

Renew Harbor Island



Work today, protect tomorrow.

2nd Quarter 2025 Groundwater Monitoring Report

For Michigan Part 115 CCR Solid Waste
Regulations

Former J.B. Sims Generating Station

July 30, 2025

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1.0 Introduction

The former J.B. Sims Generating Station was a coal-fired, steam-generating power facility with a net capacity of approximately 70.5 megawatts that was operated by the Grand Haven Board of Light and Power (GHBLP). The facility is located at 1231 North 3rd Street, on Harbor Island, in Grand Haven, Michigan (**Figure 1**) (the Site). The coal combustion residuals (CCR) generated at the former Site were stored in two CCR units: (1) the inactive Units 1/2 Impoundment and (2) the former Unit 3A/B Impoundments (**Figure 2**). Operations at the Site ceased in February 2020 and the plant subsequently was decommissioned. During deconstruction, wastewater from boiler and infrastructure cleanout was sent to Unit 3A/B. The waste disposal into Unit 3A/B ceased in July 2020.

The U.S. Environmental Protection Agency's (EPA) final CCR Rule 40 CFR §257 and Michigan's Part 115 Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451 (Part 115), establish a comprehensive set of requirements for the management and disposal of CCR (or coal ash). Pursuant to these requirements, federal and state groundwater monitoring programs are performed concurrently for the Site. The current groundwater monitoring network for the CCR units was established in 2022. Background data collection occurred between November 2022 and August 2023 for the current monitoring network and background wells. The first sample event after the background monitoring period using the updated monitoring network occurred in October 2023. The October 2023 sampling event was considered both a detection and assessment monitoring event based on the prior status of the Site in assessment monitoring before the well network was updated. Both statistically significant increases (SSIs) of constituents in groundwater above the background values and statistically significant levels (SSLs) of constituents over groundwater protection standards (GPS) were identified from the October 2023 sample event. Therefore, the status of the groundwater monitoring program for both CCR units is assessment monitoring and evaluation of potential remedies. The Site initiated assessment of corrective measures, pursuant to Part 115 R299.4443, on May 1, 2024, following the identification of SSIs at one or more monitoring wells. The Assessment of Corrective Measures was published August 5, 2024, and additional data collection will continue through 2025 and 2026 to further support the remedy selection process.

This Groundwater Monitoring Report presents the activities completed in the second quarter of 2025.

1.1 Background

The former Unit 3A/B Impoundments were engineered, clay-lined, above-ground units and ceased receiving CCR material in July 2020. In 2017, a Groundwater Monitoring System Certification was first developed for the 3A/B Impoundments, which consisted of one background well (MW-07), four (4) downgradient detection monitoring wells (MW-01R, MW-02, MW-03, and MW-04), and an additional assessment monitoring well (MW-09) (ERM, 2017). Groundwater monitoring conducted in 2017 by GHBLP identified statistically significant increases (SSIs) of constituents in groundwater, and therefore the GHBLP implemented assessment monitoring (Golder, 2018). Assessment monitoring identified SSLs over the GPS at

the Site, and therefore GHBLP stated that they were initiating assessment of corrective measures for the Site; however, that document was completed prior to the inclusion of Units 1/2 Impoundment CCR unit and therefore only represents the status of Unit 3A/B Impoundments (Golder, 2018a). The inactive CCR Units 1/2 Impoundment was a depression in the ground where sluiced ash was disposed. The inactive Units 1/2 Impoundment ceased receiving CCR material in 2012. After adding monitoring wells to the network to address the Units 1/2 Impoundment, the Updated Notice of Groundwater Protection Standard Exceedance was issued to document SSLs over GPS for both Units 1/2 Impoundment and Unit 3A/B Impoundments on July 22, 2021.

In 2021, to better understand the groundwater flow on the Island and to verify that the monitoring network in place at the time was adequate, 22 piezometers, six (6) staff gauges, and 3 stilling wells were installed. These additional monitoring locations resulted in a better understanding of groundwater flow. The Field Summary Report of Results from Approved Work Plan - Piezometer Installation and Additional Data Collection suggested that MW-07 may be an inappropriate location for a background well due to the potential for groundwater to flow from Units 1/2 Impoundment toward MW-07 (Golder, 2022). Therefore, in 2022 a new groundwater monitoring network was selected for the CCR units, including new background wells.

Background data collection for the updated monitoring network and new background wells occurred between November 2022 and August 2023. The first sample event after the updated background monitoring period occurred in October 2023, and quarterly monitoring was conducted in 2024 and the first two quarters of 2025.



Figure 1 | Site Vicinity Map

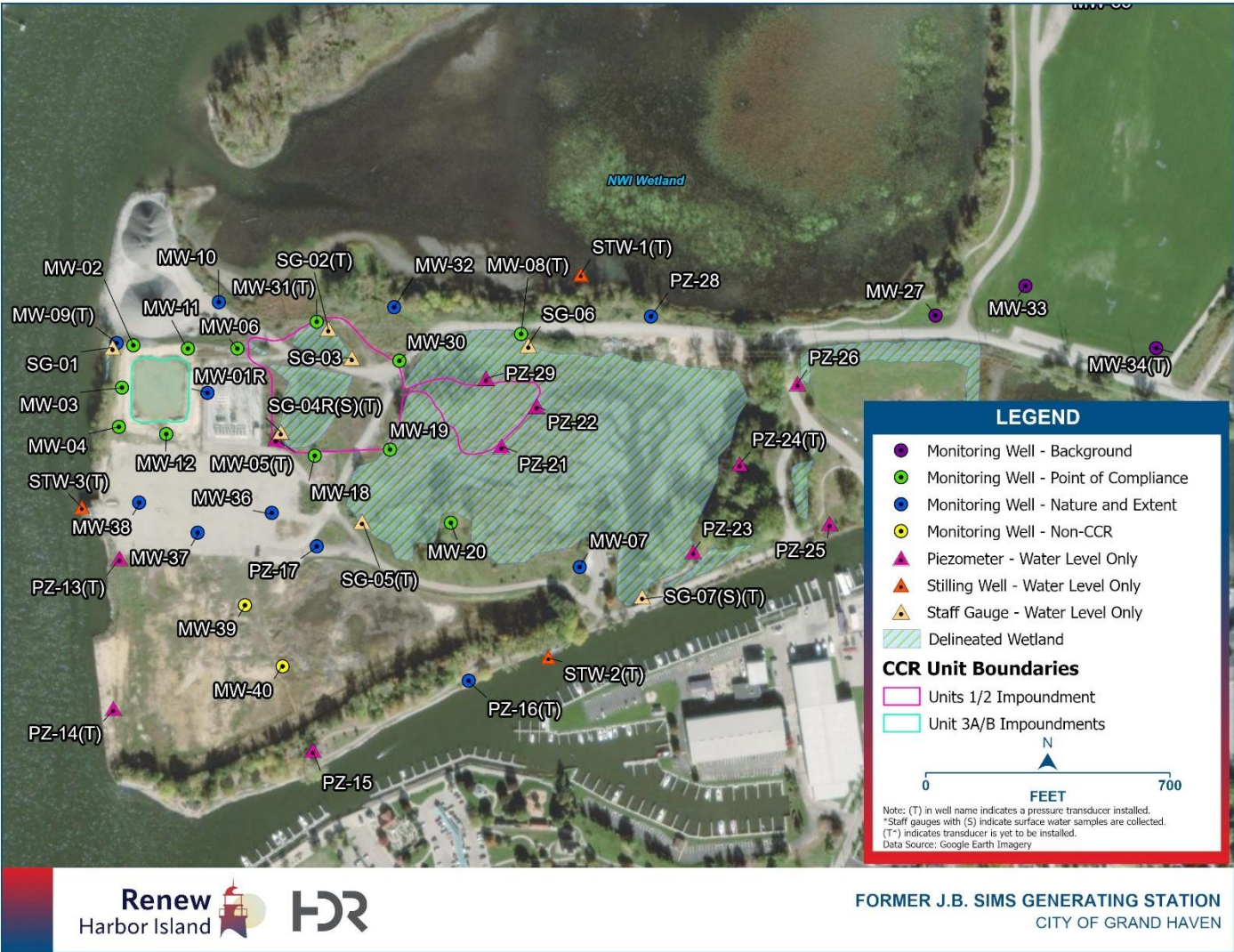


Figure 2 | Former J.B. Sims CCR Units and Monitoring Wells

2.0 Facility Description

2.1 Units 1/2 Impoundment

The inactive CCR Units 1/2 Impoundment was a depression in the ground where sluiced ash was disposed. The inactive Units 1/2 Impoundment ceased receiving CCR materials in 2012. Due to the abstract size and lack of defined boundaries, Units 1/2 Impoundment was delineated by Golder in the 2019 report *CCR Impoundment Ash Delineation at the J.B. Sims Generating Station* (Golder, 2019). Following the submission of the delineation report, a boundary of the inactive Units 1/2 Impoundment was agreed upon by GHBLP, EPA, and EGLE, which includes an area of sluiced ash disposal to the east of MW-30 into the internal wetland (**Figure 2**). The parties also agreed that the North Channel adjacent to the Units 1/2 Impoundment would be evaluated for potential inclusion in the revised boundary the Units 1/2 Impoundment. After field investigation of the North Channel area to delineate ash and submittal of the investigation data and proposed additional data collection, EGLE and EPA determined that the ash associated with the North Channel is not associated with Units 1/2 Impoundment. EGLE and EPA indicated that the North Channel ash will be evaluated as a potential CCR Management Unit under the EPA CCR Legacy Rule (40 CFR §257.95) (**Figure 2**).

2.2 Unit 3A/B Impoundments

The former CCR Unit 3A/B Impoundments were constructed as two above-ground surface impoundments underlain by a clay liner; however, the engineered clay liner did not meet Part 115 CCR surface impoundment liner criteria (**Figure 2**). Golder (2020) stated that the former 3A/B Impoundments were built over a “field of ash” that was generated from Boiler Units 1 & 2; however, existing soil borings do not support that a “field of ash” is present under the impoundments. Although the former coal-fired power generation facility ceased operations in February 2020, the Site continued to use the Unit 3A/B Impoundments to store cleanout materials from the hoppers, vessels, etc. prior to demolition of the buildings. The impoundments ceased receiving waste on July 30, 2020. Removal of CCR from the impoundments was completed on November 6, 2020 and the liner remains in place. Following the CCR removal, Golder conducted ash removal verification that was ultimately denied by EGLE. Further ash delineation will be conducted in 2025 to define the extent of any remaining CCR adjacent to the Unit 3A/B Impoundments.

2.3 Hydrogeology

The uppermost aquifer across Harbor Island consists of fine sand with gravel and silt lenses, clay, peat, ash, and municipal solid waste located between the surface and 39 feet below surface. The bottom of the aquifer is believed to consist of continuous clay observed between 20.8 and 39.0 feet below surface. The clay is observed at depth in borings MW-12, MW-17, PZ-16, PZ-26, PZ-24, PZ-25, and MW-30.

The regional general direction of groundwater flow is west to southwest towards Lake Michigan (Western Michigan University, 1981). The Grand River is located on the northern and western

side of the Site, and the South Channel is located on the south side of Harbor Island. Internal to the Island there are several influences to groundwater flow. Specifically, the following features:

- Various fill materials observed in boring logs,
- Surface water features, such as the inactive Units 1/2 Impoundment and internal wetland, and
- Former coal pile area which may have lower infiltration rates than other areas on the Island due to compaction from heavy equipment and stockpiling.

These features influence the groundwater velocity and flow direction and are very localized. Boring logs contained in the *Field Summary Report of Results from Approved Work Plan - Piezometer Installation and Additional Data Collection* show the observed fill materials encountered during well installation (Golder, 2022).

Groundwater mounding is shown around monitoring well MW-01R, consistent with observations made by Golder in 2021 (Golder, 2022). A groundwater contour map from the second quarter 2025 sampling is in **Appendix C**. The maps show groundwater flow beneath Unit 3A/B Impoundments is consistently west toward the Grand River. Groundwater flow beneath Units 1/2 Impoundment is generally radial: northward toward the north wetland, east from the ponds of Units 1/2 Impoundment toward the internal wetland, and potentially south near MW-05 (**Appendix C**). The internal wetland east of the Units 1/2 Impoundment appears to provide hydraulic separation between the CCR impoundments and the wells and piezometers located to the east (PZ-23 through PZ-26, MW-27, MW-33, and MW-34).

Groundwater was encountered between 5 and 15 feet below ground surface within the unconsolidated fill material. In 2021, Golder performed slug tests at monitoring wells MW-01R, MW-02, MW-04, MW-05, MW-07, MW-08, PZ-17, PZ-20, PZ-26, and MW-31. Hydraulic conductivity values observed across the Site range from 0.19 to 18.76 feet per day (Golder, 2022). Higher conductivity values of 172.51 feet per day at MW-17 and 242.25 feet per day at MW-20 were observed in wells near the Internal Wetland (Golder, 2022), potentially related to trash and loose sand in the screened intervals. Additional slug tests were performed in July and August 2024 at wells MW-10, MW-12, PZ-15, MW-16, MW-32, MW-36, and MW-40, while re-testing wells MW-17 and MW-20. Excluding wells MW-17 and MW-20, the hydraulic conductivity values ranged from 0.36 to 24.4 feet per day, which is a similar range measured by Golder (2022). Tests at wells MW-17 and MW-20 confirmed the anomalously high conductivity values and were 53% and 35% higher than measured in 2022. Additional information about groundwater velocity is included in Section 4.1.

2.4 Monitoring Well Network

The monitoring well network consists of the monitoring wells (MW-#) and piezometers (PZ-#) listed in **Table 1** and shown in **Figure 2**. The monitoring wells are sampled for water quality and water levels are monitored. The piezometers are monitored only for water levels. The monitoring network for each impoundment is described below.

Units 1/2 Impoundment

Due to the size of Units 1/2 Impoundment compared to the limits of Harbor Island, and variable groundwater flow direction, a traditional upgradient/downgradient groundwater monitoring system is not possible. Further detail explaining the locations and justification of each well location is provided in the Hydrogeologic Monitoring Plan (HDR, 2024). The following wells are utilized as the groundwater monitoring network:

- Background Wells: MW-27, MW-33, and MW-34
- Point of Compliance Wells (i.e. waste boundary wells): MW-06, MW-08, MW-18, MW-19, MW-20, MW-30, and MW-31
- Nature and Extent Wells: MW-07, MW-10, MW-16, MW-17, MW-28, MW-32, MW-36, and MW-37

Unit 3A/B Impoundments

The monitoring well network justification for the Unit 3A/B Impoundments is provided in the Hydrologic Monitoring Plan (HDR, 2024). The well network is as follows:

- Background Wells: MW-27, MW-33, and MW-34
- Point of Compliance Wells (i.e. waste boundary wells): MW-02, MW-03, MW-04, MW-11, and MW-12
- Nature and Extent Wells: MW-01R, MW-09, MW-10, and MW-38

Wells MW-01R and MW-04 were identified as having ash constituents in soils above their screened intervals, and therefore have been identified for replacement. In the fourth quarter 2025, new boreholes will be drilled a short distance from the existing MW-01R and MW-04 and replacement wells will be constructed if no CCR is present above the screened zone. The current MW-01R and MW-04 will be abandoned following construction of the replacement wells.

Water Level Wells

The following piezometers are monitored for water level only and are not sampled: MW-05, PZ-13, PZ-14, PZ-15, PZ-21, PZ-22, PZ-23, PZ-24, PZ-25, PZ-26, PZ-29, MW-35, MW-39, and MW-40, shown on **Figure 2**. Piezometers PZ-21, PZ-22, and PZ-29 were installed within the wetland and are inaccessible at times and therefore are monitored less frequently.

Transducers are installed in the monitoring wells, stilling wells, and staff gauges that are marked on **Figure 2** with (T) next to the location ID. The transducers collect groundwater elevation data on a continuous one-hour frequency and are described in further detail in Section 4.1

3.0 Monitoring

3.1 Groundwater Monitoring

Table 1 provides well identification numbers, well locations, the dates samples were collected during Quarter 2 2025, and whether a sample was required by the CCR Rule for the background sampling, detection monitoring or assessment monitoring programs. Any deviation

in sample collection from the Hydrogeologic Monitoring Plan (HDR, 2024) is outlined in **Section 3.3**. Sampling for the first quarter began on April 19, 2025. Monitoring water levels across the network was completed on the same day.

Table 1. Dates of Groundwater Monitoring in Second Quarter 2025		
Monitoring Well I.D.	Date Sampled	Monitoring Purpose
Background Monitoring Wells		
MW-27	4/22/2025	Assessment Monitoring
MW-33	4/19/2025	Assessment Monitoring
MW-34	4/21/2025	Assessment Monitoring
Units 1/2 Compliance Monitoring Wells		
MW-06	4/20/2025	Detection Monitoring/Initial Assessment Monitoring
MW-08	4/20/2025	Detection Monitoring/Initial Assessment Monitoring
MW-18	4/21/2025	Detection Monitoring/Initial Assessment Monitoring
MW-19	4/21/2025	Detection Monitoring/Initial Assessment Monitoring
MW-20	4/21/2025	Detection Monitoring/Initial Assessment Monitoring
MW-30	4/20/2025	Detection Monitoring/Initial Assessment Monitoring
MW-31	4/20/2025	Detection Monitoring/Initial Assessment Monitoring
Unit 3A/B Compliance Monitoring Wells		
MW-02	4/19/2025	Detection Monitoring/Initial Assessment Monitoring
MW-03	4/21/2025	Detection Monitoring/Initial Assessment Monitoring
MW-04	4/21/2025	Detection Monitoring/Initial Assessment Monitoring
MW-11	4/20/2025	Detection Monitoring/Initial Assessment Monitoring
MW-12	4/21/2025	Detection Monitoring/Initial Assessment Monitoring
Nature and Extent Wells		
MW-01R	4/20/2025	Detection Monitoring/Initial Assessment Monitoring
MW-07	4/21/2025	Detection Monitoring/Initial Assessment Monitoring
MW-09	4/19/2025	Detection Monitoring/Initial Assessment Monitoring
MW-10	4/20/2025	Detection Monitoring/Initial Assessment Monitoring
MW-16	4/21/2025	Detection Monitoring/Initial Assessment Monitoring
MW-17	4/20/2025	Detection Monitoring/Initial Assessment Monitoring
MW-28	4/21/2025	Detection Monitoring/Initial Assessment Monitoring
MW-32	4/20/2025	Detection Monitoring/Initial Assessment Monitoring
MW-36	4/21/2025	Detection Monitoring/Initial Assessment Monitoring
MW-37	4/20/2025	Detection Monitoring/Initial Assessment Monitoring
MW-38	4/20/2025	Detection Monitoring/Initial Assessment Monitoring
Water Level Only Wells		
MW-05	4/19/2025	Water Level Only
PZ-13	4/19/2025	Water Level Only
PZ-14	4/19/2025	Water Level Only
PZ-15	4/19/2025	Water Level Only
PZ-23	4/19/2025	Water Level Only
PZ-24	4/19/2025	Water Level Only
PZ-25	4/19/2025	Water Level Only

Table 1. Dates of Groundwater Monitoring in Second Quarter 2025

Monitoring Well I.D.	Date Sampled	Monitoring Purpose
PZ-26	4/19/2025	Water Level Only
PZ-29	4/19/2025	Water Level Only
MW-35	4/19/2025	Water Level Only
MW-39	4/19/2025	Water Level Only
MW-40	4/19/2025	Water Level Only

3.2 Surface Water Monitoring

Surface water monitoring coincides with the groundwater sampling. The stilling wells (STW-1, STW-2, STW-3), as well as staff gauges SG-01, SG-03, and SG-06, are monitored for water levels only. Staff gauges SG-02, SG-04R, SG-05, SG-07 are monitored for water levels and surface water quality (**Figure 2**). Surface water monitoring dates are shown in **Table 2**. Deviations from the work plan are outlined in **Section 3.3**.

Table 2. Dates of Surface Water Monitoring in Second Quarter 2025

Well ID	Monitoring Date
SG-01	4/19/2025 ¹
SG-02	4/22/2025
SG-03	4/19/2025
SG-04R	4/22/2025
SG-05	4/22/2025
SG-06	4/19/2025 ¹
SG-07	4/22/2025
STW-1	4/19/2025 ¹
STW-2	4/19/2025
STW-3	4/19/2025

¹ – Monitoring location was dry, no surface water level was measured at the gauge.

3.3 Water Level and Sample Collection

Monitoring wells were purged with a peristaltic pump until field parameters (pH, turbidity, conductivity, dissolved oxygen, temperature, and oxidation reduction potential) stabilized. The results of field measurements were recorded on a field data form, which is maintained as part of the field records and provided in **Appendix A**. After water quality parameters stabilized, samples were collected and tested for the parameters listed in **Table 3**. For quality control, one field duplicate sample was collected for each CCR unit per sampling event (two duplicate samples total per event). The following deviations from the Hydrogeologic Monitoring Plan for CCR Compliance were noted during the second quarter 2025 sampling event:

- Water levels were not measured in April 2025 at piezometers PZ-21 and PZ-22 due to deep water limiting access.

- In April 2025, water levels were not measured at staff gauges SG-01, SG-06, and at stilling well STW-1 due to low surface water conditions leaving the staff gauges and stilling well dry.
- Transducers and housing at STW-2 and STW-3 are currently broken due to ice flow of the river and will be repaired in the third quarter 2025.

3.4 Analytical Testing

Samples from the wells listed in **Table 1** were analyzed for the constituents listed in **Table 3**.

Table 3. Constituents of Interest	
Constituents for Assessment Monitoring	
Antimony	Mercury
Arsenic	Molybdenum
Barium	Nickel
Beryllium	Radium-226
Boron	Radium-226/228
Cadmium	Radium-228
Calcium	Selenium
Chloride	Silver
Chromium	Sulfate
Cobalt	Thallium
Copper	Total Dissolved Solids (TDS)
Fluoride	Vanadium
Iron	Zinc
Lead	Additional Parameters
Lithium	Total Suspended Solids (TSS)

3.5 Data Validation and Management

Data validation and data management tasks were performed per the Hydrogeologic Monitoring Plan. Data validation was performed for sampling dates provided in **Table 1**. Data validation was conducted to eliminate any data that did not meet validation criteria and to designate a data qualifier for any data quality limitation discovered.

Samples and quality control (QC) data for the reporting period were reviewed and evaluated, and no samples were rejected. Most QC analyses were within reportable limits; however, when QC was outside control limits, samples were reported as estimated. Data analyses required minimal qualifications, and the data were usable, even when qualified. Data validation reports are contained in **Appendix B**.

4.0 Monitoring Results

4.1 Water Levels and Groundwater Flow Direction

A potentiometric contour map was developed for the second quarter 2025 sampling event using the data provided in **Table 4**. The map displays the groundwater elevations and inferred potentiometric contours, and is provided in **Appendix C**. A hydrograph illustrating groundwater levels in monitoring wells near the Units 1/2 Impoundment for the November 2022 through April 2025 monitoring period is shown in **Figure 3**. Groundwater around the perimeter of the impoundment has ranged from approximately 578.9 to 581.5 feet above mean sea level (ft AMSL) during this period. A hydrograph illustrating groundwater levels in perimeter wells surrounding the Units 3A/B Impoundments (**Figure 4**) indicates groundwater elevation beneath the impoundment ranged from 582 to 579 ft ASML during the November 2022 through February 2025 monitoring period.

Utilizing groundwater elevations reported on **Table 4**, the groundwater flow velocity for six pairs of monitoring wells was calculated and is provided in **Table 5**.

Groundwater beneath the former CCR impoundments is inferred to be generally radial, flowing toward the Grand River, the North Channel, and the internal wetland. Potentiometric contours created from the groundwater elevations in **Table 4** show north and northwestern flow beneath Unit 3A/B Impoundments toward the Grand River, consistent with previous observations. Flow beneath the Units 1/2 Impoundment is generally eastward toward the internal wetland, with the internal wetland having been consistently shown to be a hydraulic divide for Harbor Island. Groundwater flow near the North Channel outlet between SG-02 toward MW-31 has been inferred to be towards the north.

Groundwater flow observed at background wells MW-27, MW-33, and MW-34 is consistent with previous observations. Because groundwater converges on the internal wetland from both the west side, where the impoundments are located, and from the east side, where the background wells are located, it can be inferred that groundwater under the CCR impoundments cannot flow to the background monitoring well locations east of the internal wetland.

Table 4. Groundwater and Surface Water Elevations in Second Quarter 2025

Well ID	Groundwater Elevation (04/19//2025)
MW-01R	581.64
MW-02	579.20
MW-03	579.44
MW-04	579.71
MW-05	580.71
MW-06	581.14
MW-07	579.31
MW-08	579.49
MW-09	579.22
MW-10	579.90
MW-11	581.02
MW-12	581.48
PZ-13	579.30
PZ-14	579.55
PZ-15	579.80
MW-16	579.07
MW-17	580.10
MW-18	580.31
MW-19	580.01
MW-20	579.91
PZ-21	Inaccessible
PZ-22	Inaccessible
PZ-23	579.67
PZ-24	579.83
PZ-25	579.16
PZ-26	580.32
MW-27	580.95
MW-28	579.31
PZ-29	579.77
MW-30	580.46
MW-31	580.46
MW-32	580.17
MW-33	580.72
MW-34	579.58
MW-35	581.54
MW-36	580.73
MW-37	579.29
MW-38	579.28
MW-39	579.38
MW-40	581.65
SG-01	DRY

Table 4. Groundwater and Surface Water Elevations in Second Quarter 2025

Well ID	Groundwater Elevation (04/19//2025)
SG-02	580.55
SG-03	580.48
SG-04R	580.44
SG-05	579.27
SG-06	DRY
SG-07	578.38
STW-1	DRY
STW-2	578.76
STW-3	578.75

Table 5. Groundwater Velocity Calculations

Well Pair	Area of Harbor Island	Distance (ft)	Porosity ¹	Hydraulic Conductivity (ft/day)	Groundwater Elevation (ft/ASML)	Hydraulic Gradient	Groundwater Velocity (ft/day)
PZ-25	Eastern	413	0.3	8.342 ²	579.16	0.0028	0.078
PZ-26					580.32		
PZ-25		400	0.3	8.342 ²	579.16	0.0013	0.035
PZ-23					579.67		
MW-01R	Western	247	0.3	6.233 ³	581.64	0.0089	0.185
MW-03					579.44		
MW-01R		274	0.3	6.233 ³	581.64	0.007	0.146
MW-04					579.71		
MW-01R		226	0.3	6.233 ³	581.64	0.0041	0.085
MW-05					580.71		
MW-01R		262	0.3	6.233 ³	581.64	0.0066	0.138
MW-10					579.90		

1. Porosity value estimated using reference values for poorly sorted fine to medium sand (Freeze-Cherry, 1979).

2. Average hydraulic conductivity value from Golder (2022) on PZ-26.

3. Calculated by averaging hydraulic conductivity values from wells MW-01R, MW-02, MW-04, and MW-05 (Golder, 2022).

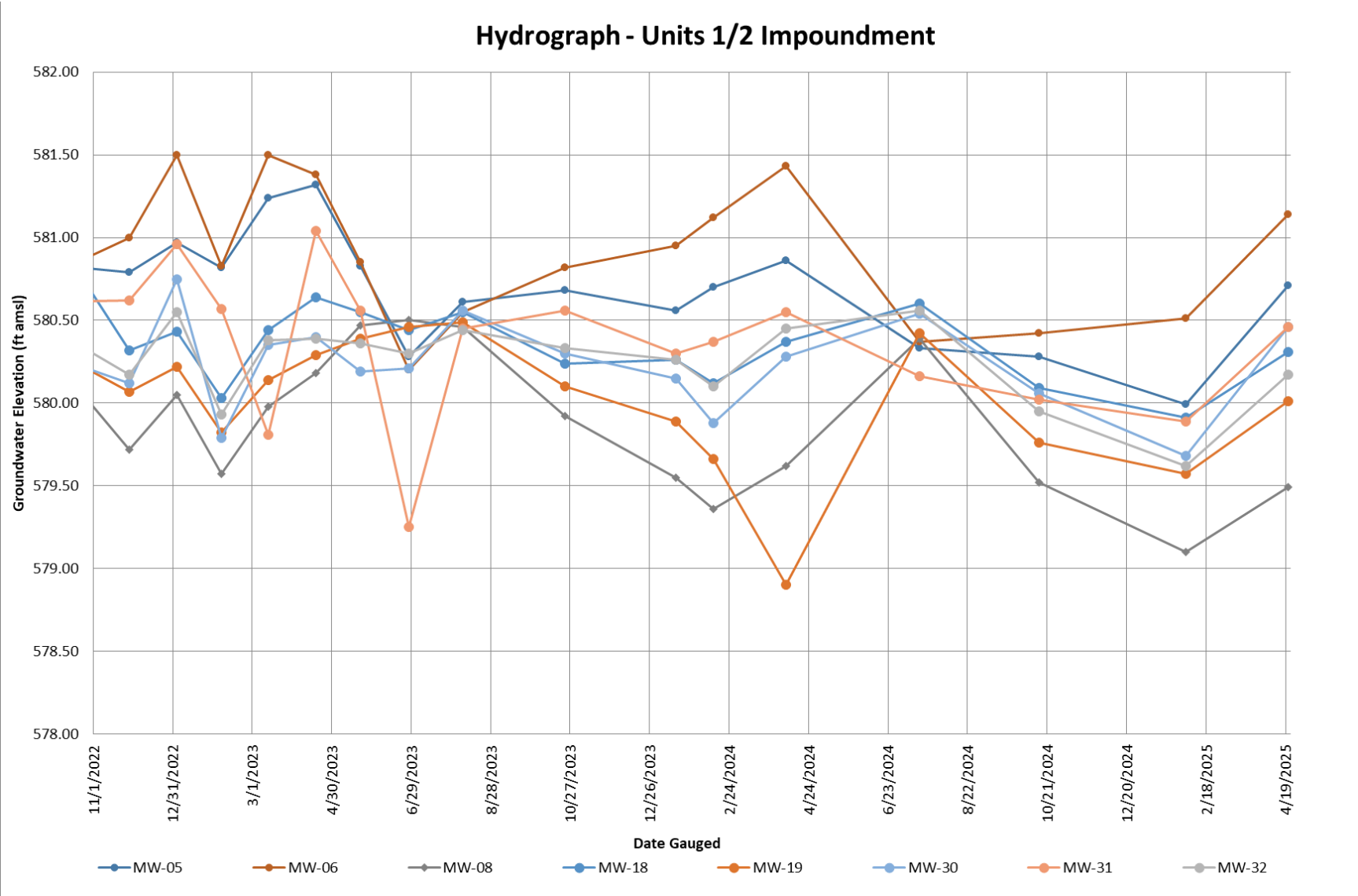


Figure 3 | Hydrograph of Wells Near Units 1/2 Impoundment

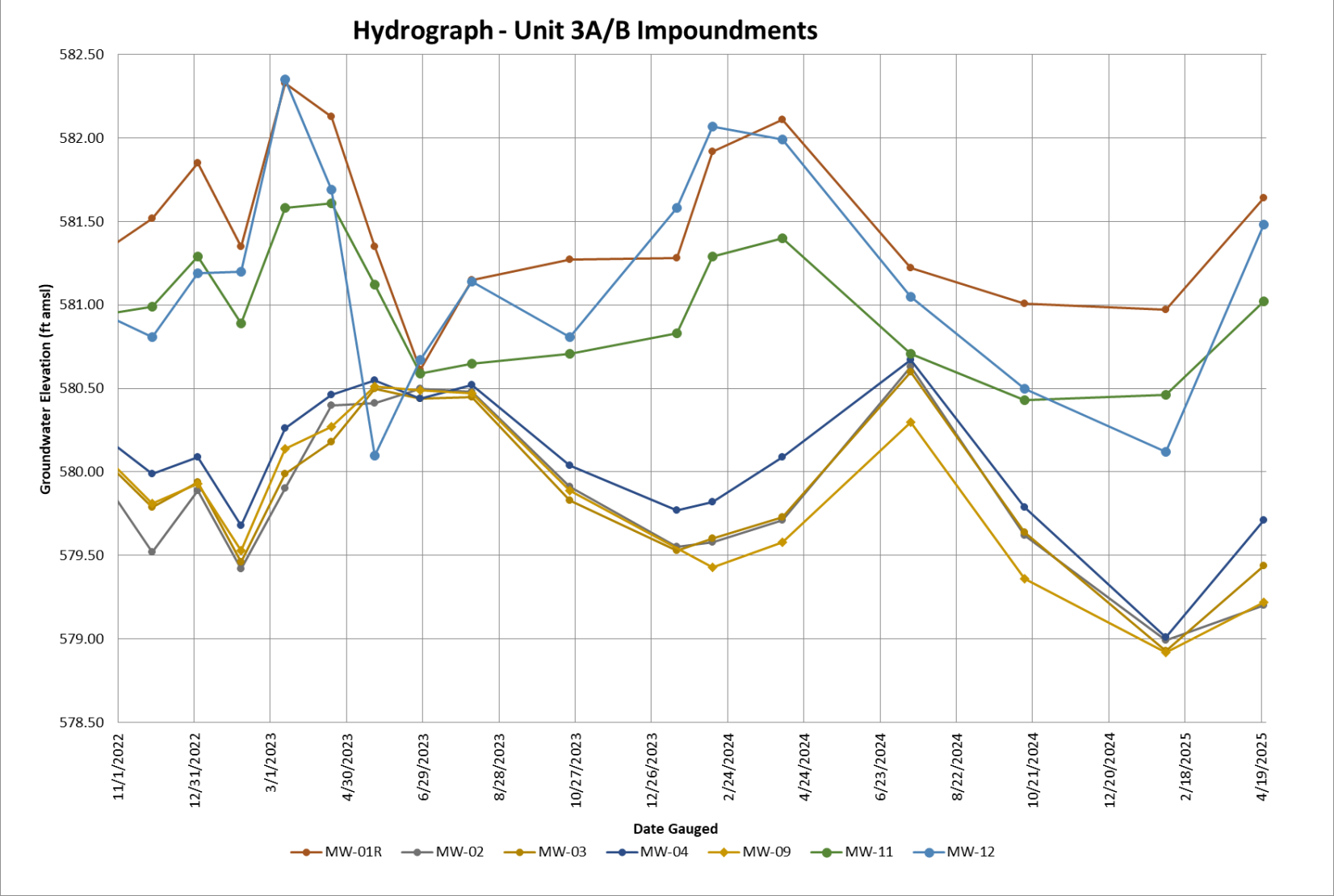


Figure 4 | Hydrograph of Wells and Piezometers Near Unit 3A/B Impoundments

Pressure transducers were installed at the locations shown in **Figure 5**. Transducer data has been collected between December 21, 2023 through the most recent download on April 21, 2025. Of note, six of the 17 transducers are not currently recording usable data:

- The SG-05 cable was severed by wildlife.
- The STW-2 cable and PVC stilling well was severed by ice flows in the Grand River.
- The STW-3 transducer experienced an internal memory failure, and the PVC stilling well was severed by ice.
- The MW-09 transducer is logging, but appears to have an internal sensor error recording anomalous data.
- The STW-1 transducer is functioning but the monitoring point is dry due to low river stage in the Northern wetland.
- The SG-07 transducer is functioning but the gauge appears to have shifted due to ice flows and needs to be resurveyed.

Trends observed from the limited dataset are as follows:

- The surface water elevation at SG-02 is generally higher than the groundwater elevation at MW-31, with the exception of specific dates where well MW-31 groundwater levels peak following rapid infiltration of precipitation. These groundwater peaks generally coincide with precipitation events producing 0.5 inches or greater. The gradient between SG-02 and monitoring well MW-31 suggests that for the majority of the time, surface water at the north side of the Units 1/2 Impoundment discharges to groundwater and flows north toward the north wetland. A graph of the measurements is shown on **Figure 6**.
- The groundwater elevation at well MW-05 is higher than the surface water elevation at SG-04R, located at the southern end of Wetland 1, during periods of significant precipitation. However, for the majority of the time, the groundwater elevation at MW-05 is below the surface water of the impoundment, indicating that surface water discharges to groundwater to flow towards the south or southwest. A graph of the measurements is shown on **Figure 7**.
- Groundwater at well MW-16, located on the south side of the Island near the South Channel, is higher than surface water at stilling well STW-2 through the fall, winter and spring, indicating groundwater flow is toward the South Channel for the majority of the year. However, from approximately May through September 2024, the MW-16 groundwater elevation is approximately equal to the South Channel stage at STW-2, meaning that there is very limited groundwater flow from the Island to the river. A graph of the measurements is shown on **Figure 8**.
- Additionally, a comparison between SG-07 and STW-2 reveals that surface water elevations at SG-07 were higher for approximately 71% of the reporting period. This indicates the water from the internal wetland is discharging to the South Channel during a majority of the reporting period. A graph of the measurements is shown on **Figure 9**.
- The surface water elevation at SG-07 was lower than groundwater at PZ-24, except for the summer months when it is higher than groundwater to the east. The lack of correlation between the surface water and groundwater elevations appears to indicate little hydraulic connection between the two points. A graph of the measurements is shown on **Figure 10**.

- On the western side of the Island, a comparison of STW-3, PZ-13, and PZ-13 indicates that groundwater discharges to the Grand River the majority of the time. A graph of the measurements is shown on **Figure 11**.
- A comparison of MW-08 and SG-07 represents the flow between the internal wetland and the groundwater between the internal wetland and the northern wetland. Well MW-08 was higher in elevation generally between December 2023 and May 2024, when groundwater on the north side of the Island is discharging to the internal wetland. Then between June and September 2024, the wetland surface is higher than the groundwater at MW-08. A graph of the measurements is shown on **Figure 12**.



Figure 5 | Transducer Deployment Map

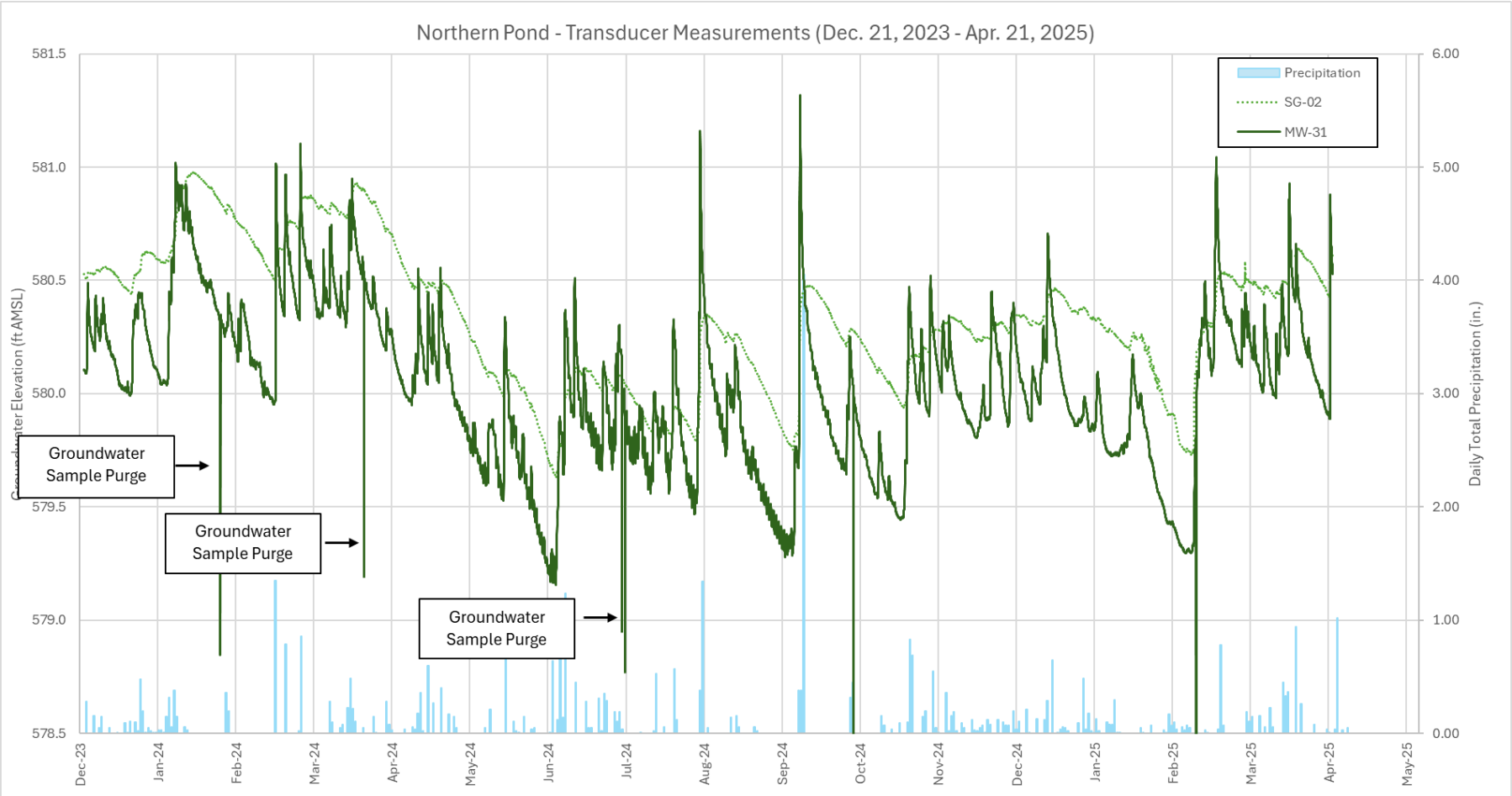


Figure 6 | Transducer Measurement Graph SG-02 and MW-31

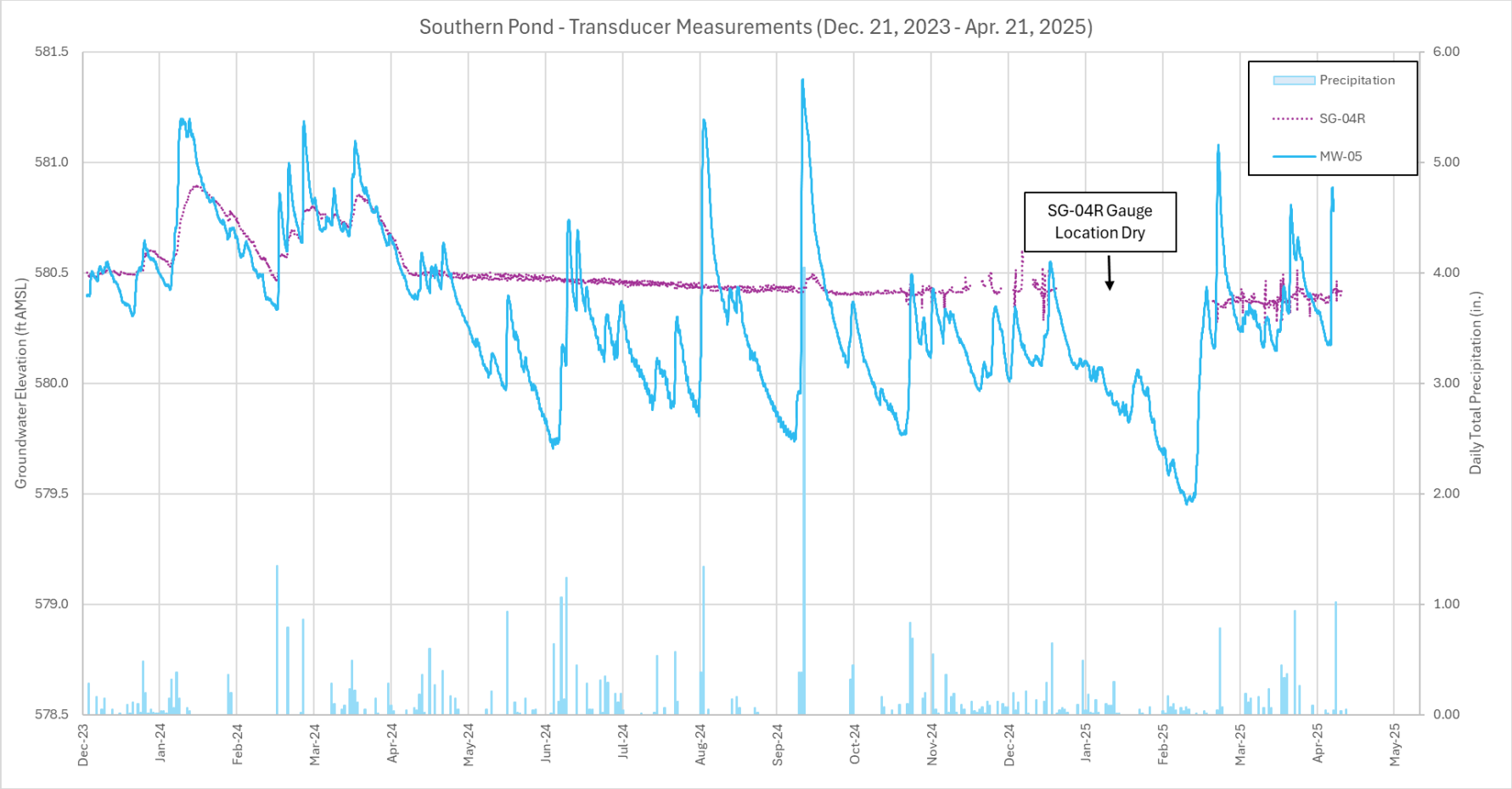


Figure 7 | Transducer Measurement Graph SG-04R and MW-05

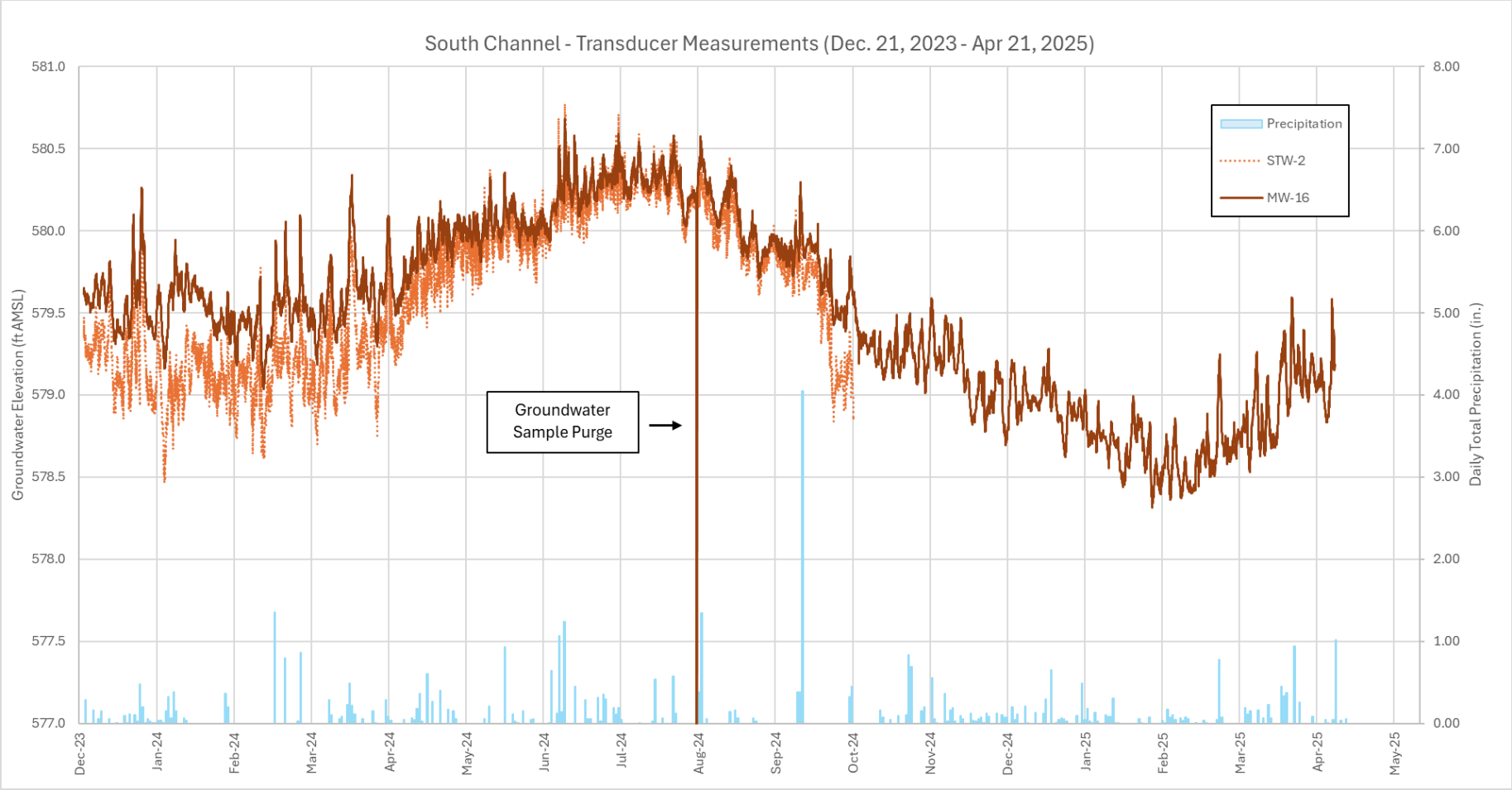


Figure 8 | Transducer Measurement Graph STW-2 and MW-16

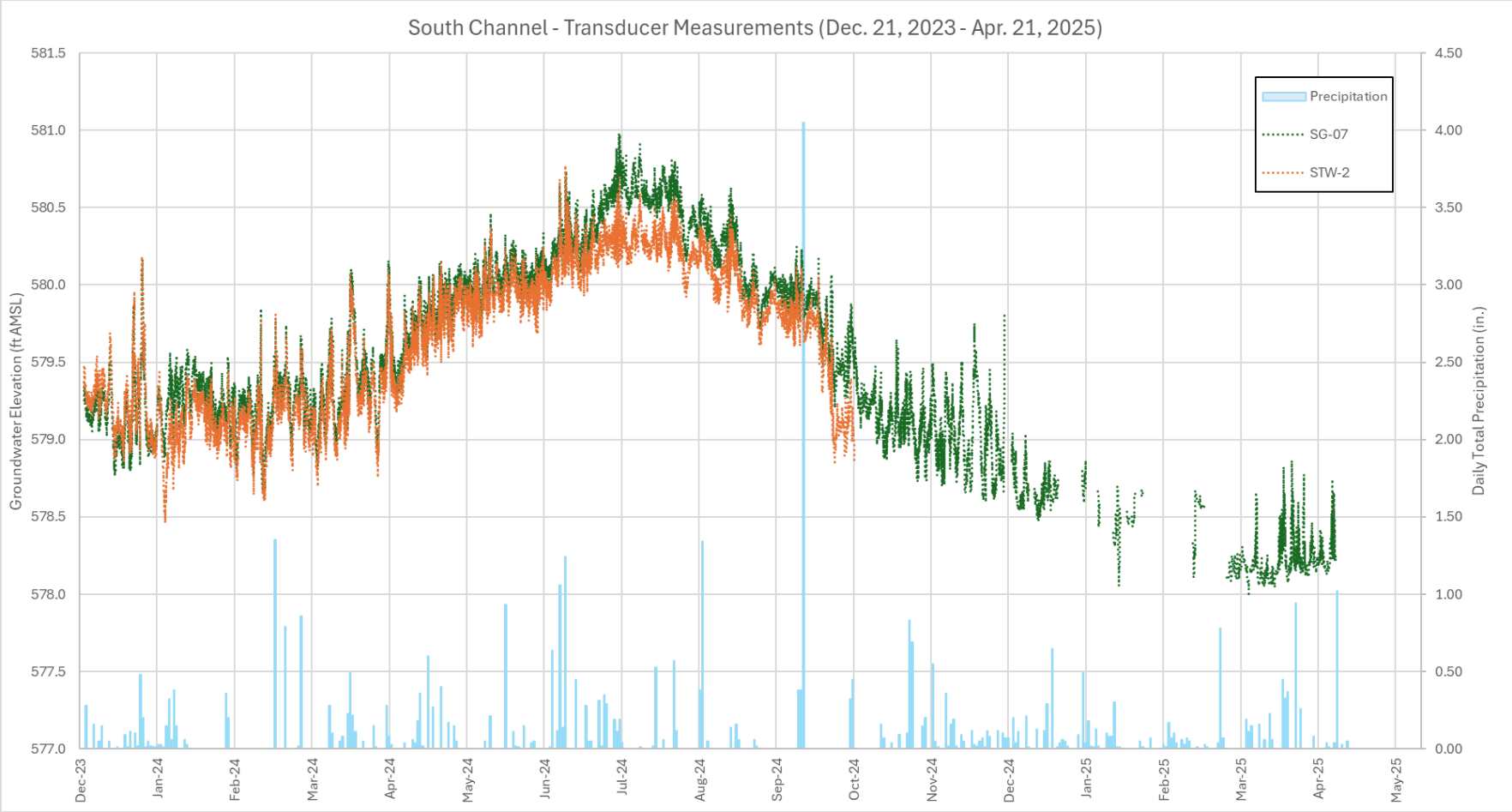


Figure 9 | Transducer Measurement Graph STW-2 and SG-07

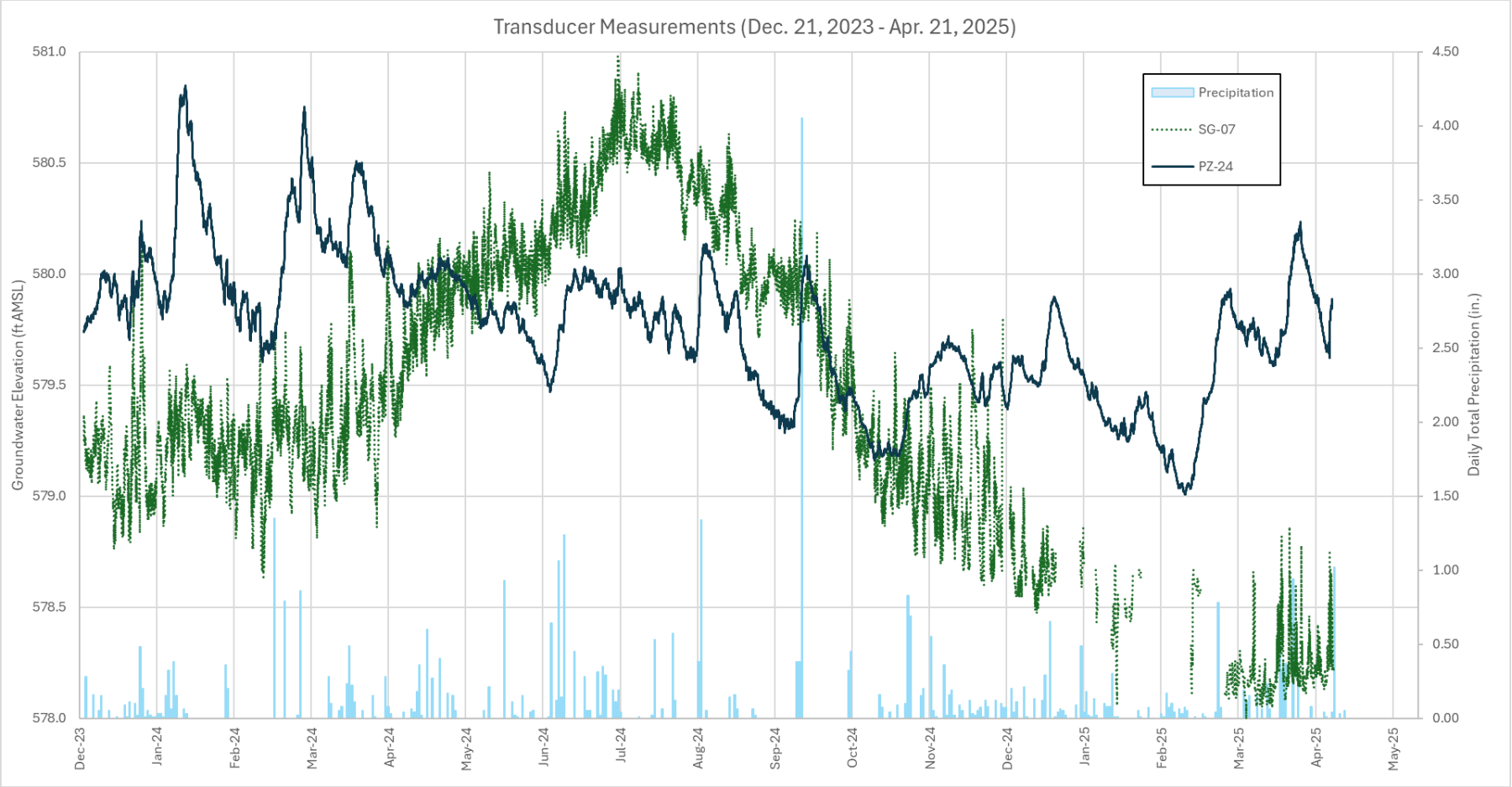


Figure 10 | Transducer Measurement Graph SG-07 and PZ-24

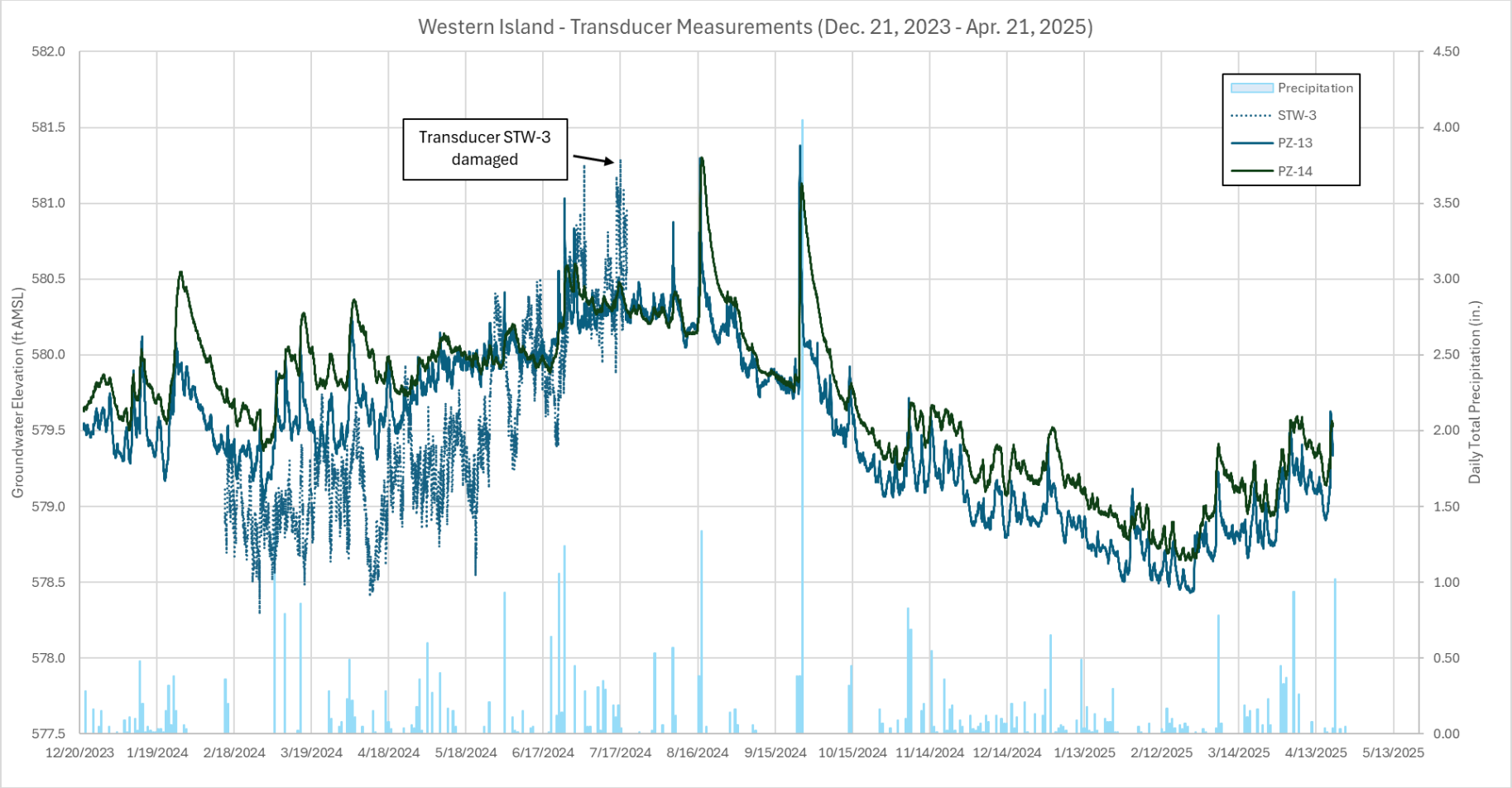


Figure 11 | Transducer Measurement Graph STW-3, PZ-13, and PZ-14

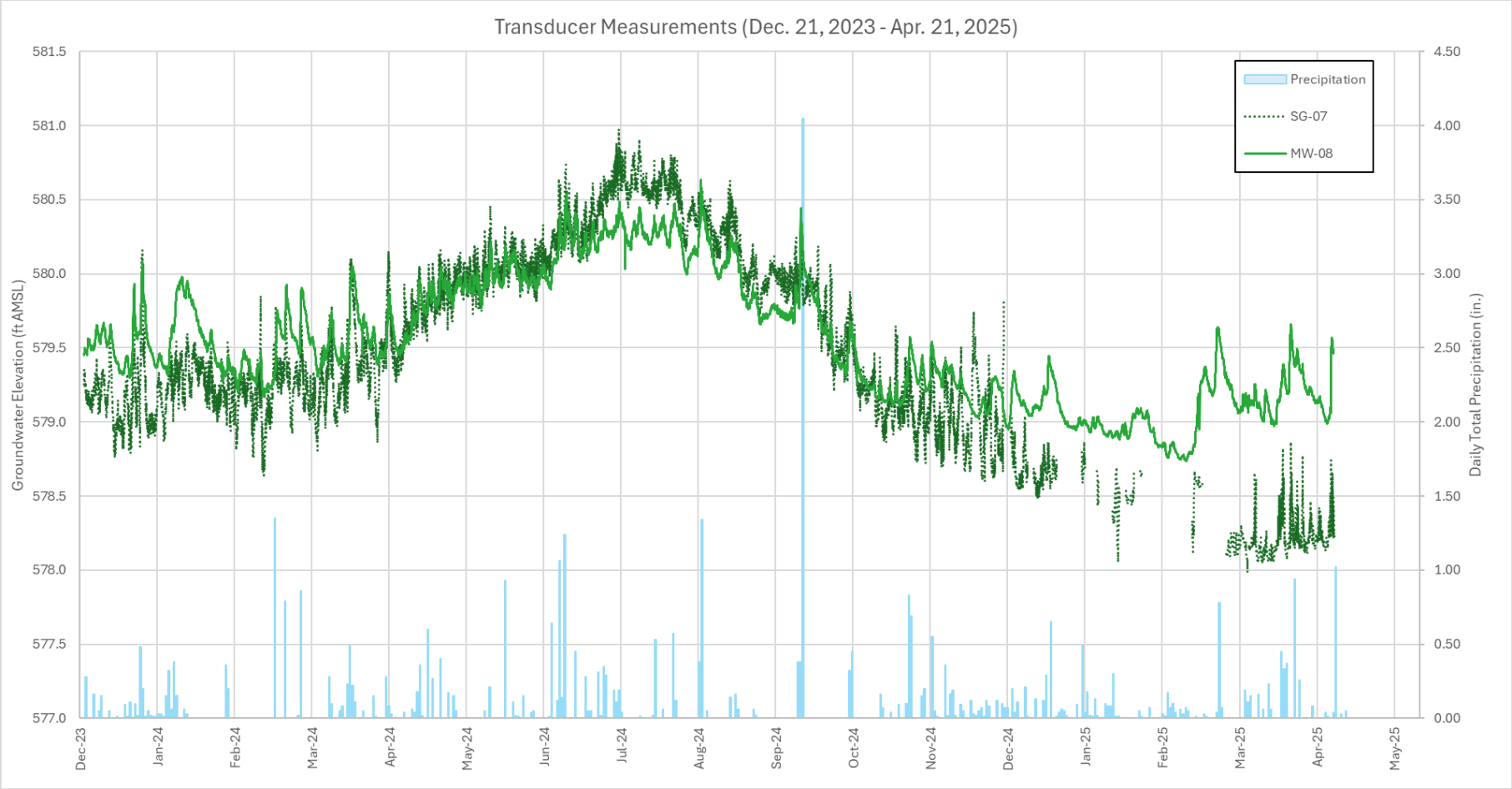


Figure 12 | Transducer Measurement Graph SG-07 and MW-08

4.2 Water Quality

In April 2025, an assessment monitoring event was conducted and the monitoring network provided in **Table 1** was sampled for the COIs contained in **Table 3**. The water quality data collected to date is presented in **Appendix D** and laboratory reports are provided in **Appendix E**.

4.2.1 Calculation of Groundwater Protection Standards (GPS)

As required in Michigan Rule R 299.4441(9), the owner must establish GPS for each constituent detected in the groundwater when in assessment monitoring. The background value (95% upper tolerance limit [UTL]), maximum contaminant level (MCLs), applicable state cleanup criteria, and Site GPS for both CCR units are provided in **Table 6**.

Table 6. Background Values and State Groundwater Protection Standards for both Units 1/2 Impoundment and Unit 3A/B Impoundments

Parameter**	Site-Specific Background Level (UTL) (mg/L)	MCL (mg/L)	State Non-Res. Drinking Water Cleanup Criteria for Groundwater (mg/L)*	GSI (mg/L)*	GPS (mg/L)
Antimony	0.0012	0.0060	0.0060	0.13	0.0060
Arsenic	0.0040	0.010	0.010	0.010	0.010
Barium	0.58	2.0	2.0	1.3 ¹	1.3
Beryllium	0.000059	0.0040	0.0040	0.036 ¹	0.0040
Boron	4.0	NV	0.50	7.20	4.0
Cadmium	0.00015	0.0050	0.0050	0.0025 ¹	0.0025 ¹
Calcium	250	NV	N/A	N/A	250
Chloride	120	NV	250	50	120
Chromium	0.042	0.10	0.10	0.12 ¹	0.10
Cobalt	0.0021	0.0060	0.10	0.10	0.0060
Copper	0.020	1.30	1.0	0.021 ¹	0.021 ¹
Fluoride	0.45	4.0	2.0	NV	2.0
Iron	83	0.30	0.30	NV	83
Lead	0.0016	0.015	0.0040	0.014 ¹	0.0040
Lithium	0.10	0.040	0.35	0.44	0.10
Mercury	0.00016 ²	0.0020	0.0020	0.0000013	0.0000013
Molybdenum	0.0093	0.10	0.210	3.2	0.10
Nickel	0.023	NV	0.10	0.12 ¹	0.10
Radium 226 and 228 combined (pCi/L)	2.6	5.0	NV	NV	5.0
Selenium	0.00089	0.050	0.050	0.0050	0.0050
Silver	0.00011	0.10	0.098	0.00020	0.00020
Sulfate	100	250	250	NV	250
Thallium	0.000075	0.0020	0.0020	0.0037	0.0020
Total Dissolved Solids	950	500	500	500	950
Vanadium	0.00093	NV	0.0062	0.027	0.0062

Table 6. Background Values and State Groundwater Protection Standards for both Units 1/2 Impoundment and Unit 3A/B Impoundments

Parameter**	Site-Specific Background Level (UTL) (mg/L)	MCL (mg/L)	State Non-Res. Drinking Water Cleanup Criteria for Groundwater (mg/L)*	GSI (mg/L)*	GPS (mg/L)
Zinc	0.038	5.00	5.00	0.27 ¹	0.27 ¹

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

**Metals data is analyzed and reported as total metals.

NV=no value

¹Per Footnote G of Table 1 Cleanup Criteria Requirements for Response Activity (Formerly the Part 201 Generic Cleanup Criteria and Screening Levels) of the Groundwater Surface Water (GSI) criteria list, values noted are calculated based on the hardness (expressed as CaCO₃) of the receiving waters. Surface water sample from the Grand River (SG-01) had a hardness of 270 mg/L that was used in the calculation of specific GSI values. The Grand River discharges into Lake Michigan, thus the GSI Criteria for Surface Water Protected for Drinking Water Use, is provided above.

²Based on comments provided by EGLE on the Hydrogeologic Monitoring Plan, future monitoring events will have lower analytical detection limits for mercury, which will address the background concentration relative to the GSI.

4.2.2 Identification of Groundwater Protection Standard (GPS) Exceedances

The April 2025 sampling data from compliance wells was compared to the GPS values provided in **Table 6**, and several COIs were found to exceed GPS at both CCR units. To determine if an exceedance of a GPS value was statistically significant, the 95% lower confidence limit (95LCL) was calculated for each of the downgradient wells. The statistical output files are in **Appendix E**. Analytical data tables are contained in **Appendix D**.

Units 1/2 Impoundment

Concentrations that exceeded GPS at SSLs are provided in **Table 7** for Units 1/2 Impoundment. The wells with SSLs over GPS following the April 2025 sample event are consistent with previous well and constituent observations.

Table 7. April 2025 LCLs that Exceed GPS for the Units 1/2 Impoundment

Well	Constituent*	Unit	95% LCL	State GPS
MW-06	Boron	mg/L	8.4	4.0
	Lithium	mg/L	0.16	0.10
	Total Dissolved Solids	mg/L	1200	950
MW-07	Boron	mg/L	10.7	4.0
MW-08	Arsenic	mg/L	0.029	0.010
	Boron	mg/L	5.1	4.0
MW-10	Boron	mg/L	13.3	4.0
	Chloride (as Cl)	mg/L	205	120
	Fluoride	mg/L	4.5	2.0
	Lithium	mg/L	0.82	0.10

Table 7. April 2025 LCLs that Exceed GPS for the Units 1/2 Impoundment

Well	Constituent*	Unit	95% LCL	State GPS
	Sulfate (as SO ₄)	mg/L	448	250
	Total Dissolved Solids	mg/L	1700	950
MW-18	Arsenic	mg/L	0.024	0.010
	Calcium	mg/L	311	250
	Fluoride	mg/L	3.5	2.0
	Sulfate (as SO ₄)	mg/L	730	250
	Total Dissolved Solids	mg/L	1310	950
MW-19	Calcium	mg/L	440	250
	Sulfate (as SO ₄)	mg/L	910	250
	Total Dissolved Solids	mg/L	1750	950
MW-30	Calcium	mg/L	430	250
	Lithium	mg/L	0.12	0.10
	Sulfate (as SO ₄)	mg/L	790	250
	Total Dissolved Solids	mg/L	2100	950
MW-31	Boron	mg/L	4.3	4.0
	Fluoride	mg/L	4.6	2.0
MW-32	Lithium	mg/L	0.11	0.10

*Mercury LCLs appear greater than the GPS at all wells although no detections were reported and the LCL is based on the reporting limit. Beginning in the second quarter of 2025 (April 2025 sampling event), the low-level mercury sampling and analysis protocol has been employed to achieve reporting limits of 0.0013 ug/L, below the current LCL of 0.16 ug/L based on the reporting limit.

Unit 3A/B Impoundments

Concentrations that exceed GPS at SSLs are provided in **Table 8** for Unit 3A/B Impoundments. The wells with SSLs over GPS following the April 2025 sample event are consistent with prior exceedances.

Table 8. April 2025 LCLs that Exceed GPS for Unit 3A/B Impoundments

Well	Constituent*	Unit	95% LCL	State GPS
MW-01R	Boron	mg/L	90	4.0
	Fluoride	mg/L	10	2.0
	Lithium	mg/L	2.0	0.10
	Sulfate (as SO ₄)	mg/L	300	250
	Total Dissolved Solids	mg/L	2290	950
MW-02	Boron	mg/L	95	4.0
	Chloride (as Cl)	mg/L	140	120
	Fluoride	mg/L	9.2	2.0
	Lithium	mg/L	1.3	0.10
	Total Dissolved Solids	mg/L	1800	950
MW-03	Calcium	mg/L	350	250
	Chloride (as Cl)	mg/L	140	120
	Sulfate (as SO ₄)	mg/L	270	250
	Total Dissolved Solids	mg/L	1800	950
MW-04	Calcium	mg/L	340	250
	Chloride (as Cl)	mg/L	130	120
	Sulfate (as SO ₄)	mg/L	530	250
	Total Dissolved Solids	mg/L	1700	950
MW-09	Boron	mg/L	5.4	4.0
	Calcium	mg/L	340	250
	Fluoride	mg/L	2.4	2.0
	Lithium	mg/L	0.29	0.10
	Sulfate (as SO ₄)	mg/L	360	250
	Total Dissolved Solids	mg/L	1300	950
MW-10	Boron	mg/L	13	4.0
	Chloride (as Cl)	mg/L	200	120
	Fluoride	mg/L	4.5	2.0
	Lithium	mg/L	0.82	0.10
	Sulfate (as SO ₄)	mg/L	450	250
	Total Dissolved Solids	mg/L	1700	950
MW-11	Boron	mg/L	4.3	4.0

*Mercury LCLs appear greater than the GPS at all wells although no detections were reported and the LCL is based on the reporting limit. Beginning in the second quarter of 2025 (April 2025 sampling event), the low-level mercury sampling and analysis protocol has been employed to achieve reporting limits of 0.0013 ug/L, below the current LCL of 0.16 ug/L based on the reporting limit.

Surface Water Monitoring

The surface water samples collected during the April 2025 sampling event were analyzed for the same list of analytes as the groundwater monitoring locations. For comparison purposes

only, the surface water sample results were compared to the GPS, even though groundwater standards are not applicable to surface water. The list of constituents that exceeded the GPS is provided in **Table 9**.

Table 9. Surface Water Sample Summary		
Surface Water Sample Location	Waterbody Monitored	Constituents that Exceeded GPS*
SG-02	Units 1/2 Impoundment	Fluoride, Sulfate, Mercury
SG-04R	Units 1/2 Impoundment	Calcium, Sulfate, TDS
SG-05	Internal Wetland South	Mercury
SG-07	Internal Wetland North	Mercury

*GPS criteria not for regulatory compliance, only used as a reference value for comparison to groundwater concentrations.

Based on the sampling results, surface water samples collected at the ponds within the boundary of the Units 1/2 Impoundment and within the internal wetland had concentrations exceeding GPS values.

5.0 Summary

The following observations are based on CCR Rule compliance groundwater monitoring during the second quarter 2025:

- One groundwater sampling event was conducted in the second quarter 2025, in April 2025.
- Groundwater flow measured in the second quarter 2025 in the vicinity of Units 1/2 Impoundment is generally radial, with components flowing eastward toward the wetland, north toward SG-02, south toward MW-05, and west toward the Grand River
- Groundwater flow measured in the second quarter in the vicinity of Unit 3A/B Impoundments is primarily west to northwest toward the Grand River.
- No monitoring locations were installed or repaired in the second quarter 2025. Transducers and housing at STW-2 and STW-3 were found to be broken due to ice flow of the river. These locations are being assessed for repair.
- Transducer data indicates surface water from the ponds within Units 1/2 Impoundments infiltrates to groundwater. Groundwater on the south and eastern sides of the Island appear to be discharging to surface water (Grand River South Channel).
- The LCLs were re-calculated after the April 2025 assessment monitoring event and were compared to GPS values. Similar SSLs were identified for Units 1/2 Impoundment as in previous monitoring events.
- The LCLs were re-calculated after the April 2025 assessment monitoring event and were compared to GPS values. Similar SSLs were identified for the Unit 3A/B Impoundments as in previous monitoring events.
- Surface water sampling locations SG-02 and SG-04R collected within the ponds of the Units 1/2 Impoundment were compared to groundwater standards and exceeded the GPS for calcium,

fluoride, sulfate, mercury, and TDS. Surface water samples from the internal wetland exceeded GPS for mercury during the April 2025 sampling event.

A Remedial Investigation Site Specific Data Collection Work Plan was developed in 2025 to assist in the remediation alternatives feasibility assessment and remedy selection process (HDR 2025). The list of data collection activities include:

- Aquifer Test (Pump Test) - The test will be conducted to provide aquifer characterization data and help determine pumping rates from the aquifer.
- Unit 3A/B Ash Delineation - The objective of the ash delineation is to determine the lateral and vertical extent of any CCR present on the roads adjacent to Unit 3A/B Impoundments. Results of the investigation will guide the method selected to remove any potential remaining CCR in the target area.
- Exploratory Borings – Soil samples will be collected to confirm the existence of the suspected clay unit beneath the surficial aquifer, as well as to provide data to inform potential slurry wall construction. Following drilling, monitoring wells will be installed to investigate groundwater flow direction and to assess the vertical extent of any contamination.
- Ash Characterization – Bottom ash samples from the Units 1/2 Impoundment will be collected to characterize the CCR.

Work under the plan is anticipated to begin in the third quarter of 2025, pending budget approvals. Modifications to the current transducer network are being proposed to optimize data collection, including repairs to ice-damaged monitoring locations. Monitoring wells MW-01R and MW-04 are proposed to be replaced during the fourth quarter 2025. The third quarter 2025 assessment monitoring event is scheduled for August 2025.

6.0 References

ERM, 2017. Groundwater Monitoring System Certification for the Grand Haven Board of Light and Power, Environmental Resources Management Michigan, Inc. November 2017.

Golder Associates, Inc., 2018. 2017 Annual Groundwater Monitoring and Corrective Action Report. January 30, 2018.

Golder Associates, Inc., 2018a. Notice of Groundwater Protection Standard Exceedance. October 15, 2018.

Golder Associates, Inc., 2019. CCR Impoundment Ash Delineation at the J.B. Sims Generating Station. October 14, 2019.

Golder Associates, Inc., 2020. 2019 Annual Groundwater Monitoring & Corrective Action Report. January 31, 2020.

Golder Associates, Inc., 2022. Field Summary Report of Results from Approved Work Plan -Piezometer Installation and Additional Data Collection. February 15, 2022.

HDR, 2024, Hydrogeologic Monitoring Plan. November 1, 2024.

HDR, 2024a., Former J.B. Sims Generating Station Determination of Statistically Significant Increases over Background per §257.93(h)(2) and R 299.4440(8) of the Michigan Part 115 Rules. January 24, 2024.

HDR, 2025. Former J.B. Sims Generating Station Remedial Investigation Data Collection Work Plan. July 8, 2025.

Western Michigan University, Department of Geology. "Hydrogeologic Atlas of Michigan, Volume 1". The Department of Geology, Kalamazoo, Michigan. 1981.

Appendix A

Field Data Sheets

Site Name: GH11 Well ID.: MW-01R
Sample I.D.(match bottle and COC form exactly): MW-01R
Personnel: AB
Date: 4/20/25 Static Depth to Water (ft, btoc) 6.78
Date/Time Sample Collected (match bottle and COC form exactly): 4/20/25, 1520
Sample Method: LF
Water level meter, pump, and tubing decontaminated prior: Yes No
Sample QC: Duplicate Yes No Duplicate Sample ID: _____
Sample QC: Equipment Blank Yes No Equip Blank Sample ID: _____
Well Purging Data (Fill In All Blanks)
Depth of Sample Collection (pump depth) (ft, btoc) dedicated tubing
Time Completed: _____ Total Purge _____ Units L

1448 START

[illegible]

Flow Rate ~200mL/min
Pump controller setting 55%
General Comments:

Water Sample Collection Field Data Sheet

Site Name: Grand Haven Well I.D.: MW-02
 Sample I.D. (match bottle and COC form exactly): MW-02
 Personnel: F. Davis Ray Date: 4/19/25
 Static Depth to Water (ft, btoc): 16.44 Well Total Depth (ft, btoc): _____
 Date/Time Sample Collected (match bottle and COC form exactly): 4/19/25 1025
 Sample Method: Peristaltic
 Water level meter, pump, and tubing decontaminated prior: (Yes) No
 Sample QC: Field Duplicate Yes (No) Duplicate Sample I.D.: _____
 Sample QC: Equipment Blank Yes (No) Equip. Blank Sample I.D.: _____
 Well Purging Data (Fill in All Blanks):
 Depth of Sample Collection (pump intake depth; ft, btoc): Ded. ~~16.44~~ tubing (2 ft above bottom)
 Time Completed: 1100 Total Purge: 12 Units: L

Field Measurements:

Time (24-hour)	Amount Purged (L)	pH	COND. (μ S/cm)	TURB. (NTU)	DO (mg/L)	TEMP (C°)	ORP (mV)	Water Depth (ft, btoc)	Flow Rate (mL/min)
0845	START PUMP							16.44	-
0855	1.5	6.99	2469	13.6	1.09	9.6	-101.3	17.35	150
0905	2.75	7.02	2496	11.8	0.76	9.6	-51.4	17.50	125
0915	4.0	7.04	2524	11.3	0.62	9.6	-71.5	17.58	125
0925	5.25	7.06	2601	5.39	0.50	9.7	-91.7	17.66	125
0935	6.5	7.08	2671	2.01	0.46	9.8	-89.9	17.75	125
0945	7.75	7.10	2735	1.95	0.39	9.9	-81.8	17.80	125
0955	9.0	7.12	2838	1.77	0.36	10.3	-107.2	17.85	125
1005	10.25	7.13	2909	0.02	0.38	10.3	-87.6	17.89	125
1010	11.0	7.14	2956	0.02	0.37	10.3	-92.9	17.93	125
1015	11.5	7.15	2990	0.02	0.34	10.3	-98.4	17.95	125
1020	12.0	7.15	3030	0.02	0.38	10.3	-100.8	17.97	125
1025	SAMPLE								
1100	STOP PUMP								

(17.75)
(17.80)

Flow Rate: 125 mL/min
 Pump Controller Setting: Medium 50%
 General Comments: All water quality parameters are stable

12
903
6

Water Sample Collection Field Data Sheet

Site Name: MW-03; LHH Well ID.: MW-03
 Sample I.D.(match bottle and COC form exactly): MW-03
 Personnel: AB
 Date: 4/21/25 Static Depth to Water (ft, btoc) 13.45
 Date/Time Sample Collected (match bottle and COC form exactly): 4/21/25; 1150
 Sample Method: LF Peri
 Water level meter, pump, and tubing decontaminated prior: (Yes) No
 Sample QC: Duplicate Yes (No) Duplicate Sample ID: _____
 Sample QC: Equipment Blank Yes (No) Equip Blank Sample ID: _____
 Well Purging Data (Fill In All Blanks)
 Depth of Sample Collection (pump depth) (ft, btoc) dedicated tubing
 Time Completed: _____ Total Purge _____ Units L

Field Measurements:

1114 START

Time (24 hour)	Amount purged (ml)	pH	COND (mS/cm)	TURB (NTU)	DO (mg/L)	TEMP (C°)	ORP (mV)	Water Depth (ft, btoc)
1118		7.45	2.72	1.64	0.60	9.2	-74.9	13.82
1122		7.45	2.72	0.49	0.45	9.2	-103.9	13.85
1126		7.43	2.70	0.02	0.27	9.1	-132.6	13.96
1130		7.42	2.69	0.02	0.21	9.1	-145.8	13.99
1134		7.41	2.67	0.02	0.17	9.1	-153.0	13.99
1138		7.41	2.64	0.02	0.13	9.1	-165.1	13.99
1142		7.41	2.63	0.02	0.12	9.1	-169.9	13.99
1146		7.40	2.61	0.02	0.11	9.1	-174.8	14.00
1150		7.40	2.60	0.02	0.12	9.1	-178.7	14.00

Flow Rate _____
 Pump controller setting _____
 General Comments:

Site Name: GHHH Well ID.: MW-04

Sample I.D.(match bottle and COC form exactly): MW-04

Personnel: AB

Date: 4/21/25 Static Depth to Water (ft, btoc) 1155

Date/Time Sample Collected (match bottle and COC form exactly): 4/21/25; 1300

Sample Method: LF Peri

Water level meter, pump, and tubing decontaminated prior: Yes No

Sample QC: Duplicate Yes No Duplicate Sample ID: _____

Sample QC: Equipment Blank Yes No Equip Blank Sample ID: _____

Well Purging Data (Fill In All Blanks)

Depth of Sample Collection (pump depth) (ft, btoc) dedicated tubing

Time Completed: _____ Total Purge _____ Units L

1232 STAFF

Flow Rate ~200 mL/min
Pump controller setting 55%
General Comments:

Site Name: C1H11 Well ID.: MW-06
Sample I.D.(match bottle and COC form exactly): MW-06
Personnel: AB
Date: 4/20/25 Static Depth to Water (ft, btoc) 9.35
Date/Time Sample Collected (match bottle and COC form exactly): 4/20/25; 1122
Sample Method: LF Per
Water level meter, pump, and tubing decontaminated prior: Yes No
Sample QC: Duplicate Yes No Duplicate Sample ID: _____
Sample QC: Equipment Blank Yes No Equip Blank Sample ID: _____
Well Purging Data (Fill In All Blanks)
Depth of Sample Collection (pump depth) (ft, btoc) dedicated tubing
Time Completed: 1140 Total Purge _____ Units 2

Start 1050

Flow Rate $\sim 200 \text{ mL/min}$
Pump controller setting $\sim 55\%$
General Comments:

Water Sample Collection Field Data Sheet

Site Name: GHHI Well I.D.: MW-07
 Sample I.D. (match bottle and COC form exactly): MW-07
 Personnel: F. Davis Ray Date: 4/21/25
 Static Depth to Water (ft, btoc): _____ Well Total Depth (ft, btoc): _____
 Date/Time Sample Collected (match bottle and COC form exactly): 4/21/25 1345
 Sample Method: Peristaltic
 Water level meter, pump, and tubing decontaminated prior: ☒ Yes ☐ No
 Sample QC: Field Duplicate Yes ☒ No Duplicate Sample I.D.: _____
 Sample QC: Equipment Blank Yes ☒ No Equip. Blank Sample I.D.: _____
 Well Purging Data (Fill in All Blanks):
 Depth of Sample Collection (pump intake depth; ft, btoc): Dedicated tubing (2 ft above bottom)
 Time Completed: 1410 Total Purge: 6 Units: L

Field Measurements:

Time (24-hour)	Amount Purged (L)	pH	COND. (μS/cm)	TURB. (NTU)	DO (mg/L)	TEMP (C°)	ORP (mV)	Water Depth (ft, btoc)	Flow Rate (mL/min)
1310	START	PUMP							—
1315	1.0	6.87	905	14.9	0.69	9.7	2.8	7.10	200
1320	2.0	6.88	901	11.1	0.55	9.7	-24.1	7.10	200
1325	3.0	6.86	900	9.53	0.37	9.8	-39.5	7.10	200
1330	4.0	6.88	900	7.33	0.34	9.8	-48.7	7.10	200
1335	5.0	6.88	899	8.88	0.32	9.9	-52.6	7.09	200
1340	6.0	6.87	899	8.68	0.33	9.9	-56.9	7.10	200
1345	SAMPLE								
1410	STOP	PUMP							

Flow Rate: 200 mL/min
 Pump Controller Setting: 60-55%
 General Comments:

Site Name: QH1 Well ID.: MW-08
Sample I.D.(match bottle and COC form exactly): MW-08; MWT-08
Personnel: AB
Date: 4/20/25 Static Depth to Water (ft, btoc) 5.95
Date/Time Sample Collected (match bottle and COC form exactly): ~~11/11~~ 4/20/25, 1318
Sample Method: LF Peri
Water level meter, pump, and tubing decontaminated prior: Yes No
Sample QC: Duplicate Yes No Duplicate Sample ID: MWT-08
Sample QC: Equipment Blank Yes No Equip Blank Sample ID: _____
Well Purging Data (Fill In All Blanks)
Depth of Sample Collection (pump depth) (ft, btoc) dedicated tubing
Time Completed: _____ Total Purge _____ Units L

Start 1250

Flow Rate $\sim 200 \text{ mL/min}$
Pump controller setting 5.52
General Comments:

Water Sample Collection Field Data Sheet

Site Name: Grand Haven Well I.D.: MW-09
 Sample I.D. (match bottle and COC form exactly): MW-09
 Personnel: F. Davis Ray Date: 4/19/25
 Static Depth to Water (ft, btoc): 10.39 Well Total Depth (ft, btoc): _____
 Date/Time Sample Collected (match bottle and COC form exactly): 4/19/25 1300
 Sample Method: Peristaltic
 Water level meter, pump, and tubing decontaminated prior: ☒ Yes ☐ No
 Sample QC: Field Duplicate Yes ☒ No Duplicate Sample I.D.: _____
 Sample QC: Equipment Blank Yes ☒ No Equip. Blank Sample I.D.: _____
 Well Purging Data (Fill in All Blanks):
 Depth of Sample Collection (pump intake depth; ft, btoc): Dedicated tubing (2 ft above bottom)
 Time Completed: 1330 Total Purge: 20 Units: L

Field Measurements:

Time (24-hour)	Amount Purged (L)	pH	COND. (μ S/cm)	TURB. (NTU)	DO (mg/L)	TEMP (C°)	ORP (mV)	Water Depth (ft, btoc)	Flow Rate (mL/min)
1115	START	PUMP							10.39
1125	2.0	7.09	1616	86.4	0.53	8.2	-70.2	10.87	200
1135	4.0	7.08	1618	39.2	0.29	8.4	-40.3	11.01	200
1145	6.0	7.08	1627	36.9	0.42	8.5	-55.8	11.07	200
1155	8.0	7.09	1616	29.4	0.31	8.5	-49.7	11.10	200
1205	10.0	7.10	1621	18.0	0.22	8.5	-61.9	11.13	200
1215	12.0	7.10	1633	10.4	0.70	8.8	-67.6	11.15	200
1225	14.0	7.11	1627	7.58	0.84	8.7	-80.3	11.16	200
1235	16.0	7.11	1626	7.72	1.46	8.8	-75.4	11.17	200
1245	18.0	7.12	1626	7.75	1.58	8.9	-73.3	11.16	200
1250	19.0	7.12	1621	2.36	1.61	8.8	-72.6	11.16	200
1255	20.0	7.12	1618	1.94	1.66	8.7	-72.1	11.17	200
1300	SAMPLE								
1330	STOP	PUMP							

Flow Rate: 200 mL/min
 Pump Controller Setting: Medium
 General Comments: - High

12
 903
 6

60-65%

Site Name: CUHH1 Well ID.: MW-10

Sample I.D.(match bottle and COC form exactly): MW-10 / MWT-10

Personnel: AB

Date: 4/20/25 Static Depth to Water (ft, btoc) 7.10

Date/Time Sample Collected (match bottle and COC form exactly): 4/20/25 ; 910

Sample Method: LF Peri

Water level meter, pump, and tubing decontaminated prior: Yes No

Sample QC: Duplicate Yes No Duplicate Sample ID: MWT-10

Sample QC: Equipment Blank Yes No Equip Blank Sample ID: _____

Well Purging Data (Fill In All Blanks)

Depth of Sample Collection (pump depth) (ft, btoc) dedicated tubing

Time Completed: _____ Total Purge _____ Units L

Start: 842

Flow Rate 200 mL/min
Pump controller setting ~55W
General Comments:
black flecks @ start of purge

Site Name: GHHI Well I.D.: MW-11
Sample I.D. (match bottle and COC form exactly): MW-11
Personnel: F. Davis Ray Date: 4/20/25
Static Depth to Water (ft, btoc): _____ Well Total Depth (ft, btoc): _____
Date/Time Sample Collected (match bottle and COC form exactly): 4/20/25 1505
Sample Method: Peristaltic
Water level meter, pump, and tubing decontaminated prior: (Yes) No
Sample QC: Field Duplicate Yes (No) Duplicate Sample I.D.: _____
Sample QC: Equipment Blank Yes (No) Equip. Blank Sample I.D.: _____
Well Purging Data (Fill in All Blanks):
Depth of Sample Collection (pump intake depth; ft, btoc): Dedicated tubing (2 ft)
Time Completed: 1530 Total Purge: 8.0 Units: L

[illegible]

Flow Rate: 200 mL/min
Pump Controller Setting: 50%
General Comments:

Site Name: CWHH Well ID.: MW-12

Sample I.D.(match bottle and COC form exactly): MW-12

Personnel: AB

Date: 4/21/25 Static Depth to Water (ft, btoc) 6.24

Date/Time Sample Collected (match bottle and COC form exactly): 4/21/25; 1412

Sample Method: LF Peri

Water level meter, pump, and tubing decontaminated prior: Yes No

Sample QC: Duplicate Yes No Duplicate Sample ID:

Sample QC: Equipment Blank Yes No Equip Blank Sample ID:

Well Purging Data (Fill In All Blanks)

Depth of Sample Collection (pump depth) (ft, btoc) Dedicated tubing

Time Completed: Total Purge Units L

1344 START

[illegible]

Flow Rate ~ 200 mL / min
Pump controller setting 55%
General Comments:

Site Name: CWHH Well ID.: MW-10

Sample I.D.(match bottle and COC form exactly): MW-10

Personnel: AB

Date: 4/21/25 Static Depth to Water (ft, btoc) 549

Date/Time Sample Collected (match bottle and COC form exactly): 4/21/25; 1520

Sample Method: LF Peri

Water level meter, pump, and tubing decontaminated prior: Yes No

Sample QC: Duplicate Yes No Duplicate Sample ID: _____

Sample QC: Equipment Blank Yes No Equip Blank Sample ID: _____

Well Purging Data (Fill In All Blanks)

Depth of Sample Collection (pump depth) (ft, btoc) dedicated tubing

Time Completed: _____ Total Purge _____ Units 2

14.510 START

[illegible]

Flow Rate ~ 200 mL / min
Pump controller setting SS9
General Comments:

Site Name: GHHI Well I.D.: MW-17 (PZ-17)

Personnel: F. Davis Ray Date: 4/20/25

Date/Time Sample Collected (match bottle and COC form exactly): 4/20/25 1635

Sample QC: Field Duplicate Yes ☒ No ☐ Duplicate Sample I.D.: _____

Well Purging Data (Fill in All Blanks):

Time Completed: 1650 Total Purge: 12 Units: 6

[illegible]

Flow Rate: 300 ml/min
Pump Controller Setting: 75%
General Comments:

General Comments:

Water Sample Collection Field Data Sheet

Site Name: CUHMI Well ID.: MW-18
 Sample I.D.(match bottle and COC form exactly): MW-18
 Personnel: AB
 Date: 4/21/2025 Static Depth to Water (ft, btoc) 7.05
 Date/Time Sample Collected (match bottle and COC form exactly): 4/21/25, 916
 Sample Method: LF Per.
 Water level meter, pump, and tubing decontaminated prior: Yes No
 Sample QC: Duplicate Yes No Duplicate Sample ID:
 Sample QC: Equipment Blank Yes No Equip Blank Sample ID:
 Well Purging Data (Fill In All Blanks)
 Depth of Sample Collection (pump depth) (ft, btoc) dedicated tubing
 Time Completed: 952 Total Purge Units L

Field Measurements:

848 START

Time (24 hour)	Amount purged (ml)	pH	COND (mS/cm)	TURB (NTU)	DO (mg/L)	TEMP (C°)	ORP (mV)	Water Depth (ft, btoc)
852		7.51	1.51	41.2	0.40	7.6	-108.5	7.08
856		7.38	1.51	50.6	0.23	7.5	-116.5	7.08
900		7.32	1.51	19.1	0.16	7.4	-104.1	7.08
904		7.29	1.51	10.3	0.17	7.4	-99.3	7.08
908		7.29	1.50	9.01	0.40	7.4	-97.1	7.08
912		7.28	1.49	6.43	0.41	7.3	-94.1	7.08
916		7.27	1.49	2.18	0.42	7.3	-86.7	7.08

Flow Rate ~200 mL/min
 Pump controller setting 852
 General Comments:

63.5 AB

Site Name: GHHI Well I.D.: MW-19
Sample I.D. (match bottle and COC form exactly): MW-19
Personnel: F. Davis Ray Date: 4/21/25
Static Depth to Water (ft, btoc): _____ Well Total Depth (ft, btoc): _____
Date/Time Sample Collected (match bottle and COC form exactly): 4/21/25 1200
Sample Method: Peristaltic
Water level meter, pump, and tubing decontaminated prior: Yes No
Sample QC: Field Duplicate Yes No Duplicate Sample I.D.: _____
Sample QC: Equipment Blank Yes No Equip. Blank Sample I.D.: _____
Well Purging Data (Fill in All Blanks):
Depth of Sample Collection (pump intake depth; ft, btoc): Dedicated tubing (274
Time Completed: 1220 Total Purge: _____ Units: L

[illegible]

Flow Rate: 200-250 ml/min
Pump Controller Setting: 75%
General Comments:

Site Name: GHHI Well I.D.: MW-20
 Sample I.D. (match bottle and COC form exactly): MW-20
 Personnel: F. Davis Ray Date: 4/21/25
 Static Depth to Water (ft, btoc): _____ Well Total Depth (ft, btoc): _____
 Date/Time Sample Collected (match bottle and COC form exactly): 4/21/25 1045
 Sample Method: Peristaltic
 Water level meter, pump, and tubing decontaminated prior: Yes No
 Sample QC: Field Duplicate Yes No Duplicate Sample I.D.: _____
 Sample QC: Equipment Blank Yes No Equip. Blank Sample I.D.: _____
 Well Purging Data (Fill in All Blanks):
 Depth of Sample Collection (pump intake depth; ft, btoc): Dedicated tubing (2 ft)
 Time Completed: 1110 Total Purge: 6 Units: 6

[illegible]

General Comments:

Water Sample Collection Field Data Sheet

Site Name: GHHI Well I.D.: MW-27
 Sample I.D. (match bottle and COC form exactly): MW-27
 Personnel: F. Davis Ray Date: 4/21/25
 Static Depth to Water (ft, btoc): _____ Well Total Depth (ft, btoc): _____
 Date/Time Sample Collected (match bottle and COC form exactly): 4/21/25 1535
 Sample Method: Peristaltic
 Water level meter, pump, and tubing decontaminated prior: ☒ Yes ☐ No
 Sample QC: Field Duplicate Yes ☒ No Duplicate Sample I.D.: _____
 Sample QC: Equipment Blank Yes ☒ No Equip. Blank Sample I.D.: _____
 Well Purging Data (Fill in All Blanks):
 Depth of Sample Collection (pump intake depth; ft, btoc): Dedicated tubing (2 ft above bottom)
 Time Completed: 1610 Total Purge: 9 Units: L

Field Measurements:

Time (24-hour)	Amount Purged (L)	pH	COND. (μ S/cm)	TURB. (NTU)	DO (mg/L)	TEMP (C°)	ORP (mV)	Water Depth (ft, btoc)	Flow Rate (mL/min)
1430	START							4.51	-
1435	0.75	6.89	787	3.92	0.56	7.7	10.6	4.73	150
1440	1.5	6.91	755	3.39	0.41	7.6	-2.1	4.74	150
1445	2.25	6.90	737	2.44	0.38	7.5	-11.5	4.75	150
1450	3.0	6.89	762	2.73	0.32	7.6	-17.6	4.75	150
1455	3.75	6.89	787	2.62	0.32	7.6	-23.6	4.75	150
1500	4.5	6.89	813	2.17	0.33	7.6	-28.4	4.76	150
1505	5.25	6.89	863	2.49	0.31	7.6	-32.6	4.76	150
1510	6.0	6.89	883	2.77	0.28	7.6	-36.3	4.77	150
1515	6.75	6.88	909	3.15	0.30	7.6	-38.8	4.77	150
1520	7.5	6.88	928	3.08	0.32	7.6	-41.9	4.78	150
1525	8.25	6.89	936	0.44	0.27	7.6	-44.4	4.78	150
1530	9.0	6.89	955	1.77	0.29	7.6	-46.2	4.79	150
1535	SAMPLE								
1610	STOP								

Flow Rate: 150 mL/min
 Pump Controller Setting: 45%

General Comments:

High winds (20 mph SW) and gravel truck hauling dust while collecting samples

* Noticed dedicated tubing stuck downwell upon retrieving equipment (after sampling). Will return tomorrow 4/22 to regrab LL Hg bottle with proper tubing (not lined)

Water Sample Collection Field Data Sheet

Site Name: GHHI Well I.D.: MW-27
 Sample I.D. (match bottle and COC form exactly): MW-27
 Personnel: F. Davis Ray Date: 4/22/25
 Static Depth to Water (ft, btoc): _____ Well Total Depth (ft, btoc): _____
 Date/Time Sample Collected (match bottle and COC form exactly): 4/22/25 1640
 Sample Method: Peristaltic
 Water level meter, pump, and tubing decontaminated prior: ☒ Yes ☐ No
 Sample QC: Field Duplicate Yes ☐ No Duplicate Sample I.D.: _____
 Sample QC: Equipment Blank Yes ☐ No Equip. Blank Sample I.D.: _____
 Well Purging Data (Fill in All Blanks):
 Depth of Sample Collection (pump intake depth; ft, btoc): Dedicated tubing (2 ft above bottom)
 Time Completed: 1645 Total Purge: 4 Units: L

Field Measurements:

Time (24-hour)	Amount Purged (L)	pH	COND. (μ S/cm)	TURB. (NTU)	DO (mg/L)	TEMP (C°)	ORP (mV)	Water Depth (ft, btoc)	Flow Rate (mL/min)
1615	0.75	6.89	1016	7.41	1.32	8.6	63.0	4.90	150
1620	1.5	6.88	1005	4.92	0.64	8.3	47.2	4.92	150
1625	2.25	6.89	1006	6.74	0.56	8.1	38.6	4.91	150
1630	3.0	6.89	1009	5.45	0.51	8.1	33.3	4.92	150
1635	3.75	6.89	1011	4.33	0.49	8.1	30.2	4.92	150
1640	SAMPLE								
1645	STOP PUMP								

Flow Rate: 150 mL/min
 Pump Controller Setting: 45%

General Comments:

Started pump at 1440, returned to grab LL Hg sample due to finding tubing down well (not lined - may have caused contaminated results) on previous purge 4/21

Site Name: GHHI Well I.D.: MW-28 (PZ-28)

Personnel: F. Davis Ray Date: 4/21/25

Date/Time Sample Collected (match bottle and COC form exactly): 4/21/25 1705

Water level meter, pump, and tubing decontaminated prior: ☒ Yes ☐ No

Sample QC: Equipment Blank Yes ☐ No ☒ Equip. Blank Sample I.D.: _____

Well Purging Data (Fill in All Blanks):

Depth of Sample Collection (pump intake depth; ft, btoc): Dedicated tubing, (2 ft above bottom)

Time Completed: 1735 Total Purge: 6 Units: 2

[illegible]

Flow Rate: 200 mL/min

Pump Controller Setting: 55-60%

General Comments:

General Comments: High winds (20 mph SW) with gravel haul trucks (dust)

Site Name: Grand Haven - HI Well I.D.: MW-30
 Sample I.D. (match bottle and COC form exactly): MW-30
 Personnel: F. Davis Ray Date: 4/20/25
 Static Depth to Water (ft, btoc): 5.59 Well Total Depth (ft, btoc): _____
 Date/Time Sample Collected (match bottle and COC form exactly): 4/20/25 0930
 Sample Method: Peristaltic
 Water level meter, pump, and tubing decontaminated prior: (Yes) No
 Sample QC: Field Duplicate Yes (No) Duplicate Sample I.D.: _____
 Sample QC: Equipment Blank Yes (No) Equip. Blank Sample I.D.: _____
 Well Purging Data (Fill in All Blanks):
 Depth of Sample Collection (pump intake depth; ft, btoc): Dedicated tubing (2 ft)
 Time Completed: 1000 Total Purge: 6 Units: L

[illegible]

Flow Rate: 150 mL/min

Pump Controller Setting: Medium

General Comments:

ORP fluctuations between -35 to 30 mV

A hand-drawn diagram of a square. Inside the square, the number 12 is at the top, 9 is on the left, 3 is on the right, and 6 is at the bottom. In the center of the square is a circle with a vertical line passing through it, extending from the top to the bottom.

50%

Water Sample Collection Field Data Sheet

Site Name: GHHI Well I.D.: MW-31 (PZ-31)

Sample I.D. (match bottle and COC form exactly): MW-31

Personnel: F. Davis Ray Date: 4/20/25

Static Depth to Water (ft, btoc): _____ Well Total Depth (ft, btoc): _____

Date/Time Sample Collected (match bottle and COC form exactly): 4/20/25 1140

Sample Method: peristaltic

Water level meter, pump, and tubing decontaminated prior: ☒ Yes ☐ No

Sample QC: Field Duplicate Yes ☒ No Duplicate Sample I.D.: _____

Sample QC: Equipment Blank Yes ☒ No Equip. Blank Sample I.D.: _____

Well Purging Data (Fill in All Blanks):

Depth of Sample Collection (pump intake depth; ft, btoc): Dedicated tubing (2ft above bottom)

Time Completed: 1230 Total Purge: 5 Units: L

Field Measurements:

Time (24-hour)	Amount Purged (L)	pH	COND. (μ S/cm)	TURB. (NTU)	DO (mg/L)	TEMP (C°)	ORP (mV)	Water Depth (ft, btoc)	Flow Rate (mL/min)
1030	START	PUMP							
1040	1.0	7.77	966	0.02	0.80	9.0	-49.4	-	100
1050	1.75	7.76	945	0.02	0.26	8.8	-81.7	-	75
1100	2.5	7.76	949	0.02	0.29	9.0	-94.8	-	75
1110	3.25	7.75	958	0.02	0.22	9.3	-105.1	-	75
1120	4.00	7.74	976	0.02	0.21	9.8	-105.7	-	75
1125	4.5	7.73	985	0.02	0.19	10.1	-106.3	-	75
1130	4.75	7.73	991	0.02	0.11	10.3	-105.8	-	75
1135	5.0	7.73	996	0.02	0.14	10.4	-105.0	-	75
1140	SAMPLE								
1230	STOP	PUMP							

Flow Rate: 75-100 mL/min

Pump Controller Setting: Medium-Low 12
903
6 35-40%

General Comments:

WLM probe would not fit down well cap with dedicated transducer (no measurements recorded)

Site Name: GHHI Well I.D.: MW-32
Sample I.D. (match bottle and COC form exactly): MW-32
Personnel: F. Davis Ray Date: 4/20/25
Static Depth to Water (ft, btoc): ~~6.09~~ Well Total Depth (ft, btoc): _____
Date/Time Sample Collected (match bottle and COC form exactly): 4/20/25 1335
Sample Method: Peristaltic
Water level meter, pump, and tubing decontaminated prior: Yes No
Sample QC: Field Duplicate Yes No Duplicate Sample I.D.: _____
Sample QC: Equipment Blank Yes No Equip. Blank Sample I.D.: _____
Well Purging Data (Fill in All Blanks):
Depth of Sample Collection (pump intake depth; ft, btoc): Dedicated tubing (2 ft)
Time Completed: 1400 Total Purge: 8 Units: 1

[illegible]

Flow Rate: 200 ml/min
Pump Controller Setting: 60-65%
General Comments:

Water Sample Collection Field Data Sheet

Site Name: Grand Haven Well I.D.: MW-33
 Sample I.D. (match bottle and COC form exactly): MW-33
 Personnel: F. Davis Ray Date: 4/19/25
 Static Depth to Water (ft, btoc): 176 Well Total Depth (ft, btoc): _____
 Date/Time Sample Collected (match bottle and COC form exactly): 4/19/25 1525
 Sample Method: Peristaltic
 Water level meter, pump, and tubing decontaminated prior: (Yes) No
 Sample QC: Field Duplicate Yes (No) Duplicate Sample I.D.: _____
 Sample QC: Equipment Blank Yes (No) Equip. Blank Sample I.D.: _____
 Well Purging Data (Fill in All Blanks):
 Depth of Sample Collection (pump intake depth; ft, btoc): Dedicated tubing (2 ft above bottom)
 Time Completed: 1550 Total Purge: 14 Units: L

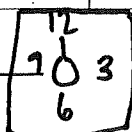
Field Measurements:

Time (24-hour)	Amount Purged (L)	pH	COND. (μ S/cm)	TURB. (NTU)	DO (mg/L)	TEMP (C°)	ORP (mV)	Water Depth (ft, btoc)	Flow Rate (mL/min)
1410	START	PUMP							-
1420	2.0	7.17	487.9	4.32	0.31	8.0	39.4	2.03	200
1430	4.0	7.07	500	1.22	0.43	8.1	-20.7	2.05	200
1440	6.0	6.93	540	0.64	0.21	7.9	-42.3	2.06	200
1450	8.0	6.87	568	0.02	0.46	7.7	-33.5	2.06	200
1500	10.0	6.83	595	0.02	0.27	7.8	-46.0	2.07	200
1510	12.0	6.81	615	0.02	0.27	7.8	-47.5	2.06	200
1515	13.0	6.81	623	0.02	0.28	7.8	-48.3	2.06	200
1520	14.0	6.80	631	0.02	0.26	7.8	-48.4	2.05	200
1525	SAMPLE								
1550	STOP PUMP								

Flow Rate: 200 mL/min

Pump Controller Setting: Medium

General Comments:



50%

Site Name: GHHI Well ID.: MW-34
Sample I.D.(match bottle and COC form exactly): MW-34
Personnel: AB
Date: 4/21/25 Static Depth to Water (ft, btoc) 4.44
Date/Time Sample Collected (match bottle and COC form exactly): 4/21/25; 1632
Sample Method: LF Peri
Water level meter, pump, and tubing decontaminated prior: Yes No
Sample QC: Duplicate Yes No Duplicate Sample ID: _____
Sample QC: Equipment Blank Yes No Equip Blank Sample ID: _____
Well Purging Data (Fill In All Blanks)
Depth of Sample Collection (pump depth) (ft, btoc) dedicated tubing
Time Completed: _____ Total Purge _____ Units L

1600 START

[illegible]

Pump controller setting

General Comments: Slight gasoline / BTEX odor

Water Sample Collection Field Data Sheet

Site Name: GLHI Well I.D.: MW-36
 Sample I.D. (match bottle and COC form exactly): MW-36
 Personnel: F. Davis Ray Date: 4/21/25
 Static Depth to Water (ft, btoc): _____ Well Total Depth (ft, btoc): _____
 Date/Time Sample Collected (match bottle and COC form exactly): 4/21/25 0915
 Sample Method: Peristaltic
 Water level meter, pump, and tubing decontaminated prior: Yes No
 Sample QC: Field Duplicate Yes No Duplicate Sample I.D.: _____
 Sample QC: Equipment Blank Yes No Equip. Blank Sample I.D.: _____
 Well Purging Data (Fill in All Blanks):
 Depth of Sample Collection (pump intake depth; ft, btoc): Dedicated tubing (2 ft above bottom)
 Time Completed: 0940 Total Purge: 25 Units: L

Field Measurements:

Time (24-hour)	Amount Purged (L)	pH	COND. (μ S/cm)	TURB. (NTU)	DO (mg/L)	TEMP (C°)	ORP (mV)	Water Depth (ft, btoc)	Flow Rate (mL/min)
0730	START	PUMP						8.75	-
0740	2.5	9.77	444.4	18.3	0.54	9.2	12.7	8.81	250
0750	5.0	9.35	473.7	5.58	0.21	8.9	8.7	8.83	250
0755	6.25	9.24	478.4	3.24	0.26	8.7	-4.9	8.82	250
0800	7.5	9.18	480.7	2.07	0.19	8.6	-24.6	8.83	250
0805	8.75	9.14	480.2	3.59	0.18	8.5	-58.1	8.83	250
0810	10.0	9.11	480.7	1.87	0.17	8.4	-94.3	8.82	250
0820	12.5	9.05	481.8	1.21	0.13	8.4	-125.5	8.83	250
0830	15.0	9.01	481.3	0.02	0.11	8.3	-160.9	8.82	250
0840	17.5	9.00	480.4	0.02	0.15	8.3	-164.4	8.83	250
0850	20.0	8.97	482.1	0.02	0.08	8.2	-192.3	8.83	250
0900	22.5	8.97	481.2	0.02	0.10	8.2	-213.5	8.82	250
0905	23.75	8.96	480.9	0.02	0.07	8.2	-217.8	8.83	250
0910	25.0	8.95	480.7	0.02	0.12	8.2	-223.0	8.83	250
0915	SAMPLE								
0940	STOP	PUMP							

Flow Rate: 250 mL/min
 Pump Controller Setting: 60-65%

General Comments:

ORP readings gradually declined while purging - inconsistent with previous data sheet

Site Name: GHH1 Well ID: MW-37

Sample I.D. (match bottle and COC form exactly): MW-37

Personnel: AB

Date: 4/20/25 Static Depth to Water (ft, btoc) 9.33

Date/Time Sample Collected (match bottle and COC form exactly): 4/20/25; 1638

Sample Method: LF Per

Water level meter, pump, and tubing decontaminated prior: (Yes) No

Sample QC: Duplicate Yes (No) Duplicate Sample ID:

Sample QC: Equipment Blank Yes (No) Equip Blank Sample ID:

Well Purging Data (Fill In All Blanks)

Depth of Sample Collection (pump depth) (ft, btoc) dedicated tubing

Time Completed: Total Purge Units L

1604 START

Flow Rate $\sim 200 \text{ ml/min}$

Pump controller setting 5320

General Comments:

General Comments: tubing hit bottom or start of purge, clean flow cell

Site Name: CHH1 Well ID.: MW-38
Sample I.D.(match bottle and COC form exactly): MW-38
Personnel: AB
Date: 4/20/25 Static Depth to Water (ft, btoc) 10.28
Date/Time Sample Collected (match bottle and COC form exactly): 4/20/25, 1030
Sample Method: LF Per
Water level meter, pump, and tubing decontaminated prior: Yes No
Sample QC: Duplicate Yes No Duplicate Sample ID: _____
Sample QC: Equipment Blank Yes No Equip Blank Sample ID: _____
Well Purging Data (Fill In All Blanks)
Depth of Sample Collection (pump depth) (ft, btoc) dedicated tubing
Time Completed: _____ Total Purge _____ Units L

Start 800

[illegible]

Pump controller setting 20%, lowest w/ out shutoff
General Comments:

General Comments:

Water Sample Collection Field Data Sheet

Site Name: GHH1 Well I.D.: SG-02
 Sample I.D. (match bottle and COC form exactly): SG-02
 Personnel: AB Date: 4/22/2025
 Static Depth to Water (ft, btoc): ~6" below Well Total Depth (ft, btoc): ~6" surface
 Date/Time Sample Collected (match bottle and COC form exactly): 4/22/2025; 1525
 Sample Method: LF Peri
 Water level meter, pump, and tubing decontaminated prior: (Yes) No
 Sample QC: Field Duplicate Yes (No) Duplicate Sample I.D.: _____
 Sample QC: Equipment Blank Yes (No) Equip. Blank Sample I.D.: _____
 Well Purging Data (Fill in All Blanks):
 Depth of Sample Collection (pump intake depth; ft, btoc): ~6" below
 Time Completed: _____ Total Purge: _____ Units: _____

Field Measurements:

Time (24-hour)	Amount Purged (L)	pH	COND. (μ S/cm)	TURB. (NTU)	DO (mg/L)	TEMP (C°)	ORP (mV)	Water Depth (ft, btoc)	Flow Rate (mL/min)
		8.38	0.640	9.08	9.53	14.8	33.2		
SW Sample									

Flow Rate: _____
 Pump Controller Setting: _____
 General Comments: _____

Water Sample Collection Field Data Sheet

Site Name: GHH1 Well I.D.: 56-04R

Sample I.D. (match bottle and COC form exactly): SH-04R

Personnel: AB R Date: 4/22/2025

Static Depth to Water (ft, btoc): _____ Well Total Depth (ft, btoc): 26" top

Date/Time Sample Collected (match bottle and COC form exactly): 4/22/25; 1510

Sample Method: grad

Water level meter, pump, and tubing decontaminated prior: Yes No

Sample QC: Field Duplicate Yes (No) Duplicate Sample I.D.: _____

Sample QC: Equipment Blank Yes ☐ No ☒ Equip. Blank Sample I.D.: _____

Well Purging Data (Fill in All Blanks):

Depth of Sample Collection (pump intake depth; ft, btoc): ~6" below

Time Completed: _____ Total Purge: _____ Units: 1

Field Measurements:

[illegible]

Flow Rate: _____

Pump Controller Setting: _____

General Comments:

Site Name: GHHI Well I.D.: SG-05
Sample I.D. (match bottle and COC form exactly): SG-05
Personnel: AB/FDR Date: 4/22/25
Static Depth to Water (ft, btoc): ~ 6" below Well Total Depth (ft, btoc): ~ 6" below
Date/Time Sample Collected (match bottle and COC form exactly): 4/22/25; 1545
Sample Method: grab
Water level meter, pump, and tubing decontaminated prior: (Yes) No
Sample QC: Field Duplicate Yes (No) Duplicate Sample I.D.: _____
Sample QC: Equipment Blank Yes (No) Equip. Blank Sample I.D.: _____
Well Purging Data (Fill in All Blanks):
Depth of Sample Collection (pump intake depth; ft, btoc): ~ 6" below
Time Completed: _____ Total Purge: _____ Units: L

Time (24-hour)	Amount Purged (L)	pH	COND. ($\mu\text{S}/\text{cm}$)	TURB. (NTU)	DO (mg/L)	TEMP ($^{\circ}\text{C}$)	ORP (mV)	Water Depth (ft, btoc)	Flow Rate (mL/min)
		8.22	0.898	6.11	10.06	16.5	31.7	—	—
SW SAMPLE									

Flow Rate: _____
Pump Controller Setting: _____
General Comments: _____

Site Name: CHH1 Well ID.: SG-06

Sample I.D.(match bottle and COC form exactly): SG-06

Personnel: AB

Date: 4/20/25 Static Depth to Water (ft, btoc) DRY

Date/Time Sample Collected (match bottle and COC form exactly): _____

Sample Method: _____

Water level meter, pump, and tubing decontaminated prior: Yes ☒ No

Sample QC: Duplicate Yes ☒ No Duplicate Sample ID: _____

Sample QC: Equipment Blank Yes ☒ No Equip Blank Sample ID: _____

Well Purging Data (Fill In All Blanks)

Depth of Sample Collection (pump depth) (ft, btoc) _____

Time Completed: _____ Total Purge _____ Units _____

Time (24 hour)	Amount purged (ml)	pH	COND (mS/cm)	TURB (NTU)	DO (mg/L)	TEMP (C°)	ORP (mV)	Water Depth (ft, btoc)
D R Y								

DRY

Water Sample Collection Field Data Sheet

Site Name: CHHI Well I.D.: SL-07
 Sample I.D. (match bottle and COC form exactly): SL-07
 Personnel: AB/FDR Date: 4/22/25
 Static Depth to Water (ft, btoc): ~6" below Well Total Depth (ft, btoc): ~6" below
 Date/Time Sample Collected (match bottle and COC form exactly): 4/22/25; 1600
 Sample Method: grab
 Water level meter, pump, and tubing decontaminated prior: Yes ~~No~~
 Sample QC: Field Duplicate Yes No Duplicate Sample I.D.: _____
 Sample QC: Equipment Blank Yes No Equip. Blank Sample I.D.: _____
 Well Purging Data (Fill in All Blanks):
 Depth of Sample Collection (pump intake depth; ft, btoc): ~6" below
 Time Completed: _____ Total Purge: _____ Units: L

Field Measurements:

Time (24-hour)	Amount Purged (L)	pH	COND. (μ S/cm)	TURB. (NTU)	DO (mg/L)	TEMP (C°)	ORP (mV)	Water Depth (ft, btoc)	Flow Rate (mL/min)
—		8.44	472.7	5.03	12.98	13.1	20.4	~6" bto	—
SW SAMPLE									

Flow Rate: _____
 Pump Controller Setting: _____
 General Comments: _____

Water Level Sweep – Measurement and Inspection Form

Site: GHHI

Sample Event: April 2025

Field Personnel: AB/FDR

Date: 4/22¹⁸/2025

Well I.D.	Date	Well Type (e.g., Flush Mount, Stickup, Other)	Well Diameter (e.g., 1 inch, 2 inch, 4 inch)	Well Pad Condition (e.g., good, average, bad)	Prior Date Depth to Water (ft, btoc)	Current Depth to Water (ft, btoc)	Total Depth (ft, btoc)	Notes/Comments
MW-01R	4/22/25		2"	Good		6.81		
-02	↓		↓	↓		16.44		
-03	↓		↓	↓		13.64		
-04	↓		↓	↓		11.78		
-05	↓		↓	↓		6.91		
-06	↓		↓	↓		9.26		
-07	↓		↓	↓		7.18		
-08	↓		↓	↓		5.85		
-09	↓		↓	↓		10.30		
-10	↓		↓	↓		6.83		
-11	↓		↓	↓		14.25		
-12	↓		↓	↓		6.55		
-13	↓		↓	↓		6.64		
-14	↓		↓	↓		6.76		
-15	↓		↓	↓		12.58		
-16	↓		↓	↓		5.84		
-17	↓		↓	↓		6.92		
-18	↓		↓	↓		6.91		
-19	↓		↓	↓		5.85		
-20	↓		↓	↓		5.83		
-21	↓		↓	↓		_____		
-22	↓		↓	↓		_____		
-23	↓		↓	↓		7.54		
-24	↓		↓	↓		7.42		
-25	↓		↓	↓		7.21		

Water Level Sweep – Measurement and Inspection Form

Site: GHH1

Sample Event: April 2025

Field Personnel: AB/FDR

Date: 4/22¹⁸/2025

Well I.D.	Date	Well Type (e.g., Flush Mount, Stickup, Other)	Well Diameter (e.g., 1 inch, 2 inch, 4 inch)	Well Pad Condition (e.g., good, average, bad)	Prior Date Depth to Water (ft, btoc)	Current Depth to Water (ft, btoc)	Total Depth (ft, btoc)	Notes/Comments
-26	4/22/25		2"	good		5.95		
-27	↓		↓	↓		4.14		
-28	↓		↓	↓		8.76		
-29	↓		↓	↓		3.72		
-30	↓		↓	↓		5.34		
-31	↓		↓	↓		5.27		
-32	↓		↓	↓		6.09		
-33	↓		↓	↓		2.09		
-34	↓		↓	↓		4.79		
-35	↓		↓	↓		8.18		
-36	↓		↓	↓		8.89		
-37	↓		↓	↓		9.33		
-38	↓		↓	↓		10.23		
-39	↓		↓	↓		6.98		
-40	↓		↓	↓		5.13		
SG-01	↓		↓	↓		DRY		
-02	↓		↓	↓		1.74		
-03	↓		↓	↓		0.38		
-04R	↓		↓	↓		0.53		
-05	↓		↓	↓		DRY		TDucer Drive @ 1.44 btoc
-06	↓		↓	↓		DRY		
-07	↓		↓	↓		1.06		
STW-1	↓		↓	↓		DRY/UNDER		Drive Pt @ 5.04
STW-2	↓		↓	↓		7.40		estimated (no case)
STW-3	↓		↓	↓		13.74		

Appendix B

Data Validation Reports

Data Verification & Validation Report

Grand Haven-Harbor Island

Sampling Event (dates and purpose): Quarterly Assessment Monitoring

Data Package Number: 25D1114, 25D1122

Lab Report Date: 5/7/2025, 5/29/2025

Data Validator: Andrew Byks

Data Validation Completion Date: 6/11/2025

General Overall Assessment:

- ☐ Data are usable without qualification.
- ☒ Data are usable with qualification (as noted below).
- ☐ Some or all data are unusable (as noted below).

Wells planned for sampling:

Unit 3A/B	Unit 1/2	Well Designation	Well ID	Planned for Sampling
✓	✓	Nature & Extent	MW-01R	X
✓		Point of Compliance	MW-02	X
✓		Point of Compliance	MW-03	X
✓		Point of Compliance	MW-04	X
	✓	Point of Compliance	MW-06	X
✓	✓	Nature & Extent	MW-07	X
	✓	Point of Compliance	MW-08	X
✓	✓	Nature & Extent	MW-09	X
✓	✓	Nature & Extent	MW-10	X
✓		Point of Compliance	MW-11	X
✓		Point of Compliance	MW-12	X
	✓	Nature & Extent	MW-16	X
	✓	Nature & Extent	MW-17	X
	✓	Point of Compliance	MW-18	X
	✓	Point of Compliance	MW-19	X
	✓	Point of Compliance	MW-20	X
✓	✓	Background	MW-27	X
	✓	Nature & Extent	MW-28	X
	✓	Point of Compliance	MW-30	X
	✓	Point of Compliance	MW-31	X
✓	✓	Nature & Extent	MW-32	X
✓	✓	Background	MW-33	X
✓	✓	Background	MW-34	X
	✓	Nature & Extent	MW-36	X
	✓	Nature & Extent	MW-37	X
✓		Nature & Extent	MW-38	X
✓	✓	Surface Water	SG-02	X
✓	✓	Surface Water	SG-04R	X
✓	✓	Surface Water	SG-05	X
✓	✓	Surface Water	SG-07	X

Data Summary

Sample ID	Matrix	Lab ID	Date Collected	App III Metals	App IV Metals	Part 115 Metals	Alkalinity/ Anions	TDS TSS	Rad-226 Rad-228	Diss. Metals
MW-02	GW	25D1114-01	4/19/2025	X	X	X	X	X	X	
MW-09	GW	25D1114-02	4/19/2025	X	X	X	X	X	X	
MW-33	GW	25D1114-03	4/19/2025	X	X	X	X	X	X	
MW-30	GW	25D1114-04	4/20/2025	X	X	X	X	X	X	
MW-31	GW	25D1114-05	4/20/2025	X	X	X	X	X	X	
MW-32	GW	25D1114-06	4/20/2025	X	X	X	X	X	X	
MW-11	GW	25D1114-07	4/20/2025	X	X	X	X	X		
MW-17	GW	25D1114-08	4/20/2025	X	X	X	X	X	X	
MW-10	GW	25D1114-09	4/20/2025	X	X	X	X	X	X	
MWT-10	GW	25D1114-10	4/20/2025	X	X	X	X	X	X	
MW-38	GW	25D1114-11	4/20/2025	X	X	X	X	X	X	
MW-06	GW	25D1114-12	4/20/2025	X	X	X	X	X	X	
MW-08	GW	25D1114-13	4/20/2025	X	X	X	X	X	X	
MWT-08	GW	25D1114-14	4/20/2025	X	X	X	X	X	X	
MW-01R	GW	25D1114-15	4/20/2025	X	X	X	X	X	X	
MW-37	GW	25D1114-16	4/20/2025	X	X	X	X	X	X	
MW-36	GW	25D1114-19	4/21/2025	X	X	X	X	X	X	
MW-20	GW	25D1114-20	4/21/2025	X	X	X	X	X	X	
MW-19	GW	25D1114-21	4/21/2025	X	X	X	X	X	X	
MW-07	GW	25D1114-22	4/21/2025	X	X	X	X	X	X	
MW-27	GW	25D1114-23	4/21/2025	X	X*	X	X	X	X	
MW-28	GW	25D1114-24	4/21/2025	X	X	X	X	X	X	
MW-18	GW	25D1114-25	4/21/2025	X	X	X	X	X	X	
MW-03	GW	25D1114-26	4/21/2025	X	X	X	X	X		
MW-04	GW	25D1114-27	4/21/2025	X	X	X	X	X	X	
MW-12	GW	25D1114-28	4/21/2025	X	X	X	X	X	X	
MW-16	GW	25D1114-29	4/21/2025	X	X	X	X	X	X	
MW-34	GW	25D1114-30	4/21/2025	X	X	X	X	X	X	
SG-04	SW	25D1114-31	4/22/2025	X	X	X	X	X		
SG-02	SW	25D1114-32	4/22/2025	X	X	X	X	X		
SG-05	SW	25D1114-33	4/22/2025	X	X	X	X	X		
SG-07	SW	25D1114-34	4/22/2025	X	X	X	X	X		
MW-27	GW	25D1114-35	4/22/2025		X*					

Other analytes requested for analysis: Na, Mg, K, HCO₃, CO₃, hardness

Any planned sampling or analysis NOT completed? If yes, explain: Samples for Rad-226 and Rad-228 were collected for wells MW-03 and MW-11 in the field and delivered to Trace Analytical Laboratories. Samples were shipped via FedEx to the subcontracted Eurofins South Bend laboratory and were misplaced during transit. Additional sample volume was not available, and analysis was not able to be completed for Rad-226 and Rad-228 for the samples.

*The sample collected at MW-27 for Hg was broken upon transfer to storage after sampling on April 21, 2025. MW-27 was purged and this sample container was collected again the following day, April 22, 2025.

Data Verification & Validation Checklist

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)
	Yes	No		Yes	No	N/A	
Field Data							
Sample Collection Field Forms	X		Purging performed as required in the Groundwater Monitoring Plan	X			
Field Calibration Records	X		Field instruments calibrated daily according to manufacturer specifications	X			
Chain of Custody	X		Accurately reflect samples, collection dates/times, analyses, bottles, etc.	X			
Field decontamination documentation	N/A		Record of decontamination for non-dedicated sampling equipment			X	
Drilling logs	X		N/A	-	-	-	
Well construction logs	X		N/A	-	-	-	
Well development field forms	X		N/A	-	-	-	
Analytical Data Package							
Cover Sheet	X		N/A	-	-	-	
Case Narrative	X		Summarizes sample receipt and any exceptions to QC acceptance criteria	X			
Internal Laboratory Chain of Custody forms	X		Analyses as requested; accurate transcription of field COC		X		2 samples lost by FedEx for Rad-226 and Rad-228
Sample Chronology and Consistency	X		Accurate representation of dates, times of receipt, preparation, and analysis	X			
Communication Records with Lab	X		E-mail records saved with final report	X			
EDD Format Consistency	X		EDD format and content as requested	X			
Sample Identification, Results Nomenclature, and Data Qualifier Consistency	X		All included in final report	X			
Method Detection Limit Consistency	X		MDLs consistent between samples		X		Dilution varies between samples
Instrument Calibration Records	X		Present and no nonconformance noted	X			
Laboratory Report Complete	X		Includes QC component	X			
Holding Times	X		Analyses performed within allowed holding time		X		pH required qualification in all samples

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)	
	Yes	No		Yes	No	N/A		
Method	X		Method as requested	X				
Reporting Limits	X		RLs as requested		X		RLs for the following were not met B – 1 sample (results > RL) Ca – 7 samples (results > RL) Chloride – 1 sample (result > RL) Fe – 6 samples (results > RL) Li – 7 samples (results > RL) Na – 7 samples (results > RL) SO4 – 15 samples (results > RL) TDS – 32 samples (results > RL)	
			MDLs<RLs	X				
			MDLs<GPS	X				
QC Validation								
Evaluate Accuracy								
Matrix Spike (Recovery)	X		See “Minimum QC Procedures for Project Parameters” table	X				
Laboratory Control Sample (Recovery)	X		See “Minimum QC Procedures for Project Parameters” table	X				
Evaluate Precision								
Matrix Spike Duplicate (RPD)	X		See “Minimum QC Procedures for Project Parameters” table	X				
Field Duplicate (RPD)	X		RPD ≤ 20%		X		See Below.	
Evaluate Representativeness								
Equipment Blanks (if applicable)	N/A		Non-detect (<RL)			X		
QC Verification								
Verify Instrument Calibration & Analytical Process								
Initial Calibration Verification	X		Laboratory-determined	-	-	-		
Continuing Calibration Verification	X		Laboratory-determined	-	-	-		
Initial Calibration Blank	X		Laboratory-determined	-	-	-		
Continuing Calibration Blank	X		Laboratory-determined	-	-	-		
Serial Dilutions	X		Laboratory-determined	-	-	-		
Post-Digestion Spikes	X		Laboratory-determined	-	-	-		
Internal Standards	X		Laboratory-determined	-	-	-		
Laboratory Duplicate (RPD)	X		Laboratory-determined	-	-	-		
Method Blanks	X		Laboratory-determined	-	-	-		
Evaluate Completeness (# usable measurements/ # unusable measurements)								
Completeness	X		100%	X				

Comments:

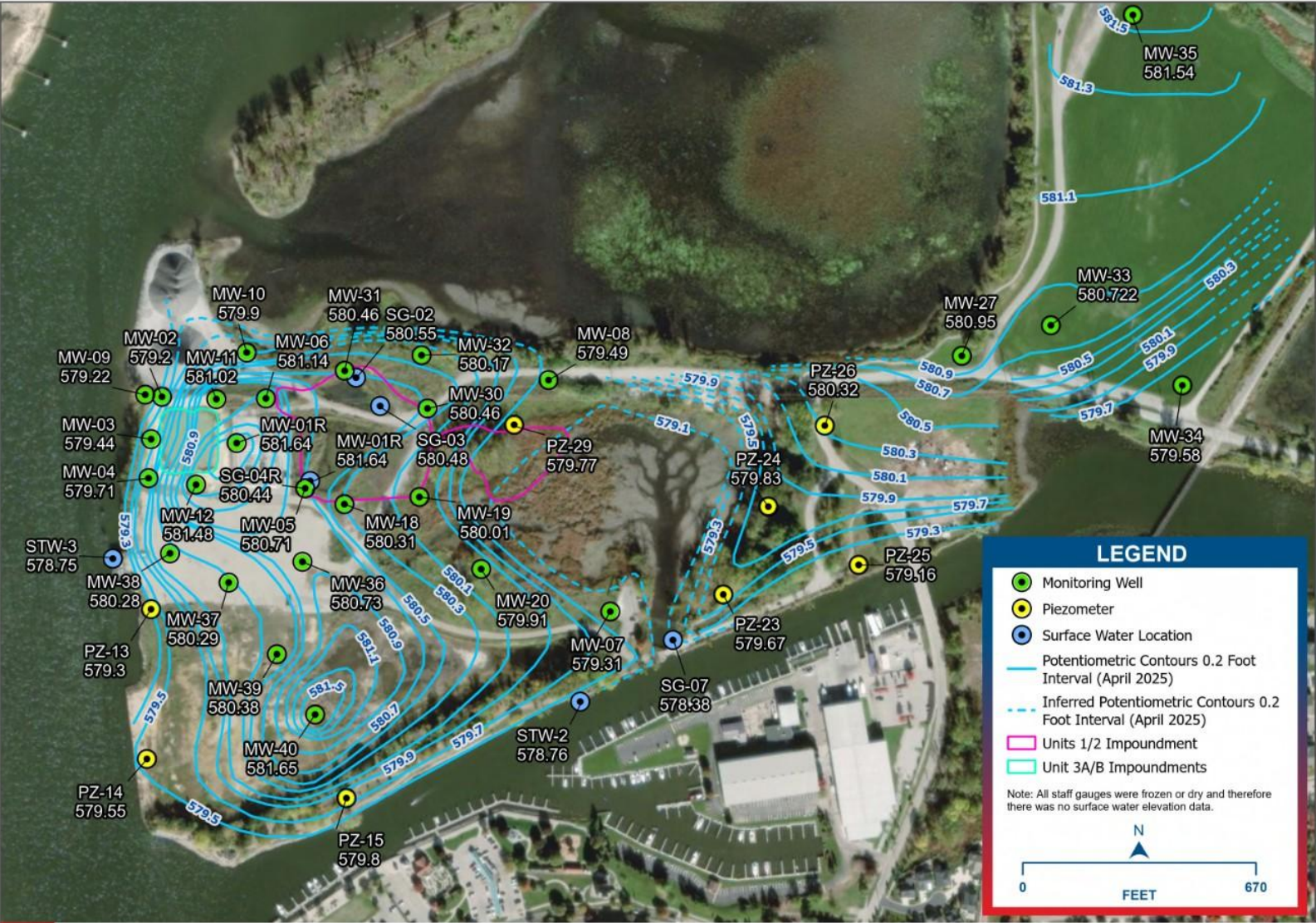
pH in 32 samples required qualification as estimated (J) due to analysis outside the EPA-established 24-hour hold time.

Copper and lead were detected in parent sample MW-08, but were not detected in field duplicate MWT-08. Copper and lead in parent sample MW-08 required qualification as estimated with high bias (J+) and in field duplicate MWT-08 as estimated but not detected (UJ).

The RPDs of Rad-226, Rad-228, and Combined Rad 226+228 were outside of control limits for the MW-10/MWT-10 parent sample and field duplicate pair. Rad-226, Rad-228, and Combined Rad-226+228 required qualification as estimated with low bias (J-) in parent sample MW-10 and as estimated with high bias (J+) in field duplicate MWT-10.

Appendix C

Potentiometric Surface Map



Appendix D

Analytical Data Tables

Sample Location: Compliance Phase: Sample Date: Sample Type: Unit: Sample Matrix:		MW-01R															
		Background Monitoring								AM/DM Round							
		11/29/2022	1/3/2023	2/8/2023	3/14/2023	4/18/2023	5/23/2023	6/28/2023	8/8/2023	10/24/2023	2/13/2024	4/10/2024	7/18/2024	10/16/2024	2/25/2025	4/20/2025	
		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	
		Unit 3A/B & 1/2															
		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	
Constituent	Unit	Fraction															
Field Parameters																	
Conductivity	mS/cm	N	2.39	3.06	2.731	2.595	3	3.1	3.23	3.22	3.13	2.51	2.87	3.13	2.89	2.97	2.71
Dissolved Oxygen	mg/L	N	0.08	0.05	0.07	0.28	0.11	0.03	0.01	0.01	0.03	0.22	1.35	0.01	0.01	0.02	0.05
Oxidation Reduction Potential	mV	N	42.3	3.6	-155.6	-185.5	-202.3	-210.1	-163.8	-165.1	-126.2	-57.3	-197.9	-316.1	7.7	-80.5	-203.4
pH	su	N	7.74	6.02	7.75	7.76	7.75	7.8	7.81	7.68	7.71	7.52	7.58	7.73	7.72	7.75	7.81
Temperature	deg c	N	12.5	9	6.9	5.9	7.2	10.7	13.5	17.2	16.1	6.1	7.5	16.3	17	7.4	8.6
Turbidity	NTU	N	0.02	0.26	0.17	0.02	0.02	0.02	0.02	1.33	0.95	1.79	0.02	0.02	1.36	0.02	0.02
Appendix III																	
Boron	mg/L	T	100	110	73	70	78	110	150 J+	140 D	160 D	38 D	64 D	150 D	130 D	120 D	100 D
Calcium	mg/L	T	240	200	290	310	280	240	210 D	160 D	130 D	400 D	350 D	160 D	160 D	190 D	260 D
Chloride	mg/L	T	150	160	52	120	130	150	170 D	180 D	210 D	49 D	67 D	170 D	150 D	120 D	94 D
Fluoride	mg/L	T	14	14	9.5	8.1	8.8	10	15 D	14 D	14 D	4.8 D	6.7 D	15 D	16 D	14 D	11 D
Sulfate (as SO4)	mg/L	T	590	400	350	780	780	540	290 D	110 D	8.8 D	980 D	810 D	100 D	130 D	310 D	570 D
Total Dissolved Solids	mg/L	T	2400 J-	2300	2200	2100	2400	2400	2400 D	2400 D	2600 D	2200 D	2300	2500 D	2300 D	2400 D	2300 D
Appendix IV																	
Antimony	mg/L	T	0.00033	0.00023 J	< 0.00025 U	0.00034	0.0012	< 0.00050 U	0.00071 JD	0.00025	0.00022 J	< 0.00050 UD	0.00017 J	0.00018 J	0.00019 J	0.00021 J	0.00018 J
Arsenic	mg/L	T	0.0020	0.0015	0.0013	0.0013	0.00077	0.00073	0.0019 J+	0.0017	0.0013	0.0041	0.0013	0.0014	0.0015	0.0013	0.0013
Barium	mg/L	T	0.30	0.30	0.25	0.22	0.21	0.29	0.29 D	0.38	0.56	0.54 D	0.20	0.33	0.42	0.38	0.40
Beryllium	mg/L	T	0.00021 J	0.00032	0.00020 J	0.00020 J	0.00012 J	0.00020 J	0.00036 J+	0.00035	0.00026	0.00015 J	< 0.000052 U	0.00013 J	< 0.000052 U	0.00012 J	0.00017 J
Cadmium	mg/L	T	0.00011 J	0.000062 J	< 0.00016 U	< 0.000032 U	< 0.00016 U	< 0.00038 U	0.00034 J+	< 0.000075 U	< 0.000075 U	< 0.00038 UD	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Chromium, Total	mg/L	T	0.0013	0.0024	0.0016	0.0016	0.0013	0.0019	0.0043	0.0037	0.0022	0.022	0.0013	0.0033	0.0021	0.0019	0.0017
Cobalt	mg/L	T	0.0011	0.0012	0.0011	0.0023	0.0017	0.00081	0.0045 J+	0.0016	0.001	0.0040	0.00064	0.0011	0.00095	0.0011	0.00098
Fluoride	mg/L	T	14	14	9.5	8.1	8.8	10	15 D	14 D	14 D	4.8 D	6.7 D	15 D	16 D	14 D	11 D
Lead	mg/L	T	0.0014	0.00082	< 0.0011 U	0.00044 J	< 0.0011 U	0.00080 J	0.0053 J+	0.0010 JD	0.00074	0.0017 JD	0.00035 J	0.00062 JD	0.00069 JD	0.00087 JD	0.00038 J
Lithium	mg/L	T	2.2	2.8	1.6	1.7	1.5	2.3	3.2 D	3.3	3.4 D	0.77 D	1.5	2.9 D	2.6 D	2.7 D	2.1 D
Mercury	mg/L	T	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00000016 U
Molybdenum	mg/L	T	0.0011 J	0.00062 J	0.00076 J	0.0020	< 0.0031 U	0.00033 J	0.00077 J+	0.00082 J	0.00074 J	0.0056	0.0016	0.00037 J	0.00034 J	0.00068 J	< 0.00025 U
Radium 226 and 228	pCi/L	T	< 0.656 UJ	< 0.828 U	1.06	1.28	< 0.737 U	< 1.1 U	0.601	1.26	< 0.674 U	1.09	< 0.682 U	< 1.23 U	1.48	< 0.84 U	< 0.914 U
Radium-226	pCi/L	T	< 0.176 UJ	< 0.125 U	< 0.139 U	< 0.212 U	< 0.233 U	< 0.322 U	< 0.164 U	0.152	< 0.182 U	< 0.137 U	< 0.21 U	0.218	< 0.268 U	0.32	< 0.306 U
Radium-228	pCi/L	T	< 0.656 UJ	< 0.828 U	0.982	1.23	< 0.737 U	< 1.1 UJ	< 0.534 U	1.11	< 0.674 U	1.05	< 0.682 U	< 1.23 UG	1.37 G	< 0.84 U	< 0.914 U
Selenium	mg/L	T	0.00060	0.00059	0.00058	0.00097	0.00056	0.00030 J	0.00076 J+	0.00066	0.00073	0.0018	0.00050	0.00079	0.00073	0.00064	0.00045 J
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.00038 U	< 0.000075 U	< 0.00038 U	< 0.00038 U	< 0.00038 UJ	< 0.00038 UD	< 0.000075 U	< 0.00038 UD	< 0.000075 U	< 0.00038 UD	< 0.00038 UD	< 0.00038 UD	< 0.000075 U
Total Suspended Solids	mg/L	T	3.0 J	2.0 J	5.0	2.0 J	2.0 J	< 4.0 U	2.0 J	3.0 J	< 4 UD	< 4.0 U	< 4.0 U	< 4.0 U	5.0	< 4.0 U	< 4.0 U
Michigan CCR Part 115																	
Copper	mg/L	T	0.00027	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	0.0013 B	0.00045	0.00029	0.0010	0.00029	0.00029	0.00030	0.00042	< 0.00020 U
Iron	mg/L	T	0.75	1.1	0.55	0.50	0.59	0.79	0.48	0.16	0.22	0.85 D	1.0	0.088	0.093	0.13	0.090
Nickel	mg/L	T	0.0015	0.0025	0.0016	0.0026	0.0018	0.0013	0.0053	0.0027	0.0021	0.022	0.0012	0.0020	0.0019	0.0018	0.0018
Silver	mg/L	T	< 0.000050 U	< 0.000050 U	< 0.00025 U	< 0.000050 U	< 0.00025 U	< 0.00025 U	< 0.000050 U	< 0.000050 U	< 0.00005 U	< 0.00025 UD	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
Vanadium	mg/L	T	0.00069 J	0.00067 J	< 0.00062 U	< 0.00062 U	0.0013	0.0016	0.0046	0.0035	0.0018	0.0018	0.0014	0.0041	0.0020	0.0019	0.0021
Zinc	mg/L	T	0.014	0.0012	0.0012	0.0018	0.013	< 0.0012 U	0.0085	0.0012	0.0013	0.0016	< 0.0012 U	< 0.0012 U	0.023	0.033	0.0012
Additional Parameters																	
Bicarbonate Alkalinity	mg/L	T	1100	1200	870	830	920	1100	1300 D	1400	1700 D	560 D	820 D	1500	1400	1300	1000
Carbonate Alkalinity	mg/L	T	< 1.6 U	< 1.6 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.31 U	< 0.31 UD	< 0.16 U	< 0.31 UD	< 0.31 UD	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	110	92	110	110	120	110	100 D	96 D	100 D	110 D	120 D	100 D	99 D	120 D	110 D
Potassium	mg/L	T	69	66	50	43	60 J	65	89 D	90 D	98 D	34 D	50	86 D	86 D	85	64 D
Sodium	mg/L	T	330	370	250	240	280	380	430 D	430 D	500 D	140 D	220 D	430 D	400 D	410 D	310 D
Total Alkalinity	mg/L	T	1100	1200	870	830	920	1100	1300 D	1400	1700 D	560 D	820 D	1500	1400	1300	1000

Notes:

ug/l - micrograms per liter.
mg/l = milligrams per liter.
su - standard pH units (pH is a field parameter)
pCi/L = picocuries per liter.
All metals were analyzed as total unless otherwise indicated.

Qualifiers:

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

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

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

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

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

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

G - The sample Minimum Detectable Concentration (MDC) is greater than the requested reporting limit.

D - Sample was diluted.

Sample Location: Compliance Phase: Sample Date: Sample Type: Unit: Sample Matrix:		MW-02															
		Background Monitoring								AM/DM Round							
		11/28/2022	1/4/2023	2/8/2023	3/14/2023	4/18/2023	5/23/2023	6/27/2023	8/8/2023	10/24/2023	2/13/2024	4/10/2024	7/17/2024	10/15/2024	2/25/2025	4/19/2025	
		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	
		Unit 3A/B															
		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	
Constituent	Unit	Fraction															
Field Parameters																	
Conductivity	mS/cm	N	3.36	4.1	3.07	2.616	3.66	3.524	4.17	4.07	4.21	3.4	3.89	4.42	4.2	5.22	3.03
Dissolved Oxygen	mg/L	N	0.28	0.49	0.2	0.41	0.08	0.06	0.07	0.1	0.03	0.26	0.15	0.45	0.85	0.99	0.38
Oxidation Reduction Potential	mV	N	89.4	-215.7	-185.2	-169.9	-135.7	-138.9	-137.4	-133.8	-166.8	-146.1	-140.3	-135.6	-158.6	104.7	-100.8
pH	su	N	7.11	7.06	7.33	7.35	7.13	7.45	7.29	7.21	7.11	7.25	7.26	7.13	7.15	7.11	7.15
Temperature	deg c	N	12.8	12	11.2	9.6	10.2	11.7	12.1	14	15	10.3	11.4	15	13.4	10.7	10.3
Turbidity	NTU	N	0.02	0.02	0.02	0.49	3.66	5.05	6.89	3.3	8.78	5.11	9.03	0.02	9.7	4.15	0.02
Appendix III																	
Boron	mg/L	T	88	86	100	98	73	95	110 J+	99 D	110 D	100 D	110 D	110 D	110 D	170 D	170 D
Calcium	mg/L	T	210	180	210	240	190	210	210 D	180 D	190 D	220 D	210 D	200 D	190 D	180 D	200 D
Chloride	mg/L	T	150	140	67	140	150	140	140 D	130 D	140 D	140 D	140 D	160 D	150 D	150 D	150 D
Fluoride	mg/L	T	9.2	10	4.5	9.4	8.7	9.2	10 D	9.7 D	9.7 D	9.5 D	10 D	10 D	11 D	16 D	13 D
Sulfate (as SO4)	mg/L	T	0.86 J	2.2 J	< 0.41 U	1.1 J	< 0.41 U	< 0.41 U	< 0.41 UD	0.93 JD	< 0.41 UD	< 0.41 UD	< 5.5 UD	< 2.2 UD	1.8 JD	< 2.2 UD	< 2.2 UD
Total Dissolved Solids	mg/L	T	1700	1800	1900	1700	1700	1800	2100 J	1900 D	1600 D	1800 D	2000	2100 D	2000 D	2600 D	2000 D
Appendix IV																	
Antimony	mg/L	T	0.00015 J	0.00016 J	< 0.00025 U	0.00019 J	0.00063 J	< 0.00050 U	0.00024 J	0.00018 J	0.00029	< 0.00010 U	0.00024 J	0.00015 J	0.00019 J	0.00027	0.00026
Arsenic	mg/L	T	0.0082	0.0076	0.0086	0.0078	0.0083	0.012	0.0096 J+	0.0086	0.0074	0.00044 J	0.0075	0.0061	0.0066	0.0095	0.0059
Barium	mg/L	T	0.51	0.53	0.55	0.51	0.38	0.48	0.47	0.45	0.42	0.73	0.46	0.33	0.32	0.35	0.50
Beryllium	mg/L	T	0.00028	0.00034	0.00042	0.00029	0.00015 J	0.00021 J	0.00032 J+	0.00043	0.00052	< 0.000052 U	0.00012 J	0.00019 J	0.00018 J	0.00022 J	0.00032
Cadmium	mg/L	T	< 0.000032 U	0.000046 J	< 0.00016 U	0.000041 J	< 0.00016 U	< 0.00038 U	< 0.000075 UJ	< 0.000075 U	0.00049	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	0.000078 J	0.000078 J
Chromium, Total	mg/L	T	0.022	0.054	0.057	0.046	0.019	0.030	0.068	0.054	0.032	0.00038	0.039	0.0038	0.047	0.033	0.063
Cobalt	mg/L	T	0.0038	0.0060	0.0080	0.0066	0.0031	0.0039	0.0089 J+	0.0076	0.0063	0.00024 J	0.0061	0.0063	0.0055	0.0097	0.0095
Fluoride	mg/L	T	9.2	10	4.5	9.4	8.7	9.2	10 D	9.7 D	9.7 D	9.5 D	10 D	10 D	11 D	16 D	13 D
Lead	mg/L	T	0.0010	0.0024	0.0030	0.0027	0.0018 J	0.0041	0.0039 J+	0.0017	0.002	< 0.00010 U	0.0056	0.0023 JD	0.0020 JD	0.0060 D	0.0050
Lithium	mg/L	T	1.2	1.5	1.5	1.6	0.87	1.2	1.7	1.4	1.2 D	1.4 D	1.5	1.3 D	1.3 D	2.3 D	2.0 D
Mercury	mg/L	T	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	0.0000054
Molybdenum	mg/L	T	0.0052	0.0062	0.011	0.011	0.0088	0.0064	0.0062 J+	0.0052	0.0051	0.0038	0.0052	0.0045	0.0048	0.016	0.013
Radium 226 and 228	pCi/L	T	< 2.18 U	< 2.8 U	3.35	1.56	< 0.686 U	1.67	1.67	2.45	1.16	1.95	2.24	< 1.21 U	1.33	--	< 1.1 U
Radium-226	pCi/L	T	< 0.547 U	0.781	0.642	0.398	< 0.302 U	0.58	0.714	0.743	< 0.354 U	1.07	< 0.432 U	0.488	0.772	--	0.565
Radium-228	pCi/L	T	< 2.18 UJ	< 2.8 UG	< 3.21 UG	< 1.24 UG	< 0.686 U	< 1.2 UJ	0.957	1.71 G	< 0.897 U	0.882	1.83 G	< 1.21 UG	< 1.1 UG	--	< 1.1 UG
Selenium	mg/L	T	0.0010	0.0012	0.0012	0.00095	0.00050	0.0010	0.0014 J+	0.0012	0.0018	0.00056	0.0014	0.0014	0.0014	0.0023	0.0017
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.00038 U	< 0.000075 U	< 0.00038 U	< 0.00038 U	< 0.000075 UJ	< 0.000075 U	0.00062	< 0.000075 U	< 0.000075 U	< 0.00038 UD	< 0.00038 UD	< 0.00038 UD	< 0.000075 U
Total Suspended Solids	mg/L	T	67	58	58	56	100	90	20 D	16 D	6.1 D	59	40	53	6.0	8.0	70
Michigan CCR Part 115																	
Copper	mg/L	T	0.00081	0.0018	0.0025	0.0020	0.0011	0.0014	0.0026 B	0.0018	0.0025	0.00023 J	0.0028	0.0020	0.0015	0.0044	0.0037
Iron	mg/L	T	23	22	24	30	27	27	24	20	18 D	31 D	25	22 D	19 D	21	28 D
Nickel	mg/L	T	0.015	0.023	0.042	0.035	0.017	0.014	0.025	0.022	0.018	0.00093 J	0.025	0.018	0.018	0.053	0.042
Silver	mg/L	T	< 0.000050 U	< 0.000050 U	< 0.00025 U	< 0.000050 U	< 0.00025 U	< 0.00025 U	< 0.000050 U	< 0.000050 U	< 0.00005 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
Vanadium	mg/L	T	0.0014	0.0036	0.0035	0.0032	0.0013	0.0026	0.0067	0.0049	0.0044	< 0.00062 U	0.0062	0.0057	0.0035	0.0049	0.0069
Zinc	mg/L	T	0.023	0.0030	0.0033	0.0022	0.025	0.0019	0.0027	0.0041	0.0036	0.0020	0.0033	0.0024	0.020	0.036	0.0036
Additional Parameters																	
Bicarbonate Alkalinity	mg/L	T	1900	2000	1900	1800	1800	1900	460	2100	2300	1800 D	2000	2200	2200	2700	2100
Carbonate Alkalinity	mg/L	T	< 1.6 U	< 1.6 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.31 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.31 UD	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	63	59	70	78	68	71	62	58 D	57 D	77 D	68	63 D	60 D	56	75 D
Potassium	mg/L	T	50	44	53	45	41	44	56 J	46 D	47 D	50 D	53	48 D	48 D	70	61 D
Sodium	mg/L	T	250	250	260	260	220	280	320 D	310 D	310 D	280 D	300 D	320 D	310 D	470 D	410 D
Total Alkalinity	mg/L	T	1900	2000	1900	1800	1800	1900	460	2100	2300	1800 D	2000	2200	2200	2700	2100

Notes:

ug/l - micrograms per liter.
mg/l = milligrams per liter.
su - standard pH units (pH is a field parameter)
pCi/L = picocuries per liter.
All metals were analyzed as total unless otherwise indicated.

Qualifiers:

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

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

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

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

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

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

G - The sample Minimum Detectable Concentration (MDC) is greater than the requested reporting limit.

D - Sample was diluted.

Sample Location: Compliance Phase: Sample Date: Sample Type: Unit: Sample Matrix:		MW-03															
		Background Monitoring								AM/DM Round							
		11/28/2022	1/4/2023	2/7/2023	3/14/2023	4/18/2023	5/23/2023	6/28/2023	8/7/2023	10/24/2023	2/14/2024	4/7/2024	7/18/2024	10/15/2024	2/26/2025	4/21/2025	
		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	
Unit:		Unit 3A/B															
Sample Matrix:		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	
Constituent	Unit	Fraction															
Field Parameters																	
Conductivity	mS/cm	N	0.344	3.52	3.43	2.459	3.15	3.08	3.19	3.03	2.98	2.81	2.87	2.69	2.7	2.6	
Dissolved Oxygen	mg/L	N	0.16	0.26	0.2	0.21	0.03	0.01	0.05	0.09	0.06	0.2	0.02	0.02	0.31	0.09	0.12
Oxidation Reduction Potential	mV	N	-180	-139.7	-212.9	-184.2	-92.8	-194.3	-129.6	-110.7	-116.1	-194.1	-220.8	-30.3	-106.1	-49.8	-178.7
pH	su	N	7.31	7.32	7.2	7.45	7.26	7.59	7.44	7.31	7.28	7.44	7.46	7.3	7.38	7.33	7.4
Temperature	deg c	N	13.3	11.4	9.2	7.3	9.3	11.8	12.5	14.9	14.9	9.6	10.1	15	14	9.3	9.1
Turbidity	NTU	N	0.02	0.68	2.4	0.02	1.4	0.02	0.02	0.21	0.26	2.12	0.02	0.02	0.31	0.02	0.02
Appendix III																	
Boron	mg/L	T	4.4	3.3	4.2	4.3	3.9	4.1	4.3 J+	4.1	4.3 D	4.5 D	3.9	3.9	4.4 D	3.7	4.5 D
Calcium	mg/L	T	390	290	400	410	360	400	430 D	350 D	380 D	360 D	350 D	340 D	330 D	320 D	340 D
Chloride	mg/L	T	300	190	240	190	150	140	160 D	170 D	180 D	140 D	99 D	120 D	120 D	110 D	94 D
Fluoride	mg/L	T	0.65	1.6	0.62	0.52	0.60	0.54	0.54 D	0.61 D	0.6 D	0.61 D	0.60 D	0.62 D	0.62 D	0.65 D	0.70 D
Sulfate (as SO4)	mg/L	T	42	460	230	550	760	690	510 D	480 D	380 D	310 D	360 D	310 D	170 D	34 D	240 D
Total Dissolved Solids	mg/L	T	2200 J-	1700	2300	2300	2300	2300	2300 D	2300 D	2200 D	2000 D	1900 D	1900 D	1800 D	1700 D	1700 D
Appendix IV																	
Antimony	mg/L	T	0.000087 J	0.000092 J	< 0.00025 U	0.00011 J	0.00045 J	< 0.00050 U	< 0.00050 UD	< 0.00010 U	< 0.0001 U	< 0.00050 UD	0.00016 J	< 0.00010 U	< 0.00010 U	0.00013 J	< 0.00010 U
Arsenic	mg/L	T	0.00084	0.0011	0.0012 J	0.0011	0.00050 J	0.00049 J	0.00091 J+	0.00076	0.0011	0.00097	0.0014	0.00077	0.00087	0.0011	0.0013
Barium	mg/L	T	0.43	0.13	0.50	0.30	0.43	0.38 D	0.38	0.41	0.42 D	0.36	0.27	0.27	0.33	0.37	
Beryllium	mg/L	T	< 0.000052 U	< 0.000052 U	< 0.00026 U	0.000053 J	< 0.000052 U	< 0.000052 U	< 0.000052 UJ	< 0.000052 U	0.00015 J	0.000057 J	0.00018 J	0.000054 J	< 0.000052 UJ	< 0.000052 U	< 0.000052 U
Cadmium	mg/L	T	< 0.000032 U	< 0.000032 U	< 0.00016 U	< 0.000032 U	< 0.00016 U	< 0.00038 U	< 0.000075 UJ	< 0.000075 U	0.00011 J	< 0.00038 UD	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Chromium, Total	mg/L	T	0.0046	0.0061	0.0049	0.0073	0.0033	0.0037	0.0060	0.0037	0.0053	0.003	0.0037	0.0052	0.0045	0.0034 J-	0.0034
Cobalt	mg/L	T	0.00088	0.00044 J	0.00081 J	0.00097	0.00044 J	0.00050 J	0.0012 J+	0.0011	0.0013	0.00037 J	0.0013	0.00059	0.00061 J-	0.00059	0.00056
Fluoride	mg/L	T	0.65	1.6	0.62	0.52	0.60	0.54	0.54 D	0.61 D	0.6 D	0.61 D	0.60 D	0.62 D	0.62 D	0.65 D	0.70 D
Lead	mg/L	T	< 0.00022 U	< 0.00022 U	< 0.0011 U	< 0.0011 U	< 0.0011 U	< 0.00050 U	< 0.00050 UJ	< 0.00050 UD	0.00022 J	< 0.00050 UD	< 0.00010 U	< 0.00050 UD	< 0.00050 UD	< 0.00010 U	< 0.00010 U
Lithium	mg/L	T	0.044	0.065	0.039	0.045	0.037	0.035	0.050	0.041	0.035	0.033 D	0.029	0.031	0.035 D	0.031	0.030 D
Mercury	mg/L	T	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	0.00024	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	0.00000077
Molybdenum	mg/L	T	< 0.00062 U	0.00072 J	< 0.0031 U	< 0.00062 U	< 0.0031 U	< 0.00025 U	< 0.00025 UJ	< 0.00025 U	0.00085 J	< 0.00025 U	0.0011 J	< 0.00025 U	0.00039 J	< 0.00025 U	< 0.00025 U
Radium 226 and 228	pCi/L	T	1.92	< 1.32 U	0.75	1.76	0.81	1.38	1.26	0.996	1.34	1.48	1.5	0.786	1.7 J-	0.92	--
Radium-226	pCi/L	T	0.583	0.526	0.242	< 0.217 U	0.268	0.574	< 0.209 U	0.417	< 0.312 U	0.466	< 0.288 U	0.22	0.348	< 0.16 U	--
Radium-228	pCi/L	T	1.34	< 1.32 UG	< 0.67 U	1.55	< 0.767 U	< 1.15 UJ	1.18	< 0.763 U	1.08	1.02	1.42 G	< 0.609 U	1.36 J-	0.77	--
Selenium	mg/L	T	0.00042 J	< 0.00022 U	< 0.0011 U	0.00040 J	< 0.00022 U	0.00017 J	0.00042 J+	0.00034 J	0.00053	0.00062	0.00049 J	0.00038 J	0.00051	0.00040 J	0.00041 J
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.00038 U	< 0.00038 U	< 0.00038 U	< 0.00038 U	< 0.00038 UJ	< 0.00038 UD	0.00018 J	< 0.00038 UD	< 0.000075 U	< 0.00038 UD	< 0.00038 UD	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	4.0	15	4.0	1.0 J	< 4.0 U	< 4.0 U	< 4.0 U	3.0 JD	< 4 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Michigan CCR Part 115																	
Copper	mg/L	T	< 0.00020 U	< 0.00020 U	< 0.0010 U	< 0.00020 U	< 0.00020 U	0.00025	0.00030 B	0.00024 J	0.00091	0.00025	0.0010	0.00030	0.00086 J+	< 0.00020 U	< 0.00020 U
Iron	mg/L	T	3.7	5.9	2.5	1.6	2.0	0.78	0.31	0.28	0.43	1.4 D	0.48	0.27	0.12	0.63	1.2 D
Nickel	mg/L	T	0.0016	0.015	< 0.0032 U	0.0018	0.00085 J	0.00087 J	0.0016	0.0015	0.0017	0.00094 J	0.0022	0.0011 J	0.0012 J-	0.0012	0.0014
Silver	mg/L	T	< 0.000050 U	< 0.000050 U	< 0.00025 U	< 0.000050 U	< 0.00025 U	< 0.00025 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.00005 U	< 0.00025 UD	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
Vanadium	mg/L	T	< 0.00062 U	< 0.00062 U	< 0.0031 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	0.0012	< 0.00062 U	0.0022	0.0018	0.0015 J-	0.0012	0.0014
Zinc	mg/L	T	0.019	< 0.0012 U	< 0.0059 U	< 0.0012 U	0.018	< 0.0012 U	0.0019	< 0.0012 U	0.002	< 0.0012 U	0.0013	< 0.0012 U	0.013	< 0.0012 U	< 0.0012 U
Additional Parameters																	
Bicarbonate Alkalinity	mg/L	T	1800	690	1600	1200	1100	1100	1300 D	1300	1400 D	1300	1200	1300	1400	1500	1300
Carbonate Alkalinity	mg/L	T	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.31 U	< 0.31 UD	< 0.16 U	< 0.31 UD	70	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	210	91	220	220	210	220	210 D	200 D	200 D	210 D	200 D	190 D	180 D	190 D	200 D
Potassium	mg/L	T	20	18	20	15	20	17	20	18 D	18 D	19 D	16	17	17 D	18	17 D
Sodium	mg/L	T	130	74	120	110	100	110	100 D	110 D	100 D	110 D	90	89 D	89 D	88 D	92 D
Total Alkalinity	mg/L	T	1800	690	1600	1200	1100	1100	1300 D	1300	1400 D	1300	1200	1300	1400	1500	1300

Notes:

ug/l - micrograms per liter.
mg/l = milligrams per liter.
su - standard pH units (pH is a field parameter)
pCi/L = picocuries per liter.
All metals were analyzed as total unless otherwise indicated.

Qualifiers:

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

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

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

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

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

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

G - The sample Minimum Detectable Concentration (MDC) is greater than the requested reporting limit.

D - Sample was diluted.

Sample Location: Compliance Phase: Sample Date: Sample Type: Unit: Sample Matrix:		MW-04															
		Background Monitoring								AM/DM Round							
		11/28/2022	1/4/2023	2/7/2023	3/14/2023	4/19/2023	5/23/2023	6/28/2023	8/7/2023	10/24/2023	2/14/2024	4/7/2024	7/18/2024	10/15/2024	2/26/2025	4/21/2025	
		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	
		Unit 3A/B															
		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	
Constituent	Unit	Fraction															
Field Parameters																	
Conductivity	mS/cm	N	0.237	2.47	2.56	2.044	2.81	2.82	2.81	2.74	2.52	2.55	2.78	2.79	2.44	2.39	2.33
Dissolved Oxygen	mg/L	N	0.15	0.1	0.07	0.79	0.15	0.06	0.05	0.16	0.14	0.3	0.06	0.05	0.07	0.09	0.16
Oxidation Reduction Potential	mV	N	-137.4	-113.2	-175.9	-126.6	43.2	-91.9	-113.3	-130.1	-133.3	-96.7	-170.1	-82.9	-143.4	-40.9	-123.3
pH	su	N	7.34	7.39	7.23	7.45	7.35	7.66	7.43	7.34	7.26	7.4	7.43	7.25	7.26	7.22	7.39
Temperature	deg c	N	13.1	10.5	8.7	6.5	7.2	10.5	13.1	16.4	16.1	8	8.8	16.1	16.7	8.4	8.1
Turbidity	NTU	N	1.95	0.02	0.02	0.02	0.02	0.02	0.28	2.98	1.42	1.83	0.38	0.02	0.21	0.02	0.02
Appendix III																	
Boron	mg/L	T	4.0	3.9	3.8	3.8	3.5	4.3	4.1 J+	4.0	4.7 DJ	4.1 D	4.2	4.4	4.7 J-	3.7	3.7
Calcium	mg/L	T	310	360	350	390	340	400	410 D	330 D	360 D	350 D	430 D	380 D	340 J-	360 D	250
Chloride	mg/L	T	180	300	200	220	220	200	190 D	160 D	150 D	130 D	120 D	120 D	96 D	90 D	21 D
Fluoride	mg/L	T	1.2	0.76	1.3	1.4	1.3	1.3	1.2 D	1.4 D	1.9 D	1.4 D	1.3 D	1.4 D	1.5 D	1.1 D	2.3 D
Sulfate (as SO4)	mg/L	T	410	1.8 J	530	580	700	690	610 D	610 D	630 D	640 D	810 D	810 D	590 D	660 D	360 D
Total Dissolved Solids	mg/L	T	1700	2100	1700	1800	1900	2100	2000 D	1900 D	1800 D	1800 D	2100 D	2100 D	1700 D	1800 D	1200 D
Appendix IV																	
Antimony	mg/L	T	0.000071 J	< 0.000050 U	< 0.00025 U	< 0.000050 U	0.00041 J	< 0.00050 U	< 0.00050 UD	0.00012 J+	< 0.0001 U	< 0.00050 UD	< 0.00010 U	< 0.00010 U	< 0.00010 U	0.00014 J	0.00046
Arsenic	mg/L	T	0.0012	0.00078	0.0012	0.0012	0.00060	0.00047 J	0.00092 J+	0.00088	0.001	0.00058	0.0012	0.00086	0.00088	0.0028	0.0014
Barium	mg/L	T	0.11	0.46	0.13	0.12	0.10	0.12	0.15 D	0.12	0.12	0.11 D	0.12	0.084	0.085	0.16	0.025
Beryllium	mg/L	T	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 UJ	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	0.000066 J	0.000054 J	< 0.000052 U	< 0.000052 U
Cadmium	mg/L	T	< 0.000032 U	< 0.000032 U	< 0.00016 U	< 0.000032 U	< 0.00016 U	< 0.00038 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.00038 UD	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Chromium, Total	mg/L	T	0.0027	0.0060	0.0047	0.0049	0.0026	0.0031	0.0046	0.0027	0.0026	0.0041	0.0047	0.0051	0.0028	0.0028	0.0010
Cobalt	mg/L	T	0.00035 J	0.00093	0.00062	0.00065	0.00031 J	0.00036 J	0.00074 J+	0.00062	0.00045 J	0.00018 J	0.00034 J	0.00024 J	0.00032 J	0.00035 J	0.00011 J
Fluoride	mg/L	T	1.2	0.76	1.3	1.4	1.3	1.3	1.2 D	1.4 D	1.9 D	1.4 D	1.3 D	1.4 D	1.5 D	1.1 D	2.3 D
Lead	mg/L	T	< 0.00022 U	< 0.00022 U	< 0.0011 U	< 0.00022 U	< 0.0011 U	< 0.00050 U	< 0.00050 UJ	< 0.00010 U	< 0.0001 U	< 0.00050 UD	< 0.00010 U	< 0.00050 UD	< 0.00050 UJ	< 0.00010 U	0.00026 J
Lithium	mg/L	T	0.067	0.047	0.061	0.074	0.054	0.061	0.074	0.074	0.066 D	0.048 D	0.062	0.068	0.074 D	0.031	0.055
Mercury	mg/L	T	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 UJ	< 0.00016 U	< 0.00016 U	< 0.00016 U	0.0000029
Molybdenum	mg/L	T	0.0013	< 0.00062 U	0.00074 J	0.00086 J	< 0.0031 U	0.00041 J	0.00044 J+	0.0012	0.0015	0.00037 J	0.00097 J	0.0014	0.0015	0.0023	0.011
Radium 226 and 228	pCi/L	T	1.43	1.08	1.55	1.23	< 0.752 U	1.49	1.2	1.29	1.2	< 0.868 U	1.11 J-	< 0.691 U	0.796	< 0.56 U	< 0.614 U
Radium-226	pCi/L	T	< 0.206 U	0.159	0.175	< 0.198 U	< 0.189 U	< 0.214 U	0.232	0.152 J-	0.275	< 0.155 U	0.176 J-	0.243	< 0.235 U	0.37	< 0.457 U
Radium-228	pCi/L	T	1.28	0.916	1.38	1.16	< 0.752 U	1.33 J	0.963	1.14	0.924	< 0.868 U	0.936 J-	< 0.691 U	0.693	< 0.56 U	< 0.614 U
Selenium	mg/L	T	< 0.00022 U	0.00041 J	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00010 U	0.00017 J+	0.00021 J+	0.00024 J	0.00043 J	0.00021 J	0.00023 J	0.00031 J	0.00019 J	0.0012
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.00038 U	< 0.000075 U	< 0.00038 U	< 0.00038 U	< 0.00038 UJ	< 0.000075 U	< 0.000075 U	< 0.00038 UD	< 0.000075 U	< 0.00038 UD	< 0.00038 UD	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	10	8.0	11	10	11	12	8.1 D	< 4.0 UJ	8	< 4.0 U	15	5.0	4.0	8.0	< 4.0 U
Michigan CCR Part 115																	
Copper	mg/L	T	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	0.00027	< 0.00020 U	0.00032	< 0.00020 U	< 0.00020 U	< 0.00020 U	0.00099
Iron	mg/L	T	4.7	6.3	5.6	6.3	6.1	6.8	6.8	5.0	5.6 D	5.5 D	6.8	5.7	4.8 D	0.62	0.19
Nickel	mg/L	T	0.012	0.0019	0.018	0.019	0.011	0.013	0.022	0.019	0.013	0.010	0.016	0.018	0.019	0.012	0.0028
Silver	mg/L	T	< 0.000050 U	< 0.000050 U	< 0.00025 U	< 0.000050 U	< 0.00025 U	< 0.00025 U	< 0.000050 U	< 0.000050 U	< 0.00005 U	< 0.00025 UD	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
Vanadium	mg/L	T	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	0.00097 J	0.0011 J	0.0012	0.00075 J	0.0011 J
Zinc	mg/L	T	0.0044	< 0.0012 U	< 0.0012 U	< 0.0012 U	0.0059	< 0.0012 U	< 0.0012 U	< 0.0012 UJ	0.0015	< 0.0012 U	< 0.0012 U	< 0.0012 U	0.0051	< 0.0012 U	0.0025
Additional Parameters																	
Bicarbonate Alkalinity	mg/L	T	800	1800	720	690	720	740	730	750	780	680 D	700	710	740	760	91
Carbonate Alkalinity	mg/L	T	< 0.16 U	< 1.6 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.31 UD	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	96	200	110	120	120	140	130 D	120 D	120 D	120 D	140 D	130 D	110 D	120 D	36
Potassium	mg/L	T	21	20	20	18	21	24	26	23 D	24 D	21 D	23	24	23 J-	18	7.9
Sodium	mg/L	T	83	110	84	83	89	100	93 D	87 D	83 D	80 D	90	84	74 D	65 D	23
Total Alkalinity	mg/L	T	800	1800	720	690	720	740	730	750	780	680 D	700	710	740	760	91

Notes:

ug/l - micrograms per liter.
mg/l = milligrams per liter.
su - standard pH units (pH is a field parameter)
pCi/L = picocuries per liter.
All metals were analyzed as total unless otherwise indicated.

Qualifiers:

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

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

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

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

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

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

G - The sample Minimum Detectable Concentration (MDC) is greater than the requested reporting limit.

D - Sample was diluted.

Sample Location: Compliance Phase: Sample Date: Sample Type: Unit: Sample Matrix:		MW-06															
		Background Monitoring								AM/DM Round							
		11/29/2022	1/3/2023	2/6/2023	3/14/2023	4/18/2023	5/23/2023	6/28/2023	8/8/2023	10/24/2023	2/13/2024	4/7/2024	7/18/2024	10/16/2024	2/26/2025	4/20/2025	
		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	
Unit:		Unit 1/2															
Sample Matrix:		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	
Constituent	Unit	Fraction															
Field Parameters																	
Conductivity	mS/cm	N	1.78	2.13	2.16	1.973	2	2.05	2.04	2	2.02	1.63	1.92	1.91	1.9	1.93	1.88
Dissolved Oxygen	mg/L	N	0.1	0.6	0.07	0.14	0.35	0.08	0.24	0.38	0.24	0.15	0.07	0.01	0.05	0.28	0.13
Oxidation Reduction Potential	mV	N	38.1	-139	-193.2	-148.9	-173.5	-184.3	-182.7	-80.3	-176.8	145.9	-139.9	-234.1	-171.6	88.1	-193.1
pH	su	N	7.33	7.26	6.42	7.21	7.28	7.36	7.27	7.17	7.26	7.2	7.18	7.39	7.29	7.49	7.38
Temperature	deg c	N	13.9	10.9	7.6	8.1	8.4	11.2	13.4	16.8	16.6	8.8	9.5	16	17.5	8.2	9.4
Turbidity	NTU	N	0.02	1.13	2.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.07	1.4	8.36	0.54
Appendix III																	
Boron	mg/L	T	12	9.5	10	9.5	7.5	8.6	9.7 J+	9.9	11 D	7.3 D	6.4	8.3	11 D	9.8	6.9
Calcium	mg/L	T	220	230	250	310	250	270	290 D	230 D	240 D	280 D	310 D	250 D	220 D	200 D	210
Chloride	mg/L	T	160	120	110	82	57	73	71 D	76 D	79 D	18 D	13 D	31 D	57 D	59 D	29 D
Fluoride	mg/L	T	1.3	1.4	1.1	1.0	1.1	1.0	1.1 D	1.4 D	1.2 D	0.98 D	1.1 D	0.99 D	1.6 D	1.2 D	1.2 D
Sulfate (as SO4)	mg/L	T	16	9.6	20	7.3	9.4	20	16 D	0.98 JD	< 0.41 UD	1.5 JD	9.2 D	< 2.2 UD	2.9 JD	30 D	15 D
Total Dissolved Solids	mg/L	T	1300	1200	1300	1200	1200	1200	1300 D	1200 D	1100 D	1100 D	1200 D	1200 D	1100 D	1200 D	1200 D
Appendix IV																	
Antimony	mg/L	T	0.000075 J	< 0.000050 U	< 0.00025 U	< 0.000050 U	0.00036 J	< 0.00050 U	< 0.00010 U	< 0.00010 U	< 0.0001 U	< 0.00050 UD	< 0.00010 U	< 0.00010 U	< 0.00010 U	< 0.00010 U	< 0.00010 U
Arsenic	mg/L	T	0.00080	0.00065	0.00058	0.00054 J	0.00047 J	0.00065	0.00062 J+	0.00082	0.001	0.00057	0.00068	0.00098	0.00082	0.00051 J	0.00051 J
Barium	mg/L	T	1.5	1.5	1.6	1.4	0.99	1.3	1.4 D	1.4 D	1.5 D	1.4 D	1.3 D	1.7 D	1.6 D	1.3 D	1.4 D
Beryllium	mg/L	T	< 0.000054 U	< 0.000052 U	0.000052 J	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 UJ	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U
Cadmium	mg/L	T	< 0.000032 U	< 0.000032 U	< 0.00016 U	< 0.000032 U	< 0.00016 U	< 0.00038 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.00038 UD	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Chromium, Total	mg/L	T	0.0015	0.0021	0.0021	0.0030	0.0014	0.0012	0.0020	0.0023	0.0015	0.0012	0.0011	0.0014	0.0013	0.0011	0.00095
Cobalt	mg/L	T	0.00048 J	0.00057	0.00067	0.00073	0.00050 J	0.00046 J	0.00080 J+	0.00067	0.00047 J	0.00035 J	0.00042 J	0.00037 J	0.00042 J	0.00039 J	0.00033 J
Fluoride	mg/L	T	1.3	1.4	1.1	1.0	1.1	1.0	1.1 D	1.4 D	1.2 D	0.98 D	1.1 D	0.99 D	1.6 D	1.2 D	1.2 D
Lead	mg/L	T	0.00035 J	0.00025 J	< 0.0011 U	< 0.00022 U	< 0.0011 U	< 0.00050 U	0.00027 J+	< 0.00010 U	< 0.0001 U	< 0.00050 UD	< 0.00010 U	< 0.00010 U	0.00012 J	0.00018 J	< 0.00010 U
Lithium	mg/L	T	0.23	0.22	0.20	0.23	0.15	0.15	0.19	0.22	0.19 D	0.13 D	0.11	0.14	0.17 D	0.17	0.12
Mercury	mg/L	T	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	0.00000070
Molybdenum	mg/L	T	< 0.00064 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.0031 U	0.00026 J	0.00027 J+	< 0.00025 U	0.00025 J	< 0.00025 U	< 0.00025 U	0.00028 J	0.00043 J	0.00056 J	< 0.00025 U
Radium 226 and 228	pCi/L	T	0.864	0.637	< 0.715 U	1.91	< 0.646 U	0.92	0.824	0.938	1.58	0.965	2.23	< 0.619 U	2.87	1.02	2.13
Radium-226	pCi/L	T	0.419	0.238	0.24	< 0.212 U	0.402	0.259	0.331	0.465	0.432	0.358	0.383	0.288	0.36	< 0.28 U	< 0.326 U
Radium-228	pCi/L	T	< 0.449 U	< 0.631 U	< 0.715 U	1.7	< 0.646 U	< 0.772 U	< 0.606 U	< 0.735 U	1.15	< 0.85 U	1.85	< 0.619 U	2.51	0.77	1.8 G
Selenium	mg/L	T	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	0.00020 J	0.00022 J+	0.00019 J	0.0002 J	0.00047 J	0.00023 J	0.00020 J	0.00029 J	0.00022 J	0.00016 J
Thallium	mg/L	T	< 0.000076 U	< 0.000075 U	< 0.00038 U	< 0.000075 U	< 0.00038 U	< 0.00038 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.00038 UD	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	36	45	42	65	53	43	41 D	37 D	48	73	54 D	27	34	12 D	42
Michigan CCR Part 115																	
Copper	mg/L	T	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.0002 U	0.00028	< 0.00020 U	0.00038	0.00025	< 0.00020 U	< 0.00020 U
Iron	mg/L	T	15	17	16	26	19	18	18	14	19 D	31 D	26	17	12 D	4.6	14
Nickel	mg/L	T	0.0011 J	0.0011 J	0.0012	0.00092 J	< 0.00065 U	< 0.00065 U	0.0010 J	0.00090 J	0.00079 J	< 0.00065 U	< 0.00065 U	0.00095 J	0.00091 J	< 0.00065 U	< 0.00065 U
Silver	mg/L	T	< 0.000051 U	< 0.000050 U	< 0.00025 U	< 0.000050 U	< 0.00025 U	< 0.00025 U	< 0.000050 U	< 0.000050 U	< 0.00005 U	< 0.00025 UD	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
Vanadium	mg/L	T	< 0.00064 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	0.00064 J	< 0.00062 U	< 0.00062 U	< 0.00062 U
Zinc	mg/L	T	0.060	0.0019	0.0018	0.0012	0.094	< 0.0012 U	0.0018	0.0013	0.0018	< 0.0012 U	0.0012	0.0013	0.058	0.0014	0.0017
Additional Parameters																	
Bicarbonate Alkalinity	mg/L	T	1100	1100	1000	1100	1100	990	1100 D	1100	1000 D	980 D	1100	1100	1000	1100	1100
Carbonate Alkalinity	mg/L	T	< 1.6 U	< 1.6 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.31 U	< 0.31 UD	< 0.16 U	< 0.31 UD	< 0.31 UD	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	110	95	100	96	90	100	100 D	90 D	89 D	81 D	78	81	97 D	110 D	80
Potassium	mg/L	T	32	24	23	20	20	23	26	24 D	26 D	20 D	18	22	25 D	25	19
Sodium	mg/L	T	110	78	84	69	63	82	87	77 D	71 D	49 D	49	64	88 D	100 D	73
Total Alkalinity	mg/L	T	1100	1100	1000	1100	1100	990	1100 D	1100	1000 D	980 D	1100	1100	1000	1100	1100

Notes:

ug/l - micrograms per liter.
mg/l = milligrams per liter.
su - standard pH units (pH is a field parameter)
pCi/L = picocuries per liter.
All metals were analyzed as total unless otherwise indicated.

Qualifiers:

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

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

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

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

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

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

G - The sample Minimum Detectable Concentration (MDC) is greater than the requested reporting limit.

D - Sample was diluted.

Sample Location: Compliance Phase: Sample Date: Sample Type: Unit: Sample Matrix:		MW-07															
		Background Monitoring								AM/DM Round							
		11/30/2022	1/4/2023	2/7/2023	3/13/2023	4/18/2023	5/23/2023	6/27/2023	8/7/2023	10/24/2023	2/13/2024	4/8/2024	7/17/2024	10/15/2024	2/26/2025	4/21/2025	
		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	
Unit:		Unit 3A/B & 1/2															
Sample Matrix:		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	
Constituent	Unit	Fraction															
Field Parameters																	
Conductivity	mS/cm	N	0.46	1.21	1.206	1.209	1.25	1.24	1.25	1.23	1.25	1.27	1.29	1.24	1.25		0.899
Dissolved Oxygen	mg/L	N	0.12	0.3	0.08	0.21	0.03	0.23	0.43	0.72	0.22	0.2	0.26	0.04	0.36	0.01	0.33
Oxidation Reduction Potential	mV	N	57.2	-88	-103.1	-143.9	-68	-109.4	-140.5	-15.7	-141	-74.7	-60.1	-176.7	-134.1	-34.2	-56.9
pH	su	N	6.88	7.04	6.93	6.58	6.86	6.93	6.88	6.65	6.88	7.02	7.05	6.95	6.87	6.84	6.87
Temperature	deg c	N	12.2	11	10	8.6	9.6	11.3	13	14.8	14.6	9.7	10.2	14.8	15	9.9	9.9
Turbidity	NTU	N	5.89	4.2	4.07	0.02	2.94	1.5	0.02	0.72	0.74	9.13	0.74	0.02	0.02	3.07	8.68
Appendix III																	
Boron	mg/L	T	13	11	12	11	10	12	11 J+	11	12 D	11 D	13 D	10	11 D	11	8.8
Calcium	mg/L	T	140	140	140	150	130	150	160 D	120 D	150 D	140 D	160 D	150 D	130 D	160 D	150
Chloride	mg/L	T	15	15	14	14	14	13	13 D	13 D	14 D	14 D	14 D	14 D	15 D	16 D	17 D
Fluoride	mg/L	T	0.14	0.070 J	0.12	< 0.055 U	0.14	0.11	0.080 JD	0.083 JD	0.14 D	0.068 JD	0.080 JD	0.19 JD	< 0.055 UD	< 0.11 UD	0.14
Sulfate (as SO4)	mg/L	T	29	30	33	20	17	15	18 D	19 D	26 D	32 D	36 D	15 D	34 D	37 D	20 D
Total Dissolved Solids	mg/L	T	660	470	650	500	620	660	720 D	620 D	620 D	680 D	710 D	720 D	680 D	710 D	720 D
Appendix IV																	
Antimony	mg/L	T	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	0.000071 J	< 0.00010 U	< 0.00010 U	< 0.00010 U	< 0.0001 U	< 0.00010 U	< 0.00010 U	< 0.00010 U	< 0.00010 U	< 0.00010 U	< 0.00010 U
Arsenic	mg/L	T	0.00023 J	0.00021 J	0.00023 J	0.00018 J	0.00013 J	0.00023 J	0.00020 J+	0.00020 J	0.00029 J	0.00021 J	0.00024 J	0.00023 J	0.00022 J	0.00018 J	0.00020 J
Barium	mg/L	T	0.33	0.34	0.36	0.30	0.25	0.34	0.35	0.38	0.35	0.38	0.34	0.36	0.37	0.42	0.40
Beryllium	mg/L	T	< 0.000052 U	< 0.000052 U	0.000062 J	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 UJ	0.000066 J	0.000055 J	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U
Cadmium	mg/L	T	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000075 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Chromium, Total	mg/L	T	0.00038	0.00030	0.00037	0.00042	0.00028	0.00029	0.00033	0.00032	0.00036	0.00032	0.00034	0.00074	0.00041	0.00028	0.00041
Cobalt	mg/L	T	0.00071	0.00088	0.00099	0.00099	0.00087	0.00095	0.0011 J+	0.00098	0.00098	0.00074	0.00083	0.00080	0.0010	0.00086	0.0011
Fluoride	mg/L	T	0.14	0.070 J	0.12	< 0.055 U	0.14	0.11	0.080 JD	0.083 JD	0.14 D	0.068 JD	0.080 JD	0.19 JD	< 0.055 UD	< 0.11 UD	0.14
Lead	mg/L	T	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00010 U	< 0.00010 UJ	< 0.00010 U	< 0.0001 U	< 0.00010 U	< 0.00010 U	< 0.00010 U	< 0.00010 U	< 0.00010 U	< 0.00010 U
Lithium	mg/L	T	0.0054	0.0070	0.0052	0.0067	0.0083	0.0055	0.010	0.0042	0.0062	0.0031	0.0057	0.0057	0.0056	0.0054	0.0069
Mercury	mg/L	T	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00000016 U
Molybdenum	mg/L	T	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00025 U	< 0.00025 UJ	< 0.00025 U	< 0.00025 U	< 0.00025 U	< 0.00025 U	< 0.00025 U	< 0.00025 U	< 0.00025 U	< 0.00025 U
Radium 226 and 228	pCi/L	T	1.12	1.26 J+	1.03	1.12	0.674	< 0.928 U	< 0.697 U	2.36	1.76	0.937	2.75	1.46	1.29	1.44	1.38
Radium-226	pCi/L	T	0.444	0.53	0.333	0.38	0.475	0.309	0.341	0.665	0.475	0.495	0.508	0.551	0.333	0.53	0.681
Radium-228	pCi/L	T	0.676	0.729 J+	0.693	< 0.835 U	< 0.559 U	< 0.928 U	< 0.697 U	1.7	1.28	< 0.789 U	2.25	< 0.965 U	0.959	0.91	< 0.778 U
Selenium	mg/L	T	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	0.00010 J	< 0.00010 UJ	< 0.00010 U	< 0.0001 U	0.00023 J	< 0.00010 U	0.00011 J	0.00017 J	0.00013 J	0.00011 J
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	44	36	35	33	33	39	39	41 D	38	29	32 D	46	43 D	44	57
Michigan CCR Part 115																	
Copper	mg/L	T	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	0.00027	< 0.00020 U	0.00024 J	0.00021 J	< 0.00020 U	0.00062	< 0.00020 U
Iron	mg/L	T	16	13	13	15	14	19	17	14	18 D	15 D	15	17	17 D	19	21
Nickel	mg/L	T	< 0.00065 U	< 0.00065 U	< 0.00065 U	< 0.00065 U	< 0.00065 U	< 0.00065 U	< 0.00065 U	< 0.00065 U	< 0.00065 U	< 0.00065 U	< 0.00065 U	< 0.00065 U	0.00071 J	< 0.00065 U	< 0.00065 U
Silver	mg/L	T	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.00005 U	< 0.00005 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
Vanadium	mg/L	T	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	0.00079 J	0.00095 J	< 0.00062 U	0.00077 J
Zinc	mg/L	T	0.016	< 0.0012 U	< 0.0012 U	< 0.0012 U	0.025	< 0.0012 U	< 0.0012 U	< 0.0012 U	0.0035	< 0.0012 U	< 0.0012 U	< 0.0012 U	0.016	0.0013	< 0.0012 U
Additional Parameters																	
Bicarbonate Alkalinity	mg/L	T	660	580	630	610	640	630	620	620	600 D	610 D	630	640	620	650	680
Carbonate Alkalinity	mg/L	T	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.31 UD	< 0.31 UD	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	37	37	37	38	38	40	36	35 D	38 D	38 D	40	36	35 D	39	39
Potassium	mg/L	T	5.4	5.4	5.2	5.7	4.8	4.4	4.7	5.1	4.9	4.7 D	4.7	4.5	4.1 D	4.5	4.6
Sodium	mg/L	T	53	47	47	47	59	57	56	48 D	51 D	52 D	57	55	47 D	44	44
Total Alkalinity	mg/L	T	660	580	630	610	640	630	620	620	600 D	610 D	630	640	620	650	680

Notes:

ug/l - micrograms per liter.
mg/l = milligrams per liter.
su - standard pH units (pH is a field parameter)
pCi/L = picocuries per liter.
All metals were analyzed as total unless otherwise indicated.

Qualifiers:

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

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

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

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

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

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

G - The sample Minimum Detectable Concentration (MDC) is greater than the requested reporting limit.

D - Sample was diluted.

Sample Location: Compliance Phase: Sample Date: Sample Type: Unit: Sample Matrix:		MW-08															
		Background Monitoring								AM/DM Round							
		12/1/2022	1/5/2023	2/7/2023	3/14/2023	4/18/2023	5/23/2023	6/27/2023	8/8/2023	10/24/2023	2/13/2024	4/7/2024	7/18/2024	10/16/2024	2/26/2025	4/20/2025	
		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	
		Unit 1/2															
		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	
Constituent	Unit	Fraction															
Field Parameters																	
Conductivity	mS/cm	N	1.06	1.13	1.133	0.787	1.03	0.99	1.03	1.02	0.87	0.89	0.9	0.99	1.11	1.01	0.91
Dissolved Oxygen	mg/L	N	0.2	0.09	0.05	0.55	0.06	0.09	0.04	0.09	1.53	0.3	0.1	0.05	0.17	0.01	0.14
Oxidation Reduction Potential	mV	N	-159.3	-119.3	-133.9	-149.9	-121.2	-145.3	-103.6	-127.6	-180.6	-141.1	-164.6	-133.3	-138.6	-35.9	-125.6
pH	su	N	7.17	6.21	7.16	7.51	7.25	7.33	7.24	7.26	7.27	7.34	7.41	7	7.15	7.23	7.28
Temperature	deg c	N	9.6	6.9	6.2	5.2	7.3	11.6	14	16.7	14.7	6.2	7.4	15.8	16.2	5	8.3
Turbidity	NTU	N	0.02	0.02	0.66	0.02	1.04	0.02	2.11	5.63	0.02	2.79	1.03	0.02	0.02	0.51	0.02
Appendix III																	
Boron	mg/L	T	2.5	4.4	9.3	7.1	6.6	7.0	7.8 J+	7.1	4.1 D	7.0 D	6.5	7.9	4.7 D	4.1	3.8
Calcium	mg/L	T	150	160	150	150	130	140	150 D	120 D	130 D	120 D	130 D	120 D	130 D	140 D	120
Chloride	mg/L	T	17	23	35	30	28	25	29 D	30 D	17 D	25 D	24 D	30 D	99 D	39 D	36 D
Fluoride	mg/L	T	0.40	0.56	1.1	1.3	1.1	0.92	1.0 D	1.0 D	0.55 D	1.0 D	1.2 D	1.1 D	0.93 D	0.61 D	0.90 D
Sulfate (as SO4)	mg/L	T	13	25	5.3	26	2.0 J	< 0.41 U	< 0.41 UD	< 0.41 UD	1.7 JD	5.6 D	7.0 D	< 2.2 UD	21 D	48 D	65 D
Total Dissolved Solids	mg/L	T	560	480	630	480	560	550	610 D	530 D	440 D	530 D	510 D	550 D	660 D	590 D	520 D
Appendix IV																	
Antimony	mg/L	T	0.000095 J	0.000054 J	0.00020 J	0.00016 J	0.00028	< 0.00010 U	0.00011 J	< 0.00010 U	< 0.0001 U	< 0.00010 U	< 0.00010 U	< 0.00010 U	0.00011 J	0.00016 J	< 0.00010 U
Arsenic	mg/L	T	0.0069	0.021	0.049	0.045	0.050	0.041	0.038 J+	0.029	0.011	0.030	0.047	0.044	0.030	0.033	0.046
Barium	mg/L	T	1.2	1.3	1.5	1.4	1.1	1.2	1.4 D	1.2 D	0.98	1.0 D	1.1 D	1.3 D	1.3 D	0.94 D	0.75
Beryllium	mg/L	T	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 UJ	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	0.00012 J	< 0.000052 U
Cadmium	mg/L	T	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000075 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	0.00011 J	< 0.000075 U
Chromium, Total	mg/L	T	0.00067	0.00093	0.0015	0.0011	0.00084	0.0011	0.00094	0.00087	0.00061	0.00070	0.00079	0.00071	0.00063	0.00065	0.00059
Cobalt	mg/L	T	0.00034 J	0.00045 J	0.00070	0.00060	0.00051 J	0.00059	0.00062 J+	0.00058	0.00034 J	0.00034 J	0.00037 J	0.00037 J	0.00034 J	0.00098	0.00026 J
Fluoride	mg/L	T	0.40	0.56	1.1	1.3	1.1	0.92	1.0 D	0.55 D	1.0 D	1.2 D	1.1 D	0.93 D	0.61 D	0.90 D	
Lead	mg/L	T	< 0.00022 U	< 0.00022 U	0.00086	< 0.00022 U	0.00022 J	< 0.00010 U	< 0.00010 UJ	< 0.00010 U	< 0.0001 U	0.00011 J	< 0.00010 U	< 0.00010 U	0.0029	0.00022 J	0.00010 J+
Lithium	mg/L	T	0.063	0.11	0.14	0.14	0.11	0.11	0.13	0.12	0.076 D	0.097 D	0.098	0.11	0.082 D	0.075	0.070
Mercury	mg/L	T	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 UJ	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00000016 U
Molybdenum	mg/L	T	0.0024	0.0018	0.0015	0.0028	0.00095 J	0.00068 J	0.00039 J+	0.00036 J	0.0016	0.0017	0.0020	0.00031 J	0.00095 J	0.0020	0.0029
Radium 226 and 228	pCi/L	T	1.43	1.62 J+	< 0.836 U	1.13	1.18	1.14	< 0.606 U	2.1	0.891	< 0.848 U	1.86 J-	0.879	2.11	0.98	1.35
Radium-226	pCi/L	T	0.277	0.31	0.286	< 0.255 U	0.32	0.396	0.19	0.358	< 0.234 U	< 0.126 U	0.177 J-	0.232	0.367	0.32	0.263
Radium-228	pCi/L	T	1.16	1.31 J+	< 0.836 U	< 1 UG	0.858	< 0.835 U	< 0.606 U	1.74 G	< 0.744 U	< 0.848 U	1.68 J+	0.646	1.75	0.66	1.08
Selenium	mg/L	T	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	0.00016 J	0.00014 J+	0.00014 J	0.00015 J	0.00034 J	0.00012 J	0.00012 J	0.00018 J	0.00030 J	0.00014 J
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	0.00013 J	< 0.000075 U
Total Suspended Solids	mg/L	T	62	55	49	42	36	31	30	20	43	46	36 D	18	31	44 D	45
Michigan CCR Part 115																	
Copper	mg/L	T	< 0.00020 U	< 0.00020 U	0.00043	< 0.00020 U	0.00045	0.00034	< 0.00020 U	< 0.00020 U	0.00021 J	0.00035	0.00025	0.00047	0.00064	0.00080	0.00028 J+
Iron	mg/L	T	32	30	21	22	18	18	15	13	22 D	22 D	19	14	15 D	21	19
Nickel	mg/L	T	0.00093 J	0.0013	0.0015	0.0013	0.0011 J	0.0011 J	0.0011 J	0.0010 J	0.00085 J	0.0026	0.0032	0.0013	0.013	0.0052	0.0030
Silver	mg/L	T	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.00005 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
Vanadium	mg/L	T	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	0.00091 J	< 0.00062 U
Zinc	mg/L	T	0.054	< 0.0012 U	0.0040	0.0013	0.12	0.0014	0.0018	< 0.0012 U	0.0025	< 0.0012 U	0.0017	0.0015	0.16	0.0037	0.0016
Additional Parameters																	
Bicarbonate Alkalinity	mg/L	T	540	510	560	470	510	490	480	480	460 D	440 D	440	460	410	400	350
Carbonate Alkalinity	mg/L	T	< 1.6 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.31 UD	< 0.31 UD	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	27	30	33	27	29	28	26	26 D	22 D	23 D	24	25	24 D	22	20
Potassium	mg/L	T	8.8	12	14	7.6 J	12	11	12	12	8.6 D	8.6 D	9.0	11	9.1 D	7.7	7.4
Sodium	mg/L	T	21	27	38	33	35	35	40	36 D	23 D	32 D	32	36	41 D	30	29
Total Alkalinity	mg/L	T	540	510	560	470	510	490	480	480	460 D	440 D	440	460	410	400	350

Notes:

ug/l - micrograms per liter.
mg/l = milligrams per liter.
su - standard pH units (pH is a field parameter)
pCi/L = picocuries per liter.
All metals were analyzed as total unless otherwise indicated.

Qualifiers:

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

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

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

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

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

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

G - The sample Minimum Detectable Concentration (MDC) is greater than the requested reporting limit.

D - Sample was diluted.

Sample Location: Compliance Phase: Sample Date: Sample Type: Unit: Sample Matrix:			MW-09														
			Background Monitoring								AM/DM Round						
			11/28/2022	1/4/2023	2/6/2023	3/14/2023	4/18/2023	5/23/2023	6/27/2023	8/8/2023	10/24/2023	2/13/2024	4/7/2024	7/17/2024	10/17/2024	2/25/2025	4/19/2025
			Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Unit:			Unit 3A/B & 1/2														
Constituent	Unit	Fraction	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Field Parameters																	
Conductivity	mS/cm	N	1.33	1.49	1.593	1.472	2.02	1.95	1.95	1.92	1.63	2.03	2.2	2.16	1.82	2.36	1.618
Dissolved Oxygen	mg/L	N	0.19	0.2	1.89	0.35	0.08	0.07	0.05	0.17	0.07	0.34	0.27	0.01	0.17	3.08	1.66
Oxidation Reduction Potential	mV	N	42	-183.9	-138.4	-131.5	-112.3	-107.1	-117	-114.7	-69.3	-106.1	-160.4	-155.1	-137.5	58.3	-72.1
pH	su	N	7.2	7.22	7.22	7.4	7.22	7.52	7.28	7.21	7.16	7.14	7.25	7.2	7.12	7	7.12
Temperature	deg c	N	12.7	10.5	8.5	6.8	7.7	10.6	12.1	15	15.7	7.7	8.8	15.2	16.3	9.1	8.7
Turbidity	NTU	N	0.02	0.02	1.04	0.02	0.55	0.66	0.71	2.01	0.49	1.89	2.01	4.56	0.02	0.73	1.94
Appendix III																	
Boron	mg/L	T	6.0	5.8	6.1	5.1	4.9	5.9	6.3 J+	5.7	6.9 D	5.3 D	5.5	5.9	6.2 D	5.1	4.9
Calcium	mg/L	T	270	230	300	400	390	410	430 D	330 D	310 D	420 D	500 D	430 D	310 D	510 D	450
Chloride	mg/L	T	15	17	18	16	12	11	11 D	12 D	12 D	18 D	25 D	25 D	25 D	67 D	57 D
Fluoride	mg/L	T	2.1	2.4	2.6	2.5	2.5	2.7	2.9 D	2.9 D	2.8 D	2.2 D	2.3 D	2.6 D	2.9 D	2.4 D	2.4 D
Sulfate (as SO4)	mg/L	T	110	83	210	480	650	580	500 D	450 D	210 D	610 D	720 D	630 D	270 D	790 D	930 D
Total Dissolved Solids	mg/L	T	960	740	1100	1400	1600	1600	1500 D	1400 D	1100 D	1600 D	1700 D	1700 D	1300 D	1900 D	2000 D
Appendix IV																	
Antimony	mg/L	T	0.000073 J	< 0.000050 U	0.00023 J	0.000092 J	0.00037 J	< 0.00050 U	< 0.00010 U	< 0.00010 U	< 0.0001 U	< 0.00050 UD	< 0.00010 U	0.00012 J	< 0.00010 U	< 0.00010 U	< 0.00010 U
Arsenic	mg/L	T	0.0025	0.0023	0.0023	0.0023	0.0013	0.0013	0.0027 J+	0.0024	0.0023	0.0015	0.0030	0.0025	0.0025	0.0015	0.0016
Barium	mg/L	T	0.59	2.4	0.36	0.38	0.18	0.20	0.17	0.20	0.28	0.31 D	0.20	0.20	0.23	0.097	0.10
Beryllium	mg/L	T	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	0.000058 J	< 0.000052 UJ	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	0.000057 J	< 0.000052 U	0.00015 J	< 0.000052 U
Cadmium	mg/L	T	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.00016 U	< 0.00038 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.00038 UD	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Chromium, Total	mg/L	T	0.0022	0.0028	0.0032	0.0030	0.0018	0.0019	0.0031	0.0027	0.0018	0.0016	0.0026	0.0021	0.0027	0.0020	0.0024
Cobalt	mg/L	T	0.00035 J	0.00046 J	0.00058	0.00099	0.00053	0.00037 J	0.00069 J+	0.00075	0.00024 J	0.00058	0.00076	0.00024 J	0.00023 J	0.00043 J	0.00053
Fluoride	mg/L	T	2.1	2.4	2.6	2.5	2.5	2.7	2.9 D	2.9 D	2.8 D	2.2 D	2.3 D	2.6 D	2.9 D	2.4 D	2.4 D
Lead	mg/L	T	< 0.00022 U	< 0.00022 U	< 0.0011 U	< 0.00022 U	< 0.0011 U	< 0.00050 U	< 0.00010 UJ	< 0.00010 U	< 0.0001 U	< 0.00050 UD	< 0.00010 U	< 0.00050 UD	< 0.00010 U	< 0.00050 UD	< 0.00010 U
Lithium	mg/L	T	0.29	0.34	0.33	0.31	0.26	0.29	0.34	0.33	0.29 D	0.26 D	0.29	0.30	0.27 D	0.33	0.31
Mercury	mg/L	T	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	0.0024	< 0.00016 U	0.0021	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00000016 U
Molybdenum	mg/L	T	0.028	0.033	0.029	0.021	0.020	0.012	0.019 J+	0.019	0.021	0.0097	0.021	0.016	0.028	0.023	0.025
Radium 226 and 228	pCi/L	T	0.789	< 0.678 U	< 0.642 UJ	< 0.796 U	< 0.688 U	< 0.912 U	< 0.742 U	< 0.821 U	< 0.688 U	< 0.98 U	< 0.743 U	< 0.771 U	< 0.851 U	< 0.45 U	< 0.778 U
Radium-226	pCi/L	T	< 0.16 U	< 0.0959 U	< 0.125 UJ	< 0.223 U	< 0.184 U	< 0.22 U	< 0.186 U	< 0.163 U	< 0.237 U	< 0.12 U	< 0.17 U	< 0.135 U	< 0.185 U	< 0.24 U	< 0.218 U
Radium-228	pCi/L	T	0.69	< 0.678 U	< 0.642 UJ	< 0.796 U	< 0.688 U	< 0.912 U	< 0.742 U	< 0.821 U	< 0.688 U	< 0.98 U	< 0.743 U	< 0.771 U	< 0.851 U	< 0.45 U	< 0.778 U
Selenium	mg/L	T	0.00026 J	< 0.00022 U	0.00028 J	0.00024 J	< 0.00022 U	0.00012 J	0.00027 J+	0.00026 J	0.00023 J	0.00024 J	0.00033 J	0.00029 J	0.00040 J	0.00064	0.00038 J
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.00038 U	< 0.000075 U	< 0.00038 U	< 0.00038 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.00038 UD	< 0.000075 U	< 0.00038 UD	< 0.000075 U	< 0.00038 UD	< 0.000075 U
Total Suspended Solids	mg/L	T	45	51	52	50	56	52	46	48	39	47	50 D	57 D	47	33	64
Michigan CCR Part 115																	
Copper	mg/L	T	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	0.00043	< 0.0002 U	< 0.00020 U	0.00029	0.0013	0.00029	0.00034	< 0.00020 U
Iron	mg/L	T	17	19	19	24	25	25	19	16	15 D	22 D	26	20	16 D	13	26
Nickel	mg/L	T	0.00088 J	0.0020	0.0020	0.0033	0.0018	0.0010 J	0.0012	0.0012	0.00072 J	0.0060	0.0072	0.0099	0.0020	0.10	0.0044
Silver	mg/L	T	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.00025 U	< 0.00025 U	< 0.000050 U	< 0.000050 U	< 0.00005 U	< 0.00025 UD	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
Vanadium	mg/L	T	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U
Zinc	mg/L	T	0.025	0.0015	< 0.0012 UJ	< 0.0012 U	0.018	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	0.0017	0.0091	0.016	0.0045
Additional Parameters																	
Bicarbonate Alkalinity	mg/L	T	750	710	750	620	610	400	720	660	780 D	610 D	600	630	790	670	610
Carbonate Alkalinity	mg/L	T	< 1.6 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.31 UD	< 0.31 UD	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	38	36	44	50	53	53	47	46 D	41 D	55 D	64	53	44 D	69	67
Potassium	mg/L	T	13	16	16	10 J	15	14	16	17	15 D	13 D	14	15	14 D	16	14
Sodium	mg/L	T	29	28	26	26	26	29	30	27 D	27 D	26 D	31	28	26 D	34	33
Total Alkalinity	mg/L	T	750	710	750	620	610	400	720	660	780 D	610 D	600	630	790	670	610

Notes:

ug/l - micrograms per liter.
mg/l = milligrams per liter.
su - standard pH units (pH is a field parameter)
pCi/L = picocuries per liter.
All metals were analyzed as total unless otherwise indicated.

Qualifiers:

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

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

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

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

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

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

G - The sample Minimum Detectable Concentration (MDC) is greater than the requested reporting limit.

D - Sample was diluted.

Sample Location: Compliance Phase: Sample Date: Sample Type: Unit: Sample Matrix:		MW-10															
		Background Monitoring								AM/DM Round							
		11/29/2022	1/4/2023	2/6/2023	3/14/2023	4/18/2023	5/23/2023	6/27/2023	8/8/2023	10/23/2023	2/13/2024	4/7/2024	7/17/2024	10/16/2024	2/26/2025	4/20/2025	
		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	
Unit:		Unit 3A/B & 1/2															
Sample Matrix:		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	
Constituent	Unit	Fraction															
Field Parameters																	
Conductivity	mS/cm	N	1.96	2.48	2.34	2.16	2.51	2.18	2.83	3.19	2.68	2.37	3.62	3.62	4	2.87	2.73
Dissolved Oxygen	mg/L	N	0.08	0.04	0.07	0.05	0.02	0.03	0.11	0.02	0.07	0.18	0.03	0.03	0.07	0.17	0.12
Oxidation Reduction Potential	mV	N	-20.3	-245.6	-222.9	-200.2	-189.2	-197.6	-216.2	-168	-149.1	-116.1	-162.4	-193.2	-144.8	99	-151.2
pH	su	N	7.85	7.79	7.05	8.19	7.96	8.81	7.85	7.74	7.47	7.8	7.8	7.42	7.53	7.76	7.77
Temperature	deg c	N	11.1	7.7	5.9	4.6	6.5	10.3	13.4	17	14.8	5.3	7.1	16.9	16.5	5.5	7
Turbidity	NTU	N	0.02	0.02	0.65	0.02	0.29	2.21	0.02	1.01	0.02	3.61	0.02	0.02	1.48	3.3	3.96
Appendix III																	
Boron	mg/L	T	25	14	9.7	4.5	9.2	17	26 J+	28 D	23 D	8.7 D	6.4	15 D	21 D	23 D	22 D
Calcium	mg/L	T	220	220	280	460	280	210	210 D	160 D	190 D	310 D	590 D	430 D	360 D	300 D	270 D
Chloride	mg/L	T	220	170	130	92	140	160	320 D	430 D	310 D	140 D	240 D	420 D	670 D	350 D	330 D
Fluoride	mg/L	T	7.1	5.7	4.0	2.7	4.6	6.5	7.3 D	7.7 D	6 D	3.3 D	2.7 D	4.2 D	5.2 D	5.9 D	5.7 D
Sulfate (as SO4)	mg/L	T	490	620	880	360	950	410	200 D	140 D	330 D	840 D	1700 D	1000 D	690 D	390 D	450 D
Total Dissolved Solids	mg/L	T	1700	1800	1800	2400	1900	1500	1700 D	1900 D	1600 D	1800 D	3200 D	2700 D	2800 D	1900 D	1800 D
Appendix IV																	
Antimony	mg/L	T	0.00013 J	< 0.000050 U	< 0.00025 U	< 0.000050 U	0.00034 J	< 0.00050 U	0.00011 J	0.00011 J	< 0.0001 UJ	< 0.000050 UD	< 0.00010 U	< 0.00010 U	< 0.00010 U	< 0.00010 U	< 0.00010 U
Arsenic	mg/L	T	0.00049 J	0.00034 J	0.00038 J	0.00037 J	0.00020 J	0.00055	0.00073 J+	0.0011	0.00094	0.00025 J	0.00085	0.0012	0.0020	0.00053 J	0.00074
Barium	mg/L	T	0.32	0.57	0.28	0.23	0.14	0.16	0.23	0.28	0.46	0.32 D	0.27	0.19	0.23	0.38	0.32
Beryllium	mg/L	T	< 0.000054 U	0.000071 J	< 0.000052 U	0.000054 J	< 0.000052 U	0.00022 J	0.000092 J+	0.00015 J	0.000052 J-	< 0.000052 U	< 0.000052 U	< 0.000052 U	0.000063 J	< 0.000052 U	0.000069 J
Cadmium	mg/L	T	< 0.000032 U	< 0.000032 U	< 0.00016 U	< 0.000032 U	< 0.00016 U	< 0.00038 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.00038 UD	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Chromium, Total	mg/L	T	0.0040	0.0050	0.0026	0.0018	0.0019	0.0042	0.0070	0.0085	0.0042	0.0013	0.0016	0.0028	0.0031	0.0045	0.0048
Cobalt	mg/L	T	0.00038 J	0.00040 J	0.00041 J	0.00053	0.00030 J	0.0018	0.00068 J+	0.00090	0.00038 J-	< 0.00010 U	0.00010 J	0.00025 J	0.00042 J	0.00029 J	0.00027 J
Fluoride	mg/L	T	7.1	5.7	4.0	2.7	4.6	6.5	7.3 D	7.7 D	6 D	3.3 D	2.7 D	4.2 D	5.2 D	5.9 D	5.7 D
Lead	mg/L	T	< 0.00023 U	< 0.00022 U	< 0.0011 U	< 0.0011 U	< 0.0011 U	< 0.00050 U	< 0.00010 UJ	0.00012 J	0.00017 J	< 0.00050 UD	< 0.00010 U	< 0.00050 UD	< 0.00050 UD	< 0.00010 U	< 0.00010 U
Lithium	mg/L	T	0.92	0.83	0.54	1.6	0.99	0.83	1.1	1.2	0.94 D	0.56 D	0.76	0.94	1.0 D	0.97	0.83 D
Mercury	mg/L	T	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 UJ	< 0.00016 U	0.0019	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00000016 U
Molybdenum	mg/L	T	0.0072	0.0033	0.0048	0.0036	0.0035 J	0.0056	0.0019 J+	0.0028	0.0027	0.00080 J	0.0015	0.0037	0.0035	0.00065 J	0.0016
Radium 226 and 228	pCi/L	T	< 0.775 U	< 0.645 U	1.36	< 1.09 U	< 0.605 UJ	< 0.801 U	< 0.752 U	< 0.736 U	< 0.897 UJ	1.22	< 0.59 U	< 0.698 U	1.96	< 0.83 U	< 1.12 UJ
Radium-226	pCi/L	T	< 0.171 U	< 0.119 U	< 0.121 U	< 0.231 U	< 0.155 UJ	< 0.248 U	< 0.179 U	< 0.142 U	< 0.229 UJ	0.206	< 0.149 U	0.185	0.417	0.62	< 0.29 UJ
Radium-228	pCi/L	T	< 1 U	< 0.645 U	1.31	< 1.09 UG	< 0.605 UJ	< 0.801 U	< 0.752 U	< 0.736 U	< 0.897 UJ	1.01	< 0.59 U	< 0.698 U	1.54	< 0.83 U	< 1.12 UJ
Selenium	mg/L	T	0.00031 J	0.00028 J	0.00031 J	0.00046 J	< 0.00022 U	0.00039 J	0.00036 J+	0.00041 J	0.00036 J	0.00083	0.00030 J	0.00034 J	0.00032 J	0.00019 J	0.00026 J
Thallium	mg/L	T	< 0.000076 U	< 0.000075 U	< 0.00038 U	< 0.00038 U	< 0.00038 U	< 0.00038 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.00038 UD	< 0.000075 U	< 0.00038 UD	< 0.00038 UD	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	4.0	4.0	1.0 J	9.0	8.0 J+	2.0 J	< 4.0 U	2.0 J	< 4 U	< 4.0 U	6.0	20	11	14 D	13
Michigan CCR Part 115																	
Copper	mg/L	T	0.00049	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	0.0013	< 0.00020 U	< 0.00020 U	0.00038 J-	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U
Iron	mg/L	T	3.7	3.7	3.9	7.2	7.3	6.2	4.5	3.2	2.4 D	3.7 D	6.0	5.9	5.2 D	7.0	7.7 D
Nickel	mg/L	T	0.00089 J	0.00087 J	< 0.00065 U	< 0.00065 U	< 0.00065 U	0.0018	0.00088 J	0.0012	0.00076 J-	< 0.00065 U	< 0.00065 U	< 0.00065 U	0.00085 J	< 0.00065 U	0.00079 J
Silver	mg/L	T	< 0.000051 U	< 0.000050 U	< 0.00025 U	< 0.000050 U	< 0.00025 U	< 0.00025 U	< 0.000050 U	< 0.000050 U	< 0.00005 U	< 0.00025 UD	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
Vanadium	mg/L	T	< 0.00064 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	0.0013	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	0.00089 J	0.0010 J	< 0.00062 U	< 0.00062 U
Zinc	mg/L	T	0.014	0.0012	< 0.0012 U	< 0.0012 U	0.013	0.0018	0.0012	0.0014	0.0025 J-	< 0.0012 U	< 0.0012 U	< 0.0012 U	0.014	< 0.0012 U	< 0.0012 U
Additional Parameters																	
Bicarbonate Alkalinity	mg/L	T	680	580	320	140	340	540	720	770	700 D	240 D	220	410	560	850	680
Carbonate Alkalinity	mg/L	T	< 1.6 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.31 UD	< 0.31 UD	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	85	86	91	95	76	63	59	58 D	61 D	86 D	120 D	100 D	91 D	110 D	100 D
Potassium	mg/L	T	44	33	31	40	42	36	46	48 D	45 D	41 D	60	63	62 D	42	38 D
Sodium	mg/L	T	220	160	120	140	160	190	310 D	390 D	300 D	120 D	130 D	250 D	360 D	230 D	220 D
Total Alkalinity	mg/L	T	680	580	320	140	340	540	720	770	700 D	240 D	220	410	560	850	680

Notes:

ug/l - micrograms per liter.
mg/l = milligrams per liter.
su - standard pH units (pH is a field parameter)
pCi/L = picocuries per liter.
All metals were analyzed as total unless otherwise indicated.

Qualifiers:

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

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

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

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

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

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

G - The sample Minimum Detectable Concentration (MDC) is greater than the requested reporting limit.

D - Sample was diluted.

Sample Location: Compliance Phase: Sample Date: Sample Type: Unit: Sample Matrix:		MW-11															
		Background Monitoring								AM/DM Round							
		11/29/2022	1/3/2023	2/8/2023	3/14/2023	4/18/2023	5/23/2023	6/28/2023	8/8/2023	10/24/2023	2/13/2024	4/7/2024	7/18/2024	10/16/2024	2/25/2025	4/20/2025	
		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	
		Unit 3A/B															
		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	
Constituent	Unit	Fraction															
Field Parameters																	
Conductivity	mS/cm	N	1.38	1.4	1.9	1.413	1.77	1.76	1.85	1.68	1.4	1.38	1.63	1.72	1.56	1.71	0.979
Dissolved Oxygen	mg/L	N	0.1	0.31	0.25	0.19	0.23	0.09	0.13	0.22	0.31	0.07	0.25	0.09	0.23	0.44	0.2
Oxidation Reduction Potential	mV	N	76.8	-142.4	-161.7	-121	-157.9	-136.5	-64.7	-27.6	-179.4	140.9	-148.2	-78	-142.4	50.6	-82.3
pH	su	N	7.28	7.32	7.4	7.47	7.33	7.34	7.31	7.22	7.44	7.33	7.38	7.13	7.24	7.09	7.28
Temperature	deg c	N	13.6	11.7	9.9	7.5	7.8	10.6	13.2	15.3	15.9	9.2	9.4	15.4	16.1	9.6	9.3
Turbidity	NTU	N	0.02	1.53	0.02	0.02	0.02	1.25	5.01	0.02	0.02	0.02	1.6	0.02	0.08	1.36	0.69
Appendix III																	
Boron	mg/L	T	8.5	13	4.8 B	2.8	1.5	2.0	3.0 J+	7.2	12 D	8.1 D	3.2	4.8	7.1 D	5.2	4.5
Calcium	mg/L	T	240	130	300	380	320	320	350 D	240 D	150 D	230 D	290 D	270 D	190 D	270 D	220
Chloride	mg/L	T	95	84	78	62	52	53	72 D	73 D	88 D	62 D	38 D	59 D	73 D	71 D	39 D
Fluoride	mg/L	T	0.81	1.4	0.37	0.32	0.21	0.22	0.25 D	0.69 D	1.2 D	0.75 D	0.61 D	0.47 D	0.90 D	0.45 D	0.69 D
Sulfate (as SO4)	mg/L	T	13 J	10	42	180	210	87	17 D	1.8 JD	< 0.41 UD	< 0.41 UD	14 D	< 2.2 UD	< 1.1 UD	< 2.2 UD	< 2.2 UD
Total Dissolved Solids	mg/L	T	970 J-	680	1200	1100	1200	1200	1100 D	930 D	1800 D	880 D	960 D	1000 D	890 D	1000 D	870 D
Appendix IV																	
Antimony	mg/L	T	0.000082 J	0.00069	< 0.000050 U	< 0.000050 U	0.00028 J	< 0.00050 U	< 0.00010 U	< 0.00010 U	< 0.0001 U	< 0.00010 U	0.00028	< 0.00010 U	< 0.00010 U	< 0.00010 U	< 0.00010 U
Arsenic	mg/L	T	0.0017	0.0041	0.0016	0.0011	0.00061	0.0010	0.0012 J+	0.0019	0.0023	0.0012	0.0013	0.0015	0.0016	0.0014	0.0020
Barium	mg/L	T	0.74	1.2	0.59	0.60	0.36	0.41	0.50	0.57	0.87	0.83	0.53	0.56	0.78	0.57	0.57
Beryllium	mg/L	T	< 0.000052 U	0.000091 J	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 UJ	< 0.000052 U	< 0.000052 U	< 0.000052 U	0.00044	< 0.000052 U	0.000088 J	< 0.000052 U	< 0.000052 U
Cadmium	mg/L	T	< 0.000032 U	0.00073	< 0.000032 U	< 0.000032 U	< 0.00016 U	< 0.00038 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.000075 U	0.00016 J	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Chromium, Total	mg/L	T	0.00080	0.0086	0.0010	0.00087	0.00045	0.00052	0.0012	0.0018	0.00063	0.00062	0.00078	0.0010	0.00091	0.00086	0.0010
Cobalt	mg/L	T	0.00036 J	0.0012	0.00061	0.00072	0.00040 J	0.00040 J	0.00066 J+	0.00061	0.00023 J	0.00026 J	0.0024	0.00028 J	0.00032 J	0.00035 J	0.00027 J
Fluoride	mg/L	T	0.81	1.4	0.37	0.32	0.21	0.22	0.25 D	0.69 D	1.2 D	0.75 D	0.61 D	0.47 D	0.90 D	0.45 D	0.69 D
Lead	mg/L	T	0.0025	0.068	0.0018 J	< 0.00022 U	< 0.0011 U	< 0.00050 U	0.0038 J+	0.00017 J	0.00036 J	0.00031 J	0.00043 J	0.00018 J	0.00041 J	0.00042 J	0.0012
Lithium	mg/L	T	0.10	0.22	0.052	0.028	0.0059	0.0084	0.022	0.095	0.15 D	0.077 D	0.028	0.042	0.065 D	0.051	0.055
Mercury	mg/L	T	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	0.0011	< 0.00016 U	< 0.00016 U	< 0.00016 U	0.00000088
Molybdenum	mg/L	T	0.0017	0.0029	0.0015	< 0.00062 U	< 0.00062 U	0.00043 J	0.00066 J+	0.0013	0.0015	0.00066 J	0.0030	0.0010 J	0.00062 J	0.00095 J	0.00099 J
Radium 226 and 228	pCi/L	T	1.19	1.32	< 0.91 U	1.07	1.67	0.812	< 1 U	1.76	0.764	1.13	< 0.775 U	< 0.575 U	2.61	1.35	--
Radium-226	pCi/L	T	0.445	0.422	0.352	0.304	0.406	0.228	0.243	0.409	0.469	0.514	0.205	0.275	0.319	0.61	--
Radium-228	pCi/L	T	0.75	0.903	< 0.91 U	< 0.84 U	1.26	< 0.721 U	< 1 U	1.35	< 0.624 U	< 0.765 U	< 0.775 U	< 0.575 U	2.3	0.74	--
Selenium	mg/L	T	0.00022 J	0.00031 J	< 0.00022 U	< 0.00022 U	< 0.00022 U	0.00014 J	0.00016 J+	0.00021 J	0.0002 J	0.00071	0.00041 J	0.00017 J	0.00015 J	0.00018 J	0.00015 J
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.00038 U	< 0.000075 U	< 0.00038 U	< 0.00038 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.000075 U	0.00021 J	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	21	35	10	11	4.0	< 4.0 U	4.0	6.0	19	9.0	4.0	4.0	28	22	16
Michigan CCR Part 115																	
Copper	mg/L	T	0.00043	0.019	0.00047	< 0.00020 U	< 0.00020 U	0.00024 J	0.00056 B	0.0016	< 0.0002 U	0.00020 J	0.0021	0.00031	0.00028	0.00025	< 0.00020 U
Iron	mg/L	T	8.7	10	4.9	6.1	3.6	3.8	4.2	6.7	11 D	8.5 D	5.6	7.1	9.5 D	8.2	7.6
Nickel	mg/L	T	0.0013	0.0094	0.0015	0.0012	0.00065 J	0.00068 J	0.0013	0.0018	0.0015	0.0011 J	0.0028	0.00098 J	0.0015	0.0015	0.0013
Silver	mg/L	T	< 0.000050 U	0.00014	< 0.000050 U	< 0.000050 U	< 0.00025 U	< 0.00025 U	< 0.000050 U	< 0.000050 U	< 0.00005 U	< 0.00005 U	0.00017	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
Vanadium	mg/L	T	< 0.00062 U	0.00062 J	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	0.0030	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U
Zinc	mg/L	T	0.032	0.10	0.0085	< 0.0012 U	0.033	< 0.0012 U	0.0049	0.0031	0.0018	< 0.0012 U	0.0035	< 0.0012 U	0.032	0.041	0.0027
Additional Parameters																	
Bicarbonate Alkalinity	mg/L	T	840	600	860	810	800	840	890	800	660 D	760 D	840	820	770	900	810
Carbonate Alkalinity	mg/L	T	< 1.6 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.31 UD	< 0.31 UD	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	60	55	63	67	60	55	55	56 D	52 D	61 D	55	49	48 D	58	47
Potassium	mg/L	T	15	19	11	8.5	5.7	5.5	8.1	14	18 D	14 D	7.2	9.2	12 D	11	9.8
Sodium	mg/L	T	57	70	37	25	21	26	38	50 D	67 D	51 D	28	36	45 D	44	32
Total Alkalinity	mg/L	T	840	600	860	810	800	840	890	800	660 D	760 D	840	820	770	900	810

Notes:

ug/l - micrograms per liter.
mg/l = milligrams per liter.
su - standard pH units (pH is a field parameter)
pCi/L = picocuries per liter.
All metals were analyzed as total unless otherwise indicated.

Qualifiers:

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

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

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

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

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

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

G - The sample Minimum Detectable Concentration (MDC) is greater than the requested reporting limit.

D - Sample was diluted.

Sample Location: Compliance Phase: Sample Date: Sample Type: Unit: Sample Matrix:		MW-12															
		Background Monitoring								AM/DM Round							
		11/28/2022	1/3/2023	2/7/2023	3/13/2023	4/19/2023	5/23/2023	6/27/2023	8/7/2023	10/23/2023	2/13/2024	4/8/2024	7/17/2024	10/16/2024	2/26/2025	4/21/2025	
		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	
		Unit 3A/B															
		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	
Constituent	Unit	Fraction															
Field Parameters																	
Conductivity	mS/cm	N	0.459	0.387	0.542	0.311	0.52	0.44	0.55	0.67	0.64	0.33	0.345	0.57	0.55	0.471	0.345
Dissolved Oxygen	mg/L	N	1.62	8.72	8.46	10.31	1.03	2.93	0.12	0.08	0.16	11.12	8.25	0.17	0.11	2.07	4.03
Oxidation Reduction Potential	mV	N	93.4	47.4	-14.8	87.6	26.2	131	54.9	-30.1	-118.7	36.8	125.4	-2.2	-38	-18.7	-21.7
pH	su	N	7.67	7	7.8	8.16	7.92	7.77	7.52	7.47	7.46	8.32	7.91	7.46	7.33	7.73	7.64
Temperature	deg c	N	8.8	3.3	1.3	3	9.7	13.9	17.5	20.9	15.9	3.5	6.5	19.5	17.6	3.7	8.2
Turbidity	NTU	N	0.02	0.02	0.02	0.02	0.02	1.92	0.02	0.02	0.31	0.02	0.02	0.02	0.02	0.02	0.02
Appendix III																	
Boron	mg/L	T	0.39	0.24	0.26	0.19	0.20	0.27	0.33 J+	0.36	0.42 D	0.22 D	0.25	0.41	0.40 D	0.36	0.23
Calcium	mg/L	T	77	46	78	77	55	63	64	95 D	95 D	40 D	40	74	79 D	59	41
Chloride	mg/L	T	24	16	27	18	16	15	17 D	22 D	26 D	17 D	12 D	18 D	18 D	27 D	15 D
Fluoride	mg/L	T	0.54	0.43	0.23	0.48	0.23	0.22	0.26 D	0.28 D	0.26 D	0.46 D	0.41 D	0.29 D	0.31 D	0.20 D	0.27 D
Sulfate (as SO4)	mg/L	T	180	130	180	120	110	99	110 D	130 D	130 D	84 D	68 D	62 D	52 D	100 D	61 D
Total Dissolved Solids	mg/L	T	360	210	340	200	260	270	330 D	420	200	100 D	210	380 D	330 D	300 D	200 D
Appendix IV																	
Antimony	mg/L	T	0.00071	0.0011	0.00076	0.00053	0.00094	0.00092	0.00064	0.00040	0.00041	0.00035	0.00053	0.00040	0.00084	0.0015	0.00068
Arsenic	mg/L	T	0.0028	0.0019	0.0018	0.0014	0.0019	0.0024	0.0029 J+	0.0034	0.0031	0.0016	0.0017	0.0032	0.0030	0.0015	0.0016
Barium	mg/L	T	0.030	0.017	0.024	0.025	0.022	0.032	0.043	0.053	0.06	0.022	0.025	0.071	0.10	0.051	0.038
Beryllium	mg/L	T	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 UJ	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U
Cadmium	mg/L	T	0.00067	0.00078	0.0014	0.00062	0.0012	0.0016	0.0024 J+	0.0022	0.0011	0.00054	0.00082	0.0032	0.0028	0.0012	0.0015
Chromium, Total	mg/L	T	0.00034	0.00048	0.00046	0.00067	0.00054	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.0002 U	0.00099	0.00095	< 0.00020 UJ	0.00025	0.00041	0.00095
Cobalt	mg/L	T	0.00019 J	< 0.00010 U	0.00014 J	< 0.00010 U	< 0.00010 U	0.00026 J	0.00050 J+	0.00053	0.00038 J	< 0.00010 U	< 0.00010 U	0.00056	0.00093	0.00011 J	0.00015 J
Fluoride	mg/L	T	0.54	0.43	0.23	0.48	0.23	0.22	0.26 D	0.28 D	0.26 D	0.46 D	0.41 D	0.29 D	0.31 D	0.20 D	0.27 D
Lead	mg/L	T	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	0.00015 J	0.00014 J+	0.00021 J	0.00021 J	< 0.00010 U	0.00039 J	0.00038 J	0.00047 J	0.00015 J	0.00051 J
Lithium	mg/L	T	0.0037	0.0033	0.0022 J	0.0025 J+	0.0037	0.0043	0.0064	0.0042	0.0048	0.0023 J	0.0019 J	0.0047	0.0059	0.0020 J	0.0019 J
Mercury	mg/L	T	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	0.00016 J	< 0.00016 U	0.00023	< 0.00016 U	< 0.00016 U	< 0.00016 U	0.00000083
Molybdenum	mg/L	T	0.0087	0.0072	0.0067	0.0056	0.0057	0.0069	0.0082 J+	0.0088	0.0096	0.0051	0.0046	0.0064	0.018	0.0087	0.0059
Radium 226 and 228	pCi/L	T	< 0.543 U	< 0.459 U	< 0.685 U	< 0.619 U	0.809	1.09	< 0.59 UJ	< 0.578 UJ	< 0.517 U	< 0.749 U	0.769	< 0.602 UJ	1.07	< 0.86 U	0.589
Radium-226	pCi/L	T	< 0.13 U	< 0.0702 U	< 0.0727 U	< 0.126 U	< 0.129 U	< 0.136 U	< 0.124 U	< 0.106 UJ	< 0.212 U	< 0.116 U	< 0.146 U	0.119	< 0.148 U	< 0.3 U	< 0.306 U
Radium-228	pCi/L	T	< 0.543 U	< 0.459 U	< 0.685 U	< 0.619 U	0.793	1.07	< 0.59 UJ	< 0.578 UJ	< 0.517 U	< 0.749 U	0.729	< 0.602 UJ	1.07	< 0.86 U	< 0.487 U
Selenium	mg/L	T	0.0015	0.0022	0.0023	0.00093	0.0017	0.00076	0.00021 J+	0.00013 J	0.00029 J	0.00089	0.0012	0.00014 J	0.00043 J	0.0043	0.0017
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	< 4.0 U	< 4.0 U	2.0 J	< 4.0 U	1.0 J	< 4.0 U	< 4.0 UJ	0.98 J+	< 4 U	< 4.0 U	< 4.0 UD	< 3.9 UD	< 4.0 U	< 4.0 UD	< 4.0 U
Michigan CCR Part 115																	
Copper	mg/L	T	0.00055	0.00092	0.0010	0.0010	0.0015	0.0016	0.0012 B	0.00094	0.00071	0.0012	0.0013	0.0014	0.0019	0.0034	0.0022
Iron	mg/L	T	< 0.26 U	< 0.026 U	0.033 J	0.027 J	< 0.026 U	< 0.026 U	0.051	0.064	0.037 J	< 0.026 UJ	< 0.026 UJ	0.068	0.15	0.021 J	0.047 J
Nickel	mg/L	T	0.0025	0.0023	0.0035	0.0016	0.0021	0.0025	0.0031	0.0035	0.0026	0.0014	0.0014	0.0029	0.0034	0.0029	0.0019
Silver	mg/L	T	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.00005 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
Vanadium	mg/L	T	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	0.00085 J	0.0013	0.0012	0.00095 J	< 0.00062 U	< 0.00062 U	0.00087 J	0.0016	0.0021	0.00074 J	0.0010 J
Zinc	mg/L	T	0.0068	0.0080	0.0095	0.0037	0.0090	0.0074	0.0085	0.010	0.008	0.0027	0.0050	0.011	0.017	0.0073	0.0080
Additional Parameters																	
Bicarbonate Alkalinity	mg/L	T	86	55	52	46	85	95	140	140	190 D	47	86	200	220	98	100
Carbonate Alkalinity	mg/L	T	< 1.6 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.31 UD	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	17	12	2.4	12	13	15	14	19	22 D	11 D	13	21	19 D	18	12
Potassium	mg/L	T	1.3	0.70	0.74	0.82	1.0	1.3	1.3	1.8	1.7	0.62	0.60	1.3	1.8	0.62	0.86
Sodium	mg/L	T	13	11	14	9.9	9.4	11	11	14	16 D	9.8 D	8.8	12	18 D	15	9.1
Total Alkalinity	mg/L	T	86	55	52	46	85	95	140	140	190 D	47	86	200	220	98	100

Notes:

ug/l - micrograms per liter.
mg/l = milligrams per liter.
su - standard pH units (pH is a field parameter)
pCi/L = picocuries per liter.
All metals were analyzed as total unless otherwise indicated.

Qualifiers:

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

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

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

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

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

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

G - The sample Minimum Detectable Concentration (MDC) is greater than the requested reporting limit.

D - Sample was diluted.

Sample Location: Compliance Phase: Sample Date: Sample Type: Unit: Sample Matrix:			MW-16				
			AM/DM Round				
			4/8/2024	7/18/2024	10/17/2024	2/25/2025	4/21/2025
			Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
			Unit 1/2				
			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Constituent	Unit	Fraction					
Field Parameters							
Conductivity	mS/cm	N	1.1	1.36	1.36	1.36	1.25
Dissolved Oxygen	mg/L	N	0.04	0.18	0.19	0.06	0.17
Oxidation Reduction Potential	mV	N	-90.4	-15.6	-135.9	-51.2	-111.6
pH	su	N	7.29	6.53	6.93	7.29	7.3
Temperature	deg c	N	7.1	17.6	18.2	4.5	8.1
Turbidity	NTU	N	0.02	0.02	0.02	0.59	0.02
Appendix III							
Boron	mg/L	T	0.22	0.43	0.39 D	0.27	0.29
Calcium	mg/L	T	190 D	250 D	230 D	280 D	230
Chloride	mg/L	T	14 D	21 D	20 D	18 D	17 D
Fluoride	mg/L	T	0.14 D	0.19 JD	< 0.055 UD	0.15 JD	0.18
Sulfate (as SO4)	mg/L	T	60 D	< 2.2 UD	< 1.1 UD	90 D	140 D
Total Dissolved Solids	mg/L	T	680 D	830 D	790 D	910 D	850 D
Appendix IV							
Antimony	mg/L	T	< 0.00010 U	< 0.00010 U	0.00011 J	< 0.00010 U	< 0.00010 U
Arsenic	mg/L	T	0.0052	0.0034	0.017	0.0012	0.0045
Barium	mg/L	T	0.18	0.28	0.29	0.18	0.21
Beryllium	mg/L	T	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U
Cadmium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Chromium, Total	mg/L	T	0.00064	0.00085	0.0013	0.00051	0.00062
Cobalt	mg/L	T	0.00021 J	0.00017 J	0.00030 J	0.00039 J	0.00019 J
Fluoride	mg/L	T	0.14 D	0.19 JD	< 0.055 UD	0.15 JD	0.18
Lead	mg/L	T	< 0.00010 U	< 0.00010 U	0.00013 J	0.00019 J	< 0.00010 U
Lithium	mg/L	T	0.016	0.025	0.024 D	0.020	0.020
Mercury	mg/L	T	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00000016 U
Molybdenum	mg/L	T	< 0.00025 U	< 0.00025 U	< 0.00025 U	< 0.00025 U	< 0.00025 U
Radium 226 and 228	pCi/L	T	1.01	< 0.623 U	2.31	< 0.62 U	1.09
Radium-226	pCi/L	T	< 0.199 U	0.296	0.371	< 0.24 U	< 0.33 U
Radium-228	pCi/L	T	0.902	< 0.623 U	1.94	< 0.62 U	0.836
Selenium	mg/L	T	0.00012 J	0.00011 J	0.00015 J	< 0.00010 U	0.00013 J
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	16 D	11	40	4.0 D	17
Michigan CCR Part 115							
Copper	mg/L	T	0.00025	< 0.00020 U	< 0.00020 U	0.00031	< 0.00020 U
Iron	mg/L	T	7.1	6.7	13 D	4.7	6.7
Nickel	mg/L	T	0.00065 J	< 0.00065 U	0.0010 J	0.0028	0.0017
Silver	mg/L	T	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
Vanadium	mg/L	T	< 0.00062 U	0.00066 J	0.00076 J	< 0.00062 U	< 0.00062 U
Zinc	mg/L	T	< 0.0012 U	< 0.0012 U	0.012	0.016	0.0012
Additional Parameters							
Bicarbonate Alkalinity	mg/L	T	550	710	760	720	620
Carbonate Alkalinity	mg/L	T	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	23	27	26 D	33	28
Potassium	mg/L	T	3.9	5.1	5.2 D	5.2	5.0
Sodium	mg/L	T	17	23	21 D	25	21
Total Alkalinity	mg/L	T	550	710	760	720	620

Notes:

ug/l - micrograms per liter.
mg/l = milligrams per liter.
su - standard pH units (pH is a field parameter)
pCi/L = picocuries per liter.
All metals were analyzed as total unless otherwise indicated.

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

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

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

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

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

G - The sample Minimum Detectable Concentration (MDC) is greater than the requested reporting limit.

D - Sample was diluted.

Sample Location: Compliance Phase: Sample Date: Sample Type: Unit: Sample Matrix:			MW-17				
			AM/DM Round				
			4/8/2024	7/17/2024	10/16/2024	2/3/2025	4/20/2025
			Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
			Unit 1/2				
			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Constituent	Unit	Fraction					
Field Parameters							
Conductivity	mS/cm	N	1.12	0.95	1.03	1.02	0.655
Dissolved Oxygen	mg/L	N	0.06	0.02	0.03	0.01	0.14
Oxidation Reduction Potential	mV	N	-157.2	-197.6	-194.5	-74.4	-128.6
pH	su	N	7.88	7.31	7.52	7.69	7.75
Temperature	deg c	N	9.1	20.3	18.6	6.7	9
Turbidity	NTU	N	0.02	0.21	1.02	3.69	1.01
Appendix III							
Boron	mg/L	T	0.79	0.75	0.89 D	0.58	0.52
Calcium	mg/L	T	160 D	140 D	130 D	130 D	120
Chloride	mg/L	T	43 D	33 D	47 D	34 D	34 D
Fluoride	mg/L	T	0.48 D	0.56 D	0.67 D	0.38 D	0.54 D
Sulfate (as SO4)	mg/L	T	4.8 JD	33 D	7.3 D	27 D	4.4 JD
Total Dissolved Solids	mg/L	T	620 D	620 D	580 D	600 D	560 D
Appendix IV							
Antimony	mg/L	T	< 0.00010 U	0.00016 J	< 0.00010 U	< 0.00010 U	< 0.00010 U
Arsenic	mg/L	T	0.0018	0.0026	0.0024	0.0012	0.0013
Barium	mg/L	T	0.70	0.53	0.65	0.55	0.60
Beryllium	mg/L	T	< 0.000052 U	< 0.000052 U	< 0.000052 U	0.000069 J	< 0.000052 U
Cadmium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Chromium, Total	mg/L	T	0.00076	0.0011	0.00081	0.00066	0.00090
Cobalt	mg/L	T	0.00033 J	0.00044 J	0.00052	0.00048 J	0.00030 J
Fluoride	mg/L	T	0.48 D	0.56 D	0.67 D	0.38 D	0.54 D
Lead	mg/L	T	0.00019 J	0.00042 J	0.00017 J	0.00077	0.00045 J
Lithium	mg/L	T	0.035	0.033	0.036 D	0.028	0.027
Mercury	mg/L	T	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00000016 U
Molybdenum	mg/L	T	0.00079 J	0.0031	0.00077 J	0.00093 J	0.00078 J
Radium 226 and 228	pCi/L	T	0.656	< 0.918 U	1.56	0.58	1.3
Radium-226	pCi/L	T	< 0.185 U	0.315	0.334	< 0.53 U	< 0.357 U
Radium-228	pCi/L	T	< 0.571 U	< 0.918 U	1.22	0.58	1.3 G
Selenium	mg/L	T	0.00014 J	0.00021 J	0.00013 J	0.00011 J	0.00021 J
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	9.0	9.0	12	10	14
Michigan CCR Part 115							
Copper	mg/L	T	0.00088	0.0016	0.00049	0.0010	0.0011
Iron	mg/L	T	6.6	3.5	3.8 D	4.1	4.8
Nickel	mg/L	T	0.0011 J	0.0020	0.0015	0.0011 J	0.0012
Silver	mg/L	T	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
Vanadium	mg/L	T	0.00084 J	0.0013	0.00089 J	0.00077 J	0.00065 J
Zinc	mg/L	T	0.0026	0.0059	0.027	0.044	0.0087
Additional Parameters							
Bicarbonate Alkalinity	mg/L	T	530	460	500	480	500
Carbonate Alkalinity	mg/L	T	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	30	24	24 D	24	24
Potassium	mg/L	T	15	16	16 D	12	12
Sodium	mg/L	T	59	39	56 D	49	47
Total Alkalinity	mg/L	T	530	460	500	480	500

Notes:

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mg/l = milligrams per liter.
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pCi/L = picocuries per liter.
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R The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte might or might not be present in the sample.

G - The sample Minimum Detectable Concentration (MDC) is greater than the requested reporting limit.

D - Sample was diluted.

Sample Location: Compliance Phase: Sample Date: Sample Type: Unit: Sample Matrix:			MW-18														
			Background Monitoring							AM/DM Round							
			11/30/2022	1/5/2023	2/8/2023	3/13/2023	4/18/2023	5/22/2023	6/27/2023	8/8/2023	10/24/2023	2/13/2024	4/10/2024	7/17/2024	10/16/2024	2/26/2025	4/21/2025
			Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Unit:			Unit 1/2														
Sample Matrix:			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Constituent	Unit	Fraction															
Field Parameters																	
Conductivity	mS/cm	N	1.54	2.06	1.788	1.554	1.4	1.52	1.62	1.46	1.6	1.51	1.69	1.64	1.69	1.85	1.49
Dissolved Oxygen	mg/L	N	0.09	0.19	0.72	0.22	0.34	0.15	0.29	0.05	0.3	0.05	0.4	0.04	0.02	0.47	0.42
Oxidation Reduction Potential	mV	N	66.8	-126.8	-70.8	-69.8	-31.3	-22.1	-88.4	-92.8	-80	132.6	-114.3	-143.3	-123.7	79.4	-86.7
pH	su	N	7.05	7.02	7.2	7.12	7.19	7.16	7.16	7.25	7.16	7.27	7.18	7.31	7.17	7.18	7.27
Temperature	deg c	N	9.9	6.5	5.2	3.8	6.3	11.3	17.2	17.8	15.3	5.5	7	17.3	16	5.3	7.3
Turbidity	NTU	N	0.02	0.02	0.09	0.02	0.52	0.02	0.02	7.06	0.59	0.02	0.02	4.07	1.39	4.55	2.18
Appendix III																	
Boron	mg/L	T	2.2	2.0	2.3	1.9	1.8	2.6	2.7 J+	2.3	3 D	3.5 D	4.0 D	3.9	3.9 D	4.4	3.7
Calcium	mg/L	T	450	410	380	330	270	340	240 D	250 D	360 D	370 D	350 D	330 D	330 D	410 D	270
Chloride	mg/L	T	28	26	22	19	16	19	24 D	27 D	22 D	24 D	16 D	27 D	24 D	32 D	19 D
Fluoride	mg/L	T	3.5	3.3	3.5	3.8	3.8	3.9	4.4 D	5.1 D	4.5 D	3.4 D	2.7 D	4.5 D	4.8 D	3.2 D	3.3 D
Sulfate (as SO4)	mg/L	T	1200	1200	480	740	660	780	760 D	620 D	800 D	980 D	790 D	750 D	740 D	1100 D	770 D
Total Dissolved Solids	mg/L	T	1800	1700	1600	1200	1200	1400	1400 D	1100 D	1400 D	1400 D	1400	1300 D	1300 D	1600 D	1200 D
Appendix IV																	
Antimony	mg/L	T	0.00012 J	0.00013 J	0.00032 J	0.00014 J	0.00030	< 0.00050 U	0.00012 J	< 0.00010 U	0.00013 J	< 0.00050 UD	0.00018 J	0.00011 J	0.00012 J	0.00023 J	0.00017 J
Arsenic	mg/L	T	0.029	0.020	0.023	0.019	0.021	0.015	0.029 J+	0.030	0.041	0.024	0.029	0.031	0.044	0.028	0.027
Barium	mg/L	T	0.021	0.018	0.015	0.012	0.013	0.023	0.024	0.023	0.025	0.015 D	0.014	0.022	0.028	0.018	0.013
Beryllium	mg/L	T	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 UJ	< 0.000052 U	< 0.000052 U	< 0.000052 U	0.000059 J	< 0.000052 U	< 0.000052 U	0.000053 J	< 0.000052 U
Cadmium	mg/L	T	0.00022 J	0.00030	< 0.00016 U	0.00018 J	0.00018 J	0.00044 J	0.00030 J+	0.000089 J	< 0.000075 U	< 0.00038 UD	< 0.000075 U	< 0.000075 U	< 0.000075 U	0.00011 J	0.00010 J
Chromium, Total	mg/L	T	< 0.00018 U	< 0.00018 U	< 0.00018 U	< 0.00018 U	< 0.00018 U	0.00025 J+	< 0.00020 U	< 0.00020 U	< 0.0002 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	0.00063
Cobalt	mg/L	T	0.0060	0.0054	0.0048	0.0032	0.0020	0.0019	0.0032 J+	0.0023	0.0017	0.0023	0.0020	0.0014	0.0016	0.0023	0.0019
Fluoride	mg/L	T	3.5	3.3	3.5	3.8	3.8	3.9	4.4 D	5.1 D	4.5 D	3.4 D	2.7 D	4.5 D	4.8 D	3.2 D	3.3 D
Lead	mg/L	T	< 0.00022 U	< 0.00022 U	< 0.0011 U	< 0.00022 U	< 0.00022 U	< 0.00050 U	0.00016 J+	0.00032 J	0.00014 J	< 0.00050 UD	< 0.00010 U	0.00015 J	0.00014 J	< 0.00010 U	< 0.00010 U
Lithium	mg/L	T	0.044	0.042	0.029	0.027	0.026	0.029	0.041	0.045	0.039 D	0.020 D	0.030	0.041	0.042 D	0.032	0.028
Mercury	mg/L	T	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00000016 U
Molybdenum	mg/L	T	0.013	0.012	0.011	0.013	0.014	0.0090	0.019 J+	0.021	0.02	0.011	0.013	0.018	0.021	0.015	0.014
Radium 226 and 228	pCi/L	T	0.618	< 0.478 U	< 0.501 U	< 0.592 U	1.27	< 0.701 UJ	< 0.872 U	0.73	< 0.625 U	< 0.578 U	0.927	< 0.621 U	1.01	0.93	< 0.555 U
Radium-226	pCi/L	T	< 0.131 U	< 0.0981 U	< 0.083 U	< 0.202 U	< 0.137 U	< 0.122 UJ	< 0.124 U	< 0.105 U	< 0.209 U	< 0.114 U	< 0.191 U	< 0.1 U	< 0.149 U	< 0.23 U	< 0.352 U
Radium-228	pCi/L	T	0.584	< 0.478 U	< 0.501 U	< 0.592 U	1.24	< 0.701 UJ	< 0.872 U	0.713	< 0.625 U	< 0.578 U	0.906	< 0.621 U	0.991	0.83	< 0.555 U
Selenium	mg/L	T	0.00031 J	0.00041 J	0.00034 J	0.00086	0.00079	0.00016 J	0.00018 J+	0.00016 J	0.00082	0.0012	0.0020	0.00016 J	0.00014 J	0.00053	0.0011
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.00038 U	< 0.000075 U	< 0.000075 U	< 0.00038 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.00038 UD	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	12	4.0	13	2.0 J	6.0	6.0	11	7.9 D	11 D	< 4.0 U	100	15	14	4.0 D	11
Michigan CCR Part 115																	
Copper	mg/L	T	0.00043	0.00043	0.00043	0.00043	0.00062	0.00055	0.00088 B	0.0015	0.00047	0.00033	0.00048	0.00062	0.0017	0.00039	0.00047
Iron	mg/L	T	10	8.6	6.8	5.4	4.3	5.3	5.8	4.9	7 D	7.7 D	7.0	6.2	6.9 D	8.1	5.8
Nickel	mg/L	T	0.011	0.011	0.0094	0.0074	0.0051	0.0050	0.0075	0.0049	0.0047	0.0056	0.0053	0.0037	0.0049	0.0058	0.0056
Silver	mg/L	T	< 0.000050 U	< 0.000050 U	< 0.00025 U	< 0.000050 U	< 0.000050 U	< 0.00025 U	< 0.000050 U	< 0.000050 U	< 0.00005 U	< 0.00025 UD	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
Vanadium	mg/L	T	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U
Zinc	mg/L	T	0.074	0.088	0.060	0.068	0.043	0.038	0.061	0.028	0.054	0.042	0.038	0.017	0.031	0.045	0.048
Additional Parameters																	
Bicarbonate Alkalinity	mg/L	T	160	110	100	130	140	130	150	200	200 D	120	120	180	220	100	120
Carbonate Alkalinity	mg/L	T	< 1.6 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.31 UD	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	37	36	33	26	22	29	28	21	30 D	42 D	39	33	35 D	50	36
Potassium	mg/L	T	11	12	11	9.4	8.7	10	11	11	11 D	8.9 D	9.1	10	10 D	8.4	7.1
Sodium	mg/L	T	21	20	21	17	15	18	20	20	20 D	24 D	23	23	23 D	31	22
Total Alkalinity	mg/L	T	160	110	100	130	140	130	150	200	200 D	120	120	180	220	100	120

Notes:

ug/l - micrograms per liter.
mg/l = milligrams per liter.
su - standard pH units (pH is a field parameter)
pCi/L = picocuries per liter.
All metals were analyzed as total unless otherwise indicated.

Qualifiers:

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

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

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

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

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

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

G - The sample Minimum Detectable Concentration (MDC) is greater than the requested reporting limit.

D - Sample was diluted.

Sample Location: Compliance Phase: Sample Date: Sample Type: Unit: Sample Matrix:		MW-19															
		Background Monitoring								AM/DM Round							
		11/30/2022	1/3/2023	2/8/2023	3/13/2023	4/18/2023	5/22/2023	6/28/2023	8/7/2023	10/24/2023	2/13/2024	4/8/2024	7/18/2024	10/16/2024	2/26/2025	4/21/2025	
		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	
Unit:		Unit 1/2															
Sample Matrix:		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	
Constituent	Unit	Fraction															
Field Parameters																	
Conductivity	mS/cm	N	1.91	2.56	2.493	2.196	2.31	2.29	1.98	20.4	2.2	1.77	2.11	2.04	1.97	1.99	1.162
Dissolved Oxygen	mg/L	N	0.12	0.41	1.03	0.13	0.02	0.09	0.32	0.4	0.26	0.05	0.06	0.02	0.3	0.32	0.27
Oxidation Reduction Potential	mV	N	68.7	-134.8	-70.2	-77.1	-7.9	-118.4	-112.9	-36.8	-109.1	141.9	19.4	-152	-71.9	91.2	-19.3
pH	su	N	7	6.39	6.98	6.9	6.92	7.07	6.9	6.82	6.88	6.73	6.85	6.85	6.75	6.7	6.74
Temperature	deg c	N	9.2	7.3	6.3	5.7	8	11.4	13.9	16.7	15.8	5.9	8.5	16.6	15.9	5.2	7.6
Turbidity	NTU	N	0.02	1.6	2.27	0.02	2.59	0.02	0.02	0.02	0.02	2.48	0.02	0.02	0.02	2.98	0.02
Appendix III																	
Boron	mg/L	T	2.6	2.0	2.2	1.5	1.6	1.8	2.3 J+	1.9	2.6 D	1.8 D	1.5	2.0	2.5 D	2.4	1.6
Calcium	mg/L	T	530	510	550	510	450 E	480	460 D	360 D	470 D	490 D	480 D	440 D	400 D	470 D	370
Chloride	mg/L	T	75	64	66	46	42	40	37 D	38 D	50 D	39 D	23 D	34 D	40 D	27 D	21 D
Fluoride	mg/L	T	2.2	2.3	1.9	1.7	1.8	1.9	1.9 D	2.2 D	2 D	1.6 D	1.5 D	1.7 D	2.1 D	1.4 D	1.5 D
Sulfate (as SO4)	mg/L	T	1300	1300	600	1100	1200	1100	800 D	830 D	1100 D	1000 D	1000 D	940 D	850 D	960 D	890 D
Total Dissolved Solids	mg/L	T	2200 J-	2200	2200	2100	2000	2000	1600 D	1600 D	1900 D	1800 D	1700 D	1700 D	1600 D	1700 D	1600 D
Appendix IV																	
Antimony	mg/L	T	< 0.000050 U	< 0.000050 U	< 0.00025 U	< 0.000050 U	0.00072 J	< 0.00050 U	< 0.00010 U	< 0.00010 U	< 0.0001 U	< 0.00050 UD	< 0.00010 U	< 0.00010 U	< 0.00010 U	0.00046	0.00019 J
Arsenic	mg/L	T	0.0061	0.0055	0.0055	0.0043	0.0032	0.0031	0.0069 J+	0.0073	0.0067	0.0026	0.0044	0.0065	0.0069	0.0042	0.0037
Barium	mg/L	T	0.046	0.050	0.047	0.036	0.030	0.040	0.037	0.044	0.037 D	0.034	0.036	0.039	0.036	0.033	
Beryllium	mg/L	T	< 0.000052 U	0.000063 J	< 0.00026 U	0.000061 J	0.000057 J	0.000071 J	0.000077 J+	0.000072 J	< 0.000052 U	0.000086 J	0.000085 J	0.000085 J	0.00011 J	0.000058 J	0.00012 J
Cadmium	mg/L	T	< 0.000032 U	< 0.000032 U	< 0.00016 U	< 0.000032 U	< 0.00016 U	< 0.00038 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.00038 UD	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Chromium, Total	mg/L	T	0.00027	0.00053	< 0.00088 U	0.00037	< 0.00018 U	< 0.00020 U	0.00031	0.00029	< 0.0002 U	< 0.00020 U	0.00025	0.00027	0.00027	0.00020 J	0.00027
Cobalt	mg/L	T	0.00046 J	0.00069	0.00078 J	0.00096	0.00069	0.00042 J	0.00050 J+	0.00044 J	0.00013 J	0.00023 J	0.00046 J	< 0.00010 U	0.00021 J	0.0012	0.00092
Fluoride	mg/L	T	2.2	2.3	1.9	1.7	1.8	1.9	1.9 D	2.2 D	2 D	1.6 D	1.5 D	1.7 D	2.1 D	1.4 D	1.5 D
Lead	mg/L	T	< 0.00022 U	< 0.00022 U	< 0.0011 U	< 0.0011 U	< 0.0011 U	< 0.00050 U	< 0.00010 UJ	< 0.00010 U	< 0.0001 U	< 0.00050 UD	< 0.00010 U	< 0.00050 UD	< 0.00050 UD	< 0.00010 U	< 0.00010 U
Lithium	mg/L	T	0.099	0.11	0.099	0.090	0.11	0.085	0.090	0.098	0.089 D	0.073 D	0.074	0.090	0.087 D	0.084	0.073
Mercury	mg/L	T	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00000016 U
Molybdenum	mg/L	T	0.013	0.011	0.0095	0.011	0.0090	0.0051	0.012 J+	0.013	0.01	0.0039	0.0099	0.0081	0.013	0.019	0.019
Radium 226 and 228	pCi/L	T	< 0.589 U	0.626	1.03	1.08	0.933	0.904	< 0.561 U	1.17	< 1.13 U	0.779	1.32	< 0.528 U	< 0.592 U	< 0.7 U	< 0.708 U
Radium-226	pCi/L	T	0.235	0.222	0.266	0.171	< 0.183 U	0.216	< 0.129 U	0.179	< 0.156 U	0.219	< 0.184 U	0.157	0.221	< 0.29 U	< 0.284 U
Radium-228	pCi/L	T	< 0.589 U	< 0.503 U	0.761	0.911	0.818	0.688	< 0.561 U	0.993	< 1.13 UG	0.561	1.15	< 0.528 U	< 0.592 U	< 0.7 U	< 0.708 U
Selenium	mg/L	T	< 0.00022 U	< 0.00022 U	< 0.0011 U	< 0.00022 U	< 0.00022 U	< 0.00010 U	< 0.00010 UJ	< 0.00010 U	< 0.0001 U	0.00012 J	< 0.00010 U	0.00012 J	0.00020 J	0.00013 J	0.00015 J
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.00038 U	< 0.00038 U	< 0.00038 U	< 0.00038 U	< 0.000075 UJ	< 0.000075 U	< 0.00038 UD	< 0.000075 U	< 0.00038 UD	< 0.00038 UD	< 0.00038 UD	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	27	25	16	6.0	23	19	29	33	26	17	6.0	34	37	15 D	18
Michigan CCR Part 115																	
Copper	mg/L	T	< 0.00020 U	< 0.00020 U	< 0.0010 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.0002 U	< 0.00020 U	0.00022 J	0.00035	< 0.00020 U	< 0.00020 U	< 0.00020 U
Iron	mg/L	T	15	18	16	13	12	13	16	15	24 D	20 D	17	21	21 D	17	14
Nickel	mg/L	T	0.0024	0.0028	< 0.0032 U	0.0024	0.0017	0.0011 J	0.0015	0.0015	0.0012	0.0012	0.0025	0.017	0.0039	0.0026	0.0029
Silver	mg/L	T	< 0.000050 U	< 0.000050 U	< 0.00025 U	< 0.000050 U	< 0.00025 U	< 0.00025 U	< 0.000050 U	< 0.000050 U	< 0.00005 U	< 0.00025 UD	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
Vanadium	mg/L	T	< 0.00062 U	< 0.00062 U	< 0.0031 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	0.00067 J
Zinc	mg/L	T	0.0023	< 0.0012 U	< 0.0059 U	< 0.0012 U	0.0042	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	0.0019	0.0046	0.0042
Additional Parameters																	
Bicarbonate Alkalinity	mg/L	T	330	340	310	280	240	260	340	330	270 D	290	270	300	260	280	280
Carbonate Alkalinity	mg/L	T	< 1.6 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.31 UD	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	49	42	45	38	43	45	32	30 D	39 D	39 D	35	33	36 D	37	31
Potassium	mg/L	T	18	22	16	20	16	16	15	17	16 D	15 D	14	14	14 D	15	13
Sodium	mg/L	T	48	40	44	37	38	38	36	31 D	37 D	33 D	30	29	30 D	32	25
Total Alkalinity	mg/L	T	330	340	310	280	240	260	340	330	270 D	290	270	300	260	280	280

Notes:

ug/l - micrograms per liter.
mg/l = milligrams per liter.
su - standard pH units (pH is a field parameter)
pCi/L = picocuries per liter.
All metals were analyzed as total unless otherwise indicated.

Qualifiers:

U The analyte was analyzed for, but was not detected at, a level greater than or equal to the level of the adjusted reporting limit (RL) for the sample and method.
J The analyte was positively identified, and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain QC criteria were not met, or to the concentration of the analyte being below the RL).
J+ Same as J, and the reported concentration is potentially biased high.
J- Same as J, and the reported concentration is potentially biased low.

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

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

G - The sample Minimum Detectable Concentration (MDC) is greater than the requested reporting limit.
D - Sample was diluted.

Sample Location: Compliance Phase: Sample Date: Sample Type: Unit: Sample Matrix:		MW-20															
		Background Monitoring								AM/DM Round							
		11/30/2022	1/4/2023	2/7/2023	3/13/2023	4/18/2023	5/23/2023	6/28/2023	8/7/2023	10/24/2023	2/13/2024	4/8/2024	7/17/2024	10/16/2024	2/26/2025	4/21/2025	
		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	
		Unit 1/2															
		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	
Constituent	Unit	Fraction															
Field Parameters																	
Conductivity	mS/cm	N	1.2	1.24	1.232	1.218	1.37	1.41	1.17	1.18	1.26	1.17	1.45	1.12	1.09	0.95	0.64
Dissolved Oxygen	mg/L	N	0.24	0.1	0.02	0.12	0.16	0.05	0.32	0.26	0.72	0.21	0.03	0.01	0.83	0.02	0.26
Oxidation Reduction Potential	mV	N	-142	-148.2	-153.3	-153	-162.4	-159.7	-174.4	-105.9	-179.7	-128.7	-117.8	-178.3	-193.1	-38.1	-113.7
pH	su	N	7.23	7.5	7.29	7.2	7.44	7.45	7.3	7.14	7.33	7.45	7.45	7.34	7.34	7.44	7.43
Temperature	deg c	N	9.7	7.2	6.7	5.7	7.2	10.8	13.1	19.6	14.8	6.5	8.3	17	16.2	6.3	7.8
Turbidity	NTU	N	0.02	0.02	1.91	0.02	0.02	0.02	0.02	0.02	0.02	1.14	0.02	0.02	2.11	2.04	0.02
Appendix III																	
Boron	mg/L	T	1.1	0.83	0.87	0.82	0.80	0.92	1.1 J+	1.1	1.1 D	0.72 D	0.76	1.1	1.3 D	0.82	0.87
Calcium	mg/L	T	130	120	140	170	130	130	58	110 D	130 D	120 D	140 D	120 D	120 D	110 D	110
Chloride	mg/L	T	70	66	62	60	88	92	71 D	70 D	70 D	41 D	77 D	62 D	44 D	29 D	29 D
Fluoride	mg/L	T	0.55	0.26	0.24	0.26	0.21	0.21	0.22 D	0.23 D	0.23 D	0.25 D	0.27 D	0.29 D	0.12 D	0.22 D	0.29 D
Sulfate (as SO4)	mg/L	T	42	78	120	110	85	76	30 D	19 D	33 D	78 D	62 D	18 D	24 D	38 D	52 D
Total Dissolved Solids	mg/L	T	660	660	690	680	760	770	650 D	570 D	650 D	640 D	840 D	640 D	560 D	510 D	540 D
Appendix IV																	
Antimony	mg/L	T	0.000096 J	0.000054 J	0.000066 J	0.000062 J	0.00016 J	< 0.00010 U	0.00011 J	0.00014 J	< 0.0001 U	< 0.00010 U	< 0.00010 U	0.00010 J	0.00012 J	0.00012 J	< 0.00010 U
Arsenic	mg/L	T	0.0015	0.0012	0.0012	0.0012	0.0013	0.0015	0.0016 J+	0.0017	0.0017	0.0011	0.0013	0.0018	0.0019	0.0010	0.0011
Barium	mg/L	T	0.94	0.61	0.47	0.37	0.31	0.42	0.43	0.49	0.53	0.42	0.45	0.46	0.82 D	0.48	0.46
Beryllium	mg/L	T	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 UJ	< 0.000052 U	< 0.000052 U	0.000059 J	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U
Cadmium	mg/L	T	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000075 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Chromium, Total	mg/L	T	0.00019 J	< 0.00018 U	0.00025	0.00029	0.00021 J	< 0.00020 U	< 0.00020 U	< 0.00022 U	0.00022 J	0.00026	0.00021 J	0.00022 J	< 0.00020 U	< 0.00020 U	< 0.00020 U
Cobalt	mg/L	T	0.0013	0.0013	0.0016	0.0016	0.0014	0.0013	0.0014 J+	0.0011	0.00095	0.0011	0.0011	0.00089	0.0010	0.00069	0.00080
Fluoride	mg/L	T	0.55	0.26	0.24	0.26	0.21	0.21	0.22 D	0.23 D	0.25 D	0.27 D	0.29 D	0.12 D	0.22 D	0.29 D	0.29 D
Lead	mg/L	T	0.0023	0.0016	0.0016	0.0016	0.0028	0.0023	0.0028 J+	0.0023	0.0018	0.0013	0.0014	0.0020	0.0017	0.0018	0.0012
Lithium	mg/L	T	0.074	0.065	0.049	0.055	0.060	0.062	0.083	0.079	0.071 D	0.029 D	0.053	0.064	0.058 D	0.035	0.034
Mercury	mg/L	T	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	0.0000051
Molybdenum	mg/L	T	0.0041	0.0039	0.0041	0.0038	0.0036	0.0048	0.0048 J+	0.0051	0.0047	0.0045	0.0033	0.0048	0.0058	0.0052	0.0035
Radium 226 and 228	pCi/L	T	1.47	0.822 J+	< 0.499 U	< 0.536 U	0.591	< 0.59 U	< 0.467 U	1.08	< 0.581 U	< 0.894 U	1.31	< 0.58 U	1	--	0.847
Radium-226	pCi/L	T	< 0.153 U	0.198	0.134	0.161	< 0.166 U	0.193	< 0.122 U	0.118	< 0.19 U	0.195	< 0.141 U	0.152	0.227	--	< 0.326 U
Radium-228	pCi/L	T	1.32	0.624 J+	< 0.499 U	< 0.536 U	0.541	< 0.59 U	< 0.467 U	0.958	< 0.581 U	< 0.894 U	1.18	< 0.58 U	0.775	--	0.746
Selenium	mg/L	T	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	0.00013 J	0.00011 J+	0.00010 J	0.00011 J	0.00026 J	0.00013 J	< 0.00010 U	< 0.00010 U	< 0.00010 U	< 0.00010 U
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	0.00011 J	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	40	42	33	37	44	42	37 D	37	38 D	33	43	34 D	38	26	29
Michigan CCR Part 115																	
Copper	mg/L	T	0.00034	0.00023 J	0.00023 J	< 0.00020 U	0.00024 J	0.00029	0.00036 B	0.00053	0.00025	0.00040	0.00034	0.00053	0.00082	< 0.00020 U	0.00020 J
Iron	mg/L	T	21	19	18	19	21	22	18	16	20 D	18 D	22	16	18 D	14	14
Nickel	mg/L	T	0.0091	0.0091	0.0095	0.0099	0.0092	0.0094	0.0098	0.0078	0.0066	0.0061	0.0077	0.0080	0.0067	0.0045	0.0063
Silver	mg/L	T	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.00005 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
Vanadium	mg/L	T	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U
Zinc	mg/L	T	0.071	0.024	0.028	0.029	0.060	0.028	0.030	0.025	0.024	0.016	0.024	0.020	0.056	0.015	0.013
Additional Parameters																	
Bicarbonate Alkalinity	mg/L	T	540	470	470	460	520	540	470	460	560 D	460	570	470	500	430	440
Carbonate Alkalinity	mg/L	T	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.31 UD	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	57	53	52	56	57	62	47	48 D	53 D	45 D	55	41	41 D	36	37
Potassium	mg/L	T	13	13	11	12	13	12	13	13	12 D	8.5 D	11	10	9.1 D	6.9	6.9
Sodium	mg/L	T	65	59	57	56	63	79	67	57 D	61 D	48 D	80	57	47 D	43	41
Total Alkalinity	mg/L	T	540	470	470	460	520	540	470	460	560 D	460	570	470	500	430	440

Notes:

ug/l - micrograms per liter.
mg/l = milligrams per liter.
su - standard pH units (pH is a field parameter)
pCi/L = picocuries per liter.
All metals were analyzed as total unless otherwise indicated.

Qualifiers:

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

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

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

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

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

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

G - The sample Minimum Detectable Concentration (MDC) is greater than the requested reporting limit.

D - Sample was diluted.

Sample Location: Compliance Phase: Sample Date: Sample Type: Unit: Sample Matrix:		MW-27															
		Background Monitoring								AM/DM Round							
		11/30/2022	1/5/2023	2/7/2023	3/13/2023	4/18/2023	5/22/2023	6/27/2023	8/7/2023	10/23/2023	2/13/2024	4/8/2024	7/18/2024	10/17/2024	2/27/2025	4/21/2025	
		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	
Unit:		Unit 3A/B & 1/2															
Sample Matrix:		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	
Constituent	Unit	Fraction															
Field Parameters																	
Conductivity	mS/cm	N	2.46	2.01	1.651	1.047	1.04	1.65	2.5	2.57	2.99	1.65	1.06	2.79	3.47	2.32	0.955
Dissolved Oxygen	mg/L	N	1.35	0.17	0.24	0.93	0.07	0.19	0.04	0.23	0.05	1.64	0.12	0.03	0.24	1.5	0.29
Oxidation Reduction Potential	mV	N	-87.3	-137.6	-79.1	-134.3	-52.1	-80.9	-89	-104.5	-191.3	-62.8	-140.2	-129.9	-80.3	155.8	-46.2
pH	su	N	6.86	6.92	6.81	6.95	6.81	6.77	6.86	6.78	6.77	6.93	6.99	6.87	6.66	6.79	6.89
Temperature	deg c	N	8.7	6.7	5	4.5	7.2	11.7	16.5	20.8	15.2	5.6	7.5	19.6	16.9	4	7.6
Turbidity	NTU	N	0.02	0.73	1.33	0.02	4.08	3.32	3.55	8.15	9.71	3.01	2.31	7.9	9.44	6.08	1.77
Appendix III																	
Boron	mg/L	T	0.31	0.17	0.16	0.14	0.14	0.20	0.45 J+	0.44	0.32 D	0.16 D	0.18	0.44	0.50 D	0.21	0.27
Calcium	mg/L	T	200	180	180	180	100	130	180 D	150 D	190 D	160 D	130 D	170 D	170 D	210 D	130
Chloride	mg/L	T	120	84	69	60	38	52	110 D	100 D	110 D	44 D	17 D	89 D	120 D	97 D	86 D
Fluoride	mg/L	T	0.37	0.29	0.31	0.41	0.42	0.35	0.36 D	0.41 D	0.43 D	0.40 D	0.71 D	0.48 D	0.23 D	0.25 D	0.44 D
Sulfate (as SO4)	mg/L	T	6.8	41	58	47	14	1.8 J	0.56 JD	3.0 D	2.4 JD	72 D	41 D	2.3 JD	1.4 JD	40 D	27 D
Total Dissolved Solids	mg/L	T	920	710	790	620	460	590	790 D	690 D	870 D	1300 D	560 D	890 D	910 D	900 D	640 D
Appendix IV																	
Antimony	mg/L	T	0.00013 J	0.000075 J	0.000099 J	0.000060 J	0.00028	< 0.00010 U	< 0.00010 U	< 0.00010 U	< 0.0001 U	< 0.00010 U	< 0.00010 U	< 0.00010 U	0.00010 J	0.00012 J	< 0.00010 U
Arsenic	mg/L	T	0.00086	0.00070	0.00069	0.00069	0.00095	0.00096	0.0010 J+	0.0012	0.0011	0.00082	0.0012	0.0011	0.0012	0.00070	0.0011
Barium	mg/L	T	0.21	0.17	0.16	0.12	0.074	0.15	0.25	0.31	0.16	0.10	0.28	0.32	0.25	0.25	0.14
Beryllium	mg/L	T	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 UJ	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U
Cadmium	mg/L	T	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000075 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Chromium, Total	mg/L	T	0.018	0.016	0.0097	0.0099	0.0083	0.025	0.027	0.034	0.028	0.0090	0.0073	0.033	0.050	0.014	0.011
Cobalt	mg/L	T	0.00063	0.00056	0.00052	0.00043 J	0.00024 J	0.00063	0.00092 J+	0.00083	0.00075	0.00037 J	0.00016 J	0.00074	0.0011	0.00046 J	0.00035 J
Fluoride	mg/L	T	0.37	0.29	0.31	0.41	0.42	0.35	0.36 D	0.41 D	0.43 D	0.40 D	0.71 D	0.48 D	0.23 D	0.25 D	0.44 D
Lead	mg/L	T	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00010 U	< 0.00010 UJ	< 0.00010 U	< 0.0001 U	< 0.00010 U	< 0.00010 U	< 0.00010 U	< 0.00010 U	< 0.00010 U	< 0.00010 U
Lithium	mg/L	T	0.0086	0.0088	0.0067	0.0073	0.0075	0.0073	0.017 D	0.0093	0.0099	0.0050	0.0058	0.0099	0.0092	0.0058	0.0055
Mercury	mg/L	T	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00000016 U
Molybdenum	mg/L	T	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	0.00041 J	< 0.00025 UJ	< 0.00025 U	< 0.00025 U	< 0.00025 U	< 0.00025 U	< 0.00025 U	0.00026 J	< 0.00025 U	< 0.00025 U
Radium 226 and 228	pCi/L	T	0.823	< 0.639 UJ	< 0.729 U	< 0.889 U	1.15	1.61	0.84	1.76	< 0.857 U	< 0.774 U	1.25	0.876	< 1.24 U	--	1.07
Radium-226	pCi/L	T	0.367	0.23	< 0.127 U	< 0.197 U	< 0.171 U	< 0.325 U	0.458	0.477	0.464	0.22	0.549	0.429	0.34	--	< 0.559 U
Radium-228	pCi/L	T	< 0.679 U	< 0.639 UJ	< 0.729 U	< 0.889 U	1.03	1.47 J	< 0.578 U	1.28	< 0.857 U	< 0.774 U	< 0.85 U	< 0.709 U	< 1.24 UG	--	0.826
Selenium	mg/L	T	0.00023 J	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	0.00016 J	0.00021 J+	0.00022 J	0.0002 J	0.00053	0.00014 J	0.00027 J	0.00032 J	0.00024 J	0.00020 J
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	34	27	22	14	5.0	11	19 D	11	22	23	9.0	6.0	26	20	13
Michigan CCR Part 115																	
Copper	mg/L	T	0.00030	< 0.00020 U	0.0016	< 0.00020 U	0.00022 J	0.00032	< 0.00020 U	0.00023 J	0.00024 J	< 0.00020 U	0.00039	< 0.00020 U	0.00022 J	< 0.00020 U	0.00037
Iron	mg/L	T	13	11	11	8.3	5.5	7.6	9.4	8.0	11 D	9.9 D	7.7	8.4	8.1 D	11	6.4
Nickel	mg/L	T	0.00077 J	0.0010 J	0.0010 J	0.00077 J	< 0.00065 U	0.00087 J	0.00067 J	0.00075 J	< 0.00065 U	0.00076 J	0.00073 J	< 0.00065 U	0.00094 J	0.00081 J	0.00089 J
Silver	mg/L	T	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
Vanadium	mg/L	T	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	0.00082 J	0.00093 J	< 0.00062 U	< 0.00062 U	0.00071 J	0.0018	0.0024	0.0010 J	0.0011 J
Zinc	mg/L	T	0.0096	< 0.0012 U	0.0016	< 0.0012 U	0.0079	0.0013	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	0.012	< 0.0012 U	< 0.0012 U
Additional Parameters																	
Bicarbonate Alkalinity	mg/L	T	1200	880	800	590	480	770	1100 D	1100	1400 D	790 D	520	1300	1700	1100	650
Carbonate Alkalinity	mg/L	T	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.31 UD	< 0.16 U	< 0.31 UD	< 0.31 UD	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	45	45	47	44	26	31	33	35 D	40 D	55 D	39	45	44 D	52	39
Potassium	mg/L	T	7.6	7.3	6.2	5.8	4.1	6.5	11	12	11 D	4.9 D	3.5	9.8	11 D	8.0	5.1
Sodium	mg/L	T	92	68	59	61	41	52	75	80 D	82 D	59 D	41	72	82 D	99 D	69
Total Alkalinity	mg/L	T	1200	880	800	590	480	770	1100 D	1100	1400 D	790 D	520	1300	1700	1100	650

Notes:

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

G - The sample Minimum Detectable Concentration (MDC) is greater than the requested reporting limit.

D - Sample was diluted.

Sample Location: Compliance Phase: Sample Date: Sample Type: Unit: Sample Matrix:			MW-28				
			AM/DM Round				
			4/7/2024	7/18/2024	10/17/2024	2/27/2025	4/21/2025
			Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
			Unit 1/2				
			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Constituent	Unit	Fraction					
Field Parameters							
Conductivity	mS/cm	N	1.18	1.46	1.22	1.83	1.005
Dissolved Oxygen	mg/L	N	0.08	0.01	0.17	0.16	0.29
Oxidation Reduction Potential	mV	N	-118.7	-158.8	-133.4	-32	-53.5
pH	su	N	7.02	6.94	6.84	6.9	6.98
Temperature	deg c	N	8.1	16.8	16	6.3	7.4
Turbidity	NTU	N	3.17	4.11	0.02	6.58	1.57
Appendix III							
Boron	mg/L	T	2.2	6.1	3.8 D	2.7	2.0
Calcium	mg/L	T	170 D	160 D	180 D	230 D	160
Chloride	mg/L	T	18 D	67 D	170 D	240 D	180 D
Fluoride	mg/L	T	0.90 D	1.5 D	1.4 D	0.94 D	0.97 D
Sulfate (as SO4)	mg/L	T	11 D	< 2.2 UD	< 1.1 UD	41 D	57 D
Total Dissolved Solids	mg/L	T	610 D	690 D	920 D	1100 D	900 D
Appendix IV							
Antimony	mg/L	T	0.00028	0.00016 J	0.00020 J	0.00073	0.00036
Arsenic	mg/L	T	0.0011	0.0014	0.0019	0.0020	0.0014
Barium	mg/L	T	0.34	0.70	0.76	0.75	0.42
Beryllium	mg/L	T	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U
Cadmium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.000075 U	0.000091 J	0.000080 J
Chromium, Total	mg/L	T	0.017	0.0092	0.015	0.0075	0.0078
Cobalt	mg/L	T	0.00064	0.00046 J	0.00041 J	0.0020	0.0031
Fluoride	mg/L	T	0.90 D	1.5 D	1.4 D	0.94 D	0.97 D
Lead	mg/L	T	0.0011	0.0013	0.00088	0.0052	0.0015
Lithium	mg/L	T	0.050	0.15	0.12 D	0.084	0.054
Mercury	mg/L	T	0.00024	< 0.00016 U	< 0.00016 U	< 0.00016 U	0.0000075
Molybdenum	mg/L	T	0.00087 J	0.00054 J	0.0020	0.0027	0.0020
Radium 226 and 228	pCi/L	T	0.909	1.29	1.27	--	< 0.964 U
Radium-226	pCi/L	T	0.282	0.273	< 0.218 U	--	< 0.416 U
Radium-228	pCi/L	T	< 0.842 U	1.02	1.06	--	< 0.964 U
Selenium	mg/L	T	0.00032 J	0.00024 J	0.00028 J	0.00029 J	0.00028 J
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	44 D	86	120	75	66
Michigan CCR Part 115							
Copper	mg/L	T	0.00052	0.00090	0.00037	0.0013	0.0015
Iron	mg/L	T	30	37	47 D	43	26
Nickel	mg/L	T	0.0036	0.00072 J	0.0024	0.0073	0.0073
Silver	mg/L	T	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
Vanadium	mg/L	T	0.00063 J	0.00074 J	0.00080 J	< 0.00062 U	< 0.00062 U
Zinc	mg/L	T	0.0090	0.0067	0.031	0.083	0.11
Additional Parameters							
Bicarbonate Alkalinity	mg/L	T	560	600	590	550	480
Carbonate Alkalinity	mg/L	T	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	27	27	33 D	39	29
Potassium	mg/L	T	12	13	14 D	13	10
Sodium	mg/L	T	29	66	51 D	80 D	65
Total Alkalinity	mg/L	T	560	600	590	550	480

Notes:

ug/l - micrograms per liter.
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J- Same as J, and the reported concentration is potentially biased low.

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

G - The sample Minimum Detectable Concentration (MDC) is greater than the requested reporting limit.

D - Sample was diluted.

Sample Location: Compliance Phase: Sample Date: Sample Type: Unit: Sample Matrix:		MW-30															
		Background Monitoring								AM/DM Round							
		11/30/2022	1/3/2023	2/6/2023	3/13/2023	4/18/2023	5/22/2023	6/27/2023	8/8/2023	10/23/2023	2/12/2024	4/7/2024	7/18/2024	10/16/2024	2/25/2025	4/20/2025	
		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	
Unit:		Unit 1/2															
Sample Matrix:		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	
Constituent	Unit	Fraction															
Field Parameters																	
Conductivity	mS/cm	N	2.26	3.18	3.025	2.273	2.73	2.66	2.85	2.67	2.21	2.68	2.61	2.93	3.06	5.15	3.38
Dissolved Oxygen	mg/L	N	0.12	0.39	0.04	0.35	0.29	0.05	0.01	0.12	0.41	0.14	0.03	0	0.06	0.01	0.26
Oxidation Reduction Potential	mV	N	-55.7	-281.2	-134.9	-148.7	-151.8	-86.8	-105.6	-92.7	-301.7	-73.8	-71.3	-198.6	-313.1	-21.4	-29.4
pH	su	N	7.07	6.48	7.16	7.25	7.17	7.16	7.21	6.94	7.05	7.18	7.15	7.06	7.02	6.82	7.02
Temperature	deg c	N	10.1	7.2	6.4	4.8	6.6	10.7	13.6	17	15	6.2	7.3	16.9	16	5.7	7.4
Turbidity	NTU	N	0.02	0.02	1.21	0.02	0.02	0.5	0.02	0.02	0.02	0.02	0.02	0.92	0.02	1.15	0.02
Appendix III																	
Boron	mg/L	T	2.2	1.7	2.1	3.5	1.7	1.9	1.9 J+	1.8	2.1 D	1.9 D	1.6	1.9	1.9 D	1.4	1.8 D
Calcium	mg/L	T	470	460 E	480	960	430	430	460 D	400 D	390 D	440 D	470 D	500 D	440 D	700 D	710 D
Chloride	mg/L	T	190	190	190	140	120	98	110 D	98 D	97 D	110 DJ+	82 D	190 D	430 D	1200 D	1100 D
Fluoride	mg/L	T	1.0	1.4	1.0	1.2	1.1	1.1	0.91 D	1.1 D	1.2 D	1.1 D	1.2 D	1.1 D	1.2 D	0.57 D	1.1 D
Sulfate (as SO4)	mg/L	T	780	1000	830	940	970	850	940 D	860 D	610 D	820 D	980 D	960 D	440 D	980 D	1000 D
Total Dissolved Solids	mg/L	T	2200 J	2400	2000	2300	2200	2100	2800 J	2300 D	1800	2100 D	2200 D	2300 D	2200 D	4000 D	4000 D
Appendix IV																	
Antimony	mg/L	T	< 0.000050 U	< 0.000050 U	< 0.00025 U	< 0.000050 U	0.00040 J	< 0.00050 U	< 0.00050 UD	< 0.00010 U	< 0.0001 U	< 0.00050 UD	< 0.00010 U	< 0.00010 U	< 0.00010 U	0.00065 JD	< 0.00010 U
Arsenic	mg/L	T	0.00046 J	0.00070	< 0.00050 U	0.00039 J	< 0.00010 U	0.00012 J	0.00027 J+	0.00043 J	0.00063	0.00021 J-	0.00044 J	0.00058	0.00097	0.0022 JD	0.0030
Barium	mg/L	T	0.10	0.089	0.10	0.045	0.047	0.058	0.066 D	0.048	0.058	0.067 J-	0.051	0.041	0.079	0.098 D	0.071
Beryllium	mg/L	T	< 0.000052 U	0.000053 J	< 0.00026 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 UJ	< 0.000052 U	< 0.000052 U	0.00011 J+	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.00026 UD	< 0.000052 U
Cadmium	mg/L	T	< 0.000032 U	< 0.000032 U	< 0.00016 U	< 0.000032 U	< 0.00016 U	< 0.00038 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.00038 UD	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.00038 UD	< 0.000075 U
Chromium, Total	mg/L	T	0.014	0.012	0.0087	0.010	0.0058	0.0052	0.012	0.013	0.0081	0.0049 J-	0.0075	0.010	0.012	0.0031 D	0.0065
Cobalt	mg/L	T	0.00091	0.0044	0.00096 J	0.0028	0.0011	0.00054	0.0013 J+	0.0011	0.00053	0.0011	0.0015	0.00077	0.00047 J	0.046 D	0.0021
Fluoride	mg/L	T	1.0	1.4	1.0	1.2	1.1	1.1	0.91 D	1.1 D	1.2 D	1.1 D	1.2 D	1.1 D	1.2 D	0.57 D	1.1 D
Lead	mg/L	T	< 0.00022 U	< 0.00022 U	< 0.0011 U	< 0.0011 U	< 0.0011 U	< 0.00050 U	< 0.00050 UJ	< 0.00050 UD	< 0.0001 U	< 0.00050 UJD	< 0.00010 U	< 0.00050 UD	0.0017 JD	< 0.00050 UD	< 0.00050 UD
Lithium	mg/L	T	0.13	0.15	0.12	0.27	0.11	0.11	0.12 D	0.14	0.12 D	0.10 D	0.11	0.13	0.12 D	0.16	0.19 D
Mercury	mg/L	T	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	0.00039	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00000016 U
Molybdenum	mg/L	T	< 0.00062 U	0.0036	< 0.0031 U	0.0017	< 0.0031 U	0.00032 J	0.00082 J+	0.0011 J	0.00061 J	0.00073 J+	0.0013	0.00089 J	0.00051 J	0.019 D	0.0037
Radium 226 and 228	pCi/L	T	< 0.873 UJ	0.445 J	< 0.624 UJ	< 0.659 U	0.875	< 0.783 U	0.586 J+	0.911	< 0.526 U	0.793 J+	< 0.559 U	0.68	< 1.12 U	1.05	< 0.695 U
Radium-226	pCi/L	T	< 0.238 UJ	0.139 J	< 0.0915 UJ	< 0.2 U	< 0.141 U	< 0.194 U	0.0986 J+	< 0.163 UJ	< 0.228 U	< 0.117 UJ	0.133	0.199	< 0.219 U	0.53	< 0.149 U
Radium-228	pCi/L	T	< 0.873 UJ	< 0.443 UJ	< 0.624 UJ	< 0.659 U	0.844	< 0.783 U	< 0.566 UJ	0.82	< 0.526 U	0.721 J+	< 0.559 U	< 0.537 U	< 1.12 UG	0.52	< 0.695 U
Selenium	mg/L	T	< 0.00022 U	< 0.00022 U	< 0.0011 U	< 0.00022 U	< 0.00022 U	< 0.00010 U	0.00011 J+	0.00012 J	0.00013 J	0.00039 J-	0.00010 J	0.00017 J	0.00024 J	< 0.00050 UD	0.00014 J
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.00038 U	< 0.00038 U	< 0.00038 U	< 0.00038 U	< 0.00038 UJ	< 0.00038 UD	< 0.000075 U	< 0.00038 UD	< 0.000075 U	< 0.00038 UD	< 0.00038 UD	< 0.00038 UD	< 0.000075 U
Total Suspended Solids	mg/L	T	4.0	11	< 4.0 UJ	5.0	6.0	4.0	< 4.0 UD	5.0	4 D	< 4.0 U	5.1 D	18	8.0	8.0	38
Michigan CCR Part 115																	
Copper	mg/L	T	< 0.00020 U	0.00037 J+	< 0.0010 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	0.00054	0.00024 J-	0.00028	< 0.00020 U	< 0.00020 U	< 0.0010 UD	0.00020 J
Iron	mg/L	T	0.87	3.6	0.99	8.8	4.1	2.4	2.9	2.9	1.4 D	2.0 D	4.9	5.9	2.1 D	2.5	17 D
Nickel	mg/L	T	0.00080 J	0.0045	< 0.0032 U	0.0041	0.0018	0.00070 J	0.0021	0.0011 J	< 0.00065 U	0.0018 J-	0.0019	0.0017	< 0.00065 U	0.11 D	0.0053
Silver	mg/L	T	< 0.000050 U	< 0.000050 U	< 0.00025 U	< 0.000050 U	< 0.00025 U	< 0.00025 U	< 0.000050 U	< 0.000050 U	< 0.00005 U	< 0.00025 UD	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.00025 UD	< 0.000050 U
Vanadium	mg/L	T	< 0.00062 U	< 0.00062 U	< 0.0031 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 UJ	< 0.00062 U	< 0.0031 UD	< 0.00062 U
Zinc	mg/L	T	0.0053	< 0.0012 U	< 0.0059 U	< 0.0012 U	0.0049	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 UJ	< 0.0012 U	< 0.0012 U	0.0033	0.10 D	0.0027
Additional Parameters																	
Bicarbonate Alkalinity	mg/L	T	930	760	880	660	630	640	< 0.16 U	690	780 D	690 D	570	630	770	550	540
Carbonate Alkalinity	mg/L	T	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.31 UD	< 0.31 UD	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	110	120	120	250	120	110	120 D	100 D	95 D	110 D	120 D	110 D	99 D	190 D	180 D
Potassium	mg/L	T	12	15	16	17	12	9.6	11	13	10 D	10 D	8.9	11	11 D	18	18 D
Sodium	mg/L	T	120	110	120	220	98	95	95 D	88 D	82 D	89 D	73	82	120 D	330 D	400 D
Total Alkalinity	mg/L	T	930	760	880	660	630	640	< 0.16 U	690	780 D	690 D	570	630	770	550	540

Notes:

ug/l - micrograms per liter.
mg/l = milligrams per liter.
su - standard pH units (pH is a field parameter)
pCi/L = picocuries per liter.
All metals were analyzed as total unless otherwise indicated.

Qualifiers:

U The analyte was analyzed for, but was not detected at, a level greater than or equal to the level of the adjusted reporting limit (RL) for the sample and method.
J The analyte was positively identified, and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain QC criteria were not met, or to the concentration of the analyte being below the RL).
J+ Same as J, and the reported concentration is potentially biased high.
J- Same as J, and the reported concentration is potentially biased low.

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

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

G - The sample Minimum Detectable Concentration (MDC) is greater than the requested reporting limit.
D - Sample was diluted.

Sample Location: Compliance Phase: Sample Date: Sample Type: Unit: Sample Matrix:		MW-31															
		Background Monitoring								AM/DM Round							
		12/1/2022	1/4/2023	2/7/2023	3/14/2023	4/18/2023	5/22/2023	6/27/2023	8/8/2023	10/23/2023	2/12/2024	4/8/2024	7/17/2024	10/15/2024	2/25/2025	4/20/2025	
		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	
		Unit 1/2															
		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	
Constituent	Unit	Fraction															
Field Parameters																	
Conductivity	mS/cm	N	1.35	1.4	1.327	1.23	1.28	1.21	1.24	1.41	1.23	1.1	1.26	1.32	1.26	1.15	0.996
Dissolved Oxygen	mg/L	N	1.65	0.09	0.21	0.11	0.11	0.09	1.39	0.05	0.15	0.05	0.04	0.23	0.66	0.2	0.14
Oxidation Reduction Potential	mV	N	-150	-262.2	-129.3	-214.9	-274.4	-220	-113.9	-55.8	-82.4	149.7	-130.1	-117.3	-73	-41.8	-105
pH	su	N	7.84	7.7	7.85	7.76	7.87	7.85	8	7.78	7.67	7.8	8.01	7.74	7.82	8.02	7.73
Temperature	deg c	N	8.7	7.6	6.3	4	6.5	13.2	14.4	17.8	14.9	7	10.2	19	14.1	6.3	10.4
Turbidity	NTU	N	2.61	0.02	1.27	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.97	0.02
Appendix III																	
Boron	mg/L	T	4.8	3.8	4.2	4.0	3.6	4.5	5.4 J+	4.8	5.1 D	4.4 D	4.5	5.4	5.8 D	4.5	4.4
Calcium	mg/L	T	180	190	170	200	170	160	130 D	150 D	170 D	170 D	200 D	170 D	150 D	150 D	200
Chloride	mg/L	T	120	100	110	97	94	92	110 D	110 D	100 D	99 DJ+	87 D	100 D	110 D	110 D	100 D
Fluoride	mg/L	T	4.6	4.9	4.7	4.6	5.1	5.2	4.7 D	5.1 D	4.6 D	4.5 D	4.7 D	4.7 D	4.5 D	4.1 D	4.5 D
Sulfate (as SO4)	mg/L	T	180	250	200	250	250	160	120 D	100 D	72 D	150 D	170 D	120 D	45 D	71 D	240 D
Total Dissolved Solids	mg/L	T	850	940 J	780	860	810	760	760 D	860 D	730 D	810 D	810 D	780 D	730 D	740	960 D
Appendix IV																	
Antimony	mg/L	T	0.000069 J	< 0.000050 U	0.000080 J	0.00012 J	0.00013 J	< 0.00010 U	< 0.00010 U	0.00012 J	< 0.0001 U	< 0.00010 U	< 0.00010 U	0.00038	0.00039	0.00069	< 0.00010 U
Arsenic	mg/L	T	0.0018	0.0013	0.0012	0.0010	0.0011	0.0014	0.0016 J+	0.0016	0.0012	0.0010	0.0012	0.0012	0.00095	0.0012	0.00073
Barium	mg/L	T	0.21	0.14	0.19	0.15	0.12	0.13	0.23	0.16	0.16	0.13	0.13	0.18	0.29	0.20	0.099
Beryllium	mg/L	T	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 UJ	< 0.000052 U	< 0.000052 U	0.000054 J	< 0.000052 U	< 0.000052 U	0.000096 J	< 0.000052 U	< 0.000052 U
Cadmium	mg/L	T	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000075 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	0.000084 J	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Chromium, Total	mg/L	T	0.0021	0.0018	0.0024	0.0019	0.0019	0.0029	0.0023	0.0025	0.0022	0.0017	0.0022	0.0029	0.0041	0.0020	0.0031
Cobalt	mg/L	T	0.00015 J	0.00015 J	0.00020 J	0.00018 J	0.00016 J	0.00021 J	0.00018 J+	0.00018 J	0.00013 J	0.00028 J	< 0.00010 U	0.00010 J	0.00036 J	< 0.00010 U	< 0.00010 U
Fluoride	mg/L	T	4.6	4.9	4.7	4.6	5.1	5.2	4.7 D	5.1 D	4.6 D	4.5 D	4.7 D	4.7 D	4.5 D	4.1 D	4.5 D
Lead	mg/L	T	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	0.00031 J	< 0.00010 UJ	< 0.00010 U	< 0.0001 U	< 0.00010 U	< 0.00010 U	0.00025 J	< 0.00010 U	< 0.00010 U	< 0.00010 U
Lithium	mg/L	T	0.052	0.048	0.052	0.054	0.046	0.053	0.056 D	0.054	0.049	0.039 D	0.039	0.052	0.063 D	0.043	0.030
Mercury	mg/L	T	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	0.00000071
Molybdenum	mg/L	T	0.0021	0.0013	0.0013	0.0011 J	0.0011 J	0.0012	0.0018 J+	0.0011 J	0.0013	0.0011 J	0.00052 J	0.00083 J	0.0011 J	0.0015	0.00040 J
Radium 226 and 228	pCi/L	T	0.753	< 0.641 U	0.717	< 0.725 U	0.592	1.14	0.58	1.23	< 0.497 U	1.01	0.754	0.991	< 0.736 U	< 0.56 U	< 0.644 U
Radium-226	pCi/L	T	0.187	0.203	0.187	< 0.189 U	0.254	0.184	0.27	0.262 J+	< 0.208 U	0.171	0.345	0.274	0.27	< 0.24 U	< 0.14 U
Radium-228	pCi/L	T	0.566	< 0.641 U	0.53	< 0.725 U	< 0.527 U	0.959	< 0.489 U	0.97	< 0.497 U	0.842	< 0.502 U	0.717	< 0.736 U	< 0.56 U	< 0.644 U
Selenium	mg/L	T	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	0.00011 J	0.00012 J+	0.00015 J	0.00014 J	0.00074	0.00013 J	0.00016 J	0.00010 J	< 0.00010 U	0.00012 J
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	0.000088 J	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	2.0 J	4.0	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	1.0 J	< 4 U	< 4.0 UD	< 3.9 UD	< 4.0 U	< 4.0 UD	< 4.0 U	< 4.0 U
Michigan CCR Part 115																	
Copper	mg/L	T	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	0.00027	< 0.00020 U	< 0.00020 U	< 0.0002 U	0.00023 J	0.00044	0.00029	0.00031	< 0.00020 U	< 0.00020 U
Iron	mg/L	T	2.5	1.4	1.5	1.1	0.77	1.2	0.92	0.21	0.13	0.19	0.12	0.14	0.23	0.22	0.15
Nickel	mg/L	T	< 0.00065 U	< 0.00065 U	< 0.00065 U	< 0.00065 U	< 0.00065 U	< 0.00065 U	< 0.00065 U	< 0.00065 U	< 0.00065 U	0.0023	< 0.00065 U	0.0021	0.0027	0.023	0.0014
Silver	mg/L	T	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.00005 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
Vanadium	mg/L	T	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	0.00064 J	0.00083 J	< 0.00062 U	0.00076 J
Zinc	mg/L	T	0.0082	< 0.0012 U	< 0.0012 U	< 0.0012 U	0.010	0.0014	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	0.010	0.013	0.0016
Additional Parameters																	
Bicarbonate Alkalinity	mg/L	T	410	340	350	320	290	320	340	410	440 D	340 D	350	410	450	410	410
Carbonate Alkalinity	mg/L	T	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.31 UD	< 0.31 UD	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	37	36	38	42	36	33	34	38 D	35 D	36 D	38	38	38 D	37	37
Potassium	mg/L	T	9.9	11	11	11	10	9.9	12	12	11 D	9.6 D	10	12	11 D	9.6	9.9
Sodium	mg/L	T	60	46	51	48	50	53	64	56 D	56 D	54 D	53	54	61 D	57	51
Total Alkalinity	mg/L	T	410	340	350	320	290	320	340	410	440 D	340 D	350	410	450	410	410

Notes:

ug/l - micrograms per liter.
mg/l = milligrams per liter.
su - standard pH units (pH is a field parameter)
pCi/L = picocuries per liter.
All metals were analyzed as total unless otherwise indicated.

Qualifiers:

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

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

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

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

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

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

G - The sample Minimum Detectable Concentration (MDC) is greater than the requested reporting limit.

D - Sample was diluted.

Sample Location: Compliance Phase: Sample Date: Sample Type: Unit: Sample Matrix:		MW-32															
		Background Monitoring								AM/DM Round							
		11/30/2022	1/4/2023	2/8/2023	3/14/2023	4/18/2023	5/22/2023	6/27/2023	8/8/2023	10/23/2023	2/12/2024	4/7/2024	7/17/2024	10/16/2024	2/25/2025	4/20/2025	
		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	
Unit:		Unit 3A/B & 1/2															
Sample Matrix:		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	
Constituent	Unit	Fraction															
Field Parameters																	
Conductivity	mS/cm	N	1.29	1.29	1.258	1.175	1.29	1.2	1.05	0.99	1.14	0.96	1.21	0.99	1.07	1.07	0.758
Dissolved Oxygen	mg/L	N	0.07	0.08	0.08	0.1	0.1	0.33	0.12	0.13	0.29	0.09	0.04	0.18	0.11	0.01	0.11
Oxidation Reduction Potential	mV	N	-184.5	-222.8	-184.7	-188.5	-199.5	-221.7	-209.8	-141.4	-186.3	138.7	-178.6	-196	-197.4	-122.6	-143.2
pH	su	N	7.69	7.5	7.57	7.53	7.67	7.75	7.65	7.52	7.53	7.64	7.63	7.58	7.59	7.67	7.67
Temperature	deg c	N	10.2	8.3	6.6	6.3	7.4	11.1	13	15.9	14.9	7	8.1	15.6	15.8	7.3	8.5
Turbidity	NTU	N	0.02	0.02	2.17	0.02	0.02	0.02	0.02	0.02	0.02	4.52	0.02	0.02	0.02	5.04	4.21
Appendix III																	
Boron	mg/L	T	3.8	3.0	3.0	2.9	2.6	3.1	3.9 J+	3.7	5 D	3.0 D	3.1	4.0	5.6 D	3.0	2.8
Calcium	mg/L	T	200	180	190	220	190	190	150 D	130 D	150 D	180 D	190 D	140 D	160 D	160 D	160
Chloride	mg/L	T	47	50	50	50	45	42	41 D	44 D	47 D	39 DJ+	38 D	42 D	50 D	50 D	46 D
Fluoride	mg/L	T	1.5	1.5	1.4	1.6	1.4	1.5	1.4 D	1.6 D	1.8 D	1.5 D	1.6 D	1.5 D	1.9 D	1.2 D	1.4 D
Sulfate (as SO4)	mg/L	T	100	110	54	170	190	140	48 D	17 D	17 D	83 D	130 D	9.5 D	5.9 D	27 D	110 D
Total Dissolved Solids	mg/L	T	790	700	730	770	800	790	600 D	550 D	640 D	680 D	770 D	560 D	580 D	650 D	690 D
Appendix IV																	
Antimony	mg/L	T	0.00067 J	< 0.00050 U	< 0.00050 U	0.00072 J	0.00014 J	< 0.00010 U	< 0.00010 U	< 0.00010 U	< 0.0001 U	0.00070	< 0.00010 U	< 0.00010 U	< 0.00010 U	< 0.00010 U	< 0.00010 U
Arsenic	mg/L	T	0.00061	0.00045 J	0.00052 J	0.00047 J	0.00044 J	0.00055	0.00058 J+	0.00062	0.00058	0.0024	0.00046 J	0.00059	0.00064	0.00039 J	0.00042 J
Barium	mg/L	T	0.62	0.60	0.57	0.41	0.29	0.34	0.37	0.41	0.85	0.059	0.57	0.63	1.3 D	0.97 D	0.84
Beryllium	mg/L	T	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 UJ	< 0.000052 U	< 0.000052 U	0.000070 J	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U
Cadmium	mg/L	T	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000075 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	0.00019 J	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Chromium, Total	mg/L	T	0.00046	0.00065	0.00057	0.00055	0.00039	0.00038	0.00032	0.00031	0.00031	0.0030	0.00038	0.00036	0.00050	0.00033	0.00035
Cobalt	mg/L	T	0.00034 J	0.00036 J	0.00039 J	0.00041 J	0.00031 J	0.00037 J	0.00068 J+	0.00058	0.00038 J	0.0019	0.00021 J	0.00046 J	0.00058	0.00022 J	0.00032 J
Fluoride	mg/L	T	1.5	1.5	1.4	1.6	1.4	1.5	1.4 D	1.6 D	1.8 D	1.5 D	1.6 D	1.5 D	1.9 D	1.2 D	1.4 D
Lead	mg/L	T	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	0.00012 J	0.00014 J+	< 0.00010 U	< 0.0001 U	0.00038 J	< 0.00010 U	< 0.00010 U	0.00042 J	< 0.00010 U	< 0.00010 U
Lithium	mg/L	T	0.15	0.14	0.12	0.11	0.094	0.10	0.13 D	0.14	0.19 D	0.10 D	0.098	0.13	0.20 D	0.12	0.094
Mercury	mg/L	T	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	0.0019	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00000016 U
Molybdenum	mg/L	T	0.0051	0.0043	0.0038	0.0032	0.0034	0.0045	0.0047 J+	0.0046	0.0045	0.0073	0.0034	0.0038	0.0045	0.0025	0.0026
Radium 226 and 228	pCi/L	T	0.614	< 0.497 U	< 0.601 U	< 0.732 U	0.877	0.847	< 0.607 U	0.985	< 0.589 U	< 0.53 U	< 0.545 U	< 0.57 U	0.732	0 J-	< 0.639 U
Radium-226	pCi/L	T	< 0.184 U	0.219	0.152	< 0.195 U	< 0.164 U	0.206	< 0.0916 U	0.403 J+	< 0.18 U	< 0.156 U	< 0.137 U	0.172	0.172	0 J-	0.217
Radium-228	pCi/L	T	0.492	< 0.497 U	< 0.601 U	< 0.732 U	0.773	0.641	< 0.607 U	< 0.848 U	< 0.589 U	< 0.53 U	< 0.545 U	< 0.57 U	< 0.603 U	-0.04 J-	< 0.639 U
Selenium	mg/L	T	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00010 U	< 0.00010 UJ	< 0.00010 U	< 0.0001 U	0.0010	0.00013 J	< 0.00010 U	0.00014 J	< 0.00010 U	< 0.00010 U
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	42	43	39	40	39	31	29 D	11	23	32 D	34 D	23 D	20	29	36
Michigan CCR Part 115																	
Copper	mg/L	T	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	0.00020 J	< 0.00020 U	< 0.00020 U	0.00041	0.016	< 0.00020 U	0.00031	0.00035	0.00023 J	< 0.00020 U
Iron	mg/L	T	20	18	18	19	18	17	15	11	11 D	17 D	16	12	13 D	14	15
Nickel	mg/L	T	0.0013	0.0016	0.0012	0.0012	0.00096 J	0.00088 J	0.0012	0.00086 J	0.00077 J	0.023	0.00095 J	0.00082 J	0.0010 J	0.00068 J	0.0019
Silver	mg/L	T	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.00005 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
Vanadium	mg/L	T	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U
Zinc	mg/L	T	0.031	0.0022	0.0026	0.0025	0.030	0.0037	0.0026	0.0030	0.0035	0.0049	0.0024	0.0024	0.058	0.068	0.0047
Additional Parameters																	
Bicarbonate Alkalinity	mg/L	T	560	490	500	450	440	430	440	440	520 D	440 D	470	440	510	480	470
Carbonate Alkalinity	mg/L	T	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.31 UD	< 0.31 UD	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	38	34	35	37	34	34	28	28 D	30 D	32 D	33	26	31 D	29	28
Potassium	mg/L	T	13	13	12	11	9.8	9.7	12	13	13 D	9.1 D	9.2	11	13 D	9.2	8.2
Sodium	mg/L	T	36	29	29	30	27	30	33	32 D	35 D	30 D	28	30	36 D	29	25
Total Alkalinity	mg/L	T	560	490	500	450	440	430	440	440	520 D	440 D	470	440	510	480	470

Notes:

ug/l - micrograms per liter.
mg/l = milligrams per liter.
su - standard pH units (pH is a field parameter)
pCi/L = picocuries per liter.
All metals were analyzed as total unless otherwise indicated.

Qualifiers:

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

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

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

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

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

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

G - The sample Minimum Detectable Concentration (MDC) is greater than the requested reporting limit.

D - Sample was diluted.

Sample Location: Compliance Phase: Sample Date: Sample Type: Unit: Sample Matrix:			MW-33														
			Background Monitoring								AM/DM Round						
			12/1/2022	1/5/2023	2/8/2023	3/15/2023	4/18/2023	5/22/2023	6/27/2023	8/7/2023	10/23/2023	2/12/2024	4/9/2024	7/18/2024	10/17/2024	2/3/2025	4/19/2025
			Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Unit:			Unit 3A/B & 1/2														
Constituent	Unit	Fraction	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Field Parameters																	
Conductivity	mS/cm	N	1.1	0.99	0.949	0.859	0.91	0.92	0.901	0.98	1	0.78	0.85	1.21	1.11	0.716	0.631
Dissolved Oxygen	mg/L	N	0.81	1.02	0.75	0.2	0.23	0.06	0.05	0.01	0.02	0.4	0.23	0.01	0.1	0.49	0.26
Oxidation Reduction Potential	mV	N	-28.5	-72.8	-61.2	-37.4	-63.6	-86.2	-106.6	-121.9	-107.1	-11.1	-43	-185.9	-16.9	42	-48.4
pH	su	N	7.12	6.49	7.14	6.96	7.04	7.02	7.03	6.98	6.86	7.27	7.16	6.95	6.86	7.25	6.8
Temperature	deg c	N	8.3	4.8	2.4	3.6	8.8	10.7	13.7	17.2	15.8	7.1	7.5	16.4	16.4	6.8	7.8
Turbidity	NTU	N	0.02	0.02	1.17	0.02	3.44	0.55	0.02	1.07	3.25	3.07	4.13	1.49	2.13	1.72	0.02
Appendix III																	
Boron	mg/L	T	0.18	0.091	0.086	0.067	0.082	0.085	0.11 J+	0.12	0.16 D	0.078 D	0.065	0.10	0.15 D	0.056	0.21
Calcium	mg/L	T	200	170	170	190	150	160	150 D	150 D	180 D	150 D	170 D	200 D	180 D	120 D	160
Chloride	mg/L	T	58	51	50	39	27	17	20 D	23 D	45 D	35 DJ+	20 D	36 D	64 D	35 D	41 D
Fluoride	mg/L	T	0.29	0.24	0.21 J	0.23	0.28	0.25	0.26 D	0.27 D	0.24 D	0.27 D	< 0.28 UD	0.28 D	0.26 D	0.29 D	0.31 D
Sulfate (as SO4)	mg/L	T	100	58	65	42	23	1.9 J	4.3 D	1.6 JD	69 D	20 D	17 D	3.7 JD	98 D	22 D	22 D
Total Dissolved Solids	mg/L	T	750 J	630	680	590	580	600	600 D	570 D	690 D	550 D	600	740 D	760 D	500 D	640 D
Appendix IV																	
Antimony	mg/L	T	0.00098	0.00088	0.00079	0.00059	0.0012	0.00017 J	0.00020 J	0.00015 J	0.00048	< 0.00050 UD	0.00068	0.00035	0.0013	0.0011	0.00036
Arsenic	mg/L	T	0.0031	0.0014	0.0016	0.0017	0.0040	0.0038	0.0032 J+	0.0027	0.0027	0.0012	0.0030	0.021	0.0011	0.0012	0.0056
Barium	mg/L	T	0.084	0.086	0.092	0.076	0.073	0.095	0.088	0.098	0.09	0.44 D	0.063	0.16	0.087	0.043	0.10
Beryllium	mg/L	T	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.00026 U	< 0.000052 U	< 0.000052 UJ	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U
Cadmium	mg/L	T	0.000049 J	0.00010 J	0.00014 J	0.00015 J	< 0.00016 U	< 0.000075 U	< 0.000075 UJ	< 0.000075 U	0.00023 J	< 0.00038 UD	0.00023 J	< 0.000075 U	0.00010 J	< 0.000075 UJ	< 0.000075 U
Chromium, Total	mg/L	T	0.0021	0.0028	0.0029	0.0027	0.0029	0.0039	0.0050	0.0059	0.0029	0.019	0.0032	0.011	0.0024	0.0035	0.0056
Cobalt	mg/L	T	0.00075	0.00049 J	0.00082	0.0017	0.0020 J	0.00083	0.00039 J+	0.00041 J	0.00053	0.0012	0.0022	0.00058	0.00064	0.00040 J	0.0031
Fluoride	mg/L	T	0.29	0.24	0.21 J	0.23	0.28	0.25	0.26 D	0.27 D	0.24 D	0.27 D	< 0.28 UD	0.28 D	0.26 D	0.29 D	0.31 D
Lead	mg/L	T	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.0011 U	0.00026 J	0.00015 J+	0.00015 J	0.00037 J	0.0014 JD	0.00043 J	0.00013 J	0.00018 J	< 0.00010 U	0.00012 J
Lithium	mg/L	T	0.0051	0.0069	0.0043	0.0047	0.0061	0.0052	< 0.0094 UD	0.0041	0.0054	0.0028	0.0046	0.0069	0.0053	0.0030	0.0049
Mercury	mg/L	T	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 UJ	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	0.0000029
Molybdenum	mg/L	T	0.0047	0.0037	0.0031	0.0031	0.0060 J	0.0026	0.00068 J+	0.00052 J	0.0032	0.00027 J	0.0030	0.0014	0.0067	0.0057	0.0048
Radium 226 and 228	pCi/L	T	0.825	< 0.587 U	0.949	< 0.852 U	< 0.815 U	1.61	0.828	1.15	< 0.621 U	< 0.892 U	< 0.846 U	0.915	< 0.964 U	0.31 J-	< 1.46 U
Radium-226	pCi/L	T	< 0.267 U	< 0.14 U	< 0.125 U	< 0.204 U	< 0.232 U	< 0.256 U	0.154	0.276 J+	< 0.282 UJ	< 0.162 U	< 0.328 U	< 0.144 U	< 0.226 U	-0.03 J-	< 0.346 U
Radium-228	pCi/L	T	0.794	< 0.587 U	0.833	< 0.852 U	< 0.815 U	1.48 J	< 0.768 U	0.875	< 0.621 UJ	< 0.892 U	< 0.846 U	0.773	< 0.964 U	0.31 J-	< 1.46 UG
Selenium	mg/L	T	0.00089	0.00076	0.00055	0.00038 J	< 0.0011 U	0.00033 J	0.00033 J+	0.00029 J	0.00059	0.00054	0.00053	0.00058	0.0010	0.00098	0.00053
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.00038 U	< 0.000075 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.00038 UD	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	2.0 J	5.0	10	1.0 J	9.0	17	21	22	10	6.0	5.0	80	< 4.0 U	< 4.0 UD	27
Michigan CCR Part 115																	
Copper	mg/L	T	0.0079	0.016	0.016	0.020	0.0067	0.0017	0.0011 B	0.00079	0.0032	0.00099	0.013	0.00085	0.015	0.032	0.0042
Iron	mg/L	T	1.2	2.5	2.8	2.5	4.6	7.4	7.7	8.7	4.4 D	1.1 D	1.2	29	0.067	0.078	8.9
Nickel	mg/L	T	0.020	0.016	0.017	0.019	0.023	0.014	0.0081	0.0049	0.0077	0.0036	0.026	0.014	0.014	0.018	0.028
Silver	mg/L	T	< 0.000050 U	< 0.000050 U	< 0.000050 U	0.00011	< 0.00025 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.00005 U	< 0.00025 UD	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
Vanadium	mg/L	T	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.0031 U	< 0.00062 U	0.00065 J	0.00079 J	< 0.00062 U	< 0.00062 U	0.00097 J	0.0033	0.0014	0.00088 J	0.00095 J
Zinc	mg/L	T	0.0071	0.0036	0.0050	0.0053	0.012	0.0014	< 0.0012 U	< 0.0012 U	0.018	0.0035	0.0072	0.0017	0.011	0.0059	0.0092
Additional Parameters																	
Bicarbonate Alkalinity	mg/L	T	460	430	400	390	440	480	440	480	420 D	330 D	430 D	550	390	320	460
Carbonate Alkalinity	mg/L	T	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.31 UD	< 0.31 UD	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	22	19	18	17	16	18	16	16	19 D	16 D	19	21	17 D	12	18
Potassium	mg/L	T	3.8	5.4	4.6	4.1	4.0	4.1	4.4	5.1	4.9	3.4 D	3.1	5.7	4.6 D	2.4	4.5
Sodium	mg/L	T	38	25	24	26	22	22	23	22	30 D	25 D	17	21	26 D	19	20
Total Alkalinity	mg/L	T	460	430	400	390	440	480	440	480	420 D	330 D	430 D	550	390	320	460

Notes:

ug/l - micrograms per liter.
mg/l = milligrams per liter.
su - standard pH units (pH is a field parameter)
pCi/L = picocuries per liter.
All metals were analyzed as total unless otherwise indicated.

Qualifiers:

U The analyte was analyzed for, but was not detected at, a level greater than or equal to the level of the adjusted reporting limit (RL) for the sample and method.
J The analyte was positively identified, and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain QC criteria were not met, or to the concentration of the analyte being below the RL).
J+ Same as J, and the reported concentration is potentially biased high.
J- Same as J, and the reported concentration is potentially biased low.

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

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

G - The sample Minimum Detectable Concentration (MDC) is greater than the requested reporting limit.
D - Sample was diluted.

Sample Location: Compliance Phase: Sample Date: Sample Type: Unit: Sample Matrix:		MW-34															
		Background Monitoring								AM/DM Round							
		12/1/2022	1/5/2023	2/8/2023	3/15/2023	4/18/2023	5/22/2023	6/27/2023	8/7/2023	10/23/2023	2/12/2024	4/9/2024	7/18/2024	10/17/2024	2/26/2025	4/21/2025	
		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	
Unit:		Unit 3A/B & 1/2															
Sample Matrix:		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	
Constituent	Unit	Fraction															
Field Parameters																	
Conductivity	mS/cm	N	2.14	1.07	1.96	1.49	1.86	1.89	2.05	2.05	1.93	1.82	1.8	2	1.9	1.83	1.86
Dissolved Oxygen	mg/L	N	0.87	1.19	0.29	0.45	1.05	2.73	0.09	0.97	0.7	1.92	0.05	0.33	0.82	0.14	0.15
Oxidation Reduction Potential	mV	N	-120.5	-104.4	-119.7	-95	-63.4	-100.5	-113.8	-124.6	-163.1	-98.9	-72.8	-139	-122.7	-30.7	-83.9
pH	su	N	6.65	7.66	6.78	6.68	6.53	6.6	6.75	6.69	6.62	6.63	6.61	6.7	6.49	6.59	6.62
Temperature	deg c	N	12.9	4.9	9.4	7.8	8	10.3	12.4	14.6	14.8	9.8	8.9	14.2	15.2	9	8.8
Turbidity	NTU	N	4.96	0.02	5.58	2.11	5.87	0.02	0.02	3.15	1.77	4.76	1.39	1.6	2.76	3.11	1.26
Appendix III																	
Boron	mg/L	T	3.2	2.7	1.9 B	1.8	1.6	2.5	4.0 J+	3.6	4.1 D	1.9 D	1.8 D	2.9	2.2 D	2.1	1.9
Calcium	mg/L	T	220	190	220	210	210	210	220 D	190 D	220 D	210 D	230 D	220 D	200 D	220 D	210
Chloride	mg/L	T	33	27	24	23	23	22	23 D	24 D	25 D	20 DJ+	16 D	22 D	20 D	19 D	21 D
Fluoride	mg/L	T	0.35	0.20	0.23	0.24	0.21	0.23	0.26 D	0.29 D	0.28 D	0.21 D	0.22 D	0.31 D	0.096 JD	0.22 D	0.32 D
Sulfate (as SO4)	mg/L	T	2.5 J	1.9 J	< 0.41 U	0.87 J	0.56 J	< 0.41 U	< 0.41 UD	< 0.41 UD	< 0.41 UD	< 0.41 UD	< 1.1 UD	< 2.2 UD	< 1.1 UD	< 2.2 UD	< 2.2 UD
Total Dissolved Solids	mg/L	T	820	750	800	790	700	760	820 D	770 D	800 D	730 D	730	760 D	710 D	720 D	750 D
Appendix IV																	
Antimony	mg/L	T	0.00023 J	0.00011 J	0.000095 J	0.00013 J	0.00091 J	0.00010 J	0.00016 J	0.00015 J	0.00014 J	< 0.00050 UD	0.00013 J	0.00029	0.00021 J	0.00019 J	0.00013 J
Arsenic	mg/L	T	0.0016	0.0010	0.00088	0.00090	0.00089 J	0.0010	0.0013 J+	0.0012	0.0013	0.00017 J-	0.00085	0.0010	0.0010	0.00072	0.00075
Barium	mg/L	T	0.54	0.54	0.58	0.50	0.17	0.49	0.53	0.49	0.52	0.066 DJ-	0.46	0.52	0.48	0.47	0.54
Beryllium	mg/L	T	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.00026 U	0.000059 J	< 0.000052 UJ	< 0.000052 U	< 0.000052 U	< 0.000052 UJ	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U
Cadmium	mg/L	T	0.000036 J	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.00016 U	< 0.000075 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.00038 UD	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Chromium, Total	mg/L	T	0.024	0.022	0.025	0.029	< 0.00088 U	0.027	0.034	0.028	0.019	0.0050 J+	0.026	0.023	0.023	0.018	0.025
Cobalt	mg/L	T	0.0015	0.0013	0.0013	0.0013	< 0.00050 U	0.0014	0.0018 J+	0.0016	0.0013	0.00061	0.0011	0.0010	0.0012	0.00090	0.0010
Fluoride	mg/L	T	0.35	0.20	0.23	0.24	0.21	0.23	0.26 D	0.29 D	0.28 D	0.21 D	0.22 D	0.31 D	0.096 JD	0.22 D	0.32 D
Lead	mg/L	T	0.0069	0.0016	0.00059	0.00094	< 0.0011 U	0.00074	0.00087 J+	0.00091	0.00063	< 0.00050 UJ	0.00038 J	0.00047 J	0.00049 J	0.00041 J	0.00028 J
Lithium	mg/L	T	0.077	0.086	0.053	0.012	0.046	0.065	0.088 D	0.10	0.099 D	0.043 D	0.057	0.079	0.065 D	0.057	0.056
Mercury	mg/L	T	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	0.0000016
Molybdenum	mg/L	T	0.0018	0.00081 J	< 0.00062 U	< 0.00062 U	0.0079	0.0018	0.00030 J+	< 0.00025 U	< 0.00025 U	< 0.00025 UJ	< 0.00025 U	< 0.00025 U	0.00041 J	< 0.00025 U	< 0.00025 U
Radium 226 and 228	pCi/L	T	2.02	1.15	1.28	1.34	1.99	1.81	2.79	1.24	2.4	1.86 J+	2.2	1.76	2.07	--	2.62
Radium-226	pCi/L	T	0.57	0.534	0.654	0.558	0.396	0.561	0.357	0.637 J+	0.699	0.527	0.602	0.427	0.369	--	< 0.656 U
Radium-228	pCi/L	T	1.45	< 0.849 U	< 0.918 U	0.78	1.59	1.25 J	2.44	< 0.862 U	1.7	1.33 J+	1.59 G	1.33	1.7 G	--	2.12 G
Selenium	mg/L	T	0.00034 J	0.00025 J	0.00027 J	0.00023 J	< 0.0011 U	0.00029 J	0.00030 J+	0.00027 J	0.00031 J	0.00039 J-	0.00028 J	0.00028 J	0.00030 J	0.00026 J	0.00026 J
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.00038 U	< 0.000075 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.00038 UD	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	110	52	83	44	160	160	170 D	130	150	120	160	150	140	97	160
Michigan CCR Part 115																	
Copper	mg/L	T	0.0034	0.00075	0.00033	0.0085	< 0.0010 U	0.00069	0.00045 B	0.00043	0.00045	0.00024 J	0.00040	0.00058	0.00055	0.00029	0.00028
Iron	mg/L	T	73	70	83	78	75	77	77	64 D	70 D	72 D	76	65	59 D	64	69
Nickel	mg/L	T	0.0016	0.0013	0.0012	0.0013	< 0.0032 U	0.0016	0.0020	0.0018	0.0015	0.00089 J	0.011	0.019	0.028	0.041	0.012
Silver	mg/L	T	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.00025 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.00005 U	< 0.00025 UD	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
Vanadium	mg/L	T	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.0031 U	0.00065 J	0.00069 J	< 0.00062 U	< 0.00062 U	< 0.00062 U	0.00090 J	0.0011 J	0.0012	0.00078 J	0.0010 J
Zinc	mg/L	T	0.031	0.0019	0.0023	0.0023	0.020	0.0015	0.0018	0.0017	0.0021	< 0.0012 UJ	0.0014	0.0033	0.021	0.0036	0.0026
Additional Parameters																	
Bicarbonate Alkalinity	mg/L	T	1100	950	920	890	880	950	970 D	970	1000 D	830 D	950 D	960	920	900	930
Carbonate Alkalinity	mg/L	T	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.31 UD	< 0.16 U	< 0.31 UD	< 0.31 UD	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	30	23	22	21	20	24	27	26 D	29 D	23 D	25	25	22 D	23	24
Potassium	mg/L	T	11	13	9.5	8.5	8.4	8.9	12	13	13 D	8.8 D	8.0	10	8.6 D	8.3	8.2
Sodium	mg/L	T	34	30	28	22	23	30	38	33 D	38 D	26 D	25	29	25 D	26	24
Total Alkalinity	mg/L	T	1100	950	920	890	880	950	970 D	970	1000 D	830 D	950 D	960	920	900	930

Notes:

ug/l - micrograms per liter.
mg/l = milligrams per liter.
su - standard pH units (pH is a field parameter)
pCi/L = picocuries per liter.
All metals were analyzed as total unless otherwise indicated.

Qualifiers:

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

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

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

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

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

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

G - The sample Minimum Detectable Concentration (MDC) is greater than the requested reporting limit.

D - Sample was diluted.

Sample Location: Compliance Phase: Sample Date: Sample Type: Unit: Sample Matrix:			MW-36				
			AM/DM Round				
			4/8/2024	7/17/2024	10/16/2024	2/26/2025	4/21/2025
			Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
			Unit 1/2				
			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Constituent	Unit	Fraction					
Field Parameters							
Conductivity	mS/cm	N	0.658	0.66	0.7	0.614	0.4807
Dissolved Oxygen	mg/L	N	0.08	0.02	0.01	0.06	0.12
Oxidation Reduction Potential	mV	N	-207.1	-331.7	-230.1	130.6	-223
pH	su	N	10.42	9.89	8.79	9.54	8.95
Temperature	deg c	N	8.4	19.1	18.3	5.4	8.2
Turbidity	NTU	N	5.41	2.01	1.11	2.82	0.02
Appendix III							
Boron	mg/L	T	0.28	0.41	0.61 D	0.25	0.41
Calcium	mg/L	T	67	61	61 D	56	72
Chloride	mg/L	T	34 D	39 D	38 D	34 D	32 D
Fluoride	mg/L	T	0.61 D	0.65 D	0.92 D	0.61 D	0.72 D
Sulfate (as SO4)	mg/L	T	5.7 JD	21 D	10 D	10 D	6.8 D
Total Dissolved Solids	mg/L	T	330 D	460 D	390 D	400 D	450 D
Appendix IV							
Antimony	mg/L	T	0.00076	0.0015	0.00075	0.0029	0.00076
Arsenic	mg/L	T	0.029	0.029	0.013	0.012	0.0093
Barium	mg/L	T	0.15	0.17	0.20	0.13	0.25
Beryllium	mg/L	T	0.000059 J	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U
Cadmium	mg/L	T	0.00032	0.00082	0.00019 J	0.00046	0.000094 J
Chromium, Total	mg/L	T	0.0013	0.0031	0.0018	0.0021	0.0011
Cobalt	mg/L	T	0.00027 J	0.00027 J	0.00018 J	0.00028 J	0.00018 J
Fluoride	mg/L	T	0.61 D	0.65 D	0.92 D	0.61 D	0.72 D
Lead	mg/L	T	0.025	0.051	0.012	0.032	0.0060
Lithium	mg/L	T	0.0057	0.0089	0.012	0.0042	0.010
Mercury	mg/L	T	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	0.0000063
Molybdenum	mg/L	T	0.019	0.042	0.034	0.037	0.017
Radium 226 and 228	pCi/L	T	< 0.861 U	< 1.4 UJ	1.08	--	< 0.933 U
Radium-226	pCi/L	T	0.467	< 0.207 UJ	< 0.194 U	--	< 0.319 U
Radium-228	pCi/L	T	< 0.861 U	< 1.4 UJ	0.959	--	< 0.933 U
Selenium	mg/L	T	0.00060	0.00072	0.00065	0.00064	0.00049 J
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	38	4.0 J+	< 4.0 U	5.0	< 4.0 U
Michigan CCR Part 115							
Copper	mg/L	T	0.0077	0.019	0.0086	0.011	0.0025
Iron	mg/L	T	0.40	0.35	0.44	0.39	1.1
Nickel	mg/L	T	0.011	0.0084	0.0054	0.0066	0.0056
Silver	mg/L	T	0.00021	0.00057	0.00011	0.00023	0.000051
Vanadium	mg/L	T	0.0024	0.0052	0.0025	0.0052	0.0037
Zinc	mg/L	T	0.0088	0.020	0.014	0.013	0.0042
Additional Parameters							
Bicarbonate Alkalinity	mg/L	T	78	160	270	200	320
Carbonate Alkalinity	mg/L	T	120	110	34	97	39
Magnesium	mg/L	T	6.9	7.5	9.3 D	6.1	13
Potassium	mg/L	T	52	45	30 D	46	33
Sodium	mg/L	T	61	65	57 D	62	56
Total Alkalinity	mg/L	T	200	260	310	300	350

Notes:

ug/l - micrograms per liter.
mg/l = milligrams per liter.
su - standard pH units (pH is a field parameter)
pCi/L = picocuries per liter.
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J- Same as J, and the reported concentration is potentially biased low.

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

G - The sample Minimum Detectable Concentration (MDC) is greater than the requested reporting limit.

D - Sample was diluted.

Sample Location: Compliance Phase: Sample Date: Sample Type: Unit: Sample Matrix:			MW-37				
			AM/DM Round				
			4/8/2024	7/17/2024	10/15/2024	2/3/2025	4/20/2025
			Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
			Unit 1/2				
			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Constituent	Unit	Fraction					
Field Parameters							
Conductivity	mS/cm	N	1.16	1.24	1	1.09	1
Dissolved Oxygen	mg/L	N	1.04	0.04	0.01	0.89	0.14
Oxidation Reduction Potential	mV	N	-19	65	6.7	74.1	-72.7
pH	su	N	7.47	7.15	7.21	7.16	7.42
Temperature	deg c	N	9	17.8	18.1	7.9	9.3
Turbidity	NTU	N	0.02	0.02	7.46	0.02	0.5
Appendix III							
Boron	mg/L	T	5.2	3.9	1.9 D	5.9	4.8
Calcium	mg/L	T	160 D	160 D	120 D	160 D	140
Chloride	mg/L	T	22 D	29 D	40 D	15 D	15 D
Fluoride	mg/L	T	0.63 D	0.39 D	0.50 D	0.40 D	0.50 D
Sulfate (as SO4)	mg/L	T	210 D	260 D	110 D	270 D	260 D
Total Dissolved Solids	mg/L	T	790 D	840 D	630 D	780 D	700 D
Appendix IV							
Antimony	mg/L	T	0.00064	0.00040	0.00023 J	0.00011 J	0.00017 J
Arsenic	mg/L	T	0.00055	0.00046 J	0.00046 J	0.00074	0.00061
Barium	mg/L	T	0.040	0.046	0.044	0.074	0.067
Beryllium	mg/L	T	< 0.000052 U	< 0.000052 U	< 0.000052 U	0.000076 J	< 0.000052 U
Cadmium	mg/L	T	0.00012 J	0.00013 J	0.00011 J	< 0.000075 U	< 0.000075 U
Chromium, Total	mg/L	T	0.00039	0.00054	0.00027	0.00028	0.00036
Cobalt	mg/L	T	0.00075	0.00053	0.00051 J	0.00076	0.00038 J
Fluoride	mg/L	T	0.63 D	0.39 D	0.50 D	0.40 D	0.50 D
Lead	mg/L	T	0.00017 J	0.00013 J	< 0.00010 U	< 0.00010 U	0.00058
Lithium	mg/L	T	0.020	0.022	0.019	0.0093	0.0097
Mercury	mg/L	T	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	0.0000016
Molybdenum	mg/L	T	0.015	0.0075	0.0064	0.012	0.013
Radium 226 and 228	pCi/L	T	< 0.569 U	< 0.764 U	< 0.96 UJ	0.95	1.09
Radium-226	pCi/L	T	< 0.142 U	0.104	< 0.226 UJ	0.67	< 0.319 U
Radium-228	pCi/L	T	< 0.569 U	< 0.764 U	< 0.96 UJ	< 0.43 U	1.09
Selenium	mg/L	T	0.0046	0.0030	0.0018	0.00065	0.00091
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	< 4.0 UD	3.9 JD	< 4.0 UD	< 4.0 U	< 4.0 U
Michigan CCR Part 115							
Copper	mg/L	T	0.013	0.014	0.014	0.0067	0.0088
Iron	mg/L	T	0.16	< 0.026 U	0.026 J	2.1	1.7
Nickel	mg/L	T	0.0046	0.0052	0.0039	0.0029	0.0029
Silver	mg/L	T	< 0.000050 U	< 0.000050 U	0.00017 J+	< 0.000050 U	< 0.000050 U
Vanadium	mg/L	T	< 0.00062 U	< 0.00062 U	< 0.00062 U	0.00067 J	< 0.00062 U
Zinc	mg/L	T	0.017	0.017	0.011	0.015	0.0097
Additional Parameters							
Bicarbonate Alkalinity	mg/L	T	310	340	350	340	290
Carbonate Alkalinity	mg/L	T	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	13	12	9.8 D	12	9.9
Potassium	mg/L	T	18	20	18 D	13	19
Sodium	mg/L	T	100 D	98 D	57 D	68	58
Total Alkalinity	mg/L	T	310	340	350	340	290

Notes:

ug/l - micrograms per liter.
mg/l = milligrams per liter.
su - standard pH units (pH is a field parameter)
pCi/L = picocuries per liter.
All metals were analyzed as total unless otherwise indicated.

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

G - The sample Minimum Detectable Concentration (MDC) is greater than the requested reporting limit.
D - Sample was diluted.

Sample Location: Compliance Phase: Sample Date: Sample Type: Unit: Sample Matrix:			MW-38				
			AM/DM Round				
			4/8/2024	7/17/2024	10/16/2024	2/26/2025	4/20/2025
			Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
			Unit 3A/B				
			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Constituent	Unit	Fraction					
Field Parameters							
Conductivity	mS/cm	N	1.27	1.18	1.3	0.91	0.587
Dissolved Oxygen	mg/L	N	0.4	0.17	0.13	0.33	1.51
Oxidation Reduction Potential	mV	N	-207.4	-25.1	-69.8	-5.7	-102.8
pH	su	N	10	9.23	9	9.12	9.17
Temperature	deg c	N	11.7	20.6	16.9	6	8.1
Turbidity	NTU	N	7.83	0.02	0.02	8.46	3.32
Appendix III							
Boron	mg/L	T	1.6 D	2.4	3.0 D	1.2	0.47
Calcium	mg/L	T	150 D	96 D	110 D	74	72
Chloride	mg/L	T	51 D	57 D	58 D	42 D	11 D
Fluoride	mg/L	T	0.79 D	1.0 D	1.8 D	0.83 D	0.63 D
Sulfate (as SO4)	mg/L	T	280 D	170 D	210 D	130 D	210 D
Total Dissolved Solids	mg/L	T	840 D	850 D	980 D	350 D	460 D
Appendix IV							
Antimony	mg/L	T	0.00068	0.0017	0.0011	0.0018	0.0013
Arsenic	mg/L	T	0.0050	0.0071	0.0033	0.0057	0.0050
Barium	mg/L	T	0.16	0.12	0.17	0.070	0.036
Beryllium	mg/L	T	< 0.000052 U	0.000067 J	0.000090 J	< 0.000052 U	< 0.000052 U
Cadmium	mg/L	T	0.000096 J	0.00037	0.00015 J	0.00049	< 0.000075 U
Chromium, Total	mg/L	T	0.0040	0.016	0.0072	0.013	0.0039
Cobalt	mg/L	T	0.00053	0.00071	0.00055	0.00079	0.00025 J
Fluoride	mg/L	T	0.79 D	1.0 D	1.8 D	0.83 D	0.63 D
Lead	mg/L	T	0.015	0.086	0.023	0.060	0.0076
Lithium	mg/L	T	0.12	0.098	0.12 D	0.094	0.047
Mercury	mg/L	T	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	0.0000093
Molybdenum	mg/L	T	0.0097	0.014	0.0095	0.023	0.025
Radium 226 and 228	pCi/L	T	1.21	< 1.72 U	2.12	--	< 2.65 U
Radium-226	pCi/L	T	0.492	< 0.314 U	0.278	--	< 0.988 U
Radium-228	pCi/L	T	< 1.08 UG	< 1.72 UG	1.84	--	< 2.65 UG
Selenium	mg/L	T	0.00073	0.00095	0.00059	0.0010	0.0015
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	160 D	53	< 4.0 U	45 D	7.0
Michigan CCR Part 115							
Copper	mg/L	T	0.0031	0.020	0.0063	0.018	0.0037
Iron	mg/L	T	0.39	1.0	0.51	1.4	0.13
Nickel	mg/L	T	0.0053	0.0096	0.0067	0.0083	0.0038
Silver	mg/L	T	< 0.000050 U	0.00019	0.000065	0.00015	< 0.000050 U
Vanadium	mg/L	T	0.0066	0.010	0.0053	0.015	0.014
Zinc	mg/L	T	0.0066	0.020	0.015	0.021	0.0039
Additional Parameters							
Bicarbonate Alkalinity	mg/L	T	270	300	380	230	55
Carbonate Alkalinity	mg/L	T	12	50	60	75	43
Magnesium	mg/L	T	18	13	18 D	7.4	1.3
Potassium	mg/L	T	91 D	86 D	88 D	82	44
Sodium	mg/L	T	97 D	100 D	100 D	96 D	36
Total Alkalinity	mg/L	T	280	350	440	300	98

Notes:

ug/l - micrograms per liter.
mg/l = milligrams per liter.
su - standard pH units (pH is a field parameter)
pCi/L = picocuries per liter.
All metals were analyzed as total unless otherwise indicated.

Qualifiers:

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

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

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

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

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

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

G - The sample Minimum Detectable Concentration (MDC) is greater than the requested reporting limit.

D - Sample was diluted.

Sample Location: Compliance Phase: Sample Date: Sample Type: Unit: Sample Matrix:			SG-02												
			Background Monitoring							AM/DM Round					
			12/2/2022	1/5/2023	3/14/2023	4/19/2023	5/23/2023	6/28/2023	8/8/2023	10/24/2023	2/14/2024	4/10/2024	7/17/2024	10/17/2024	4/22/2025
			Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
			Surface Water												
Constituent	Unit	Fraction	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
(None)															
NO SAMPLE	mg/L	N	--	--	--	--	--	--	--	--	--	--	--	--	--
Field Parameters															
Conductivity	mS/cm	N	1.42	1	0.898	0.93	1.03	1.56	1.66	1.47	0.84	0.99	1.57	1.45	0.69
Dissolved Oxygen	mg/L	N	5.28	9.57	4.27	10.32	7.83	8.9	9.54	8.29	14.38	9.31	7.69	8.44	9.53
Oxidation Reduction Potential	mV	N	147.3	-25.2	131.1	13.3	16.1	25.6	69.3	-44.9	135.6	-32.5	-39.7	78.5	33.2
pH	su	N	8.02	8.38	8	8.23	9.14	8.52	8.7	8.15	8.01	8.38	7.86	7.67	8.38
Temperature	deg c	N	2.8	3.5	2.7	8.9	26.6	26.2	29.6	17.5	3.6	14.8	28.2	12.4	14.8
Turbidity	NTU	N	1.62	0.02	1.2	2.41	6.62	4.2	3.26	6.09	0.46	3.59	1.34	7.03	9.08
Appendix III															
Boron	mg/L	T	4.0	2.2	2.1	2.0	2.8	5.6 J+	6.9	7 D	3.5 D	3.1 D	8.1	7.3 D	2.6
Calcium	mg/L	T	210	140	140	130	150	210 D	170 D	180 D	140 D	140 D	170 D	160 D	100
Chloride	mg/L	T	75	46	41	37	40	86 D	120 D	99 D	52 D	36 D	120 D	110 D	54 D
Fluoride	mg/L	T	2.6	1.9	2.3	2.6	3.3	4.6 D	5.1 D	3.6 D	2.2 D	2.1 D	4.5 D	3.7 D	2.5 D
Sulfate (as SO4)	mg/L	T	620	360	350	400	430	620 D	640 D	530 D	380 D	340 D	540 D	490 D	270 D
Total Dissolved Solids	mg/L	T	1100	660	580	680	740	1200 D	1400 D	1100	690 D	690	1100 D	1100 D	560 D
Appendix IV															
Antimony	mg/L	T	0.00051	0.00043	0.00066	0.00058 J	0.0012	0.00085	0.0011	0.00061	0.00038	0.00088	0.0011	0.00076	0.00079
Arsenic	mg/L	T	0.0019	0.0012	0.0018	0.0017 J	0.0032	0.0037	0.0091	0.0023	0.0012	0.0017	0.0086	0.0020	0.0014
Barium	mg/L	T	0.049	0.033	0.034	0.22	0.080	0.13	0.11	0.06	0.037	0.045	0.12	0.060	0.049
Beryllium	mg/L	T	0.000060 J	< 0.000052 U	< 0.000052 U	< 0.00027 U	< 0.000052 U	0.00029	0.00014 J	< 0.000052 U	< 0.000052 U	< 0.000052 U	0.000057 J	< 0.000052 U	0.000078 J
Cadmium	mg/L	T	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.00017 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Chromium, Total	mg/L	T	0.00038	0.00024 J	0.00057	< 0.00091 U	0.00046	0.00091	0.00080	0.00036	0.00025	0.00045	0.00064	0.00034	0.00036
Cobalt	mg/L	T	0.00021 J	0.00022 J	0.00028 J	< 0.00052 U	0.00035 J	0.00040 J	0.00057	0.00015 J	0.00012 J	0.00017 J	0.00034 J	< 0.00010 U	0.00012 J
Fluoride	mg/L	T	2.6	1.9	2.3	2.6	3.3	4.6 D	5.1 D	3.6 D	2.2 D	2.1 D	4.5 D	3.7 D	2.5 D
Lead	mg/L	T	0.0013	0.00081	0.0012	0.0020 J	0.0011	0.00050 J	0.0012	0.00064	0.00061	0.0011	0.00083	0.00043 J	0.00063
Lithium	mg/L	T	0.046	0.032	0.035	0.038	0.053	0.067	0.085	0.058	0.042 D	0.043	0.086	0.072	0.046
Mercury	mg/L	T	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	0.00022	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	0.0000064
Molybdenum	mg/L	T	0.0069	0.0060	0.011	0.0062 J	0.016	0.0072	0.012	0.0081	0.0069	0.013	0.011	0.0097	0.014
Radium 226 and 228	pCi/L	T	< 0.342 U	0.712 J+	< 0.551 U	1.42	1.49	1.44	1.28	< 0.532 U	< 1 U	0.722	< 0.916 U	< 0.7 U	0.658
Radium-226	pCi/L	T	0.151	< 0.121 U	< 0.177 U	0.266	0.229	0.456	0.329	< 0.265 U	< 0.18 U	0.206	0.466	0.175	0.382
Radium-228	pCi/L	T	< 0.342 U	0.627 J+	< 0.551 U	1.15	1.26	0.981	0.954	< 0.532 U	< 1 U	< 0.601 U	< 0.916 U	< 0.7 U	< 0.565 U
Selenium	mg/L	T	0.00073	0.00059	0.0010	< 0.0011 U	0.0013	0.0013	0.0014	0.0008	0.0018	0.0014	0.0015	0.00078	0.0014
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.00039 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	< 4.0 U	3.0 J	1.0 J	0.99 J	1.0 J	30	14	< 3.9 UD	< 4.0 U	< 4.0 U	17	< 4.0 U	11
Michigan CCR Part 115															
Copper	mg/L	T	0.0010	0.00085	0.011	0.0011 J	0.0014	0.0012	0.0010	0.00047	0.00089	0.0016	0.00083	0.00061	0.0015
Iron	mg/L	T	0.20	0.15	0.20	0.23	0.16	0.27	0.48	0.28	0.14	0.16	0.48	0.21	0.10
Nickel	mg/L	T	0.0023	0.0020	0.0023	< 0.0034 U	0.0027	0.0036	0.0040	0.0034	0.0020	0.0024	0.0037	0.0035	0.0021
Silver	mg/L	T	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.00026 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.00005 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
Vanadium	mg/L	T	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.0032 U	0.0019	0.0014	0.0052	0.00072 J	< 0.00062 U	0.0014	0.0055	0.0020	0.0012
Zinc	mg/L	T	0.0041	0.0031	0.0029	0.029	0.0014	0.0024	0.0028	0.005	0.0013	0.0020	0.0024	0.0033	0.0016
Additional Parameters															
Bicarbonate Alkalinity	mg/L	T	96	76	62	71	35	73	65	130 D	93	79	94	110	85
Carbonate Alkalinity	mg/L	T	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	19	< 0.31 UD	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	48	31	28	28	33	53	63 D	57 D	37 D	34	61	56 D	28
Potassium	mg/L	T	13	9.1	8.0	7.3	6.8	18	21 D	16 D	9.1 D	8.2	20	13 D	6.7
Sodium	mg/L	T	40	24	22	21	27	52	62 D	58 D	31 D	28	66	60 D	27
Total Alkalinity	mg/L	T	96	76	62	71	35	73	83	130 D	93	79	94	110	85

Notes:

ug/l - micrograms per liter.
mg/l = milligrams per liter.
su - standard pH units (pH is a field parameter)
pCi/L = picocuries per liter.
All metals were analyzed as total unless otherwise indicated.

Qualifiers:

U - The analyte was analyzed for, but was not detected at, a level greater than or equal to the level of the adjusted reporting limit (RL) for the sample and method.
J - The analyte was positively identified, and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain QC criteria were not met, or to the concentration of the analyte being below the RL).
J+ - Same as J, and the reported concentration is potentially biased high.
J- - Same as J, and the reported concentration is potentially biased low.

G - The sample Minimum Detectable Concentration (MDC) is greater than the requested reporting limit.

D - Sample was diluted.

Sample Location: Compliance Phase: Sample Date: Sample Type: Unit: Sample Matrix:			SG-04R													
			Background Monitoring							AM/DM Round						
			12/2/2022	1/5/2023	2/6/2023	3/14/2023	4/19/2023	5/23/2023	6/28/2023	8/8/2023	10/24/2023	2/14/2024	4/8/2024	7/17/2024	10/17/2024	4/22/2025
			Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Unit:			Surface Water													
Sample Matrix:			Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Constituent	Unit	Fraction														
(None)																
NO SAMPLE	mg/L	N	--	--	< 0	--	--	--	--	--	--	--	--	--	--	--
Field Parameters																
Conductivity	mS/cm	N	1	1.64	--	1.404	1.96	1.79	2.56	2.56	2.12	1.41	1.64	2.39	2	1.074
Dissolved Oxygen	mg/L	N	6.42	9.64	--	10.26	10.46	7.17	6.62	8.21	8.36	11.92	9.24	6.23	9.56	7.13
Oxidation Reduction Potential	mV	N	125.3	-34.8	--	-34	91.5	29.9	368	58.7	-33.8	155.6	20.8	-6.5	55.1	44.8
pH	su	N	8.03	8.44	--	8.05	8.21	8.3	8.24	8.68	8.36	7.2	8.46	8.74	8.35	7.56
Temperature	deg c	N	3.3	4	--	5.9	8.2	25.6	25.9	23.8	17.1	2.7	14.7	27.5	13.1	15.4
Turbidity	NTU	N	7.25	1.1	--	3.22	1.04	5.27	10.6	2.28	5.92	8.1	3.75	4.11	8.89	7.77
Appendix III																
Boron	mg/L	T	3.0	2.1	--	2.6	2.4	3.2	5.0 J+	5.4	5.4 D	4.5 D	4.4 D	6.8	5.6 D	3.5 D
Calcium	mg/L	T	430	300	--	370	310	390	600 D	580 DE	500 D	340 D	370 D	510 D	390 D	410 D
Chloride	mg/L	T	27	22	--	21	20	22	33 D	38 D	35 D	23 D	20 D	38 D	42 D	71 D
Fluoride	mg/L	T	2.6	2.0	--	2.3	2.7	3.5	5.0 D	5.3 D	3.7 D	2.3 D	2.7 D	4.2 D	3.7 D	1.6 D
Sulfate (as SO4)	mg/L	T	1200	890	--	750	880	1000	1600 D	1800 D	820 D	890 D	890 D	1500 D	1200 D	750 D
Total Dissolved Solids	mg/L	T	1800	1200	--	1200	1400	1600	2500 D	2700 D	2200	1400 D	1400 D	2200 D	1900 D	1900 D
Appendix IV																
Antimony	mg/L	T	0.00059	0.00052	--	0.00069	0.0011 J	0.00064 J	0.0013 D	0.0011	0.00089	< 0.00050 UD	0.0010	0.00046	0.00052	< 0.00010 U
Arsenic	mg/L	T	0.00099	0.00091	--	0.0016	0.0026 J	0.0012	0.0043	0.0058	0.0017	0.0019	0.0016	0.0028	0.0018	0.0014
Barium	mg/L	T	0.022	0.019	--	0.023	0.040	0.039	0.040 D	0.029	0.029	0.027 D	0.025	0.024	0.026	0.12
Beryllium	mg/L	T	< 0.000052 U	< 0.000052 U	--	< 0.000052 U	< 0.00026 U	< 0.000052 U	0.00012 J	0.000066 J	< 0.000052 U	0.000057 J	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U
Cadmium	mg/L	T	< 0.000032 U	< 0.000032 U	--	< 0.000032 U	< 0.00016 U	< 0.00038 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.00038 UD	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Chromium, Total	mg/L	T	0.00019 J	0.00028	--	0.00035	< 0.00088 U	0.00040	0.0010	0.00028	0.00063	0.00060	0.00028	0.00026	< 0.00020 U	0.0044
Cobalt	mg/L	T	0.00024 J	0.00028 J	--	0.00037 J	< 0.00050 U	0.00032 J	0.0011	0.00083	0.00063	0.00029 J	0.00012 J	0.00020 J	< 0.00010 U	0.00024 J
Fluoride	mg/L	T	2.6	2.0	--	2.3	2.7	3.5	5.0 D	5.3 D	3.7 D	2.3 D	2.7 D	4.2 D	3.7 D	1.6 D
Lead	mg/L	T	0.00033 J	0.00027 J	--	0.00047 J	0.0011 J	0.0013 J	0.0025 JD	0.00054 JD	0.00022 J	0.0015 JD	0.00071	< 0.00050 UD	< 0.00010 U	< 0.00010 U
Lithium	mg/L	T	0.044	0.039	--	0.0089	0.043	0.056	0.072	0.084	0.064	0.049 D	0.059	0.091	0.076	0.056 D
Mercury	mg/L	T	< 0.00016 U	< 0.00016 U	--	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00000016 U
Molybdenum	mg/L	T	0.0078	0.0066	--	0.0073	0.010	0.0072	0.013	0.016	0.016	0.0091	0.015	0.013	0.014	0.00096 J
Radium 226 and 228	pCi/L	T	< 0.408 U	< 0.497 U	--	< 0.672 U	< 0.809 U	< 0.803 U	1.82	< 0.788 U	< 0.641 U	0.651	< 0.564 U	< 0.892 U	< 0.591 U	< 0.535 U
Radium-226	pCi/L	T	< 0.11 U	< 0.109 U	--	< 0.167 U	< 0.213 U	0.264	0.233	< 0.133 U	< 0.2 U	0.186	< 0.213 U	0.25	< 0.14 U	< 0.326 U
Radium-228	pCi/L	T	< 0.408 U	< 0.497 U	--	< 0.672 U	< 0.809 U	< 0.803 U	1.59	< 0.788 U	< 0.641 U	< 0.639 U	< 0.564 U	< 0.892 U	< 0.591 U	< 0.535 U
Selenium	mg/L	T	0.0015	0.0014	--	0.0016	0.0013 J	0.0012	0.0023	0.0028	0.0024	0.0023	0.0024	0.0022	0.0034	0.00020 J
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	--	< 0.000075 U	< 0.00038 U	< 0.00038 U	< 0.00038 UD	< 0.00038 UD	< 0.000075 U	< 0.00038 UD	0.000075 J	< 0.00038 UD	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	5.0	< 4.0 U	--	3.0 J	1.0 J	5.0	23	9.0	< 4 U	14	< 4.0 U	15	7.0	21
Michigan CCR Part 115																
Copper	mg/L	T	0.00047	0.00048	--	0.012	0.0012	0.00056	0.0018	0.00071	0.00086	0.0013	0.0011	0.00082	0.00063	< 0.00020 U
Iron	mg/L	T	0.055	0.11	--	0.11	0.13	0.19	0.31	0.089	0.05	0.36 D	0.10	0.045 J	0.022 J	7.0 D
Nickel	mg/L	T	0.0025	0.0028	--	0.0027	< 0.0032 U	0.0022	0.0055	0.0041	0.0035	0.0037	0.0038	0.0030	0.0024	0.013
Silver	mg/L	T	< 0.000050 U	< 0.000050 U	--	< 0.000050 U	< 0.00025 U	< 0.00025 U	< 0.000050 U	< 0.000050 U	< 0.00005 U	< 0.00025 UD	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
Vanadium	mg/L	T	< 0.00062 U	< 0.00062 U	--	< 0.00062 U	< 0.0031 U	0.00094 J	0.0041	0.0065	< 0.00062 U	0.00097 J	0.0013	0.0038	0.0013	0.00094 J
Zinc	mg/L	T	0.0037	0.0023	--	0.0033	0.0061 J	0.0012	0.0070	0.0019	0.0086	0.0062	0.0020	0.0023	0.0026	< 0.0012 U
Additional Parameters																
Bicarbonate Alkalinity	mg/L	T	110	87	--	98	100	62	50	30	61 D	100	93	42	46	670
Carbonate Alkalinity	mg/L	T	< 0.16 U	< 0.16 U	--	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	13	< 0.31 UD	< 0.16 U	< 0.16 U	0.80 J	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	41	30	--	33	29	35	53	62 D	57 D	44 D	43	61	55 D	140 D
Potassium	mg/L	T	15	10	--	9.8	9.1	10	17	21	12 D	9.1 D	8.9	8.4	8.4 D	20 D
Sodium	mg/L	T	24	20	--	21	19	22	39	40 D	34 D	26 D	26	39	34 D	74 D
Total Alkalinity	mg/L	T	110	87	--	98	100	62	50	43	61 D	100	93	43	46	670

Notes:

ug/l - micrograms per liter.
mg/l = milligrams per liter.
su - standard pH units (pH is a field parameter)
pCi/L = picocuries per liter.
All metals were analyzed as total unless otherwise indicated.

Qualifiers:

U - The analyte was analyzed for, but was not detected at, a level greater than or equal to the level of the adjusted reporting limit (RL) for the sample and method.
J - The analyte was positively identified, and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain QC criteria were not met, or to the concentration of the analyte being below the RL).
J+ - Same as J, and the reported concentration is potentially biased high.
J- - Same as J, and the reported concentration is potentially biased low.

G - The sample Minimum Detectable Concentration (MDC) is greater than the requested reporting limit.

D - Sample was diluted.

Sample Location: Compliance Phase: Sample Date: Sample Type: Unit: Sample Matrix:		SG-05													
		Background Monitoring							AM/DM Round						
		12/2/2022	1/5/2023	3/14/2023	4/19/2023	5/23/2023	6/28/2023	8/8/2023	10/24/2023	2/14/2024	4/8/2024	7/17/2024	10/17/2024	4/22/2025	
		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	
		Surface Water													
		Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	
Constituent	Unit	Fraction													
(None)															
NO SAMPLE	mg/L	N	--	--	--	--	--	--	--	--	--	--	--	--	--
Field Parameters															
Conductivity	mS/cm	N	0.731	0.98	0.742	1.11	0.75	0.61	0.359	0.91	0.75	0.8	0.465	1.06	0.898
Dissolved Oxygen	mg/L	N	6.85	13.1	15.74	6.77	7.83	11.25	11.39	11.73	0.59	8.37	7.51	4.59	10.6
Oxidation Reduction Potential	mV	N	142	-44.6	6.4	18.3	16.3	153.3	39.2	-28.7	134.6	34.6	-29	57.7	31.7
pH	su	N	7.44	8.02	8.28	7.88	8.31	6.73	9.19	7.87	7.67	8.4	9.4	7.51	8.22
Temperature	deg c	N	4.1	4	9.8	7.6	27.8	23.4	28.9	19.5	5.2	17.3	26.7	13.8	16.5
Turbidity	NTU	N	9.38	8.02	9.83	26.6	6.8	7.84	4.36	29.3	41.6	14.9	2.68	48.3	6.11
Appendix III															
Boron	mg/L	T	0.59	0.60	0.48	0.57	0.36	0.46 J+	0.39	0.72 D	0.45 D	0.53	0.34	0.68 D	1.2
Calcium	mg/L	T	140	120	120	120	81	34	120 D	130 D	99 D	22	140 D	160	
Chloride	mg/L	T	79	51	61	50	54	64 D	29 D	54 D	54 D	37 D	52 D	46 D	46 D
Fluoride	mg/L	T	0.73	0.98	0.94	0.69	0.30	0.42 D	0.45 D	0.79 D	0.68 D	0.83 D	0.32 D	0.65 D	1.1 D
Sulfate (as SO4)	mg/L	T	8.4 J	150	38 J	110	43	38 D	11 D	12 D	7.2 D	83 D	13 D	6.0 D	240 D
Total Dissolved Solids	mg/L	T	620	630	460	570	400	320 D	210 D	510 D	520 D	440 D	240 D	630 D	750 D
Appendix IV															
Antimony	mg/L	T	0.00018 J	0.000093 J	0.00030	0.0010 J	0.00029	0.0010	0.00044	0.00016 J	0.00011 J	0.00024 J	0.00030	0.00039	0.00027
Arsenic	mg/L	T	0.00084	0.00056	0.00071	0.0026 J	0.0017	0.0024	0.0013	0.00088	0.0010	0.00094	0.0017	0.0016	0.0012
Barium	mg/L	T	0.58	0.23	0.35	0.039	0.20	0.11	0.16	0.51	0.50	0.26	0.10	0.63	0.37
Beryllium	mg/L	T	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.00026 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	0.000062 J	< 0.000052 U
Cadmium	mg/L	T	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.00016 U	< 0.000075 U	0.00011 J	0.00075	0.000094 J	0.00041	0.00013 J	< 0.000075 U	0.00067	< 0.000075 U
Chromium, Total	mg/L	T	0.00036	0.00024 J	0.00048	< 0.00088 U	0.00035	0.00049	0.0017	0.00039	0.0020	0.00056	0.00043	0.0038	0.00050
Cobalt	mg/L	T	0.00037 J	0.00025 J	0.00029 J	< 0.00050 U	0.00025 J	0.00032 J	0.00033 J	0.00027 J	0.00046 J	0.00024 J	0.00013 J	0.00085	0.00029 J
Fluoride	mg/L	T	0.73	0.98	0.94	0.69	0.30	0.42 D	0.45 D	0.79 D	0.68 D	0.83 D	0.32 D	0.65 D	1.1 D
Lead	mg/L	T	0.00023 J	0.00038 J	0.00045 J	0.0012 J	0.0022	0.0040	0.0095	0.0031	0.011	0.0031	0.0019	0.016	0.0011
Lithium	mg/L	T	0.038	0.033	0.0045	0.029	0.016	0.022	0.027	0.039	0.016 D	0.023	0.014	0.042 D	0.044
Mercury	mg/L	T	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	0.00017 J	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	0.0000019
Molybdenum	mg/L	T	0.00077 J	0.0029	0.0013	0.0090	0.0083	0.0087	0.0015	0.00085 J	0.00058 J	0.0024	0.0039	0.00078 J	0.0054
Radium 226 and 228	pCi/L	T	0.851	< 0.537 U	< 0.776 U	0.858	< 0.758 U	< 0.818 U	< 0.82 U	< 0.771 U	< 0.889 U	0.971	< 1.12 U	< 0.773 U	< 0.852 U
Radium-226	pCi/L	T	0.308	< 0.122 U	< 0.188 U	0.306	< 0.219 U	< 0.154 U	< 0.147 U	< 0.286 U	0.216	< 0.204 U	< 0.17 U	< 0.244 U	< 0.499 U
Radium-228	pCi/L	T	0.543	< 0.537 U	< 0.776 U	< 0.798 U	< 0.758 U	< 0.818 U	< 0.82 U	< 0.771 U	< 0.889 U	0.845	< 1.12 UG	< 0.773 U	< 0.852 U
Selenium	mg/L	T	< 0.00022 U	< 0.00022 U	< 0.00022 U	0.0013 J	0.00022 J	0.00038 J	0.00027 J	0.00017 J	0.00054	0.00014 J	0.00027 J	0.00039 J	0.00022 J
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.00038 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	5.0	7.9	8.0	17	6.0	14	73	12	120	8.0	4.0	74	17
Michigan CCR Part 115															
Copper	mg/L	T	0.00029	0.00036	0.0089	0.0011 J	0.00084	0.0028	0.0066	0.0012	0.0063	0.0021	0.0015	0.011	0.00071
Iron	mg/L	T	3.0	1.5	2.7	3.2	1.1	0.74	1.1	2.9 D	7.2 D	1.9	1.0	7.2 D	1.6
Nickel	mg/L	T	0.0013	0.0015	0.0012	< 0.0032 U	0.0026	0.0034	0.0026	0.0012	0.0024	0.0017	0.0020	0.0047	0.0024
Silver	mg/L	T	< 0.000050 U	< 0.000050 U	0.000053	< 0.00025 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.00005 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
Vanadium	mg/L	T	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.0031 U	< 0.00062 U	0.0012	0.00069 J	< 0.00062 U	< 0.00062 U	0.00071 J	0.00090 J	0.0020	0.0011 J
Zinc	mg/L	T	0.030	0.0018	0.0022	0.0060 J	0.0024	0.0090	0.019	0.043	0.019	0.0065	0.0033	0.055	0.0031
Additional Parameters															
Bicarbonate Alkalinity	mg/L	T	490	270	290	290	240	65	96	400 D	400	240	63	490	320
Carbonate Alkalinity	mg/L	T	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	46	16	< 0.31 UD	< 0.16 U	< 0.16 U	42	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	27	23	26	26	25	21	12	24 D	26 D	23	19	29 D	33
Potassium	mg/L	T	8.1	6.5	7.9	6.8	4.3	0.31	0.79	8.5 D	7.9 D	5.1	0.32	7.8 D	8.6
Sodium	mg/L	T	43	30	38	34	37	44	21	40 D	43 D	30	30	45 D	45
Total Alkalinity	mg/L	T	490	270	290	290	240	110	110	400 D	400	240	100	490	320

Notes:

ug/l - micrograms per liter.
mg/l = milligrams per liter.
su - standard pH units (pH is a field parameter)
pCi/L = picocuries per liter.
All metals were analyzed as total unless otherwise indicated.

Qualifiers:

U - The analyte was analyzed for, but was not detected at, a level greater than or equal to the level of the adjusted reporting limit (RL) for the sample and method.
J - The analyte was positively identified, and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain QC criteria were not met, or to the concentration of the analyte being below the RL).
J+ - Same as J, and the reported concentration is potentially biased high.
J- - Same as J, and the reported concentration is potentially biased low.

G - The sample Minimum Detectable Concentration (MDC) is greater than the requested reporting limit.

D - Sample was diluted.

	Sample Location:	SG-07	
	Compliance Phase:	AM/DM Round	
	Sample Date:	4/22/2025	
	Sample Type:	Field Sample	
	Unit:		
	Sample Matrix:	Surface Water	
Constituent	Unit	Fraction	
Field Parameters			
Conductivity	mS/cm	N	0.4727
Dissolved Oxygen	mg/L	N	12.98
Oxidation Reduction Potential	mV	N	20.4
pH	su	N	8.44
Temperature	deg c	N	13.1
Turbidity	NTU	N	5.03
Appendix III			
Boron	mg/L	T	0.076
Calcium	mg/L	T	68
Chloride	mg/L	T	51 D
Fluoride	mg/L	T	0.16
Sulfate (as SO4)	mg/L	T	44 D
Total Dissolved Solids	mg/L	T	360 D
Appendix IV			
Antimony	mg/L	T	0.00013 J
Arsenic	mg/L	T	0.00091
Barium	mg/L	T	0.057
Beryllium	mg/L	T	< 0.000052 U
Cadmium	mg/L	T	< 0.000075 U
Chromium, Total	mg/L	T	0.00051
Cobalt	mg/L	T	0.00020 J
Fluoride	mg/L	T	0.16
Lead	mg/L	T	0.00049 J
Lithium	mg/L	T	0.0035
Mercury	mg/L	T	0.0000019
Molybdenum	mg/L	T	0.0017
Radium 226 and 228	pCi/L	T	< 0.833 U
Radium-226	pCi/L	T	< 0.457 U
Radium-228	pCi/L	T	< 0.833 U
Selenium	mg/L	T	0.00027 J
Thallium	mg/L	T	< 0.000075 U
Total Suspended Solids	mg/L	T	14
Michigan CCR Part 115			
Copper	mg/L	T	0.0016
Iron	mg/L	T	0.32
Nickel	mg/L	T	0.0012
Silver	mg/L	T	< 0.000050 U
Vanadium	mg/L	T	0.00067 J
Zinc	mg/L	T	0.0034
Additional Parameters			
Bicarbonate Alkalinity	mg/L	T	210
Carbonate Alkalinity	mg/L	T	6.3
Magnesium	mg/L	T	20
Potassium	mg/L	T	3.3
Sodium	mg/L	T	27
Total Alkalinity	mg/L	T	210

Notes:

ug/l - micrograms per liter.
mg/l = milligrams per liter.
su - standard pH units (pH is a field parameter)
pCi/L = picocuries per liter.
All metals were analyzed as total unless otherwise indicated.

Qualifiers:

U The analyte was analyzed for, but was not detected at, a level greater than or equal to the level of the adjusted reporting limit (RL) for the sample and method.
J The analyte was positively identified, and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain QC criteria were not met, or to the concentration of the analyte being below the RL).
J+ Same as J, and the reported concentration is potentially biased high.
J- Same as J, and the reported concentration is potentially biased low.
UJ The analyte was not detected at a level greater than or equal to the adjusted method detection limit (MDL). However, the reported adjusted MDL is approximate and might be inaccurate or imprecise.
R The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte might or might not be present in the sample.
G - The sample Minimum Detectable Concentration (MDC) is greater than the requested reporting limit.
D - Sample was diluted.

Appendix E

Laboratory Reports

Trace Analytical Laboratories, Inc.
2241 Black Creek Road
Muskegon, MI 49444-2673



231-773-5998 Phone
888-979-4469 Fax
www.trace-labs.com

May 07, 2025

Ms. Molly Reeves
HDR Michigan Inc.
1000 Oakbrook Dr., Suite 200
Ann Arbor, MI 48104

RE: Trace Project 25D1114
Client Project City of Grand Haven - Harbor Island

Dear Ms. Reeves:

Enclosed are your analytical results. The results of this report relate only to the samples listed in the body of this report.

All reports were examined through Trace's validation process to ensure that requirements for quality and completeness were satisfied. All reported analytical results were obtained in accordance with the methods referenced on the reports. Every practical effort was made to meet the reporting limit specifications for this work, however, some results may have raised reporting limits to correct for percent solids.

If you have questions concerning this report, please contact me at 231.773.5998 or by email at jmink@trace-labs.com.

Sincerely,

A handwritten signature in black ink that reads "Jon Mink".

Jon Mink
Senior Project Manager
Enclosures



Wisconsin Accreditation No. FID: 998044080 / TNI EL V1:2016

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SAMPLE SUMMARY

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID	Sample ID	Matrix	Collected By	Date Collected	Date Received
25D1114-01	MW-02	Ground Water	AB/FDR	04/19/25 10:25	04/21/25 08:03
25D1114-02	MW-09	Ground Water	AB/FDR	04/19/25 13:00	04/21/25 08:03
25D1114-03	MW-33	Ground Water	AB/FDR	04/19/25 15:25	04/21/25 08:03
25D1114-04	MW-30	Ground Water	AB/FDR	04/20/25 09:30	04/21/25 08:03
25D1114-05	MW-31	Ground Water	AB/FDR	04/20/25 11:40	04/21/25 08:03
25D1114-06	MW-32	Ground Water	AB/FDR	04/20/25 13:35	04/21/25 08:03
25D1114-07	MW-11	Ground Water	AB/FDR	04/20/25 15:05	04/21/25 08:03
25D1114-08	MW-17	Ground Water	AB/FDR	04/20/25 16:35	04/21/25 08:03
25D1114-09	MW-10	Ground Water	AB/FDR	04/20/25 09:10	04/21/25 08:03
25D1114-10	MWT-10	Ground Water	AB/FDR	04/20/25 09:10	04/21/25 08:03
25D1114-11	MW-38	Ground Water	AB/FDR	04/20/25 10:30	04/21/25 08:03
25D1114-12	MW-06	Ground Water	AB/FDR	04/20/25 11:22	04/21/25 08:03
25D1114-13	MW-08	Ground Water	AB/FDR	04/20/25 13:18	04/21/25 08:03
25D1114-14	MWT-08	Ground Water	AB/FDR	04/20/25 13:18	04/21/25 08:03
25D1114-15	MW-01R	Ground Water	AB/FDR	04/20/25 15:20	04/21/25 08:03
25D1114-16	MW-37	Ground Water	AB/FDR	04/20/25 16:38	04/21/25 08:03
25D1114-17	LLHG-TB-041925	Ground Water	AB/FDR	04/19/25 16:30	04/21/25 08:03
25D1114-18	LLHG-TB-042025	Ground Water	AB/FDR	04/20/25 17:15	04/21/25 08:03
25D1114-19	MW-36	Ground Water	AB/FDR	04/21/25 09:15	04/23/25 08:00
25D1114-20	MW-20	Ground Water	AB/FDR	04/21/25 10:45	04/23/25 08:00
25D1114-21	MW-19	Ground Water	AB/FDR	04/21/25 12:00	04/23/25 08:00
25D1114-22	MW-07	Ground Water	AB/FDR	04/21/25 13:45	04/23/25 08:00
25D1114-23	MW-27	Ground Water	AB/FDR	04/21/25 15:35	04/23/25 08:00
25D1114-24	MW-28	Ground Water	AB/FDR	04/21/25 17:05	04/23/25 08:00
25D1114-25	MW-18	Ground Water	AB/FDR	04/21/25 09:16	04/23/25 08:00
25D1114-26	MW-03	Ground Water	AB/FDR	04/21/25 11:50	04/23/25 08:00
25D1114-27	MW-04	Ground Water	AB/FDR	04/21/25 13:00	04/23/25 08:00
25D1114-28	MW-12	Ground Water	AB/FDR	04/21/25 14:12	04/23/25 08:00
25D1114-29	MW-16	Ground Water	AB/FDR	04/21/25 15:20	04/23/25 08:00
25D1114-30	MW-34	Ground Water	AB/FDR	04/21/25 16:32	04/23/25 08:00
25D1114-31	SG-04	Ground Water	AB/FDR	04/22/25 15:10	04/23/25 08:00
25D1114-32	SG-02	Ground Water	AB/FDR	04/22/25 15:25	04/23/25 08:00
25D1114-33	SG-05	Ground Water	AB/FDR	04/22/25 15:45	04/23/25 08:00
25D1114-34	SG-07	Ground Water	AB/FDR	04/22/25 16:00	04/23/25 08:00
25D1114-35	MW-27	Ground Water	AB/FDR	04/22/25 16:40	04/23/25 08:00

CERTIFICATE OF ANALYSIS

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25D1114-36	LLHG-TB-04212025	Aqueous	AB/FDR	04/21/25 17:15	04/23/25 08:00
25D1114-37	LLHG-TB-04222025	Aqueous	AB/FDR	04/22/25 16:45	04/23/25 08:00

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-01 Date Collected: 04/19/25 10:25 Matrix: Ground Water
Sample ID: MW-02 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E
Batch: T166193

Mercury	5.4	ng/L	0.50	1	04/29/25	acs	04/30/25	acs		
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Analysis Method: EPA 200.7 Rev. 4.4
Batch: T166003

Boron	170	mg/L	0.18	20	04/28/25	ejb	04/30/25	cma		0.10
Calcium	200	mg/L	5.1	20	04/28/25	ejb	04/30/25	cma		0.74
Lithium	2.0	mg/L	0.050	20	04/28/25	ejb	04/30/25	cma	N	0.038
Magnesium	75	mg/L	1.0	20	04/28/25	ejb	04/30/25	cma		0.20
Potassium	61	mg/L	5.0	20	04/28/25	ejb	04/30/25	cma		0.71
Sodium	410	mg/L	2.5	20	04/28/25	ejb	04/30/25	cma		1.8

Analysis Method: EPA 200.8 Rev. 5.4
Batch: T166003

Antimony	0.00026	mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00010
Arsenic	0.0059	mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Barium	0.50	mg/L	0.0025	1	04/28/25	ejb	04/29/25	acs		0.00068
Beryllium	0.00032	mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000052
Cadmium	0.000078	mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs	J	0.000075
Chromium	0.068	mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Cobalt	0.0095	mg/L	0.00052	1	04/28/25	ejb	04/29/25	acs		0.00010
Lead	0.0050	mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Molybdenum	0.013	mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00025
Selenium	0.0017	mg/L	0.00050	1	04/28/25	ejb	04/29/25	acs		0.00010
Thallium	<0.000075	mg/L	0.00038	1	04/28/25	ejb	04/29/25	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
Batch: T165739

Fluoride	13	mg/L	0.20	10	04/21/25	ljs	04/21/25	ljs	N	0.11
Chloride	150	mg/L	1.5	10	04/21/25	ljs	04/21/25	ljs		1.2
Sulfate as SO ₄	<2.2	mg/L	6.0	10	04/21/25	ljs	04/21/25	ljs		2.2

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-01 Date Collected: 04/19/25 10:25 Matrix: Ground Water
Sample ID: MW-02 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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WET CHEMISTRY

Analysis Method: SM 2320 B-21

Batch: T165815

Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	2100 mg/L	5.0	1	04/22/25	bm	04/22/25	bm	N	0.16
Carbonate Alkalinity as CaCO ₃ at pH 8.2	<0.16 mg/L	5.0	1	04/22/25	bm	04/22/25	bm	N	0.16
Total Alkalinity as CaCO ₃ at pH 4.5	2100 mg/L	5.0	1	04/22/25	bm	04/22/25	bm		0.16

Analysis Method: SM 2540 C-20

Batch: T165799

Total Dissolved Solids	2000 mg/L	67	6.666667	04/22/25	cdj	04/22/25	cdj		
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Analysis Method: SM 2540 D-20

Batch: T165796

Total Suspended Solids	70 mg/L	4.0	1	04/22/25	cdj	04/22/25	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T165783

pH	7.22 pH Units		1	04/19/25	cem	04/21/25	mj	H04, PH01	
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-02 Date Collected: 04/19/25 13:00 Matrix: Ground Water
Sample ID: MW-09 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E

Batch: T166193

Mercury	< ng/L	0.50	1	04/29/25	acs	04/30/25	acs		
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Analysis Method: EPA 200.7 Rev. 4.4

Batch: T166003

Boron	4.9 mg/L	0.0088	1	04/28/25	ejb	04/30/25	cma		0.0051
Calcium	450 mg/L	0.26	1	04/28/25	ejb	04/30/25	cma		0.037
Lithium	0.31 mg/L	0.0025	1	04/28/25	ejb	04/30/25	cma	N	0.0019
Magnesium	67 mg/L	0.10	1	04/28/25	ejb	04/30/25	cma		0.010
Potassium	14 mg/L	0.25	1	04/28/25	ejb	04/30/25	cma		0.036
Sodium	33 mg/L	0.12	1	04/28/25	ejb	04/30/25	cma		0.088

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T166003

Antimony	<0.00010 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00010
Arsenic	0.0016 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Barium	0.10 mg/L	0.0025	1	04/28/25	ejb	04/29/25	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000075
Chromium	0.0024 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Cobalt	0.00053 mg/L	0.00052	1	04/28/25	ejb	04/29/25	acs		0.00010
Lead	<0.00010 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Molybdenum	0.025 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00025
Selenium	0.00038 mg/L	0.00050	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/28/25	ejb	04/29/25	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T165739

Fluoride	2.4 mg/L	0.20	10	04/21/25	ljs	04/21/25	ljs	N	0.11
Chloride	57 mg/L	1.5	10	04/21/25	ljs	04/21/25	ljs		1.2
Sulfate as SO4	930 mg/L	60	100	04/21/25	ljs	04/22/25	ljs		22

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-02 Date Collected: 04/19/25 13:00 Matrix: Ground Water
Sample ID: MW-09 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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WET CHEMISTRY

Analysis Method: SM 2320 B-21

Batch: T165734

Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	610 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs	N	0.16
Carbonate Alkalinity as CaCO ₃ at pH 8.2	<0.16 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs	N	0.16
Total Alkalinity as CaCO ₃ at pH 4.5	610 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs		0.16

Analysis Method: SM 2540 C-20

Batch: T165799

Total Dissolved Solids	2000 mg/L	40	4	04/22/25	cdj	04/22/25	cdj		
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Analysis Method: SM 2540 D-20

Batch: T165796

Total Suspended Solids	64 mg/L	4.0	1	04/22/25	cdj	04/22/25	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T165783

pH	6.96 pH Units		1	04/19/25	cem	04/21/25	mj	H04, PH01b	
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-03 Date Collected: 04/19/25 15:25 Matrix: Ground Water
Sample ID: MW-33 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E
Batch: T166193

Mercury	2.9 ng/L	0.50	1	04/29/25	acs	04/30/25	acs		
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Analysis Method: EPA 200.7 Rev. 4.4
Batch: T166003

Boron	0.21 mg/L	0.0088	1	04/28/25	ejb	04/30/25	cma		0.0051
Calcium	160 mg/L	0.26	1	04/28/25	ejb	04/30/25	cma		0.037
Lithium	0.0049 mg/L	0.0025	1	04/28/25	ejb	04/30/25	cma	N	0.0019
Magnesium	18 mg/L	0.10	1	04/28/25	ejb	04/30/25	cma		0.010
Potassium	4.5 mg/L	0.25	1	04/28/25	ejb	04/30/25	cma		0.036
Sodium	20 mg/L	0.12	1	04/28/25	ejb	04/30/25	cma		0.088

Analysis Method: EPA 200.8 Rev. 5.4
Batch: T166003

Antimony	0.00036 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00010
Arsenic	0.0056 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Barium	0.10 mg/L	0.0025	1	04/28/25	ejb	04/29/25	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000075
Chromium	0.0056 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Cobalt	0.0031 mg/L	0.00052	1	04/28/25	ejb	04/29/25	acs		0.00010
Lead	0.00012 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Molybdenum	0.0048 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00025
Selenium	0.00053 mg/L	0.00050	1	04/28/25	ejb	04/29/25	acs		0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/28/25	ejb	04/29/25	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
Batch: T165739

Fluoride	0.31 mg/L	0.20	10	04/21/25	ljs	04/21/25	ljs	N	0.11
Chloride	41 mg/L	1.5	10	04/21/25	ljs	04/21/25	ljs		1.2
Sulfate as SO4	22 mg/L	6.0	10	04/21/25	ljs	04/21/25	ljs		2.2

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-03 Date Collected: 04/19/25 15:25 Matrix: Ground Water
Sample ID: MW-33 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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WET CHEMISTRY

Analysis Method: SM 2320 B-21

Batch: T165734

Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	460 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs	N	0.16
Carbonate Alkalinity as CaCO ₃ at pH 8.2	<0.16 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs	N	0.16
Total Alkalinity as CaCO ₃ at pH 4.5	460 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs		0.16

Analysis Method: SM 2540 C-20

Batch: T165799

Total Dissolved Solids	640 mg/L	40	4	04/22/25	cdj	04/22/25	cdj		
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Analysis Method: SM 2540 D-20

Batch: T165796

Total Suspended Solids	27 mg/L	4.0	1	04/22/25	cdj	04/22/25	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T165783

pH	6.82 pH Units		1	04/19/25	cem	04/21/25	mj	H04, PH01c	
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-04 Date Collected: 04/20/25 09:30 Matrix: Ground Water
Sample ID: MW-30 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E

Batch: T166193

Mercury	< ng/L	0.50	1	04/29/25	acs	04/30/25	acs		
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Analysis Method: EPA 200.7 Rev. 4.4

Batch: T166003

Boron	1.8 mg/L	0.088	10	04/28/25	ejb	04/30/25	cma		0.051
Calcium	710 mg/L	2.6	10	04/28/25	ejb	04/30/25	cma		0.37
Lithium	0.19 mg/L	0.025	10	04/28/25	ejb	04/30/25	cma	N	0.019
Magnesium	180 mg/L	0.50	10	04/28/25	ejb	04/30/25	cma		0.10
Potassium	18 mg/L	2.5	10	04/28/25	ejb	04/30/25	cma		0.36
Sodium	400 mg/L	1.2	10	04/28/25	ejb	04/30/25	cma		0.88

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T166003

Antimony	<0.00010 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00010
Arsenic	0.0030 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Barium	0.071 mg/L	0.0025	1	04/28/25	ejb	04/29/25	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000075
Chromium	0.0065 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Cobalt	0.0021 mg/L	0.00052	1	04/28/25	ejb	04/29/25	acs		0.00010
Lead	<0.00050 mg/L	0.0028	5	04/28/25	ejb	04/29/25	acs	DL02	0.00050
Molybdenum	0.0037 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00025
Selenium	0.00014 mg/L	0.00050	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/28/25	ejb	04/29/25	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T165739

Fluoride	1.1 mg/L	0.20	10	04/21/25	ljs	04/21/25	ljs	N	0.11
Chloride	1100 mg/L	15	100	04/21/25	ljs	04/22/25	ljs		12
Sulfate as SO4	1000 mg/L	60	100	04/21/25	ljs	04/22/25	ljs		22

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-04 Date Collected: 04/20/25 09:30 Matrix: Ground Water
Sample ID: MW-30 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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WET CHEMISTRY

Analysis Method: SM 2320 B-21

Batch: T165734

Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	540 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs	N	0.16
Carbonate Alkalinity as CaCO ₃ at pH 8.2	<0.16 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs	N	0.16
Total Alkalinity as CaCO ₃ at pH 4.5	540 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs		0.16

Analysis Method: SM 2540 C-20

Batch: T165799

Total Dissolved Solids	4000 mg/L	40	4	04/22/25	cdj	04/22/25	cdj		
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Analysis Method: SM 2540 D-20

Batch: T165796

Total Suspended Solids	38 mg/L	4.0	1	04/22/25	cdj	04/22/25	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T165783

pH	6.94 pH Units		1	04/20/25	cem	04/21/25	mj	H02, PH01d	
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-05 Date Collected: 04/20/25 11:40 Matrix: Ground Water
Sample ID: MW-31 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E

Batch: T166193

Mercury	0.71	ng/L	0.50	1	04/29/25	acs	04/30/25	acs		
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Analysis Method: EPA 200.7 Rev. 4.4

Batch: T166003

Boron	4.4	mg/L	0.0088	1	04/28/25	ejb	04/30/25	cma		0.0051
Calcium	200	mg/L	0.26	1	04/28/25	ejb	04/30/25	cma		0.037
Lithium	0.030	mg/L	0.0025	1	04/28/25	ejb	04/30/25	cma	N	0.0019
Magnesium	37	mg/L	0.10	1	04/28/25	ejb	04/30/25	cma		0.010
Potassium	9.9	mg/L	0.25	1	04/28/25	ejb	04/30/25	cma		0.036
Sodium	51	mg/L	0.12	1	04/28/25	ejb	04/30/25	cma		0.088

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T166003

Antimony	<0.00010	mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00010
Arsenic	0.00073	mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Barium	0.099	mg/L	0.0025	1	04/28/25	ejb	04/29/25	acs		0.00068
Beryllium	<0.000052	mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000052
Cadmium	<0.000075	mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000075
Chromium	0.0031	mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Cobalt	<0.00010	mg/L	0.00052	1	04/28/25	ejb	04/29/25	acs		0.00010
Lead	<0.00010	mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Molybdenum	0.00040	mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs	J	0.00025
Selenium	0.00012	mg/L	0.00050	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Thallium	<0.000075	mg/L	0.00038	1	04/28/25	ejb	04/29/25	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T165739

Fluoride	4.5	mg/L	0.20	10	04/21/25	ljs	04/21/25	ljs	N	0.11
Chloride	100	mg/L	1.5	10	04/21/25	ljs	04/21/25	ljs		1.2
Sulfate as SO4	240	mg/L	15	25	04/21/25	ljs	04/22/25	ljs		5.5

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-05 Date Collected: 04/20/25 11:40 Matrix: Ground Water
Sample ID: MW-31 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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WET CHEMISTRY

Analysis Method: SM 2320 B-21

Batch: T165734

Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	410 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs	N	0.16
Carbonate Alkalinity as CaCO ₃ at pH 8.2	<0.16 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs	N	0.16
Total Alkalinity as CaCO ₃ at pH 4.5	410 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs		0.16

Analysis Method: SM 2540 C-20

Batch: T165799

Total Dissolved Solids	960 mg/L	40	4	04/22/25	cdj	04/22/25	cdj		
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Analysis Method: SM 2540 D-20

Batch: T165796

Total Suspended Solids	<4.0 mg/L	4.0	1	04/22/25	cdj	04/22/25	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T165783

pH	7.68 pH Units		1	04/20/25	cem	04/21/25	mj	PH01e	
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-06 Date Collected: 04/20/25 13:35 Matrix: Ground Water
Sample ID: MW-32 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E

Batch: T166193

Mercury	< ng/L	0.50	1	04/29/25	acs	04/30/25	acs		
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Analysis Method: EPA 200.7 Rev. 4.4

Batch: T166003

Boron	2.8 mg/L	0.0088	1	04/28/25	ejb	04/30/25	cma		0.0051
Calcium	160 mg/L	0.26	1	04/28/25	ejb	04/30/25	cma		0.037
Lithium	0.094 mg/L	0.0025	1	04/28/25	ejb	04/30/25	cma	N	0.0019
Magnesium	28 mg/L	0.10	1	04/28/25	ejb	04/30/25	cma		0.010
Potassium	8.2 mg/L	0.25	1	04/28/25	ejb	04/30/25	cma		0.036
Sodium	25 mg/L	0.12	1	04/28/25	ejb	04/30/25	cma		0.088

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T166003

Antimony	<0.00010 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00010
Arsenic	0.00042 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Barium	0.84 mg/L	0.0025	1	04/28/25	ejb	04/29/25	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000075
Chromium	0.00035 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Cobalt	0.00032 mg/L	0.00052	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Lead	<0.00010 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Molybdenum	0.0026 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00025
Selenium	<0.00010 mg/L	0.00050	1	04/28/25	ejb	04/29/25	acs		0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/28/25	ejb	04/29/25	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T165739

Fluoride	1.4 mg/L	0.20	10	04/21/25	ljs	04/21/25	ljs	N	0.11
Chloride	46 mg/L	1.5	10	04/21/25	ljs	04/21/25	ljs		1.2
Sulfate as SO4	110 mg/L	6.0	10	04/21/25	ljs	04/21/25	ljs		2.2

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-06 Date Collected: 04/20/25 13:35 Matrix: Ground Water
Sample ID: MW-32 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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WET CHEMISTRY

Analysis Method: SM 2320 B-21

Batch: T165734

Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	470 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs	N	0.16
Carbonate Alkalinity as CaCO ₃ at pH 8.2	<0.16 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs	N	0.16
Total Alkalinity as CaCO ₃ at pH 4.5	470 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs		0.16

Analysis Method: SM 2540 C-20

Batch: T165799

Total Dissolved Solids	690 mg/L	40	4	04/22/25	cdj	04/22/25	cdj		
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Analysis Method: SM 2540 D-20

Batch: T165796

Total Suspended Solids	36 mg/L	4.0	1	04/22/25	cdj	04/22/25	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T165783

pH	7.33 pH Units		1	04/20/25	cem	04/21/25	mj	PH01f	
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-07 Date Collected: 04/20/25 15:05 Matrix: Ground Water
Sample ID: MW-11 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E

Batch: T166193

Mercury	0.88	ng/L	0.50	1	04/29/25	acs	04/30/25	acs		
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Analysis Method: EPA 200.7 Rev. 4.4

Batch: T166003

Boron	4.5	mg/L	0.0088	1	04/28/25	ejb	04/30/25	cma		0.0051
Calcium	220	mg/L	0.26	1	04/28/25	ejb	04/30/25	cma		0.037
Lithium	0.055	mg/L	0.0025	1	04/28/25	ejb	04/30/25	cma	N	0.0019
Magnesium	47	mg/L	0.10	1	04/28/25	ejb	04/30/25	cma		0.010
Potassium	9.8	mg/L	0.25	1	04/28/25	ejb	04/30/25	cma		0.036
Sodium	32	mg/L	0.12	1	04/28/25	ejb	04/30/25	cma		0.088

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T166003

Antimony	<0.00010	mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00010
Arsenic	0.0020	mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Barium	0.57	mg/L	0.0025	1	04/28/25	ejb	04/29/25	acs		0.00068
Beryllium	<0.000052	mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000052
Cadmium	<0.000075	mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000075
Chromium	0.0010	mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Cobalt	0.00027	mg/L	0.00052	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Lead	0.0012	mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Molybdenum	0.00099	mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs	J	0.00025
Selenium	0.00015	mg/L	0.00050	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Thallium	<0.000075	mg/L	0.00038	1	04/28/25	ejb	04/29/25	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T165739

Fluoride	0.69	mg/L	0.20	10	04/21/25	ljs	04/21/25	ljs	N	0.11
Chloride	39	mg/L	1.5	10	04/21/25	ljs	04/21/25	ljs		1.2
Sulfate as SO ₄	<2.2	mg/L	6.0	10	04/21/25	ljs	04/21/25	ljs		2.2

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-07 Date Collected: 04/20/25 15:05 Matrix: Ground Water
Sample ID: MW-11 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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WET CHEMISTRY

Analysis Method: SM 2320 B-21

Batch: T165734

Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	810 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs	N	0.16
Carbonate Alkalinity as CaCO ₃ at pH 8.2	<0.16 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs	N	0.16
Total Alkalinity as CaCO ₃ at pH 4.5	810 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs		0.16

Analysis Method: SM 2540 C-20

Batch: T165799

Total Dissolved Solids	870 mg/L	40	4	04/22/25	cdj	04/22/25	cdj		
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Analysis Method: SM 2540 D-20

Batch: T165796

Total Suspended Solids	16 mg/L	4.0	1	04/22/25	cdj	04/22/25	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T165783

pH	7.25 pH Units		1	04/20/25	cem	04/21/25	mj	PH01g	
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-08 Date Collected: 04/20/25 16:35 Matrix: Ground Water
Sample ID: MW-17 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E

Batch: T166193

Mercury	< ng/L	0.50	1	04/29/25	acs	04/30/25	acs		
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Analysis Method: EPA 200.7 Rev. 4.4

Batch: T166003

Boron	0.52 mg/L	0.0088	1	04/28/25	ejb	04/30/25	cma		0.0051
Calcium	120 mg/L	0.26	1	04/28/25	ejb	04/30/25	cma		0.037
Lithium	0.027 mg/L	0.0025	1	04/28/25	ejb	04/30/25	cma	N	0.0019
Magnesium	24 mg/L	0.10	1	04/28/25	ejb	04/30/25	cma		0.010
Potassium	12 mg/L	0.25	1	04/28/25	ejb	04/30/25	cma		0.036
Sodium	47 mg/L	0.12	1	04/28/25	ejb	04/30/25	cma		0.088

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T166003

Antimony	<0.00010 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00010
Arsenic	0.0013 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Barium	0.60 mg/L	0.0025	1	04/28/25	ejb	04/29/25	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000075
Chromium	0.00090 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Cobalt	0.00030 mg/L	0.00052	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Lead	0.00045 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Molybdenum	0.00078 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs	J	0.00025
Selenium	0.00021 mg/L	0.00050	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/28/25	ejb	04/29/25	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T165739

Fluoride	0.54 mg/L	0.20	10	04/21/25	ljs	04/21/25	ljs	N	0.11
Chloride	34 mg/L	1.5	10	04/21/25	ljs	04/21/25	ljs		1.2
Sulfate as SO4	4.4 mg/L	6.0	10	04/21/25	ljs	04/21/25	ljs	J	2.2

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-08 Date Collected: 04/20/25 16:35 Matrix: Ground Water
Sample ID: MW-17 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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WET CHEMISTRY

Analysis Method: SM 2320 B-21

Batch: T165734

Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	500 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs	N	0.16
Carbonate Alkalinity as CaCO ₃ at pH 8.2	<0.16 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs	N	0.16
Total Alkalinity as CaCO ₃ at pH 4.5	500 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs		0.16

Analysis Method: SM 2540 C-20

Batch: T165799

Total Dissolved Solids	560 mg/L	40	4	04/22/25	cdj	04/22/25	cdj		
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Analysis Method: SM 2540 D-20

Batch: T165796

Total Suspended Solids	14 mg/L	4.0	1	04/22/25	cdj	04/22/25	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T165783

pH	7.62 pH Units		1	04/20/25	cem	04/21/25	mj	PH01h	
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-09 Date Collected: 04/20/25 09:10 Matrix: Ground Water
Sample ID: MW-10 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E

Batch: T166193

Mercury	< ng/L	0.50	1	04/29/25	acs	04/30/25	acs		
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Analysis Method: EPA 200.7 Rev. 4.4

Batch: T166003

Boron	22 mg/L	0.088	10	04/28/25	ejb	04/30/25	cma		0.051
Calcium	270 mg/L	2.6	10	04/28/25	ejb	04/30/25	cma		0.37
Lithium	0.83 mg/L	0.025	10	04/28/25	ejb	04/30/25	cma	N	0.019
Magnesium	100 mg/L	0.50	10	04/28/25	ejb	04/30/25	cma		0.10
Potassium	38 mg/L	2.5	10	04/28/25	ejb	04/30/25	cma		0.36
Sodium	220 mg/L	1.2	10	04/28/25	ejb	04/30/25	cma		0.88

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T166003

Antimony	<0.00010 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00010
Arsenic	0.00074 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Barium	0.32 mg/L	0.0025	1	04/28/25	ejb	04/29/25	acs		0.00068
Beryllium	0.000069 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs	J	0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000075
Chromium	0.0048 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Cobalt	0.00027 mg/L	0.00052	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Lead	<0.00010 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Molybdenum	0.0016 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00025
Selenium	0.00026 mg/L	0.00050	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/28/25	ejb	04/29/25	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T165739

Fluoride	5.7 mg/L	0.20	10	04/21/25	ljs	04/21/25	ljs	N	0.11
Chloride	330 mg/L	7.5	50	04/21/25	ljs	04/22/25	ljs		6.0
Sulfate as SO4	450 mg/L	30	50	04/21/25	ljs	04/22/25	ljs		11

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-09 Date Collected: 04/20/25 09:10 Matrix: Ground Water
Sample ID: MW-10 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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WET CHEMISTRY

Analysis Method: SM 2320 B-21

Batch: T165734

Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	680 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs	N	0.16
Carbonate Alkalinity as CaCO ₃ at pH 8.2	<0.16 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs	N	0.16
Total Alkalinity as CaCO ₃ at pH 4.5	680 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs		0.16

Analysis Method: SM 2540 C-20

Batch: T165799

Total Dissolved Solids	1800 mg/L	40	4	04/22/25	cdj	04/22/25	cdj		
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Analysis Method: SM 2540 D-20

Batch: T165796

Total Suspended Solids	13 mg/L	4.0	1	04/22/25	cdj	04/22/25	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T165783

pH	7.59 pH Units		1	04/20/25	cem	04/21/25	mj	H02, PH01i	
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-10 Date Collected: 04/20/25 09:10 Matrix: Ground Water
Sample ID: MWT-10 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E

Batch: T166193

Mercury	< ng/L	0.50	1	04/29/25	acs	04/30/25	acs		
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Analysis Method: EPA 200.7 Rev. 4.4

Batch: T166003

Boron	23 mg/L	0.088	10	04/28/25	ejb	04/30/25	cma		0.051
Calcium	330 mg/L	2.6	10	04/28/25	ejb	04/30/25	cma		0.37
Lithium	1.0 mg/L	0.025	10	04/28/25	ejb	04/30/25	cma	N	0.019
Magnesium	120 mg/L	0.50	10	04/28/25	ejb	04/30/25	cma		0.10
Potassium	45 mg/L	2.5	10	04/28/25	ejb	04/30/25	cma		0.36
Sodium	260 mg/L	1.2	10	04/28/25	ejb	04/30/25	cma		0.88

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T166003

Antimony	<0.00010 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00010
Arsenic	0.00083 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Barium	0.39 mg/L	0.0025	1	04/28/25	ejb	04/29/25	acs		0.00068
Beryllium	0.000059 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs	J	0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000075
Chromium	0.0058 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Cobalt	0.00034 mg/L	0.00052	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Lead	<0.00010 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Molybdenum	0.0019 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00025
Selenium	0.00031 mg/L	0.00050	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/28/25	ejb	04/29/25	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T165739

Fluoride	5.8 mg/L	0.20	10	04/21/25	ljs	04/21/25	ljs	N	0.11
Chloride	340 mg/L	7.5	50	04/21/25	ljs	04/22/25	ljs		6.0
Sulfate as SO4	450 mg/L	30	50	04/21/25	ljs	04/22/25	ljs		11

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-10 Date Collected: 04/20/25 09:10 Matrix: Ground Water
Sample ID: MWT-10 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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WET CHEMISTRY

Analysis Method: SM 2320 B-21

Batch: T165734

Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	680 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs	N	0.16
Carbonate Alkalinity as CaCO ₃ at pH 8.2	<0.16 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs	N	0.16
Total Alkalinity as CaCO ₃ at pH 4.5	680 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs		0.16

Analysis Method: SM 2540 C-20

Batch: T165799

Total Dissolved Solids	1900 mg/L	40	4	04/22/25	cdj	04/22/25	cdj		
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Analysis Method: SM 2540 D-20

Batch: T165796

Total Suspended Solids	15 mg/L	4.0	1	04/22/25	cdj	04/22/25	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T165783

pH	7.63 pH Units		1	04/20/25	cem	04/21/25	mj	H02, PH01j	
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-11 Date Collected: 04/20/25 10:30 Matrix: Ground Water
Sample ID: MW-38 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E
Batch: T166193

Mercury	9.3 ng/L	0.50	1	04/29/25	acs	04/30/25	acs		
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Analysis Method: EPA 200.7 Rev. 4.4
Batch: T166003

Boron	0.47 mg/L	0.0088	1	04/28/25	ejb	04/30/25	cma		0.0051
Calcium	72 mg/L	0.26	1	04/28/25	ejb	04/30/25	cma		0.037
Lithium	0.047 mg/L	0.0025	1	04/28/25	ejb	04/30/25	cma	N	0.0019
Magnesium	1.3 mg/L	0.10	1	04/28/25	ejb	04/30/25	cma		0.010
Potassium	44 mg/L	0.25	1	04/28/25	ejb	04/30/25	cma		0.036
Sodium	36 mg/L	0.12	1	04/28/25	ejb	04/30/25	cma		0.088

Analysis Method: EPA 200.8 Rev. 5.4
Batch: T166003

Antimony	0.0013 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00010
Arsenic	0.0050 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Barium	0.036 mg/L	0.0025	1	04/28/25	ejb	04/29/25	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000075
Chromium	0.0039 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Cobalt	0.00025 mg/L	0.00052	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Lead	0.0076 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Molybdenum	0.025 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00025
Selenium	0.0015 mg/L	0.00050	1	04/28/25	ejb	04/29/25	acs		0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/28/25	ejb	04/29/25	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
Batch: T165739

Fluoride	0.63 mg/L	0.20	10	04/21/25	ljs	04/21/25	ljs	N	0.11
Chloride	11 mg/L	1.5	10	04/21/25	ljs	04/21/25	ljs		1.2
Sulfate as SO4	210 mg/L	15	25	04/21/25	ljs	04/22/25	ljs		5.5

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-11 Date Collected: 04/20/25 10:30 Matrix: Ground Water
Sample ID: MW-38 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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WET CHEMISTRY

Analysis Method: SM 2320 B-21

Batch: T165734

Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	55 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs	N	0.16
Carbonate Alkalinity as CaCO ₃ at pH 8.2	43 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs	N	0.16
Total Alkalinity as CaCO ₃ at pH 4.5	98 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs		0.16

Analysis Method: SM 2540 C-20

Batch: T165799

Total Dissolved Solids	460 mg/L	40	4	04/22/25	cdj	04/22/25	cdj		
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Analysis Method: SM 2540 D-20

Batch: T165796

Total Suspended Solids	7.0 mg/L	4.0	1	04/22/25	cdj	04/22/25	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T165783

pH	9.36 pH Units		1	04/20/25	cem	04/21/25	mj	H02, PH01k	
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-12 Date Collected: 04/20/25 11:22 Matrix: Ground Water
Sample ID: MW-06 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E

Batch: T166193

Mercury	0.70 ng/L	0.50	1	04/29/25	acs	04/30/25	acs		
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Analysis Method: EPA 200.7 Rev. 4.4

Batch: T166003

Boron	6.9 mg/L	0.0088	1	04/28/25	ejb	04/30/25	cma		0.0051
Calcium	210 mg/L	0.26	1	04/28/25	ejb	04/30/25	cma		0.037
Lithium	0.12 mg/L	0.0025	1	04/28/25	ejb	04/30/25	cma	N	0.0019
Magnesium	80 mg/L	0.10	1	04/28/25	ejb	04/30/25	cma		0.010
Potassium	19 mg/L	0.25	1	04/28/25	ejb	04/30/25	cma		0.036
Sodium	73 mg/L	0.12	1	04/28/25	ejb	04/30/25	cma		0.088

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T166003

Antimony	<0.00010 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00010
Arsenic	0.00051 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Barium	1.4 mg/L	0.012	5	04/28/25	ejb	04/29/25	acs		0.0034
Beryllium	<0.000052 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000075
Chromium	0.00095 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Cobalt	0.00033 mg/L	0.00052	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Lead	<0.00010 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Molybdenum	<0.00025 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00025
Selenium	0.00016 mg/L	0.00050	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/28/25	ejb	04/29/25	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T165739

Fluoride	1.2 mg/L	0.20	10	04/21/25	ljs	04/21/25	ljs	N	0.11
Chloride	29 mg/L	1.5	10	04/21/25	ljs	04/21/25	ljs		1.2
Sulfate as SO4	15 mg/L	6.0	10	04/21/25	ljs	04/21/25	ljs		2.2

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-12 Date Collected: 04/20/25 11:22 Matrix: Ground Water
Sample ID: MW-06 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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WET CHEMISTRY

Analysis Method: SM 2320 B-21

Batch: T165815

Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	1100 mg/L	5.0	1	04/22/25	bm	04/22/25	bm	N	0.16
Carbonate Alkalinity as CaCO ₃ at pH 8.2	<0.16 mg/L	5.0	1	04/22/25	bm	04/22/25	bm	N	0.16
Total Alkalinity as CaCO ₃ at pH 4.5	1100 mg/L	5.0	1	04/22/25	bm	04/22/25	bm		0.16

Analysis Method: SM 2540 C-20

Batch: T165799

Total Dissolved Solids	1200 mg/L	40	4	04/22/25	cdj	04/22/25	cdj		
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Analysis Method: SM 2540 D-20

Batch: T165796

Total Suspended Solids	42 mg/L	4.0	1	04/22/25	cdj	04/22/25	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T165783

pH	7.29 pH Units		1	04/20/25	cem	04/21/25	mj	H02, PH01I	
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-13 Date Collected: 04/20/25 13:18 Matrix: Ground Water
Sample ID: MW-08 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E

Batch: T166193

Mercury	< ng/L	0.50	1	04/29/25	acs	04/30/25	acs		
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Analysis Method: EPA 200.7 Rev. 4.4

Batch: T166003

Boron	3.8 mg/L	0.0088	1	04/28/25	ejb	04/30/25	cma		0.0051
Calcium	120 mg/L	0.26	1	04/28/25	ejb	04/30/25	cma		0.037
Lithium	0.070 mg/L	0.0025	1	04/28/25	ejb	04/30/25	cma	N	0.0019
Magnesium	20 mg/L	0.10	1	04/28/25	ejb	04/30/25	cma		0.010
Potassium	7.4 mg/L	0.25	1	04/28/25	ejb	04/30/25	cma		0.036
Sodium	29 mg/L	0.12	1	04/28/25	ejb	04/30/25	cma		0.088

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T166003

Antimony	<0.00010 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00010
Arsenic	0.046 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Barium	0.75 mg/L	0.0025	1	04/28/25	ejb	04/29/25	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000075
Chromium	0.00059 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Cobalt	0.00026 mg/L	0.00052	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Lead	0.00010 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Molybdenum	0.0029 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00025
Selenium	0.00014 mg/L	0.00050	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/28/25	ejb	04/29/25	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T165739

Fluoride	0.90 mg/L	0.20	10	04/21/25	ljs	04/21/25	ljs	N	0.11
Chloride	36 mg/L	1.5	10	04/21/25	ljs	04/21/25	ljs		1.2
Sulfate as SO4	65 mg/L	6.0	10	04/21/25	ljs	04/21/25	ljs		2.2

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-13 Date Collected: 04/20/25 13:18 Matrix: Ground Water
Sample ID: MW-08 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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WET CHEMISTRY

Analysis Method: SM 2320 B-21

Batch: T165734

Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	350 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs	N	0.16
Carbonate Alkalinity as CaCO ₃ at pH 8.2	<0.16 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs	N	0.16
Total Alkalinity as CaCO ₃ at pH 4.5	350 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs		0.16

Analysis Method: SM 2540 C-20

Batch: T165799

Total Dissolved Solids	520 mg/L	40	4	04/22/25	cdj	04/22/25	cdj		
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Analysis Method: SM 2540 D-20

Batch: T165796

Total Suspended Solids	45 mg/L	4.0	1	04/22/25	cdj	04/22/25	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T165783

pH	7.12 pH Units		1	04/20/25	cem	04/21/25	mj	PH01m	
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-14 Date Collected: 04/20/25 13:18 Matrix: Ground Water
Sample ID: MWT-08 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E

Batch: T166193

Mercury	< ng/L	0.50	1	04/29/25	acs	04/30/25	acs		
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Analysis Method: EPA 200.7 Rev. 4.4

Batch: T166003

Boron	3.9 mg/L	0.0088	1	04/28/25	ejb	04/30/25	cma		0.0051
Calcium	110 mg/L	0.26	1	04/28/25	ejb	04/30/25	cma		0.037
Lithium	0.068 mg/L	0.0025	1	04/28/25	ejb	04/30/25	cma	N	0.0019
Magnesium	20 mg/L	0.10	1	04/28/25	ejb	04/30/25	cma		0.010
Potassium	7.2 mg/L	0.25	1	04/28/25	ejb	04/30/25	cma		0.036
Sodium	28 mg/L	0.12	1	04/28/25	ejb	04/30/25	cma		0.088

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T166003

Antimony	<0.00010 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00010
Arsenic	0.050 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Barium	0.76 mg/L	0.0025	1	04/28/25	ejb	04/29/25	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000075
Chromium	0.00053 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Cobalt	0.00026 mg/L	0.00052	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Lead	<0.00010 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Molybdenum	0.0030 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00025
Selenium	0.00013 mg/L	0.00050	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/28/25	ejb	04/29/25	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T165739

Fluoride	0.98 mg/L	0.20	10	04/21/25	ljs	04/22/25	ljs	N	0.11
Chloride	36 mg/L	1.5	10	04/21/25	ljs	04/22/25	ljs		1.2
Sulfate as SO4	61 mg/L	6.0	10	04/21/25	ljs	04/22/25	ljs		2.2

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-14 Date Collected: 04/20/25 13:18 Matrix: Ground Water
Sample ID: MWT-08 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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WET CHEMISTRY

Analysis Method: SM 2320 B-21

Batch: T165734

Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	360 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs	N	0.16
Carbonate Alkalinity as CaCO ₃ at pH 8.2	<0.16 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs	N	0.16
Total Alkalinity as CaCO ₃ at pH 4.5	360 mg/L	5.0	1	04/21/25	ajs	04/22/25	ajs		0.16

Analysis Method: SM 2540 C-20

Batch: T165799

Total Dissolved Solids	550 mg/L	40	4	04/22/25	cdj	04/22/25	cdj		
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Analysis Method: SM 2540 D-20

Batch: T165796

Total Suspended Solids	41 mg/L	4.0	1	04/22/25	cdj	04/22/25	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T165783

pH	7.11 pH Units		1	04/20/25	cem	04/21/25	mj	PH01n	
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-15 Date Collected: 04/20/25 15:20 Matrix: Ground Water
Sample ID: MW-01R Date Received: 04/21/25 08:03

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E

Batch: T166193

Mercury	< ng/L	0.50	1	04/29/25	acs	04/30/25	acs			
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Analysis Method: EPA 200.7 Rev. 4.4

Batch: T166003

Boron	100 mg/L	0.088	10	04/28/25	ejb	04/30/25	cma			0.051
Calcium	260 mg/L	2.6	10	04/28/25	ejb	04/30/25	cma			0.37
Lithium	2.1 mg/L	0.025	10	04/28/25	ejb	04/30/25	cma	N		0.019
Magnesium	110 mg/L	0.50	10	04/28/25	ejb	04/30/25	cma			0.10
Potassium	64 mg/L	2.5	10	04/28/25	ejb	04/30/25	cma			0.36
Sodium	310 mg/L	1.2	10	04/28/25	ejb	04/30/25	cma			0.88

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T166003

Antimony	0.00018 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs	J		0.00010
Arsenic	0.0013 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs			0.00010
Barium	0.40 mg/L	0.0025	1	04/28/25	ejb	04/29/25	acs			0.00068
Beryllium	0.00017 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs	J		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs			0.000075
Chromium	0.0017 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs			0.00020
Cobalt	0.00098 mg/L	0.00052	1	04/28/25	ejb	04/29/25	acs			0.00010
Lead	0.00038 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs	J		0.00010
Molybdenum	<0.00025 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs			0.00025
Selenium	0.00045 mg/L	0.00050	1	04/28/25	ejb	04/29/25	acs	J		0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/28/25	ejb	04/29/25	acs			0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T165739

Fluoride	11 mg/L	0.20	10	04/21/25	ljs	04/22/25	ljs	N		0.11
Chloride	94 mg/L	1.5	10	04/21/25	ljs	04/22/25	ljs			1.2
Sulfate as SO4	570 mg/L	30	50	04/21/25	ljs	04/22/25	ljs			11

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-15 Date Collected: 04/20/25 15:20 Matrix: Ground Water
Sample ID: MW-01R Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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WET CHEMISTRY

Analysis Method: SM 2320 B-21

Batch: T165815

Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	1000 mg/L	5.0	1	04/22/25	bm	04/22/25	bm	N	0.16
Carbonate Alkalinity as CaCO ₃ at pH 8.2	<0.16 mg/L	5.0	1	04/22/25	bm	04/22/25	bm	N	0.16
Total Alkalinity as CaCO ₃ at pH 4.5	1000 mg/L	5.0	1	04/22/25	bm	04/22/25	bm		0.16

Analysis Method: SM 2540 C-20

Batch: T165799

Total Dissolved Solids	2300 mg/L	40	4	04/22/25	cdj	04/22/25	cdj		
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Analysis Method: SM 2540 D-20

Batch: T165796

Total Suspended Solids	<4.0 mg/L	4.0	1	04/22/25	cdj	04/22/25	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T165783

pH	7.78 pH Units		1	04/20/25	cem	04/21/25	mj	PH01o	
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-16 Date Collected: 04/20/25 16:38 Matrix: Ground Water
Sample ID: MW-37 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E
Batch: T166193

Mercury	1.6 ng/L	0.50	1	04/29/25	acs	04/30/25	acs		
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Analysis Method: EPA 200.7 Rev. 4.4
Batch: T166003

Boron	4.8 mg/L	0.0088	1	04/28/25	ejb	04/30/25	cma		0.0051
Calcium	140 mg/L	0.26	1	04/28/25	ejb	04/30/25	cma		0.037
Lithium	0.0097 mg/L	0.0025	1	04/28/25	ejb	04/30/25	cma	N	0.0019
Magnesium	9.9 mg/L	0.10	1	04/28/25	ejb	04/30/25	cma		0.010
Potassium	19 mg/L	0.25	1	04/28/25	ejb	04/30/25	cma		0.036
Sodium	58 mg/L	0.12	1	04/28/25	ejb	04/30/25	cma		0.088

Analysis Method: EPA 200.8 Rev. 5.4
Batch: T166003

Antimony	0.00017 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Arsenic	0.00061 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Barium	0.067 mg/L	0.0025	1	04/28/25	ejb	04/29/25	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000075
Chromium	0.00036 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Cobalt	0.00038 mg/L	0.00052	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Lead	0.00058 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Molybdenum	0.013 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00025
Selenium	0.00091 mg/L	0.00050	1	04/28/25	ejb	04/29/25	acs		0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/28/25	ejb	04/29/25	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
Batch: T165739

Fluoride	0.50 mg/L	0.20	10	04/21/25	ljs	04/22/25	ljs	N	0.11
Chloride	15 mg/L	1.5	10	04/21/25	ljs	04/22/25	ljs		1.2
Sulfate as SO4	260 mg/L	15	25	04/21/25	ljs	04/22/25	ljs		5.5

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-16 Date Collected: 04/20/25 16:38 Matrix: Ground Water
Sample ID: MW-37 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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WET CHEMISTRY

Analysis Method: SM 2320 B-21

Batch: T165815

Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	290 mg/L	5.0	1	04/22/25	bm	04/22/25	bm	N	0.16
Carbonate Alkalinity as CaCO ₃ at pH 8.2	<0.16 mg/L	5.0	1	04/22/25	bm	04/22/25	bm	N	0.16
Total Alkalinity as CaCO ₃ at pH 4.5	290 mg/L	5.0	1	04/22/25	bm	04/22/25	bm		0.16

Analysis Method: SM 2540 C-20

Batch: T165799

Total Dissolved Solids	700 mg/L	40	4	04/22/25	cdj	04/22/25	cdj		
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Analysis Method: SM 2540 D-20

Batch: T165796

Total Suspended Solids	<4.0 mg/L	4.0	1	04/22/25	cdj	04/22/25	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T165783

pH	7.74 pH Units		1	04/20/25	cem	04/21/25	mj	PH01p	
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-17 Date Collected: 04/19/25 16:30 Matrix: Ground Water
Sample ID: LLHG-TB-041925 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E
Batch: T166193

Mercury	< ng/L	0.20	1	04/29/25	acs	04/30/25	acs
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-18 Date Collected: 04/20/25 17:15 Matrix: Ground Water
Sample ID: LLHG-TB-042025 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E
Batch: T166193

Mercury	< ng/L	0.20	1	04/29/25	acs	04/30/25	acs
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-19 Date Collected: 04/21/25 09:15 Matrix: Ground Water
Sample ID: MW-36 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E

Batch: T166193

Mercury	6.3 ng/L	0.50	1	04/29/25	acs	04/30/25	acs		
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Analysis Method: EPA 200.7 Rev. 4.4

Batch: T166003

Boron	0.41 mg/L	0.0088	1	04/28/25	ejb	04/30/25	cma		0.0051
Calcium	72 mg/L	0.26	1	04/28/25	ejb	04/30/25	cma		0.037
Lithium	0.010 mg/L	0.0025	1	04/28/25	ejb	04/30/25	cma	N	0.0019
Magnesium	13 mg/L	0.10	1	04/28/25	ejb	04/30/25	cma		0.010
Potassium	33 mg/L	0.25	1	04/28/25	ejb	04/30/25	cma		0.036
Sodium	56 mg/L	0.12	1	04/28/25	ejb	04/30/25	cma		0.088

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T166003

Antimony	0.00076 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00010
Arsenic	0.0093 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Barium	0.25 mg/L	0.0025	1	04/28/25	ejb	04/29/25	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000052
Cadmium	0.000094 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs	J	0.000075
Chromium	0.0011 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Cobalt	0.00018 mg/L	0.00052	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Lead	0.0060 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Molybdenum	0.017 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00025
Selenium	0.00049 mg/L	0.00050	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/28/25	ejb	04/29/25	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T165878

Fluoride	0.72 mg/L	0.20	10	04/23/25	ljs	04/24/25	ljs	N	0.11
Chloride	32 mg/L	1.5	10	04/23/25	ljs	04/24/25	ljs		1.2
Sulfate as SO4	6.8 mg/L	6.0	10	04/23/25	ljs	04/24/25	ljs		2.2

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-19 Date Collected: 04/21/25 09:15 Matrix: Ground Water
Sample ID: MW-36 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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WET CHEMISTRY

Analysis Method: SM 2320 B-21

Batch: T165924

Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	320 mg/L	5.0	1	04/24/25	bm	04/24/25	bm	N	0.16
Carbonate Alkalinity as CaCO ₃ at pH 8.2	39 mg/L	5.0	1	04/24/25	bm	04/24/25	bm	N	0.16
Total Alkalinity as CaCO ₃ at pH 4.5	350 mg/L	5.0	1	04/24/25	bm	04/24/25	bm		0.16

Analysis Method: SM 2540 C-20

Batch: T165871

Total Dissolved Solids	450 mg/L	40	4	04/23/25	cdj	04/23/25	cdj		
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Analysis Method: SM 2540 D-20

Batch: T165867

Total Suspended Solids	<4.0 mg/L	4.0	1	04/23/25	cdj	04/23/25	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T166143

pH	8.72 pH Units		1	04/21/25	mj	04/23/25	mj	H04, PH01q	
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-20 Date Collected: 04/21/25 10:45 Matrix: Ground Water
Sample ID: MW-20 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E

Batch: T166193

Mercury	5.1 ng/L	0.50	1	04/29/25	acs	04/30/25	acs		
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Analysis Method: EPA 200.7 Rev. 4.4

Batch: T166003

Boron	0.87 mg/L	0.0088	1	04/28/25	ejb	04/30/25	cma		0.0051
Calcium	110 mg/L	0.26	1	04/28/25	ejb	04/30/25	cma		0.037
Lithium	0.034 mg/L	0.0025	1	04/28/25	ejb	04/30/25	cma	N	0.0019
Magnesium	37 mg/L	0.10	1	04/28/25	ejb	04/30/25	cma		0.010
Potassium	6.9 mg/L	0.25	1	04/28/25	ejb	04/30/25	cma		0.036
Sodium	41 mg/L	0.12	1	04/28/25	ejb	04/30/25	cma		0.088

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T166003

Antimony	<0.00010 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00010
Arsenic	0.0011 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Barium	0.46 mg/L	0.0025	1	04/28/25	ejb	04/29/25	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000075
Chromium	<0.00020 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Cobalt	0.00080 mg/L	0.00052	1	04/28/25	ejb	04/29/25	acs		0.00010
Lead	0.0012 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Molybdenum	0.0035 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00025
Selenium	<0.00010 mg/L	0.00050	1	04/28/25	ejb	04/29/25	acs		0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/28/25	ejb	04/29/25	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T165878

Fluoride	0.29 mg/L	0.20	10	04/23/25	ljs	04/24/25	ljs	N	0.11
Chloride	29 mg/L	1.5	10	04/23/25	ljs	04/24/25	ljs		1.2
Sulfate as SO4	52 mg/L	6.0	10	04/23/25	ljs	04/24/25	ljs		2.2

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-20 Date Collected: 04/21/25 10:45 Matrix: Ground Water
Sample ID: MW-20 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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WET CHEMISTRY

Analysis Method: SM 2320 B-21

Batch: T165924

Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	440 mg/L	5.0	1	04/24/25	bm	04/24/25	bm	N	0.16
Carbonate Alkalinity as CaCO ₃ at pH 8.2	<0.16 mg/L	5.0	1	04/24/25	bm	04/24/25	bm	N	0.16
Total Alkalinity as CaCO ₃ at pH 4.5	440 mg/L	5.0	1	04/24/25	bm	04/24/25	bm		0.16

Analysis Method: SM 2540 C-20

Batch: T165871

Total Dissolved Solids	540 mg/L	40	4	04/23/25	cdj	04/23/25	cdj		
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Analysis Method: SM 2540 D-20

Batch: T165867

Total Suspended Solids	29 mg/L	4.0	1	04/23/25	cdj	04/23/25	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T166143

pH	7.22 pH Units		1	04/21/25	mj	04/23/25	mj	H04, PH01s	
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-21 Date Collected: 04/21/25 12:00 Matrix: Ground Water
Sample ID: MW-19 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E

Batch: T166196

Mercury	< ng/L	0.50	1	04/29/25	acs	04/30/25	acs		
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Analysis Method: EPA 200.7 Rev. 4.4

Batch: T166043

Boron	1.6 mg/L	0.0088	1	04/28/25	ejb	04/30/25	cma	MS07	0.0051
Calcium	370 mg/L	0.26	1	04/28/25	ejb	04/30/25	cma		0.037
Lithium	0.073 mg/L	0.0025	1	04/28/25	ejb	04/30/25	cma	N	0.0019
Magnesium	31 mg/L	0.10	1	04/28/25	ejb	04/30/25	cma	MS07	0.010
Potassium	13 mg/L	0.25	1	04/28/25	ejb	04/30/25	cma		0.036
Sodium	25 mg/L	0.12	1	04/28/25	ejb	04/30/25	cma	MS07	0.088

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T166043

Antimony	0.00019 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Arsenic	0.0037 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Barium	0.033 mg/L	0.0025	1	04/28/25	ejb	04/29/25	acs		0.00068
Beryllium	0.00012 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs	J	0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000075
Chromium	0.00027 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Cobalt	0.00092 mg/L	0.00052	1	04/28/25	ejb	04/29/25	acs		0.00010
Lead	<0.00010 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Molybdenum	0.019 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00025
Selenium	0.00015 mg/L	0.00050	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/28/25	ejb	04/29/25	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T165878

Fluoride	1.5 mg/L	0.20	10	04/23/25	ljs	04/24/25	ljs	N	0.11
Chloride	21 mg/L	1.5	10	04/23/25	ljs	04/24/25	ljs		1.2
Sulfate as SO4	890 mg/L	60	100	04/25/25	ljs	04/26/25	ljs		22

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-21 Date Collected: 04/21/25 12:00 Matrix: Ground Water
Sample ID: MW-19 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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WET CHEMISTRY

Analysis Method: SM 2320 B-21

Batch: T165924

Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	280 mg/L	5.0	1	04/24/25	bm	04/24/25	bm	N	0.16
Carbonate Alkalinity as CaCO ₃ at pH 8.2	<0.16 mg/L	5.0	1	04/24/25	bm	04/24/25	bm	N	0.16
Total Alkalinity as CaCO ₃ at pH 4.5	280 mg/L	5.0	1	04/24/25	bm	04/24/25	bm		0.16

Analysis Method: SM 2540 C-20

Batch: T165871

Total Dissolved Solids	1600 mg/L	40	4	04/23/25	cdj	04/23/25	cdj		
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Analysis Method: SM 2540 D-20

Batch: T165867

Total Suspended Solids	18 mg/L	4.0	1	04/23/25	cdj	04/23/25	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T166143

pH	6.68 pH Units		1	04/21/25	mj	04/23/25	mj	H04, PH01t	
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-22 Date Collected: 04/21/25 13:45 Matrix: Ground Water
Sample ID: MW-07 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E

Batch: T166196

Mercury	< ng/L	0.50	1	04/29/25	acs	04/30/25	acs		
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Analysis Method: EPA 200.7 Rev. 4.4

Batch: T166043

Boron	8.8 mg/L	0.0088	1	04/28/25	ejb	04/30/25	cma		0.0051
Calcium	150 mg/L	0.26	1	04/28/25	ejb	04/30/25	cma		0.037
Lithium	0.0069 mg/L	0.0025	1	04/28/25	ejb	04/30/25	cma	N	0.0019
Magnesium	39 mg/L	0.10	1	04/28/25	ejb	04/30/25	cma		0.010
Potassium	4.6 mg/L	0.25	1	04/28/25	ejb	04/30/25	cma		0.036
Sodium	44 mg/L	0.12	1	04/28/25	ejb	04/30/25	cma		0.088

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T166043

Antimony	<0.00010 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00010
Arsenic	0.00020 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Barium	0.40 mg/L	0.0025	1	04/28/25	ejb	04/29/25	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000075
Chromium	0.00041 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Cobalt	0.0011 mg/L	0.00052	1	04/28/25	ejb	04/29/25	acs		0.00010
Lead	<0.00010 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Molybdenum	<0.00025 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00025
Selenium	0.00011 mg/L	0.00050	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/28/25	ejb	04/29/25	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T166090

Fluoride	0.14 mg/L	0.020	1	04/28/25	ljs	04/28/25	ljs	N	0.011
Chloride	17 mg/L	1.5	10	04/23/25	ljs	04/24/25	ljs		1.2
Sulfate as SO4	20 mg/L	6.0	10	04/23/25	ljs	04/24/25	ljs		2.2

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-22 Date Collected: 04/21/25 13:45 Matrix: Ground Water
Sample ID: MW-07 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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WET CHEMISTRY

Analysis Method: SM 2320 B-21

Batch: T165924

Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	680 mg/L	5.0	1	04/24/25	bm	04/24/25	bm	N	0.16
Carbonate Alkalinity as CaCO ₃ at pH 8.2	<0.16 mg/L	5.0	1	04/24/25	bm	04/24/25	bm	N	0.16
Total Alkalinity as CaCO ₃ at pH 4.5	680 mg/L	5.0	1	04/24/25	bm	04/24/25	bm		0.16

Analysis Method: SM 2540 C-20

Batch: T165871

Total Dissolved Solids	720 mg/L	40	4	04/23/25	cdj	04/23/25	cdj		
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Analysis Method: SM 2540 D-20

Batch: T165867

Total Suspended Solids	57 mg/L	4.0	1	04/23/25	cdj	04/23/25	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T166143

pH	6.89 pH Units		1	04/21/25	mj	04/23/25	mj	H04, PH01u	
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-23 Date Collected: 04/21/25 15:35 Matrix: Ground Water
Sample ID: MW-27 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 7470A

Batch: T165995

Mercury	< mg/L	0.00020	1	04/25/25	cma	04/28/25	jlh		
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METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4

Batch: T166043

Boron	0.27 mg/L	0.0088	1	04/28/25	ejb	04/30/25	cma		0.0051
Calcium	130 mg/L	0.26	1	04/28/25	ejb	04/30/25	cma		0.037
Lithium	0.0055 mg/L	0.0025	1	04/28/25	ejb	04/30/25	cma	N	0.0019
Magnesium	39 mg/L	0.10	1	04/28/25	ejb	04/30/25	cma		0.010
Potassium	5.1 mg/L	0.25	1	04/28/25	ejb	04/30/25	cma		0.036
Sodium	69 mg/L	0.12	1	04/28/25	ejb	04/30/25	cma		0.088

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T166043

Antimony	<0.00010 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00010
Arsenic	0.0011 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Barium	0.14 mg/L	0.0025	1	04/28/25	ejb	04/29/25	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000075
Chromium	0.011 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Cobalt	0.00035 mg/L	0.00052	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Lead	<0.00010 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Molybdenum	<0.00025 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00025
Selenium	0.00020 mg/L	0.00050	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/28/25	ejb	04/29/25	acs		0.000075

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-23 Date Collected: 04/21/25 15:35 Matrix: Ground Water
Sample ID: MW-27 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T165878

Fluoride	0.44 mg/L	0.20	10	04/23/25	ljs	04/24/25	ljs	N	0.11
Chloride	86 mg/L	1.5	10	04/23/25	ljs	04/24/25	ljs		1.2
Sulfate as SO ₄	27 mg/L	6.0	10	04/23/25	ljs	04/24/25	ljs		2.2

Analysis Method: SM 2320 B-21

Batch: T165924

Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	650 mg/L	5.0	1	04/24/25	bm	04/24/25	bm	N	0.16
Carbonate Alkalinity as CaCO ₃ at pH 8.2	<0.16 mg/L	5.0	1	04/24/25	bm	04/24/25	bm	N	0.16
Total Alkalinity as CaCO ₃ at pH 4.5	650 mg/L	5.0	1	04/24/25	bm	04/24/25	bm		0.16

Analysis Method: SM 2540 C-20

Batch: T165871

Total Dissolved Solids	640 mg/L	40	4	04/23/25	cdj	04/23/25	cdj		
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Analysis Method: SM 2540 D-20

Batch: T165867

Total Suspended Solids	13 mg/L	4.0	1	04/23/25	cdj	04/23/25	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T166143

pH	6.84 pH Units		1	04/21/25	mj	04/23/25	mj	H04, PH01v	
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-24 Date Collected: 04/21/25 17:05 Matrix: Ground Water
Sample ID: MW-28 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E
Batch: T166196

Mercury	7.5 ng/L	0.50	1	04/29/25	acs	04/30/25	acs		
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Analysis Method: EPA 200.7 Rev. 4.4
Batch: T166043

Boron	2.0 mg/L	0.0088	1	04/28/25	ejb	04/30/25	cma		0.0051
Calcium	160 mg/L	0.26	1	04/28/25	ejb	04/30/25	cma		0.037
Lithium	0.054 mg/L	0.0025	1	04/28/25	ejb	04/30/25	cma	N	0.0019
Magnesium	29 mg/L	0.10	1	04/28/25	ejb	04/30/25	cma		0.010
Potassium	10 mg/L	0.25	1	04/28/25	ejb	04/30/25	cma		0.036
Sodium	65 mg/L	0.12	1	04/28/25	ejb	04/30/25	cma		0.088

Analysis Method: EPA 200.8 Rev. 5.4
Batch: T166043

Antimony	0.00036 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00010
Arsenic	0.0014 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Barium	0.42 mg/L	0.0025	1	04/28/25	ejb	04/29/25	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000052
Cadmium	0.000080 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs	J	0.000075
Chromium	0.0078 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Cobalt	0.0031 mg/L	0.00052	1	04/28/25	ejb	04/29/25	acs		0.00010
Lead	0.0015 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Molybdenum	0.0020 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00025
Selenium	0.00028 mg/L	0.00050	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/28/25	ejb	04/29/25	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
Batch: T165878

Fluoride	0.97 mg/L	0.20	10	04/23/25	ljs	04/24/25	ljs	N	0.11
Chloride	180 mg/L	1.5	10	04/23/25	ljs	04/24/25	ljs		1.2
Sulfate as SO4	57 mg/L	6.0	10	04/23/25	ljs	04/24/25	ljs		2.2

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-24 Date Collected: 04/21/25 17:05 Matrix: Ground Water
Sample ID: MW-28 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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WET CHEMISTRY

Analysis Method: SM 2320 B-21

Batch: T165924

Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	480 mg/L	5.0	1	04/24/25	bm	04/24/25	bm	N	0.16
Carbonate Alkalinity as CaCO ₃ at pH 8.2	<0.16 mg/L	5.0	1	04/24/25	bm	04/24/25	bm	N	0.16
Total Alkalinity as CaCO ₃ at pH 4.5	480 mg/L	5.0	1	04/24/25	bm	04/24/25	bm		0.16

Analysis Method: SM 2540 C-20

Batch: T165871

Total Dissolved Solids	900 mg/L	40	4	04/23/25	cdj	04/23/25	cdj		
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Analysis Method: SM 2540 D-20

Batch: T165867

Total Suspended Solids	66 mg/L	4.0	1	04/23/25	cdj	04/23/25	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T166143

pH	6.78 pH Units		1	04/21/25	mj	04/23/25	mj	H04, PH01w	
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-25 Date Collected: 04/21/25 09:16 Matrix: Ground Water
Sample ID: MW-18 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E

Batch: T166196

Mercury	< ng/L	0.50	1	04/29/25	acs	04/30/25	acs		
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Analysis Method: EPA 200.7 Rev. 4.4

Batch: T166043

Boron	3.7 mg/L	0.0088	1	04/28/25	ejb	04/30/25	cma		0.0051
Calcium	270 mg/L	0.26	1	04/28/25	ejb	04/30/25	cma		0.037
Lithium	0.028 mg/L	0.0025	1	04/28/25	ejb	04/30/25	cma	N	0.0019
Magnesium	36 mg/L	0.10	1	04/28/25	ejb	04/30/25	cma		0.010
Potassium	7.1 mg/L	0.25	1	04/28/25	ejb	04/30/25	cma		0.036
Sodium	22 mg/L	0.12	1	04/28/25	ejb	04/30/25	cma		0.088

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T166043

Antimony	0.00017 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Arsenic	0.027 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Barium	0.013 mg/L	0.0025	1	04/28/25	ejb	04/29/25	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000052
Cadmium	0.00010 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs	J	0.000075
Chromium	0.00063 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Cobalt	0.0019 mg/L	0.00052	1	04/28/25	ejb	04/29/25	acs		0.00010
Lead	<0.00010 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Molybdenum	0.014 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00025
Selenium	0.0011 mg/L	0.00050	1	04/28/25	ejb	04/29/25	acs		0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/28/25	ejb	04/29/25	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T165878

Fluoride	3.3 mg/L	0.20	10	04/23/25	ljs	04/24/25	ljs	N	0.11
Chloride	19 mg/L	1.5	10	04/23/25	ljs	04/24/25	ljs		1.2
Sulfate as SO4	770 mg/L	30	50	04/25/25	ljs	04/26/25	ljs		11

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-25 Date Collected: 04/21/25 09:16 Matrix: Ground Water
Sample ID: MW-18 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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WET CHEMISTRY

Analysis Method: SM 2320 B-21

Batch: T165924

Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	120 mg/L	5.0	1	04/24/25	bm	04/24/25	bm	N	0.16
Carbonate Alkalinity as CaCO ₃ at pH 8.2	<0.16 mg/L	5.0	1	04/24/25	bm	04/24/25	bm	N	0.16
Total Alkalinity as CaCO ₃ at pH 4.5	120 mg/L	5.0	1	04/24/25	bm	04/24/25	bm		0.16

Analysis Method: SM 2540 C-20

Batch: T165871

Total Dissolved Solids	1200 mg/L	40	4	04/23/25	cdj	04/23/25	cdj		
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Analysis Method: SM 2540 D-20

Batch: T165867

Total Suspended Solids	11 mg/L	4.0	1	04/23/25	cdj	04/23/25	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T166143

pH	6.97 pH Units		1	04/21/25	mj	04/23/25	mj	H04, PH01x	
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-26 Date Collected: 04/21/25 11:50 Matrix: Ground Water
Sample ID: MW-03 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E

Batch: T166196

Mercury	0.77	ng/L	0.50	1	04/29/25	acs	04/30/25	acs		
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Analysis Method: EPA 200.7 Rev. 4.4

Batch: T166043

Boron	4.5	mg/L	0.088	10	04/28/25	ejb	04/30/25	cma		0.051
Calcium	340	mg/L	2.6	10	04/28/25	ejb	04/30/25	cma		0.37
Lithium	0.030	mg/L	0.025	10	04/28/25	ejb	04/30/25	cma	N	0.019
Magnesium	200	mg/L	0.50	10	04/28/25	ejb	04/30/25	cma		0.10
Potassium	17	mg/L	2.5	10	04/28/25	ejb	04/30/25	cma		0.36
Sodium	92	mg/L	1.2	10	04/28/25	ejb	04/30/25	cma		0.88

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T166043

Antimony	<0.00010	mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00010
Arsenic	0.0013	mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Barium	0.37	mg/L	0.0025	1	04/28/25	ejb	04/29/25	acs		0.00068
Beryllium	<0.000052	mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000052
Cadmium	<0.000075	mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000075
Chromium	0.0050	mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Cobalt	0.00056	mg/L	0.00052	1	04/28/25	ejb	04/29/25	acs		0.00010
Lead	<0.00010	mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Molybdenum	<0.00025	mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00025
Selenium	0.00041	mg/L	0.00050	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Thallium	<0.000075	mg/L	0.00038	1	04/28/25	ejb	04/29/25	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T165878

Fluoride	0.70	mg/L	0.20	10	04/23/25	ljs	04/24/25	ljs	N	0.11
Chloride	94	mg/L	1.5	10	04/23/25	ljs	04/24/25	ljs		1.2
Sulfate as SO4	240	mg/L	15	25	04/25/25	ljs	04/26/25	ljs		5.5

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-26 Date Collected: 04/21/25 11:50 Matrix: Ground Water
Sample ID: MW-03 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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WET CHEMISTRY

Analysis Method: SM 2320 B-21

Batch: T165924

Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	1300 mg/L	5.0	1	04/24/25	bm	04/24/25	bm	N	0.16
Carbonate Alkalinity as CaCO ₃ at pH 8.2	<0.16 mg/L	5.0	1	04/24/25	bm	04/24/25	bm	N	0.16
Total Alkalinity as CaCO ₃ at pH 4.5	1300 mg/L	5.0	1	04/24/25	bm	04/24/25	bm		0.16

Analysis Method: SM 2540 C-20

Batch: T165871

Total Dissolved Solids	1700 mg/L	40	4	04/23/25	cdj	04/23/25	cdj		
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Analysis Method: SM 2540 D-20

Batch: T165867

Total Suspended Solids	<4.0 mg/L	4.0	1	04/23/25	cdj	04/23/25	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T166143

pH	7.30 pH Units		1	04/21/25	mj	04/23/25	mj	H04, PH01y	
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-27 Date Collected: 04/21/25 13:00 Matrix: Ground Water
Sample ID: MW-04 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E

Batch: T166196

Mercury	2.9 ng/L	0.50	1	04/29/25	acs	04/30/25	acs		
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Analysis Method: EPA 200.7 Rev. 4.4

Batch: T166043

Boron	3.7 mg/L	0.0088	1	04/28/25	ejb	04/30/25	cma		0.0051
Calcium	250 mg/L	0.26	1	04/28/25	ejb	04/30/25	cma		0.037
Lithium	0.055 mg/L	0.0025	1	04/28/25	ejb	04/30/25	cma	N	0.0019
Magnesium	36 mg/L	0.10	1	04/28/25	ejb	04/30/25	cma		0.010
Potassium	7.9 mg/L	0.25	1	04/28/25	ejb	04/30/25	cma		0.036
Sodium	23 mg/L	0.12	1	04/28/25	ejb	04/30/25	cma		0.088

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T166043

Antimony	0.00046 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00010
Arsenic	0.0014 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Barium	0.025 mg/L	0.0025	1	04/28/25	ejb	04/29/25	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000075
Chromium	0.0010 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Cobalt	0.00011 mg/L	0.00052	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Lead	0.00026 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Molybdenum	0.011 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00025
Selenium	0.0012 mg/L	0.00050	1	04/28/25	ejb	04/29/25	acs		0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/28/25	ejb	04/29/25	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T165878

Fluoride	2.3 mg/L	0.20	10	04/23/25	ljs	04/24/25	ljs	N	0.11
Chloride	21 mg/L	1.5	10	04/23/25	ljs	04/24/25	ljs		1.2
Sulfate as SO4	360 mg/L	15	25	04/25/25	ljs	04/26/25	ljs		5.5

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-27 Date Collected: 04/21/25 13:00 Matrix: Ground Water
Sample ID: MW-04 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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WET CHEMISTRY

Analysis Method: SM 2320 B-21

Batch: T165924

Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	91 mg/L	5.0	1	04/24/25	bm	04/24/25	bm	N	0.16
Carbonate Alkalinity as CaCO ₃ at pH 8.2	<0.16 mg/L	5.0	1	04/24/25	bm	04/24/25	bm	N	0.16
Total Alkalinity as CaCO ₃ at pH 4.5	91 mg/L	5.0	1	04/24/25	bm	04/24/25	bm		0.16

Analysis Method: SM 2540 C-20

Batch: T165871

Total Dissolved Solids	1200 mg/L	40	4	04/23/25	cdj	04/23/25	cdj		
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Analysis Method: SM 2540 D-20

Batch: T165867

Total Suspended Solids	<4.0 mg/L	4.0	1	04/23/25	cdj	04/23/25	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T166143

pH	7.48 pH Units		1	04/21/25	mj	04/23/25	mj	H04, PH01z	
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-28 Date Collected: 04/21/25 14:12 Matrix: Ground Water
Sample ID: MW-12 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E

Batch: T166196

Mercury	0.83	ng/L	0.50	1	04/29/25	acs	04/30/25	acs		
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Analysis Method: EPA 200.7 Rev. 4.4

Batch: T166043

Boron	0.23	mg/L	0.0088	1	04/28/25	ejb	04/30/25	cma		0.0051
Calcium	41	mg/L	0.26	1	04/28/25	ejb	04/30/25	cma		0.037
Lithium	0.0019	mg/L	0.0025	1	04/28/25	ejb	04/30/25	cma	J, N	0.0019
Magnesium	12	mg/L	0.10	1	04/28/25	ejb	04/30/25	cma		0.010
Potassium	0.86	mg/L	0.25	1	04/28/25	ejb	04/30/25	cma		0.036
Sodium	9.1	mg/L	0.12	1	04/28/25	ejb	04/30/25	cma		0.088

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T166043

Antimony	0.00068	mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00010
Arsenic	0.0016	mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Barium	0.038	mg/L	0.0025	1	04/28/25	ejb	04/29/25	acs		0.00068
Beryllium	<0.000052	mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000052
Cadmium	0.0015	mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000075
Chromium	0.00095	mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Cobalt	0.00015	mg/L	0.00052	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Lead	0.00051	mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Molybdenum	0.0059	mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00025
Selenium	0.0017	mg/L	0.00050	1	04/28/25	ejb	04/29/25	acs		0.00010
Thallium	<0.000075	mg/L	0.00038	1	04/28/25	ejb	04/29/25	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T165878

Fluoride	0.27	mg/L	0.20	10	04/23/25	ljs	04/24/25	ljs	N	0.11
Chloride	15	mg/L	1.5	10	04/23/25	ljs	04/24/25	ljs		1.2
Sulfate as SO4	61	mg/L	6.0	10	04/23/25	ljs	04/24/25	ljs		2.2

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-28 Date Collected: 04/21/25 14:12 Matrix: Ground Water
Sample ID: MW-12 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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WET CHEMISTRY

Analysis Method: SM 2320 B-21

Batch: T165924

Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	100 mg/L	5.0	1	04/24/25	bm	04/24/25	bm	N	0.16
Carbonate Alkalinity as CaCO ₃ at pH 8.2	<0.16 mg/L	5.0	1	04/24/25	bm	04/24/25	bm	N	0.16
Total Alkalinity as CaCO ₃ at pH 4.5	100 mg/L	5.0	1	04/24/25	bm	04/24/25	bm		0.16

Analysis Method: SM 2540 C-20

Batch: T165871

Total Dissolved Solids	200 mg/L	40	4	04/23/25	cdj	04/23/25	cdj		
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Analysis Method: SM 2540 D-20

Batch: T165867

Total Suspended Solids	<4.0 mg/L	4.0	1	04/23/25	cdj	04/23/25	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T166143

pH	7.70 pH Units		1	04/21/25	mj	04/23/25	mj	H04, PH01aa	
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-29 Date Collected: 04/21/25 15:20 Matrix: Ground Water
Sample ID: MW-16 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E

Batch: T166196

Mercury	< ng/L	0.50	1	04/29/25	acs	04/30/25	acs		
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Analysis Method: EPA 200.7 Rev. 4.4

Batch: T166043

Boron	0.29 mg/L	0.0088	1	04/28/25	ejb	04/30/25	cma		0.0051
Calcium	230 mg/L	0.26	1	04/28/25	ejb	04/30/25	cma		0.037
Lithium	0.020 mg/L	0.0025	1	04/28/25	ejb	04/30/25	cma	N	0.0019
Magnesium	28 mg/L	0.10	1	04/28/25	ejb	04/30/25	cma		0.010
Potassium	5.0 mg/L	0.25	1	04/28/25	ejb	04/30/25	cma		0.036
Sodium	21 mg/L	0.12	1	04/28/25	ejb	04/30/25	cma		0.088

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T166043

Antimony	<0.00010 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00010
Arsenic	0.0045 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Barium	0.21 mg/L	0.0025	1	04/28/25	ejb	04/29/25	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000075
Chromium	0.00062 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Cobalt	0.00019 mg/L	0.00052	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Lead	<0.00010 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Molybdenum	<0.00025 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00025
Selenium	0.00013 mg/L	0.00050	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/28/25	ejb	04/29/25	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T166090

Fluoride	0.18 mg/L	0.020	1	04/28/25	ljs	04/28/25	ljs	N	0.011
Chloride	17 mg/L	1.5	10	04/23/25	ljs	04/24/25	ljs		1.2
Sulfate as SO4	140 mg/L	6.0	10	04/23/25	ljs	04/24/25	ljs		2.2

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-29 Date Collected: 04/21/25 15:20 Matrix: Ground Water
Sample ID: MW-16 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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WET CHEMISTRY

Analysis Method: SM 2320 B-21

Batch: T165924

Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	620 mg/L	5.0	1	04/24/25	bm	04/24/25	bm	N	0.16
Carbonate Alkalinity as CaCO ₃ at pH 8.2	<0.16 mg/L	5.0	1	04/24/25	bm	04/24/25	bm	N	0.16
Total Alkalinity as CaCO ₃ at pH 4.5	620 mg/L	5.0	1	04/24/25	bm	04/24/25	bm		0.16

Analysis Method: SM 2540 C-20

Batch: T165871

Total Dissolved Solids	850 mg/L	40	4	04/23/25	cdj	04/23/25	cdj		
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Analysis Method: SM 2540 D-20

Batch: T165867

Total Suspended Solids	17 mg/L	4.0	1	04/23/25	cdj	04/23/25	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T166143

pH	7.30 pH Units		1	04/21/25	mj	04/23/25	mj	H04, PH01ab	
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-30 Date Collected: 04/21/25 16:32 Matrix: Ground Water
Sample ID: MW-34 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E

Batch: T166196

Mercury	1.6	ng/L	0.50	1	04/29/25	acs	04/30/25	acs		
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Analysis Method: EPA 200.7 Rev. 4.4

Batch: T166043

Boron	1.9	mg/L	0.0088	1	04/28/25	ejb	04/30/25	cma		0.0051
Calcium	210	mg/L	0.26	1	04/28/25	ejb	04/30/25	cma		0.037
Lithium	0.056	mg/L	0.0025	1	04/28/25	ejb	04/30/25	cma	N	0.0019
Magnesium	24	mg/L	0.10	1	04/28/25	ejb	04/30/25	cma		0.010
Potassium	8.2	mg/L	0.25	1	04/28/25	ejb	04/30/25	cma		0.036
Sodium	24	mg/L	0.12	1	04/28/25	ejb	04/30/25	cma		0.088

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T166043

Antimony	0.00013	mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Arsenic	0.00075	mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Barium	0.54	mg/L	0.0025	1	04/28/25	ejb	04/29/25	acs		0.00068
Beryllium	<0.000052	mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000052
Cadmium	<0.000075	mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000075
Chromium	0.025	mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Cobalt	0.0010	mg/L	0.00052	1	04/28/25	ejb	04/29/25	acs		0.00010
Lead	0.00028	mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Molybdenum	<0.00025	mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00025
Selenium	0.00026	mg/L	0.00050	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Thallium	<0.000075	mg/L	0.00038	1	04/28/25	ejb	04/29/25	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T165878

Fluoride	0.32	mg/L	0.20	10	04/23/25	ljs	04/24/25	ljs	N	0.11
Chloride	21	mg/L	1.5	10	04/23/25	ljs	04/24/25	ljs		1.2
Sulfate as SO4	<2.2	mg/L	6.0	10	04/23/25	ljs	04/24/25	ljs		2.2

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-30 Date Collected: 04/21/25 16:32 Matrix: Ground Water
Sample ID: MW-34 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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WET CHEMISTRY

Analysis Method: SM 2320 B-21

Batch: T165924

Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	930 mg/L	5.0	1	04/24/25	bm	04/24/25	bm	N	0.16
Carbonate Alkalinity as CaCO ₃ at pH 8.2	<0.16 mg/L	5.0	1	04/24/25	bm	04/24/25	bm	N	0.16
Total Alkalinity as CaCO ₃ at pH 4.5	930 mg/L	5.0	1	04/24/25	bm	04/24/25	bm		0.16

Analysis Method: SM 2540 C-20

Batch: T165871

Total Dissolved Solids	750 mg/L	40	4	04/23/25	cdj	04/23/25	cdj		
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Analysis Method: SM 2540 D-20

Batch: T165869

Total Suspended Solids	160 mg/L	4.0	1	04/23/25	cdj	04/23/25	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T166143

pH	6.58 pH Units		1	04/21/25	mj	04/23/25	mj	H04, PH01ac	
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-31 Date Collected: 04/22/25 15:10 Matrix: Ground Water
Sample ID: SG-04 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E

Batch: T166196

Mercury	< ng/L	0.50	1	04/29/25	acs	04/30/25	acs		
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Analysis Method: EPA 200.7 Rev. 4.4

Batch: T166043

Boron	3.5 mg/L	0.088	10	04/28/25	ejb	04/30/25	cma		0.051
Calcium	410 mg/L	2.6	10	04/28/25	ejb	04/30/25	cma		0.37
Lithium	0.056 mg/L	0.025	10	04/28/25	ejb	04/30/25	cma	N	0.019
Magnesium	140 mg/L	0.50	10	04/28/25	ejb	04/30/25	cma		0.10
Potassium	20 mg/L	2.5	10	04/28/25	ejb	04/30/25	cma		0.36
Sodium	74 mg/L	1.2	10	04/28/25	ejb	04/30/25	cma		0.88

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T166043

Antimony	<0.00010 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00010
Arsenic	0.0014 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Barium	0.12 mg/L	0.0025	1	04/28/25	ejb	04/29/25	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000075
Chromium	0.0044 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Cobalt	0.00024 mg/L	0.00052	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Lead	<0.00010 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Molybdenum	0.00096 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs	J	0.00025
Selenium	0.00020 mg/L	0.00050	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/28/25	ejb	04/29/25	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T165878

Fluoride	1.6 mg/L	0.20	10	04/23/25	ljs	04/24/25	ljs	N	0.11
Chloride	71 mg/L	1.5	10	04/23/25	ljs	04/24/25	ljs		1.2
Sulfate as SO4	750 mg/L	30	50	04/25/25	ljs	04/26/25	ljs		11

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-31 Date Collected: 04/22/25 15:10 Matrix: Ground Water
Sample ID: SG-04 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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WET CHEMISTRY

Analysis Method: SM 2320 B-21

Batch: T165924

Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	670 mg/L	5.0	1	04/24/25	bm	04/24/25	bm	N	0.16
Carbonate Alkalinity as CaCO ₃ at pH 8.2	<0.16 mg/L	5.0	1	04/24/25	bm	04/24/25	bm	N	0.16
Total Alkalinity as CaCO ₃ at pH 4.5	670 mg/L	5.0	1	04/24/25	bm	04/24/25	bm		0.16

Analysis Method: SM 2540 C-20

Batch: T165871

Total Dissolved Solids	1900 mg/L	40	4	04/23/25	cdj	04/23/25	cdj		
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Analysis Method: SM 2540 D-20

Batch: T165867

Total Suspended Solids	21 mg/L	4.0	1	04/23/25	cdj	04/23/25	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T166143

pH	7.37 pH Units		1	04/22/25	mj	04/23/25	mj	PH01ad	
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-32 Date Collected: 04/22/25 15:25 Matrix: Ground Water
Sample ID: SG-02 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E

Batch: T166196

Mercury	6.4 ng/L	0.50	1	04/29/25	acs	04/30/25	acs		
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Analysis Method: EPA 200.7 Rev. 4.4

Batch: T166138

Boron	2.6 mg/L	0.0088	1	04/29/25	ejb	04/30/25	cma		0.0051
Calcium	100 mg/L	0.26	1	04/29/25	ejb	04/30/25	cma		0.037
Lithium	0.046 mg/L	0.0025	1	04/29/25	ejb	04/30/25	cma	N	0.0019
Magnesium	28 mg/L	0.10	1	04/29/25	ejb	04/30/25	cma		0.010
Potassium	6.7 mg/L	0.25	1	04/29/25	ejb	04/30/25	cma		0.036
Sodium	27 mg/L	0.12	1	04/29/25	ejb	04/30/25	cma		0.088

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T166138

Antimony	0.00079 mg/L	0.00025	1	04/29/25	ejb	04/29/25	acs		0.00010
Arsenic	0.0014 mg/L	0.00055	1	04/29/25	ejb	04/29/25	acs		0.00010
Barium	0.049 mg/L	0.0025	1	04/29/25	ejb	04/29/25	acs		0.00068
Beryllium	0.000078 mg/L	0.00025	1	04/29/25	ejb	04/29/25	acs	J	0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/29/25	ejb	04/29/25	acs		0.000075
Chromium	0.00036 mg/L	0.00025	1	04/29/25	ejb	04/29/25	acs		0.00020
Cobalt	0.00012 mg/L	0.00052	1	04/29/25	ejb	04/29/25	acs	J	0.00010
Lead	0.00063 mg/L	0.00055	1	04/29/25	ejb	04/29/25	acs		0.00010
Molybdenum	0.014 mg/L	0.0012	1	04/29/25	ejb	04/29/25	acs		0.00025
Selenium	0.0014 mg/L	0.00050	1	04/29/25	ejb	04/29/25	acs		0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/29/25	ejb	04/29/25	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T165878

Fluoride	2.5 mg/L	0.20	10	04/23/25	ljs	04/24/25	ljs	N	0.11
Chloride	54 mg/L	1.5	10	04/23/25	ljs	04/24/25	ljs		1.2
Sulfate as SO4	270 mg/L	15	25	04/25/25	ljs	04/26/25	ljs		5.5

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-32 Date Collected: 04/22/25 15:25 Matrix: Ground Water
Sample ID: SG-02 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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WET CHEMISTRY

Analysis Method: SM 2320 B-21

Batch: T165924

Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	85 mg/L	5.0	1	04/24/25	bm	04/24/25	bm	N	0.16
Carbonate Alkalinity as CaCO ₃ at pH 8.2	<0.16 mg/L	5.0	1	04/24/25	bm	04/24/25	bm	N	0.16
Total Alkalinity as CaCO ₃ at pH 4.5	85 mg/L	5.0	1	04/24/25	bm	04/24/25	bm		0.16

Analysis Method: SM 2540 C-20

Batch: T165871

Total Dissolved Solids	560 mg/L	40	4	04/23/25	cdj	04/23/25	cdj		
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Analysis Method: SM 2540 D-20

Batch: T165867

Total Suspended Solids	11 mg/L	4.0	1	04/23/25	cdj	04/23/25	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T166143

pH	8.17 pH Units		1	04/22/25	mj	04/23/25	mj	PH01ae	
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-33 Date Collected: 04/22/25 15:45 Matrix: Ground Water
Sample ID: SG-05 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E

Batch: T166196

Mercury	1.9 ng/L	0.50	1	04/29/25	acs	04/30/25	acs		
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Analysis Method: EPA 200.7 Rev. 4.4

Batch: T166043

Boron	1.2 mg/L	0.0088	1	04/28/25	ejb	04/30/25	cma		0.0051
Calcium	160 mg/L	0.26	1	04/28/25	ejb	04/30/25	cma		0.037
Lithium	0.044 mg/L	0.0025	1	04/28/25	ejb	04/30/25	cma	N	0.0019
Magnesium	33 mg/L	0.10	1	04/28/25	ejb	04/30/25	cma		0.010
Potassium	8.6 mg/L	0.25	1	04/28/25	ejb	04/30/25	cma		0.036
Sodium	45 mg/L	0.12	1	04/28/25	ejb	04/30/25	cma		0.088

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T166043

Antimony	0.00027 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00010
Arsenic	0.0012 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Barium	0.37 mg/L	0.0025	1	04/28/25	ejb	04/29/25	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000075
Chromium	0.00050 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Cobalt	0.00029 mg/L	0.00052	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Lead	0.0011 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Molybdenum	0.0054 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00025
Selenium	0.00022 mg/L	0.00050	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/28/25	ejb	04/29/25	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T165878

Fluoride	1.1 mg/L	0.20	10	04/23/25	ljs	04/24/25	ljs	N	0.11
Chloride	46 mg/L	1.5	10	04/23/25	ljs	04/24/25	ljs		1.2
Sulfate as SO4	240 mg/L	15	25	04/25/25	ljs	04/26/25	ljs		5.5

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-33 Date Collected: 04/22/25 15:45 Matrix: Ground Water
Sample ID: SG-05 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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WET CHEMISTRY

Analysis Method: SM 2320 B-21

Batch: T165924

Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	320 mg/L	5.0	1	04/24/25	bm	04/24/25	bm	N	0.16
Carbonate Alkalinity as CaCO ₃ at pH 8.2	<0.16 mg/L	5.0	1	04/24/25	bm	04/24/25	bm	N	0.16
Total Alkalinity as CaCO ₃ at pH 4.5	320 mg/L	5.0	1	04/24/25	bm	04/24/25	bm		0.16

Analysis Method: SM 2540 C-20

Batch: T165871

Total Dissolved Solids	750 mg/L	40	4	04/23/25	cdj	04/23/25	cdj		
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Analysis Method: SM 2540 D-20

Batch: T165867

Total Suspended Solids	17 mg/L	4.0	1	04/23/25	cdj	04/23/25	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T166143

pH	7.96 pH Units		1	04/22/25	mj	04/23/25	mj	PH01af	
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-34 Date Collected: 04/22/25 16:00 Matrix: Ground Water
Sample ID: SG-07 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E
Batch: T166196

Mercury	1.9 ng/L	0.50	1	04/29/25	acs	04/30/25	acs		
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Analysis Method: EPA 200.7 Rev. 4.4
Batch: T166043

Boron	0.076 mg/L	0.0088	1	04/28/25	ejb	04/30/25	cma		0.0051
Calcium	68 mg/L	0.26	1	04/28/25	ejb	04/30/25	cma		0.037
Lithium	0.0035 mg/L	0.0025	1	04/28/25	ejb	04/30/25	cma	N	0.0019
Magnesium	20 mg/L	0.10	1	04/28/25	ejb	04/30/25	cma		0.010
Potassium	3.3 mg/L	0.25	1	04/28/25	ejb	04/30/25	cma		0.036
Sodium	27 mg/L	0.12	1	04/28/25	ejb	04/30/25	cma		0.088

Analysis Method: EPA 200.8 Rev. 5.4
Batch: T166043

Antimony	0.00013 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Arsenic	0.00091 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs		0.00010
Barium	0.057 mg/L	0.0025	1	04/28/25	ejb	04/29/25	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.000075
Chromium	0.00051 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Cobalt	0.00020 mg/L	0.00052	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Lead	0.00049 mg/L	0.00055	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Molybdenum	0.0017 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00025
Selenium	0.00027 mg/L	0.00050	1	04/28/25	ejb	04/29/25	acs	J	0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/28/25	ejb	04/29/25	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
Batch: T166090

Fluoride	0.16 mg/L	0.020	1	04/28/25	ljs	04/28/25	ljs	N	0.011
Chloride	51 mg/L	1.5	10	04/23/25	ljs	04/24/25	ljs		1.2
Sulfate as SO4	44 mg/L	6.0	10	04/23/25	ljs	04/24/25	ljs		2.2

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-34 Date Collected: 04/22/25 16:00 Matrix: Ground Water
Sample ID: SG-07 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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WET CHEMISTRY

Analysis Method: SM 2320 B-21

Batch: T165924

Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	210 mg/L	5.0	1	04/24/25	bm	04/24/25	bm	N	0.16
Carbonate Alkalinity as CaCO ₃ at pH 8.2	6.3 mg/L	5.0	1	04/24/25	bm	04/24/25	bm	N	0.16
Total Alkalinity as CaCO ₃ at pH 4.5	210 mg/L	5.0	1	04/24/25	bm	04/24/25	bm		0.16

Analysis Method: SM 2540 C-20

Batch: T165871

Total Dissolved Solids	360 mg/L	40	4	04/23/25	cdj	04/23/25	cdj		
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Analysis Method: SM 2540 D-20

Batch: T165867

Total Suspended Solids	14 mg/L	4.0	1	04/23/25	cdj	04/23/25	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T166143

pH	8.29 pH Units		1	04/22/25	mj	04/23/25	mj	PH01ag	
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-35 Date Collected: 04/22/25 16:40 Matrix: Ground Water
Sample ID: MW-27 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E
Batch: T166196

Mercury	< ng/L	0.50	1	04/29/25	acs	04/30/25	acs
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-36 Date Collected: 04/21/25 17:15 Matrix: Aqueous
Sample ID: LLHG-TB-04212025 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E

Batch: T166196

Mercury	< ng/L	0.20	1	04/29/25	acs	04/30/25	acs
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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-37 Date Collected: 04/22/25 16:45 Matrix: Aqueous
Sample ID: LLHG-TB-04222025 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 1631E

Batch: T166196

Mercury	< ng/L	0.20	1	04/29/25	acs	04/30/25	acs
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QUALITY CONTROL RESULTS

Trace Project ID: 25D1114

Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T165995

Analysis Description: Mercury, Total, EPA 7470/7471

QC Batch Method: EPA 7470A Prep

Analysis Method: EPA 7470A

METHOD BLANK: T165995-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Mercury	mg/L	<0.00020	0.00020	

LABORATORY CONTROL SAMPLE: T165995-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Mercury	mg/L	0.00200	0.00210	105	80-120	

MATRIX SPIKE / MATRIX SPIKE DUPLICATE: T165995-MSD1

Original: 25D1114-23

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Notes
Mercury	mg/L	0	0.00200	0.00200	0.00200	100	100	76-123	0	20	

Trace Project ID: 25D1114

Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T166193

Analysis Description: Mercury, Total, Low Level

QC Batch Method: EPA 1631E

Analysis Method: EPA 1631E

METHOD BLANK: T166193-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Mercury	ng/L	<0.20	0.20	

METHOD BLANK: T166193-BLK2

Parameter	Units	Blank Result	Reporting Limit	Notes
Mercury	ng/L	<0.20	0.20	

METHOD BLANK: T166193-BLK3

Parameter	Units	Blank Result	Reporting Limit	Notes
Mercury	ng/L	<0.20	0.20	

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LABORATORY CONTROL SAMPLE: T166193-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Mercury	ng/L	5.00	4.24	85	77-123	

MATRIX SPIKE / MATRIX SPIKE DUPLICATE: T166193-MSD1

Original: 25D1114-12

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Notes
Mercury	ng/L	0.697	10.0	11.6	12.2	109	115	71-125	5	24	

MATRIX SPIKE / MATRIX SPIKE DUPLICATE: T166193-MSD2

Original: 25D1114-13

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Notes
Mercury	ng/L	0.308	10.0	9.31	9.30	90	90	71-125	0.1	24	

Trace Project ID: 25D1114

Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T166196

Analysis Description: Mercury, Total, Low Level

QC Batch Method: EPA 1631E

Analysis Method: EPA 1631E

METHOD BLANK: T166196-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Mercury	ng/L	<0.20	0.20	

METHOD BLANK: T166196-BLK2

Parameter	Units	Blank Result	Reporting Limit	Notes
Mercury	ng/L	<0.20	0.20	

METHOD BLANK: T166196-BLK3

Parameter	Units	Blank Result	Reporting Limit	Notes
Mercury	ng/L	<0.20	0.20	

LABORATORY CONTROL SAMPLE: T166196-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Mercury	ng/L	5.00	4.24	85	77-123	

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MATRIX SPIKE / MATRIX SPIKE DUPLICATE: T166196-MSD1

Original: 25D1114-21

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Notes
Mercury	ng/L	0	10.0	9.87	9.78	99	98	71-125	0.9	24	

MATRIX SPIKE / MATRIX SPIKE DUPLICATE: T166196-MSD2

Original: 25D1114-22

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Notes
Mercury	ng/L	0.205	10.0	9.58	9.65	94	94	71-125	0.7	24	

Trace Project ID: 25D1114

Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T166003

Analysis Description: Boron, Total

QC Batch Method: EPA 200.2

Analysis Method: EPA 200.7 Rev. 4.4

METHOD BLANK: T166003-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Boron	mg/L	<0.0088	0.0088	
Calcium	mg/L	<0.26	0.26	
Potassium	mg/L	<0.25	0.25	
Lithium	mg/L	<0.0025	0.0025	
Magnesium	mg/L	<0.10	0.10	
Sodium	mg/L	<0.12	0.12	

LABORATORY CONTROL SAMPLE: T166003-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Boron	mg/L	1.60	1.62	101	85-115	
Calcium	mg/L	16.0	15.6	97	85-115	
Potassium	mg/L	16.0	15.8	99	85-115	
Lithium	mg/L	1.60	1.61	101	85-115	
Magnesium	mg/L	16.0	16.0	100	85-115	
Sodium	mg/L	16.0	15.8	99	85-115	

MATRIX SPIKE: T166003-MS1

Original: 25D1114-04

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Boron	mg/L	1.84	1.60	3.87	127	70-130	
Calcium	mg/L	706	16.0	813	667	70-130	MS09
Potassium	mg/L	18.0	16.0	37.9	124	70-130	
Lithium	mg/L	0.195	1.60	2.09	118	70-130	
Magnesium	mg/L	182	16.0	224	263	70-130	MS09

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MATRIX SPIKE: T166003-MS1 Original: 25D1114-04

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Sodium	mg/L	402	16.0	460	360	70-130	MS09

MATRIX SPIKE: T166003-MS2 Original: 25D1114-02

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Boron	mg/L	4.92	1.60	6.51	99	70-130	
Calcium	mg/L	448	16.0	498	312	70-130	MS09
Potassium	mg/L	14.4	16.0	31.6	108	70-130	
Lithium	mg/L	0.306	1.60	2.10	112	70-130	
Magnesium	mg/L	67.1	16.0	89.3	139	70-130	MS09
Sodium	mg/L	33.4	16.0	50.8	109	70-130	

Trace Project ID: 25D1114

Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T166043

Analysis Description: Calcium, Total

QC Batch Method: EPA 200.2

Analysis Method: EPA 200.7 Rev. 4.4

METHOD BLANK: T166043-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Boron	mg/L	<0.0088	0.0088	
Calcium	mg/L	<0.26	0.26	
Potassium	mg/L	<0.25	0.25	
Lithium	mg/L	<0.0025	0.0025	
Magnesium	mg/L	<0.10	0.10	
Sodium	mg/L	<0.12	0.12	

LABORATORY CONTROL SAMPLE: T166043-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Boron	mg/L	1.60	1.66	104	85-115	
Calcium	mg/L	16.0	15.5	97	85-115	
Potassium	mg/L	16.0	15.6	97	85-115	
Lithium	mg/L	1.60	1.59	100	85-115	
Magnesium	mg/L	16.0	15.8	99	85-115	
Sodium	mg/L	16.0	15.7	98	85-115	

MATRIX SPIKE: T166043-MS1 Original: 25D1114-21

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
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MATRIX SPIKE: T166043-MS1 Original: 25D1114-21

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Boron	mg/L	1.57	1.60	4.60	190	70-130	MS07
Calcium	mg/L	365	16.0	488	769	70-130	MS09
Potassium	mg/L	12.7	16.0	33.0	126	70-130	
Lithium	mg/L	0	1.60	1.99	124	70-130	
Magnesium	mg/L	31.3	16.0	57.7	165	70-130	MS07
Sodium	mg/L	24.7	16.0	47.6	143	70-130	MS07

MATRIX SPIKE: T166043-MS2 Original: 25D1114-22

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Boron	mg/L	8.78	1.60	10.9	133	70-130	MS09
Calcium	mg/L	148	16.0	173	153	70-130	MS09
Potassium	mg/L	4.59	16.0	20.7	100	70-130	
Lithium	mg/L	0	1.60	1.65	103	70-130	
Magnesium	mg/L	39.0	16.0	57.1	113	70-130	
Sodium	mg/L	44.0	16.0	60.3	102	70-130	

Trace Project ID: 25D1114

Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T166138

Analysis Description: Calcium, Total

QC Batch Method: EPA 200.2

Analysis Method: EPA 200.7 Rev. 4.4

METHOD BLANK: T166138-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Boron	mg/L	<0.0088	0.0088	
Calcium	mg/L	<0.26	0.26	
Potassium	mg/L	<0.25	0.25	
Lithium	mg/L	<0.0025	0.0025	
Magnesium	mg/L	<0.10	0.10	
Sodium	mg/L	<0.12	0.12	

LABORATORY CONTROL SAMPLE: T166138-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Boron	mg/L	1.60	1.61	101	85-115	
Calcium	mg/L	16.0	15.0	94	85-115	
Potassium	mg/L	16.0	16.0	100	85-115	
Lithium	mg/L	1.60	1.64	102	85-115	

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LABORATORY CONTROL SAMPLE: T166138-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Magnesium	mg/L	16.0	15.8	99	85-115	
Sodium	mg/L	16.0	16.1	101	85-115	

MATRIX SPIKE: T166138-MS1 Original: **25D1114-32**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Boron	mg/L	2.61	1.60	3.82	75	70-130	
Calcium	mg/L	101	16.0	101	-1	70-130	MS09
Potassium	mg/L	6.73	16.0	21.2	90	70-130	
Lithium	mg/L	0.0455	1.60	1.64	100	70-130	
Magnesium	mg/L	28.0	16.0	39.5	72	70-130	
Sodium	mg/L	26.7	16.0	38.3	73	70-130	

Trace Project ID: 25D1114

Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T166003

Analysis Description: Antimony, Total

QC Batch Method: EPA 200.2

Analysis Method: EPA 200.8 Rev. 5.4

METHOD BLANK: T166003-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Arsenic	mg/L	<0.00055	0.00055	
Barium	mg/L	<0.0025	0.0025	
Beryllium	mg/L	<0.00025	0.00025	
Cadmium	mg/L	<0.00025	0.00025	
Cobalt	mg/L	<0.00052	0.00052	
Chromium	mg/L	<0.00025	0.00025	
Molybdenum	mg/L	<0.0012	0.0012	
Lead	mg/L	<0.00055	0.00055	
Antimony	mg/L	<0.00025	0.00025	
Selenium	mg/L	<0.00050	0.00050	
Thallium	mg/L	<0.00038	0.00038	

LABORATORY CONTROL SAMPLE: T166003-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Arsenic	mg/L	0.100	0.0993	99	85-115	
Barium	mg/L	1.60	1.59	100	85-115	
Beryllium	mg/L	0.200	0.202	101	85-115	

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LABORATORY CONTROL SAMPLE: T166003-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Cadmium	mg/L	0.0500	0.0495	99	85-115	
Cobalt	mg/L	1.60	1.55	97	85-115	
Chromium	mg/L	0.0500	0.0501	100	85-115	
Molybdenum	mg/L	1.60	1.65	103	85-115	
Lead	mg/L	0.100	0.0945	94	85-115	
Antimony	mg/L	0.100	0.105	105	85-115	
Selenium	mg/L	0.100	0.0988	99	85-115	
Thallium	mg/L	0.100	0.0942	94	85-115	

MATRIX SPIKE: T166003-MS1

Original: 25D1114-04

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Arsenic	mg/L	0.00298	0.100	0.107	104	70-130	
Barium	mg/L	0.0707	1.60	1.75	105	70-130	
Beryllium	mg/L	0	0.200	0.237	119	70-130	
Cadmium	mg/L	0	0.0500	0.0455	91	70-130	
Cobalt	mg/L	0.00212	1.60	1.81	113	70-130	
Chromium	mg/L	0.00654	0.0500	0.0687	124	70-130	
Molybdenum	mg/L	0.00366	1.60	1.94	121	70-130	
Lead	mg/L	0	0.100	0.0831	83	70-130	
Antimony	mg/L	0	0.100	0.103	103	70-130	
Selenium	mg/L	0	0.100	0.0932	93	70-130	
Thallium	mg/L	0	0.100	0.0867	87	70-130	

MATRIX SPIKE: T166003-MS2

Original: 25D1114-02

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Arsenic	mg/L	0.00165	0.100	0.109	107	70-130	
Barium	mg/L	0.101	1.60	1.77	104	70-130	
Beryllium	mg/L	0	0.200	0.220	110	70-130	
Cadmium	mg/L	0	0.0500	0.0484	97	70-130	
Cobalt	mg/L	0.000535	1.60	1.74	108	70-130	
Chromium	mg/L	0.00241	0.0500	0.0609	117	70-130	
Molybdenum	mg/L	0.0252	1.60	1.88	116	70-130	
Lead	mg/L	0	0.100	0.0891	89	70-130	
Antimony	mg/L	0	0.100	0.106	106	70-130	
Selenium	mg/L	0	0.100	0.0966	97	70-130	
Thallium	mg/L	0	0.100	0.0912	91	70-130	

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Trace Project ID: 25D1114

Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T166043

Analysis Description: Selenium, Total

QC Batch Method: EPA 200.2

Analysis Method: EPA 200.8 Rev. 5.4

METHOD BLANK: T166043-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Arsenic	mg/L	<0.00055	0.00055	
Barium	mg/L	<0.0025	0.0025	
Beryllium	mg/L	<0.00025	0.00025	
Cadmium	mg/L	<0.00025	0.00025	
Cobalt	mg/L	<0.00052	0.00052	
Chromium	mg/L	<0.00025	0.00025	
Molybdenum	mg/L	<0.0012	0.0012	
Lead	mg/L	<0.00055	0.00055	
Antimony	mg/L	<0.00025	0.00025	
Selenium	mg/L	<0.00050	0.00050	
Thallium	mg/L	<0.00038	0.00038	

LABORATORY CONTROL SAMPLE: T166043-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Arsenic	mg/L	0.100	0.101	101	85-115	
Barium	mg/L	1.60	1.66	103	85-115	
Beryllium	mg/L	0.200	0.187	93	85-115	
Cadmium	mg/L	0.0500	0.0499	100	85-115	
Cobalt	mg/L	1.60	1.55	97	85-115	
Chromium	mg/L	0.0500	0.0471	94	85-115	
Molybdenum	mg/L	1.60	1.67	104	85-115	
Lead	mg/L	0.100	0.0940	94	85-115	
Antimony	mg/L	0.100	0.108	108	85-115	
Selenium	mg/L	0.100	0.0996	100	85-115	
Thallium	mg/L	0.100	0.0929	93	85-115	

MATRIX SPIKE: T166043-MS1

Original: 25D1114-21

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Arsenic	mg/L	0.00374	0.100	0.108	105	70-130	
Barium	mg/L	0.0326	1.60	1.74	107	70-130	
Beryllium	mg/L	0	0.200	0.191	95	70-130	
Cadmium	mg/L	0	0.0500	0.0485	97	70-130	

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MATRIX SPIKE: T166043-MS1 Original: **25D1114-21**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Cobalt	mg/L	0.000921	1.60	1.59	99	70-130	
Chromium	mg/L	0	0.0500	0.0524	105	70-130	
Molybdenum	mg/L	0.0186	1.60	1.82	112	70-130	
Lead	mg/L	0	0.100	0.0878	88	70-130	
Antimony	mg/L	0	0.100	0.110	110	70-130	
Selenium	mg/L	0	0.100	0.0972	97	70-130	
Thallium	mg/L	0	0.100	0.0903	90	70-130	

MATRIX SPIKE: T166043-MS2 Original: **25D1114-22**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Arsenic	mg/L	0	0.100	0.101	101	70-130	
Barium	mg/L	0.404	1.60	2.05	103	70-130	
Beryllium	mg/L	0	0.200	0.190	95	70-130	
Cadmium	mg/L	0	0.0500	0.0488	98	70-130	
Cobalt	mg/L	0.00107	1.60	1.57	98	70-130	
Chromium	mg/L	0	0.0500	0.0488	98	70-130	
Molybdenum	mg/L	0	1.60	1.76	110	70-130	
Lead	mg/L	0	0.100	0.0903	90	70-130	
Antimony	mg/L	0	0.100	0.110	110	70-130	
Selenium	mg/L	0	0.100	0.0954	95	70-130	
Thallium	mg/L	0	0.100	0.0900	90	70-130	

Trace Project ID: 25D1114

Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T166138

QC Batch Method: EPA 200.2

Analysis Description: Selenium, Total

Analysis Method: EPA 200.8 Rev. 5.4

METHOD BLANK: T166138-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Arsenic	mg/L	<0.00055	0.00055	
Barium	mg/L	<0.0025	0.0025	
Beryllium	mg/L	<0.00025	0.00025	
Cadmium	mg/L	<0.00025	0.00025	
Cobalt	mg/L	<0.00052	0.00052	
Chromium	mg/L	<0.00025	0.00025	
Molybdenum	mg/L	<0.0012	0.0012	
Lead	mg/L	<0.00055	0.00055	

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METHOD BLANK: T166138-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Antimony	mg/L	<0.00025	0.00025	
Selenium	mg/L	<0.00050	0.00050	
Thallium	mg/L	<0.00038	0.00038	

LABORATORY CONTROL SAMPLE: T166138-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Arsenic	mg/L	0.100	0.0970	97	85-115	
Barium	mg/L	1.60	1.69	106	85-115	
Beryllium	mg/L	0.200	0.178	89	85-115	
Cadmium	mg/L	0.0500	0.0501	100	85-115	
Cobalt	mg/L	1.60	1.52	95	85-115	
Chromium	mg/L	0.0500	0.0448	90	85-115	
Molybdenum	mg/L	1.60	1.69	106	85-115	
Lead	mg/L	0.100	0.0967	97	85-115	
Antimony	mg/L	0.100	0.109	109	85-115	
Selenium	mg/L	0.100	0.0943	94	85-115	
Thallium	mg/L	0.100	0.0954	95	85-115	

MATRIX SPIKE: T166138-MS1 Original: **25D1114-32**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Arsenic	mg/L	0.00135	0.100	0.0965	95	70-130	
Barium	mg/L	0.0486	1.60	1.64	99	70-130	
Beryllium	mg/L	0	0.200	0.170	85	70-130	
Cadmium	mg/L	0	0.0500	0.0473	95	70-130	
Cobalt	mg/L	0	1.60	1.45	91	70-130	
Chromium	mg/L	0	0.0500	0.0475	95	70-130	
Molybdenum	mg/L	0.0140	1.60	1.68	104	70-130	
Lead	mg/L	0.000625	0.100	0.0885	88	70-130	
Antimony	mg/L	0.000785	0.100	0.106	105	70-130	
Selenium	mg/L	0.00141	0.100	0.0916	90	70-130	
Thallium	mg/L	0	0.100	0.0876	88	70-130	

Trace Project ID: 25D1114

Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T165739

Analysis Description: Chloride

QC Batch Method: IC Prep W

Analysis Method: EPA 300.0 Rev. 2.1

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METHOD BLANK: T165739-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Chloride	mg/L	<0.15	0.15	
Fluoride	mg/L	<0.020	0.020	
Sulfate as SO4	mg/L	<0.60	0.60	

LABORATORY CONTROL SAMPLE: T165739-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Chloride	mg/L	5.00	5.15	103	90-110	
Fluoride	mg/L	1.00	1.09	109	90-110	
Sulfate as SO4	mg/L	5.00	5.03	101	90-110	

Trace Project ID: 25D1114

Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T165878

Analysis Description: Sulfate

QC Batch Method: IC Prep W

Analysis Method: EPA 300.0 Rev. 2.1

METHOD BLANK: T165878-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Chloride	mg/L	<0.15	0.15	
Fluoride	mg/L	<0.020	0.020	
Sulfate as SO4	mg/L	<0.60	0.60	

LABORATORY CONTROL SAMPLE: T165878-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Chloride	mg/L	5.00	5.17	103	90-110	
Fluoride	mg/L	1.00	1.07	107	90-110	
Sulfate as SO4	mg/L	5.00	5.04	101	90-110	

MATRIX SPIKE: T165878-MS1 Original: 25D1114-19

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Chloride	mg/L	31.9	50.0	83.0	102	80-120	
Fluoride	mg/L	0.716	10.0	11.4	107	80-120	
Sulfate as SO4	mg/L	6.76	50.0	58.5	103	80-120	

MATRIX SPIKE: T165878-MS2 Original: 25D1114-20

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
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MATRIX SPIKE: T165878-MS2 Original: **25D1114-20**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Chloride	mg/L	29.2	50.0	80.1	102	80-120	
Fluoride	mg/L	0.286	10.0	10.6	103	80-120	
Sulfate as SO4	mg/L	52.3	50.0	103	102	80-120	

Trace Project ID: 25D1114

Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T166042

Analysis Description: Sulfate

QC Batch Method: IC Prep W

Analysis Method: EPA 300.0 Rev. 2.1

METHOD BLANK: T166042-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Sulfate as SO4	mg/L	<1.0	1.0	

LABORATORY CONTROL SAMPLE: T166042-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Sulfate as SO4	mg/L	5.00	4.99	100	90-110	

Trace Project ID: 25D1114

Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T166090

Analysis Description: Fluoride

QC Batch Method: IC Prep W

Analysis Method: EPA 300.0 Rev. 2.1

METHOD BLANK: T166090-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Fluoride	mg/L	<0.020	0.020	

LABORATORY CONTROL SAMPLE: T166090-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Fluoride	mg/L	1.00	1.09	109	90-110	

Trace Project ID: 25D1114

Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T165734

Analysis Description: Alkalinity, Bicarbonate

QC Batch Method: SM 2320 B-21

Analysis Method: SM 2320 B-21

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LABORATORY CONTROL SAMPLE: T165734-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	mg/L	100	93.2	93	88-112	
Carbonate Alkalinity as CaCO ₃ at pH 8.2	mg/L	100	93.2	93	88-112	
Total Alkalinity as CaCO ₃ at pH 4.5	mg/L	100	93.2	93	88-112	

SAMPLE DUPLICATE: T165734-DUP1

Original: 25D1114-11

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Notes
Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	mg/L	54.6	55.2	1	20	
Carbonate Alkalinity as CaCO ₃ at pH 8.2	mg/L	43.3	43.0	0.6	20	
Total Alkalinity as CaCO ₃ at pH 4.5	mg/L	97.9	98.2	0.3	20	

Trace Project ID: 25D1114

Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T165815

Analysis Description: Alkalinity, Carbonate

QC Batch Method: SM 2320 B-21

Analysis Method: SM 2320 B-21

LABORATORY CONTROL SAMPLE: T165815-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	mg/L	100	90.2	90	88-112	
Carbonate Alkalinity as CaCO ₃ at pH 8.2	mg/L	100	90.2	90	88-112	
Total Alkalinity as CaCO ₃ at pH 4.5	mg/L	100	90.2	90	88-112	

Trace Project ID: 25D1114

Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T165924

Analysis Description: Alkalinity, Bicarbonate

QC Batch Method: SM 2320 B-21

Analysis Method: SM 2320 B-21

LABORATORY CONTROL SAMPLE: T165924-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	mg/L	100	91.4	91	88-112	
Carbonate Alkalinity as CaCO ₃ at pH 8.2	mg/L	100	91.4	91	88-112	

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LABORATORY CONTROL SAMPLE: T165924-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Total Alkalinity as CaCO ₃ at pH 4.5	mg/L	100	91.4	91	88-112	

SAMPLE DUPLICATE: T165924-DUP1

Original: 25D1114-25

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Notes
Bicarbonate Alkalinity as CaCO ₃ at pH 4.5	mg/L	124	126	1	20	
Carbonate Alkalinity as CaCO ₃ at pH 8.2	mg/L	0	<10		20	
Total Alkalinity as CaCO ₃ at pH 4.5	mg/L	124	126	1	20	

Trace Project ID: 25D1114

Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T165799

Analysis Description: Total Dissolved Solids

QC Batch Method: SM 2540 C-20

Analysis Method: SM 2540 C-20

METHOD BLANK: T165799-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Total Dissolved Solids	mg/L	3.00	10	J

LABORATORY CONTROL SAMPLE: T165799-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Total Dissolved Solids	mg/L	500	492	98	80-120	

SAMPLE DUPLICATE: T165799-DUP1

Original: 25D1114-01

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Notes
Total Dissolved Solids	mg/L	2010	2090	4	10	

Trace Project ID: 25D1114

Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T165871

Analysis Description: Total Dissolved Solids

QC Batch Method: SM 2540 C-20

Analysis Method: SM 2540 C-20

METHOD BLANK: T165871-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes

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METHOD BLANK: T165871-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Total Dissolved Solids	mg/L	<10	10	

LABORATORY CONTROL SAMPLE: T165871-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Total Dissolved Solids	mg/L	500	486	97	80-120	

Trace Project ID: 25D1114

Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T165796

Analysis Description: Total Suspended Solids

QC Batch Method: SM 2540 D-20

Analysis Method: SM 2540 D-20

METHOD BLANK: T165796-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Total Suspended Solids	mg/L	<4.0	4.0	

LABORATORY CONTROL SAMPLE: T165796-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Total Suspended Solids	mg/L	100	94.0	94	85-115	

SAMPLE DUPLICATE: T165796-DUP1

Original: 25D1114-16

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Notes
Total Suspended Solids	mg/L	0	<10		10	

Trace Project ID: 25D1114

Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T165867

Analysis Description: Total Suspended Solids

QC Batch Method: SM 2540 D-20

Analysis Method: SM 2540 D-20

METHOD BLANK: T165867-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Total Suspended Solids	mg/L	<4.0	4.0	

LABORATORY CONTROL SAMPLE: T165867-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes

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LABORATORY CONTROL SAMPLE: T165867-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Total Suspended Solids	mg/L	100	100	100	85-115	

Trace Project ID: 25D1114

Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T165869

Analysis Description: Total Suspended Solids

QC Batch Method: SM 2540 D-20

Analysis Method: SM 2540 D-20

METHOD BLANK: T165869-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Total Suspended Solids	mg/L	<4.0	4.0	

LABORATORY CONTROL SAMPLE: T165869-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Total Suspended Solids	mg/L	100	100	100	85-115	

SAMPLE DUPLICATE: T165869-DUP1

Original: 25D1114-30

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Notes
Total Suspended Solids	mg/L	161	161	0	10	

Trace Project ID: 25D1114

Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T165783

Analysis Description: pH, SM 4500

QC Batch Method: *** DEFAULT PREP ***

Analysis Method: SM 4500-H+ B-11

SAMPLE DUPLICATE: T165783-DUP1

Original: 25D1114-01

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Notes
pH	pH Units	7.22	7.19	0.4	20	H04, PH01a

Trace Project ID: 25D1114

Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T166143

Analysis Description: pH, SM 4500

QC Batch Method: *** DEFAULT PREP ***

Analysis Method: SM 4500-H+ B-11

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SAMPLE DUPLICATE: T166143-DUP1 Original: 25D1114-19

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Notes
pH	pH Units	8.72	8.71	0.1	20	PH01r

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AN EXPLANATION OF TERMS AND SYMBOLS WHICH MAY OCCUR IN THIS REPORT

DEFINITIONS

LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MS	Matrix Spike
MSD	Matrix Spike Duplicate
RPD	Relative Percent Difference
DUP	Matrix Duplicate
LOQ	Limit of Quantitation
LOD	Limit of Detection
TIC	Tentatively Identified Compound
<, ND or U	Indicates the compound was analyzed for but not detected
*	Indicates a result that exceeds its associated MCL or Surrogate control limits
N	Indicates that the compound has not been evaluated by NELAC
NA	Indicates that the compound is not available.

NOTE: Samples for volatiles that have been extracted with a water miscible solvent were corrected for the total volume of the solvent/water mixture.
Solid matrices Method Blanks are at 100% solids as such results are the same wet or dry.

DATA QUALIFIERS

Trace ID: 25D1114-01

Analysis: SM 4500-H+ B-11

pH	Note H04 : The sample was received and, therefore, analyzed beyond the established EPA hold time. The result must be considered estimated.
pH	Note PH01 : The pH was analyzed at 11:11

Trace ID: 25D1114-02

Analysis: SM 4500-H+ B-11

pH	Note H04 : The sample was received and, therefore, analyzed beyond the established EPA hold time. The result must be considered estimated.
pH	Note PH01b : The pH was analyzed at 11:13

Trace ID: 25D1114-03

Analysis: SM 4500-H+ B-11

pH	Note H04 : The sample was received and, therefore, analyzed beyond the established EPA hold time. The result must be considered estimated.
pH	Note PH01c : The pH was analyzed at 11:14

Trace ID: 25D1114-04

Analysis: EPA 200.8 Rev. 5.4

Lead	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
------	---

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Analysis: SM 4500-H+ B-11

pH Note H02 : The sample result and reporting limit must be considered estimated. The analysis was performed beyond the analyte EPA established hold time .

pH Note PH01d : The pH was analyzed at 11:15

Trace ID: 25D1114-05

Analysis: SM 4500-H+ B-11

pH Note PH01e : The pH was analyzed at 11:16

Trace ID: 25D1114-06

Analysis: SM 4500-H+ B-11

pH Note PH01f : The pH was analyzed at 11:17

Trace ID: 25D1114-07

Analysis: SM 4500-H+ B-11

pH Note PH01g : The pH was analyzed at 11:18

Trace ID: 25D1114-08

Analysis: SM 4500-H+ B-11

pH Note PH01h : The pH was analyzed at 11:19

Trace ID: 25D1114-09

Analysis: SM 4500-H+ B-11

pH Note H02 : The sample result and reporting limit must be considered estimated. The analysis was performed beyond the analyte EPA established hold time .

pH Note PH01i : The pH was analyzed at 11:20

Trace ID: 25D1114-10

Analysis: SM 4500-H+ B-11

pH Note H02 : The sample result and reporting limit must be considered estimated. The analysis was performed beyond the analyte EPA established hold time .

pH Note PH01j : The pH was analyzed at 11:21

Trace ID: 25D1114-11

Analysis: SM 4500-H+ B-11

pH Note H02 : The sample result and reporting limit must be considered estimated. The analysis was performed beyond the analyte EPA established hold time .

pH Note PH01k : The pH was analyzed at 11:22

Trace ID: 25D1114-12

Analysis: SM 4500-H+ B-11

pH Note H02 : The sample result and reporting limit must be considered estimated. The analysis was performed beyond the analyte EPA established hold time .

CERTIFICATE OF ANALYSIS

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pH	Note PH01l : The pH was analyzed at 11:23
----	---

Trace ID: 25D1114-13

Analysis: SM 4500-H+ B-11

pH	Note PH01m : The pH was analyzed at 11:24
----	---

Trace ID: 25D1114-14

Analysis: SM 4500-H+ B-11

pH	Note PH01n : The pH was analyzed at 11:25
----	---

Trace ID: 25D1114-15

Analysis: SM 4500-H+ B-11

pH	Note PH01o : The pH was analyzed at 11:26
----	---

Trace ID: 25D1114-16

Analysis: SM 4500-H+ B-11

pH	Note PH01p : The pH was analyzed at 11:27
----	---

Trace ID: 25D1114-19

Analysis: SM 4500-H+ B-11

pH	Note H04 : The sample was received and, therefore, analyzed beyond the established EPA hold time. The result must be considered estimated.
----	--

pH	Note PH01q : The pH was analyzed at 9:38
----	--

Trace ID: 25D1114-20

Analysis: SM 4500-H+ B-11

pH	Note H04 : The sample was received and, therefore, analyzed beyond the established EPA hold time. The result must be considered estimated.
----	--

pH	Note PH01s : The pH was analyzed at 9:42
----	--

Trace ID: 25D1114-21

Analysis: EPA 200.7 Rev. 4.4

Boron	Note MS07 : The MS recovery was out of control. The result for this analyte, in the non-spiked version of the sample, must be considered estimated.
-------	---

Magnesium	Note MS07 : The MS recovery was out of control. The result for this analyte, in the non-spiked version of the sample, must be considered estimated.
-----------	---

Sodium	Note MS07 : The MS recovery was out of control. The result for this analyte, in the non-spiked version of the sample, must be considered estimated.
--------	---

Analysis: SM 4500-H+ B-11

pH	Note H04 : The sample was received and, therefore, analyzed beyond the established EPA hold time. The result must be considered estimated.
----	--

pH	Note PH01t : The pH was analyzed at 9:44
----	--

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Trace ID: 25D1114-22

Analysis: SM 4500-H+ B-11

pH	Note H04 : The sample was received and, therefore, analyzed beyond the established EPA hold time. The result must be considered estimated.
----	--

pH	Note PH01u : The pH was analyzed at 9:45
----	--

Trace ID: 25D1114-23

Analysis: SM 4500-H+ B-11

pH	Note H04 : The sample was received and, therefore, analyzed beyond the established EPA hold time. The result must be considered estimated.
----	--

pH	Note PH01v : The pH was analyzed at 9:46
----	--

Trace ID: 25D1114-24

Analysis: SM 4500-H+ B-11

pH	Note H04 : The sample was received and, therefore, analyzed beyond the established EPA hold time. The result must be considered estimated.
----	--

pH	Note PH01w : The pH was analyzed at 9:48
----	--

Trace ID: 25D1114-25

Analysis: SM 4500-H+ B-11

pH	Note H04 : The sample was received and, therefore, analyzed beyond the established EPA hold time. The result must be considered estimated.
----	--

pH	Note PH01x : The pH was analyzed at 9:49
----	--

Trace ID: 25D1114-26

Analysis: SM 4500-H+ B-11

pH	Note H04 : The sample was received and, therefore, analyzed beyond the established EPA hold time. The result must be considered estimated.
----	--

pH	Note PH01y : The pH was analyzed at 9:50
----	--

Trace ID: 25D1114-27

Analysis: SM 4500-H+ B-11

pH	Note H04 : The sample was received and, therefore, analyzed beyond the established EPA hold time. The result must be considered estimated.
----	--

pH	Note PH01z : The pH was analyzed at 9:51
----	--

Trace ID: 25D1114-28

Analysis: SM 4500-H+ B-11

pH	Note H04 : The sample was received and, therefore, analyzed beyond the established EPA hold time. The result must be considered estimated.
----	--

pH	Note PH01aa : The pH was analyzed at 9:52
----	---

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Trace ID: 25D1114-29

Analysis: SM 4500-H+ B-11

pH	Note H04 : The sample was received and, therefore, analyzed beyond the established EPA hold time. The result must be considered estimated.
pH	Note PH01ab : The pH was analyzed at 9:53

Trace ID: 25D1114-30

Analysis: SM 4500-H+ B-11

pH	Note H04 : The sample was received and, therefore, analyzed beyond the established EPA hold time. The result must be considered estimated.
pH	Note PH01ac : The pH was analyzed at 9:55

Trace ID: 25D1114-31

Analysis: SM 4500-H+ B-11

pH	Note PH01ad : The pH was analyzed at 9:56
----	---

Trace ID: 25D1114-32

Analysis: SM 4500-H+ B-11

pH	Note PH01ae : The pH was analyzed at 9:57
----	---

Trace ID: 25D1114-33

Analysis: SM 4500-H+ B-11

pH	Note PH01af : The pH was analyzed at 9:58
----	---

Trace ID: 25D1114-34

Analysis: SM 4500-H+ B-11

pH	Note PH01ag : The pH was analyzed at 9:59
----	---

Trace ID: T165783-DUP1

Analysis: SM 4500-H+ B-11

pH	Note H04 : The sample was received and, therefore, analyzed beyond the established EPA hold time. The result must be considered estimated.
pH	Note PH01a : The pH was analyzed at 11:12

Trace ID: T166003-MS1

Analysis: EPA 200.7 Rev. 4.4

Calcium	Note MS09 : The MS recovery was out of control. Because the background concentration of this analyte is greater than 4X the spike amount, no data require qualification.
Magnesium	Note MS09 : The MS recovery was out of control. Because the background concentration of this analyte is greater than 4X the spike amount, no data require qualification.

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Sodium

Note MS09 : The MS recovery was out of control. Because the background concentration of this analyte is greater than 4X the spike amount, no data require qualification.

Trace ID: T166003-MS2

Analysis: EPA 200.7 Rev. 4.4

Calcium

Note MS09 : The MS recovery was out of control. Because the background concentration of this analyte is greater than 4X the spike amount, no data require qualification.

Magnesium

Note MS09 : The MS recovery was out of control. Because the background concentration of this analyte is greater than 4X the spike amount, no data require qualification.

Trace ID: T166043-MS1

Analysis: EPA 200.7 Rev. 4.4

Boron

Note MS07 : The MS recovery was out of control. The result for this analyte, in the non-spiked version of the sample, must be considered estimated.

Calcium

Note MS09 : The MS recovery was out of control. Because the background concentration of this analyte is greater than 4X the spike amount, no data require qualification.

Magnesium

Note MS07 : The MS recovery was out of control. The result for this analyte, in the non-spiked version of the sample, must be considered estimated.

Sodium

Note MS07 : The MS recovery was out of control. The result for this analyte, in the non-spiked version of the sample, must be considered estimated.

Trace ID: T166043-MS2

Analysis: EPA 200.7 Rev. 4.4

Boron

Note MS09 : The MS recovery was out of control. Because the background concentration of this analyte is greater than 4X the spike amount, no data require qualification.

Calcium

Note MS09 : The MS recovery was out of control. Because the background concentration of this analyte is greater than 4X the spike amount, no data require qualification.

Trace ID: T166138-MS1

Analysis: EPA 200.7 Rev. 4.4

Calcium

Note MS09 : The MS recovery was out of control. Because the background concentration of this analyte is greater than 4X the spike amount, no data require qualification.

Trace ID: T166143-DUP1

Analysis: SM 4500-H+ B-11

pH

Note PH01r : The pH was analyzed at 9:40

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2241 Black Creek Road
Muskegon, MI 49444-2673



231-773-5998 Phone
888-979-4469 Fax
www.trace-labs.com



CHAIN-OF-CUSTODY RECORD

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Muskegon, MI 49444-2673
Phone 231.773.5998
Fax 888.979.4469
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Page 1 of 2
Trace ID No.
25D1114

Report Results To:

Bill To:

Trace Use:

Company Name: Andrew Byks Molly Reeves	PO #: 10337505-006
Report To: HDR Michigan	Contact Name: Lara Zawaden
Mailing Address: 1000 Oakbrook Drive, Suite 200	Billing Address (if different):
City, State, Zip Code: Ann Arbor, MI 48104	City, State, Zip Code:
Office Phone:	Phone Number:
Email Address: andrew_byks@hadrinc.com	Billing Email Address:

Logged By: AM
Checked By: MJ
Soil Volatiles Preserved (circle if applicable): MeOH Low Level Lab
Sampling Time:

Turnaround Requirements:

Matrix Key:

☒ Standard, 5-10 Days
☐ 3 Day*
☐ 1 Day*
S = Soil / Solid
W = Water
SL = Sludge
OI = Oil
WI = Wipes
LW = Liquid Waste
A = Air
D = Drinking Water

*Results provided end of business day, requires prior approval.

Project Name: Grand Haven Harbor Island		Sampled By: AS/FDR	
Trace No.	Date Collected	Time Collected	Client Sample ID
1	4/19/25	1025	MW-02
2	4/19/25	1300	MW-09
3	4/19/25	1525	MW-33
4	4/20/25	930	MW-30
5	4/20/25	1140	MW-31
6	4/20/25	1335	MW-32
7	4/20/25	1505	MW-11
8	4/20/25	1635	MW-17
9	4/20/25	910	MW-10
10	4/20/25	910	MW-10
Please Sign		Released By: Andrew Byks	Received By: [Signature]
		Date: 4/21/25	Time: 8:02

In executing this Chain of Custody, the client acknowledges the terms as set forth at www.trace-labs.com/terms-of-agreement.

☐ Check this box if you would not like your samples analyzed if received outside of the conditions outlined in the Trace Sample Acceptance Policy at www.trace-labs.com/downloads.

Form 70-Z.1

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Page 2 of 2

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Muskegon, MI 49444-2673
Phone 231.773.5998
Fax 888.979.4469
www.trace-labs.com

Trace ID No.
25D1114

Report Results To:

Bill To:

Trace Use:

Company Name:	HDR Michigan	PO #:	10337505.000
Report To:	Andrew Byks / Mally Reeves	Contact Name:	Lara Zambiden
Mailing Address:	see pg 1	Billing Address (if different):	
City, State, Zip Code:		City, State, Zip Code:	
Office Phone:		Phone Number:	
Email Address:		Billing Email Address:	

Logged By:	CM
Checked By:	MS
Soil Volatiles Preserved (circle if applicable):	
MeOH	Low Level
Lab	
Sampling Time:	

Turnaround Requirements:

Matrix Key:

- ☒ Standard, 5-10 Days
☐ 3 Day*
☐ 1 Day*
 S = Soil / Solid
 W = Water
 SL = Sludge
 OI = Oil
 WI = Wipes
 LW = Liquid Waste
 A = Air
 D = Drinking Water

*Results provided end of business day, requires prior approval.

Project Name:		Crand Haven Harbor Island		Sampled By:		AB/FDR	
Trace No.	Date Collected	Time Collected	Client Sample ID	Metals Field Filtered (Y / N)	Matrix	Number of Containers	Preservation
11	4/20/25	1030	MM-38	N	W	4	2
12	4/20/25	1122	MM-06	N	W	4	2
13	4/20/25	1318	MM-08	N	W	4	2
14	4/20/25	1318	MM-T-08	N	W	4	2
15	4/20/25	1520	MM-01R	N	W	4	2
16	4/20/25	1638	MM-37	N	W	4	2
17	4/19/25	1630	LHG-TB-04192025	-	W	1	2
18	4/20/25	1715	LHG-TB-04202025	-	W	1	2
Please Sign Released By: Andrew Byks Received By: [Signature] Date: 4/21/25 Time: 8:03 Released By: [Signature] Received By: [Signature] Date: [Blank] Time: [Blank]							

Analysis Requested
App III Part 257
App IV Part 257
Part IIS Metals
TSS
Low Level Hg

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Trace ID No.
25D1114

Page 2 of 2

Report Results To:

Company Name: HDR Michigan, Inc
Report To: Andrew Byks / Molly Reeves
Mailing Address: 1000 Oakbrook Drive, Suite 200
City, State, Zip Code: Ann Arbor MI 48104
Office Phone: Cell Phone:
Email Address: andrew.byks@hdrinc.com
Billing Email Address: tara.zawaidan@hdrinc.com

Trace Use:

Logged By: CM
Checked By: MS
Soil Volatiles Preserved (circle if applicable):
MeOH Low Level Lab
Sampling Time:

Turnaround Requirements:

☒ Standard, 5-10 Days
☐ 3 Day*
☐ 1 Day*
Matrix Key:
S = Soil / Solid
W = Water
SL = Sludge
OI = Oil
WI = Wipes
LW = Liquid Waste
A = Air
D = Drinking Water

*Results provided end of business day, requires prior approval.

Project Name: Grand Haven Harbor Island		Sampled By: AS/FDR	
Trace No.	Date Collected	Time Collected	Client Sample ID
29	4/21/25	1520	MMW-10
30	4/21/25	1632	MMW-34
31	4/22/25	1510	SG-04
32	4/22/25	1525	SG-02
33	4/22/25	1545	SG-05
34	4/22/25	1600	SG-01
35	4/22/25	1640	MMW-27
36	4/22/25	1715	LLHG-TB-04212025
37	4/22/25	1645	LLHG-TB-04222025

Metals Field Filtered (Y / N)	Matrix	Number of Containers	Preservation	Analysis Requested	Remarks
N	W	4	2	X	App III Part 257
N	W	4	2	X	App II Part 257
N	W	4	2	X	Part 115 Metals
N	W	4	2	X	Total Suspended Solids
N	W	4	2	X	Low Level Hg

Please Sign		Released By		Received By		Date	
1) Andrew Byks	CM	4/23/25	800	2)	4)	AS	

☐ Check this box if you would not like your samples analyzed if received outside of the conditions outlined in the Trace Sample Acceptance Policy at www.trace-labs.com/downloads. Form 70-Z-1

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25D1114

HDR Michigan Inc.

Project Manager: Jon Mink

Sample Log In Checklist

Date: 4/21/25	Original Observation	Corrected Temperature	IR-9 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	IR-13 (CF: 0.0°C)	SR1 (CF: -0.4°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 9:00									
Initials: MJ									
Package Description: Cooler									
Package Temp °C	0.0	0.0	/	/	/	/	/	/	/
Representative Sample Temp °C	4.1	4.1	/	/	/	/	/	/	/

Sample Receipt

Yes No

- ☒ ☐ Received on ice or other coolant
☒ ☐ Ice still present upon receipt
☐ ☒ Custody seals present
☐ Trace Courier ☒ Client Drop-off
☐ Yes ☐ No Custody seals intact (if applicable)
☐ UPS ☐ Fed Ex ☐ US Mail ☐ Other

Sample Condition

Yes No N/A

- ☒ ☐ ☐ All sample containers arrived unbroken and labeled
☒ ☐ ☐ Sufficient sample to run requested analyses
☒ ☐ ☐ Correct chemical preservative added to samples
☐ ☒ ☐ Samples preserved at Trace
☒ ☐ ☐ Chemical preservation verified, check EMD pH test strip used (if applicable)
☒ pH 0-2.5 (Lot: HC311850) ☐ pH 11.0-13.0 (Lot: HC022540) ☐ Other
☐ ☐ ☒ Air bubbles absent from VOAs

Chain of Custody (COC)

Yes No

- ☒ ☐ All bottle labels agree with COC
☒ ☐ COC filled out properly
☒ ☐ COC signed by client

Notes:

MW-09
MW-02
MW-31
MUT-08
LLHg-TB-04192025

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www.trace-labs.com

25D1114

HDR Michigan Inc.

Project Manager: Jon Mink

Sample Log In Checklist

Date: 4/21/25	Original Observation	Corrected Temperature	IR-9 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	IR-13 (CF: 0.0°C)	SR1 (CF: -0.4°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 9:00									
Initials: MJ									
Package Description: Cooler									
Package Temp °C	0.0	0.0							
Representative Sample Temp °C	3.3	3.3							

Sample Receipt

Yes	No	
☒	☐	Received on ice or other coolant
☒	☐	Ice still present upon receipt
☐	☒	Custody seals present
☐	☒	Trace Courier
☒		Client Drop-off
☐	☐	Yes
☐	☐	No
☐	☐	Custody seals intact (if applicable)
☐	☐	UPS
☐	☐	Fed Ex
☐	☐	US Mail
☐	☐	Other

Sample Condition

Yes	No	N/A	
☒	☐	☐	All sample containers arrived unbroken and labeled
☒	☐	☐	Sufficient sample to run requested analyses
☒	☐	☐	Correct chemical preservative added to samples
☒	☐	☐	Samples preserved at Trace
☒	☐	☐	Chemical preservation verified, check EMD pH test strip used (if applicable)
			☒ pH 0-2.5 (Lot: HC311850)
			☐ pH 11.0-13.0 (Lot: HC022540)
			☐ Other
☐	☐	☒	Air bubbles absent from VOAs

Chain of Custody (COC)

Yes	No	
☒	☐	All bottle labels agree with COC
☒	☐	COC filled out properly
☒	☐	COC signed by client

Notes:

NW-32

NW-11

MW-01R

MW-37

LLHg-TB-04202025

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25D1114

HDR Michigan Inc.

Project Manager: Jon Mink

Sample Log In Checklist

Date: 4/21/25	Original Observation	Corrected Temperature	IR-9 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	IR-13 (CF: 0.0°C)	SR1 (CF: -0.4°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 9:00									
Initials: MJ									
Package Description: Cooler									
Package Temp °C	0.0	0.0							
Representative Sample Temp °C	3.9	3.9							

Sample Receipt

Yes No

☒ ☐ Received on ice or other coolant

☒ ☐ Ice still present upon receipt

☐ ☒ Custody seals present

☐ Trace Courier ☒ Client Drop-off

☐ Yes ☐ No Custody seals intact (if applicable)

☐ UPS ☐ Fed Ex ☐ US Mail ☐ Other

Sample Condition

Yes No N/A

☒ ☐ ☐ All sample containers arrived unbroken and labeled

☒ ☐ ☐ Sufficient sample to run requested analyses

☒ ☐ ☐ Correct chemical preservative added to samples

☐ ☒ ☐ Samples preserved at Trace

☒ ☐ ☐ Chemical preservation verified, check EMD pH test strip used (if applicable)

☒ pH 0-2.5 (Lot: HC311850) ☐ pH 11.0-13.0 (Lot: HC022540) ☐ Other

☐ ☐ ☒ Air bubbles absent from VOAs

Chain of Custody (COC)

Yes No

☒ ☐ All bottle labels agree with COC

☒ ☐ COC filled out properly

☒ ☐ COC signed by client

Notes:

MW-17

MW-38

MW-33

MW-30

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25D1114

HDR Michigan Inc.

Project Manager: Jon Mink

Sample Log In Checklist

Date: 4/21/24	Original Observation	Corrected Temperature	IR-9 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	IR-13 (CF: 0.0°C)	SR1 (CF: -0.4°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 9:00									
Initials: MJ									
Package Description: Cooler									
Package Temp °C	0.0	0.0							
Representative Sample Temp °C	4.3	4.3							

Sample Receipt

Yes No

☒ ☐ Received on ice or other coolant

☒ ☐ Ice still present upon receipt

☐ ☒ Custody seals present

☐ Trace Courier ☒ Client Drop-off

☐ Yes ☐ No Custody seals intact (if applicable)

☐ UPS ☐ Fed Ex ☐ US Mail ☐ Other

Sample Condition

Yes No N/A

☒ ☐ ☐ All sample containers arrived unbroken and labeled

☒ ☐ ☐ Sufficient sample to run requested analyses

☒ ☐ ☐ Correct chemical preservative added to samples

☐ ☒ ☐ Samples preserved at Trace

☒ ☐ ☐ Chemical preservation verified, check EMD pH test strip used (if applicable)

☒ pH 0-2.5 (Lot: HC311850)

☐ pH 11.0-13.0 (Lot: HC022540)

☐ Other

☐ ☐ ☒ Air bubbles absent from VOAs

Chain of Custody (COC)

Yes No

☒ ☐ All bottle labels agree with COC

☒ ☐ COC filled out properly

☒ ☐ COC signed by client

Notes:

MWF-10

MW-10

MW-08

MW-06

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25D1114

HDR Michigan Inc.
Project Manager: Jon Mink

Sample Log In Checklist

Date: 4/23/25	Original Observation	Corrected Temperature	IR-9 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	IR-13 (CF: 0.0°C)	SR1 (CF: -0.4°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 9:00									
Initials: MJ									
Package Description: Cooler									
Package Temp °C	0.0	0.0							
Representative Sample Temp °C	8.0	8.0							

Sample Receipt

Yes No

☒ ☐ Received on ice or other coolant

☒ ☐ Ice still present upon receipt

☐ ☒ Custody seals present

☐ Trace Courier ☒ Client Drop-off

☐ Yes ☐ No Custody seals intact (if applicable)

☐ UPS ☐ Fed Ex ☐ US Mail ☐ Other

Sample Condition

Yes No N/A

☒ ☐ ☐ All sample containers arrived unbroken and labeled

☒ ☐ ☐ Sufficient sample to run requested analyses

☒ ☐ ☐ Correct chemical preservative added to samples

☐ ☒ ☐ Samples preserved at Trace

☒ ☐ ☐ Chemical preservation verified, check EMD pH test strip used (if applicable)

☐ ☐ ☒ pH 0-2.5 (Lot: HC311850) ☐ pH 11.0-13.0 (Lot: HC022540) ☐ Other

☐ ☐ ☒ Air bubbles absent from VOAs

Chain of Custody (COC)

Yes No

☒ ☐ All bottle labels agree with COC

☒ ☐ COC filled out properly

☒ ☐ COC signed by client

Notes:

SG-02
MW-27
MW-16
MW-34
LLHg-TB-04212025

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25D1114

HDR Michigan Inc.
Project Manager: Jon Mink

Sample Log In Checklist

Date: 4/23/25	Original Observation	Corrected Temperature	IR-9 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	IR-13 (CF: 0.0°C)	SR1 (CF: -0.4°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 9:00									
Initials: MJ									
Package Description: Cooler									
Package Temp °C	0.0	0.0							
Representative Sample Temp °C	7.4	7.4							

Sample Receipt

Yes	No	
☒	☐	Received on ice or other coolant
☒	☐	Ice still present upon receipt
☐	☒	Custody seals present
☐	☒	Trace Courier
☐	☒	Client Drop-off
☐	☐	Yes
☐	☐	No
☐	☐	UPS
☐	☐	Fed Ex
☐	☐	US Mail
☐	☐	Other

Sample Condition

Yes	No	N/A	
☒	☐	☐	All sample containers arrived unbroken and labeled
☒	☐	☐	Sufficient sample to run requested analyses
☒	☐	☐	Correct chemical preservative added to samples
☐	☒	☐	Samples preserved at Trace
☒	☐	☐	Chemical preservation verified, check EMD pH test strip used (if applicable)
☐	☐	☒	pH 0-2.5 (Lot: HC311850)
☐	☐	☐	pH 11.0-13.0 (Lot: HC022540)
☐	☐	☐	Other
☐	☐	☒	Air bubbles absent from VOAs

Chain of Custody (COC)

Yes	No	
☒	☐	All bottle labels agree with COC
☒	☐	COC filled out properly
☒	☐	COC signed by client

Notes:

MW-12

MW-18

MW-04

MW-03

Form 70-A.57
Effective 2/20/25

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25D1114

HDR Michigan Inc.
Project Manager: Jon Mink

Sample Log In Checklist

Date: 4/23/25	Original Observation	Corrected Temperature	IR-9 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	IR-13 (CF: 0.0°C)	SR1 (CF: -0.4°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 900									
Initials: CM									
Package Description: Cooler									
Package Temp °C	0.1	0.1							
Representative Sample Temp °C	7.4	7.4							

Sample Receipt

Yes	No	
☒	☐	Received on ice or other coolant
☒	☐	Ice still present upon receipt
☐	☒	Custody seals present
☒	☐	Trace Courier
☐	☐	Client Drop-off
☐	☐	Yes
☐	☐	No
☐	☐	Custody seals intact (if applicable)
☐	☐	UPS
☐	☐	Fed Ex
☐	☐	US Mail
☐	☐	Other

Sample Condition

Yes	No	N/A	
☒	☐	☐	All sample containers arrived unbroken and labeled
☒	☐	☐	Sufficient sample to run requested analyses
☒	☐	☐	Correct chemical preservative added to samples
☐	☒	☐	Samples preserved at Trace
☒	☐	☐	Chemical preservation verified, check EMD pH test strip used (if applicable)
☐	☐	☐	☐ pH 0-2.5 (Lot: HC311850) ☐ pH 11.0-13.0 (Lot: HC022540) ☐ Other
☐	☐	☒	Air bubbles absent from VOAs

Chain of Custody (COC)

Yes	No	
☒	☐	All bottle labels agree with COC
☒	☐	COC filled out properly
☒	☐	COC signed by client

Notes:

MW-20
MW-36
MW-07
MW-19

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25D1114
HDR Michigan Inc.
Project Manager: Jon Mink

Sample Log In Checklist

Date: 4/23/25	Original Observation	Corrected Temperature	IR-9 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	IR-13 (CF: 0.0°C)	SR1 (CF: -0.4°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 9:00									
Initials: MS									
Package Description: Cooker									
Package Temp °C	0.0	0.0							
Representative Sample Temp °C									

Sample Receipt

Yes	No	
☒	☐	Received on ice or other coolant
☒	☐	Ice still present upon receipt
☐	☒	Custody seals present
☐	☒	Trace Courier
☒		Client Drop-off
☐	☐	Yes
☐	☐	No
☐	☐	Custody seals intact (if applicable)
☐	☐	UPS
☐	☐	Fed Ex
☐	☐	US Mail
☐	☐	Other

Sample Condition

Yes	No	N/A	
☒	☐	☐	All sample containers arrived unbroken and labeled
☒	☐	☐	Sufficient sample to run requested analyses
☒	☐	☐	Correct chemical preservative added to samples
☐	☒	☐	Samples preserved at Trace
☒	☐	☐	Chemical preservation verified, check EMD pH test strip used (if applicable)
			☒ pH 0-2.5 (Lot: HC311850) ☐ pH 11.0-13.0 (Lot: HC022540) ☐ Other
☐	☐	☒	Air bubbles absent from VOAs

Chain of Custody (COC)

Yes	No	
☒	☐	All bottle labels agree with COC
☒	☐	COC filled out properly
☒	☐	COC signed by client

Notes:

SG-05
SG-04R
SG-07
MW-28
LHg-TB-0422025

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May 07, 2025

Ms. Molly Reeves
HDR Michigan Inc.
1000 Oakbrook Dr., Suite 200
Ann Arbor, MI 48104

RE: Trace Project 25D1114
Client Project City of Grand Haven - Harbor Island

Dear Ms. Reeves:

Enclosed are your analytical results. The results of this report relate only to the samples listed in the body of this report.

All reports were examined through Trace's validation process to ensure that requirements for quality and completeness were satisfied. All reported analytical results were obtained in accordance with the methods referenced on the reports. Every practical effort was made to meet the reporting limit specifications for this work, however, some results may have raised reporting limits to correct for percent solids.

If you have questions concerning this report, please contact me at 231.773.5998 or by email at jmink@trace-labs.com.

Sincerely,

A handwritten signature in black ink, appearing to read "Jon Mink".

Jon Mink
Senior Project Manager
Enclosures



Wisconsin Accreditation No. FID: 998044080 / TNI EL V1:2016

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SAMPLE SUMMARY

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID	Sample ID	Matrix	Collected By	Date Collected	Date Received
25D1114-01	MW-02	Ground Water	AB/FDR	04/19/25 10:25	04/21/25 08:03
25D1114-02	MW-09	Ground Water	AB/FDR	04/19/25 13:00	04/21/25 08:03
25D1114-03	MW-33	Ground Water	AB/FDR	04/19/25 15:25	04/21/25 08:03
25D1114-04	MW-30	Ground Water	AB/FDR	04/20/25 09:30	04/21/25 08:03
25D1114-05	MW-31	Ground Water	AB/FDR	04/20/25 11:40	04/21/25 08:03
25D1114-06	MW-32	Ground Water	AB/FDR	04/20/25 13:35	04/21/25 08:03
25D1114-07	MW-11	Ground Water	AB/FDR	04/20/25 15:05	04/21/25 08:03
25D1114-08	MW-17	Ground Water	AB/FDR	04/20/25 16:35	04/21/25 08:03
25D1114-09	MW-10	Ground Water	AB/FDR	04/20/25 09:10	04/21/25 08:03
25D1114-10	MWT-10	Ground Water	AB/FDR	04/20/25 09:10	04/21/25 08:03
25D1114-11	MW-38	Ground Water	AB/FDR	04/20/25 10:30	04/21/25 08:03
25D1114-12	MW-06	Ground Water	AB/FDR	04/20/25 11:22	04/21/25 08:03
25D1114-13	MW-08	Ground Water	AB/FDR	04/20/25 13:18	04/21/25 08:03
25D1114-14	MWT-08	Ground Water	AB/FDR	04/20/25 13:18	04/21/25 08:03
25D1114-15	MW-01R	Ground Water	AB/FDR	04/20/25 15:20	04/21/25 08:03
25D1114-16	MW-37	Ground Water	AB/FDR	04/20/25 16:38	04/21/25 08:03
25D1114-19	MW-36	Ground Water	AB/FDR	04/21/25 09:15	04/23/25 08:00
25D1114-20	MW-20	Ground Water	AB/FDR	04/21/25 10:45	04/23/25 08:00
25D1114-21	MW-19	Ground Water	AB/FDR	04/21/25 12:00	04/23/25 08:00
25D1114-22	MW-07	Ground Water	AB/FDR	04/21/25 13:45	04/23/25 08:00
25D1114-23	MW-27	Ground Water	AB/FDR	04/21/25 15:35	04/23/25 08:00
25D1114-24	MW-28	Ground Water	AB/FDR	04/21/25 17:05	04/23/25 08:00
25D1114-25	MW-18	Ground Water	AB/FDR	04/21/25 09:16	04/23/25 08:00
25D1114-26	MW-03	Ground Water	AB/FDR	04/21/25 11:50	04/23/25 08:00
25D1114-27	MW-04	Ground Water	AB/FDR	04/21/25 13:00	04/23/25 08:00
25D1114-28	MW-12	Ground Water	AB/FDR	04/21/25 14:12	04/23/25 08:00
25D1114-29	MW-16	Ground Water	AB/FDR	04/21/25 15:20	04/23/25 08:00
25D1114-30	MW-34	Ground Water	AB/FDR	04/21/25 16:32	04/23/25 08:00
25D1114-31	SG-04	Ground Water	AB/FDR	04/22/25 15:10	04/23/25 08:00
25D1114-32	SG-02	Ground Water	AB/FDR	04/22/25 15:25	04/23/25 08:00
25D1114-33	SG-05	Ground Water	AB/FDR	04/22/25 15:45	04/23/25 08:00
25D1114-34	SG-07	Ground Water	AB/FDR	04/22/25 16:00	04/23/25 08:00

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-01 Date Collected: 04/19/25 10:25 Matrix: Ground Water
Sample ID: MW-02 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4 Batch: T166003									
Iron	28 mg/L	1.0	20	04/28/25	ejb	04/30/25	cma		0.15
Analysis Method: EPA 200.8 Rev. 5.4 Batch: T166003									
Copper	0.0037 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Nickel	0.042 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00065
Silver	<0.000050 mg/L	0.000050	1	04/28/25	ejb	04/29/25	acs		0.000050
Vanadium	0.0069 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs	MS07	0.00062
Zinc	0.0036 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-02 Date Collected: 04/19/25 13:00 Matrix: Ground Water
Sample ID: MW-09 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
<i>Batch: T166003</i>									
Iron	26 mg/L	0.050	1	04/28/25	ejb	04/30/25	cma		0.0075
Analysis Method: EPA 200.8 Rev. 5.4									
<i>Batch: T166003</i>									
Copper	<0.00020 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Nickel	0.0044 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00065
Silver	<0.000050 mg/L	0.000050	1	04/28/25	ejb	04/29/25	acs		0.000050
Vanadium	<0.00062 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00062
Zinc	0.0045 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-03 Date Collected: 04/19/25 15:25 Matrix: Ground Water
Sample ID: MW-33 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4 Batch: T166003									
Iron	8.9 mg/L	0.050	1	04/28/25	ejb	04/30/25	cma		0.0075
Analysis Method: EPA 200.8 Rev. 5.4 Batch: T166003									
Copper	0.0042 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Nickel	0.028 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00065
Silver	<0.000050 mg/L	0.000050	1	04/28/25	ejb	04/29/25	acs		0.000050
Vanadium	0.00095 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs	J	0.00062
Zinc	0.0092 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-04 Date Collected: 04/20/25 09:30 Matrix: Ground Water
Sample ID: MW-30 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
<i>Batch: T166003</i>									
Iron	17 mg/L	0.50	10	04/28/25	ejb	04/30/25	cma		0.075
Analysis Method: EPA 200.8 Rev. 5.4									
<i>Batch: T166003</i>									
Copper	0.00020 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs	J	0.00020
Nickel	0.0053 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00065
Silver	<0.000050 mg/L	0.000050	1	04/28/25	ejb	04/29/25	acs		0.000050
Vanadium	<0.00062 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs	MS07	0.00062
Zinc	0.0027 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-05 Date Collected: 04/20/25 11:40 Matrix: Ground Water
Sample ID: MW-31 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
<i>Batch: T166003</i>									
Iron	0.15 mg/L	0.050	1	04/28/25	ejb	04/30/25	cma		0.0075
Analysis Method: EPA 200.8 Rev. 5.4									
<i>Batch: T166003</i>									
Copper	<0.00020 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Nickel	0.0014 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00065
Silver	<0.000050 mg/L	0.000050	1	04/28/25	ejb	04/29/25	acs		0.000050
Vanadium	0.00076 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs	J	0.00062
Zinc	0.0016 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-06 Date Collected: 04/20/25 13:35 Matrix: Ground Water
Sample ID: MW-32 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
<i>Batch: T166003</i>									
Iron	15 mg/L	0.050	1	04/28/25	ejb	04/30/25	cma		0.0075
Analysis Method: EPA 200.8 Rev. 5.4									
<i>Batch: T166003</i>									
Copper	<0.00020 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Nickel	0.0019 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00065
Silver	<0.000050 mg/L	0.000050	1	04/28/25	ejb	04/29/25	acs		0.000050
Vanadium	<0.00062 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00062
Zinc	0.0047 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-07 Date Collected: 04/20/25 15:05 Matrix: Ground Water
Sample ID: MW-11 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
<i>Batch: T166003</i>									
Iron	7.6 mg/L	0.050	1	04/28/25	ejb	04/30/25	cma		0.0075
Analysis Method: EPA 200.8 Rev. 5.4									
<i>Batch: T166003</i>									
Copper	<0.00020 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Nickel	0.0013 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00065
Silver	<0.000050 mg/L	0.000050	1	04/28/25	ejb	04/29/25	acs		0.000050
Vanadium	<0.00062 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00062
Zinc	0.0027 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-08 Date Collected: 04/20/25 16:35 Matrix: Ground Water
Sample ID: MW-17 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
Batch: T166003									
Iron	4.8 mg/L	0.050	1	04/28/25	ejb	04/30/25	cma		0.0075
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T166003									
Copper	0.0011 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Nickel	0.0012 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00065
Silver	<0.000050 mg/L	0.000050	1	04/28/25	ejb	04/29/25	acs		0.000050
Vanadium	0.00065 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs	J	0.00062
Zinc	0.0087 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-09 Date Collected: 04/20/25 09:10 Matrix: Ground Water
Sample ID: MW-10 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
Batch: T166003

Iron	7.7 mg/L	0.50	10	04/28/25	ejb	04/30/25	cma		0.075
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Analysis Method: EPA 200.8 Rev. 5.4
Batch: T166003

Copper	<0.00020 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Nickel	0.00079 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs	J	0.00065
Silver	<0.000050 mg/L	0.000050	1	04/28/25	ejb	04/29/25	acs		0.000050
Vanadium	<0.00062 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00062
Zinc	<0.0012 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-10 Date Collected: 04/20/25 09:10 Matrix: Ground Water
Sample ID: MWT-10 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
Batch: T166003

Iron	9.6 mg/L	0.50	10	04/28/25	ejb	04/30/25	cma		0.075
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Analysis Method: EPA 200.8 Rev. 5.4
Batch: T166003

Copper	<0.00020 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Nickel	0.00091 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs	J	0.00065
Silver	<0.000050 mg/L	0.000050	1	04/28/25	ejb	04/29/25	acs		0.000050
Vanadium	0.00073 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs	J	0.00062
Zinc	0.0015 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-11 Date Collected: 04/20/25 10:30 Matrix: Ground Water
Sample ID: MW-38 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4 Batch: T166003									
Iron	0.13 mg/L	0.050	1	04/28/25	ejb	04/30/25	cma		0.0075
Analysis Method: EPA 200.8 Rev. 5.4 Batch: T166003									
Copper	0.0037 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Nickel	0.0038 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00065
Silver	<0.000050 mg/L	0.000050	1	04/28/25	ejb	04/29/25	acs		0.000050
Vanadium	0.014 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00062
Zinc	0.0039 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-12 Date Collected: 04/20/25 11:22 Matrix: Ground Water
Sample ID: MW-06 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
<i>Batch: T166003</i>									
Iron	14 mg/L	0.050	1	04/28/25	ejb	04/30/25	cma		0.0075
Analysis Method: EPA 200.8 Rev. 5.4									
<i>Batch: T166003</i>									
Copper	<0.00020 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Nickel	<0.00065 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00065
Silver	<0.000050 mg/L	0.000050	1	04/28/25	ejb	04/29/25	acs		0.000050
Vanadium	<0.00062 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00062
Zinc	0.0017 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-13 Date Collected: 04/20/25 13:18 Matrix: Ground Water
Sample ID: MW-08 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
<i>Batch: T166003</i>									
Iron	19 mg/L	0.050	1	04/28/25	ejb	04/30/25	cma		0.0075
Analysis Method: EPA 200.8 Rev. 5.4									
<i>Batch: T166003</i>									
Copper	0.00028 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Nickel	0.0030 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00065
Silver	<0.000050 mg/L	0.000050	1	04/28/25	ejb	04/29/25	acs		0.000050
Vanadium	<0.00062 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00062
Zinc	0.0016 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-14 Date Collected: 04/20/25 13:18 Matrix: Ground Water
Sample ID: MWT-08 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
Batch: T166003

Iron	17 mg/L	0.050	1	04/28/25	ejb	04/30/25	cma		0.0075
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Analysis Method: EPA 200.8 Rev. 5.4
Batch: T166003

Copper	<0.00020 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Nickel	0.0022 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00065
Silver	<0.000050 mg/L	0.000050	1	04/28/25	ejb	04/29/25	acs		0.000050
Vanadium	<0.00062 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00062
Zinc	0.0012 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-15 Date Collected: 04/20/25 15:20 Matrix: Ground Water
Sample ID: MW-01R Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
<i>Batch: T166003</i>									
Iron	0.090 mg/L	0.050	1	04/28/25	ejb	04/30/25	cma		0.0075
Analysis Method: EPA 200.8 Rev. 5.4									
<i>Batch: T166003</i>									
Copper	<0.00020 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Nickel	0.0018 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00065
Silver	<0.000050 mg/L	0.000050	1	04/28/25	ejb	04/29/25	acs		0.000050
Vanadium	0.0021 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00062
Zinc	0.0012 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-16 Date Collected: 04/20/25 16:38 Matrix: Ground Water
Sample ID: MW-37 Date Received: 04/21/25 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
Batch: T166003

Iron	1.7 mg/L	0.050	1	04/28/25	ejb	04/30/25	cma		0.0075
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Analysis Method: EPA 200.8 Rev. 5.4
Batch: T166003

Copper	0.0088 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Nickel	0.0029 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00065
Silver	<0.000050 mg/L	0.000050	1	04/28/25	ejb	04/29/25	acs		0.000050
Vanadium	<0.00062 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00062
Zinc	0.0097 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-19 Date Collected: 04/21/25 09:15 Matrix: Ground Water
Sample ID: MW-36 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
Batch: T166003

Iron	1.1 mg/L	0.050	1	04/28/25	ejb	04/30/25	cma		0.0075
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Analysis Method: EPA 200.8 Rev. 5.4
Batch: T166003

Copper	0.0025 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Nickel	0.0056 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00065
Silver	0.000051 mg/L	0.000050	1	04/28/25	ejb	04/29/25	acs		0.000050
Vanadium	0.0037 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00062
Zinc	0.0042 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-20 Date Collected: 04/21/25 10:45 Matrix: Ground Water
Sample ID: MW-20 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
<i>Batch: T166003</i>									
Iron	14 mg/L	0.050	1	04/28/25	ejb	04/30/25	cma		0.0075
Analysis Method: EPA 200.8 Rev. 5.4									
<i>Batch: T166003</i>									
Copper	0.00020 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs	J	0.00020
Nickel	0.0063 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00065
Silver	<0.000050 mg/L	0.000050	1	04/28/25	ejb	04/29/25	acs		0.000050
Vanadium	<0.00062 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00062
Zinc	0.013 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-21 Date Collected: 04/21/25 12:00 Matrix: Ground Water
Sample ID: MW-19 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
Batch: T166043									
Iron	14 mg/L	0.050	1	04/28/25	ejb	04/30/25	cma	MS07	0.0075
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T166043									
Copper	<0.00020 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Nickel	0.0029 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00065
Silver	<0.000050 mg/L	0.000050	1	04/28/25	ejb	04/29/25	acs		0.000050
Vanadium	0.00067 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs	J	0.00062
Zinc	0.0042 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-22 Date Collected: 04/21/25 13:45 Matrix: Ground Water
Sample ID: MW-07 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
<i>Batch: T166043</i>									
Iron	21 mg/L	0.050	1	04/28/25	ejb	04/30/25	cma		0.0075
Analysis Method: EPA 200.8 Rev. 5.4									
<i>Batch: T166043</i>									
Copper	<0.00020 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Nickel	<0.00065 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00065
Silver	<0.000050 mg/L	0.000050	1	04/28/25	ejb	04/29/25	acs		0.000050
Vanadium	0.00077 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs	J	0.00062
Zinc	<0.0012 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-23 Date Collected: 04/21/25 15:35 Matrix: Ground Water
Sample ID: MW-27 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4 Batch: T166043									
Iron	6.4 mg/L	0.050	1	04/28/25	ejb	04/30/25	cma		0.0075
Analysis Method: EPA 200.8 Rev. 5.4 Batch: T166043									
Copper	0.00037 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Nickel	0.00089 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs	J	0.00065
Silver	<0.000050 mg/L	0.000050	1	04/28/25	ejb	04/29/25	acs		0.000050
Vanadium	0.0011 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs	J	0.00062
Zinc	<0.0012 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-24 Date Collected: 04/21/25 17:05 Matrix: Ground Water
Sample ID: MW-28 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
Batch: T166043									
Iron	26 mg/L	0.050	1	04/28/25	ejb	04/30/25	cma		0.0075
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T166043									
Copper	0.0015 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Nickel	0.0073 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00065
Silver	<0.000050 mg/L	0.000050	1	04/28/25	ejb	04/29/25	acs		0.000050
Vanadium	<0.00062 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00062
Zinc	0.11 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-25 Date Collected: 04/21/25 09:16 Matrix: Ground Water
Sample ID: MW-18 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
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METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
Batch: T166043

Iron	5.8 mg/L	0.050	1	04/28/25	ejb	04/30/25	cma		0.0075
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Analysis Method: EPA 200.8 Rev. 5.4
Batch: T166043

Copper	0.00047 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Nickel	0.0056 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00065
Silver	<0.000050 mg/L	0.000050	1	04/28/25	ejb	04/29/25	acs		0.000050
Vanadium	<0.00062 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00062
Zinc	0.048 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-26 Date Collected: 04/21/25 11:50 Matrix: Ground Water
Sample ID: MW-03 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4 Batch: T166043									
Iron	1.2 mg/L	0.50	10	04/28/25	ejb	04/30/25	cma		0.075
Analysis Method: EPA 200.8 Rev. 5.4 Batch: T166043									
Copper	<0.00020 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Nickel	0.0014 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00065
Silver	<0.000050 mg/L	0.000050	1	04/28/25	ejb	04/29/25	acs		0.000050
Vanadium	0.0014 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00062
Zinc	<0.0012 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-27 Date Collected: 04/21/25 13:00 Matrix: Ground Water
Sample ID: MW-04 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
Batch: T166043									
Iron	0.19 mg/L	0.050	1	04/28/25	ejb	04/30/25	cma		0.0075
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T166043									
Copper	0.00099 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Nickel	0.0028 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00065
Silver	<0.000050 mg/L	0.000050	1	04/28/25	ejb	04/29/25	acs		0.000050
Vanadium	0.0011 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs	J	0.00062
Zinc	0.0025 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-28 Date Collected: 04/21/25 14:12 Matrix: Ground Water
Sample ID: MW-12 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4 Batch: T166043									
Iron	0.047 mg/L	0.050	1	04/28/25	ejb	04/30/25	cma	J	0.0075
Analysis Method: EPA 200.8 Rev. 5.4 Batch: T166043									
Copper	0.0022 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Nickel	0.0019 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00065
Silver	<0.000050 mg/L	0.000050	1	04/28/25	ejb	04/29/25	acs		0.000050
Vanadium	0.0010 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs	J	0.00062
Zinc	0.0080 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-29 Date Collected: 04/21/25 15:20 Matrix: Ground Water
Sample ID: MW-16 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
<i>Batch: T166043</i>									
Iron	6.7 mg/L	0.050	1	04/28/25	ejb	04/30/25	cma		0.0075
Analysis Method: EPA 200.8 Rev. 5.4									
<i>Batch: T166043</i>									
Copper	<0.00020 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Nickel	0.0017 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00065
Silver	<0.000050 mg/L	0.000050	1	04/28/25	ejb	04/29/25	acs		0.000050
Vanadium	<0.00062 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00062
Zinc	0.0012 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-30 Date Collected: 04/21/25 16:32 Matrix: Ground Water
Sample ID: MW-34 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4 Batch: T166043									
Iron	69 mg/L	0.050	1	04/28/25	ejb	04/30/25	cma		0.0075
Analysis Method: EPA 200.8 Rev. 5.4 Batch: T166043									
Copper	0.00028 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Nickel	0.012 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00065
Silver	<0.000050 mg/L	0.000050	1	04/28/25	ejb	04/29/25	acs		0.000050
Vanadium	0.0010 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs	J	0.00062
Zinc	0.0026 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-31 Date Collected: 04/22/25 15:10 Matrix: Ground Water
Sample ID: SG-04 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4 Batch: T166043									
Iron	7.0 mg/L	0.50	10	04/28/25	ejb	04/30/25	cma		0.075
Analysis Method: EPA 200.8 Rev. 5.4 Batch: T166043									
Copper	<0.00020 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Nickel	0.013 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00065
Silver	<0.000050 mg/L	0.000050	1	04/28/25	ejb	04/29/25	acs		0.000050
Vanadium	0.00094 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs	J	0.00062
Zinc	<0.0012 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-32 Date Collected: 04/22/25 15:25 Matrix: Ground Water
Sample ID: SG-02 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
Batch: T166138									
Iron	0.10 mg/L	0.050	1	04/29/25	ejb	04/30/25	cma		0.0075
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T166138									
Copper	0.0015 mg/L	0.00025	1	04/29/25	ejb	04/29/25	acs		0.00020
Nickel	0.0021 mg/L	0.0012	1	04/29/25	ejb	04/29/25	acs		0.00065
Silver	<0.000050 mg/L	0.000050	1	04/29/25	ejb	04/29/25	acs		0.000050
Vanadium	0.0012 mg/L	0.0012	1	04/29/25	ejb	04/29/25	acs		0.00062
Zinc	0.0016 mg/L	0.0012	1	04/29/25	ejb	04/29/25	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-33 Date Collected: 04/22/25 15:45 Matrix: Ground Water
Sample ID: SG-05 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4 Batch: T166043									
Iron	1.6 mg/L	0.050	1	04/28/25	ejb	04/30/25	cma		0.0075
Analysis Method: EPA 200.8 Rev. 5.4 Batch: T166043									
Copper	0.00071 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Nickel	0.0024 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00065
Silver	<0.000050 mg/L	0.000050	1	04/28/25	ejb	04/29/25	acs		0.000050
Vanadium	0.0011 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs	J	0.00062
Zinc	0.0031 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 25D1114
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 25D1114-34 Date Collected: 04/22/25 16:00 Matrix: Ground Water
Sample ID: SG-07 Date Received: 04/23/25 08:00

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
Batch: T166043									
Iron	0.32 mg/L	0.050	1	04/28/25	ejb	04/30/25	cma		0.0075
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T166043									
Copper	0.0016 mg/L	0.00025	1	04/28/25	ejb	04/29/25	acs		0.00020
Nickel	0.0012 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.00065
Silver	<0.000050 mg/L	0.000050	1	04/28/25	ejb	04/29/25	acs		0.000050
Vanadium	0.00067 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs	J	0.00062
Zinc	0.0034 mg/L	0.0012	1	04/28/25	ejb	04/29/25	acs		0.0012

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QUALITY CONTROL RESULTS

Trace Project ID: 25D1114

Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T166003

Analysis Description: Iron, Total

QC Batch Method: EPA 200.2

Analysis Method: EPA 200.7 Rev. 4.4

METHOD BLANK: T166003-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Iron	mg/L	<0.050	0.050	

LABORATORY CONTROL SAMPLE: T166003-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Iron	mg/L	16.0	15.9	99	85-115	

MATRIX SPIKE: T166003-MS1 Original: 25D1114-04

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Iron	mg/L	16.6	16.0	37.0	127	70-130	

MATRIX SPIKE: T166003-MS2 Original: 25D1114-02

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Iron	mg/L	26.3	16.0	43.5	108	70-130	

Trace Project ID: 25D1114

Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T166043

Analysis Description: Iron, Total

QC Batch Method: EPA 200.2

Analysis Method: EPA 200.7 Rev. 4.4

METHOD BLANK: T166043-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Iron	mg/L	<0.050	0.050	

LABORATORY CONTROL SAMPLE: T166043-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Iron	mg/L	16.0	15.7	98	85-115	

MATRIX SPIKE: T166043-MS1 Original: 25D1114-21

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
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MATRIX SPIKE: T166043-MS1 Original: 25D1114-21

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Iron	mg/L	13.5	16.0	35.2	135	70-130	MS07

MATRIX SPIKE: T166043-MS2 Original: 25D1114-22

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Iron	mg/L	21.3	16.0	38.0	105	70-130	

Trace Project ID: 25D1114

Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T166138

Analysis Description: Iron, Total

QC Batch Method: EPA 200.2

Analysis Method: EPA 200.7 Rev. 4.4

METHOD BLANK: T166138-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Iron	mg/L	<0.050	0.050	

LABORATORY CONTROL SAMPLE: T166138-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Iron	mg/L	16.0	15.6	98	85-115	

MATRIX SPIKE: T166138-MS1 Original: 25D1114-32

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Iron	mg/L	0.101	16.0	15.1	94	70-130	

Trace Project ID: 25D1114

Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T166003

Analysis Description: Vanadium, Total

QC Batch Method: EPA 200.2

Analysis Method: EPA 200.8 Rev. 5.4

METHOD BLANK: T166003-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Silver	mg/L	<0.000050	0.000050	
Copper	mg/L	<0.00025	0.00025	
Nickel	mg/L	<0.0012	0.0012	
Vanadium	mg/L	<0.0012	0.0012	
Zinc	mg/L	<0.0012	0.0012	

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LABORATORY CONTROL SAMPLE: T166003-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Silver	mg/L	0.0500	0.0487	97	85-115	
Copper	mg/L	1.60	1.50	94	85-115	
Nickel	mg/L	1.60	1.55	97	85-115	
Vanadium	mg/L	1.60	1.62	101	85-115	
Zinc	mg/L	1.60	1.55	97	85-115	

MATRIX SPIKE: T166003-MS1 Original: **25D1114-04**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Silver	mg/L	0	0.0500	0.0456	91	70-130	
Copper	mg/L	0	1.60	1.53	96	70-130	
Nickel	mg/L	0.00531	1.60	1.67	104	70-130	
Vanadium	mg/L	0	1.60	2.17	136	70-130	MS07
Zinc	mg/L	0	1.60	1.41	88	70-130	

MATRIX SPIKE: T166003-MS2 Original: **25D1114-02**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Silver	mg/L	0	0.0500	0.0475	95	70-130	
Copper	mg/L	0	1.60	1.54	96	70-130	
Nickel	mg/L	0.00439	1.60	1.66	104	70-130	
Vanadium	mg/L	0	1.60	2.02	126	70-130	
Zinc	mg/L	0	1.60	1.46	91	70-130	

Trace Project ID: 25D1114

Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T166043

Analysis Description: Zinc, Total

QC Batch Method: EPA 200.2

Analysis Method: EPA 200.8 Rev. 5.4

METHOD BLANK: T166043-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Silver	mg/L	<0.000050	0.000050	
Copper	mg/L	<0.00025	0.00025	
Nickel	mg/L	<0.0012	0.0012	
Vanadium	mg/L	<0.0012	0.0012	
Zinc	mg/L	<0.0012	0.0012	

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LABORATORY CONTROL SAMPLE: T166043-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Silver	mg/L	0.0500	0.0491	98	85-115	
Copper	mg/L	1.60	1.48	93	85-115	
Nickel	mg/L	1.60	1.54	96	85-115	
Vanadium	mg/L	1.60	1.59	100	85-115	
Zinc	mg/L	1.60	1.55	97	85-115	

MATRIX SPIKE: T166043-MS1 Original: 25D1114-21

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Silver	mg/L	0	0.0500	0.0472	94	70-130	
Copper	mg/L	0	1.60	1.43	89	70-130	
Nickel	mg/L	0.00289	1.60	1.53	96	70-130	
Vanadium	mg/L	0	1.60	1.78	111	70-130	
Zinc	mg/L	0	1.60	1.41	88	70-130	

MATRIX SPIKE: T166043-MS2 Original: 25D1114-22

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Silver	mg/L	0	0.0500	0.0477	95	70-130	
Copper	mg/L	0	1.60	1.44	90	70-130	
Nickel	mg/L	0	1.60	1.53	96	70-130	
Vanadium	mg/L	0	1.60	1.68	105	70-130	
Zinc	mg/L	0	1.60	1.44	90	70-130	

Trace Project ID: 25D1114

Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T166138

Analysis Description: Nickel, Total

QC Batch Method: EPA 200.2

Analysis Method: EPA 200.8 Rev. 5.4

METHOD BLANK: T166138-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Silver	mg/L	<0.000050	0.000050	
Copper	mg/L	<0.00025	0.00025	
Nickel	mg/L	<0.0012	0.0012	
Vanadium	mg/L	<0.0012	0.0012	
Zinc	mg/L	<0.0012	0.0012	

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LABORATORY CONTROL SAMPLE: T166138-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Silver	mg/L	0.0500	0.0496	99	85-115	
Copper	mg/L	1.60	1.44	90	85-115	
Nickel	mg/L	1.60	1.51	94	85-115	
Vanadium	mg/L	1.60	1.52	95	85-115	
Zinc	mg/L	1.60	1.44	90	85-115	

MATRIX SPIKE: T166138-MS1 Original: **25D1114-32**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Silver	mg/L	0	0.0500	0.0463	93	70-130	
Copper	mg/L	0.00150	1.60	1.36	85	70-130	
Nickel	mg/L	0	1.60	1.41	88	70-130	
Vanadium	mg/L	0	1.60	1.52	95	70-130	
Zinc	mg/L	0	1.60	1.35	85	70-130	

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AN EXPLANATION OF TERMS AND SYMBOLS WHICH MAY OCCUR IN THIS REPORT

DEFINITIONS

LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MS	Matrix Spike
MSD	Matrix Spike Duplicate
RPD	Relative Percent Difference
DUP	Matrix Duplicate
LOQ	Limit of Quantitation
LOD	Limit of Detection
TIC	Tentatively Identified Compound
<, ND or U	Indicates the compound was analyzed for but not detected
*	Indicates a result that exceeds its associated MCL or Surrogate control limits
N	Indicates that the compound has not been evaluated by NELAC
NA	Indicates that the compound is not available.

NOTE: Samples for volatiles that have been extracted with a water miscible solvent were corrected for the total volume of the solvent/water mixture.
Solid matrices Method Blanks are at 100% solids as such results are the same wet or dry.

DATA QUALIFIERS

Trace ID: 25D1114-01

Analysis: EPA 200.8 Rev. 5.4

Vanadium	Note MS07 : The MS recovery was out of control. The result for this analyte, in the non-spiked version of the sample, must be considered estimated.
-----------------	---

Trace ID: 25D1114-04

Analysis: EPA 200.8 Rev. 5.4

Vanadium	Note MS07 : The MS recovery was out of control. The result for this analyte, in the non-spiked version of the sample, must be considered estimated.
-----------------	---

Trace ID: 25D1114-21

Analysis: EPA 200.7 Rev. 4.4

Iron	Note MS07 : The MS recovery was out of control. The result for this analyte, in the non-spiked version of the sample, must be considered estimated.
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Trace ID: T166003-MS1

Analysis: EPA 200.8 Rev. 5.4

Vanadium	Note MS07 : The MS recovery was out of control. The result for this analyte, in the non-spiked version of the sample, must be considered estimated.
-----------------	---

Trace ID: T166043-MS1

Analysis: EPA 200.7 Rev. 4.4

Iron	Note MS07 : The MS recovery was out of control. The result for this analyte, in the non-spiked version of the sample, must be considered estimated.
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CHAIN-OF-CUSTODY RECORD

Page 1 of 2

Report Results To:

Bill To:

Trace Use:

Company Name: Andrew Byks Molly Reeves	PO #: 10337505-006
Report To: HDR Michigan	Contact Name: Lara Zawaden
Mailing Address: 1000 Oakbrook Drive, Suite 200	Billing Address (if different):
City, State, Zip Code: Ann Arbor, MI 48104	City, State, Zip Code:
Office Phone:	Phone Number:
Email Address: andrew_byks@hadrinc.com	Billing Email Address:

Logged By: AM	Checked By: MJ
Soil Volatiles Preserved (circle if applicable): MeOH Low Level Lab	
Sampling Time:	

Turnaround Requirements:

Matrix Key:

☒ Standard, 5-10 Days
☐ 3 Day*
☐ 1 Day*
S = Soil / Solid
W = Water
SL = Sludge
OI = Oil
WI = Wipes
LW = Liquid Waste
A = Air
D = Drinking Water

*Results provided end of business day, requires prior approval.

Project Name: Grand Haven Harbor Island		Sampled By: AS/FDR	
Trace No.	Date Collected	Time Collected	Client Sample ID
1	4/19/25	1025	MW-02
2	4/19/25	1300	MW-09
3	4/19/25	1525	MW-33
4	4/20/25	930	MW-30
5	4/20/25	1140	MW-31
6	4/20/25	1335	MW-32
7	4/20/25	1505	MW-11
8	4/20/25	1635	MW-17
9	4/20/25	910	MW-10
10	4/20/25	910	MW-T-10
Please Sign		Released By: Andrew Byks	Received By: [Signature]
		Date: 4/21/25	Time: 8:02
		In executing this Chain of Custody, the client acknowledges the terms as set forth at www.trace-labs.com/terms-of-agreement.	

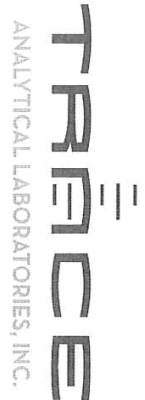
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Page 2 of 2

Report Results To:

Bill To:

Trace Use:

Company Name:	HDR Michigan	PO #:	10337505.000
Report To:	Andrew Byks / Mally Reeves	Contact Name:	Larry Zambiden
Mailing Address:	see pg 1	Billing Address (if different):	
City, State, Zip Code:		City, State, Zip Code:	
Office Phone:	Cell Phone:	Phone Number:	
Email Address:		Billing Email Address:	

Logged By:	CM	
Checked By:	MS	
Soil Volatiles Preserved (circle if applicable):		
MeOH	Low Level	Lab
Sampling Time:		

Turnaround Requirements:

Matrix Key:

☒ Standard, 5-10 Days
☐ 3 Day*
☐ 1 Day*
S = Soil / Solid
W = Water
SL = Sludge
OI = Oil
WI = Wipes
LW = Liquid Waste
A = Air
D = Drinking Water

*Results provided end of business day, requires prior approval.

Project Name:	Curaud Haven Harbor Island	Sampled By:	AS/FDR																		
Trace No.	Date Collected	Time Collected	Client Sample ID	Metals Field Filtered (Y / N)	Matrix	Number of Containers	Cool	HCl	HNO ₃	H ₂ SO ₄	NaOH	Other	Analysis Requested	Remarks							
11	4/20/25	1030	MMW-38	N	W	4	4	2						App III Part 251							
12	4/20/25	1122	MMW-06	N	W	4	4	2						App II Part 251							
13	4/20/25	1318	MMW-08	N	W	4	4	2						Part IIS Metals							
14	4/20/25	1318	MMW-T-08	N	W	4	4	2						TSS							
15	4/20/25	1520	MMW-01R	N	W	4	4	2						Low Level Hg							
16	4/20/25	1638	MMW-37	N	W	4	4	2													
17	4/19/25	1630	LHG-TB-04192025	-	W	1	1	2													
18	4/20/25	1715	LHG-TB-04202025	-	W	1	1	2													
Please Sign														Released By		Received By		Date		Time	
3)														Andrew J. Byks		[Signature]		4/21/25		5:03	
4)																					

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Form 70-Z-1

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Phone 231.773.5998
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Report Results To:

Company Name:	HDR Michigan, Inc	PO #:	10337505.006
Report To:	Andrew Byks / Molly Reeves	Contact Name:	Lara Zawaidan
Mailing Address:	1000 Oakbrook Drive, Suite 200	Billing Address (if different):	
City, State, Zip Code:	Ann Arbor MI 48104	City, State, Zip Code:	
Office Phone:		Phone Number:	
Email Address:	andrew.byks@hdrinc.com	Billing Email Address:	lara.zawaidan@hdrinc.com

Trace Use:

Logged By:	CM	
Checked By:	MS	
Soil Volatiles Preserved (circle if applicable):		
MeOH	Low Level	Lab
Sampling Time:		

Turnaround Requirements:

- ☒ Standard, 5-10 Days
☐ 3 Day*
☐ 1 Day*

Matrix Key:

- S = Soil / Solid
W = Water
SL = Sludge
OI = Oil
WI = Wipes
LW = Liquid Waste
A = Air
D = Drinking Water

*Results provided end of business day, requires prior approval.

Project Name: Grand Haven Harbor Island		Sampled By: AB/FDR			
Trace No.	Date Collected	Time Collected	Client Sample ID		
20	4/21/25	1520	MMW-10		
30	4/21/25	1632	MMW-34		
31	4/22/25	1510	SG-04		
32	4/22/25	1525	SG-02		
33	4/22/25	1545	SG-05		
34	4/22/25	1600	SG-01		
35	4/22/25	1640	MMW-27		
36	4/22/25	1715	LHG-TB-04212025		
37	4/22/25	1645	LHG-TB-04222025		
Please Sign		Released By	Received By	Date	Time
1) Andrew Byks		CM	4/23/25	800	2)
3)					4)

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Form 70-Z-1

CERTIFICATE OF ANALYSIS

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25D1114

HDR Michigan Inc.

Project Manager: Jon Mink

Sample Log In Checklist

Date: 4/21/25	Original Observation	Corrected Temperature	IR-9 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	IR-13 (CF: 0.0°C)	SR1 (CF: -0.4°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 9:00									
Initials: MJ									
Package Description: Cooler									
Package Temp °C	0.0	0.0	/	/	/	/	/	/	/
Representative Sample Temp °C	4.1	4.1	/	/	/	/	/	/	/

Sample Receipt

Yes No

- ☒ ☐ Received on ice or other coolant
☒ ☐ Ice still present upon receipt
☐ ☒ Custody seals present
☐ Trace Courier ☒ Client Drop-off
☐ Yes ☐ No Custody seals intact (if applicable)
☐ UPS ☐ Fed Ex ☐ US Mail ☐ Other

Sample Condition

Yes No N/A

- ☒ ☐ ☐ All sample containers arrived unbroken and labeled
☒ ☐ ☐ Sufficient sample to run requested analyses
☒ ☐ ☐ Correct chemical preservative added to samples
☐ ☒ ☐ Samples preserved at Trace
☒ ☐ ☐ Chemical preservation verified, check EMD pH test strip used (if applicable)
☒ pH 0-2.5 (Lot: HC311850) ☐ pH 11.0-13.0 (Lot: HC022540) ☐ Other
☐ ☐ ☒ Air bubbles absent from VOAs

Chain of Custody (COC)

Yes No

- ☒ ☐ All bottle labels agree with COC
☒ ☐ COC filled out properly
☒ ☐ COC signed by client

Notes:

MW-09
MW-02
MW-31
MUT-08
LLHg-TB-04192025

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25D1114

HDR Michigan Inc.

Project Manager: Jon Mink

Sample Log In Checklist

Date: 4/21/25	Original Observation	Corrected Temperature	IR-9 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	IR-13 (CF: 0.0°C)	SR1 (CF: -0.4°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 9:00									
Initials: MS									
Package Description: Cooler									
Package Temp °C	0.0	0.0							
Representative Sample Temp °C	3.3	3.3							

Sample Receipt

Yes	No	
☒	☐	Received on ice or other coolant
☒	☐	Ice still present upon receipt
☐	☒	Custody seals present
☐	☒	Trace Courier
☒		Client Drop-off
☐	☐	Yes
☐	☐	No
☐	☐	Custody seals intact (if applicable)
☐	☐	UPS
☐	☐	Fed Ex
☐	☐	US Mail
☐	☐	Other

Sample Condition

Yes	No	N/A	
☒	☐	☐	All sample containers arrived unbroken and labeled
☒	☐	☐	Sufficient sample to run requested analyses
☒	☐	☐	Correct chemical preservative added to samples
☒	☐	☐	Samples preserved at Trace
☒	☐	☐	Chemical preservation verified, check EMD pH test strip used (if applicable)
			☒ pH 0-2.5 (Lot: HC311850)
			☐ pH 11.0-13.0 (Lot: HC022540)
			☐ Other
☐	☐	☒	Air bubbles absent from VOAs

Chain of Custody (COC)

Yes	No	
☒	☐	All bottle labels agree with COC
☒	☐	COC filled out properly
☒	☐	COC signed by client

Notes:

NW-32

NW-11

MW-01R

MW-37

LLHg-TB-04202025

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25D1114

HDR Michigan Inc.

Project Manager: Jon Mink

Sample Log In Checklist

Date: 4/21/25	Original Observation	Corrected Temperature	IR-9 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	IR-13 (CF: 0.0°C)	SR1 (CF: -0.4°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 9:00									
Initials: MS									
Package Description: Cooler									
Package Temp °C	0.0	0.0							
Representative Sample Temp °C	3.9	3.9							

Sample Receipt

Yes No

☒ ☐ Received on ice or other coolant

☒ ☐ Ice still present upon receipt

☐ ☒ Custody seals present

☐ Trace Courier ☒ Client Drop-off

☐ Yes ☐ No Custody seals intact (if applicable)

☐ UPS ☐ Fed Ex ☐ US Mail ☐ Other

Sample Condition

Yes No N/A

☒ ☐ ☐ All sample containers arrived unbroken and labeled

☒ ☐ ☐ Sufficient sample to run requested analyses

☒ ☐ ☐ Correct chemical preservative added to samples

☐ ☒ ☐ Samples preserved at Trace

☒ ☐ ☐ Chemical preservation verified, check EMD pH test strip used (if applicable)

☒ pH 0-2.5 (Lot: HC311850) ☐ pH 11.0-13.0 (Lot: HC022540) ☐ Other

☐ ☐ ☒ Air bubbles absent from VOAs

Chain of Custody (COC)

Yes No

☒ ☐ All bottle labels agree with COC

☒ ☐ COC filled out properly

☒ ☐ COC signed by client

Notes:

MW-17

MW-38

MW-33

MW-30

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25D1114

HDR Michigan Inc.

Project Manager: Jon Mink

Sample Log In Checklist

Date: 4/21/24	Original Observation	Corrected Temperature	IR-9 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	IR-13 (CF: 0.0°C)	SR1 (CF: -0.4°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 9:00									
Initials: MJ									
Package Description: Cooler									
Package Temp °C	0.0	0.0							
Representative Sample Temp °C	4.3	4.3							

Sample Receipt

Yes No

- ☒ Received on ice or other coolant
☒ Ice still present upon receipt
☐ Custody seals present
☐ Trace Courier ☒ Client Drop-off
☐ Yes ☐ No Custody seals intact (if applicable)
☐ UPS ☐ Fed Ex ☐ US Mail ☐ Other

Sample Condition

Yes No N/A

- ☒ All sample containers arrived unbroken and labeled
☒ Sufficient sample to run requested analyses
☒ Correct chemical preservative added to samples
☐ Samples preserved at Trace
☒ Chemical preservation verified, check EMD pH test strip used (if applicable)
☒ pH 0-2.5 (Lot: HC311850) ☐ pH 11.0-13.0 (Lot: HC022540) ☐ Other
☐ Air bubbles absent from VOAs

Chain of Custody (COC)

Yes No

- ☒ All bottle labels agree with COC
☒ COC filled out properly
☒ COC signed by client

Notes:

MWF-10
MW-10
MW-08
MW-06

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25D1114

HDR Michigan Inc.
Project Manager: Jon Mink

Sample Log In Checklist

Date: 4/23/25	Original Observation	Corrected Temperature	IR-9 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	IR-13 (CF: 0.0°C)	SR1 (CF: -0.4°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 9:00									
Initials: MJ									
Package Description: Cooler									
Package Temp °C	0.0	0.0							
Representative Sample Temp °C	8.0	8.0							

Sample Receipt

Yes No

☒ ☐ Received on ice or other coolant

☒ ☐ Ice still present upon receipt

☐ ☒ Custody seals present

☐ Trace Courier ☒ Client Drop-off

☐ Yes ☐ No Custody seals intact (if applicable)

☐ UPS ☐ Fed Ex ☐ US Mail ☐ Other

Sample Condition

Yes No N/A

☒ ☐ ☐ All sample containers arrived unbroken and labeled

☒ ☐ ☐ Sufficient sample to run requested analyses

☒ ☐ ☐ Correct chemical preservative added to samples

☐ ☒ ☐ Samples preserved at Trace

☒ ☐ ☐ Chemical preservation verified, check EMD pH test strip used (if applicable)

☐ ☐ ☒ pH 0-2.5 (Lot: HC311850) ☐ pH 11.0-13.0 (Lot: HC022540) ☐ Other

☐ ☐ ☒ Air bubbles absent from VOAs

Chain of Custody (COC)

Yes No

☒ ☐ All bottle labels agree with COC

☒ ☐ COC filled out properly

☒ ☐ COC signed by client

Notes:

SG-02
MW-27
MW-16
MW-34
LLHg-TB-04212025

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25D1114

HDR Michigan Inc.
Project Manager: Jon Mink

Sample Log In Checklist

Date: 4/23/25	Original Observation	Corrected Temperature	IR-9 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	IR-13 (CF: 0.0°C)	SR1 (CF: -0.4°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 9:00									
Initials: MJ									
Package Description: Cooler									
Package Temp °C	0.0	0.0							
Representative Sample Temp °C	7.4	7.4							

Sample Receipt

Yes	No	
☒	☐	Received on ice or other coolant
☒	☐	Ice still present upon receipt
☐	☒	Custody seals present
☐	☒	Trace Courier
☐	☒	Client Drop-off
☐	☐	Yes
☐	☐	No
☐	☐	UPS
☐	☐	Fed Ex
☐	☐	US Mail
☐	☐	Other

Sample Condition

Yes	No	N/A	
☒	☐	☐	All sample containers arrived unbroken and labeled
☒	☐	☐	Sufficient sample to run requested analyses
☒	☐	☐	Correct chemical preservative added to samples
☐	☒	☐	Samples preserved at Trace
☒	☐	☐	Chemical preservation verified, check EMD pH test strip used (if applicable)
☐	☐	☒	pH 0-2.5 (Lot: HC311850)
☐	☐	☐	pH 11.0-13.0 (Lot: HC022540)
☐	☐	☐	Other
☐	☐	☒	Air bubbles absent from VOAs

Chain of Custody (COC)

Yes	No	
☒	☐	All bottle labels agree with COC
☒	☐	COC filled out properly
☒	☐	COC signed by client

Notes:

MW-12

MW-18

MW-04

MW-03

Form 70-A.57
Effective 2/20/25

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25D1114

HDR Michigan Inc.
Project Manager: Jon Mink

Sample Log In Checklist

Date: 4/23/25	Original Observation	Corrected Temperature	IR-9 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	IR-13 (CF: 0.0°C)	SR1 (CF: -0.4°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 900									
Initials: CM									
Package Description: Cooler									
Package Temp °C	0.1	0.1							
Representative Sample Temp °C	7.4	7.4							

Sample Receipt

Yes	No	
☒	☐	Received on ice or other coolant
☒	☐	Ice still present upon receipt
☐	☒	Custody seals present
☒	☐	Trace Courier
☐	☐	Client Drop-off
☐	☐	Custody seals intact (if applicable)
☐	☐	UPS
☐	☐	Fed Ex
☐	☐	US Mail
☐	☐	Other

Sample Condition

Yes	No	N/A	
☒	☐	☐	All sample containers arrived unbroken and labeled
☒	☐	☐	Sufficient sample to run requested analyses
☒	☐	☐	Correct chemical preservative added to samples
☐	☒	☐	Samples preserved at Trace
☒	☐	☐	Chemical preservation verified, check EMD pH test strip used (if applicable)
☐	☐	☐	☐ pH 0-2.5 (Lot: HC311850) ☐ pH 11.0-13.0 (Lot: HC022540) ☐ Other
☐	☐	☒	Air bubbles absent from VOAs

Chain of Custody (COC)

Yes	No	
☒	☐	All bottle labels agree with COC
☒	☐	COC filled out properly
☒	☐	COC signed by client

Notes:

MW-20
MW-36
MW-07
MW-19

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25D1114
HDR Michigan Inc.
Project Manager: Jon Mink

Sample Log In Checklist

Date: 4/23/25	Original Observation	Corrected Temperature	IR-9 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	IR-13 (CF: 0.0°C)	SR1 (CF: -0.4°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 9:00									
Initials: MS									
Package Description: Cooler									
Package Temp °C	0.0	0.0							
Representative Sample Temp °C									

Sample Receipt

Yes	No	
☒	☐	Received on ice or other coolant
☒	☐	Ice still present upon receipt
☐	☒	Custody seals present
☐	☒	Trace Courier
☒		Client Drop-off
☐	Yes	No
☐	UPS	Fed Ex
	US Mail	Other

Sample Condition

Yes	No	N/A	
☒	☐	☐	All sample containers arrived unbroken and labeled
☒	☐	☐	Sufficient sample to run requested analyses
☒	☐	☐	Correct chemical preservative added to samples
☒	☒	☐	Samples preserved at Trace
☒	☐	☐	Chemical preservation verified, check EMD pH test strip used (if applicable)
			☒ pH 0-2.5 (Lot: HC311850) ☐ pH 11.0-13.0 (Lot: HC022540) ☐ Other
☐	☐	☒	Air bubbles absent from VOAs

Chain of Custody (COC)

Yes	No	
☒	☐	All bottle labels agree with COC
☒	☐	COC filled out properly
☒	☐	COC signed by client

Notes:

SG-05
SG-04R
SG-07
MW-28
LHg-TB-0422025

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May 30, 2025

Ms. Molly Reeves
HDR Michigan Inc.
1000 Oakbrook Dr., Suite 200
Ann Arbor, MI 48104

RE: Trace Project 25D1122
Client Project City of Grand Haven - Harbor Island

Dear Ms. Reeves:

Enclosed are your analytical results. The results of this report relate only to the samples listed in the body of this report.

All reports were examined through Trace's validation process to ensure that requirements for quality and completeness were satisfied. All reported analytical results were obtained in accordance with the methods referenced on the reports. Every practical effort was made to meet the reporting limit specifications for this work, however, some results may have raised reporting limits to correct for percent solids.

The results were obtained from Eurofins Eaton East Analytical.

If you have questions concerning this report, please contact me at 231.773.5998 or by email at jmink@trace-labs.com.

Sincerely,

A handwritten signature in black ink, appearing to read "Jon Mink", with a stylized flourish at the end.

Jon Mink
Senior Project Manager

Enclosures

SAMPLE SUMMARY

Trace Project ID: 25D1122
Client Project ID: City of Grand Haven - Harbor Island

Trace ID	Sample ID	Matrix	Collected By	Date Collected	Date Received
25D1122-01	MW-02	Ground Water	AB/FDR	04/19/25 10:25	04/21/25 08:03
25D1122-02	MW-09	Ground Water	AB/FDR	04/19/25 13:00	04/21/25 08:03
25D1122-03	MW-33	Ground Water	AB/FDR	04/19/25 15:25	04/21/25 08:03
25D1122-04	MW-30	Ground Water	AB/FDR	04/20/25 09:30	04/21/25 08:03
25D1122-05	MW-31	Ground Water	AB/FDR	04/20/25 11:40	04/21/25 08:03
25D1122-06	MW-32	Ground Water	AB/FDR	04/20/25 13:35	04/21/25 08:03
25D1122-07	MW-11	Ground Water	AB/FDR	04/20/25 15:05	04/21/25 08:03
25D1122-08	MW-17	Ground Water	AB/FDR	04/20/25 16:35	04/21/25 08:03
25D1122-09	MW-10	Ground Water	AB/FDR	04/20/25 09:10	04/21/25 08:03
25D1122-10	MWT-10	Ground Water	AB/FDR	04/20/25 09:10	04/21/25 08:03
25D1122-11	MW-38	Ground Water	AB/FDR	04/20/25 10:30	04/21/25 08:03
25D1122-12	MW-06	Ground Water	AB/FDR	04/20/25 11:22	04/21/25 08:03
25D1122-13	MW-08	Ground Water	AB/FDR	04/20/25 13:18	04/21/25 08:03
25D1122-14	MWT-08	Ground Water	AB/FDR	04/20/25 13:18	04/21/25 08:03
25D1122-15	MW-01R	Ground Water	AB/FDR	04/20/25 15:20	04/21/25 08:03
25D1122-16	MW-37	Ground Water	AB/FDR	04/20/25 16:38	04/21/25 08:03
25D1122-17	MW-36	Ground Water	AB/FDR	04/21/25 09:15	04/21/25 08:03
25D1122-18	MW-20	Ground Water	AB/FDR	04/21/25 10:45	04/21/25 08:03
25D1122-19	MW-19	Ground Water	AB/FDR	04/21/25 12:00	04/21/25 08:03
25D1122-20	MW-07	Ground Water	AB/FDR	04/21/25 13:45	04/21/25 08:03
25D1122-21	MW-27	Ground Water	AB/FDR	04/21/25 15:35	04/21/25 08:03

Trace Analytical Laboratories, Inc.
2241 Black Creek Road
Muskegon, MI 49444-2673



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25D1122-22	MW-28	Ground Water	AB/FDR	04/21/25 17:05	04/21/25 08:03
25D1122-23	MW-18	Ground Water	AB/FDR	04/21/25 09:16	04/21/25 08:03
25D1122-24	MW-03	Ground Water	AB/FDR	04/21/25 11:50	04/21/25 08:03
25D1122-25	MW-04	Ground Water	AB/FDR	04/21/25 13:00	04/21/25 08:03
25D1122-26	MW-12	Ground Water	AB/FDR	04/21/25 14:12	04/21/25 08:03
25D1122-27	MW-16	Ground Water	AB/FDR	04/21/25 15:20	04/21/25 08:03
25D1122-28	MW-34	Ground Water	AB/FDR	04/21/25 16:32	04/21/25 08:03
25D1122-29	SG-04	Ground Water	AB/FDR	04/22/25 15:10	04/21/25 08:03
25D1122-30	SG-02	Ground Water	AB/FDR	04/22/25 15:25	04/21/25 08:03
25D1122-31	SG-05	Ground Water	AB/FDR	04/22/25 15:45	04/21/25 08:03
25D1122-32	SG-07	Ground Water	AB/FDR	04/22/25 16:00	04/21/25 08:03

ANALYTICAL REPORT

PREPARED FOR

Attn: Jon Mink
Trace Analytical Laboratories
2241 Black Creek Road
Muskegon, Michigan 49444

Generated 5/29/2025 9:23:36 AM

JOB DESCRIPTION

25D1122

JOB NUMBER

810-145552-1

Eurofins Eaton Analytical South Bend

Job Notes

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

Authorization



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5/29/2025 9:23:36 AM

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Definitions/Glossary

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

Qualifiers

Rad

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

Glossary

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

Case Narrative

Client: Trace Analytical Laboratories
Project: 25D1122

Job ID: 810-145552-1

Job ID: 810-145552-1

Eurofins Eaton Analytical South Bend

Job Narrative 810-145552-1

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

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

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

Receipt

The samples were received on 4/22/2025 9:00 AM and 4/24/2025 9:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice.

Gas Flow Proportional Counter

Method 904.0: Radium 228 Batch 715329

The detection goal was not met for the following sample due to a reduced sample volume used in prep attributed to the presence of matrix interferences. MW-02 (810-145552-1) and MW-33 (810-145552-3)

Method 904.0: Radium 228 Batch 715332

The detection goal was not met for the following sample due to a reduced sample volume used in prep attributed to the presence of matrix interferences. MW-17 (810-145552-8), MW-10 (810-145552-9), MWT-10 (810-145552-10), MW-38 (810-145552-11) and MW-06 (810-145552-12)

Method 904.0: Radium 228 Batch 715334

The detection goal was not met for the following sample due to the presence of matrix interferences: MW-34 (810-145552-28). Analytical results are reported with the detection limit achieved.

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

Rad

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

Eurofins Eaton Analytical South Bend

Detection Summary

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

Client Sample ID: MW-02

Lab Sample ID: 810-145552-1

No Detections.

Client Sample ID: MW-09

Lab Sample ID: 810-145552-2

No Detections.

Client Sample ID: MW-33

Lab Sample ID: 810-145552-3

No Detections.

Client Sample ID: MW-30

Lab Sample ID: 810-145552-4

No Detections.

Client Sample ID: MW-31

Lab Sample ID: 810-145552-5

No Detections.

Client Sample ID: MW-32

Lab Sample ID: 810-145552-6

No Detections.

Client Sample ID: MW-17

Lab Sample ID: 810-145552-8

No Detections.

Client Sample ID: MW-10

Lab Sample ID: 810-145552-9

No Detections.

Client Sample ID: MWT-10

Lab Sample ID: 810-145552-10

No Detections.

Client Sample ID: MW-38

Lab Sample ID: 810-145552-11

No Detections.

Client Sample ID: MW-06

Lab Sample ID: 810-145552-12

No Detections.

Client Sample ID: MW-08

Lab Sample ID: 810-145552-13

No Detections.

Client Sample ID: MWT-08

Lab Sample ID: 810-145552-14

No Detections.

Client Sample ID: MW-01R

Lab Sample ID: 810-145552-15

No Detections.

Client Sample ID: MW-37

Lab Sample ID: 810-145552-16

No Detections.

Client Sample ID: MW-36

Lab Sample ID: 810-145552-17

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Eaton Analytical South Bend

Detection Summary

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

Client Sample ID: MW-20

Lab Sample ID: 810-145552-18

No Detections.

Client Sample ID: MW-19

Lab Sample ID: 810-145552-19

No Detections.

Client Sample ID: MW-07

Lab Sample ID: 810-145552-20

No Detections.

Client Sample ID: MW-27

Lab Sample ID: 810-145552-21

No Detections.

Client Sample ID: MW-28

Lab Sample ID: 810-145552-22

No Detections.

Client Sample ID: MW-18

Lab Sample ID: 810-145552-23

No Detections.

Client Sample ID: MW-04

Lab Sample ID: 810-145552-25

No Detections.

Client Sample ID: MW-12

Lab Sample ID: 810-145552-26

No Detections.

Client Sample ID: MW-16

Lab Sample ID: 810-145552-27

No Detections.

Client Sample ID: MW-34

Lab Sample ID: 810-145552-28

No Detections.

Client Sample ID: SG-04

Lab Sample ID: 810-145552-29

No Detections.

Client Sample ID: SG-02

Lab Sample ID: 810-145552-30

No Detections.

Client Sample ID: SG-05

Lab Sample ID: 810-145552-31

No Detections.

Client Sample ID: SG-07

Lab Sample ID: 810-145552-32

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

Client Sample ID: MW-02

Lab Sample ID: 810-145552-1

Date Collected: 04/19/25 10:25

Matrix: Water

Date Received: 04/22/25 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.565		0.293	0.298	1.00	0.383	pCi/L	04/30/25 12:53	05/27/25 12:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.0		30 - 110					04/30/25 12:53	05/27/25 12:14	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.304	U G	0.627	0.627	1.00	1.10	pCi/L	04/30/25 12:57	05/23/25 14:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.0		30 - 110					04/30/25 12:57	05/23/25 14:36	1
Y Carrier	85.6		30 - 110					04/30/25 12:57	05/23/25 14:36	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.869	U	0.692	0.694	5.00	1.10	pCi/L		05/28/25 15:15	1

Client Sample ID: MW-09

Lab Sample ID: 810-145552-2

Date Collected: 04/19/25 13:00

Matrix: Water

Date Received: 04/22/25 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0147	U	0.112	0.112	1.00	0.218	pCi/L	04/30/25 12:53	05/27/25 12:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		30 - 110					04/30/25 12:53	05/27/25 12:14	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.544	U	0.491	0.493	1.00	0.778	pCi/L	04/30/25 12:57	05/23/25 14:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		30 - 110					04/30/25 12:57	05/23/25 14:36	1
Y Carrier	80.7		30 - 110					04/30/25 12:57	05/23/25 14:36	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.558	U	0.504	0.506	5.00	0.778	pCi/L		05/28/25 15:15	1

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

Client Sample ID: MW-33

Lab Sample ID: 810-145552-3

Date Collected: 04/19/25 15:25

Matrix: Water

Date Received: 04/22/25 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.120	U	0.199	0.200	1.00	0.346	pCi/L	04/30/25 12:53	05/27/25 12:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.7		30 - 110					04/30/25 12:53	05/27/25 12:14	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.371	U G	0.836	0.837	1.00	1.46	pCi/L	04/30/25 12:57	05/23/25 14:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.7		30 - 110					04/30/25 12:57	05/23/25 14:36	1
Y Carrier	77.0		30 - 110					04/30/25 12:57	05/23/25 14:36	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.491	U	0.859	0.861	5.00	1.46	pCi/L		05/28/25 15:15	1

Client Sample ID: MW-30

Lab Sample ID: 810-145552-4

Date Collected: 04/20/25 09:30

Matrix: Water

Date Received: 04/22/25 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.124	U	0.102	0.103	1.00	0.149	pCi/L	04/30/25 12:53	05/27/25 12:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.9		30 - 110					04/30/25 12:53	05/27/25 12:14	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.213	U	0.335	0.336	1.00	0.695	pCi/L	04/30/25 12:57	05/23/25 14:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.9		30 - 110					04/30/25 12:57	05/23/25 14:36	1
Y Carrier	78.1		30 - 110					04/30/25 12:57	05/23/25 14:36	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.124	U	0.350	0.351	5.00	0.695	pCi/L		05/28/25 15:15	1

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

Client Sample ID: MW-31

Lab Sample ID: 810-145552-5

Date Collected: 04/20/25 11:40

Matrix: Water

Date Received: 04/22/25 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.132	U	0.0999	0.101	1.00	0.140	pCi/L	04/30/25 12:53	05/27/25 12:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.4		30 - 110					04/30/25 12:53	05/27/25 12:14	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.181	U	0.313	0.313	1.00	0.644	pCi/L	04/30/25 12:57	05/23/25 14:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.4		30 - 110					04/30/25 12:57	05/23/25 14:37	1
Y Carrier	78.9		30 - 110					04/30/25 12:57	05/23/25 14:37	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.132	U	0.329	0.329	5.00	0.644	pCi/L		05/28/25 15:15	1

Client Sample ID: MW-32

Lab Sample ID: 810-145552-6

Date Collected: 04/20/25 13:35

Matrix: Water

Date Received: 04/22/25 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.217		0.138	0.140	1.00	0.191	pCi/L	04/30/25 12:58	05/27/25 14:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.0		30 - 110					04/30/25 12:58	05/27/25 14:23	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.126	U	0.361	0.361	1.00	0.639	pCi/L	04/30/25 13:04	05/24/25 10:42	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.0		30 - 110					04/30/25 13:04	05/24/25 10:42	1
Y Carrier	74.4		30 - 110					04/30/25 13:04	05/24/25 10:42	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.343	U	0.386	0.387	5.00	0.639	pCi/L		05/28/25 11:44	1

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

Client Sample ID: MW-17

Lab Sample ID: 810-145552-8

Date Collected: 04/20/25 16:35

Matrix: Water

Date Received: 04/22/25 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0417	U	0.156	0.156	1.00	0.357	pCi/L	04/30/25 12:58	05/27/25 14:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	74.2		30 - 110					04/30/25 12:58	05/27/25 14:22	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.30	G	0.863	0.872	1.00	1.28	pCi/L	04/30/25 13:04	05/24/25 10:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	74.2		30 - 110					04/30/25 13:04	05/24/25 10:40	1
Y Carrier	78.1		30 - 110					04/30/25 13:04	05/24/25 10:40	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.30		0.877	0.886	5.00	1.28	pCi/L		05/28/25 11:44	1

Client Sample ID: MW-10

Lab Sample ID: 810-145552-9

Date Collected: 04/20/25 09:10

Matrix: Water

Date Received: 04/22/25 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.00884	U	0.139	0.139	1.00	0.290	pCi/L	04/30/25 12:58	05/27/25 14:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.8		30 - 110					04/30/25 12:58	05/27/25 14:22	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.581	U G	0.678	0.680	1.00	1.12	pCi/L	04/30/25 13:04	05/24/25 10:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.8		30 - 110					04/30/25 13:04	05/24/25 10:41	1
Y Carrier	76.6		30 - 110					04/30/25 13:04	05/24/25 10:41	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.589	U	0.692	0.694	5.00	1.12	pCi/L		05/28/25 11:44	1

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

Client Sample ID: MWT-10

Lab Sample ID: 810-145552-10

Date Collected: 04/20/25 09:10

Matrix: Water

Date Received: 04/22/25 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.187	U	0.192	0.192	1.00	0.298	pCi/L	04/30/25 12:58	05/27/25 14:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.7		30 - 110					04/30/25 12:58	05/27/25 14:22	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	2.45	G	0.932	0.959	1.00	1.19	pCi/L	04/30/25 13:04	05/24/25 10:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.7		30 - 110					04/30/25 13:04	05/24/25 10:41	1
Y Carrier	78.9		30 - 110					04/30/25 13:04	05/24/25 10:41	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	2.64		0.952	0.978	5.00	1.19	pCi/L		05/28/25 11:44	1

Client Sample ID: MW-38

Lab Sample ID: 810-145552-11

Date Collected: 04/20/25 10:30

Matrix: Water

Date Received: 04/22/25 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0482	U	0.513	0.513	1.00	0.988	pCi/L	04/30/25 12:58	05/27/25 14:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	35.5		30 - 110					04/30/25 12:58	05/27/25 14:22	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.153	U G	1.41	1.41	1.00	2.65	pCi/L	04/30/25 13:04	05/24/25 10:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	35.5		30 - 110					04/30/25 13:04	05/24/25 10:41	1
Y Carrier	73.6		30 - 110					04/30/25 13:04	05/24/25 10:41	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.201	U	1.50	1.50	5.00	2.65	pCi/L		05/28/25 11:44	1

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Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

Client Sample ID: MW-06

Lab Sample ID: 810-145552-12

Date Collected: 04/20/25 11:22

Matrix: Water

Date Received: 04/22/25 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.323	U	0.234	0.236	1.00	0.326	pCi/L	04/30/25 12:58	05/27/25 14:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.8		30 - 110					04/30/25 12:58	05/27/25 14:22	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.80	G	0.901	0.916	1.00	1.22	pCi/L	04/30/25 13:04	05/24/25 11:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.8		30 - 110					04/30/25 13:04	05/24/25 11:06	1
Y Carrier	77.0		30 - 110					04/30/25 13:04	05/24/25 11:06	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	2.13		0.931	0.946	5.00	1.22	pCi/L		05/28/25 11:44	1

Client Sample ID: MW-08

Lab Sample ID: 810-145552-13

Date Collected: 04/20/25 13:18

Matrix: Water

Date Received: 04/22/25 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.263		0.180	0.181	1.00	0.252	pCi/L	04/30/25 12:58	05/27/25 14:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		30 - 110					04/30/25 12:58	05/27/25 14:22	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.08		0.648	0.656	1.00	0.952	pCi/L	04/30/25 13:04	05/24/25 10:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		30 - 110					04/30/25 13:04	05/24/25 10:41	1
Y Carrier	64.7		30 - 110					04/30/25 13:04	05/24/25 10:41	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.35		0.673	0.681	5.00	0.952	pCi/L		05/28/25 11:44	1

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Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

Client Sample ID: MWT-08

Lab Sample ID: 810-145552-14

Date Collected: 04/20/25 13:18

Matrix: Water

Date Received: 04/22/25 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.307		0.160	0.162	1.00	0.187	pCi/L	04/30/25 12:58	05/27/25 14:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.8		30 - 110					04/30/25 12:58	05/27/25 14:22	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.29		0.532	0.545	1.00	0.692	pCi/L	04/30/25 13:04	05/24/25 10:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.8		30 - 110					04/30/25 13:04	05/24/25 10:41	1
Y Carrier	80.4		30 - 110					04/30/25 13:04	05/24/25 10:41	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.60		0.556	0.569	5.00	0.692	pCi/L		05/28/25 11:44	1

Client Sample ID: MW-01R

Lab Sample ID: 810-145552-15

Date Collected: 04/20/25 15:20

Matrix: Water

Date Received: 04/22/25 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.151	U	0.186	0.186	1.00	0.306	pCi/L	04/30/25 12:58	05/27/25 14:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.9		30 - 110					04/30/25 12:58	05/27/25 14:22	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.693	U	0.590	0.593	1.00	0.914	pCi/L	04/30/25 13:04	05/24/25 10:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.9		30 - 110					04/30/25 13:04	05/24/25 10:41	1
Y Carrier	77.4		30 - 110					04/30/25 13:04	05/24/25 10:41	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.844	U	0.619	0.621	5.00	0.914	pCi/L		05/28/25 11:44	1

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

Client Sample ID: MW-37

Lab Sample ID: 810-145552-16

Date Collected: 04/20/25 16:38

Matrix: Water

Date Received: 04/22/25 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0420	U	0.155	0.155	1.00	0.319	pCi/L	04/30/25 12:58	05/27/25 14:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.4		30 - 110					04/30/25 12:58	05/27/25 14:22	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.09		0.644	0.652	1.00	0.946	pCi/L	04/30/25 13:04	05/24/25 10:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.4		30 - 110					04/30/25 13:04	05/24/25 10:41	1
Y Carrier	74.8		30 - 110					04/30/25 13:04	05/24/25 10:41	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.09		0.662	0.670	5.00	0.946	pCi/L		05/28/25 11:44	1

Client Sample ID: MW-36

Lab Sample ID: 810-145552-17

Date Collected: 04/21/25 09:15

Matrix: Water

Date Received: 04/24/25 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.210	U	0.202	0.203	1.00	0.319	pCi/L	04/30/25 12:58	05/27/25 16:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.6		30 - 110					04/30/25 12:58	05/27/25 16:08	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.539	U	0.575	0.577	1.00	0.933	pCi/L	04/30/25 13:04	05/24/25 12:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.6		30 - 110					04/30/25 13:04	05/24/25 12:14	1
Y Carrier	77.0		30 - 110					04/30/25 13:04	05/24/25 12:14	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.749	U	0.609	0.612	5.00	0.933	pCi/L		05/28/25 11:44	1

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

Client Sample ID: MW-20

Lab Sample ID: 810-145552-18

Date Collected: 04/21/25 10:45

Matrix: Water

Date Received: 04/24/25 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.101	U	0.183	0.183	1.00	0.326	pCi/L	04/30/25 13:05	05/28/25 13:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.8		30 - 110					04/30/25 13:05	05/28/25 13:41	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.746		0.407	0.412	1.00	0.568	pCi/L	04/30/25 13:08	05/28/25 09:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.8		30 - 110					04/30/25 13:08	05/28/25 09:49	1
Y Carrier	80.0		30 - 110					04/30/25 13:08	05/28/25 09:49	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.847		0.446	0.451	5.00	0.568	pCi/L		05/28/25 15:16	1

Client Sample ID: MW-19

Lab Sample ID: 810-145552-19

Date Collected: 04/21/25 12:00

Matrix: Water

Date Received: 04/24/25 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0952	U	0.161	0.161	1.00	0.284	pCi/L	05/01/25 07:30	05/27/25 19:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.5		30 - 110					05/01/25 07:30	05/27/25 19:03	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.193	U	0.407	0.408	1.00	0.708	pCi/L	05/01/25 07:36	05/27/25 10:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.5		30 - 110					05/01/25 07:36	05/27/25 10:07	1
Y Carrier	69.9		30 - 110					05/01/25 07:36	05/27/25 10:07	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.289	U	0.438	0.439	5.00	0.708	pCi/L		05/28/25 15:16	1

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

Client Sample ID: MW-07

Lab Sample ID: 810-145552-20

Date Collected: 04/21/25 13:45

Matrix: Water

Date Received: 04/24/25 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.681		0.317	0.322	1.00	0.347	pCi/L	05/01/25 07:30	05/27/25 19:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		30 - 110					05/01/25 07:30	05/27/25 19:03	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.702	U	0.510	0.514	1.00	0.778	pCi/L	05/01/25 07:36	05/27/25 10:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		30 - 110					05/01/25 07:36	05/27/25 10:07	1
Y Carrier	78.5		30 - 110					05/01/25 07:36	05/27/25 10:07	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.38		0.600	0.607	5.00	0.778	pCi/L		05/28/25 15:16	1

Client Sample ID: MW-27

Lab Sample ID: 810-145552-21

Date Collected: 04/21/25 15:35

Matrix: Water

Date Received: 04/24/25 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.239	U	0.332	0.332	1.00	0.559	pCi/L	05/01/25 07:30	05/27/25 19:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		30 - 110					05/01/25 07:30	05/27/25 19:03	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.826		0.489	0.495	1.00	0.701	pCi/L	05/01/25 07:36	05/27/25 10:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		30 - 110					05/01/25 07:36	05/27/25 10:07	1
Y Carrier	80.7		30 - 110					05/01/25 07:36	05/27/25 10:07	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.07		0.591	0.596	5.00	0.701	pCi/L		05/28/25 15:16	1

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

Client Sample ID: MW-28

Lab Sample ID: 810-145552-22

Date Collected: 04/21/25 17:05

Matrix: Water

Date Received: 04/24/25 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.350	U	0.286	0.287	1.00	0.416	pCi/L	05/01/25 07:30	05/27/25 19:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.3		30 - 110					05/01/25 07:30	05/27/25 19:03	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.259	U	0.553	0.554	1.00	0.964	pCi/L	05/01/25 07:36	05/27/25 10:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.3		30 - 110					05/01/25 07:36	05/27/25 10:07	1
Y Carrier	75.9		30 - 110					05/01/25 07:36	05/27/25 10:07	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.610	U	0.623	0.624	5.00	0.964	pCi/L		05/28/25 15:16	1

Client Sample ID: MW-18

Lab Sample ID: 810-145552-23

Date Collected: 04/21/25 09:16

Matrix: Water

Date Received: 04/24/25 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.00896	U	0.176	0.176	1.00	0.352	pCi/L	05/01/25 07:30	05/27/25 19:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.8		30 - 110					05/01/25 07:30	05/27/25 19:04	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0910	U	0.308	0.308	1.00	0.555	pCi/L	05/01/25 07:36	05/27/25 10:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.8		30 - 110					05/01/25 07:36	05/27/25 10:08	1
Y Carrier	77.8		30 - 110					05/01/25 07:36	05/27/25 10:08	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.100	U	0.355	0.355	5.00	0.555	pCi/L		05/28/25 15:16	1

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

Client Sample ID: MW-04

Lab Sample ID: 810-145552-25

Date Collected: 04/21/25 13:00

Matrix: Water

Date Received: 04/24/25 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.206	U	0.273	0.273	1.00	0.457	pCi/L	04/30/25 13:05	05/28/25 13:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.3		30 - 110					04/30/25 13:05	05/28/25 13:41	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.316	U	0.374	0.375	1.00	0.614	pCi/L	04/30/25 13:08	05/28/25 09:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.3		30 - 110					04/30/25 13:08	05/28/25 09:49	1
Y Carrier	83.7		30 - 110					04/30/25 13:08	05/28/25 09:49	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.522	U	0.463	0.464	5.00	0.614	pCi/L		05/28/25 15:16	1

Client Sample ID: MW-12

Lab Sample ID: 810-145552-26

Date Collected: 04/21/25 14:12

Matrix: Water

Date Received: 04/24/25 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.126	U	0.180	0.180	1.00	0.306	pCi/L	04/30/25 13:05	05/28/25 13:42	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.0		30 - 110					04/30/25 13:05	05/28/25 13:42	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.463	U	0.328	0.331	1.00	0.487	pCi/L	04/30/25 13:08	05/28/25 09:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.0		30 - 110					04/30/25 13:08	05/28/25 09:49	1
Y Carrier	81.5		30 - 110					04/30/25 13:08	05/28/25 09:49	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.589		0.374	0.377	5.00	0.487	pCi/L		05/28/25 15:16	1

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

Client Sample ID: MW-16

Lab Sample ID: 810-145552-27

Date Collected: 04/21/25 15:20

Matrix: Water

Date Received: 04/24/25 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.251	U	0.219	0.221	1.00	0.330	pCi/L	04/30/25 13:05	05/28/25 13:42	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.3		30 - 110					04/30/25 13:05	05/28/25 13:42	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.836		0.390	0.398	1.00	0.525	pCi/L	04/30/25 13:08	05/28/25 09:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.3		30 - 110					04/30/25 13:08	05/28/25 09:49	1
Y Carrier	78.9		30 - 110					04/30/25 13:08	05/28/25 09:49	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.09		0.447	0.455	5.00	0.525	pCi/L		05/28/25 15:16	1

Client Sample ID: MW-34

Lab Sample ID: 810-145552-28

Date Collected: 04/21/25 16:32

Matrix: Water

Date Received: 04/24/25 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.498	U	0.439	0.441	1.00	0.656	pCi/L	04/30/25 13:05	05/28/25 13:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.2		30 - 110					04/30/25 13:05	05/28/25 13:43	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	2.12	G	0.925	0.945	1.00	1.23	pCi/L	04/30/25 13:08	05/28/25 09:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.2		30 - 110					04/30/25 13:08	05/28/25 09:49	1
Y Carrier	79.3		30 - 110					04/30/25 13:08	05/28/25 09:49	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	2.62		1.02	1.04	5.00	1.23	pCi/L		05/28/25 15:16	1

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

Client Sample ID: SG-04

Lab Sample ID: 810-145552-29

Date Collected: 04/22/25 15:10

Matrix: Water

Date Received: 04/24/25 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0186	U	0.161	0.161	1.00	0.326	pCi/L	04/30/25 13:05	05/28/25 13:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.2		30 - 110					04/30/25 13:05	05/28/25 13:43	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.365	U	0.337	0.339	1.00	0.535	pCi/L	04/30/25 13:08	05/28/25 09:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.2		30 - 110					04/30/25 13:08	05/28/25 09:49	1
Y Carrier	81.5		30 - 110					04/30/25 13:08	05/28/25 09:49	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.383	U	0.373	0.375	5.00	0.535	pCi/L		05/28/25 15:16	1

Client Sample ID: SG-02

Lab Sample ID: 810-145552-30

Date Collected: 04/22/25 15:25

Matrix: Water

Date Received: 04/24/25 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.382		0.267	0.269	1.00	0.375	pCi/L	04/30/25 13:05	05/28/25 13:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.3		30 - 110					04/30/25 13:05	05/28/25 13:43	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.276	U	0.341	0.342	1.00	0.565	pCi/L	04/30/25 13:08	05/28/25 09:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.3		30 - 110					04/30/25 13:08	05/28/25 09:49	1
Y Carrier	80.7		30 - 110					04/30/25 13:08	05/28/25 09:49	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.658		0.433	0.435	5.00	0.565	pCi/L		05/28/25 15:16	1

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

Client Sample ID: SG-05

Lab Sample ID: 810-145552-31

Date Collected: 04/22/25 15:45

Matrix: Water

Date Received: 04/24/25 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.352	U	0.329	0.330	1.00	0.499	pCi/L	04/30/25 13:05	05/28/25 13:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	68.0		30 - 110					04/30/25 13:05	05/28/25 13:48	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.495	U	0.527	0.529	1.00	0.852	pCi/L	04/30/25 13:08	05/28/25 09:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	68.0		30 - 110					04/30/25 13:08	05/28/25 09:49	1
Y Carrier	81.1		30 - 110					04/30/25 13:08	05/28/25 09:49	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.847	U	0.621	0.623	5.00	0.852	pCi/L		05/28/25 15:16	1

Client Sample ID: SG-07

Lab Sample ID: 810-145552-32

Date Collected: 04/22/25 16:00

Matrix: Water

Date Received: 04/24/25 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0684	U	0.236	0.236	1.00	0.457	pCi/L	04/30/25 13:05	05/28/25 13:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.0		30 - 110					04/30/25 13:05	05/28/25 13:48	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.542	U	0.522	0.524	1.00	0.833	pCi/L	04/30/25 13:08	05/28/25 09:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.0		30 - 110					04/30/25 13:08	05/28/25 09:51	1
Y Carrier	80.4		30 - 110					04/30/25 13:08	05/28/25 09:51	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.611	U	0.573	0.575	5.00	0.833	pCi/L		05/28/25 15:16	1

Eurofins Eaton Analytical South Bend

Tracer/Carrier Summary

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)			
Lab Sample ID	Client Sample ID	Ba			
		(30-110)			
810-145552-1	MW-02	87.0			
810-145552-2	MW-09	94.1			
810-145552-3	MW-33	85.7			
810-145552-4	MW-30	82.9			
810-145552-5	MW-31	86.4			
810-145552-6	MW-32	87.0			
810-145552-8	MW-17	74.2			
810-145552-9	MW-10	91.8			
810-145552-10	MWT-10	84.7			
810-145552-11	MW-38	35.5			
810-145552-12	MW-06	78.8			
810-145552-13	MW-08	90.0			
810-145552-14	MWT-08	90.8			
810-145552-15	MW-01R	93.9			
810-145552-16	MW-37	83.4			
810-145552-17	MW-36	82.6			
810-145552-18	MW-20	81.8			
810-145552-19	MW-19	87.5			
810-145552-20	MW-07	94.1			
810-145552-21	MW-27	90.3			
810-145552-22	MW-28	78.3			
810-145552-23	MW-18	91.8			
810-145552-25	MW-04	89.3			
810-145552-26	MW-12	87.0			
810-145552-27	MW-16	91.3			
810-145552-28	MW-34	85.2			
810-145552-29	SG-04	88.2			
810-145552-30	SG-02	81.3			
810-145552-31	SG-05	68.0			
810-145552-32	SG-07	76.0			
LCS 160-715328/2-A	Lab Control Sample	89.0			
LCS 160-715330/2-A	Lab Control Sample	87.7			
LCS 160-715333/2-A	Lab Control Sample	87.5			
LCS 160-715483/2-A	Lab Control Sample	100			
MB 160-715328/1-A	Method Blank	81.3			
MB 160-715330/1-A	Method Blank	88.0			
MB 160-715333/1-A	Method Blank	88.2			
MB 160-715483/1-A	Method Blank	91.6			
Tracer/Carrier Legend					
Ba = Ba Carrier					

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)			
Lab Sample ID	Client Sample ID	Ba	Y		
		(30-110)	(30-110)		
810-145552-1	MW-02	87.0	85.6		
810-145552-2	MW-09	94.1	80.7		

Eurofins Eaton Analytical South Bend

Tracer/Carrier Summary

Client: Trace Analytical Laboratories

Job ID: 810-145552-1

Project/Site: 25D1122

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits)	
		Ba (30-110)	Y (30-110)
810-145552-3	MW-33	85.7	77.0
810-145552-4	MW-30	82.9	78.1
810-145552-5	MW-31	86.4	78.9
810-145552-6	MW-32	87.0	74.4
810-145552-8	MW-17	74.2	78.1
810-145552-9	MW-10	91.8	76.6
810-145552-10	MWT-10	84.7	78.9
810-145552-11	MW-38	35.5	73.6
810-145552-12	MW-06	78.8	77.0
810-145552-13	MW-08	90.0	64.7
810-145552-14	MWT-08	90.8	80.4
810-145552-15	MW-01R	93.9	77.4
810-145552-16	MW-37	83.4	74.8
810-145552-17	MW-36	82.6	77.0
810-145552-18	MW-20	81.8	80.0
810-145552-19	MW-19	87.5	69.9
810-145552-20	MW-07	94.1	78.5
810-145552-21	MW-27	90.3	80.7
810-145552-22	MW-28	78.3	75.9
810-145552-23	MW-18	91.8	77.8
810-145552-25	MW-04	89.3	83.7
810-145552-26	MW-12	87.0	81.5
810-145552-27	MW-16	91.3	78.9
810-145552-28	MW-34	85.2	79.3
810-145552-29	SG-04	88.2	81.5
810-145552-30	SG-02	81.3	80.7
810-145552-31	SG-05	68.0	81.1
810-145552-32	SG-07	76.0	80.4
LCS 160-715329/2-A	Lab Control Sample	89.0	77.8
LCS 160-715332/2-A	Lab Control Sample	87.7	78.5
LCS 160-715334/2-A	Lab Control Sample	87.5	80.4
LCS 160-715484/2-A	Lab Control Sample	100	76.6
MB 160-715329/1-A	Method Blank	81.3	74.8
MB 160-715332/1-A	Method Blank	88.0	74.8
MB 160-715334/1-A	Method Blank	88.2	80.0
MB 160-715484/1-A	Method Blank	91.6	78.9

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

QC Sample Results

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-715328/1-A

Matrix: Water

Analysis Batch: 719413

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 715328

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1802		0.119	0.120	1.00	0.161	pCi/L	04/30/25 12:53	05/27/25 08:19	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.3		30 - 110					04/30/25 12:53	05/27/25 08:19	1

Lab Sample ID: LCS 160-715328/2-A

Matrix: Water

Analysis Batch: 719413

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 715328

Analyte		Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226		9.58	9.232		1.04	1.00	0.204	pCi/L	96	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits							
Ba Carrier	89.0		30 - 110							

Lab Sample ID: MB 160-715330/1-A

Matrix: Water

Analysis Batch: 719413

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 715330

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.01156	U	0.0724	0.0724	1.00	0.148	pCi/L	04/30/25 12:58	05/27/25 12:16	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		30 - 110					04/30/25 12:58	05/27/25 12:16	1

Lab Sample ID: LCS 160-715330/2-A

Matrix: Water

Analysis Batch: 719413

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 715330

Analyte		Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226		9.58	9.175		1.07	1.00	0.230	pCi/L	96	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits							
Ba Carrier	87.7		30 - 110							

Lab Sample ID: MB 160-715333/1-A

Matrix: Water

Analysis Batch: 719582

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 715333

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.04742	U	0.200	0.200	1.00	0.378	pCi/L	04/30/25 13:05	05/28/25 13:41	1

Eurofins Eaton Analytical South Bend

QC Sample Results

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

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

Lab Sample ID: MB 160-715333/1-A

Matrix: Water

Analysis Batch: 719582

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 715333

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	88.2		30 - 110	04/30/25 13:05	05/28/25 13:41	1

Lab Sample ID: LCS 160-715333/2-A

Matrix: Water

Analysis Batch: 719582

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 715333

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	9.58	9.066		1.23	1.00	0.352	pCi/L	95	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	87.5		30 - 110						

Lab Sample ID: MB 160-715483/1-A

Matrix: Water

Analysis Batch: 719412

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 715483

			Count	Total						
	MB	MB	Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.09166	U	0.119	0.119	1.00	0.305	pCi/L	05/01/25 07:30	05/27/25 17:49	1
	MB	MB								
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.6		30 - 110					05/01/25 07:30	05/27/25 17:49	1

Lab Sample ID: LCS 160-715483/2-A

Matrix: Water

Analysis Batch: 719412

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 715483

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	9.58	8.547		1.13	1.00	0.270	pCi/L	89	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	100		30 - 110						

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-715329/1-A

Matrix: Water

Analysis Batch: 719017

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 715329

			Count	Total						
	MB	MB	Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.1528	U	0.388	0.389	1.00	0.777	pCi/L	04/30/25 12:57	05/23/25 14:26	1
Carrier	MB	MB								
	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.3		30 - 110					04/30/25 12:57	05/23/25 14:26	1

Eurofins Eaton Analytical South Bend

QC Sample Results

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

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

Lab Sample ID: MB 160-715329/1-A

Matrix: Water

Analysis Batch: 719017

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 715329

	MB	MB									
Carrier	%Yield	Qualifier	Limits						Prepared	Analyzed	Dil Fac
Y Carrier	74.8		30 - 110						04/30/25 12:57	05/23/25 14:26	1

Lab Sample ID: LCS 160-715329/2-A

Matrix: Water

Analysis Batch: 719017

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 715329

Analyte		Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	
Radium-228		9.42	11.79		1.64	1.00	0.816	pCi/L	125	75 - 125	

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	89.0		30 - 110
Y Carrier	77.8		30 - 110

Lab Sample ID: MB 160-715332/1-A

Matrix: Water

Analysis Batch: 719073

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 715332

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.08847	U	0.272	0.272	1.00	0.544	pCi/L	04/30/25 13:04	05/24/25 10:37	1

Carrier	MB %Yield	MB Qualifier	Limits						Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		30 - 110						04/30/25 13:04	05/24/25 10:37	1
Y Carrier	74.8		30 - 110						04/30/25 13:04	05/24/25 10:37	1

Lab Sample ID: LCS 160-715332/2-A

Matrix: Water

Analysis Batch: 719073

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 715332

Analyte		Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	
Radium-228		9.42	11.22		1.48	1.00	0.563	pCi/L	119	75 - 125	

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	87.7		30 - 110
Y Carrier	78.5		30 - 110

Lab Sample ID: MB 160-715334/1-A

Matrix: Water

Analysis Batch: 719575

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 715334

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.2576	U	0.358	0.358	1.00	0.600	pCi/L	04/30/25 13:08	05/28/25 09:48	1

Eurofins Eaton Analytical South Bend

QC Sample Results

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

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

Lab Sample ID: MB 160-715334/1-A

Matrix: Water

Analysis Batch: 719575

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 715334

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	88.2		30 - 110	04/30/25 13:08	05/28/25 09:48	1
Y Carrier	80.0		30 - 110	04/30/25 13:08	05/28/25 09:48	1

Lab Sample ID: LCS 160-715334/2-A

Matrix: Water

Analysis Batch: 719575

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 715334

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	9.40	11.01		1.47	1.00	0.593	pCi/L	117	75 - 125

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	87.5		30 - 110
Y Carrier	80.4		30 - 110

Lab Sample ID: MB 160-715484/1-A

Matrix: Water

Analysis Batch: 719413

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 715484

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.05168	U	0.319	0.319	1.00	0.582	pCi/L	05/01/25 07:36	05/27/25 10:09	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	91.6		30 - 110	05/01/25 07:36	05/27/25 10:09	1
Y Carrier	78.9		30 - 110	05/01/25 07:36	05/27/25 10:09	1

Lab Sample ID: LCS 160-715484/2-A

Matrix: Water

Analysis Batch: 719413

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 715484

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	9.41	11.12		1.45	1.00	0.531	pCi/L	118	75 - 125

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	100		30 - 110
Y Carrier	76.6		30 - 110

QC Association Summary

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

Rad

Prep Batch: 715328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-145552-1	MW-02	Total/NA	Water	PrecSep-21	
810-145552-2	MW-09	Total/NA	Water	PrecSep-21	
810-145552-3	MW-33	Total/NA	Water	PrecSep-21	
810-145552-4	MW-30	Total/NA	Water	PrecSep-21	
810-145552-5	MW-31	Total/NA	Water	PrecSep-21	
MB 160-715328/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-715328/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 715329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-145552-1	MW-02	Total/NA	Water	PrecSep_0	
810-145552-2	MW-09	Total/NA	Water	PrecSep_0	
810-145552-3	MW-33	Total/NA	Water	PrecSep_0	
810-145552-4	MW-30	Total/NA	Water	PrecSep_0	
810-145552-5	MW-31	Total/NA	Water	PrecSep_0	
MB 160-715329/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-715329/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Prep Batch: 715330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-145552-6	MW-32	Total/NA	Water	PrecSep-21	
810-145552-8	MW-17	Total/NA	Water	PrecSep-21	
810-145552-9	MW-10	Total/NA	Water	PrecSep-21	
810-145552-10	MWT-10	Total/NA	Water	PrecSep-21	
810-145552-11	MW-38	Total/NA	Water	PrecSep-21	
810-145552-12	MW-06	Total/NA	Water	PrecSep-21	
810-145552-13	MW-08	Total/NA	Water	PrecSep-21	
810-145552-14	MWT-08	Total/NA	Water	PrecSep-21	
810-145552-15	MW-01R	Total/NA	Water	PrecSep-21	
810-145552-16	MW-37	Total/NA	Water	PrecSep-21	
810-145552-17	MW-36	Total/NA	Water	PrecSep-21	
MB 160-715330/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-715330/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 715332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-145552-6	MW-32	Total/NA	Water	PrecSep_0	
810-145552-8	MW-17	Total/NA	Water	PrecSep_0	
810-145552-9	MW-10	Total/NA	Water	PrecSep_0	
810-145552-10	MWT-10	Total/NA	Water	PrecSep_0	
810-145552-11	MW-38	Total/NA	Water	PrecSep_0	
810-145552-12	MW-06	Total/NA	Water	PrecSep_0	
810-145552-13	MW-08	Total/NA	Water	PrecSep_0	
810-145552-14	MWT-08	Total/NA	Water	PrecSep_0	
810-145552-15	MW-01R	Total/NA	Water	PrecSep_0	
810-145552-16	MW-37	Total/NA	Water	PrecSep_0	
810-145552-17	MW-36	Total/NA	Water	PrecSep_0	
MB 160-715332/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-715332/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

QC Association Summary

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

Rad

Prep Batch: 715333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-145552-18	MW-20	Total/NA	Water	PrecSep-21	
810-145552-25	MW-04	Total/NA	Water	PrecSep-21	
810-145552-26	MW-12	Total/NA	Water	PrecSep-21	
810-145552-27	MW-16	Total/NA	Water	PrecSep-21	
810-145552-28	MW-34	Total/NA	Water	PrecSep-21	
810-145552-29	SG-04	Total/NA	Water	PrecSep-21	
810-145552-30	SG-02	Total/NA	Water	PrecSep-21	
810-145552-31	SG-05	Total/NA	Water	PrecSep-21	
810-145552-32	SG-07	Total/NA	Water	PrecSep-21	
MB 160-715333/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-715333/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 715334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-145552-18	MW-20	Total/NA	Water	PrecSep_0	
810-145552-25	MW-04	Total/NA	Water	PrecSep_0	
810-145552-26	MW-12	Total/NA	Water	PrecSep_0	
810-145552-27	MW-16	Total/NA	Water	PrecSep_0	
810-145552-28	MW-34	Total/NA	Water	PrecSep_0	
810-145552-29	SG-04	Total/NA	Water	PrecSep_0	
810-145552-30	SG-02	Total/NA	Water	PrecSep_0	
810-145552-31	SG-05	Total/NA	Water	PrecSep_0	
810-145552-32	SG-07	Total/NA	Water	PrecSep_0	
MB 160-715334/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-715334/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Prep Batch: 715483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-145552-19	MW-19	Total/NA	Water	PrecSep-21	
810-145552-20	MW-07	Total/NA	Water	PrecSep-21	
810-145552-21	MW-27	Total/NA	Water	PrecSep-21	
810-145552-22	MW-28	Total/NA	Water	PrecSep-21	
810-145552-23	MW-18	Total/NA	Water	PrecSep-21	
MB 160-715483/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-715483/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 715484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-145552-19	MW-19	Total/NA	Water	PrecSep_0	
810-145552-20	MW-07	Total/NA	Water	PrecSep_0	
810-145552-21	MW-27	Total/NA	Water	PrecSep_0	
810-145552-22	MW-28	Total/NA	Water	PrecSep_0	
810-145552-23	MW-18	Total/NA	Water	PrecSep_0	
MB 160-715484/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-715484/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

Client Sample ID: MW-02

Lab Sample ID: 810-145552-1

Date Collected: 04/19/25 10:25

Matrix: Water

Date Received: 04/22/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			715328	MLT	EET SL	04/30/25 12:53
Total/NA	Analysis	903.0		1	719413	SWS	EET SL	05/27/25 12:14
Total/NA	Prep	PrecSep_0			715329	MLT	EET SL	04/30/25 12:57
Total/NA	Analysis	904.0		1	719010	SWS	EET SL	05/23/25 14:36
Total/NA	Analysis	Ra226_Ra228 Pos		1	719615	SCB	EET SL	05/28/25 15:15

Client Sample ID: MW-09

Lab Sample ID: 810-145552-2

Date Collected: 04/19/25 13:00

Matrix: Water

Date Received: 04/22/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			715328	MLT	EET SL	04/30/25 12:53
Total/NA	Analysis	903.0		1	719413	SWS	EET SL	05/27/25 12:14
Total/NA	Prep	PrecSep_0			715329	MLT	EET SL	04/30/25 12:57
Total/NA	Analysis	904.0		1	719010	SWS	EET SL	05/23/25 14:36
Total/NA	Analysis	Ra226_Ra228 Pos		1	719615	SCB	EET SL	05/28/25 15:15

Client Sample ID: MW-33

Lab Sample ID: 810-145552-3

Date Collected: 04/19/25 15:25

Matrix: Water

Date Received: 04/22/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			715328	MLT	EET SL	04/30/25 12:53
Total/NA	Analysis	903.0		1	719413	SWS	EET SL	05/27/25 12:14
Total/NA	Prep	PrecSep_0			715329	MLT	EET SL	04/30/25 12:57
Total/NA	Analysis	904.0		1	719010	SWS	EET SL	05/23/25 14:36
Total/NA	Analysis	Ra226_Ra228 Pos		1	719615	SCB	EET SL	05/28/25 15:15

Client Sample ID: MW-30

Lab Sample ID: 810-145552-4

Date Collected: 04/20/25 09:30

Matrix: Water

Date Received: 04/22/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			715328	MLT	EET SL	04/30/25 12:53
Total/NA	Analysis	903.0		1	719413	SWS	EET SL	05/27/25 12:14
Total/NA	Prep	PrecSep_0			715329	MLT	EET SL	04/30/25 12:57
Total/NA	Analysis	904.0		1	719010	SWS	EET SL	05/23/25 14:36
Total/NA	Analysis	Ra226_Ra228 Pos		1	719615	SCB	EET SL	05/28/25 15:15

Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

Client Sample ID: MW-31

Lab Sample ID: 810-145552-5

Date Collected: 04/20/25 11:40

Matrix: Water

Date Received: 04/22/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			715328	MLT	EET SL	04/30/25 12:53
Total/NA	Analysis	903.0		1	719413	SWS	EET SL	05/27/25 12:14
Total/NA	Prep	PrecSep_0			715329	MLT	EET SL	04/30/25 12:57
Total/NA	Analysis	904.0		1	719010	SWS	EET SL	05/23/25 14:37
Total/NA	Analysis	Ra226_Ra228 Pos		1	719615	SCB	EET SL	05/28/25 15:15

Client Sample ID: MW-32

Lab Sample ID: 810-145552-6

Date Collected: 04/20/25 13:35

Matrix: Water

Date Received: 04/22/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			715330	MLT	EET SL	04/30/25 12:58
Total/NA	Analysis	903.0		1	719413	SWS	EET SL	05/27/25 14:23
Total/NA	Prep	PrecSep_0			715332	MLT	EET SL	04/30/25 13:04
Total/NA	Analysis	904.0		1	719074	SWS	EET SL	05/24/25 10:42
Total/NA	Analysis	Ra226_Ra228 Pos		1	719592	SCB	EET SL	05/28/25 11:44

Client Sample ID: MW-17

Lab Sample ID: 810-145552-8

Date Collected: 04/20/25 16:35

Matrix: Water

Date Received: 04/22/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			715330	MLT	EET SL	04/30/25 12:58
Total/NA	Analysis	903.0		1	719413	SWS	EET SL	05/27/25 14:22
Total/NA	Prep	PrecSep_0			715332	MLT	EET SL	04/30/25 13:04
Total/NA	Analysis	904.0		1	719074	SWS	EET SL	05/24/25 10:40
Total/NA	Analysis	Ra226_Ra228 Pos		1	719592	SCB	EET SL	05/28/25 11:44

Client Sample ID: MW-10

Lab Sample ID: 810-145552-9

Date Collected: 04/20/25 09:10

Matrix: Water

Date Received: 04/22/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			715330	MLT	EET SL	04/30/25 12:58
Total/NA	Analysis	903.0		1	719413	SWS	EET SL	05/27/25 14:22
Total/NA	Prep	PrecSep_0			715332	MLT	EET SL	04/30/25 13:04
Total/NA	Analysis	904.0		1	719074	SWS	EET SL	05/24/25 10:41
Total/NA	Analysis	Ra226_Ra228 Pos		1	719592	SCB	EET SL	05/28/25 11:44

Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

Client Sample ID: MWT-10

Lab Sample ID: 810-145552-10

Date Collected: 04/20/25 09:10

Matrix: Water

Date Received: 04/22/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			715330	MLT	EET SL	04/30/25 12:58
Total/NA	Analysis	903.0		1	719413	SWS	EET SL	05/27/25 14:22
Total/NA	Prep	PrecSep_0			715332	MLT	EET SL	04/30/25 13:04
Total/NA	Analysis	904.0		1	719074	SWS	EET SL	05/24/25 10:41
Total/NA	Analysis	Ra226_Ra228 Pos		1	719592	SCB	EET SL	05/28/25 11:44

Client Sample ID: MW-38

Lab Sample ID: 810-145552-11

Date Collected: 04/20/25 10:30

Matrix: Water

Date Received: 04/22/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			715330	MLT	EET SL	04/30/25 12:58
Total/NA	Analysis	903.0		1	719413	SWS	EET SL	05/27/25 14:22
Total/NA	Prep	PrecSep_0			715332	MLT	EET SL	04/30/25 13:04
Total/NA	Analysis	904.0		1	719074	SWS	EET SL	05/24/25 10:41
Total/NA	Analysis	Ra226_Ra228 Pos		1	719592	SCB	EET SL	05/28/25 11:44

Client Sample ID: MW-06

Lab Sample ID: 810-145552-12

Date Collected: 04/20/25 11:22

Matrix: Water

Date Received: 04/22/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			715330	MLT	EET SL	04/30/25 12:58
Total/NA	Analysis	903.0		1	719413	SWS	EET SL	05/27/25 14:22
Total/NA	Prep	PrecSep_0			715332	MLT	EET SL	04/30/25 13:04
Total/NA	Analysis	904.0		1	719074	SWS	EET SL	05/24/25 11:06
Total/NA	Analysis	Ra226_Ra228 Pos		1	719592	SCB	EET SL	05/28/25 11:44

Client Sample ID: MW-08

Lab Sample ID: 810-145552-13

Date Collected: 04/20/25 13:18

Matrix: Water

Date Received: 04/22/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			715330	MLT	EET SL	04/30/25 12:58
Total/NA	Analysis	903.0		1	719413	SWS	EET SL	05/27/25 14:22
Total/NA	Prep	PrecSep_0			715332	MLT	EET SL	04/30/25 13:04
Total/NA	Analysis	904.0		1	719074	SWS	EET SL	05/24/25 10:41
Total/NA	Analysis	Ra226_Ra228 Pos		1	719592	SCB	EET SL	05/28/25 11:44

Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

Client Sample ID: MWT-08

Lab Sample ID: 810-145552-14

Date Collected: 04/20/25 13:18

Matrix: Water

Date Received: 04/22/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			715330	MLT	EET SL	04/30/25 12:58
Total/NA	Analysis	903.0		1	719413	SWS	EET SL	05/27/25 14:22
Total/NA	Prep	PrecSep_0			715332	MLT	EET SL	04/30/25 13:04
Total/NA	Analysis	904.0		1	719074	SWS	EET SL	05/24/25 10:41
Total/NA	Analysis	Ra226_Ra228 Pos		1	719592	SCB	EET SL	05/28/25 11:44

Client Sample ID: MW-01R

Lab Sample ID: 810-145552-15

Date Collected: 04/20/25 15:20

Matrix: Water

Date Received: 04/22/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			715330	MLT	EET SL	04/30/25 12:58
Total/NA	Analysis	903.0		1	719413	SWS	EET SL	05/27/25 14:22
Total/NA	Prep	PrecSep_0			715332	MLT	EET SL	04/30/25 13:04
Total/NA	Analysis	904.0		1	719074	SWS	EET SL	05/24/25 10:41
Total/NA	Analysis	Ra226_Ra228 Pos		1	719592	SCB	EET SL	05/28/25 11:44

Client Sample ID: MW-37

Lab Sample ID: 810-145552-16

Date Collected: 04/20/25 16:38

Matrix: Water

Date Received: 04/22/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			715330	MLT	EET SL	04/30/25 12:58
Total/NA	Analysis	903.0		1	719413	SWS	EET SL	05/27/25 14:22
Total/NA	Prep	PrecSep_0			715332	MLT	EET SL	04/30/25 13:04
Total/NA	Analysis	904.0		1	719074	SWS	EET SL	05/24/25 10:41
Total/NA	Analysis	Ra226_Ra228 Pos		1	719592	SCB	EET SL	05/28/25 11:44

Client Sample ID: MW-36

Lab Sample ID: 810-145552-17

Date Collected: 04/21/25 09:15

Matrix: Water

Date Received: 04/24/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			715330	MLT	EET SL	04/30/25 12:58
Total/NA	Analysis	903.0		1	719413	SWS	EET SL	05/27/25 16:08
Total/NA	Prep	PrecSep_0			715332	MLT	EET SL	04/30/25 13:04
Total/NA	Analysis	904.0		1	719058	SWS	EET SL	05/24/25 12:14
Total/NA	Analysis	Ra226_Ra228 Pos		1	719592	SCB	EET SL	05/28/25 11:44

Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

Client Sample ID: MW-20

Lab Sample ID: 810-145552-18

Date Collected: 04/21/25 10:45

Matrix: Water

Date Received: 04/24/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			715333	MLT	EET SL	04/30/25 13:05
Total/NA	Analysis	903.0		1	719582	SWS	EET SL	05/28/25 13:41
Total/NA	Prep	PrecSep_0			715334	MLT	EET SL	04/30/25 13:08
Total/NA	Analysis	904.0		1	719575	SWS	EET SL	05/28/25 09:49
Total/NA	Analysis	Ra226_Ra228 Pos		1	719616	SCB	EET SL	05/28/25 15:16

Client Sample ID: MW-19

Lab Sample ID: 810-145552-19

Date Collected: 04/21/25 12:00

Matrix: Water

Date Received: 04/24/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			715483	OGC	EET SL	05/01/25 07:30
Total/NA	Analysis	903.0		1	719413	SWS	EET SL	05/27/25 19:03
Total/NA	Prep	PrecSep_0			715484	OGC	EET SL	05/01/25 07:36
Total/NA	Analysis	904.0		1	719412	SWS	EET SL	05/27/25 10:07
Total/NA	Analysis	Ra226_Ra228 Pos		1	719616	SCB	EET SL	05/28/25 15:16

Client Sample ID: MW-07

Lab Sample ID: 810-145552-20

Date Collected: 04/21/25 13:45

Matrix: Water

Date Received: 04/24/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			715483	OGC	EET SL	05/01/25 07:30
Total/NA	Analysis	903.0		1	719413	SWS	EET SL	05/27/25 19:03
Total/NA	Prep	PrecSep_0			715484	OGC	EET SL	05/01/25 07:36
Total/NA	Analysis	904.0		1	719412	SWS	EET SL	05/27/25 10:07
Total/NA	Analysis	Ra226_Ra228 Pos		1	719616	SCB	EET SL	05/28/25 15:16

Client Sample ID: MW-27

Lab Sample ID: 810-145552-21

Date Collected: 04/21/25 15:35

Matrix: Water

Date Received: 04/24/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			715483	OGC	EET SL	05/01/25 07:30
Total/NA	Analysis	903.0		1	719413	SWS	EET SL	05/27/25 19:03
Total/NA	Prep	PrecSep_0			715484	OGC	EET SL	05/01/25 07:36
Total/NA	Analysis	904.0		1	719412	SWS	EET SL	05/27/25 10:07
Total/NA	Analysis	Ra226_Ra228 Pos		1	719616	SCB	EET SL	05/28/25 15:16

Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

Client Sample ID: MW-28

Lab Sample ID: 810-145552-22

Date Collected: 04/21/25 17:05

Matrix: Water

Date Received: 04/24/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			715483	OGC	EET SL	05/01/25 07:30
Total/NA	Analysis	903.0		1	719413	SWS	EET SL	05/27/25 19:03
Total/NA	Prep	PrecSep_0			715484	OGC	EET SL	05/01/25 07:36
Total/NA	Analysis	904.0		1	719412	SWS	EET SL	05/27/25 10:07
Total/NA	Analysis	Ra226_Ra228 Pos		1	719616	SCB	EET SL	05/28/25 15:16

Client Sample ID: MW-18

Lab Sample ID: 810-145552-23

Date Collected: 04/21/25 09:16

Matrix: Water

Date Received: 04/24/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			715483	OGC	EET SL	05/01/25 07:30
Total/NA	Analysis	903.0		1	719413	SWS	EET SL	05/27/25 19:04
Total/NA	Prep	PrecSep_0			715484	OGC	EET SL	05/01/25 07:36
Total/NA	Analysis	904.0		1	719412	SWS	EET SL	05/27/25 10:08
Total/NA	Analysis	Ra226_Ra228 Pos		1	719616	SCB	EET SL	05/28/25 15:16

Client Sample ID: MW-04

Lab Sample ID: 810-145552-25

Date Collected: 04/21/25 13:00

Matrix: Water

Date Received: 04/24/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			715333	MLT	EET SL	04/30/25 13:05
Total/NA	Analysis	903.0		1	719582	SWS	EET SL	05/28/25 13:41
Total/NA	Prep	PrecSep_0			715334	MLT	EET SL	04/30/25 13:08
Total/NA	Analysis	904.0		1	719575	SWS	EET SL	05/28/25 09:49
Total/NA	Analysis	Ra226_Ra228 Pos		1	719616	SCB	EET SL	05/28/25 15:16

Client Sample ID: MW-12

Lab Sample ID: 810-145552-26

Date Collected: 04/21/25 14:12

Matrix: Water

Date Received: 04/24/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			715333	MLT	EET SL	04/30/25 13:05
Total/NA	Analysis	903.0		1	719582	SWS	EET SL	05/28/25 13:42
Total/NA	Prep	PrecSep_0			715334	MLT	EET SL	04/30/25 13:08
Total/NA	Analysis	904.0		1	719575	SWS	EET SL	05/28/25 09:49
Total/NA	Analysis	Ra226_Ra228 Pos		1	719616	SCB	EET SL	05/28/25 15:16

Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

Client Sample ID: MW-16

Lab Sample ID: 810-145552-27

Date Collected: 04/21/25 15:20

Matrix: Water

Date Received: 04/24/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			715333	MLT	EET SL	04/30/25 13:05
Total/NA	Analysis	903.0		1	719582	SWS	EET SL	05/28/25 13:42
Total/NA	Prep	PrecSep_0			715334	MLT	EET SL	04/30/25 13:08
Total/NA	Analysis	904.0		1	719575	SWS	EET SL	05/28/25 09:49
Total/NA	Analysis	Ra226_Ra228 Pos		1	719616	SCB	EET SL	05/28/25 15:16

Client Sample ID: MW-34

Lab Sample ID: 810-145552-28

Date Collected: 04/21/25 16:32

Matrix: Water

Date Received: 04/24/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			715333	MLT	EET SL	04/30/25 13:05
Total/NA	Analysis	903.0		1	719575	SWS	EET SL	05/28/25 13:43
Total/NA	Prep	PrecSep_0			715334	MLT	EET SL	04/30/25 13:08
Total/NA	Analysis	904.0		1	719575	SWS	EET SL	05/28/25 09:49
Total/NA	Analysis	Ra226_Ra228 Pos		1	719616	SCB	EET SL	05/28/25 15:16

Client Sample ID: SG-04

Lab Sample ID: 810-145552-29

Date Collected: 04/22/25 15:10

Matrix: Water

Date Received: 04/24/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			715333	MLT	EET SL	04/30/25 13:05
Total/NA	Analysis	903.0		1	719575	SWS	EET SL	05/28/25 13:43
Total/NA	Prep	PrecSep_0			715334	MLT	EET SL	04/30/25 13:08
Total/NA	Analysis	904.0		1	719575	SWS	EET SL	05/28/25 09:49
Total/NA	Analysis	Ra226_Ra228 Pos		1	719616	SCB	EET SL	05/28/25 15:16

Client Sample ID: SG-02

Lab Sample ID: 810-145552-30

Date Collected: 04/22/25 15:25

Matrix: Water

Date Received: 04/24/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			715333	MLT	EET SL	04/30/25 13:05
Total/NA	Analysis	903.0		1	719575	SWS	EET SL	05/28/25 13:43
Total/NA	Prep	PrecSep_0			715334	MLT	EET SL	04/30/25 13:08
Total/NA	Analysis	904.0		1	719575	SWS	EET SL	05/28/25 09:49
Total/NA	Analysis	Ra226_Ra228 Pos		1	719616	SCB	EET SL	05/28/25 15:16

Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

Client Sample ID: SG-05

Lab Sample ID: 810-145552-31

Date Collected: 04/22/25 15:45

Matrix: Water

Date Received: 04/24/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			715333	MLT	EET SL	04/30/25 13:05
Total/NA	Analysis	903.0		1	719575	SWS	EET SL	05/28/25 13:48
Total/NA	Prep	PrecSep_0			715334	MLT	EET SL	04/30/25 13:08
Total/NA	Analysis	904.0		1	719575	SWS	EET SL	05/28/25 09:49
Total/NA	Analysis	Ra226_Ra228 Pos		1	719616	SCB	EET SL	05/28/25 15:16

Client Sample ID: SG-07

Lab Sample ID: 810-145552-32

Date Collected: 04/22/25 16:00

Matrix: Water

Date Received: 04/24/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			715333	MLT	EET SL	04/30/25 13:05
Total/NA	Analysis	903.0		1	719575	SWS	EET SL	05/28/25 13:48
Total/NA	Prep	PrecSep_0			715334	MLT	EET SL	04/30/25 13:08
Total/NA	Analysis	904.0		1	719581	SWS	EET SL	05/28/25 09:51
Total/NA	Analysis	Ra226_Ra228 Pos		1	719616	SCB	EET SL	05/28/25 15:16

Laboratory References:

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

Accreditation/Certification Summary

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

Laboratory: Eurofins St. Louis

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

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-27
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25
Connecticut	State	PH-0241	03-31-27
Florida	NELAP	E87689	06-30-25
HI - RadChem Recognition	State	n/a	06-30-25
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-25
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-25
MI - RadChem Recognition	State	9005	06-30-25
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-25
New Jersey	NELAP	MO002	06-30-25
New Mexico	State	MO00054	06-30-25
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	07-31-25
North Dakota	State	R-207	06-30-25
Oklahoma	NELAP	9997	08-31-25
Oregon	NELAP	4157	09-01-25
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-25
Texas	NELAP	T104704193	07-31-25
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-25
Virginia	NELAP	460230	06-14-25
Washington	State	C592	08-30-25
West Virginia DEP	State	381	10-31-25

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

Eurofins Eaton Analytical South Bend

Method Summary

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

Method	Method Description	Protocol	Laboratory
903.0	Radium-226 (GFPC)	EPA	EET SL
904.0	Radium-228 (GFPC)	EPA	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
Pos			
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency
None = None
TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

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

Sample Summary

Client: Trace Analytical Laboratories
Project/Site: 25D1122

Job ID: 810-145552-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
810-145552-1	MW-02	Water	04/19/25 10:25	04/22/25 09:00
810-145552-2	MW-09	Water	04/19/25 13:00	04/22/25 09:00
810-145552-3	MW-33	Water	04/19/25 15:25	04/22/25 09:00
810-145552-4	MW-30	Water	04/20/25 09:30	04/22/25 09:00
810-145552-5	MW-31	Water	04/20/25 11:40	04/22/25 09:00
810-145552-6	MW-32	Water	04/20/25 13:35	04/22/25 09:00
810-145552-8	MW-17	Water	04/20/25 16:35	04/22/25 09:00
810-145552-9	MW-10	Water	04/20/25 09:10	04/22/25 09:00
810-145552-10	MWT-10	Water	04/20/25 09:10	04/22/25 09:00
810-145552-11	MW-38	Water	04/20/25 10:30	04/22/25 09:00
810-145552-12	MW-06	Water	04/20/25 11:22	04/22/25 09:00
810-145552-13	MW-08	Water	04/20/25 13:18	04/22/25 09:00
810-145552-14	MWT-08	Water	04/20/25 13:18	04/22/25 09:00
810-145552-15	MW-01R	Water	04/20/25 15:20	04/22/25 09:00
810-145552-16	MW-37	Water	04/20/25 16:38	04/22/25 09:00
810-145552-17	MW-36	Water	04/21/25 09:15	04/24/25 09:00
810-145552-18	MW-20	Water	04/21/25 10:45	04/24/25 09:00
810-145552-19	MW-19	Water	04/21/25 12:00	04/24/25 09:00
810-145552-20	MW-07	Water	04/21/25 13:45	04/24/25 09:00
810-145552-21	MW-27	Water	04/21/25 15:35	04/24/25 09:00
810-145552-22	MW-28	Water	04/21/25 17:05	04/24/25 09:00
810-145552-23	MW-18	Water	04/21/25 09:16	04/24/25 09:00
810-145552-25	MW-04	Water	04/21/25 13:00	04/24/25 09:00
810-145552-26	MW-12	Water	04/21/25 14:12	04/24/25 09:00
810-145552-27	MW-16	Water	04/21/25 15:20	04/24/25 09:00
810-145552-28	MW-34	Water	04/21/25 16:32	04/24/25 09:00
810-145552-29	SG-04	Water	04/22/25 15:10	04/24/25 09:00
810-145552-30	SG-02	Water	04/22/25 15:25	04/24/25 09:00
810-145552-31	SG-05	Water	04/22/25 15:45	04/24/25 09:00
810-145552-32	SG-07	Water	04/22/25 16:00	04/24/25 09:00

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810-145552 Chain of Custody

110 S. Hill Street
South Bend, IN 46617
T: 1.800.332.4345
F: 1.574.233.8207

Order #
Batch #

www.eurofinsus.com/Eaton

CHAIN OF CUSTODY RECORD

Page ____ of ____

Shaded area for EEA use only

EXPORT TO:

Trace Analytical Laboratories, Inc., 2241 Black Creek Rd., Westport, MI 49444 231-3-5998

ILL TO:

Accounts Payable, Trace Analytical Laboratories, Inc., 2241 Black Creek Rd., Westport, MI 49444

LAB Number	COLLECTION			SAMPLER (Signature)	COMPLIANCE MONITORING	Yes	No	POPULATION SERVED	SOURCE WATER	PROJECT NAME	PC#	# OF CONTAINERS	MATRIX CODE	TURNAROUND TIME
	DATE	TIME	AM PM											
1	04/19/25	10:25	X	MM-02										
2	04/19/25	13:00	X	MM-09										
3	04/19/25	15:25	X	MM-33										
4	04/20/25	9:30	X	MM-30										
5	04/20/25	11:40	X	MM-31										
6	04/20/25	13:35	X	MM-32										
7	04/20/25	15:05	X	MM-11										
8	04/20/25	16:35	X	MM-17										
9	04/20/25	9:10	X	MM-10										
10	04/20/25	9:10	X	MM-10										
11	04/20/25	10:30	X	MM-38										
12	04/20/25	11:22	X	MM-06										
13	04/20/25	13:18	X	MM-08										
14	04/20/25	13:18	X	MM-08										

RELINQUISHED BY: (Signature) DATE TIME RECEIVED BY: (Signature) DATE TIME

RELINQUISHED BY: (Signature) DATE TIME

RELINQUISHED BY: (Signature) DATE TIME

MATRIX CODES:

DW-DRINKING WATER
RW-REAGENT WATER
GW-GROUND WATER
EW-EXPOSURE WATER
SW-SURFACE WATER
PW-POOL WATER
WW-WASTE WATER

TURNAROUND TIME (TAT) - SURCHARGES

SW = Standard Written: (15 working days) 0%
RW = Rush Written: (5 working days) 50%
RW = Rush Written: (5 working days) 75%
RW = Rush Written: (5 working days) 75%

RV = Immediate Verbal: (3 working days) 100%
RW = Immediate Written: (3 working days) 125%
SP = Weekend Holiday
STAT = Less than 48 hours

CALL

Samples received unannounced with less than 48 hours holding time remaining may be subject to additional charges.

06-LO-F0435 Issue 6.0 Effective Date: 2016-09-20

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Eaton Analytical

110 S. Hill Street
South Bend, IN 46617
T: 1.800.332.4345
F: 1.574.233.8207

Order #
Batch #

www.eurofinsus.com/Eaton

Shaded area for EEA use only

CHAIN OF CUSTODY RECORD

Page ____ of ____

REPORT TO:

Jon Mink, Tim Brewer (jnmink@trace-labs.com, tbrewer@trace-labs.com) Trace Analytical Laboratories, Inc., 2241 Black Creek Rd., Muskegon, MI 49444 231-773-5998

BILL TO:

Accounts Payable, Trace Analytical Laboratories, Inc., 2241 Black Creek Rd., Muskegon, MI 49444

SAMPLER (Signature)

PWS ID #

STATE (sample origin)

PROJECT NAME

PO#

COMPLIANCE MONITORING

Yes

No

POPULATION SERVED

SOURCE WATER

2501122

2501122

SAMPLING SITE

TEST NAME

SAMPLE REMARKS

CHLORINATED
YES NO

OF CONTAINERS

MATRIX CODE

TURNAROUND TIME

LAB Number

COLLECTION

DATE TIME AM PM

04/20/25 15:20 X

04/20/25 16:38 X

MM-37

MM-37

RADIUM 226/228

RADIUM 226/228

SW

LAB Number	DATE	TIME	AM	PM	RECEIVED BY (Signature)	DATE	TIME	AM	PM	RECEIVED BY (Signature)	DATE	TIME	AM	PM	LAB COMMENTS
1	04/20/25	15:20	X		MM-37										
2	04/20/25	16:38	X		MM-37										
3															
4															
5															
6															
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10															
11															
12															
13															
14															

RELINQUISHED BY (Signature)

DATE

TIME

RECEIVED BY (Signature)

DATE

TIME

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT

RELINQUISHED BY (Signature)

DATE

TIME

RECEIVED BY (Signature)

DATE

TIME

Feder

RELINQUISHED BY (Signature)

DATE

TIME

RECEIVED FOR LABORATORY BY:

DATE

TIME

MATRIX CODES:

DM-DRINKING WATER
RM-REAGENT WATER
GM-GROUND WATER
EW-EXPOSURE WATER
SW-SURFACE WATER
PW-POOL WATER
WW-WASTE WATER

TURN-AROUND TIME (TAT) - SURCHARGES

SW = Standard Written: (15 working days) 0%
RV = Rush Verbal: (5 working days) 50%
RW = Rush Written: (5 working days) 75%

RV = Immediate Verbal: (3 working days) 100%
RW = Immediate Written: (3 working days) 125%
SP = Weekend, Holiday
STAT = Less than 48 hours

CALL

Samples received unannounced with less than 48 hours holding time remaining may be subject to additional charges.

N/A



Eaton Analytical

110 S. Hill Street
South Bend, IN 46617
T: 1.800.332.4345
F: 1.574.233.8207

Order #
Batch #

www.EurofinsUS.com/Eaton

CHAIN OF CUSTODY RECORD

Page ____ of ____

REPORT TO:	Shaded area for EEA use only		SAMPLER (Signature)	PWS ID #	STATE (sample origin)	PROJECT NAME	PO#		
------------	------------------------------	--	---------------------	----------	-----------------------	--------------	-----	--	--

on Mink, Tim Brewer (tmink@trace-labs.com, tbrewer@trace-labs.com) Trace Analytical Laboratories, Inc., 2241 Black Creek Rd., Muskegon, MI 49444 231-735-9988

HILL TO: accounts Payable, Trace Analytical Laboratories, Inc., 2241 Black Creek Rd., Muskegon, MI 49444

COMPLIANCE MONITORING	Yes	No	POPULATION SERVED	SOURCE WATER	25D1122	25D1122		
	X							

LAB Number

COLLECTION

SAMPLING SITE

TEST NAME

SAMPLE REMARKS

CHLORINATED

OF CONTAINERS

MATRIX CODE

TURNAROUND TIME

DATE	TIME	AM	PM	RECEIVED BY (Signature)	DATE	TIME	AM	PM	LAB COMMENTS
04/21/25	9:15	X		MM-36					
04/21/25	10:45	X		MM-20					
04/21/25	12:00	X		MM-19					
04/21/25	13:45	X		MM-07					
04/21/25	15:35	X		MM-27					
04/21/25	17:05	X		MM-28					
04/21/25	9:16	X		MM-18					
04/21/25	11:50	X		MM-03					
04/21/25	13:00	X		MM-04					
04/21/25	14:12	X		MM-12					
04/21/25	15:20	X		MM-16					
04/21/25	16:32	X		MM-34					
04/22/25	15:10	X		SG-04					
04/22/25	15:25	X		SG-02					

RELINQUISHED BY (Signature)

DATE

TIME

RECEIVED BY (Signature)

DATE

TIME

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT

RELINQUISHED BY (Signature)

DATE

TIME

RECEIVED BY (Signature)

DATE

TIME

- Fedex

RELINQUISHED BY (Signature)

DATE

TIME

RECEIVED FOR LABORATORY BY:

DATE

TIME

MATRIX CODES:

TURN-AROUND TIME (TAT) - SURCHARGES

DW-DRINKING WATER
RW-REAGENT WATER
GW-GROUND WATER
EW-EXPOSURE WATER
SW-SURFACE WATER
PW-POOL WATER
WW-WASTE WATER

SW = Standard Written: (15 working days) 0%
RW = Rush Verbal: (5 working days) 50%
RW = Rush Written: (5 working days) 75%

IV = Immediate Verbal: (3 working days) 100%
IW = Immediate Written: (3 working days) 125%
SP = Weekend, Holiday
STAT = Less than 48 hours
CALL

Samples received unannounced with less than 48 hours holding time remaining may be subject to additional charges.

STAT = Less than 48 hours



eurofins

Eaton Analytical

110 S. Hill Street
South Bend, IN 46617
T: 1.800.332.4345
F: 1.574.233.8207

Order #
Batch #

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CHAIN OF CUSTODY RECORD

Page ____ of ____

Shaded area for EEA use only

EXPORT TO: n Mink, Tim Brewer (timink@trace-labs.com) Trace Analytical Laboratories, Inc., 2241 Black Creek Rd., Muskegon, MI 49444 231-73-5998

SAMPLER (Signature)

PWS ID #

STATE (sample origin)

PROJECT NAME

PO#

TURNAROUND TIME

ILL TO:

Accounts Payable, Trace Analytical Laboratories, Inc., 2241 Black Creek Rd., Muskegon, MI 49444

COMPLIANCE MONITORING

Yes

No

POPULATION SERVED

MI

25D1122

25D1122

LAB Number

COLLECTION

SAMPLING SITE

TEST NAME

SAMPLE REMARKS

CHLORINATED

OF CONTAINERS

MATRIX CODE

SW

	DATE	TIME	AM	PM	RECEIVED BY:(Signature)	DATE	TIME	AM	PM	RECEIVED BY:(Signature)	DATE	TIME	AM	PM	LAB COMMENTS	LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT
1	04/22/25	15:45		X	SG-05											
2	04/22/25	16:00		X	SG-07											
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																

RELINQUISHED BY:(Signature)

RELINQUISHED BY:(Signature)

RELINQUISHED BY:(Signature)

Relinquished By:

RELINQUISHED BY:(Signature)

DATE

TIME

RECEIVED FOR LABORATORY BY:

DATE

TIME

LAB COMMENTS

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT

MATRIX CODES:

DW-DRINKING WATER
RW-REAGENT WATER
GW-GROUND WATER
EW-EXPOSURE WATER
SW-SURFACE WATER

TURNAROUND TIME (TAT) - SURCHARGES

SW = Standard Written: (15 working days) 0%

RW = Rush Written: (5 working days) 50%

RW = Rush Written: (5 working days) 75%

IV = Immediate Verbal: (3 working days) 100%

IV = Immediate Written: (3 working days) 125%

SP = Weekend, Holiday
STAT = Less than 48 hours

CALL

Samples received unannounced with less than 48 hours holding time remaining may be subject to additional charges.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Eurofins Eaton Analytical South Bend

110 S Hill Street
South Bend, IN 46617
Phone: 574-233-4777 Fax: 574-233-8207

Chain of Custody Record



Environment Testing

Client Information (Sub Contract Lab)		Sampler: N/A	Lab PM: Fullmer, Karen	Carrier Tracking No(s): N/A	COC No: 810-55161.1							
Shipping/Receiving		Phone: N/A	E-Mail: Karen.Fullmer@et.eurofins.com	State of Origin: Michigan	Page: Page 1 of 4							
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Michigan		Job #: 810-145552-1	Preservation Codes:							
Address: 13715 Rider Trail North,		Due Date Requested: 5/27/2025		Analysis Requested								
City: Earth City		TAT Requested (days): N/A										
State, Zip: MO, 63045												
Phone: 314-298-8566(Tel) 314-298-8757(Fax)		PO #: N/A										
Email: N/A		WO #: N/A										
Project Name: 25D1122		Project #: 81000263										
Site: N/A		SSOW#: N/A		Other: N/A								
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (W=Water, S=Soil, O=Organic, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 EPA 903.0 - Radium 226 (St. Louis)	904.0/PrecSep_0 EPA 904.0 - Radium 228 (St. Louis)	Ra226_228GFPC_P/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
MMW-02 (810-145552-1)	4/19/25	10:25	Eastern	G	Water		X	X	X		1	
MMW-09 (810-145552-2)	4/19/25	13:00	Eastern	G	Water		X	X	X		1	
MMW-33 (810-145552-3)	4/19/25	15:25	Eastern	G	Water		X	X	X		1	
MMW-30 (810-145552-4)	4/20/25	09:30	Eastern	G	Water		X	X	X		1	
MMW-31 (810-145552-5)	4/20/25	11:40	Eastern	G	Water		X	X	X		1	
MMW-32 (810-145552-6)	4/20/25	13:35	Eastern	G	Water		X	X	X		1	
MMW-11 (810-145552-7)	4/20/25	15:05	Eastern	G	Water		X	X	X		1	
MMW-17 (810-145552-8)	4/20/25	16:35	Eastern	G	Water		X	X	X		1	
MMW-10 (810-145552-9)	4/20/25	09:10	Eastern	G	Water		X	X	X		1	

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

Possible Hazard Identification

Unconfirmed

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

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

☐ Return To Client ☐ Disposal By Lab ☐ Archive For Months

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

Relinquished by: Penny Phlegmlyst Date: 04/28/2025 Time: 1106 Company: E2ASB

Relinquished by: Date: Time: Company

Relinquished by: Date: Time: Company

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

Chain of Custody Record



Environment Testing

Page 52 of 64

Eurofins Eaton Analytical South Bend
110 S Hill Street
South Bend, IN 46617
Phone: 574-233-4777 Fax: 574-233-8207

Chain of Custody Record



Environment Testing

Client Information (Sub Contract Lab)		Sampler: N/A	Lab PM: Fullmer, Karen	Carrier Tracking No(s): N/A	COC No: 810-55161.3							
Client Contact: N/A	Phone: N/A	E-Mail: Karen.Fullmer@et.eurofins.com	State of Origin: Michigan	Page: 3 of 4								
Shipping/Receiving: N/A		Accreditations Required (See note): State - Michigan		Job #: 810-145552-1	Preservation Codes:							
Company: TestAmerica Laboratories, Inc.		Due Date Requested: 5/27/2025		Analysis Requested								
Address: 13715 Rider Trail North,		TAT Requested (days): N/A										
City: Earth City												
State, Zip: MO, 63045												
Phone: 314-298-8566(Tel) 314-298-8757(Fax)		PO #: N/A										
Email: N/A		WO #: N/A										
Project Name: 2SD1122		Project #: 81000263										
Site: N/A		SSOW#: N/A										
Other: N/A												
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, B=soil, O=other, S=sludge, T=trans, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 EPA 903.0 - Radium 226 (St. Louis)	904.0/PrecSep_0 EPA 904.0 - Radium 228 (St. Louis)	Ra226_228GFPC_P/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
MW-19 (810-145552-19)		4/21/25	12:00	G	Water		X	X	X		1	
MW-07 (810-145552-20)		4/21/25	13:45	G	Water		X	X	X		1	
MW-27 (810-145552-21)		4/21/25	15:35	G	Water		X	X	X		1	
MW-28 (810-145552-22)		4/21/25	17:05	G	Water		X	X	X		1	
MW-18 (810-145552-23)		4/21/25	09:16	G	Water		X	X	X		1	
MW-03 (810-145552-24)		4/21/25	11:50	G	Water		X	X	X		1	
MW-04 (810-145552-25)		4/21/25	13:00	G	Water		X	X	X		1	
MW-12 (810-145552-26)		4/21/25	14:12	G	Water		X	X	X		1	
MW-16 (810-145552-27)		4/21/25	15:20	G	Water		X	X	X		1	

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

Possible Hazard Identification

Unconfirmed

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

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

Relinquished by: *Karen Fullmer* Date/Time: *04/26/2025 11:06* Company: *ETAS* Received By: Date/Time: Company:

Relinquished by: Date/Time: Company: Received By: Date/Time: Company:

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

Chain of Custody Record

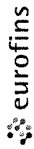
Ver: 10/10/2024

Chain of Custody Record



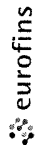
Client Information (Sub Contract Lab)		Sampler:	Lab PM:	Carrier Tracking No(s):	COC No:
Client Contact:		N/A	Fullmer, Karen	N/A	810-55161.1
Shipping/Receiving		Phone:	E-Mail:	State of Origin:	Page:
		N/A	Karen.Fullmer@et-eurofins.com	Michigan	Page 1 of 4
Company:		Accreditations Required (See note):		Job #:	Preservation Codes:
TestAmerica Laboratories, Inc.		State - Michigan		810-145552-1	
Address:		Due Date Requested:	Analysis Requested		
13715 Rider Trail North,		5/27/2025			
City:	Earth City	TAT Requested (days):	N/A		
State:	MO, 63045				
Phone:	314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	N/A	N/A			
Project Name:	25D1122	WO #:			
Site:	N/A	SSOW#:			
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Blood, A=Air)
MW-02 (810-145552-1)	4/19/25	10:25 Eastern	G	Water	
MW-09 (810-145552-2)	4/19/25	13:00 Eastern	G	Water	
MW-33 (810-145552-3)	4/19/25	15:25 Eastern	G	Water	
MW-30 (810-145552-4)	4/20/25	09:30 Eastern	G	Water	
MW-31 (810-145552-5)	4/20/25	11:40 Eastern	G	Water	
MW-32 (810-145552-6)	4/20/25	13:35 Eastern	G	Water	
MW-11 (810-145552-7)	4/20/25	15:05 Eastern	G	Water	
MW-17 (810-145552-8)	4/20/25	16:35 Eastern	G	Water	
MW-10 (810-145552-9)	4/20/25	09:10 Eastern	G	Water	
Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Eaton Analytical, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Eaton Analytical, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Eaton Analytical, LLC.					
Possible Hazard Identification					
Unconfirmed					
Deliverable Requested: I, II, III, IV, Other (specify)					
Primary Deliverable Rank: 2					
Empty Kit Relinquished by:					
Date:					
Time:					
Relinquished by: <i>Penny Rahberg Welf</i>					
Date/Time: 04/28/2025 11:06					
Relinquished by: <i>M. Pinette</i>					
Date/Time: APR 29 2025 08:10					
Relinquished by: Meadow Pinette					
Date/Time:					
Cooler Temperature(s) °C and Other Remarks:					
Custody Seal No.: Δ Yes Δ No					

Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler:	Lab PM:	Carrier Tracking No(s):	COC No:							
Client Contact		N/A	Fullmer, Karen	N/A	810-55161.2							
Shipping/Receiving		Phone:	E-Mail:	State of Origin:	Page:							
Company:		N/A	Karen.Fullmer@et-eurofins.com	Michigan	Page 2 of 4							
TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #:	Preservation Codes:							
Address:		State - Michigan		810-145552-1								
City:		Due Date Requested:		Analysis Requested								
Earth City		5/27/2025										
State Zip:		TAT Requested (days):										
MO, 63045		N/A										
Phone:		PO #:	N/A									
314-298-8566(Tel) 314-298-8757(Fax)		N/A										
Email:		WO #:										
N/A		N/A										
Project Name:		Project #:										
25D1122		81000263										
Site:		SSOW#:										
N/A		N/A										
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=oil, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PresSep, 21 EPA 903.0 - Radium 226 (St. Louis)	904.0/PresSep, 0 EPA 904.0 - Radium 228 (St. Louis)	Ra226, 228GFP, P/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
MWT-10 (810-145552-10)	4/20/25	09:10 Eastern	G	Water		X	X	X	X	X	1	
MW-38 (810-145552-11)	4/20/25	10:30 Eastern	G	Water		X	X	X	X	X	1	
MW-06 (810-145552-12)	4/20/25	11:22 Eastern	G	Water		X	X	X	X	X	1	
MW-08 (810-145552-13)	4/20/25	13:18 Eastern	G	Water		X	X	X	X	X	1	
MWT-08 (810-145552-14)	4/20/25	13:18 Eastern	G	Water		X	X	X	X	X	1	
MW-01R (810-145552-15)	4/20/25	15:20 Eastern	G	Water		X	X	X	X	X	1	
MW-37 (810-145552-16)	4/20/25	16:38 Eastern	G	Water		X	X	X	X	X	1	
MW-36 (810-145552-17)	4/21/25	09:15 Eastern	G	Water		X	X	X	X	X	1	
MW-20 (810-145552-18)	4/21/25	10:45 Eastern	G	Water		X	X	X	X	X	1	
Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Eaton Analytical, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Eaton Analytical, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Eaton Analytical, LLC.												
Possible Hazard Identification												
Unconfirmed												
Deliverable Requested: I, II, III, IV, Other (specify)												
Primary Deliverable Rank: 2												
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)												
Return To Client ☐ Disposal By Lab ☐ Archive For ☐ Months												
Special Instructions/QC Requirements:												
Empty Kit Relinquished by:												
Date:												
Time:												
Method of Shipment:												
Relinquished by: <i>Penny Delaney</i>												
Date/Time: 04/28/2025 1104												
Company: EEAAB												
Relinquished by:												
Date/Time:												
Company:												
Relinquished by:												
Date/Time:												
Company:												
Custody Seals Intact: ☐ Yes ☐ No												
Custody Seal No.:												
Cooler Temperature(s) °C and Other Remarks:												

Chain of Custody Record



Environment Testing

Client Information (Sub Contract Lab)		Sampler:	Lab PM:	Carrier Tracking No(s):	COC No:							
Client Contact		N/A	Fullmer, Karen	N/A	810-55161.3							
Shipping/Receiving		Phone:	E-Mail:	State of Origin:	Page:							
		N/A	Karen.Fullmer@et.eurofins.com	Michigan	Page 3 of 4							
Company:		Job #:										
TestAmerica Laboratories, Inc.		810-145552-1										
Address:		Preservation Codes:										
13715 Rider Trail North,												
City:		Analysis Requested										
Earth City												
State, Zip:												
MO, 63045												
Phone:												
314-298-8566(Tel) 314-298-8757(Fax)												
Email:												
N/A												
Project Name:												
25D1122												
Site:												
N/A												
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=grab) [BT=Tissue, A=Air]	Matrix (W=water, S=solid, O=wastewater, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PreSep_21 EPA 903.0 - Radium 226 (St. Louis)	904.0/PreSep_0 EPA 904.0 - Radium 228 (St. Louis)	Ra226, 228GFP, PC, P/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
MW-19 (810-145552-19)	4/21/25	12:00 Eastern	G	Water	X	X	X	X	X	X	1	
MW-07 (810-145552-20)	4/21/25	13:45 Eastern	G	Water	X	X	X	X	X	X	1	
MW-27 (810-145552-21)	4/21/25	15:35 Eastern	G	Water	X	X	X	X	X	X	1	
MW-28 (810-145552-22)	4/21/25	17:05 Eastern	G	Water	X	X	X	X	X	X	1	
MW-18 (810-145552-23)	4/21/25	09:16 Eastern	G	Water	X	X	X	X	X	X	1	
MW-03 (810-145552-24)	4/21/25	11:50 Eastern	G	Water	X	X	X	X	X	X	1	
MW-04 (810-145552-25)	4/21/25	13:00 Eastern	G	Water	X	X	X	X	X	X	1	
MW-12 (810-145552-26)	4/21/25	14:12 Eastern	G	Water	X	X	X	X	X	X	1	
MW-16 (810-145552-27)	4/21/25	15:20 Eastern	G	Water	X	X	X	X	X	X	1	

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

Possible Hazard Identification

Unconfirmed

Deliverable Requested: I, II, III, IV, Other (specify) _____

Primary Deliverable Rank: 2

Empty Kit Relinquished by: _____ Date: _____

Time: _____

Special Instructions/QC Requirements: _____

Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

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

Received by: _____ Date/Time: _____ Company: _____

Received by: _____ Date/Time: _____ Company: _____

Received by: _____ Date/Time: _____ Company: _____

Cooler Temperature(s) °C and Other Remarks: _____

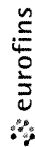
Custody Seal No.: _____

Δ Yes Δ No

[illegible]

Client Information (Sub Contract Lab)			Lab PI: Fulmer, Karen	Carrier Tracking No(s): N/A	COC No: 810-55161.1
Client Contact: Shipping/Receiving			E-Mail: Karen.Fulmer@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 4
Company: TestAmerica Laboratories, Inc.			Accreditations Required (See note): State - Michigan		
Address: 13715 Rider Trail North,			Job #: 810-145552-1		
City: Earth City			Preservation Codes:		
State, Zip: MO, 63045					
Phone: 314-298-8566(Tel) 314-298-8757(Fax)					
Email: N/A					
Project Name: 25D1122					
Site: N/A					
SSOW#: N/A					
Project #: 81000263					
WO #: N/A					
PO #: N/A					
TAT Requested (days): N/A					
Due Date Requested: 5/27/2025					
Analysis Requested					
Field Filtered Sample (Yes or No)					
Perform MS/MSD (Yes or No)					
903.0/PreSep 21 EPA 903.0 - Radium 226 (St. Louis)					
904.0/PreSep 0 EPA 904.0 - Radium 228 (St. Louis)					
Radium 228					
Total Number of Containers					
Special Instructions/Note:					
Other: N/A					
Sample Identification - Client ID (Lab ID)					
MW-02 (810-145552-1)	4/19/25	10:25 Eastern	G	Water	1
MW-09 (810-145552-2)	4/19/25	13:00 Eastern	G	Water	1
MW-33 (810-145552-3)	4/19/25	15:25 Eastern	G	Water	1
MW-30 (810-145552-4)	4/20/25	09:30 Eastern	G	Water	1
MW-31 (810-145552-5)	4/20/25	11:40 Eastern	G	Water	1
MW-32 (810-145552-6)	4/20/25	13:35 Eastern	G	Water	1
MW-11 (810-145552-7)	4/20/25	15:05 Eastern	G	Water	1
MW-17 (810-145552-8)	4/20/25	16:35 Eastern	G	Water	1
MW-10 (810-145552-9)	4/20/25	09:10 Eastern	G	Water	1
Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Eaton Analytical, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Eaton Analytical, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Eaton Analytical, LLC.					
Possible Hazard Identification					
Unconfirmed					
Deliverable Requested: I, II, III, IV, Other (specify)					
Primary Deliverable Rank: 2					
Empty Kit Relinquished by:					
Date:					
Relinquished by: <i>Kelley Penkey Wulfst</i>					
Date/Time: 04/28/2025 11:06					
Company: EEA					
Relinquished by: <i>M. Pinetta</i>					
Date/Time: APR 29 2025 08:10					
Company: Meadow Pinette					
Relinquished by:					
Date/Time:					
Company:					
Custody Seal No.: <i>Δ Yes Δ No</i>					
Custody Seals Intact:					
Cooler Temperature(s) °C and Other Remarks:					

Chain of Custody Record



Environment Testing

Client Information (Sub Contract Lab)		Sampler:	Lab PM:	Carrier Tracking No(s):	COC No:					
Client Contact:		N/A	Fullmer, Karen	N/A	810-55161.2					
Shipping/Receiving		Phone:	E-Mail:	State of Origin:	Page:					
		N/A	Karen.Fullmer@et-eurofinsus.com	Michigan	Page 2 of 4					
Company:		Job #:								
TestAmerica Laboratories, Inc.		810-145552-1								
Address:		Preservation Codes:								
13715 Rider Trail North,										
City:	Earth City	Analysis Requested								
State:	MO, 63045									
Phone:	314-298-8566(Tel) 314-298-8757(Fax)									
Email:	N/A									
Project Name:	25D1122									
Site:	N/A									
Due Date Requested:		Total Number of Containers								
5/27/2025										
TAT Requested (days):										
N/A										
PO #:										
N/A										
WO #:										
N/A										
Project #:										
81000263										
SSOW#:										
N/A										
Sample Date		Sample Time	Sample Type (C-comp, G-grab)	Matrix (W-water, S-solid, O-oil, A-air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PreSep, 21 EPA 903.0 - Radium 226 (St. Louis)	904.0/PreSep, 0 EPA 904.0 - Radium 228 (St. Louis)	Ra226, 228GFP, P/ Combined Radium-226 and Radium-228	Special Instructions/Note:
MWT-10 (810-145552-10)		4/20/25	09:10 Eastern	G	Water	X	X	X	X	1
MW-38 (810-145552-11)		4/20/25	10:30 Eastern	G	Water	X	X	X	X	1
MW-06 (810-145552-12)		4/20/25	11:22 Eastern	G	Water	X	X	X	X	1
MW-08 (810-145552-13)		4/20/25	13:18 Eastern	G	Water	X	X	X	X	1
MWT-08 (810-145552-14)		4/20/25	13:18 Eastern	G	Water	X	X	X	X	1
MW-01R (810-145552-15)		4/20/25	15:20 Eastern	G	Water	X	X	X	X	1
MW-37 (810-145552-16)		4/20/25	16:38 Eastern	G	Water	X	X	X	X	1
MW-36 (810-145552-17)		4/21/25	09:15 Eastern	G	Water	X	X	X	X	1
MW-20 (810-145552-18)		4/21/25	10:45 Eastern	G	Water	X	X	X	X	1
Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Eaton Analytical, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Eaton Analytical, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Eaton Analytical, LLC.										
Possible Hazard Identification										
Unconfirmed										
Deliverable Requested: I, II, III, IV, Other (specify)										
Primary Deliverable Rank: 2										
Special Instructions/QC Requirements:										
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)										
Return To Client ☐ Disposal By Lab ☐ Archive For ☐ Months										
Empty Kit Relinquished by:										
Date:										
Time:										
Method of Shipment:										
Relinquished by: <i>Penney Delaney-Wright</i>										
Date/Time: 04/28/2025 1106										
Company: EEAASB										
Relinquished by:										
Date/Time:										
Company:										
Relinquished by:										
Date/Time:										
Company:										
Custody Seals Intact: ☐ Yes ☐ No										
Custody Seal No.:										
Cooler Temperature(s) °C and Other Remarks:										

Login Sample Receipt Checklist

Client: Trace Analytical Laboratories

Job Number: 810-145552-1

Login Number: 145552

List Source: Eurofins Eaton Analytical South Bend

List Number: 1

Creator: Trowbridge, Peyton

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	False	Thermal preservation not required.
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Samples do not require splitting or compositing.	True	
Were samples preserved to correct pH upon receipt, if applicable?	True	
Container provided by EEA	True	

Login Sample Receipt Checklist

Client: Trace Analytical Laboratories

Job Number: 810-145552-1

Login Number: 145552

List Number: 2

Creator: Pinette, Meadow L

List Source: Eurofins St. Louis

List Creation: 04/29/25 12:13 PM

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



CHAIN-OF-CUSTODY RECORD

25D1122

Page 1 of 2

Trace Analytical Laboratories, Inc.
2241 Black Creek Road
Muskegon, MI 49444-2673

Phone 231.773.5998
Fax 888.979.4469
www.trace-labs.com

Trace ID No.
CM4121125
25D1122 11/15

Report Results To:

Bill To:

Trace Use:

Company Name: Andrew Byks/Molly Reeves	PO #: 10337505-006
Report To: HDR Michigan	Contact Name: Lara Zawajda
Mailing Address: 1000 Oakbrook Drive, Suite 200	Billing Address (if different):
City, State, Zip Code: Ann Arbor, MI 48104	City, State, Zip Code:
Office Phone:	Phone Number:
Email Address: andrew_byks@hdrinc.com	Billing Email Address:

Logged By: CM	Checked By: MT
Soil Volatiles Preserved (circle if applicable):	MeOH Low Level Lab
Sampling Time:	

Turnaround Requirements:

Matrix Key:

- ☒ Standard, 5-10 Days
☐ 3 Day*
☐ 1 Day*
 S = Soil / Solid
 W = Water
 SL = Sludge
 CI = Oil
 WI = Wipes
 LW = Liquid Waste
 A = Air
 D = Drinking Water

*Results provided end of business day, requires prior approval.

Project Name: Curand Haven Harbor Island		Sampled By: AS/FDR	
Trace No.	Date Collected	Time Collected	Client Sample ID
1	4/19/25	1025	MW-02
2	4/19/25	1300	MW-09
3	4/19/25	1525	MW-33
4	4/20/25	930	MW-30
5	4/20/25	1140	MW-31
6	4/20/25	1335	MW-32
7	4/20/25	1505	MW-11
8	4/20/25	1635	MW-17
9	4/20/25	910	MW-10
10	4/20/25	910	MW-T-10
Please Sign		Released By: Andrew Byks	
Received By: [Signature]		Date: 4/21/25	
Time: 8:02		Time: 2	
In executing this Chain of Custody, the client acknowledges the terms as set forth at www.trace-labs.com/terms-of-agreement		Released By: [Signature]	
Time: 4		Time: 2	

Analysis Requested	App III Part 257 CCR
	App IV Part 257 CCR
	Part 115 Metals
	TSS (Total Suspended)
	Low Level Hg
Remarks	
Possible Health Hazards?	

☐

Check this box if you would not like your samples analyzed if received outside of the conditions outlined in the Trace Sample Acceptance Policy at www.trace-labs.com/downloads.

Form 70-Z-1

TRACE

ANALYTICAL LABORATORIES, INC.

CHAIN-OF-CUSTODY RECORD

Trace Analytical Laboratories, Inc.
2241 Black Creek Road
Muskegon, MI 49444-2673

Phone 231.773.5998
Fax 888.979.4469
www.trace-labs.com

25D1122 Page 2 of 2

Trace ID No.
CM4120179
25D1122 1114 1115

Report Results To:

Company Name: HDR Michigan

Report To: Andrew Byks / Molly Reeves

Mailing Address: 588 pg 2

City, State, Zip Code:

Office Phone:

Email Address:

Bill To:

PO #: 10337505.000

Contact Name: Lora Zawiszen

Billing Address (if different):

City, State, Zip Code:

Phone Number:

Billing Email Address:

Turnaround Requirements:

☒ Standard 5-10 Days
☐ 3 Day*
☐ 1 Day*

*Results provided end of business day, requires prior approval

Matrix Key:

S = Soil / Solid
W = Water
SL = Sludge
OI = Oil
WI = Wipes
LW = Liquid Waste
A = Air
D = Drinking Water

Project Name: Grand Haven Harbor Island		Sampled By: AB/FDR		Analysis Requested	
Trace No.	Date Collected	Time Collected	Client Sample ID	Metals Field Filtered (Y / N)	Matrix
11	4/20/25	1030	MW-38	N	W
12	4/20/25	1122	MW-06	N	W
13	4/20/25	1318	MW-08	N	W
14	4/20/25	1318	MW-08	N	W
15	4/20/25	1520	MW-01R	N	W
16	4/20/25	1638	MW-37	N	W
17	4/19/25	1630	LHG-TB-04192025	N	W
18	4/20/25	1715	LHG-TB-04202025	N	W
19	4/20/25	1715	LHG-TB-04202025	N	W
20	4/20/25	1715	LHG-TB-04202025	N	W
21	4/20/25	1715	LHG-TB-04202025	N	W
22	4/20/25	1715	LHG-TB-04202025	N	W
23	4/20/25	1715	LHG-TB-04202025	N	W
24	4/20/25	1715	LHG-TB-04202025	N	W
25	4/20/25	1715	LHG-TB-04202025	N	W
26	4/20/25	1715	LHG-TB-04202025	N	W
27	4/20/25	1715	LHG-TB-04202025	N	W
28	4/20/25	1715	LHG-TB-04202025	N	W
29	4/20/25	1715	LHG-TB-04202025	N	W
30	4/20/25	1715	LHG-TB-04202025	N	W
31	4/20/25	1715	LHG-TB-04202025	N	W
32	4/20/25	1715	LHG-TB-04202025	N	W
33	4/20/25	1715	LHG-TB-04202025	N	W
34	4/20/25	1715	LHG-TB-04202025	N	W
35	4/20/25	1715	LHG-TB-04202025	N	W
36	4/20/25	1715	LHG-TB-04202025	N	W
37	4/20/25	1715	LHG-TB-04202025	N	W
38	4/20/25	1715	LHG-TB-04202025	N	W
39	4/20/25	1715	LHG-TB-04202025	N	W
40	4/20/25	1715	LHG-TB-04202025	N	W
41	4/20/25	1715	LHG-TB-04202025	N	W
42	4/20/25	1715	LHG-TB-04202025	N	W
43	4/20/25	1715	LHG-TB-04202025	N	W
44	4/20/25	1715	LHG-TB-04202025	N	W
45	4/20/25	1715	LHG-TB-04202025	N	W
46	4/20/25	1715	LHG-TB-04202025	N	W
47	4/20/25	1715	LHG-TB-04202025	N	W
48	4/20/25	1715	LHG-TB-04202025	N	W
49	4/20/25	1715	LHG-TB-04202025	N	W
50	4/20/25	1715	LHG-TB-04202025	N	W
51	4/20/25	1715	LHG-TB-04202025	N	W
52	4/20/25	1715	LHG-TB-04202025	N	W
53	4/20/25	1715	LHG-TB-04202025	N	W
54	4/20/25	1715	LHG-TB-04202025	N	W
55	4/20/25	1715	LHG-TB-04202025	N	W
56	4/20/25	1715	LHG-TB-04202025	N	W
57	4/20/25	1715	LHG-TB-04202025	N	W
58	4/20/25	1715	LHG-TB-04202025	N	W
59	4/20/25	1715	LHG-TB-04202025	N	W
60	4/20/25	1715	LHG-TB-04202025	N	W
61	4/20/25	1715	LHG-TB-04202025	N	W
62	4/20/25	1715	LHG-TB-04202025	N	W
63	4/20/25	1715	LHG-TB-04202025	N	W
64	4/20/25	1715	LHG-TB-04202025	N	W
65	4/20/25	1715	LHG-TB-04202025	N	W
66	4/20/25	1715	LHG-TB-04202025	N	W
67	4/20/25	1715	LHG-TB-04202025	N	W
68	4/20/25	1715	LHG-TB-04202025	N	W
69	4/20/25	1715	LHG-TB-04202025	N	W
70	4/20/25	1715	LHG-TB-04202025	N	W
71	4/20/25	1715	LHG-TB-04202025	N	W
72	4/20/25	1715	LHG-TB-04202025	N	W
73	4/20/25	1715	LHG-TB-04202025	N	W
74	4/20/25	1715	LHG-TB-04202025	N	W
75	4/20/25	1715	LHG-TB-04202025	N	W
76	4/20/25	1715	LHG-TB-04202025	N	W
77	4/20/25	1715	LHG-TB-04202025	N	W
78	4/20/25	1715	LHG-TB-04202025	N	W
79	4/20/25	1715	LHG-TB-04202025	N	W
80	4/20/25	1715	LHG-TB-04202025	N	W
81	4/20/25	1715	LHG-TB-04202025	N	W
82	4/20/25	1715	LHG-TB-04202025	N	W
83	4/20/25	1715	LHG-TB-04202025	N	W
84	4/20/25	1715	LHG-TB-04202025	N	W
85	4/20/25	1715	LHG-TB-04202025	N	W
86	4/20/25	1715	LHG-TB-04202025	N	W
87	4/20/25	1715	LHG-TB-04202025	N	W
88	4/20/25	1715	LHG-TB-04202025	N	W
89	4/20/25	1715	LHG-TB-04202025	N	W
90	4/20/25	1715	LHG-TB-04202025	N	W
91	4/20/25	1715	LHG-TB-04202025	N	W
92	4/20/25	1715	LHG-TB-04202025	N	W
93	4/20/25	1715	LHG-TB-04202025	N	W
94	4/20/25	1715	LHG-TB-04202025	N	W
95	4/20/25	1715	LHG-TB-04202025	N	W
96	4/20/25	1715	LHG-TB-04202025	N	W
97	4/20/25	1715	LHG-TB-04202025	N	W
98	4/20/25	1715	LHG-TB-04202025	N	W
99	4/20/25	1715	LHG-TB-04202025	N	W
100	4/20/25	1715	LHG-TB-04202025	N	W

Please Sign

25D1122

HDR Michigan Inc.
Project Manager: Jon Mink

Sample Log In Checklist

Date: 4/21/24	Original Observation	Corrected Temperature	IR-9 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	IR-13 (CF: 0.0°C)	SR1 (CF: -0.4°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 9:00									
Initials: MJ									
Package Description: Cooler									
Package Temp °C	0.0	0.0							
Representative Sample Temp °C	4.3	4.3							

Sample Receipt

Yes	No	
☒	☐	Received on ice or other coolant
☒	☐	Ice still present upon receipt
☐	☒	Custody seals present
☐	☒	Trace Courier
	☒	Client Drop-off
☐	☐	Custody seals intact (if applicable)
☐	☐	UPS
	☐	Fed Ex
	☐	US Mail
	☐	Other

Sample Condition

Yes	No	N/A	
☒	☐	☐	All sample containers arrived unbroken and labeled
☒	☐	☐	Sufficient sample to run requested analyses
☒	☐	☐	Correct chemical preservative added to samples
☐	☒	☐	Samples preserved at Trace
☒	☐	☐	Chemical preservation verified, check EMD pH test strip used (if applicable)
	☒	☐	pH 0-2.5 (Lot: HC311850)
	☐	☐	pH 11.0-13.0 (Lot: HC022540)
	☐	☐	Other
☐	☐	☒	Air bubbles absent from VOAs

Chain of Custody (COC)

Yes	No	
☒	☐	All bottle labels agree with COC
☒	☐	COC filled out properly
☒	☐	COC signed by client

Notes:

MWF-10
MW-10
MW-08
MW-06

25D1122
HDR Michigan Inc.
Project Manager: Jon Mink

Sample Log In Checklist

Date: 4/21/25	Original Observation	Corrected Temperature	IR-9 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	IR-13 (CF: 0.0°C)	SR1 (CF: -0.4°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 9:00									
Initials: MJ									
Package Description: Cooler									
Package Temp °C	0.0	0.0							
Representative Sample Temp °C	3.9	3.9							

Sample Receipt

Yes No

☒ ☐ Received on ice or other coolant

☒ ☐ Ice still present upon receipt

☐ ☒ Custody seals present

☐ Trace Courier

☒ Client Drop-off

☐ Yes ☐ No Custody seals intact (if applicable)

☐ UPS

☐ Fed Ex

☐ US Mail

☐ Other

Sample Condition

Yes No N/A

☒ ☐ ☐ All sample containers arrived unbroken and labeled

☒ ☐ ☐ Sufficient sample to run requested analyses

☒ ☐ ☐ Correct chemical preservative added to samples

☐ ☒ ☐ Samples preserved at Trace

☒ ☐ ☐ Chemical preservation verified, check EMD pH test strip used (if applicable)

☒ pH 0-2.5 (Lot: HC311850)

☐ pH 11.0-13.0 (Lot: HC022540)

☐ Other

☐ ☐ ☒ Air bubbles absent from VOAs

Chain of Custody (COC)

Yes No

☒ ☐ All bottle labels agree with COC

☒ ☐ COC filled out properly

☒ ☐ COC signed by client

Notes:

MW-17

MW-38

MW-33

MW-30

25D1122

HDR Michigan Inc.

Project Manager: Jon Mink

Sample Log In Checklist

Date: 4/21/25	Original Observation	Corrected Temperature	IR-9 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	IR-13 (CF: 0.0°C)	SR1 (CF: -0.4°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 9:00									
Initials: MJ									
Package Description: Cooler									
Package Temp °C	0.0	0.0							
Representative Sample Temp °C	3.3	3.3							

Sample Receipt

Yes	No	
☒	☐	Received on ice or other coolant
☒	☐	Ice still present upon receipt
☐	☒	Custody seals present
☐	☒	Trace Courier
		☒ Client Drop-off
☐	☐	Custody seals intact (if applicable)
☐	☐	UPS
		☐ Fed Ex
		☐ US Mail
		☐ Other

Sample Condition

Yes	No	N/A	
☒	☐	☐	All sample containers arrived unbroken and labeled
☒	☐	☐	Sufficient sample to run requested analyses
☒	☐	☐	Correct chemical preservative added to samples
☐	☒	☐	Samples preserved at Trace
☒	☐	☐	Chemical preservation verified, check EMD pH test strip used (if applicable)
			☒ pH 0-2.5 (Lot: HC311850) ☐ pH 11.0-13.0 (Lot: HC022540) ☐ Other
☐	☐	☒	Air bubbles absent from VOAs

Chain of Custody (COC)

Yes	No	
☒	☐	All bottle labels agree with COC
☒	☐	COC filled out properly
☒	☐	COC signed by client

Notes:

MW-32

MW-11

MW-01R

MW-37

LCHg-TB-04202025

25D1122

HDR Michigan Inc.

Project Manager: Jon Mink

Sample Log In Checklist

Date: 4/21/25	Original Observation	Corrected Temperature	IR-9 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	IR-13 (CF: 0.0°C)	SR1 (CF: -0.4°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 9:00									
Initials: MJ									
Package Description: Cooler									
Package Temp °C	0.0	0.0							
Representative Sample Temp °C	4.7	4.7							

Sample Receipt

Yes No

☒ ☐ Received on ice or other coolant

☒ ☐ Ice still present upon receipt

☐ ☒ Custody seals present

☐ Trace Courier ☒ Client Drop-off

☐ Yes ☐ No Custody seals intact (if applicable)

☐ UPS ☐ Fed Ex ☐ US Mail ☐ Other

Sample Condition

Yes No N/A

☒ ☐ ☐ All sample containers arrived unbroken and labeled

☒ ☐ ☐ Sufficient sample to run requested analyses

☒ ☐ ☐ Correct chemical preservative added to samples

☐ ☒ ☐ Samples preserved at Trace

☒ ☐ ☐ Chemical preservation verified, check EMD pH test strip used (if applicable)

☒ pH 0-2.5 (Lot: HC311850) ☐ pH 11.0-13.0 (Lot: HC022540) ☐ Other

☐ ☐ ☒ Air bubbles absent from VOAs

Chain of Custody (COC)

Yes No

☒ ☐ All bottle labels agree with COC

☒ ☐ COC filled out properly

☒ ☐ COC signed by client

Notes:

MW-09

MW-02

MW-31

MUT-08

LLHg-TB-04192025

Trace Analytical Laboratories, Inc.
2241 Black Creek Road
Muskegon, MI 49444-2673



231-773-5998 Phone
888-979-4469 Fax
www.trace-labs.com



Trace Analytical Laboratories, Inc.
2241 Black Creek Road
Muskegon, MI 49444-2673

Phone 231.773.5998
Fax 888.979.4469
www.trace-labs.com

CHAIN-OF-CUSTODY RECORD

Page 1 of 2

Report Results To:

Bill To:

Company Name: HDR, Michigan Inc.	PO #: 10331505-000
Report To: Andrew Bays/Molly Reeves	Contact Name: Lara Zawajden
Mailing Address: 1000 Oakbrook Dr. Suite 200	Billing Address (if different):
City, State, Zip Code: Ann Arbor MI 48104	City, State, Zip Code:
Office Phone:	Phone Number:
Email Address: andrew.bays@hdrinc.com	Billing Email Address: lara-zawajden@hdrinc.com

Turnaround Requirements:

Matrix Key:

- ☒ Standard, 5-10 Days
☐ 3 Day*
☐ 1 Day*
 S = Soil / Solid
 W = Water
 SL = Sludge
 OI = Oil
 WI = Wipes
 LW = Liquid Waste
 A = Air
 D = Drinking Water

*Results provided end of business day, requires prior approval

Project Name: Grand Haven Harbor Island		Sampled By: AS/FDR	
Trace No.	Date Collected	Time Collected	Client Sample ID
17	4/21/25	915	MW-30
18	4/21/25	1045	MW-20
19	4/21/25	1200	MW-19
20	4/21/25	1345	MW-07
21	4/21/25	1535	MW-27
22	4/21/25	1705	MW-28
23	4/21/25	910	MW-18
24	4/21/25	1150	MW-03
25	4/21/25	1300	MW-04
26	4/21/25	1412	MW-12
Released By: Andrew Bays		Received By: CM	
Date: 4/23/25		Time: 800	
In executing this Chain of Custody, the client acknowledges the terms as set forth at www.trace-labs.com/terms-of-agreement.		Released By: AS	
Please Sign		Date	
3) Andrew Bays		4/23/25	
4)		800	

☐ Check this box if you would not like your samples analyzed if received outside of the conditions outlined in the Trace Sample Acceptance Policy at www.trace-labs.com/downloads.

Form 70-Z.1

Analysis Requested

Remarks

Possible Health Hazards?

Trace Use:

Logged By: CM	Checked By: MS
Soil Volatiles Preserved (circle if applicable):	
Meth	Low Level
Sampling Time:	

Trace ID No.	25D1122
--------------	---------

TRICE
ANALYTICAL LABORATORIES, INC.

Phone 231.773.5998
Fax 888.979.4469
www.trace-labs.com

Page 2 of 2

Trace ID No.

75D1122

Trace Use:

Logged By:	CM
Checked By:	ms
Soil Varieties Preserved (circle if applicable):	
MeOH	Low Level
	Lab
Sampling Time:	

Matrix Key:

☒ Standard, 5-10 Days S = Soil / Solid WI = Wipes

☐ 3 Day* W = Water LW = Liquid Waste

☐ 1 Day* SL= Sludge A = Air

D = Drinking Water

+257	
257	
metals	
ded Solids	
Hg	

Analysis Requested

Project Name: Grand Haven Harbor Island						Sampled By: AG/FDR						
Trace No.	Date Collected	Time Collected	Client Sample ID	Metals Field Filtered (Y / N)								
				Matrix								
				Number of Containers								
				Preservation								
				Cool								
				HCl								
				HNO ₃								
				H ₂ SO ₄								
NaOH												
Other												
App III Part												
App IV Part												
Part 115												
Total Suspended Solids												
Low Level												
Remarks												
Possible Health Hazard												

Please Sign																
	Released By	Received By	Date	Time		Released By				Received By						
27	4/21/25	1520	NNW-16	N	W	4	4	2		X	X	X	X			
28	4/21/25	1932	NNW-34	N	W	4	4	2		X	X	X	X			
29	4/22/25	1510	SG-04	N	W	4	4	2		X	X	X	X			
30	4/22/25	1525	SG-02	N	W	4	4	2		X	X	X	X			
31	4/22/25	1545	SG-05	N	W	4	4	2		X	X	X	X			
32	4/22/25	1600	SG-07	N	W	4	4	2		X	X	X	X			
	4/22/25	1640	NNW-27	N	W	1	1						X			
	4/21/25	1715	LHHG-TB-04212025	N	W	1	1						X			
	4/22/25	1645	LHHG-TB-04222025	N	W	1	1						X			
					AR											
1) Andrew Pafayn					CM					4/23/25	BB	2)				
3)										4/23/25						
										4)						

In executing this Chain of Custody, the client acknowledges the terms as set forth at www.trace-laps.com/terms-of-agreement.

☐ Check this box if you would not like your samples analyzed if received outside of the conditions outlined in the Trace Sample Acceptance Policy at www.trace-labs.com/downloads.

Form 70-Z.1

25D1122

HDR Michigan Inc.

Project Manager: Jon Mink

Sample Log In Checklist

Date: 4/23/25	Original Observation	Corrected Temperature	IR-9 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	IR-13 (CF: 0.0°C)	SR1 (CF: -0.4°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 9:00									
Initials: MS									
Package Description: Cooler									
Package Temp °C	0.0	0.0							
Representative Sample Temp °C									

Sample Receipt

Yes No

☒ ☐ Received on ice or other coolant

☒ ☐ Ice still present upon receipt

☐ ☒ Custody seals present

☐ Trace Courier ☒ Client Drop-off

☐ Yes ☐ No Custody seals intact (if applicable)

☐ UPS

☐ Fed Ex

☐ US Mail

☐ Other

Sample Condition

Yes No N/A

☒ ☐ ☐ All sample containers arrived unbroken and labeled

☒ ☐ ☐ Sufficient sample to run requested analyses

☒ ☐ ☐ Correct chemical preservative added to samples

☐ ☒ ☐ Samples preserved at Trace

☒ ☐ ☐ Chemical preservation verified, check EMD pH test strip used (if applicable)

☒ pH 0-2.5 (Lot: HC311850)

☐ pH 11.0-13.0 (Lot: HC022540)

☐ Other

☐ ☐ ☒ Air bubbles absent from VOAs

Chain of Custody (COC)

Yes No

☒ ☐ All bottle labels agree with COC

☒ ☐ COC filled out properly

☒ ☐ COC signed by client

Notes:

SG-05
SG-04R
SG-07
MW-28
LMg-TB-0422025

25D1122

HDR Michigan Inc.
Project Manager: Jon Mink

Sample Log In Checklist

Date: 4/23/25	Original Observation	Corrected Temperature	IR-9 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	IR-13 (CF: 0.0°C)	SR1 (CF: -0.4°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 900									
Initials: CM									
Package Description: Cooler									
Package Temp °C	0.1	0.1							
Representative Sample Temp °C	7.4	7.4							

Sample Receipt

Yes	No	
☒	☐	Received on ice or other coolant
☒	☐	Ice still present upon receipt
☐	☒	Custody seals present
☒	☐	Trace Courier
☐	☐	Client Drop-off
☐	☐	Yes
☐	☐	No
☐	☐	Custody seals intact (if applicable)
☐	☐	UPS
☐	☐	Fed Ex
☐	☐	US Mail
☐	☐	Other

Sample Condition

Yes	No	N/A	
☒	☐	☐	All sample containers arrived unbroken and labeled
☒	☐	☐	Sufficient sample to run requested analyses
☒	☐	☐	Correct chemical preservative added to samples
☒	☐	☐	Samples preserved at Trace
☒	☐	☐	Chemical preservation verified, check EMD pH test strip used (if applicable)
☐	☐	☐	☐ pH 0-2.5 (Lot: HC311850) ☐ pH 11.0-13.0 (Lot: HC022540) ☐ Other
☐	☐	☒	Air bubbles absent from VOAs

Chain of Custody (COC)

Yes	No	
☒	☐	All bottle labels agree with COC
☒	☐	COC filled out properly
☒	☐	COC signed by client

Notes:

MW-20

MW-36

MW-07

MW-19

25D1122

HDR Michigan Inc.

Project Manager: Jon Mink

Sample Log In Checklist

Date: 4/23/25	Original Observation	Corrected Temperature	IR-9 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	IR-13 (CF: 0.0°C)	SR1 (CF: -0.4°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 9:00									
Initials: MJ									
Package Description: Cooler									
Package Temp °C	0.0	0.0							
Representative Sample Temp °C	8.0	8.0							

Sample Receipt

Yes No

☒ ☐ Received on ice or other coolant

☒ ☐ Ice still present upon receipt

☐ ☒ Custody seals present

☐ Trace Courier ☒ Client Drop-off

☐ Yes ☐ No Custody seals intact (if applicable)

☐ UPS

☐ Fed Ex

☐ US Mail

☐ Other

Sample Condition

Yes No N/A

☒ ☐ ☐ All sample containers arrived unbroken and labeled

☒ ☐ ☐ Sufficient sample to run requested analyses

☒ ☐ ☐ Correct chemical preservative added to samples

☐ ☒ ☐ Samples preserved at Trace

☒ ☐ ☐ Chemical preservation verified, check EMD pH test strip used (if applicable)

☒ pH 0-2.5 (Lot: HC311850)

☐ pH 11.0-13.0 (Lot: HC022540)

☐ Other

☐ ☐ ☒ Air bubbles absent from VOAs

Chain of Custody (COC)

Yes No

☒ ☐ All bottle labels agree with COC

☒ ☐ COC filled out properly

☒ ☐ COC signed by client

Notes:

SG-02
MW-27
MW-16
MW-34
LLHg-TB-04212025

25D1122

HDR Michigan Inc.
Project Manager: Jon Mink

Sample Log In Checklist

Date: 4/23/25	Original Observation	Corrected Temperature	IR-9 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	IR-13 (CF: 0.0°C)	SR1 (CF: -0.4°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 9:00									
Initials: MJ									
Package Description: Cooler									
Package Temp °C	0.0	0.0							
Representative Sample Temp °C	7.4	7.4							

Sample Receipt

Yes No

☒ ☐ Received on ice or other coolant

☒ ☐ Ice still present upon receipt

☐ ☒ Custody seals present

☐ Trace Courier ☒ Client Drop-off

☐ Yes ☐ No Custody seals intact (if applicable)

☐ UPS ☐ Fed Ex ☐ US Mail ☐ Other

Sample Condition

Yes No N/A

☒ ☐ ☐ All sample containers arrived unbroken and labeled

☒ ☐ ☐ Sufficient sample to run requested analyses

☒ ☐ ☐ Correct chemical preservative added to samples

☐ ☒ ☐ Samples preserved at Trace

☒ ☐ ☐ Chemical preservation verified, check EMD pH test strip used (if applicable)

☒ pH 0-2.5 (Lot: HC311850) ☐ pH 11.0-13.0 (Lot: HC022540) ☐ Other

☐ ☐ ☒ Air bubbles absent from VOAs

Chain of Custody (COC)

Yes No

☒ ☐ All bottle labels agree with COC

☒ ☐ COC filled out properly

☒ ☐ COC signed by client

Notes:

MW-12

MW-18

MW-04

MW-03

Appendix F

Statistical Outputs

Table 1: Summary Statistics, Non-Detects Included

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit ^a	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
11_2_3_105	MW-01R	Appendix III	Boron	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	106	110	38.0	160	36.2	0.341	-0.209
11_2_3_107	MW-01R	Appendix III	Calcium	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	239	240	130	400	77.2	0.323	0.577
11_2_3_108	MW-01R	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Normal	Normal	131	150	49.0	210	48.0	0.365	-0.470
11_2_3_112	MW-01R	Appendix III	Fluoride	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Normal	Normal	11.7	14.0	4.80	16.0	3.47	0.298	-0.606
11_2_3_120	MW-01R	Appendix III	pH (field)	su	15	0	0%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	7.61	7.74	6.02	7.81	0.447	0.0587	-3.67
11_2_3_124	MW-01R	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Normal	Gamma	450	400	8.80	980	300	0.668	0.195
11_2_3_126	MW-01R	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	2347	2400	2100	2600	125	0.0531	-0.0405
11_2_4_101	MW-01R	Appendix IV	Antimony	mg/L	15	3	20%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	0.000364	0.000250	0.000170	0.00120	0.000278	0.764	2.28
11_2_4_102	MW-01R	Appendix IV	Arsenic	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	0.00156	0.00130	0.000730	0.00410	0.000781	0.500	2.66
11_2_4_103	MW-01R	Appendix IV	Barium	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.338	0.300	0.200	0.560	0.110	0.325	0.793
11_2_4_104	MW-01R	Appendix IV	Beryllium	mg/L	15	2	13%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.000193	0.000200	0.0000520	0.000360	0.0000965	0.500	0.384
11_2_4_106	MW-01R	Appendix IV	Cadmium	mg/L	15	12	80%	2022-11-29 to 2025-04-20		Nonparametric	0.000143	0.0000750	0.0000320	0.000380	0.000121	0.843	1.40
11_2_4_109	MW-01R	Appendix IV	Chromium, Total	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	0.00351	0.00190	0.00130	0.0220	0.00520	1.48	3.68
11_2_4_110	MW-01R	Appendix IV	Cobalt	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	0.00161	0.00110	0.000640	0.00450	0.00115	0.717	1.92
11_2_4_113	MW-01R	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Normal	Normal	11.7	14.0	4.80	16.0	3.47	0.298	-0.606
11_2_4_115	MW-01R	Appendix IV	Lead	mg/L	15	2	13%	2022-11-29 to 2025-04-20	Lognormal	Lognormal	0.00115	0.000820	0.000350	0.00530	0.00120	1.04	3.28
11_2_4_116	MW-01R	Appendix IV	Lithium	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	2.30	2.30	0.770	3.40	0.775	0.336	-0.319
11_2_4_117	MW-01R	Appendix IV	Mercury	mg/L	15	15	100%	2022-11-29 to 2025-04-20		Nonparametric	0.000149	0.000160	0.000000160	0.000160	0.0000413	0.276	-3.87
11_2_4_118	MW-01R	Appendix IV	Molybdenum	mg/L	15	2	13%	2022-11-29 to 2025-04-20	Lognormal	Lognormal	0.00127	0.000760	0.000250	0.00560	0.00142	1.11	2.41
11_2_4_121	MW-01R	Appendix IV	Radium 226 and 228	pCi/L	15	9	60%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Nonparametric	0.912	0.840	0.601	1.28	0.236	0.259	0.341
11_2_4_122	MW-01R	Appendix IV	Selenium	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal	Gamma	0.000711	0.000640	0.000300	0.00180	0.000340	0.478	2.53
11_2_4_125	MW-01R	Appendix IV	Thallium	mg/L	15	15	100%	2022-11-29 to 2025-04-20		Nonparametric	0.000258	0.000380	0.0000750	0.000380	0.000155	0.599	-0.455
11_2_5_111	MW-01R	Part 115	Copper	mg/L	15	6	40%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	0.000387	0.000290	0.000200	0.00130	0.000324	0.838	2.28
11_2_5_114	MW-01R	Part 115	Iron	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Normal	Normal	0.493	0.500	0.0880	1.10	0.351	0.712	0.275
11_2_5_119	MW-01R	Part 115	Nickel	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	0.00347	0.00190	0.00120	0.0220	0.00522	1.50	3.66
11_2_5_123	MW-01R	Part 115	Silver	mg/L	15	15	100%	2022-11-29 to 2025-04-20		Nonparametric	0.000103	0.0000500	0.0000500	0.000250	0.0000915	0.886	1.18
11_2_5_128	MW-01R	Part 115	Vanadium	mg/L	15	2	13%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.00191	0.00180	0.000620	0.00460	0.00125	0.651	1.08
11_2_5_129	MW-01R	Part 115	Zinc	mg/L	15	3	20%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	0.00697	0.00130	0.00120	0.0330	0.00980	1.40	1.80
12_2_3_105	MW-02	Appendix III	Boron	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Nonparametric	Nonparametric	109	100	73.0	170	27.1	0.250	1.62
12_2_3_107	MW-02	Appendix III	Calcium	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	201	200	180	240	16.8	0.0837	0.587
12_2_3_108	MW-02	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Nonparametric	Nonparametric	139	140	67.0	160	21.2	0.153	-3.10
12_2_3_112	MW-02	Appendix III	Fluoride	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Nonparametric	Nonparametric	9.99	9.70	4.50	16.0	2.39	0.239	0.456
12_2_3_120	MW-02	Appendix III	pH (field)	su	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	7.21	7.15	7.06	7.45	0.112	0.0155	0.786
12_2_3_124	MW-02	Appendix III	Sulfate (as SO4)	mg/L	15	10	67%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Nonparametric	1.43	0.930	0.410	5.50	1.36	0.953	2.04
12_2_3_126	MW-02	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	1913	1900	1600	2600	245	0.128	1.55
12_2_4_101	MW-02	Appendix IV	Antimony	mg/L	15	3	20%	2022-11-28 to 2025-04-19	Gamma; Lognormal	Gamma	0.000253	0.000240	0.000100	0.000630	0.000139	0.550	1.86
12_2_4_102	MW-02	Appendix IV	Arsenic	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Normal	Normal	0.00761	0.00780	0.000440	0.0120	0.00250	0.328	-1.46
12_2_4_103	MW-02	Appendix IV	Barium	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	0.466	0.470	0.320	0.730	0.103	0.222	0.865
12_2_4_104	MW-02	Appendix IV	Beryllium	mg/L	15	1	7%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	0.000269	0.000280	0.0000520	0.000520	0.000127	0.472	0.282
12_2_4_106	MW-02	Appendix IV	Cadmium	mg/L	15	10	67%	2022-11-28 to 2025-04-19	Lognormal	Nonparametric	0.000128	0.0000750	0.0000320	0.000490	0.000131	1.03	2.20
12_2_4_109	MW-02	Appendix IV	Chromium, Total	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Normal	Normal	0.0422	0.0460	0.000380	0.0680	0.0195	0.463	-0.518
12_2_4_110	MW-02	Appendix IV	Cobalt	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Normal	Normal	0.00610	0.00630	0.000240	0.00970	0.00257	0.421	-0.650

(Table continues on next page)

^a Non-detects are excluded from goodness-of-fit tests.

Table 1: Summary Statistics, Non-Detects Included *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit ^a	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
12_2_4_113	MW-02	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Nonparametric	Nonparametric	9.99	9.70	4.50	16.0	2.39	0.239	0.456
12_2_4_115	MW-02	Appendix IV	Lead	mg/L	15	1	7%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	0.00291	0.00240	0.000100	0.00600	0.00169	0.582	0.458
12_2_4_116	MW-02	Appendix IV	Lithium	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	1.46	1.40	0.870	2.30	0.347	0.237	0.938
12_2_4_117	MW-02	Appendix IV	Mercury	mg/L	15	14	93%	2022-11-28 to 2025-04-19		Nonparametric	0.360	0.000160	0.000160	5.40	1.39	3.87	3.87
12_2_4_118	MW-02	Appendix IV	Molybdenum	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Lognormal	Lognormal	0.00749	0.00620	0.00380	0.0160	0.00363	0.485	1.23
12_2_4_121	MW-02	Appendix IV	Radium 226 and 228	pCi/L	14	5	36%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	1.60	1.38	0.686	3.35	0.814	0.508	0.916
12_2_4_122	MW-02	Appendix IV	Selenium	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	0.00127	0.00120	0.000500	0.00230	0.000459	0.362	0.396
12_2_4_125	MW-02	Appendix IV	Thallium	mg/L	15	14	93%	2022-11-28 to 2025-04-19		Nonparametric	0.000233	0.0000750	0.0000750	0.000620	0.000185	0.793	0.586
12_2_5_111	MW-02	Part 115	Copper	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	0.00208	0.00200	0.000230	0.00440	0.00107	0.517	0.515
12_2_5_114	MW-02	Part 115	Iron	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	24.1	24.0	18.0	31.0	3.92	0.163	0.255
12_2_5_119	MW-02	Part 115	Nickel	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Normal	Normal	0.0245	0.0220	0.000930	0.0530	0.0133	0.543	0.643
12_2_5_123	MW-02	Part 115	Silver	mg/L	15	15	100%	2022-11-28 to 2025-04-19		Nonparametric	0.0000900	0.0000500	0.0000500	0.000250	0.0000828	0.920	1.67
12_2_5_128	MW-02	Part 115	Vanadium	mg/L	15	1	7%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	0.00396	0.00360	0.000620	0.00690	0.00196	0.495	-0.131
12_2_5_129	MW-02	Part 115	Zinc	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Nonparametric	Nonparametric	0.00907	0.00330	0.00190	0.0360	0.0111	1.22	1.52
13_2_3_105	MW-03	Appendix III	Boron	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	4.12	4.20	3.30	4.50	0.332	0.0806	-1.09
13_2_3_107	MW-03	Appendix III	Calcium	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	363	360	290	430	37.9	0.104	-0.0346
13_2_3_108	MW-03	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	160	150	94.0	300	55.4	0.346	1.22
13_2_3_112	MW-03	Appendix III	Fluoride	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Nonparametric	Nonparametric	0.672	0.610	0.520	1.60	0.261	0.388	3.67
13_2_3_120	MW-03	Appendix III	pH (field)	su	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	7.36	7.33	7.20	7.59	0.0995	0.0135	0.576
13_2_3_124	MW-03	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	368	360	34.0	760	212	0.576	0.165
13_2_3_126	MW-03	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Nonparametric	Nonparametric	2060	2200	1700	2300	253	0.123	-0.395
13_2_4_101	MW-03	Appendix IV	Antimony	mg/L	15	9	60%	2022-11-28 to 2025-04-21	Gamma; Lognormal	Nonparametric	0.000219	0.000110	0.0000870	0.000500	0.000173	0.791	1.03
13_2_4_102	MW-03	Appendix IV	Arsenic	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.000961	0.000970	0.000490	0.00140	0.000264	0.275	-0.318
13_2_4_103	MW-03	Appendix IV	Barium	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.355	0.370	0.130	0.500	0.0886	0.250	-0.986
13_2_4_104	MW-03	Appendix IV	Beryllium	mg/L	15	10	67%	2022-11-28 to 2025-04-21	Lognormal	Nonparametric	0.0000815	0.0000520	0.0000520	0.000260	0.0000634	0.778	2.16
13_2_4_106	MW-03	Appendix IV	Cadmium	mg/L	15	14	93%	2022-11-28 to 2025-04-21		Nonparametric	0.000121	0.0000750	0.0000320	0.000380	0.000112	0.928	1.88
13_2_4_109	MW-03	Appendix IV	Chromium, Total	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.00463	0.00460	0.00300	0.00730	0.00123	0.267	0.592
13_2_4_110	MW-03	Appendix IV	Cobalt	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.000777	0.000610	0.000370	0.00130	0.000327	0.420	0.495
13_2_4_113	MW-03	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Nonparametric	Nonparametric	0.672	0.610	0.520	1.60	0.261	0.388	3.67
13_2_4_115	MW-03	Appendix IV	Lead	mg/L	15	14	93%	2022-11-28 to 2025-04-21		Nonparametric	0.000484	0.000500	0.000100	0.00110	0.000358	0.739	0.857
13_2_4_116	MW-03	Appendix IV	Lithium	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.0387	0.0350	0.0290	0.0650	0.00948	0.245	1.68
13_2_4_117	MW-03	Appendix IV	Mercury	mg/L	15	13	87%	2022-11-28 to 2025-04-21		Nonparametric	0.0515	0.000160	0.000160	0.770	0.199	3.86	3.87
13_2_4_118	MW-03	Appendix IV	Molybdenum	mg/L	15	11	73%	2022-11-28 to 2025-04-21		Nonparametric	0.000817	0.000390	0.000250	0.00310	0.000965	1.18	2.06
13_2_4_121	MW-03	Appendix IV	Radium 226 and 228	pCi/L	14	1	7%	2022-11-28 to 2025-02-26	Gamma; Lognormal; Normal	Normal	1.08	0.978	0.540	1.92	0.411	0.380	0.778
13_2_4_122	MW-03	Appendix IV	Selenium	mg/L	15	3	20%	2022-11-28 to 2025-04-21	Gamma; Normal	Normal	0.000442	0.000410	0.000170	0.00110	0.000219	0.496	1.95
13_2_4_125	MW-03	Appendix IV	Thallium	mg/L	15	14	93%	2022-11-28 to 2025-04-21		Nonparametric	0.000265	0.000380	0.0000750	0.000380	0.000148	0.559	-0.539
13_2_5_111	MW-03	Part 115	Copper	mg/L	15	7	47%	2022-11-28 to 2025-04-21	Nonparametric	Nonparametric	0.000421	0.000250	0.000200	0.00100	0.000329	0.782	1.17
13_2_5_114	MW-03	Part 115	Iron	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Gamma	1.44	0.780	0.120	5.90	1.59	1.10	1.89
13_2_5_119	MW-03	Part 115	Nickel	mg/L	15	1	7%	2022-11-28 to 2025-04-21	Nonparametric	Nonparametric	0.00241	0.00150	0.000850	0.0150	0.00353	1.47	3.69
13_2_5_123	MW-03	Part 115	Silver	mg/L	15	15	100%	2022-11-28 to 2025-04-21		Nonparametric	0.000103	0.0000500	0.0000500	0.000250	0.0000915	0.886	1.18
13_2_5_128	MW-03	Part 115	Vanadium	mg/L	15	9	60%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Nonparametric	0.00116	0.000620	0.000620	0.00310	0.000745	0.643	1.51
13_2_5_129	MW-03	Part 115	Zinc	mg/L	15	9	60%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Nonparametric	0.00471	0.00120	0.00120	0.0190	0.00642	1.36	1.69

(Table continues on next page)

^a Non-detects are excluded from goodness-of-fit tests.

Table 1: Summary Statistics, Non-Detects Included (*continued*)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit ^a	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
14_2_3_105	MW-04	Appendix III	Boron	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	4.06	4.00	3.50	4.70	0.354	0.0872	0.504
14_2_3_107	MW-04	Appendix III	Calcium	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	357	360	250	430	43.7	0.122	-0.713
14_2_3_108	MW-04	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	160	160	21.0	300	67.5	0.422	-0.0186
14_2_3_112	MW-04	Appendix III	Fluoride	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Lognormal	Lognormal	1.38	1.30	0.760	2.30	0.347	0.251	1.24
14_2_3_120	MW-04	Appendix III	pH (field)	su	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	7.36	7.35	7.22	7.66	0.114	0.0154	1.14
14_2_3_124	MW-04	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Nonparametric	Nonparametric	575	610	1.80	810	200	0.348	-1.78
14_2_3_126	MW-04	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Normal	Normal	1847	1800	1200	2100	236	0.128	-1.33
14_2_4_101	MW-04	Appendix IV	Antimony	mg/L	15	10	67%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Nonparametric	0.000230	0.000120	0.0000500	0.000500	0.000186	0.807	0.650
14_2_4_102	MW-04	Appendix IV	Arsenic	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal	Gamma	0.00106	0.000920	0.000470	0.00280	0.000549	0.516	2.39
14_2_4_103	MW-04	Appendix IV	Barium	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Nonparametric	Nonparametric	0.134	0.120	0.0250	0.460	0.0954	0.710	3.13
14_2_4_104	MW-04	Appendix IV	Beryllium	mg/L	15	13	87%	2022-11-28 to 2025-04-21		Nonparametric	0.0000531	0.0000520	0.0000520	0.0000660	0.00000361	0.0681	3.75
14_2_4_106	MW-04	Appendix IV	Cadmium	mg/L	15	15	100%	2022-11-28 to 2025-04-21		Nonparametric	0.000118	0.0000750	0.0000320	0.000380	0.000113	0.952	1.92
14_2_4_109	MW-04	Appendix IV	Chromium, Total	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.00373	0.00410	0.00100	0.00600	0.00134	0.358	-0.277
14_2_4_110	MW-04	Appendix IV	Cobalt	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.000438	0.000350	0.000110	0.000930	0.000227	0.518	0.718
14_2_4_113	MW-04	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Lognormal	Lognormal	1.38	1.30	0.760	2.30	0.347	0.251	1.24
14_2_4_115	MW-04	Appendix IV	Lead	mg/L	15	14	93%	2022-11-28 to 2025-04-21		Nonparametric	0.000401	0.000260	0.000100	0.00110	0.000328	0.817	1.30
14_2_4_116	MW-04	Appendix IV	Lithium	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.0611	0.0620	0.0310	0.0740	0.0124	0.202	-1.03
14_2_4_117	MW-04	Appendix IV	Mercury	mg/L	15	14	93%	2022-11-28 to 2025-04-21		Nonparametric	0.193	0.000160	0.000160	2.90	0.749	3.87	3.87
14_2_4_118	MW-04	Appendix IV	Molybdenum	mg/L	15	2	13%	2022-11-28 to 2025-04-21	Lognormal	Lognormal	0.00185	0.00120	0.000370	0.0110	0.00264	1.43	3.39
14_2_4_121	MW-04	Appendix IV	Radium 226 and 228	pCi/L	15	5	33%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.987	0.868	0.560	1.55	0.352	0.357	0.350
14_2_4_122	MW-04	Appendix IV	Selenium	mg/L	15	5	33%	2022-11-28 to 2025-04-21	Gamma; Lognormal	Gamma	0.000305	0.000220	0.000100	0.00120	0.000262	0.857	3.23
14_2_4_125	MW-04	Appendix IV	Thallium	mg/L	15	15	100%	2022-11-28 to 2025-04-21		Nonparametric	0.000217	0.0000750	0.0000750	0.000380	0.000158	0.725	0.149
14_2_5_111	MW-04	Part 115	Copper	mg/L	15	12	80%	2022-11-28 to 2025-04-21		Nonparametric	0.000265	0.000200	0.000200	0.000990	0.000203	0.767	3.69
14_2_5_114	MW-04	Part 115	Iron	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Nonparametric	Nonparametric	5.12	5.60	0.190	6.80	2.04	0.397	-1.88
14_2_5_119	MW-04	Part 115	Nickel	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Normal	Normal	0.0138	0.0130	0.00190	0.0220	0.00586	0.425	-0.796
14_2_5_123	MW-04	Part 115	Silver	mg/L	15	15	100%	2022-11-28 to 2025-04-21		Nonparametric	0.000103	0.0000500	0.0000500	0.000250	0.0000915	0.886	1.18
14_2_5_128	MW-04	Part 115	Vanadium	mg/L	15	10	67%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Nonparametric	0.000755	0.000620	0.000620	0.00120	0.000218	0.289	1.25
14_2_5_129	MW-04	Part 115	Zinc	mg/L	15	10	67%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Nonparametric	0.00209	0.00120	0.00120	0.00590	0.00163	0.780	1.65
16_1_3_105	MW-06	Appendix III	Boron	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	9.16	9.50	6.40	12.0	1.63	0.178	-0.144
16_1_3_107	MW-06	Appendix III	Calcium	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	251	250	200	310	34.7	0.139	0.466
16_1_3_108	MW-06	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	69.0	71.0	13.0	160	39.7	0.575	0.694
16_1_3_112	MW-06	Appendix III	Fluoride	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	1.18	1.10	0.980	1.60	0.180	0.153	1.00
16_1_3_120	MW-06	Appendix III	pH (field)	su	15	0	0%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	7.23	7.27	6.42	7.49	0.241	0.0334	-2.99
16_1_3_124	MW-06	Appendix III	Sulfate (as SO4)	mg/L	15	2	13%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Gamma	10.7	9.40	0.410	30.0	8.68	0.811	0.662
16_1_3_126	MW-06	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-11-29 to 2025-04-20		Nonparametric	1200	1200	1100	1300	65.5	0.0546	0
16_1_4_101	MW-06	Appendix IV	Antimony	mg/L	15	13	87%	2022-11-29 to 2025-04-20		Nonparametric	0.000172	0.000100	0.0000500	0.000500	0.000155	0.901	1.54
16_1_4_102	MW-06	Appendix IV	Arsenic	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.000680	0.000650	0.000470	0.00100	0.000168	0.247	0.740
16_1_4_103	MW-06	Appendix IV	Barium	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	1.42	1.40	0.990	1.70	0.167	0.118	-0.857
16_1_4_104	MW-06	Appendix IV	Beryllium	mg/L	15	14	93%	2022-11-29 to 2025-04-20		Nonparametric	0.0000521	0.0000520	0.0000520	0.0000540	0.000000516	0.00991	3.87
16_1_4_106	MW-06	Appendix IV	Cadmium	mg/L	15	15	100%	2022-11-29 to 2025-04-20		Nonparametric	0.000118	0.0000750	0.0000320	0.000380	0.000113	0.952	1.92
16_1_4_109	MW-06	Appendix IV	Chromium, Total	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.00161	0.00140	0.000950	0.00300	0.000570	0.354	1.15
16_1_4_110	MW-06	Appendix IV	Cobalt	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.000509	0.000470	0.000330	0.000800	0.000147	0.288	0.749

(Table continues on next page)

^a Non-detects are excluded from goodness-of-fit tests.

Table 1: Summary Statistics, Non-Detects Included *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit ^a	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
16_1_4_113	MW-06	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	1.18	1.10	0.980	1.60	0.180	0.153	1.00
16_1_4_115	MW-06	Appendix IV	Lead	mg/L	15	10	67%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Nonparametric	0.000339	0.000220	0.000100	0.00110	0.000338	0.995	1.72
16_1_4_116	MW-06	Appendix IV	Lithium	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.175	0.170	0.110	0.230	0.0405	0.232	-0.0572
16_1_4_117	MW-06	Appendix IV	Mercury	mg/L	15	14	93%	2022-11-29 to 2025-04-20		Nonparametric	0.0468	0.000160	0.000160	0.700	0.181	3.86	3.87
16_1_4_118	MW-06	Appendix IV	Molybdenum	mg/L	15	9	60%	2022-11-29 to 2025-04-20	Lognormal	Nonparametric	0.000577	0.000280	0.000250	0.00310	0.000718	1.24	3.52
16_1_4_121	MW-06	Appendix IV	Radium 226 and 228	pCi/L	15	3	20%	2022-11-29 to 2025-04-20	Gamma; Lognormal	Gamma	0.859	0.824	0.460	1.91	0.347	0.404	2.16
16_1_4_122	MW-06	Appendix IV	Selenium	mg/L	15	5	33%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	0.000232	0.000220	0.000160	0.000470	0.0000712	0.307	2.99
16_1_4_125	MW-06	Appendix IV	Thallium	mg/L	15	15	100%	2022-11-29 to 2025-04-20		Nonparametric	0.000156	0.0000750	0.0000750	0.000380	0.000140	0.892	1.18
16_1_5_111	MW-06	Part 115	Copper	mg/L	15	12	80%	2022-11-29 to 2025-04-20		Nonparametric	0.000221	0.000200	0.000200	0.000380	0.0000499	0.226	2.76
16_1_5_114	MW-06	Part 115	Iron	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Normal	Normal	17.8	17.0	4.60	31.0	6.33	0.356	0.266
16_1_5_119	MW-06	Part 115	Nickel	mg/L	15	6	40%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.000851	0.000900	0.000650	0.00120	0.000195	0.230	0.318
16_1_5_123	MW-06	Part 115	Silver	mg/L	15	15	100%	2022-11-29 to 2025-04-20		Nonparametric	0.000103	0.0000500	0.0000500	0.000250	0.0000915	0.885	1.18
16_1_5_128	MW-06	Part 115	Vanadium	mg/L	15	14	93%	2022-11-29 to 2025-04-20		Nonparametric	0.000623	0.000620	0.000620	0.000640	0.00000704	0.0113	2.40
16_1_5_129	MW-06	Part 115	Zinc	mg/L	15	2	13%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	0.0153	0.00170	0.00120	0.0940	0.0296	1.94	1.97
17_1_3_105	MW-07	Appendix III	Boron	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Lognormal; Normal	Normal	11.2	11.0	8.80	13.0	1.11	0.0994	-0.206
17_1_3_107	MW-07	Appendix III	Calcium	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	145	150	120	160	11.9	0.0821	-0.500
17_1_3_108	MW-07	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Nonparametric	Nonparametric	14.3	14.0	13.0	17.0	1.11	0.0776	1.02
17_1_3_112	MW-07	Appendix III	Fluoride	mg/L	15	3	20%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.105	0.110	0.0550	0.190	0.0394	0.374	0.509
17_1_3_120	MW-07	Appendix III	pH (field)	su	15	0	0%	2022-11-30 to 2025-04-21	Nonparametric	Nonparametric	6.88	6.88	6.58	7.05	0.128	0.0186	-1.11
17_1_3_124	MW-07	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	25.4	26.0	15.0	37.0	8.01	0.315	0.0697
17_1_3_126	MW-07	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Normal	Normal	649	660	470	720	76.3	0.117	-1.41
17_1_4_101	MW-07	Appendix IV	Antimony	mg/L	15	14	93%	2022-11-30 to 2025-04-21		Nonparametric	0.0000847	0.000100	0.0000500	0.000100	0.0000229	0.270	-0.923
17_1_4_102	MW-07	Appendix IV	Arsenic	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.000212	0.000210	0.000130	0.000290	0.0000353	0.166	-0.191
17_1_4_103	MW-07	Appendix IV	Barium	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.349	0.350	0.250	0.420	0.0398	0.114	-0.710
17_1_4_104	MW-07	Appendix IV	Beryllium	mg/L	15	12	80%	2022-11-30 to 2025-04-21		Nonparametric	0.0000538	0.0000520	0.0000520	0.0000660	0.00000428	0.0795	2.42
17_1_4_106	MW-07	Appendix IV	Cadmium	mg/L	15	15	100%	2022-11-30 to 2025-04-21		Nonparametric	0.0000607	0.0000750	0.0000320	0.0000750	0.0000210	0.346	-0.788
17_1_4_109	MW-07	Appendix IV	Chromium, Total	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal	Gamma	0.000370	0.000340	0.000280	0.000740	0.000113	0.305	2.78
17_1_4_110	MW-07	Appendix IV	Cobalt	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.000919	0.000950	0.000710	0.00110	0.000118	0.129	-0.192
17_1_4_113	MW-07	Appendix IV	Fluoride (App IV)	mg/L	15	3	20%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.105	0.110	0.0550	0.190	0.0394	0.374	0.509
17_1_4_115	MW-07	Appendix IV	Lead	mg/L	15	15	100%	2022-11-30 to 2025-04-21		Nonparametric	0.000140	0.000100	0.000100	0.000220	0.0000586	0.418	0.788
17_1_4_116	MW-07	Appendix IV	Lithium	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.00606	0.00570	0.00310	0.0100	0.00163	0.269	0.765
17_1_4_117	MW-07	Appendix IV	Mercury	mg/L	15	15	100%	2022-11-30 to 2025-04-21		Nonparametric	0.000149	0.000160	0.000000160	0.000160	0.0000413	0.276	-3.87
17_1_4_118	MW-07	Appendix IV	Molybdenum	mg/L	15	15	100%	2022-11-30 to 2025-04-21		Nonparametric	0.000373	0.000250	0.000250	0.000620	0.000181	0.484	0.788
17_1_4_121	MW-07	Appendix IV	Radium 226 and 228	pCi/L	15	2	13%	2022-11-30 to 2025-04-21	Gamma; Lognormal	Gamma	0.971	0.842	0.570	2.36	0.432	0.445	2.61
17_1_4_122	MW-07	Appendix IV	Selenium	mg/L	15	9	60%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Nonparametric	0.000157	0.000130	0.000100	0.000230	0.0000578	0.369	0.229
17_1_4_125	MW-07	Appendix IV	Thallium	mg/L	15	15	100%	2022-11-30 to 2025-04-21		Nonparametric	0.0000750	0.0000750	0.0000750	0.0000750	0	0	NA
17_1_5_111	MW-07	Part 115	Copper	mg/L	15	11	73%	2022-11-30 to 2025-04-21		Nonparametric	0.000236	0.000200	0.000200	0.000620	0.000108	0.458	3.66
17_1_5_114	MW-07	Part 115	Iron	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	16.2	16.0	13.0	21.0	2.37	0.146	0.434
17_1_5_119	MW-07	Part 115	Nickel	mg/L	15	14	93%	2022-11-30 to 2025-04-21		Nonparametric	0.000654	0.000650	0.000650	0.000710	0.0000155	0.0237	3.87
17_1_5_123	MW-07	Part 115	Silver	mg/L	15	15	100%	2022-11-30 to 2025-04-21		Nonparametric	0.0000500	0.0000500	0.0000500	0.0000500	0	0	NA
17_1_5_128	MW-07	Part 115	Vanadium	mg/L	15	12	80%	2022-11-30 to 2025-04-21		Nonparametric	0.000663	0.000620	0.000620	0.000950	0.0000971	0.146	2.32
17_1_5_129	MW-07	Part 115	Zinc	mg/L	15	10	67%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Nonparametric	0.00492	0.00120	0.00120	0.0250	0.00757	1.54	1.95

(Table continues on next page)

^a Non-detects are excluded from goodness-of-fit tests.

Table 1: Summary Statistics, Non-Detects Included (*continued*)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit ^a	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
18_1_3_105	MW-08	Appendix III	Boron	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	5.99	6.60	2.50	9.30	1.91	0.319	-0.222
18_1_3_107	MW-08	Appendix III	Calcium	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	136	130	120	160	13.5	0.0994	0.256
18_1_3_108	MW-08	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Lognormal	Lognormal	32.5	29.0	17.0	99.0	19.4	0.599	3.20
18_1_3_112	MW-08	Appendix III	Fluoride	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Normal	Normal	0.911	1.00	0.400	1.30	0.263	0.289	-0.661
18_1_3_120	MW-08	Appendix III	pH (field)	su	15	0	0%	2022-12-01 to 2025-04-20	Nonparametric	Nonparametric	7.19	7.25	6.21	7.51	0.295	0.0411	-2.84
18_1_3_124	MW-08	Appendix III	Sulfate (as SO4)	mg/L	15	4	27%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Gamma	14.9	5.60	0.410	65.0	19.4	1.30	1.67
18_1_3_126	MW-08	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	547	550	440	660	59.1	0.108	0.196
18_1_4_101	MW-08	Appendix IV	Antimony	mg/L	15	7	47%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.000125	0.000100	0.0000540	0.000280	0.0000553	0.444	1.84
18_1_4_102	MW-08	Appendix IV	Arsenic	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Normal	Normal	0.0347	0.0380	0.00690	0.0500	0.0135	0.390	-0.865
18_1_4_103	MW-08	Appendix IV	Barium	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	1.18	1.20	0.750	1.50	0.202	0.171	-0.455
18_1_4_104	MW-08	Appendix IV	Beryllium	mg/L	15	14	93%	2022-12-01 to 2025-04-20		Nonparametric	0.0000565	0.0000520	0.0000520	0.000120	0.0000176	0.311	3.87
18_1_4_106	MW-08	Appendix IV	Cadmium	mg/L	15	14	93%	2022-12-01 to 2025-04-20		Nonparametric	0.0000630	0.0000750	0.0000320	0.000110	0.0000244	0.387	-0.169
18_1_4_109	MW-08	Appendix IV	Chromium, Total	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.000839	0.000750	0.000590	0.00150	0.000248	0.295	1.47
18_1_4_110	MW-08	Appendix IV	Cobalt	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.000493	0.000450	0.000260	0.000980	0.000190	0.385	1.19
18_1_4_113	MW-08	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Normal	Normal	0.911	1.00	0.400	1.30	0.263	0.289	-0.661
18_1_4_115	MW-08	Appendix IV	Lead	mg/L	15	9	60%	2022-12-01 to 2025-04-20	Gamma; Lognormal	Nonparametric	0.000378	0.000110	0.000100	0.00290	0.000724	1.91	3.47
18_1_4_116	MW-08	Appendix IV	Lithium	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.102	0.110	0.0630	0.140	0.0248	0.243	0.00168
18_1_4_117	MW-08	Appendix IV	Mercury	mg/L	15	15	100%	2022-12-01 to 2025-04-20		Nonparametric	0.000149	0.000160	0.000000160	0.000160	0.0000413	0.276	-3.87
18_1_4_118	MW-08	Appendix IV	Molybdenum	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.00149	0.00160	0.000310	0.00290	0.000859	0.577	0.113
18_1_4_121	MW-08	Appendix IV	Radium 226 and 228	pCi/L	15	3	20%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	1.04	0.952	0.550	2.10	0.422	0.407	1.25
18_1_4_122	MW-08	Appendix IV	Selenium	mg/L	15	5	33%	2022-12-01 to 2025-04-20	Lognormal	Lognormal	0.000193	0.000180	0.000120	0.000340	0.0000649	0.337	0.972
18_1_4_125	MW-08	Appendix IV	Thallium	mg/L	15	14	93%	2022-12-01 to 2025-04-20		Nonparametric	0.0000787	0.0000750	0.0000750	0.000130	0.0000142	0.181	3.87
18_1_5_111	MW-08	Part 115	Copper	mg/L	15	5	33%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.000348	0.000280	0.000200	0.000800	0.000182	0.523	1.37
18_1_5_114	MW-08	Part 115	Iron	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	20.1	19.0	13.0	32.0	5.36	0.267	0.986
18_1_5_119	MW-08	Part 115	Nickel	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Nonparametric	Nonparametric	0.00257	0.00130	0.000850	0.0130	0.00313	1.22	3.03
18_1_5_123	MW-08	Part 115	Silver	mg/L	15	15	100%	2022-12-01 to 2025-04-20		Nonparametric	0.0000500	0.0000500	0.0000500	0.0000500	0	0	NA
18_1_5_128	MW-08	Part 115	Vanadium	mg/L	15	14	93%	2022-12-01 to 2025-04-20		Nonparametric	0.000639	0.000620	0.000620	0.000910	0.0000749	0.117	3.87
18_1_5_129	MW-08	Part 115	Zinc	mg/L	15	3	20%	2022-12-01 to 2025-04-20	Nonparametric	Nonparametric	0.0238	0.00170	0.00120	0.160	0.0496	2.08	2.24
19_2_3_105	MW-09	Appendix III	Boron	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	5.71	5.80	4.90	6.90	0.573	0.100	0.245
19_2_3_107	MW-09	Appendix III	Calcium	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	379	400	230	510	83.4	0.220	-0.172
19_2_3_108	MW-09	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Lognormal	Lognormal	22.7	17.0	11.0	67.0	16.8	0.739	2.07
19_2_3_112	MW-09	Appendix III	Fluoride	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	2.55	2.50	2.10	2.90	0.256	0.101	-0.0145
19_2_3_120	MW-09	Appendix III	pH (field)	su	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	7.22	7.21	7.00	7.52	0.121	0.0168	0.984
19_2_3_124	MW-09	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Normal	Normal	482	500	83.0	930	256	0.532	-0.0972
19_2_3_126	MW-09	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	1440	1500	740	2000	350	0.243	-0.412
19_2_4_101	MW-09	Appendix IV	Antimony	mg/L	15	10	67%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Nonparametric	0.000176	0.000100	0.0000500	0.000500	0.000153	0.871	1.59
19_2_4_102	MW-09	Appendix IV	Arsenic	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Nonparametric	Nonparametric	0.00213	0.00230	0.00130	0.00300	0.000543	0.255	-0.410
19_2_4_103	MW-09	Appendix IV	Barium	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Lognormal	Lognormal	0.393	0.200	0.0970	2.40	0.569	1.45	3.57
19_2_4_104	MW-09	Appendix IV	Beryllium	mg/L	15	12	80%	2022-11-28 to 2025-04-19		Nonparametric	0.0000593	0.0000520	0.0000520	0.000150	0.0000252	0.425	3.83
19_2_4_106	MW-09	Appendix IV	Cadmium	mg/L	15	15	100%	2022-11-28 to 2025-04-19		Nonparametric	0.000110	0.0000750	0.0000320	0.000380	0.000114	1.04	2.07
19_2_4_109	MW-09	Appendix IV	Chromium, Total	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	0.00239	0.00240	0.00160	0.00320	0.000519	0.217	0.0616
19_2_4_110	MW-09	Appendix IV	Cobalt	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	0.000515	0.000530	0.000230	0.000990	0.000219	0.425	0.526

(Table continues on next page)

^a Non-detects are excluded from goodness-of-fit tests.

Table 1: Summary Statistics, Non-Detects Included *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit ^a	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
19_2_4_113	MW-09	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	2.55	2.50	2.10	2.90	0.256	0.101	-0.0145
19_2_4_115	MW-09	Appendix IV	Lead	mg/L	15	15	100%	2022-11-28 to 2025-04-19		Nonparametric	0.000364	0.000220	0.000100	0.00110	0.000342	0.940	1.42
19_2_4_116	MW-09	Appendix IV	Lithium	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	0.303	0.300	0.260	0.340	0.0274	0.0905	-0.129
19_2_4_117	MW-09	Appendix IV	Mercury	mg/L	15	13	87%	2022-11-28 to 2025-04-19		Nonparametric	0.000428	0.000160	0.000000160	0.00240	0.000743	1.74	2.42
19_2_4_118	MW-09	Appendix IV	Molybdenum	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	0.0216	0.0210	0.00970	0.0330	0.00634	0.293	-0.133
19_2_4_121	MW-09	Appendix IV	Radium 226 and 228	pCi/L	15	14	93%	2022-11-28 to 2025-04-19		Nonparametric	0.755	0.771	0.450	0.980	0.123	0.163	-0.634
19_2_4_122	MW-09	Appendix IV	Selenium	mg/L	15	2	13%	2022-11-28 to 2025-04-19	Gamma; Lognormal	Gamma	0.000292	0.000260	0.000120	0.000640	0.000118	0.403	1.91
19_2_4_125	MW-09	Appendix IV	Thallium	mg/L	15	15	100%	2022-11-28 to 2025-04-19		Nonparametric	0.000197	0.0000750	0.0000750	0.000380	0.000155	0.785	0.455
19_2_5_111	MW-09	Part 115	Copper	mg/L	15	10	67%	2022-11-28 to 2025-04-19	Gamma; Lognormal	Nonparametric	0.000310	0.000200	0.000200	0.00130	0.000282	0.911	3.51
19_2_5_114	MW-09	Part 115	Iron	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	20.1	19.0	13.0	26.0	4.31	0.214	0.0248
19_2_5_119	MW-09	Part 115	Nickel	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Lognormal	Nonparametric	0.00957	0.00200	0.000720	0.100	0.0252	2.63	3.80
19_2_5_123	MW-09	Part 115	Silver	mg/L	15	15	100%	2022-11-28 to 2025-04-19		Nonparametric	0.0000900	0.0000500	0.0000500	0.000250	0.0000828	0.920	1.67
19_2_5_128	MW-09	Part 115	Vanadium	mg/L	15	15	100%	2022-11-28 to 2025-04-19		Nonparametric	0.000620	0.000620	0.000620	0.000620	0	0	NA
19_2_5_129	MW-09	Part 115	Zinc	mg/L	15	8	53%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Nonparametric	0.00569	0.00120	0.00120	0.0250	0.00774	1.36	1.66
20_3_3_105	MW-10	Appendix III	Boron	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	16.8	17.0	4.50	28.0	7.76	0.461	-0.176
20_3_3_107	MW-10	Appendix III	Calcium	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	299	280	160	590	117	0.392	1.26
20_3_3_108	MW-10	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	275	240	92.0	670	154	0.561	1.18
20_3_3_112	MW-10	Appendix III	Fluoride	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	5.24	5.70	2.70	7.70	1.61	0.308	-0.204
20_3_3_120	MW-10	Appendix III	pH (field)	su	15	0	0%	2022-11-29 to 2025-04-20	Lognormal; Normal	Normal	7.79	7.79	7.05	8.81	0.387	0.0497	0.925
20_3_3_124	MW-10	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	630	490	140	1700	400	0.635	1.36
20_3_3_126	MW-10	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	2033	1800	1500	3200	500	0.246	1.34
20_3_4_101	MW-10	Appendix IV	Antimony	mg/L	15	11	73%	2022-11-29 to 2025-04-20		Nonparametric	0.000176	0.000100	0.0000500	0.000500	0.000151	0.858	1.57
20_3_4_102	MW-10	Appendix IV	Arsenic	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.000711	0.000550	0.000200	0.00200	0.000468	0.658	1.57
20_3_4_103	MW-10	Appendix IV	Barium	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.292	0.280	0.140	0.570	0.113	0.387	1.11
20_3_4_104	MW-10	Appendix IV	Beryllium	mg/L	15	7	47%	2022-11-29 to 2025-04-20	Gamma; Lognormal	Gamma	0.0000758	0.0000540	0.0000520	0.000220	0.0000476	0.628	2.52
20_3_4_106	MW-10	Appendix IV	Cadmium	mg/L	15	15	100%	2022-11-29 to 2025-04-20		Nonparametric	0.000118	0.0000750	0.0000320	0.000380	0.000113	0.952	1.92
20_3_4_109	MW-10	Appendix IV	Chromium, Total	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.00382	0.00400	0.00130	0.00850	0.00202	0.529	0.919
20_3_4_110	MW-10	Appendix IV	Cobalt	mg/L	15	1	7%	2022-11-29 to 2025-04-20	Gamma; Lognormal	Gamma	0.000481	0.000380	0.000100	0.00180	0.000418	0.870	2.51
20_3_4_113	MW-10	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	5.24	5.70	2.70	7.70	1.61	0.308	-0.204
20_3_4_115	MW-10	Appendix IV	Lead	mg/L	15	13	87%	2022-11-29 to 2025-04-20		Nonparametric	0.000429	0.000230	0.000100	0.00110	0.000383	0.891	1.03
20_3_4_116	MW-10	Appendix IV	Lithium	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.934	0.940	0.540	1.60	0.255	0.273	0.983
20_3_4_117	MW-10	Appendix IV	Mercury	mg/L	15	14	93%	2022-11-29 to 2025-04-20		Nonparametric	0.000265	0.000160	0.000000160	0.00190	0.000454	1.71	3.82
20_3_4_118	MW-10	Appendix IV	Molybdenum	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.00314	0.00330	0.000650	0.00720	0.00179	0.568	0.693
20_3_4_121	MW-10	Appendix IV	Radium 226 and 228	pCi/L	15	12	80%	2022-11-29 to 2025-04-20		Nonparametric	0.846	0.801	0.590	1.36	0.213	0.251	1.10
20_3_4_122	MW-10	Appendix IV	Selenium	mg/L	15	1	7%	2022-11-29 to 2025-04-20	Gamma; Lognormal	Gamma	0.000356	0.000320	0.000190	0.000830	0.000149	0.418	2.48
20_3_4_125	MW-10	Appendix IV	Thallium	mg/L	15	15	100%	2022-11-29 to 2025-04-20		Nonparametric	0.000217	0.0000760	0.0000750	0.000380	0.000157	0.724	0.149
20_3_5_111	MW-10	Part 115	Copper	mg/L	15	12	80%	2022-11-29 to 2025-04-20		Nonparametric	0.000305	0.000200	0.000200	0.00130	0.000288	0.946	3.37
20_3_5_114	MW-10	Part 115	Iron	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	5.17	5.20	2.40	7.70	1.71	0.330	0.0202
20_3_5_119	MW-10	Part 115	Nickel	mg/L	15	7	47%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	0.000839	0.000760	0.000650	0.00180	0.000307	0.366	2.53
20_3_5_123	MW-10	Part 115	Silver	mg/L	15	15	100%	2022-11-29 to 2025-04-20		Nonparametric	0.000103	0.0000500	0.0000500	0.000250	0.0000915	0.885	1.18
20_3_5_128	MW-10	Part 115	Vanadium	mg/L	15	12	80%	2022-11-29 to 2025-04-20		Nonparametric	0.000710	0.000620	0.000620	0.00130	0.000200	0.281	2.35
20_3_5_129	MW-10	Part 115	Zinc	mg/L	15	7	47%	2022-11-29 to 2025-04-20	Gamma; Lognormal	Gamma	0.00383	0.00120	0.00120	0.0140	0.00511	1.33	1.66

(Table continues on next page)

^a Non-detects are excluded from goodness-of-fit tests.

Table 1: Summary Statistics, Non-Detects Included *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit ^a	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
21_2_3_105	MW-11	Appendix III	Boron	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	5.85	4.80	1.50	13.0	3.45	0.591	0.839
21_2_3_107	MW-11	Appendix III	Calcium	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	260	270	130	380	70.5	0.271	-0.234
21_2_3_108	MW-11	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	66.6	71.0	38.0	95.0	16.7	0.251	-0.185
21_2_3_112	MW-11	Appendix III	Fluoride	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.623	0.610	0.210	1.40	0.354	0.569	0.841
21_2_3_120	MW-11	Appendix III	pH (field)	su	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	7.30	7.32	7.09	7.47	0.104	0.0143	-0.541
21_2_3_124	MW-11	Appendix III	Sulfate (as SO4)	mg/L	15	6	40%	2022-11-29 to 2025-04-20	Gamma; Lognormal	Gamma	38.9	10.0	0.410	210	67.6	1.74	2.00
21_2_3_126	MW-11	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	1052	1000	680	1800	253	0.240	1.83
21_2_4_101	MW-11	Appendix IV	Antimony	mg/L	15	11	73%	2022-11-29 to 2025-04-20		Nonparametric	0.000182	0.000100	0.0000500	0.000690	0.000185	1.01	2.03
21_2_4_102	MW-11	Appendix IV	Arsenic	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.00163	0.00150	0.000610	0.00410	0.000803	0.492	2.17
21_2_4_103	MW-11	Appendix IV	Barium	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.645	0.570	0.360	1.20	0.210	0.326	1.31
21_2_4_104	MW-11	Appendix IV	Beryllium	mg/L	15	12	80%	2022-11-29 to 2025-04-20		Nonparametric	0.0000829	0.0000520	0.0000520	0.000440	0.0000997	1.20	3.76
21_2_4_106	MW-11	Appendix IV	Cadmium	mg/L	15	13	87%	2022-11-29 to 2025-04-20		Nonparametric	0.000142	0.0000750	0.0000320	0.000730	0.000184	1.30	2.78
21_2_4_109	MW-11	Appendix IV	Chromium, Total	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	0.00140	0.000870	0.000450	0.00860	0.00202	1.44	3.71
21_2_4_110	MW-11	Appendix IV	Cobalt	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Lognormal	Lognormal	0.000605	0.000400	0.000230	0.00240	0.000558	0.923	2.73
21_2_4_113	MW-11	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.623	0.610	0.210	1.40	0.354	0.569	0.841
21_2_4_115	MW-11	Appendix IV	Lead	mg/L	15	3	20%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	0.00543	0.000430	0.000170	0.0680	0.0173	3.20	3.85
21_2_4_116	MW-11	Appendix IV	Lithium	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.0666	0.0520	0.00590	0.220	0.0572	0.858	1.59
21_2_4_117	MW-11	Appendix IV	Mercury	mg/L	15	13	87%	2022-11-29 to 2025-04-20		Nonparametric	0.0589	0.000160	0.000160	0.880	0.227	3.86	3.87
21_2_4_118	MW-11	Appendix IV	Molybdenum	mg/L	15	2	13%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.00123	0.000990	0.000430	0.00300	0.000797	0.648	1.42
21_2_4_121	MW-11	Appendix IV	Radium 226 and 228	pCi/L	14	4	29%	2022-11-29 to 2025-02-25	Gamma; Lognormal; Normal	Normal	0.985	0.881	0.460	1.76	0.387	0.394	0.846
21_2_4_122	MW-11	Appendix IV	Selenium	mg/L	15	3	20%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	0.000245	0.000210	0.000140	0.000710	0.000146	0.598	2.67
21_2_4_125	MW-11	Appendix IV	Thallium	mg/L	15	14	93%	2022-11-29 to 2025-04-20		Nonparametric	0.000145	0.0000750	0.0000750	0.000380	0.000126	0.872	1.44
21_2_5_111	MW-11	Part 115	Copper	mg/L	15	4	27%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	0.00175	0.000280	0.000200	0.0190	0.00481	2.75	3.79
21_2_5_114	MW-11	Part 115	Iron	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	7.03	7.10	3.60	11.0	2.32	0.329	0.0170
21_2_5_119	MW-11	Part 115	Nickel	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	0.00190	0.00130	0.000650	0.00940	0.00214	1.12	3.52
21_2_5_123	MW-11	Part 115	Silver	mg/L	15	13	87%	2022-11-29 to 2025-04-20		Nonparametric	0.0000907	0.0000500	0.0000500	0.000250	0.0000745	0.822	1.59
21_2_5_128	MW-11	Part 115	Vanadium	mg/L	15	13	87%	2022-11-29 to 2025-04-20		Nonparametric	0.000779	0.000620	0.000620	0.00300	0.000615	0.789	3.87
21_2_5_129	MW-11	Part 115	Zinc	mg/L	15	4	27%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Gamma	0.0178	0.00350	0.00120	0.100	0.0270	1.51	2.27
22_2_3_105	MW-12	Appendix III	Boron	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.302	0.270	0.190	0.420	0.0822	0.272	0.157
22_2_3_107	MW-12	Appendix III	Calcium	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	65.5	64.0	40.0	95.0	18.6	0.284	0.0280
22_2_3_108	MW-12	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	19.2	18.0	12.0	27.0	4.78	0.249	0.589
22_2_3_112	MW-12	Appendix III	Fluoride	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal	Gamma	0.325	0.280	0.200	0.540	0.109	0.336	0.788
22_2_3_120	MW-12	Appendix III	pH (field)	su	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	7.68	7.67	7.00	8.32	0.330	0.0430	0.0491
22_2_3_124	MW-12	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	108	110	52.0	180	39.4	0.366	0.460
22_2_3_126	MW-12	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	274	270	100	420	87.2	0.318	-0.176
22_2_4_101	MW-12	Appendix IV	Antimony	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.000714	0.000680	0.000350	0.00150	0.000313	0.439	1.11
22_2_4_102	MW-12	Appendix IV	Arsenic	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal	Gamma	0.00228	0.00190	0.00140	0.00340	0.000713	0.313	0.293
22_2_4_103	MW-12	Appendix IV	Barium	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.0409	0.0320	0.0170	0.100	0.0228	0.559	1.40
22_2_4_104	MW-12	Appendix IV	Beryllium	mg/L	15	15	100%	2022-11-28 to 2025-04-21		Nonparametric	0.0000520	0.0000520	0.0000520	0.0000520	0	0	NA
22_2_4_106	MW-12	Appendix IV	Cadmium	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.00147	0.00120	0.000540	0.00320	0.000828	0.564	0.893
22_2_4_109	MW-12	Appendix IV	Chromium, Total	mg/L	15	5	33%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.000469	0.000410	0.000200	0.000990	0.000294	0.626	0.847
22_2_4_110	MW-12	Appendix IV	Cobalt	mg/L	15	5	33%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.000283	0.000150	0.000100	0.000930	0.000247	0.874	1.50

(Table continues on next page)

^a Non-detects are excluded from goodness-of-fit tests.

Table 1: Summary Statistics, Non-Detects Included *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit ^a	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
22_2_4_113	MW-12	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal	Gamma	0.325	0.280	0.200	0.540	0.109	0.336	0.788
22_2_4_115	MW-12	Appendix IV	Lead	mg/L	15	6	40%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.000254	0.000220	0.000100	0.000510	0.000124	0.487	1.03
22_2_4_116	MW-12	Appendix IV	Lithium	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.00359	0.00370	0.00190	0.00640	0.00146	0.408	0.493
22_2_4_117	MW-12	Appendix IV	Mercury	mg/L	15	12	80%	2022-11-28 to 2025-04-21		Nonparametric	0.0555	0.000160	0.000160	0.830	0.214	3.86	3.87
22_2_4_118	MW-12	Appendix IV	Molybdenum	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal	Gamma	0.00774	0.00690	0.00460	0.0180	0.00322	0.415	2.51
22_2_4_121	MW-12	Appendix IV	Radium 226 and 228	pCi/L	15	10	67%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Nonparametric	0.649	0.602	0.459	1.09	0.168	0.259	1.44
22_2_4_122	MW-12	Appendix IV	Selenium	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Gamma	0.00125	0.000930	0.000130	0.00430	0.00112	0.896	1.50
22_2_4_125	MW-12	Appendix IV	Thallium	mg/L	15	15	100%	2022-11-28 to 2025-04-21		Nonparametric	0.0000750	0.0000750	0.0000750	0.0000750	0	0	NA
22_2_5_111	MW-12	Part 115	Copper	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.00139	0.00120	0.000550	0.00340	0.000707	0.509	1.78
22_2_5_114	MW-12	Part 115	Iron	mg/L	15	6	40%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.0592	0.0330	0.0210	0.260	0.0644	1.09	2.64
22_2_5_119	MW-12	Part 115	Nickel	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.00251	0.00250	0.00140	0.00350	0.000722	0.288	-0.165
22_2_5_123	MW-12	Part 115	Silver	mg/L	15	15	100%	2022-11-28 to 2025-04-21		Nonparametric	0.0000500	0.0000500	0.0000500	0.0000500	0	0	NA
22_2_5_128	MW-12	Part 115	Vanadium	mg/L	15	6	40%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.000955	0.000850	0.000620	0.00210	0.000435	0.455	1.59
22_2_5_129	MW-12	Part 115	Zinc	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.00813	0.00800	0.00270	0.0170	0.00333	0.410	1.01
28_1_3_105	MW-18	Appendix III	Boron	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	2.95	2.70	1.80	4.40	0.878	0.298	0.250
28_1_3_107	MW-18	Appendix III	Calcium	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	339	340	240	450	61.6	0.181	-0.0687
28_1_3_108	MW-18	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	23.0	24.0	16.0	32.0	4.61	0.201	0.111
28_1_3_112	MW-18	Appendix III	Fluoride	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	3.85	3.80	2.70	5.10	0.677	0.176	0.341
28_1_3_120	MW-18	Appendix III	pH (field)	su	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	7.18	7.18	7.02	7.31	0.0783	0.0109	-0.404
28_1_3_124	MW-18	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	825	770	480	1200	207	0.251	0.688
28_1_3_126	MW-18	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	1400	1400	1100	1800	200	0.143	0.556
28_1_4_101	MW-18	Appendix IV	Antimony	mg/L	15	3	20%	2022-11-30 to 2025-04-21	Gamma; Lognormal	Gamma	0.000211	0.000140	0.000100	0.000500	0.000135	0.639	1.47
28_1_4_102	MW-18	Appendix IV	Arsenic	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.0273	0.0280	0.0150	0.0440	0.00774	0.283	0.718
28_1_4_103	MW-18	Appendix IV	Barium	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.0189	0.0180	0.0120	0.0280	0.00512	0.270	0.170
28_1_4_104	MW-18	Appendix IV	Beryllium	mg/L	15	13	87%	2022-11-30 to 2025-04-21		Nonparametric	0.0000525	0.0000520	0.0000520	0.0000590	0.00000181	0.0344	3.75
28_1_4_106	MW-18	Appendix IV	Cadmium	mg/L	15	6	40%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.000184	0.000160	0.0000750	0.000440	0.000120	0.653	0.974
28_1_4_109	MW-18	Appendix IV	Chromium, Total	mg/L	15	13	87%	2022-11-30 to 2025-04-21		Nonparametric	0.000225	0.000200	0.000180	0.000630	0.000113	0.503	3.72
28_1_4_110	MW-18	Appendix IV	Cobalt	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Lognormal	Lognormal	0.00280	0.00230	0.00140	0.00600	0.00145	0.519	1.34
28_1_4_113	MW-18	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	3.85	3.80	2.70	5.10	0.677	0.176	0.341
28_1_4_115	MW-18	Appendix IV	Lead	mg/L	15	10	67%	2022-11-30 to 2025-04-21	Nonparametric	Nonparametric	0.000279	0.000220	0.000100	0.00110	0.000261	0.934	2.54
28_1_4_116	MW-18	Appendix IV	Lithium	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.0343	0.0320	0.0200	0.0450	0.00795	0.232	-0.140
28_1_4_117	MW-18	Appendix IV	Mercury	mg/L	15	15	100%	2022-11-30 to 2025-04-21		Nonparametric	0.000149	0.000160	0.000000160	0.000160	0.0000413	0.276	-3.87
28_1_4_118	MW-18	Appendix IV	Molybdenum	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.0149	0.0140	0.00900	0.0210	0.00390	0.261	0.408
28_1_4_121	MW-18	Appendix IV	Radium 226 and 228	pCi/L	15	9	60%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Nonparametric	0.658	0.618	0.462	1.27	0.200	0.303	2.27
28_1_4_122	MW-18	Appendix IV	Selenium	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.000611	0.000410	0.000140	0.00200	0.000527	0.862	1.42
28_1_4_125	MW-18	Appendix IV	Thallium	mg/L	15	15	100%	2022-11-30 to 2025-04-21		Nonparametric	0.000136	0.0000750	0.0000750	0.000380	0.000126	0.929	1.67
28_1_5_111	MW-18	Part 115	Copper	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Nonparametric	Nonparametric	0.000649	0.000470	0.000330	0.00170	0.000409	0.631	2.02
28_1_5_114	MW-18	Part 115	Iron	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	6.65	6.80	4.30	10.0	1.52	0.228	0.590
28_1_5_119	MW-18	Part 115	Nickel	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Lognormal	Lognormal	0.00646	0.00560	0.00370	0.0110	0.00231	0.357	1.15
28_1_5_123	MW-18	Part 115	Silver	mg/L	15	15	100%	2022-11-30 to 2025-04-21		Nonparametric	0.0000900	0.0000500	0.0000500	0.000250	0.0000828	0.920	1.67
28_1_5_128	MW-18	Part 115	Vanadium	mg/L	15	15	100%	2022-11-30 to 2025-04-21		Nonparametric	0.000620	0.000620	0.000620	0.000620	0	0	NA
28_1_5_129	MW-18	Part 115	Zinc	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.0490	0.0450	0.0170	0.0880	0.0188	0.383	0.422

(Table continues on next page)

^a Non-detects are excluded from goodness-of-fit tests.

Table 1: Summary Statistics, Non-Detects Included *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit ^a	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
29_1_3_105	MW-19	Appendix III	Boron	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	2.02	2.00	1.50	2.60	0.393	0.195	0.178
29_1_3_107	MW-19	Appendix III	Calcium	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	465	470	360	550	54.6	0.118	-0.593
29_1_3_108	MW-19	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	42.8	40.0	21.0	75.0	15.5	0.362	0.721
29_1_3_112	MW-19	Appendix III	Fluoride	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	1.85	1.90	1.40	2.30	0.280	0.152	0.0295
29_1_3_120	MW-19	Appendix III	pH (field)	su	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	6.83	6.85	6.39	7.07	0.162	0.0236	-1.33
29_1_3_124	MW-19	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	998	1000	600	1300	192	0.193	-0.159
29_1_3_126	MW-19	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	1860	1800	1600	2200	238	0.128	0.331
29_1_4_101	MW-19	Appendix IV	Antimony	mg/L	15	12	80%	2022-11-30 to 2025-04-21		Nonparametric	0.000225	0.000100	0.0000500	0.000720	0.000214	0.951	1.26
29_1_4_102	MW-19	Appendix IV	Arsenic	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.00513	0.00550	0.00260	0.00730	0.00158	0.308	-0.153
29_1_4_103	MW-19	Appendix IV	Barium	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.0390	0.0370	0.0300	0.0500	0.00559	0.143	0.540
29_1_4_104	MW-19	Appendix IV	Beryllium	mg/L	15	3	20%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.0000873	0.0000720	0.0000520	0.000260	0.0000518	0.594	2.97
29_1_4_106	MW-19	Appendix IV	Cadmium	mg/L	15	15	100%	2022-11-30 to 2025-04-21		Nonparametric	0.000118	0.0000750	0.0000320	0.000380	0.000113	0.952	1.92
29_1_4_109	MW-19	Appendix IV	Chromium, Total	mg/L	15	5	33%	2022-11-30 to 2025-04-21	Gamma; Lognormal	Gamma	0.000313	0.000270	0.000180	0.000880	0.000180	0.575	2.62
29_1_4_110	MW-19	Appendix IV	Cobalt	mg/L	15	1	7%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.000546	0.000460	0.000100	0.00120	0.000323	0.592	0.456
29_1_4_113	MW-19	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	1.85	1.90	1.40	2.30	0.280	0.152	0.0295
29_1_4_115	MW-19	Appendix IV	Lead	mg/L	15	15	100%	2022-11-30 to 2025-04-21		Nonparametric	0.000423	0.000220	0.000100	0.00110	0.000388	0.918	1.01
29_1_4_116	MW-19	Appendix IV	Lithium	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.0901	0.0900	0.0730	0.110	0.0117	0.130	0.168
29_1_4_117	MW-19	Appendix IV	Mercury	mg/L	15	15	100%	2022-11-30 to 2025-04-21		Nonparametric	0.000149	0.000160	0.000000160	0.000160	0.0000413	0.276	-3.87
29_1_4_118	MW-19	Appendix IV	Molybdenum	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.0111	0.0110	0.00390	0.0190	0.00417	0.375	0.427
29_1_4_121	MW-19	Appendix IV	Radium 226 and 228	pCi/L	15	7	47%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.774	0.700	0.514	1.17	0.240	0.310	0.526
29_1_4_122	MW-19	Appendix IV	Selenium	mg/L	15	10	67%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Nonparametric	0.000213	0.000130	0.000100	0.00110	0.000251	1.17	3.60
29_1_4_125	MW-19	Appendix IV	Thallium	mg/L	15	15	100%	2022-11-30 to 2025-04-21		Nonparametric	0.000217	0.0000750	0.0000750	0.000380	0.000158	0.725	0.149
29_1_5_111	MW-19	Part 115	Copper	mg/L	15	13	87%	2022-11-30 to 2025-04-21		Nonparametric	0.000265	0.000200	0.000200	0.00100	0.000207	0.782	3.67
29_1_5_114	MW-19	Part 115	Iron	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	16.8	16.0	12.0	24.0	3.45	0.205	0.605
29_1_5_119	MW-19	Part 115	Nickel	mg/L	15	1	7%	2022-11-30 to 2025-04-21	Nonparametric	Nonparametric	0.00319	0.00240	0.00110	0.0170	0.00391	1.22	3.58
29_1_5_123	MW-19	Part 115	Silver	mg/L	15	15	100%	2022-11-30 to 2025-04-21		Nonparametric	0.000103	0.0000500	0.0000500	0.000250	0.0000915	0.886	1.18
29_1_5_128	MW-19	Part 115	Vanadium	mg/L	15	14	93%	2022-11-30 to 2025-04-21		Nonparametric	0.000789	0.000620	0.000620	0.00310	0.000640	0.811	3.87
29_1_5_129	MW-19	Part 115	Zinc	mg/L	15	10	67%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Nonparametric	0.00226	0.00120	0.00120	0.00590	0.00161	0.714	1.27
30_1_3_105	MW-20	Appendix III	Boron	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Lognormal; Normal	Normal	0.947	0.870	0.720	1.30	0.171	0.180	0.553
30_1_3_107	MW-20	Appendix III	Calcium	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Nonparametric	Nonparametric	123	120	58.0	170	23.5	0.192	-0.984
30_1_3_108	MW-20	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Normal	Normal	62.1	66.0	29.0	92.0	19	0.306	-0.455
30_1_3_112	MW-20	Appendix III	Fluoride	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Nonparametric	Nonparametric	0.257	0.240	0.120	0.550	0.0910	0.355	2.45
30_1_3_120	MW-20	Appendix III	pH (field)	su	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	7.36	7.34	7.14	7.50	0.108	0.0146	-0.592
30_1_3_124	MW-20	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	57.7	52.0	18.0	120	32.5	0.564	0.535
30_1_3_126	MW-20	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	655	650	510	840	89.2	0.136	0.364
30_1_4_101	MW-20	Appendix IV	Antimony	mg/L	15	5	33%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.000102	0.000100	0.0000540	0.000160	0.0000277	0.272	0.173
30_1_4_102	MW-20	Appendix IV	Arsenic	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.00141	0.00130	0.00100	0.00190	0.000284	0.202	0.311
30_1_4_103	MW-20	Appendix IV	Barium	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Lognormal	Lognormal	0.511	0.460	0.310	0.940	0.166	0.325	1.74
30_1_4_104	MW-20	Appendix IV	Beryllium	mg/L	15	14	93%	2022-11-30 to 2025-04-21		Nonparametric	0.0000525	0.0000520	0.0000520	0.0000590	0.00000181	0.0344	3.87
30_1_4_106	MW-20	Appendix IV	Cadmium	mg/L	15	15	100%	2022-11-30 to 2025-04-21		Nonparametric	0.0000607	0.0000750	0.0000320	0.0000750	0.0000210	0.346	-0.788
30_1_4_109	MW-20	Appendix IV	Chromium, Total	mg/L	15	7	47%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.000215	0.000200	0.000180	0.000290	0.0000295	0.137	1.49
30_1_4_110	MW-20	Appendix IV	Cobalt	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.00117	0.00110	0.000690	0.00160	0.000276	0.236	-0.0220

(Table continues on next page)

^a Non-detects are excluded from goodness-of-fit tests.

Table 1: Summary Statistics, Non-Detects Included *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit ^a	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
30_1_4_113	MW-20	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Nonparametric	Nonparametric	0.257	0.240	0.120	0.550	0.0910	0.355	2.45
30_1_4_115	MW-20	Appendix IV	Lead	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.00190	0.00180	0.00120	0.00280	0.000503	0.265	0.568
30_1_4_116	MW-20	Appendix IV	Lithium	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.0581	0.0600	0.0290	0.0830	0.0162	0.278	-0.394
30_1_4_117	MW-20	Appendix IV	Mercury	mg/L	15	14	93%	2022-11-30 to 2025-04-21		Nonparametric	0.340	0.000160	0.000160	5.10	1.32	3.87	3.87
30_1_4_118	MW-20	Appendix IV	Molybdenum	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.00440	0.00450	0.00330	0.00580	0.000713	0.162	0.194
30_1_4_121	MW-20	Appendix IV	Radium 226 and 228	pCi/L	14	7	50%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Nonparametric	0.703	0.586	0.467	1.47	0.279	0.397	1.95
30_1_4_122	MW-20	Appendix IV	Selenium	mg/L	15	9	60%	2022-11-30 to 2025-04-21	Nonparametric	Nonparametric	0.000156	0.000130	0.000100	0.000260	0.0000613	0.393	0.476
30_1_4_125	MW-20	Appendix IV	Thallium	mg/L	15	14	93%	2022-11-30 to 2025-04-21		Nonparametric	0.0000773	0.0000750	0.0000750	0.000110	0.00000904	0.117	3.87
30_1_5_111	MW-20	Part 115	Copper	mg/L	15	2	13%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.000344	0.000290	0.000200	0.000820	0.000171	0.497	1.76
30_1_5_114	MW-20	Part 115	Iron	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	18.4	18.0	14.0	22.0	2.59	0.141	-0.311
30_1_5_119	MW-20	Part 115	Nickel	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.00798	0.00800	0.00450	0.00990	0.00164	0.205	-0.644
30_1_5_123	MW-20	Part 115	Silver	mg/L	15	15	100%	2022-11-30 to 2025-04-21		Nonparametric	0.0000500	0.0000500	0.0000500	0.0000500	0	0	NA
30_1_5_128	MW-20	Part 115	Vanadium	mg/L	15	15	100%	2022-11-30 to 2025-04-21		Nonparametric	0.000620	0.000620	0.000620	0.000620	0	0	NA
30_1_5_129	MW-20	Part 115	Zinc	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Lognormal	Lognormal	0.0309	0.0250	0.0130	0.0710	0.0173	0.561	1.42
40_1_3_105	MW-30	Appendix III	Boron	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Nonparametric	Nonparametric	1.96	1.90	1.40	3.50	0.472	0.241	2.67
40_1_3_107	MW-30	Appendix III	Calcium	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Nonparametric	Nonparametric	516	460	390	960	155	0.300	2.10
40_1_3_108	MW-30	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Nonparametric	Nonparametric	290	140	82.0	1200	360	1.24	2.18
40_1_3_112	MW-30	Appendix III	Fluoride	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Nonparametric	Nonparametric	1.09	1.10	0.570	1.40	0.182	0.168	-1.45
40_1_3_120	MW-30	Appendix III	pH (field)	su	15	0	0%	2022-11-30 to 2025-04-20	Nonparametric	Nonparametric	7.05	7.07	6.48	7.25	0.193	0.0274	-2.03
40_1_3_124	MW-30	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Normal	Normal	864	940	440	1000	158	0.183	-1.71
40_1_3_126	MW-30	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Nonparametric	Nonparametric	2460	2200	1800	4000	661	0.269	1.94
40_1_4_101	MW-30	Appendix IV	Antimony	mg/L	15	13	87%	2022-11-30 to 2025-04-20		Nonparametric	0.000237	0.000100	0.0000500	0.000650	0.000211	0.891	0.835
40_1_4_102	MW-30	Appendix IV	Arsenic	mg/L	15	2	13%	2022-11-30 to 2025-04-20	Gamma; Lognormal	Gamma	0.000733	0.000460	0.000100	0.00300	0.000805	1.10	2.21
40_1_4_103	MW-30	Appendix IV	Barium	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.0679	0.0660	0.0410	0.100	0.0209	0.308	0.448
40_1_4_104	MW-30	Appendix IV	Beryllium	mg/L	15	13	87%	2022-11-30 to 2025-04-20		Nonparametric	0.0000837	0.0000520	0.0000520	0.000260	0.0000731	0.874	2.24
40_1_4_106	MW-30	Appendix IV	Cadmium	mg/L	15	15	100%	2022-11-30 to 2025-04-20		Nonparametric	0.000139	0.0000750	0.0000320	0.000380	0.000130	0.940	1.36
40_1_4_109	MW-30	Appendix IV	Chromium, Total	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.00885	0.00870	0.00310	0.0140	0.00333	0.376	-0.0920
40_1_4_110	MW-30	Appendix IV	Cobalt	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Nonparametric	Nonparametric	0.00437	0.00110	0.000470	0.0460	0.0116	2.64	3.82
40_1_4_113	MW-30	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Nonparametric	Nonparametric	1.09	1.10	0.570	1.40	0.182	0.168	-1.45
40_1_4_115	MW-30	Appendix IV	Lead	mg/L	15	14	93%	2022-11-30 to 2025-04-20		Nonparametric	0.000609	0.000500	0.000100	0.00170	0.000449	0.736	1.15
40_1_4_116	MW-30	Appendix IV	Lithium	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Lognormal	Lognormal	0.139	0.120	0.100	0.270	0.0431	0.311	2.33
40_1_4_117	MW-30	Appendix IV	Mercury	mg/L	15	14	93%	2022-11-30 to 2025-04-20		Nonparametric	0.000165	0.000160	0.000000160	0.000390	0.0000747	0.454	1.38
40_1_4_118	MW-30	Appendix IV	Molybdenum	mg/L	15	3	20%	2022-11-30 to 2025-04-20	Lognormal	Nonparametric	0.00274	0.00110	0.000320	0.0190	0.00465	1.70	3.46
40_1_4_121	MW-30	Appendix IV	Radium 226 and 228	pCi/L	15	8	53%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Nonparametric	0.688	0.624	0.445	1.12	0.187	0.272	0.942
40_1_4_122	MW-30	Appendix IV	Selenium	mg/L	15	7	47%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.000265	0.000220	0.000100	0.00110	0.000256	0.966	2.82
40_1_4_125	MW-30	Appendix IV	Thallium	mg/L	15	15	100%	2022-11-30 to 2025-04-20		Nonparametric	0.000278	0.000380	0.0000750	0.000380	0.000149	0.535	-0.788
40_1_5_111	MW-30	Part 115	Copper	mg/L	15	10	67%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Nonparametric	0.000349	0.000200	0.000200	0.00100	0.000280	0.804	1.98
40_1_5_114	MW-30	Part 115	Iron	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Gamma; Lognormal	Gamma	4.16	2.90	0.870	17.0	4.11	0.989	2.49
40_1_5_119	MW-30	Part 115	Nickel	mg/L	15	3	20%	2022-11-30 to 2025-04-20	Lognormal	Nonparametric	0.00935	0.00180	0.000650	0.110	0.0279	2.98	3.85
40_1_5_123	MW-30	Part 115	Silver	mg/L	15	15	100%	2022-11-30 to 2025-04-20		Nonparametric	0.000117	0.0000500	0.0000500	0.000250	0.0000976	0.836	0.788
40_1_5_128	MW-30	Part 115	Vanadium	mg/L	15	15	100%	2022-11-30 to 2025-04-20		Nonparametric	0.000951	0.000620	0.000620	0.00310	0.000873	0.918	2.40
40_1_5_129	MW-30	Part 115	Zinc	mg/L	15	10	67%	2022-11-30 to 2025-04-20	Nonparametric	Nonparametric	0.00886	0.00120	0.00120	0.100	0.0253	2.85	3.84

(Table continues on next page)

^a Non-detects are excluded from goodness-of-fit tests.

Table 1: Summary Statistics, Non-Detects Included *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit ^a	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
41_1_3_105	MW-31	Appendix III	Boron	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	4.61	4.50	3.60	5.80	0.616	0.134	0.306
41_1_3_107	MW-31	Appendix III	Calcium	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	171	170	130	200	20.9	0.122	-0.102
41_1_3_108	MW-31	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	103	100	87.0	120	8.77	0.0855	0.168
41_1_3_112	MW-31	Appendix III	Fluoride	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	4.70	4.70	4.10	5.20	0.283	0.0602	0.0656
41_1_3_120	MW-31	Appendix III	pH (field)	su	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	7.83	7.82	7.67	8.02	0.110	0.0140	0.591
41_1_3_124	MW-31	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	159	160	45.0	250	70	0.441	-0.0430
41_1_3_126	MW-31	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	812	810	730	960	70.9	0.0874	0.876
41_1_4_101	MW-31	Appendix IV	Antimony	mg/L	15	7	47%	2022-12-01 to 2025-04-20	Gamma; Lognormal	Gamma	0.000175	0.000100	0.0000500	0.000690	0.000175	1.00	2.25
41_1_4_102	MW-31	Appendix IV	Arsenic	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.00123	0.00120	0.000730	0.00180	0.000279	0.226	0.425
41_1_4_103	MW-31	Appendix IV	Barium	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.168	0.160	0.0990	0.290	0.0498	0.297	1.03
41_1_4_104	MW-31	Appendix IV	Beryllium	mg/L	15	13	87%	2022-12-01 to 2025-04-20		Nonparametric	0.0000551	0.0000520	0.0000520	0.0000960	0.0000113	0.206	3.86
41_1_4_106	MW-31	Appendix IV	Cadmium	mg/L	15	14	93%	2022-12-01 to 2025-04-20		Nonparametric	0.0000613	0.0000750	0.0000320	0.0000840	0.0000215	0.352	-0.744
41_1_4_109	MW-31	Appendix IV	Chromium, Total	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.00241	0.00230	0.00170	0.00410	0.000630	0.262	1.48
41_1_4_110	MW-31	Appendix IV	Cobalt	mg/L	15	3	20%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.000172	0.000160	0.000100	0.000360	0.0000722	0.420	1.40
41_1_4_113	MW-31	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	4.70	4.70	4.10	5.20	0.283	0.0602	0.0656
41_1_4_115	MW-31	Appendix IV	Lead	mg/L	15	13	87%	2022-12-01 to 2025-04-20		Nonparametric	0.000164	0.000100	0.000100	0.000310	0.0000742	0.453	0.509
41_1_4_116	MW-31	Appendix IV	Lithium	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.0487	0.0520	0.0300	0.0630	0.00821	0.169	-0.697
41_1_4_117	MW-31	Appendix IV	Mercury	mg/L	15	14	93%	2022-12-01 to 2025-04-20		Nonparametric	0.0475	0.000160	0.000160	0.710	0.183	3.86	3.87
41_1_4_118	MW-31	Appendix IV	Molybdenum	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Normal	Normal	0.00118	0.00110	0.000400	0.00210	0.000429	0.362	0.232
41_1_4_121	MW-31	Appendix IV	Radium 226 and 228	pCi/L	15	6	40%	2022-12-01 to 2025-04-20	Gamma; Lognormal	Gamma	0.704	0.644	0.497	1.23	0.212	0.301	1.75
41_1_4_122	MW-31	Appendix IV	Selenium	mg/L	15	6	40%	2022-12-01 to 2025-04-20	Nonparametric	Nonparametric	0.000198	0.000150	0.000100	0.000740	0.000157	0.795	3.28
41_1_4_125	MW-31	Appendix IV	Thallium	mg/L	15	14	93%	2022-12-01 to 2025-04-20		Nonparametric	0.0000759	0.0000750	0.0000750	0.0000880	0.00000336	0.0442	3.87
41_1_5_111	MW-31	Part 115	Copper	mg/L	15	10	67%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Nonparametric	0.000236	0.000200	0.000200	0.000440	0.0000677	0.287	2.29
41_1_5_114	MW-31	Part 115	Iron	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Nonparametric	Nonparametric	0.719	0.230	0.120	2.50	0.710	0.988	1.22
41_1_5_119	MW-31	Part 115	Nickel	mg/L	15	10	67%	2022-12-01 to 2025-04-20	Nonparametric	Nonparametric	0.00253	0.000650	0.000650	0.0230	0.00571	2.25	3.77
41_1_5_123	MW-31	Part 115	Silver	mg/L	15	15	100%	2022-12-01 to 2025-04-20		Nonparametric	0.0000500	0.0000500	0.0000500	0.0000500	0	0	NA
41_1_5_128	MW-31	Part 115	Vanadium	mg/L	15	12	80%	2022-12-01 to 2025-04-20		Nonparametric	0.000645	0.000620	0.000620	0.000830	0.0000627	0.0972	2.59
41_1_5_129	MW-31	Part 115	Zinc	mg/L	15	9	60%	2022-12-01 to 2025-04-20	Gamma; Normal	Nonparametric	0.00367	0.00120	0.00120	0.0130	0.00424	1.16	1.36
42_1_3_105	MW-32	Appendix III	Boron	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Nonparametric	Nonparametric	3.50	3.10	2.60	5.60	0.853	0.244	1.45
42_1_3_107	MW-32	Appendix III	Calcium	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Normal	173	180	130	220	24.9	0.144	0.0329
42_1_3_108	MW-32	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Normal	45.4	46.0	38.0	50.0	4.24	0.0934	-0.367
42_1_3_112	MW-32	Appendix III	Fluoride	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Normal	1.52	1.50	1.20	1.90	0.170	0.112	0.650
42_1_3_120	MW-32	Appendix III	pH (field)	su	15	0	0%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Normal	7.61	7.63	7.50	7.75	0.0734	0.00965	0.0449
42_1_3_124	MW-32	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Gamma	80.8	83.0	5.90	190	60.6	0.750	0.329
42_1_3_126	MW-32	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Normal	687	690	550	800	87.6	0.128	-0.208
42_1_4_101	MW-32	Appendix IV	Antimony	mg/L	15	11	73%	2022-11-30 to 2025-04-20		Nonparametric	0.000132	0.000100	0.0000500	0.000700	0.000159	1.20	3.73
42_1_4_102	MW-32	Appendix IV	Arsenic	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Nonparametric	Nonparametric	0.000648	0.000550	0.000390	0.00240	0.000491	0.758	3.70
42_1_4_103	MW-32	Appendix IV	Barium	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.589	0.570	0.0590	1.30	0.308	0.524	0.667
42_1_4_104	MW-32	Appendix IV	Beryllium	mg/L	15	14	93%	2022-11-30 to 2025-04-20		Nonparametric	0.0000532	0.0000520	0.0000520	0.0000700	0.00000465	0.0874	3.87
42_1_4_106	MW-32	Appendix IV	Cadmium	mg/L	15	14	93%	2022-11-30 to 2025-04-20		Nonparametric	0.0000683	0.0000750	0.0000320	0.000190	0.0000395	0.578	2.10
42_1_4_109	MW-32	Appendix IV	Chromium, Total	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Nonparametric	Nonparametric	0.000591	0.000380	0.000310	0.00300	0.000675	1.14	3.71
42_1_4_110	MW-32	Appendix IV	Cobalt	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Lognormal	Lognormal	0.000501	0.000380	0.000210	0.00190	0.000408	0.816	3.24

(Table continues on next page)

^a Non-detects are excluded from goodness-of-fit tests.

Table 1: Summary Statistics, Non-Detects Included (*continued*)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit ^a	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
42_1_4_113	MW-32	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Normal	1.52	1.50	1.20	1.90	0.170	0.112	0.650
42_1_4_115	MW-32	Appendix IV	Lead	mg/L	15	11	73%	2022-11-30 to 2025-04-20		Nonparametric	0.000184	0.000140	0.000100	0.000420	0.000103	0.561	1.28
42_1_4_116	MW-32	Appendix IV	Lithium	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.128	0.120	0.0940	0.200	0.0328	0.257	1.13
42_1_4_117	MW-32	Appendix IV	Mercury	mg/L	15	14	93%	2022-11-30 to 2025-04-20		Nonparametric	0.000265	0.000160	0.000000160	0.00190	0.000454	1.71	3.82
42_1_4_118	MW-32	Appendix IV	Molybdenum	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.00415	0.00430	0.00250	0.00730	0.00117	0.282	1.17
42_1_4_121	MW-32	Appendix IV	Radium 226 and 228	pCi/L	15	9	60%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Nonparametric	0.652	0.603	0.497	0.985	0.143	0.219	1.32
42_1_4_122	MW-32	Appendix IV	Selenium	mg/L	15	12	80%	2022-11-30 to 2025-04-20		Nonparametric	0.000205	0.000130	0.000100	0.00100	0.000227	1.11	3.49
42_1_4_125	MW-32	Appendix IV	Thallium	mg/L	15	15	100%	2022-11-30 to 2025-04-20		Nonparametric	0.0000750	0.0000750	0.0000750	0.0000750	0	0	NA
42_1_5_111	MW-32	Part 115	Copper	mg/L	15	9	60%	2022-11-30 to 2025-04-20	Nonparametric	Nonparametric	0.00129	0.000200	0.000200	0.0160	0.00407	3.16	3.87
42_1_5_114	MW-32	Part 115	Iron	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Normal	15.6	16.0	11.0	20.0	2.90	0.186	-0.311
42_1_5_119	MW-32	Part 115	Nickel	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Nonparametric	Nonparametric	0.00255	0.00100	0.000680	0.0230	0.00567	2.22	3.85
42_1_5_123	MW-32	Part 115	Silver	mg/L	15	15	100%	2022-11-30 to 2025-04-20		Nonparametric	0.0000500	0.0000500	0.0000500	0.0000500	0	0	NA
42_1_5_128	MW-32	Part 115	Vanadium	mg/L	15	15	100%	2022-11-30 to 2025-04-20		Nonparametric	0.000620	0.000620	0.000620	0.000620	0	0	NA
42_1_5_129	MW-32	Part 115	Zinc	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Nonparametric	Nonparametric	0.0148	0.00350	0.00220	0.0680	0.0219	1.48	1.75

^a Non-detects are excluded from goodness-of-fit tests.

Table 2: Summary Statistics, Non-Detects Excluded

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
11_2_3_105	MW-01R	Appendix III	Boron	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	106	110	38.0	160	36.2	0.341	-0.209
11_2_3_107	MW-01R	Appendix III	Calcium	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	239	240	130	400	77.2	0.323	0.577
11_2_3_108	MW-01R	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Normal	Normal	131	150	49.0	210	48.0	0.365	-0.470
11_2_3_112	MW-01R	Appendix III	Fluoride	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Normal	Normal	11.7	14.0	4.80	16.0	3.47	0.298	-0.606
11_2_3_120	MW-01R	Appendix III	pH (field)	su	15	0	0%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	7.61	7.74	6.02	7.81	0.447	0.0587	-3.67
11_2_3_124	MW-01R	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Normal	Gamma	450	400	8.80	980	300	0.668	0.195
11_2_3_126	MW-01R	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	2347	2400	2100	2600	125	0.0531	-0.0405
11_2_4_101	MW-01R	Appendix IV	Antimony	mg/L	15	3	20%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	0.000351	0.000225	0.000170	0.00120	0.000306	0.872	2.40
11_2_4_102	MW-01R	Appendix IV	Arsenic	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	0.00156	0.00130	0.000730	0.00410	0.000781	0.500	2.66
11_2_4_103	MW-01R	Appendix IV	Barium	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.338	0.300	0.200	0.560	0.110	0.325	0.793
11_2_4_104	MW-01R	Appendix IV	Beryllium	mg/L	15	2	13%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.000215	0.000200	0.000120	0.000360	0.0000839	0.391	0.691
11_2_4_106	MW-01R	Appendix IV	Cadmium	mg/L	15	12	80%	2022-11-29 to 2025-04-20		Nonparametric	0.000171	0.000110	0.0000620	0.000340	0.000149	0.871	1.53
11_2_4_109	MW-01R	Appendix IV	Chromium, Total	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	0.00351	0.00190	0.00130	0.0220	0.00520	1.48	3.68
11_2_4_110	MW-01R	Appendix IV	Cobalt	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	0.00161	0.00110	0.000640	0.00450	0.00115	0.717	1.92
11_2_4_113	MW-01R	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Normal	Normal	11.7	14.0	4.80	16.0	3.47	0.298	-0.606
11_2_4_115	MW-01R	Appendix IV	Lead	mg/L	15	2	13%	2022-11-29 to 2025-04-20	Lognormal	Lognormal	0.00116	0.000800	0.000350	0.00530	0.00130	1.12	3.09
11_2_4_116	MW-01R	Appendix IV	Lithium	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	2.30	2.30	0.770	3.40	0.775	0.336	-0.319
11_2_4_118	MW-01R	Appendix IV	Molybdenum	mg/L	15	2	13%	2022-11-29 to 2025-04-20	Lognormal	Lognormal	0.00121	0.000760	0.000330	0.00560	0.00141	1.16	2.93
11_2_4_121	MW-01R	Appendix IV	Radium 226 and 228	pCi/L	15	9	60%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Nonparametric	1.00	1.06	0.601	1.28	0.274	0.273	-0.629
11_2_4_122	MW-01R	Appendix IV	Selenium	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal	Gamma	0.000711	0.000640	0.000300	0.00180	0.000340	0.478	2.53
11_2_5_111	MW-01R	Part 115	Copper	mg/L	15	6	40%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	0.000512	0.000300	0.000270	0.00130	0.000375	0.731	1.67
11_2_5_114	MW-01R	Part 115	Iron	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Normal	Normal	0.493	0.500	0.0880	1.10	0.351	0.712	0.275
11_2_5_119	MW-01R	Part 115	Nickel	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	0.00347	0.00190	0.00120	0.0220	0.00522	1.50	3.66
11_2_5_128	MW-01R	Part 115	Vanadium	mg/L	15	2	13%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.00211	0.00180	0.000670	0.00460	0.00122	0.577	1.03
11_2_5_129	MW-01R	Part 115	Zinc	mg/L	15	3	20%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	0.00842	0.00170	0.00120	0.0330	0.0105	1.25	1.47
12_2_3_105	MW-02	Appendix III	Boron	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Nonparametric	Nonparametric	109	100	73.0	170	27.1	0.250	1.62
12_2_3_107	MW-02	Appendix III	Calcium	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	201	200	180	240	16.8	0.0837	0.587
12_2_3_108	MW-02	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Nonparametric	Nonparametric	139	140	67.0	160	21.2	0.153	-3.10
12_2_3_112	MW-02	Appendix III	Fluoride	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Nonparametric	Nonparametric	9.99	9.70	4.50	16.0	2.39	0.239	0.456
12_2_3_120	MW-02	Appendix III	pH (field)	su	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	7.21	7.15	7.06	7.45	0.112	0.0155	0.786
12_2_3_124	MW-02	Appendix III	Sulfate (as SO4)	mg/L	15	10	67%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Nonparametric	1.38	1.10	0.860	2.20	0.592	0.429	0.765
12_2_3_126	MW-02	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	1913	1900	1600	2600	245	0.128	1.55
12_2_4_101	MW-02	Appendix IV	Antimony	mg/L	15	3	20%	2022-11-28 to 2025-04-19	Gamma; Lognormal	Gamma	0.000246	0.000215	0.000150	0.000630	0.000130	0.530	2.65
12_2_4_102	MW-02	Appendix IV	Arsenic	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Normal	Normal	0.00761	0.00780	0.000440	0.0120	0.00250	0.328	-1.46
12_2_4_103	MW-02	Appendix IV	Barium	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	0.466	0.470	0.320	0.730	0.103	0.222	0.865
12_2_4_104	MW-02	Appendix IV	Beryllium	mg/L	15	1	7%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	0.000285	0.000285	0.000120	0.000520	0.000116	0.408	0.520
12_2_4_106	MW-02	Appendix IV	Cadmium	mg/L	15	10	67%	2022-11-28 to 2025-04-19	Lognormal	Nonparametric	0.000147	0.0000780	0.0000410	0.000490	0.000193	1.31	2.19
12_2_4_109	MW-02	Appendix IV	Chromium, Total	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Normal	Normal	0.0422	0.0460	0.000380	0.0680	0.0195	0.463	-0.518
12_2_4_110	MW-02	Appendix IV	Cobalt	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Normal	Normal	0.00610	0.00630	0.000240	0.00970	0.00257	0.421	-0.650
12_2_4_113	MW-02	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Nonparametric	Nonparametric	9.99	9.70	4.50	16.0	2.39	0.239	0.456
12_2_4_115	MW-02	Appendix IV	Lead	mg/L	15	1	7%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	0.00311	0.00255	0.00100	0.00600	0.00156	0.502	0.706
12_2_4_116	MW-02	Appendix IV	Lithium	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	1.46	1.40	0.870	2.30	0.347	0.237	0.938
12_2_4_117	MW-02	Appendix IV	Mercury	mg/L	15	14	93%	2022-11-28 to 2025-04-19		Nonparametric	5.40	5.40	5.40	5.40	NA	NA	NA

(Table continues on next page)

Table 2: Summary Statistics, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
12_2_4_118	MW-02	Appendix IV	Molybdenum	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Lognormal	Lognormal	0.00749	0.00620	0.00380	0.0160	0.00363	0.485	1.23
12_2_4_121	MW-02	Appendix IV	Radium 226 and 228	pCi/L	14	5	36%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	1.61	1.56	0.708	3.35	0.837	0.520	1.23
12_2_4_122	MW-02	Appendix IV	Selenium	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	0.00127	0.00120	0.000500	0.00230	0.000459	0.362	0.396
12_2_4_125	MW-02	Appendix IV	Thallium	mg/L	15	14	93%	2022-11-28 to 2025-04-19		Nonparametric	0.000620	0.000620	0.000620	0.000620	NA	NA	NA
12_2_5_111	MW-02	Part 115	Copper	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	0.00208	0.00200	0.000230	0.00440	0.00107	0.517	0.515
12_2_5_114	MW-02	Part 115	Iron	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	24.1	24.0	18.0	31.0	3.92	0.163	0.255
12_2_5_119	MW-02	Part 115	Nickel	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Normal	Normal	0.0245	0.0220	0.000930	0.0530	0.0133	0.543	0.643
12_2_5_128	MW-02	Part 115	Vanadium	mg/L	15	1	7%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	0.00420	0.00400	0.00130	0.00690	0.00180	0.428	-0.0768
12_2_5_129	MW-02	Part 115	Zinc	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Nonparametric	Nonparametric	0.00907	0.00330	0.00190	0.0360	0.0111	1.22	1.52
13_2_3_105	MW-03	Appendix III	Boron	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	4.12	4.20	3.30	4.50	0.332	0.0806	-1.09
13_2_3_107	MW-03	Appendix III	Calcium	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	363	360	290	430	37.9	0.104	-0.0346
13_2_3_108	MW-03	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	160	150	94.0	300	55.4	0.346	1.22
13_2_3_112	MW-03	Appendix III	Fluoride	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Nonparametric	Nonparametric	0.672	0.610	0.520	1.60	0.261	0.388	3.67
13_2_3_120	MW-03	Appendix III	pH (field)	su	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	7.36	7.33	7.20	7.59	0.0995	0.0135	0.576
13_2_3_124	MW-03	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	368	360	34.0	760	212	0.576	0.165
13_2_3_126	MW-03	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Nonparametric	Nonparametric	2060	2200	1700	2300	253	0.123	-0.395
13_2_4_101	MW-03	Appendix IV	Antimony	mg/L	15	9	60%	2022-11-28 to 2025-04-21	Gamma; Lognormal	Nonparametric	0.000171	0.000120	0.0000870	0.000450	0.000139	0.811	2.25
13_2_4_102	MW-03	Appendix IV	Arsenic	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.000961	0.000970	0.000490	0.00140	0.000264	0.275	-0.318
13_2_4_103	MW-03	Appendix IV	Barium	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.355	0.370	0.130	0.500	0.0886	0.250	-0.986
13_2_4_104	MW-03	Appendix IV	Beryllium	mg/L	15	10	67%	2022-11-28 to 2025-04-21	Lognormal	Nonparametric	0.0000988	0.0000570	0.0000530	0.000180	0.0000614	0.621	0.740
13_2_4_106	MW-03	Appendix IV	Cadmium	mg/L	15	14	93%	2022-11-28 to 2025-04-21		Nonparametric	0.000110	0.000110	0.000110	0.000110	NA	NA	NA
13_2_4_109	MW-03	Appendix IV	Chromium, Total	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.00463	0.00460	0.00300	0.00730	0.00123	0.267	0.592
13_2_4_110	MW-03	Appendix IV	Cobalt	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.000777	0.000610	0.000370	0.00130	0.000327	0.420	0.495
13_2_4_113	MW-03	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Nonparametric	Nonparametric	0.672	0.610	0.520	1.60	0.261	0.388	3.67
13_2_4_115	MW-03	Appendix IV	Lead	mg/L	15	14	93%	2022-11-28 to 2025-04-21		Nonparametric	0.000220	0.000220	0.000220	0.000220	NA	NA	NA
13_2_4_116	MW-03	Appendix IV	Lithium	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.0387	0.0350	0.0290	0.0650	0.00948	0.245	1.68
13_2_4_117	MW-03	Appendix IV	Mercury	mg/L	15	13	87%	2022-11-28 to 2025-04-21		Nonparametric	0.385	0.385	0.000240	0.770	0.544	1.41	NA
13_2_4_118	MW-03	Appendix IV	Molybdenum	mg/L	15	11	73%	2022-11-28 to 2025-04-21		Nonparametric	0.000765	0.000785	0.000390	0.00110	0.000296	0.386	-0.377
13_2_4_121	MW-03	Appendix IV	Radium 226 and 228	pCi/L	14	1	7%	2022-11-28 to 2025-02-26	Gamma; Lognormal; Normal	Normal	1.06	0.959	0.540	1.92	0.421	0.397	0.927
13_2_4_122	MW-03	Appendix IV	Selenium	mg/L	15	3	20%	2022-11-28 to 2025-04-21	Gamma; Normal	Normal	0.000424	0.000415	0.000170	0.000620	0.000111	0.262	-0.595
13_2_4_125	MW-03	Appendix IV	Thallium	mg/L	15	14	93%	2022-11-28 to 2025-04-21		Nonparametric	0.000180	0.000180	0.000180	0.000180	NA	NA	NA
13_2_5_111	MW-03	Part 115	Copper	mg/L	15	7	47%	2022-11-28 to 2025-04-21	Nonparametric	Nonparametric	0.000514	0.000300	0.000240	0.00100	0.000342	0.666	0.676
13_2_5_114	MW-03	Part 115	Iron	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Gamma	1.44	0.780	0.120	5.90	1.59	1.10	1.89
13_2_5_119	MW-03	Part 115	Nickel	mg/L	15	1	7%	2022-11-28 to 2025-04-21	Nonparametric	Nonparametric	0.00235	0.00145	0.000850	0.0150	0.00366	1.55	3.67
13_2_5_128	MW-03	Part 115	Vanadium	mg/L	15	9	60%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Nonparametric	0.00155	0.00145	0.00120	0.00220	0.000389	0.251	1.03
13_2_5_129	MW-03	Part 115	Zinc	mg/L	15	9	60%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Nonparametric	0.00920	0.00750	0.00130	0.0190	0.00843	0.916	0.211
14_2_3_105	MW-04	Appendix III	Boron	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	4.06	4.00	3.50	4.70	0.354	0.0872	0.504
14_2_3_107	MW-04	Appendix III	Calcium	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	357	360	250	430	43.7	0.122	-0.713
14_2_3_108	MW-04	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	160	160	21.0	300	67.5	0.422	-0.0186
14_2_3_112	MW-04	Appendix III	Fluoride	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Lognormal	Lognormal	1.38	1.30	0.760	2.30	0.347	0.251	1.24
14_2_3_120	MW-04	Appendix III	pH (field)	su	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	7.36	7.35	7.22	7.66	0.114	0.0154	1.14
14_2_3_124	MW-04	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Nonparametric	Nonparametric	575	610	1.80	810	200	0.348	-1.78
14_2_3_126	MW-04	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Normal	Normal	1847	1800	1200	2100	236	0.128	-1.33

(Table continues on next page)

Table 2: Summary Statistics, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
14_2_4_101	MW-04	Appendix IV	Antimony	mg/L	15	10	67%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Nonparametric	0.000240	0.000140	0.0000710	0.000460	0.000180	0.751	0.562
14_2_4_102	MW-04	Appendix IV	Arsenic	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal	Gamma	0.00106	0.000920	0.000470	0.00280	0.000549	0.516	2.39
14_2_4_103	MW-04	Appendix IV	Barium	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Nonparametric	Nonparametric	0.134	0.120	0.0250	0.460	0.0954	0.710	3.13
14_2_4_104	MW-04	Appendix IV	Beryllium	mg/L	15	13	87%	2022-11-28 to 2025-04-21		Nonparametric	0.0000600	0.0000600	0.0000540	0.0000660	0.00000849	0.141	NA
14_2_4_109	MW-04	Appendix IV	Chromium, Total	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.00373	0.00410	0.00100	0.00600	0.00134	0.358	-0.277
14_2_4_110	MW-04	Appendix IV	Cobalt	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.000438	0.000350	0.000110	0.000930	0.000227	0.518	0.718
14_2_4_113	MW-04	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Lognormal	Lognormal	1.38	1.30	0.760	2.30	0.347	0.251	1.24
14_2_4_115	MW-04	Appendix IV	Lead	mg/L	15	14	93%	2022-11-28 to 2025-04-21		Nonparametric	0.000260	0.000260	0.000260	0.000260	NA	NA	NA
14_2_4_116	MW-04	Appendix IV	Lithium	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.0611	0.0620	0.0310	0.0740	0.0124	0.202	-1.03
14_2_4_117	MW-04	Appendix IV	Mercury	mg/L	15	14	93%	2022-11-28 to 2025-04-21		Nonparametric	2.90	2.90	2.90	2.90	NA	NA	NA
14_2_4_118	MW-04	Appendix IV	Molybdenum	mg/L	15	2	13%	2022-11-28 to 2025-04-21	Lognormal	Lognormal	0.00185	0.00120	0.000370	0.0110	0.00280	1.52	3.37
14_2_4_121	MW-04	Appendix IV	Radium 226 and 228	pCi/L	15	5	33%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	1.13	1.22	0.634	1.55	0.342	0.302	-0.458
14_2_4_122	MW-04	Appendix IV	Selenium	mg/L	15	5	33%	2022-11-28 to 2025-04-21	Gamma; Lognormal	Gamma	0.000360	0.000235	0.000170	0.00120	0.000309	0.857	2.70
14_2_5_111	MW-04	Part 115	Copper	mg/L	15	12	80%	2022-11-28 to 2025-04-21		Nonparametric	0.000527	0.000320	0.000270	0.000990	0.000402	0.763	1.70
14_2_5_114	MW-04	Part 115	Iron	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Nonparametric	Nonparametric	5.12	5.60	0.190	6.80	2.04	0.397	-1.88
14_2_5_119	MW-04	Part 115	Nickel	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Normal	Normal	0.0138	0.0130	0.00190	0.0220	0.00586	0.425	-0.796
14_2_5_128	MW-04	Part 115	Vanadium	mg/L	15	10	67%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Nonparametric	0.00102	0.00110	0.000750	0.00120	0.000174	0.170	-1.15
14_2_5_129	MW-04	Part 115	Zinc	mg/L	15	10	67%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Nonparametric	0.00388	0.00440	0.00150	0.00590	0.00183	0.472	-0.401
16_1_3_105	MW-06	Appendix III	Boron	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	9.16	9.50	6.40	12.0	1.63	0.178	-0.144
16_1_3_107	MW-06	Appendix III	Calcium	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	251	250	200	310	34.7	0.139	0.466
16_1_3_108	MW-06	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	69.0	71.0	13.0	160	39.7	0.575	0.694
16_1_3_112	MW-06	Appendix III	Fluoride	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	1.18	1.10	0.980	1.60	0.180	0.153	1.00
16_1_3_120	MW-06	Appendix III	pH (field)	su	15	0	0%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	7.23	7.27	6.42	7.49	0.241	0.0334	-2.99
16_1_3_124	MW-06	Appendix III	Sulfate (as SO4)	mg/L	15	2	13%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Gamma	12.1	9.60	0.980	30.0	8.41	0.693	0.535
16_1_3_126	MW-06	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-11-29 to 2025-04-20		Nonparametric	1200	1200	1100	1300	65.5	0.0546	0
16_1_4_101	MW-06	Appendix IV	Antimony	mg/L	15	13	87%	2022-11-29 to 2025-04-20		Nonparametric	0.000218	0.000218	0.0000750	0.000360	0.000202	0.927	NA
16_1_4_102	MW-06	Appendix IV	Arsenic	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.000680	0.000650	0.000470	0.00100	0.000168	0.247	0.740
16_1_4_103	MW-06	Appendix IV	Barium	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	1.42	1.40	0.990	1.70	0.167	0.118	-0.857
16_1_4_104	MW-06	Appendix IV	Beryllium	mg/L	15	14	93%	2022-11-29 to 2025-04-20		Nonparametric	0.0000520	0.0000520	0.0000520	0.0000520	NA	NA	NA
16_1_4_109	MW-06	Appendix IV	Chromium, Total	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.00161	0.00140	0.000950	0.00300	0.000570	0.354	1.15
16_1_4_110	MW-06	Appendix IV	Cobalt	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.000509	0.000470	0.000330	0.000800	0.000147	0.288	0.749
16_1_4_113	MW-06	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	1.18	1.10	0.980	1.60	0.180	0.153	1.00
16_1_4_115	MW-06	Appendix IV	Lead	mg/L	15	10	67%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Nonparametric	0.000234	0.000250	0.000120	0.000350	0.0000879	0.376	-0.0168
16_1_4_116	MW-06	Appendix IV	Lithium	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.175	0.170	0.110	0.230	0.0405	0.232	-0.0572
16_1_4_117	MW-06	Appendix IV	Mercury	mg/L	15	14	93%	2022-11-29 to 2025-04-20		Nonparametric	0.700	0.700	0.700	0.700	NA	NA	NA
16_1_4_118	MW-06	Appendix IV	Molybdenum	mg/L	15	9	60%	2022-11-29 to 2025-04-20	Lognormal	Nonparametric	0.000342	0.000275	0.000250	0.000560	0.000126	0.369	1.37
16_1_4_121	MW-06	Appendix IV	Radium 226 and 228	pCi/L	15	3	20%	2022-11-29 to 2025-04-20	Gamma; Lognormal	Gamma	0.908	0.857	0.460	1.91	0.373	0.411	1.87
16_1_4_122	MW-06	Appendix IV	Selenium	mg/L	15	5	33%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	0.000238	0.000210	0.000160	0.000470	0.0000882	0.370	2.40
16_1_5_111	MW-06	Part 115	Copper	mg/L	15	12	80%	2022-11-29 to 2025-04-20		Nonparametric	0.000303	0.000280	0.000250	0.000380	0.0000681	0.224	1.36
16_1_5_114	MW-06	Part 115	Iron	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Normal	Normal	17.8	17.0	4.60	31.0	6.33	0.356	0.266
16_1_5_119	MW-06	Part 115	Nickel	mg/L	15	6	40%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.000986	0.000950	0.000790	0.00120	0.000127	0.129	0.313
16_1_5_128	MW-06	Part 115	Vanadium	mg/L	15	14	93%	2022-11-29 to 2025-04-20		Nonparametric	0.000640	0.000640	0.000640	0.000640	NA	NA	NA
16_1_5_129	MW-06	Part 115	Zinc	mg/L	15	2	13%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	0.0175	0.00180	0.00120	0.0940	0.0314	1.80	1.75

(Table continues on next page)

Table 2: Summary Statistics, Non-Detects Excluded (*continued*)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
17_1_3_105	MW-07	Appendix III	Boron	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Lognormal; Normal	Normal	11.2	11.0	8.80	13.0	1.11	0.0994	-0.206
17_1_3_107	MW-07	Appendix III	Calcium	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	145	150	120	160	11.9	0.0821	-0.500
17_1_3_108	MW-07	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Nonparametric	Nonparametric	14.3	14.0	13.0	17.0	1.11	0.0776	1.02
17_1_3_112	MW-07	Appendix III	Fluoride	mg/L	15	3	20%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.113	0.115	0.0680	0.190	0.0380	0.335	0.491
17_1_3_120	MW-07	Appendix III	pH (field)	su	15	0	0%	2022-11-30 to 2025-04-21	Nonparametric	Nonparametric	6.88	6.88	6.58	7.05	0.128	0.0186	-1.11
17_1_3_124	MW-07	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	25.4	26.0	15.0	37.0	8.01	0.315	0.0697
17_1_3_126	MW-07	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Normal	Normal	649	660	470	720	76.3	0.117	-1.41
17_1_4_101	MW-07	Appendix IV	Antimony	mg/L	15	14	93%	2022-11-30 to 2025-04-21		Nonparametric	0.0000710	0.0000710	0.0000710	0.0000710	NA	NA	NA
17_1_4_102	MW-07	Appendix IV	Arsenic	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.000212	0.000210	0.000130	0.000290	0.0000353	0.166	-0.191
17_1_4_103	MW-07	Appendix IV	Barium	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.349	0.350	0.250	0.420	0.0398	0.114	-0.710
17_1_4_104	MW-07	Appendix IV	Beryllium	mg/L	15	12	80%	2022-11-30 to 2025-04-21		Nonparametric	0.0000610	0.0000620	0.0000550	0.0000660	0.00000557	0.0913	-0.782
17_1_4_109	MW-07	Appendix IV	Chromium, Total	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal	Gamma	0.000370	0.000340	0.000280	0.000740	0.000113	0.305	2.78
17_1_4_110	MW-07	Appendix IV	Cobalt	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.000919	0.000950	0.000710	0.00110	0.000118	0.129	-0.192
17_1_4_113	MW-07	Appendix IV	Fluoride (App IV)	mg/L	15	3	20%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.113	0.115	0.0680	0.190	0.0380	0.335	0.491
17_1_4_116	MW-07	Appendix IV	Lithium	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.00606	0.00570	0.00310	0.0100	0.00163	0.269	0.765
17_1_4_121	MW-07	Appendix IV	Radium 226 and 228	pCi/L	15	2	13%	2022-11-30 to 2025-04-21	Gamma; Lognormal	Gamma	0.995	0.842	0.570	2.36	0.459	0.461	2.43
17_1_4_122	MW-07	Appendix IV	Selenium	mg/L	15	9	60%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Nonparametric	0.000142	0.000120	0.000100	0.000230	0.0000500	0.353	1.38
17_1_5_111	MW-07	Part 115	Copper	mg/L	15	11	73%	2022-11-30 to 2025-04-21		Nonparametric	0.000335	0.000255	0.000210	0.000620	0.000192	0.572	1.90
17_1_5_114	MW-07	Part 115	Iron	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	16.2	16.0	13.0	21.0	2.37	0.146	0.434
17_1_5_119	MW-07	Part 115	Nickel	mg/L	15	14	93%	2022-11-30 to 2025-04-21		Nonparametric	0.000710	0.000710	0.000710	0.000710	NA	NA	NA
17_1_5_128	MW-07	Part 115	Vanadium	mg/L	15	12	80%	2022-11-30 to 2025-04-21		Nonparametric	0.000837	0.000790	0.000770	0.000950	0.0000987	0.118	1.65
17_1_5_129	MW-07	Part 115	Zinc	mg/L	15	10	67%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Nonparametric	0.0124	0.0160	0.00130	0.0250	0.00984	0.796	0.0296
18_1_3_105	MW-08	Appendix III	Boron	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	5.99	6.60	2.50	9.30	1.91	0.319	-0.222
18_1_3_107	MW-08	Appendix III	Calcium	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	136	130	120	160	13.5	0.0994	0.256
18_1_3_108	MW-08	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Lognormal	Lognormal	32.5	29.0	17.0	99.0	19.4	0.599	3.20
18_1_3_112	MW-08	Appendix III	Fluoride	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Normal	Normal	0.911	1.00	0.400	1.30	0.263	0.289	-0.661
18_1_3_120	MW-08	Appendix III	pH (field)	su	15	0	0%	2022-12-01 to 2025-04-20	Nonparametric	Nonparametric	7.19	7.25	6.21	7.51	0.295	0.0411	-2.84
18_1_3_124	MW-08	Appendix III	Sulfate (as SO4)	mg/L	15	4	27%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Gamma	20	13.0	1.70	65.0	20.4	1.02	1.34
18_1_3_126	MW-08	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	547	550	440	660	59.1	0.108	0.196
18_1_4_101	MW-08	Appendix IV	Antimony	mg/L	15	7	47%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.000146	0.000135	0.0000540	0.000280	0.0000706	0.483	0.839
18_1_4_102	MW-08	Appendix IV	Arsenic	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Normal	Normal	0.0347	0.0380	0.00690	0.0500	0.0135	0.390	-0.865
18_1_4_103	MW-08	Appendix IV	Barium	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	1.18	1.20	0.750	1.50	0.202	0.171	-0.455
18_1_4_104	MW-08	Appendix IV	Beryllium	mg/L	15	14	93%	2022-12-01 to 2025-04-20		Nonparametric	0.000120	0.000120	0.000120	0.000120	NA	NA	NA
18_1_4_106	MW-08	Appendix IV	Cadmium	mg/L	15	14	93%	2022-12-01 to 2025-04-20		Nonparametric	0.000110	0.000110	0.000110	0.000110	NA	NA	NA
18_1_4_109	MW-08	Appendix IV	Chromium, Total	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.000839	0.000750	0.000590	0.00150	0.000248	0.295	1.47
18_1_4_110	MW-08	Appendix IV	Cobalt	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.000493	0.000450	0.000260	0.000980	0.000190	0.385	1.19
18_1_4_113	MW-08	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Normal	Normal	0.911	1.00	0.400	1.30	0.263	0.289	-0.661
18_1_4_115	MW-08	Appendix IV	Lead	mg/L	15	9	60%	2022-12-01 to 2025-04-20	Gamma; Lognormal	Nonparametric	0.000735	0.000220	0.000100	0.00290	0.00110	1.49	2.13
18_1_4_116	MW-08	Appendix IV	Lithium	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.102	0.110	0.0630	0.140	0.0248	0.243	0.00168
18_1_4_118	MW-08	Appendix IV	Molybdenum	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.00149	0.00160	0.000310	0.00290	0.000859	0.577	0.113
18_1_4_121	MW-08	Appendix IV	Radium 226 and 228	pCi/L	15	3	20%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	1.11	1.06	0.550	2.10	0.444	0.402	0.976
18_1_4_122	MW-08	Appendix IV	Selenium	mg/L	15	5	33%	2022-12-01 to 2025-04-20	Lognormal	Lognormal	0.000179	0.000145	0.000120	0.000340	0.0000769	0.430	1.62
18_1_4_125	MW-08	Appendix IV	Thallium	mg/L	15	14	93%	2022-12-01 to 2025-04-20		Nonparametric	0.000130	0.000130	0.000130	0.000130	NA	NA	NA

(Table continues on next page)

Table 2: Summary Statistics, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
18_1_5_111	MW-08	Part 115	Copper	mg/L	15	5	33%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.000422	0.000390	0.000210	0.000800	0.000183	0.433	1.05
18_1_5_114	MW-08	Part 115	Iron	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	20.1	19.0	13.0	32.0	5.36	0.267	0.986
18_1_5_119	MW-08	Part 115	Nickel	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Nonparametric	Nonparametric	0.00257	0.00130	0.000850	0.0130	0.00313	1.22	3.03
18_1_5_128	MW-08	Part 115	Vanadium	mg/L	15	14	93%	2022-12-01 to 2025-04-20		Nonparametric	0.000910	0.000910	0.000910	0.000910	NA	NA	NA
18_1_5_129	MW-08	Part 115	Zinc	mg/L	15	3	20%	2022-12-01 to 2025-04-20	Nonparametric	Nonparametric	0.0295	0.00215	0.00130	0.160	0.0544	1.85	1.90
19_2_3_105	MW-09	Appendix III	Boron	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	5.71	5.80	4.90	6.90	0.573	0.100	0.245
19_2_3_107	MW-09	Appendix III	Calcium	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	379	400	230	510	83.4	0.220	-0.172
19_2_3_108	MW-09	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Lognormal	Lognormal	22.7	17.0	11.0	67.0	16.8	0.739	2.07
19_2_3_112	MW-09	Appendix III	Fluoride	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	2.55	2.50	2.10	2.90	0.256	0.101	-0.0145
19_2_3_120	MW-09	Appendix III	pH (field)	su	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	7.22	7.21	7.00	7.52	0.121	0.0168	0.984
19_2_3_124	MW-09	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Normal	Normal	482	500	83.0	930	256	0.532	-0.0972
19_2_3_126	MW-09	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	1440	1500	740	2000	350	0.243	-0.412
19_2_4_101	MW-09	Appendix IV	Antimony	mg/L	15	10	67%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Nonparametric	0.000177	0.000120	0.0000730	0.000370	0.000124	0.700	1.19
19_2_4_102	MW-09	Appendix IV	Arsenic	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Nonparametric	Nonparametric	0.00213	0.00230	0.00130	0.00300	0.000543	0.255	-0.410
19_2_4_103	MW-09	Appendix IV	Barium	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Lognormal	Lognormal	0.393	0.200	0.0970	2.40	0.569	1.45	3.57
19_2_4_104	MW-09	Appendix IV	Beryllium	mg/L	15	12	80%	2022-11-28 to 2025-04-19		Nonparametric	0.0000883	0.0000580	0.0000570	0.000150	0.0000534	0.605	1.73
19_2_4_109	MW-09	Appendix IV	Chromium, Total	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	0.00239	0.00240	0.00160	0.00320	0.000519	0.217	0.0616
19_2_4_110	MW-09	Appendix IV	Cobalt	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	0.000515	0.000530	0.000230	0.000990	0.000219	0.425	0.526
19_2_4_113	MW-09	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	2.55	2.50	2.10	2.90	0.256	0.101	-0.0145
19_2_4_116	MW-09	Appendix IV	Lithium	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	0.303	0.300	0.260	0.340	0.0274	0.0905	-0.129
19_2_4_117	MW-09	Appendix IV	Mercury	mg/L	15	13	87%	2022-11-28 to 2025-04-19		Nonparametric	0.00225	0.00225	0.00210	0.00240	0.000212	0.0943	NA
19_2_4_118	MW-09	Appendix IV	Molybdenum	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	0.0216	0.0210	0.00970	0.0330	0.00634	0.293	-0.133
19_2_4_121	MW-09	Appendix IV	Radium 226 and 228	pCi/L	15	14	93%	2022-11-28 to 2025-04-19		Nonparametric	0.789	0.789	0.789	0.789	NA	NA	NA
19_2_4_122	MW-09	Appendix IV	Selenium	mg/L	15	2	13%	2022-11-28 to 2025-04-19	Gamma; Lognormal	Gamma	0.000303	0.000270	0.000120	0.000640	0.000123	0.406	1.71
19_2_5_111	MW-09	Part 115	Copper	mg/L	15	10	67%	2022-11-28 to 2025-04-19	Gamma; Lognormal	Nonparametric	0.000530	0.000340	0.000290	0.00130	0.000434	0.819	2.14
19_2_5_114	MW-09	Part 115	Iron	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Normal	20.1	19.0	13.0	26.0	4.31	0.214	0.0248
19_2_5_119	MW-09	Part 115	Nickel	mg/L	15	0	0%	2022-11-28 to 2025-04-19	Lognormal	Nonparametric	0.00957	0.00200	0.000720	0.100	0.0252	2.63	3.80
19_2_5_129	MW-09	Part 115	Zinc	mg/L	15	8	53%	2022-11-28 to 2025-04-19	Gamma; Lognormal; Normal	Nonparametric	0.0108	0.00910	0.00150	0.0250	0.00906	0.837	0.478
20_3_3_105	MW-10	Appendix III	Boron	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	16.8	17.0	4.50	28.0	7.76	0.461	-0.176
20_3_3_107	MW-10	Appendix III	Calcium	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	299	280	160	590	117	0.392	1.26
20_3_3_108	MW-10	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	275	240	92.0	670	154	0.561	1.18
20_3_3_112	MW-10	Appendix III	Fluoride	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	5.24	5.70	2.70	7.70	1.61	0.308	-0.204
20_3_3_120	MW-10	Appendix III	pH (field)	su	15	0	0%	2022-11-29 to 2025-04-20	Lognormal; Normal	Normal	7.79	7.79	7.05	8.81	0.387	0.0497	0.925
20_3_3_124	MW-10	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	630	490	140	1700	400	0.635	1.36
20_3_3_126	MW-10	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	2033	1800	1500	3200	500	0.246	1.34
20_3_4_101	MW-10	Appendix IV	Antimony	mg/L	15	11	73%	2022-11-29 to 2025-04-20		Nonparametric	0.000172	0.000120	0.000110	0.000340	0.000112	0.650	1.96
20_3_4_102	MW-10	Appendix IV	Arsenic	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.000711	0.000550	0.000200	0.00200	0.000468	0.658	1.57
20_3_4_103	MW-10	Appendix IV	Barium	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.292	0.280	0.140	0.570	0.113	0.387	1.11
20_3_4_104	MW-10	Appendix IV	Beryllium	mg/L	15	7	47%	2022-11-29 to 2025-04-20	Gamma; Lognormal	Gamma	0.0000964	0.0000700	0.0000520	0.000220	0.0000591	0.613	1.67
20_3_4_109	MW-10	Appendix IV	Chromium, Total	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.00382	0.00400	0.00130	0.00850	0.00202	0.529	0.919
20_3_4_110	MW-10	Appendix IV	Cobalt	mg/L	15	1	7%	2022-11-29 to 2025-04-20	Gamma; Lognormal	Gamma	0.000508	0.000390	0.000100	0.00180	0.000420	0.827	2.54
20_3_4_113	MW-10	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	5.24	5.70	2.70	7.70	1.61	0.308	-0.204
20_3_4_115	MW-10	Appendix IV	Lead	mg/L	15	13	87%	2022-11-29 to 2025-04-20		Nonparametric	0.000145	0.000145	0.000120	0.000170	0.0000354	0.244	NA

(Table continues on next page)

Table 2: Summary Statistics, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
20_3_4_116	MW-10	Appendix IV	Lithium	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.934	0.940	0.540	1.60	0.255	0.273	0.983
20_3_4_117	MW-10	Appendix IV	Mercury	mg/L	15	14	93%	2022-11-29 to 2025-04-20		Nonparametric	0.00190	0.00190	0.00190	0.00190	NA	NA	NA
20_3_4_118	MW-10	Appendix IV	Molybdenum	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.00314	0.00330	0.000650	0.00720	0.00179	0.568	0.693
20_3_4_121	MW-10	Appendix IV	Radium 226 and 228	pCi/L	15	12	80%	2022-11-29 to 2025-04-20		Nonparametric	1.05	0.975	0.817	1.36	0.279	0.266	1.13
20_3_4_122	MW-10	Appendix IV	Selenium	mg/L	15	1	7%	2022-11-29 to 2025-04-20	Gamma; Lognormal	Gamma	0.000366	0.000330	0.000190	0.000830	0.000149	0.408	2.51
20_3_5_111	MW-10	Part 115	Copper	mg/L	15	12	80%	2022-11-29 to 2025-04-20		Nonparametric	0.000723	0.000490	0.000380	0.00130	0.000502	0.695	1.64
20_3_5_114	MW-10	Part 115	Iron	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	5.17	5.20	2.40	7.70	1.71	0.330	0.0202
20_3_5_119	MW-10	Part 115	Nickel	mg/L	15	7	47%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	0.00100	0.000875	0.000760	0.00180	0.000348	0.346	2.15
20_3_5_128	MW-10	Part 115	Vanadium	mg/L	15	12	80%	2022-11-29 to 2025-04-20		Nonparametric	0.00106	0.00100	0.000890	0.00130	0.000212	0.200	1.22
20_3_5_129	MW-10	Part 115	Zinc	mg/L	15	7	47%	2022-11-29 to 2025-04-20	Gamma; Lognormal	Gamma	0.00614	0.00215	0.00120	0.0140	0.00626	1.02	0.637
21_2_3_105	MW-11	Appendix III	Boron	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	5.85	4.80	1.50	13.0	3.45	0.591	0.839
21_2_3_107	MW-11	Appendix III	Calcium	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	260	270	130	380	70.5	0.271	-0.234
21_2_3_108	MW-11	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	66.6	71.0	38.0	95.0	16.7	0.251	-0.185
21_2_3_112	MW-11	Appendix III	Fluoride	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.623	0.610	0.210	1.40	0.354	0.569	0.841
21_2_3_120	MW-11	Appendix III	pH (field)	su	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	7.30	7.32	7.09	7.47	0.104	0.0143	-0.541
21_2_3_124	MW-11	Appendix III	Sulfate (as SO4)	mg/L	15	6	40%	2022-11-29 to 2025-04-20	Gamma; Lognormal	Gamma	63.9	17.0	1.80	210	79	1.24	1.28
21_2_3_126	MW-11	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	1052	1000	680	1800	253	0.240	1.83
21_2_4_101	MW-11	Appendix IV	Antimony	mg/L	15	11	73%	2022-11-29 to 2025-04-20		Nonparametric	0.000333	0.000280	0.0000820	0.000690	0.000256	0.768	1.17
21_2_4_102	MW-11	Appendix IV	Arsenic	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.00163	0.00150	0.000610	0.00410	0.000803	0.492	2.17
21_2_4_103	MW-11	Appendix IV	Barium	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.645	0.570	0.360	1.20	0.210	0.326	1.31
21_2_4_104	MW-11	Appendix IV	Beryllium	mg/L	15	12	80%	2022-11-29 to 2025-04-20		Nonparametric	0.000206	0.0000910	0.0000880	0.000440	0.000202	0.981	1.73
21_2_4_106	MW-11	Appendix IV	Cadmium	mg/L	15	13	87%	2022-11-29 to 2025-04-20		Nonparametric	0.000445	0.000445	0.000160	0.000730	0.000403	0.906	NA
21_2_4_109	MW-11	Appendix IV	Chromium, Total	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	0.00140	0.000870	0.000450	0.00860	0.00202	1.44	3.71
21_2_4_110	MW-11	Appendix IV	Cobalt	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Lognormal	Lognormal	0.000605	0.000400	0.000230	0.00240	0.000558	0.923	2.73
21_2_4_113	MW-11	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.623	0.610	0.210	1.40	0.354	0.569	0.841
21_2_4_115	MW-11	Appendix IV	Lead	mg/L	15	3	20%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	0.00663	0.000425	0.000170	0.0680	0.0194	2.92	3.44
21_2_4_116	MW-11	Appendix IV	Lithium	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.0666	0.0520	0.00590	0.220	0.0572	0.858	1.59
21_2_4_117	MW-11	Appendix IV	Mercury	mg/L	15	13	87%	2022-11-29 to 2025-04-20		Nonparametric	0.441	0.441	0.00110	0.880	0.621	1.41	NA
21_2_4_118	MW-11	Appendix IV	Molybdenum	mg/L	15	2	13%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.00132	0.00100	0.000430	0.00300	0.000818	0.618	1.24
21_2_4_121	MW-11	Appendix IV	Radium 226 and 228	pCi/L	14	4	29%	2022-11-29 to 2025-02-25	Gamma; Lognormal; Normal	Normal	1.05	0.961	0.460	1.76	0.433	0.412	0.479
21_2_4_122	MW-11	Appendix IV	Selenium	mg/L	15	3	20%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	0.000251	0.000190	0.000140	0.000710	0.000164	0.655	2.35
21_2_4_125	MW-11	Appendix IV	Thallium	mg/L	15	14	93%	2022-11-29 to 2025-04-20		Nonparametric	0.000210	0.000210	0.000210	0.000210	NA	NA	NA
21_2_5_111	MW-11	Part 115	Copper	mg/L	15	4	27%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	0.00231	0.000430	0.000200	0.0190	0.00557	2.41	3.24
21_2_5_114	MW-11	Part 115	Iron	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Normal	7.03	7.10	3.60	11.0	2.32	0.329	0.0170
21_2_5_119	MW-11	Part 115	Nickel	mg/L	15	0	0%	2022-11-29 to 2025-04-20	Nonparametric	Nonparametric	0.00190	0.00130	0.000650	0.00940	0.00214	1.12	3.52
21_2_5_123	MW-11	Part 115	Silver	mg/L	15	13	87%	2022-11-29 to 2025-04-20		Nonparametric	0.000155	0.000155	0.000140	0.000170	0.0000212	0.137	NA
21_2_5_128	MW-11	Part 115	Vanadium	mg/L	15	13	87%	2022-11-29 to 2025-04-20		Nonparametric	0.00181	0.00181	0.000620	0.00300	0.00168	0.930	NA
21_2_5_129	MW-11	Part 115	Zinc	mg/L	15	4	27%	2022-11-29 to 2025-04-20	Gamma; Lognormal; Normal	Gamma	0.0239	0.00850	0.00180	0.100	0.0295	1.23	1.91
22_2_3_105	MW-12	Appendix III	Boron	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.302	0.270	0.190	0.420	0.0822	0.272	0.157
22_2_3_107	MW-12	Appendix III	Calcium	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	65.5	64.0	40.0	95.0	18.6	0.284	0.0280
22_2_3_108	MW-12	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	19.2	18.0	12.0	27.0	4.78	0.249	0.589
22_2_3_112	MW-12	Appendix III	Fluoride	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal	Gamma	0.325	0.280	0.200	0.540	0.109	0.336	0.788
22_2_3_120	MW-12	Appendix III	pH (field)	su	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	7.68	7.67	7.00	8.32	0.330	0.0430	0.0491

(Table continues on next page)

Table 2: Summary Statistics, Non-Detects Excluded (*continued*)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
22_2_3_124	MW-12	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	108	110	52.0	180	39.4	0.366	0.460
22_2_3_126	MW-12	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	274	270	100	420	87.2	0.318	-0.176
22_2_4_101	MW-12	Appendix IV	Antimony	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.000714	0.000680	0.000350	0.00150	0.000313	0.439	1.11
22_2_4_102	MW-12	Appendix IV	Arsenic	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal	Gamma	0.00228	0.00190	0.00140	0.00340	0.000713	0.313	0.293
22_2_4_103	MW-12	Appendix IV	Barium	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.0409	0.0320	0.0170	0.100	0.0228	0.559	1.40
22_2_4_106	MW-12	Appendix IV	Cadmium	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.00147	0.00120	0.000540	0.00320	0.000828	0.564	0.893
22_2_4_109	MW-12	Appendix IV	Chromium, Total	mg/L	15	5	33%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.000604	0.000510	0.000250	0.000990	0.000272	0.450	0.452
22_2_4_110	MW-12	Appendix IV	Cobalt	mg/L	15	5	33%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.000375	0.000320	0.000110	0.000930	0.000259	0.692	1.05
22_2_4_113	MW-12	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal	Gamma	0.325	0.280	0.200	0.540	0.109	0.336	0.788
22_2_4_115	MW-12	Appendix IV	Lead	mg/L	15	6	40%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.000290	0.000210	0.000140	0.000510	0.000147	0.508	0.419
22_2_4_116	MW-12	Appendix IV	Lithium	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.00359	0.00370	0.00190	0.00640	0.00146	0.408	0.493
22_2_4_117	MW-12	Appendix IV	Mercury	mg/L	15	12	80%	2022-11-28 to 2025-04-21		Nonparametric	0.277	0.000230	0.000160	0.830	0.479	1.73	1.73
22_2_4_118	MW-12	Appendix IV	Molybdenum	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal	Gamma	0.00774	0.00690	0.00460	0.0180	0.00322	0.415	2.51
22_2_4_121	MW-12	Appendix IV	Radium 226 and 228	pCi/L	15	10	67%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Nonparametric	0.706	0.623	0.487	1.09	0.248	0.352	1.09
22_2_4_122	MW-12	Appendix IV	Selenium	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Gamma	0.00125	0.000930	0.000130	0.00430	0.00112	0.896	1.50
22_2_5_111	MW-12	Part 115	Copper	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.00139	0.00120	0.000550	0.00340	0.000707	0.509	1.78
22_2_5_114	MW-12	Part 115	Iron	mg/L	15	6	40%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.0553	0.0470	0.0210	0.150	0.0389	0.703	2.10
22_2_5_119	MW-12	Part 115	Nickel	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.00251	0.00250	0.00140	0.00350	0.000722	0.288	-0.165
22_2_5_128	MW-12	Part 115	Vanadium	mg/L	15	6	40%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.00118	0.00100	0.000740	0.00210	0.000436	0.370	1.34
22_2_5_129	MW-12	Part 115	Zinc	mg/L	15	0	0%	2022-11-28 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.00813	0.00800	0.00270	0.0170	0.00333	0.410	1.01
28_1_3_105	MW-18	Appendix III	Boron	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	2.95	2.70	1.80	4.40	0.878	0.298	0.250
28_1_3_107	MW-18	Appendix III	Calcium	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	339	340	240	450	61.6	0.181	-0.0687
28_1_3_108	MW-18	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	23.0	24.0	16.0	32.0	4.61	0.201	0.111
28_1_3_112	MW-18	Appendix III	Fluoride	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	3.85	3.80	2.70	5.10	0.677	0.176	0.341
28_1_3_120	MW-18	Appendix III	pH (field)	su	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	7.18	7.18	7.02	7.31	0.0783	0.0109	-0.404
28_1_3_124	MW-18	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	825	770	480	1200	207	0.251	0.688
28_1_3_126	MW-18	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	1400	1400	1100	1800	200	0.143	0.556
28_1_4_101	MW-18	Appendix IV	Antimony	mg/L	15	3	20%	2022-11-30 to 2025-04-21	Gamma; Lognormal	Gamma	0.000172	0.000135	0.000110	0.000320	0.0000728	0.422	1.30
28_1_4_102	MW-18	Appendix IV	Arsenic	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.0273	0.0280	0.0150	0.0440	0.00774	0.283	0.718
28_1_4_103	MW-18	Appendix IV	Barium	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.0189	0.0180	0.0120	0.0280	0.00512	0.270	0.170
28_1_4_104	MW-18	Appendix IV	Beryllium	mg/L	15	13	87%	2022-11-30 to 2025-04-21		Nonparametric	0.0000560	0.0000560	0.0000530	0.0000590	0.00000424	0.0758	NA
28_1_4_106	MW-18	Appendix IV	Cadmium	mg/L	15	6	40%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.000213	0.000180	0.0000890	0.000440	0.000116	0.544	0.868
28_1_4_109	MW-18	Appendix IV	Chromium, Total	mg/L	15	13	87%	2022-11-30 to 2025-04-21		Nonparametric	0.000440	0.000440	0.000250	0.000630	0.000269	0.611	NA
28_1_4_110	MW-18	Appendix IV	Cobalt	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Lognormal	Lognormal	0.00280	0.00230	0.00140	0.00600	0.00145	0.519	1.34
28_1_4_113	MW-18	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	3.85	3.80	2.70	5.10	0.677	0.176	0.341
28_1_4_115	MW-18	Appendix IV	Lead	mg/L	15	10	67%	2022-11-30 to 2025-04-21	Nonparametric	Nonparametric	0.000182	0.000150	0.000140	0.000320	0.0000776	0.426	2.17
28_1_4_116	MW-18	Appendix IV	Lithium	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.0343	0.0320	0.0200	0.0450	0.00795	0.232	-0.140
28_1_4_118	MW-18	Appendix IV	Molybdenum	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.0149	0.0140	0.00900	0.0210	0.00390	0.261	0.408
28_1_4_121	MW-18	Appendix IV	Radium 226 and 228	pCi/L	15	9	60%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Nonparametric	0.725	0.659	0.462	1.27	0.284	0.392	1.82
28_1_4_122	MW-18	Appendix IV	Selenium	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.000611	0.000410	0.000140	0.00200	0.000527	0.862	1.42
28_1_5_111	MW-18	Part 115	Copper	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Nonparametric	Nonparametric	0.000649	0.000470	0.000330	0.00170	0.000409	0.631	2.02
28_1_5_114	MW-18	Part 115	Iron	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	6.65	6.80	4.30	10.0	1.52	0.228	0.590
28_1_5_119	MW-18	Part 115	Nickel	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Lognormal	Lognormal	0.00646	0.00560	0.00370	0.0110	0.00231	0.357	1.15

(Table continues on next page)

Table 2: Summary Statistics, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
28_1_5_129	MW-18	Part 115	Zinc	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.0490	0.0450	0.0170	0.0880	0.0188	0.383	0.422
29_1_3_105	MW-19	Appendix III	Boron	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	2.02	2.00	1.50	2.60	0.393	0.195	0.178
29_1_3_107	MW-19	Appendix III	Calcium	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	465	470	360	550	54.6	0.118	-0.593
29_1_3_108	MW-19	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	42.8	40.0	21.0	75.0	15.5	0.362	0.721
29_1_3_112	MW-19	Appendix III	Fluoride	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	1.85	1.90	1.40	2.30	0.280	0.152	0.0295
29_1_3_120	MW-19	Appendix III	pH (field)	su	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	6.83	6.85	6.39	7.07	0.162	0.0236	-1.33
29_1_3_124	MW-19	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	998	1000	600	1300	192	0.193	-0.159
29_1_3_126	MW-19	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	1860	1800	1600	2200	238	0.128	0.331
29_1_4_101	MW-19	Appendix IV	Antimony	mg/L	15	12	80%	2022-11-30 to 2025-04-21		Nonparametric	0.000457	0.000460	0.000190	0.000720	0.000265	0.580	-0.0566
29_1_4_102	MW-19	Appendix IV	Arsenic	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.00513	0.00550	0.00260	0.00730	0.00158	0.308	-0.153
29_1_4_103	MW-19	Appendix IV	Barium	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.0390	0.0370	0.0300	0.0500	0.00559	0.143	0.540
29_1_4_104	MW-19	Appendix IV	Beryllium	mg/L	15	3	20%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.0000788	0.0000745	0.0000570	0.000120	0.0000200	0.254	0.988
29_1_4_109	MW-19	Appendix IV	Chromium, Total	mg/L	15	5	33%	2022-11-30 to 2025-04-21	Gamma; Lognormal	Gamma	0.000303	0.000270	0.000200	0.000530	0.0000907	0.299	1.98
29_1_4_110	MW-19	Appendix IV	Cobalt	mg/L	15	1	7%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.000578	0.000480	0.000130	0.00120	0.000310	0.537	0.468
29_1_4_113	MW-19	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	1.85	1.90	1.40	2.30	0.280	0.152	0.0295
29_1_4_116	MW-19	Appendix IV	Lithium	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.0901	0.0900	0.0730	0.110	0.0117	0.130	0.168
29_1_4_118	MW-19	Appendix IV	Molybdenum	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.0111	0.0110	0.00390	0.0190	0.00417	0.375	0.427
29_1_4_121	MW-19	Appendix IV	Radium 226 and 228	pCi/L	15	7	47%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.851	0.918	0.514	1.17	0.254	0.298	-0.302
29_1_4_122	MW-19	Appendix IV	Selenium	mg/L	15	10	67%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Nonparametric	0.000144	0.000130	0.000120	0.000200	0.0000336	0.233	1.60
29_1_5_111	MW-19	Part 115	Copper	mg/L	15	13	87%	2022-11-30 to 2025-04-21		Nonparametric	0.000285	0.000285	0.000220	0.000350	0.0000919	0.323	NA
29_1_5_114	MW-19	Part 115	Iron	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	16.8	16.0	12.0	24.0	3.45	0.205	0.605
29_1_5_119	MW-19	Part 115	Nickel	mg/L	15	1	7%	2022-11-30 to 2025-04-21	Nonparametric	Nonparametric	0.00319	0.00240	0.00110	0.0170	0.00405	1.27	3.49
29_1_5_128	MW-19	Part 115	Vanadium	mg/L	15	14	93%	2022-11-30 to 2025-04-21		Nonparametric	0.000670	0.000670	0.000670	0.000670	NA	NA	NA
29_1_5_129	MW-19	Part 115	Zinc	mg/L	15	10	67%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Nonparametric	0.00344	0.00420	0.00190	0.00460	0.00124	0.361	-0.586
30_1_3_105	MW-20	Appendix III	Boron	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Lognormal; Normal	Normal	0.947	0.870	0.720	1.30	0.171	0.180	0.553
30_1_3_107	MW-20	Appendix III	Calcium	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Nonparametric	Nonparametric	123	120	58.0	170	23.5	0.192	-0.984
30_1_3_108	MW-20	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Normal	Normal	62.1	66.0	29.0	92.0	19	0.306	-0.455
30_1_3_112	MW-20	Appendix III	Fluoride	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Nonparametric	Nonparametric	0.257	0.240	0.120	0.550	0.0910	0.355	2.45
30_1_3_120	MW-20	Appendix III	pH (field)	su	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	7.36	7.34	7.14	7.50	0.108	0.0146	-0.592
30_1_3_124	MW-20	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	57.7	52.0	18.0	120	32.5	0.564	0.535
30_1_3_126	MW-20	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	655	650	510	840	89.2	0.136	0.364
30_1_4_101	MW-20	Appendix IV	Antimony	mg/L	15	5	33%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.000103	0.000105	0.0000540	0.000160	0.0000346	0.336	0.0500
30_1_4_102	MW-20	Appendix IV	Arsenic	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.00141	0.00130	0.00100	0.00190	0.000284	0.202	0.311
30_1_4_103	MW-20	Appendix IV	Barium	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Lognormal	Lognormal	0.511	0.460	0.310	0.940	0.166	0.325	1.74
30_1_4_104	MW-20	Appendix IV	Beryllium	mg/L	15	14	93%	2022-11-30 to 2025-04-21		Nonparametric	0.0000590	0.0000590	0.0000590	0.0000590	NA	NA	NA
30_1_4_109	MW-20	Appendix IV	Chromium, Total	mg/L	15	7	47%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.000231	0.000220	0.000190	0.000290	0.0000327	0.141	0.767
30_1_4_110	MW-20	Appendix IV	Cobalt	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.00117	0.00110	0.000690	0.00160	0.000276	0.236	-0.0220
30_1_4_113	MW-20	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Nonparametric	Nonparametric	0.257	0.240	0.120	0.550	0.0910	0.355	2.45
30_1_4_115	MW-20	Appendix IV	Lead	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.00190	0.00180	0.00120	0.00280	0.000503	0.265	0.568
30_1_4_116	MW-20	Appendix IV	Lithium	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.0581	0.0600	0.0290	0.0830	0.0162	0.278	-0.394
30_1_4_117	MW-20	Appendix IV	Mercury	mg/L	15	14	93%	2022-11-30 to 2025-04-21		Nonparametric	5.10	5.10	5.10	5.10	NA	NA	NA
30_1_4_118	MW-20	Appendix IV	Molybdenum	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.00440	0.00450	0.00330	0.00580	0.000713	0.162	0.194
30_1_4_121	MW-20	Appendix IV	Radium 226 and 228	pCi/L	14	7	50%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Nonparametric	0.813	0.628	0.534	1.47	0.347	0.427	1.38

(Table continues on next page)

Table 2: Summary Statistics, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
30_1_4_122	MW-20	Appendix IV	Selenium	mg/L	15	9	60%	2022-11-30 to 2025-04-21	Nonparametric	Nonparametric	0.000140	0.000120	0.000100	0.000260	0.0000600	0.429	2.23
30_1_4_125	MW-20	Appendix IV	Thallium	mg/L	15	14	93%	2022-11-30 to 2025-04-21		Nonparametric	0.000110	0.000110	0.000110	0.000110	NA	NA	NA
30_1_5_111	MW-20	Part 115	Copper	mg/L	15	2	13%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.000366	0.000340	0.000200	0.000820	0.000174	0.474	1.67
30_1_5_114	MW-20	Part 115	Iron	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	18.4	18.0	14.0	22.0	2.59	0.141	-0.311
30_1_5_119	MW-20	Part 115	Nickel	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Gamma; Lognormal; Normal	Normal	0.00798	0.00800	0.00450	0.00990	0.00164	0.205	-0.644
30_1_5_129	MW-20	Part 115	Zinc	mg/L	15	0	0%	2022-11-30 to 2025-04-21	Lognormal	Lognormal	0.0309	0.0250	0.0130	0.0710	0.0173	0.561	1.42
40_1_3_105	MW-30	Appendix III	Boron	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Nonparametric	Nonparametric	1.96	1.90	1.40	3.50	0.472	0.241	2.67
40_1_3_107	MW-30	Appendix III	Calcium	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Nonparametric	Nonparametric	516	460	390	960	155	0.300	2.10
40_1_3_108	MW-30	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Nonparametric	Nonparametric	290	140	82.0	1200	360	1.24	2.18
40_1_3_112	MW-30	Appendix III	Fluoride	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Nonparametric	Nonparametric	1.09	1.10	0.570	1.40	0.182	0.168	-1.45
40_1_3_120	MW-30	Appendix III	pH (field)	su	15	0	0%	2022-11-30 to 2025-04-20	Nonparametric	Nonparametric	7.05	7.07	6.48	7.25	0.193	0.0274	-2.03
40_1_3_124	MW-30	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Normal	Normal	864	940	440	1000	158	0.183	-1.71
40_1_3_126	MW-30	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Nonparametric	Nonparametric	2460	2200	1800	4000	661	0.269	1.94
40_1_4_101	MW-30	Appendix IV	Antimony	mg/L	15	13	87%	2022-11-30 to 2025-04-20		Nonparametric	0.000525	0.000525	0.000400	0.000650	0.000177	0.337	NA
40_1_4_102	MW-30	Appendix IV	Arsenic	mg/L	15	2	13%	2022-11-30 to 2025-04-20	Gamma; Lognormal	Gamma	0.000800	0.000460	0.000120	0.00300	0.000844	1.06	2.05
40_1_4_103	MW-30	Appendix IV	Barium	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.0679	0.0660	0.0410	0.100	0.0209	0.308	0.448
40_1_4_104	MW-30	Appendix IV	Beryllium	mg/L	15	13	87%	2022-11-30 to 2025-04-20		Nonparametric	0.0000815	0.0000815	0.0000530	0.000110	0.0000403	0.495	NA
40_1_4_109	MW-30	Appendix IV	Chromium, Total	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.00885	0.00870	0.00310	0.0140	0.00333	0.376	-0.0920
40_1_4_110	MW-30	Appendix IV	Cobalt	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Nonparametric	Nonparametric	0.00437	0.00110	0.000470	0.0460	0.0116	2.64	3.82
40_1_4_113	MW-30	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Nonparametric	Nonparametric	1.09	1.10	0.570	1.40	0.182	0.168	-1.45
40_1_4_115	MW-30	Appendix IV	Lead	mg/L	15	14	93%	2022-11-30 to 2025-04-20		Nonparametric	0.00170	0.00170	0.00170	0.00170	NA	NA	NA
40_1_4_116	MW-30	Appendix IV	Lithium	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Lognormal	Lognormal	0.139	0.120	0.100	0.270	0.0431	0.311	2.33
40_1_4_117	MW-30	Appendix IV	Mercury	mg/L	15	14	93%	2022-11-30 to 2025-04-20		Nonparametric	0.000390	0.000390	0.000390	0.000390	NA	NA	NA
40_1_4_118	MW-30	Appendix IV	Molybdenum	mg/L	15	3	20%	2022-11-30 to 2025-04-20	Lognormal	Nonparametric	0.00286	0.000995	0.000320	0.0190	0.00521	1.82	3.19
40_1_4_121	MW-30	Appendix IV	Radium 226 and 228	pCi/L	15	8	53%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Nonparametric	0.640	0.586	0.445	0.911	0.181	0.282	0.894
40_1_4_122	MW-30	Appendix IV	Selenium	mg/L	15	7	47%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.000175	0.000135	0.000100	0.000390	0.0000975	0.557	1.89
40_1_5_111	MW-30	Part 115	Copper	mg/L	15	10	67%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Nonparametric	0.000326	0.000280	0.000200	0.000540	0.000135	0.415	1.21
40_1_5_114	MW-30	Part 115	Iron	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Gamma; Lognormal	Gamma	4.16	2.90	0.870	17.0	4.11	0.989	2.49
40_1_5_119	MW-30	Part 115	Nickel	mg/L	15	3	20%	2022-11-30 to 2025-04-20	Lognormal	Nonparametric	0.0113	0.00185	0.000700	0.110	0.0311	2.75	3.45
40_1_5_129	MW-30	Part 115	Zinc	mg/L	15	10	67%	2022-11-30 to 2025-04-20	Nonparametric	Nonparametric	0.0232	0.00490	0.00270	0.100	0.0429	1.85	2.23
41_1_3_105	MW-31	Appendix III	Boron	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	4.61	4.50	3.60	5.80	0.616	0.134	0.306
41_1_3_107	MW-31	Appendix III	Calcium	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	171	170	130	200	20.9	0.122	-0.102
41_1_3_108	MW-31	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	103	100	87.0	120	8.77	0.0855	0.168
41_1_3_112	MW-31	Appendix III	Fluoride	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	4.70	4.70	4.10	5.20	0.283	0.0602	0.0656
41_1_3_120	MW-31	Appendix III	pH (field)	su	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	7.83	7.82	7.67	8.02	0.110	0.0140	0.591
41_1_3_124	MW-31	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	159	160	45.0	250	70	0.441	-0.0430
41_1_3_126	MW-31	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	812	810	730	960	70.9	0.0874	0.876
41_1_4_101	MW-31	Appendix IV	Antimony	mg/L	15	7	47%	2022-12-01 to 2025-04-20	Gamma; Lognormal	Gamma	0.000247	0.000125	0.0000690	0.000690	0.000220	0.891	1.35
41_1_4_102	MW-31	Appendix IV	Arsenic	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.00123	0.00120	0.000730	0.00180	0.000279	0.226	0.425
41_1_4_103	MW-31	Appendix IV	Barium	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.168	0.160	0.0990	0.290	0.0498	0.297	1.03
41_1_4_104	MW-31	Appendix IV	Beryllium	mg/L	15	13	87%	2022-12-01 to 2025-04-20		Nonparametric	0.0000750	0.0000750	0.0000540	0.0000960	0.0000297	0.396	NA
41_1_4_106	MW-31	Appendix IV	Cadmium	mg/L	15	14	93%	2022-12-01 to 2025-04-20		Nonparametric	0.0000840	0.0000840	0.0000840	0.0000840	NA	NA	NA
41_1_4_109	MW-31	Appendix IV	Chromium, Total	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.00241	0.00230	0.00170	0.00410	0.000630	0.262	1.48

(Table continues on next page)

Table 2: Summary Statistics, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
41_1_4_110	MW-31	Appendix IV	Cobalt	mg/L	15	3	20%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.000190	0.000180	0.000100	0.000360	0.0000698	0.367	1.46
41_1_4_113	MW-31	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	4.70	4.70	4.10	5.20	0.283	0.0602	0.0656
41_1_4_115	MW-31	Appendix IV	Lead	mg/L	15	13	87%	2022-12-01 to 2025-04-20		Nonparametric	0.000280	0.000280	0.000250	0.000310	0.0000424	0.152	NA
41_1_4_116	MW-31	Appendix IV	Lithium	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.0487	0.0520	0.0300	0.0630	0.00821	0.169	-0.697
41_1_4_117	MW-31	Appendix IV	Mercury	mg/L	15	14	93%	2022-12-01 to 2025-04-20		Nonparametric	0.710	0.710	0.710	0.710	NA	NA	NA
41_1_4_118	MW-31	Appendix IV	Molybdenum	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Gamma; Normal	Normal	0.00118	0.00110	0.000400	0.00210	0.000429	0.362	0.232
41_1_4_121	MW-31	Appendix IV	Radium 226 and 228	pCi/L	15	6	40%	2022-12-01 to 2025-04-20	Gamma; Lognormal	Gamma	0.751	0.673	0.502	1.23	0.259	0.345	1.28
41_1_4_122	MW-31	Appendix IV	Selenium	mg/L	15	6	40%	2022-12-01 to 2025-04-20	Nonparametric	Nonparametric	0.000197	0.000130	0.000100	0.000740	0.000205	1.04	2.95
41_1_4_125	MW-31	Appendix IV	Thallium	mg/L	15	14	93%	2022-12-01 to 2025-04-20		Nonparametric	0.0000880	0.0000880	0.0000880	0.0000880	NA	NA	NA
41_1_5_111	MW-31	Part 115	Copper	mg/L	15	10	67%	2022-12-01 to 2025-04-20	Gamma; Lognormal; Normal	Nonparametric	0.000308	0.000290	0.000230	0.000440	0.0000795	0.258	1.46
41_1_5_114	MW-31	Part 115	Iron	mg/L	15	0	0%	2022-12-01 to 2025-04-20	Nonparametric	Nonparametric	0.719	0.230	0.120	2.50	0.710	0.988	1.22
41_1_5_119	MW-31	Part 115	Nickel	mg/L	15	10	67%	2022-12-01 to 2025-04-20	Nonparametric	Nonparametric	0.00630	0.00230	0.00140	0.0230	0.00935	1.48	2.22
41_1_5_128	MW-31	Part 115	Vanadium	mg/L	15	12	80%	2022-12-01 to 2025-04-20		Nonparametric	0.000743	0.000760	0.000640	0.000830	0.0000961	0.129	-0.757
41_1_5_129	MW-31	Part 115	Zinc	mg/L	15	9	60%	2022-12-01 to 2025-04-20	Gamma; Normal	Nonparametric	0.00737	0.00910	0.00140	0.0130	0.00480	0.651	-0.511
42_1_3_105	MW-32	Appendix III	Boron	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Nonparametric	Nonparametric	3.50	3.10	2.60	5.60	0.853	0.244	1.45
42_1_3_107	MW-32	Appendix III	Calcium	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Normal	173	180	130	220	24.9	0.144	0.0329
42_1_3_108	MW-32	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Normal	45.4	46.0	38.0	50.0	4.24	0.0934	-0.367
42_1_3_112	MW-32	Appendix III	Fluoride	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Normal	1.52	1.50	1.20	1.90	0.170	0.112	0.650
42_1_3_120	MW-32	Appendix III	pH (field)	su	15	0	0%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Normal	7.61	7.63	7.50	7.75	0.0734	0.00965	0.0449
42_1_3_124	MW-32	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Gamma	80.8	83.0	5.90	190	60.6	0.750	0.329
42_1_3_126	MW-32	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Normal	687	690	550	800	87.6	0.128	-0.208
42_1_4_101	MW-32	Appendix IV	Antimony	mg/L	15	11	73%	2022-11-30 to 2025-04-20		Nonparametric	0.000245	0.000106	0.0000670	0.000700	0.000305	1.25	1.93
42_1_4_102	MW-32	Appendix IV	Arsenic	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Nonparametric	Nonparametric	0.000648	0.000550	0.000390	0.00240	0.000491	0.758	3.70
42_1_4_103	MW-32	Appendix IV	Barium	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.589	0.570	0.0590	1.30	0.308	0.524	0.667
42_1_4_104	MW-32	Appendix IV	Beryllium	mg/L	15	14	93%	2022-11-30 to 2025-04-20		Nonparametric	0.0000700	0.0000700	0.0000700	0.0000700	NA	NA	NA
42_1_4_106	MW-32	Appendix IV	Cadmium	mg/L	15	14	93%	2022-11-30 to 2025-04-20		Nonparametric	0.000190	0.000190	0.000190	0.000190	NA	NA	NA
42_1_4_109	MW-32	Appendix IV	Chromium, Total	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Nonparametric	Nonparametric	0.000591	0.000380	0.000310	0.00300	0.000675	1.14	3.71
42_1_4_110	MW-32	Appendix IV	Cobalt	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Lognormal	Lognormal	0.000501	0.000380	0.000210	0.00190	0.000408	0.816	3.24
42_1_4_113	MW-32	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Normal	1.52	1.50	1.20	1.90	0.170	0.112	0.650
42_1_4_115	MW-32	Appendix IV	Lead	mg/L	15	11	73%	2022-11-30 to 2025-04-20		Nonparametric	0.000265	0.000260	0.000120	0.000420	0.000157	0.592	0.0419
42_1_4_116	MW-32	Appendix IV	Lithium	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.128	0.120	0.0940	0.200	0.0328	0.257	1.13
42_1_4_117	MW-32	Appendix IV	Mercury	mg/L	15	14	93%	2022-11-30 to 2025-04-20		Nonparametric	0.00190	0.00190	0.00190	0.00190	NA	NA	NA
42_1_4_118	MW-32	Appendix IV	Molybdenum	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Normal	0.00415	0.00430	0.00250	0.00730	0.00117	0.282	1.17
42_1_4_121	MW-32	Appendix IV	Radium 226 and 228	pCi/L	15	9	60%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Nonparametric	0.746	0.731	0.550	0.985	0.179	0.240	0.217
42_1_4_122	MW-32	Appendix IV	Selenium	mg/L	15	12	80%	2022-11-30 to 2025-04-20		Nonparametric	0.000423	0.000140	0.000130	0.00100	0.000499	1.18	1.73
42_1_5_111	MW-32	Part 115	Copper	mg/L	15	9	60%	2022-11-30 to 2025-04-20	Nonparametric	Nonparametric	0.00292	0.000330	0.000200	0.0160	0.00641	2.20	2.45
42_1_5_114	MW-32	Part 115	Iron	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Gamma; Lognormal; Normal	Normal	15.6	16.0	11.0	20.0	2.90	0.186	-0.311
42_1_5_119	MW-32	Part 115	Nickel	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Nonparametric	Nonparametric	0.00255	0.00100	0.000680	0.0230	0.00567	2.22	3.85
42_1_5_129	MW-32	Part 115	Zinc	mg/L	15	0	0%	2022-11-30 to 2025-04-20	Nonparametric	Nonparametric	0.0148	0.00350	0.00220	0.0680	0.0219	1.48	1.75

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Normal				Lognormal				Gamma				Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
								Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value			
11_2_3_105	MW-01R	Appendix III	Boron	mg/L	15	0	0%	0.963	0.746	0.115	0.855	0.919	0.184	0.172	0.271	0.148	>= 0.10	0.332	>= 0.10	0.397	Gamma; Lognormal; Normal	Normal
11_2_3_107	MW-01R	Appendix III	Calcium	mg/L	15	0	0%	0.957	0.641	0.113	0.875	0.975	0.929	0.128	0.732	0.132	>= 0.10	0.200	>= 0.10	0.324	Gamma; Lognormal; Normal	Normal
11_2_3_108	MW-01R	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.939	0.374	0.184	0.190	0.861	0.025	0.225	0.039	0.214	0.05 <= p < 0.10	0.739	0.01 <= p < 0.05	0.452	Gamma; Normal	Normal
11_2_3_112	MW-01R	Appendix III	Fluoride	mg/L	15	0	0%	0.896	0.083	0.283	0.002	0.860	0.024	0.281	0.002	0.291	< 0.01	0.834	0.01 <= p < 0.05	0.352	Normal	Normal
11_2_3_120	MW-01R	Appendix III	pH (field)	su	15	0	0%	0.431	0.000	0.363	0.000	0.414	0.000	0.373	0.000	0.373	< 0.01	3.697	< 0.01	0.065	Nonparametric	Nonparametric
11_2_3_124	MW-01R	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	0.951	0.534	0.131	0.701	0.809	0.005	0.223	0.043	0.161	>= 0.10	0.502	>= 0.10	1.222	Gamma; Normal	Gamma
11_2_3_126	MW-01R	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	0.940	0.386	0.201	0.106	0.939	0.370	0.206	0.088	0.209	0.05 <= p < 0.10	0.576	>= 0.10	0.053	Gamma; Lognormal; Normal	Normal
11_2_4_101	MW-01R	Appendix IV	Antimony	mg/L	15	3	20%	0.628	0.000	0.347	0.000	0.787	0.007	0.248	0.040	0.280	0.01 <= p < 0.05	1.381	< 0.01	0.605	Nonparametric	Nonparametric
11_2_4_102	MW-01R	Appendix IV	Arsenic	mg/L	15	0	0%	0.684	0.000	0.264	0.006	0.861	0.025	0.269	0.005	0.248	0.01 <= p < 0.05	1.126	< 0.01	0.399	Nonparametric	Nonparametric
11_2_4_103	MW-01R	Appendix IV	Barium	mg/L	15	0	0%	0.919	0.189	0.169	0.299	0.957	0.649	0.124	0.777	0.144	>= 0.10	0.293	>= 0.10	0.316	Gamma; Lognormal; Normal	Normal
11_2_4_104	MW-01R	Appendix IV	Beryllium	mg/L	15	2	13%	0.889	0.094	0.214	0.105	0.926	0.297	0.144	0.654	0.167	>= 0.10	0.422	>= 0.10	0.384	Gamma; Lognormal; Normal	Normal
11_2_4_106	MW-01R	Appendix IV	Cadmium	mg/L	15	12	80%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.866		Nonparametric
11_2_4_109	MW-01R	Appendix IV	Chromium, Total	mg/L	15	0	0%	0.429	0.000	0.373	0.000	0.750	0.001	0.228	0.034	0.288	< 0.01	2.067	< 0.01	0.719	Nonparametric	Nonparametric
11_2_4_110	MW-01R	Appendix IV	Cobalt	mg/L	15	0	0%	0.701	0.000	0.304	0.001	0.862	0.026	0.253	0.010	0.283	< 0.01	1.299	< 0.01	0.555	Nonparametric	Nonparametric
11_2_4_113	MW-01R	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.896	0.083	0.283	0.002	0.860	0.024	0.281	0.002	0.291	< 0.01	0.834	0.01 <= p < 0.05	0.352	Normal	Normal
11_2_4_115	MW-01R	Appendix IV	Lead	mg/L	15	2	13%	0.573	0.000	0.319	0.001	0.896	0.118	0.184	0.270	0.246	0.01 <= p < 0.05	0.972	0.01 <= p < 0.05	0.715	Lognormal	Lognormal
11_2_4_116	MW-01R	Appendix IV	Lithium	mg/L	15	0	0%	0.958	0.657	0.116	0.850	0.896	0.082	0.145	0.536	0.144	>= 0.10	0.387	>= 0.10	0.402	Gamma; Lognormal; Normal	Normal
11_2_4_117	MW-01R	Appendix IV	Mercury	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
11_2_4_118	MW-01R	Appendix IV	Molybdenum	mg/L	15	2	13%	0.600	0.000	0.302	0.002	0.903	0.147	0.211	0.117	0.264	0.01 <= p < 0.05	0.908	0.01 <= p < 0.05	0.784	Lognormal	Lognormal
11_2_4_121	MW-01R	Appendix IV	Radium 226 and 228	pCi/L	15	9	60%	0.897	0.358	0.248	0.296	0.874	0.243	0.284	0.137	0.283	>= 0.10	0.437	>= 0.10	0.302	Gamma; Lognormal; Normal	Nonparametric
11_2_4_122	MW-01R	Appendix IV	Selenium	mg/L	15	0	0%	0.734	0.001	0.274	0.003	0.919	0.188	0.185	0.180	0.209	0.05 <= p < 0.10	0.735	0.05 <= p < 0.10	0.391	Gamma; Lognormal	Gamma
11_2_4_125	MW-01R	Appendix IV	Thallium	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
11_2_5_111	MW-01R	Part 115	Copper	mg/L	15	6	40%	0.691	0.001	0.344	0.003	0.763	0.008	0.284	0.035	0.295	0.01 <= p < 0.05	1.165	< 0.01	0.586	Nonparametric	Nonparametric
11_2_5_114	MW-01R	Part 115	Iron	mg/L	15	0	0%	0.907	0.122	0.181	0.203	0.868	0.032	0.231	0.030	0.192	>= 0.10	0.676	0.05 <= p < 0.10	0.944	Gamma; Normal	Normal
11_2_5_119	MW-01R	Part 115	Nickel	mg/L	15	0	0%	0.420	0.000	0.426	0.000	0.717	0.000	0.288	0.002	0.366	< 0.01	2.424	< 0.01	0.714	Nonparametric	Nonparametric
11_2_5_123	MW-01R	Part 115	Silver	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
11_2_5_128	MW-01R	Part 115	Vanadium	mg/L	15	2	13%	0.869	0.051	0.273	0.009	0.934	0.380	0.170	0.380	0.202	>= 0.10	0.451	>= 0.10	0.586	Gamma; Lognormal; Normal	Normal
11_2_5_129	MW-01R	Part 115	Zinc	mg/L	15	3	20%	0.749	0.003	0.319	0.001	0.789	0.007	0.296	0.005	0.326	< 0.01	1.174	< 0.01	1.333	Nonparametric	Nonparametric
12_2_3_105	MW-02	Appendix III	Boron	mg/L	15	0	0%	0.771	0.002	0.346	0.000	0.853	0.019	0.300	0.001	0.314	< 0.01	1.169	< 0.01	0.224	Nonparametric	Nonparametric
12_2_3_107	MW-02	Appendix III	Calcium	mg/L	15	0	0%	0.914	0.157	0.170	0.287	0.921	0.202	0.175	0.245	0.176	>= 0.10	0.513	>= 0.10	0.082	Gamma; Lognormal; Normal	Normal
12_2_3_108	MW-02	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.591	0.000	0.383	0.000	0.503	0.000	0.410	0.000	0.404	< 0.01	2.767	< 0.01	0.204	Nonparametric	Nonparametric
12_2_3_112	MW-02	Appendix III	Fluoride	mg/L	15	0	0%	0.816	0.006	0.299	0.001	0.768	0.001	0.286	0.002	0.267	< 0.01	1.453	< 0.01	0.262	Nonparametric	Nonparametric
12_2_3_120	MW-02	Appendix III	pH (field)	su	15	0	0%	0.916	0.168	0.225	0.039	0.918	0.180	0.224	0.041	0.230	0.01 <= p < 0.05	0.571	>= 0.10	0.015	Gamma; Lognormal; Normal	Normal
12_2_3_124	MW-02	Appendix III	Sulfate (as SO4)	mg/L	15	10	67%	0.865	0.247	0.281	0.218	0.887	0.340	0.245	0.418	0.276	>= 0.10	0.427	>= 0.10	0.416	Gamma; Lognormal; Normal	Nonparametric
12_2_3_126	MW-02	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	0.868	0.031	0.162	0.365	0.912	0.147	0.140	0.591	0.144	>= 0.10	0.505	>= 0.10	0.120	Gamma; Lognormal; Normal	Normal
12_2_4_101	MW-02	Appendix IV	Antimony	mg/L	15	3	20%	0.671	0.000	0.284	0.008	0.848	0.035	0.180	0.349	0.208	>= 0.10	0.832	0.01 <= p < 0.05	0.398	Gamma; Lognormal	Gamma
12_2_4_102	MW-02	Appendix IV	Arsenic	mg/L	15	0	0%	0.859	0.023	0.200	0.110	0.509	0.000	0.377	0.000	0.321	< 0.01	2.190	< 0.01	0.770	Normal	Normal
12_2_4_103	MW-02	Appendix IV	Barium	mg/L	15	0	0%	0.921	0.200	0.141	0.582	0.950	0.526	0.143	0.562	0.128	>= 0.10	0.356	>= 0.10	0.217	Gamma; Lognormal; Normal	Normal
12_2_4_104	MW-02	Appendix IV	Beryllium	mg/L	15	1	7%	0.959	0.712	0.141	0.636	0.976	0.947	0.130	0.749	0.117	>= 0.10	0.186	>= 0.10	0.425	Gamma; Lognormal; Normal	Normal

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Normal				Lognormal				Gamma				Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
								Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value			
12_2_4_106	MW-02	Appendix IV	Cadmium	mg/L	15	10	67%	0.631	0.002	0.439	0.002	0.793	0.070	0.353	0.041	0.411	0.01 <= p < 0.05	0.798	0.01 <= p < 0.05	0.998	Lognormal	Nonparametric
12_2_4_109	MW-02	Appendix IV	Chromium, Total	mg/L	15	0	0%	0.957	0.639	0.128	0.733	0.567	0.000	0.293	0.001	0.236	0.01 <= p < 0.05	1.365	< 0.01	1.277	Normal	Normal
12_2_4_110	MW-02	Appendix IV	Cobalt	mg/L	15	0	0%	0.951	0.547	0.151	0.476	0.626	0.000	0.277	0.003	0.251	0.01 <= p < 0.05	1.207	< 0.01	0.904	Normal	Normal
12_2_4_113	MW-02	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.816	0.006	0.299	0.001	0.768	0.001	0.286	0.002	0.267	< 0.01	1.453	< 0.01	0.262	Nonparametric	Nonparametric
12_2_4_115	MW-02	Appendix IV	Lead	mg/L	15	1	7%	0.913	0.174	0.175	0.293	0.963	0.764	0.107	0.936	0.138	>= 0.10	0.320	>= 0.10	0.515	Gamma; Lognormal; Normal	Normal
12_2_4_116	MW-02	Appendix IV	Lithium	mg/L	15	0	0%	0.925	0.232	0.193	0.140	0.958	0.660	0.159	0.394	0.161	>= 0.10	0.384	>= 0.10	0.231	Gamma; Lognormal; Normal	Normal
12_2_4_117	MW-02	Appendix IV	Mercury	mg/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
12_2_4_118	MW-02	Appendix IV	Molybdenum	mg/L	15	0	0%	0.830	0.009	0.285	0.002	0.901	0.098	0.225	0.040	0.252	0.01 <= p < 0.05	0.881	0.01 <= p < 0.05	0.434	Lognormal	Lognormal
12_2_4_121	MW-02	Appendix IV	Radium 226 and 228	pCi/L	14	5	36%	0.887	0.186	0.249	0.111	0.969	0.882	0.160	0.726	0.185	>= 0.10	0.282	>= 0.10	0.491	Gamma; Lognormal; Normal	Normal
12_2_4_122	MW-02	Appendix IV	Selenium	mg/L	15	0	0%	0.955	0.607	0.186	0.173	0.922	0.204	0.181	0.207	0.157	>= 0.10	0.427	>= 0.10	0.403	Gamma; Lognormal; Normal	Normal
12_2_4_125	MW-02	Appendix IV	Thallium	mg/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
12_2_5_111	MW-02	Part 115	Copper	mg/L	15	0	0%	0.972	0.893	0.128	0.728	0.865	0.028	0.185	0.181	0.148	>= 0.10	0.345	>= 0.10	0.711	Gamma; Lognormal; Normal	Normal
12_2_5_114	MW-02	Part 115	Iron	mg/L	15	0	0%	0.970	0.858	0.107	0.917	0.976	0.936	0.116	0.849	0.121	>= 0.10	0.171	>= 0.10	0.163	Gamma; Lognormal; Normal	Normal
12_2_5_119	MW-02	Part 115	Nickel	mg/L	15	0	0%	0.927	0.243	0.219	0.051	0.702	0.000	0.297	0.001	0.228	0.01 <= p < 0.05	0.819	0.01 <= p < 0.05	0.932	Normal	Normal
12_2_5_123	MW-02	Part 115	Silver	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
12_2_5_128	MW-02	Part 115	Vanadium	mg/L	15	1	7%	0.955	0.638	0.131	0.743	0.893	0.088	0.164	0.391	0.127	>= 0.10	0.386	>= 0.10	0.524	Gamma; Lognormal; Normal	Normal
12_2_5_129	MW-02	Part 115	Zinc	mg/L	15	0	0%	0.671	0.000	0.407	0.000	0.777	0.002	0.316	0.000	0.369	< 0.01	1.966	< 0.01	1.034	Nonparametric	Nonparametric
13_2_3_105	MW-03	Appendix III	Boron	mg/L	15	0	0%	0.904	0.111	0.173	0.266	0.882	0.051	0.174	0.259	0.185	>= 0.10	0.580	>= 0.10	0.084	Gamma; Lognormal; Normal	Normal
13_2_3_107	MW-03	Appendix III	Calcium	mg/L	15	0	0%	0.980	0.966	0.135	0.653	0.976	0.937	0.115	0.854	0.123	>= 0.10	0.211	>= 0.10	0.106	Gamma; Lognormal; Normal	Normal
13_2_3_108	MW-03	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.907	0.123	0.162	0.360	0.972	0.888	0.113	0.869	0.121	>= 0.10	0.239	>= 0.10	0.323	Gamma; Lognormal; Normal	Normal
13_2_3_112	MW-03	Appendix III	Fluoride	mg/L	15	0	0%	0.445	0.000	0.400	0.000	0.556	0.000	0.354	0.000	0.374	< 0.01	2.877	< 0.01	0.263	Nonparametric	Nonparametric
13_2_3_120	MW-03	Appendix III	pH (field)	su	15	0	0%	0.955	0.608	0.170	0.292	0.957	0.644	0.168	0.306	0.173	>= 0.10	0.351	>= 0.10	0.013	Gamma; Lognormal; Normal	Normal
13_2_3_124	MW-03	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	0.975	0.922	0.078	0.999	0.825	0.008	0.212	0.070	0.167	>= 0.10	0.555	>= 0.10	0.914	Gamma; Lognormal; Normal	Normal
13_2_3_126	MW-03	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	0.804	0.004	0.243	0.017	0.804	0.004	0.252	0.011	0.259	< 0.01	1.282	< 0.01	0.126	Nonparametric	Nonparametric
13_2_4_101	MW-03	Appendix IV	Antimony	mg/L	15	9	60%	0.669	0.003	0.366	0.012	0.815	0.080	0.256	0.250	0.299	>= 0.10	0.738	0.01 <= p < 0.05	0.608	Gamma; Lognormal	Nonparametric
13_2_4_102	MW-03	Appendix IV	Arsenic	mg/L	15	0	0%	0.959	0.667	0.168	0.309	0.904	0.111	0.182	0.199	0.186	>= 0.10	0.449	>= 0.10	0.310	Gamma; Lognormal; Normal	Normal
13_2_4_103	MW-03	Appendix IV	Barium	mg/L	15	0	0%	0.938	0.352	0.131	0.698	0.803	0.004	0.193	0.141	0.169	>= 0.10	0.708	0.05 <= p < 0.10	0.319	Gamma; Lognormal; Normal	Normal
13_2_4_104	MW-03	Appendix IV	Beryllium	mg/L	15	10	67%	0.768	0.043	0.352	0.042	0.761	0.038	0.344	0.053	0.373	0.01 <= p < 0.05	0.737	0.01 <= p < 0.05	0.607	Lognormal	Nonparametric
13_2_4_106	MW-03	Appendix IV	Cadmium	mg/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
13_2_4_109	MW-03	Appendix IV	Chromium, Total	mg/L	15	0	0%	0.940	0.386	0.173	0.260	0.955	0.606	0.166	0.323	0.177	>= 0.10	0.340	>= 0.10	0.263	Gamma; Lognormal; Normal	Normal
13_2_4_110	MW-03	Appendix IV	Cobalt	mg/L	15	0	0%	0.895	0.079	0.229	0.033	0.928	0.255	0.180	0.214	0.204	0.05 <= p < 0.10	0.498	>= 0.10	0.424	Gamma; Lognormal; Normal	Normal
13_2_4_113	MW-03	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.445	0.000	0.400	0.000	0.556	0.000	0.354	0.000	0.374	< 0.01	2.877	< 0.01	0.263	Nonparametric	Nonparametric
13_2_4_115	MW-03	Appendix IV	Lead	mg/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
13_2_4_116	MW-03	Appendix IV	Lithium	mg/L	15	0	0%	0.846	0.015	0.184	0.188	0.916	0.167	0.168	0.303	0.180	>= 0.10	0.523	>= 0.10	0.219	Gamma; Lognormal; Normal	Normal
13_2_4_117	MW-03	Appendix IV	Mercury	mg/L	15	13	87%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		5.709		Nonparametric
13_2_4_118	MW-03	Appendix IV	Molybdenum	mg/L	15	11	73%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.441		Nonparametric
13_2_4_121	MW-03	Appendix IV	Radium 226 and 228	pCi/L	14	1	7%	0.917	0.231	0.177	0.322	0.975	0.943	0.110	0.936	0.135	>= 0.10	0.233	>= 0.10	0.382	Gamma; Lognormal; Normal	Normal
13_2_4_122	MW-03	Appendix IV	Selenium	mg/L	15	3	20%	0.932	0.406	0.182	0.336	0.817	0.015	0.248	0.041	0.220	>= 0.10	0.674	0.05 <= p < 0.10	0.321	Gamma; Normal	Normal
13_2_4_125	MW-03	Appendix IV	Thallium	mg/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Normal				Lognormal				Gamma				Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
								Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value			
13_2_5_111	MW-03	Part 115	Copper	mg/L	15	7	47%	0.734	0.005	0.359	0.003	0.753	0.009	0.329	0.011	0.355	< 0.01	1.086	< 0.01	0.648	Nonparametric	Nonparametric
13_2_5_114	MW-03	Part 115	Iron	mg/L	15	0	0%	0.780	0.002	0.203	0.098	0.981	0.976	0.098	0.963	0.133	>= 0.10	0.303	>= 0.10	1.098	Gamma; Lognormal; Normal	Gamma
13_2_5_119	MW-03	Part 115	Nickel	mg/L	15	1	7%	0.393	0.000	0.445	0.000	0.685	0.000	0.284	0.003	0.362	< 0.01	2.460	< 0.01	0.708	Nonparametric	Nonparametric
13_2_5_123	MW-03	Part 115	Silver	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
13_2_5_128	MW-03	Part 115	Vanadium	mg/L	15	9	60%	0.891	0.324	0.218	0.498	0.915	0.470	0.181	0.781	0.196	>= 0.10	0.335	>= 0.10	0.238	Gamma; Lognormal; Normal	Nonparametric
13_2_5_129	MW-03	Part 115	Zinc	mg/L	15	9	60%	0.801	0.060	0.303	0.089	0.804	0.063	0.280	0.146	0.313	>= 0.10	0.691	0.05 <= p < 0.10	1.258	Gamma; Lognormal; Normal	Nonparametric
14_2_3_105	MW-04	Appendix III	Boron	mg/L	15	0	0%	0.952	0.564	0.122	0.796	0.964	0.756	0.105	0.926	0.109	>= 0.10	0.243	>= 0.10	0.086	Gamma; Lognormal; Normal	Normal
14_2_3_107	MW-04	Appendix III	Calcium	mg/L	15	0	0%	0.951	0.543	0.146	0.531	0.911	0.141	0.173	0.266	0.153	>= 0.10	0.393	>= 0.10	0.130	Gamma; Lognormal; Normal	Normal
14_2_3_108	MW-04	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.980	0.967	0.120	0.816	0.798	0.003	0.200	0.108	0.153	>= 0.10	0.556	>= 0.10	0.622	Gamma; Lognormal; Normal	Normal
14_2_3_112	MW-04	Appendix III	Fluoride	mg/L	15	0	0%	0.850	0.017	0.282	0.002	0.890	0.066	0.236	0.024	0.249	0.01 <= p < 0.05	0.906	0.01 <= p < 0.05	0.242	Lognormal	Lognormal
14_2_3_120	MW-04	Appendix III	pH (field)	su	15	0	0%	0.892	0.073	0.148	0.511	0.897	0.086	0.145	0.535	0.152	>= 0.10	0.498	>= 0.10	0.015	Gamma; Lognormal; Normal	Normal
14_2_3_124	MW-04	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	0.833	0.010	0.242	0.018	0.408	0.000	0.400	0.000	0.365	< 0.01	3.082	< 0.01	1.517	Nonparametric	Nonparametric
14_2_3_126	MW-04	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	0.846	0.015	0.200	0.109	0.790	0.003	0.234	0.026	0.201	>= 0.10	0.842	0.01 <= p < 0.05	0.142	Gamma; Normal	Normal
14_2_4_101	MW-04	Appendix IV	Antimony	mg/L	15	10	67%	0.829	0.136	0.311	0.116	0.895	0.382	0.238	0.466	0.285	>= 0.10	0.456	>= 0.10	0.813	Gamma; Lognormal; Normal	Nonparametric
14_2_4_102	MW-04	Appendix IV	Arsenic	mg/L	15	0	0%	0.750	0.001	0.269	0.005	0.935	0.321	0.176	0.243	0.201	>= 0.10	0.576	>= 0.10	0.426	Gamma; Lognormal	Gamma
14_2_4_103	MW-04	Appendix IV	Barium	mg/L	15	0	0%	0.586	0.000	0.327	0.000	0.792	0.003	0.229	0.034	0.250	0.01 <= p < 0.05	1.560	< 0.01	0.577	Nonparametric	Nonparametric
14_2_4_104	MW-04	Appendix IV	Beryllium	mg/L	15	13	87%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.142		Nonparametric
14_2_4_106	MW-04	Appendix IV	Cadmium	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
14_2_4_109	MW-04	Appendix IV	Chromium, Total	mg/L	15	0	0%	0.935	0.326	0.158	0.403	0.845	0.015	0.197	0.121	0.179	>= 0.10	0.686	0.05 <= p < 0.10	0.448	Gamma; Lognormal; Normal	Normal
14_2_4_110	MW-04	Appendix IV	Cobalt	mg/L	15	0	0%	0.932	0.289	0.235	0.026	0.955	0.609	0.155	0.433	0.179	>= 0.10	0.336	>= 0.10	0.564	Gamma; Lognormal; Normal	Normal
14_2_4_113	MW-04	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.850	0.017	0.282	0.002	0.890	0.066	0.236	0.024	0.249	0.01 <= p < 0.05	0.906	0.01 <= p < 0.05	0.242	Lognormal	Lognormal
14_2_4_115	MW-04	Appendix IV	Lead	mg/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
14_2_4_116	MW-04	Appendix IV	Lithium	mg/L	15	0	0%	0.898	0.090	0.165	0.336	0.834	0.010	0.204	0.093	0.193	>= 0.10	0.660	0.05 <= p < 0.10	0.236	Gamma; Lognormal; Normal	Normal
14_2_4_117	MW-04	Appendix IV	Mercury	mg/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
14_2_4_118	MW-04	Appendix IV	Molybdenum	mg/L	15	2	13%	0.488	0.000	0.395	0.000	0.885	0.083	0.222	0.080	0.306	< 0.01	1.174	< 0.01	0.883	Lognormal	Lognormal
14_2_4_121	MW-04	Appendix IV	Radium 226 and 228	pCi/L	15	5	33%	0.898	0.208	0.180	0.478	0.860	0.076	0.224	0.167	0.216	>= 0.10	0.598	>= 0.10	0.338	Gamma; Lognormal; Normal	Normal
14_2_4_122	MW-04	Appendix IV	Selenium	mg/L	15	5	33%	0.614	0.000	0.310	0.007	0.820	0.026	0.240	0.104	0.261	0.05 <= p < 0.10	1.017	< 0.01	0.583	Gamma; Lognormal	Gamma
14_2_4_125	MW-04	Appendix IV	Thallium	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
14_2_5_111	MW-04	Part 115	Copper	mg/L	15	12	80%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.706		Nonparametric
14_2_5_114	MW-04	Part 115	Iron	mg/L	15	0	0%	0.726	0.000	0.285	0.002	0.539	0.000	0.431	0.000	0.410	< 0.01	2.876	< 0.01	1.027	Nonparametric	Nonparametric
14_2_5_119	MW-04	Part 115	Nickel	mg/L	15	0	0%	0.910	0.137	0.164	0.339	0.731	0.001	0.277	0.003	0.225	0.01 <= p < 0.05	1.224	< 0.01	0.706	Normal	Normal
14_2_5_123	MW-04	Part 115	Silver	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
14_2_5_128	MW-04	Part 115	Vanadium	mg/L	15	10	67%	0.906	0.445	0.269	0.273	0.873	0.280	0.277	0.234	0.294	>= 0.10	0.425	>= 0.10	0.183	Gamma; Lognormal; Normal	Nonparametric
14_2_5_129	MW-04	Part 115	Zinc	mg/L	15	10	67%	0.941	0.673	0.212	0.650	0.903	0.426	0.263	0.304	0.266	>= 0.10	0.338	>= 0.10	0.569	Gamma; Lognormal; Normal	Nonparametric
16_1_3_105	MW-06	Appendix III	Boron	mg/L	15	0	0%	0.960	0.701	0.183	0.194	0.947	0.480	0.211	0.071	0.206	0.05 <= p < 0.10	0.385	>= 0.10	0.184	Gamma; Lognormal; Normal	Normal
16_1_3_107	MW-06	Appendix III	Calcium	mg/L	15	0	0%	0.941	0.390	0.174	0.254	0.955	0.609	0.149	0.497	0.157	>= 0.10	0.297	>= 0.10	0.137	Gamma; Lognormal; Normal	Normal
16_1_3_108	MW-06	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.946	0.459	0.172	0.274	0.926	0.238	0.233	0.027	0.192	>= 0.10	0.361	>= 0.10	0.698	Gamma; Lognormal; Normal	Normal
16_1_3_112	MW-06	Appendix III	Fluoride	mg/L	15	0	0%	0.893	0.075	0.201	0.107	0.916	0.168	0.188	0.163	0.192	>= 0.10	0.517	>= 0.10	0.146	Gamma; Lognormal; Normal	Normal
16_1_3_120	MW-06	Appendix III	pH (field)	su	15	0	0%	0.642	0.000	0.331	0.000	0.621	0.000	0.341	0.000	0.331	< 0.01	1.950	< 0.01	0.035	Nonparametric	Nonparametric

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Normal				Lognormal				Gamma				Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
								Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value			
16_1_3_124	MW-06	Appendix III	Sulfate (as SO4)	mg/L	15	2	13%	0.947	0.547	0.157	0.510	0.875	0.060	0.223	0.076	0.171	>= 0.10	0.454	>= 0.10	1.043	Gamma; Lognormal; Normal	Gamma
16_1_3_126	MW-06	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.055		Nonparametric
16_1_4_101	MW-06	Appendix IV	Antimony	mg/L	15	13	87%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		1.109		Nonparametric
16_1_4_102	MW-06	Appendix IV	Arsenic	mg/L	15	0	0%	0.910	0.135	0.171	0.281	0.942	0.406	0.130	0.705	0.146	>= 0.10	0.415	>= 0.10	0.238	Gamma; Lognormal; Normal	Normal
16_1_4_103	MW-06	Appendix IV	Barium	mg/L	15	0	0%	0.916	0.166	0.187	0.168	0.871	0.034	0.212	0.067	0.201	>= 0.10	0.618	>= 0.10	0.126	Gamma; Lognormal; Normal	Normal
16_1_4_104	MW-06	Appendix IV	Beryllium	mg/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
16_1_4_106	MW-06	Appendix IV	Cadmium	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
16_1_4_109	MW-06	Appendix IV	Chromium, Total	mg/L	15	0	0%	0.882	0.051	0.243	0.017	0.941	0.395	0.189	0.158	0.211	0.05 <= p < 0.10	0.533	>= 0.10	0.327	Gamma; Lognormal; Normal	Normal
16_1_4_110	MW-06	Appendix IV	Cobalt	mg/L	15	0	0%	0.911	0.141	0.190	0.152	0.946	0.467	0.139	0.611	0.156	>= 0.10	0.423	>= 0.10	0.277	Gamma; Lognormal; Normal	Normal
16_1_4_113	MW-06	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.893	0.075	0.201	0.107	0.916	0.168	0.188	0.163	0.192	>= 0.10	0.517	>= 0.10	0.146	Gamma; Lognormal; Normal	Normal
16_1_4_115	MW-06	Appendix IV	Lead	mg/L	15	10	67%	0.986	0.963	0.172	0.896	0.961	0.816	0.223	0.566	0.220	>= 0.10	0.221	>= 0.10	0.413	Gamma; Lognormal; Normal	Nonparametric
16_1_4_116	MW-06	Appendix IV	Lithium	mg/L	15	0	0%	0.938	0.359	0.135	0.651	0.937	0.342	0.143	0.562	0.140	>= 0.10	0.345	>= 0.10	0.242	Gamma; Lognormal; Normal	Normal
16_1_4_117	MW-06	Appendix IV	Mercury	mg/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
16_1_4_118	MW-06	Appendix IV	Molybdenum	mg/L	15	9	60%	0.773	0.033	0.354	0.018	0.800	0.058	0.341	0.028	0.363	0.01 <= p < 0.05	0.727	0.01 <= p < 0.05	0.332	Lognormal	Nonparametric
16_1_4_121	MW-06	Appendix IV	Radium 226 and 228	pCi/L	15	3	20%	0.826	0.019	0.255	0.030	0.949	0.629	0.181	0.344	0.200	>= 0.10	0.444	>= 0.10	0.361	Gamma; Lognormal	Gamma
16_1_4_122	MW-06	Appendix IV	Selenium	mg/L	15	5	33%	0.695	0.001	0.336	0.002	0.812	0.020	0.284	0.021	0.305	0.01 <= p < 0.05	1.020	< 0.01	0.297	Nonparametric	Nonparametric
16_1_4_125	MW-06	Appendix IV	Thallium	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
16_1_5_111	MW-06	Part 115	Copper	mg/L	15	12	80%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.217		Nonparametric
16_1_5_114	MW-06	Part 115	Iron	mg/L	15	0	0%	0.936	0.340	0.223	0.043	0.838	0.012	0.220	0.050	0.184	>= 0.10	0.634	0.05 <= p < 0.10	0.436	Gamma; Normal	Normal
16_1_5_119	MW-06	Part 115	Nickel	mg/L	15	6	40%	0.956	0.755	0.166	0.677	0.962	0.819	0.152	0.791	0.165	>= 0.10	0.286	>= 0.10	0.129	Gamma; Lognormal; Normal	Normal
16_1_5_123	MW-06	Part 115	Silver	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
16_1_5_128	MW-06	Part 115	Vanadium	mg/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
16_1_5_129	MW-06	Part 115	Zinc	mg/L	15	2	13%	0.583	0.000	0.459	0.000	0.634	0.000	0.420	0.000	0.463	< 0.01	2.630	< 0.01	1.685	Nonparametric	Nonparametric
17_1_3_105	MW-07	Appendix III	Boron	mg/L	15	0	0%	0.913	0.152	0.233	0.027	0.905	0.112	0.253	0.011	0.243	0.01 <= p < 0.05	0.736	0.01 <= p < 0.05	0.102	Lognormal; Normal	Normal
17_1_3_107	MW-07	Appendix III	Calcium	mg/L	15	0	0%	0.917	0.175	0.207	0.084	0.909	0.132	0.214	0.063	0.220	0.05 <= p < 0.10	0.601	>= 0.10	0.084	Gamma; Lognormal; Normal	Normal
17_1_3_108	MW-07	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.866	0.029	0.284	0.002	0.879	0.046	0.275	0.003	0.280	< 0.01	0.866	0.01 <= p < 0.05	0.075	Nonparametric	Nonparametric
17_1_3_112	MW-07	Appendix III	Fluoride	mg/L	15	3	20%	0.897	0.145	0.205	0.176	0.905	0.184	0.198	0.215	0.211	>= 0.10	0.591	>= 0.10	0.337	Gamma; Lognormal; Normal	Normal
17_1_3_120	MW-07	Appendix III	pH (field)	su	15	0	0%	0.869	0.033	0.238	0.022	0.864	0.028	0.242	0.018	0.236	0.01 <= p < 0.05	0.861	0.01 <= p < 0.05	0.019	Nonparametric	Nonparametric
17_1_3_124	MW-07	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	0.896	0.083	0.217	0.057	0.895	0.080	0.185	0.181	0.204	>= 0.10	0.662	0.05 <= p < 0.10	0.329	Gamma; Lognormal; Normal	Normal
17_1_3_126	MW-07	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	0.824	0.007	0.217	0.056	0.787	0.003	0.247	0.014	0.233	0.01 <= p < 0.05	1.111	< 0.01	0.128	Normal	Normal
17_1_4_101	MW-07	Appendix IV	Antimony	mg/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
17_1_4_102	MW-07	Appendix IV	Arsenic	mg/L	15	0	0%	0.932	0.290	0.172	0.274	0.896	0.082	0.202	0.104	0.186	>= 0.10	0.578	>= 0.10	0.178	Gamma; Lognormal; Normal	Normal
17_1_4_103	MW-07	Appendix IV	Barium	mg/L	15	0	0%	0.930	0.276	0.214	0.063	0.892	0.073	0.239	0.021	0.228	0.01 <= p < 0.05	0.603	>= 0.10	0.121	Gamma; Lognormal; Normal	Normal
17_1_4_104	MW-07	Appendix IV	Beryllium	mg/L	15	12	80%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.093		Nonparametric
17_1_4_106	MW-07	Appendix IV	Cadmium	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
17_1_4_109	MW-07	Appendix IV	Chromium, Total	mg/L	15	0	0%	0.680	0.000	0.262	0.007	0.814	0.006	0.190	0.152	0.208	0.05 <= p < 0.10	0.993	0.01 <= p < 0.05	0.243	Gamma; Lognormal	Gamma
17_1_4_110	MW-07	Appendix IV	Cobalt	mg/L	15	0	0%	0.951	0.540	0.165	0.335	0.944	0.438	0.176	0.243	0.181	>= 0.10	0.382	>= 0.10	0.132	Gamma; Lognormal; Normal	Normal
17_1_4_113	MW-07	Appendix IV	Fluoride (App IV)	mg/L	15	3	20%	0.897	0.145	0.205	0.176	0.905	0.184	0.198	0.215	0.211	>= 0.10	0.591	>= 0.10	0.337	Gamma; Lognormal; Normal	Normal
17_1_4_115	MW-07	Appendix IV	Lead	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Normal		Lognormal		Gamma				Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution				
								S-W		Lilliefors		S-W		Lilliefors					K-S		A-D	
								Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value				Stat.	p-Value	Stat.	p-Value
17_1_4_116	MW-07	Appendix IV	Lithium	mg/L	15	0	0%	0.931	0.280	0.187	0.167	0.943	0.418	0.197	0.120	0.179	>= 0.10	0.461	>= 0.10	0.272	Gamma; Lognormal; Normal	Normal
17_1_4_117	MW-07	Appendix IV	Mercury	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	Nonparametric	
17_1_4_118	MW-07	Appendix IV	Molybdenum	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	Nonparametric	
17_1_4_121	MW-07	Appendix IV	Radium 226 and 228	pCi/L	15	2	13%	0.735	0.001	0.239	0.041	0.902	0.144	0.148	0.604	0.173	>= 0.10	0.641	0.05 <= p < 0.10	0.366	Gamma; Lognormal	Gamma
17_1_4_122	MW-07	Appendix IV	Selenium	mg/L	15	9	60%	0.837	0.122	0.259	0.235	0.883	0.281	0.242	0.333	0.261	>= 0.10	0.476	>= 0.10	0.320	Gamma; Lognormal; Normal	Nonparametric
17_1_4_125	MW-07	Appendix IV	Thallium	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	Nonparametric	
17_1_5_111	MW-07	Part 115	Copper	mg/L	15	11	73%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.488	Nonparametric	
17_1_5_114	MW-07	Part 115	Iron	mg/L	15	0	0%	0.951	0.544	0.161	0.373	0.959	0.667	0.146	0.532	0.155	>= 0.10	0.278	>= 0.10	0.144	Gamma; Lognormal; Normal	Normal
17_1_5_119	MW-07	Part 115	Nickel	mg/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	Nonparametric	
17_1_5_123	MW-07	Part 115	Silver	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	Nonparametric	
17_1_5_128	MW-07	Part 115	Vanadium	mg/L	15	12	80%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.115	Nonparametric	
17_1_5_129	MW-07	Part 115	Zinc	mg/L	15	10	67%	0.910	0.468	0.244	0.420	0.871	0.271	0.317	0.101	0.325	>= 0.10	0.432	>= 0.10	1.249	Gamma; Lognormal; Normal	Nonparametric
18_1_3_105	MW-08	Appendix III	Boron	mg/L	15	0	0%	0.937	0.342	0.204	0.092	0.903	0.106	0.248	0.014	0.240	0.01 <= p < 0.05	0.673	0.05 <= p < 0.10	0.361	Gamma; Lognormal; Normal	Normal
18_1_3_107	MW-08	Appendix III	Calcium	mg/L	15	0	0%	0.887	0.061	0.205	0.091	0.887	0.061	0.192	0.142	0.201	>= 0.10	0.728	0.05 <= p < 0.10	0.099	Gamma; Lognormal; Normal	Normal
18_1_3_108	MW-08	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.593	0.000	0.302	0.001	0.832	0.010	0.214	0.063	0.246	0.01 <= p < 0.05	1.223	< 0.01	0.413	Lognormal	Lognormal
18_1_3_112	MW-08	Appendix III	Fluoride	mg/L	15	0	0%	0.914	0.155	0.216	0.058	0.856	0.021	0.275	0.003	0.258	< 0.01	0.911	0.01 <= p < 0.05	0.341	Normal	Normal
18_1_3_120	MW-08	Appendix III	pH (field)	su	15	0	0%	0.670	0.000	0.316	0.000	0.645	0.000	0.327	0.000	0.320	< 0.01	1.861	< 0.01	0.043	Nonparametric	Nonparametric
18_1_3_124	MW-08	Appendix III	Sulfate (as SO4)	mg/L	15	4	27%	0.838	0.030	0.202	0.239	0.950	0.641	0.149	0.708	0.162	>= 0.10	0.259	>= 0.10	1.215	Gamma; Lognormal; Normal	Gamma
18_1_3_126	MW-08	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	0.982	0.983	0.144	0.549	0.984	0.991	0.126	0.754	0.128	>= 0.10	0.170	>= 0.10	0.108	Gamma; Lognormal; Normal	Normal
18_1_4_101	MW-08	Appendix IV	Antimony	mg/L	15	7	47%	0.944	0.648	0.195	0.491	0.973	0.920	0.152	0.850	0.171	>= 0.10	0.211	>= 0.10	0.505	Gamma; Lognormal; Normal	Normal
18_1_4_102	MW-08	Appendix IV	Arsenic	mg/L	15	0	0%	0.901	0.099	0.153	0.446	0.778	0.002	0.256	0.009	0.218	0.05 <= p < 0.10	1.001	0.01 <= p < 0.05	0.576	Gamma; Normal	Normal
18_1_4_103	MW-08	Appendix IV	Barium	mg/L	15	0	0%	0.969	0.847	0.143	0.558	0.939	0.373	0.172	0.268	0.166	>= 0.10	0.341	>= 0.10	0.183	Gamma; Lognormal; Normal	Normal
18_1_4_104	MW-08	Appendix IV	Beryllium	mg/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	Nonparametric	
18_1_4_106	MW-08	Appendix IV	Cadmium	mg/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	Nonparametric	
18_1_4_109	MW-08	Appendix IV	Chromium, Total	mg/L	15	0	0%	0.857	0.022	0.174	0.255	0.923	0.211	0.157	0.406	0.168	>= 0.10	0.505	>= 0.10	0.266	Gamma; Lognormal; Normal	Normal
18_1_4_110	MW-08	Appendix IV	Cobalt	mg/L	15	0	0%	0.881	0.049	0.208	0.082	0.938	0.361	0.199	0.113	0.212	0.05 <= p < 0.10	0.542	>= 0.10	0.361	Gamma; Lognormal; Normal	Normal
18_1_4_113	MW-08	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.914	0.155	0.216	0.058	0.856	0.021	0.275	0.003	0.258	< 0.01	0.911	0.01 <= p < 0.05	0.341	Normal	Normal
18_1_4_115	MW-08	Appendix IV	Lead	mg/L	15	9	60%	0.671	0.003	0.347	0.023	0.874	0.244	0.289	0.119	0.344	0.05 <= p < 0.10	0.617	0.05 <= p < 0.10	1.312	Gamma; Lognormal	Nonparametric
18_1_4_116	MW-08	Appendix IV	Lithium	mg/L	15	0	0%	0.942	0.410	0.159	0.394	0.936	0.330	0.192	0.142	0.187	>= 0.10	0.404	>= 0.10	0.254	Gamma; Lognormal; Normal	Normal
18_1_4_117	MW-08	Appendix IV	Mercury	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	Nonparametric	
18_1_4_118	MW-08	Appendix IV	Molybdenum	mg/L	15	0	0%	0.940	0.385	0.135	0.653	0.888	0.063	0.217	0.055	0.189	>= 0.10	0.504	>= 0.10	0.751	Gamma; Lognormal; Normal	Normal
18_1_4_121	MW-08	Appendix IV	Radium 226 and 228	pCi/L	15	3	20%	0.935	0.433	0.183	0.324	0.983	0.993	0.114	0.936	0.131	>= 0.10	0.164	>= 0.10	0.393	Gamma; Lognormal; Normal	Normal
18_1_4_122	MW-08	Appendix IV	Selenium	mg/L	15	5	33%	0.727	0.002	0.298	0.012	0.801	0.015	0.251	0.075	0.273	0.01 <= p < 0.05	1.073	< 0.01	0.362	Lognormal	Lognormal
18_1_4_125	MW-08	Appendix IV	Thallium	mg/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	Nonparametric	
18_1_5_111	MW-08	Part 115	Copper	mg/L	15	5	33%	0.916	0.321	0.196	0.336	0.978	0.953	0.126	0.922	0.141	>= 0.10	0.214	>= 0.10	0.415	Gamma; Lognormal; Normal	Normal
18_1_5_114	MW-08	Part 115	Iron	mg/L	15	0	0%	0.899	0.091	0.226	0.038	0.946	0.462	0.181	0.204	0.190	>= 0.10	0.427	>= 0.10	0.255	Gamma; Lognormal; Normal	Normal
18_1_5_119	MW-08	Part 115	Nickel	mg/L	15	0	0%	0.568	0.000	0.300	0.001	0.824	0.008	0.260	0.007	0.294	< 0.01	1.501	< 0.01	0.765	Nonparametric	Nonparametric
18_1_5_123	MW-08	Part 115	Silver	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	Nonparametric	
18_1_5_128	MW-08	Part 115	Vanadium	mg/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	Nonparametric	

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Normal		Lognormal		Gamma				Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution				
								S-W		Lilliefors		S-W		Lilliefors					K-S		A-D	
								Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value				Stat.	p-Value	Stat.	p-Value
18_1_5_129	MW-08	Part 115	Zinc	mg/L	15	3	20%	0.595	0.000	0.430	0.000	0.731	0.002	0.312	0.002	0.395	< 0.01	1.874	< 0.01	1.828	Nonparametric	Nonparametric
19_2_3_105	MW-09	Appendix III	Boron	mg/L	15	0	0%	0.955	0.610	0.122	0.793	0.955	0.612	0.126	0.756	0.132	>= 0.10	0.297	>= 0.10	0.100	Gamma; Lognormal; Normal	Normal
19_2_3_107	MW-09	Appendix III	Calcium	mg/L	15	0	0%	0.956	0.620	0.151	0.474	0.941	0.392	0.188	0.162	0.179	>= 0.10	0.405	>= 0.10	0.233	Gamma; Lognormal; Normal	Normal
19_2_3_108	MW-09	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.680	0.000	0.313	0.000	0.843	0.014	0.209	0.076	0.244	0.01 <= p < 0.05	1.216	< 0.01	0.558	Lognormal	Lognormal
19_2_3_112	MW-09	Appendix III	Fluoride	mg/L	15	0	0%	0.944	0.441	0.117	0.842	0.947	0.479	0.108	0.908	0.119	>= 0.10	0.309	>= 0.10	0.101	Gamma; Lognormal; Normal	Normal
19_2_3_120	MW-09	Appendix III	pH (field)	su	15	0	0%	0.904	0.111	0.225	0.040	0.909	0.131	0.221	0.046	0.222	0.01 <= p < 0.05	0.680	0.05 <= p < 0.10	0.017	Gamma; Lognormal; Normal	Normal
19_2_3_124	MW-09	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	0.956	0.629	0.129	0.724	0.878	0.044	0.237	0.023	0.205	>= 0.10	0.594	>= 0.10	0.732	Gamma; Normal	Normal
19_2_3_126	MW-09	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	0.969	0.838	0.143	0.563	0.925	0.233	0.172	0.274	0.162	>= 0.10	0.394	>= 0.10	0.271	Gamma; Lognormal; Normal	Normal
19_2_4_101	MW-09	Appendix IV	Antimony	mg/L	15	10	67%	0.868	0.257	0.277	0.233	0.937	0.645	0.219	0.600	0.260	>= 0.10	0.332	>= 0.10	0.671	Gamma; Lognormal; Normal	Nonparametric
19_2_4_102	MW-09	Appendix IV	Arsenic	mg/L	15	0	0%	0.879	0.046	0.287	0.002	0.847	0.016	0.319	0.000	0.314	< 0.01	1.106	< 0.01	0.279	Nonparametric	Nonparametric
19_2_4_103	MW-09	Appendix IV	Barium	mg/L	15	0	0%	0.469	0.000	0.376	0.000	0.847	0.016	0.181	0.203	0.268	< 0.01	1.604	< 0.01	0.774	Lognormal	Lognormal
19_2_4_104	MW-09	Appendix IV	Beryllium	mg/L	15	12	80%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.554		Nonparametric
19_2_4_106	MW-09	Appendix IV	Cadmium	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
19_2_4_109	MW-09	Appendix IV	Chromium, Total	mg/L	15	0	0%	0.945	0.446	0.123	0.786	0.944	0.442	0.149	0.491	0.146	>= 0.10	0.357	>= 0.10	0.222	Gamma; Lognormal; Normal	Normal
19_2_4_110	MW-09	Appendix IV	Cobalt	mg/L	15	0	0%	0.951	0.539	0.117	0.838	0.946	0.462	0.137	0.634	0.130	>= 0.10	0.261	>= 0.10	0.450	Gamma; Lognormal; Normal	Normal
19_2_4_113	MW-09	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.944	0.441	0.117	0.842	0.947	0.479	0.108	0.908	0.119	>= 0.10	0.309	>= 0.10	0.101	Gamma; Lognormal; Normal	Normal
19_2_4_115	MW-09	Appendix IV	Lead	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
19_2_4_116	MW-09	Appendix IV	Lithium	mg/L	15	0	0%	0.919	0.183	0.174	0.254	0.916	0.169	0.172	0.274	0.182	>= 0.10	0.496	>= 0.10	0.091	Gamma; Lognormal; Normal	Normal
19_2_4_117	MW-09	Appendix IV	Mercury	mg/L	15	13	87%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.094		Nonparametric
19_2_4_118	MW-09	Appendix IV	Molybdenum	mg/L	15	0	0%	0.972	0.886	0.141	0.589	0.926	0.234	0.199	0.113	0.174	>= 0.10	0.363	>= 0.10	0.329	Gamma; Lognormal; Normal	Normal
19_2_4_121	MW-09	Appendix IV	Radium 226 and 228	pCi/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
19_2_4_122	MW-09	Appendix IV	Selenium	mg/L	15	2	13%	0.831	0.016	0.235	0.049	0.912	0.195	0.216	0.101	0.197	>= 0.10	0.634	0.05 <= p < 0.10	0.382	Gamma; Lognormal	Gamma
19_2_4_125	MW-09	Appendix IV	Thallium	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
19_2_5_111	MW-09	Part 115	Copper	mg/L	15	10	67%	0.659	0.003	0.391	0.012	0.751	0.031	0.311	0.116	0.352	0.05 <= p < 0.10	0.807	0.01 <= p < 0.05	0.630	Gamma; Lognormal	Nonparametric
19_2_5_114	MW-09	Part 115	Iron	mg/L	15	0	0%	0.928	0.252	0.149	0.498	0.934	0.311	0.149	0.495	0.158	>= 0.10	0.415	>= 0.10	0.220	Gamma; Lognormal; Normal	Normal
19_2_5_119	MW-09	Part 115	Nickel	mg/L	15	0	0%	0.368	0.000	0.428	0.000	0.855	0.020	0.215	0.061	0.260	0.01 <= p < 0.05	2.017	< 0.01	1.262	Lognormal	Nonparametric
19_2_5_123	MW-09	Part 115	Silver	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
19_2_5_128	MW-09	Part 115	Vanadium	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
19_2_5_129	MW-09	Part 115	Zinc	mg/L	15	8	53%	0.913	0.419	0.186	0.655	0.894	0.298	0.197	0.562	0.205	>= 0.10	0.339	>= 0.10	1.143	Gamma; Lognormal; Normal	Nonparametric
20_3_3_105	MW-10	Appendix III	Boron	mg/L	15	0	0%	0.930	0.275	0.171	0.280	0.900	0.095	0.199	0.115	0.201	>= 0.10	0.547	>= 0.10	0.567	Gamma; Lognormal; Normal	Normal
20_3_3_107	MW-10	Appendix III	Calcium	mg/L	15	0	0%	0.887	0.060	0.197	0.121	0.962	0.723	0.152	0.464	0.161	>= 0.10	0.396	>= 0.10	0.360	Gamma; Lognormal; Normal	Normal
20_3_3_108	MW-10	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.898	0.088	0.152	0.464	0.969	0.837	0.149	0.499	0.151	>= 0.10	0.304	>= 0.10	0.552	Gamma; Lognormal; Normal	Normal
20_3_3_112	MW-10	Appendix III	Fluoride	mg/L	15	0	0%	0.952	0.558	0.146	0.533	0.917	0.172	0.187	0.172	0.180	>= 0.10	0.390	>= 0.10	0.342	Gamma; Lognormal; Normal	Normal
20_3_3_120	MW-10	Appendix III	pH (field)	su	15	0	0%	0.887	0.060	0.234	0.026	0.900	0.094	0.224	0.040	0.226	0.01 <= p < 0.05	0.773	0.01 <= p < 0.05	0.049	Lognormal; Normal	Normal
20_3_3_124	MW-10	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	0.891	0.070	0.170	0.287	0.979	0.959	0.107	0.917	0.114	>= 0.10	0.196	>= 0.10	0.652	Gamma; Lognormal; Normal	Normal
20_3_3_126	MW-10	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	0.808	0.005	0.339	0.000	0.854	0.020	0.310	0.000	0.324	< 0.01	1.205	< 0.01	0.223	Nonparametric	Nonparametric
20_3_4_101	MW-10	Appendix IV	Antimony	mg/L	15	11	73%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.542		Nonparametric
20_3_4_102	MW-10	Appendix IV	Arsenic	mg/L	15	0	0%	0.868	0.031	0.168	0.304	0.988	0.998	0.097	0.965	0.120	>= 0.10	0.187	>= 0.10	0.627	Gamma; Lognormal; Normal	Normal
20_3_4_103	MW-10	Appendix IV	Barium	mg/L	15	0	0%	0.919	0.188	0.202	0.101	0.979	0.965	0.137	0.631	0.153	>= 0.10	0.245	>= 0.10	0.373	Gamma; Lognormal; Normal	Normal

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Normal				Lognormal				Gamma				Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
								Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value			
20_3_4_104	MW-10	Appendix IV	Beryllium	mg/L	15	7	47%	0.770	0.014	0.291	0.044	0.865	0.135	0.259	0.118	0.284	0.05 <= p < 0.10	0.661	0.05 <= p < 0.10	0.514	Gamma; Lognormal	Gamma
20_3_4_106	MW-10	Appendix IV	Cadmium	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_3_4_109	MW-10	Appendix IV	Chromium, Total	mg/L	15	0	0%	0.922	0.207	0.146	0.523	0.965	0.786	0.162	0.359	0.136	>= 0.10	0.255	>= 0.10	0.546	Gamma; Lognormal; Normal	Normal
20_3_4_110	MW-10	Appendix IV	Cobalt	mg/L	15	1	7%	0.703	0.000	0.297	0.002	0.939	0.401	0.195	0.157	0.241	0.01 <= p < 0.05	0.706	0.05 <= p < 0.10	0.666	Gamma; Lognormal	Gamma
20_3_4_113	MW-10	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.952	0.558	0.146	0.533	0.917	0.172	0.187	0.172	0.180	>= 0.10	0.390	>= 0.10	0.342	Gamma; Lognormal; Normal	Normal
20_3_4_115	MW-10	Appendix IV	Lead	mg/L	15	13	87%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.246		Nonparametric
20_3_4_116	MW-10	Appendix IV	Lithium	mg/L	15	0	0%	0.910	0.133	0.198	0.118	0.938	0.355	0.177	0.232	0.162	>= 0.10	0.467	>= 0.10	0.270	Gamma; Lognormal; Normal	Normal
20_3_4_117	MW-10	Appendix IV	Mercury	mg/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_3_4_118	MW-10	Appendix IV	Molybdenum	mg/L	15	0	0%	0.948	0.495	0.178	0.229	0.934	0.312	0.185	0.183	0.146	>= 0.10	0.304	>= 0.10	0.677	Gamma; Lognormal; Normal	Normal
20_3_4_121	MW-10	Appendix IV	Radium 226 and 228	pCi/L	15	12	80%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.259		Nonparametric
20_3_4_122	MW-10	Appendix IV	Selenium	mg/L	15	1	7%	0.733	0.001	0.241	0.027	0.902	0.120	0.164	0.385	0.188	>= 0.10	0.768	0.01 <= p < 0.05	0.332	Gamma; Lognormal	Gamma
20_3_4_125	MW-10	Appendix IV	Thallium	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_3_5_111	MW-10	Part 115	Copper	mg/L	15	12	80%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.649		Nonparametric
20_3_5_114	MW-10	Part 115	Iron	mg/L	15	0	0%	0.931	0.282	0.172	0.270	0.929	0.261	0.168	0.307	0.164	>= 0.10	0.466	>= 0.10	0.355	Gamma; Lognormal; Normal	Normal
20_3_5_119	MW-10	Part 115	Nickel	mg/L	15	7	47%	0.693	0.002	0.379	0.001	0.763	0.011	0.361	0.003	0.377	< 0.01	1.019	< 0.01	0.287	Nonparametric	Nonparametric
20_3_5_123	MW-10	Part 115	Silver	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_3_5_128	MW-10	Part 115	Vanadium	mg/L	15	12	80%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.194		Nonparametric
20_3_5_129	MW-10	Part 115	Zinc	mg/L	15	7	47%	0.702	0.002	0.345	0.006	0.772	0.014	0.248	0.158	0.297	0.05 <= p < 0.10	1.024	< 0.01	1.150	Gamma; Lognormal	Gamma
21_2_3_105	MW-11	Appendix III	Boron	mg/L	15	0	0%	0.920	0.193	0.174	0.254	0.972	0.882	0.120	0.811	0.109	>= 0.10	0.201	>= 0.10	0.629	Gamma; Lognormal; Normal	Normal
21_2_3_107	MW-11	Appendix III	Calcium	mg/L	15	0	0%	0.981	0.975	0.090	0.986	0.938	0.361	0.135	0.648	0.124	>= 0.10	0.279	>= 0.10	0.301	Gamma; Lognormal; Normal	Normal
21_2_3_108	MW-11	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.969	0.850	0.137	0.628	0.935	0.322	0.172	0.272	0.166	>= 0.10	0.319	>= 0.10	0.272	Gamma; Lognormal; Normal	Normal
21_2_3_112	MW-11	Appendix III	Fluoride	mg/L	15	0	0%	0.924	0.220	0.134	0.670	0.958	0.653	0.136	0.647	0.112	>= 0.10	0.225	>= 0.10	0.596	Gamma; Lognormal; Normal	Normal
21_2_3_120	MW-11	Appendix III	pH (field)	su	15	0	0%	0.962	0.723	0.142	0.569	0.959	0.683	0.145	0.538	0.141	>= 0.10	0.288	>= 0.10	0.014	Gamma; Lognormal; Normal	Normal
21_2_3_124	MW-11	Appendix III	Sulfate (as SO4)	mg/L	15	6	40%	0.762	0.008	0.279	0.042	0.944	0.622	0.174	0.600	0.241	>= 0.10	0.425	>= 0.10	1.536	Gamma; Lognormal	Gamma
21_2_3_126	MW-11	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	0.830	0.009	0.212	0.068	0.918	0.179	0.171	0.281	0.176	>= 0.10	0.593	>= 0.10	0.217	Gamma; Lognormal; Normal	Normal
21_2_4_101	MW-11	Appendix IV	Antimony	mg/L	15	11	73%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.875		Nonparametric
21_2_4_102	MW-11	Appendix IV	Arsenic	mg/L	15	0	0%	0.799	0.004	0.201	0.107	0.958	0.656	0.114	0.862	0.141	>= 0.10	0.437	>= 0.10	0.427	Gamma; Lognormal; Normal	Normal
21_2_4_103	MW-11	Appendix IV	Barium	mg/L	15	0	0%	0.888	0.062	0.252	0.011	0.956	0.626	0.204	0.095	0.224	0.01 <= p < 0.05	0.480	>= 0.10	0.304	Gamma; Lognormal; Normal	Normal
21_2_4_104	MW-11	Appendix IV	Beryllium	mg/L	15	12	80%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.920		Nonparametric
21_2_4_106	MW-11	Appendix IV	Cadmium	mg/L	15	13	87%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		1.073		Nonparametric
21_2_4_109	MW-11	Appendix IV	Chromium, Total	mg/L	15	0	0%	0.419	0.000	0.407	0.000	0.750	0.001	0.287	0.002	0.347	< 0.01	2.231	< 0.01	0.690	Nonparametric	Nonparametric
21_2_4_110	MW-11	Appendix IV	Cobalt	mg/L	15	0	0%	0.644	0.000	0.285	0.002	0.886	0.059	0.208	0.081	0.237	0.01 <= p < 0.05	0.991	0.01 <= p < 0.05	0.642	Lognormal	Lognormal
21_2_4_113	MW-11	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.924	0.220	0.134	0.670	0.958	0.653	0.136	0.647	0.112	>= 0.10	0.225	>= 0.10	0.596	Gamma; Lognormal; Normal	Normal
21_2_4_115	MW-11	Appendix IV	Lead	mg/L	15	3	20%	0.372	0.000	0.475	0.000	0.839	0.027	0.256	0.029	0.305	0.01 <= p < 0.05	1.890	< 0.01	1.691	Nonparametric	Nonparametric
21_2_4_116	MW-11	Appendix IV	Lithium	mg/L	15	0	0%	0.856	0.021	0.181	0.209	0.956	0.629	0.143	0.557	0.088	>= 0.10	0.163	>= 0.10	0.985	Gamma; Lognormal; Normal	Normal
21_2_4_117	MW-11	Appendix IV	Mercury	mg/L	15	13	87%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		4.727		Nonparametric
21_2_4_118	MW-11	Appendix IV	Molybdenum	mg/L	15	2	13%	0.846	0.026	0.192	0.209	0.958	0.719	0.127	0.820	0.154	>= 0.10	0.374	>= 0.10	0.586	Gamma; Lognormal; Normal	Normal
21_2_4_121	MW-11	Appendix IV	Radium 226 and 228	pCi/L	14	4	29%	0.947	0.628	0.178	0.492	0.971	0.900	0.121	0.949	0.149	>= 0.10	0.187	>= 0.10	0.428	Gamma; Lognormal; Normal	Normal
21_2_4_122	MW-11	Appendix IV	Selenium	mg/L	15	3	20%	0.681	0.001	0.324	0.001	0.829	0.020	0.250	0.037	0.284	0.01 <= p < 0.05	1.064	< 0.01	0.486	Nonparametric	Nonparametric

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Normal		Lognormal		Gamma				Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution				
								S-W		Lilliefors		S-W		Lilliefors					K-S		A-D	
								Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value				Stat.	p-Value	Stat.	p-Value
21_2_4_125	MW-11	Appendix IV	Thallium	mg/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	Nonparametric			
21_2_5_111	MW-11	Part 115	Copper	mg/L	15	4	27%	0.426	0.000	0.424	0.000	0.791	0.007	0.267	0.027	0.348	< 0.01	1.726	< 0.01	1.357	Nonparametric	Nonparametric
21_2_5_114	MW-11	Part 115	Iron	mg/L	15	0	0%	0.965	0.780	0.093	0.979	0.943	0.425	0.122	0.796	0.121	>= 0.10	0.272	>= 0.10	0.356	Gamma; Lognormal; Normal	Normal
21_2_5_119	MW-11	Part 115	Nickel	mg/L	15	0	0%	0.483	0.000	0.385	0.000	0.805	0.004	0.284	0.002	0.335	< 0.01	1.782	< 0.01	0.627	Nonparametric	Nonparametric
21_2_5_123	MW-11	Part 115	Silver	mg/L	15	13	87%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.137		Nonparametric
21_2_5_128	MW-11	Part 115	Vanadium	mg/L	15	13	87%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		1.115		Nonparametric
21_2_5_129	MW-11	Part 115	Zinc	mg/L	15	4	27%	0.745	0.002	0.244	0.065	0.901	0.189	0.234	0.093	0.212	>= 0.10	0.630	>= 0.10	1.378	Gamma; Lognormal; Normal	Gamma
22_2_3_105	MW-12	Appendix III	Boron	mg/L	15	0	0%	0.900	0.094	0.185	0.183	0.910	0.137	0.177	0.237	0.179	>= 0.10	0.596	>= 0.10	0.278	Gamma; Lognormal; Normal	Normal
22_2_3_107	MW-12	Appendix III	Calcium	mg/L	15	0	0%	0.925	0.232	0.142	0.574	0.909	0.132	0.172	0.272	0.169	>= 0.10	0.484	>= 0.10	0.300	Gamma; Lognormal; Normal	Normal
22_2_3_108	MW-12	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.889	0.066	0.266	0.005	0.922	0.205	0.226	0.038	0.243	0.01 <= p < 0.05	0.646	0.05 <= p < 0.10	0.244	Gamma; Lognormal; Normal	Normal
22_2_3_112	MW-12	Appendix III	Fluoride	mg/L	15	0	0%	0.875	0.040	0.225	0.040	0.913	0.151	0.179	0.217	0.199	>= 0.10	0.705	0.05 <= p < 0.10	0.319	Gamma; Lognormal	Gamma
22_2_3_120	MW-12	Appendix III	pH (field)	su	15	0	0%	0.980	0.972	0.122	0.793	0.980	0.969	0.126	0.756	0.117	>= 0.10	0.198	>= 0.10	0.043	Gamma; Lognormal; Normal	Normal
22_2_3_124	MW-12	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	0.932	0.293	0.153	0.454	0.945	0.445	0.146	0.523	0.125	>= 0.10	0.337	>= 0.10	0.381	Gamma; Lognormal; Normal	Normal
22_2_3_126	MW-12	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	0.957	0.644	0.169	0.300	0.897	0.086	0.175	0.250	0.154	>= 0.10	0.450	>= 0.10	0.368	Gamma; Lognormal; Normal	Normal
22_2_4_101	MW-12	Appendix IV	Antimony	mg/L	15	0	0%	0.912	0.143	0.123	0.787	0.965	0.775	0.135	0.654	0.134	>= 0.10	0.250	>= 0.10	0.421	Gamma; Lognormal; Normal	Normal
22_2_4_102	MW-12	Appendix IV	Arsenic	mg/L	15	0	0%	0.878	0.045	0.236	0.024	0.891	0.069	0.201	0.107	0.219	0.05 <= p < 0.10	0.775	0.01 <= p < 0.05	0.315	Gamma; Lognormal	Gamma
22_2_4_103	MW-12	Appendix IV	Barium	mg/L	15	0	0%	0.862	0.026	0.184	0.185	0.955	0.609	0.164	0.338	0.174	>= 0.10	0.428	>= 0.10	0.507	Gamma; Lognormal; Normal	Normal
22_2_4_104	MW-12	Appendix IV	Beryllium	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
22_2_4_106	MW-12	Appendix IV	Cadmium	mg/L	15	0	0%	0.900	0.096	0.170	0.286	0.960	0.693	0.116	0.847	0.128	>= 0.10	0.299	>= 0.10	0.560	Gamma; Lognormal; Normal	Normal
22_2_4_109	MW-12	Appendix IV	Chromium, Total	mg/L	15	5	33%	0.889	0.164	0.198	0.321	0.936	0.510	0.179	0.481	0.199	>= 0.10	0.374	>= 0.10	0.468	Gamma; Lognormal; Normal	Normal
22_2_4_110	MW-12	Appendix IV	Cobalt	mg/L	15	5	33%	0.887	0.158	0.171	0.556	0.944	0.597	0.162	0.646	0.165	>= 0.10	0.331	>= 0.10	0.715	Gamma; Lognormal; Normal	Normal
22_2_4_113	MW-12	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.875	0.040	0.225	0.040	0.913	0.151	0.179	0.217	0.199	>= 0.10	0.705	0.05 <= p < 0.10	0.319	Gamma; Lognormal	Gamma
22_2_4_115	MW-12	Appendix IV	Lead	mg/L	15	6	40%	0.856	0.087	0.262	0.075	0.865	0.110	0.216	0.260	0.237	>= 0.10	0.614	>= 0.10	0.523	Gamma; Lognormal; Normal	Normal
22_2_4_116	MW-12	Appendix IV	Lithium	mg/L	15	0	0%	0.919	0.188	0.171	0.278	0.922	0.208	0.150	0.479	0.167	>= 0.10	0.442	>= 0.10	0.416	Gamma; Lognormal; Normal	Normal
22_2_4_117	MW-12	Appendix IV	Mercury	mg/L	15	12	80%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		4.837		Nonparametric
22_2_4_118	MW-12	Appendix IV	Molybdenum	mg/L	15	0	0%	0.734	0.001	0.237	0.023	0.903	0.105	0.153	0.447	0.176	>= 0.10	0.653	0.05 <= p < 0.10	0.332	Gamma; Lognormal	Gamma
22_2_4_121	MW-12	Appendix IV	Radium 226 and 228	pCi/L	15	10	67%	0.895	0.385	0.231	0.510	0.931	0.605	0.195	0.771	0.221	>= 0.10	0.312	>= 0.10	0.332	Gamma; Lognormal; Normal	Nonparametric
22_2_4_122	MW-12	Appendix IV	Selenium	mg/L	15	0	0%	0.862	0.026	0.159	0.393	0.938	0.364	0.149	0.499	0.108	>= 0.10	0.251	>= 0.10	1.077	Gamma; Lognormal; Normal	Gamma
22_2_4_125	MW-12	Appendix IV	Thallium	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
22_2_5_111	MW-12	Part 115	Copper	mg/L	15	0	0%	0.849	0.017	0.182	0.199	0.982	0.982	0.113	0.870	0.117	>= 0.10	0.297	>= 0.10	0.453	Gamma; Lognormal; Normal	Normal
22_2_5_114	MW-12	Part 115	Iron	mg/L	15	6	40%	0.773	0.010	0.261	0.077	0.962	0.819	0.150	0.808	0.175	>= 0.10	0.356	>= 0.10	0.583	Gamma; Lognormal; Normal	Normal
22_2_5_119	MW-12	Part 115	Nickel	mg/L	15	0	0%	0.939	0.364	0.107	0.914	0.915	0.161	0.151	0.469	0.135	>= 0.10	0.375	>= 0.10	0.313	Gamma; Lognormal; Normal	Normal
22_2_5_123	MW-12	Part 115	Silver	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
22_2_5_128	MW-12	Part 115	Vanadium	mg/L	15	6	40%	0.873	0.134	0.215	0.270	0.941	0.597	0.186	0.497	0.206	>= 0.10	0.363	>= 0.10	0.336	Gamma; Lognormal; Normal	Normal
22_2_5_129	MW-12	Part 115	Zinc	mg/L	15	0	0%	0.907	0.120	0.153	0.446	0.918	0.178	0.215	0.061	0.185	>= 0.10	0.540	>= 0.10	0.442	Gamma; Lognormal; Normal	Normal
28_1_3_105	MW-18	Appendix III	Boron	mg/L	15	0	0%	0.913	0.149	0.169	0.295	0.923	0.211	0.161	0.374	0.166	>= 0.10	0.522	>= 0.10	0.303	Gamma; Lognormal; Normal	Normal
28_1_3_107	MW-18	Appendix III	Calcium	mg/L	15	0	0%	0.958	0.660	0.173	0.263	0.943	0.422	0.208	0.080	0.195	>= 0.10	0.380	>= 0.10	0.188	Gamma; Lognormal; Normal	Normal
28_1_3_108	MW-18	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.960	0.699	0.140	0.592	0.951	0.539	0.152	0.465	0.147	>= 0.10	0.334	>= 0.10	0.205	Gamma; Lognormal; Normal	Normal
28_1_3_112	MW-18	Appendix III	Fluoride	mg/L	15	0	0%	0.953	0.578	0.162	0.357	0.963	0.739	0.142	0.570	0.154	>= 0.10	0.345	>= 0.10	0.176	Gamma; Lognormal; Normal	Normal

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Normal		Lognormal		Gamma				Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution				
								S-W		Lilliefors		S-W		Lilliefors					K-S		A-D	
								Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value				Stat.	p-Value	Stat.	p-Value
28_1_3_120	MW-18	Appendix III	pH (field)	su	15	0	0%	0.945	0.449	0.203	0.099	0.944	0.430	0.205	0.091	0.200	>= 0.10	0.441	>= 0.10	0.011	Gamma; Lognormal; Normal	Normal
28_1_3_124	MW-18	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	0.887	0.061	0.281	0.002	0.919	0.185	0.236	0.024	0.252	0.01 <= p < 0.05	0.723	0.05 <= p < 0.10	0.247	Gamma; Lognormal; Normal	Normal
28_1_3_126	MW-18	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	0.934	0.308	0.233	0.027	0.948	0.489	0.207	0.083	0.215	0.05 <= p < 0.10	0.446	>= 0.10	0.140	Gamma; Lognormal; Normal	Normal
28_1_4_101	MW-18	Appendix IV	Antimony	mg/L	15	3	20%	0.788	0.007	0.256	0.029	0.847	0.033	0.230	0.079	0.248	0.05 <= p < 0.10	0.920	0.01 <= p < 0.05	0.371	Gamma; Lognormal	Gamma
28_1_4_102	MW-18	Appendix IV	Arsenic	mg/L	15	0	0%	0.933	0.303	0.185	0.184	0.965	0.774	0.149	0.499	0.152	>= 0.10	0.339	>= 0.10	0.282	Gamma; Lognormal; Normal	Normal
28_1_4_103	MW-18	Appendix IV	Barium	mg/L	15	0	0%	0.930	0.272	0.179	0.221	0.927	0.246	0.162	0.355	0.177	>= 0.10	0.498	>= 0.10	0.277	Gamma; Lognormal; Normal	Normal
28_1_4_104	MW-18	Appendix IV	Beryllium	mg/L	15	13	87%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.076		Nonparametric
28_1_4_106	MW-18	Appendix IV	Cadmium	mg/L	15	6	40%	0.910	0.314	0.168	0.654	0.943	0.617	0.165	0.685	0.176	>= 0.10	0.295	>= 0.10	0.551	Gamma; Lognormal; Normal	Normal
28_1_4_109	MW-18	Appendix IV	Chromium, Total	mg/L	15	13	87%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.654		Nonparametric
28_1_4_110	MW-18	Appendix IV	Cobalt	mg/L	15	0	0%	0.798	0.003	0.301	0.001	0.892	0.072	0.248	0.014	0.274	< 0.01	0.940	0.01 <= p < 0.05	0.452	Lognormal	Lognormal
28_1_4_113	MW-18	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.953	0.578	0.162	0.357	0.963	0.739	0.142	0.570	0.154	>= 0.10	0.345	>= 0.10	0.176	Gamma; Lognormal; Normal	Normal
28_1_4_115	MW-18	Appendix IV	Lead	mg/L	15	10	67%	0.643	0.002	0.412	0.006	0.685	0.007	0.381	0.017	0.405	0.01 <= p < 0.05	0.947	< 0.01	0.351	Nonparametric	Nonparametric
28_1_4_116	MW-18	Appendix IV	Lithium	mg/L	15	0	0%	0.903	0.105	0.199	0.113	0.902	0.101	0.203	0.097	0.208	0.05 <= p < 0.10	0.705	0.05 <= p < 0.10	0.244	Gamma; Lognormal; Normal	Normal
28_1_4_117	MW-18	Appendix IV	Mercury	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
28_1_4_118	MW-18	Appendix IV	Molybdenum	mg/L	15	0	0%	0.913	0.150	0.195	0.132	0.938	0.359	0.150	0.483	0.168	>= 0.10	0.477	>= 0.10	0.261	Gamma; Lognormal; Normal	Normal
28_1_4_121	MW-18	Appendix IV	Radium 226 and 228	pCi/L	15	9	60%	0.813	0.076	0.326	0.046	0.913	0.456	0.263	0.217	0.281	>= 0.10	0.443	>= 0.10	0.343	Gamma; Lognormal; Normal	Nonparametric
28_1_4_122	MW-18	Appendix IV	Selenium	mg/L	15	0	0%	0.839	0.012	0.186	0.177	0.919	0.187	0.175	0.247	0.175	>= 0.10	0.497	>= 0.10	0.875	Gamma; Lognormal; Normal	Normal
28_1_4_125	MW-18	Appendix IV	Thallium	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
28_1_5_111	MW-18	Part 115	Copper	mg/L	15	0	0%	0.674	0.000	0.328	0.000	0.810	0.005	0.241	0.019	0.269	< 0.01	1.568	< 0.01	0.478	Nonparametric	Nonparametric
28_1_5_114	MW-18	Part 115	Iron	mg/L	15	0	0%	0.970	0.863	0.143	0.563	0.990	0.999	0.113	0.869	0.112	>= 0.10	0.155	>= 0.10	0.226	Gamma; Lognormal; Normal	Normal
28_1_5_119	MW-18	Part 115	Nickel	mg/L	15	0	0%	0.826	0.008	0.279	0.003	0.893	0.075	0.234	0.026	0.254	0.01 <= p < 0.05	0.915	0.01 <= p < 0.05	0.326	Lognormal	Lognormal
28_1_5_123	MW-18	Part 115	Silver	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
28_1_5_128	MW-18	Part 115	Vanadium	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
28_1_5_129	MW-18	Part 115	Zinc	mg/L	15	0	0%	0.982	0.981	0.121	0.800	0.968	0.831	0.135	0.657	0.107	>= 0.10	0.136	>= 0.10	0.419	Gamma; Lognormal; Normal	Normal
29_1_3_105	MW-19	Appendix III	Boron	mg/L	15	0	0%	0.922	0.204	0.124	0.774	0.925	0.230	0.130	0.703	0.137	>= 0.10	0.393	>= 0.10	0.196	Gamma; Lognormal; Normal	Normal
29_1_3_107	MW-19	Appendix III	Calcium	mg/L	15	0	0%	0.947	0.486	0.139	0.609	0.924	0.218	0.159	0.389	0.155	>= 0.10	0.474	>= 0.10	0.123	Gamma; Lognormal; Normal	Normal
29_1_3_108	MW-19	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.927	0.244	0.187	0.168	0.958	0.658	0.141	0.584	0.142	>= 0.10	0.349	>= 0.10	0.363	Gamma; Lognormal; Normal	Normal
29_1_3_112	MW-19	Appendix III	Fluoride	mg/L	15	0	0%	0.959	0.679	0.109	0.903	0.957	0.647	0.134	0.659	0.130	>= 0.10	0.271	>= 0.10	0.154	Gamma; Lognormal; Normal	Normal
29_1_3_120	MW-19	Appendix III	pH (field)	su	15	0	0%	0.903	0.105	0.144	0.546	0.893	0.073	0.148	0.505	0.149	>= 0.10	0.496	>= 0.10	0.024	Gamma; Lognormal; Normal	Normal
29_1_3_124	MW-19	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	0.970	0.860	0.102	0.944	0.948	0.499	0.115	0.856	0.118	>= 0.10	0.225	>= 0.10	0.204	Gamma; Lognormal; Normal	Normal
29_1_3_126	MW-19	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	0.858	0.023	0.216	0.059	0.862	0.026	0.209	0.078	0.218	0.05 <= p < 0.10	0.794	0.01 <= p < 0.05	0.127	Gamma; Lognormal; Normal	Normal
29_1_4_101	MW-19	Appendix IV	Antimony	mg/L	15	12	80%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.678		Nonparametric
29_1_4_102	MW-19	Appendix IV	Arsenic	mg/L	15	0	0%	0.924	0.225	0.144	0.551	0.916	0.167	0.173	0.264	0.163	>= 0.10	0.496	>= 0.10	0.335	Gamma; Lognormal; Normal	Normal
29_1_4_103	MW-19	Appendix IV	Barium	mg/L	15	0	0%	0.951	0.533	0.173	0.264	0.966	0.800	0.154	0.443	0.163	>= 0.10	0.332	>= 0.10	0.141	Gamma; Lognormal; Normal	Normal
29_1_4_104	MW-19	Appendix IV	Beryllium	mg/L	15	3	20%	0.893	0.131	0.192	0.259	0.931	0.396	0.149	0.657	0.156	>= 0.10	0.387	>= 0.10	0.240	Gamma; Lognormal; Normal	Normal
29_1_4_106	MW-19	Appendix IV	Cadmium	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
29_1_4_109	MW-19	Appendix IV	Chromium, Total	mg/L	15	5	33%	0.777	0.008	0.269	0.038	0.870	0.099	0.224	0.165	0.239	>= 0.10	0.804	0.01 <= p < 0.05	0.260	Gamma; Lognormal	Gamma
29_1_4_110	MW-19	Appendix IV	Cobalt	mg/L	15	1	7%	0.957	0.668	0.171	0.329	0.941	0.428	0.187	0.202	0.147	>= 0.10	0.275	>= 0.10	0.632	Gamma; Lognormal; Normal	Normal
29_1_4_113	MW-19	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.959	0.679	0.109	0.903	0.957	0.647	0.134	0.659	0.130	>= 0.10	0.271	>= 0.10	0.154	Gamma; Lognormal; Normal	Normal

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Normal		Lognormal		Gamma				Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution				
								S-W		Lilliefors		S-W		Lilliefors					K-S		A-D	
								Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value				Stat.	p-Value	Stat.	p-Value
29_1_4_115	MW-19	Appendix IV	Lead	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric	
29_1_4_116	MW-19	Appendix IV	Lithium	mg/L	15	0	0%	0.931	0.287	0.169	0.297	0.930	0.274	0.145	0.543	0.152	>= 0.10	0.409	>= 0.10	0.131	Gamma; Lognormal; Normal	Normal
29_1_4_117	MW-19	Appendix IV	Mercury	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric	
29_1_4_118	MW-19	Appendix IV	Molybdenum	mg/L	15	0	0%	0.932	0.296	0.191	0.149	0.914	0.154	0.173	0.260	0.157	>= 0.10	0.446	>= 0.10	0.420	Gamma; Lognormal; Normal	Normal
29_1_4_121	MW-19	Appendix IV	Radium 226 and 228	pCi/L	15	7	47%	0.900	0.291	0.208	0.391	0.876	0.173	0.251	0.144	0.245	>= 0.10	0.509	>= 0.10	0.323	Gamma; Lognormal; Normal	Normal
29_1_4_122	MW-19	Appendix IV	Selenium	mg/L	15	10	67%	0.807	0.093	0.261	0.315	0.838	0.160	0.250	0.384	0.272	>= 0.10	0.511	>= 0.10	0.215	Gamma; Lognormal; Normal	Nonparametric
29_1_4_125	MW-19	Appendix IV	Thallium	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric	
29_1_5_111	MW-19	Part 115	Copper	mg/L	15	13	87%	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.328		Nonparametric	
29_1_5_114	MW-19	Part 115	Iron	mg/L	15	0	0%	0.950	0.522	0.144	0.556	0.970	0.857	0.106	0.924	0.117	>= 0.10	0.249	>= 0.10	0.201	Gamma; Lognormal; Normal	Normal
29_1_5_119	MW-19	Part 115	Nickel	mg/L	15	1	7%	0.476	0.000	0.386	0.000	0.814	0.007	0.228	0.046	0.302	< 0.01	1.525	< 0.01	0.693	Nonparametric	Nonparametric
29_1_5_123	MW-19	Part 115	Silver	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric	
29_1_5_128	MW-19	Part 115	Vanadium	mg/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric	
29_1_5_129	MW-19	Part 115	Zinc	mg/L	15	10	67%	0.823	0.122	0.330	0.080	0.814	0.106	0.340	0.060	0.361	0.01 <= p < 0.05	0.615	0.05 <= p < 0.10	0.406	Gamma; Lognormal; Normal	Nonparametric
30_1_3_105	MW-20	Appendix III	Boron	mg/L	15	0	0%	0.889	0.064	0.214	0.062	0.906	0.118	0.224	0.041	0.229	0.01 <= p < 0.05	0.801	0.01 <= p < 0.05	0.176	Lognormal; Normal	Normal
30_1_3_107	MW-20	Appendix III	Calcium	mg/L	15	0	0%	0.857	0.022	0.230	0.031	0.747	0.001	0.288	0.002	0.263	< 0.01	1.187	< 0.01	0.231	Nonparametric	Nonparametric
30_1_3_108	MW-20	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.929	0.265	0.190	0.154	0.864	0.028	0.255	0.010	0.235	0.01 <= p < 0.05	0.760	0.01 <= p < 0.05	0.358	Normal	Normal
30_1_3_112	MW-20	Appendix III	Fluoride	mg/L	15	0	0%	0.706	0.000	0.290	0.001	0.832	0.010	0.241	0.019	0.238	0.01 <= p < 0.05	1.197	< 0.01	0.307	Nonparametric	Nonparametric
30_1_3_120	MW-20	Appendix III	pH (field)	su	15	0	0%	0.915	0.164	0.223	0.044	0.914	0.157	0.223	0.044	0.231	0.01 <= p < 0.05	0.611	>= 0.10	0.015	Gamma; Lognormal; Normal	Normal
30_1_3_124	MW-20	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	0.928	0.254	0.152	0.465	0.946	0.461	0.163	0.354	0.158	>= 0.10	0.303	>= 0.10	0.618	Gamma; Lognormal; Normal	Normal
30_1_3_126	MW-20	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	0.954	0.594	0.168	0.305	0.960	0.701	0.192	0.143	0.183	>= 0.10	0.369	>= 0.10	0.136	Gamma; Lognormal; Normal	Normal
30_1_4_101	MW-20	Appendix IV	Antimony	mg/L	15	5	33%	0.956	0.740	0.156	0.696	0.932	0.467	0.186	0.418	0.171	>= 0.10	0.331	>= 0.10	0.363	Gamma; Lognormal; Normal	Normal
30_1_4_102	MW-20	Appendix IV	Arsenic	mg/L	15	0	0%	0.935	0.327	0.180	0.215	0.944	0.435	0.156	0.415	0.167	>= 0.10	0.418	>= 0.10	0.201	Gamma; Lognormal; Normal	Normal
30_1_4_103	MW-20	Appendix IV	Barium	mg/L	15	0	0%	0.793	0.003	0.283	0.002	0.890	0.066	0.235	0.026	0.253	0.01 <= p < 0.05	0.996	0.01 <= p < 0.05	0.282	Lognormal	Lognormal
30_1_4_104	MW-20	Appendix IV	Beryllium	mg/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric	
30_1_4_106	MW-20	Appendix IV	Cadmium	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric	
30_1_4_109	MW-20	Appendix IV	Chromium, Total	mg/L	15	7	47%	0.927	0.492	0.260	0.116	0.944	0.655	0.243	0.176	0.254	>= 0.10	0.342	>= 0.10	0.138	Gamma; Lognormal; Normal	Normal
30_1_4_110	MW-20	Appendix IV	Cobalt	mg/L	15	0	0%	0.962	0.732	0.150	0.486	0.955	0.606	0.173	0.267	0.172	>= 0.10	0.272	>= 0.10	0.248	Gamma; Lognormal; Normal	Normal
30_1_4_113	MW-20	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.706	0.000	0.290	0.001	0.832	0.010	0.241	0.019	0.238	0.01 <= p < 0.05	1.197	< 0.01	0.307	Nonparametric	Nonparametric
30_1_4_115	MW-20	Appendix IV	Lead	mg/L	15	0	0%	0.926	0.236	0.179	0.221	0.954	0.588	0.137	0.630	0.151	>= 0.10	0.350	>= 0.10	0.261	Gamma; Lognormal; Normal	Normal
30_1_4_116	MW-20	Appendix IV	Lithium	mg/L	15	0	0%	0.956	0.628	0.123	0.781	0.905	0.114	0.172	0.276	0.149	>= 0.10	0.484	>= 0.10	0.315	Gamma; Lognormal; Normal	Normal
30_1_4_117	MW-20	Appendix IV	Mercury	mg/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric	
30_1_4_118	MW-20	Appendix IV	Molybdenum	mg/L	15	0	0%	0.965	0.776	0.130	0.713	0.966	0.793	0.151	0.472	0.150	>= 0.10	0.292	>= 0.10	0.163	Gamma; Lognormal; Normal	Normal
30_1_4_121	MW-20	Appendix IV	Radium 226 and 228	pCi/L	14	7	50%	0.821	0.065	0.274	0.114	0.871	0.188	0.263	0.150	0.283	>= 0.10	0.544	>= 0.10	0.382	Gamma; Lognormal; Normal	Nonparametric
30_1_4_122	MW-20	Appendix IV	Selenium	mg/L	15	9	60%	0.675	0.003	0.400	0.003	0.757	0.023	0.352	0.019	0.375	0.01 <= p < 0.05	0.870	0.01 <= p < 0.05	0.347	Nonparametric	Nonparametric
30_1_4_125	MW-20	Appendix IV	Thallium	mg/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric	
30_1_5_111	MW-20	Part 115	Copper	mg/L	15	2	13%	0.825	0.014	0.206	0.135	0.928	0.318	0.150	0.592	0.156	>= 0.10	0.514	>= 0.10	0.411	Gamma; Lognormal; Normal	Normal
30_1_5_114	MW-20	Part 115	Iron	mg/L	15	0	0%	0.935	0.321	0.172	0.273	0.920	0.192	0.200	0.111	0.189	>= 0.10	0.425	>= 0.10	0.146	Gamma; Lognormal; Normal	Normal
30_1_5_119	MW-20	Part 115	Nickel	mg/L	15	0	0%	0.913	0.150	0.220	0.049	0.883	0.052	0.218	0.054	0.227	0.01 <= p < 0.05	0.617	>= 0.10	0.226	Gamma; Lognormal; Normal	Normal
30_1_5_123	MW-20	Part 115	Silver	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric	

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Normal		Lognormal				Gamma				Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution		
								S-W		Lilliefors		S-W		Lilliefors		K-S					A-D	
								Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value				Stat.	p-Value
30_1_5_128	MW-20	Part 115	Vanadium	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric	
30_1_5_129	MW-20	Part 115	Zinc	mg/L	15	0	0%	0.796	0.003	0.320	0.000	0.915	0.161	0.225	0.040	0.258	0.01 <= p < 0.05	0.849	0.01 <= p < 0.05	0.494	Lognormal	Lognormal
40_1_3_105	MW-30	Appendix III	Boron	mg/L	15	0	0%	0.700	0.000	0.284	0.002	0.820	0.007	0.253	0.011	0.266	< 0.01	1.171	< 0.01	0.201	Nonparametric	Nonparametric
40_1_3_107	MW-30	Appendix III	Calcium	mg/L	15	0	0%	0.699	0.000	0.341	0.000	0.772	0.002	0.298	0.001	0.315	< 0.01	1.675	< 0.01	0.250	Nonparametric	Nonparametric
40_1_3_108	MW-30	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.583	0.000	0.409	0.000	0.789	0.003	0.291	0.001	0.355	< 0.01	1.879	< 0.01	0.848	Nonparametric	Nonparametric
40_1_3_112	MW-30	Appendix III	Fluoride	mg/L	15	0	0%	0.840	0.013	0.265	0.006	0.743	0.001	0.293	0.001	0.287	< 0.01	1.285	< 0.01	0.200	Nonparametric	Nonparametric
40_1_3_120	MW-30	Appendix III	pH (field)	su	15	0	0%	0.798	0.003	0.240	0.020	0.785	0.002	0.246	0.015	0.241	0.01 <= p < 0.05	1.065	< 0.01	0.028	Nonparametric	Nonparametric
40_1_3_124	MW-30	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	0.800	0.004	0.218	0.054	0.726	0.000	0.243	0.017	0.224	0.01 <= p < 0.05	1.358	< 0.01	0.223	Normal	Normal
40_1_3_126	MW-30	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	0.689	0.000	0.336	0.000	0.766	0.001	0.303	0.001	0.316	< 0.01	1.779	< 0.01	0.229	Nonparametric	Nonparametric
40_1_4_101	MW-30	Appendix IV	Antimony	mg/L	15	13	87%	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.343		Nonparametric	
40_1_4_102	MW-30	Appendix IV	Arsenic	mg/L	15	2	13%	0.705	0.001	0.316	0.001	0.958	0.727	0.157	0.511	0.219	>= 0.10	0.665	0.05 <= p < 0.10	0.876	Gamma; Lognormal	Gamma
40_1_4_103	MW-30	Appendix IV	Barium	mg/L	15	0	0%	0.904	0.108	0.148	0.503	0.930	0.271	0.118	0.828	0.130	>= 0.10	0.423	>= 0.10	0.306	Gamma; Lognormal; Normal	Normal
40_1_4_104	MW-30	Appendix IV	Beryllium	mg/L	15	13	87%	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.516		Nonparametric	
40_1_4_106	MW-30	Appendix IV	Cadmium	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric	
40_1_4_109	MW-30	Appendix IV	Chromium, Total	mg/L	15	0	0%	0.958	0.655	0.161	0.371	0.932	0.293	0.145	0.535	0.161	>= 0.10	0.329	>= 0.10	0.432	Gamma; Lognormal; Normal	Normal
40_1_4_110	MW-30	Appendix IV	Cobalt	mg/L	15	0	0%	0.352	0.000	0.432	0.000	0.781	0.002	0.223	0.044	0.319	< 0.01	2.574	< 0.01	1.135	Nonparametric	Nonparametric
40_1_4_113	MW-30	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.840	0.013	0.265	0.006	0.743	0.001	0.293	0.001	0.287	< 0.01	1.285	< 0.01	0.200	Nonparametric	Nonparametric
40_1_4_115	MW-30	Appendix IV	Lead	mg/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric	
40_1_4_116	MW-30	Appendix IV	Lithium	mg/L	15	0	0%	0.733	0.001	0.246	0.015	0.840	0.013	0.214	0.064	0.229	0.01 <= p < 0.05	1.062	< 0.01	0.255	Lognormal	Lognormal
40_1_4_117	MW-30	Appendix IV	Mercury	mg/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric	
40_1_4_118	MW-30	Appendix IV	Molybdenum	mg/L	15	3	20%	0.498	0.000	0.352	0.000	0.903	0.175	0.177	0.378	0.262	0.01 <= p < 0.05	1.158	< 0.01	1.109	Lognormal	Nonparametric
40_1_4_121	MW-30	Appendix IV	Radium 226 and 228	pCi/L	15	8	53%	0.847	0.116	0.293	0.071	0.891	0.282	0.252	0.196	0.271	>= 0.10	0.521	>= 0.10	0.268	Gamma; Lognormal; Normal	Nonparametric
40_1_4_122	MW-30	Appendix IV	Selenium	mg/L	15	7	47%	0.766	0.012	0.270	0.087	0.880	0.188	0.228	0.257	0.253	>= 0.10	0.601	>= 0.10	0.458	Gamma; Lognormal; Normal	Normal
40_1_4_125	MW-30	Appendix IV	Thallium	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric	
40_1_5_111	MW-30	Part 115	Copper	mg/L	15	10	67%	0.906	0.443	0.233	0.496	0.964	0.836	0.190	0.797	0.219	>= 0.10	0.262	>= 0.10	0.389	Gamma; Lognormal; Normal	Nonparametric
40_1_5_114	MW-30	Part 115	Iron	mg/L	15	0	0%	0.708	0.000	0.239	0.021	0.974	0.910	0.121	0.798	0.173	>= 0.10	0.469	>= 0.10	0.789	Gamma; Lognormal	Gamma
40_1_5_119	MW-30	Part 115	Nickel	mg/L	15	3	20%	0.367	0.000	0.493	0.000	0.775	0.005	0.241	0.053	0.391	< 0.01	2.271	< 0.01	1.330	Lognormal	Nonparametric
40_1_5_123	MW-30	Part 115	Silver	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric	
40_1_5_128	MW-30	Part 115	Vanadium	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric	
40_1_5_129	MW-30	Part 115	Zinc	mg/L	15	10	67%	0.576	0.000	0.462	0.001	0.725	0.017	0.392	0.012	0.457	< 0.01	1.004	< 0.01	1.477	Nonparametric	Nonparametric
41_1_3_105	MW-31	Appendix III	Boron	mg/L	15	0	0%	0.969	0.837	0.173	0.264	0.975	0.925	0.149	0.489	0.159	>= 0.10	0.237	>= 0.10	0.133	Gamma; Lognormal; Normal	Normal
41_1_3_107	MW-31	Appendix III	Calcium	mg/L	15	0	0%	0.930	0.270	0.179	0.217	0.928	0.251	0.177	0.234	0.169	>= 0.10	0.477	>= 0.10	0.125	Gamma; Lognormal; Normal	Normal
41_1_3_108	MW-31	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.935	0.328	0.217	0.057	0.939	0.373	0.203	0.095	0.211	0.05 <= p < 0.10	0.581	>= 0.10	0.086	Gamma; Lognormal; Normal	Normal
41_1_3_112	MW-31	Appendix III	Fluoride	mg/L	15	0	0%	0.922	0.207	0.233	0.027	0.921	0.203	0.222	0.045	0.226	0.01 <= p < 0.05	0.605	>= 0.10	0.060	Gamma; Lognormal; Normal	Normal
41_1_3_120	MW-31	Appendix III	pH (field)	su	15	0	0%	0.922	0.205	0.159	0.392	0.924	0.224	0.156	0.420	0.154	>= 0.10	0.469	>= 0.10	0.014	Gamma; Lognormal; Normal	Normal
41_1_3_124	MW-31	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	0.929	0.267	0.144	0.545	0.910	0.138	0.144	0.550	0.131	>= 0.10	0.389	>= 0.10	0.528	Gamma; Lognormal; Normal	Normal
41_1_3_126	MW-31	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	0.907	0.121	0.178	0.227	0.922	0.203	0.162	0.359	0.167	>= 0.10	0.441	>= 0.10	0.085	Gamma; Lognormal; Normal	Normal
41_1_4_101	MW-31	Appendix IV	Antimony	mg/L	15	7	47%	0.795	0.025	0.328	0.011	0.887	0.221	0.273	0.081	0.312	0.01 <= p < 0.05	0.622	0.05 <= p < 0.10	0.843	Gamma; Lognormal	Gamma
41_1_4_102	MW-31	Appendix IV	Arsenic	mg/L	15	0	0%	0.952	0.556	0.212	0.067	0.959	0.682	0.170	0.284	0.185	>= 0.10	0.371	>= 0.10	0.229	Gamma; Lognormal; Normal	Normal

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Normal				Lognormal				Gamma				Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
								Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value			
41_1_4_103	MW-31	Appendix IV	Barium	mg/L	15	0	0%	0.931	0.281	0.163	0.348	0.980	0.968	0.114	0.861	0.133	>= 0.10	0.248	>= 0.10	0.282	Gamma; Lognormal; Normal	Normal
41_1_4_104	MW-31	Appendix IV	Beryllium	mg/L	15	13	87%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.407		Nonparametric
41_1_4_106	MW-31	Appendix IV	Cadmium	mg/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
41_1_4_109	MW-31	Appendix IV	Chromium, Total	mg/L	15	0	0%	0.873	0.038	0.174	0.253	0.941	0.399	0.129	0.717	0.145	>= 0.10	0.416	>= 0.10	0.237	Gamma; Lognormal; Normal	Normal
41_1_4_110	MW-31	Appendix IV	Cobalt	mg/L	15	3	20%	0.871	0.068	0.224	0.099	0.960	0.780	0.167	0.474	0.188	>= 0.10	0.412	>= 0.10	0.336	Gamma; Lognormal; Normal	Normal
41_1_4_113	MW-31	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.922	0.207	0.233	0.027	0.921	0.203	0.222	0.045	0.226	0.01 <= p < 0.05	0.605	>= 0.10	0.060	Gamma; Lognormal; Normal	Normal
41_1_4_115	MW-31	Appendix IV	Lead	mg/L	15	13	87%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.152		Nonparametric
41_1_4_116	MW-31	Appendix IV	Lithium	mg/L	15	0	0%	0.945	0.445	0.191	0.149	0.900	0.095	0.203	0.096	0.212	0.05 <= p < 0.10	0.604	>= 0.10	0.184	Gamma; Lognormal; Normal	Normal
41_1_4_117	MW-31	Appendix IV	Mercury	mg/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
41_1_4_118	MW-31	Appendix IV	Molybdenum	mg/L	15	0	0%	0.936	0.334	0.223	0.043	0.877	0.044	0.300	0.001	0.275	< 0.01	0.711	0.05 <= p < 0.10	0.424	Gamma; Normal	Normal
41_1_4_121	MW-31	Appendix IV	Radium 226 and 228	pCi/L	15	6	40%	0.810	0.026	0.274	0.050	0.874	0.135	0.215	0.269	0.234	>= 0.10	0.665	0.05 <= p < 0.10	0.311	Gamma; Lognormal	Gamma
41_1_4_122	MW-31	Appendix IV	Selenium	mg/L	15	6	40%	0.480	0.000	0.460	0.000	0.630	0.000	0.367	0.001	0.417	< 0.01	1.831	< 0.01	0.605	Nonparametric	Nonparametric
41_1_4_125	MW-31	Appendix IV	Thallium	mg/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
41_1_5_111	MW-31	Part 115	Copper	mg/L	15	10	67%	0.881	0.313	0.290	0.181	0.936	0.636	0.249	0.388	0.259	>= 0.10	0.345	>= 0.10	0.240	Gamma; Lognormal; Normal	Nonparametric
41_1_5_114	MW-31	Part 115	Iron	mg/L	15	0	0%	0.816	0.006	0.288	0.002	0.864	0.028	0.252	0.011	0.283	< 0.01	0.960	0.01 <= p < 0.05	1.081	Nonparametric	Nonparametric
41_1_5_119	MW-31	Part 115	Nickel	mg/L	15	10	67%	0.602	0.001	0.450	0.001	0.756	0.034	0.377	0.019	0.435	< 0.01	0.930	< 0.01	1.104	Nonparametric	Nonparametric
41_1_5_123	MW-31	Part 115	Silver	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
41_1_5_128	MW-31	Part 115	Vanadium	mg/L	15	12	80%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.132		Nonparametric
41_1_5_129	MW-31	Part 115	Zinc	mg/L	15	9	60%	0.864	0.204	0.236	0.372	0.771	0.032	0.331	0.039	0.321	0.05 <= p < 0.10	0.726	0.01 <= p < 0.05	1.001	Gamma; Normal	Nonparametric
42_1_3_105	MW-32	Appendix III	Boron	mg/L	15	0	0%	0.821	0.007	0.280	0.002	0.872	0.036	0.271	0.004	0.281	< 0.01	0.964	0.01 <= p < 0.05	0.220	Nonparametric	Nonparametric
42_1_3_107	MW-32	Appendix III	Calcium	mg/L	15	0	0%	0.958	0.656	0.161	0.369	0.955	0.613	0.171	0.282	0.171	>= 0.10	0.417	>= 0.10	0.146	Gamma; Lognormal; Normal	Normal
42_1_3_108	MW-32	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.894	0.078	0.194	0.132	0.893	0.075	0.188	0.165	0.201	>= 0.10	0.622	0.05 <= p < 0.10	0.095	Gamma; Lognormal; Normal	Normal
42_1_3_112	MW-32	Appendix III	Fluoride	mg/L	15	0	0%	0.913	0.150	0.214	0.064	0.926	0.236	0.194	0.134	0.201	>= 0.10	0.626	0.05 <= p < 0.10	0.110	Gamma; Lognormal; Normal	Normal
42_1_3_120	MW-32	Appendix III	pH (field)	su	15	0	0%	0.952	0.552	0.137	0.635	0.952	0.550	0.137	0.631	0.145	>= 0.10	0.370	>= 0.10	0.010	Gamma; Lognormal; Normal	Normal
42_1_3_124	MW-32	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	0.929	0.259	0.146	0.530	0.901	0.098	0.192	0.142	0.173	>= 0.10	0.459	>= 0.10	1.109	Gamma; Lognormal; Normal	Gamma
42_1_3_126	MW-32	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	0.922	0.208	0.163	0.353	0.918	0.181	0.159	0.385	0.172	>= 0.10	0.453	>= 0.10	0.130	Gamma; Lognormal; Normal	Normal
42_1_4_101	MW-32	Appendix IV	Antimony	mg/L	15	11	73%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		1.090		Nonparametric
42_1_4_102	MW-32	Appendix IV	Arsenic	mg/L	15	0	0%	0.435	0.000	0.440	0.000	0.638	0.000	0.330	0.000	0.378	< 0.01	2.449	< 0.01	0.426	Nonparametric	Nonparametric
42_1_4_103	MW-32	Appendix IV	Barium	mg/L	15	0	0%	0.959	0.669	0.180	0.213	0.842	0.014	0.180	0.214	0.156	>= 0.10	0.398	>= 0.10	0.720	Gamma; Lognormal; Normal	Normal
42_1_4_104	MW-32	Appendix IV	Beryllium	mg/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
42_1_4_106	MW-32	Appendix IV	Cadmium	mg/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
42_1_4_109	MW-32	Appendix IV	Chromium, Total	mg/L	15	0	0%	0.417	0.000	0.398	0.000	0.660	0.000	0.238	0.022	0.298	< 0.01	2.440	< 0.01	0.567	Nonparametric	Nonparametric
42_1_4_110	MW-32	Appendix IV	Cobalt	mg/L	15	0	0%	0.577	0.000	0.290	0.001	0.861	0.025	0.191	0.148	0.226	0.01 <= p < 0.05	1.186	< 0.01	0.527	Lognormal	Lognormal
42_1_4_113	MW-32	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.913	0.150	0.214	0.064	0.926	0.236	0.194	0.134	0.201	>= 0.10	0.626	0.05 <= p < 0.10	0.110	Gamma; Lognormal; Normal	Normal
42_1_4_115	MW-32	Appendix IV	Lead	mg/L	15	11	73%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.654		Nonparametric
42_1_4_116	MW-32	Appendix IV	Lithium	mg/L	15	0	0%	0.871	0.035	0.154	0.440	0.915	0.160	0.151	0.468	0.155	>= 0.10	0.510	>= 0.10	0.239	Gamma; Lognormal; Normal	Normal
42_1_4_117	MW-32	Appendix IV	Mercury	mg/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
42_1_4_118	MW-32	Appendix IV	Molybdenum	mg/L	15	0	0%	0.896	0.083	0.185	0.184	0.949	0.508	0.144	0.549	0.149	>= 0.10	0.401	>= 0.10	0.271	Gamma; Lognormal; Normal	Normal
42_1_4_121	MW-32	Appendix IV	Radium 226 and 228	pCi/L	15	9	60%	0.885	0.292	0.269	0.189	0.884	0.289	0.260	0.232	0.284	>= 0.10	0.479	>= 0.10	0.242	Gamma; Lognormal; Normal	Nonparametric

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Normal				Lognormal				Gamma				Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
								Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value			
42_1_4_122	MW-32	Appendix IV	Selenium	mg/L	15	12	80%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.157		Nonparametric	
42_1_4_125	MW-32	Appendix IV	Thallium	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		Nonparametric	
42_1_5_111	MW-32	Part 115	Copper	mg/L	15	9	60%	0.508	0.000	0.485	0.000	0.650	0.002	0.410	0.002	0.483	< 0.01	1.395	< 0.01	1.659	Nonparametric	Nonparametric
42_1_5_114	MW-32	Part 115	Iron	mg/L	15	0	0%	0.941	0.397	0.152	0.461	0.921	0.200	0.168	0.306	0.170	>= 0.10	0.438	>= 0.10	0.195	Gamma; Lognormal; Normal	Normal
42_1_5_119	MW-32	Part 115	Nickel	mg/L	15	0	0%	0.332	0.000	0.479	0.000	0.593	0.000	0.297	0.001	0.390	< 0.01	3.473	< 0.01	0.843	Nonparametric	Nonparametric
42_1_5_123	MW-32	Part 115	Silver	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		Nonparametric	
42_1_5_128	MW-32	Part 115	Vanadium	mg/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		Nonparametric	
42_1_5_129	MW-32	Part 115	Zinc	mg/L	15	0	0%	0.633	0.000	0.407	0.000	0.744	0.001	0.305	0.001	0.370	< 0.01	2.120	< 0.01	1.261	Nonparametric	Nonparametric

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 4: Autocorrelation Tests, Non-Detects Excluded

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Autocorrelation	Box-Ljung p-value	Sig.
11_2_3_105	MW-01R	Appendix III	Boron	mg/L	15	0	0%	0.222	0.344	
11_2_3_107	MW-01R	Appendix III	Calcium	mg/L	15	0	0%	0.192	0.411	
11_2_3_108	MW-01R	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.088	0.707	
11_2_3_112	MW-01R	Appendix III	Fluoride	mg/L	15	0	0%	0.327	0.162	
11_2_3_120	MW-01R	Appendix III	pH (field)	su	15	0	0%	-0.091	0.696	
11_2_3_124	MW-01R	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	0.209	0.371	
11_2_3_126	MW-01R	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	-0.001	0.997	
11_2_4_101	MW-01R	Appendix IV	Antimony	mg/L	15	3	20%	0.394	0.124	
11_2_4_102	MW-01R	Appendix IV	Arsenic	mg/L	15	0	0%	-0.063	0.787	
11_2_4_103	MW-01R	Appendix IV	Barium	mg/L	15	0	0%	0.412	0.079	
11_2_4_104	MW-01R	Appendix IV	Beryllium	mg/L	15	2	13%	0.466	0.060	
11_2_4_106	MW-01R	Appendix IV	Cadmium	mg/L	15	12	80%	-0.267	0.464	
11_2_4_109	MW-01R	Appendix IV	Chromium, Total	mg/L	15	0	0%	-0.118	0.615	
11_2_4_110	MW-01R	Appendix IV	Cobalt	mg/L	15	0	0%	-0.246	0.294	
11_2_4_113	MW-01R	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.327	0.162	
11_2_4_115	MW-01R	Appendix IV	Lead	mg/L	15	2	13%	-0.063	0.800	
11_2_4_116	MW-01R	Appendix IV	Lithium	mg/L	15	0	0%	0.212	0.366	
11_2_4_118	MW-01R	Appendix IV	Molybdenum	mg/L	15	2	13%	0.023	0.927	
11_2_4_121	MW-01R	Appendix IV	Radium 226 and 228	pCi/L	15	9	60%	-0.747	0.021	*
11_2_4_122	MW-01R	Appendix IV	Selenium	mg/L	15	0	0%	-0.131	0.576	
11_2_5_111	MW-01R	Part 115	Copper	mg/L	15	6	40%	-0.291	0.306	
11_2_5_114	MW-01R	Part 115	Iron	mg/L	15	0	0%	0.373	0.111	
11_2_5_119	MW-01R	Part 115	Nickel	mg/L	15	0	0%	-0.132	0.573	
11_2_5_128	MW-01R	Part 115	Vanadium	mg/L	15	2	13%	0.229	0.356	
11_2_5_129	MW-01R	Part 115	Zinc	mg/L	15	3	20%	0.173	0.499	
12_2_3_105	MW-02	Appendix III	Boron	mg/L	15	0	0%	0.525	0.025	*
12_2_3_107	MW-02	Appendix III	Calcium	mg/L	15	0	0%	-0.054	0.817	
12_2_3_108	MW-02	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.059	0.802	
12_2_3_112	MW-02	Appendix III	Fluoride	mg/L	15	0	0%	0.367	0.118	
12_2_3_120	MW-02	Appendix III	pH (field)	su	15	0	0%	0.079	0.736	
12_2_3_124	MW-02	Appendix III	Sulfate (as SO4)	mg/L	15	10	67%	-0.513	0.129	
12_2_3_126	MW-02	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	0.306	0.192	
12_2_4_101	MW-02	Appendix IV	Antimony	mg/L	15	3	20%	-0.046	0.858	
12_2_4_102	MW-02	Appendix IV	Arsenic	mg/L	15	0	0%	0.145	0.536	
12_2_4_103	MW-02	Appendix IV	Barium	mg/L	15	0	0%	0.185	0.430	
12_2_4_104	MW-02	Appendix IV	Beryllium	mg/L	15	1	7%	0.258	0.284	
12_2_4_106	MW-02	Appendix IV	Cadmium	mg/L	15	10	67%	-0.299	0.376	
12_2_4_109	MW-02	Appendix IV	Chromium, Total	mg/L	15	0	0%	0.169	0.471	
12_2_4_110	MW-02	Appendix IV	Cobalt	mg/L	15	0	0%	0.143	0.541	
12_2_4_113	MW-02	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.367	0.118	
12_2_4_115	MW-02	Appendix IV	Lead	mg/L	15	1	7%	0.015	0.951	
12_2_4_116	MW-02	Appendix IV	Lithium	mg/L	15	0	0%	0.213	0.364	

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 4: Autocorrelation Tests, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Autocorrelation	Box-Ljung p-value	Sig.
12_2_4_117	MW-02	Appendix IV	Mercury	mg/L	15	14	93%	NA	NA	
12_2_4_118	MW-02	Appendix IV	Molybdenum	mg/L	15	0	0%	0.432	0.065	
12_2_4_121	MW-02	Appendix IV	Radium 226 and 228	pCi/L	14	5	36%	0.135	0.635	
12_2_4_122	MW-02	Appendix IV	Selenium	mg/L	15	0	0%	0.190	0.418	
12_2_4_125	MW-02	Appendix IV	Thallium	mg/L	15	14	93%	NA	NA	
12_2_5_111	MW-02	Part 115	Copper	mg/L	15	0	0%	0.039	0.869	
12_2_5_114	MW-02	Part 115	Iron	mg/L	15	0	0%	0.136	0.563	
12_2_5_119	MW-02	Part 115	Nickel	mg/L	15	0	0%	0.272	0.246	
12_2_5_128	MW-02	Part 115	Vanadium	mg/L	15	1	7%	0.286	0.236	
12_2_5_129	MW-02	Part 115	Zinc	mg/L	15	0	0%	0.037	0.875	
13_2_3_105	MW-03	Appendix III	Boron	mg/L	15	0	0%	-0.410	0.080	
13_2_3_107	MW-03	Appendix III	Calcium	mg/L	15	0	0%	0.082	0.726	
13_2_3_108	MW-03	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.448	0.056	
13_2_3_112	MW-03	Appendix III	Fluoride	mg/L	15	0	0%	0.006	0.980	
13_2_3_120	MW-03	Appendix III	pH (field)	su	15	0	0%	-0.198	0.399	
13_2_3_124	MW-03	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	0.496	0.034	*
13_2_3_126	MW-03	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	0.532	0.023	*
13_2_4_101	MW-03	Appendix IV	Antimony	mg/L	15	9	60%	-0.085	0.792	
13_2_4_102	MW-03	Appendix IV	Arsenic	mg/L	15	0	0%	0.186	0.427	
13_2_4_103	MW-03	Appendix IV	Barium	mg/L	15	0	0%	-0.377	0.107	
13_2_4_104	MW-03	Appendix IV	Beryllium	mg/L	15	10	67%	-0.764	0.024	*
13_2_4_106	MW-03	Appendix IV	Cadmium	mg/L	15	14	93%	NA	NA	
13_2_4_109	MW-03	Appendix IV	Chromium, Total	mg/L	15	0	0%	-0.026	0.911	
13_2_4_110	MW-03	Appendix IV	Cobalt	mg/L	15	0	0%	-0.163	0.487	
13_2_4_113	MW-03	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.006	0.980	
13_2_4_115	MW-03	Appendix IV	Lead	mg/L	15	14	93%	NA	NA	
13_2_4_116	MW-03	Appendix IV	Lithium	mg/L	15	0	0%	0.315	0.179	
13_2_4_117	MW-03	Appendix IV	Mercury	mg/L	15	13	87%	-0.500	0.157	
13_2_4_118	MW-03	Appendix IV	Molybdenum	mg/L	15	11	73%	-0.385	0.276	
13_2_4_121	MW-03	Appendix IV	Radium 226 and 228	pCi/L	14	1	7%	-0.196	0.429	
13_2_4_122	MW-03	Appendix IV	Selenium	mg/L	15	3	20%	0.176	0.493	
13_2_4_125	MW-03	Appendix IV	Thallium	mg/L	15	14	93%	NA	NA	
13_2_5_111	MW-03	Part 115	Copper	mg/L	15	7	47%	-0.494	0.095	
13_2_5_114	MW-03	Part 115	Iron	mg/L	15	0	0%	0.622	0.008	**
13_2_5_119	MW-03	Part 115	Nickel	mg/L	15	1	7%	-0.034	0.887	
13_2_5_128	MW-03	Part 115	Vanadium	mg/L	15	9	60%	-0.010	0.975	
13_2_5_129	MW-03	Part 115	Zinc	mg/L	15	9	60%	0.285	0.377	
14_2_3_105	MW-04	Appendix III	Boron	mg/L	15	0	0%	0.168	0.474	
14_2_3_107	MW-04	Appendix III	Calcium	mg/L	15	0	0%	-0.022	0.925	
14_2_3_108	MW-04	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.594	0.011	*
14_2_3_112	MW-04	Appendix III	Fluoride	mg/L	15	0	0%	-0.055	0.813	
14_2_3_120	MW-04	Appendix III	pH (field)	su	15	0	0%	0.074	0.752	

(Table continues on next page)
*** p < 0.001, ** p < 0.01, * p < 0.05

Table 4: Autocorrelation Tests, Non-Detects Excluded (*continued*)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Autocorrelation	Box-Ljung p-value	Sig.
14_2_3_124	MW-04	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	0.362	0.123	
14_2_3_126	MW-04	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	0.055	0.816	
14_2_4_101	MW-04	Appendix IV	Antimony	mg/L	15	10	67%	-0.454	0.179	
14_2_4_102	MW-04	Appendix IV	Arsenic	mg/L	15	0	0%	0.123	0.601	
14_2_4_103	MW-04	Appendix IV	Barium	mg/L	15	0	0%	-0.068	0.771	
14_2_4_104	MW-04	Appendix IV	Beryllium	mg/L	15	13	87%	-0.500	0.157	
14_2_4_109	MW-04	Appendix IV	Chromium, Total	mg/L	15	0	0%	0.137	0.560	
14_2_4_110	MW-04	Appendix IV	Cobalt	mg/L	15	0	0%	0.286	0.223	
14_2_4_113	MW-04	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	-0.055	0.813	
14_2_4_115	MW-04	Appendix IV	Lead	mg/L	15	14	93%	NA	NA	
14_2_4_116	MW-04	Appendix IV	Lithium	mg/L	15	0	0%	-0.061	0.793	
14_2_4_117	MW-04	Appendix IV	Mercury	mg/L	15	14	93%	NA	NA	
14_2_4_118	MW-04	Appendix IV	Molybdenum	mg/L	15	2	13%	0.134	0.590	
14_2_4_121	MW-04	Appendix IV	Radium 226 and 228	pCi/L	15	5	33%	0.355	0.194	
14_2_4_122	MW-04	Appendix IV	Selenium	mg/L	15	5	33%	-0.105	0.701	
14_2_5_111	MW-04	Part 115	Copper	mg/L	15	12	80%	-0.132	0.717	
14_2_5_114	MW-04	Part 115	Iron	mg/L	15	0	0%	0.539	0.022	*
14_2_5_119	MW-04	Part 115	Nickel	mg/L	15	0	0%	0.103	0.662	
14_2_5_128	MW-04	Part 115	Vanadium	mg/L	15	10	67%	-0.496	0.142	
14_2_5_129	MW-04	Part 115	Zinc	mg/L	15	10	67%	-0.622	0.066	
16_1_3_105	MW-06	Appendix III	Boron	mg/L	15	0	0%	0.151	0.519	
16_1_3_107	MW-06	Appendix III	Calcium	mg/L	15	0	0%	0.340	0.147	
16_1_3_108	MW-06	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.571	0.015	*
16_1_3_112	MW-06	Appendix III	Fluoride	mg/L	15	0	0%	0.020	0.932	
16_1_3_120	MW-06	Appendix III	pH (field)	su	15	0	0%	0.072	0.758	
16_1_3_124	MW-06	Appendix III	Sulfate (as SO4)	mg/L	15	2	13%	-0.030	0.904	
16_1_3_126	MW-06	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	0.167	0.477	
16_1_4_101	MW-06	Appendix IV	Antimony	mg/L	15	13	87%	-0.500	0.157	
16_1_4_102	MW-06	Appendix IV	Arsenic	mg/L	15	0	0%	0.251	0.284	
16_1_4_103	MW-06	Appendix IV	Barium	mg/L	15	0	0%	0.196	0.403	
16_1_4_104	MW-06	Appendix IV	Beryllium	mg/L	15	14	93%	NA	NA	
16_1_4_109	MW-06	Appendix IV	Chromium, Total	mg/L	15	0	0%	0.356	0.129	
16_1_4_110	MW-06	Appendix IV	Cobalt	mg/L	15	0	0%	0.484	0.039	*
16_1_4_113	MW-06	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.020	0.932	
16_1_4_115	MW-06	Appendix IV	Lead	mg/L	15	10	67%	0.145	0.668	
16_1_4_116	MW-06	Appendix IV	Lithium	mg/L	15	0	0%	0.444	0.058	
16_1_4_117	MW-06	Appendix IV	Mercury	mg/L	15	14	93%	NA	NA	
16_1_4_118	MW-06	Appendix IV	Molybdenum	mg/L	15	9	60%	0.402	0.213	
16_1_4_121	MW-06	Appendix IV	Radium 226 and 228	pCi/L	15	3	20%	-0.274	0.284	
16_1_4_122	MW-06	Appendix IV	Selenium	mg/L	15	5	33%	-0.122	0.657	
16_1_5_111	MW-06	Part 115	Copper	mg/L	15	12	80%	-0.634	0.082	
16_1_5_114	MW-06	Part 115	Iron	mg/L	15	0	0%	0.433	0.065	

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 4: Autocorrelation Tests, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Autocorrelation	Box-Ljung p-value	Sig.
16_1_5_119	MW-06	Part 115	Nickel	mg/L	15	6	40%	0.370	0.193	
16_1_5_128	MW-06	Part 115	Vanadium	mg/L	15	14	93%	NA	NA	
16_1_5_129	MW-06	Part 115	Zinc	mg/L	15	2	13%	-0.222	0.370	
17_1_3_105	MW-07	Appendix III	Boron	mg/L	15	0	0%	-0.208	0.376	
17_1_3_107	MW-07	Appendix III	Calcium	mg/L	15	0	0%	-0.406	0.083	
17_1_3_108	MW-07	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.609	0.009	**
17_1_3_112	MW-07	Appendix III	Fluoride	mg/L	15	3	20%	-0.079	0.759	
17_1_3_120	MW-07	Appendix III	pH (field)	su	15	0	0%	0.147	0.530	
17_1_3_124	MW-07	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	0.195	0.405	
17_1_3_126	MW-07	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	0.185	0.431	
17_1_4_101	MW-07	Appendix IV	Antimony	mg/L	15	14	93%	NA	NA	
17_1_4_102	MW-07	Appendix IV	Arsenic	mg/L	15	0	0%	0.003	0.989	
17_1_4_103	MW-07	Appendix IV	Barium	mg/L	15	0	0%	0.461	0.049	*
17_1_4_104	MW-07	Appendix IV	Beryllium	mg/L	15	12	80%	-0.403	0.269	
17_1_4_109	MW-07	Appendix IV	Chromium, Total	mg/L	15	0	0%	0.035	0.882	
17_1_4_110	MW-07	Appendix IV	Cobalt	mg/L	15	0	0%	0.083	0.722	
17_1_4_113	MW-07	Appendix IV	Fluoride (App IV)	mg/L	15	3	20%	-0.079	0.759	
17_1_4_116	MW-07	Appendix IV	Lithium	mg/L	15	0	0%	-0.293	0.211	
17_1_4_121	MW-07	Appendix IV	Radium 226 and 228	pCi/L	15	2	13%	-0.233	0.347	
17_1_4_122	MW-07	Appendix IV	Selenium	mg/L	15	9	60%	-0.588	0.069	
17_1_5_111	MW-07	Part 115	Copper	mg/L	15	11	73%	-0.160	0.652	
17_1_5_114	MW-07	Part 115	Iron	mg/L	15	0	0%	0.285	0.224	
17_1_5_119	MW-07	Part 115	Nickel	mg/L	15	14	93%	NA	NA	
17_1_5_128	MW-07	Part 115	Vanadium	mg/L	15	12	80%	-0.660	0.071	
17_1_5_129	MW-07	Part 115	Zinc	mg/L	15	10	67%	-0.358	0.290	
18_1_3_105	MW-08	Appendix III	Boron	mg/L	15	0	0%	0.208	0.375	
18_1_3_107	MW-08	Appendix III	Calcium	mg/L	15	0	0%	0.384	0.101	
18_1_3_108	MW-08	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.137	0.558	
18_1_3_112	MW-08	Appendix III	Fluoride	mg/L	15	0	0%	0.296	0.207	
18_1_3_120	MW-08	Appendix III	pH (field)	su	15	0	0%	0.078	0.738	
18_1_3_124	MW-08	Appendix III	Sulfate (as SO4)	mg/L	15	4	27%	0.419	0.113	
18_1_3_126	MW-08	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	-0.113	0.631	
18_1_4_101	MW-08	Appendix IV	Antimony	mg/L	15	7	47%	-0.048	0.871	
18_1_4_102	MW-08	Appendix IV	Arsenic	mg/L	15	0	0%	0.326	0.164	
18_1_4_103	MW-08	Appendix IV	Barium	mg/L	15	0	0%	0.398	0.090	
18_1_4_104	MW-08	Appendix IV	Beryllium	mg/L	15	14	93%	NA	NA	
18_1_4_106	MW-08	Appendix IV	Cadmium	mg/L	15	14	93%	NA	NA	
18_1_4_109	MW-08	Appendix IV	Chromium, Total	mg/L	15	0	0%	0.477	0.042	*
18_1_4_110	MW-08	Appendix IV	Cobalt	mg/L	15	0	0%	-0.155	0.508	
18_1_4_113	MW-08	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.296	0.207	
18_1_4_115	MW-08	Appendix IV	Lead	mg/L	15	9	60%	-0.313	0.333	
18_1_4_116	MW-08	Appendix IV	Lithium	mg/L	15	0	0%	0.396	0.091	

(Table continues on next page)
*** p < 0.001, ** p < 0.01, * p < 0.05

Table 4: Autocorrelation Tests, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Autocorrelation	Box-Ljung p-value	Sig.
18_1_4_118	MW-08	Appendix IV	Molybdenum	mg/L	15	0	0%	0.256	0.274	
18_1_4_121	MW-08	Appendix IV	Radium 226 and 228	pCi/L	15	3	20%	0.158	0.537	
18_1_4_122	MW-08	Appendix IV	Selenium	mg/L	15	5	33%	-0.224	0.413	
18_1_4_125	MW-08	Appendix IV	Thallium	mg/L	15	14	93%	NA	NA	
18_1_5_111	MW-08	Part 115	Copper	mg/L	15	5	33%	0.246	0.369	
18_1_5_114	MW-08	Part 115	Iron	mg/L	15	0	0%	0.486	0.038	*
18_1_5_119	MW-08	Part 115	Nickel	mg/L	15	0	0%	0.223	0.342	
18_1_5_128	MW-08	Part 115	Vanadium	mg/L	15	14	93%	NA	NA	
18_1_5_129	MW-08	Part 115	Zinc	mg/L	15	3	20%	-0.253	0.322	
19_2_3_105	MW-09	Appendix III	Boron	mg/L	15	0	0%	0.023	0.922	
19_2_3_107	MW-09	Appendix III	Calcium	mg/L	15	0	0%	0.353	0.132	
19_2_3_108	MW-09	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.594	0.011	*
19_2_3_112	MW-09	Appendix III	Fluoride	mg/L	15	0	0%	0.318	0.175	
19_2_3_120	MW-09	Appendix III	pH (field)	su	15	0	0%	0.320	0.172	
19_2_3_124	MW-09	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	0.387	0.099	
19_2_3_126	MW-09	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	0.489	0.037	*
19_2_4_101	MW-09	Appendix IV	Antimony	mg/L	15	10	67%	-0.610	0.071	
19_2_4_102	MW-09	Appendix IV	Arsenic	mg/L	15	0	0%	0.072	0.758	
19_2_4_103	MW-09	Appendix IV	Barium	mg/L	15	0	0%	0.157	0.503	
19_2_4_104	MW-09	Appendix IV	Beryllium	mg/L	15	12	80%	-0.172	0.637	
19_2_4_109	MW-09	Appendix IV	Chromium, Total	mg/L	15	0	0%	0.104	0.658	
19_2_4_110	MW-09	Appendix IV	Cobalt	mg/L	15	0	0%	0.036	0.877	
19_2_4_113	MW-09	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.318	0.175	
19_2_4_116	MW-09	Appendix IV	Lithium	mg/L	15	0	0%	0.161	0.493	
19_2_4_117	MW-09	Appendix IV	Mercury	mg/L	15	13	87%	-0.500	0.157	
19_2_4_118	MW-09	Appendix IV	Molybdenum	mg/L	15	0	0%	0.353	0.132	
19_2_4_121	MW-09	Appendix IV	Radium 226 and 228	pCi/L	15	14	93%	NA	NA	
19_2_4_122	MW-09	Appendix IV	Selenium	mg/L	15	2	13%	0.465	0.061	
19_2_5_111	MW-09	Part 115	Copper	mg/L	15	10	67%	-0.398	0.239	
19_2_5_114	MW-09	Part 115	Iron	mg/L	15	0	0%	0.201	0.392	
19_2_5_119	MW-09	Part 115	Nickel	mg/L	15	0	0%	-0.069	0.768	
19_2_5_129	MW-09	Part 115	Zinc	mg/L	15	8	53%	-0.590	0.056	
20_3_3_105	MW-10	Appendix III	Boron	mg/L	15	0	0%	0.539	0.021	*
20_3_3_107	MW-10	Appendix III	Calcium	mg/L	15	0	0%	0.451	0.054	
20_3_3_108	MW-10	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.544	0.020	*
20_3_3_112	MW-10	Appendix III	Fluoride	mg/L	15	0	0%	0.554	0.018	*
20_3_3_120	MW-10	Appendix III	pH (field)	su	15	0	0%	0.056	0.812	
20_3_3_124	MW-10	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	0.373	0.111	
20_3_3_126	MW-10	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	0.399	0.088	
20_3_4_101	MW-10	Appendix IV	Antimony	mg/L	15	11	73%	-0.363	0.304	
20_3_4_102	MW-10	Appendix IV	Arsenic	mg/L	15	0	0%	0.312	0.183	
20_3_4_103	MW-10	Appendix IV	Barium	mg/L	15	0	0%	0.287	0.221	

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 4: Autocorrelation Tests, Non-Detects Excluded (*continued*)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Autocorrelation	Box-Ljung p-value	Sig.
20_3_4_104	MW-10	Appendix IV	Beryllium	mg/L	15	7	47%	-0.201	0.496	
20_3_4_109	MW-10	Appendix IV	Chromium, Total	mg/L	15	0	0%	0.525	0.025	*
20_3_4_110	MW-10	Appendix IV	Cobalt	mg/L	15	1	7%	0.104	0.665	
20_3_4_113	MW-10	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.554	0.018	*
20_3_4_115	MW-10	Appendix IV	Lead	mg/L	15	13	87%	-0.500	0.157	
20_3_4_116	MW-10	Appendix IV	Lithium	mg/L	15	0	0%	-0.109	0.641	
20_3_4_117	MW-10	Appendix IV	Mercury	mg/L	15	14	93%	NA	NA	
20_3_4_118	MW-10	Appendix IV	Molybdenum	mg/L	15	0	0%	0.164	0.483	
20_3_4_121	MW-10	Appendix IV	Radium 226 and 228	pCi/L	15	12	80%	-0.037	0.920	
20_3_4_122	MW-10	Appendix IV	Selenium	mg/L	15	1	7%	0.008	0.974	
20_3_5_111	MW-10	Part 115	Copper	mg/L	15	12	80%	-0.659	0.071	
20_3_5_114	MW-10	Part 115	Iron	mg/L	15	0	0%	0.545	0.020	*
20_3_5_119	MW-10	Part 115	Nickel	mg/L	15	7	47%	-0.227	0.444	
20_3_5_128	MW-10	Part 115	Vanadium	mg/L	15	12	80%	-0.334	0.361	
20_3_5_129	MW-10	Part 115	Zinc	mg/L	15	7	47%	-0.252	0.394	
21_2_3_105	MW-11	Appendix III	Boron	mg/L	15	0	0%	0.416	0.076	
21_2_3_107	MW-11	Appendix III	Calcium	mg/L	15	0	0%	0.283	0.227	
21_2_3_108	MW-11	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.285	0.224	
21_2_3_112	MW-11	Appendix III	Fluoride	mg/L	15	0	0%	0.258	0.271	
21_2_3_120	MW-11	Appendix III	pH (field)	su	15	0	0%	0.216	0.357	
21_2_3_124	MW-11	Appendix III	Sulfate (as SO4)	mg/L	15	6	40%	0.534	0.060	
21_2_3_126	MW-11	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	-0.179	0.444	
21_2_4_101	MW-11	Appendix IV	Antimony	mg/L	15	11	73%	-0.539	0.127	
21_2_4_102	MW-11	Appendix IV	Arsenic	mg/L	15	0	0%	0.161	0.491	
21_2_4_103	MW-11	Appendix IV	Barium	mg/L	15	0	0%	0.237	0.313	
21_2_4_104	MW-11	Appendix IV	Beryllium	mg/L	15	12	80%	-0.667	0.068	
21_2_4_106	MW-11	Appendix IV	Cadmium	mg/L	15	13	87%	-0.500	0.157	
21_2_4_109	MW-11	Appendix IV	Chromium, Total	mg/L	15	0	0%	-0.068	0.773	
21_2_4_110	MW-11	Appendix IV	Cobalt	mg/L	15	0	0%	-0.220	0.348	
21_2_4_113	MW-11	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.258	0.271	
21_2_4_115	MW-11	Appendix IV	Lead	mg/L	15	3	20%	-0.060	0.815	
21_2_4_116	MW-11	Appendix IV	Lithium	mg/L	15	0	0%	0.321	0.171	
21_2_4_117	MW-11	Appendix IV	Mercury	mg/L	15	13	87%	-0.500	0.157	
21_2_4_118	MW-11	Appendix IV	Molybdenum	mg/L	15	2	13%	0.020	0.935	
21_2_4_121	MW-11	Appendix IV	Radium 226 and 228	pCi/L	14	4	29%	-0.160	0.559	
21_2_4_122	MW-11	Appendix IV	Selenium	mg/L	15	3	20%	0.225	0.380	
21_2_4_125	MW-11	Appendix IV	Thallium	mg/L	15	14	93%	NA	NA	
21_2_5_111	MW-11	Part 115	Copper	mg/L	15	4	27%	-0.138	0.602	
21_2_5_114	MW-11	Part 115	Iron	mg/L	15	0	0%	0.413	0.078	
21_2_5_119	MW-11	Part 115	Nickel	mg/L	15	0	0%	-0.070	0.766	
21_2_5_123	MW-11	Part 115	Silver	mg/L	15	13	87%	-0.500	0.157	
21_2_5_128	MW-11	Part 115	Vanadium	mg/L	15	13	87%	-0.500	0.157	

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 4: Autocorrelation Tests, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Autocorrelation	Box-Ljung p-value	Sig.
21_2_5_129	MW-11	Part 115	Zinc	mg/L	15	4	27%	0.006	0.983	
22_2_3_105	MW-12	Appendix III	Boron	mg/L	15	0	0%	0.266	0.256	
22_2_3_107	MW-12	Appendix III	Calcium	mg/L	15	0	0%	0.057	0.807	
22_2_3_108	MW-12	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	-0.129	0.581	
22_2_3_112	MW-12	Appendix III	Fluoride	mg/L	15	0	0%	0.089	0.705	
22_2_3_120	MW-12	Appendix III	pH (field)	su	15	0	0%	0.130	0.580	
22_2_3_124	MW-12	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	0.469	0.045	*
22_2_3_126	MW-12	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	0.059	0.800	
22_2_4_101	MW-12	Appendix IV	Antimony	mg/L	15	0	0%	0.280	0.233	
22_2_4_102	MW-12	Appendix IV	Arsenic	mg/L	15	0	0%	0.325	0.165	
22_2_4_103	MW-12	Appendix IV	Barium	mg/L	15	0	0%	0.472	0.044	*
22_2_4_106	MW-12	Appendix IV	Cadmium	mg/L	15	0	0%	0.328	0.162	
22_2_4_109	MW-12	Appendix IV	Chromium, Total	mg/L	15	5	33%	0.037	0.892	
22_2_4_110	MW-12	Appendix IV	Cobalt	mg/L	15	5	33%	0.153	0.577	
22_2_4_113	MW-12	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.089	0.705	
22_2_4_115	MW-12	Appendix IV	Lead	mg/L	15	6	40%	0.003	0.990	
22_2_4_116	MW-12	Appendix IV	Lithium	mg/L	15	0	0%	0.221	0.345	
22_2_4_117	MW-12	Appendix IV	Mercury	mg/L	15	12	80%	-0.167	0.648	
22_2_4_118	MW-12	Appendix IV	Molybdenum	mg/L	15	0	0%	0.085	0.716	
22_2_4_121	MW-12	Appendix IV	Radium 226 and 228	pCi/L	15	10	67%	0.009	0.978	
22_2_4_122	MW-12	Appendix IV	Selenium	mg/L	15	0	0%	0.200	0.393	
22_2_5_111	MW-12	Part 115	Copper	mg/L	15	0	0%	0.553	0.018	*
22_2_5_114	MW-12	Part 115	Iron	mg/L	15	6	40%	-0.119	0.676	
22_2_5_119	MW-12	Part 115	Nickel	mg/L	15	0	0%	0.150	0.521	
22_2_5_128	MW-12	Part 115	Vanadium	mg/L	15	6	40%	-0.026	0.928	
22_2_5_129	MW-12	Part 115	Zinc	mg/L	15	0	0%	0.107	0.649	
28_1_3_105	MW-18	Appendix III	Boron	mg/L	15	0	0%	0.816	0.000	***
28_1_3_107	MW-18	Appendix III	Calcium	mg/L	15	0	0%	0.250	0.286	
28_1_3_108	MW-18	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.030	0.897	
28_1_3_112	MW-18	Appendix III	Fluoride	mg/L	15	0	0%	0.275	0.240	
28_1_3_120	MW-18	Appendix III	pH (field)	su	15	0	0%	0.118	0.615	
28_1_3_124	MW-18	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	0.074	0.752	
28_1_3_126	MW-18	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	0.232	0.322	
28_1_4_101	MW-18	Appendix IV	Antimony	mg/L	15	3	20%	-0.311	0.224	
28_1_4_102	MW-18	Appendix IV	Arsenic	mg/L	15	0	0%	0.279	0.234	
28_1_4_103	MW-18	Appendix IV	Barium	mg/L	15	0	0%	0.319	0.173	
28_1_4_104	MW-18	Appendix IV	Beryllium	mg/L	15	13	87%	-0.500	0.157	
28_1_4_106	MW-18	Appendix IV	Cadmium	mg/L	15	6	40%	0.229	0.420	
28_1_4_109	MW-18	Appendix IV	Chromium, Total	mg/L	15	13	87%	-0.500	0.157	
28_1_4_110	MW-18	Appendix IV	Cobalt	mg/L	15	0	0%	0.660	0.005	**
28_1_4_113	MW-18	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.275	0.240	
28_1_4_115	MW-18	Appendix IV	Lead	mg/L	15	10	67%	-0.255	0.450	

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 4: Autocorrelation Tests, Non-Detects Excluded (*continued*)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Autocorrelation	Box-Ljung p-value	Sig.
28_1_4_116	MW-18	Appendix IV	Lithium	mg/L	15	0	0%	0.314	0.181	
28_1_4_118	MW-18	Appendix IV	Molybdenum	mg/L	15	0	0%	0.301	0.199	
28_1_4_121	MW-18	Appendix IV	Radium 226 and 228	pCi/L	15	9	60%	-0.028	0.931	
28_1_4_122	MW-18	Appendix IV	Selenium	mg/L	15	0	0%	0.214	0.361	
28_1_5_111	MW-18	Part 115	Copper	mg/L	15	0	0%	0.015	0.950	
28_1_5_114	MW-18	Part 115	Iron	mg/L	15	0	0%	0.447	0.057	
28_1_5_119	MW-18	Part 115	Nickel	mg/L	15	0	0%	0.652	0.005	**
28_1_5_129	MW-18	Part 115	Zinc	mg/L	15	0	0%	0.430	0.066	
29_1_3_105	MW-19	Appendix III	Boron	mg/L	15	0	0%	0.022	0.925	
29_1_3_107	MW-19	Appendix III	Calcium	mg/L	15	0	0%	0.253	0.281	
29_1_3_108	MW-19	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.562	0.016	*
29_1_3_112	MW-19	Appendix III	Fluoride	mg/L	15	0	0%	0.328	0.162	
29_1_3_120	MW-19	Appendix III	pH (field)	su	15	0	0%	-0.199	0.395	
29_1_3_124	MW-19	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	-0.027	0.908	
29_1_3_126	MW-19	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	0.684	0.004	**
29_1_4_101	MW-19	Appendix IV	Antimony	mg/L	15	12	80%	0.000	1.000	
29_1_4_102	MW-19	Appendix IV	Arsenic	mg/L	15	0	0%	0.239	0.307	
29_1_4_103	MW-19	Appendix IV	Barium	mg/L	15	0	0%	0.413	0.078	
29_1_4_104	MW-19	Appendix IV	Beryllium	mg/L	15	3	20%	-0.094	0.712	
29_1_4_109	MW-19	Appendix IV	Chromium, Total	mg/L	15	5	33%	0.249	0.363	
29_1_4_110	MW-19	Appendix IV	Cobalt	mg/L	15	1	7%	0.336	0.163	
29_1_4_113	MW-19	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.328	0.162	
29_1_4_116	MW-19	Appendix IV	Lithium	mg/L	15	0	0%	0.342	0.144	
29_1_4_118	MW-19	Appendix IV	Molybdenum	mg/L	15	0	0%	0.408	0.082	
29_1_4_121	MW-19	Appendix IV	Radium 226 and 228	pCi/L	15	7	47%	0.103	0.729	
29_1_4_122	MW-19	Appendix IV	Selenium	mg/L	15	10	67%	-0.362	0.284	
29_1_5_111	MW-19	Part 115	Copper	mg/L	15	13	87%	-0.500	0.157	
29_1_5_114	MW-19	Part 115	Iron	mg/L	15	0	0%	0.423	0.071	
29_1_5_119	MW-19	Part 115	Nickel	mg/L	15	1	7%	0.094	0.697	
29_1_5_128	MW-19	Part 115	Vanadium	mg/L	15	14	93%	NA	NA	
29_1_5_129	MW-19	Part 115	Zinc	mg/L	15	10	67%	-0.477	0.159	
30_1_3_105	MW-20	Appendix III	Boron	mg/L	15	0	0%	0.157	0.502	
30_1_3_107	MW-20	Appendix III	Calcium	mg/L	15	0	0%	0.193	0.409	
30_1_3_108	MW-20	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.469	0.045	*
30_1_3_112	MW-20	Appendix III	Fluoride	mg/L	15	0	0%	0.052	0.824	
30_1_3_120	MW-20	Appendix III	pH (field)	su	15	0	0%	0.000	0.999	
30_1_3_124	MW-20	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	0.621	0.008	**
30_1_3_126	MW-20	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	0.381	0.104	
30_1_4_101	MW-20	Appendix IV	Antimony	mg/L	15	5	33%	0.197	0.472	
30_1_4_102	MW-20	Appendix IV	Arsenic	mg/L	15	0	0%	0.228	0.330	
30_1_4_103	MW-20	Appendix IV	Barium	mg/L	15	0	0%	0.214	0.360	
30_1_4_104	MW-20	Appendix IV	Beryllium	mg/L	15	14	93%	NA	NA	

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 4: Autocorrelation Tests, Non-Detects Excluded (*continued*)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Autocorrelation	Box-Ljung p-value	Sig.
30_1_4_109	MW-20	Appendix IV	Chromium, Total	mg/L	15	7	47%	-0.184	0.534	
30_1_4_110	MW-20	Appendix IV	Cobalt	mg/L	15	0	0%	0.717	0.002	**
30_1_4_113	MW-20	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.052	0.824	
30_1_4_115	MW-20	Appendix IV	Lead	mg/L	15	0	0%	0.342	0.145	
30_1_4_116	MW-20	Appendix IV	Lithium	mg/L	15	0	0%	0.346	0.140	
30_1_4_117	MW-20	Appendix IV	Mercury	mg/L	15	14	93%	NA	NA	
30_1_4_118	MW-20	Appendix IV	Molybdenum	mg/L	15	0	0%	0.243	0.300	
30_1_4_121	MW-20	Appendix IV	Radium 226 and 228	pCi/L	14	7	50%	0.021	0.945	
30_1_4_122	MW-20	Appendix IV	Selenium	mg/L	15	9	60%	-0.117	0.718	
30_1_4_125	MW-20	Appendix IV	Thallium	mg/L	15	14	93%	NA	NA	
30_1_5_111	MW-20	Part 115	Copper	mg/L	15	2	13%	0.053	0.831	
30_1_5_114	MW-20	Part 115	Iron	mg/L	15	0	0%	0.203	0.385	
30_1_5_119	MW-20	Part 115	Nickel	mg/L	15	0	0%	0.690	0.003	**
30_1_5_129	MW-20	Part 115	Zinc	mg/L	15	0	0%	-0.107	0.647	
40_1_3_105	MW-30	Appendix III	Boron	mg/L	15	0	0%	-0.037	0.874	
40_1_3_107	MW-30	Appendix III	Calcium	mg/L	15	0	0%	0.061	0.795	
40_1_3_108	MW-30	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.630	0.007	**
40_1_3_112	MW-30	Appendix III	Fluoride	mg/L	15	0	0%	-0.269	0.250	
40_1_3_120	MW-30	Appendix III	pH (field)	su	15	0	0%	0.024	0.918	
40_1_3_124	MW-30	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	-0.198	0.399	
40_1_3_126	MW-30	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	0.420	0.073	
40_1_4_101	MW-30	Appendix IV	Antimony	mg/L	15	13	87%	-0.500	0.157	
40_1_4_102	MW-30	Appendix IV	Arsenic	mg/L	15	2	13%	0.543	0.029	*
40_1_4_103	MW-30	Appendix IV	Barium	mg/L	15	0	0%	0.354	0.131	
40_1_4_104	MW-30	Appendix IV	Beryllium	mg/L	15	13	87%	-0.500	0.157	
40_1_4_109	MW-30	Appendix IV	Chromium, Total	mg/L	15	0	0%	0.177	0.451	
40_1_4_110	MW-30	Appendix IV	Cobalt	mg/L	15	0	0%	-0.082	0.726	
40_1_4_113	MW-30	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	-0.269	0.250	
40_1_4_115	MW-30	Appendix IV	Lead	mg/L	15	14	93%	NA	NA	
40_1_4_116	MW-30	Appendix IV	Lithium	mg/L	15	0	0%	-0.088	0.708	
40_1_4_117	MW-30	Appendix IV	Mercury	mg/L	15	14	93%	NA	NA	
40_1_4_118	MW-30	Appendix IV	Molybdenum	mg/L	15	3	20%	0.021	0.935	
40_1_4_121	MW-30	Appendix IV	Radium 226 and 228	pCi/L	15	8	53%	-0.341	0.270	
40_1_4_122	MW-30	Appendix IV	Selenium	mg/L	15	7	47%	-0.330	0.265	
40_1_5_111	MW-30	Part 115	Copper	mg/L	15	10	67%	0.010	0.975	
40_1_5_114	MW-30	Part 115	Iron	mg/L	15	0	0%	-0.084	0.721	
40_1_5_119	MW-30	Part 115	Nickel	mg/L	15	3	20%	-0.074	0.774	
40_1_5_129	MW-30	Part 115	Zinc	mg/L	15	10	67%	-0.327	0.333	
41_1_3_105	MW-31	Appendix III	Boron	mg/L	15	0	0%	0.372	0.113	
41_1_3_107	MW-31	Appendix III	Calcium	mg/L	15	0	0%	0.200	0.393	
41_1_3_108	MW-31	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.105	0.655	
41_1_3_112	MW-31	Appendix III	Fluoride	mg/L	15	0	0%	0.321	0.170	

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 4: Autocorrelation Tests, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Autocorrelation	Box-Ljung p-value	Sig.
41_1_3_120	MW-31	Appendix III	pH (field)	su	15	0	0%	-0.244	0.298	
41_1_3_124	MW-31	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	0.477	0.042	*
41_1_3_126	MW-31	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	-0.091	0.699	
41_1_4_101	MW-31	Appendix IV	Antimony	mg/L	15	7	47%	0.430	0.146	
41_1_4_102	MW-31	Appendix IV	Arsenic	mg/L	15	0	0%	0.264	0.259	
41_1_4_103	MW-31	Appendix IV	Barium	mg/L	15	0	0%	0.062	0.790	
41_1_4_104	MW-31	Appendix IV	Beryllium	mg/L	15	13	87%	-0.500	0.157	
41_1_4_106	MW-31	Appendix IV	Cadmium	mg/L	15	14	93%	NA	NA	
41_1_4_109	MW-31	Appendix IV	Chromium, Total	mg/L	15	0	0%	-0.037	0.873	
41_1_4_110	MW-31	Appendix IV	Cobalt	mg/L	15	3	20%	-0.513	0.045	*
41_1_4_113	MW-31	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.321	0.170	
41_1_4_115	MW-31	Appendix IV	Lead	mg/L	15	13	87%	-0.500	0.157	
41_1_4_116	MW-31	Appendix IV	Lithium	mg/L	15	0	0%	0.202	0.389	
41_1_4_117	MW-31	Appendix IV	Mercury	mg/L	15	14	93%	NA	NA	
41_1_4_118	MW-31	Appendix IV	Molybdenum	mg/L	15	0	0%	0.039	0.868	
41_1_4_121	MW-31	Appendix IV	Radium 226 and 228	pCi/L	15	6	40%	-0.423	0.137	
41_1_4_122	MW-31	Appendix IV	Selenium	mg/L	15	6	40%	-0.122	0.669	
41_1_4_125	MW-31	Appendix IV	Thallium	mg/L	15	14	93%	NA	NA	
41_1_5_111	MW-31	Part 115	Copper	mg/L	15	10	67%	-0.385	0.254	
41_1_5_114	MW-31	Part 115	Iron	mg/L	15	0	0%	0.590	0.012	*
41_1_5_119	MW-31	Part 115	Nickel	mg/L	15	10	67%	-0.315	0.352	
41_1_5_128	MW-31	Part 115	Vanadium	mg/L	15	12	80%	-0.407	0.265	
41_1_5_129	MW-31	Part 115	Zinc	mg/L	15	9	60%	-0.407	0.207	
42_1_3_105	MW-32	Appendix III	Boron	mg/L	15	0	0%	0.110	0.639	
42_1_3_107	MW-32	Appendix III	Calcium	mg/L	15	0	0%	0.453	0.053	
42_1_3_108	MW-32	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.551	0.019	*
42_1_3_112	MW-32	Appendix III	Fluoride	mg/L	15	0	0%	-0.244	0.299	
42_1_3_120	MW-32	Appendix III	pH (field)	su	15	0	0%	0.165	0.481	
42_1_3_124	MW-32	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	0.429	0.067	
42_1_3_126	MW-32	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	0.396	0.091	
42_1_4_101	MW-32	Appendix IV	Antimony	mg/L	15	11	73%	0.004	0.991	
42_1_4_102	MW-32	Appendix IV	Arsenic	mg/L	15	0	0%	-0.075	0.750	
42_1_4_103	MW-32	Appendix IV	Barium	mg/L	15	0	0%	0.335	0.153	
42_1_4_104	MW-32	Appendix IV	Beryllium	mg/L	15	14	93%	NA	NA	
42_1_4_106	MW-32	Appendix IV	Cadmium	mg/L	15	14	93%	NA	NA	
42_1_4_109	MW-32	Appendix IV	Chromium, Total	mg/L	15	0	0%	-0.121	0.604	
42_1_4_110	MW-32	Appendix IV	Cobalt	mg/L	15	0	0%	-0.200	0.393	
42_1_4_113	MW-32	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	-0.244	0.299	
42_1_4_115	MW-32	Appendix IV	Lead	mg/L	15	11	73%	0.292	0.409	
42_1_4_116	MW-32	Appendix IV	Lithium	mg/L	15	0	0%	0.098	0.676	
42_1_4_117	MW-32	Appendix IV	Mercury	mg/L	15	14	93%	NA	NA	
42_1_4_118	MW-32	Appendix IV	Molybdenum	mg/L	15	0	0%	0.122	0.603	

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 4: Autocorrelation Tests, Non-Detects Excluded (*continued*)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Autocorrelation	Box-Ljung p-value	Sig.
42_1_4_121	MW-32	Appendix IV	Radium 226 and 228	pCi/L	15	9	60%	0.087	0.788	
42_1_4_122	MW-32	Appendix IV	Selenium	mg/L	15	12	80%	-0.172	0.637	
42_1_5_111	MW-32	Part 115	Copper	mg/L	15	9	60%	-0.226	0.483	
42_1_5_114	MW-32	Part 115	Iron	mg/L	15	0	0%	0.563	0.016	*
42_1_5_119	MW-32	Part 115	Nickel	mg/L	15	0	0%	-0.096	0.683	
42_1_5_129	MW-32	Part 115	Zinc	mg/L	15	0	0%	0.264	0.259	

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 5: Outlier Counts by Date

Date	Count
2022-11-30	3
2023-01-03	8
2023-01-04	5
2023-01-05	1
2023-02-06	1
2023-02-08	1
2023-03-13	2
2023-03-14	1
2023-04-18	4
2023-05-23	2
2023-06-27	1
2023-06-28	3
2023-08-07	1
2023-08-08	1
2023-10-24	2
2024-02-12	8
2024-02-13	10
2024-04-07	2
2024-07-17	2
2024-07-18	1
2024-10-15	1
2024-10-16	8
2025-02-25	16
2025-02-26	1
2025-04-20	2
2025-04-21	6

Table 6: Outliers Identified at the 1% Significance Level, Non-Detects Excluded

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	No. Detects	Date	Dilution	Value
11_2_3_120	MW-01R	Appendix III	pH (field)	su	15	0	0%	15	2023-01-03	NA	6.02
11_2_4_101	MW-01R	Appendix IV	Antimony	mg/L	15	3	20%	12	2023-04-18	5	0.00120
11_2_4_102	MW-01R	Appendix IV	Arsenic	mg/L	15	0	0%	15	2024-02-13	1	0.00410
11_2_4_109	MW-01R	Appendix IV	Chromium, Total	mg/L	15	0	0%	15	2024-02-13	1	0.0220
11_2_4_110	MW-01R	Appendix IV	Cobalt	mg/L	15	0	0%	15	2023-06-28	1	0.00450
11_2_4_115	MW-01R	Appendix IV	Lead	mg/L	15	2	13%	13	2023-06-28	5	0.00530
11_2_4_118	MW-01R	Appendix IV	Molybdenum	mg/L	15	2	13%	13	2024-02-13	1	0.00560
11_2_4_122	MW-01R	Appendix IV	Selenium	mg/L	15	0	0%	15	2024-02-13	1	0.00180
11_2_5_119	MW-01R	Part 115	Nickel	mg/L	15	0	0%	15	2024-02-13	1	0.0220
12_2_3_105	MW-02	Appendix III	Boron	mg/L	15	0	0%	15	2025-02-25	20	170
12_2_3_108	MW-02	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	15	2023-02-08	50	67.0

(Table continues on next page)

Table 6: Outliers Identified at the 1% Significance Level, Non-Detects Excluded (*continued*)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	No. Detects	Date	Dilution	Value
12_2_3_112	MW-02	Appendix III	Fluoride	mg/L	15	0	0%	15	2025-02-25	10	16.0
12_2_4_101	MW-02	Appendix IV	Antimony	mg/L	15	3	20%	12	2023-04-18	5	0.000630
12_2_4_102	MW-02	Appendix IV	Arsenic	mg/L	15	0	0%	15	2024-02-13	1	0.000440
12_2_4_106	MW-02	Appendix IV	Cadmium	mg/L	15	10	67%	5	2023-10-24	1	0.000490
12_2_4_113	MW-02	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	15	2025-02-25	10	16.0
13_2_3_112	MW-03	Appendix III	Fluoride	mg/L	15	0	0%	15	2023-01-04	5	1.60
13_2_4_101	MW-03	Appendix IV	Antimony	mg/L	15	9	60%	6	2023-04-18	5	0.000450
13_2_4_113	MW-03	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	15	2023-01-04	5	1.60
13_2_5_119	MW-03	Part 115	Nickel	mg/L	15	1	7%	14	2023-01-04	1	0.0150
14_2_3_112	MW-04	Appendix III	Fluoride	mg/L	15	0	0%	15	2025-04-21	10	2.30
14_2_4_102	MW-04	Appendix IV	Arsenic	mg/L	15	0	0%	15	2025-02-26	1	0.00280
14_2_4_103	MW-04	Appendix IV	Barium	mg/L	15	0	0%	15	2023-01-04	1	0.460
14_2_4_113	MW-04	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	15	2025-04-21	10	2.30
14_2_4_118	MW-04	Appendix IV	Molybdenum	mg/L	15	2	13%	13	2025-04-21	1	0.0110
14_2_4_122	MW-04	Appendix IV	Selenium	mg/L	15	5	33%	10	2025-04-21	1	0.00120
14_2_5_114	MW-04	Part 115	Iron	mg/L	15	0	0%	15	2025-04-21	1	0.190
16_1_3_120	MW-06	Appendix III	pH (field)	su	15	0	0%	15	2023-02-06	NA	6.42
16_1_4_121	MW-06	Appendix IV	Radium 226 and 228	pCi/L	15	3	20%	12	2023-03-14	NA	1.91
16_1_4_122	MW-06	Appendix IV	Selenium	mg/L	15	5	33%	10	2024-02-13	1	0.000470
17_1_4_109	MW-07	Appendix IV	Chromium, Total	mg/L	15	0	0%	15	2024-07-17	1	0.000740
17_1_4_116	MW-07	Appendix IV	Lithium	mg/L	15	0	0%	15	2023-06-27	1	0.0100
17_1_4_121	MW-07	Appendix IV	Radium 226 and 228	pCi/L	15	2	13%	13	2023-08-07	1	2.36
18_1_3_108	MW-08	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	15	2024-10-16	5	99.0
18_1_3_120	MW-08	Appendix III	pH (field)	su	15	0	0%	15	2023-01-05	NA	6.21
18_1_4_115	MW-08	Appendix IV	Lead	mg/L	15	9	60%	6	2024-10-16	1	0.00290
18_1_5_119	MW-08	Part 115	Nickel	mg/L	15	0	0%	15	2024-10-16	1	0.0130
18_1_5_129	MW-08	Part 115	Zinc	mg/L	15	3	20%	12	2024-10-16	1	0.160
19_2_3_108	MW-09	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	15	2025-02-25	10	67.0
19_2_4_103	MW-09	Appendix IV	Barium	mg/L	15	0	0%	15	2023-01-04	5	2.40
19_2_4_104	MW-09	Appendix IV	Beryllium	mg/L	15	12	80%	3	2025-02-25	1	0.000150
19_2_4_122	MW-09	Appendix IV	Selenium	mg/L	15	2	13%	13	2025-02-25	1	0.000640
19_2_5_111	MW-09	Part 115	Copper	mg/L	15	10	67%	5	2024-07-17	1	0.00130
19_2_5_119	MW-09	Part 115	Nickel	mg/L	15	0	0%	15	2025-02-25	1	0.100
20_3_3_120	MW-10	Appendix III	pH (field)	su	15	0	0%	15	2023-05-23	NA	8.81
20_3_4_101	MW-10	Appendix IV	Antimony	mg/L	15	11	73%	4	2023-04-18	5	0.000340
20_3_4_110	MW-10	Appendix IV	Cobalt	mg/L	15	1	7%	14	2023-05-23	1	0.00180
20_3_4_122	MW-10	Appendix IV	Selenium	mg/L	15	1	7%	14	2024-02-13	1	0.000830
21_2_3_126	MW-11	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	15	2023-10-24	4	1800
21_2_4_102	MW-11	Appendix IV	Arsenic	mg/L	15	0	0%	15	2023-01-03	1	0.00410
21_2_4_104	MW-11	Appendix IV	Beryllium	mg/L	15	12	80%	3	2024-04-07	1	0.000440
21_2_4_109	MW-11	Appendix IV	Chromium, Total	mg/L	15	0	0%	15	2023-01-03	1	0.00860
21_2_4_110	MW-11	Appendix IV	Cobalt	mg/L	15	0	0%	15	2024-04-07	1	0.00240
21_2_4_115	MW-11	Appendix IV	Lead	mg/L	15	3	20%	12	2023-01-03	1	0.0680

(Table continues on next page)

Table 6: Outliers Identified at the 1% Significance Level, Non-Detects Excluded (*continued*)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	No. Detects	Date	Dilution	Value
21_2_4_122	MW-11	Appendix IV	Selenium	mg/L	15	3	20%	12	2024-02-13	1	0.000710
21_2_5_111	MW-11	Part 115	Copper	mg/L	15	4	27%	11	2023-01-03	1	0.0190
21_2_5_119	MW-11	Part 115	Nickel	mg/L	15	0	0%	15	2023-01-03	1	0.00940
21_2_5_129	MW-11	Part 115	Zinc	mg/L	15	4	27%	11	2023-01-03	1	0.100
22_2_4_117	MW-12	Appendix IV	Mercury	mg/L	15	12	80%	3	2025-04-21	1	0.830
22_2_4_118	MW-12	Appendix IV	Molybdenum	mg/L	15	0	0%	15	2024-10-16	1	0.0180
22_2_5_114	MW-12	Part 115	Iron	mg/L	15	6	40%	9	2024-10-16	1	0.150
28_1_4_115	MW-18	Appendix IV	Lead	mg/L	15	10	67%	5	2023-08-08	1	0.000320
28_1_5_111	MW-18	Part 115	Copper	mg/L	15	0	0%	15	2024-10-16	1	0.00170
29_1_5_119	MW-19	Part 115	Nickel	mg/L	15	1	7%	14	2024-07-18	1	0.0170
30_1_3_107	MW-20	Appendix III	Calcium	mg/L	15	0	0%	15	2023-06-28	1	58.0
30_1_3_112	MW-20	Appendix III	Fluoride	mg/L	15	0	0%	15	2022-11-30	25	0.550
30_1_4_103	MW-20	Appendix IV	Barium	mg/L	15	0	0%	15	2022-11-30	1	0.940
30_1_4_113	MW-20	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	15	2022-11-30	25	0.550
30_1_4_122	MW-20	Appendix IV	Selenium	mg/L	15	9	60%	6	2024-02-13	1	0.000260
40_1_3_105	MW-30	Appendix III	Boron	mg/L	15	0	0%	15	2023-03-13	50	3.50
40_1_3_108	MW-30	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	15	2025-02-25	100	1200
40_1_3_112	MW-30	Appendix III	Fluoride	mg/L	15	0	0%	15	2025-02-25	10	0.570
40_1_3_120	MW-30	Appendix III	pH (field)	su	15	0	0%	15	2023-01-03	NA	6.48
40_1_3_124	MW-30	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	15	2024-10-16	25	440
40_1_3_126	MW-30	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	15	2025-02-25	1923077	4000
40_1_4_102	MW-30	Appendix IV	Arsenic	mg/L	15	2	13%	13	2025-04-20	1	0.00300
40_1_4_110	MW-30	Appendix IV	Cobalt	mg/L	15	0	0%	15	2025-02-25	5	0.0460
40_1_4_113	MW-30	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	15	2025-02-25	10	0.570
40_1_4_116	MW-30	Appendix IV	Lithium	mg/L	15	0	0%	15	2023-03-13	50	0.270
40_1_4_118	MW-30	Appendix IV	Molybdenum	mg/L	15	3	20%	12	2025-02-25	5	0.0190
40_1_5_114	MW-30	Part 115	Iron	mg/L	15	0	0%	15	2025-04-20	10	17.0
40_1_5_119	MW-30	Part 115	Nickel	mg/L	15	3	20%	12	2025-02-25	5	0.110
40_1_5_129	MW-30	Part 115	Zinc	mg/L	15	10	67%	5	2025-02-25	5	0.100
41_1_4_110	MW-31	Appendix IV	Cobalt	mg/L	15	3	20%	12	2024-10-15	1	0.000360
41_1_4_122	MW-31	Appendix IV	Selenium	mg/L	15	6	40%	9	2024-02-12	1	0.000740
41_1_5_119	MW-31	Part 115	Nickel	mg/L	15	10	67%	5	2025-02-25	1	0.0230
42_1_4_102	MW-32	Appendix IV	Arsenic	mg/L	15	0	0%	15	2024-02-12	1	0.00240
42_1_4_109	MW-32	Appendix IV	Chromium, Total	mg/L	15	0	0%	15	2024-02-12	1	0.00300
42_1_4_110	MW-32	Appendix IV	Cobalt	mg/L	15	0	0%	15	2024-02-12	1	0.00190
42_1_4_118	MW-32	Appendix IV	Molybdenum	mg/L	15	0	0%	15	2024-02-12	1	0.00730
42_1_4_122	MW-32	Appendix IV	Selenium	mg/L	15	12	80%	3	2024-02-12	1	0.00100
42_1_5_111	MW-32	Part 115	Copper	mg/L	15	9	60%	6	2024-02-12	1	0.0160
42_1_5_119	MW-32	Part 115	Nickel	mg/L	15	0	0%	15	2024-02-12	1	0.0230

ID	Well	Constituent Type	Constituent	Unit	% NDs	Full									Without Non-Detects												
						Sample Size					p-Value				Sample Size					p-Value							
						Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA						
11_2_3_105	MW-01R	Appendix III	Boron	mg/L	0%	4	5	3	3	15	0.043	*	0.018	*	0.060	4	5	3	3	15	0.043	*	0.018	*	0.060		
11_2_3_107	MW-01R	Appendix III	Calcium	mg/L	0%	4	5	3	3	15	0.059		0.064		0.036	*	4	5	3	3	15	0.059		0.064		0.036	*
11_2_3_108	MW-01R	Appendix III	Chloride (as Cl)	mg/L	0%	4	5	3	3	15	0.037	*	0.038	*	0.069	4	5	3	3	15	0.037	*	0.038	*	0.069		
11_2_3_112	MW-01R	Appendix III	Fluoride	mg/L	0%	4	5	3	3	15	0.031	*	0.021	*	0.067	4	5	3	3	15	0.031	*	0.021	*	0.067		
11_2_3_120	MW-01R	Appendix III	pH (field)	su	0%	4	5	3	3	15	0.383		0.375		0.383	4	5	3	3	15	0.383		0.375		0.383		
11_2_3_124	MW-01R	Appendix III	Sulfate (as SO4)	mg/L	0%	4	5	3	3	15	0.051		0.030	*	0.054	4	5	3	3	15	0.051		0.030	*	0.054		
11_2_3_126	MW-01R	Appendix III	Total Dissolved Solids	mg/L	0%	4	5	3	3	15	0.153		0.174		0.180	4	5	3	3	15	0.153		0.174		0.180		
11_2_4_101	MW-01R	Appendix IV	Antimony	mg/L	20%	4	5	3	3	15	0.953		0.704		0.819	2	4	3	3	12	0.985		0.770		0.851		
11_2_4_102	MW-01R	Appendix IV	Arsenic	mg/L	0%	4	5	3	3	15	0.066		0.343		0.167	4	5	3	3	15	0.066		0.343		0.167		
11_2_4_103	MW-01R	Appendix IV	Barium	mg/L	0%	4	5	3	3	15	0.160		0.215		0.170	4	5	3	3	15	0.160		0.215		0.170		
11_2_4_104	MW-01R	Appendix IV	Beryllium	mg/L	13%	4	5	3	3	15	0.440		0.328		0.511	4	4	3	2	13	0.361		0.417		0.541		
11_2_4_106	MW-01R	Appendix IV	Cadmium	mg/L	80%	4	5	3	3	15	0.984		0.853		0.899	1	0	1	1	3	0.368		NA		NA		
11_2_4_109	MW-01R	Appendix IV	Chromium, Total	mg/L	0%	4	5	3	3	15	0.053		0.466		0.198	4	5	3	3	15	0.053		0.466		0.198		
11_2_4_110	MW-01R	Appendix IV	Cobalt	mg/L	0%	4	5	3	3	15	0.258		0.468		0.437	4	5	3	3	15	0.258		0.468		0.437		
11_2_4_113	MW-01R	Appendix IV	Fluoride (App IV)	mg/L	0%	4	5	3	3	15	0.031	*	0.021	*	0.067	4	5	3	3	15	0.031	*	0.021	*	0.067		
11_2_4_115	MW-01R	Appendix IV	Lead	mg/L	13%	4	5	3	3	15	0.240		0.298		0.203	3	4	3	3	13	0.115		0.358		0.166		
11_2_4_116	MW-01R	Appendix IV	Lithium	mg/L	0%	4	5	3	3	15	0.055		0.045	*	0.116	4	5	3	3	15	0.055		0.045	*	0.116		
11_2_4_117	MW-01R	Appendix IV	Mercury	mg/L	100%	4	5	3	3	15	0.572		0.622		0.622	NA	NA	NA	NA	NA	NA		NA		NA		
11_2_4_118	MW-01R	Appendix IV	Molybdenum	mg/L	13%	4	5	3	3	15	0.968		0.638		0.773	4	3	3	3	13	0.933		0.663		0.709		
11_2_4_121	MW-01R	Appendix IV	Radium 226 and 228	pCi/L	60%	4	5	3	3	15	0.660		0.699		0.774	2	1	2	1	6	0.463		0.840		0.859		
11_2_4_122	MW-01R	Appendix IV	Selenium	mg/L	0%	4	5	3	3	15	0.208		0.552		0.412	4	5	3	3	15	0.208		0.552		0.412		
11_2_4_125	MW-01R	Appendix IV	Thallium	mg/L	100%	4	5	3	3	15	0.281		0.301		0.301	NA	NA	NA	NA	NA	NA		NA		NA		
11_2_5_111	MW-01R	Part 115	Copper	mg/L	40%	4	5	3	3	15	0.098		0.244		0.155	2	1	3	3	9	0.257		0.544		0.385		
11_2_5_114	MW-01R	Part 115	Iron	mg/L	0%	4	5	3	3	15	0.301		0.381		0.477	4	5	3	3	15	0.301		0.381		0.477		
11_2_5_119	MW-01R	Part 115	Nickel	mg/L	0%	4	5	3	3	15	0.215		0.492		0.386	4	5	3	3	15	0.215		0.492		0.386		
11_2_5_123	MW-01R	Part 115	Silver	mg/L	100%	4	5	3	3	15	0.321		0.348		0.348	NA	NA	NA	NA	NA	NA		NA		NA		
11_2_5_128	MW-01R	Part 115	Vanadium	mg/L	13%	4	5	3	3	15	0.067		0.000	***	0.023	*	3	4	3	3	13	0.090		0.001	***	0.026	*
11_2_5_129	MW-01R	Part 115	Zinc	mg/L	20%	4	5	3	3	15	0.376		0.585		0.608	4	3	2	3	12	0.664		0.843		0.840		
12_2_3_105	MW-02	Appendix III	Boron	mg/L	0%	4	5	3	3	15	0.917		0.966		0.983	4	5	3	3	15	0.917		0.966		0.983		
12_2_3_107	MW-02	Appendix III	Calcium	mg/L	0%	4	5	3	3	15	0.695		0.624		0.628	4	5	3	3	15	0.695		0.624		0.628		
12_2_3_108	MW-02	Appendix III	Chloride (as Cl)	mg/L	0%	4	5	3	3	15	0.690		0.479		0.469	4	5	3	3	15	0.690		0.479		0.469		
12_2_3_112	MW-02	Appendix III	Fluoride	mg/L	0%	4	5	3	3	15	0.896		1.000		0.964	4	5	3	3	15	0.896		1.000		0.964		
12_2_3_120	MW-02	Appendix III	pH (field)	su	0%	4	5	3	3	15	0.263		0.378		0.378	4	5	3	3	15	0.263		0.378		0.378		
12_2_3_124	MW-02	Appendix III	Sulfate (as SO4)	mg/L	67%	4	5	3	3	15	0.949		0.825		0.971	1	1	1	2	5	0.532		0.676		0.743		
12_2_3_126	MW-02	Appendix III	Total Dissolved Solids	mg/L	0%	4	5	3	3	15	0.244		0.414		0.375	4	5	3	3	15	0.244		0.414		0.375		
12_2_4_101	MW-02	Appendix IV	Antimony	mg/L	20%	4	5	3	3	15	0.294		0.189		0.195	2	4	3	3	12	0.494		0.524		0.482		
12_2_4_102	MW-02	Appendix IV	Arsenic	mg/L	0%	4	5	3	3	15	0.813		0.781		0.587	4	5	3	3	15	0.813		0.781		0.587		
12_2_4_103	MW-02	Appendix IV	Barium	mg/L	0%	4	5	3	3	15	0.271		0.359		0.425	4	5	3	3	15	0.271		0.359		0.425		
12_2_4_104	MW-02	Appendix IV	Beryllium	mg/L	7%	4	5	3	3	15	0.666		0.660		0.720	3	5	3	3	14	0.423		0.503		0.459		

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

ID	Well	Constituent Type	Constituent	Unit	% NDs	Full							Without Non-Detects														
						Sample Size					p-Value			Sample Size					p-Value								
						Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA						
12_2_4_106	MW-02	Appendix IV	Cadmium	mg/L	67%	4	5	3	3	15	0.866	0.663	0.908	2	2	0	1	5	0.331	0.008	**	0.087					
12_2_4_109	MW-02	Appendix IV	Chromium, Total	mg/L	0%	4	5	3	3	15	0.284	0.428	0.682	4	5	3	3	15	0.284	0.428		0.682					
12_2_4_110	MW-02	Appendix IV	Cobalt	mg/L	0%	4	5	3	3	15	0.515	0.740	0.716	4	5	3	3	15	0.515	0.740		0.716					
12_2_4_113	MW-02	Appendix IV	Fluoride (App IV)	mg/L	0%	4	5	3	3	15	0.896	1.000	0.964	4	5	3	3	15	0.896	1.000		0.964					
12_2_4_115	MW-02	Appendix IV	Lead	mg/L	7%	4	5	3	3	15	0.300	0.394	0.569	3	5	3	3	14	0.140	0.215		0.131					
12_2_4_116	MW-02	Appendix IV	Lithium	mg/L	0%	4	5	3	3	15	0.249	0.458	0.465	4	5	3	3	15	0.249	0.458		0.465					
12_2_4_117	MW-02	Appendix IV	Mercury	mg/L	93%	4	5	3	3	15	0.572	0.622	0.622	0	1	0	0	1	NA	NA		NA					
12_2_4_118	MW-02	Appendix IV	Molybdenum	mg/L	0%	4	5	3	3	15	0.162	0.261	0.242	4	5	3	3	15	0.162	0.261		0.242					
12_2_4_121	MW-02	Appendix IV	Radium 226 and 228	pCi/L	36%	3	5	3	3	14	0.439	0.341	0.567	2	3	2	2	9	0.485	0.610		0.637					
12_2_4_122	MW-02	Appendix IV	Selenium	mg/L	0%	4	5	3	3	15	0.712	0.850	0.782	4	5	3	3	15	0.712	0.850		0.782					
12_2_4_125	MW-02	Appendix IV	Thallium	mg/L	93%	4	5	3	3	15	0.693	0.654	0.802	0	0	0	1	1	NA	NA		NA					
12_2_5_111	MW-02	Part 115	Copper	mg/L	0%	4	5	3	3	15	0.817	0.890	0.869	4	5	3	3	15	0.817	0.890		0.869					
12_2_5_114	MW-02	Part 115	Iron	mg/L	0%	4	5	3	3	15	0.043	*	0.027	*	0.020	*	4	5	3	3	15	0.043	*	0.027	*	0.020	*
12_2_5_119	MW-02	Part 115	Nickel	mg/L	0%	4	5	3	3	15	0.584	0.658	0.889	4	5	3	3	15	0.584	0.658		0.889					
12_2_5_123	MW-02	Part 115	Silver	mg/L	100%	4	5	3	3	15	0.453	0.497	0.497	NA	NA	NA	NA	NA	NA	NA		NA					
12_2_5_128	MW-02	Part 115	Vanadium	mg/L	7%	4	5	3	3	15	0.310	0.304	0.466	3	5	3	3	14	0.334	0.353		0.413					
12_2_5_129	MW-02	Part 115	Zinc	mg/L	0%	4	5	3	3	15	0.495	0.584	0.431	4	5	3	3	15	0.495	0.584		0.431					
13_2_3_105	MW-03	Appendix III	Boron	mg/L	0%	4	5	3	3	15	0.421	0.418	0.404	4	5	3	3	15	0.421	0.418		0.404					
13_2_3_107	MW-03	Appendix III	Calcium	mg/L	0%	4	5	3	3	15	0.745	0.686	0.648	4	5	3	3	15	0.745	0.686		0.648					
13_2_3_108	MW-03	Appendix III	Chloride (as Cl)	mg/L	0%	4	5	3	3	15	0.589	0.457	0.507	4	5	3	3	15	0.589	0.457		0.507					
13_2_3_112	MW-03	Appendix III	Fluoride	mg/L	0%	4	5	3	3	15	0.238	0.399	0.356	4	5	3	3	15	0.238	0.399		0.356					
13_2_3_120	MW-03	Appendix III	pH (field)	su	0%	4	5	3	3	15	0.380	0.334	0.337	4	5	3	3	15	0.380	0.334		0.337					
13_2_3_124	MW-03	Appendix III	Sulfate (as SO4)	mg/L	0%	4	5	3	3	15	0.121	0.102	0.173	4	5	3	3	15	0.121	0.102		0.173					
13_2_3_126	MW-03	Appendix III	Total Dissolved Solids	mg/L	0%	4	5	3	3	15	0.539	0.664	0.655	4	5	3	3	15	0.539	0.664		0.655					
13_2_4_101	MW-03	Appendix IV	Antimony	mg/L	60%	4	5	3	3	15	0.262	0.630	0.510	2	3	0	1	6	0.213	0.592		0.475					
13_2_4_102	MW-03	Appendix IV	Arsenic	mg/L	0%	4	5	3	3	15	0.371	0.632	0.648	4	5	3	3	15	0.371	0.632		0.648					
13_2_4_103	MW-03	Appendix IV	Barium	mg/L	0%	4	5	3	3	15	0.962	0.982	0.913	4	5	3	3	15	0.962	0.982		0.913					
13_2_4_104	MW-03	Appendix IV	Beryllium	mg/L	67%	4	5	3	3	15	0.891	0.793	0.823	1	2	1	1	5	0.849	0.840		0.823					
13_2_4_106	MW-03	Appendix IV	Cadmium	mg/L	93%	4	5	3	3	15	0.851	0.660	0.806	0	0	0	1	1	NA	NA		NA					
13_2_4_109	MW-03	Appendix IV	Chromium, Total	mg/L	0%	4	5	3	3	15	0.333	0.448	0.383	4	5	3	3	15	0.333	0.448		0.383					
13_2_4_110	MW-03	Appendix IV	Cobalt	mg/L	0%	4	5	3	3	15	0.224	0.340	0.287	4	5	3	3	15	0.224	0.340		0.287					
13_2_4_113	MW-03	Appendix IV	Fluoride (App IV)	mg/L	0%	4	5	3	3	15	0.238	0.399	0.356	4	5	3	3	15	0.238	0.399		0.356					
13_2_4_115	MW-03	Appendix IV	Lead	mg/L	93%	4	5	3	3	15	0.851	0.827	0.901	0	0	0	1	1	NA	NA		NA					
13_2_4_116	MW-03	Appendix IV	Lithium	mg/L	0%	4	5	3	3	15	0.781	0.770	0.791	4	5	3	3	15	0.781	0.770		0.791					
13_2_4_117	MW-03	Appendix IV	Mercury	mg/L	87%	4	5	3	3	15	0.568	0.622	0.638	0	1	0	1	2	0.317	NA		NA					
13_2_4_118	MW-03	Appendix IV	Molybdenum	mg/L	73%	4	5	3	3	15	0.314	0.667	0.503	1	1	0	2	4	0.407	0.635		0.722					
13_2_4_121	MW-03	Appendix IV	Radium 226 and 228	pCi/L	7%	4	4	3	3	14	0.525	0.578	0.564	3	4	3	3	13	0.303	0.411		0.352					
13_2_4_122	MW-03	Appendix IV	Selenium	mg/L	20%	4	5	3	3	15	0.259	0.396	0.442	2	4	3	3	12	0.220	0.333		0.441					
13_2_4_125	MW-03	Appendix IV	Thallium	mg/L	93%	4	5	3	3	15	0.487	0.527	0.566	0	0	0	1	1	NA	NA		NA					

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

						Full								Without Non-Detects													
						Sample Size					p-Value			Sample Size					p-Value								
ID	Well	Constituent Type	Constituent	Unit	% NDs	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA						
13_2_5_111	MW-03	Part 115	Copper	mg/L	47%	4	5	3	3	15	0.764	0.578	0.612	1	2	3	2	8	0.401	0.199	0.189						
13_2_5_114	MW-03	Part 115	Iron	mg/L	0%	4	5	3	3	15	0.090	0.297	0.112	4	5	3	3	15	0.090	0.297	0.112						
13_2_5_119	MW-03	Part 115	Nickel	mg/L	7%	4	5	3	3	15	0.849	0.408	0.479	3	5	3	3	14	0.955	0.395	0.658						
13_2_5_123	MW-03	Part 115	Silver	mg/L	100%	4	5	3	3	15	0.321	0.348	0.348	NA	NA	NA	NA	NA	NA	NA	NA						
13_2_5_128	MW-03	Part 115	Vanadium	mg/L	60%	4	5	3	3	15	0.975	0.930	0.968	1	2	1	2	6	0.431	0.629	0.589						
13_2_5_129	MW-03	Part 115	Zinc	mg/L	60%	4	5	3	3	15	0.129	0.216	0.187	0	2	1	3	6	0.501	0.730	0.721						
14_2_3_105	MW-04	Appendix III	Boron	mg/L	0%	4	5	3	3	15	0.158	0.075	0.084	4	5	3	3	15	0.158	0.075	0.084						
14_2_3_107	MW-04	Appendix III	Calcium	mg/L	0%	4	5	3	3	15	0.614	0.807	0.855	4	5	3	3	15	0.614	0.807	0.855						
14_2_3_108	MW-04	Appendix III	Chloride (as Cl)	mg/L	0%	4	5	3	3	15	0.874	0.921	0.912	4	5	3	3	15	0.874	0.921	0.912						
14_2_3_112	MW-04	Appendix III	Fluoride	mg/L	0%	4	5	3	3	15	0.413	0.369	0.287	4	5	3	3	15	0.413	0.369	0.287						
14_2_3_120	MW-04	Appendix III	pH (field)	su	0%	4	5	3	3	15	0.120	0.113	0.112	4	5	3	3	15	0.120	0.113	0.112						
14_2_3_124	MW-04	Appendix III	Sulfate (as SO4)	mg/L	0%	4	5	3	3	15	0.576	0.508	0.483	4	5	3	3	15	0.576	0.508	0.483						
14_2_3_126	MW-04	Appendix III	Total Dissolved Solids	mg/L	0%	4	5	3	3	15	0.231	0.616	0.671	4	5	3	3	15	0.231	0.616	0.671						
14_2_4_101	MW-04	Appendix IV	Antimony	mg/L	67%	4	5	3	3	15	0.538	0.520	0.610	1	2	1	1	5	0.284	0.125	0.064						
14_2_4_102	MW-04	Appendix IV	Arsenic	mg/L	0%	4	5	3	3	15	0.917	0.735	0.887	4	5	3	3	15	0.917	0.735	0.887						
14_2_4_103	MW-04	Appendix IV	Barium	mg/L	0%	4	5	3	3	15	0.248	0.277	0.287	4	5	3	3	15	0.248	0.277	0.287						
14_2_4_104	MW-04	Appendix IV	Beryllium	mg/L	87%	4	5	3	3	15	0.356	0.305	0.308	0	0	1	1	2	0.317	NA	NA						
14_2_4_106	MW-04	Appendix IV	Cadmium	mg/L	100%	4	5	3	3	15	0.680	0.603	0.698	NA	NA	NA	NA	NA	NA	NA	NA						
14_2_4_109	MW-04	Appendix IV	Chromium, Total	mg/L	0%	4	5	3	3	15	0.668	0.534	0.507	4	5	3	3	15	0.668	0.534	0.507						
14_2_4_110	MW-04	Appendix IV	Cobalt	mg/L	0%	4	5	3	3	15	0.785	0.625	0.733	4	5	3	3	15	0.785	0.625	0.733						
14_2_4_113	MW-04	Appendix IV	Fluoride (App IV)	mg/L	0%	4	5	3	3	15	0.413	0.369	0.287	4	5	3	3	15	0.413	0.369	0.287						
14_2_4_115	MW-04	Appendix IV	Lead	mg/L	93%	4	5	3	3	15	0.927	0.884	0.945	0	1	0	0	1	NA	NA	NA						
14_2_4_116	MW-04	Appendix IV	Lithium	mg/L	0%	4	5	3	3	15	0.023	*	0.009	**	0.015	*	4	5	3	3	15	0.023	*	0.009	**	0.015	*
14_2_4_117	MW-04	Appendix IV	Mercury	mg/L	93%	4	5	3	3	15	0.572	0.622	0.622	0	1	0	0	1	NA	NA	NA						
14_2_4_118	MW-04	Appendix IV	Molybdenum	mg/L	13%	4	5	3	3	15	0.495	0.574	0.632	3	4	3	3	13	0.590	0.713	0.859						
14_2_4_121	MW-04	Appendix IV	Radium 226 and 228	pCi/L	33%	4	5	3	3	15	0.934	0.967	0.945	2	3	2	3	10	0.631	0.637	0.546						
14_2_4_122	MW-04	Appendix IV	Selenium	mg/L	33%	4	5	3	3	15	0.519	0.819	0.877	3	2	3	2	10	0.460	0.377	0.446						
14_2_4_125	MW-04	Appendix IV	Thallium	mg/L	100%	4	5	3	3	15	0.861	0.889	0.889	NA	NA	NA	NA	NA	NA	NA	NA						
14_2_5_111	MW-04	Part 115	Copper	mg/L	80%	4	5	3	3	15	0.359	0.522	0.451	0	2	0	1	3	0.221	0.627	0.590						
14_2_5_114	MW-04	Part 115	Iron	mg/L	0%	4	5	3	3	15	0.359	0.888	0.858	4	5	3	3	15	0.359	0.888	0.858						
14_2_5_119	MW-04	Part 115	Nickel	mg/L	0%	4	5	3	3	15	0.130	0.200	0.403	4	5	3	3	15	0.130	0.200	0.403						
14_2_5_123	MW-04	Part 115	Silver	mg/L	100%	4	5	3	3	15	0.321	0.348	0.348	NA	NA	NA	NA	NA	NA	NA	NA						
14_2_5_128	MW-04	Part 115	Vanadium	mg/L	67%	4	5	3	3	15	0.915	0.785	0.814	1	2	1	1	5	0.317	0.333	0.306						
14_2_5_129	MW-04	Part 115	Zinc	mg/L	67%	4	5	3	3	15	0.048	*	0.162	0.094	0	2	0	3	5	0.564	0.798	0.789					
16_1_3_105	MW-06	Appendix III	Boron	mg/L	0%	4	5	3	3	15	0.026	*	0.008	**	0.016	*	4	5	3	3	15	0.026	*	0.008	**	0.016	*
16_1_3_107	MW-06	Appendix III	Calcium	mg/L	0%	4	5	3	3	15	0.337	0.356	0.378	4	5	3	3	15	0.337	0.356	0.378						
16_1_3_108	MW-06	Appendix III	Chloride (as Cl)	mg/L	0%	4	5	3	3	15	0.550	0.419	0.563	4	5	3	3	15	0.550	0.419	0.563						
16_1_3_112	MW-06	Appendix III	Fluoride	mg/L	0%	4	5	3	3	15	0.260	0.187	0.196	4	5	3	3	15	0.260	0.187	0.196						
16_1_3_120	MW-06	Appendix III	pH (field)	su	0%	4	5	3	3	15	0.891	0.654	0.639	4	5	3	3	15	0.891	0.654	0.639						

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

ID	Well	Constituent Type	Constituent	Unit	% NDs	Full								Without Non-Detects													
						Sample Size					p-Value			Sample Size					p-Value								
						Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA						
16_1_3_124	MW-06	Appendix III	Sulfate (as SO4)	mg/L	13%	4	5	3	3	15	0.471	0.479	0.322	4	5	2	2	13	0.805	0.815	0.714						
16_1_3_126	MW-06	Appendix III	Total Dissolved Solids	mg/L	0%	4	5	3	3	15	0.670	0.717	0.687	4	5	3	3	15	0.670	0.717	0.687						
16_1_4_101	MW-06	Appendix IV	Antimony	mg/L	87%	4	5	3	3	15	0.772	0.534	0.703	0	1	0	1	2	0.317	NA	NA						
16_1_4_102	MW-06	Appendix IV	Arsenic	mg/L	0%	4	5	3	3	15	0.041	*	0.006	**	0.006	**	4	5	3	3	15	0.041	*	0.006	**	0.006	**
16_1_4_103	MW-06	Appendix IV	Barium	mg/L	0%	4	5	3	3	15	0.084	0.107	0.118	4	5	3	3	15	0.084	0.107	0.118						
16_1_4_104	MW-06	Appendix IV	Beryllium	mg/L	93%	4	5	3	3	15	0.261	0.277	0.277	1	0	0	0	1	NA	NA	NA						
16_1_4_106	MW-06	Appendix IV	Cadmium	mg/L	100%	4	5	3	3	15	0.680	0.603	0.698	NA	NA	NA	NA	NA	NA	NA	NA						
16_1_4_109	MW-06	Appendix IV	Chromium, Total	mg/L	0%	4	5	3	3	15	0.543	0.801	0.704	4	5	3	3	15	0.543	0.801	0.704						
16_1_4_110	MW-06	Appendix IV	Cobalt	mg/L	0%	4	5	3	3	15	0.829	0.613	0.724	4	5	3	3	15	0.829	0.613	0.724						
16_1_4_113	MW-06	Appendix IV	Fluoride (App IV)	mg/L	0%	4	5	3	3	15	0.260	0.187	0.196	4	5	3	3	15	0.260	0.187	0.196						
16_1_4_115	MW-06	Appendix IV	Lead	mg/L	67%	4	5	3	3	15	0.396	0.494	0.384	2	0	1	2	5	0.741	0.935	0.920						
16_1_4_116	MW-06	Appendix IV	Lithium	mg/L	0%	4	5	3	3	15	0.494	0.491	0.415	4	5	3	3	15	0.494	0.491	0.415						
16_1_4_117	MW-06	Appendix IV	Mercury	mg/L	93%	4	5	3	3	15	0.572	0.622	0.622	0	1	0	0	1	NA	NA	NA						
16_1_4_118	MW-06	Appendix IV	Molybdenum	mg/L	60%	4	5	3	3	15	0.793	0.688	0.666	1	1	2	2	6	0.463	0.290	0.375						
16_1_4_121	MW-06	Appendix IV	Radium 226 and 228	pCi/L	20%	4	5	3	3	15	0.414	0.381	0.363	3	4	2	3	12	0.271	0.320	0.266						
16_1_4_122	MW-06	Appendix IV	Selenium	mg/L	33%	4	5	3	3	15	0.353	0.399	0.361	2	3	3	2	10	0.394	0.273	0.276						
16_1_4_125	MW-06	Appendix IV	Thallium	mg/L	100%	4	5	3	3	15	0.514	0.349	0.350	NA	NA	NA	NA	NA	NA	NA	NA						
16_1_5_111	MW-06	Part 115	Copper	mg/L	80%	4	5	3	3	15	0.596	0.476	0.518	1	0	1	1	3	0.368	NA	NA						
16_1_5_114	MW-06	Part 115	Iron	mg/L	0%	4	5	3	3	15	0.546	0.699	0.690	4	5	3	3	15	0.546	0.699	0.690						
16_1_5_119	MW-06	Part 115	Nickel	mg/L	40%	4	5	3	3	15	0.185	0.175	0.171	3	1	2	3	9	0.703	0.661	0.684						
16_1_5_123	MW-06	Part 115	Silver	mg/L	100%	4	5	3	3	15	0.514	0.349	0.351	NA	NA	NA	NA	NA	NA	NA	NA						
16_1_5_128	MW-06	Part 115	Vanadium	mg/L	93%	4	5	3	3	15	0.357	0.390	0.390	0	0	1	0	1	NA	NA	NA						
16_1_5_129	MW-06	Part 115	Zinc	mg/L	13%	4	5	3	3	15	0.264	0.318	0.158	3	4	3	3	13	0.292	0.390	0.240						
17_1_3_105	MW-07	Appendix III	Boron	mg/L	0%	4	5	3	3	15	0.414	0.525	0.534	4	5	3	3	15	0.414	0.525	0.534						
17_1_3_107	MW-07	Appendix III	Calcium	mg/L	0%	4	5	3	3	15	0.768	0.859	0.859	4	5	3	3	15	0.768	0.859	0.859						
17_1_3_108	MW-07	Appendix III	Chloride (as Cl)	mg/L	0%	4	5	3	3	15	0.168	0.384	0.338	4	5	3	3	15	0.168	0.384	0.338						
17_1_3_112	MW-07	Appendix III	Fluoride	mg/L	20%	4	5	3	3	15	0.835	0.873	0.938	3	4	3	2	12	0.262	0.510	0.416						
17_1_3_120	MW-07	Appendix III	pH (field)	su	0%	4	5	3	3	15	0.742	0.593	0.597	4	5	3	3	15	0.742	0.593	0.597						
17_1_3_124	MW-07	Appendix III	Sulfate (as SO4)	mg/L	0%	4	5	3	3	15	0.055	0.012	*	0.008	**	4	5	3	3	15	0.055	0.012	*	0.008	**		
17_1_3_126	MW-07	Appendix III	Total Dissolved Solids	mg/L	0%	4	5	3	3	15	0.693	0.816	0.811	4	5	3	3	15	0.693	0.816	0.811						
17_1_4_101	MW-07	Appendix IV	Antimony	mg/L	93%	4	5	3	3	15	0.564	0.607	0.602	0	1	0	0	1	NA	NA	NA						
17_1_4_102	MW-07	Appendix IV	Arsenic	mg/L	0%	4	5	3	3	15	0.413	0.278	0.334	4	5	3	3	15	0.413	0.278	0.334						
17_1_4_103	MW-07	Appendix IV	Barium	mg/L	0%	4	5	3	3	15	0.481	0.471	0.437	4	5	3	3	15	0.481	0.471	0.437						
17_1_4_104	MW-07	Appendix IV	Beryllium	mg/L	80%	4	5	3	3	15	0.596	0.532	0.543	1	0	1	1	3	0.368	NA	NA						
17_1_4_106	MW-07	Appendix IV	Cadmium	mg/L	100%	4	5	3	3	15	0.581	0.630	0.630	NA	NA	NA	NA	NA	NA	NA	NA						
17_1_4_109	MW-07	Appendix IV	Chromium, Total	mg/L	0%	4	5	3	3	15	0.400	0.402	0.420	4	5	3	3	15	0.400	0.402	0.420						
17_1_4_110	MW-07	Appendix IV	Cobalt	mg/L	0%	4	5	3	3	15	0.838	0.723	0.731	4	5	3	3	15	0.838	0.723	0.731						
17_1_4_113	MW-07	Appendix IV	Fluoride (App IV)	mg/L	20%	4	5	3	3	15	0.835	0.873	0.938	3	4	3	2	12	0.262	0.510	0.416						
17_1_4_115	MW-07	Appendix IV	Lead	mg/L	100%	4	5	3	3	15	0.581	0.630	0.630	NA	NA	NA	NA	NA	NA	NA	NA						

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

ID	Well	Constituent Type	Constituent	Unit	% NDs	Full								Without Non-Detects													
						Sample Size					p-Value			Sample Size					p-Value								
						Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA						
17_1_4_116	MW-07	Appendix IV	Lithium	mg/L	0%	4	5	3	3	15	0.415	0.568	0.529	4	5	3	3	15	0.415	0.568	0.529						
17_1_4_117	MW-07	Appendix IV	Mercury	mg/L	100%	4	5	3	3	15	0.572	0.622	0.622	NA	NA	NA	NA	NA	NA	NA	NA						
17_1_4_118	MW-07	Appendix IV	Molybdenum	mg/L	100%	4	5	3	3	15	0.581	0.630	0.630	NA	NA	NA	NA	NA	NA	NA	NA						
17_1_4_121	MW-07	Appendix IV	Radium 226 and 228	pCi/L	13%	4	5	3	3	15	0.880	0.465	0.628	4	4	2	3	13	0.538	0.159	0.243						
17_1_4_122	MW-07	Appendix IV	Selenium	mg/L	60%	4	5	3	3	15	0.136	0.175	0.157	2	2	1	1	6	0.253	0.541	0.447						
17_1_4_125	MW-07	Appendix IV	Thallium	mg/L	100%	4	5	3	3	15	NA	0.277	0.277	NA	NA	NA	NA	NA	NA	NA	NA						
17_1_5_111	MW-07	Part 115	Copper	mg/L	73%	4	5	3	3	15	0.964	0.564	0.625	1	1	1	1	4	0.392	NA	NA						
17_1_5_114	MW-07	Part 115	Iron	mg/L	0%	4	5	3	3	15	0.587	0.682	0.631	4	5	3	3	15	0.587	0.682	0.631						
17_1_5_119	MW-07	Part 115	Nickel	mg/L	93%	4	5	3	3	15	0.261	0.277	0.277	0	0	0	1	1	NA	NA	NA						
17_1_5_123	MW-07	Part 115	Silver	mg/L	100%	4	5	3	3	15	NA	0.277	0.277	NA	NA	NA	NA	NA	NA	NA	NA						
17_1_5_128	MW-07	Part 115	Vanadium	mg/L	80%	4	5	3	3	15	0.617	0.548	0.576	0	1	1	1	3	0.368	NA	NA						
17_1_5_129	MW-07	Part 115	Zinc	mg/L	67%	4	5	3	3	15	0.067	0.243	0.046	*	1	1	0	3	5	0.186	0.269	0.247					
18_1_3_105	MW-08	Appendix III	Boron	mg/L	0%	5	5	3	2	15	0.173	0.285	0.297	5	5	3	2	15	0.173	0.285	0.297						
18_1_3_107	MW-08	Appendix III	Calcium	mg/L	0%	5	5	3	2	15	0.462	0.457	0.475	5	5	3	2	15	0.462	0.457	0.475						
18_1_3_108	MW-08	Appendix III	Chloride (as Cl)	mg/L	0%	5	5	3	2	15	0.932	0.277	0.698	5	5	3	2	15	0.932	0.277	0.698						
18_1_3_112	MW-08	Appendix III	Fluoride	mg/L	0%	5	5	3	2	15	0.209	0.099	0.108	5	5	3	2	15	0.209	0.099	0.108						
18_1_3_120	MW-08	Appendix III	pH (field)	su	0%	5	5	3	2	15	0.110	0.390	0.410	5	5	3	2	15	0.110	0.390	0.410						
18_1_3_124	MW-08	Appendix III	Sulfate (as SO4)	mg/L	27%	5	5	3	2	15	0.196	0.572	0.119	5	4	0	2	11	0.622	0.780	0.752						
18_1_3_126	MW-08	Appendix III	Total Dissolved Solids	mg/L	0%	5	5	3	2	15	0.686	0.802	0.809	5	5	3	2	15	0.686	0.802	0.809						
18_1_4_101	MW-08	Appendix IV	Antimony	mg/L	47%	5	5	3	2	15	0.894	0.707	0.778	4	2	1	1	8	0.505	0.480	0.606						
18_1_4_102	MW-08	Appendix IV	Arsenic	mg/L	0%	5	5	3	2	15	0.079	0.051	0.132	5	5	3	2	15	0.079	0.051	0.132						
18_1_4_103	MW-08	Appendix IV	Barium	mg/L	0%	5	5	3	2	15	0.624	0.676	0.666	5	5	3	2	15	0.624	0.676	0.666						
18_1_4_104	MW-08	Appendix IV	Beryllium	mg/L	93%	5	5	3	2	15	0.572	0.622	0.622	1	0	0	0	1	NA	NA	NA						
18_1_4_106	MW-08	Appendix IV	Cadmium	mg/L	93%	5	5	3	2	15	0.567	0.658	0.494	1	0	0	0	1	NA	NA	NA						
18_1_4_109	MW-08	Appendix IV	Chromium, Total	mg/L	0%	5	5	3	2	15	0.295	0.646	0.548	5	5	3	2	15	0.295	0.646	0.548						
18_1_4_110	MW-08	Appendix IV	Cobalt	mg/L	0%	5	5	3	2	15	0.433	0.594	0.588	5	5	3	2	15	0.433	0.594	0.588						
18_1_4_113	MW-08	Appendix IV	Fluoride (App IV)	mg/L	0%	5	5	3	2	15	0.209	0.099	0.108	5	5	3	2	15	0.209	0.099	0.108						
18_1_4_115	MW-08	Appendix IV	Lead	mg/L	60%	5	5	3	2	15	0.109	0.107	0.199	3	2	0	1	6	0.252	0.013	*	0.157					
18_1_4_116	MW-08	Appendix IV	Lithium	mg/L	0%	5	5	3	2	15	0.314	0.333	0.323	5	5	3	2	15	0.314	0.333	0.323						
18_1_4_117	MW-08	Appendix IV	Mercury	mg/L	100%	5	5	3	2	15	0.572	0.622	0.622	NA	NA	NA	NA	NA	NA	NA	NA						
18_1_4_118	MW-08	Appendix IV	Molybdenum	mg/L	0%	5	5	3	2	15	0.053	0.036	*	0.001	**	5	5	3	2	15	0.053	0.036	*	0.001	**		
18_1_4_121	MW-08	Appendix IV	Radium 226 and 228	pCi/L	20%	5	5	3	2	15	0.475	0.870	0.825	3	5	2	2	12	0.642	0.678	0.813						
18_1_4_122	MW-08	Appendix IV	Selenium	mg/L	33%	5	5	3	2	15	0.027	*	0.010	*	0.007	**	2	3	3	2	10	0.088	0.000	***	0.001	***	
18_1_4_125	MW-08	Appendix IV	Thallium	mg/L	93%	5	5	3	2	15	0.572	0.622	0.622	1	0	0	0	1	NA	NA	NA						
18_1_5_111	MW-08	Part 115	Copper	mg/L	33%	5	5	3	2	15	0.826	0.772	0.856	3	4	1	2	10	0.484	0.640	0.637						
18_1_5_114	MW-08	Part 115	Iron	mg/L	0%	5	5	3	2	15	0.026	*	0.011	*	0.004	**	5	5	3	2	15	0.026	*	0.011	*	0.004	**
18_1_5_119	MW-08	Part 115	Nickel	mg/L	0%	5	5	3	2	15	0.699	0.191	0.530	5	5	3	2	15	0.699	0.191	0.530						
18_1_5_123	MW-08	Part 115	Silver	mg/L	100%	5	5	3	2	15	NA	0.622	0.622	NA	NA	NA	NA	NA	NA	NA	NA						
18_1_5_128	MW-08	Part 115	Vanadium	mg/L	93%	5	5	3	2	15	0.572	0.622	0.622	1	0	0	0	1	NA	NA	NA						

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

ID	Well	Constituent Type	Constituent	Unit	% NDs	Full							Without Non-Detects														
						Sample Size					p-Value			Sample Size					p-Value								
						Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA						
18_1_5_129	MW-08	Part 115	Zinc	mg/L	20%	5	5	3	2	15	0.407	0.342	0.477	3	5	2	2	12	0.185	0.546	0.558						
19_2_3_105	MW-09	Appendix III	Boron	mg/L	0%	4	5	3	3	15	0.048	*	0.024	*	0.025	*	4	5	3	3	15	0.048	*	0.024	*	0.025	*
19_2_3_107	MW-09	Appendix III	Calcium	mg/L	0%	4	5	3	3	15	0.206	0.164	0.150	4	5	3	3	15	0.206	0.164	0.150						
19_2_3_108	MW-09	Appendix III	Chloride (as Cl)	mg/L	0%	4	5	3	3	15	0.556	0.712	0.695	4	5	3	3	15	0.556	0.712	0.695						
19_2_3_112	MW-09	Appendix III	Fluoride	mg/L	0%	4	5	3	3	15	0.171	0.194	0.230	4	5	3	3	15	0.171	0.194	0.230						
19_2_3_120	MW-09	Appendix III	pH (field)	su	0%	4	5	3	3	15	0.226	0.211	0.211	4	5	3	3	15	0.226	0.211	0.211						
19_2_3_124	MW-09	Appendix III	Sulfate (as SO4)	mg/L	0%	4	5	3	3	15	0.123	0.056	0.062	4	5	3	3	15	0.123	0.056	0.062						
19_2_3_126	MW-09	Appendix III	Total Dissolved Solids	mg/L	0%	4	5	3	3	15	0.147	0.162	0.168	4	5	3	3	15	0.147	0.162	0.168						
19_2_4_101	MW-09	Appendix IV	Antimony	mg/L	67%	4	5	3	3	15	0.678	0.511	0.575	1	2	1	1	5	0.532	0.891	0.841						
19_2_4_102	MW-09	Appendix IV	Arsenic	mg/L	0%	4	5	3	3	15	0.130	0.252	0.221	4	5	3	3	15	0.130	0.252	0.221						
19_2_4_103	MW-09	Appendix IV	Barium	mg/L	0%	4	5	3	3	15	0.291	0.454	0.462	4	5	3	3	15	0.291	0.454	0.462						
19_2_4_104	MW-09	Appendix IV	Beryllium	mg/L	80%	4	5	3	3	15	0.805	0.509	0.535	1	1	1	0	3	0.368	NA	NA						
19_2_4_106	MW-09	Appendix IV	Cadmium	mg/L	100%	4	5	3	3	15	0.733	0.747	0.815	NA	NA	NA	NA	NA	NA	NA	NA						
19_2_4_109	MW-09	Appendix IV	Chromium, Total	mg/L	0%	4	5	3	3	15	0.775	0.841	0.850	4	5	3	3	15	0.775	0.841	0.850						
19_2_4_110	MW-09	Appendix IV	Cobalt	mg/L	0%	4	5	3	3	15	0.110	0.141	0.076	4	5	3	3	15	0.110	0.141	0.076						
19_2_4_113	MW-09	Appendix IV	Fluoride (App IV)	mg/L	0%	4	5	3	3	15	0.171	0.194	0.230	4	5	3	3	15	0.171	0.194	0.230						
19_2_4_115	MW-09	Appendix IV	Lead	mg/L	100%	4	5	3	3	15	0.208	0.365	0.226	NA	NA	NA	NA	NA	NA	NA	NA						
19_2_4_116	MW-09	Appendix IV	Lithium	mg/L	0%	4	5	3	3	15	0.159	0.188	0.219	4	5	3	3	15	0.159	0.188	0.219						
19_2_4_117	MW-09	Appendix IV	Mercury	mg/L	87%	4	5	3	3	15	0.675	0.575	0.757	0	1	0	1	2	0.317	NA	NA						
19_2_4_118	MW-09	Appendix IV	Molybdenum	mg/L	0%	4	5	3	3	15	0.183	0.423	0.613	4	5	3	3	15	0.183	0.423	0.613						
19_2_4_121	MW-09	Appendix IV	Radium 226 and 228	pCi/L	93%	4	5	3	3	15	0.554	0.696	0.549	0	0	0	1	1	NA	NA	NA						
19_2_4_122	MW-09	Appendix IV	Selenium	mg/L	13%	4	5	3	3	15	0.892	0.771	0.788	3	4	3	3	13	0.934	0.652	0.729						
19_2_4_125	MW-09	Appendix IV	Thallium	mg/L	100%	4	5	3	3	15	0.281	0.301	0.301	NA	NA	NA	NA	NA	NA	NA	NA						
19_2_5_111	MW-09	Part 115	Copper	mg/L	67%	4	5	3	3	15	0.337	0.147	0.121	1	1	2	1	5	0.285	0.819	0.736						
19_2_5_114	MW-09	Part 115	Iron	mg/L	0%	4	5	3	3	15	0.016	*	0.001	***	0.002	**	4	5	3	3	15	0.016	*	0.001	***	0.002	**
19_2_5_119	MW-09	Part 115	Nickel	mg/L	0%	4	5	3	3	15	0.214	0.466	0.298	4	5	3	3	15	0.214	0.466	0.298						
19_2_5_123	MW-09	Part 115	Silver	mg/L	100%	4	5	3	3	15	0.453	0.497	0.497	NA	NA	NA	NA	NA	NA	NA	NA						
19_2_5_128	MW-09	Part 115	Vanadium	mg/L	100%	4	5	3	3	15	NA	0.277	0.277	NA	NA	NA	NA	NA	NA	NA	NA						
19_2_5_129	MW-09	Part 115	Zinc	mg/L	53%	4	5	3	3	15	0.652	0.458	0.472	2	2	1	2	7	0.502	0.694	0.558						
20_3_3_105	MW-10	Appendix III	Boron	mg/L	0%	4	5	3	3	15	0.082	0.069	0.094	4	5	3	3	15	0.082	0.069	0.094						
20_3_3_107	MW-10	Appendix III	Calcium	mg/L	0%	4	5	3	3	15	0.614	0.582	0.595	4	5	3	3	15	0.614	0.582	0.595						
20_3_3_108	MW-10	Appendix III	Chloride (as Cl)	mg/L	0%	4	5	3	3	15	0.118	0.088	0.068	4	5	3	3	15	0.118	0.088	0.068						
20_3_3_112	MW-10	Appendix III	Fluoride	mg/L	0%	4	5	3	3	15	0.248	0.272	0.305	4	5	3	3	15	0.248	0.272	0.305						
20_3_3_120	MW-10	Appendix III	pH (field)	su	0%	4	5	3	3	15	0.161	0.150	0.152	4	5	3	3	15	0.161	0.150	0.152						
20_3_3_124	MW-10	Appendix III	Sulfate (as SO4)	mg/L	0%	4	5	3	3	15	0.676	0.697	0.419	4	5	3	3	15	0.676	0.697	0.419						
20_3_3_126	MW-10	Appendix III	Total Dissolved Solids	mg/L	0%	4	5	3	3	15	0.863	0.822	0.858	4	5	3	3	15	0.863	0.822	0.858						
20_3_4_101	MW-10	Appendix IV	Antimony	mg/L	73%	4	5	3	3	15	0.991	0.619	0.851	0	1	2	1	4	0.223	0.000	***	0.000	***				
20_3_4_102	MW-10	Appendix IV	Arsenic	mg/L	0%	4	5	3	3	15	0.074	0.068	0.051	4	5	3	3	15	0.074	0.068	0.051						
20_3_4_103	MW-10	Appendix IV	Barium	mg/L	0%	4	5	3	3	15	0.086	0.097	0.082	4	5	3	3	15	0.086	0.097	0.082						

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

ID	Well	Constituent Type	Constituent	Unit	% NDs	Full							Without Non-Detects														
						Sample Size					p-Value			Sample Size					p-Value								
						Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA						
20_3_4_104	MW-10	Appendix IV	Beryllium	mg/L	47%	4	5	3	3	15	0.591	0.580	0.489	1	3	2	2	8	0.324	0.750	0.641						
20_3_4_106	MW-10	Appendix IV	Cadmium	mg/L	100%	4	5	3	3	15	0.680	0.603	0.698	NA	NA	NA	NA	NA	NA	NA	NA						
20_3_4_109	MW-10	Appendix IV	Chromium, Total	mg/L	0%	4	5	3	3	15	0.395	0.153	0.275	4	5	3	3	15	0.395	0.153	0.275						
20_3_4_110	MW-10	Appendix IV	Cobalt	mg/L	7%	4	5	3	3	15	0.748	0.714	0.699	3	5	3	3	14	0.902	0.845	0.908						
20_3_4_113	MW-10	Appendix IV	Fluoride (App IV)	mg/L	0%	4	5	3	3	15	0.248	0.272	0.305	4	5	3	3	15	0.248	0.272	0.305						
20_3_4_115	MW-10	Appendix IV	Lead	mg/L	87%	4	5	3	3	15	0.847	0.638	0.812	0	0	1	1	2	0.317	NA	NA						
20_3_4_116	MW-10	Appendix IV	Lithium	mg/L	0%	4	5	3	3	15	0.178	0.271	0.156	4	5	3	3	15	0.178	0.271	0.156						
20_3_4_117	MW-10	Appendix IV	Mercury	mg/L	93%	4	5	3	3	15	1.000	0.704	0.899	0	1	0	0	1	NA	NA	NA						
20_3_4_118	MW-10	Appendix IV	Molybdenum	mg/L	0%	4	5	3	3	15	0.676	0.526	0.430	4	5	3	3	15	0.676	0.526	0.430						
20_3_4_121	MW-10	Appendix IV	Radium 226 and 228	pCi/L	80%	4	5	3	3	15	0.505	0.635	0.689	2	0	0	1	3	0.221	0.484	0.445						
20_3_4_122	MW-10	Appendix IV	Selenium	mg/L	7%	4	5	3	3	15	0.623	0.896	0.948	4	4	3	3	14	0.671	0.947	0.985						
20_3_4_125	MW-10	Appendix IV	Thallium	mg/L	100%	4	5	3	3	15	0.912	0.890	0.890	NA	NA	NA	NA	NA	NA	NA	NA						
20_3_5_111	MW-10	Part 115	Copper	mg/L	80%	4	5	3	3	15	0.195	0.659	0.514	0	1	0	2	3	0.221	0.070	0.125						
20_3_5_114	MW-10	Part 115	Iron	mg/L	0%	4	5	3	3	15	0.038	*	0.022	*	0.034	*	4	5	3	3	15	0.038	*	0.022	*	0.034	*
20_3_5_119	MW-10	Part 115	Nickel	mg/L	47%	4	5	3	3	15	0.411	0.799	0.761	1	2	2	3	8	0.670	0.624	0.658						
20_3_5_123	MW-10	Part 115	Silver	mg/L	100%	4	5	3	3	15	0.514	0.349	0.351	NA	NA	NA	NA	NA	NA	NA	NA						
20_3_5_128	MW-10	Part 115	Vanadium	mg/L	80%	4	5	3	3	15	0.374	0.790	0.779	0	1	1	1	3	0.368	NA	NA						
20_3_5_129	MW-10	Part 115	Zinc	mg/L	47%	4	5	3	3	15	0.032	*	0.070	0.032	*	1	2	2	3	8	0.124	0.450	0.288				
21_2_3_105	MW-11	Appendix III	Boron	mg/L	0%	4	5	3	3	15	0.020	*	0.019	*	0.006	**	4	5	3	3	15	0.020	*	0.019	*	0.006	**
21_2_3_107	MW-11	Appendix III	Calcium	mg/L	0%	4	5	3	3	15	0.136	0.102	0.121	4	5	3	3	15	0.136	0.102	0.121						
21_2_3_108	MW-11	Appendix III	Chloride (as Cl)	mg/L	0%	4	5	3	3	15	0.016	*	0.002	**	0.003	**	4	5	3	3	15	0.016	*	0.002	**	0.003	**
21_2_3_112	MW-11	Appendix III	Fluoride	mg/L	0%	4	5	3	3	15	0.078	0.112	0.107	4	5	3	3	15	0.078	0.112	0.107						
21_2_3_120	MW-11	Appendix III	pH (field)	su	0%	4	5	3	3	15	0.250	0.334	0.335	4	5	3	3	15	0.250	0.334	0.335						
21_2_3_124	MW-11	Appendix III	Sulfate (as SO4)	mg/L	40%	4	5	3	3	15	0.137	0.099	0.140	2	4	2	1	9	0.261	0.280	0.209						
21_2_3_126	MW-11	Appendix III	Total Dissolved Solids	mg/L	0%	4	5	3	3	15	0.848	0.578	0.610	4	5	3	3	15	0.848	0.578	0.610						
21_2_4_101	MW-11	Appendix IV	Antimony	mg/L	73%	4	5	3	3	15	0.679	0.594	0.658	1	2	0	1	4	0.223	0.000	***	0.000	***				
21_2_4_102	MW-11	Appendix IV	Arsenic	mg/L	0%	4	5	3	3	15	0.230	0.438	0.290	4	5	3	3	15	0.230	0.438	0.290						
21_2_4_103	MW-11	Appendix IV	Barium	mg/L	0%	4	5	3	3	15	0.035	*	0.050	*	0.028	*	4	5	3	3	15	0.035	*	0.050	*	0.028	*
21_2_4_104	MW-11	Appendix IV	Beryllium	mg/L	80%	4	5	3	3	15	0.824	0.691	0.788	1	1	0	1	3	0.368	NA	NA						
21_2_4_106	MW-11	Appendix IV	Cadmium	mg/L	87%	4	5	3	3	15	0.599	0.641	0.696	1	1	0	0	2	0.317	NA	NA						
21_2_4_109	MW-11	Appendix IV	Chromium, Total	mg/L	0%	4	5	3	3	15	0.132	0.484	0.353	4	5	3	3	15	0.132	0.484	0.353						
21_2_4_110	MW-11	Appendix IV	Cobalt	mg/L	0%	4	5	3	3	15	0.428	0.659	0.571	4	5	3	3	15	0.428	0.659	0.571						
21_2_4_113	MW-11	Appendix IV	Fluoride (App IV)	mg/L	0%	4	5	3	3	15	0.078	0.112	0.107	4	5	3	3	15	0.078	0.112	0.107						
21_2_4_115	MW-11	Appendix IV	Lead	mg/L	20%	4	5	3	3	15	0.735	0.482	0.634	4	2	3	3	12	0.743	0.650	0.771						
21_2_4_116	MW-11	Appendix IV	Lithium	mg/L	0%	4	5	3	3	15	0.055	0.124	0.032	*	4	5	3	3	15	0.055	0.124	0.032	*				
21_2_4_117	MW-11	Appendix IV	Mercury	mg/L	87%	4	5	3	3	15	0.232	0.621	0.439	0	2	0	0	2	NA	NA	NA						
21_2_4_118	MW-11	Appendix IV	Molybdenum	mg/L	13%	4	5	3	3	15	0.642	0.872	0.794	4	3	3	3	13	0.964	0.882	0.943						
21_2_4_121	MW-11	Appendix IV	Radium 226 and 228	pCi/L	29%	4	4	3	3	14	0.862	0.809	0.828	3	3	1	3	10	0.334	0.279	0.383						
21_2_4_122	MW-11	Appendix IV	Selenium	mg/L	20%	4	5	3	3	15	0.373	0.372	0.350	3	3	3	3	12	0.442	0.361	0.376						

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

ID	Well	Constituent Type	Constituent	Unit	% NDs	Full								Without Non-Detects													
						Sample Size					p-Value			Sample Size					p-Value								
						Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA						
21_2_4_125	MW-11	Appendix IV	Thallium	mg/L	93%	4	5	3	3	15	0.221	0.304	0.251	0	1	0	0	1	NA	NA	NA						
21_2_5_111	MW-11	Part 115	Copper	mg/L	27%	4	5	3	3	15	0.341	0.524	0.666	4	2	3	2	11	0.860	0.758	0.936						
21_2_5_114	MW-11	Part 115	Iron	mg/L	0%	4	5	3	3	15	0.039	*	0.023	*	0.047	*	4	5	3	3	15	0.039	*	0.023	*	0.047	*
21_2_5_119	MW-11	Part 115	Nickel	mg/L	0%	4	5	3	3	15	0.503	0.501	0.510	4	5	3	3	15	0.503	0.501	0.510						
21_2_5_123	MW-11	Part 115	Silver	mg/L	87%	4	5	3	3	15	0.151	0.116	0.133	1	1	0	0	2	0.317	NA	NA						
21_2_5_128	MW-11	Part 115	Vanadium	mg/L	87%	4	5	3	3	15	0.572	0.622	0.622	1	1	0	0	2	0.317	NA	NA						
21_2_5_129	MW-11	Part 115	Zinc	mg/L	27%	4	5	3	3	15	0.459	0.311	0.358	3	3	2	3	11	0.309	0.335	0.378						
22_2_3_105	MW-12	Appendix III	Boron	mg/L	0%	4	5	3	3	15	0.019	*	0.000	***	0.001	***	4	5	3	3	15	0.019	*	0.000	***	0.001	***
22_2_3_107	MW-12	Appendix III	Calcium	mg/L	0%	4	5	3	3	15	0.077	0.056	0.070	4	5	3	3	15	0.077	0.056	0.070						
22_2_3_108	MW-12	Appendix III	Chloride (as Cl)	mg/L	0%	4	5	3	3	15	0.076	0.081	0.065	4	5	3	3	15	0.076	0.081	0.065						
22_2_3_112	MW-12	Appendix III	Fluoride	mg/L	0%	4	5	3	3	15	0.829	0.813	0.865	4	5	3	3	15	0.829	0.813	0.865						
22_2_3_120	MW-12	Appendix III	pH (field)	su	0%	4	5	3	3	15	0.106	0.282	0.291	4	5	3	3	15	0.106	0.282	0.291						
22_2_3_124	MW-12	Appendix III	Sulfate (as SO4)	mg/L	0%	4	5	3	3	15	0.647	0.643	0.747	4	5	3	3	15	0.647	0.643	0.747						
22_2_3_126	MW-12	Appendix III	Total Dissolved Solids	mg/L	0%	4	5	3	3	15	0.100	0.069	0.170	4	5	3	3	15	0.100	0.069	0.170						
22_2_4_101	MW-12	Appendix IV	Antimony	mg/L	0%	4	5	3	3	15	0.338	0.326	0.407	4	5	3	3	15	0.338	0.326	0.407						
22_2_4_102	MW-12	Appendix IV	Arsenic	mg/L	0%	4	5	3	3	15	0.016	*	0.000	***	0.000	***	4	5	3	3	15	0.016	*	0.000	***	0.000	***
22_2_4_103	MW-12	Appendix IV	Barium	mg/L	0%	4	5	3	3	15	0.054	0.054	0.038	*	4	5	3	3	15	0.054	0.054	0.038	*				
22_2_4_104	MW-12	Appendix IV	Beryllium	mg/L	100%	4	5	3	3	15	NA	0.277	0.277	NA	NA	NA	NA	NA	NA	NA	NA						
22_2_4_106	MW-12	Appendix IV	Cadmium	mg/L	0%	4	5	3	3	15	0.118	0.026	*	0.067	4	5	3	3	15	0.118	0.026	*	0.067				
22_2_4_109	MW-12	Appendix IV	Chromium, Total	mg/L	33%	4	5	3	3	15	0.045	*	0.056	0.020	*	4	4	0	2	10	0.072	0.108	0.036	*			
22_2_4_110	MW-12	Appendix IV	Cobalt	mg/L	33%	4	5	3	3	15	0.019	*	0.010	**	0.001	***	2	2	3	3	10	0.091	0.217	0.060			
22_2_4_113	MW-12	Appendix IV	Fluoride (App IV)	mg/L	0%	4	5	3	3	15	0.829	0.813	0.865	4	5	3	3	15	0.829	0.813	0.865						
22_2_4_115	MW-12	Appendix IV	Lead	mg/L	40%	4	5	3	3	15	0.421	0.464	0.386	1	3	3	2	9	0.498	0.680	0.676						
22_2_4_116	MW-12	Appendix IV	Lithium	mg/L	0%	4	5	3	3	15	0.037	*	0.009	**	0.011	*	4	5	3	3	15	0.037	*	0.009	**	0.011	*
22_2_4_117	MW-12	Appendix IV	Mercury	mg/L	80%	4	5	3	3	15	0.232	0.622	0.584	0	2	0	1	3	0.221	0.667	0.643						
22_2_4_118	MW-12	Appendix IV	Molybdenum	mg/L	0%	4	5	3	3	15	0.034	*	0.027	*	0.012	*	4	5	3	3	15	0.034	*	0.027	*	0.012	*
22_2_4_121	MW-12	Appendix IV	Radium 226 and 228	pCi/L	67%	4	5	3	3	15	0.732	0.627	0.687	0	4	0	1	5	1.000	0.763	0.830						
22_2_4_122	MW-12	Appendix IV	Selenium	mg/L	0%	4	5	3	3	15	0.020	*	0.023	*	0.000	***	4	5	3	3	15	0.020	*	0.023	*	0.000	***
22_2_4_125	MW-12	Appendix IV	Thallium	mg/L	100%	4	5	3	3	15	NA	0.277	0.277	NA	NA	NA	NA	NA	NA	NA	NA						
22_2_5_111	MW-12	Part 115	Copper	mg/L	0%	4	5	3	3	15	0.473	0.712	0.529	4	5	3	3	15	0.473	0.712	0.529						
22_2_5_114	MW-12	Part 115	Iron	mg/L	40%	4	5	3	3	15	0.018	*	0.024	*	0.006	**	2	2	3	2	9	0.158	0.373	0.251			
22_2_5_119	MW-12	Part 115	Nickel	mg/L	0%	4	5	3	3	15	0.072	0.060	0.075	4	5	3	3	15	0.072	0.060	0.075						
22_2_5_123	MW-12	Part 115	Silver	mg/L	100%	4	5	3	3	15	NA	0.277	0.277	NA	NA	NA	NA	NA	NA	NA	NA						
22_2_5_128	MW-12	Part 115	Vanadium	mg/L	40%	4	5	3	3	15	0.130	0.309	0.204	1	4	3	1	9	0.174	0.045	*	0.074					
22_2_5_129	MW-12	Part 115	Zinc	mg/L	0%	4	5	3	3	15	0.217	0.273	0.327	4	5	3	3	15	0.217	0.273	0.327						
28_1_3_105	MW-18	Appendix III	Boron	mg/L	0%	4	5	3	3	15	0.944	0.980	0.965	4	5	3	3	15	0.944	0.980	0.965						
28_1_3_107	MW-18	Appendix III	Calcium	mg/L	0%	4	5	3	3	15	0.021	*	0.011	*	0.011	*	4	5	3	3	15	0.021	*	0.011	*	0.011	*
28_1_3_108	MW-18	Appendix III	Chloride (as Cl)	mg/L	0%	4	5	3	3	15	0.021	*	0.004	**	0.001	**	4	5	3	3	15	0.021	*	0.004	**	0.001	**
28_1_3_112	MW-18	Appendix III	Fluoride	mg/L	0%	4	5	3	3	15	0.038	*	0.008	**	0.013	*	4	5	3	3	15	0.038	*	0.008	**	0.013	*

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

ID	Well	Constituent Type	Constituent	Unit	% NDs	Full								Without Non-Detects													
						Sample Size					p-Value			Sample Size					p-Value								
						Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA						
28_1_3_120	MW-18	Appendix III	pH (field)	su	0%	4	5	3	3	15	0.421	0.385	0.387	4	5	3	3	15	0.421	0.385	0.387						
28_1_3_124	MW-18	Appendix III	Sulfate (as SO4)	mg/L	0%	4	5	3	3	15	0.367	0.364	0.533	4	5	3	3	15	0.367	0.364	0.533						
28_1_3_126	MW-18	Appendix III	Total Dissolved Solids	mg/L	0%	4	5	3	3	15	0.075	0.049	*	0.047	*	4	5	3	3	15	0.075	0.049	*	0.047	*		
28_1_4_101	MW-18	Appendix IV	Antimony	mg/L	20%	4	5	3	3	15	0.016	*	0.159	0.048	*	3	4	2	3	12	0.044	*	0.188	0.109			
28_1_4_102	MW-18	Appendix IV	Arsenic	mg/L	0%	4	5	3	3	15	0.022	*	0.007	**	0.015	*	4	5	3	3	15	0.022	*	0.007	**	0.015	*
28_1_4_103	MW-18	Appendix IV	Barium	mg/L	0%	4	5	3	3	15	0.029	*	0.005	**	0.005	**	4	5	3	3	15	0.029	*	0.005	**	0.005	**
28_1_4_104	MW-18	Appendix IV	Beryllium	mg/L	87%	4	5	3	3	15	0.697	0.670	0.673	1	1	0	0	2	0.317	NA	NA						
28_1_4_106	MW-18	Appendix IV	Cadmium	mg/L	40%	4	5	3	3	15	0.461	0.668	0.564	2	4	2	1	9	0.959	0.995	0.984						
28_1_4_109	MW-18	Appendix IV	Chromium, Total	mg/L	87%	4	5	3	3	15	0.683	0.559	0.539	0	2	0	0	2	NA	NA	NA						
28_1_4_110	MW-18	Appendix IV	Cobalt	mg/L	0%	4	5	3	3	15	0.401	0.452	0.472	4	5	3	3	15	0.401	0.452	0.472						
28_1_4_113	MW-18	Appendix IV	Fluoride (App IV)	mg/L	0%	4	5	3	3	15	0.038	*	0.008	**	0.013	*	4	5	3	3	15	0.038	*	0.008	**	0.013	*
28_1_4_115	MW-18	Appendix IV	Lead	mg/L	67%	4	5	3	3	15	0.686	0.374	0.558	0	0	3	2	5	0.076	0.397	0.353						
28_1_4_116	MW-18	Appendix IV	Lithium	mg/L	0%	4	5	3	3	15	0.039	*	0.004	**	0.010	**	4	5	3	3	15	0.039	*	0.004	**	0.010	**
28_1_4_117	MW-18	Appendix IV	Mercury	mg/L	100%	4	5	3	3	15	0.572	0.622	0.622	NA	NA	NA	NA	NA	NA	NA	NA						
28_1_4_118	MW-18	Appendix IV	Molybdenum	mg/L	0%	4	5	3	3	15	0.051	0.006	**	0.010	**	4	5	3	3	15	0.051	0.006	**	0.010	**		
28_1_4_121	MW-18	Appendix IV	Radium 226 and 228	pCi/L	60%	4	5	3	3	15	0.299	0.612	0.548	1	2	1	2	6	0.733	0.919	0.957						
28_1_4_122	MW-18	Appendix IV	Selenium	mg/L	0%	4	5	3	3	15	0.133	0.167	0.085	4	5	3	3	15	0.133	0.167	0.085						
28_1_4_125	MW-18	Appendix IV	Thallium	mg/L	100%	4	5	3	3	15	0.321	0.348	0.348	NA	NA	NA	NA	NA	NA	NA	NA						
28_1_5_111	MW-18	Part 115	Copper	mg/L	0%	4	5	3	3	15	0.031	*	0.152	0.066	4	5	3	3	15	0.031	*	0.152	0.066				
28_1_5_114	MW-18	Part 115	Iron	mg/L	0%	4	5	3	3	15	0.033	*	0.014	*	0.011	*	4	5	3	3	15	0.033	*	0.014	*	0.011	*
28_1_5_119	MW-18	Part 115	Nickel	mg/L	0%	4	5	3	3	15	0.291	0.429	0.424	4	5	3	3	15	0.291	0.429	0.424						
28_1_5_123	MW-18	Part 115	Silver	mg/L	100%	4	5	3	3	15	0.321	0.348	0.348	NA	NA	NA	NA	NA	NA	NA	NA						
28_1_5_128	MW-18	Part 115	Vanadium	mg/L	100%	4	5	3	3	15	NA	0.277	0.277	NA	NA	NA	NA	NA	NA	NA	NA						
28_1_5_129	MW-18	Part 115	Zinc	mg/L	0%	4	5	3	3	15	0.504	0.453	0.305	4	5	3	3	15	0.504	0.453	0.305						
29_1_3_105	MW-19	Appendix III	Boron	mg/L	0%	4	5	3	3	15	0.008	**	0.000	***	0.000	***	4	5	3	3	15	0.008	**	0.000	***	0.000	***
29_1_3_107	MW-19	Appendix III	Calcium	mg/L	0%	4	5	3	3	15	0.150	0.244	0.262	4	5	3	3	15	0.150	0.244	0.262						
29_1_3_108	MW-19	Appendix III	Chloride (as Cl)	mg/L	0%	4	5	3	3	15	0.218	0.219	0.257	4	5	3	3	15	0.218	0.219	0.257						
29_1_3_112	MW-19	Appendix III	Fluoride	mg/L	0%	4	5	3	3	15	0.182	0.204	0.207	4	5	3	3	15	0.182	0.204	0.207						
29_1_3_120	MW-19	Appendix III	pH (field)	su	0%	4	5	3	3	15	0.362	0.310	0.305	4	5	3	3	15	0.362	0.310	0.305						
29_1_3_124	MW-19	Appendix III	Sulfate (as SO4)	mg/L	0%	4	5	3	3	15	0.251	0.463	0.474	4	5	3	3	15	0.251	0.463	0.474						
29_1_3_126	MW-19	Appendix III	Total Dissolved Solids	mg/L	0%	4	5	3	3	15	0.234	0.310	0.296	4	5	3	3	15	0.234	0.310	0.296						
29_1_4_101	MW-19	Appendix IV	Antimony	mg/L	80%	4	5	3	3	15	0.405	0.292	0.342	1	2	0	0	3	1.000	0.993	0.881						
29_1_4_102	MW-19	Appendix IV	Arsenic	mg/L	0%	4	5	3	3	15	0.015	*	0.001	***	0.004	**	4	5	3	3	15	0.015	*	0.001	***	0.004	**
29_1_4_103	MW-19	Appendix IV	Barium	mg/L	0%	4	5	3	3	15	0.098	0.074	0.066	4	5	3	3	15	0.098	0.074	0.066						
29_1_4_104	MW-19	Appendix IV	Beryllium	mg/L	20%	4	5	3	3	15	0.661	0.662	0.764	3	5	3	1	12	0.548	0.411	0.433						
29_1_4_106	MW-19	Appendix IV	Cadmium	mg/L	100%	4	5	3	3	15	0.680	0.603	0.698	NA	NA	NA	NA	NA	NA	NA	NA						
29_1_4_109	MW-19	Appendix IV	Chromium, Total	mg/L	33%	4	5	3	3	15	0.561	0.362	0.511	2	3	3	2	10	0.892	0.804	0.941						
29_1_4_110	MW-19	Appendix IV	Cobalt	mg/L	7%	4	5	3	3	15	0.144	0.119	0.112	4	5	2	3	14	0.187	0.184	0.106						
29_1_4_113	MW-19	Appendix IV	Fluoride (App IV)	mg/L	0%	4	5	3	3	15	0.182	0.204	0.207	4	5	3	3	15	0.182	0.204	0.207						

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

						Full								Without Non-Detects													
						Sample Size					p-Value			Sample Size					p-Value								
ID	Well	Constituent Type	Constituent	Unit	% NDs	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA						
29_1_4_115	MW-19	Appendix IV	Lead	mg/L	100%	4	5	3	3	15	0.708	0.607	0.757	NA	NA	NA	NA	NA	NA	NA	NA						
29_1_4_116	MW-19	Appendix IV	Lithium	mg/L	0%	4	5	3	3	15	0.811	0.889	0.849	4	5	3	3	15	0.811	0.889	0.849						
29_1_4_117	MW-19	Appendix IV	Mercury	mg/L	100%	4	5	3	3	15	0.572	0.622	0.622	NA	NA	NA	NA	NA	NA	NA	NA						
29_1_4_118	MW-19	Appendix IV	Molybdenum	mg/L	0%	4	5	3	3	15	0.751	0.985	0.910	4	5	3	3	15	0.751	0.985	0.910						
29_1_4_121	MW-19	Appendix IV	Radium 226 and 228	pCi/L	47%	4	5	3	3	15	0.945	0.949	0.929	3	4	1	0	8	0.297	0.388	0.468						
29_1_4_122	MW-19	Appendix IV	Selenium	mg/L	67%	4	5	3	3	15	0.296	0.445	0.378	2	1	1	1	5	0.317	0.134	0.167						
29_1_4_125	MW-19	Appendix IV	Thallium	mg/L	100%	4	5	3	3	15	0.861	0.889	0.889	NA	NA	NA	NA	NA	NA	NA	NA						
29_1_5_111	MW-19	Part 115	Copper	mg/L	87%	4	5	3	3	15	0.759	0.531	0.572	0	1	1	0	2	0.317	NA	NA						
29_1_5_114	MW-19	Part 115	Iron	mg/L	0%	4	5	3	3	15	0.077	0.057	0.044	*	4	5	3	3	15	0.077	0.057	0.044	*				
29_1_5_119	MW-19	Part 115	Nickel	mg/L	7%	4	5	3	3	15	0.928	0.431	0.804	3	5	3	3	14	0.995	0.465	0.801						
29_1_5_123	MW-19	Part 115	Silver	mg/L	100%	4	5	3	3	15	0.321	0.348	0.348	NA	NA	NA	NA	NA	NA	NA	NA						
29_1_5_128	MW-19	Part 115	Vanadium	mg/L	93%	4	5	3	3	15	0.672	0.480	0.488	0	1	0	0	1	NA	NA	NA						
29_1_5_129	MW-19	Part 115	Zinc	mg/L	67%	4	5	3	3	15	0.460	0.429	0.510	1	2	0	2	5	0.150	0.013	*	0.028	*				
30_1_3_105	MW-20	Appendix III	Boron	mg/L	0%	4	5	3	3	15	0.014	*	0.000	***	0.000	***	4	5	3	3	15	0.014	*	0.000	***	0.000	***
30_1_3_107	MW-20	Appendix III	Calcium	mg/L	0%	4	5	3	3	15	0.164	0.123	0.121	4	5	3	3	15	0.164	0.123	0.121						
30_1_3_108	MW-20	Appendix III	Chloride (as Cl)	mg/L	0%	4	5	3	3	15	0.361	0.478	0.555	4	5	3	3	15	0.361	0.478	0.555						
30_1_3_112	MW-20	Appendix III	Fluoride	mg/L	0%	4	5	3	3	15	0.997	0.867	1.000	4	5	3	3	15	0.997	0.867	1.000						
30_1_3_120	MW-20	Appendix III	pH (field)	su	0%	4	5	3	3	15	0.190	0.147	0.150	4	5	3	3	15	0.190	0.147	0.150						
30_1_3_124	MW-20	Appendix III	Sulfate (as SO4)	mg/L	0%	4	5	3	3	15	0.019	*	0.011	*	0.001	**	4	5	3	3	15	0.019	*	0.011	*	0.001	**
30_1_3_126	MW-20	Appendix III	Total Dissolved Solids	mg/L	0%	4	5	3	3	15	0.314	0.306	0.381	4	5	3	3	15	0.314	0.306	0.381						
30_1_4_101	MW-20	Appendix IV	Antimony	mg/L	33%	4	5	3	3	15	0.543	0.536	0.451	3	2	3	2	10	0.698	0.665	0.589						
30_1_4_102	MW-20	Appendix IV	Arsenic	mg/L	0%	4	5	3	3	15	0.012	*	0.000	***	0.000	***	4	5	3	3	15	0.012	*	0.000	***	0.000	***
30_1_4_103	MW-20	Appendix IV	Barium	mg/L	0%	4	5	3	3	15	0.029	*	0.005	**	0.005	**	4	5	3	3	15	0.029	*	0.005	**	0.005	**
30_1_4_104	MW-20	Appendix IV	Beryllium	mg/L	93%	4	5	3	3	15	0.432	0.474	0.474	1	0	0	0	1	NA	NA	NA						
30_1_4_106	MW-20	Appendix IV	Cadmium	mg/L	100%	4	5	3	3	15	0.581	0.630	0.630	NA	NA	NA	NA	NA	NA	NA	NA						
30_1_4_109	MW-20	Appendix IV	Chromium, Total	mg/L	47%	4	5	3	3	15	0.649	0.496	0.520	2	3	1	2	8	0.418	0.458	0.448						
30_1_4_110	MW-20	Appendix IV	Cobalt	mg/L	0%	4	5	3	3	15	0.842	0.903	0.937	4	5	3	3	15	0.842	0.903	0.937						
30_1_4_113	MW-20	Appendix IV	Fluoride (App IV)	mg/L	0%	4	5	3	3	15	0.997	0.867	1.000	4	5	3	3	15	0.997	0.867	1.000						
30_1_4_115	MW-20	Appendix IV	Lead	mg/L	0%	4	5	3	3	15	0.191	0.240	0.238	4	5	3	3	15	0.191	0.240	0.238						
30_1_4_116	MW-20	Appendix IV	Lithium	mg/L	0%	4	5	3	3	15	0.047	*	0.025	*	0.047	*	4	5	3	3	15	0.047	*	0.025	*	0.047	*
30_1_4_117	MW-20	Appendix IV	Mercury	mg/L	93%	4	5	3	3	15	0.572	0.622	0.622	0	1	0	0	1	NA	NA	NA						
30_1_4_118	MW-20	Appendix IV	Molybdenum	mg/L	0%	4	5	3	3	15	0.093	0.077	0.060	4	5	3	3	15	0.093	0.077	0.060						
30_1_4_121	MW-20	Appendix IV	Radium 226 and 228	pCi/L	50%	3	5	3	3	14	0.959	0.637	0.715	1	3	1	2	7	0.634	0.635	0.617						
30_1_4_122	MW-20	Appendix IV	Selenium	mg/L	60%	4	5	3	3	15	0.259	0.225	0.231	1	2	2	1	6	0.199	0.004	**	0.011	*				
30_1_4_125	MW-20	Appendix IV	Thallium	mg/L	93%	4	5	3	3	15	0.432	0.474	0.474	1	0	0	0	1	NA	NA	NA						
30_1_5_111	MW-20	Part 115	Copper	mg/L	13%	4	5	3	3	15	0.076	0.121	0.074	3	4	3	3	13	0.143	0.262	0.189						
30_1_5_114	MW-20	Part 115	Iron	mg/L	0%	4	5	3	3	15	0.177	0.286	0.349	4	5	3	3	15	0.177	0.286	0.349						
30_1_5_119	MW-20	Part 115	Nickel	mg/L	0%	4	5	3	3	15	0.584	0.656	0.606	4	5	3	3	15	0.584	0.656	0.606						
30_1_5_123	MW-20	Part 115	Silver	mg/L	100%	4	5	3	3	15	NA	0.277	0.277	NA	NA	NA	NA	NA	NA	NA	NA						

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

ID	Well	Constituent Type	Constituent	Unit	% NDs	Full								Without Non-Detects													
						Sample Size					p-Value			Sample Size					p-Value								
						Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA						
30_1_5_128	MW-20	Part 115	Vanadium	mg/L	100%	4	5	3	3	15	NA	0.277	0.277	NA	NA	NA	NA	NA	NA	NA	NA	NA					
30_1_5_129	MW-20	Part 115	Zinc	mg/L	0%	4	5	3	3	15	0.338	0.126	0.171	4	5	3	3	15	0.338	0.126	0.171						
40_1_3_105	MW-30	Appendix III	Boron	mg/L	0%	4	5	3	3	15	0.387	0.767	0.734	4	5	3	3	15	0.387	0.767	0.734						
40_1_3_107	MW-30	Appendix III	Calcium	mg/L	0%	4	5	3	3	15	0.615	0.462	0.453	4	5	3	3	15	0.615	0.462	0.453						
40_1_3_108	MW-30	Appendix III	Chloride (as Cl)	mg/L	0%	4	5	3	3	15	0.579	0.797	0.765	4	5	3	3	15	0.579	0.797	0.765						
40_1_3_112	MW-30	Appendix III	Fluoride	mg/L	0%	4	5	3	3	15	0.530	0.744	0.664	4	5	3	3	15	0.530	0.744	0.664						
40_1_3_120	MW-30	Appendix III	pH (field)	su	0%	4	5	3	3	15	0.552	0.353	0.350	4	5	3	3	15	0.552	0.353	0.350						
40_1_3_124	MW-30	Appendix III	Sulfate (as SO4)	mg/L	0%	4	5	3	3	15	0.065	0.003	**	0.004	**	4	5	3	3	15	0.065	0.003	**	0.004	**		
40_1_3_126	MW-30	Appendix III	Total Dissolved Solids	mg/L	0%	4	5	3	3	15	0.374	0.745	0.693	4	5	3	3	15	0.374	0.745	0.693						
40_1_4_101	MW-30	Appendix IV	Antimony	mg/L	87%	4	5	3	3	15	0.491	0.426	0.493	1	1	0	0	2	0.317	NA	NA						
40_1_4_102	MW-30	Appendix IV	Arsenic	mg/L	13%	4	5	3	3	15	0.426	0.905	0.778	3	4	3	3	13	0.614	0.828	0.900						
40_1_4_103	MW-30	Appendix IV	Barium	mg/L	0%	4	5	3	3	15	0.040	*	0.012	*	0.012	*	4	5	3	3	15	0.040	*	0.012	*	0.012	*
40_1_4_104	MW-30	Appendix IV	Beryllium	mg/L	87%	4	5	3	3	15	0.003	**	0.027	*	0.011	*	2	0	0	0	2	NA	NA	NA			
40_1_4_106	MW-30	Appendix IV	Cadmium	mg/L	100%	4	5	3	3	15	0.444	0.262	0.425	NA	NA	NA	NA	NA	NA	NA	NA	NA					
40_1_4_109	MW-30	Appendix IV	Chromium, Total	mg/L	0%	4	5	3	3	15	0.090	0.071	0.107	4	5	3	3	15	0.090	0.071	0.107						
40_1_4_110	MW-30	Appendix IV	Cobalt	mg/L	0%	4	5	3	3	15	0.094	0.406	0.173	4	5	3	3	15	0.094	0.406	0.173						
40_1_4_113	MW-30	Appendix IV	Fluoride (App IV)	mg/L	0%	4	5	3	3	15	0.530	0.744	0.664	4	5	3	3	15	0.530	0.744	0.664						
40_1_4_115	MW-30	Appendix IV	Lead	mg/L	93%	4	5	3	3	15	0.932	0.966	0.929	0	0	0	1	1	NA	NA	NA						
40_1_4_116	MW-30	Appendix IV	Lithium	mg/L	0%	4	5	3	3	15	0.971	0.709	0.824	4	5	3	3	15	0.971	0.709	0.824						
40_1_4_117	MW-30	Appendix IV	Mercury	mg/L	93%	4	5	3	3	15	1.000	0.992	0.736	0	1	0	0	1	NA	NA	NA						
40_1_4_118	MW-30	Appendix IV	Molybdenum	mg/L	20%	4	5	3	3	15	0.104	0.280	0.112	3	4	3	2	12	0.287	0.332	0.270						
40_1_4_121	MW-30	Appendix IV	Radium 226 and 228	pCi/L	53%	4	5	3	3	15	0.297	0.239	0.241	3	1	3	0	7	0.319	0.237	0.230						
40_1_4_122	MW-30	Appendix IV	Selenium	mg/L	47%	4	5	3	3	15	0.044	*	0.049	*	0.010	**	1	2	3	2	8	0.324	0.032	*	0.098		
40_1_4_125	MW-30	Appendix IV	Thallium	mg/L	100%	4	5	3	3	15	0.390	0.427	0.427	NA	NA	NA	NA	NA	NA	NA	NA						
40_1_5_111	MW-30	Part 115	Copper	mg/L	67%	4	5	3	3	15	0.036	*	0.058	0.039	*	2	2	0	1	5	0.301	0.159	0.248				
40_1_5_114	MW-30	Part 115	Iron	mg/L	0%	4	5	3	3	15	0.035	*	0.139	0.026	*	4	5	3	3	15	0.035	*	0.139	0.026	*		
40_1_5_119	MW-30	Part 115	Nickel	mg/L	20%	4	5	3	3	15	0.048	*	0.435	0.087		3	5	3	1	12	0.290	0.420	0.257				
40_1_5_123	MW-30	Part 115	Silver	mg/L	100%	4	5	3	3	15	0.121	0.105	0.105	NA	NA	NA	NA	NA	NA	NA	NA						
40_1_5_128	MW-30	Part 115	Vanadium	mg/L	100%	4	5	3	3	15	0.115	0.098	0.098	NA	NA	NA	NA	NA	NA	NA	NA						
40_1_5_129	MW-30	Part 115	Zinc	mg/L	67%	4	5	3	3	15	0.370	0.457	0.419	1	2	0	2	5	0.301	0.001	***	0.033	*				
41_1_3_105	MW-31	Appendix III	Boron	mg/L	0%	5	5	3	2	15	0.026	*	0.004	**	0.007	**	5	5	3	2	15	0.026	*	0.004	**	0.007	**
41_1_3_107	MW-31	Appendix III	Calcium	mg/L	0%	5	5	3	2	15	0.133	0.083	0.083	5	5	3	2	15	0.133	0.083	0.083						
41_1_3_108	MW-31	Appendix III	Chloride (as Cl)	mg/L	0%	5	5	3	2	15	0.045	*	0.036	*	0.030	*	5	5	3	2	15	0.045	*	0.036	*	0.030	*
41_1_3_112	MW-31	Appendix III	Fluoride	mg/L	0%	5	5	3	2	15	0.287	0.370	0.372	5	5	3	2	15	0.287	0.370	0.372						
41_1_3_120	MW-31	Appendix III	pH (field)	su	0%	5	5	3	2	15	0.666	0.759	0.756	5	5	3	2	15	0.666	0.759	0.756						
41_1_3_124	MW-31	Appendix III	Sulfate (as SO4)	mg/L	0%	5	5	3	2	15	0.045	*	0.012	*	0.005	**	5	5	3	2	15	0.045	*	0.012	*	0.005	**
41_1_3_126	MW-31	Appendix III	Total Dissolved Solids	mg/L	0%	5	5	3	2	15	0.143	0.321	0.282	5	5	3	2	15	0.143	0.321	0.282						
41_1_4_101	MW-31	Appendix IV	Antimony	mg/L	47%	5	5	3	2	15	0.408	0.805	0.727	3	2	2	1	8	0.694	0.859	0.806						
41_1_4_102	MW-31	Appendix IV	Arsenic	mg/L	0%	5	5	3	2	15	0.212	0.225	0.229	5	5	3	2	15	0.212	0.225	0.229						

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

ID	Well	Constituent Type	Constituent	Unit	% NDs	Full									Without Non-Detects												
						Sample Size					p-Value				Sample Size					p-Value							
						Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA						
41_1_4_103	MW-31	Appendix IV	Barium	mg/L	0%	5	5	3	2	15	0.049	*	0.052	0.037	*	5	5	3	2	15	0.049	*	0.052	0.037	*		
41_1_4_104	MW-31	Appendix IV	Beryllium	mg/L	87%	5	5	3	2	15	0.281		0.070	0.071		1	0	0	1	2	0.317	NA	NA	NA			
41_1_4_106	MW-31	Appendix IV	Cadmium	mg/L	93%	5	5	3	2	15	0.567		0.379	0.345		1	0	0	0	1	NA	NA	NA	NA			
41_1_4_109	MW-31	Appendix IV	Chromium, Total	mg/L	0%	5	5	3	2	15	0.228		0.132	0.166		5	5	3	2	15	0.228	0.132	0.166	0.166			
41_1_4_110	MW-31	Appendix IV	Cobalt	mg/L	20%	5	5	3	2	15	0.888		0.479	0.662		4	3	3	2	12	0.861	0.613	0.701	0.701			
41_1_4_113	MW-31	Appendix IV	Fluoride (App IV)	mg/L	0%	5	5	3	2	15	0.287		0.370	0.372		5	5	3	2	15	0.287	0.370	0.372	0.372			
41_1_4_115	MW-31	Appendix IV	Lead	mg/L	87%	5	5	3	2	15	0.569		0.567	0.552		0	1	1	0	2	0.317	NA	NA	NA			
41_1_4_116	MW-31	Appendix IV	Lithium	mg/L	0%	5	5	3	2	15	0.195		0.220	0.263		5	5	3	2	15	0.195	0.220	0.263	0.263			
41_1_4_117	MW-31	Appendix IV	Mercury	mg/L	93%	5	5	3	2	15	0.572		0.622	0.622		0	1	0	0	1	NA	NA	NA	NA			
41_1_4_118	MW-31	Appendix IV	Molybdenum	mg/L	0%	5	5	3	2	15	0.145		0.175	0.155		5	5	3	2	15	0.145	0.175	0.155	0.155			
41_1_4_121	MW-31	Appendix IV	Radium 226 and 228	pCi/L	40%	5	5	3	2	15	0.863		0.677	0.723		3	3	3	0	9	0.837	0.827	0.864	0.864			
41_1_4_122	MW-31	Appendix IV	Selenium	mg/L	40%	5	5	3	2	15	0.353		0.388	0.294		1	3	3	2	9	0.239	0.000	***	0.001	***		
41_1_4_125	MW-31	Appendix IV	Thallium	mg/L	93%	5	5	3	2	15	0.572		0.622	0.622		1	0	0	0	1	NA	NA	NA	NA			
41_1_5_111	MW-31	Part 115	Copper	mg/L	67%	5	5	3	2	15	0.729		0.643	0.644		1	2	1	1	5	0.532	0.861	0.829	0.829			
41_1_5_114	MW-31	Part 115	Iron	mg/L	0%	5	5	3	2	15	0.338		0.326	0.427		5	5	3	2	15	0.338	0.326	0.427	0.427			
41_1_5_119	MW-31	Part 115	Nickel	mg/L	67%	5	5	3	2	15	0.696		0.623	0.664		2	1	1	1	5	0.362	0.883	0.845	0.845			
41_1_5_123	MW-31	Part 115	Silver	mg/L	100%	5	5	3	2	15	NA		0.622	0.622		NA	NA	NA	NA	NA	NA	NA	NA	NA			
41_1_5_128	MW-31	Part 115	Vanadium	mg/L	80%	5	5	3	2	15	0.418		0.237	0.253		0	1	1	1	3	0.368	NA	NA	NA			
41_1_5_129	MW-31	Part 115	Zinc	mg/L	60%	5	5	3	2	15	0.526		0.624	0.619		2	3	0	1	6	0.414	0.373	0.357	0.357			
42_1_3_105	MW-32	Appendix III	Boron	mg/L	0%	4	5	3	3	15	0.014	*	0.000	***	0.000	***	4	5	3	3	15	0.014	*	0.000	***	0.000	***
42_1_3_107	MW-32	Appendix III	Calcium	mg/L	0%	4	5	3	3	15	0.050		0.026	*	0.016	*	4	5	3	3	15	0.050	0.026	*	0.016	*	
42_1_3_108	MW-32	Appendix III	Chloride (as Cl)	mg/L	0%	4	5	3	3	15	0.211		0.296	0.323		4	5	3	3	15	0.211	0.296	0.323	0.323			
42_1_3_112	MW-32	Appendix III	Fluoride	mg/L	0%	4	5	3	3	15	0.189		0.053	0.066		4	5	3	3	15	0.189	0.053	0.066	0.066			
42_1_3_120	MW-32	Appendix III	pH (field)	su	0%	4	5	3	3	15	0.565		0.611	0.613		4	5	3	3	15	0.565	0.611	0.613	0.613			
42_1_3_124	MW-32	Appendix III	Sulfate (as SO4)	mg/L	0%	4	5	3	3	15	0.015	*	0.002	**	0.013	*	4	5	3	3	15	0.015	*	0.002	**	0.013	*
42_1_3_126	MW-32	Appendix III	Total Dissolved Solids	mg/L	0%	4	5	3	3	15	0.033	*	0.006	**	0.004	**	4	5	3	3	15	0.033	*	0.006	**	0.004	**
42_1_4_101	MW-32	Appendix IV	Antimony	mg/L	73%	4	5	3	3	15	0.777		0.646	0.961		1	2	0	1	4	0.259	0.091	0.249	0.249			
42_1_4_102	MW-32	Appendix IV	Arsenic	mg/L	0%	4	5	3	3	15	0.086		0.594	0.631		4	5	3	3	15	0.086	0.594	0.631	0.631			
42_1_4_103	MW-32	Appendix IV	Barium	mg/L	0%	4	5	3	3	15	0.213		0.211	0.493		4	5	3	3	15	0.213	0.211	0.493	0.493			
42_1_4_104	MW-32	Appendix IV	Beryllium	mg/L	93%	4	5	3	3	15	0.432		0.474	0.474		1	0	0	0	1	NA	NA	NA	NA			
42_1_4_106	MW-32	Appendix IV	Cadmium	mg/L	93%	4	5	3	3	15	0.789		0.826	0.865		1	0	0	0	1	NA	NA	NA	NA			
42_1_4_109	MW-32	Appendix IV	Chromium, Total	mg/L	0%	4	5	3	3	15	0.135		0.330	0.183		4	5	3	3	15	0.135	0.330	0.183	0.183			
42_1_4_110	MW-32	Appendix IV	Cobalt	mg/L	0%	4	5	3	3	15	0.149		0.572	0.470		4	5	3	3	15	0.149	0.572	0.470	0.470			
42_1_4_113	MW-32	Appendix IV	Fluoride (App IV)	mg/L	0%	4	5	3	3	15	0.189		0.053	0.066		4	5	3	3	15	0.189	0.053	0.066	0.066			
42_1_4_115	MW-32	Appendix IV	Lead	mg/L	73%	4	5	3	3	15	0.390		0.305	0.327		1	1	1	1	4	0.392	NA	NA	NA			
42_1_4_116	MW-32	Appendix IV	Lithium	mg/L	0%	4	5	3	3	15	0.008	**	0.000	***	0.000	***	4	5	3	3	15	0.008	**	0.000	***	0.000	***
42_1_4_117	MW-32	Appendix IV	Mercury	mg/L	93%	4	5	3	3	15	1.000		0.704	0.899		0	1	0	0	1	NA	NA	NA	NA			
42_1_4_118	MW-32	Appendix IV	Molybdenum	mg/L	0%	4	5	3	3	15	0.154		0.424	0.360		4	5	3	3	15	0.154	0.424	0.360	0.360			
42_1_4_121	MW-32	Appendix IV	Radium 226 and 228	pCi/L	60%	4	5	3	3	15	0.104		0.192	0.155		1	2	1	2	6	0.194	0.005	**	0.004	**		

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 7: Seasonality Tests *(continued)*

ID	Well	Constituent Type	Constituent	Unit	% NDs	Full							Without Non-Detects								
						Sample Size					p-Value			Sample Size					p-Value		
						Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA
42_1_4_122	MW-32	Appendix IV	Selenium	mg/L	80%	4	5	3	3	15	0.208	0.337	0.223	1	1	0	1	3	0.368	NA	NA
42_1_4_125	MW-32	Appendix IV	Thallium	mg/L	100%	4	5	3	3	15	NA	0.277	0.277	NA	NA	NA	NA	NA	NA	NA	NA
42_1_5_111	MW-32	Part 115	Copper	mg/L	60%	4	5	3	3	15	0.222	0.480	0.525	2	1	1	2	6	0.463	0.752	0.797
42_1_5_114	MW-32	Part 115	Iron	mg/L	0%	4	5	3	3	15	0.203	0.151	0.116	4	5	3	3	15	0.203	0.151	0.116
42_1_5_119	MW-32	Part 115	Nickel	mg/L	0%	4	5	3	3	15	0.671	0.462	0.464	4	5	3	3	15	0.671	0.462	0.464
42_1_5_123	MW-32	Part 115	Silver	mg/L	100%	4	5	3	3	15	NA	0.277	0.277	NA	NA	NA	NA	NA	NA	NA	NA
42_1_5_128	MW-32	Part 115	Vanadium	mg/L	100%	4	5	3	3	15	NA	0.277	0.277	NA	NA	NA	NA	NA	NA	NA	NA
42_1_5_129	MW-32	Part 115	Zinc	mg/L	0%	4	5	3	3	15	0.328	0.410	0.310	4	5	3	3	15	0.328	0.410	0.310

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 8: Trend Tests: Lognormal MLE and MK

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Type	Method	Slope	p-value	Trend
11_2_3_105	MW-01R	Appendix III	Boron	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000173	0.623	↔
11_2_3_107	MW-01R	Appendix III	Calcium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000191	0.503	↔
11_2_3_108	MW-01R	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000194	0.630	↔
11_2_3_112	MW-01R	Appendix III	Fluoride	mg/L	15	0	0%	Parametric	Lognormal MLE	0.0000985	0.754	↔
11_2_3_120	MW-01R	Appendix III	pH (field)	su	15	0	0%	Nonparametric	MK	0.0000279	0.690	↔
11_2_3_124	MW-01R	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000584	0.590	↔
11_2_3_126	MW-01R	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	Parametric	Lognormal MLE	0.0000237	0.617	↔
11_2_4_102	MW-01R	Appendix IV	Arsenic	mg/L	15	0	0%	Nonparametric	MK	0	0.681	↔
11_2_4_103	MW-01R	Appendix IV	Barium	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000490	0.053	↔
11_2_4_104	MW-01R	Appendix IV	Beryllium	mg/L	15	2	13%	Parametric	Lognormal MLE	-0.00123	0.016	↔
11_2_4_109	MW-01R	Appendix IV	Chromium, Total	mg/L	15	0	0%	Nonparametric	MK	0.000000420	0.517	↔
11_2_4_110	MW-01R	Appendix IV	Cobalt	mg/L	15	0	0%	Nonparametric	MK	-0.000000263	0.271	↔
11_2_4_113	MW-01R	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	Parametric	Lognormal MLE	0.0000985	0.754	↔
11_2_4_115	MW-01R	Appendix IV	Lead	mg/L	15	2	13%	Parametric	Lognormal MLE	-0.000633	0.300	↔
11_2_4_116	MW-01R	Appendix IV	Lithium	mg/L	15	0	0%	Parametric	Lognormal MLE	0.0000787	0.827	↔
11_2_4_118	MW-01R	Appendix IV	Molybdenum	mg/L	15	2	13%	Parametric	Lognormal MLE	-0.00105	0.171	↔
11_2_4_122	MW-01R	Appendix IV	Selenium	mg/L	15	0	0%	Parametric	Lognormal MLE	0.0000645	0.854	↔
11_2_5_111	MW-01R	Part 115	Copper	mg/L	15	6	40%	Nonparametric	MK	0.0000000529	0.180	↔
11_2_5_114	MW-01R	Part 115	Iron	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.00239	0.000	↓
11_2_5_119	MW-01R	Part 115	Nickel	mg/L	15	0	0%	Nonparametric	MK	0	0.960	↔
11_2_5_128	MW-01R	Part 115	Vanadium	mg/L	15	2	13%	Parametric	Lognormal MLE	0.00136	0.018	↔
11_2_5_129	MW-01R	Part 115	Zinc	mg/L	15	3	20%	Nonparametric	MK	0	0.958	↔
12_2_3_105	MW-02	Appendix III	Boron	mg/L	15	0	0%	Nonparametric	MK	0.0519	0.001	↑
12_2_3_107	MW-02	Appendix III	Calcium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.0000743	0.298	↔
12_2_3_108	MW-02	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	Nonparametric	MK	0	0.147	↔
12_2_3_112	MW-02	Appendix III	Fluoride	mg/L	15	0	0%	Nonparametric	MK	0.00352	0.002	↑
12_2_3_120	MW-02	Appendix III	pH (field)	su	15	0	0%	Parametric	Lognormal MLE	-0.0000150	0.258	↔
12_2_3_126	MW-02	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000279	0.000	↑
12_2_4_101	MW-02	Appendix IV	Antimony	mg/L	15	3	20%	Parametric	Lognormal MLE	0.000108	0.802	↔
12_2_4_102	MW-02	Appendix IV	Arsenic	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000520	0.443	↔
12_2_4_103	MW-02	Appendix IV	Barium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000318	0.071	↔
12_2_4_104	MW-02	Appendix IV	Beryllium	mg/L	15	1	7%	Parametric	Lognormal MLE	-0.000570	0.290	↔
12_2_4_109	MW-02	Appendix IV	Chromium, Total	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000105	0.927	↔
12_2_4_110	MW-02	Appendix IV	Cobalt	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000297	0.712	↔
12_2_4_113	MW-02	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	Nonparametric	MK	0.00352	0.002	↑
12_2_4_115	MW-02	Appendix IV	Lead	mg/L	15	1	7%	Parametric	Lognormal MLE	0.000606	0.516	↔
12_2_4_116	MW-02	Appendix IV	Lithium	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000405	0.023	↔
12_2_4_118	MW-02	Appendix IV	Molybdenum	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000260	0.498	↔
12_2_4_121	MW-02	Appendix IV	Radium 226 and 228	pCi/L	14	5	36%	Parametric	Lognormal MLE	-0.00118	0.055	↔
12_2_4_122	MW-02	Appendix IV	Selenium	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000721	0.020	↔
12_2_5_111	MW-02	Part 115	Copper	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000767	0.206	↔
12_2_5_114	MW-02	Part 115	Iron	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.0000748	0.606	↔
12_2_5_119	MW-02	Part 115	Nickel	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000265	0.751	↔

(Table continues on next page)

Table 8: Trend Tests: Lognormal MLE and MK *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Type	Method	Slope	p-value	Trend
12_2_5_128	MW-02	Part 115	Vanadium	mg/L	15	1	7%	Parametric	Lognormal MLE	0.000867	0.156	↔
12_2_5_129	MW-02	Part 115	Zinc	mg/L	15	0	0%	Nonparametric	MK	0.00000718	0.620	↔
13_2_3_105	MW-03	Appendix III	Boron	mg/L	15	0	0%	Parametric	Lognormal MLE	0.0000353	0.638	↔
13_2_3_107	MW-03	Appendix III	Calcium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000168	0.045	↔
13_2_3_108	MW-03	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000952	0.000	↓
13_2_3_112	MW-03	Appendix III	Fluoride	mg/L	15	0	0%	Nonparametric	MK	0.0000438	0.293	↔
13_2_3_120	MW-03	Appendix III	pH (field)	su	15	0	0%	Parametric	Lognormal MLE	0.00000597	0.618	↔
13_2_3_124	MW-03	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.00110	0.152	↔
13_2_3_126	MW-03	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	Nonparametric	MK	-0.694	0.010	↓
13_2_4_102	MW-03	Appendix IV	Arsenic	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000327	0.216	↔
13_2_4_103	MW-03	Appendix IV	Barium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.00000490	0.986	↔
13_2_4_109	MW-03	Appendix IV	Chromium, Total	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000311	0.161	↔
13_2_4_110	MW-03	Appendix IV	Cobalt	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000246	0.511	↔
13_2_4_113	MW-03	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	Nonparametric	MK	0.0000438	0.293	↔
13_2_4_116	MW-03	Appendix IV	Lithium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000552	0.000	↓
13_2_4_121	MW-03	Appendix IV	Radium 226 and 228	pCi/L	14	1	7%	Parametric	Lognormal MLE	-0.000966	0.001	↓
13_2_4_122	MW-03	Appendix IV	Selenium	mg/L	15	3	20%	Parametric	Lognormal MLE	0.000679	0.057	↔
13_2_5_114	MW-03	Part 115	Iron	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.00208	0.012	↔
13_2_5_119	MW-03	Part 115	Nickel	mg/L	15	1	7%	Nonparametric	MK	-0.00000657	0.275	↔
14_2_3_105	MW-04	Appendix III	Boron	mg/L	15	0	0%	Parametric	Lognormal MLE	0.0000457	0.549	↔
14_2_3_107	MW-04	Appendix III	Calcium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000128	0.250	↔
14_2_3_108	MW-04	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.00185	0.000	↓
14_2_3_112	MW-04	Appendix III	Fluoride	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000403	0.034	↔
14_2_3_120	MW-04	Appendix III	pH (field)	su	15	0	0%	Parametric	Lognormal MLE	-0.0000164	0.208	↔
14_2_3_124	MW-04	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	Nonparametric	MK	0.241	0.112	↔
14_2_3_126	MW-04	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000208	0.072	↔
14_2_4_102	MW-04	Appendix IV	Arsenic	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000634	0.066	↔
14_2_4_103	MW-04	Appendix IV	Barium	mg/L	15	0	0%	Nonparametric	MK	-0.0000552	0.117	↔
14_2_4_109	MW-04	Appendix IV	Chromium, Total	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000672	0.063	↔
14_2_4_110	MW-04	Appendix IV	Cobalt	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.00134	0.000	↓
14_2_4_113	MW-04	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000403	0.034	↔
14_2_4_116	MW-04	Appendix IV	Lithium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000276	0.165	↔
14_2_4_118	MW-04	Appendix IV	Molybdenum	mg/L	15	2	13%	Parametric	Lognormal MLE	0.00212	0.001	↑
14_2_4_121	MW-04	Appendix IV	Radium 226 and 228	pCi/L	15	5	33%	Parametric	Lognormal MLE	-0.00142	0.000	↓
14_2_4_122	MW-04	Appendix IV	Selenium	mg/L	15	5	33%	Parametric	Lognormal MLE	0.00155	0.013	↔
14_2_5_114	MW-04	Part 115	Iron	mg/L	15	0	0%	Nonparametric	MK	-0.00237	0.148	↔
14_2_5_119	MW-04	Part 115	Nickel	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000222	0.724	↔
16_1_3_105	MW-06	Appendix III	Boron	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000222	0.151	↔
16_1_3_107	MW-06	Appendix III	Calcium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000176	0.122	↔
16_1_3_108	MW-06	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.00153	0.002	↓
16_1_3_112	MW-06	Appendix III	Fluoride	mg/L	15	0	0%	Parametric	Lognormal MLE	0.0000494	0.704	↔
16_1_3_120	MW-06	Appendix III	pH (field)	su	15	0	0%	Nonparametric	MK	0.000143	0.215	↔
16_1_3_124	MW-06	Appendix III	Sulfate (as SO4)	mg/L	15	2	13%	Parametric	Lognormal MLE	-0.000521	0.687	↔

(Table continues on next page)

Table 8: Trend Tests: Lognormal MLE and MK *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Type	Method	Slope	p-value	Trend
16_1_3_126	MW-06	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	Nonparametric	MK	0	0.069	↔
16_1_4_102	MW-06	Appendix IV	Arsenic	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.0000160	0.940	↔
16_1_4_103	MW-06	Appendix IV	Barium	mg/L	15	0	0%	Parametric	Lognormal MLE	0.0000416	0.712	↔
16_1_4_109	MW-06	Appendix IV	Chromium, Total	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000785	0.000	↓
16_1_4_110	MW-06	Appendix IV	Cobalt	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000692	0.000	↓
16_1_4_113	MW-06	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	Parametric	Lognormal MLE	0.0000494	0.704	↔
16_1_4_116	MW-06	Appendix IV	Lithium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000532	0.001	↓
16_1_4_121	MW-06	Appendix IV	Radium 226 and 228	pCi/L	15	3	20%	Parametric	Lognormal MLE	-0.000102	0.777	↔
16_1_4_122	MW-06	Appendix IV	Selenium	mg/L	15	5	33%	Nonparametric	MK	0	0.673	↔
16_1_5_114	MW-06	Part 115	Iron	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000675	0.054	↔
16_1_5_119	MW-06	Part 115	Nickel	mg/L	15	6	40%	Parametric	Lognormal MLE	-0.000522	0.093	↔
16_1_5_129	MW-06	Part 115	Zinc	mg/L	15	2	13%	Nonparametric	MK	-0.000000340	0.365	↔
17_1_3_105	MW-07	Appendix III	Boron	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000168	0.035	↔
17_1_3_107	MW-07	Appendix III	Calcium	mg/L	15	0	0%	Parametric	Lognormal MLE	0.0000798	0.271	↔
17_1_3_108	MW-07	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	Nonparametric	MK	0	0.314	↔
17_1_3_112	MW-07	Appendix III	Fluoride	mg/L	15	3	20%	Parametric	Lognormal MLE	-0.0000563	0.896	↔
17_1_3_120	MW-07	Appendix III	pH (field)	su	15	0	0%	Nonparametric	MK	-0.0000115	0.803	↔
17_1_3_124	MW-07	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000199	0.494	↔
17_1_3_126	MW-07	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000268	0.004	↑
17_1_4_102	MW-07	Appendix IV	Arsenic	mg/L	15	0	0%	Parametric	Lognormal MLE	0.0000256	0.872	↔
17_1_4_103	MW-07	Appendix IV	Barium	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000270	0.001	↑
17_1_4_109	MW-07	Appendix IV	Chromium, Total	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000223	0.288	↔
17_1_4_110	MW-07	Appendix IV	Cobalt	mg/L	15	0	0%	Parametric	Lognormal MLE	0.0000515	0.661	↔
17_1_4_113	MW-07	Appendix IV	Fluoride (App IV)	mg/L	15	3	20%	Parametric	Lognormal MLE	-0.0000563	0.896	↔
17_1_4_116	MW-07	Appendix IV	Lithium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000145	0.547	↔
17_1_4_121	MW-07	Appendix IV	Radium 226 and 228	pCi/L	15	2	13%	Parametric	Lognormal MLE	-0.000461	0.139	↔
17_1_5_114	MW-07	Part 115	Iron	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000329	0.001	↑
18_1_3_105	MW-08	Appendix III	Boron	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000226	0.479	↔
18_1_3_107	MW-08	Appendix III	Calcium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000214	0.002	↓
18_1_3_108	MW-08	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000752	0.017	↔
18_1_3_112	MW-08	Appendix III	Fluoride	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000131	0.666	↔
18_1_3_120	MW-08	Appendix III	pH (field)	su	15	0	0%	Nonparametric	MK	0.0000933	0.488	↔
18_1_3_124	MW-08	Appendix III	Sulfate (as SO4)	mg/L	15	4	27%	Parametric	Lognormal MLE	0.00247	0.188	↔
18_1_3_126	MW-08	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	Parametric	Lognormal MLE	0.0000623	0.516	↔
18_1_4_101	MW-08	Appendix IV	Antimony	mg/L	15	7	47%	Parametric	Lognormal MLE	-0.000429	0.466	↔
18_1_4_102	MW-08	Appendix IV	Arsenic	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000555	0.263	↔
18_1_4_103	MW-08	Appendix IV	Barium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000403	0.002	↓
18_1_4_109	MW-08	Appendix IV	Chromium, Total	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000619	0.000	↓
18_1_4_110	MW-08	Appendix IV	Cobalt	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000303	0.334	↔
18_1_4_113	MW-08	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000131	0.666	↔
18_1_4_116	MW-08	Appendix IV	Lithium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000433	0.029	↔
18_1_4_118	MW-08	Appendix IV	Molybdenum	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000150	0.824	↔
18_1_4_121	MW-08	Appendix IV	Radium 226 and 228	pCi/L	15	3	20%	Parametric	Lognormal MLE	-0.000661	0.054	↔

(Table continues on next page)

Table 8: Trend Tests: Lognormal MLE and MK *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Type	Method	Slope	p-value	Trend
18_1_4_122	MW-08	Appendix IV	Selenium	mg/L	15	5	33%	Parametric	Lognormal MLE	0.000486	0.204	↔
18_1_5_111	MW-08	Part 115	Copper	mg/L	15	5	33%	Parametric	Lognormal MLE	0.00131	0.011	↔
18_1_5_114	MW-08	Part 115	Iron	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000340	0.108	↔
18_1_5_119	MW-08	Part 115	Nickel	mg/L	15	0	0%	Nonparametric	MK	0.00000259	0.072	↔
18_1_5_129	MW-08	Part 115	Zinc	mg/L	15	3	20%	Nonparametric	MK	0.000000237	0.881	↔
19_2_3_105	MW-09	Appendix III	Boron	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.0000978	0.256	↔
19_2_3_107	MW-09	Appendix III	Calcium	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000473	0.005	↑
19_2_3_108	MW-09	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	Parametric	Lognormal MLE	0.00160	0.000	↑
19_2_3_112	MW-09	Appendix III	Fluoride	mg/L	15	0	0%	Parametric	Lognormal MLE	0.00000671	0.941	↔
19_2_3_120	MW-09	Appendix III	pH (field)	su	15	0	0%	Parametric	Lognormal MLE	-0.0000350	0.003	↓
19_2_3_124	MW-09	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	Parametric	Lognormal MLE	0.00151	0.004	↑
19_2_3_126	MW-09	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000634	0.000	↑
19_2_4_102	MW-09	Appendix IV	Arsenic	mg/L	15	0	0%	Nonparametric	MK	0	1.000	↔
19_2_4_103	MW-09	Appendix IV	Barium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.00177	0.001	↓
19_2_4_109	MW-09	Appendix IV	Chromium, Total	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000170	0.380	↔
19_2_4_110	MW-09	Appendix IV	Cobalt	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000428	0.270	↔
19_2_4_113	MW-09	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	Parametric	Lognormal MLE	0.00000671	0.941	↔
19_2_4_116	MW-09	Appendix IV	Lithium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.0000379	0.642	↔
19_2_4_118	MW-09	Appendix IV	Molybdenum	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.0000932	0.751	↔
19_2_4_122	MW-09	Appendix IV	Selenium	mg/L	15	2	13%	Parametric	Lognormal MLE	0.00101	0.000	↑
19_2_5_114	MW-09	Part 115	Iron	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.0000879	0.654	↔
19_2_5_119	MW-09	Part 115	Nickel	mg/L	15	0	0%	Nonparametric	MK	0.00000516	0.059	↔
20_3_3_105	MW-10	Appendix III	Boron	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000460	0.351	↔
20_3_3_107	MW-10	Appendix III	Calcium	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000442	0.143	↔
20_3_3_108	MW-10	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	Parametric	Lognormal MLE	0.00121	0.002	↑
20_3_3_112	MW-10	Appendix III	Fluoride	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.0000762	0.803	↔
20_3_3_120	MW-10	Appendix III	pH (field)	su	15	0	0%	Parametric	Lognormal MLE	-0.0000334	0.437	↔
20_3_3_124	MW-10	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000306	0.597	↔
20_3_3_126	MW-10	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	Nonparametric	MK	0.367	0.191	↔
20_3_4_102	MW-10	Appendix IV	Arsenic	mg/L	15	0	0%	Parametric	Lognormal MLE	0.00107	0.029	↔
20_3_4_103	MW-10	Appendix IV	Barium	mg/L	15	0	0%	Parametric	Lognormal MLE	0.0000829	0.804	↔
20_3_4_104	MW-10	Appendix IV	Beryllium	mg/L	15	7	47%	Parametric	Lognormal MLE	-0.000415	0.543	↔
20_3_4_109	MW-10	Appendix IV	Chromium, Total	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.0000181	0.970	↔
20_3_4_110	MW-10	Appendix IV	Cobalt	mg/L	15	1	7%	Parametric	Lognormal MLE	-0.00105	0.101	↔
20_3_4_113	MW-10	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.0000762	0.803	↔
20_3_4_116	MW-10	Appendix IV	Lithium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.0000614	0.799	↔
20_3_4_118	MW-10	Appendix IV	Molybdenum	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.00151	0.001	↓
20_3_4_122	MW-10	Appendix IV	Selenium	mg/L	15	1	7%	Parametric	Lognormal MLE	-0.000218	0.491	↔
20_3_5_114	MW-10	Part 115	Iron	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000494	0.089	↔
20_3_5_119	MW-10	Part 115	Nickel	mg/L	15	7	47%	Nonparametric	MK	0	0.373	↔
20_3_5_129	MW-10	Part 115	Zinc	mg/L	15	7	47%	Parametric	Lognormal MLE	-0.00209	0.235	↔
21_2_3_105	MW-11	Appendix III	Boron	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000127	0.822	↔
21_2_3_107	MW-11	Appendix III	Calcium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000130	0.628	↔

(Table continues on next page)

Table 8: Trend Tests: Lognormal MLE and MK *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Type	Method	Slope	p-value	Trend
21_2_3_108	MW-11	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000426	0.050	↔
21_2_3_112	MW-11	Appendix III	Fluoride	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000380	0.469	↔
21_2_3_120	MW-11	Appendix III	pH (field)	su	15	0	0%	Parametric	Lognormal MLE	-0.0000279	0.009	↓
21_2_3_124	MW-11	Appendix III	Sulfate (as SO4)	mg/L	15	6	40%	Parametric	Lognormal MLE	-0.0105	0.003	↓
21_2_3_126	MW-11	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000138	0.471	↔
21_2_4_102	MW-11	Appendix IV	Arsenic	mg/L	15	0	0%	Parametric	Lognormal MLE	0.0000473	0.902	↔
21_2_4_103	MW-11	Appendix IV	Barium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.0000499	0.854	↔
21_2_4_109	MW-11	Appendix IV	Chromium, Total	mg/L	15	0	0%	Nonparametric	MK	0	0.960	↔
21_2_4_110	MW-11	Appendix IV	Cobalt	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000756	0.162	↔
21_2_4_113	MW-11	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000380	0.469	↔
21_2_4_116	MW-11	Appendix IV	Lithium	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000232	0.793	↔
21_2_4_118	MW-11	Appendix IV	Molybdenum	mg/L	15	2	13%	Parametric	Lognormal MLE	-0.000132	0.822	↔
21_2_4_121	MW-11	Appendix IV	Radium 226 and 228	pCi/L	14	4	29%	Parametric	Lognormal MLE	-0.00111	0.002	↓
21_2_4_122	MW-11	Appendix IV	Selenium	mg/L	15	3	20%	Nonparametric	MK	-0.000000775	0.098	↔
21_2_5_111	MW-11	Part 115	Copper	mg/L	15	4	27%	Nonparametric	MK	-0.000000218	0.419	↔
21_2_5_114	MW-11	Part 115	Iron	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000401	0.185	↔
21_2_5_119	MW-11	Part 115	Nickel	mg/L	15	0	0%	Nonparametric	MK	0	0.960	↔
21_2_5_129	MW-11	Part 115	Zinc	mg/L	15	4	27%	Parametric	Lognormal MLE	-0.000552	0.760	↔
22_2_3_105	MW-12	Appendix III	Boron	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000223	0.356	↔
22_2_3_107	MW-12	Appendix III	Calcium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000302	0.240	↔
22_2_3_108	MW-12	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.0000939	0.665	↔
22_2_3_112	MW-12	Appendix III	Fluoride	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000325	0.233	↔
22_2_3_120	MW-12	Appendix III	pH (field)	su	15	0	0%	Parametric	Lognormal MLE	-0.00000234	0.952	↔
22_2_3_124	MW-12	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.00106	0.000	↓
22_2_3_126	MW-12	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000132	0.687	↔
22_2_4_101	MW-12	Appendix IV	Antimony	mg/L	15	0	0%	Parametric	Lognormal MLE	0.0000257	0.946	↔
22_2_4_102	MW-12	Appendix IV	Arsenic	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000139	0.619	↔
22_2_4_103	MW-12	Appendix IV	Barium	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000994	0.008	↑
22_2_4_106	MW-12	Appendix IV	Cadmium	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000662	0.160	↔
22_2_4_109	MW-12	Appendix IV	Chromium, Total	mg/L	15	5	33%	Parametric	Lognormal MLE	0.000450	0.565	↔
22_2_4_110	MW-12	Appendix IV	Cobalt	mg/L	15	5	33%	Parametric	Lognormal MLE	0.000814	0.414	↔
22_2_4_113	MW-12	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000325	0.233	↔
22_2_4_115	MW-12	Appendix IV	Lead	mg/L	15	6	40%	Parametric	Lognormal MLE	0.00157	0.006	↑
22_2_4_116	MW-12	Appendix IV	Lithium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000351	0.332	↔
22_2_4_118	MW-12	Appendix IV	Molybdenum	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000168	0.569	↔
22_2_4_122	MW-12	Appendix IV	Selenium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.0000128	0.989	↔
22_2_5_111	MW-12	Part 115	Copper	mg/L	15	0	0%	Parametric	Lognormal MLE	0.00121	0.000	↑
22_2_5_114	MW-12	Part 115	Iron	mg/L	15	6	40%	Parametric	Lognormal MLE	0.000967	0.174	↔
22_2_5_119	MW-12	Part 115	Nickel	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.0000500	0.858	↔
22_2_5_128	MW-12	Part 115	Vanadium	mg/L	15	6	40%	Parametric	Lognormal MLE	0.00105	0.046	↔
22_2_5_129	MW-12	Part 115	Zinc	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000238	0.542	↔
28_1_3_105	MW-18	Appendix III	Boron	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000940	0.000	↑
28_1_3_107	MW-18	Appendix III	Calcium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.0000796	0.633	↔

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Table 8: Trend Tests: Lognormal MLE and MK *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Type	Method	Slope	p-value	Trend
28_1_3_108	MW-18	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	Parametric	Lognormal MLE	0.0000862	0.637	↔
28_1_3_112	MW-18	Appendix III	Fluoride	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.0000488	0.756	↔
28_1_3_120	MW-18	Appendix III	pH (field)	su	15	0	0%	Parametric	Lognormal MLE	0.0000224	0.005	↑
28_1_3_124	MW-18	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	Parametric	Lognormal MLE	0.0000640	0.772	↔
28_1_3_126	MW-18	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000132	0.276	↔
28_1_4_101	MW-18	Appendix IV	Antimony	mg/L	15	3	20%	Parametric	Lognormal MLE	0.0000149	0.967	↔
28_1_4_102	MW-18	Appendix IV	Arsenic	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000467	0.036	↔
28_1_4_103	MW-18	Appendix IV	Barium	mg/L	15	0	0%	Parametric	Lognormal MLE	0.0000215	0.931	↔
28_1_4_106	MW-18	Appendix IV	Cadmium	mg/L	15	6	40%	Parametric	Lognormal MLE	-0.00154	0.011	↔
28_1_4_110	MW-18	Appendix IV	Cobalt	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.00106	0.000	↓
28_1_4_113	MW-18	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.0000488	0.756	↔
28_1_4_116	MW-18	Appendix IV	Lithium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.0000923	0.671	↔
28_1_4_118	MW-18	Appendix IV	Molybdenum	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000298	0.178	↔
28_1_4_122	MW-18	Appendix IV	Selenium	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000487	0.530	↔
28_1_5_111	MW-18	Part 115	Copper	mg/L	15	0	0%	Nonparametric	MK	0.000000101	0.367	↔
28_1_5_114	MW-18	Part 115	Iron	mg/L	15	0	0%	Parametric	Lognormal MLE	0.0000331	0.870	↔
28_1_5_119	MW-18	Part 115	Nickel	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000672	0.004	↓
28_1_5_129	MW-18	Part 115	Zinc	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000764	0.017	↔
29_1_3_105	MW-19	Appendix III	Boron	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.00000827	0.962	↔
29_1_3_107	MW-19	Appendix III	Calcium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000246	0.006	↓
29_1_3_108	MW-19	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.00102	0.000	↓
29_1_3_112	MW-19	Appendix III	Fluoride	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000344	0.001	↓
29_1_3_120	MW-19	Appendix III	pH (field)	su	15	0	0%	Parametric	Lognormal MLE	-0.0000228	0.269	↔
29_1_3_124	MW-19	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000183	0.299	↔
29_1_3_126	MW-19	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000336	0.000	↓
29_1_4_102	MW-19	Appendix IV	Arsenic	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000124	0.677	↔
29_1_4_103	MW-19	Appendix IV	Barium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000248	0.023	↔
29_1_4_104	MW-19	Appendix IV	Beryllium	mg/L	15	3	20%	Parametric	Lognormal MLE	0.000640	0.003	↑
29_1_4_109	MW-19	Appendix IV	Chromium, Total	mg/L	15	5	33%	Parametric	Lognormal MLE	-0.000248	0.470	↔
29_1_4_110	MW-19	Appendix IV	Cobalt	mg/L	15	1	7%	Parametric	Lognormal MLE	-0.000404	0.562	↔
29_1_4_113	MW-19	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000344	0.001	↓
29_1_4_116	MW-19	Appendix IV	Lithium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000313	0.000	↓
29_1_4_118	MW-19	Appendix IV	Molybdenum	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000470	0.187	↔
29_1_4_121	MW-19	Appendix IV	Radium 226 and 228	pCi/L	15	7	47%	Parametric	Lognormal MLE	-0.00115	0.026	↔
29_1_5_114	MW-19	Part 115	Iron	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000239	0.157	↔
29_1_5_119	MW-19	Part 115	Nickel	mg/L	15	1	7%	Nonparametric	MK	0.000000279	0.585	↔
30_1_3_105	MW-20	Appendix III	Boron	mg/L	15	0	0%	Parametric	Lognormal MLE	0.0000208	0.895	↔
30_1_3_107	MW-20	Appendix III	Calcium	mg/L	15	0	0%	Nonparametric	MK	-0.0231	0.084	↔
30_1_3_108	MW-20	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000953	0.000	↓
30_1_3_112	MW-20	Appendix III	Fluoride	mg/L	15	0	0%	Nonparametric	MK	0	0.960	↔
30_1_3_120	MW-20	Appendix III	pH (field)	su	15	0	0%	Parametric	Lognormal MLE	0.0000168	0.177	↔
30_1_3_124	MW-20	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000914	0.068	↔
30_1_3_126	MW-20	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000272	0.006	↓

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Table 8: Trend Tests: Lognormal MLE and MK *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Type	Method	Slope	p-value	Trend
30_1_4_101	MW-20	Appendix IV	Antimony	mg/L	15	5	33%	Parametric	Lognormal MLE	0.000262	0.412	↔
30_1_4_102	MW-20	Appendix IV	Arsenic	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.0000738	0.681	↔
30_1_4_103	MW-20	Appendix IV	Barium	mg/L	15	0	0%	Parametric	Lognormal MLE	0.0000112	0.965	↔
30_1_4_109	MW-20	Appendix IV	Chromium, Total	mg/L	15	7	47%	Parametric	Lognormal MLE	-0.0000784	0.706	↔
30_1_4_110	MW-20	Appendix IV	Cobalt	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000764	0.000	↓
30_1_4_113	MW-20	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	Nonparametric	MK	0	0.960	↔
30_1_4_115	MW-20	Appendix IV	Lead	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000413	0.047	↔
30_1_4_116	MW-20	Appendix IV	Lithium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000631	0.006	↓
30_1_4_118	MW-20	Appendix IV	Molybdenum	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000129	0.364	↔
30_1_5_111	MW-20	Part 115	Copper	mg/L	15	2	13%	Parametric	Lognormal MLE	0.000230	0.590	↔
30_1_5_114	MW-20	Part 115	Iron	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000337	0.001	↓
30_1_5_119	MW-20	Part 115	Nickel	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000646	0.000	↓
30_1_5_129	MW-20	Part 115	Zinc	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000910	0.015	↔
40_1_3_105	MW-30	Appendix III	Boron	mg/L	15	0	0%	Nonparametric	MK	-0.000379	0.116	↔
40_1_3_107	MW-30	Appendix III	Calcium	mg/L	15	0	0%	Nonparametric	MK	0.0351	0.551	↔
40_1_3_108	MW-30	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	Nonparametric	MK	0	0.920	↔
40_1_3_112	MW-30	Appendix III	Fluoride	mg/L	15	0	0%	Nonparametric	MK	0	1.000	↔
40_1_3_120	MW-30	Appendix III	pH (field)	su	15	0	0%	Nonparametric	MK	-0.000189	0.197	↔
40_1_3_124	MW-30	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.0000841	0.673	↔
40_1_3_126	MW-30	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	Nonparametric	MK	0.324	0.290	↔
40_1_4_102	MW-30	Appendix IV	Arsenic	mg/L	15	2	13%	Parametric	Lognormal MLE	0.00241	0.000	↑
40_1_4_103	MW-30	Appendix IV	Barium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.00000302	0.991	↔
40_1_4_109	MW-30	Appendix IV	Chromium, Total	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000669	0.054	↔
40_1_4_110	MW-30	Appendix IV	Cobalt	mg/L	15	0	0%	Nonparametric	MK	0	1.000	↔
40_1_4_113	MW-30	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	Nonparametric	MK	0	1.000	↔
40_1_4_116	MW-30	Appendix IV	Lithium	mg/L	15	0	0%	Parametric	Lognormal MLE	0.0000771	0.735	↔
40_1_4_122	MW-30	Appendix IV	Selenium	mg/L	15	7	47%	Parametric	Lognormal MLE	0.000982	0.101	↔
40_1_5_114	MW-30	Part 115	Iron	mg/L	15	0	0%	Parametric	Lognormal MLE	0.00114	0.077	↔
41_1_3_105	MW-31	Appendix III	Boron	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000179	0.104	↔
41_1_3_107	MW-31	Appendix III	Calcium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.0000226	0.839	↔
41_1_3_108	MW-31	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.0000187	0.807	↔
41_1_3_112	MW-31	Appendix III	Fluoride	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000128	0.003	↓
41_1_3_120	MW-31	Appendix III	pH (field)	su	15	0	0%	Parametric	Lognormal MLE	0.00000610	0.624	↔
41_1_3_124	MW-31	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000870	0.037	↔
41_1_3_126	MW-31	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.0000422	0.577	↔
41_1_4_101	MW-31	Appendix IV	Antimony	mg/L	15	7	47%	Parametric	Lognormal MLE	0.00180	0.021	↔
41_1_4_102	MW-31	Appendix IV	Arsenic	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000478	0.004	↓
41_1_4_103	MW-31	Appendix IV	Barium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.00000452	0.986	↔
41_1_4_109	MW-31	Appendix IV	Chromium, Total	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000375	0.048	↔
41_1_4_110	MW-31	Appendix IV	Cobalt	mg/L	15	3	20%	Parametric	Lognormal MLE	-0.000690	0.117	↔
41_1_4_113	MW-31	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000128	0.003	↓
41_1_4_116	MW-31	Appendix IV	Lithium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000308	0.034	↔
41_1_4_118	MW-31	Appendix IV	Molybdenum	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000841	0.007	↓

(Table continues on next page)

Table 8: Trend Tests: Lognormal MLE and MK *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Type	Method	Slope	p-value	Trend
41_1_4_121	MW-31	Appendix IV	Radium 226 and 228	pCi/L	15	6	40%	Parametric	Lognormal MLE	-0.000634	0.104	↔
41_1_5_114	MW-31	Part 115	Iron	mg/L	15	0	0%	Nonparametric	MK	-0.00189	0.002	↓
42_1_3_105	MW-32	Appendix III	Boron	mg/L	15	0	0%	Nonparametric	MK	0.000236	0.582	↔
42_1_3_107	MW-32	Appendix III	Calcium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000235	0.044	↔
42_1_3_108	MW-32	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.0000301	0.724	↔
42_1_3_112	MW-32	Appendix III	Fluoride	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.0000296	0.764	↔
42_1_3_120	MW-32	Appendix III	pH (field)	su	15	0	0%	Parametric	Lognormal MLE	0.00000643	0.449	↔
42_1_3_124	MW-32	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.00169	0.059	↔
42_1_3_126	MW-32	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000198	0.060	↔
42_1_4_102	MW-32	Appendix IV	Arsenic	mg/L	15	0	0%	Nonparametric	MK	0.0000000259	0.882	↔
42_1_4_103	MW-32	Appendix IV	Barium	mg/L	15	0	0%	Parametric	Lognormal MLE	0.000775	0.206	↔
42_1_4_109	MW-32	Appendix IV	Chromium, Total	mg/L	15	0	0%	Nonparametric	MK	-0.000000168	0.074	↔
42_1_4_110	MW-32	Appendix IV	Cobalt	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000121	0.797	↔
42_1_4_113	MW-32	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.0000296	0.764	↔
42_1_4_116	MW-32	Appendix IV	Lithium	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.0000335	0.876	↔
42_1_4_118	MW-32	Appendix IV	Molybdenum	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000390	0.078	↔
42_1_5_114	MW-32	Part 115	Iron	mg/L	15	0	0%	Parametric	Lognormal MLE	-0.000348	0.021	↔
42_1_5_119	MW-32	Part 115	Nickel	mg/L	15	0	0%	Nonparametric	MK	-0.000000590	0.123	↔
42_1_5_129	MW-32	Part 115	Zinc	mg/L	15	0	0%	Nonparametric	MK	0.00000286	0.321	↔

Table 9: Trend Tests: Piecewise Linear-Linear

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Break 1	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend			
11_2_3_105	MW-01R	Appendix III	Boron	mg/L	15	0	0%	0.15826	0.467	↔	-0.017015	0.801	↔	2023-07-16	0.092	↔
11_2_3_108	MW-01R	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.1415	0.539	↔	-0.081746	0.454	↔	2023-08-08	0.096	↔
11_2_3_112	MW-01R	Appendix III	Fluoride	mg/L	15	0	0%	-0.063674	0.398	↔	0.0036633	0.389	↔	2023-02-09	0.139	↔
11_2_3_120	MW-01R	Appendix III	pH (field)	su	15	0	0%	0.0051548	0.381	↔	< 0.0001	0.995	↔	2023-04-07	0.224	↔
11_2_3_124	MW-01R	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	-0.33509	0.445	↔	4.8148	0.583	↔	2025-02-16	0.079	↔
11_2_3_126	MW-01R	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	0.48269	0.413	↔	-0.19355	0.485	↔	2023-10-23	0.134	↔
11_2_4_101	MW-01R	Appendix IV	Antimony	mg/L	15	3	20%	< 0.0001	0.356	↔	> -0.0001	0.034	↔	2023-04-17	0.383	↔
11_2_4_102	MW-01R	Appendix IV	Arsenic	mg/L	15	0	0%	< 0.0001	0.230	↔	> -0.0001	0.327	↔	2024-02-13	0.195	↔
11_2_4_103	MW-01R	Appendix IV	Barium	mg/L	15	0	0%	0.00059418	0.202	↔	> -0.0001	0.684	↔	2023-10-23	0.334	↔
11_2_4_104	MW-01R	Appendix IV	Beryllium	mg/L	15	2	13%	> -0.0001	0.039	↔	< 0.0001	0.691	↔	2025-01-02	0.367	↔
11_2_4_106	MW-01R	Appendix IV	Cadmium	mg/L	15	12	80%	< 0.0001	0.205	↔	> -0.0001	0.145	↔	2023-05-23	0.280	↔
11_2_4_109	MW-01R	Appendix IV	Chromium, Total	mg/L	15	0	0%	< 0.0001	0.096	↔	> -0.0001	0.195	↔	2024-02-13	0.322	↔
11_2_4_110	MW-01R	Appendix IV	Cobalt	mg/L	15	0	0%	< 0.0001	0.276	↔	> -0.0001	0.229	↔	2023-06-28	0.213	↔
11_2_4_113	MW-01R	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	-0.063674	0.398	↔	0.0036633	0.389	↔	2023-02-09	0.139	↔
11_2_4_115	MW-01R	Appendix IV	Lead	mg/L	15	2	13%	< 0.0001	0.366	↔	> -0.0001	0.228	↔	2023-06-28	0.197	↔
11_2_4_116	MW-01R	Appendix IV	Lithium	mg/L	15	0	0%	0.0024652	0.601	↔	-0.00055308	0.708	↔	2023-08-07	0.054	↔
11_2_4_118	MW-01R	Appendix IV	Molybdenum	mg/L	15	2	13%	< 0.0001	0.249	↔	> -0.0001	0.190	↔	2024-02-13	0.260	↔

(Table continues on next page)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Break 1	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend			
11_2_4_121	MW-01R	Appendix IV	Radium 226 and 228	pCi/L	15	9	60%	0.0049143	0.637	↔	> -0.0001	0.744	↔	2023-01-31	0.114	↔
11_2_4_122	MW-01R	Appendix IV	Selenium	mg/L	15	0	0%	< 0.0001	0.137	↔	> -0.0001	0.226	↔	2024-02-13	0.277	↔
11_2_4_125	MW-01R	Appendix IV	Thallium	mg/L	15	15	100%	< 0.0001	0.232	↔	> -0.0001	0.548	↔	2023-04-24	0.223	↔
11_2_5_111	MW-01R	Part 115	Copper	mg/L	15	6	40%	< 0.0001	0.320	↔	> -0.0001	0.271	↔	2024-01-07	0.186	↔
11_2_5_114	MW-01R	Part 115	Iron	mg/L	15	0	0%	-0.00031362	0.612	↔	-0.0014199	0.339	↔	2024-04-14	0.394	↔
11_2_5_119	MW-01R	Part 115	Nickel	mg/L	15	0	0%	< 0.0001	0.134	↔	> -0.0001	0.221	↔	2024-02-13	0.281	↔
11_2_5_123	MW-01R	Part 115	Silver	mg/L	15	15	100%	< 0.0001	0.304	↔	> -0.0001	0.133	↔	2023-02-08	0.258	↔
11_2_5_128	MW-01R	Part 115	Vanadium	mg/L	15	2	13%	< 0.0001	0.033	↔	> -0.0001	0.502	↔	2023-06-28	0.474	↔
11_2_5_129	MW-01R	Part 115	Zinc	mg/L	15	3	20%	> -0.0001	0.611	↔	< 0.0001	0.130	↔	2024-01-12	0.273	↔
12_2_3_105	MW-02	Appendix III	Boron	mg/L	15	0	0%	0.037028	0.014	↔	0.33736	0.220	↔	2024-10-15	0.899	↔
12_2_3_107	MW-02	Appendix III	Calcium	mg/L	15	0	0%	0.0017262	0.969	↔	-0.044575	0.460	↔	2024-04-09	0.104	↔
12_2_3_108	MW-02	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	-0.37114	0.643	↔	0.042093	0.075	↔	2023-02-07	0.279	↔
12_2_3_112	MW-02	Appendix III	Fluoride	mg/L	15	0	0%	0.0030521	0.263	↔	0.015936	0.216	↔	2024-07-20	0.628	↔
12_2_3_120	MW-02	Appendix III	pH (field)	su	15	0	0%	0.0030136	0.142	↔	-0.00022928	0.060	↔	2023-02-15	0.406	↔
12_2_3_124	MW-02	Appendix III	Sulfate (as SO4)	mg/L	15	10	67%	-0.005543	0.651	↔	0.0029726	0.119	↔	2023-04-18	0.261	↔
12_2_3_126	MW-02	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	0.056222	0.933	↔	0.91924	0.098	↔	2023-11-20	0.496	↔
12_2_4_101	MW-02	Appendix IV	Antimony	mg/L	15	3	20%	< 0.0001	0.203	↔	> -0.0001	0.189	↔	2023-04-18	0.263	↔
12_2_4_102	MW-02	Appendix IV	Arsenic	mg/L	15	0	0%	> -0.0001	0.130	↔	< 0.0001	0.511	↔	2024-02-13	0.265	↔
12_2_4_103	MW-02	Appendix IV	Barium	mg/L	15	0	0%	-0.00043624	0.756	↔	> -0.0001	0.481	↔	2023-04-17	0.141	↔
12_2_4_104	MW-02	Appendix IV	Beryllium	mg/L	15	1	7%	> -0.0001	0.137	↔	< 0.0001	0.591	↔	2025-01-11	0.207	↔
12_2_4_106	MW-02	Appendix IV	Cadmium	mg/L	15	10	67%	< 0.0001	0.210	↔	> -0.0001	0.213	↔	2023-05-23	0.245	↔
12_2_4_109	MW-02	Appendix IV	Chromium, Total	mg/L	15	0	0%	> -0.0001	0.289	↔	< 0.0001	0.151	↔	2024-02-13	0.296	↔
12_2_4_110	MW-02	Appendix IV	Cobalt	mg/L	15	0	0%	> -0.0001	0.732	↔	< 0.0001	0.216	↔	2024-09-13	0.301	↔
12_2_4_113	MW-02	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.0030521	0.263	↔	0.015936	0.216	↔	2024-07-20	0.628	↔
12_2_4_115	MW-02	Appendix IV	Lead	mg/L	15	1	7%	< 0.0001	0.843	↔	< 0.0001	0.176	↔	2024-10-14	0.355	↔
12_2_4_116	MW-02	Appendix IV	Lithium	mg/L	15	0	0%	< 0.0001	0.941	↔	0.0044887	0.036	↔	2024-10-12	0.578	↔
12_2_4_118	MW-02	Appendix IV	Molybdenum	mg/L	15	0	0%	> -0.0001	0.075	↔	< 0.0001	0.012	↔	2024-09-03	0.671	↔
12_2_4_121	MW-02	Appendix IV	Radium 226 and 228	pCi/L	14	5	36%	-0.0041271	0.095	↔	0.0006029	0.768	↔	2023-12-26	0.472	↔
12_2_4_122	MW-02	Appendix IV	Selenium	mg/L	15	0	0%	< 0.0001	0.863	↔	< 0.0001	0.148	↔	2024-02-13	0.447	↔
12_2_5_111	MW-02	Part 115	Copper	mg/L	15	0	0%	< 0.0001	0.791	↔	< 0.0001	0.069	↔	2024-10-14	0.514	↔
12_2_5_119	MW-02	Part 115	Nickel	mg/L	15	0	0%	> -0.0001	0.125	↔	< 0.0001	0.036	↔	2024-02-13	0.501	↔
12_2_5_123	MW-02	Part 115	Silver	mg/L	15	15	100%	> -0.0001	0.315	↔	< 0.0001	1.000	↔	2024-04-30	0.174	↔
13_2_3_107	MW-03	Appendix III	Calcium	mg/L	15	0	0%	0.42187	0.546	↔	-0.093788	0.032	↔	2023-03-13	0.368	↔
13_2_3_108	MW-03	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	-0.80846	0.031	↔	-0.086099	0.019	↔	2023-04-14	0.830	↔
13_2_3_112	MW-03	Appendix III	Fluoride	mg/L	15	0	0%	-0.0037155	0.266	↔	0.00014256	0.647	↔	2023-04-07	0.281	↔
13_2_3_120	MW-03	Appendix III	pH (field)	su	15	0	0%	0.00019785	0.593	↔	-0.00014007	0.626	↔	2024-02-13	0.069	↔
13_2_3_124	MW-03	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	3.7216	0.034	↔	-0.73963	0.000	↓	2023-04-12	0.744	↔
13_2_3_126	MW-03	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	2.2318	0.118	↔	-0.9611	0.000	↓	2023-04-26	0.738	↔
13_2_4_101	MW-03	Appendix IV	Antimony	mg/L	15	9	60%	< 0.0001	0.152	↔	> -0.0001	0.057	↔	2023-04-30	0.389	↔
13_2_4_102	MW-03	Appendix IV	Arsenic	mg/L	15	0	0%	> -0.0001	0.432	↔	< 0.0001	0.123	↔	2023-05-07	0.240	↔
13_2_4_103	MW-03	Appendix IV	Barium	mg/L	15	0	0%	0.00028544	0.591	↔	-0.00012562	0.455	↔	2023-07-13	0.078	↔
13_2_4_104	MW-03	Appendix IV	Beryllium	mg/L	15	10	67%	< 0.0001	0.729	↔	> -0.0001	0.381	↔	2023-02-06	0.101	↔

(Table continues on next page)

Table 9: Trend Tests: Piecewise Linear-Linear *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Break 1	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend			
13_2_4_106	MW-03	Appendix IV	Cadmium	mg/L	15	14	93%	< 0.0001	0.342	↔	> -0.0001	0.237	↔	2023-05-22	0.222	↔
13_2_4_109	MW-03	Appendix IV	Chromium, Total	mg/L	15	0	0%	> -0.0001	0.308	↔	< 0.0001	0.969	↔	2023-10-24	0.186	↔
13_2_4_110	MW-03	Appendix IV	Cobalt	mg/L	15	0	0%	< 0.0001	0.369	↔	> -0.0001	0.148	↔	2023-10-16	0.233	↔
13_2_4_113	MW-03	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	-0.0037155	0.266	↔	0.00014256	0.647	↔	2023-04-07	0.281	↔
13_2_4_115	MW-03	Appendix IV	Lead	mg/L	15	14	93%	> -0.0001	0.336	↔	> -0.0001	0.870	↔	2024-10-15	0.254	↔
13_2_4_116	MW-03	Appendix IV	Lithium	mg/L	15	0	0%	> -0.0001	0.052	↔	< 0.0001	0.937	↔	2024-03-19	0.534	↔
13_2_4_118	MW-03	Appendix IV	Molybdenum	mg/L	15	11	73%	< 0.0001	0.722	↔	> -0.0001	0.092	↔	2023-02-06	0.244	↔
13_2_4_121	MW-03	Appendix IV	Radium 226 and 228	pCi/L	14	1	7%	-0.016216	0.182	↔	-0.00082843	0.045	↔	2023-01-08	0.601	↔
13_2_4_122	MW-03	Appendix IV	Selenium	mg/L	15	3	20%	> -0.0001	0.737	↔	< 0.0001	0.711	↔	2023-05-22	0.032	↔
13_2_4_125	MW-03	Appendix IV	Thallium	mg/L	15	14	93%	< 0.0001	0.053	↔	> -0.0001	0.035	↔	2023-03-16	0.505	↔
13_2_5_111	MW-03	Part 115	Copper	mg/L	15	7	47%	< 0.0001	0.196	↔	> -0.0001	0.734	↔	2024-10-15	0.210	↔
13_2_5_114	MW-03	Part 115	Iron	mg/L	15	0	0%	-0.022027	0.003	↓	0.00057823	0.647	↔	2023-06-11	0.784	↔
13_2_5_119	MW-03	Part 115	Nickel	mg/L	15	1	7%	> -0.0001	0.202	↔	> -0.0001	0.977	↔	2023-04-23	0.302	↔
13_2_5_123	MW-03	Part 115	Silver	mg/L	15	15	100%	< 0.0001	0.587	↔	> -0.0001	0.114	↔	2023-02-06	0.254	↔
13_2_5_128	MW-03	Part 115	Vanadium	mg/L	15	9	60%	> -0.0001	0.716	↔	< 0.0001	0.354	↔	2023-05-26	0.107	↔
13_2_5_129	MW-03	Part 115	Zinc	mg/L	15	9	60%	> -0.0001	0.267	↔	< 0.0001	0.744	↔	2023-07-23	0.216	↔
14_2_3_105	MW-04	Appendix III	Boron	mg/L	15	0	0%	0.0010696	0.011	↔	-0.0051627	0.475	↔	2024-10-15	0.555	↔
14_2_3_107	MW-04	Appendix III	Calcium	mg/L	15	0	0%	0.032461	0.495	↔	-2.037	0.050	↔	2025-02-14	0.487	↔
14_2_3_120	MW-04	Appendix III	pH (field)	su	15	0	0%	0.00070391	0.498	↔	-0.00025147	0.119	↔	2023-05-22	0.233	↔
14_2_3_124	MW-04	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	3.2404	0.047	↔	-0.15874	0.474	↔	2023-04-25	0.489	↔
14_2_3_126	MW-04	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	0.073231	0.747	↔	-11.111	0.030	↔	2025-02-13	0.592	↔
14_2_4_101	MW-04	Appendix IV	Antimony	mg/L	15	10	67%	< 0.0001	0.276	↔	> -0.0001	0.465	↔	2023-04-30	0.201	↔
14_2_4_102	MW-04	Appendix IV	Arsenic	mg/L	15	0	0%	> -0.0001	0.797	↔	< 0.0001	0.161	↔	2024-08-10	0.465	↔
14_2_4_103	MW-04	Appendix IV	Barium	mg/L	15	0	0%	-0.00085817	0.480	↔	> -0.0001	0.604	↔	2023-04-18	0.262	↔
14_2_4_104	MW-04	Appendix IV	Beryllium	mg/L	15	13	87%	< 0.0001	0.047	↔	> -0.0001	0.387	↔	2024-07-18	0.346	↔
14_2_4_106	MW-04	Appendix IV	Cadmium	mg/L	15	15	100%	< 0.0001	0.368	↔	> -0.0001	0.264	↔	2023-05-22	0.202	↔
14_2_4_109	MW-04	Appendix IV	Chromium, Total	mg/L	15	0	0%	< 0.0001	0.822	↔	> -0.0001	0.307	↔	2025-01-15	0.378	↔
14_2_4_110	MW-04	Appendix IV	Cobalt	mg/L	15	0	0%	> -0.0001	0.158	↔	> -0.0001	0.683	↔	2024-02-14	0.429	↔
14_2_4_115	MW-04	Appendix IV	Lead	mg/L	15	14	93%	< 0.0001	0.622	↔	> -0.0001	0.157	↔	2023-02-06	0.213	↔
14_2_4_116	MW-04	Appendix IV	Lithium	mg/L	15	0	0%	< 0.0001	0.498	↔	> -0.0001	0.155	↔	2023-08-06	0.218	↔
14_2_4_118	MW-04	Appendix IV	Molybdenum	mg/L	15	2	13%	< 0.0001	0.804	↔	0.00016111	0.000	↑	2025-02-19	0.935	↔
14_2_4_121	MW-04	Appendix IV	Radium 226 and 228	pCi/L	15	5	33%	-0.00126	0.019	↔	-0.00034825	0.751	↔	2024-05-22	0.654	↔
14_2_4_122	MW-04	Appendix IV	Selenium	mg/L	15	5	33%	> -0.0001	0.729	↔	< 0.0001	0.085	↔	2024-01-12	0.371	↔
14_2_4_125	MW-04	Appendix IV	Thallium	mg/L	15	15	100%	< 0.0001	0.339	↔	> -0.0001	0.724	↔	2024-10-15	0.204	↔
14_2_5_114	MW-04	Part 115	Iron	mg/L	15	0	0%	0.00089062	0.553	↔	-0.02198	0.000	↓	2024-07-07	0.895	↔
14_2_5_119	MW-04	Part 115	Nickel	mg/L	15	0	0%	< 0.0001	0.267	↔	-0.00017037	0.244	↔	2025-01-16	0.362	↔
14_2_5_123	MW-04	Part 115	Silver	mg/L	15	15	100%	< 0.0001	0.587	↔	> -0.0001	0.114	↔	2023-02-06	0.254	↔
14_2_5_128	MW-04	Part 115	Vanadium	mg/L	15	10	67%	> -0.0001	1.000	↔	< 0.0001	0.008	↑	2023-06-24	0.625	↔
16_1_3_105	MW-06	Appendix III	Boron	mg/L	15	0	0%	-0.029194	0.390	↔	-0.00070283	0.702	↔	2023-02-20	0.247	↔
16_1_3_107	MW-06	Appendix III	Calcium	mg/L	15	0	0%	0.07948	0.176	↔	-0.23817	0.093	↔	2024-04-07	0.485	↔
16_1_3_108	MW-06	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	-0.69975	0.022	↔	-0.044719	0.100	↔	2023-04-04	0.790	↔
16_1_3_112	MW-06	Appendix III	Fluoride	mg/L	15	0	0%	-0.0028703	0.456	↔	0.00023835	0.267	↔	2023-03-09	0.207	↔

(Table continues on next page)

Table 9: Trend Tests: Piecewise Linear-Linear *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Break 1	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend			
16_1_3_120	MW-06	Appendix III	pH (field)	su	15	0	0%	-0.004239	0.657	↔	0.0004893	0.067	↔	2023-02-05	0.287	↔
16_1_3_124	MW-06	Appendix III	Sulfate (as SO4)	mg/L	15	2	13%	-0.038656	0.151	↔	0.043622	0.047	↔	2024-01-28	0.403	↔
16_1_3_126	MW-06	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	-0.37491	0.067	↔	0.11718	0.431	↔	2023-12-13	0.433	↔
16_1_4_101	MW-06	Appendix IV	Antimony	mg/L	15	13	87%	< 0.0001	0.278	↔	> -0.0001	0.242	↔	2023-04-18	0.209	↔
16_1_4_102	MW-06	Appendix IV	Arsenic	mg/L	15	0	0%	< 0.0001	0.144	↔	> -0.0001	0.142	↔	2024-09-16	0.340	↔
16_1_4_103	MW-06	Appendix IV	Barium	mg/L	15	0	0%	-0.0018101	0.420	↔	0.00024548	0.256	↔	2023-04-17	0.204	↔
16_1_4_104	MW-06	Appendix IV	Beryllium	mg/L	15	14	93%	> -0.0001	0.030	↔	< 0.0001	0.562	↔	2023-03-01	0.687	↔
16_1_4_106	MW-06	Appendix IV	Cadmium	mg/L	15	15	100%	< 0.0001	0.371	↔	> -0.0001	0.261	↔	2023-05-22	0.202	↔
16_1_4_109	MW-06	Appendix IV	Chromium, Total	mg/L	15	0	0%	< 0.0001	0.381	↔	> -0.0001	0.013	↔	2023-01-03	0.477	↔
16_1_4_110	MW-06	Appendix IV	Cobalt	mg/L	15	0	0%	< 0.0001	0.576	↔	> -0.0001	0.004	↓	2023-02-02	0.554	↔
16_1_4_113	MW-06	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	-0.0028703	0.456	↔	0.00023835	0.267	↔	2023-03-09	0.207	↔
16_1_4_115	MW-06	Appendix IV	Lead	mg/L	15	10	67%	< 0.0001	0.728	↔	> -0.0001	0.051	↔	2023-02-05	0.310	↔
16_1_4_116	MW-06	Appendix IV	Lithium	mg/L	15	0	0%	-0.00017535	0.038	↔	< 0.0001	0.647	↔	2024-04-06	0.553	↔
16_1_4_118	MW-06	Appendix IV	Molybdenum	mg/L	15	9	60%	> -0.0001	0.504	↔	< 0.0001	0.851	↔	2024-01-28	0.121	↔
16_1_4_121	MW-06	Appendix IV	Radium 226 and 228	pCi/L	15	3	20%	0.0025878	0.745	↔	-0.00030478	0.489	↔	2023-03-13	0.063	↔
16_1_4_122	MW-06	Appendix IV	Selenium	mg/L	15	5	33%	< 0.0001	0.141	↔	> -0.0001	0.237	↔	2024-02-13	0.271	↔
16_1_4_125	MW-06	Appendix IV	Thallium	mg/L	15	15	100%	< 0.0001	0.597	↔	> -0.0001	0.112	↔	2023-02-05	0.256	↔
16_1_5_111	MW-06	Part 115	Copper	mg/L	15	12	80%	< 0.0001	0.010	↑	> -0.0001	0.234	↔	2024-07-18	0.508	↔
16_1_5_114	MW-06	Part 115	Iron	mg/L	15	0	0%	0.02099	0.105	↔	-0.039944	0.027	↔	2024-02-13	0.532	↔
16_1_5_119	MW-06	Part 115	Nickel	mg/L	15	6	40%	> -0.0001	0.084	↔	< 0.0001	0.416	↔	2024-01-07	0.439	↔
16_1_5_123	MW-06	Part 115	Silver	mg/L	15	15	100%	< 0.0001	0.597	↔	> -0.0001	0.112	↔	2023-02-05	0.255	↔
16_1_5_128	MW-06	Part 115	Vanadium	mg/L	15	14	93%	> -0.0001	0.212	↔	< 0.0001	0.379	↔	2023-01-24	0.423	↔
17_1_3_107	MW-07	Appendix III	Calcium	mg/L	15	0	0%	0.0049336	0.770	↔	0.053636	0.874	↔	2024-10-15	0.109	↔
17_1_3_108	MW-07	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	-0.01025	0.001	↓	0.0053899	0.000	↑	2023-07-09	0.877	↔
17_1_3_112	MW-07	Appendix III	Fluoride	mg/L	15	3	20%	> -0.0001	0.953	↔	0.00055556	0.632	↔	2025-02-09	0.062	↔
17_1_3_120	MW-07	Appendix III	pH (field)	su	15	0	0%	-0.0014388	0.615	↔	0.00013666	0.389	↔	2023-03-12	0.116	↔
17_1_3_124	MW-07	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	-0.092907	0.211	↔	0.016124	0.140	↔	2023-04-18	0.283	↔
17_1_4_101	MW-07	Appendix IV	Antimony	mg/L	15	14	93%	< 0.0001	0.000	↑	> -0.0001	1.000	↔	2023-07-09	0.903	↔
17_1_4_102	MW-07	Appendix IV	Arsenic	mg/L	15	0	0%	< 0.0001	0.350	↔	> -0.0001	0.394	↔	2023-11-29	0.137	↔
17_1_4_103	MW-07	Appendix IV	Barium	mg/L	15	0	0%	< 0.0001	0.229	↔	0.0002003	0.407	↔	2024-08-04	0.498	↔
17_1_4_104	MW-07	Appendix IV	Beryllium	mg/L	15	12	80%	< 0.0001	0.568	↔	> -0.0001	0.239	↔	2023-08-06	0.156	↔
17_1_4_106	MW-07	Appendix IV	Cadmium	mg/L	15	15	100%	< 0.0001	0.001	↑	> -0.0001	1.000	↔	2023-07-30	0.841	↔
17_1_4_109	MW-07	Appendix IV	Chromium, Total	mg/L	15	0	0%	< 0.0001	0.111	↔	> -0.0001	0.544	↔	2024-07-17	0.237	↔
17_1_4_110	MW-07	Appendix IV	Cobalt	mg/L	15	0	0%	< 0.0001	0.316	↔	> -0.0001	0.712	↔	2023-01-19	0.264	↔
17_1_4_113	MW-07	Appendix IV	Fluoride (App IV)	mg/L	15	3	20%	> -0.0001	0.953	↔	0.00055556	0.632	↔	2025-02-09	0.062	↔
17_1_4_115	MW-07	Appendix IV	Lead	mg/L	15	15	100%	> -0.0001	0.001	↓	< 0.0001	1.000	↔	2023-07-30	0.841	↔
17_1_4_116	MW-07	Appendix IV	Lithium	mg/L	15	0	0%	> -0.0001	0.332	↔	< 0.0001	0.619	↔	2024-02-13	0.119	↔
17_1_4_118	MW-07	Appendix IV	Molybdenum	mg/L	15	15	100%	> -0.0001	0.001	↓	< 0.0001	1.000	↔	2023-07-30	0.841	↔
17_1_4_121	MW-07	Appendix IV	Radium 226 and 228	pCi/L	15	2	13%	0.00049986	0.841	↔	-0.00083656	0.294	↔	2023-08-04	0.149	↔
17_1_4_122	MW-07	Appendix IV	Selenium	mg/L	15	9	60%	> -0.0001	0.082	↔	< 0.0001	0.787	↔	2023-06-26	0.514	↔
17_1_5_111	MW-07	Part 115	Copper	mg/L	15	11	73%	< 0.0001	0.760	↔	< 0.0001	0.441	↔	2024-07-28	0.295	↔
17_1_5_114	MW-07	Part 115	Iron	mg/L	15	0	0%	0.0032224	0.205	↔	0.037037	0.457	↔	2025-01-09	0.528	↔

(Table continues on next page)

Table 9: Trend Tests: Piecewise Linear-Linear *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Break 1	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend			
17_1_5_119	MW-07	Part 115	Nickel	mg/L	15	14	93%	> -0.0001	1.000	↔	< 0.0001	0.399	↔	2023-06-26	0.110	↔
17_1_5_128	MW-07	Part 115	Vanadium	mg/L	15	12	80%	< 0.0001	0.036	↔	> -0.0001	0.458	↔	2024-10-14	0.455	↔
17_1_5_129	MW-07	Part 115	Zinc	mg/L	15	10	67%	> -0.0001	0.476	↔	< 0.0001	0.876	↔	2023-08-07	0.075	↔
18_1_3_105	MW-08	Appendix III	Boron	mg/L	15	0	0%	0.081614	0.146	↔	-0.0041814	0.010	↔	2023-02-06	0.643	↔
18_1_3_107	MW-08	Appendix III	Calcium	mg/L	15	0	0%	-0.089713	0.014	↔	0.014176	0.563	↔	2023-11-29	0.634	↔
18_1_3_108	MW-08	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.051953	0.051	↔	-0.097376	0.844	↔	2024-10-16	0.314	↔
18_1_3_112	MW-08	Appendix III	Fluoride	mg/L	15	0	0%	0.010236	0.035	↔	-0.00031142	0.204	↔	2023-02-11	0.523	↔
18_1_3_120	MW-08	Appendix III	pH (field)	su	15	0	0%	0.0055286	0.158	↔	-0.00011588	0.739	↔	2023-03-14	0.297	↔
18_1_3_124	MW-08	Appendix III	Sulfate (as SO4)	mg/L	15	4	27%	-0.063882	0.074	↔	0.13781	0.000	↑	2024-01-12	0.803	↔
18_1_3_126	MW-08	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	-0.13762	0.626	↔	0.13196	0.326	↔	2023-10-23	0.111	↔
18_1_4_101	MW-08	Appendix IV	Antimony	mg/L	15	7	47%	< 0.0001	0.308	↔	> -0.0001	0.308	↔	2023-02-07	0.187	↔
18_1_4_102	MW-08	Appendix IV	Arsenic	mg/L	15	0	0%	0.00049606	0.307	↔	> -0.0001	0.671	↔	2023-02-06	0.436	↔
18_1_4_103	MW-08	Appendix IV	Barium	mg/L	15	0	0%	-0.00018978	0.378	↔	-0.0035849	0.415	↔	2025-01-02	0.517	↔
18_1_4_104	MW-08	Appendix IV	Beryllium	mg/L	15	14	93%	> -0.0001	1.000	↔	< 0.0001	0.173	↔	2024-07-09	0.326	↔
18_1_4_106	MW-08	Appendix IV	Cadmium	mg/L	15	14	93%	< 0.0001	0.009	↑	< 0.0001	0.259	↔	2023-07-11	0.781	↔
18_1_4_109	MW-08	Appendix IV	Chromium, Total	mg/L	15	0	0%	< 0.0001	0.321	↔	> -0.0001	0.002	↓	2023-01-26	0.598	↔
18_1_4_110	MW-08	Appendix IV	Cobalt	mg/L	15	0	0%	> -0.0001	0.399	↔	< 0.0001	0.458	↔	2024-06-25	0.110	↔
18_1_4_113	MW-08	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.010236	0.035	↔	-0.00031142	0.204	↔	2023-02-11	0.523	↔
18_1_4_115	MW-08	Appendix IV	Lead	mg/L	15	9	60%	< 0.0001	0.134	↔	> -0.0001	0.783	↔	2024-10-16	0.207	↔
18_1_4_116	MW-08	Appendix IV	Lithium	mg/L	15	0	0%	0.0013429	0.043	↔	> -0.0001	0.001	↓	2023-01-19	0.730	↔
18_1_4_118	MW-08	Appendix IV	Molybdenum	mg/L	15	0	0%	> -0.0001	0.060	↔	< 0.0001	0.096	↔	2023-06-27	0.413	↔
18_1_4_122	MW-08	Appendix IV	Selenium	mg/L	15	5	33%	> -0.0001	0.362	↔	< 0.0001	0.597	↔	2023-06-27	0.111	↔
18_1_4_125	MW-08	Appendix IV	Thallium	mg/L	15	14	93%	> -0.0001	0.890	↔	< 0.0001	0.242	↔	2024-05-13	0.321	↔
18_1_5_114	MW-08	Part 115	Iron	mg/L	15	0	0%	-0.1043	0.005	↓	0.0027177	0.541	↔	2023-04-22	0.712	↔
18_1_5_119	MW-08	Part 115	Nickel	mg/L	15	0	0%	< 0.0001	0.018	↔	> -0.0001	0.565	↔	2025-01-11	0.447	↔
18_1_5_128	MW-08	Part 115	Vanadium	mg/L	15	14	93%	> -0.0001	1.000	↔	< 0.0001	0.173	↔	2024-07-09	0.326	↔
19_2_3_105	MW-09	Appendix III	Boron	mg/L	15	0	0%	0.00031123	0.674	↔	-0.0059292	0.695	↔	2024-10-17	0.268	↔
19_2_3_107	MW-09	Appendix III	Calcium	mg/L	15	0	0%	1.2997	0.144	↔	0.097954	0.240	↔	2023-03-18	0.526	↔
19_2_3_108	MW-09	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.0097119	0.455	↔	0.1544	0.000	↑	2024-07-05	0.885	↔
19_2_3_112	MW-09	Appendix III	Fluoride	mg/L	15	0	0%	0.0026069	0.120	↔	-0.00055025	0.129	↔	2023-06-22	0.381	↔
19_2_3_120	MW-09	Appendix III	pH (field)	su	15	0	0%	0.0014765	0.454	↔	-0.00036066	0.006	↓	2023-03-13	0.526	↔
19_2_3_124	MW-09	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	3.51	0.173	↔	0.34412	0.162	↔	2023-03-29	0.573	↔
19_2_3_126	MW-09	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	4.7268	0.130	↔	0.52065	0.085	↔	2023-04-06	0.671	↔
19_2_4_101	MW-09	Appendix IV	Antimony	mg/L	15	10	67%	< 0.0001	0.246	↔	> -0.0001	0.216	↔	2023-04-18	0.232	↔
19_2_4_102	MW-09	Appendix IV	Arsenic	mg/L	15	0	0%	< 0.0001	0.502	↔	> -0.0001	0.720	↔	2024-10-17	0.214	↔
19_2_4_103	MW-09	Appendix IV	Barium	mg/L	15	0	0%	-0.00778	0.105	↔	-0.00012276	0.853	↔	2023-04-18	0.422	↔
19_2_4_106	MW-09	Appendix IV	Cadmium	mg/L	15	15	100%	< 0.0001	0.170	↔	> -0.0001	0.329	↔	2023-05-23	0.249	↔
19_2_4_109	MW-09	Appendix IV	Chromium, Total	mg/L	15	0	0%	> -0.0001	0.393	↔	< 0.0001	0.649	↔	2024-01-14	0.146	↔
19_2_4_110	MW-09	Appendix IV	Cobalt	mg/L	15	0	0%	< 0.0001	0.470	↔	> -0.0001	0.145	↔	2023-03-02	0.227	↔
19_2_4_113	MW-09	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.0026069	0.120	↔	-0.00055025	0.129	↔	2023-06-22	0.381	↔
19_2_4_115	MW-09	Appendix IV	Lead	mg/L	15	15	100%	> -0.0001	0.588	↔	< 0.0001	0.950	↔	2023-10-23	0.092	↔
19_2_4_116	MW-09	Appendix IV	Lithium	mg/L	15	0	0%	> -0.0001	0.250	↔	0.00024557	0.256	↔	2024-10-16	0.210	↔

(Table continues on next page)

Table 9: Trend Tests: Piecewise Linear-Linear *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Break 1	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend			
19_2_4_117	MW-09	Appendix IV	Mercury	mg/L	15	13	87%	< 0.0001	0.075	↔	> -0.0001	0.211	↔	2023-10-24	0.339	↔
19_2_4_118	MW-09	Appendix IV	Molybdenum	mg/L	15	0	0%	> -0.0001	0.043	↔	< 0.0001	0.076	↔	2023-05-22	0.579	↔
19_2_4_121	MW-09	Appendix IV	Radium 226 and 228	pCi/L	15	14	93%	0.0003278	0.439	↔	-0.00049538	0.148	↔	2024-02-12	0.219	↔
19_2_4_122	MW-09	Appendix IV	Selenium	mg/L	15	2	13%	> -0.0001	0.836	↔	< 0.0001	0.015	↔	2023-12-10	0.659	↔
19_2_4_125	MW-09	Appendix IV	Thallium	mg/L	15	15	100%	< 0.0001	0.455	↔	> -0.0001	0.835	↔	2023-02-06	0.094	↔
19_2_5_111	MW-09	Part 115	Copper	mg/L	15	10	67%	< 0.0001	0.039	↔	> -0.0001	0.401	↔	2024-07-17	0.361	↔
19_2_5_123	MW-09	Part 115	Silver	mg/L	15	15	100%	< 0.0001	0.394	↔	> -0.0001	0.154	↔	2023-04-17	0.247	↔
19_2_5_129	MW-09	Part 115	Zinc	mg/L	15	8	53%	> -0.0001	0.135	↔	< 0.0001	0.257	↔	2023-10-28	0.269	↔
20_3_3_105	MW-10	Appendix III	Boron	mg/L	15	0	0%	-0.0076108	0.643	↔	0.026962	0.487	↔	2024-04-07	0.130	↔
20_3_3_107	MW-10	Appendix III	Calcium	mg/L	15	0	0%	0.34005	0.083	↔	-0.53864	0.531	↔	2024-07-17	0.272	↔
20_3_3_108	MW-10	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.51539	0.008	↑	-0.85469	0.798	↔	2024-10-16	0.505	↔
20_3_3_112	MW-10	Appendix III	Fluoride	mg/L	15	0	0%	-0.0038554	0.266	↔	0.0055855	0.484	↔	2024-05-04	0.147	↔
20_3_3_120	MW-10	Appendix III	pH (field)	su	15	0	0%	0.002118	0.574	↔	-0.00065551	0.247	↔	2023-05-22	0.143	↔
20_3_3_124	MW-10	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	1.1745	0.152	↔	-2.0946	0.266	↔	2024-06-02	0.254	↔
20_3_3_126	MW-10	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	1.6015	0.013	↔	-5.3833	0.635	↔	2024-10-16	0.462	↔
20_3_4_101	MW-10	Appendix IV	Antimony	mg/L	15	11	73%	< 0.0001	0.413	↔	> -0.0001	0.227	↔	2023-05-05	0.179	↔
20_3_4_102	MW-10	Appendix IV	Arsenic	mg/L	15	0	0%	< 0.0001	0.005	↑	> -0.0001	0.642	↔	2024-10-16	0.536	↔
20_3_4_103	MW-10	Appendix IV	Barium	mg/L	15	0	0%	-0.0015701	0.289	↔	0.00014028	0.315	↔	2023-04-09	0.261	↔
20_3_4_104	MW-10	Appendix IV	Beryllium	mg/L	15	7	47%	< 0.0001	0.194	↔	> -0.0001	0.141	↔	2023-05-23	0.287	↔
20_3_4_106	MW-10	Appendix IV	Cadmium	mg/L	15	15	100%	< 0.0001	0.373	↔	> -0.0001	0.262	↔	2023-05-22	0.202	↔
20_3_4_109	MW-10	Appendix IV	Chromium, Total	mg/L	15	0	0%	> -0.0001	0.451	↔	< 0.0001	0.571	↔	2024-08-27	0.085	↔
20_3_4_110	MW-10	Appendix IV	Cobalt	mg/L	15	1	7%	< 0.0001	0.265	↔	> -0.0001	0.096	↔	2023-05-23	0.308	↔
20_3_4_113	MW-10	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	-0.0038554	0.266	↔	0.0055855	0.484	↔	2024-05-04	0.147	↔
20_3_4_115	MW-10	Appendix IV	Lead	mg/L	15	13	87%	< 0.0001	0.547	↔	> -0.0001	0.051	↔	2023-02-05	0.337	↔
20_3_4_116	MW-10	Appendix IV	Lithium	mg/L	15	0	0%	0.0027203	0.633	↔	-0.00028923	0.361	↔	2023-03-13	0.117	↔
20_3_4_117	MW-10	Appendix IV	Mercury	mg/L	15	14	93%	< 0.0001	0.088	↔	> -0.0001	0.291	↔	2024-04-07	0.307	↔
20_3_4_118	MW-10	Appendix IV	Molybdenum	mg/L	15	0	0%	> -0.0001	0.116	↔	> -0.0001	0.591	↔	2023-07-22	0.515	↔
20_3_4_121	MW-10	Appendix IV	Radium 226 and 228	pCi/L	15	12	80%	-0.00021512	0.466	↔	0.0054717	0.368	↔	2025-02-04	0.170	↔
20_3_4_122	MW-10	Appendix IV	Selenium	mg/L	15	1	7%	< 0.0001	0.209	↔	> -0.0001	0.036	↔	2024-02-12	0.405	↔
20_3_4_125	MW-10	Appendix IV	Thallium	mg/L	15	15	100%	< 0.0001	0.554	↔	> -0.0001	0.309	↔	2023-02-05	0.202	↔
20_3_5_111	MW-10	Part 115	Copper	mg/L	15	12	80%	< 0.0001	0.684	↔	> -0.0001	0.262	↔	2023-05-22	0.127	↔
20_3_5_114	MW-10	Part 115	Iron	mg/L	15	0	0%	-0.0038444	0.478	↔	0.0066841	0.127	↔	2023-11-13	0.333	↔
20_3_5_119	MW-10	Part 115	Nickel	mg/L	15	7	47%	< 0.0001	0.522	↔	> -0.0001	0.181	↔	2023-05-22	0.184	↔
20_3_5_123	MW-10	Part 115	Silver	mg/L	15	15	100%	< 0.0001	0.588	↔	> -0.0001	0.114	↔	2023-02-05	0.253	↔
20_3_5_128	MW-10	Part 115	Vanadium	mg/L	15	12	80%	< 0.0001	0.319	↔	> -0.0001	0.814	↔	2024-10-16	0.121	↔
21_2_3_105	MW-11	Appendix III	Boron	mg/L	15	0	0%	-0.06216	0.370	↔	0.0025445	0.512	↔	2023-03-13	0.266	↔
21_2_3_107	MW-11	Appendix III	Calcium	mg/L	15	0	0%	1.1813	0.394	↔	-0.12809	0.116	↔	2023-03-13	0.295	↔
21_2_3_108	MW-11	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	-0.28511	0.347	↔	-0.010177	0.547	↔	2023-03-13	0.402	↔
21_2_3_112	MW-11	Appendix III	Fluoride	mg/L	15	0	0%	-0.010254	0.496	↔	0.00029343	0.454	↔	2023-01-27	0.186	↔
21_2_3_124	MW-11	Appendix III	Sulfate (as SO4)	mg/L	15	6	40%	0.9723	0.426	↔	-0.16977	0.027	↔	2023-03-13	0.400	↔
21_2_3_126	MW-11	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	1.0687	0.212	↔	-0.87084	0.192	↔	2023-10-24	0.274	↔
21_2_4_101	MW-11	Appendix IV	Antimony	mg/L	15	11	73%	> -0.0001	0.622	↔	> -0.0001	0.839	↔	2023-10-06	0.112	↔

(Table continues on next page)

Table 9: Trend Tests: Piecewise Linear-Linear *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Break 1	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend			
21_2_4_102	MW-11	Appendix IV	Arsenic	mg/L	15	0	0%	> -0.0001	0.577	↔	< 0.0001	0.583	↔	2024-02-12	0.074	↔
21_2_4_103	MW-11	Appendix IV	Barium	mg/L	15	0	0%	-0.002957	0.269	↔	0.00019481	0.439	↔	2023-04-15	0.294	↔
21_2_4_104	MW-11	Appendix IV	Beryllium	mg/L	15	12	80%	< 0.0001	0.110	↔	> -0.0001	0.379	↔	2024-04-07	0.260	↔
21_2_4_106	MW-11	Appendix IV	Cadmium	mg/L	15	13	87%	> -0.0001	0.731	↔	> -0.0001	0.588	↔	2023-03-13	0.126	↔
21_2_4_109	MW-11	Appendix IV	Chromium, Total	mg/L	15	0	0%	> -0.0001	0.399	↔	< 0.0001	0.976	↔	2023-04-17	0.241	↔
21_2_4_110	MW-11	Appendix IV	Cobalt	mg/L	15	0	0%	< 0.0001	0.545	↔	> -0.0001	0.283	↔	2024-04-06	0.144	↔
21_2_4_113	MW-11	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	-0.010254	0.496	↔	0.00029343	0.454	↔	2023-01-27	0.186	↔
21_2_4_115	MW-11	Appendix IV	Lead	mg/L	15	3	20%	-0.00021013	0.344	↔	> -0.0001	0.959	↔	2023-04-11	0.274	↔
21_2_4_116	MW-11	Appendix IV	Lithium	mg/L	15	0	0%	-0.0010585	0.345	↔	< 0.0001	0.708	↔	2023-03-13	0.301	↔
21_2_4_118	MW-11	Appendix IV	Molybdenum	mg/L	15	2	13%	> -0.0001	0.209	↔	< 0.0001	0.747	↔	2023-03-16	0.253	↔
21_2_4_121	MW-11	Appendix IV	Radium 226 and 228	pCi/L	14	4	29%	0.00050214	0.910	↔	-0.0011045	0.047	↔	2023-04-16	0.405	↔
21_2_4_122	MW-11	Appendix IV	Selenium	mg/L	15	3	20%	< 0.0001	0.119	↔	> -0.0001	0.137	↔	2024-02-13	0.337	↔
21_2_4_125	MW-11	Appendix IV	Thallium	mg/L	15	14	93%	< 0.0001	0.587	↔	> -0.0001	0.074	↔	2023-02-07	0.300	↔
21_2_5_111	MW-11	Part 115	Copper	mg/L	15	4	27%	> -0.0001	0.378	↔	> -0.0001	0.948	↔	2023-04-09	0.240	↔
21_2_5_114	MW-11	Part 115	Iron	mg/L	15	0	0%	-0.053941	0.222	↔	0.0046412	0.074	↔	2023-02-21	0.359	↔
21_2_5_119	MW-11	Part 115	Nickel	mg/L	15	0	0%	> -0.0001	0.382	↔	< 0.0001	0.835	↔	2023-04-17	0.237	↔
21_2_5_123	MW-11	Part 115	Silver	mg/L	15	13	87%	< 0.0001	0.563	↔	> -0.0001	0.147	↔	2023-04-17	0.203	↔
21_2_5_128	MW-11	Part 115	Vanadium	mg/L	15	13	87%	< 0.0001	0.173	↔	> -0.0001	0.193	↔	2024-04-06	0.279	↔
21_2_5_129	MW-11	Part 115	Zinc	mg/L	15	4	27%	-0.00025964	0.073	↔	< 0.0001	0.361	↔	2023-07-02	0.363	↔
22_2_3_105	MW-12	Appendix III	Boron	mg/L	15	0	0%	0.00014966	0.186	↔	-0.0024074	0.283	↔	2025-02-16	0.230	↔
22_2_3_107	MW-12	Appendix III	Calcium	mg/L	15	0	0%	-0.003204	0.901	↔	-0.33333	0.525	↔	2025-02-04	0.149	↔
22_2_3_108	MW-12	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	-0.0092356	0.477	↔	0.011157	0.514	↔	2024-04-07	0.088	↔
22_2_3_112	MW-12	Appendix III	Fluoride	mg/L	15	0	0%	-0.0033199	0.396	↔	> -0.0001	0.832	↔	2023-02-06	0.395	↔
22_2_3_120	MW-12	Appendix III	pH (field)	su	15	0	0%	0.004172	0.559	↔	-0.00028479	0.481	↔	2023-03-12	0.132	↔
22_2_3_124	MW-12	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	-0.15977	0.001	↓	0.10726	0.551	↔	2024-08-22	0.715	↔
22_2_4_101	MW-12	Appendix IV	Antimony	mg/L	15	0	0%	> -0.0001	0.143	↔	< 0.0001	0.033	↔	2024-01-23	0.434	↔
22_2_4_102	MW-12	Appendix IV	Arsenic	mg/L	15	0	0%	< 0.0001	0.410	↔	> -0.0001	0.552	↔	2024-12-18	0.208	↔
22_2_4_103	MW-12	Appendix IV	Barium	mg/L	15	0	0%	< 0.0001	0.006	↑	-0.00024074	0.619	↔	2024-11-16	0.513	↔
22_2_4_106	MW-12	Appendix IV	Cadmium	mg/L	15	0	0%	< 0.0001	0.367	↔	< 0.0001	0.984	↔	2023-06-26	0.223	↔
22_2_4_110	MW-12	Appendix IV	Cobalt	mg/L	15	5	33%	< 0.0001	0.029	↔	> -0.0001	0.628	↔	2024-10-16	0.404	↔
22_2_4_113	MW-12	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	-0.0033199	0.396	↔	> -0.0001	0.832	↔	2023-02-06	0.395	↔
22_2_4_116	MW-12	Appendix IV	Lithium	mg/L	15	0	0%	< 0.0001	0.356	↔	> -0.0001	0.183	↔	2023-06-26	0.216	↔
22_2_4_118	MW-12	Appendix IV	Molybdenum	mg/L	15	0	0%	< 0.0001	0.193	↔	> -0.0001	0.560	↔	2025-01-15	0.175	↔
22_2_4_121	MW-12	Appendix IV	Radium 226 and 228	pCi/L	15	10	67%	0.0016847	0.462	↔	-0.00019152	0.381	↔	2023-04-18	0.166	↔
22_2_4_122	MW-12	Appendix IV	Selenium	mg/L	15	0	0%	> -0.0001	0.080	↔	< 0.0001	0.043	↔	2023-09-16	0.450	↔
22_2_5_111	MW-12	Part 115	Copper	mg/L	15	0	0%	< 0.0001	0.496	↔	< 0.0001	0.033	↔	2024-05-27	0.713	↔
22_2_5_128	MW-12	Part 115	Vanadium	mg/L	15	6	40%	< 0.0001	0.015	↔	> -0.0001	0.691	↔	2024-10-16	0.438	↔
22_2_5_129	MW-12	Part 115	Zinc	mg/L	15	0	0%	< 0.0001	0.201	↔	> -0.0001	0.843	↔	2024-10-16	0.148	↔
28_1_3_105	MW-18	Appendix III	Boron	mg/L	15	0	0%	0.003827	0.000	↑	0.00024933	0.871	↔	2024-06-10	0.890	↔
28_1_3_107	MW-18	Appendix III	Calcium	mg/L	15	0	0%	-1.1356	0.098	↔	0.081082	0.193	↔	2023-04-17	0.518	↔
28_1_3_108	MW-18	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	-0.085419	0.363	↔	0.0071774	0.179	↔	2023-03-07	0.266	↔
28_1_3_112	MW-18	Appendix III	Fluoride	mg/L	15	0	0%	0.0046962	0.124	↔	-0.0016672	0.232	↔	2023-08-08	0.284	↔

(Table continues on next page)

Table 9: Trend Tests: Piecewise Linear-Linear *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Break 1	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend			
28_1_3_120	MW-18	Appendix III	pH (field)	su	15	0	0%	0.00043707	0.059	↔	> -0.0001	0.782	↔	2023-12-03	0.503	↔
28_1_3_124	MW-18	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	-8.8592	0.157	↔	0.27774	0.102	↔	2023-02-07	0.596	↔
28_1_3_126	MW-18	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	-5.4949	0.010	↔	0.1134	0.509	↔	2023-03-13	0.632	↔
28_1_4_101	MW-18	Appendix IV	Antimony	mg/L	15	3	20%	< 0.0001	0.606	↔	> -0.0001	0.420	↔	2023-04-17	0.099	↔
28_1_4_102	MW-18	Appendix IV	Arsenic	mg/L	15	0	0%	< 0.0001	0.021	↔	> -0.0001	0.745	↔	2024-10-16	0.402	↔
28_1_4_103	MW-18	Appendix IV	Barium	mg/L	15	0	0%	< 0.0001	0.234	↔	> -0.0001	0.502	↔	2024-12-28	0.220	↔
28_1_4_104	MW-18	Appendix IV	Beryllium	mg/L	15	13	87%	< 0.0001	0.106	↔	> -0.0001	0.431	↔	2024-04-10	0.256	↔
28_1_4_106	MW-18	Appendix IV	Cadmium	mg/L	15	6	40%	< 0.0001	0.887	↔	> -0.0001	0.151	↔	2023-04-29	0.243	↔
28_1_4_110	MW-18	Appendix IV	Cobalt	mg/L	15	0	0%	> -0.0001	0.000	↓	> -0.0001	0.299	↔	2023-04-18	0.916	↔
28_1_4_113	MW-18	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.0046962	0.124	↔	-0.0016672	0.232	↔	2023-08-08	0.284	↔
28_1_4_115	MW-18	Appendix IV	Lead	mg/L	15	10	67%	< 0.0001	0.687	↔	> -0.0001	0.071	↔	2023-02-07	0.277	↔
28_1_4_116	MW-18	Appendix IV	Lithium	mg/L	15	0	0%	-0.0001884	0.564	↔	< 0.0001	0.792	↔	2023-02-07	0.192	↔
28_1_4_118	MW-18	Appendix IV	Molybdenum	mg/L	15	0	0%	< 0.0001	0.130	↔	> -0.0001	0.691	↔	2023-08-08	0.280	↔
28_1_4_121	MW-18	Appendix IV	Radium 226 and 228	pCi/L	15	9	60%	0.0029302	0.490	↔	-0.00029333	0.225	↔	2023-03-05	0.186	↔
28_1_4_122	MW-18	Appendix IV	Selenium	mg/L	15	0	0%	< 0.0001	0.170	↔	> -0.0001	0.598	↔	2024-04-10	0.192	↔
28_1_4_125	MW-18	Appendix IV	Thallium	mg/L	15	15	100%	< 0.0001	0.694	↔	> -0.0001	0.264	↔	2023-02-07	0.144	↔
28_1_5_111	MW-18	Part 115	Copper	mg/L	15	0	0%	< 0.0001	0.212	↔	> -0.0001	0.562	↔	2025-01-03	0.179	↔
28_1_5_114	MW-18	Part 115	Iron	mg/L	15	0	0%	-0.045456	0.003	↓	0.002667	0.035	↔	2023-03-14	0.714	↔
28_1_5_119	MW-18	Part 115	Nickel	mg/L	15	0	0%	> -0.0001	0.000	↓	> -0.0001	0.680	↔	2023-04-22	0.859	↔
28_1_5_123	MW-18	Part 115	Silver	mg/L	15	15	100%	< 0.0001	0.694	↔	> -0.0001	0.264	↔	2023-02-07	0.144	↔
28_1_5_129	MW-18	Part 115	Zinc	mg/L	15	0	0%	> -0.0001	0.002	↓	< 0.0001	0.331	↔	2024-07-17	0.619	↔
29_1_3_105	MW-19	Appendix III	Boron	mg/L	15	0	0%	-0.0061067	0.465	↔	0.00036058	0.438	↔	2023-03-12	0.190	↔
29_1_3_107	MW-19	Appendix III	Calcium	mg/L	15	0	0%	-0.37831	0.143	↔	-0.028238	0.713	↔	2023-08-05	0.485	↔
29_1_3_108	MW-19	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	-0.24447	0.019	↔	-0.021952	0.023	↔	2023-04-13	0.847	↔
29_1_3_112	MW-19	Appendix III	Fluoride	mg/L	15	0	0%	-0.00045005	0.180	↔	-0.0015811	0.807	↔	2024-10-16	0.417	↔
29_1_3_120	MW-19	Appendix III	pH (field)	su	15	0	0%	0.0010373	0.498	↔	-0.00032841	0.155	↔	2023-05-12	0.204	↔
29_1_3_124	MW-19	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	-5.5515	0.455	↔	-0.066719	0.719	↔	2023-02-07	0.370	↔
29_1_3_126	MW-19	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	-2.4679	0.002	↓	-0.20327	0.300	↔	2023-07-02	0.830	↔
29_1_4_101	MW-19	Appendix IV	Antimony	mg/L	15	12	80%	< 0.0001	0.311	↔	> -0.0001	0.580	↔	2023-04-18	0.155	↔
29_1_4_102	MW-19	Appendix IV	Arsenic	mg/L	15	0	0%	< 0.0001	0.605	↔	> -0.0001	0.799	↔	2024-10-16	0.118	↔
29_1_4_103	MW-19	Appendix IV	Barium	mg/L	15	0	0%	> -0.0001	0.112	↔	> -0.0001	0.561	↔	2023-04-02	0.549	↔
29_1_4_104	MW-19	Appendix IV	Beryllium	mg/L	15	3	20%	> -0.0001	0.643	↔	< 0.0001	0.612	↔	2023-10-04	0.045	↔
29_1_4_106	MW-19	Appendix IV	Cadmium	mg/L	15	15	100%	< 0.0001	0.366	↔	> -0.0001	0.259	↔	2023-05-21	0.205	↔
29_1_4_109	MW-19	Appendix IV	Chromium, Total	mg/L	15	5	33%	> -0.0001	0.180	↔	< 0.0001	0.831	↔	2023-09-05	0.299	↔
29_1_4_110	MW-19	Appendix IV	Cobalt	mg/L	15	1	7%	> -0.0001	0.015	↔	< 0.0001	0.016	↔	2024-08-31	0.655	↔
29_1_4_113	MW-19	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	-0.00045005	0.180	↔	-0.0015811	0.807	↔	2024-10-16	0.417	↔
29_1_4_115	MW-19	Appendix IV	Lead	mg/L	15	15	100%	< 0.0001	0.271	↔	> -0.0001	0.071	↔	2023-02-08	0.327	↔
29_1_4_116	MW-19	Appendix IV	Lithium	mg/L	15	0	0%	> -0.0001	0.081	↔	< 0.0001	0.898	↔	2024-02-12	0.585	↔
29_1_4_118	MW-19	Appendix IV	Molybdenum	mg/L	15	0	0%	> -0.0001	0.179	↔	< 0.0001	0.006	↑	2024-06-10	0.691	↔
29_1_4_121	MW-19	Appendix IV	Radium 226 and 228	pCi/L	15	7	47%	0.006212	0.177	↔	-0.0005142	0.055	↔	2023-02-08	0.381	↔
29_1_4_122	MW-19	Appendix IV	Selenium	mg/L	15	10	67%	> -0.0001	0.288	↔	< 0.0001	0.820	↔	2023-08-04	0.234	↔
29_1_4_125	MW-19	Appendix IV	Thallium	mg/L	15	15	100%	< 0.0001	0.263	↔	> -0.0001	0.331	↔	2023-02-08	0.208	↔

(Table continues on next page)

Table 9: Trend Tests: Piecewise Linear-Linear *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Break 1	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend			
29_1_5_111	MW-19	Part 115	Copper	mg/L	15	13	87%	> -0.0001	0.520	↔	< 0.0001	0.977	↔	2023-07-12	0.090	↔
29_1_5_114	MW-19	Part 115	Iron	mg/L	15	0	0%	0.01052	0.018	↔	-0.055556	0.480	↔	2024-11-30	0.442	↔
29_1_5_119	MW-19	Part 115	Nickel	mg/L	15	1	7%	< 0.0001	0.090	↔	> -0.0001	0.526	↔	2024-07-18	0.262	↔
29_1_5_123	MW-19	Part 115	Silver	mg/L	15	15	100%	< 0.0001	0.611	↔	> -0.0001	0.110	↔	2023-02-07	0.258	↔
29_1_5_128	MW-19	Part 115	Vanadium	mg/L	15	14	93%	> -0.0001	0.422	↔	< 0.0001	0.969	↔	2023-08-10	0.116	↔
29_1_5_129	MW-19	Part 115	Zinc	mg/L	15	10	67%	> -0.0001	0.174	↔	< 0.0001	0.074	↔	2024-06-08	0.402	↔
30_1_3_105	MW-20	Appendix III	Boron	mg/L	15	0	0%	0.00025234	0.300	↔	-0.0013259	0.781	↔	2024-10-16	0.146	↔
30_1_3_107	MW-20	Appendix III	Calcium	mg/L	15	0	0%	-0.13748	0.431	↔	0.0064334	0.861	↔	2023-06-25	0.153	↔
30_1_3_108	MW-20	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.10545	0.227	↔	-0.071375	0.002	↓	2023-05-23	0.686	↔
30_1_3_112	MW-20	Appendix III	Fluoride	mg/L	15	0	0%	-0.0082857	0.001	↓	< 0.0001	0.849	↔	2023-01-07	0.801	↔
30_1_3_120	MW-20	Appendix III	pH (field)	su	15	0	0%	< 0.0001	0.557	↔	0.00032423	0.916	↔	2024-10-16	0.115	↔
30_1_3_124	MW-20	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	-0.18053	0.295	↔	-0.013452	0.798	↔	2023-08-06	0.314	↔
30_1_3_126	MW-20	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	0.066452	0.713	↔	-0.54174	0.039	↔	2024-04-07	0.486	↔
30_1_4_101	MW-20	Appendix IV	Antimony	mg/L	15	5	33%	< 0.0001	0.305	↔	> -0.0001	0.842	↔	2023-04-17	0.315	↔
30_1_4_102	MW-20	Appendix IV	Arsenic	mg/L	15	0	0%	< 0.0001	0.188	↔	> -0.0001	0.332	↔	2025-01-03	0.337	↔
30_1_4_103	MW-20	Appendix IV	Barium	mg/L	15	0	0%	-0.0094286	0.059	↔	0.00019413	0.123	↔	2023-01-25	0.649	↔
30_1_4_104	MW-20	Appendix IV	Beryllium	mg/L	15	14	93%	< 0.0001	0.132	↔	> -0.0001	0.244	↔	2024-02-13	0.275	↔
30_1_4_106	MW-20	Appendix IV	Cadmium	mg/L	15	15	100%	< 0.0001	0.001	↑	< 0.0001	1.000	↔	2023-07-31	0.842	↔
30_1_4_109	MW-20	Appendix IV	Chromium, Total	mg/L	15	7	47%	< 0.0001	0.551	↔	> -0.0001	0.355	↔	2023-02-06	0.206	↔
30_1_4_110	MW-20	Appendix IV	Cobalt	mg/L	15	0	0%	> -0.0001	0.049	↔	> -0.0001	0.112	↔	2023-10-24	0.765	↔
30_1_4_113	MW-20	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	-0.0082857	0.001	↓	< 0.0001	0.849	↔	2023-01-07	0.801	↔
30_1_4_115	MW-20	Appendix IV	Lead	mg/L	15	0	0%	< 0.0001	0.501	↔	> -0.0001	0.052	↔	2023-05-20	0.331	↔
30_1_4_116	MW-20	Appendix IV	Lithium	mg/L	15	0	0%	< 0.0001	0.637	↔	> -0.0001	0.044	↔	2023-08-06	0.417	↔
30_1_4_118	MW-20	Appendix IV	Molybdenum	mg/L	15	0	0%	< 0.0001	0.374	↔	> -0.0001	0.821	↔	2023-08-06	0.172	↔
30_1_4_121	MW-20	Appendix IV	Radium 226 and 228	pCi/L	14	7	50%	-0.018514	0.033	↔	< 0.0001	0.996	↔	2023-01-14	0.659	↔
30_1_4_122	MW-20	Appendix IV	Selenium	mg/L	15	9	60%	> -0.0001	0.090	↔	> -0.0001	0.518	↔	2023-06-28	0.519	↔
30_1_4_125	MW-20	Appendix IV	Thallium	mg/L	15	14	93%	< 0.0001	0.258	↔	> -0.0001	0.153	↔	2024-02-12	0.275	↔
30_1_5_111	MW-20	Part 115	Copper	mg/L	15	2	13%	< 0.0001	0.004	↑	> -0.0001	0.456	↔	2024-10-16	0.603	↔
30_1_5_114	MW-20	Part 115	Iron	mg/L	15	0	0%	-0.00030203	0.951	↔	-0.014615	0.041	↔	2024-04-07	0.542	↔
30_1_5_129	MW-20	Part 115	Zinc	mg/L	15	0	0%	> -0.0001	0.261	↔	> -0.0001	0.914	↔	2023-08-11	0.245	↔
40_1_3_105	MW-30	Appendix III	Boron	mg/L	15	0	0%	0.0024876	0.806	↔	-0.00085802	0.137	↔	2023-03-12	0.200	↔
40_1_3_107	MW-30	Appendix III	Calcium	mg/L	15	0	0%	-0.15358	0.527	↔	1.5487	0.188	↔	2024-09-27	0.272	↔
40_1_3_108	MW-30	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	-0.2078	0.185	↔	3.8083	0.000	↑	2024-06-17	0.966	↔
40_1_3_112	MW-30	Appendix III	Fluoride	mg/L	15	0	0%	< 0.0001	0.956	↔	-0.0013314	0.346	↔	2024-09-25	0.204	↔
40_1_3_120	MW-30	Appendix III	pH (field)	su	15	0	0%	0.00049211	0.479	↔	-0.00059711	0.275	↔	2024-01-14	0.146	↔
40_1_3_124	MW-30	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	-0.28581	0.268	↔	1.6193	0.186	↔	2024-10-15	0.243	↔
40_1_3_126	MW-30	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	-0.12233	0.780	↔	10.419	0.000	↑	2024-10-04	0.868	↔
40_1_4_101	MW-30	Appendix IV	Antimony	mg/L	15	13	87%	< 0.0001	0.328	↔	> -0.0001	0.664	↔	2023-04-26	0.165	↔
40_1_4_102	MW-30	Appendix IV	Arsenic	mg/L	15	2	13%	< 0.0001	0.890	↔	< 0.0001	0.000	↑	2024-08-28	0.951	↔
40_1_4_103	MW-30	Appendix IV	Barium	mg/L	15	0	0%	-0.00022202	0.035	↔	< 0.0001	0.088	↔	2023-07-09	0.480	↔
40_1_4_104	MW-30	Appendix IV	Beryllium	mg/L	15	13	87%	> -0.0001	0.719	↔	< 0.0001	0.376	↔	2024-07-15	0.110	↔
40_1_4_106	MW-30	Appendix IV	Cadmium	mg/L	15	15	100%	< 0.0001	0.532	↔	> -0.0001	0.952	↔	2023-05-21	0.125	↔

(Table continues on next page)

Table 9: Trend Tests: Piecewise Linear-Linear *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Break 1	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend			
40_1_4_109	MW-30	Appendix IV	Chromium, Total	mg/L	15	0	0%	> -0.0001	0.280	↔	> -0.0001	0.437	↔	2023-02-06	0.312	↔
40_1_4_110	MW-30	Appendix IV	Cobalt	mg/L	15	0	0%	> -0.0001	0.913	↔	< 0.0001	0.150	↔	2024-07-10	0.331	↔
40_1_4_113	MW-30	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	< 0.0001	0.956	↔	-0.0013314	0.346	↔	2024-09-25	0.204	↔
40_1_4_115	MW-30	Appendix IV	Lead	mg/L	15	14	93%	> -0.0001	0.618	↔	< 0.0001	0.594	↔	2023-11-13	0.051	↔
40_1_4_116	MW-30	Appendix IV	Lithium	mg/L	15	0	0%	-0.00010682	0.226	↔	0.00022409	0.277	↔	2024-05-05	0.233	↔
40_1_4_117	MW-30	Appendix IV	Mercury	mg/L	15	14	93%	< 0.0001	0.070	↔	> -0.0001	0.100	↔	2024-04-07	0.469	↔
40_1_4_118	MW-30	Appendix IV	Molybdenum	mg/L	15	3	20%	> -0.0001	0.677	↔	< 0.0001	0.202	↔	2024-08-02	0.416	↔
40_1_4_122	MW-30	Appendix IV	Selenium	mg/L	15	7	47%	> -0.0001	0.322	↔	< 0.0001	0.593	↔	2023-07-07	0.140	↔
40_1_4_125	MW-30	Appendix IV	Thallium	mg/L	15	15	100%	< 0.0001	0.142	↔	> -0.0001	0.318	↔	2023-02-12	0.341	↔
40_1_5_111	MW-30	Part 115	Copper	mg/L	15	10	67%	> -0.0001	0.589	↔	< 0.0001	0.594	↔	2024-07-18	0.096	↔
40_1_5_119	MW-30	Part 115	Nickel	mg/L	15	3	20%	> -0.0001	0.953	↔	0.00018349	0.145	↔	2024-07-09	0.348	↔
40_1_5_123	MW-30	Part 115	Silver	mg/L	15	15	100%	< 0.0001	0.439	↔	> -0.0001	0.560	↔	2023-02-06	0.103	↔
40_1_5_128	MW-30	Part 115	Vanadium	mg/L	15	15	100%	> -0.0001	0.499	↔	< 0.0001	0.264	↔	2024-01-06	0.151	↔
40_1_5_129	MW-30	Part 115	Zinc	mg/L	15	10	67%	> -0.0001	0.889	↔	0.00015881	0.167	↔	2024-06-25	0.331	↔
41_1_3_105	MW-31	Appendix III	Boron	mg/L	15	0	0%	0.0019038	0.019	↔	-0.0059702	0.675	↔	2024-10-15	0.419	↔
41_1_3_107	MW-31	Appendix III	Calcium	mg/L	15	0	0%	-0.16675	0.165	↔	0.033281	0.359	↔	2023-06-27	0.237	↔
41_1_3_108	MW-31	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	-0.024182	0.192	↔	0.033751	0.426	↔	2024-04-08	0.196	↔
41_1_3_112	MW-31	Appendix III	Fluoride	mg/L	15	0	0%	0.0020381	0.323	↔	-0.00095213	0.007	↓	2023-05-11	0.547	↔
41_1_3_124	MW-31	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	-0.20938	0.009	↓	3.1296	0.039	↔	2025-02-17	0.584	↔
41_1_3_126	MW-31	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	-0.14328	0.062	↔	4.0741	0.014	↔	2025-02-22	0.562	↔
41_1_4_102	MW-31	Appendix IV	Arsenic	mg/L	15	0	0%	> -0.0001	0.223	↔	> -0.0001	0.438	↔	2025-02-19	0.382	↔
41_1_4_103	MW-31	Appendix IV	Barium	mg/L	15	0	0%	< 0.0001	0.317	↔	-0.0018704	0.172	↔	2025-02-21	0.245	↔
41_1_4_104	MW-31	Appendix IV	Beryllium	mg/L	15	13	87%	> -0.0001	1.000	↔	< 0.0001	0.407	↔	2023-06-06	0.112	↔
41_1_4_106	MW-31	Appendix IV	Cadmium	mg/L	15	14	93%	< 0.0001	0.000	↑	> -0.0001	0.761	↔	2023-08-18	0.839	↔
41_1_4_109	MW-31	Appendix IV	Chromium, Total	mg/L	15	0	0%	< 0.0001	0.068	↔	> -0.0001	0.885	↔	2024-10-15	0.291	↔
41_1_4_110	MW-31	Appendix IV	Cobalt	mg/L	15	3	20%	< 0.0001	0.357	↔	> -0.0001	0.706	↔	2024-10-15	0.225	↔
41_1_4_113	MW-31	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.0020381	0.323	↔	-0.00095213	0.007	↓	2023-05-11	0.547	↔
41_1_4_115	MW-31	Appendix IV	Lead	mg/L	15	13	87%	> -0.0001	0.174	↔	> -0.0001	0.965	↔	2023-10-11	0.420	↔
41_1_4_116	MW-31	Appendix IV	Lithium	mg/L	15	0	0%	< 0.0001	0.955	↔	-0.00024074	0.207	↔	2025-01-23	0.452	↔
41_1_4_121	MW-31	Appendix IV	Radium 226 and 228	pCi/L	15	6	40%	0.00083121	0.692	↔	-0.00035434	0.257	↔	2023-05-21	0.130	↔
41_1_4_122	MW-31	Appendix IV	Selenium	mg/L	15	6	40%	< 0.0001	0.346	↔	> -0.0001	0.257	↔	2024-02-12	0.202	↔
41_1_4_125	MW-31	Appendix IV	Thallium	mg/L	15	14	93%	< 0.0001	0.257	↔	> -0.0001	0.152	↔	2024-02-11	0.276	↔
41_1_5_111	MW-31	Part 115	Copper	mg/L	15	10	67%	< 0.0001	0.022	↔	> -0.0001	0.132	↔	2024-05-31	0.477	↔
41_1_5_114	MW-31	Part 115	Iron	mg/L	15	0	0%	-0.0066396	0.000	↓	< 0.0001	0.858	↔	2023-09-08	0.891	↔
41_1_5_119	MW-31	Part 115	Nickel	mg/L	15	10	67%	< 0.0001	0.884	↔	< 0.0001	0.219	↔	2024-05-29	0.371	↔
41_1_5_128	MW-31	Part 115	Vanadium	mg/L	15	12	80%	< 0.0001	1.000	↔	< 0.0001	0.104	↔	2024-01-04	0.415	↔
41_1_5_129	MW-31	Part 115	Zinc	mg/L	15	9	60%	> -0.0001	0.414	↔	< 0.0001	0.172	↔	2023-12-06	0.240	↔
42_1_3_105	MW-32	Appendix III	Boron	mg/L	15	0	0%	0.0021934	0.051	↔	-0.0098749	0.632	↔	2024-10-16	0.365	↔
42_1_3_107	MW-32	Appendix III	Calcium	mg/L	15	0	0%	-0.19303	0.119	↔	0.0067392	0.853	↔	2023-08-07	0.442	↔
42_1_3_108	MW-32	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	-0.020407	0.028	↔	0.02534	0.036	↔	2024-03-12	0.525	↔
42_1_3_112	MW-32	Appendix III	Fluoride	mg/L	15	0	0%	0.00034519	0.102	↔	-0.0023263	0.561	↔	2024-10-17	0.403	↔
42_1_3_124	MW-32	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	-0.14468	0.076	↔	1.537	0.323	↔	2025-02-11	0.313	↔

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Table 9: Trend Tests: Piecewise Linear-Linear *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Break 1	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend			
42_1_3_126	MW-32	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	-0.59418	0.196	↔	0.010466	0.939	↔	2023-08-07	0.356	↔
42_1_4_101	MW-32	Appendix IV	Antimony	mg/L	15	11	73%	< 0.0001	0.189	↔	> -0.0001	0.128	↔	2024-02-11	0.333	↔
42_1_4_102	MW-32	Appendix IV	Arsenic	mg/L	15	0	0%	< 0.0001	0.217	↔	> -0.0001	0.097	↔	2024-02-11	0.326	↔
42_1_4_103	MW-32	Appendix IV	Barium	mg/L	15	0	0%	-0.0024461	0.308	↔	0.00093882	0.017	↔	2023-04-24	0.477	↔
42_1_4_104	MW-32	Appendix IV	Beryllium	mg/L	15	14	93%	< 0.0001	0.131	↔	> -0.0001	0.244	↔	2024-02-12	0.276	↔
42_1_4_106	MW-32	Appendix IV	Cadmium	mg/L	15	14	93%	< 0.0001	0.030	↔	> -0.0001	0.079	↔	2024-02-11	0.605	↔
42_1_4_109	MW-32	Appendix IV	Chromium, Total	mg/L	15	0	0%	< 0.0001	0.364	↔	> -0.0001	0.194	↔	2024-02-11	0.210	↔
42_1_4_110	MW-32	Appendix IV	Cobalt	mg/L	15	0	0%	< 0.0001	0.116	↔	> -0.0001	0.184	↔	2024-02-12	0.309	↔
42_1_4_113	MW-32	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.00034519	0.102	↔	-0.0023263	0.561	↔	2024-10-17	0.403	↔
42_1_4_115	MW-32	Appendix IV	Lead	mg/L	15	11	73%	> -0.0001	0.610	↔	< 0.0001	0.827	↔	2023-06-12	0.053	↔
42_1_4_116	MW-32	Appendix IV	Lithium	mg/L	15	0	0%	-0.00042857	0.565	↔	< 0.0001	0.706	↔	2023-02-11	0.063	↔
42_1_4_117	MW-32	Appendix IV	Mercury	mg/L	15	14	93%	< 0.0001	0.160	↔	> -0.0001	0.140	↔	2024-04-06	0.308	↔
42_1_4_118	MW-32	Appendix IV	Molybdenum	mg/L	15	0	0%	< 0.0001	0.356	↔	> -0.0001	0.029	↔	2024-02-11	0.416	↔
42_1_4_121	MW-32	Appendix IV	Radium 226 and 228	pCi/L	15	9	60%	0.0017717	0.307	↔	-0.00034237	0.051	↔	2023-04-17	0.365	↔
42_1_4_122	MW-32	Appendix IV	Selenium	mg/L	15	12	80%	< 0.0001	0.459	↔	> -0.0001	0.199	↔	2024-02-11	0.183	↔
42_1_5_111	MW-32	Part 115	Copper	mg/L	15	9	60%	< 0.0001	0.249	↔	> -0.0001	0.149	↔	2024-02-11	0.282	↔
42_1_5_114	MW-32	Part 115	Iron	mg/L	15	0	0%	-0.027722	0.008	↓	0.0014959	0.716	↔	2023-08-08	0.640	↔
42_1_5_119	MW-32	Part 115	Nickel	mg/L	15	0	0%	< 0.0001	0.295	↔	> -0.0001	0.186	↔	2024-02-11	0.243	↔
42_1_5_129	MW-32	Part 115	Zinc	mg/L	15	0	0%	> -0.0001	0.528	↔	< 0.0001	0.134	↔	2023-12-02	0.304	↔

Table 10: Trend Tests: Piecewise Linear-Linear-Linear

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Line 3			Break 1	Break 2	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend				
11_2_3_105	MW-01R	Appendix III	Boron	mg/L	15	0	0%	0.24964	0.393	↔	-0.1369	0.433	↔	0.096892	0.618	↔	2023-06-25	2024-04-12	0.188	↔
11_2_3_108	MW-01R	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	-1.264	0.241	↔	0.78707	0.460	↔	-0.08787	0.269	↔	2023-02-08	2023-05-27	0.289	↔
11_2_3_120	MW-01R	Appendix III	pH (field)	su	15	0	0%	0.0049138	0.289	↔	-0.00095261	0.826	↔	0.00058088	0.653	↔	2023-05-06	2024-02-12	0.249	↔
11_2_4_101	MW-01R	Appendix IV	Antimony	mg/L	15	3	20%	< 0.0001	0.040	↔	> -0.0001	0.349	↔	> -0.0001	0.672	↔	2023-04-18	2023-08-16	0.555	↔
11_2_4_102	MW-01R	Appendix IV	Arsenic	mg/L	15	0	0%	> -0.0001	0.697	↔	< 0.0001	0.264	↔	> -0.0001	0.185	↔	2023-07-26	2024-02-13	0.331	↔
11_2_4_103	MW-01R	Appendix IV	Barium	mg/L	15	0	0%	-0.0008266	0.516	↔	0.0013761	0.263	↔	-0.00020023	0.335	↔	2023-04-07	2023-10-12	0.508	↔
11_2_4_104	MW-01R	Appendix IV	Beryllium	mg/L	15	2	13%	< 0.0001	0.281	↔	> -0.0001	0.246	↔	< 0.0001	0.420	↔	2023-09-18	2024-04-09	0.606	↔
11_2_4_106	MW-01R	Appendix IV	Cadmium	mg/L	15	12	80%	> -0.0001	0.823	↔	< 0.0001	0.667	↔	> -0.0001	0.090	↔	2023-02-23	2023-05-22	0.339	↔
11_2_4_109	MW-01R	Appendix IV	Chromium, Total	mg/L	15	0	0%	< 0.0001	0.940	↔	< 0.0001	0.359	↔	> -0.0001	0.156	↔	2023-06-28	2024-02-13	0.374	↔
11_2_4_110	MW-01R	Appendix IV	Cobalt	mg/L	15	0	0%	< 0.0001	0.305	↔	> -0.0001	0.501	↔	< 0.0001	0.840	↔	2024-02-13	2024-07-31	0.247	↔
11_2_4_115	MW-01R	Appendix IV	Lead	mg/L	15	2	13%	> -0.0001	0.663	↔	< 0.0001	0.333	↔	> -0.0001	0.165	↔	2023-03-03	2023-06-28	0.292	↔
11_2_4_118	MW-01R	Appendix IV	Molybdenum	mg/L	15	2	13%	> -0.0001	0.832	↔	< 0.0001	0.321	↔	> -0.0001	0.146	↔	2023-06-21	2024-02-13	0.327	↔
11_2_4_121	MW-01R	Appendix IV	Radium 226 and 228	pCi/L	15	9	60%	-0.00038744	0.562	↔	-0.0053777	0.243	↔	-0.0016844	0.411	↔	2024-08-22	2024-04-02	0.192	↔
11_2_4_122	MW-01R	Appendix IV	Selenium	mg/L	15	0	0%	> -0.0001	0.779	↔	< 0.0001	0.543	↔	> -0.0001	0.082	↔	2023-06-09	2024-02-12	0.371	↔
11_2_5_111	MW-01R	Part 115	Copper	mg/L	15	6	40%	> -0.0001	0.796	↔	< 0.0001	0.319	↔	> -0.0001	0.200	↔	2023-02-05	2023-06-27	0.334	↔
11_2_5_114	MW-01R	Part 115	Iron	mg/L	15	0	0%	-0.0026874	0.365	↔	0.00057551	0.705	↔	-0.001788	0.110	↔	2023-05-14	2024-04-09	0.493	↔

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Table 10: Trend Tests: Piecewise Linear-Linear-Linear (*continued*)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Line 3			Break 1	Break 2	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend				
11_2_5_119	MW-01R	Part 115	Nickel	mg/L	15	0	0%	< 0.0001	0.971	↔	< 0.0001	0.391	↔	> -0.0001	0.179	↔	2023-07-05	2024-02-13	0.331	↔
11_2_5_123	MW-01R	Part 115	Silver	mg/L	15	15	100%	< 0.0001	0.131	↔	> -0.0001	0.531	↔	> -0.0001	0.800	↔	2023-04-29	2023-07-08	0.378	↔
11_2_5_128	MW-01R	Part 115	Vanadium	mg/L	15	2	13%	< 0.0001	0.056	↔	> -0.0001	0.717	↔	> -0.0001	0.964	↔	2023-06-28	2024-10-27	0.474	↔
12_2_3_105	MW-02	Appendix III	Boron	mg/L	15	0	0%	0.056845	0.137	↔	0.013858	0.887	↔	0.35062	0.001	↑	2023-10-24	2024-10-08	0.904	↔
12_2_3_112	MW-02	Appendix III	Fluoride	mg/L	15	0	0%	-0.025566	0.711	↔	0.0043004	0.220	↔	0.01468	0.284	↔	2023-01-25	2024-07-17	0.656	↔
12_2_3_120	MW-02	Appendix III	pH (field)	su	15	0	0%	0.0015544	0.053	↔	-0.002127	0.551	↔	-0.00010259	0.635	↔	2023-05-23	2023-08-11	0.462	↔
12_2_3_124	MW-02	Appendix III	Sulfate (as SO4)	mg/L	15	10	67%	-0.0042457	0.414	↔	0.018964	0.075	↔	-0.0041804	0.447	↔	2023-10-14	2024-04-10	0.547	↔
12_2_4_101	MW-02	Appendix IV	Antimony	mg/L	15	3	20%	< 0.0001	0.182	↔	> -0.0001	0.062	↔	< 0.0001	0.448	↔	2023-04-17	2024-04-30	0.492	↔
12_2_4_102	MW-02	Appendix IV	Arsenic	mg/L	15	0	0%	< 0.0001	0.238	↔	> -0.0001	0.346	↔	< 0.0001	0.105	↔	2023-05-24	2024-02-12	0.561	↔
12_2_4_104	MW-02	Appendix IV	Beryllium	mg/L	15	1	7%	> -0.0001	0.959	↔	< 0.0001	0.535	↔	< 0.0001	0.625	↔	2024-12-08	2023-11-29	0.249	↔
12_2_4_106	MW-02	Appendix IV	Cadmium	mg/L	15	10	67%	< 0.0001	0.062	↔	> -0.0001	0.668	↔	< 0.0001	0.692	↔	2023-10-24	2024-05-29	0.417	↔
12_2_4_113	MW-02	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	-0.025566	0.711	↔	0.0043004	0.220	↔	0.01468	0.284	↔	2023-01-25	2024-07-17	0.656	↔
12_2_4_115	MW-02	Appendix IV	Lead	mg/L	15	1	7%	< 0.0001	0.547	↔	> -0.0001	0.865	↔	< 0.0001	0.167	↔	2023-01-14	2024-10-14	0.420	↔
12_2_4_118	MW-02	Appendix IV	Molybdenum	mg/L	15	0	0%	< 0.0001	0.154	↔	> -0.0001	0.035	↔	< 0.0001	0.002	↑	2023-02-08	2024-06-25	0.784	↔
12_2_4_121	MW-02	Appendix IV	Radium 226 and 228	pCi/L	14	5	36%	-0.0041271	0.134	↔	0.0065263	0.733	↔	-0.00033868	0.930	↔	2024-02-12	2024-04-29	0.484	↔
12_2_4_122	MW-02	Appendix IV	Selenium	mg/L	15	0	0%	< 0.0001	0.401	↔	> -0.0001	0.927	↔	< 0.0001	0.167	↔	2023-10-24	2024-06-04	0.470	↔
12_2_5_111	MW-02	Part 115	Copper	mg/L	15	0	0%	< 0.0001	0.633	↔	> -0.0001	0.840	↔	< 0.0001	0.591	↔	2023-07-14	2024-10-15	0.530	↔
12_2_5_114	MW-02	Part 115	Iron	mg/L	15	0	0%	0.0032821	0.752	↔	-0.031896	0.333	↔	0.13208	0.263	↔	2024-03-23	2025-01-18	0.281	↔
12_2_5_119	MW-02	Part 115	Nickel	mg/L	15	0	0%	0.00024904	0.229	↔	> -0.0001	0.228	↔	< 0.0001	0.006	↑	2023-02-08	2024-02-12	0.650	↔
12_2_5_123	MW-02	Part 115	Silver	mg/L	15	15	100%	< 0.0001	0.142	↔	> -0.0001	0.190	↔	< 0.0001	0.770	↔	2023-04-18	2023-10-26	0.483	↔
12_2_5_128	MW-02	Part 115	Vanadium	mg/L	15	1	7%	< 0.0001	0.231	↔	> -0.0001	0.842	↔	< 0.0001	0.211	↔	2023-07-10	2024-02-12	0.372	↔
13_2_3_107	MW-03	Appendix III	Calcium	mg/L	15	0	0%	0.21502	0.409	↔	-0.14486	0.119	↔	0.37037	0.707	↔	2023-06-08	2025-01-30	0.406	↔
13_2_3_108	MW-03	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	-0.86106	0.006	↓	0.55556	0.608	↔	-0.11757	0.028	↔	2023-05-11	2023-07-13	0.851	↔
13_2_3_124	MW-03	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	4.3684	0.002	↑	-2.726	0.230	↔	-0.47454	0.071	↔	2023-04-24	2023-08-19	0.815	↔
13_2_3_126	MW-03	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	1.8739	0.113	↔	-1.4145	0.146	↔	-0.64495	0.231	↔	2023-06-02	2024-04-06	0.754	↔
13_2_4_101	MW-03	Appendix IV	Antimony	mg/L	15	9	60%	< 0.0001	0.109	↔	> -0.0001	0.460	↔	> -0.0001	0.622	↔	2023-04-29	2023-11-03	0.430	↔
13_2_4_103	MW-03	Appendix IV	Barium	mg/L	15	0	0%	0.00023702	0.479	↔	-0.00095628	0.299	↔	0.00051587	0.484	↔	2024-01-27	2024-08-18	0.234	↔
13_2_4_104	MW-03	Appendix IV	Beryllium	mg/L	15	10	67%	> -0.0001	0.584	↔	< 0.0001	0.637	↔	> -0.0001	0.393	↔	2023-06-01	2023-11-19	0.136	↔
13_2_4_106	MW-03	Appendix IV	Cadmium	mg/L	15	14	93%	< 0.0001	0.308	↔	> -0.0001	0.261	↔	< 0.0001	0.881	↔	2024-02-13	2024-07-23	0.281	↔
13_2_4_110	MW-03	Appendix IV	Cobalt	mg/L	15	0	0%	< 0.0001	0.359	↔	> -0.0001	0.417	↔	< 0.0001	0.999	↔	2023-10-23	2024-09-28	0.255	↔
13_2_4_115	MW-03	Appendix IV	Lead	mg/L	15	14	93%	< 0.0001	0.005	↑	> -0.0001	0.207	↔	> -0.0001	0.283	↔	2023-03-25	2023-06-07	0.767	↔
13_2_4_122	MW-03	Appendix IV	Selenium	mg/L	15	3	20%	> -0.0001	0.691	↔	< 0.0001	0.546	↔	> -0.0001	0.911	↔	2023-05-22	2024-10-19	0.067	↔
13_2_4_125	MW-03	Appendix IV	Thallium	mg/L	15	14	93%	< 0.0001	0.105	↔	> -0.0001	0.510	↔	> -0.0001	0.689	↔	2023-02-17	2024-10-15	0.603	↔
13_2_5_111	MW-03	Part 115	Copper	mg/L	15	7	47%	< 0.0001	0.832	↔	< 0.0001	0.414	↔	> -0.0001	0.746	↔	2023-02-06	2024-10-30	0.225	↔
13_2_5_119	MW-03	Part 115	Nickel	mg/L	15	1	7%	> -0.0001	0.242	↔	< 0.0001	0.948	↔	> -0.0001	0.926	↔	2023-05-03	2023-07-15	0.304	↔
13_2_5_123	MW-03	Part 115	Silver	mg/L	15	15	100%	< 0.0001	0.504	↔	> -0.0001	0.480	↔	> -0.0001	0.692	↔	2023-02-03	2023-08-21	0.286	↔
13_2_5_128	MW-03	Part 115	Vanadium	mg/L	15	9	60%	> -0.0001	0.504	↔	< 0.0001	0.550	↔	> -0.0001	0.668	↔	2023-08-07	2024-05-17	0.212	↔
13_2_5_129	MW-03	Part 115	Zinc	mg/L	15	9	60%	> -0.0001	0.209	↔	< 0.0001	0.464	↔	> -0.0001	0.309	↔	2024-01-22	2024-10-14	0.329	↔
14_2_3_112	MW-04	Appendix III	Fluoride	mg/L	15	0	0%	0.0018255	0.035	↔	-0.0010496	0.398	↔	0.019215	0.009	↑	2023-10-24	2025-02-19	0.736	↔
14_2_3_120	MW-04	Appendix III	pH (field)	su	15	0	0%	0.0013486	0.105	↔	-0.0022288	0.581	↔	> -0.0001	0.845	↔	2023-05-23	2023-08-16	0.398	↔
14_2_3_124	MW-04	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	3.0223	0.054	↔	0.11008	0.729	↔	-5.461	0.205	↔	2023-04-19	2025-02-13	0.627	↔
14_2_4_101	MW-04	Appendix IV	Antimony	mg/L	15	10	67%	< 0.0001	0.217	↔	> -0.0001	0.132	↔	< 0.0001	0.182	↔	2023-05-22	2025-02-11	0.460	↔

(Table continues on next page)

Table 10: Trend Tests: Piecewise Linear-Linear-Linear (*continued*)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Line 3			Break 1	Break 2	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend				
14_2_4_102	MW-04	Appendix IV	Arsenic	mg/L	15	0	0%	> -0.0001	0.605	↔	< 0.0001	0.692	↔	< 0.0001	0.195	↔	2023-05-22	2024-09-10	0.502	↔
14_2_4_104	MW-04	Appendix IV	Beryllium	mg/L	15	13	87%	> -0.0001	0.691	↔	< 0.0001	0.007	↑	> -0.0001	0.031	↔	2024-02-12	2024-07-18	0.743	↔
14_2_4_106	MW-04	Appendix IV	Cadmium	mg/L	15	15	100%	< 0.0001	0.248	↔	> -0.0001	0.558	↔	> -0.0001	0.817	↔	2023-05-22	2023-08-14	0.260	↔
14_2_4_109	MW-04	Appendix IV	Chromium, Total	mg/L	15	0	0%	> -0.0001	0.414	↔	< 0.0001	0.157	↔	> -0.0001	0.309	↔	2024-02-09	2024-11-25	0.536	↔
14_2_4_110	MW-04	Appendix IV	Cobalt	mg/L	15	0	0%	> -0.0001	0.971	↔	> -0.0001	0.470	↔	> -0.0001	0.888	↔	2023-06-28	2024-03-10	0.459	↔
14_2_4_113	MW-04	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.0018255	0.035	↔	-0.0010496	0.398	↔	0.019215	0.009	↑	2023-10-24	2025-02-19	0.736	↔
14_2_4_115	MW-04	Appendix IV	Lead	mg/L	15	14	93%	< 0.0001	0.293	↔	> -0.0001	0.344	↔	< 0.0001	0.734	↔	2023-04-18	2023-07-31	0.392	↔
14_2_4_116	MW-04	Appendix IV	Lithium	mg/L	15	0	0%	< 0.0001	0.656	↔	> -0.0001	0.830	↔	-0.00010986	0.752	↔	2023-07-31	2024-10-15	0.301	↔
14_2_4_118	MW-04	Appendix IV	Molybdenum	mg/L	15	2	13%	> -0.0001	0.832	↔	< 0.0001	0.663	↔	0.00015788	0.000	↑	2024-02-13	2025-02-20	0.938	↔
14_2_4_125	MW-04	Appendix IV	Thallium	mg/L	15	15	100%	< 0.0001	0.657	↔	< 0.0001	0.774	↔	> -0.0001	0.743	↔	2023-02-06	2024-11-01	0.295	↔
14_2_5_111	MW-04	Part 115	Copper	mg/L	15	12	80%	< 0.0001	0.440	↔	< 0.0001	0.000	↑	< 0.0001	0.000	↑	2025-02-21	2023-08-03	0.967	↔
14_2_5_123	MW-04	Part 115	Silver	mg/L	15	15	100%	< 0.0001	0.510	↔	> -0.0001	0.455	↔	> -0.0001	0.689	↔	2023-02-05	2023-08-13	0.291	↔
14_2_5_128	MW-04	Part 115	Vanadium	mg/L	15	10	67%	< 0.0001	1.000	↔	< 0.0001	0.019	↔	> -0.0001	0.222	↔	2024-01-17	2024-08-08	0.831	↔
14_2_5_129	MW-04	Part 115	Zinc	mg/L	15	10	67%	> -0.0001	0.318	↔	< 0.0001	0.378	↔	> -0.0001	0.781	↔	2023-12-07	2024-11-22	0.188	↔
16_1_3_105	MW-06	Appendix III	Boron	mg/L	15	0	0%	-0.0062473	0.046	↔	0.03	0.200	↔	-0.054717	0.171	↔	2024-06-05	2024-12-26	0.538	↔
16_1_3_107	MW-06	Appendix III	Calcium	mg/L	15	0	0%	0.56276	0.351	↔	0.02134	0.832	↔	-0.2107	0.043	↔	2023-02-27	2024-04-06	0.585	↔
16_1_3_108	MW-06	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	-0.74149	0.079	↔	-0.14298	0.017	↔	0.056972	0.514	↔	2023-03-04	2024-04-07	0.864	↔
16_1_3_120	MW-06	Appendix III	pH (field)	su	15	0	0%	-0.0113	0.009	↓	0.0083735	0.248	↔	0.00014019	0.545	↔	2023-02-06	2023-04-19	0.689	↔
16_1_3_124	MW-06	Appendix III	Sulfate (as SO4)	mg/L	15	2	13%	-0.037766	0.296	↔	-0.00072031	0.986	↔	0.090542	0.153	↔	2023-10-23	2024-09-19	0.472	↔
16_1_4_101	MW-06	Appendix IV	Antimony	mg/L	15	13	87%	< 0.0001	0.359	↔	> -0.0001	0.852	↔	> -0.0001	0.551	↔	2023-04-18	2024-03-02	0.213	↔
16_1_4_102	MW-06	Appendix IV	Arsenic	mg/L	15	0	0%	> -0.0001	0.229	↔	< 0.0001	0.153	↔	> -0.0001	0.077	↔	2023-04-06	2023-09-18	0.507	↔
16_1_4_103	MW-06	Appendix IV	Barium	mg/L	15	0	0%	-0.0024059	0.257	↔	0.00069525	0.081	↔	-0.0013039	0.284	↔	2023-04-17	2024-09-13	0.449	↔
16_1_4_104	MW-06	Appendix IV	Beryllium	mg/L	15	14	93%	> -0.0001	0.005	↓	< 0.0001	0.668	↔	> -0.0001	0.884	↔	2023-02-10	2024-10-08	0.780	↔
16_1_4_106	MW-06	Appendix IV	Cadmium	mg/L	15	15	100%	< 0.0001	0.405	↔	> -0.0001	0.830	↔	> -0.0001	0.636	↔	2023-05-22	2023-11-17	0.203	↔
16_1_4_109	MW-06	Appendix IV	Chromium, Total	mg/L	15	0	0%	< 0.0001	0.344	↔	> -0.0001	0.509	↔	> -0.0001	0.136	↔	2023-01-21	2023-05-22	0.546	↔
16_1_4_110	MW-06	Appendix IV	Cobalt	mg/L	15	0	0%	< 0.0001	0.400	↔	> -0.0001	0.379	↔	> -0.0001	0.980	↔	2023-08-02	2024-01-10	0.652	↔
16_1_4_115	MW-06	Appendix IV	Lead	mg/L	15	10	67%	< 0.0001	0.649	↔	> -0.0001	0.192	↔	< 0.0001	0.977	↔	2023-02-05	2024-03-02	0.380	↔
16_1_4_116	MW-06	Appendix IV	Lithium	mg/L	15	0	0%	-0.00019403	0.009	↓	0.00033333	0.495	↔	-0.0009434	0.266	↔	2024-05-17	2025-01-22	0.652	↔
16_1_4_118	MW-06	Appendix IV	Molybdenum	mg/L	15	9	60%	< 0.0001	0.369	↔	> -0.0001	0.248	↔	< 0.0001	0.493	↔	2023-04-17	2023-09-18	0.399	↔
16_1_4_121	MW-06	Appendix IV	Radium 226 and 228	pCi/L	15	3	20%	0.0040941	0.621	↔	-0.0011912	0.282	↔	0.0010391	0.576	↔	2023-03-13	2024-05-09	0.188	↔
16_1_4_122	MW-06	Appendix IV	Selenium	mg/L	15	5	33%	> -0.0001	0.641	↔	< 0.0001	0.516	↔	> -0.0001	0.042	↔	2023-08-06	2024-02-12	0.470	↔
16_1_4_125	MW-06	Appendix IV	Thallium	mg/L	15	15	100%	< 0.0001	0.518	↔	> -0.0001	0.475	↔	> -0.0001	0.695	↔	2023-02-03	2023-08-24	0.289	↔
16_1_5_111	MW-06	Part 115	Copper	mg/L	15	12	80%	> -0.0001	0.714	↔	< 0.0001	0.052	↔	> -0.0001	0.095	↔	2023-09-04	2024-07-18	0.668	↔
16_1_5_114	MW-06	Part 115	Iron	mg/L	15	0	0%	0.02113	0.080	↔	-0.073255	0.050	↔	0.17736	0.165	↔	2024-04-01	2025-02-14	0.689	↔
16_1_5_119	MW-06	Part 115	Nickel	mg/L	15	6	40%	> -0.0001	0.114	↔	> -0.0001	0.564	↔	< 0.0001	0.707	↔	2023-04-18	2024-04-08	0.541	↔
16_1_5_123	MW-06	Part 115	Silver	mg/L	15	15	100%	< 0.0001	0.255	↔	> -0.0001	0.745	↔	> -0.0001	0.498	↔	2023-02-11	2023-06-27	0.283	↔
16_1_5_128	MW-06	Part 115	Vanadium	mg/L	15	14	93%	> -0.0001	0.051	↔	< 0.0001	0.936	↔	< 0.0001	0.640	↔	2023-01-04	2023-05-10	0.492	↔
17_1_3_105	MW-07	Appendix III	Boron	mg/L	15	0	0%	-0.014662	0.296	↔	0.0066941	0.360	↔	-0.0049397	0.091	↔	2023-04-09	2023-12-03	0.466	↔
17_1_3_107	MW-07	Appendix III	Calcium	mg/L	15	0	0%	0.021813	0.647	↔	-0.020149	0.790	↔	0.10749	0.773	↔	2023-12-30	2024-12-05	0.127	↔
17_1_3_108	MW-07	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	-0.010682	0.001	↓	0.002806	0.020	↔	0.010033	0.003	↑	2023-06-04	2024-08-18	0.943	↔
17_1_3_112	MW-07	Appendix III	Fluoride	mg/L	15	3	20%	< 0.0001	0.664	↔	0.0013449	0.358	↔	0.00085959	0.488	↔	2024-12-22	2024-07-03	0.147	↔
17_1_3_120	MW-07	Appendix III	pH (field)	su	15	0	0%	-0.00067376	0.352	↔	0.0012325	0.221	↔	-0.00055269	0.206	↔	2023-08-06	2024-03-21	0.371	↔

(Table continues on next page)

Table 10: Trend Tests: Piecewise Linear-Linear-Linear *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Line 3			Break 1	Break 2	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend				
17_1_3_124	MW-07	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	-0.10035	0.079	↔	0.070191	0.436	↔	-0.0094586	0.630	↔	2023-05-25	2024-01-12	0.457	↔
17_1_3_126	MW-07	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	-0.72203	0.405	↔	1.5159	0.568	↔	0.070432	0.470	↔	2023-03-13	2023-06-05	0.557	↔
17_1_4_101	MW-07	Appendix IV	Antimony	mg/L	15	14	93%	< 0.0001	0.000	↑	> -0.0001	1.000	↔	< 0.0001	1.000	↔	2023-07-09	2023-12-22	0.903	↔
17_1_4_102	MW-07	Appendix IV	Arsenic	mg/L	15	0	0%	> -0.0001	0.391	↔	< 0.0001	0.171	↔	> -0.0001	0.239	↔	2023-04-02	2024-02-17	0.340	↔
17_1_4_103	MW-07	Appendix IV	Barium	mg/L	15	0	0%	-0.00019729	0.658	↔	0.00011127	0.175	↔	0.00018332	0.468	↔	2023-04-11	2024-10-14	0.555	↔
17_1_4_104	MW-07	Appendix IV	Beryllium	mg/L	15	12	80%	< 0.0001	0.316	↔	> -0.0001	0.554	↔	< 0.0001	0.870	↔	2023-08-07	2024-05-10	0.231	↔
17_1_4_106	MW-07	Appendix IV	Cadmium	mg/L	15	15	100%	> -0.0001	0.657	↔	< 0.0001	0.003	↑	> -0.0001	0.683	↔	2023-01-27	2023-07-24	0.895	↔
17_1_4_109	MW-07	Appendix IV	Chromium, Total	mg/L	15	0	0%	> -0.0001	0.439	↔	< 0.0001	0.338	↔	> -0.0001	0.114	↔	2023-09-03	2024-07-16	0.451	↔
17_1_4_110	MW-07	Appendix IV	Cobalt	mg/L	15	0	0%	< 0.0001	0.083	↔	> -0.0001	0.060	↔	< 0.0001	0.103	↔	2023-06-20	2024-02-14	0.570	↔
17_1_4_113	MW-07	Appendix IV	Fluoride (App IV)	mg/L	15	3	20%	< 0.0001	0.664	↔	0.0013449	0.358	↔	0.00085959	0.488	↔	2024-12-22	2024-07-03	0.147	↔
17_1_4_115	MW-07	Appendix IV	Lead	mg/L	15	15	100%	> -0.0001	0.004	↓	< 0.0001	1.000	↔	> -0.0001	1.000	↔	2023-07-30	2023-12-17	0.841	↔
17_1_4_116	MW-07	Appendix IV	Lithium	mg/L	15	0	0%	< 0.0001	0.345	↔	> -0.0001	0.555	↔	< 0.0001	0.259	↔	2023-06-27	2024-01-01	0.339	↔
17_1_4_117	MW-07	Appendix IV	Mercury	mg/L	15	15	100%	> -0.0001	0.928	↔	< 0.0001	0.709	↔	> -0.0001	0.032	↔	2023-05-10	2024-09-27	0.635	↔
17_1_4_118	MW-07	Appendix IV	Molybdenum	mg/L	15	15	100%	> -0.0001	0.408	↔	> -0.0001	0.018	↔	< 0.0001	0.542	↔	2023-04-17	2023-08-11	0.874	↔
17_1_4_121	MW-07	Appendix IV	Radium 226 and 228	pCi/L	15	2	13%	-0.0047504	0.644	↔	0.0019061	0.763	↔	-0.00098433	0.260	↔	2023-02-12	2023-08-04	0.191	↔
17_1_4_122	MW-07	Appendix IV	Selenium	mg/L	15	9	60%	< 0.0001	0.791	↔	> -0.0001	0.109	↔	< 0.0001	0.694	↔	2023-03-08	2023-05-23	0.609	↔
17_1_5_111	MW-07	Part 115	Copper	mg/L	15	11	73%	< 0.0001	0.737	↔	> -0.0001	0.981	↔	< 0.0001	0.256	↔	2023-10-24	2024-07-11	0.300	↔
17_1_5_114	MW-07	Part 115	Iron	mg/L	15	0	0%	0.01652	0.233	↔	-0.0038023	0.634	↔	0.014016	0.137	↔	2023-05-23	2024-04-19	0.595	↔
17_1_5_119	MW-07	Part 115	Nickel	mg/L	15	14	93%	> -0.0001	0.548	↔	< 0.0001	0.060	↔	> -0.0001	0.594	↔	2023-09-28	2024-10-15	0.508	↔
17_1_5_128	MW-07	Part 115	Vanadium	mg/L	15	12	80%	> -0.0001	0.481	↔	< 0.0001	0.012	↔	> -0.0001	0.522	↔	2023-12-20	2024-10-15	0.743	↔
17_1_5_129	MW-07	Part 115	Zinc	mg/L	15	10	67%	> -0.0001	0.329	↔	< 0.0001	0.597	↔	> -0.0001	0.294	↔	2024-03-18	2024-10-14	0.230	↔
18_1_3_105	MW-08	Appendix III	Boron	mg/L	15	0	0%	0.077383	0.183	↔	-0.0019671	0.550	↔	-0.010064	0.134	↔	2023-02-05	2024-07-17	0.691	↔
18_1_3_108	MW-08	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	-0.0059434	0.989	↔	0.055903	0.125	↔	-0.10302	0.851	↔	2023-02-23	2024-10-16	0.318	↔
18_1_3_112	MW-08	Appendix III	Fluoride	mg/L	15	0	0%	0.010236	0.040	↔	-0.0057143	0.509	↔	-0.0001286	0.649	↔	2023-03-08	2023-05-12	0.608	↔
18_1_3_124	MW-08	Appendix III	Sulfate (as SO4)	mg/L	15	4	27%	-0.091878	0.110	↔	0.011542	0.619	↔	0.23008	0.002	↑	2023-06-26	2024-08-13	0.904	↔
18_1_4_101	MW-08	Appendix IV	Antimony	mg/L	15	7	47%	< 0.0001	0.203	↔	> -0.0001	0.217	↔	< 0.0001	0.546	↔	2023-03-11	2023-07-30	0.454	↔
18_1_4_102	MW-08	Appendix IV	Arsenic	mg/L	15	0	0%	0.00053039	0.298	↔	> -0.0001	0.385	↔	0.00021666	0.512	↔	2023-02-06	2025-02-04	0.504	↔
18_1_4_103	MW-08	Appendix IV	Barium	mg/L	15	0	0%	-0.00081191	0.035	↔	0.0019608	0.317	↔	-0.0029087	0.016	↔	2024-02-19	2024-09-10	0.719	↔
18_1_4_104	MW-08	Appendix IV	Beryllium	mg/L	15	14	93%	< 0.0001	1.000	↔	> -0.0001	1.000	↔	< 0.0001	0.220	↔	2023-07-17	2024-07-09	0.326	↔
18_1_4_106	MW-08	Appendix IV	Cadmium	mg/L	15	14	93%	< 0.0001	0.017	↔	> -0.0001	1.000	↔	< 0.0001	0.404	↔	2023-07-30	2024-07-09	0.790	↔
18_1_4_109	MW-08	Appendix IV	Chromium, Total	mg/L	15	0	0%	< 0.0001	0.019	↔	> -0.0001	0.075	↔	> -0.0001	0.806	↔	2023-02-11	2023-10-11	0.793	↔
18_1_4_110	MW-08	Appendix IV	Cobalt	mg/L	15	0	0%	< 0.0001	0.537	↔	> -0.0001	0.166	↔	< 0.0001	0.393	↔	2023-02-06	2024-02-15	0.322	↔
18_1_4_113	MW-08	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.010236	0.040	↔	-0.0057143	0.509	↔	-0.0001286	0.649	↔	2023-03-08	2023-05-12	0.608	↔
18_1_4_115	MW-08	Appendix IV	Lead	mg/L	15	9	60%	> -0.0001	0.340	↔	< 0.0001	0.094	↔	> -0.0001	0.006	↓	2024-04-05	2024-10-15	0.712	↔
18_1_4_117	MW-08	Appendix IV	Mercury	mg/L	15	15	100%	> -0.0001	0.861	↔	> -0.0001	0.226	↔	> -0.0001	0.249	↔	2024-11-24	2023-09-22	0.709	↔
18_1_4_118	MW-08	Appendix IV	Molybdenum	mg/L	15	0	0%	> -0.0001	0.146	↔	< 0.0001	0.692	↔	< 0.0001	0.414	↔	2023-06-04	2025-01-15	0.520	↔
18_1_4_121	MW-08	Appendix IV	Radium 226 and 228	pCi/L	15	3	20%	-0.0051375	0.776	↔	-0.00080504	0.252	↔	0.0032792	0.784	↔	2023-02-06	2025-01-27	0.319	↔
18_1_4_122	MW-08	Appendix IV	Selenium	mg/L	15	5	33%	> -0.0001	0.480	↔	< 0.0001	0.530	↔	> -0.0001	0.423	↔	2023-05-06	2025-02-25	0.178	↔
18_1_5_114	MW-08	Part 115	Iron	mg/L	15	0	0%	-0.11433	0.033	↔	-0.0013423	0.836	↔	0.017487	0.855	↔	2023-04-05	2024-10-16	0.729	↔
18_1_5_129	MW-08	Part 115	Zinc	mg/L	15	3	20%	-0.00015381	0.360	↔	0.00048706	0.086	↔	-0.00065085	0.622	↔	2024-01-19	2024-10-16	0.403	↔
19_2_3_107	MW-09	Appendix III	Calcium	mg/L	15	0	0%	1.1946	0.081	↔	-0.91646	0.745	↔	0.17702	0.156	↔	2023-05-13	2023-08-07	0.579	↔
19_2_3_108	MW-09	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	-0.026917	0.391	↔	0.043318	0.019	↔	0.19683	0.216	↔	2023-08-05	2024-10-18	0.930	↔

(Table continues on next page)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Line 3			Break 1	Break 2	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend				
19_2_3_112	MW-09	Appendix III	Fluoride	mg/L	15	0	0%	0.0032304	0.017	↔	-0.0025383	0.130	↔	0.00035347	0.605	↔	2023-07-15	2024-02-13	0.588	↔
19_2_3_120	MW-09	Appendix III	pH (field)	su	15	0	0%	0.0017135	0.214	↔	-0.00078406	0.533	↔	-0.00023044	0.291	↔	2023-03-24	2023-10-17	0.559	↔
19_2_3_124	MW-09	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	3.6322	0.042	↔	-0.12778	0.719	↔	2.5624	0.587	↔	2023-04-18	2024-10-22	0.716	↔
19_2_3_126	MW-09	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	5.1353	0.093	↔	0.029215	0.942	↔	2.7882	0.638	↔	2023-04-14	2024-10-17	0.758	↔
19_2_4_101	MW-09	Appendix IV	Antimony	mg/L	15	10	67%	< 0.0001	0.312	↔	> -0.0001	0.893	↔	> -0.0001	0.504	↔	2023-04-18	2024-01-09	0.233	↔
19_2_4_102	MW-09	Appendix IV	Arsenic	mg/L	15	0	0%	> -0.0001	0.290	↔	< 0.0001	0.306	↔	> -0.0001	0.147	↔	2023-04-18	2024-06-25	0.367	↔
19_2_4_103	MW-09	Appendix IV	Barium	mg/L	15	0	0%	-0.0078852	0.138	↔	0.00060276	0.900	↔	-0.00040924	0.775	↔	2023-04-27	2023-12-18	0.426	↔
19_2_4_106	MW-09	Appendix IV	Cadmium	mg/L	15	15	100%	> -0.0001	0.856	↔	< 0.0001	0.527	↔	> -0.0001	0.269	↔	2023-01-17	2023-05-22	0.279	↔
19_2_4_109	MW-09	Appendix IV	Chromium, Total	mg/L	15	0	0%	< 0.0001	0.342	↔	> -0.0001	0.495	↔	< 0.0001	0.941	↔	2023-01-28	2023-04-17	0.368	↔
19_2_4_110	MW-09	Appendix IV	Cobalt	mg/L	15	0	0%	< 0.0001	0.462	↔	> -0.0001	0.091	↔	< 0.0001	0.755	↔	2023-03-12	2024-12-01	0.337	↔
19_2_4_113	MW-09	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.0032304	0.017	↔	-0.0025383	0.130	↔	0.00035347	0.605	↔	2023-07-15	2024-02-13	0.588	↔
19_2_4_115	MW-09	Appendix IV	Lead	mg/L	15	15	100%	> -0.0001	0.557	↔	< 0.0001	0.809	↔	> -0.0001	0.870	↔	2023-10-23	2024-07-28	0.103	↔
19_2_4_117	MW-09	Appendix IV	Mercury	mg/L	15	13	87%	> -0.0001	0.660	↔	< 0.0001	0.497	↔	> -0.0001	0.053	↔	2023-04-19	2023-10-23	0.470	↔
19_2_4_118	MW-09	Appendix IV	Molybdenum	mg/L	15	0	0%	> -0.0001	0.088	↔	> -0.0001	0.921	↔	< 0.0001	0.101	↔	2023-05-22	2024-02-12	0.624	↔
19_2_4_122	MW-09	Appendix IV	Selenium	mg/L	15	2	13%	< 0.0001	0.881	↔	> -0.0001	0.030	↔	> -0.0001	0.054	↔	2025-02-15	2024-05-03	0.818	↔
19_2_4_125	MW-09	Appendix IV	Thallium	mg/L	15	15	100%	< 0.0001	0.211	↔	> -0.0001	0.468	↔	< 0.0001	0.519	↔	2023-05-08	2023-06-30	0.247	↔
19_2_5_111	MW-09	Part 115	Copper	mg/L	15	10	67%	> -0.0001	0.836	↔	< 0.0001	0.025	↔	> -0.0001	0.070	↔	2024-02-03	2024-07-17	0.669	↔
19_2_5_114	MW-09	Part 115	Iron	mg/L	15	0	0%	0.0055321	0.501	↔	-0.043478	0.501	↔	0.24528	0.049	↔	2024-05-20	2025-02-15	0.436	↔
19_2_5_119	MW-09	Part 115	Nickel	mg/L	15	0	0%	> -0.0001	0.985	↔	< 0.0001	0.802	↔	0.00015258	0.443	↔	2023-10-21	2024-08-28	0.341	↔
19_2_5_123	MW-09	Part 115	Silver	mg/L	15	15	100%	< 0.0001	0.198	↔	> -0.0001	0.619	↔	> -0.0001	0.756	↔	2023-04-18	2023-10-26	0.273	↔
20_3_3_105	MW-10	Appendix III	Boron	mg/L	15	0	0%	0.037008	0.284	↔	-0.12655	0.210	↔	0.040423	0.127	↔	2023-10-15	2024-02-21	0.401	↔
20_3_3_112	MW-10	Appendix III	Fluoride	mg/L	15	0	0%	0.0074087	0.283	↔	-0.023894	0.234	↔	0.0079619	0.131	↔	2023-09-14	2024-03-02	0.449	↔
20_3_3_120	MW-10	Appendix III	pH (field)	su	15	0	0%	0.0030697	0.432	↔	-0.0016727	0.272	↔	0.0012261	0.532	↔	2023-05-22	2024-07-05	0.273	↔
20_3_3_124	MW-10	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	-1.882	0.134	↔	6.6946	0.073	↔	-2.931	0.007	↓	2023-10-03	2024-04-06	0.721	↔
20_3_3_126	MW-10	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	-0.57007	0.530	↔	25.926	0.004	↑	-3.8386	0.011	↔	2024-02-07	2024-04-08	0.823	↔
20_3_4_101	MW-10	Appendix IV	Antimony	mg/L	15	11	73%	> -0.0001	0.950	↔	< 0.0001	0.568	↔	> -0.0001	0.275	↔	2023-01-18	2023-04-18	0.190	↔
20_3_4_102	MW-10	Appendix IV	Arsenic	mg/L	15	0	0%	< 0.0001	0.544	↔	< 0.0001	0.113	↔	> -0.0001	0.374	↔	2024-02-13	2024-11-08	0.657	↔
20_3_4_103	MW-10	Appendix IV	Barium	mg/L	15	0	0%	-0.0019874	0.071	↔	0.0015463	0.451	↔	-0.00011032	0.625	↔	2023-05-04	2023-09-15	0.424	↔
20_3_4_104	MW-10	Appendix IV	Beryllium	mg/L	15	7	47%	< 0.0001	0.082	↔	> -0.0001	0.540	↔	< 0.0001	0.725	↔	2023-05-23	2024-02-10	0.440	↔
20_3_4_106	MW-10	Appendix IV	Cadmium	mg/L	15	15	100%	< 0.0001	0.407	↔	> -0.0001	0.833	↔	> -0.0001	0.636	↔	2023-05-22	2023-11-16	0.202	↔
20_3_4_109	MW-10	Appendix IV	Chromium, Total	mg/L	15	0	0%	< 0.0001	0.181	↔	> -0.0001	0.076	↔	< 0.0001	0.195	↔	2023-08-07	2024-05-01	0.479	↔
20_3_4_110	MW-10	Appendix IV	Cobalt	mg/L	15	1	7%	< 0.0001	0.058	↔	> -0.0001	0.331	↔	< 0.0001	0.591	↔	2023-05-23	2024-01-04	0.552	↔
20_3_4_113	MW-10	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	0.0074087	0.283	↔	-0.023894	0.234	↔	0.0079619	0.131	↔	2023-09-14	2024-03-02	0.449	↔
20_3_4_117	MW-10	Appendix IV	Mercury	mg/L	15	14	93%	> -0.0001	0.763	↔	< 0.0001	0.367	↔	> -0.0001	0.050	↔	2023-09-26	2024-04-06	0.463	↔
20_3_4_121	MW-10	Appendix IV	Radium 226 and 228	pCi/L	15	12	80%	0.0034468	0.710	↔	-0.00034563	0.344	↔	0.0067339	0.298	↔	2023-02-05	2025-02-11	0.258	↔
20_3_4_122	MW-10	Appendix IV	Selenium	mg/L	15	1	7%	< 0.0001	0.161	↔	< 0.0001	0.698	↔	> -0.0001	0.964	↔	2024-10-17	2024-03-15	0.374	↔
20_3_4_125	MW-10	Appendix IV	Thallium	mg/L	15	15	100%	> -0.0001	0.866	↔	< 0.0001	0.654	↔	> -0.0001	0.148	↔	2024-04-06	2024-10-13	0.244	↔
20_3_5_111	MW-10	Part 115	Copper	mg/L	15	12	80%	> -0.0001	0.466	↔	< 0.0001	0.706	↔	> -0.0001	0.172	↔	2023-02-19	2023-05-22	0.251	↔
20_3_5_114	MW-10	Part 115	Iron	mg/L	15	0	0%	0.030726	0.004	↑	-0.038697	0.043	↔	0.0082437	0.001	↑	2023-04-19	2023-08-20	0.823	↔
20_3_5_119	MW-10	Part 115	Nickel	mg/L	15	7	47%	< 0.0001	0.225	↔	> -0.0001	0.331	↔	< 0.0001	0.749	↔	2023-05-23	2024-02-27	0.313	↔
20_3_5_123	MW-10	Part 115	Silver	mg/L	15	15	100%	< 0.0001	0.257	↔	> -0.0001	0.616	↔	> -0.0001	0.550	↔	2023-02-11	2023-06-27	0.280	↔
20_3_5_128	MW-10	Part 115	Vanadium	mg/L	15	12	80%	< 0.0001	0.591	↔	< 0.0001	0.799	↔	> -0.0001	0.850	↔	2023-05-23	2024-10-19	0.142	↔

(Table continues on next page)

Table 10: Trend Tests: Piecewise Linear-Linear-Linear (*continued*)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Line 3			Break 1	Break 2	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend				
21_2_3_105	MW-11	Appendix III	Boron	mg/L	15	0	0%	-0.069246	0.017	↔	0.068336	0.192	↔	-0.0090506	0.128	↔	2023-05-03	2023-09-13	0.625	↔
21_2_3_107	MW-11	Appendix III	Calcium	mg/L	15	0	0%	1.6772	0.060	↔	-0.69338	0.371	↔	0.068429	0.598	↔	2023-03-21	2023-10-23	0.515	↔
21_2_3_108	MW-11	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	-0.30824	0.037	↔	0.52778	0.361	↔	-0.03273	0.199	↔	2023-05-09	2023-07-02	0.551	↔
21_2_3_112	MW-11	Appendix III	Fluoride	mg/L	15	0	0%	-0.0065344	0.034	↔	0.0062104	0.272	↔	-0.0007279	0.249	↔	2023-05-06	2023-09-27	0.572	↔
21_2_3_124	MW-11	Appendix III	Sulfate (as SO4)	mg/L	15	6	40%	1.548	0.001	↑	-2.5798	0.001	↓	0.0055023	0.903	↔	2023-04-17	2023-07-03	0.905	↔
21_2_4_101	MW-11	Appendix IV	Antimony	mg/L	15	11	73%	> -0.0001	0.550	↔	< 0.0001	0.888	↔	> -0.0001	0.797	↔	2023-09-20	2024-04-07	0.123	↔
21_2_4_102	MW-11	Appendix IV	Arsenic	mg/L	15	0	0%	> -0.0001	0.278	↔	< 0.0001	0.666	↔	< 0.0001	0.961	↔	2023-04-03	2024-11-27	0.290	↔
21_2_4_103	MW-11	Appendix IV	Barium	mg/L	15	0	0%	-0.003838	0.042	↔	0.0025435	0.459	↔	-0.00042572	0.274	↔	2023-05-07	2023-10-23	0.535	↔
21_2_4_104	MW-11	Appendix IV	Beryllium	mg/L	15	12	80%	> -0.0001	0.660	↔	< 0.0001	0.356	↔	> -0.0001	0.069	↔	2023-09-26	2024-04-06	0.446	↔
21_2_4_106	MW-11	Appendix IV	Cadmium	mg/L	15	13	87%	> -0.0001	0.501	↔	< 0.0001	0.911	↔	> -0.0001	0.897	↔	2023-09-24	2024-04-07	0.129	↔
21_2_4_109	MW-11	Appendix IV	Chromium, Total	mg/L	15	0	0%	> -0.0001	0.242	↔	< 0.0001	0.881	↔	> -0.0001	0.903	↔	2023-04-29	2023-06-28	0.248	↔
21_2_4_110	MW-11	Appendix IV	Cobalt	mg/L	15	0	0%	> -0.0001	0.496	↔	< 0.0001	0.331	↔	> -0.0001	0.267	↔	2023-09-23	2024-04-07	0.303	↔
21_2_4_113	MW-11	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	-0.0065344	0.034	↔	0.0062104	0.272	↔	-0.0007279	0.249	↔	2023-05-06	2023-09-27	0.572	↔
21_2_4_115	MW-11	Appendix IV	Lead	mg/L	15	3	20%	-0.00021013	0.394	↔	> -0.0001	0.954	↔	< 0.0001	0.978	↔	2023-04-09	2024-03-06	0.274	↔
21_2_4_116	MW-11	Appendix IV	Lithium	mg/L	15	0	0%	-0.0010886	0.036	↔	0.0011398	0.235	↔	-0.00011212	0.290	↔	2023-05-08	2023-08-23	0.531	↔
21_2_4_118	MW-11	Appendix IV	Molybdenum	mg/L	15	2	13%	> -0.0001	0.054	↔	< 0.0001	0.566	↔	> -0.0001	0.374	↔	2023-05-30	2023-09-03	0.415	↔
21_2_4_121	MW-11	Appendix IV	Radium 226 and 228	pCi/L	14	4	29%	-0.0047721	0.761	↔	0.0025185	0.752	↔	-0.0011669	0.084	↔	2023-01-19	2023-04-18	0.424	↔
21_2_4_122	MW-11	Appendix IV	Selenium	mg/L	15	3	20%	> -0.0001	0.428	↔	< 0.0001	0.060	↔	> -0.0001	0.025	↔	2023-08-02	2024-02-13	0.610	↔
21_2_4_125	MW-11	Appendix IV	Thallium	mg/L	15	14	93%	< 0.0001	0.054	↔	> -0.0001	0.133	↔	> -0.0001	0.933	↔	2023-05-13	2023-06-28	0.583	↔
21_2_5_111	MW-11	Part 115	Copper	mg/L	15	4	27%	> -0.0001	0.421	↔	< 0.0001	0.911	↔	> -0.0001	0.913	↔	2023-04-13	2024-04-07	0.242	↔
21_2_5_114	MW-11	Part 115	Iron	mg/L	15	0	0%	-0.037053	0.217	↔	0.0081062	0.071	↔	-0.011111	0.851	↔	2023-04-04	2024-11-07	0.426	↔
21_2_5_119	MW-11	Part 115	Nickel	mg/L	15	0	0%	> -0.0001	0.235	↔	< 0.0001	0.808	↔	> -0.0001	0.814	↔	2023-04-19	2024-04-06	0.250	↔
21_2_5_123	MW-11	Part 115	Silver	mg/L	15	13	87%	< 0.0001	0.379	↔	> -0.0001	0.629	↔	> -0.0001	0.906	↔	2023-04-01	2023-10-19	0.251	↔
21_2_5_128	MW-11	Part 115	Vanadium	mg/L	15	13	87%	> -0.0001	0.759	↔	< 0.0001	0.408	↔	> -0.0001	0.076	↔	2023-09-19	2024-04-06	0.427	↔
21_2_5_129	MW-11	Part 115	Zinc	mg/L	15	4	27%	-0.00043432	0.427	↔	> -0.0001	0.715	↔	< 0.0001	0.416	↔	2023-03-13	2023-10-01	0.394	↔
22_2_3_105	MW-12	Appendix III	Boron	mg/L	15	0	0%	-0.0016634	0.124	↔	0.0018832	0.262	↔	> -0.0001	0.613	↔	2023-03-27	2023-07-08	0.441	↔
22_2_3_107	MW-12	Appendix III	Calcium	mg/L	15	0	0%	-0.034438	0.403	↔	0.13197	0.682	↔	-0.30133	0.581	↔	2024-04-08	2024-11-22	0.253	↔
22_2_3_112	MW-12	Appendix III	Fluoride	mg/L	15	0	0%	-0.0016915	0.054	↔	0.00072198	0.105	↔	-0.00043823	0.143	↔	2023-05-16	2024-02-13	0.608	↔
22_2_3_120	MW-12	Appendix III	pH (field)	su	15	0	0%	0.0064006	0.203	↔	-0.0044118	0.778	↔	< 0.0001	0.942	↔	2023-03-21	2023-06-22	0.215	↔
22_2_3_126	MW-12	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	-0.28057	0.236	↔	0.66368	0.349	↔	-2.4161	0.336	↔	2024-02-13	2025-01-15	0.303	↔
22_2_4_102	MW-12	Appendix IV	Arsenic	mg/L	15	0	0%	< 0.0001	0.451	↔	> -0.0001	0.816	↔	> -0.0001	0.707	↔	2024-11-27	2023-08-29	0.257	↔
22_2_4_109	MW-12	Appendix IV	Chromium, Total	mg/L	15	5	33%	< 0.0001	0.453	↔	> -0.0001	0.583	↔	< 0.0001	0.126	↔	2024-04-07	2025-02-24	0.322	↔
22_2_4_110	MW-12	Appendix IV	Cobalt	mg/L	15	5	33%	< 0.0001	0.539	↔	< 0.0001	0.417	↔	> -0.0001	0.659	↔	2023-09-02	2024-10-16	0.404	↔
22_2_4_113	MW-12	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	-0.0016915	0.054	↔	0.00072198	0.105	↔	-0.00043823	0.143	↔	2023-05-16	2024-02-13	0.608	↔
22_2_4_115	MW-12	Appendix IV	Lead	mg/L	15	6	40%	> -0.0001	0.582	↔	< 0.0001	0.435	↔	> -0.0001	0.766	↔	2023-10-23	2024-08-29	0.458	↔
22_2_4_118	MW-12	Appendix IV	Molybdenum	mg/L	15	0	0%	> -0.0001	0.692	↔	< 0.0001	0.147	↔	> -0.0001	0.582	↔	2023-03-08	2024-12-30	0.254	↔
22_2_4_121	MW-12	Appendix IV	Radium 226 and 228	pCi/L	15	10	67%	0.0026423	0.027	↔	-0.0046567	0.386	↔	0.00022409	0.477	↔	2023-05-23	2023-08-12	0.501	↔
22_2_4_122	MW-12	Appendix IV	Selenium	mg/L	15	0	0%	> -0.0001	0.179	↔	< 0.0001	0.765	↔	< 0.0001	0.148	↔	2023-07-31	2024-09-30	0.535	↔
22_2_5_111	MW-12	Part 115	Copper	mg/L	15	0	0%	< 0.0001	0.116	↔	> -0.0001	0.338	↔	< 0.0001	0.001	↑	2023-05-15	2023-10-04	0.824	↔
22_2_5_114	MW-12	Part 115	Iron	mg/L	15	6	40%	-0.0062213	0.001	↓	0.00011476	0.041	↔	-0.00032398	0.706	↔	2023-01-06	2024-10-16	0.844	↔
22_2_5_128	MW-12	Part 115	Vanadium	mg/L	15	6	40%	< 0.0001	0.658	↔	< 0.0001	0.142	↔	> -0.0001	0.727	↔	2023-05-19	2024-10-16	0.439	↔
22_2_5_129	MW-12	Part 115	Zinc	mg/L	15	0	0%	> -0.0001	0.328	↔	< 0.0001	0.131	↔	> -0.0001	0.017	↔	2024-04-07	2024-10-15	0.652	↔

(Table continues on next page)

Table 10: Trend Tests: Piecewise Linear-Linear-Linear (*continued*)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Line 3			Break 1	Break 2	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend				
28_1_3_105	MW-18	Appendix III	Boron	mg/L	15	0	0%	0.0017812	0.318	↔	0.0058989	0.005	↑	> -0.0001	0.987	↔	2023-08-07	2024-04-24	0.920	↔
28_1_3_120	MW-18	Appendix III	pH (field)	su	15	0	0%	0.0017479	0.495	↔	0.00038334	0.517	↔	< 0.0001	0.726	↔	2023-02-05	2023-08-05	0.590	↔
28_1_3_124	MW-18	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	-9.7174	0.016	↔	1.0639	0.871	↔	0.21949	0.334	↔	2023-02-08	2023-05-16	0.606	↔
28_1_3_126	MW-18	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	-5.498	0.020	↔	0.35012	0.738	↔	-0.053269	0.893	↔	2023-03-19	2024-02-12	0.643	↔
28_1_4_101	MW-18	Appendix IV	Antimony	mg/L	15	3	20%	< 0.0001	0.376	↔	> -0.0001	0.545	↔	< 0.0001	0.631	↔	2024-02-13	2024-08-13	0.185	↔
28_1_4_102	MW-18	Appendix IV	Arsenic	mg/L	15	0	0%	> -0.0001	0.390	↔	0.00011101	0.204	↔	> -0.0001	0.549	↔	2023-04-08	2023-09-17	0.510	↔
28_1_4_103	MW-18	Appendix IV	Barium	mg/L	15	0	0%	> -0.0001	0.184	↔	0.00029412	0.164	↔	> -0.0001	0.230	↔	2023-04-07	2023-05-23	0.467	↔
28_1_4_104	MW-18	Appendix IV	Beryllium	mg/L	15	13	87%	> -0.0001	0.761	↔	< 0.0001	0.250	↔	> -0.0001	0.256	↔	2023-09-15	2024-04-10	0.396	↔
28_1_4_106	MW-18	Appendix IV	Cadmium	mg/L	15	6	40%	< 0.0001	0.794	↔	> -0.0001	0.265	↔	< 0.0001	0.900	↔	2023-05-21	2024-09-02	0.283	↔
28_1_4_109	MW-18	Appendix IV	Chromium, Total	mg/L	15	13	87%	< 0.0001	0.277	↔	< 0.0001	0.000	↑	< 0.0001	0.000	↑	2025-02-06	2023-09-22	0.943	↔
28_1_4_110	MW-18	Appendix IV	Cobalt	mg/L	15	0	0%	> -0.0001	0.399	↔	> -0.0001	0.043	↔	> -0.0001	0.333	↔	2023-02-06	2023-04-01	0.930	↔
28_1_4_115	MW-18	Appendix IV	Lead	mg/L	15	10	67%	< 0.0001	0.496	↔	> -0.0001	0.315	↔	> -0.0001	0.719	↔	2023-02-07	2023-07-25	0.397	↔
28_1_4_116	MW-18	Appendix IV	Lithium	mg/L	15	0	0%	-0.00018346	0.093	↔	0.00020602	0.525	↔	> -0.0001	0.315	↔	2023-04-05	2023-06-26	0.429	↔
28_1_4_117	MW-18	Appendix IV	Mercury	mg/L	15	15	100%	> -0.0001	0.935	↔	< 0.0001	0.697	↔	> -0.0001	0.033	↔	2023-04-06	2024-09-28	0.635	↔
28_1_4_118	MW-18	Appendix IV	Molybdenum	mg/L	15	0	0%	< 0.0001	0.222	↔	> -0.0001	0.715	↔	< 0.0001	0.926	↔	2023-08-07	2024-05-24	0.292	↔
28_1_4_121	MW-18	Appendix IV	Radium 226 and 228	pCi/L	15	9	60%	0.0033655	0.187	↔	-0.0012302	0.125	↔	0.00029397	0.626	↔	2023-04-17	2024-02-27	0.472	↔
28_1_4_122	MW-18	Appendix IV	Selenium	mg/L	15	0	0%	< 0.0001	0.029	↔	> -0.0001	0.324	↔	< 0.0001	0.344	↔	2024-04-10	2024-12-07	0.538	↔
28_1_4_125	MW-18	Appendix IV	Thallium	mg/L	15	15	100%	< 0.0001	0.512	↔	> -0.0001	0.646	↔	> -0.0001	0.599	↔	2023-02-07	2023-03-28	0.216	↔
28_1_5_111	MW-18	Part 115	Copper	mg/L	15	0	0%	> -0.0001	0.945	↔	< 0.0001	0.159	↔	> -0.0001	0.493	↔	2024-06-23	2024-10-16	0.462	↔
28_1_5_114	MW-18	Part 115	Iron	mg/L	15	0	0%	-0.045456	0.001	↓	0.011466	0.049	↔	-0.0012511	0.529	↔	2023-04-04	2023-12-14	0.847	↔
28_1_5_119	MW-18	Part 115	Nickel	mg/L	15	0	0%	> -0.0001	0.001	↓	> -0.0001	0.233	↔	< 0.0001	0.504	↔	2023-04-18	2024-07-17	0.889	↔
28_1_5_123	MW-18	Part 115	Silver	mg/L	15	15	100%	< 0.0001	0.644	↔	> -0.0001	0.673	↔	> -0.0001	0.715	↔	2023-02-07	2023-07-16	0.165	↔
28_1_5_129	MW-18	Part 115	Zinc	mg/L	15	0	0%	-0.00023586	0.069	↔	> -0.0001	0.162	↔	< 0.0001	0.328	↔	2023-04-18	2024-08-23	0.716	↔
29_1_3_107	MW-19	Appendix III	Calcium	mg/L	15	0	0%	-0.53203	0.037	↔	0.32503	0.303	↔	-0.21937	0.123	↔	2023-08-06	2024-03-10	0.652	↔
29_1_3_108	MW-19	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	-0.24111	0.005	↓	-0.011107	0.456	↔	-0.11111	0.564	↔	2023-04-23	2024-12-28	0.866	↔
29_1_3_112	MW-19	Appendix III	Fluoride	mg/L	15	0	0%	-0.0010466	0.099	↔	0.0016222	0.373	↔	-0.0046825	0.464	↔	2024-03-28	2024-12-03	0.552	↔
29_1_4_101	MW-19	Appendix IV	Antimony	mg/L	15	12	80%	< 0.0001	0.227	↔	> -0.0001	0.426	↔	< 0.0001	0.607	↔	2023-04-18	2024-05-19	0.246	↔
29_1_4_102	MW-19	Appendix IV	Arsenic	mg/L	15	0	0%	> -0.0001	0.538	↔	< 0.0001	0.404	↔	> -0.0001	0.773	↔	2023-03-18	2024-10-16	0.201	↔
29_1_4_103	MW-19	Appendix IV	Barium	mg/L	15	0	0%	-0.00011197	0.068	↔	< 0.0001	0.417	↔	> -0.0001	0.208	↔	2023-04-17	2023-09-06	0.643	↔
29_1_4_106	MW-19	Appendix IV	Cadmium	mg/L	15	15	100%	< 0.0001	0.813	↔	< 0.0001	0.807	↔	> -0.0001	0.286	↔	2023-02-24	2023-05-21	0.208	↔
29_1_4_109	MW-19	Appendix IV	Chromium, Total	mg/L	15	5	33%	< 0.0001	0.009	↑	> -0.0001	0.062	↔	< 0.0001	0.651	↔	2023-01-23	2023-04-17	0.859	↔
29_1_4_110	MW-19	Appendix IV	Cobalt	mg/L	15	1	7%	< 0.0001	0.428	↔	> -0.0001	0.013	↔	< 0.0001	0.023	↔	2023-01-10	2024-08-12	0.717	↔
29_1_4_113	MW-19	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	-0.0010466	0.099	↔	0.0016222	0.373	↔	-0.0046825	0.464	↔	2024-03-28	2024-12-03	0.552	↔
29_1_4_115	MW-19	Appendix IV	Lead	mg/L	15	15	100%	< 0.0001	0.007	↑	> -0.0001	0.093	↔	< 0.0001	0.692	↔	2023-04-01	2023-06-08	0.783	↔
29_1_4_116	MW-19	Appendix IV	Lithium	mg/L	15	0	0%	> -0.0001	0.635	↔	> -0.0001	0.213	↔	< 0.0001	0.887	↔	2023-05-03	2024-02-13	0.587	↔
29_1_4_117	MW-19	Appendix IV	Mercury	mg/L	15	15	100%	> -0.0001	0.944	↔	< 0.0001	0.695	↔	> -0.0001	0.033	↔	2023-03-02	2024-09-29	0.635	↔
29_1_4_118	MW-19	Appendix IV	Molybdenum	mg/L	15	0	0%	> -0.0001	0.626	↔	> -0.0001	0.481	↔	< 0.0001	0.011	↔	2023-01-15	2024-06-22	0.709	↔
29_1_4_122	MW-19	Appendix IV	Selenium	mg/L	15	10	67%	> -0.0001	0.246	↔	< 0.0001	0.823	↔	> -0.0001	0.983	↔	2023-08-23	2024-10-16	0.236	↔
29_1_4_125	MW-19	Appendix IV	Thallium	mg/L	15	15	100%	< 0.0001	0.152	↔	> -0.0001	0.267	↔	< 0.0001	0.884	↔	2023-02-27	2023-06-28	0.375	↔
29_1_5_111	MW-19	Part 115	Copper	mg/L	15	13	87%	> -0.0001	0.466	↔	< 0.0001	0.850	↔	> -0.0001	0.742	↔	2023-09-14	2024-07-17	0.108	↔
29_1_5_114	MW-19	Part 115	Iron	mg/L	15	0	0%	-0.03195	0.165	↔	0.061038	0.186	↔	-0.011231	0.042	↔	2023-05-09	2023-10-23	0.709	↔
29_1_5_119	MW-19	Part 115	Nickel	mg/L	15	1	7%	> -0.0001	0.294	↔	< 0.0001	0.009	↑	> -0.0001	0.049	↔	2024-01-21	2024-07-18	0.732	↔

(Table continues on next page)

Table 10: Trend Tests: Piecewise Linear-Linear-Linear *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Line 3			Break 1	Break 2	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend				
29_1_5_123	MW-19	Part 115	Silver	mg/L	15	15	100%	< 0.0001	0.342	↔	> -0.0001	0.296	↔	< 0.0001	0.911	↔	2023-02-08	2025-02-17	0.263	↔
29_1_5_128	MW-19	Part 115	Vanadium	mg/L	15	14	93%	< 0.0001	0.737	↔	> -0.0001	0.334	↔	< 0.0001	0.708	↔	2023-02-07	2024-06-28	0.189	↔
29_1_5_129	MW-19	Part 115	Zinc	mg/L	15	10	67%	< 0.0001	0.656	↔	> -0.0001	0.111	↔	< 0.0001	0.043	↔	2023-02-07	2023-12-11	0.499	↔
30_1_3_107	MW-20	Appendix III	Calcium	mg/L	15	0	0%	0.49715	0.628	↔	-0.30777	0.195	↔	0.019041	0.656	↔	2023-02-03	2023-06-29	0.302	↔
30_1_3_108	MW-20	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	0.088132	0.345	↔	-0.053389	0.199	↔	-0.10772	0.283	↔	2023-05-23	2024-07-17	0.705	↔
30_1_3_112	MW-20	Appendix III	Fluoride	mg/L	15	0	0%	-0.0082857	0.002	↓	> -0.0001	0.617	↔	0.0012963	0.310	↔	2023-01-06	2025-02-19	0.836	↔
30_1_3_124	MW-20	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	1.1301	0.021	↔	-0.69933	0.020	↔	0.0074937	0.828	↔	2023-02-16	2023-06-28	0.761	↔
30_1_4_101	MW-20	Appendix IV	Antimony	mg/L	15	5	33%	> -0.0001	0.196	↔	< 0.0001	0.339	↔	> -0.0001	0.458	↔	2023-01-17	2023-04-17	0.598	↔
30_1_4_102	MW-20	Appendix IV	Arsenic	mg/L	15	0	0%	> -0.0001	0.629	↔	< 0.0001	0.117	↔	> -0.0001	0.547	↔	2023-01-08	2024-10-25	0.450	↔
30_1_4_103	MW-20	Appendix IV	Barium	mg/L	15	0	0%	-0.0070028	0.008	↓	0.00046991	0.019	↔	-0.00099476	0.713	↔	2023-02-18	2024-10-16	0.766	↔
30_1_4_104	MW-20	Appendix IV	Beryllium	mg/L	15	14	93%	< 0.0001	0.093	↔	> -0.0001	0.322	↔	< 0.0001	0.746	↔	2024-02-12	2024-05-14	0.453	↔
30_1_4_106	MW-20	Appendix IV	Cadmium	mg/L	15	15	100%	> -0.0001	0.565	↔	< 0.0001	0.003	↑	> -0.0001	0.761	↔	2023-01-23	2023-07-18	0.897	↔
30_1_4_109	MW-20	Appendix IV	Chromium, Total	mg/L	15	7	47%	< 0.0001	0.323	↔	> -0.0001	0.810	↔	> -0.0001	0.784	↔	2023-02-07	2024-07-24	0.214	↔
30_1_4_110	MW-20	Appendix IV	Cobalt	mg/L	15	0	0%	< 0.0001	0.627	↔	> -0.0001	0.001	↓	< 0.0001	0.717	↔	2023-02-06	2025-02-19	0.820	↔
30_1_4_113	MW-20	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	-0.0082857	0.002	↓	> -0.0001	0.617	↔	0.0012963	0.310	↔	2023-01-06	2025-02-19	0.836	↔
30_1_4_115	MW-20	Appendix IV	Lead	mg/L	15	0	0%	< 0.0001	0.214	↔	> -0.0001	0.314	↔	< 0.0001	0.823	↔	2023-06-27	2024-01-09	0.520	↔
30_1_4_116	MW-20	Appendix IV	Lithium	mg/L	15	0	0%	< 0.0001	0.657	↔	> -0.0001	0.388	↔	-0.00012295	0.765	↔	2023-06-29	2024-12-10	0.429	↔
30_1_4_121	MW-20	Appendix IV	Radium 226 and 228	pCi/L	14	7	50%	-0.018514	0.036	↔	0.00090454	0.311	↔	-0.00058059	0.308	↔	2023-01-21	2023-11-30	0.737	↔
30_1_4_122	MW-20	Appendix IV	Selenium	mg/L	15	9	60%	> -0.0001	0.027	↔	< 0.0001	0.439	↔	> -0.0001	0.156	↔	2023-07-02	2024-02-13	0.648	↔
30_1_4_125	MW-20	Appendix IV	Thallium	mg/L	15	14	93%	> -0.0001	0.807	↔	< 0.0001	0.652	↔	> -0.0001	0.083	↔	2023-07-06	2024-02-12	0.379	↔
30_1_5_111	MW-20	Part 115	Copper	mg/L	15	2	13%	< 0.0001	0.488	↔	< 0.0001	0.071	↔	> -0.0001	0.286	↔	2024-02-28	2024-10-16	0.731	↔
30_1_5_129	MW-20	Part 115	Zinc	mg/L	15	0	0%	> -0.0001	0.157	↔	0.00013019	0.382	↔	-0.00019608	0.125	↔	2024-01-31	2024-10-15	0.468	↔
40_1_3_105	MW-30	Appendix III	Boron	mg/L	15	0	0%	0.0070866	0.751	↔	-0.0026009	0.591	↔	-0.0003396	0.708	↔	2023-01-26	2023-08-07	0.220	↔
40_1_3_107	MW-30	Appendix III	Calcium	mg/L	15	0	0%	2.4545	0.410	↔	-1.7942	0.163	↔	0.66964	0.040	↔	2023-03-12	2023-09-28	0.501	↔
40_1_3_108	MW-30	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	-0.57888	0.446	↔	-0.036769	0.897	↔	3.8094	0.000	↑	2023-05-21	2024-06-27	0.968	↔
40_1_3_112	MW-30	Appendix III	Fluoride	mg/L	15	0	0%	-0.00055844	0.615	↔	0.00042284	0.695	↔	-0.0010615	0.274	↔	2023-06-27	2024-06-05	0.241	↔
40_1_3_126	MW-30	Appendix III	Total Dissolved Solids	mg/L	15	0	0%	-0.32881	0.659	↔	0.92457	0.681	↔	10.302	0.216	↔	2024-03-11	2024-10-17	0.871	↔
40_1_4_101	MW-30	Appendix IV	Antimony	mg/L	15	13	87%	< 0.0001	0.357	↔	> -0.0001	0.329	↔	< 0.0001	0.836	↔	2023-05-21	2024-10-20	0.251	↔
40_1_4_102	MW-30	Appendix IV	Arsenic	mg/L	15	2	13%	> -0.0001	0.105	↔	< 0.0001	0.172	↔	< 0.0001	0.000	↑	2023-04-18	2024-09-12	0.970	↔
40_1_4_103	MW-30	Appendix IV	Barium	mg/L	15	0	0%	-0.00045097	0.054	↔	< 0.0001	0.976	↔	0.00011492	0.144	↔	2023-03-23	2024-07-17	0.641	↔
40_1_4_109	MW-30	Appendix IV	Chromium, Total	mg/L	15	0	0%	> -0.0001	0.234	↔	< 0.0001	0.772	↔	> -0.0001	0.761	↔	2023-02-08	2024-10-16	0.417	↔
40_1_4_110	MW-30	Appendix IV	Cobalt	mg/L	15	0	0%	> -0.0001	0.917	↔	< 0.0001	0.967	↔	< 0.0001	0.411	↔	2023-10-03	2024-07-18	0.332	↔
40_1_4_113	MW-30	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	-0.00055844	0.615	↔	0.00042284	0.695	↔	-0.0010615	0.274	↔	2023-06-27	2024-06-05	0.241	↔
40_1_4_115	MW-30	Appendix IV	Lead	mg/L	15	14	93%	< 0.0001	0.188	↔	> -0.0001	0.233	↔	< 0.0001	0.268	↔	2023-02-23	2023-09-08	0.390	↔
40_1_4_116	MW-30	Appendix IV	Lithium	mg/L	15	0	0%	-0.00011393	0.340	↔	< 0.0001	0.832	↔	0.00049659	0.692	↔	2024-02-12	2024-12-23	0.253	↔
40_1_4_117	MW-30	Appendix IV	Mercury	mg/L	15	14	93%	> -0.0001	0.795	↔	< 0.0001	0.276	↔	> -0.0001	0.007	↓	2023-10-15	2024-04-06	0.617	↔
40_1_4_121	MW-30	Appendix IV	Radium 226 and 228	pCi/L	15	8	53%	-0.00033509	0.541	↔	0.0012154	0.465	↔	-0.0032348	0.582	↔	2024-03-11	2024-12-29	0.141	↔
40_1_4_122	MW-30	Appendix IV	Selenium	mg/L	15	7	47%	> -0.0001	0.380	↔	< 0.0001	0.598	↔	> -0.0001	0.607	↔	2023-06-10	2025-02-24	0.175	↔
40_1_5_111	MW-30	Part 115	Copper	mg/L	15	10	67%	< 0.0001	0.239	↔	> -0.0001	0.335	↔	< 0.0001	0.250	↔	2023-01-24	2023-03-31	0.388	↔
40_1_5_123	MW-30	Part 115	Silver	mg/L	15	15	100%	< 0.0001	0.429	↔	> -0.0001	0.552	↔	< 0.0001	0.834	↔	2023-02-27	2023-07-12	0.153	↔
40_1_5_128	MW-30	Part 115	Vanadium	mg/L	15	15	100%	> -0.0001	0.641	↔	< 0.0001	0.999	↔	< 0.0001	0.411	↔	2023-07-28	2024-07-08	0.163	↔
41_1_3_107	MW-31	Appendix III	Calcium	mg/L	15	0	0%	-0.21457	0.096	↔	0.10845	0.510	↔	-0.029252	0.678	↔	2023-06-27	2024-04-05	0.339	↔

(Table continues on next page)

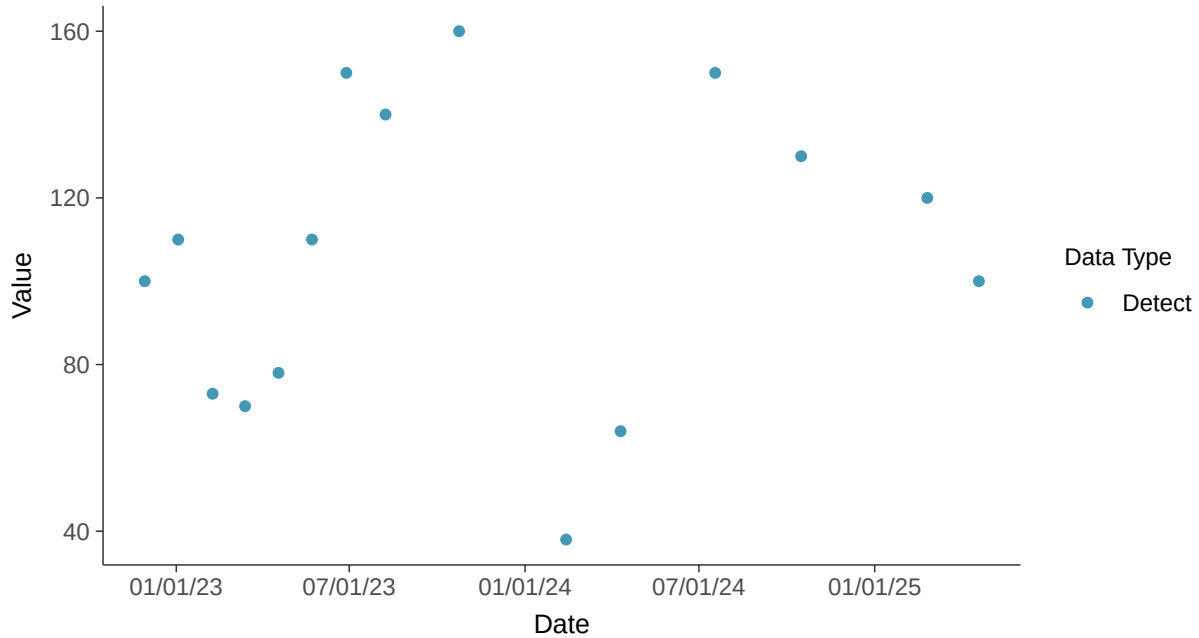
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Line 3			Break 1	Break 2	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend				
41_1_3_108	MW-31	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	-0.030588	0.111	↔	0.11236	0.444	↔	-0.18519	0.444	↔	2024-05-07	2025-01-05	0.348	↔
41_1_3_124	MW-31	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	-0.43496	0.161	↔	-0.099552	0.505	↔	2.9844	0.057	↔	2023-08-07	2025-02-24	0.643	↔
41_1_4_102	MW-31	Appendix IV	Arsenic	mg/L	15	0	0%	> -0.0001	0.041	↔	< 0.0001	0.150	↔	> -0.0001	0.007	↓	2023-03-03	2023-06-12	0.736	↔
41_1_4_103	MW-31	Appendix IV	Barium	mg/L	15	0	0%	> -0.0001	0.260	↔	0.0012222	0.056	↔	-0.0018704	0.074	↔	2024-06-05	2024-12-05	0.676	↔
41_1_4_104	MW-31	Appendix IV	Beryllium	mg/L	15	13	87%	> -0.0001	0.621	↔	< 0.0001	0.090	↔	> -0.0001	0.655	↔	2023-07-08	2024-10-15	0.444	↔
41_1_4_106	MW-31	Appendix IV	Cadmium	mg/L	15	14	93%	> -0.0001	0.630	↔	< 0.0001	0.004	↑	> -0.0001	0.531	↔	2023-02-25	2023-07-14	0.915	↔
41_1_4_109	MW-31	Appendix IV	Chromium, Total	mg/L	15	0	0%	< 0.0001	0.759	↔	< 0.0001	0.383	↔	> -0.0001	0.472	↔	2024-06-04	2024-12-11	0.403	↔
41_1_4_110	MW-31	Appendix IV	Cobalt	mg/L	15	3	20%	> -0.0001	0.891	↔	> -0.0001	0.543	↔	> -0.0001	0.651	↔	2024-10-16	2024-01-12	0.273	↔
41_1_4_115	MW-31	Appendix IV	Lead	mg/L	15	13	87%	> -0.0001	0.038	↔	< 0.0001	0.422	↔	> -0.0001	0.427	↔	2023-11-26	2024-07-17	0.547	↔
41_1_4_116	MW-31	Appendix IV	Lithium	mg/L	15	0	0%	> -0.0001	0.026	↔	0.00012222	0.126	↔	-0.00024074	0.077	↔	2024-04-25	2024-11-17	0.797	↔
41_1_4_122	MW-31	Appendix IV	Selenium	mg/L	15	6	40%	> -0.0001	0.457	↔	< 0.0001	0.614	↔	> -0.0001	0.055	↔	2023-07-23	2024-02-11	0.397	↔
41_1_4_125	MW-31	Appendix IV	Thallium	mg/L	15	14	93%	> -0.0001	0.802	↔	< 0.0001	0.287	↔	> -0.0001	0.152	↔	2023-07-04	2024-02-12	0.380	↔
41_1_5_111	MW-31	Part 115	Copper	mg/L	15	10	67%	> -0.0001	0.861	↔	< 0.0001	0.142	↔	> -0.0001	0.045	↔	2023-09-10	2024-05-19	0.629	↔
41_1_5_119	MW-31	Part 115	Nickel	mg/L	15	10	67%	> -0.0001	0.662	↔	< 0.0001	0.109	↔	-0.00013772	0.355	↔	2023-04-23	2025-02-18	0.426	↔
42_1_3_105	MW-32	Appendix III	Boron	mg/L	15	0	0%	-0.007555	0.652	↔	0.002892	0.114	↔	-0.010868	0.100	↔	2023-02-25	2024-10-15	0.431	↔
42_1_3_108	MW-32	Appendix III	Chloride (as Cl)	mg/L	15	0	0%	-0.021505	0.004	↓	0.087912	0.079	↔	-0.074074	0.348	↔	2024-05-26	2024-12-15	0.708	↔
42_1_3_112	MW-32	Appendix III	Fluoride	mg/L	15	0	0%	> -0.0001	0.966	↔	0.00041037	0.196	↔	-0.0023879	0.588	↔	2023-04-10	2024-10-16	0.413	↔
42_1_3_124	MW-32	Appendix III	Sulfate (as SO4)	mg/L	15	0	0%	0.68844	0.171	↔	-2.5556	0.232	↔	0.041241	0.643	↔	2023-05-04	2023-07-01	0.548	↔
42_1_4_101	MW-32	Appendix IV	Antimony	mg/L	15	11	73%	< 0.0001	0.145	↔	> -0.0001	0.151	↔	< 0.0001	0.899	↔	2024-02-11	2024-10-27	0.407	↔
42_1_4_102	MW-32	Appendix IV	Arsenic	mg/L	15	0	0%	> -0.0001	0.835	↔	< 0.0001	0.518	↔	> -0.0001	0.059	↔	2023-06-11	2024-02-11	0.413	↔
42_1_4_104	MW-32	Appendix IV	Beryllium	mg/L	15	14	93%	> -0.0001	0.803	↔	< 0.0001	0.659	↔	> -0.0001	0.082	↔	2023-07-05	2024-02-11	0.380	↔
42_1_4_106	MW-32	Appendix IV	Cadmium	mg/L	15	14	93%	< 0.0001	0.005	↑	> -0.0001	0.214	↔	< 0.0001	0.821	↔	2024-02-12	2024-11-17	0.665	↔
42_1_4_109	MW-32	Appendix IV	Chromium, Total	mg/L	15	0	0%	> -0.0001	0.596	↔	< 0.0001	0.202	↔	> -0.0001	0.135	↔	2023-07-28	2024-02-12	0.388	↔
42_1_4_110	MW-32	Appendix IV	Cobalt	mg/L	15	0	0%	< 0.0001	0.192	↔	> -0.0001	0.330	↔	> -0.0001	0.977	↔	2024-02-11	2024-08-17	0.359	↔
42_1_4_113	MW-32	Appendix IV	Fluoride (App IV)	mg/L	15	0	0%	> -0.0001	0.966	↔	0.00041037	0.196	↔	-0.0023879	0.588	↔	2023-04-10	2024-10-16	0.413	↔
42_1_4_115	MW-32	Appendix IV	Lead	mg/L	15	11	73%	> -0.0001	0.354	↔	< 0.0001	0.178	↔	> -0.0001	0.674	↔	2023-08-05	2024-10-16	0.339	↔
42_1_4_116	MW-32	Appendix IV	Lithium	mg/L	15	0	0%	-0.00042857	0.548	↔	< 0.0001	0.159	↔	-0.00048148	0.602	↔	2023-03-10	2024-11-28	0.308	↔
42_1_4_117	MW-32	Appendix IV	Mercury	mg/L	15	14	93%	> -0.0001	0.790	↔	< 0.0001	0.333	↔	> -0.0001	0.045	↔	2023-10-08	2024-04-06	0.472	↔
42_1_4_118	MW-32	Appendix IV	Molybdenum	mg/L	15	0	0%	> -0.0001	0.360	↔	< 0.0001	0.275	↔	> -0.0001	0.013	↔	2023-02-24	2024-02-11	0.572	↔
42_1_4_121	MW-32	Appendix IV	Radium 226 and 228	pCi/L	15	9	60%	0.0021991	0.074	↔	-0.0010868	0.323	↔	0.00016256	0.609	↔	2023-05-02	2024-02-11	0.553	↔
42_1_4_122	MW-32	Appendix IV	Selenium	mg/L	15	12	80%	> -0.0001	0.459	↔	< 0.0001	0.621	↔	> -0.0001	0.070	↔	2023-07-18	2024-02-11	0.379	↔
42_1_5_111	MW-32	Part 115	Copper	mg/L	15	9	60%	> -0.0001	0.811	↔	< 0.0001	0.648	↔	> -0.0001	0.078	↔	2023-07-08	2024-02-11	0.389	↔
42_1_5_114	MW-32	Part 115	Iron	mg/L	15	0	0%	-0.030109	0.028	↔	0.0062812	0.588	↔	-0.0023434	0.815	↔	2023-08-07	2024-04-27	0.656	↔
42_1_5_129	MW-32	Part 115	Zinc	mg/L	15	0	0%	> -0.0001	0.243	↔	0.00061099	0.005	↑	-0.0011722	0.003	↓	2024-07-09	2025-01-16	0.842	↔

Appendix III: Boron, MW-01R

ID: 11_2_3_105

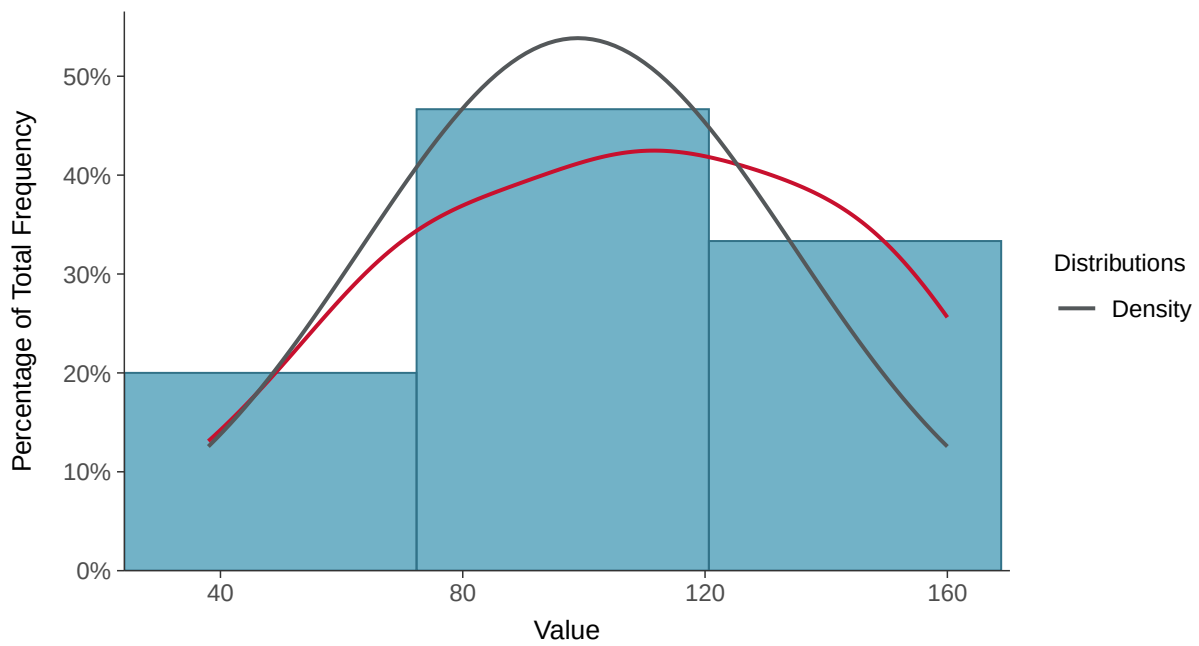
Scatter Plot

Boron, MW-01R (mg/L)



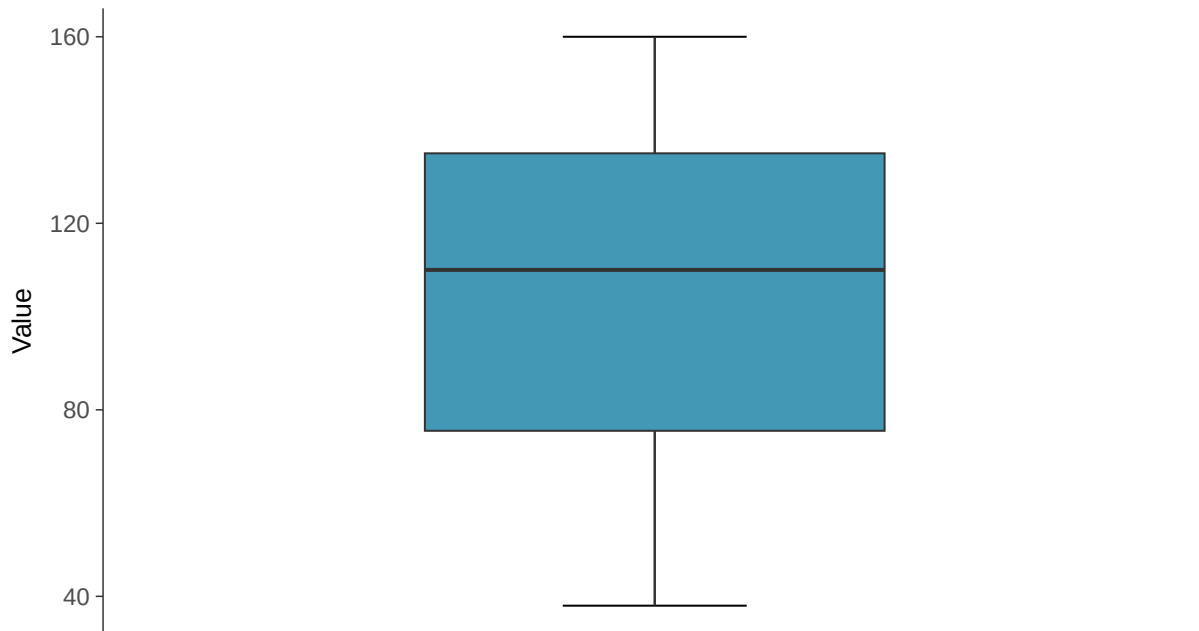
Histogram

Boron, MW-01R (mg/L)



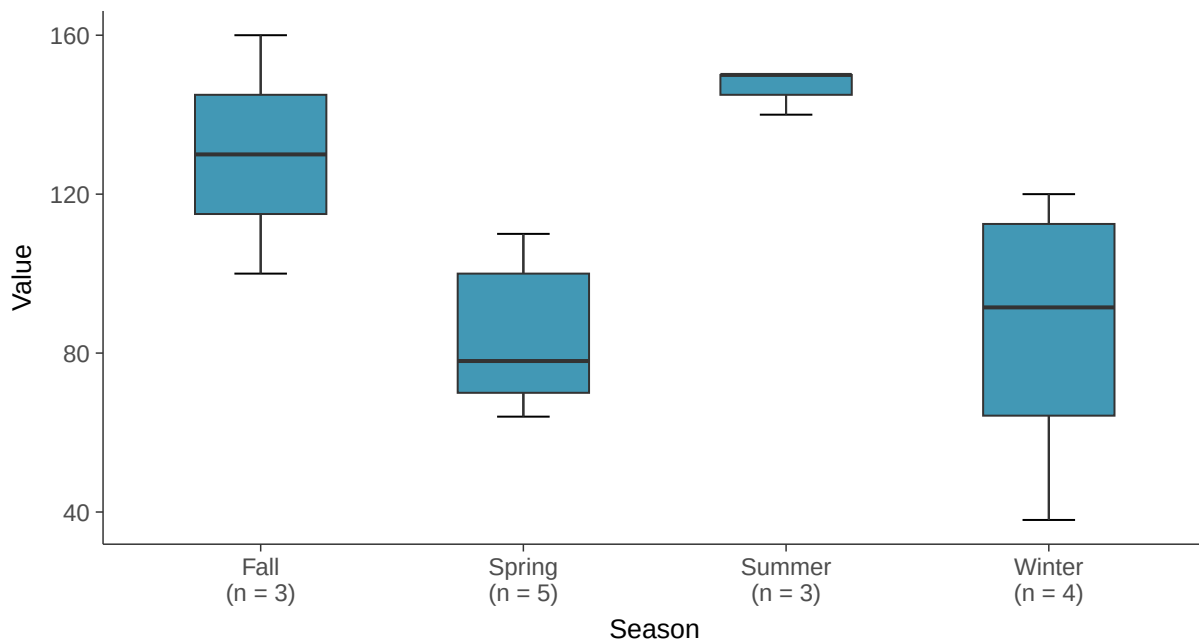
Boxplot

Boron, MW-01R (mg/L)



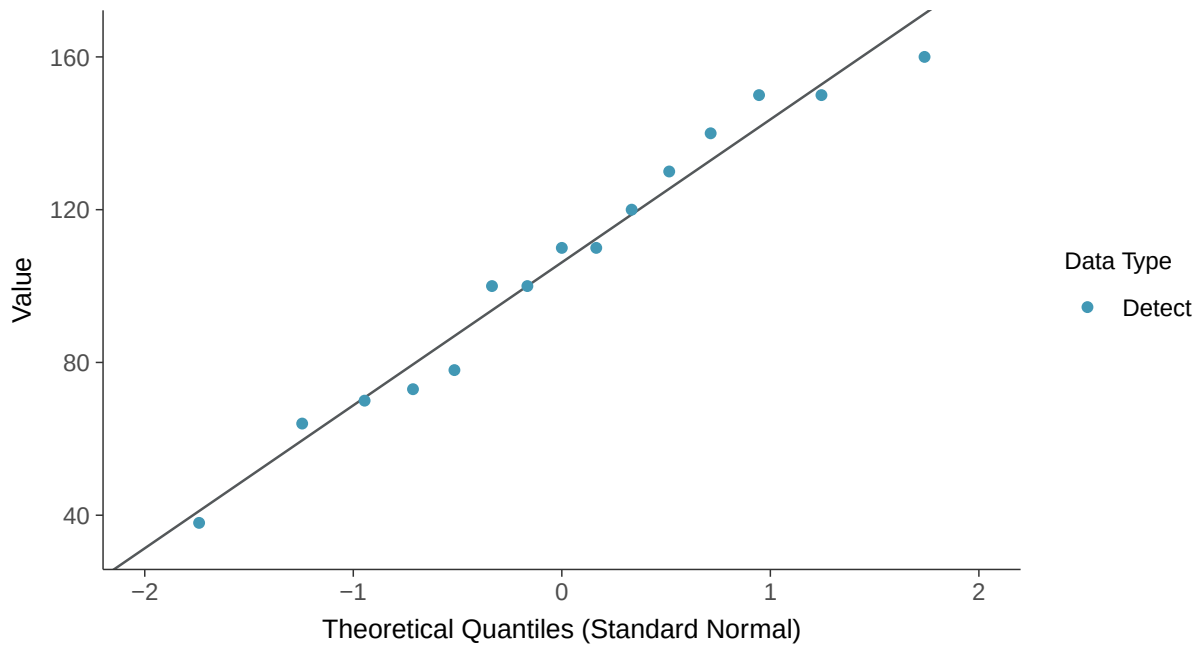
Boxplot by Season

Boron, MW-01R (mg/L)



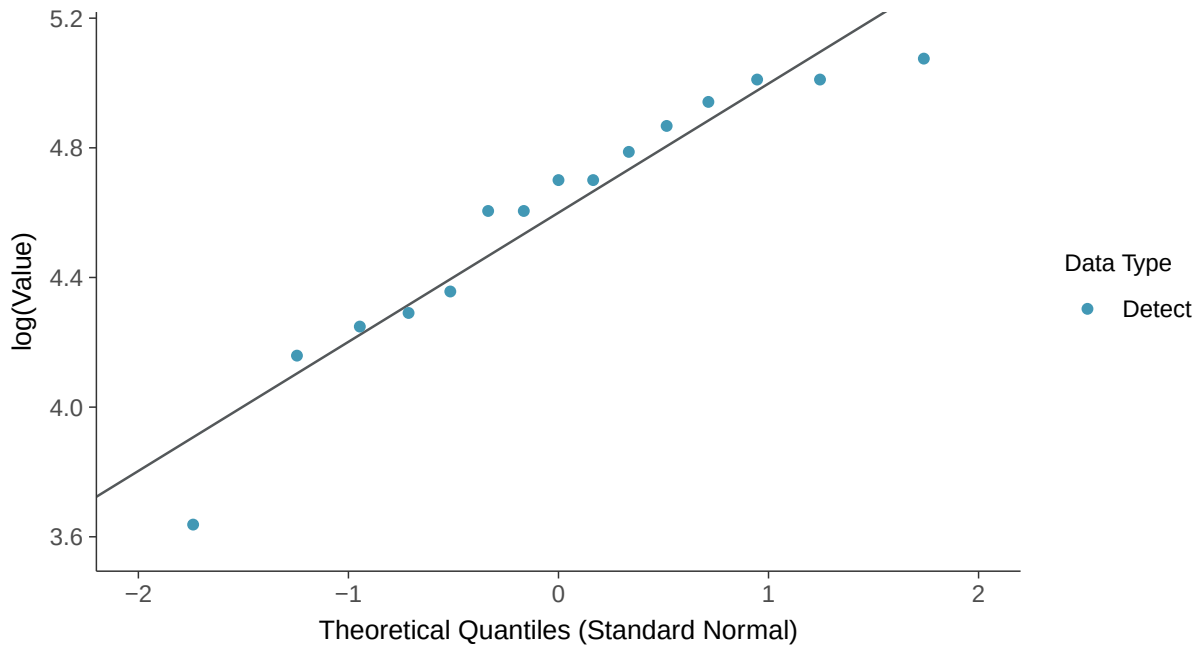
Normal Q-Q plot

Boron, MW-01R (mg/L)



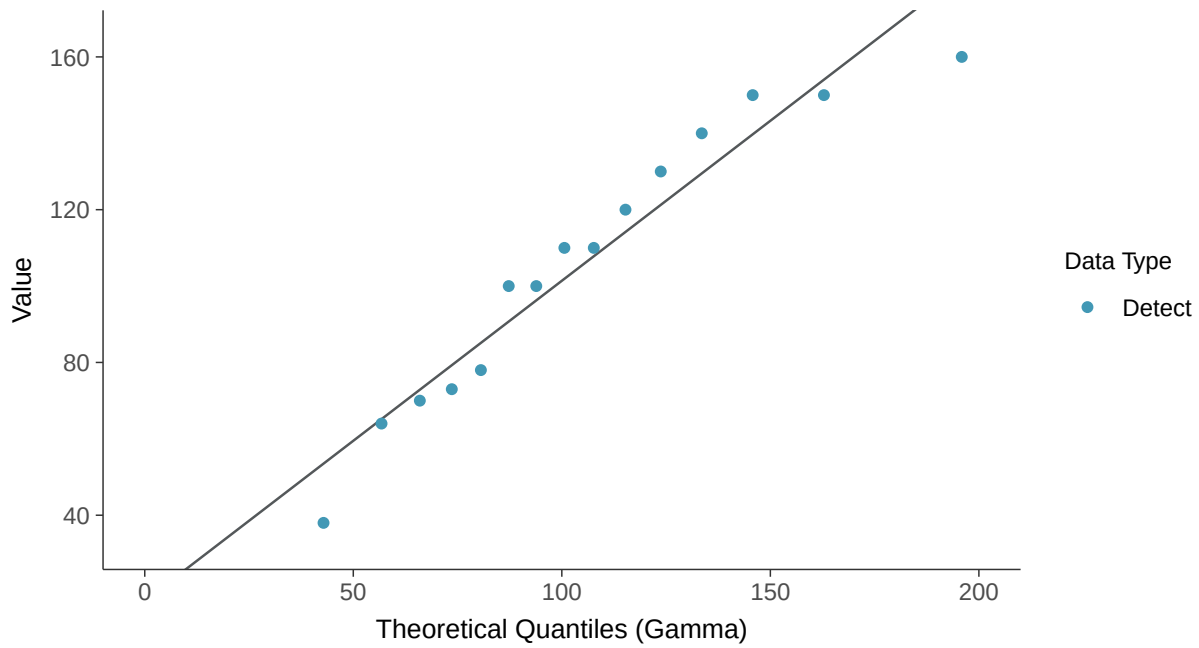
Lognormal Q-Q plot

Boron, MW-01R (mg/L)



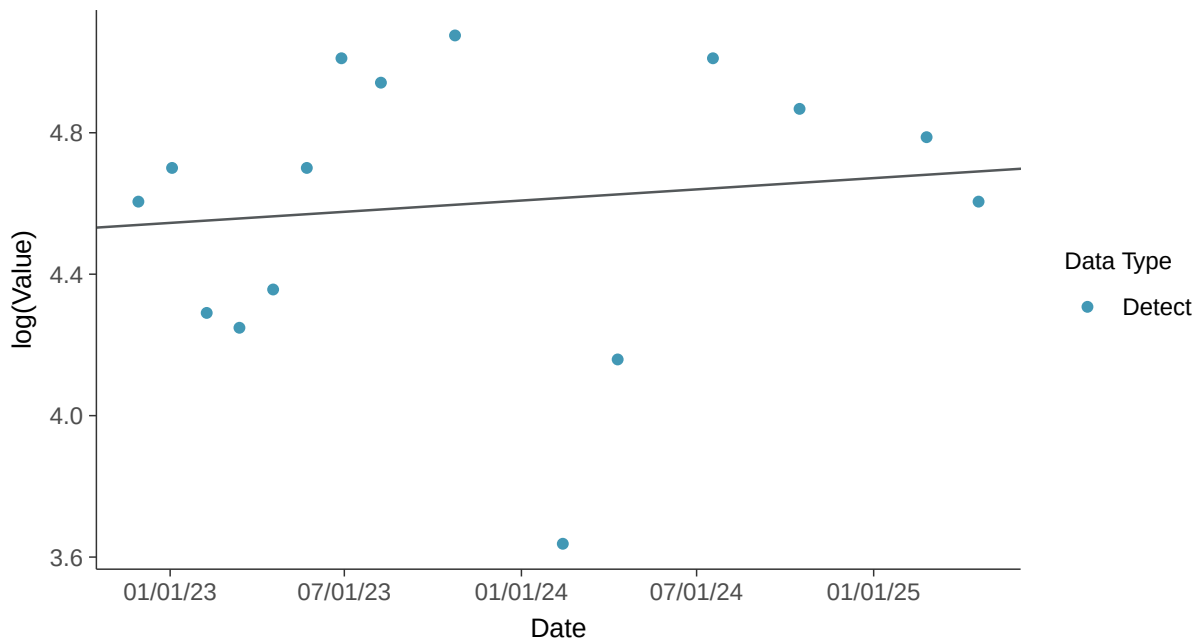
Gamma Q-Q plot

Boron, MW-01R (mg/L)



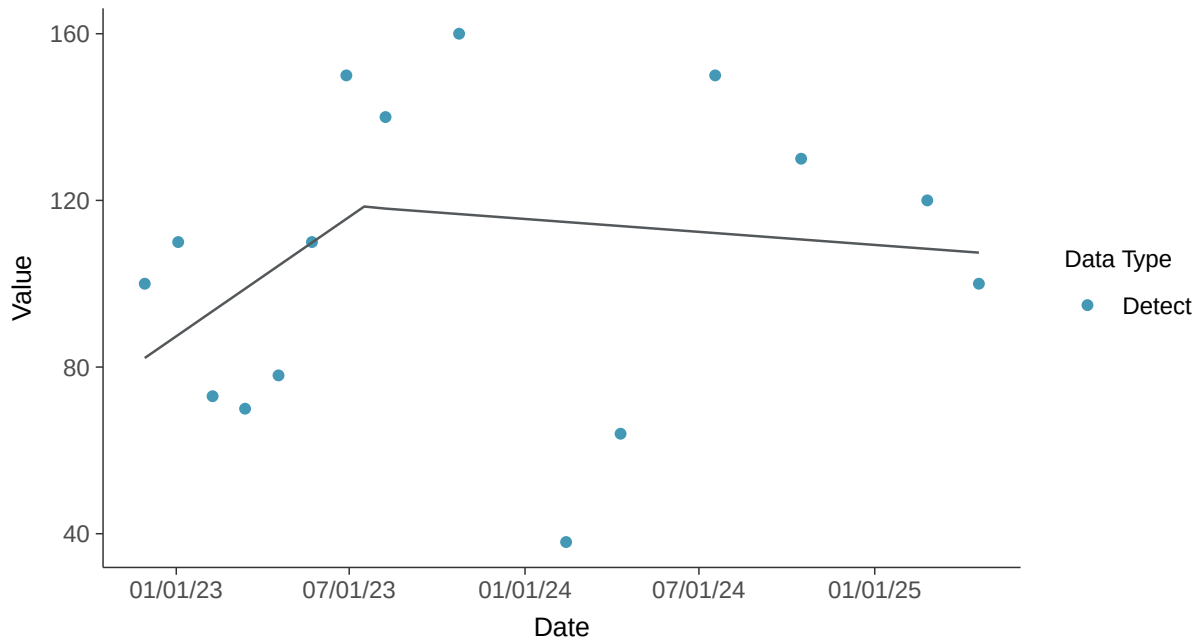
Trend Regression: Lognormal MLE

Boron, MW-01R (mg/L)



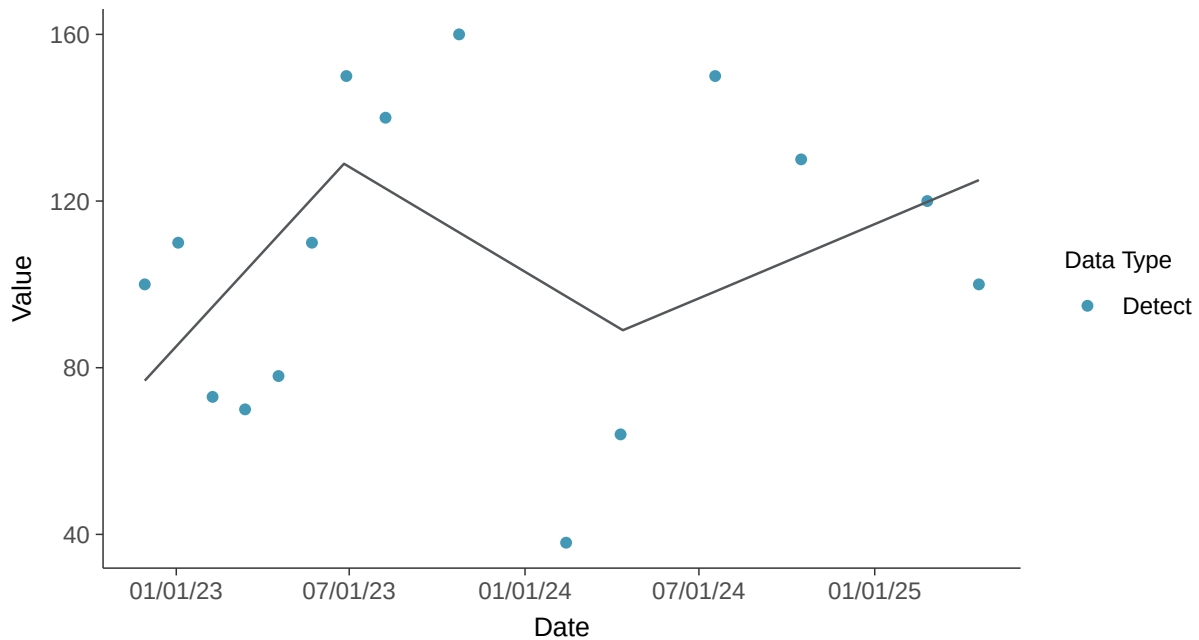
Trend Regression: Piecewise Linear-Linear

Boron, MW-01R (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Boron, MW-01R (mg/L)

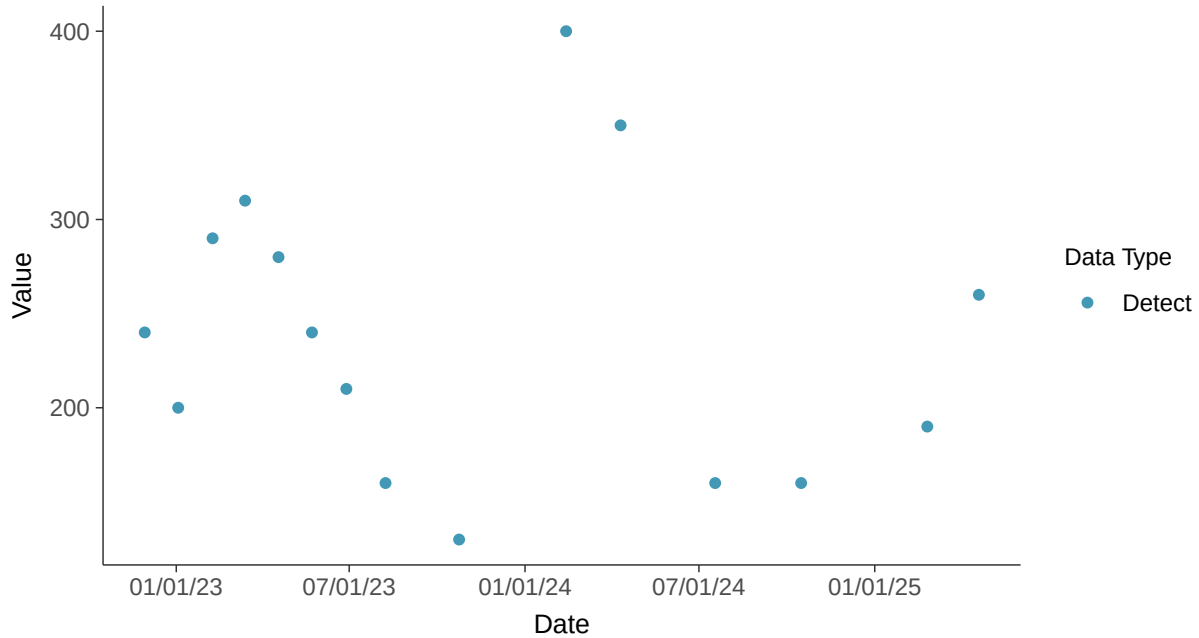


Appendix III: Calcium, MW-01R

ID: 11_2_3_107

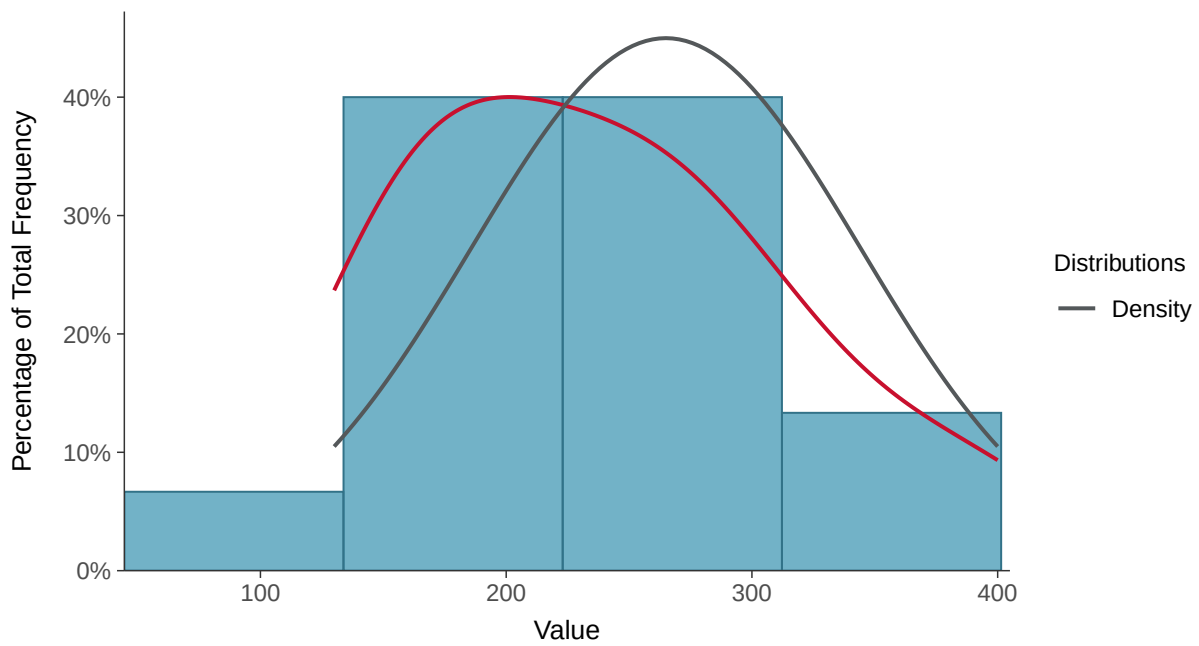
Scatter Plot

Calcium, MW-01R (mg/L)



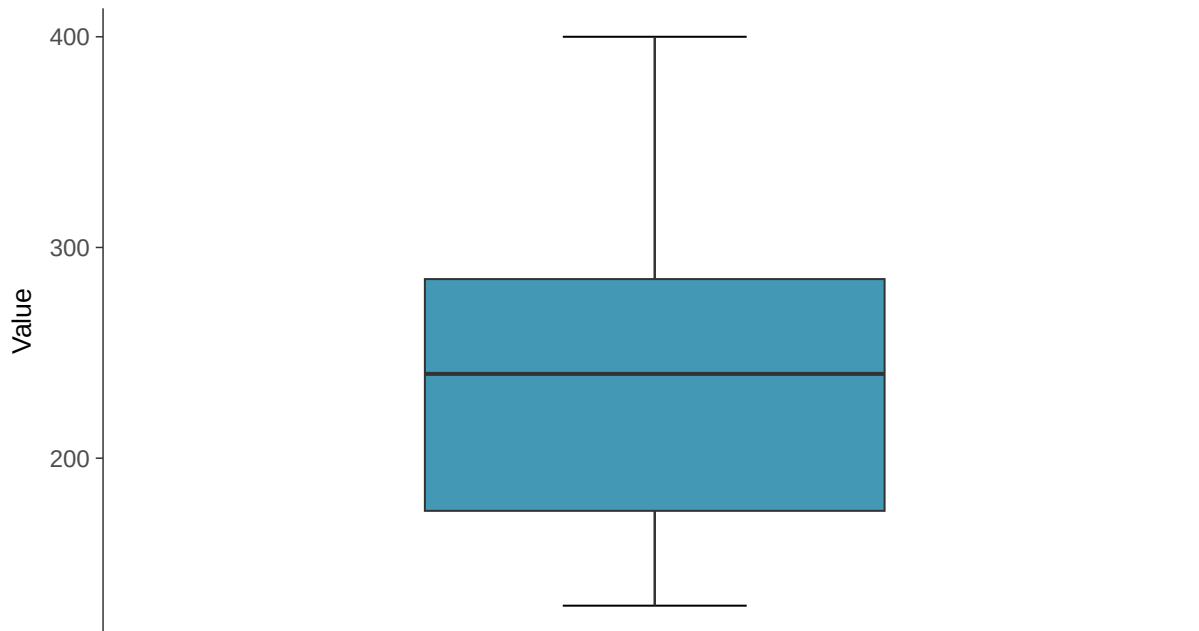
Histogram

Calcium, MW-01R (mg/L)



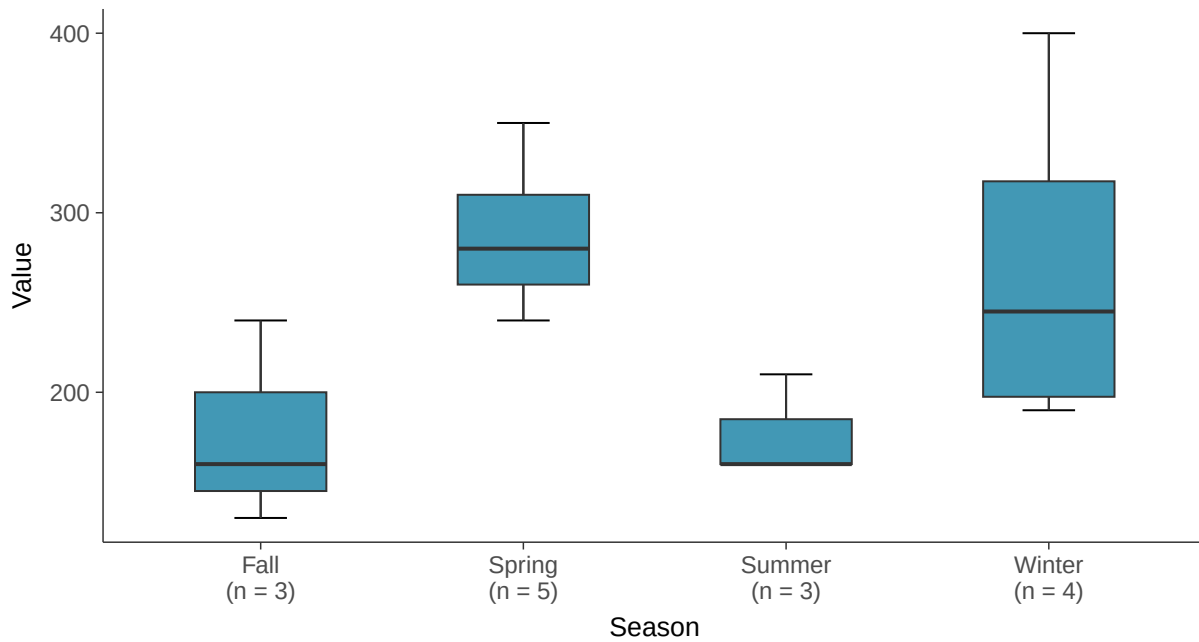
Boxplot

Calcium, MW-01R (mg/L)



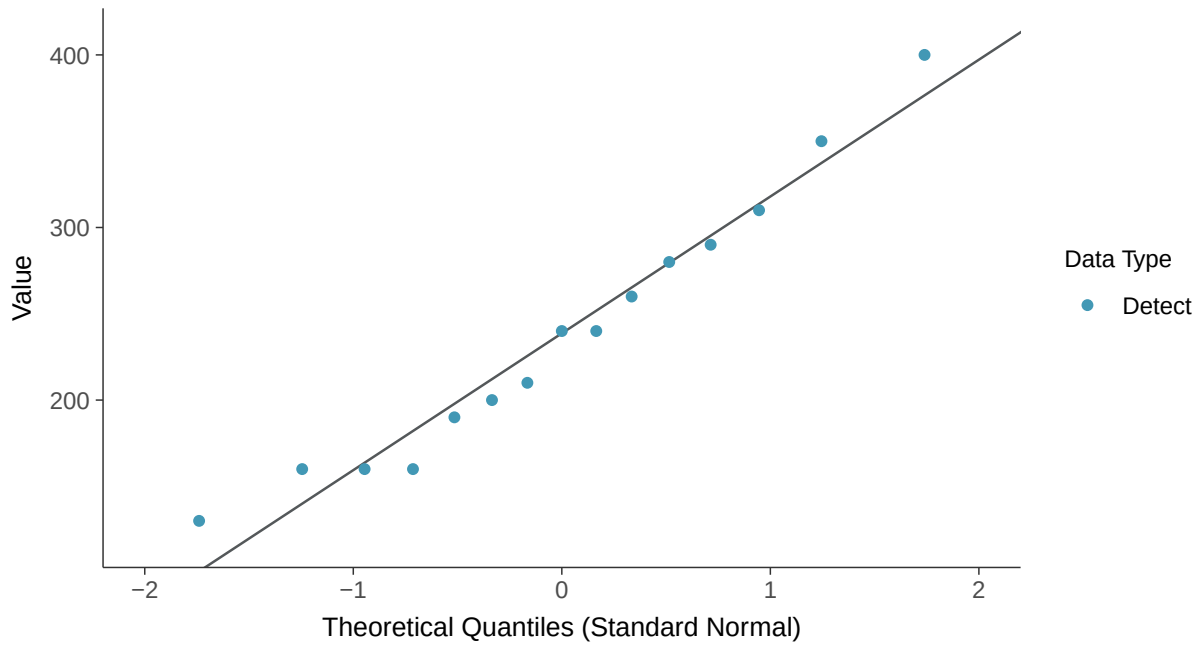
Boxplot by Season

Calcium, MW-01R (mg/L)



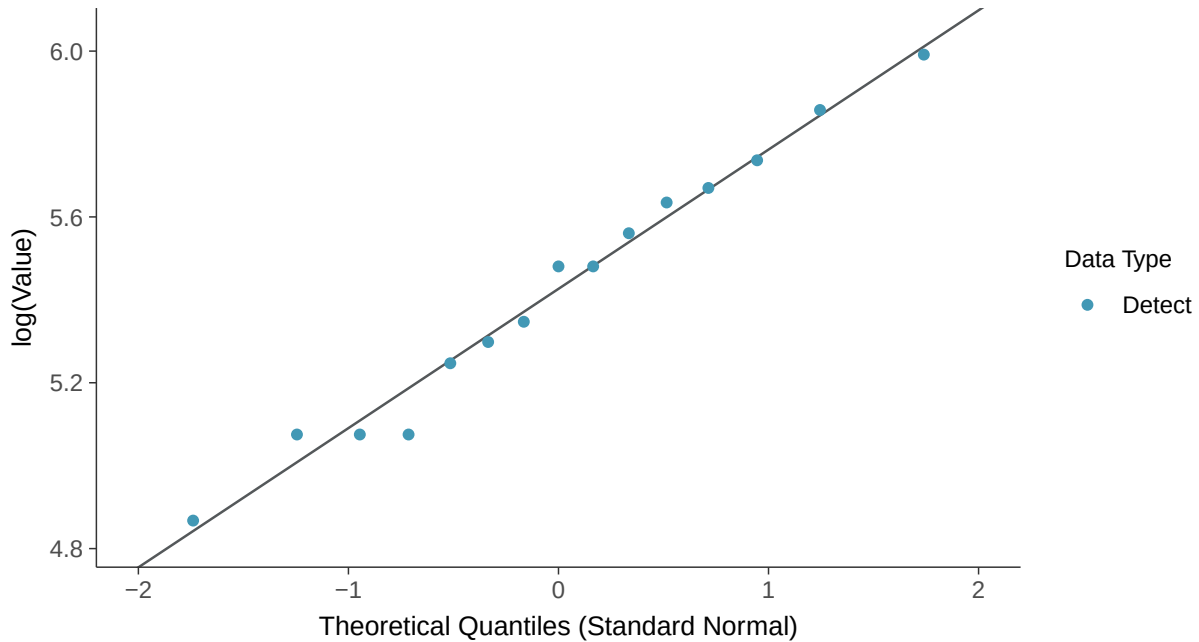
Normal Q-Q plot

Calcium, MW-01R (mg/L)



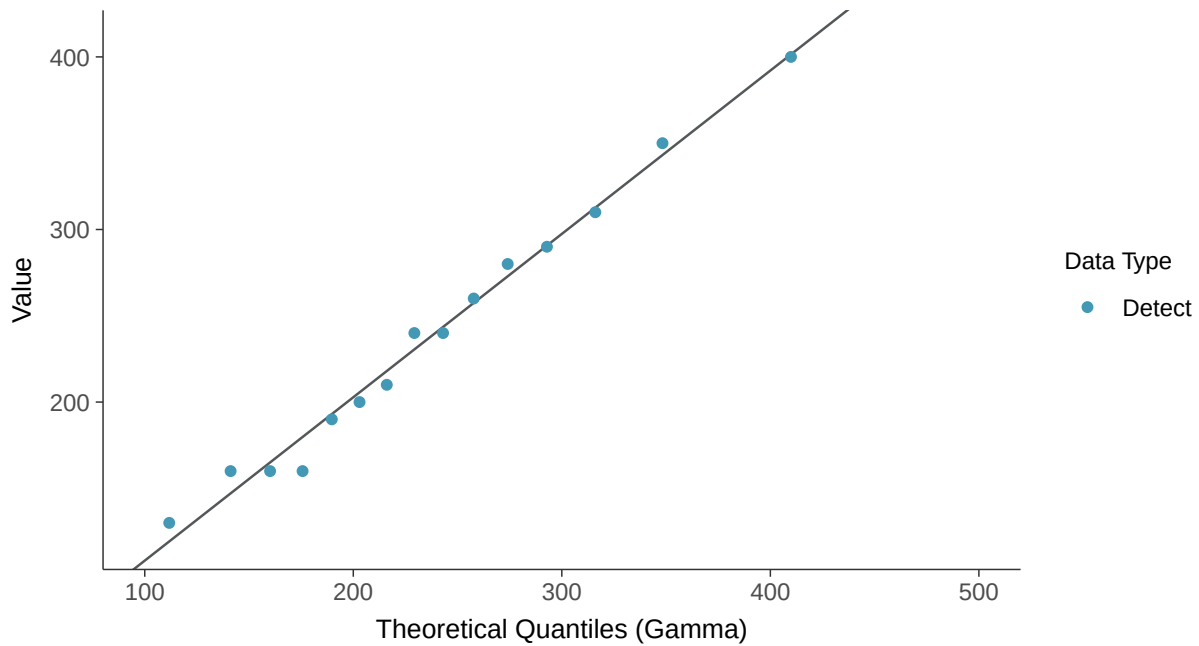
Lognormal Q-Q plot

Calcium, MW-01R (mg/L)



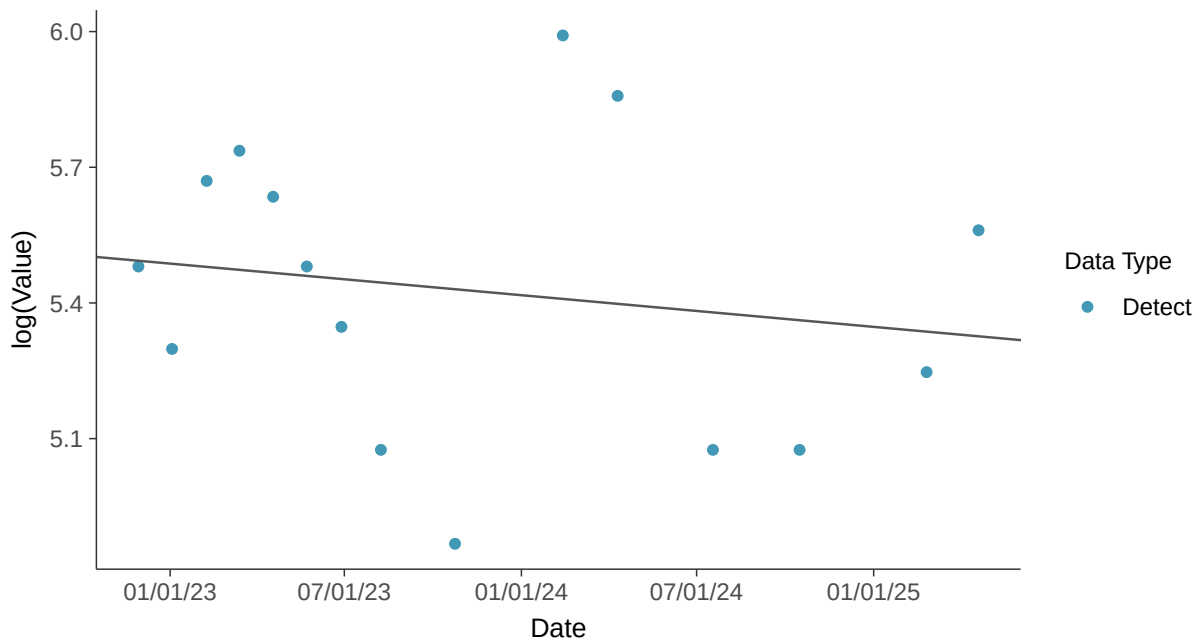
Gamma Q-Q plot

Calcium, MW-01R (mg/L)



Trend Regression: Lognormal MLE

Calcium, MW-01R (mg/L)

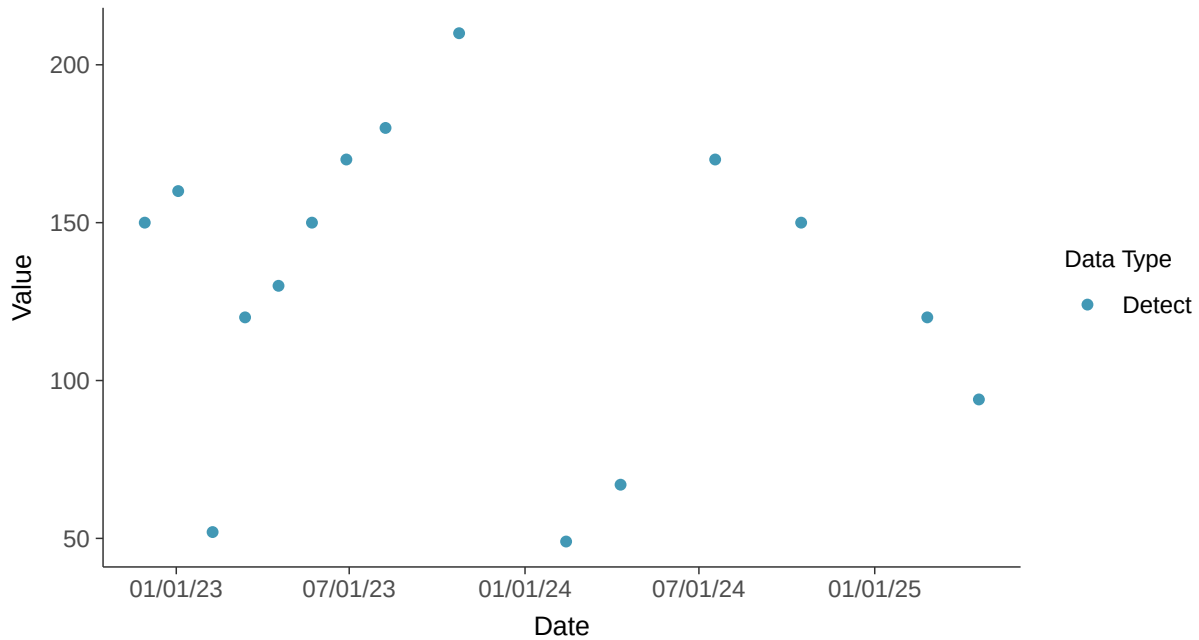


Appendix III: Chloride (as Cl), MW-01R

ID: 11_2_3_108

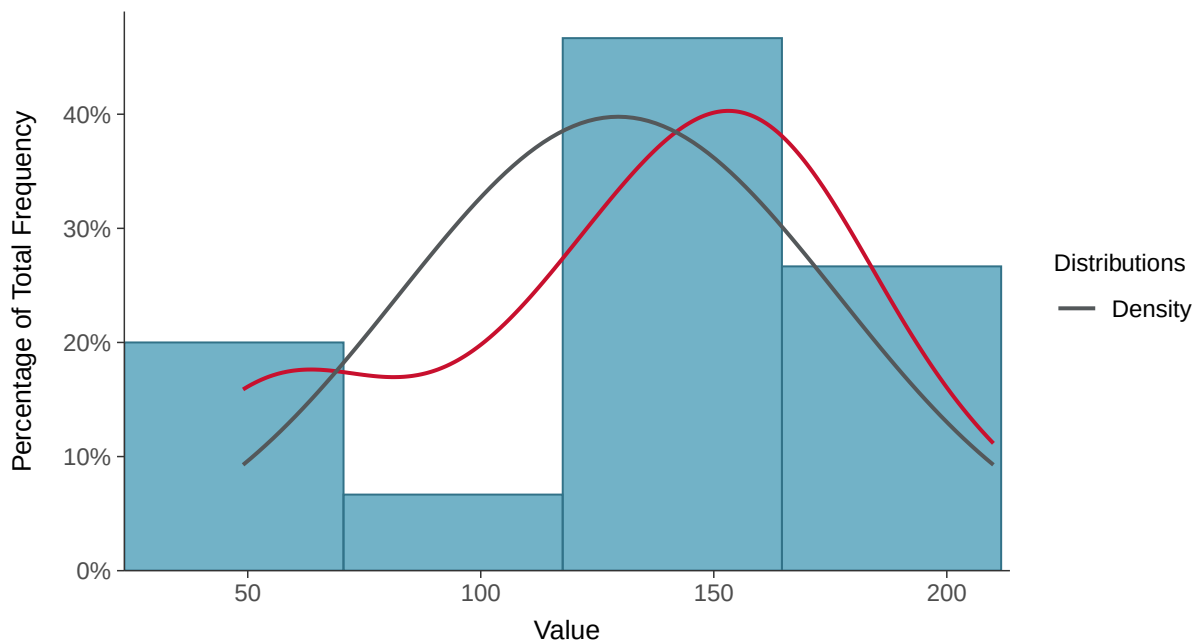
Scatter Plot

Chloride (as Cl), MW-01R (mg/L)



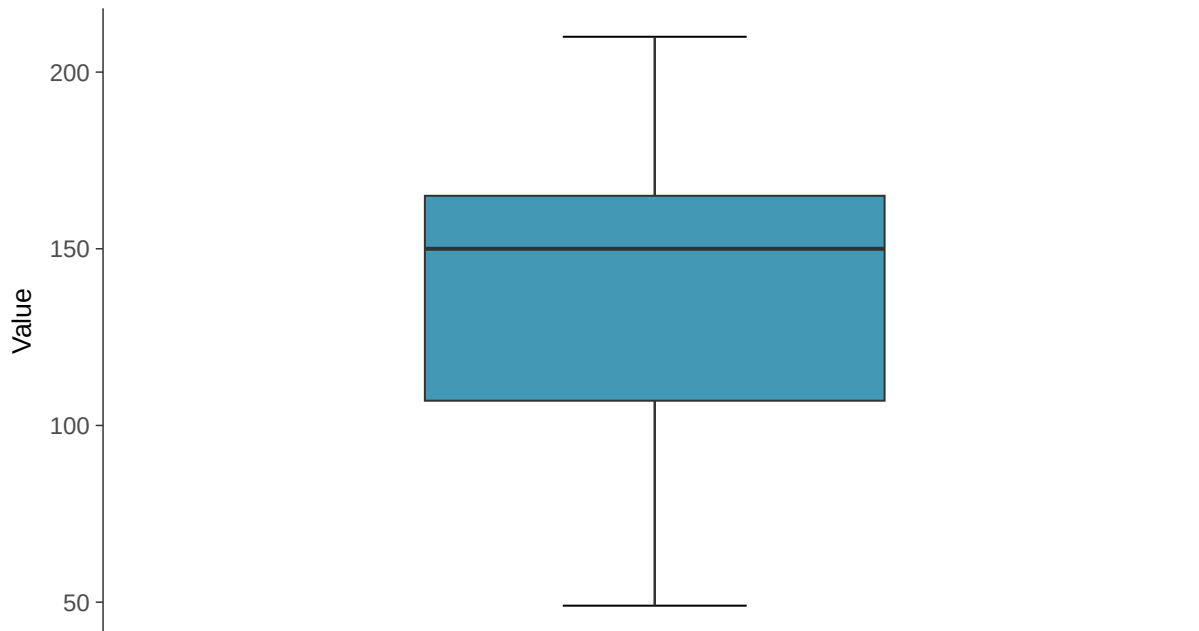
Histogram

Chloride (as Cl), MW-01R (mg/L)



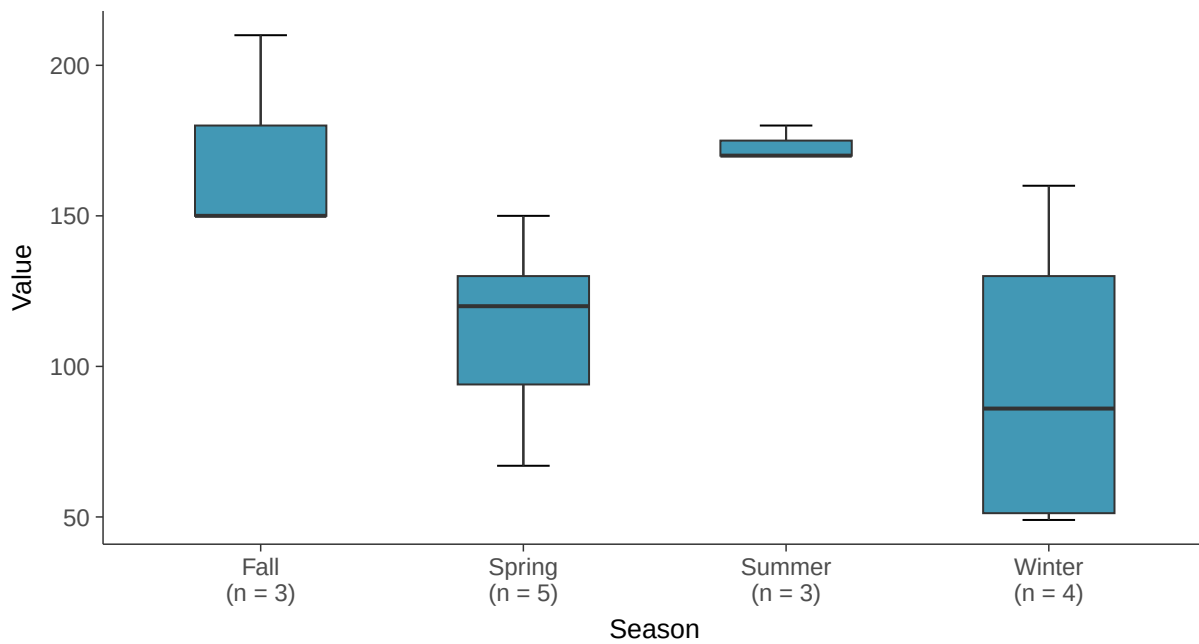
Boxplot

Chloride (as Cl), MW-01R (mg/L)



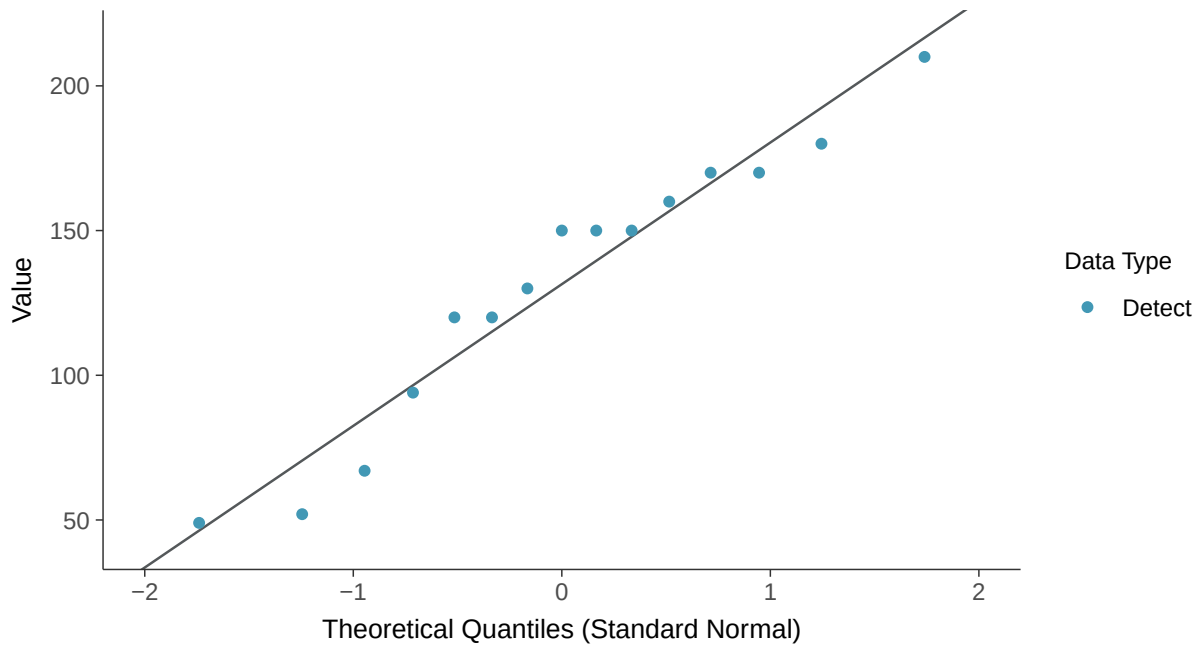
Boxplot by Season

Chloride (as Cl), MW-01R (mg/L)



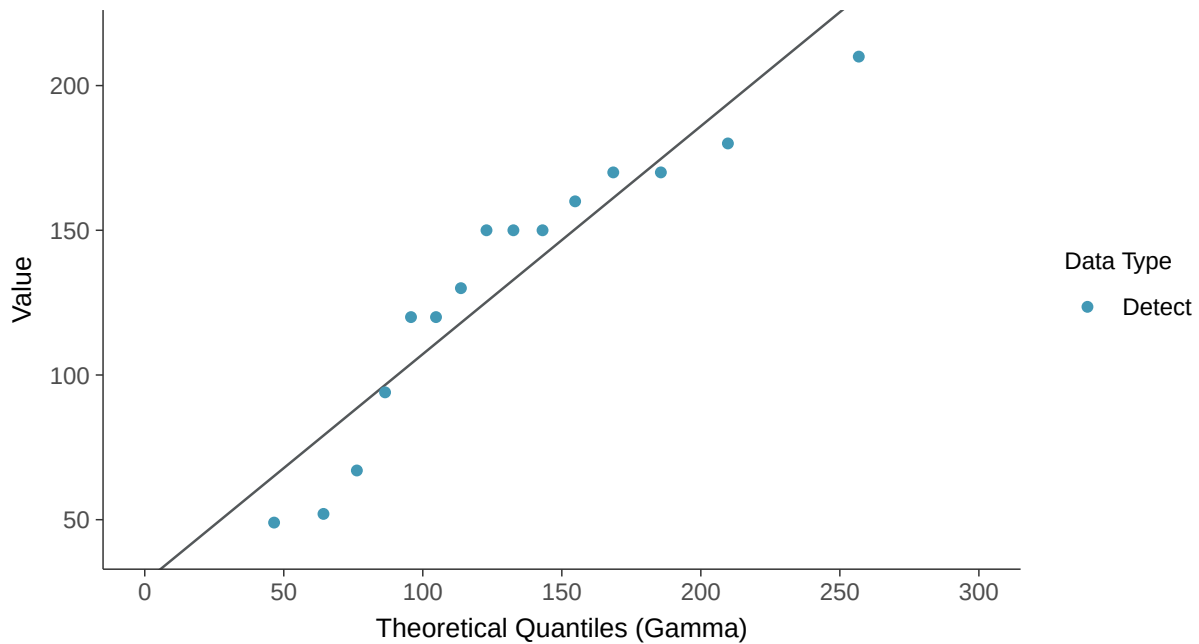
Normal Q-Q plot

Chloride (as Cl), MW-01R (mg/L)



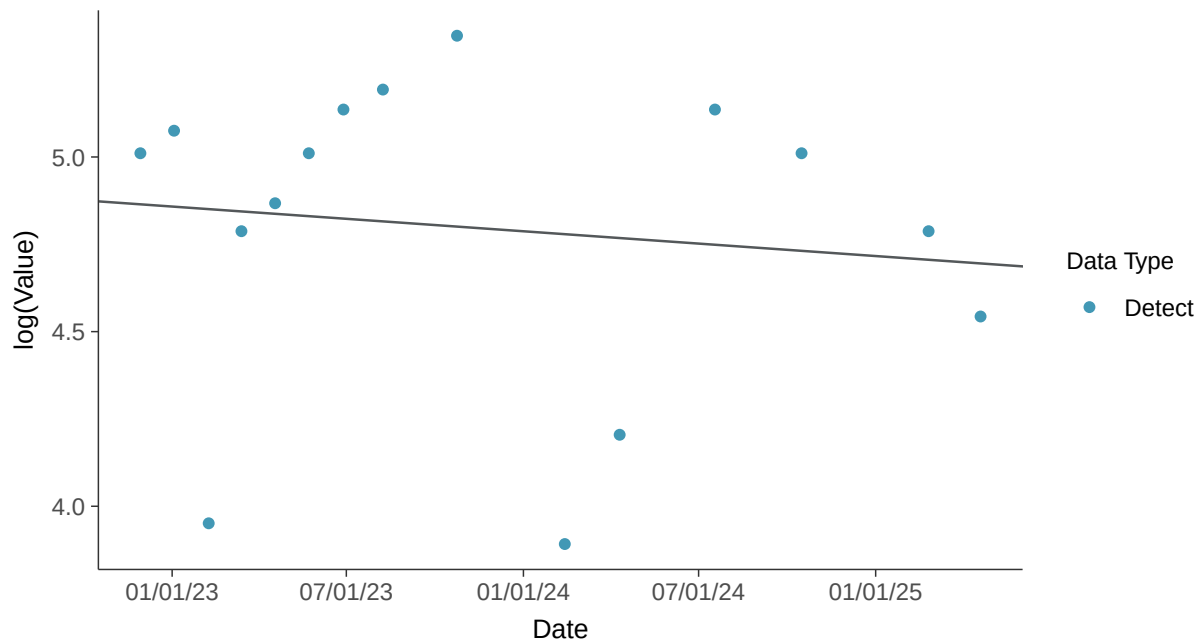
Gamma Q-Q plot

Chloride (as Cl), MW-01R (mg/L)



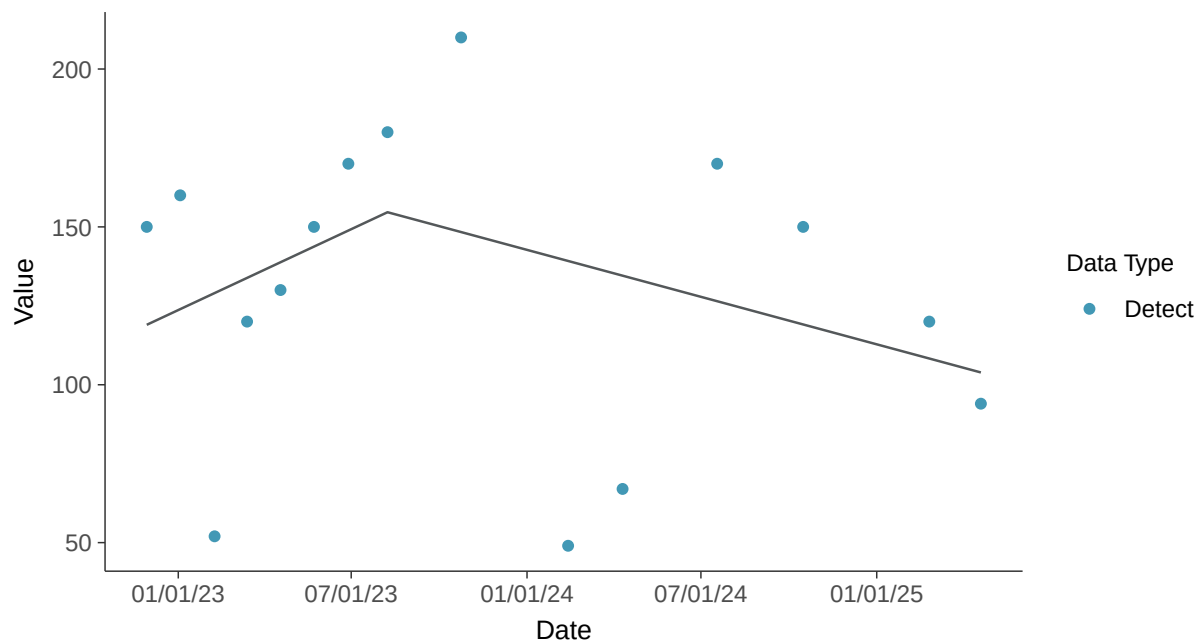
Trend Regression: Lognormal MLE

Chloride (as Cl), MW-01R (mg/L)



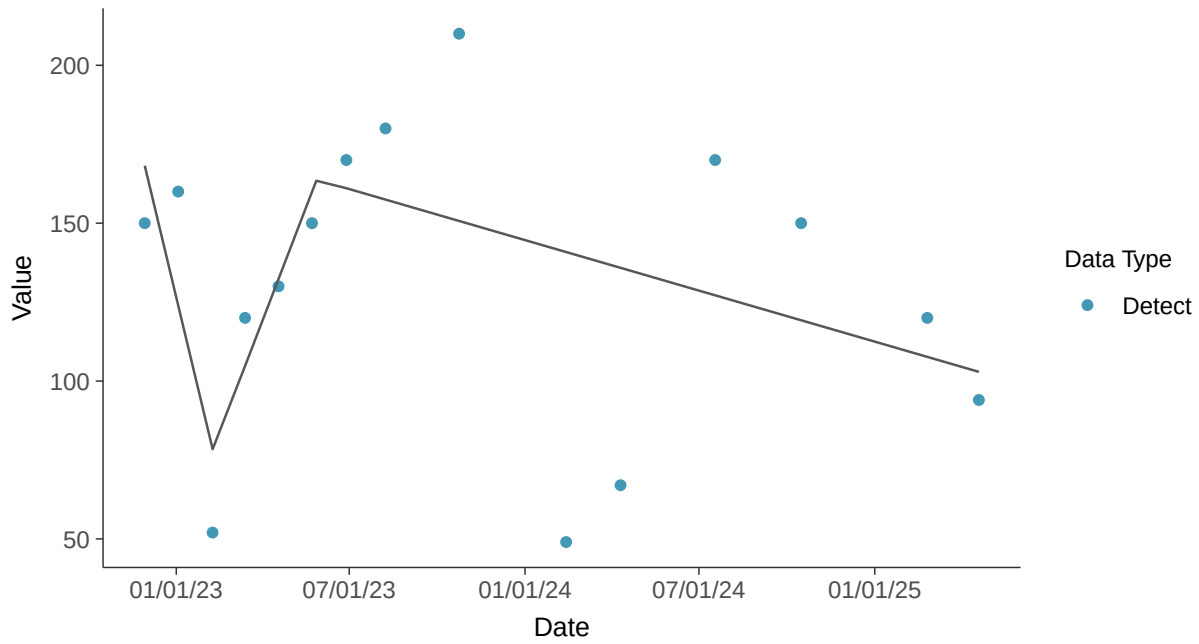
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-01R (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Chloride (as Cl), MW-01R (mg/L)

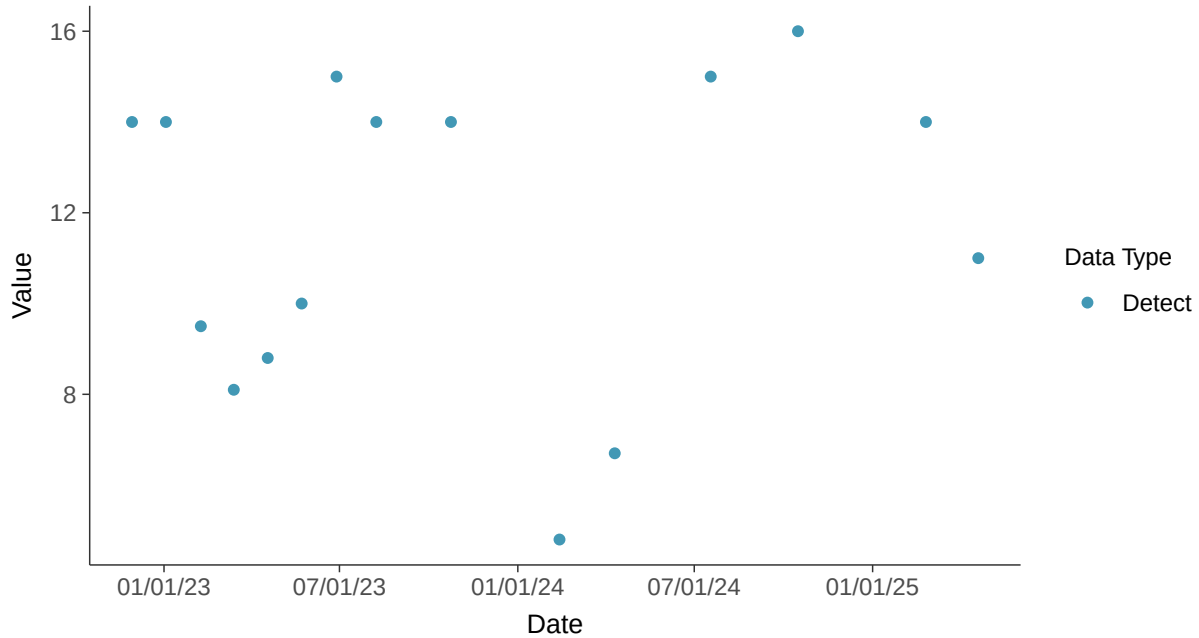


Appendix III: Fluoride, MW-01R

ID: 11_2_3_112

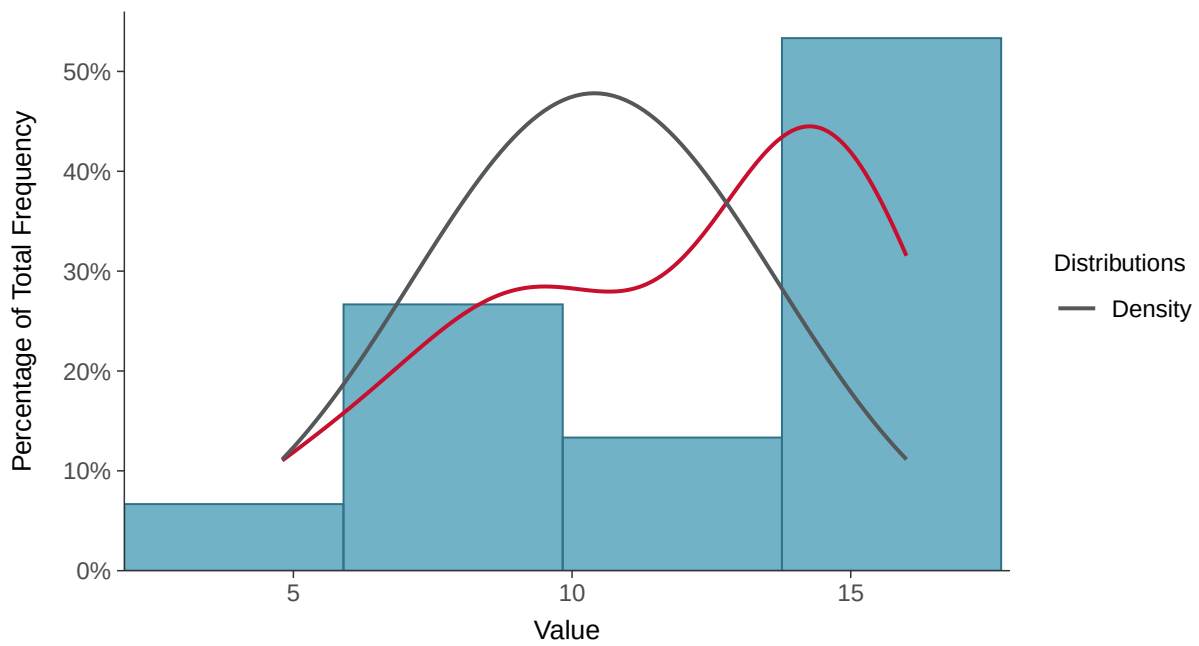
Scatter Plot

Fluoride, MW-01R (mg/L)



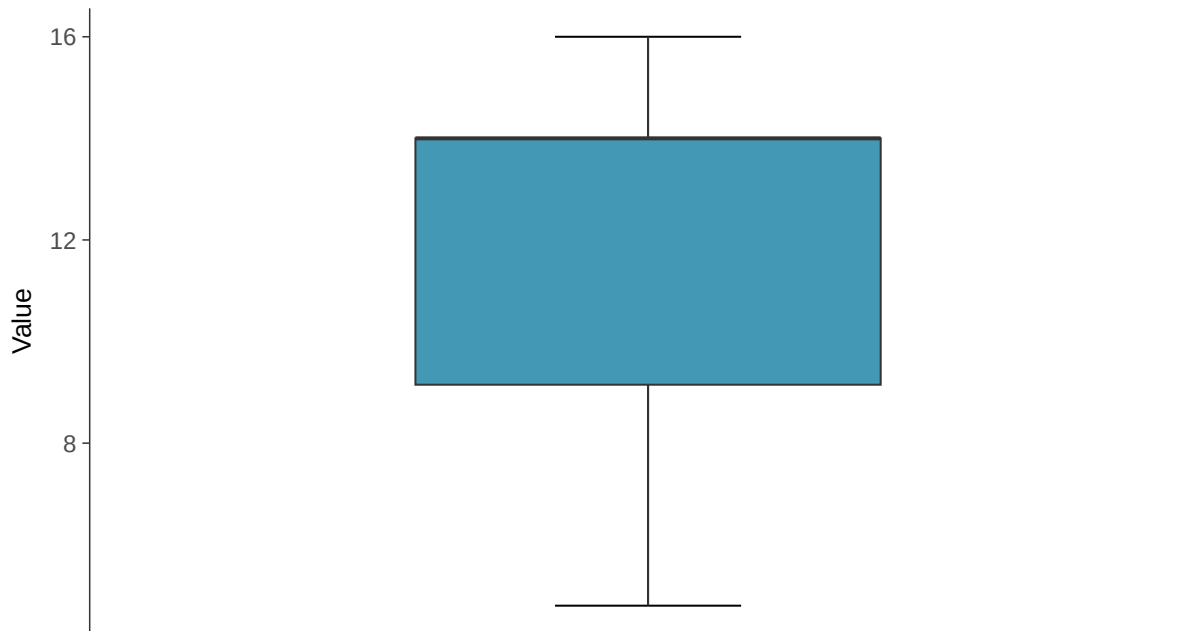
Histogram

Fluoride, MW-01R (mg/L)



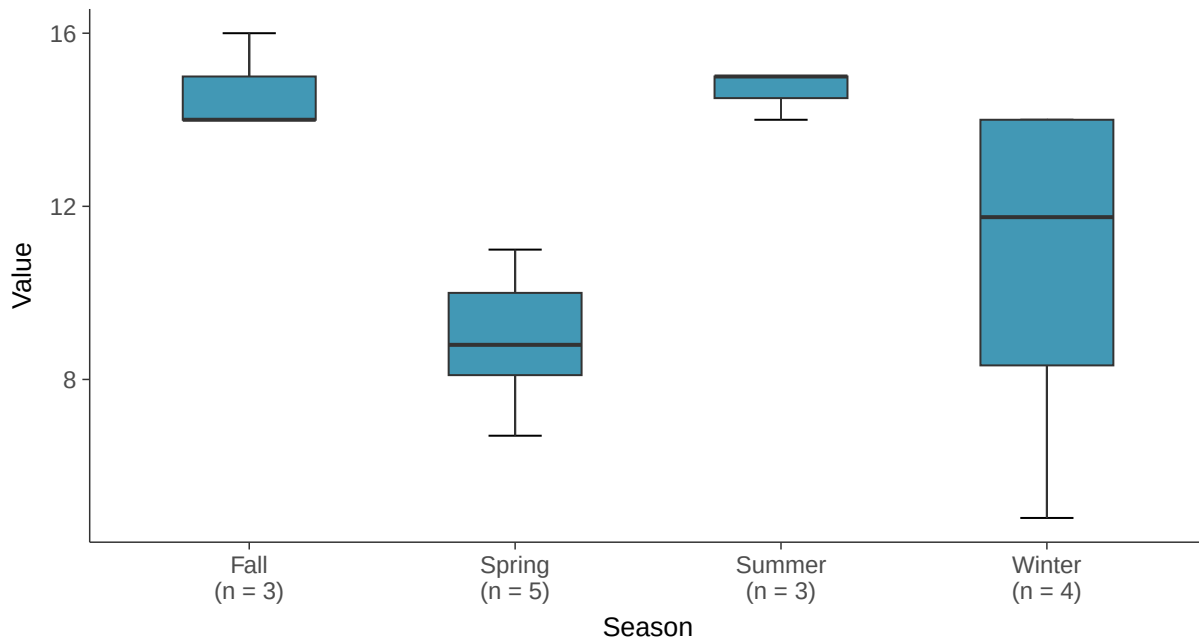
Boxplot

Fluoride, MW-01R (mg/L)



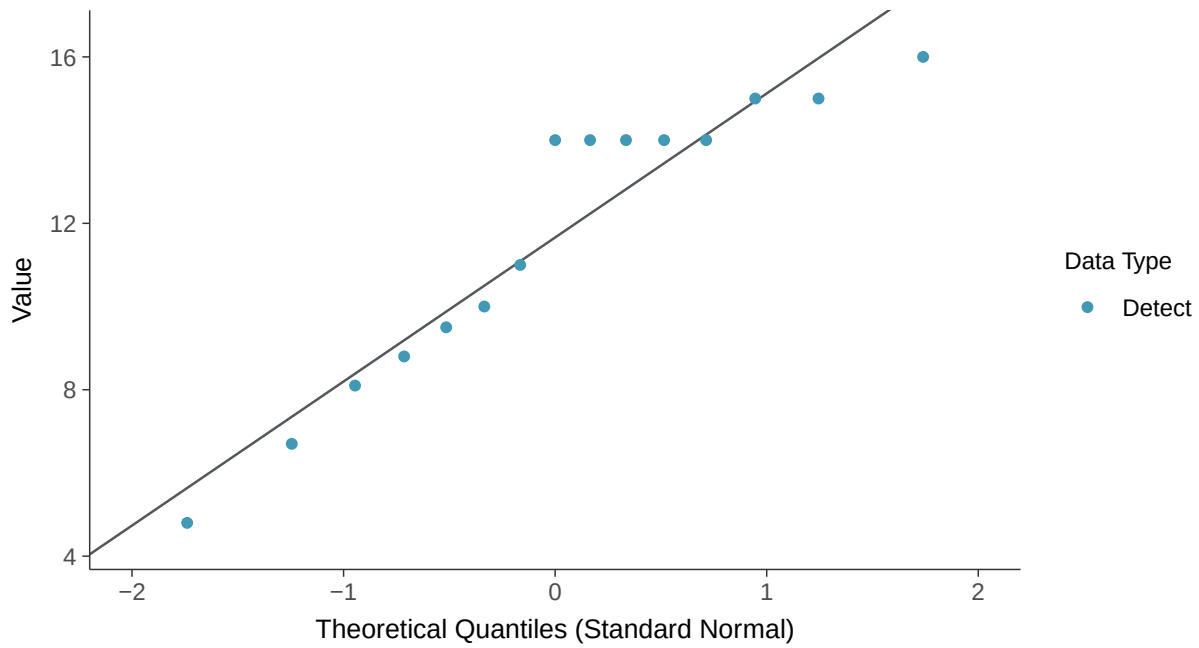
Boxplot by Season

Fluoride, MW-01R (mg/L)



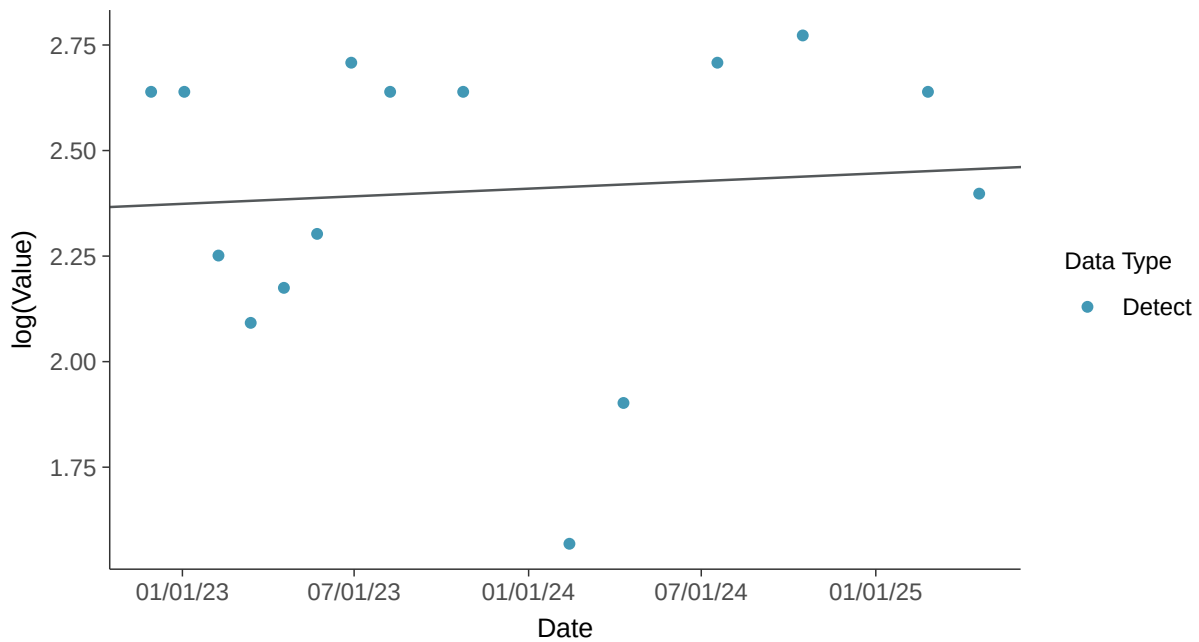
Normal Q-Q plot

Fluoride, MW-01R (mg/L)



Trend Regression: Lognormal MLE

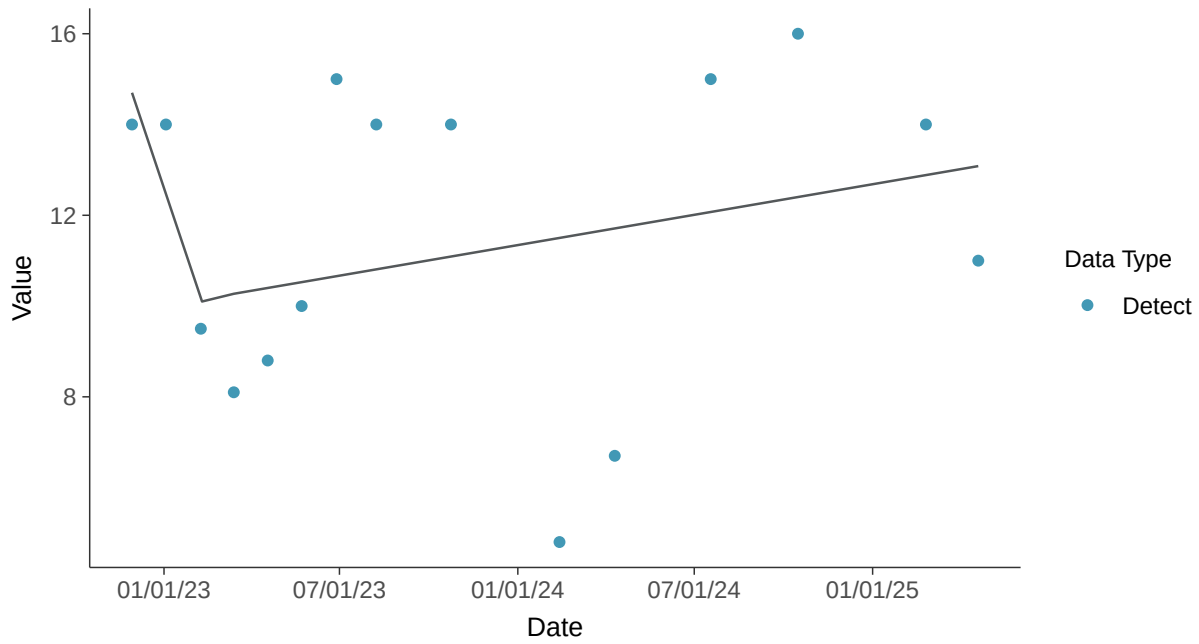
Fluoride, MW-01R (mg/L)





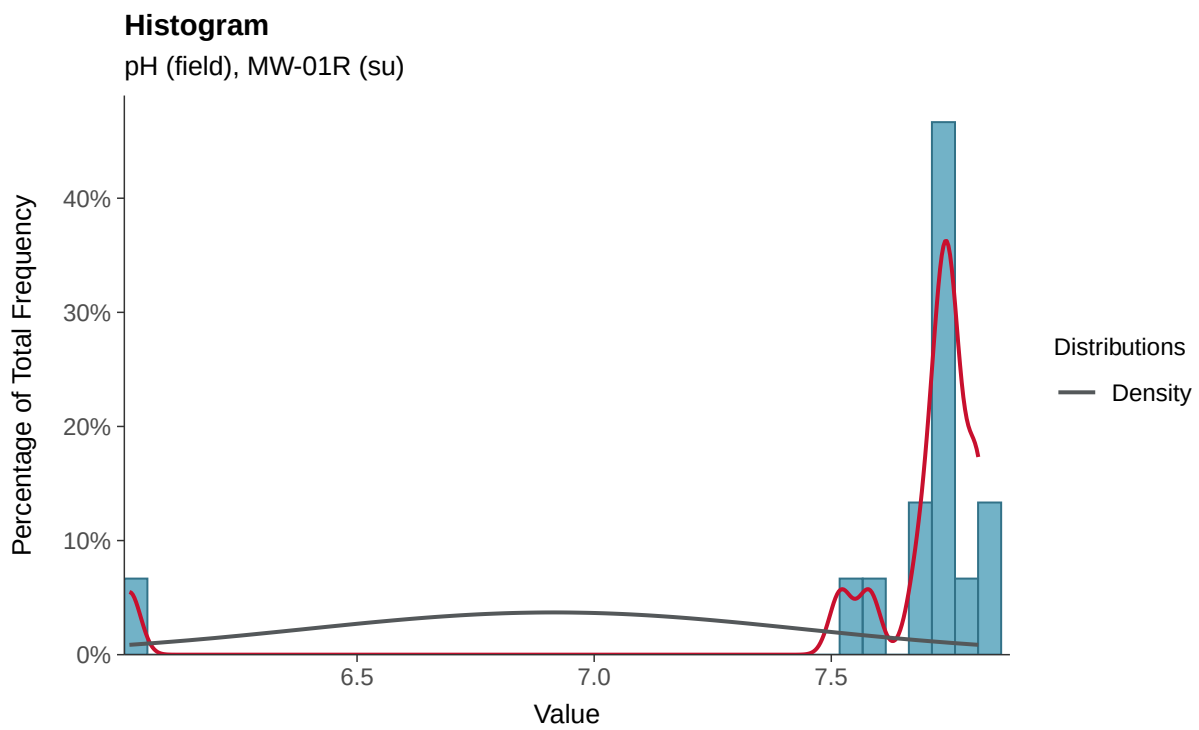
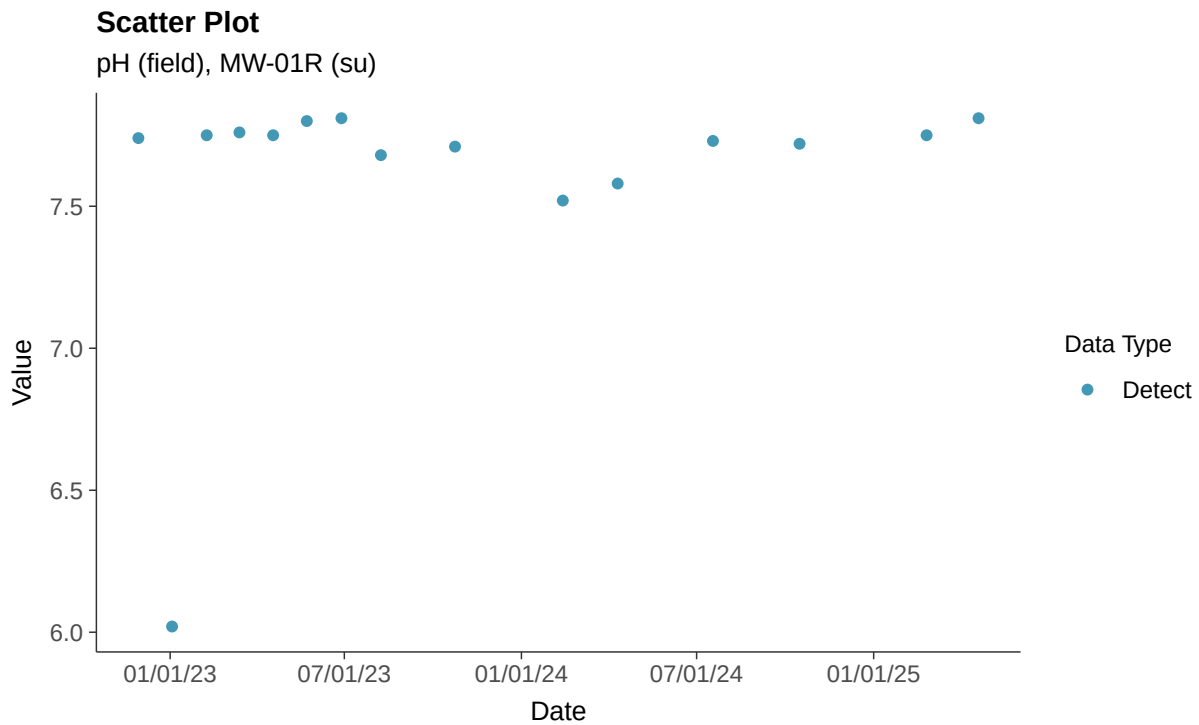
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-01R (mg/L)



Appendix III: pH (field), MW-01R

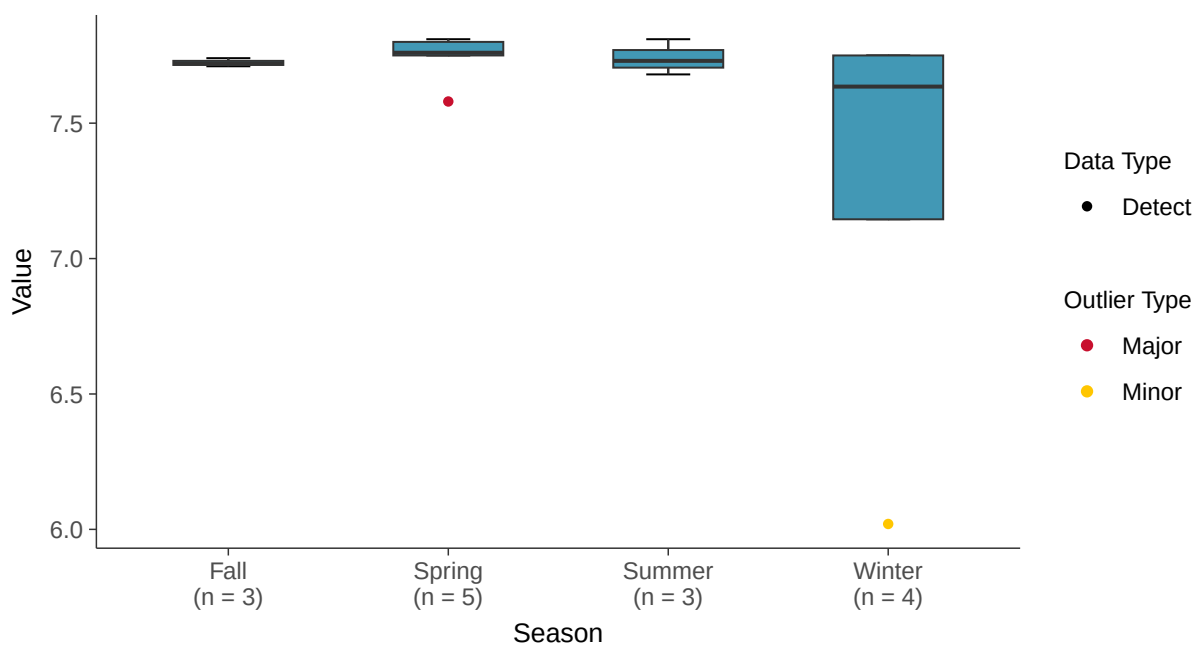
ID: 11_2_3_120



pH (field), MW-01R (su)

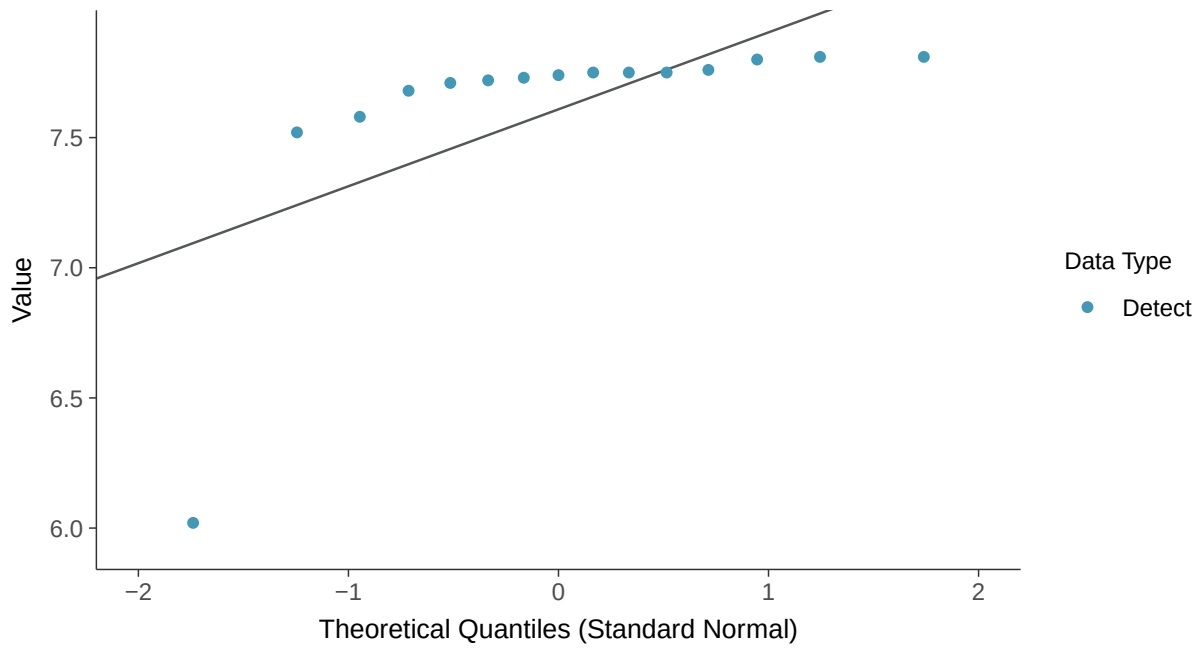


pH (field), MW-01R (su)



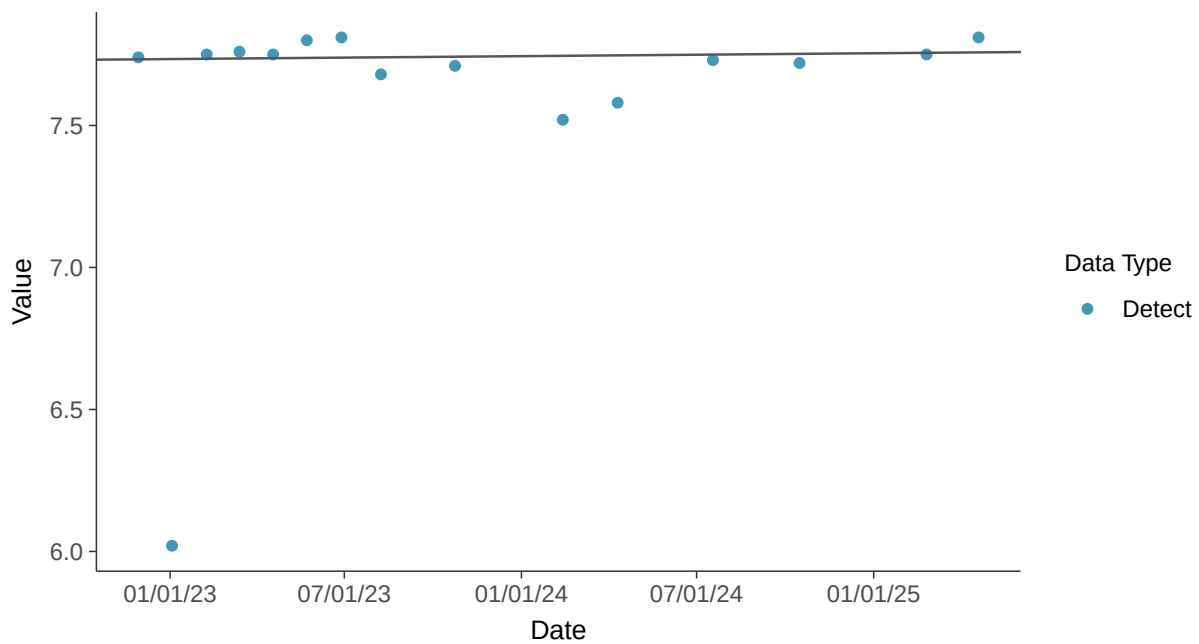
Normal Q-Q plot

pH (field), MW-01R (su)



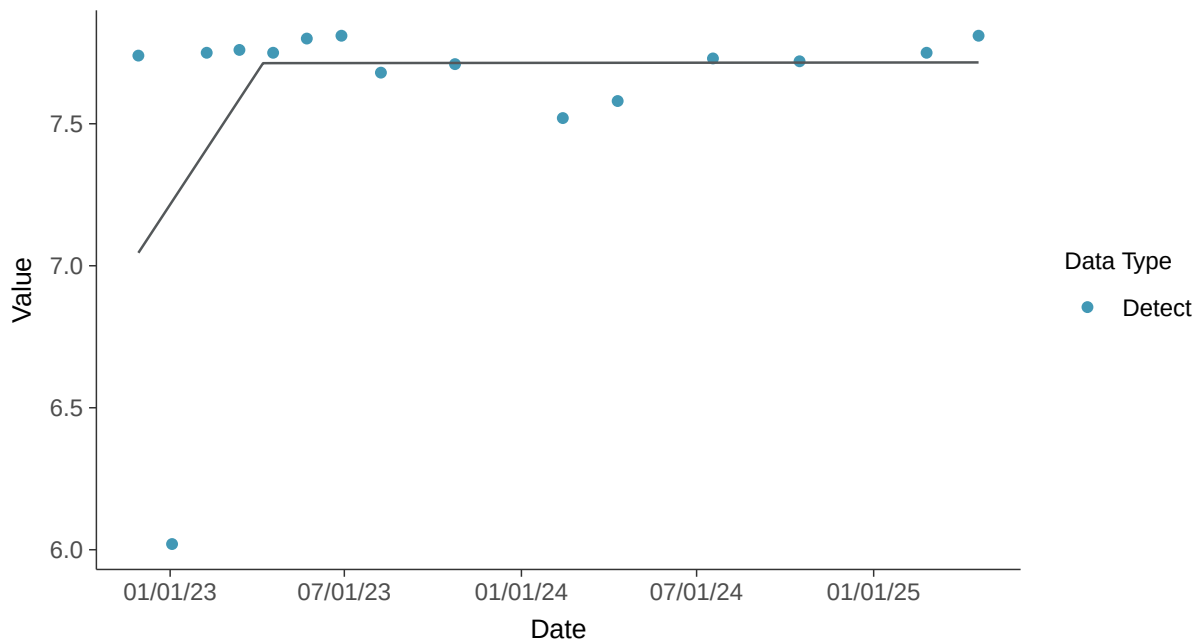
Trend Regression: Mann-Kendall/Theil-Sen Estimate

pH (field), MW-01R (su)



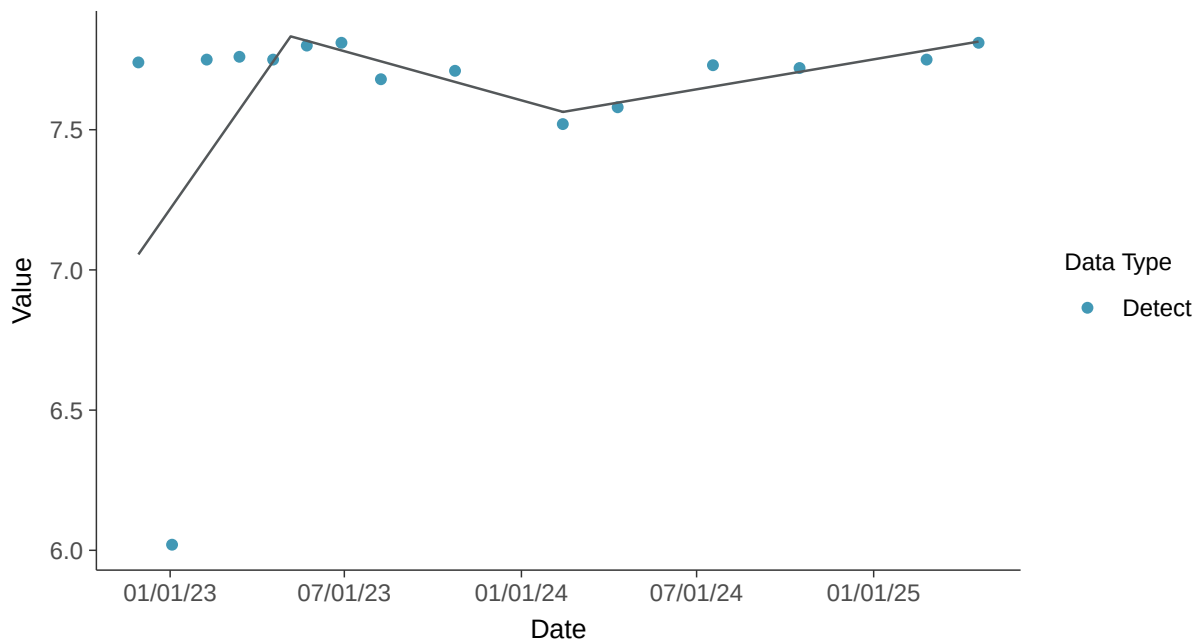
Trend Regression: Piecewise Linear-Linear

pH (field), MW-01R (su)



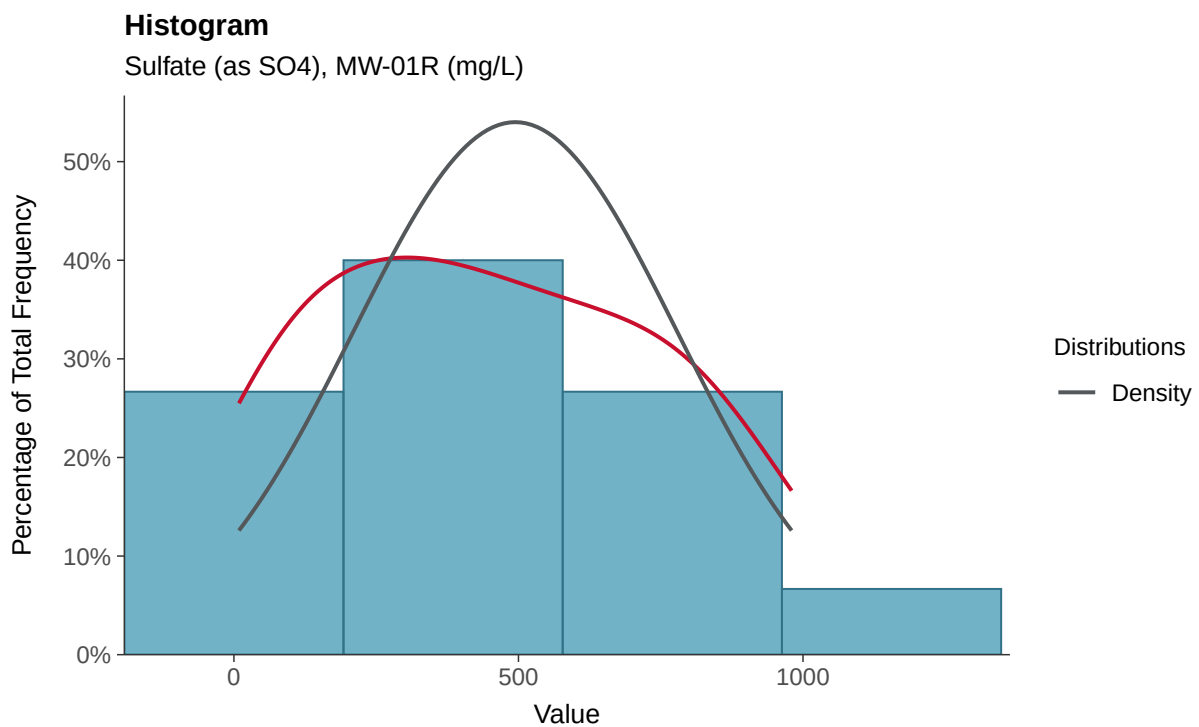
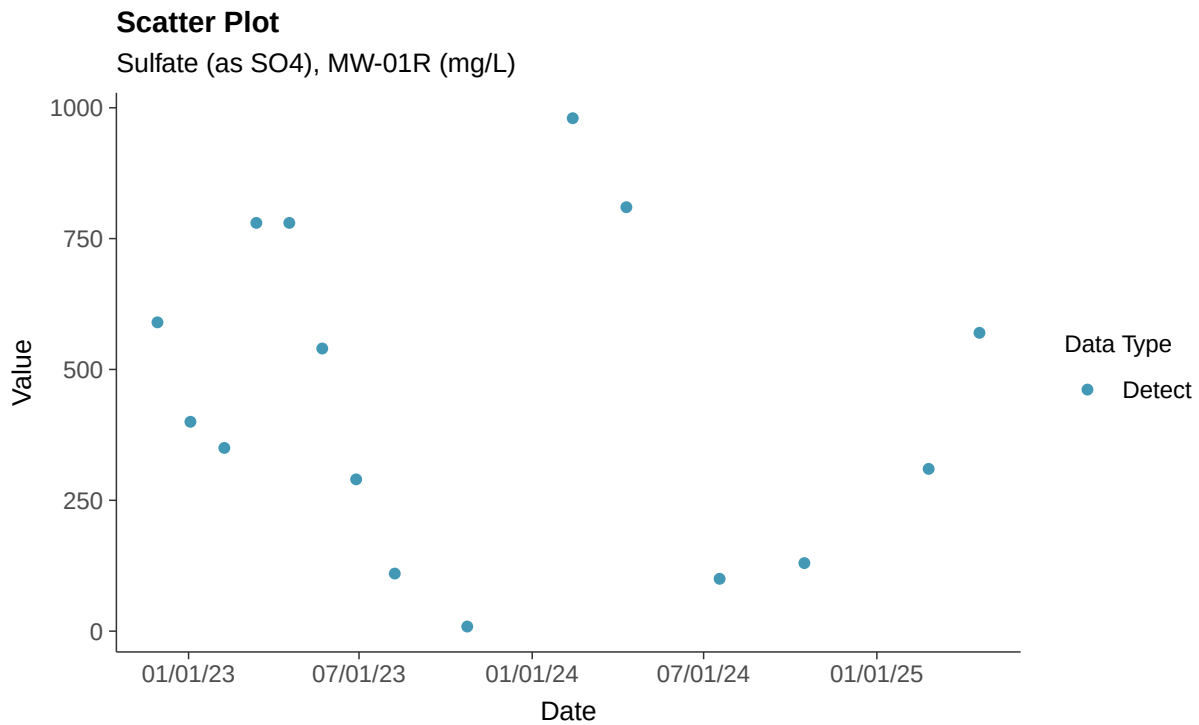
Trend Regression: Piecewise Linear-Linear-Linear

pH (field), MW-01R (su)



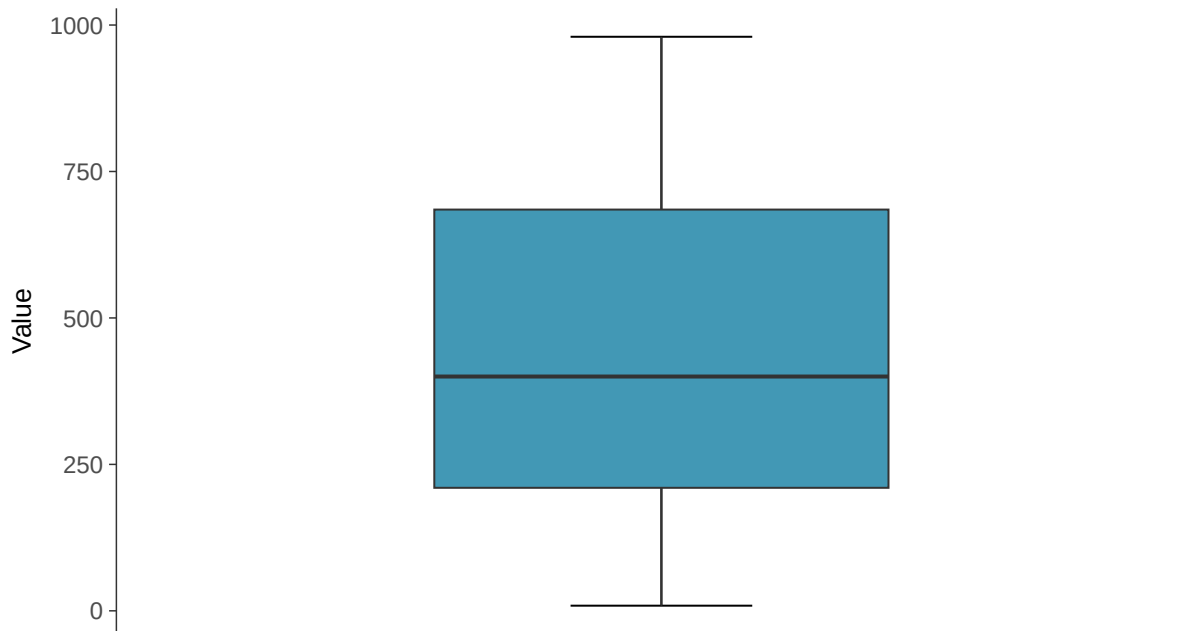
Appendix III: Sulfate (as SO₄), MW-01R

ID: 11_2_3_124



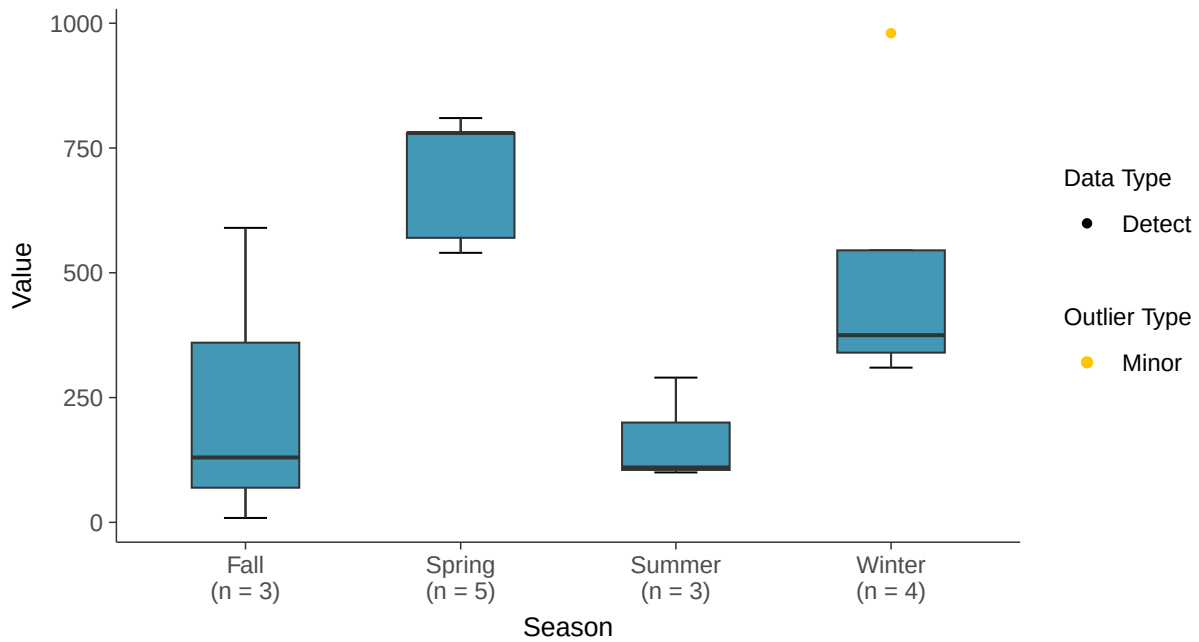
Boxplot

Sulfate (as SO₄), MW-01R (mg/L)



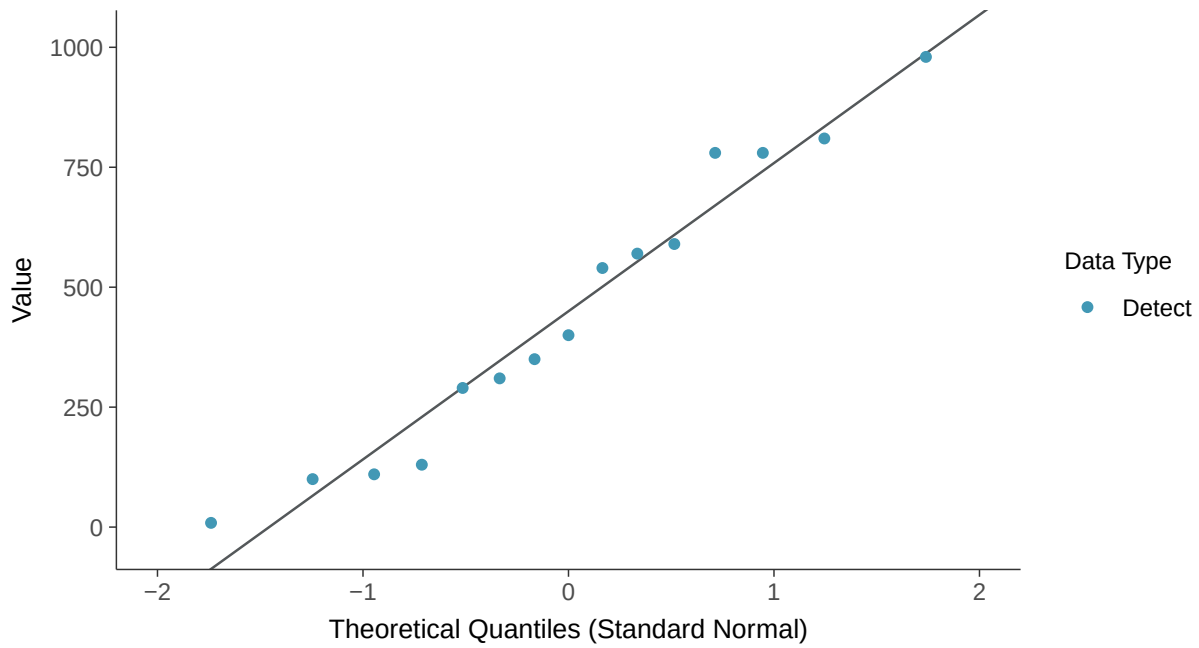
Boxplot by Season

Sulfate (as SO₄), MW-01R (mg/L)



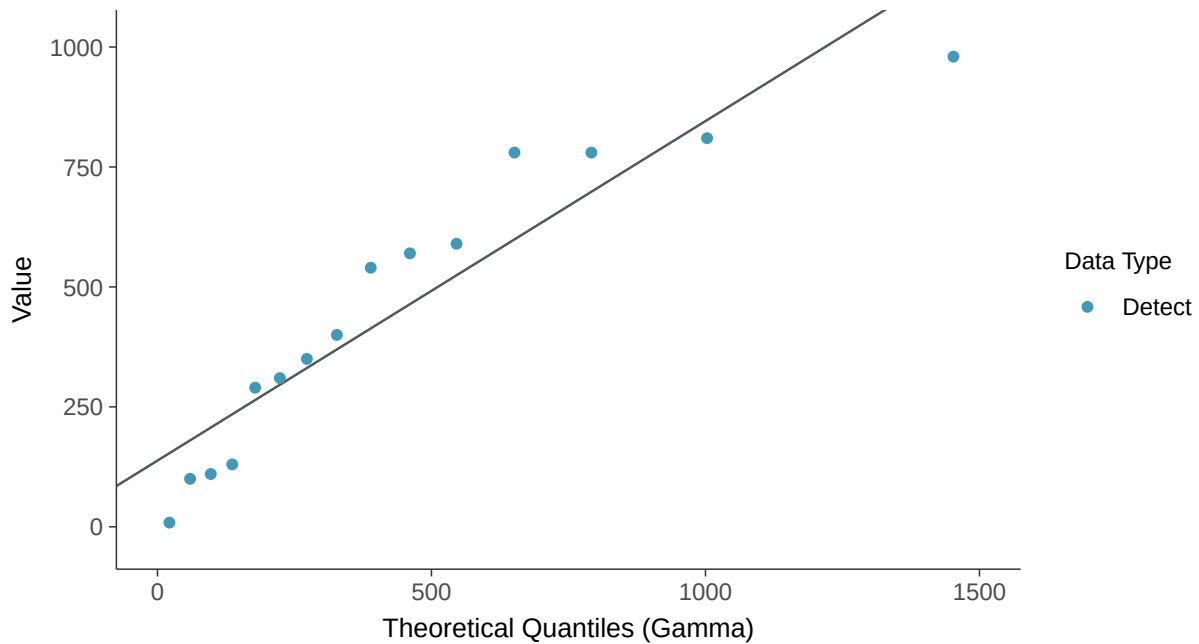
Normal Q-Q plot

Sulfate (as SO₄), MW-01R (mg/L)



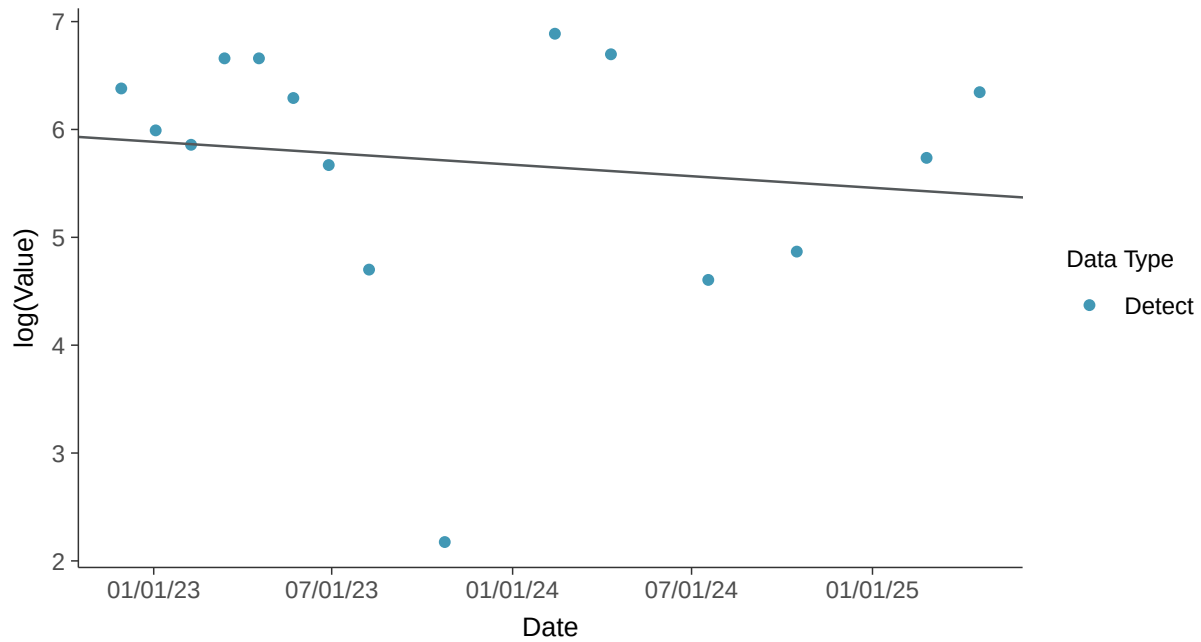
Gamma Q-Q plot

Sulfate (as SO₄), MW-01R (mg/L)



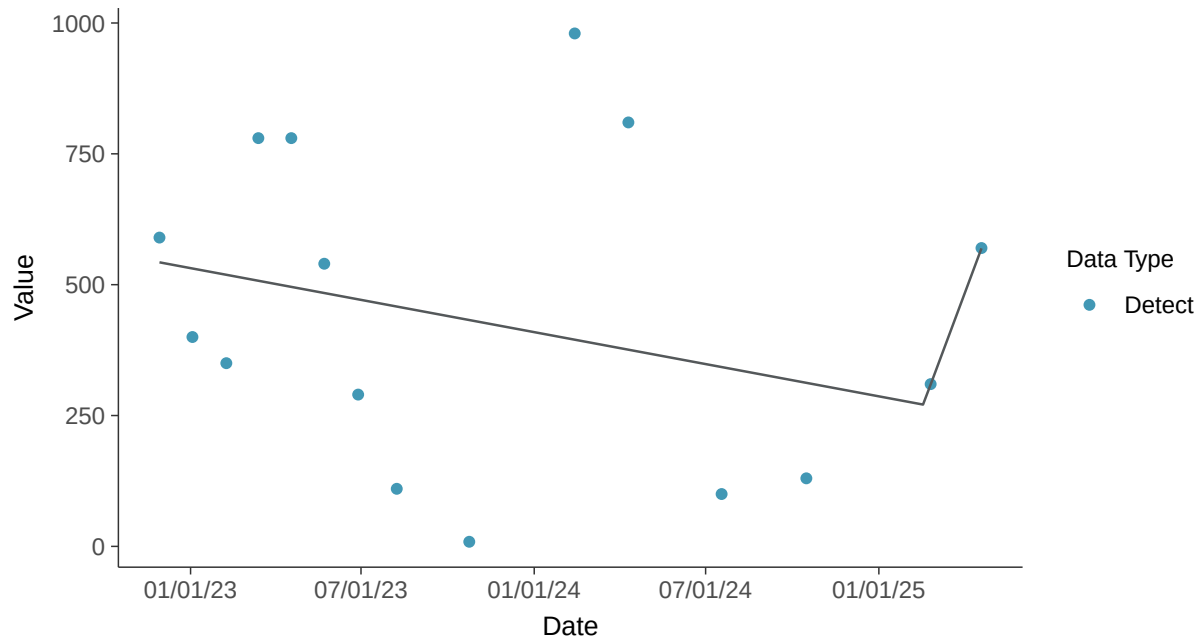
Trend Regression: Lognormal MLE

Sulfate (as SO₄), MW-01R (mg/L)



Trend Regression: Piecewise Linear-Linear

Sulfate (as SO₄), MW-01R (mg/L)

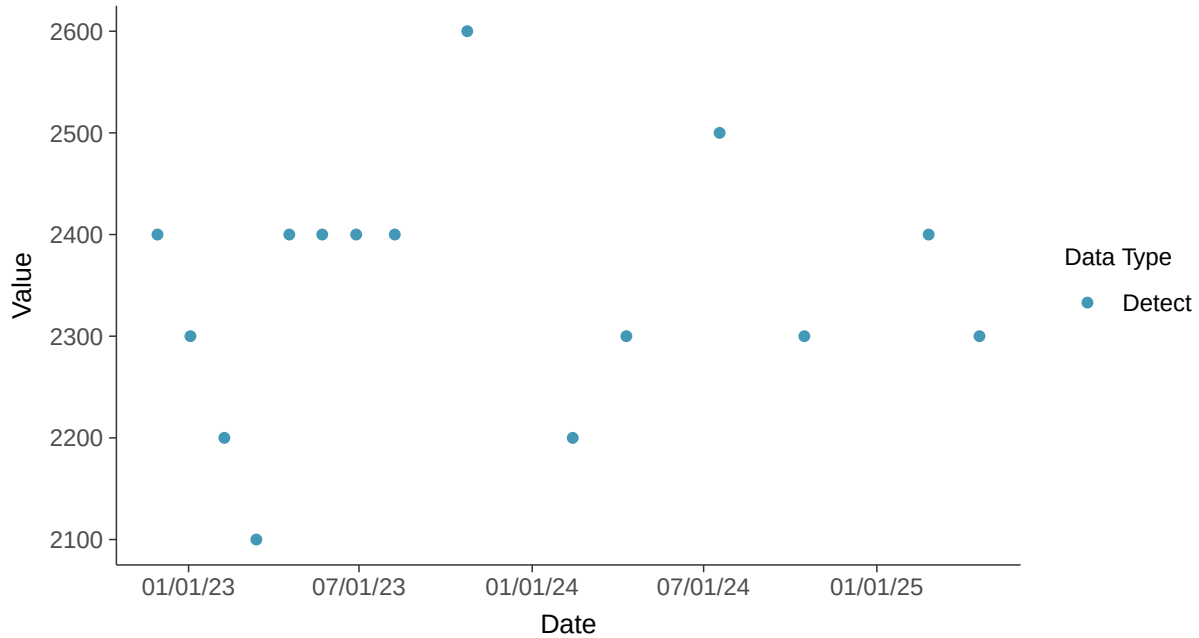


Appendix III: Total Dissolved Solids, MW-01R

ID: 11_2_3_126

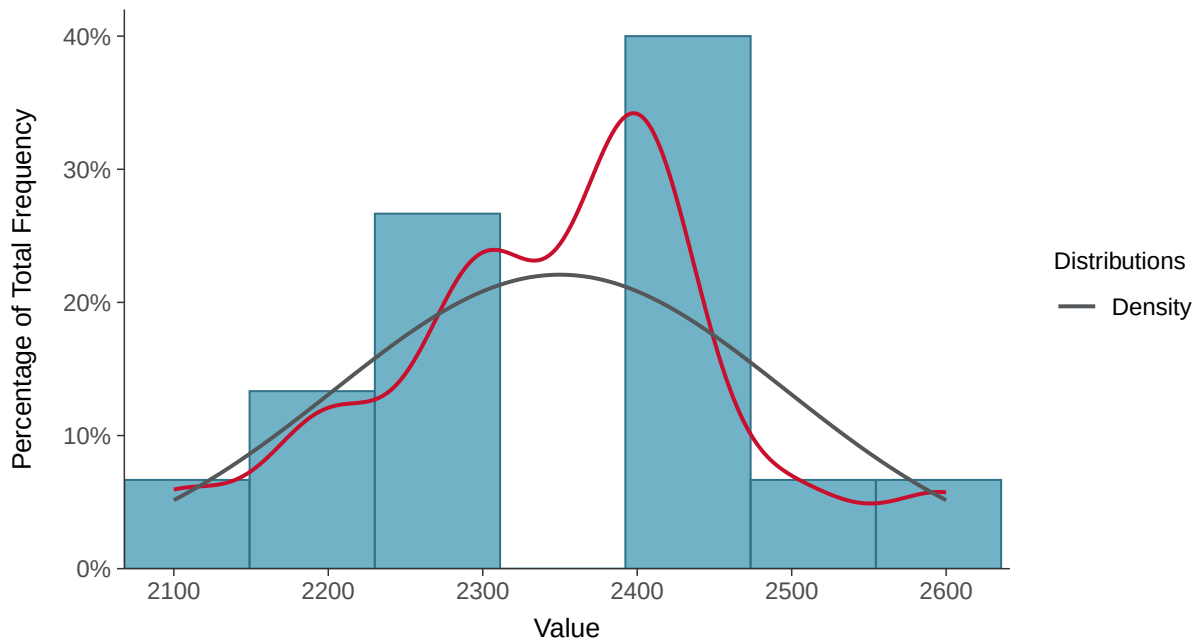
Scatter Plot

Total Dissolved Solids, MW-01R (mg/L)



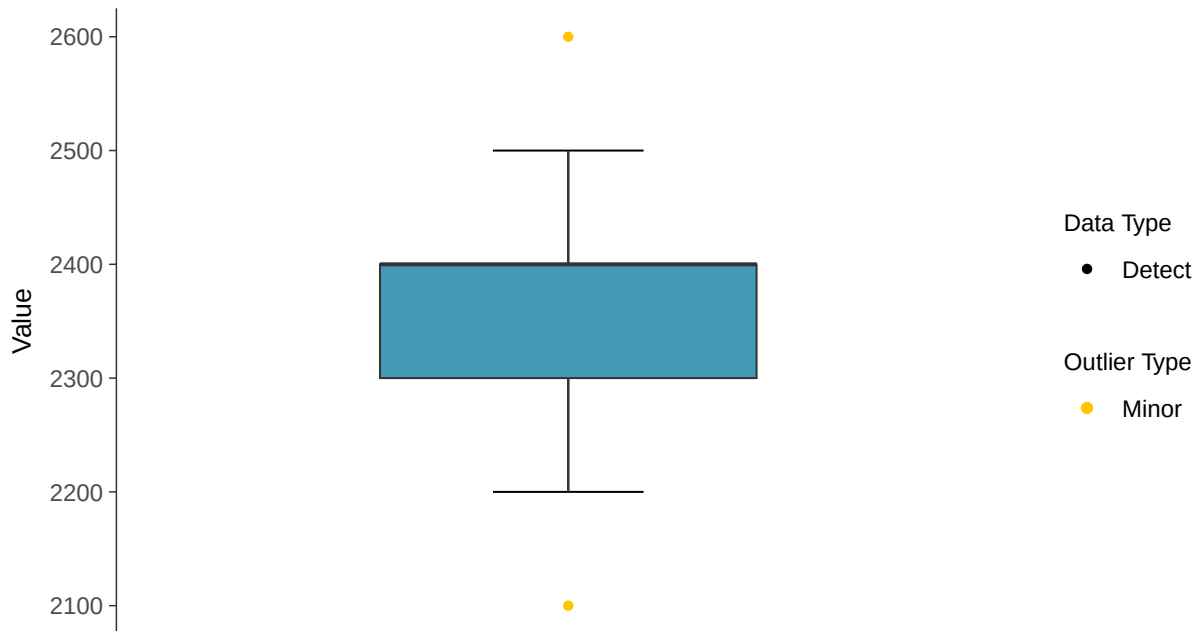
Histogram

Total Dissolved Solids, MW-01R (mg/L)



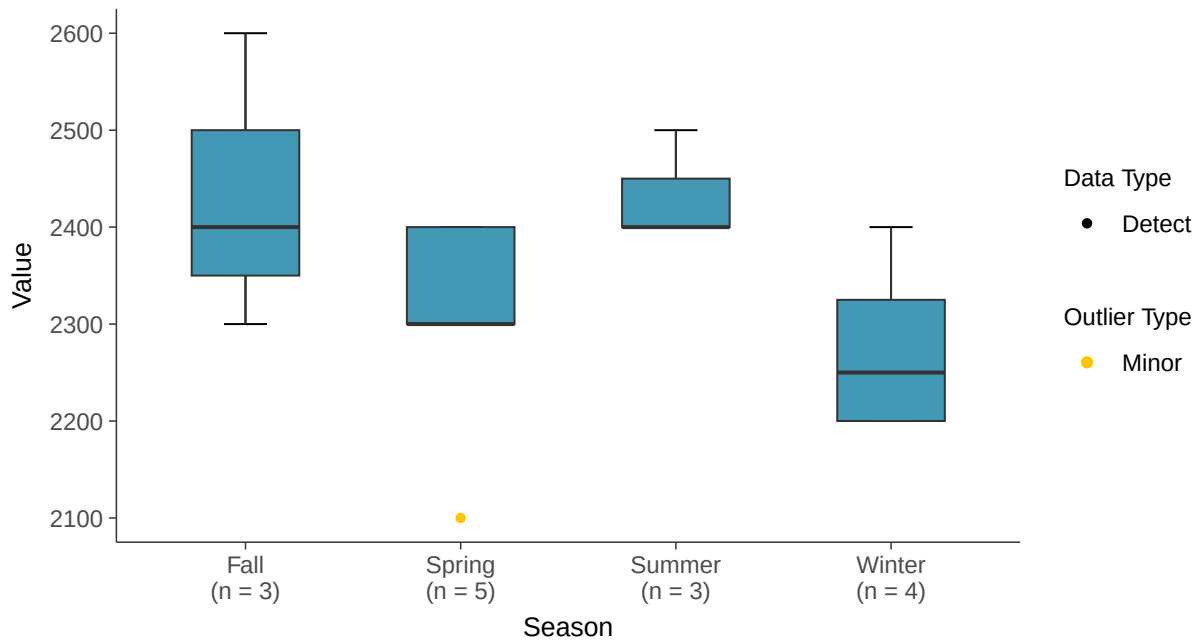
Boxplot

Total Dissolved Solids, MW-01R (mg/L)



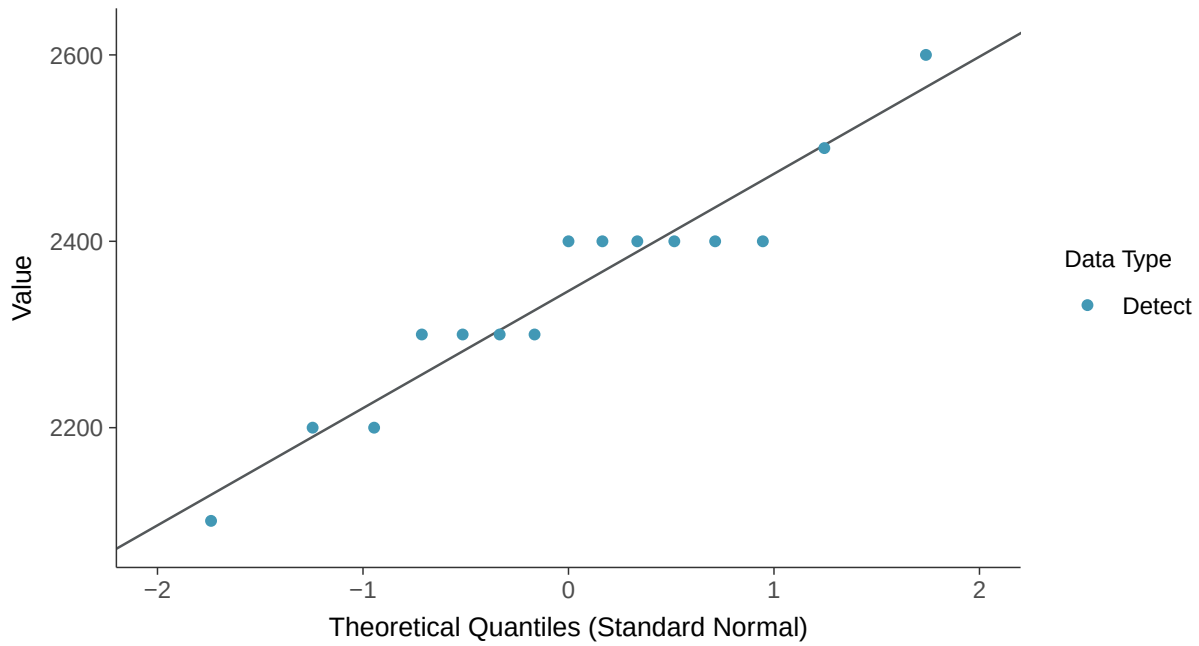
Boxplot by Season

Total Dissolved Solids, MW-01R (mg/L)



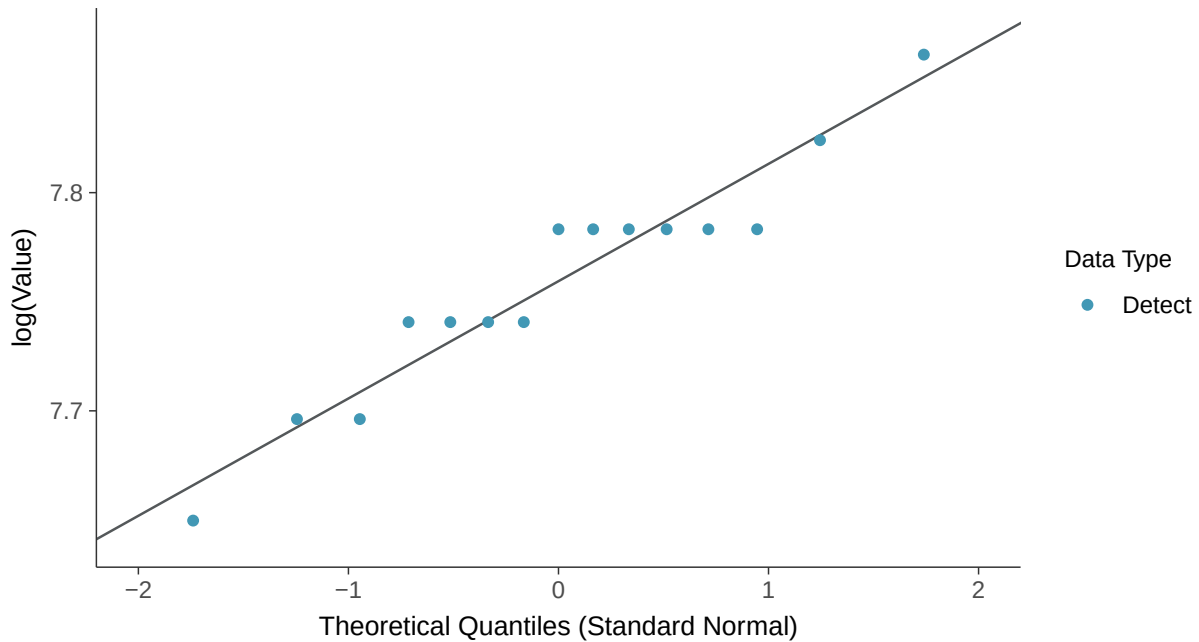
Normal Q-Q plot

Total Dissolved Solids, MW-01R (mg/L)



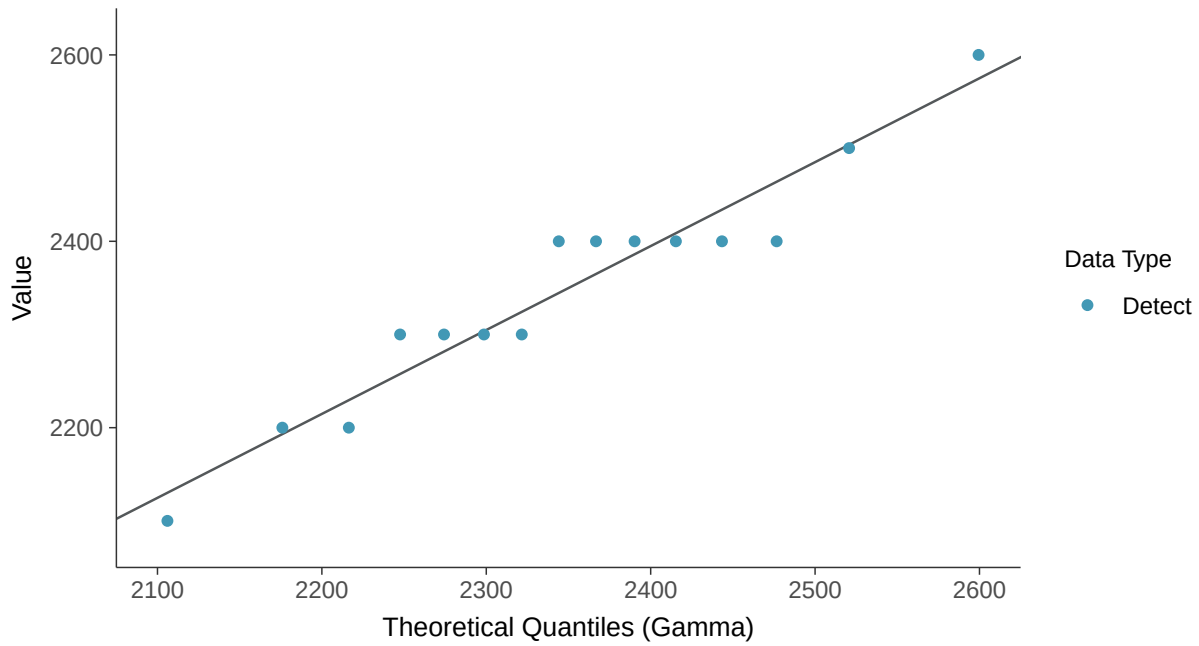
Lognormal Q-Q plot

Total Dissolved Solids, MW-01R (mg/L)



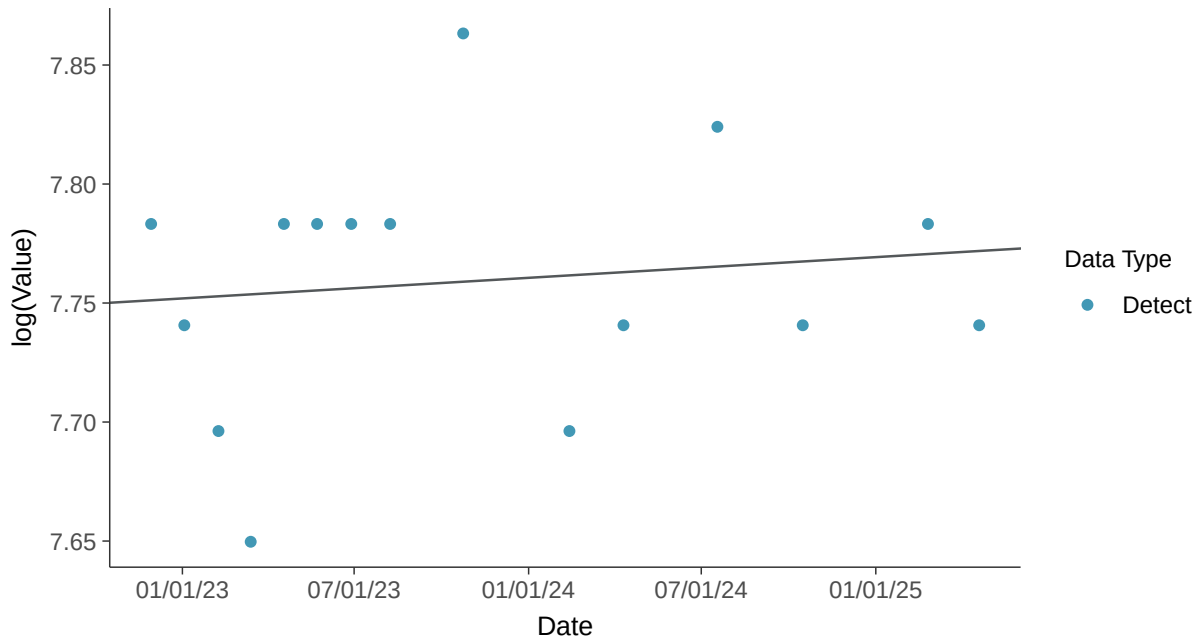
Gamma Q-Q plot

Total Dissolved Solids, MW-01R (mg/L)



Trend Regression: Lognormal MLE

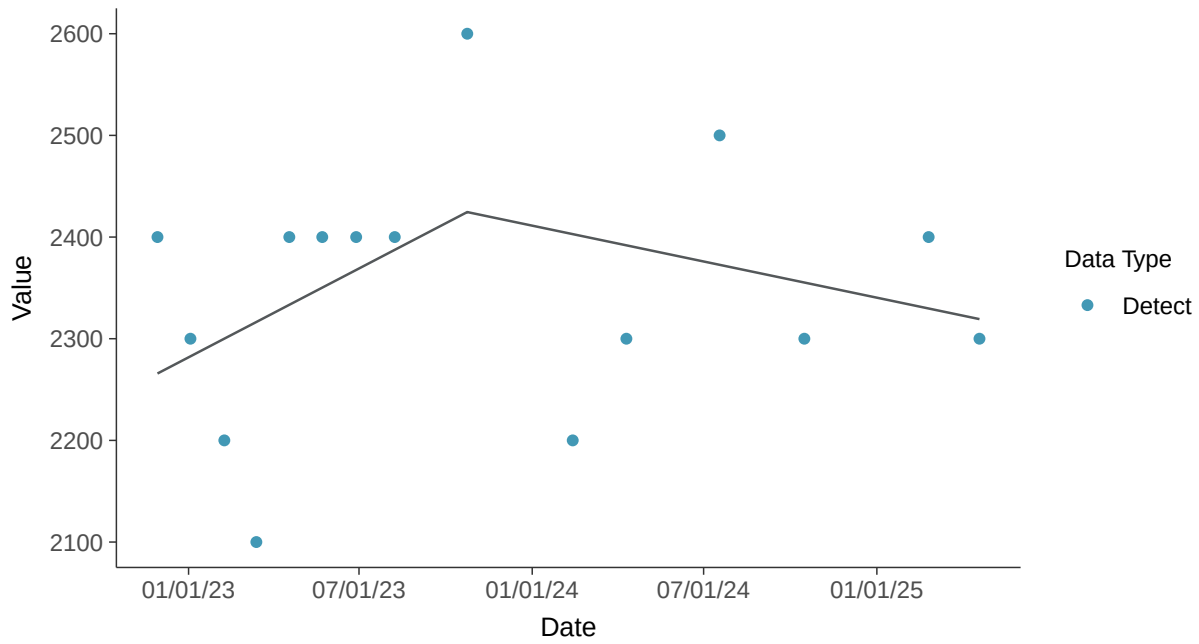
Total Dissolved Solids, MW-01R (mg/L)





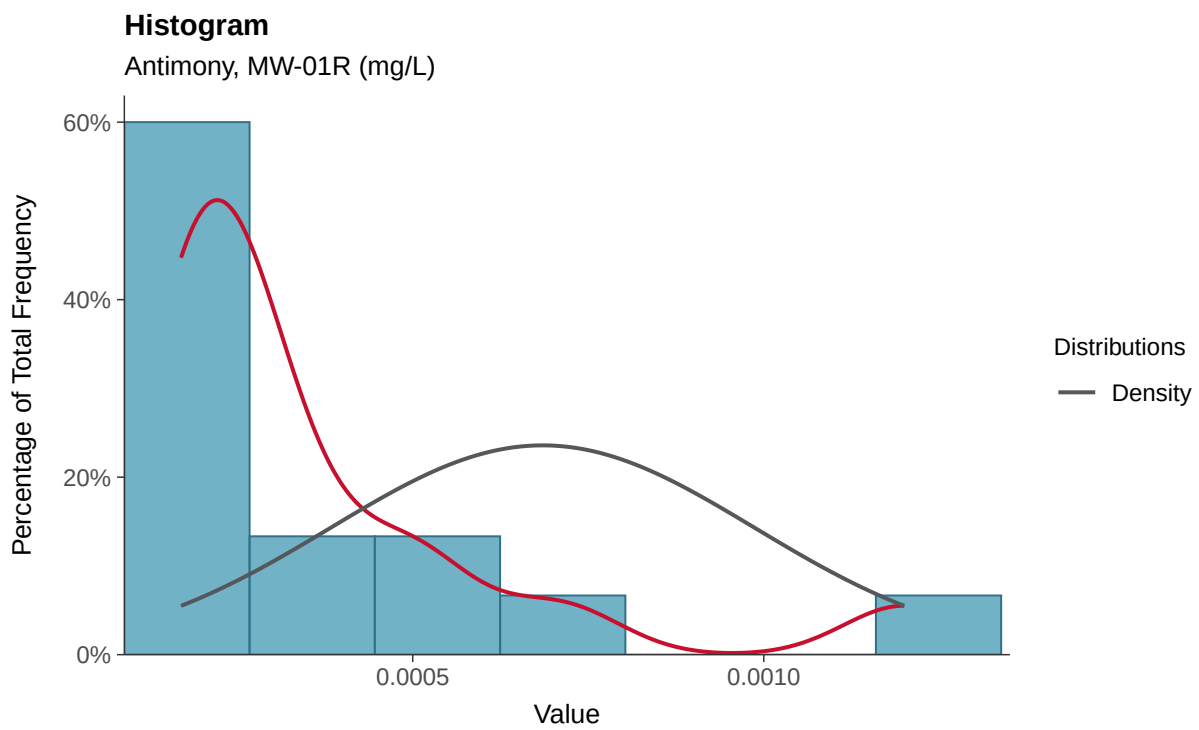
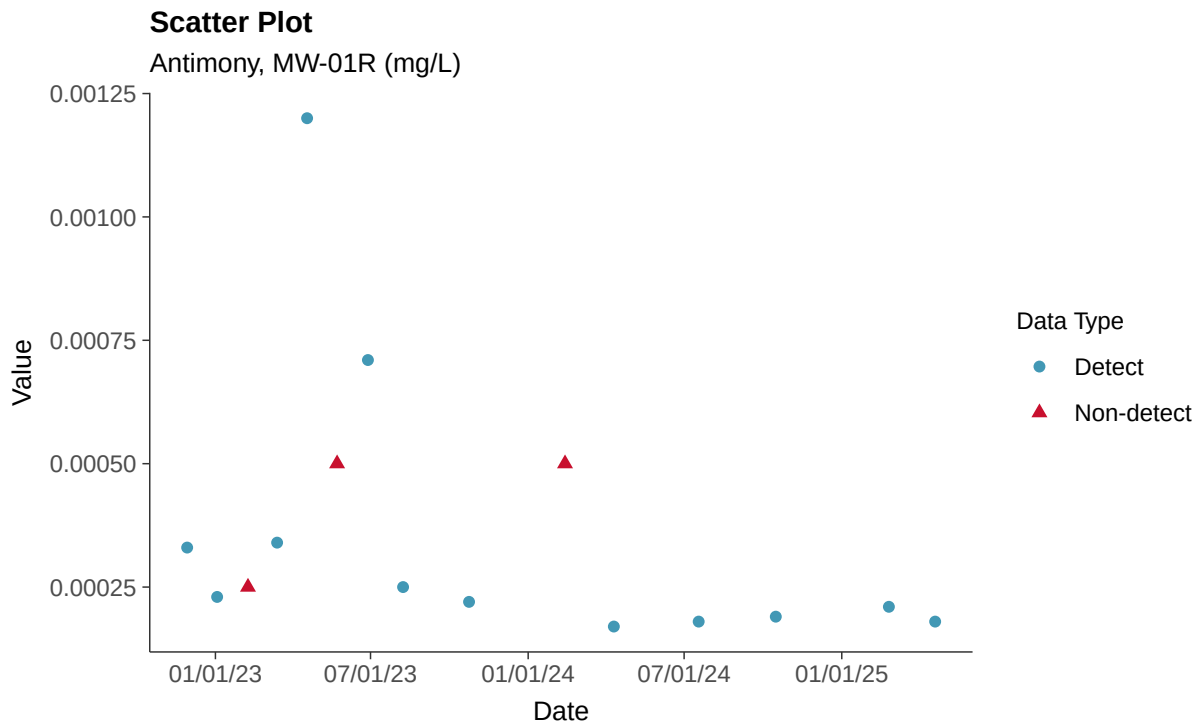
Trend Regression: Piecewise Linear-Linear

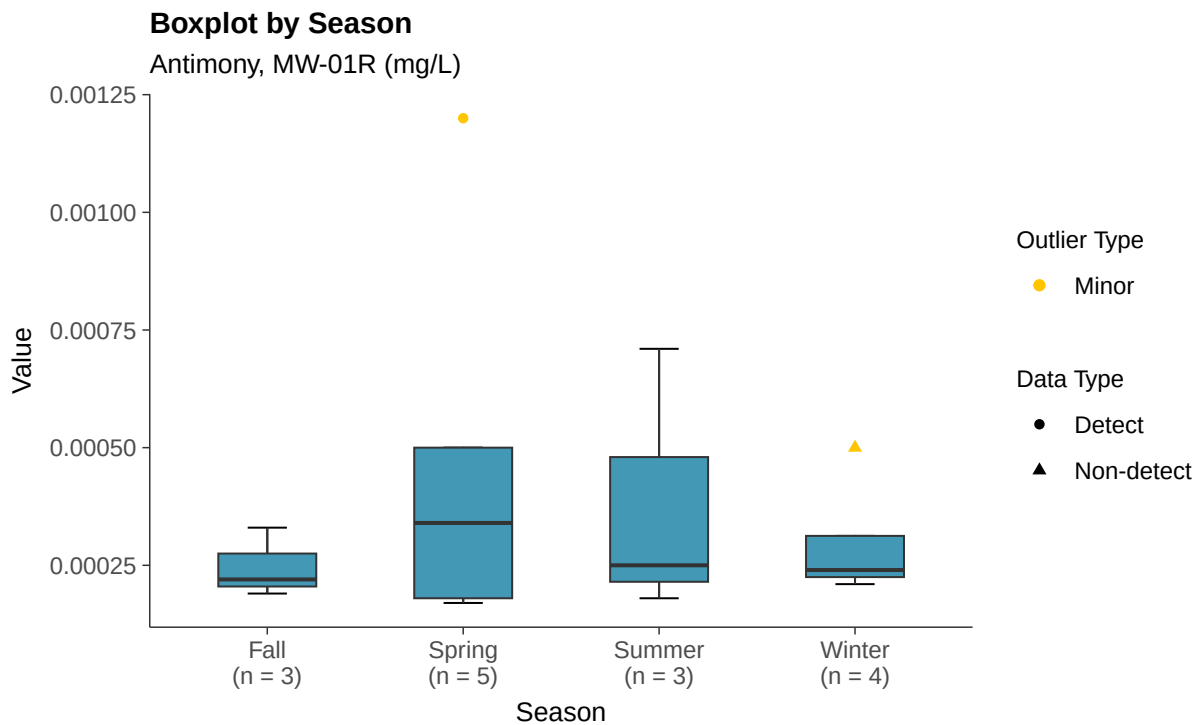
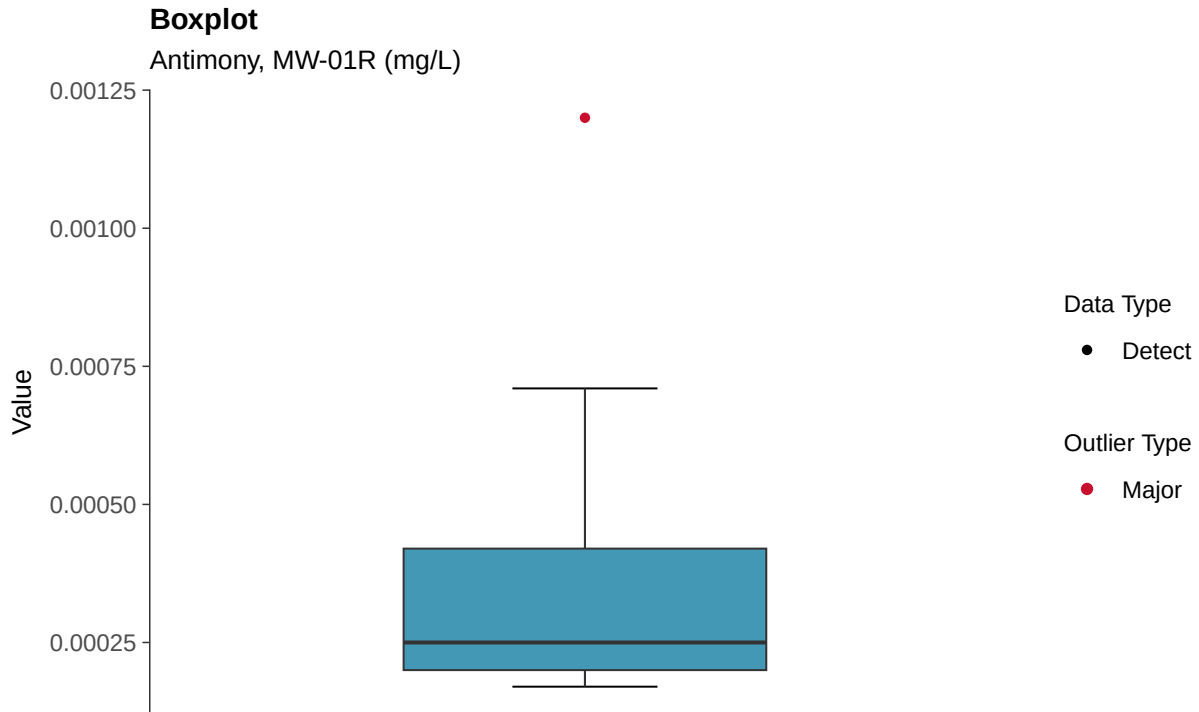
Total Dissolved Solids, MW-01R (mg/L)



Appendix IV: Antimony, MW-01R

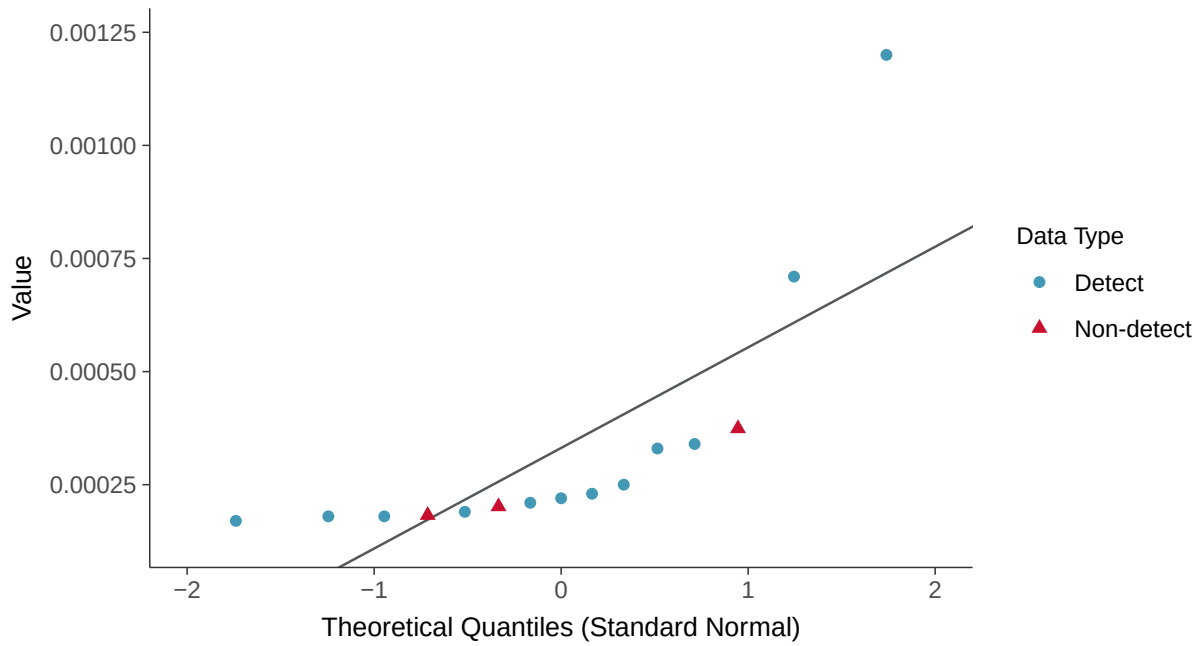
ID: 11_2_4_101





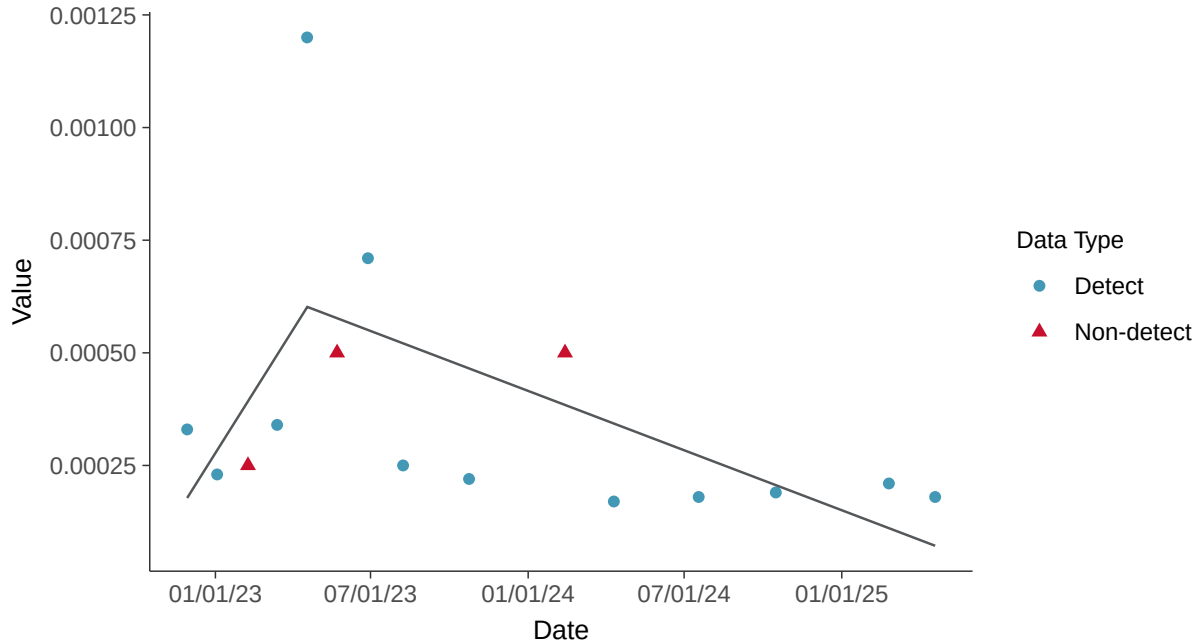
Normal Q-Q plot using ROS Imputed Estimates

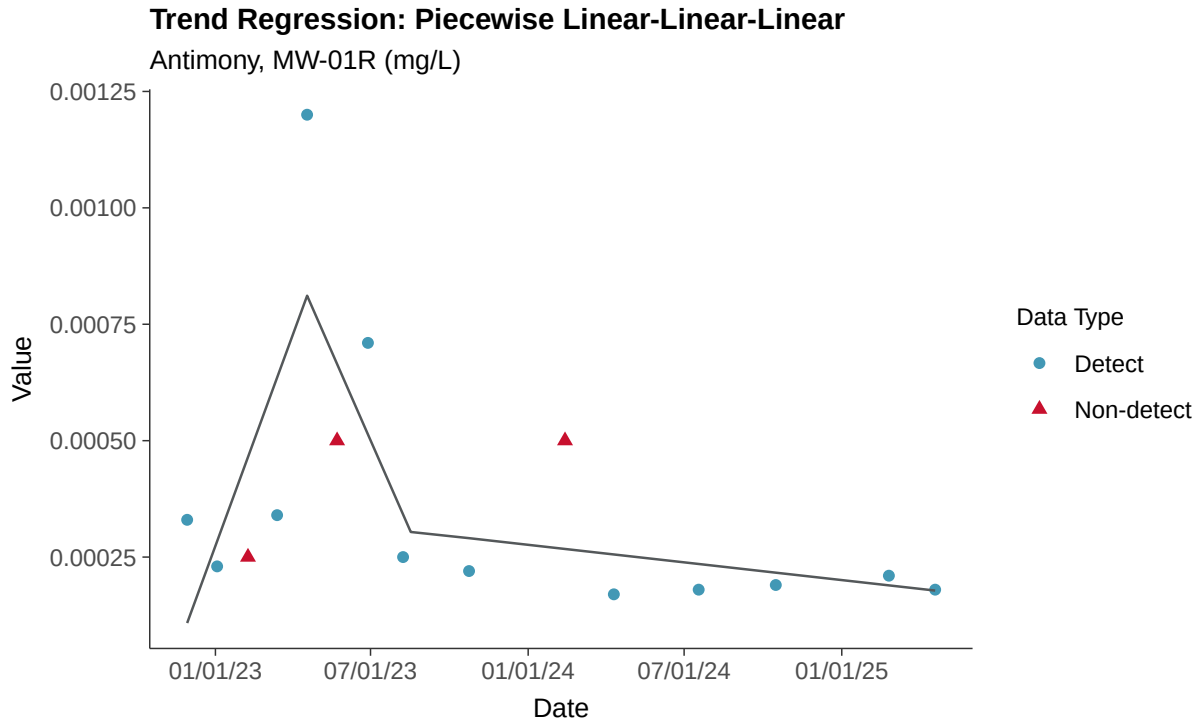
Antimony, MW-01R (mg/L)



Trend Regression: Piecewise Linear-Linear

Antimony, MW-01R (mg/L)



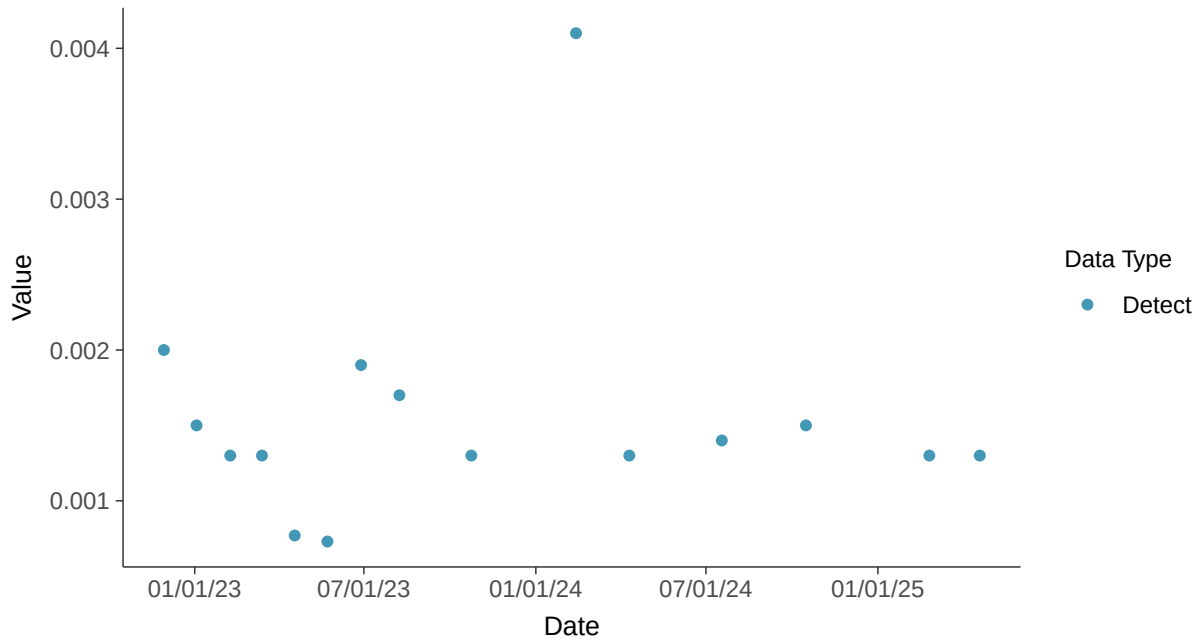


Appendix IV: Arsenic, MW-01R

ID: 11_2_4_102

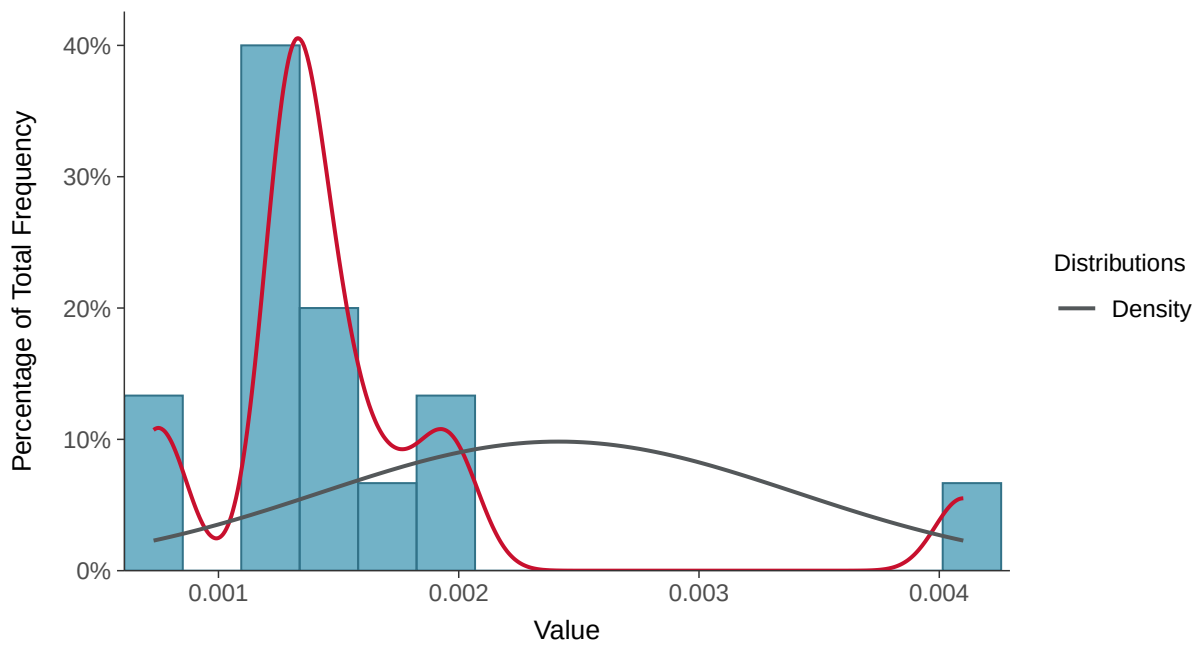
Scatter Plot

Arsenic, MW-01R (mg/L)



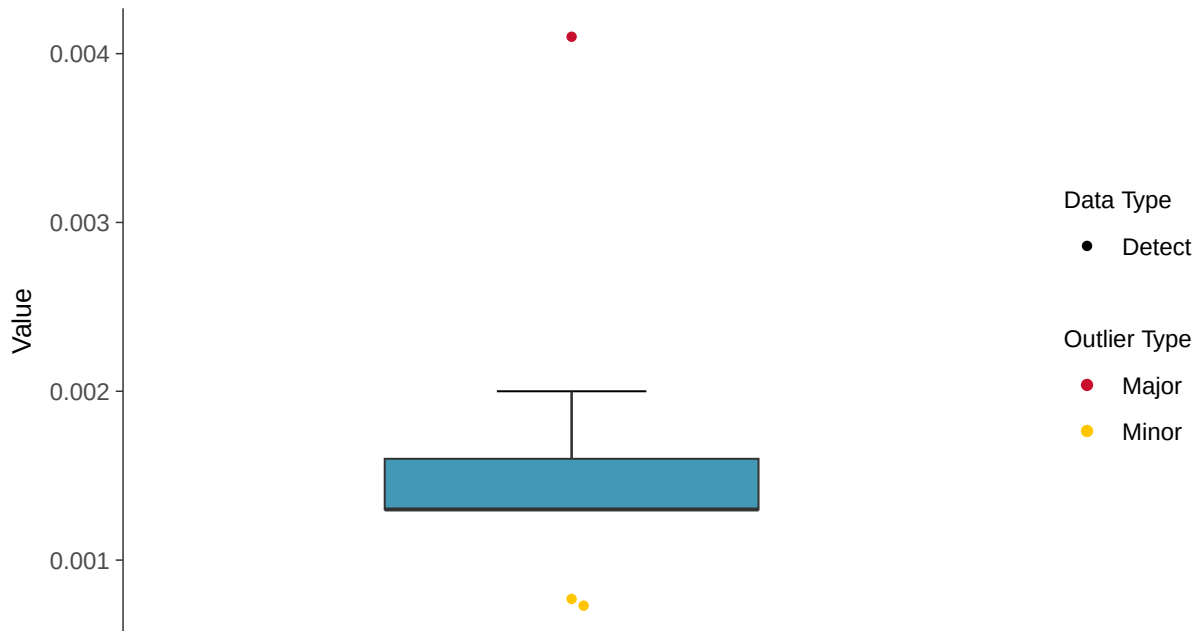
Histogram

Arsenic, MW-01R (mg/L)



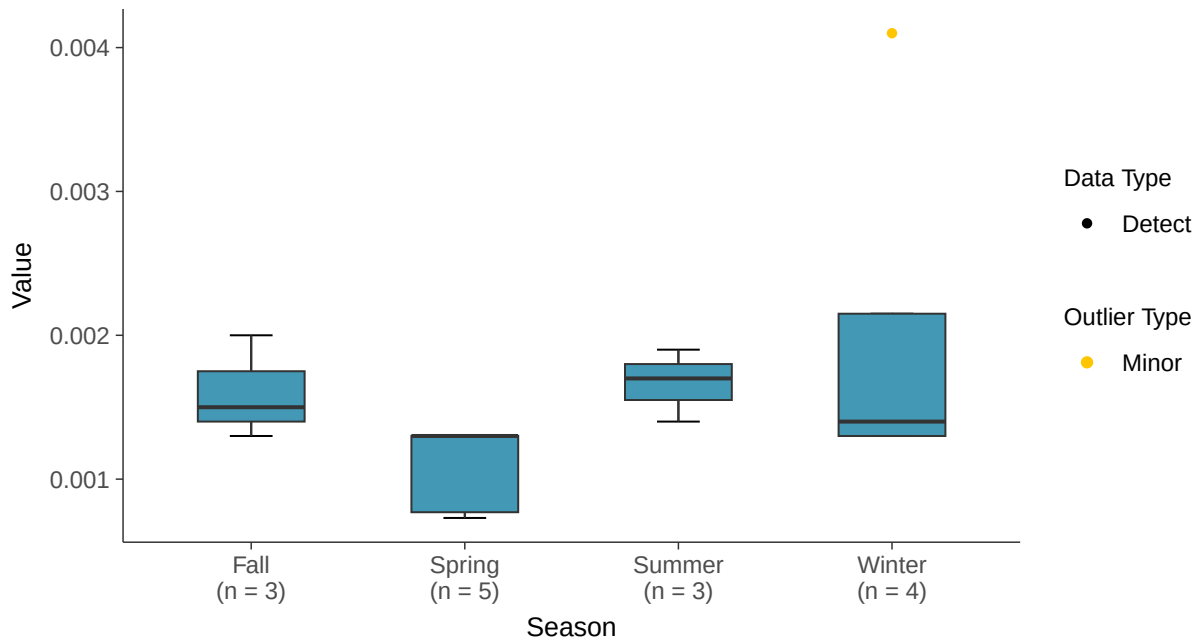
Boxplot

Arsenic, MW-01R (mg/L)



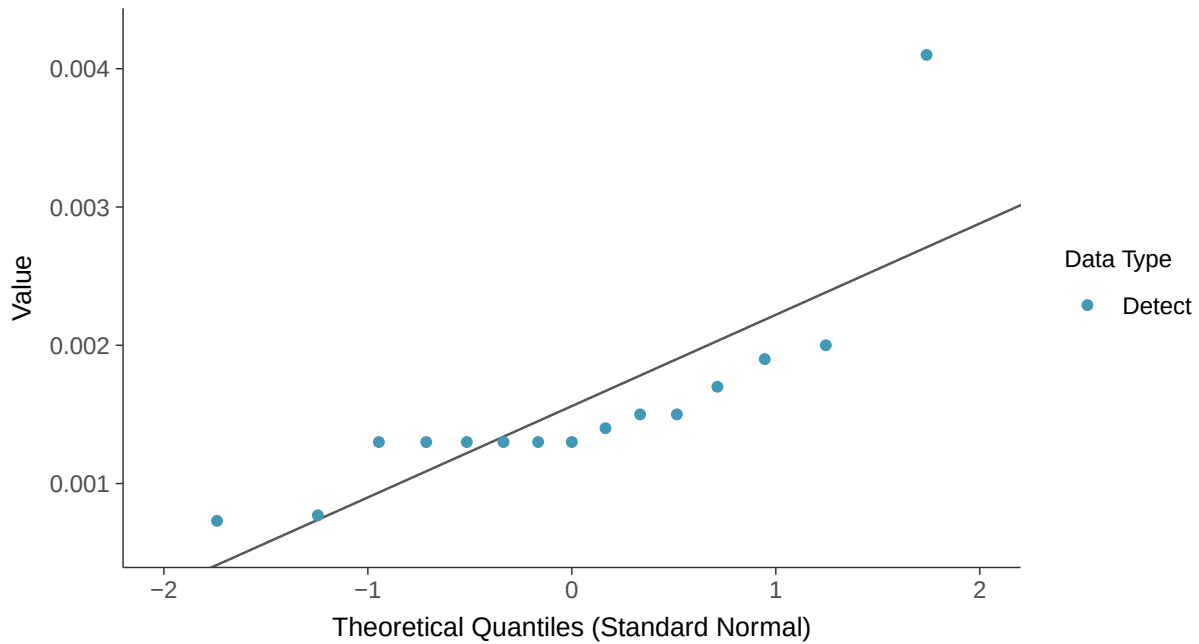
Boxplot by Season

Arsenic, MW-01R (mg/L)



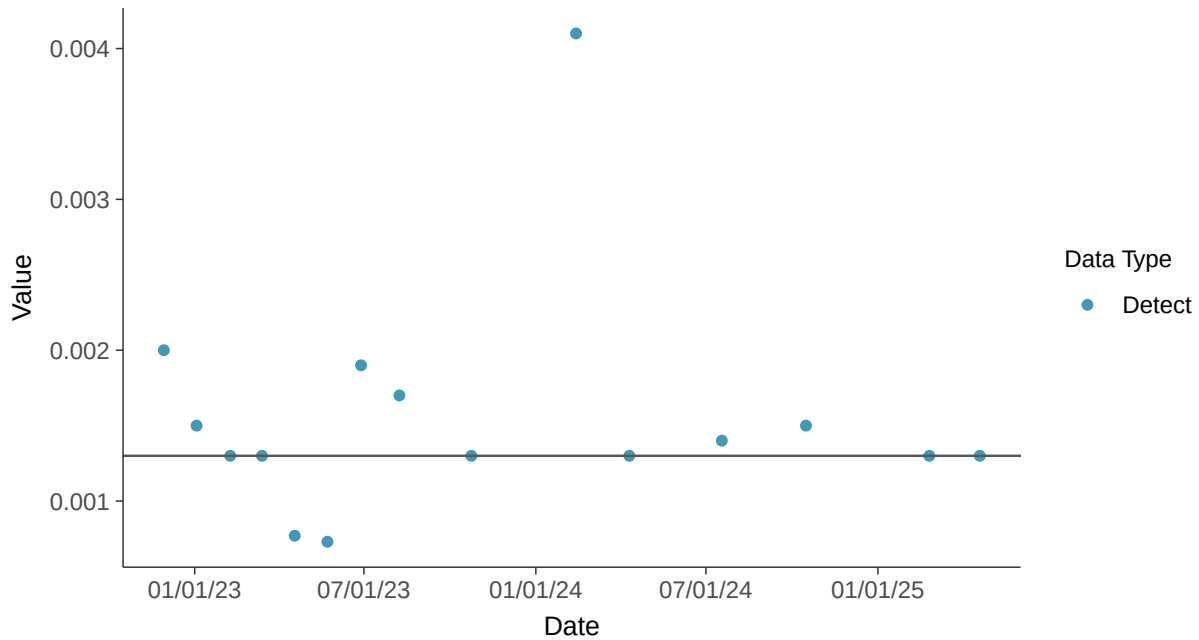
Normal Q-Q plot

Arsenic, MW-01R (mg/L)



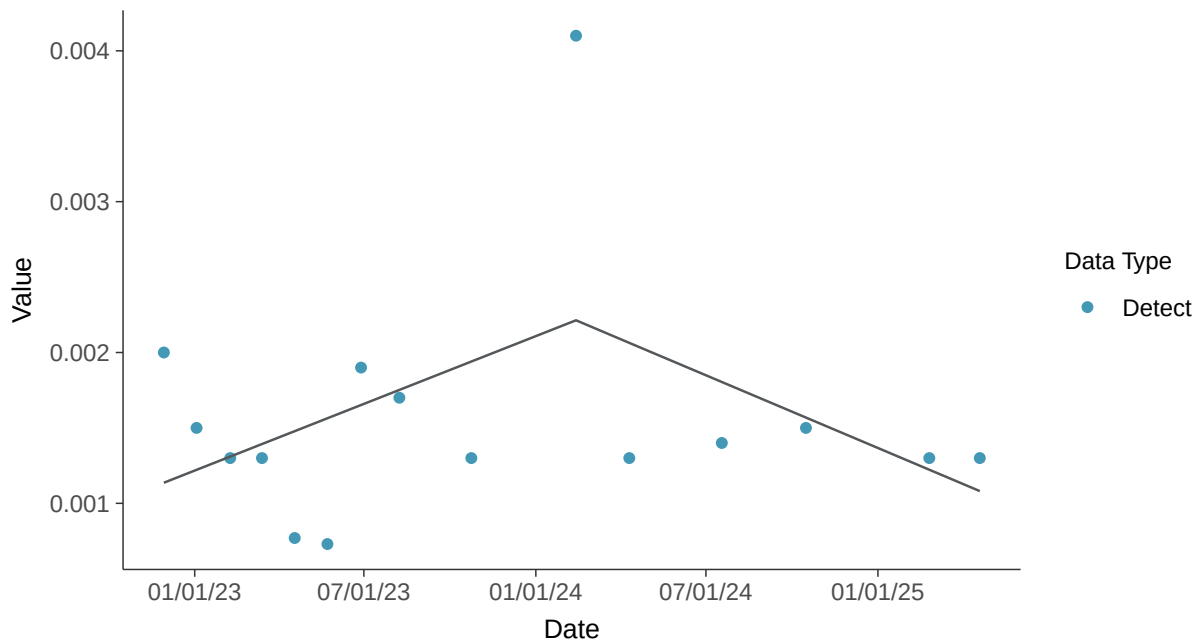
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Arsenic, MW-01R (mg/L)



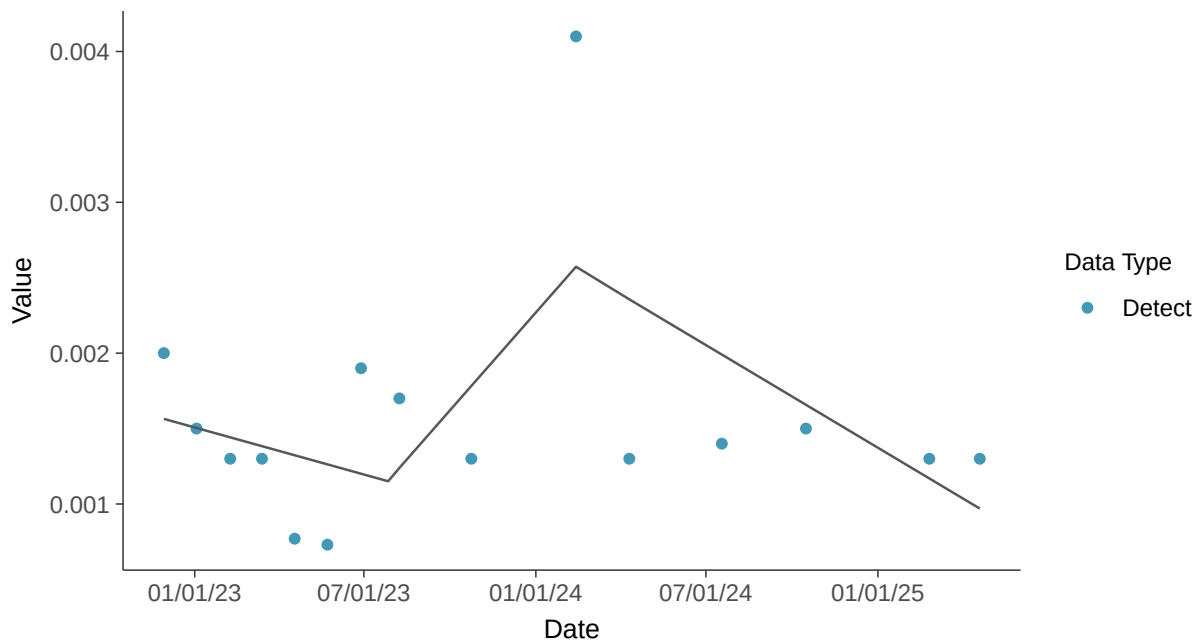
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-01R (mg/L)



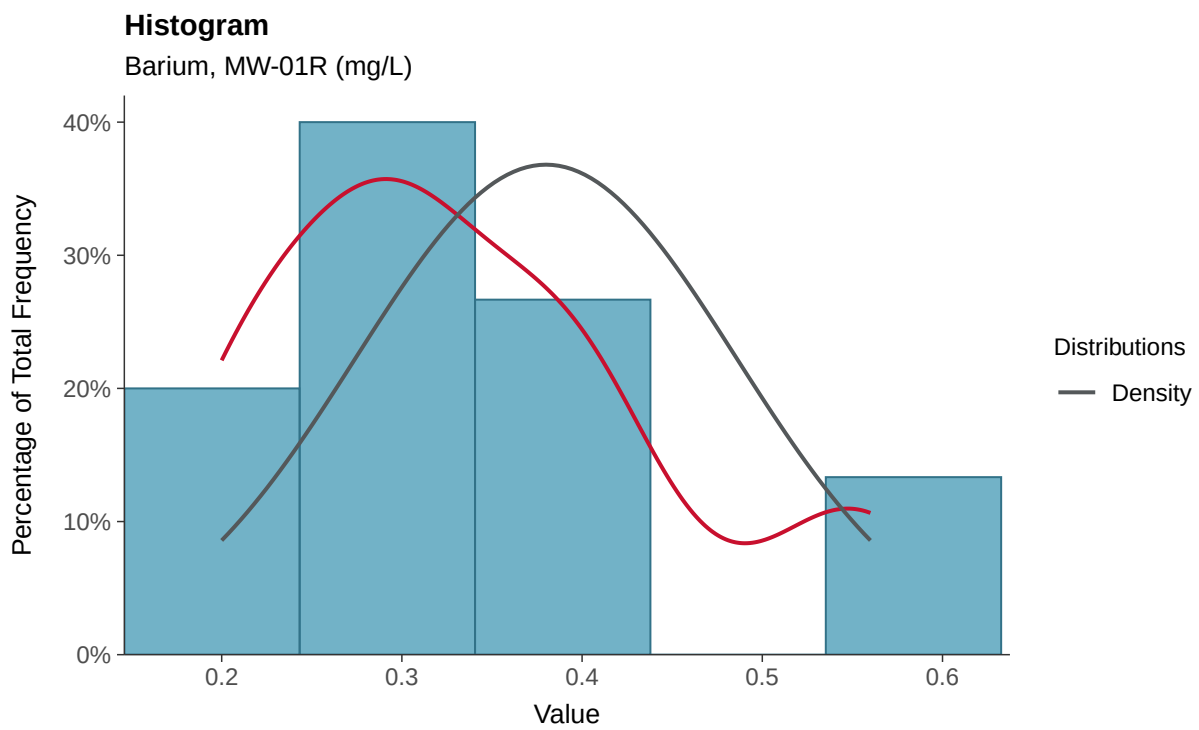
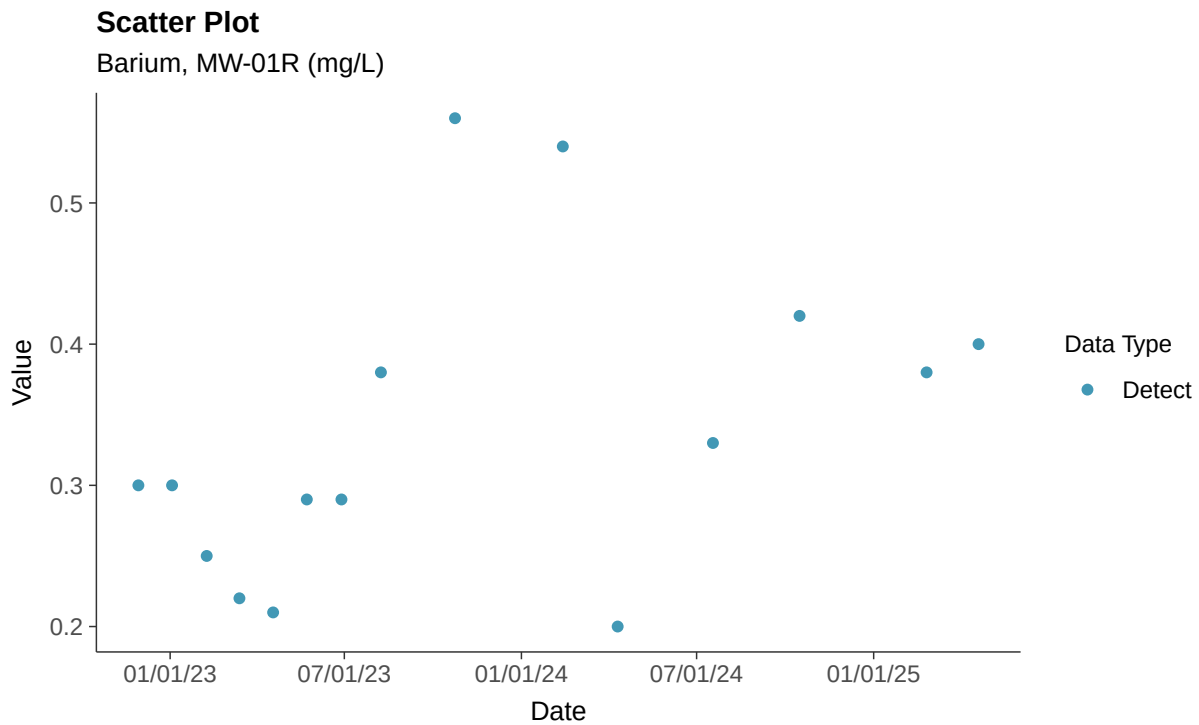
Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-01R (mg/L)



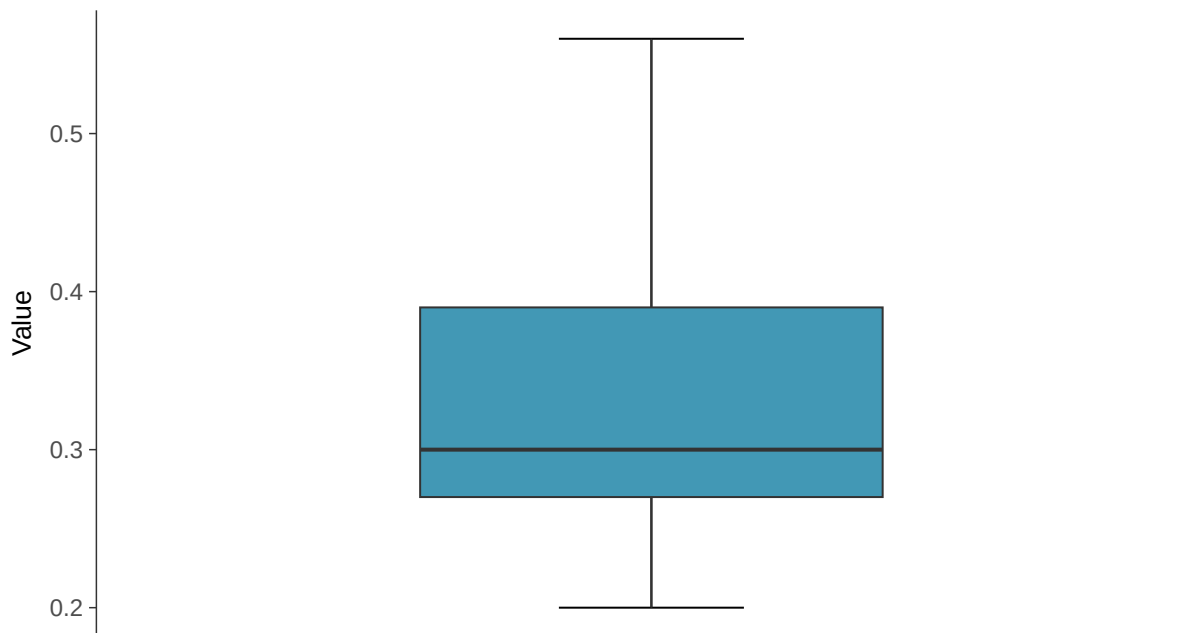
Appendix IV: Barium, MW-01R

ID: 11_2_4_103



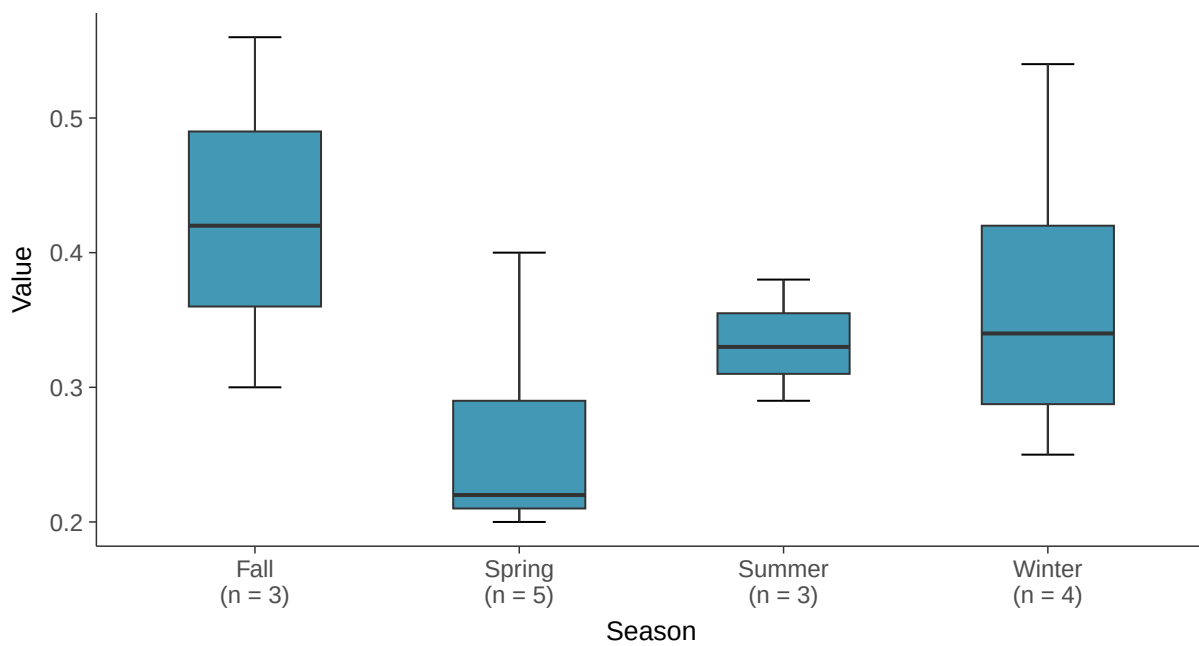
Boxplot

Barium, MW-01R (mg/L)



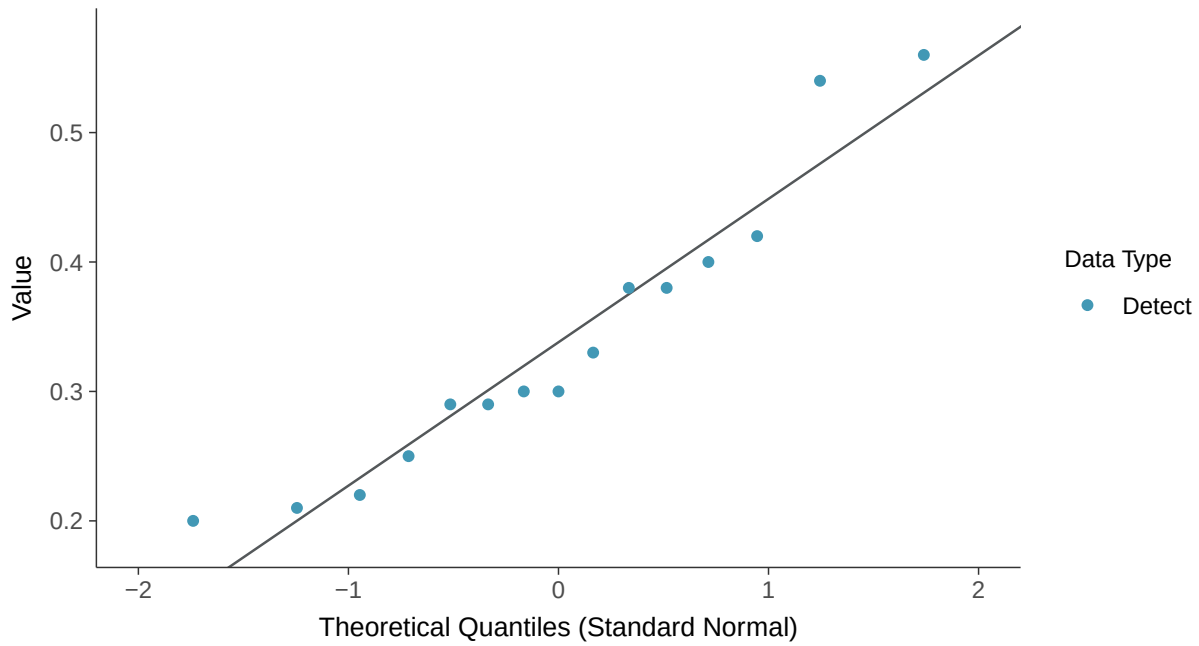
Boxplot by Season

Barium, MW-01R (mg/L)



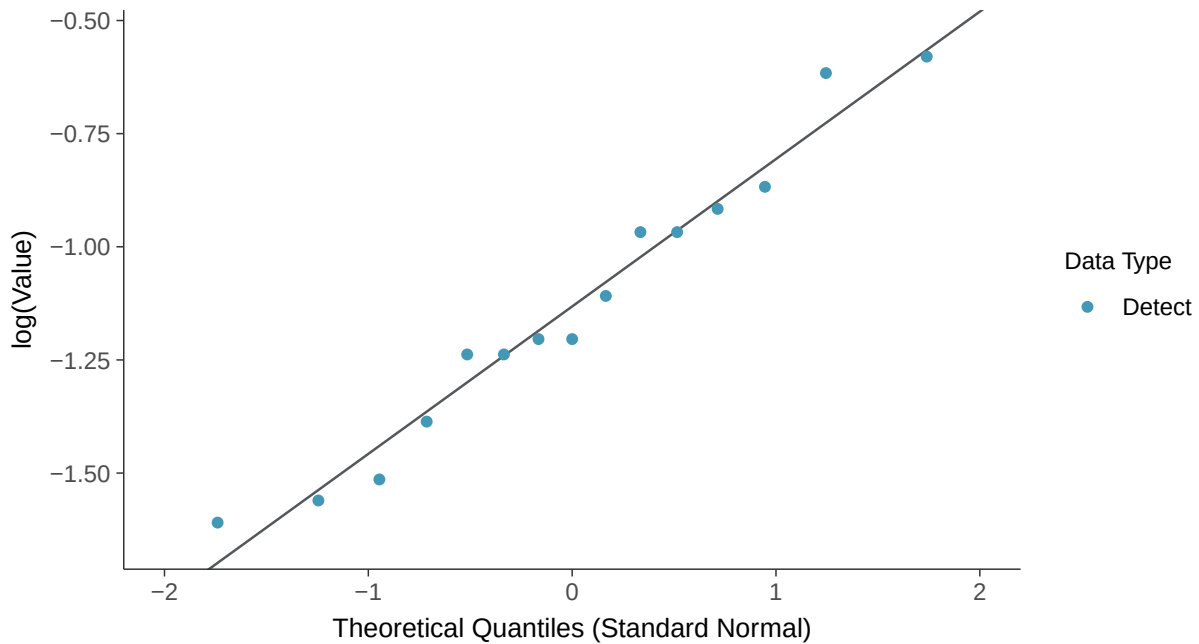
Normal Q-Q plot

Barium, MW-01R (mg/L)



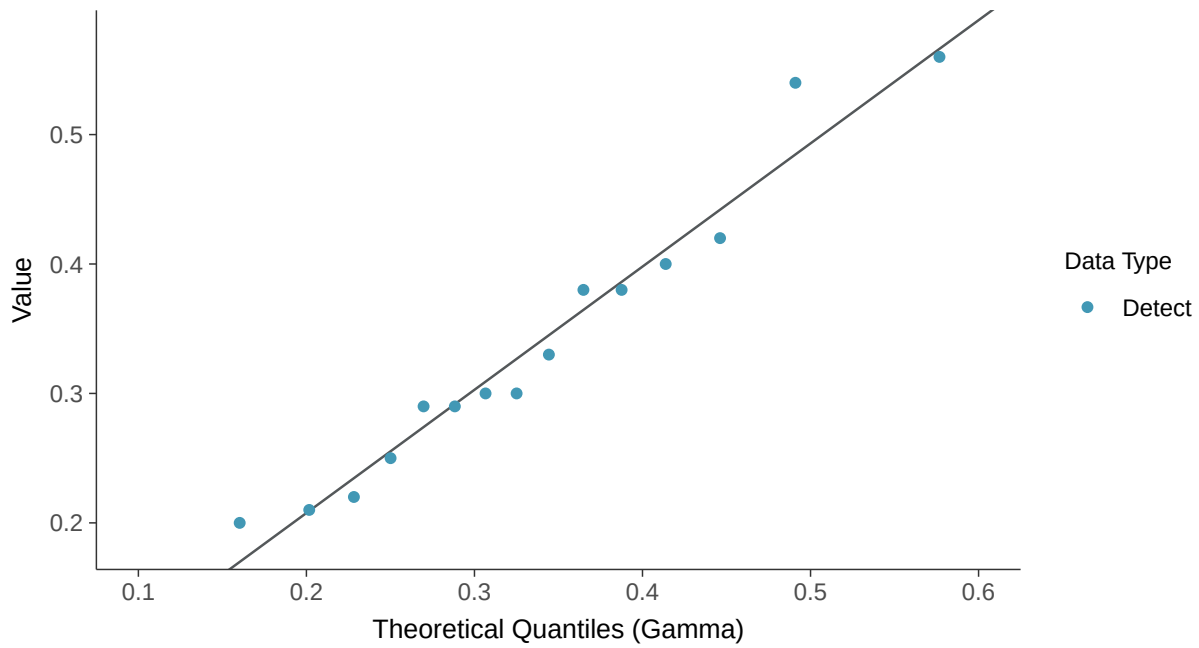
Lognormal Q-Q plot

Barium, MW-01R (mg/L)



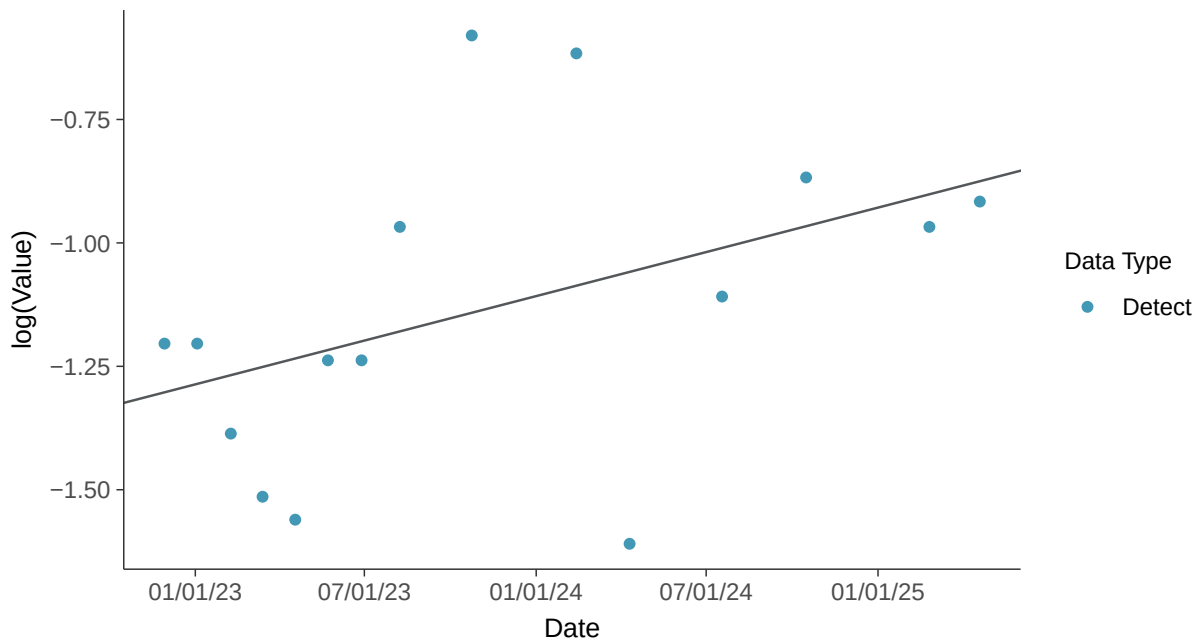
Gamma Q-Q plot

Barium, MW-01R (mg/L)



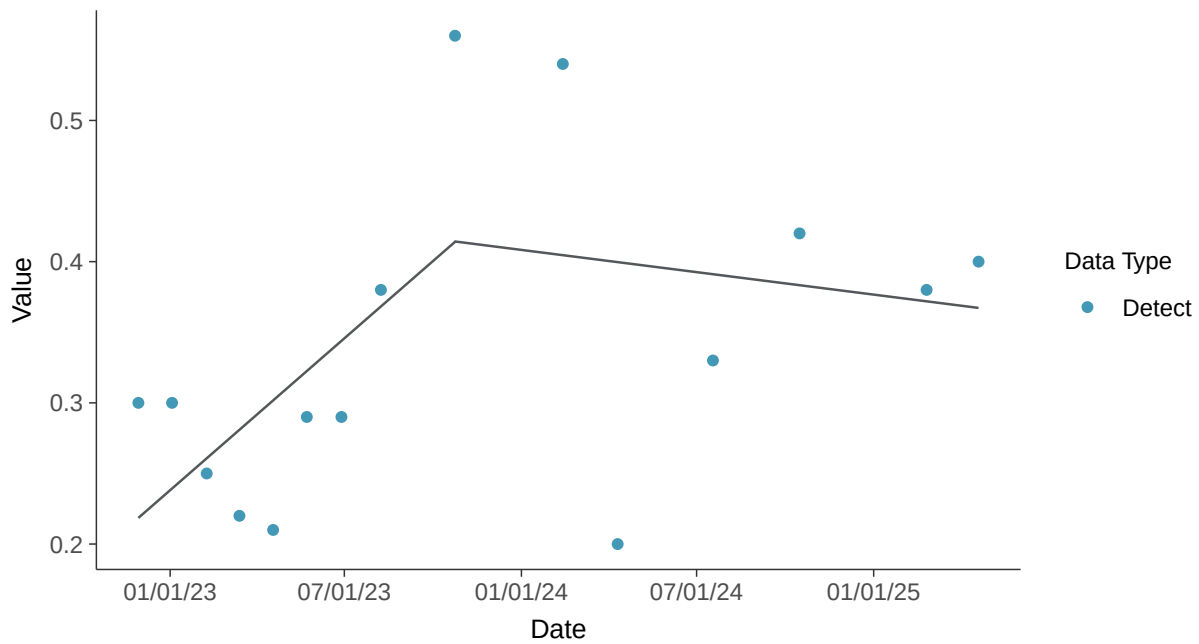
Trend Regression: Lognormal MLE

Barium, MW-01R (mg/L)



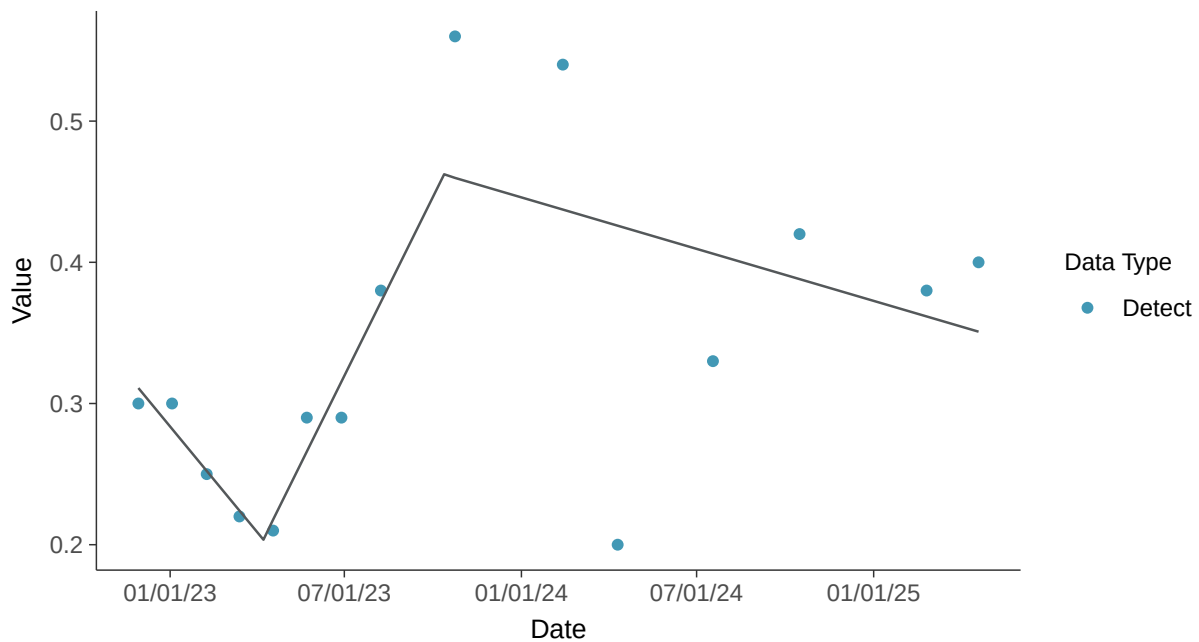
Trend Regression: Piecewise Linear-Linear

Barium, MW-01R (mg/L)



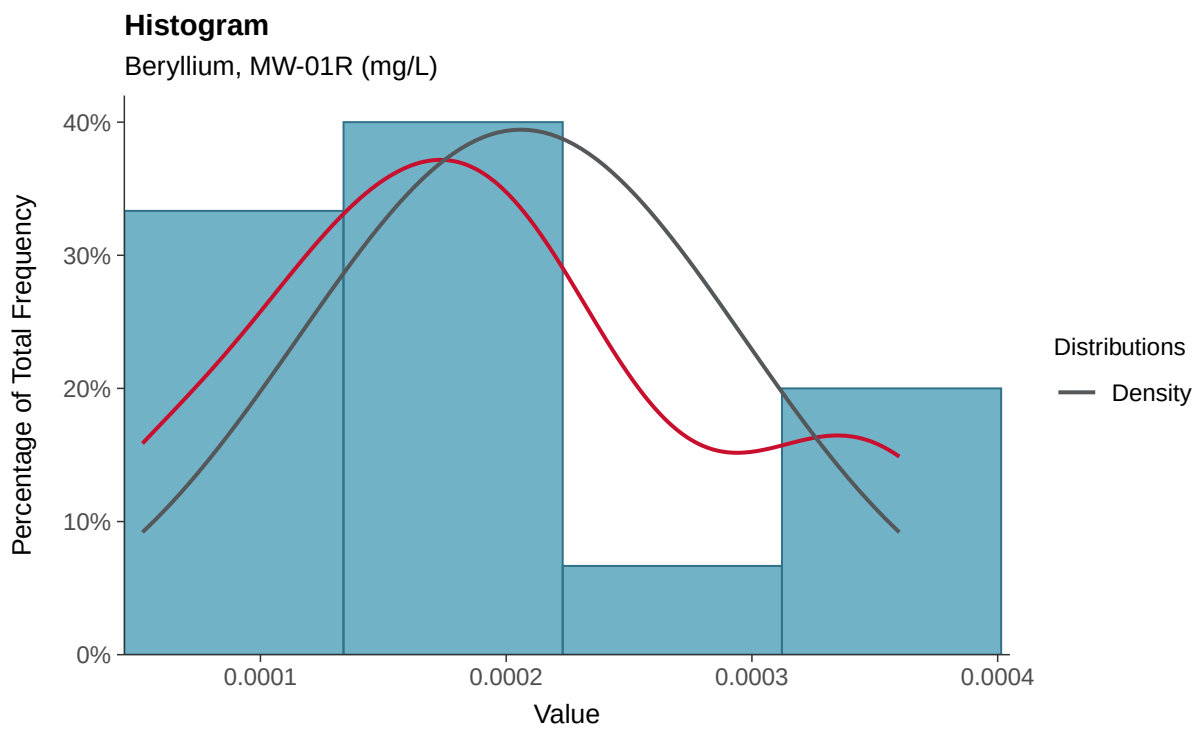
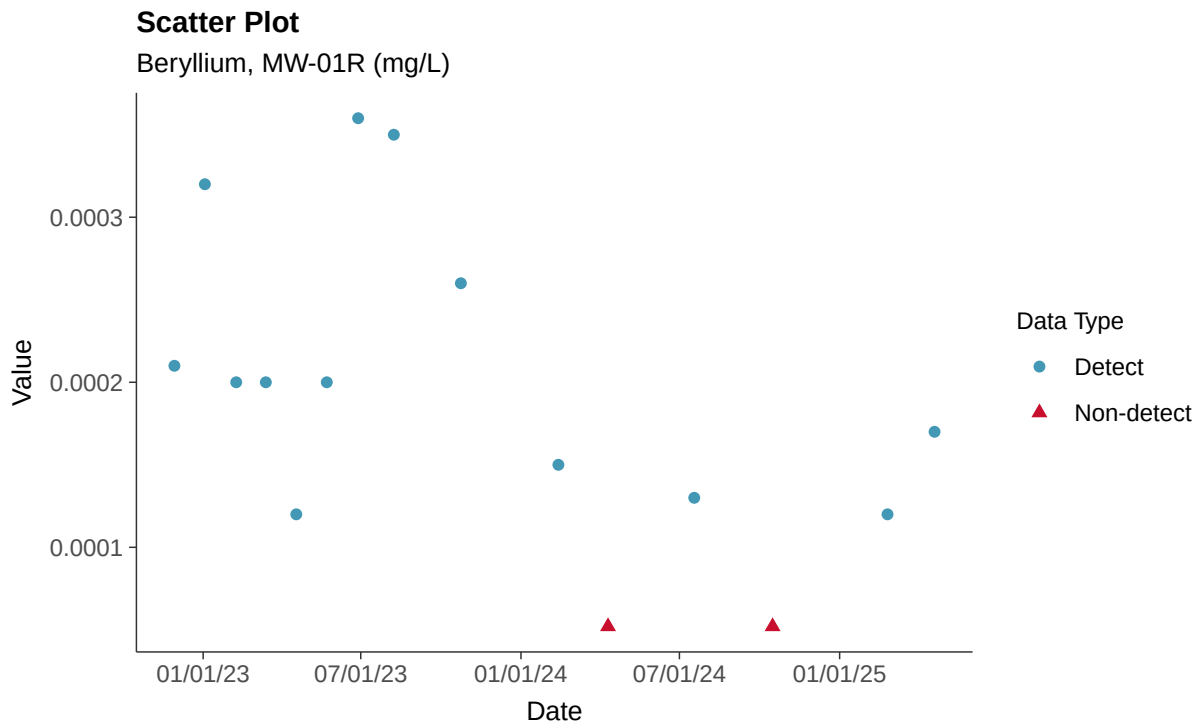
Trend Regression: Piecewise Linear-Linear-Linear

Barium, MW-01R (mg/L)



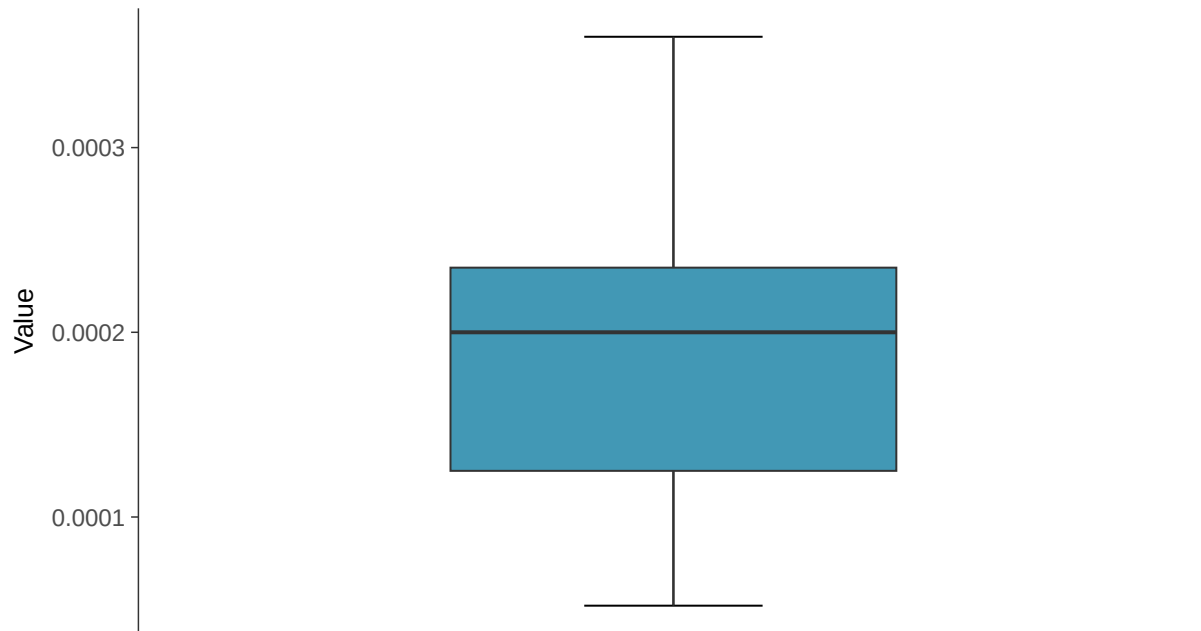
Appendix IV: Beryllium, MW-01R

ID: 11_2_4_104



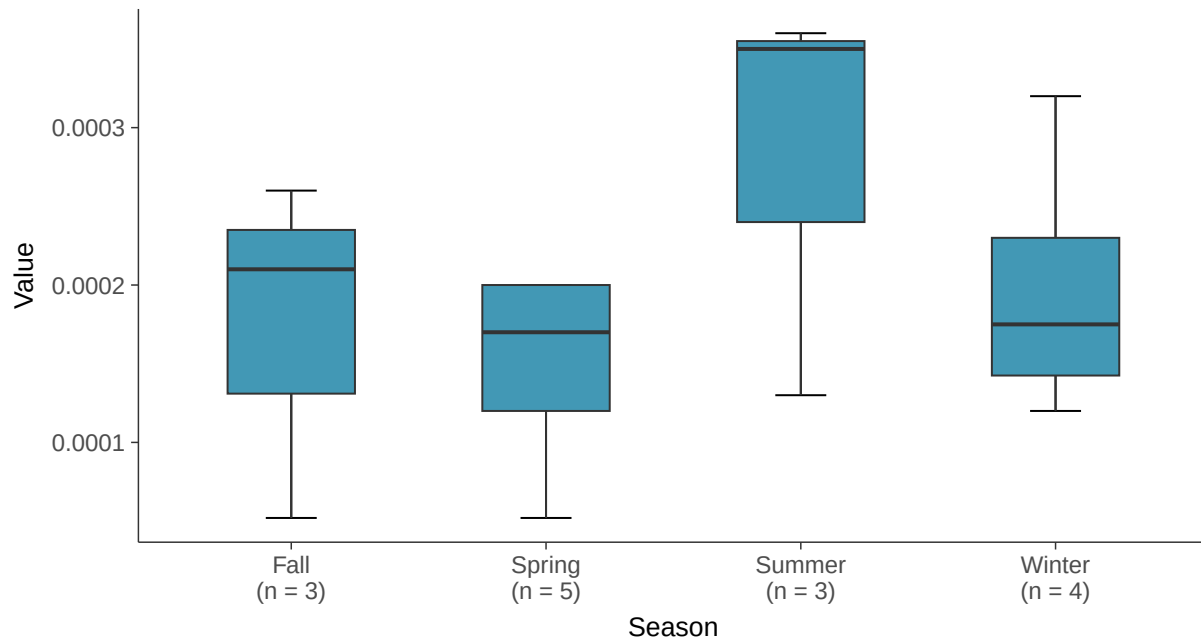
Boxplot

Beryllium, MW-01R (mg/L)



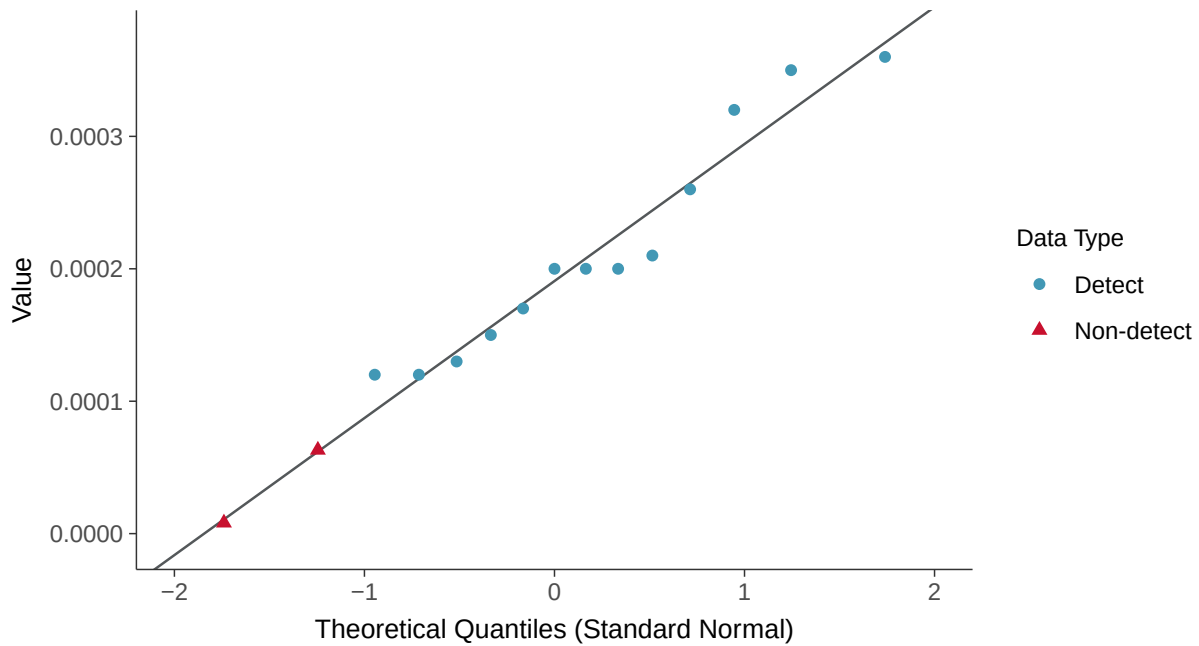
Boxplot by Season

Beryllium, MW-01R (mg/L)



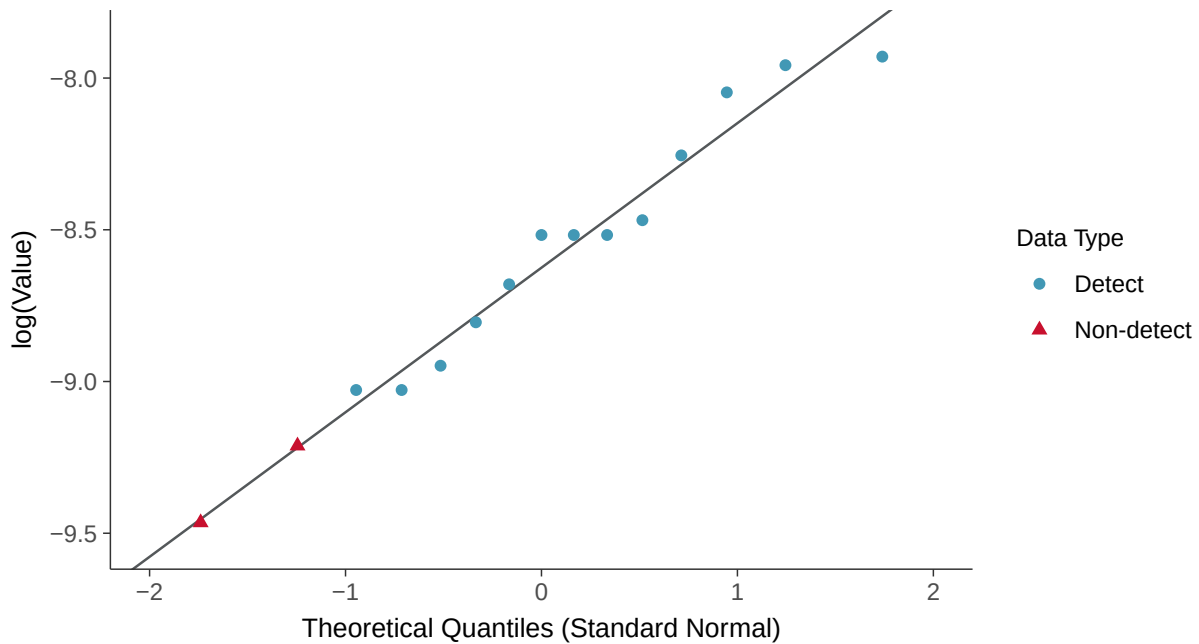
Normal Q-Q plot using ROS Imputed Estimates

Beryllium, MW-01R (mg/L)



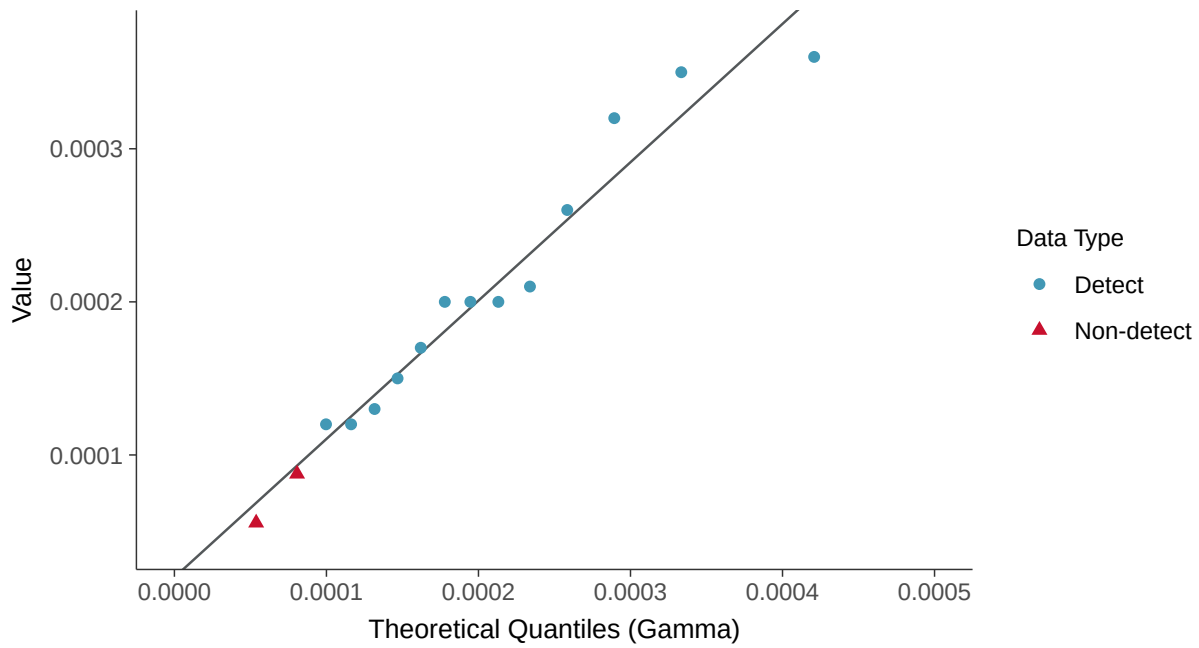
Lognormal Q-Q plot using ROS Imputed Estimates

Beryllium, MW-01R (mg/L)



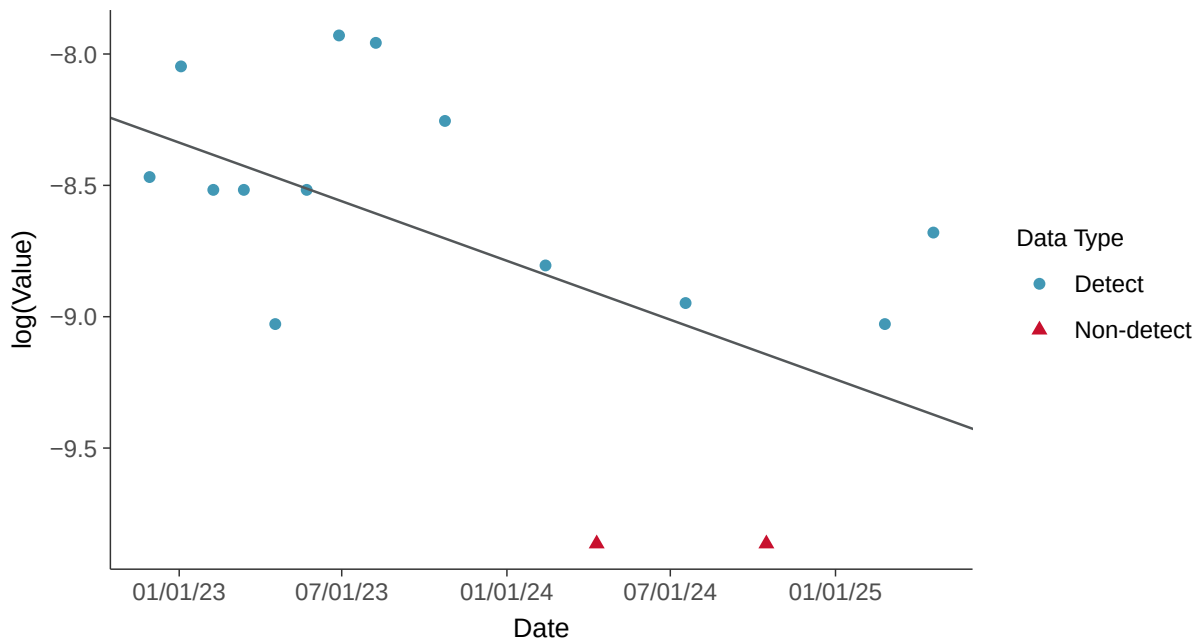
Gamma Q-Q plot using ROS Imputed Estimates

Beryllium, MW-01R (mg/L)



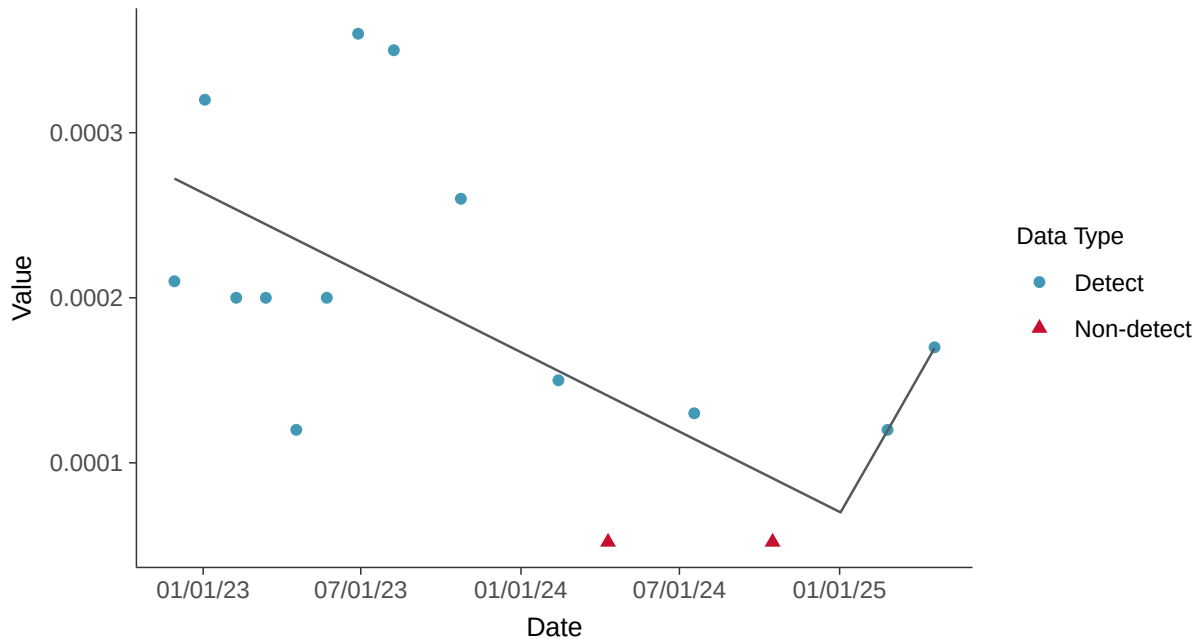
Trend Regression: Lognormal MLE

Beryllium, MW-01R (mg/L)



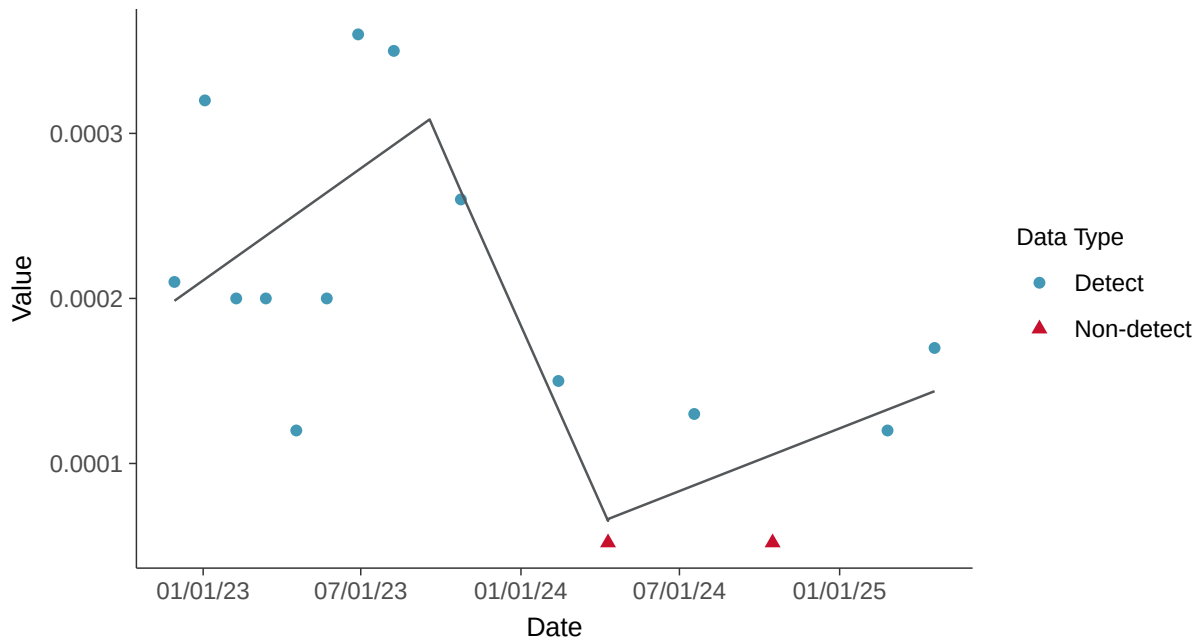
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-01R (mg/L)



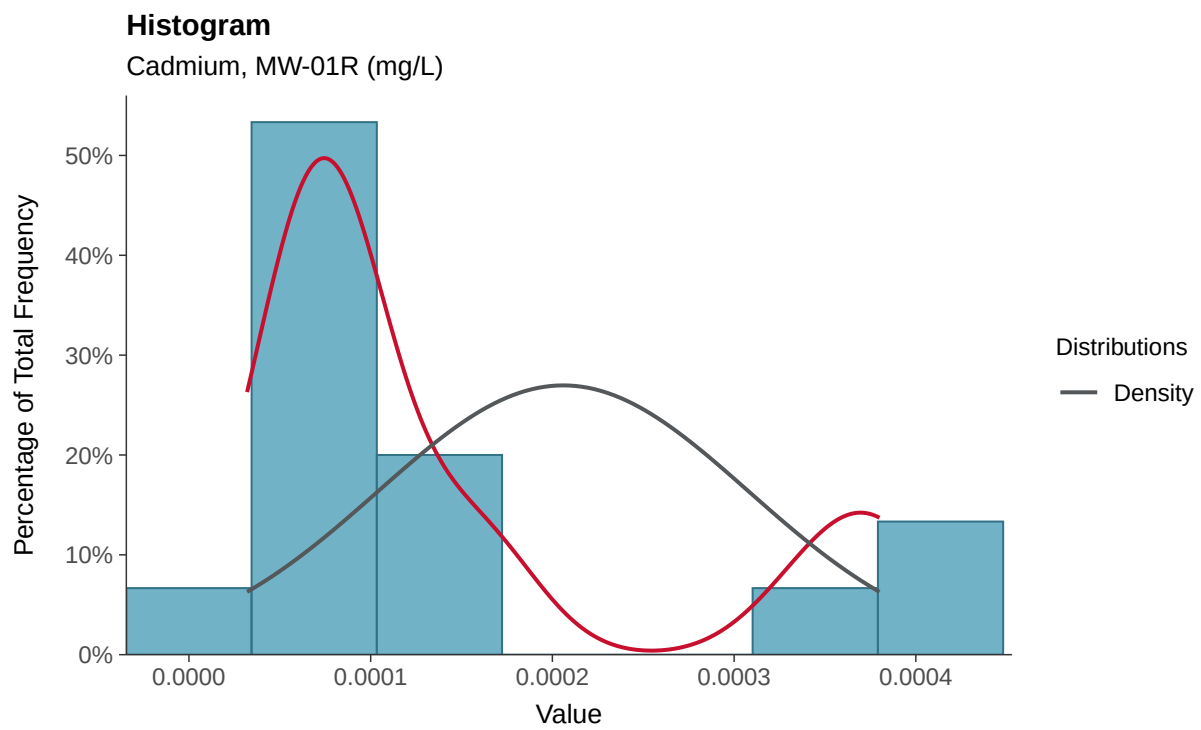
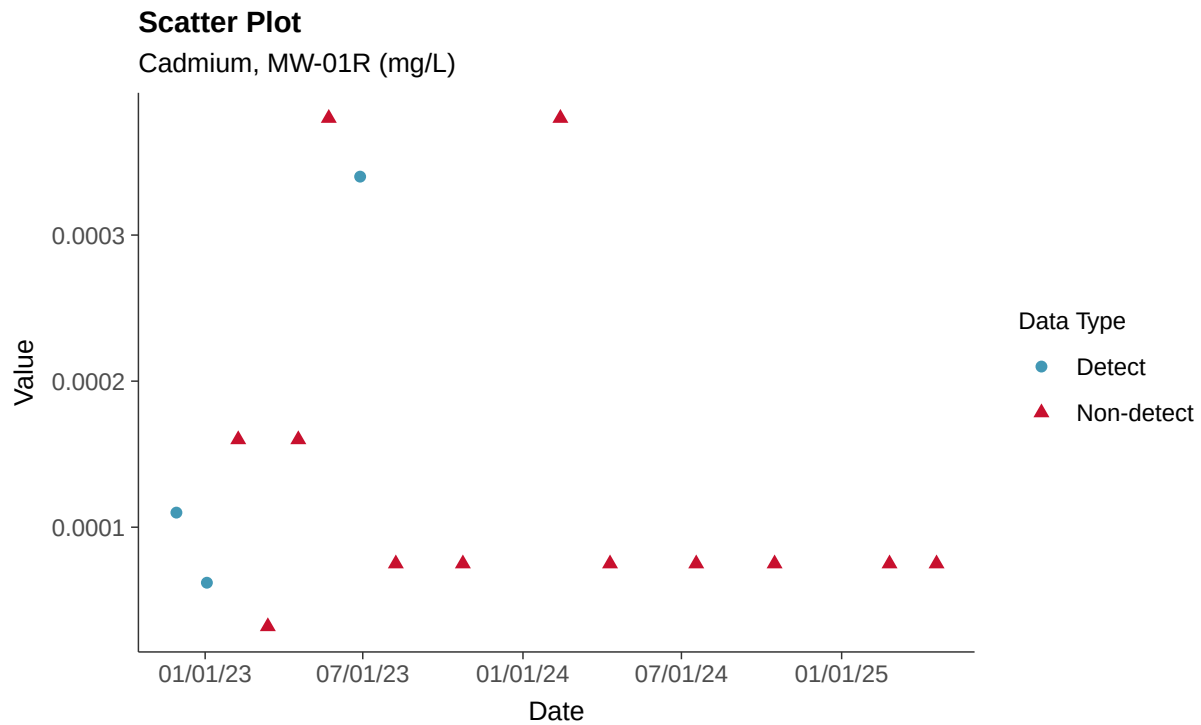
Trend Regression: Piecewise Linear-Linear-Linear

Beryllium, MW-01R (mg/L)



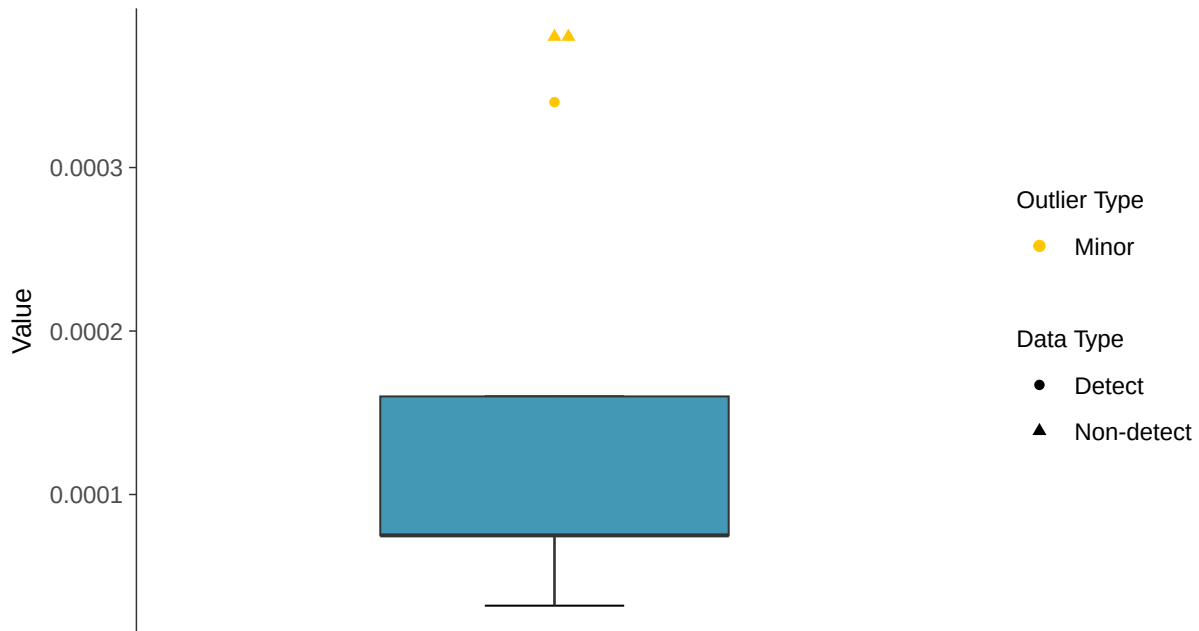
Appendix IV: Cadmium, MW-01R

ID: 11_2_4_106



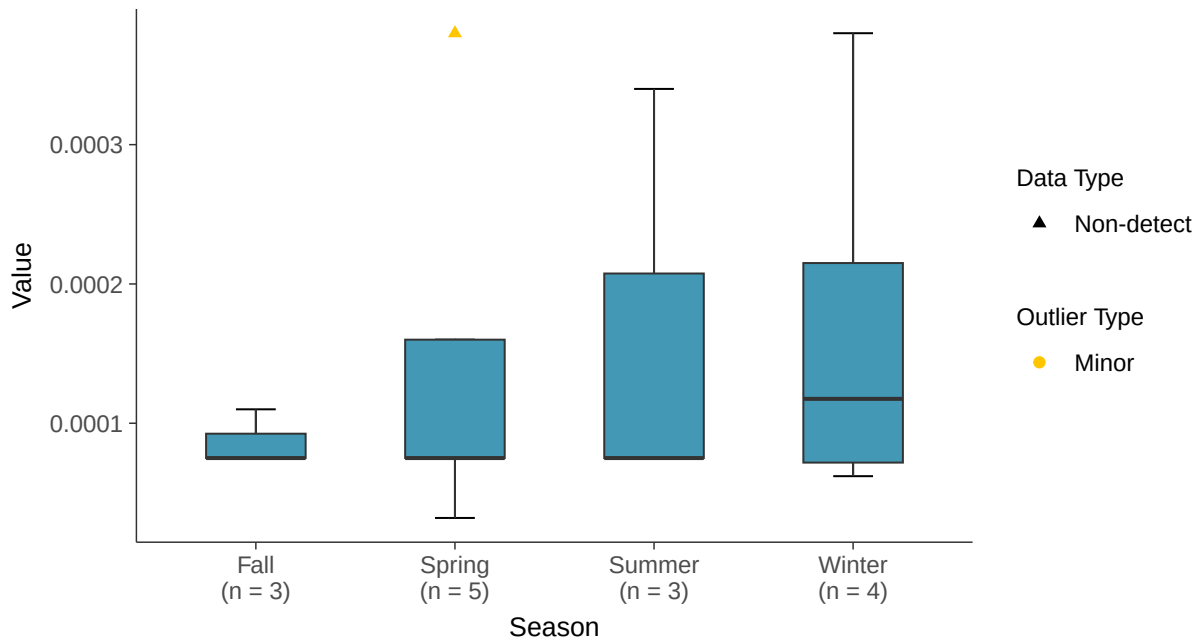
Boxplot

Cadmium, MW-01R (mg/L)



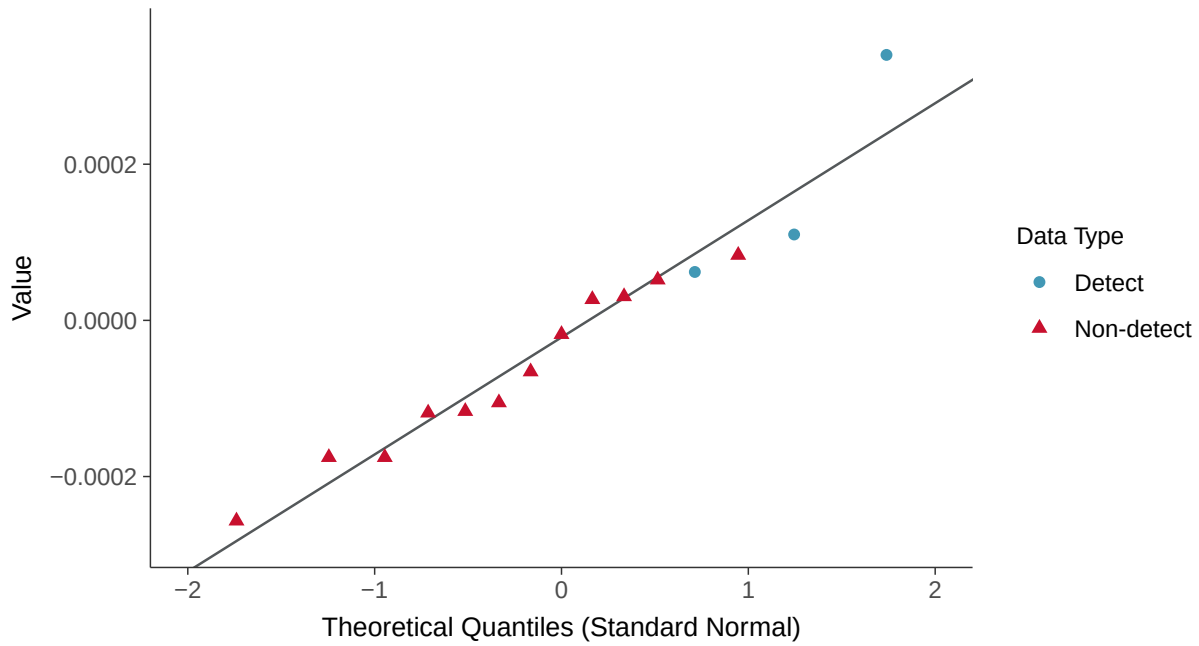
Boxplot by Season

Cadmium, MW-01R (mg/L)



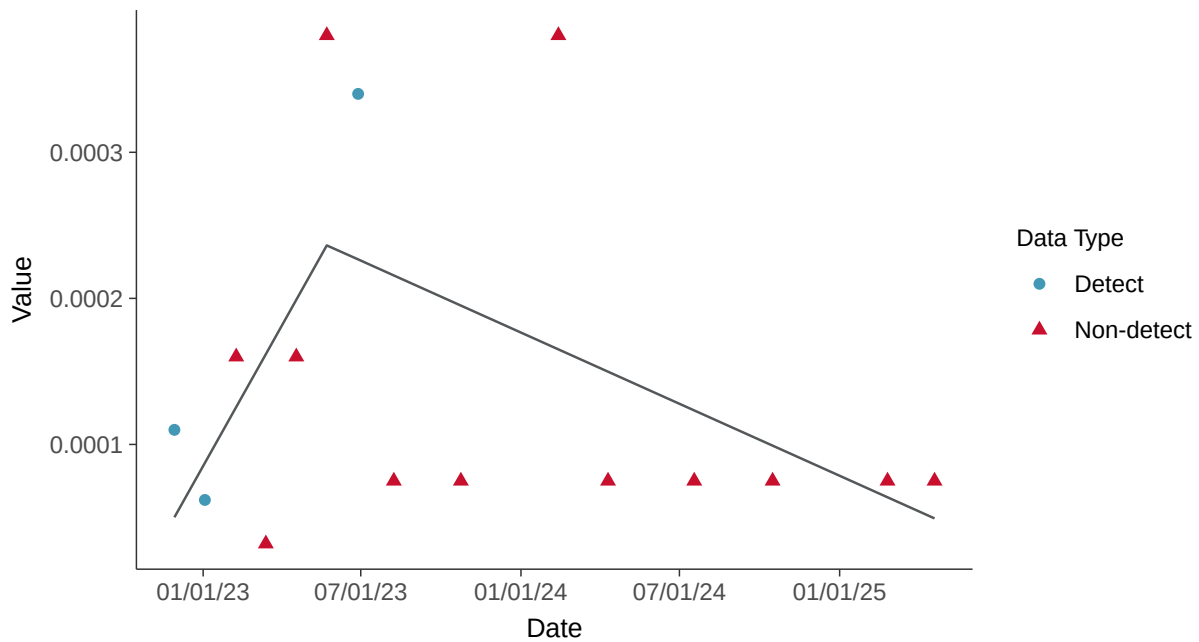
Normal Q-Q plot using ROS Imputed Estimates

Cadmium, MW-01R (mg/L)



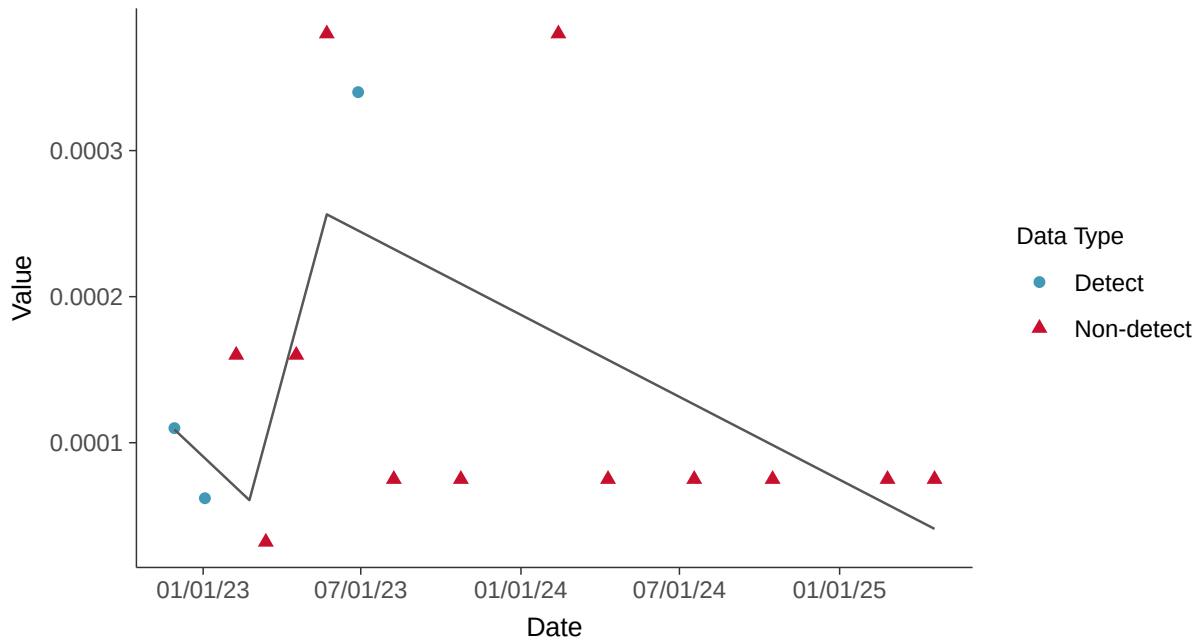
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-01R (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear
Cadmium, MW-01R (mg/L)

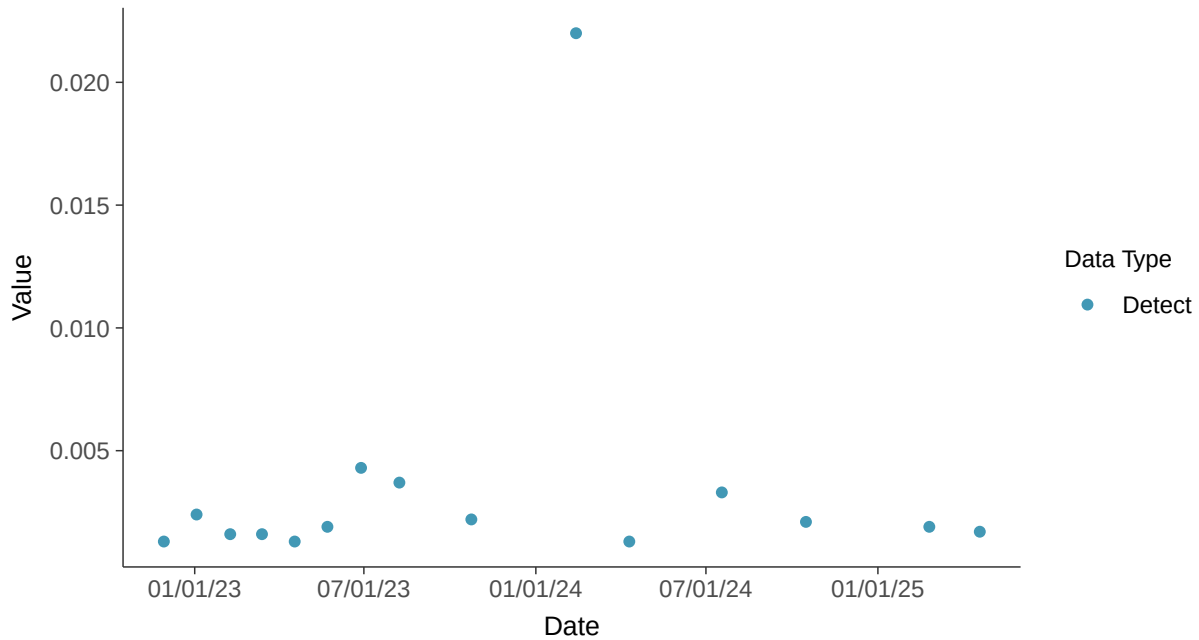


Appendix IV: Chromium, Total, MW-01R

ID: 11_2_4_109

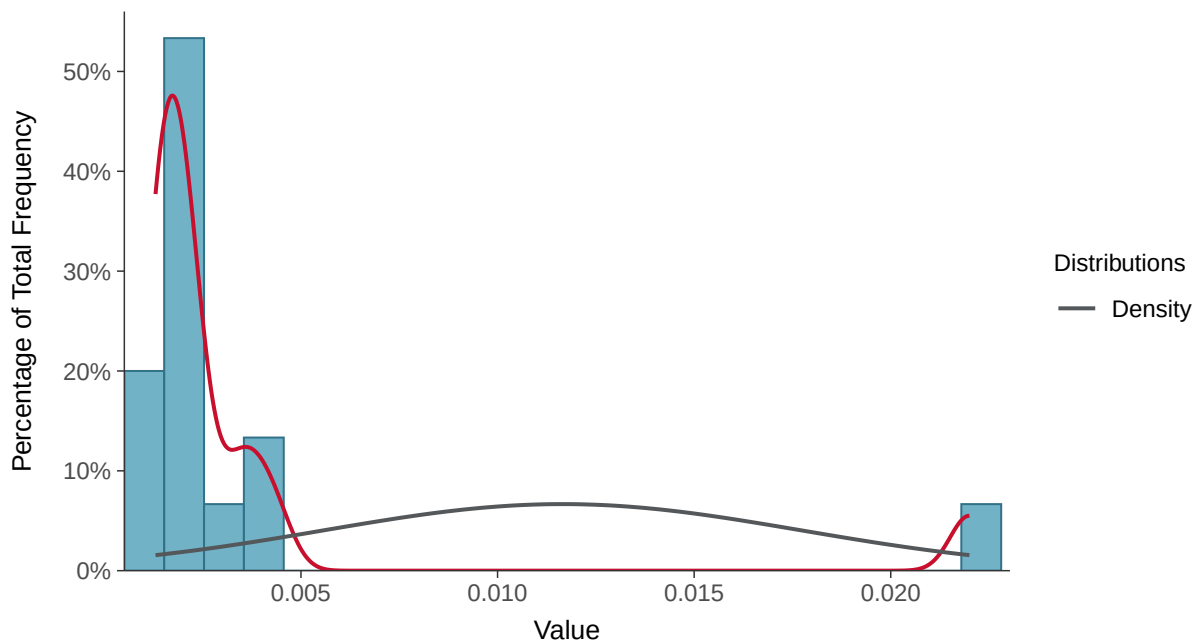
Scatter Plot

Chromium, Total, MW-01R (mg/L)



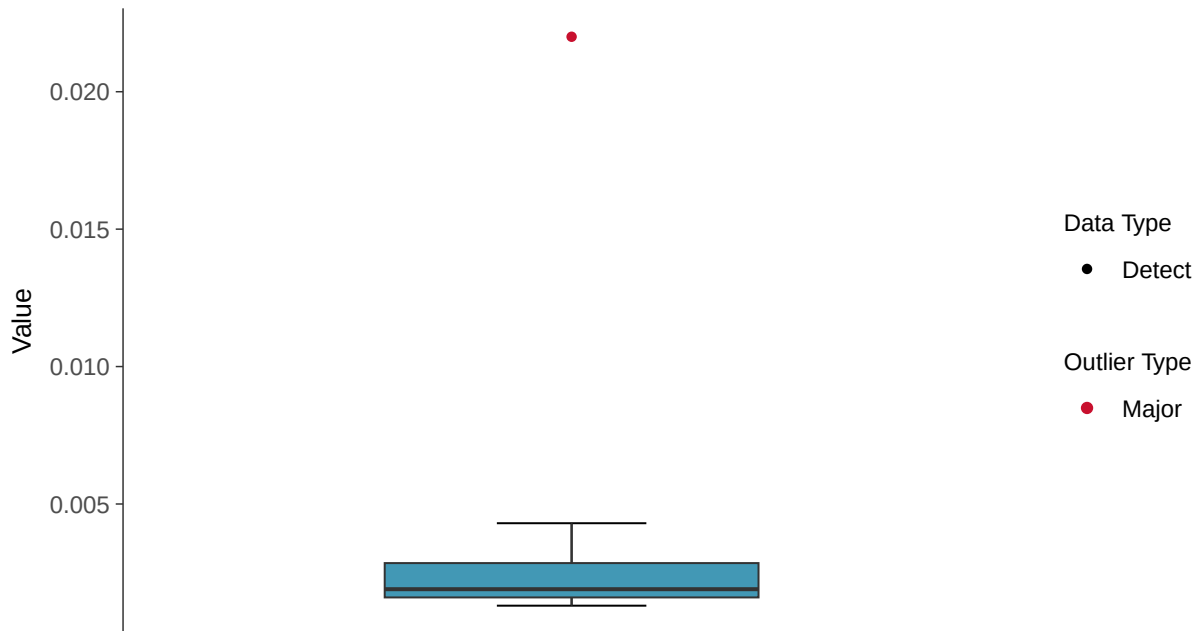
Histogram

Chromium, Total, MW-01R (mg/L)



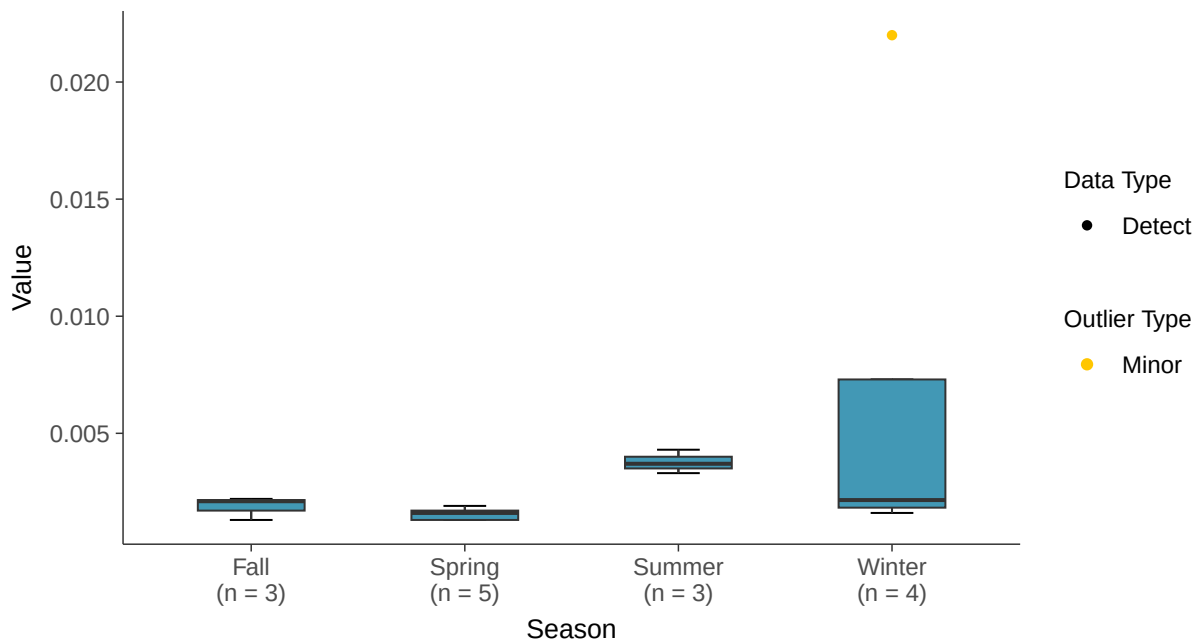
Boxplot

Chromium, Total, MW-01R (mg/L)



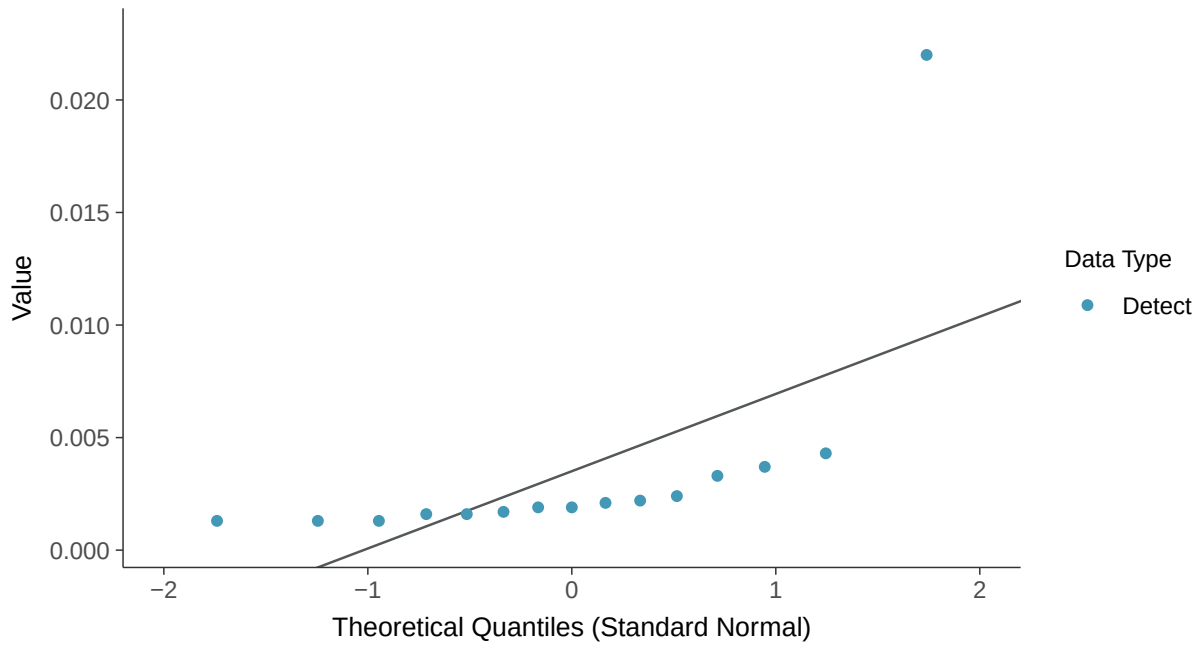
Boxplot by Season

Chromium, Total, MW-01R (mg/L)



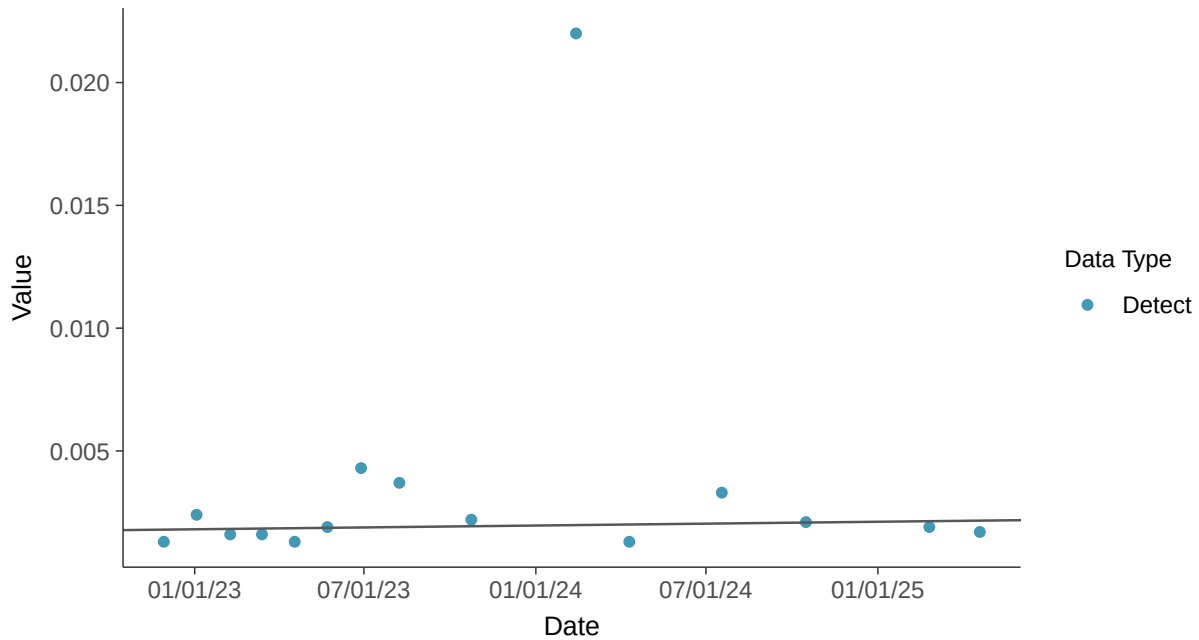
Normal Q-Q plot

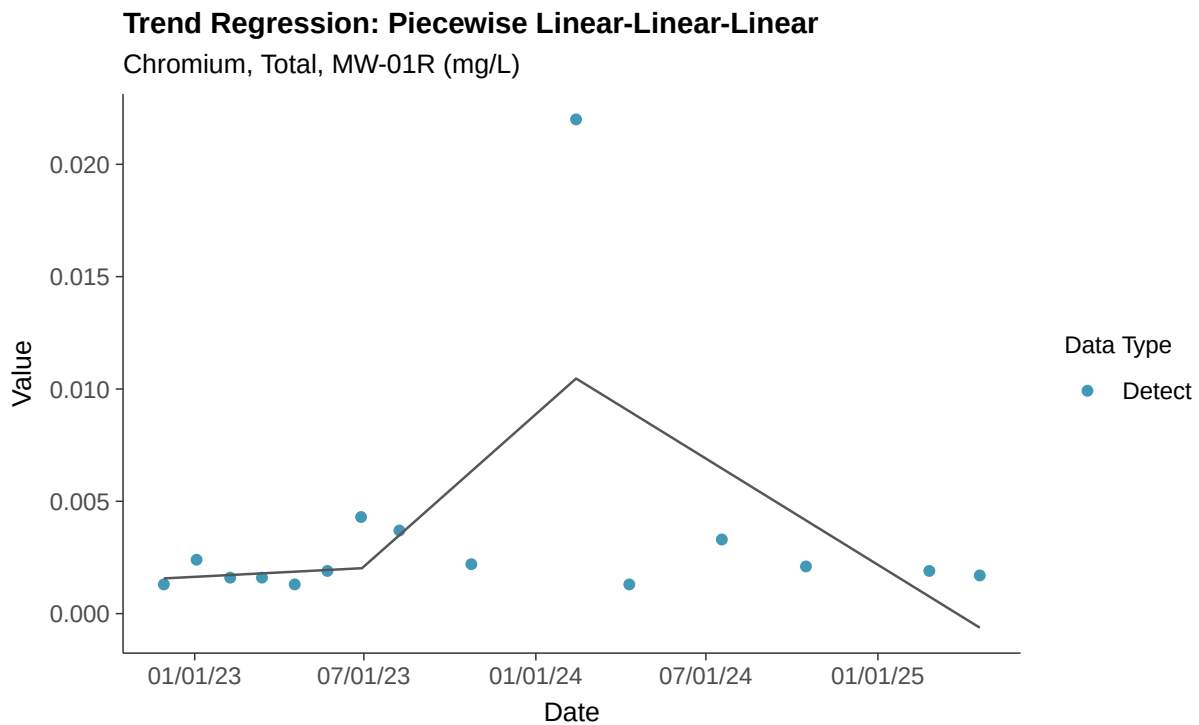
Chromium, Total, MW-01R (mg/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

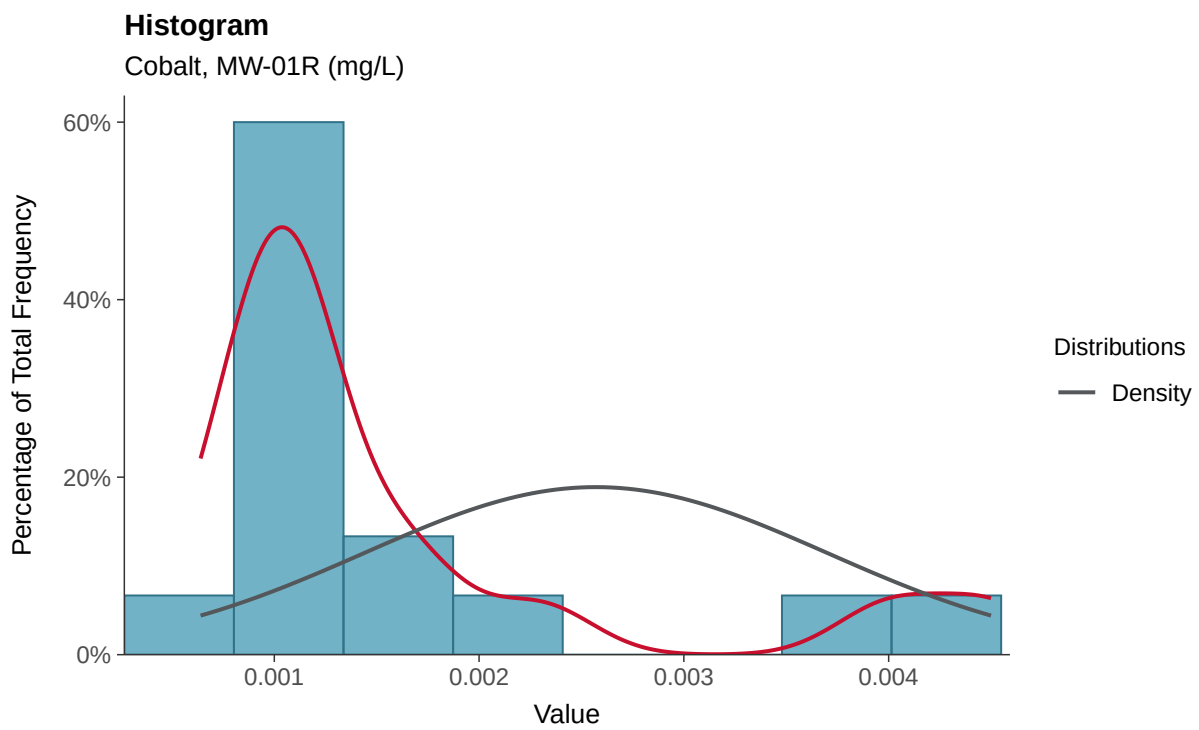
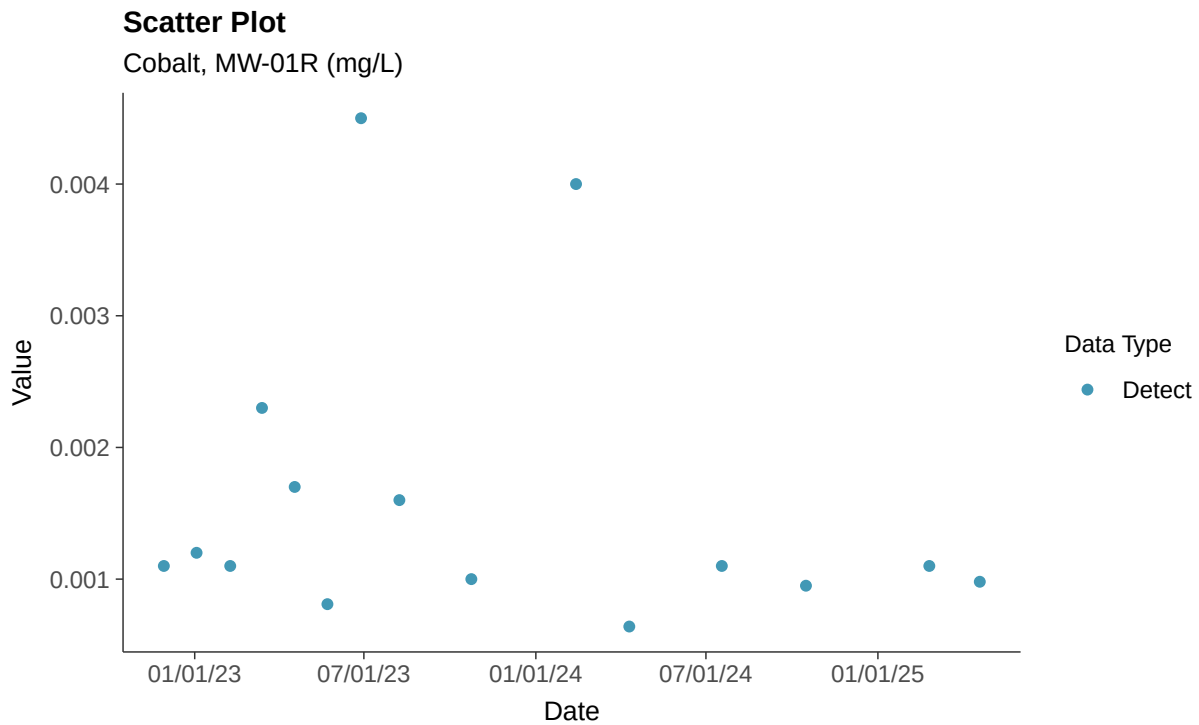
Chromium, Total, MW-01R (mg/L)





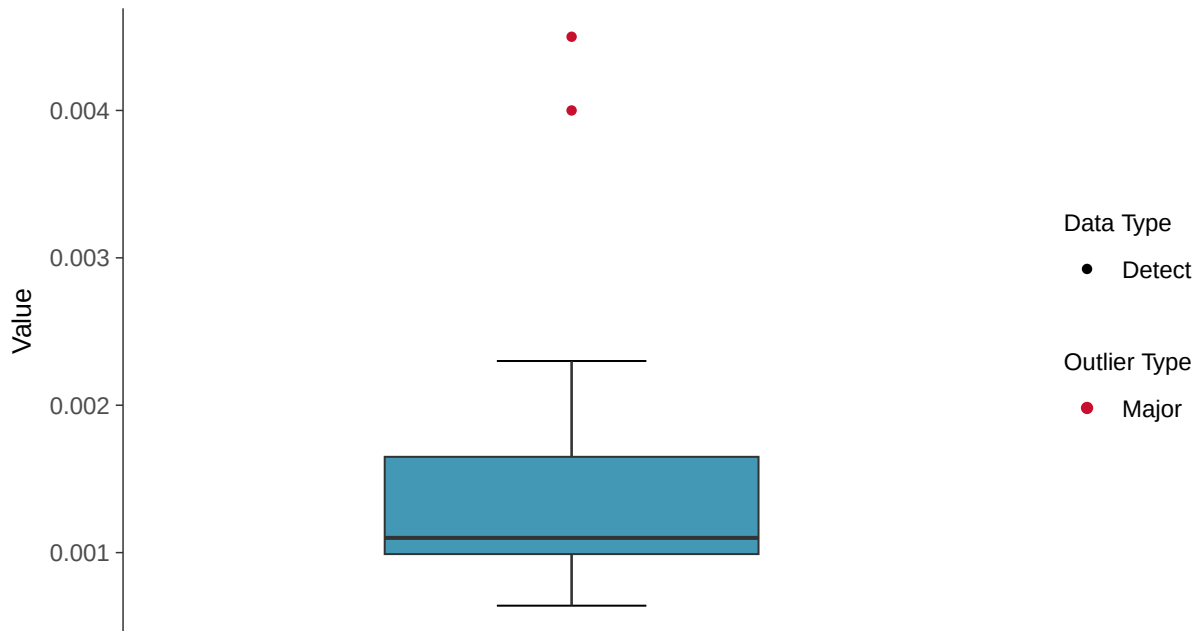
Appendix IV: Cobalt, MW-01R

ID: 11_2_4_110



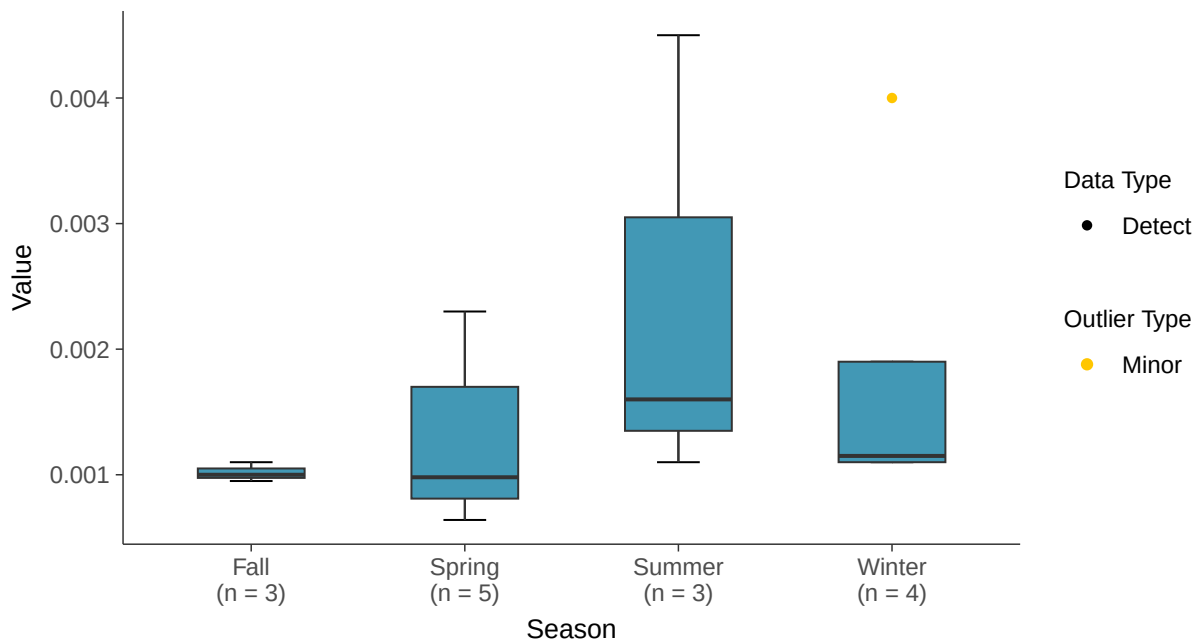
Boxplot

Cobalt, MW-01R (mg/L)



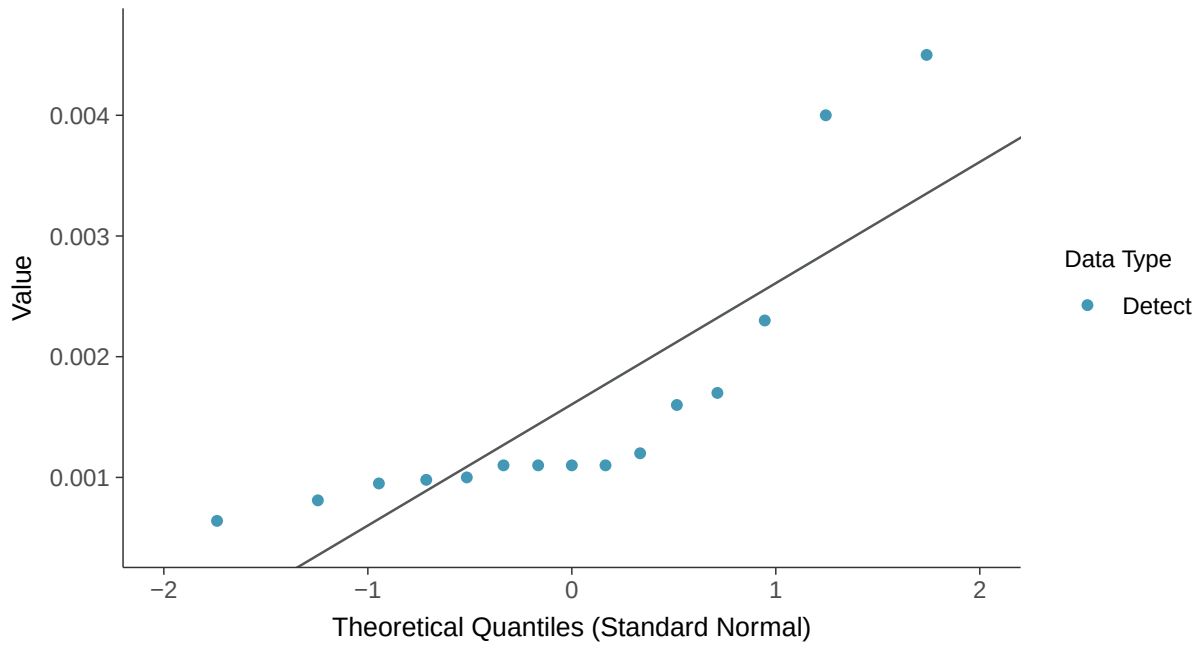
Boxplot by Season

Cobalt, MW-01R (mg/L)



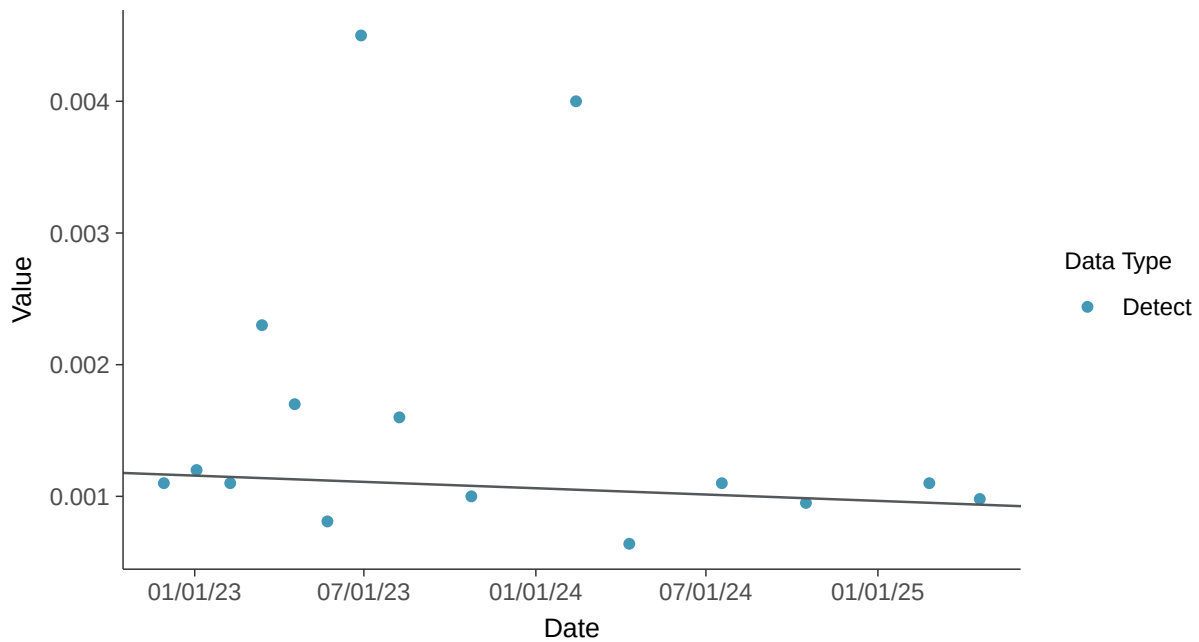
Normal Q-Q plot

Cobalt, MW-01R (mg/L)



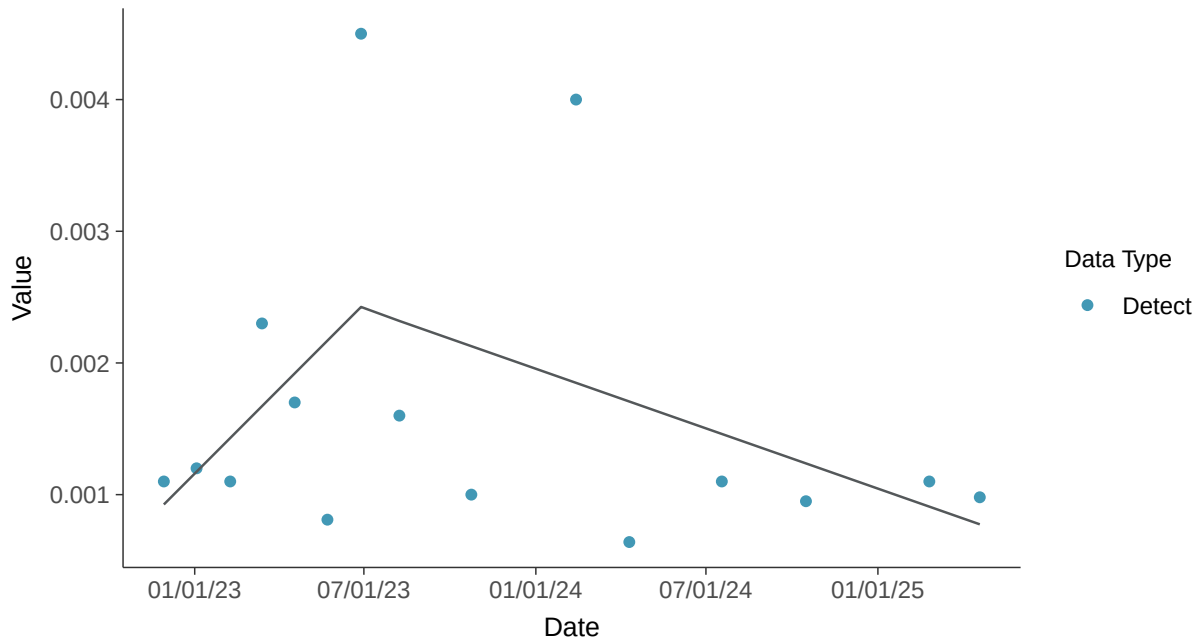
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Cobalt, MW-01R (mg/L)



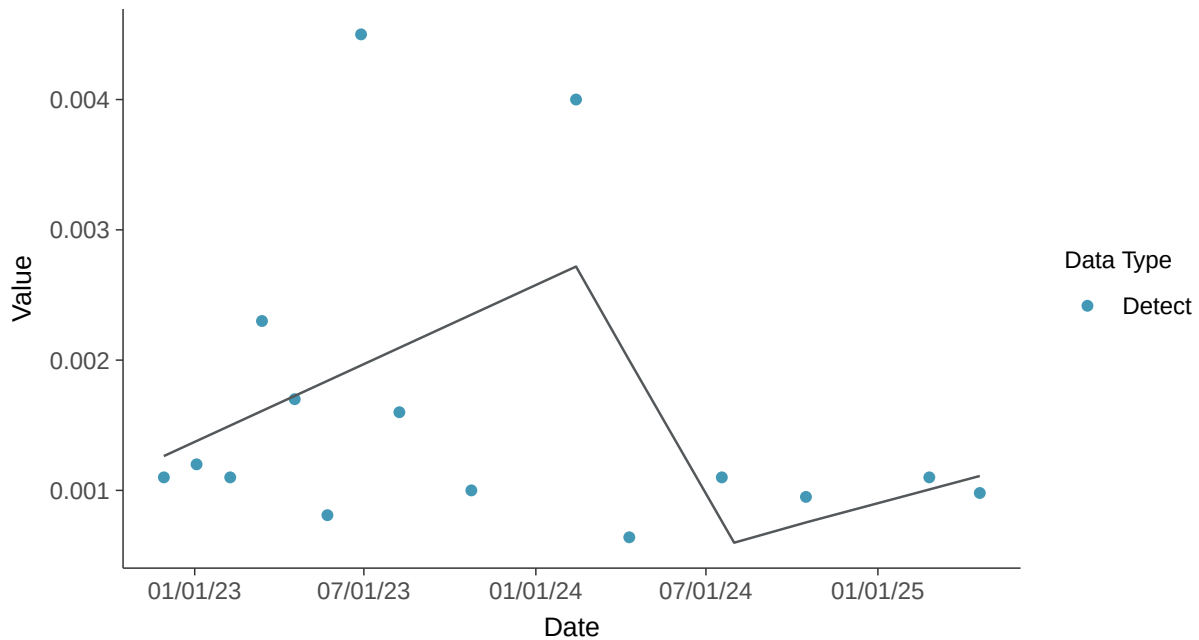
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-01R (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cobalt, MW-01R (mg/L)

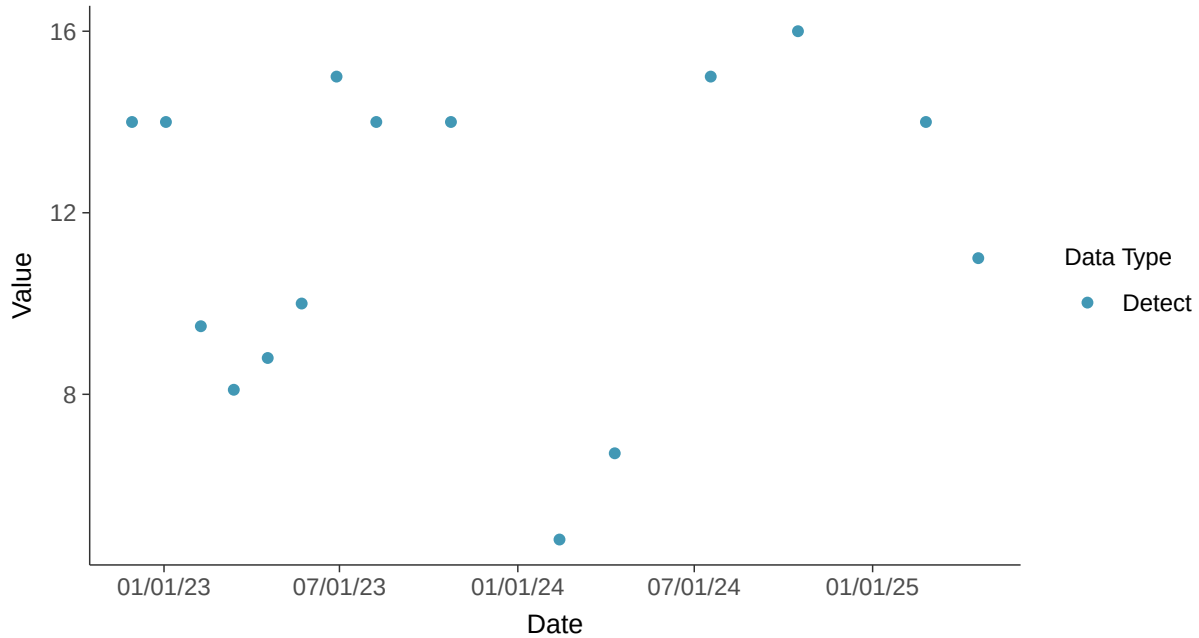


Appendix IV: Fluoride (App IV), MW-01R

ID: 11_2_4_113

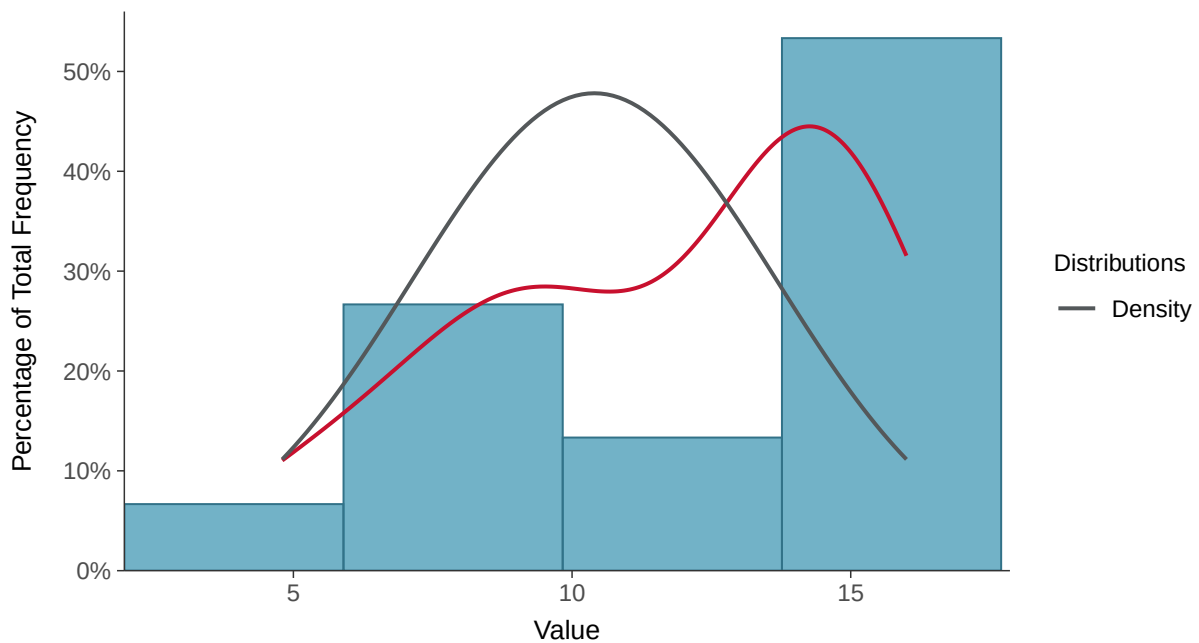
Scatter Plot

Fluoride (App IV), MW-01R (mg/L)



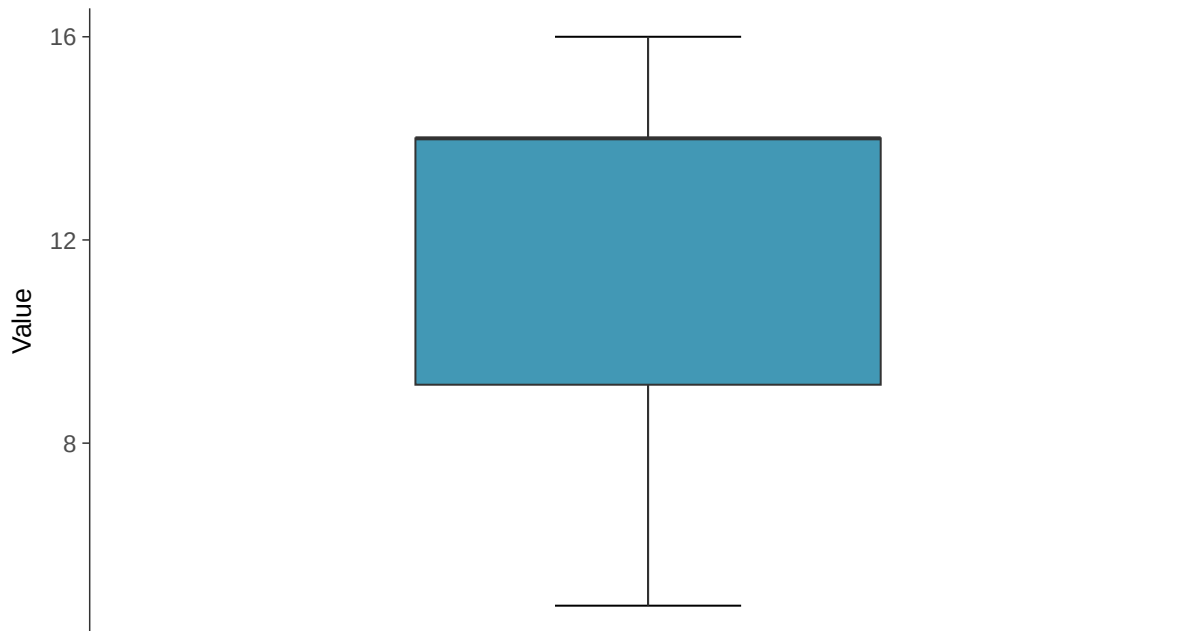
Histogram

Fluoride (App IV), MW-01R (mg/L)



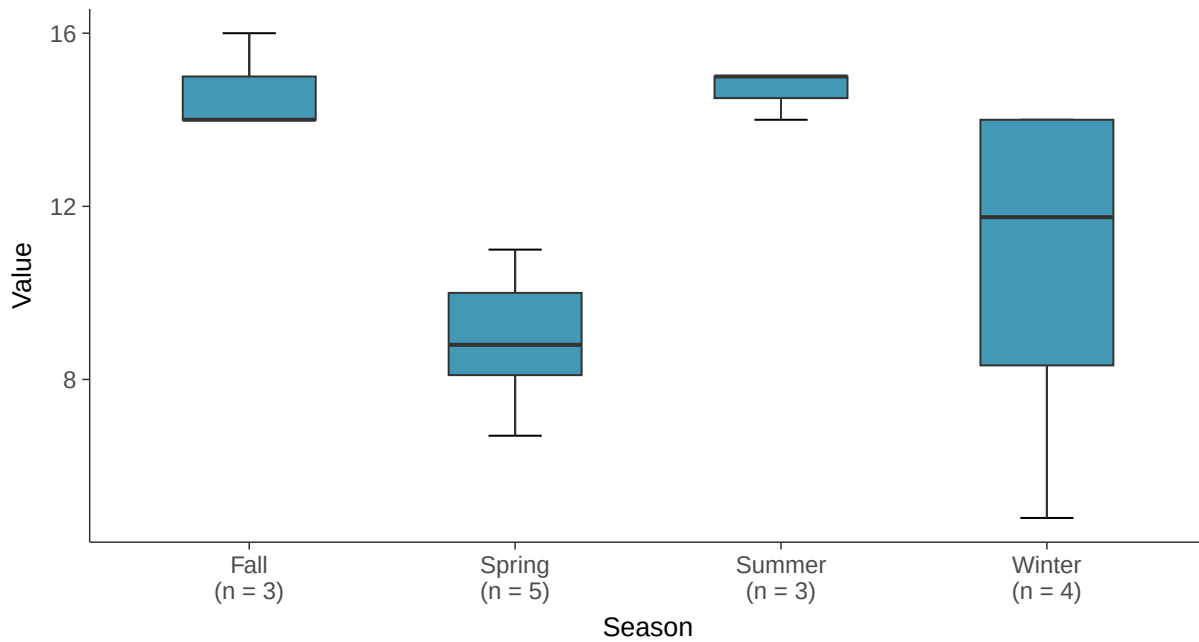
Boxplot

Fluoride (App IV), MW-01R (mg/L)



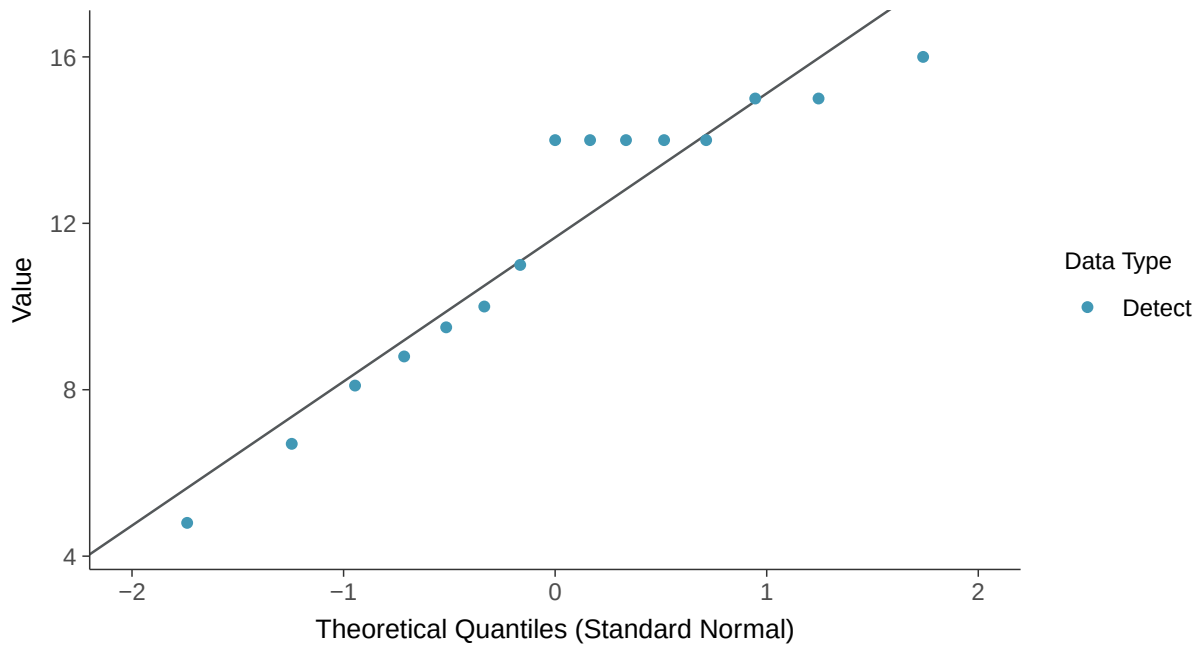
Boxplot by Season

Fluoride (App IV), MW-01R (mg/L)



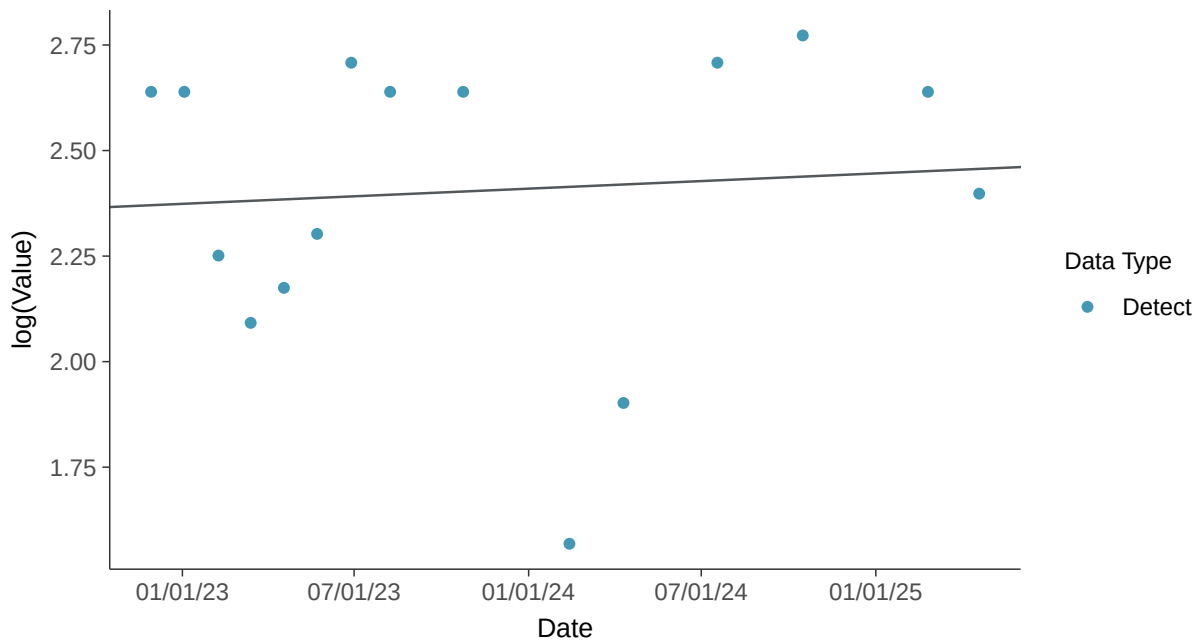
Normal Q-Q plot

Fluoride (App IV), MW-01R (mg/L)



Trend Regression: Lognormal MLE

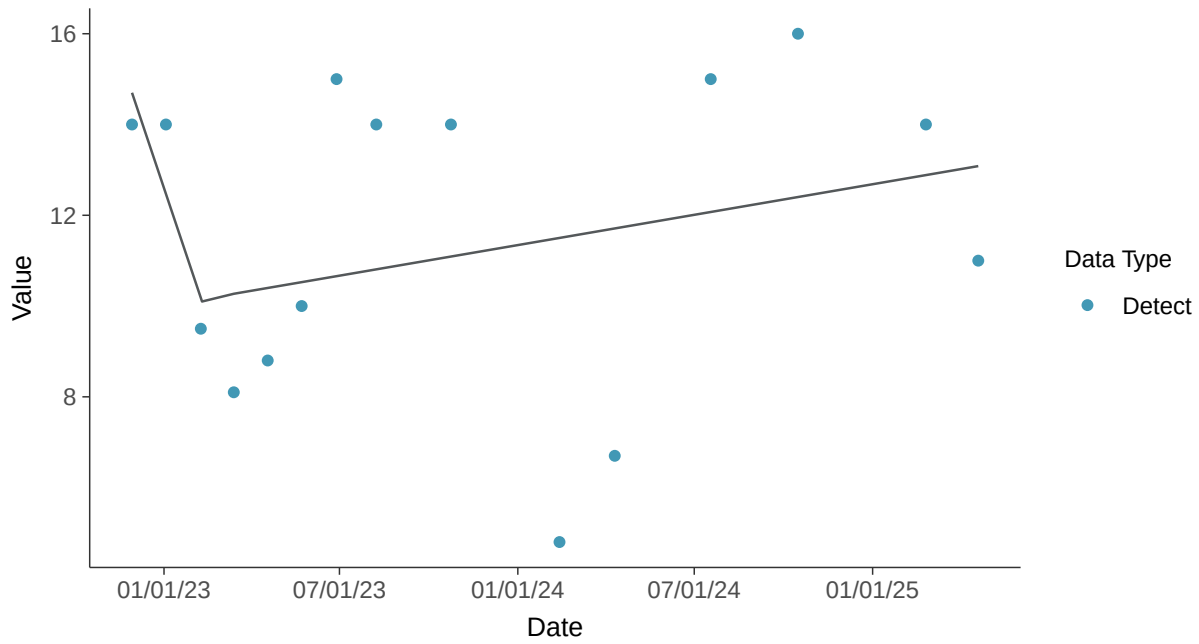
Fluoride (App IV), MW-01R (mg/L)





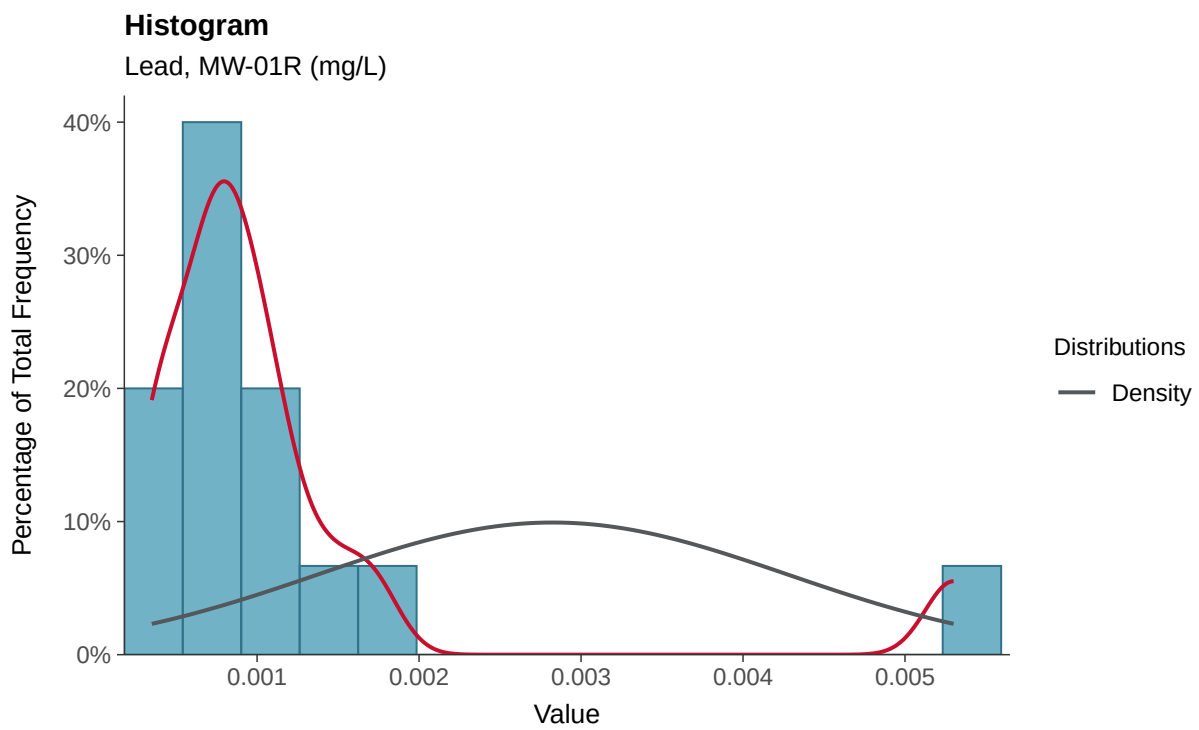
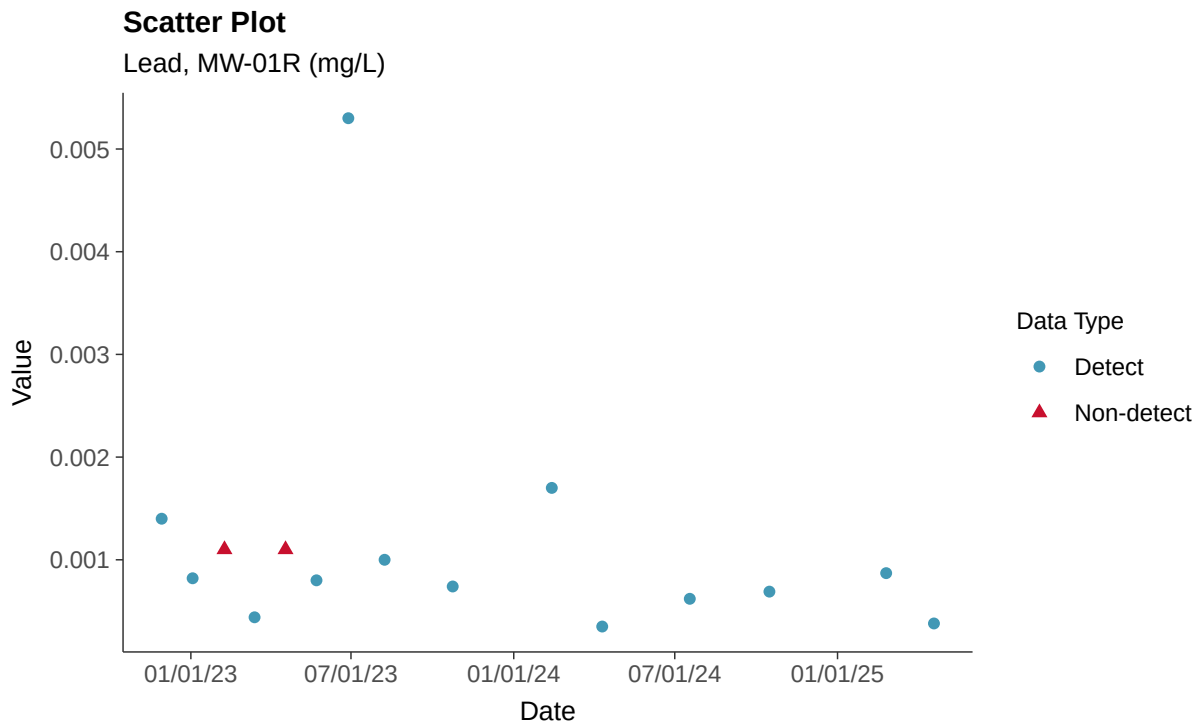
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-01R (mg/L)



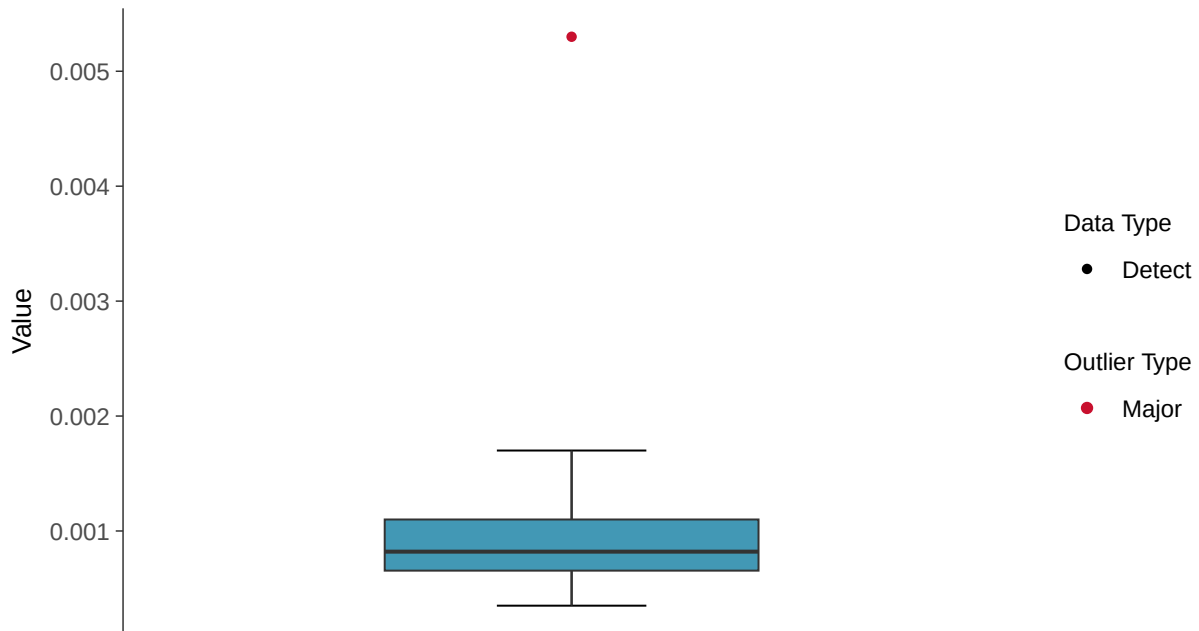
Appendix IV: Lead, MW-01R

ID: 11_2_4_115



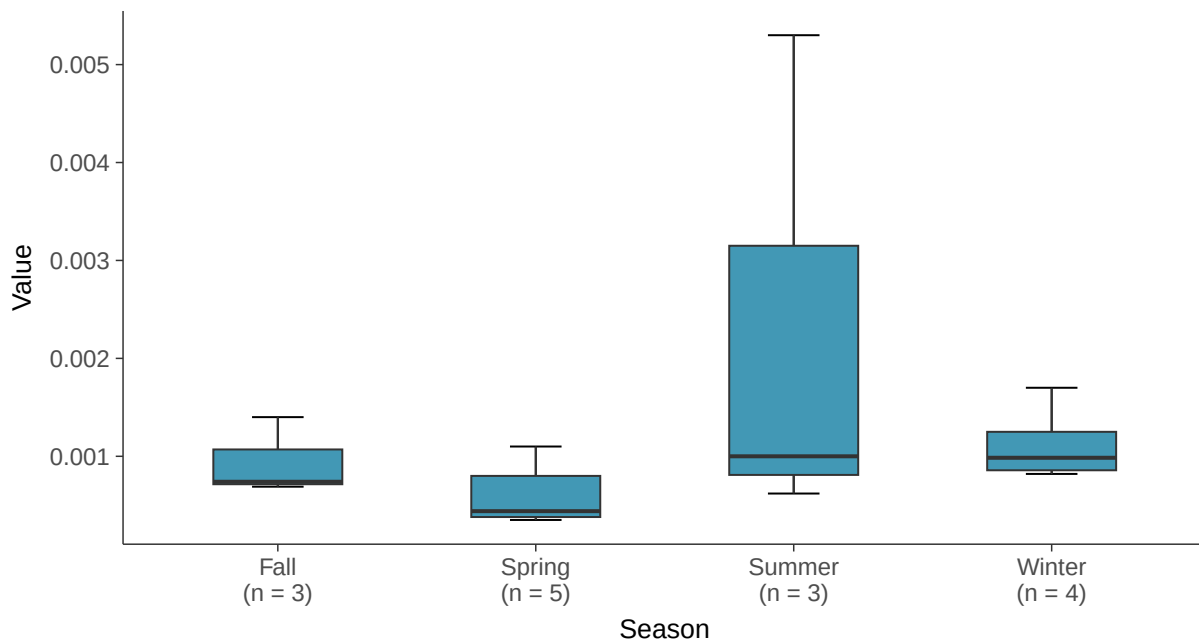
Boxplot

Lead, MW-01R (mg/L)



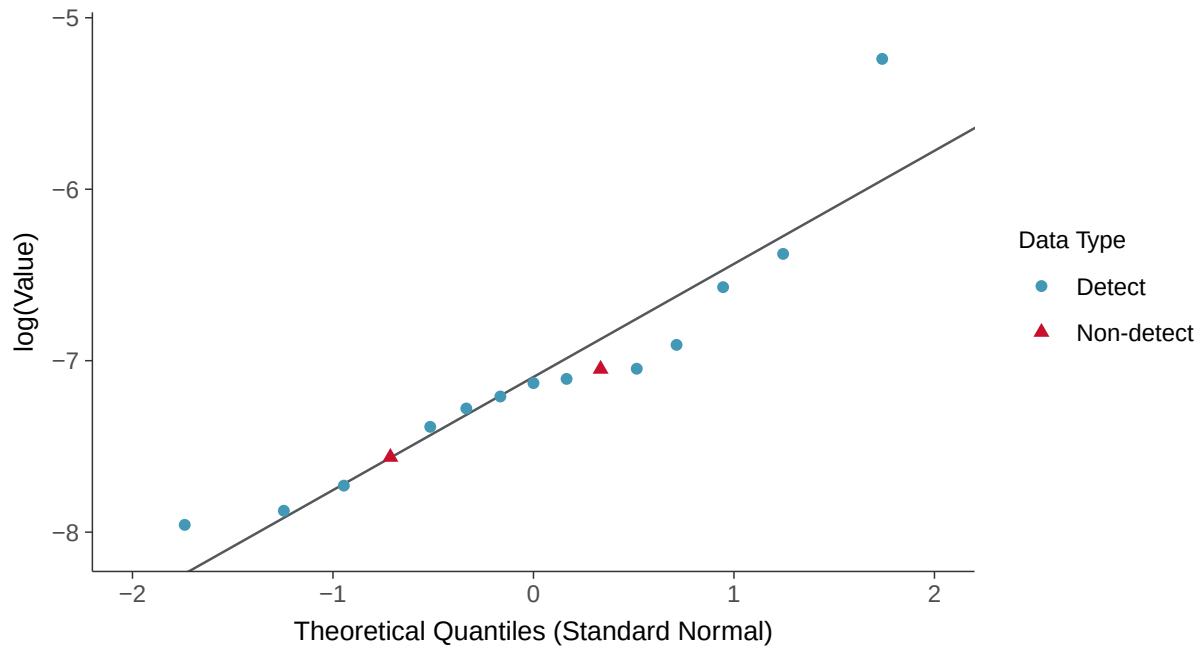
Boxplot by Season

Lead, MW-01R (mg/L)



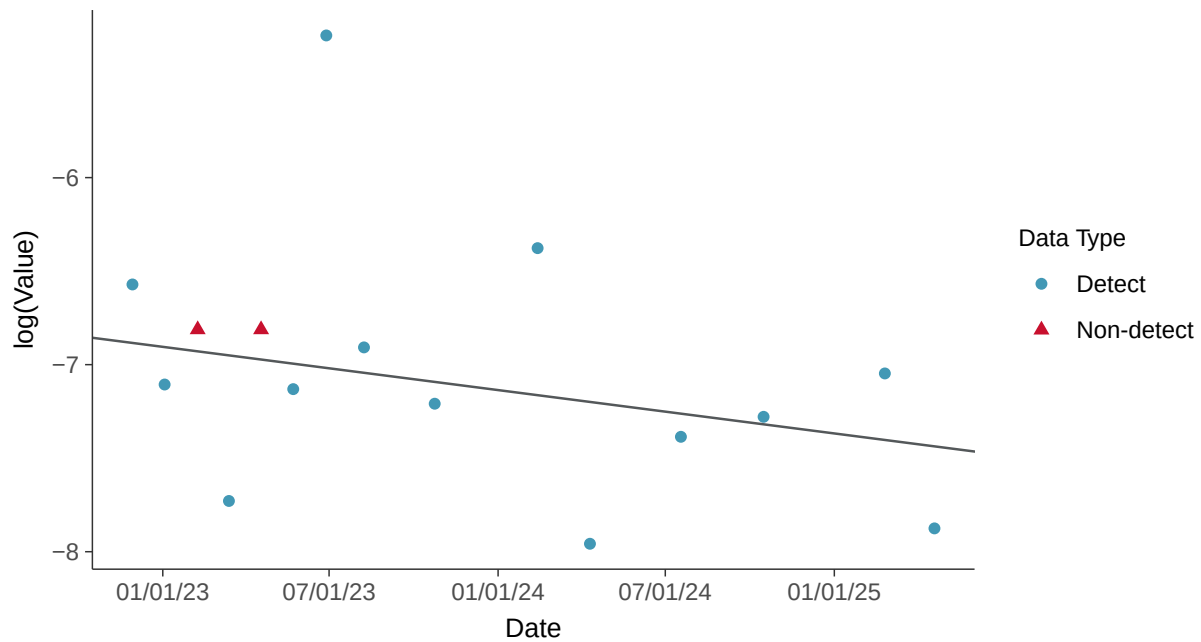
Lognormal Q-Q plot using ROS Imputed Estimates

Lead, MW-01R (mg/L)



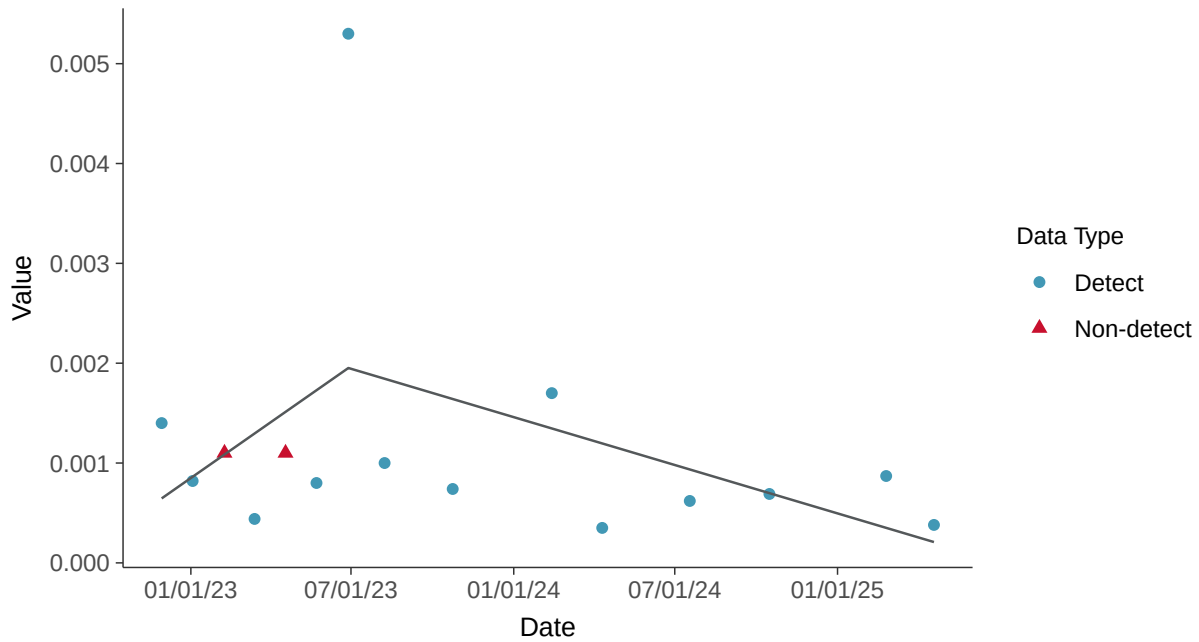
Trend Regression: Lognormal MLE

Lead, MW-01R (mg/L)



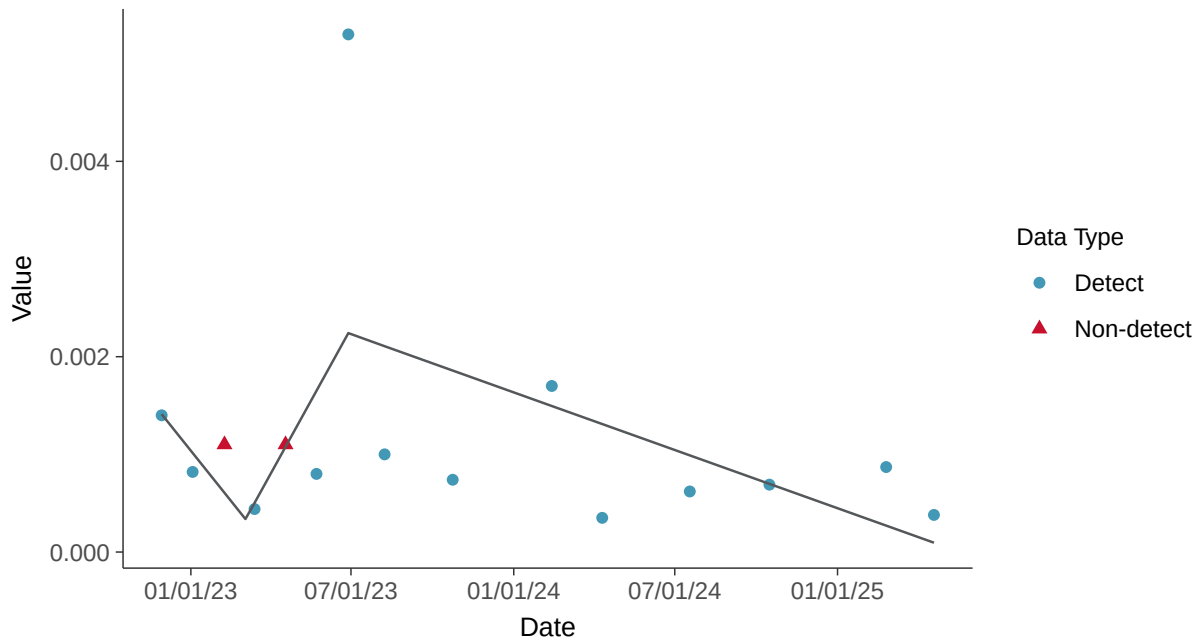
Trend Regression: Piecewise Linear-Linear

Lead, MW-01R (mg/L)



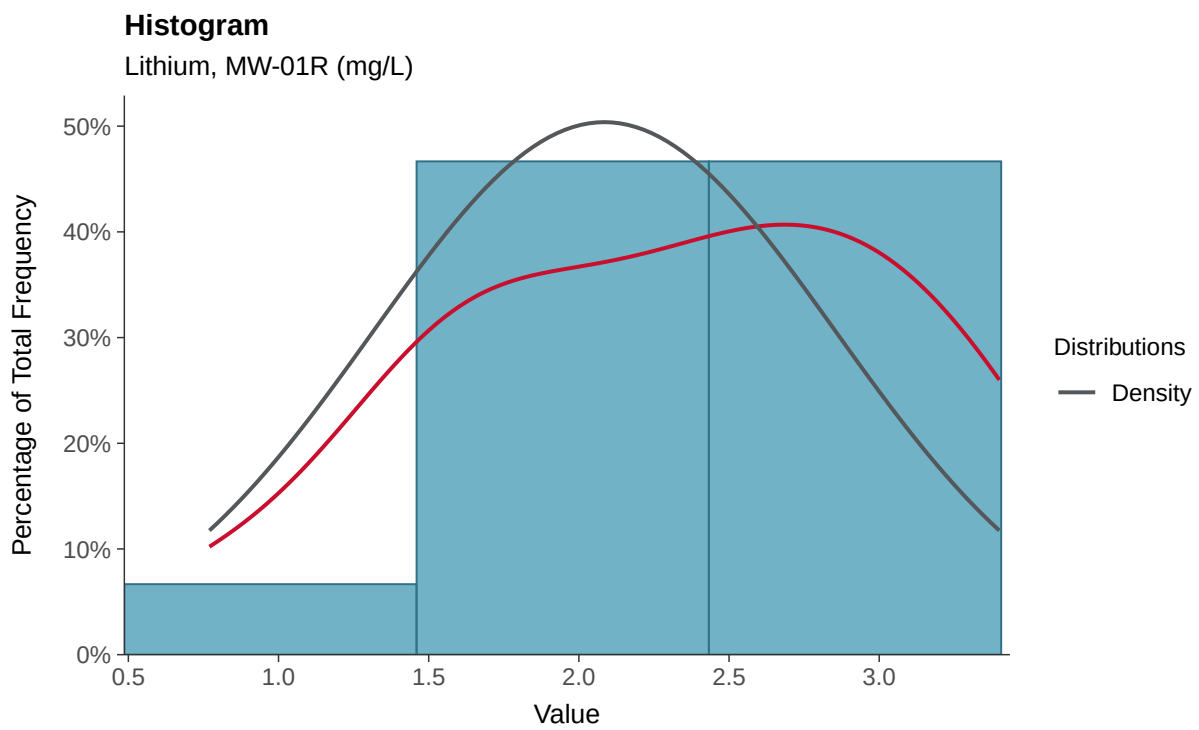
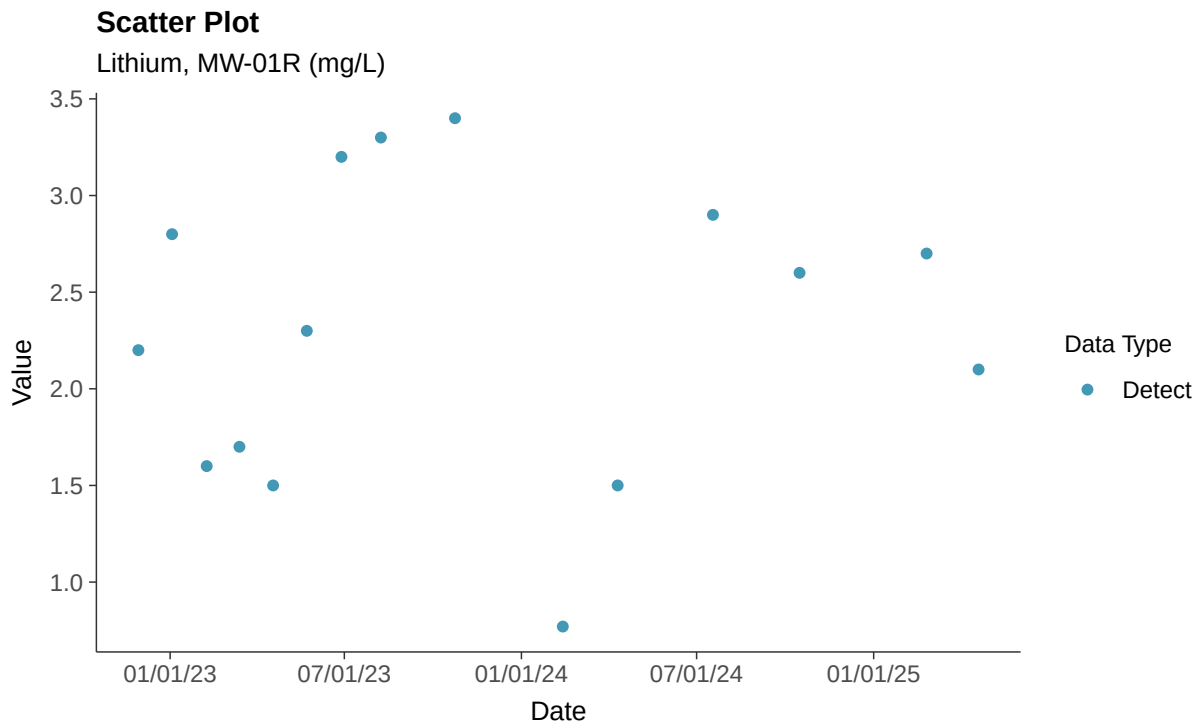
Trend Regression: Piecewise Linear-Linear-Linear

Lead, MW-01R (mg/L)



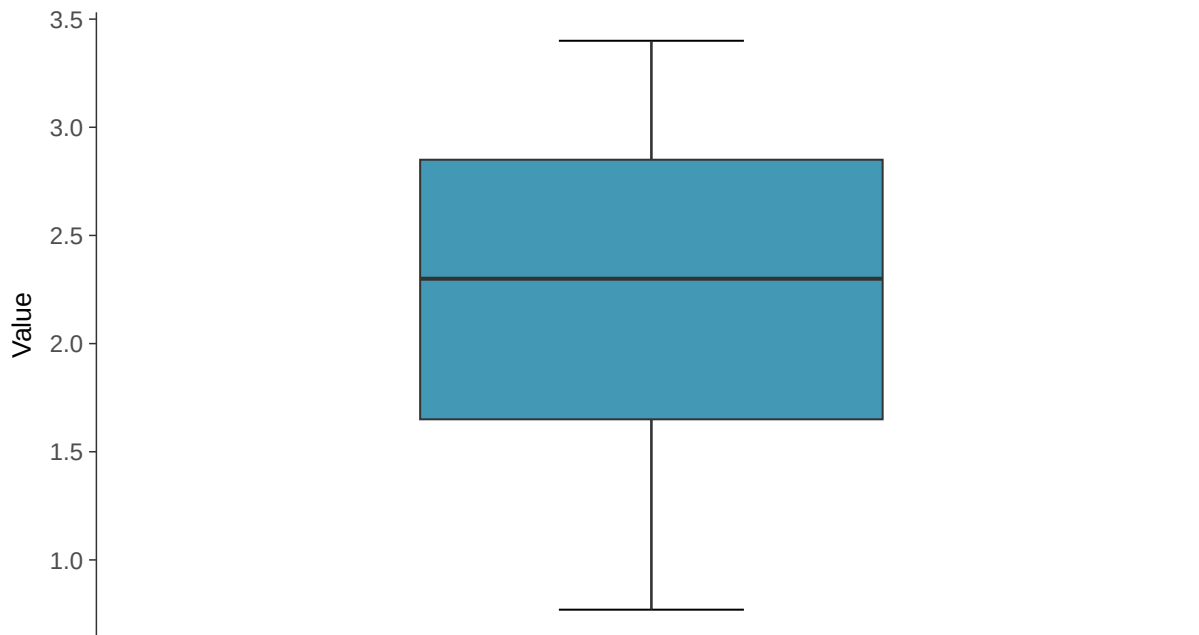
Appendix IV: Lithium, MW-01R

ID: 11_2_4_116



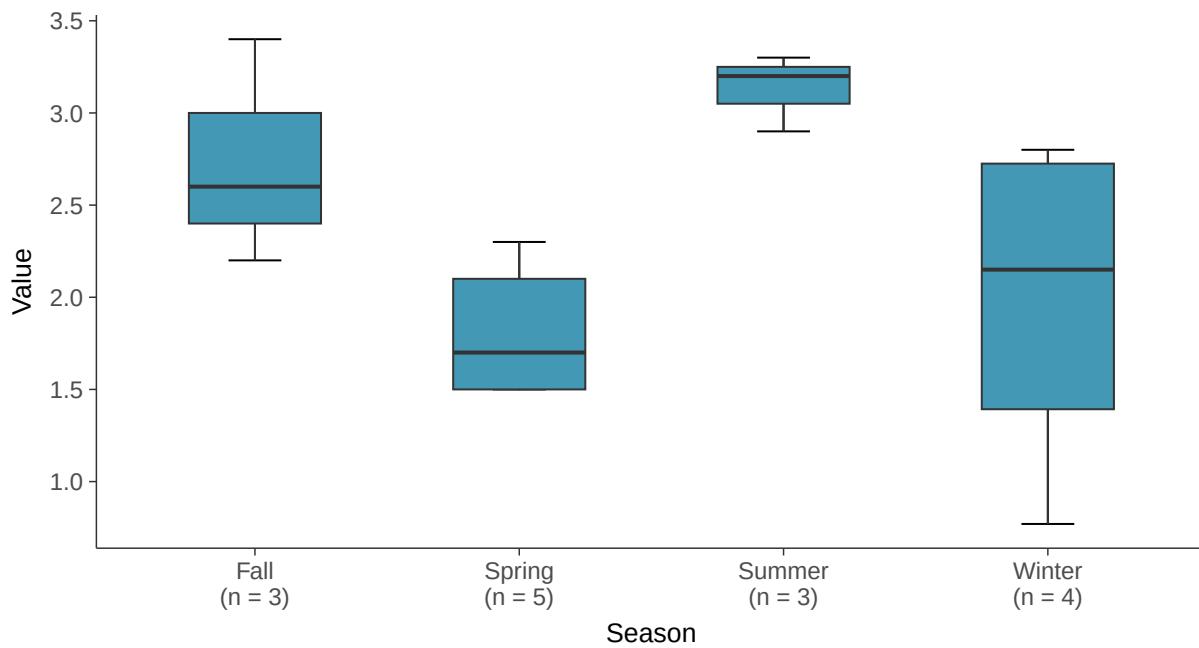
Boxplot

Lithium, MW-01R (mg/L)



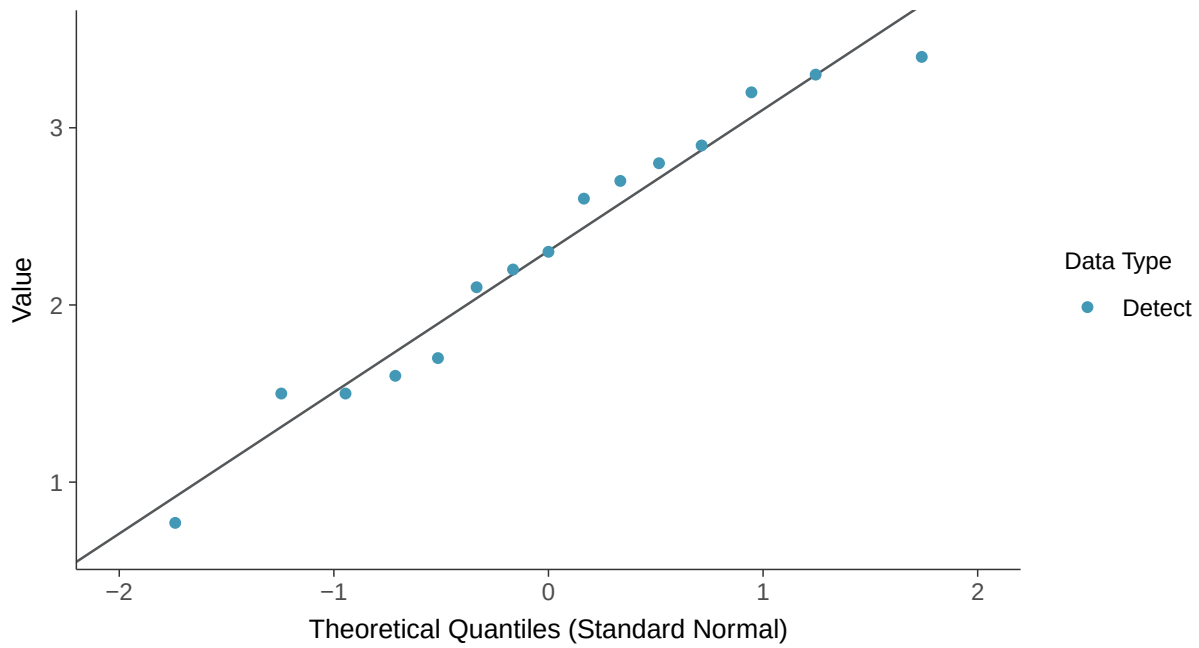
Boxplot by Season

Lithium, MW-01R (mg/L)



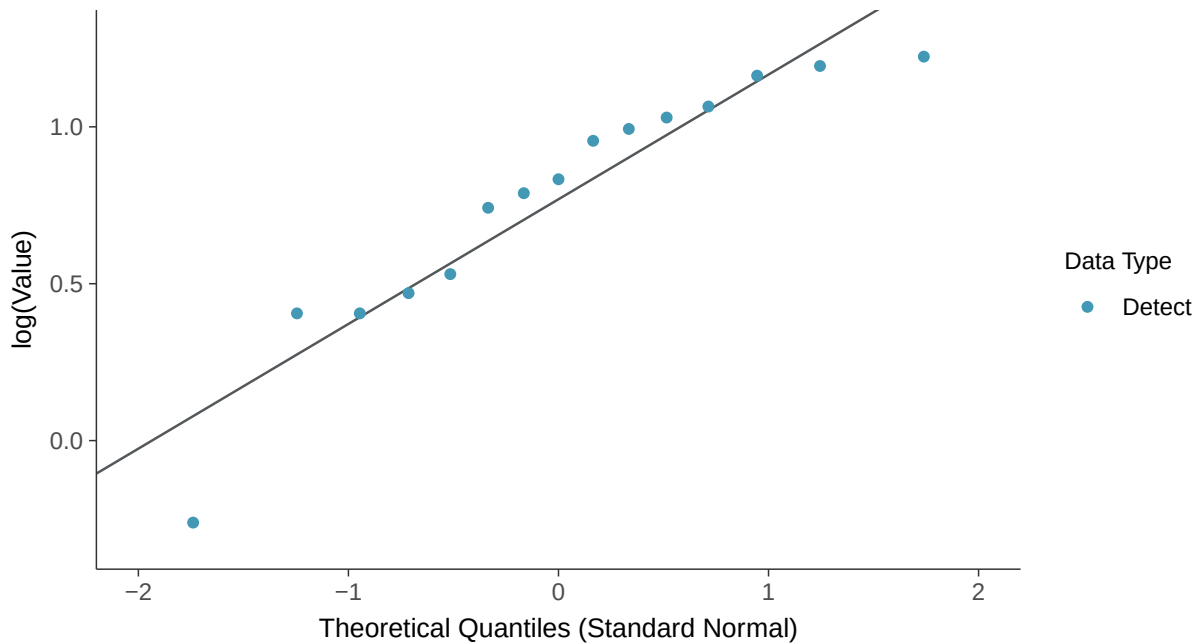
Normal Q-Q plot

Lithium, MW-01R (mg/L)



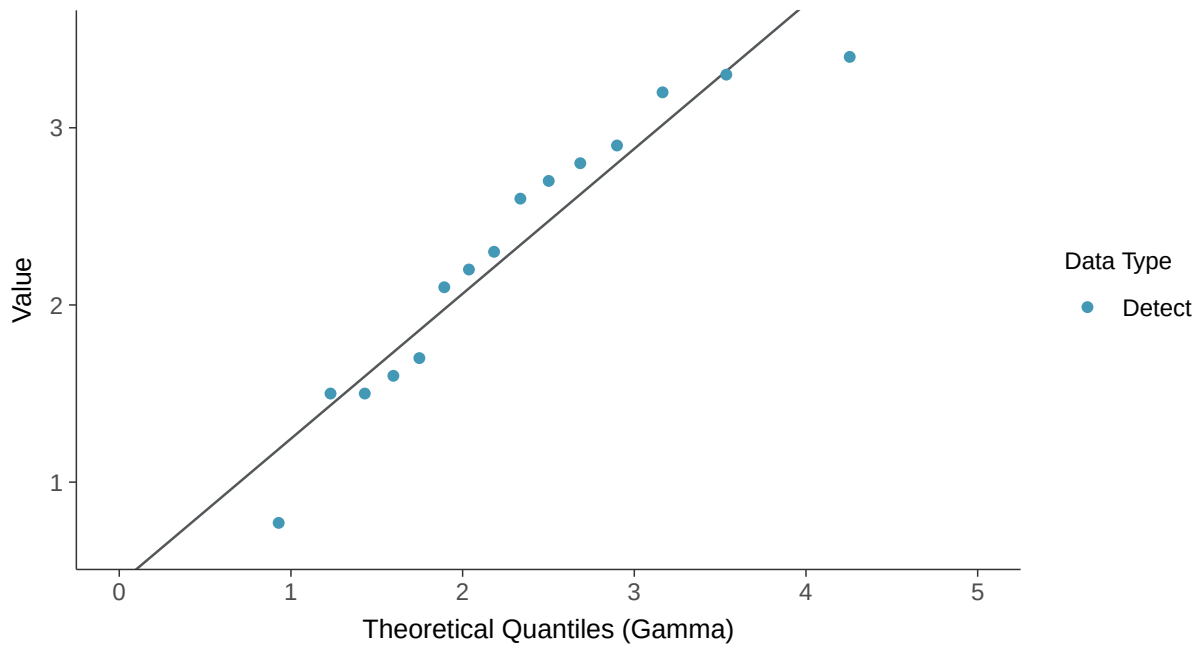
Lognormal Q-Q plot

Lithium, MW-01R (mg/L)



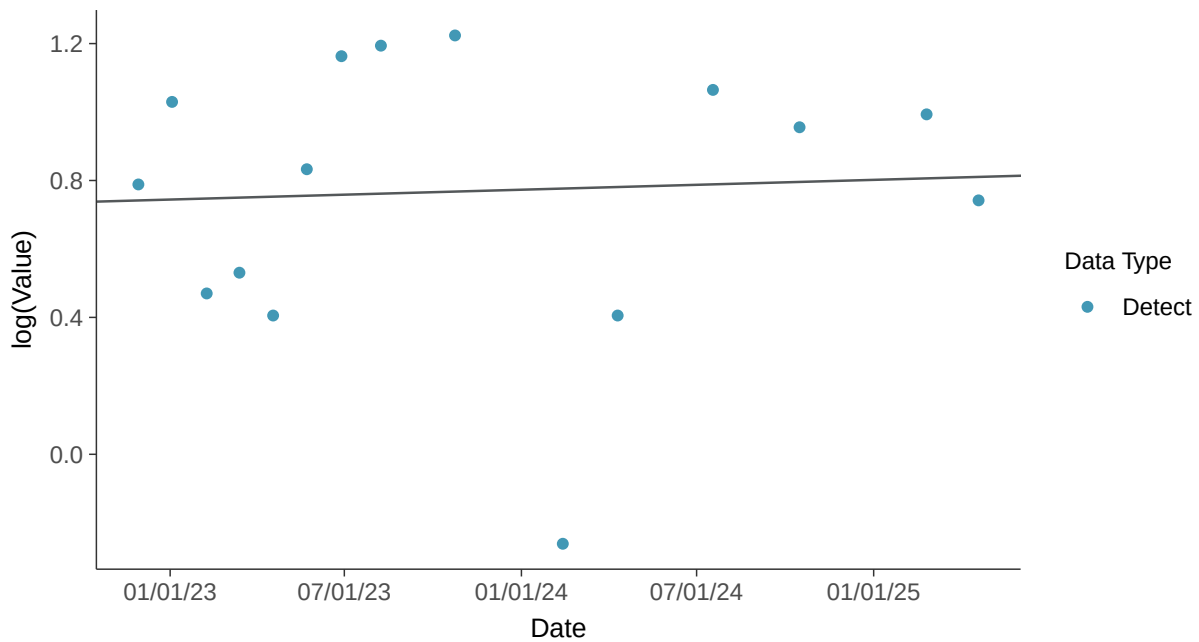
Gamma Q-Q plot

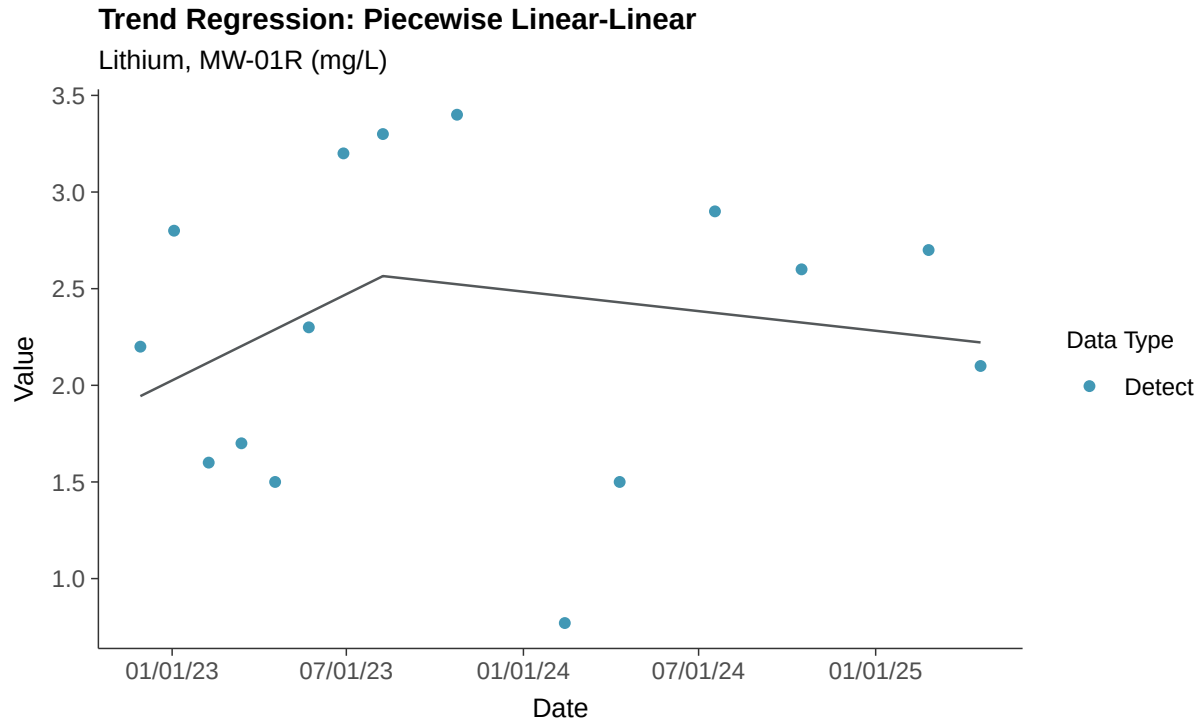
Lithium, MW-01R (mg/L)



Trend Regression: Lognormal MLE

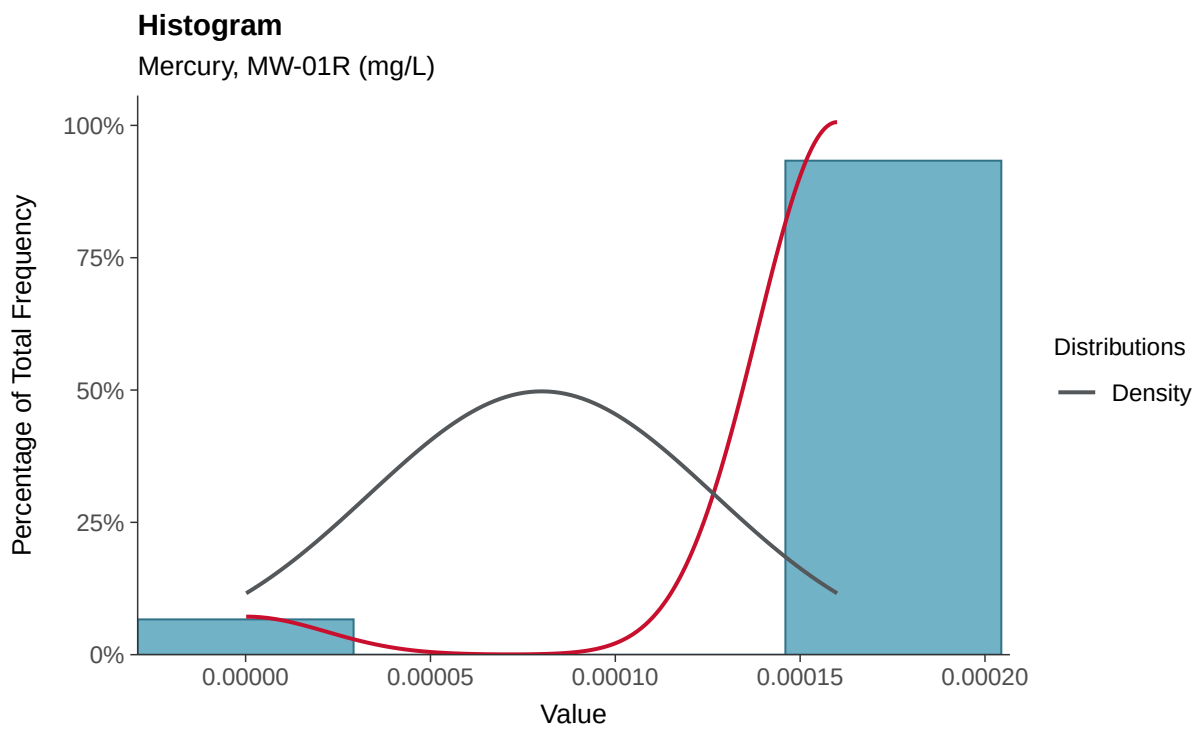
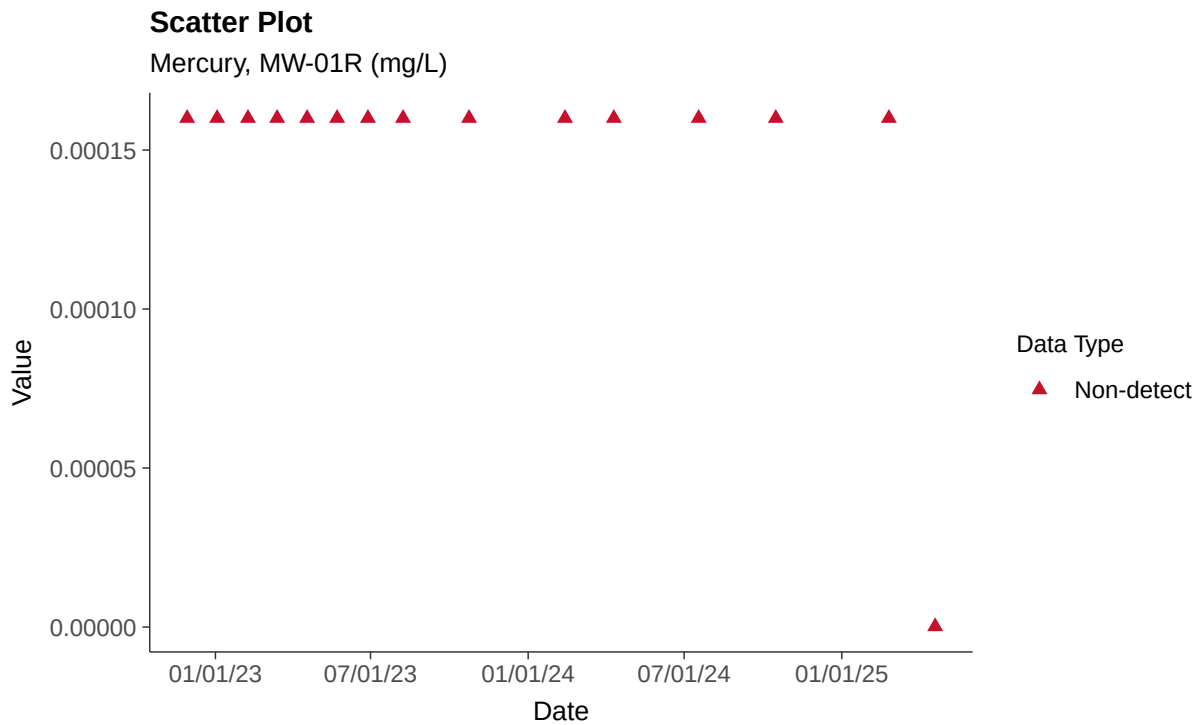
Lithium, MW-01R (mg/L)

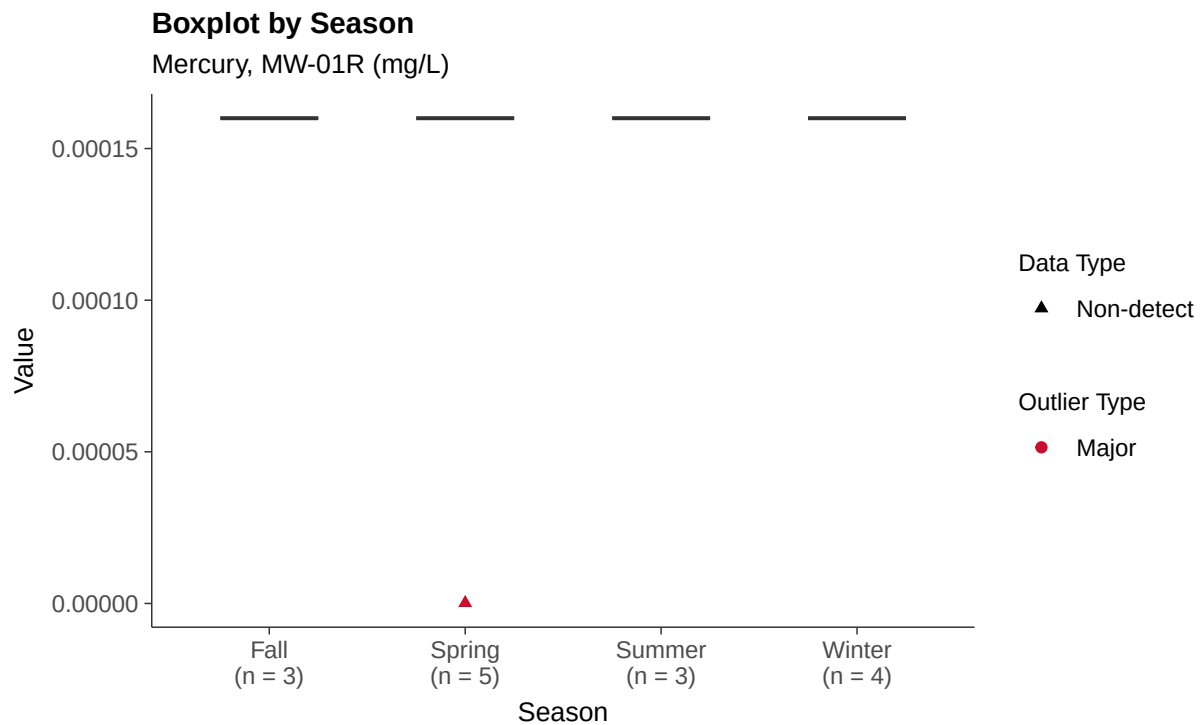
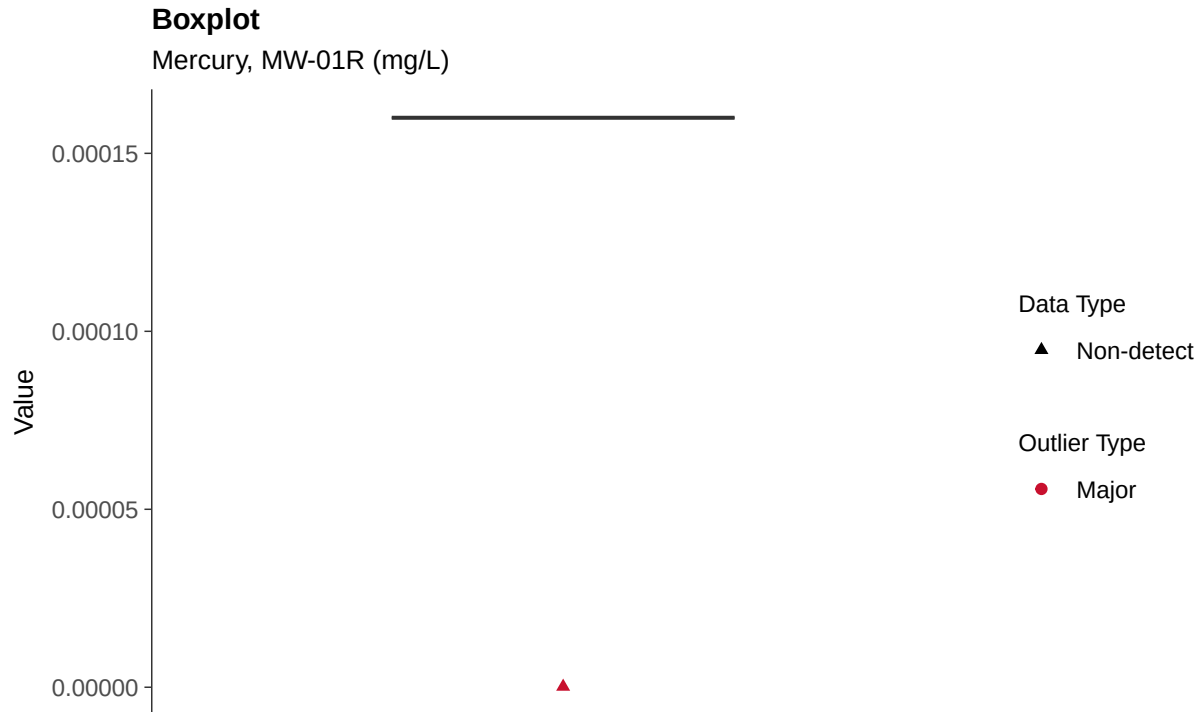




Appendix IV: Mercury, MW-01R

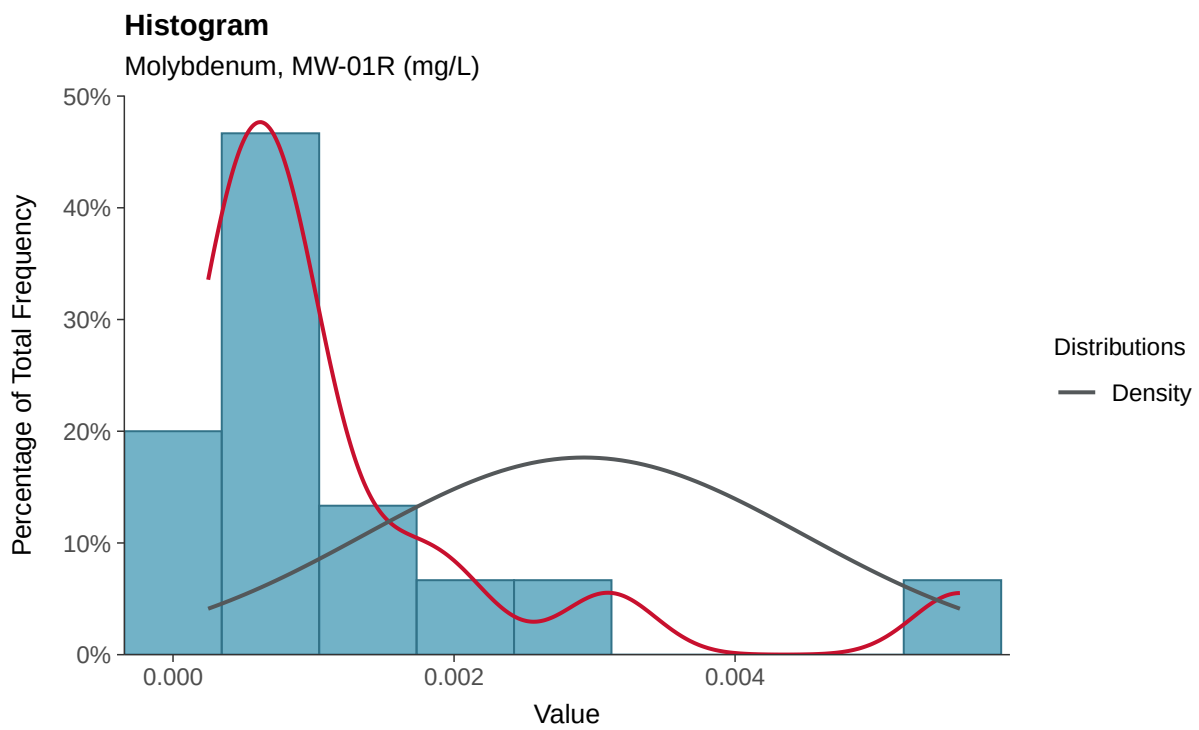
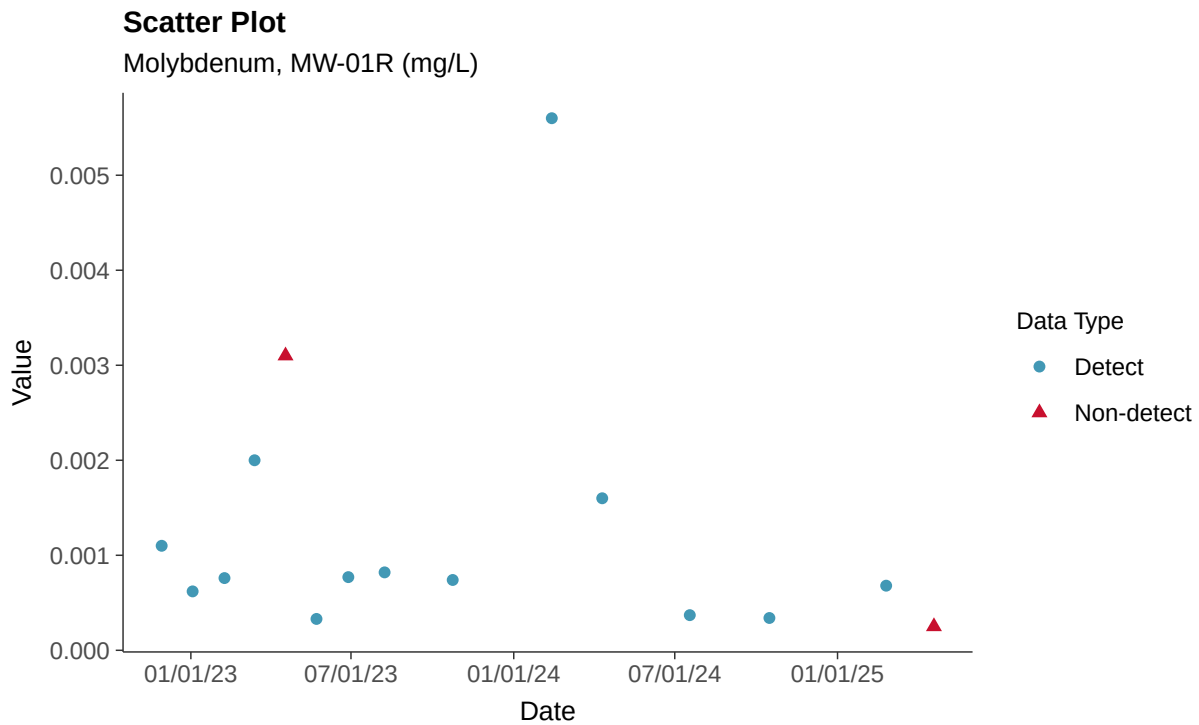
ID: 11_2_4_117





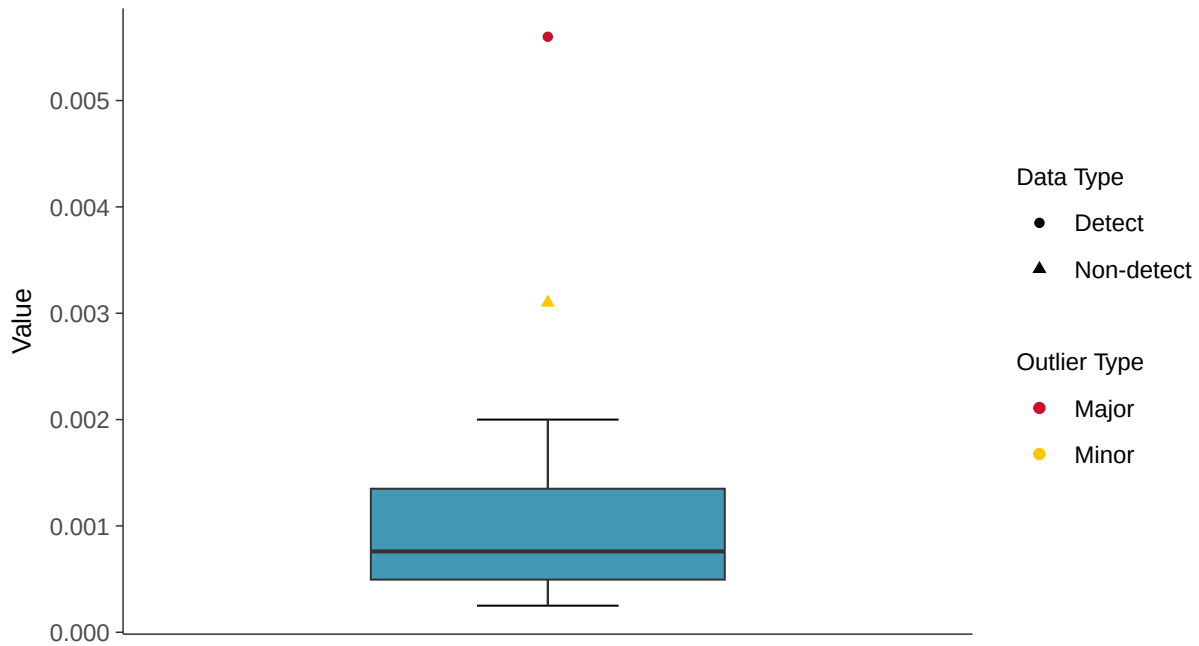
Appendix IV: Molybdenum, MW-01R

ID: 11_2_4_118



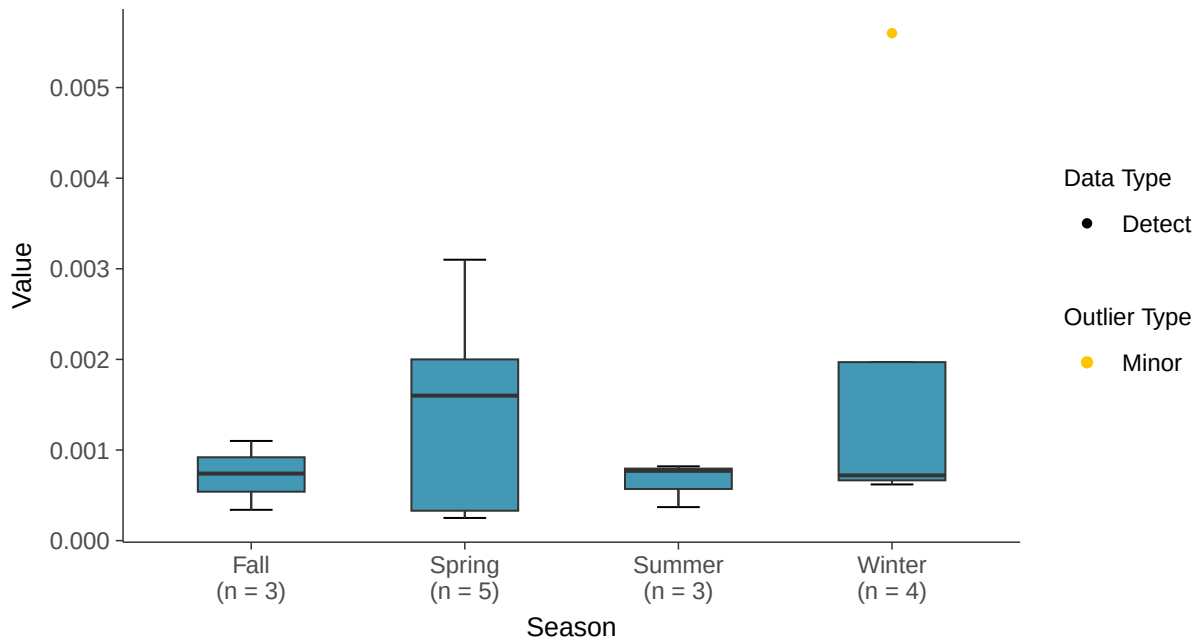
Boxplot

Molybdenum, MW-01R (mg/L)



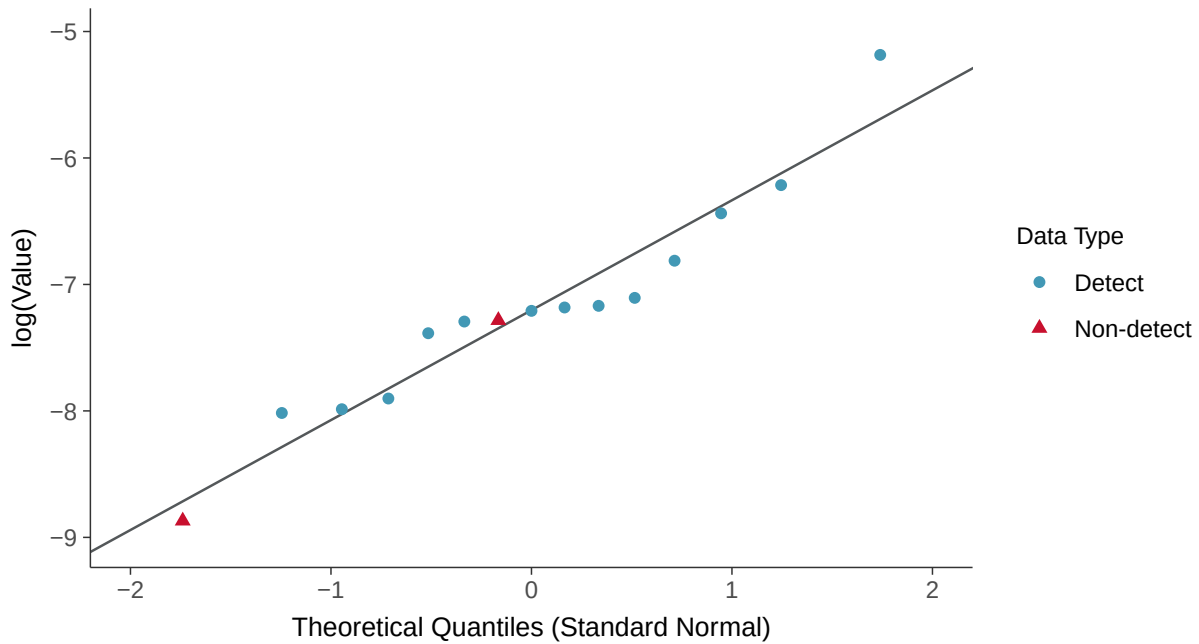
Boxplot by Season

Molybdenum, MW-01R (mg/L)



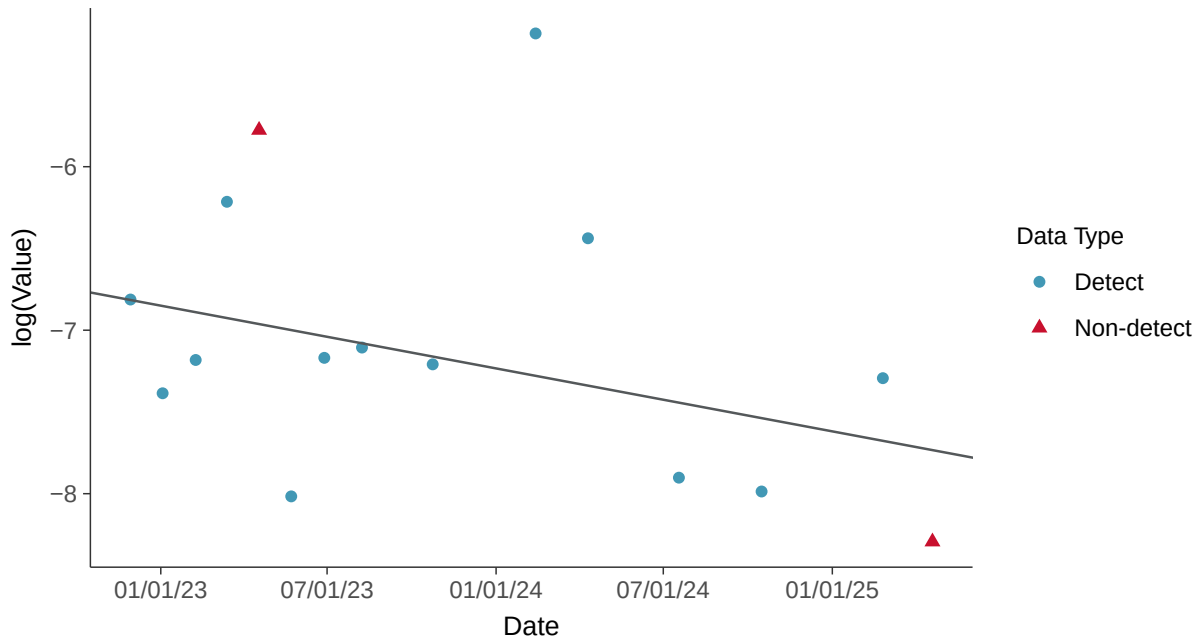
Lognormal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-01R (mg/L)



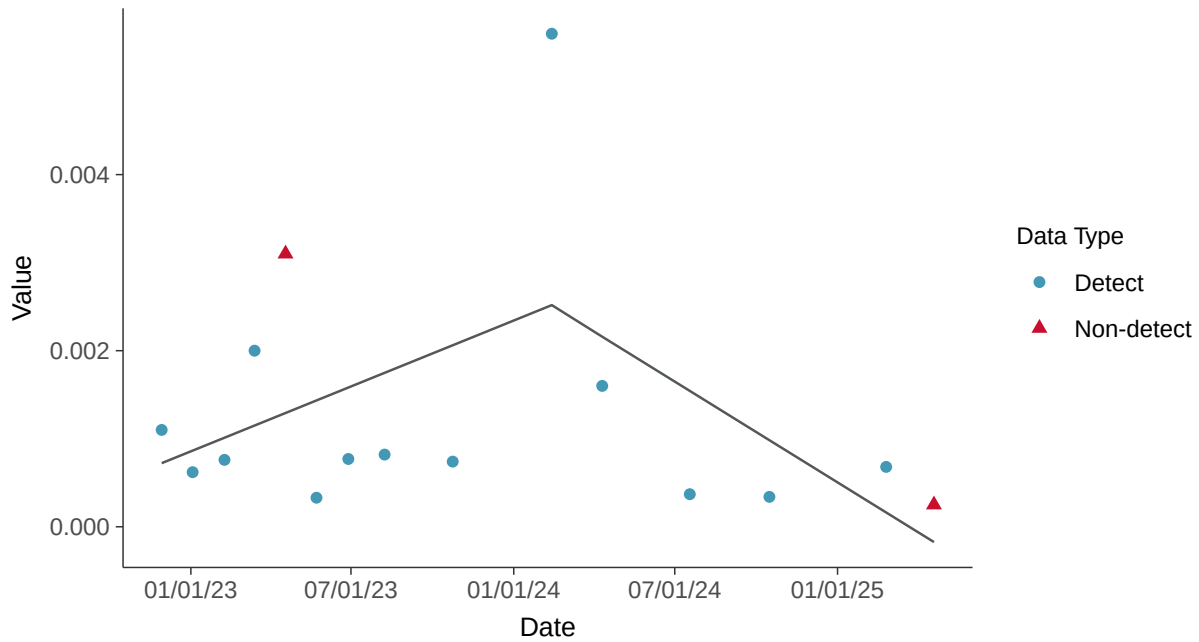
Trend Regression: Lognormal MLE

Molybdenum, MW-01R (mg/L)



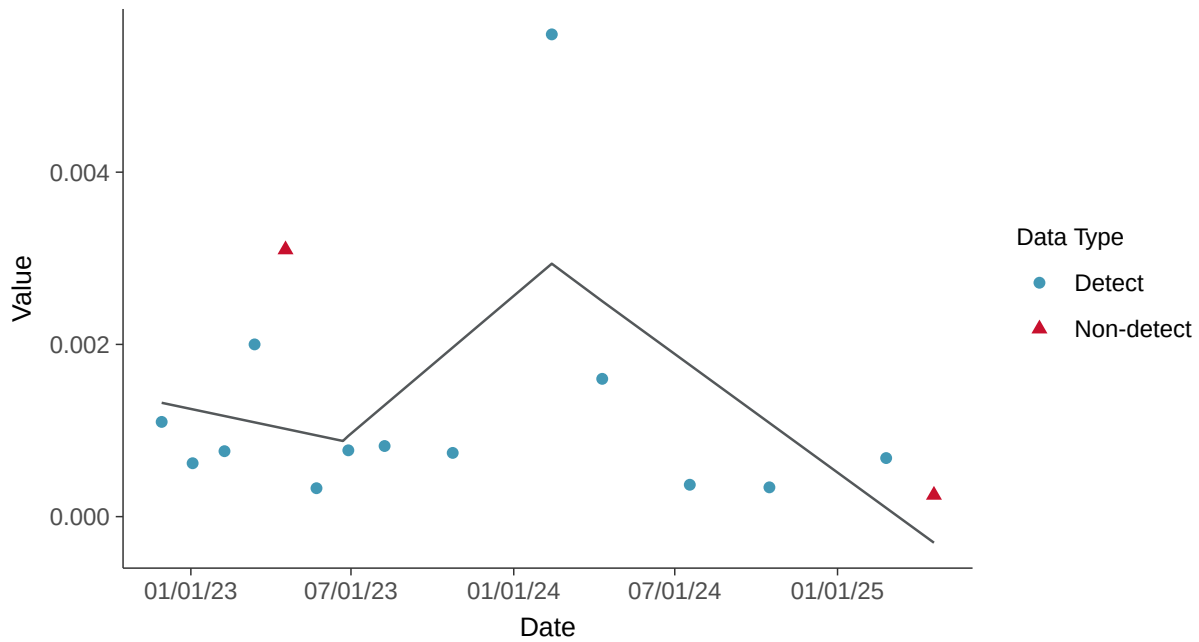
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-01R (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-01R (mg/L)

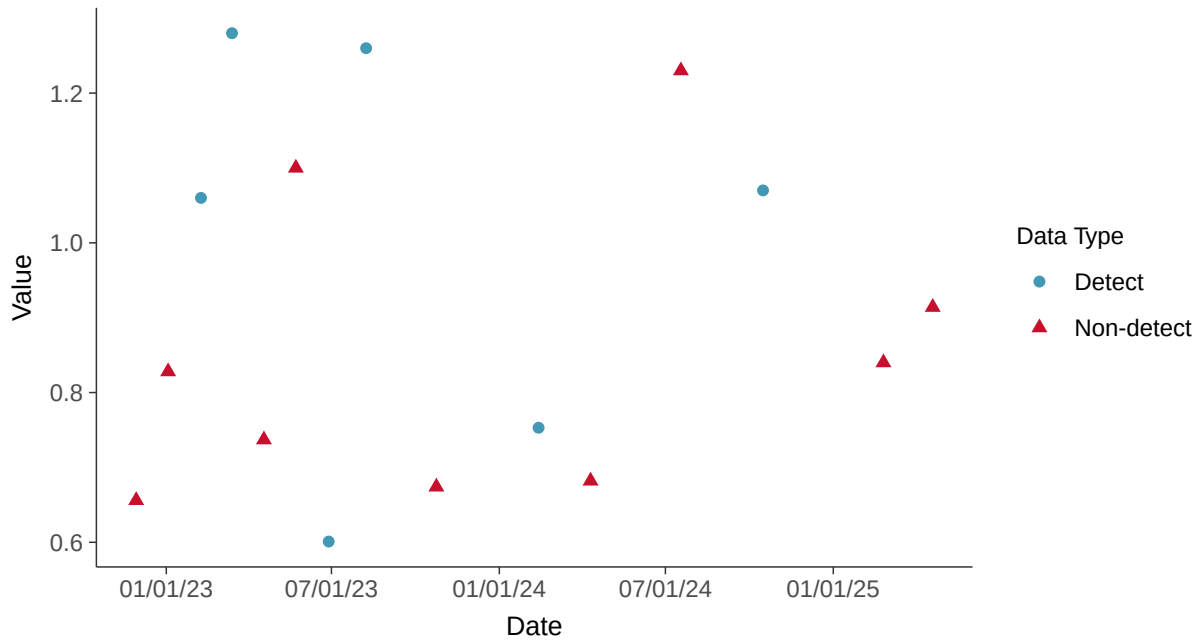


Appendix IV: Radium 226 and 228, MW-01R

ID: 11_2_4_121

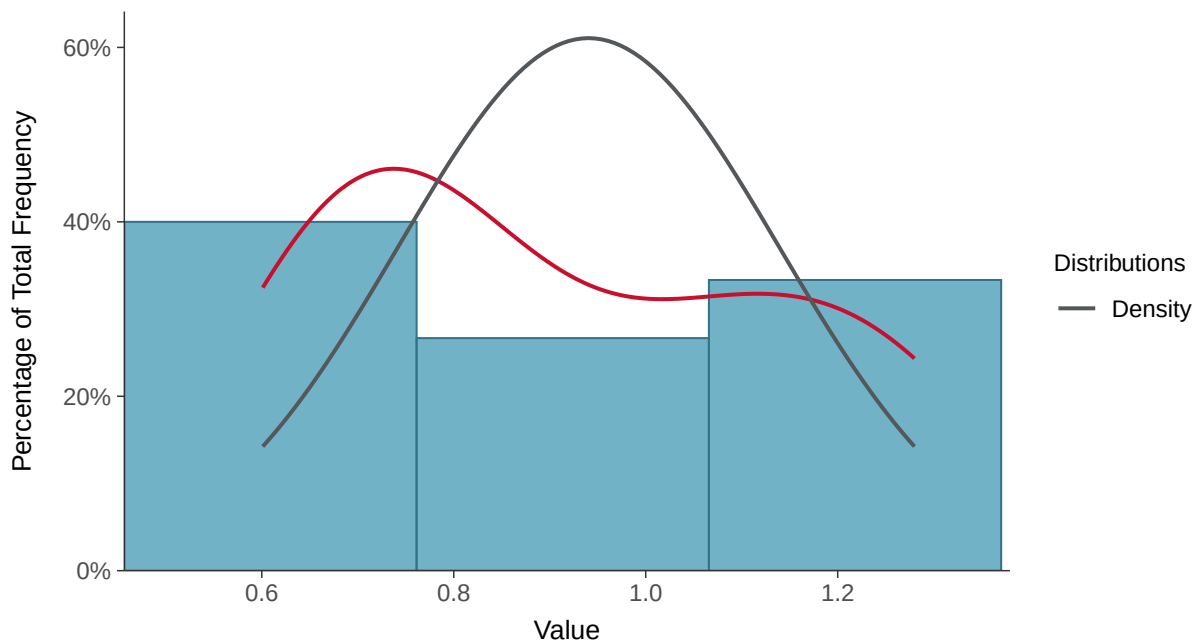
Scatter Plot

Radium 226 and 228, MW-01R (pCi/L)



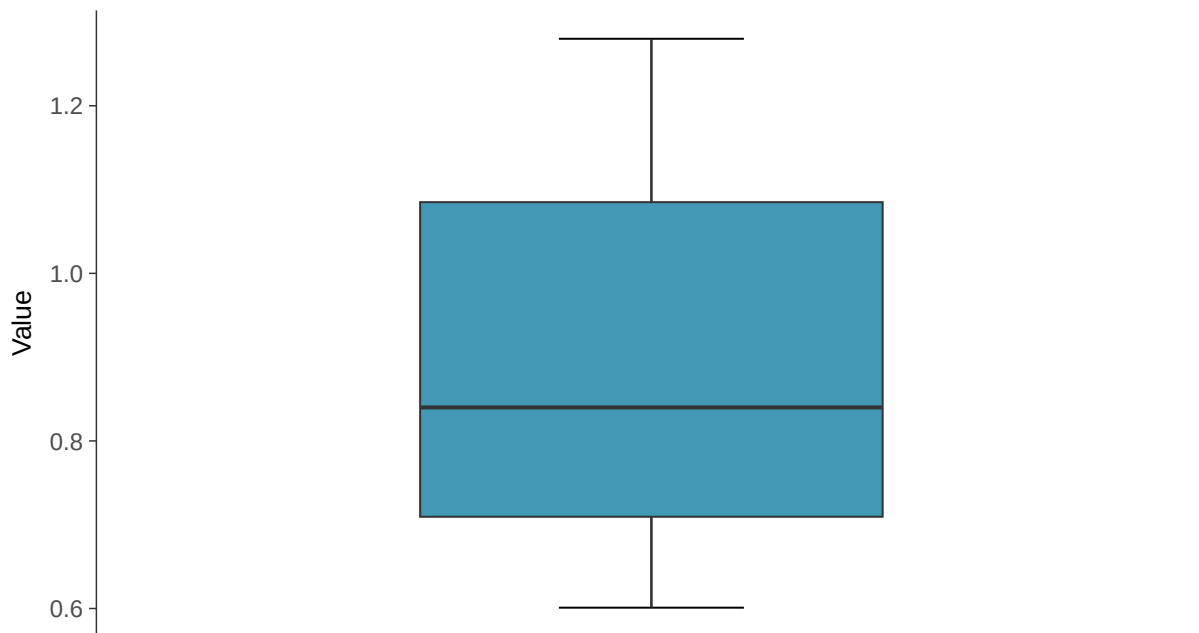
Histogram

Radium 226 and 228, MW-01R (pCi/L)



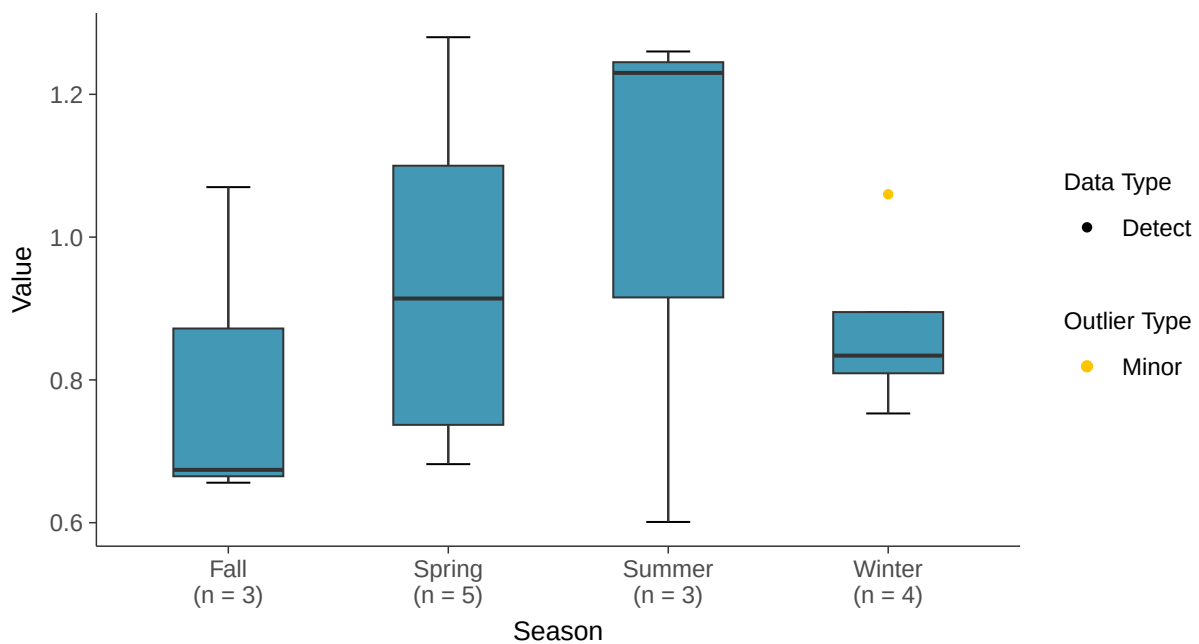
Boxplot

Radium 226 and 228, MW-01R (pCi/L)



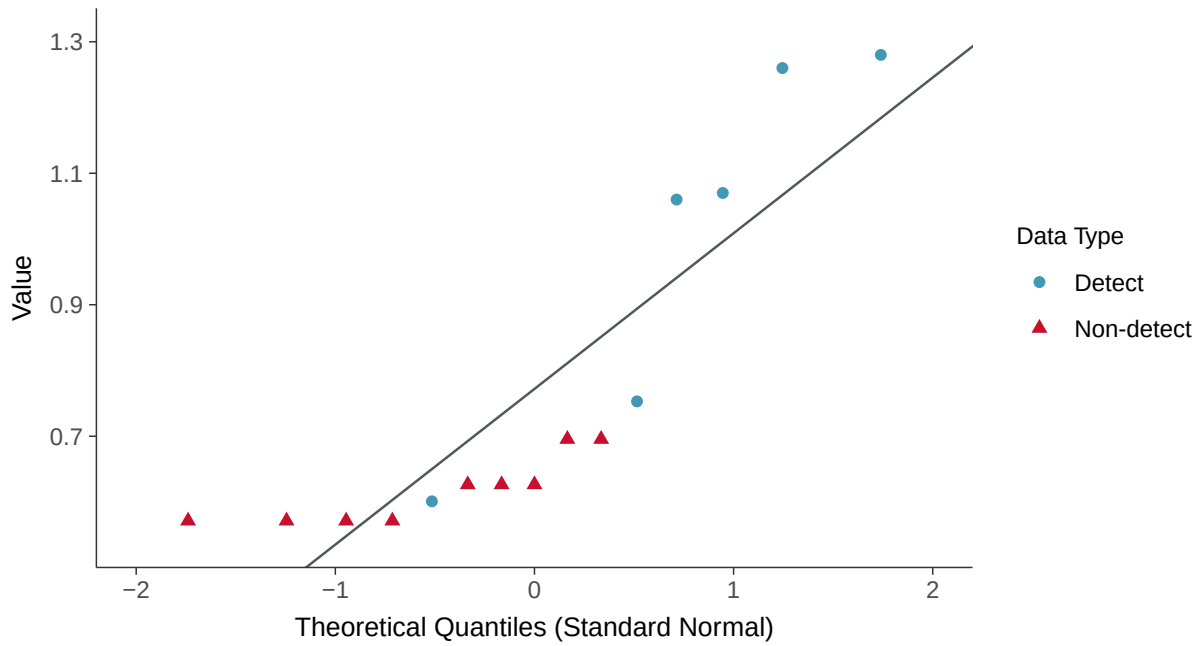
Boxplot by Season

Radium 226 and 228, MW-01R (pCi/L)



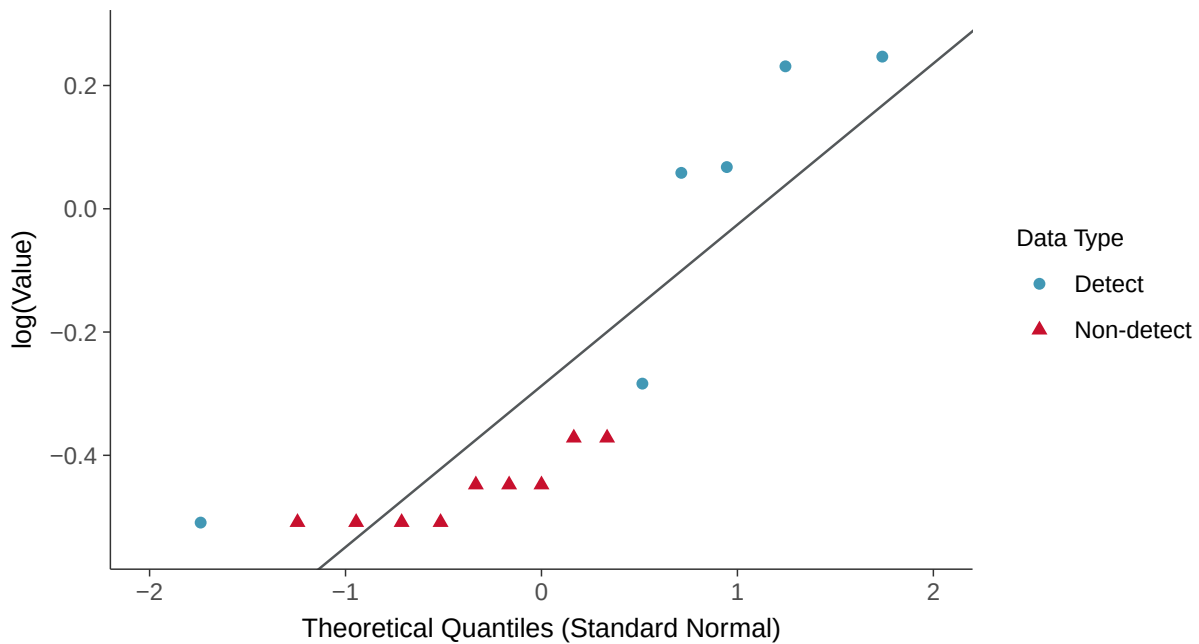
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-01R (pCi/L)



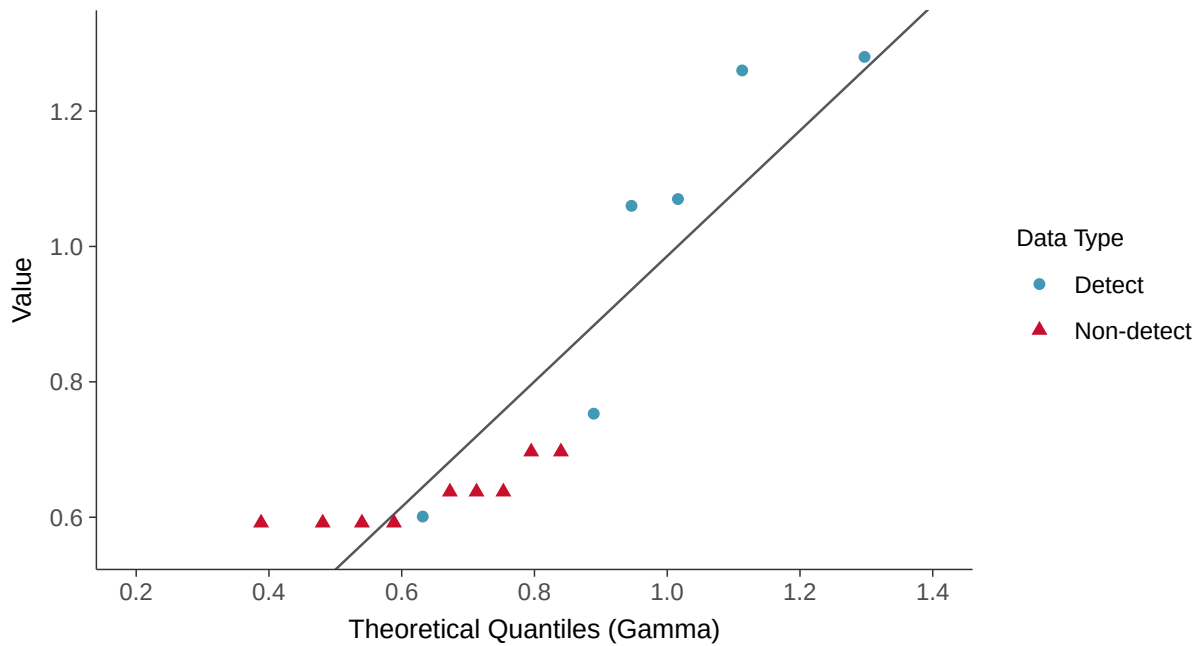
Lognormal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-01R (pCi/L)



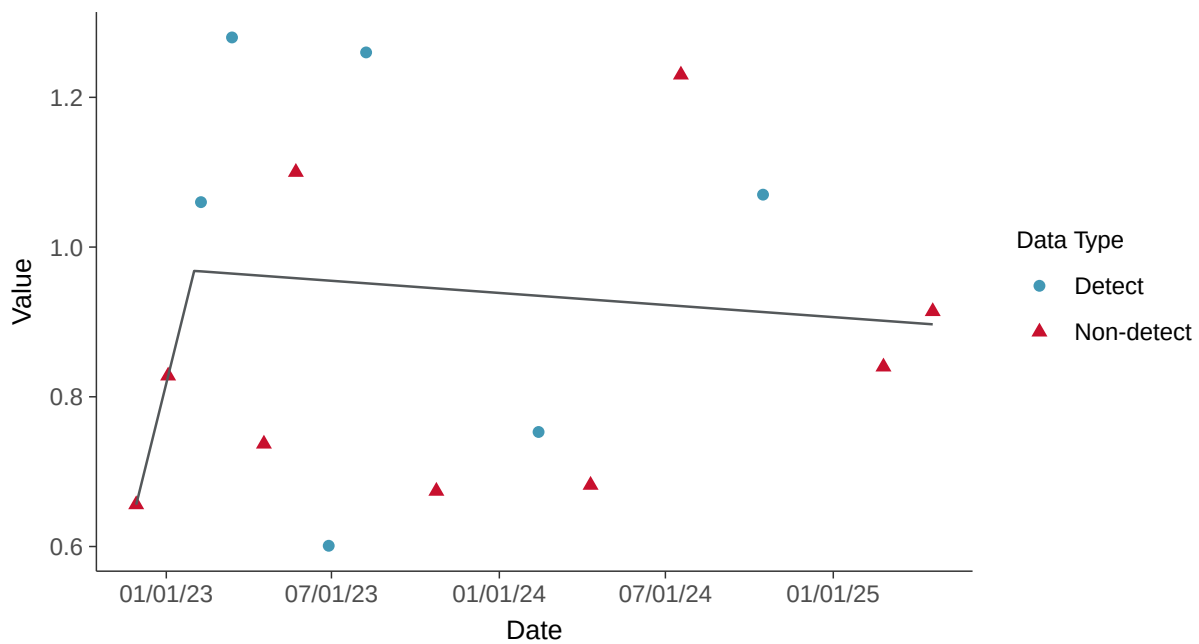
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-01R (pCi/L)



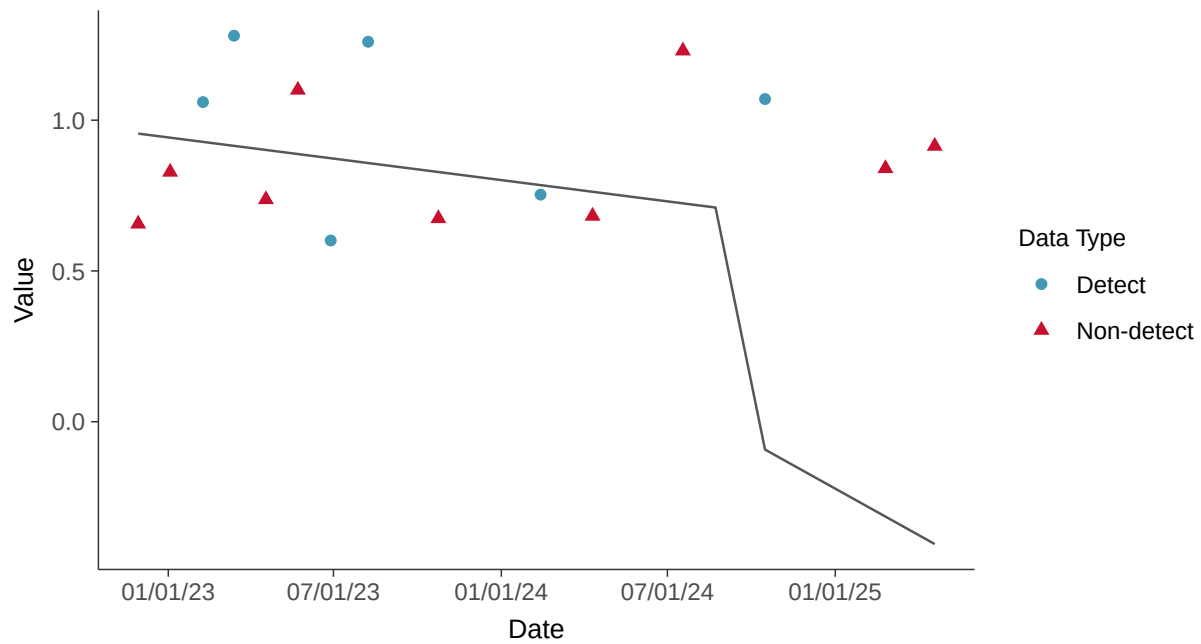
Trend Regression: Piecewise Linear-Linear

Radium 226 and 228, MW-01R (pCi/L)



Trend Regression: Piecewise Linear-Linear-Linear

Radium 226 and 228, MW-01R (pCi/L)

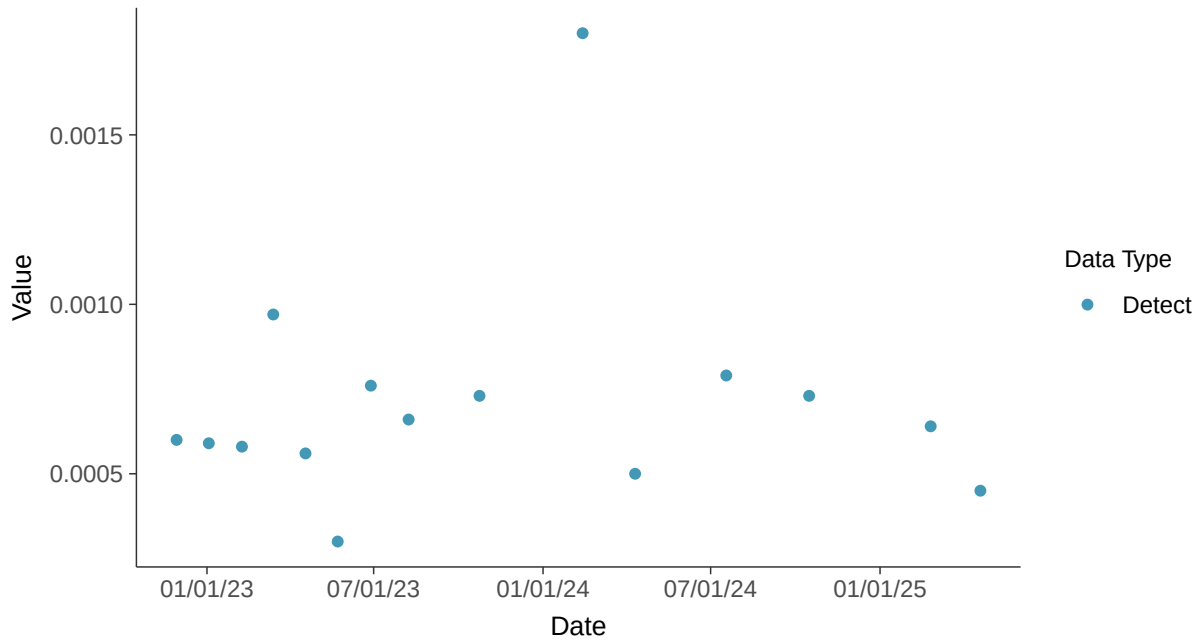


Appendix IV: Selenium, MW-01R

ID: 11_2_4_122

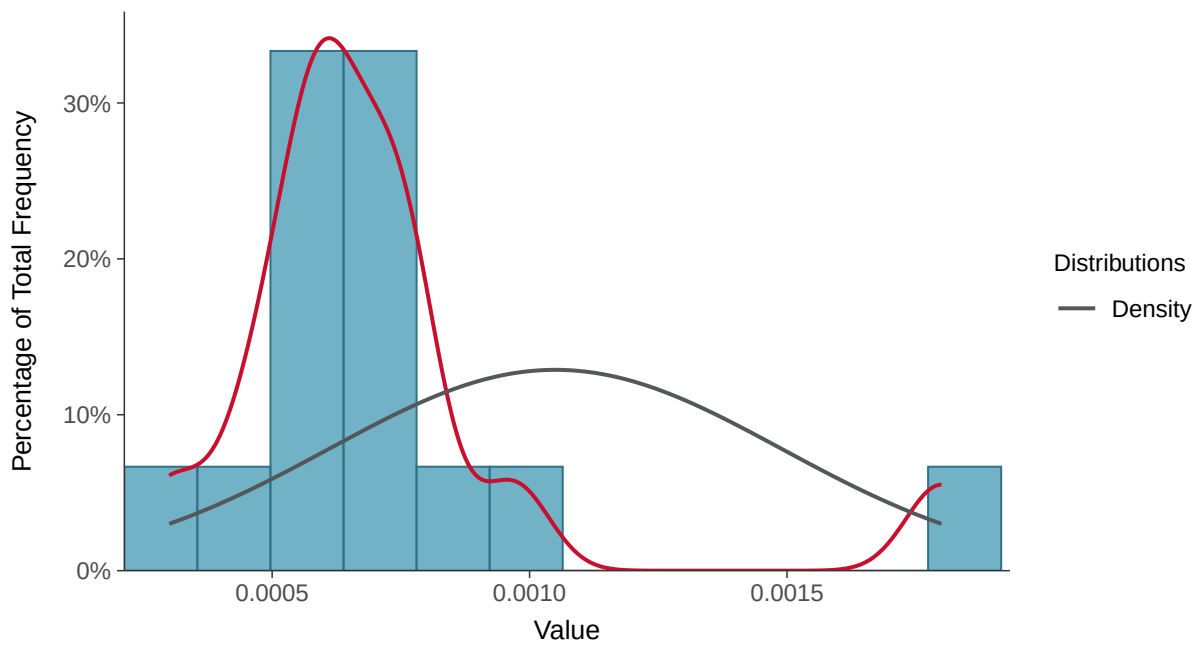
Scatter Plot

Selenium, MW-01R (mg/L)



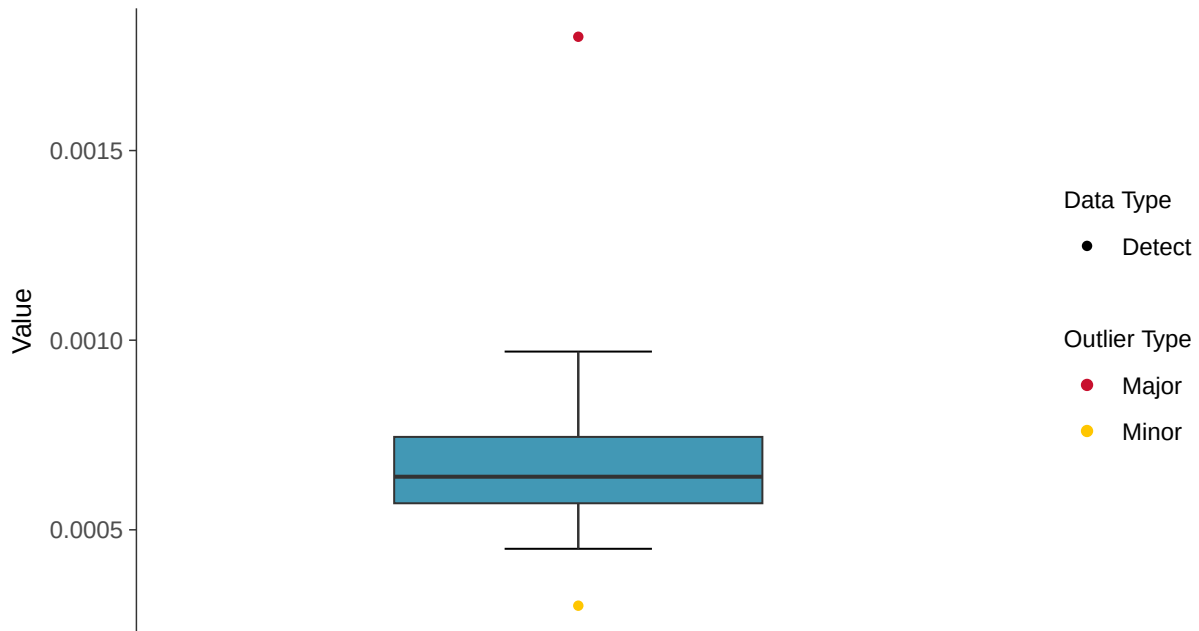
Histogram

Selenium, MW-01R (mg/L)



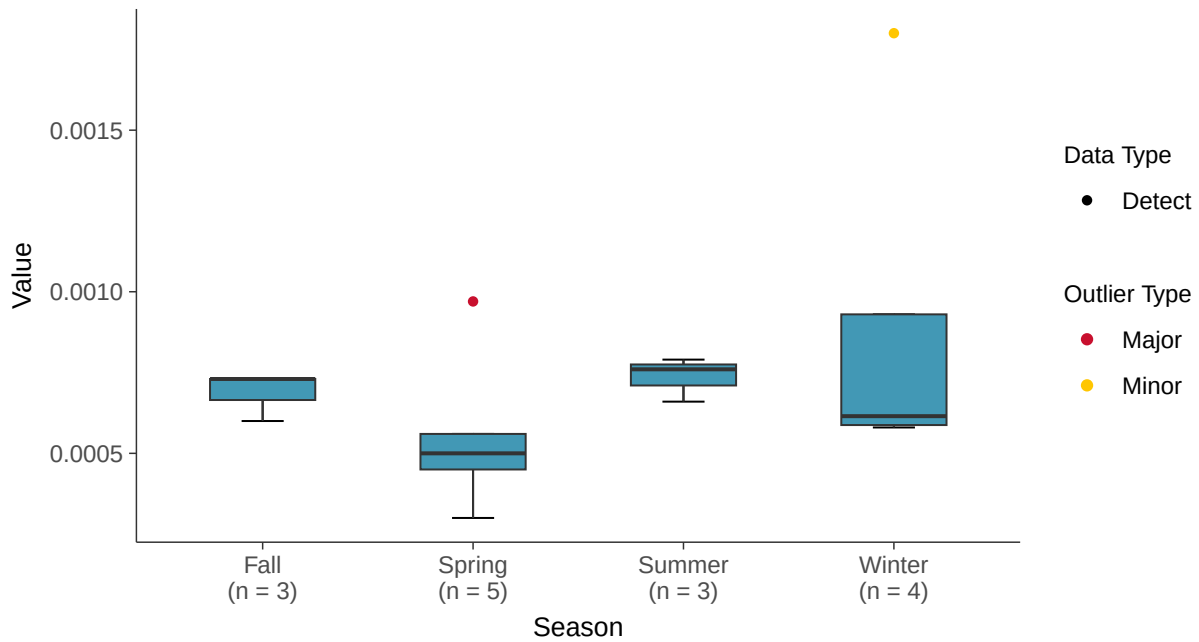
Boxplot

Selenium, MW-01R (mg/L)



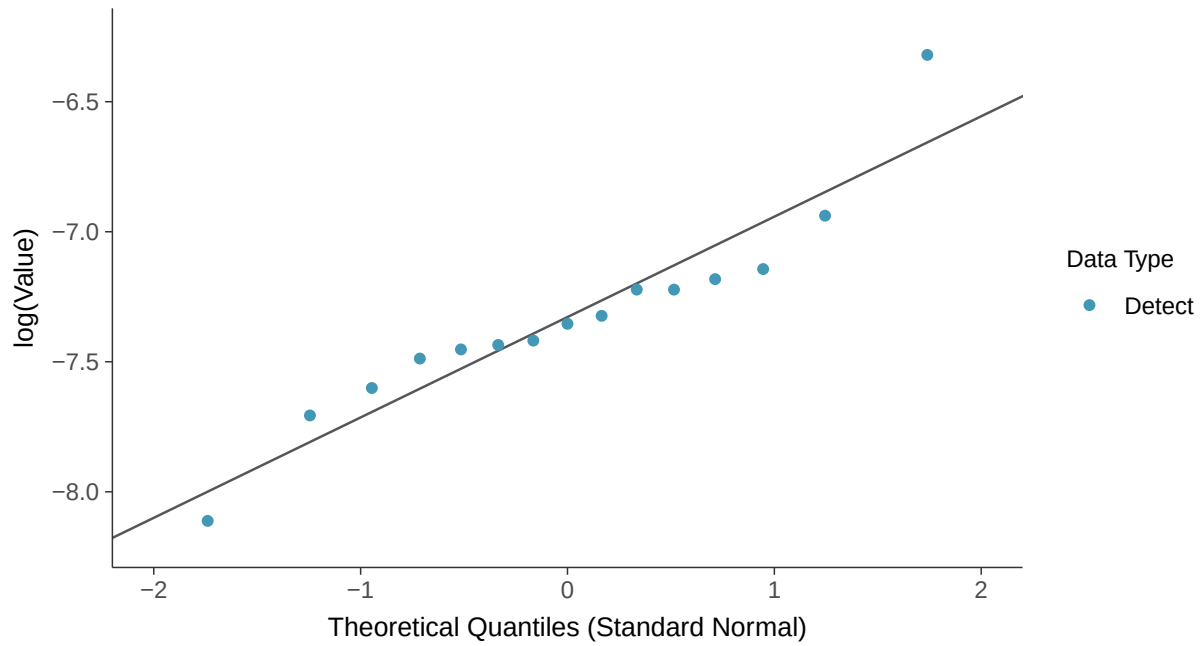
Boxplot by Season

Selenium, MW-01R (mg/L)



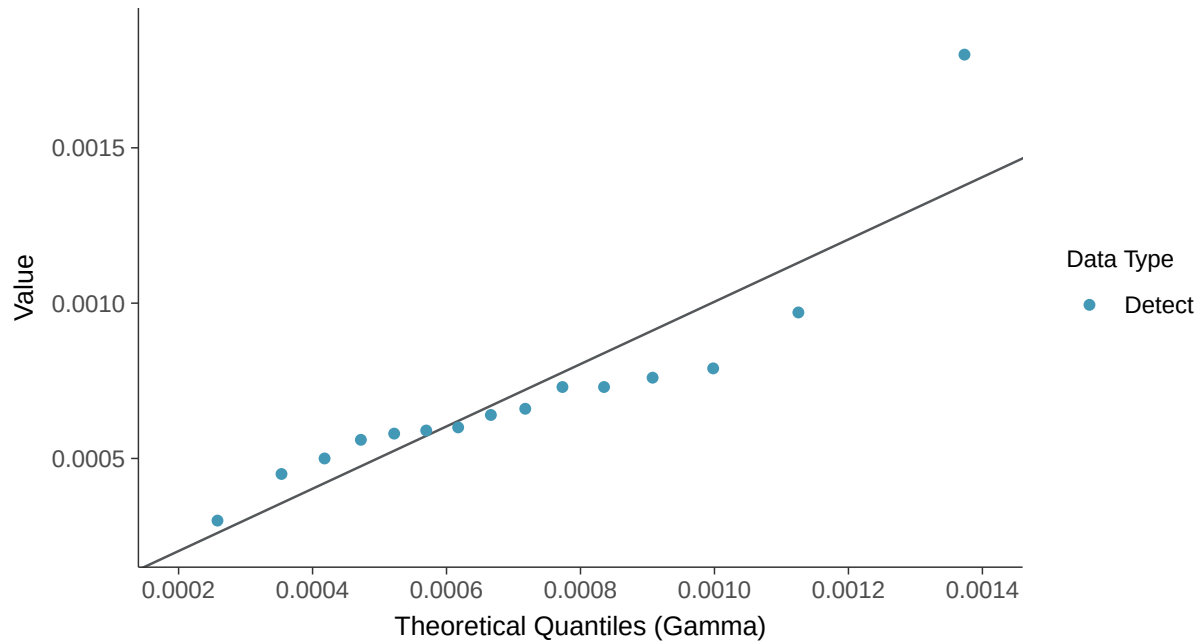
Lognormal Q-Q plot

Selenium, MW-01R (mg/L)



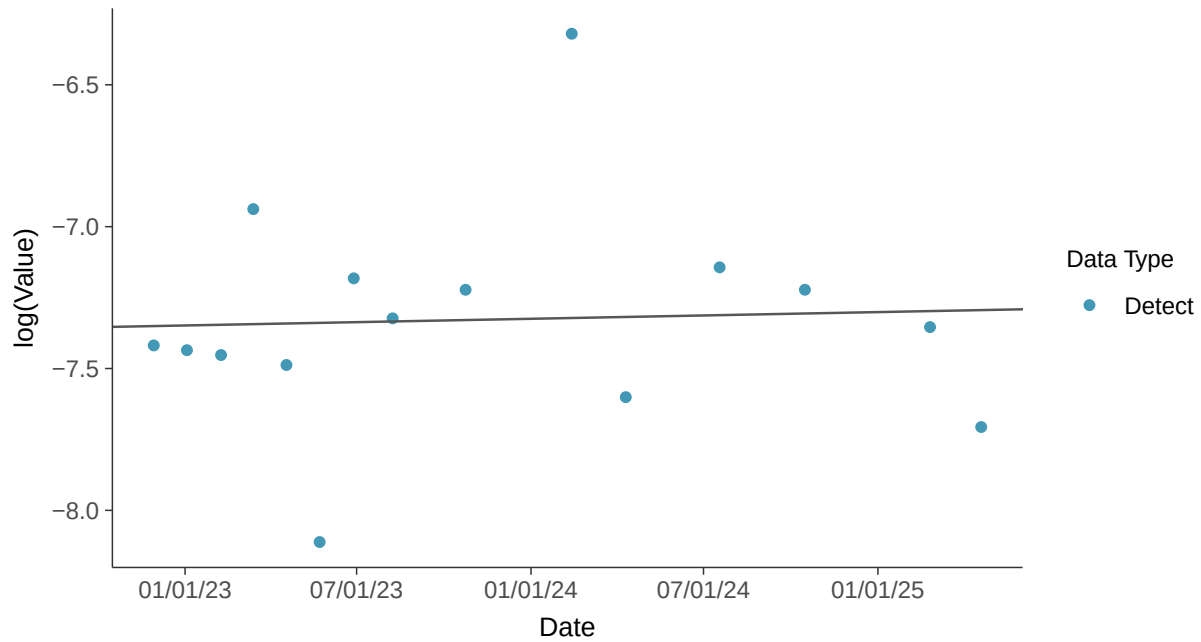
Gamma Q-Q plot

Selenium, MW-01R (mg/L)



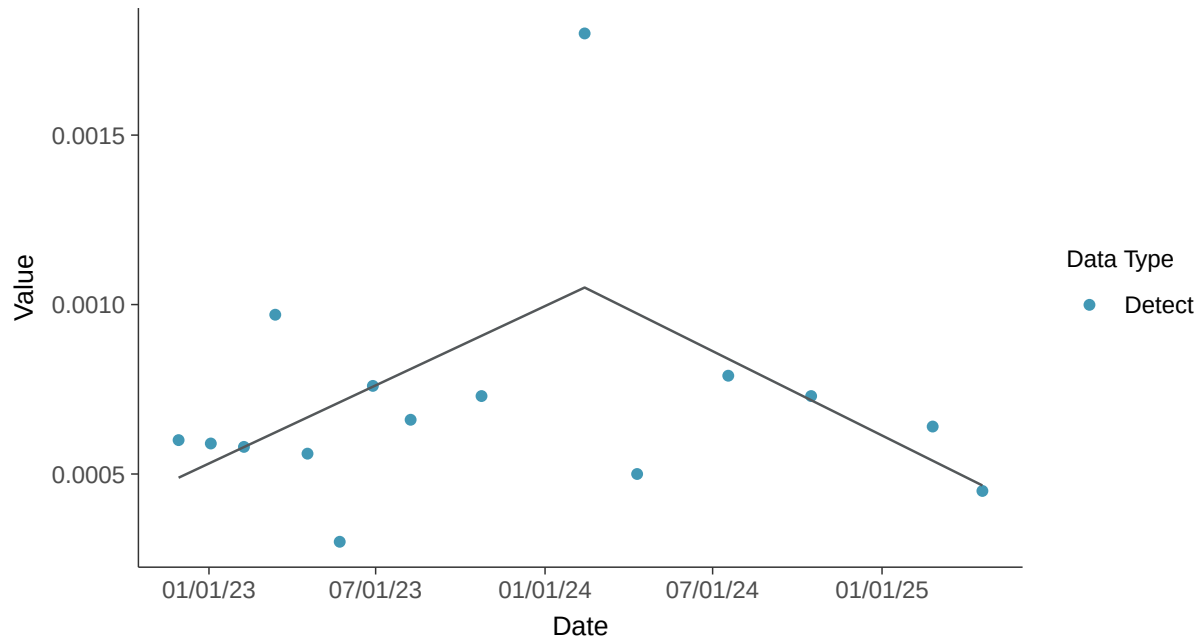
Trend Regression: Lognormal MLE

Selenium, MW-01R (mg/L)



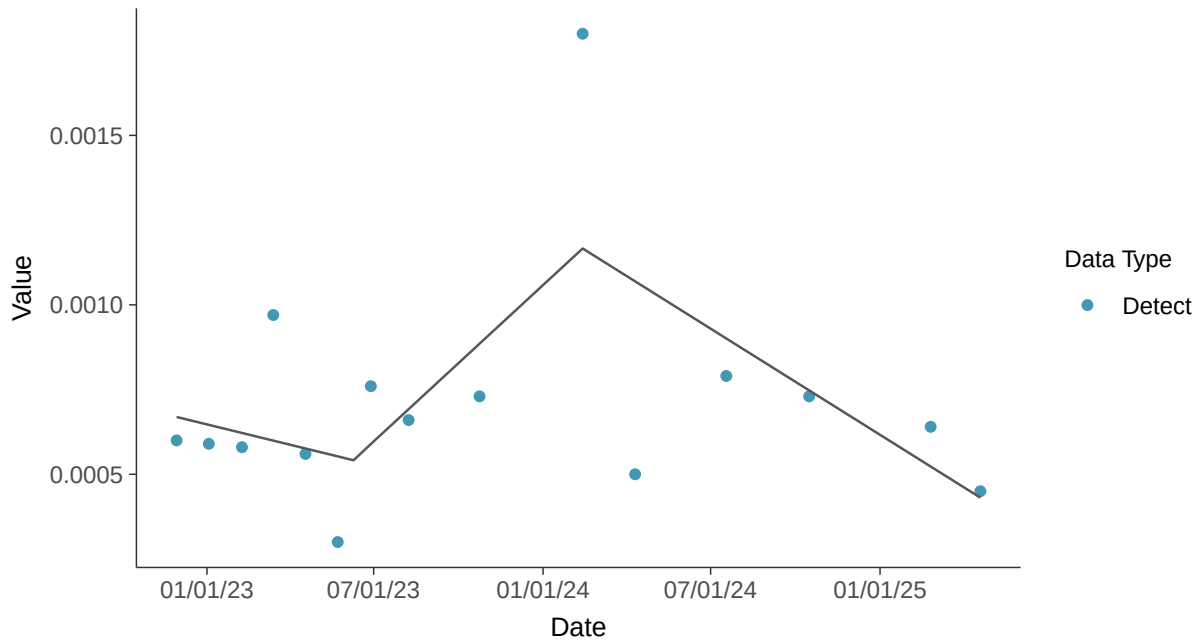
Trend Regression: Piecewise Linear-Linear

Selenium, MW-01R (mg/L)



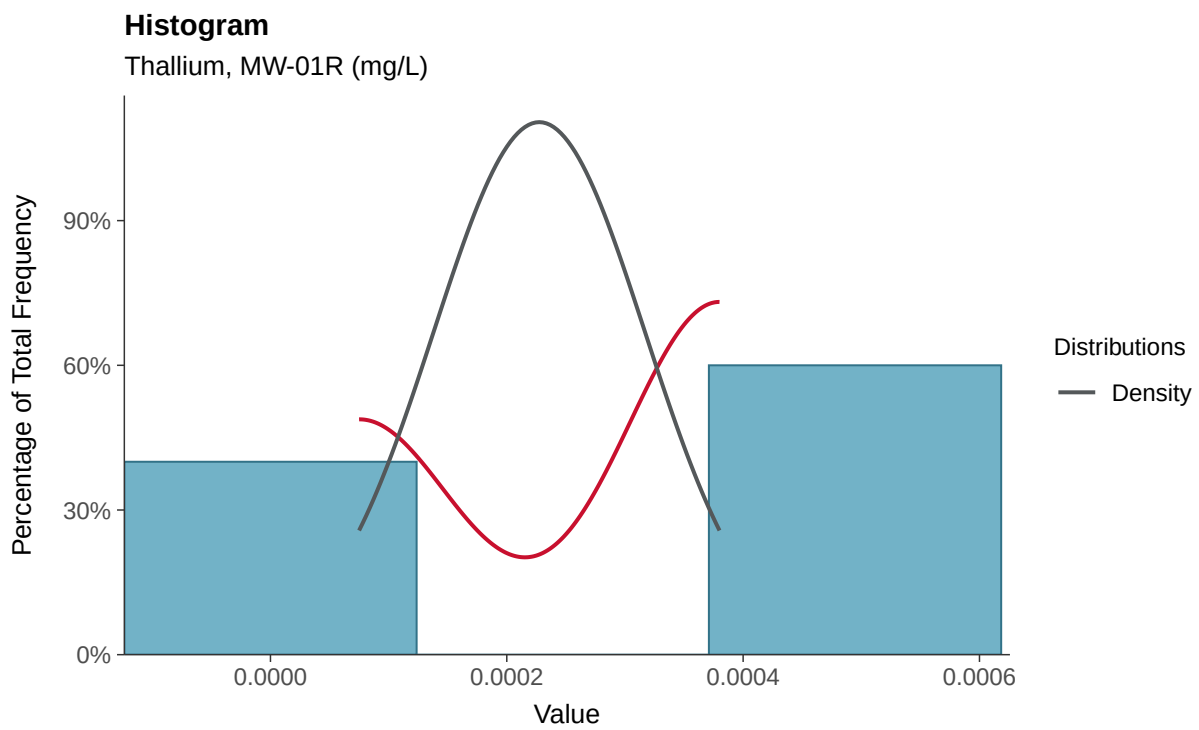
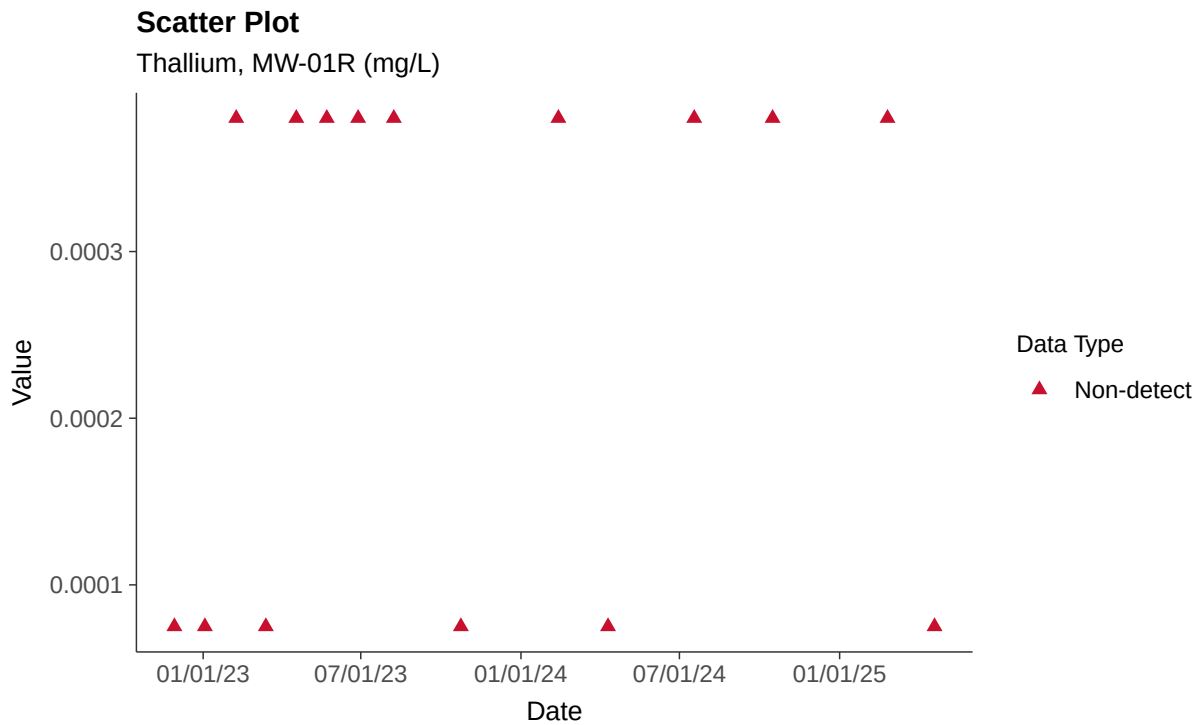


Trend Regression: Piecewise Linear-Linear-Linear
Selenium, MW-01R (mg/L)



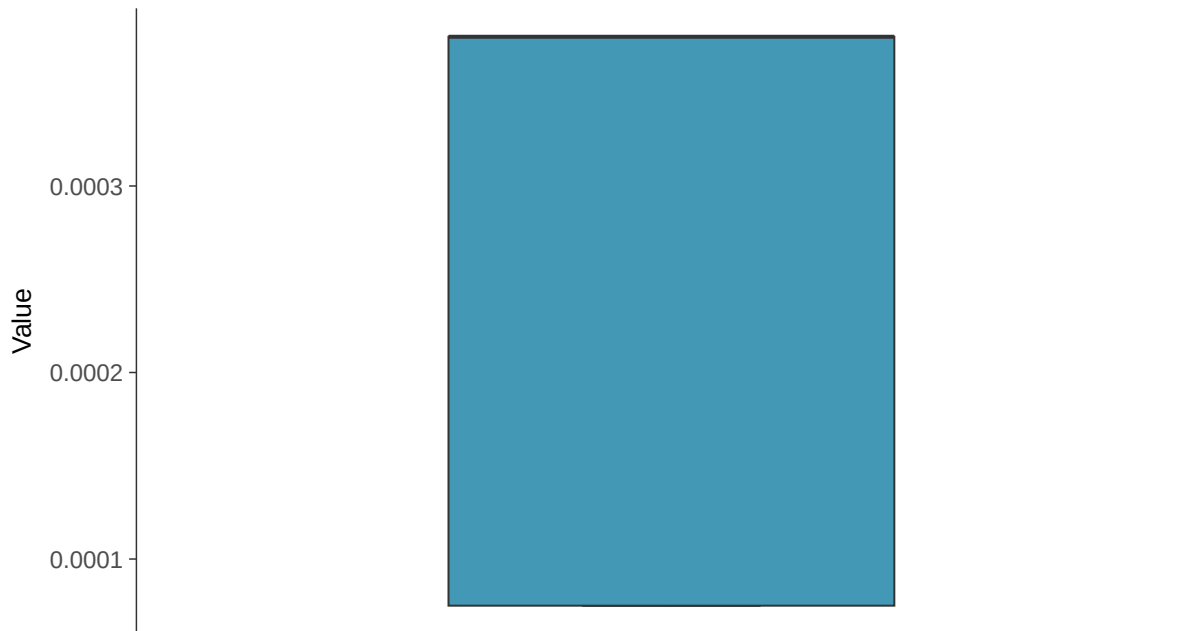
Appendix IV: Thallium, MW-01R

ID: 11_2_4_125



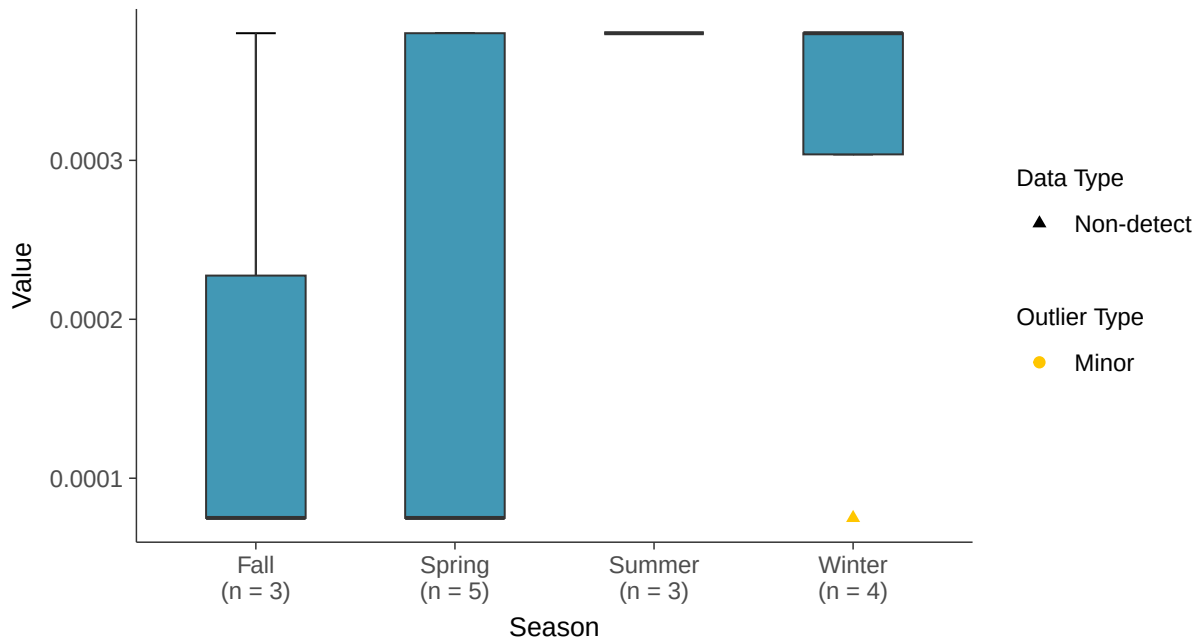
Boxplot

Thallium, MW-01R (mg/L)



Boxplot by Season

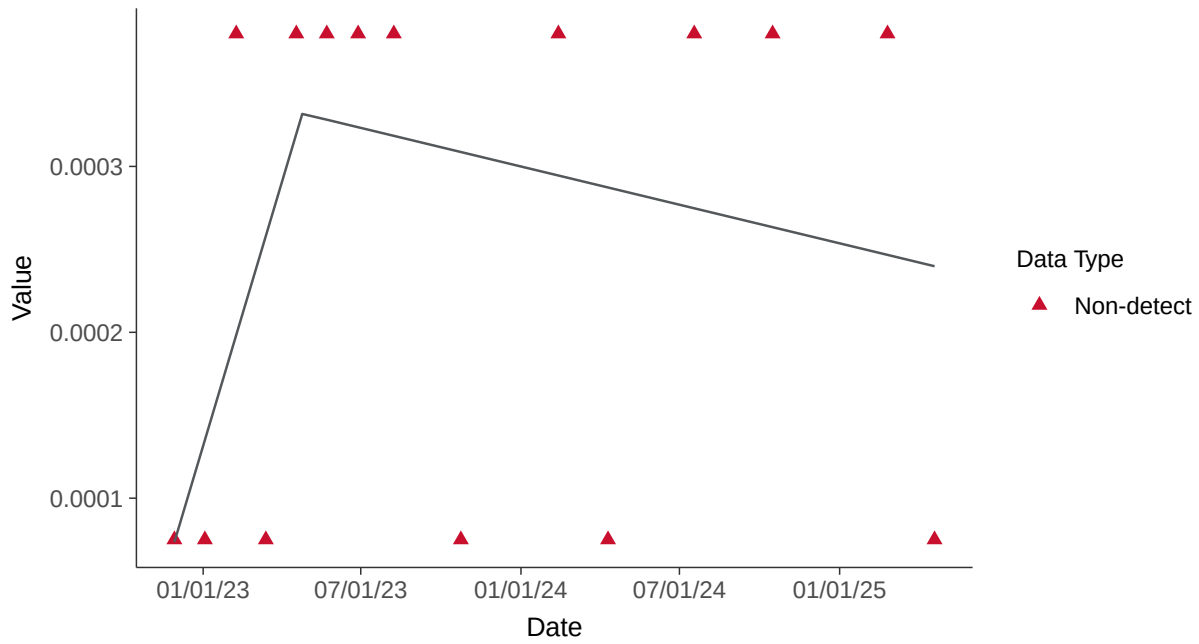
Thallium, MW-01R (mg/L)





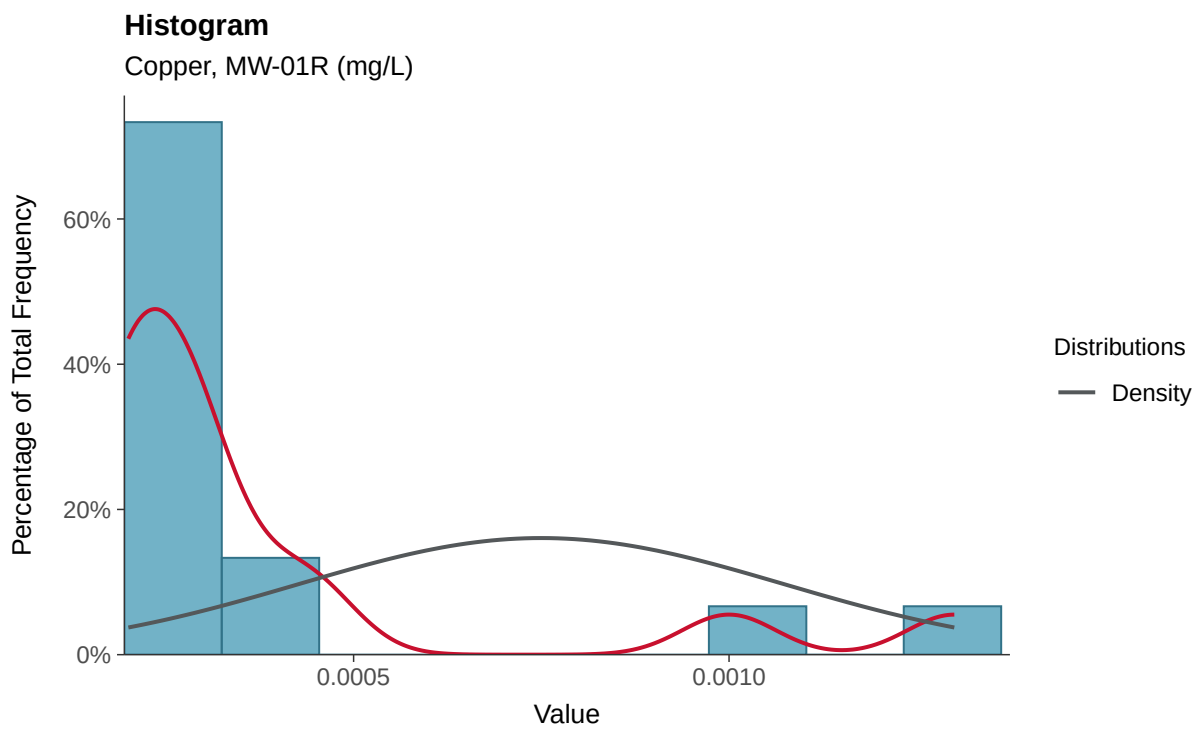
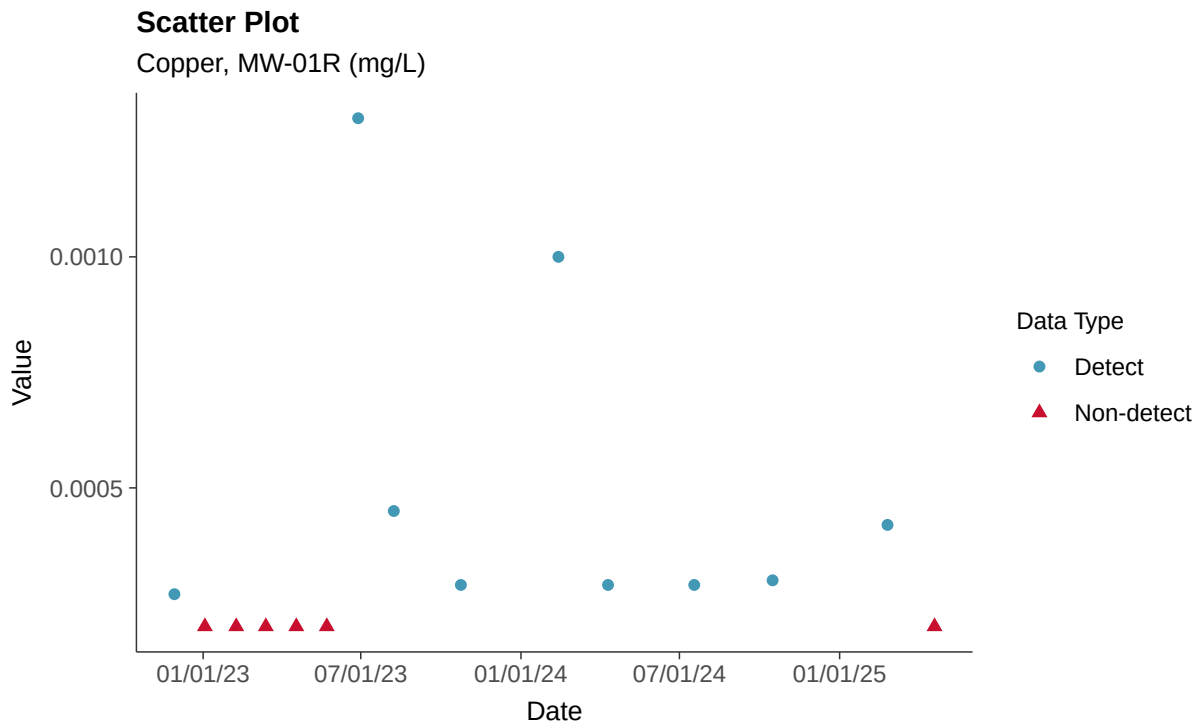
Trend Regression: Piecewise Linear-Linear

Thallium, MW-01R (mg/L)



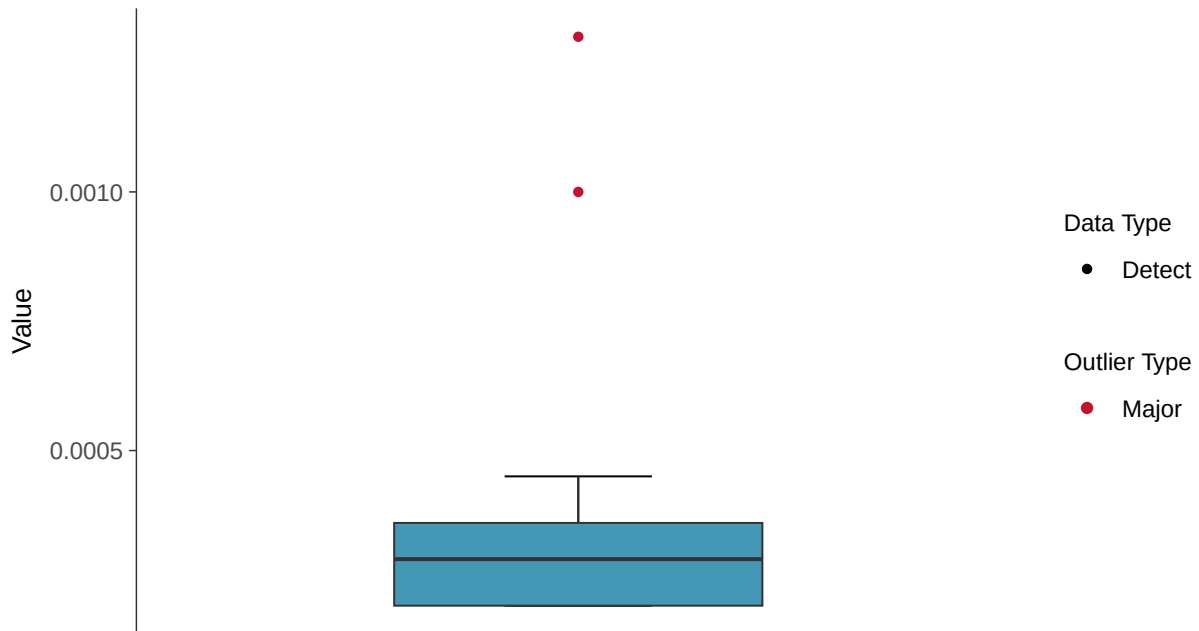
Part 115: Copper, MW-01R

ID: 11_2_5_111



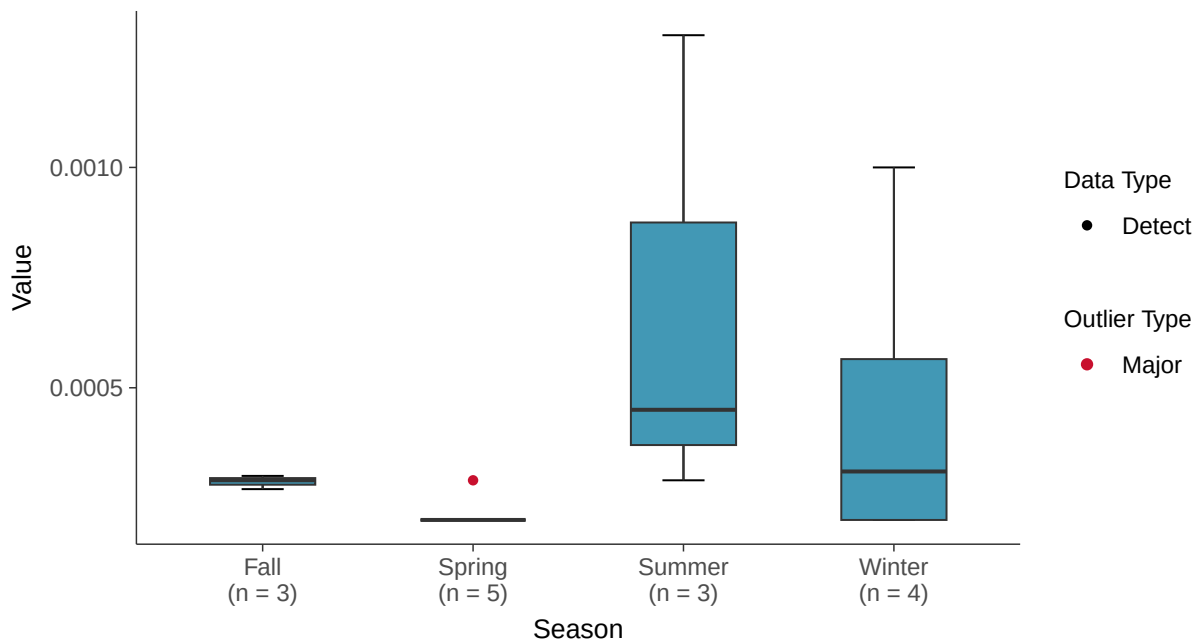
Boxplot

Copper, MW-01R (mg/L)



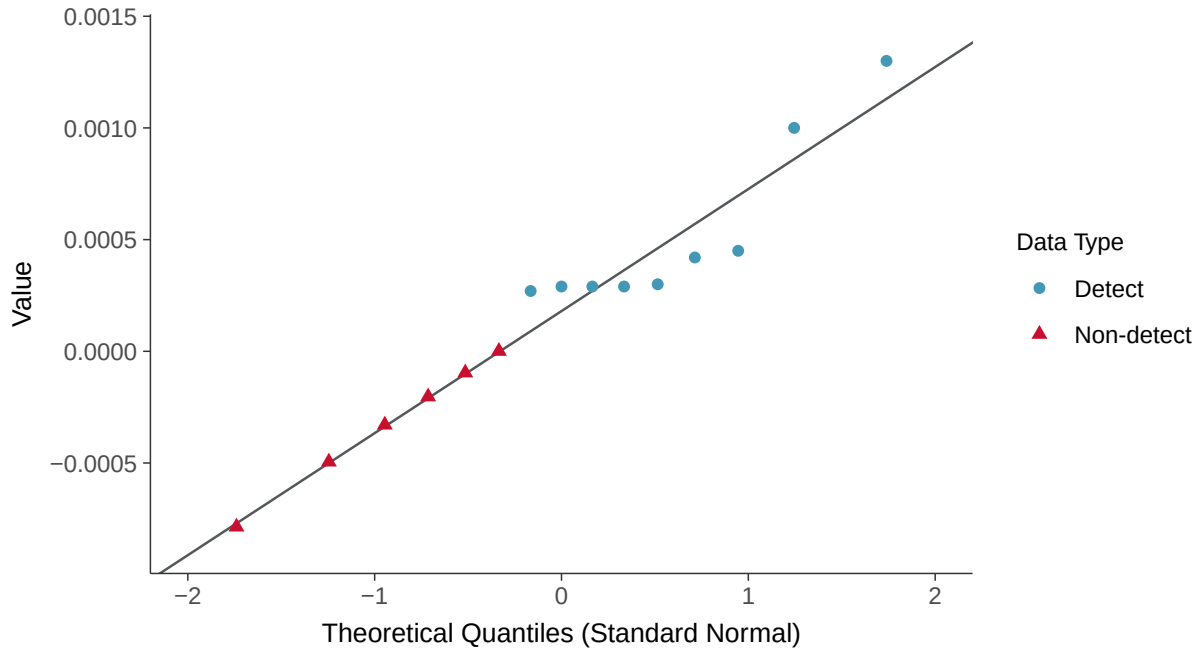
Boxplot by Season

Copper, MW-01R (mg/L)



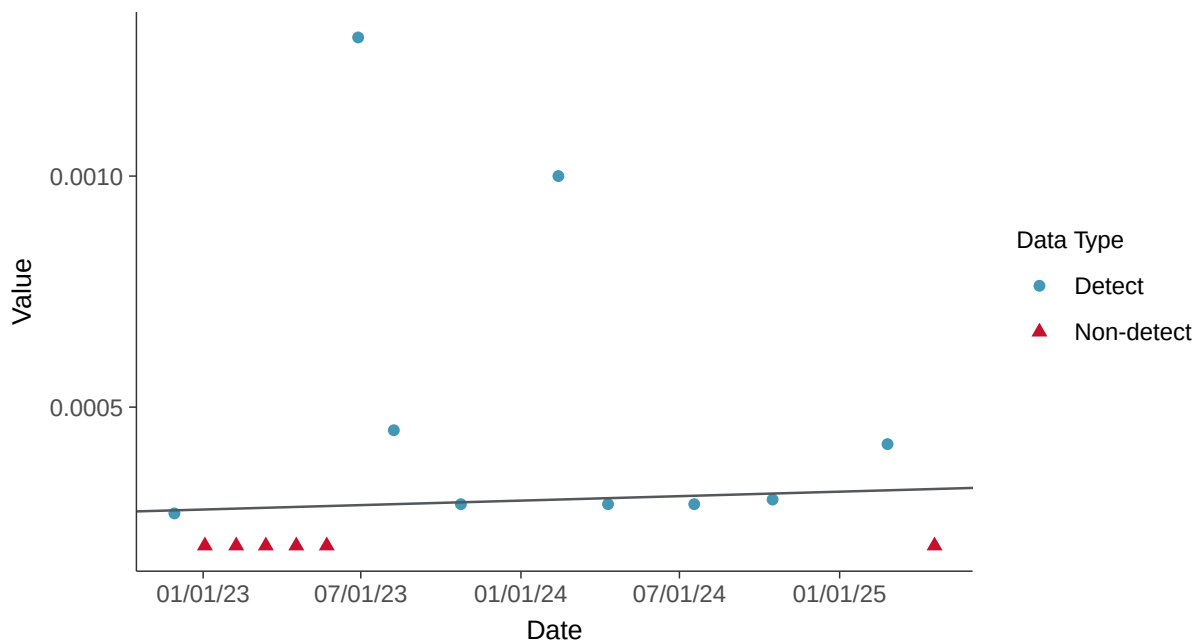
Normal Q-Q plot using ROS Imputed Estimates

Copper, MW-01R (mg/L)



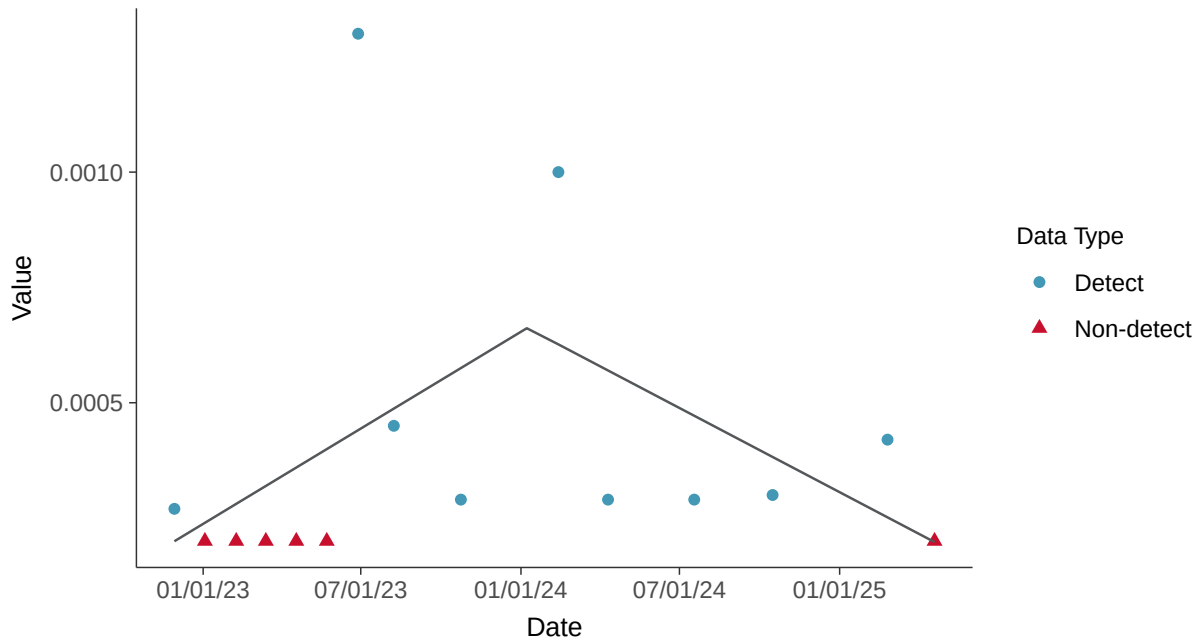
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Copper, MW-01R (mg/L)



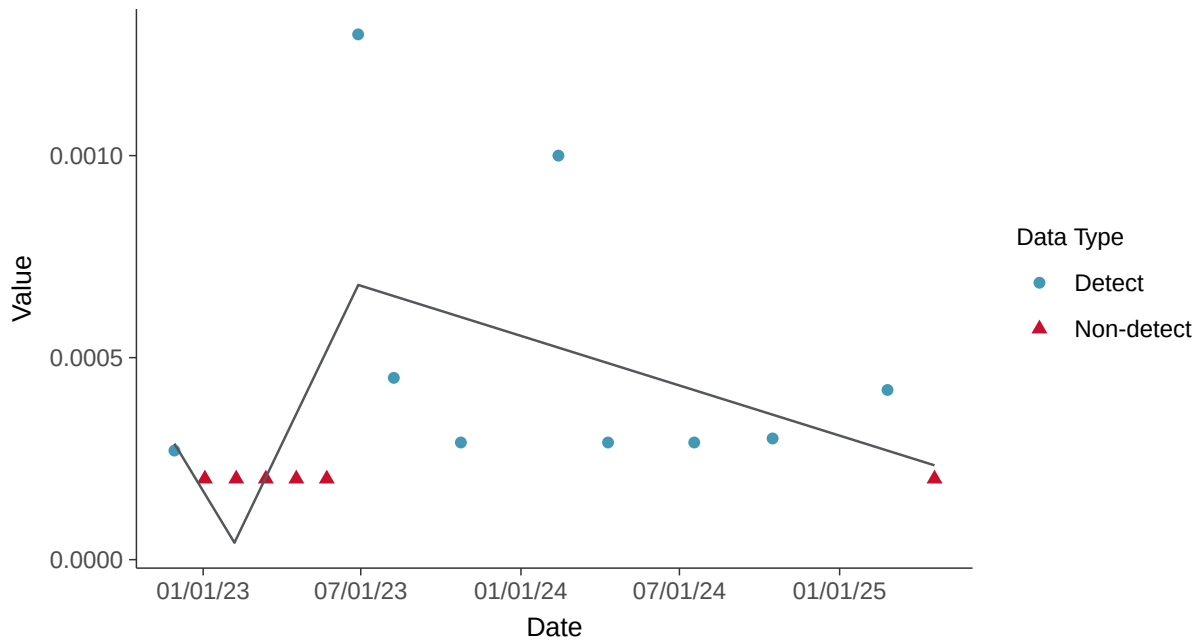
Trend Regression: Piecewise Linear-Linear

Copper, MW-01R (mg/L)



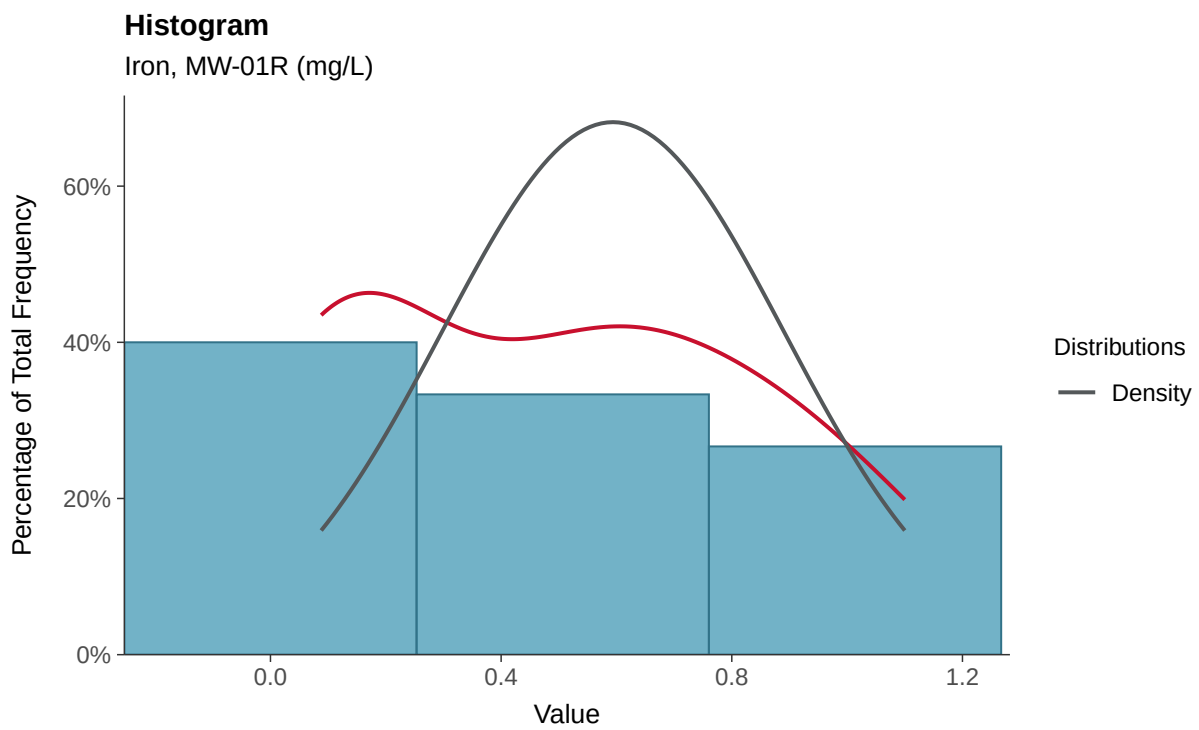
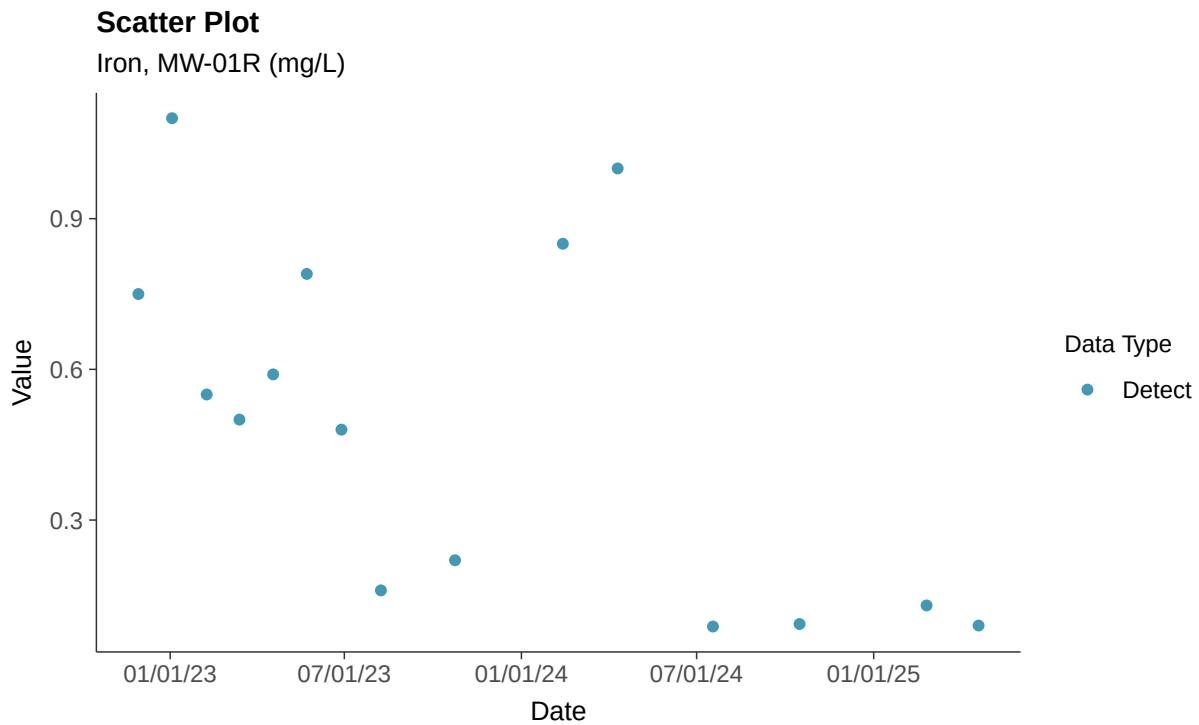
Trend Regression: Piecewise Linear-Linear-Linear

Copper, MW-01R (mg/L)



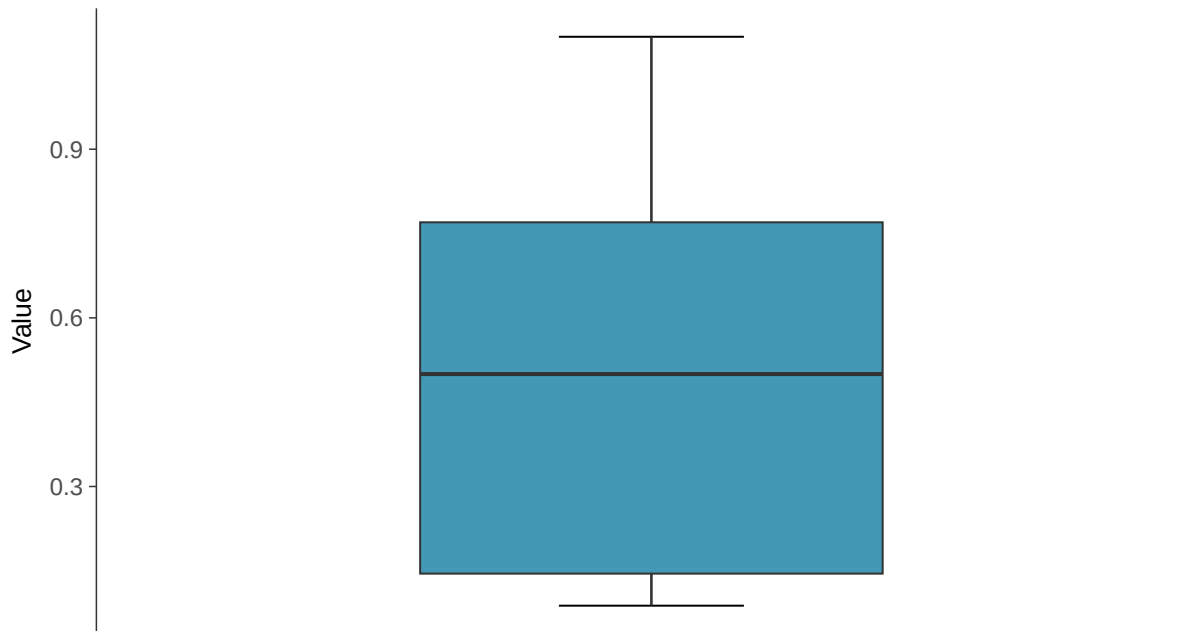
Part 115: Iron, MW-01R

ID: 11_2_5_114



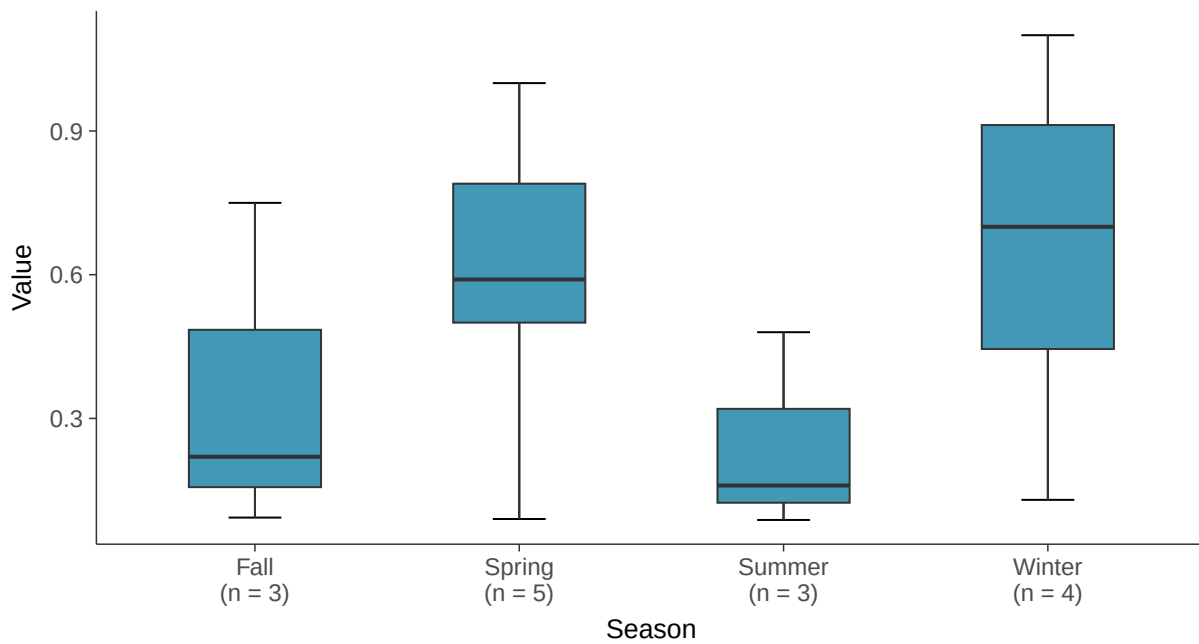
Boxplot

Iron, MW-01R (mg/L)

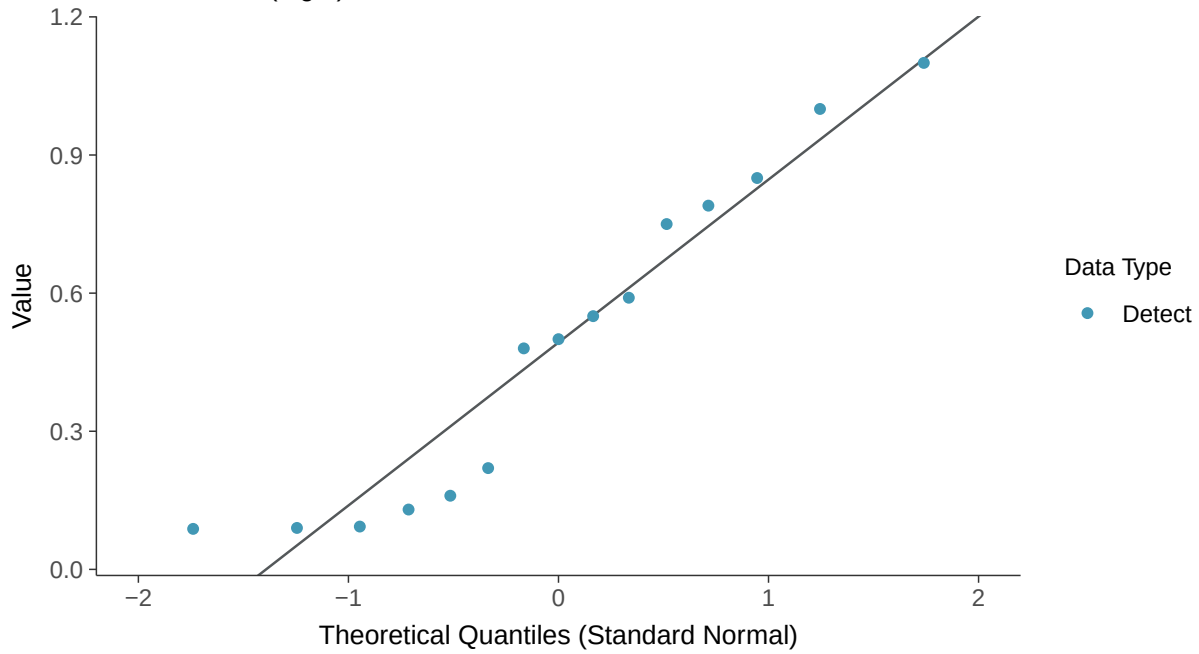


Boxplot by Season

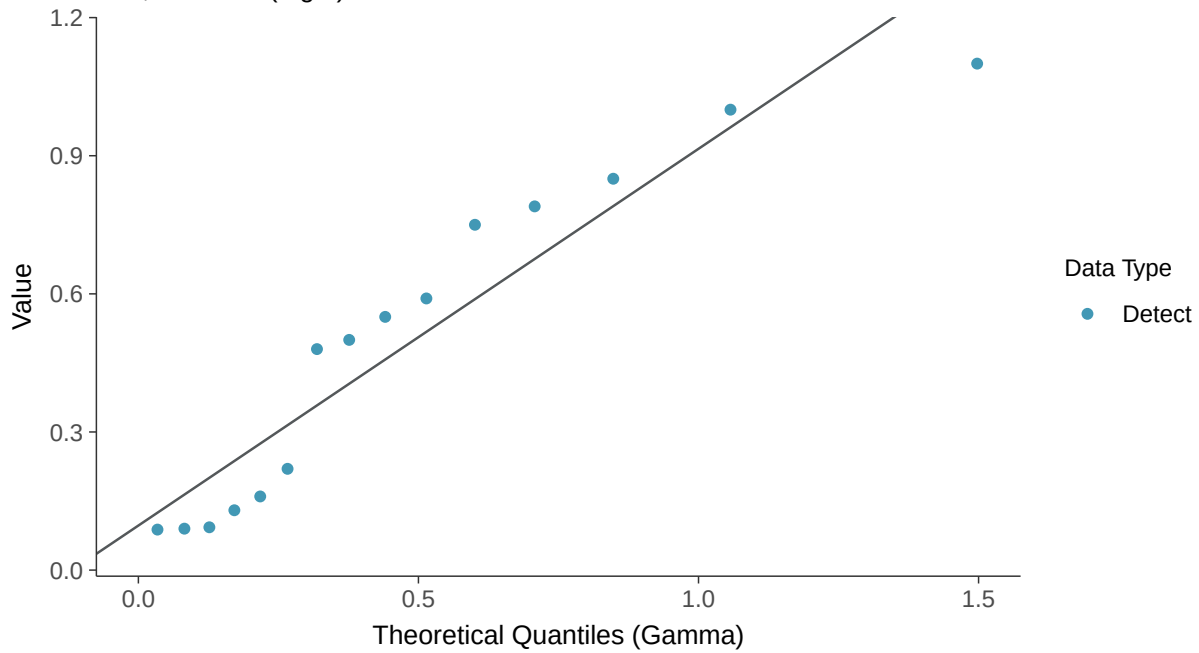
Iron, MW-01R (mg/L)

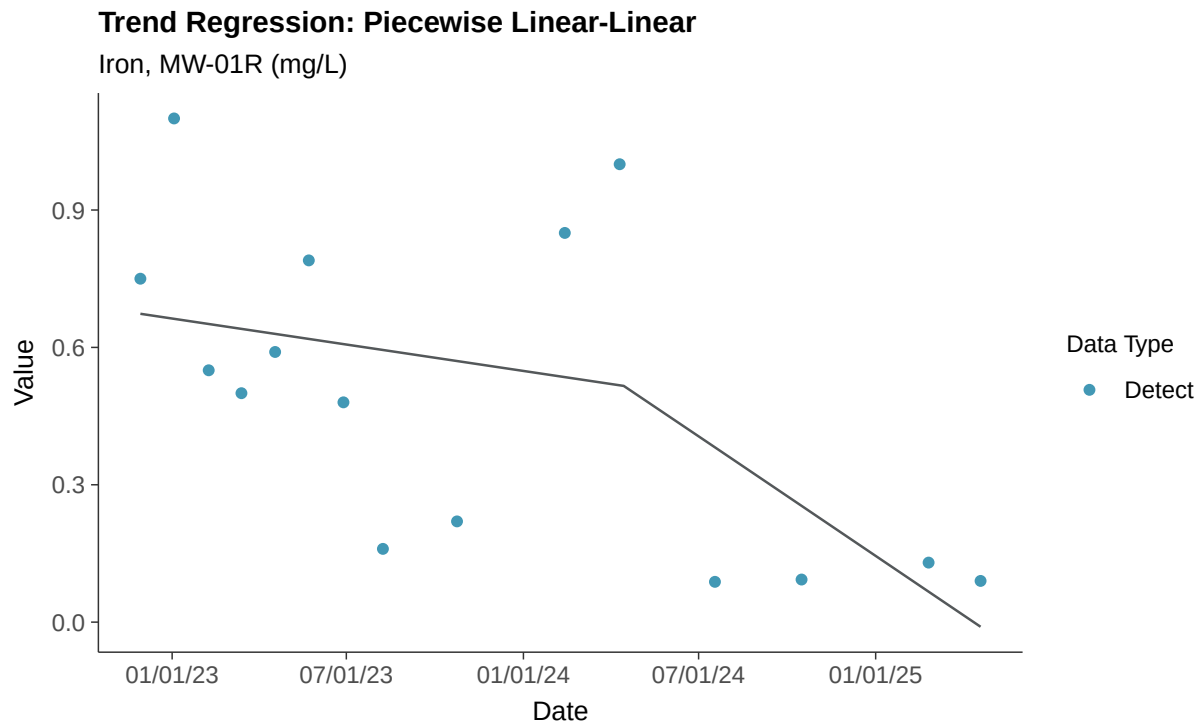
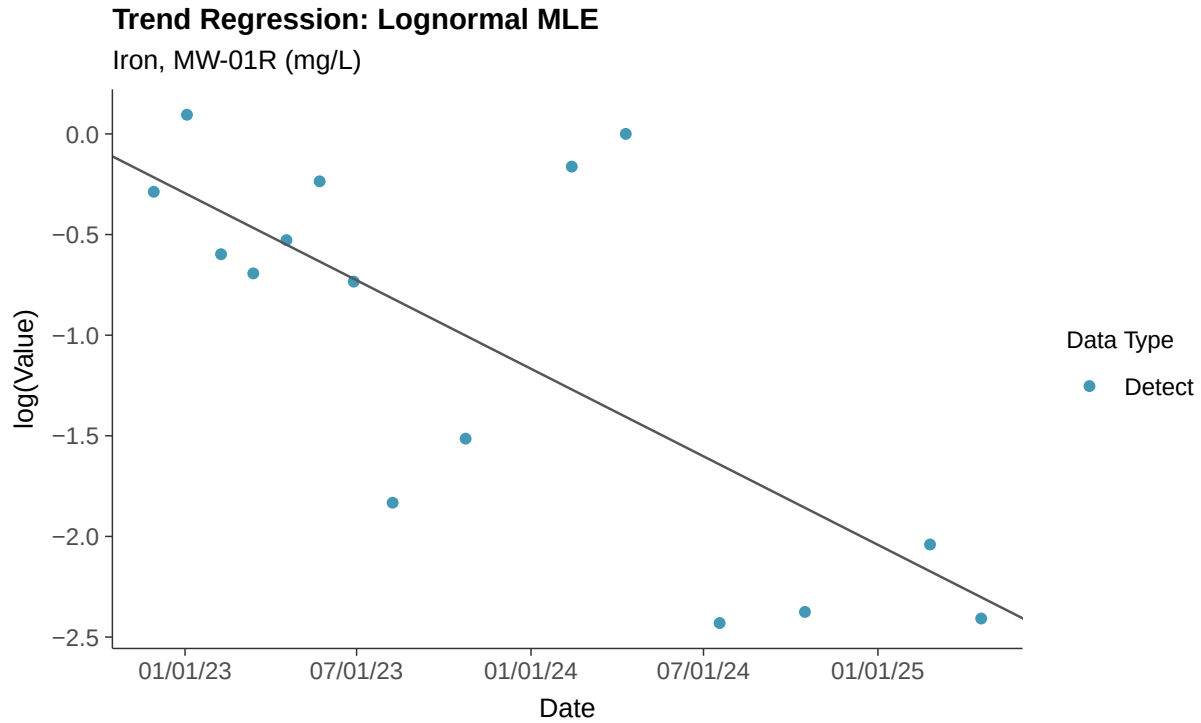


Normal Q-Q plot
Iron, MW-01R (mg/L)



Gamma Q-Q plot
Iron, MW-01R (mg/L)

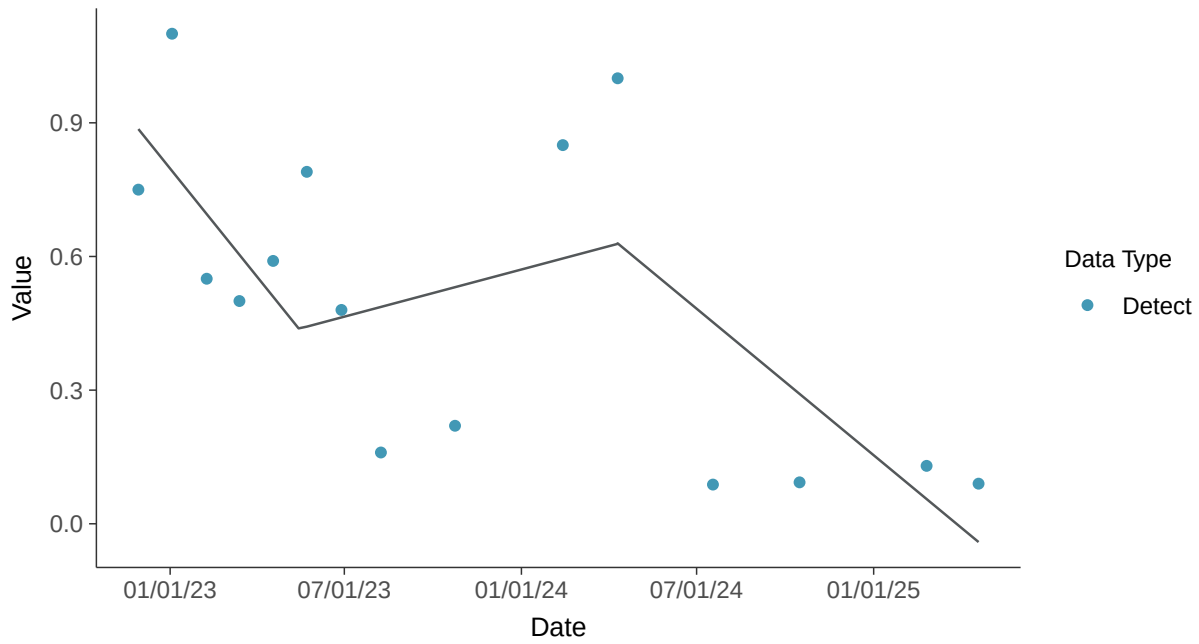






Trend Regression: Piecewise Linear-Linear-Linear

Iron, MW-01R (mg/L)

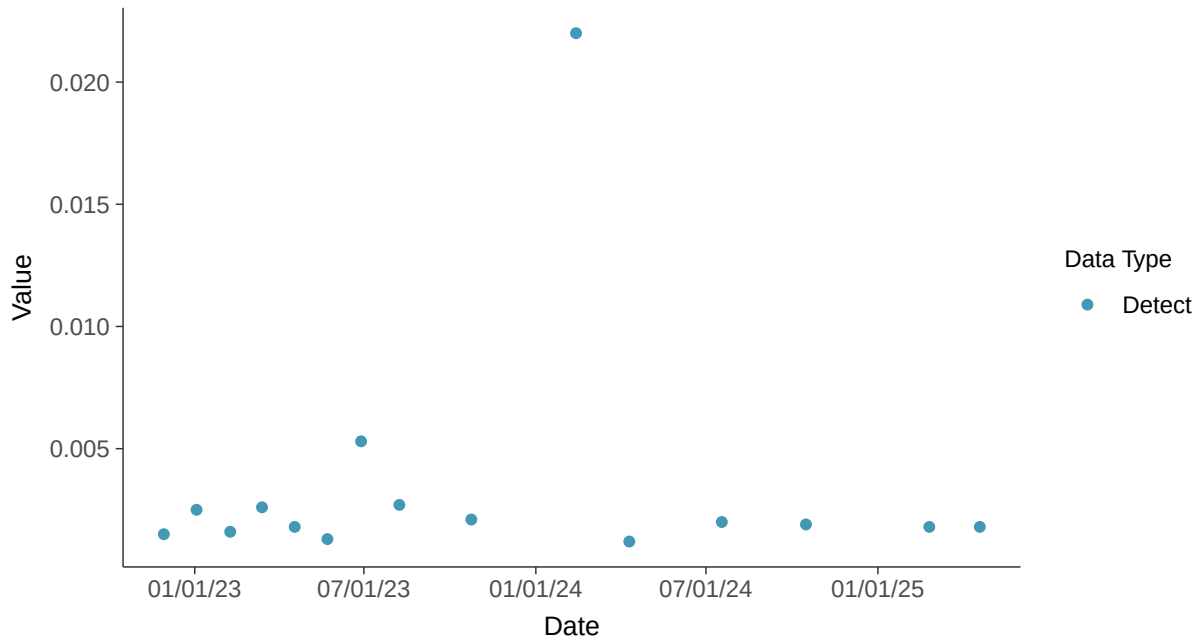


Part 115: Nickel, MW-01R

ID: 11_2_5_119

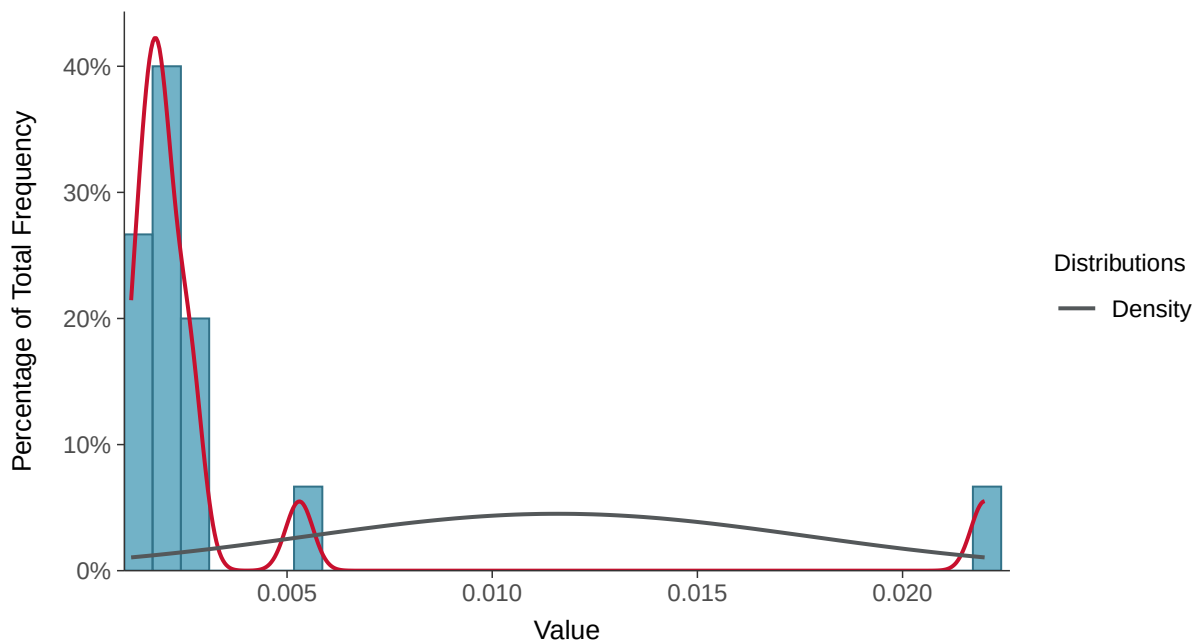
Scatter Plot

Nickel, MW-01R (mg/L)



Histogram

Nickel, MW-01R (mg/L)



Nickel, MW-01R (mg/L)

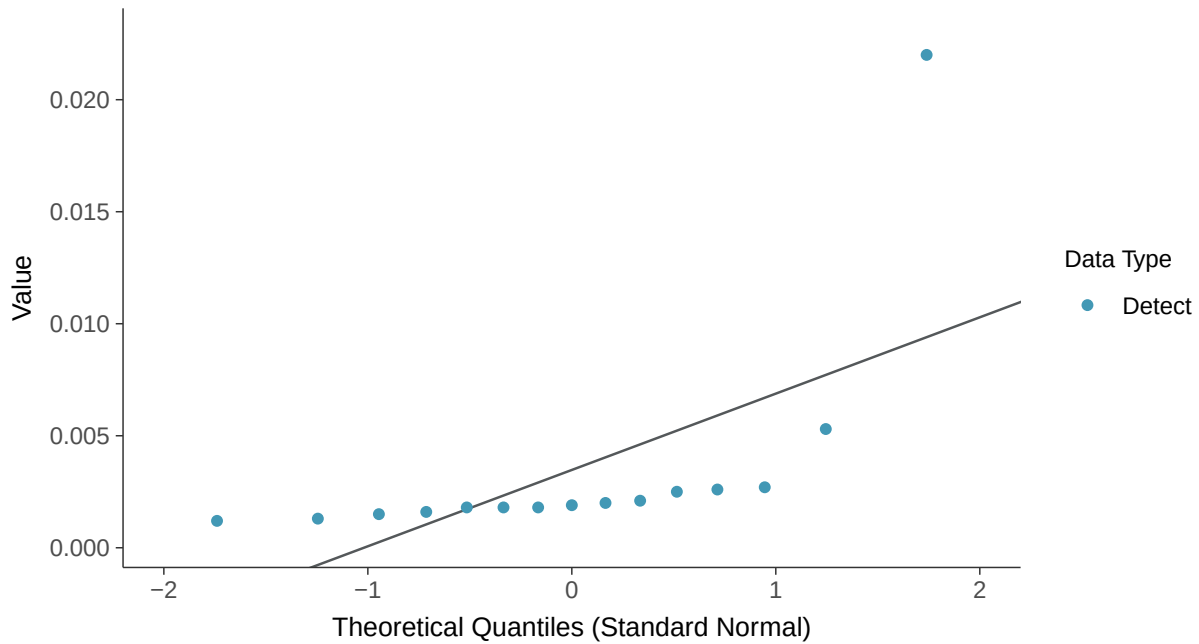


Nickel, MW-01R (mg/L)



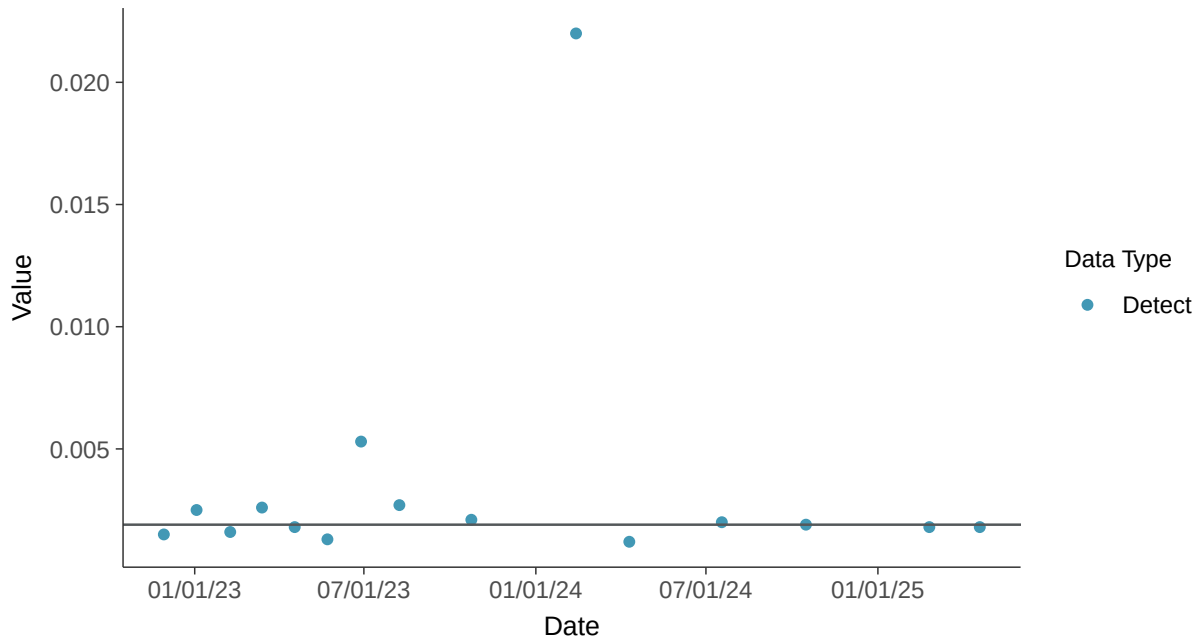
Normal Q-Q plot

Nickel, MW-01R (mg/L)



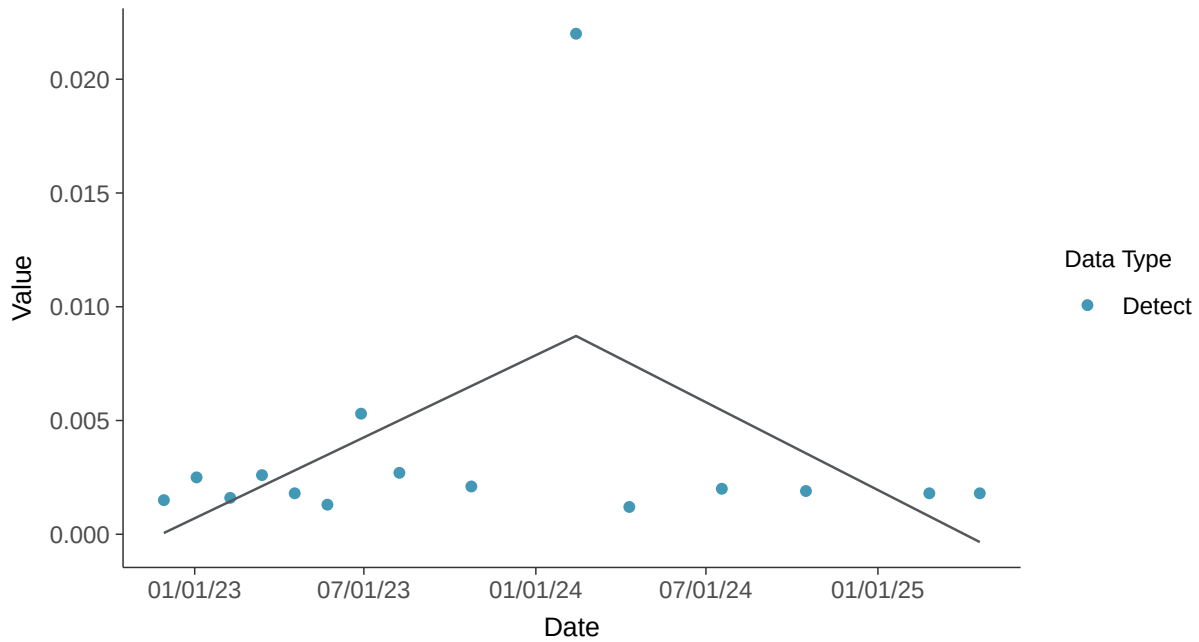
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Nickel, MW-01R (mg/L)



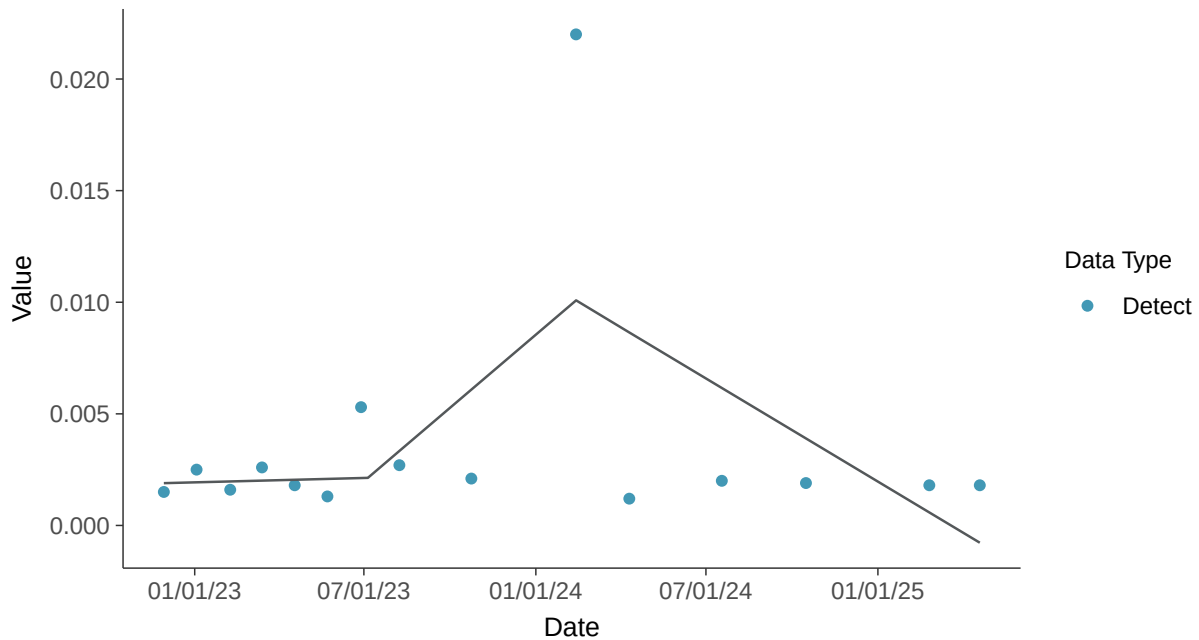
Trend Regression: Piecewise Linear-Linear

Nickel, MW-01R (mg/L)



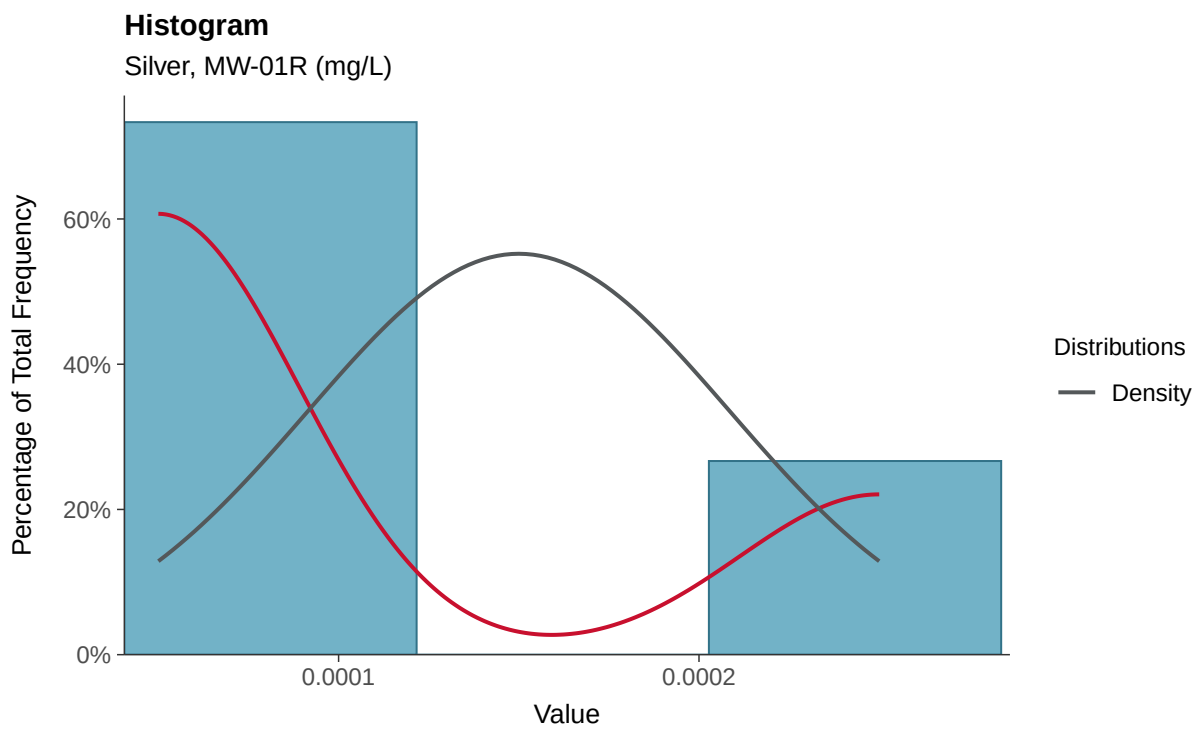
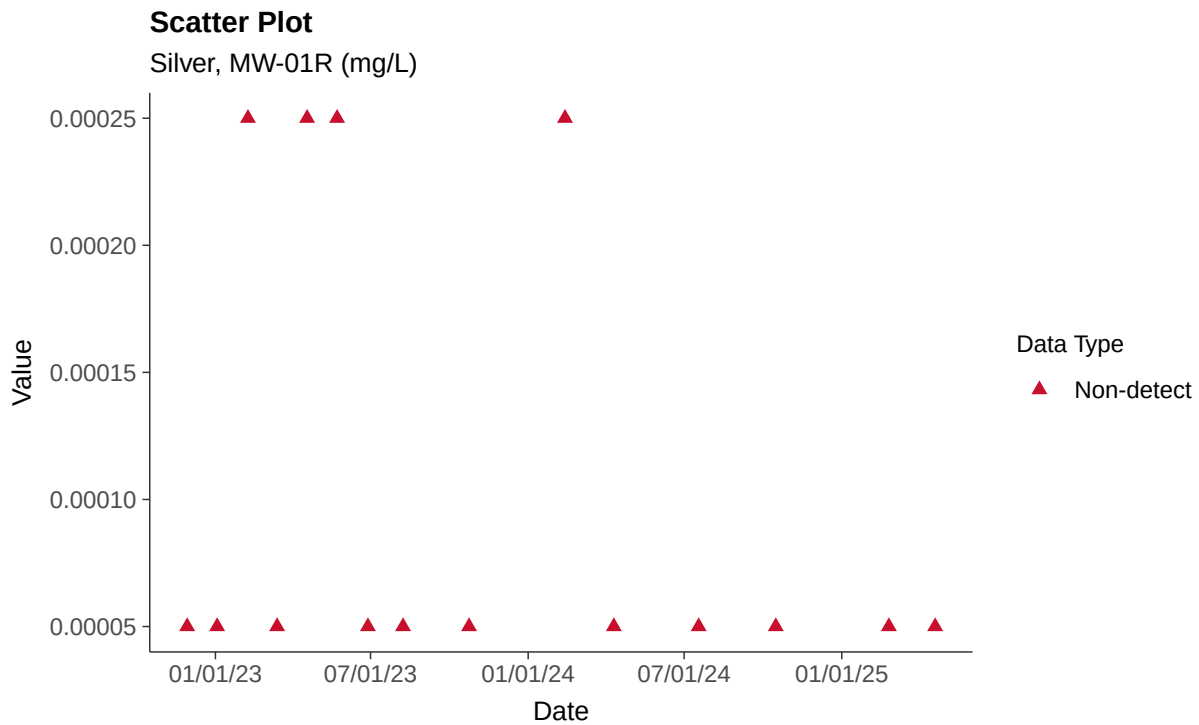
Trend Regression: Piecewise Linear-Linear-Linear

Nickel, MW-01R (mg/L)



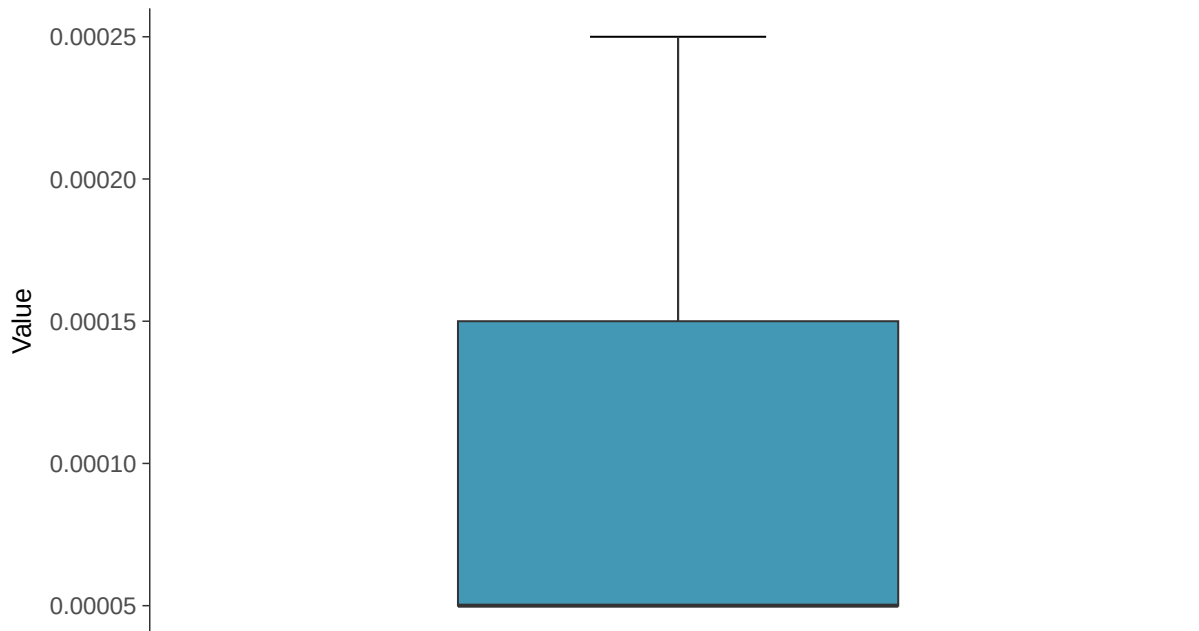
Part 115: Silver, MW-01R

ID: 11_2_5_123



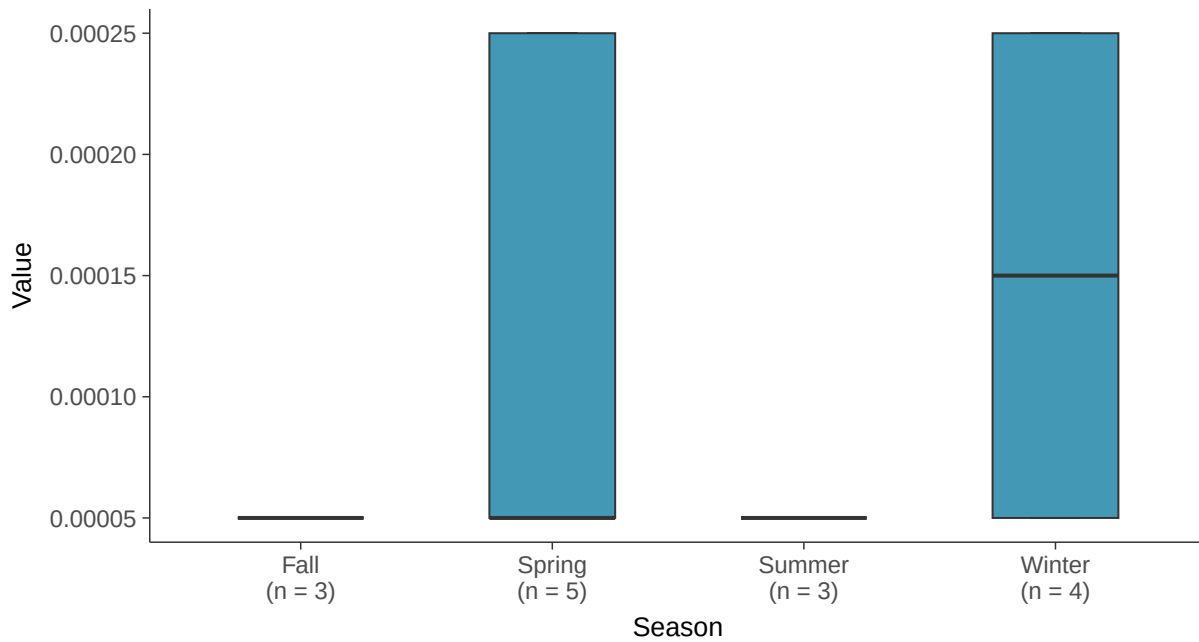
Boxplot

Silver, MW-01R (mg/L)



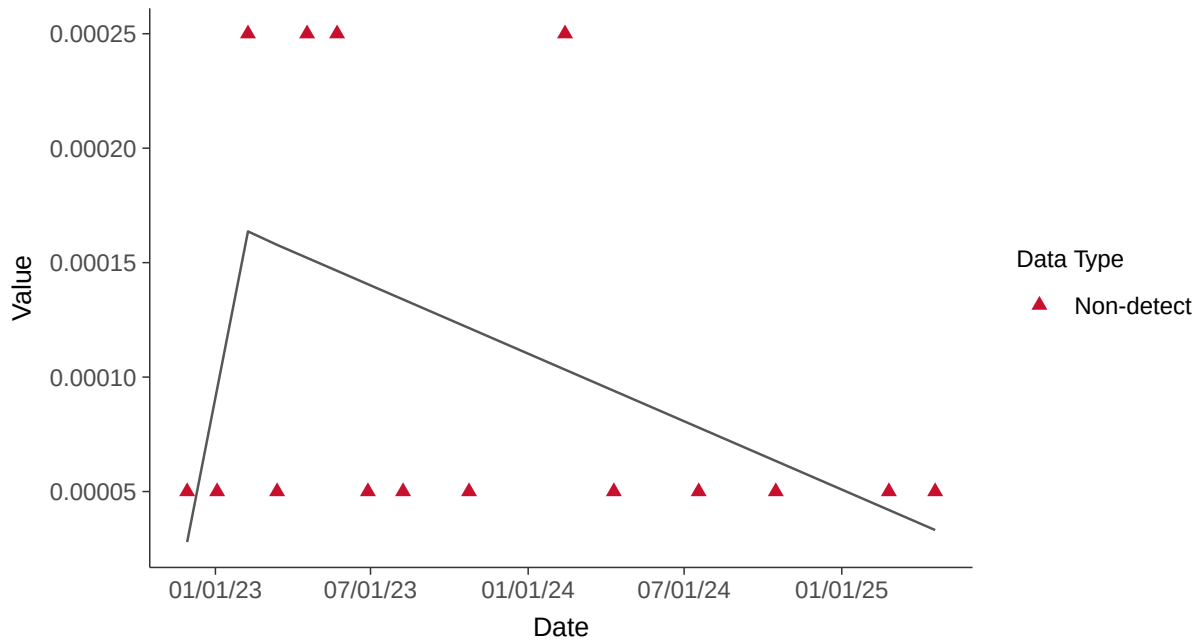
Boxplot by Season

Silver, MW-01R (mg/L)



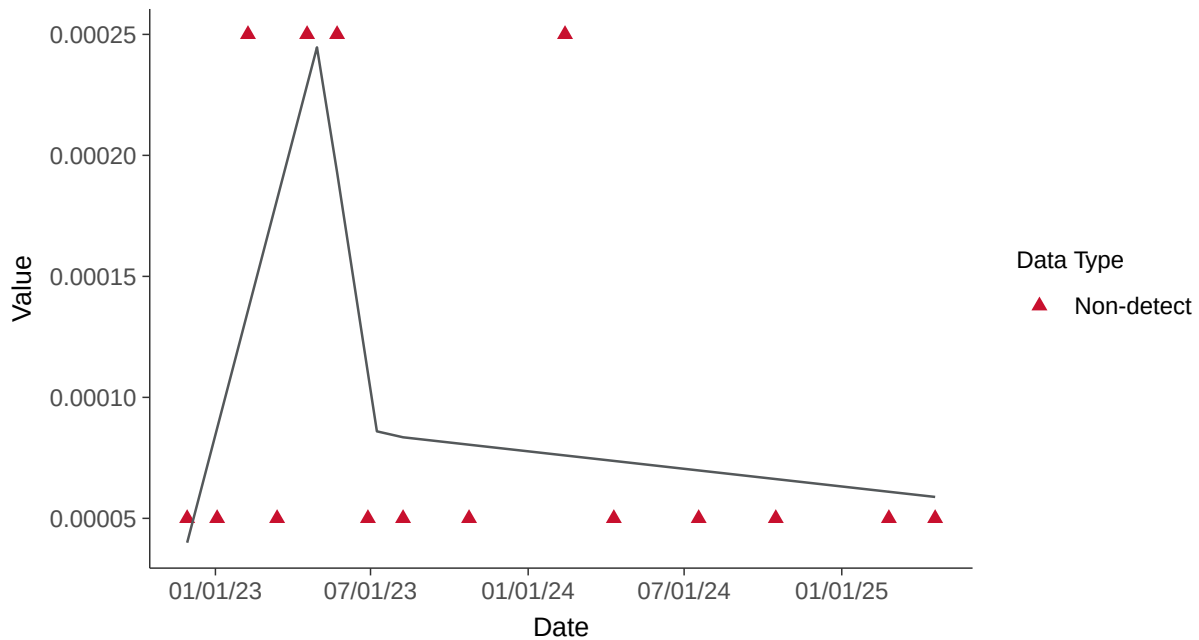
Trend Regression: Piecewise Linear-Linear

Silver, MW-01R (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Silver, MW-01R (mg/L)

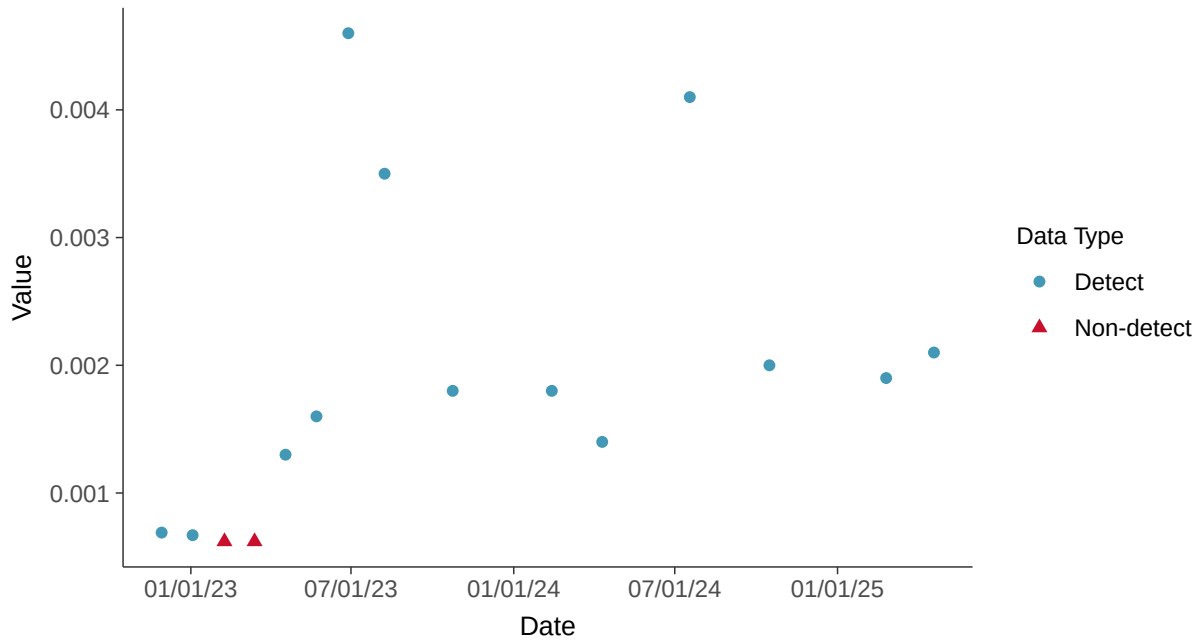


Part 115: Vanadium, MW-01R

ID: 11_2_5_128

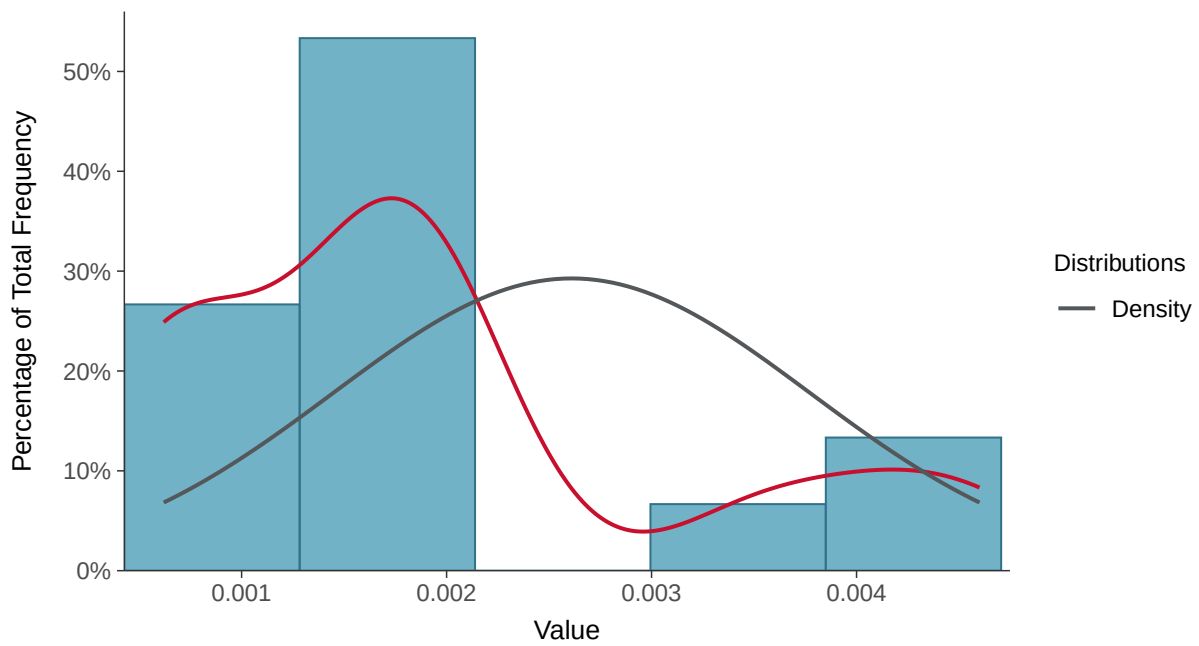
Scatter Plot

Vanadium, MW-01R (mg/L)



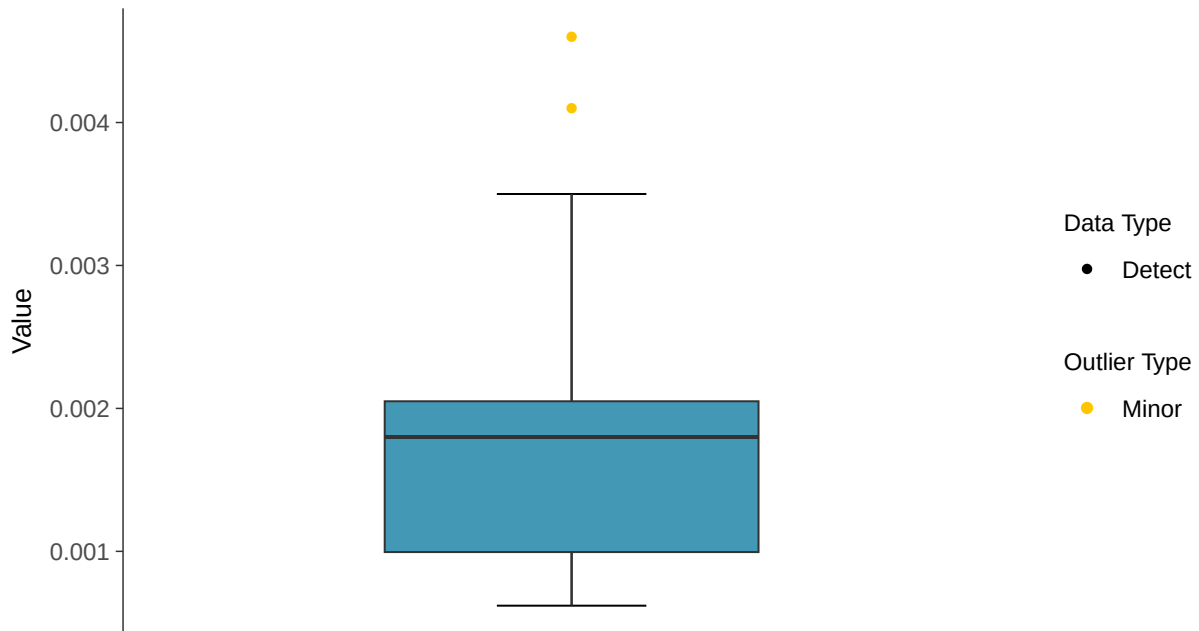
Histogram

Vanadium, MW-01R (mg/L)



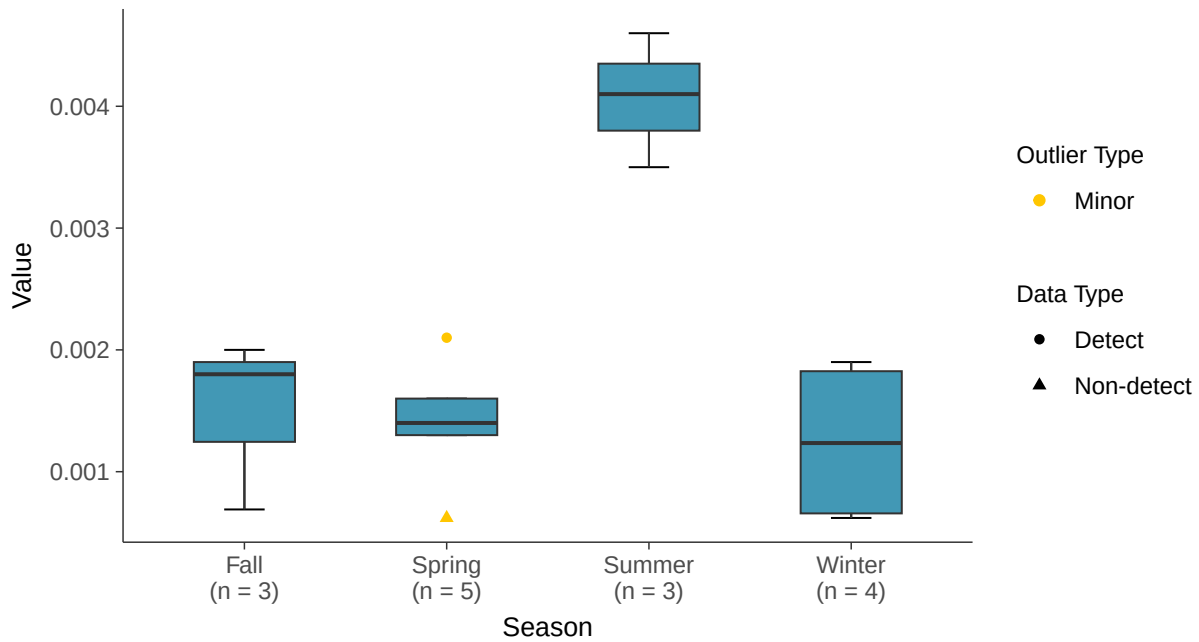
Boxplot

Vanadium, MW-01R (mg/L)



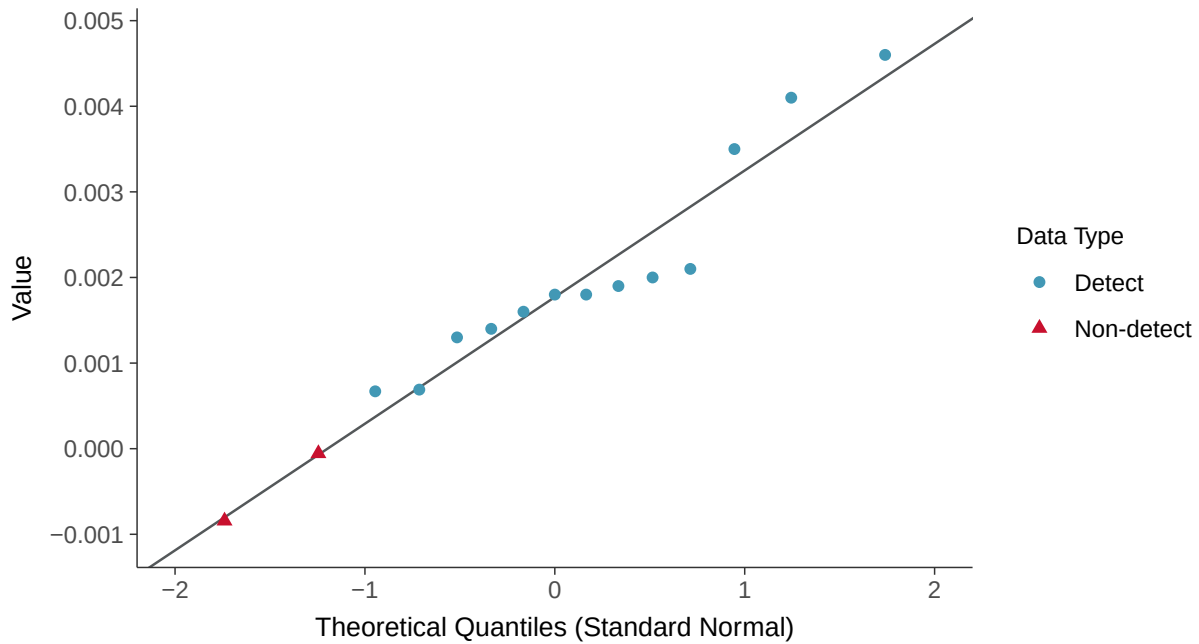
Boxplot by Season

Vanadium, MW-01R (mg/L)



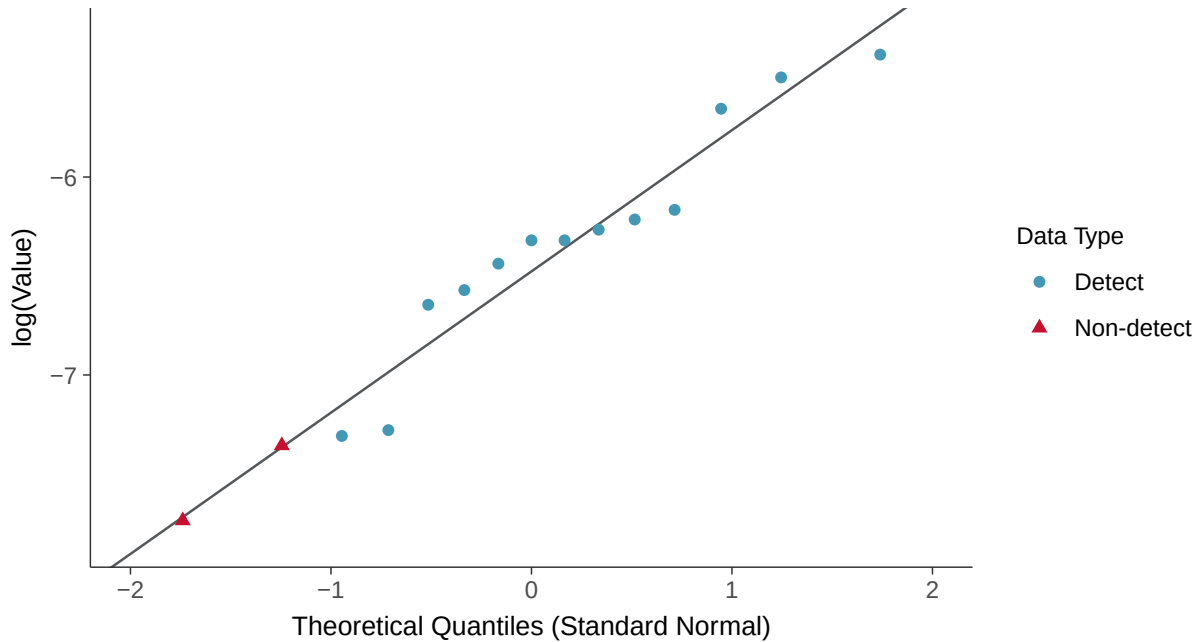
Normal Q-Q plot using ROS Imputed Estimates

Vanadium, MW-01R (mg/L)



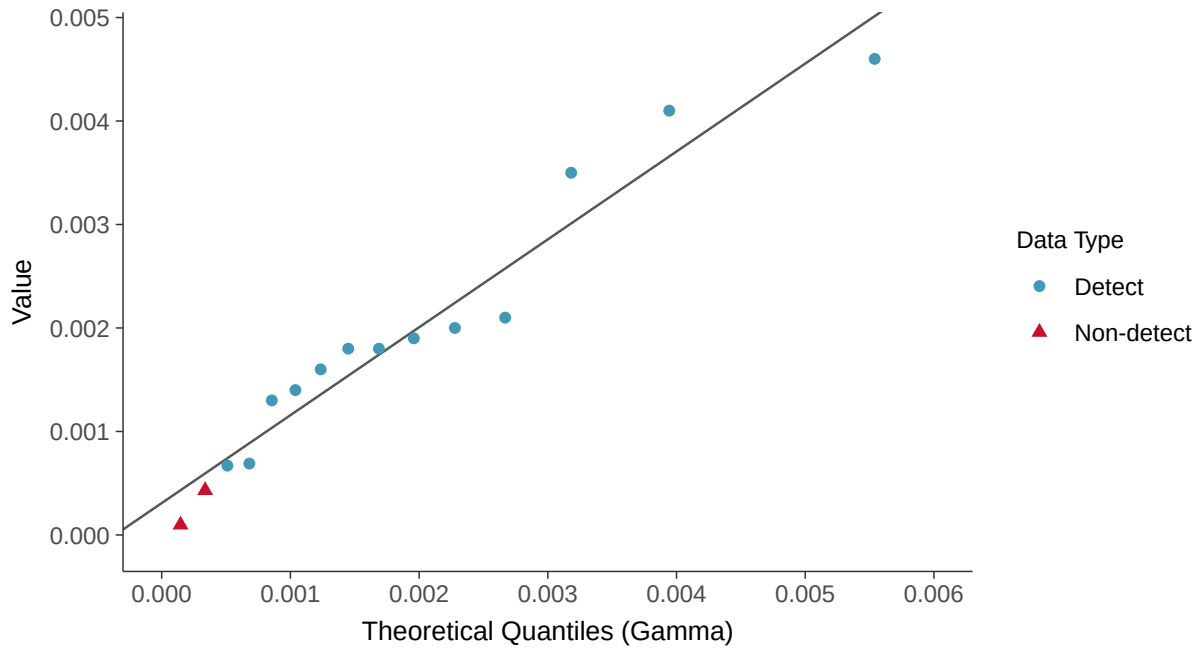
Lognormal Q-Q plot using ROS Imputed Estimates

Vanadium, MW-01R (mg/L)



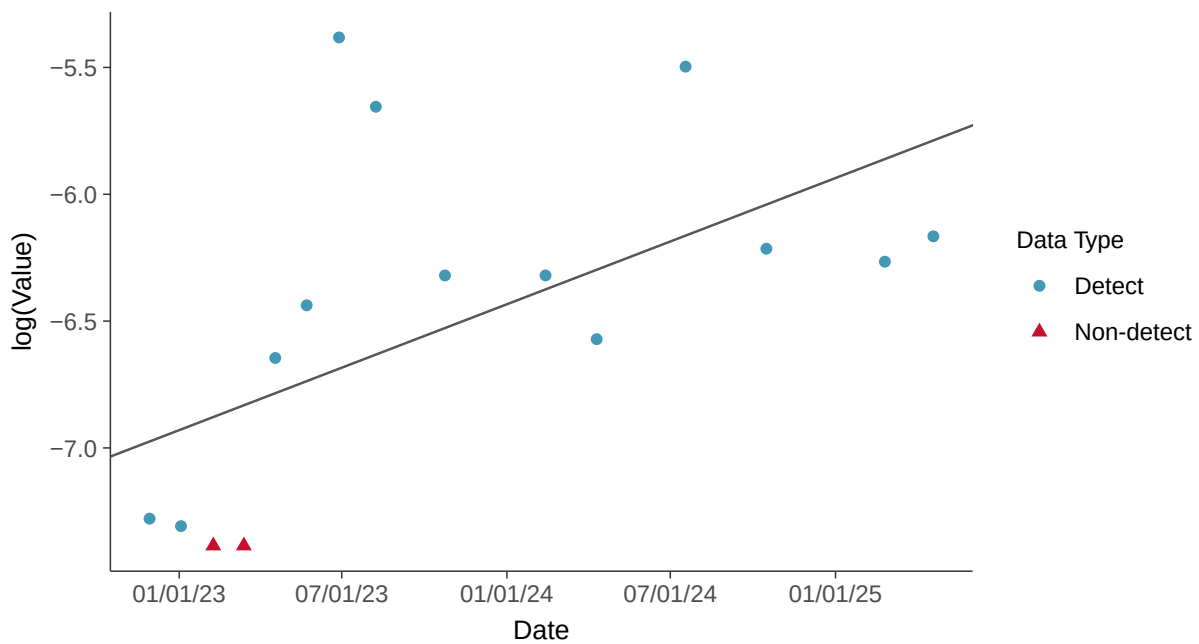
Gamma Q-Q plot using ROS Imputed Estimates

Vanadium, MW-01R (mg/L)



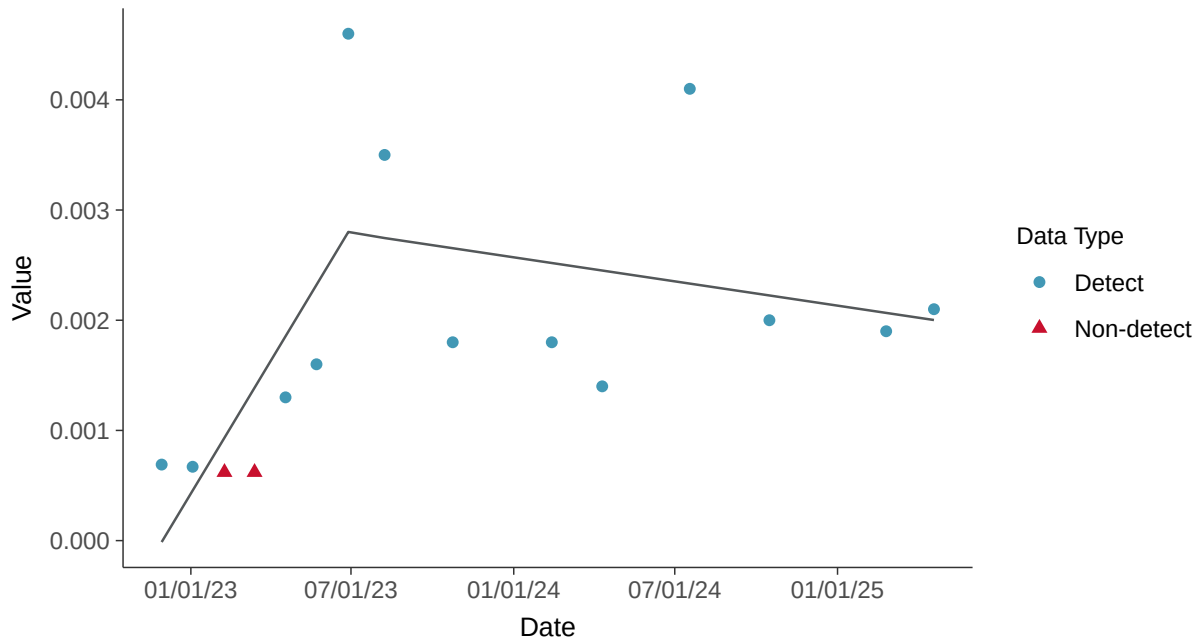
Trend Regression: Lognormal MLE

Vanadium, MW-01R (mg/L)



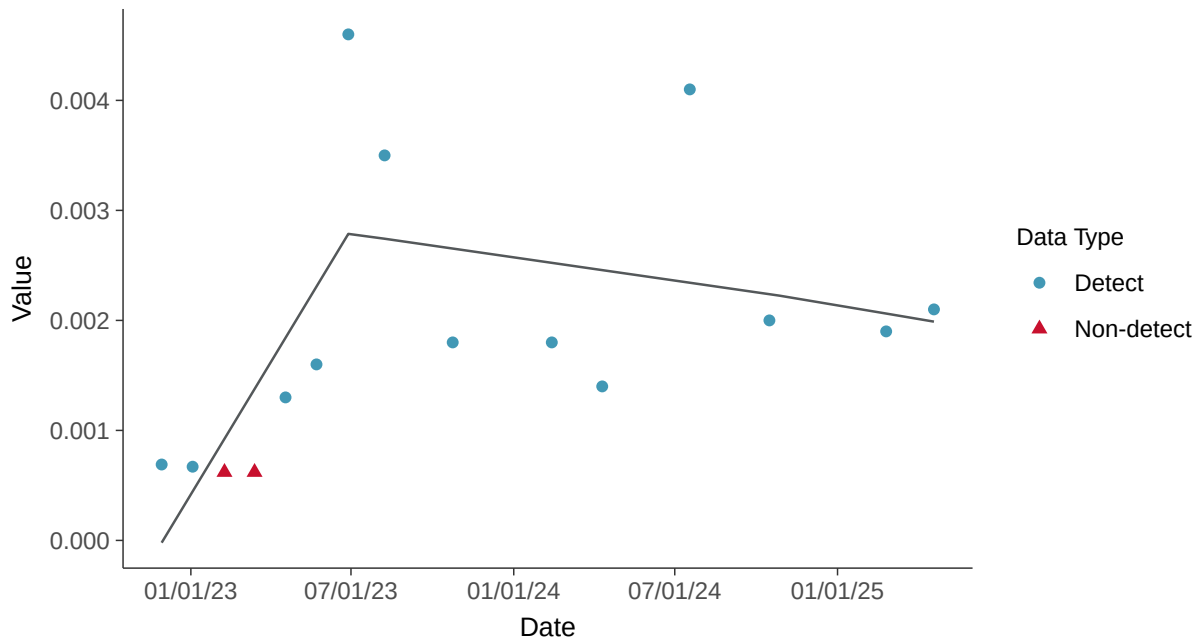
Trend Regression: Piecewise Linear-Linear

Vanadium, MW-01R (mg/L)



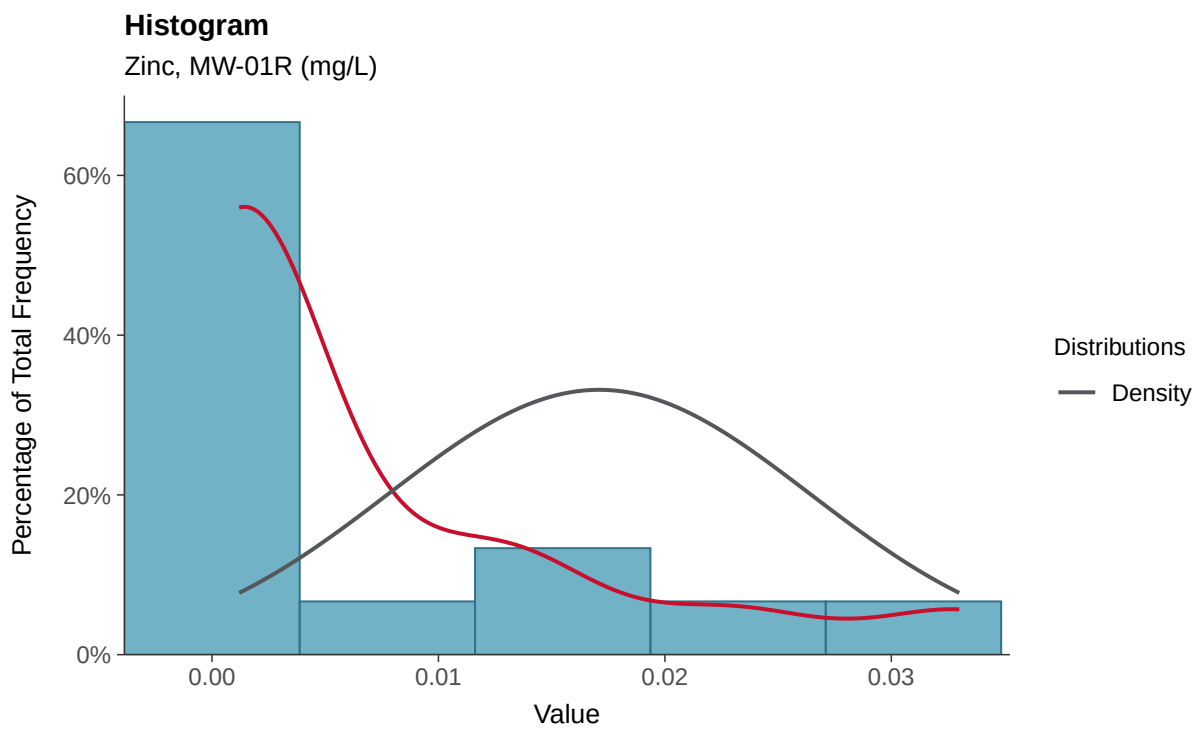
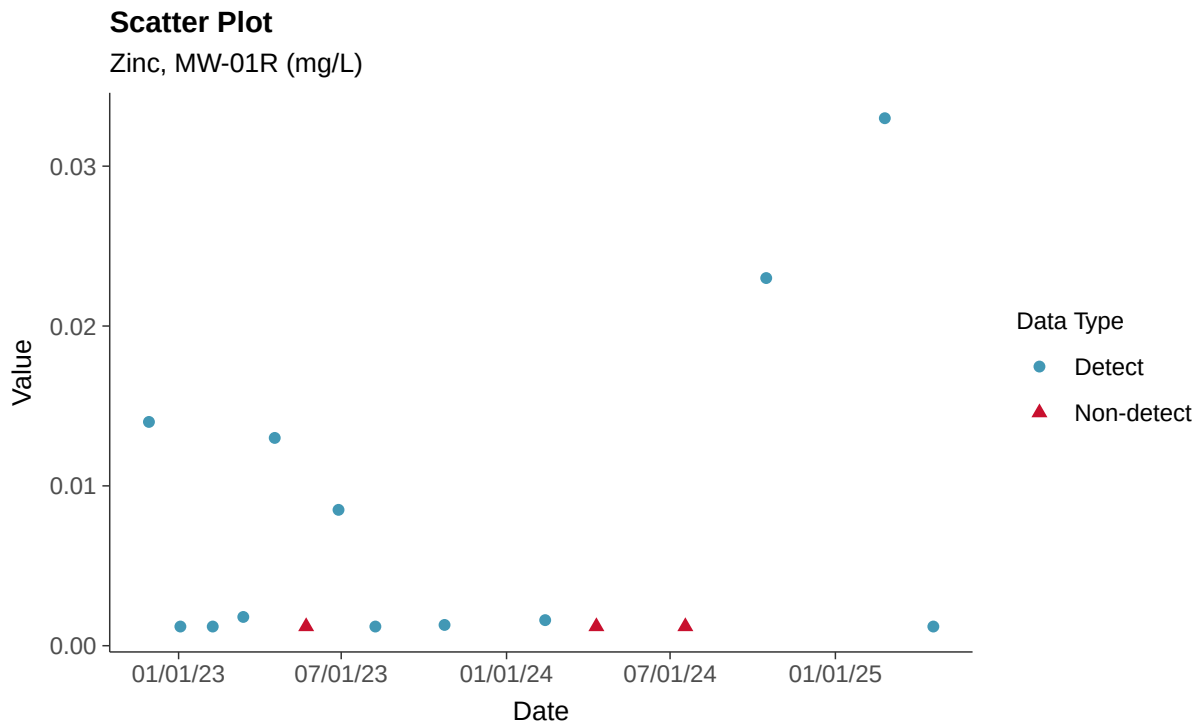
Trend Regression: Piecewise Linear-Linear-Linear

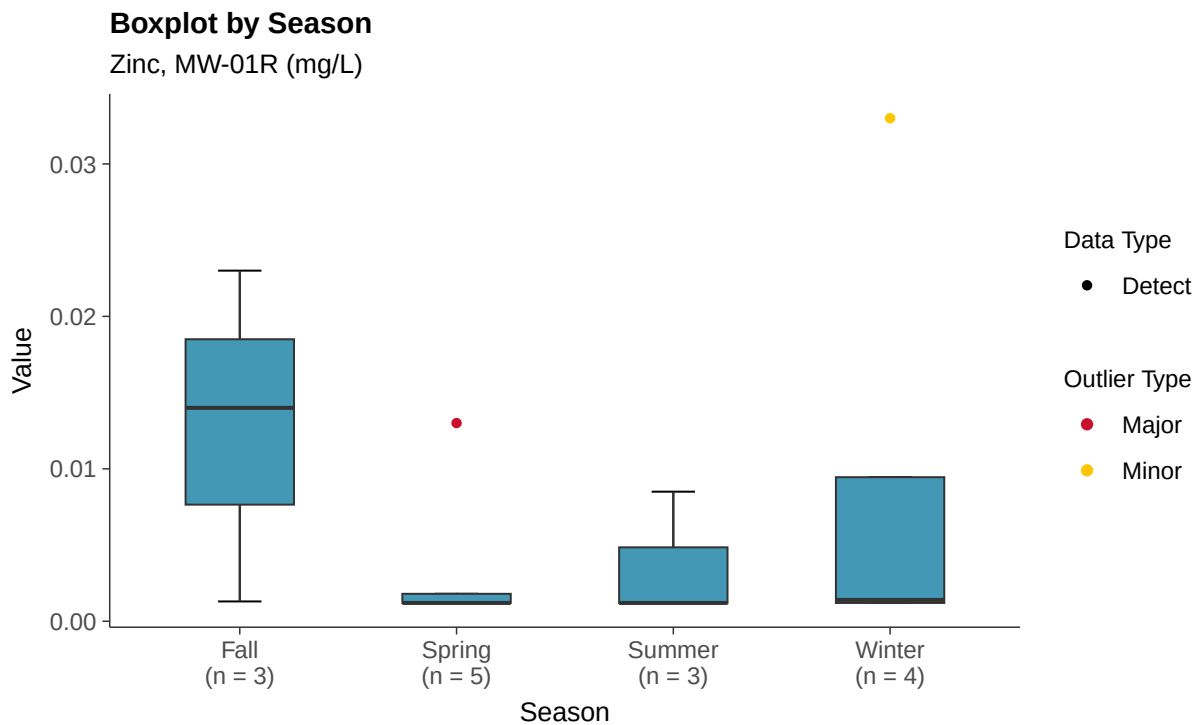
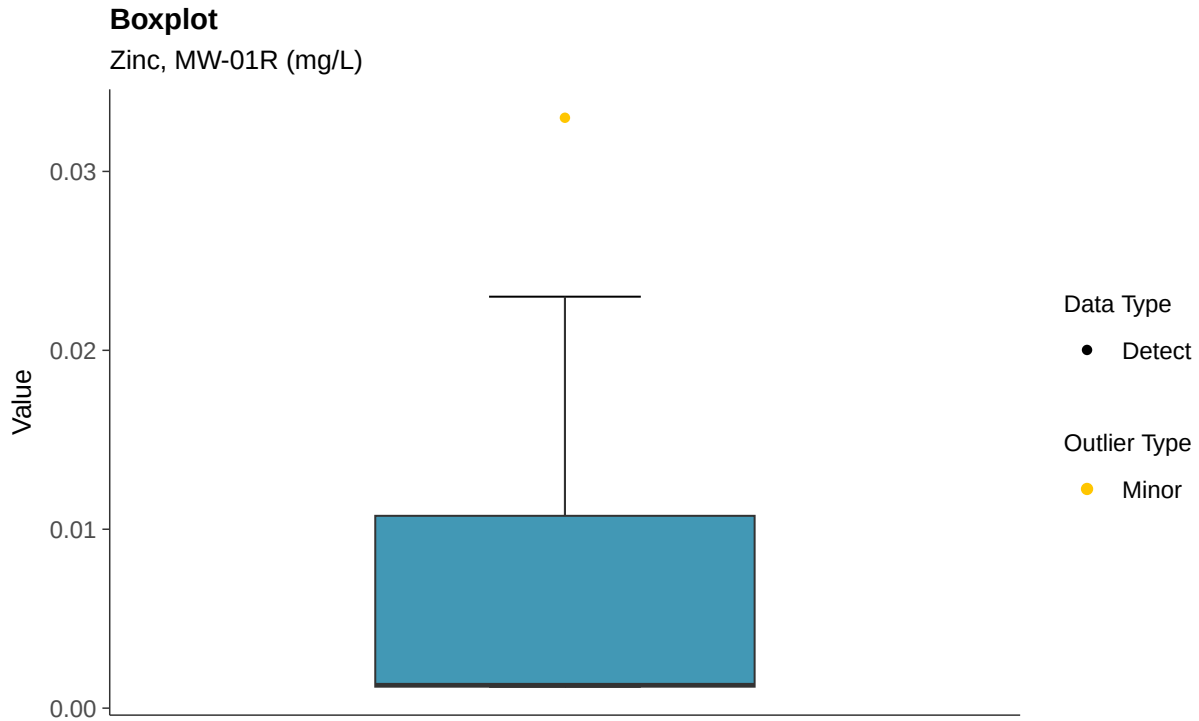
Vanadium, MW-01R (mg/L)



Part 115: Zinc, MW-01R

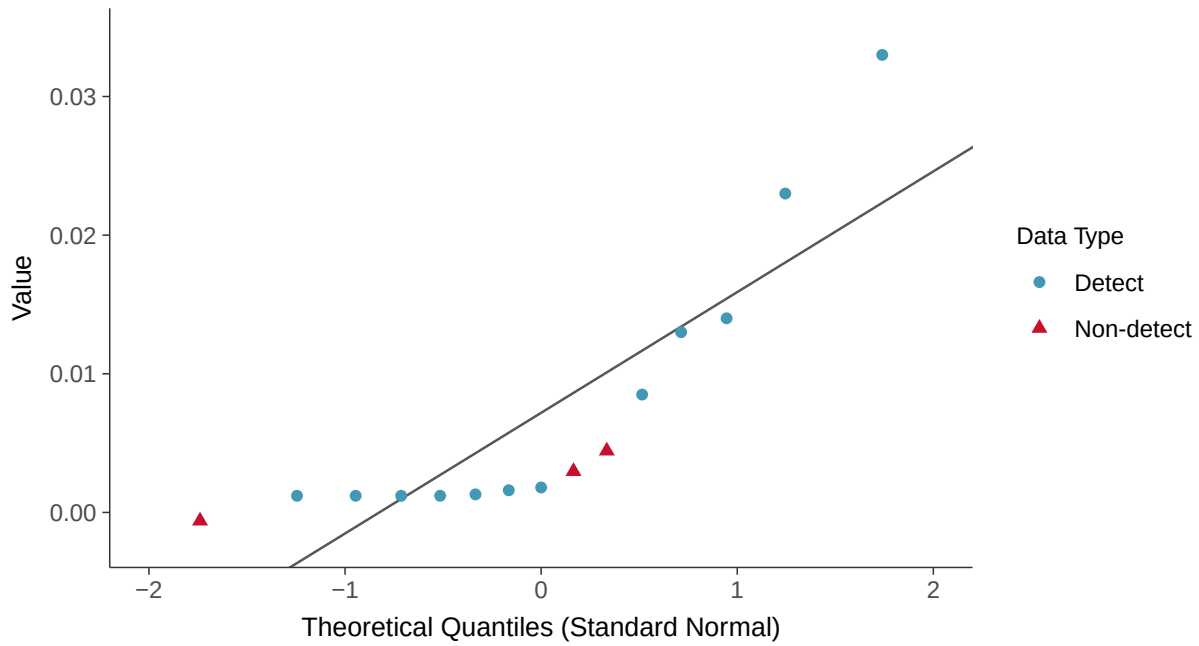
ID: 11_2_5_129





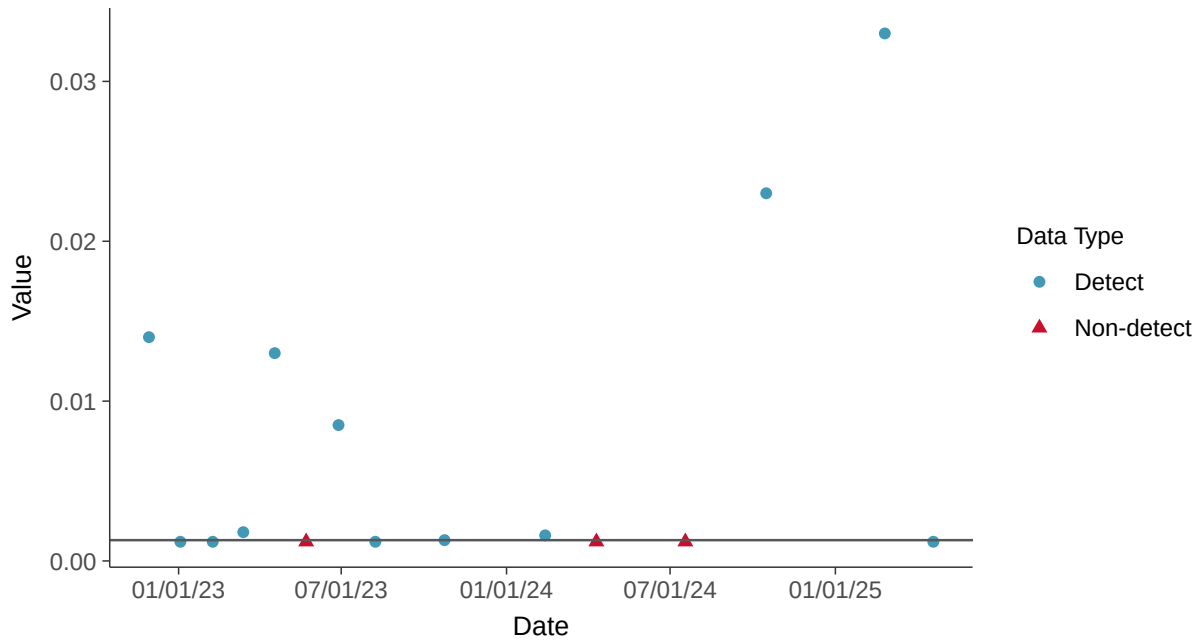
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-01R (mg/L)



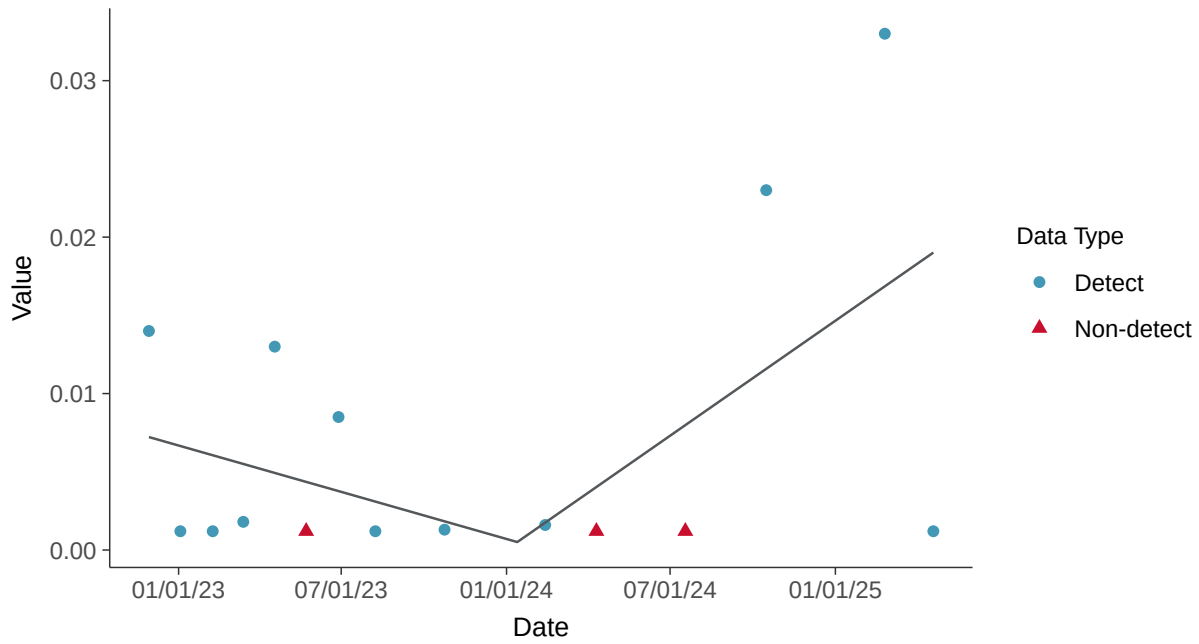
Trend Regression: Mann-Kendall/Theil-Sen Estimate

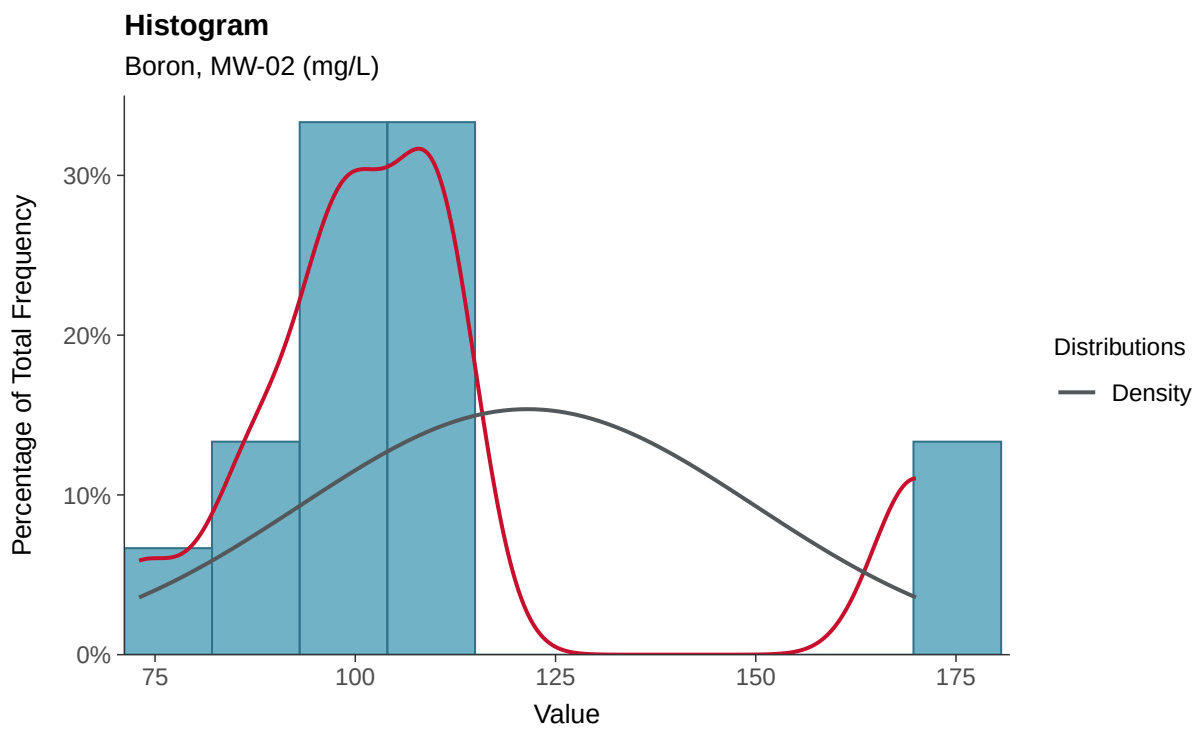
Zinc, MW-01R (mg/L)





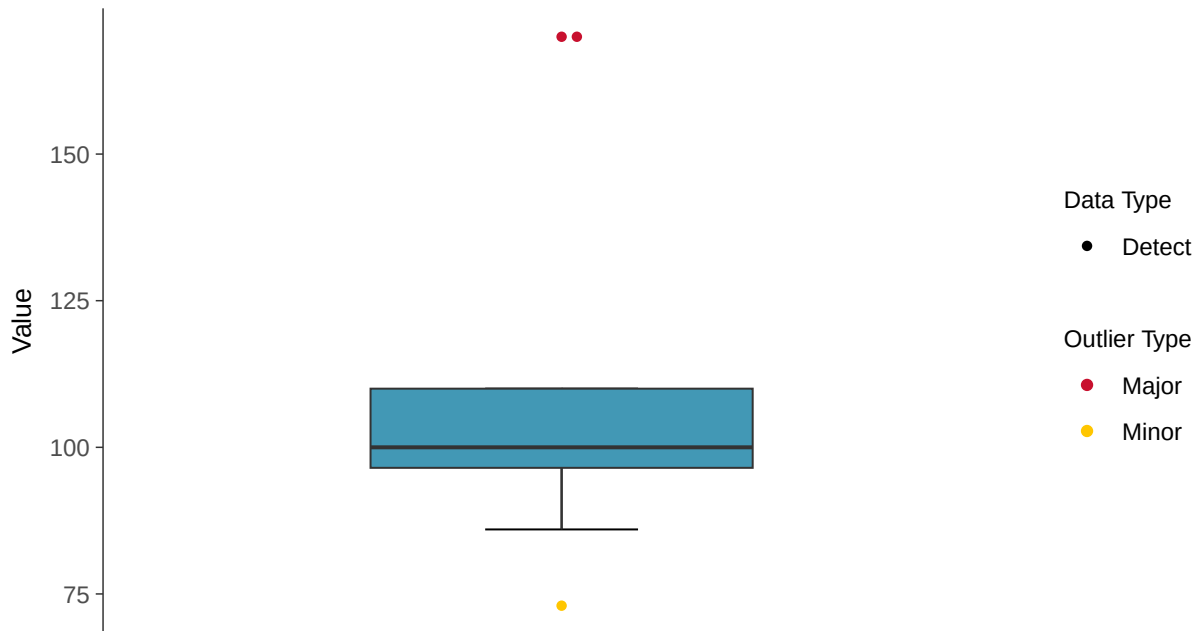
Trend Regression: Piecewise Linear-Linear
Zinc, MW-01R (mg/L)





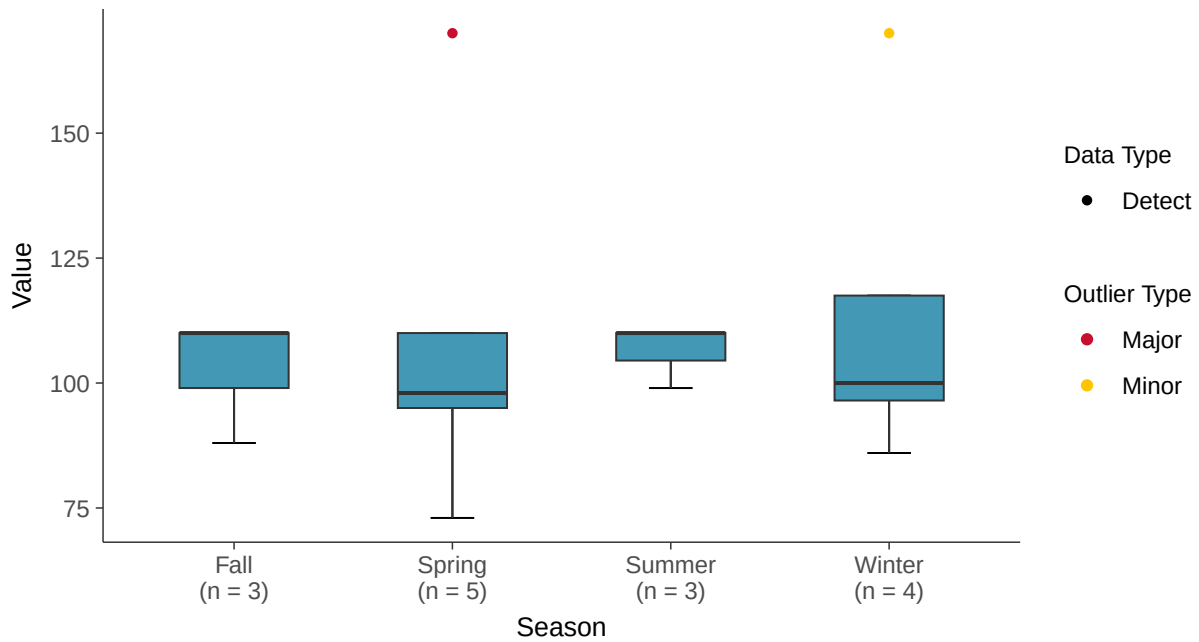
Boxplot

Boron, MW-02 (mg/L)



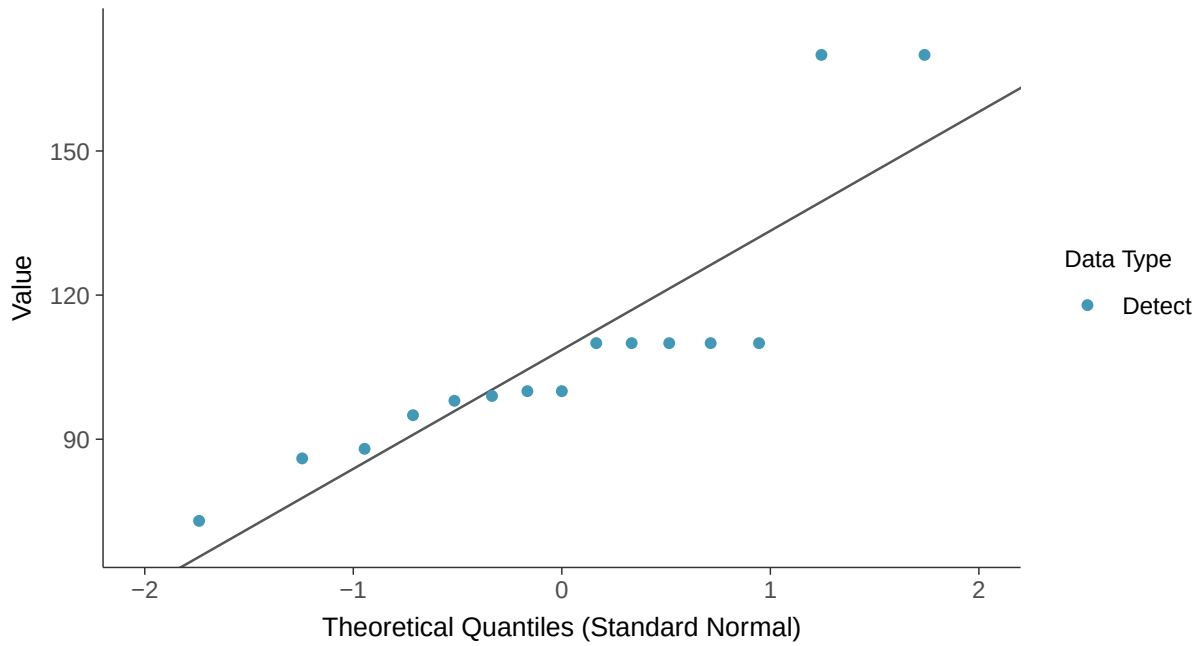
Boxplot by Season

Boron, MW-02 (mg/L)



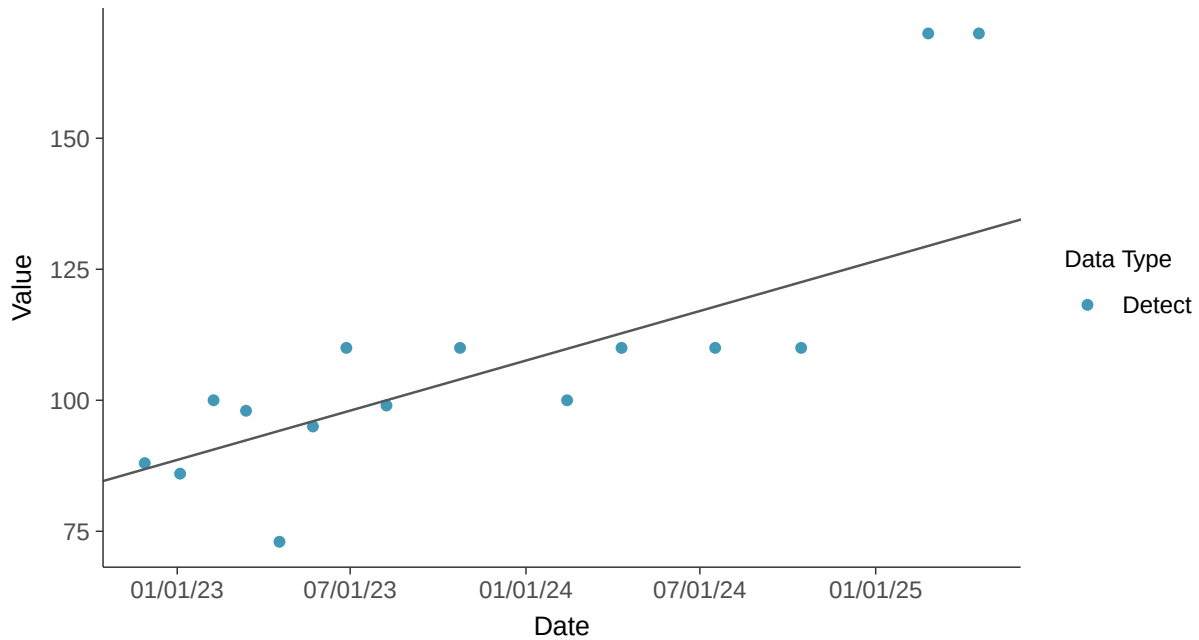
Normal Q-Q plot

Boron, MW-02 (mg/L)



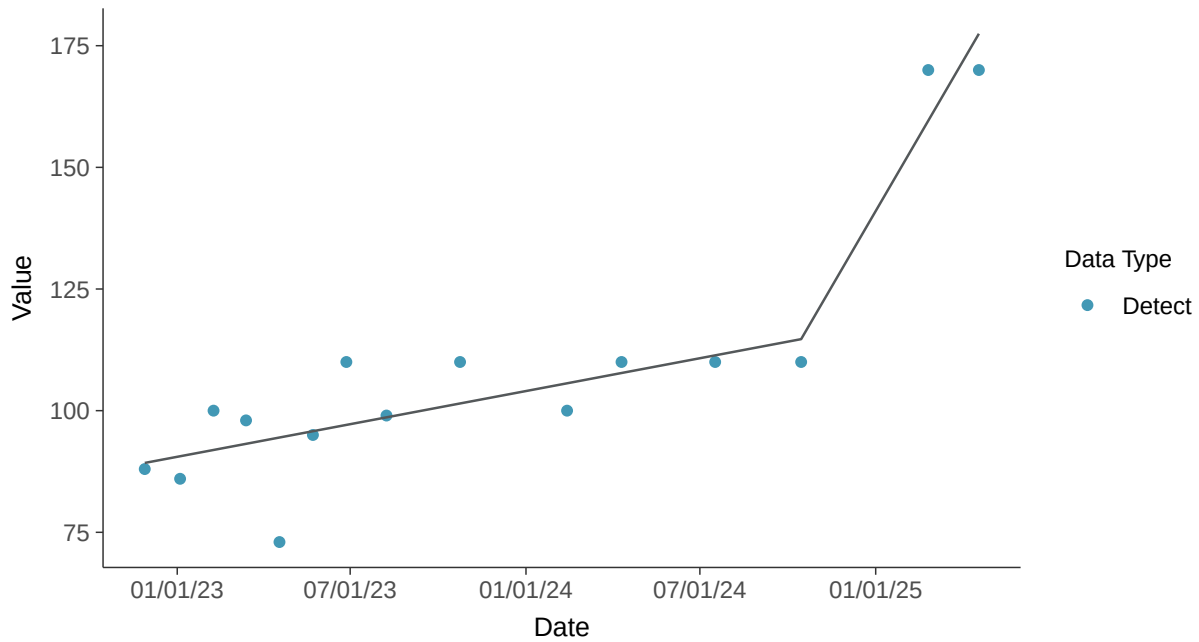
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Boron, MW-02 (mg/L)



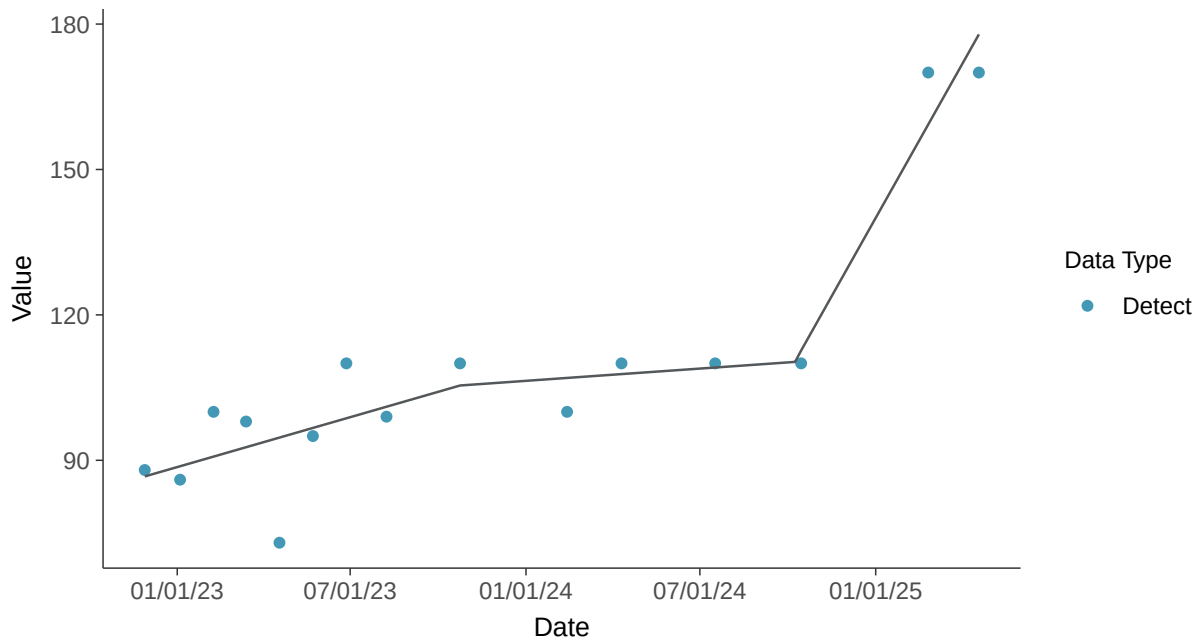
Trend Regression: Piecewise Linear-Linear

Boron, MW-02 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Boron, MW-02 (mg/L)

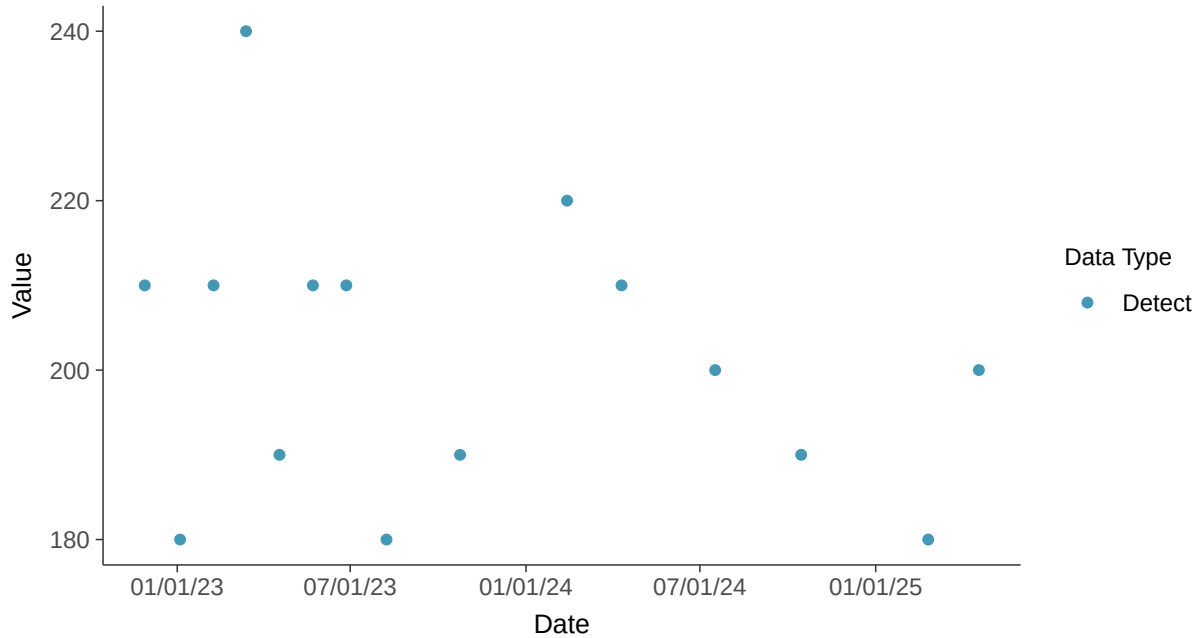


Appendix III: Calcium, MW-02

ID: 12_2_3_107

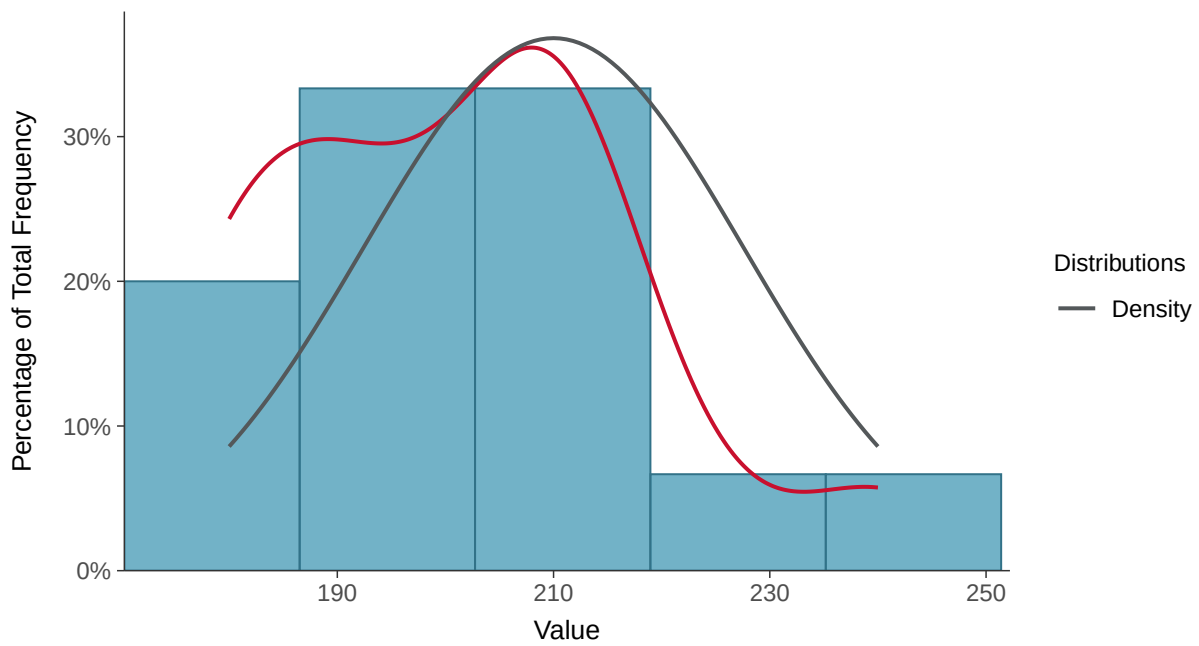
Scatter Plot

Calcium, MW-02 (mg/L)



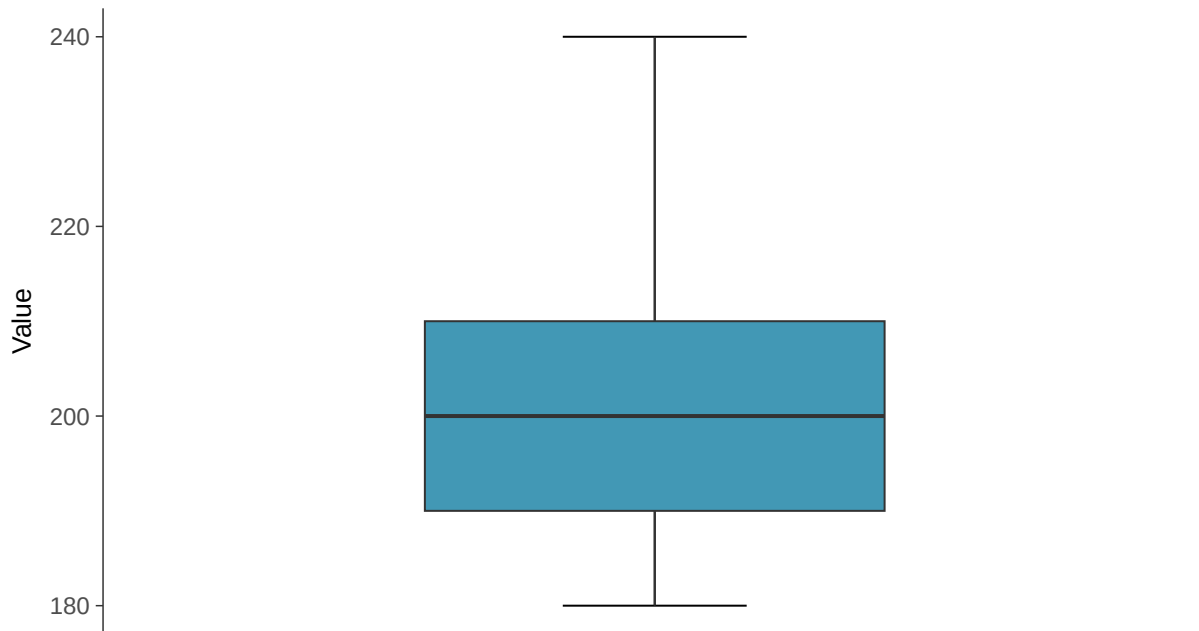
Histogram

Calcium, MW-02 (mg/L)



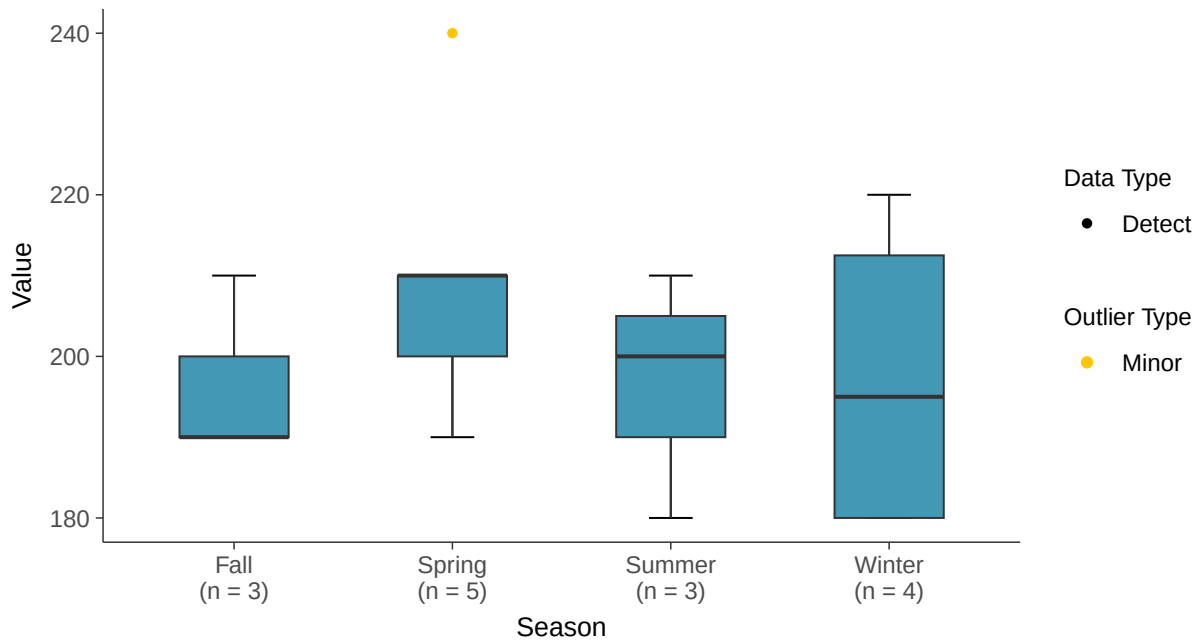
Boxplot

Calcium, MW-02 (mg/L)



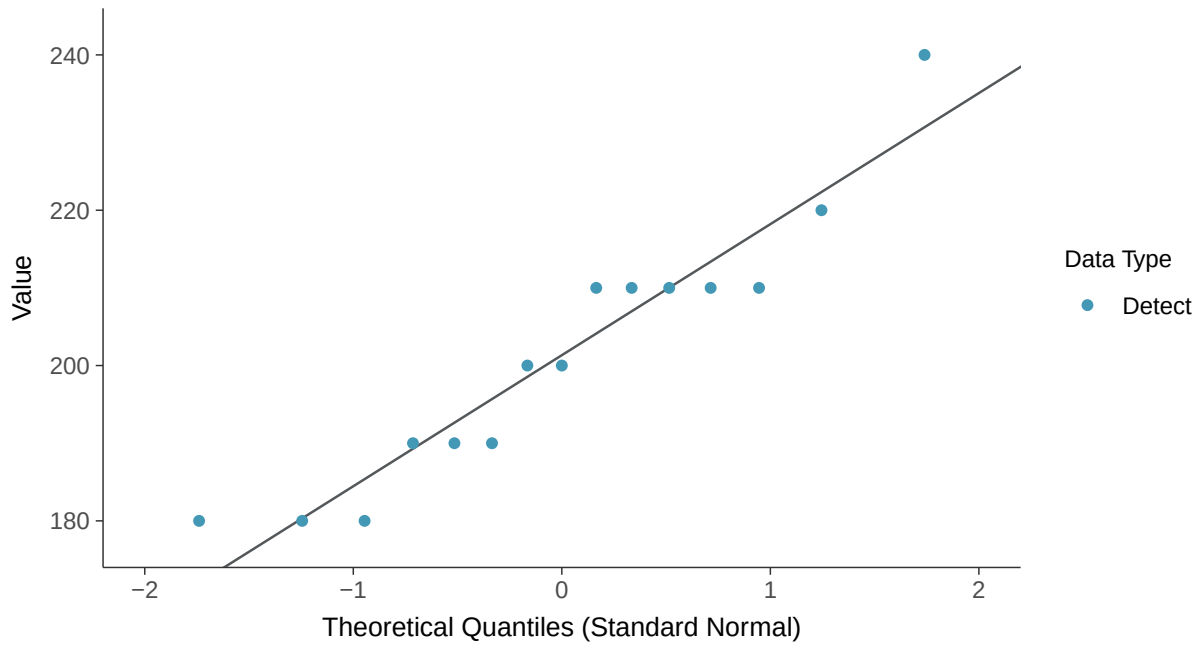
Boxplot by Season

Calcium, MW-02 (mg/L)



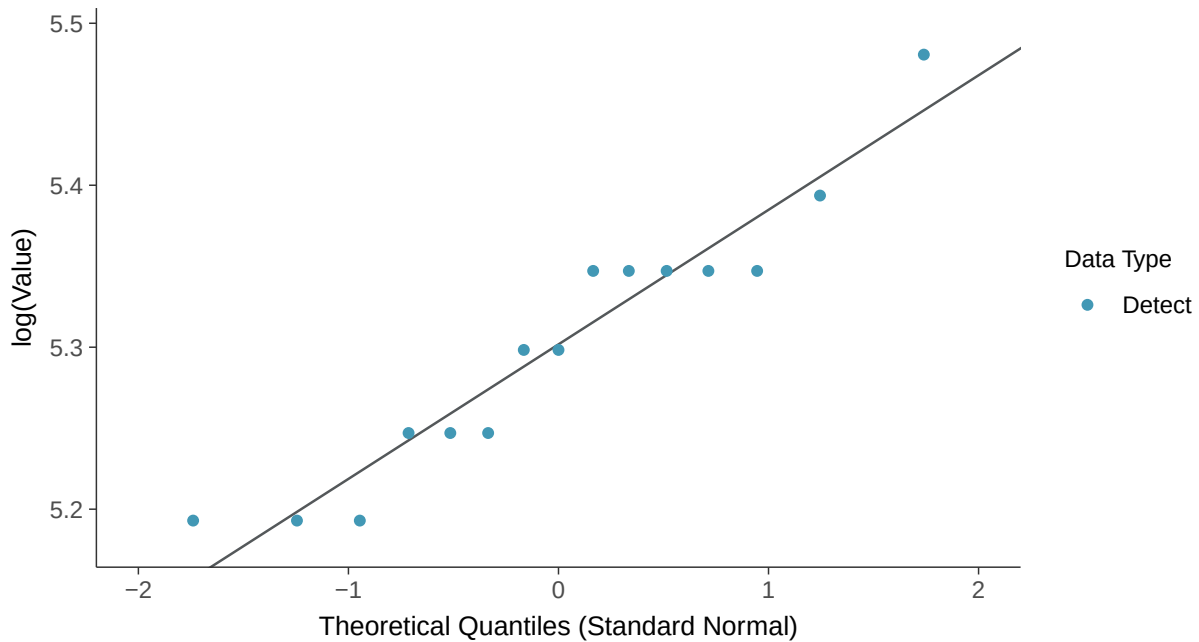
Normal Q-Q plot

Calcium, MW-02 (mg/L)



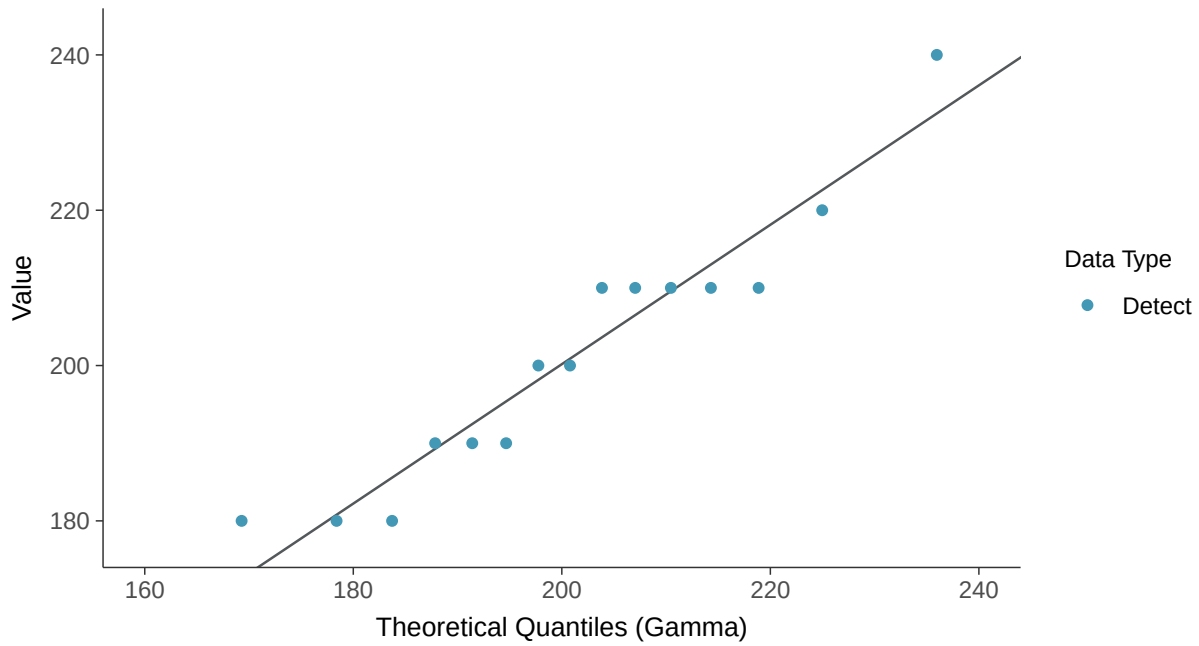
Lognormal Q-Q plot

Calcium, MW-02 (mg/L)



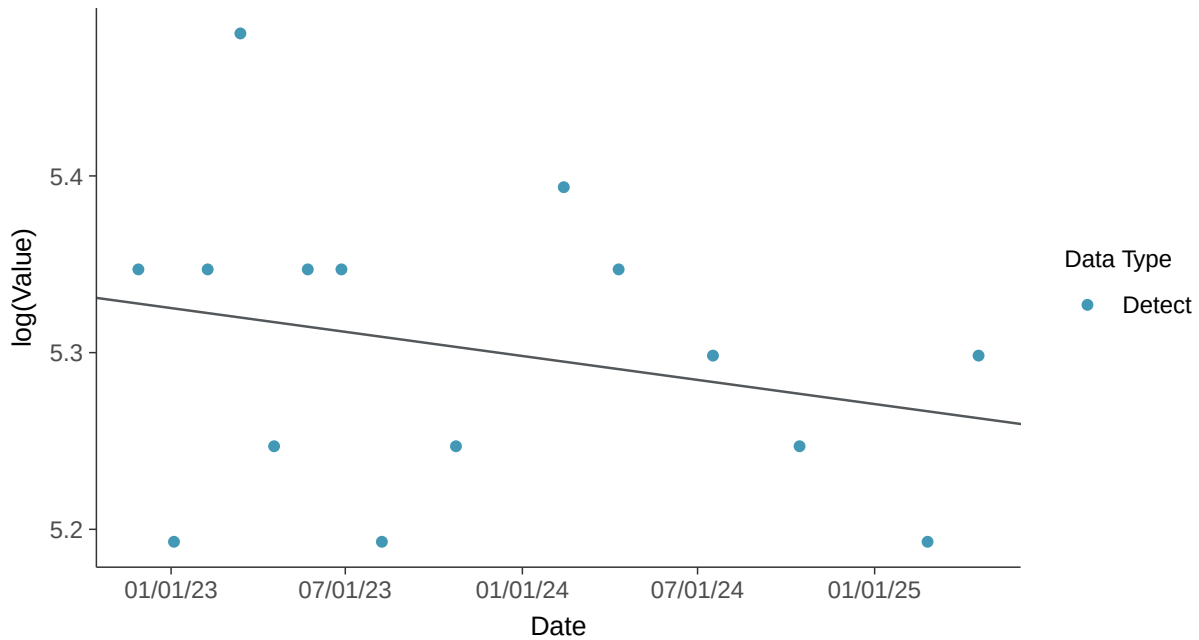
Gamma Q-Q plot

Calcium, MW-02 (mg/L)



Trend Regression: Lognormal MLE

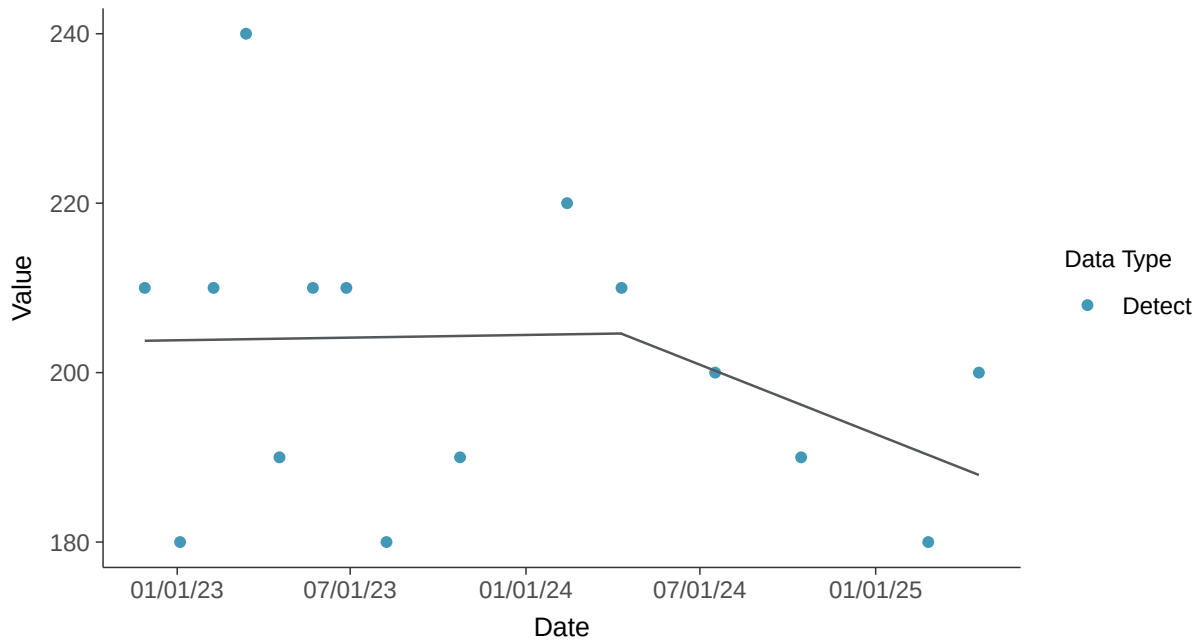
Calcium, MW-02 (mg/L)





Trend Regression: Piecewise Linear-Linear

Calcium, MW-02 (mg/L)

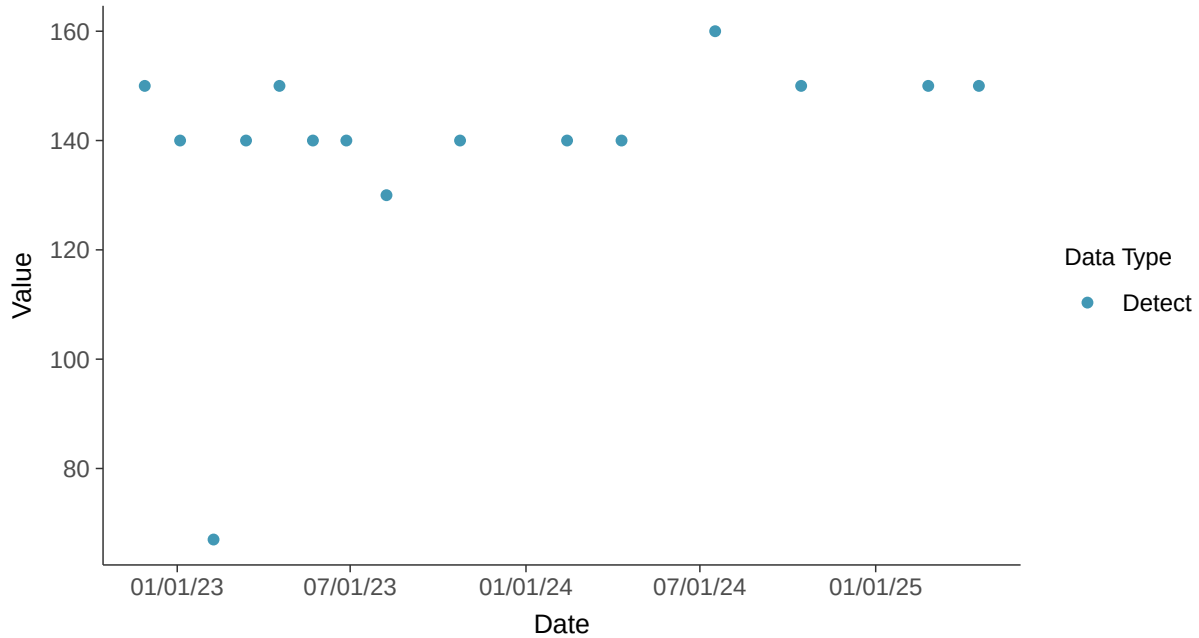


Appendix III: Chloride (as Cl), MW-02

ID: 12_2_3_108

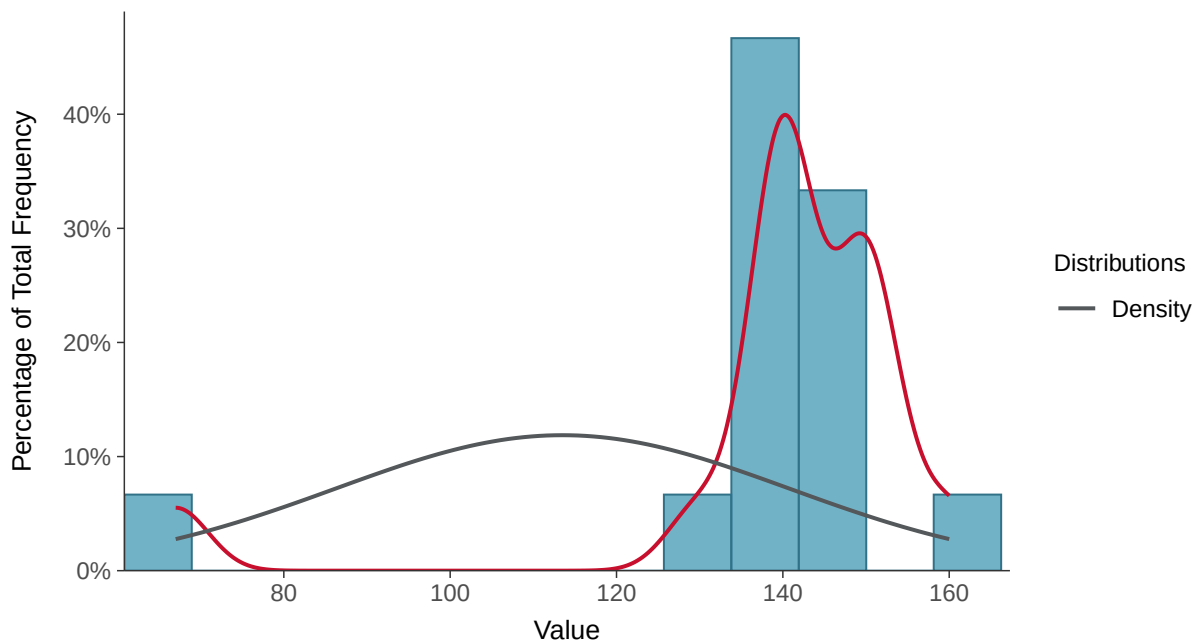
Scatter Plot

Chloride (as Cl), MW-02 (mg/L)



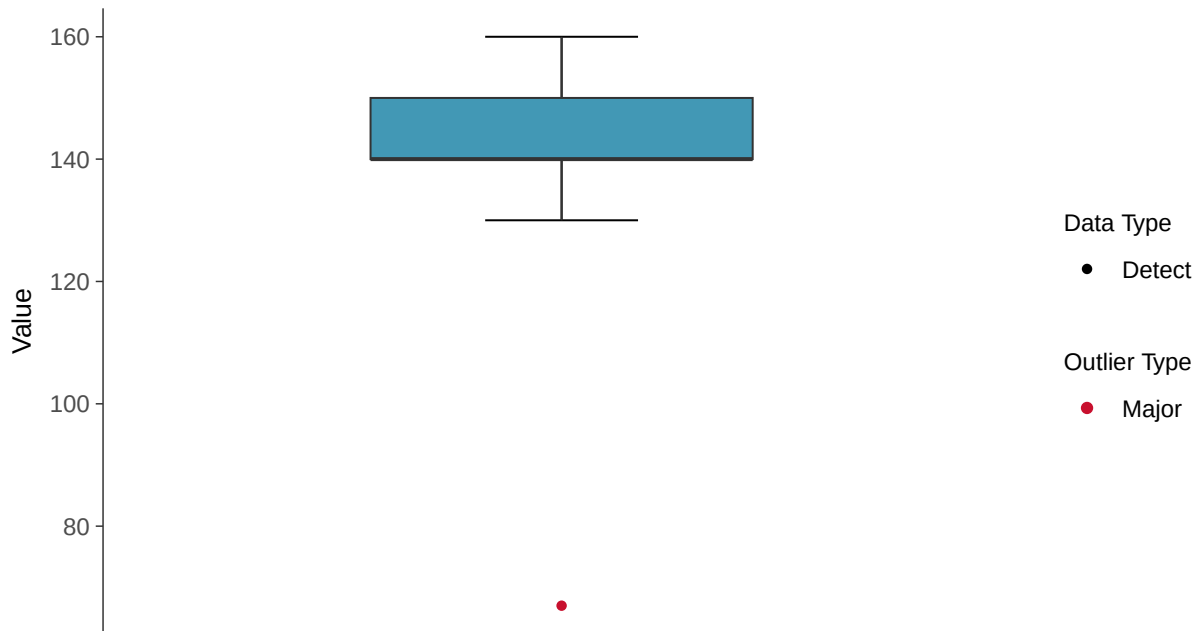
Histogram

Chloride (as Cl), MW-02 (mg/L)



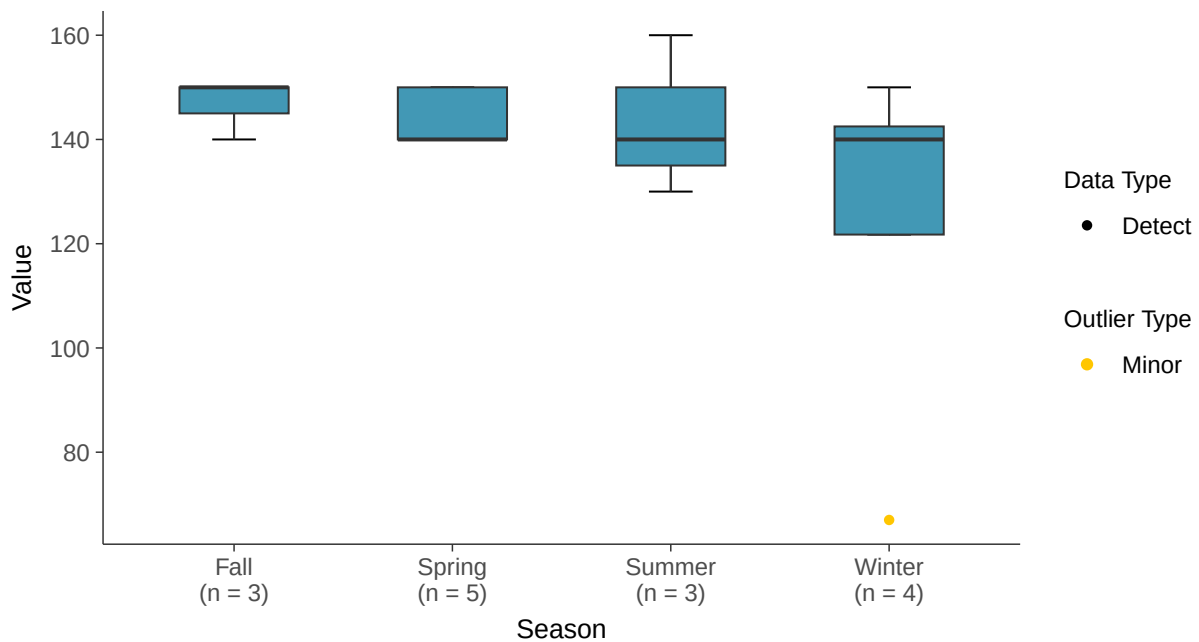
Boxplot

Chloride (as Cl), MW-02 (mg/L)



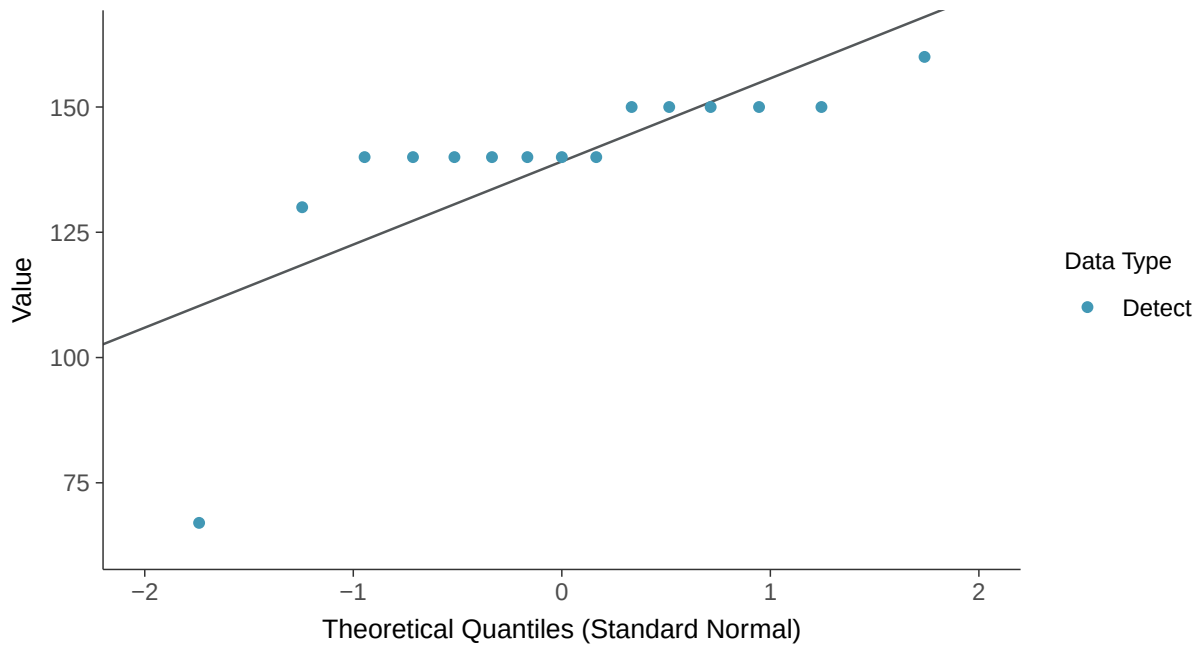
Boxplot by Season

Chloride (as Cl), MW-02 (mg/L)



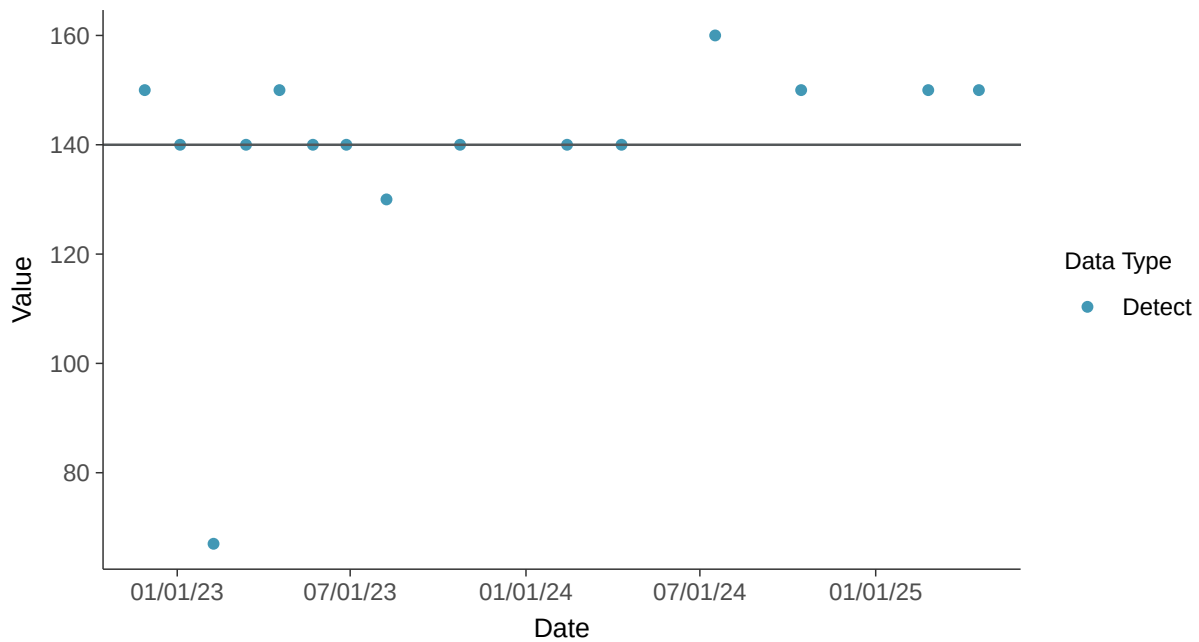
Normal Q-Q plot

Chloride (as Cl), MW-02 (mg/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

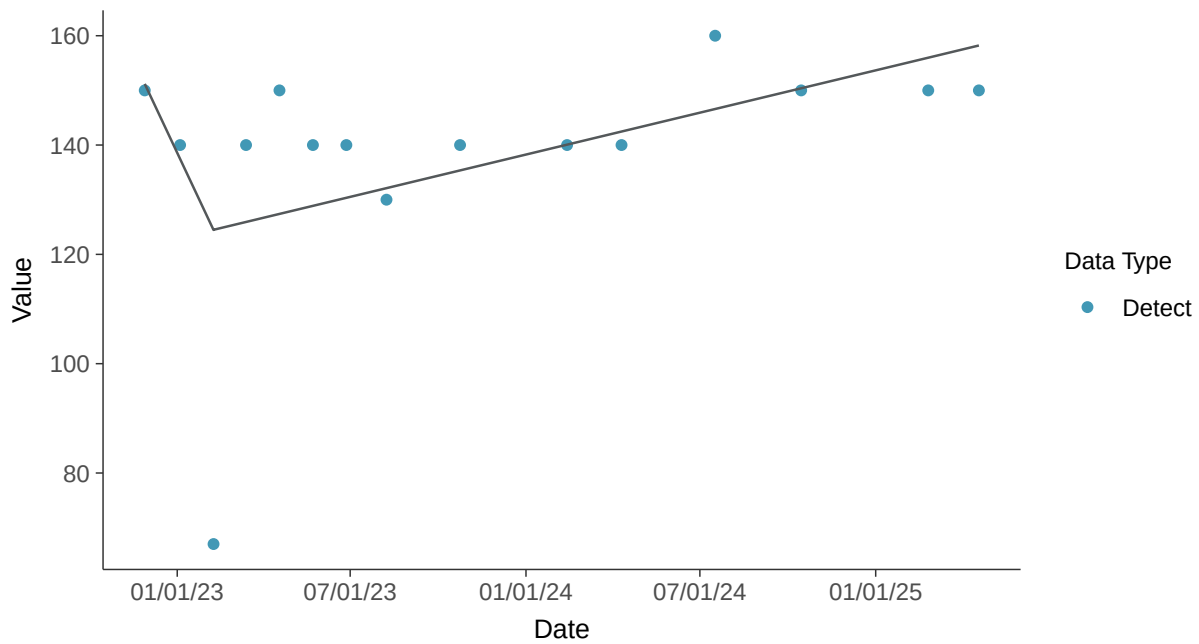
Chloride (as Cl), MW-02 (mg/L)





Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-02 (mg/L)

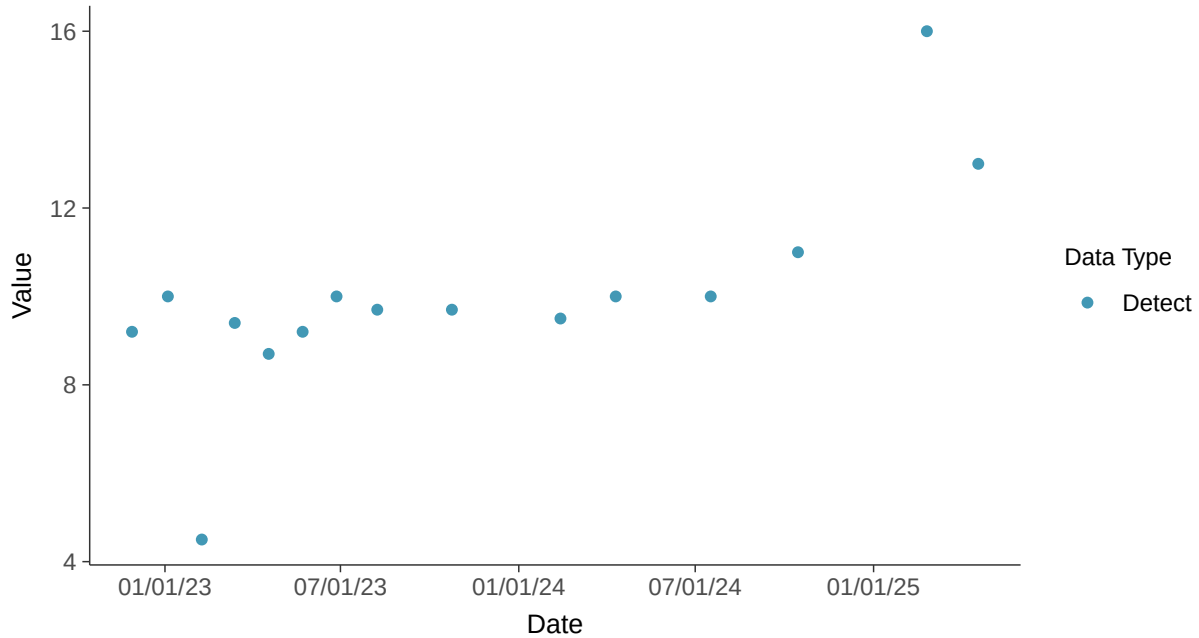


Appendix III: Fluoride, MW-02

ID: 12_2_3_112

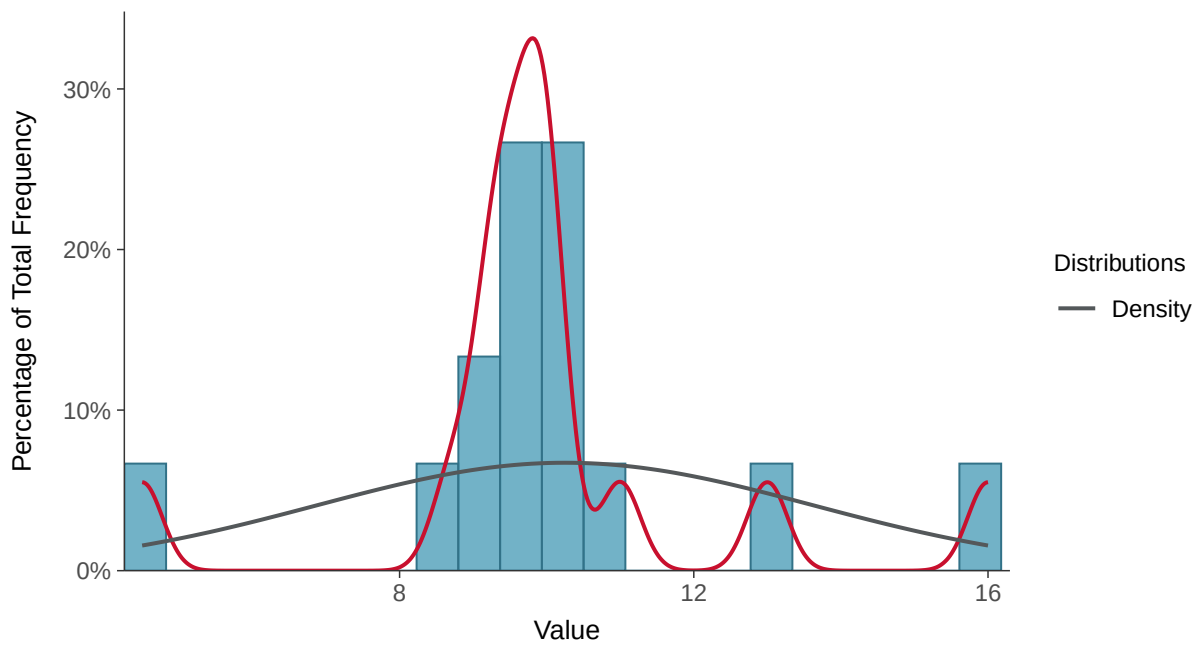
Scatter Plot

Fluoride, MW-02 (mg/L)



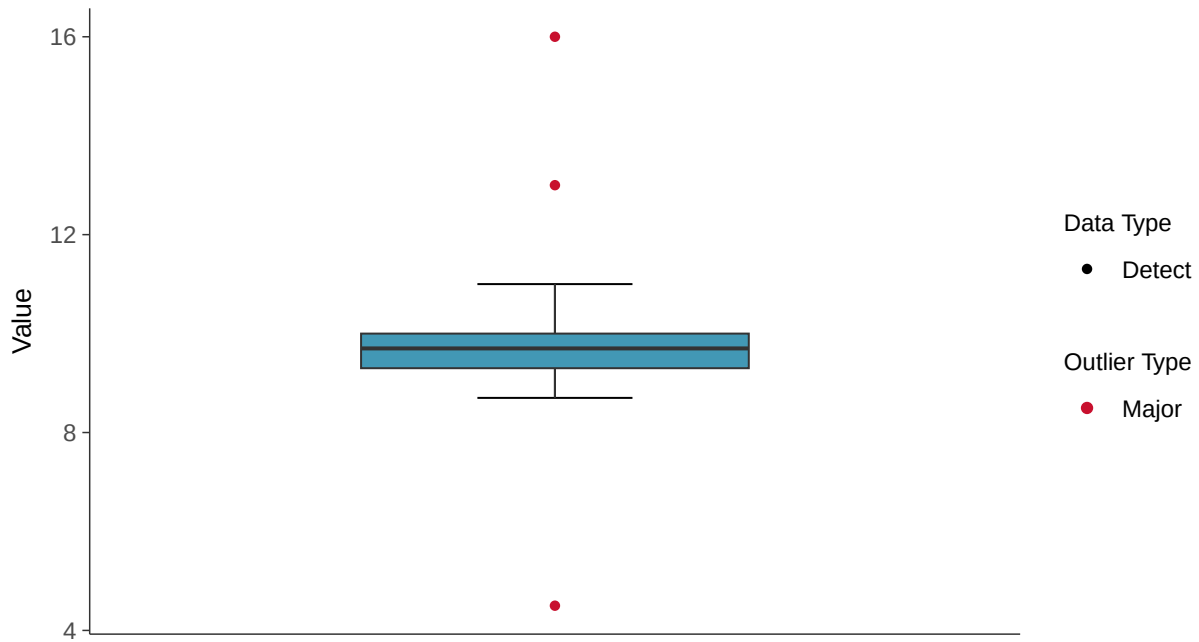
Histogram

Fluoride, MW-02 (mg/L)



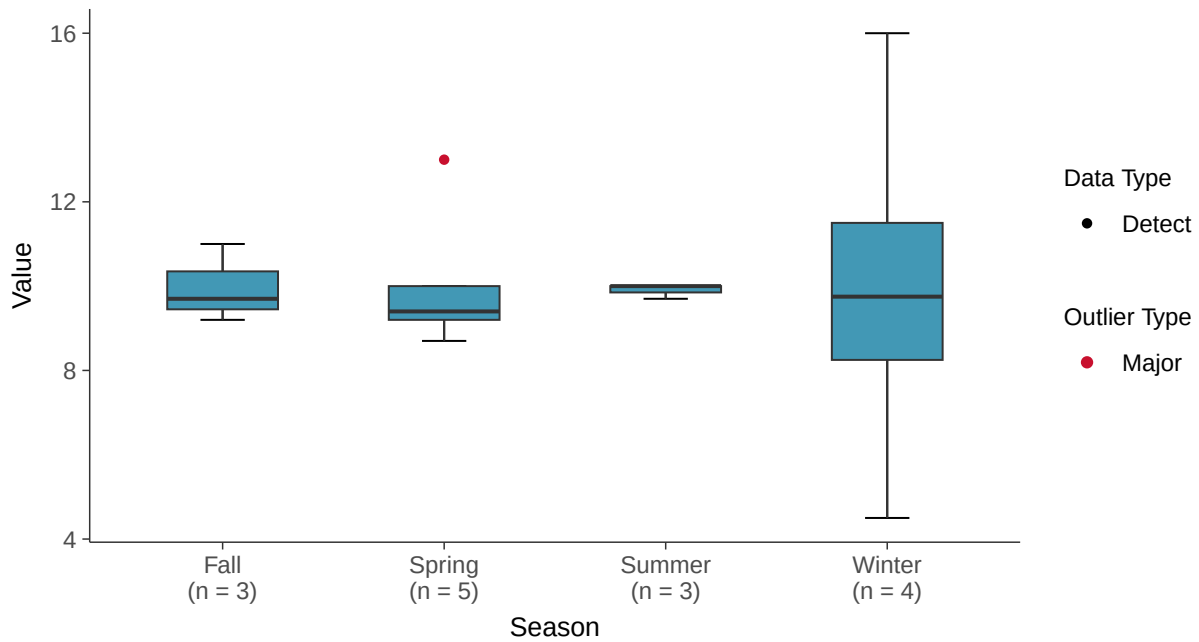
Boxplot

Fluoride, MW-02 (mg/L)



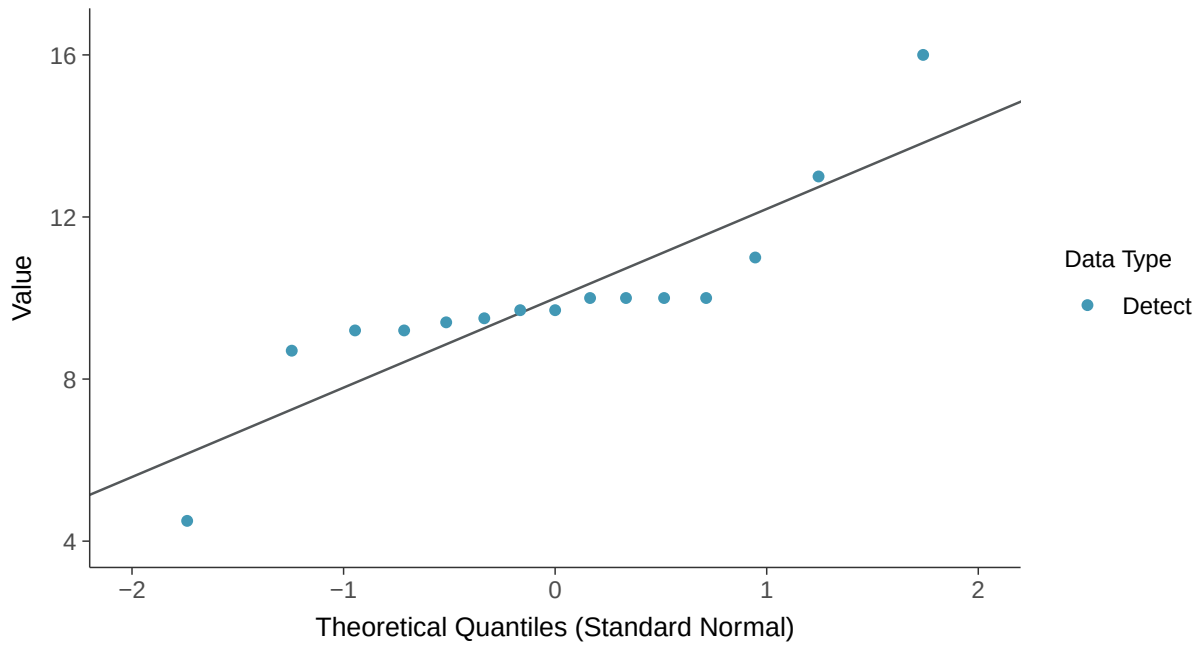
Boxplot by Season

Fluoride, MW-02 (mg/L)



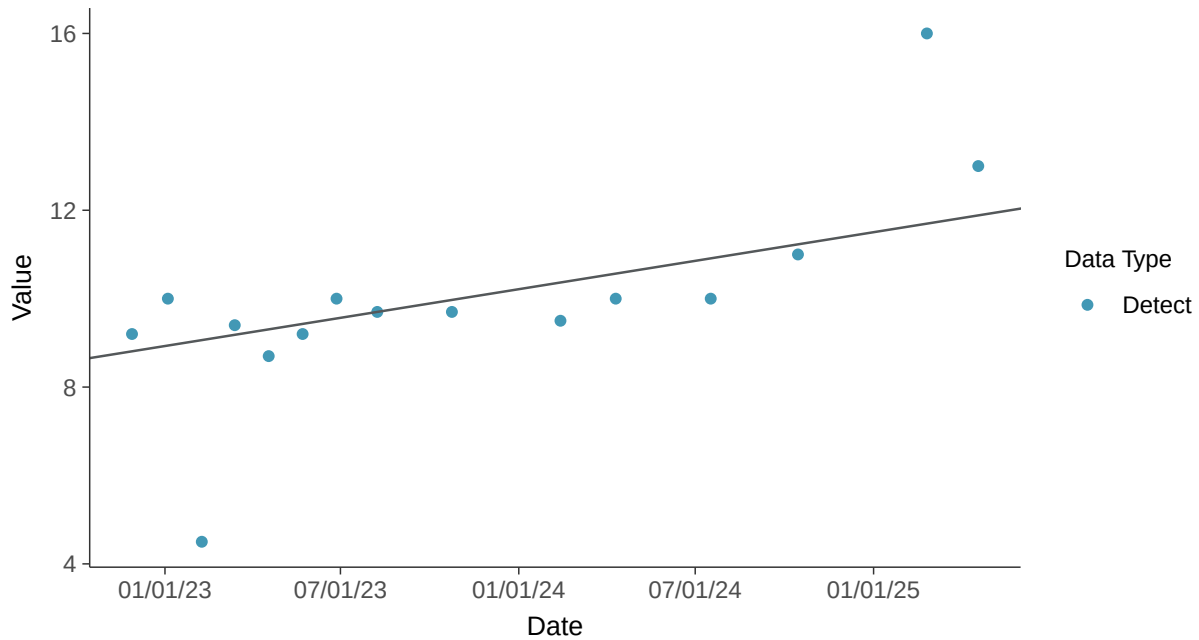
Normal Q-Q plot

Fluoride, MW-02 (mg/L)



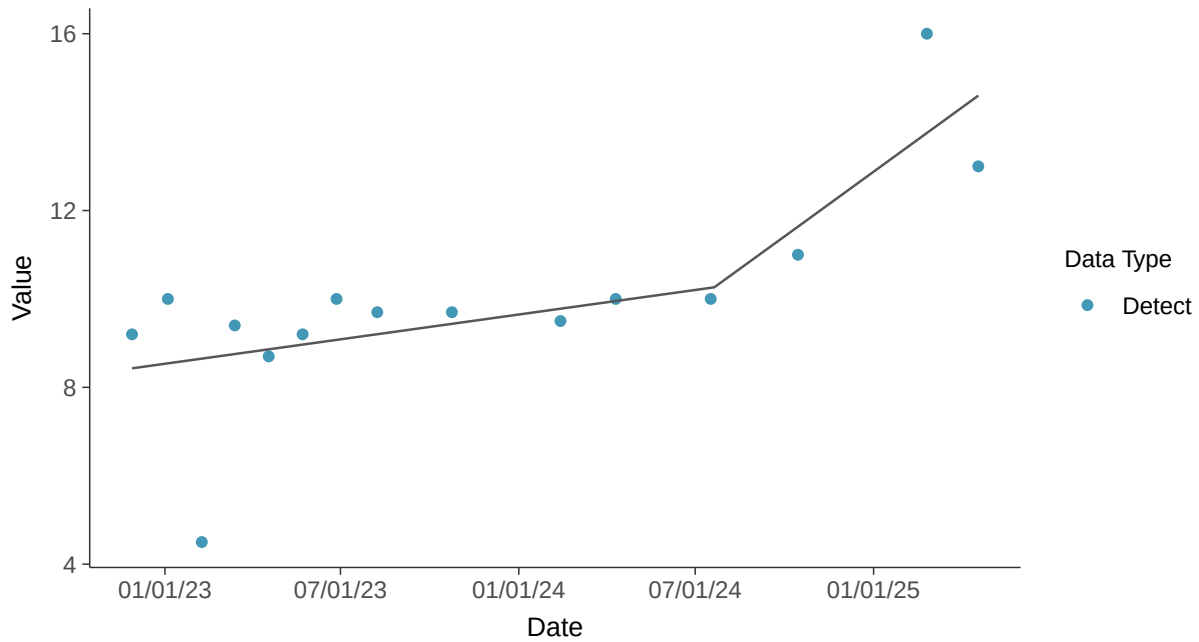
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Fluoride, MW-02 (mg/L)



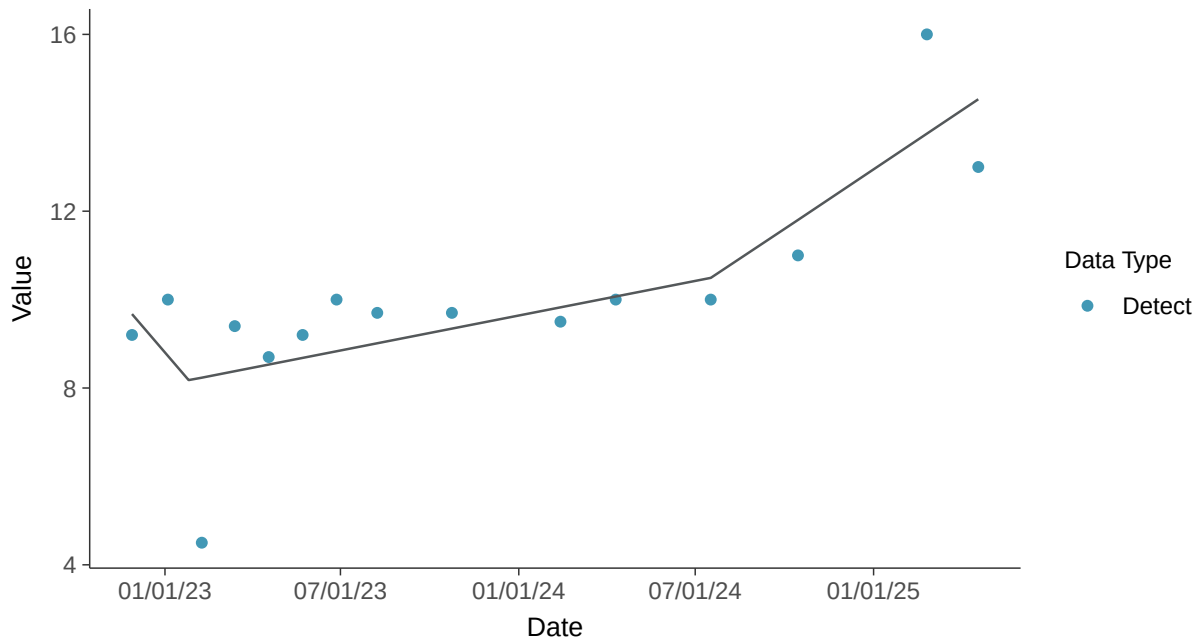
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-02 (mg/L)



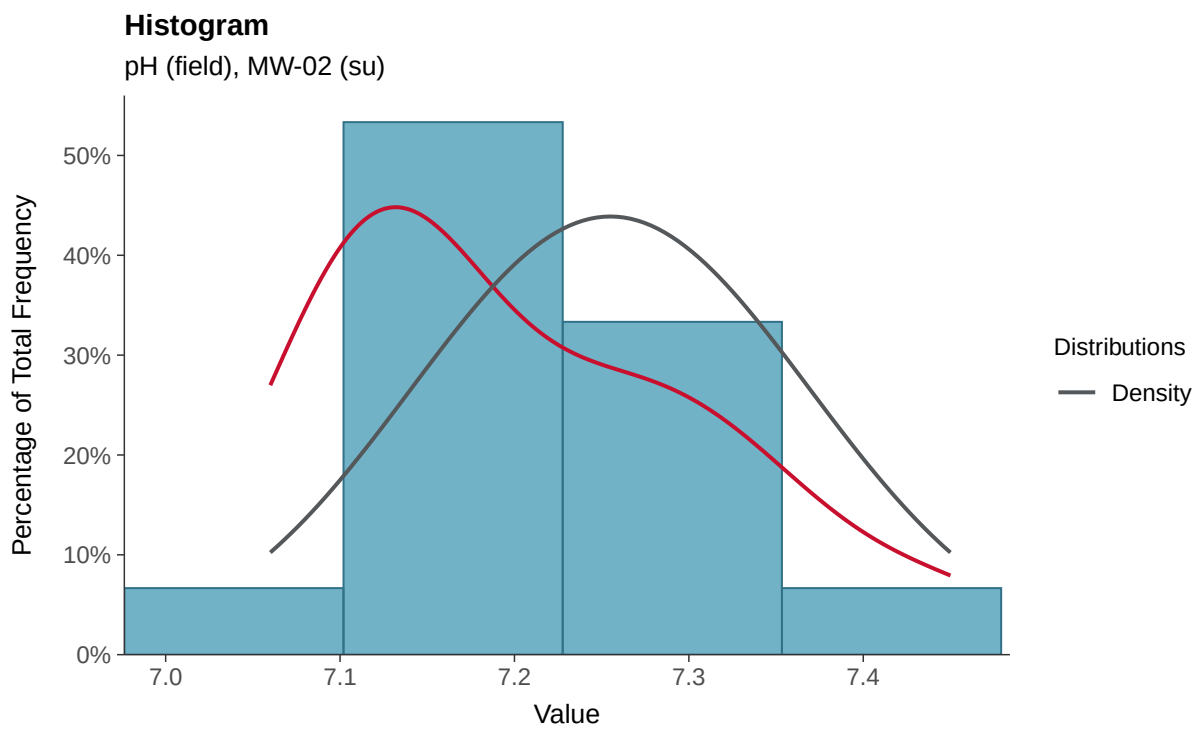
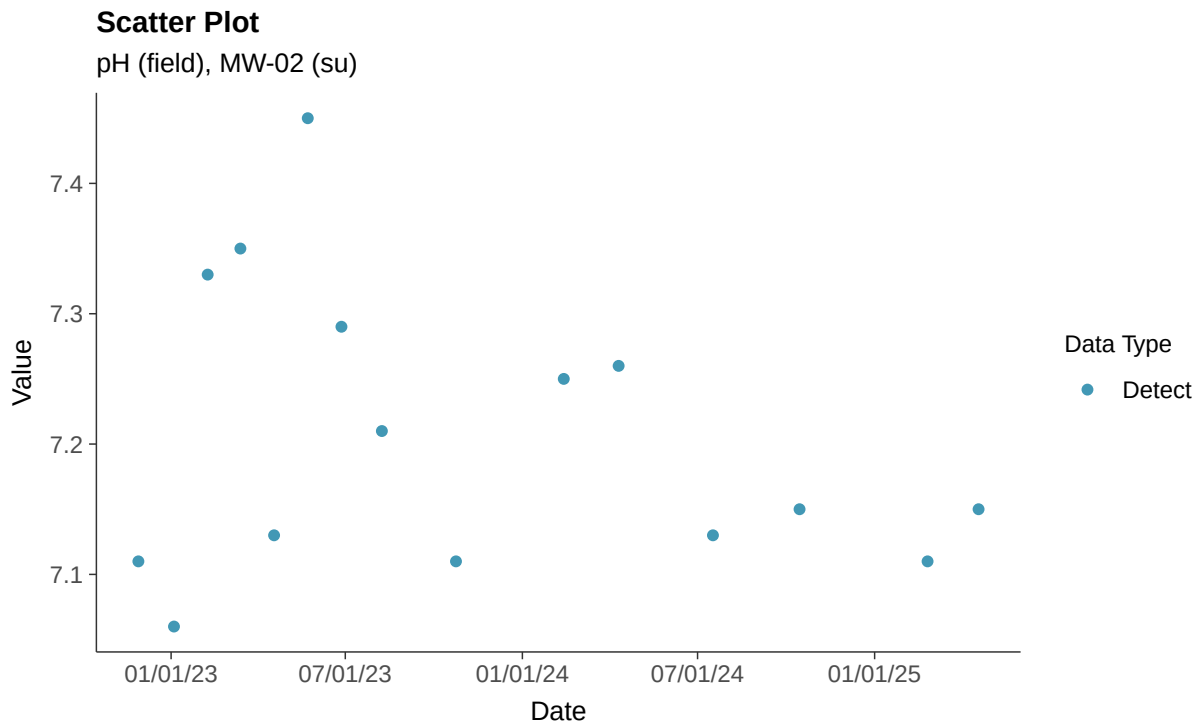
Trend Regression: Piecewise Linear-Linear-Linear

Fluoride, MW-02 (mg/L)



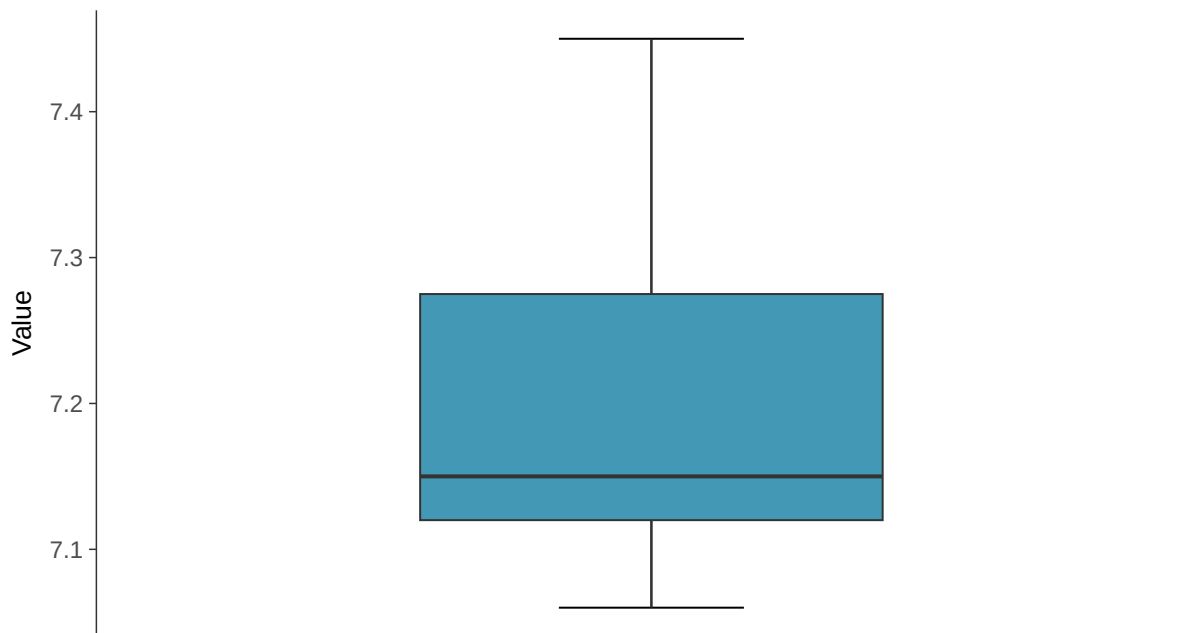
Appendix III: pH (field), MW-02

ID: 12_2_3_120



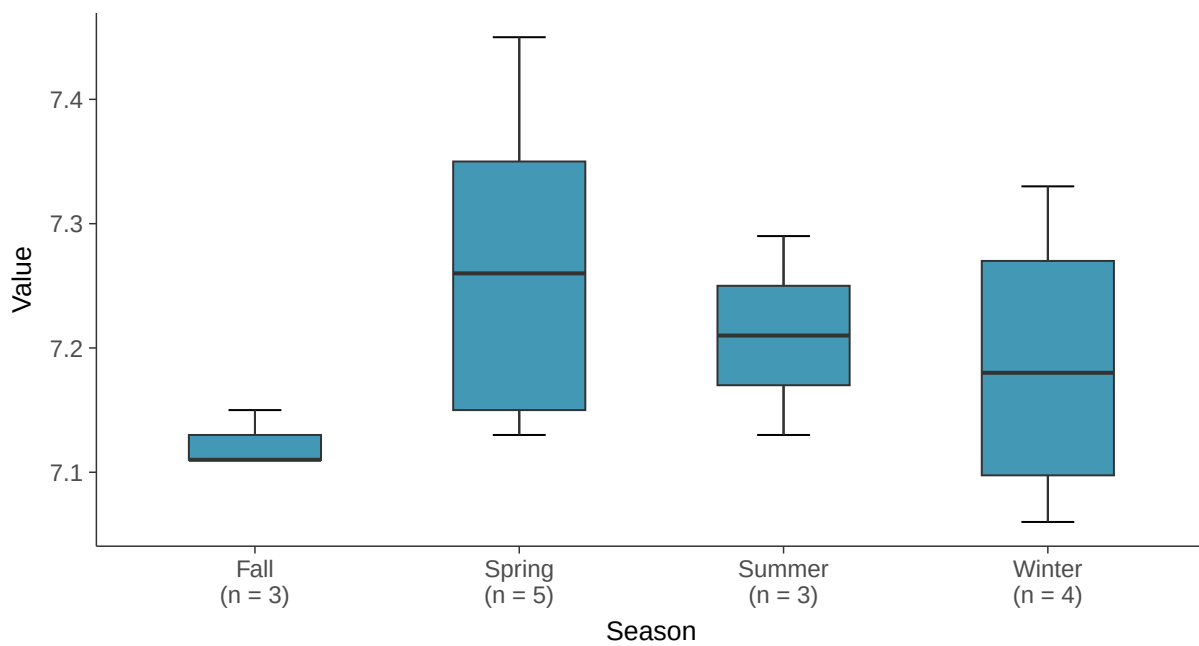
Boxplot

pH (field), MW-02 (su)

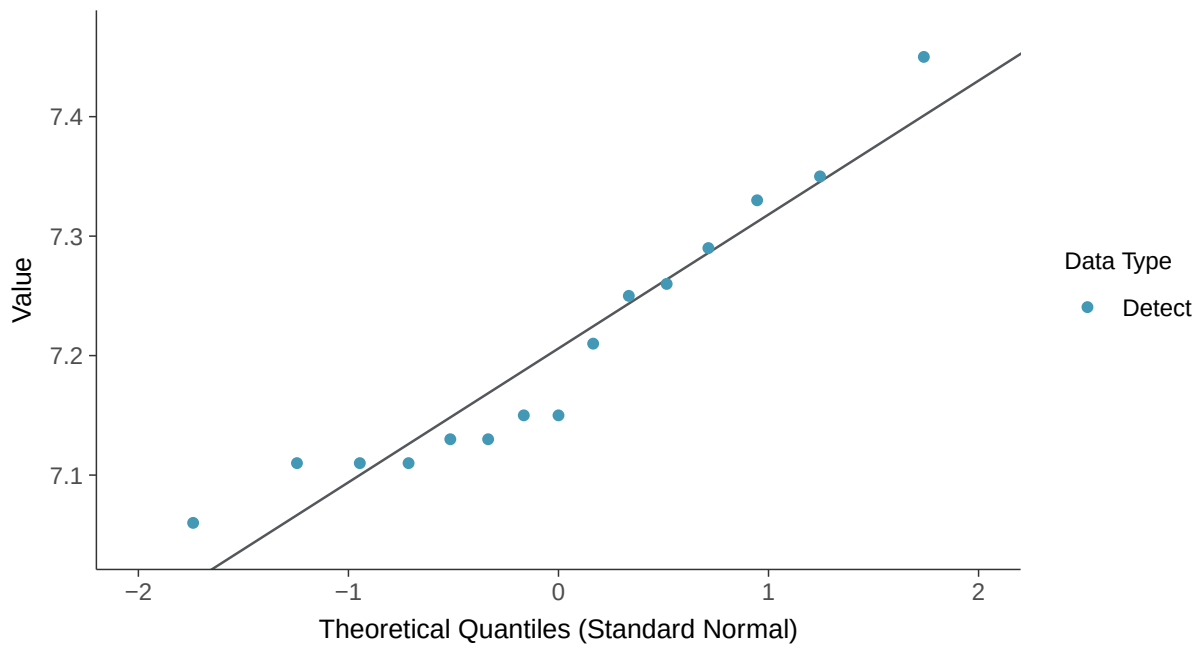


Boxplot by Season

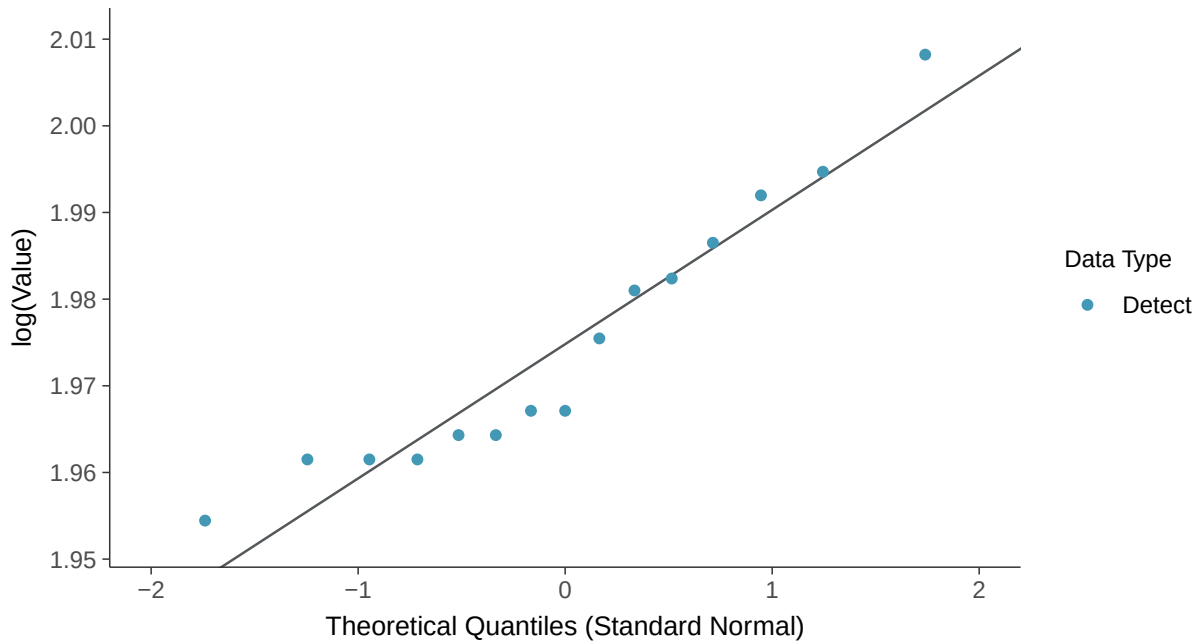
pH (field), MW-02 (su)



Normal Q-Q plot
pH (field), MW-02 (su)

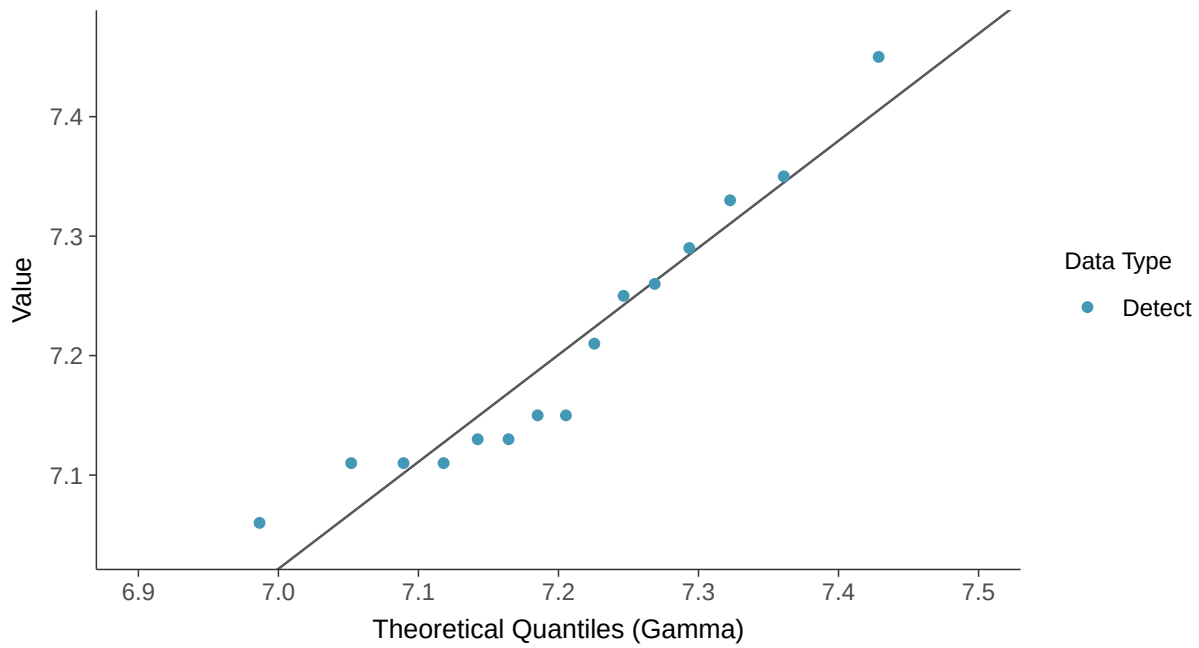


Lognormal Q-Q plot
pH (field), MW-02 (su)



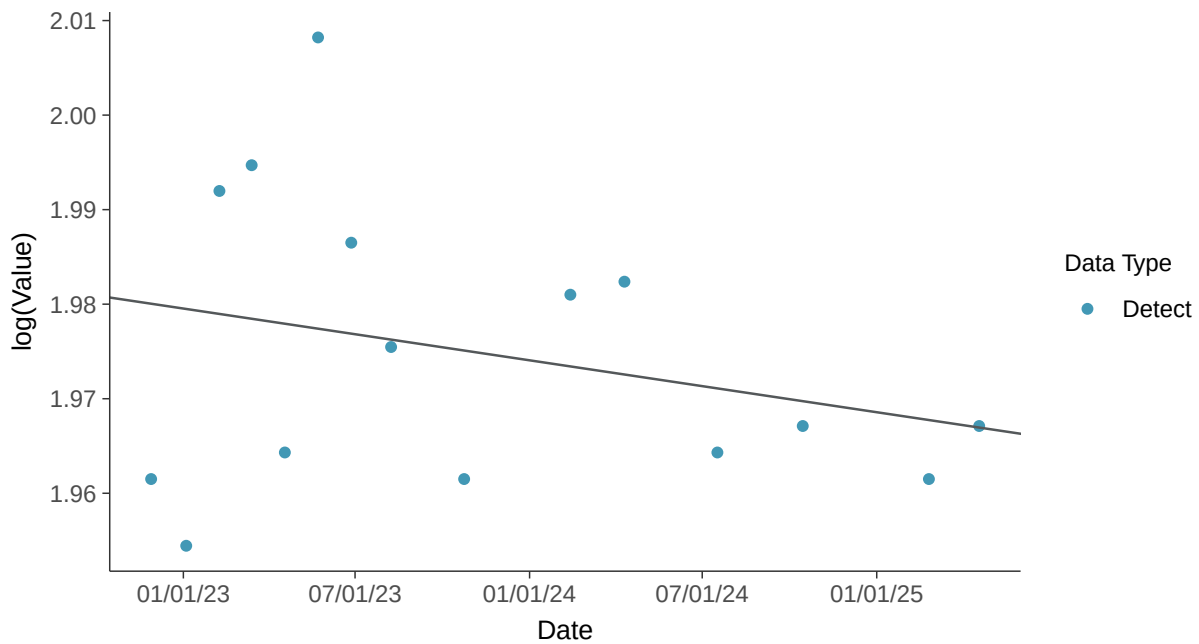
Gamma Q-Q plot

pH (field), MW-02 (su)



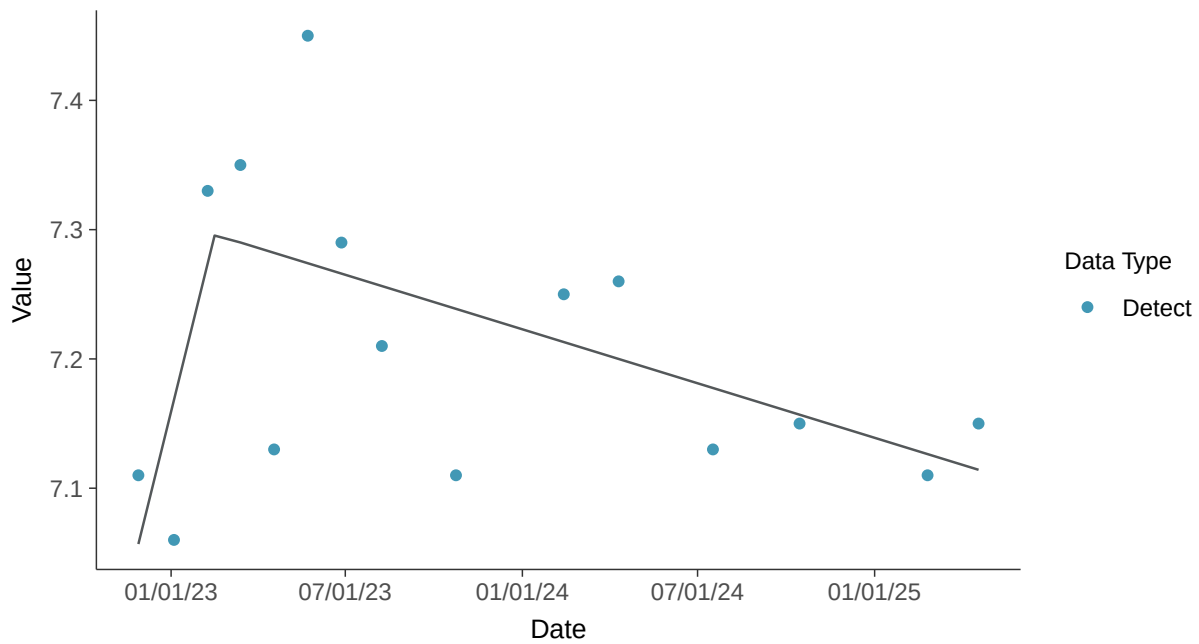
Trend Regression: Lognormal MLE

pH (field), MW-02 (su)



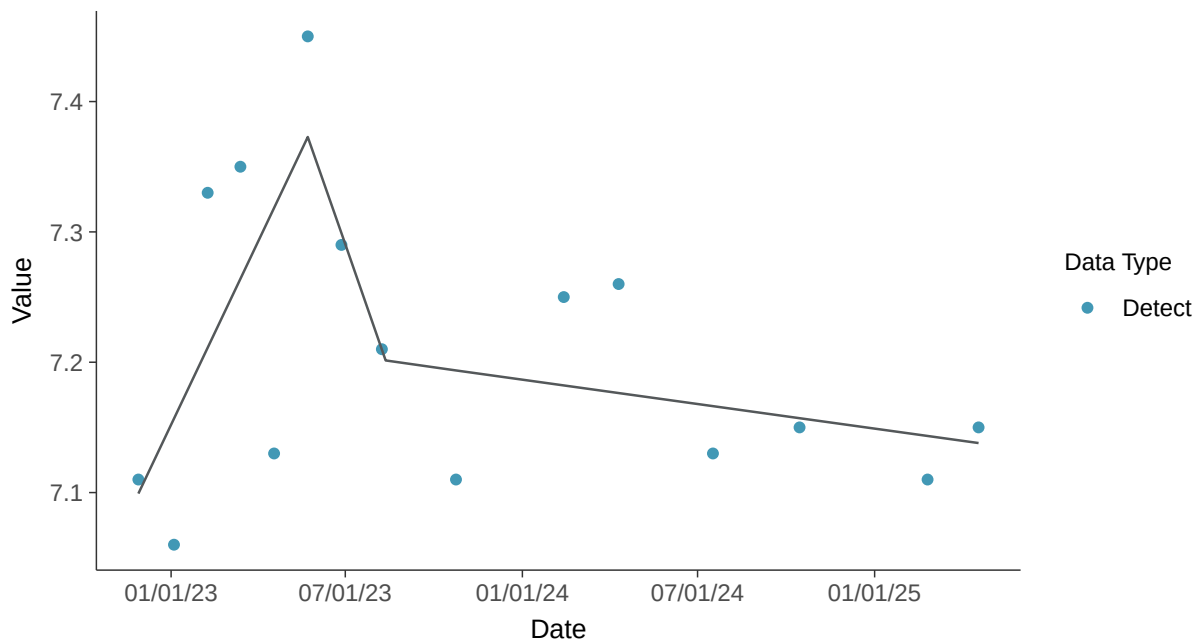
Trend Regression: Piecewise Linear-Linear

pH (field), MW-02 (su)



Trend Regression: Piecewise Linear-Linear-Linear

pH (field), MW-02 (su)

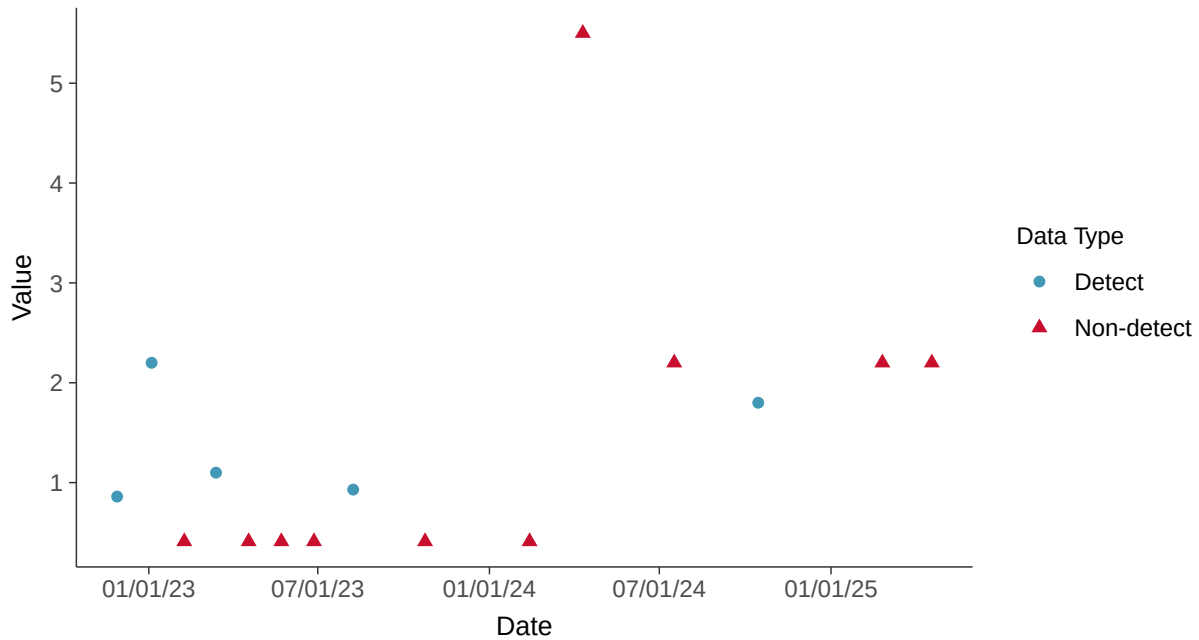


Appendix III: Sulfate (as SO₄), MW-02

ID: 12_2_3_124

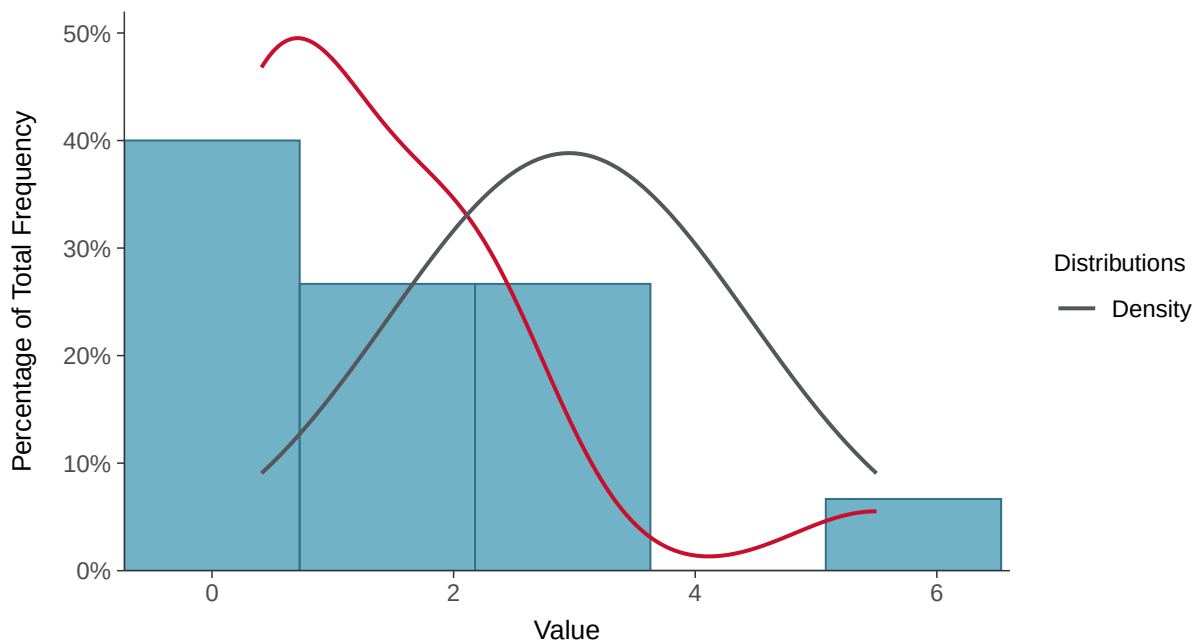
Scatter Plot

Sulfate (as SO₄), MW-02 (mg/L)



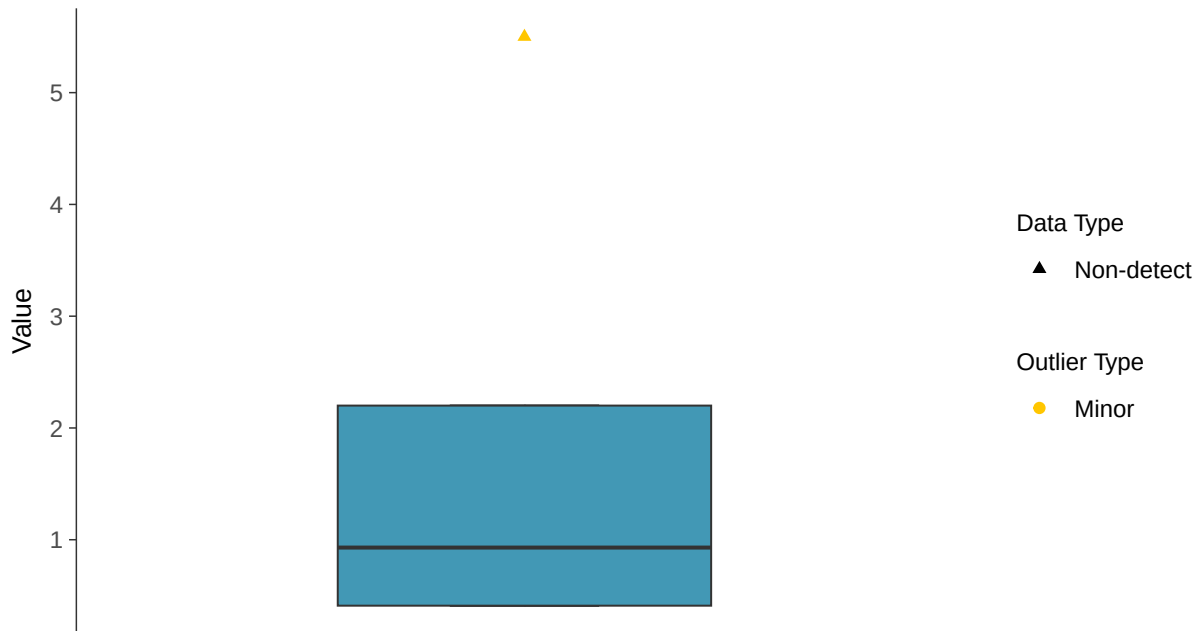
Histogram

Sulfate (as SO₄), MW-02 (mg/L)



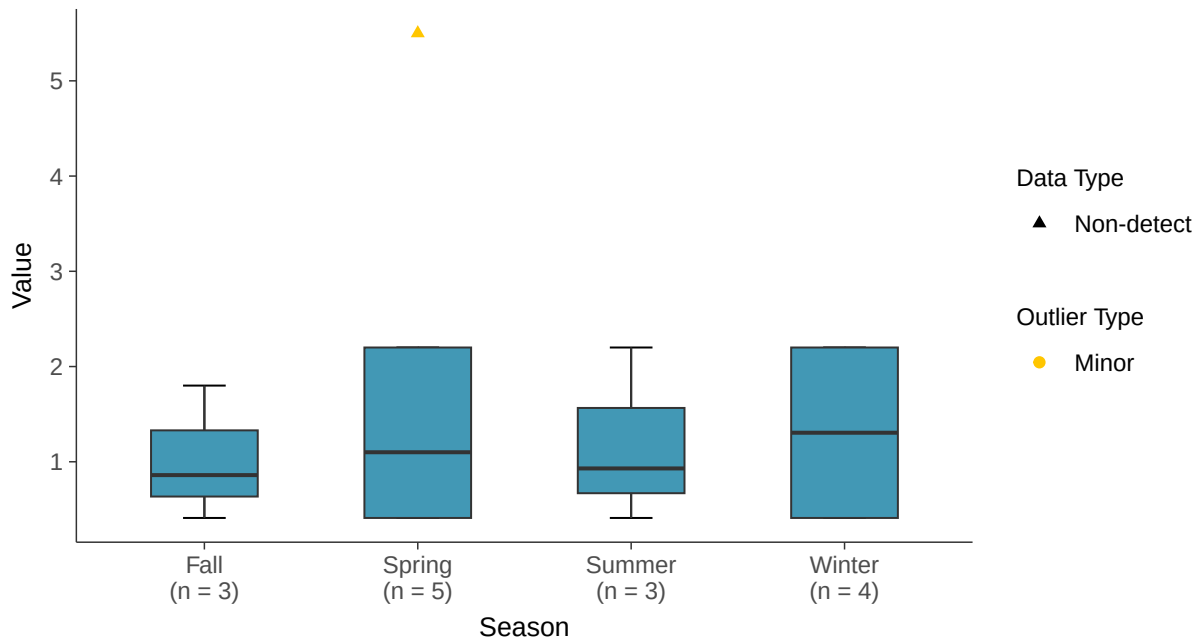
Boxplot

Sulfate (as SO₄), MW-02 (mg/L)



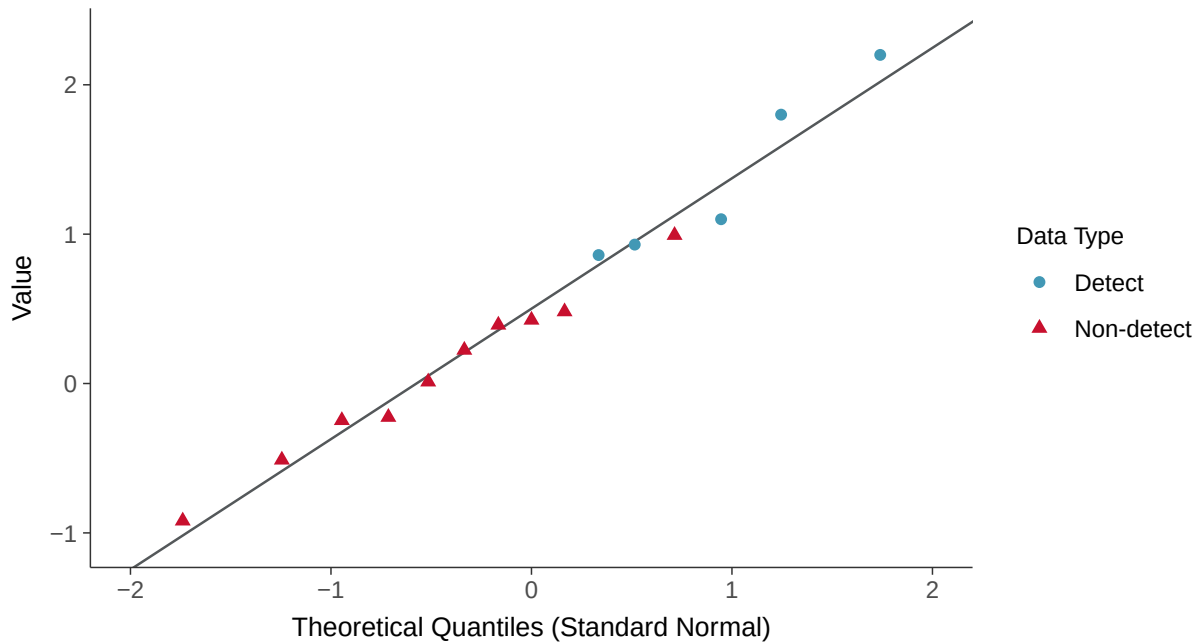
Boxplot by Season

Sulfate (as SO₄), MW-02 (mg/L)



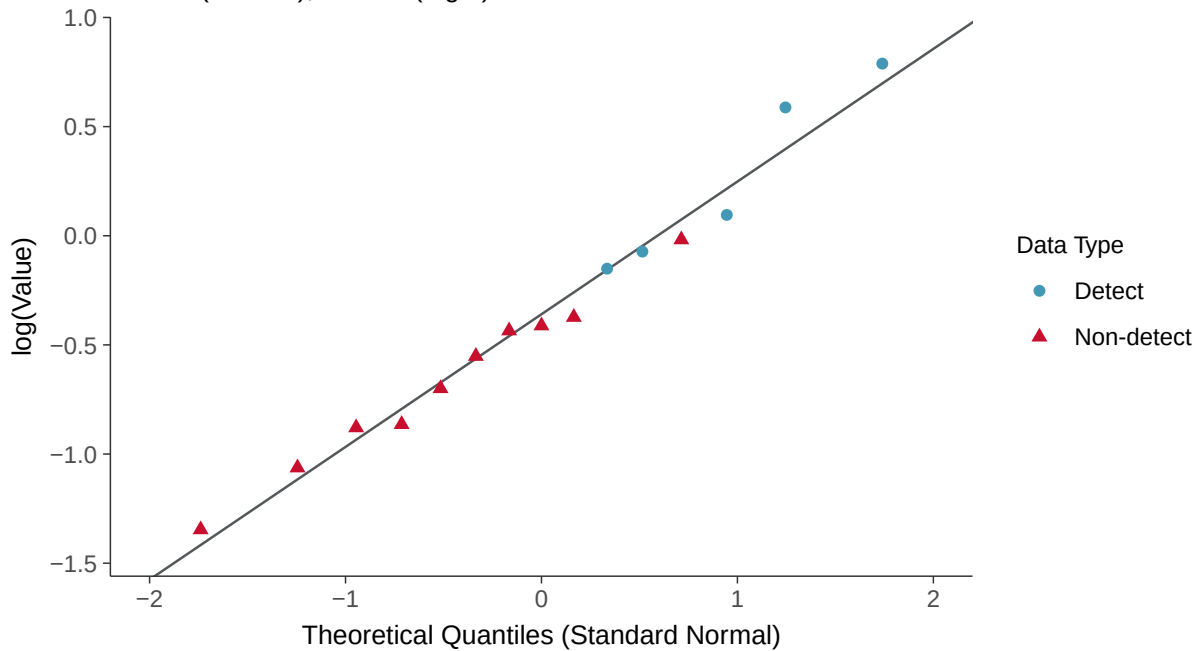
Normal Q-Q plot using ROS Imputed Estimates

Sulfate (as SO₄), MW-02 (mg/L)



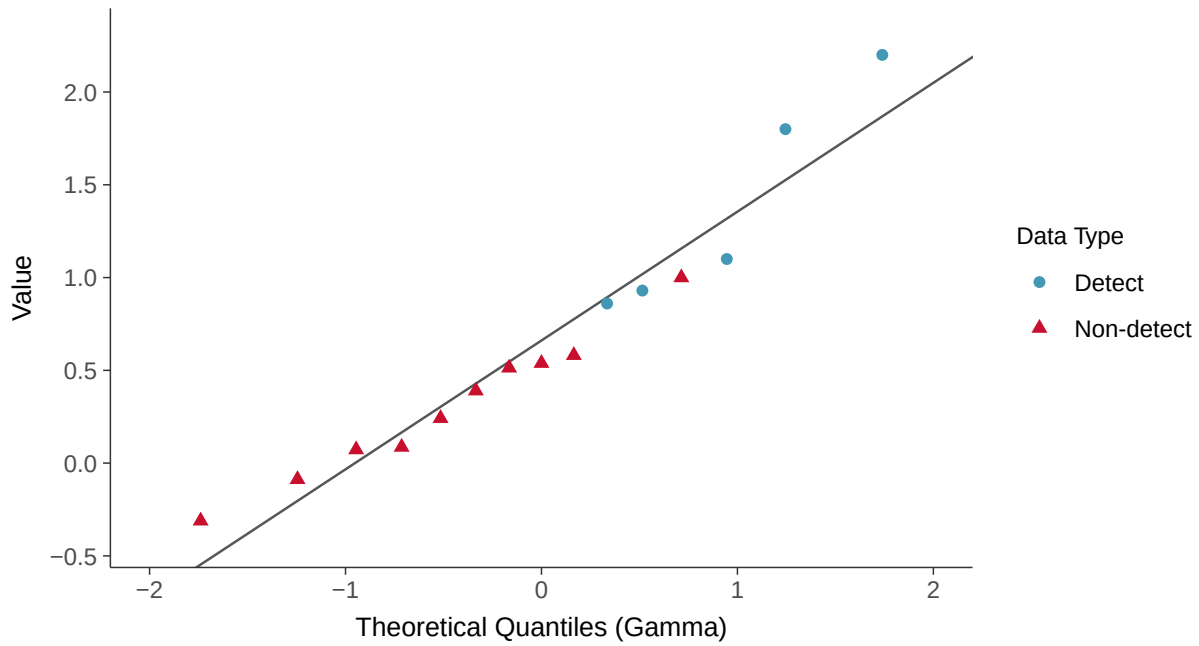
Lognormal Q-Q plot using ROS Imputed Estimates

Sulfate (as SO₄), MW-02 (mg/L)



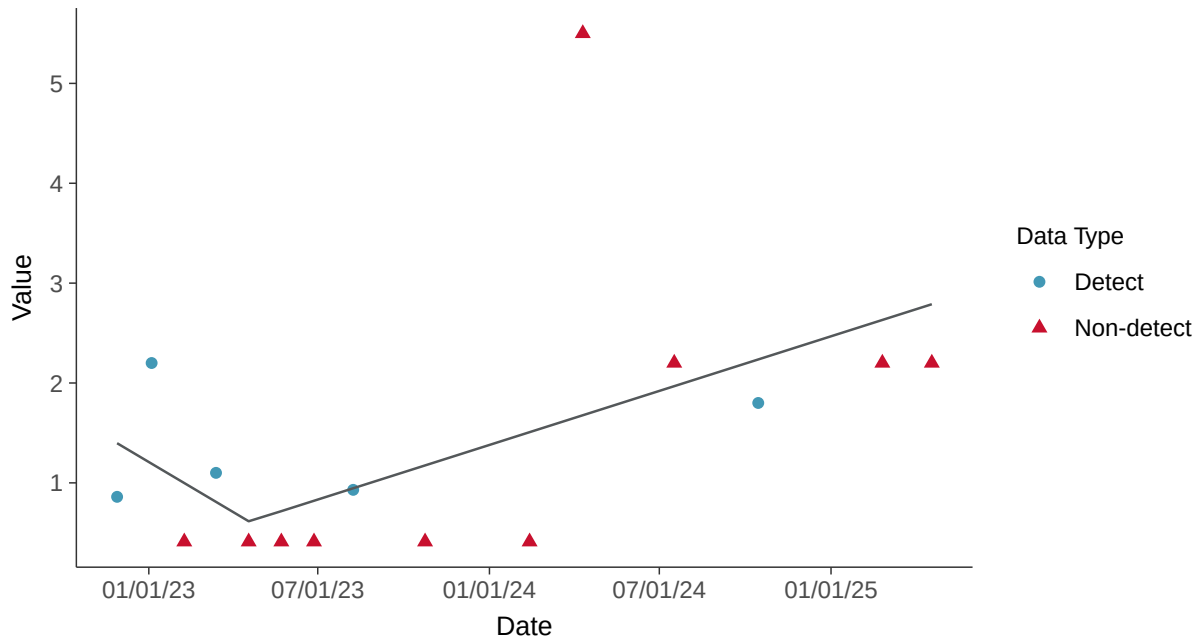
Gamma Q-Q plot using ROS Imputed Estimates

Sulfate (as SO₄), MW-02 (mg/L)



Trend Regression: Piecewise Linear-Linear

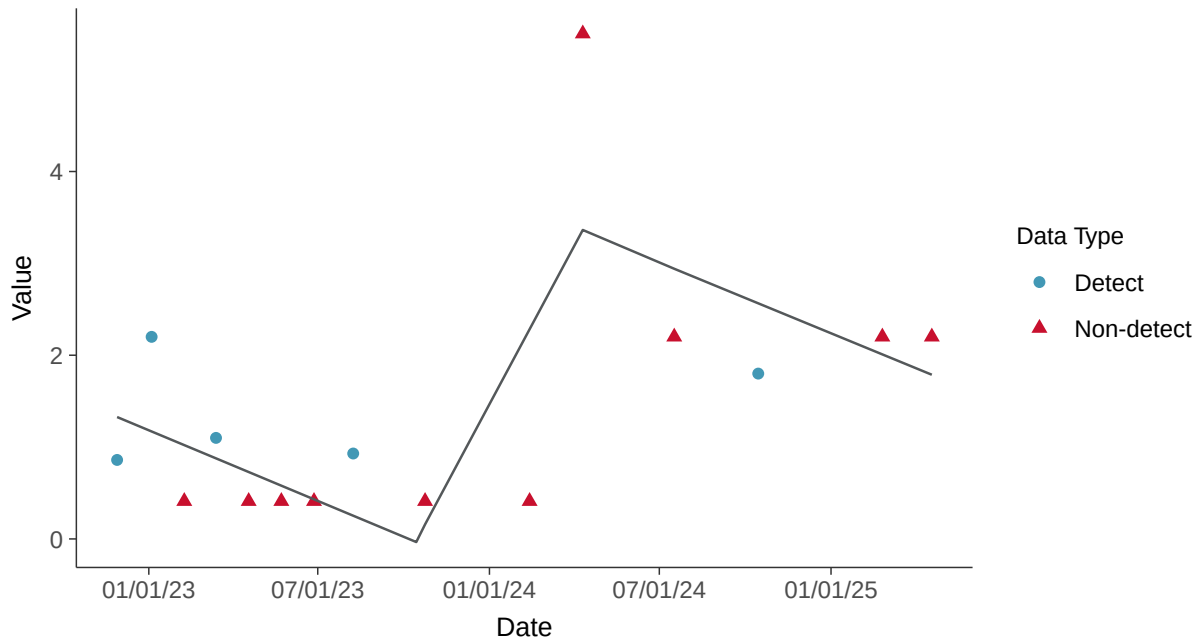
Sulfate (as SO₄), MW-02 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

Sulfate (as SO₄), MW-02 (mg/L)

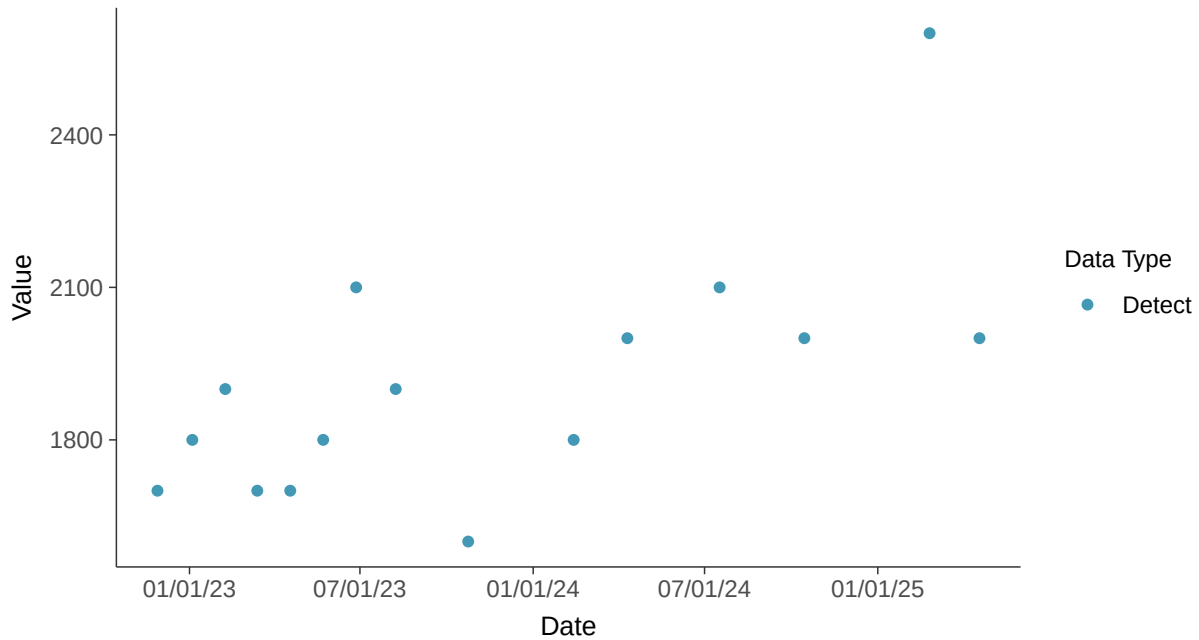


Appendix III: Total Dissolved Solids, MW-02

ID: 12_2_3_126

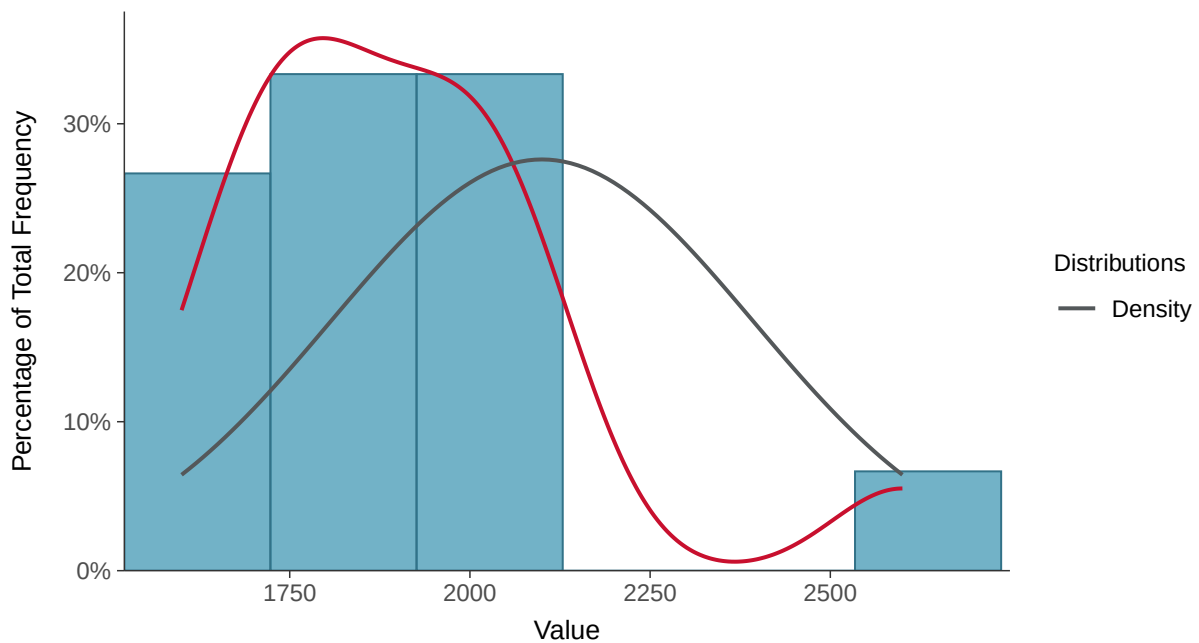
Scatter Plot

Total Dissolved Solids, MW-02 (mg/L)



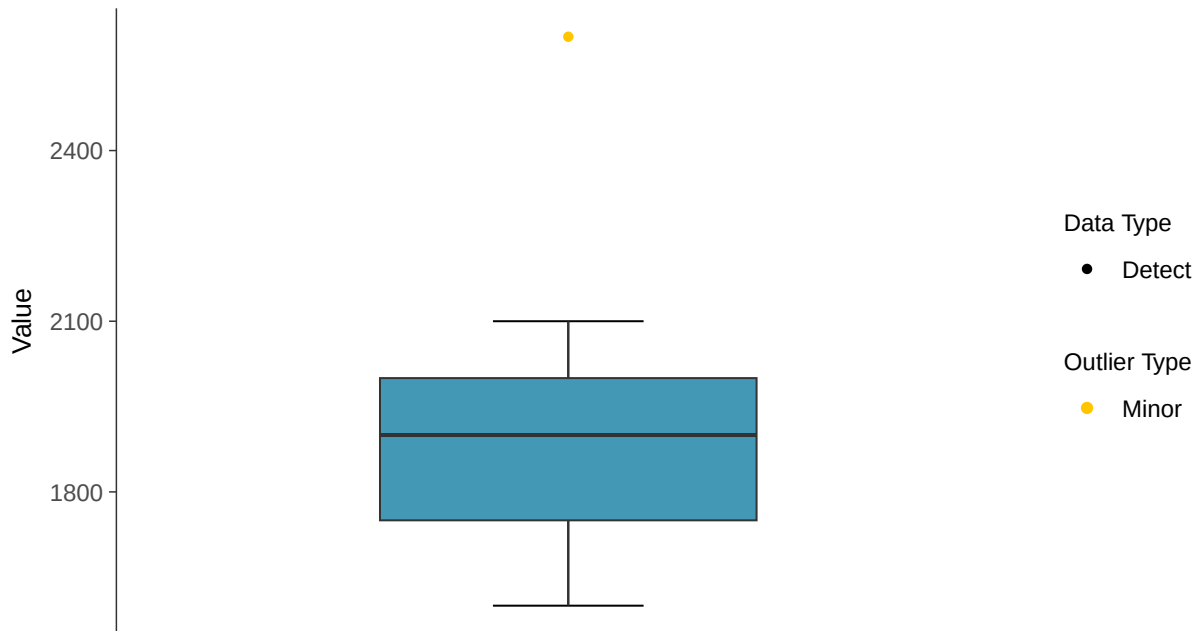
Histogram

Total Dissolved Solids, MW-02 (mg/L)



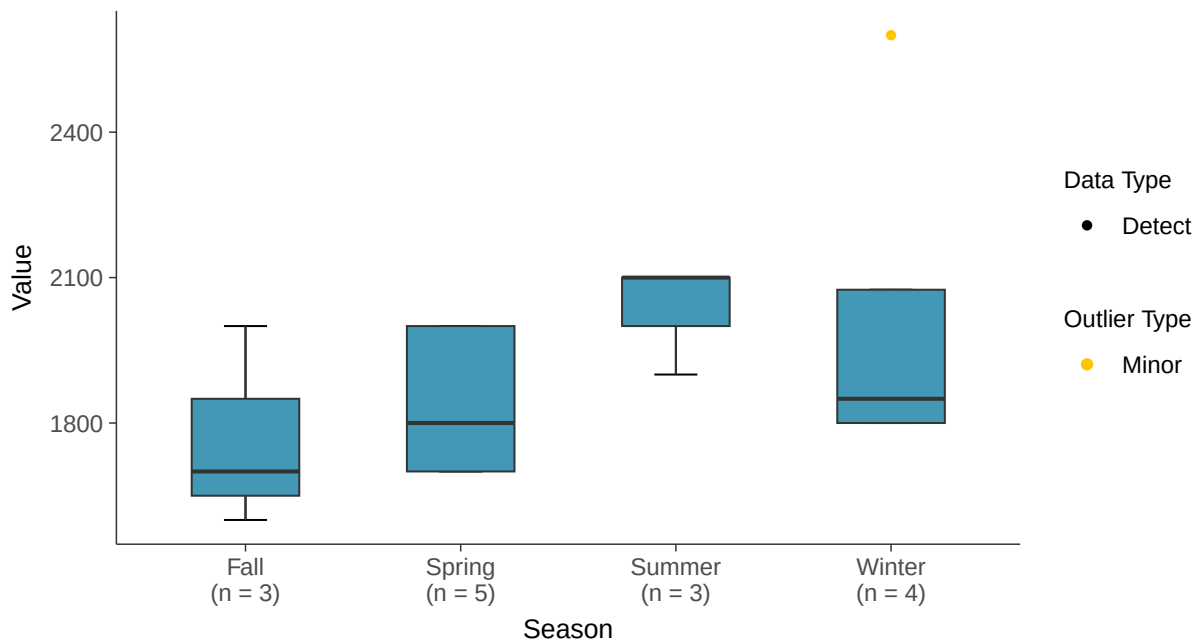
Boxplot

Total Dissolved Solids, MW-02 (mg/L)



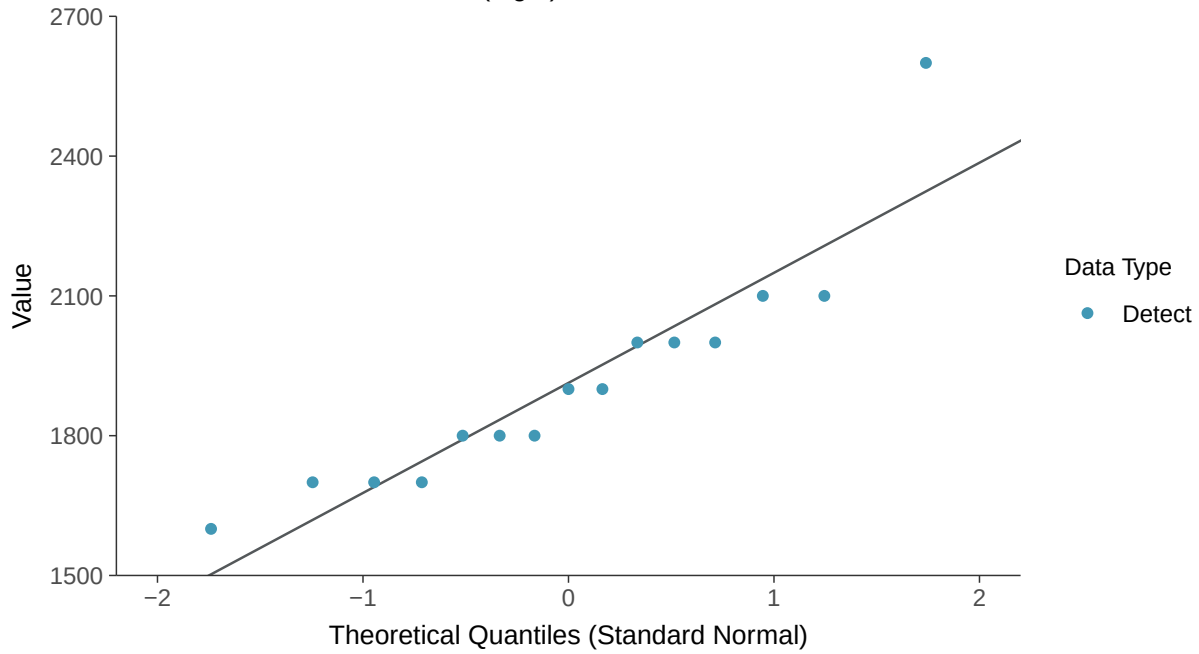
Boxplot by Season

Total Dissolved Solids, MW-02 (mg/L)



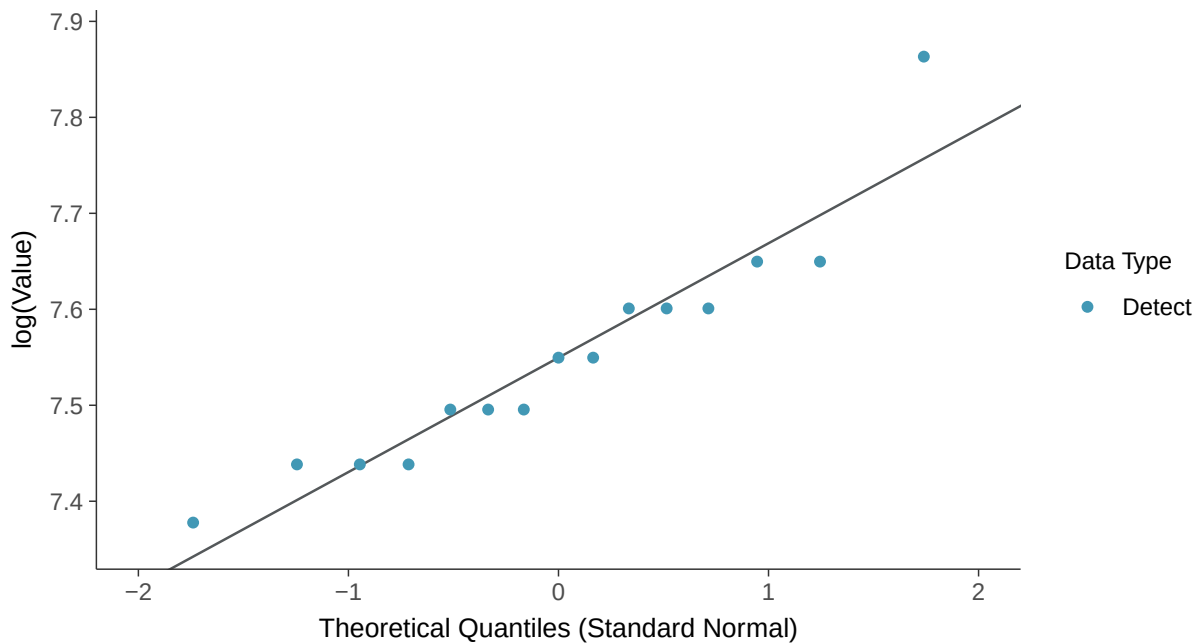
Normal Q-Q plot

Total Dissolved Solids, MW-02 (mg/L)



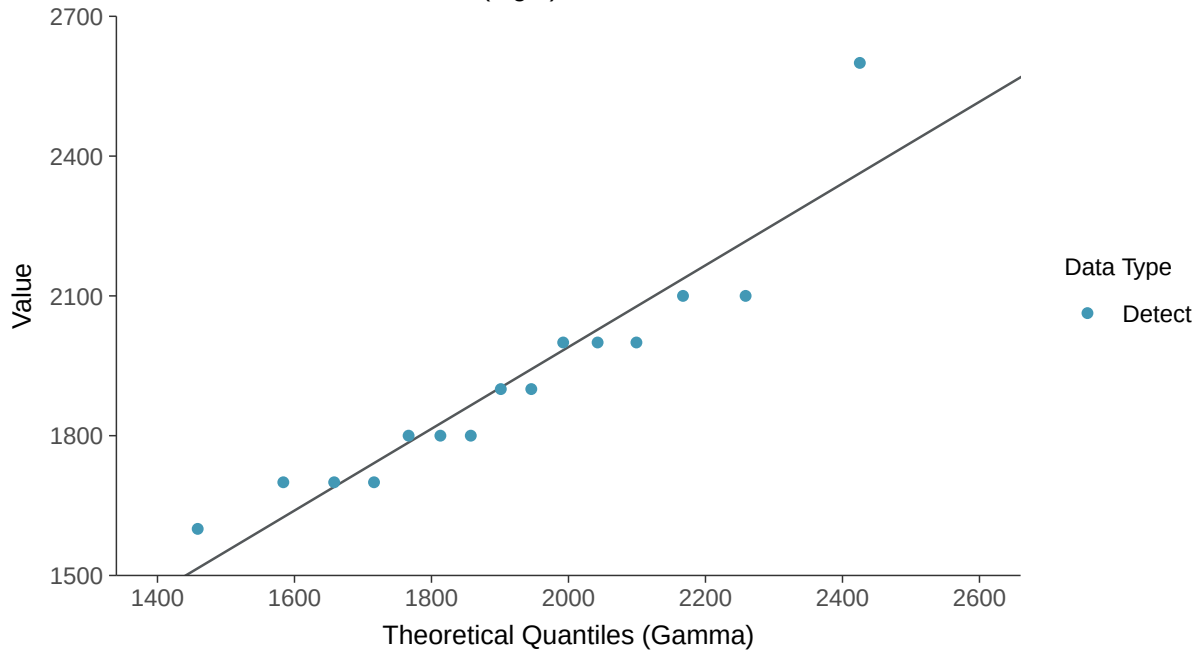
Lognormal Q-Q plot

Total Dissolved Solids, MW-02 (mg/L)



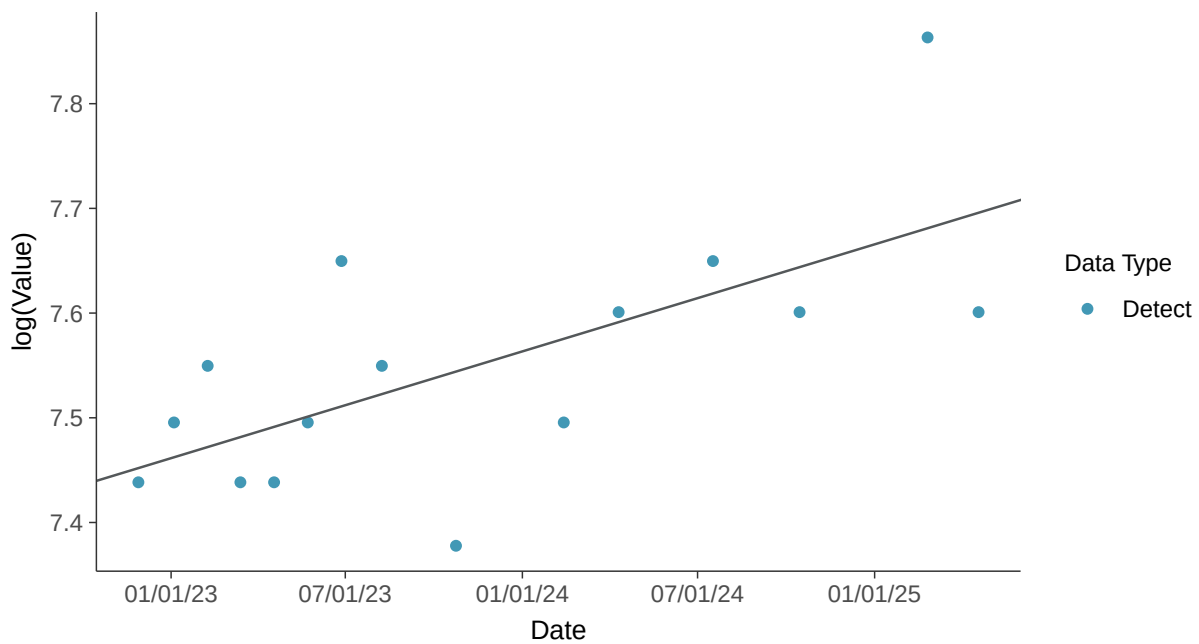
Gamma Q-Q plot

Total Dissolved Solids, MW-02 (mg/L)



Trend Regression: Lognormal MLE

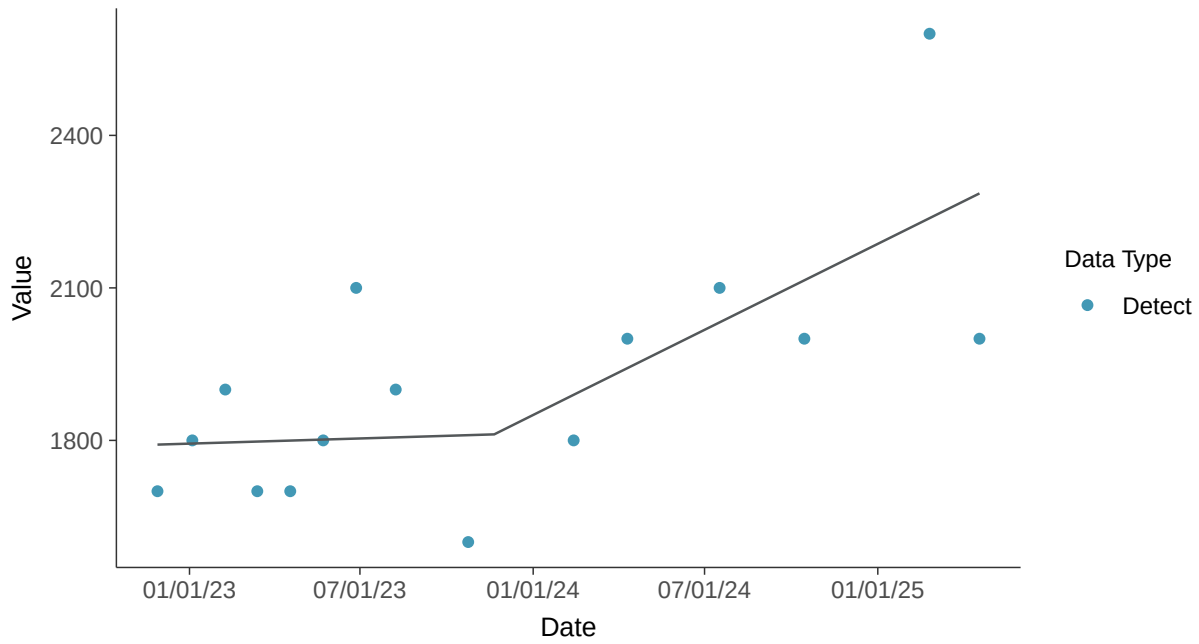
Total Dissolved Solids, MW-02 (mg/L)





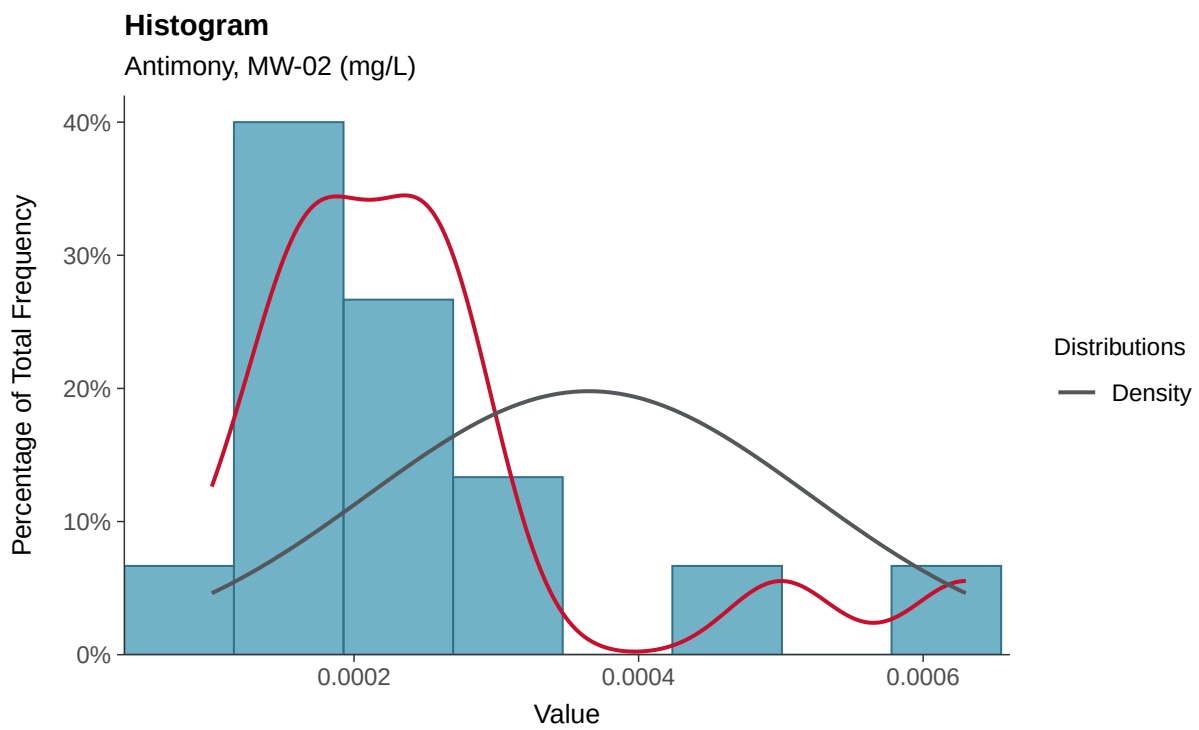
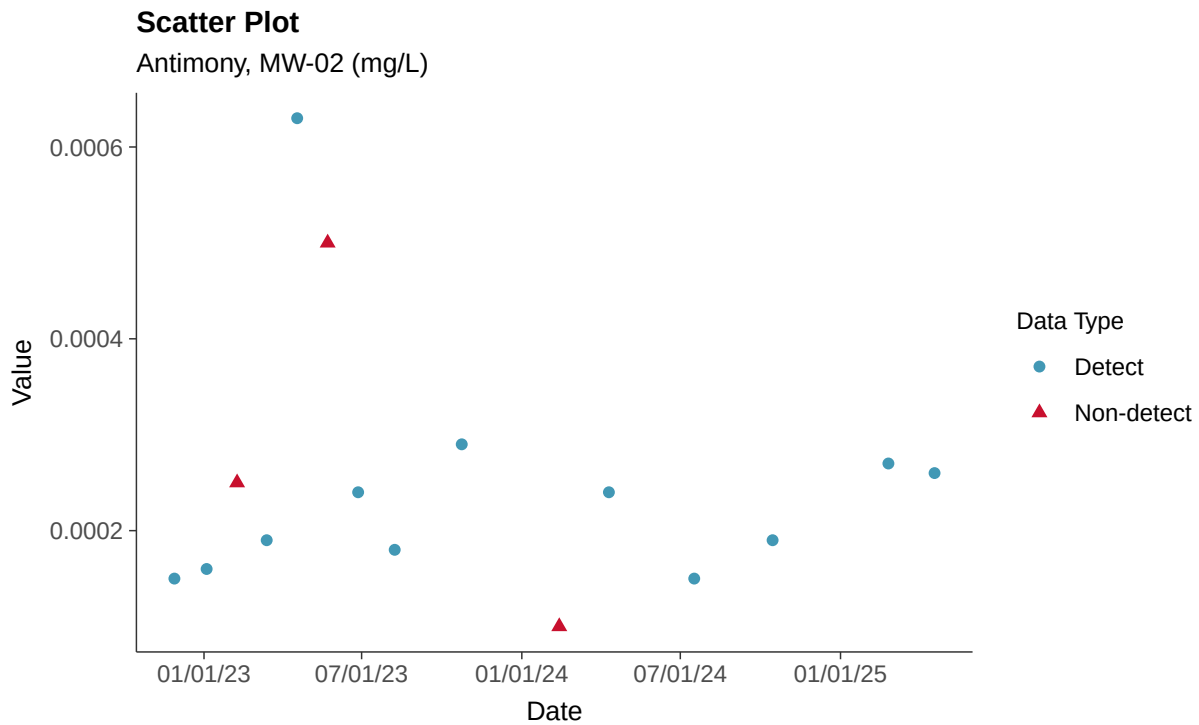
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-02 (mg/L)



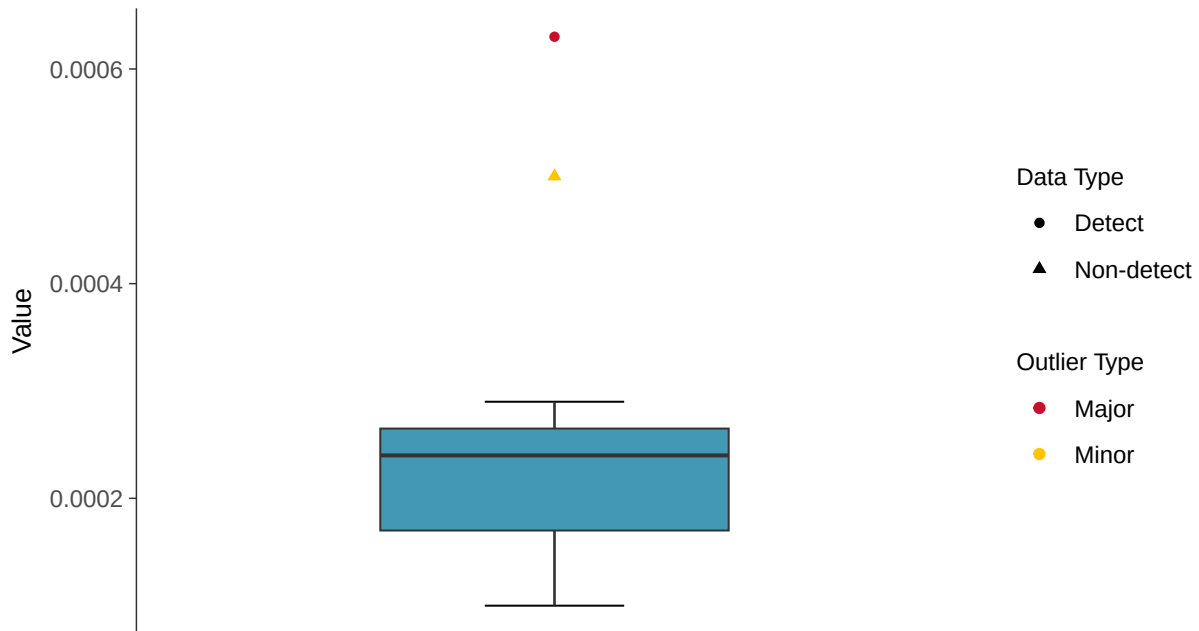
Appendix IV: Antimony, MW-02

ID: 12_2_4_101



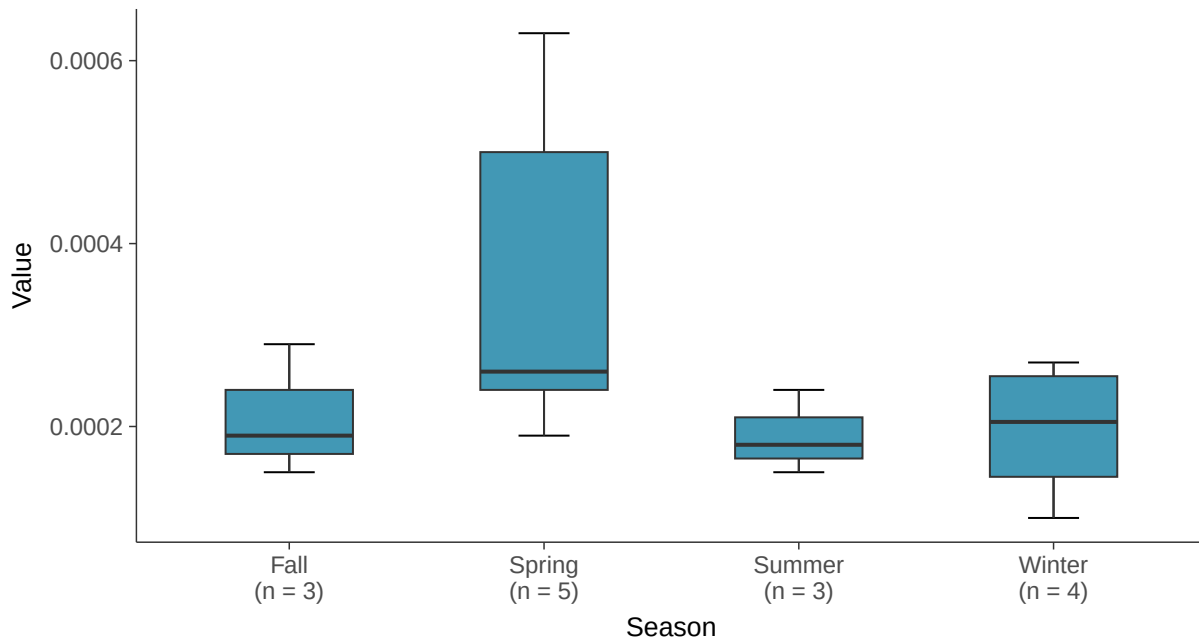
Boxplot

Antimony, MW-02 (mg/L)



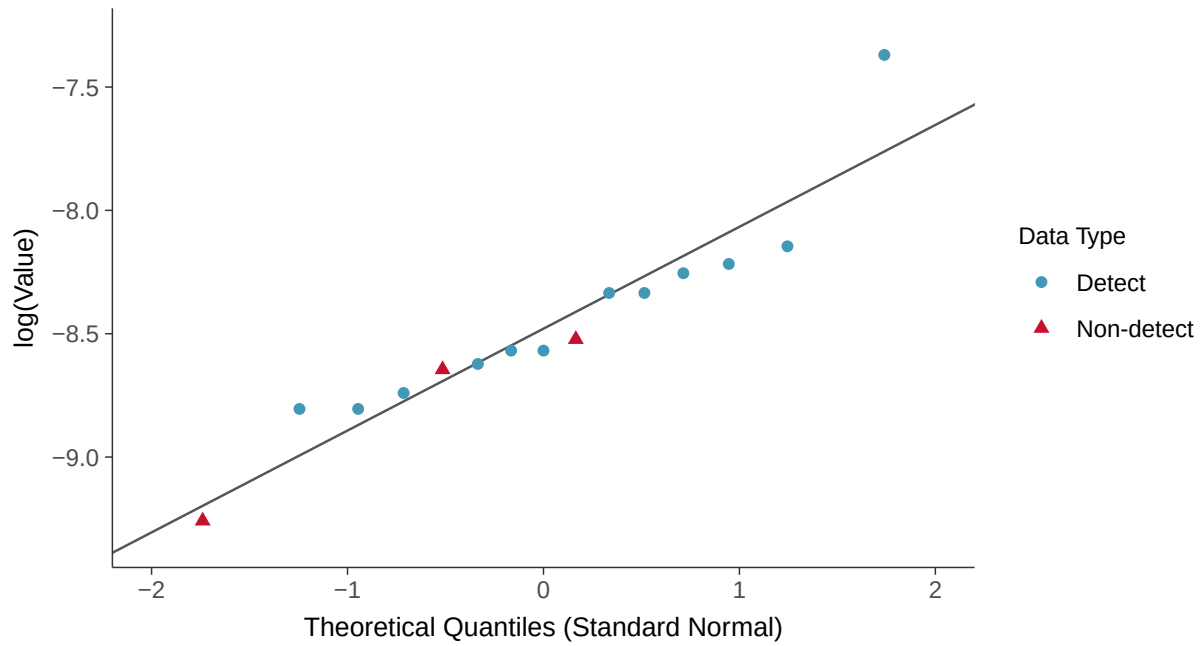
Boxplot by Season

Antimony, MW-02 (mg/L)



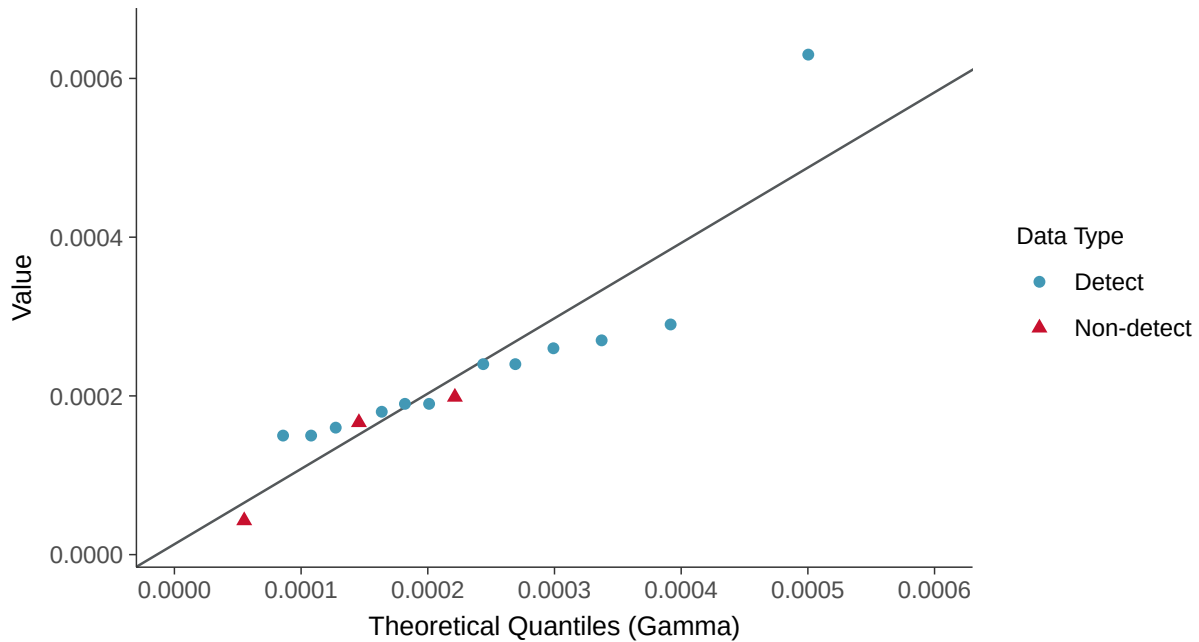
Lognormal Q-Q plot using ROS Imputed Estimates

Antimony, MW-02 (mg/L)



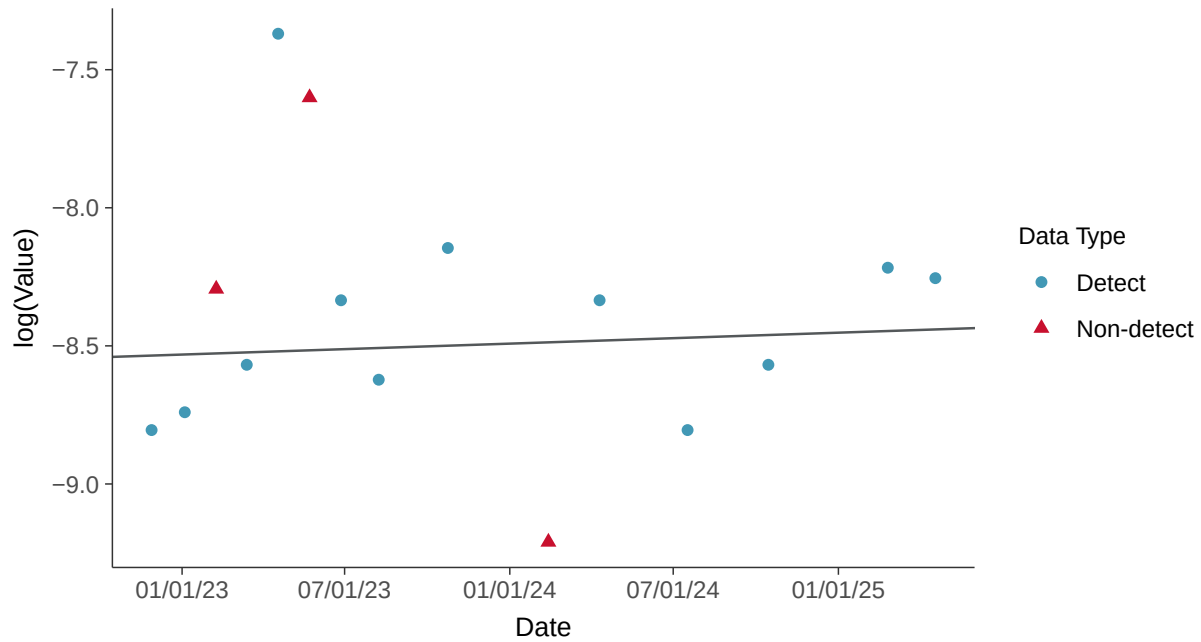
Gamma Q-Q plot using ROS Imputed Estimates

Antimony, MW-02 (mg/L)



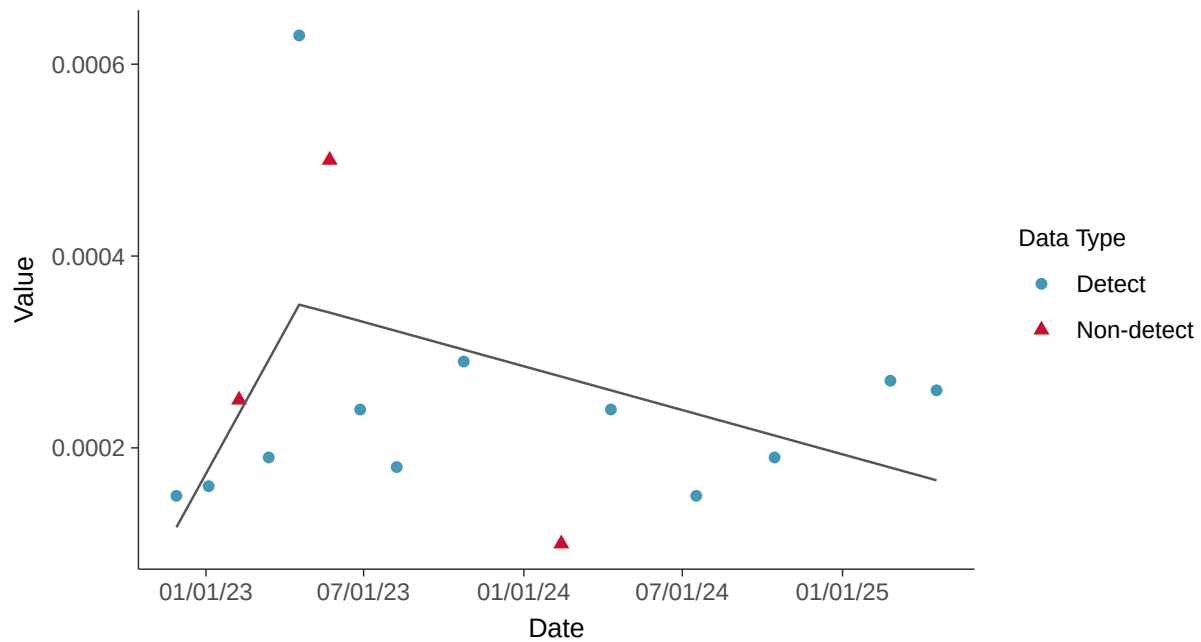
Trend Regression: Lognormal MLE

Antimony, MW-02 (mg/L)



Trend Regression: Piecewise Linear-Linear

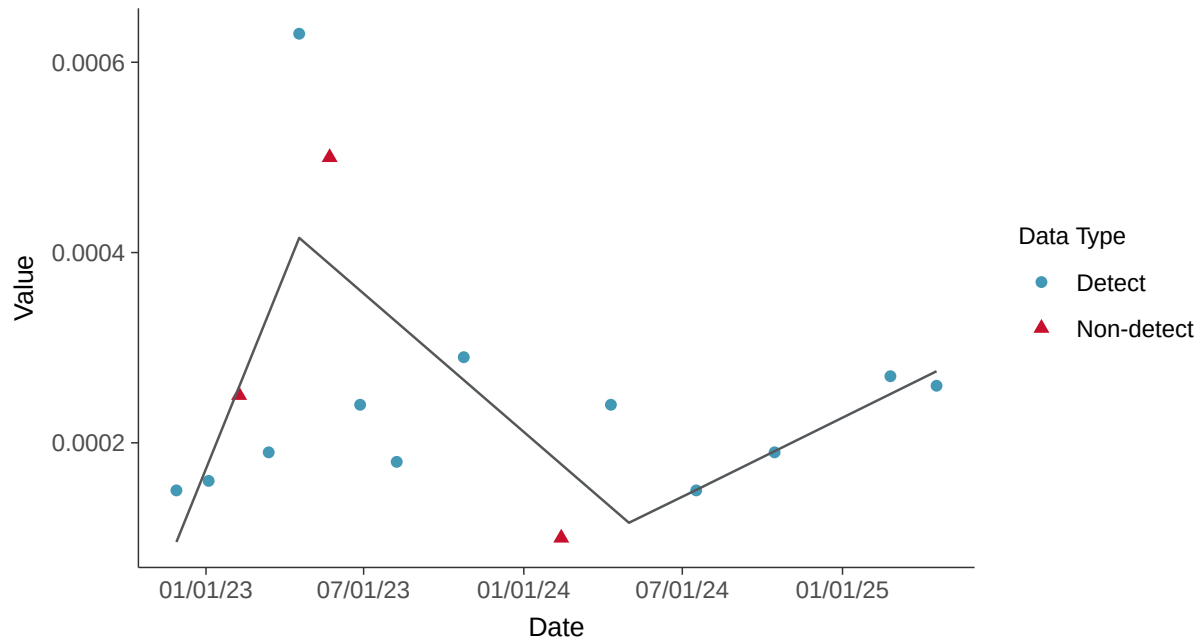
Antimony, MW-02 (mg/L)





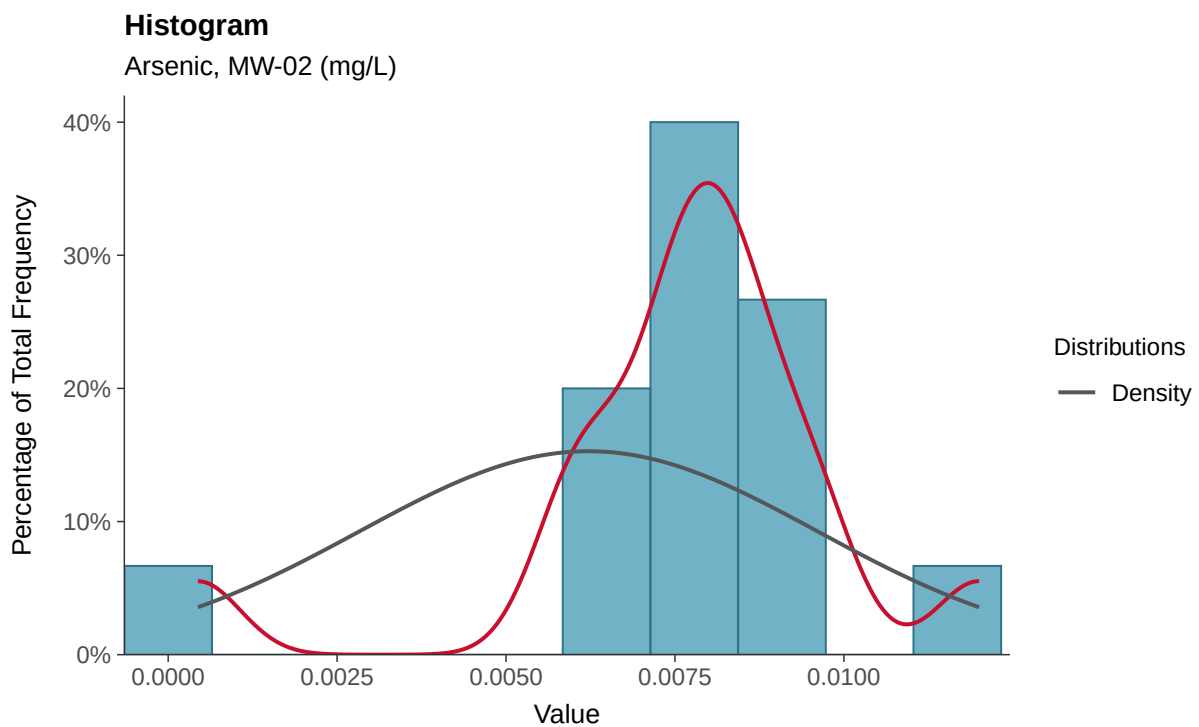
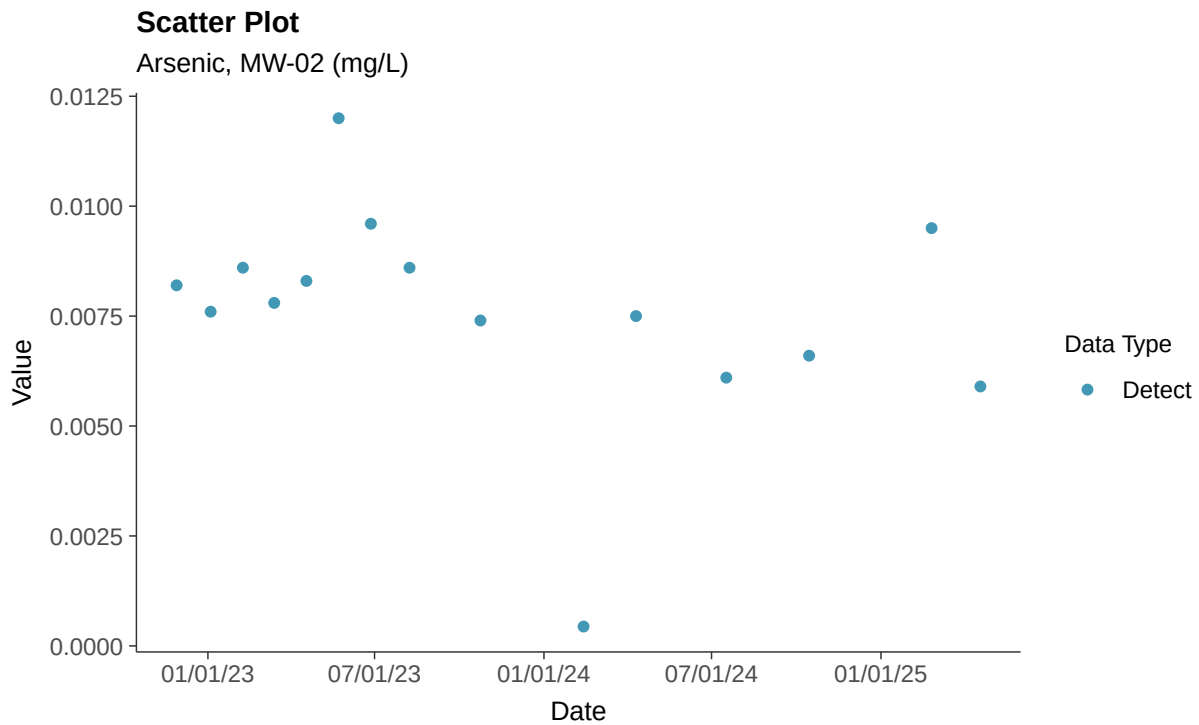
Trend Regression: Piecewise Linear-Linear-Linear

Antimony, MW-02 (mg/L)



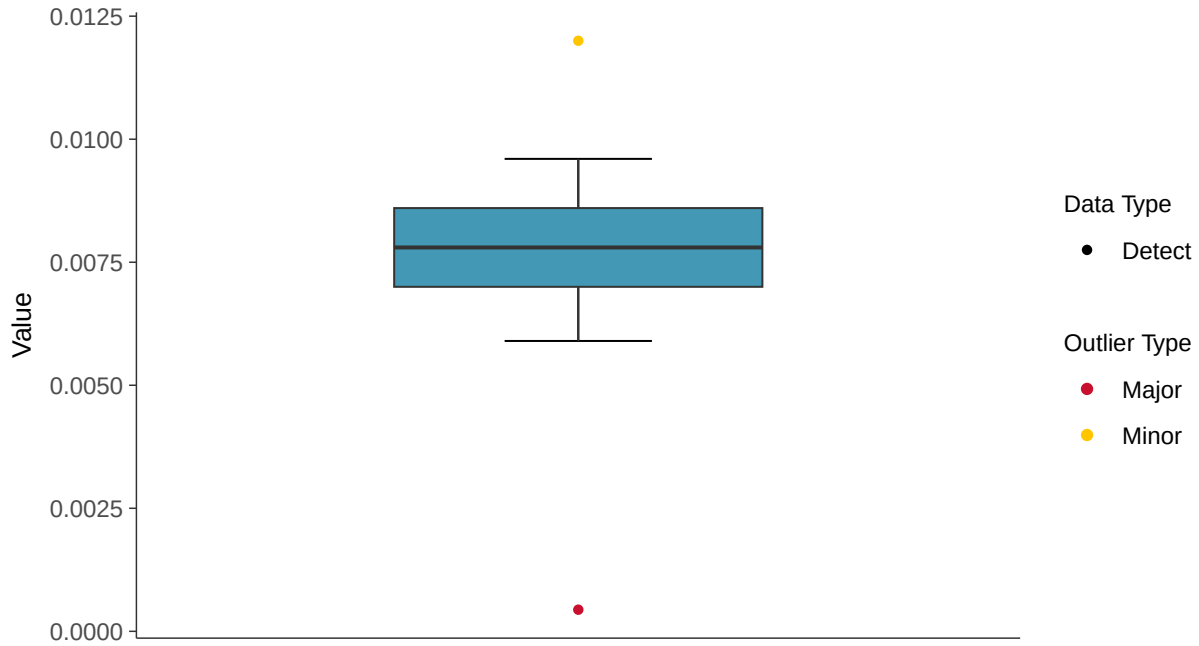
Appendix IV: Arsenic, MW-02

ID: 12_2_4_102



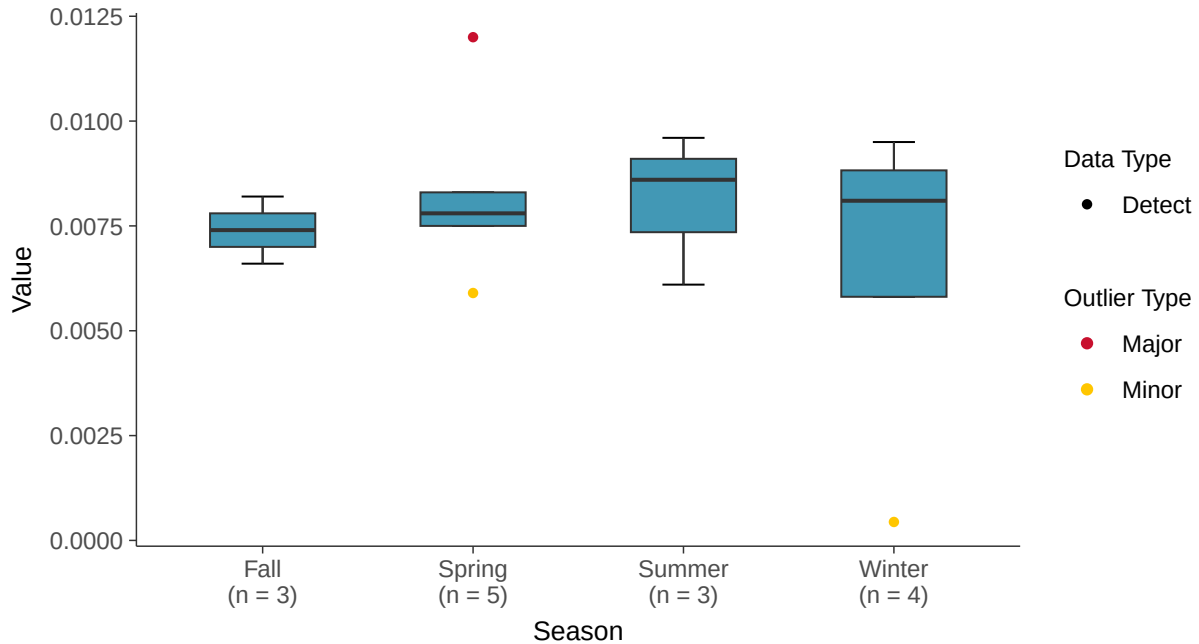
Boxplot

Arsenic, MW-02 (mg/L)



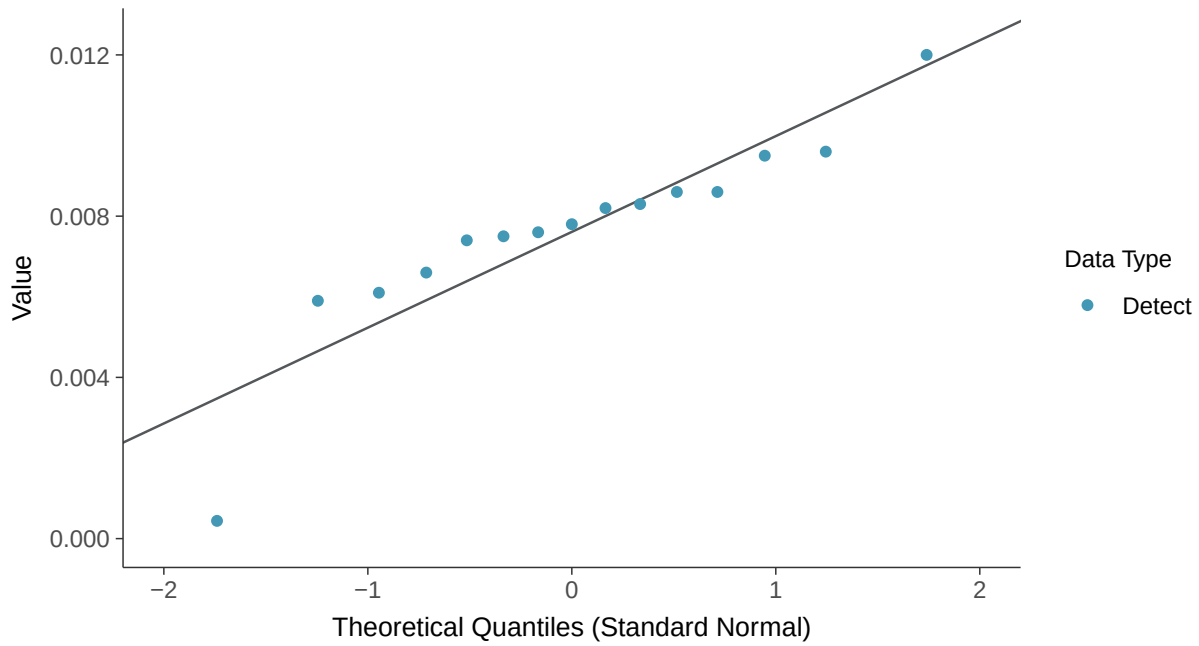
Boxplot by Season

Arsenic, MW-02 (mg/L)



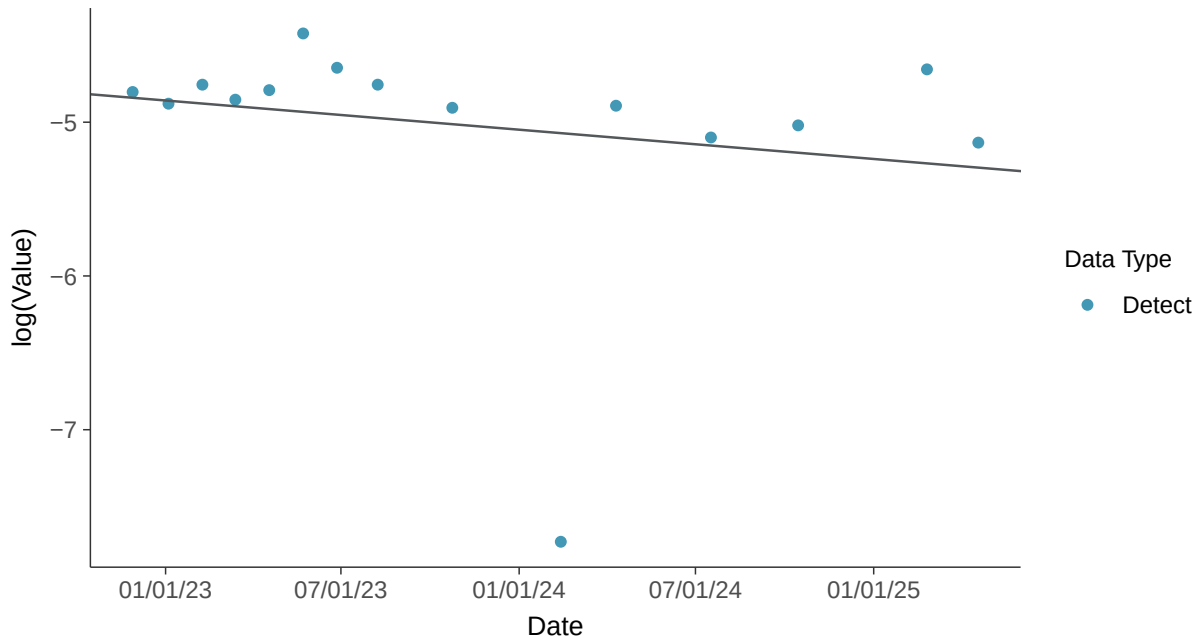
Normal Q-Q plot

Arsenic, MW-02 (mg/L)



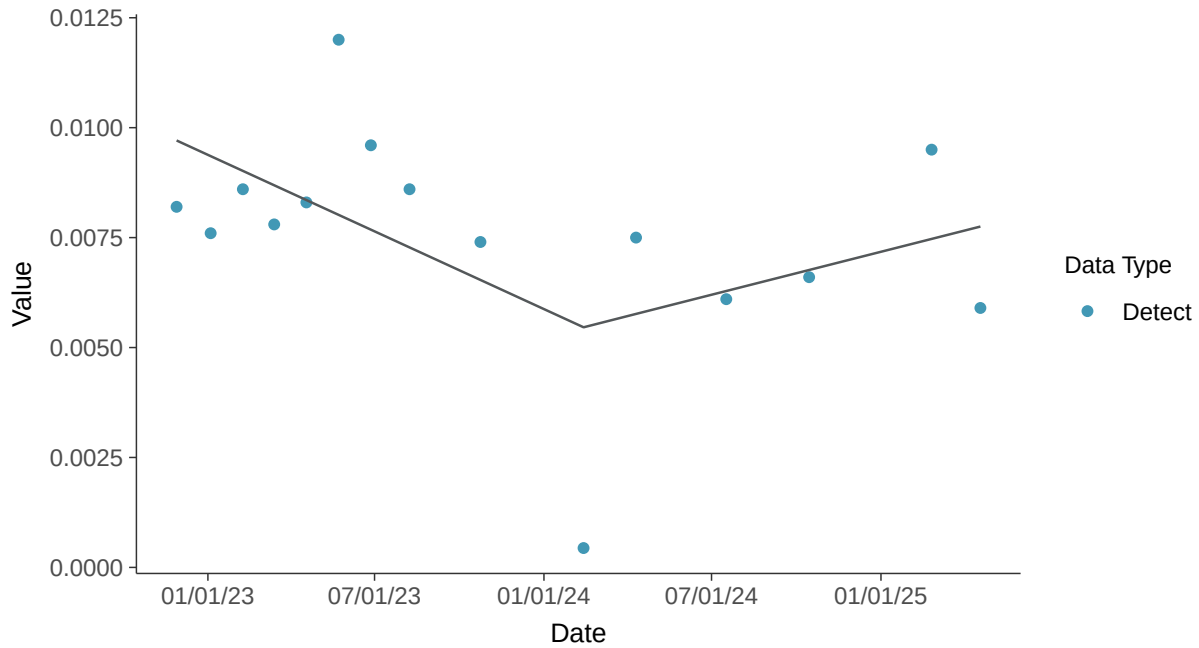
Trend Regression: Lognormal MLE

Arsenic, MW-02 (mg/L)



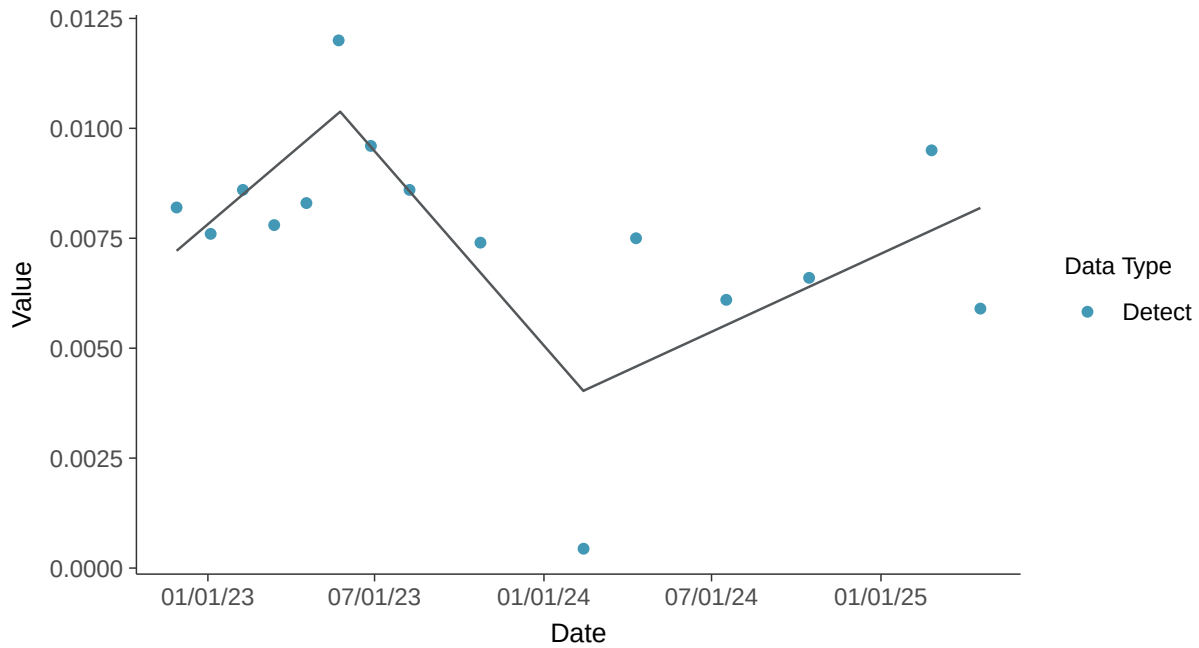
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-02 (mg/L)



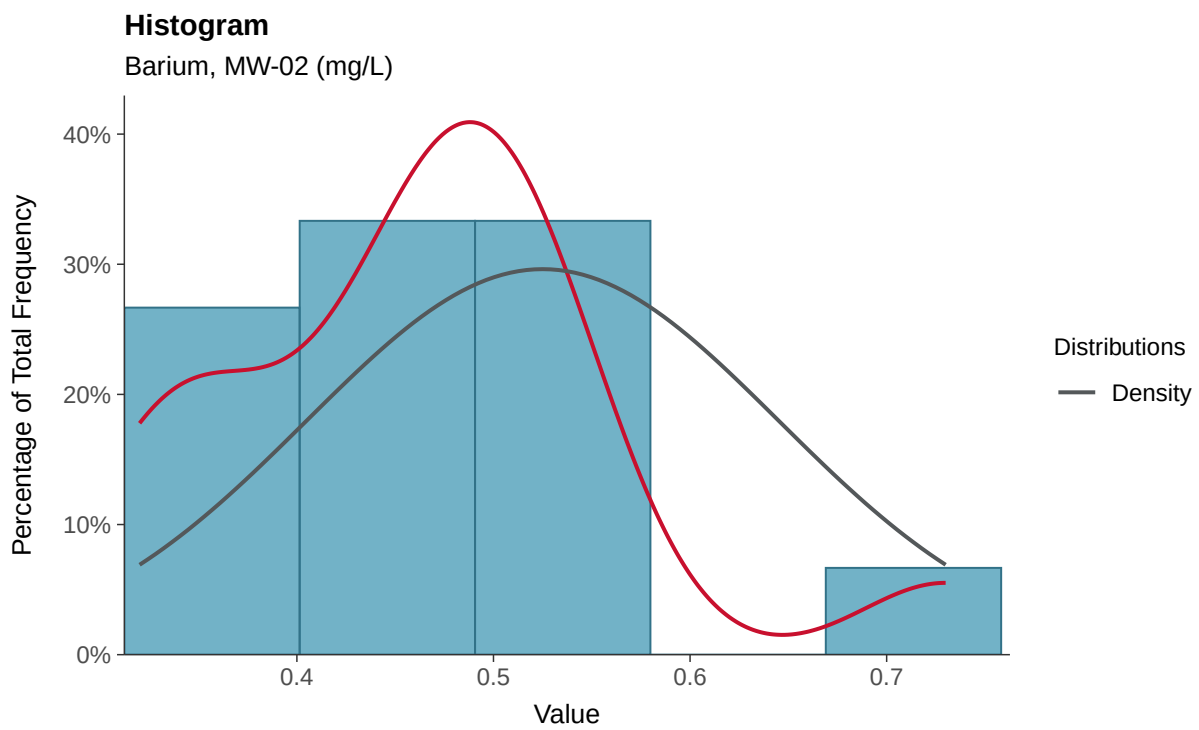
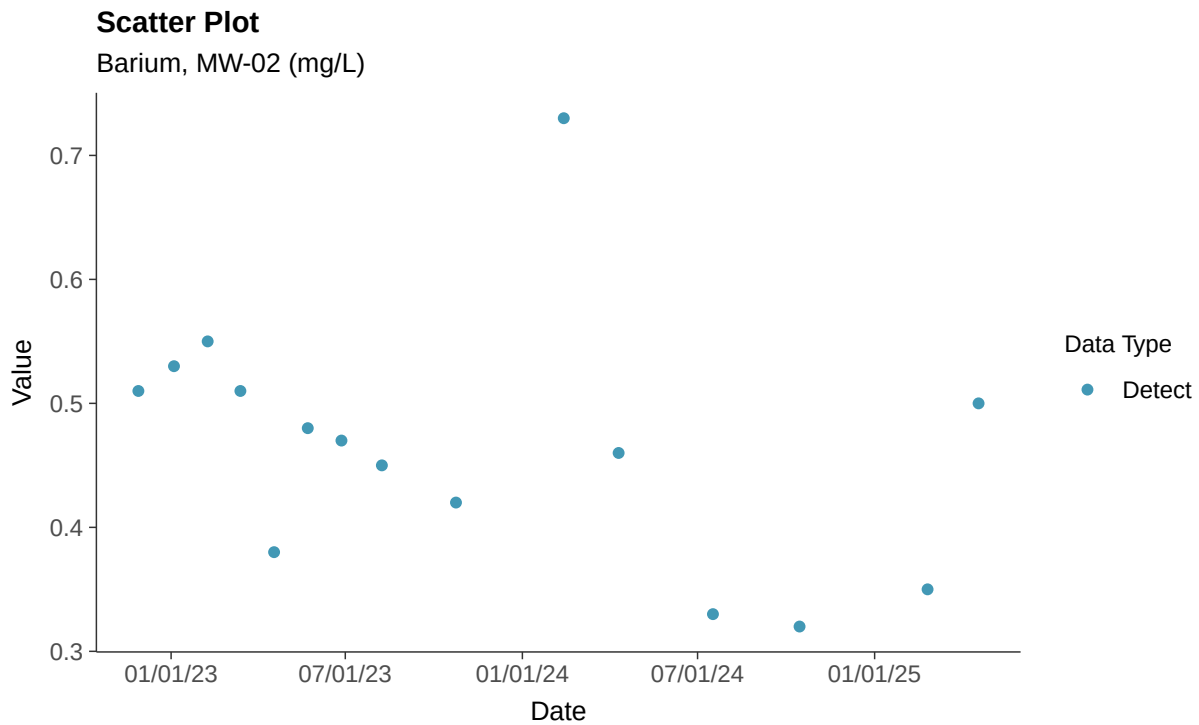
Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-02 (mg/L)



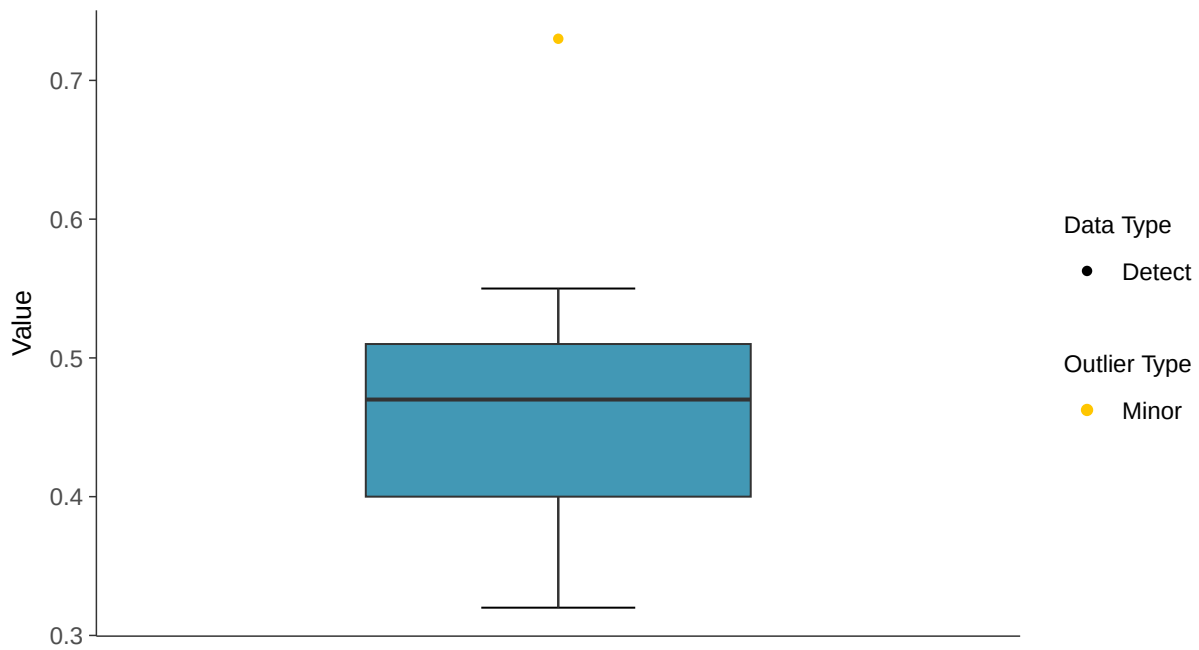
Appendix IV: Barium, MW-02

ID: 12_2_4_103



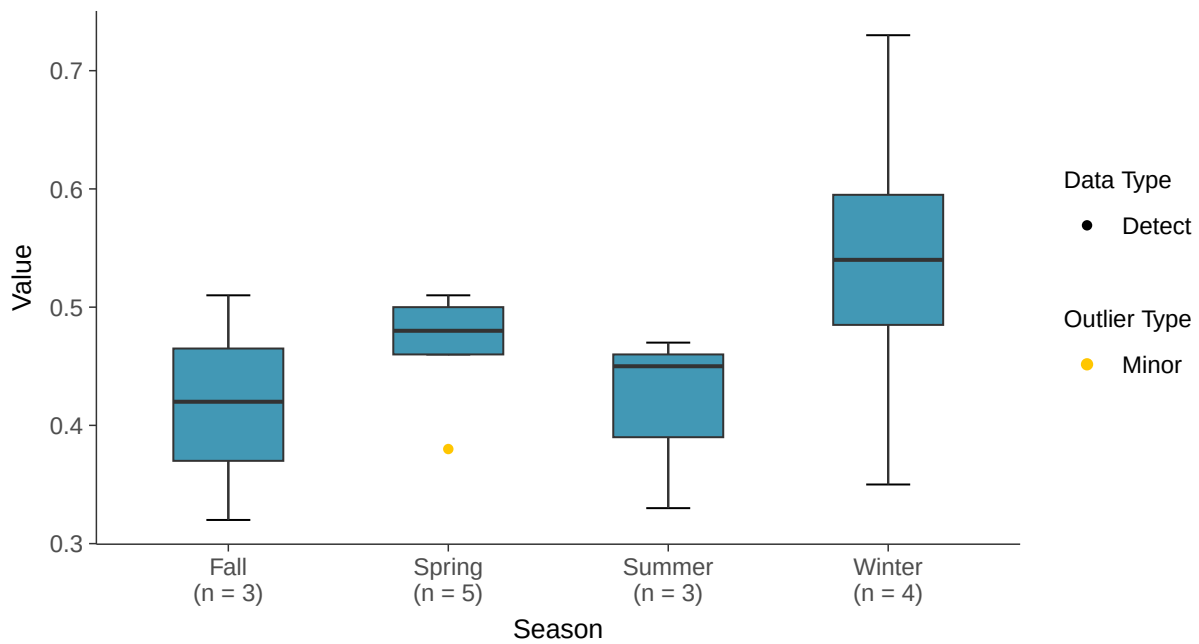
Boxplot

Barium, MW-02 (mg/L)

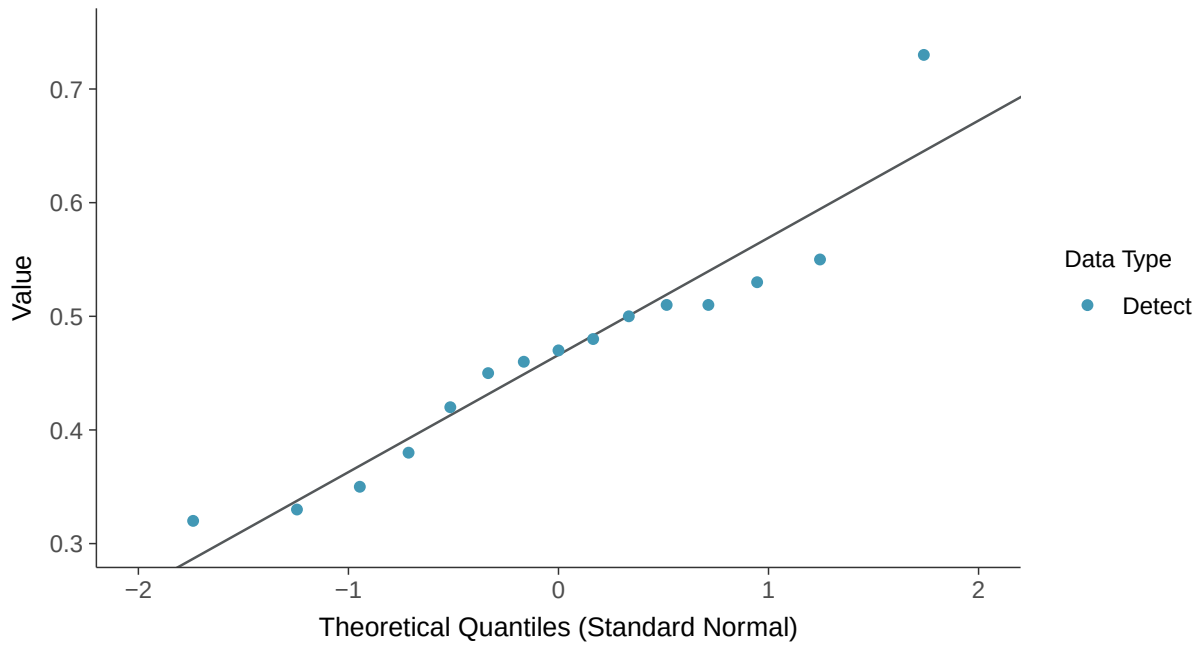


Boxplot by Season

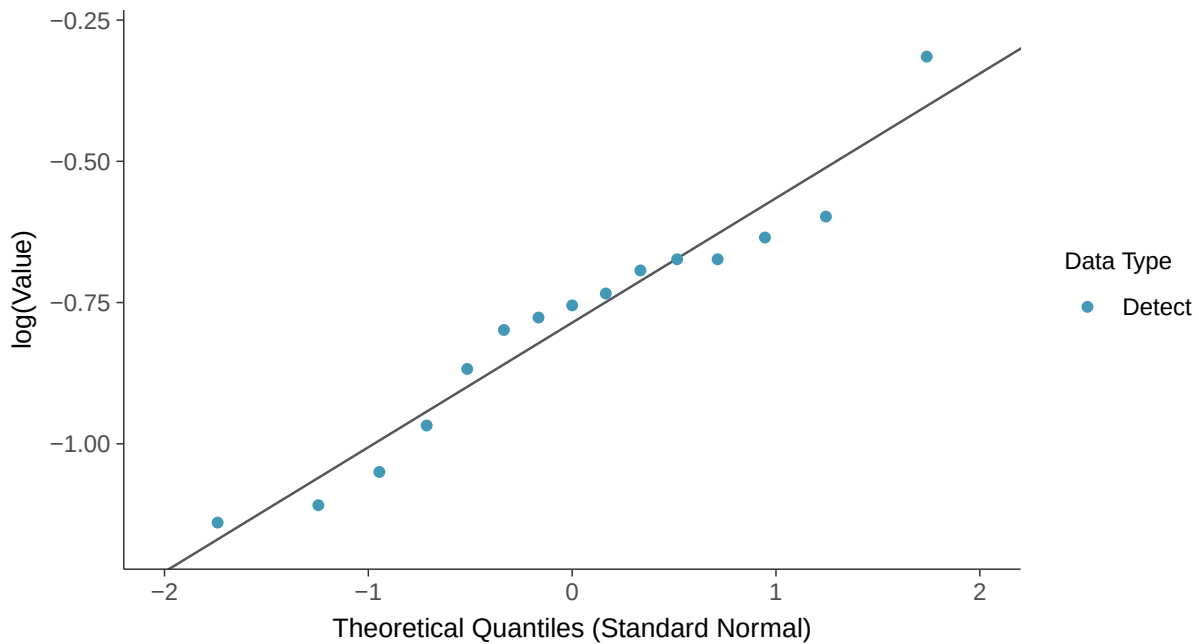
Barium, MW-02 (mg/L)



Normal Q-Q plot
Barium, MW-02 (mg/L)

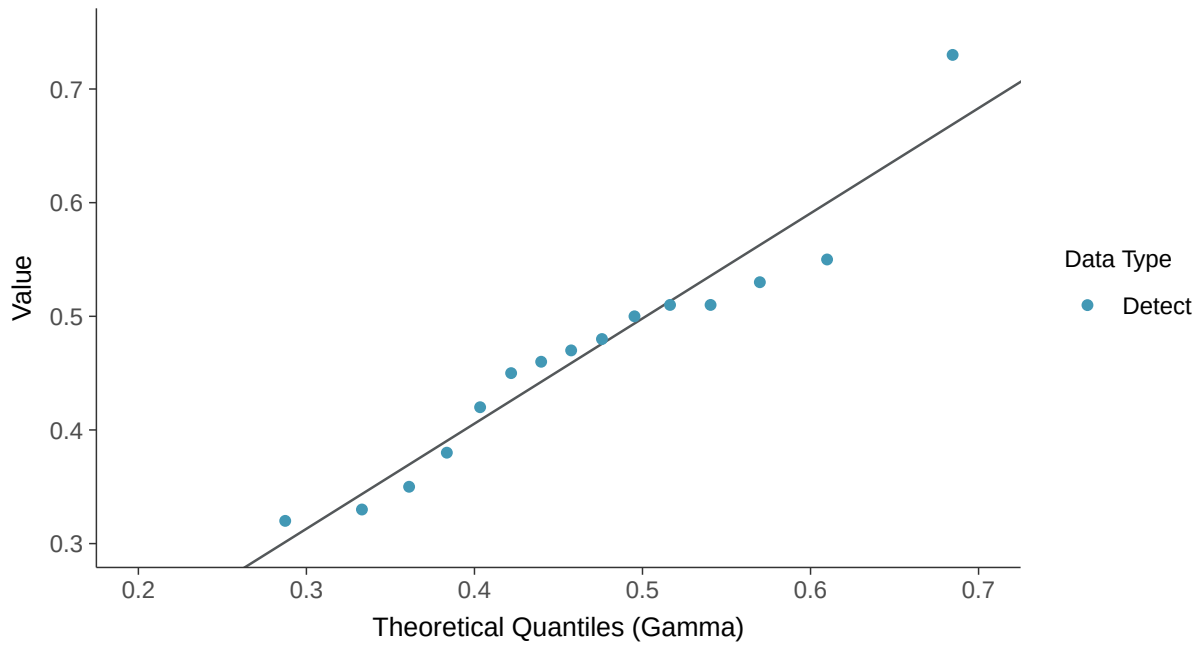


Lognormal Q-Q plot
Barium, MW-02 (mg/L)



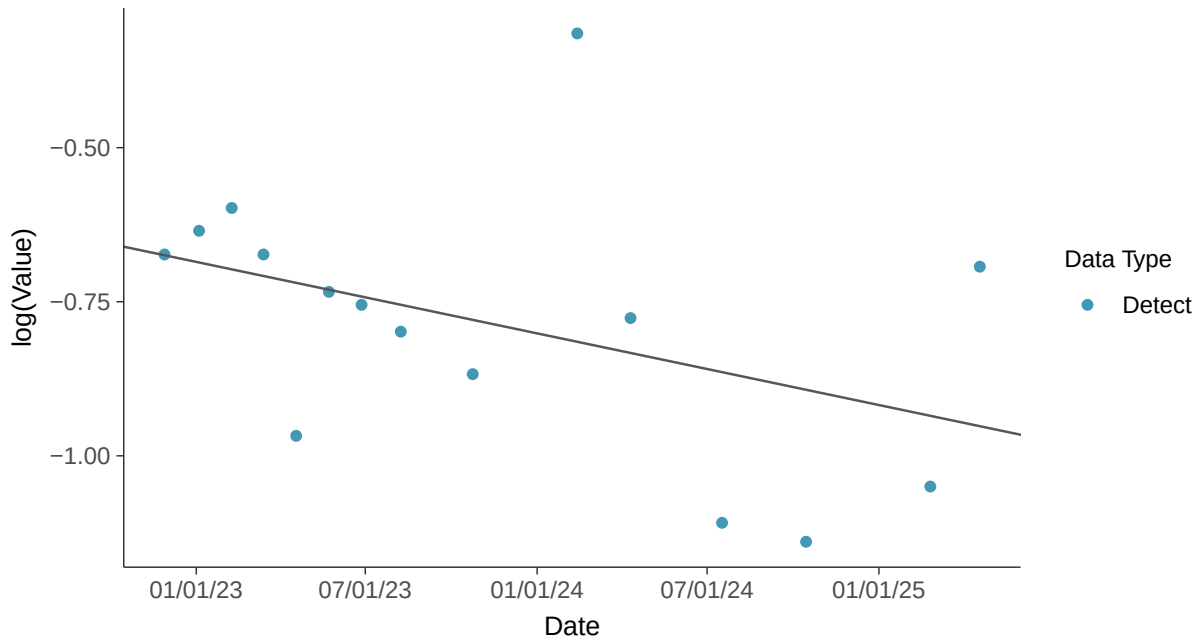
Gamma Q-Q plot

Barium, MW-02 (mg/L)



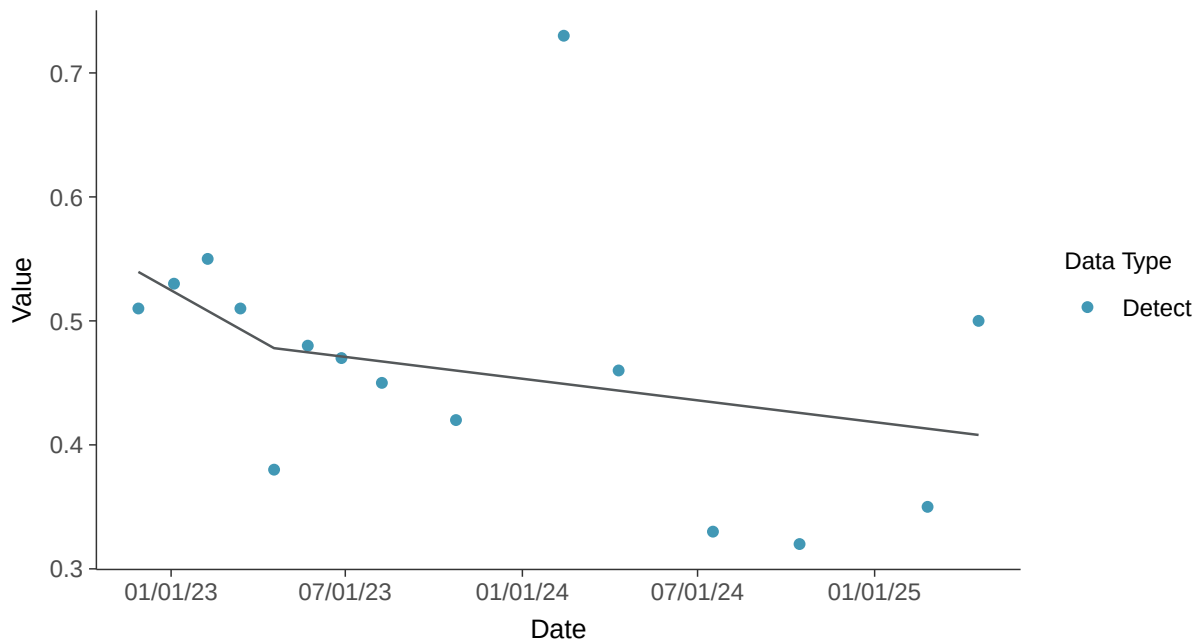
Trend Regression: Lognormal MLE

Barium, MW-02 (mg/L)



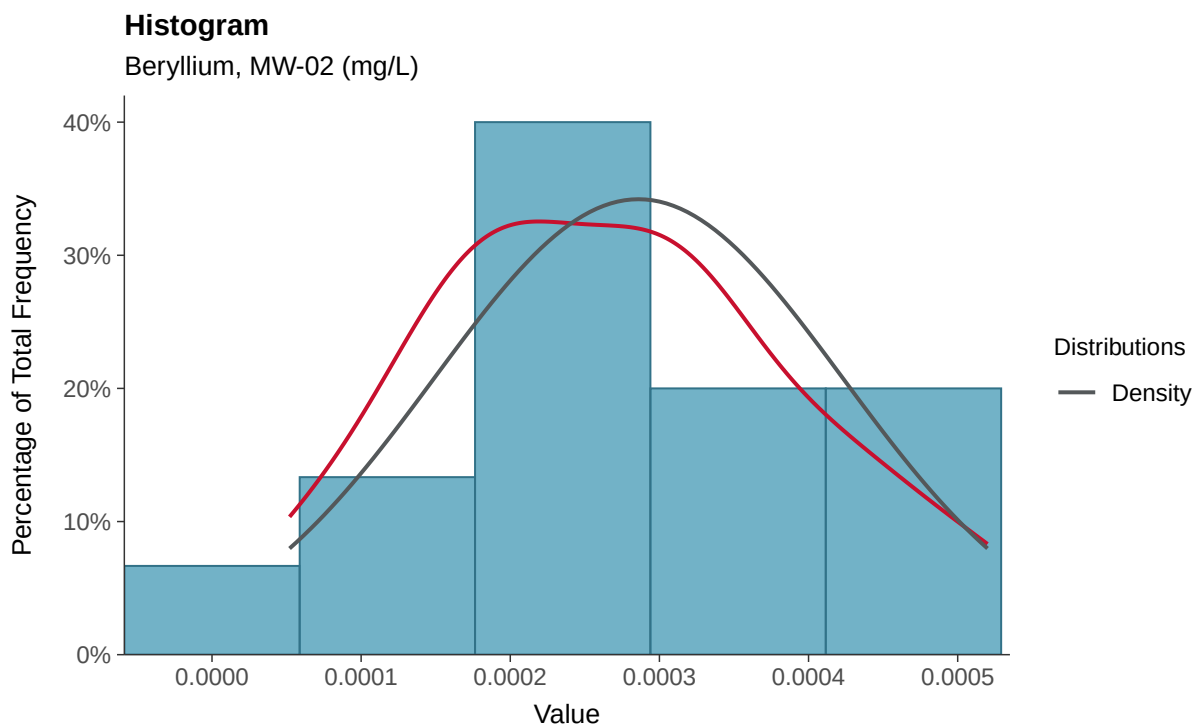
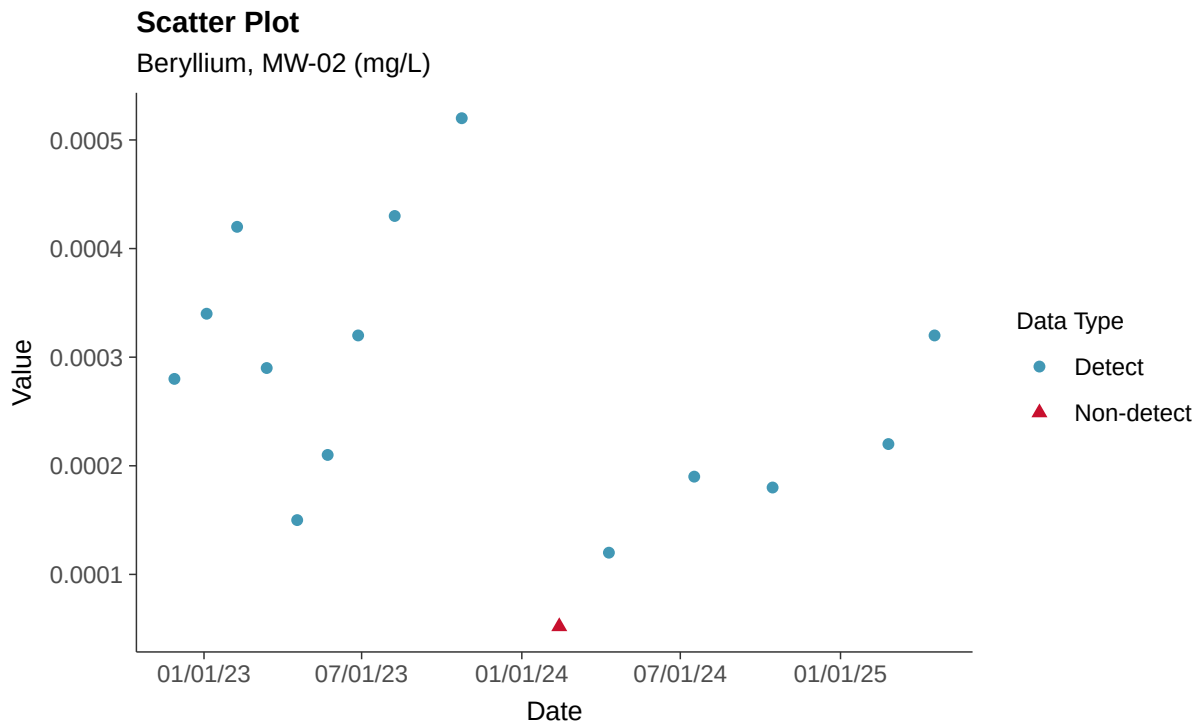


Trend Regression: Piecewise Linear-Linear
Barium, MW-02 (mg/L)



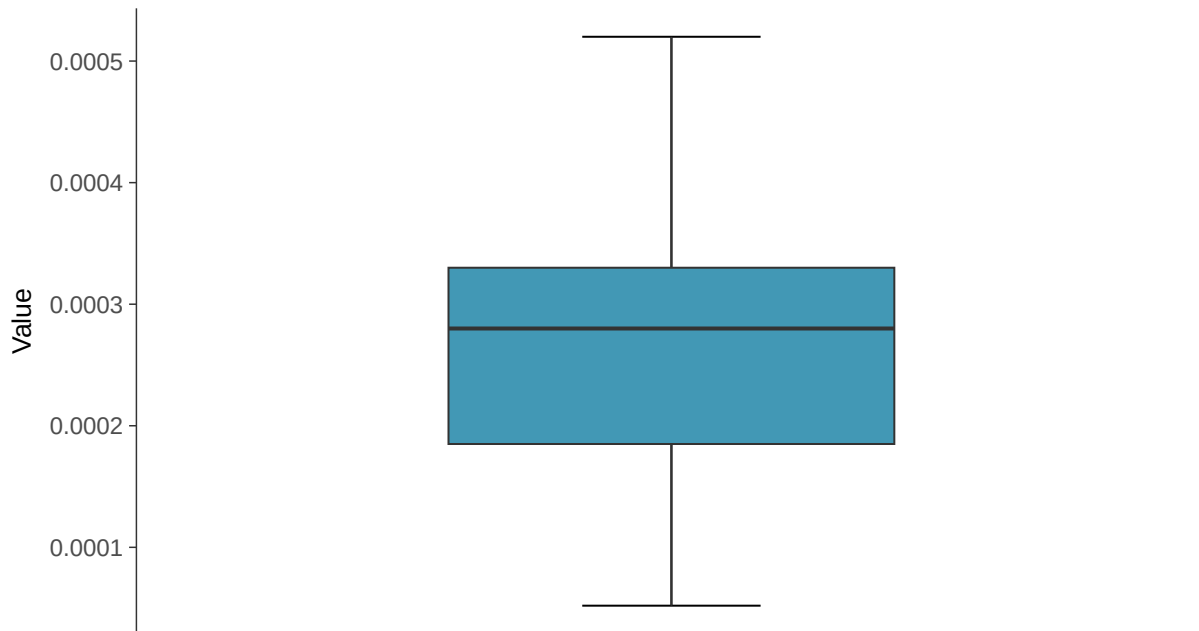
Appendix IV: Beryllium, MW-02

ID: 12_2_4_104



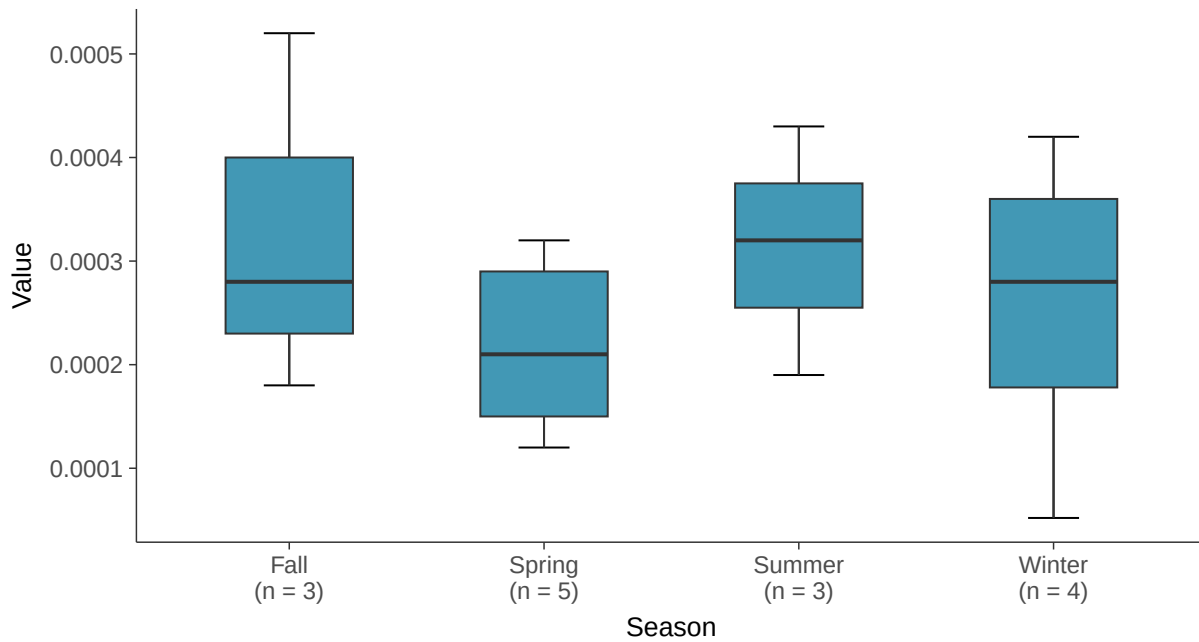
Boxplot

Beryllium, MW-02 (mg/L)



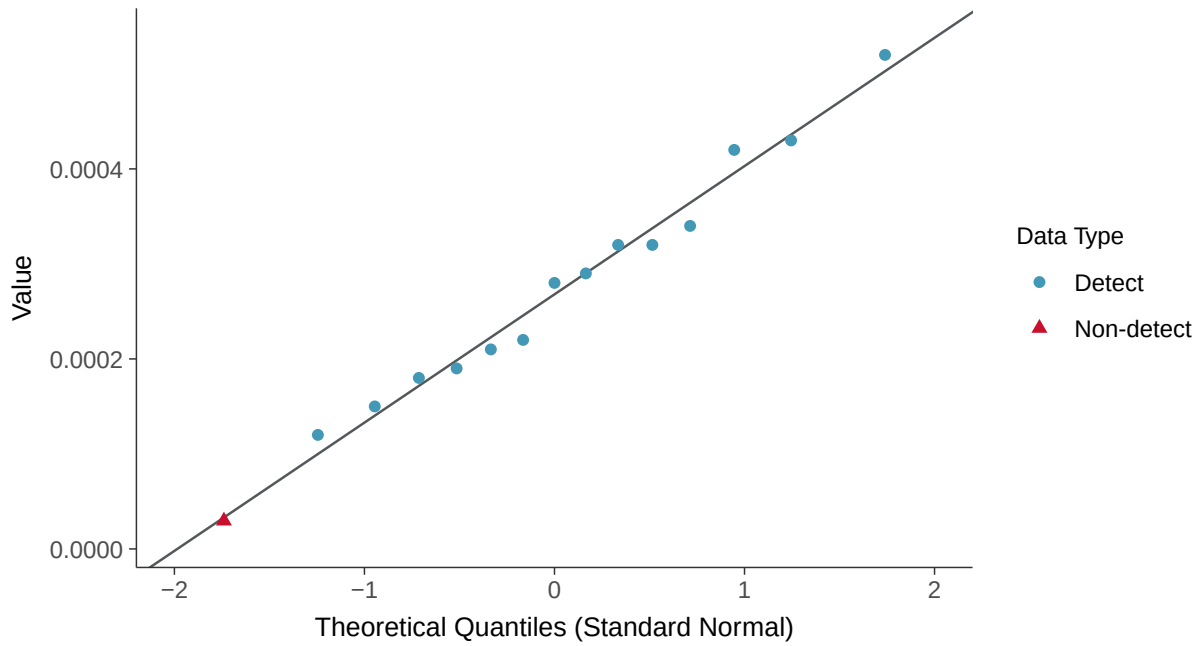
Boxplot by Season

Beryllium, MW-02 (mg/L)



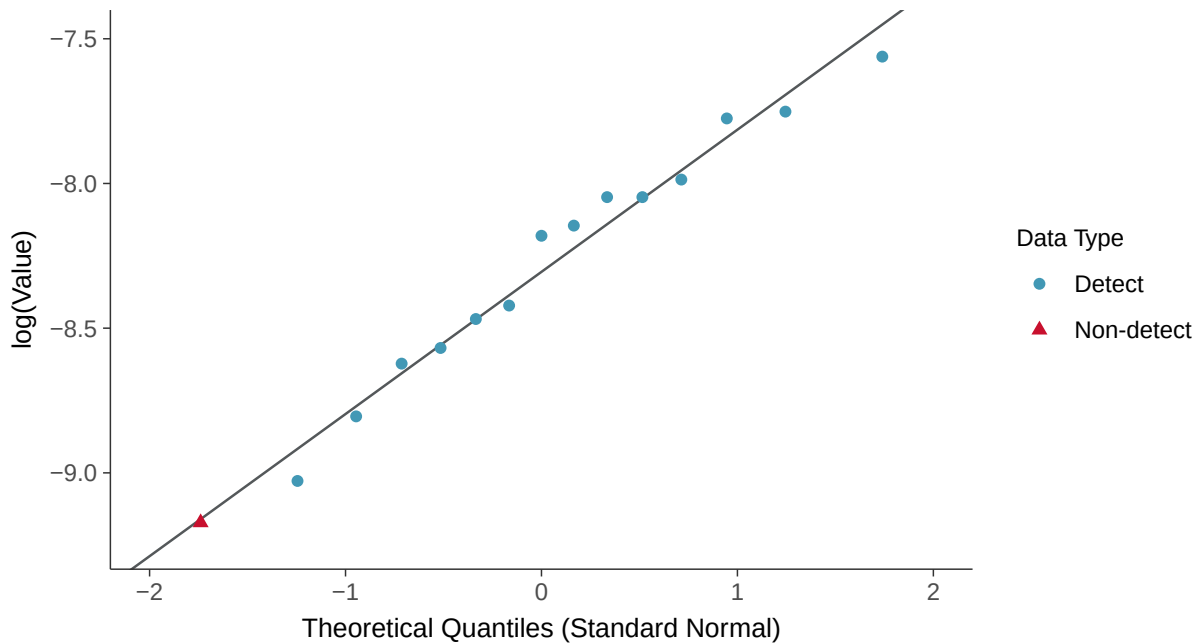
Normal Q-Q plot using ROS Imputed Estimates

Beryllium, MW-02 (mg/L)



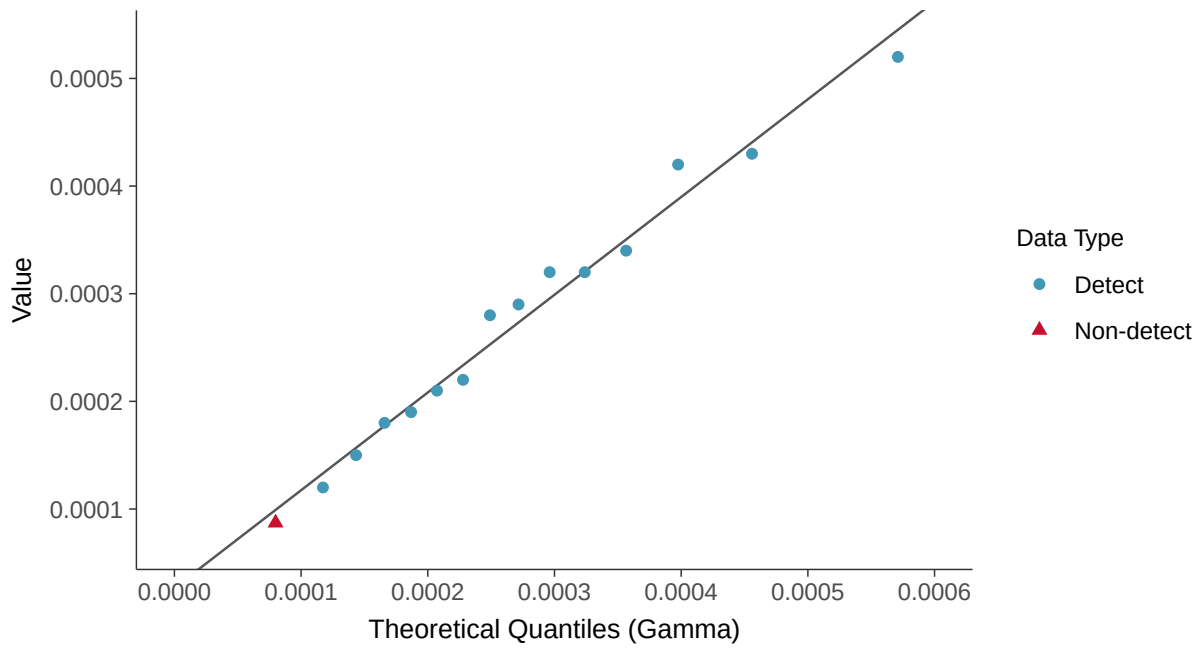
Lognormal Q-Q plot using ROS Imputed Estimates

Beryllium, MW-02 (mg/L)



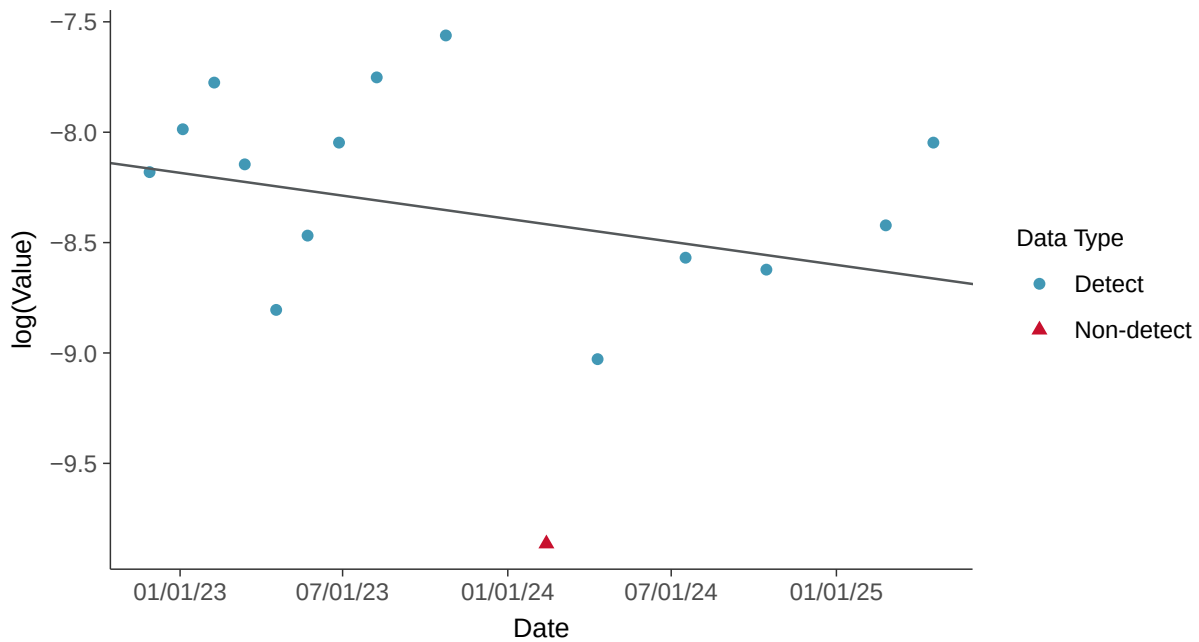
Gamma Q-Q plot using ROS Imputed Estimates

Beryllium, MW-02 (mg/L)



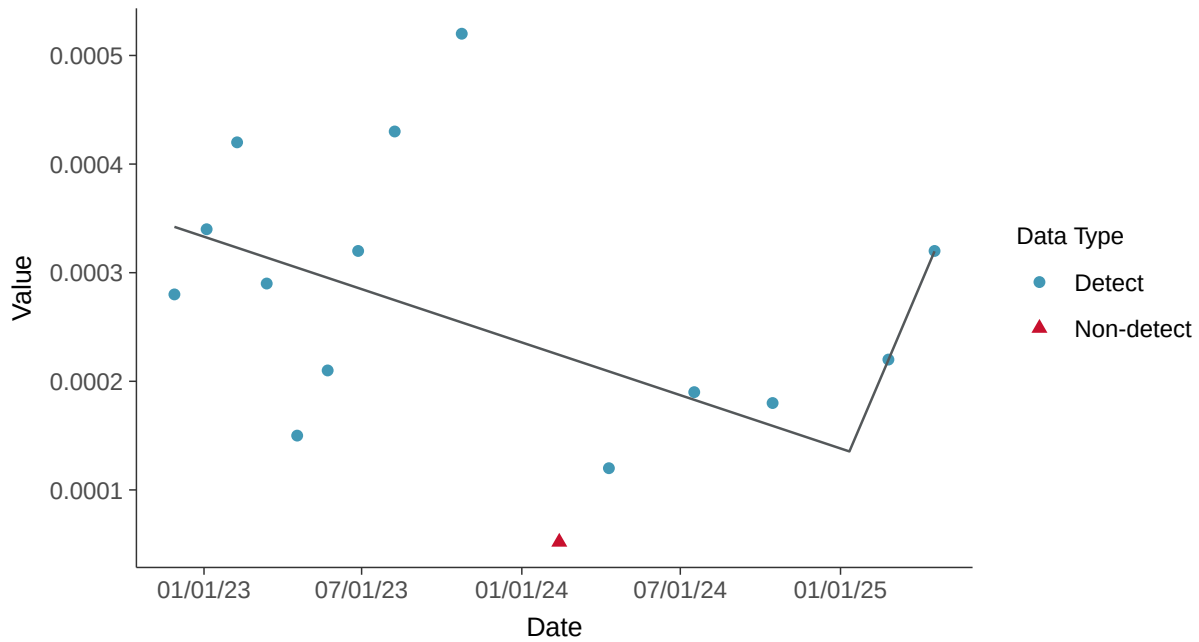
Trend Regression: Lognormal MLE

Beryllium, MW-02 (mg/L)



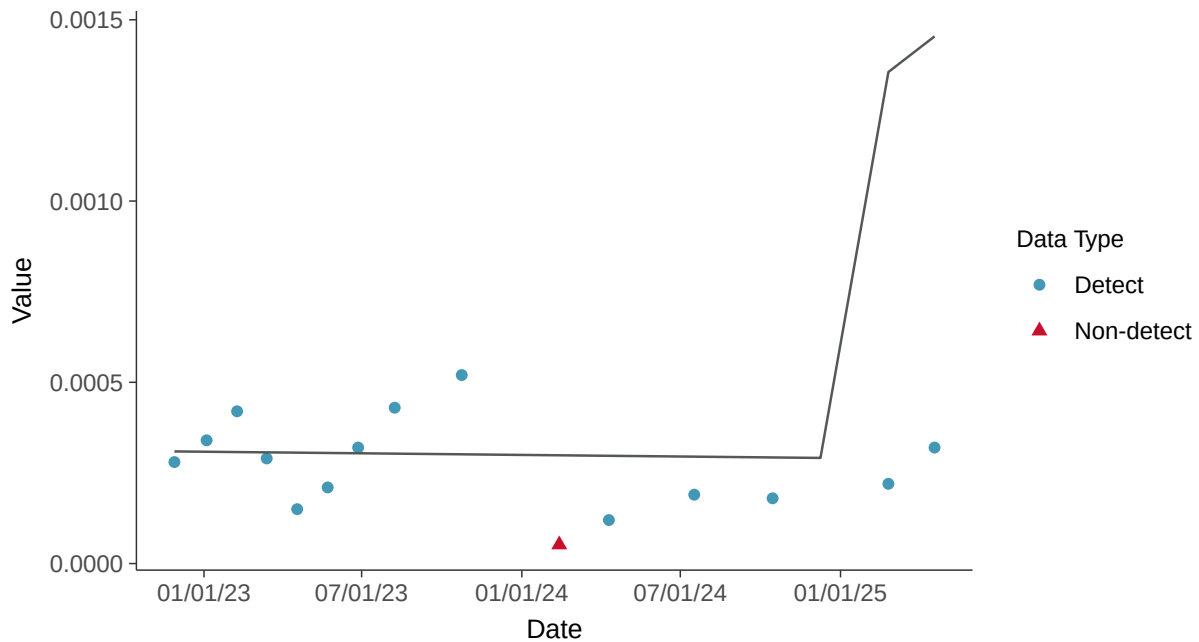
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-02 (mg/L)



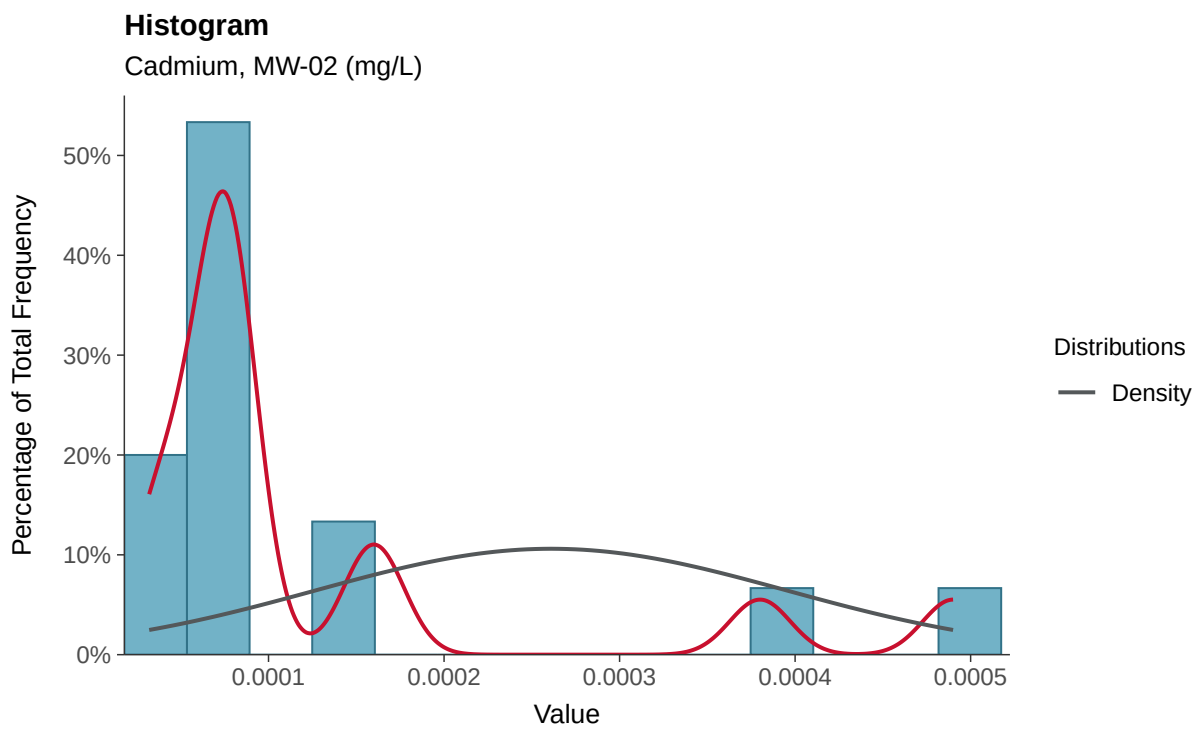
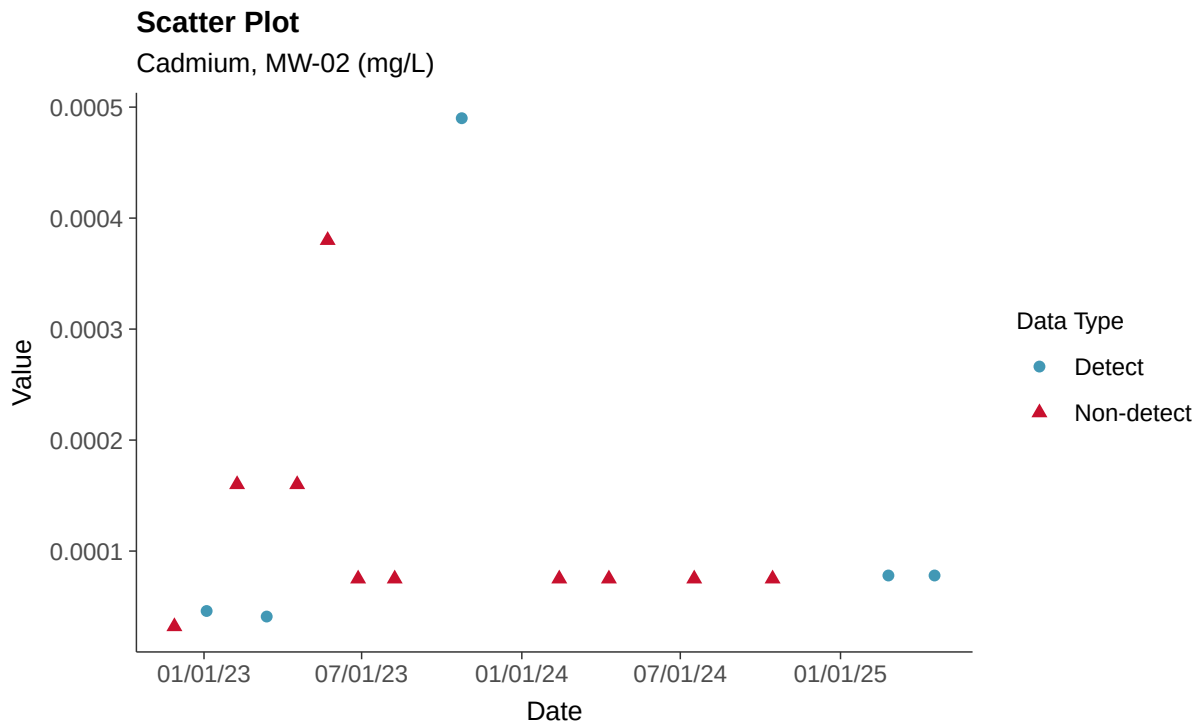
Trend Regression: Piecewise Linear-Linear-Linear

Beryllium, MW-02 (mg/L)



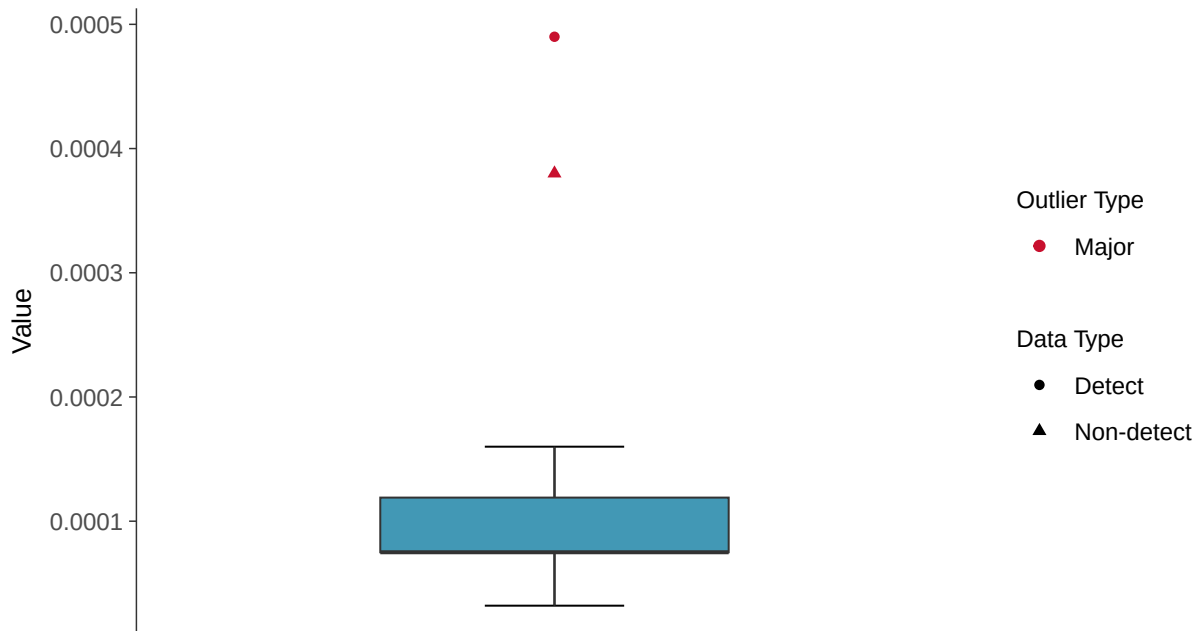
Appendix IV: Cadmium, MW-02

ID: 12_2_4_106



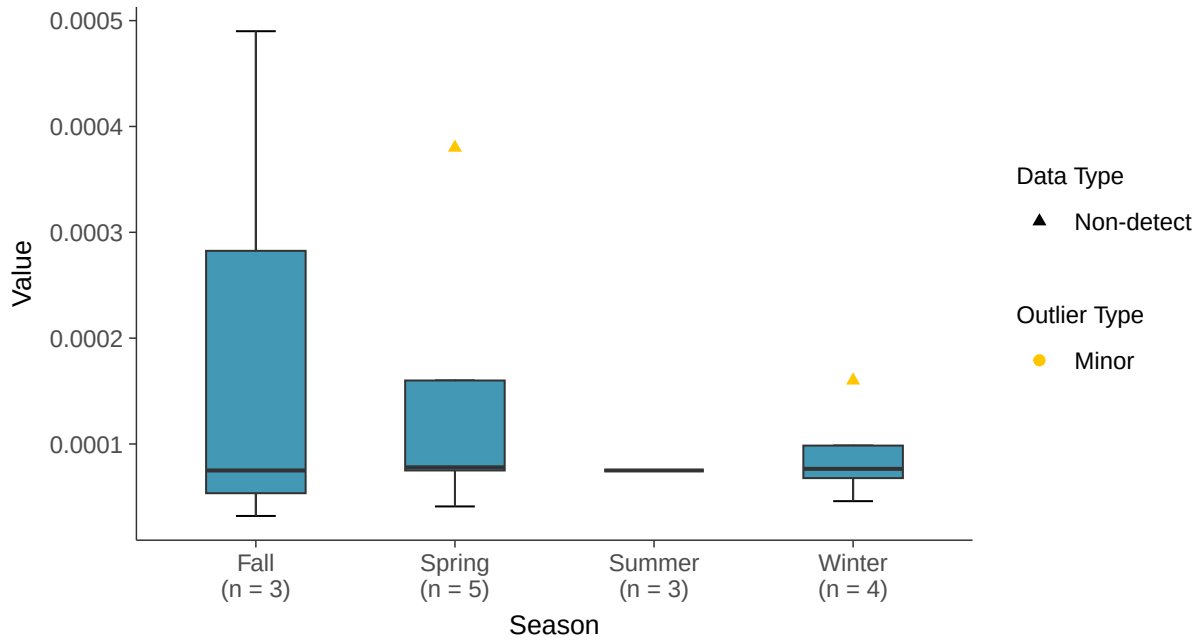
Boxplot

Cadmium, MW-02 (mg/L)



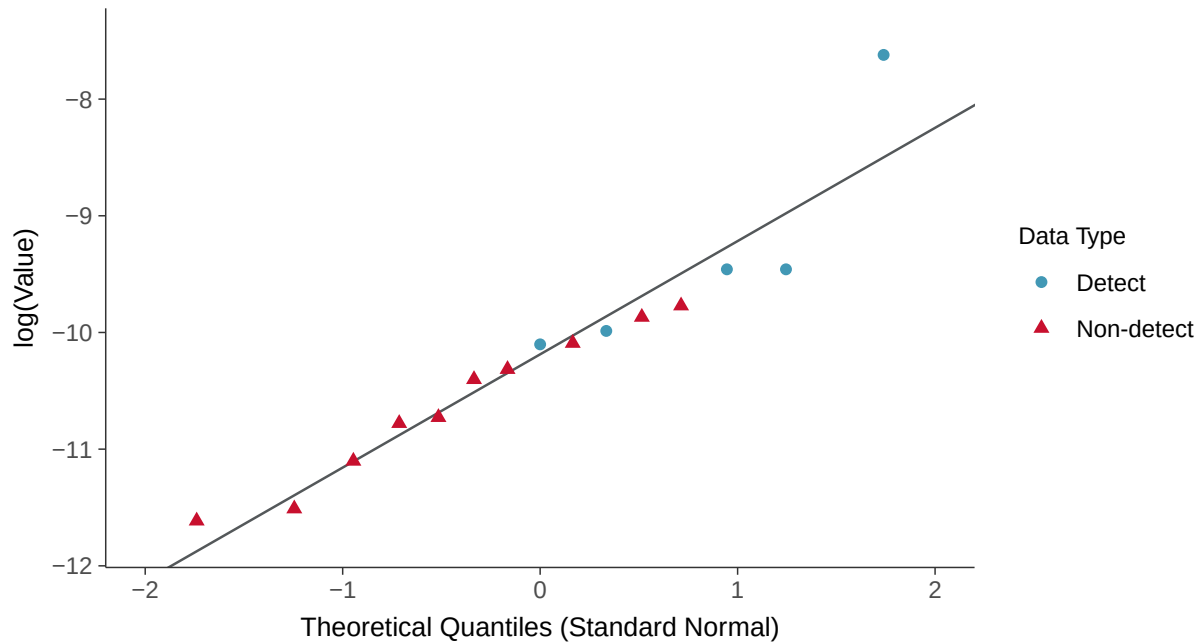
Boxplot by Season

Cadmium, MW-02 (mg/L)



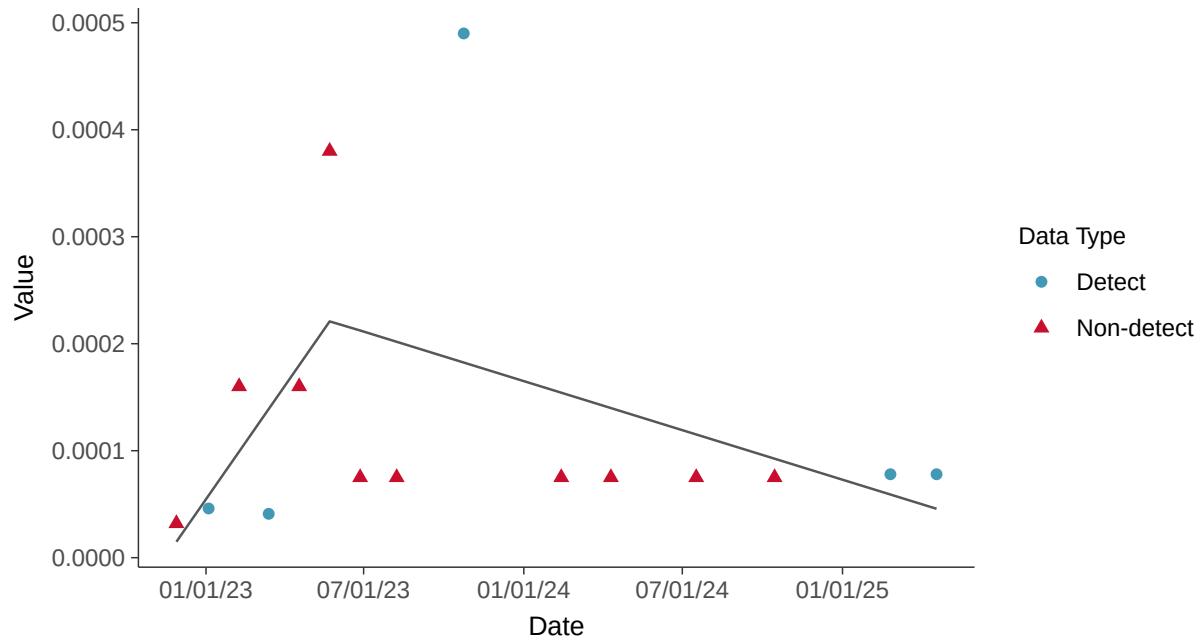
Lognormal Q-Q plot using ROS Imputed Estimates

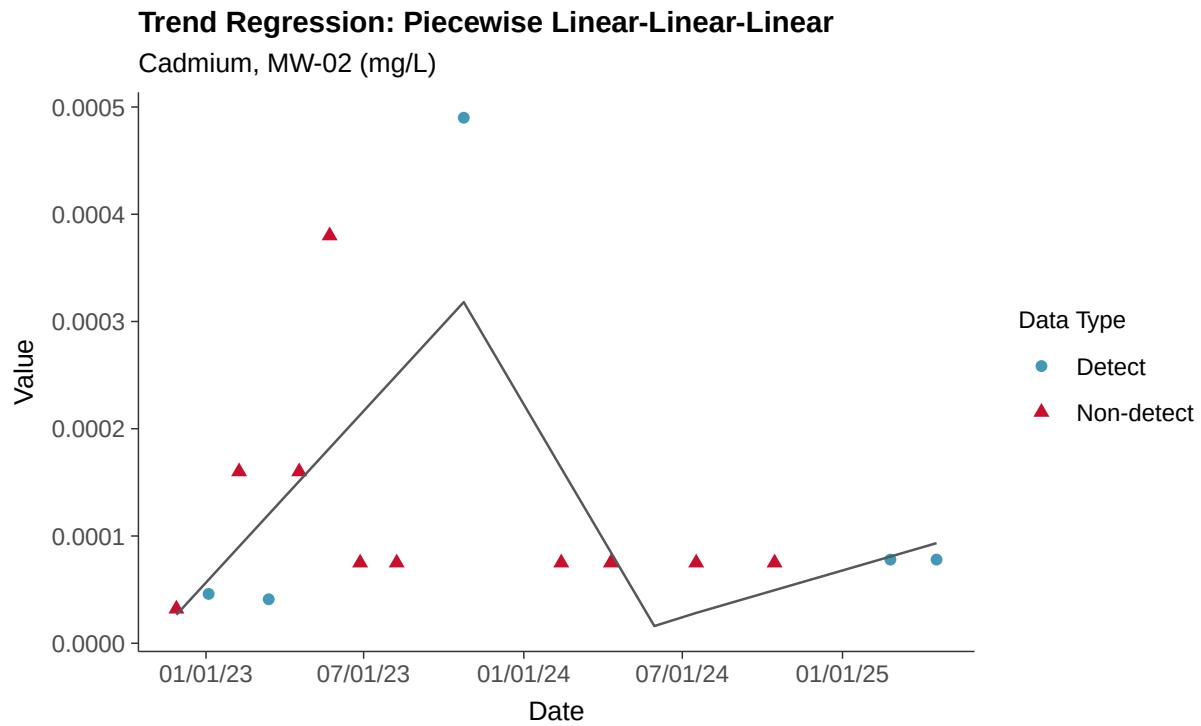
Cadmium, MW-02 (mg/L)



Trend Regression: Piecewise Linear-Linear

Cadmium, MW-02 (mg/L)



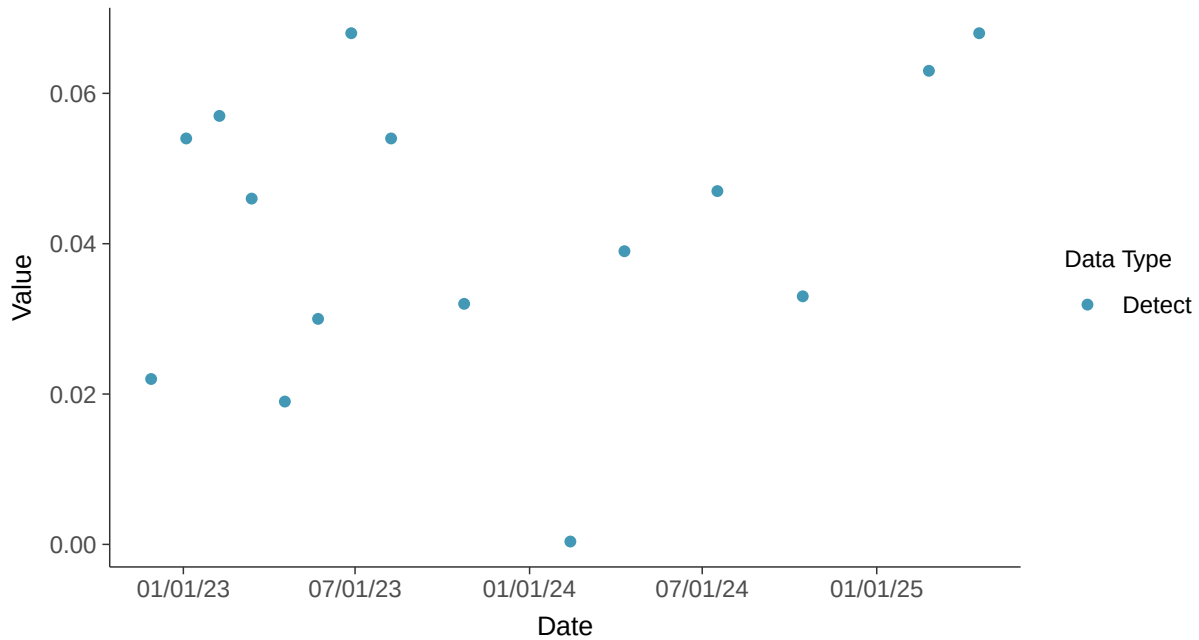


Appendix IV: Chromium, Total, MW-02

ID: 12_2_4_109

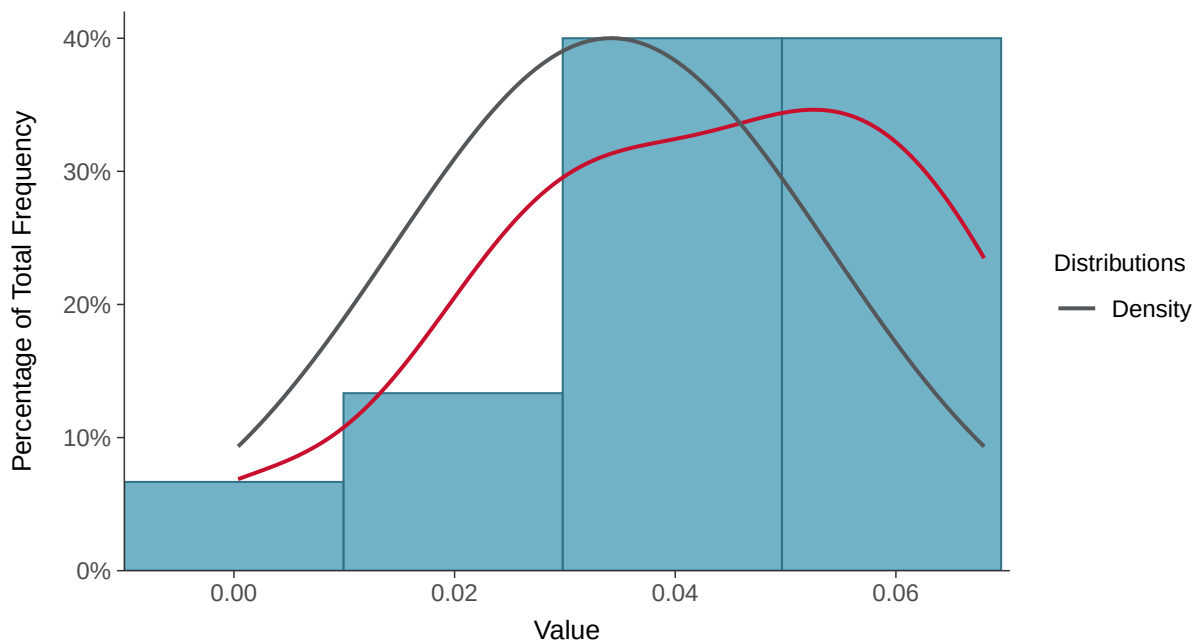
Scatter Plot

Chromium, Total, MW-02 (mg/L)



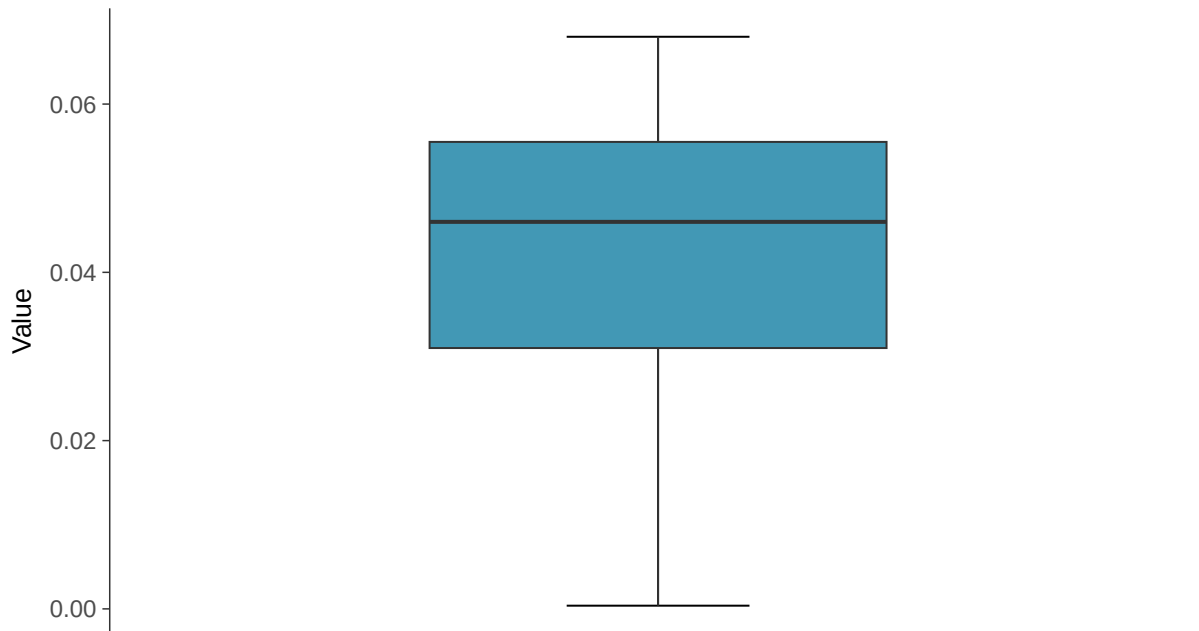
Histogram

Chromium, Total, MW-02 (mg/L)



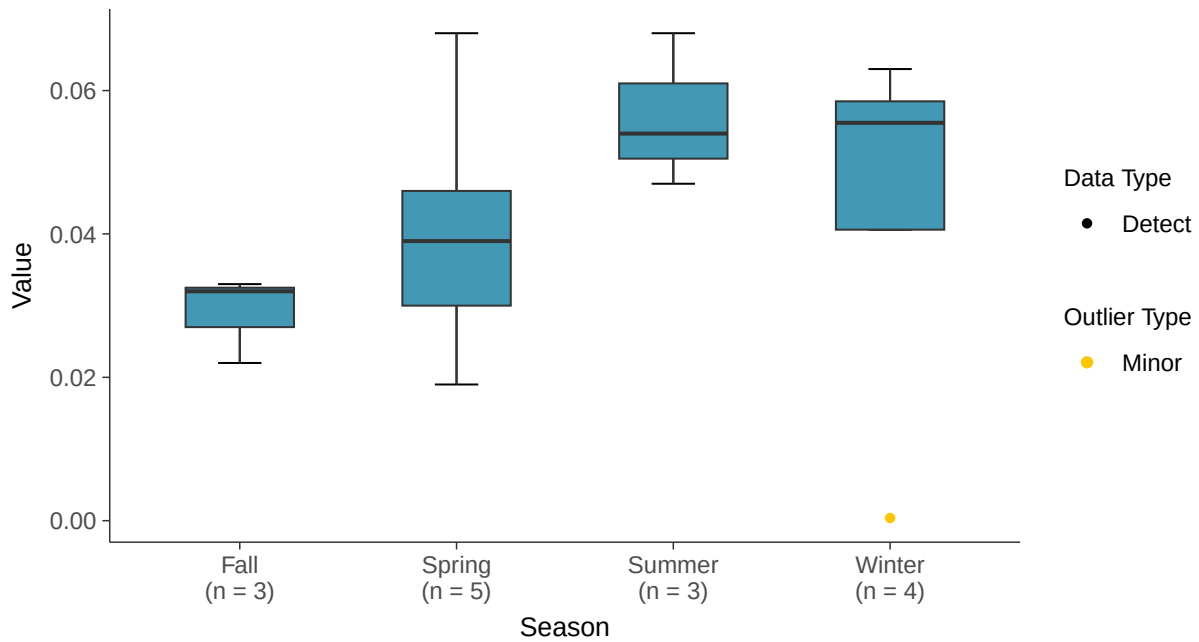
Boxplot

Chromium, Total, MW-02 (mg/L)



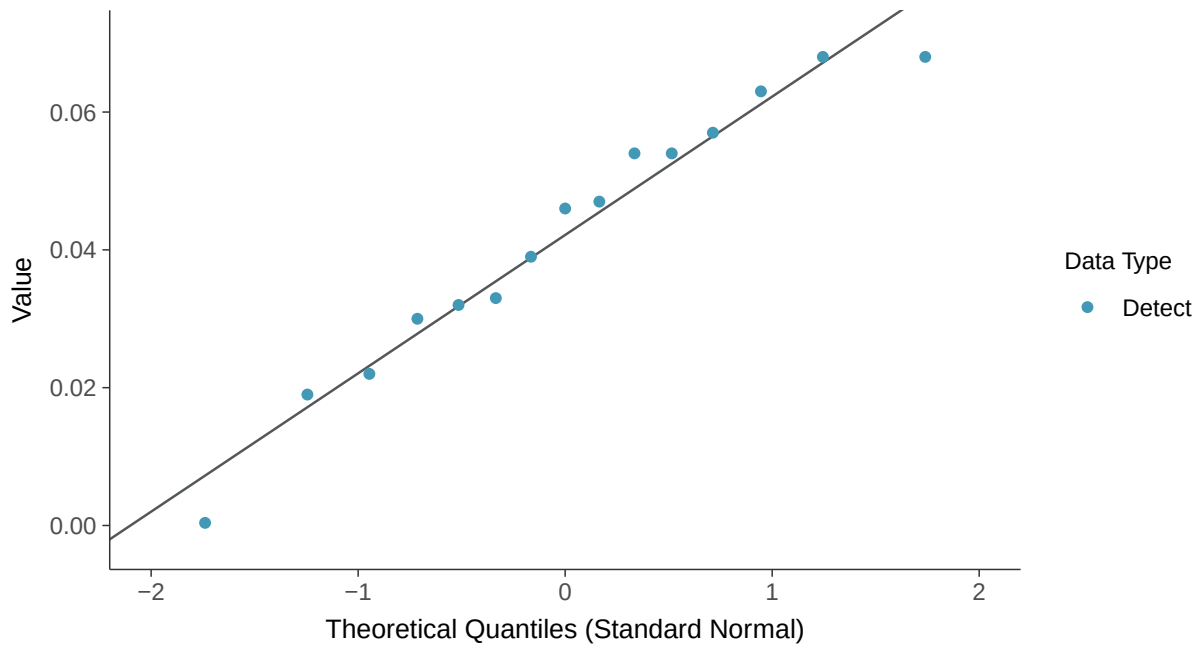
Boxplot by Season

Chromium, Total, MW-02 (mg/L)



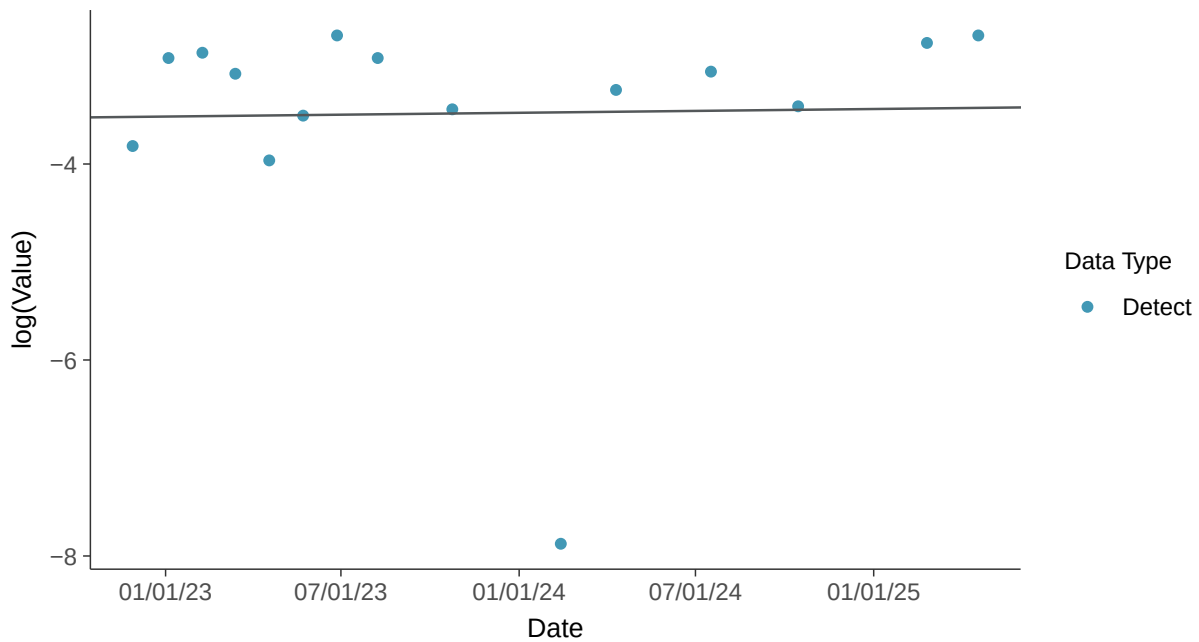
Normal Q-Q plot

Chromium, Total, MW-02 (mg/L)



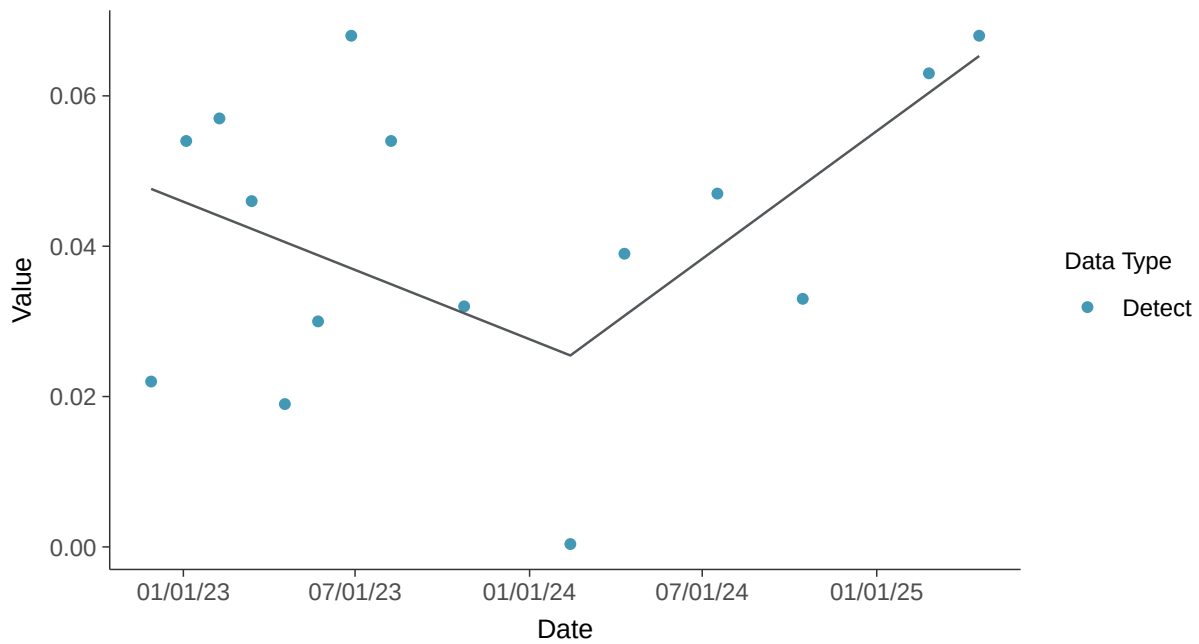
Trend Regression: Lognormal MLE

Chromium, Total, MW-02 (mg/L)



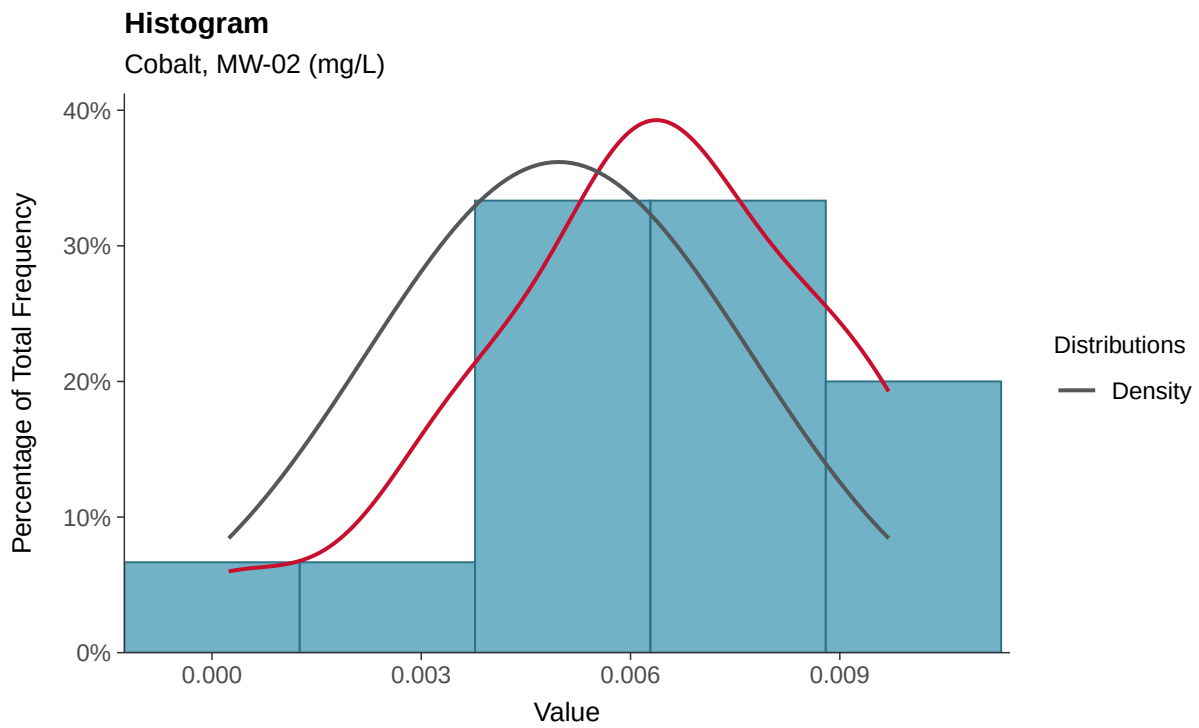
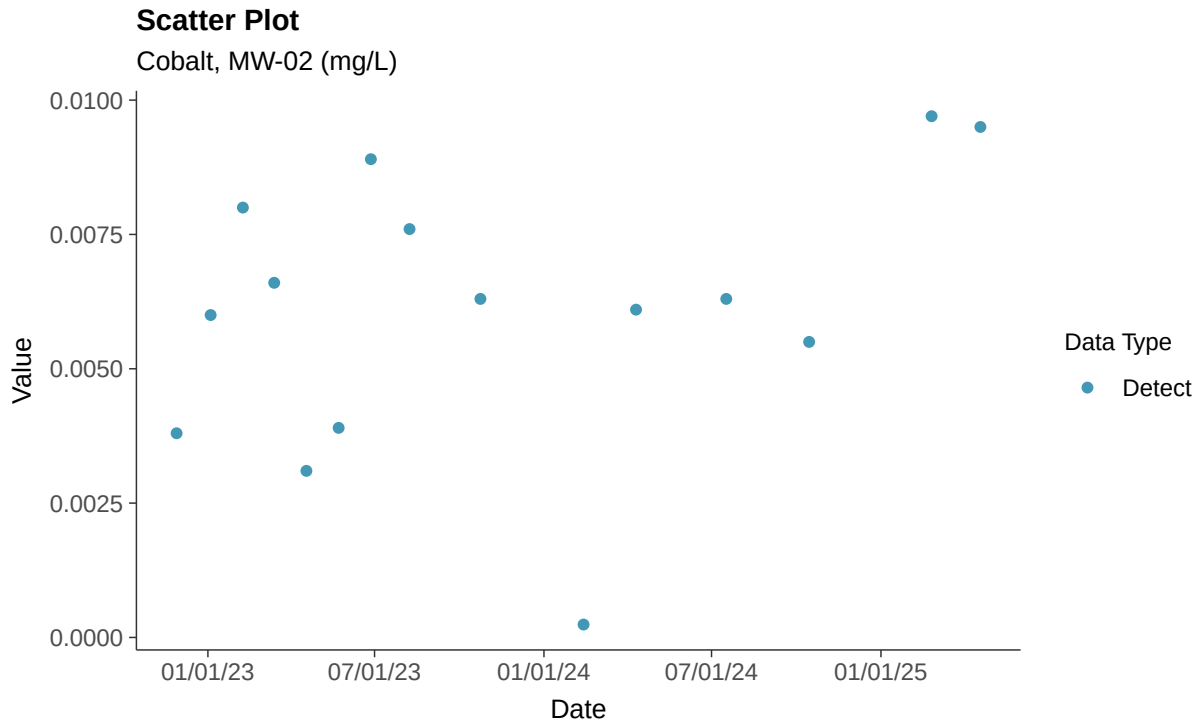
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-02 (mg/L)



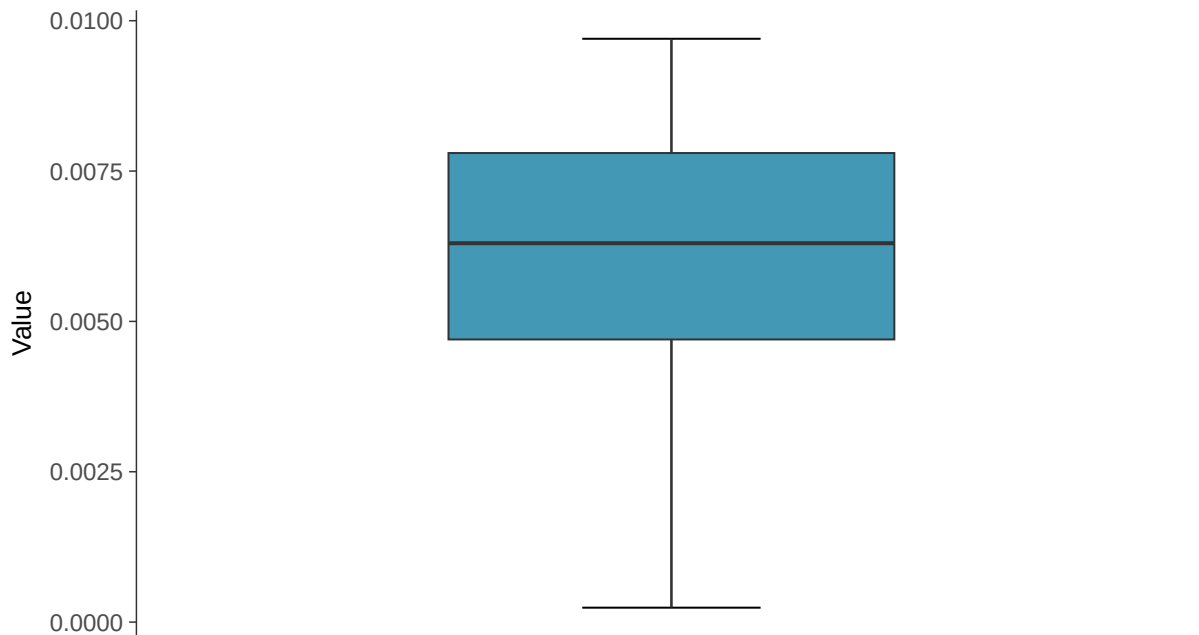
Appendix IV: Cobalt, MW-02

ID: 12_2_4_110



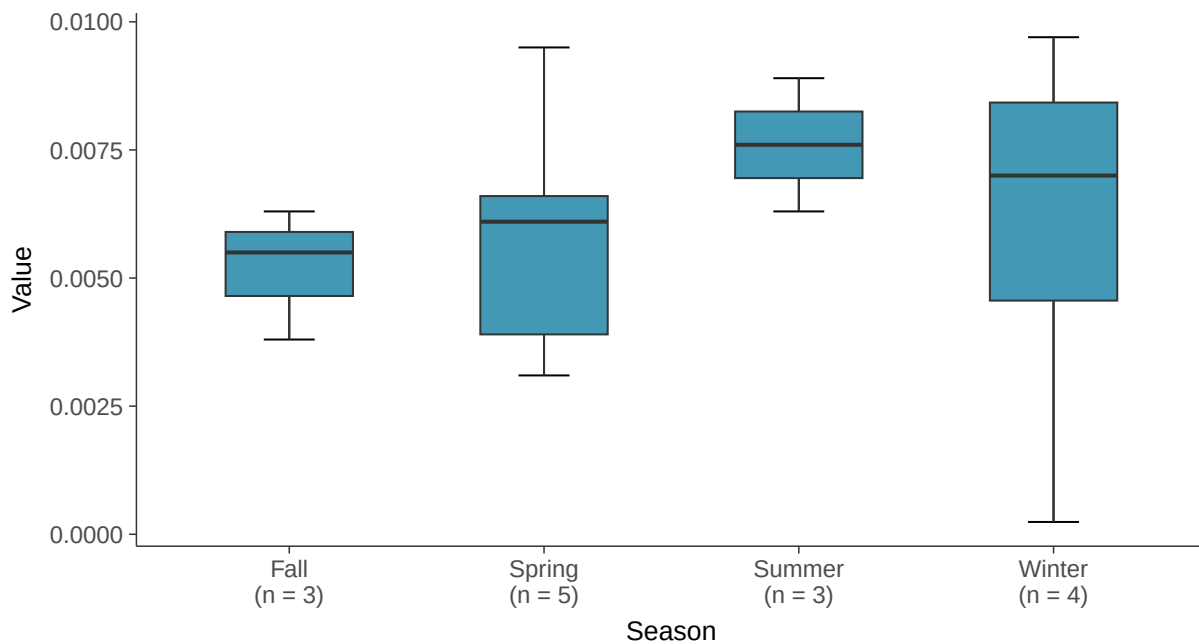
Boxplot

Cobalt, MW-02 (mg/L)

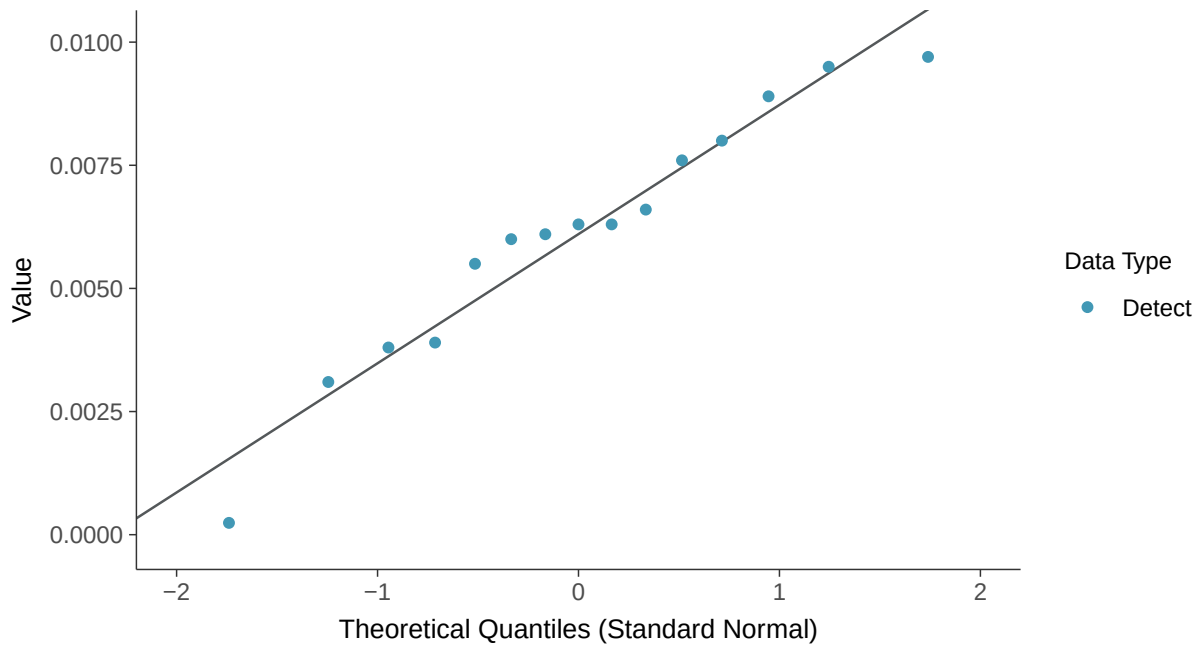


Boxplot by Season

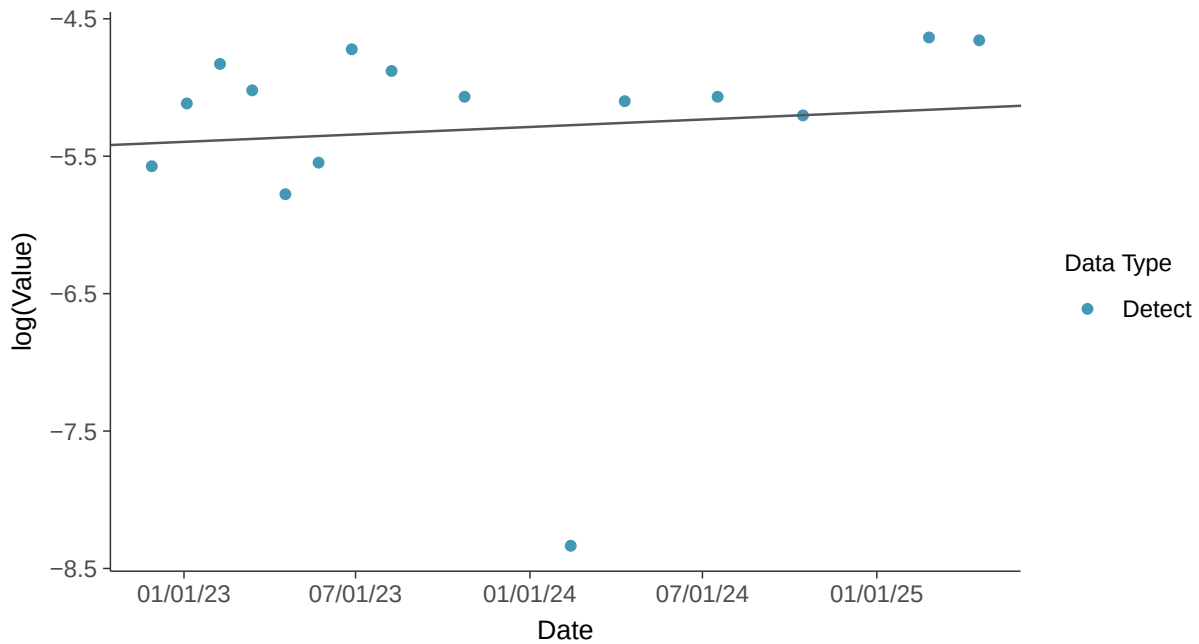
Cobalt, MW-02 (mg/L)



Normal Q-Q plot
Cobalt, MW-02 (mg/L)

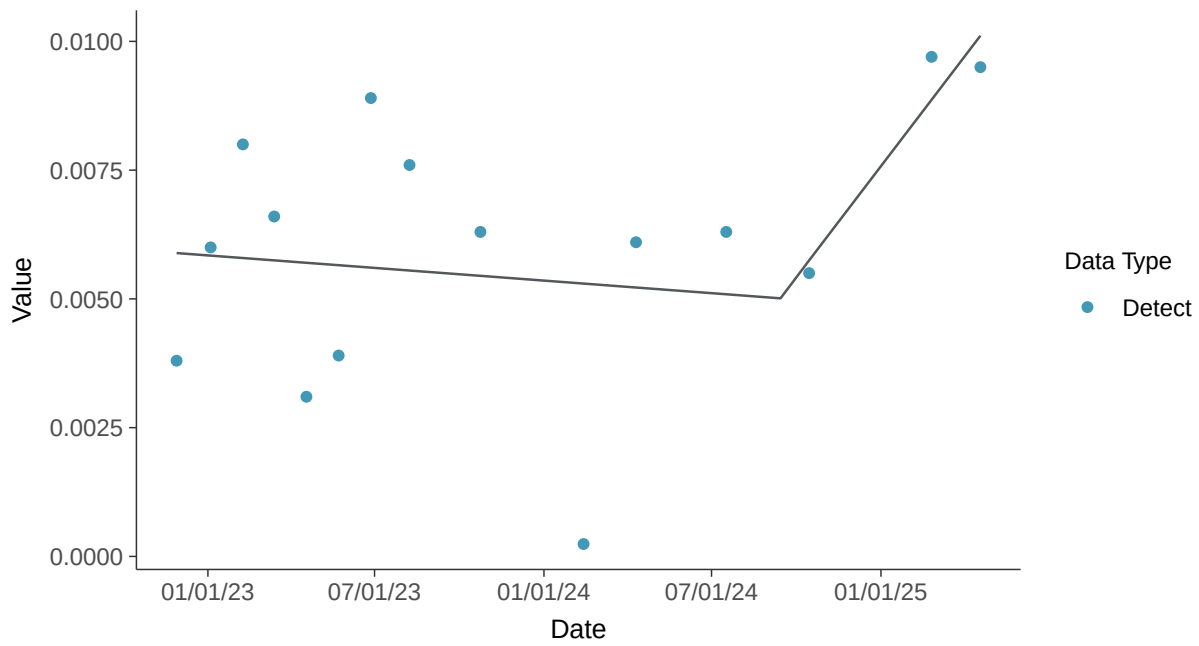


Trend Regression: Lognormal MLE
Cobalt, MW-02 (mg/L)





Trend Regression: Piecewise Linear-Linear
Cobalt, MW-02 (mg/L)

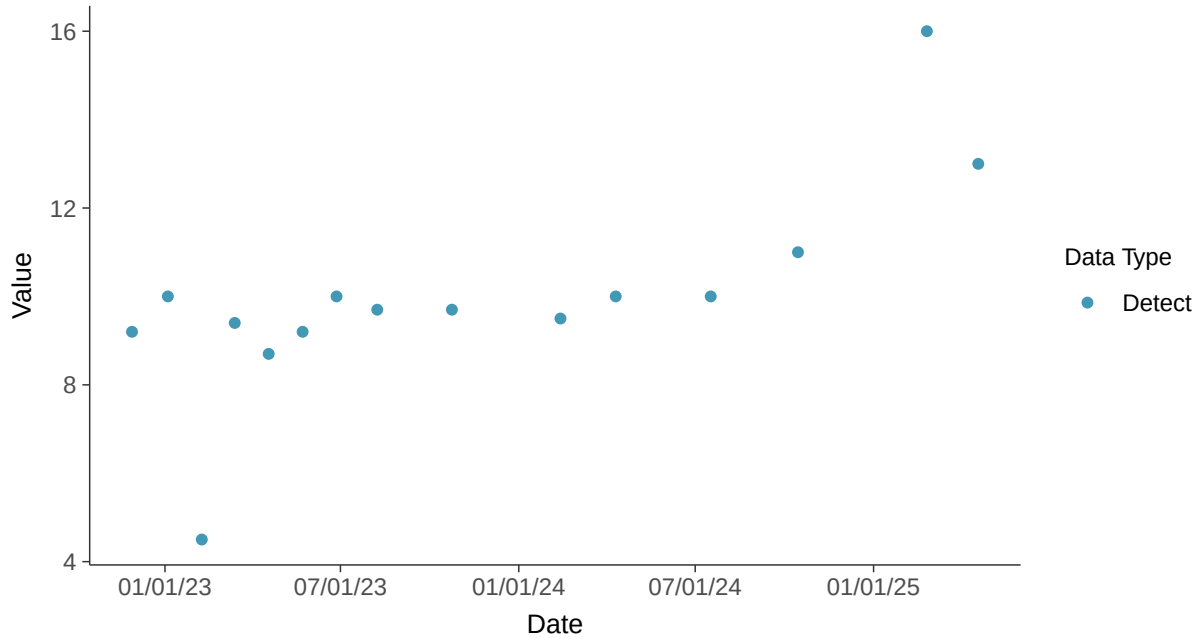


Appendix IV: Fluoride (App IV), MW-02

ID: 12_2_4_113

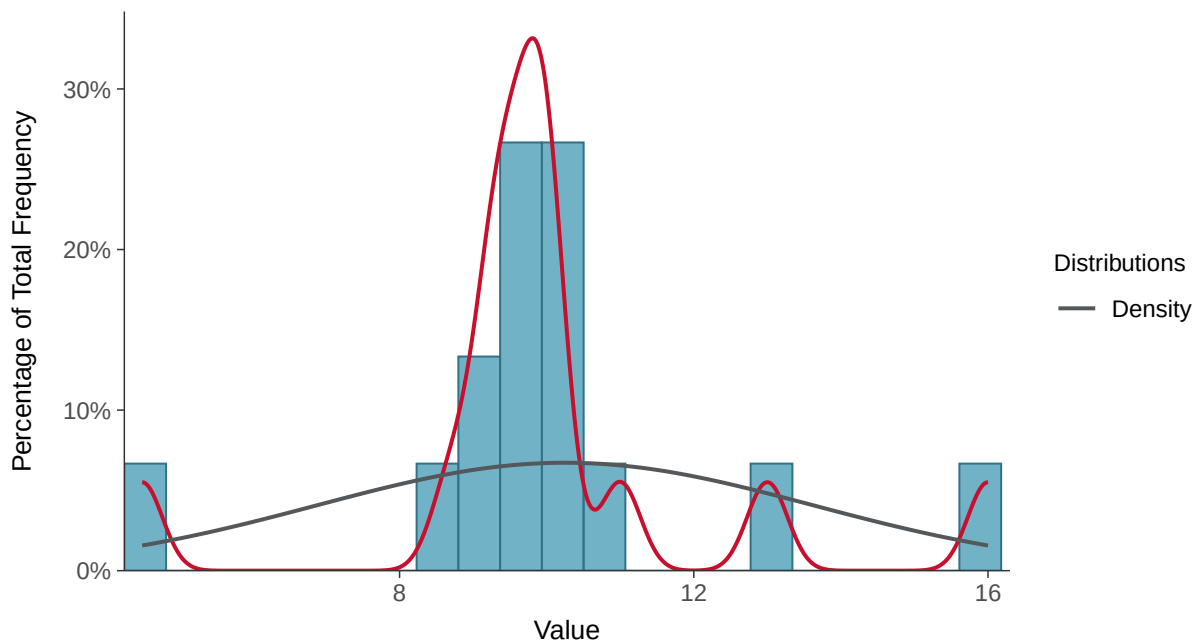
Scatter Plot

Fluoride (App IV), MW-02 (mg/L)



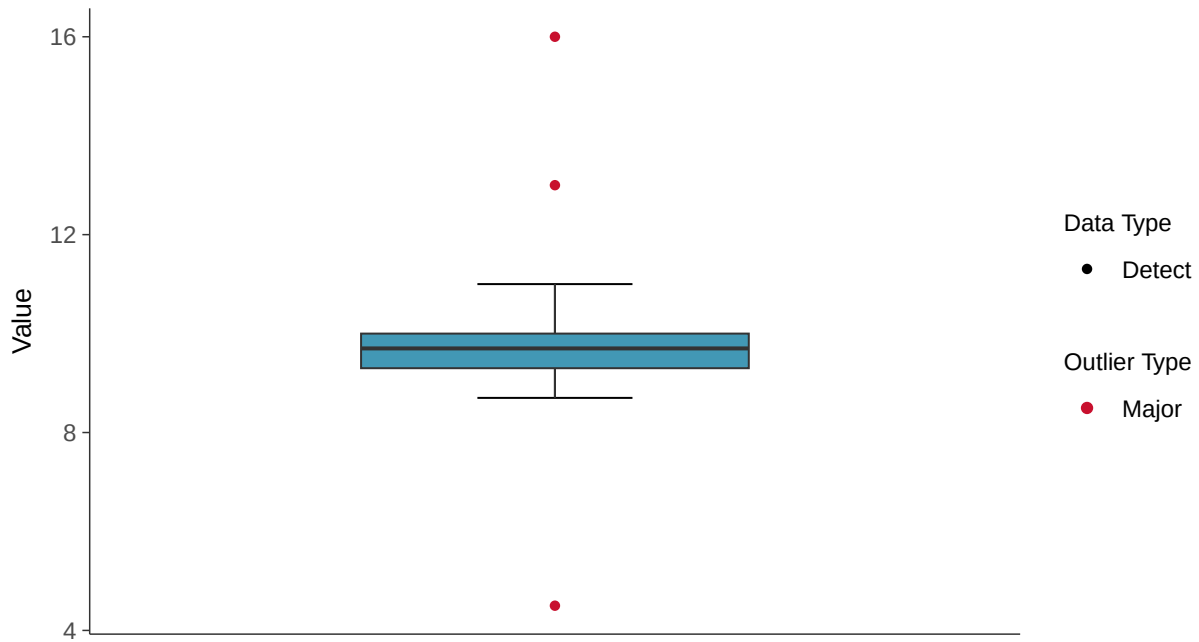
Histogram

Fluoride (App IV), MW-02 (mg/L)



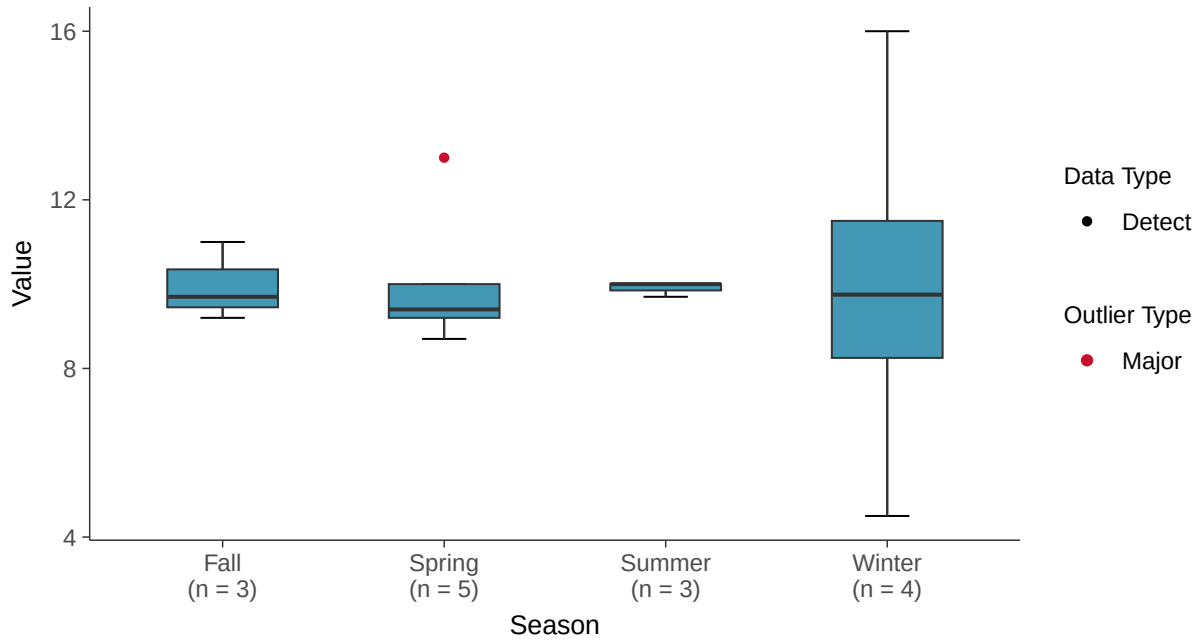
Boxplot

Fluoride (App IV), MW-02 (mg/L)



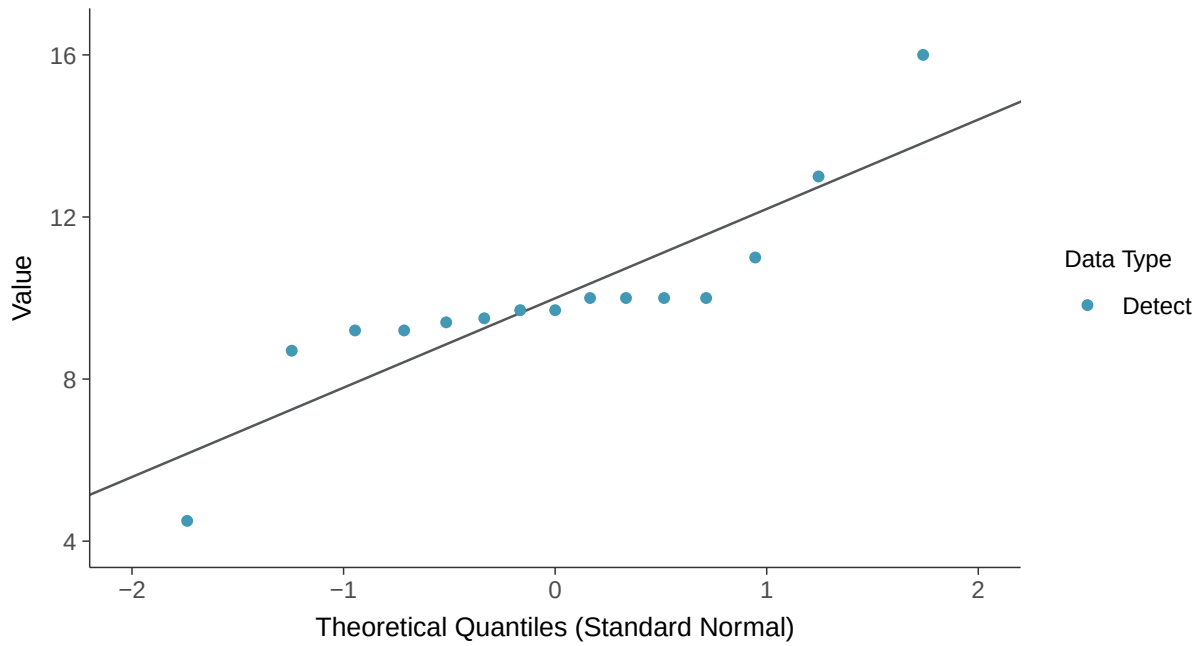
Boxplot by Season

Fluoride (App IV), MW-02 (mg/L)



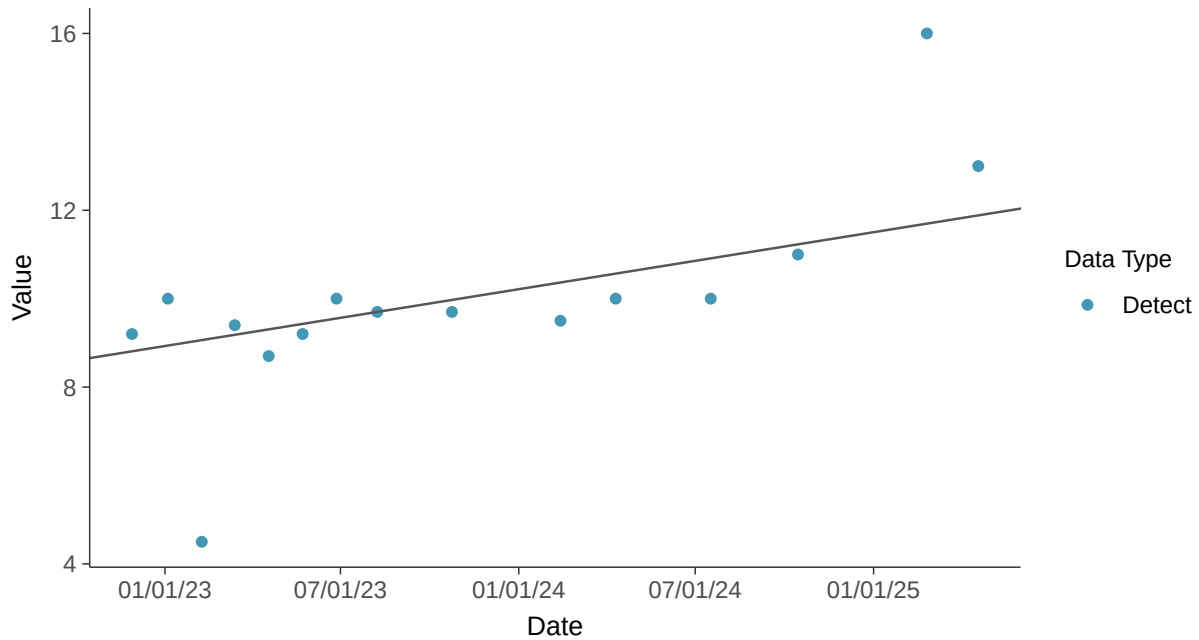
Normal Q-Q plot

Fluoride (App IV), MW-02 (mg/L)



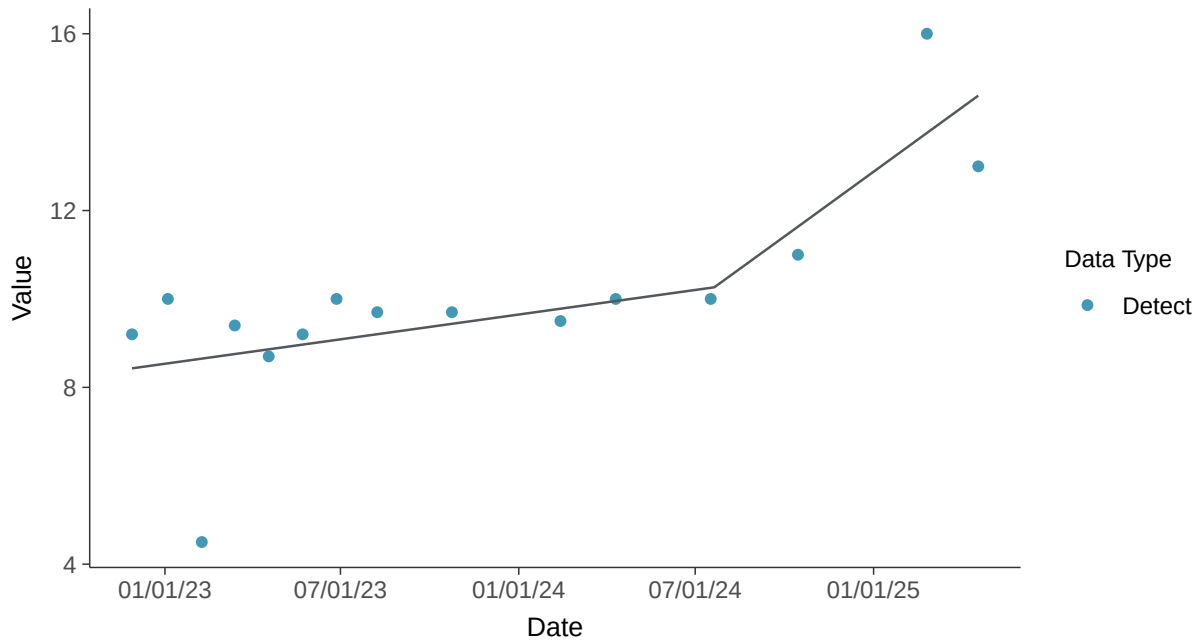
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Fluoride (App IV), MW-02 (mg/L)



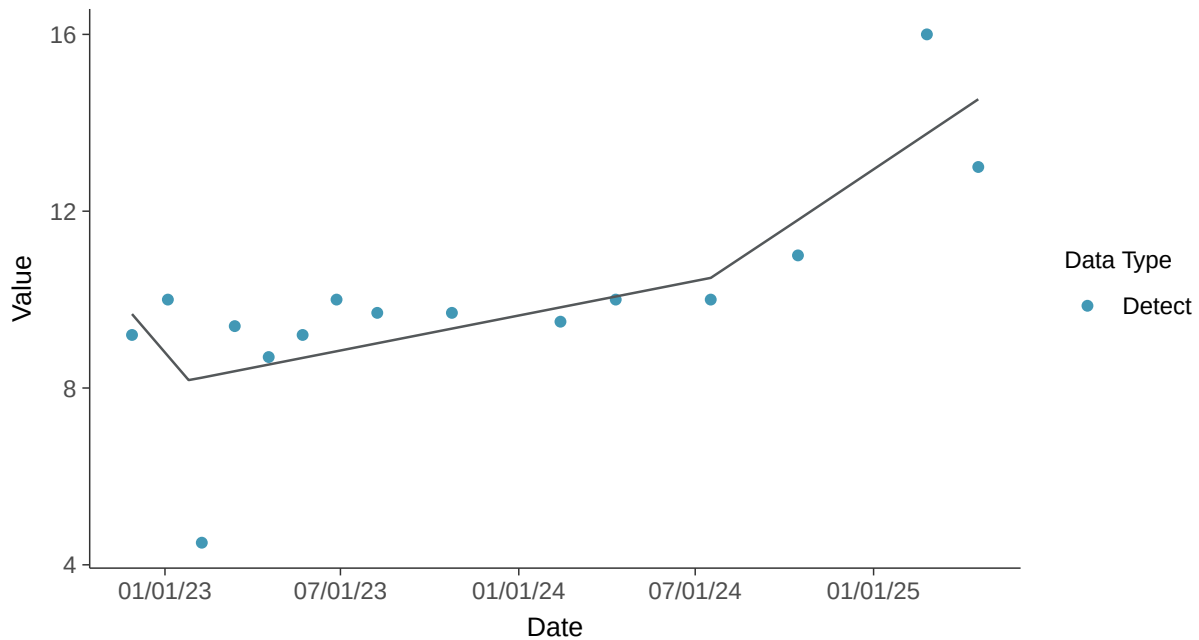
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-02 (mg/L)



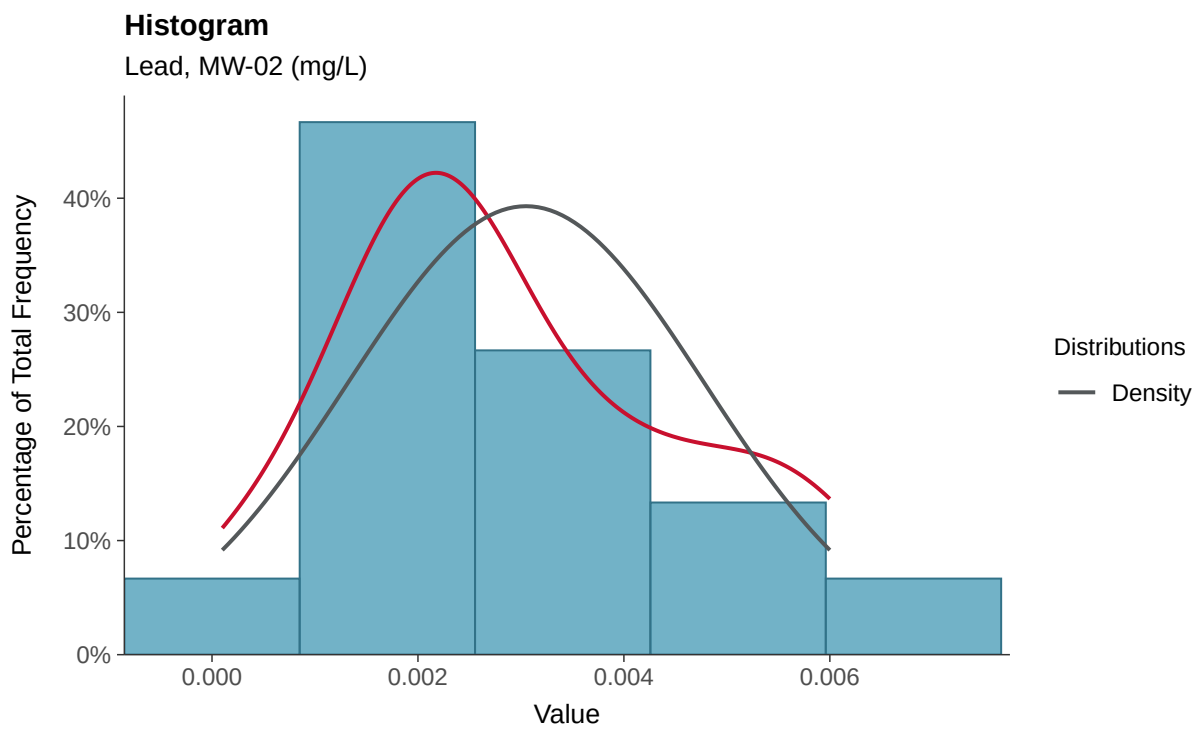
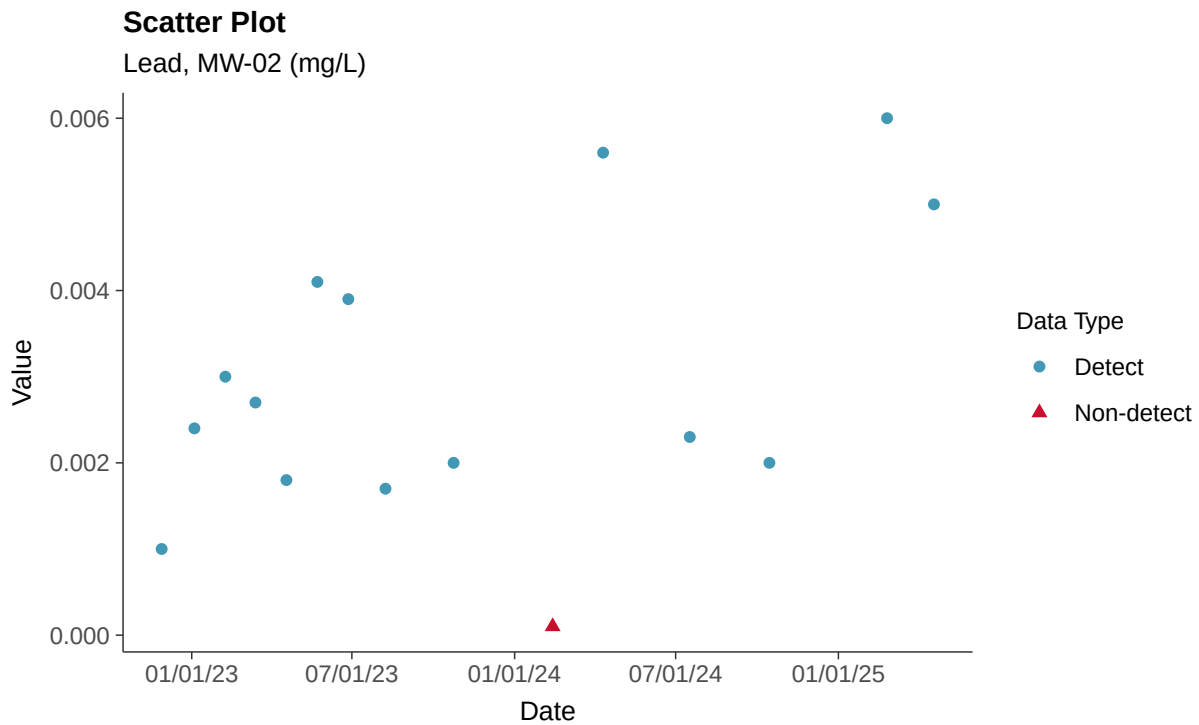
Trend Regression: Piecewise Linear-Linear-Linear

Fluoride (App IV), MW-02 (mg/L)



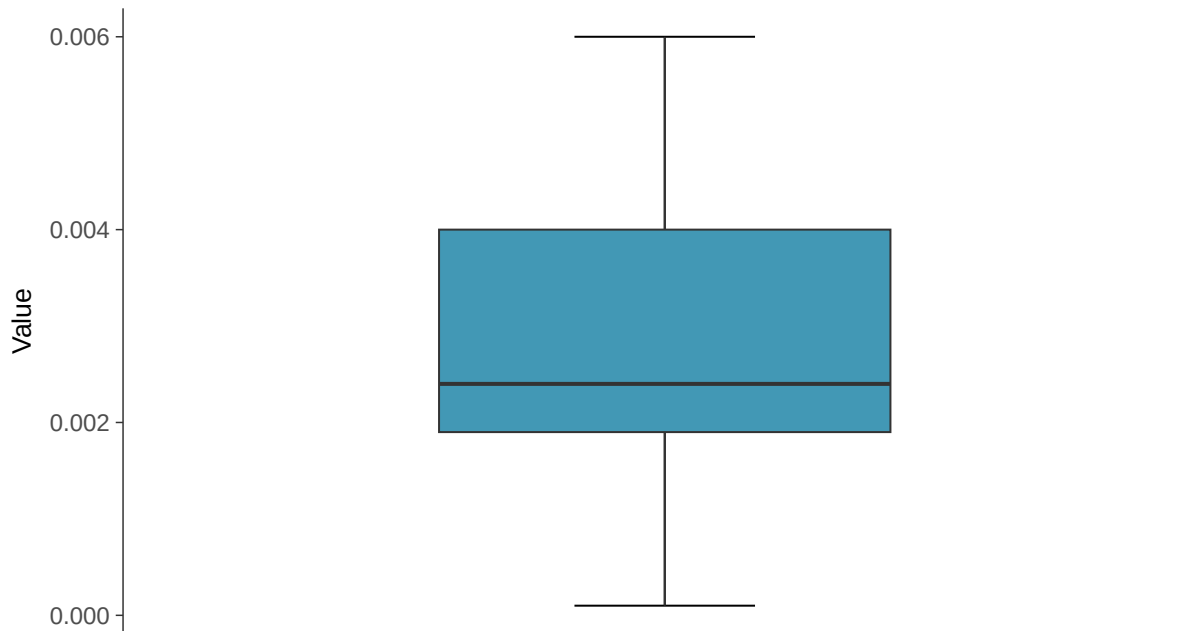
Appendix IV: Lead, MW-02

ID: 12_2_4_115



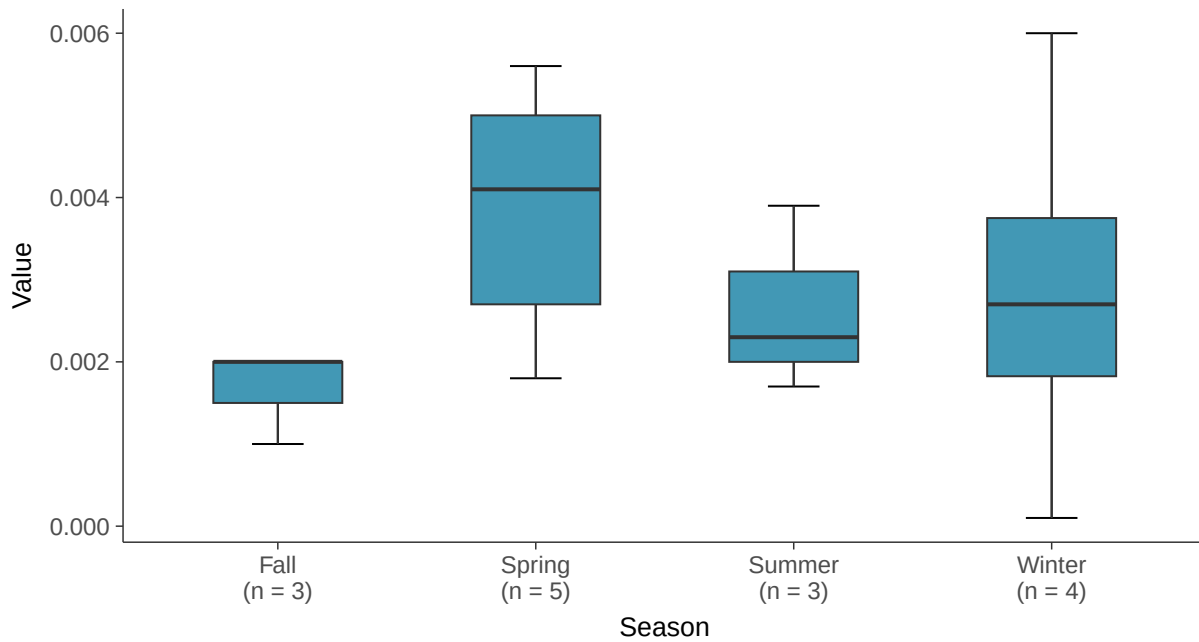
Boxplot

Lead, MW-02 (mg/L)



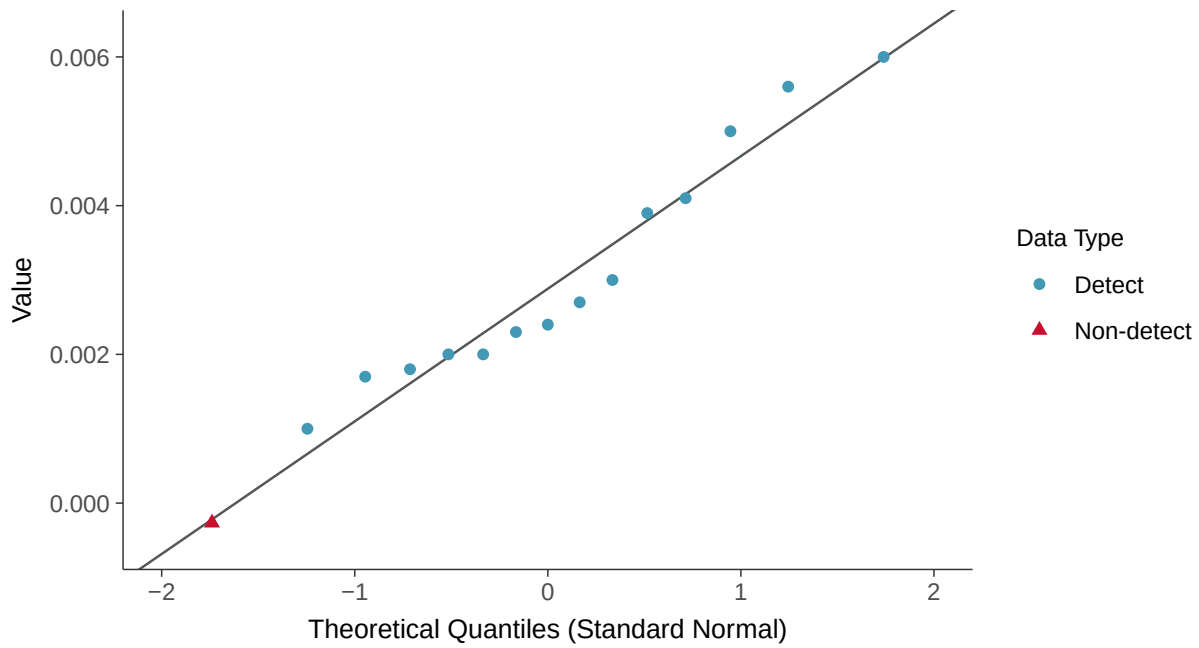
Boxplot by Season

Lead, MW-02 (mg/L)



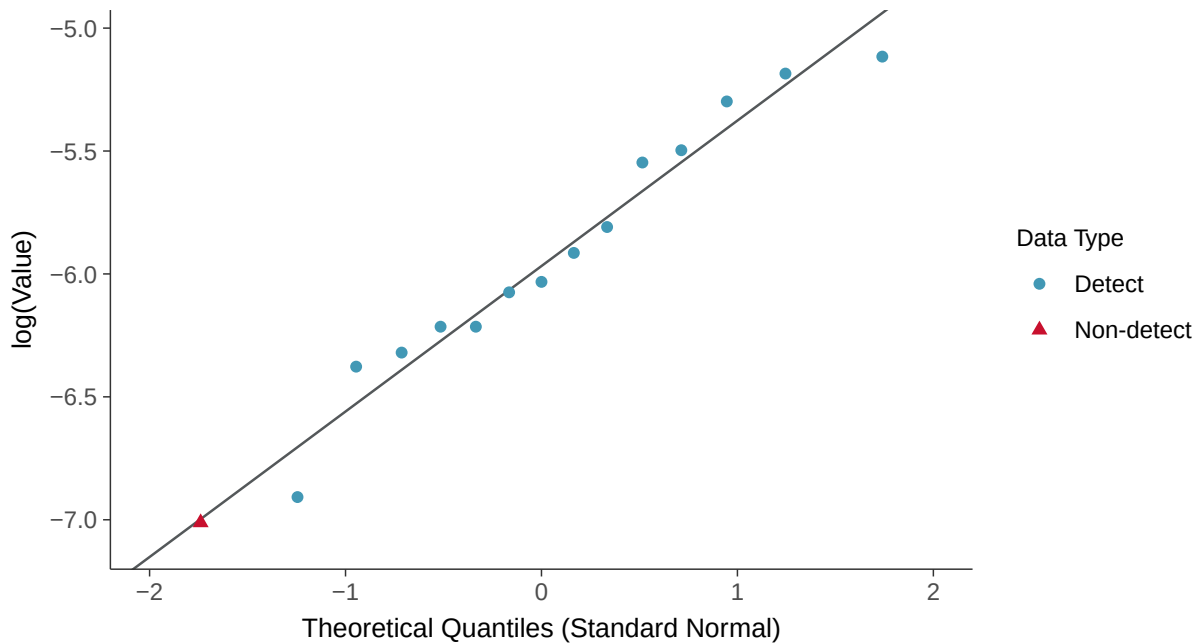
Normal Q-Q plot using ROS Imputed Estimates

Lead, MW-02 (mg/L)



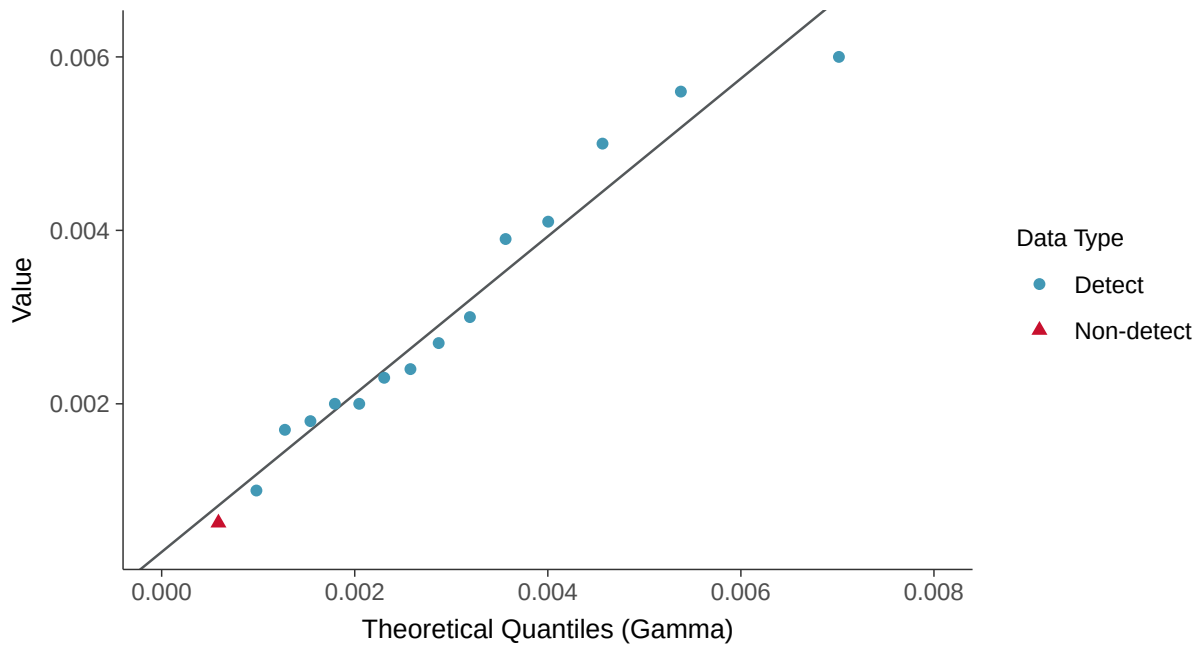
Lognormal Q-Q plot using ROS Imputed Estimates

Lead, MW-02 (mg/L)



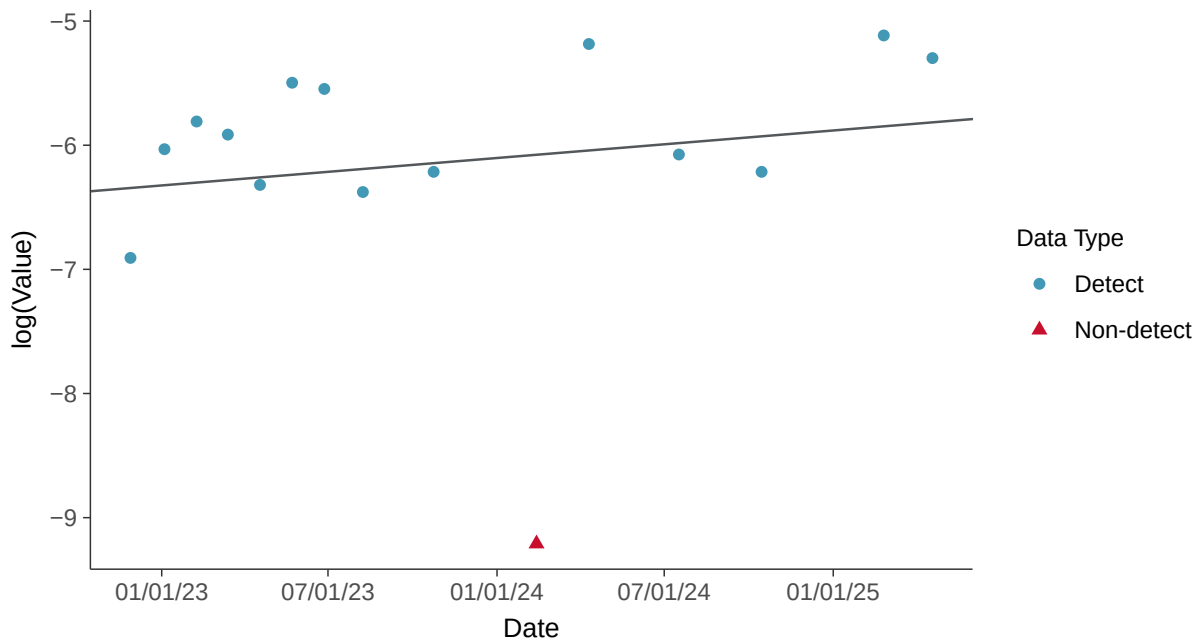
Gamma Q-Q plot using ROS Imputed Estimates

Lead, MW-02 (mg/L)



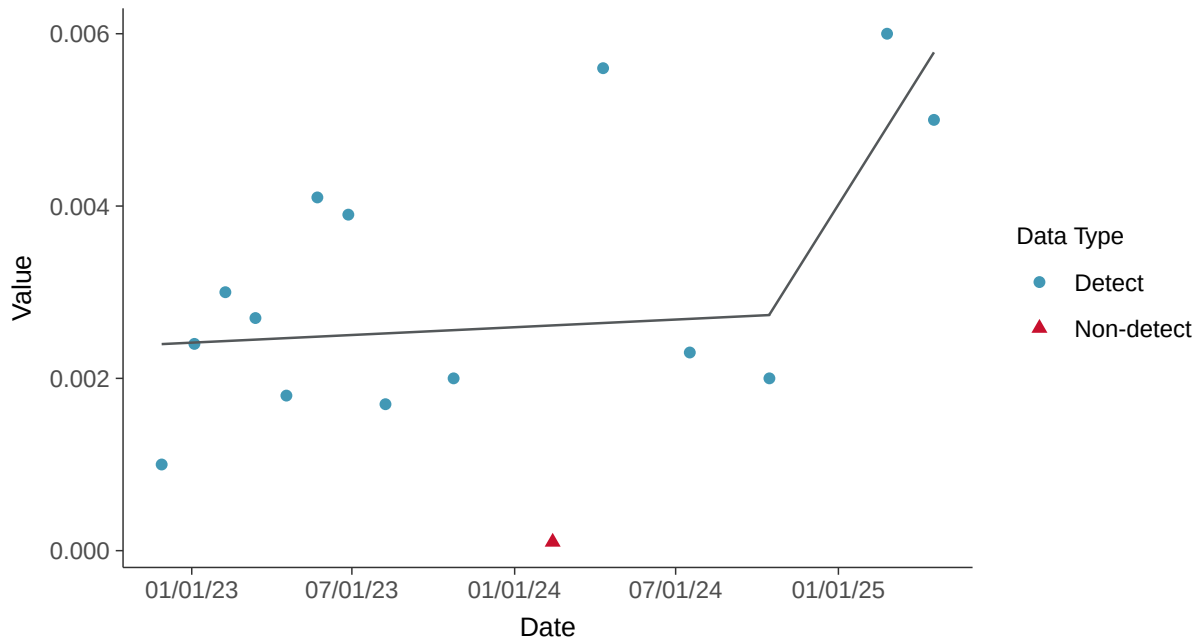
Trend Regression: Lognormal MLE

Lead, MW-02 (mg/L)



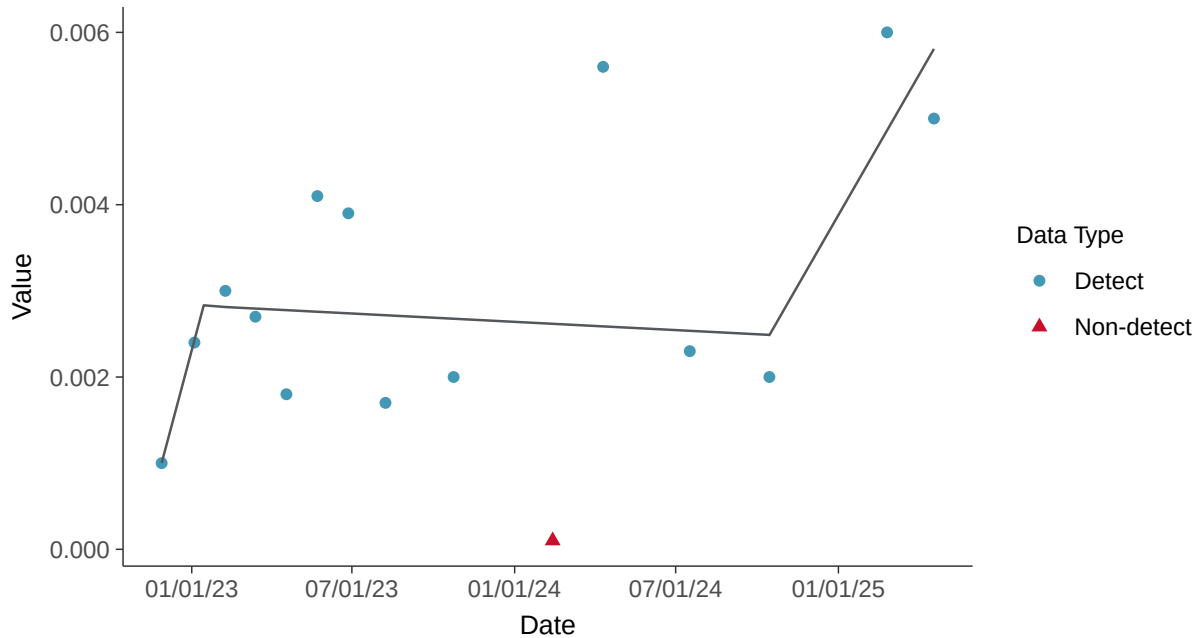
Trend Regression: Piecewise Linear-Linear

Lead, MW-02 (mg/L)



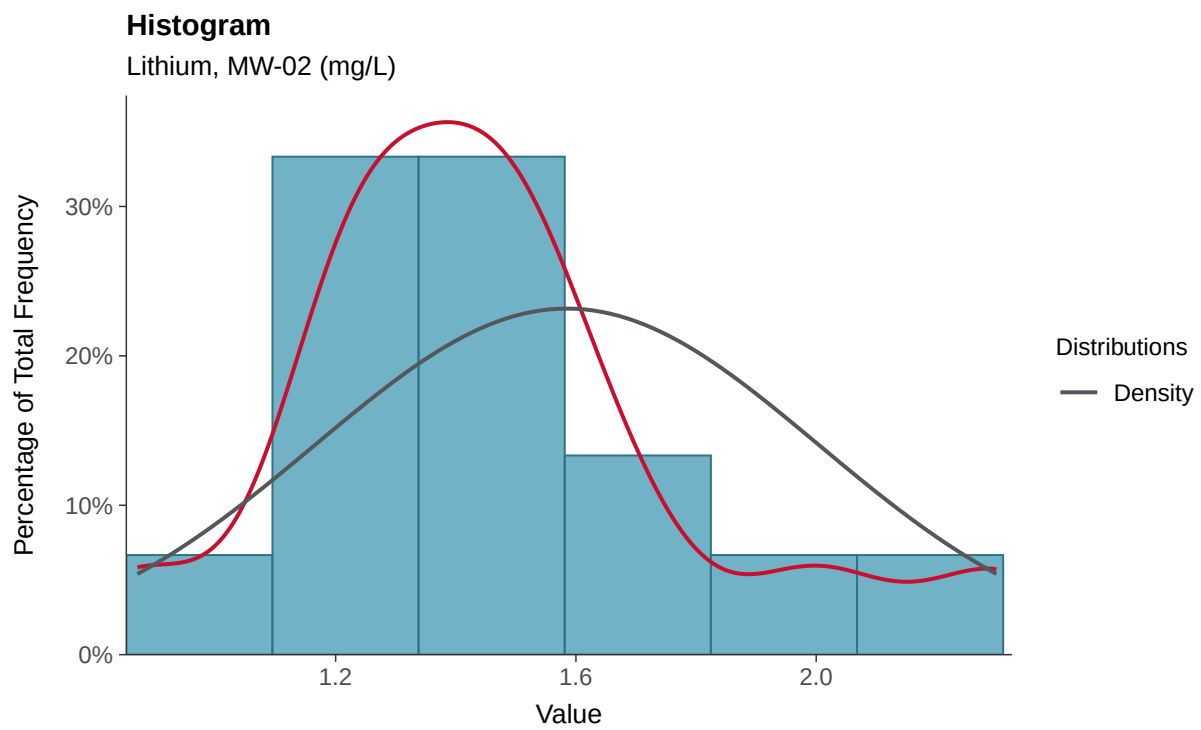
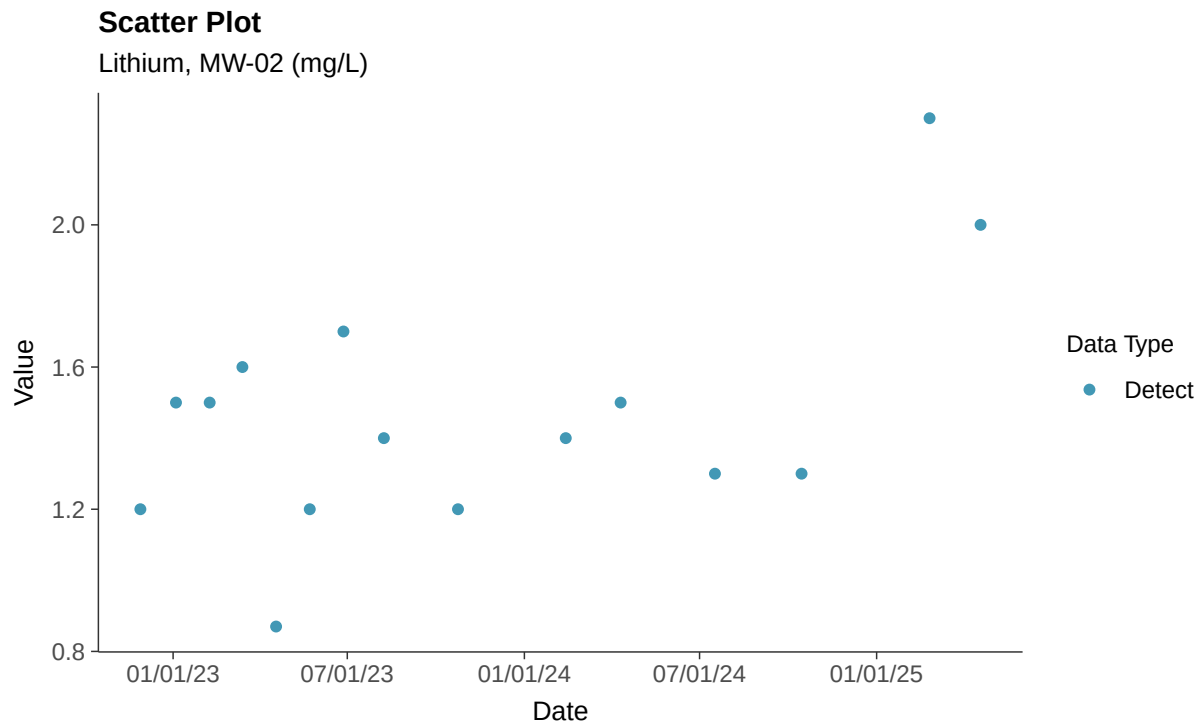
Trend Regression: Piecewise Linear-Linear-Linear

Lead, MW-02 (mg/L)



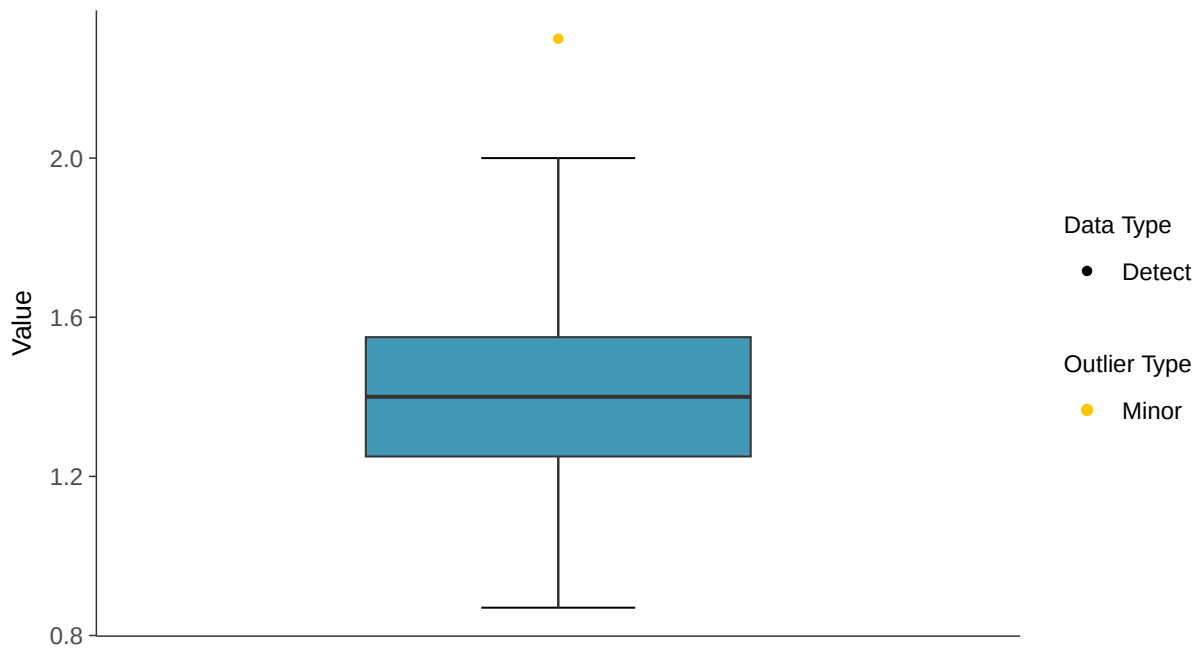
Appendix IV: Lithium, MW-02

ID: 12_2_4_116



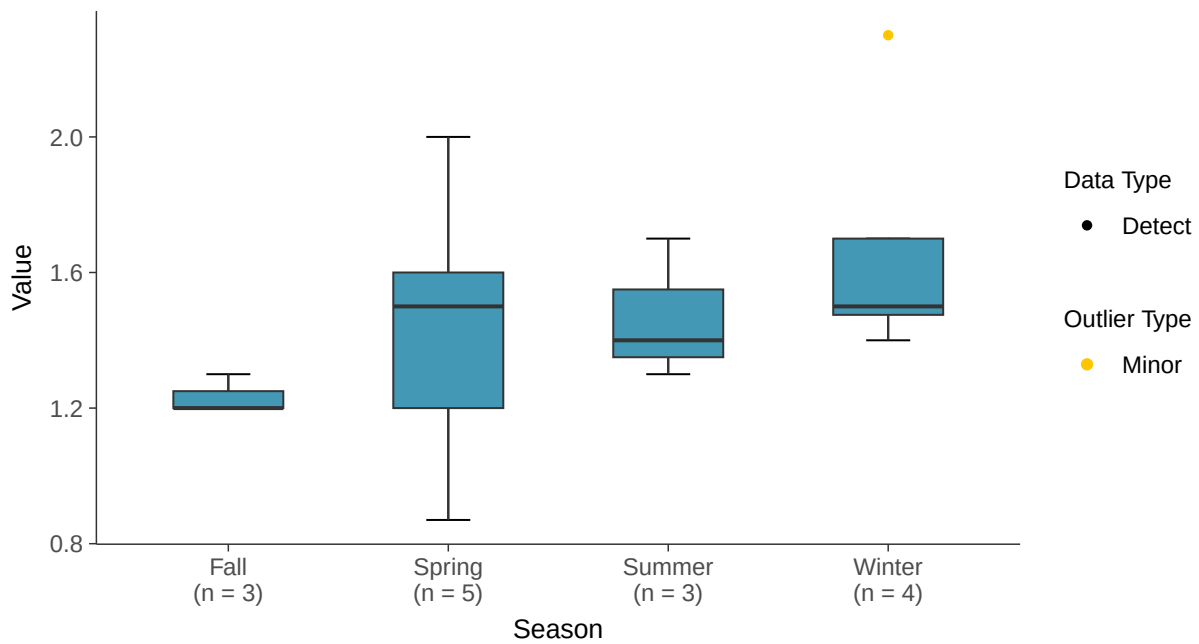
Boxplot

Lithium, MW-02 (mg/L)

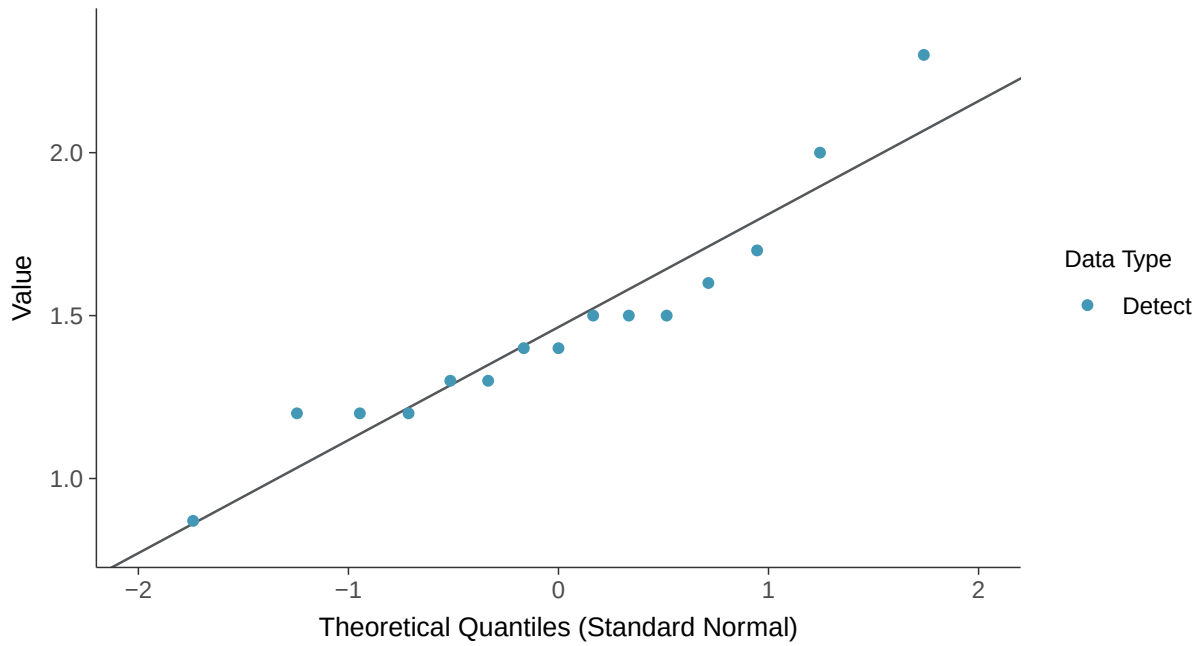


Boxplot by Season

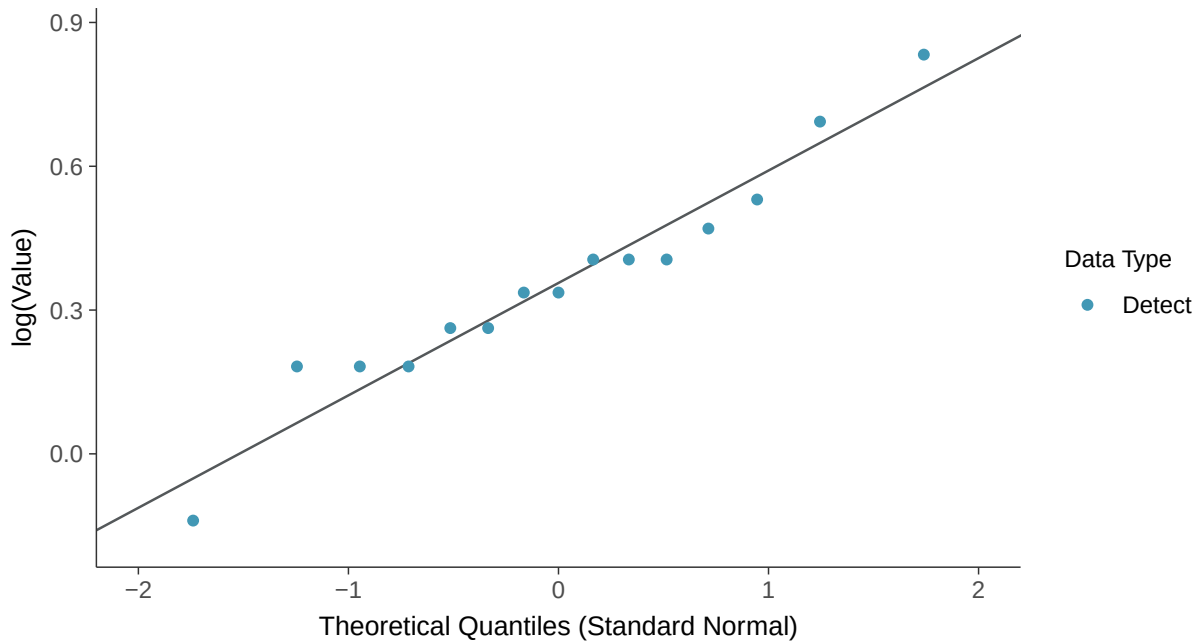
Lithium, MW-02 (mg/L)



Normal Q-Q plot
Lithium, MW-02 (mg/L)

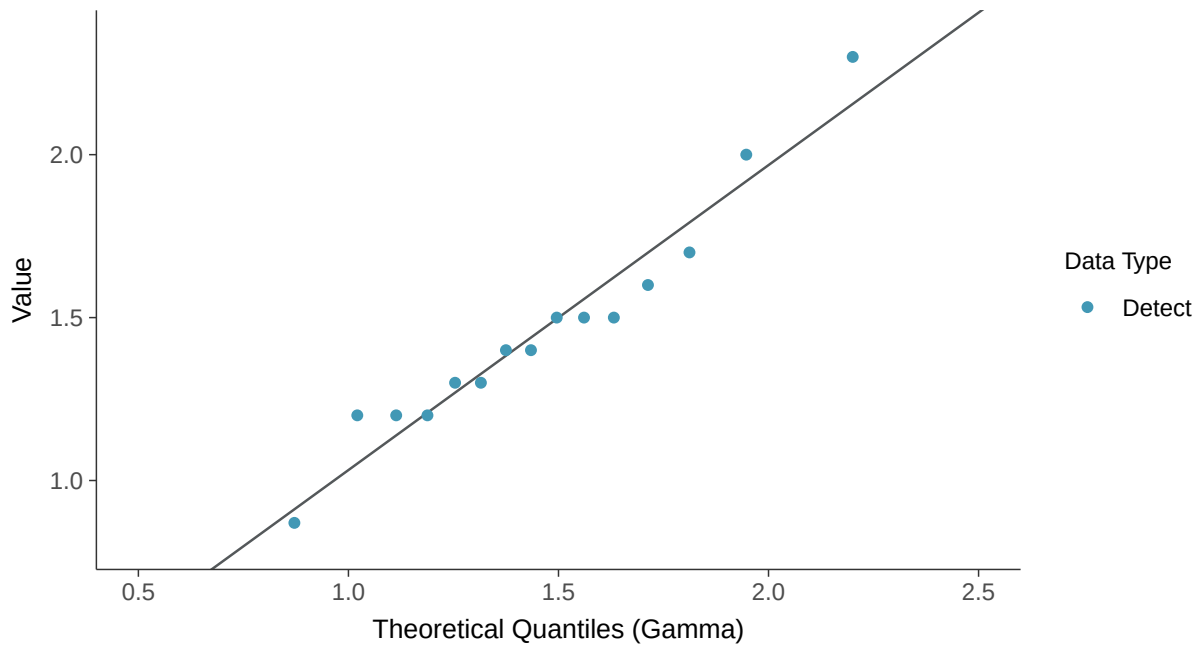


Lognormal Q-Q plot
Lithium, MW-02 (mg/L)



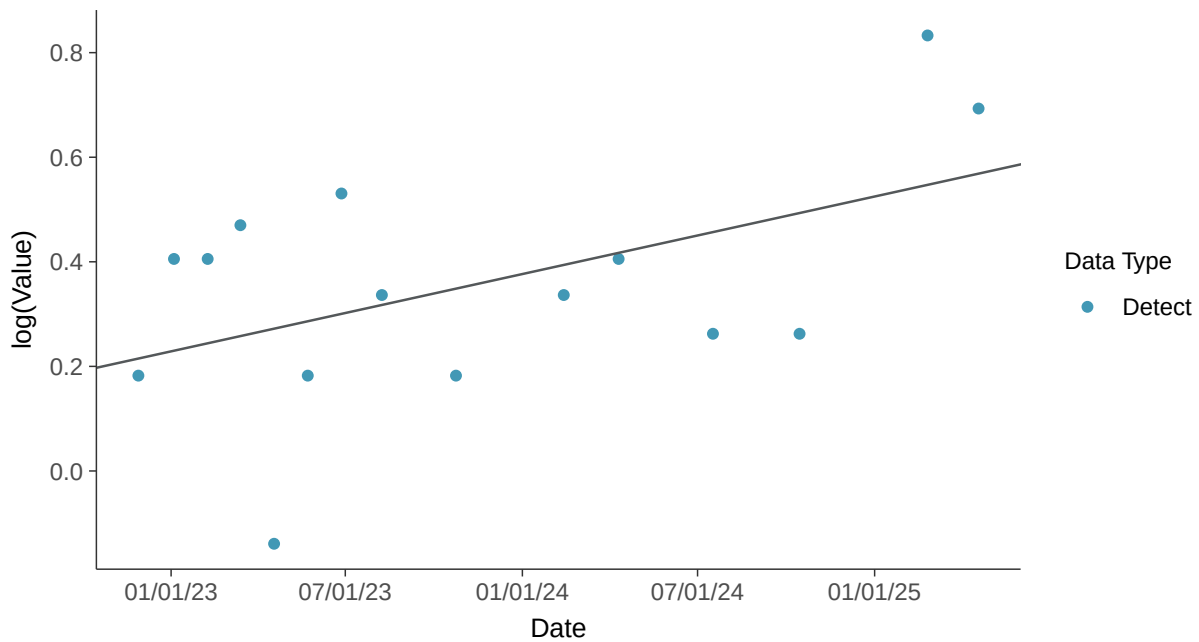
Gamma Q-Q plot

Lithium, MW-02 (mg/L)



Trend Regression: Lognormal MLE

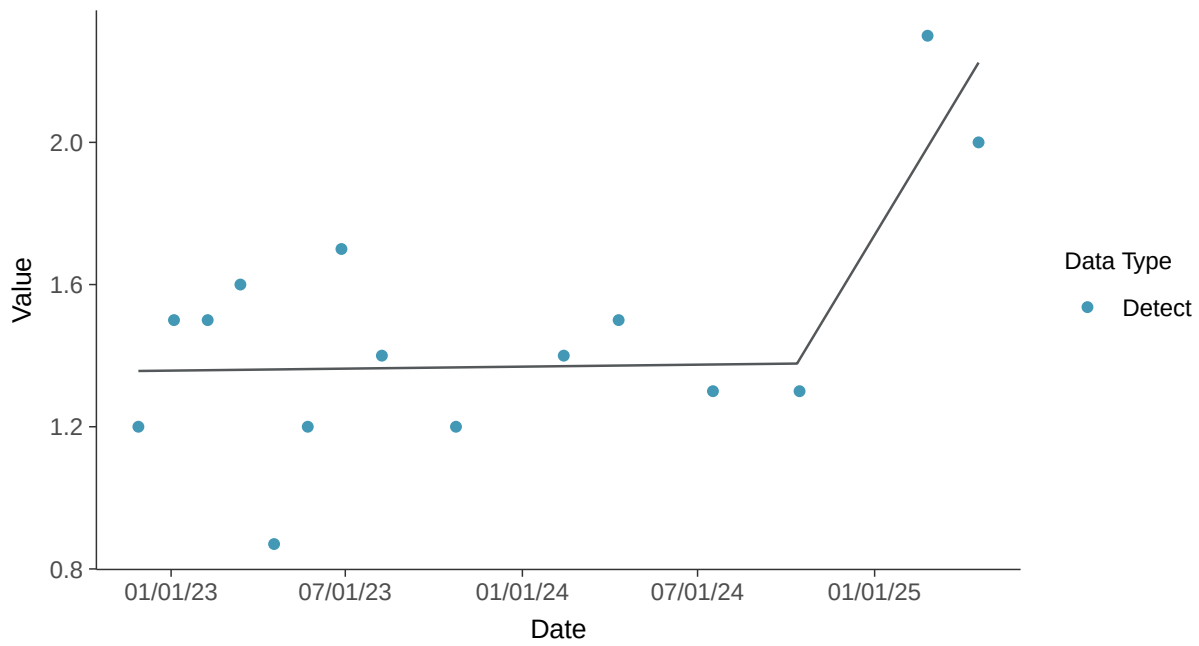
Lithium, MW-02 (mg/L)





Trend Regression: Piecewise Linear-Linear

Lithium, MW-02 (mg/L)

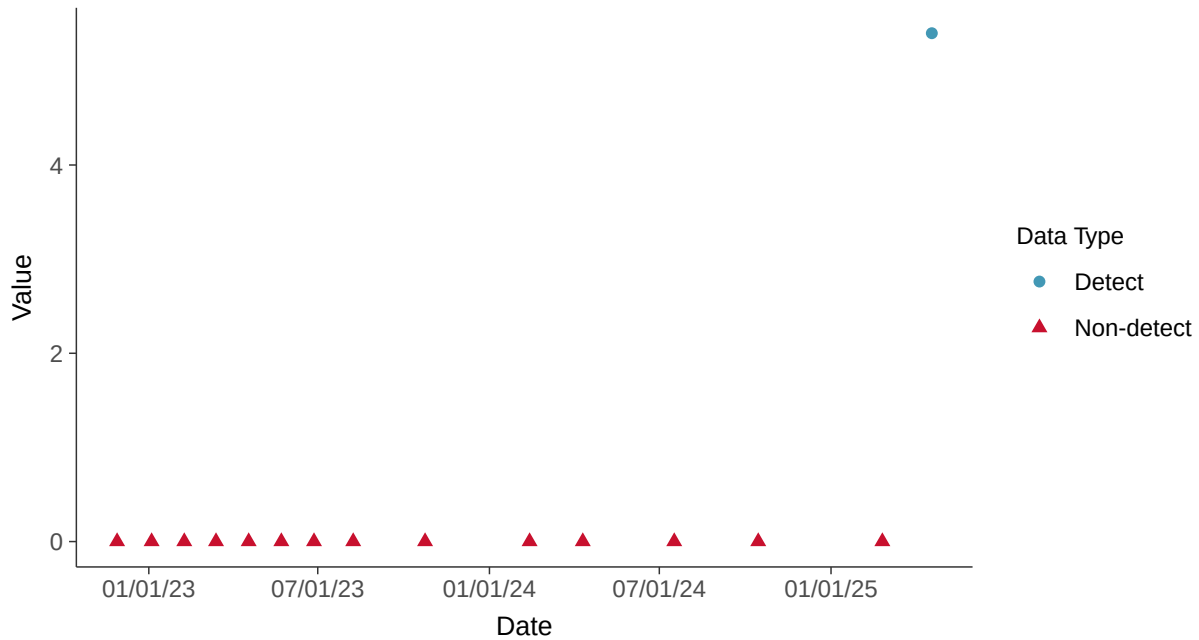


Appendix IV: Mercury, MW-02

ID: 12_2_4_117

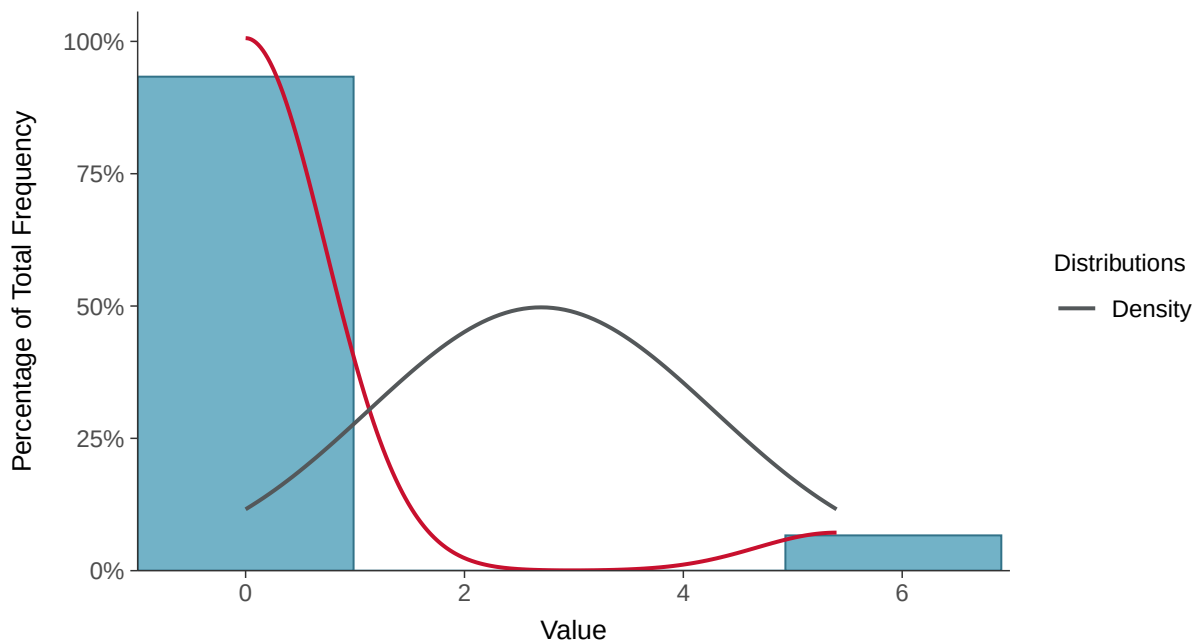
Scatter Plot

Mercury, MW-02 (mg/L)



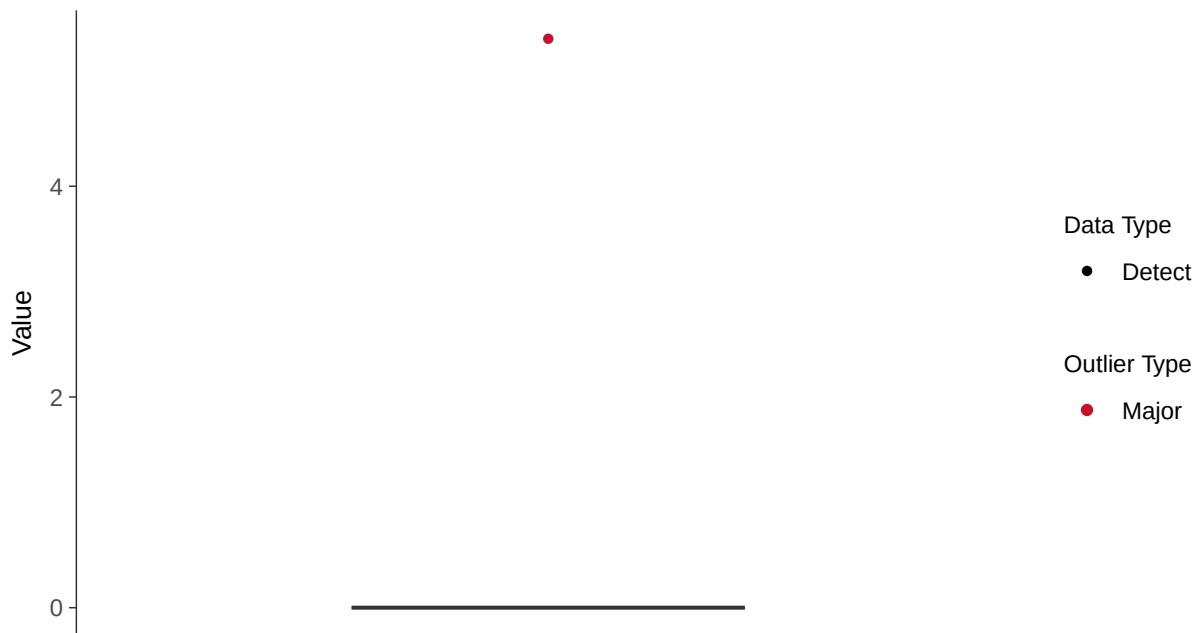
Histogram

Mercury, MW-02 (mg/L)



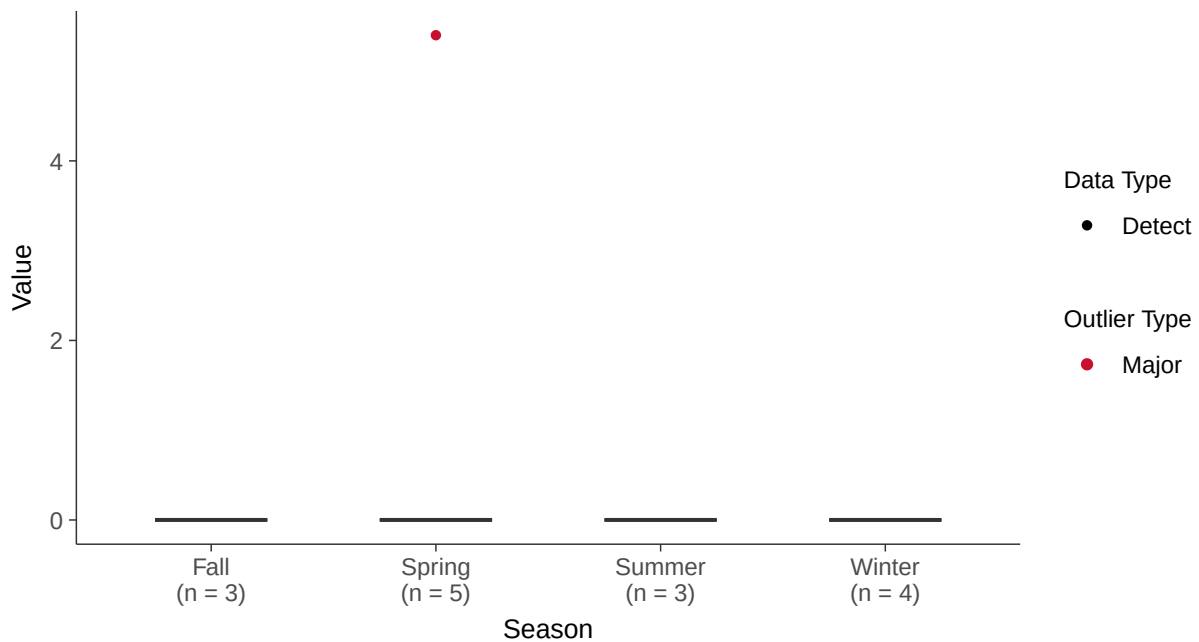
Boxplot

Mercury, MW-02 (mg/L)



Boxplot by Season

Mercury, MW-02 (mg/L)

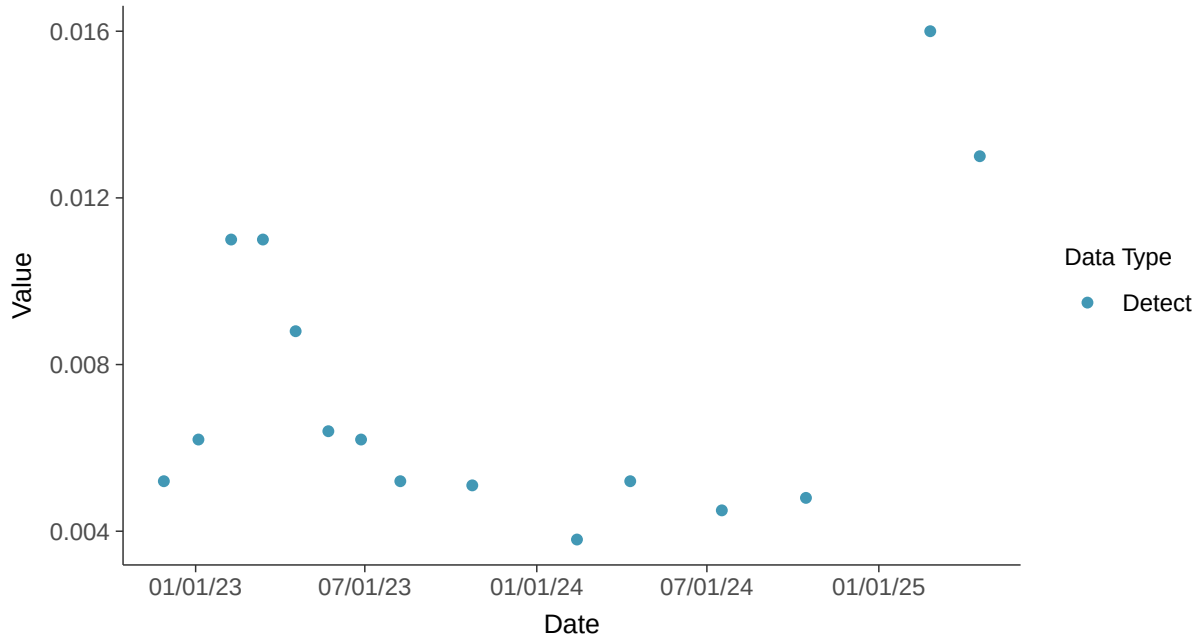


Appendix IV: Molybdenum, MW-02

ID: 12_2_4_118

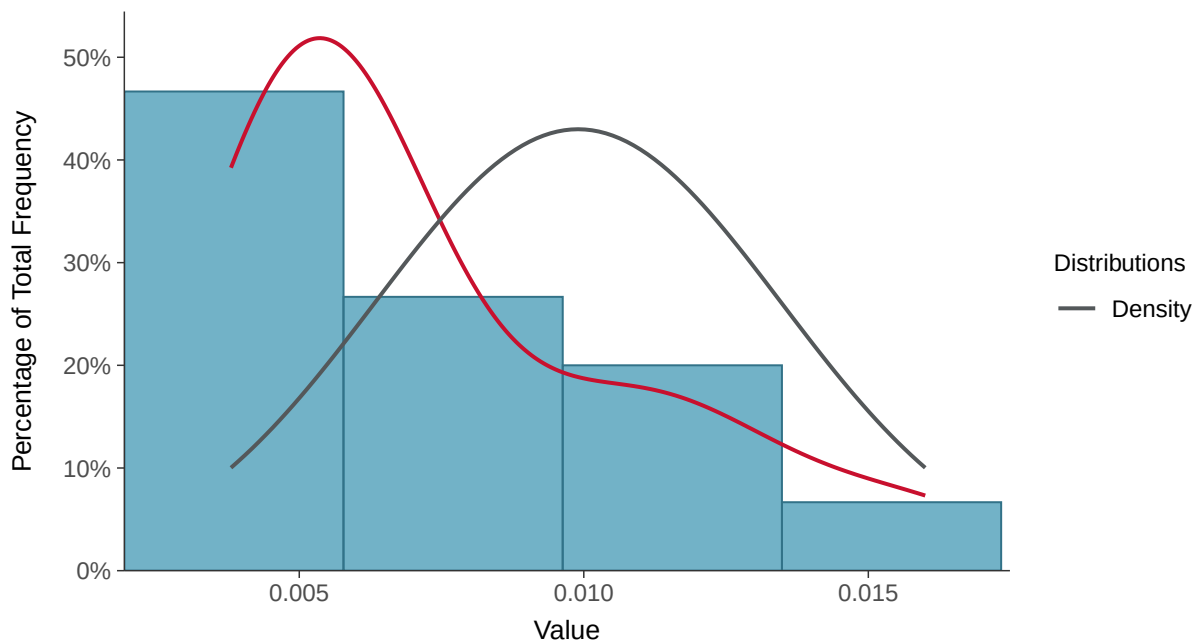
Scatter Plot

Molybdenum, MW-02 (mg/L)



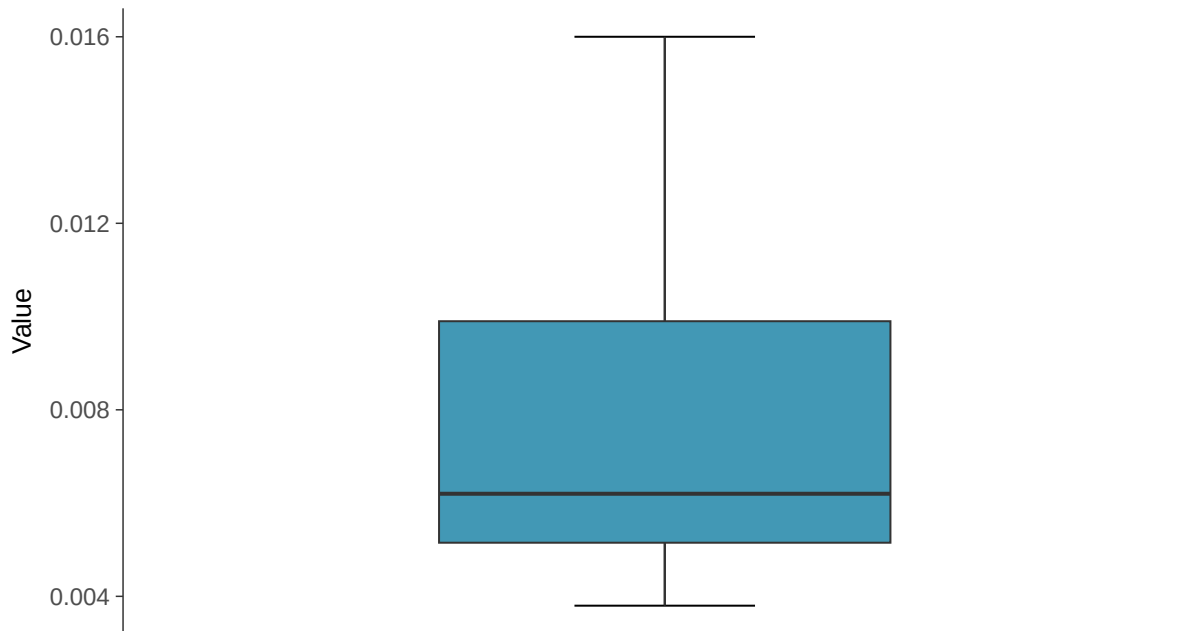
Histogram

Molybdenum, MW-02 (mg/L)



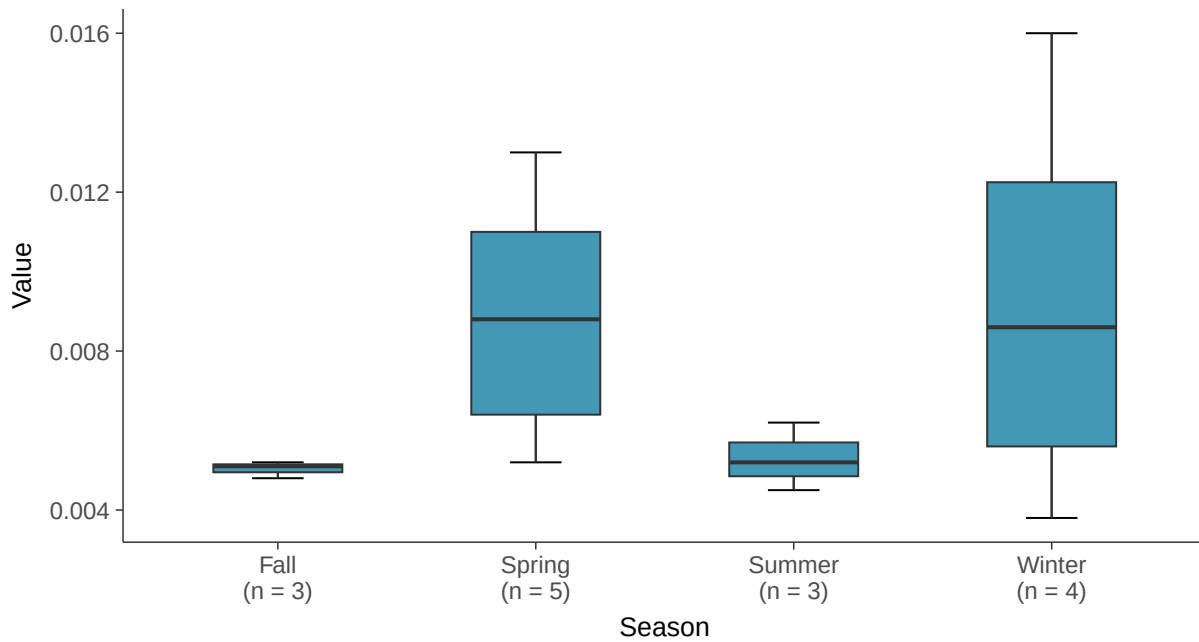
Boxplot

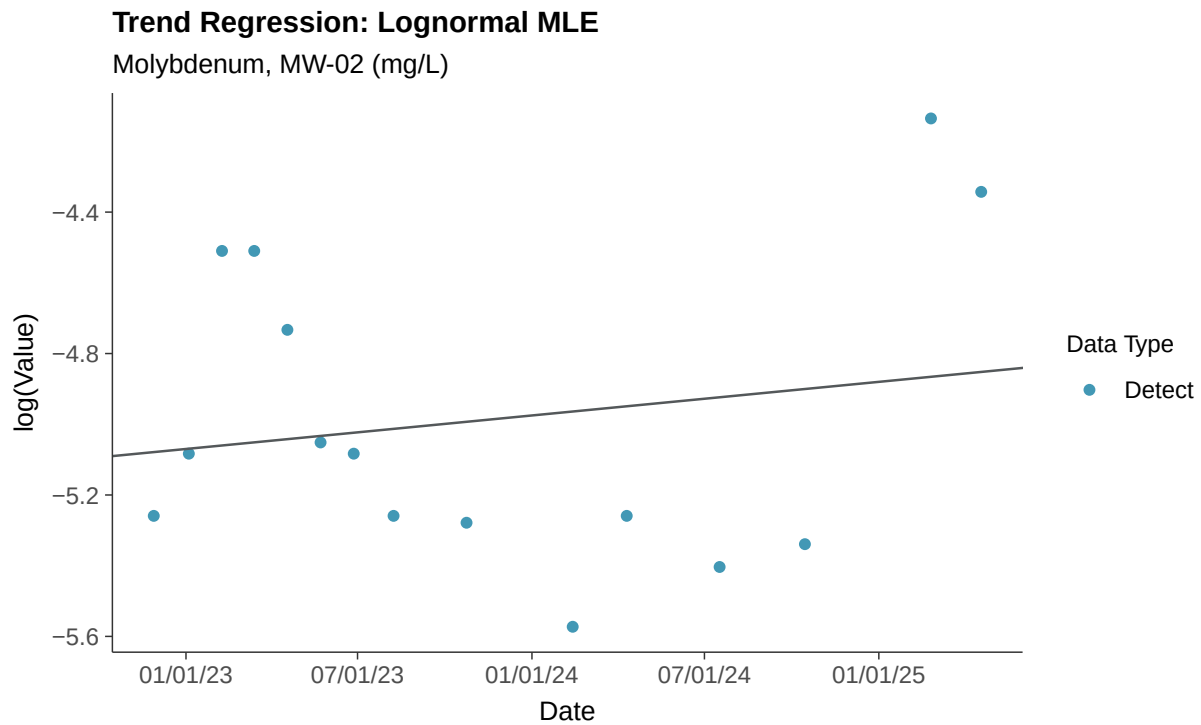
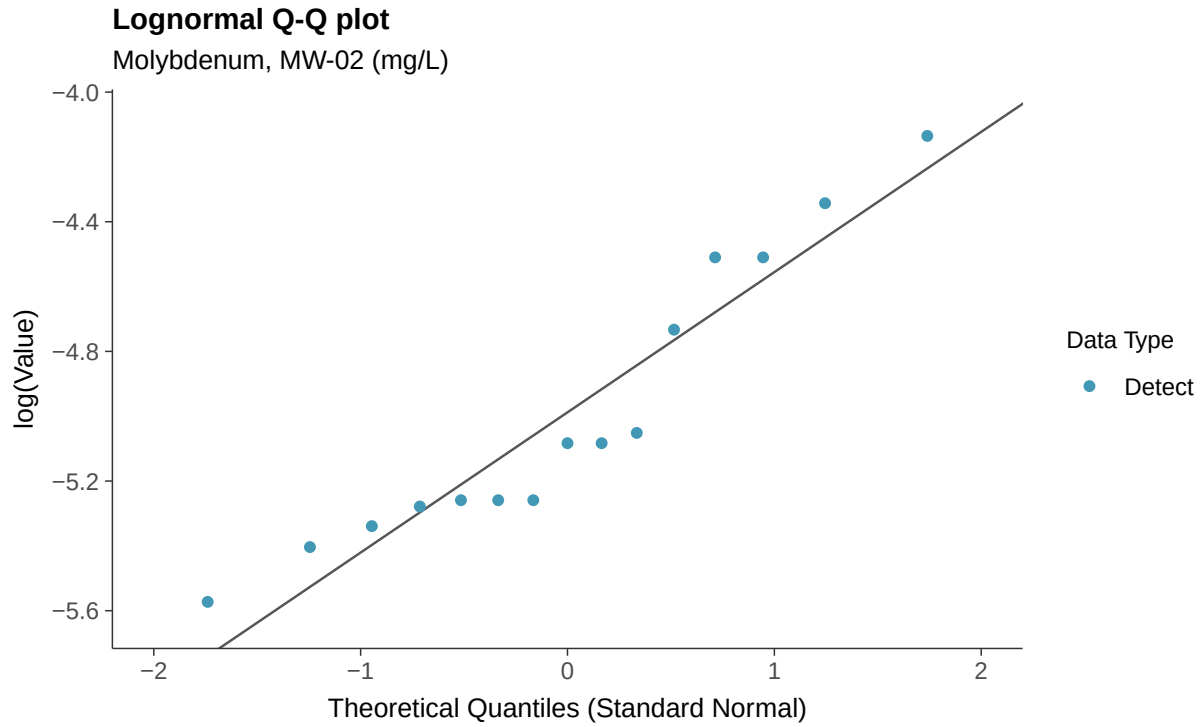
Molybdenum, MW-02 (mg/L)



Boxplot by Season

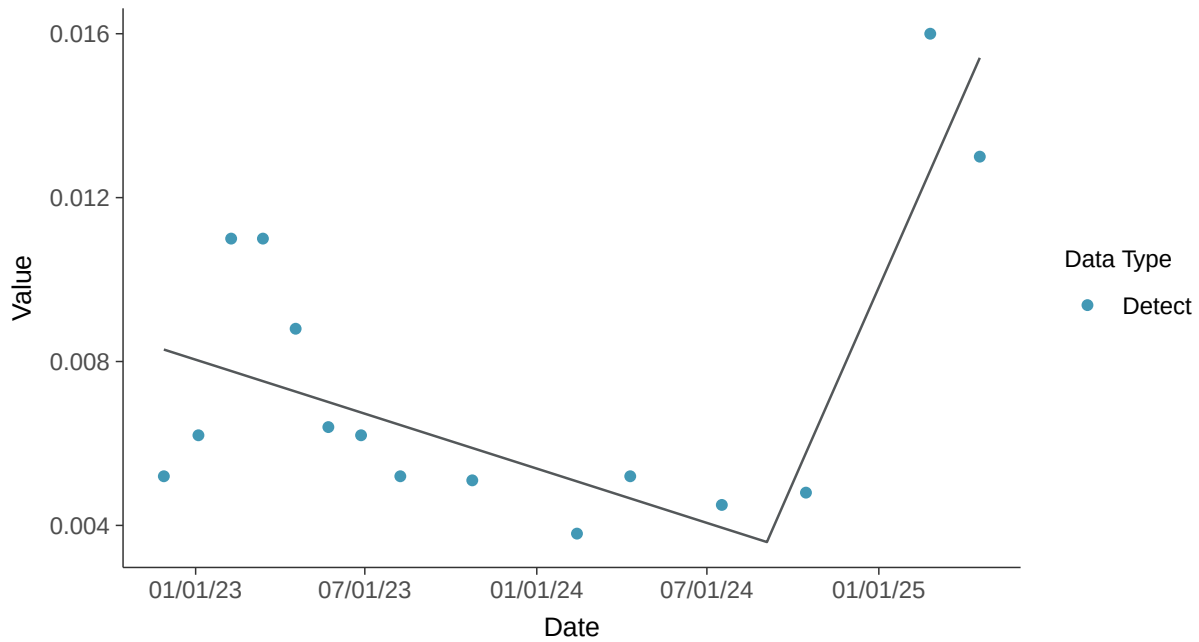
Molybdenum, MW-02 (mg/L)





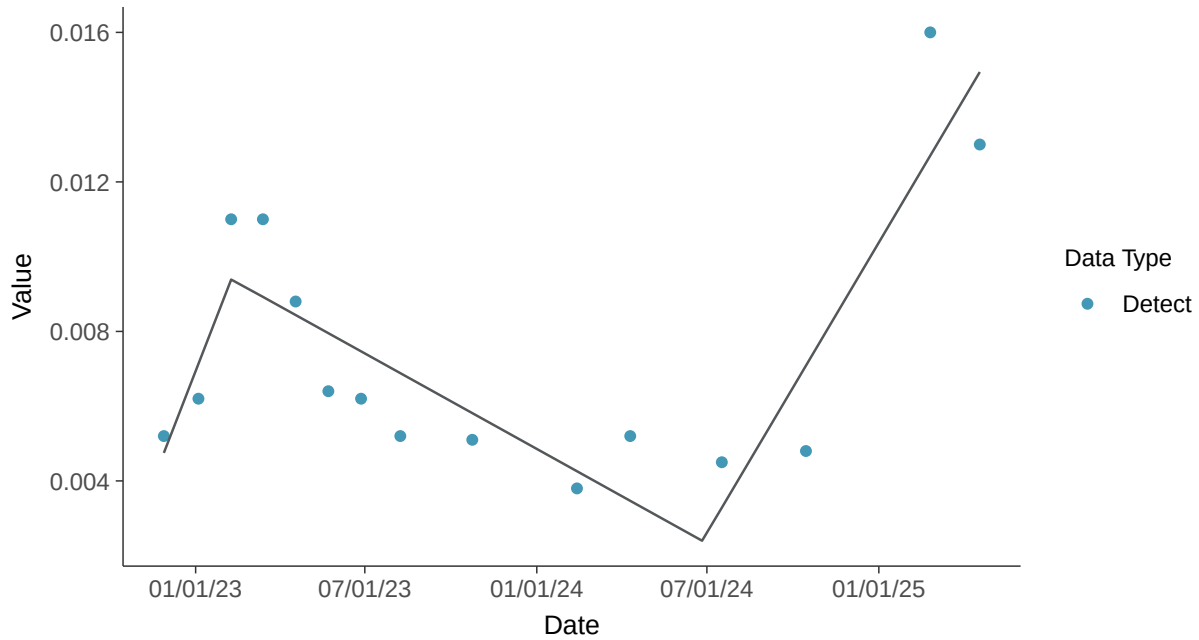
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-02 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-02 (mg/L)

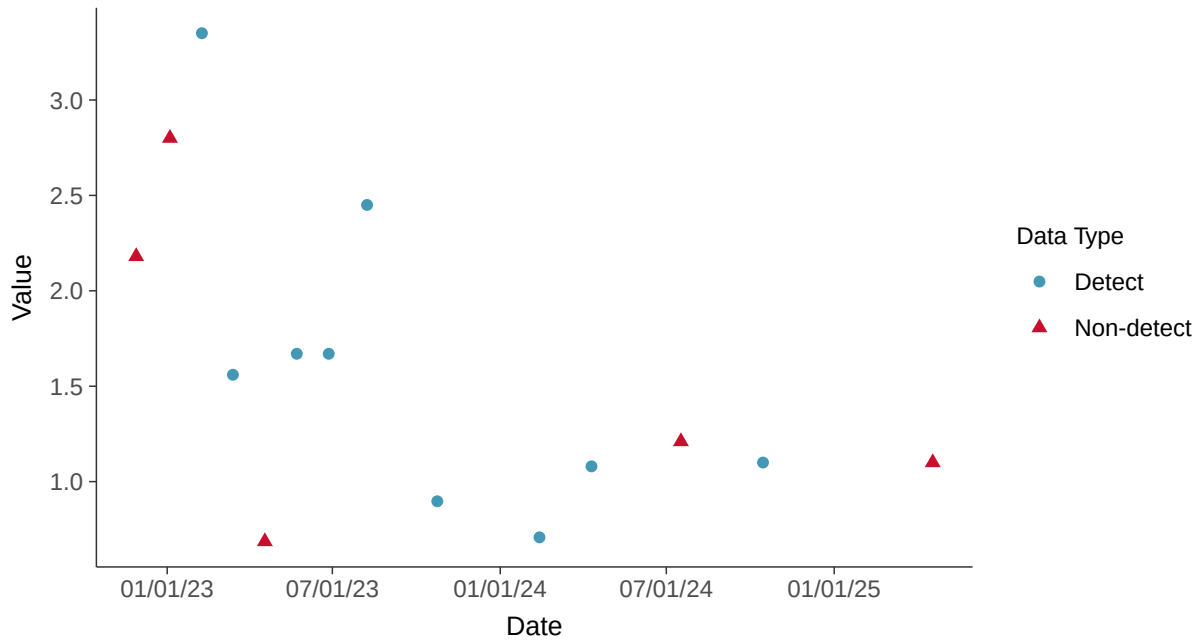


Appendix IV: Radium 226 and 228, MW-02

ID: 12_2_4_121

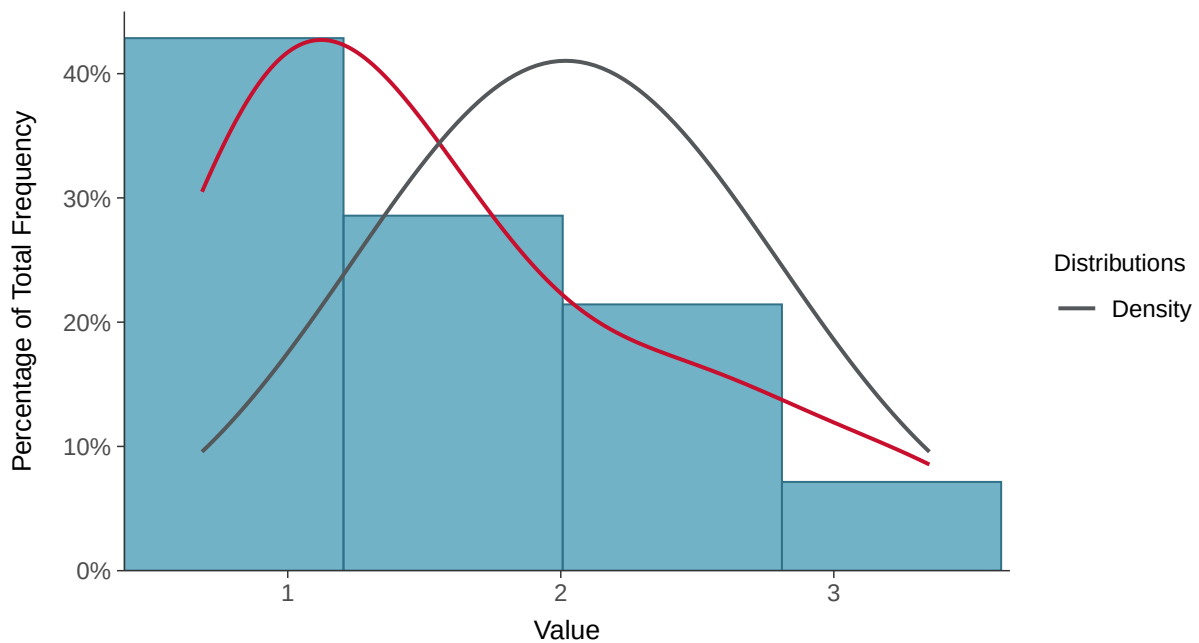
Scatter Plot

Radium 226 and 228, MW-02 (pCi/L)



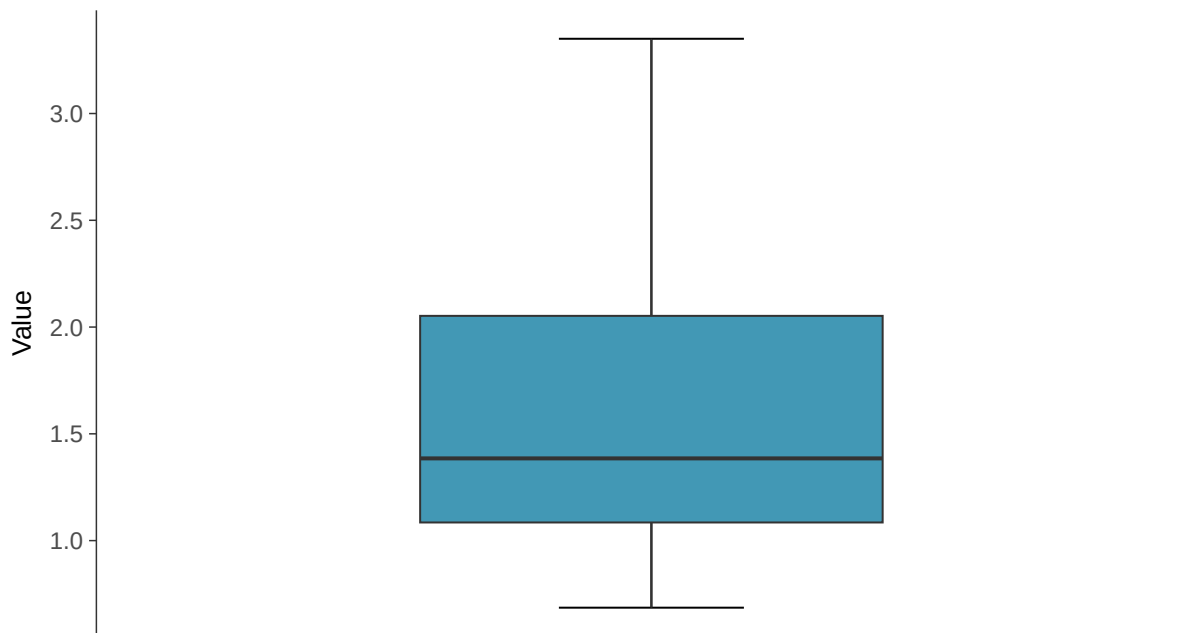
Histogram

Radium 226 and 228, MW-02 (pCi/L)



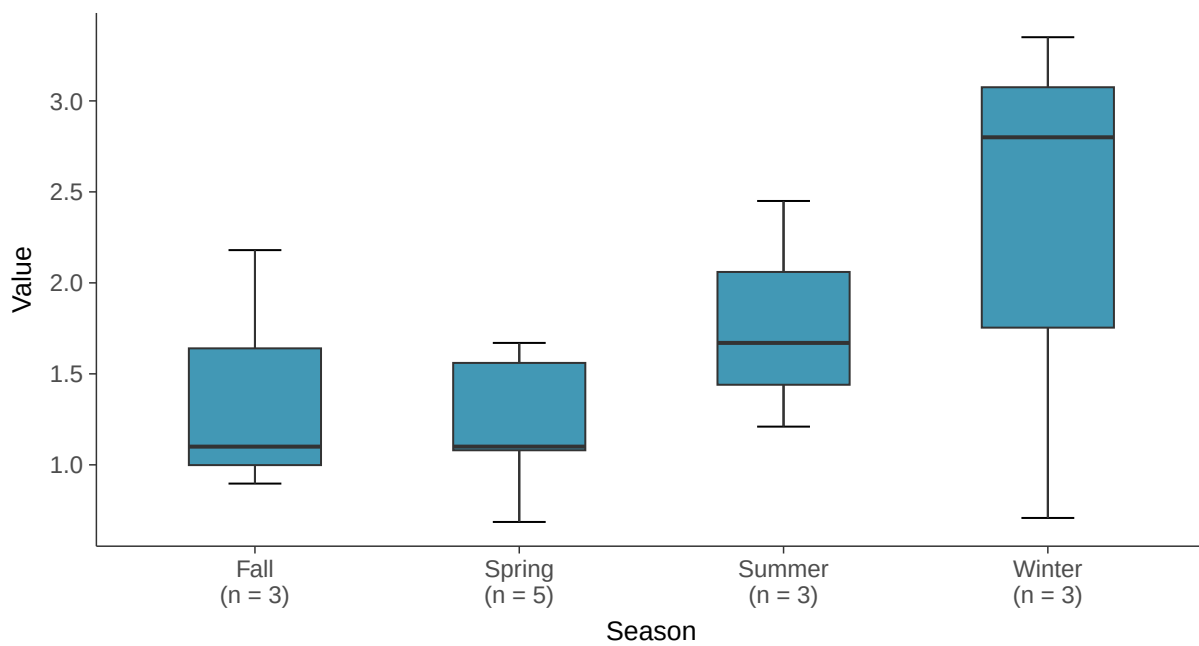
Boxplot

Radium 226 and 228, MW-02 (pCi/L)



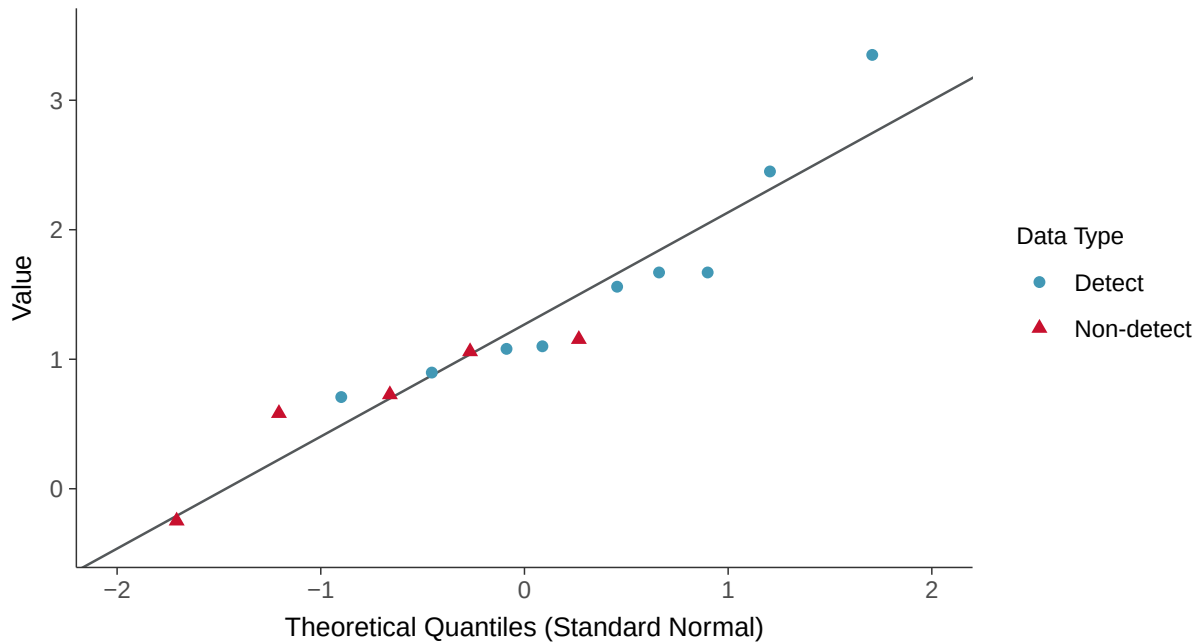
Boxplot by Season

Radium 226 and 228, MW-02 (pCi/L)



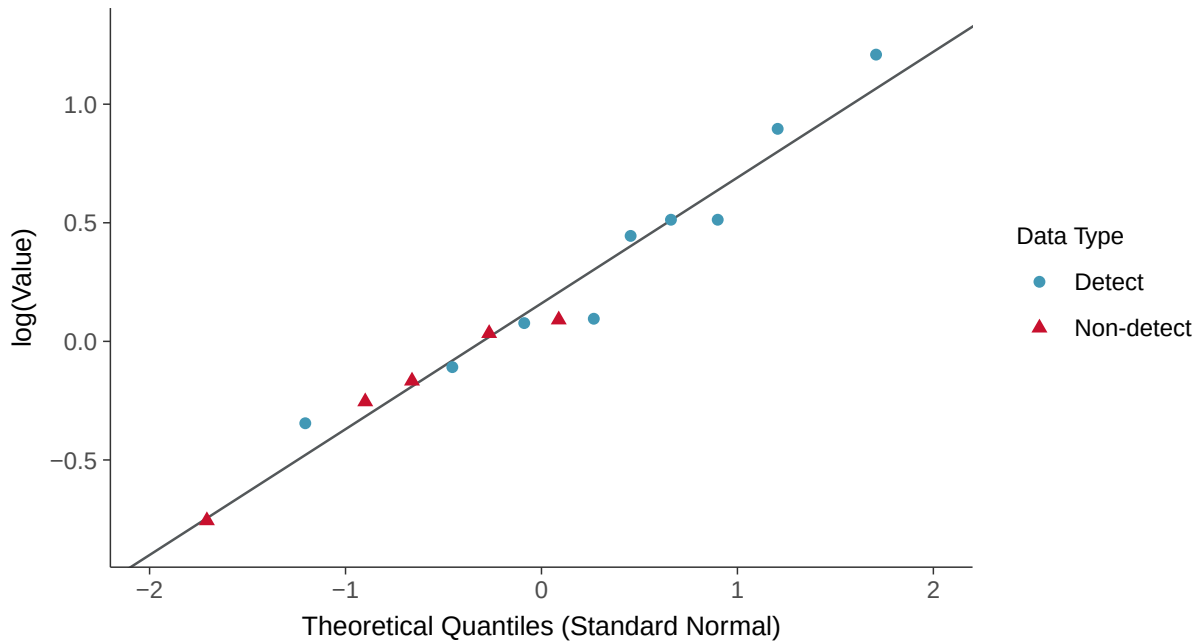
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-02 (pCi/L)



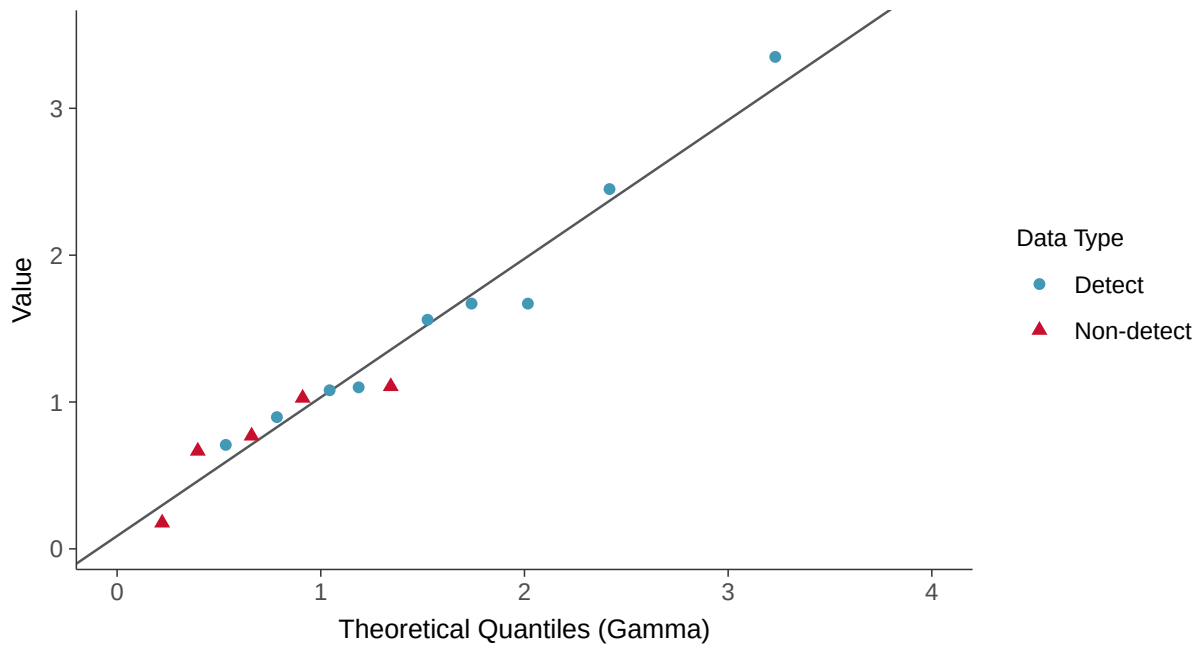
Lognormal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-02 (pCi/L)



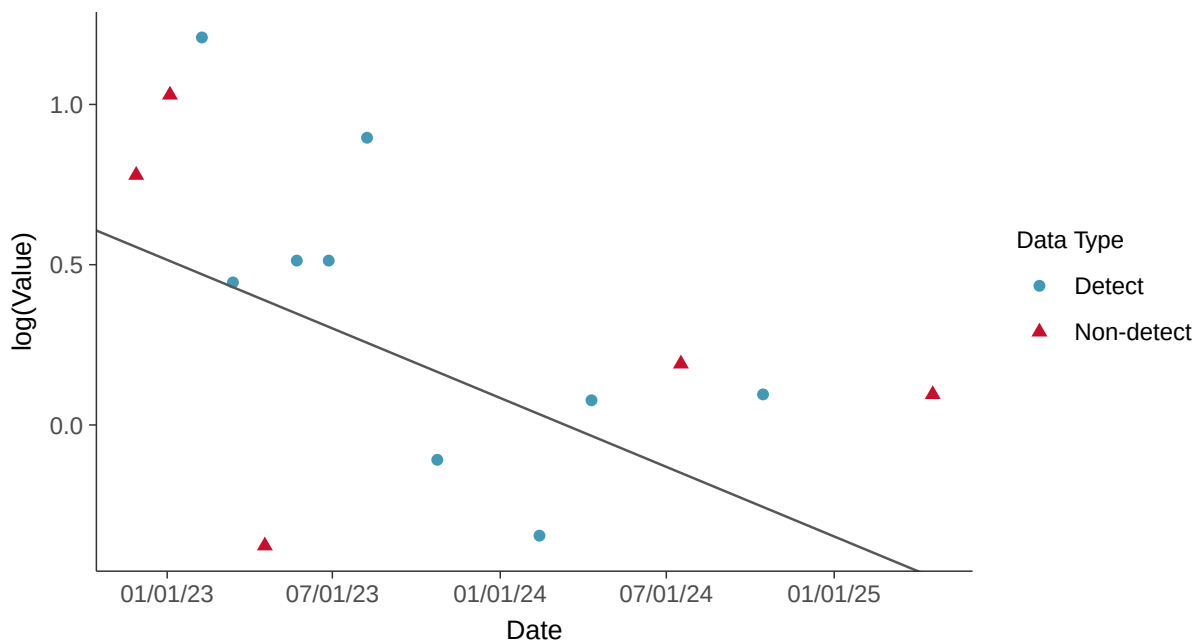
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-02 (pCi/L)



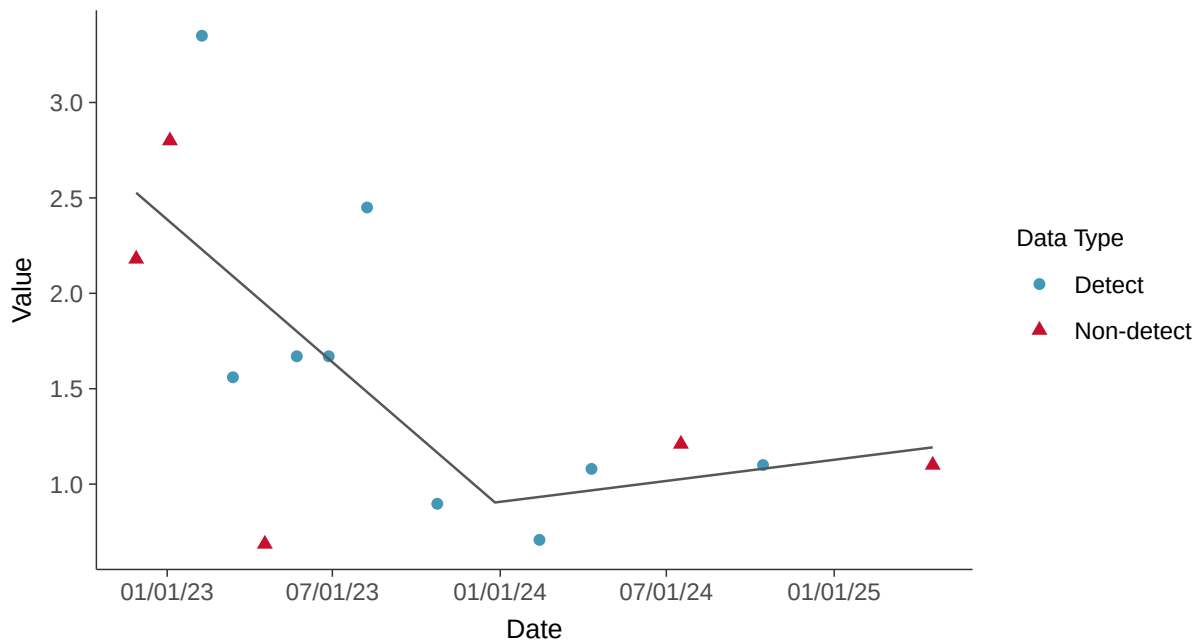
Trend Regression: Lognormal MLE

Radium 226 and 228, MW-02 (pCi/L)



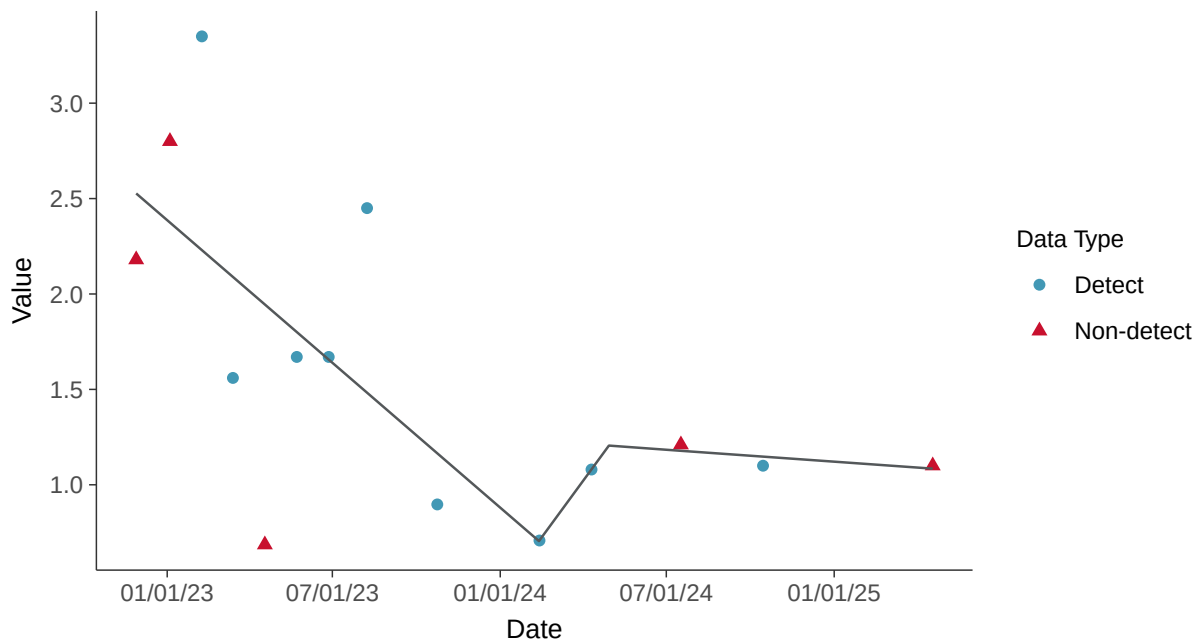
Trend Regression: Piecewise Linear-Linear

Radium 226 and 228, MW-02 (pCi/L)



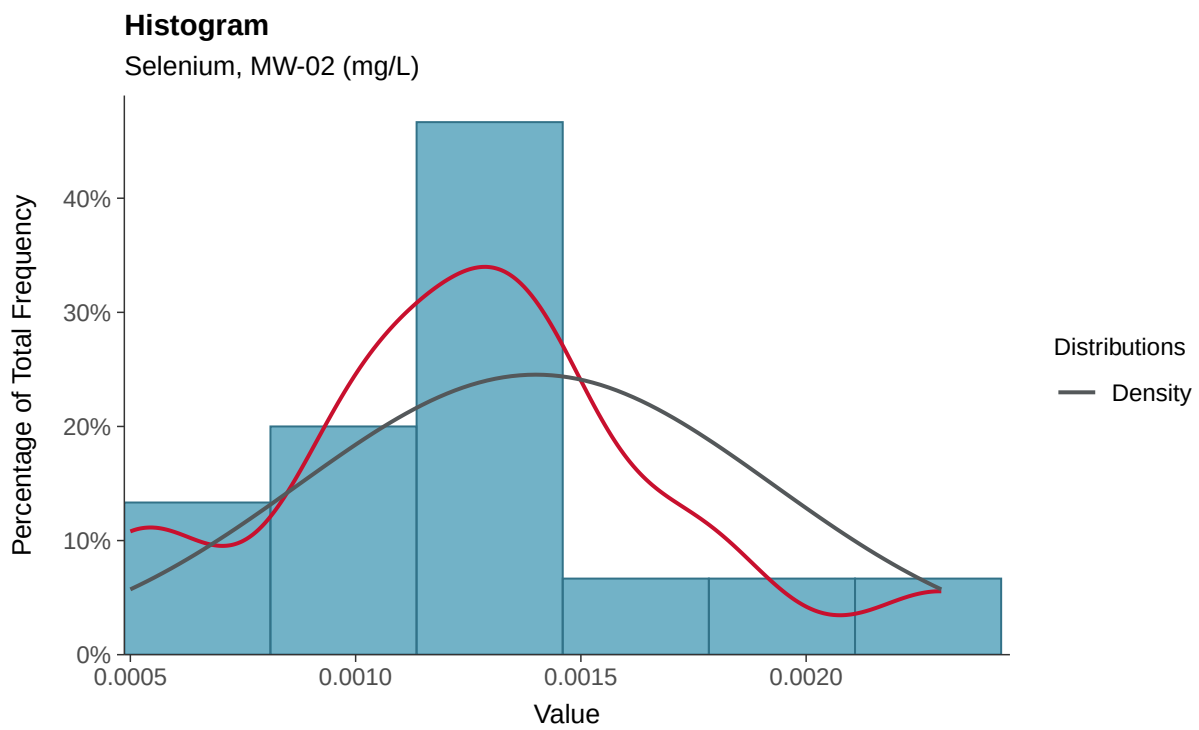
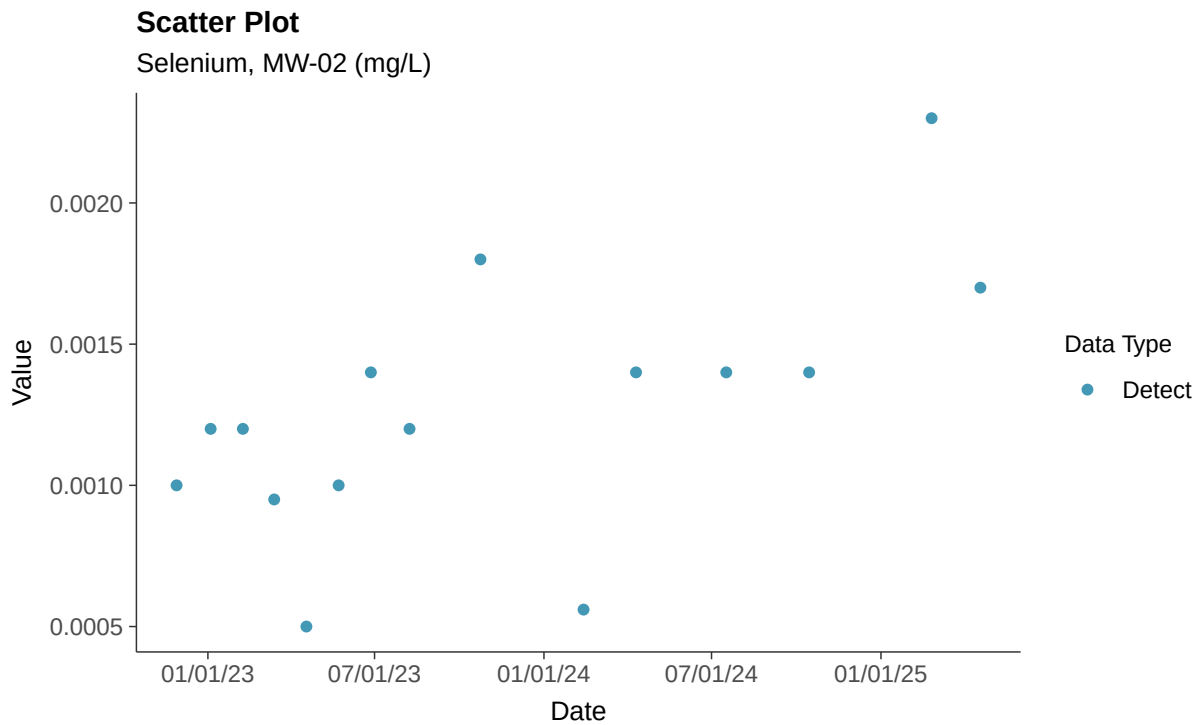
Trend Regression: Piecewise Linear-Linear-Linear

Radium 226 and 228, MW-02 (pCi/L)



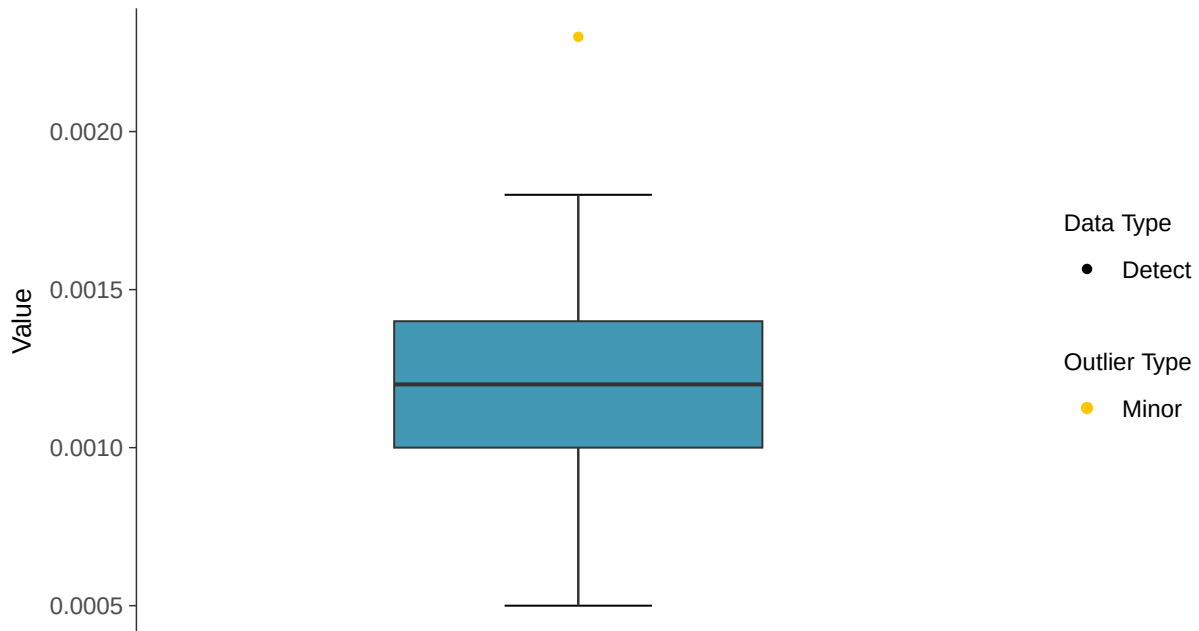
Appendix IV: Selenium, MW-02

ID: 12_2_4_122



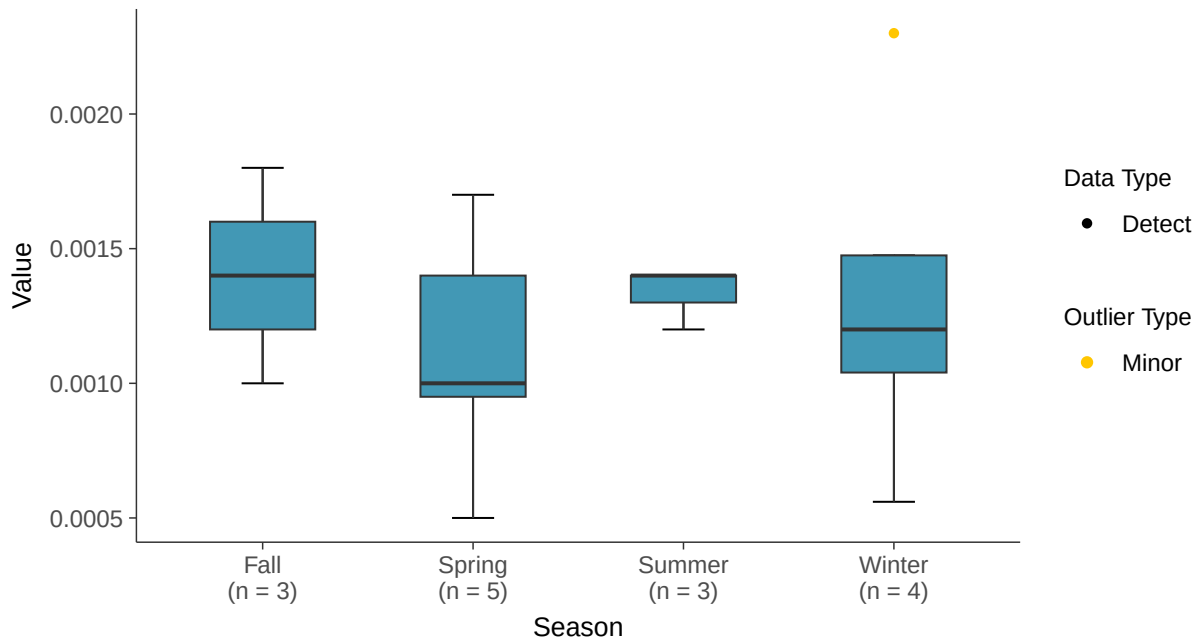
Boxplot

Selenium, MW-02 (mg/L)



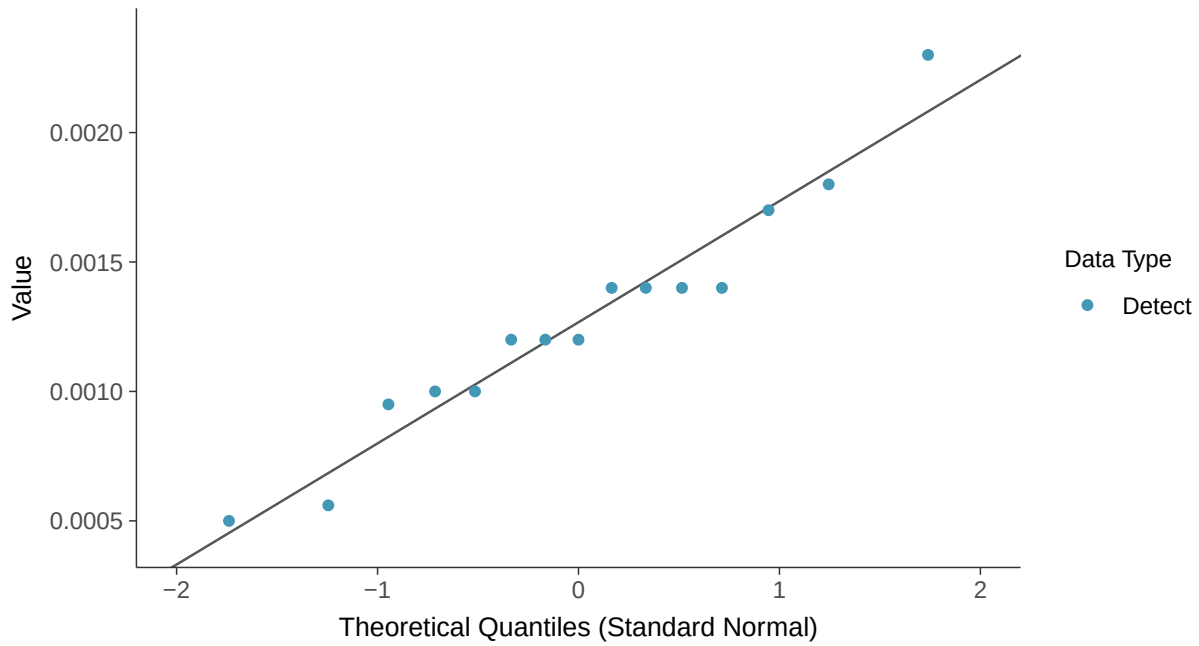
Boxplot by Season

Selenium, MW-02 (mg/L)



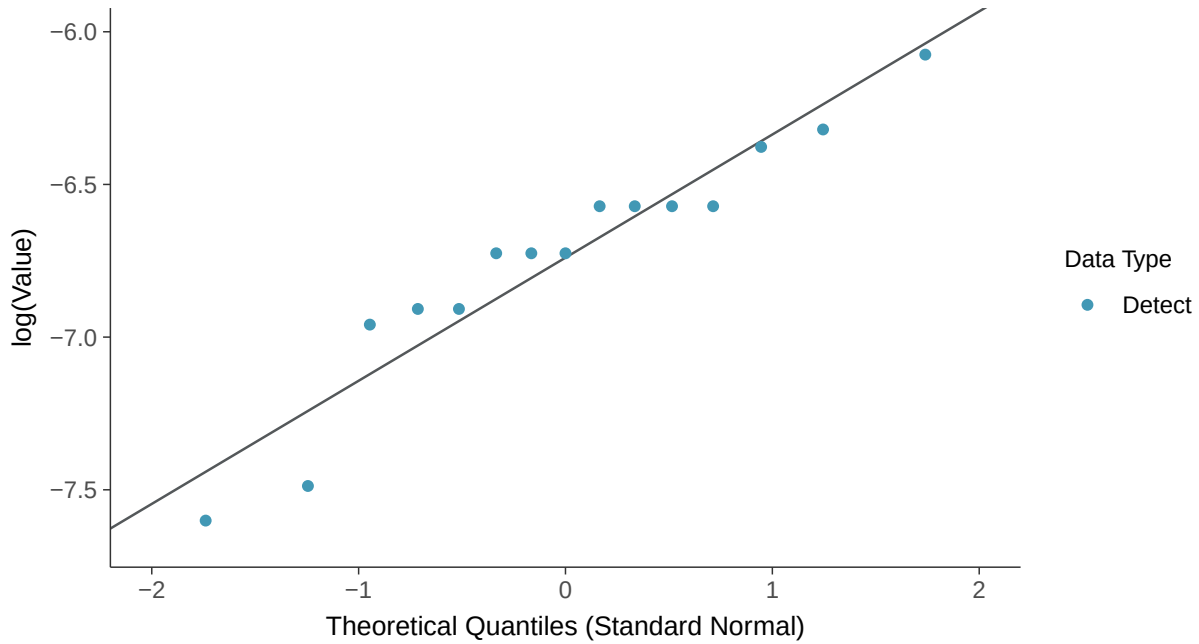
Normal Q-Q plot

Selenium, MW-02 (mg/L)



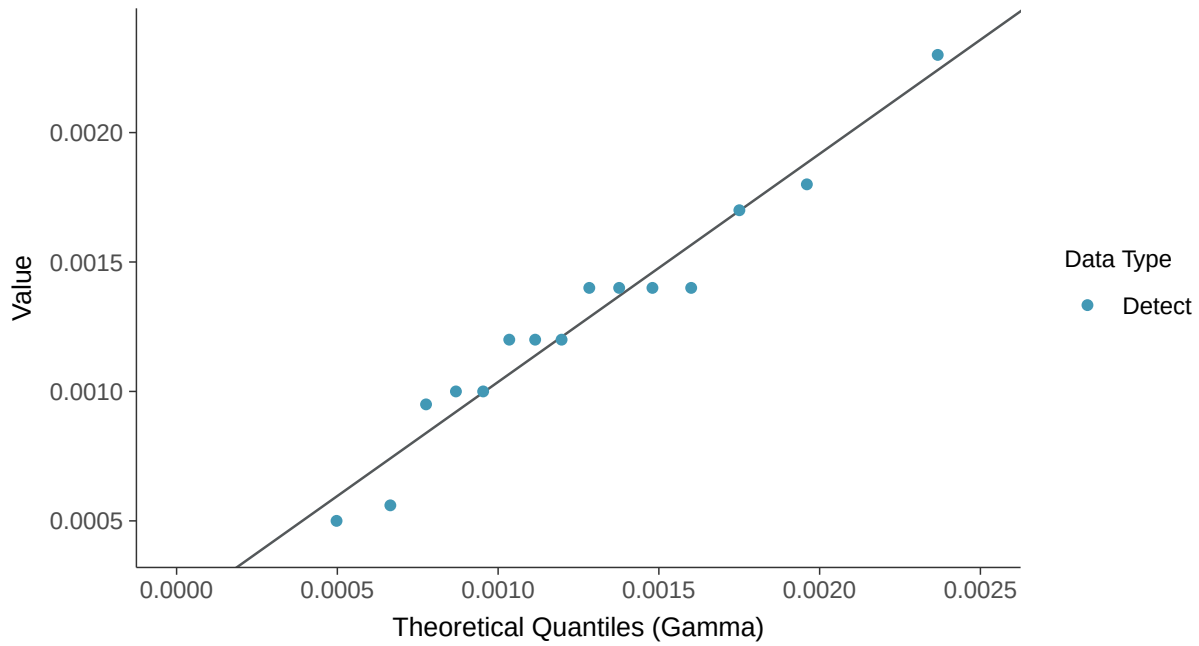
Lognormal Q-Q plot

Selenium, MW-02 (mg/L)



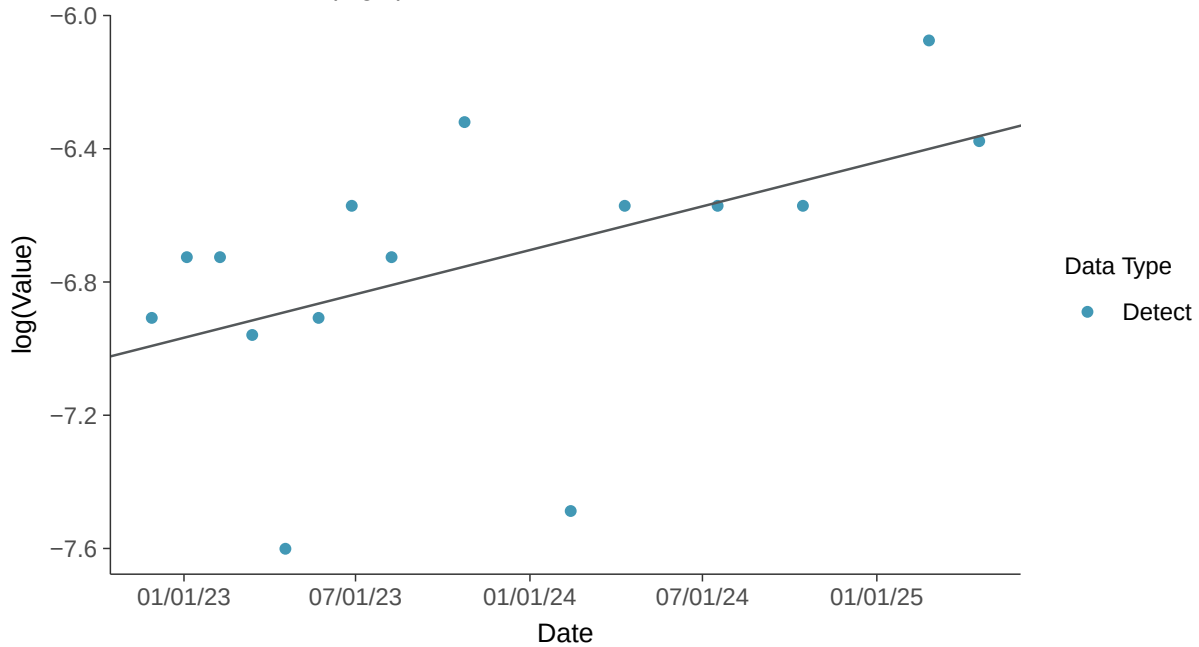
Gamma Q-Q plot

Selenium, MW-02 (mg/L)



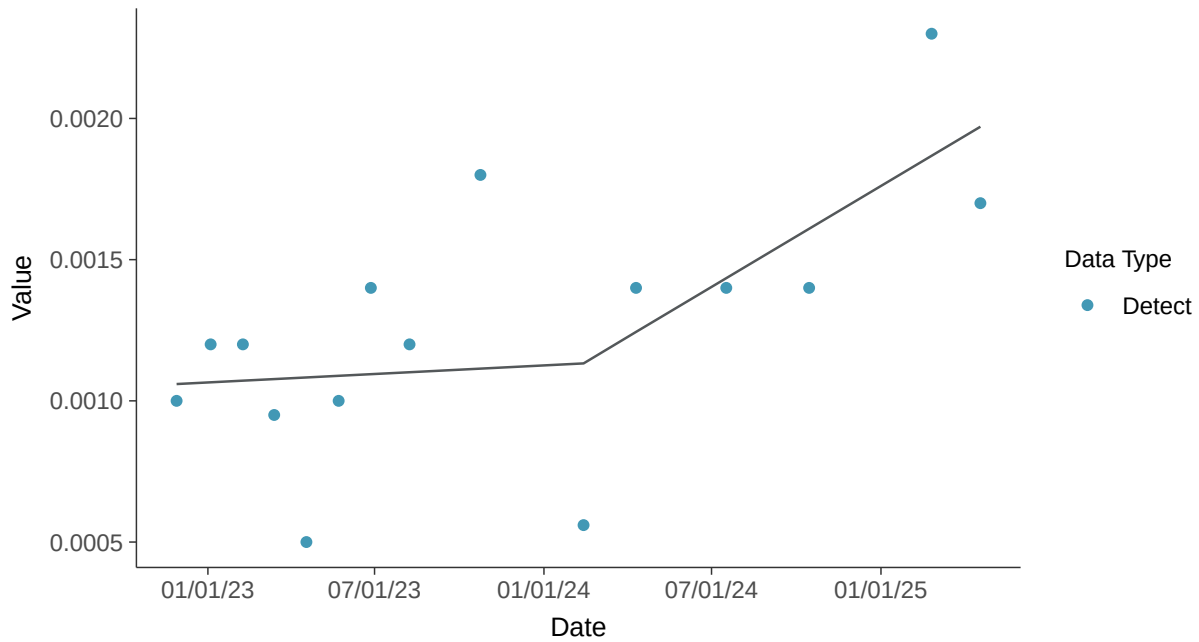
Trend Regression: Lognormal MLE

Selenium, MW-02 (mg/L)



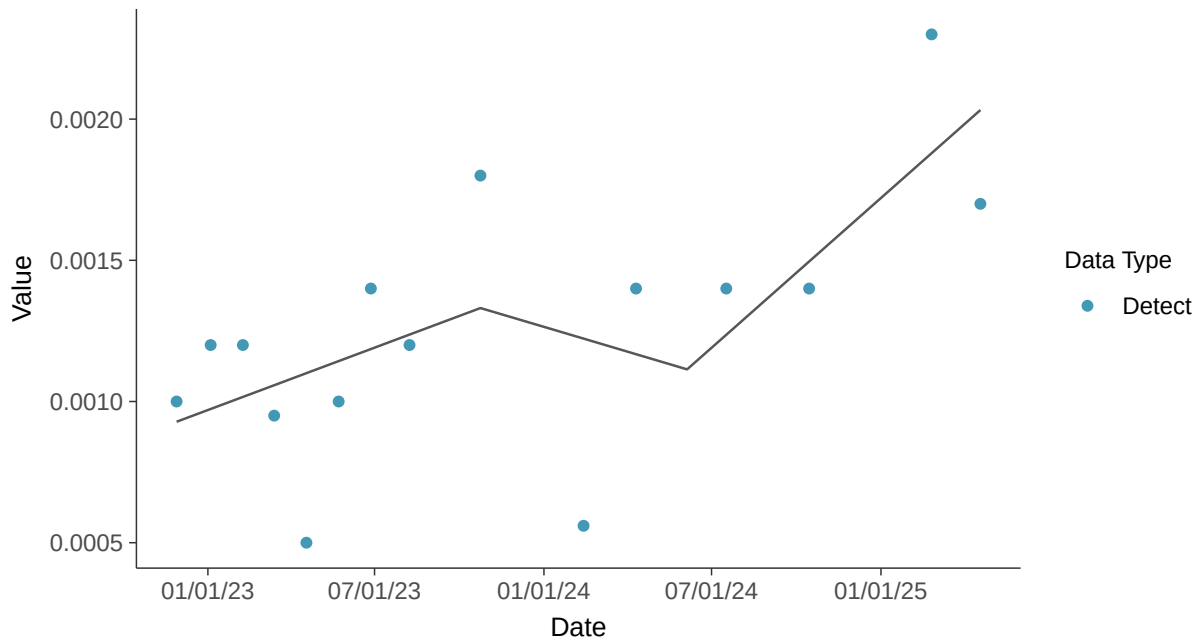
Trend Regression: Piecewise Linear-Linear

Selenium, MW-02 (mg/L)



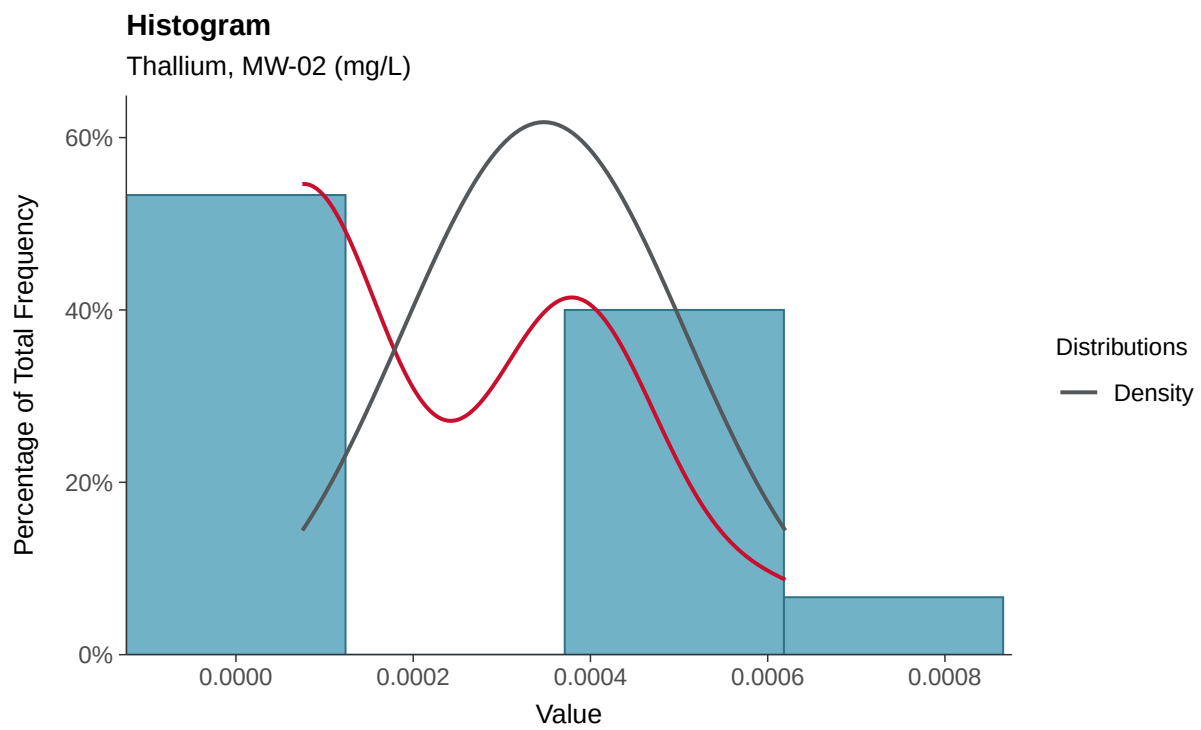
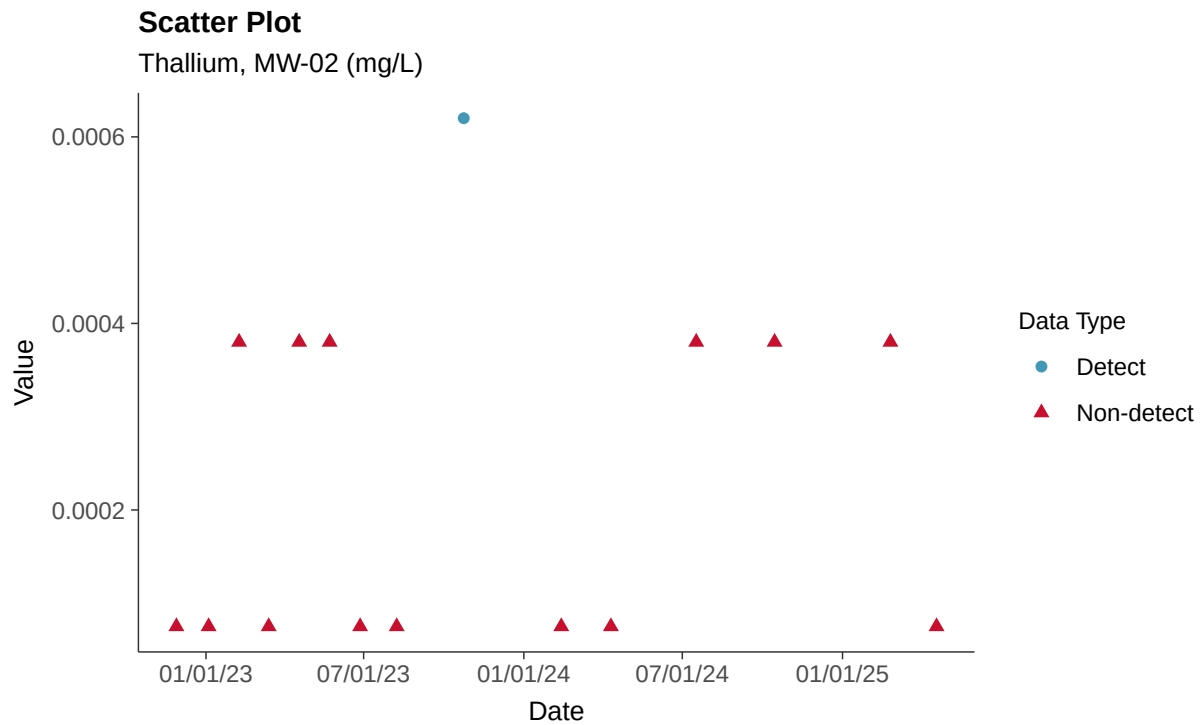
Trend Regression: Piecewise Linear-Linear-Linear

Selenium, MW-02 (mg/L)



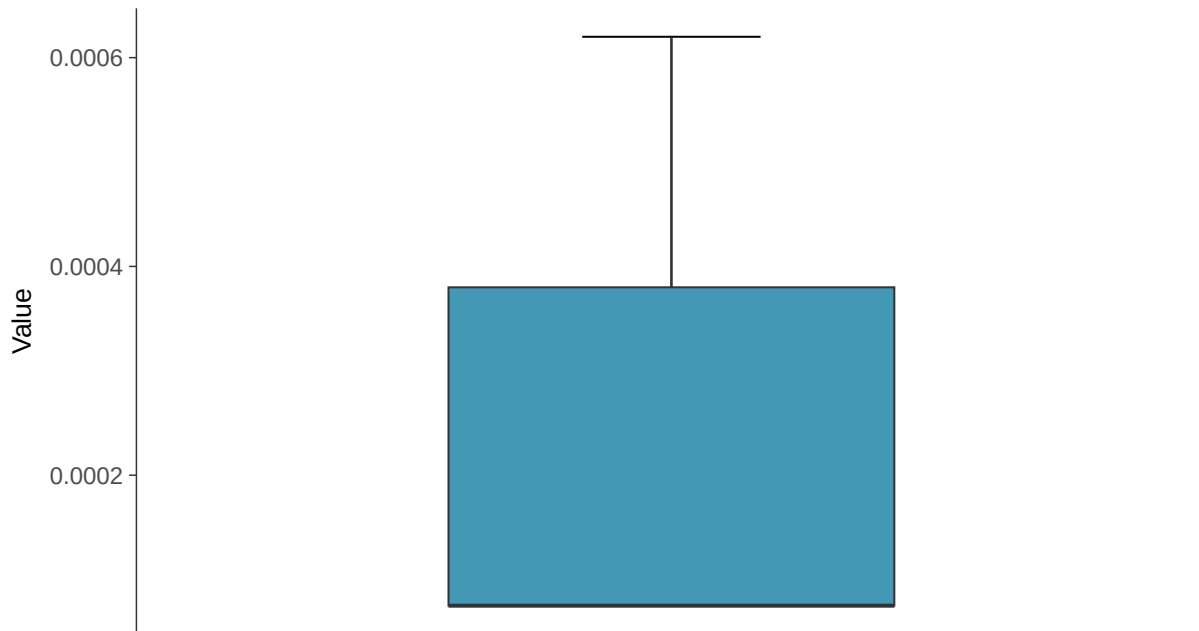
Appendix IV: Thallium, MW-02

ID: 12_2_4_125



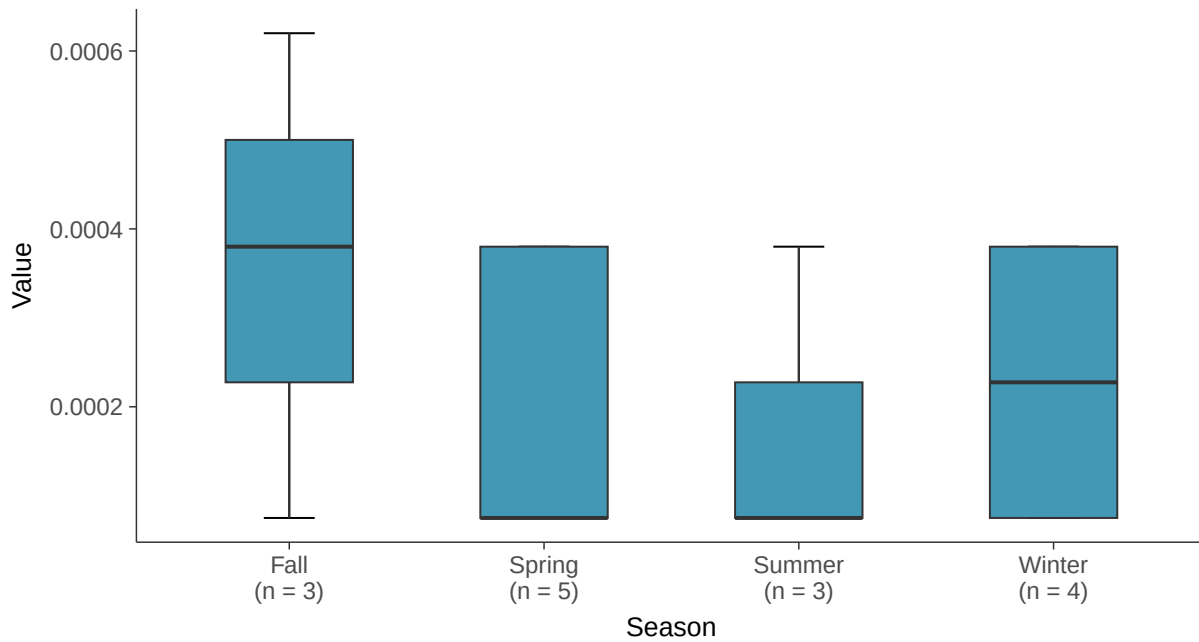
Boxplot

Thallium, MW-02 (mg/L)



Boxplot by Season

Thallium, MW-02 (mg/L)

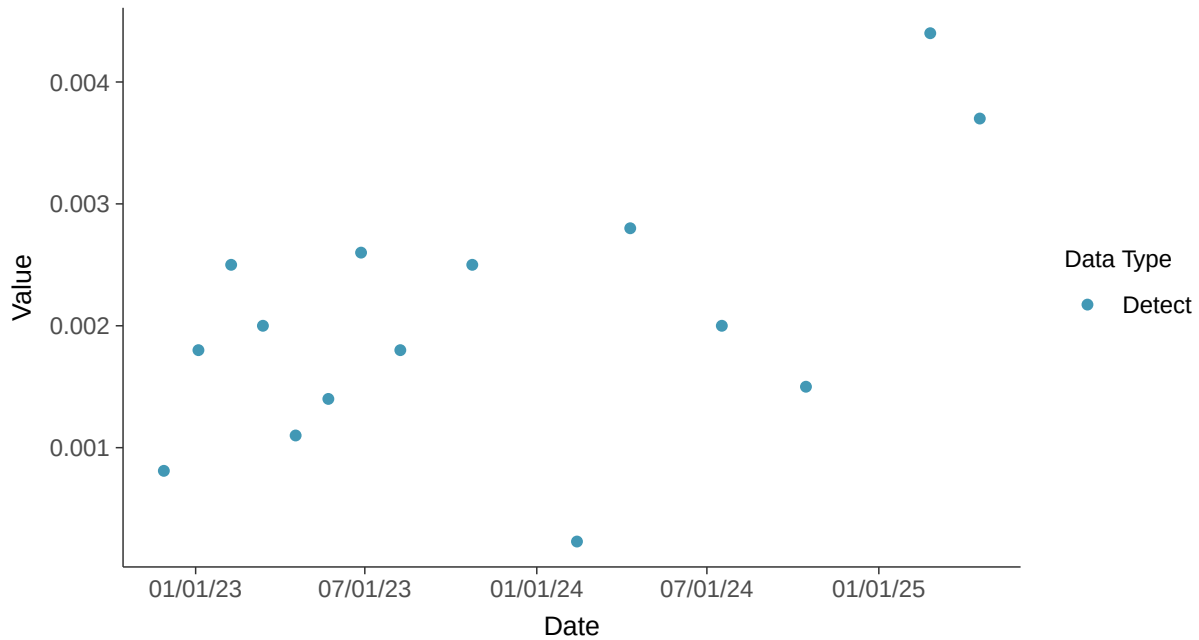


Part 115: Copper, MW-02

ID: 12_2_5_111

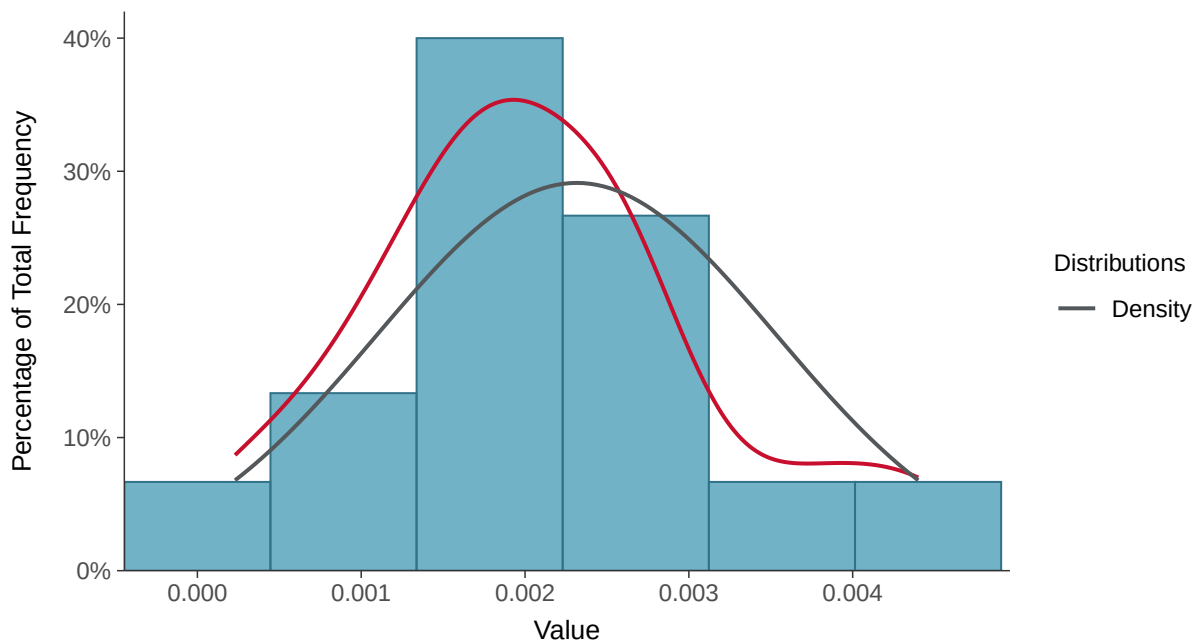
Scatter Plot

Copper, MW-02 (mg/L)



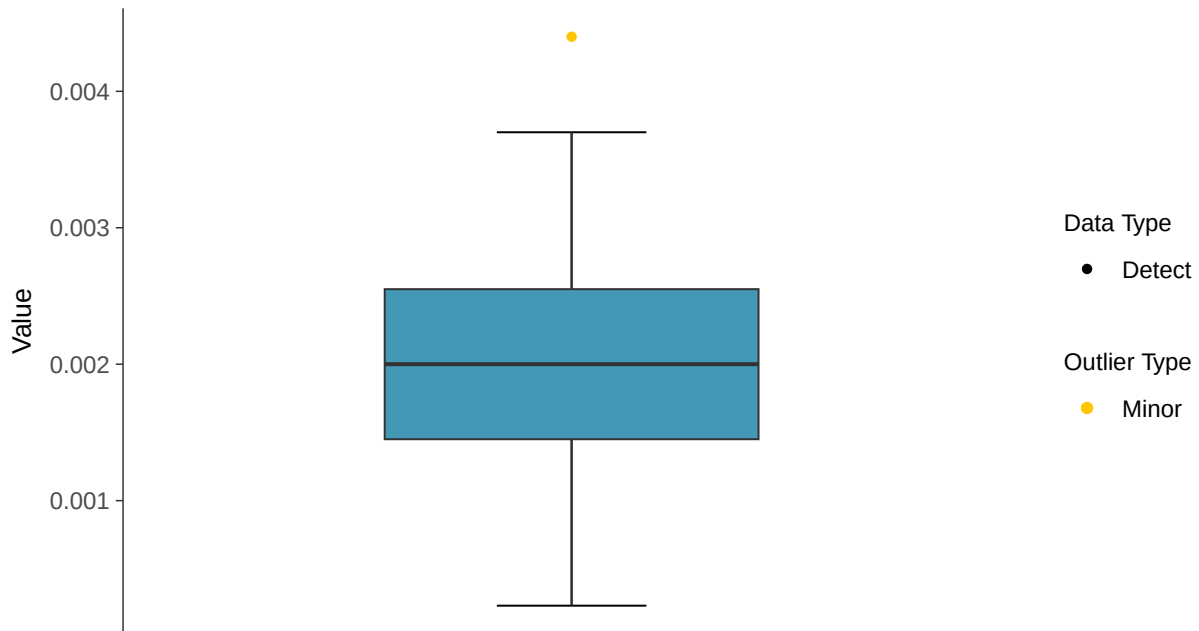
Histogram

Copper, MW-02 (mg/L)



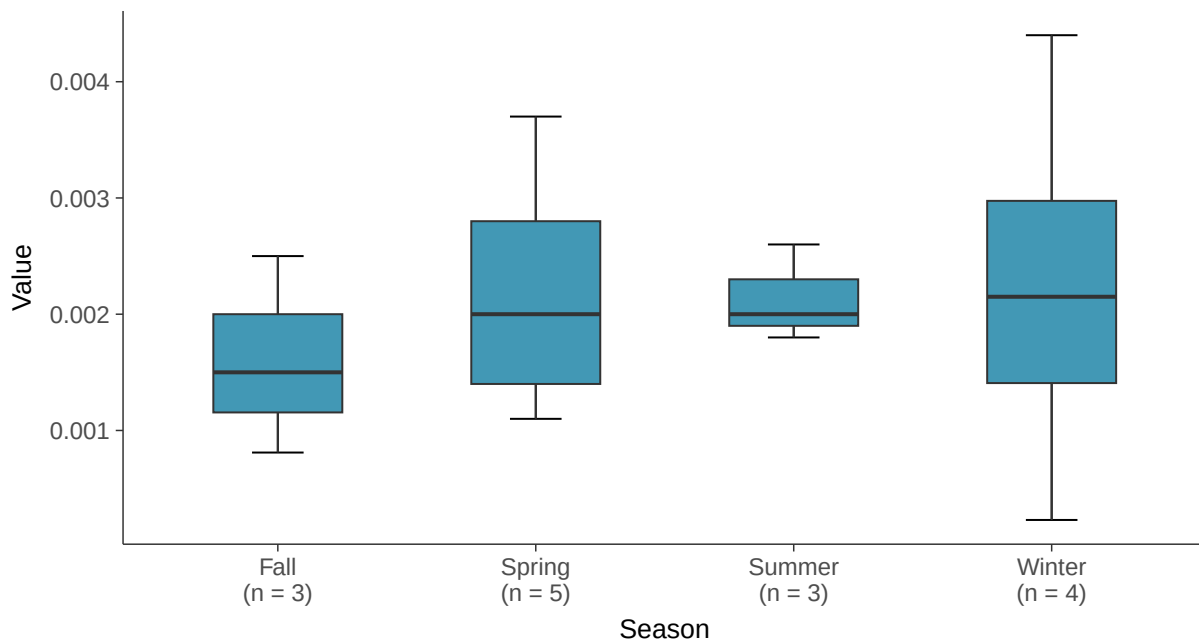
Boxplot

Copper, MW-02 (mg/L)



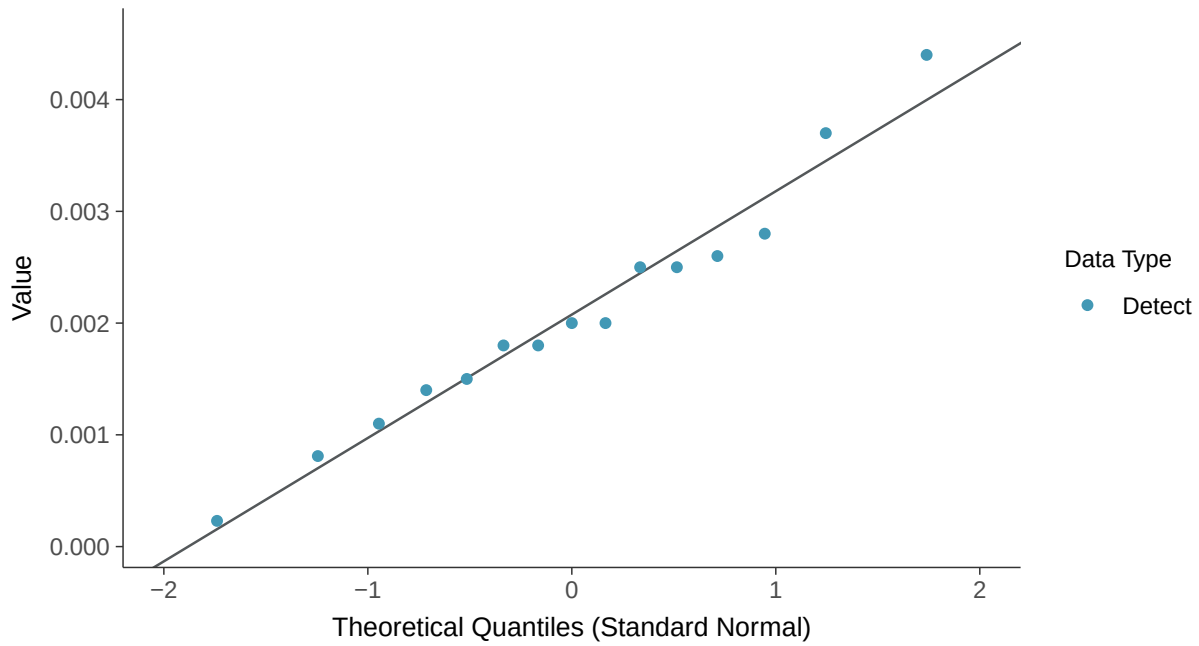
Boxplot by Season

Copper, MW-02 (mg/L)



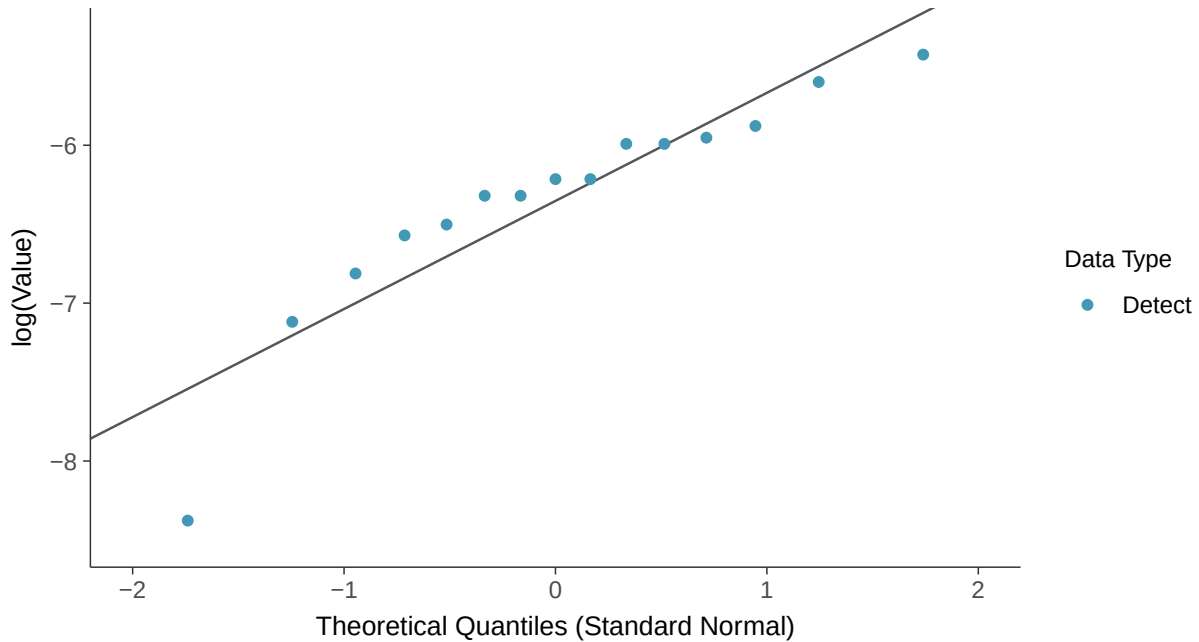
Normal Q-Q plot

Copper, MW-02 (mg/L)



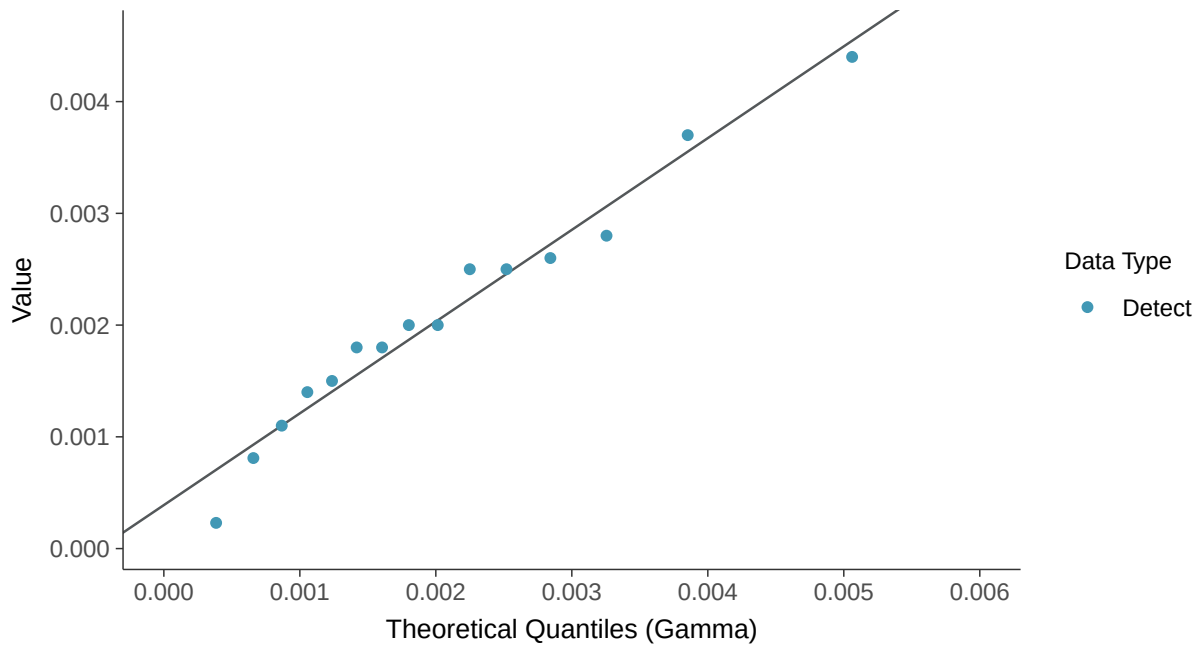
Lognormal Q-Q plot

Copper, MW-02 (mg/L)



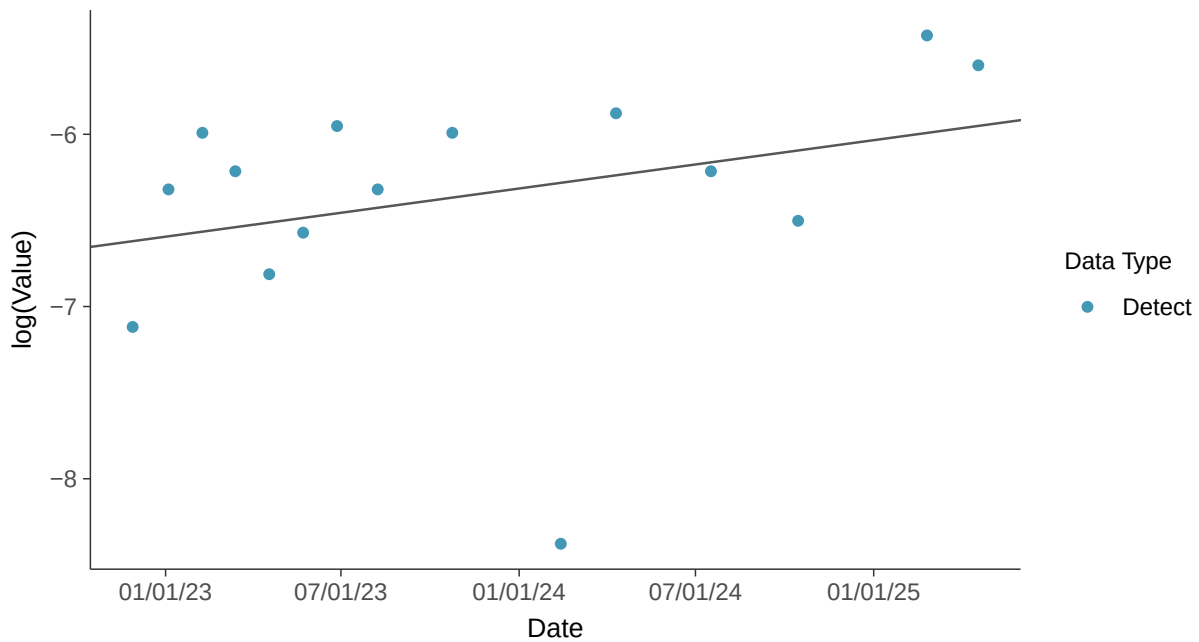
Gamma Q-Q plot

Copper, MW-02 (mg/L)



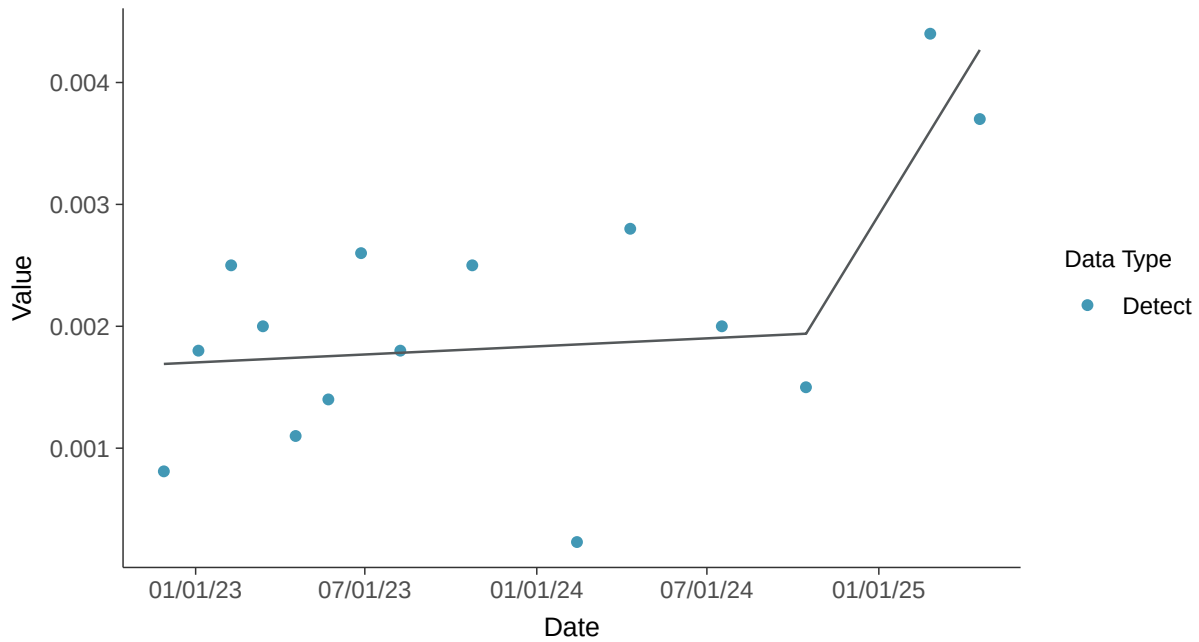
Trend Regression: Lognormal MLE

Copper, MW-02 (mg/L)



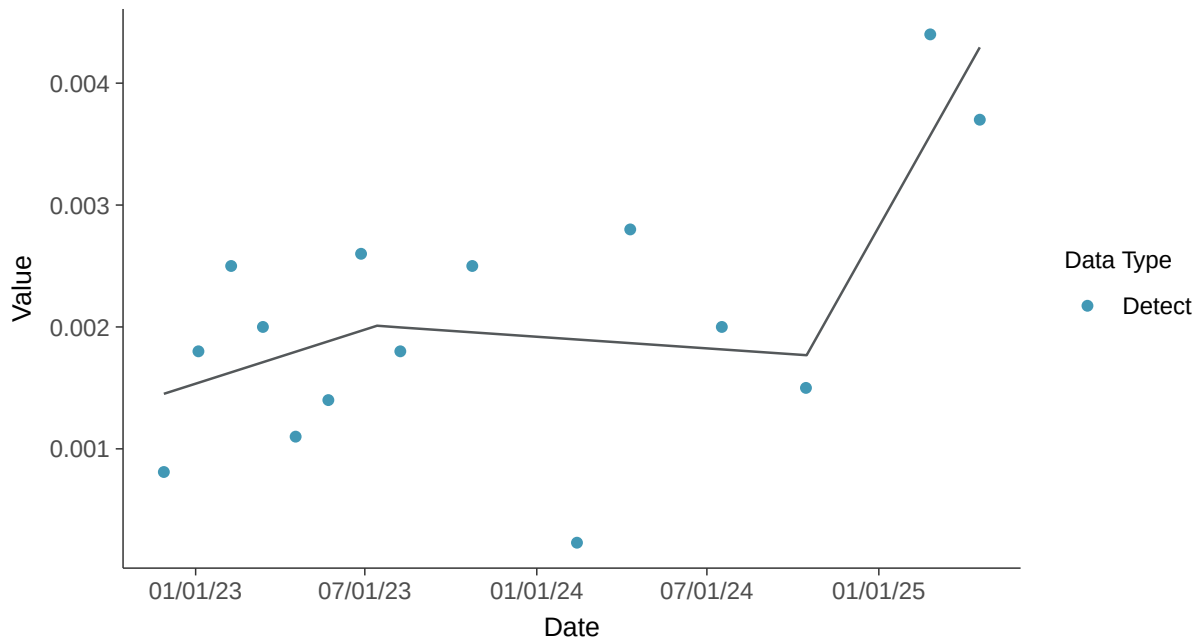
Trend Regression: Piecewise Linear-Linear

Copper, MW-02 (mg/L)



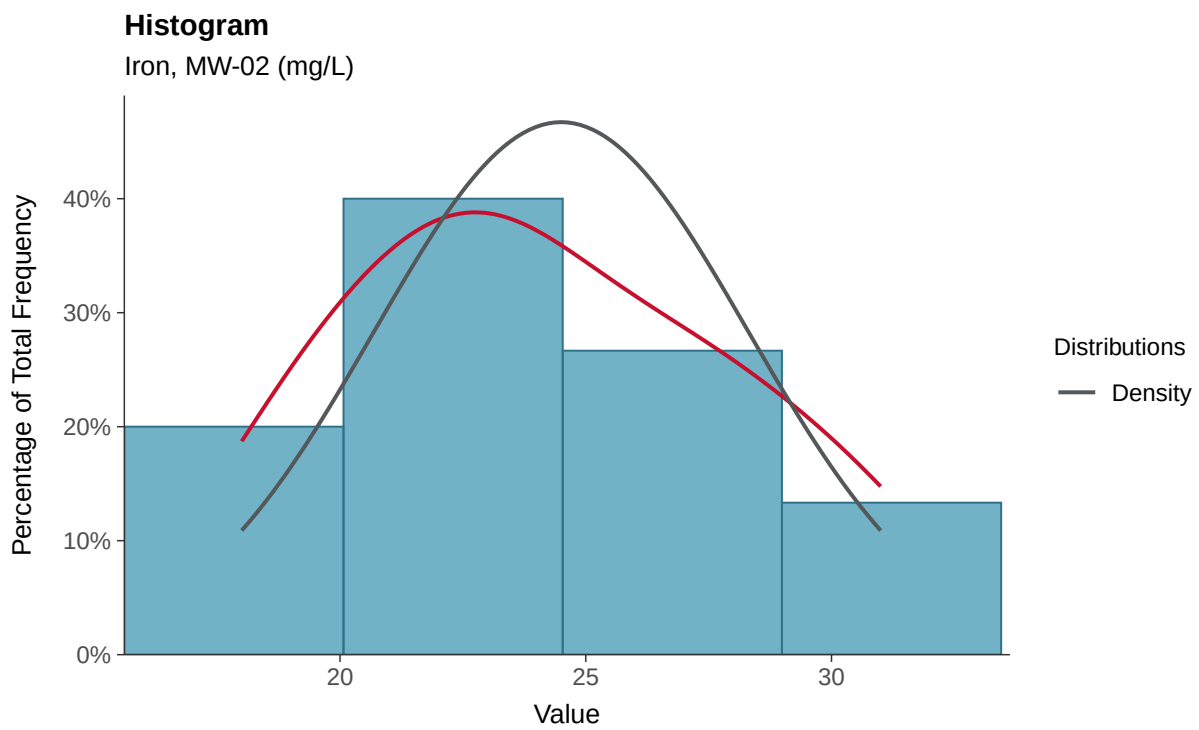
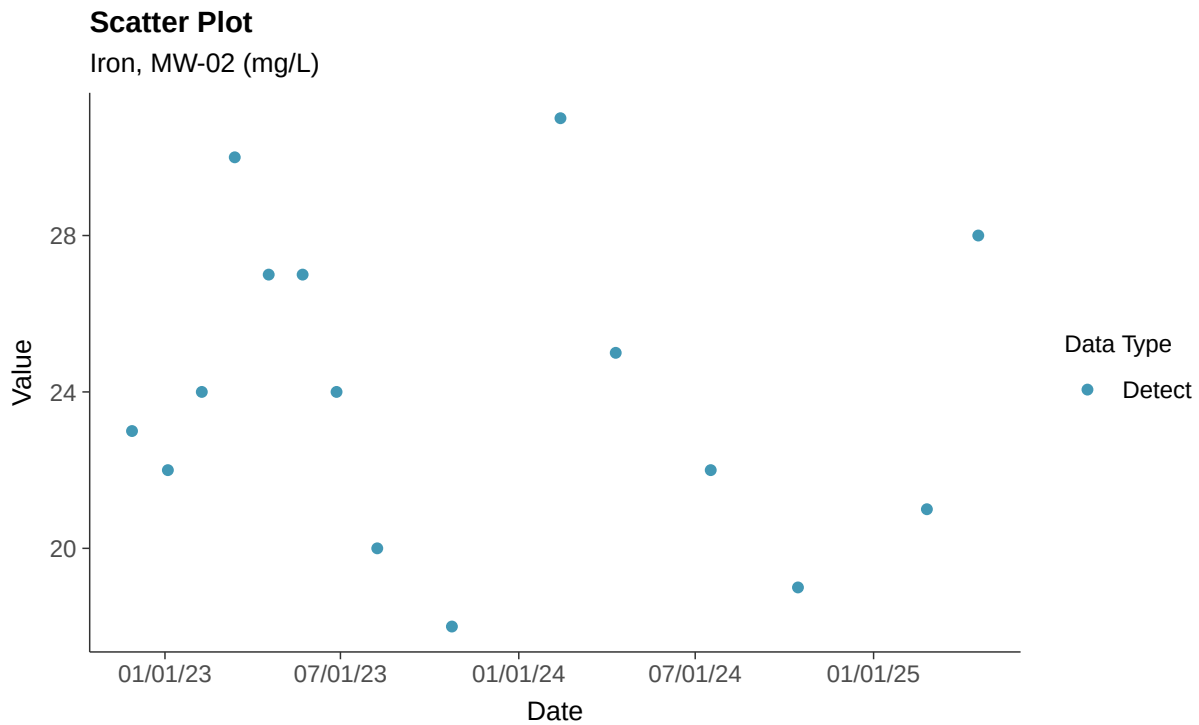
Trend Regression: Piecewise Linear-Linear-Linear

Copper, MW-02 (mg/L)



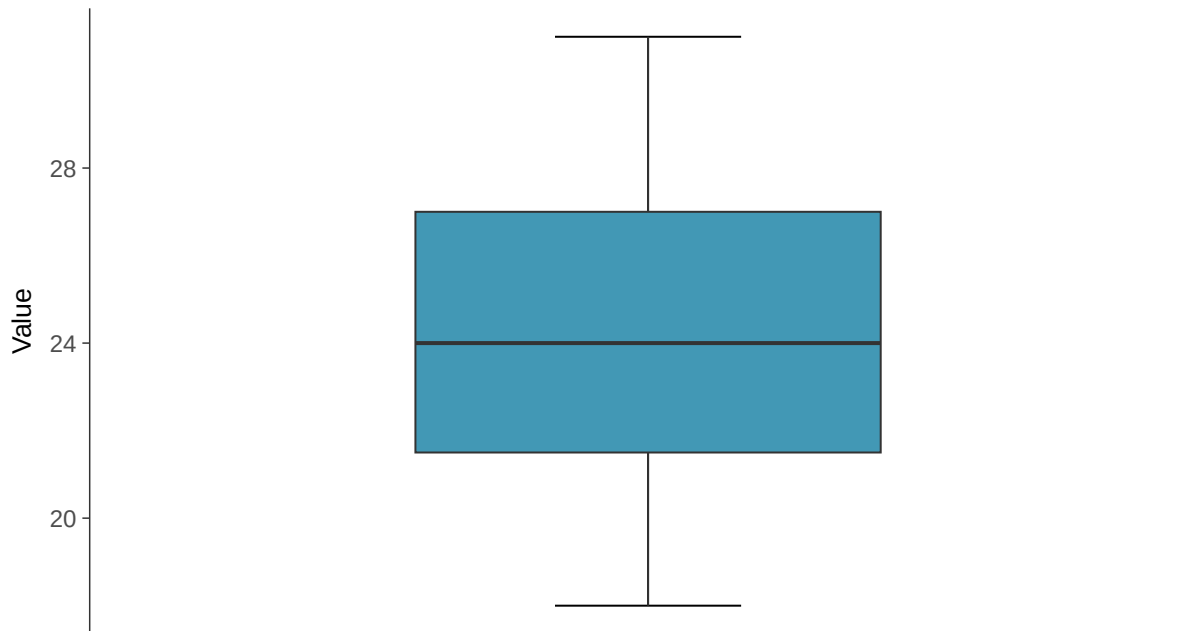
Part 115: Iron, MW-02

ID: 12_2_5_114



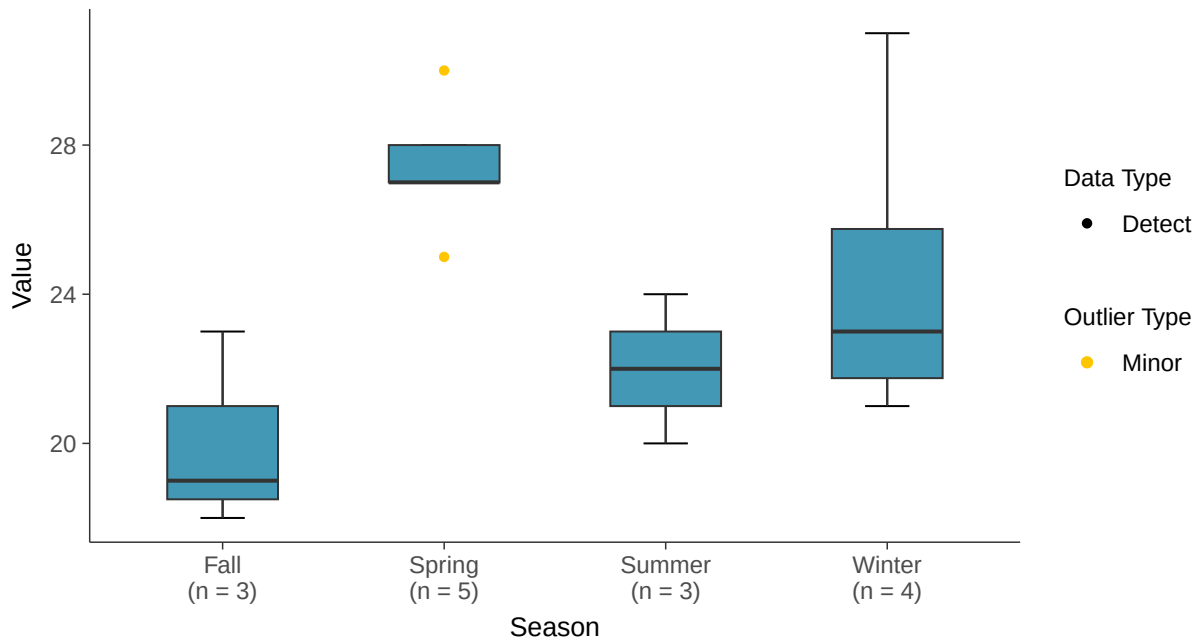
Boxplot

Iron, MW-02 (mg/L)



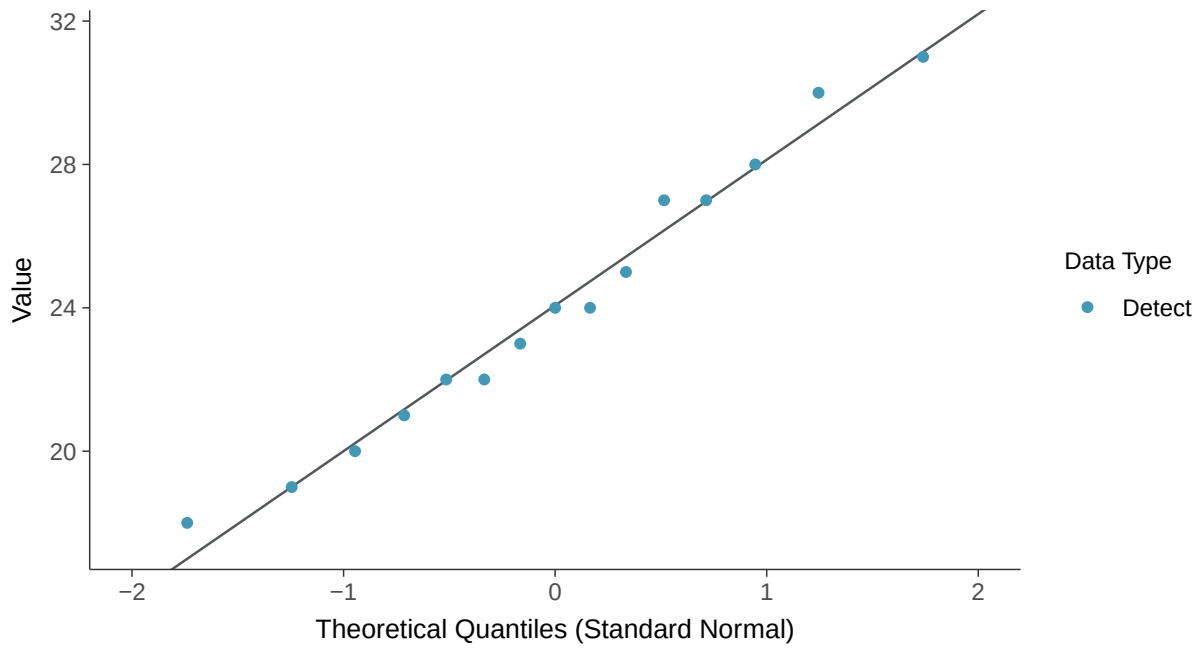
Boxplot by Season

Iron, MW-02 (mg/L)



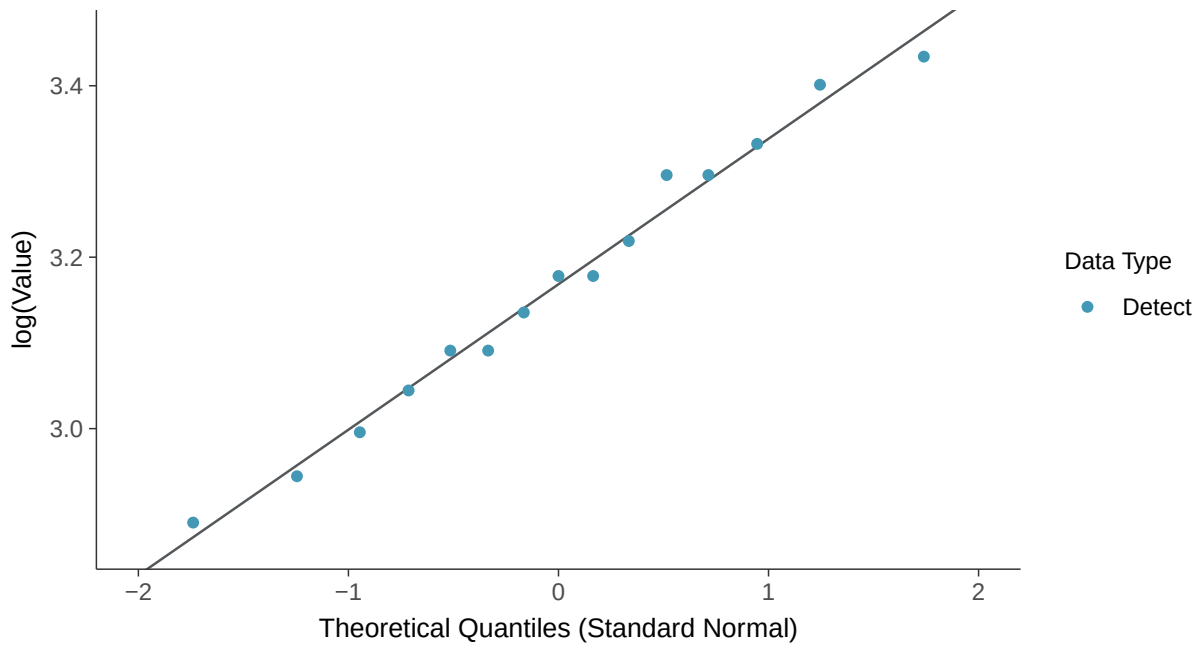
Normal Q-Q plot

Iron, MW-02 (mg/L)



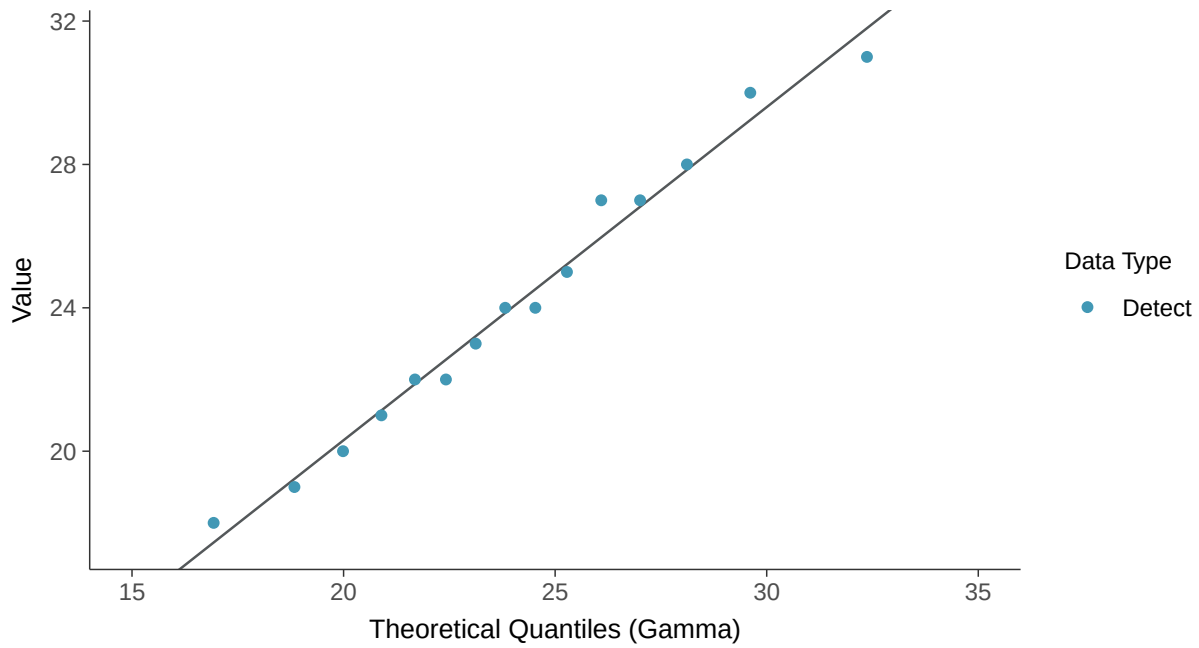
Lognormal Q-Q plot

Iron, MW-02 (mg/L)



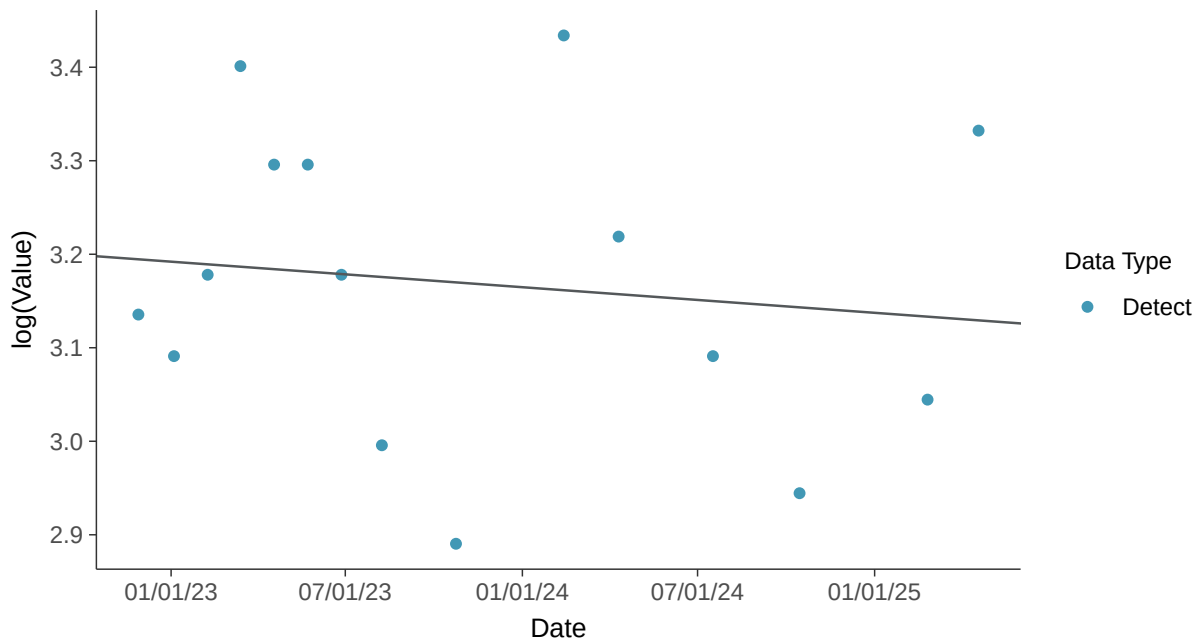
Gamma Q-Q plot

Iron, MW-02 (mg/L)



Trend Regression: Lognormal MLE

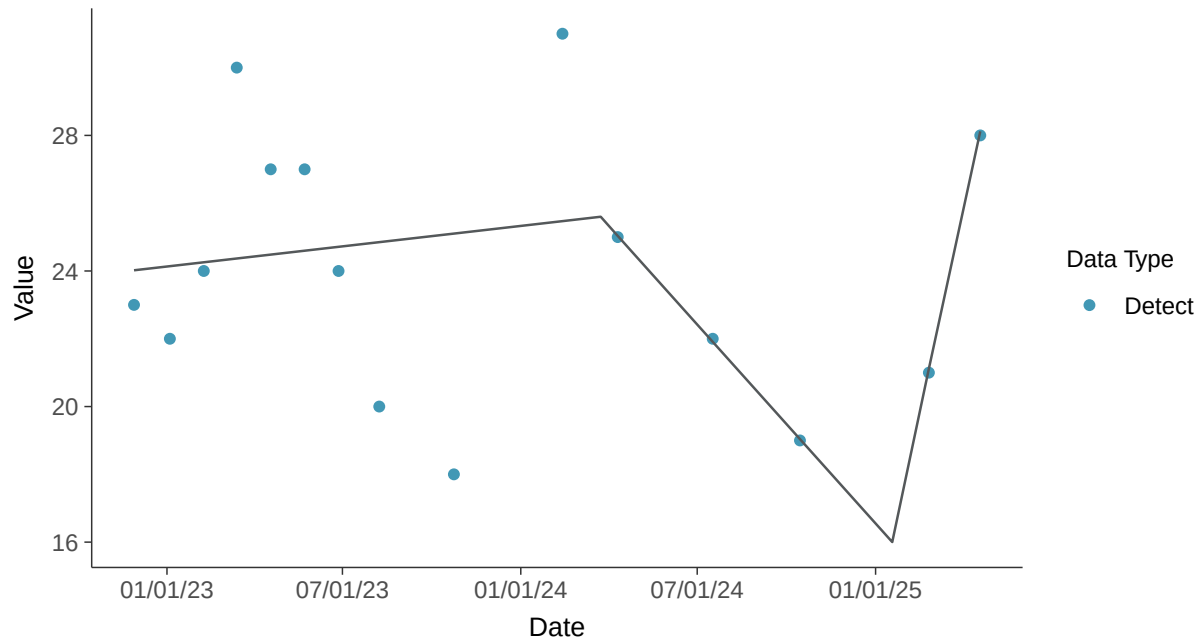
Iron, MW-02 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

Iron, MW-02 (mg/L)

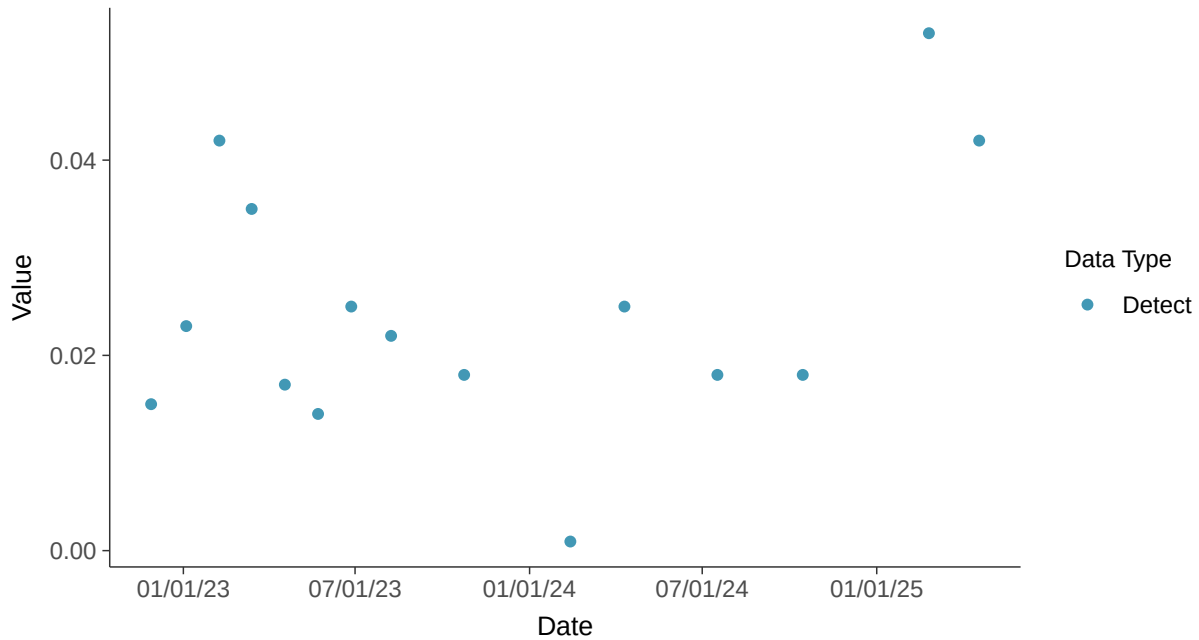


Part 115: Nickel, MW-02

ID: 12_2_5_119

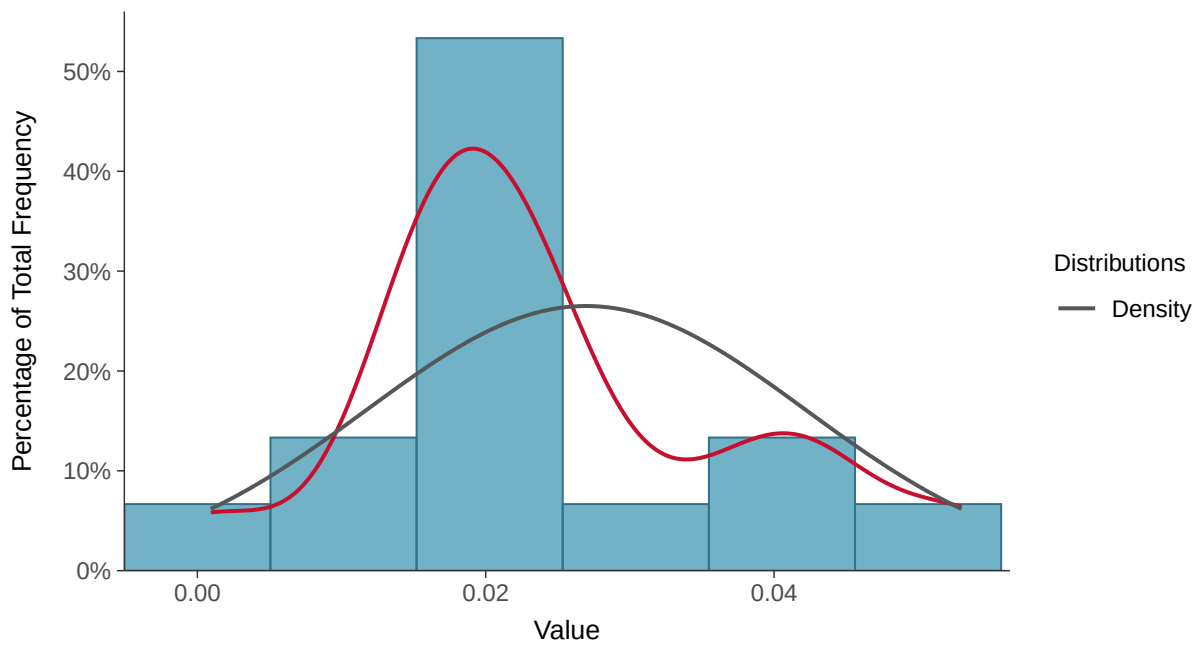
Scatter Plot

Nickel, MW-02 (mg/L)



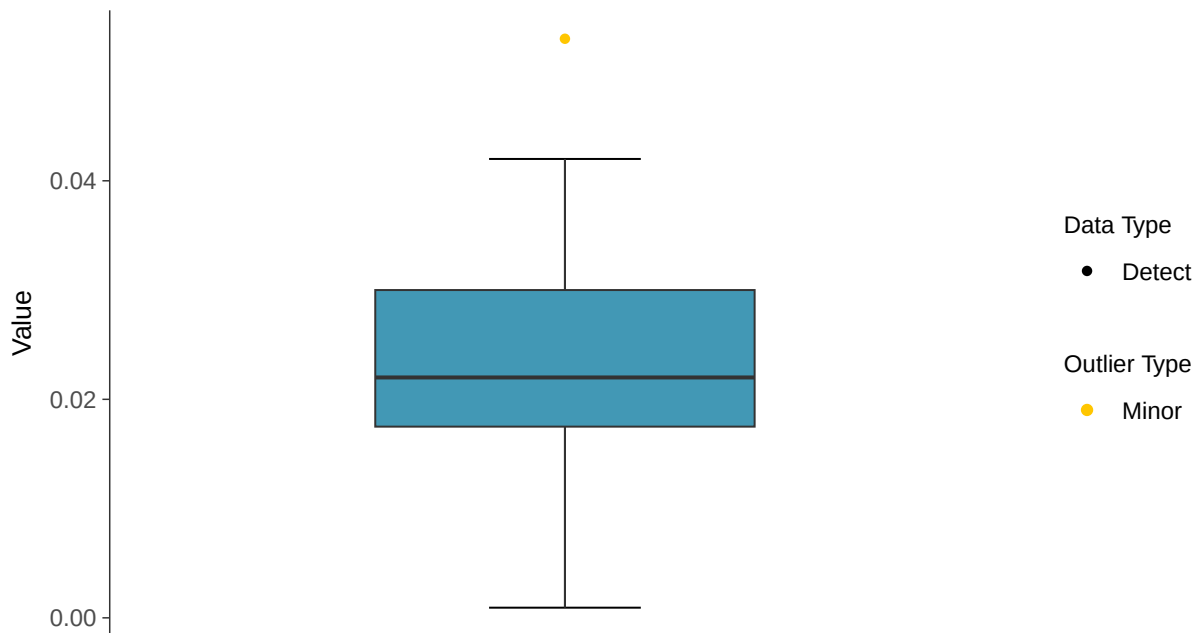
Histogram

Nickel, MW-02 (mg/L)



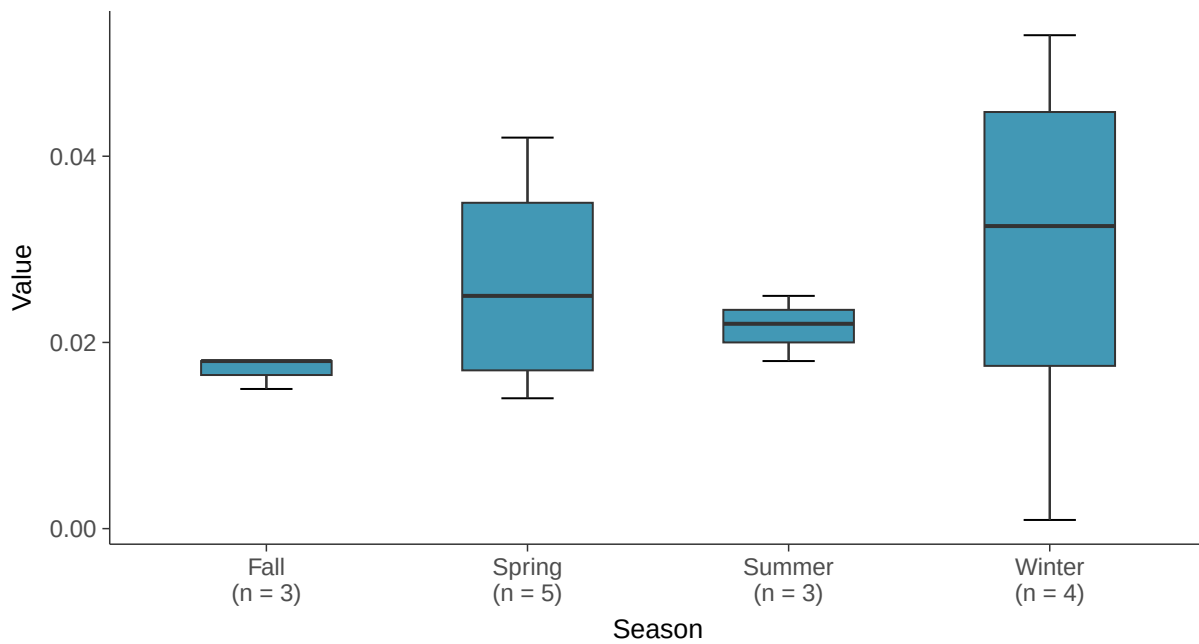
Boxplot

Nickel, MW-02 (mg/L)

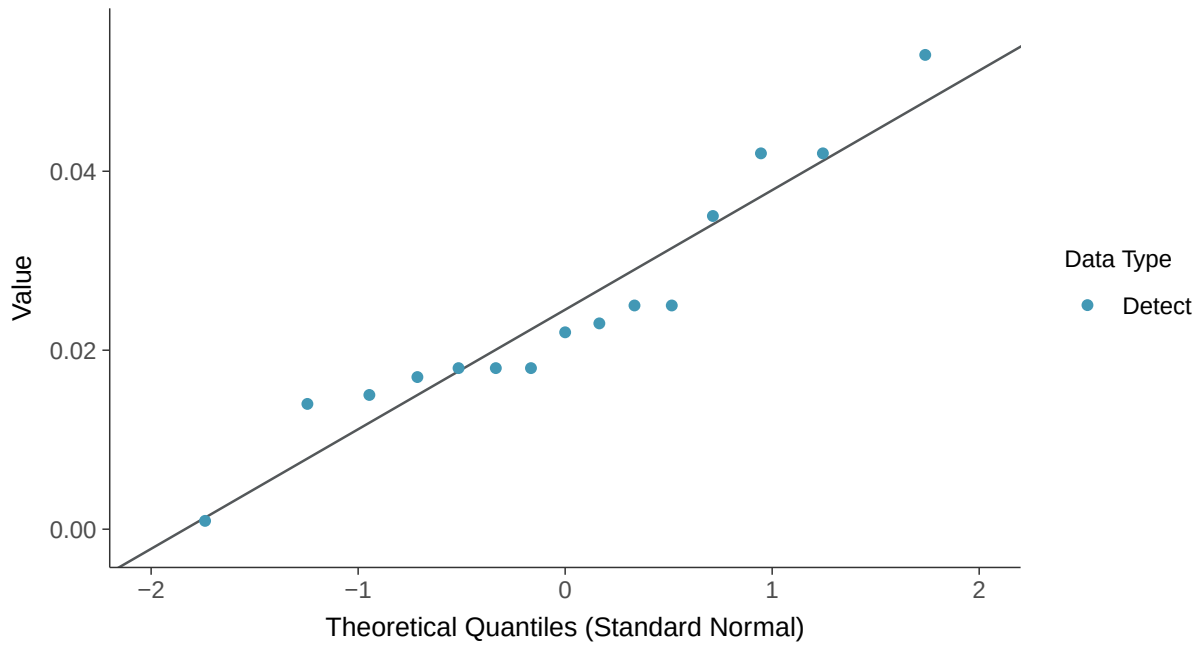


Boxplot by Season

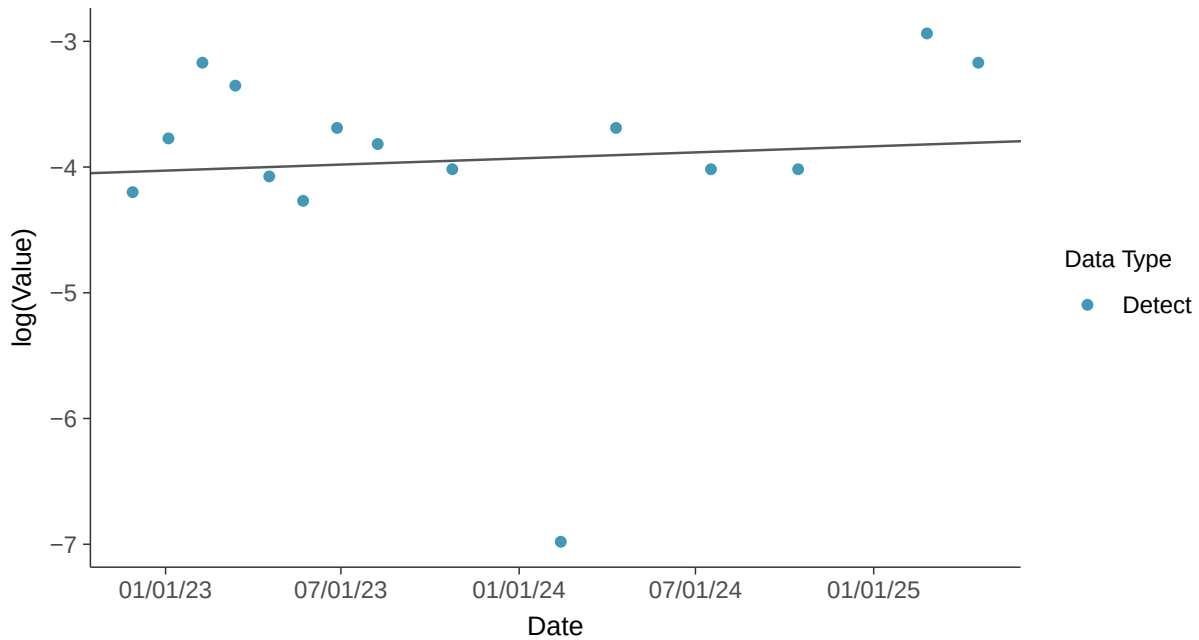
Nickel, MW-02 (mg/L)



Normal Q-Q plot
Nickel, MW-02 (mg/L)

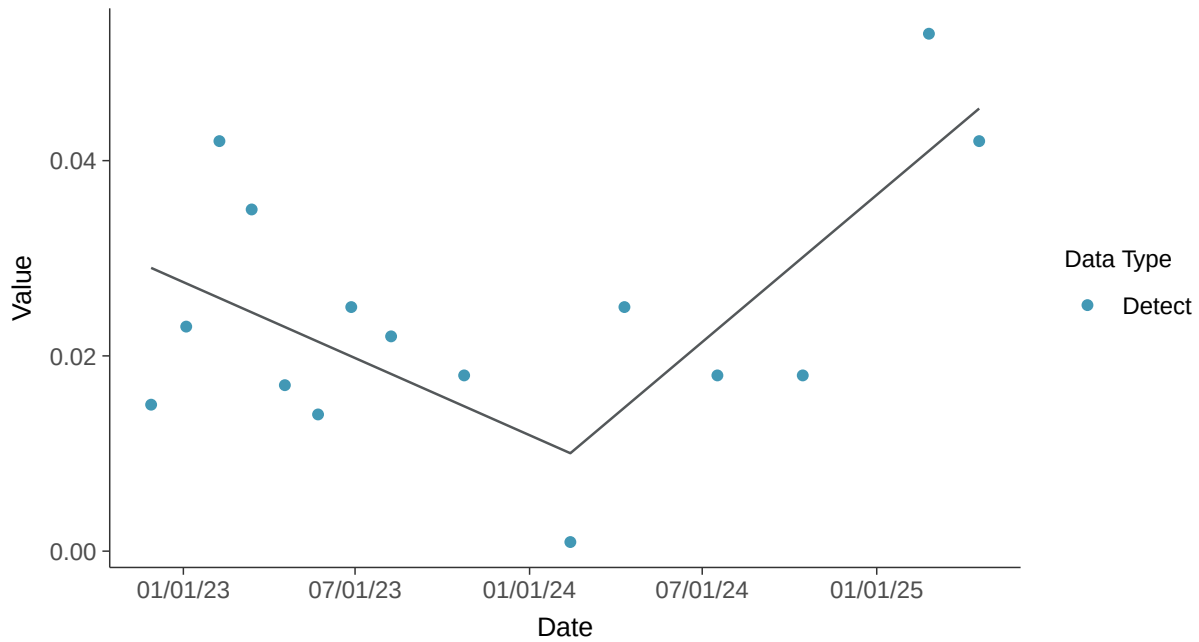


Trend Regression: Lognormal MLE
Nickel, MW-02 (mg/L)



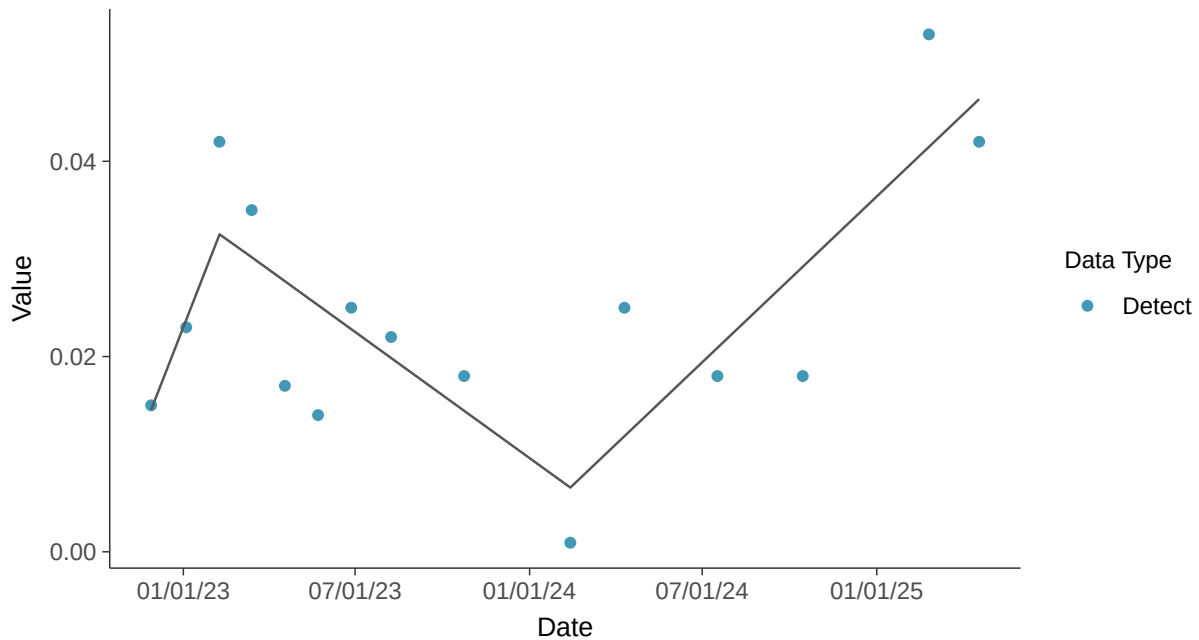
Trend Regression: Piecewise Linear-Linear

Nickel, MW-02 (mg/L)



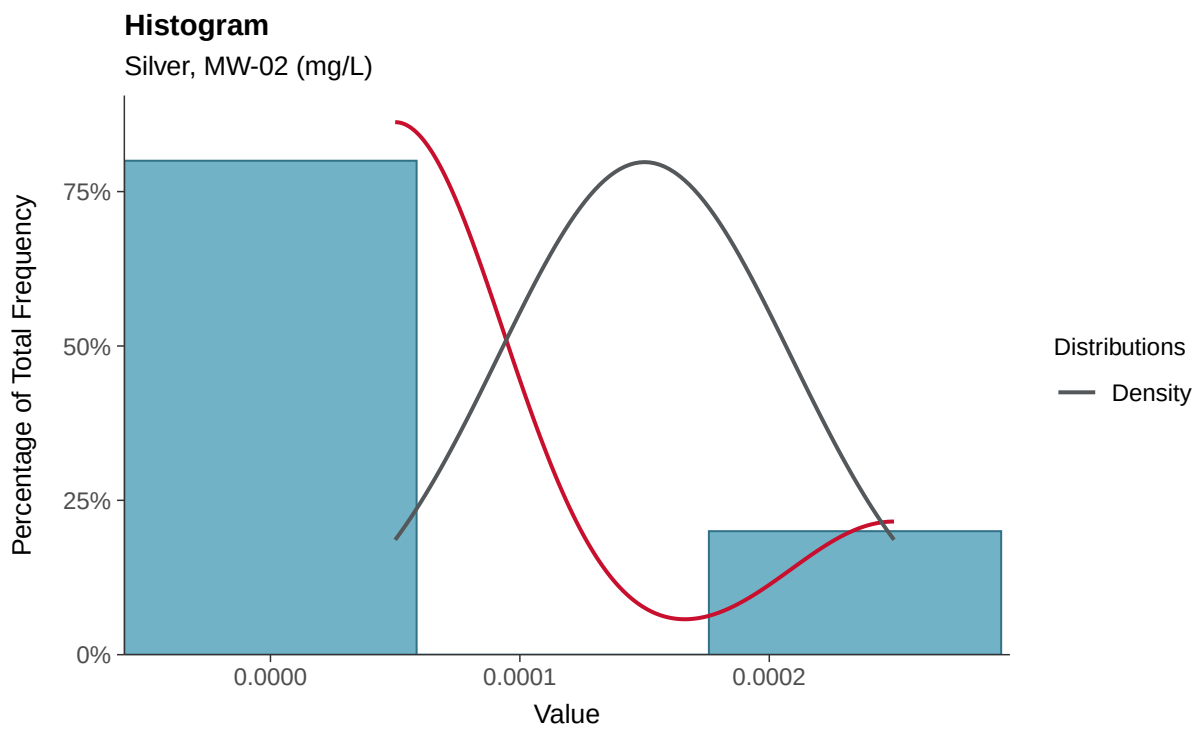
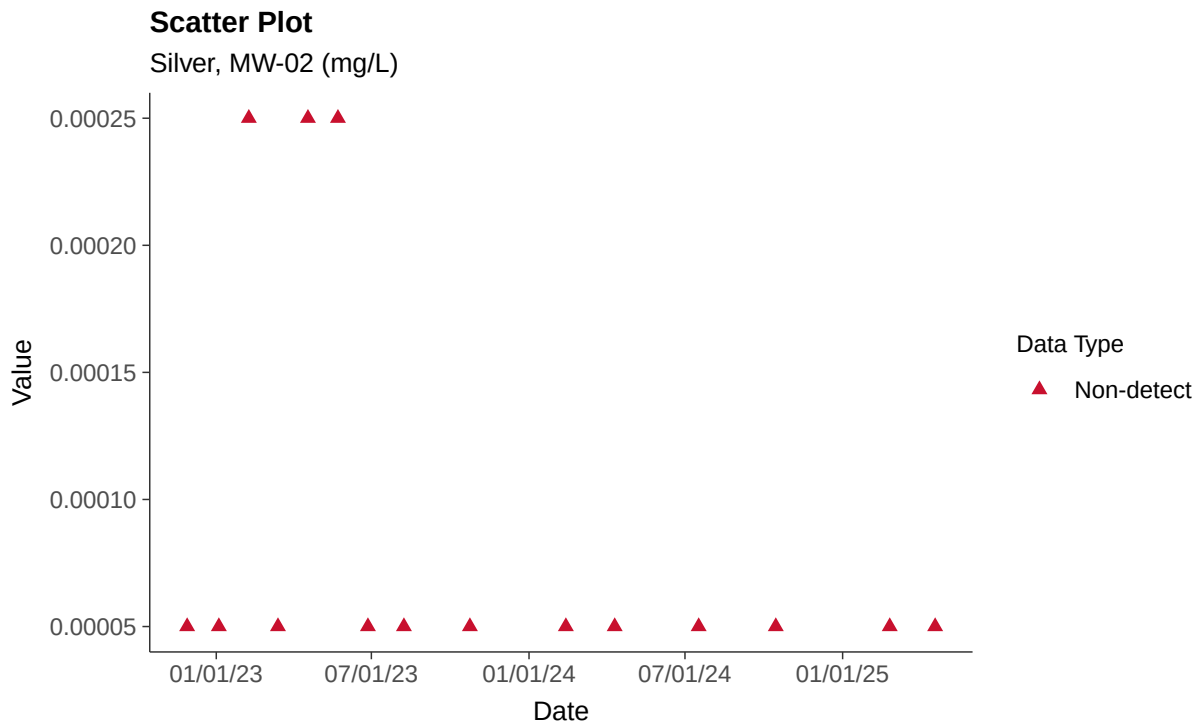
Trend Regression: Piecewise Linear-Linear-Linear

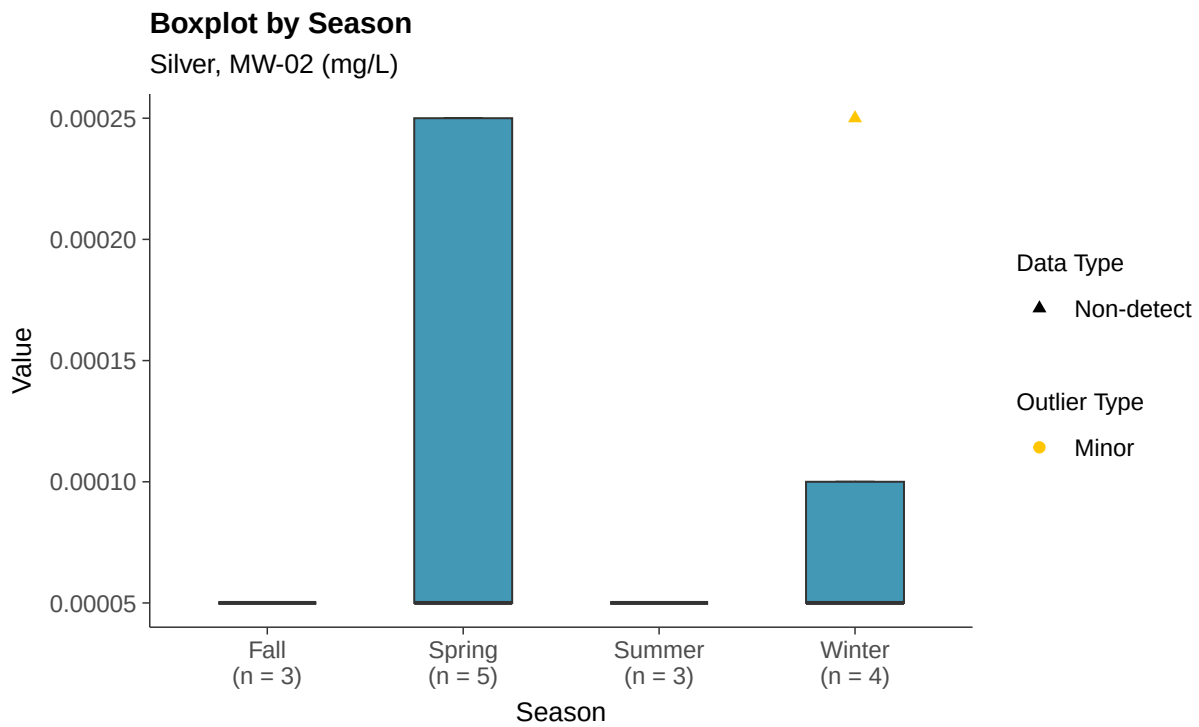
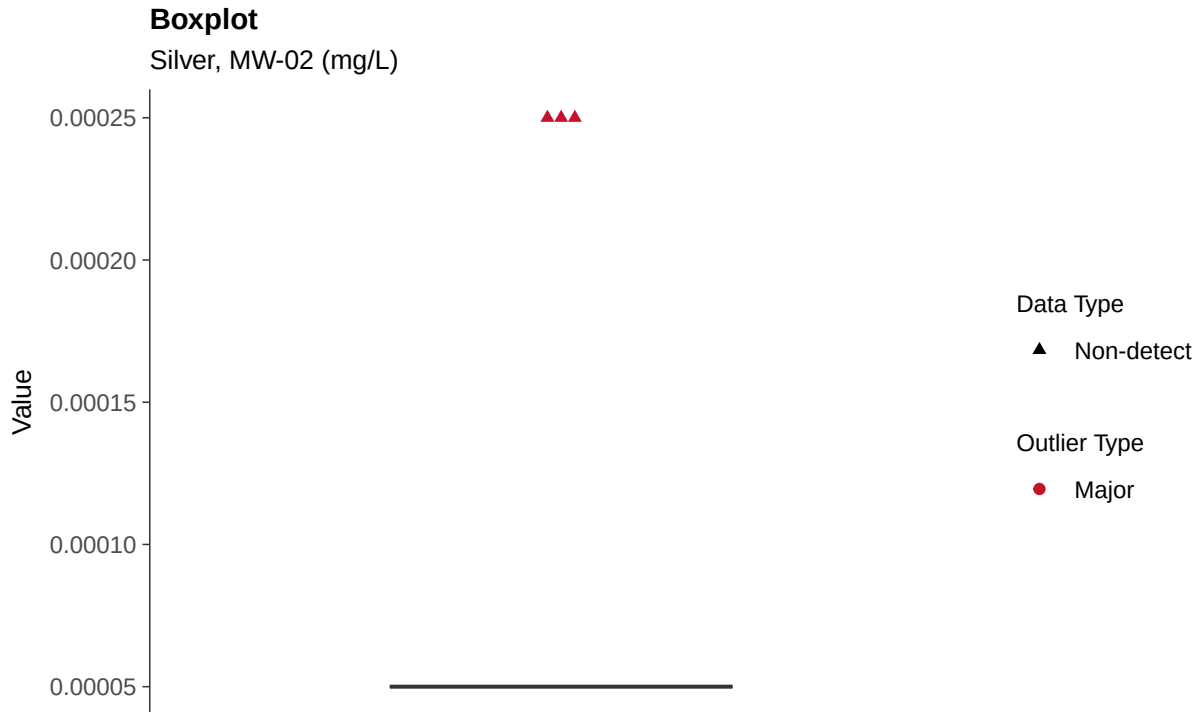
Nickel, MW-02 (mg/L)



Part 115: Silver, MW-02

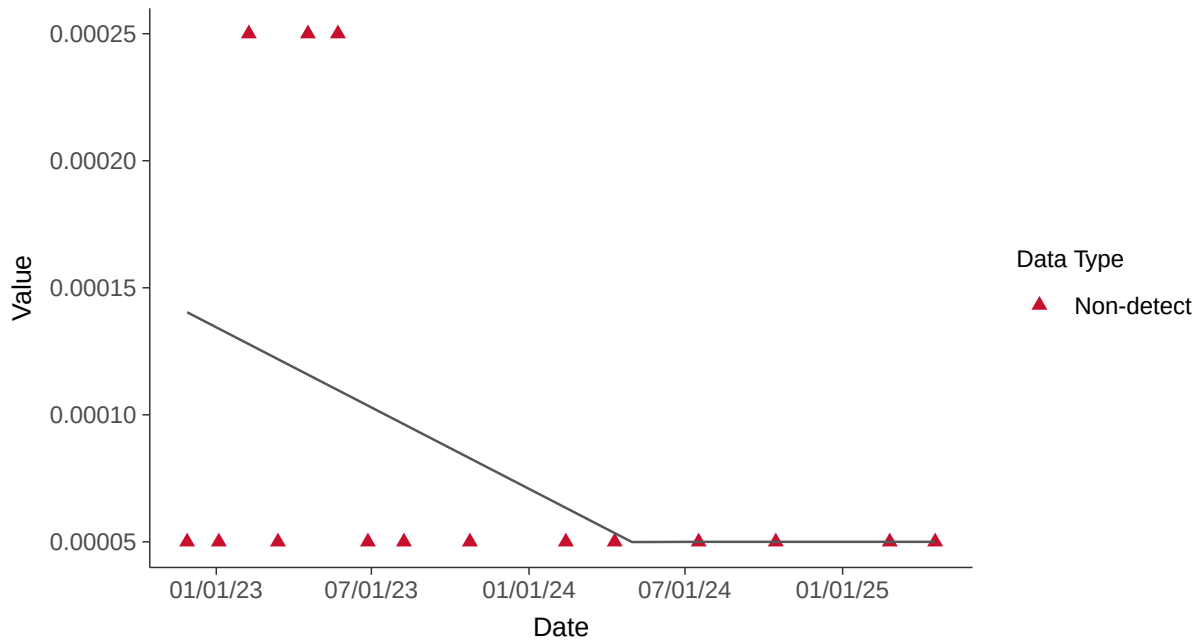
ID: 12_2_5_123





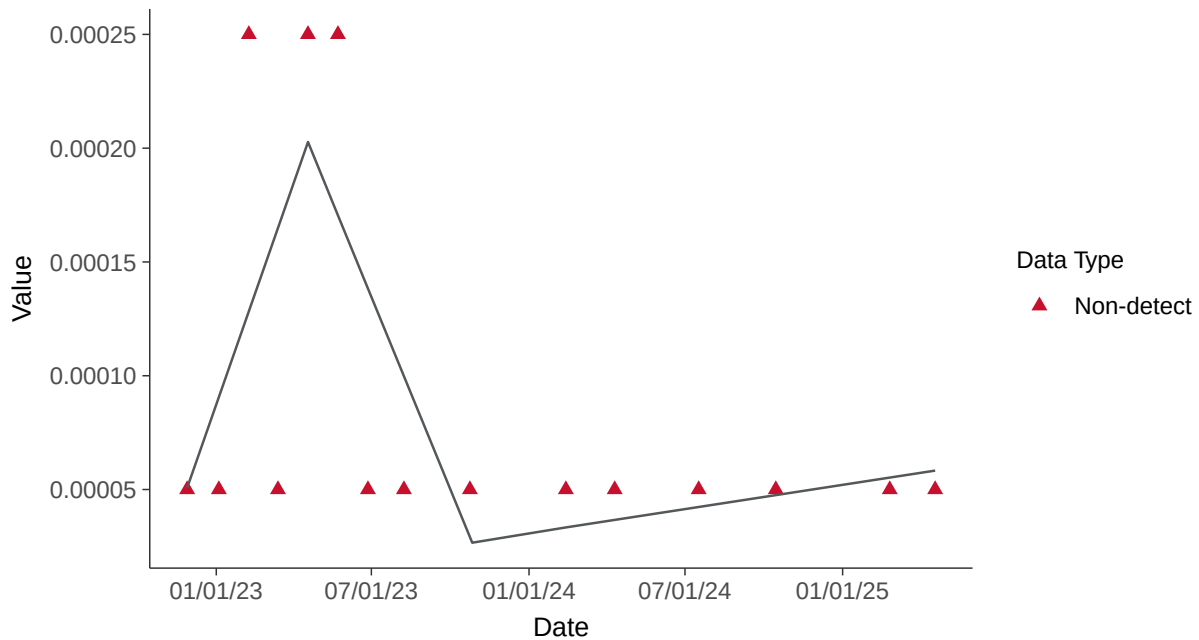
Trend Regression: Piecewise Linear-Linear

Silver, MW-02 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Silver, MW-02 (mg/L)

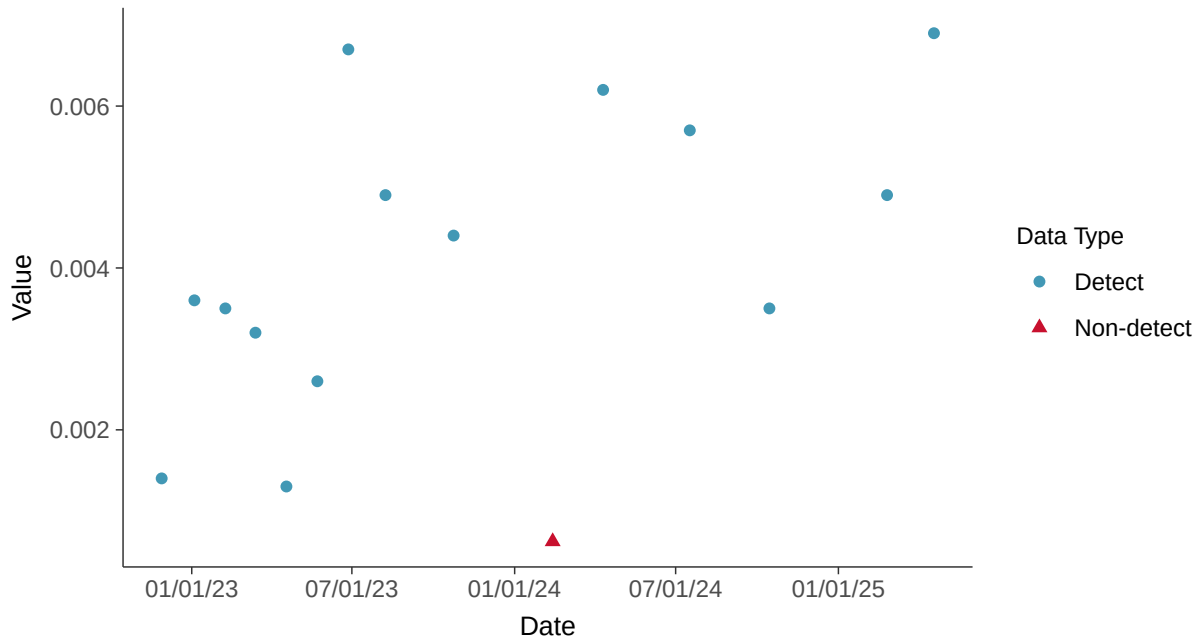


Part 115: Vanadium, MW-02

ID: 12_2_5_128

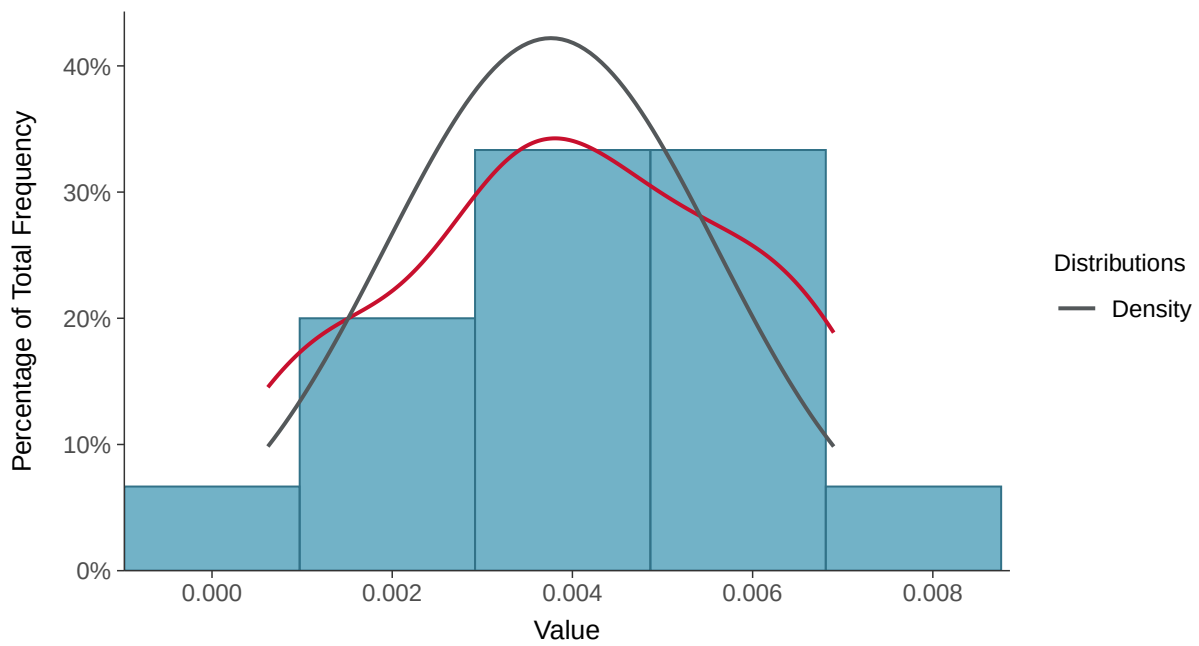
Scatter Plot

Vanadium, MW-02 (mg/L)



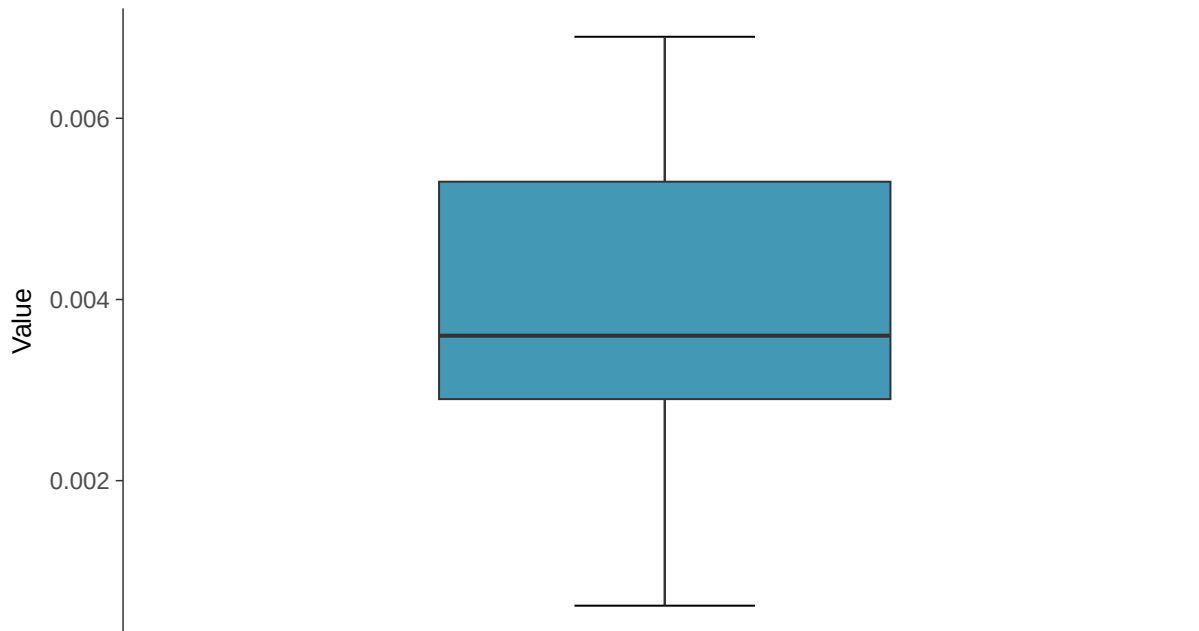
Histogram

Vanadium, MW-02 (mg/L)



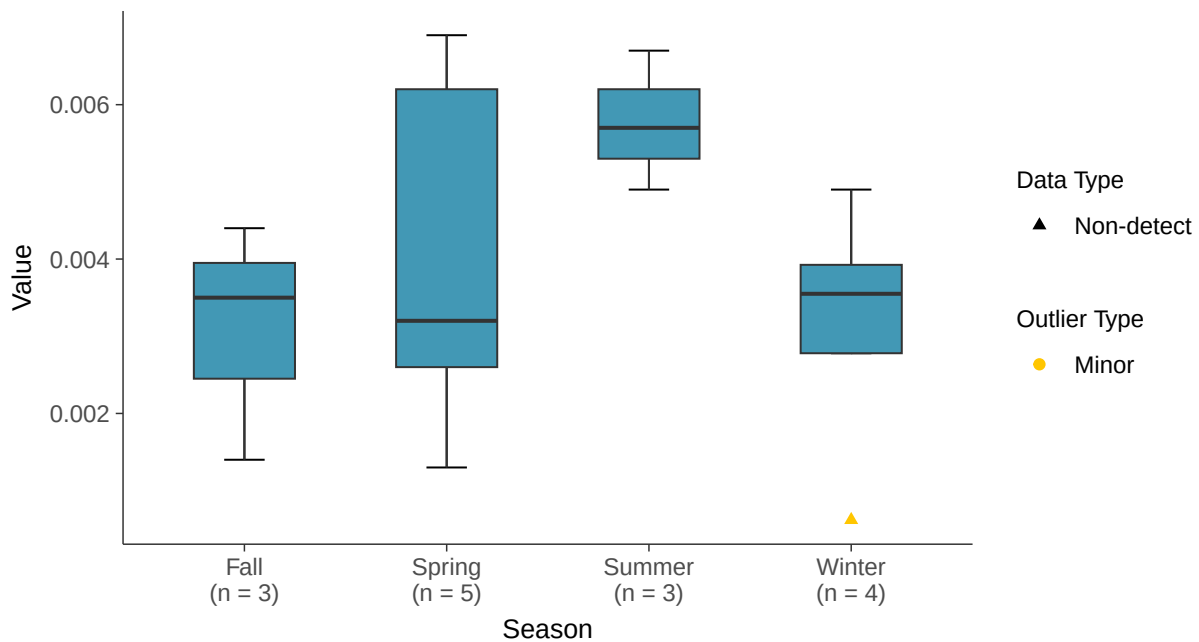
Boxplot

Vanadium, MW-02 (mg/L)



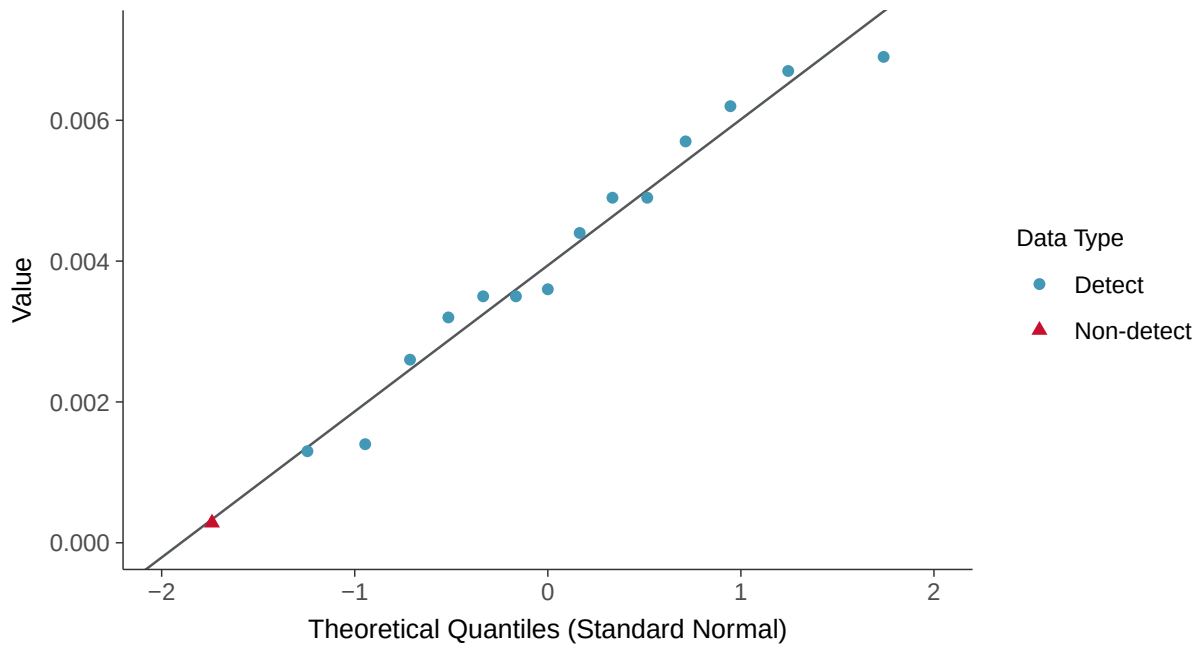
Boxplot by Season

Vanadium, MW-02 (mg/L)



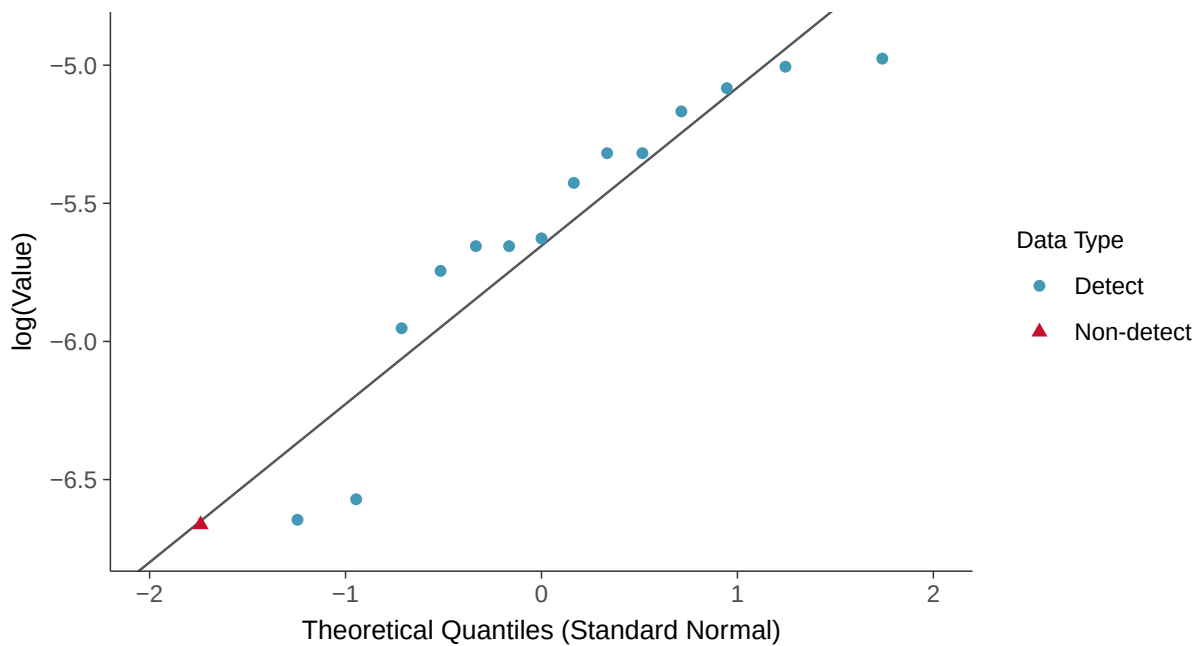
Normal Q-Q plot using ROS Imputed Estimates

Vanadium, MW-02 (mg/L)



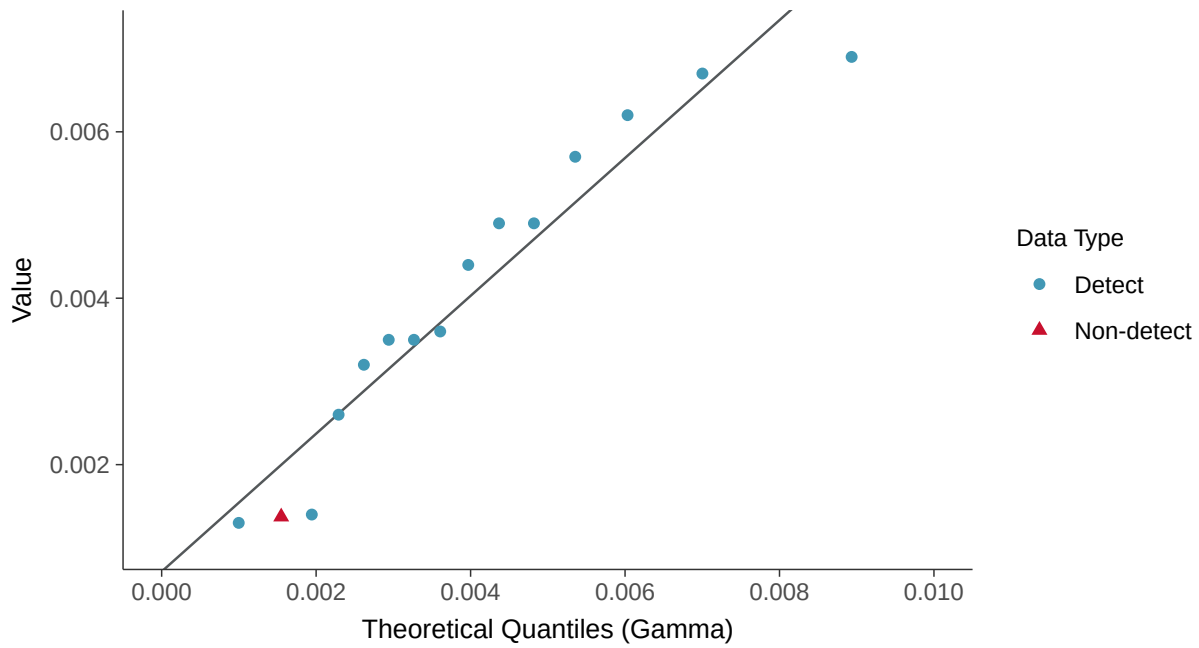
Lognormal Q-Q plot using ROS Imputed Estimates

Vanadium, MW-02 (mg/L)



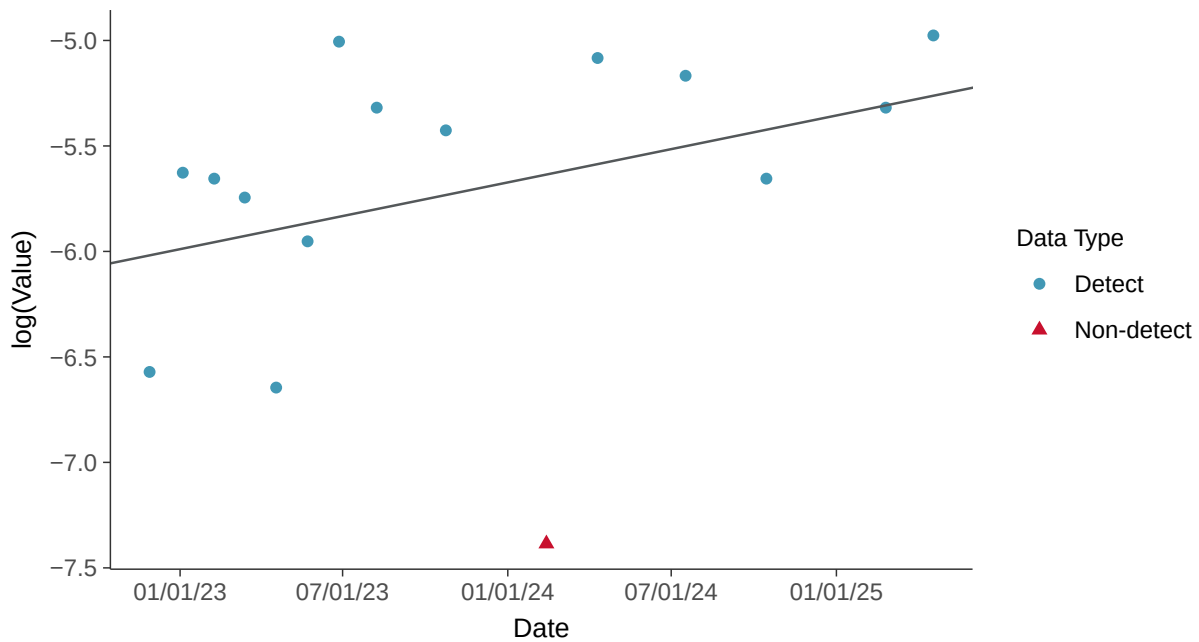
Gamma Q-Q plot using ROS Imputed Estimates

Vanadium, MW-02 (mg/L)



Trend Regression: Lognormal MLE

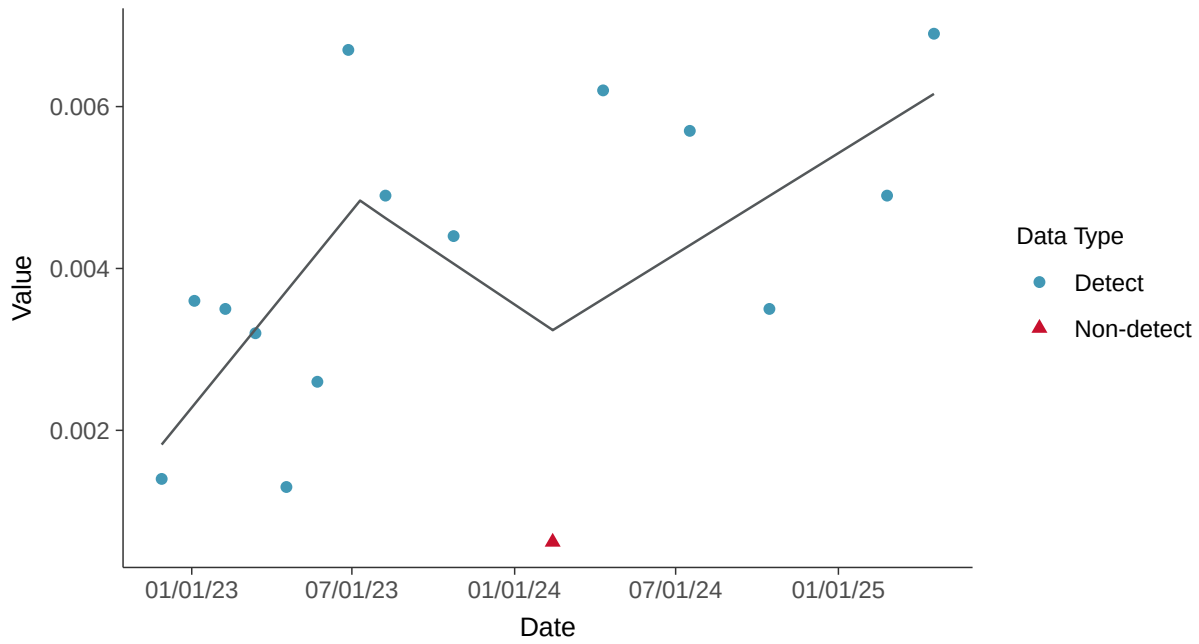
Vanadium, MW-02 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

Vanadium, MW-02 (mg/L)

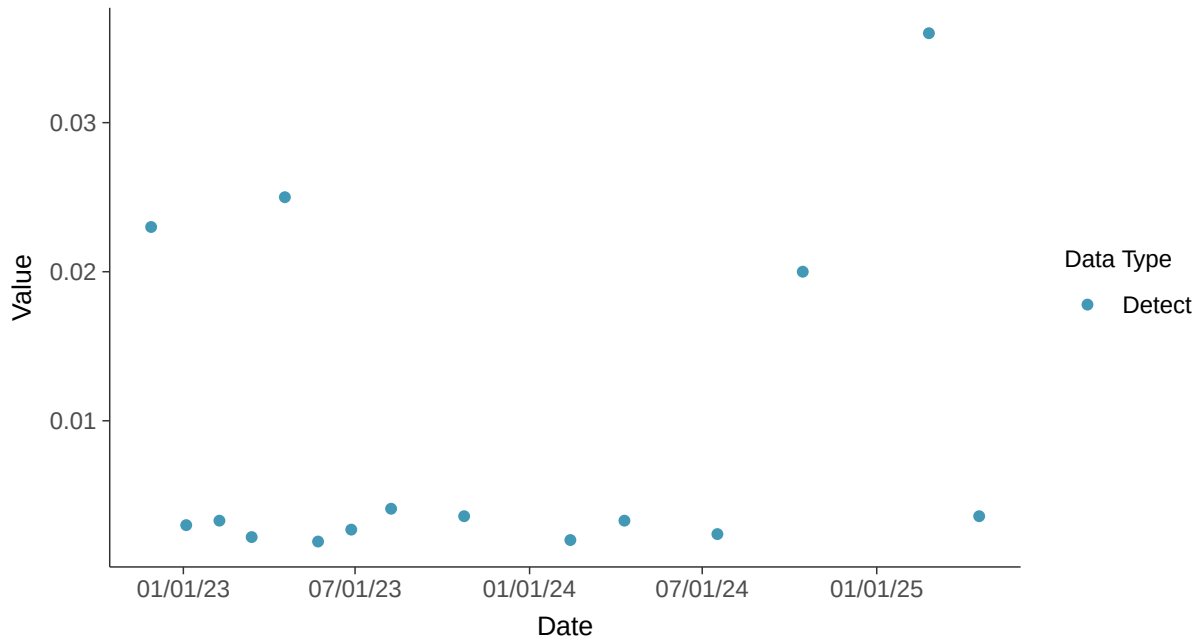


Part 115: Zinc, MW-02

ID: 12_2_5_129

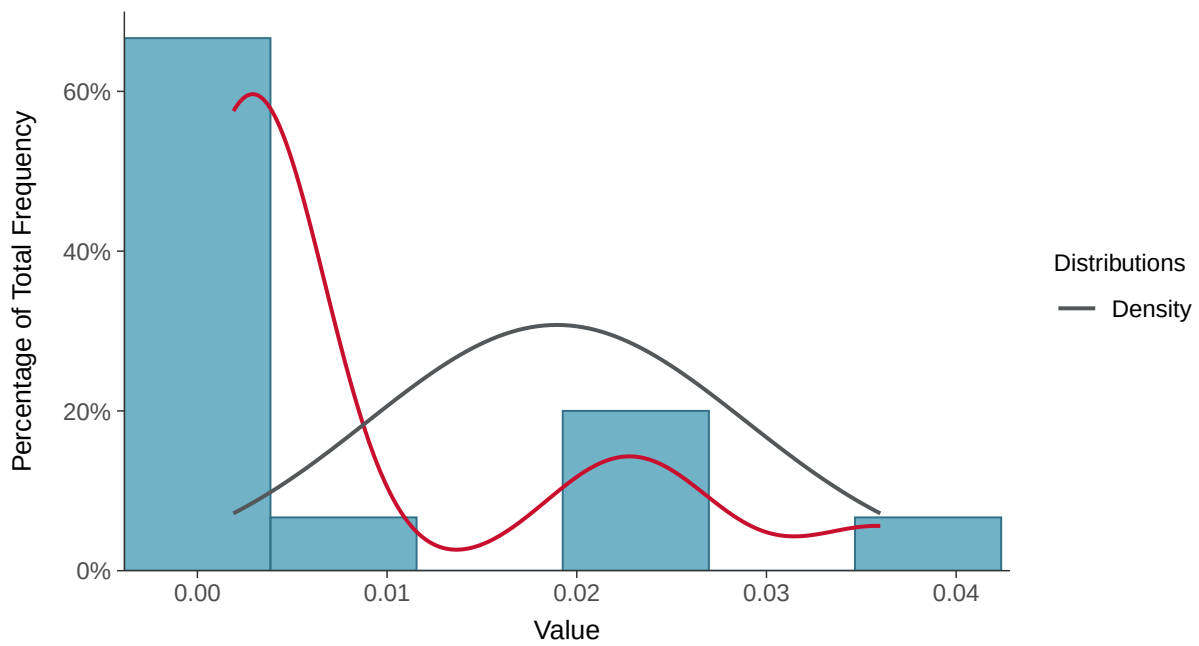
Scatter Plot

Zinc, MW-02 (mg/L)



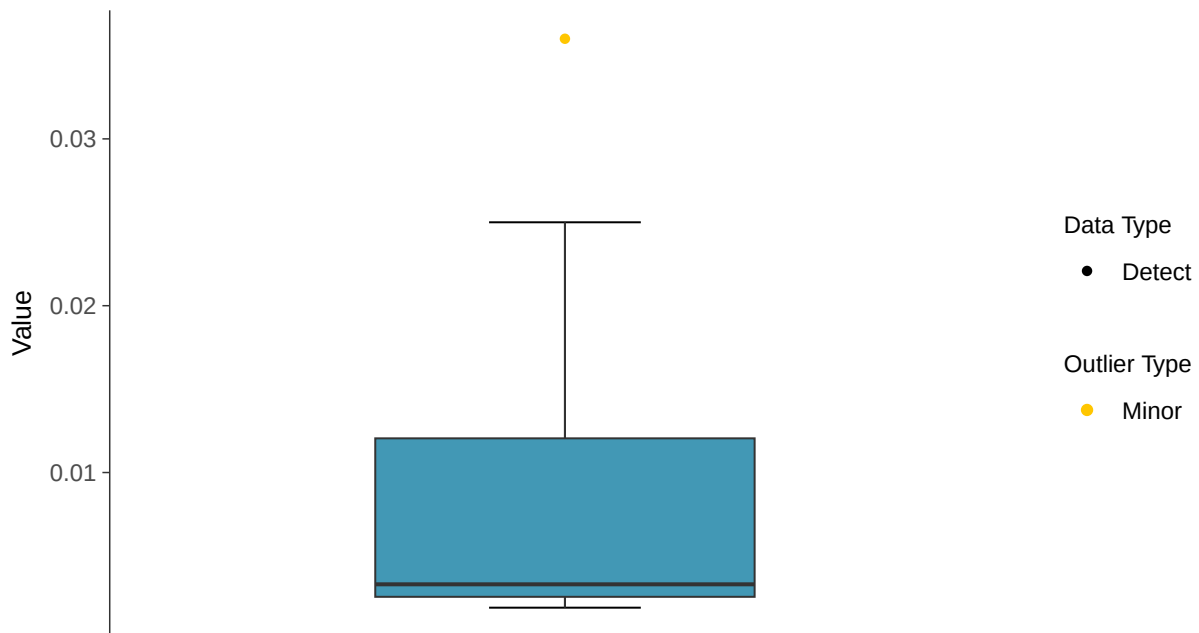
Histogram

Zinc, MW-02 (mg/L)



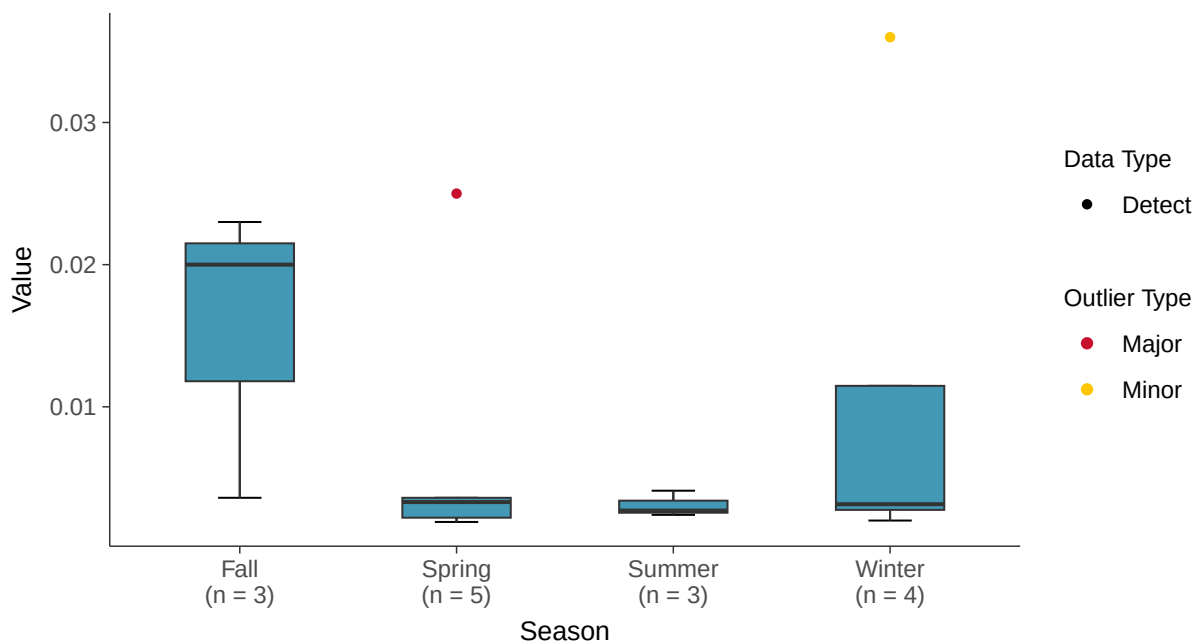
Boxplot

Zinc, MW-02 (mg/L)



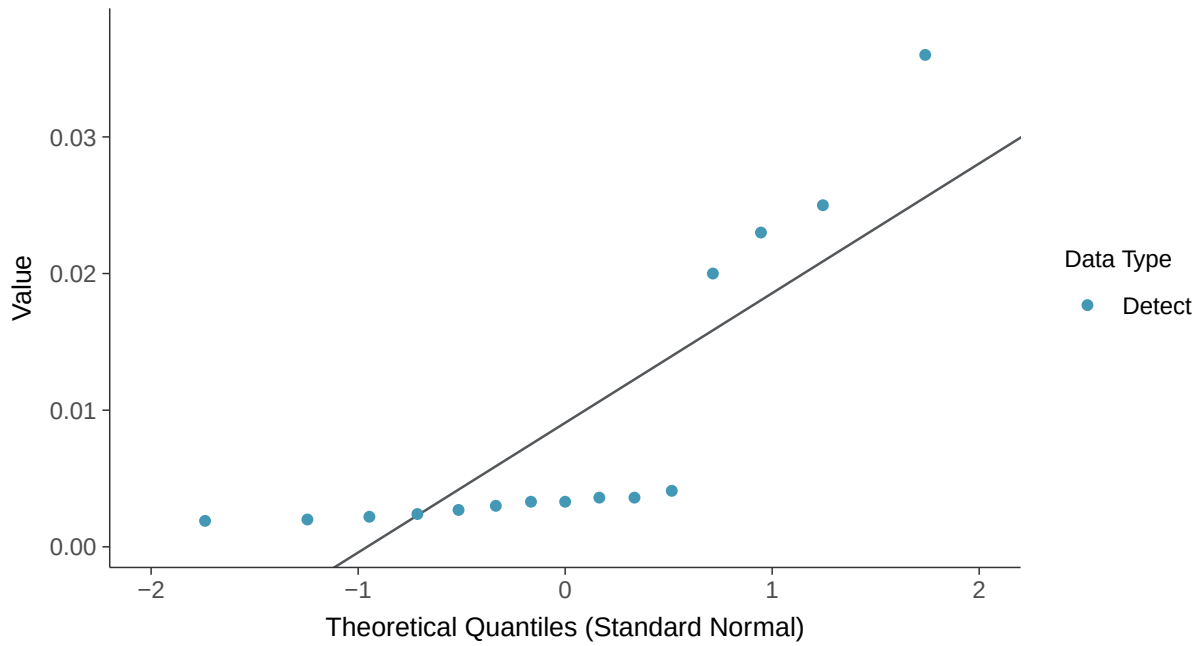
Boxplot by Season

Zinc, MW-02 (mg/L)



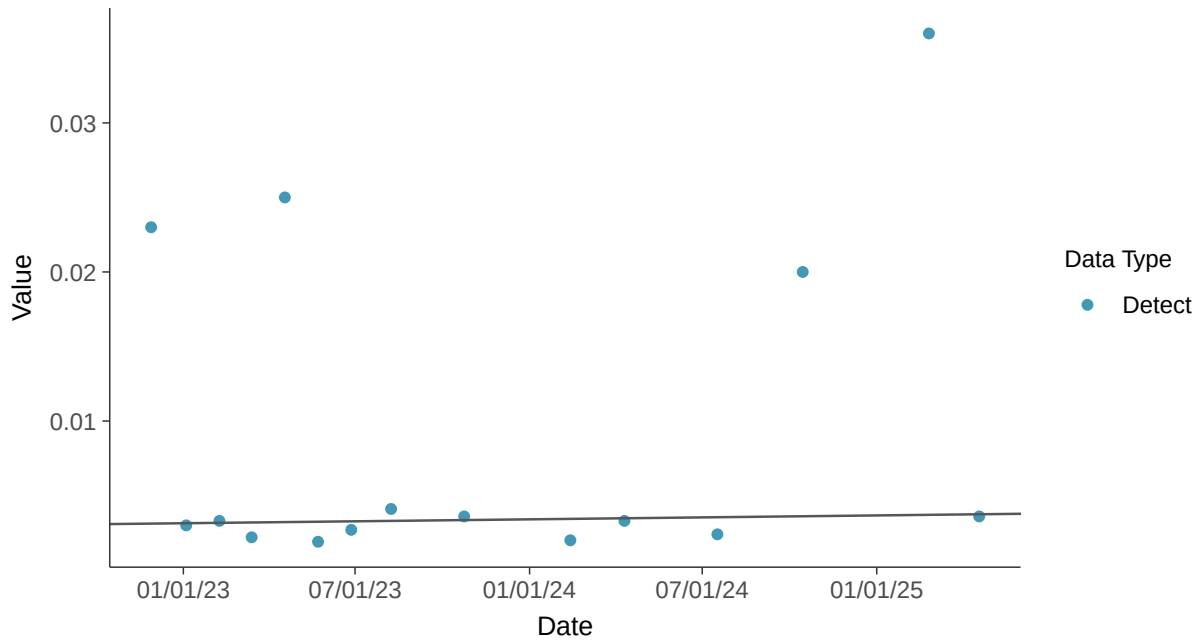
Normal Q-Q plot

Zinc, MW-02 (mg/L)



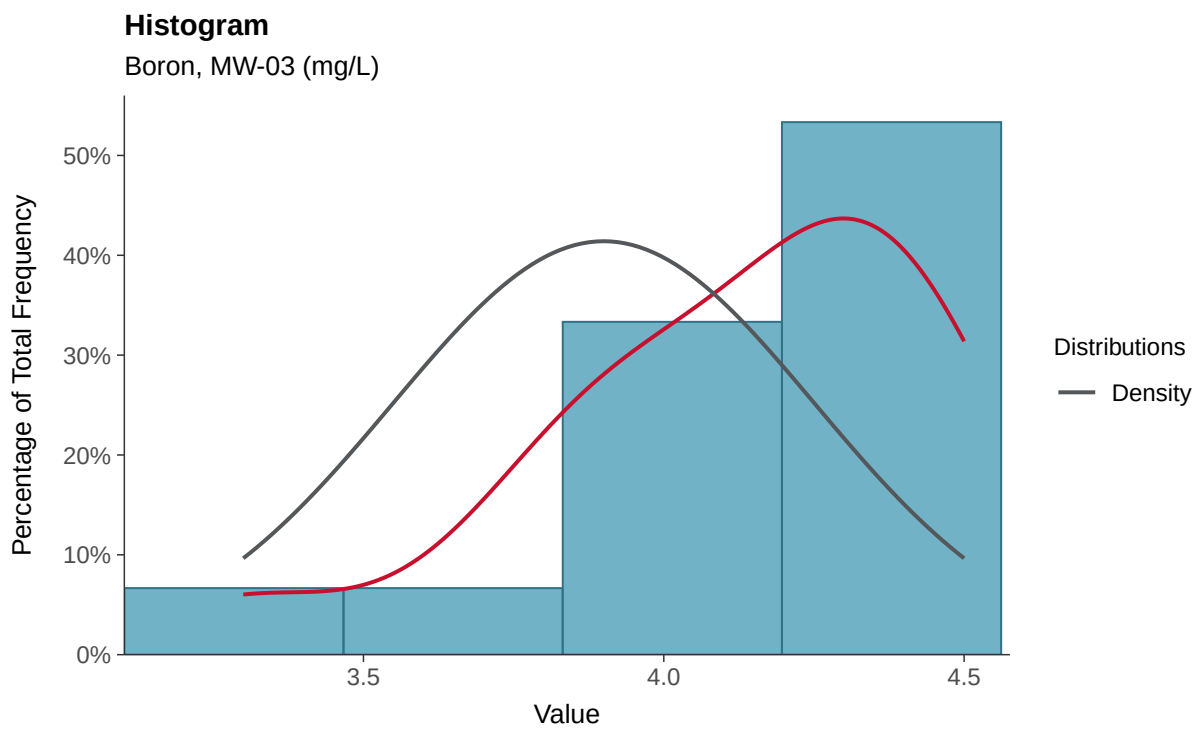
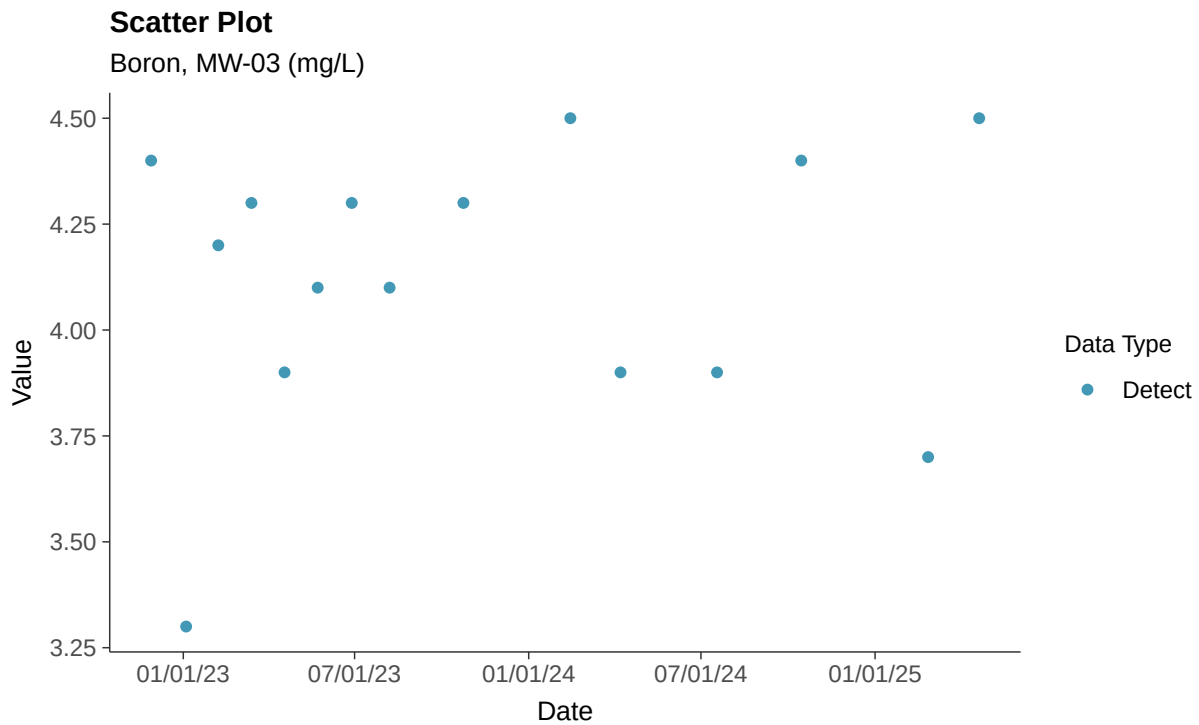
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Zinc, MW-02 (mg/L)



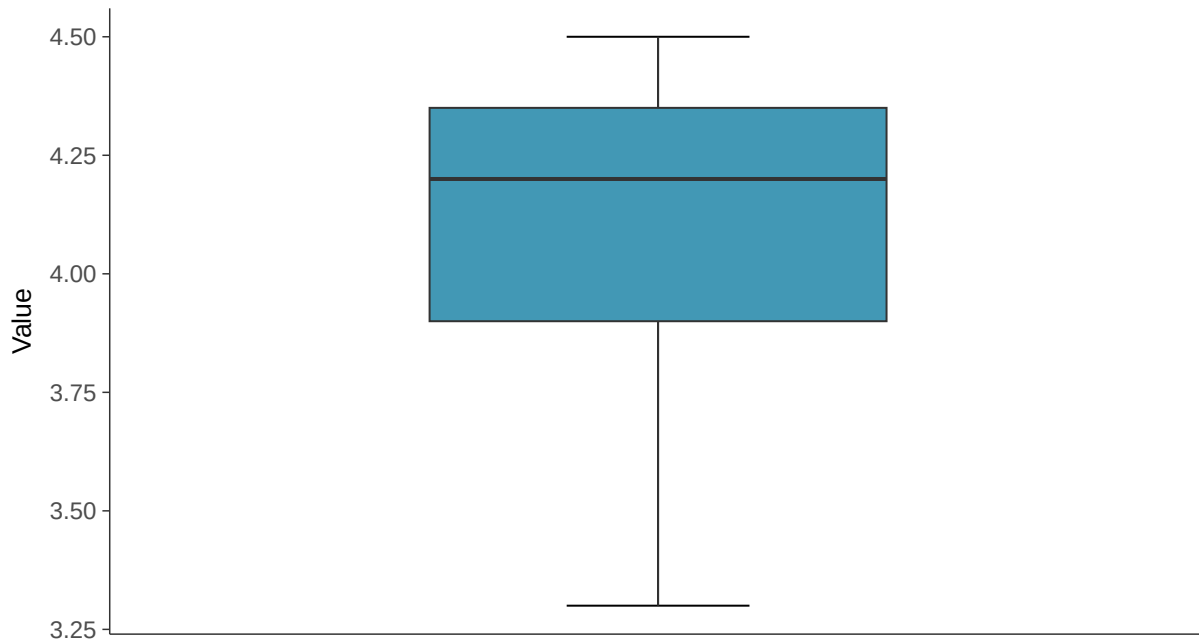
Appendix III: Boron, MW-03

ID: 13_2_3_105



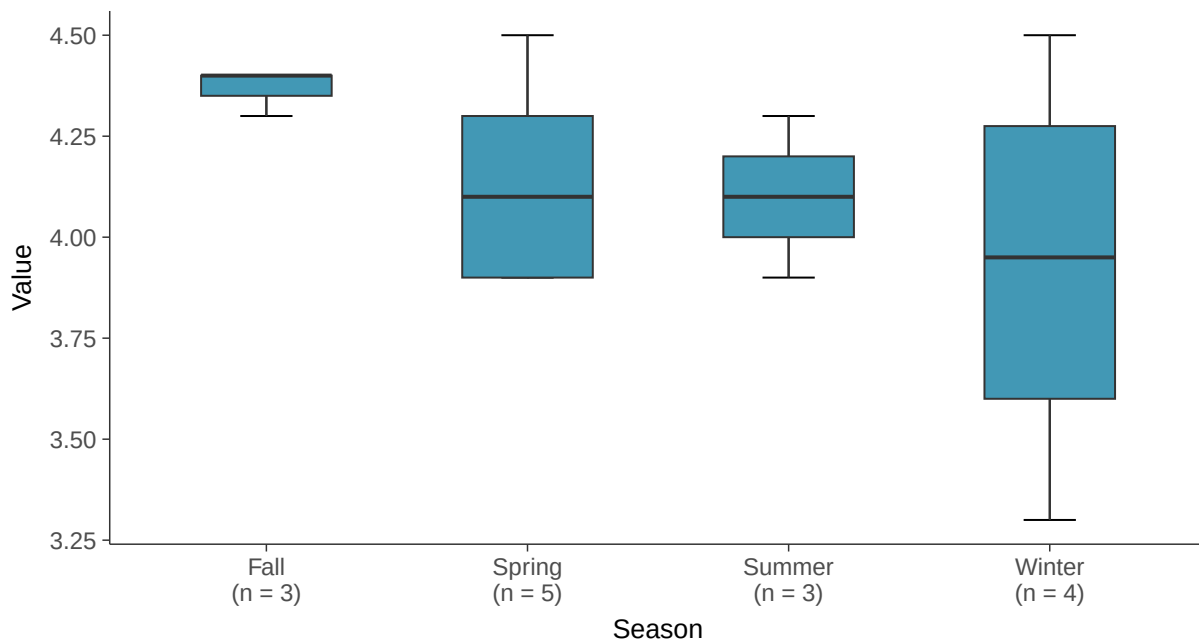
Boxplot

Boron, MW-03 (mg/L)

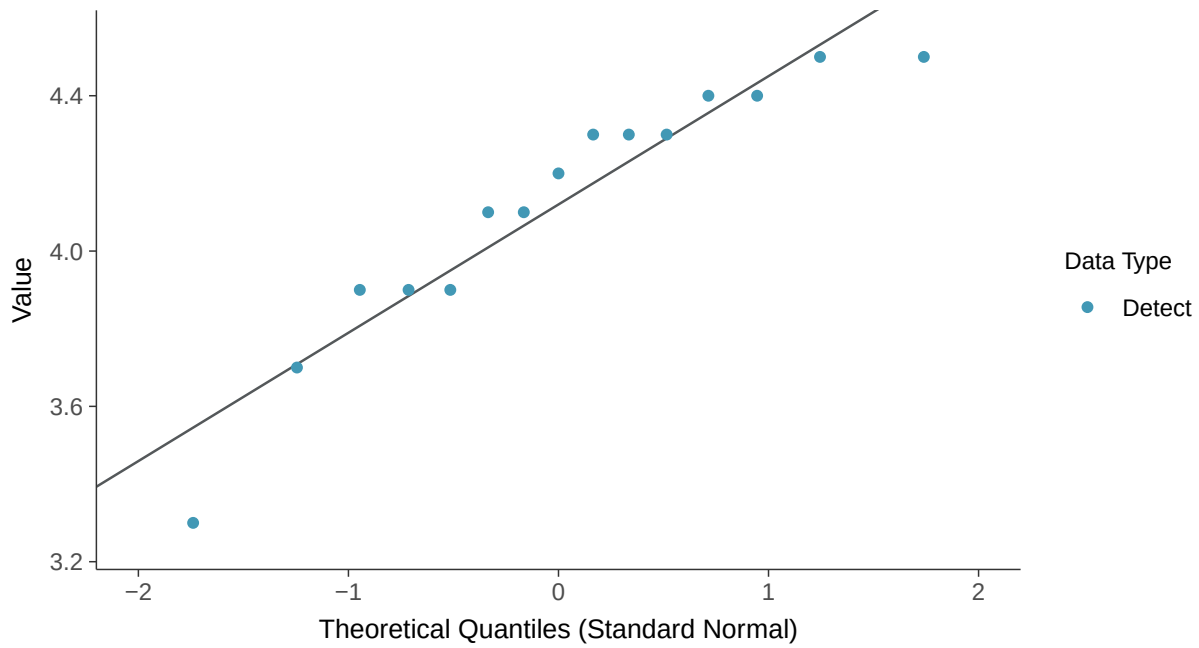


Boxplot by Season

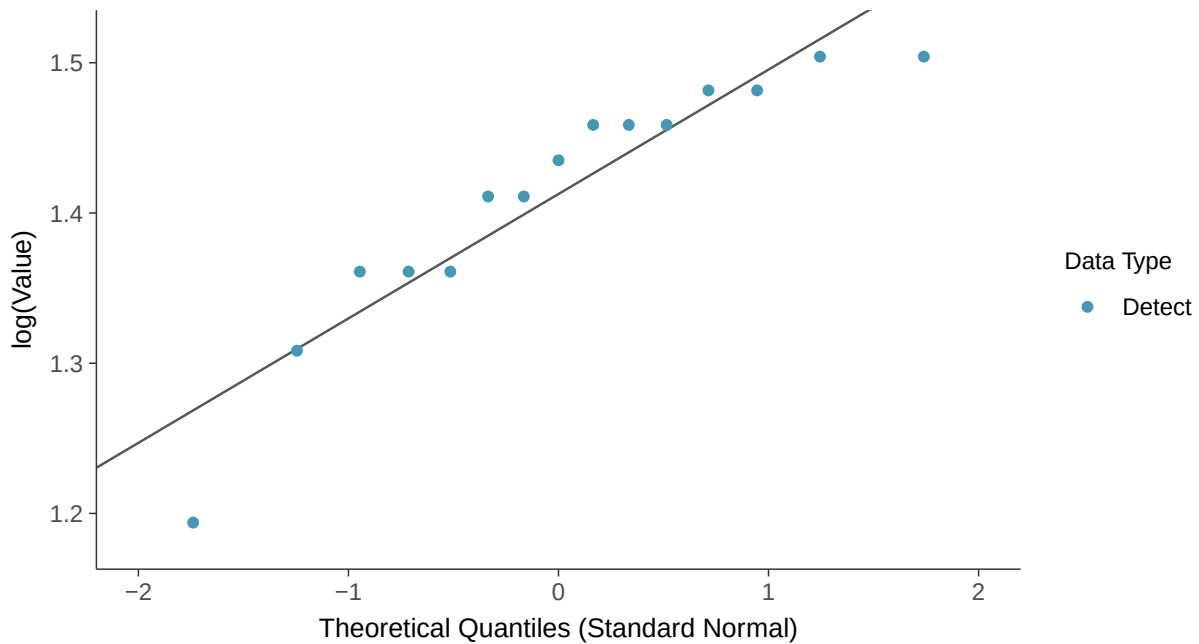
Boron, MW-03 (mg/L)



Normal Q-Q plot
Boron, MW-03 (mg/L)

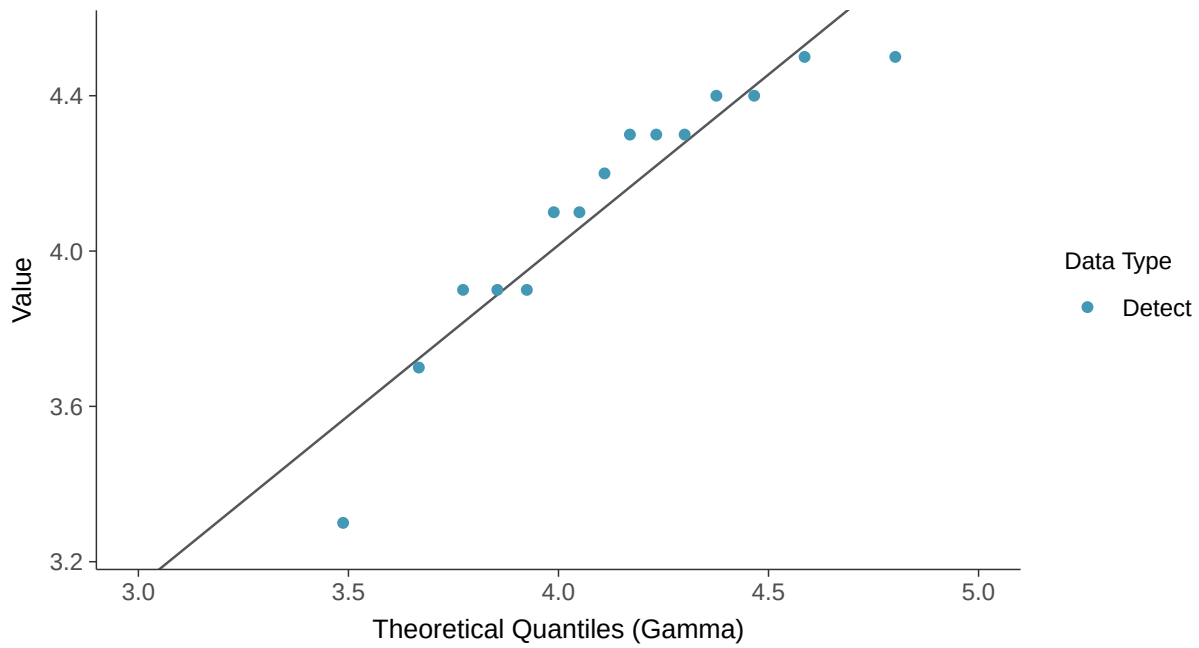


Lognormal Q-Q plot
Boron, MW-03 (mg/L)



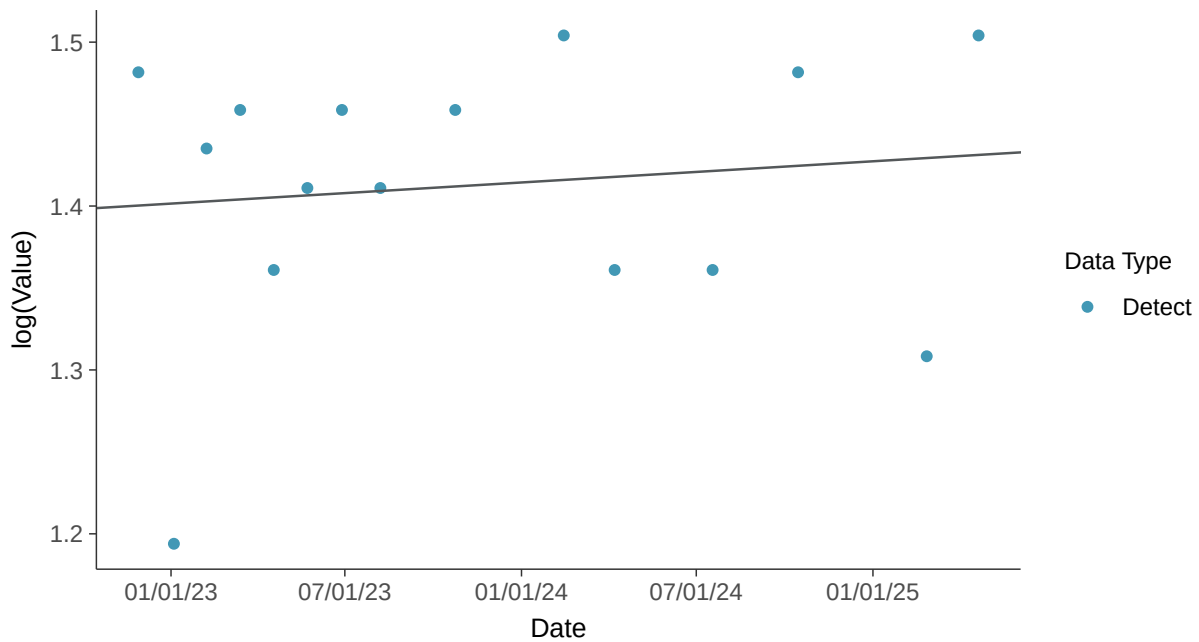
Gamma Q-Q plot

Boron, MW-03 (mg/L)



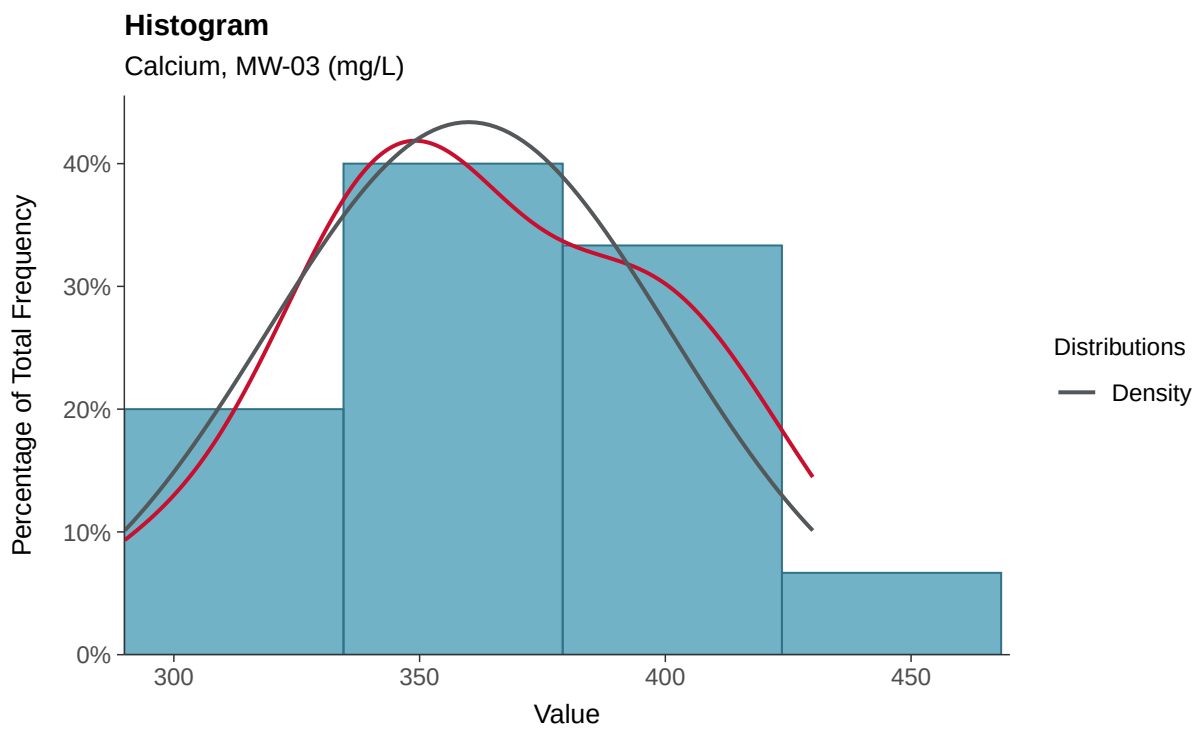
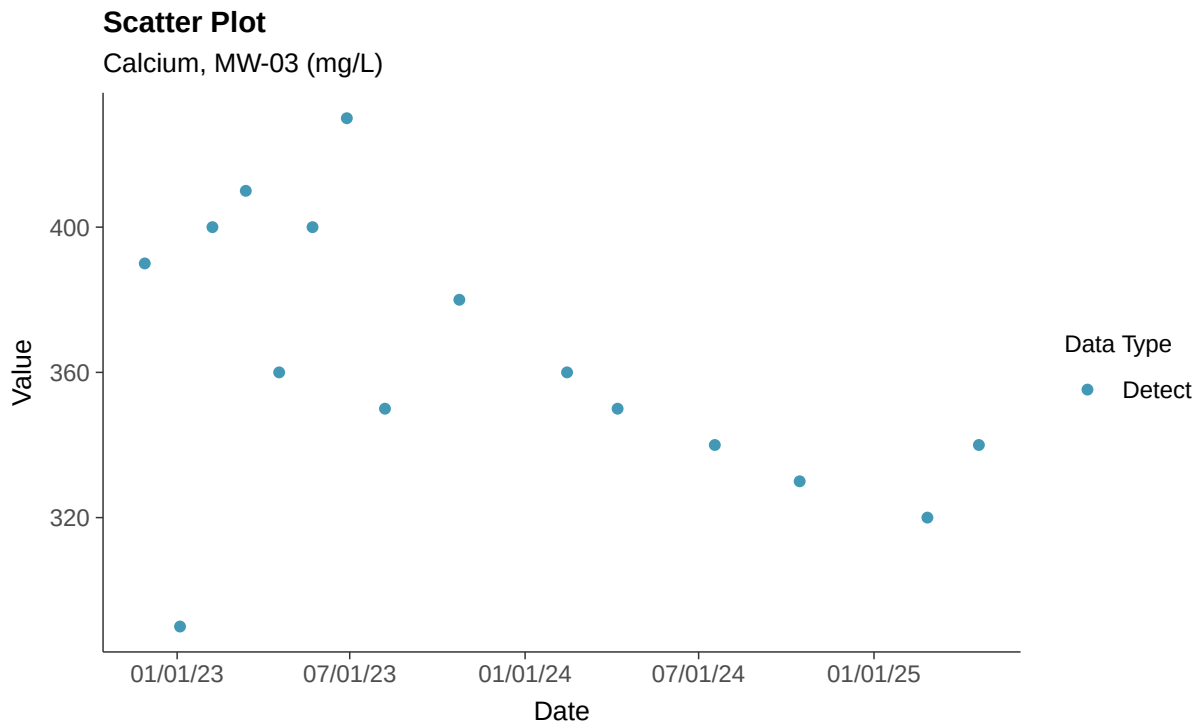
Trend Regression: Lognormal MLE

Boron, MW-03 (mg/L)



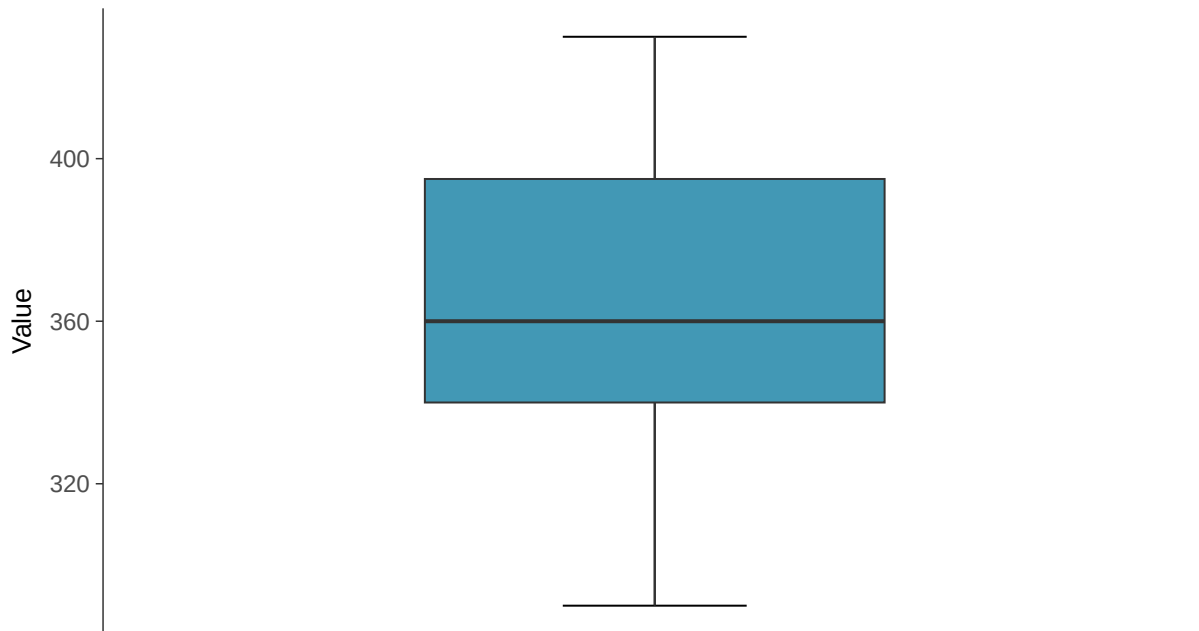
Appendix III: Calcium, MW-03

ID: 13_2_3_107



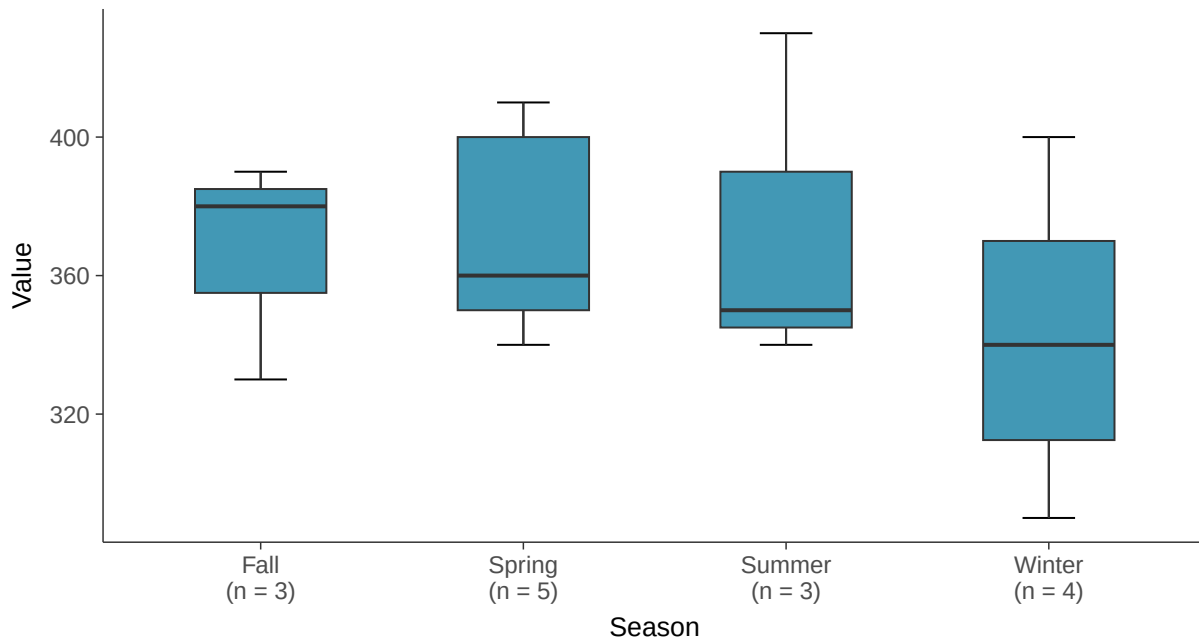
Boxplot

Calcium, MW-03 (mg/L)



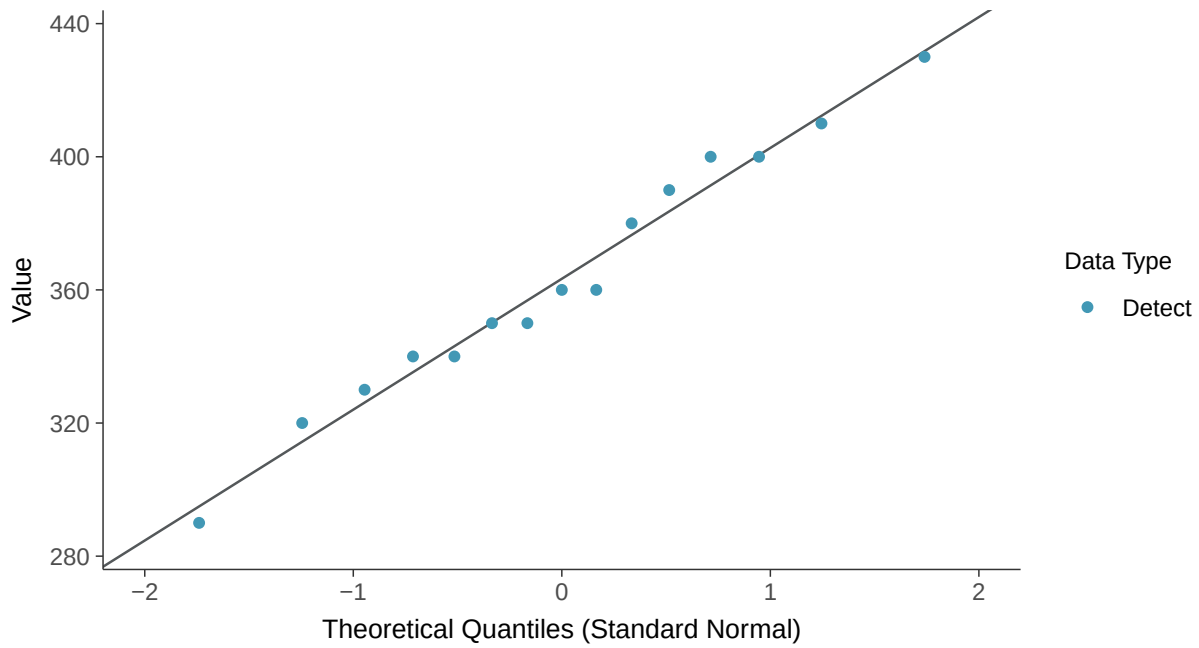
Boxplot by Season

Calcium, MW-03 (mg/L)



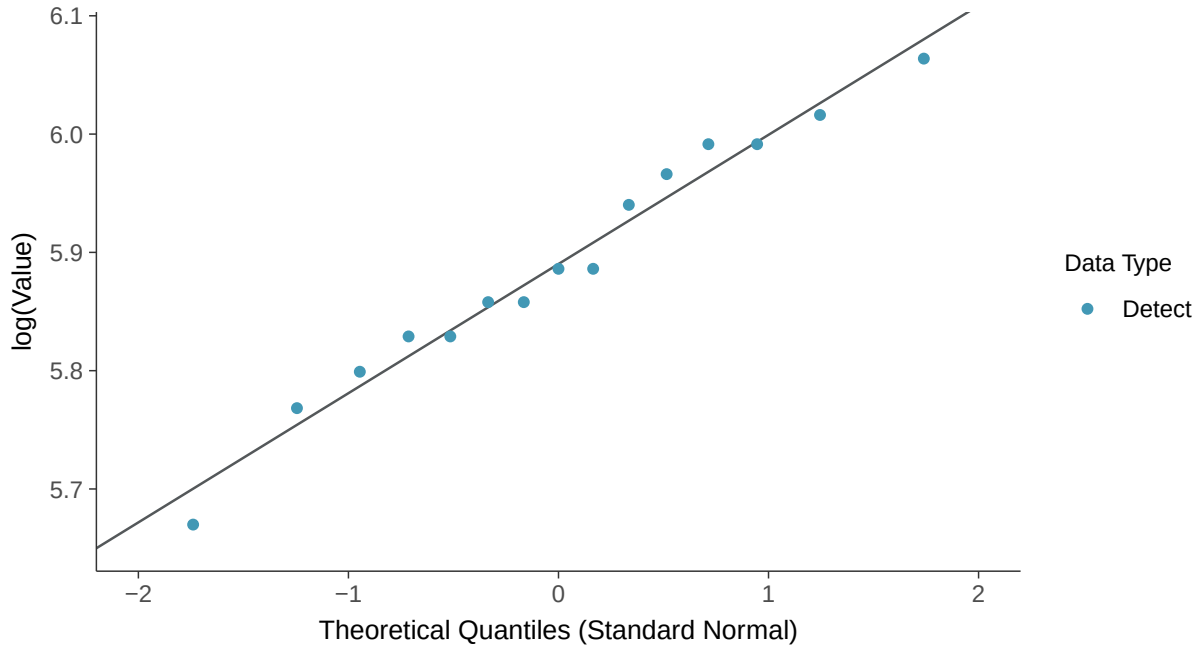
Normal Q-Q plot

Calcium, MW-03 (mg/L)



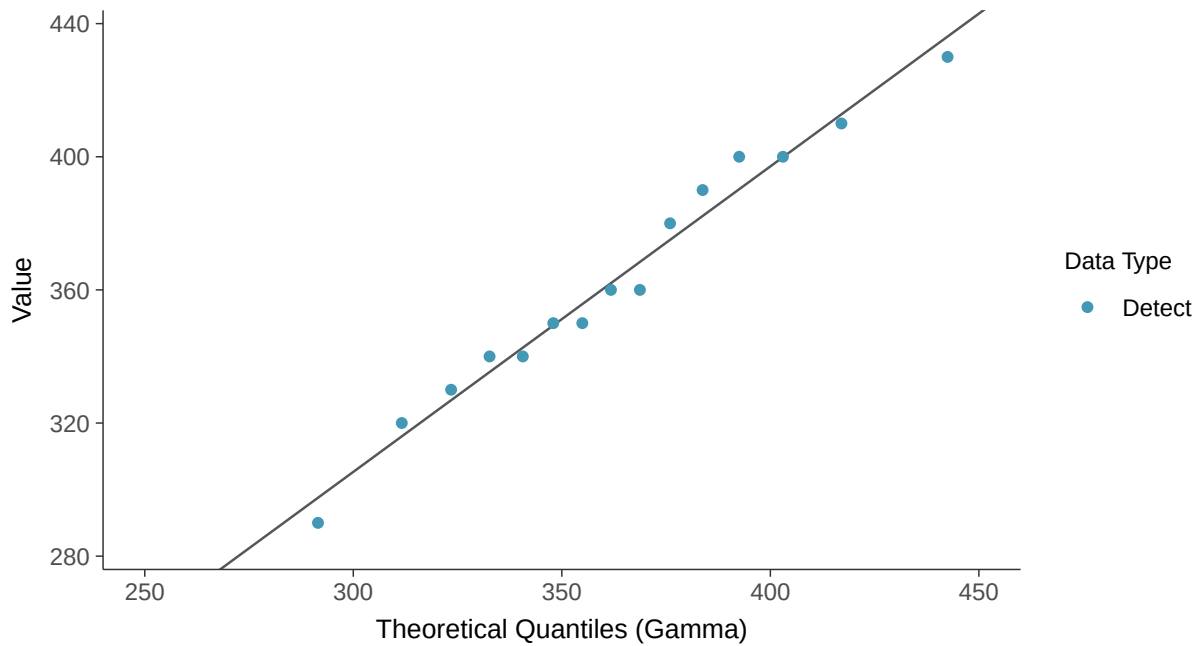
Lognormal Q-Q plot

Calcium, MW-03 (mg/L)



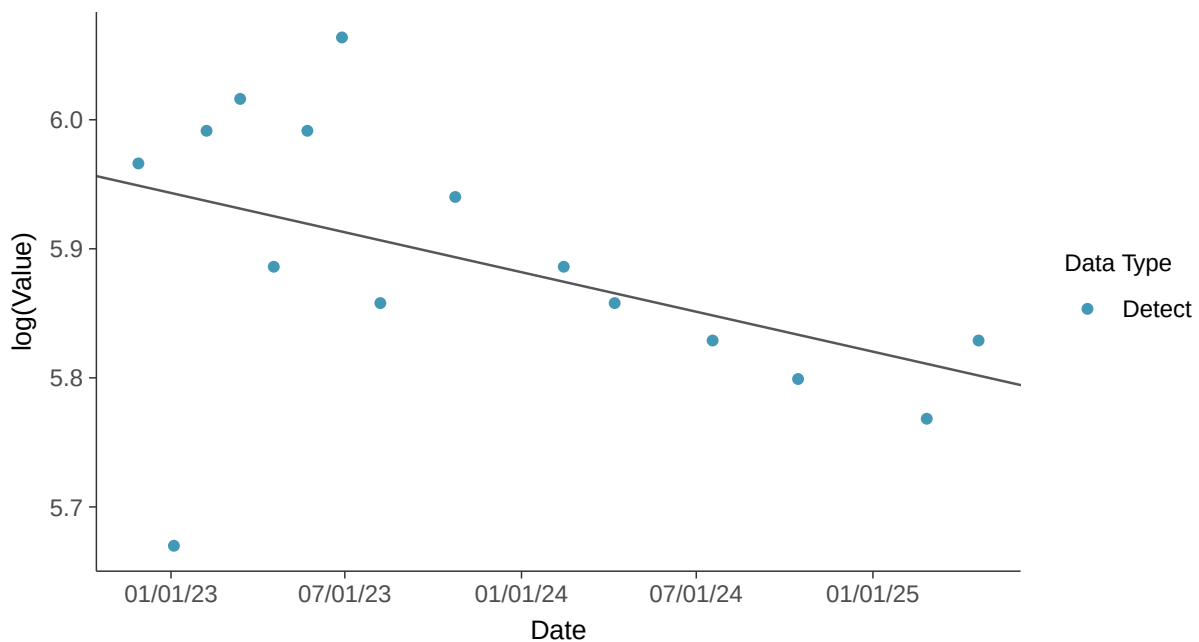
Gamma Q-Q plot

Calcium, MW-03 (mg/L)



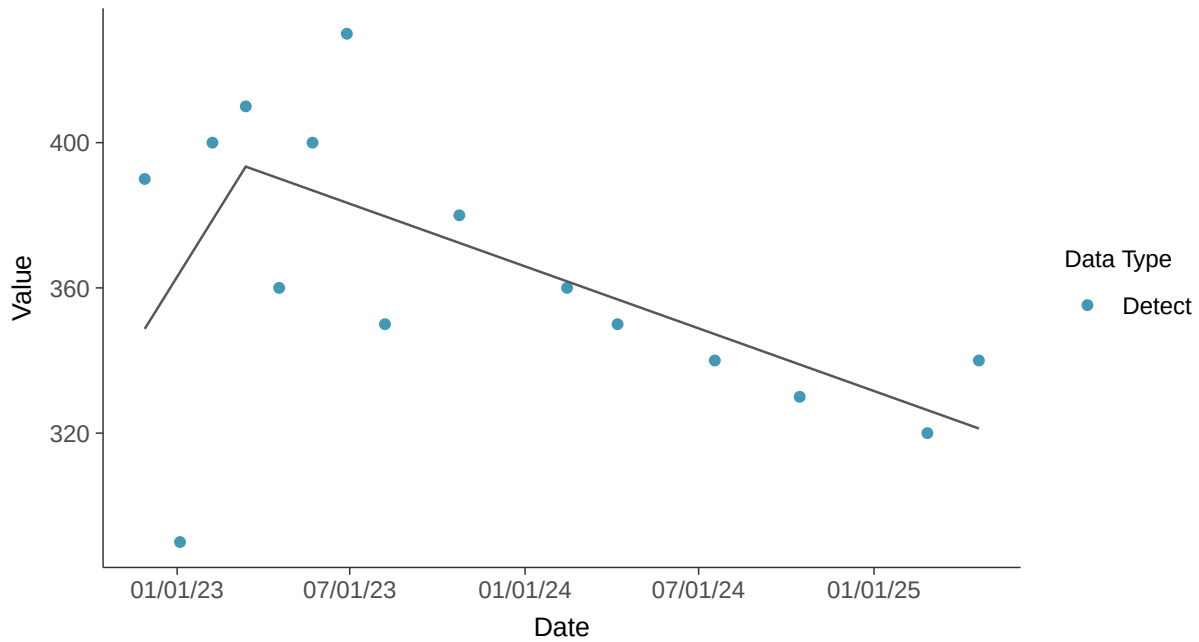
Trend Regression: Lognormal MLE

Calcium, MW-03 (mg/L)



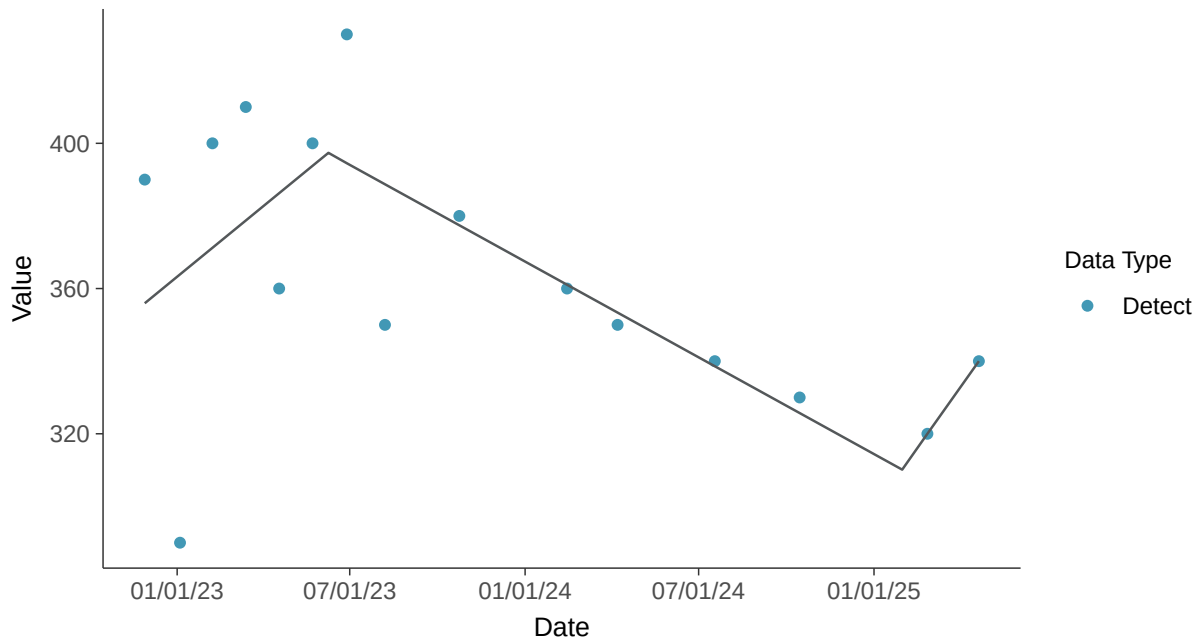
Trend Regression: Piecewise Linear-Linear

Calcium, MW-03 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Calcium, MW-03 (mg/L)

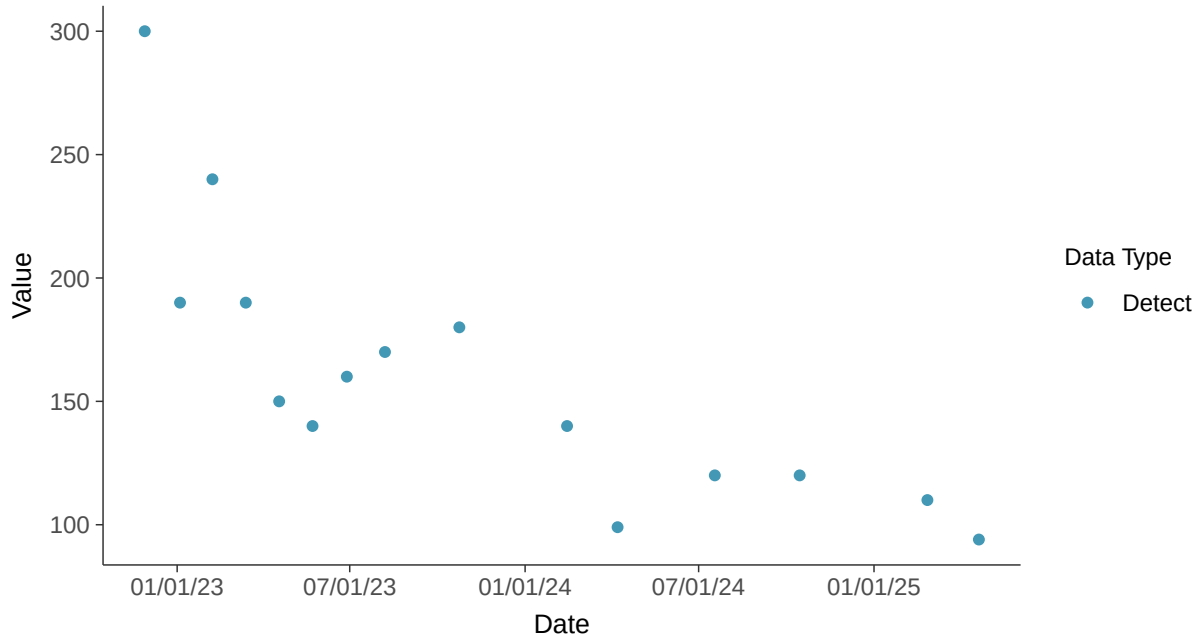


Appendix III: Chloride (as Cl), MW-03

ID: 13_2_3_108

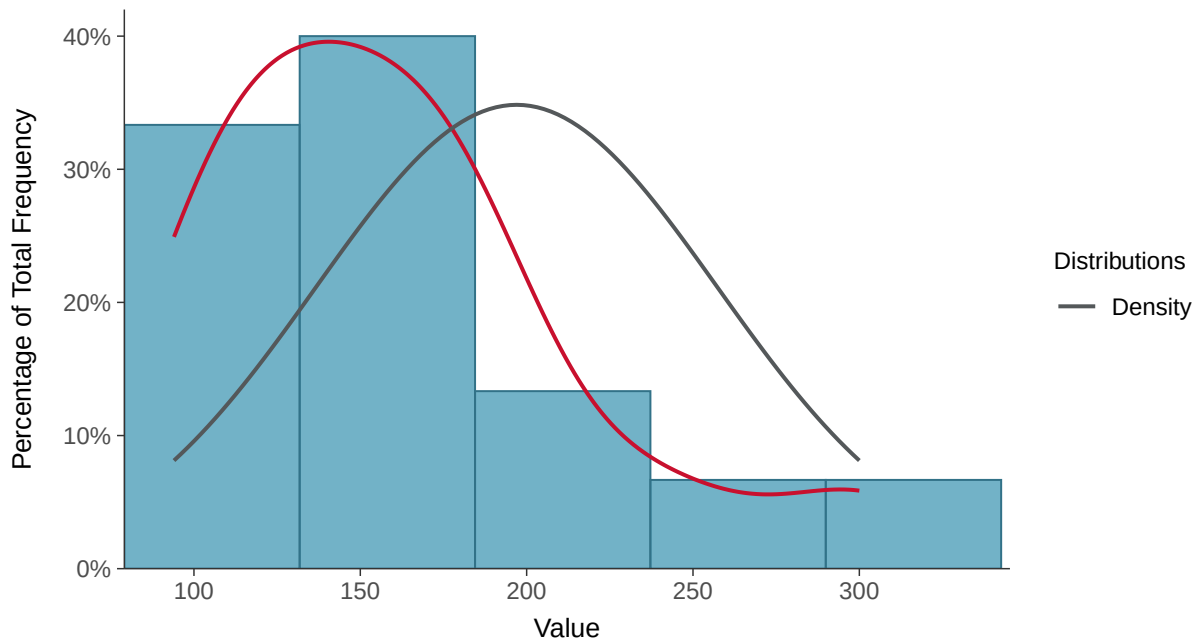
Scatter Plot

Chloride (as Cl), MW-03 (mg/L)



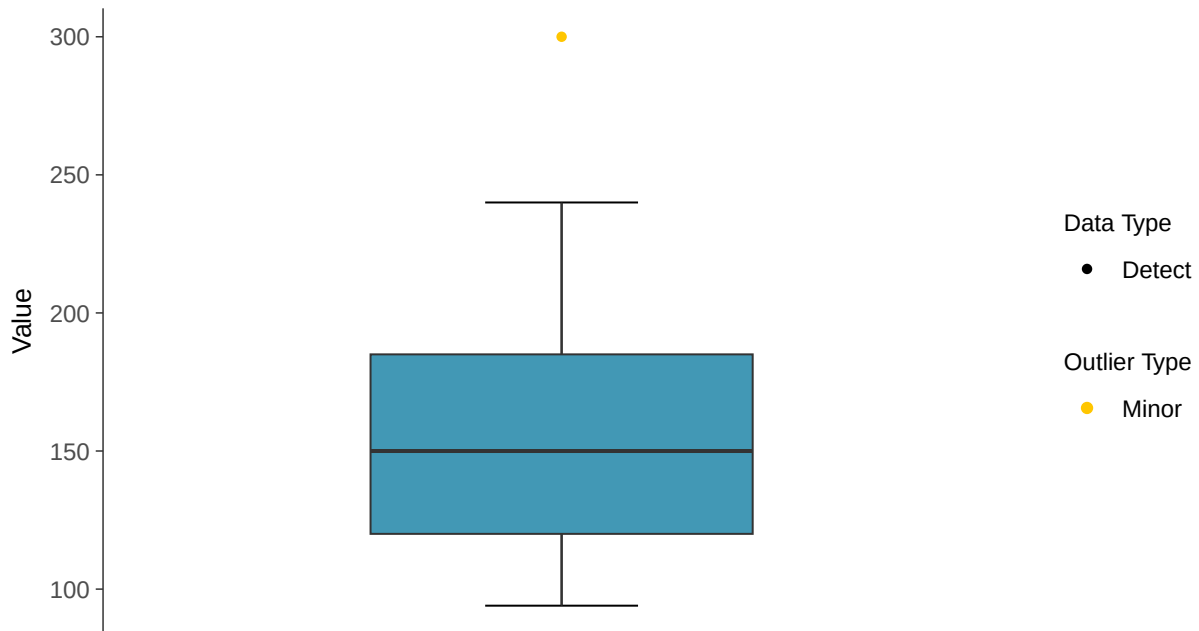
Histogram

Chloride (as Cl), MW-03 (mg/L)



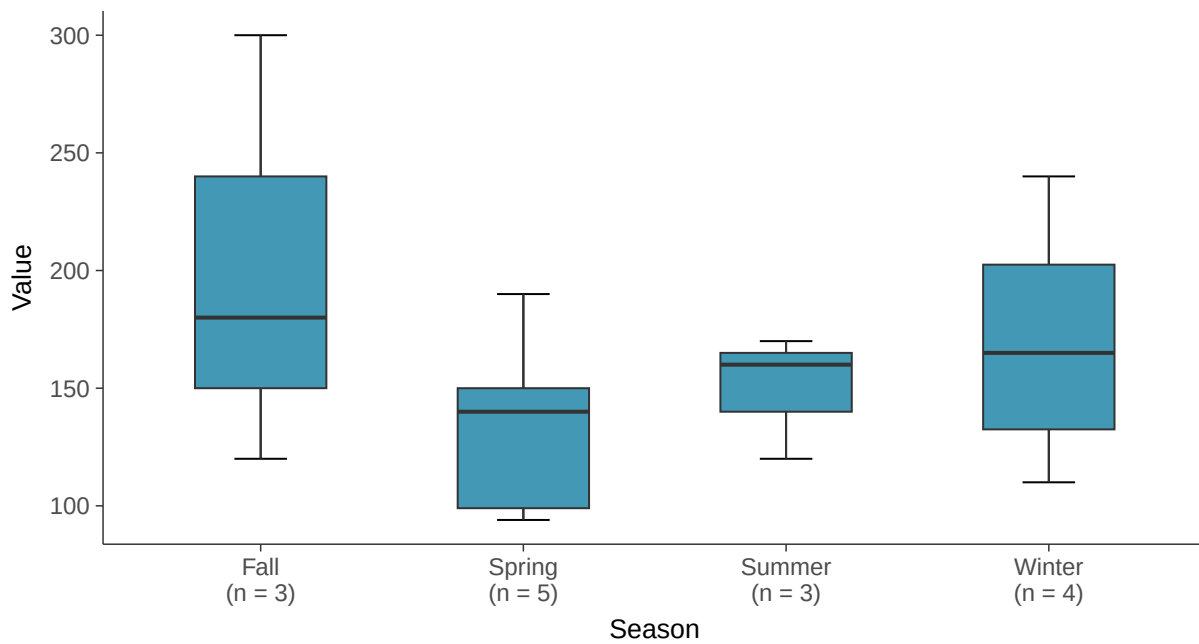
Boxplot

Chloride (as Cl), MW-03 (mg/L)



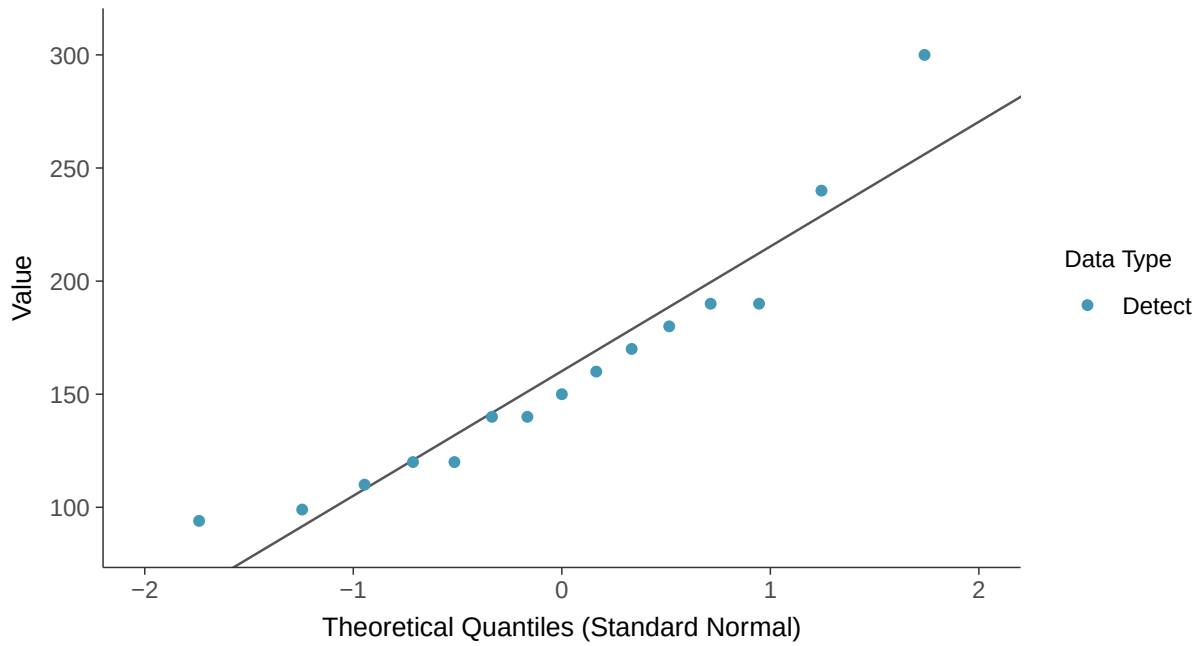
Boxplot by Season

Chloride (as Cl), MW-03 (mg/L)



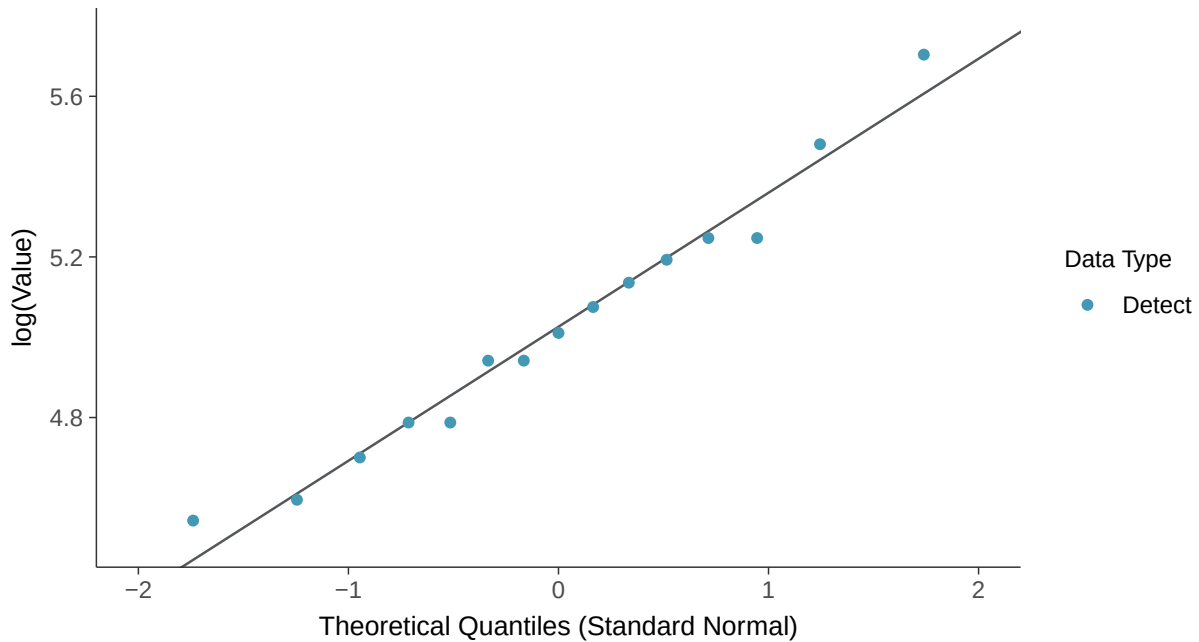
Normal Q-Q plot

Chloride (as Cl), MW-03 (mg/L)



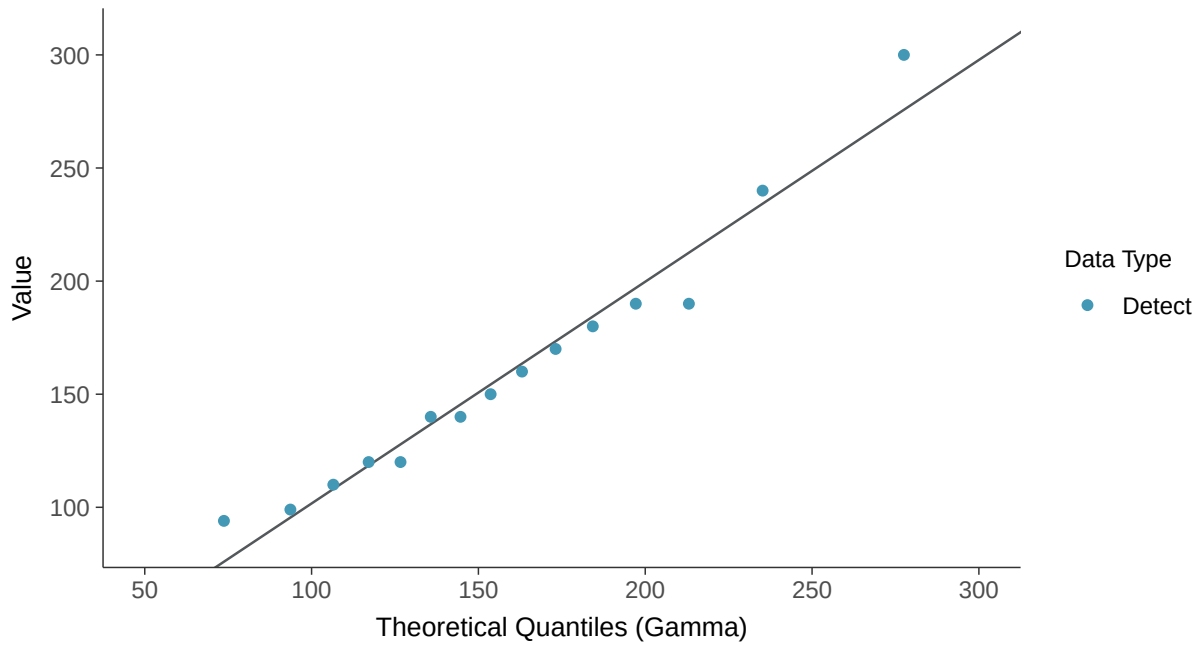
Lognormal Q-Q plot

Chloride (as Cl), MW-03 (mg/L)



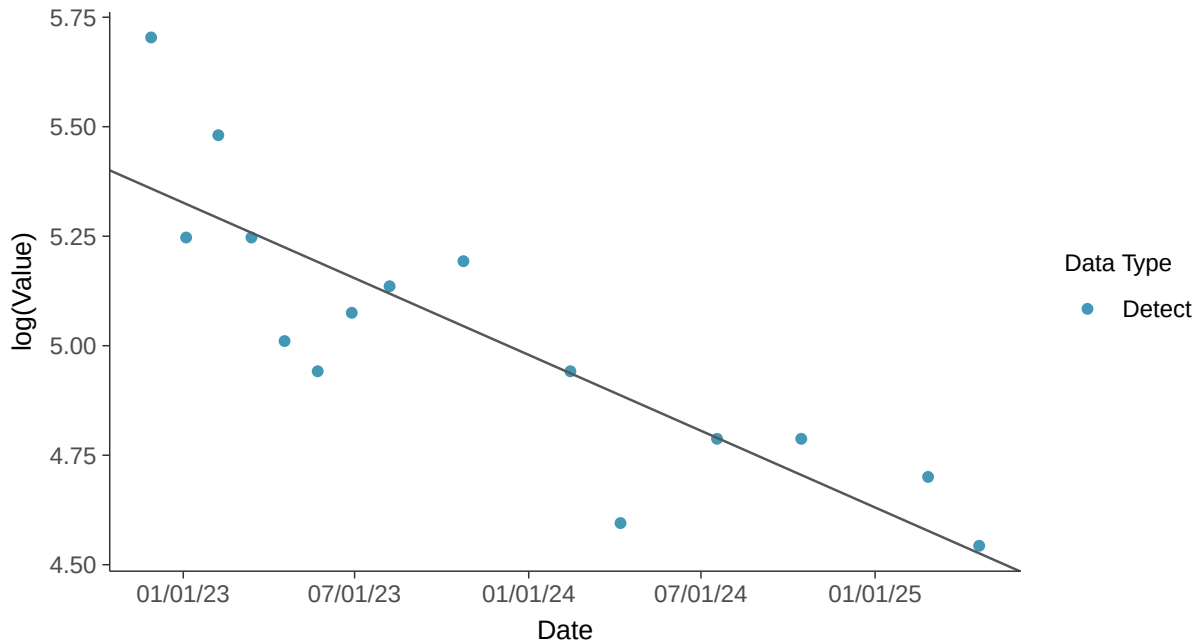
Gamma Q-Q plot

Chloride (as Cl), MW-03 (mg/L)



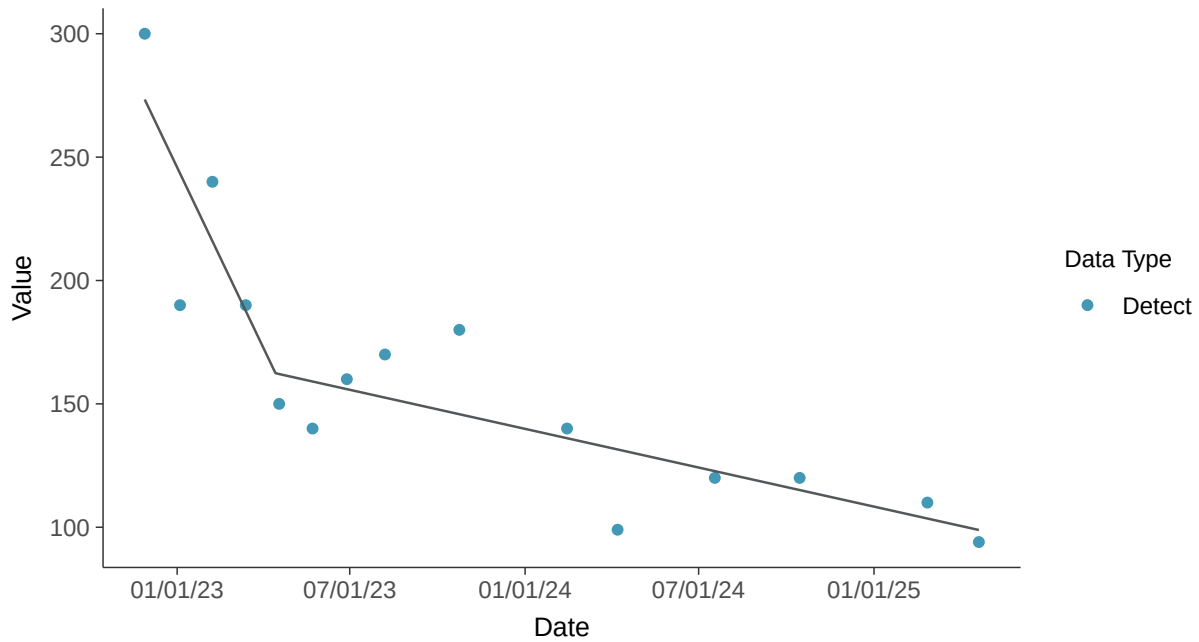
Trend Regression: Lognormal MLE

Chloride (as Cl), MW-03 (mg/L)



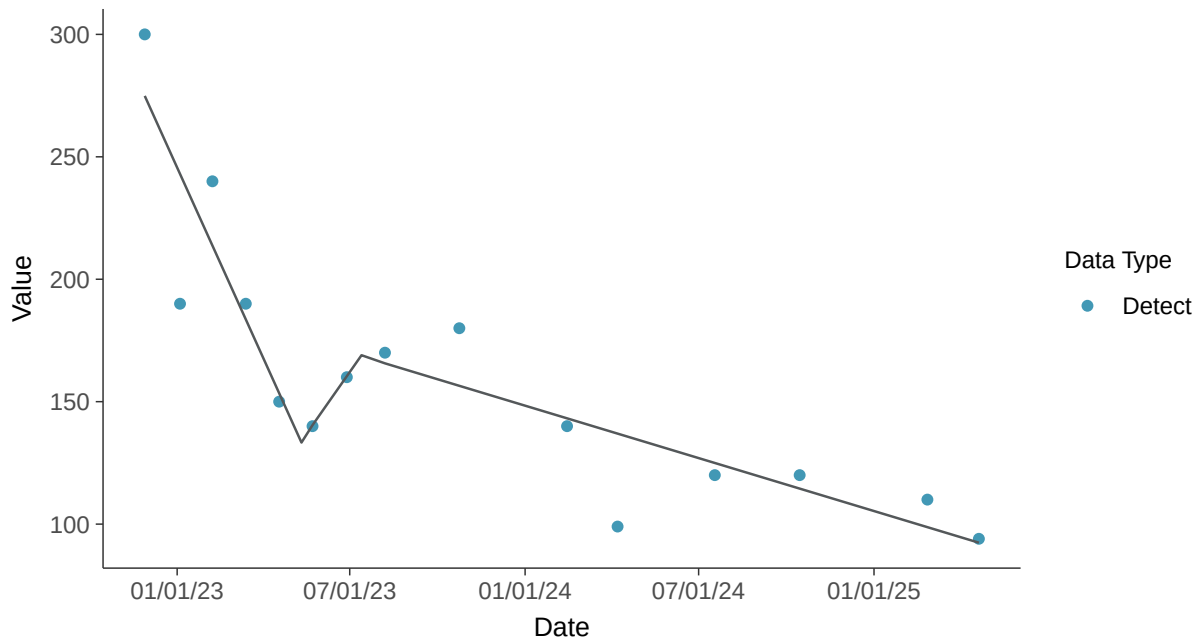
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-03 (mg/L)



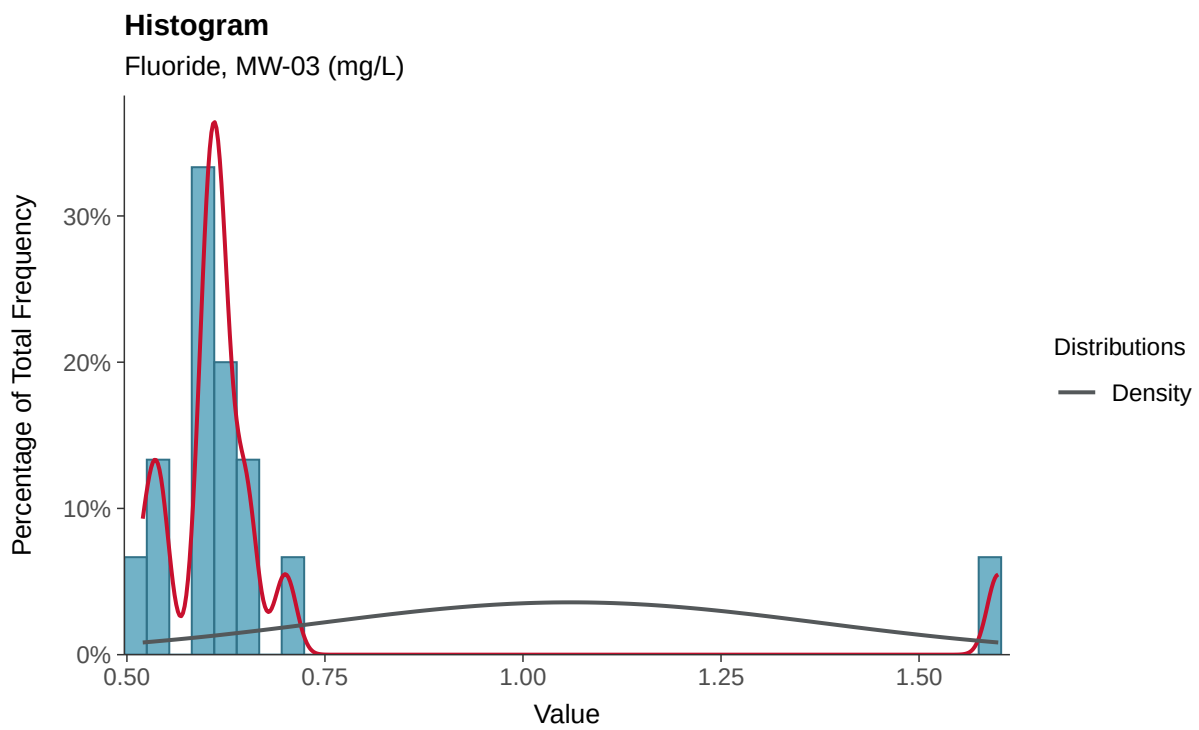
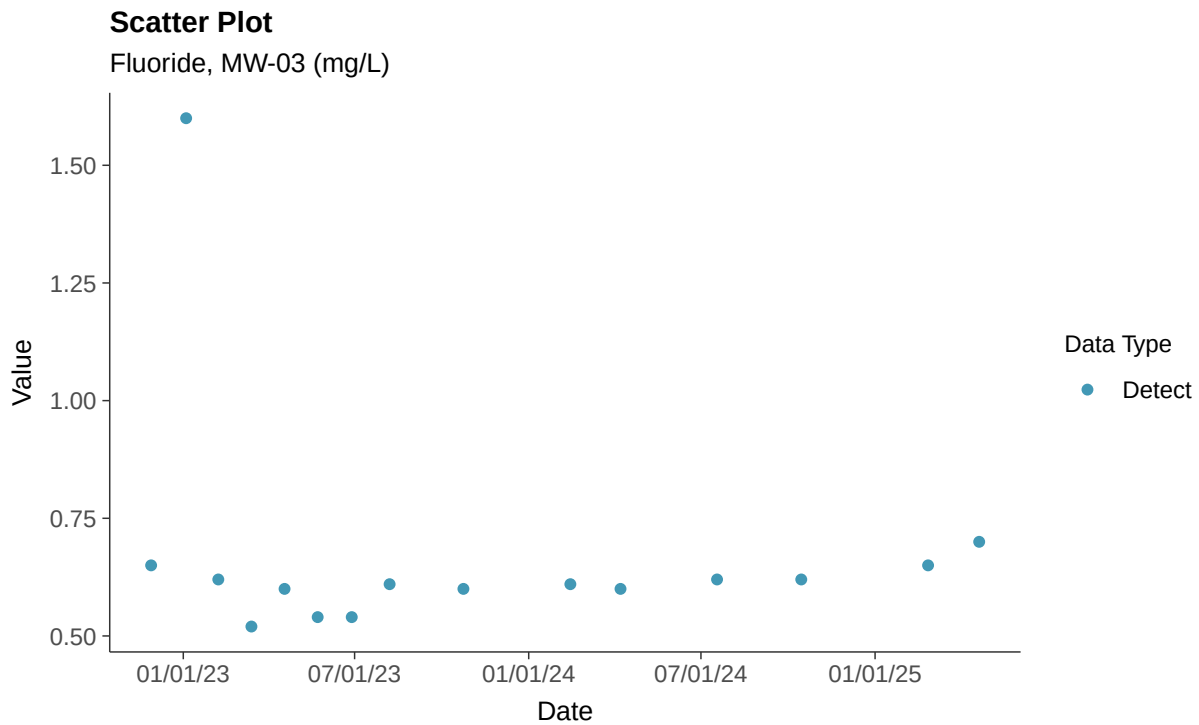
Trend Regression: Piecewise Linear-Linear-Linear

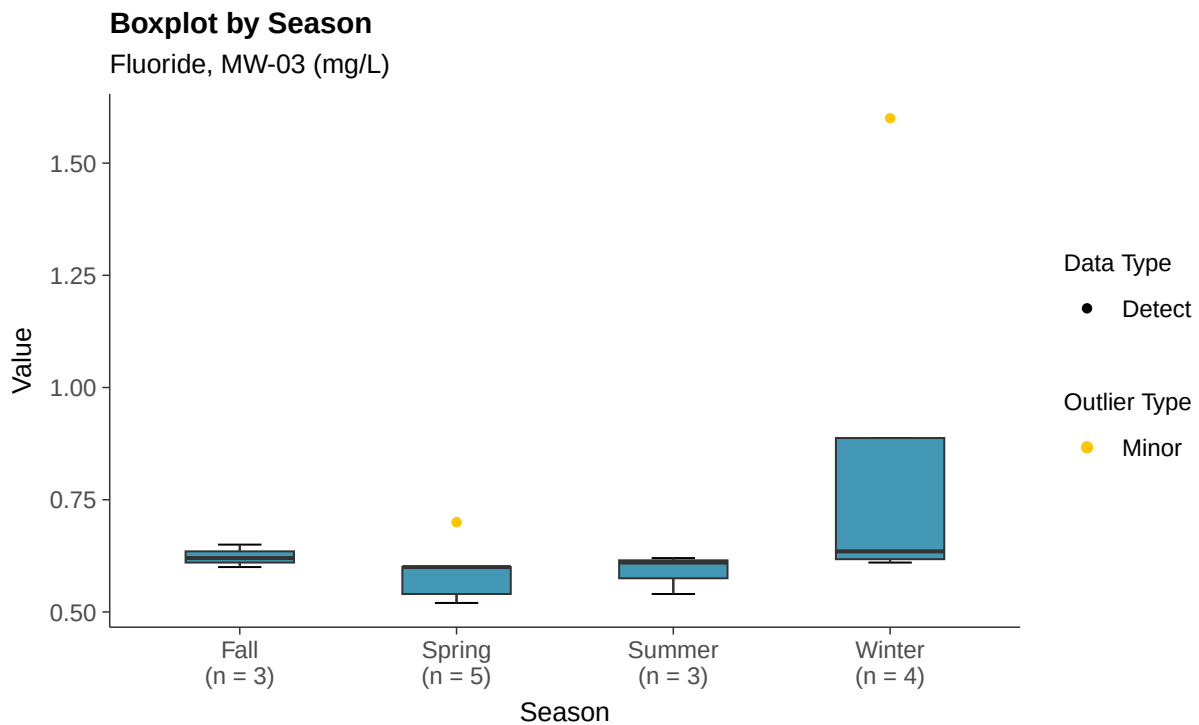
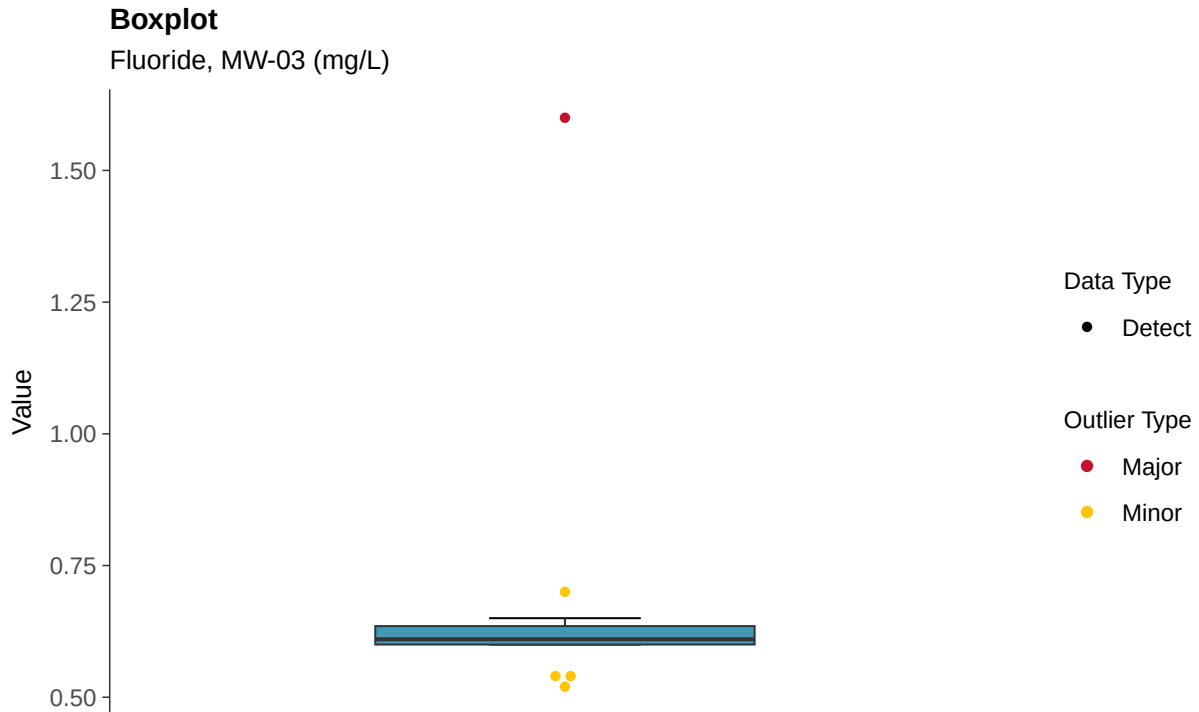
Chloride (as Cl), MW-03 (mg/L)



Appendix III: Fluoride, MW-03

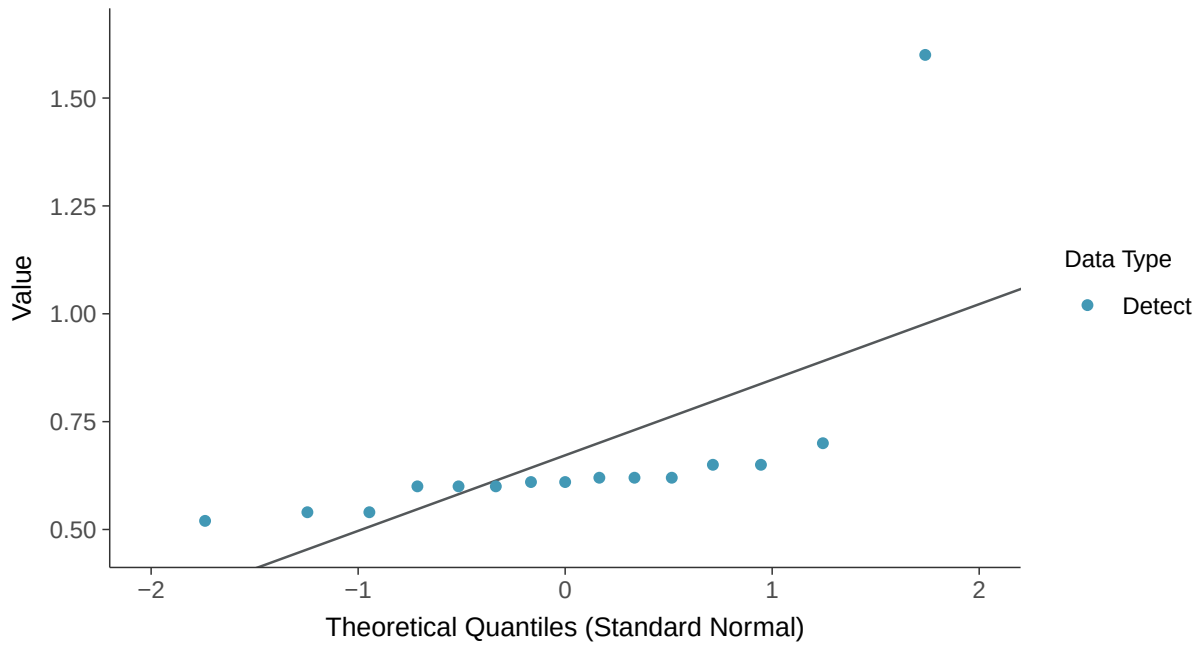
ID: 13_2_3_112





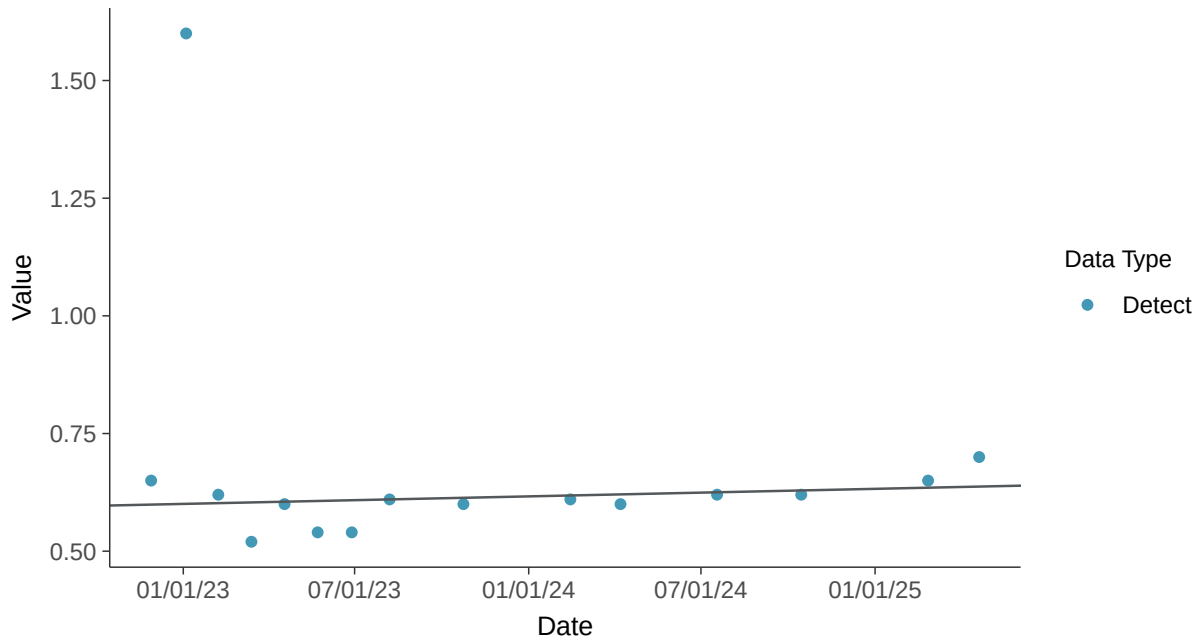
Normal Q-Q plot

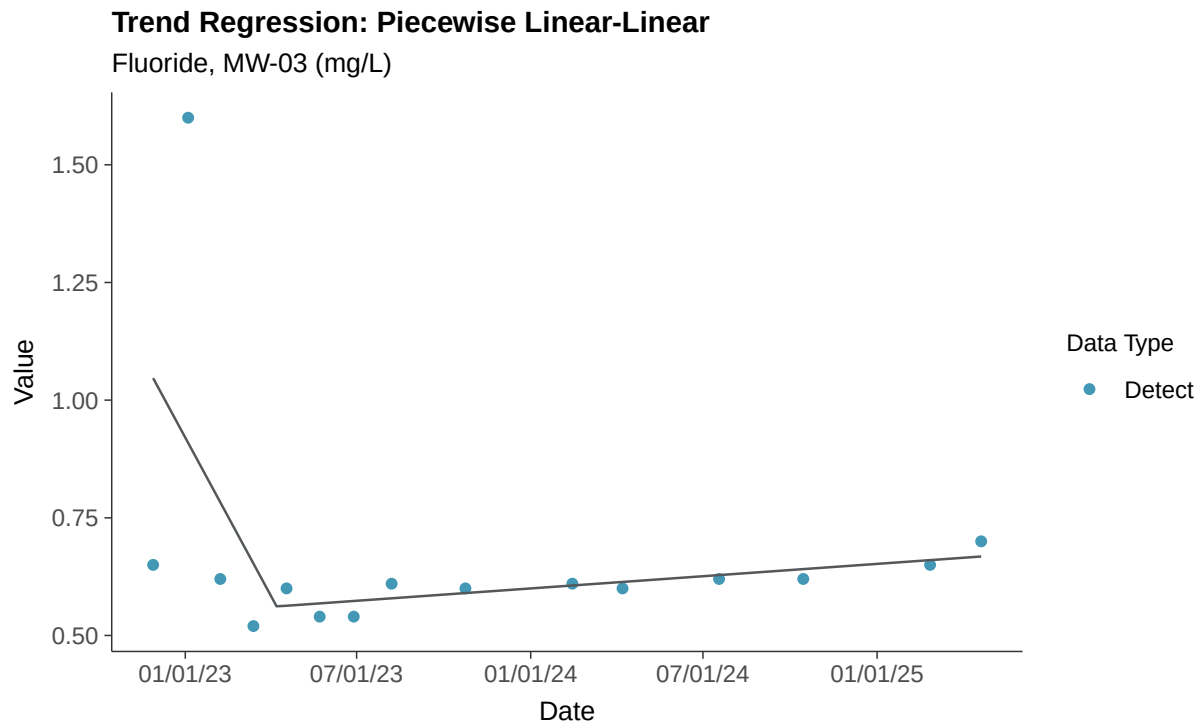
Fluoride, MW-03 (mg/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

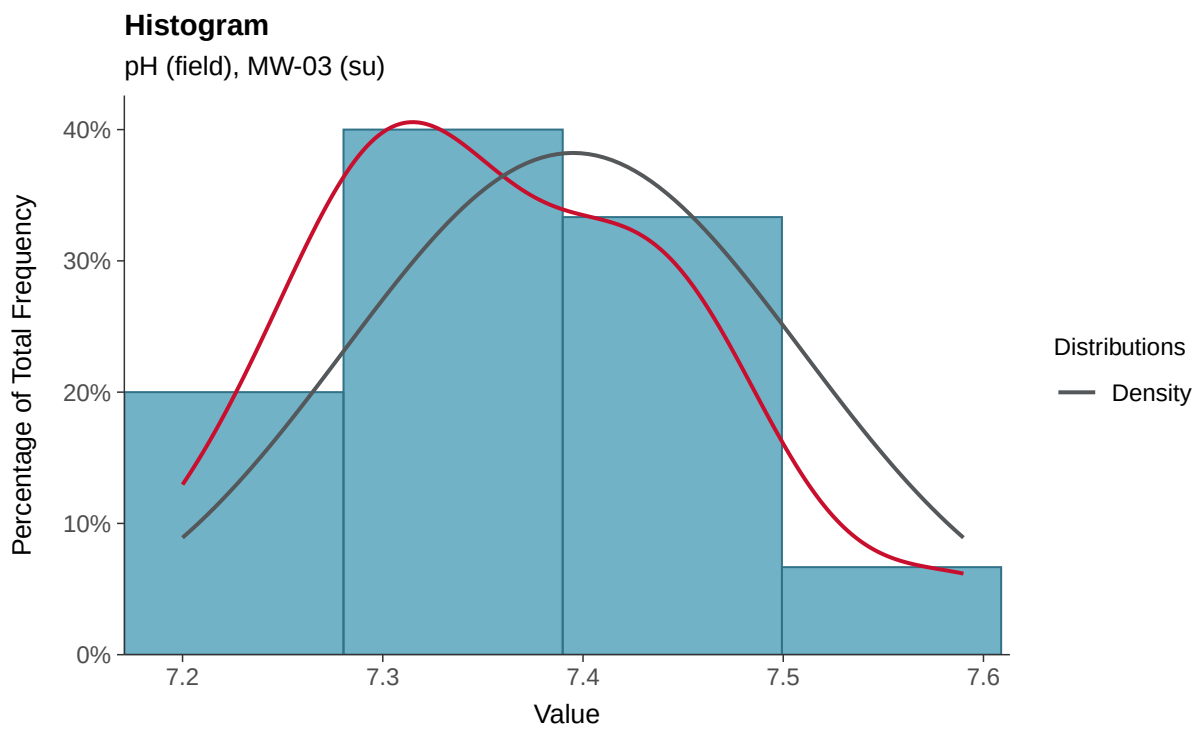
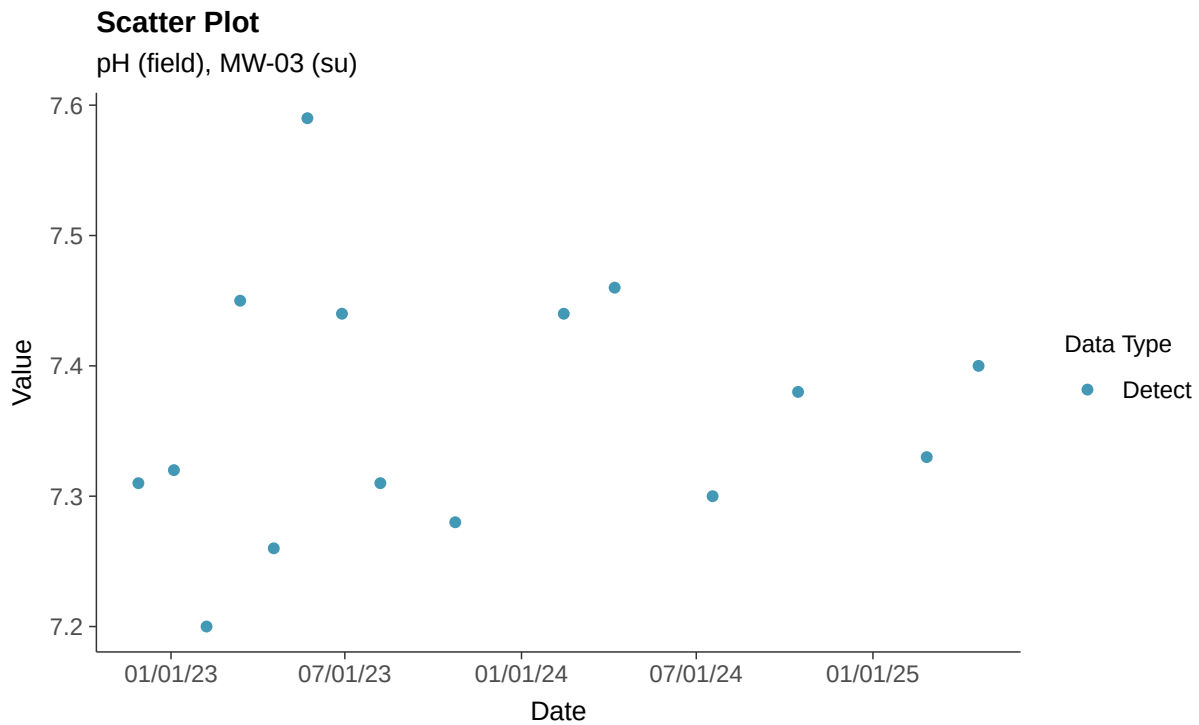
Fluoride, MW-03 (mg/L)





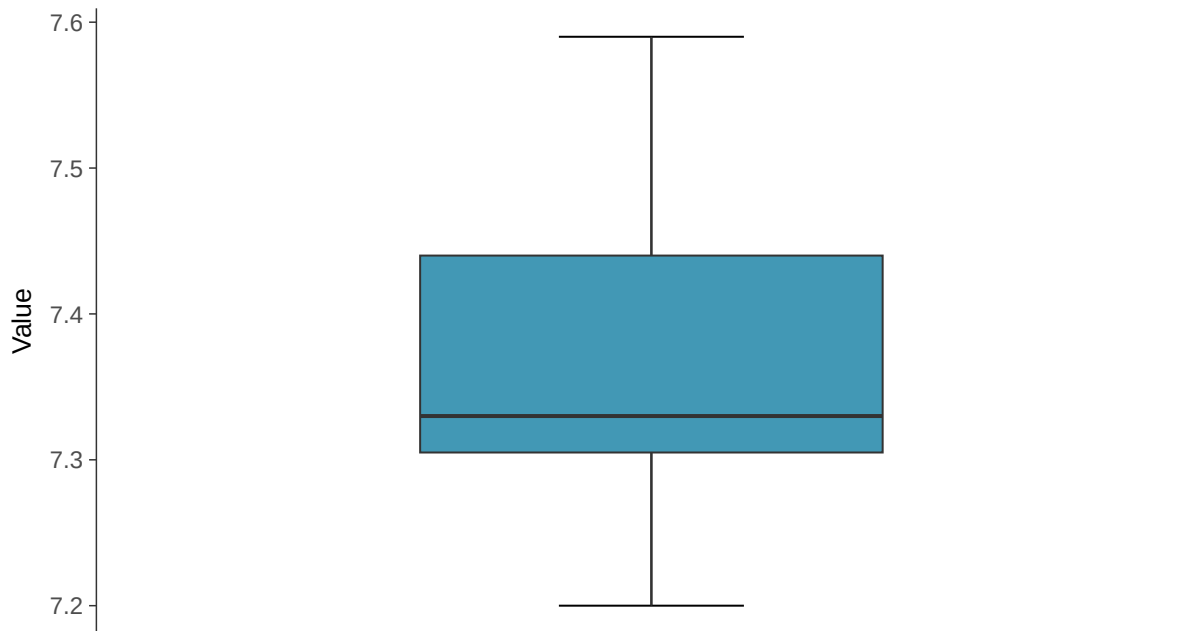
Appendix III: pH (field), MW-03

ID: 13_2_3_120



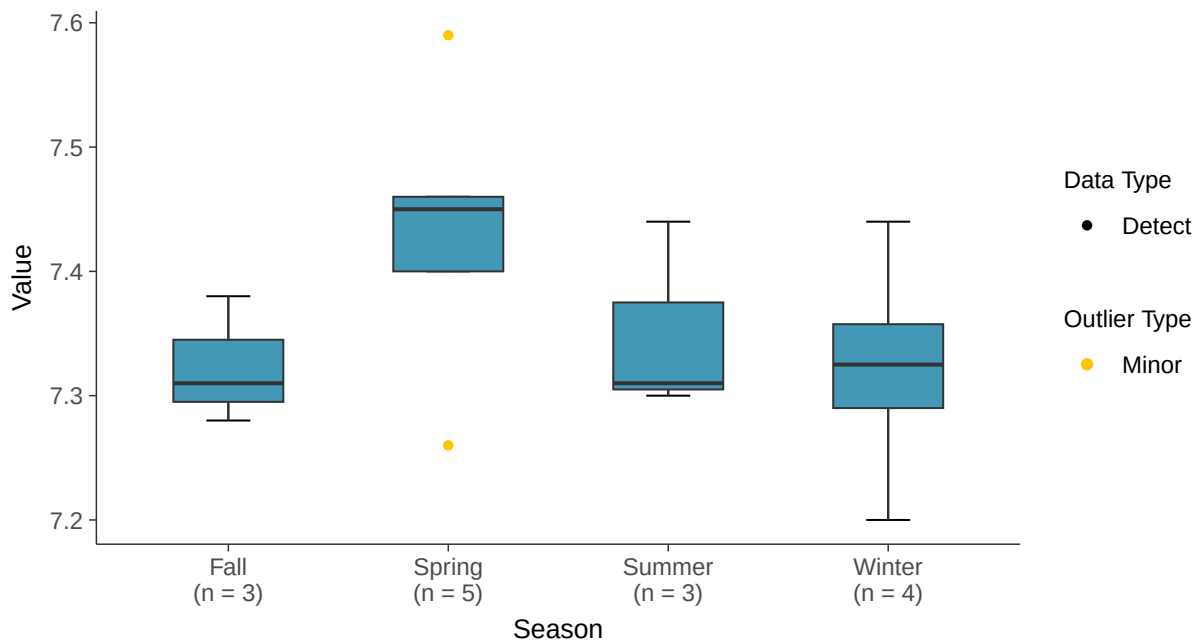
Boxplot

pH (field), MW-03 (su)

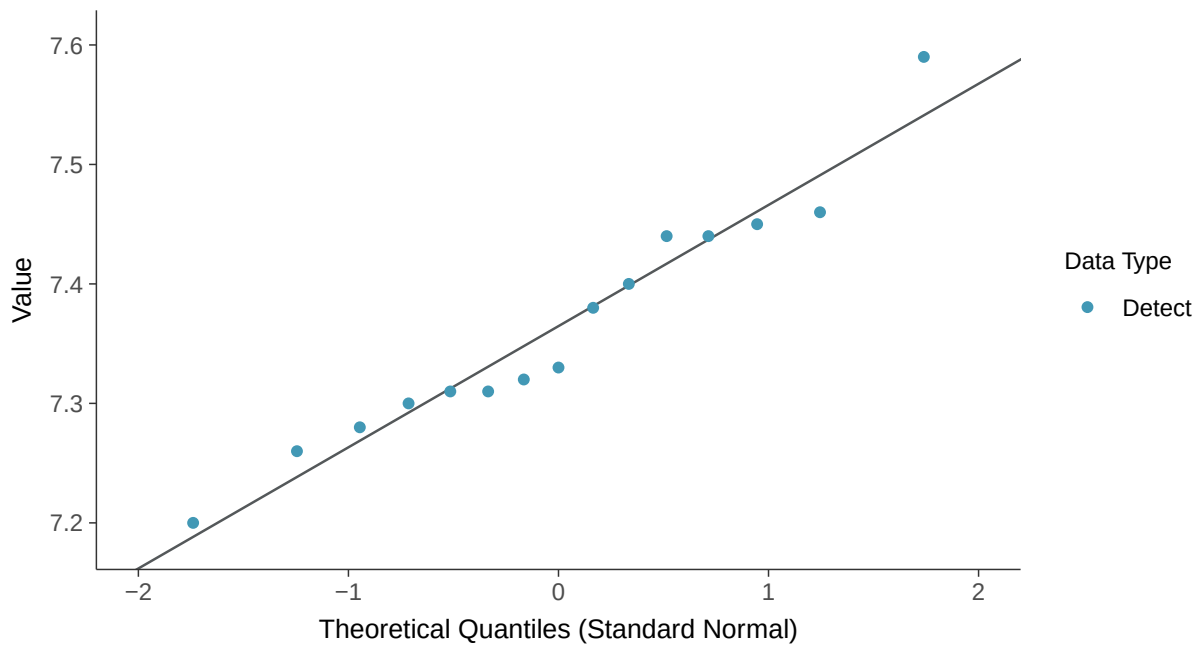


Boxplot by Season

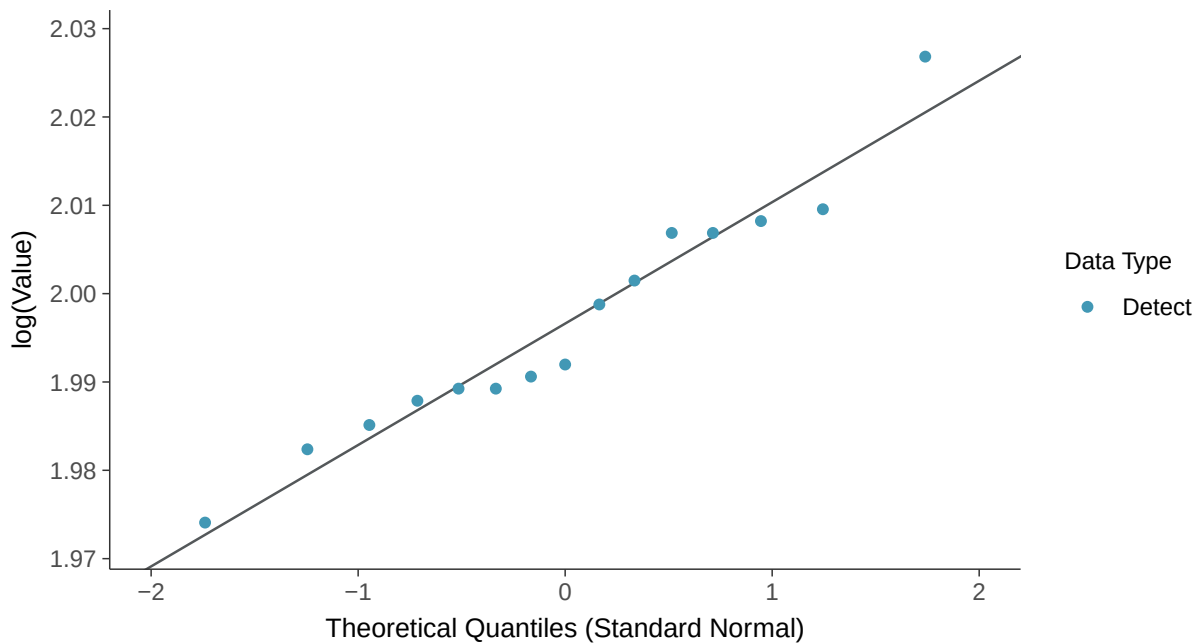
pH (field), MW-03 (su)



Normal Q-Q plot
pH (field), MW-03 (su)

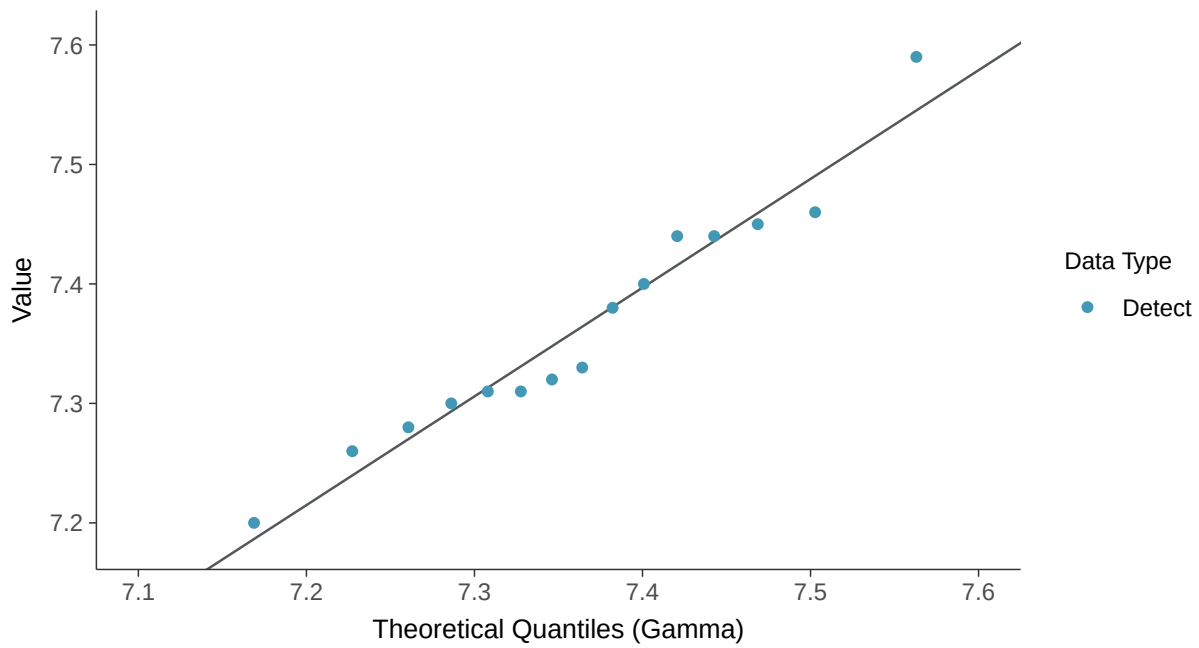


Lognormal Q-Q plot
pH (field), MW-03 (su)



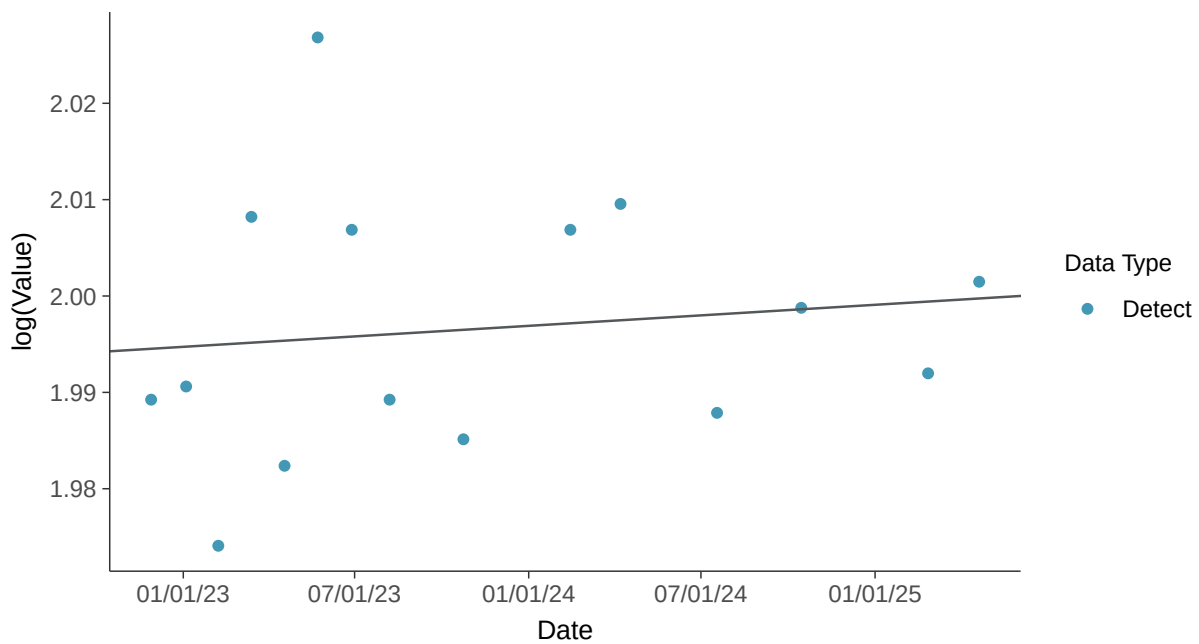
Gamma Q-Q plot

pH (field), MW-03 (su)



Trend Regression: Lognormal MLE

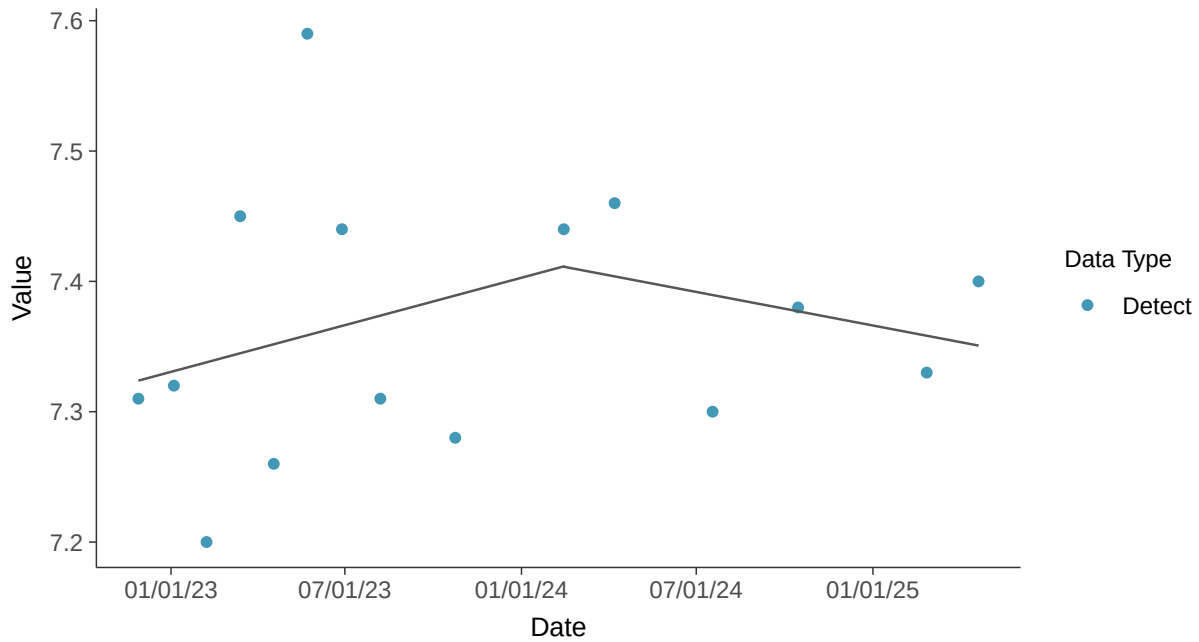
pH (field), MW-03 (su)





Trend Regression: Piecewise Linear-Linear

pH (field), MW-03 (su)

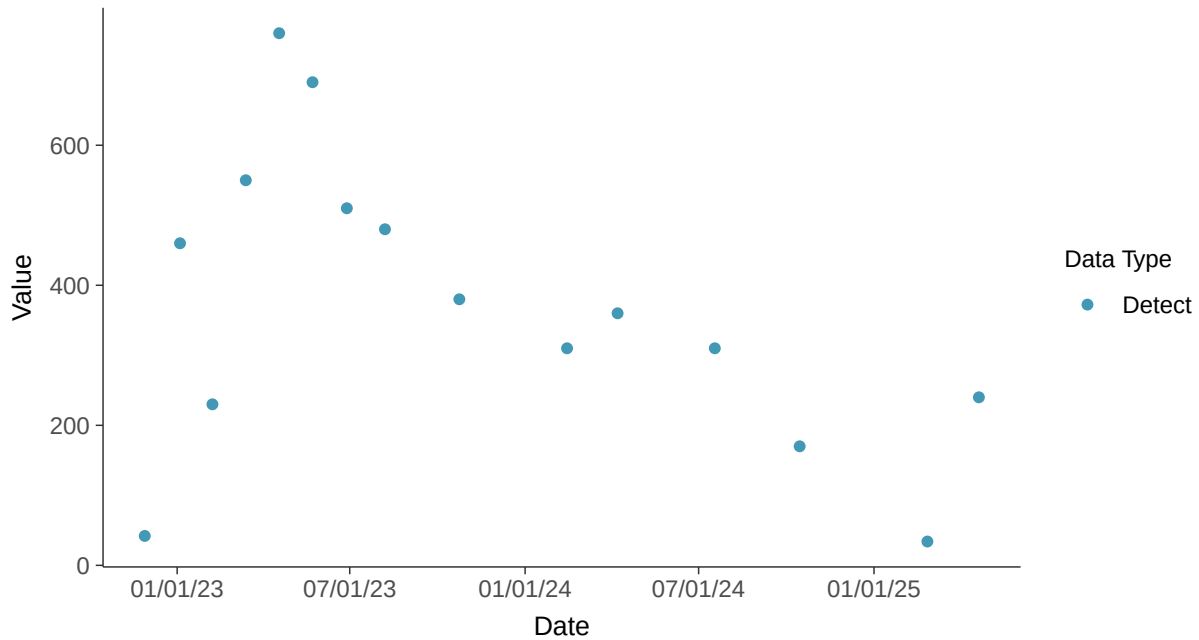


Appendix III: Sulfate (as SO₄), MW-03

ID: 13_2_3_124

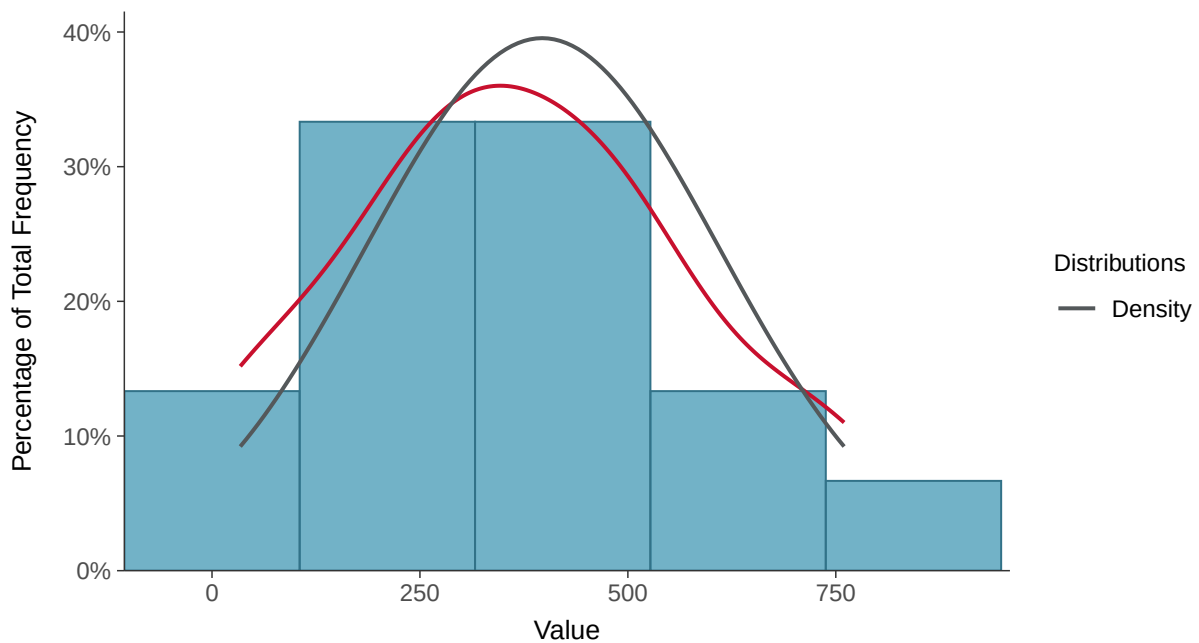
Scatter Plot

Sulfate (as SO₄), MW-03 (mg/L)



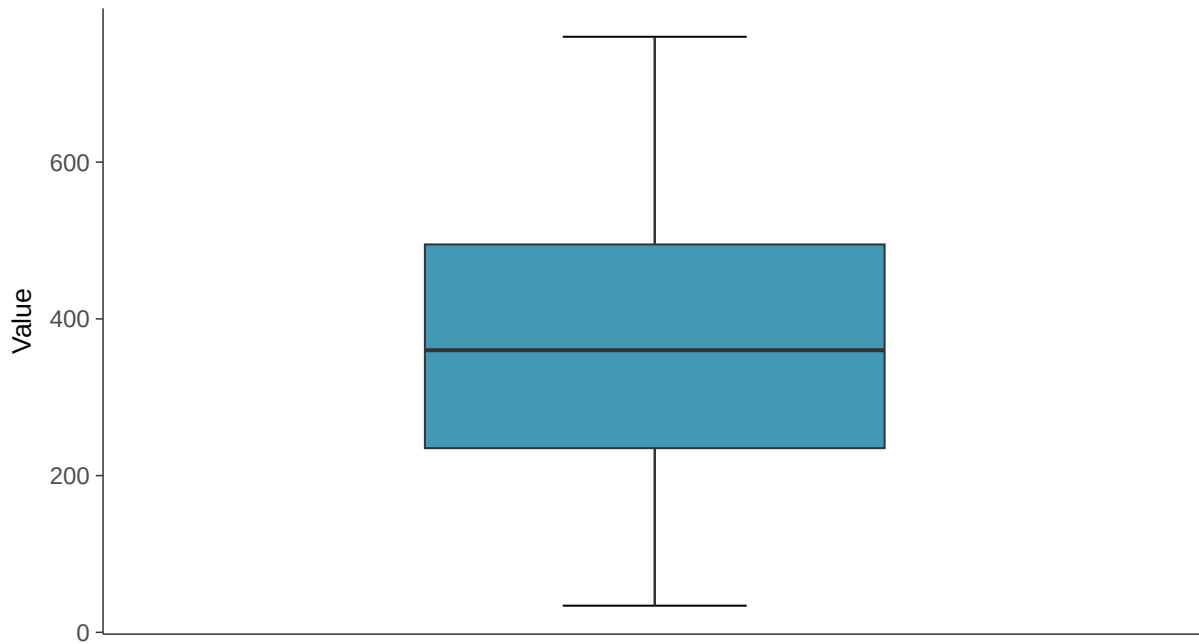
Histogram

Sulfate (as SO₄), MW-03 (mg/L)



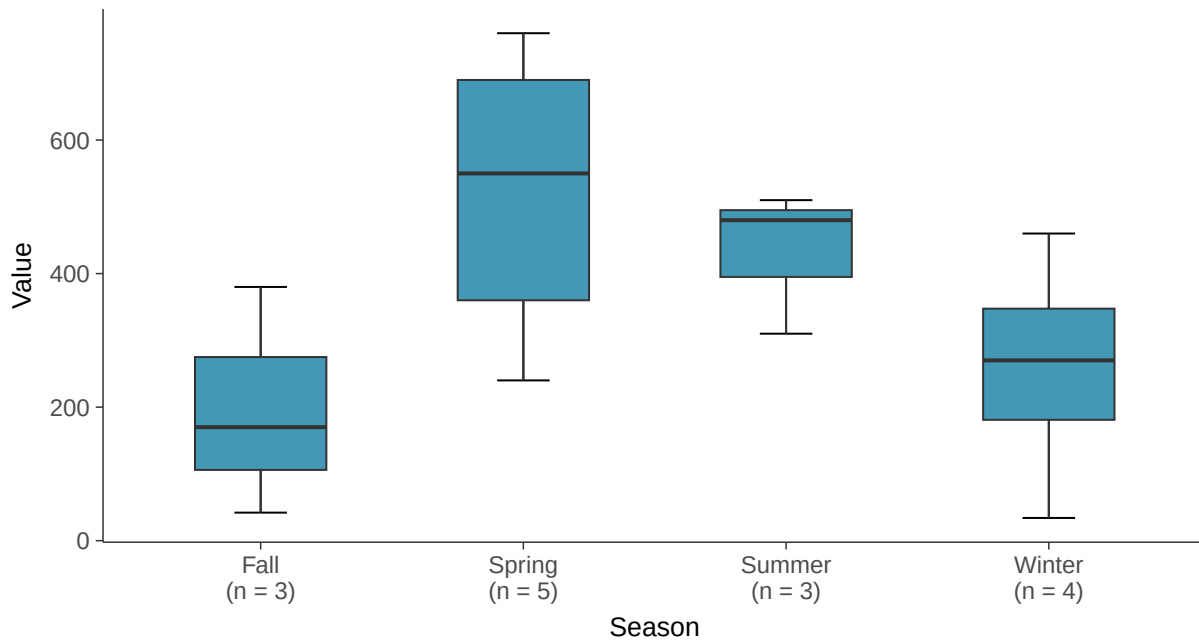
Boxplot

Sulfate (as SO₄), MW-03 (mg/L)



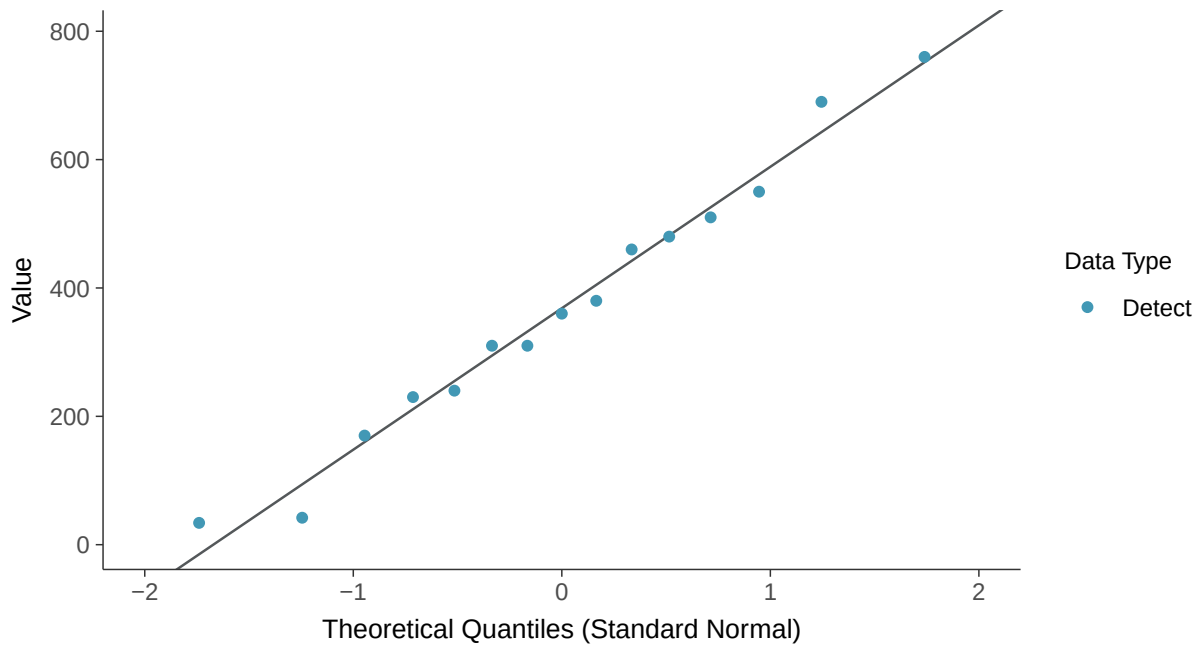
Boxplot by Season

Sulfate (as SO₄), MW-03 (mg/L)



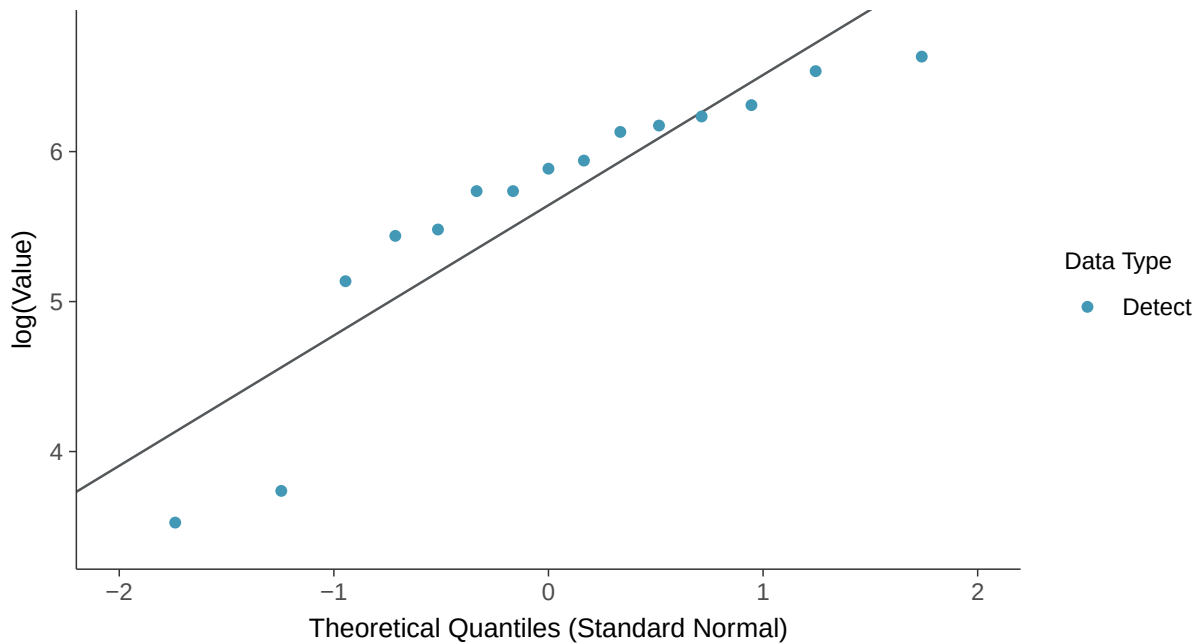
Normal Q-Q plot

Sulfate (as SO₄), MW-03 (mg/L)



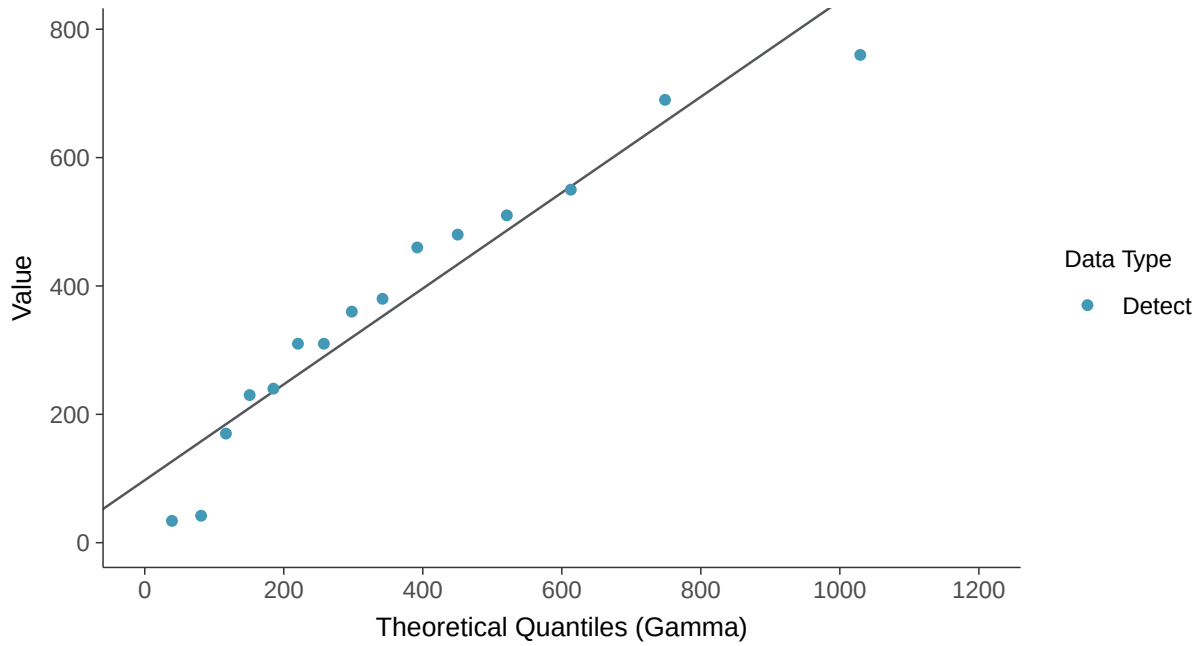
Lognormal Q-Q plot

Sulfate (as SO₄), MW-03 (mg/L)



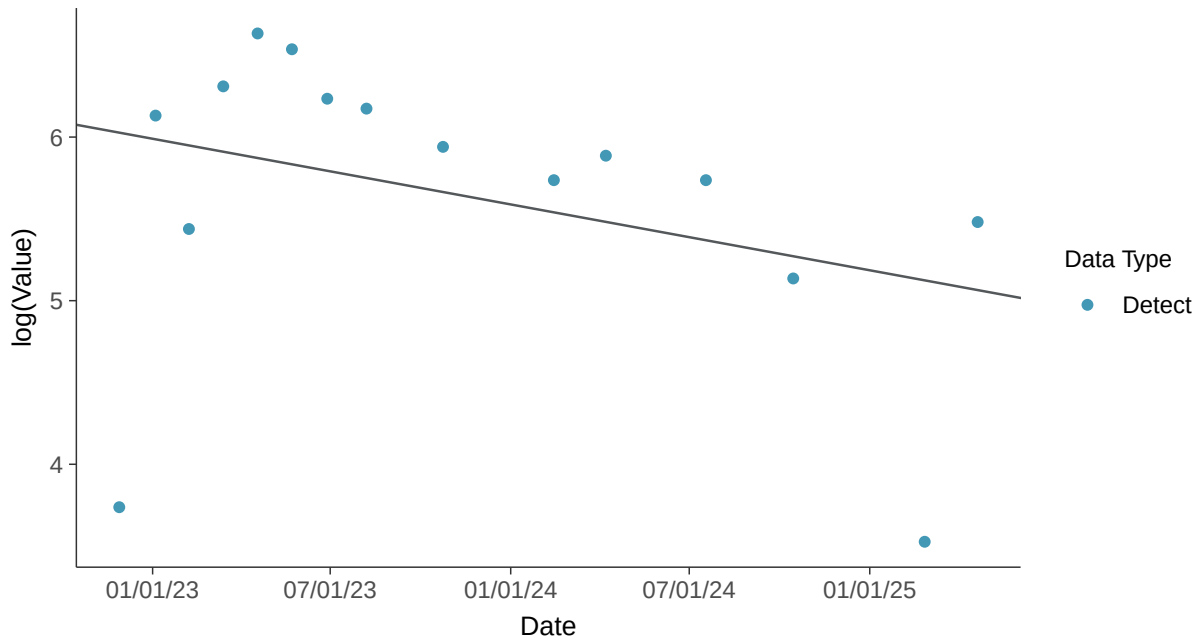
Gamma Q-Q plot

Sulfate (as SO₄), MW-03 (mg/L)



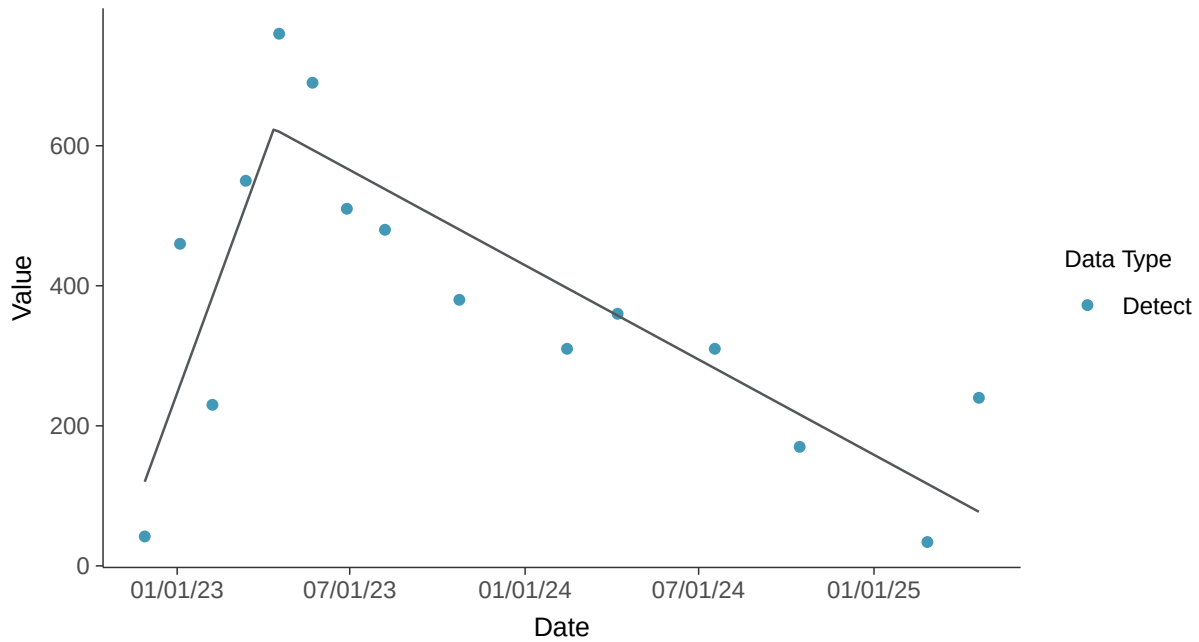
Trend Regression: Lognormal MLE

Sulfate (as SO₄), MW-03 (mg/L)



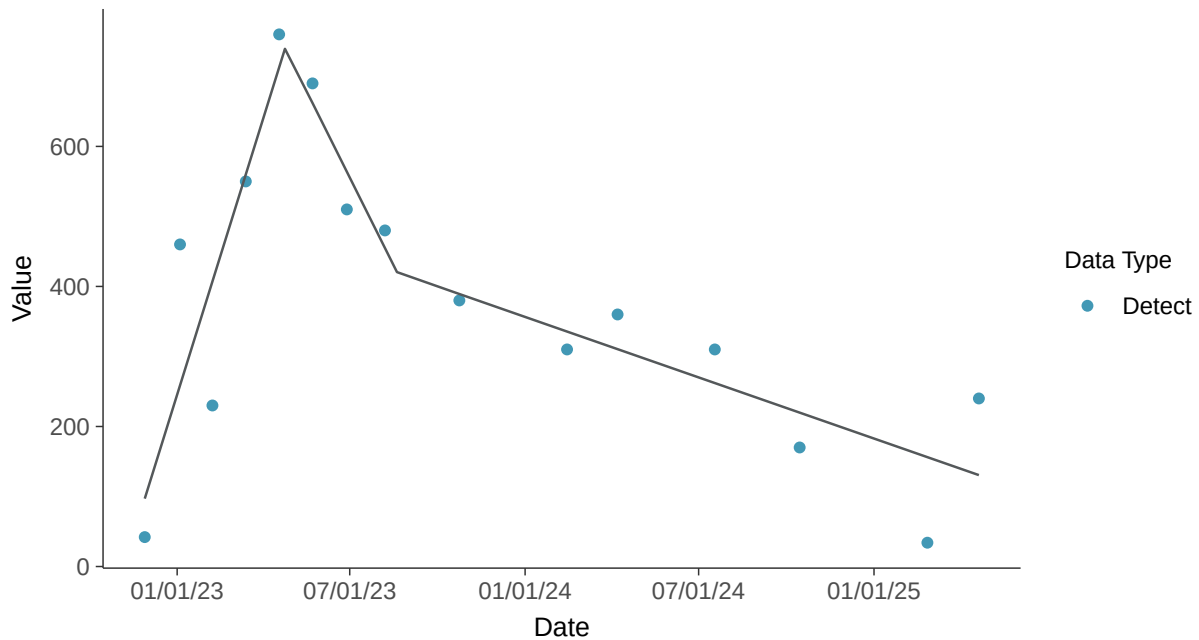
Trend Regression: Piecewise Linear-Linear

Sulfate (as SO₄), MW-03 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Sulfate (as SO₄), MW-03 (mg/L)

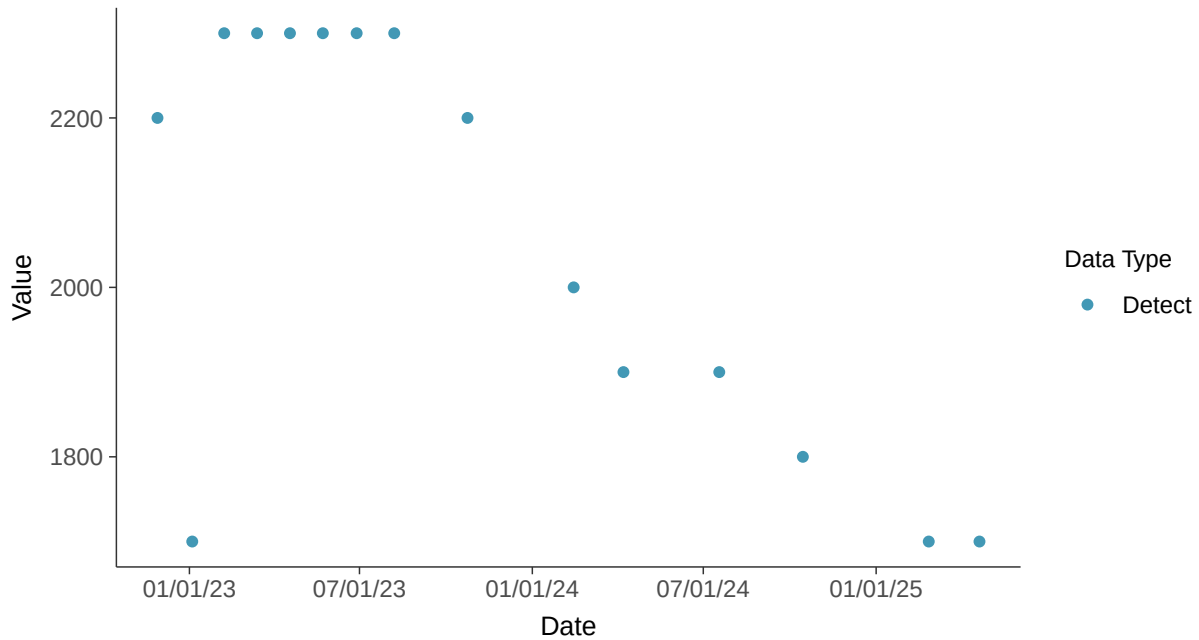


Appendix III: Total Dissolved Solids, MW-03

ID: 13_2_3_126

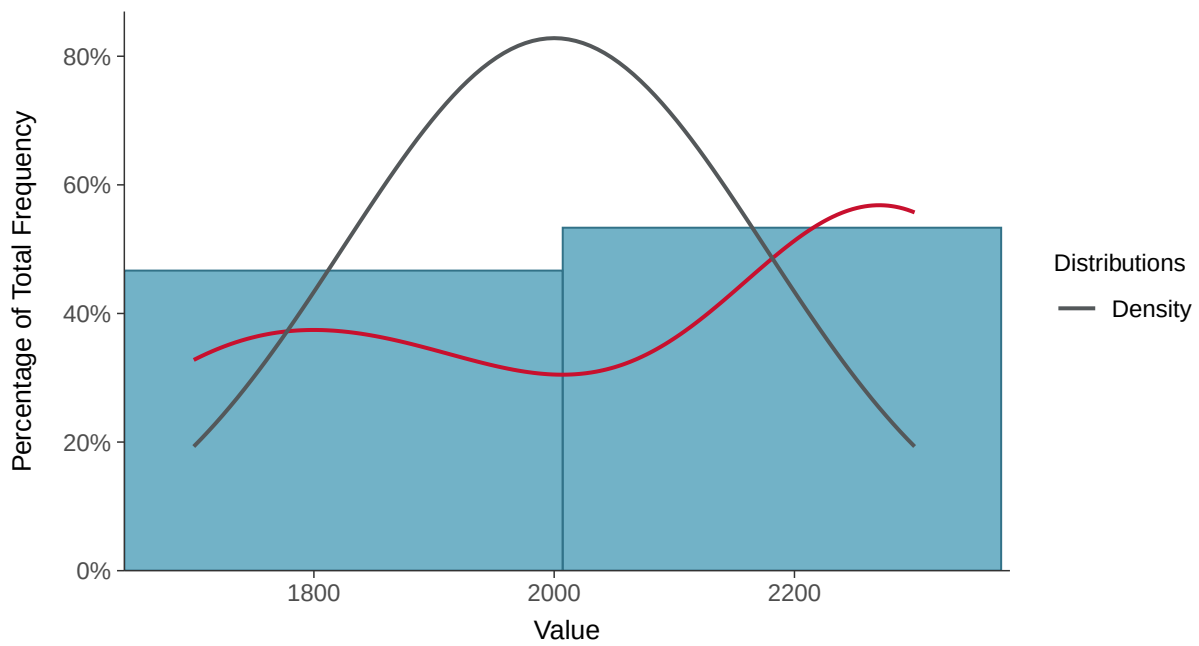
Scatter Plot

Total Dissolved Solids, MW-03 (mg/L)



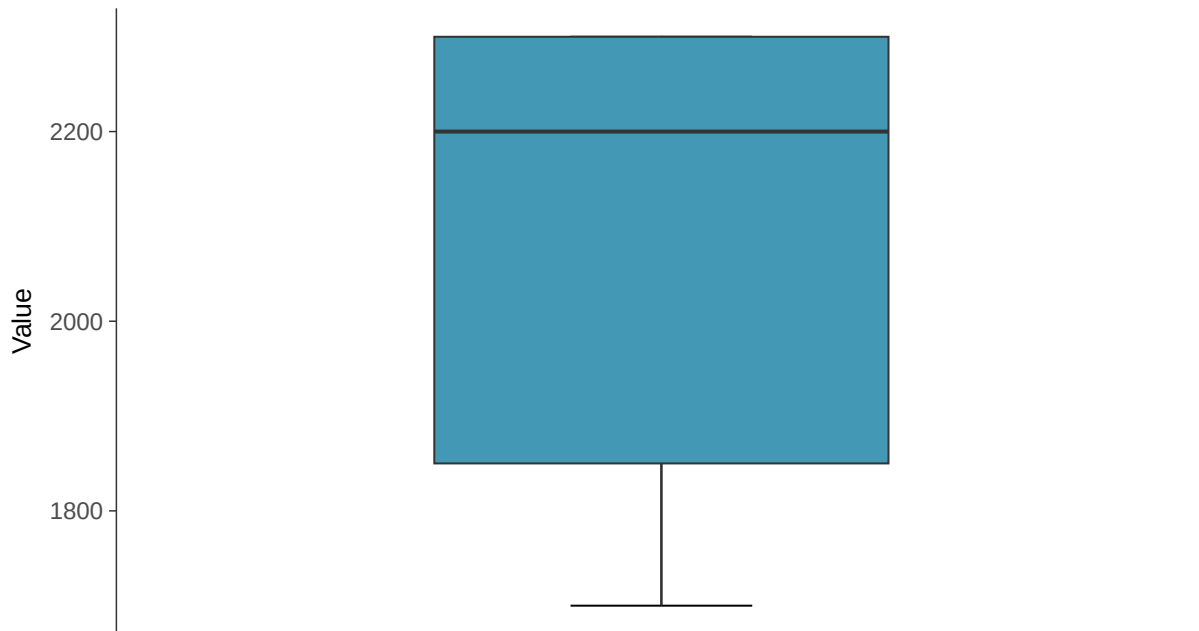
Histogram

Total Dissolved Solids, MW-03 (mg/L)



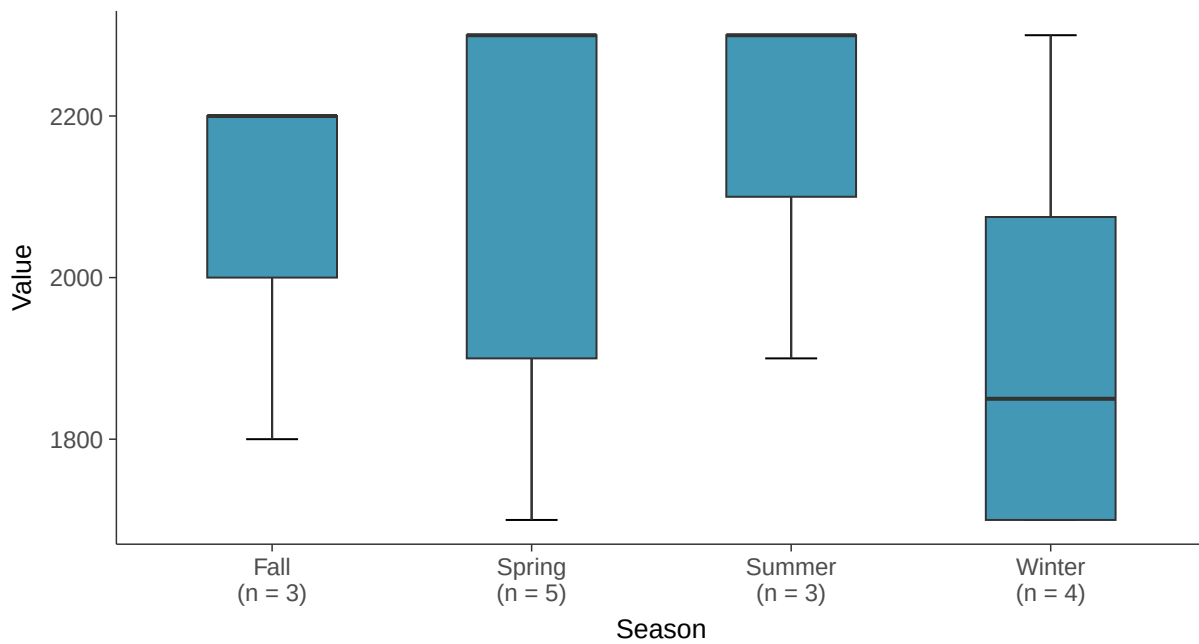
Boxplot

Total Dissolved Solids, MW-03 (mg/L)



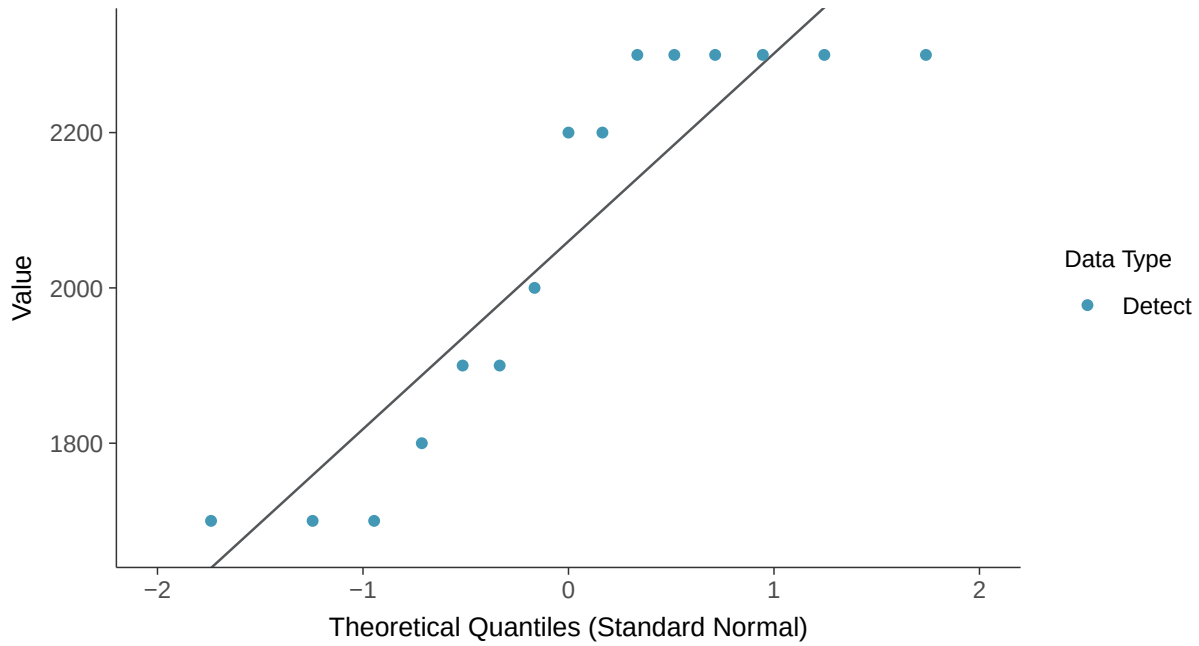
Boxplot by Season

Total Dissolved Solids, MW-03 (mg/L)



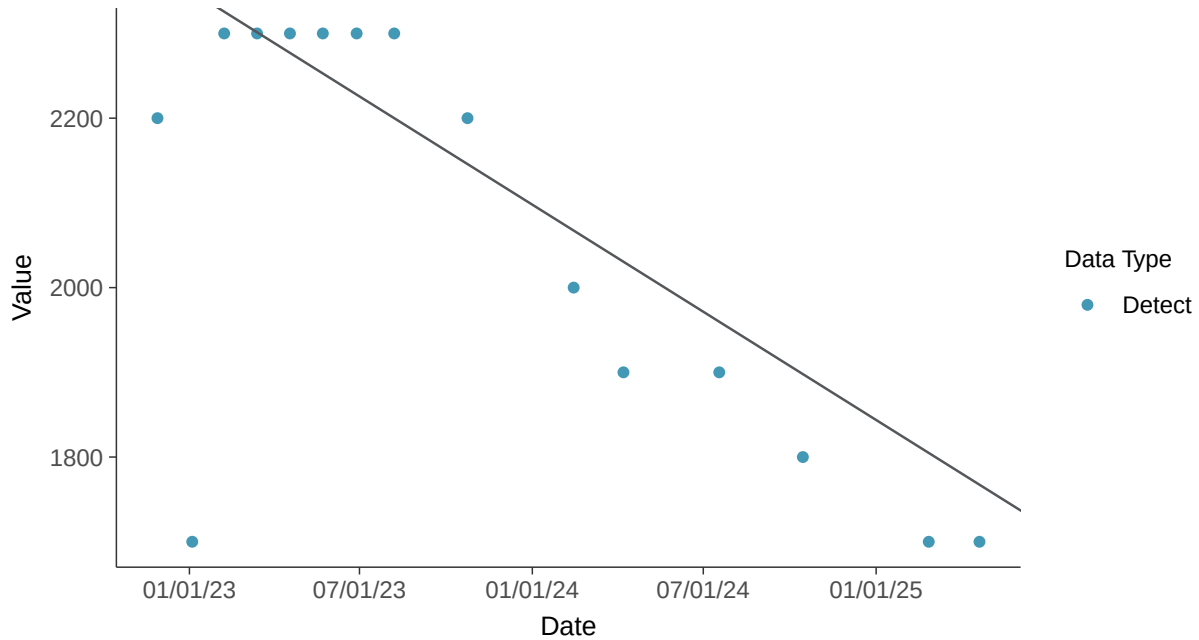
Normal Q-Q plot

Total Dissolved Solids, MW-03 (mg/L)



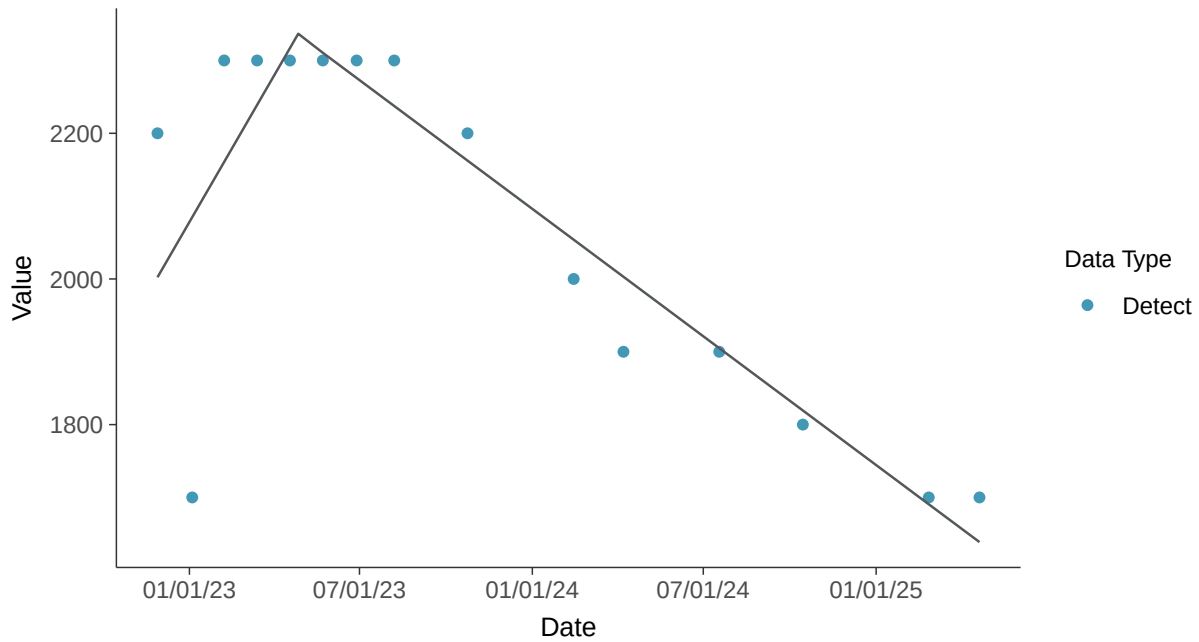
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Total Dissolved Solids, MW-03 (mg/L)



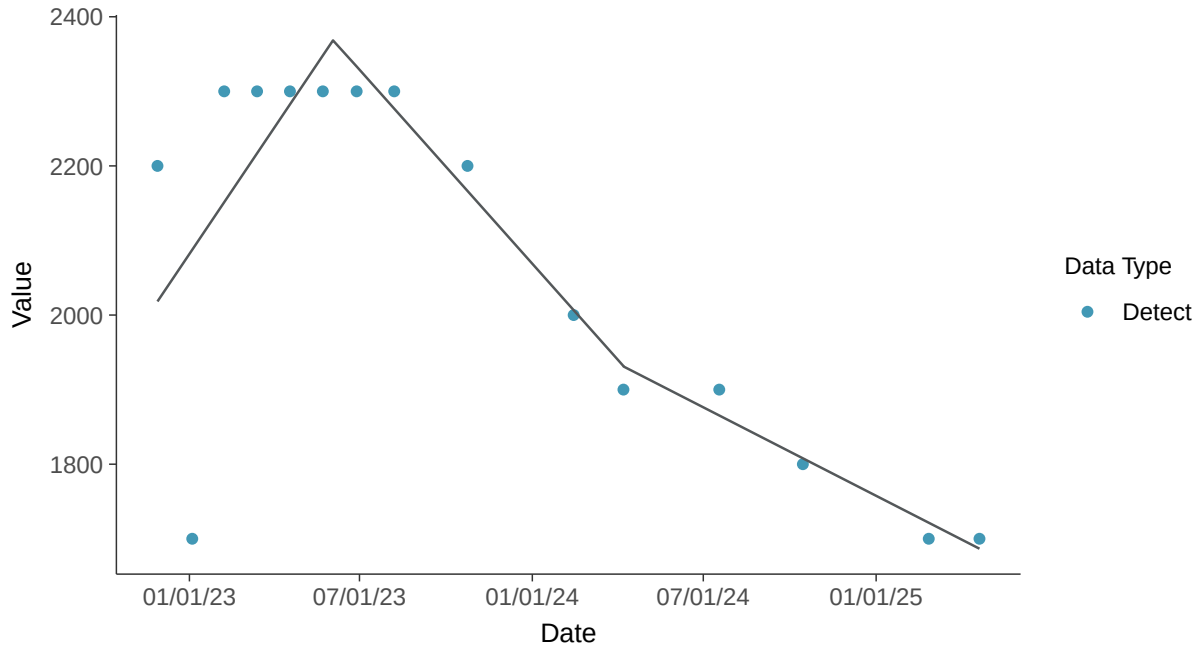
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-03 (mg/L)



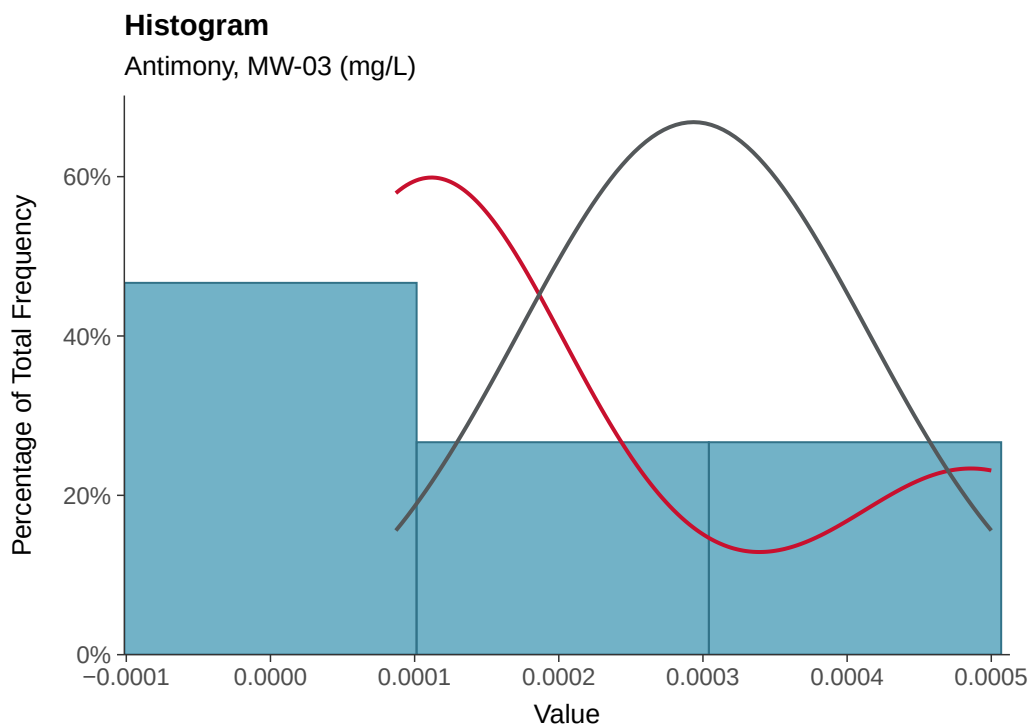
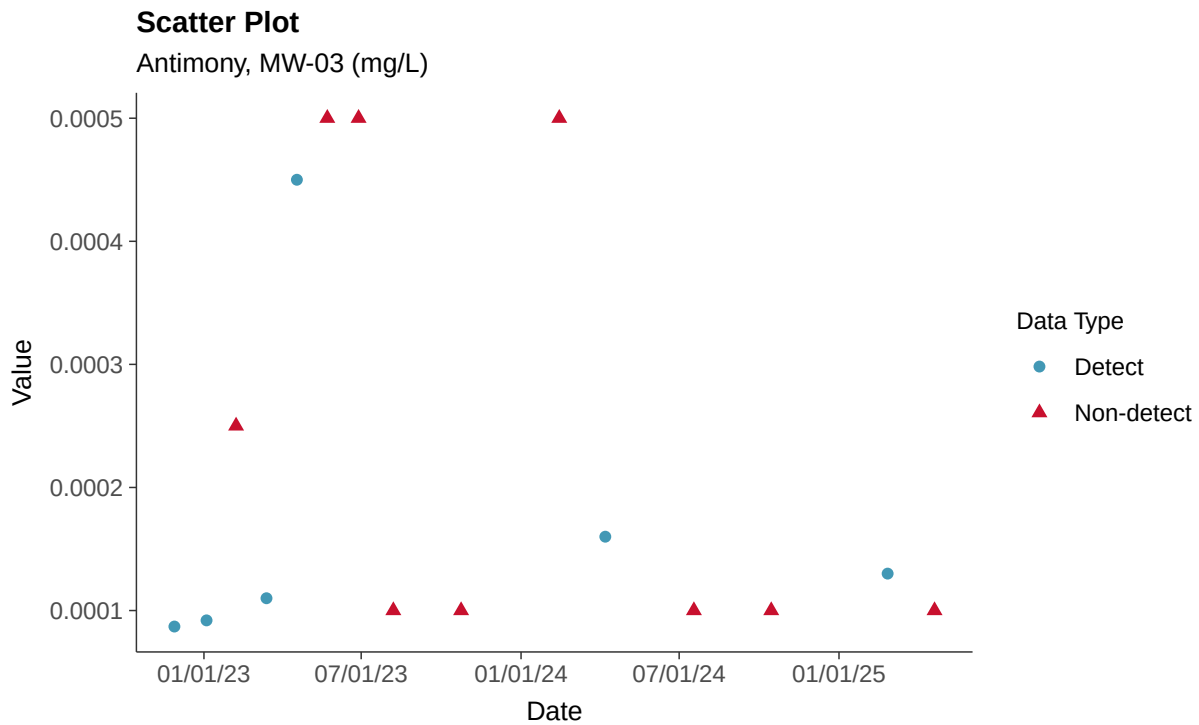
Trend Regression: Piecewise Linear-Linear-Linear

Total Dissolved Solids, MW-03 (mg/L)



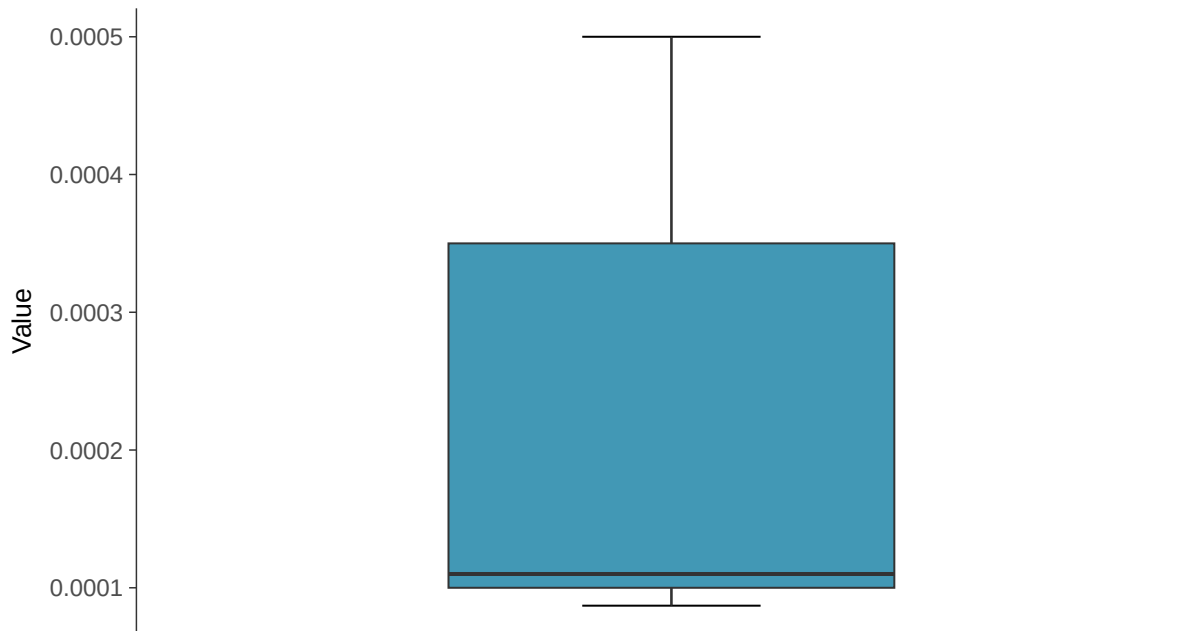
Appendix IV: Antimony, MW-03

ID: 13_2_4_101



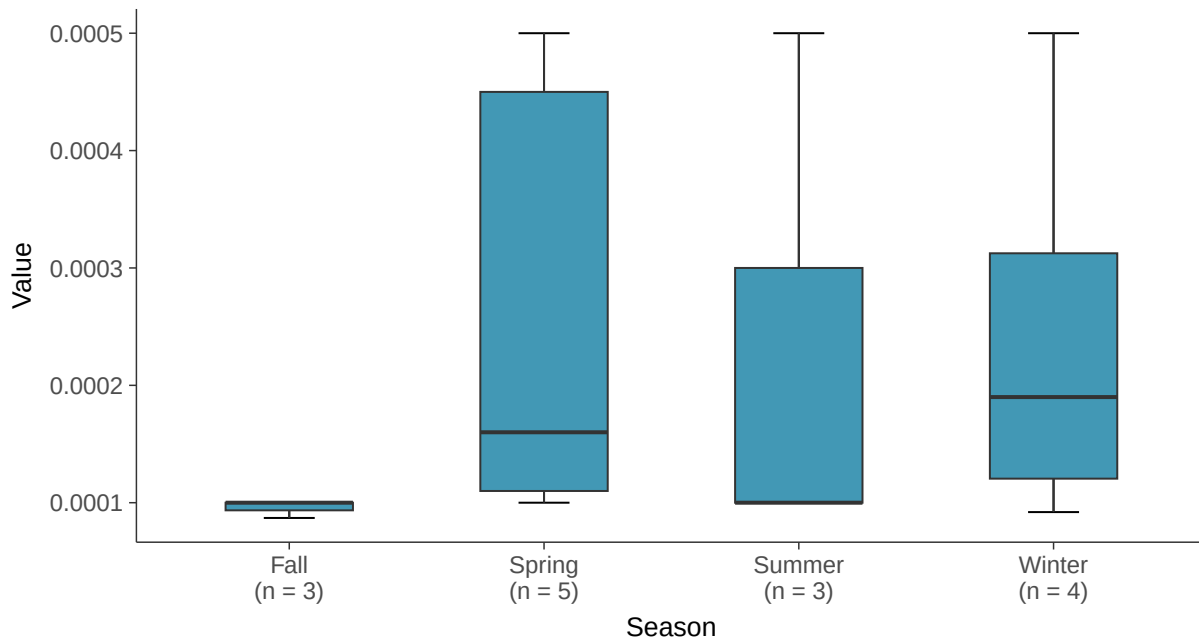
Boxplot

Antimony, MW-03 (mg/L)



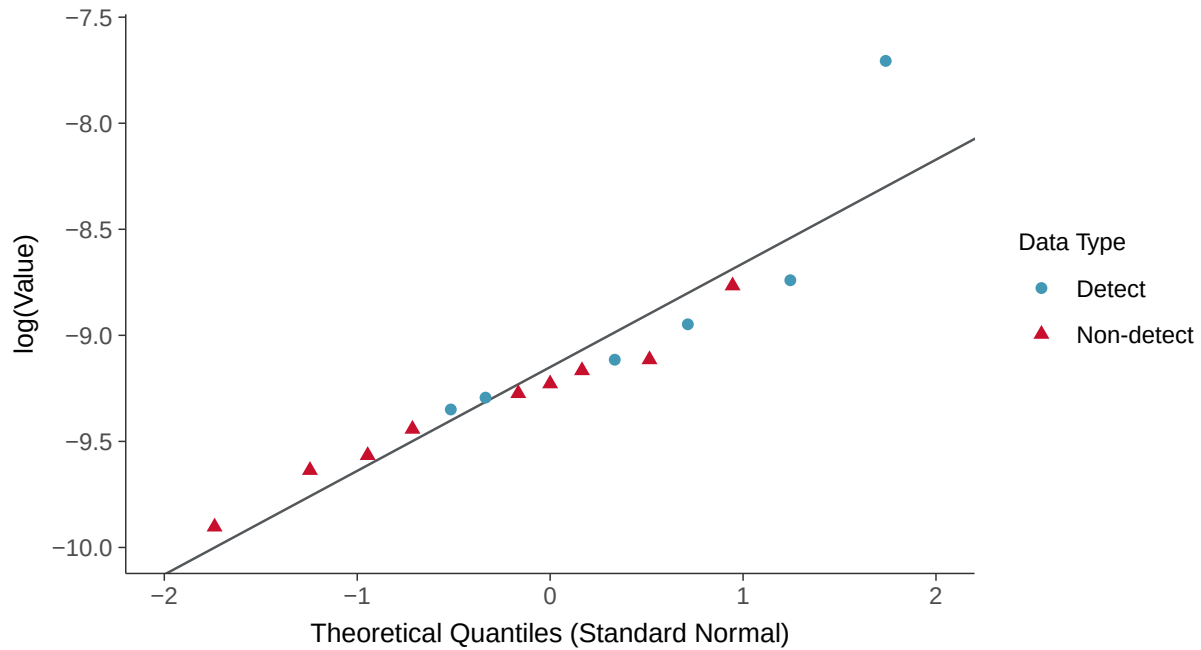
Boxplot by Season

Antimony, MW-03 (mg/L)



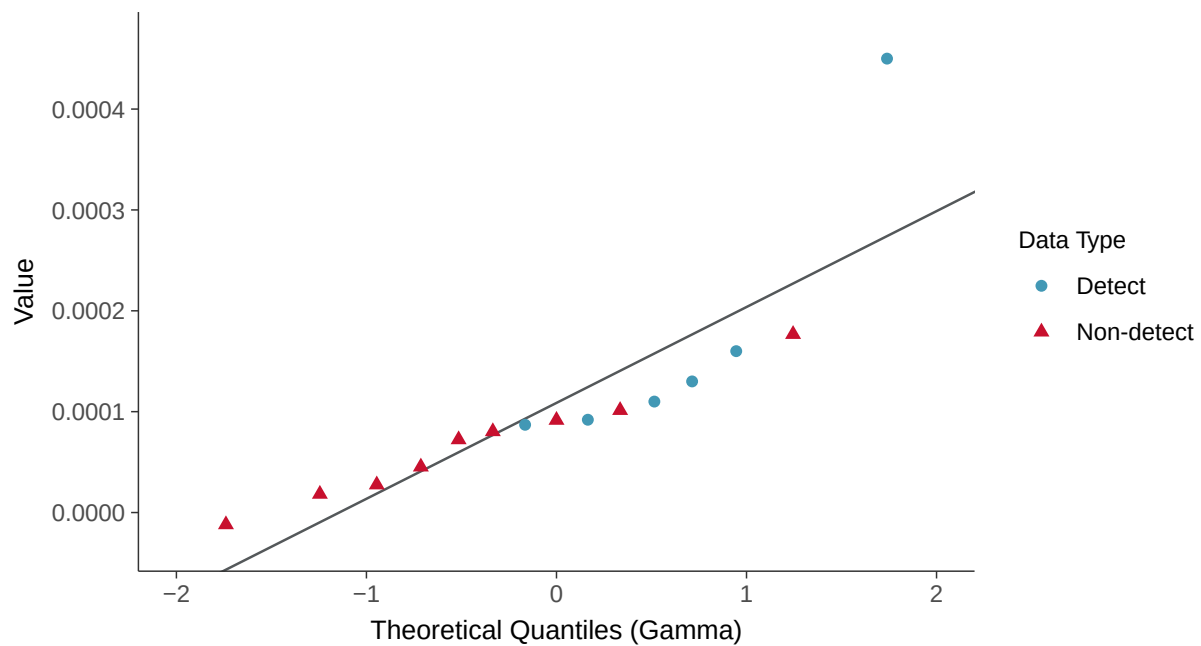
Lognormal Q-Q plot using ROS Imputed Estimates

Antimony, MW-03 (mg/L)



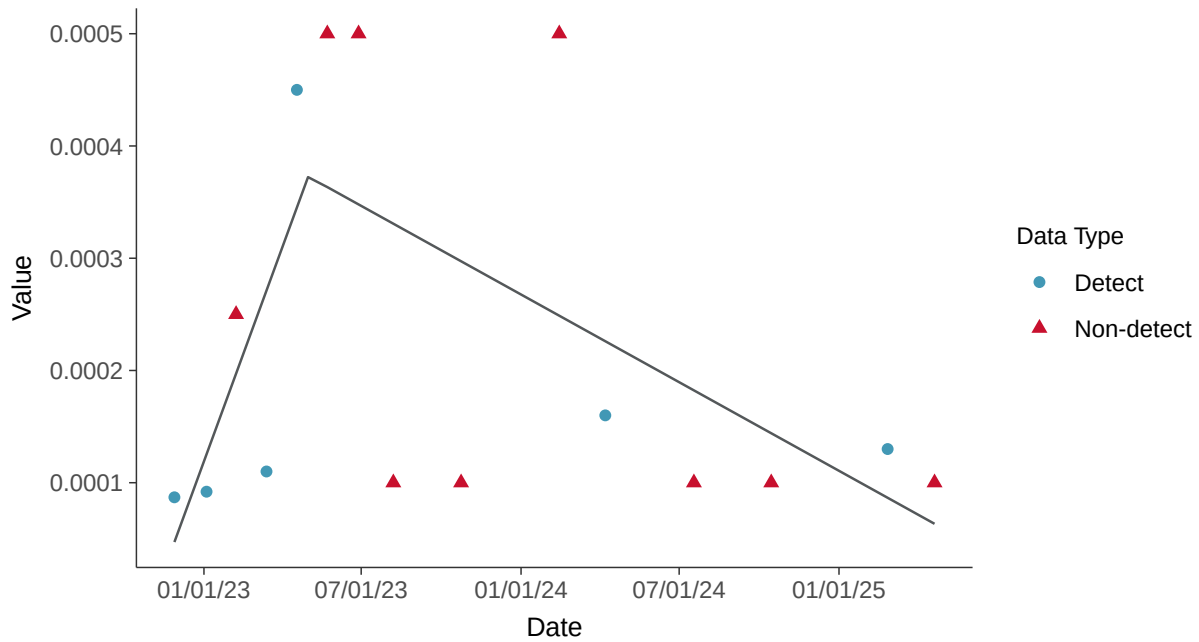
Gamma Q-Q plot using ROS Imputed Estimates

Antimony, MW-03 (mg/L)



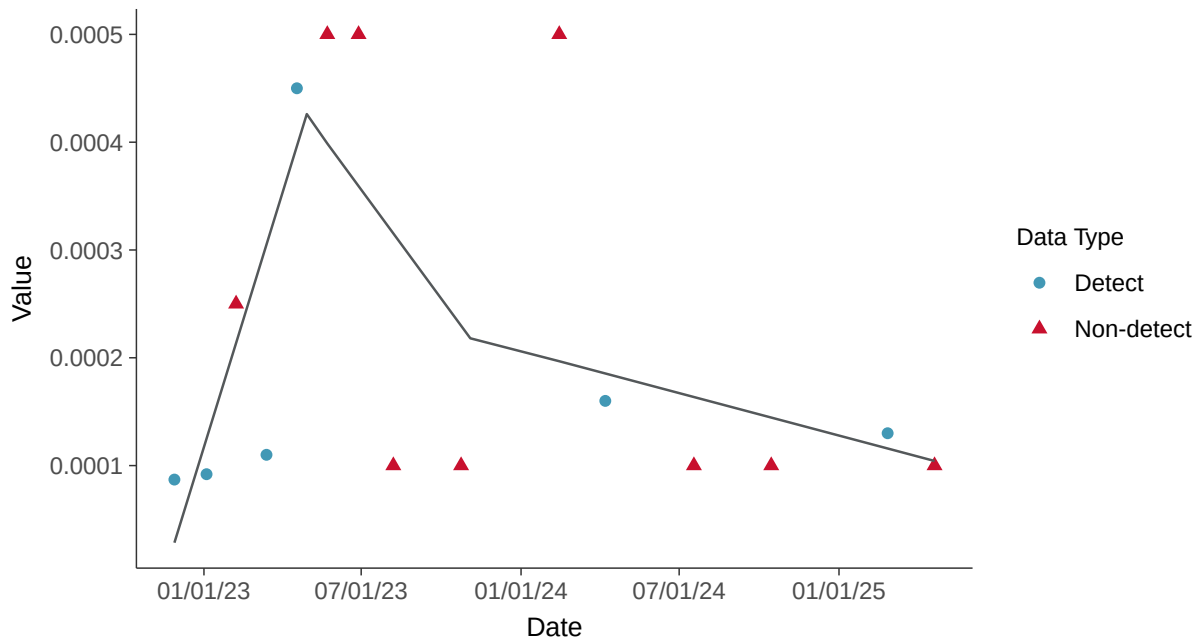
Trend Regression: Piecewise Linear-Linear

Antimony, MW-03 (mg/L)



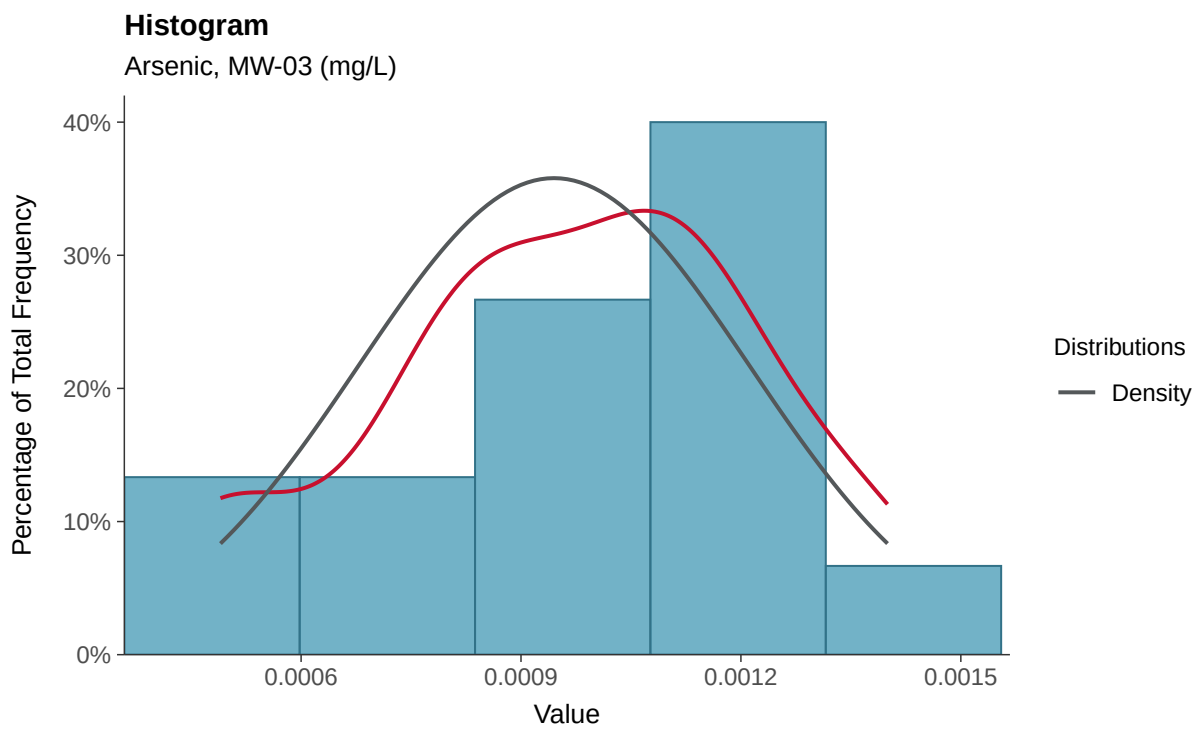
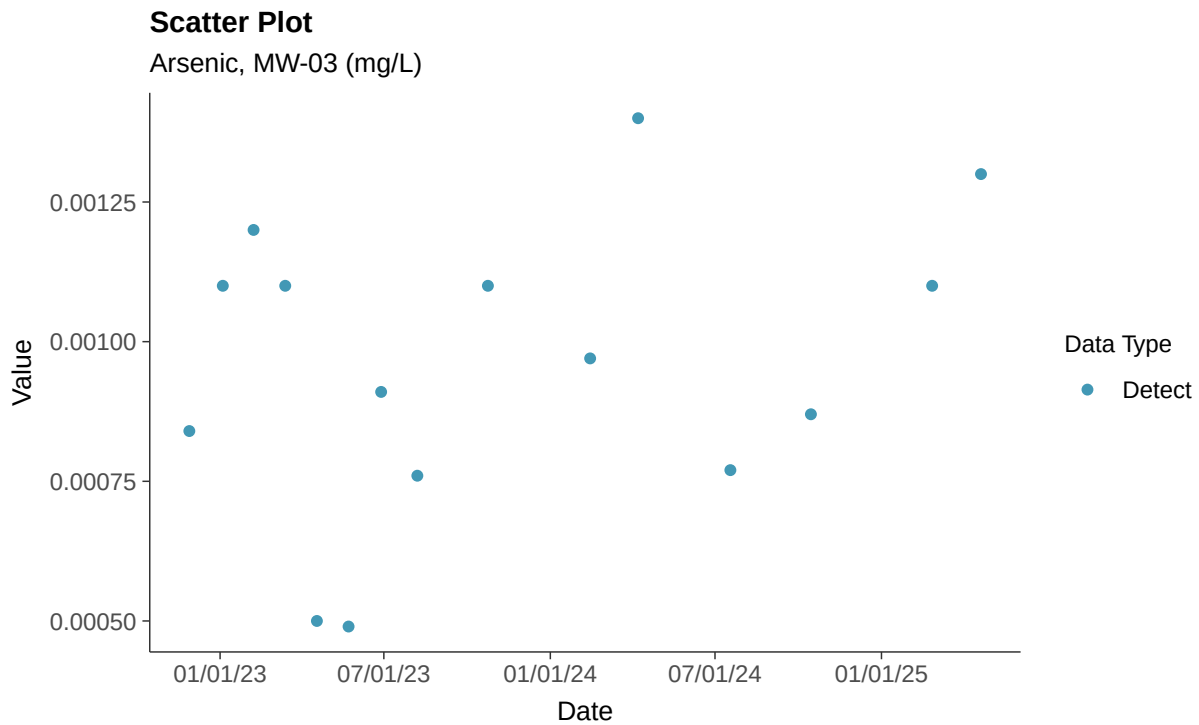
Trend Regression: Piecewise Linear-Linear-Linear

Antimony, MW-03 (mg/L)



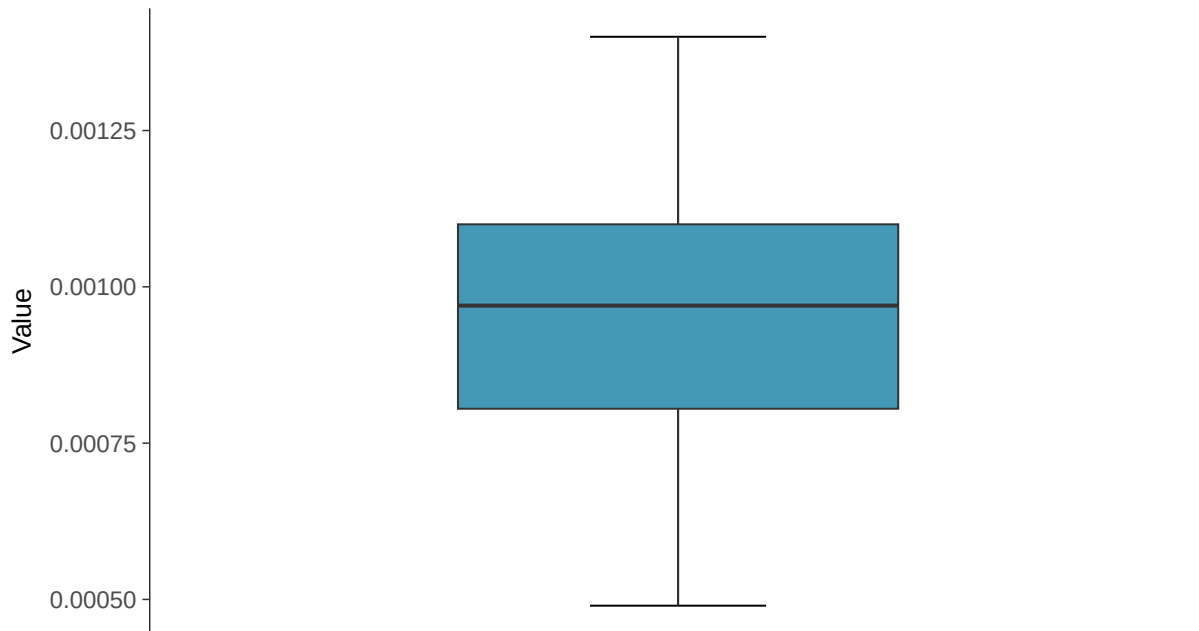
Appendix IV: Arsenic, MW-03

ID: 13_2_4_102



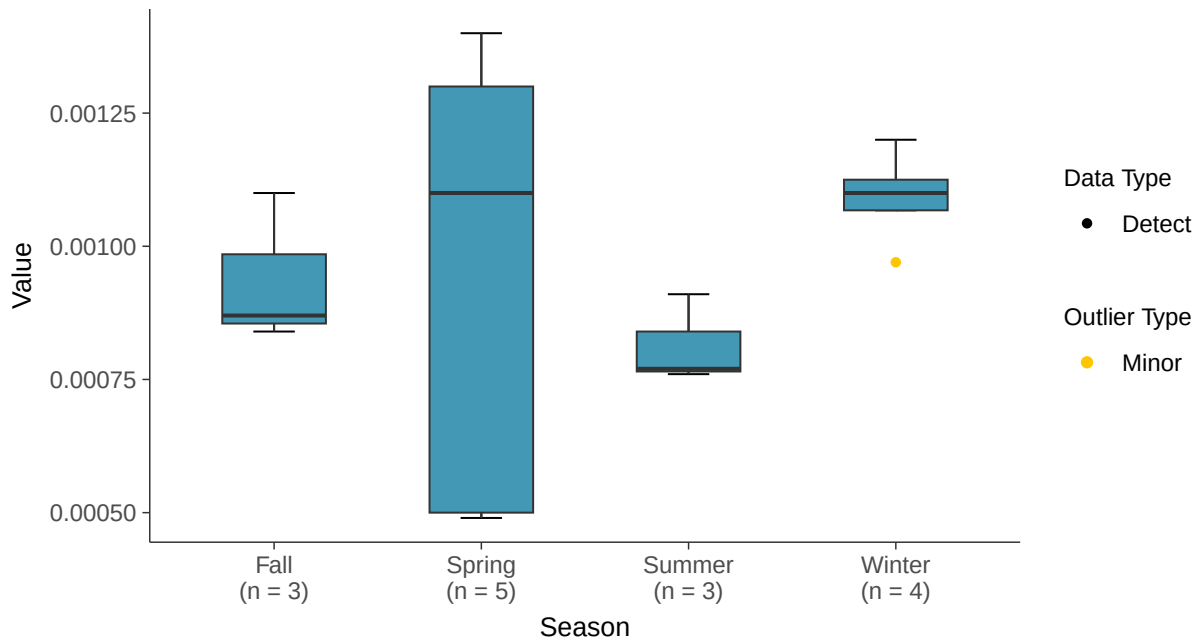
Boxplot

Arsenic, MW-03 (mg/L)



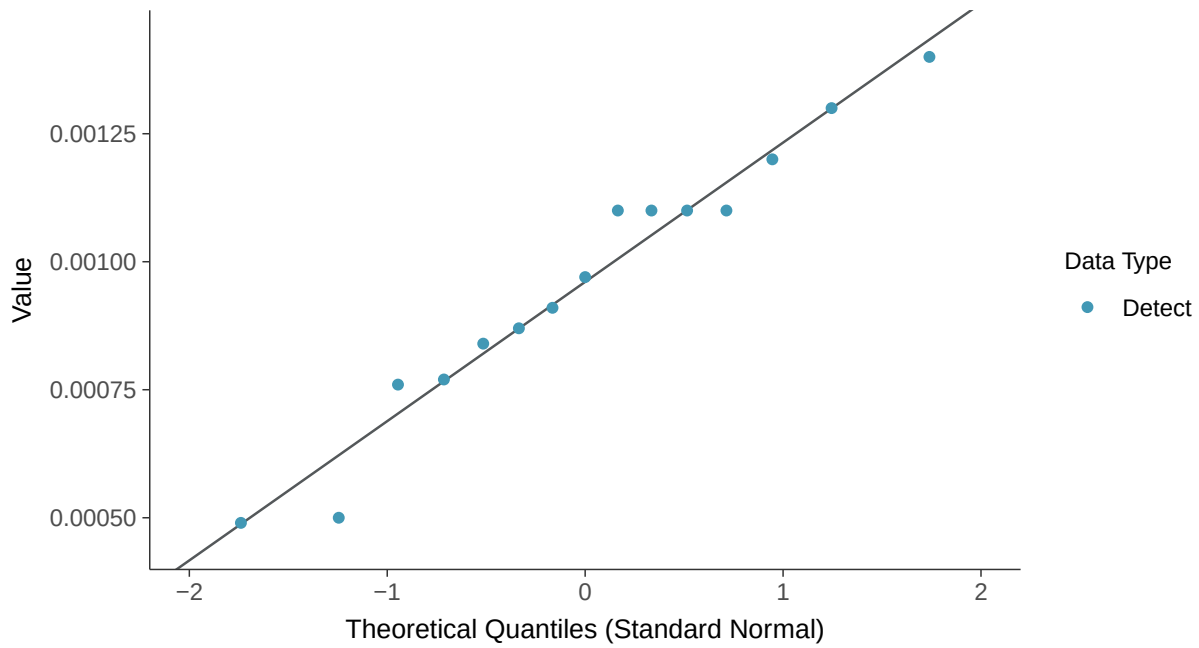
Boxplot by Season

Arsenic, MW-03 (mg/L)



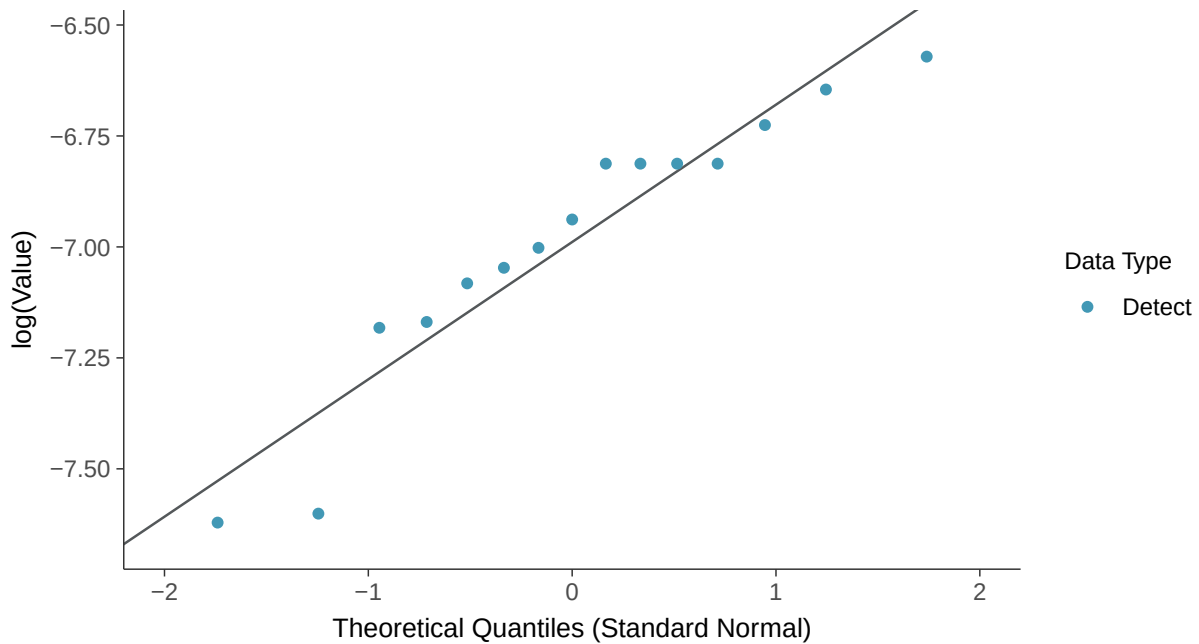
Normal Q-Q plot

Arsenic, MW-03 (mg/L)



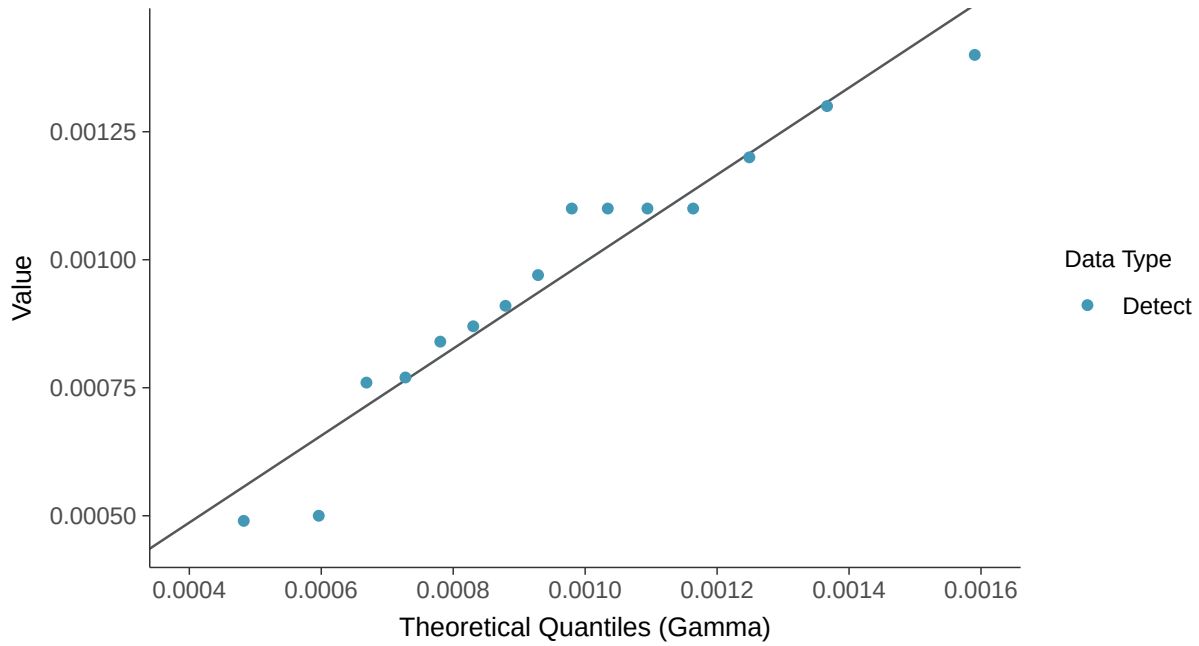
Lognormal Q-Q plot

Arsenic, MW-03 (mg/L)



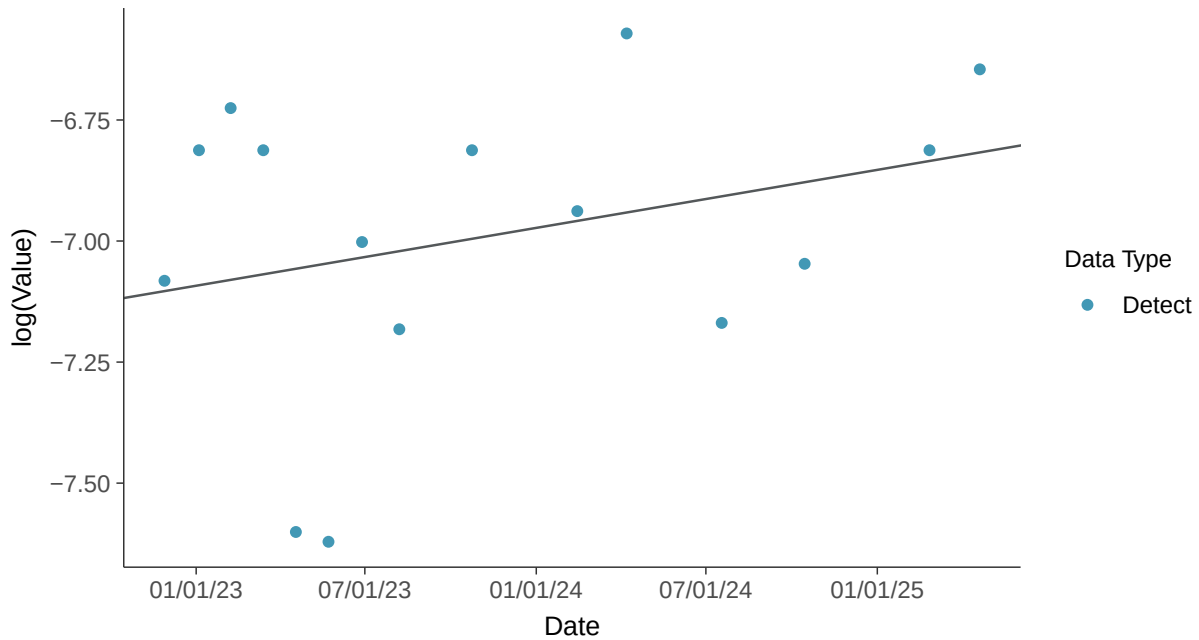
Gamma Q-Q plot

Arsenic, MW-03 (mg/L)



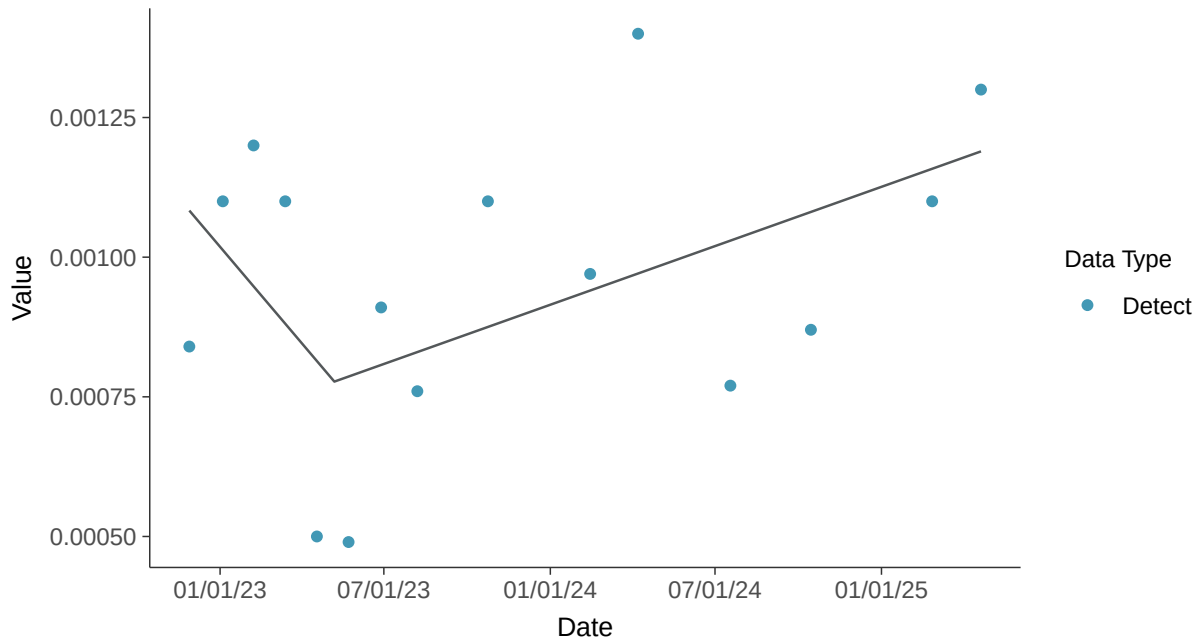
Trend Regression: Lognormal MLE

Arsenic, MW-03 (mg/L)



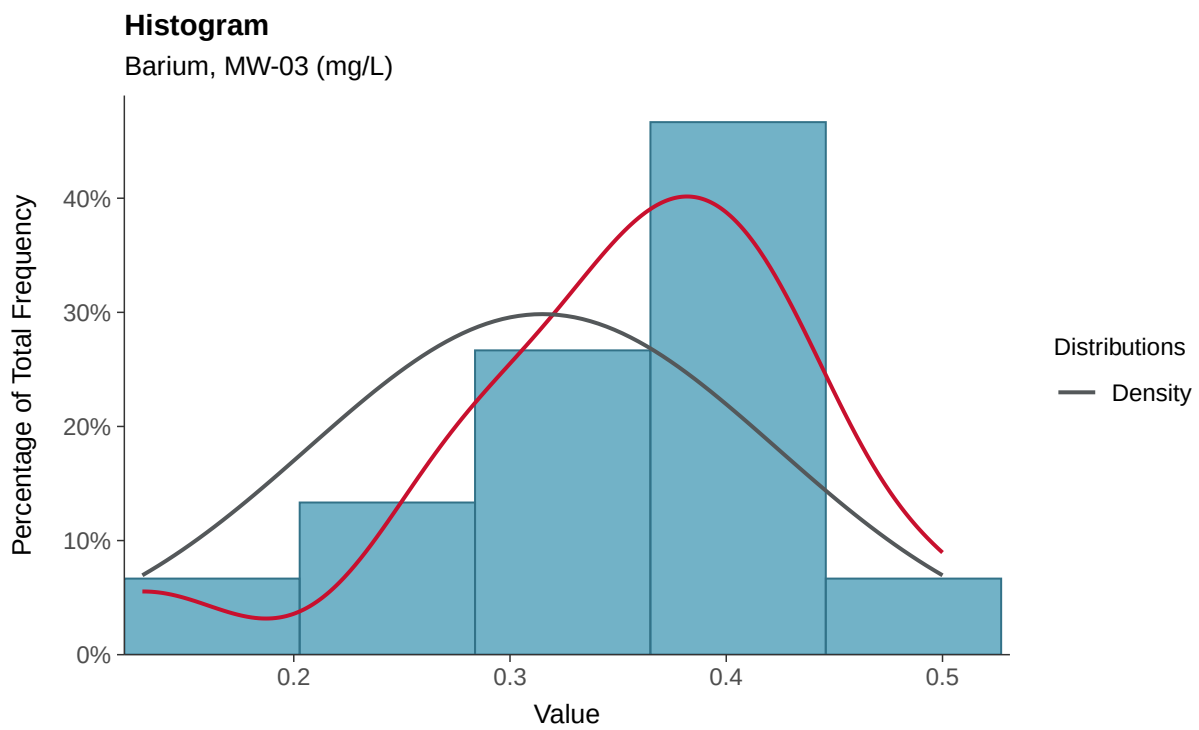
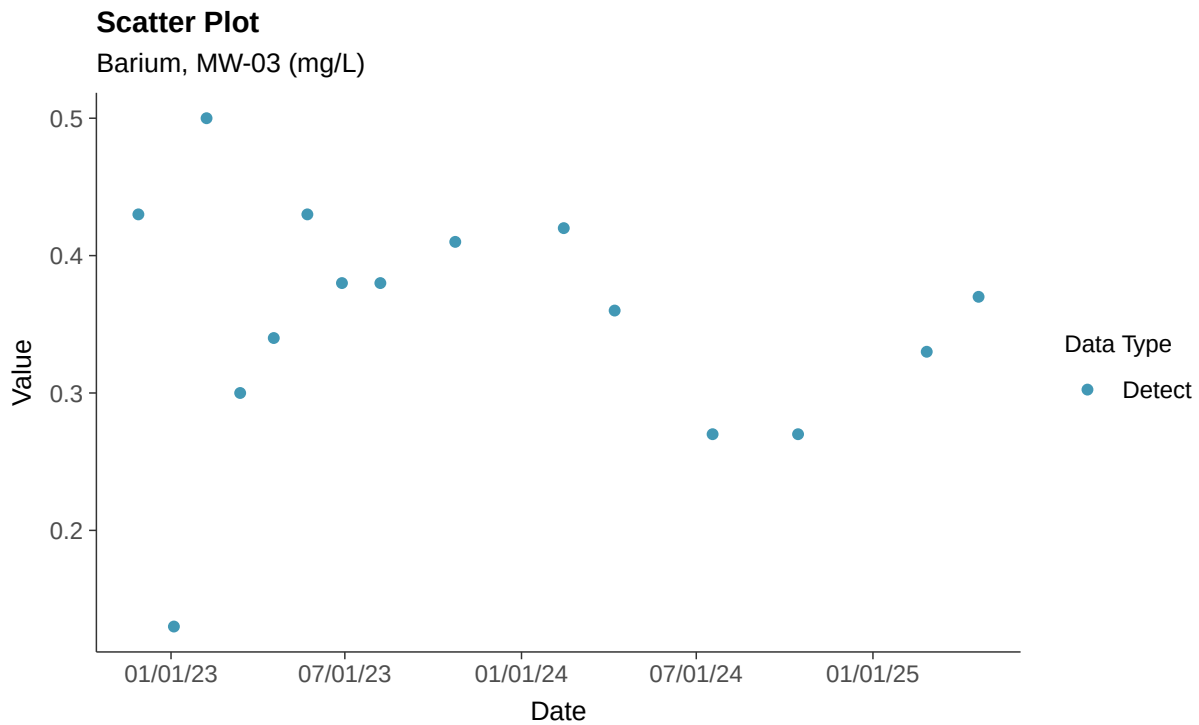


Trend Regression: Piecewise Linear-Linear
Arsenic, MW-03 (mg/L)



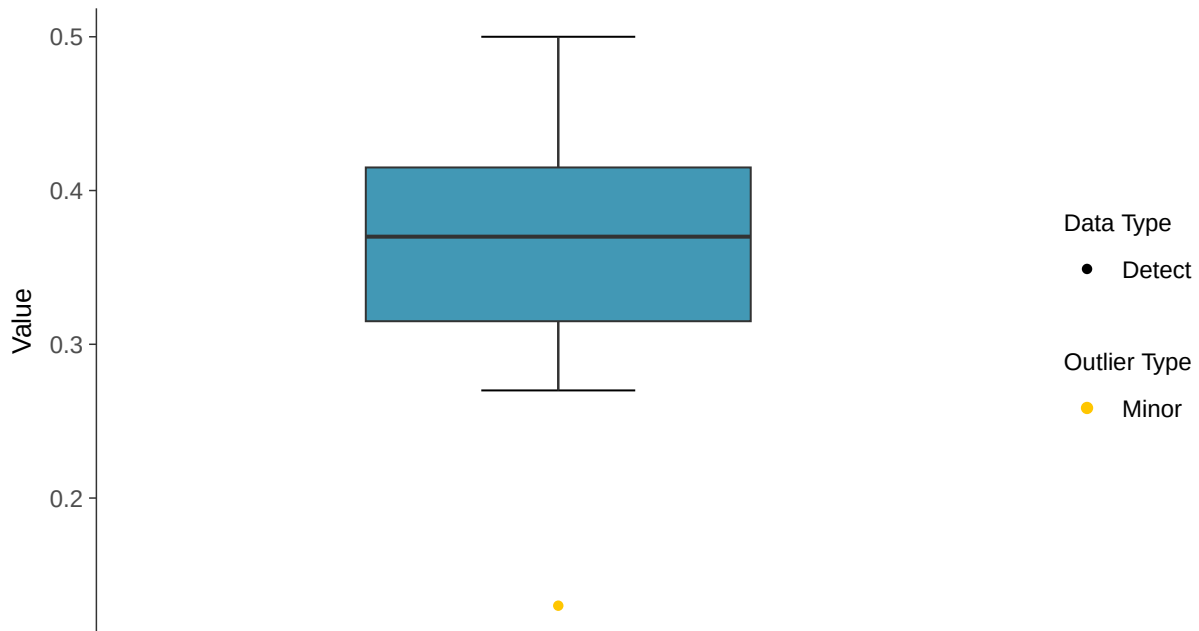
Appendix IV: Barium, MW-03

ID: 13_2_4_103



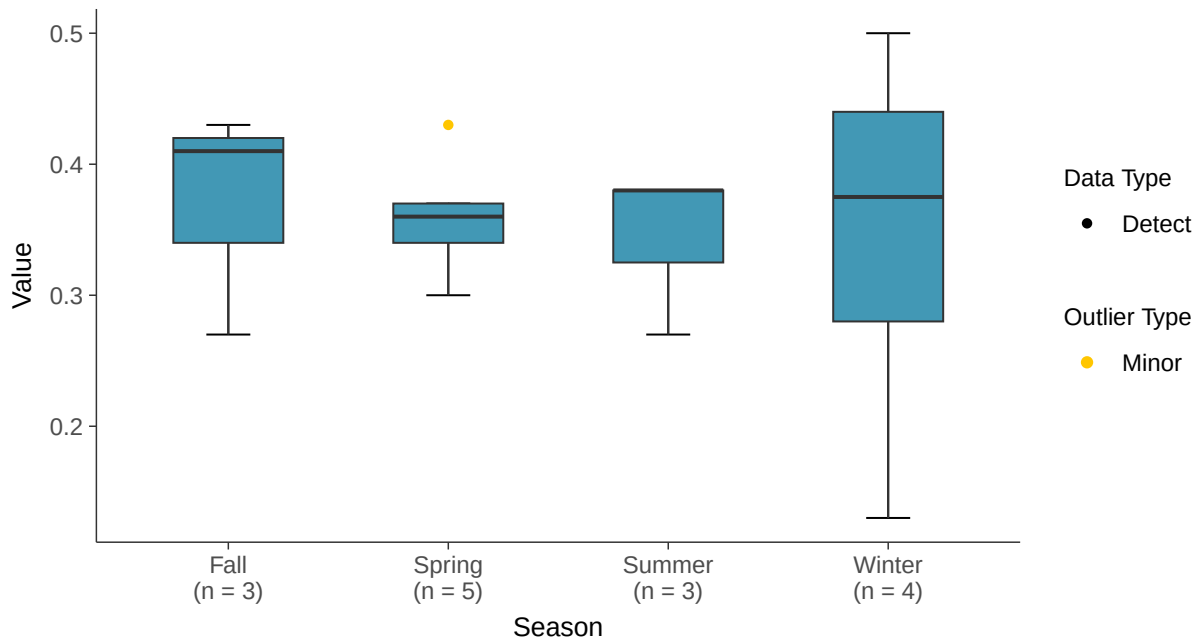
Boxplot

Barium, MW-03 (mg/L)

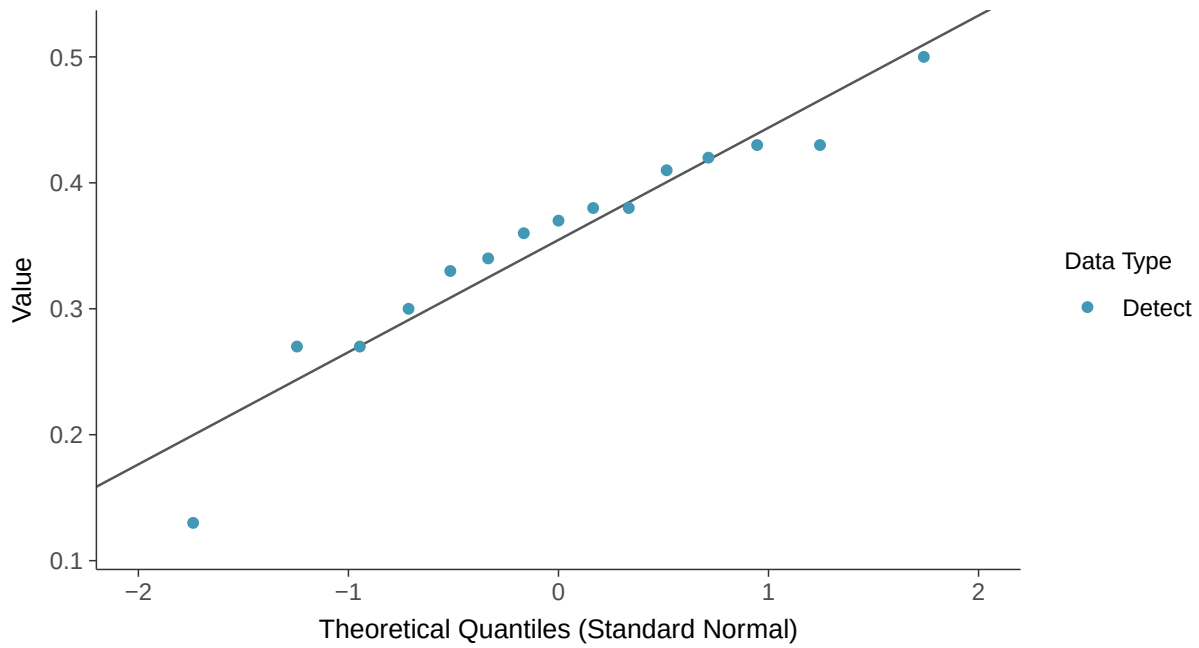


Boxplot by Season

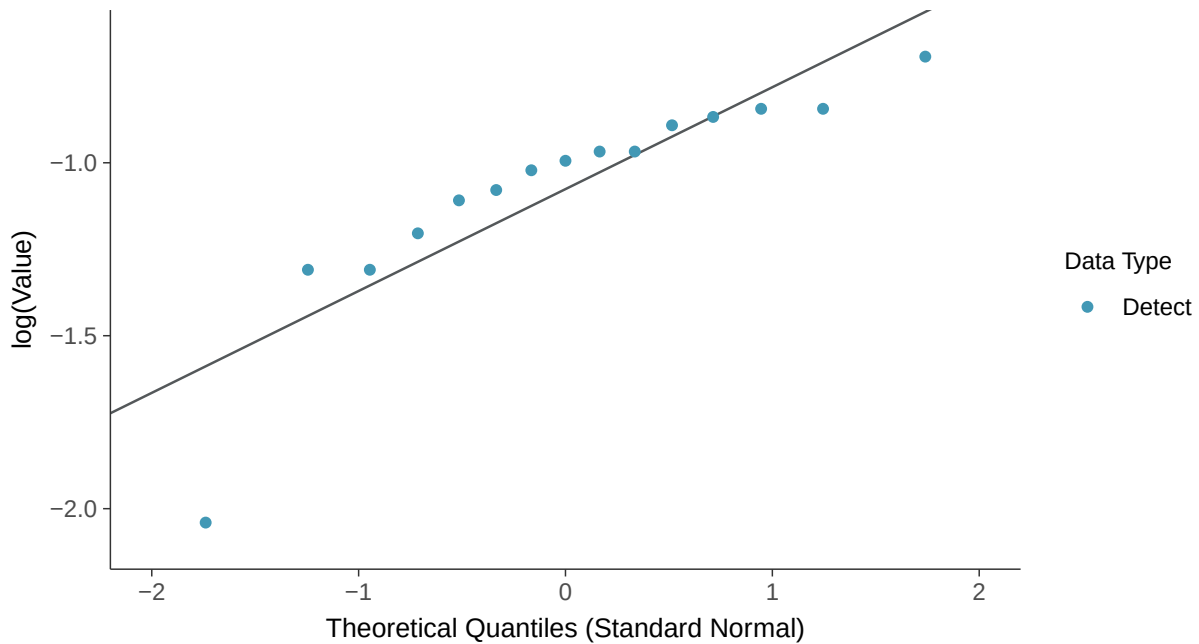
Barium, MW-03 (mg/L)



Normal Q-Q plot
Barium, MW-03 (mg/L)

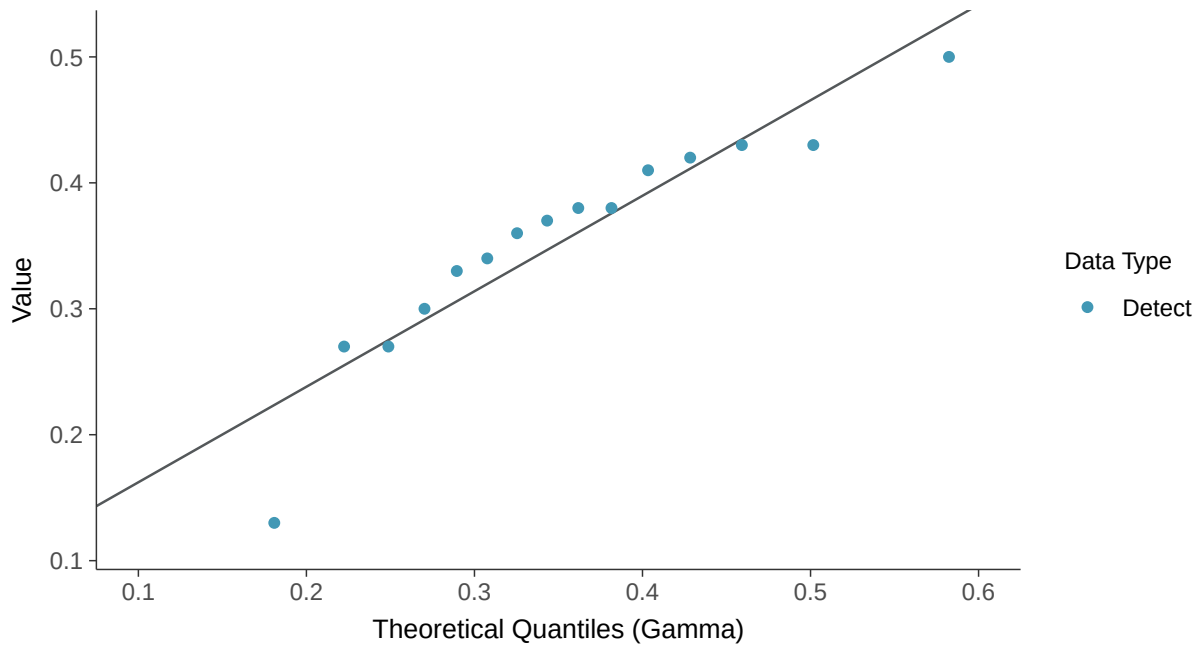


Lognormal Q-Q plot
Barium, MW-03 (mg/L)



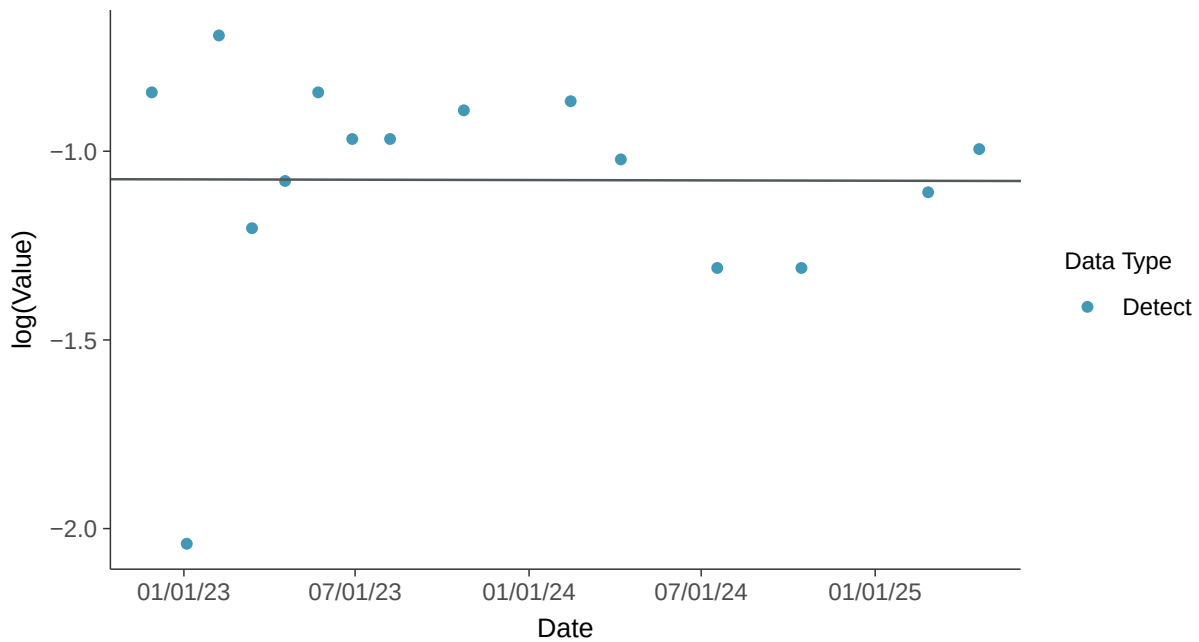
Gamma Q-Q plot

Barium, MW-03 (mg/L)



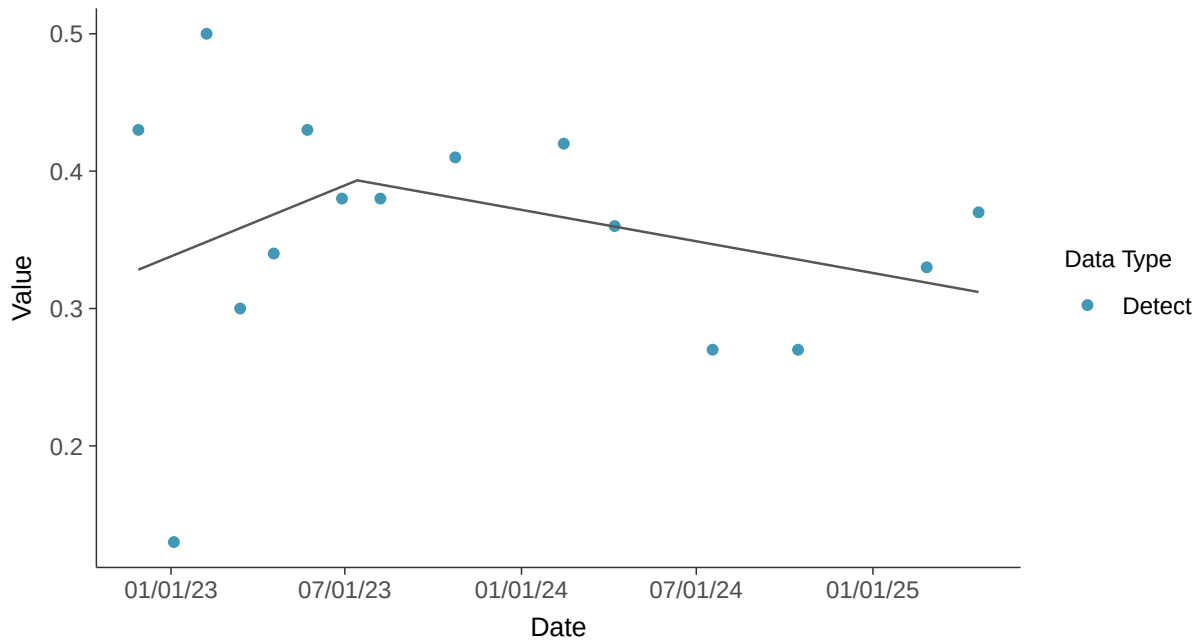
Trend Regression: Lognormal MLE

Barium, MW-03 (mg/L)



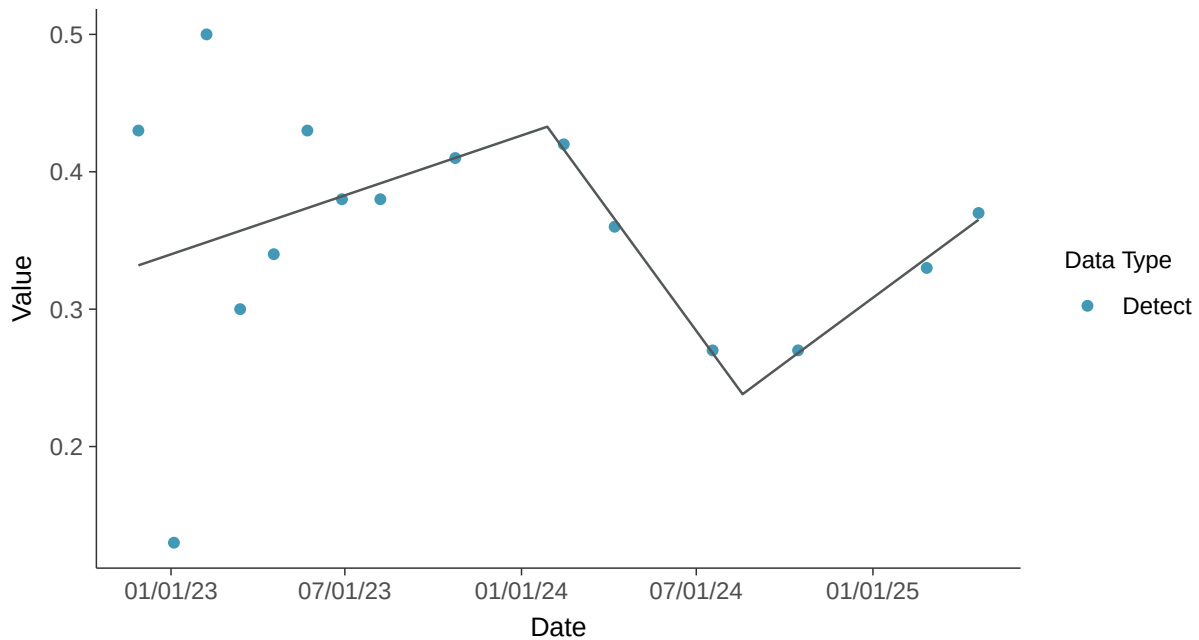
Trend Regression: Piecewise Linear-Linear

Barium, MW-03 (mg/L)



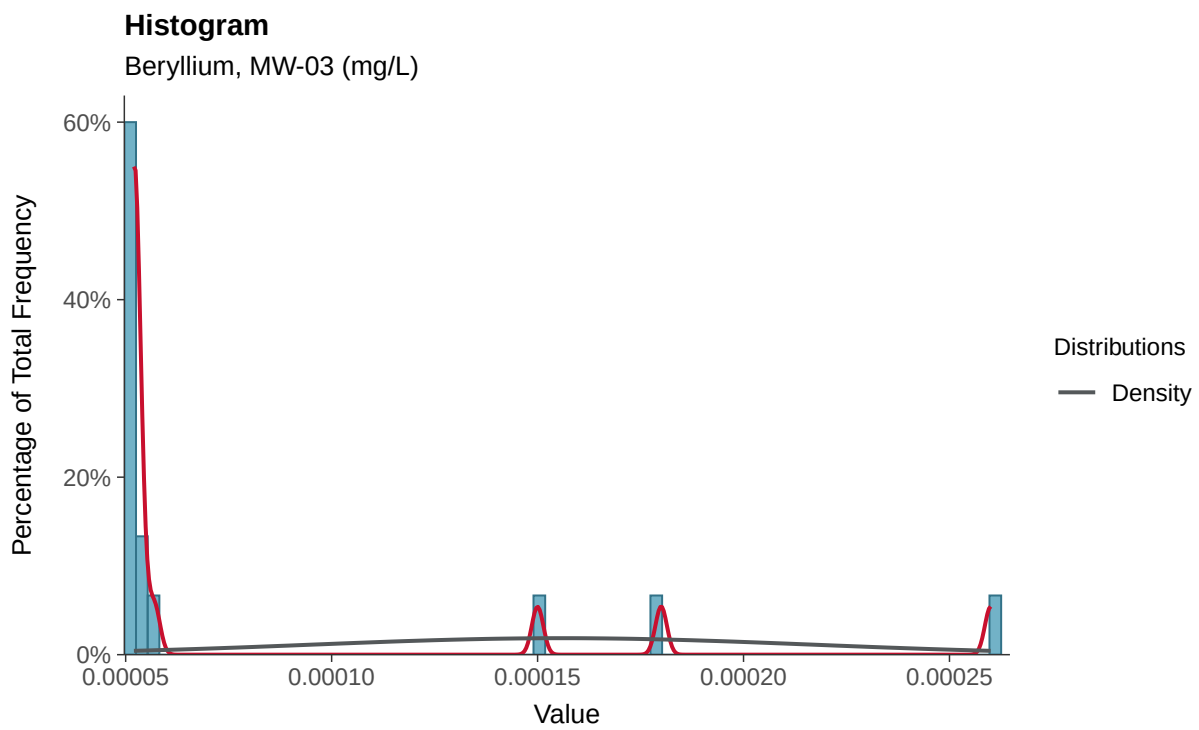
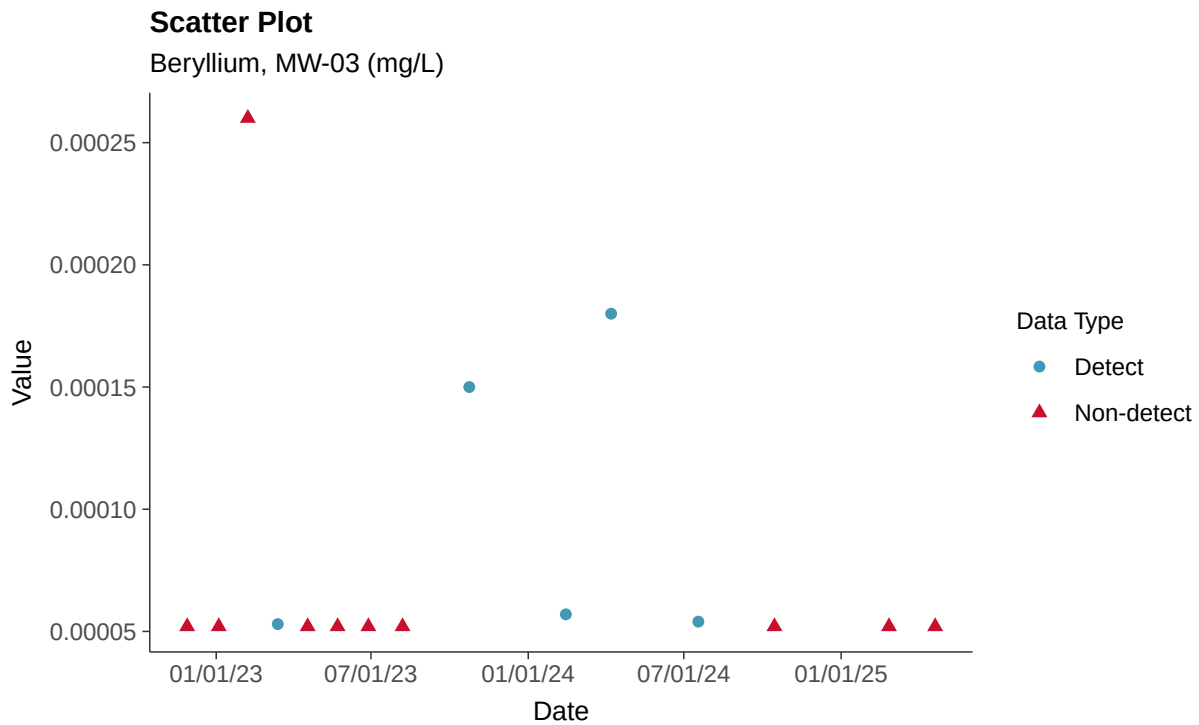
Trend Regression: Piecewise Linear-Linear-Linear

Barium, MW-03 (mg/L)



Appendix IV: Beryllium, MW-03

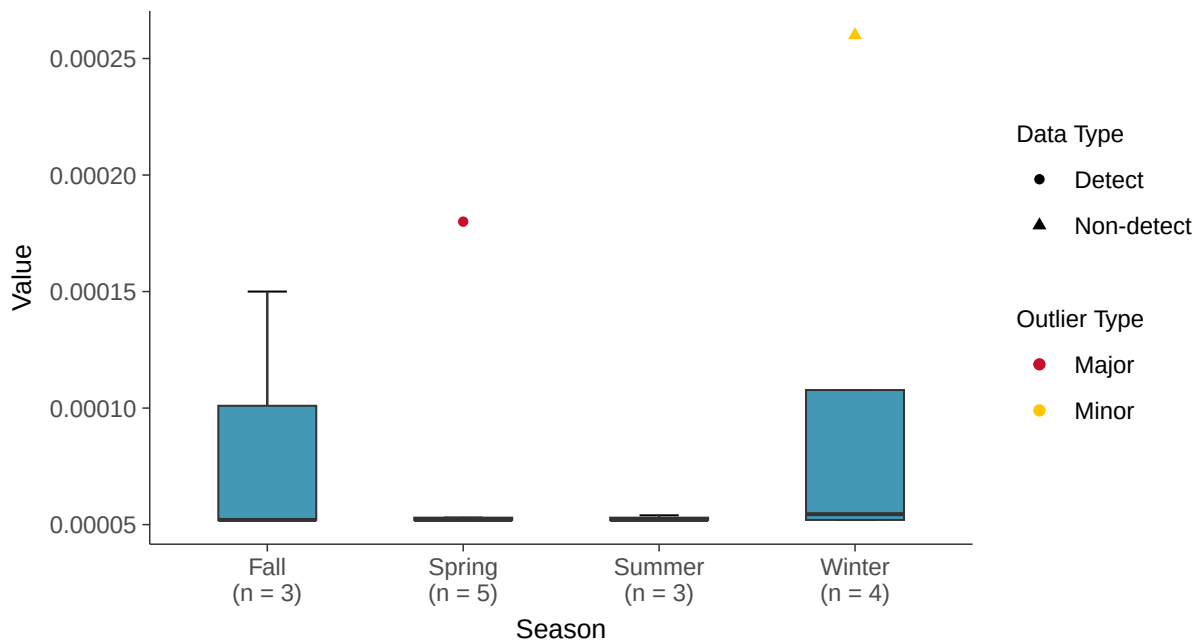
ID: 13_2_4_104



Beryllium, MW-03 (mg/L)

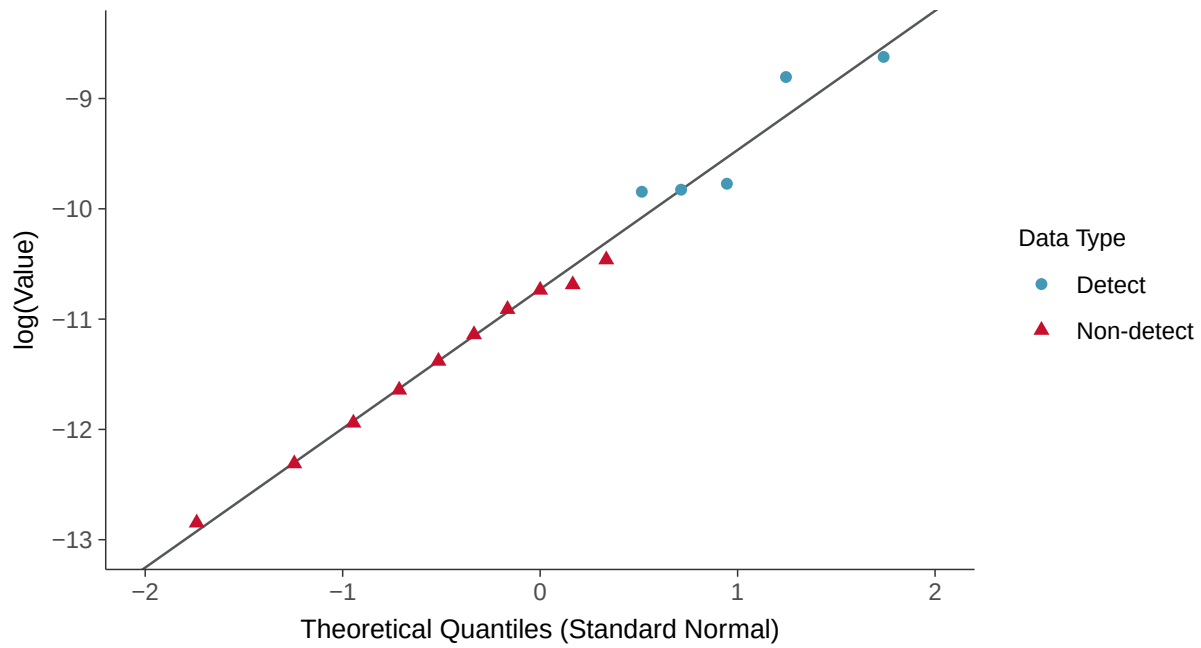


Beryllium, MW-03 (mg/L)



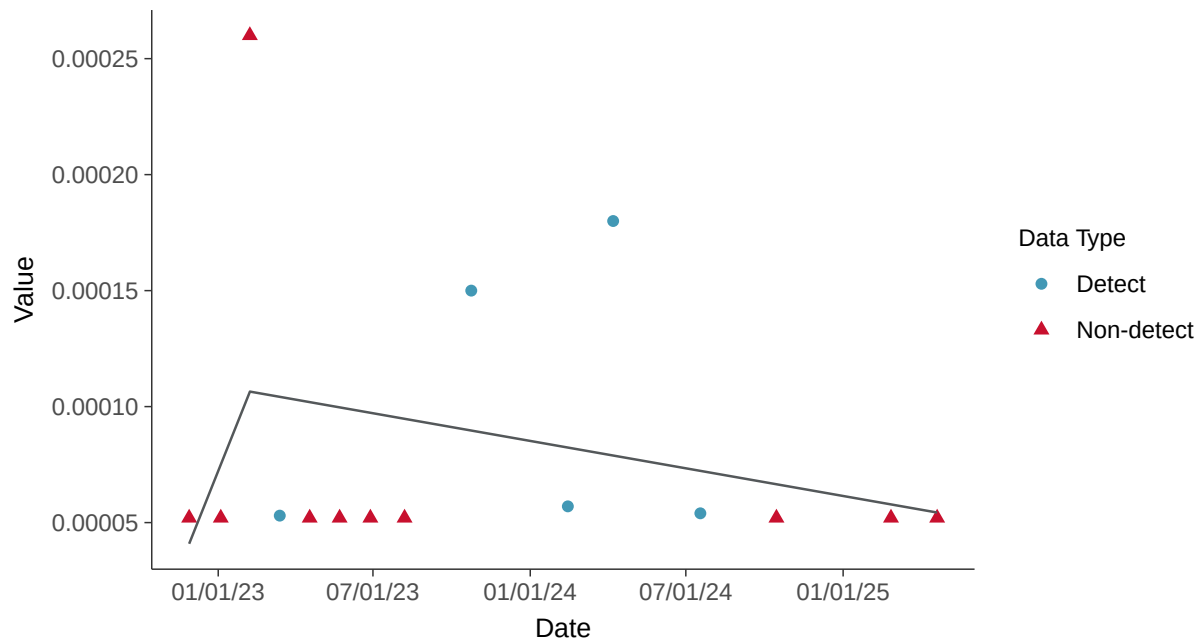
Lognormal Q-Q plot using ROS Imputed Estimates

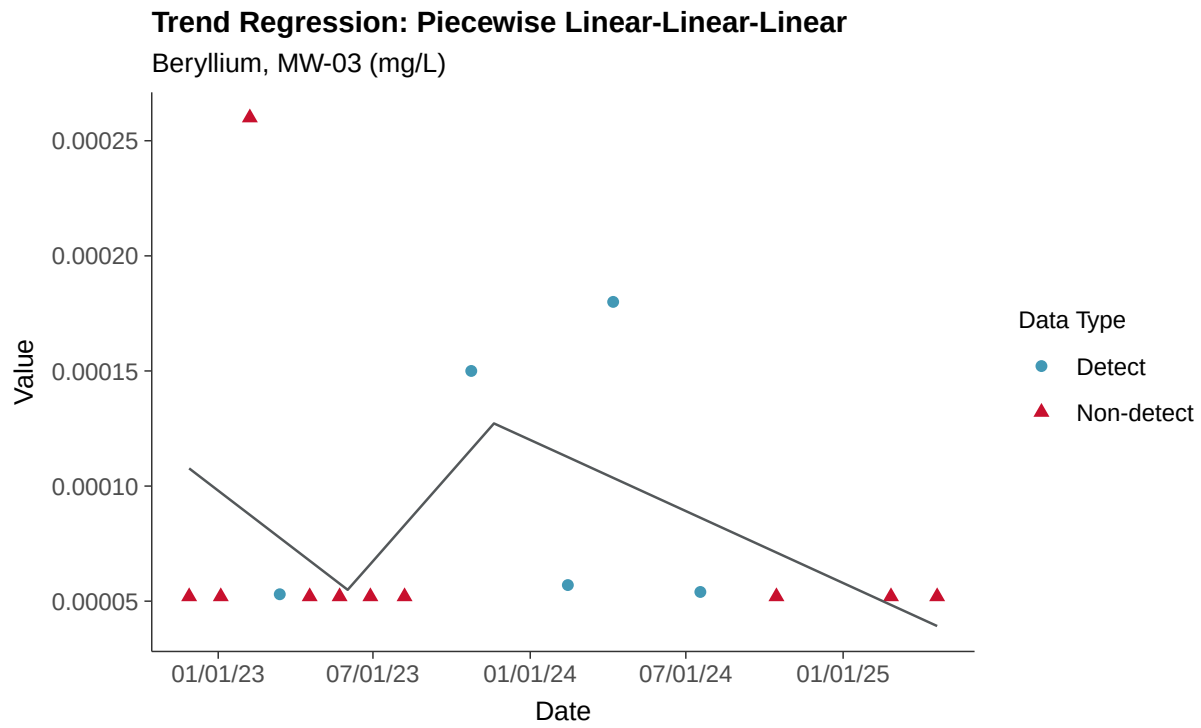
Beryllium, MW-03 (mg/L)



Trend Regression: Piecewise Linear-Linear

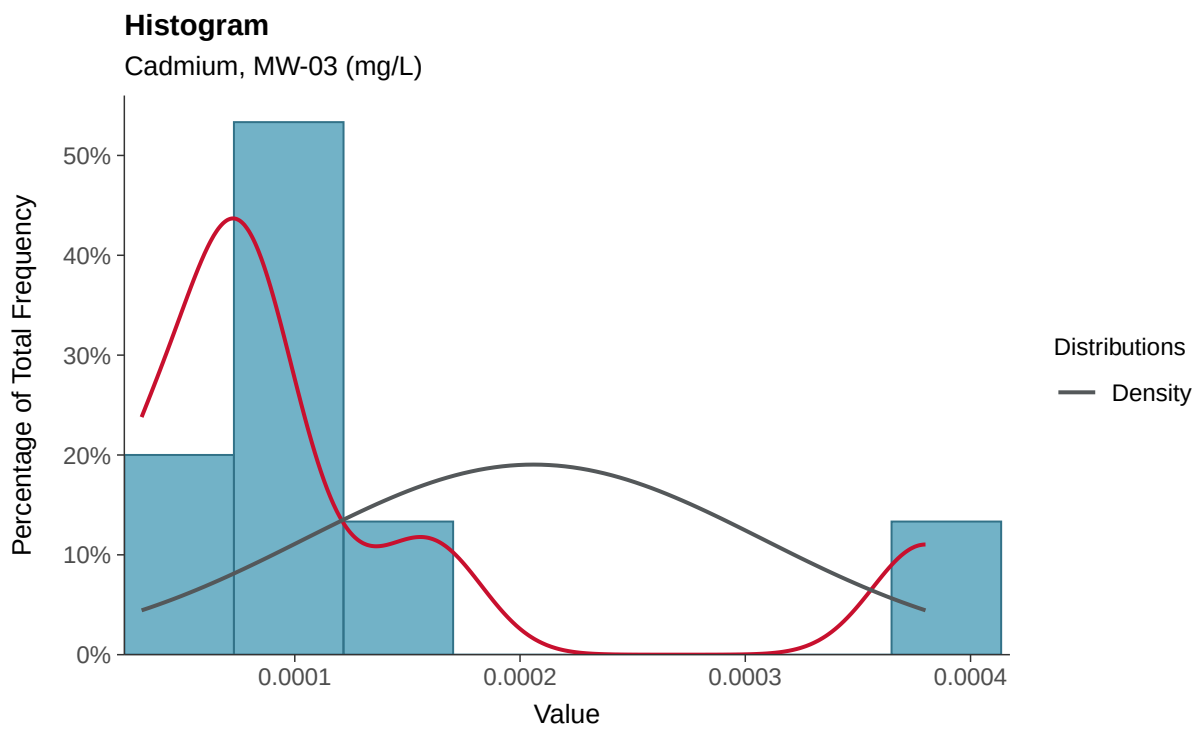
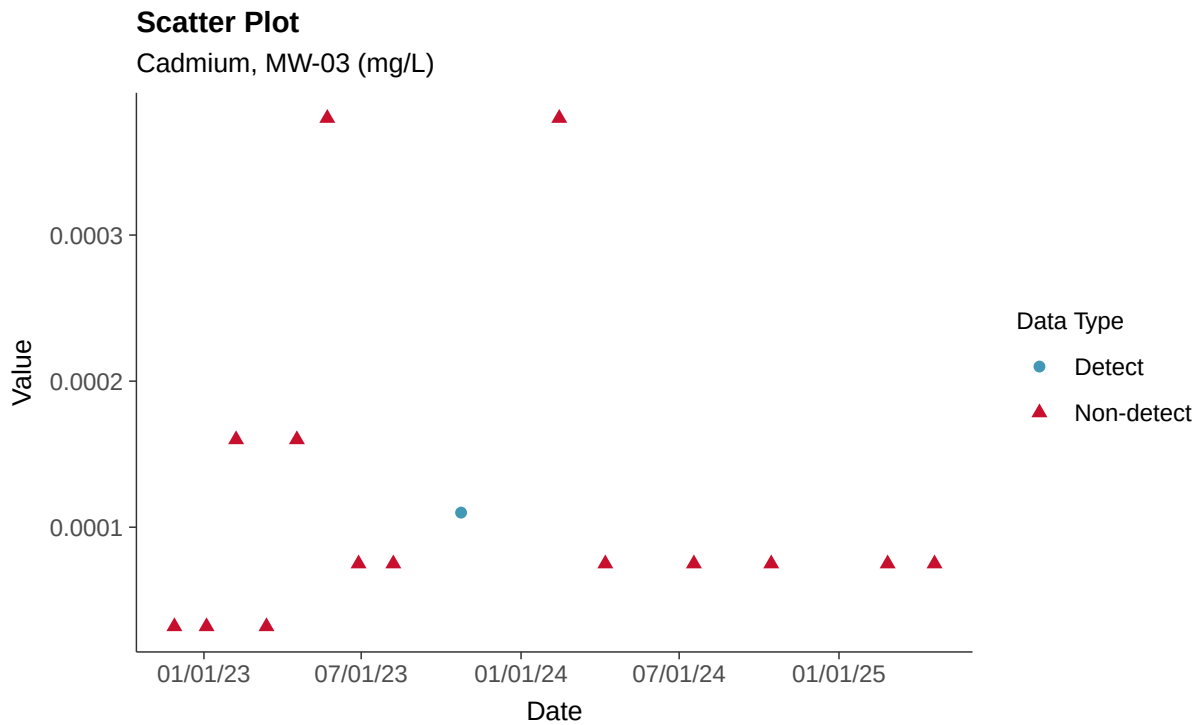
Beryllium, MW-03 (mg/L)





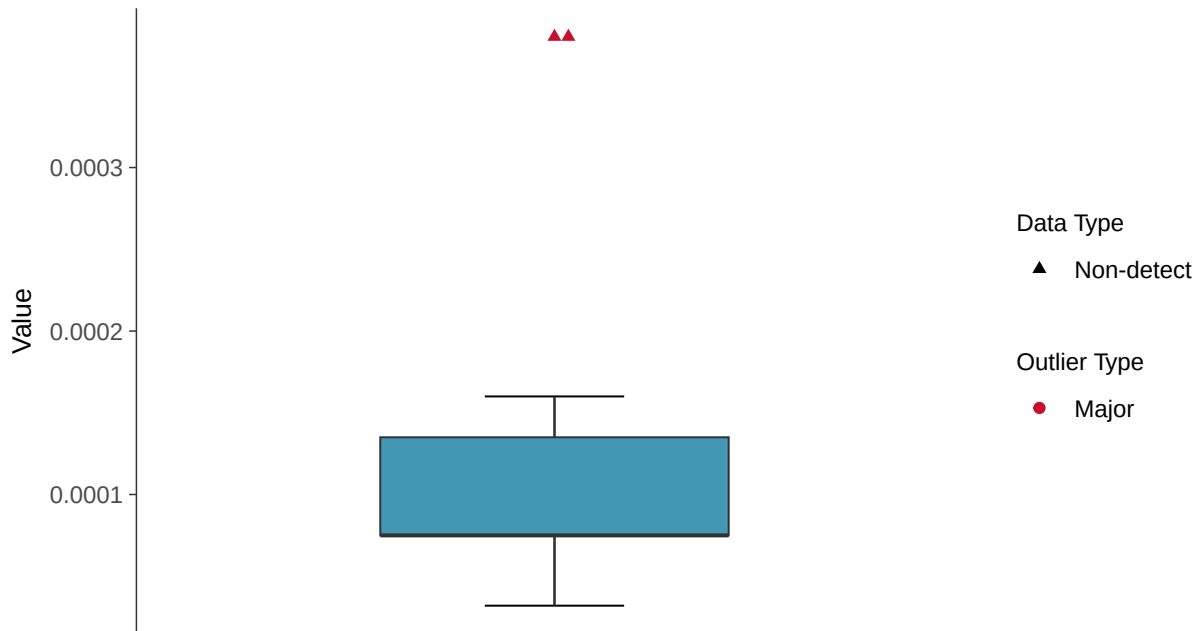
Appendix IV: Cadmium, MW-03

ID: 13_2_4_106



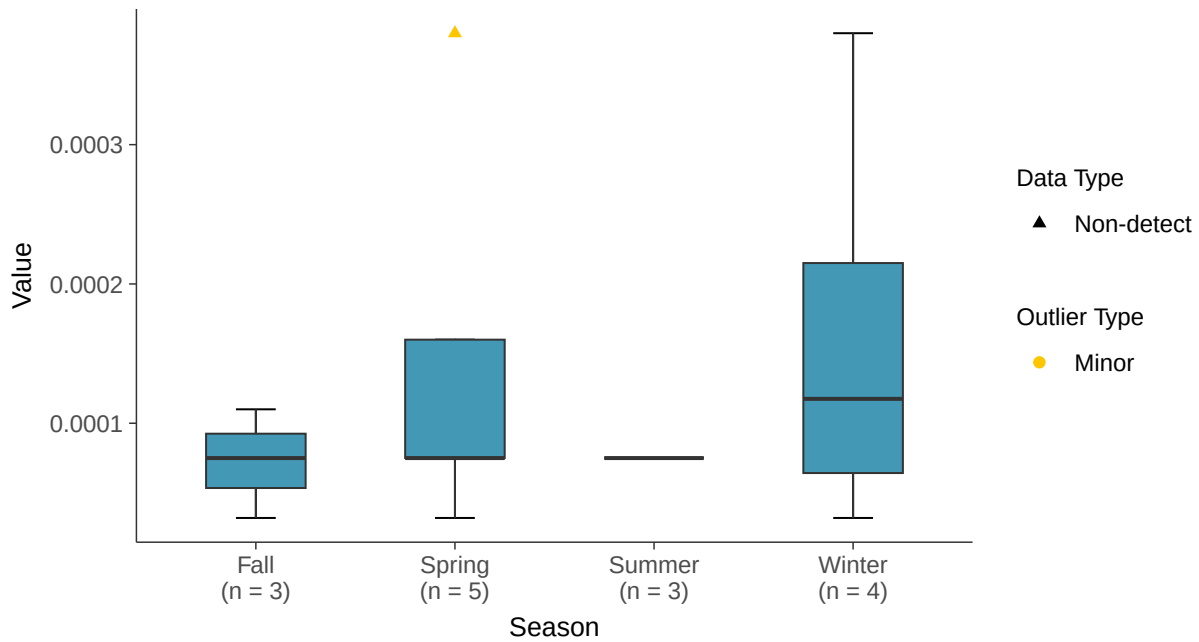
Boxplot

Cadmium, MW-03 (mg/L)



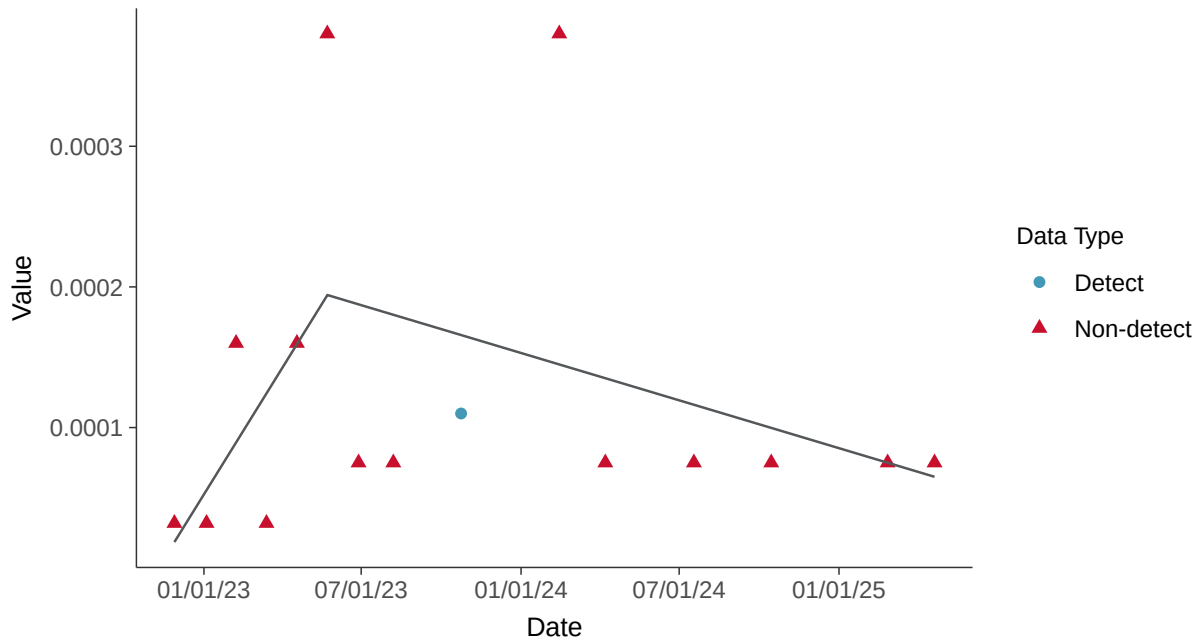
Boxplot by Season

Cadmium, MW-03 (mg/L)



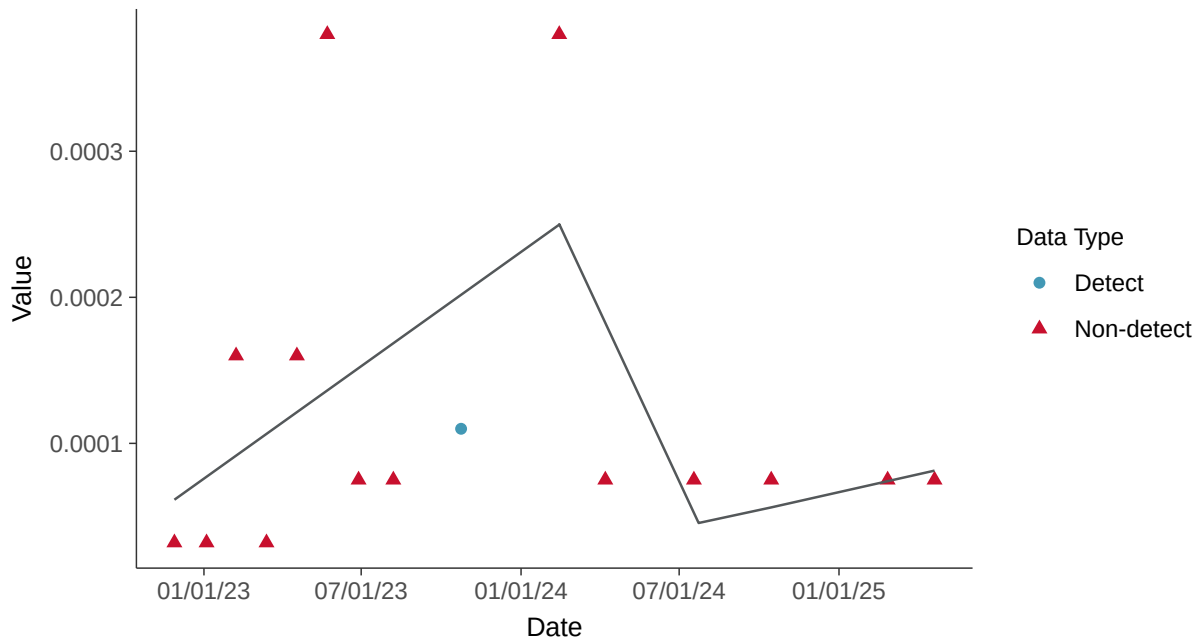
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-03 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cadmium, MW-03 (mg/L)

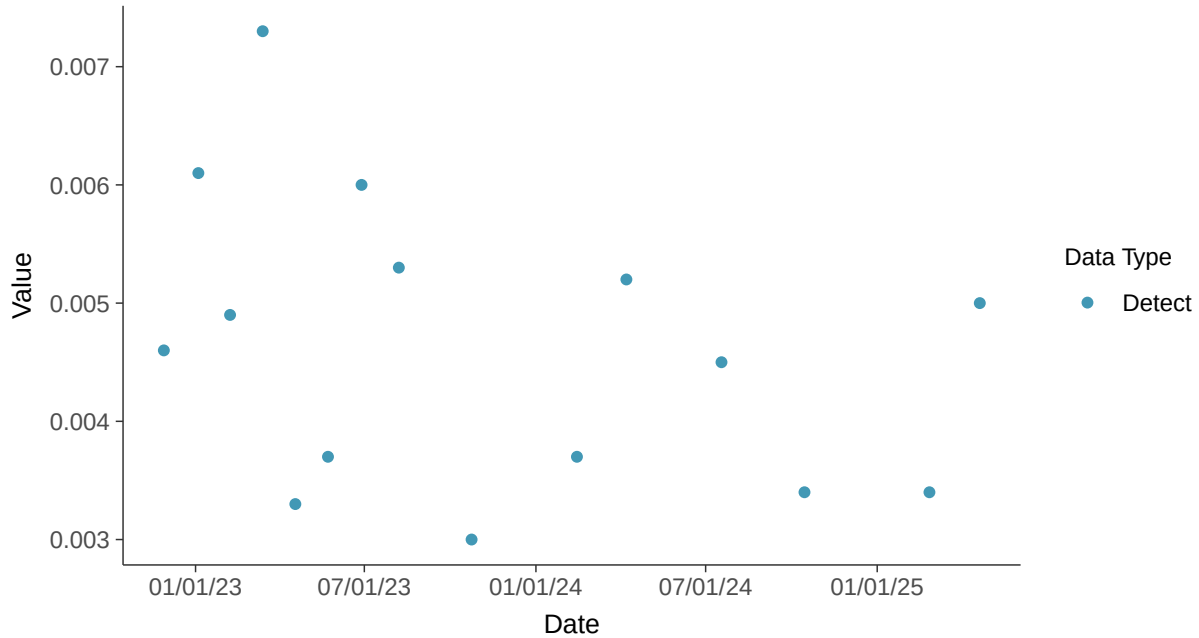


Appendix IV: Chromium, Total, MW-03

ID: 13_2_4_109

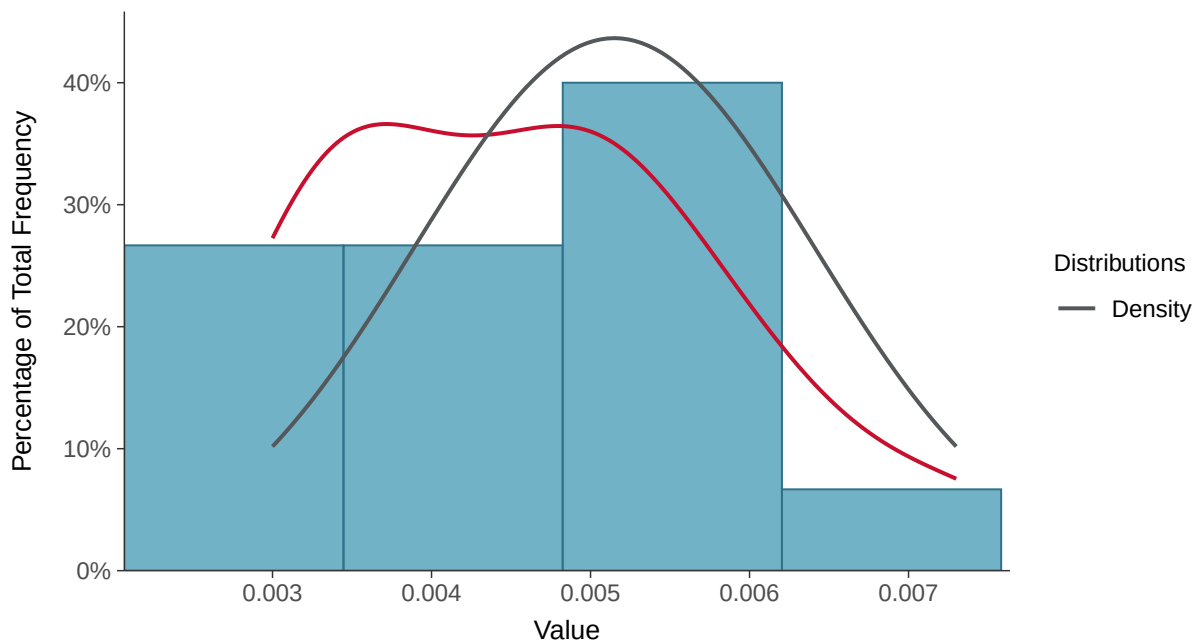
Scatter Plot

Chromium, Total, MW-03 (mg/L)



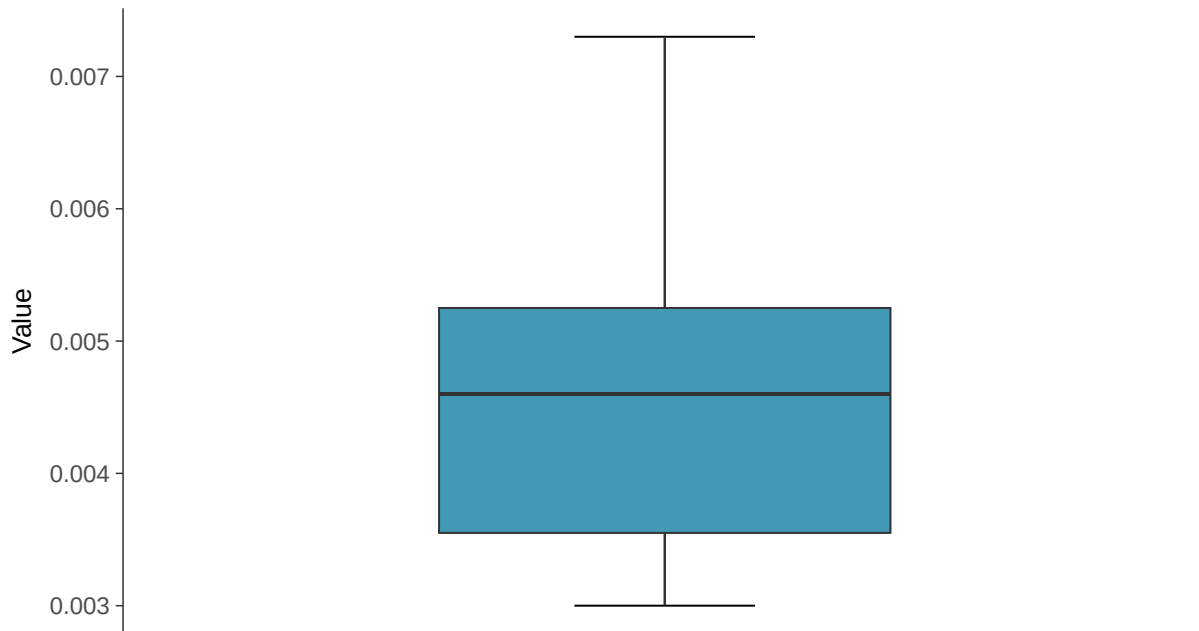
Histogram

Chromium, Total, MW-03 (mg/L)



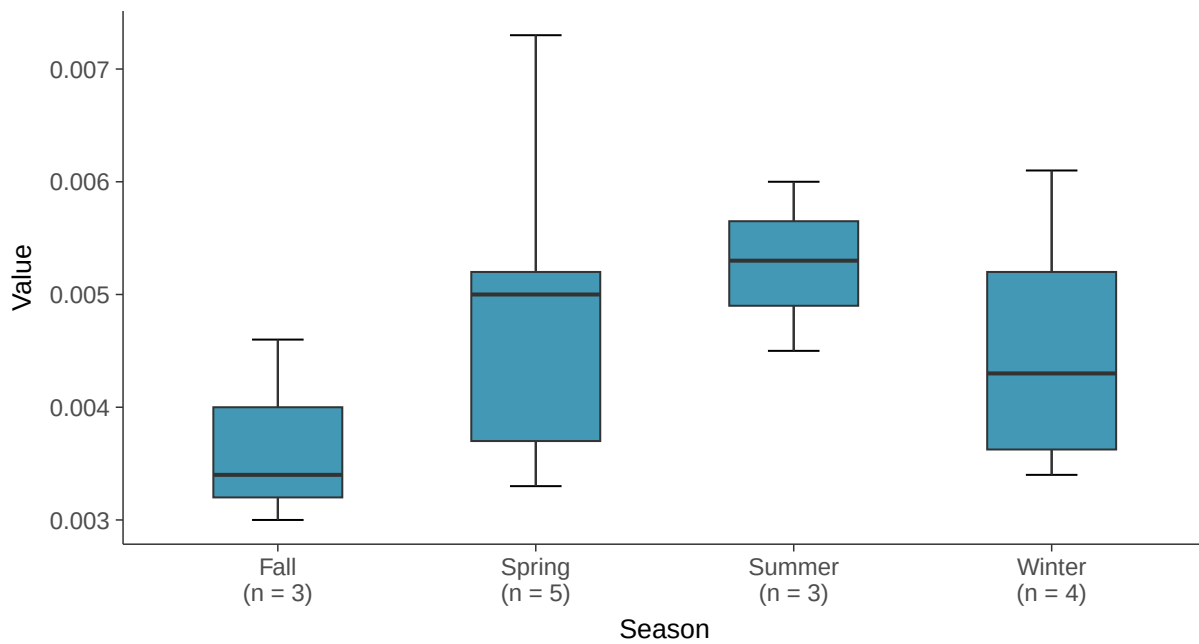
Boxplot

Chromium, Total, MW-03 (mg/L)



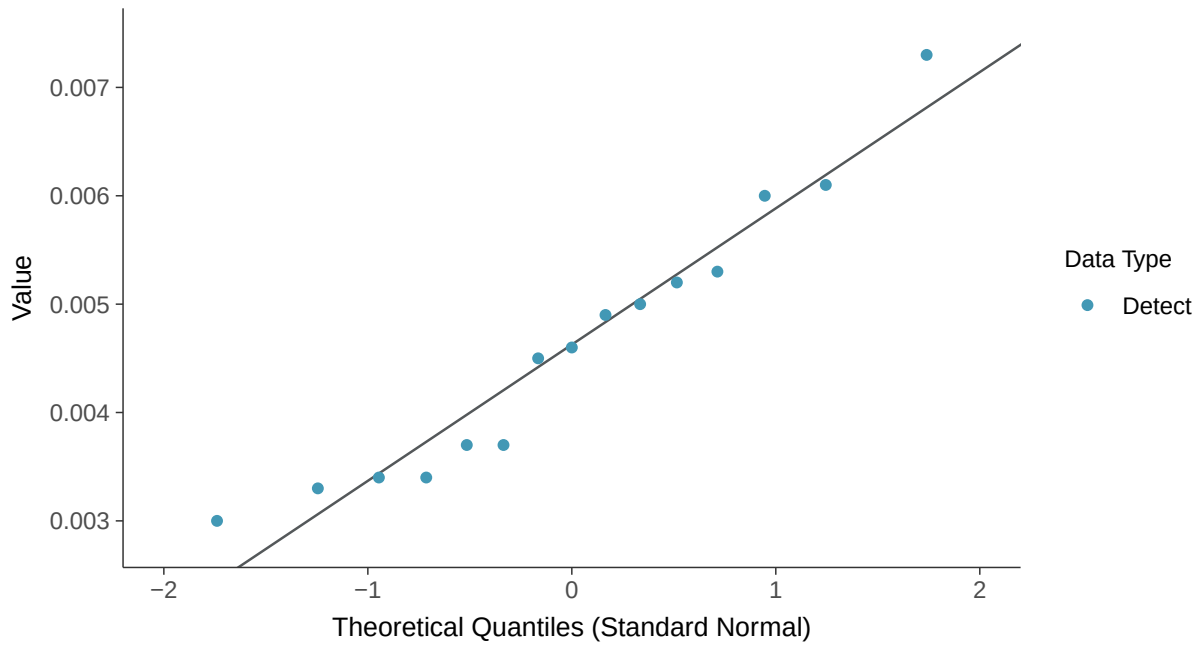
Boxplot by Season

Chromium, Total, MW-03 (mg/L)



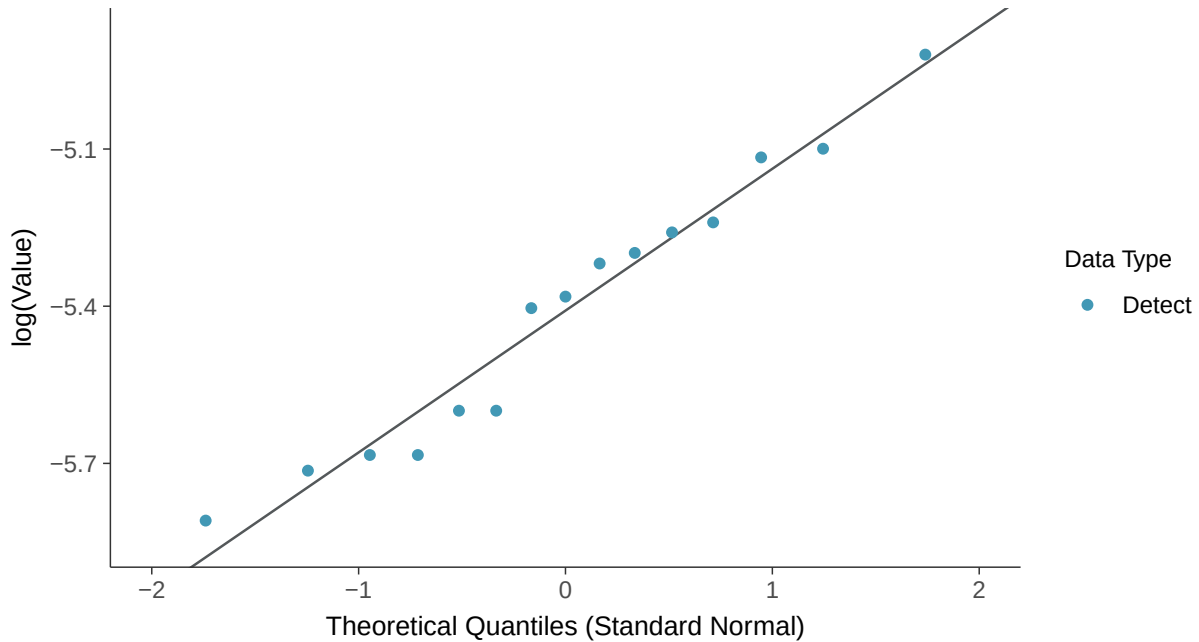
Normal Q-Q plot

Chromium, Total, MW-03 (mg/L)

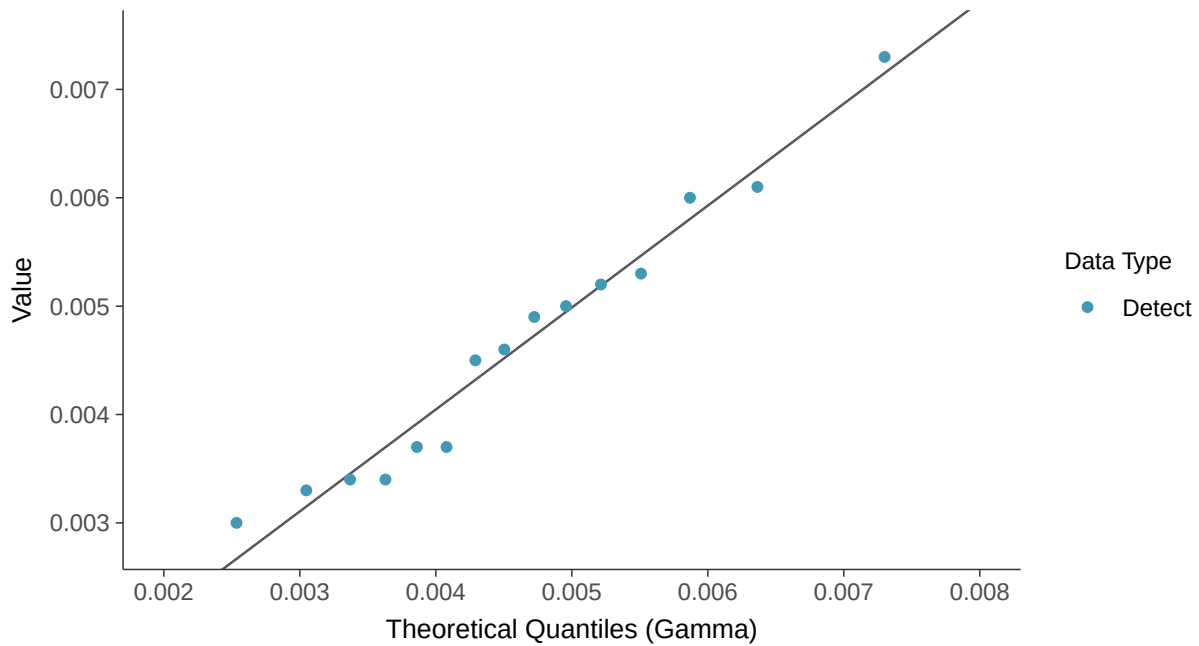


Lognormal Q-Q plot

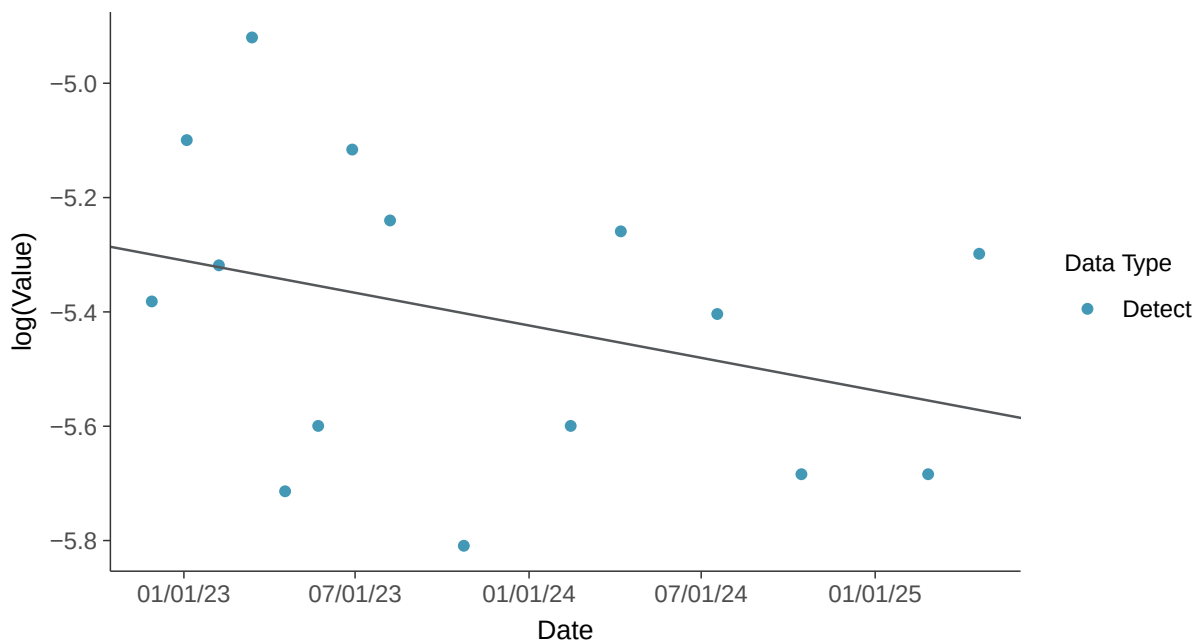
Chromium, Total, MW-03 (mg/L)



Chromium, Total, MW-03 (mg/L)



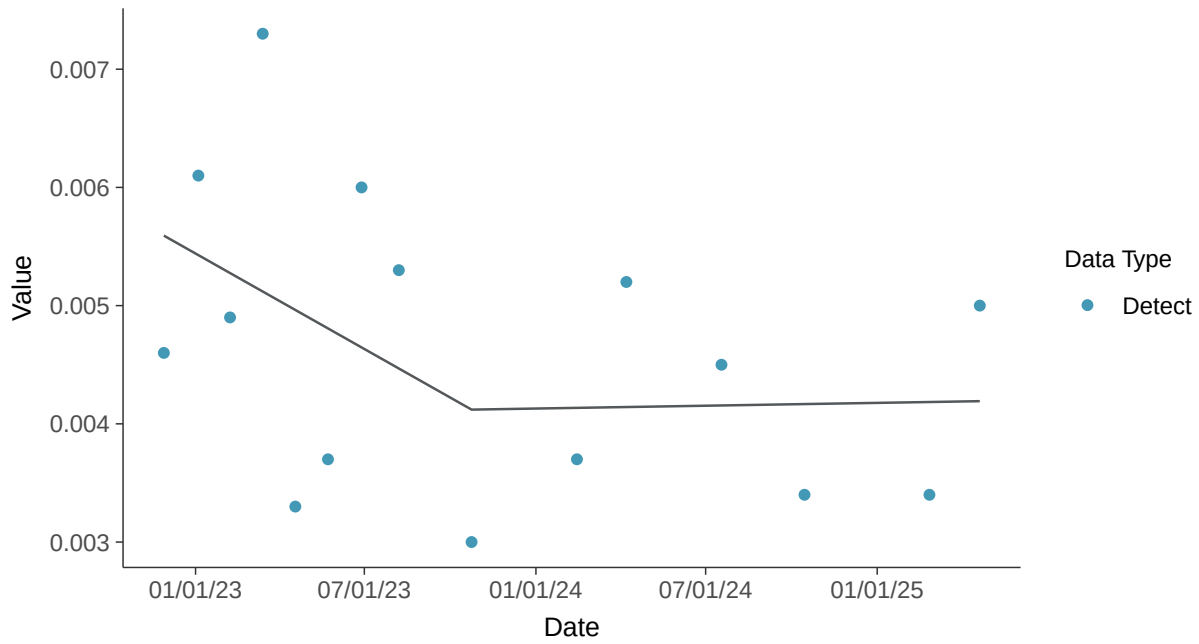
Chromium, Total, MW-03 (mg/L)





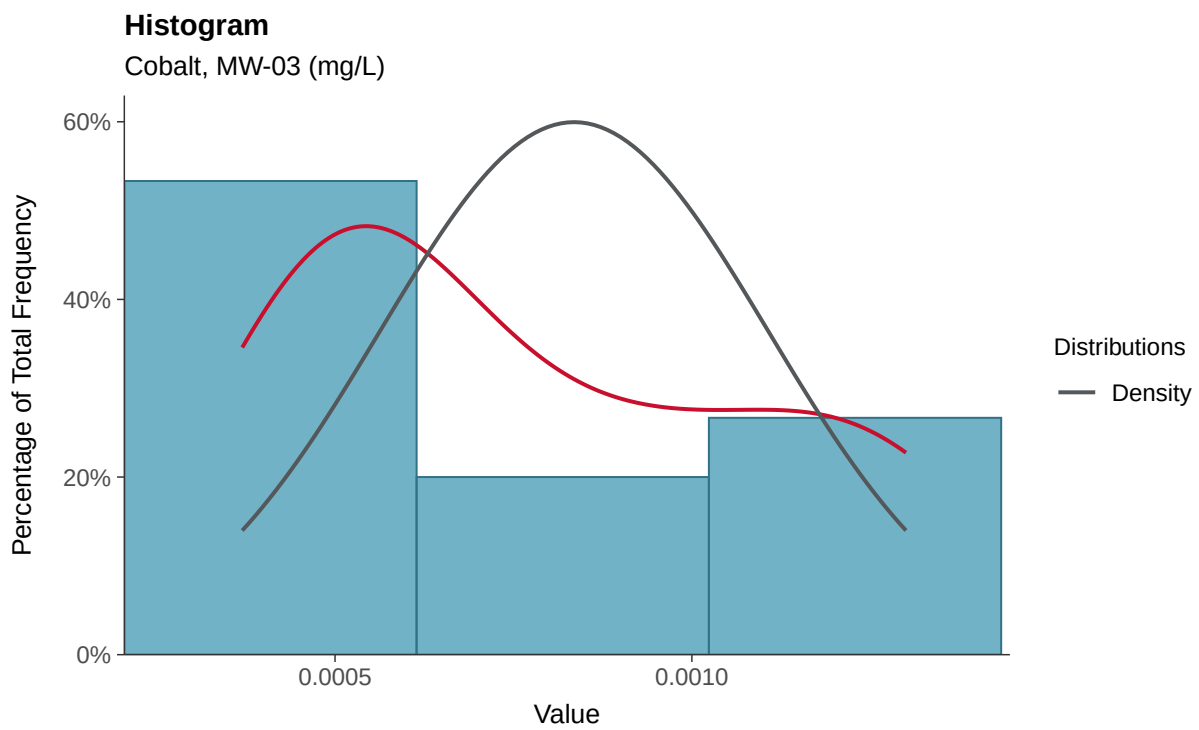
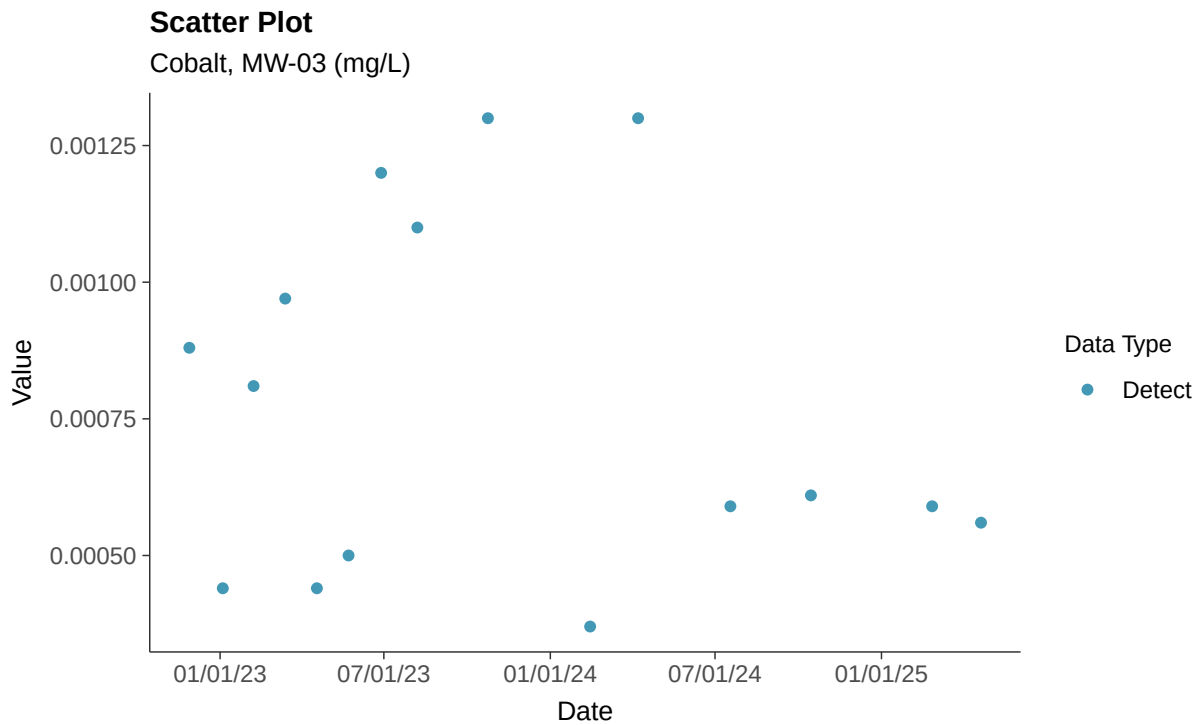
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-03 (mg/L)



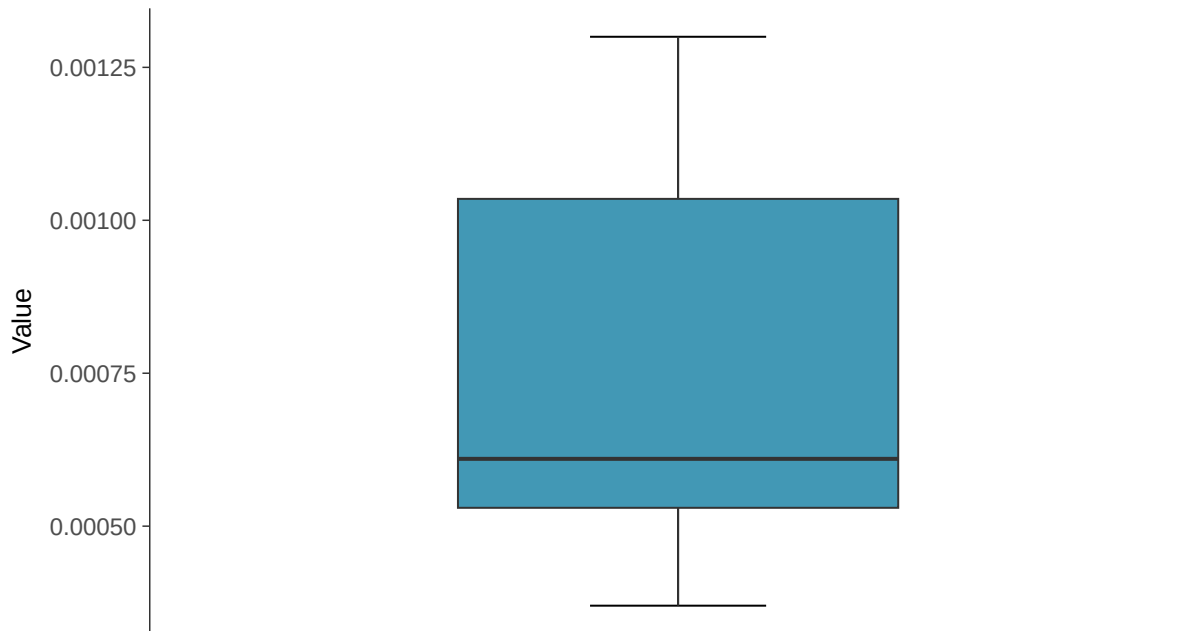
Appendix IV: Cobalt, MW-03

ID: 13_2_4_110



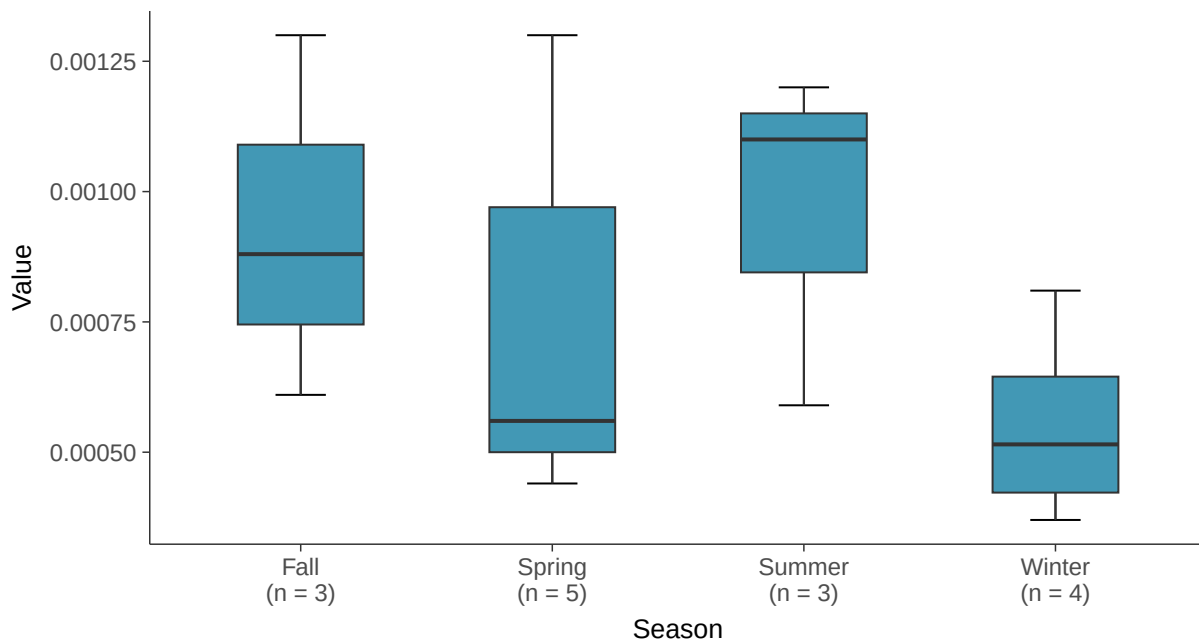
Boxplot

Cobalt, MW-03 (mg/L)

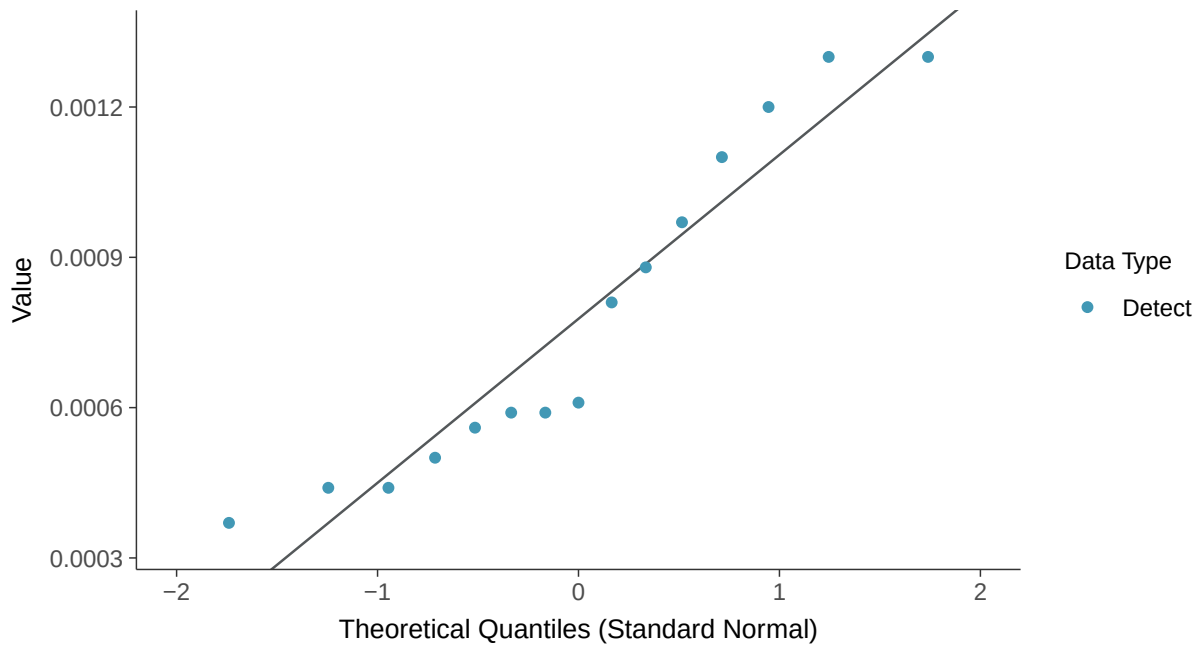


Boxplot by Season

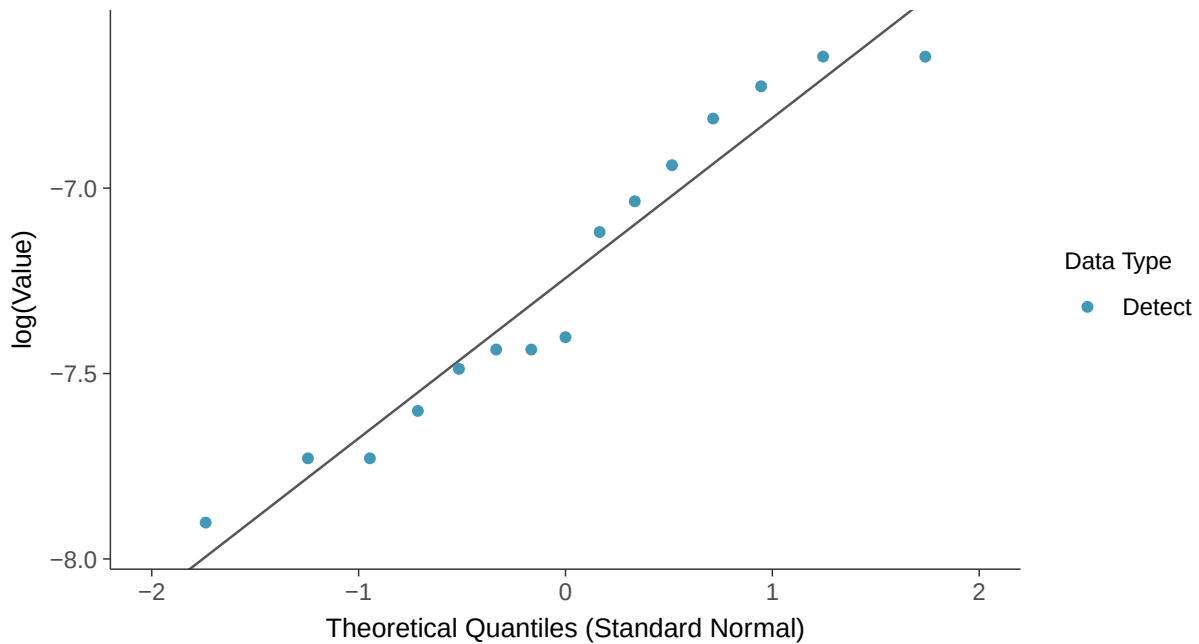
Cobalt, MW-03 (mg/L)



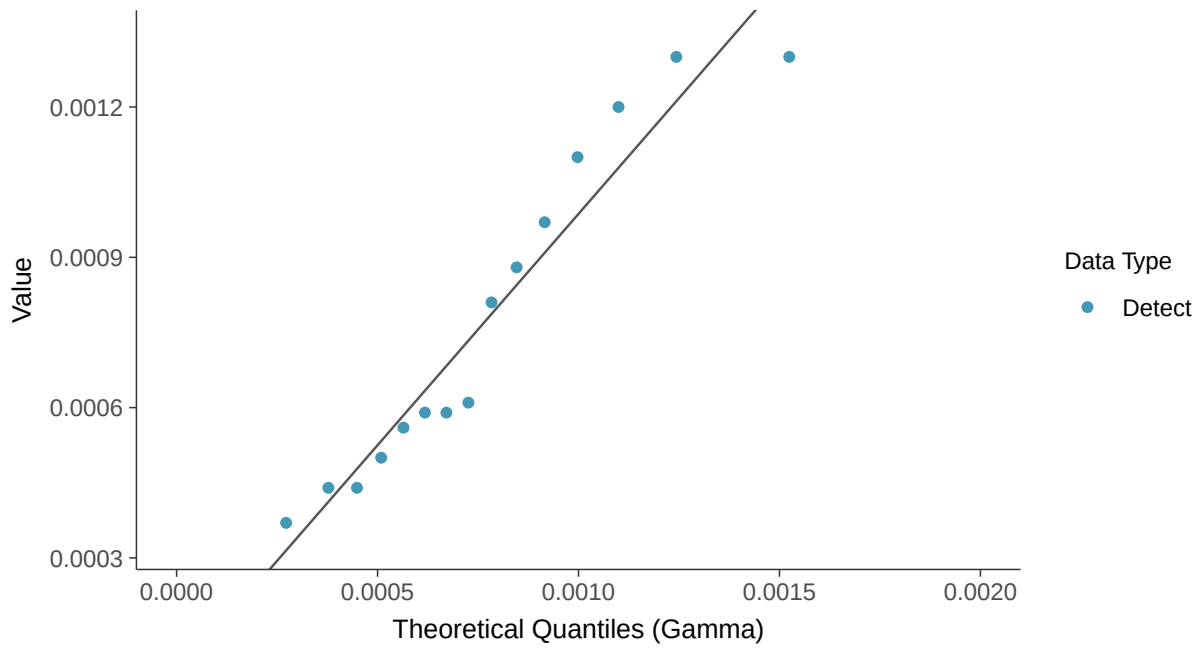
Normal Q-Q plot
Cobalt, MW-03 (mg/L)



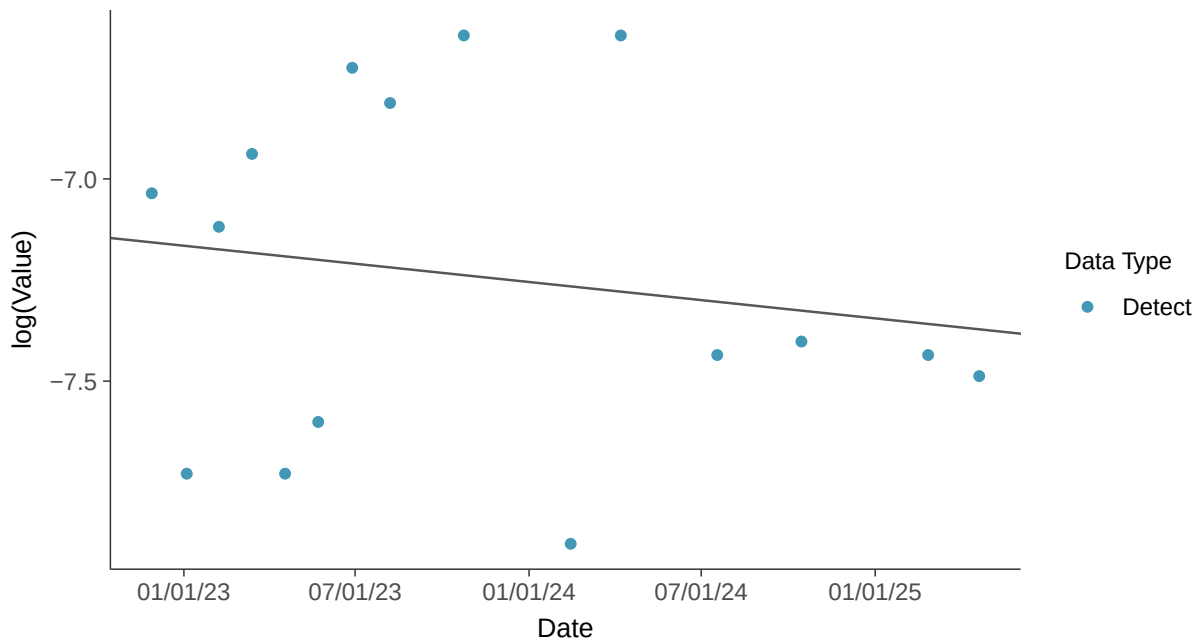
Lognormal Q-Q plot
Cobalt, MW-03 (mg/L)



Gamma Q-Q plot
Cobalt, MW-03 (mg/L)

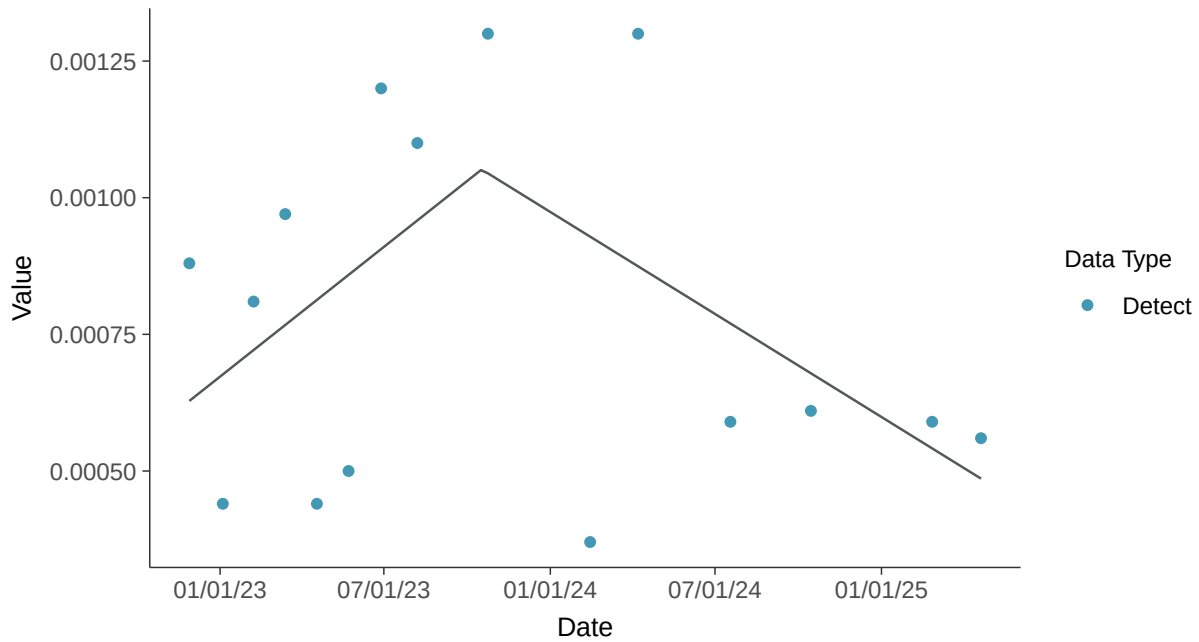


Trend Regression: Lognormal MLE
Cobalt, MW-03 (mg/L)



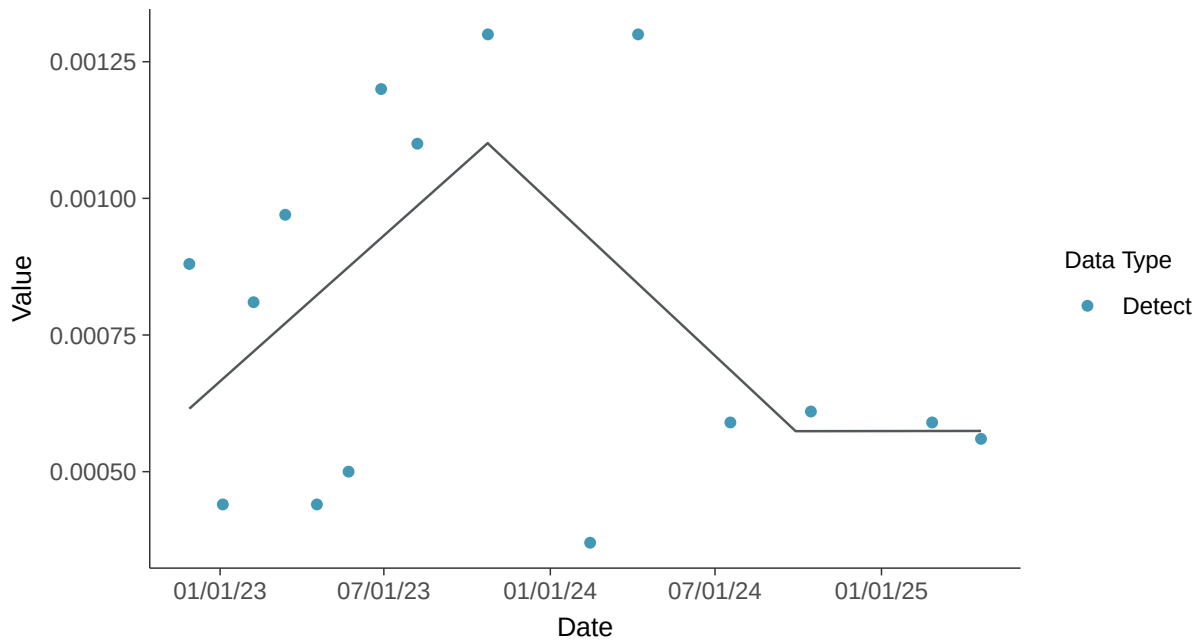
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-03 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cobalt, MW-03 (mg/L)

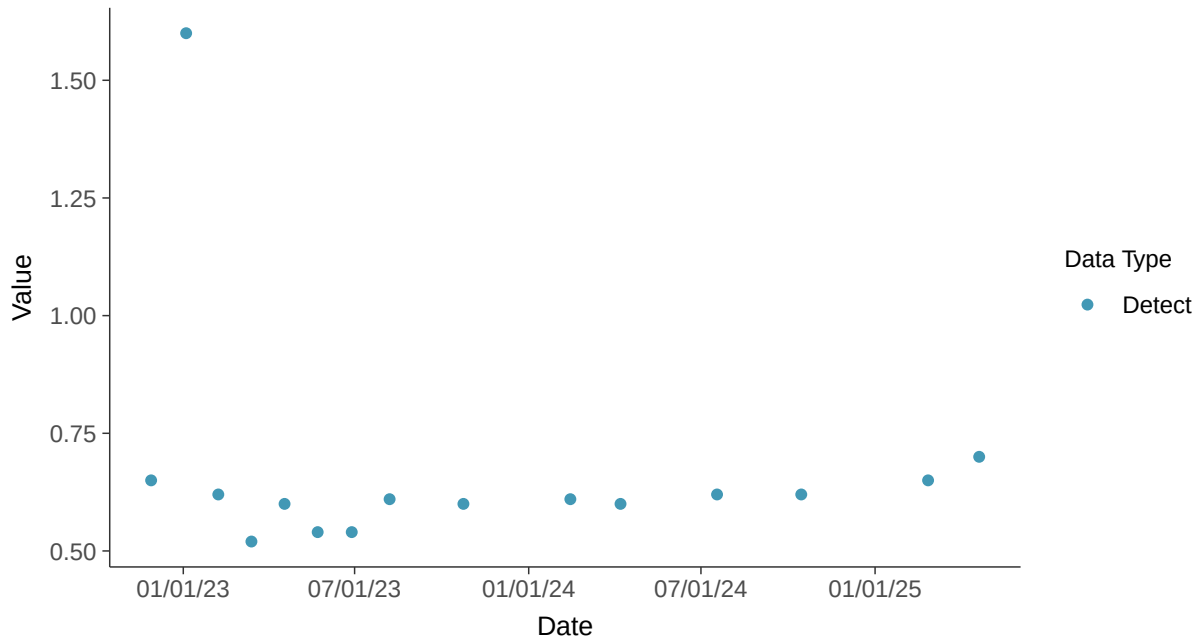


Appendix IV: Fluoride (App IV), MW-03

ID: 13_2_4_113

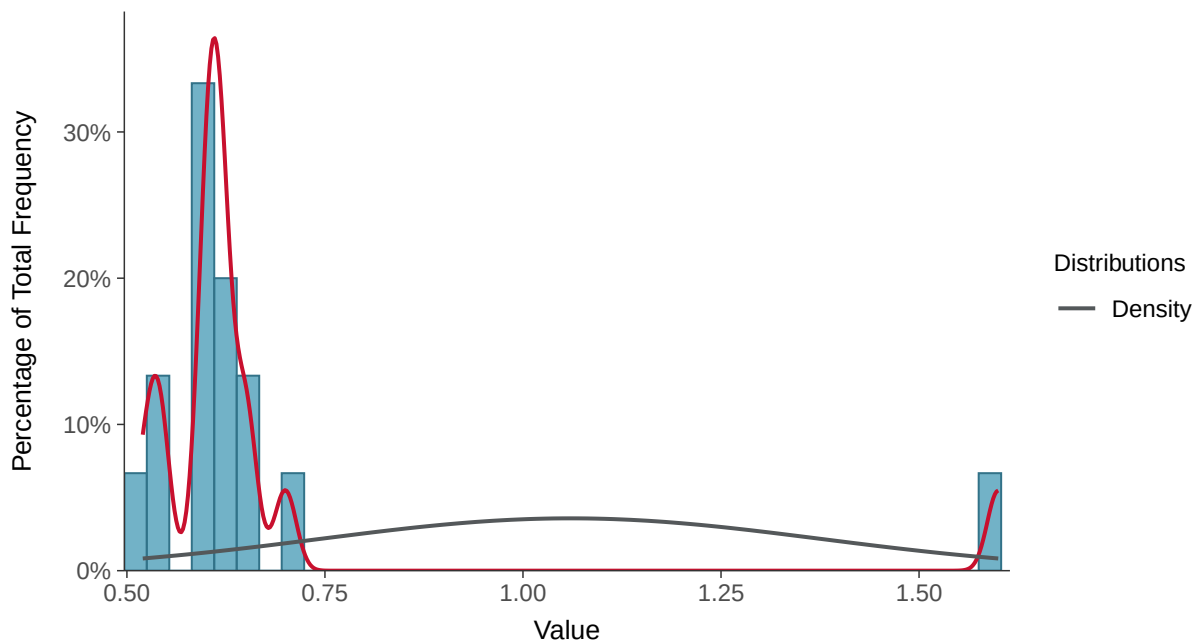
Scatter Plot

Fluoride (App IV), MW-03 (mg/L)



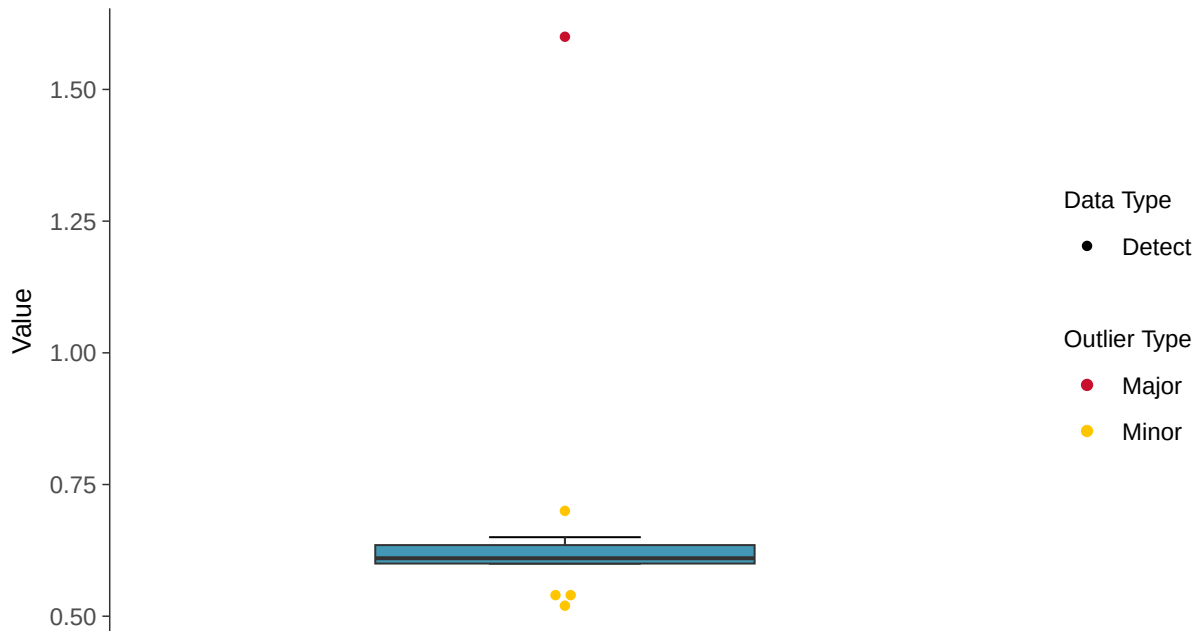
Histogram

Fluoride (App IV), MW-03 (mg/L)



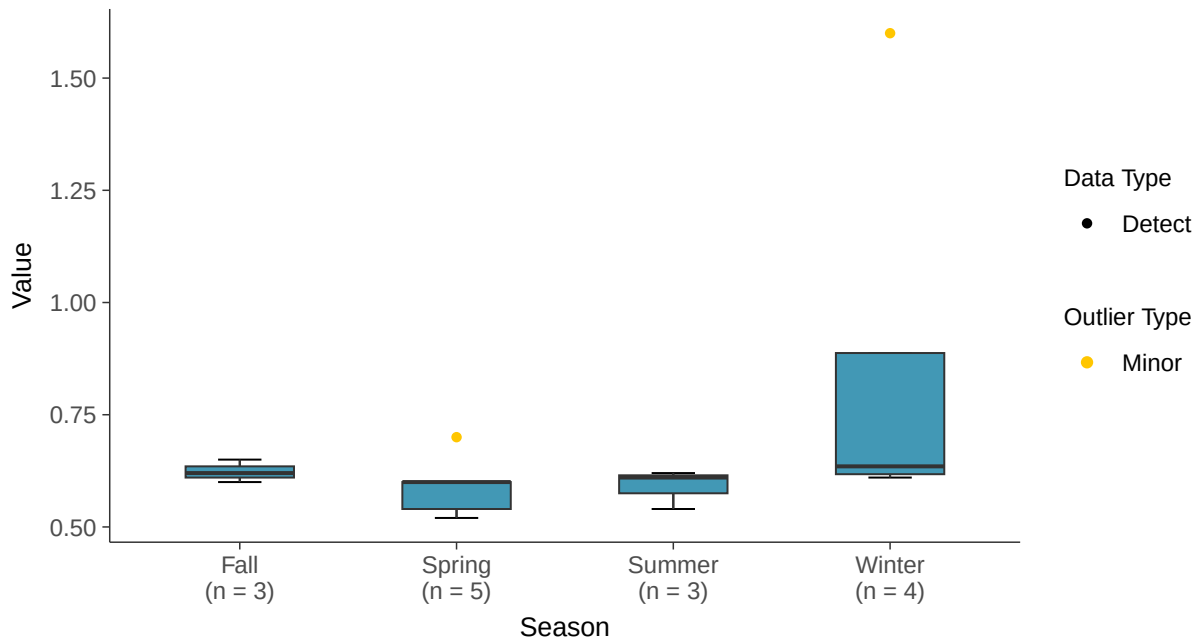
Boxplot

Fluoride (App IV), MW-03 (mg/L)



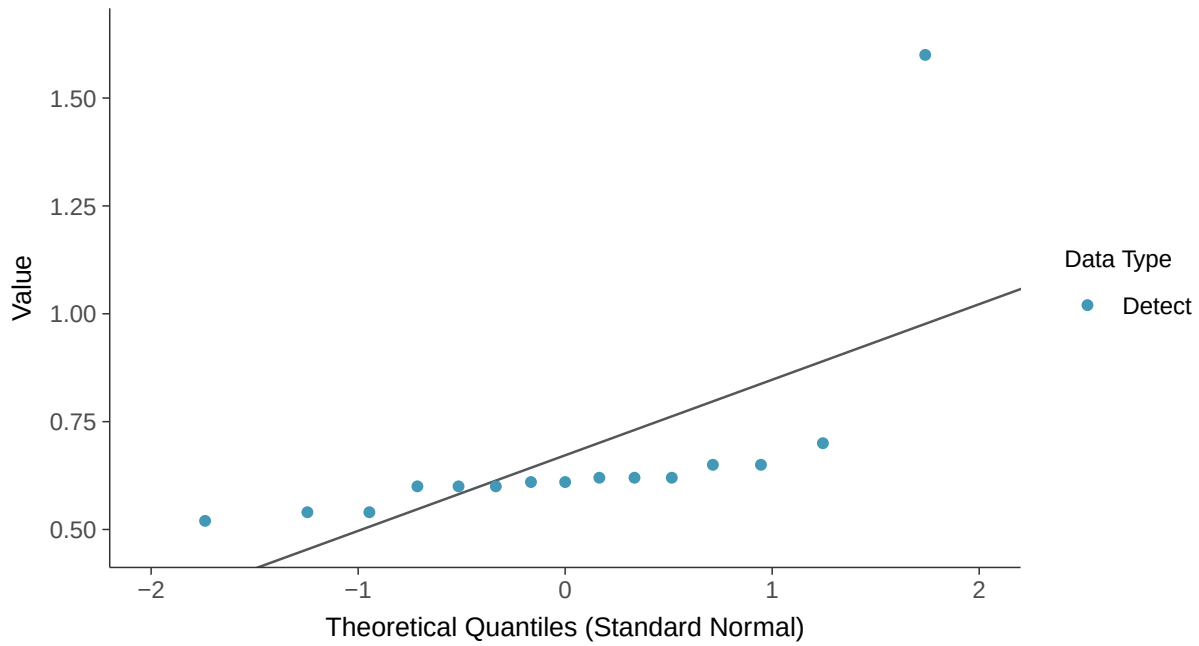
Boxplot by Season

Fluoride (App IV), MW-03 (mg/L)



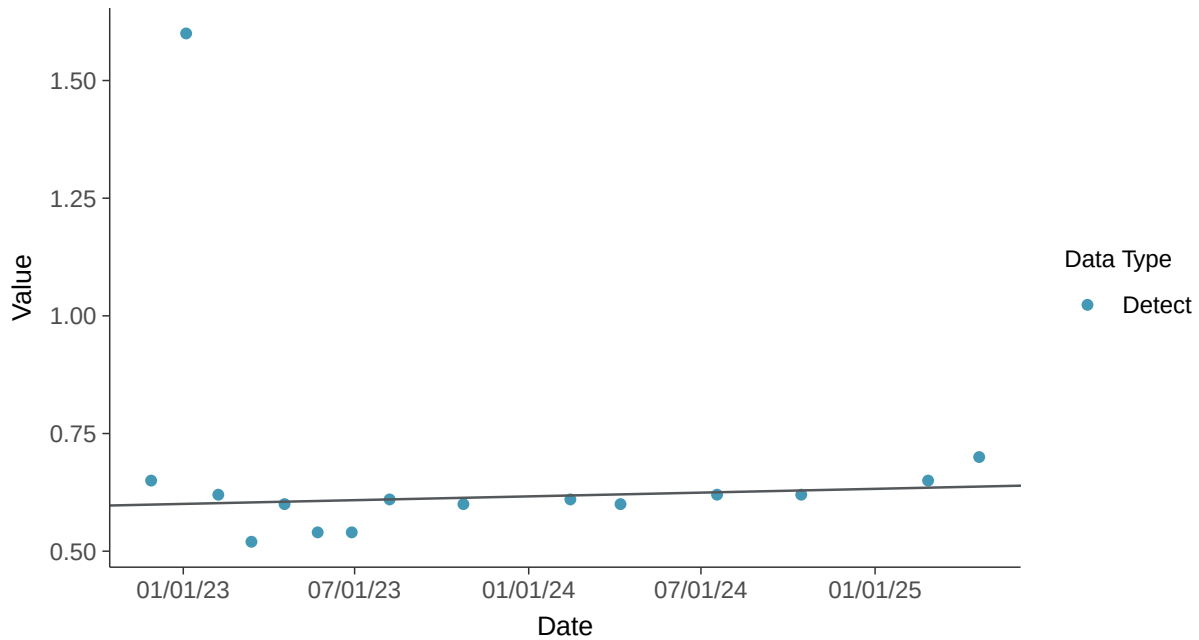
Normal Q-Q plot

Fluoride (App IV), MW-03 (mg/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

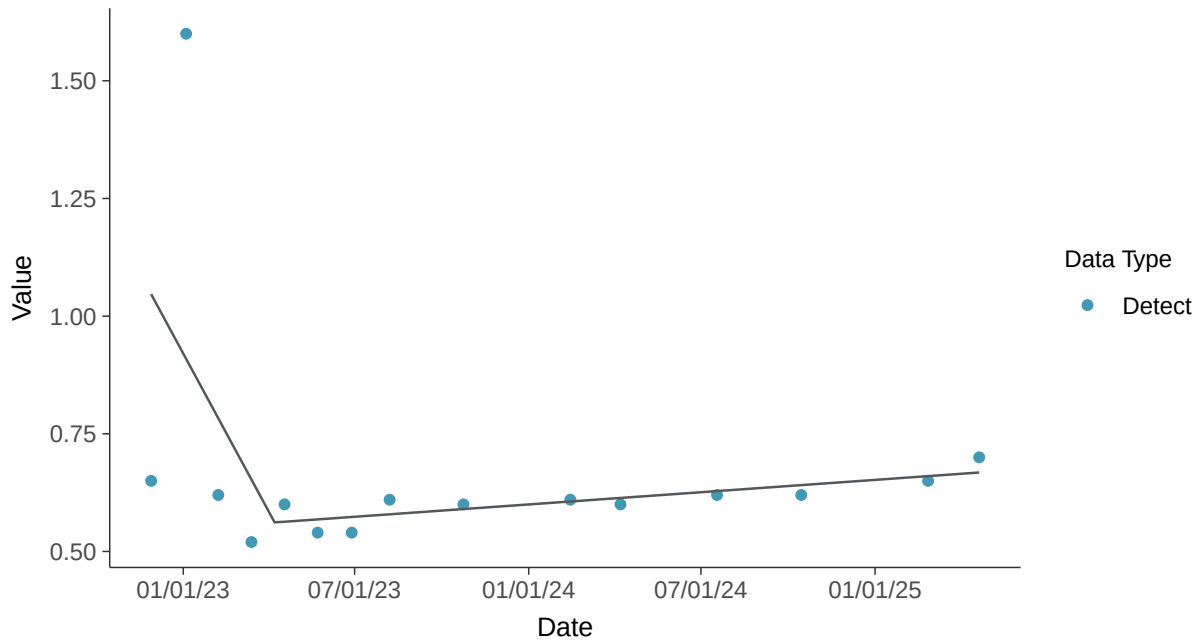
Fluoride (App IV), MW-03 (mg/L)





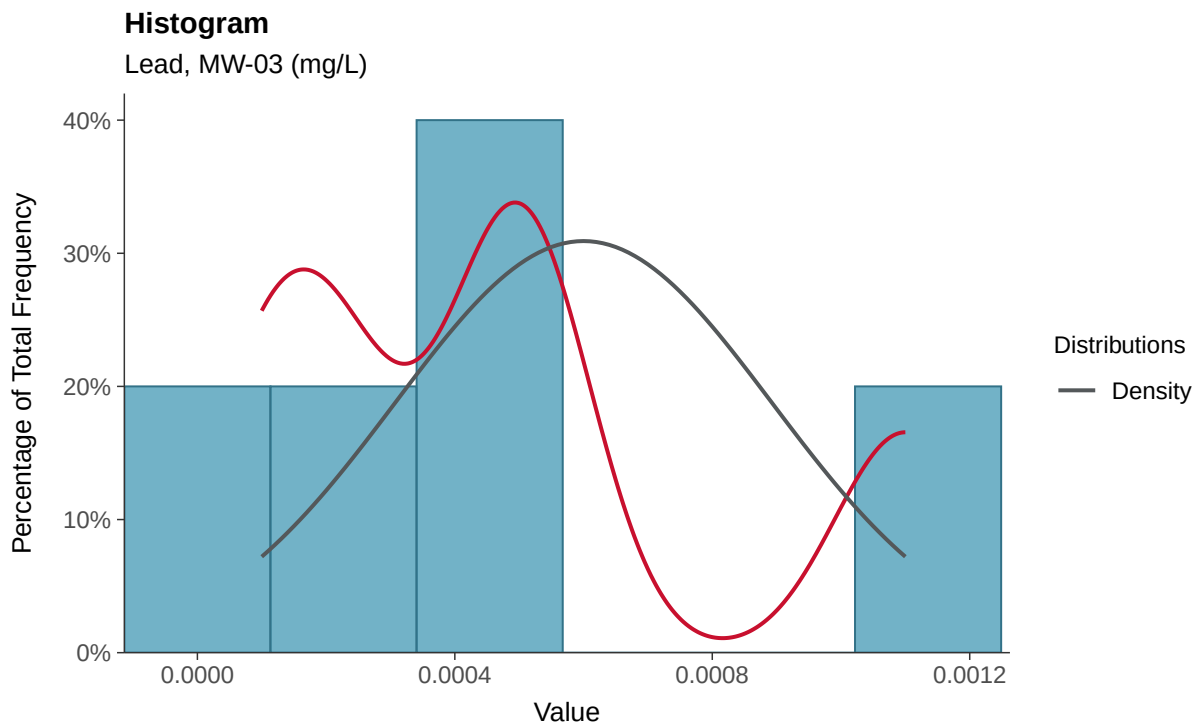
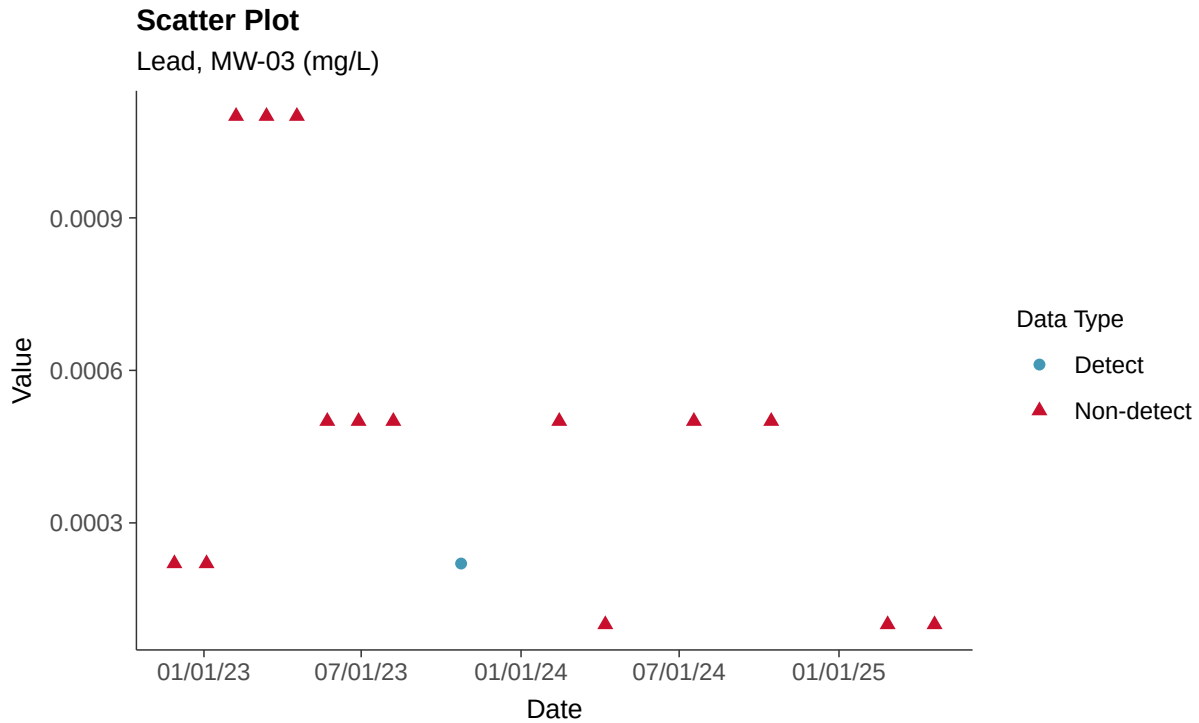
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-03 (mg/L)



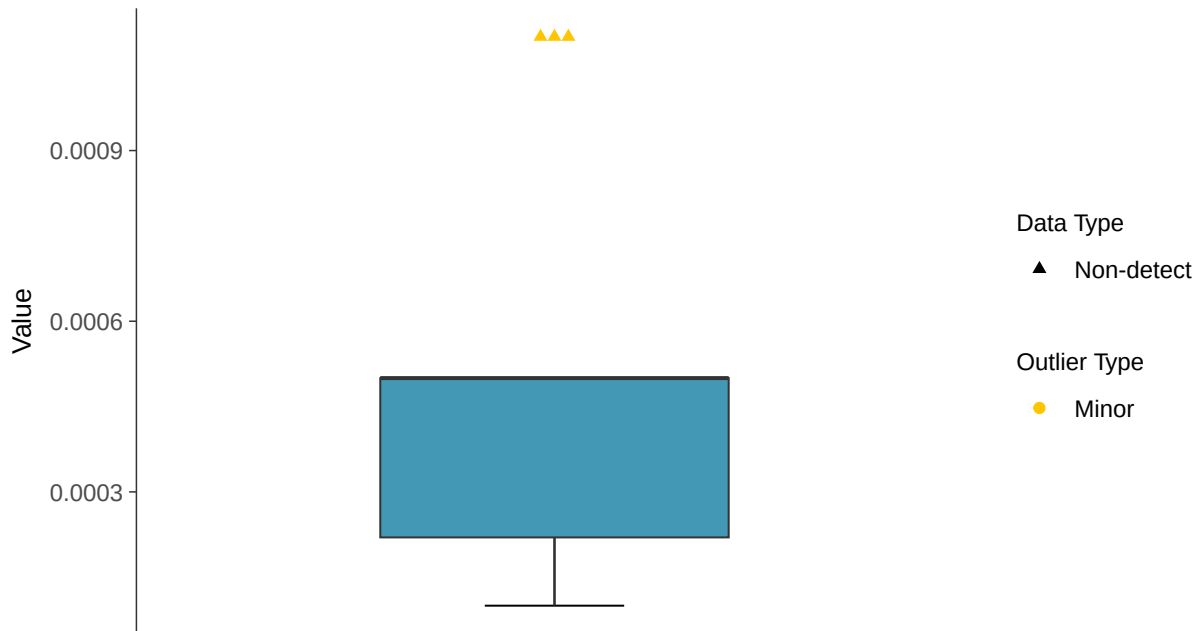
Appendix IV: Lead, MW-03

ID: 13_2_4_115



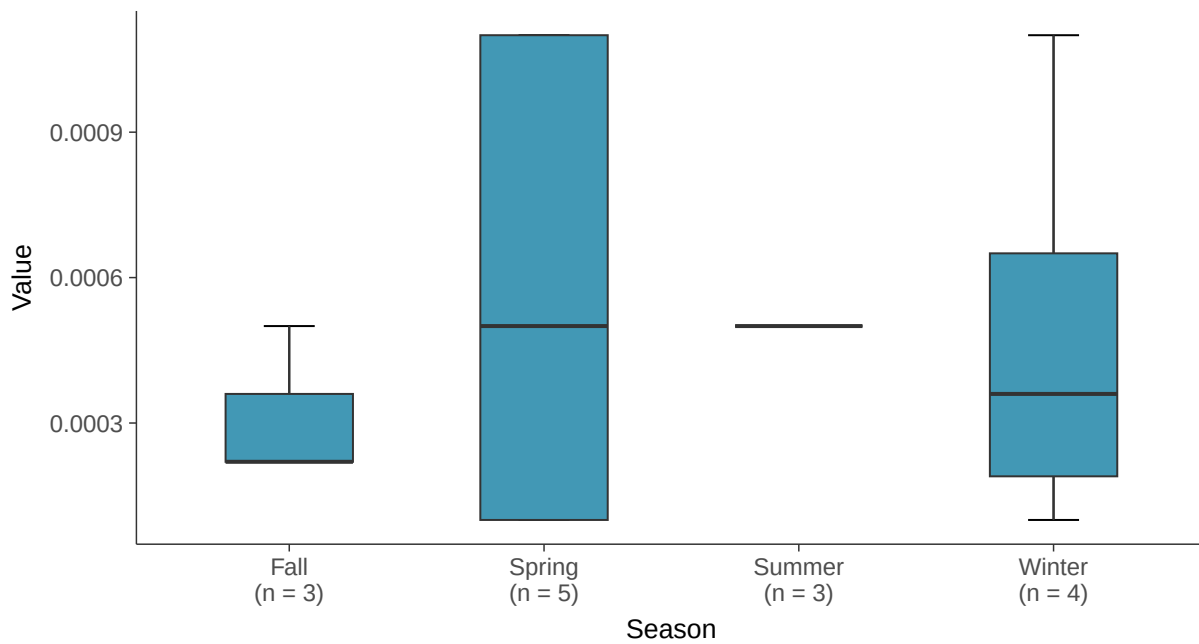
Boxplot

Lead, MW-03 (mg/L)



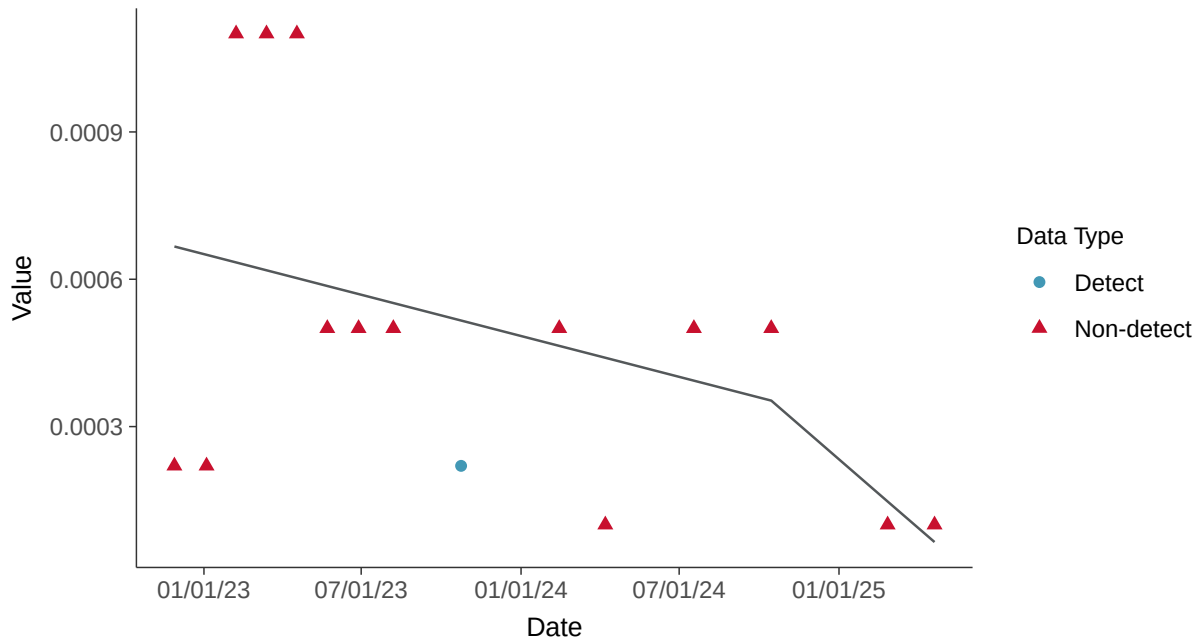
Boxplot by Season

Lead, MW-03 (mg/L)



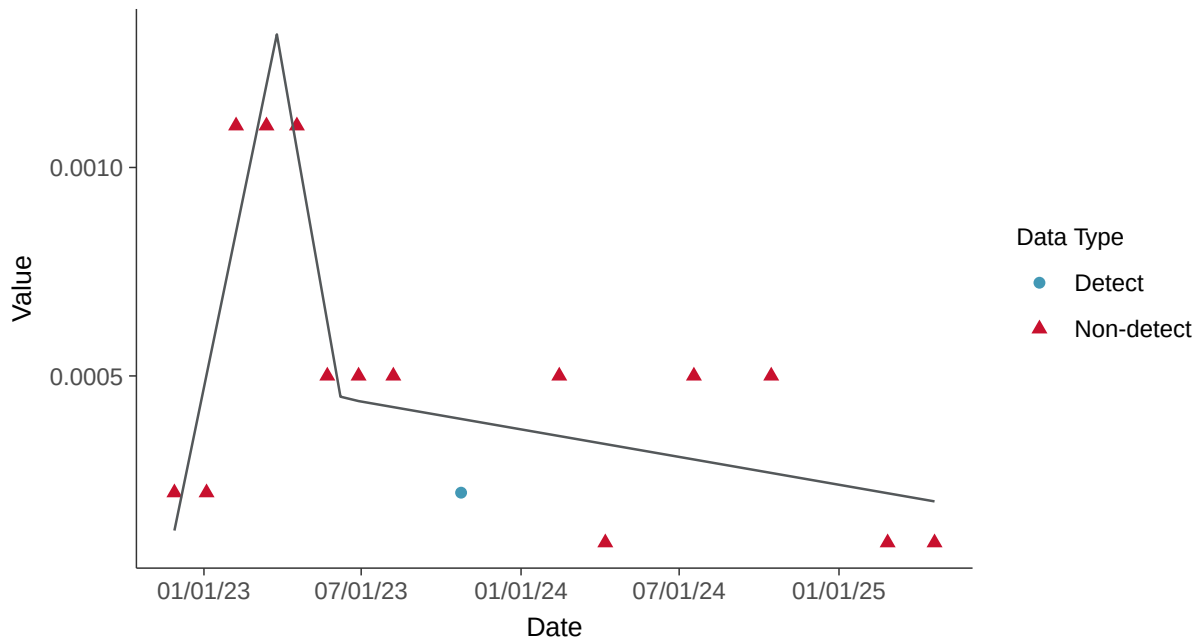
Trend Regression: Piecewise Linear-Linear

Lead, MW-03 (mg/L)



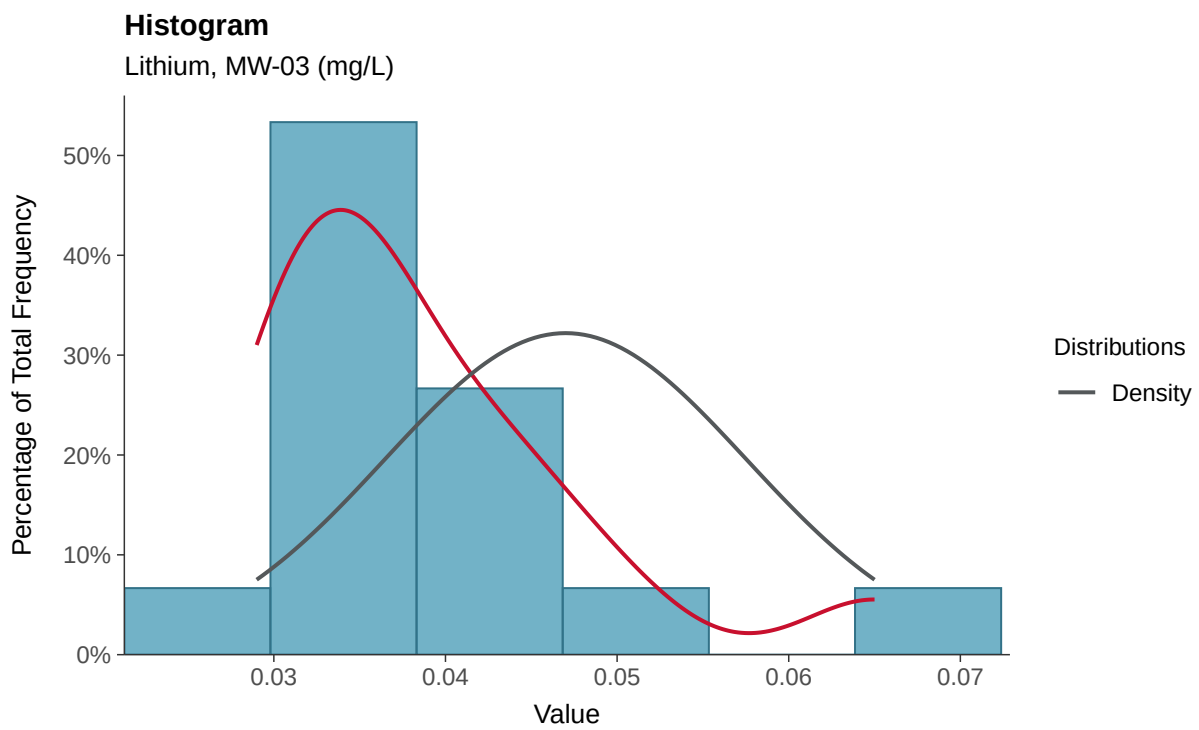
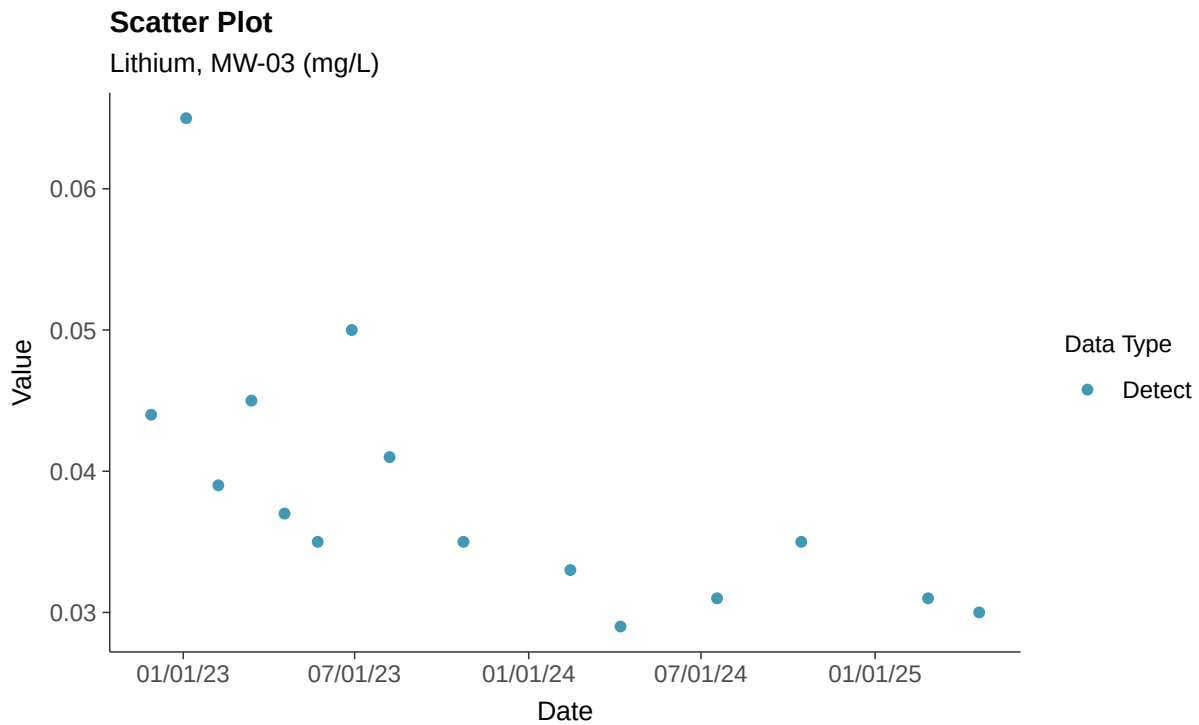
Trend Regression: Piecewise Linear-Linear-Linear

Lead, MW-03 (mg/L)



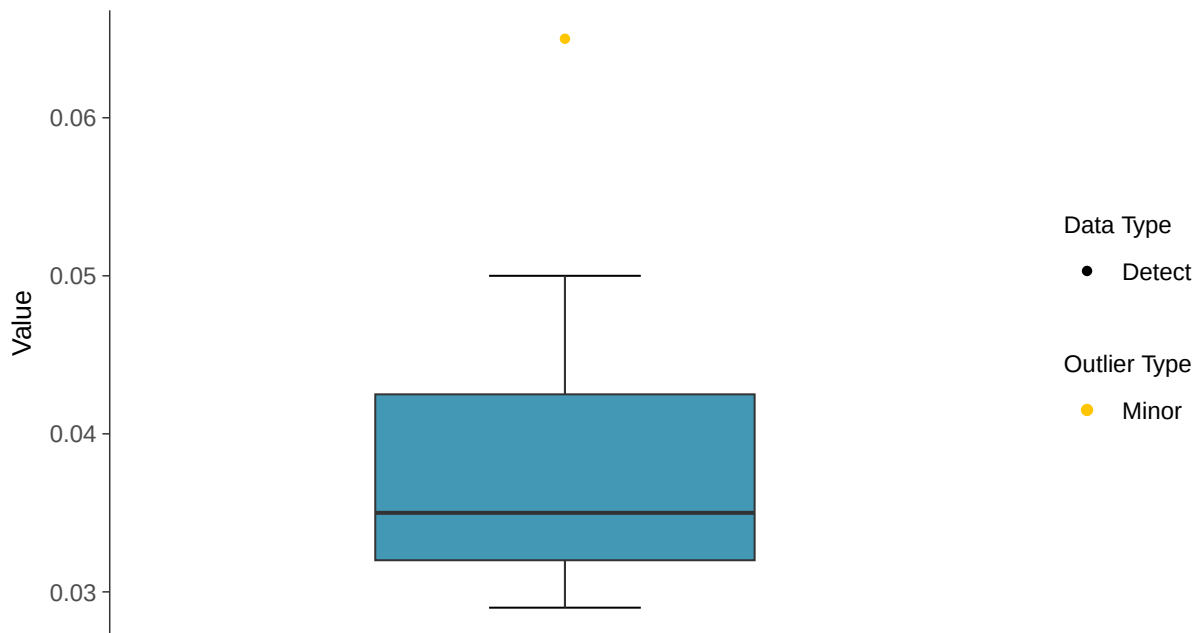
Appendix IV: Lithium, MW-03

ID: 13_2_4_116



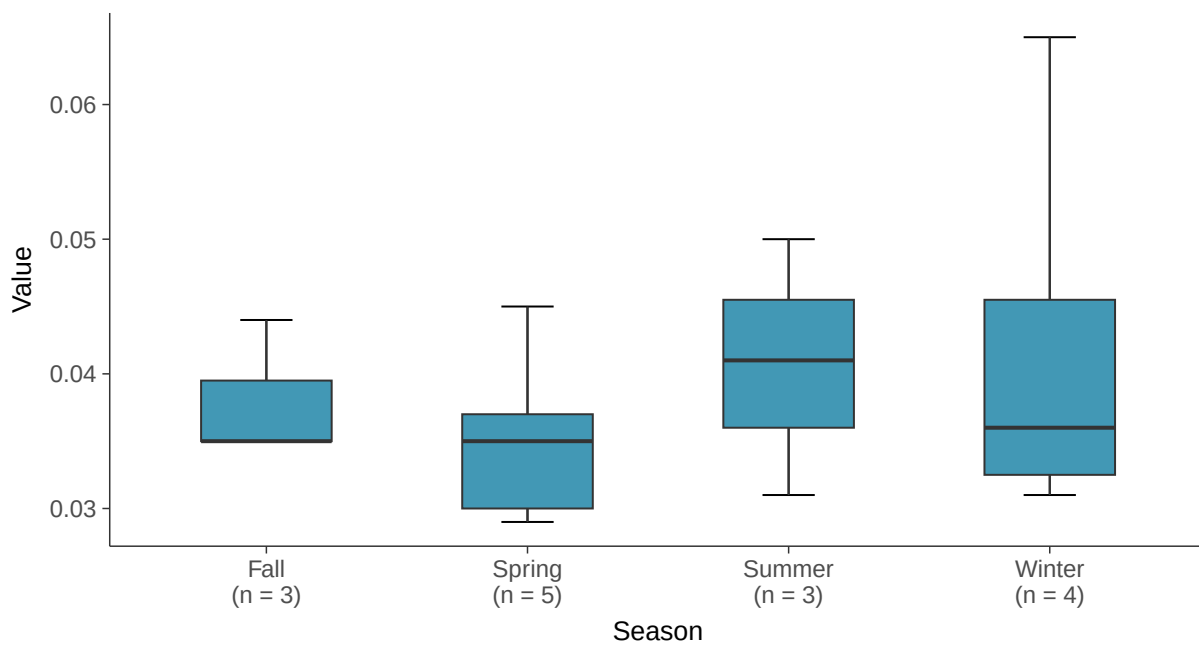
Boxplot

Lithium, MW-03 (mg/L)



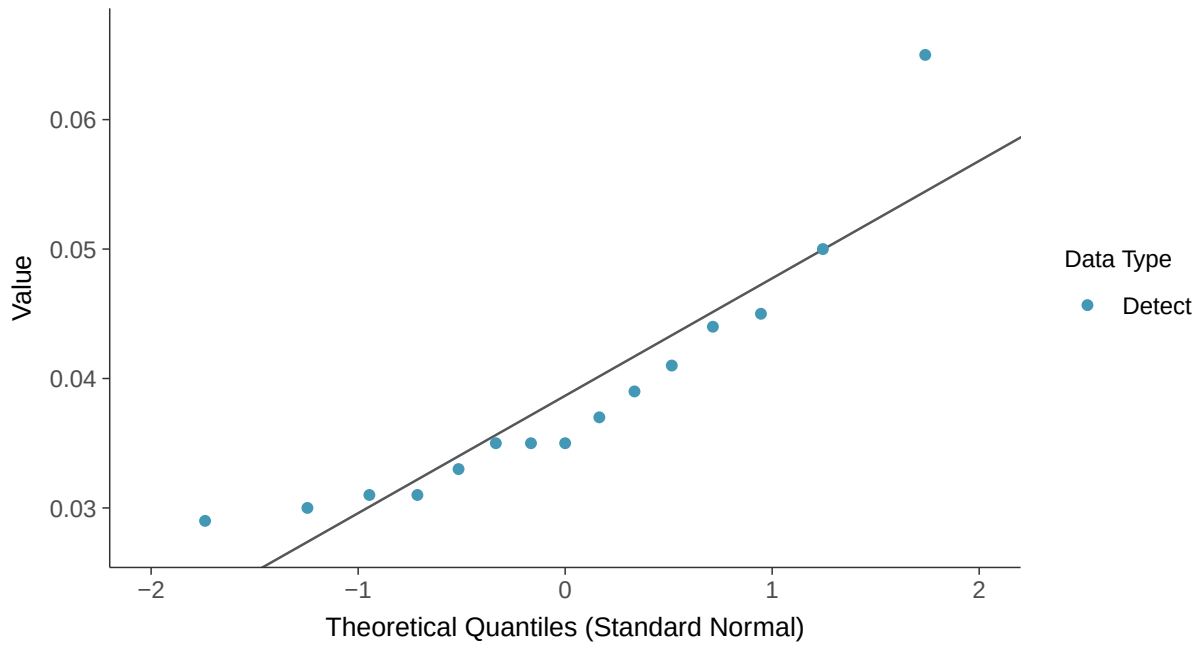
Boxplot by Season

Lithium, MW-03 (mg/L)



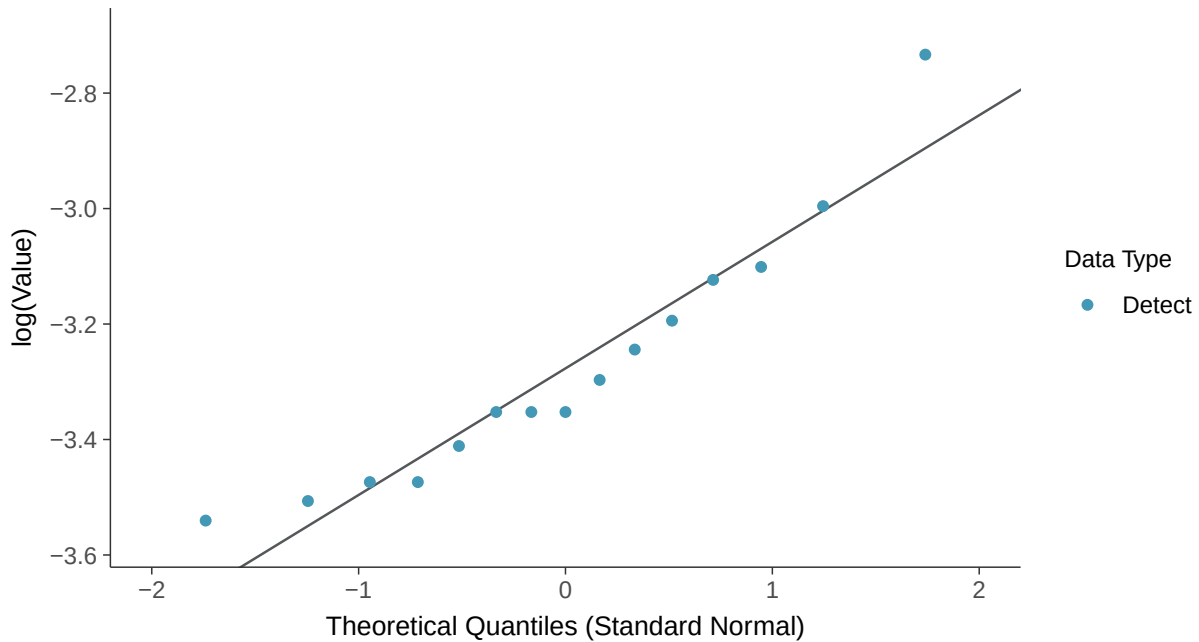
Normal Q-Q plot

Lithium, MW-03 (mg/L)



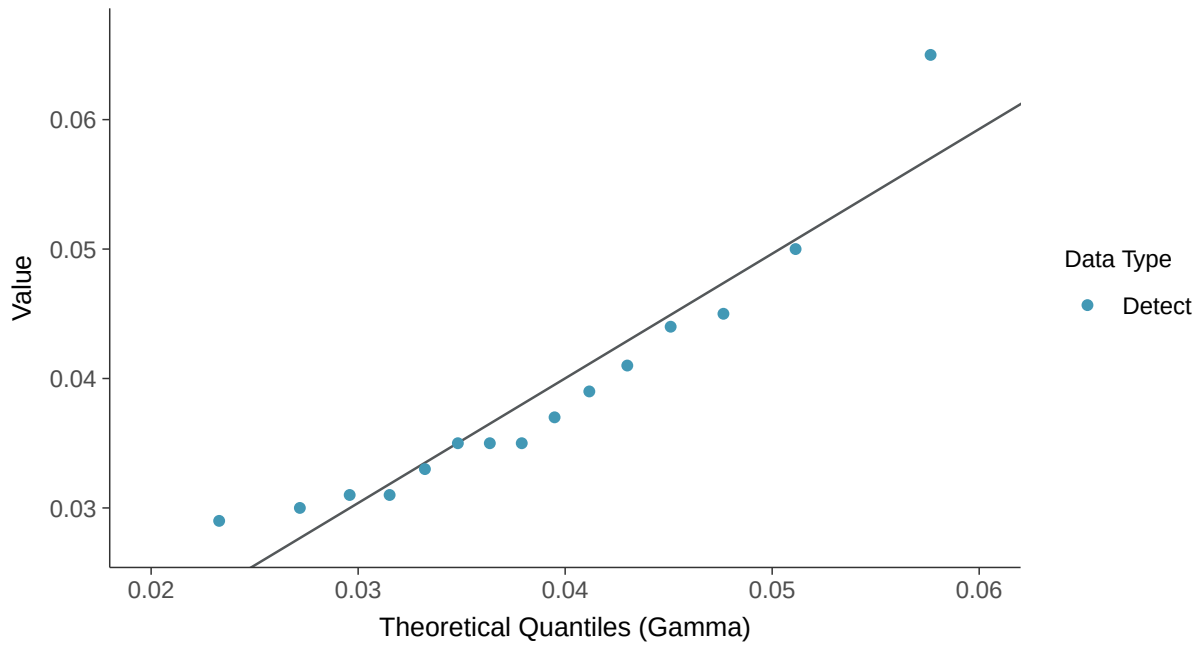
Lognormal Q-Q plot

Lithium, MW-03 (mg/L)



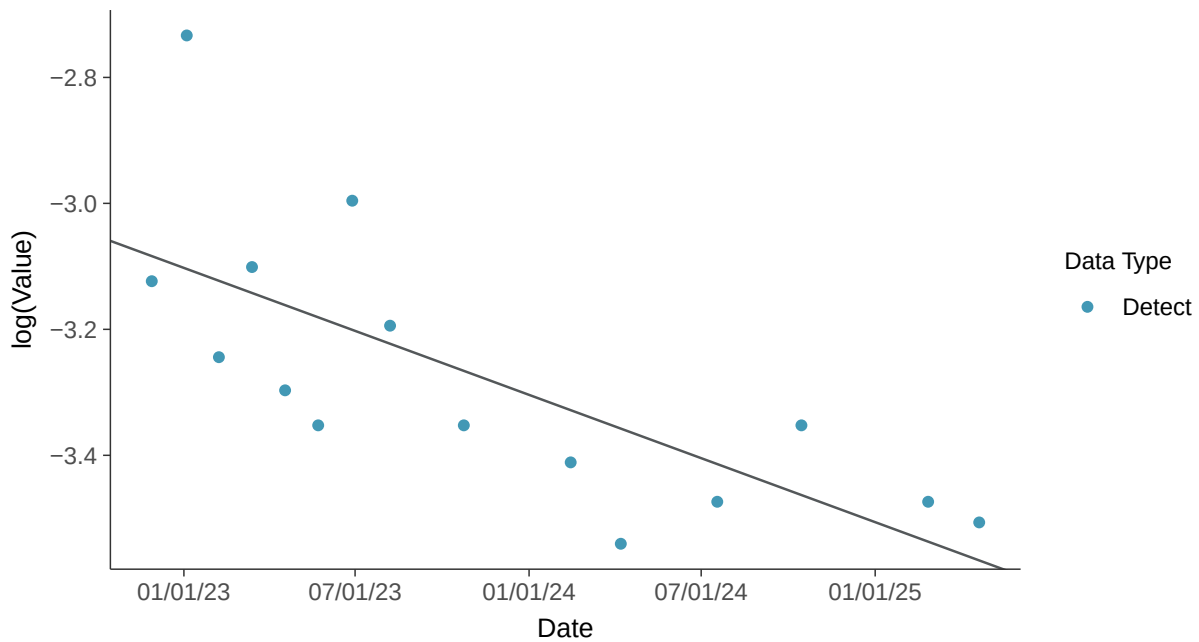
Gamma Q-Q plot

Lithium, MW-03 (mg/L)



Trend Regression: Lognormal MLE

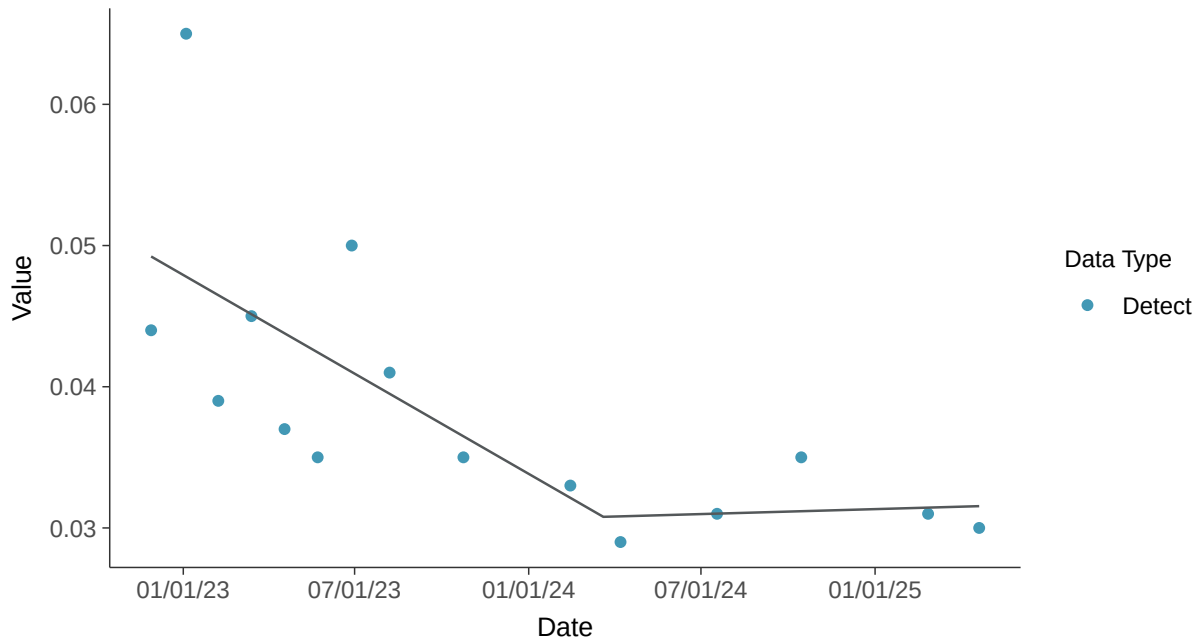
Lithium, MW-03 (mg/L)





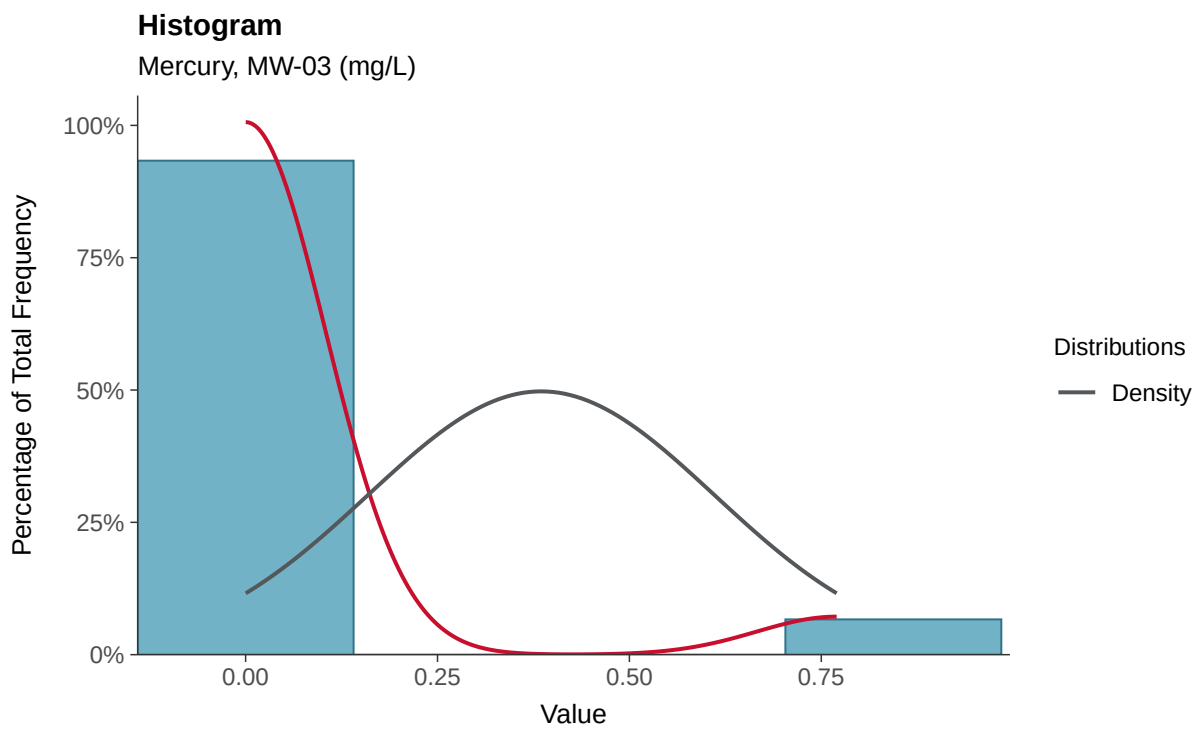
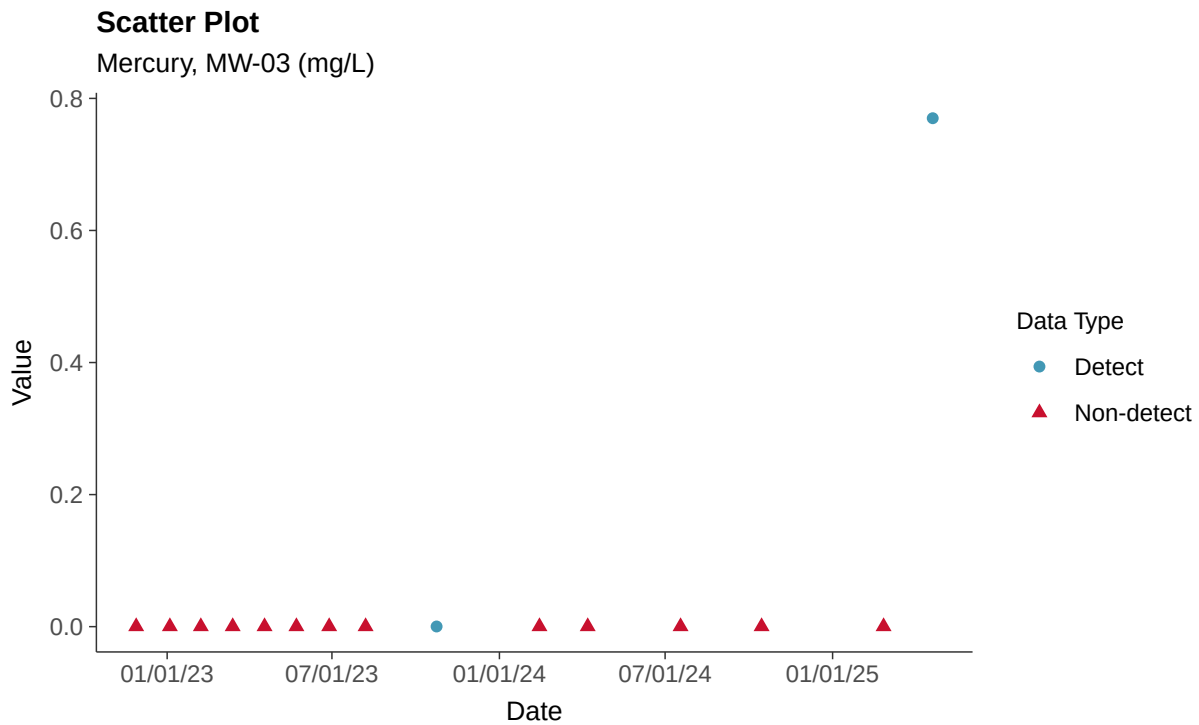
Trend Regression: Piecewise Linear-Linear

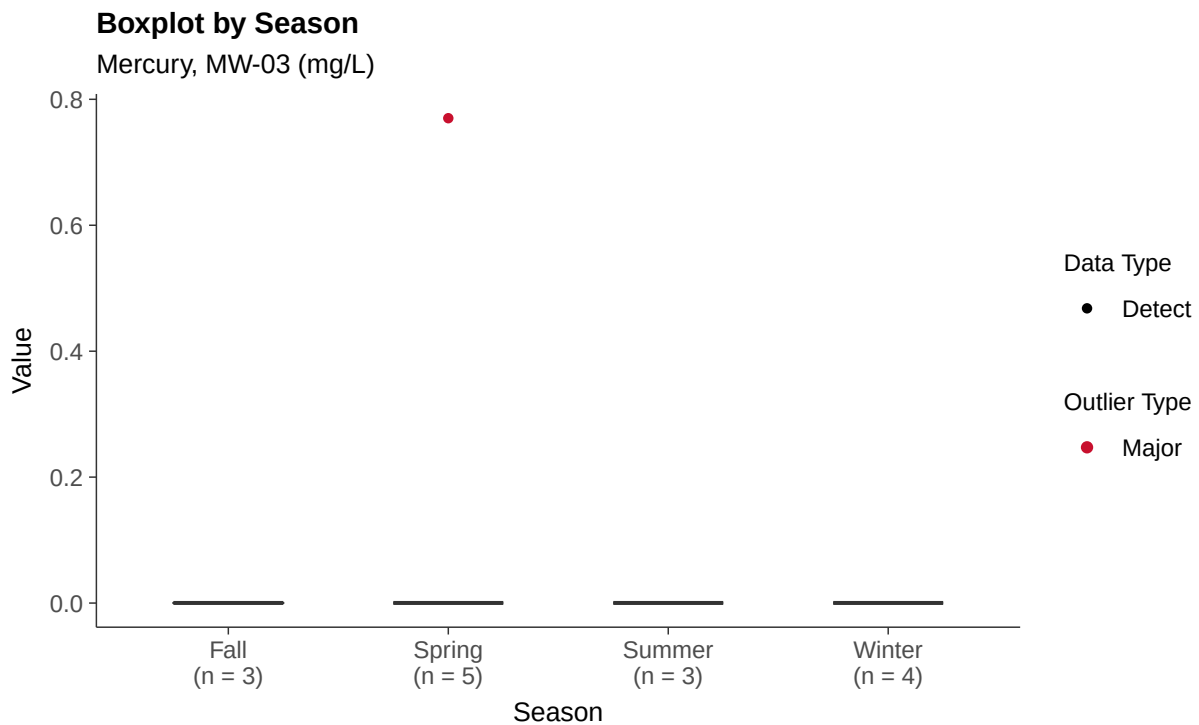
Lithium, MW-03 (mg/L)



Appendix IV: Mercury, MW-03

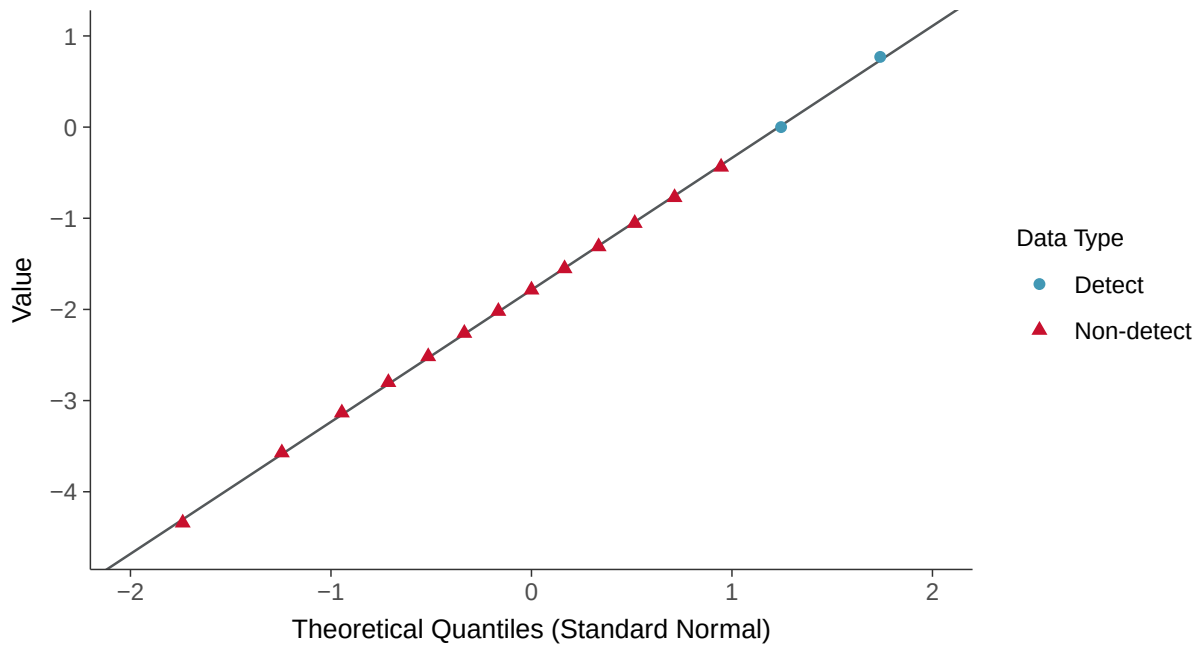
ID: 13_2_4_117





Normal Q-Q plot using ROS Imputed Estimates

Mercury, MW-03 (mg/L)

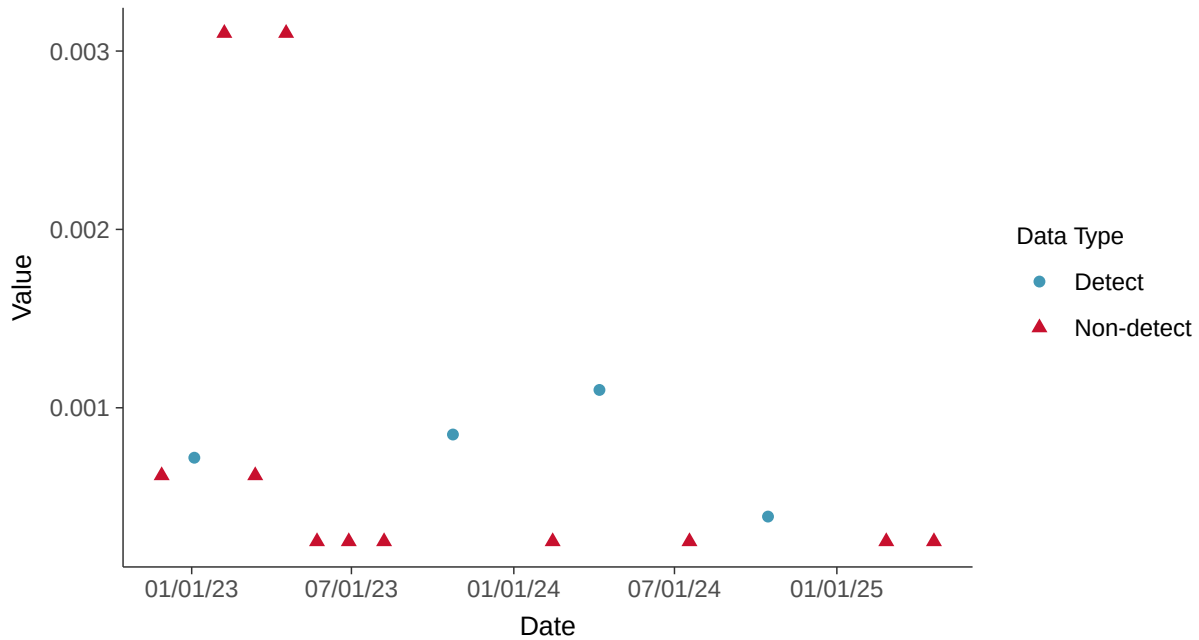


Appendix IV: Molybdenum, MW-03

ID: 13_2_4_118

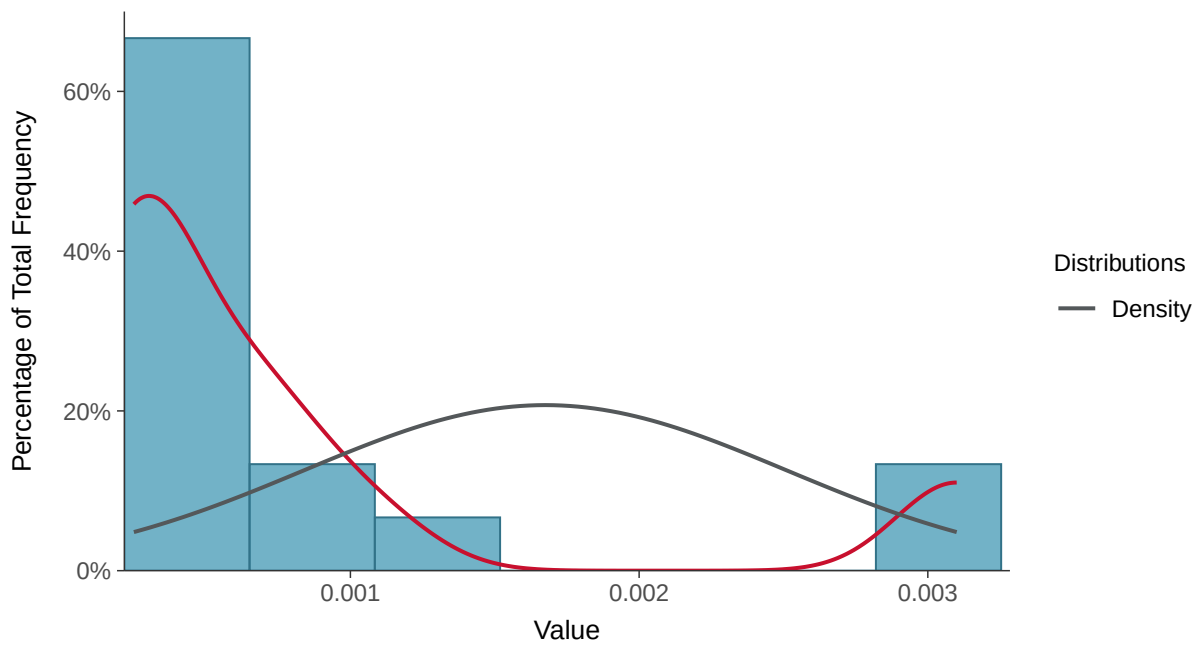
Scatter Plot

Molybdenum, MW-03 (mg/L)



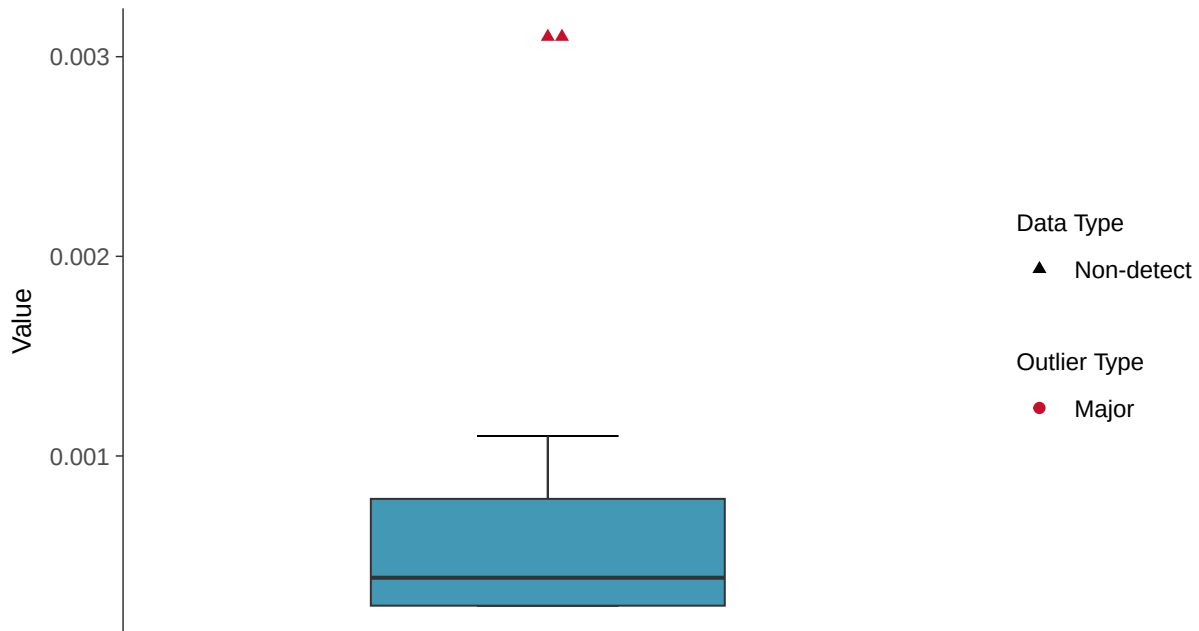
Histogram

Molybdenum, MW-03 (mg/L)



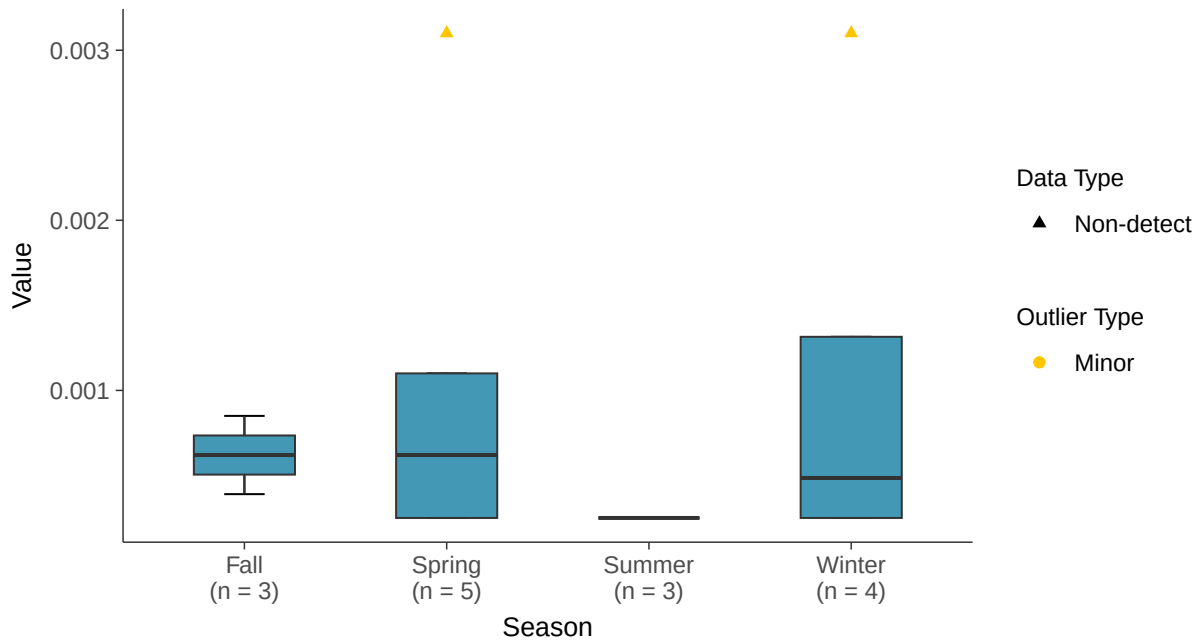
Boxplot

Molybdenum, MW-03 (mg/L)



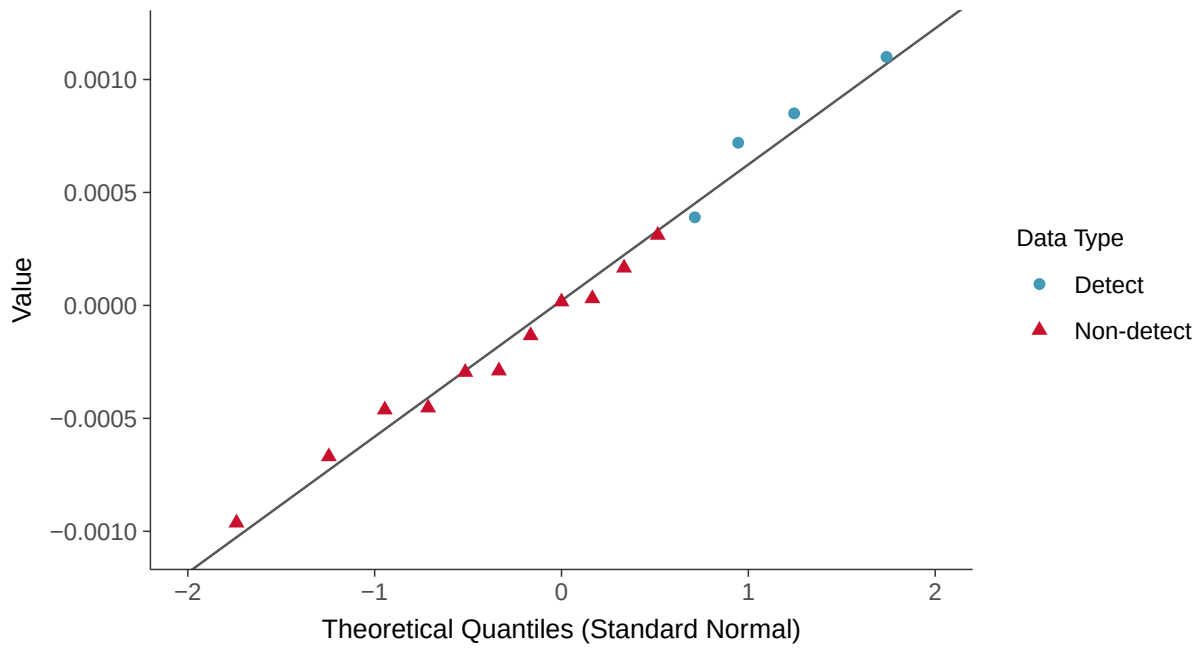
Boxplot by Season

Molybdenum, MW-03 (mg/L)



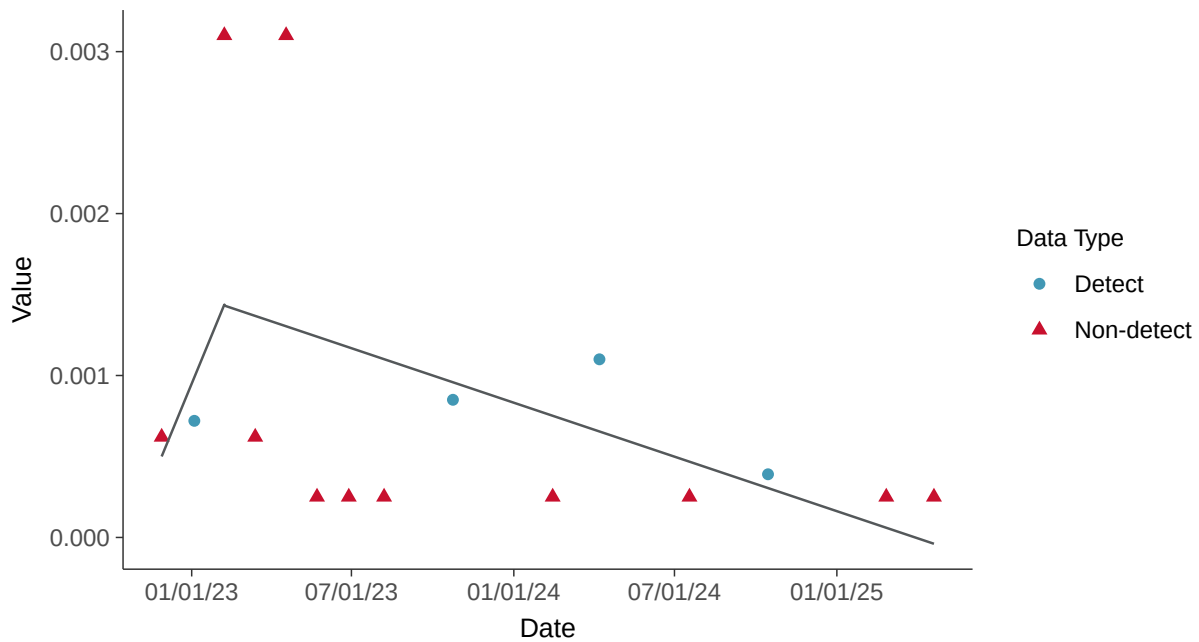
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-03 (mg/L)



Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-03 (mg/L)

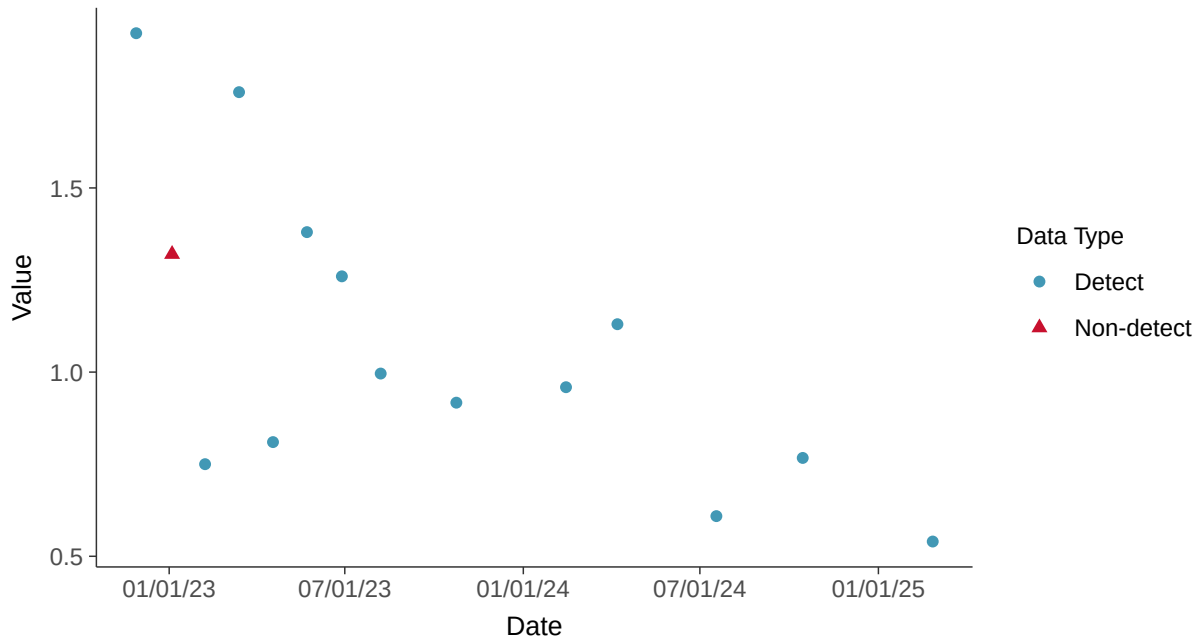


Appendix IV: Radium 226 and 228, MW-03

ID: 13_2_4_121

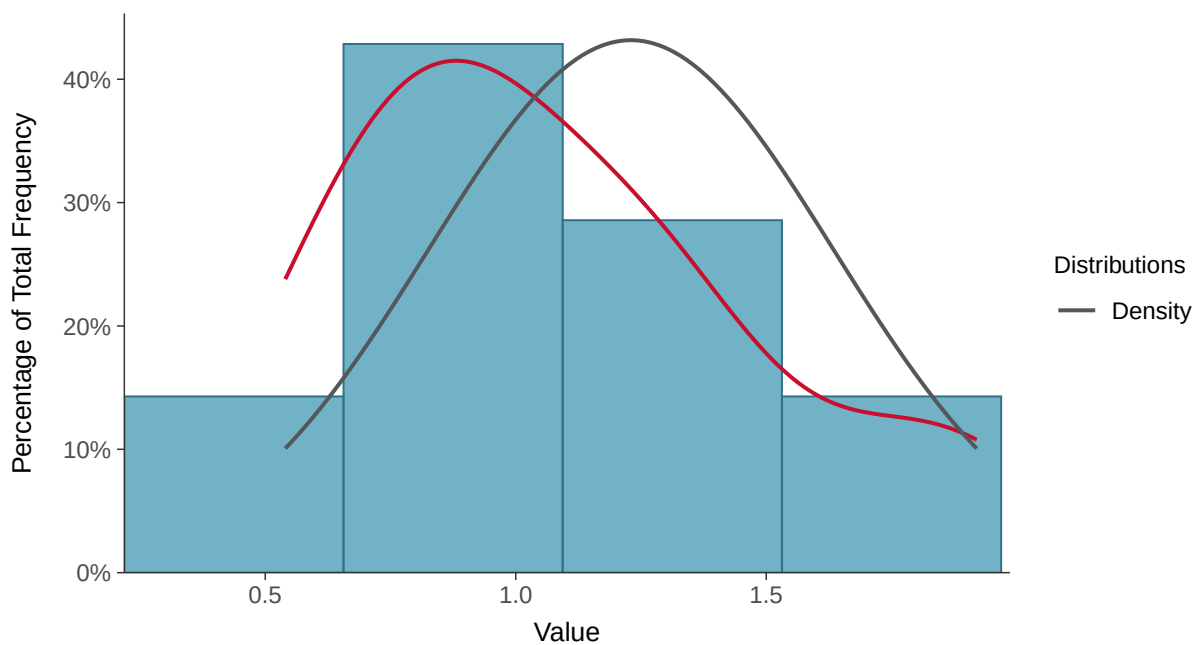
Scatter Plot

Radium 226 and 228, MW-03 (pCi/L)



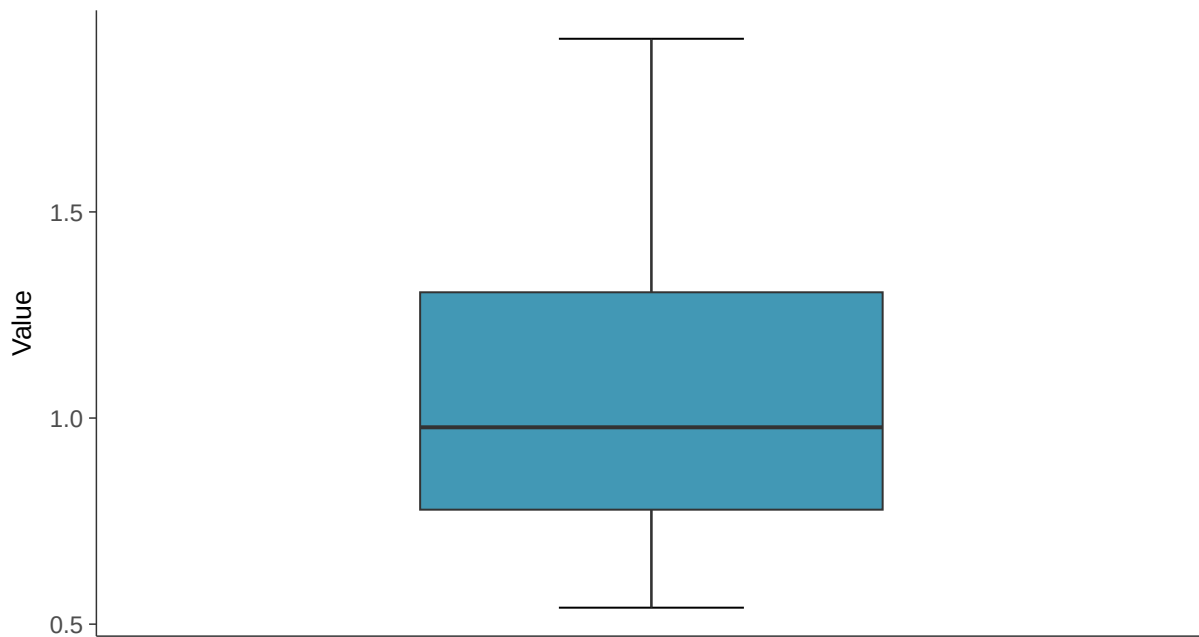
Histogram

Radium 226 and 228, MW-03 (pCi/L)



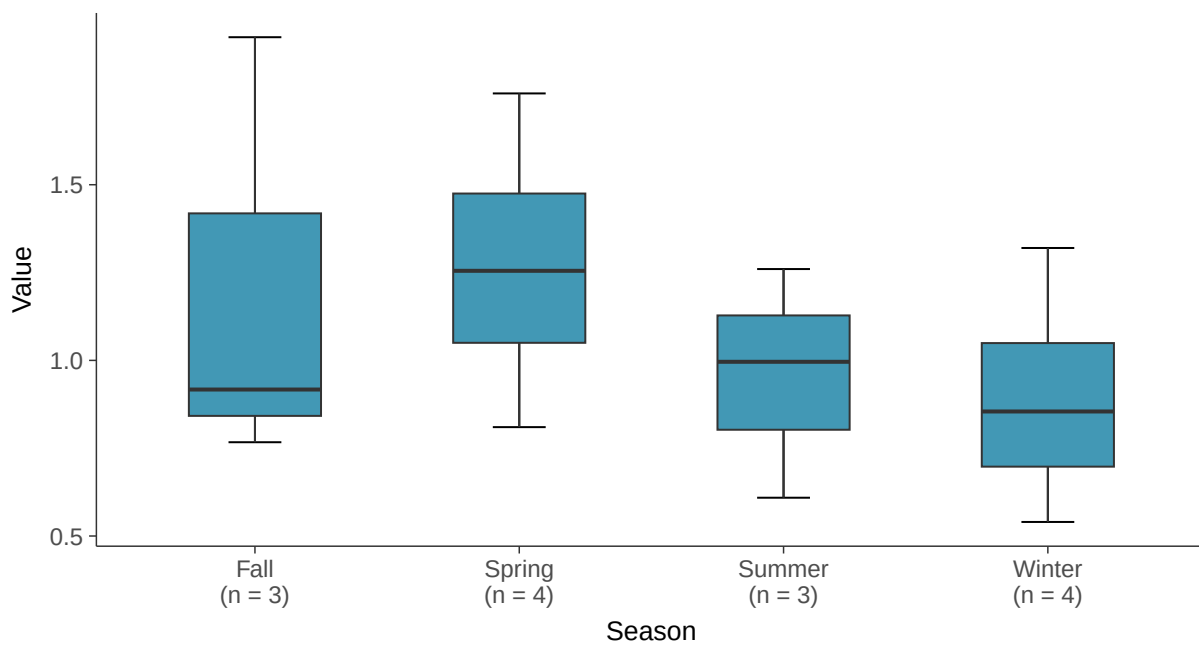
Boxplot

Radium 226 and 228, MW-03 (pCi/L)



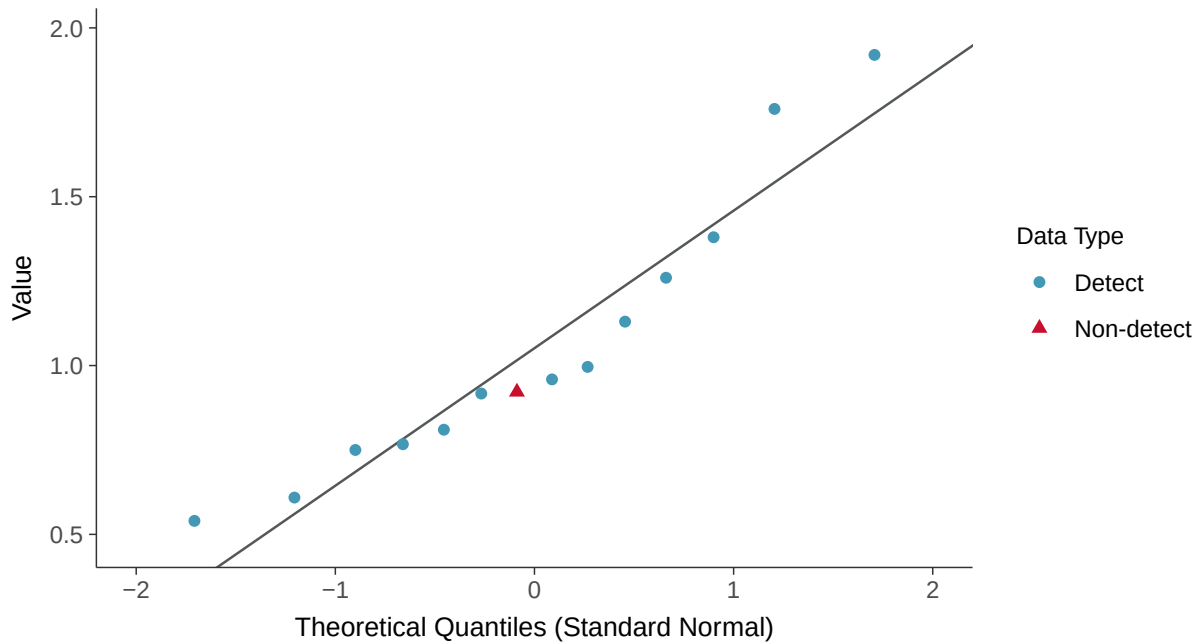
Boxplot by Season

Radium 226 and 228, MW-03 (pCi/L)



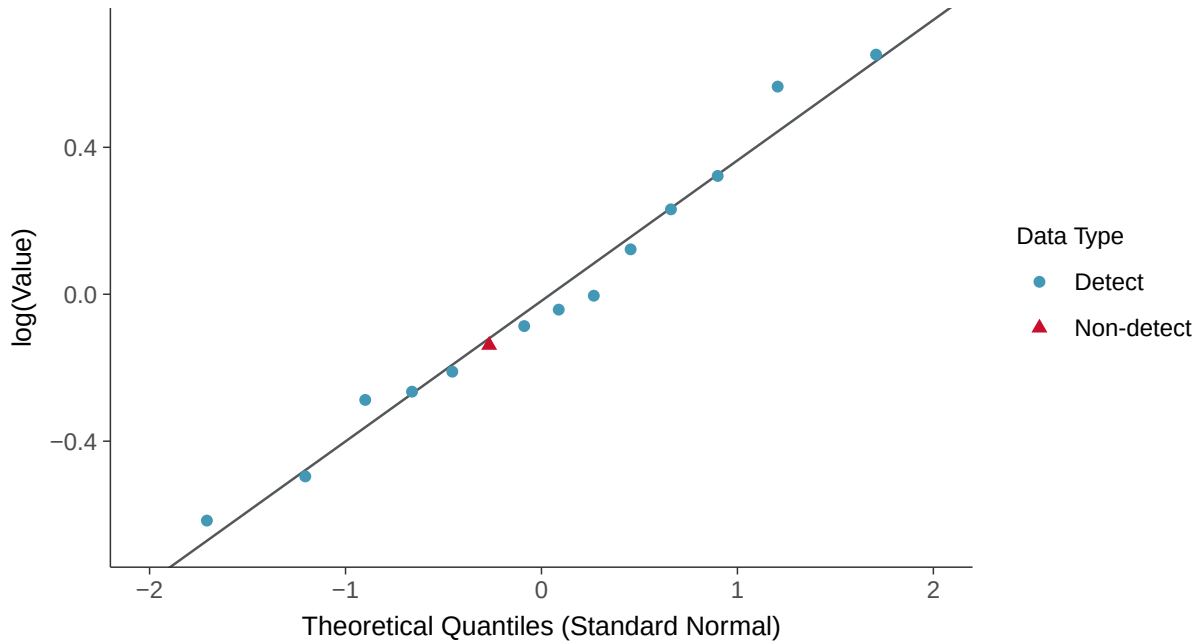
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-03 (pCi/L)



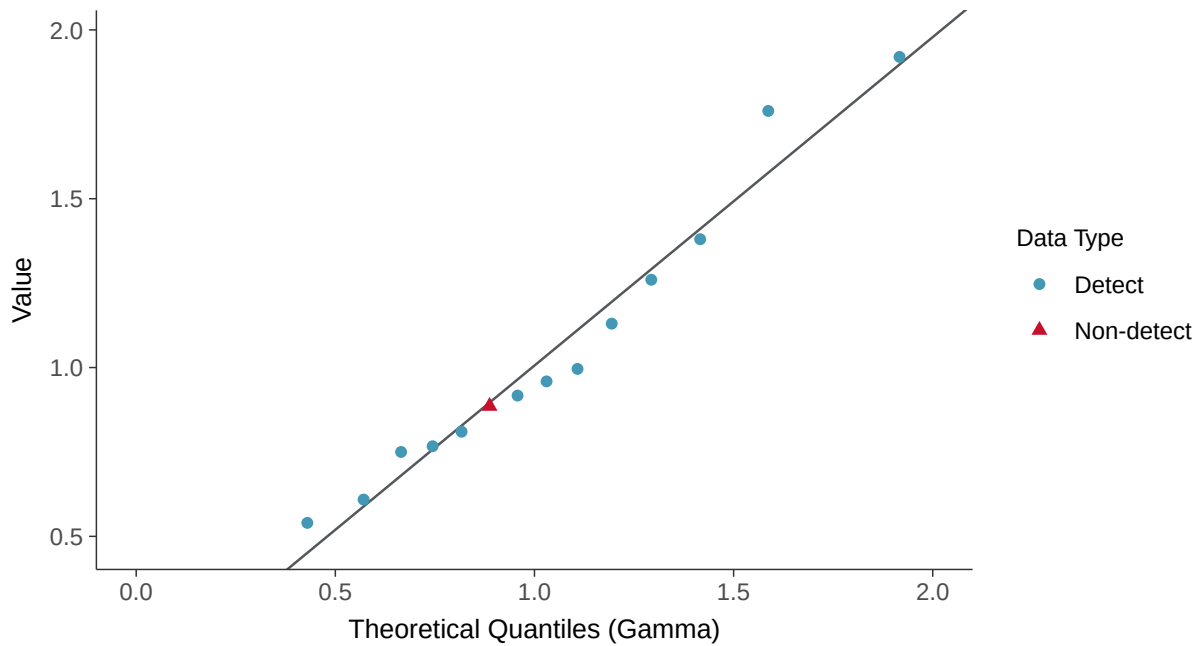
Lognormal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-03 (pCi/L)



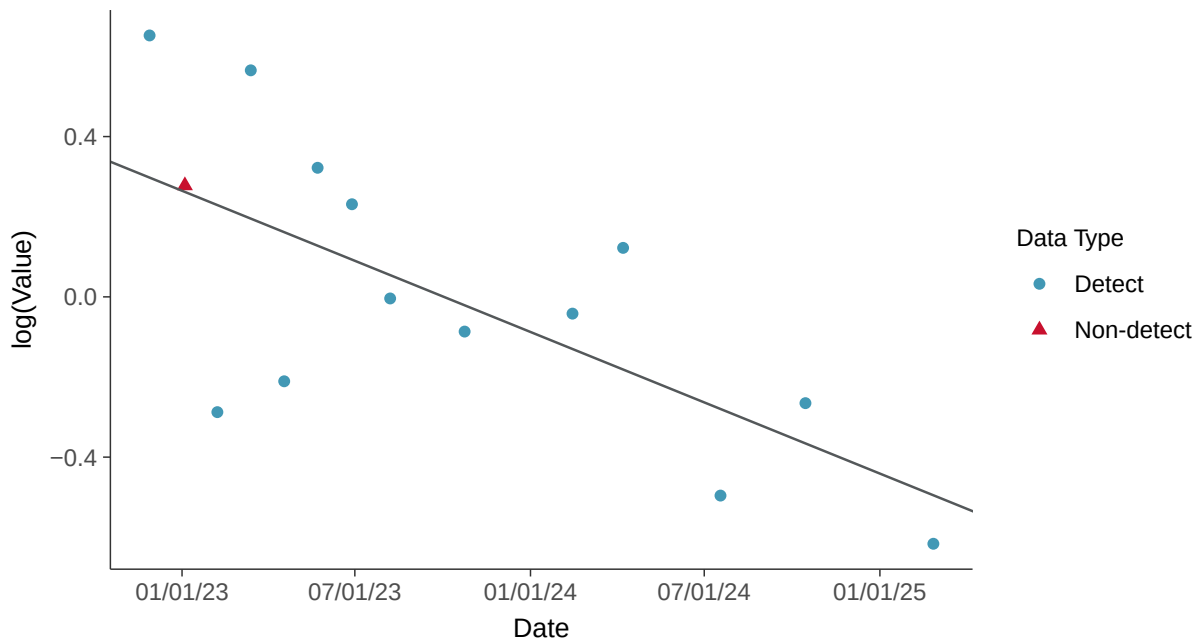
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-03 (pCi/L)



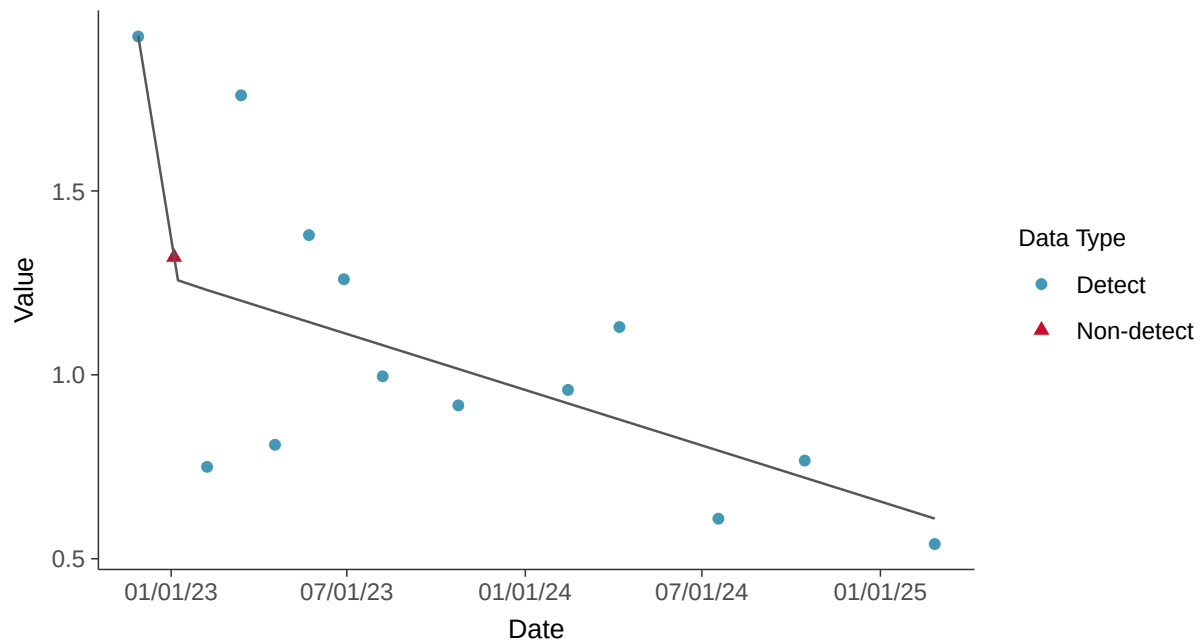
Trend Regression: Lognormal MLE

Radium 226 and 228, MW-03 (pCi/L)



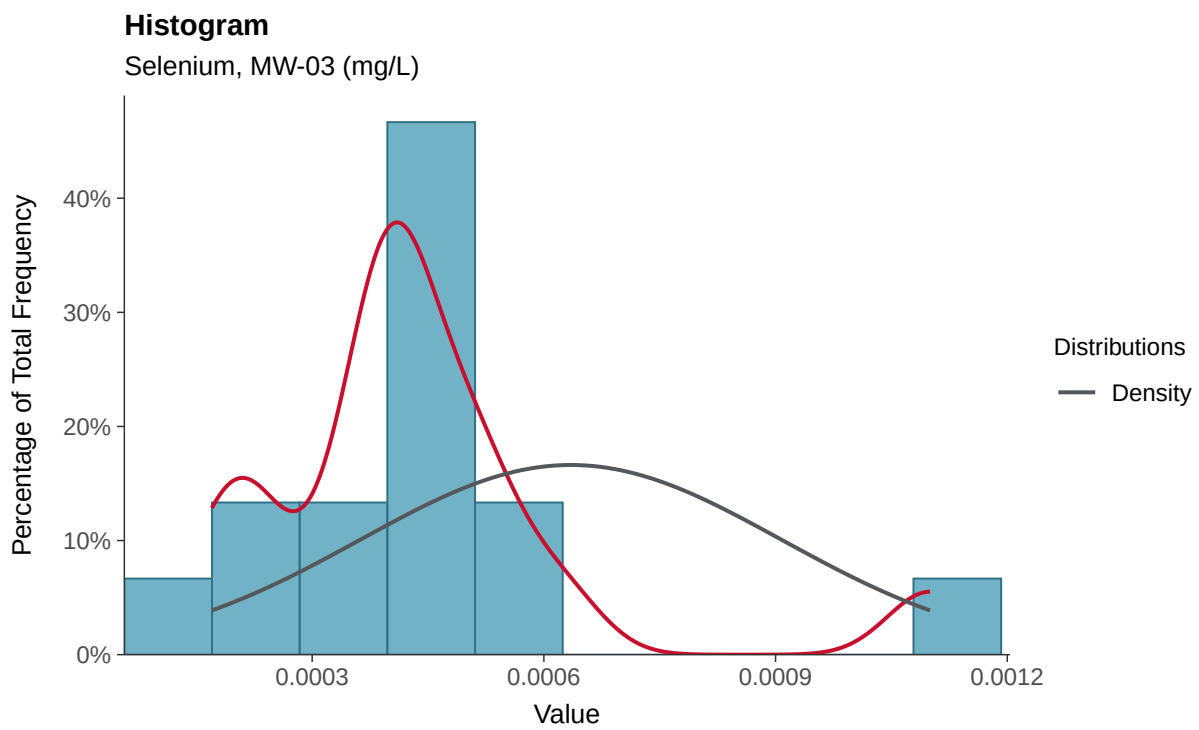
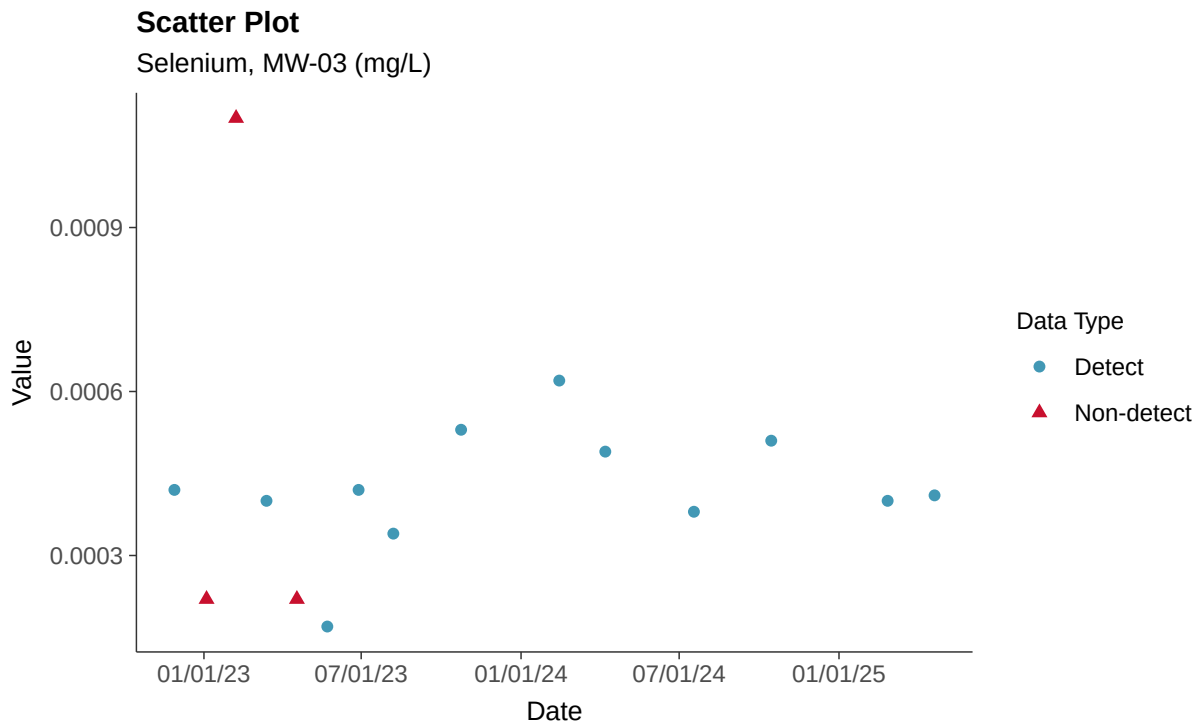
Trend Regression: Piecewise Linear-Linear

Radium 226 and 228, MW-03 (pCi/L)



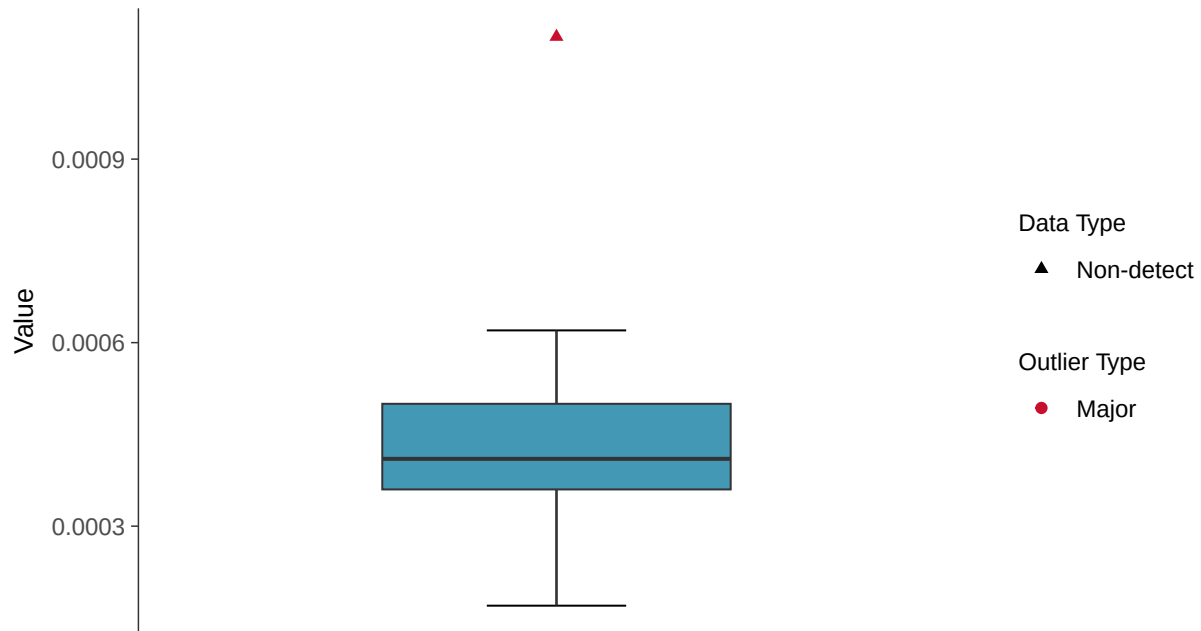
Appendix IV: Selenium, MW-03

ID: 13_2_4_122



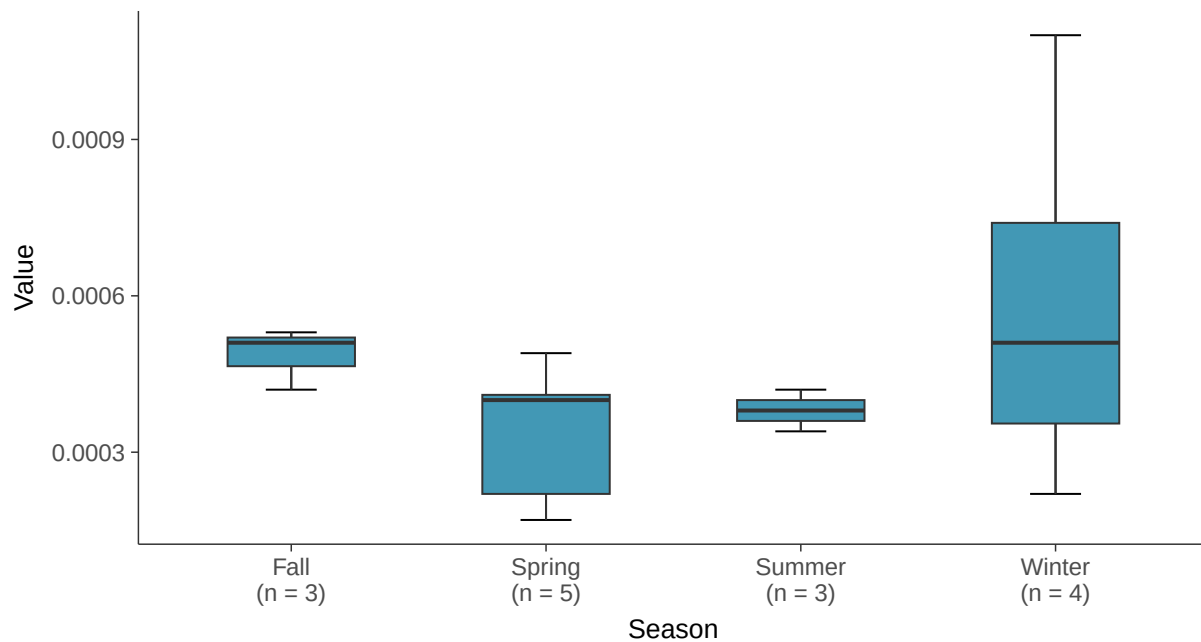
Boxplot

Selenium, MW-03 (mg/L)



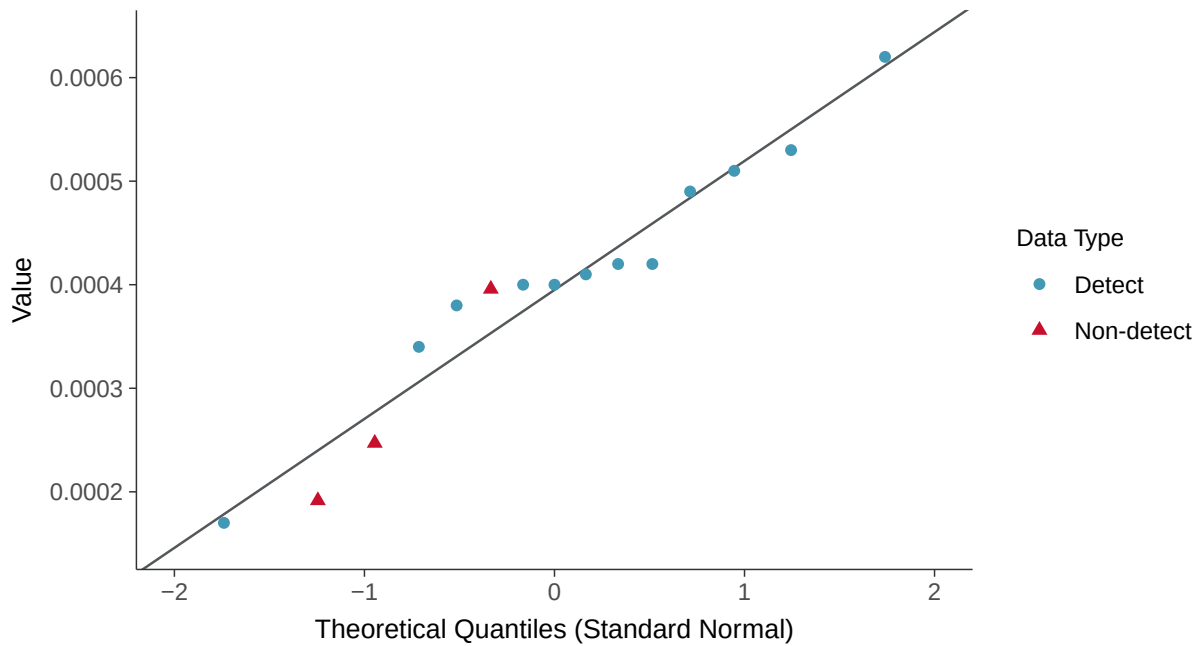
Boxplot by Season

Selenium, MW-03 (mg/L)



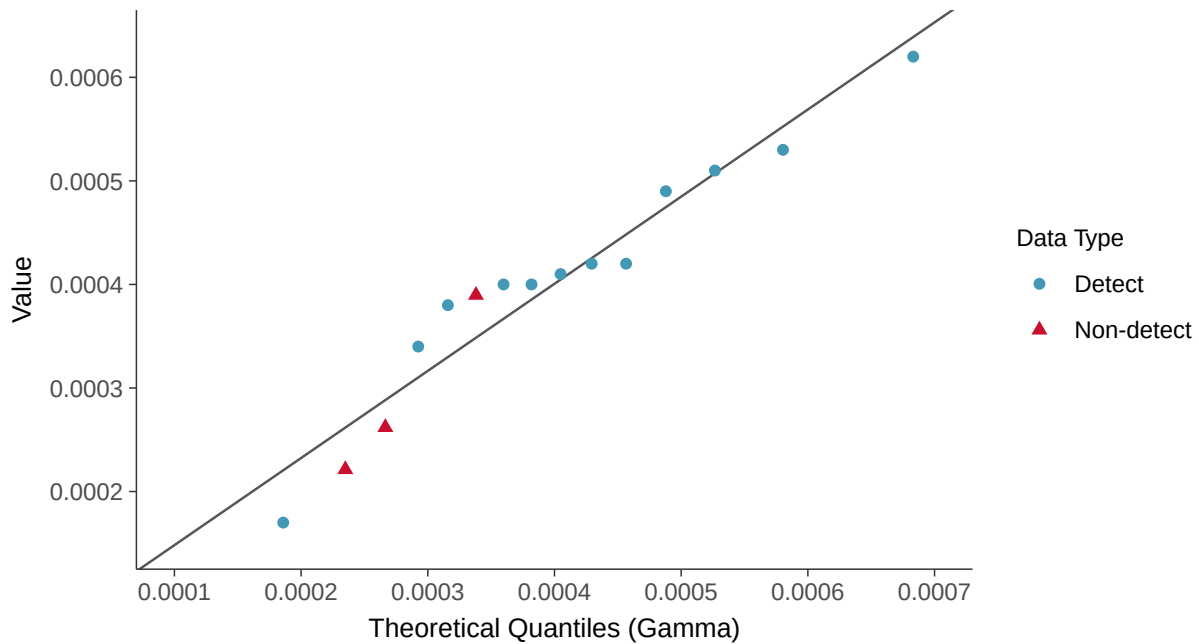
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-03 (mg/L)



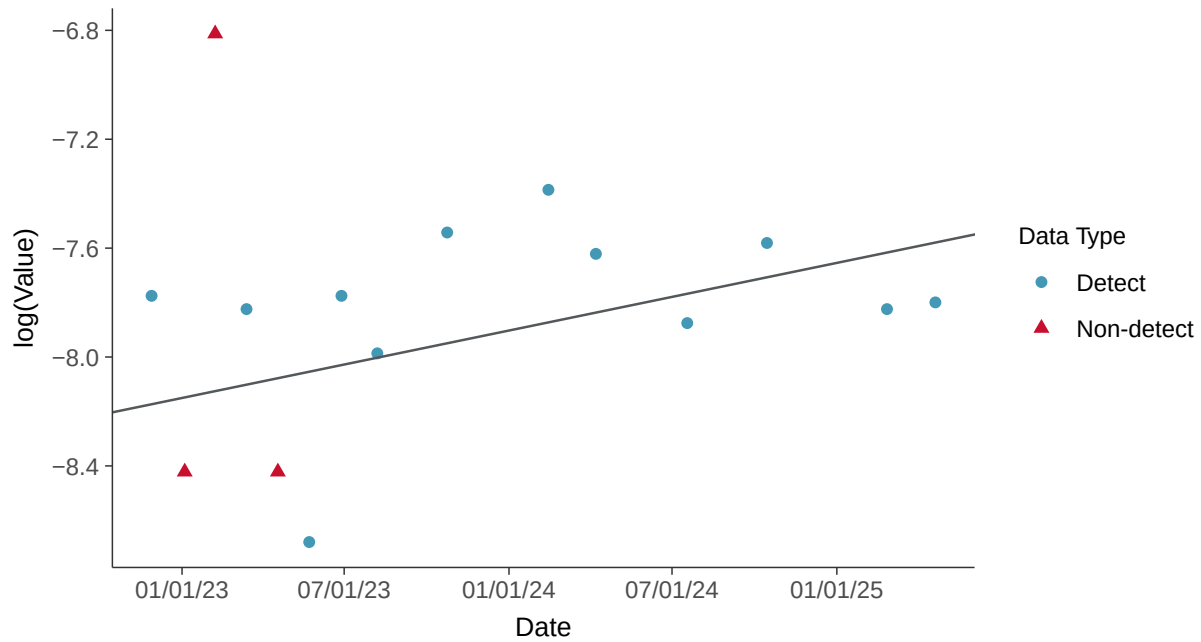
Gamma Q-Q plot using ROS Imputed Estimates

Selenium, MW-03 (mg/L)



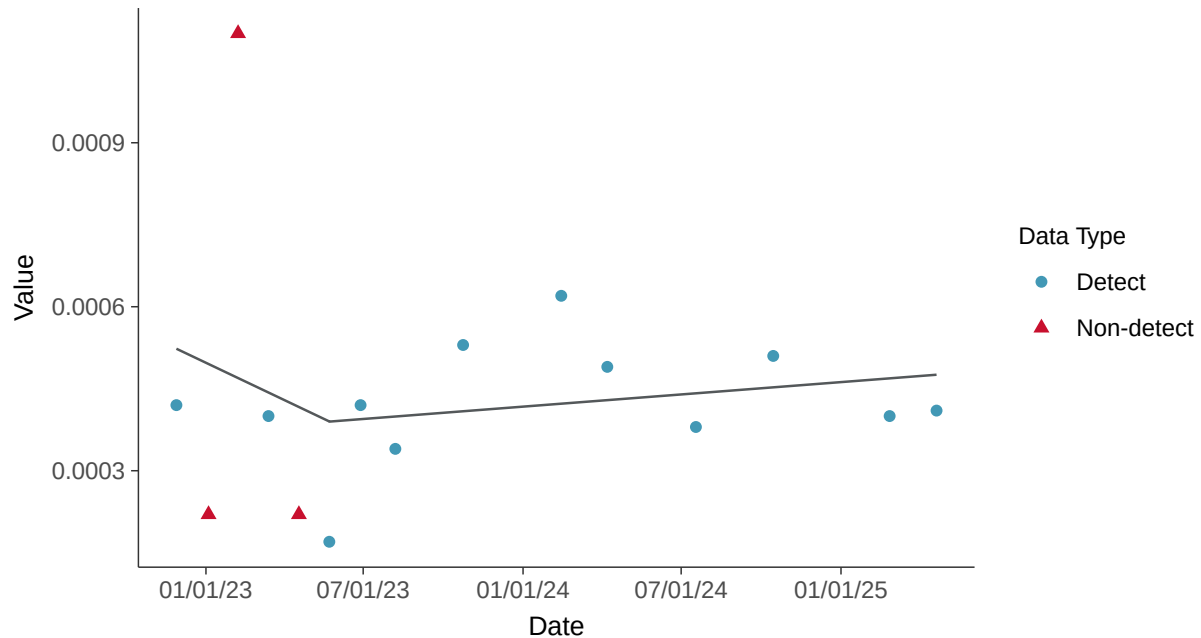
Trend Regression: Lognormal MLE

Selenium, MW-03 (mg/L)



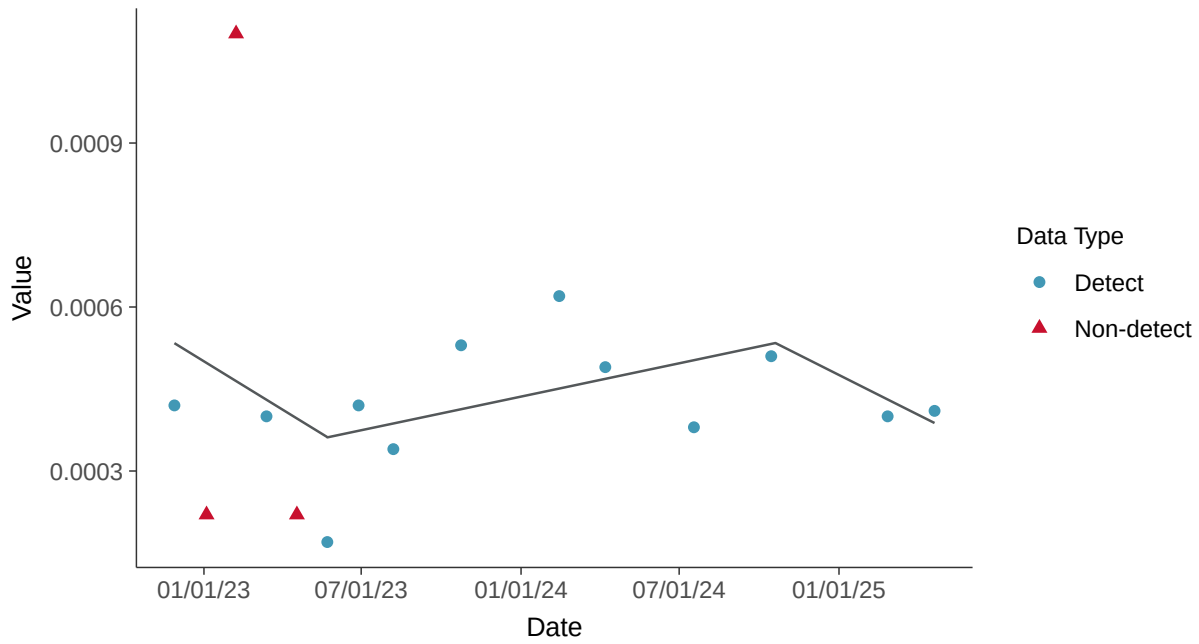
Trend Regression: Piecewise Linear-Linear

Selenium, MW-03 (mg/L)



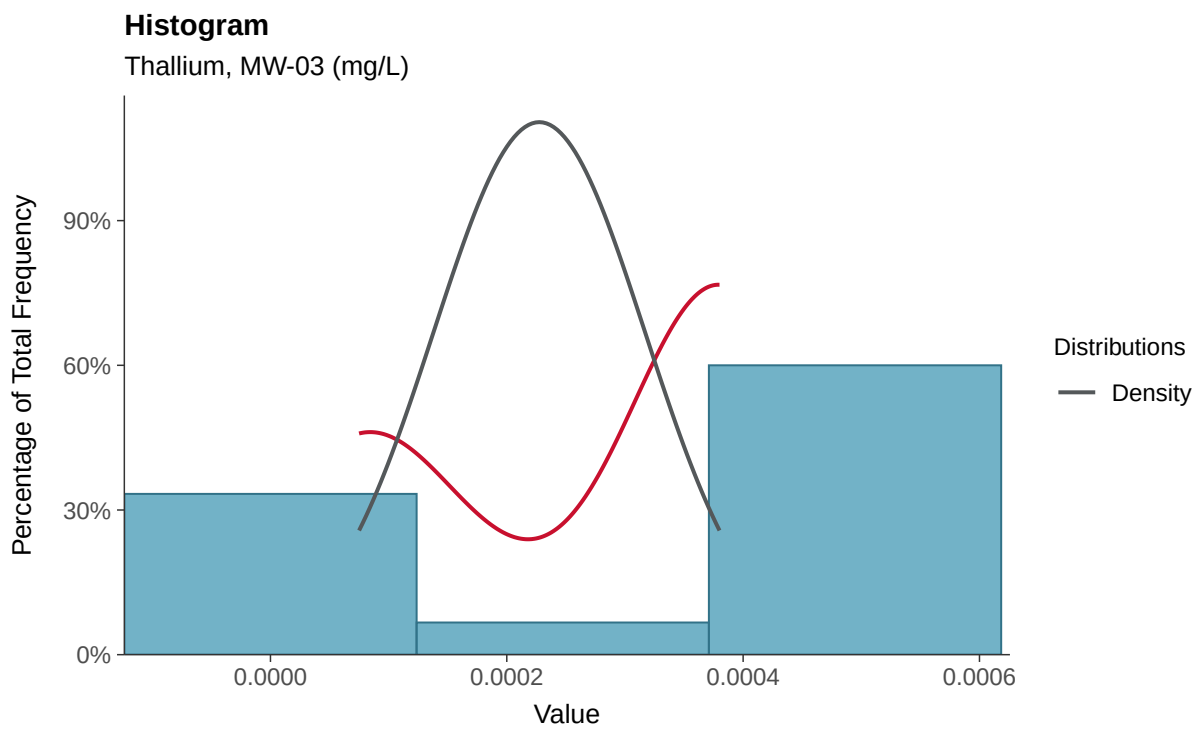
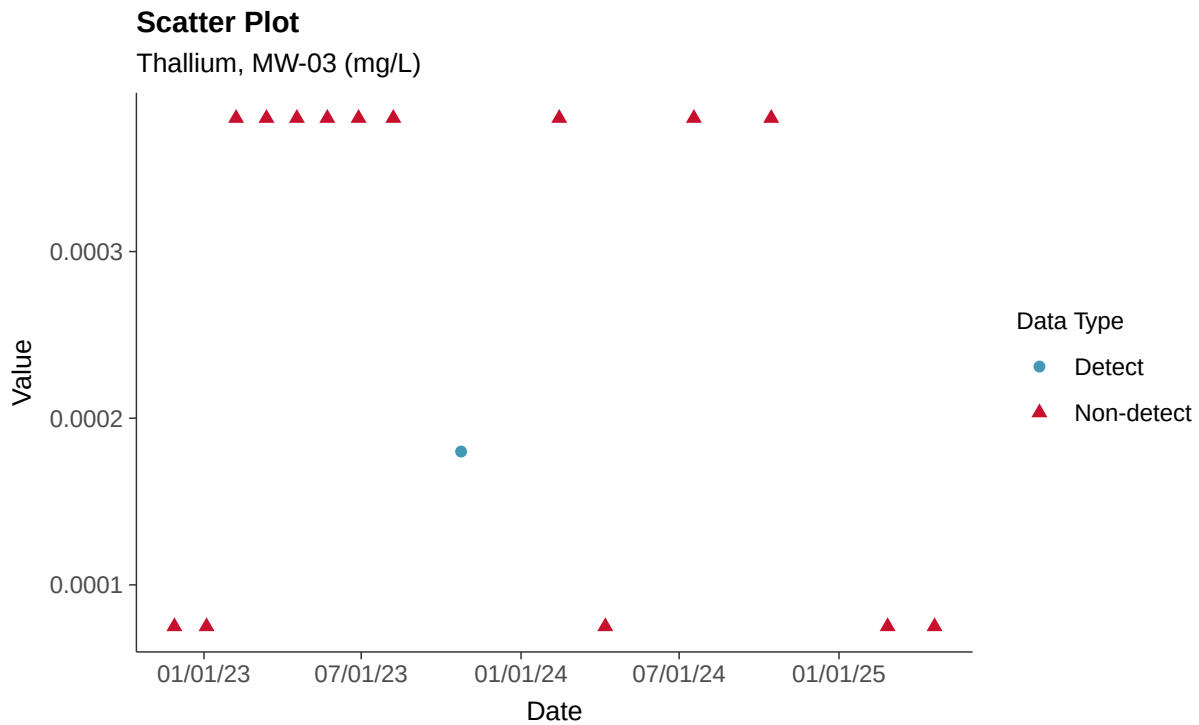


Trend Regression: Piecewise Linear-Linear-Linear
Selenium, MW-03 (mg/L)



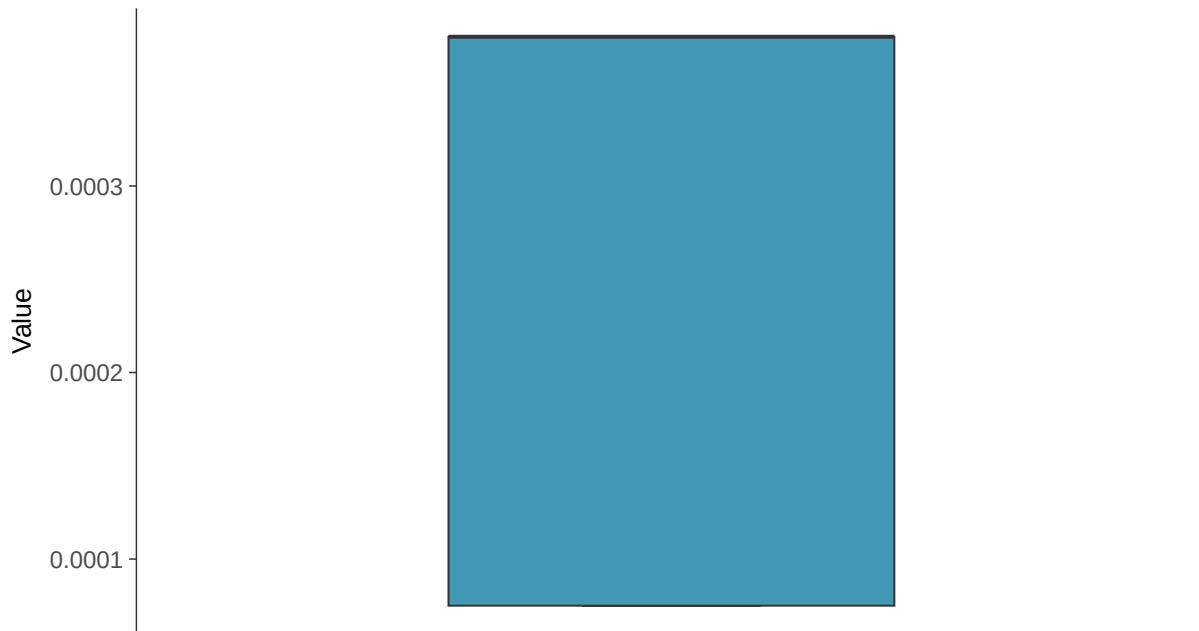
Appendix IV: Thallium, MW-03

ID: 13_2_4_125



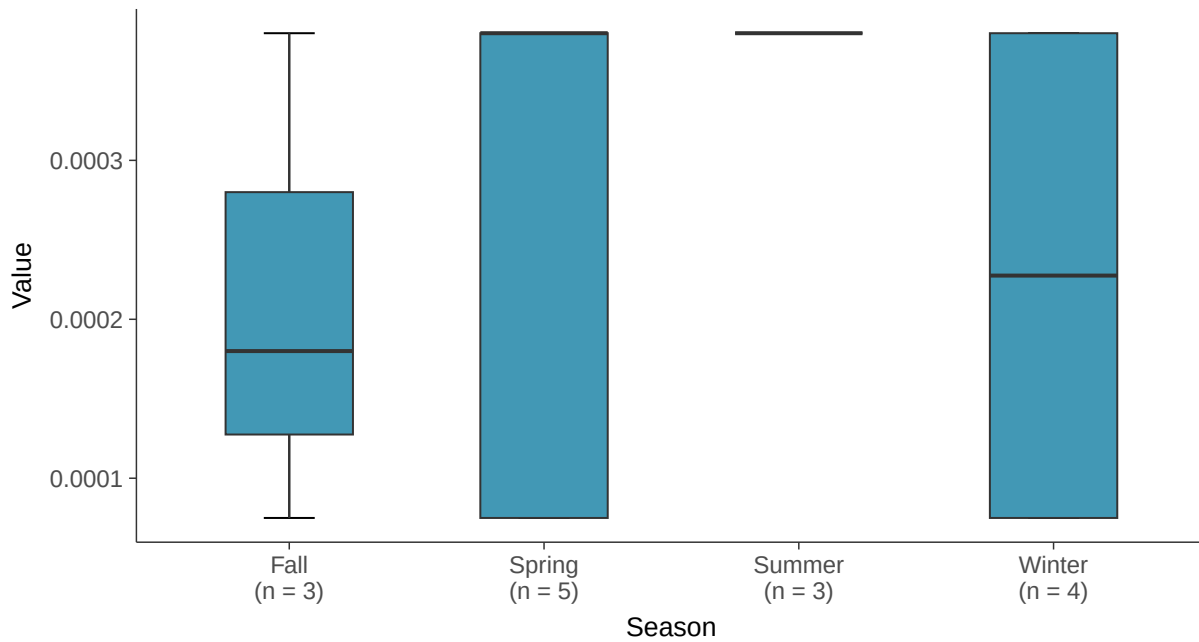
Boxplot

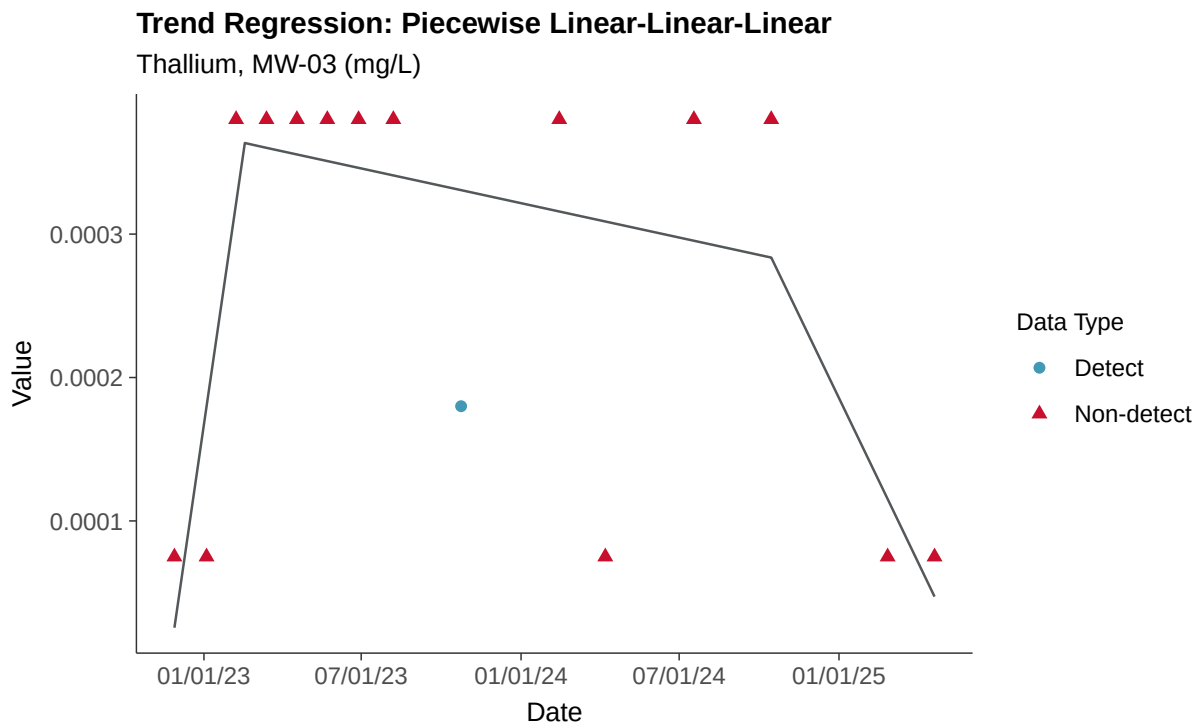
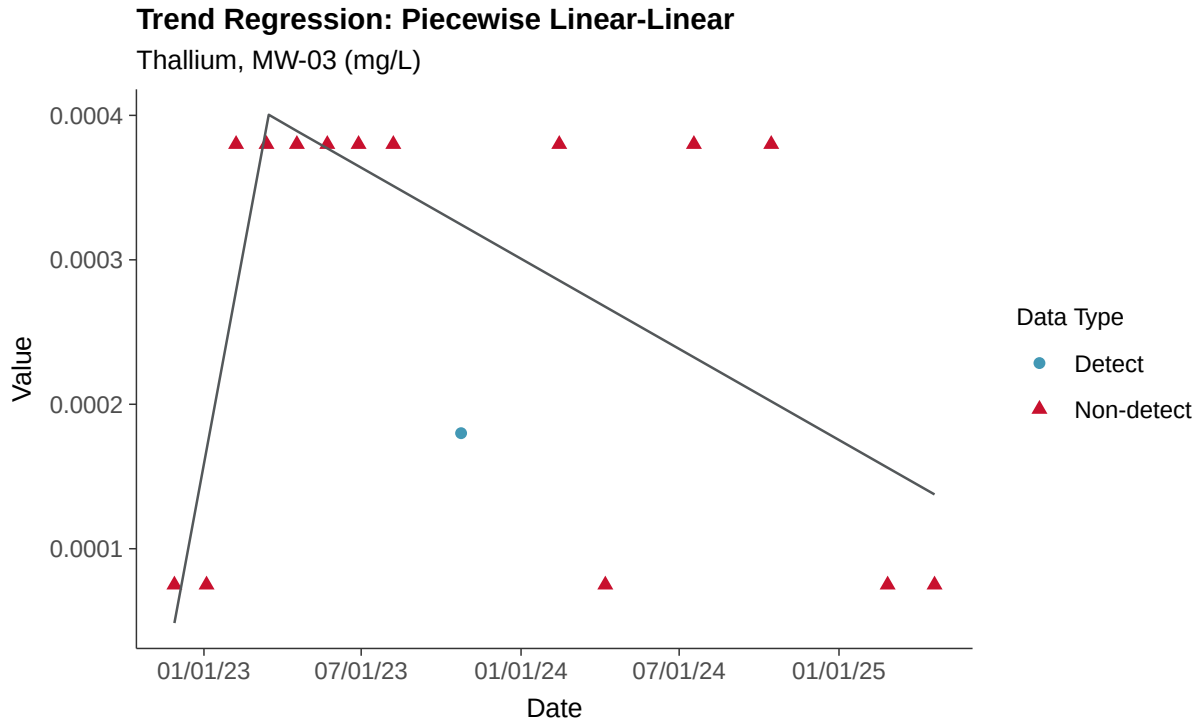
Thallium, MW-03 (mg/L)



Boxplot by Season

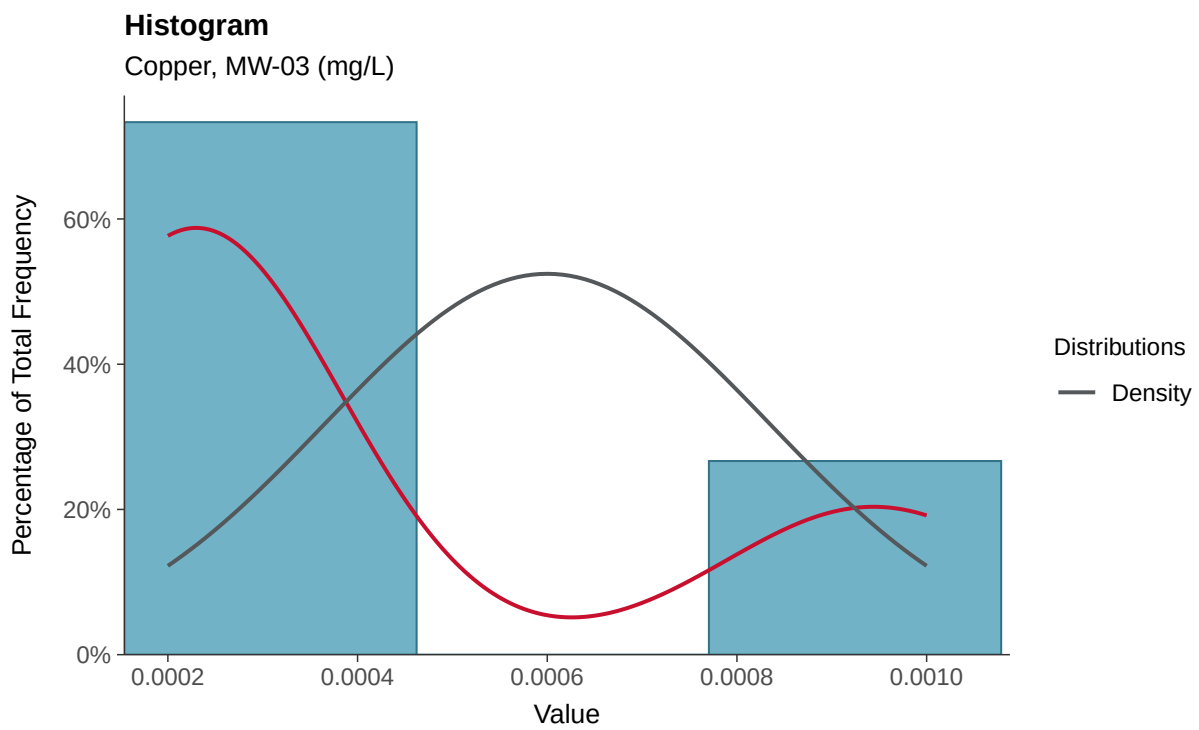
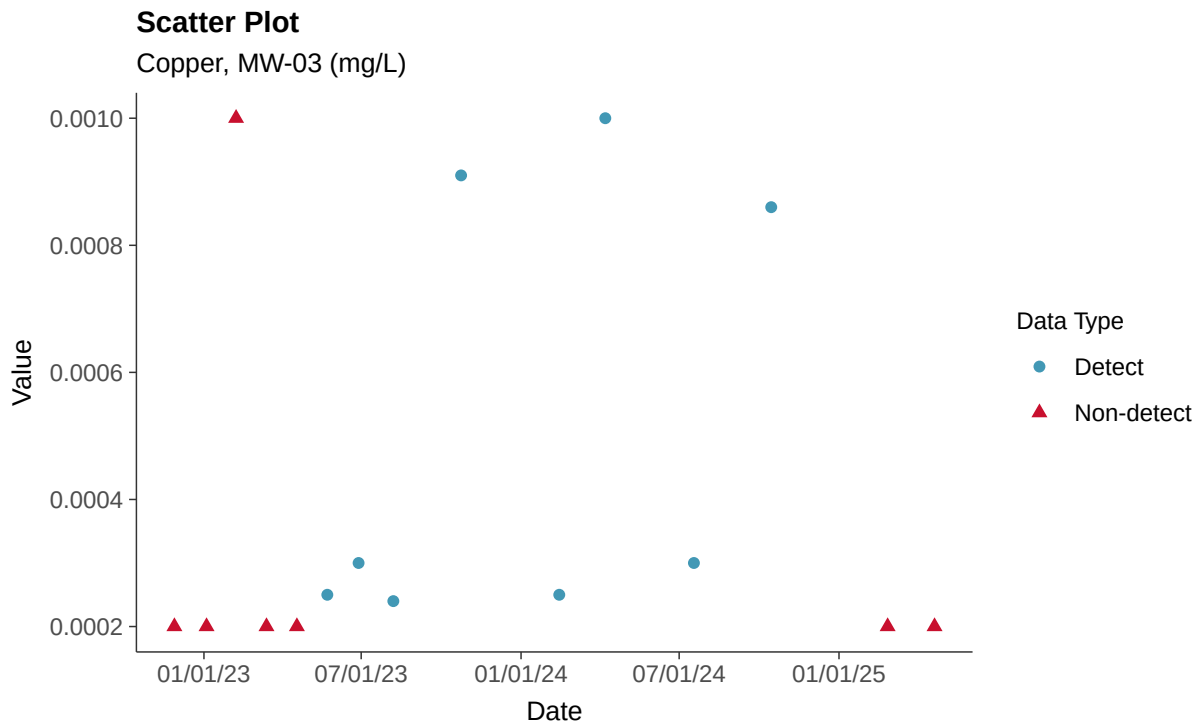
Thallium, MW-03 (mg/L)





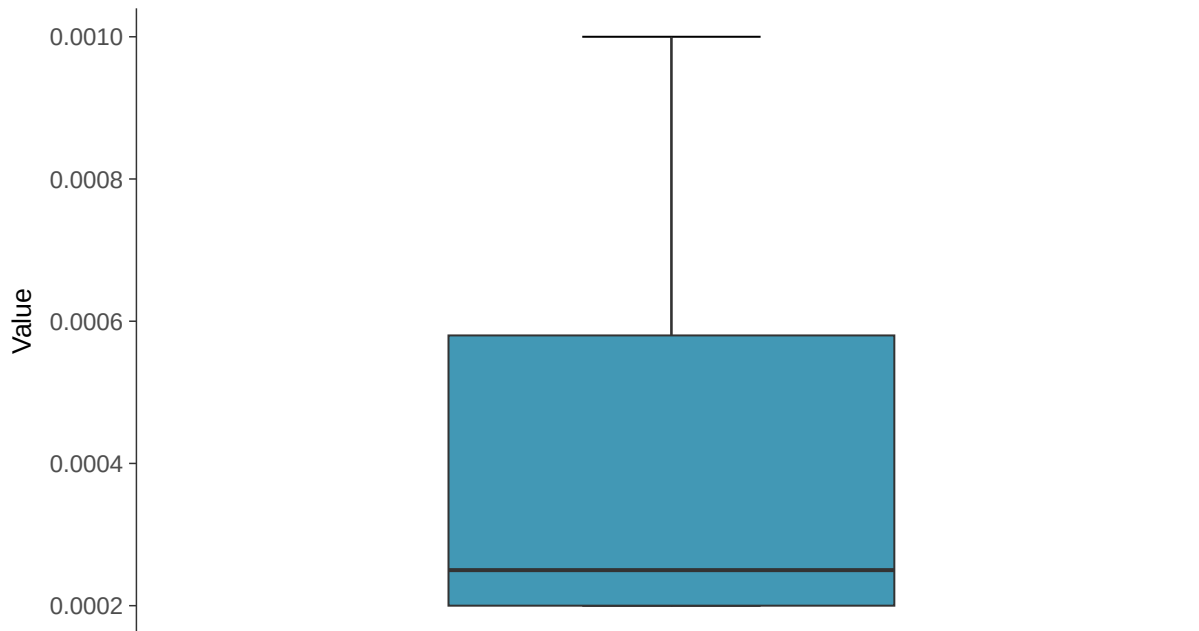
Part 115: Copper, MW-03

ID: 13_2_5_111



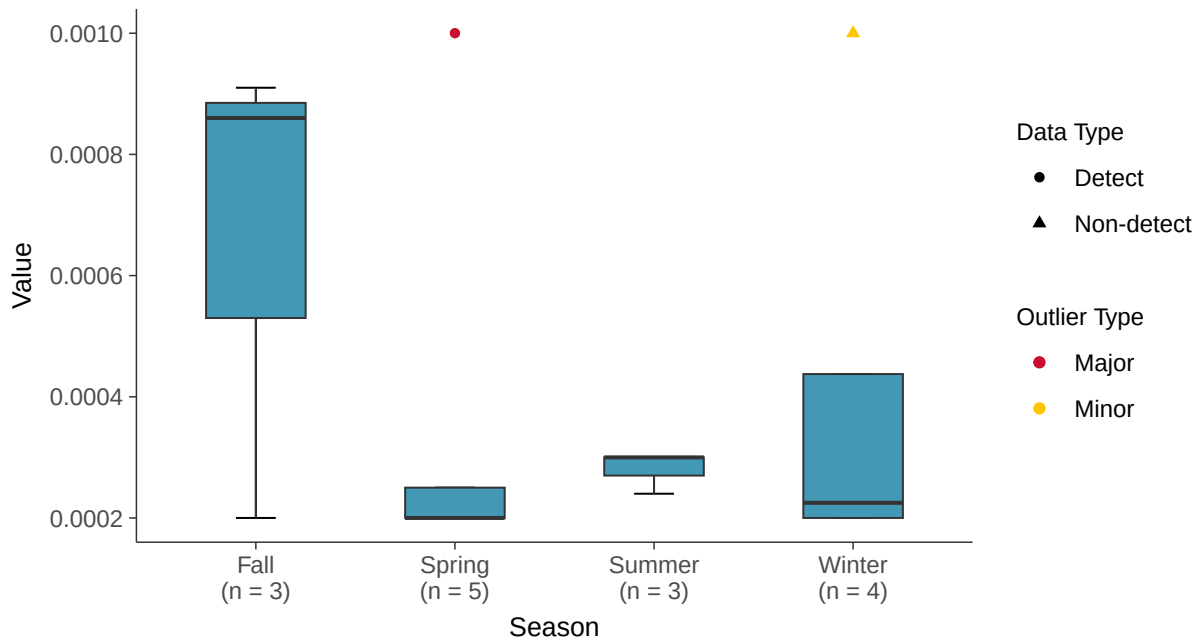
Boxplot

Copper, MW-03 (mg/L)



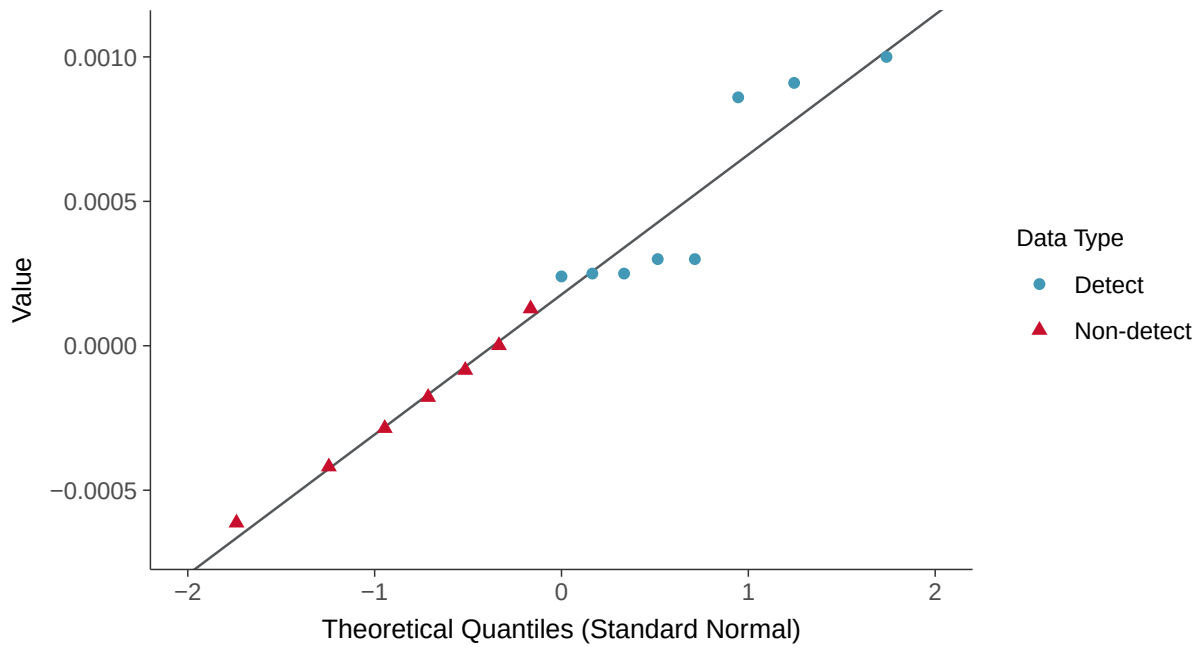
Boxplot by Season

Copper, MW-03 (mg/L)



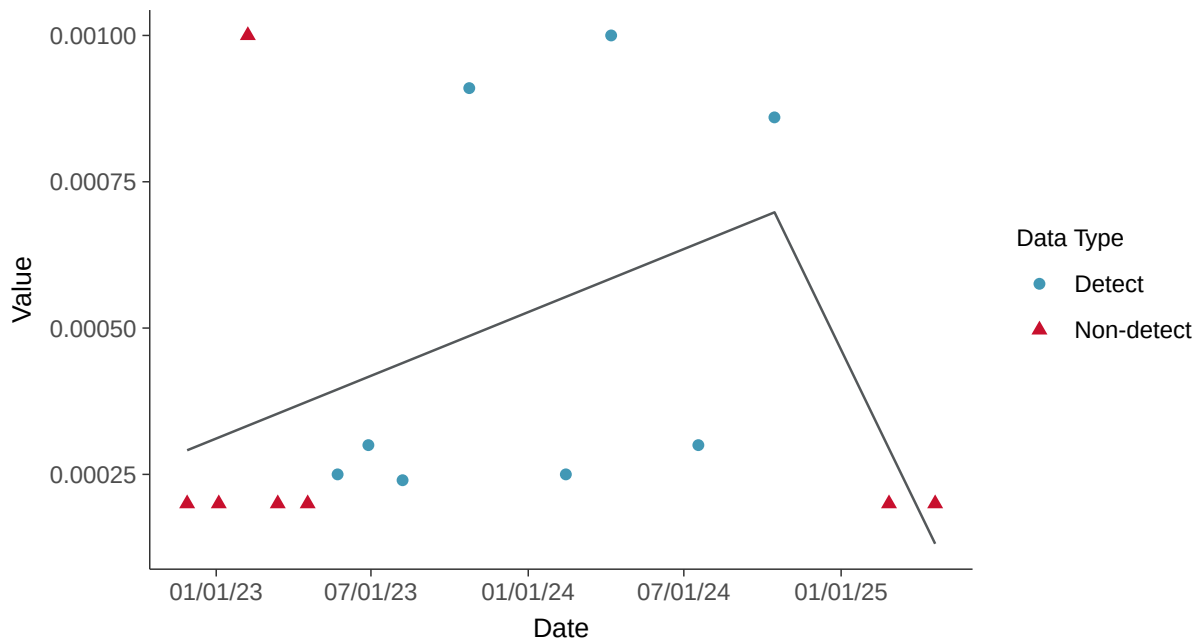
Normal Q-Q plot using ROS Imputed Estimates

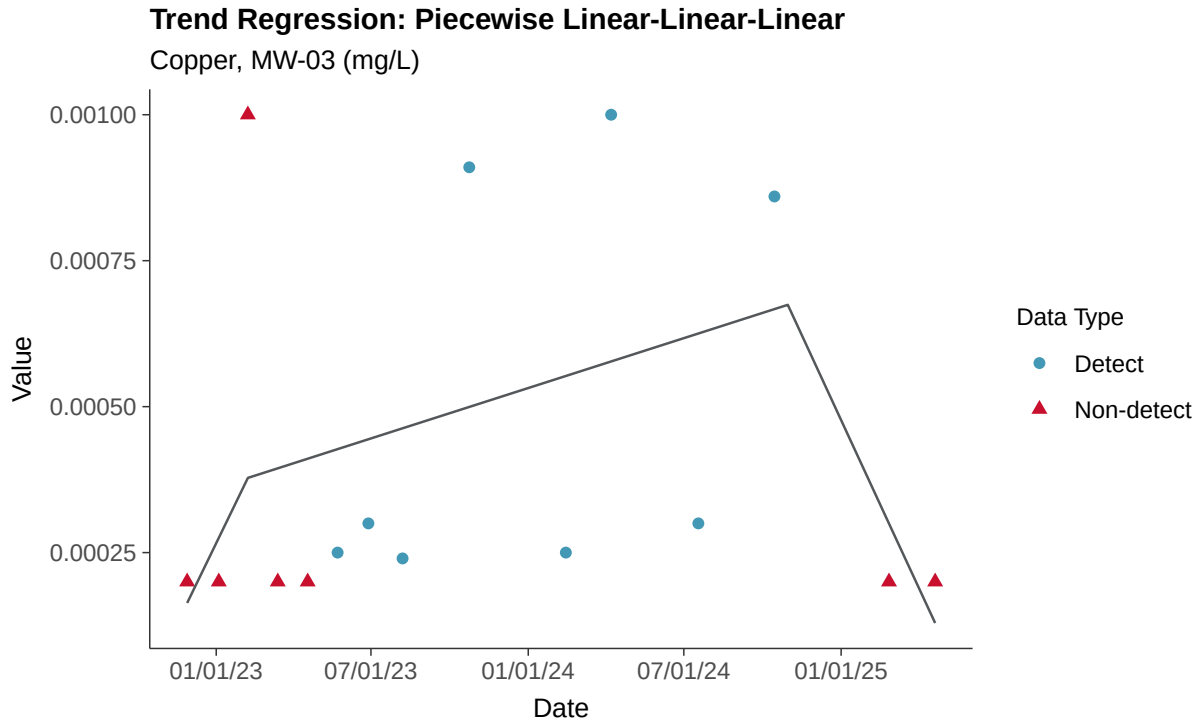
Copper, MW-03 (mg/L)



Trend Regression: Piecewise Linear-Linear

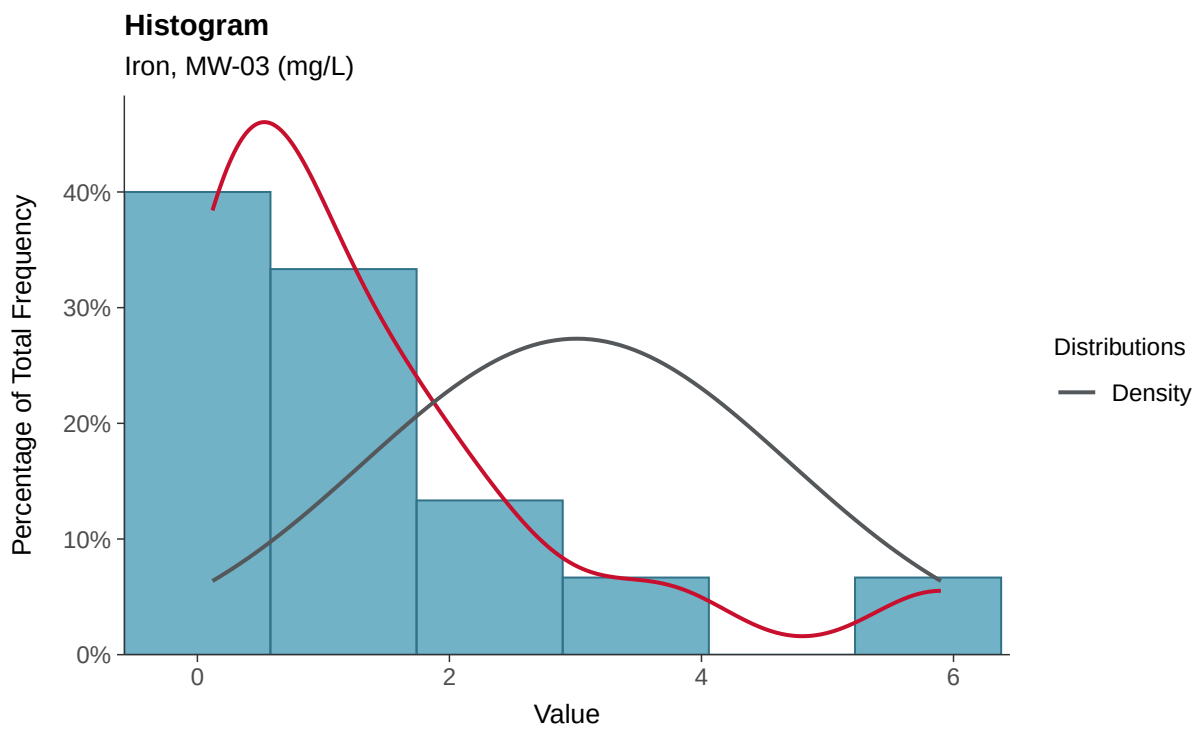
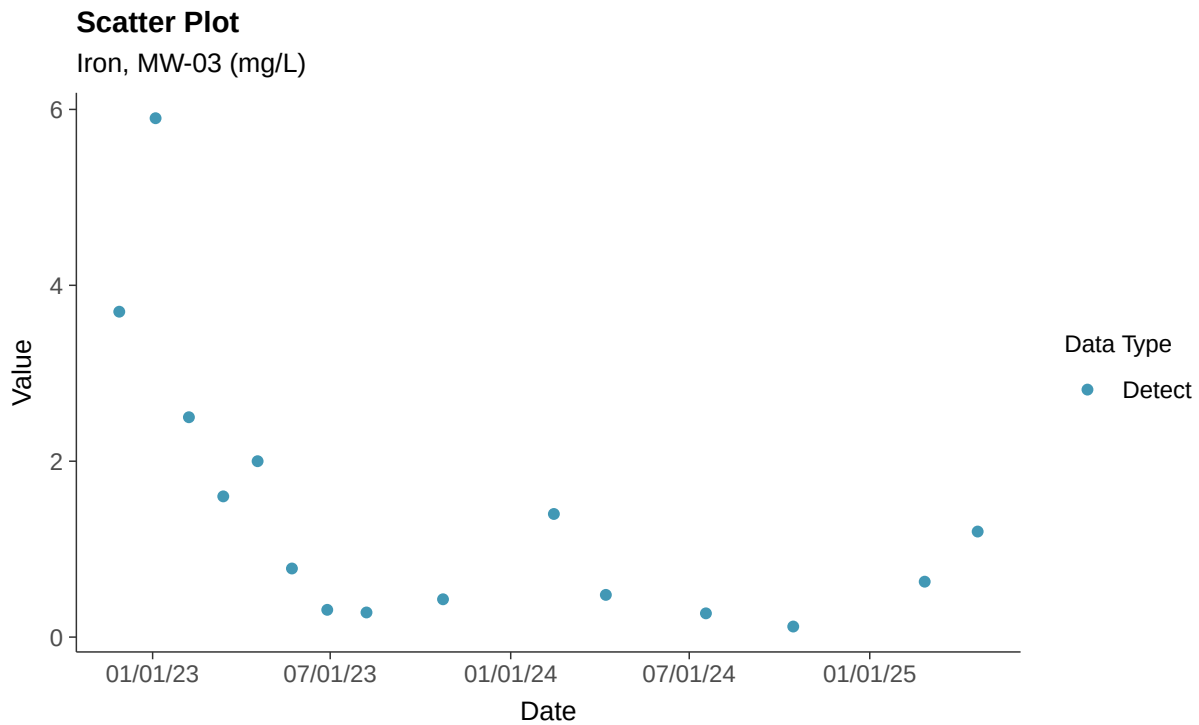
Copper, MW-03 (mg/L)





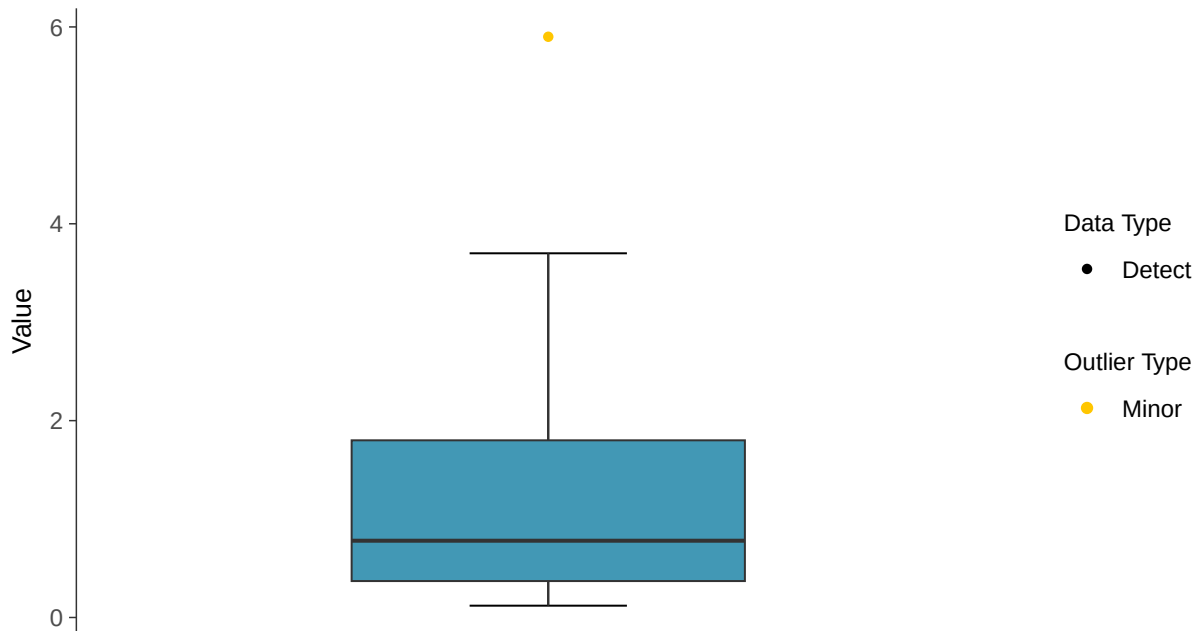
Part 115: Iron, MW-03

ID: 13_2_5_114



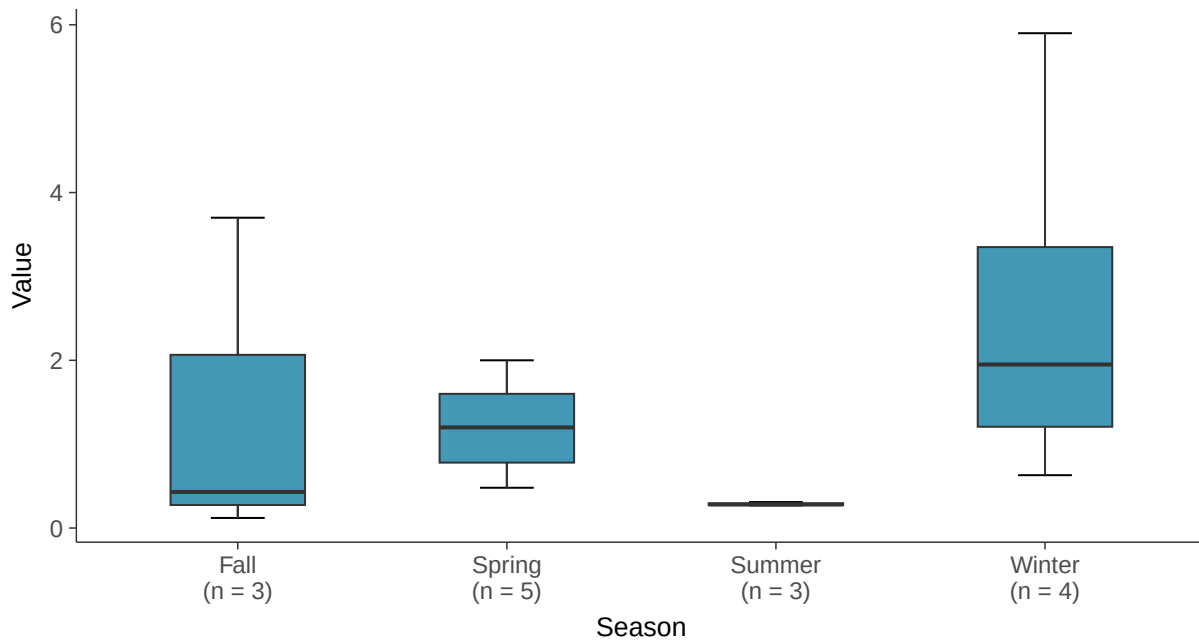
Boxplot

Iron, MW-03 (mg/L)



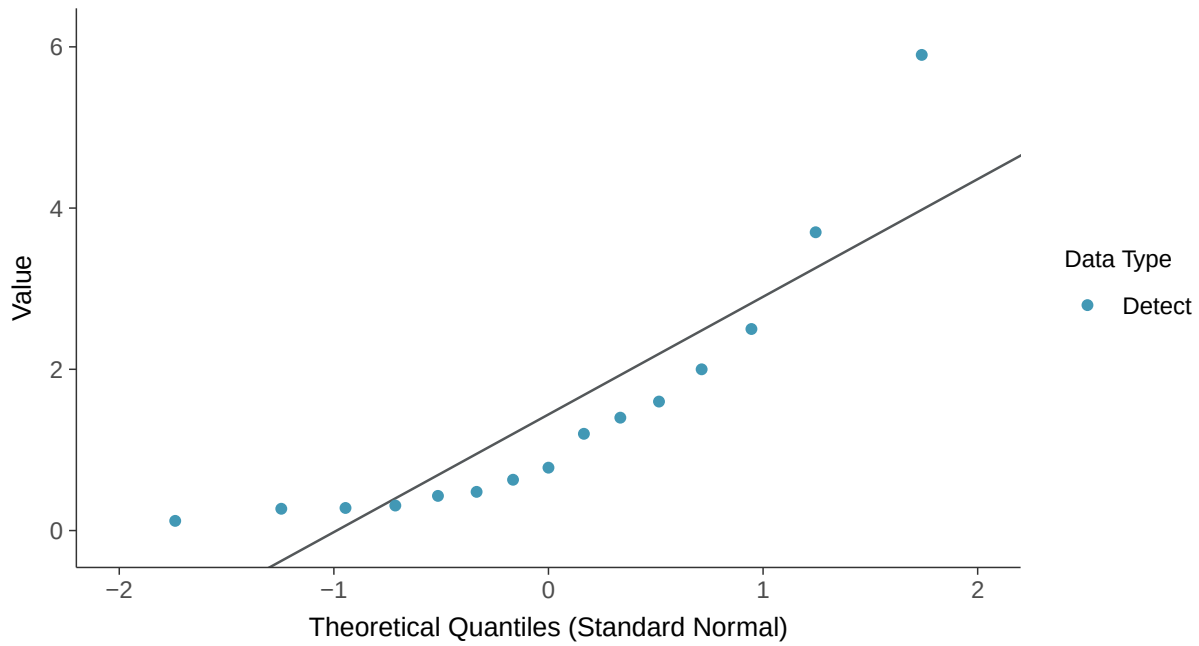
Boxplot by Season

Iron, MW-03 (mg/L)



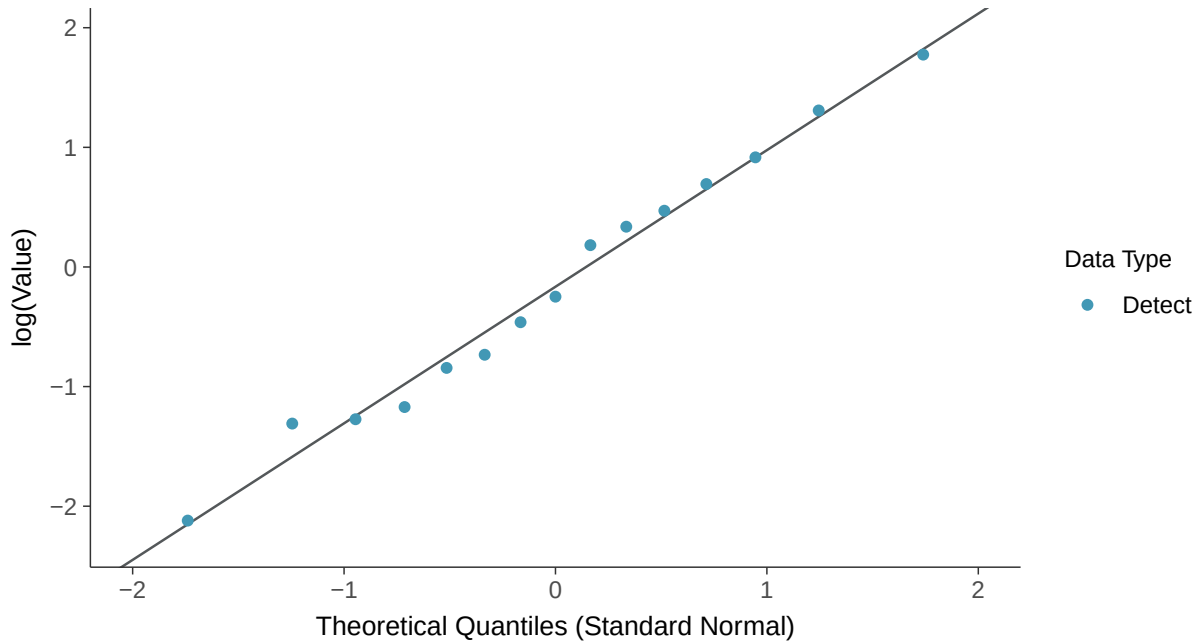
Normal Q-Q plot

Iron, MW-03 (mg/L)

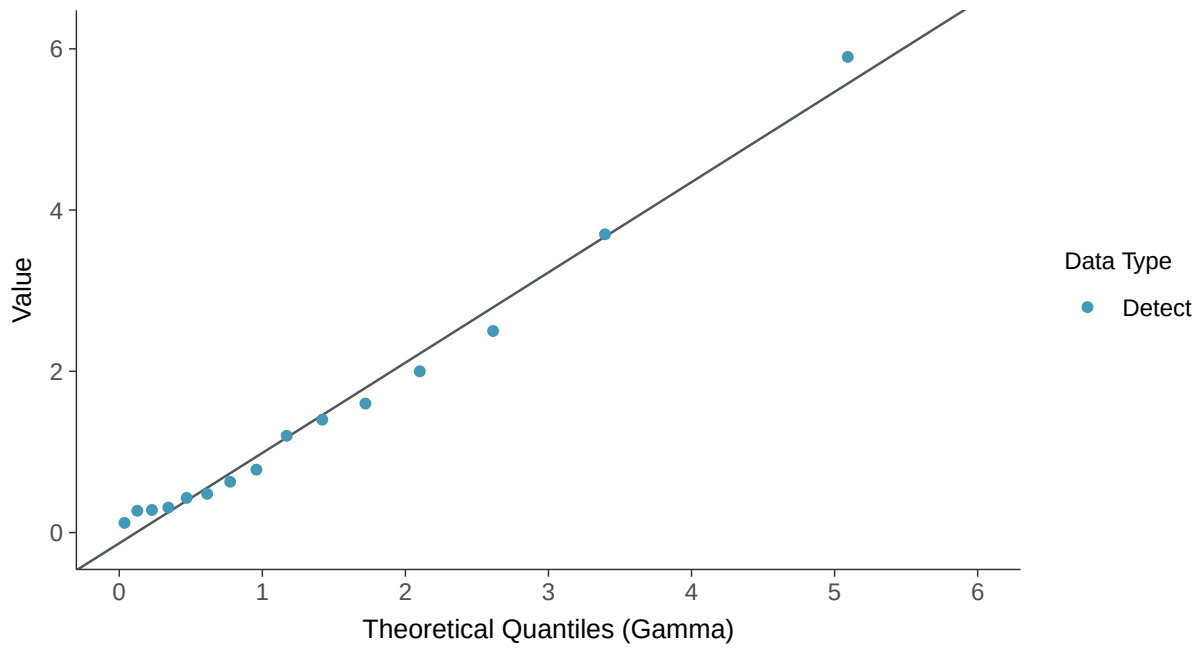


Lognormal Q-Q plot

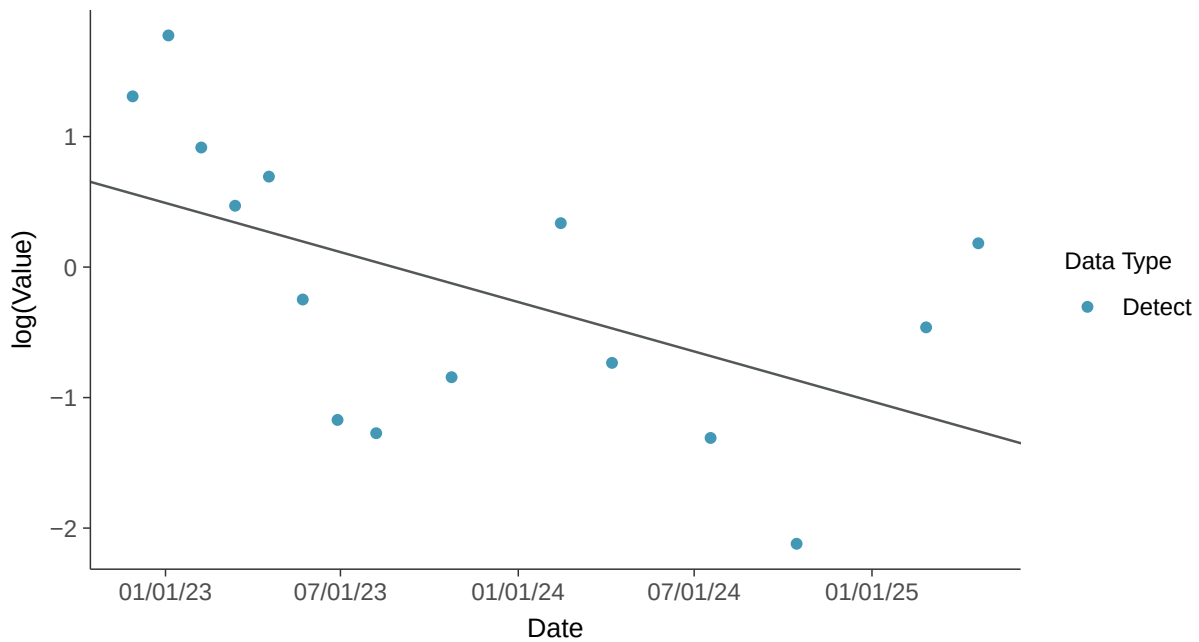
Iron, MW-03 (mg/L)



Iron, MW-03 (mg/L)



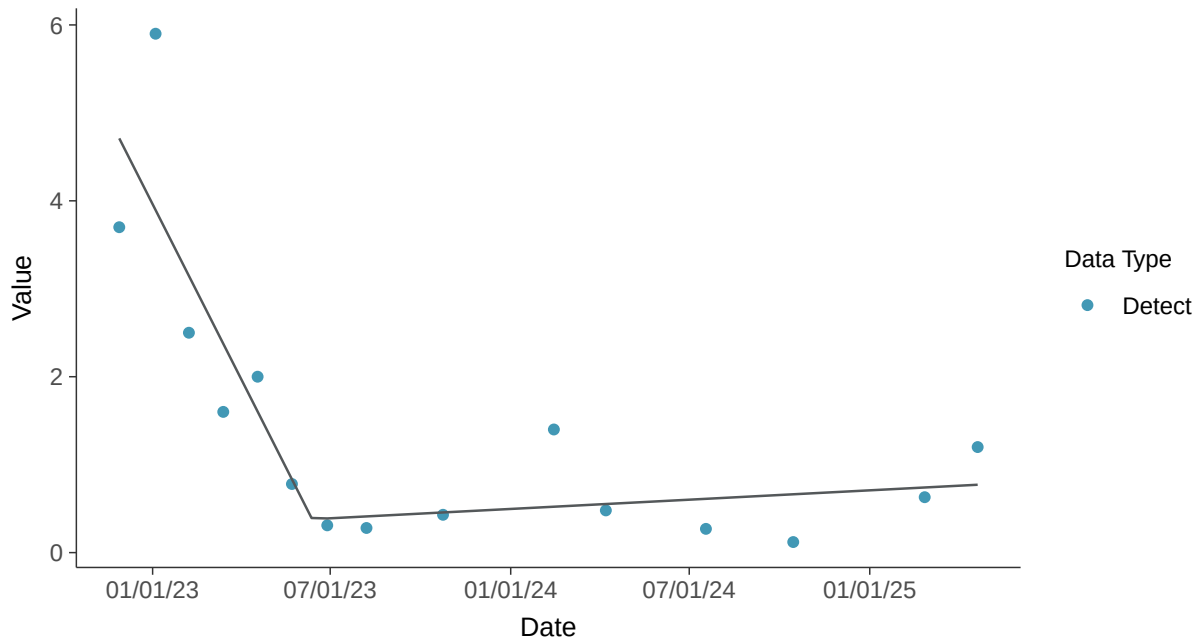
Iron, MW-03 (mg/L)





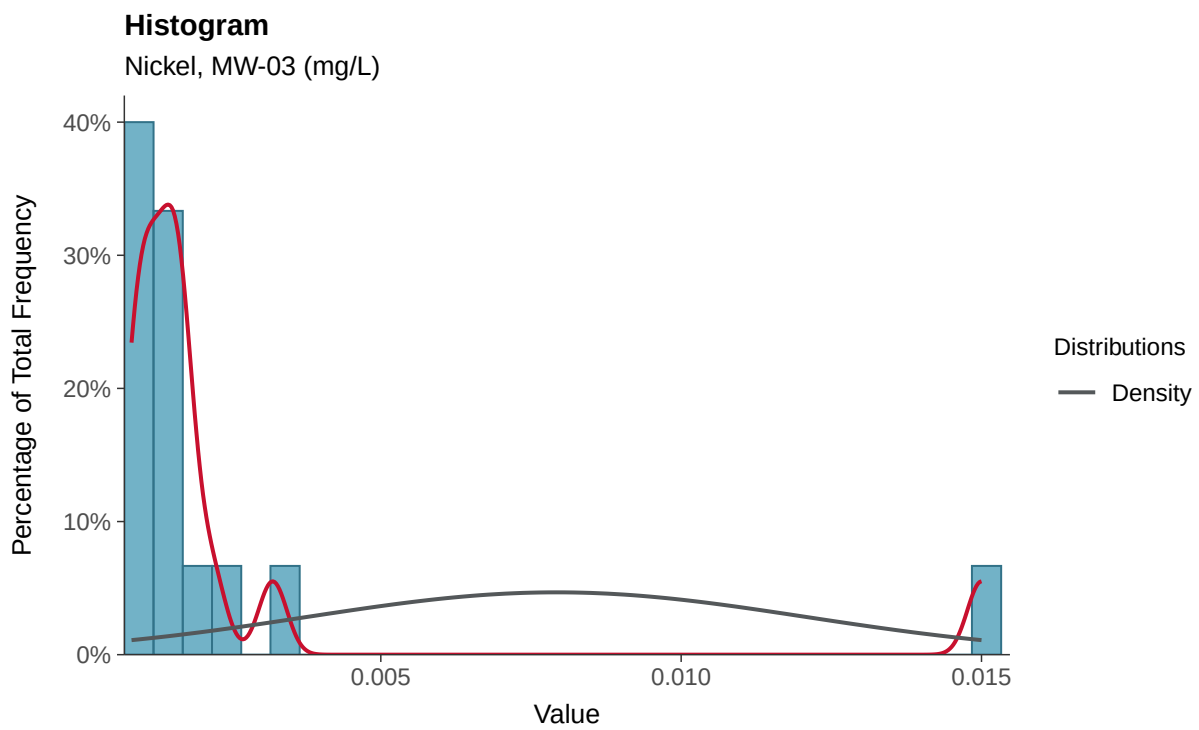
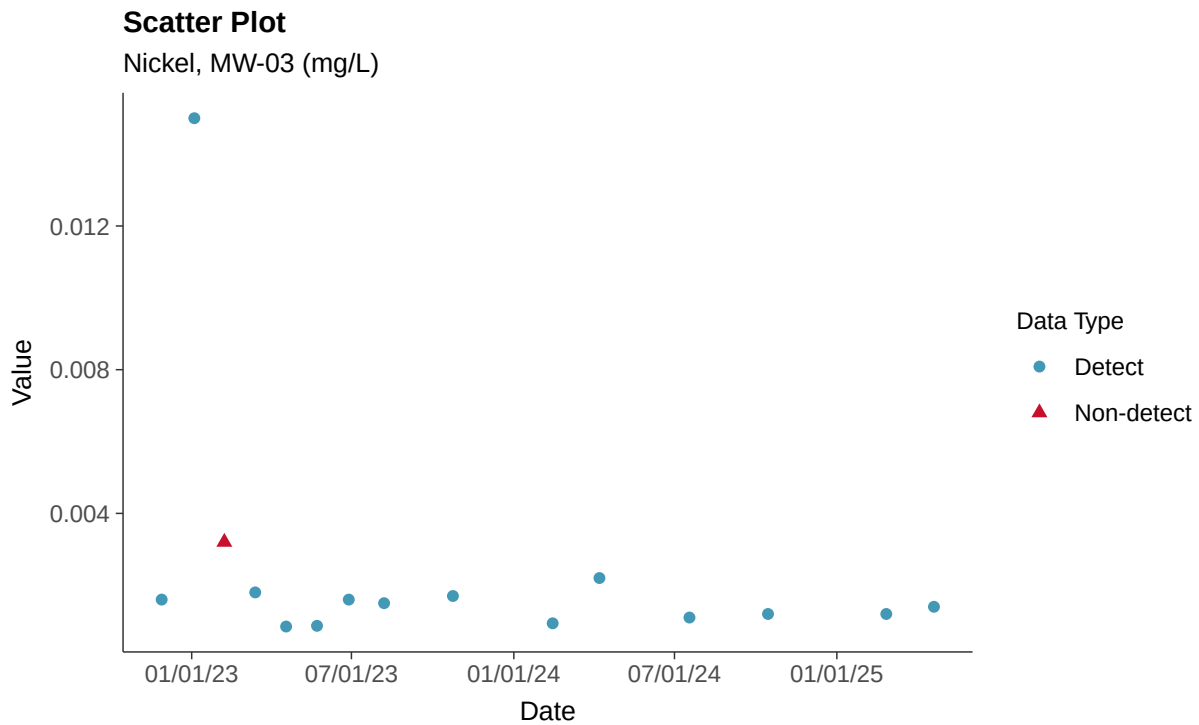
Trend Regression: Piecewise Linear-Linear

Iron, MW-03 (mg/L)



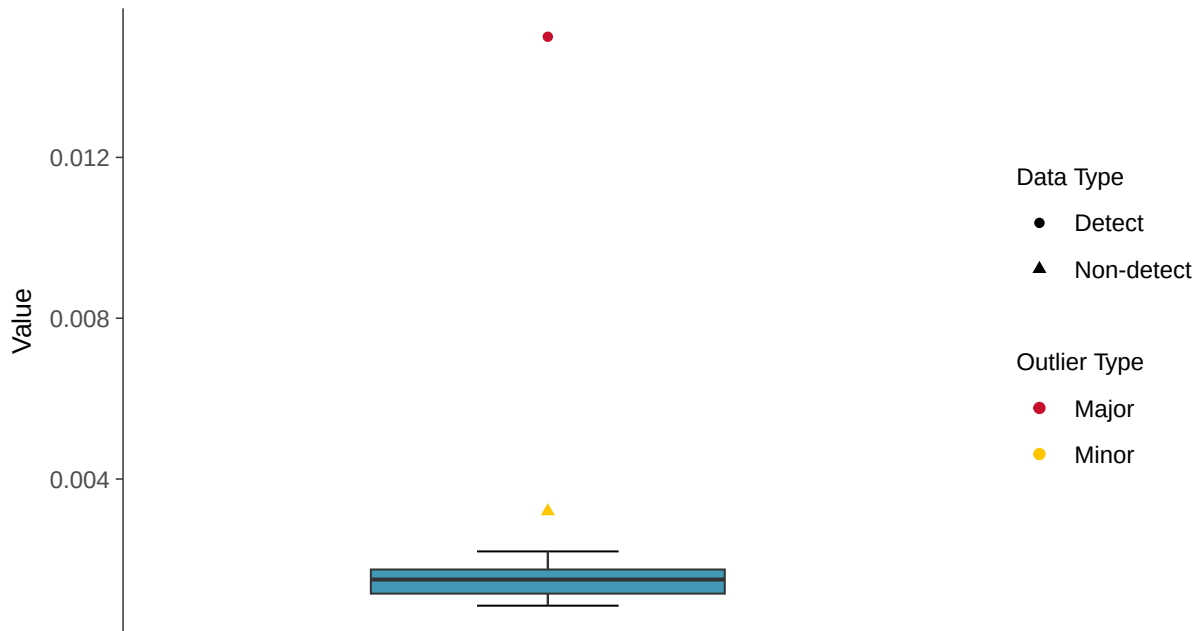
Part 115: Nickel, MW-03

ID: 13_2_5_119



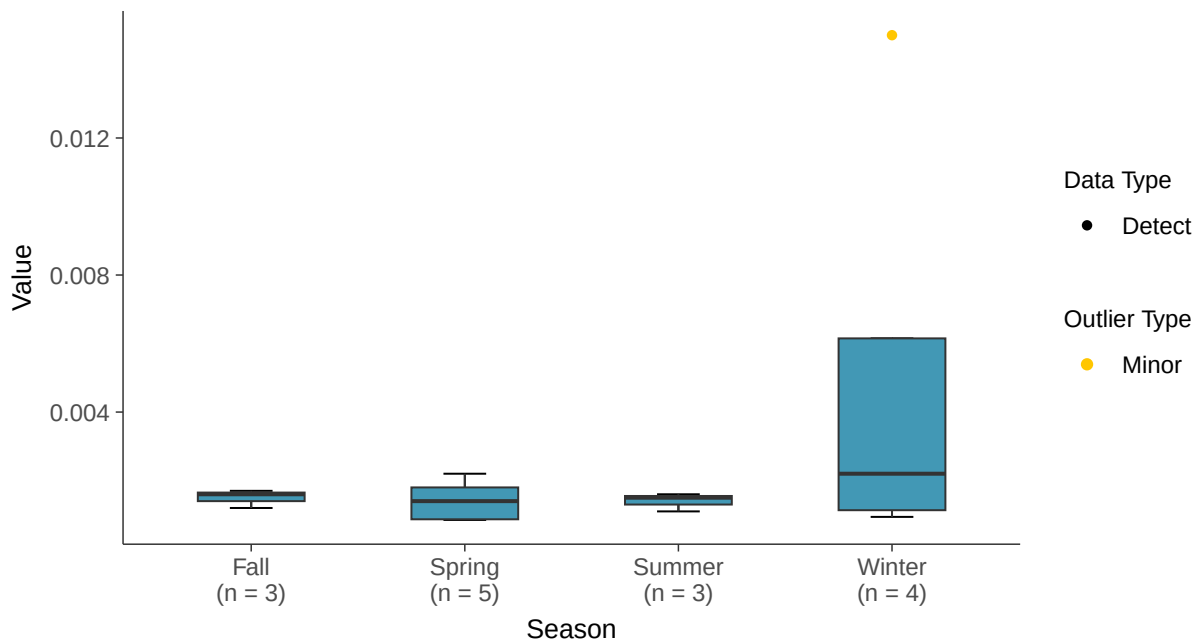
Boxplot

Nickel, MW-03 (mg/L)



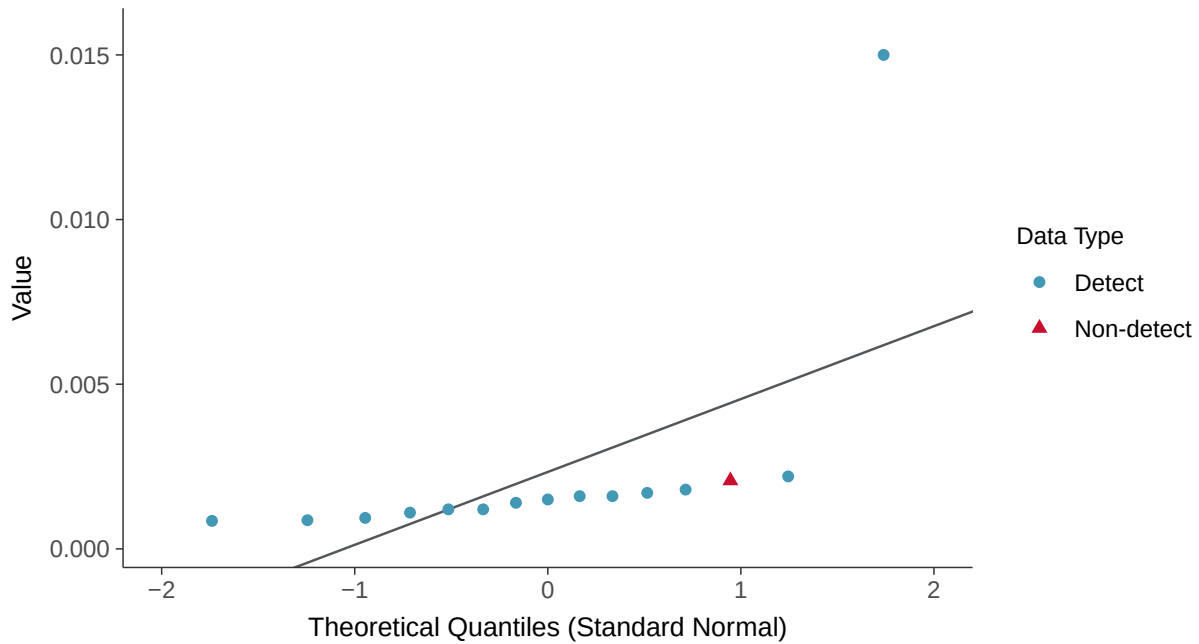
Boxplot by Season

Nickel, MW-03 (mg/L)



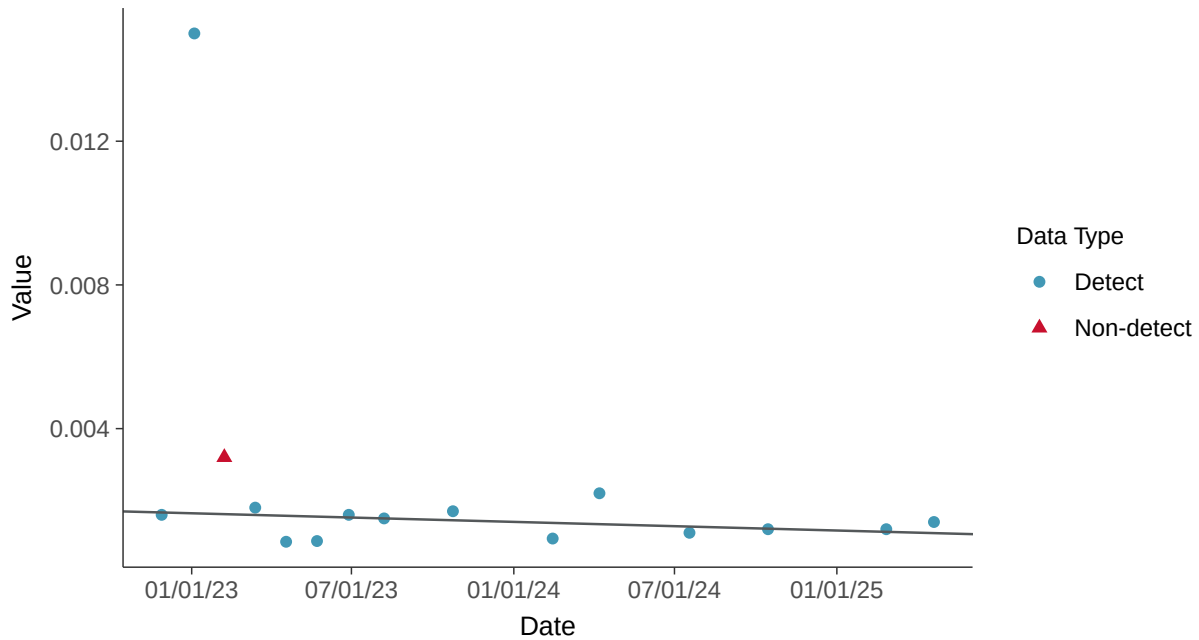
Normal Q-Q plot using ROS Imputed Estimates

Nickel, MW-03 (mg/L)



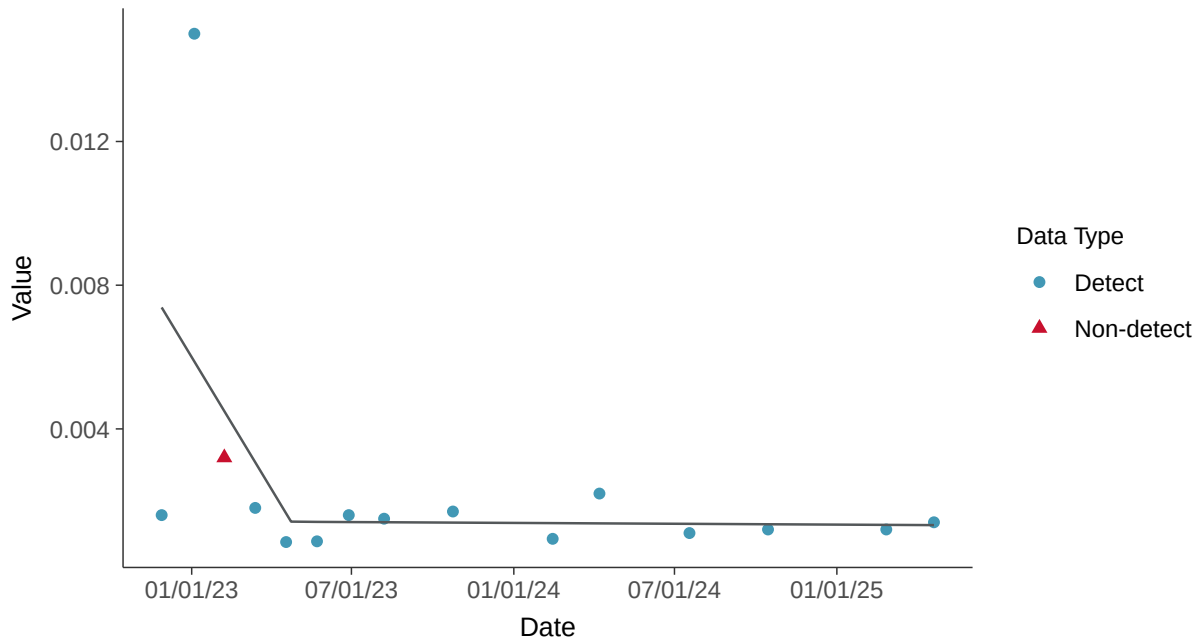
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Nickel, MW-03 (mg/L)



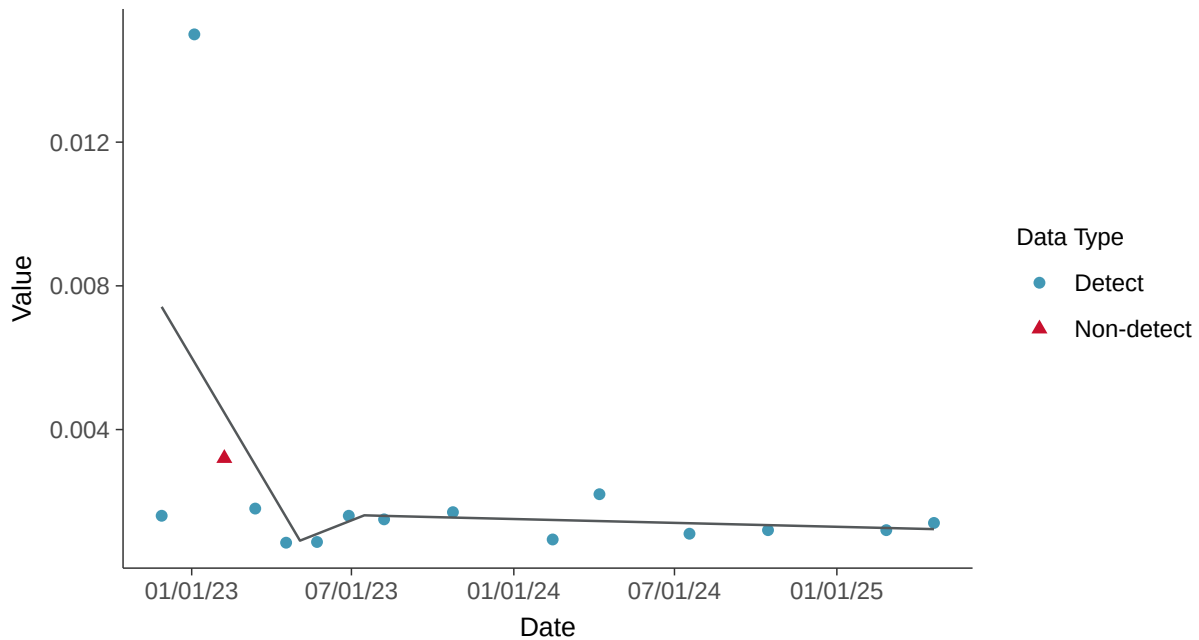
Trend Regression: Piecewise Linear-Linear

Nickel, MW-03 (mg/L)



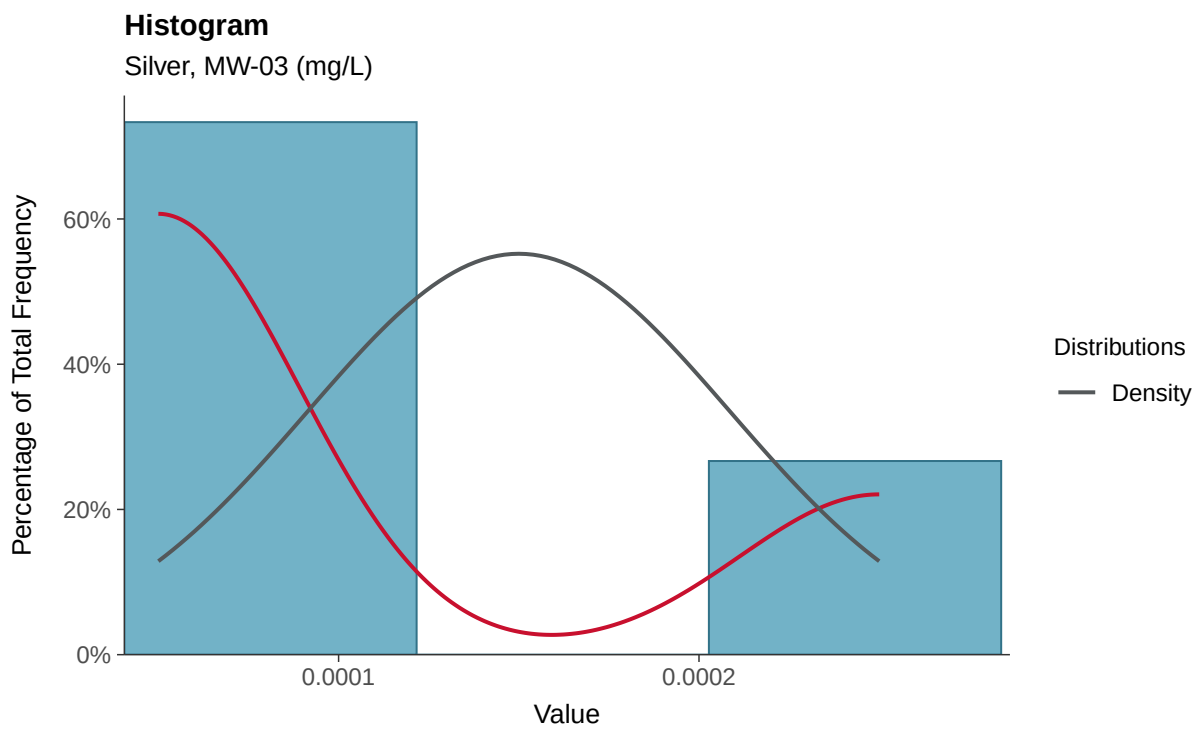
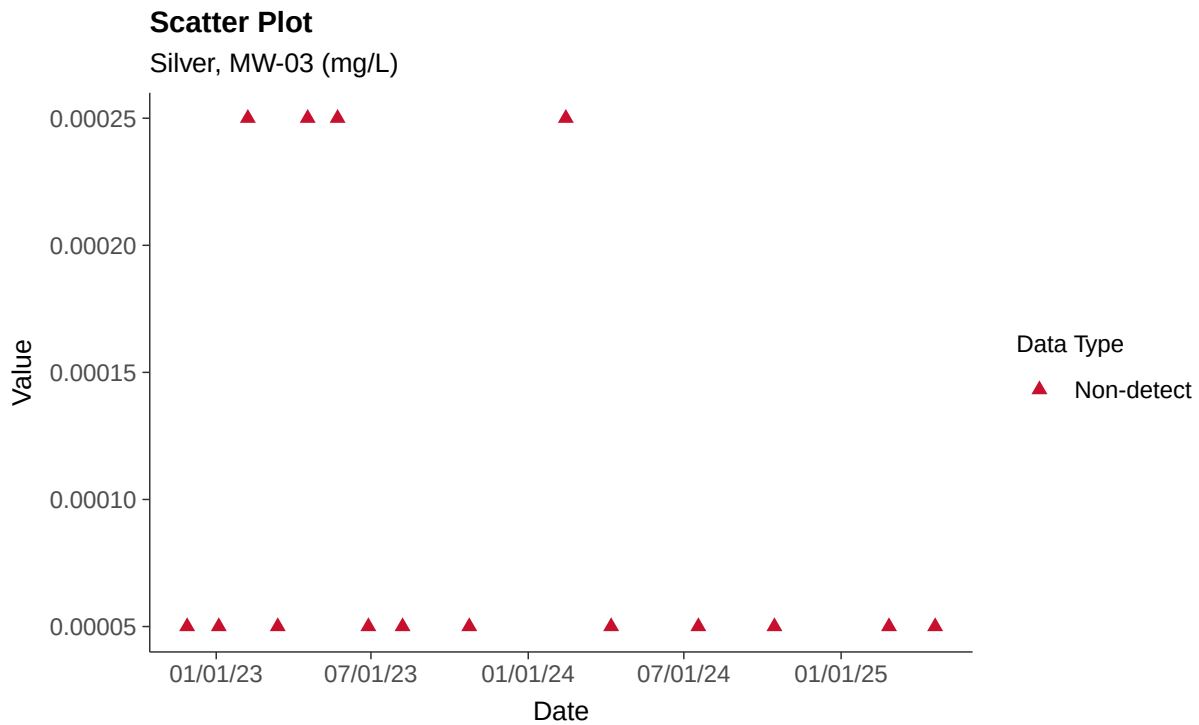
Trend Regression: Piecewise Linear-Linear-Linear

Nickel, MW-03 (mg/L)



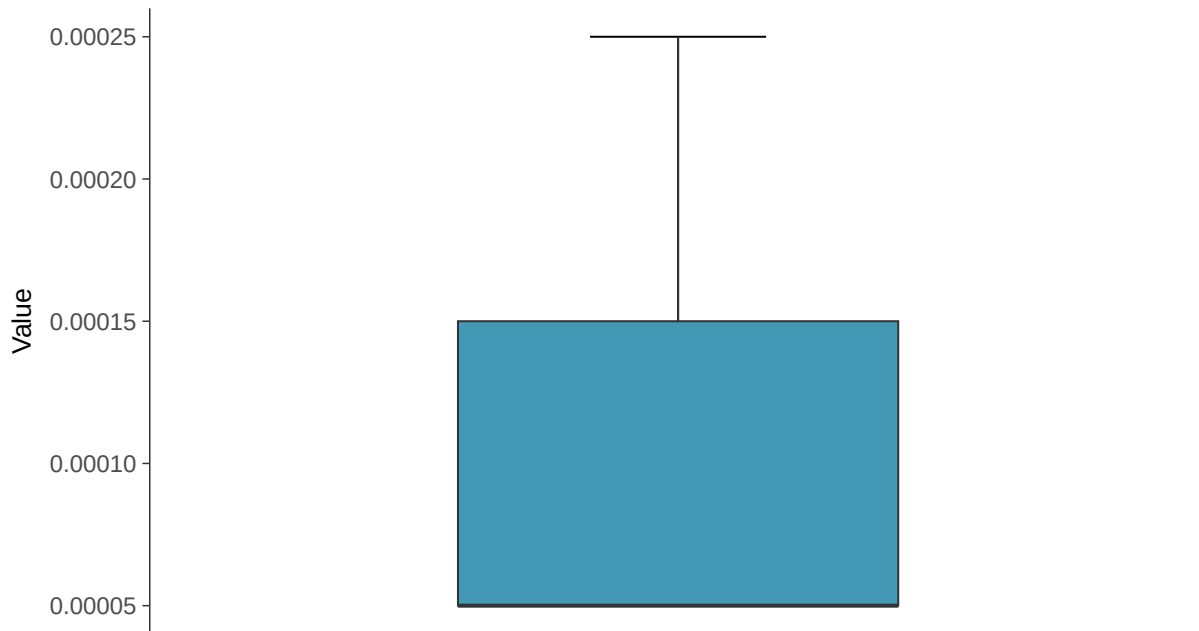
Part 115: Silver, MW-03

ID: 13_2_5_123



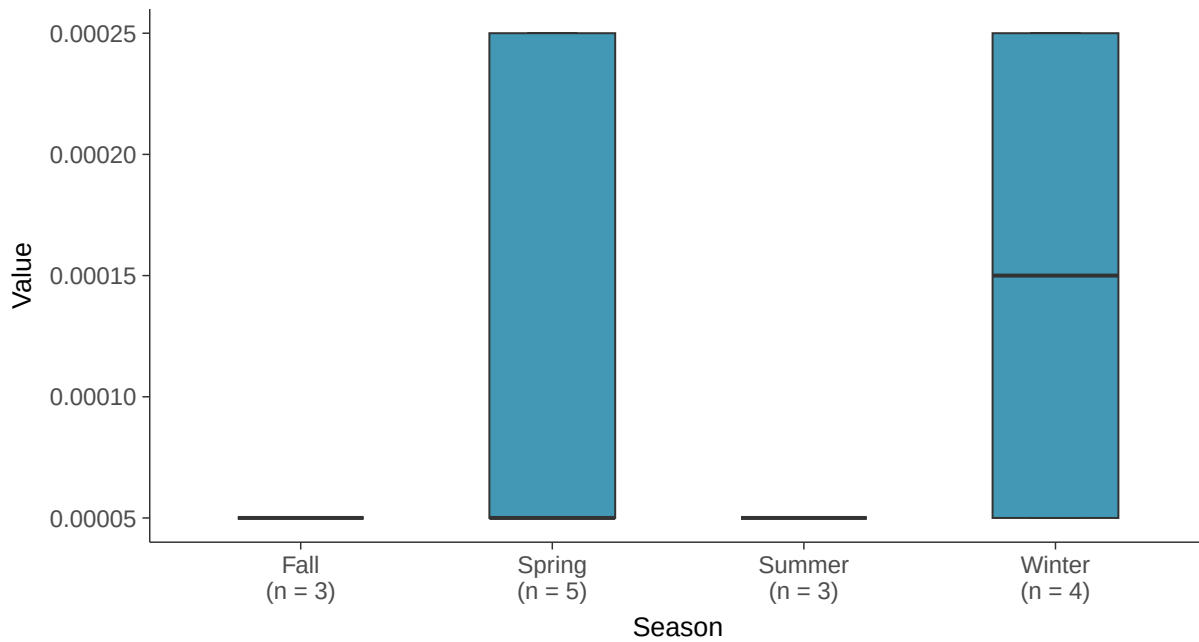
Boxplot

Silver, MW-03 (mg/L)



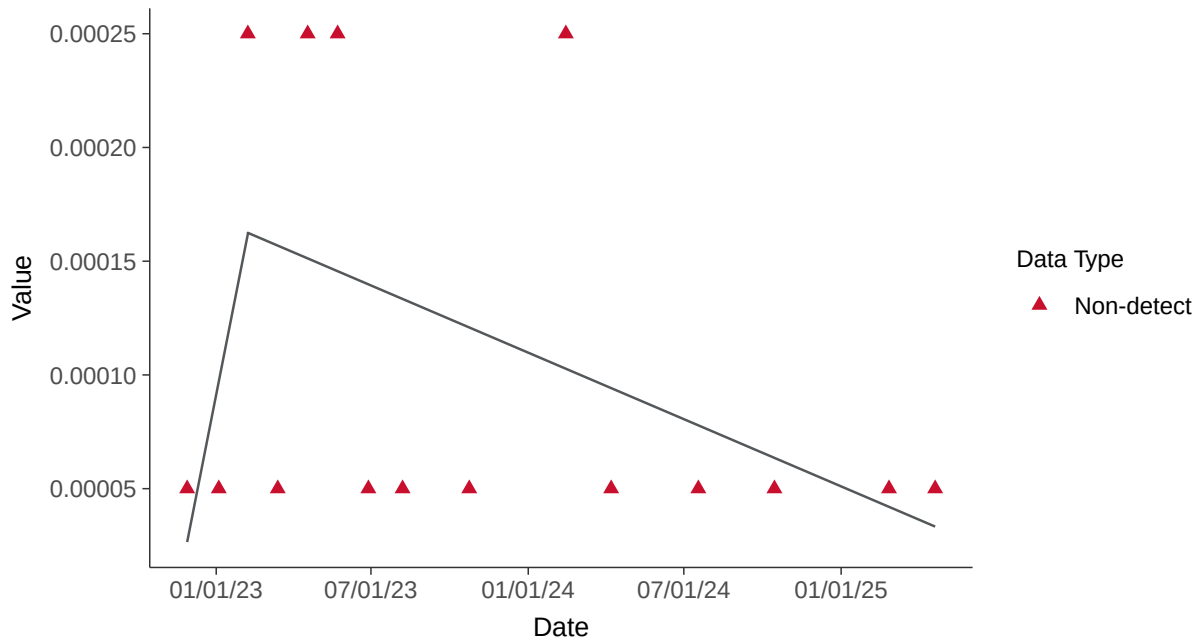
Boxplot by Season

Silver, MW-03 (mg/L)



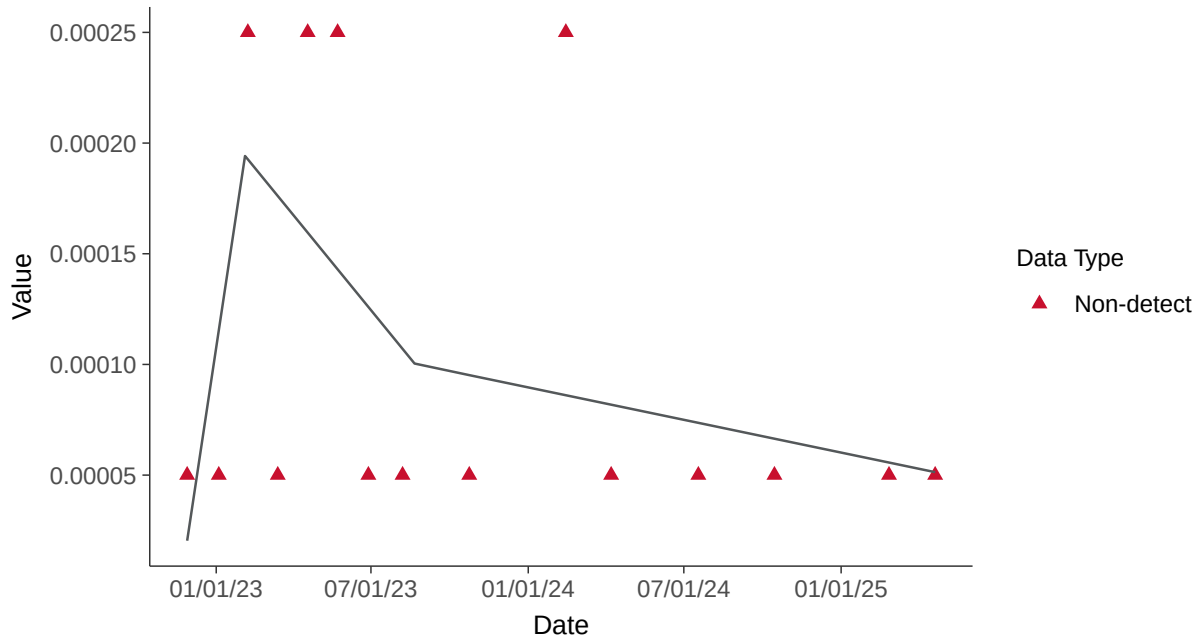
Trend Regression: Piecewise Linear-Linear

Silver, MW-03 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Silver, MW-03 (mg/L)

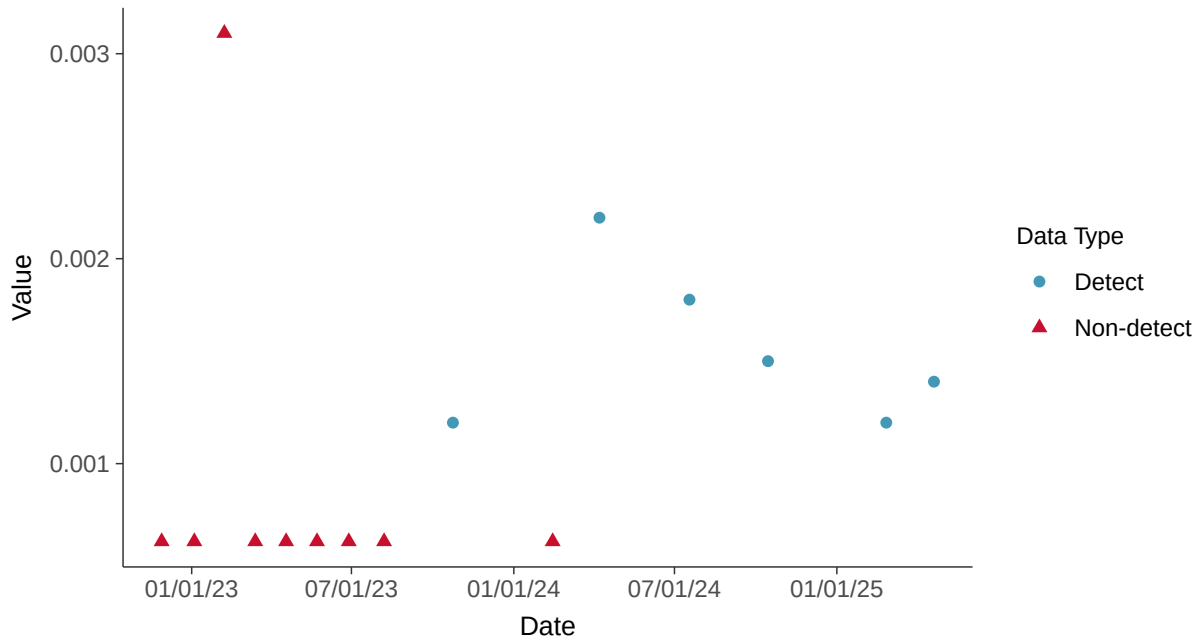


Part 115: Vanadium, MW-03

ID: 13_2_5_128

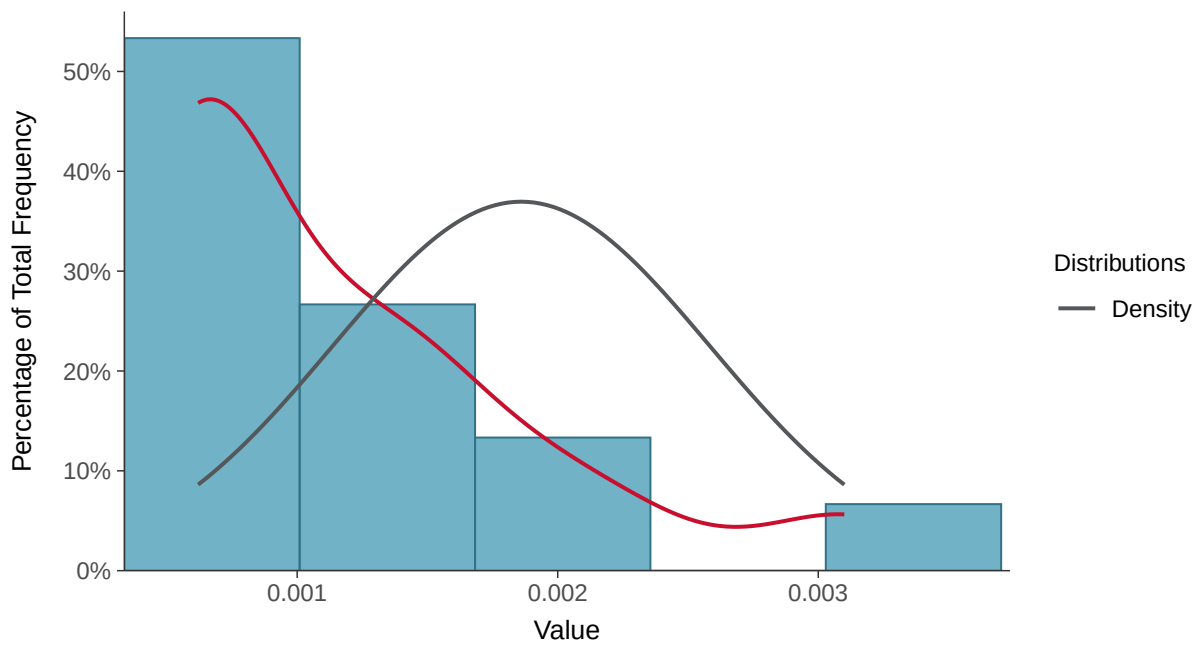
Scatter Plot

Vanadium, MW-03 (mg/L)



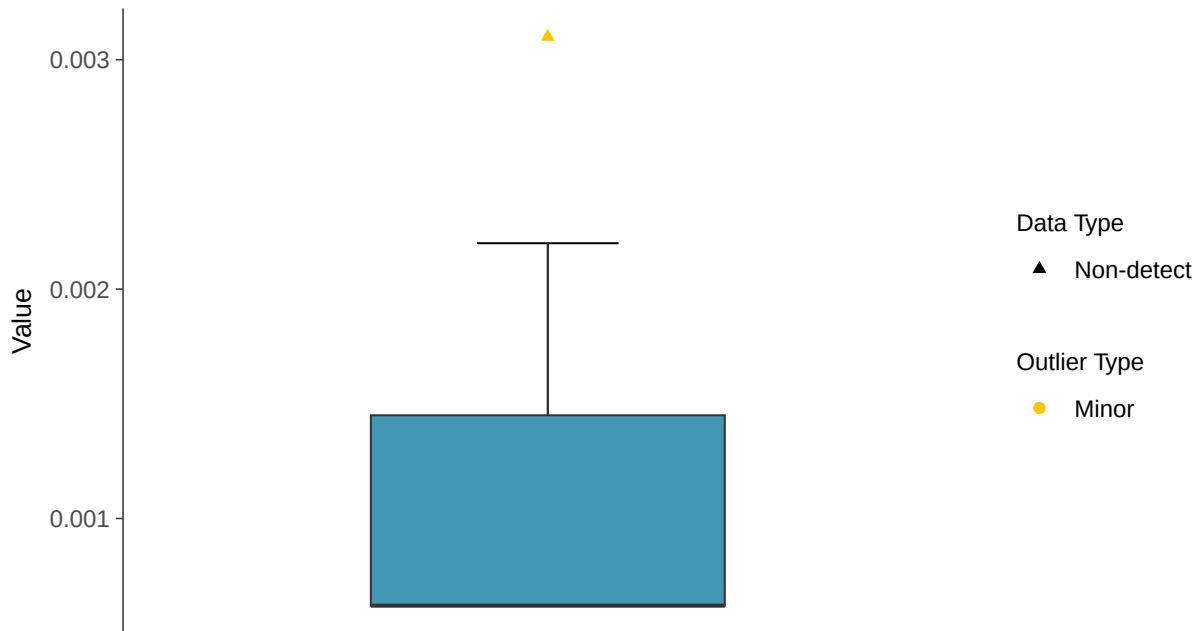
Histogram

Vanadium, MW-03 (mg/L)



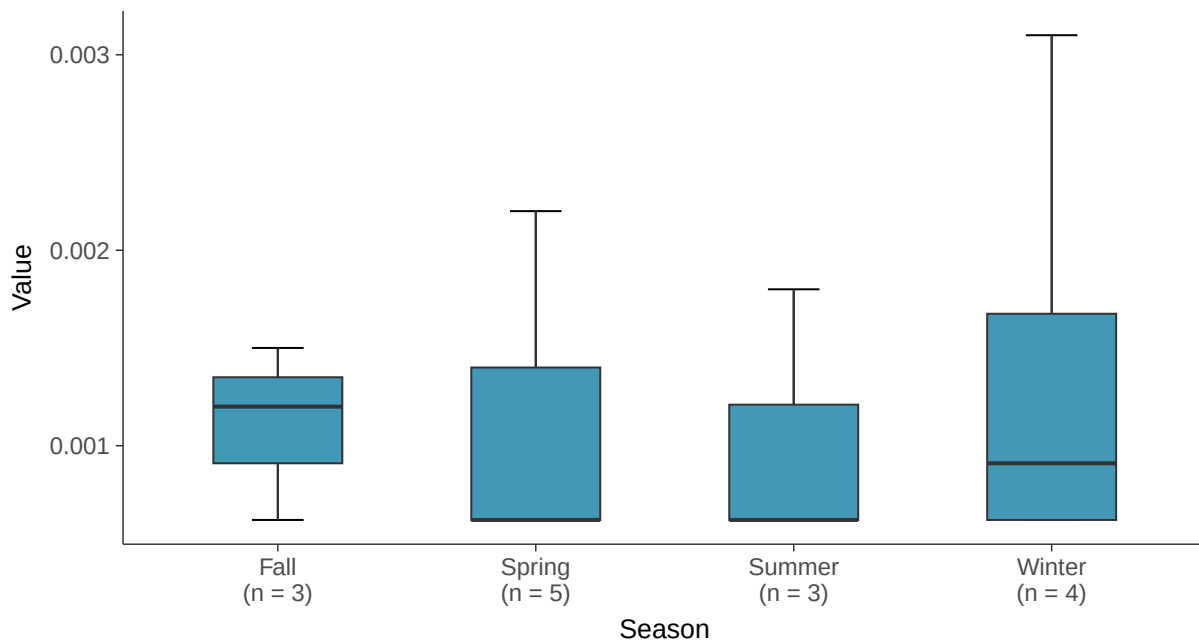
Boxplot

Vanadium, MW-03 (mg/L)



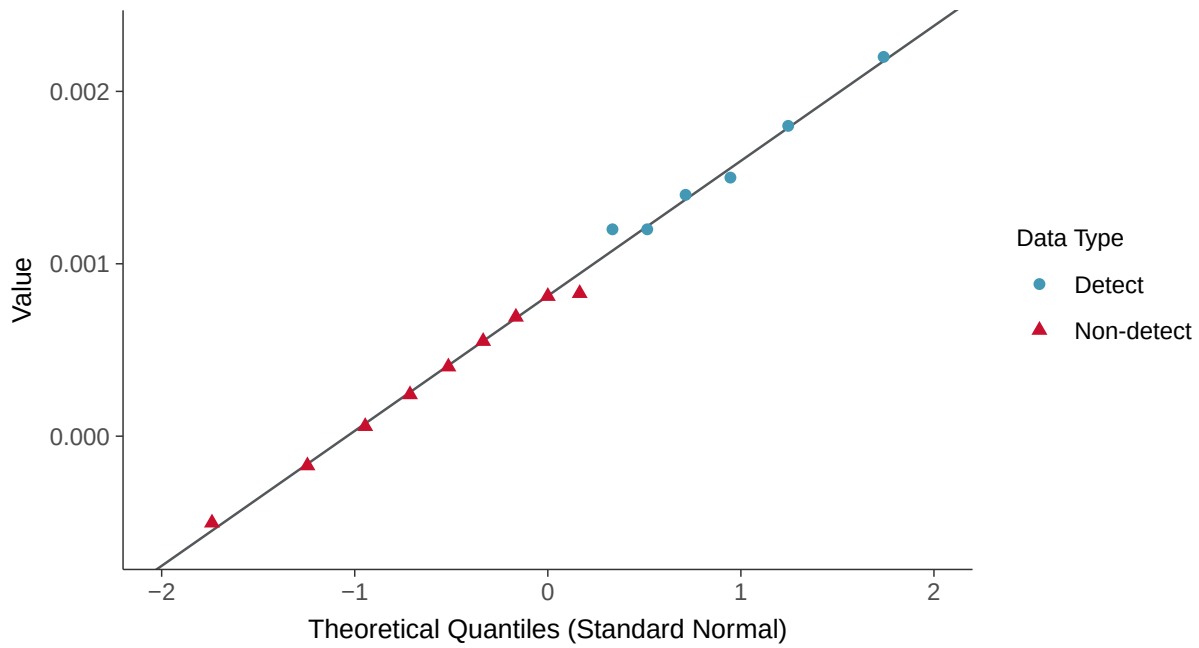
Boxplot by Season

Vanadium, MW-03 (mg/L)



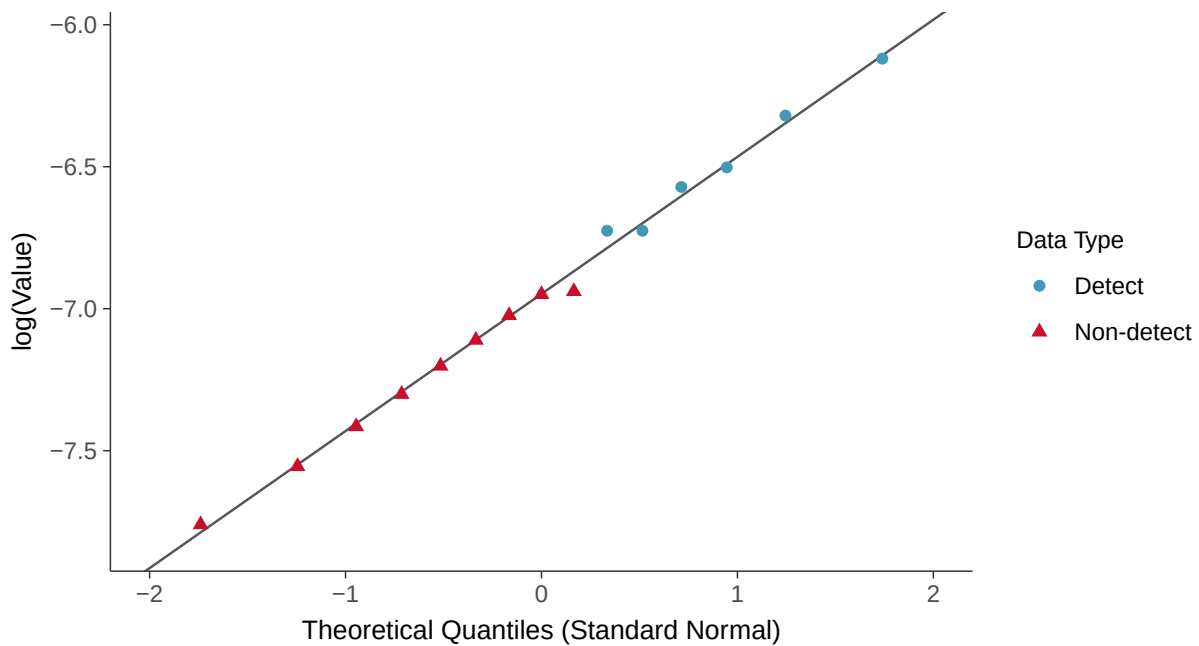
Normal Q-Q plot using ROS Imputed Estimates

Vanadium, MW-03 (mg/L)



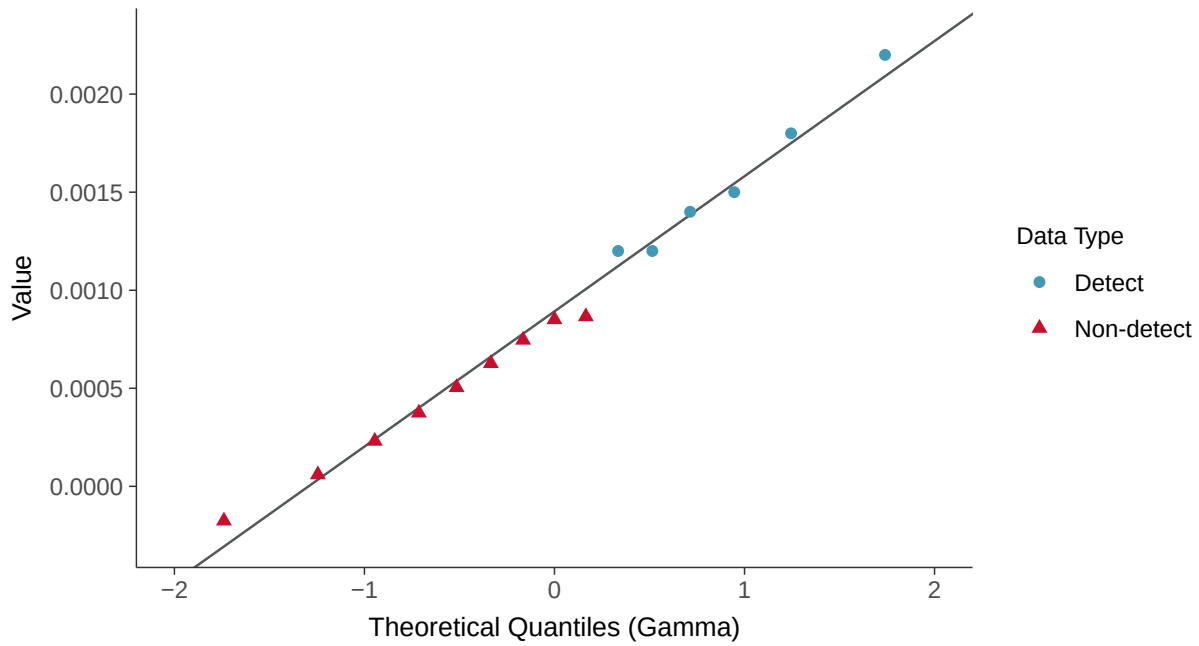
Lognormal Q-Q plot using ROS Imputed Estimates

Vanadium, MW-03 (mg/L)



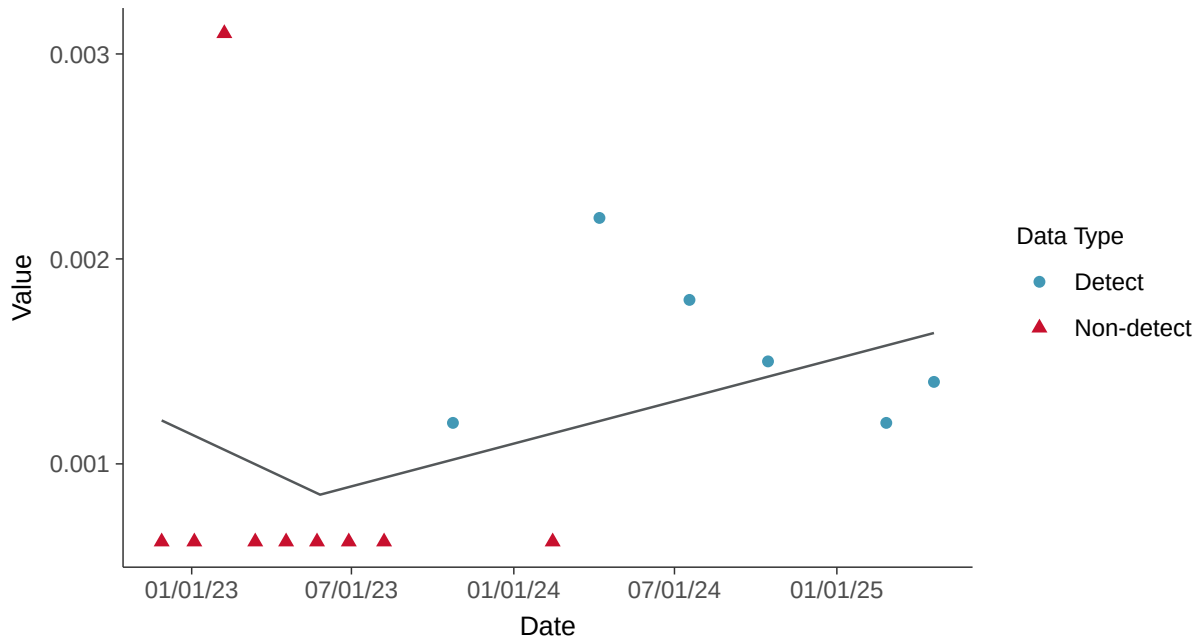
Gamma Q-Q plot using ROS Imputed Estimates

Vanadium, MW-03 (mg/L)



Trend Regression: Piecewise Linear-Linear

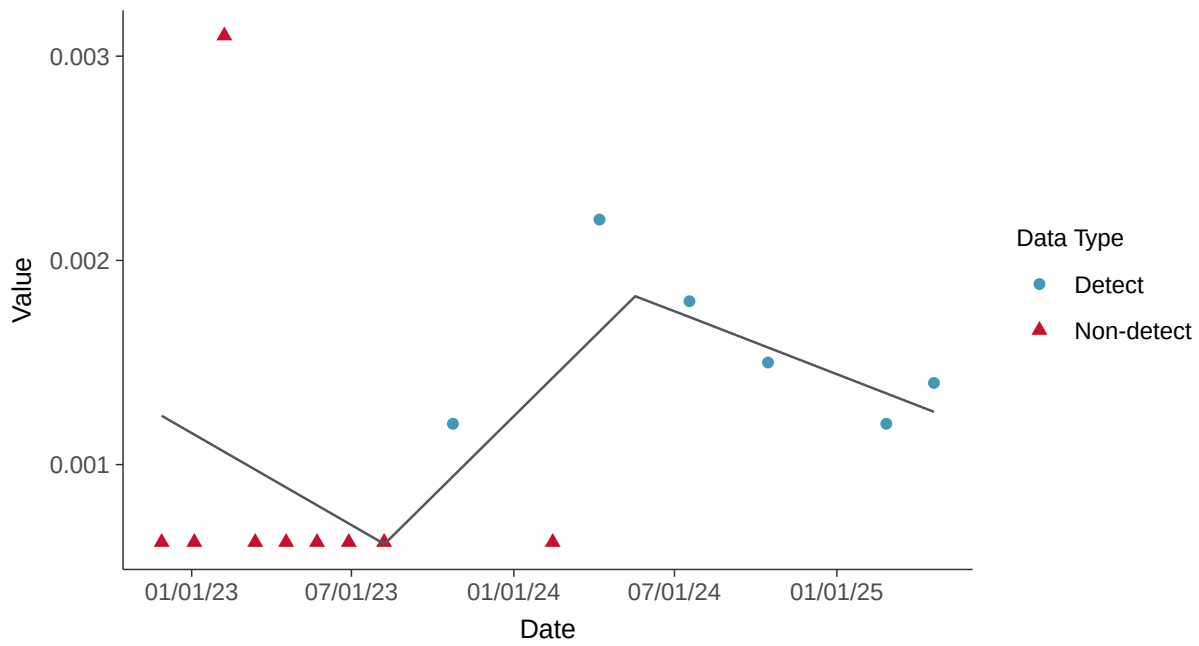
Vanadium, MW-03 (mg/L)





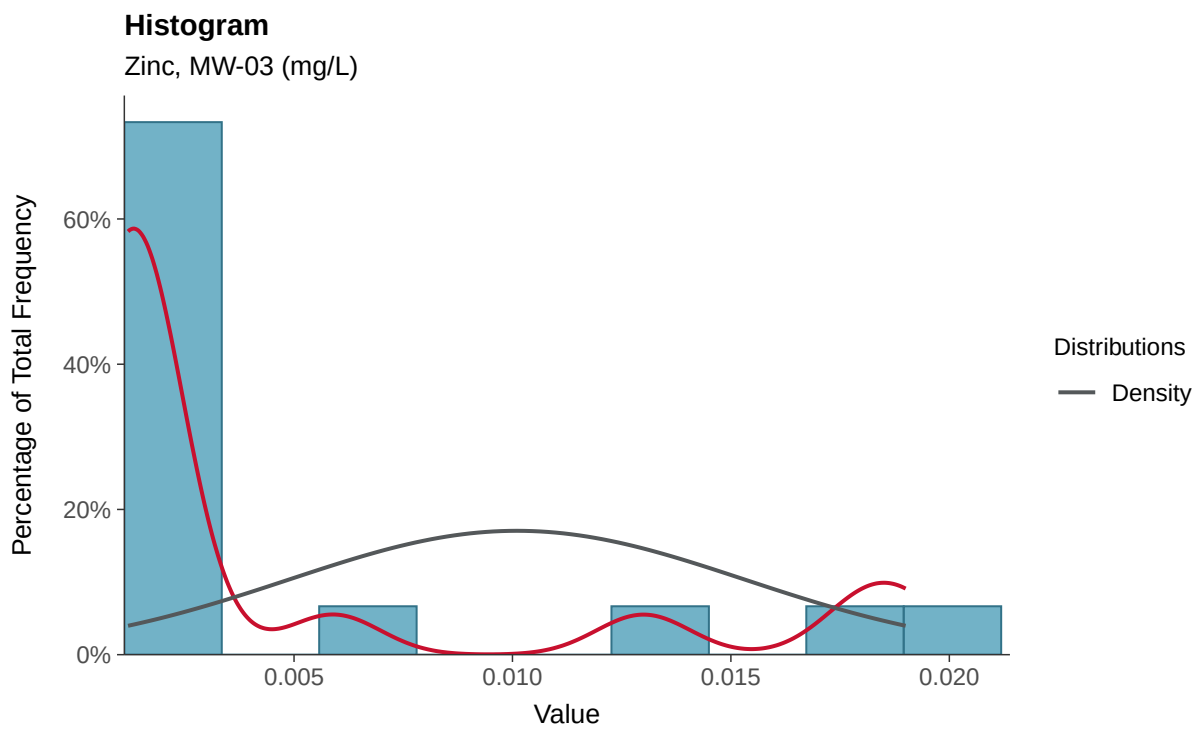
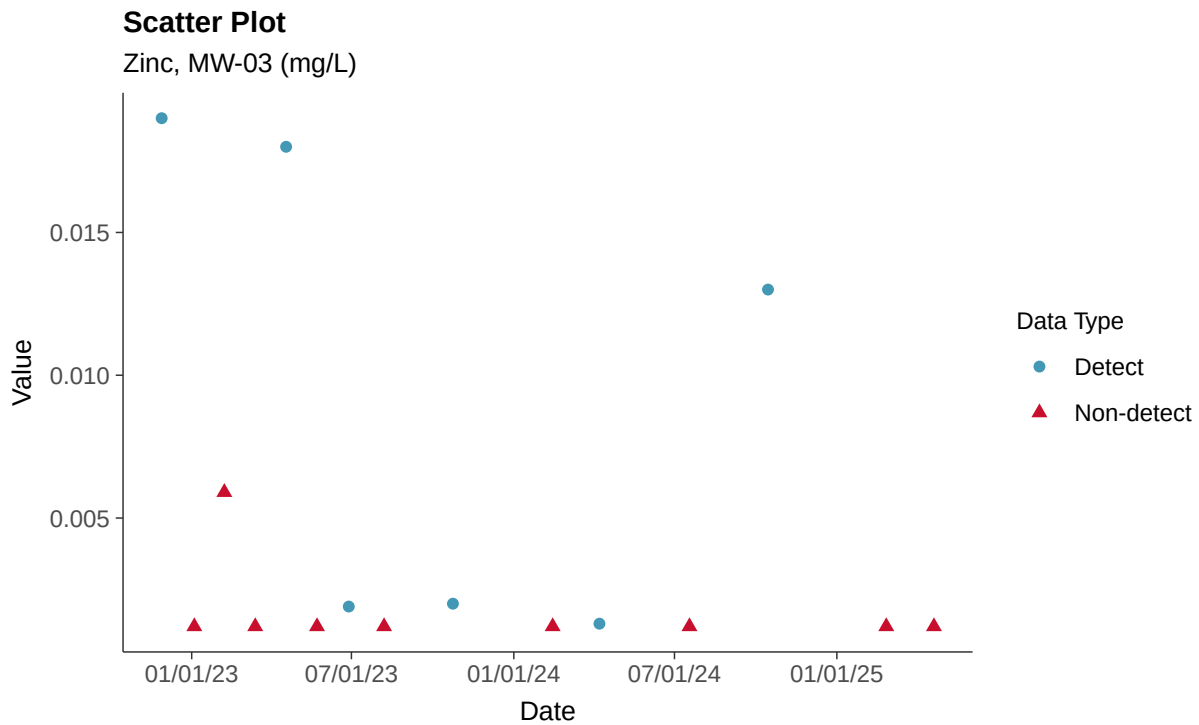
Trend Regression: Piecewise Linear-Linear-Linear

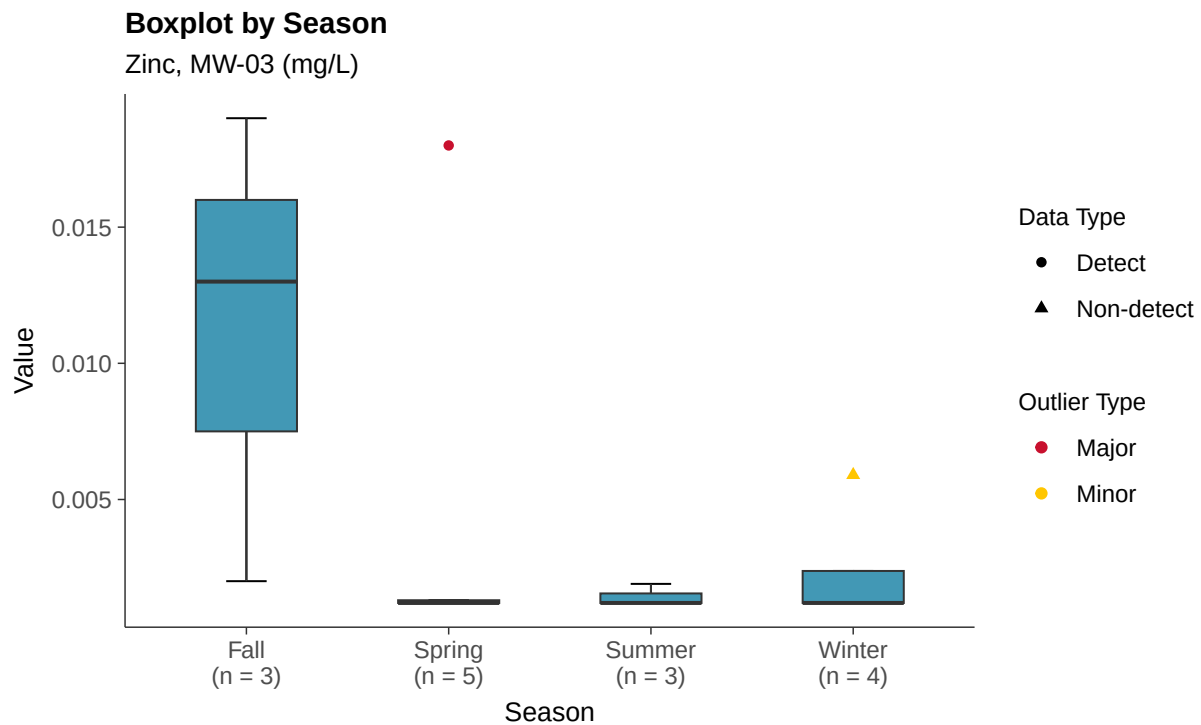
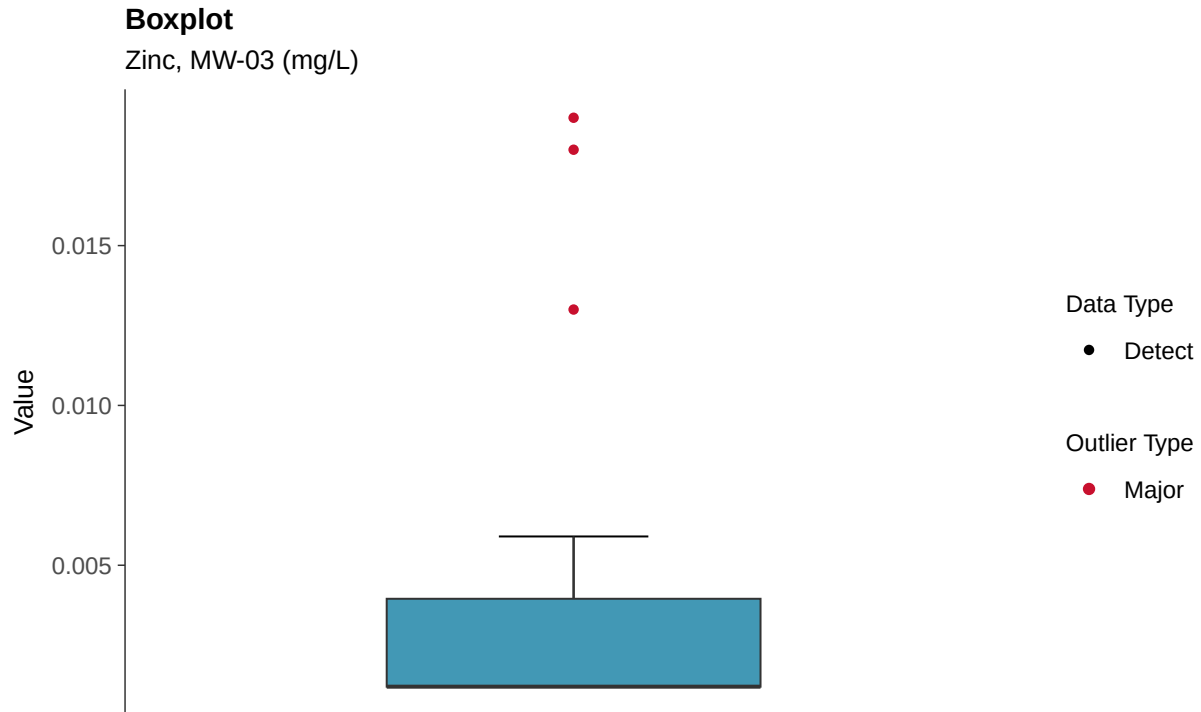
Vanadium, MW-03 (mg/L)



Part 115: Zinc, MW-03

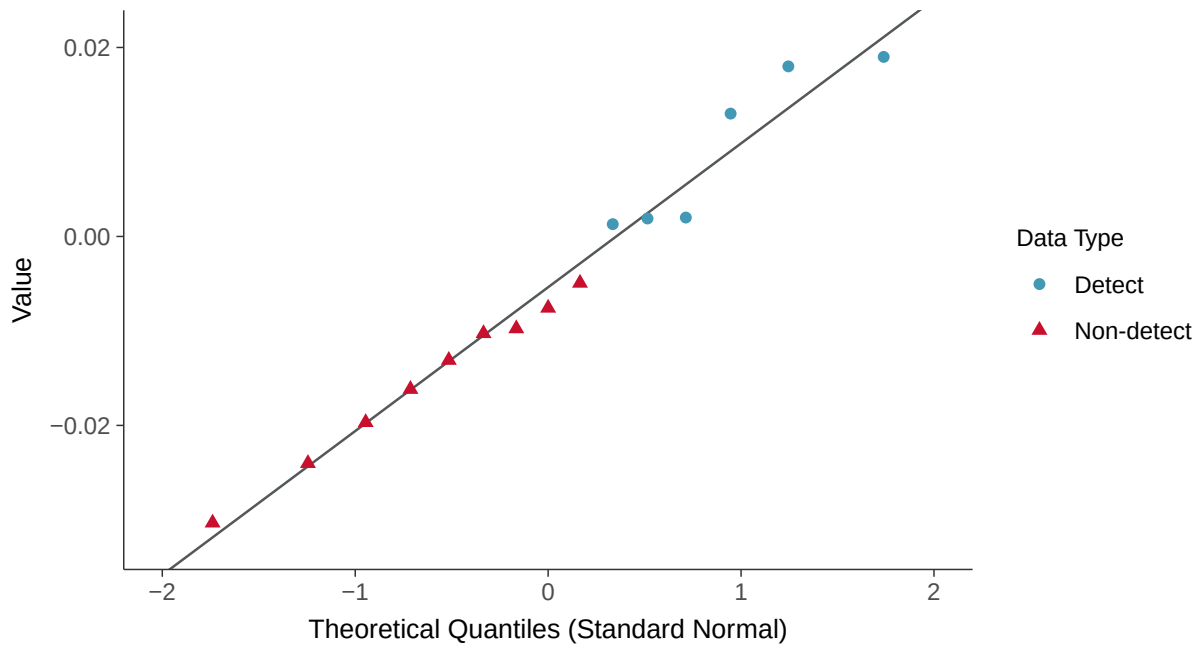
ID: 13_2_5_129





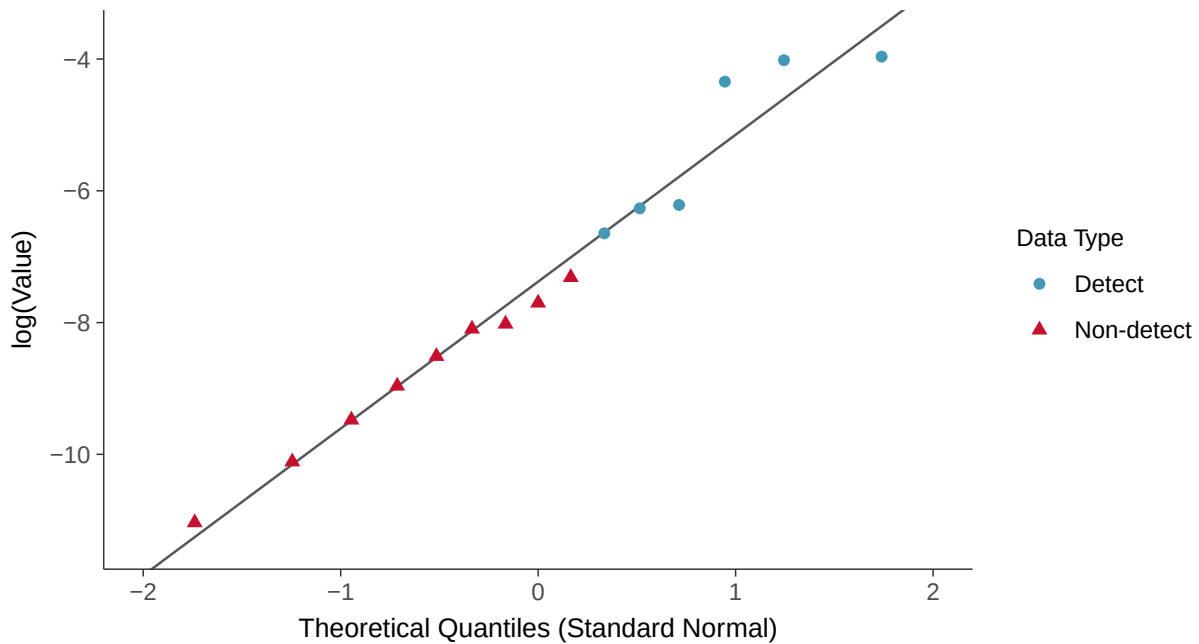
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-03 (mg/L)



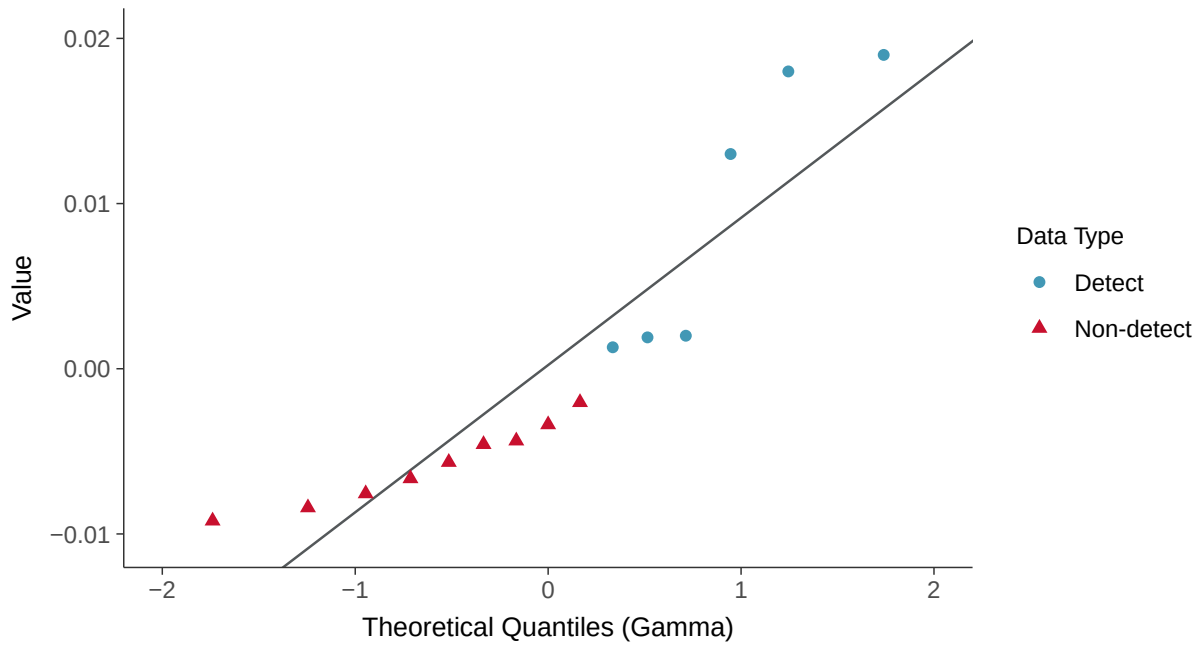
Lognormal Q-Q plot using ROS Imputed Estimates

Zinc, MW-03 (mg/L)



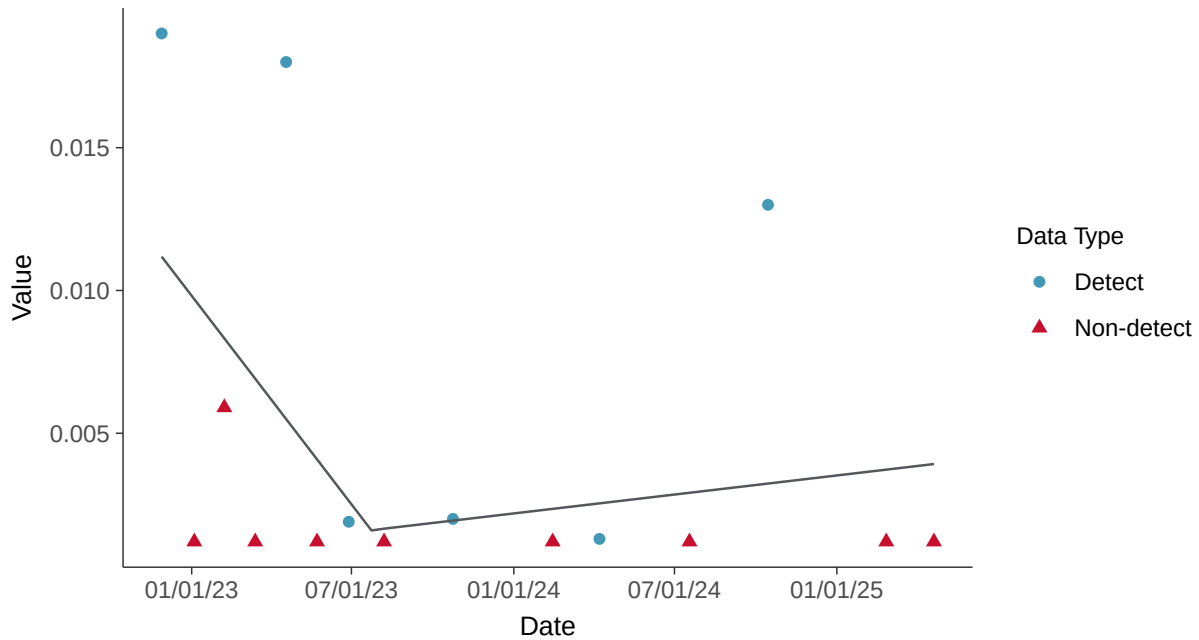
Gamma Q-Q plot using ROS Imputed Estimates

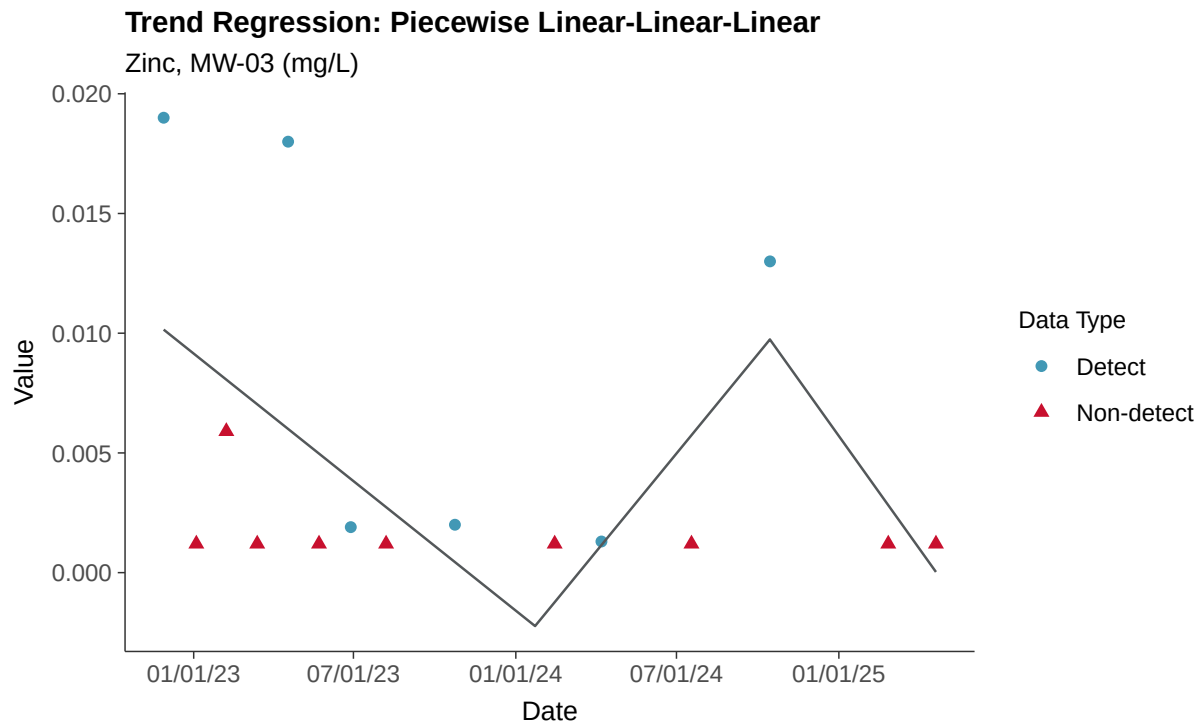
Zinc, MW-03 (mg/L)



Trend Regression: Piecewise Linear-Linear

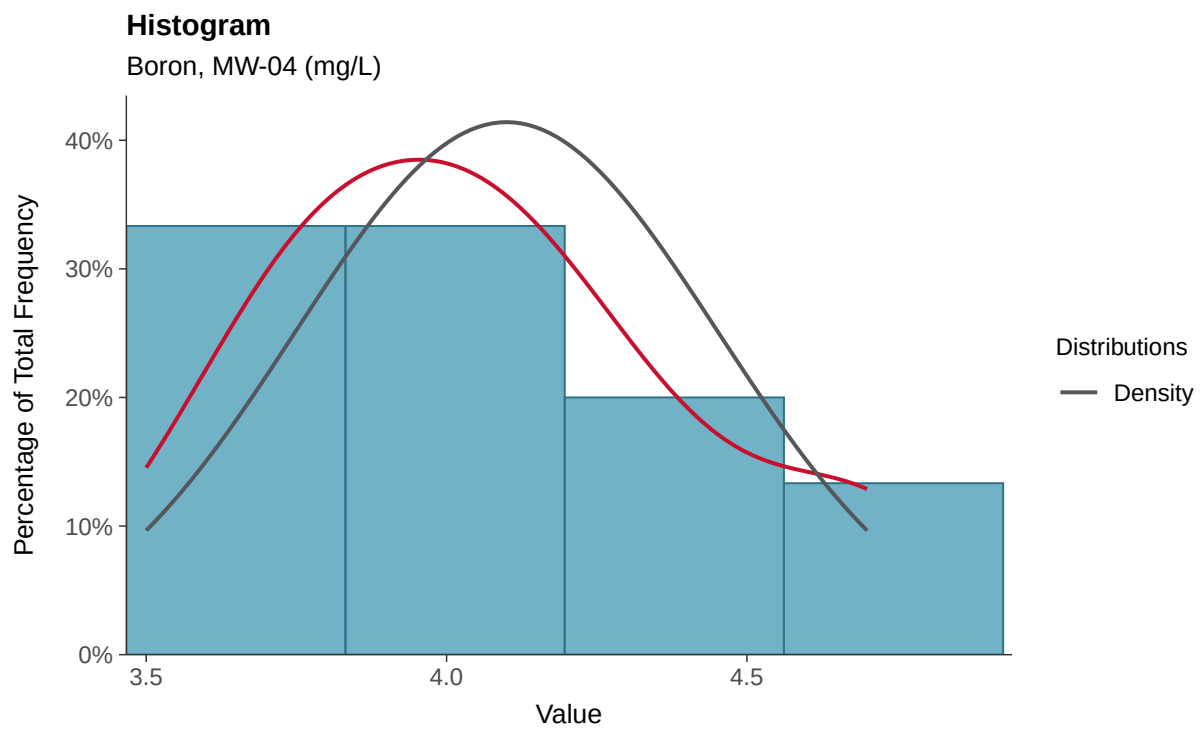
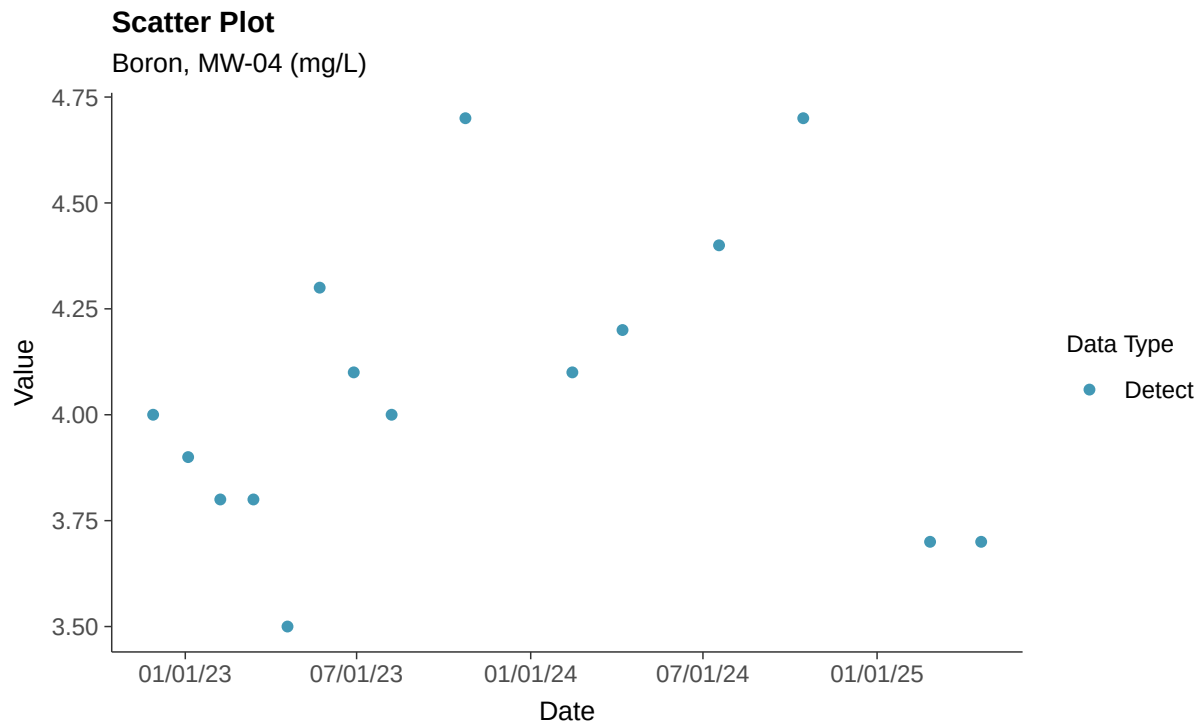
Zinc, MW-03 (mg/L)





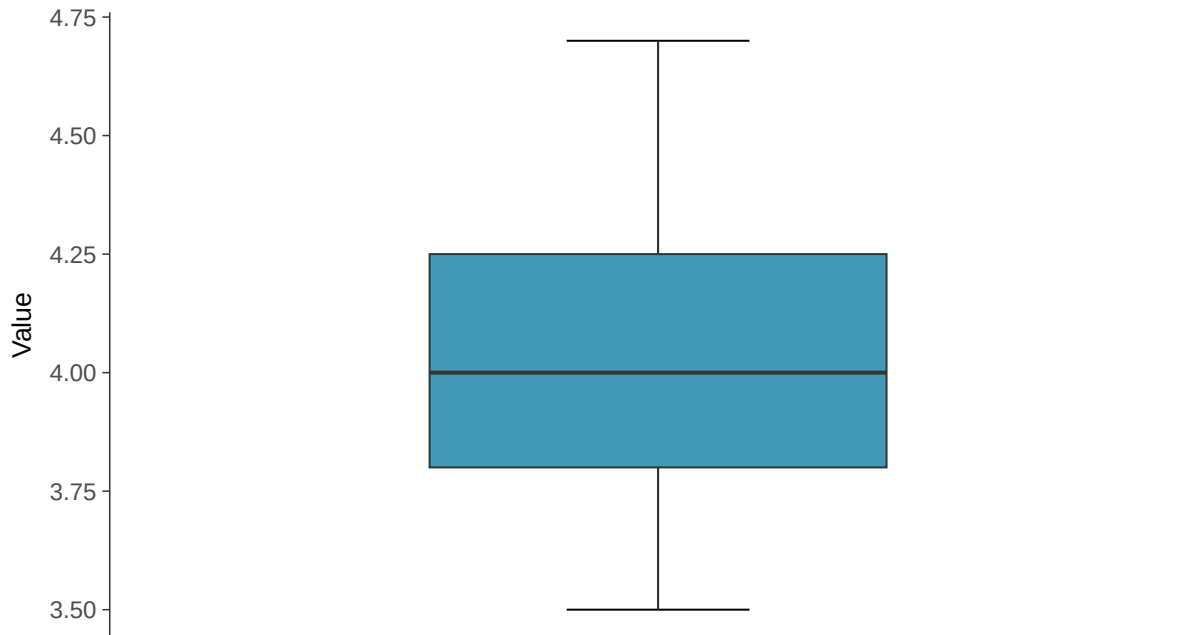
Appendix III: Boron, MW-04

ID: 14_2_3_105



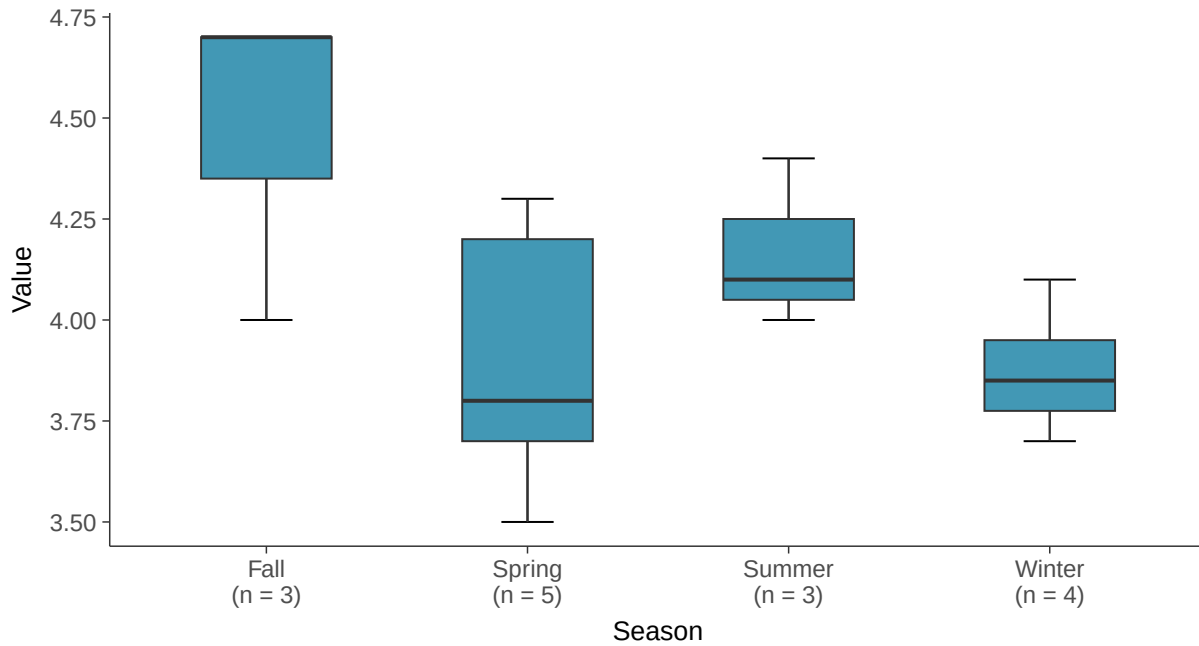
Boxplot

Boron, MW-04 (mg/L)



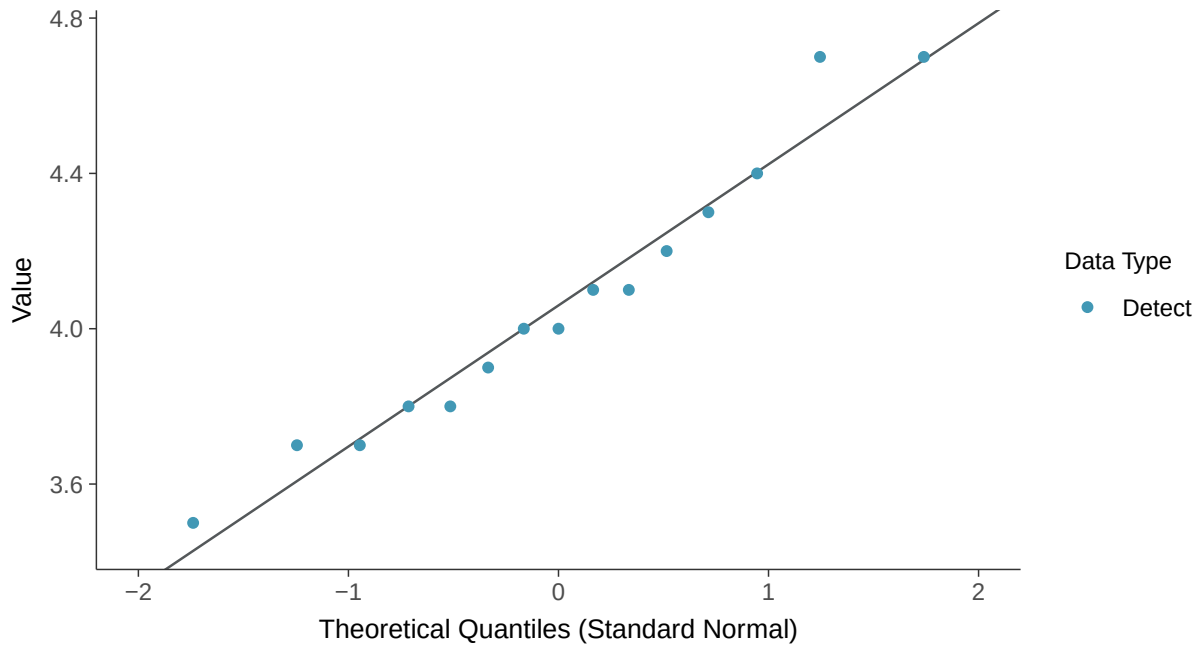
Boxplot by Season

Boron, MW-04 (mg/L)



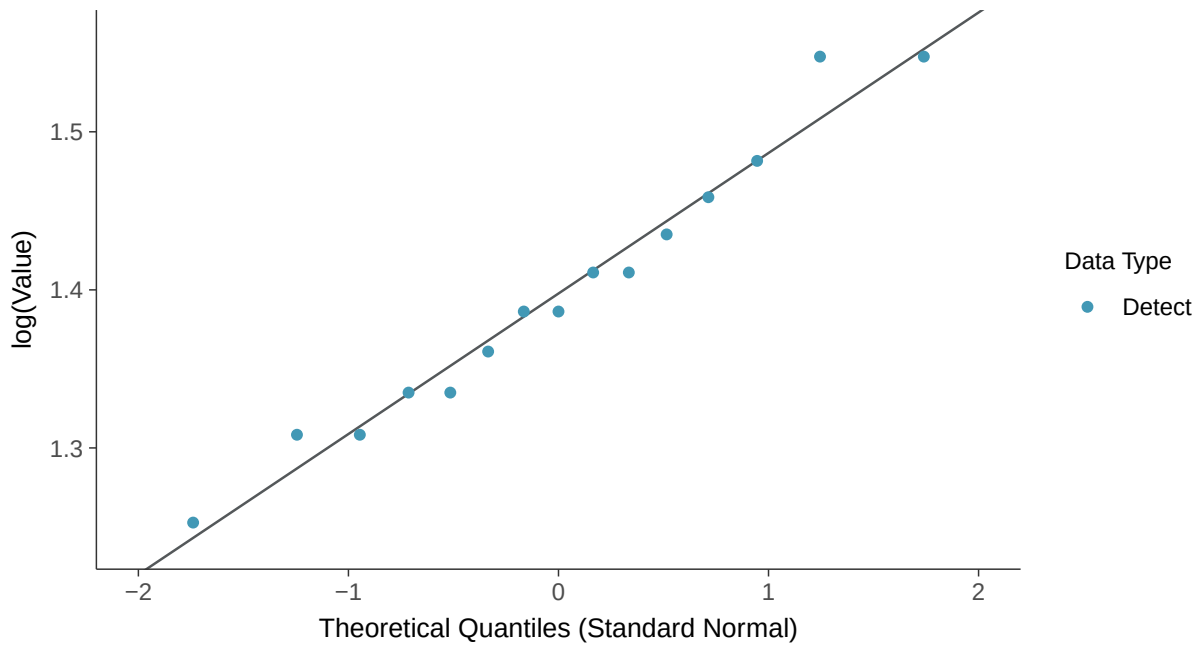
Normal Q-Q plot

Boron, MW-04 (mg/L)



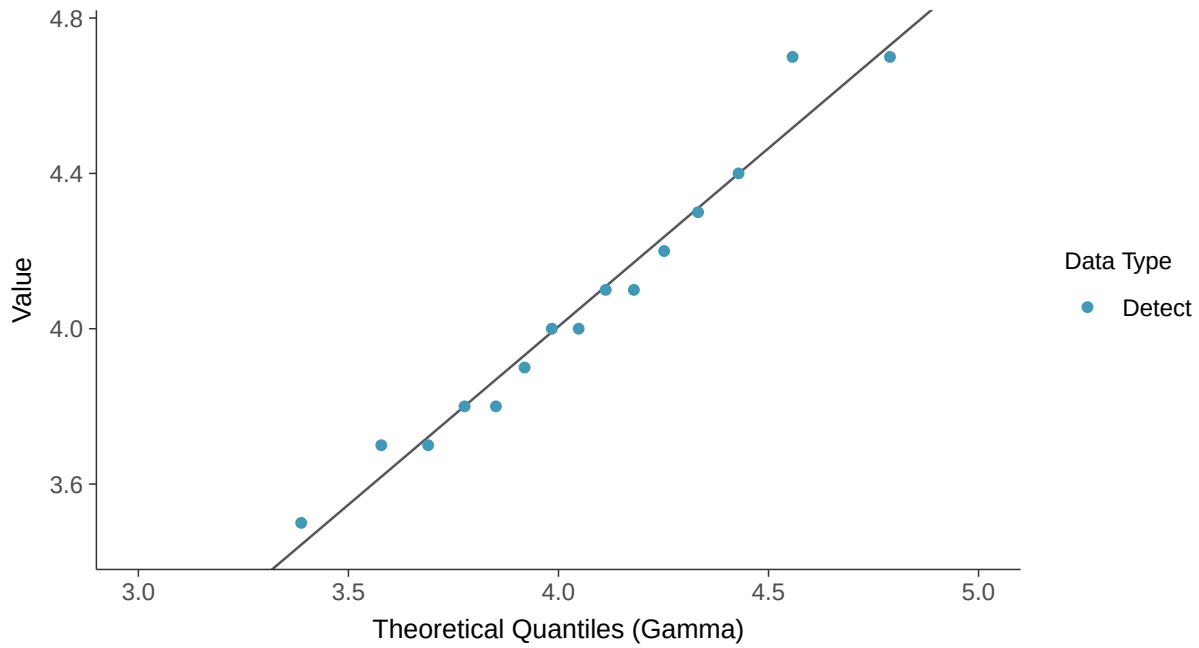
Lognormal Q-Q plot

Boron, MW-04 (mg/L)



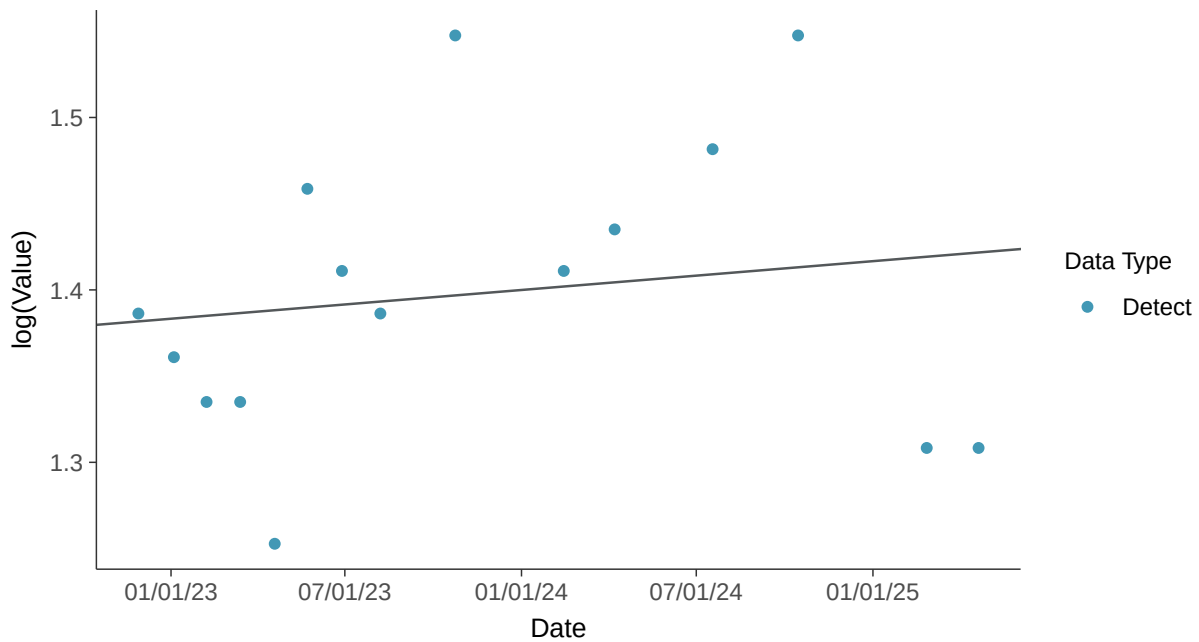
Gamma Q-Q plot

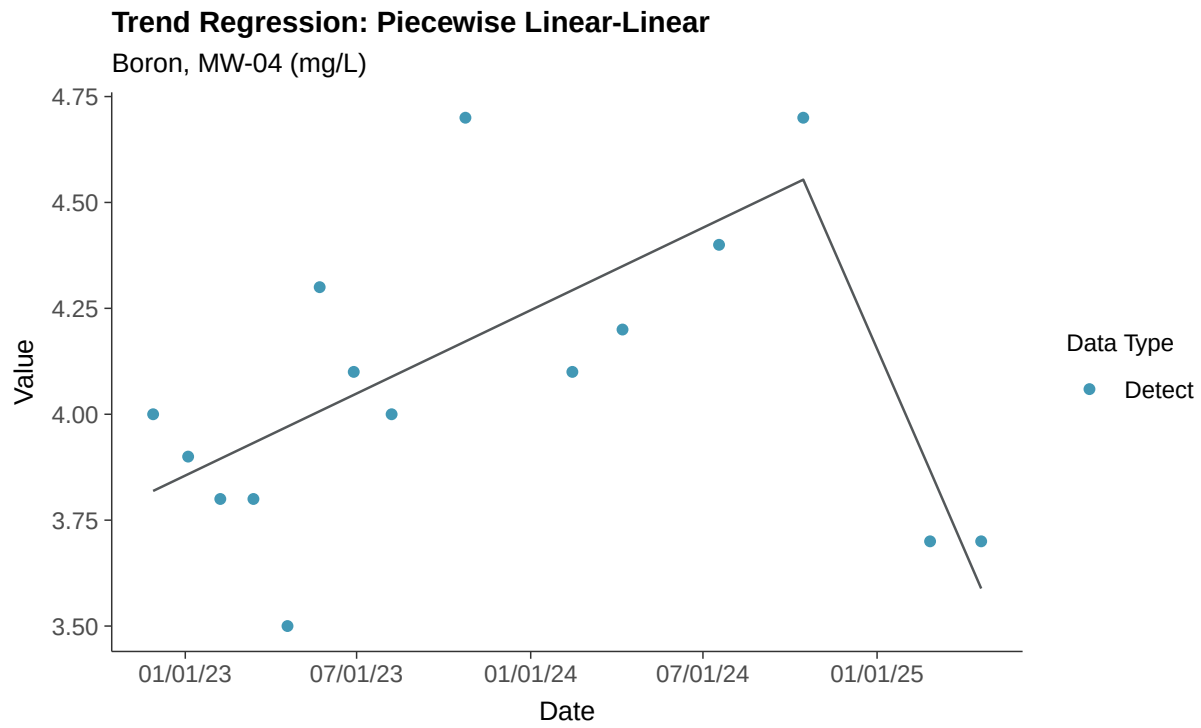
Boron, MW-04 (mg/L)



Trend Regression: Lognormal MLE

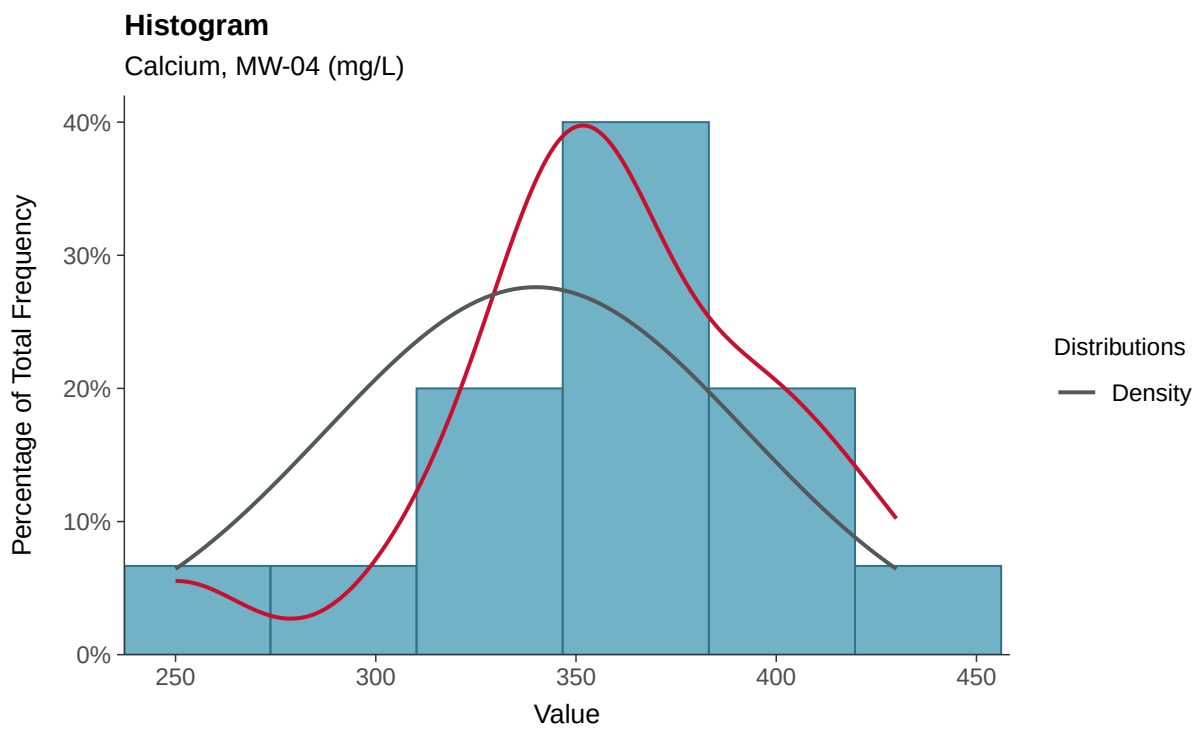
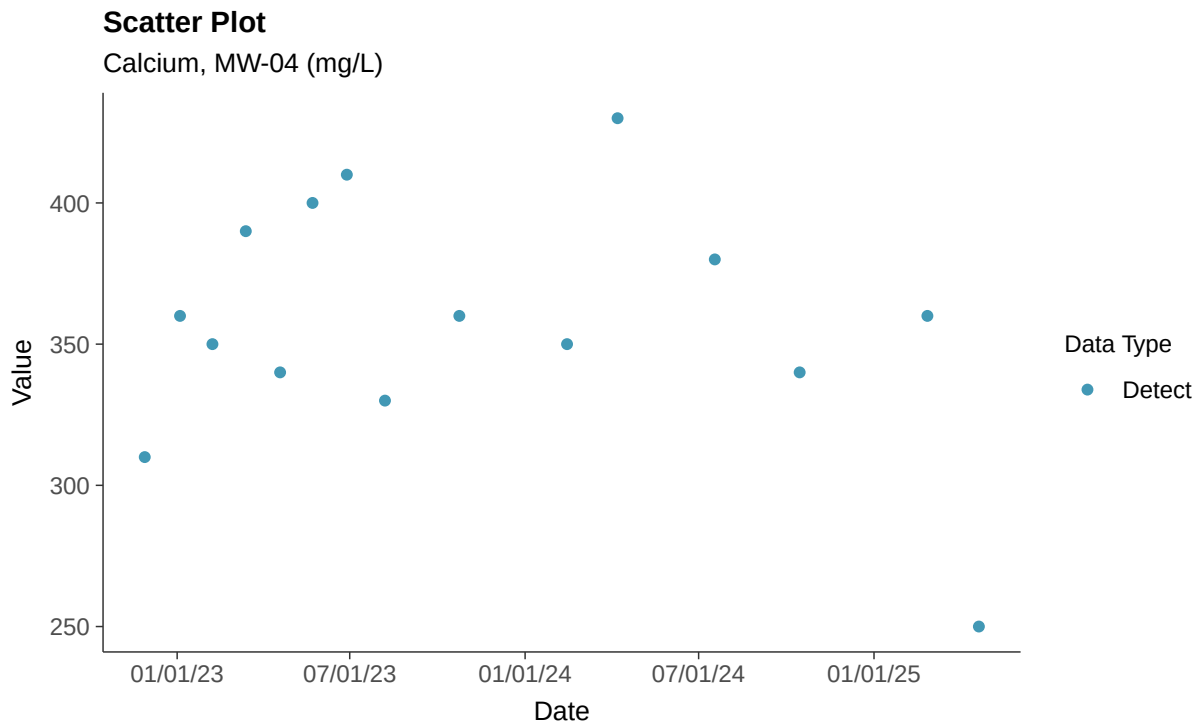
Boron, MW-04 (mg/L)





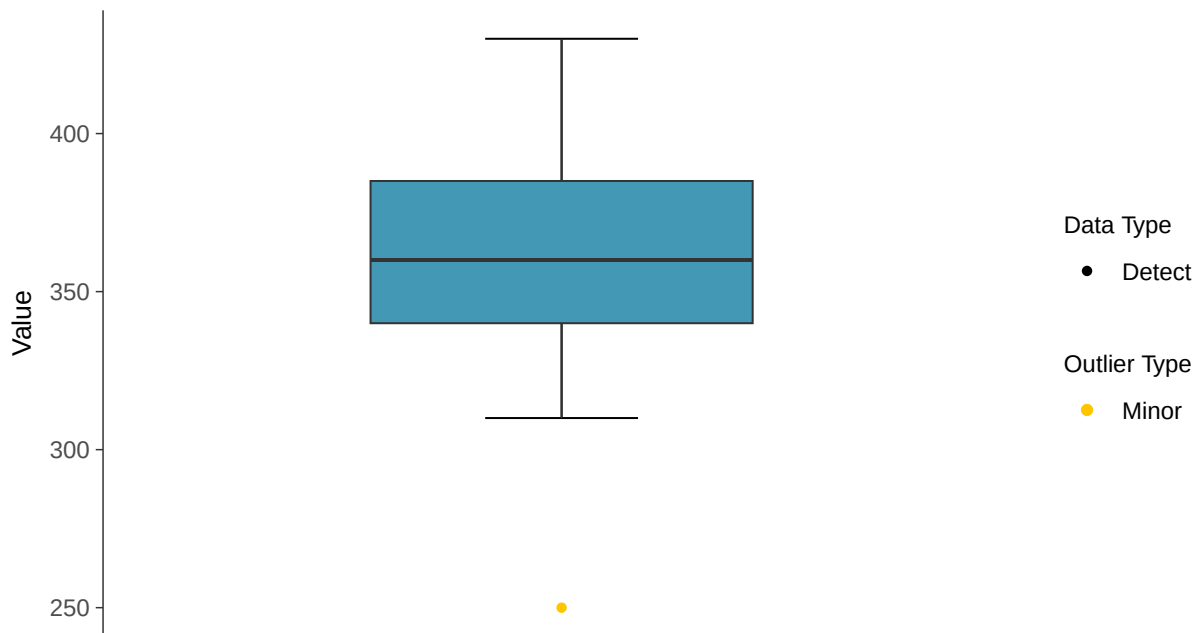
Appendix III: Calcium, MW-04

ID: 14_2_3_107



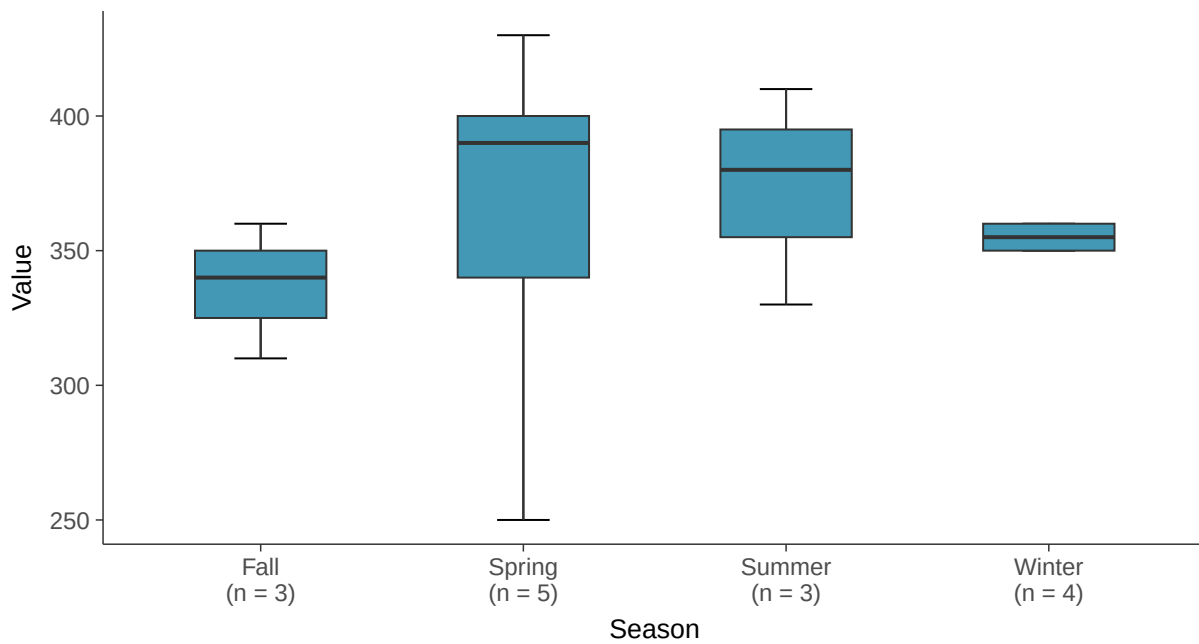
Boxplot

Calcium, MW-04 (mg/L)



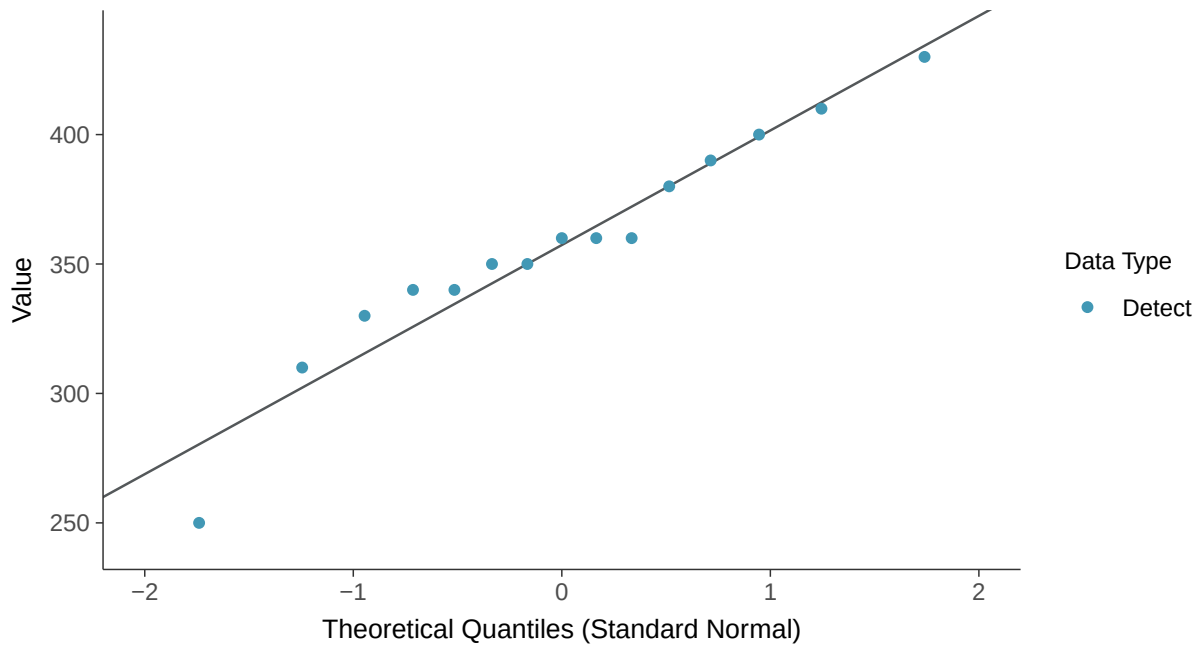
Boxplot by Season

Calcium, MW-04 (mg/L)



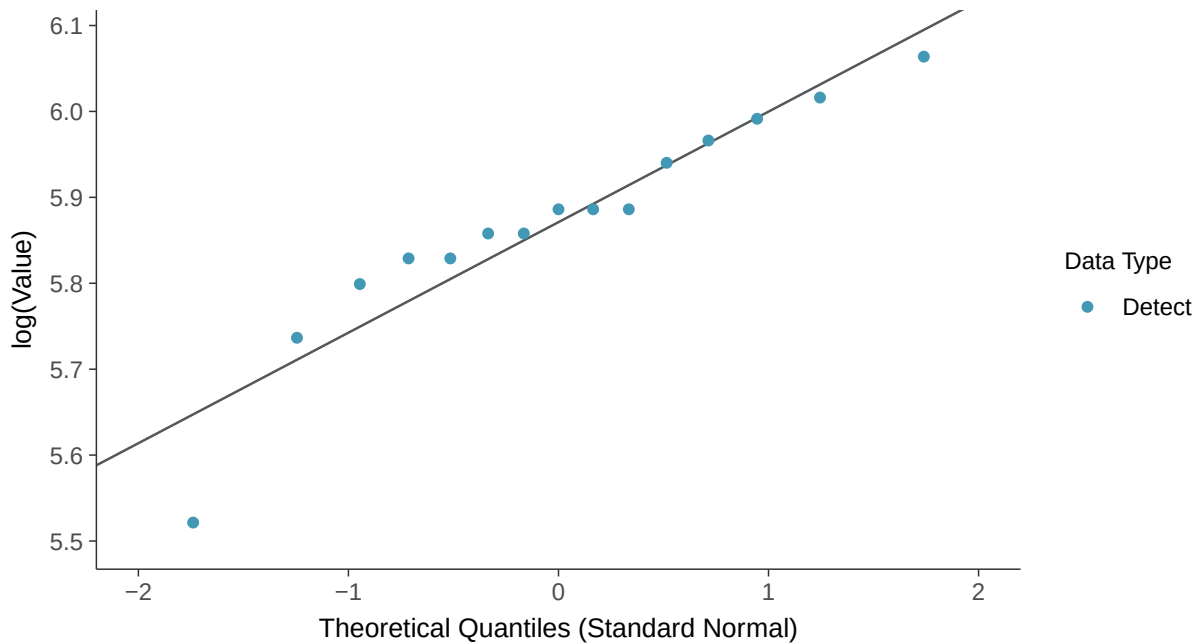
Normal Q-Q plot

Calcium, MW-04 (mg/L)



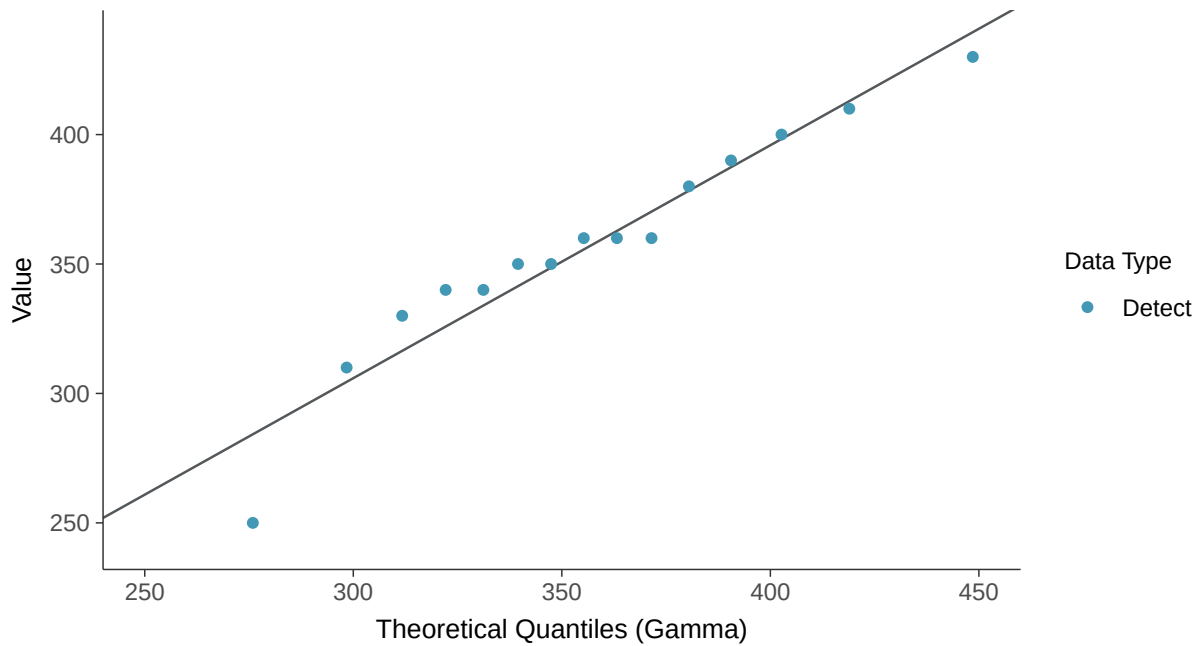
Lognormal Q-Q plot

Calcium, MW-04 (mg/L)



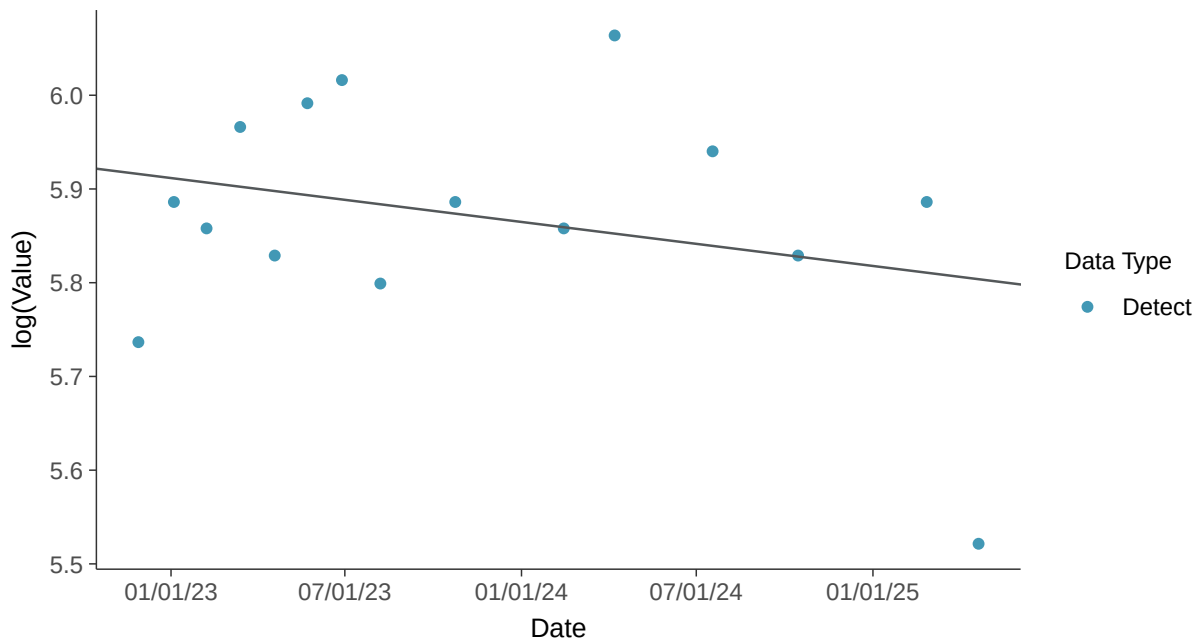
Gamma Q-Q plot

Calcium, MW-04 (mg/L)

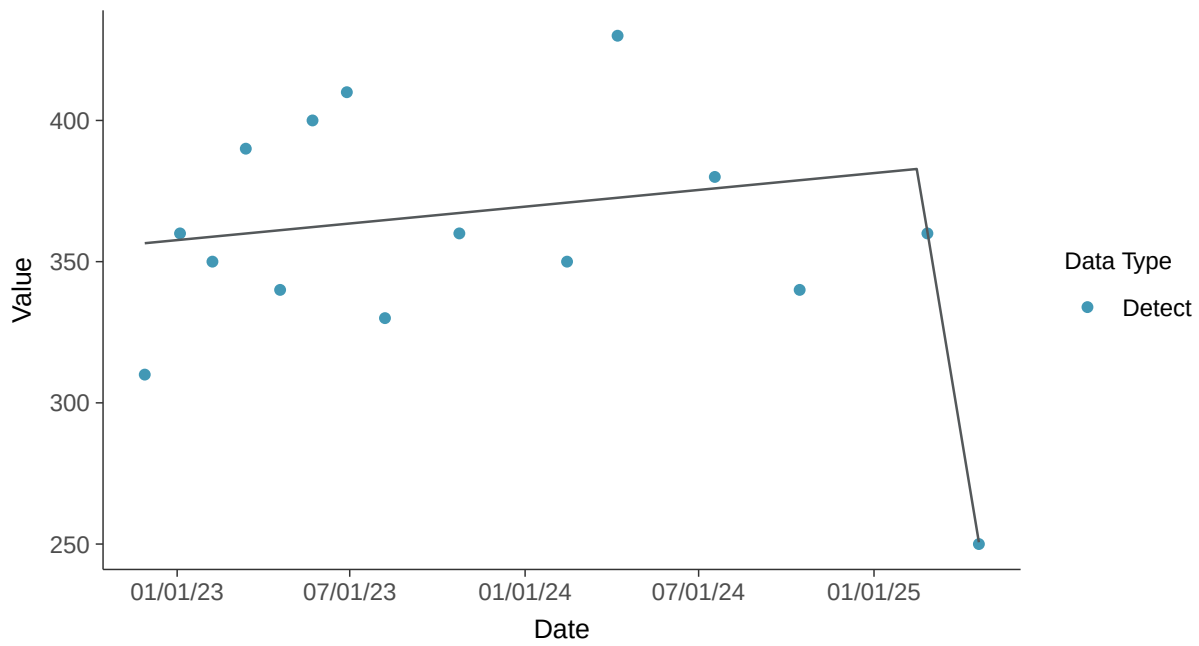


Trend Regression: Lognormal MLE

Calcium, MW-04 (mg/L)



Trend Regression: Piecewise Linear-Linear
Calcium, MW-04 (mg/L)

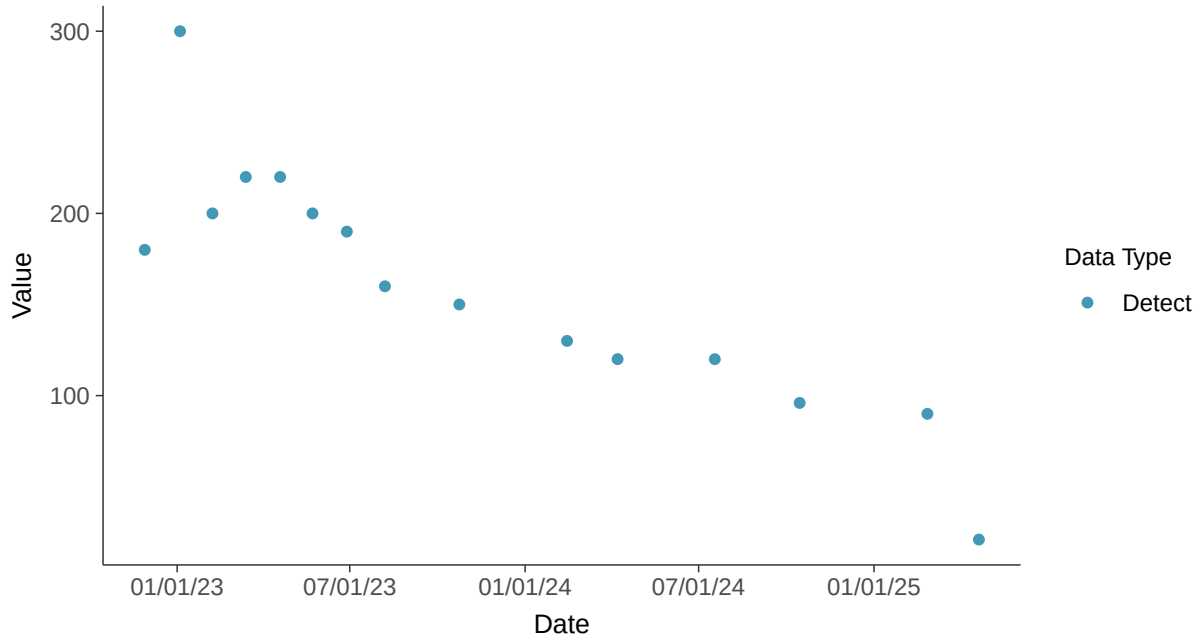


Appendix III: Chloride (as Cl), MW-04

ID: 14_2_3_108

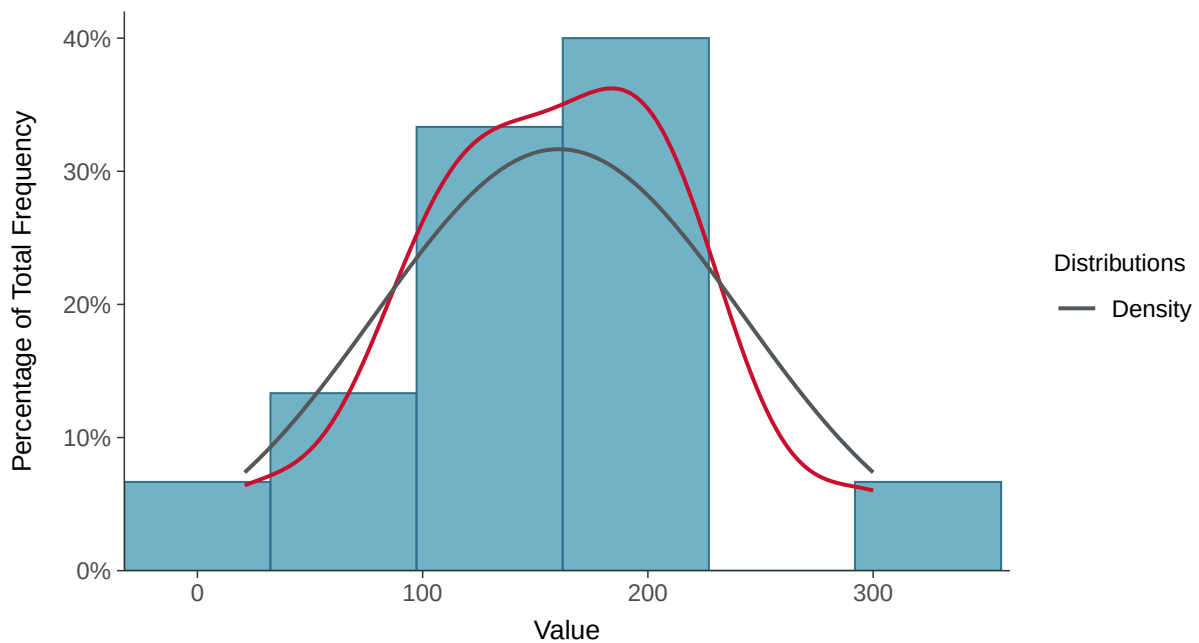
Scatter Plot

Chloride (as Cl), MW-04 (mg/L)



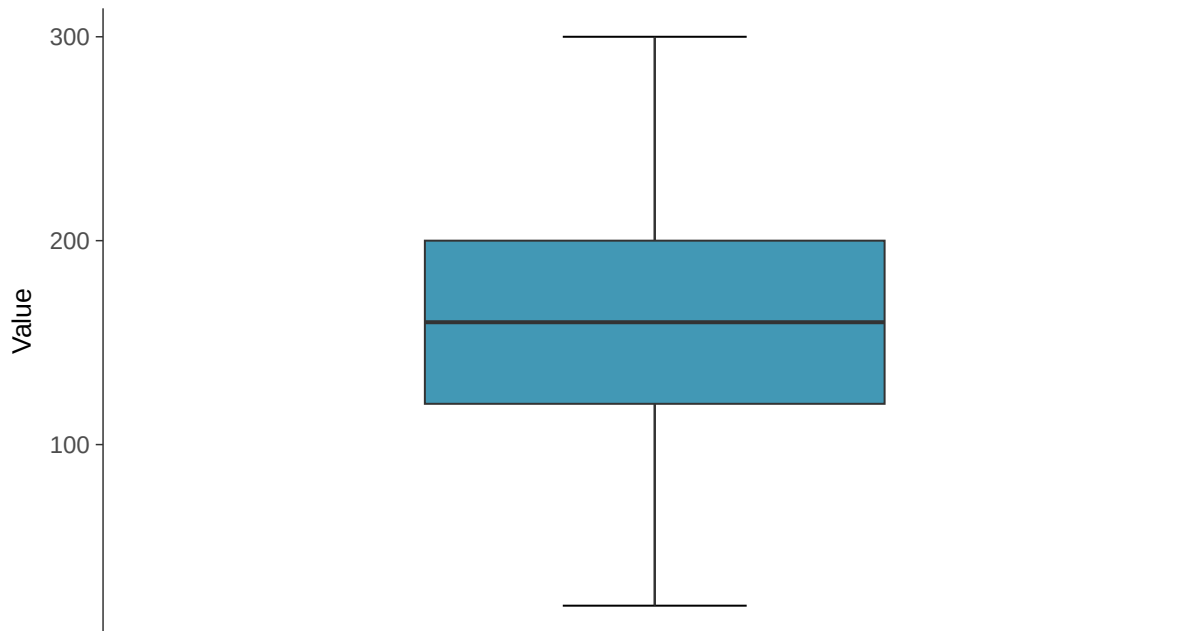
Histogram

Chloride (as Cl), MW-04 (mg/L)



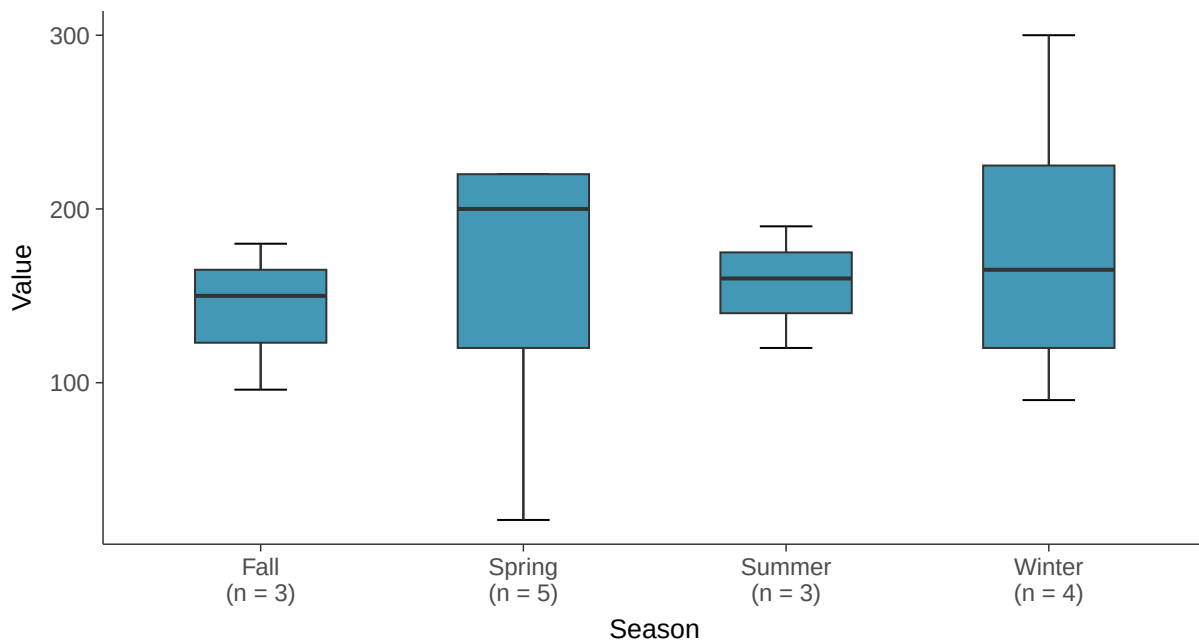
Boxplot

Chloride (as Cl), MW-04 (mg/L)



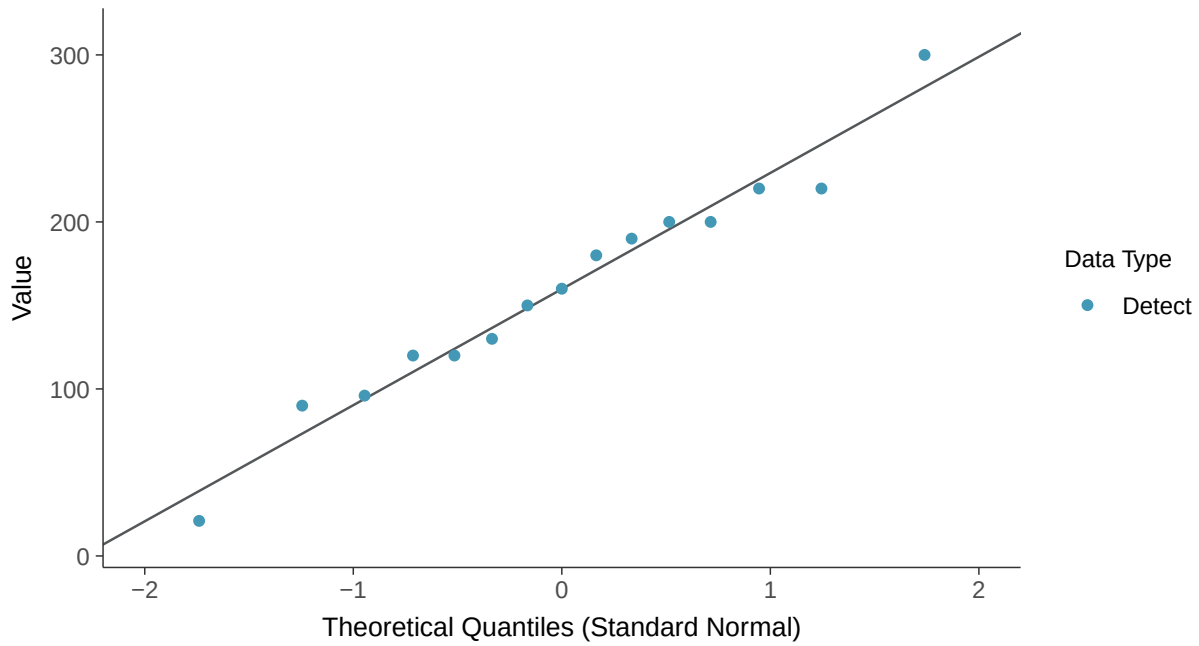
Boxplot by Season

Chloride (as Cl), MW-04 (mg/L)



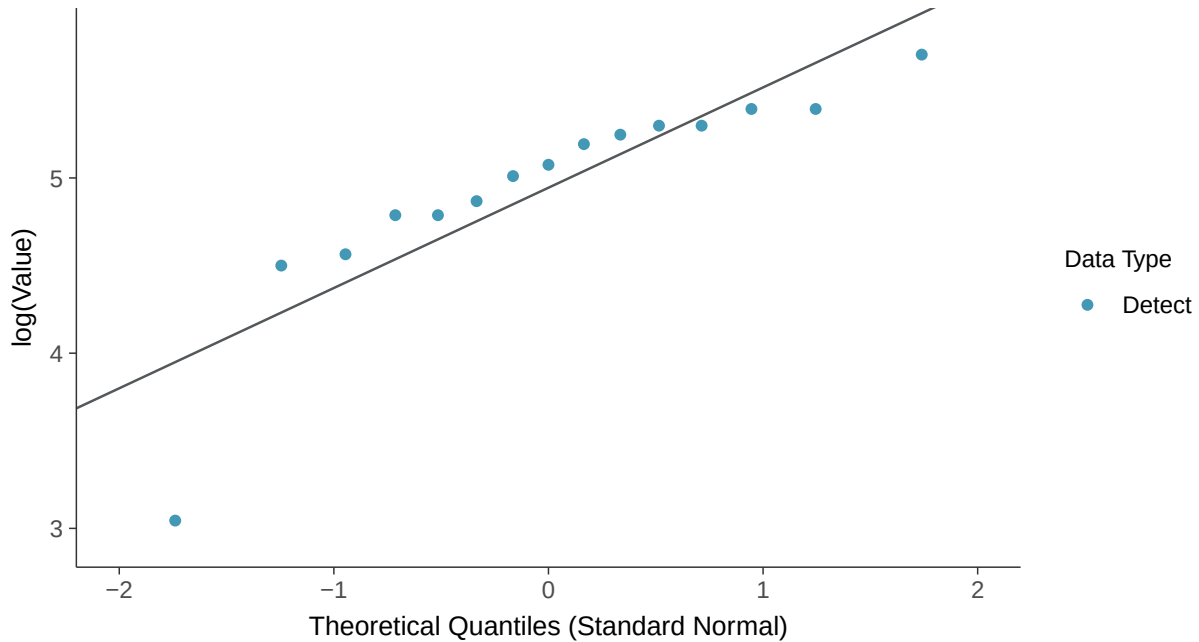
Normal Q-Q plot

Chloride (as Cl), MW-04 (mg/L)



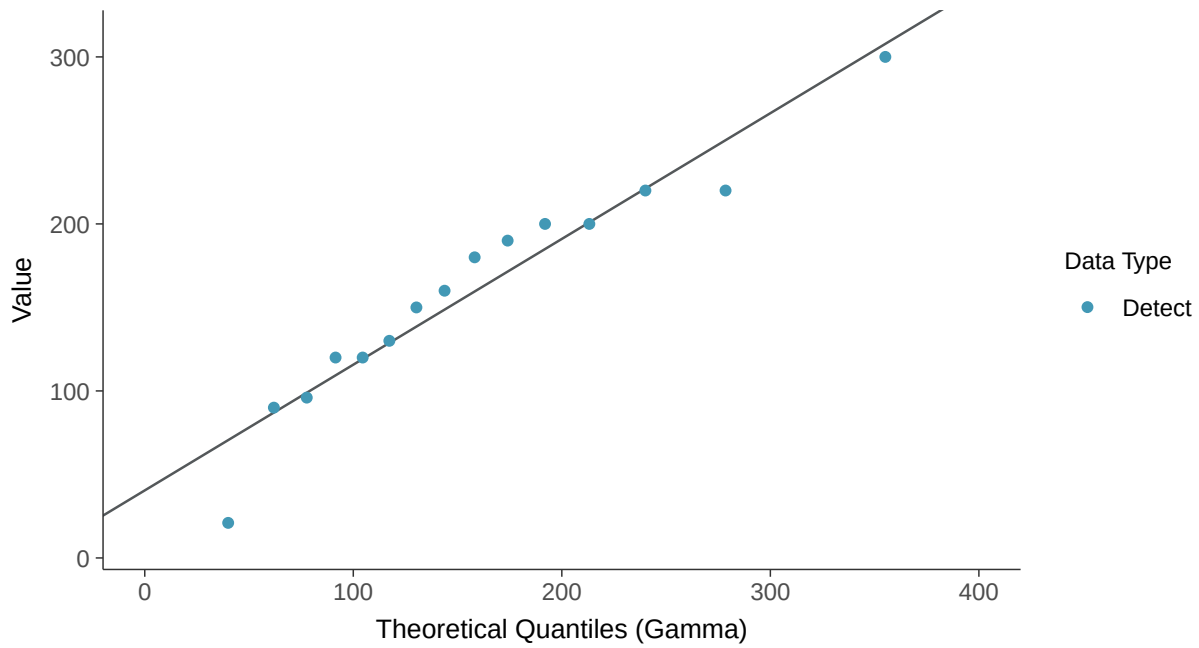
Lognormal Q-Q plot

Chloride (as Cl), MW-04 (mg/L)



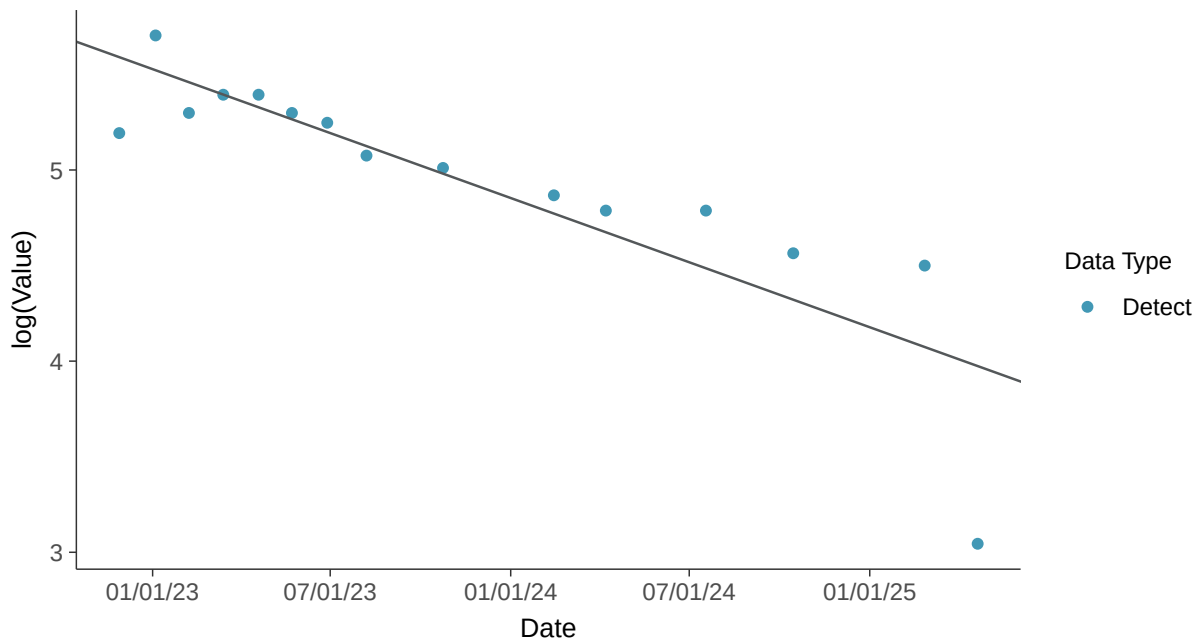
Gamma Q-Q plot

Chloride (as Cl), MW-04 (mg/L)



Trend Regression: Lognormal MLE

Chloride (as Cl), MW-04 (mg/L)

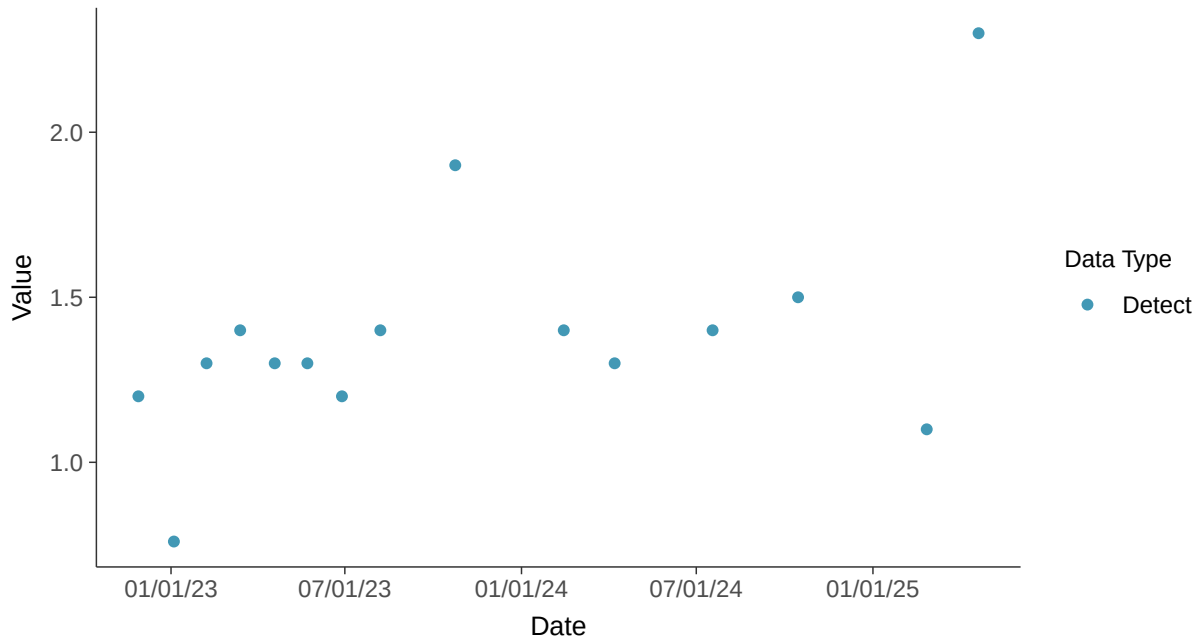


Appendix III: Fluoride, MW-04

ID: 14_2_3_112

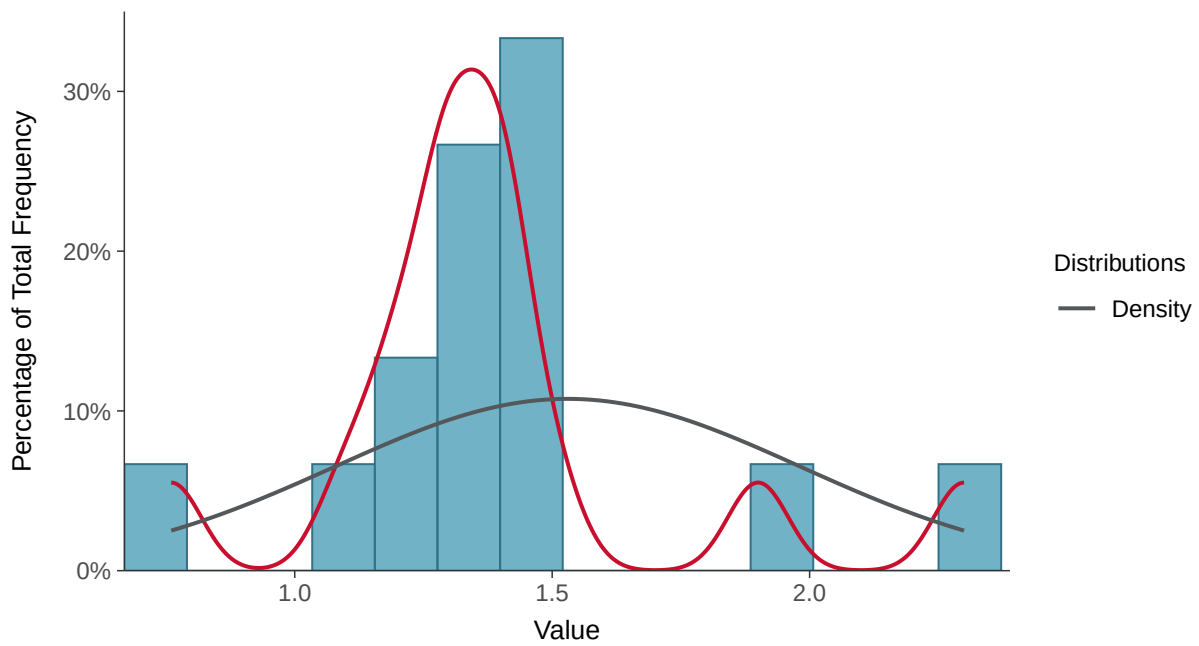
Scatter Plot

Fluoride, MW-04 (mg/L)



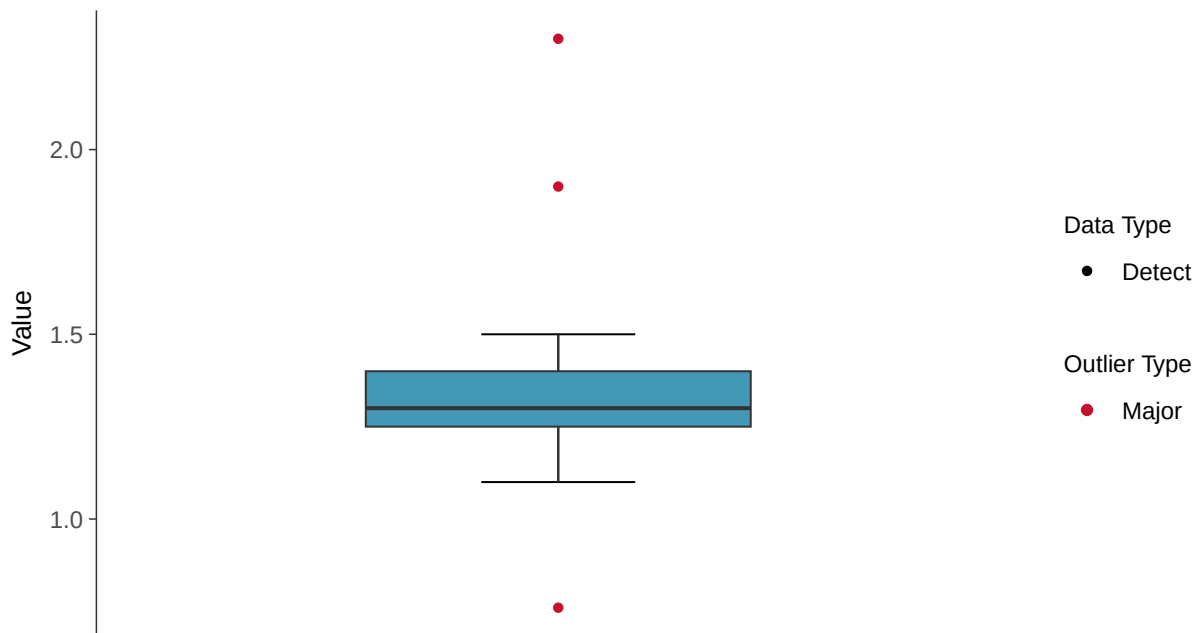
Histogram

Fluoride, MW-04 (mg/L)



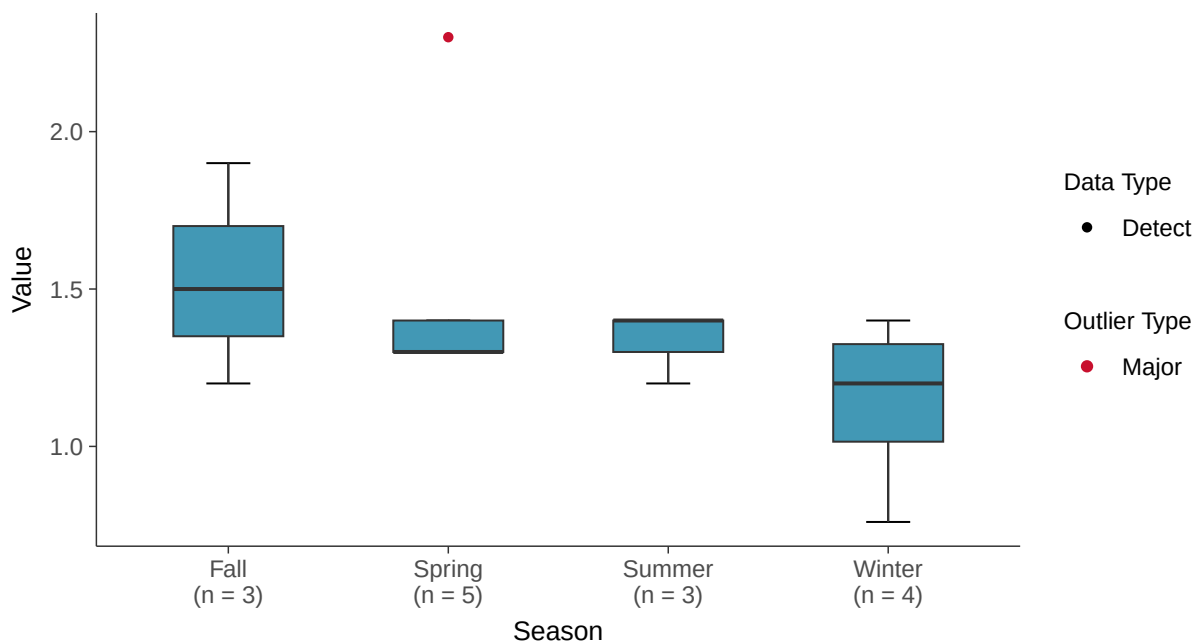
Boxplot

Fluoride, MW-04 (mg/L)



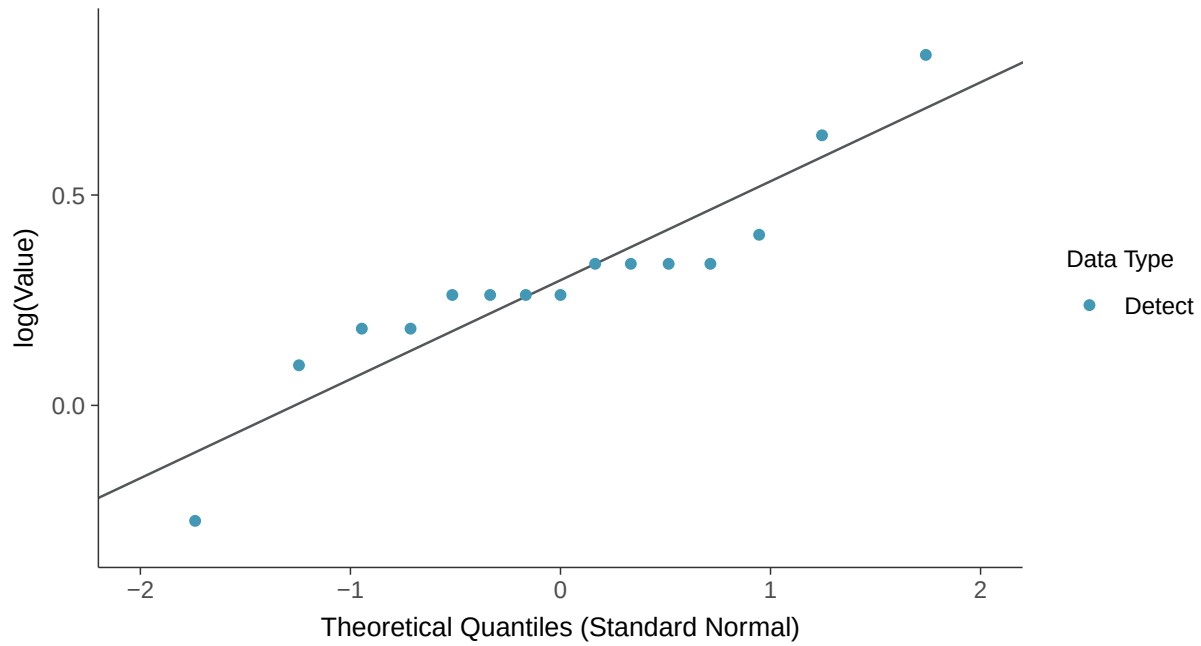
Boxplot by Season

Fluoride, MW-04 (mg/L)



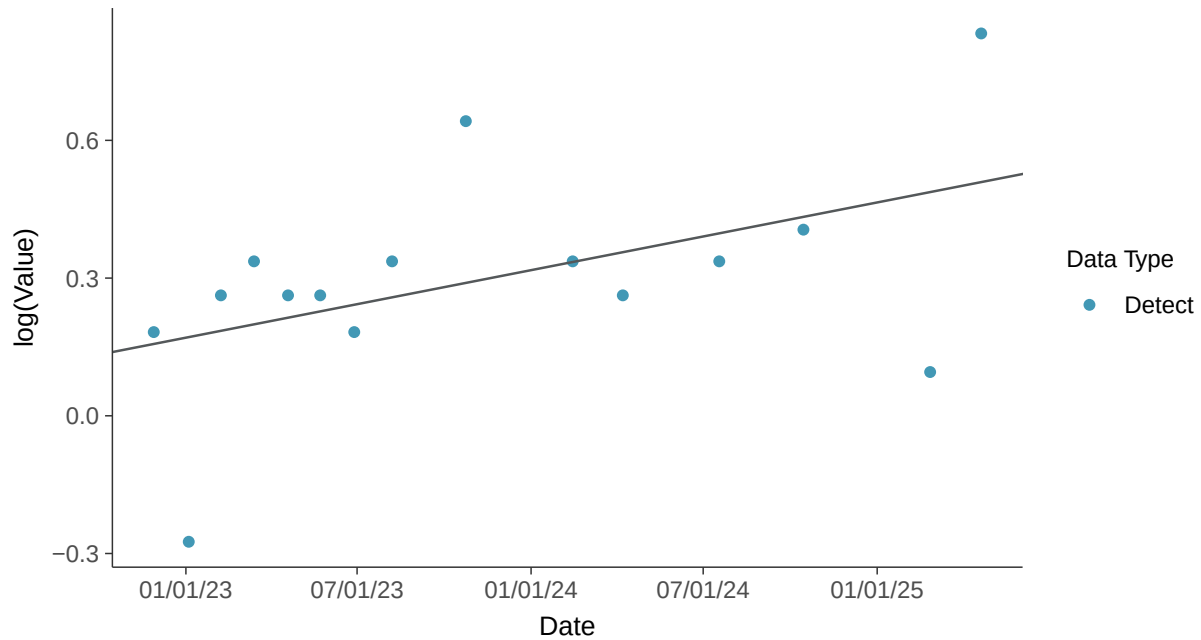
Lognormal Q-Q plot

Fluoride, MW-04 (mg/L)



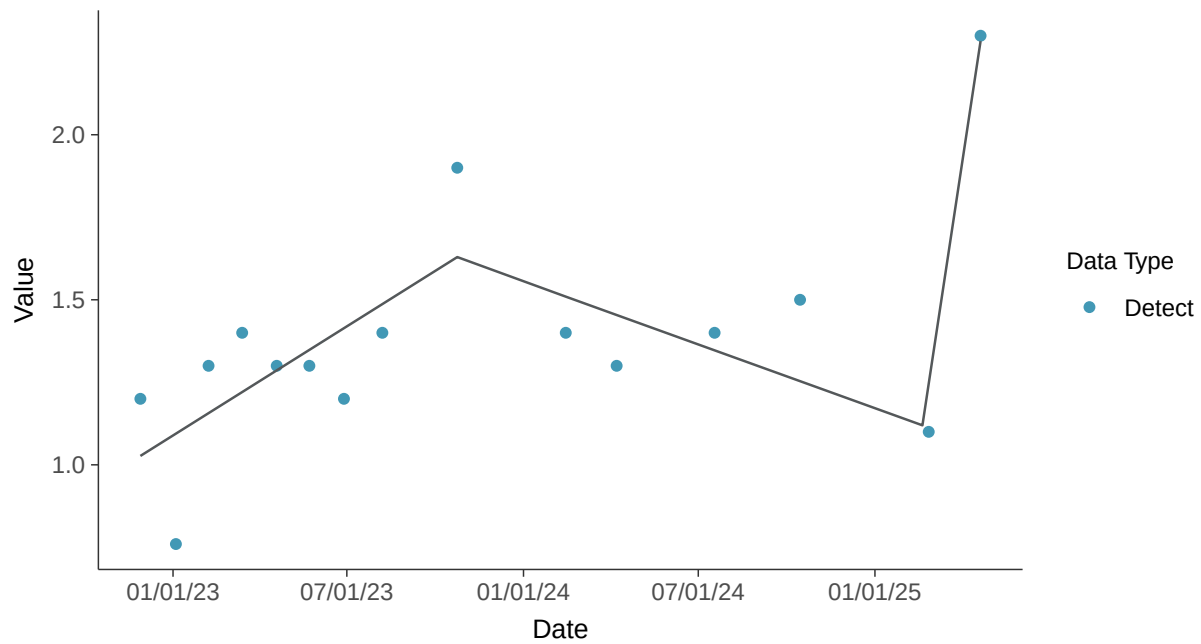
Trend Regression: Lognormal MLE

Fluoride, MW-04 (mg/L)



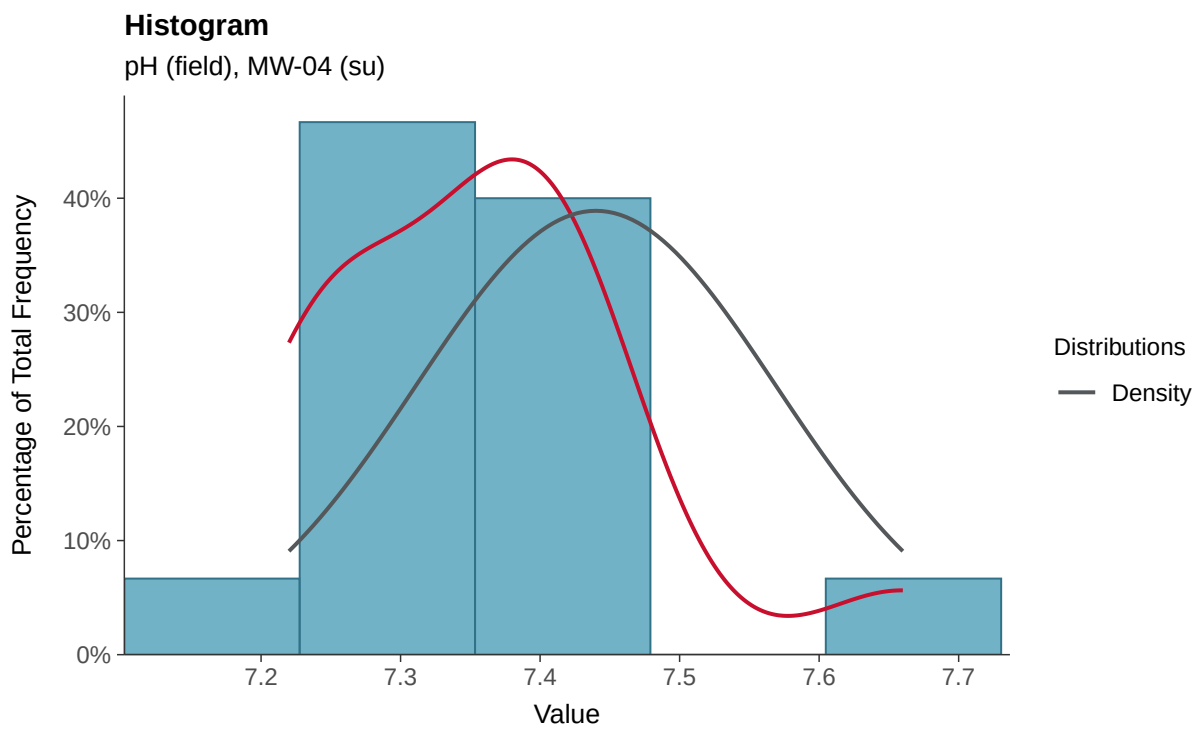
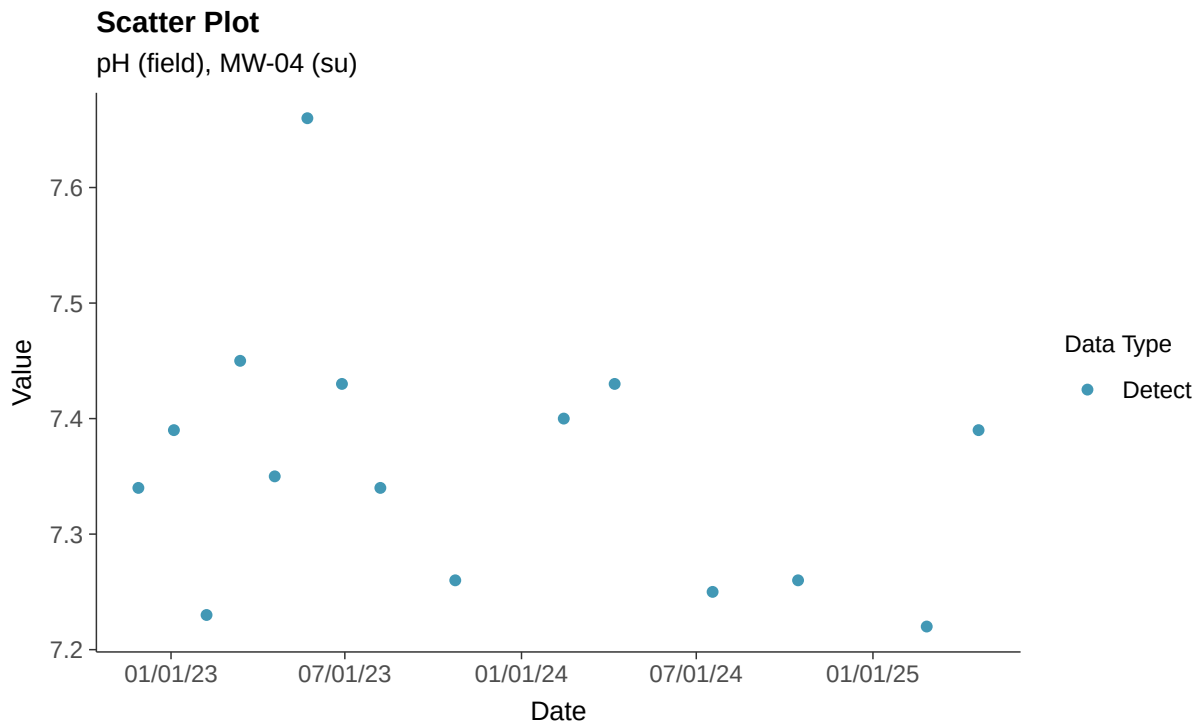
Trend Regression: Piecewise Linear-Linear-Linear

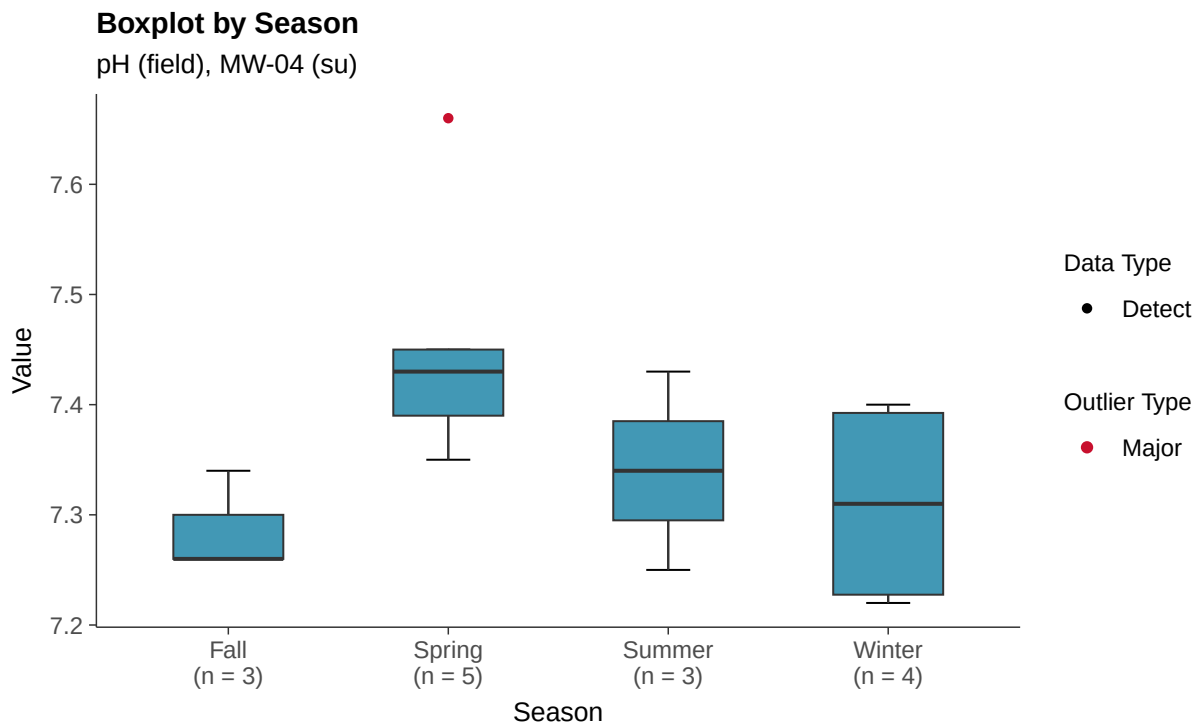
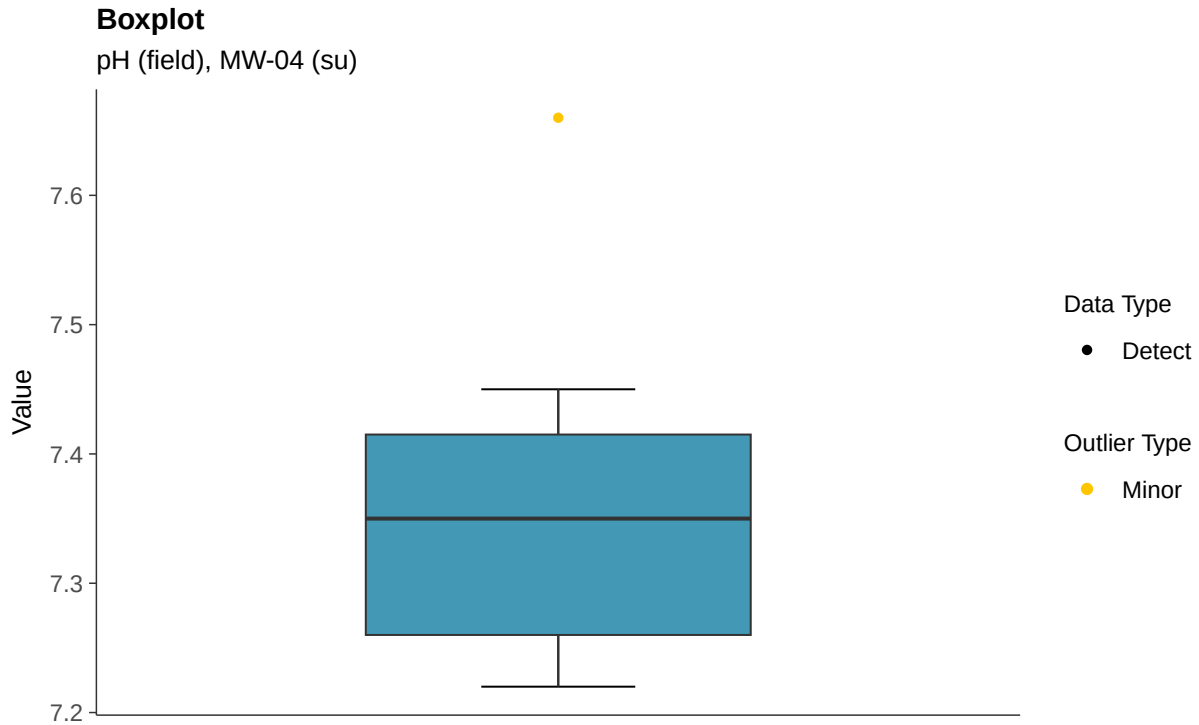
Fluoride, MW-04 (mg/L)



Appendix III: pH (field), MW-04

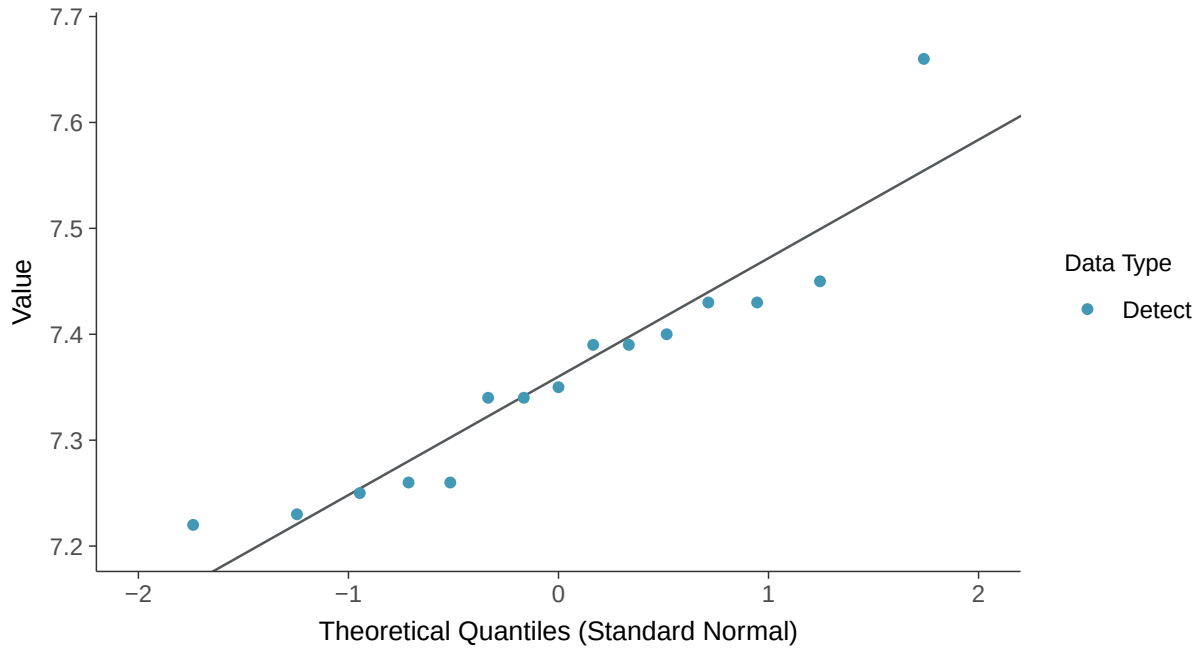
ID: 14_2_3_120





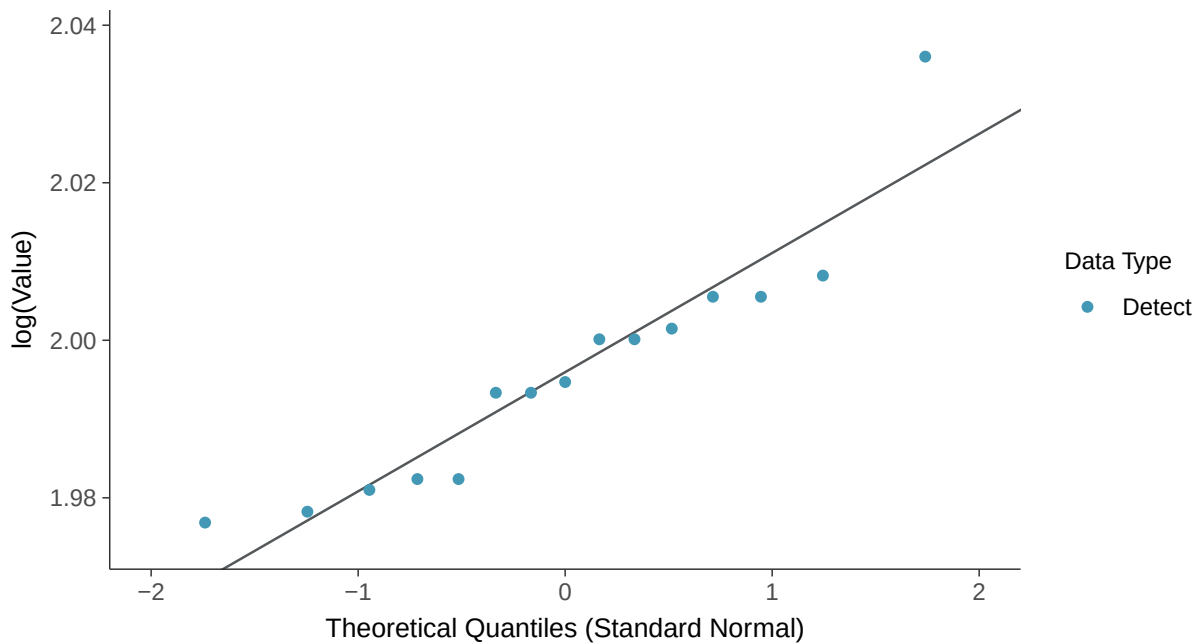
Normal Q-Q plot

pH (field), MW-04 (su)



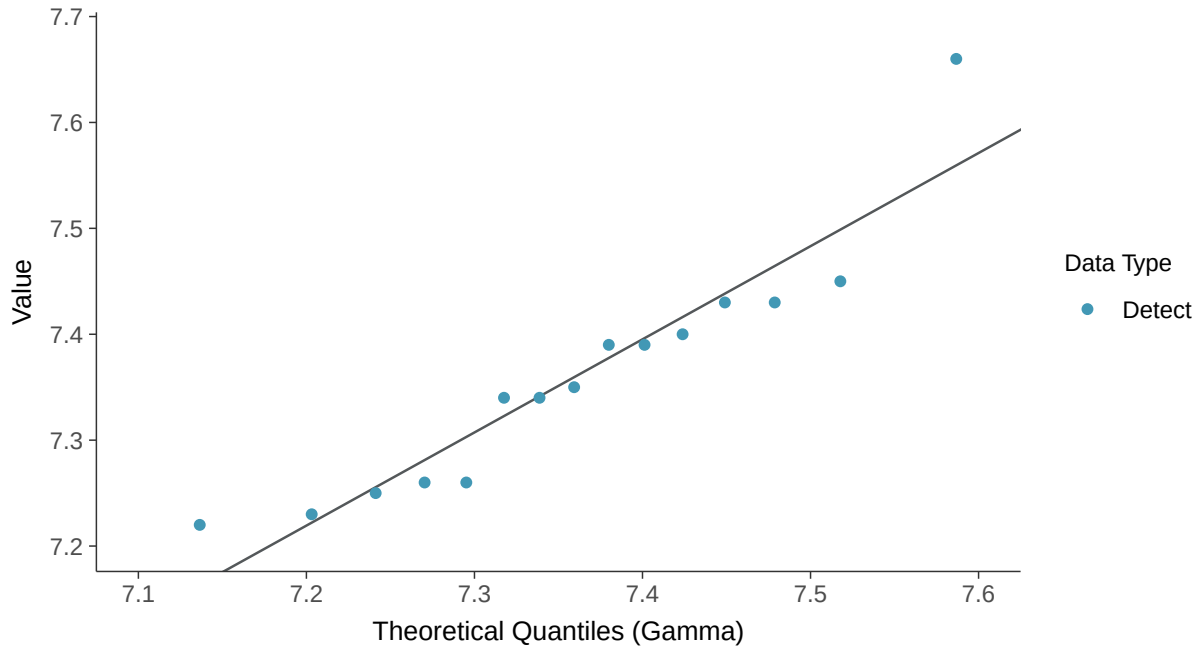
Lognormal Q-Q plot

pH (field), MW-04 (su)



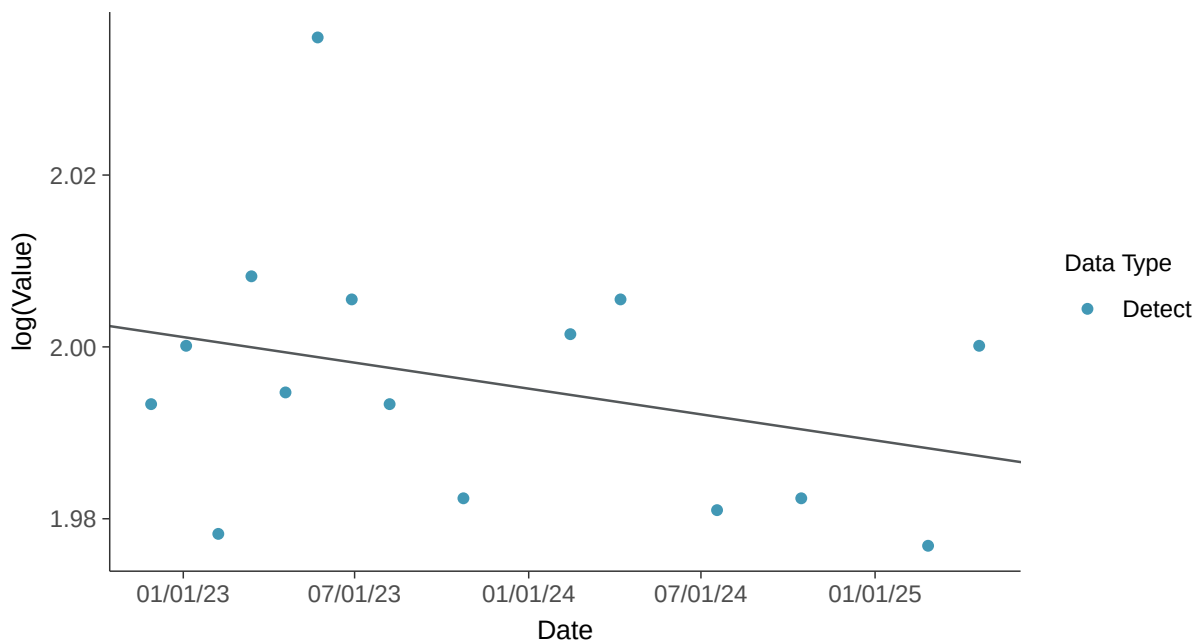
Gamma Q-Q plot

pH (field), MW-04 (su)



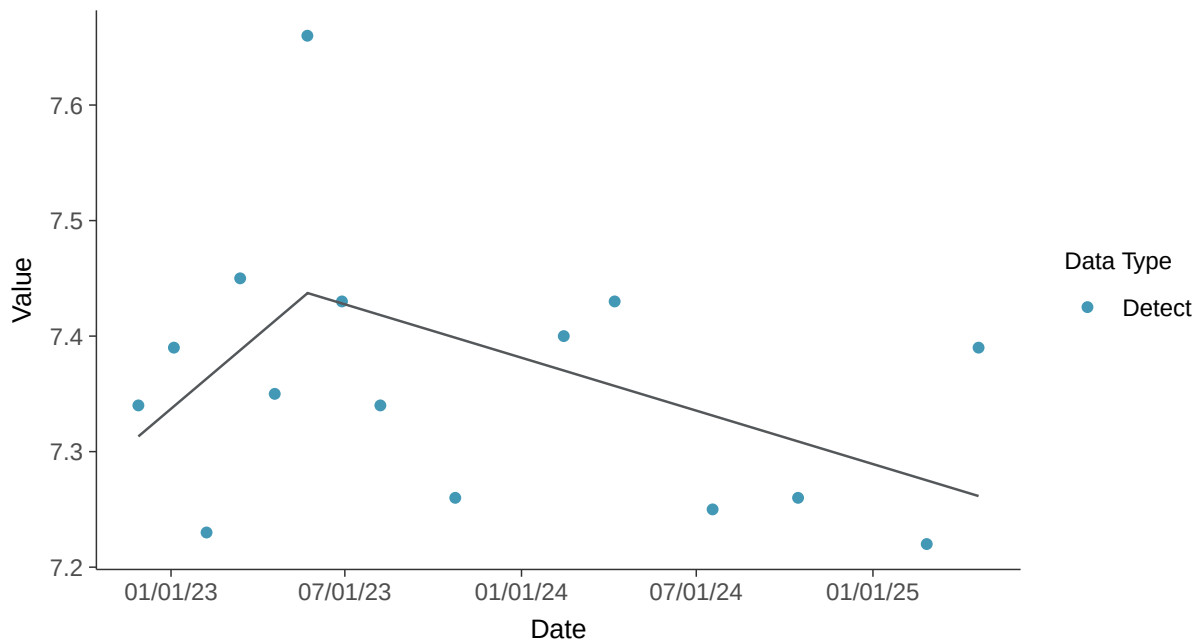
Trend Regression: Lognormal MLE

pH (field), MW-04 (su)



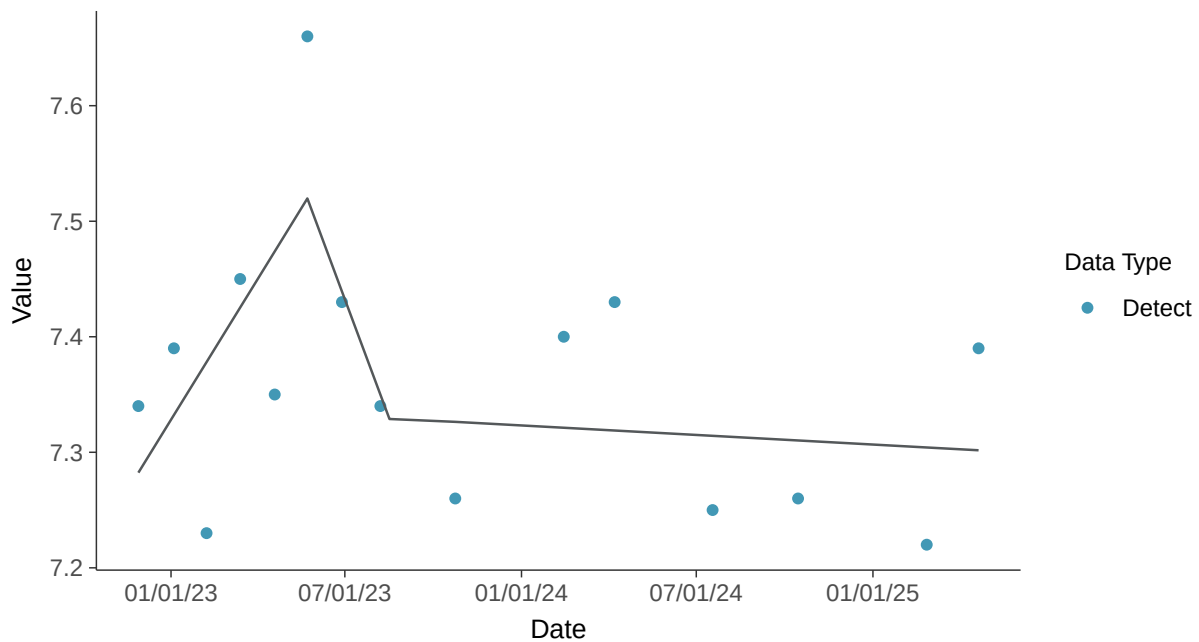
Trend Regression: Piecewise Linear-Linear

pH (field), MW-04 (su)



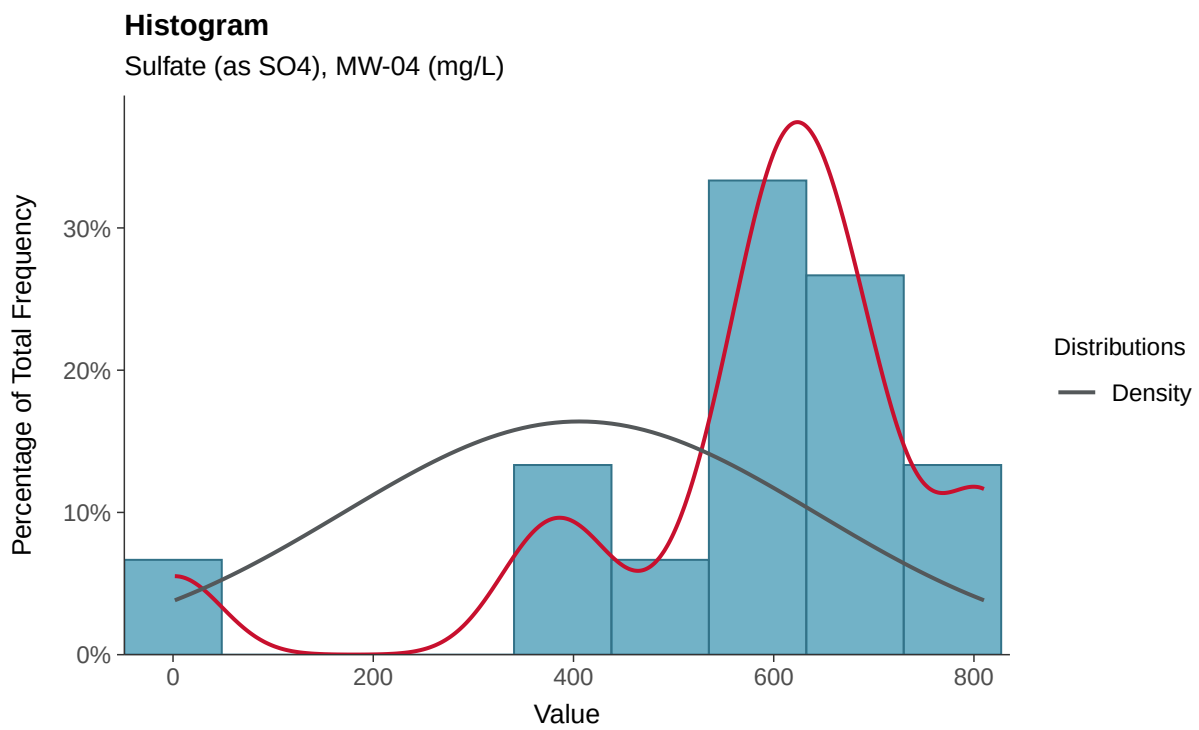
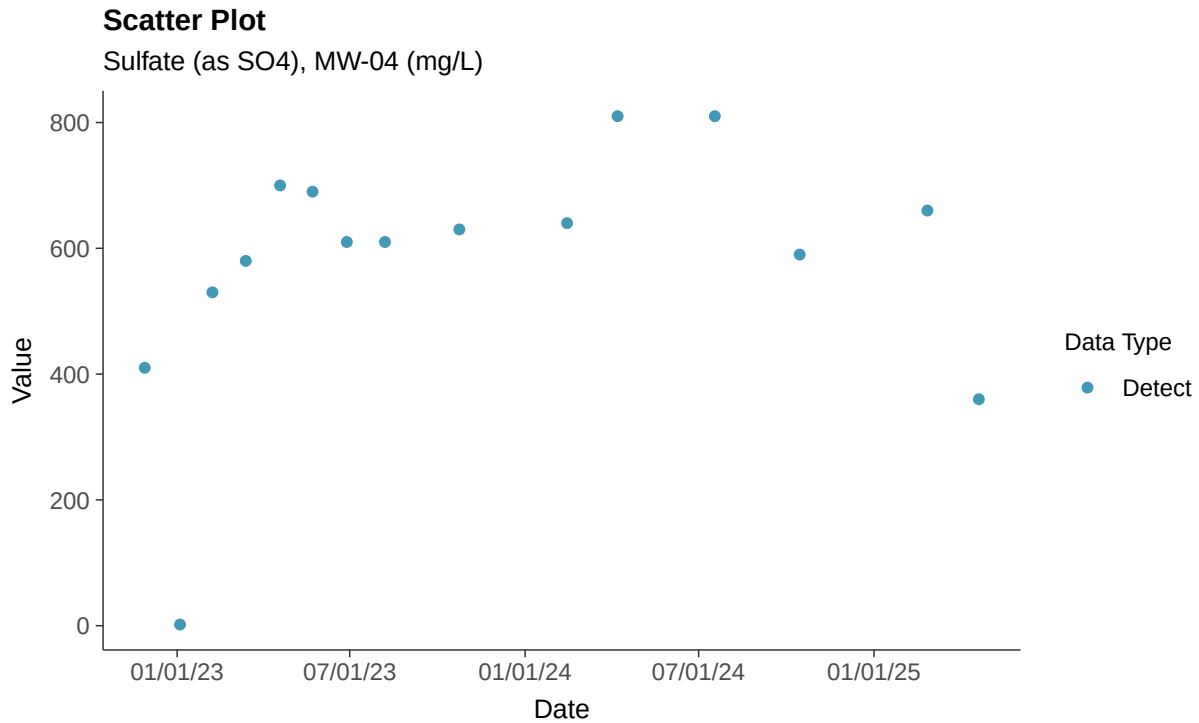
Trend Regression: Piecewise Linear-Linear-Linear

pH (field), MW-04 (su)



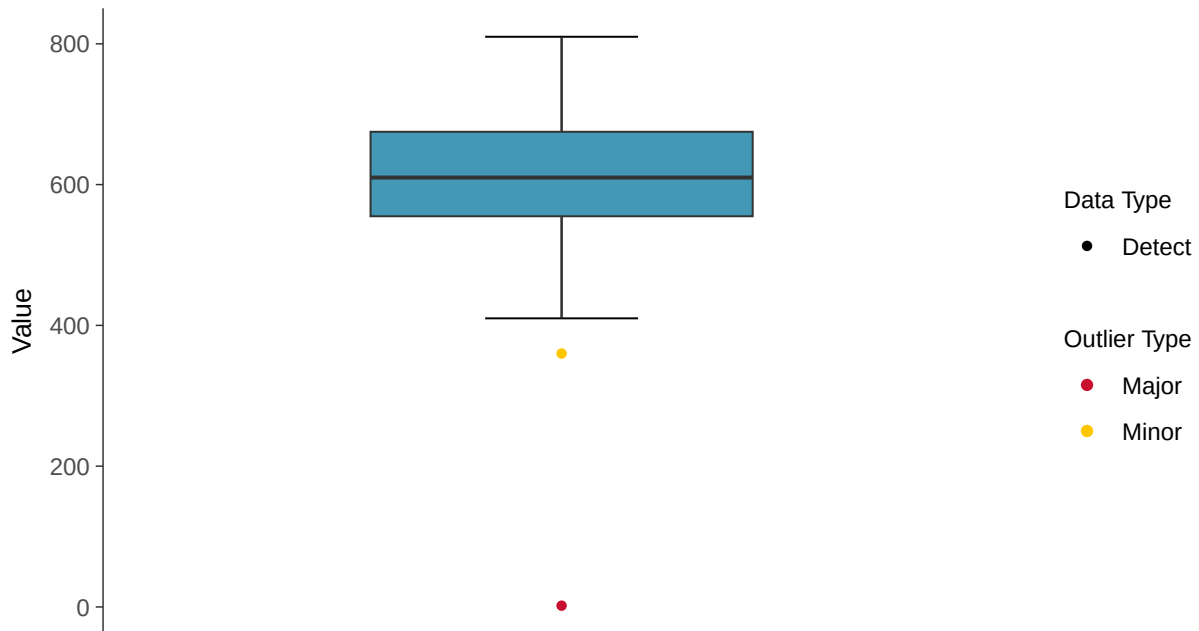
Appendix III: Sulfate (as SO₄), MW-04

ID: 14_2_3_124



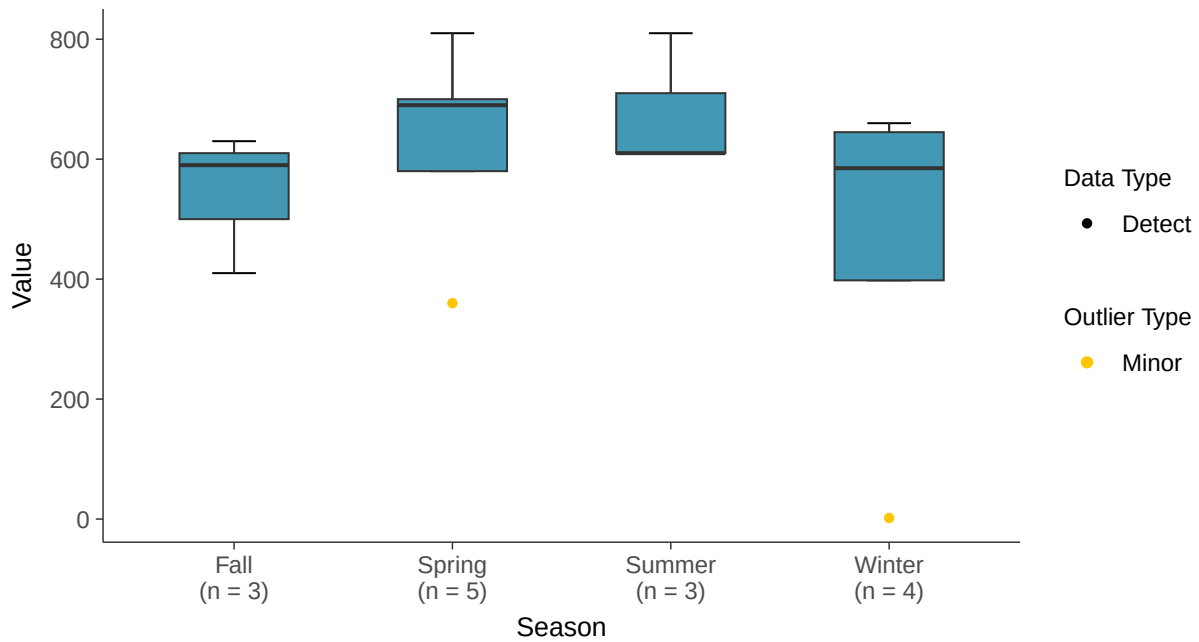
Boxplot

Sulfate (as SO₄), MW-04 (mg/L)



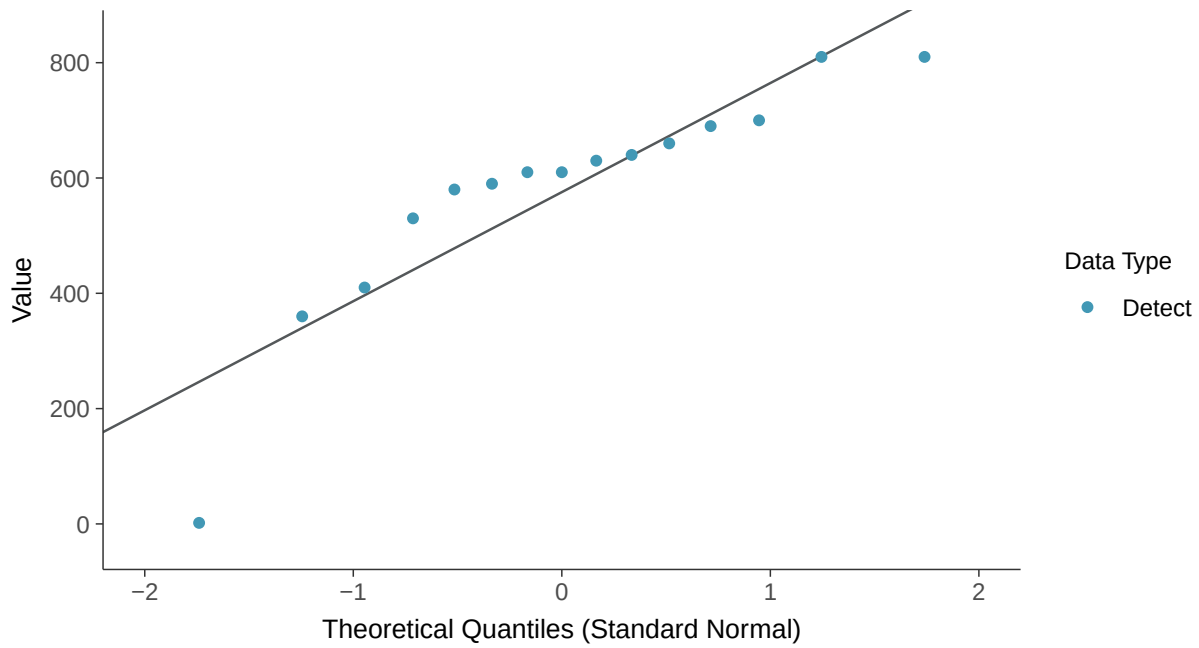
Boxplot by Season

Sulfate (as SO₄), MW-04 (mg/L)



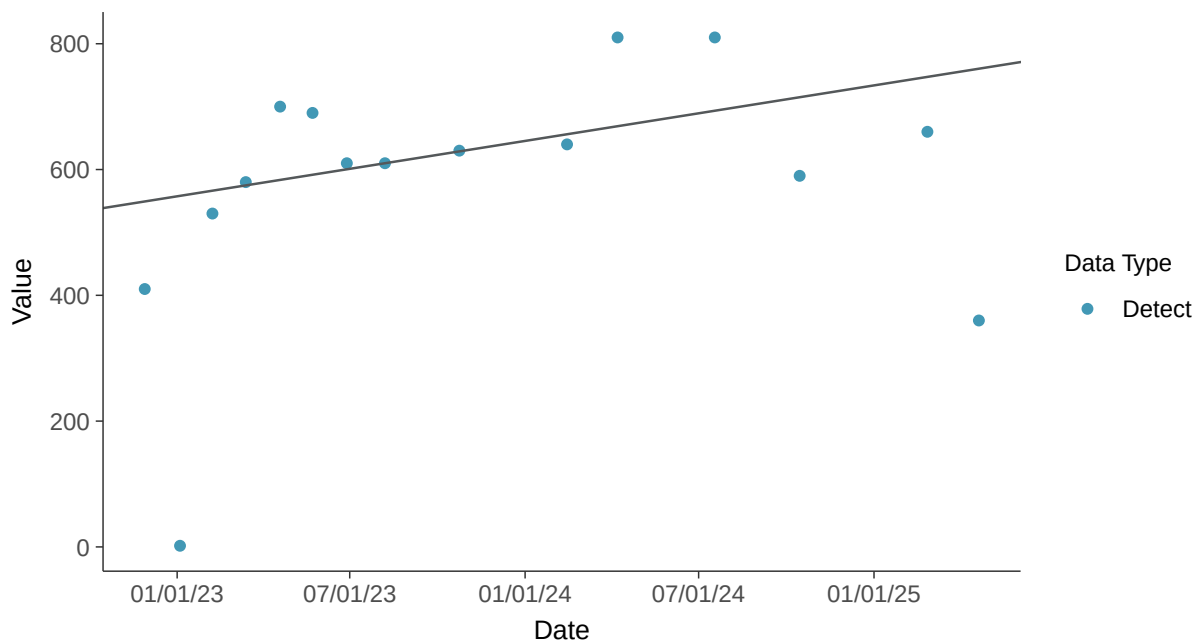
Normal Q-Q plot

Sulfate (as SO₄), MW-04 (mg/L)



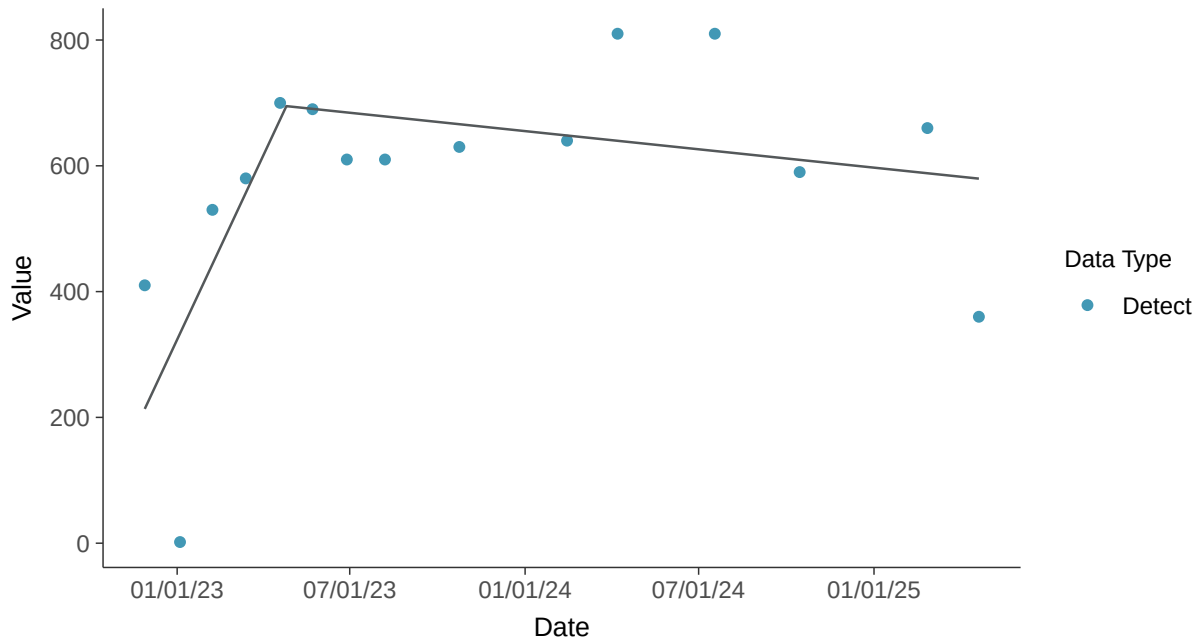
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Sulfate (as SO₄), MW-04 (mg/L)



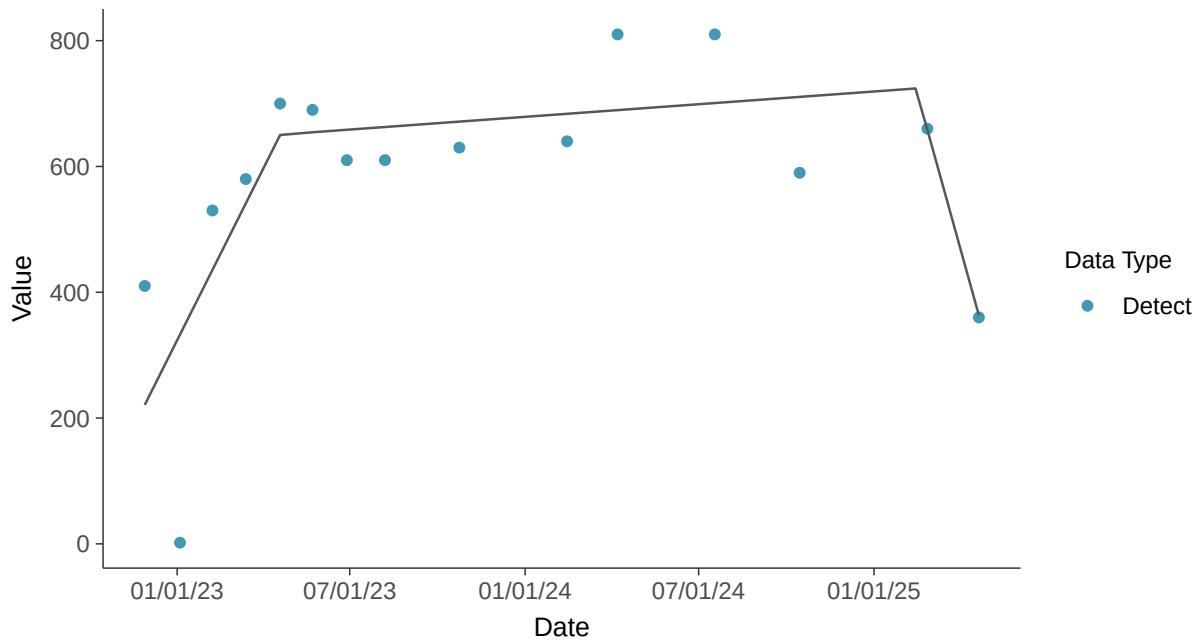
Trend Regression: Piecewise Linear-Linear

Sulfate (as SO₄), MW-04 (mg/L)



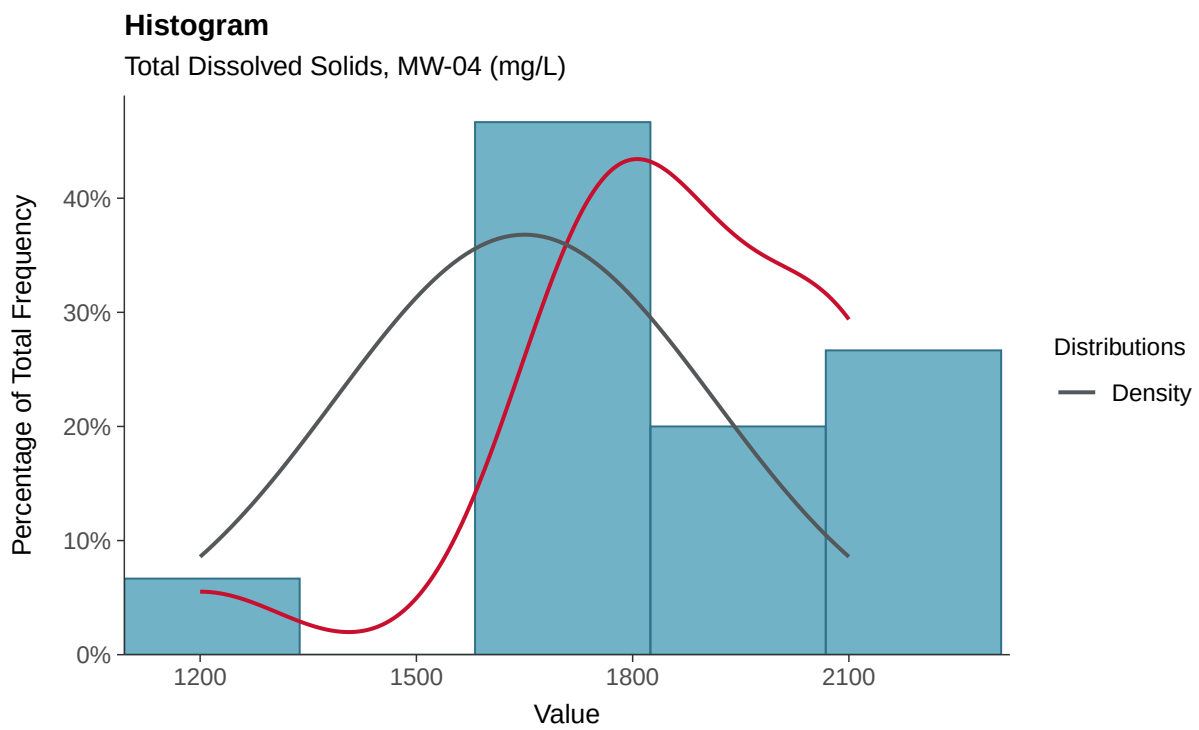
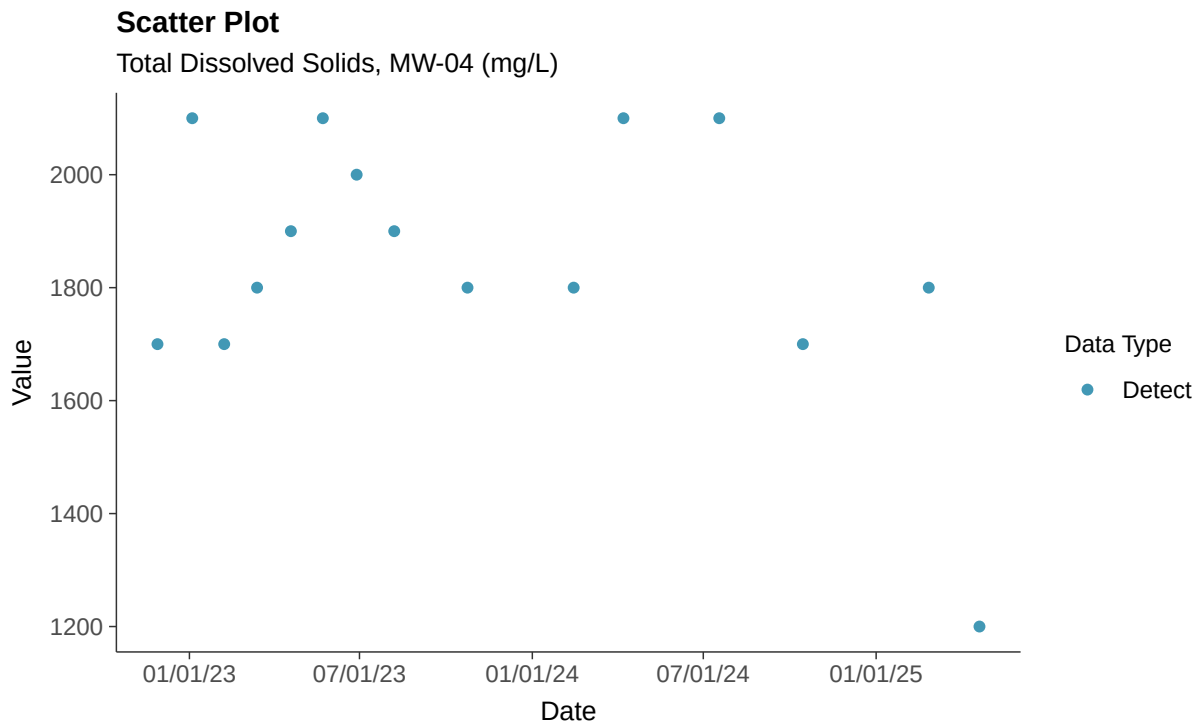
Trend Regression: Piecewise Linear-Linear-Linear

Sulfate (as SO₄), MW-04 (mg/L)



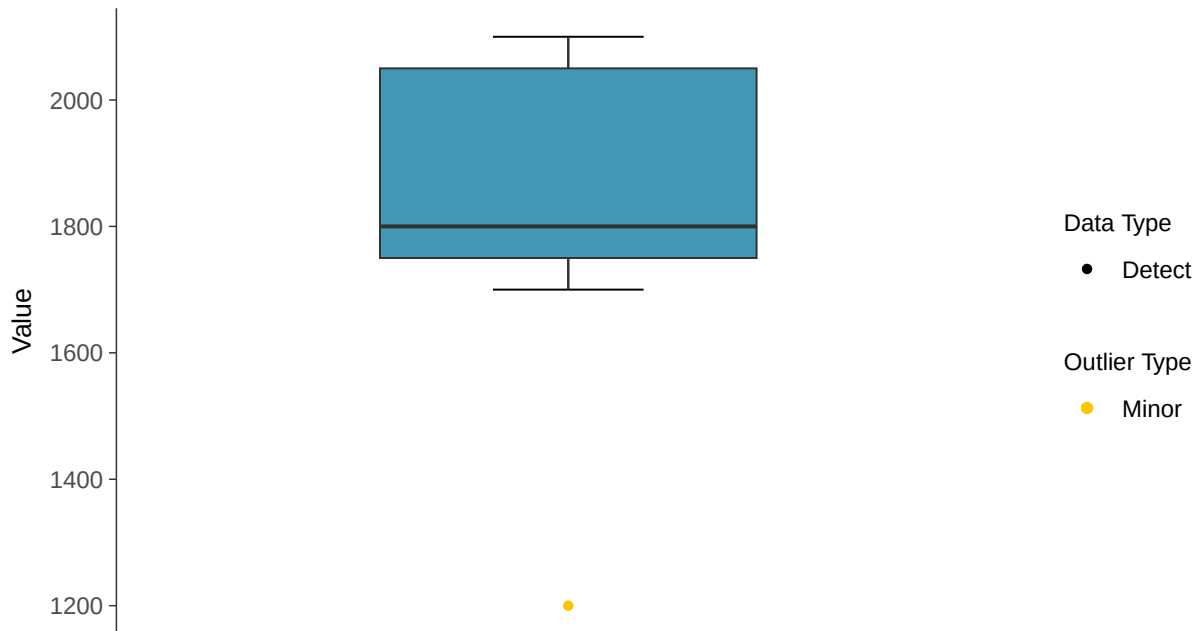
Appendix III: Total Dissolved Solids, MW-04

ID: 14_2_3_126



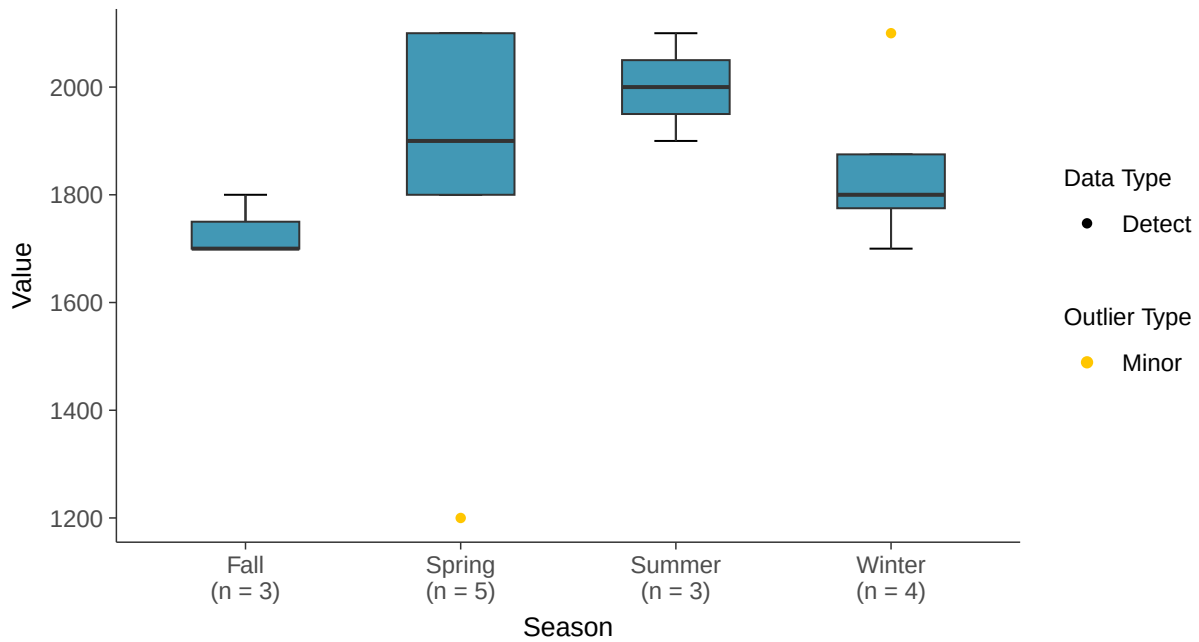
Boxplot

Total Dissolved Solids, MW-04 (mg/L)



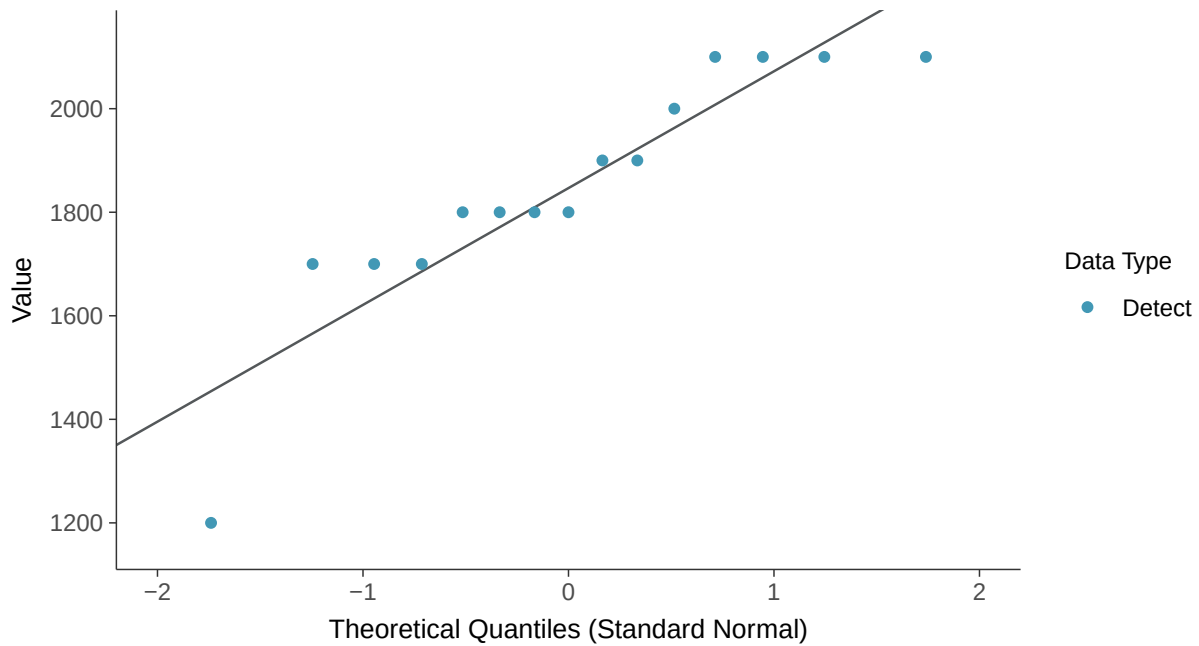
Boxplot by Season

Total Dissolved Solids, MW-04 (mg/L)



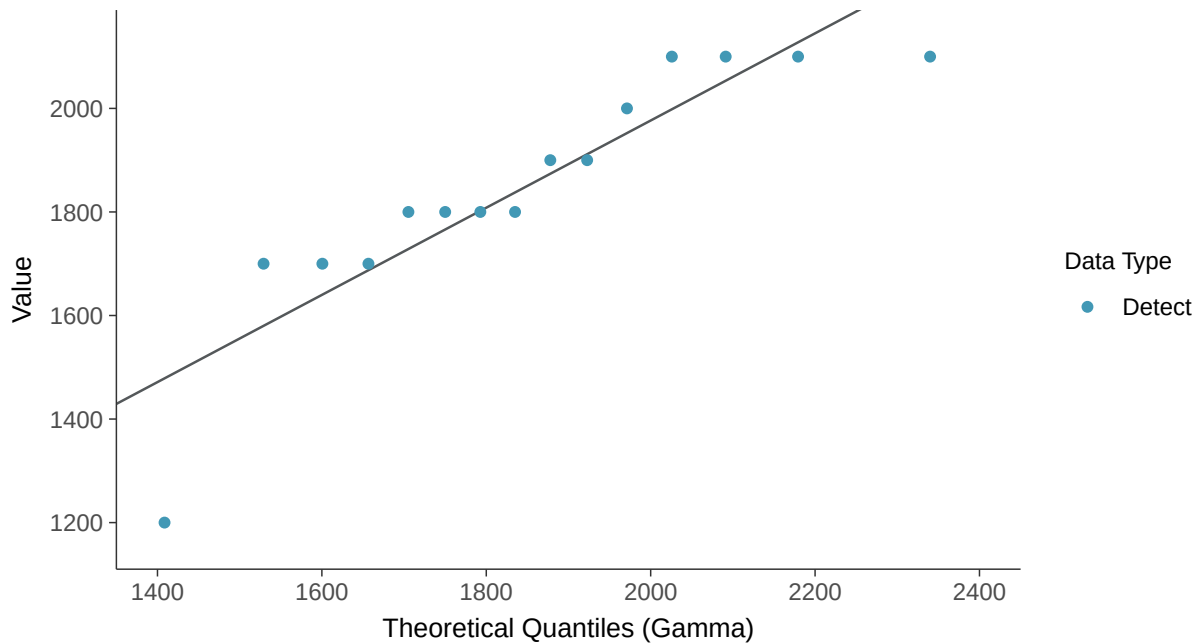
Normal Q-Q plot

Total Dissolved Solids, MW-04 (mg/L)



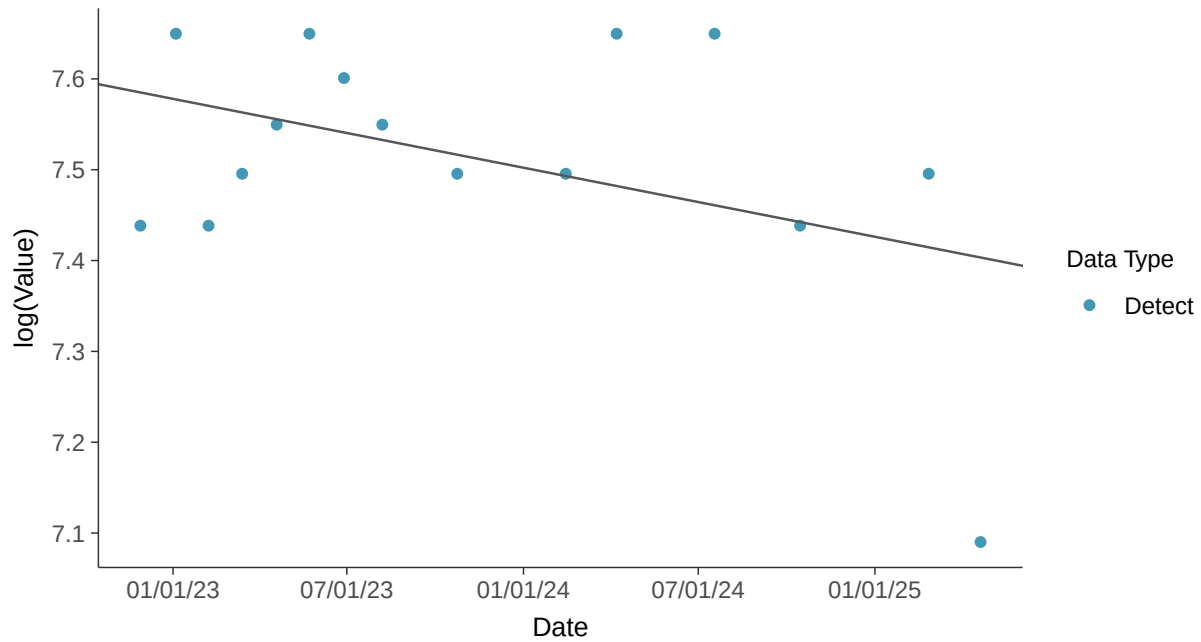
Gamma Q-Q plot

Total Dissolved Solids, MW-04 (mg/L)



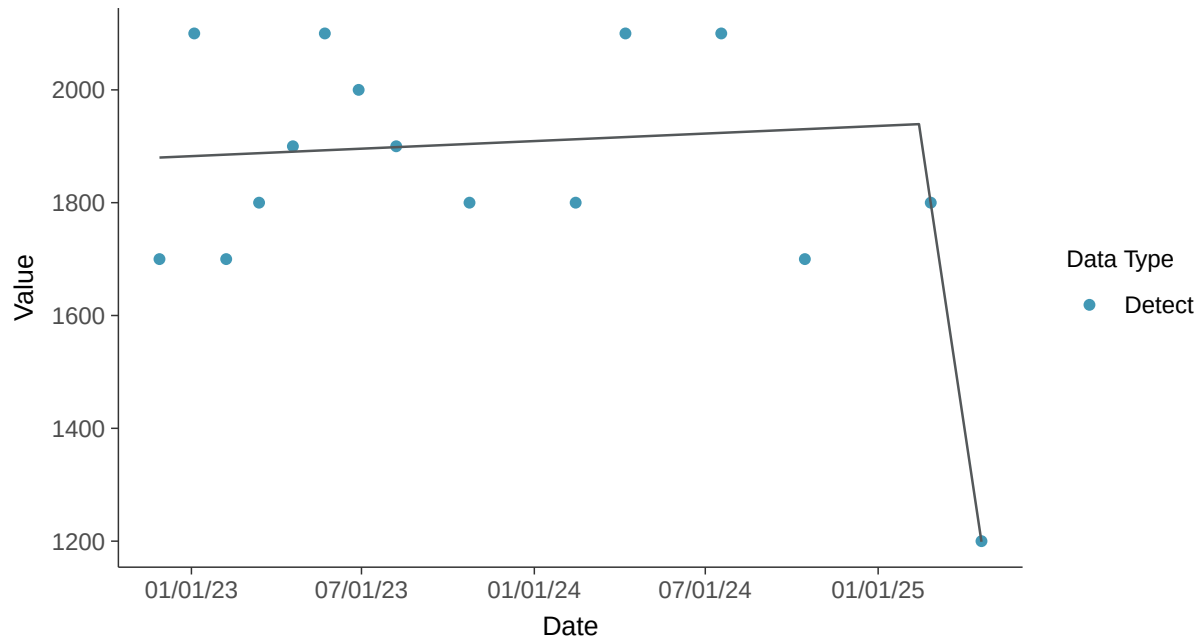
Trend Regression: Lognormal MLE

Total Dissolved Solids, MW-04 (mg/L)



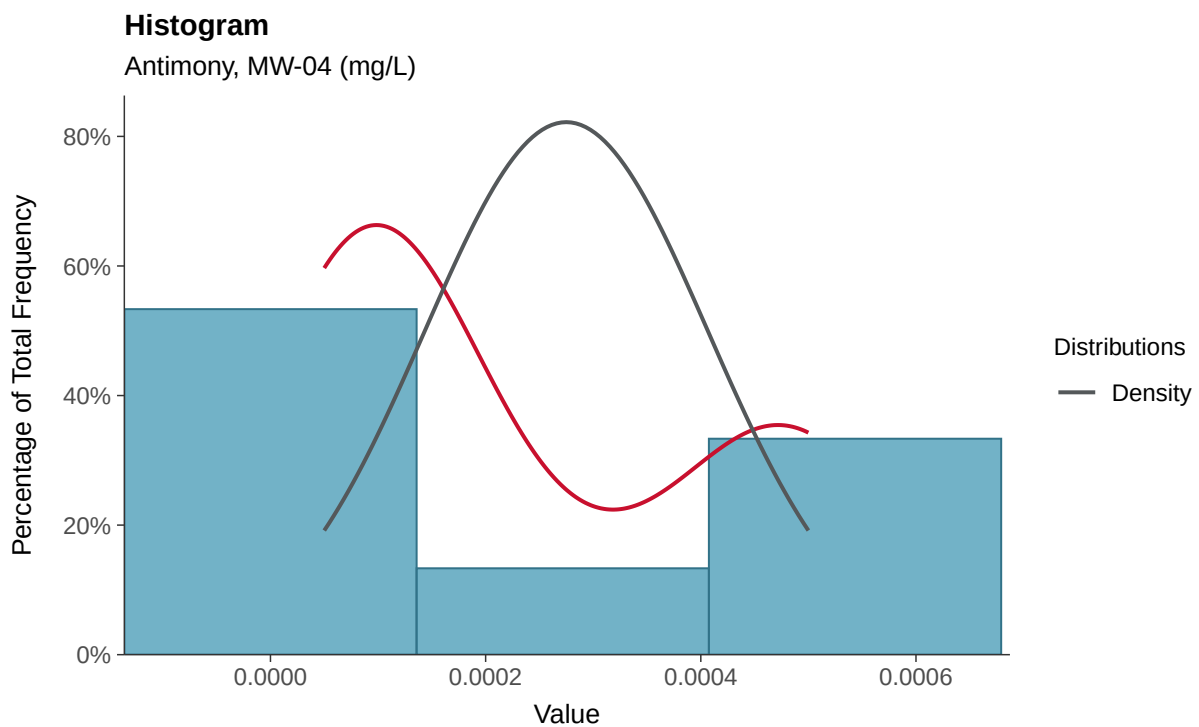
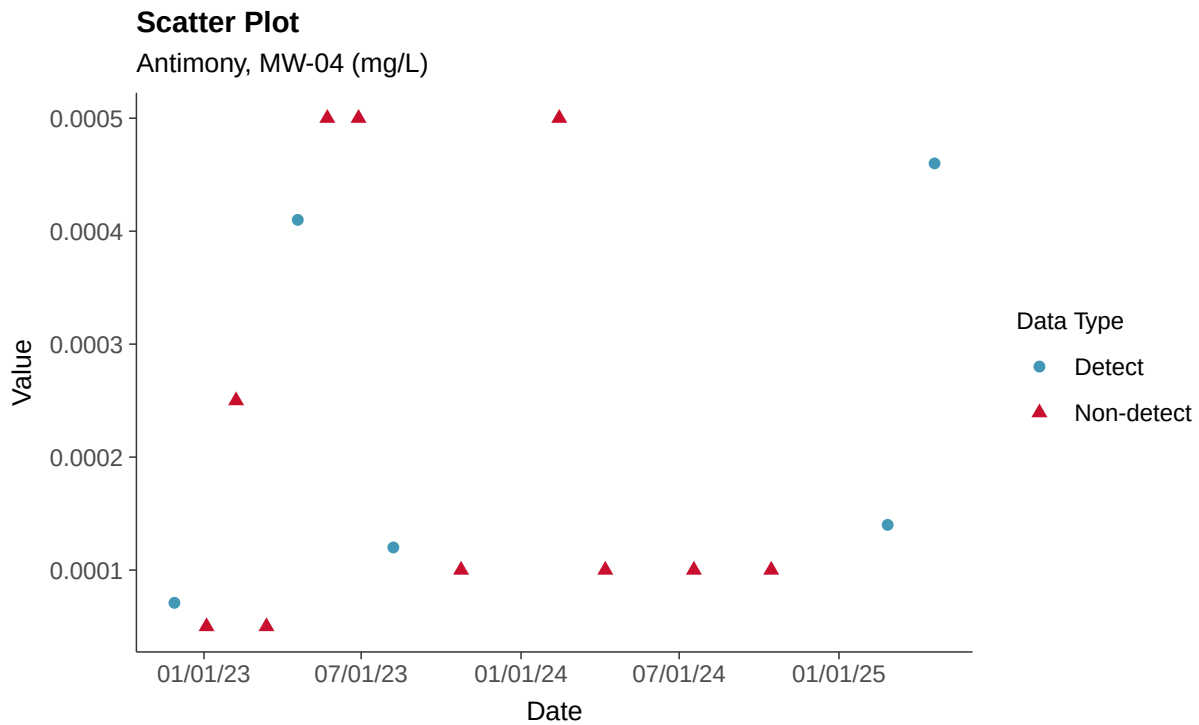
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-04 (mg/L)



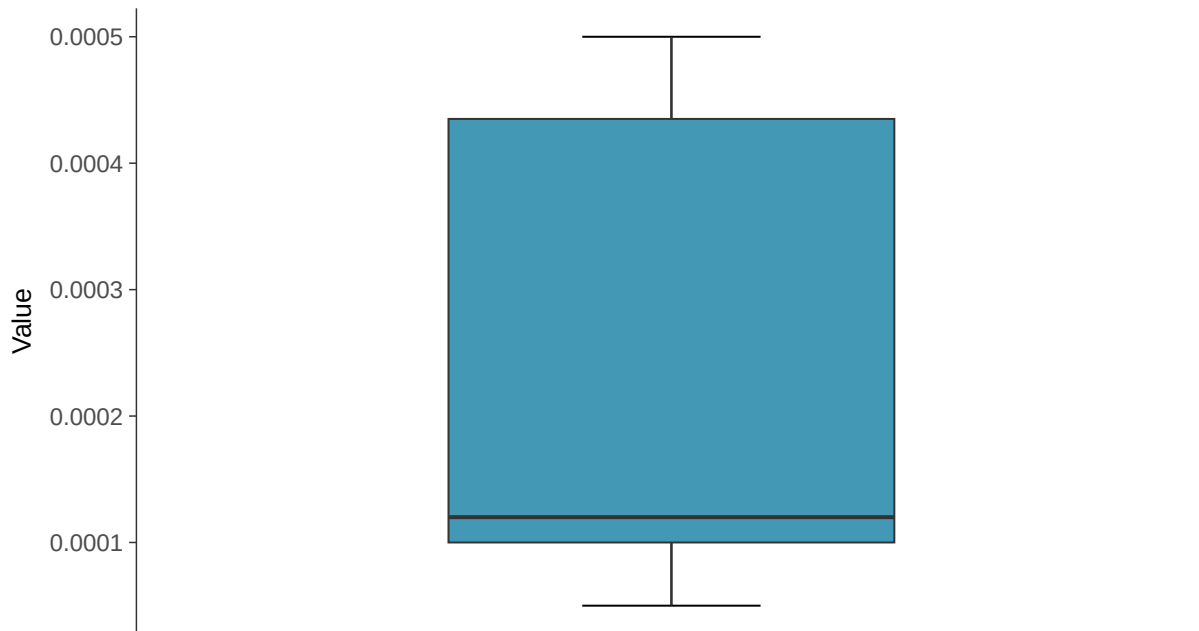
Appendix IV: Antimony, MW-04

ID: 14_2_4_101



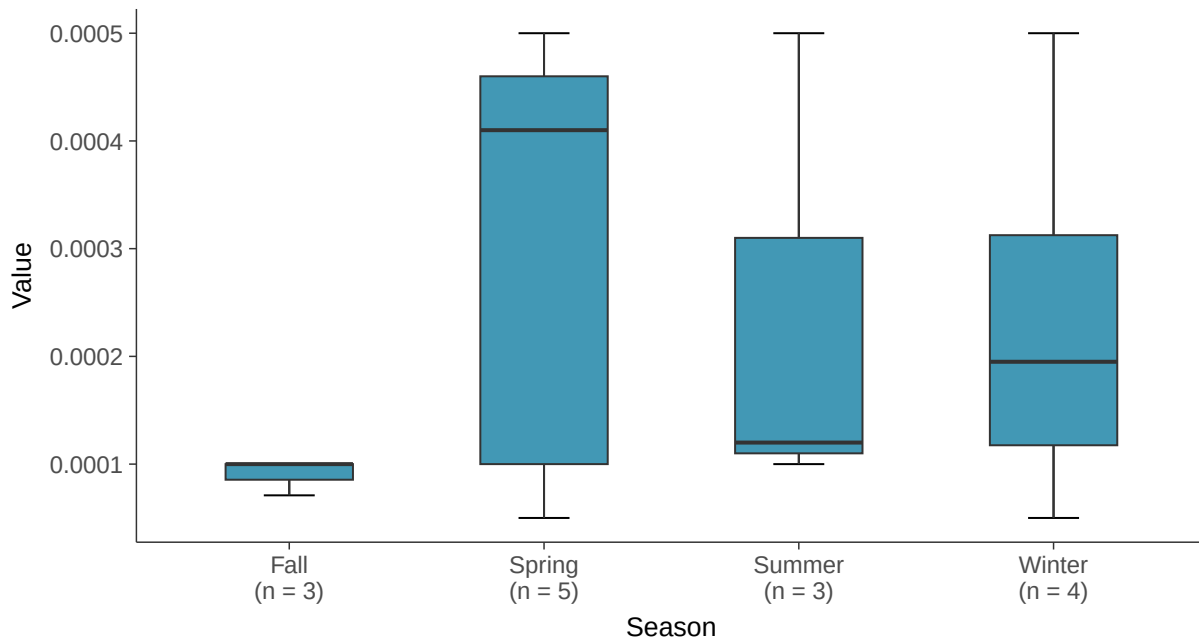
Boxplot

Antimony, MW-04 (mg/L)



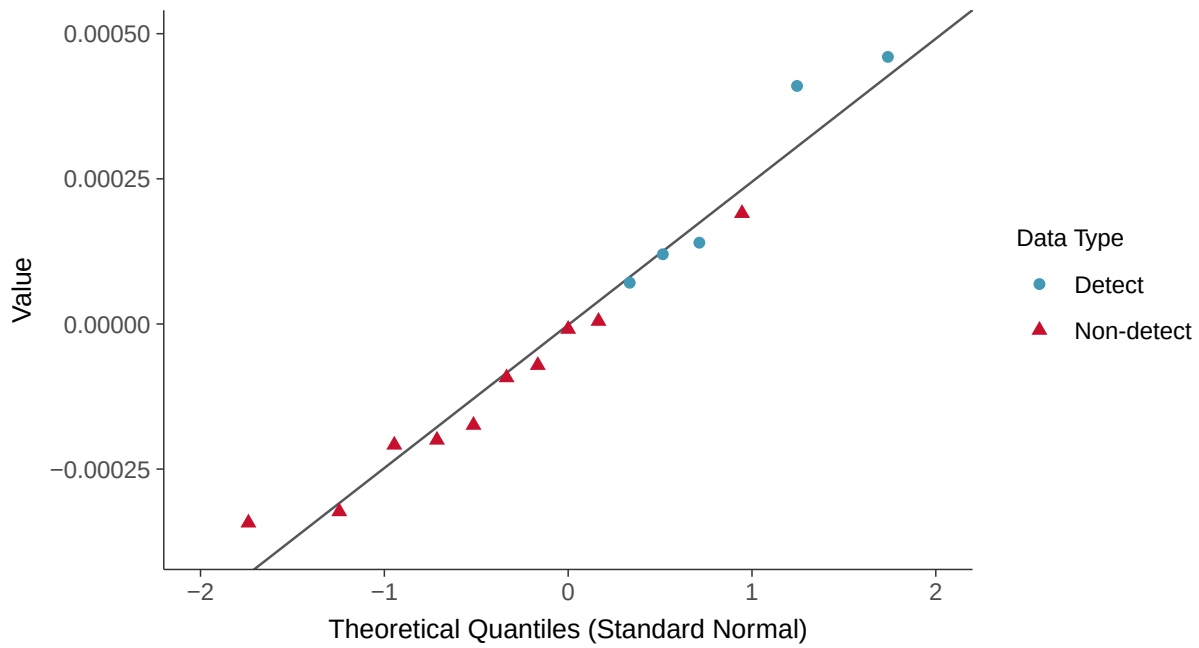
Boxplot by Season

Antimony, MW-04 (mg/L)



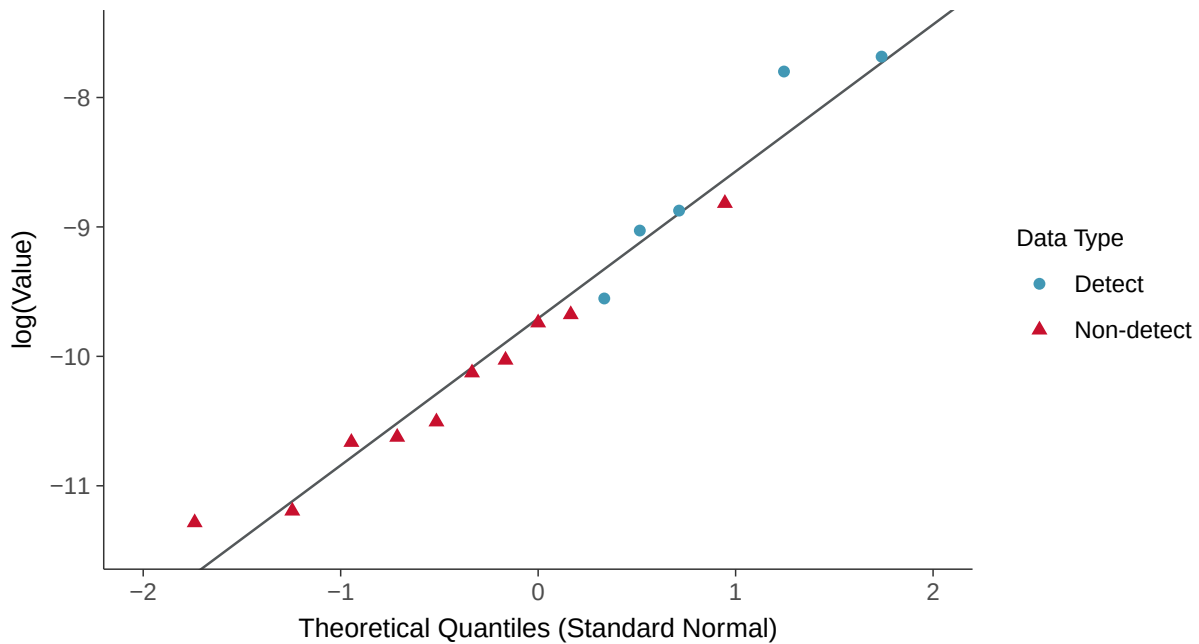
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-04 (mg/L)



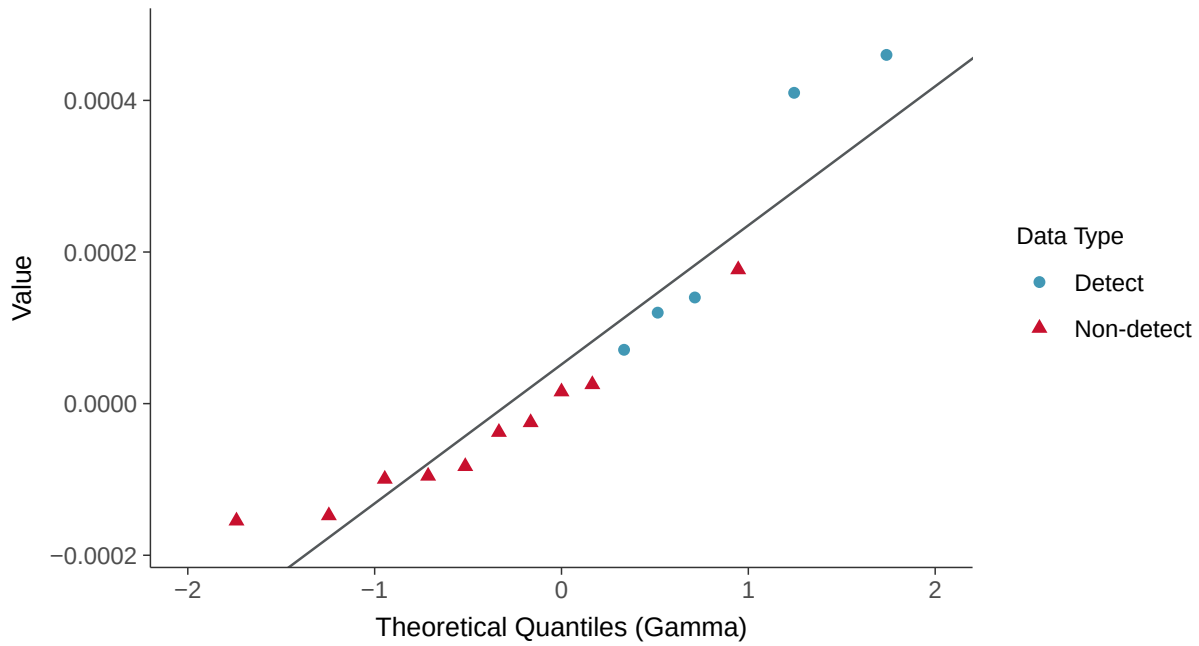
Lognormal Q-Q plot using ROS Imputed Estimates

Antimony, MW-04 (mg/L)



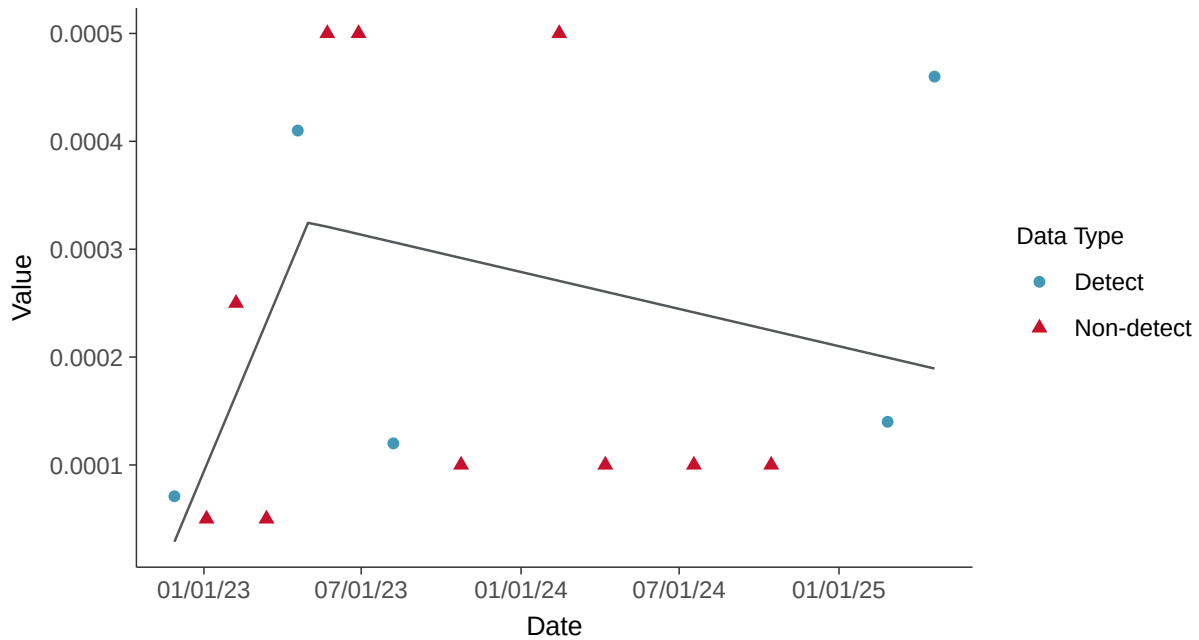
Gamma Q-Q plot using ROS Imputed Estimates

Antimony, MW-04 (mg/L)



Trend Regression: Piecewise Linear-Linear

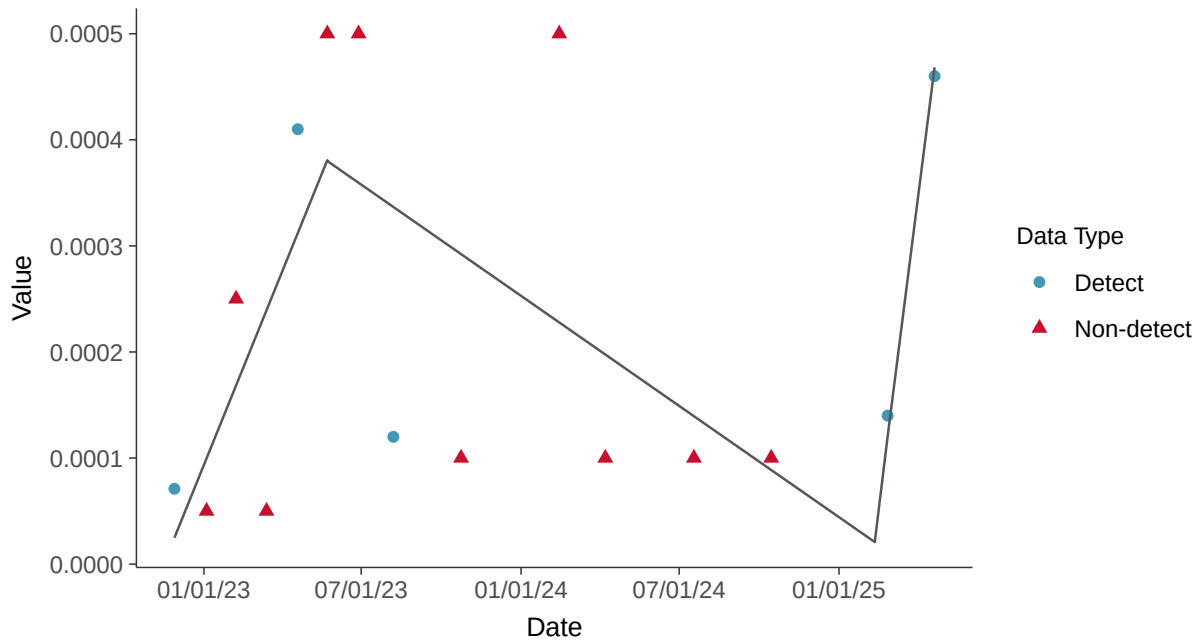
Antimony, MW-04 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

Antimony, MW-04 (mg/L)

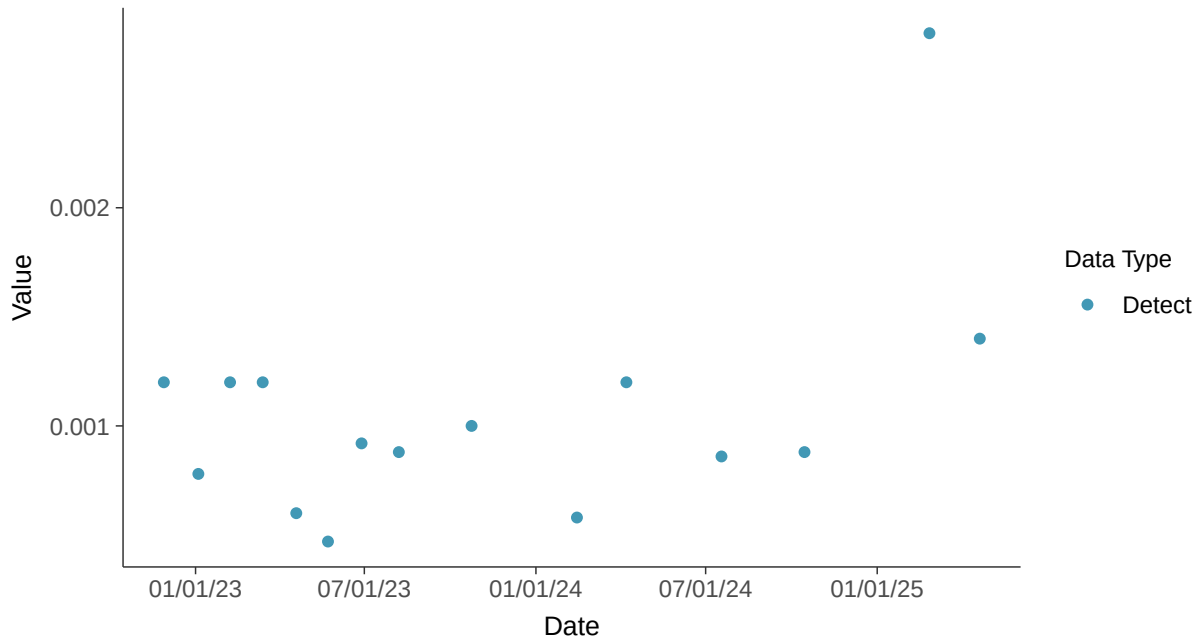


Appendix IV: Arsenic, MW-04

ID: 14_2_4_102

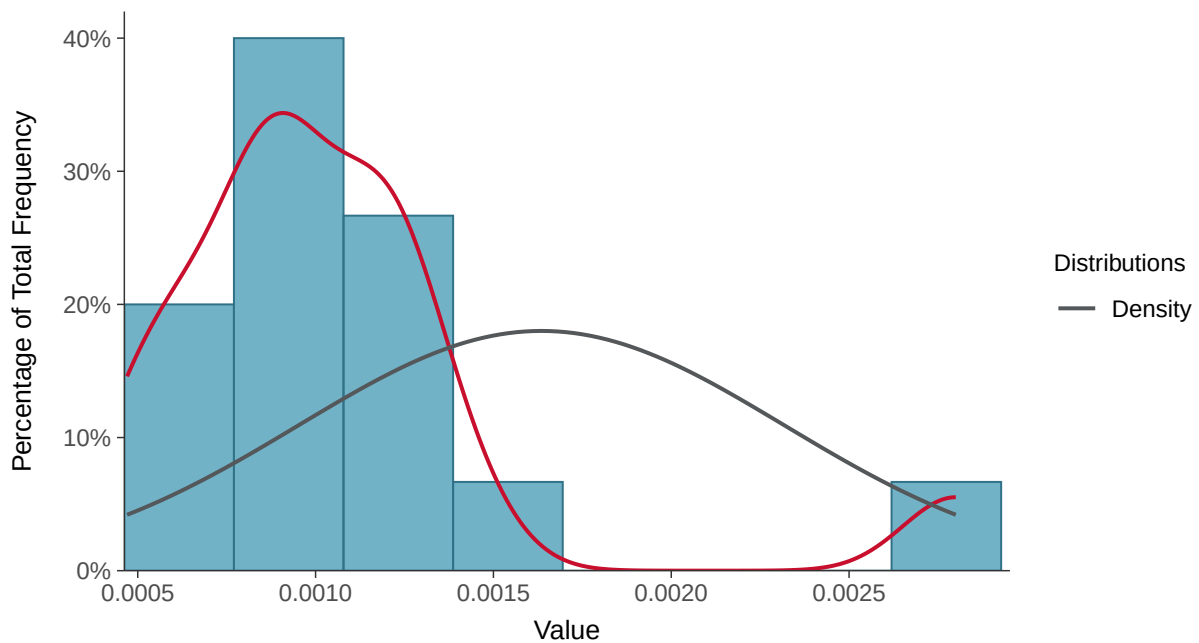
Scatter Plot

Arsenic, MW-04 (mg/L)



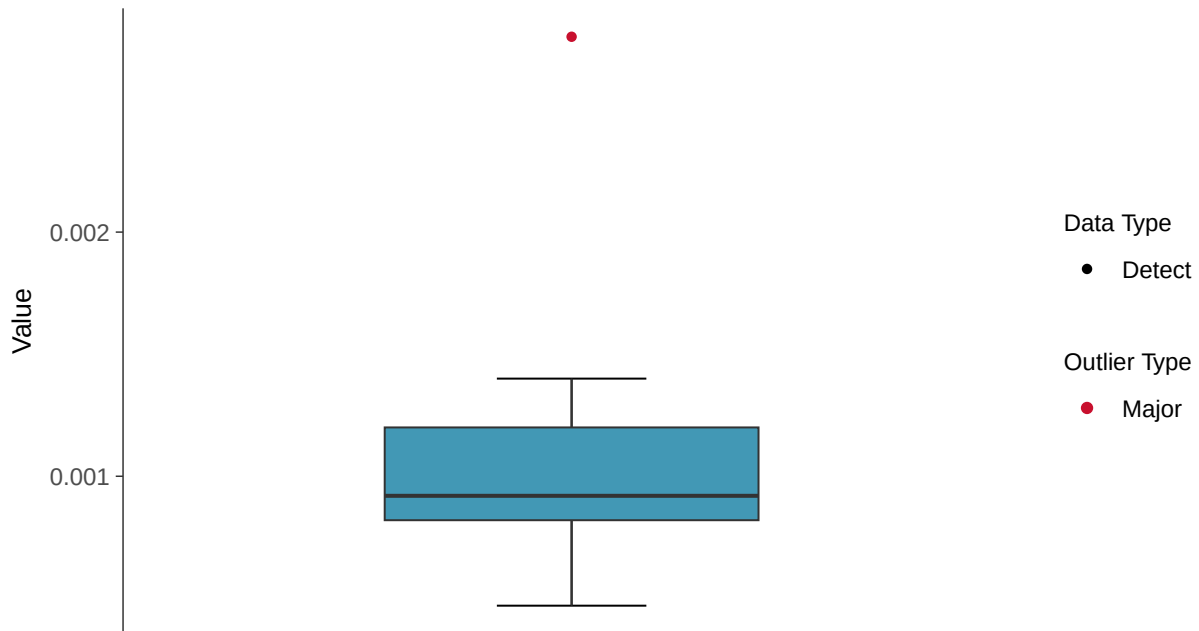
Histogram

Arsenic, MW-04 (mg/L)



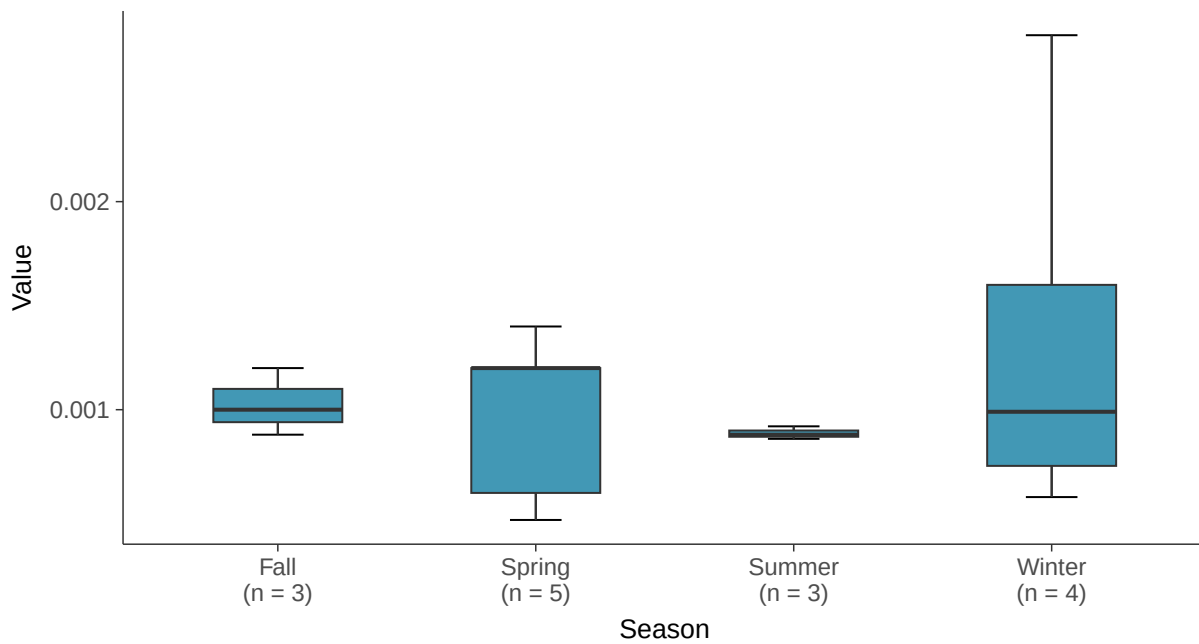
Boxplot

Arsenic, MW-04 (mg/L)



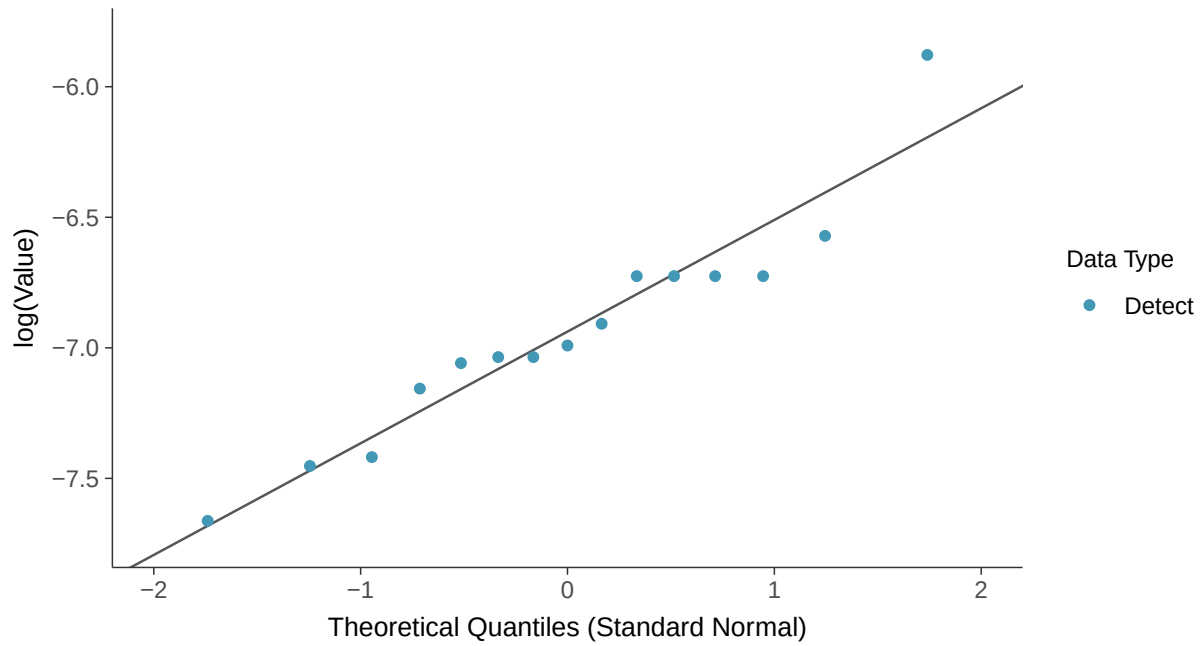
Boxplot by Season

Arsenic, MW-04 (mg/L)



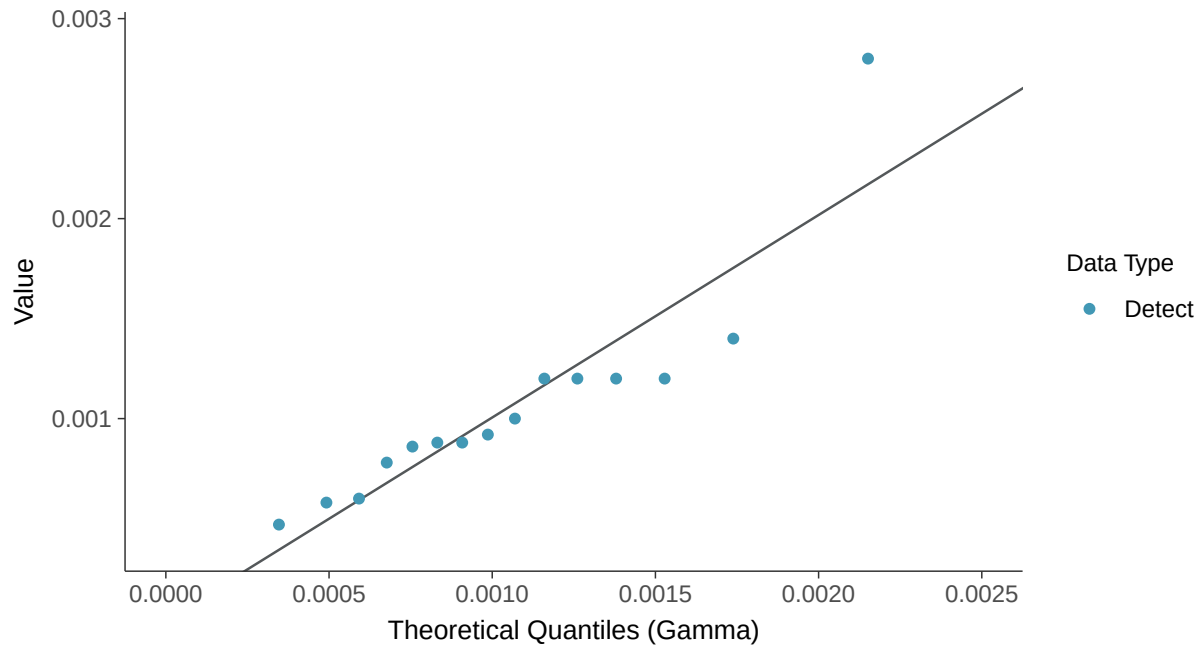
Lognormal Q-Q plot

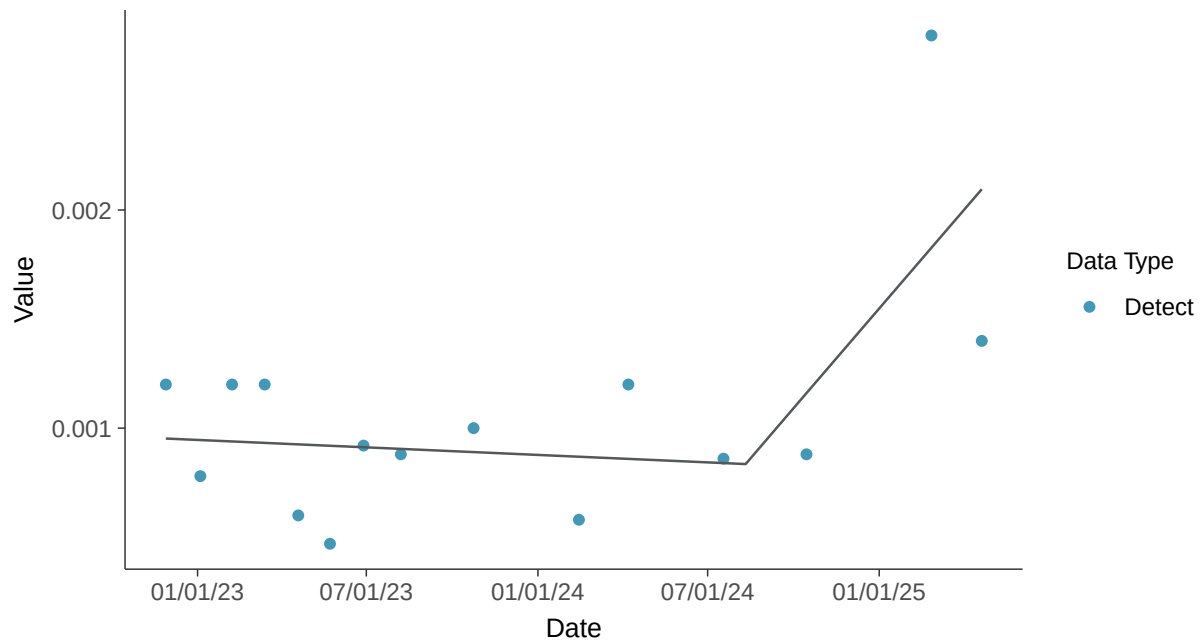
Arsenic, MW-04 (mg/L)



Gamma Q-Q plot

Arsenic, MW-04 (mg/L)

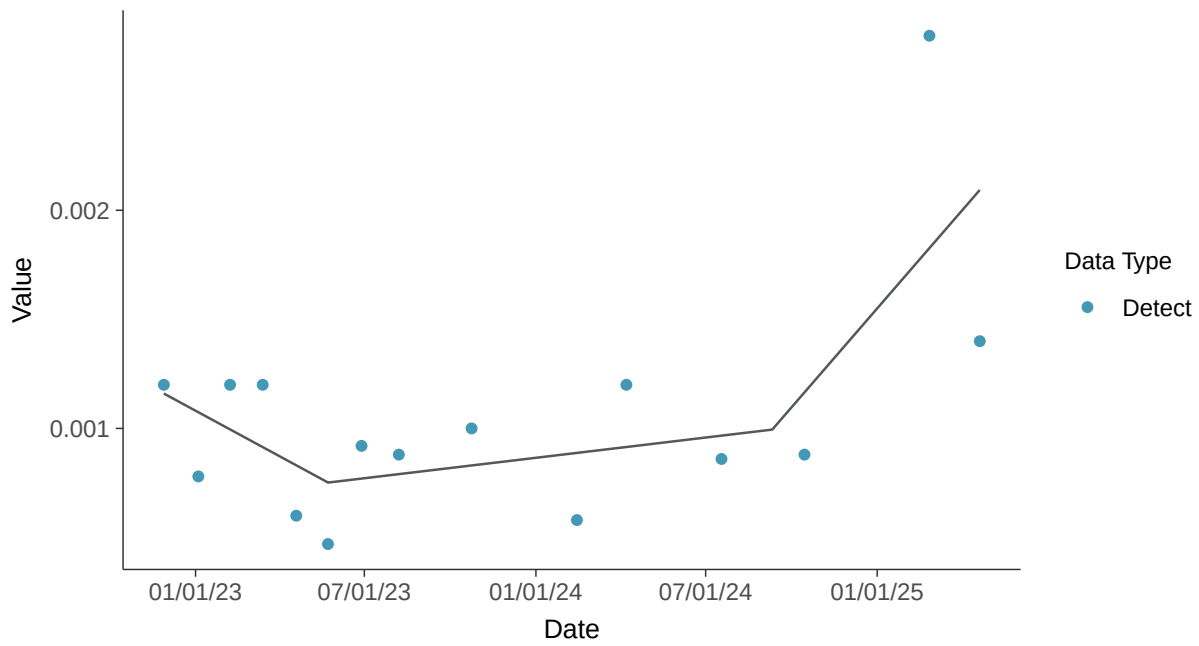






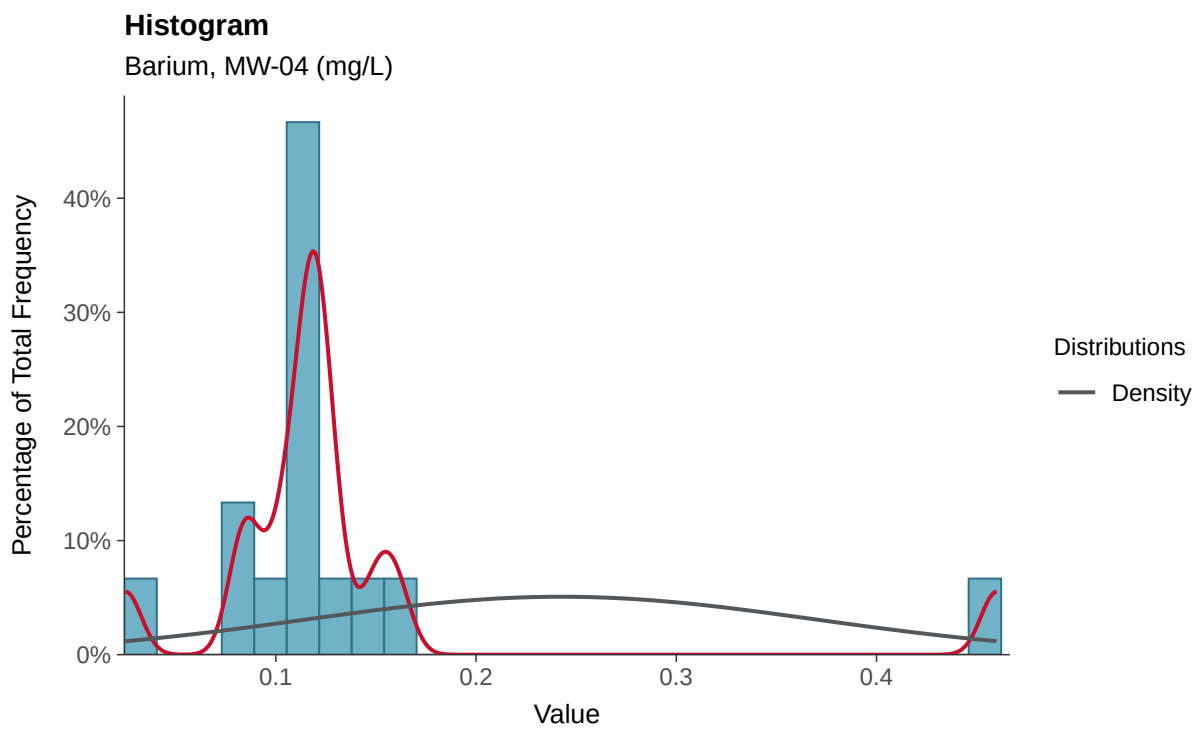
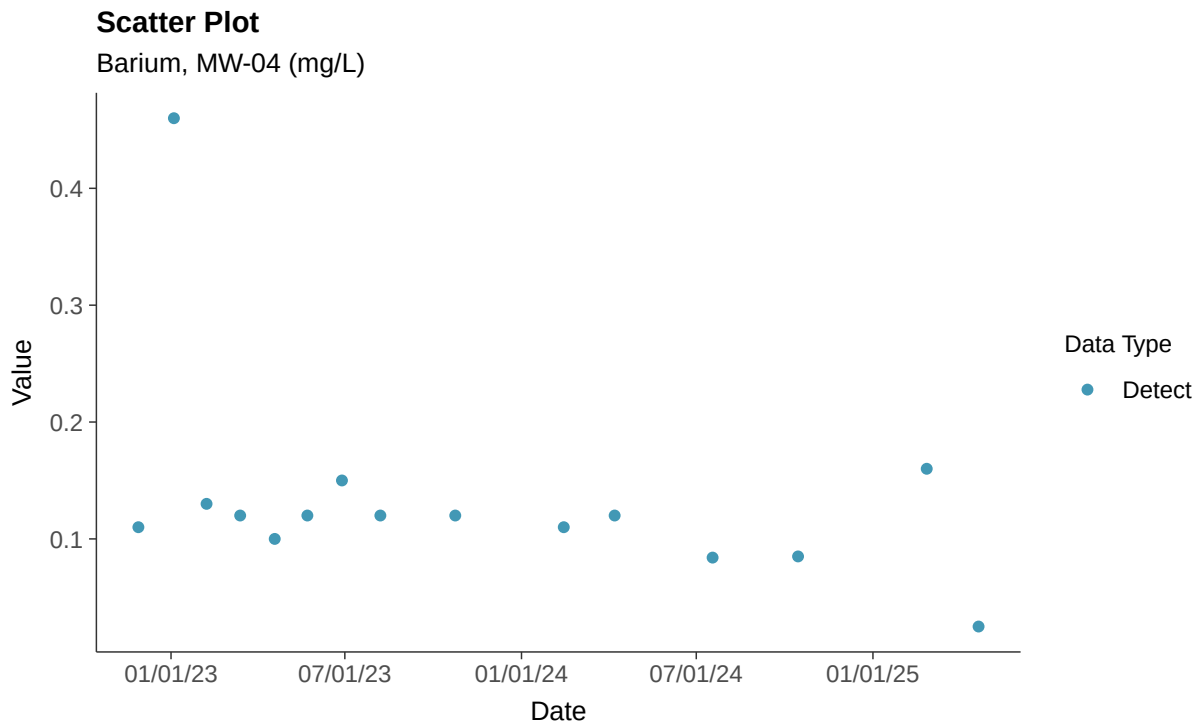
Trend Regression: Piecewise Linear-Linear-Linear

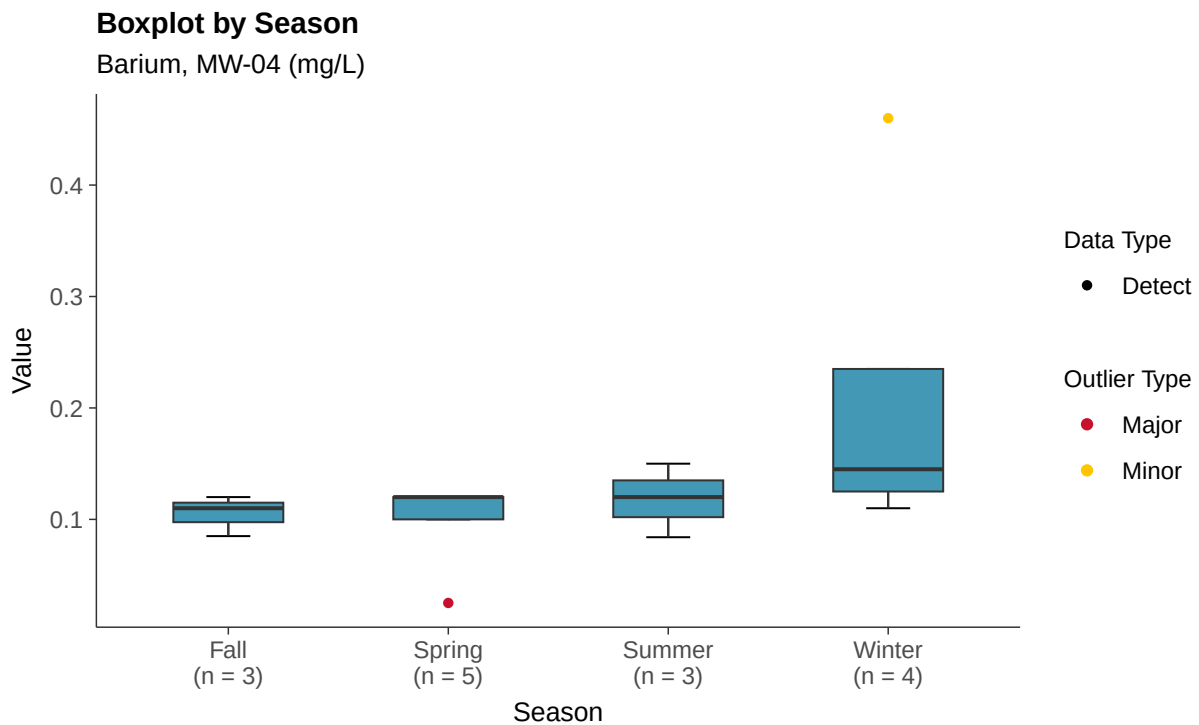
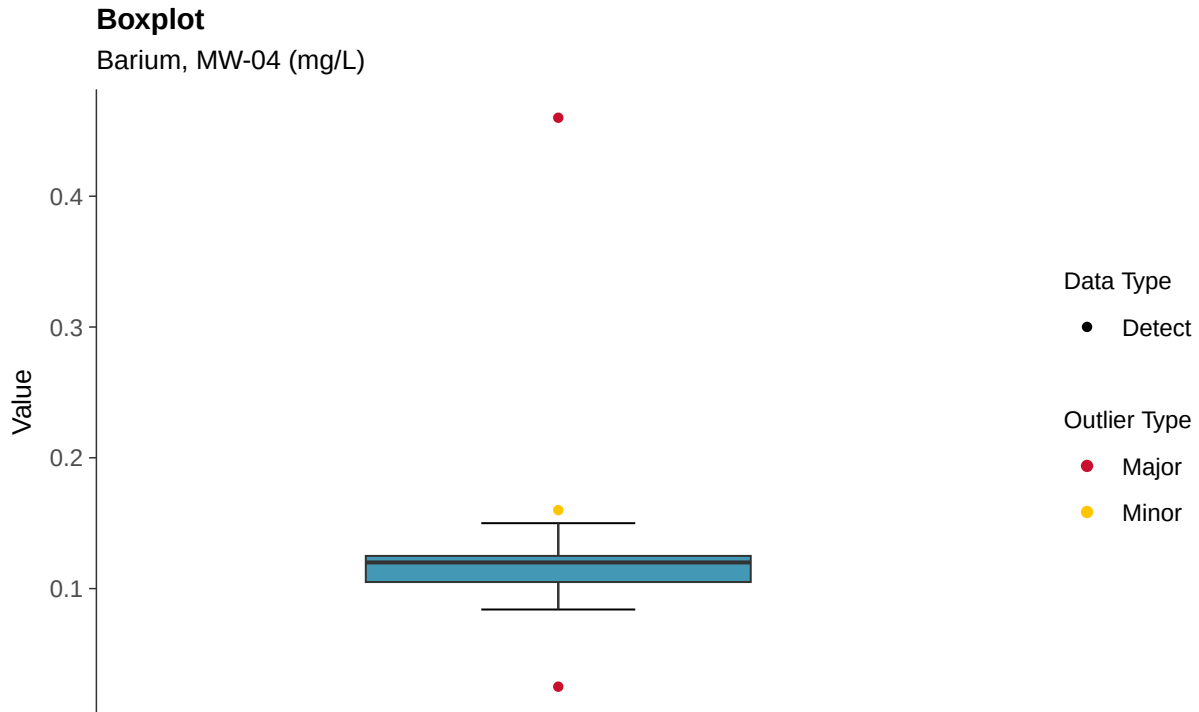
Arsenic, MW-04 (mg/L)



Appendix IV: Barium, MW-04

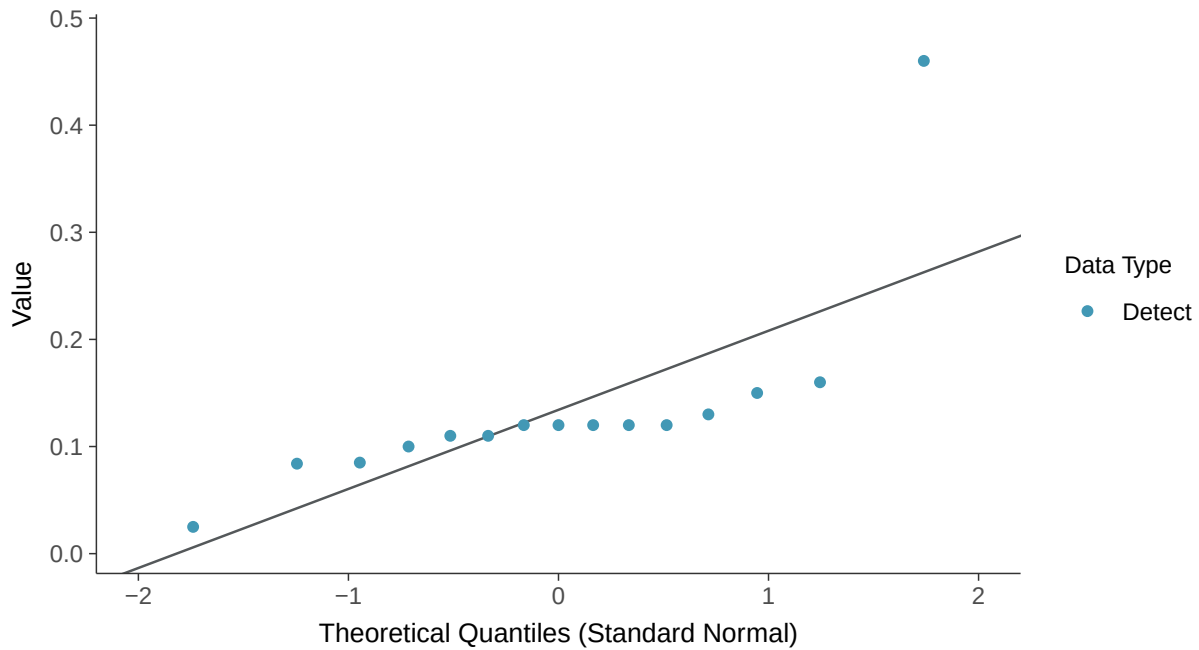
ID: 14_2_4_103





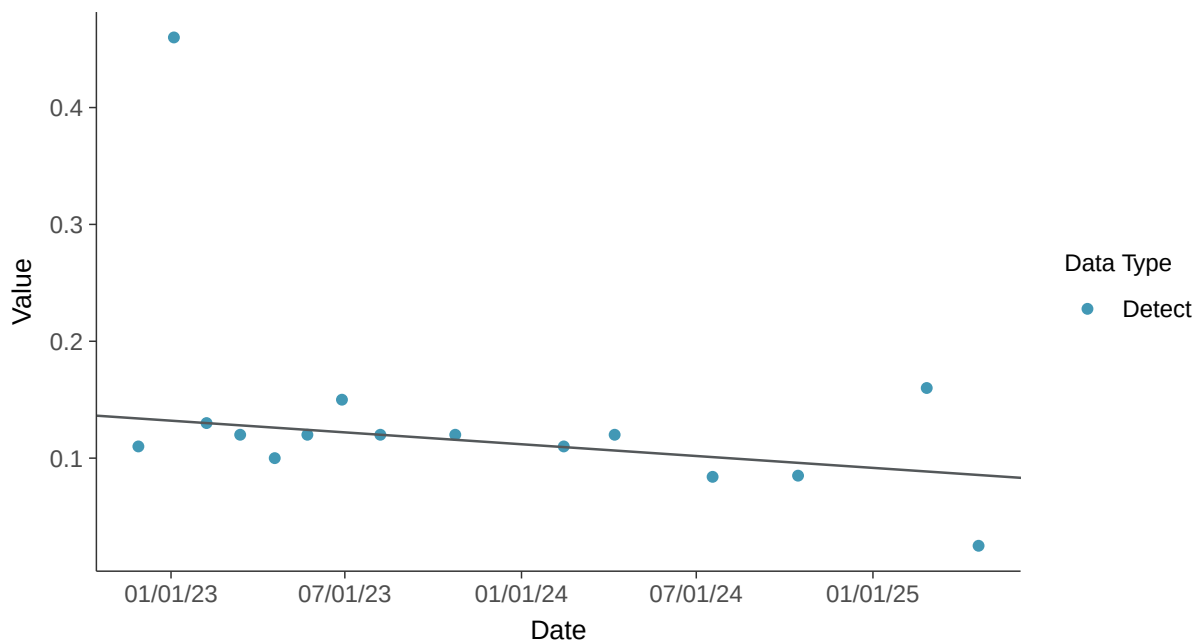
Normal Q-Q plot

Barium, MW-04 (mg/L)

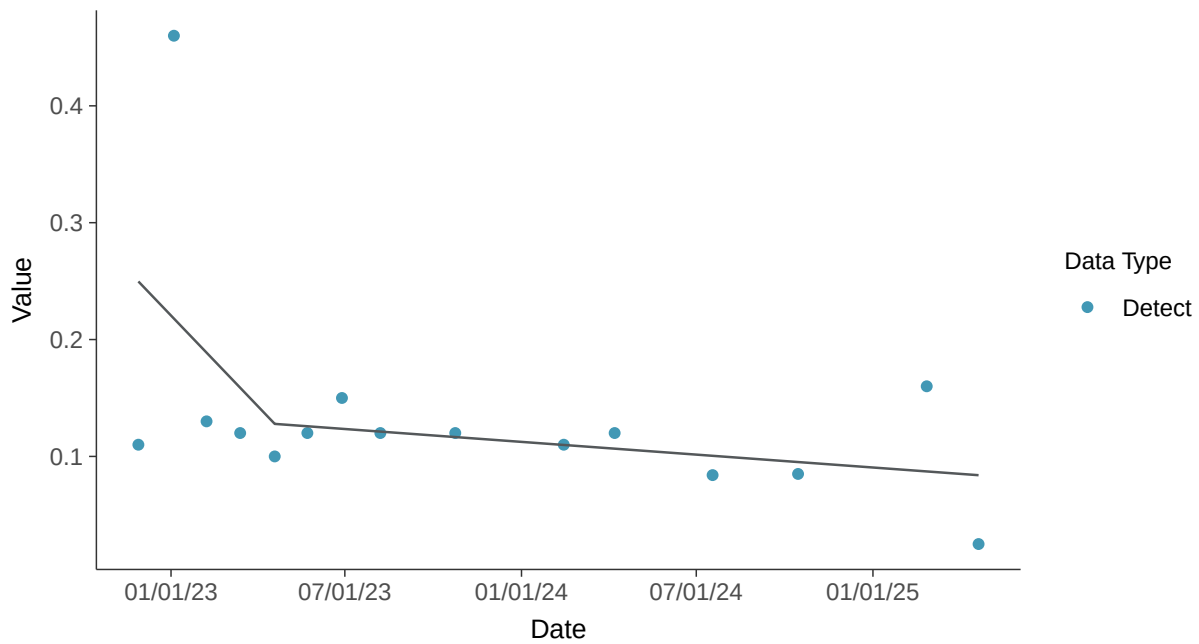


Trend Regression: Mann-Kendall/Theil-Sen Estimate

Barium, MW-04 (mg/L)

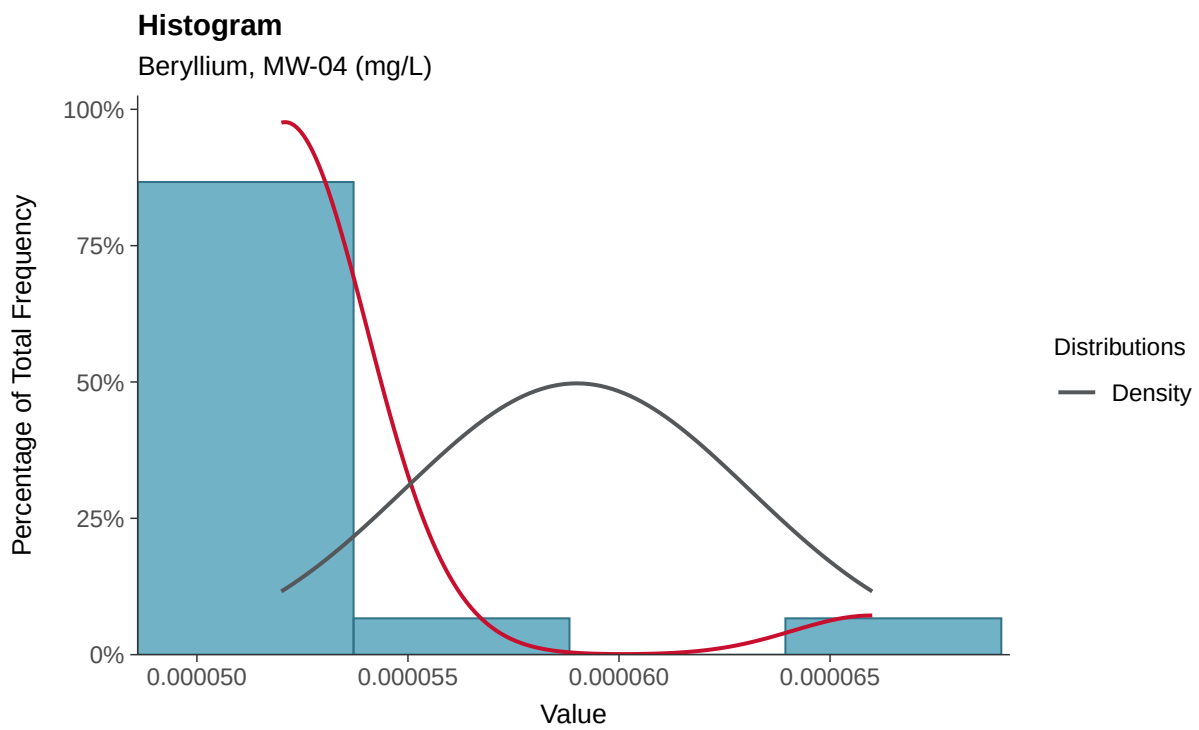
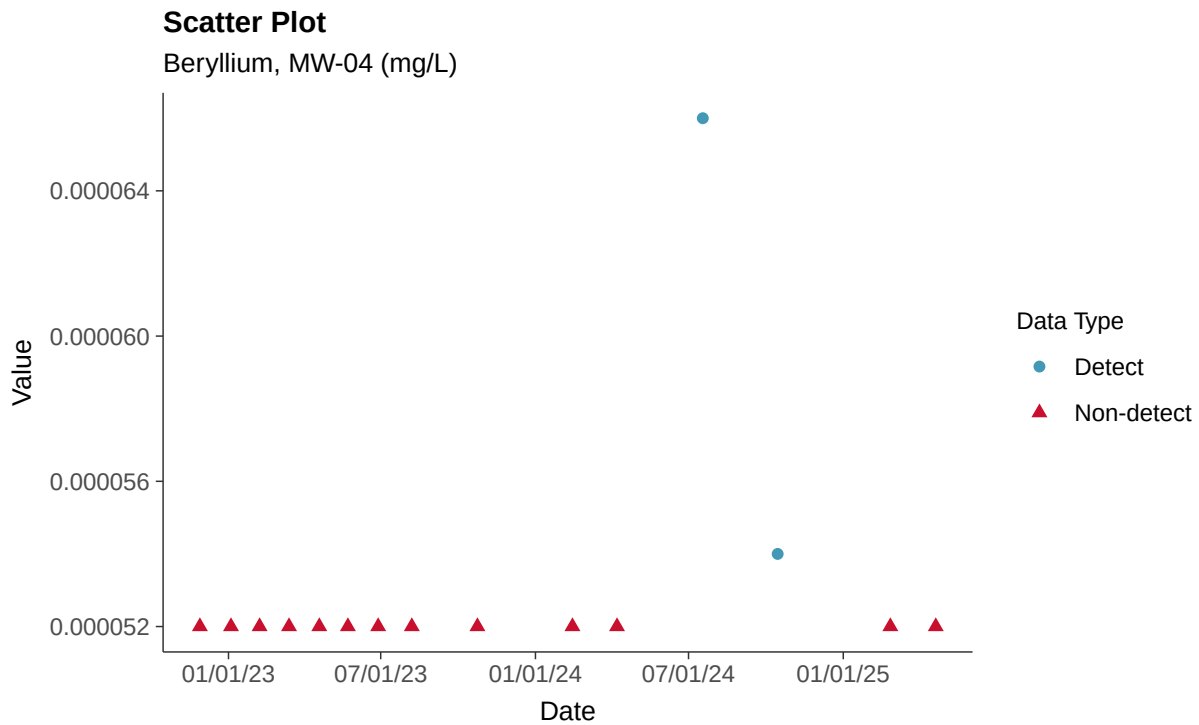


Trend Regression: Piecewise Linear-Linear
Barium, MW-04 (mg/L)



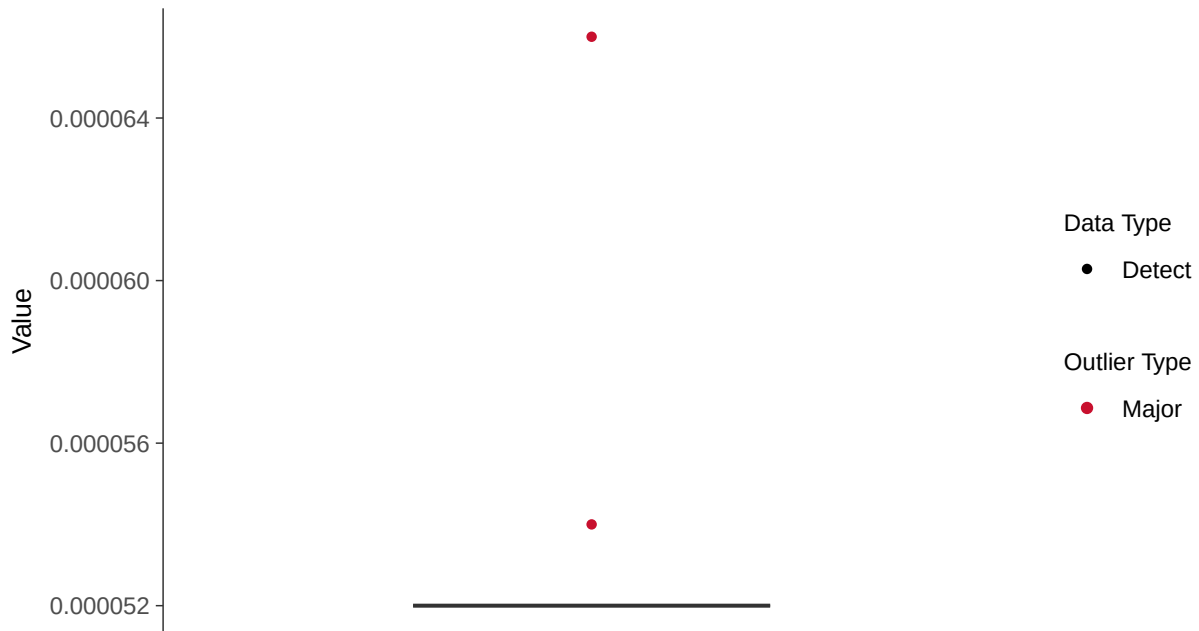
Appendix IV: Beryllium, MW-04

ID: 14_2_4_104



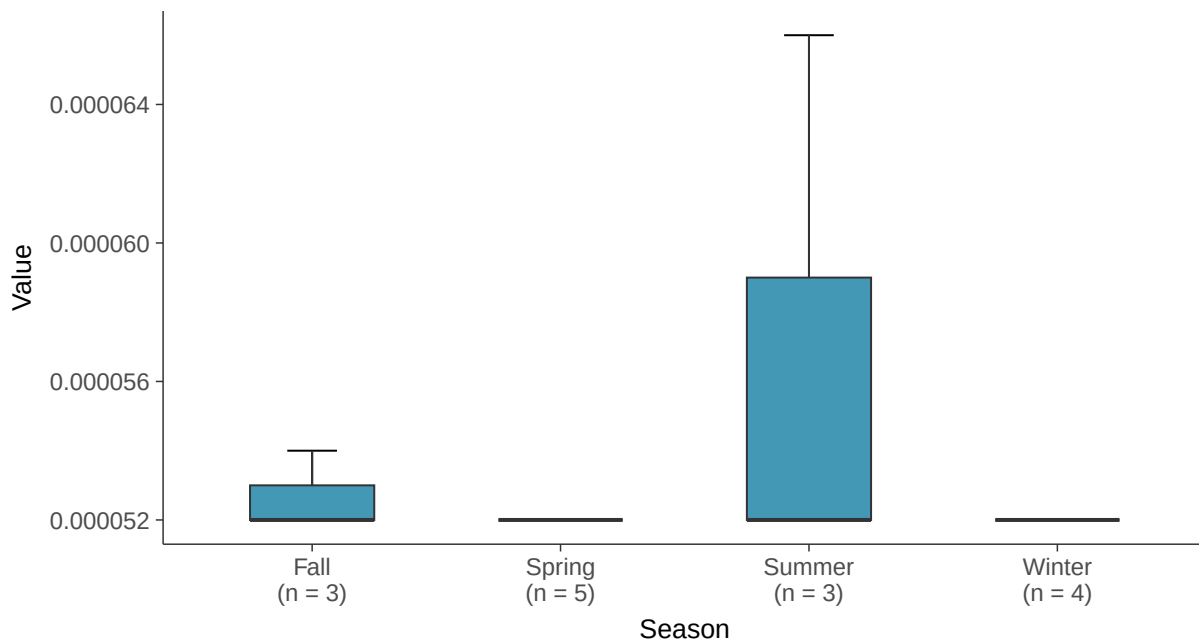
Boxplot

Beryllium, MW-04 (mg/L)

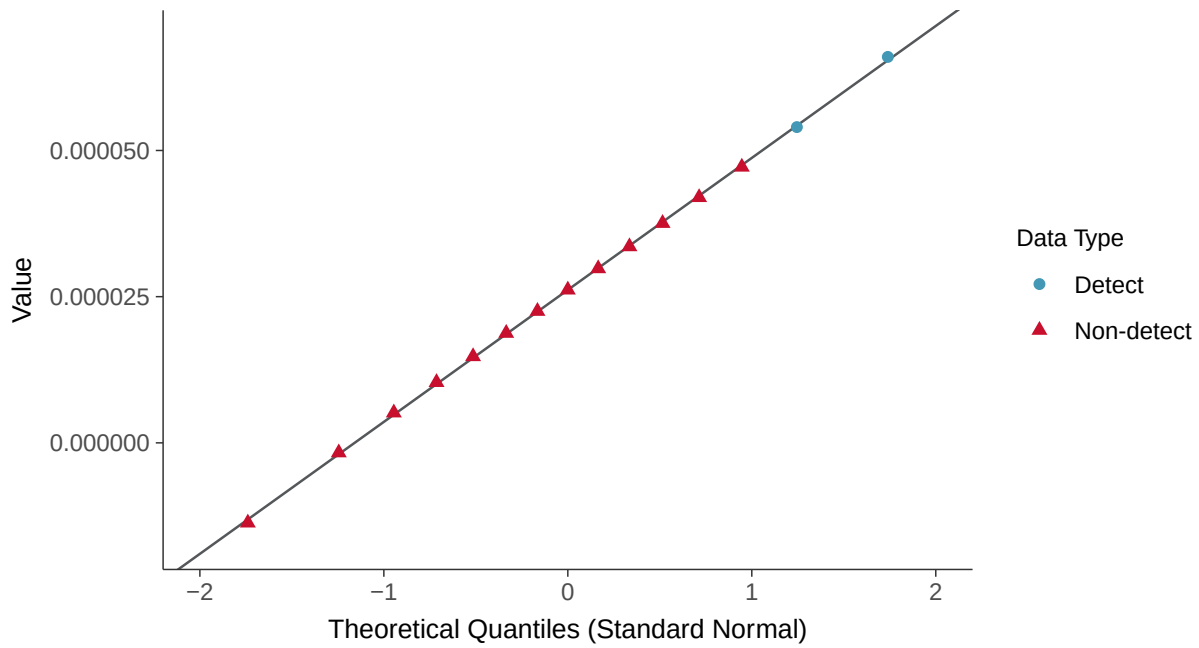


Boxplot by Season

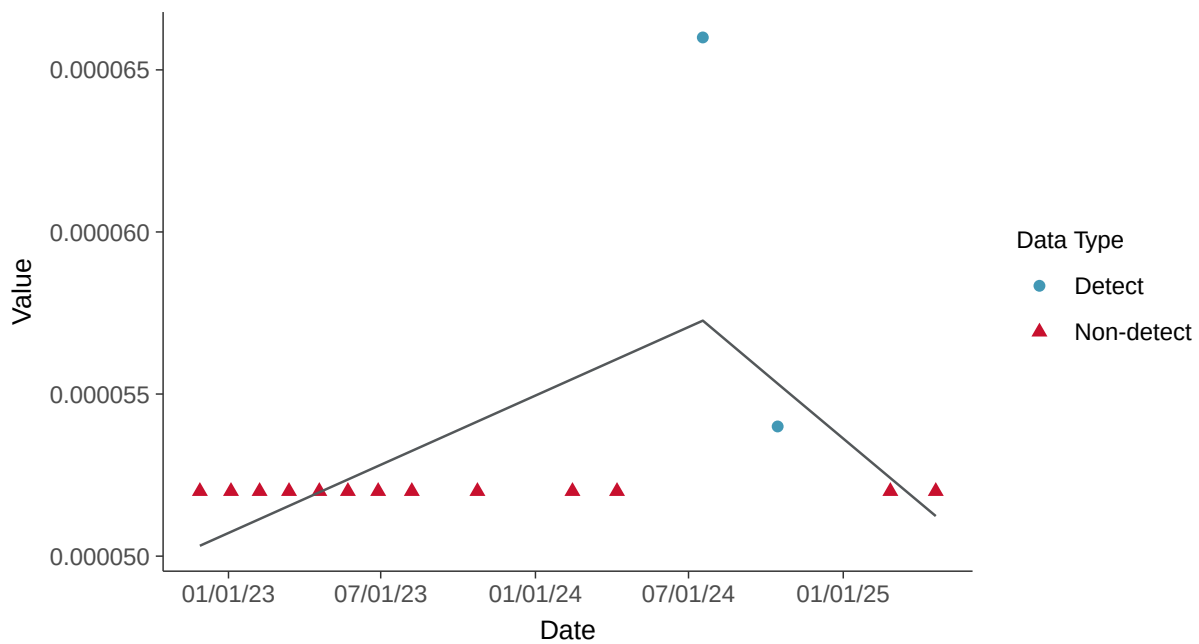
Beryllium, MW-04 (mg/L)



Beryllium, MW-04 (mg/L)

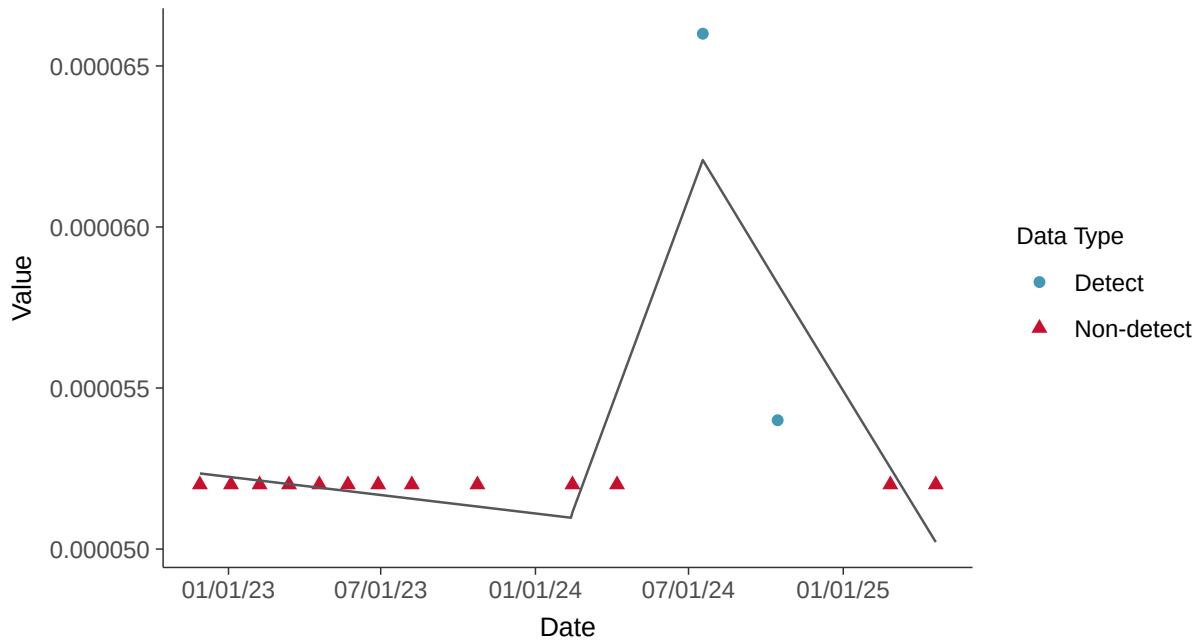


Beryllium, MW-04 (mg/L)



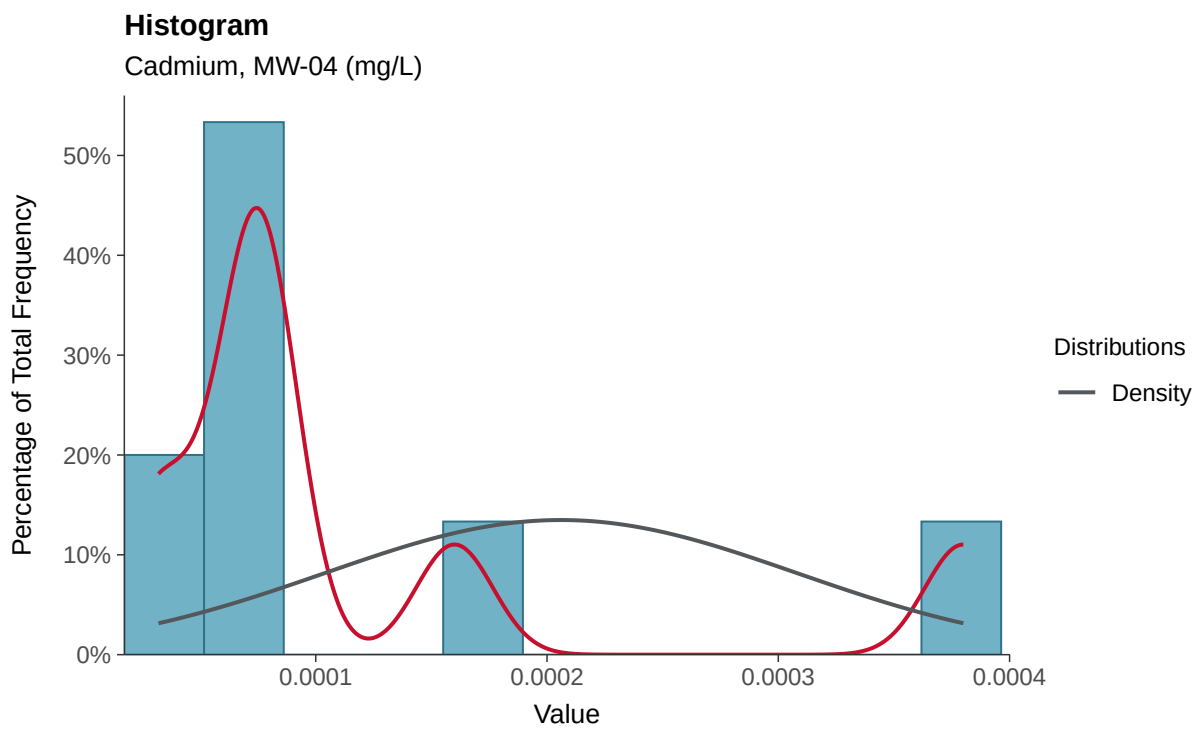
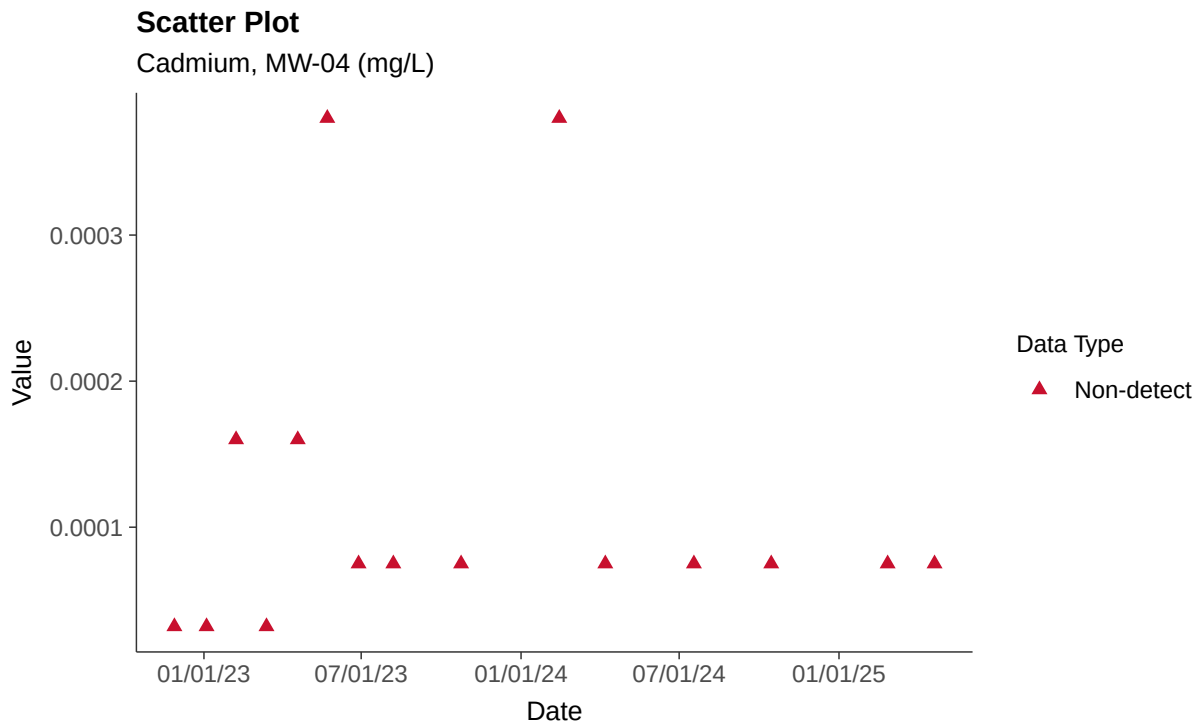
Trend Regression: Piecewise Linear-Linear-Linear

Beryllium, MW-04 (mg/L)



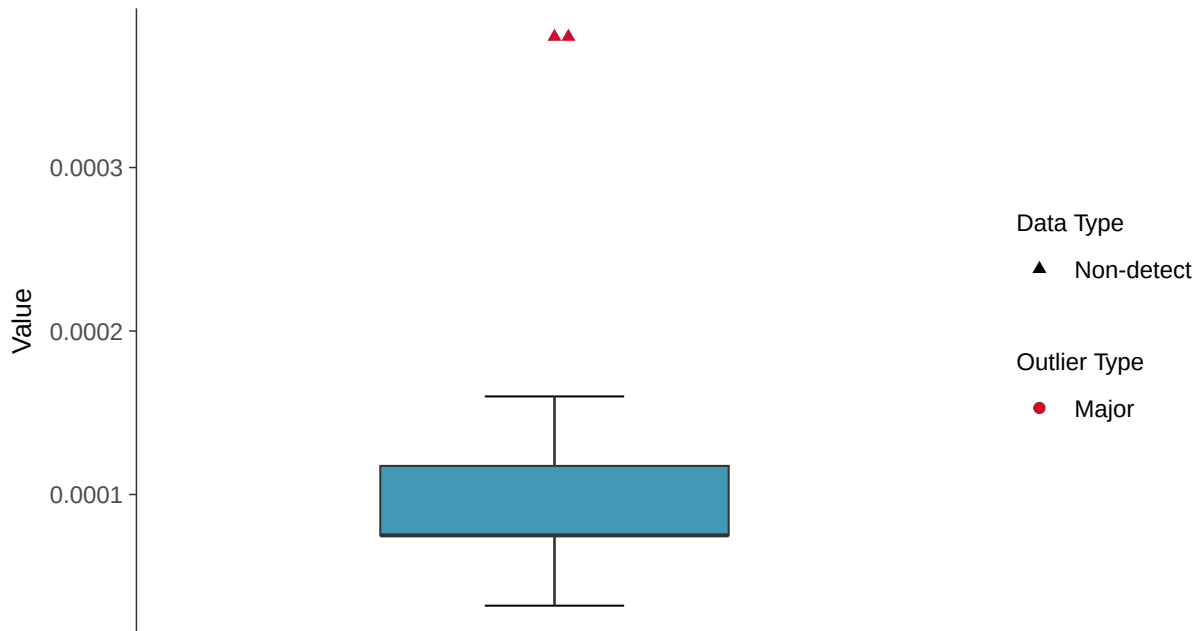
Appendix IV: Cadmium, MW-04

ID: 14_2_4_106



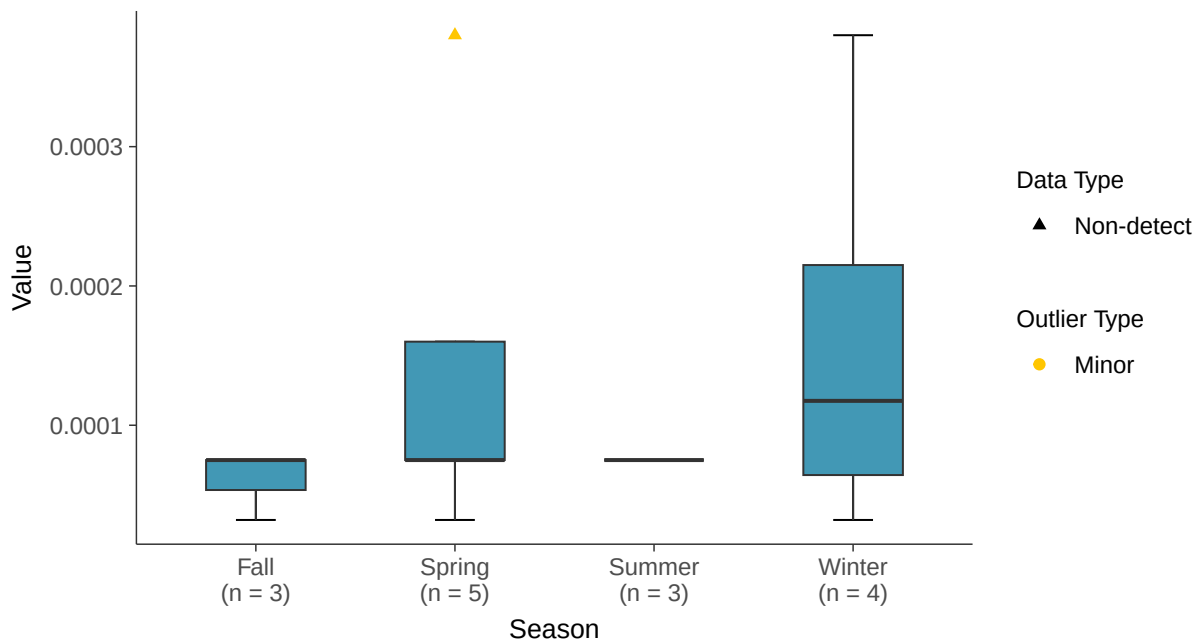
Boxplot

Cadmium, MW-04 (mg/L)



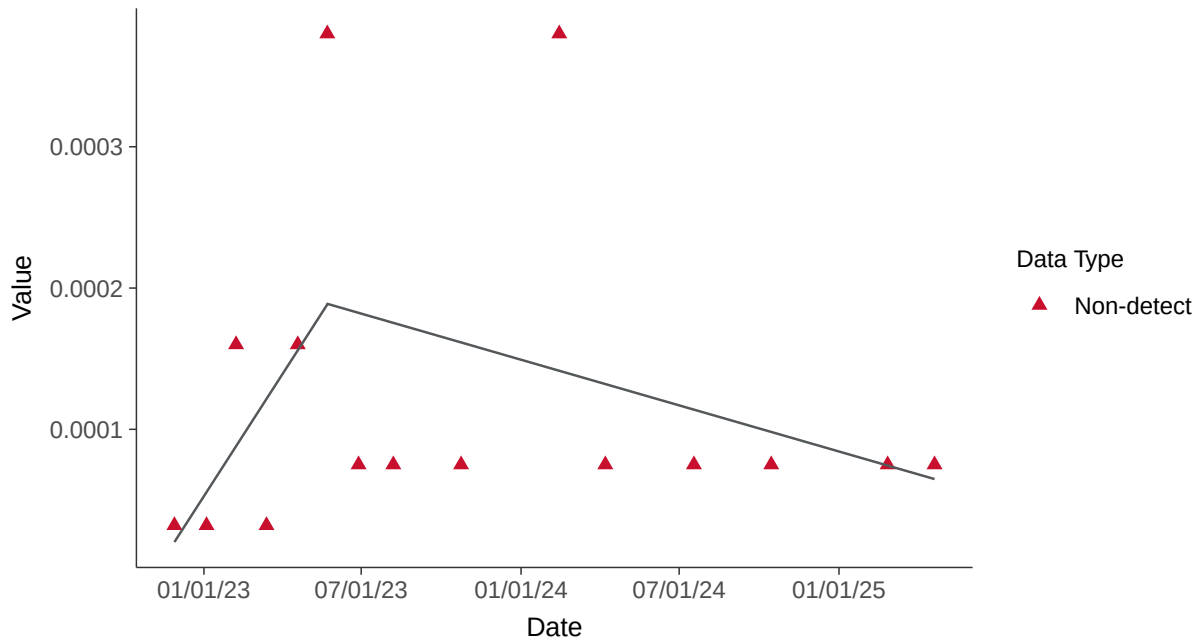
Boxplot by Season

Cadmium, MW-04 (mg/L)



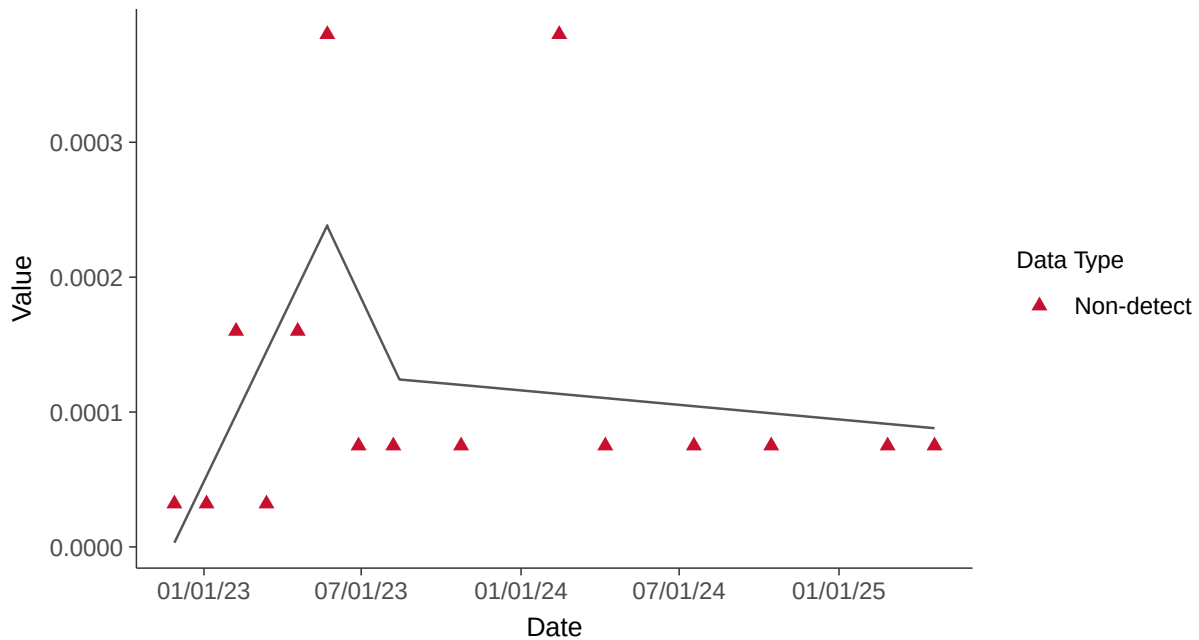
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-04 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cadmium, MW-04 (mg/L)

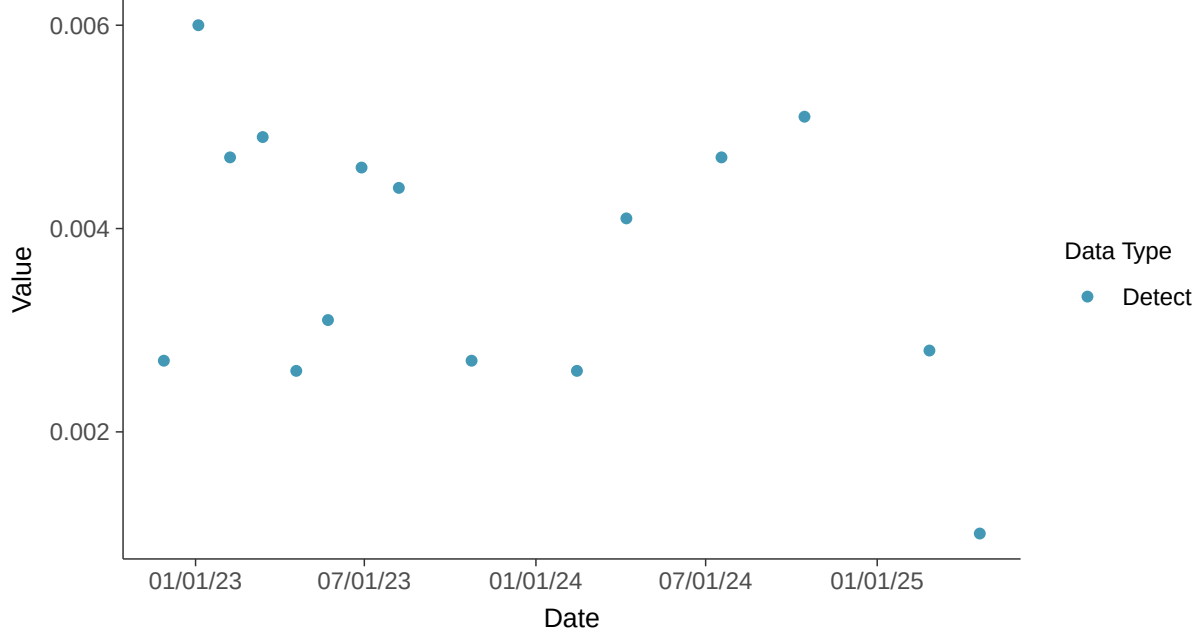


Appendix IV: Chromium, Total, MW-04

ID: 14_2_4_109

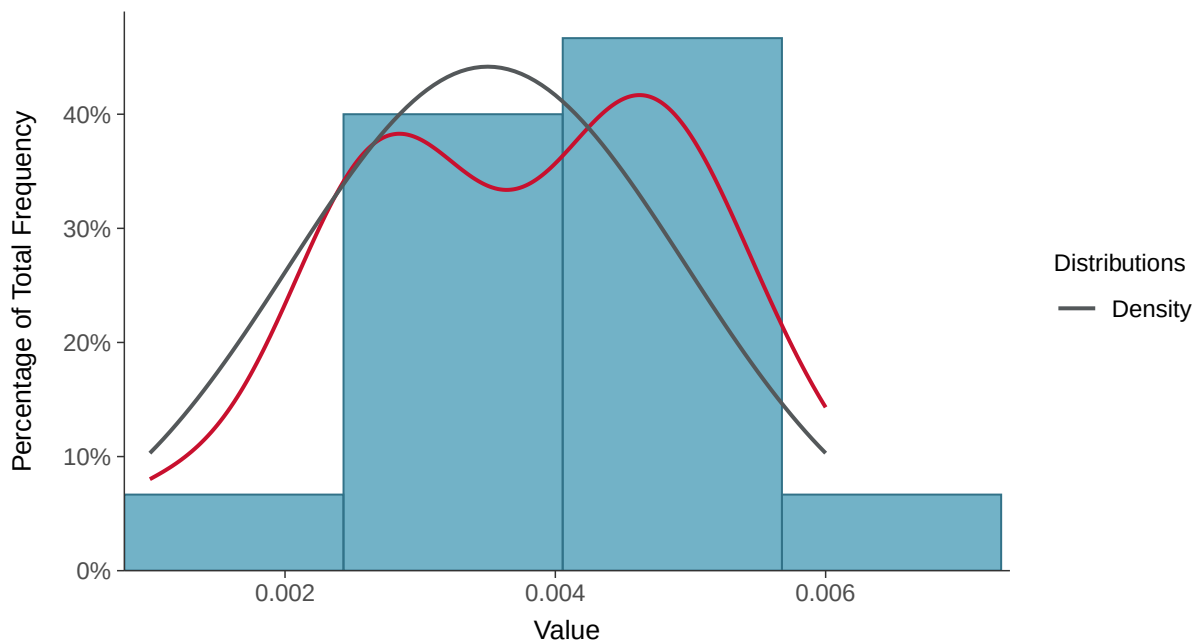
Scatter Plot

Chromium, Total, MW-04 (mg/L)



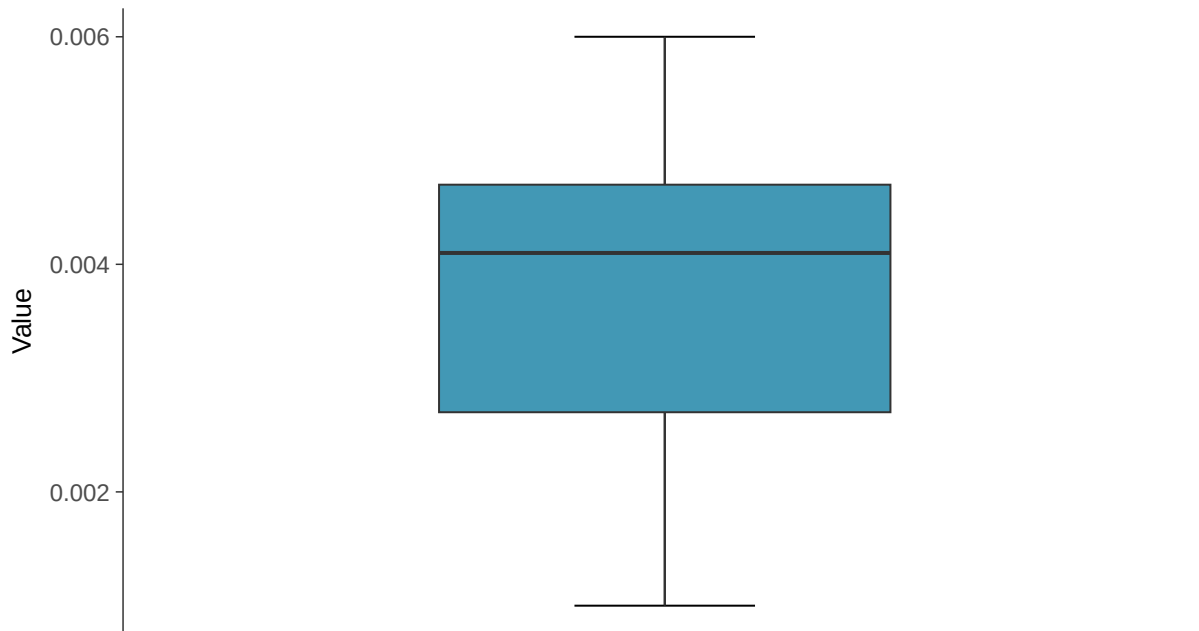
Histogram

Chromium, Total, MW-04 (mg/L)



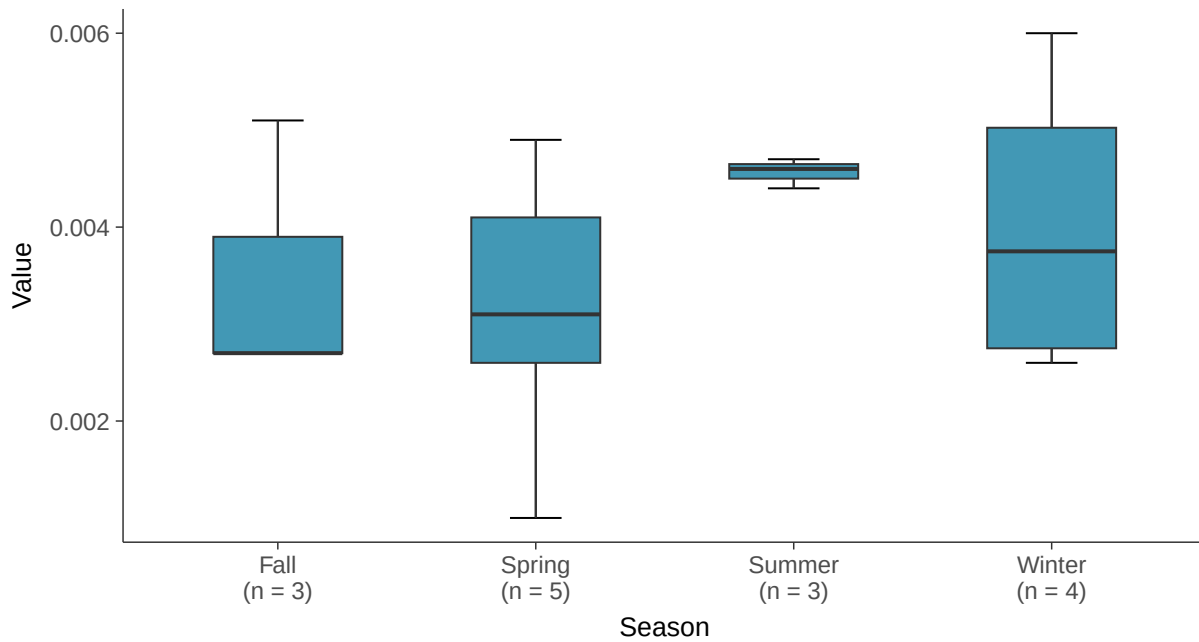
Boxplot

Chromium, Total, MW-04 (mg/L)



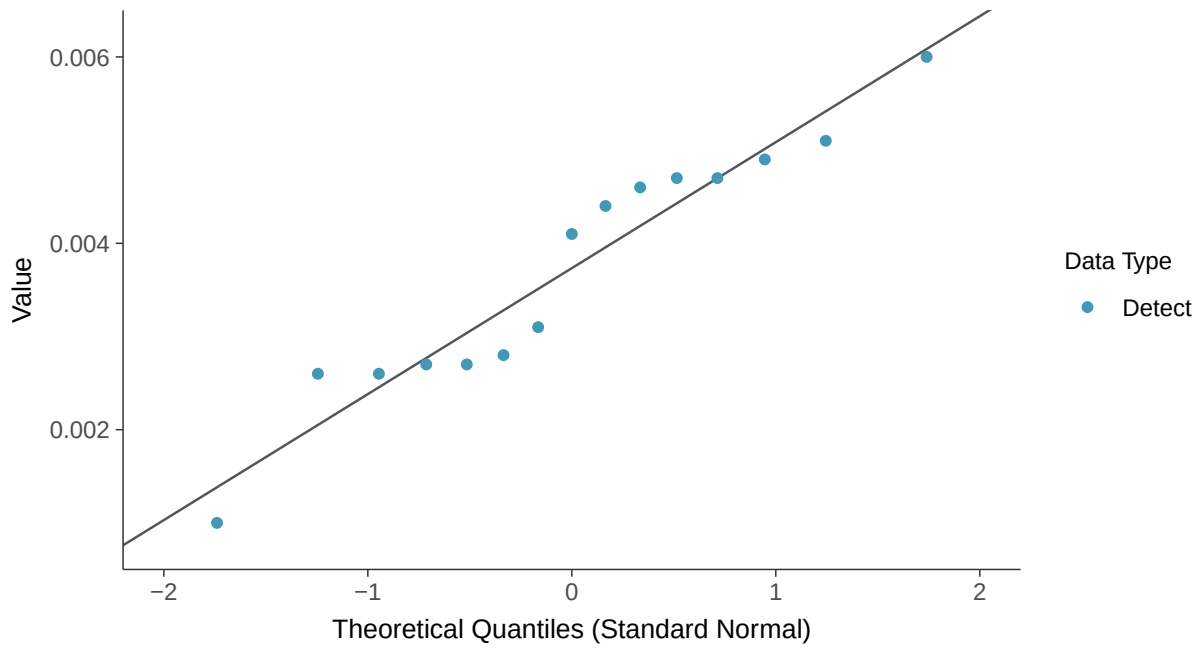
Boxplot by Season

Chromium, Total, MW-04 (mg/L)



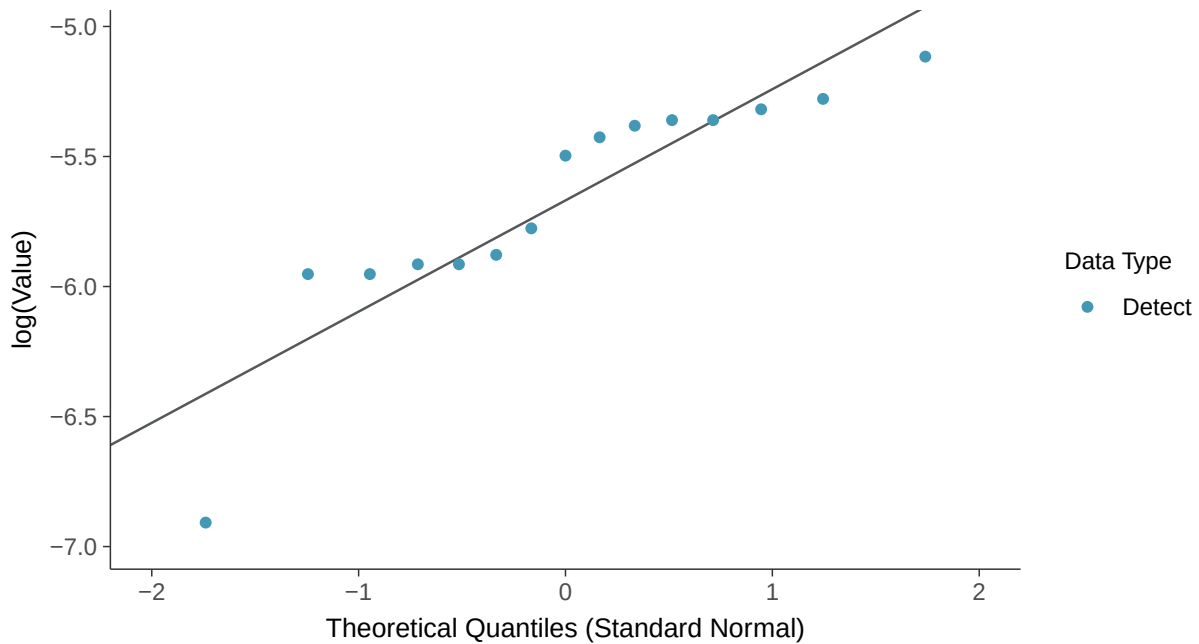
Normal Q-Q plot

Chromium, Total, MW-04 (mg/L)



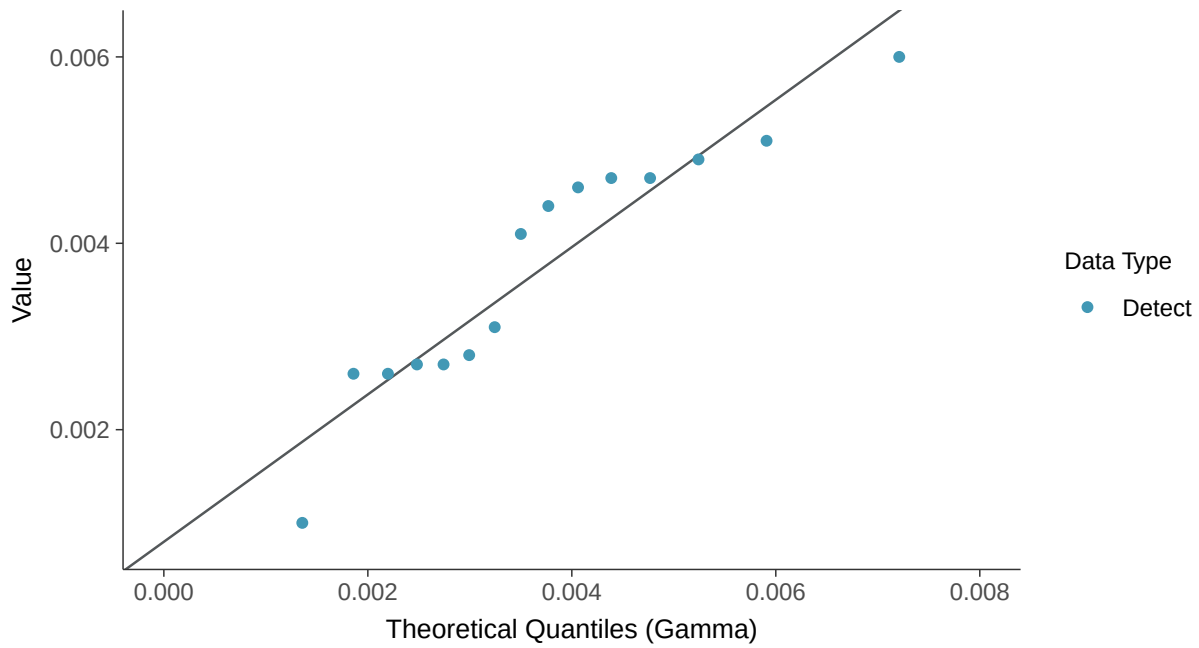
Lognormal Q-Q plot

Chromium, Total, MW-04 (mg/L)



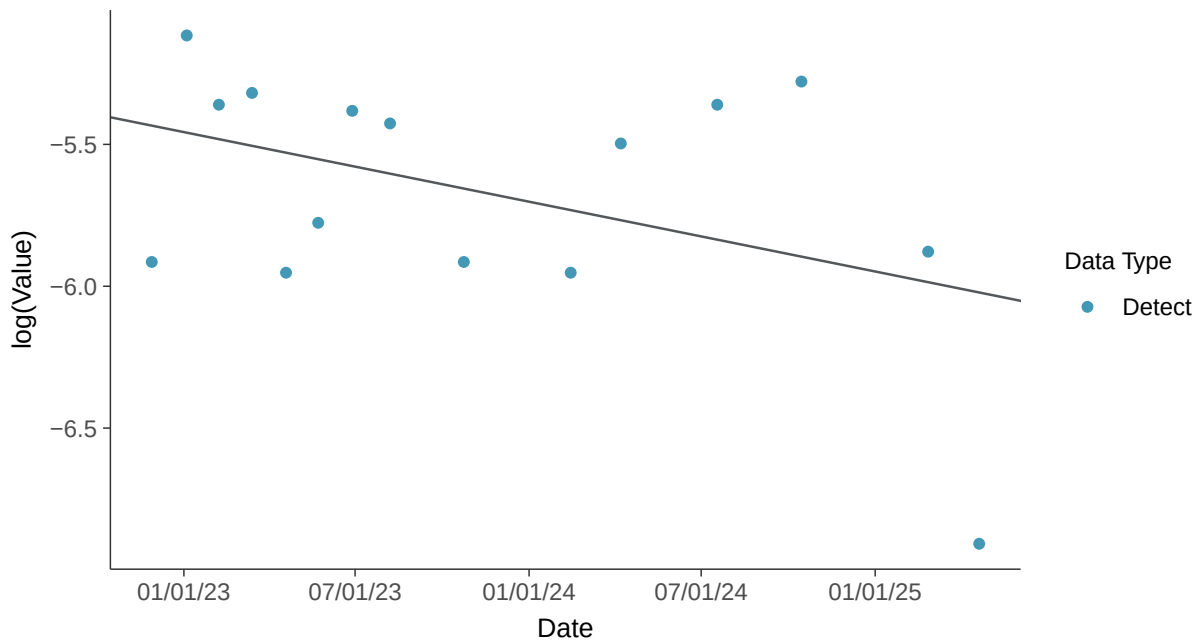
Gamma Q-Q plot

Chromium, Total, MW-04 (mg/L)



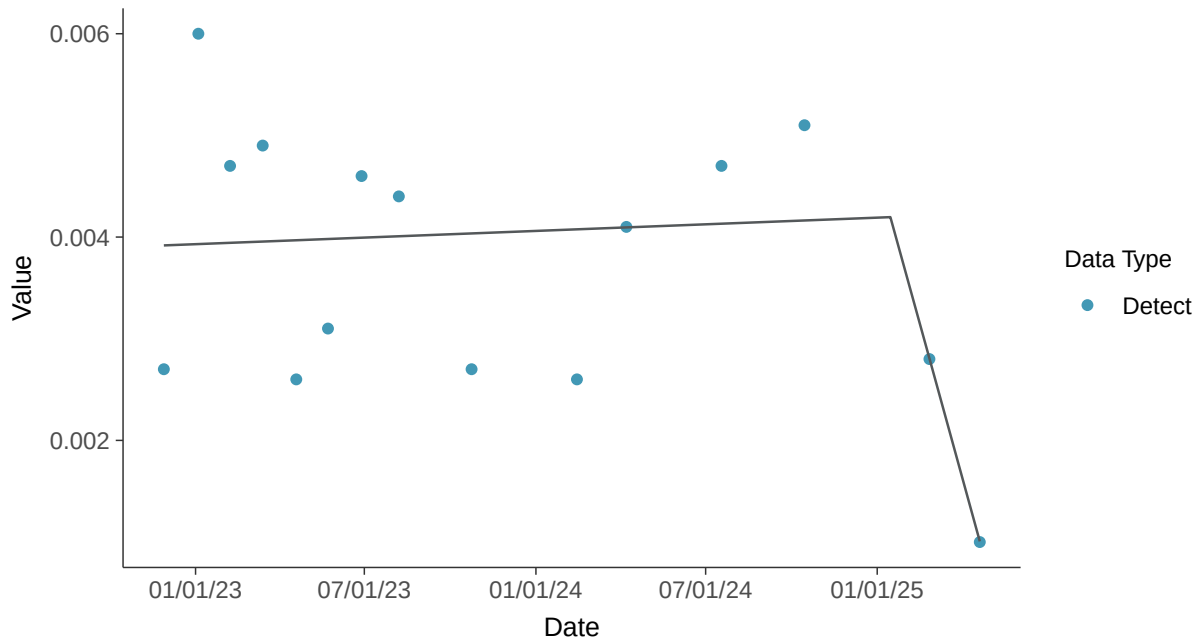
Trend Regression: Lognormal MLE

Chromium, Total, MW-04 (mg/L)



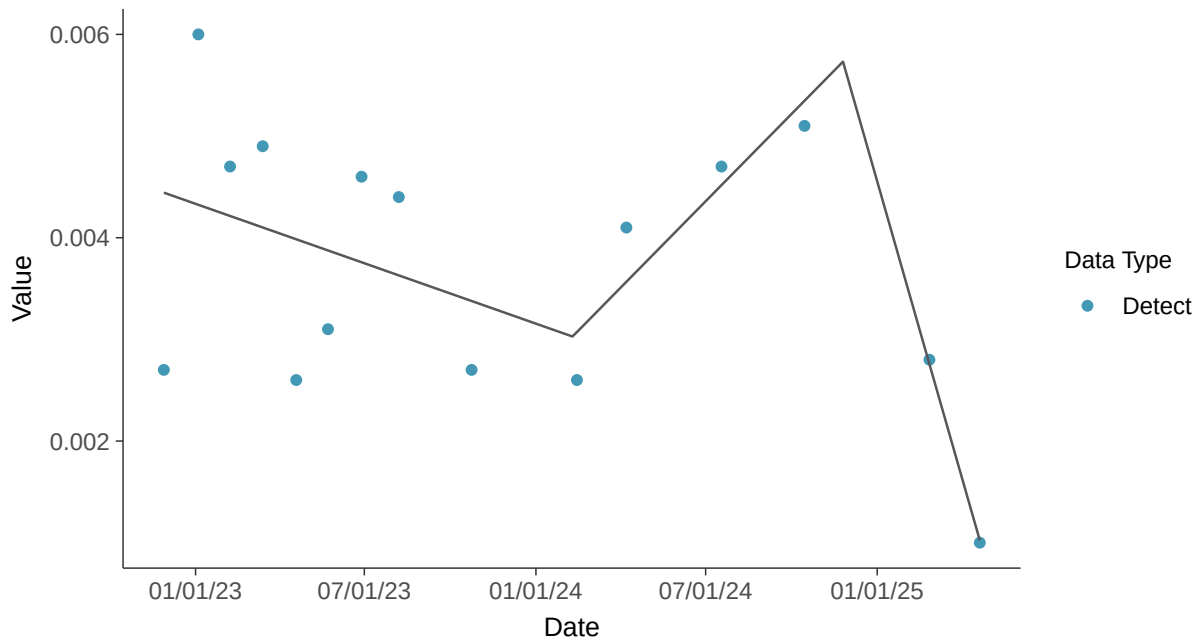
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-04 (mg/L)



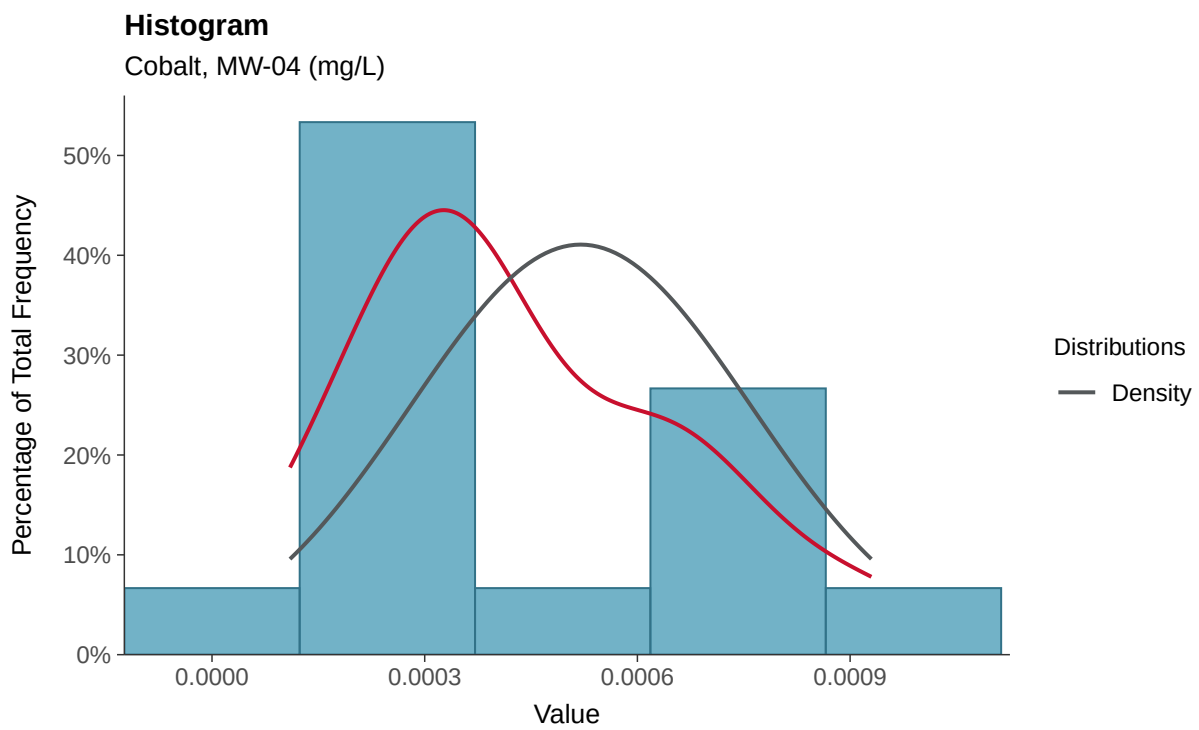
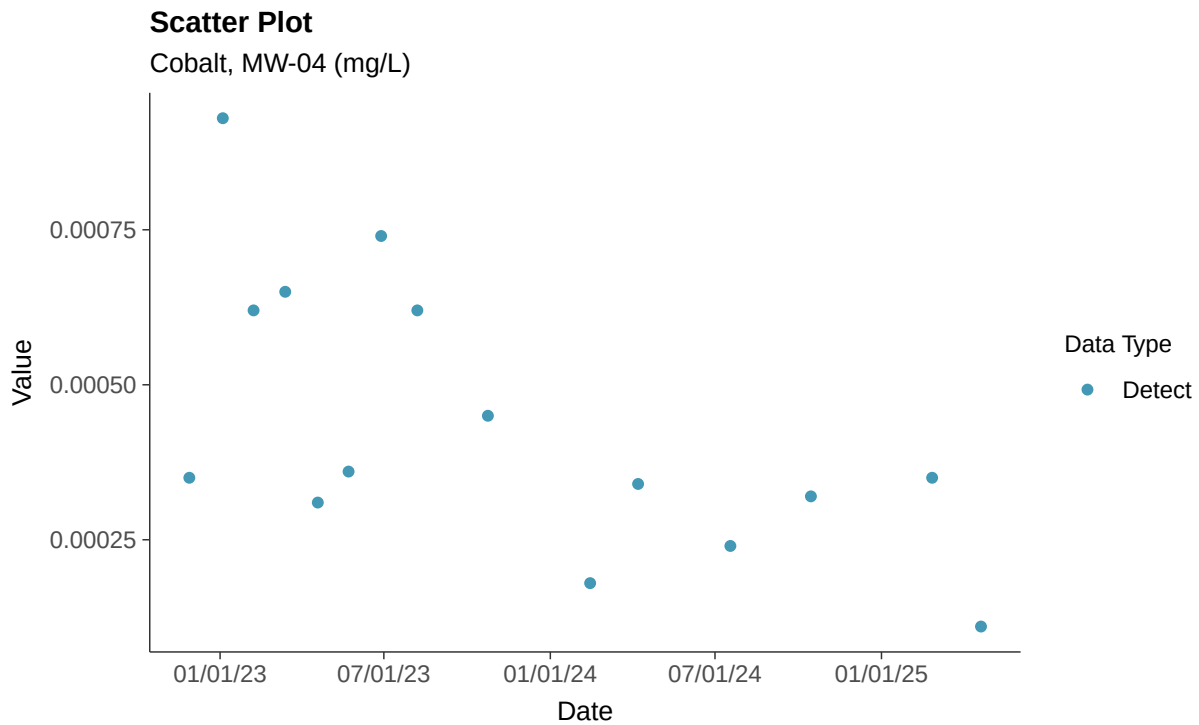
Trend Regression: Piecewise Linear-Linear-Linear

Chromium, Total, MW-04 (mg/L)



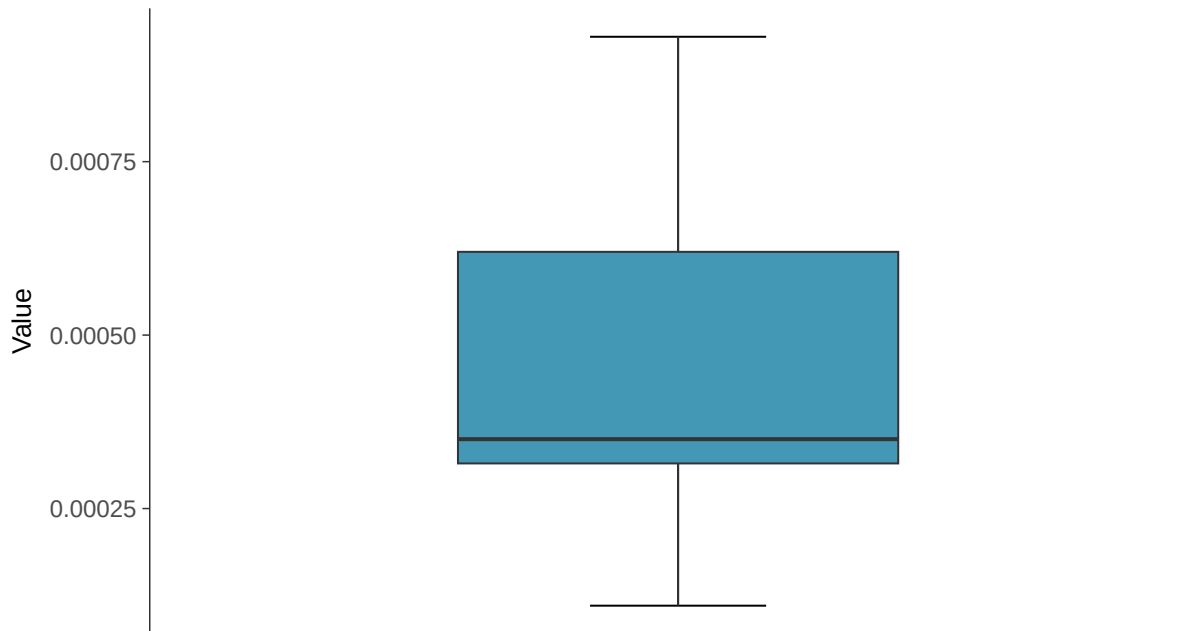
Appendix IV: Cobalt, MW-04

ID: 14_2_4_110



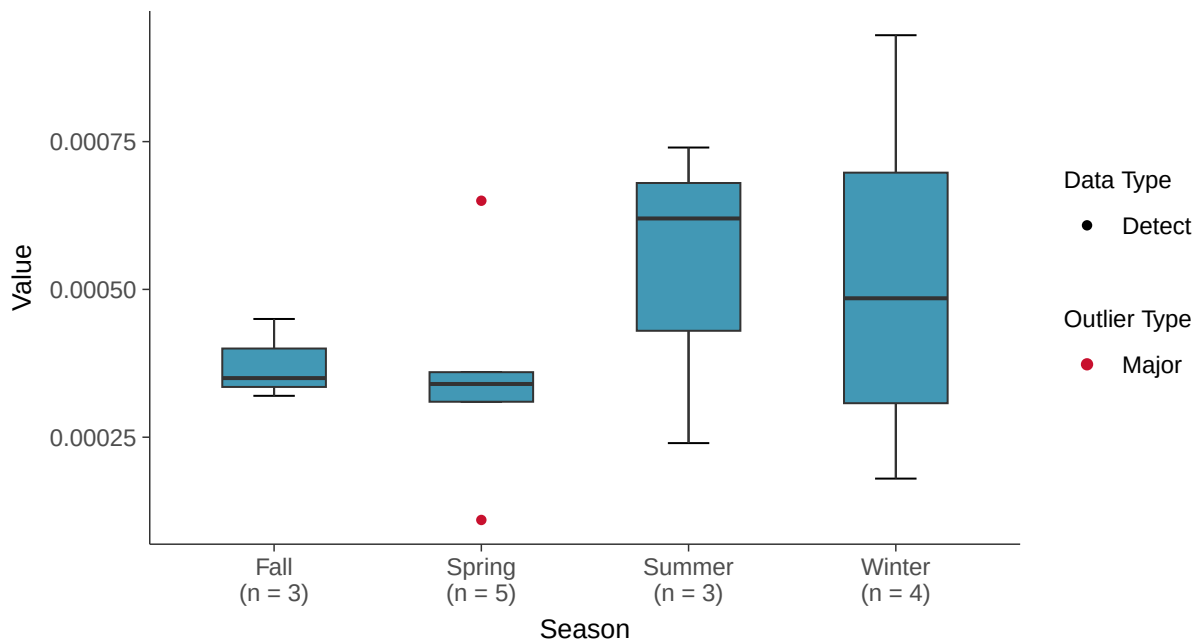
Boxplot

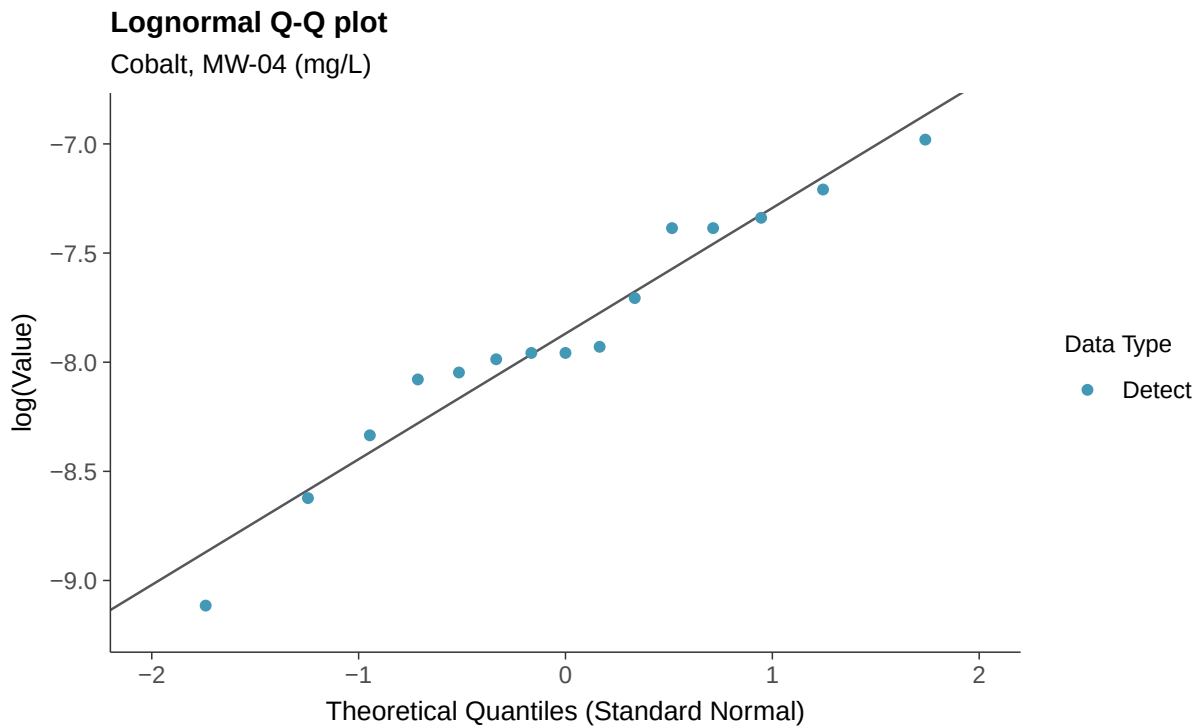
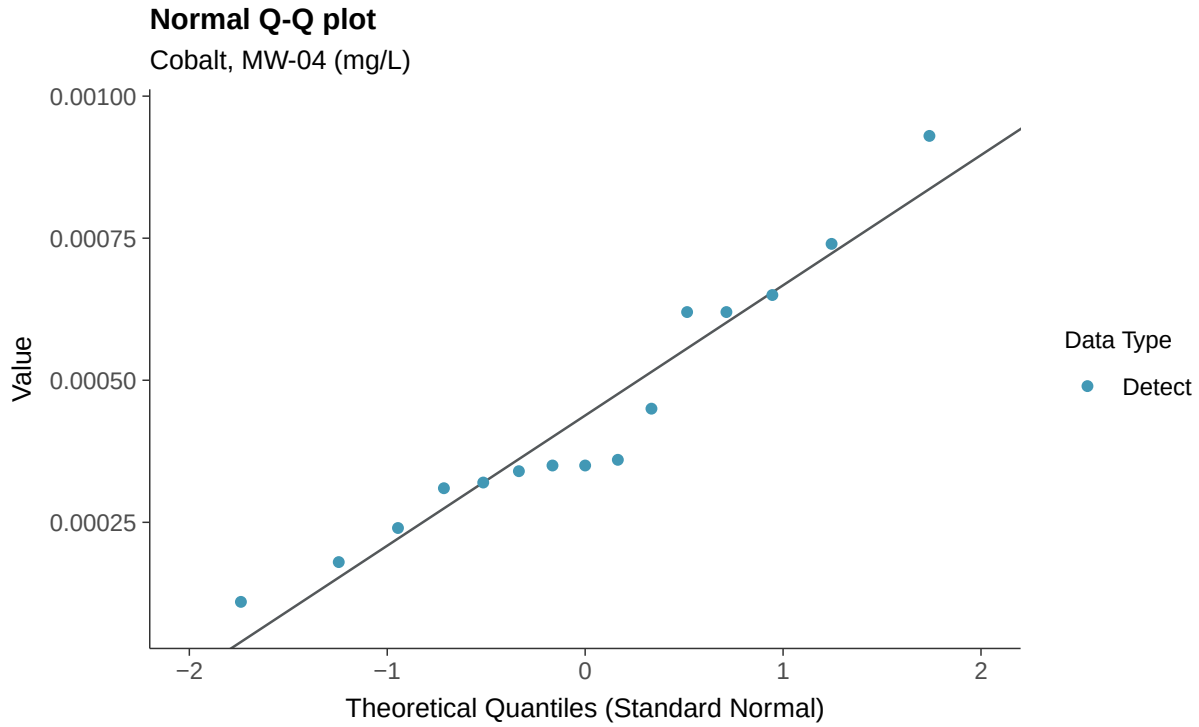
Cobalt, MW-04 (mg/L)

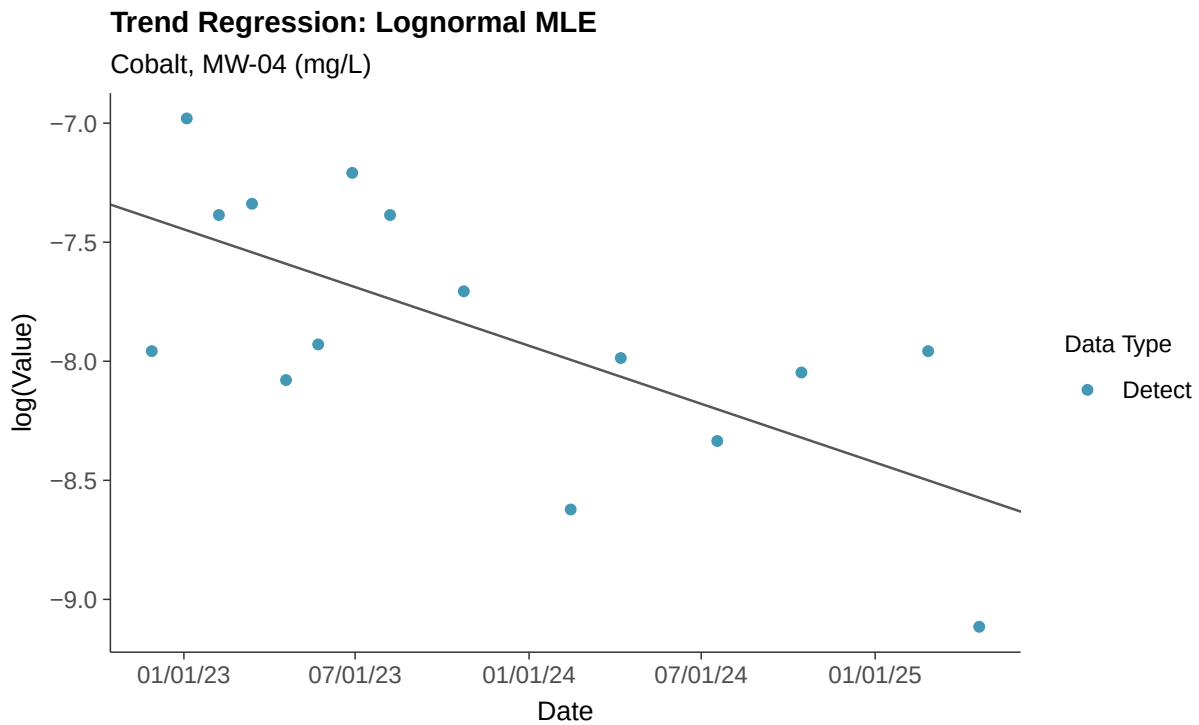
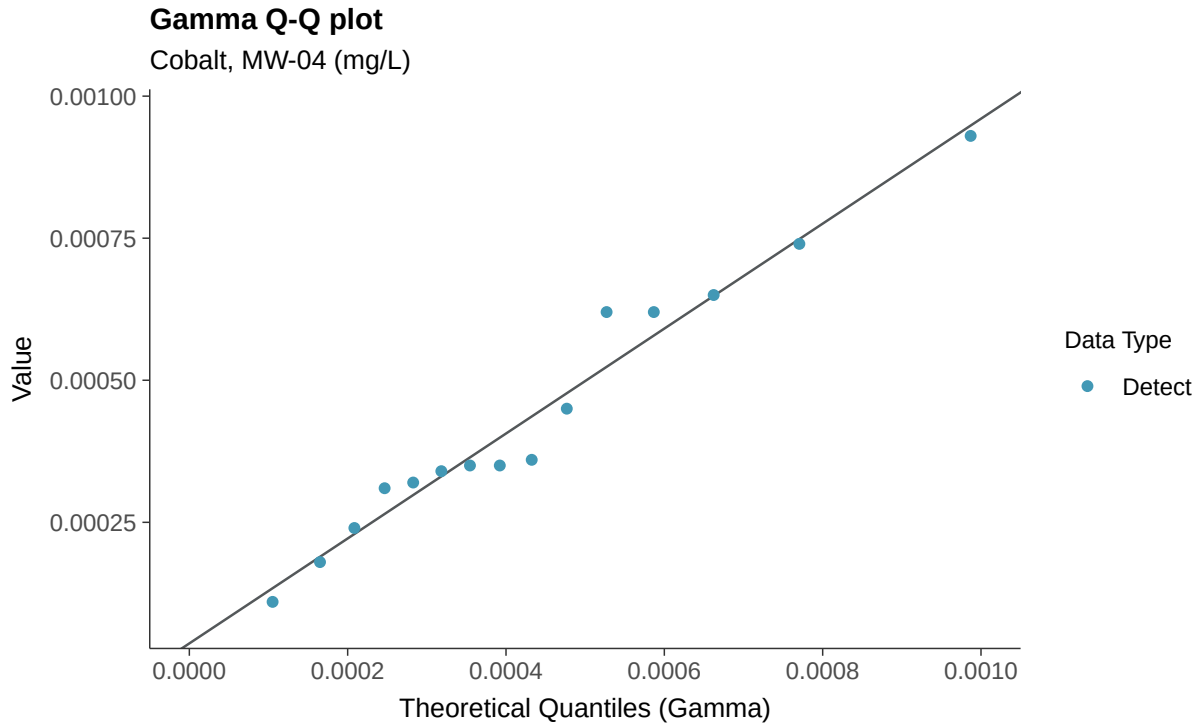


Boxplot by Season

Cobalt, MW-04 (mg/L)

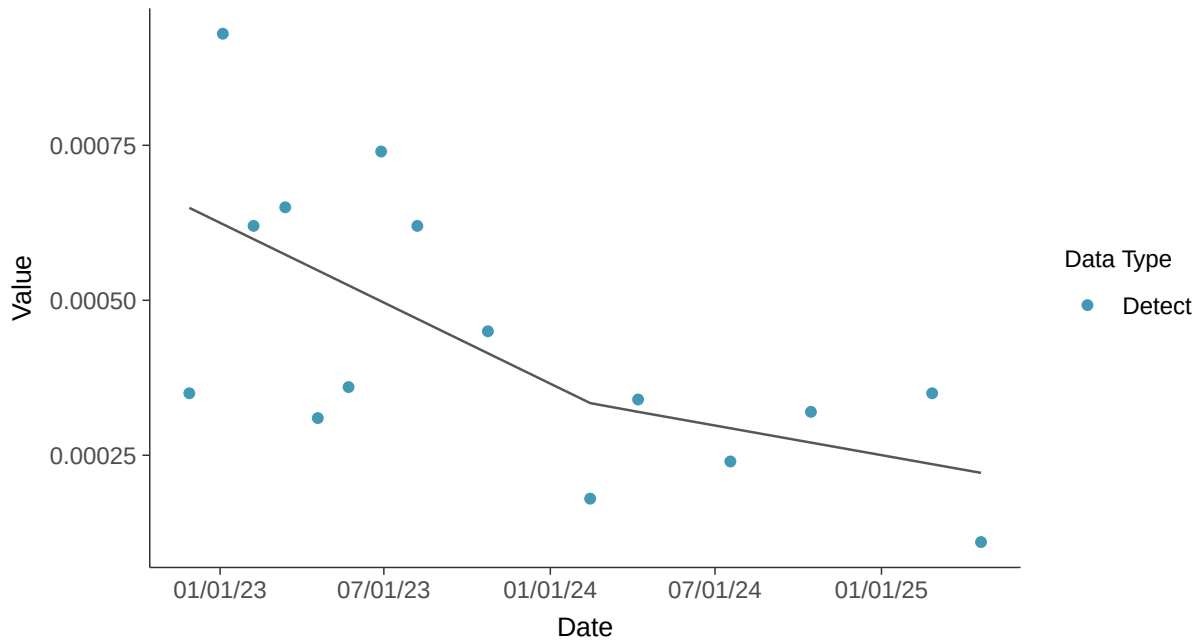






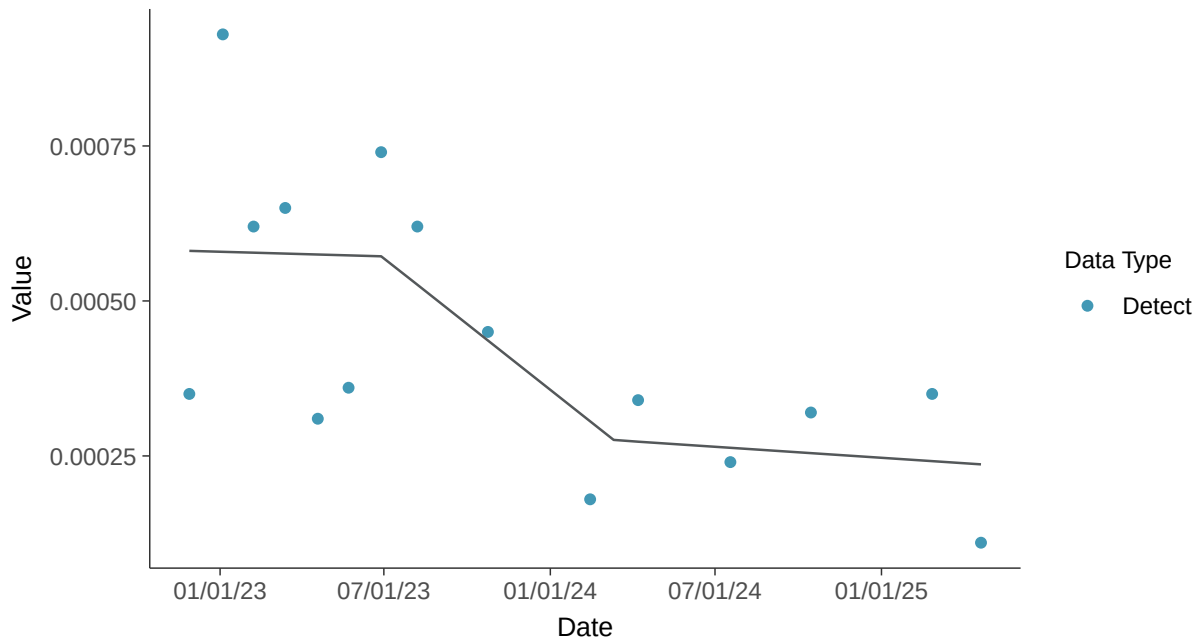
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-04 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cobalt, MW-04 (mg/L)

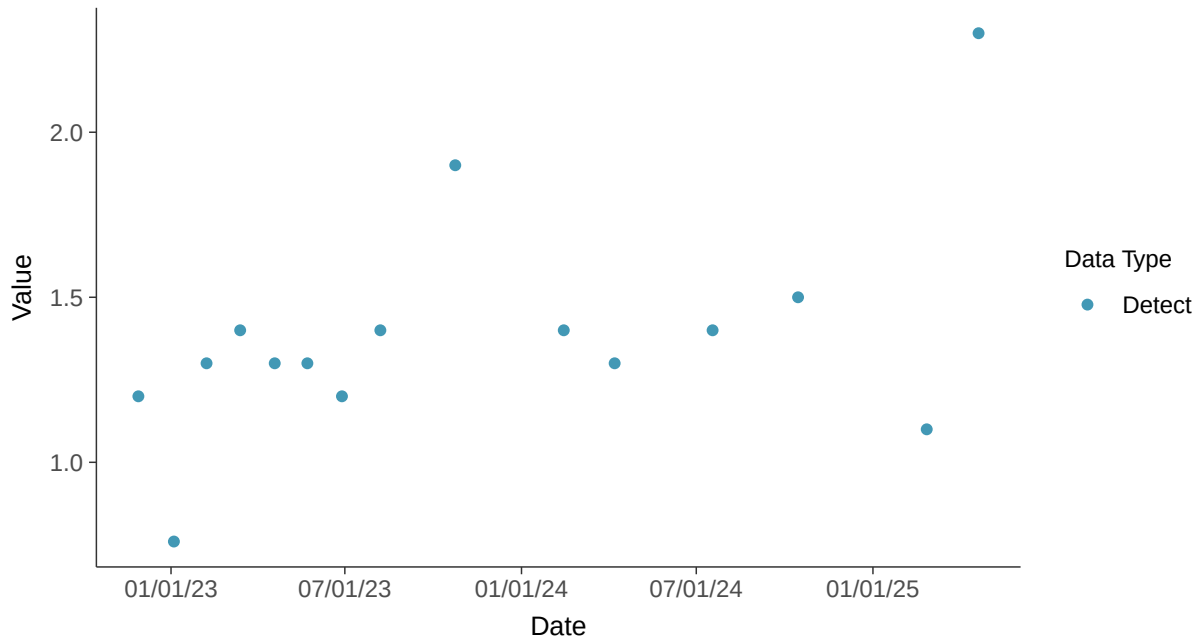


Appendix IV: Fluoride (App IV), MW-04

ID: 14_2_4_113

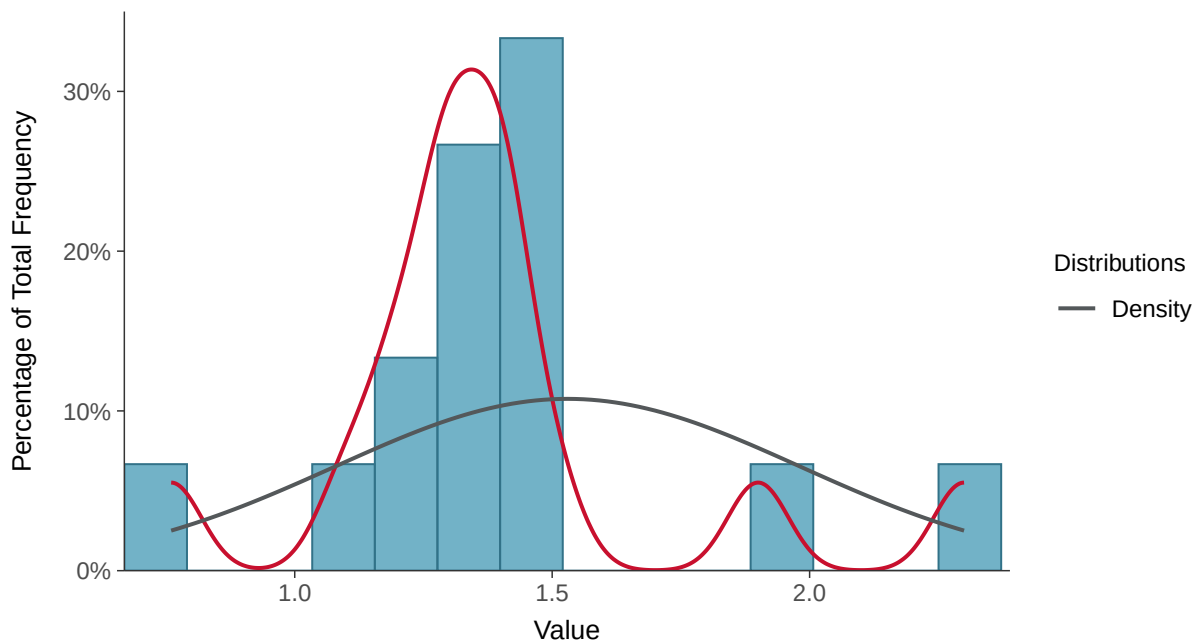
Scatter Plot

Fluoride (App IV), MW-04 (mg/L)



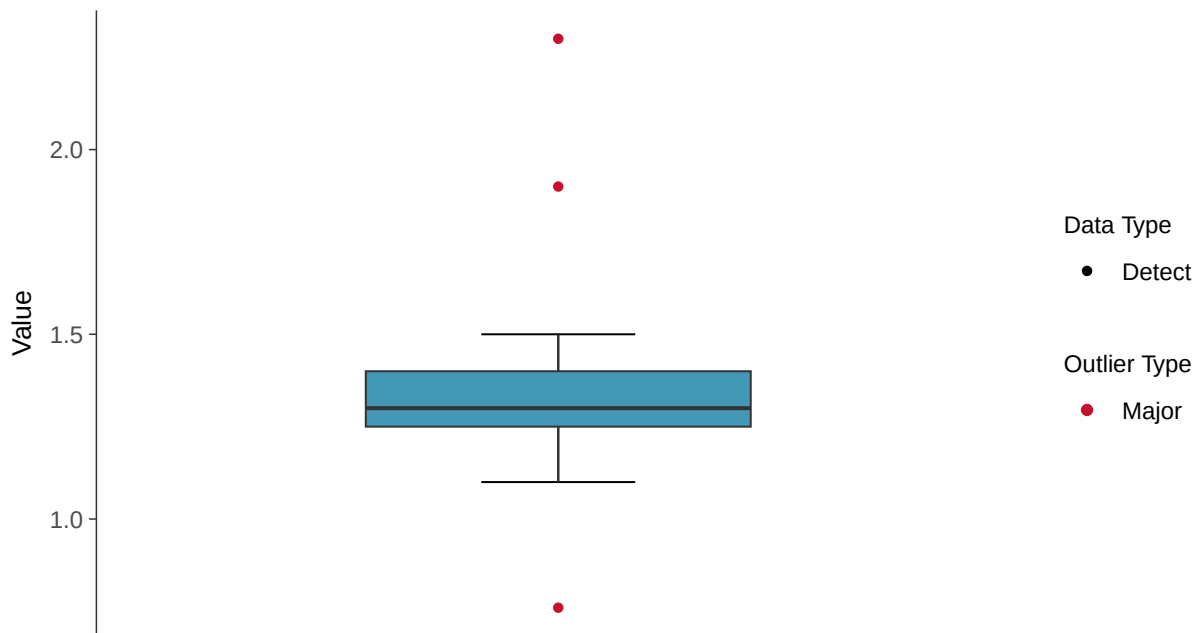
Histogram

Fluoride (App IV), MW-04 (mg/L)



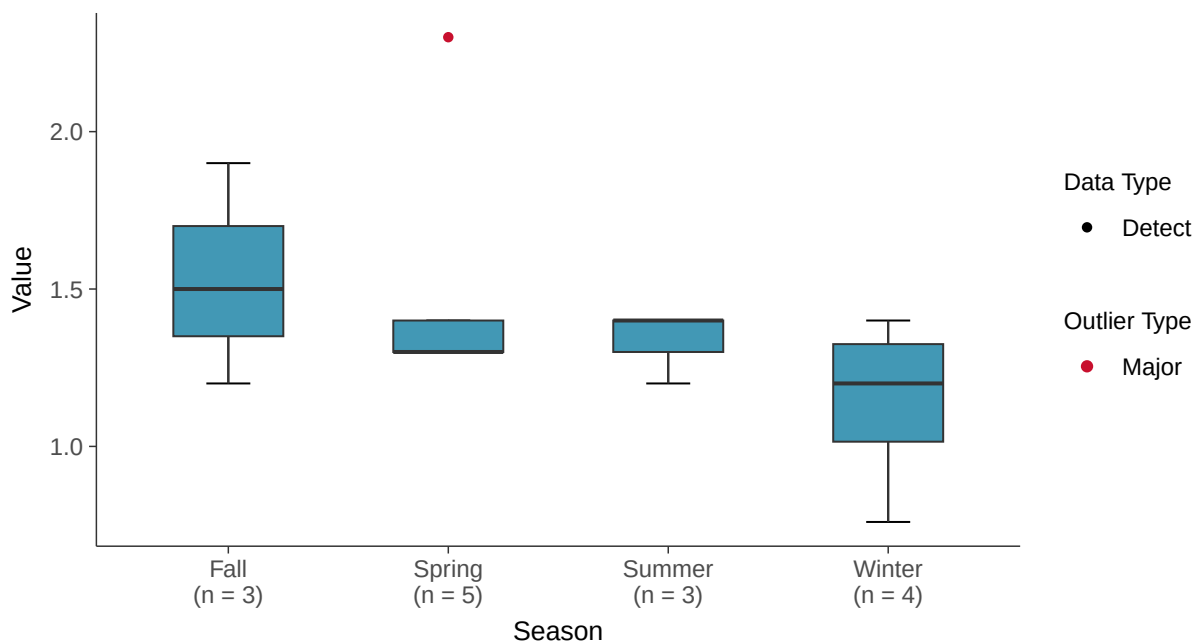
Boxplot

Fluoride (App IV), MW-04 (mg/L)



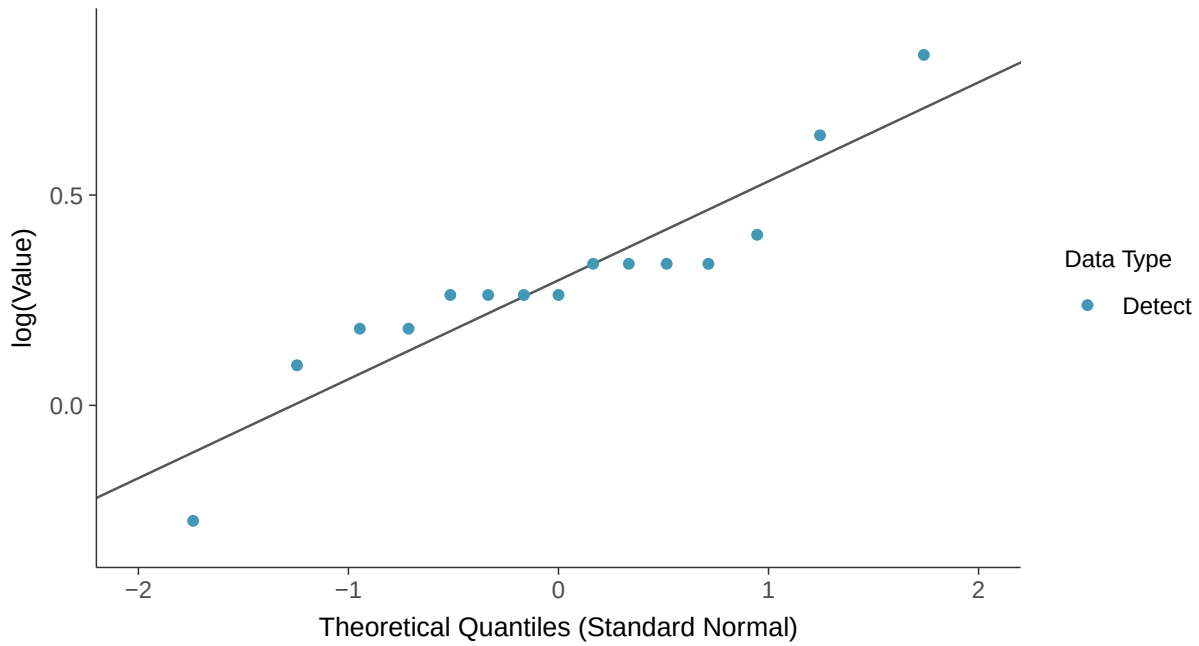
Boxplot by Season

Fluoride (App IV), MW-04 (mg/L)



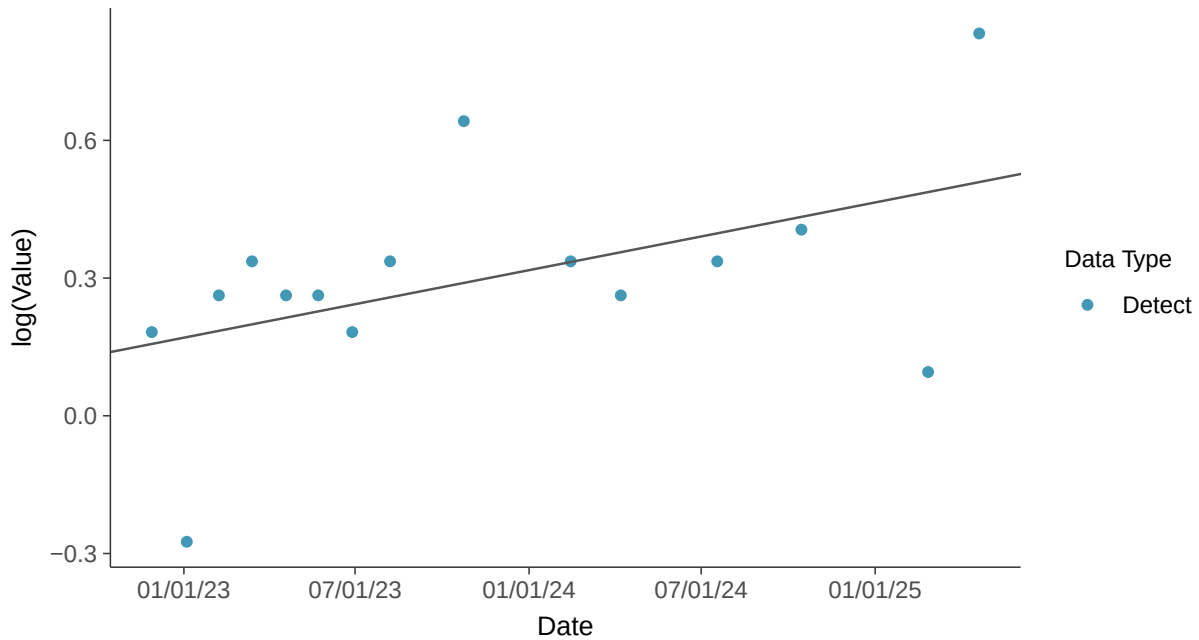
Lognormal Q-Q plot

Fluoride (App IV), MW-04 (mg/L)



Trend Regression: Lognormal MLE

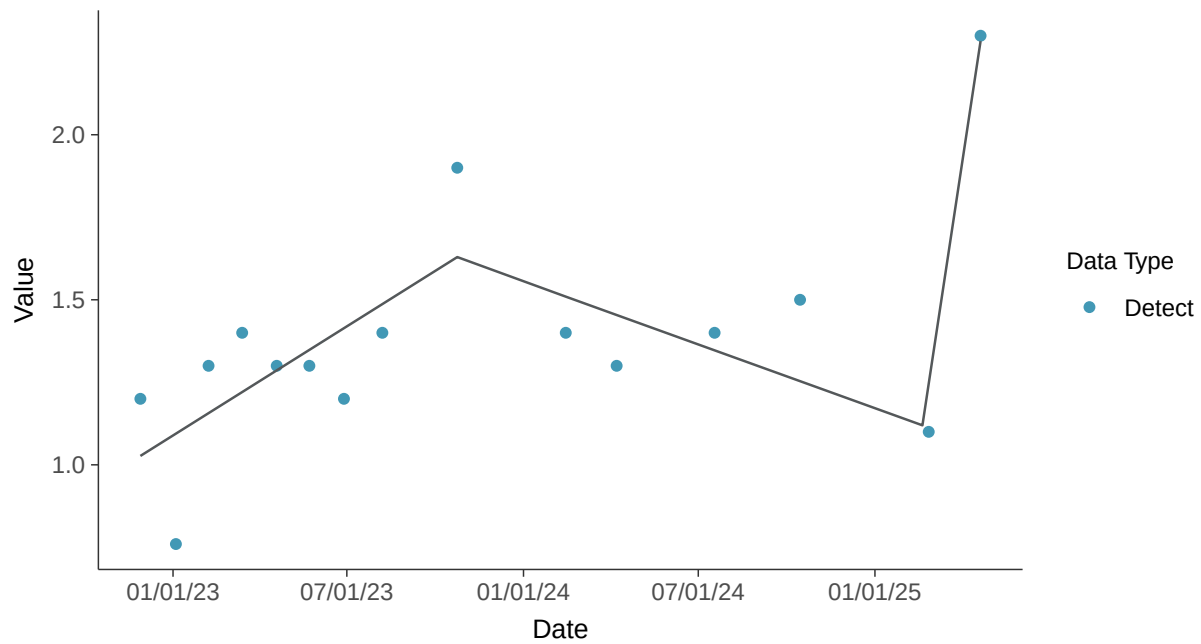
Fluoride (App IV), MW-04 (mg/L)





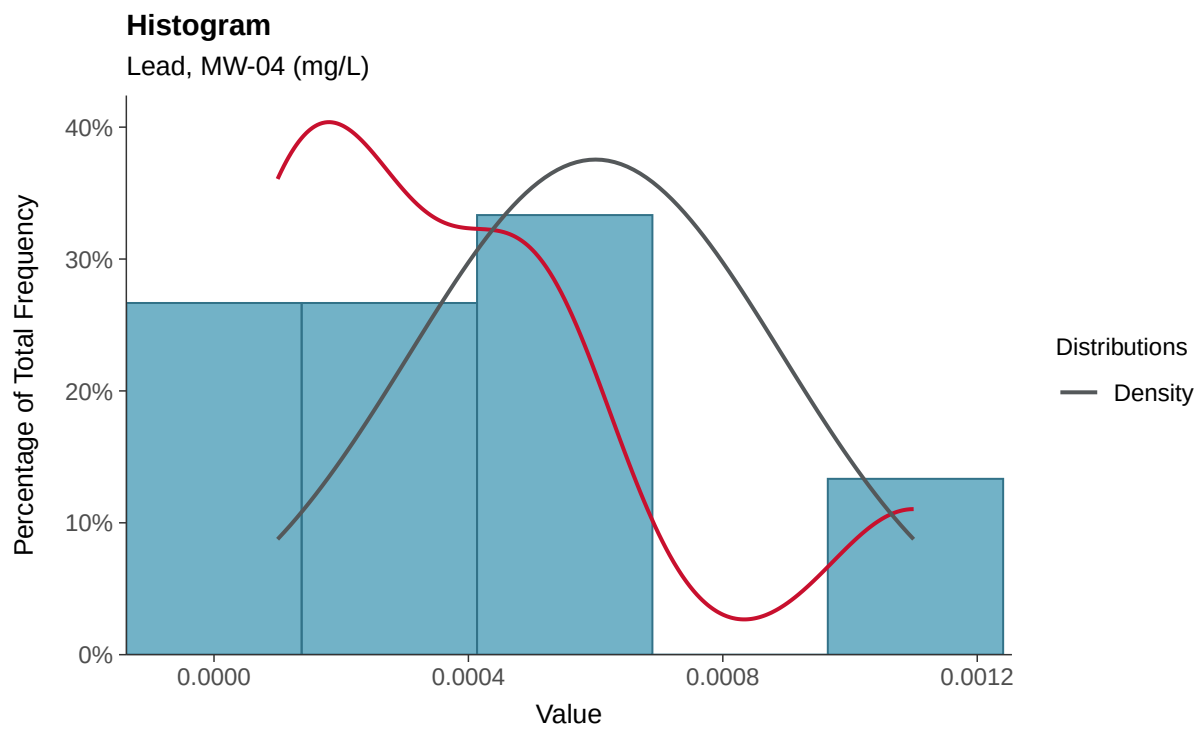
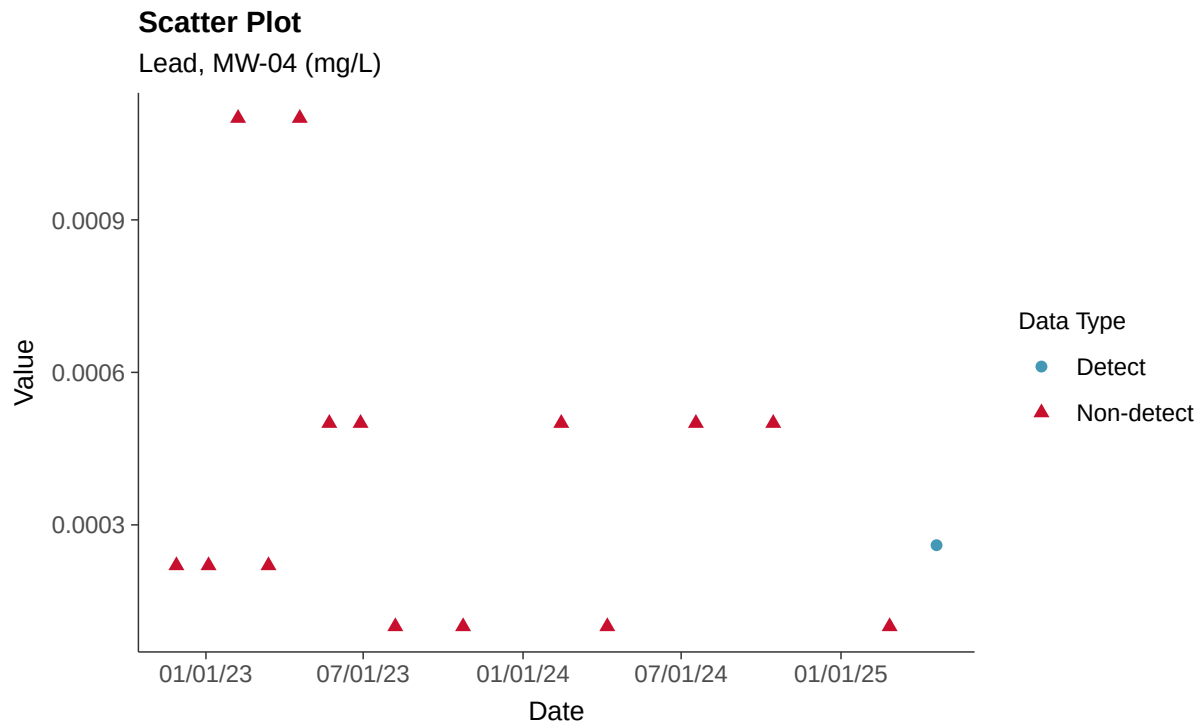
Trend Regression: Piecewise Linear-Linear-Linear

Fluoride (App IV), MW-04 (mg/L)



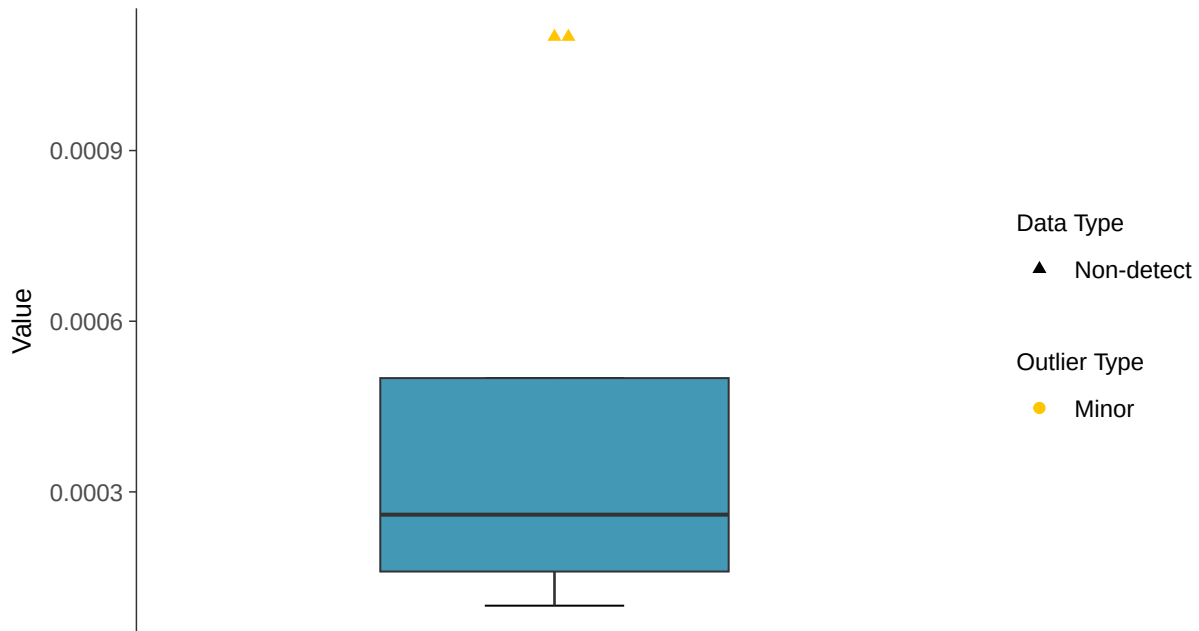
Appendix IV: Lead, MW-04

ID: 14_2_4_115



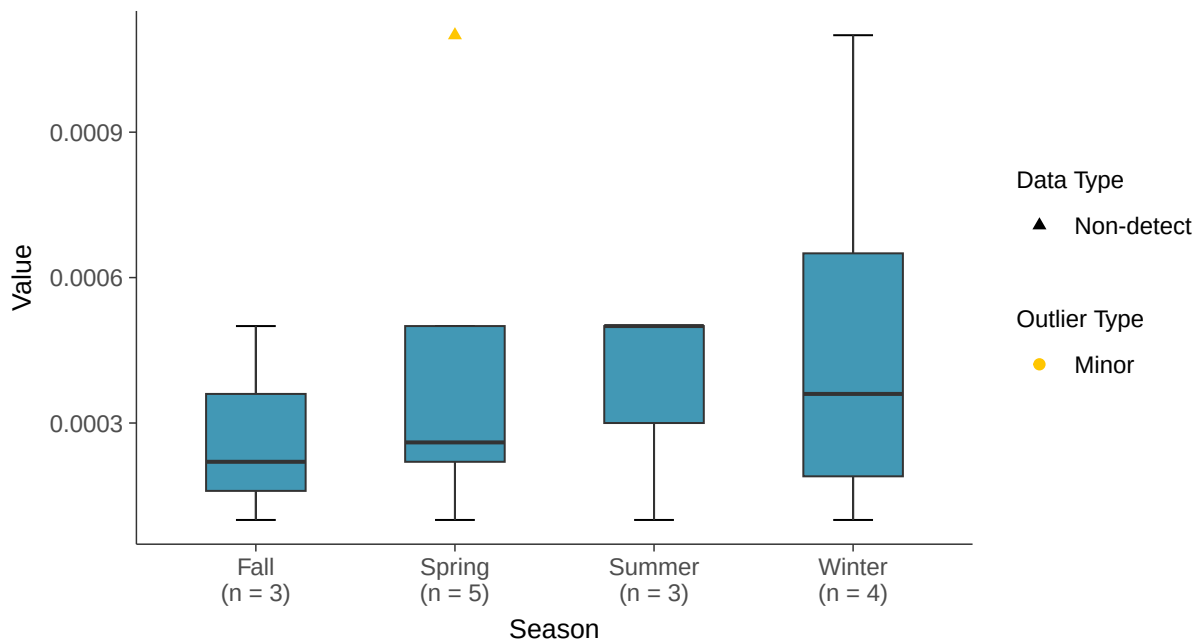
Boxplot

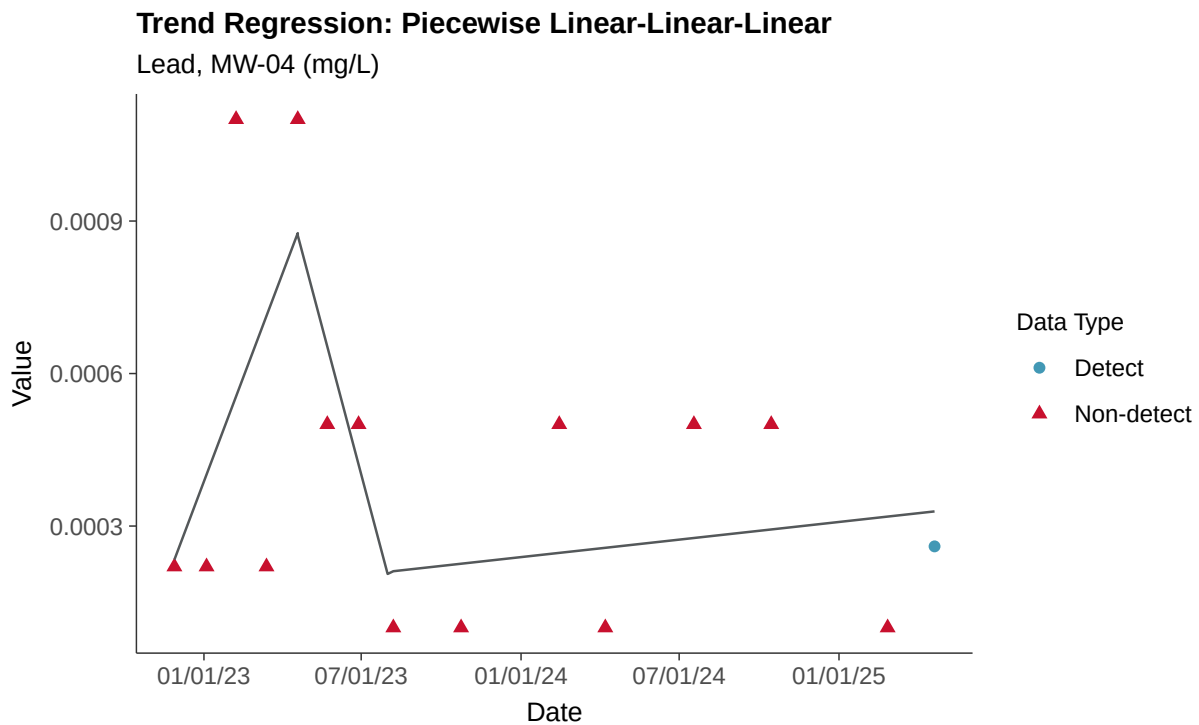
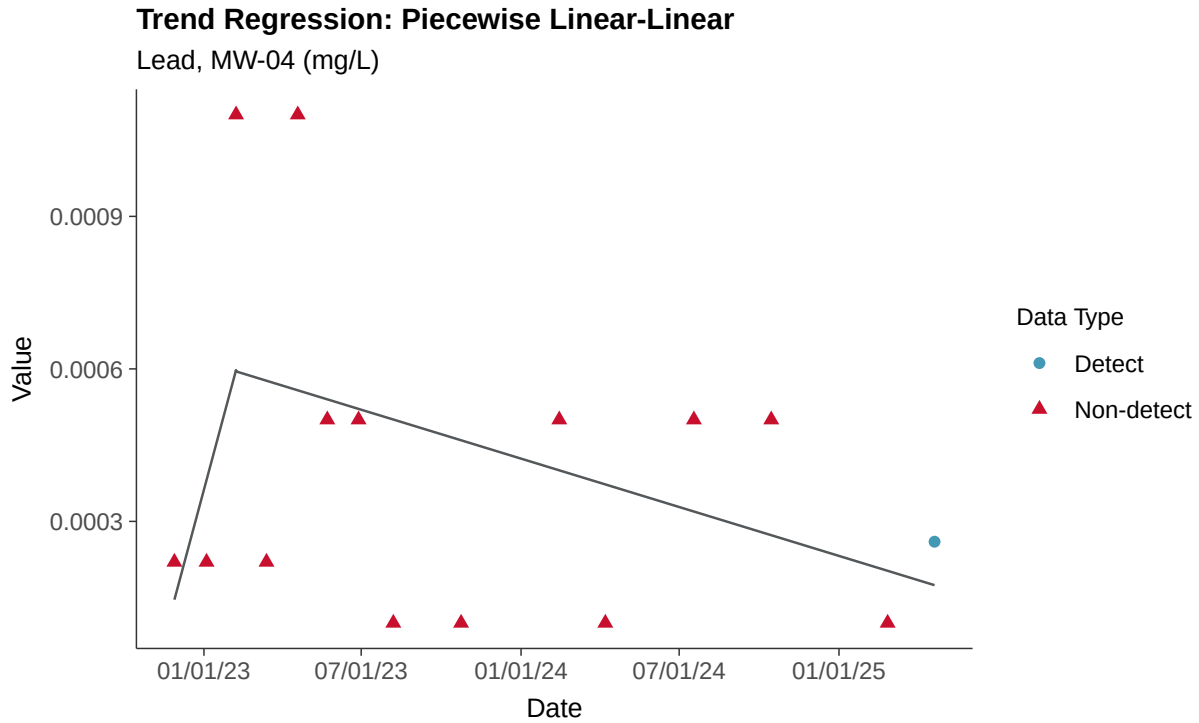
Lead, MW-04 (mg/L)



Boxplot by Season

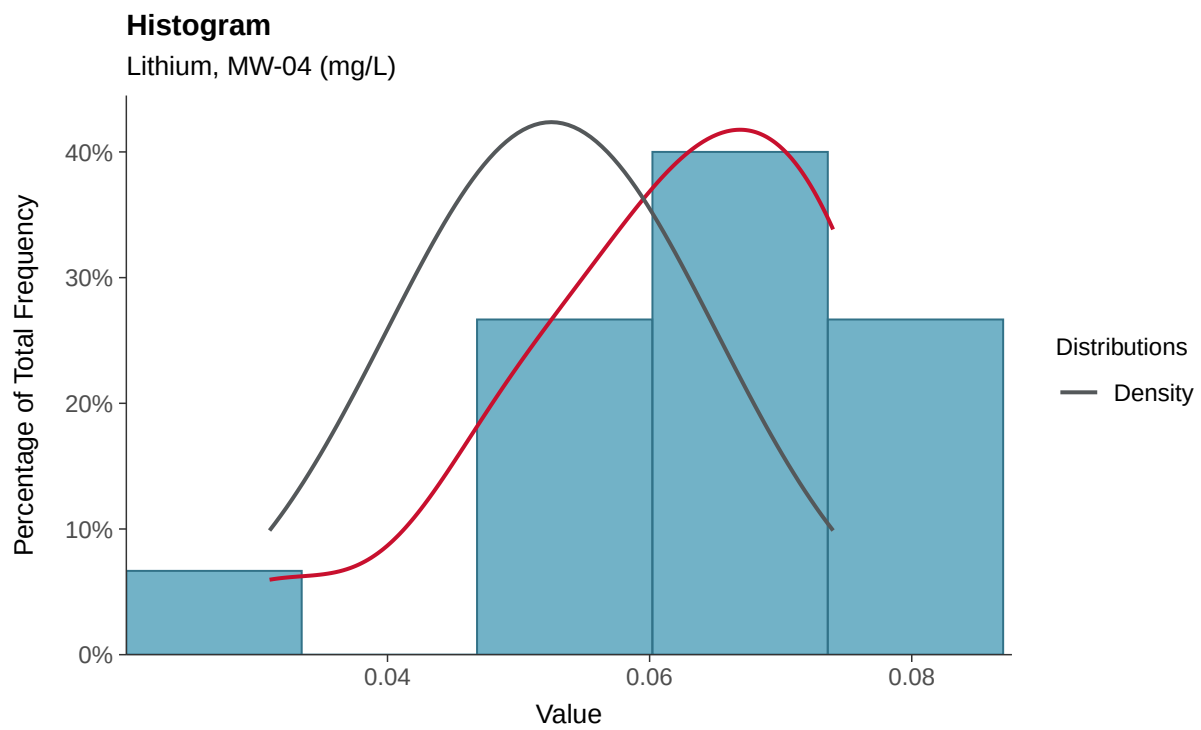
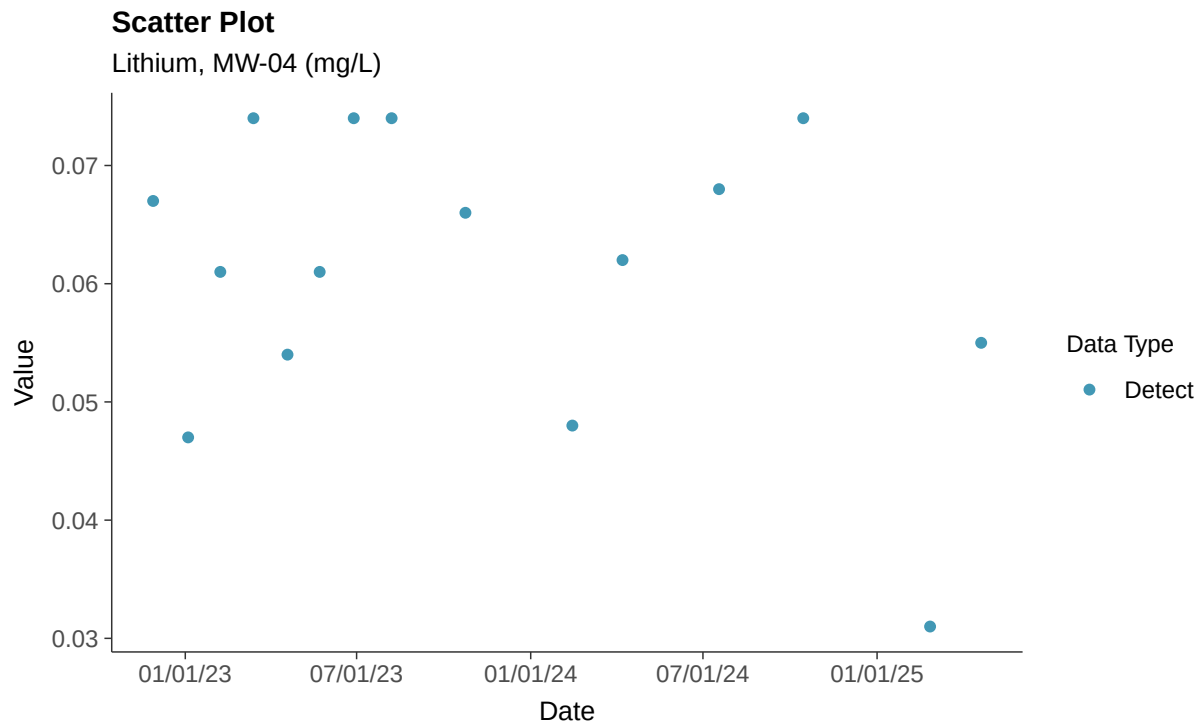
Lead, MW-04 (mg/L)





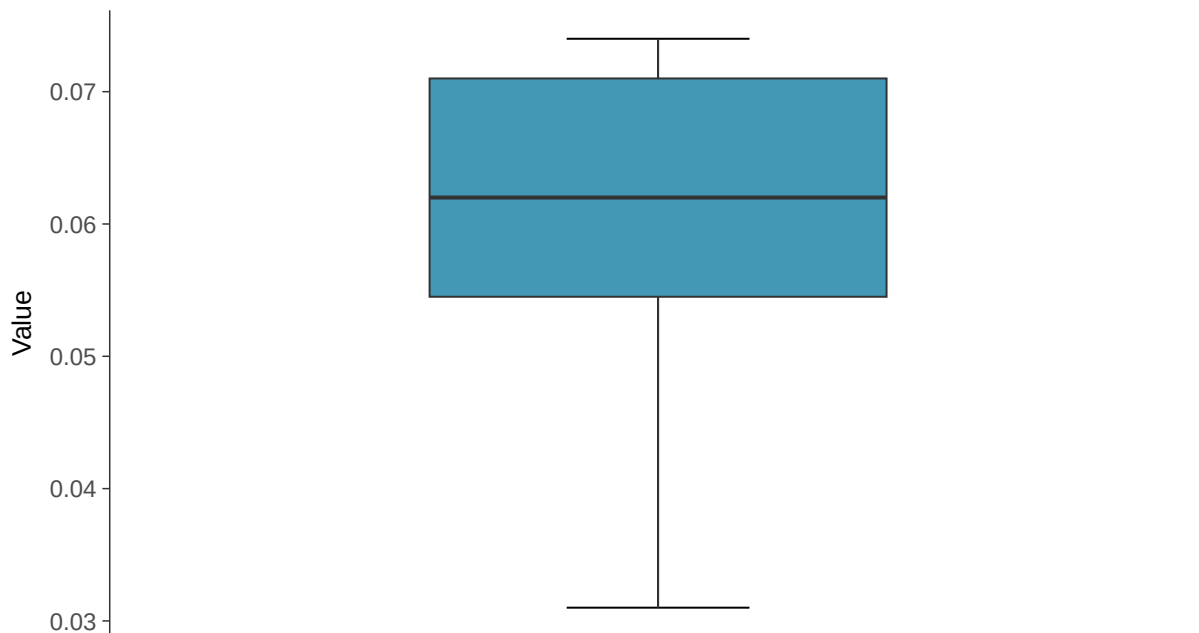
Appendix IV: Lithium, MW-04

ID: 14_2_4_116



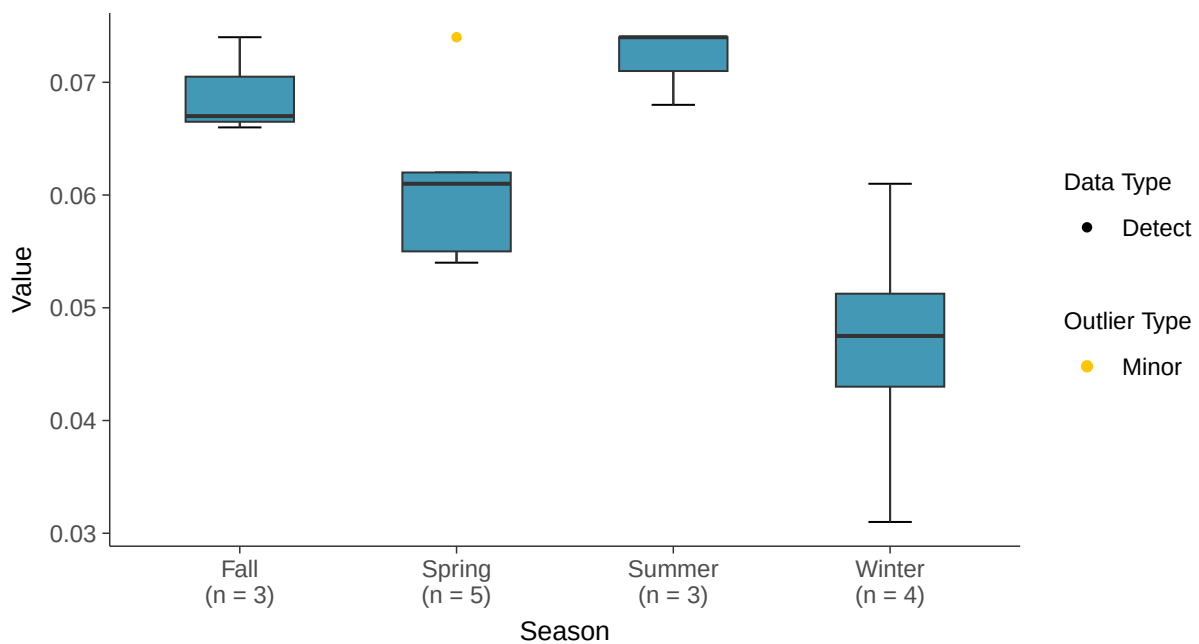
Boxplot

Lithium, MW-04 (mg/L)



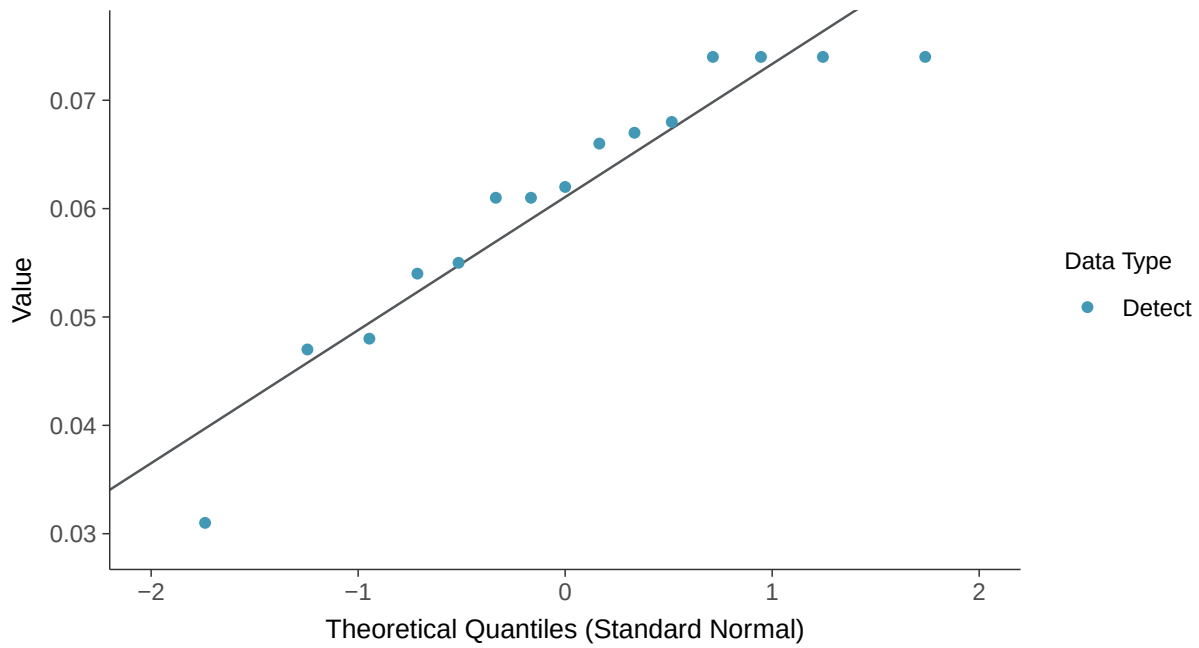
Boxplot by Season

Lithium, MW-04 (mg/L)



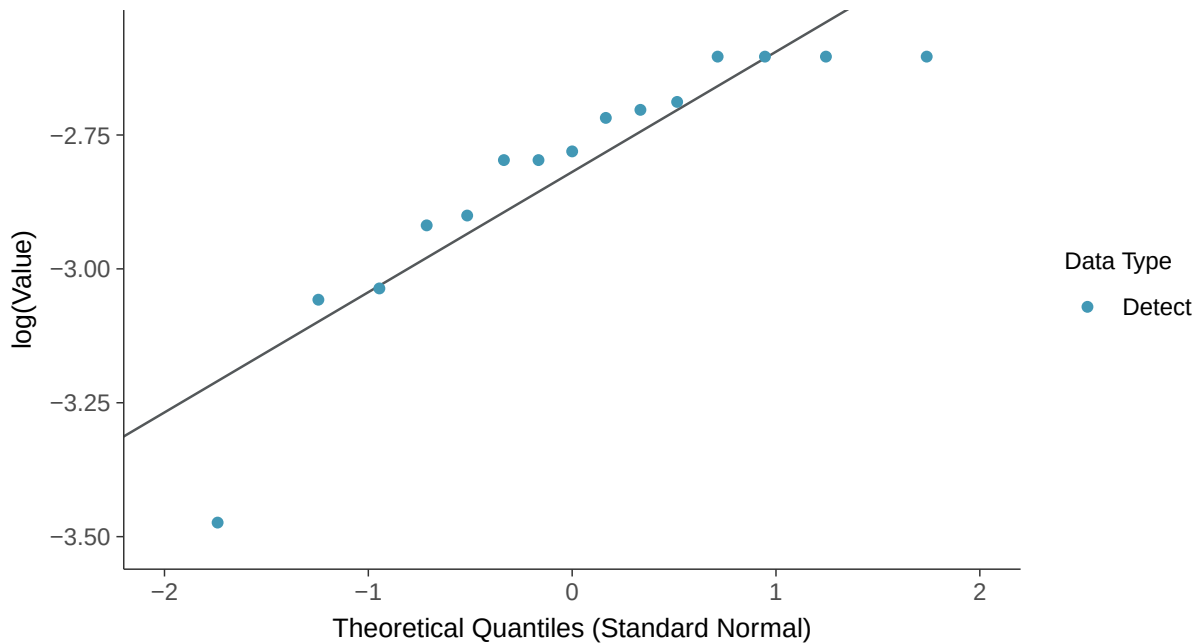
Normal Q-Q plot

Lithium, MW-04 (mg/L)



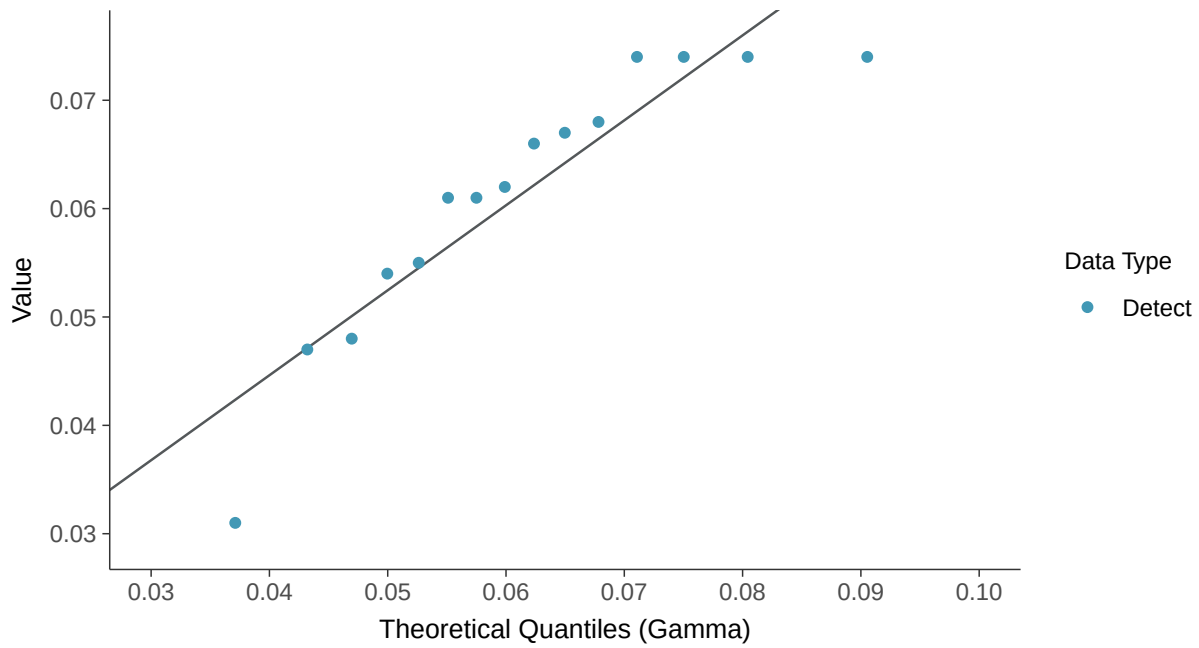
Lognormal Q-Q plot

Lithium, MW-04 (mg/L)



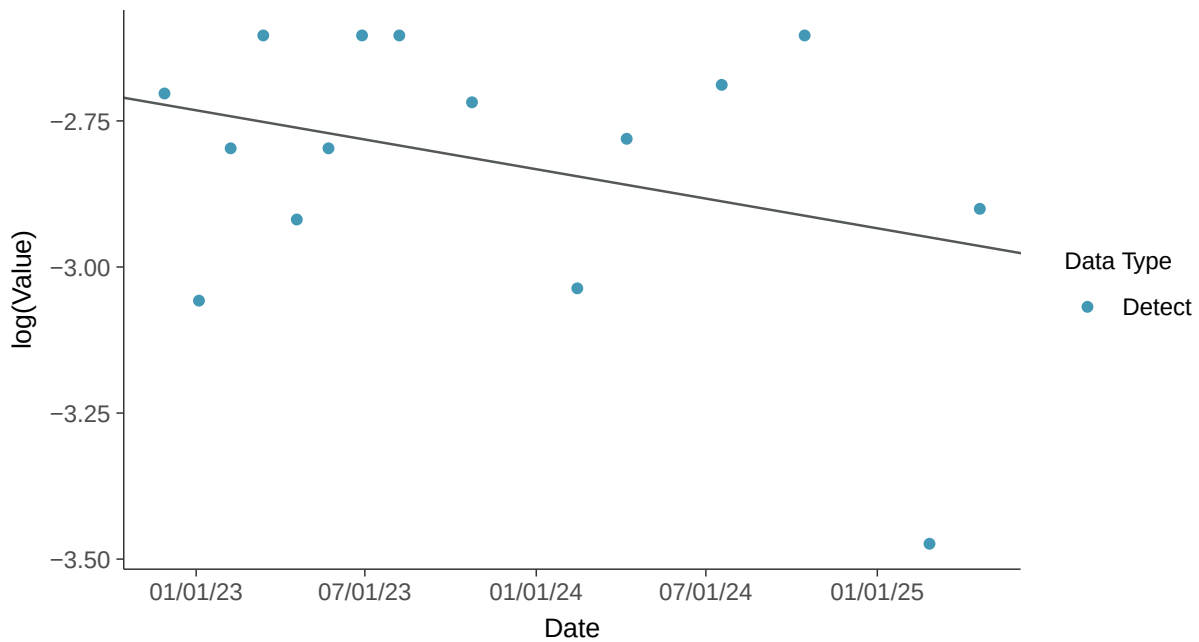
Gamma Q-Q plot

Lithium, MW-04 (mg/L)



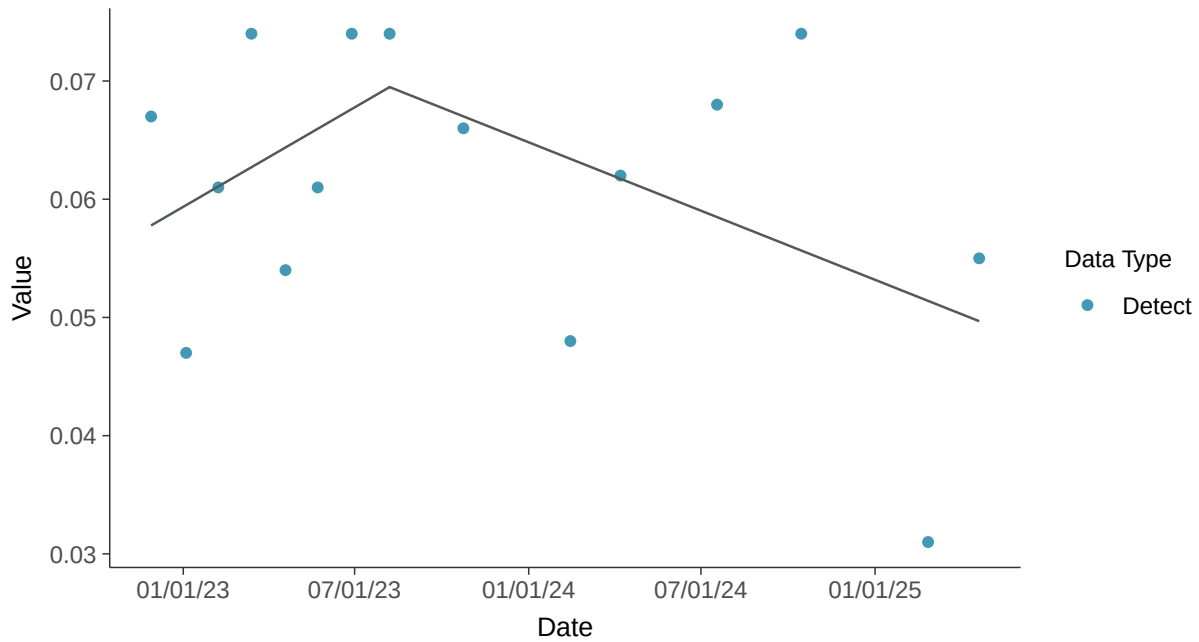
Trend Regression: Lognormal MLE

Lithium, MW-04 (mg/L)



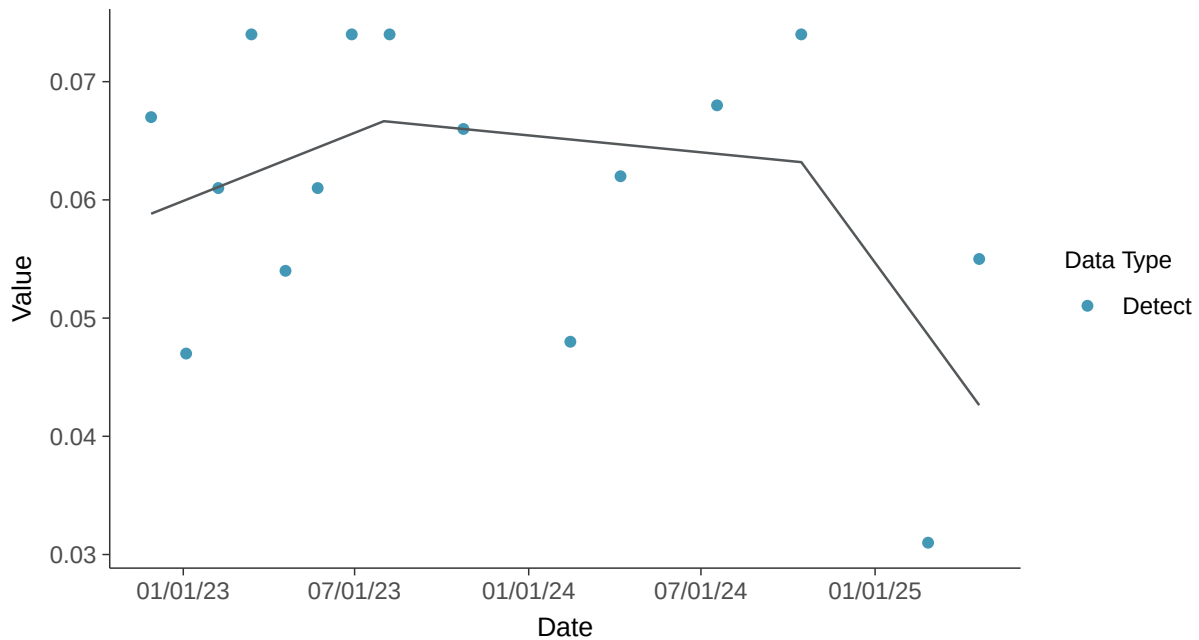
Trend Regression: Piecewise Linear-Linear

Lithium, MW-04 (mg/L)



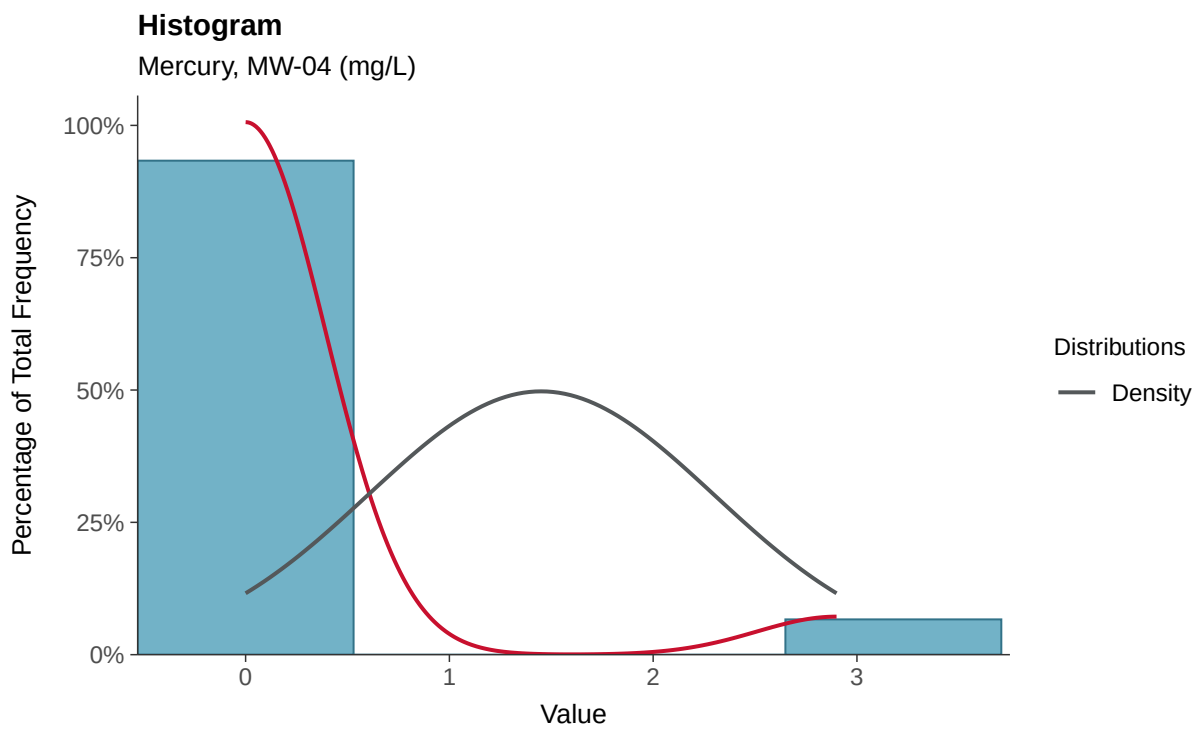
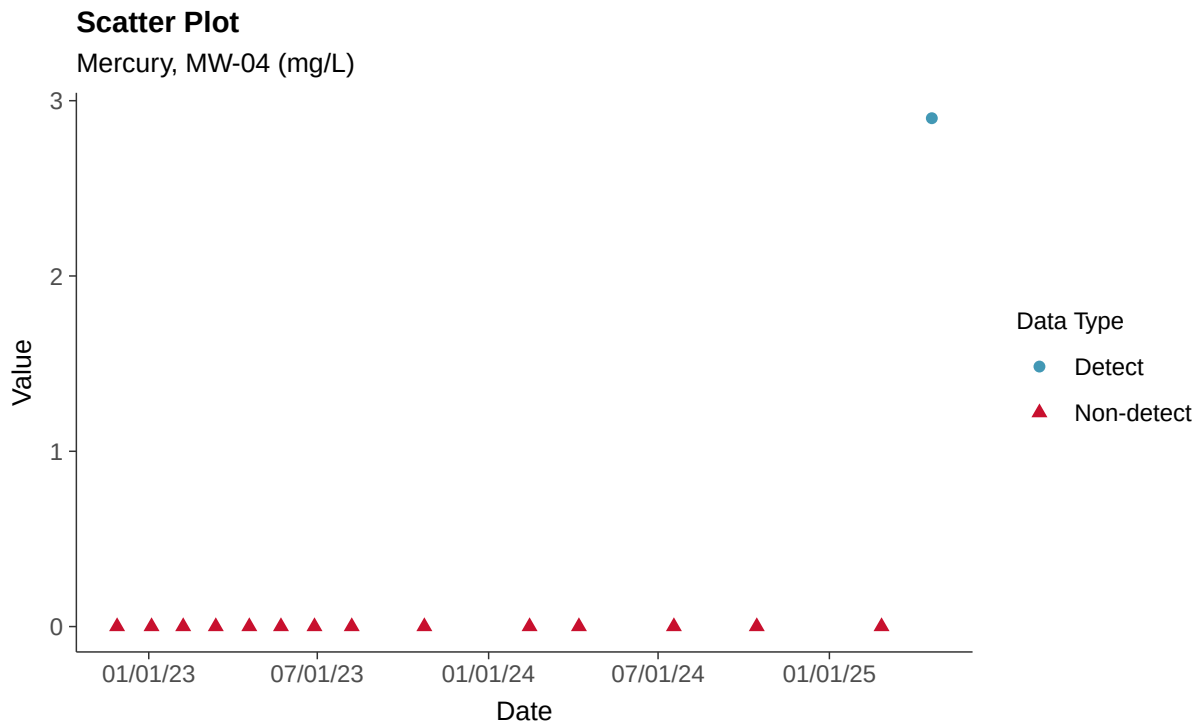
Trend Regression: Piecewise Linear-Linear-Linear

Lithium, MW-04 (mg/L)



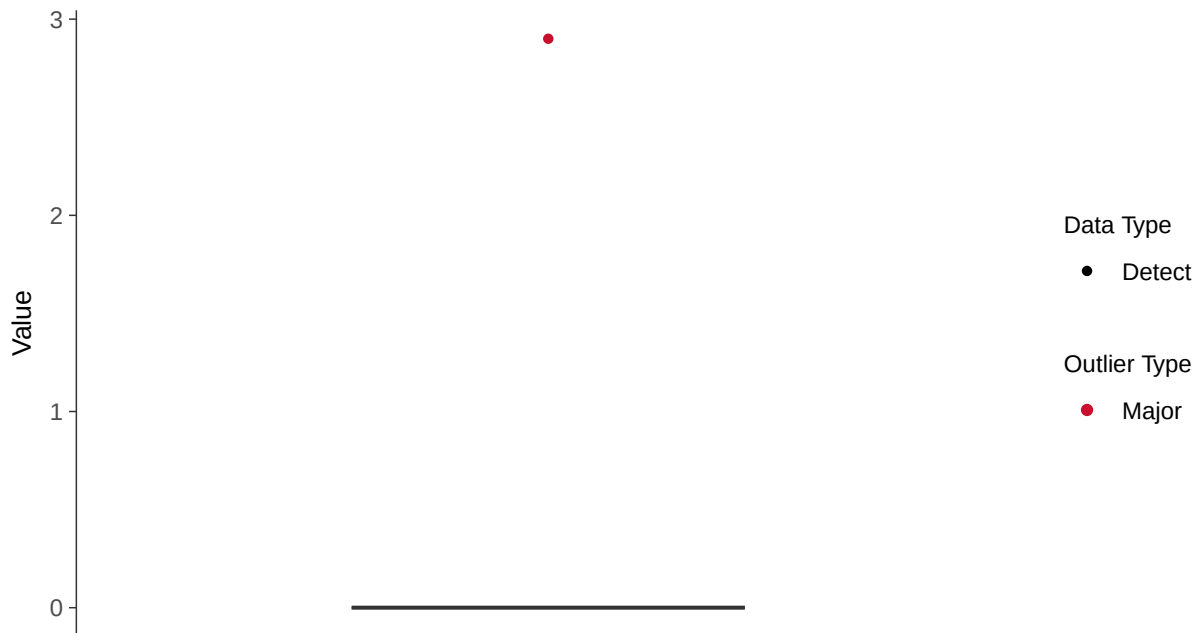
Appendix IV: Mercury, MW-04

ID: 14_2_4_117



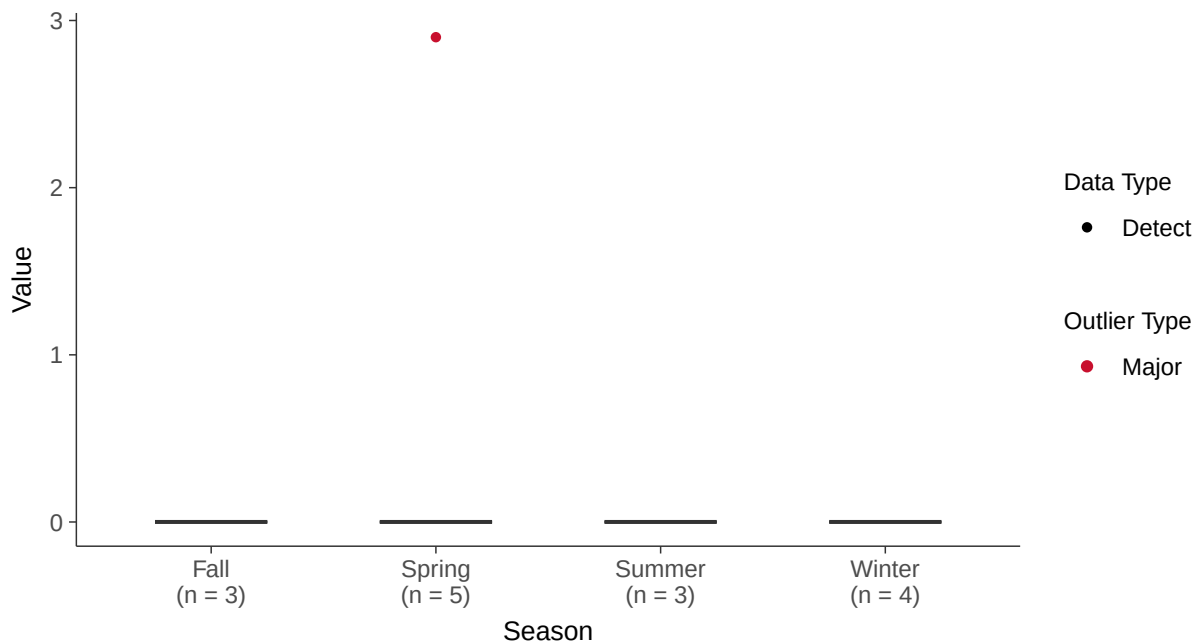
Boxplot

Mercury, MW-04 (mg/L)



Boxplot by Season

Mercury, MW-04 (mg/L)

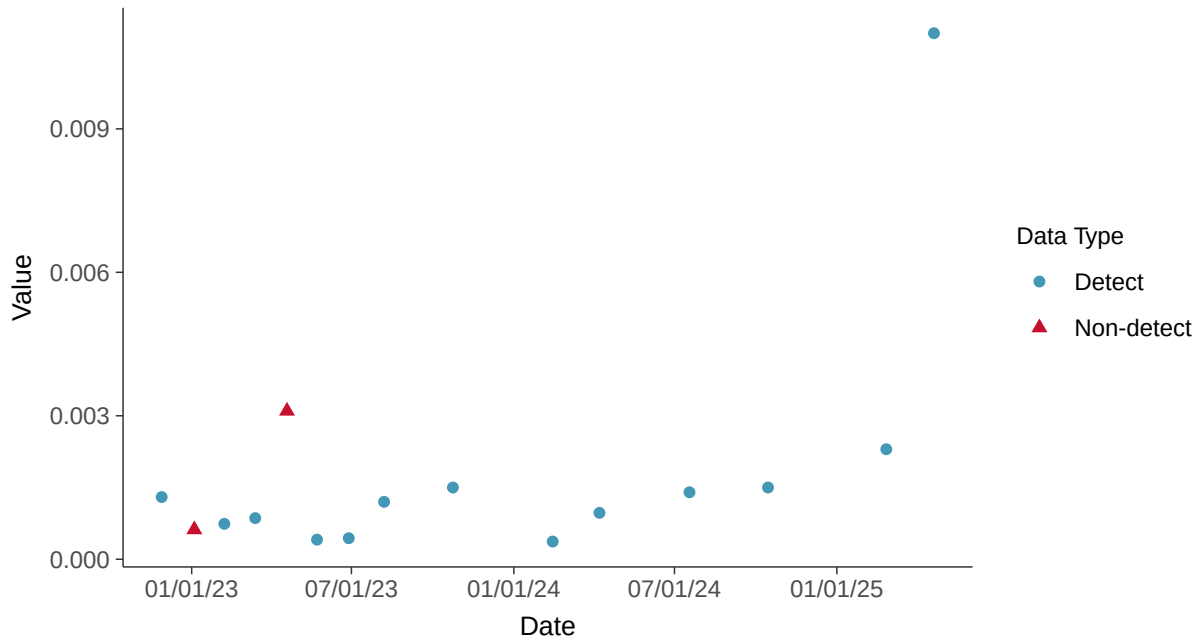


Appendix IV: Molybdenum, MW-04

ID: 14_2_4_118

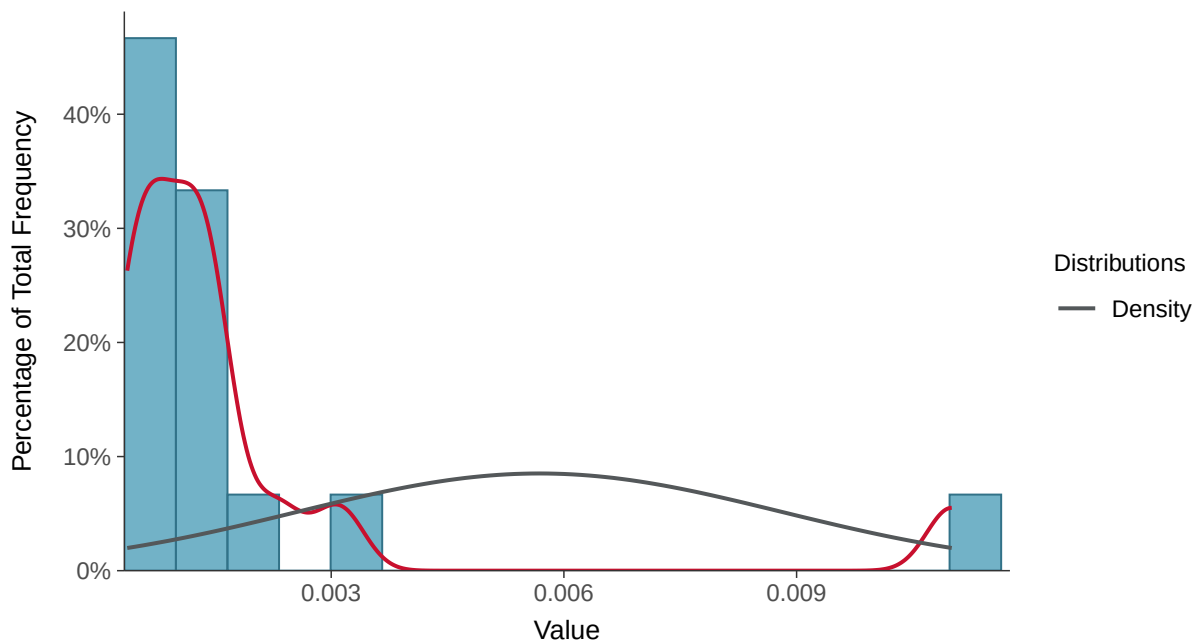
Scatter Plot

Molybdenum, MW-04 (mg/L)



Histogram

Molybdenum, MW-04 (mg/L)



Molybdenum, MW-04 (mg/L)

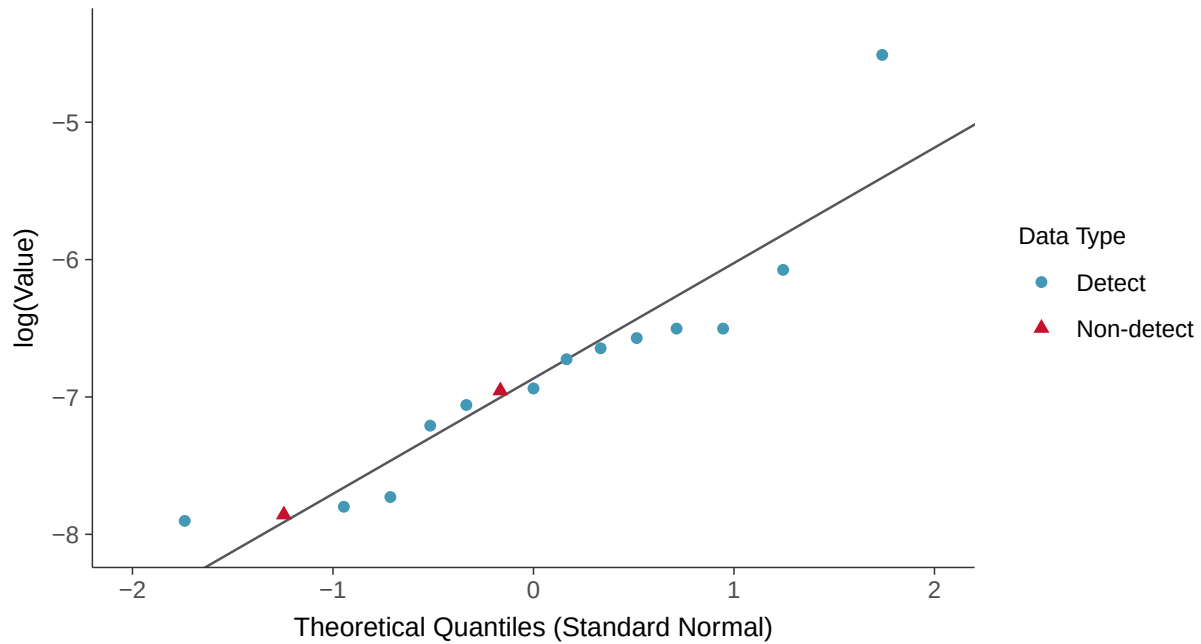


Molybdenum, MW-04 (mg/L)



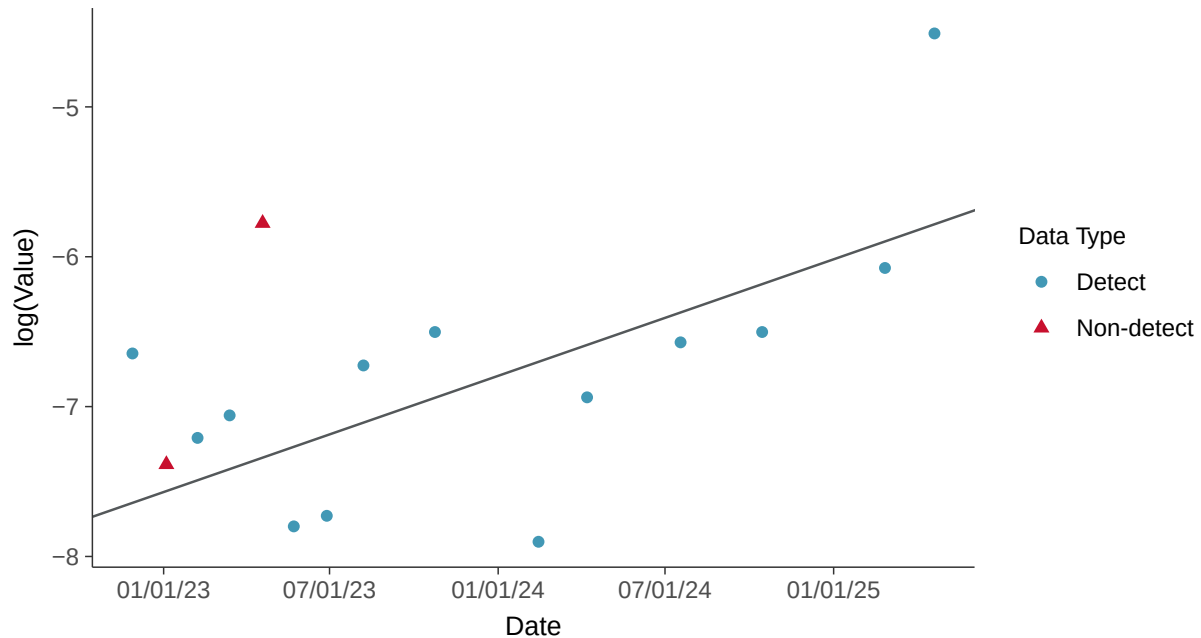
Lognormal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-04 (mg/L)



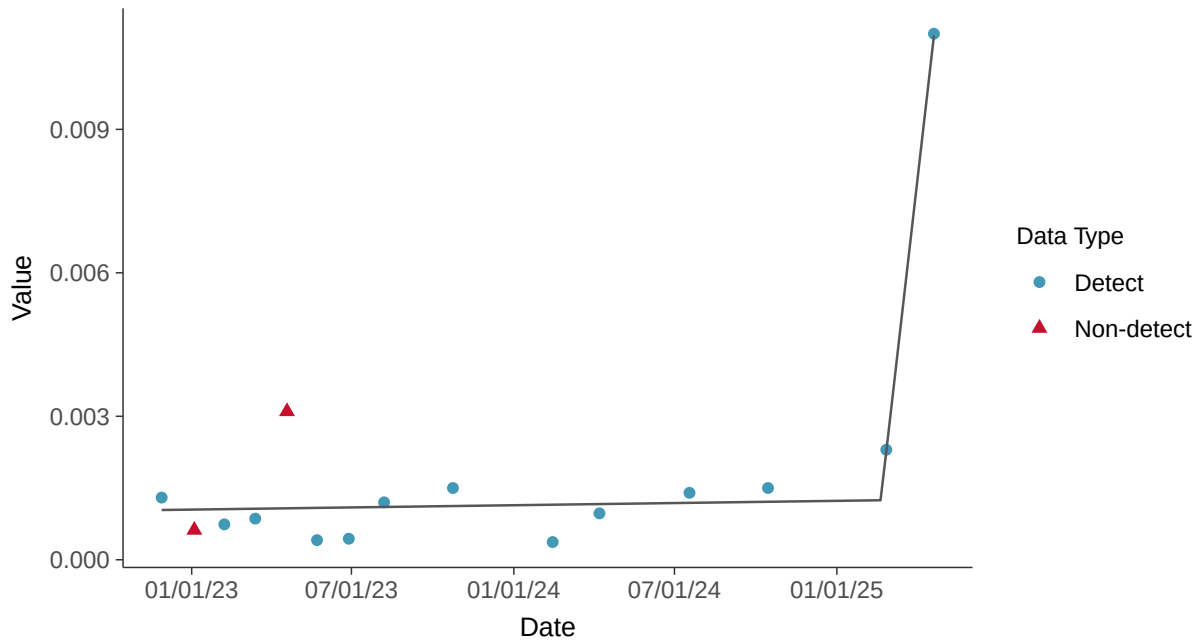
Trend Regression: Lognormal MLE

Molybdenum, MW-04 (mg/L)



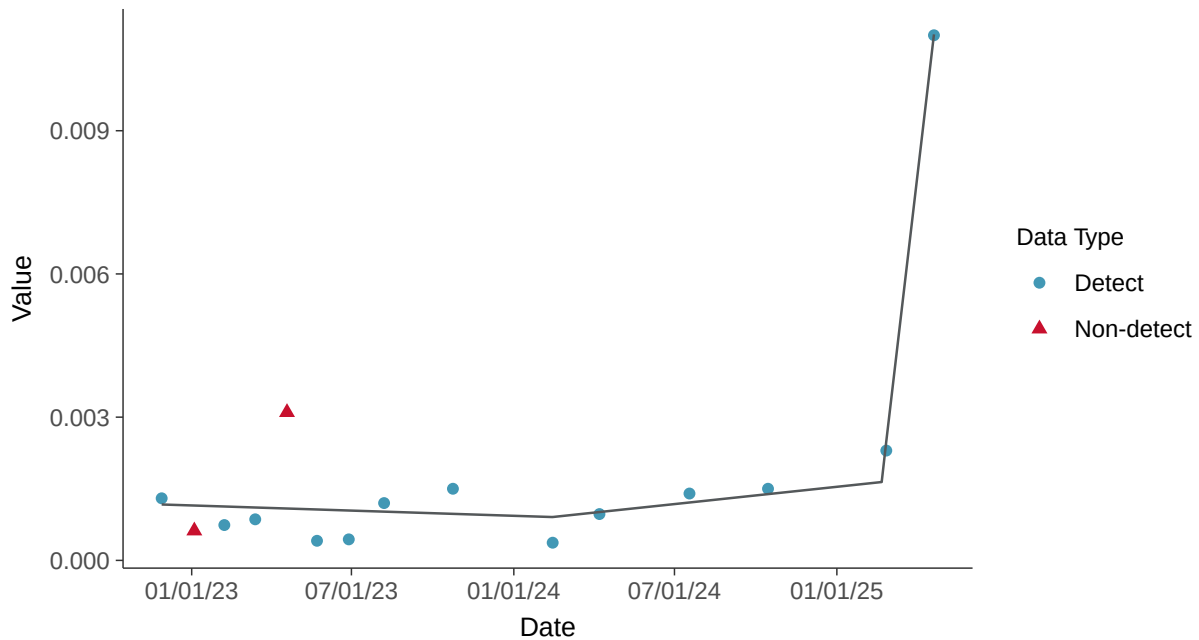
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-04 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-04 (mg/L)

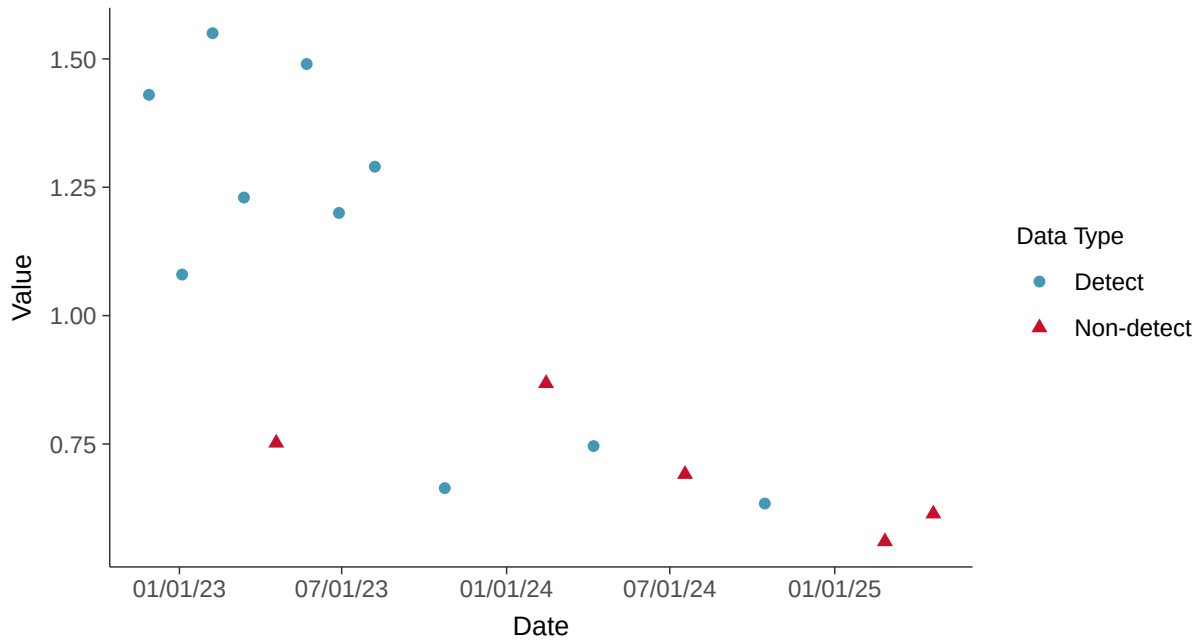


Appendix IV: Radium 226 and 228, MW-04

ID: 14_2_4_121

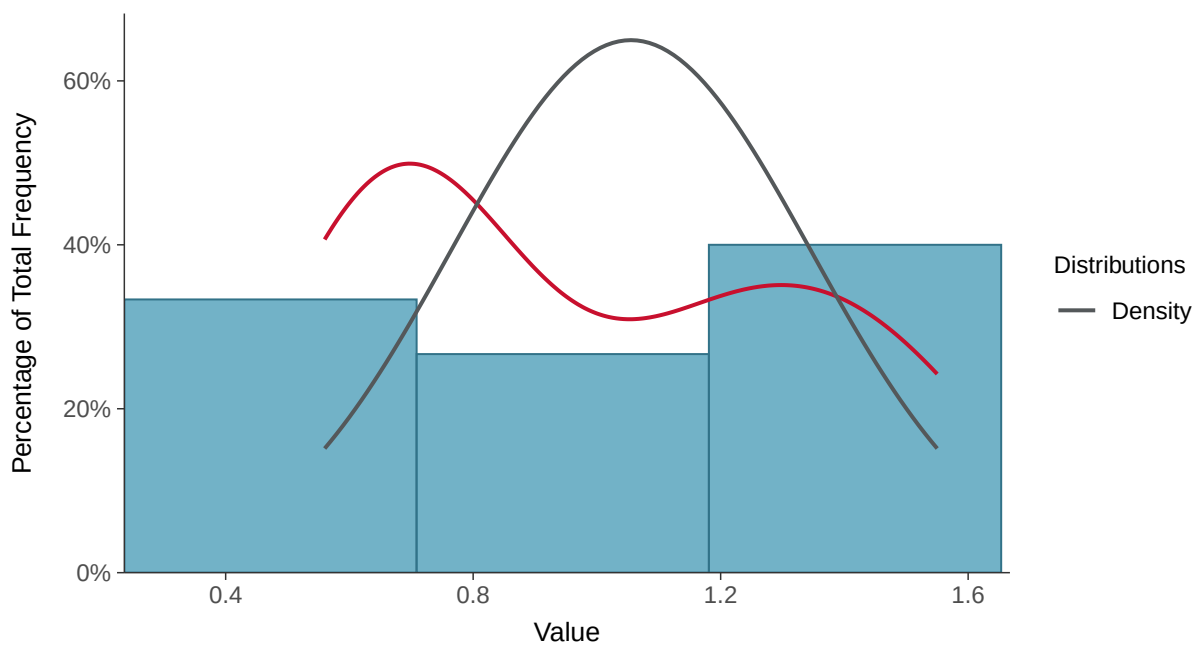
Scatter Plot

Radium 226 and 228, MW-04 (pCi/L)



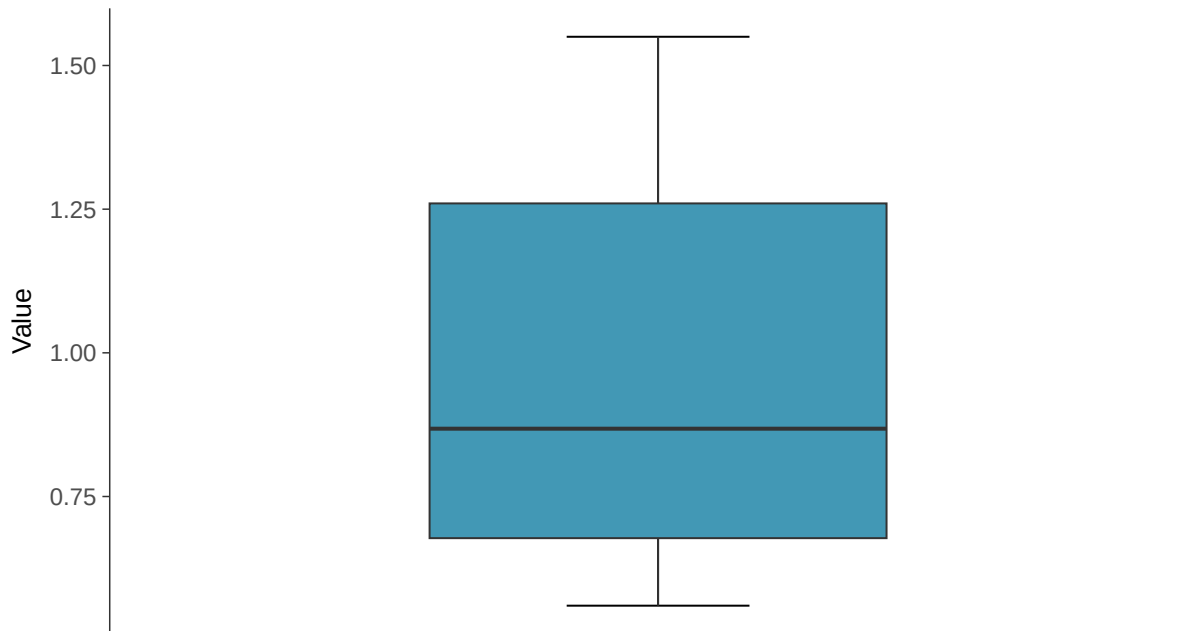
Histogram

Radium 226 and 228, MW-04 (pCi/L)



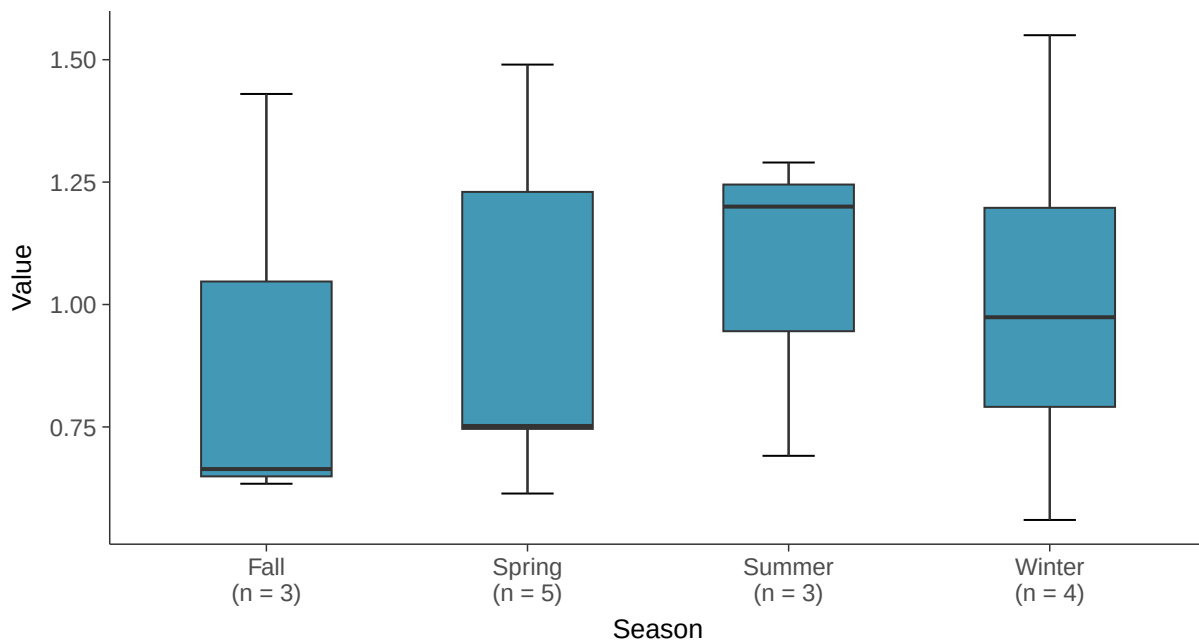
Boxplot

Radium 226 and 228, MW-04 (pCi/L)



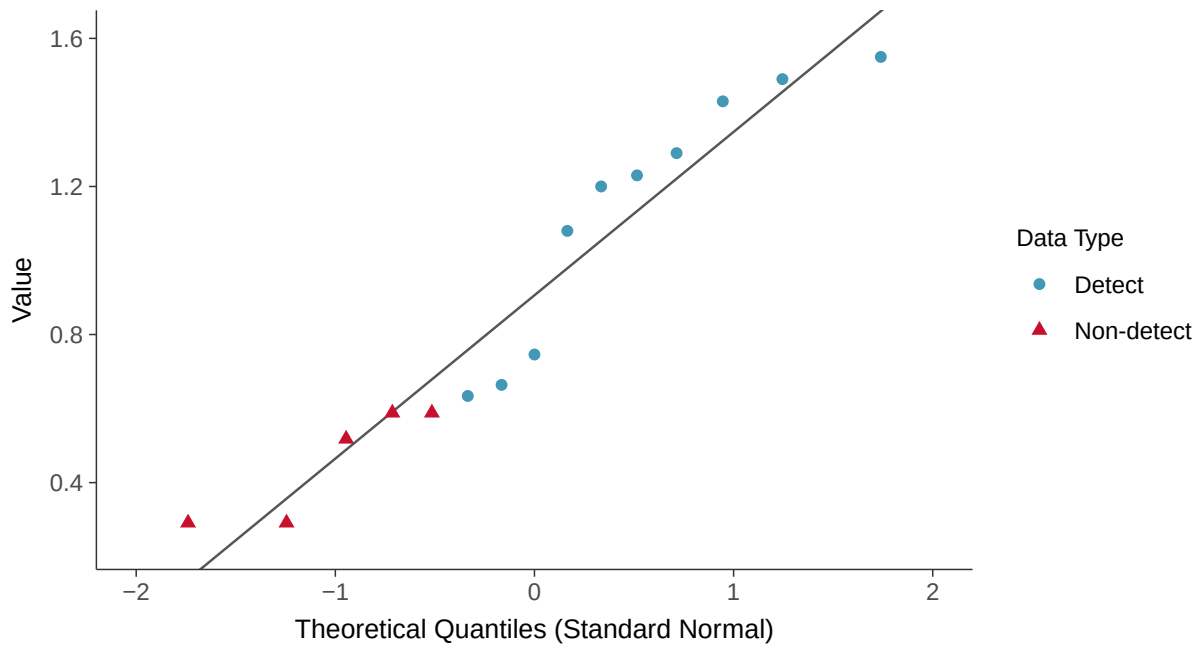
Boxplot by Season

Radium 226 and 228, MW-04 (pCi/L)



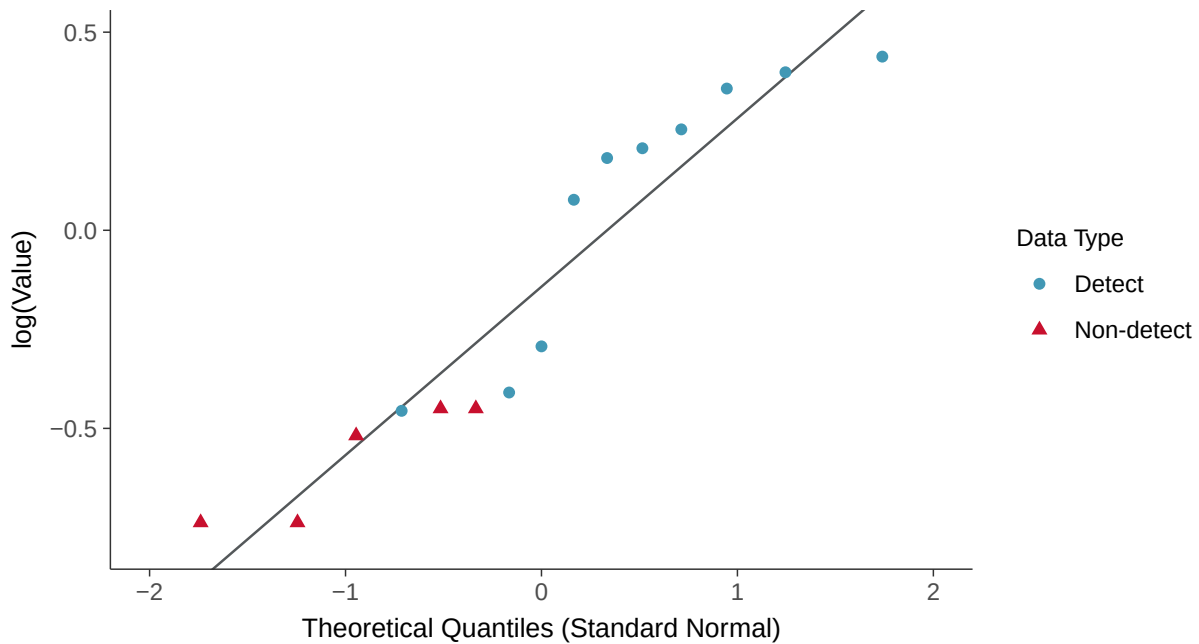
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-04 (pCi/L)



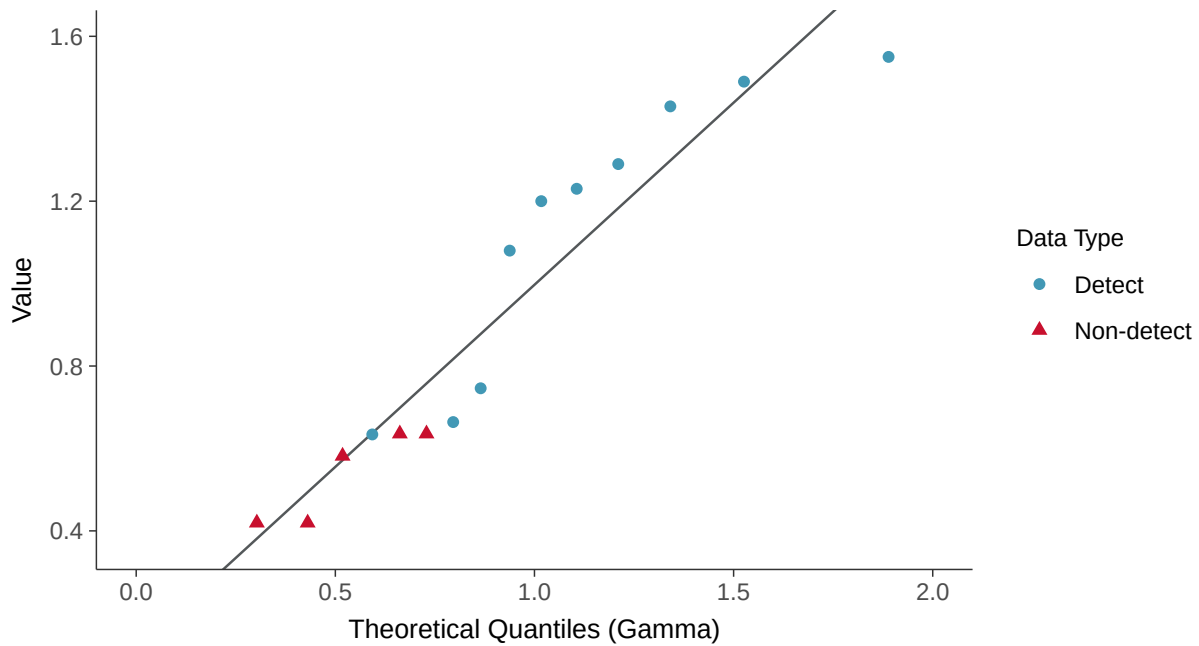
Lognormal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-04 (pCi/L)



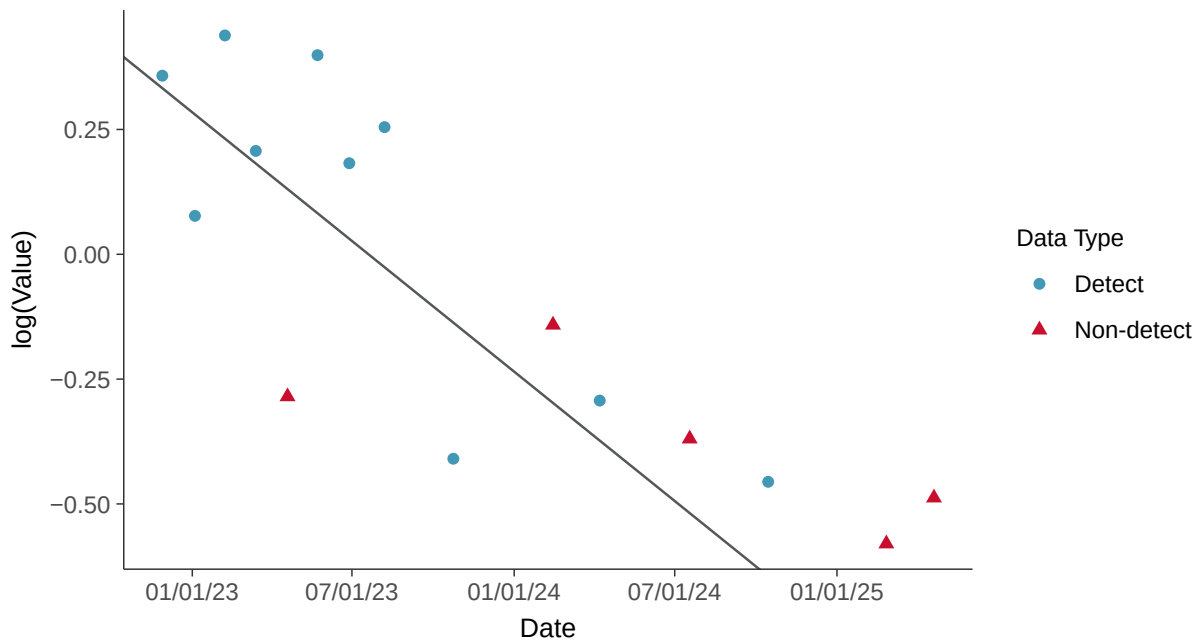
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-04 (pCi/L)



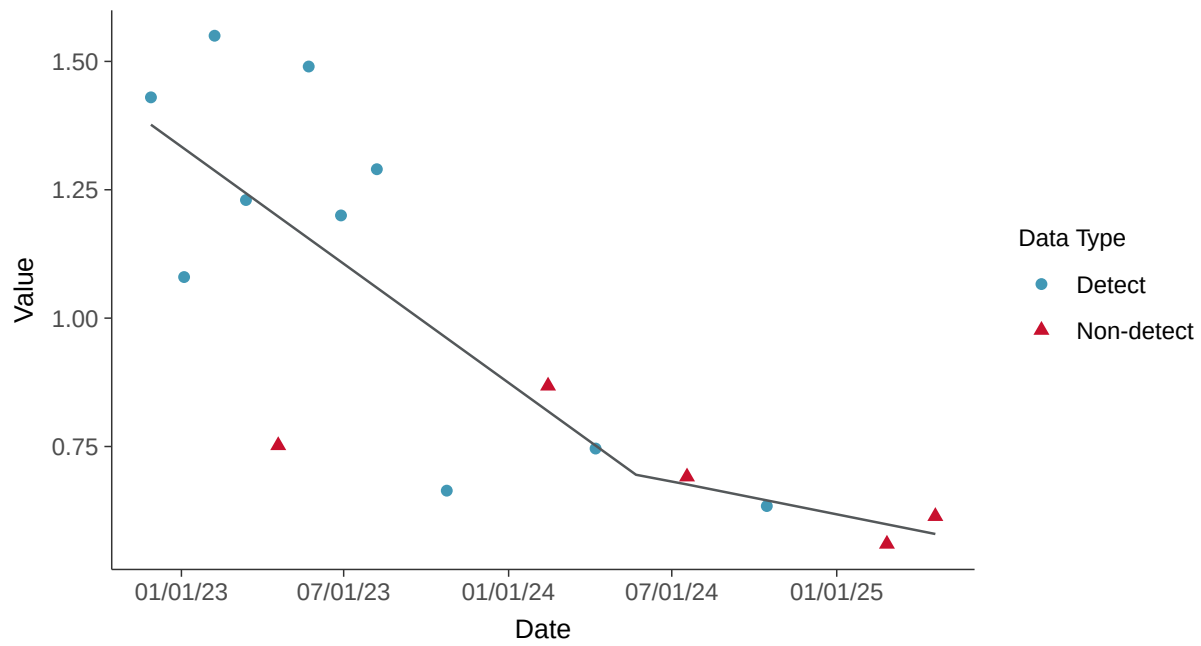
Trend Regression: Lognormal MLE

Radium 226 and 228, MW-04 (pCi/L)



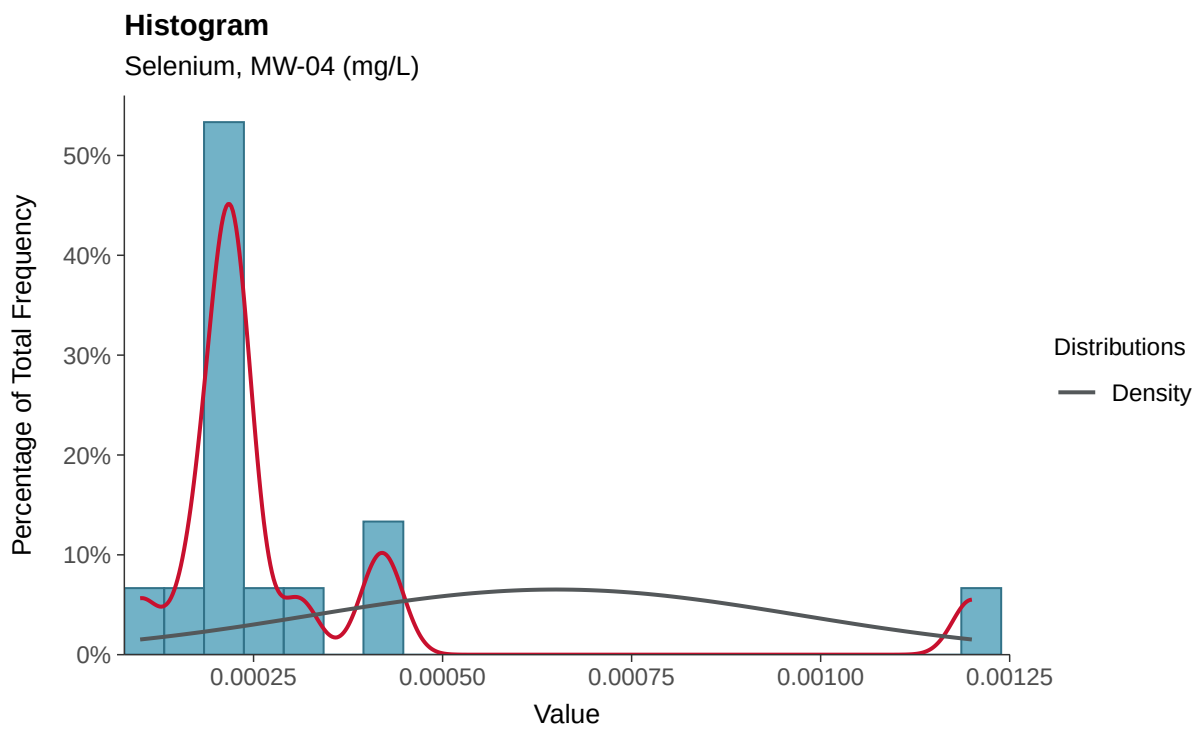
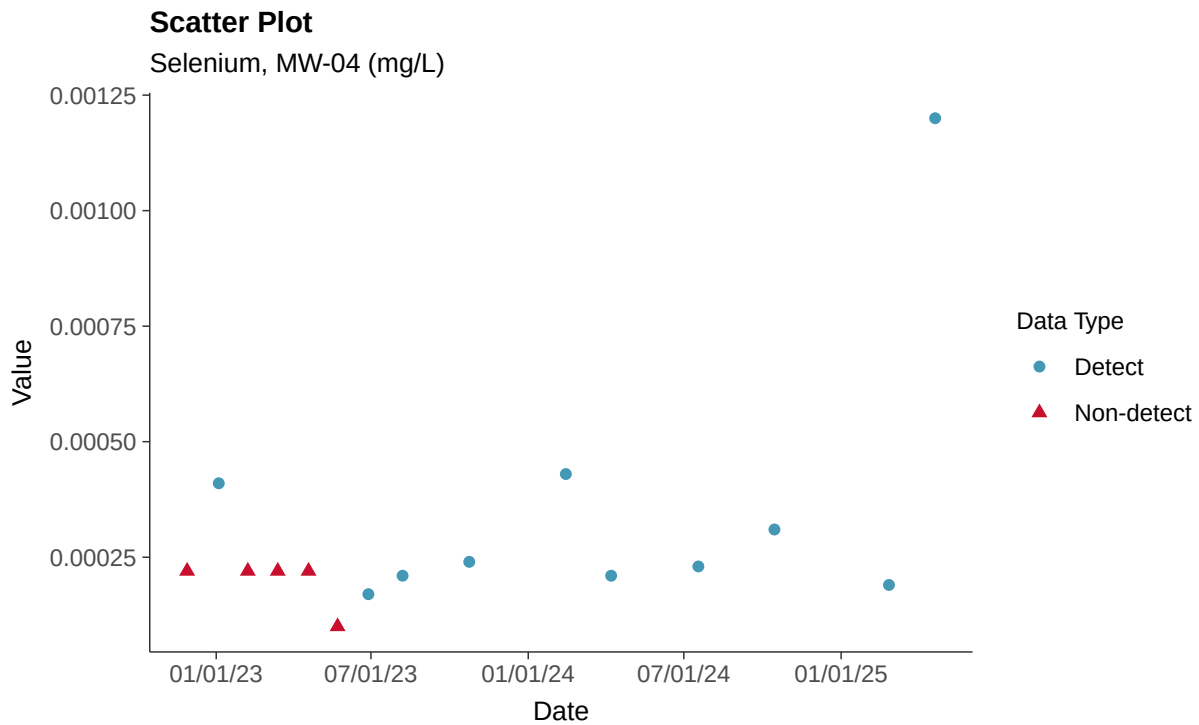


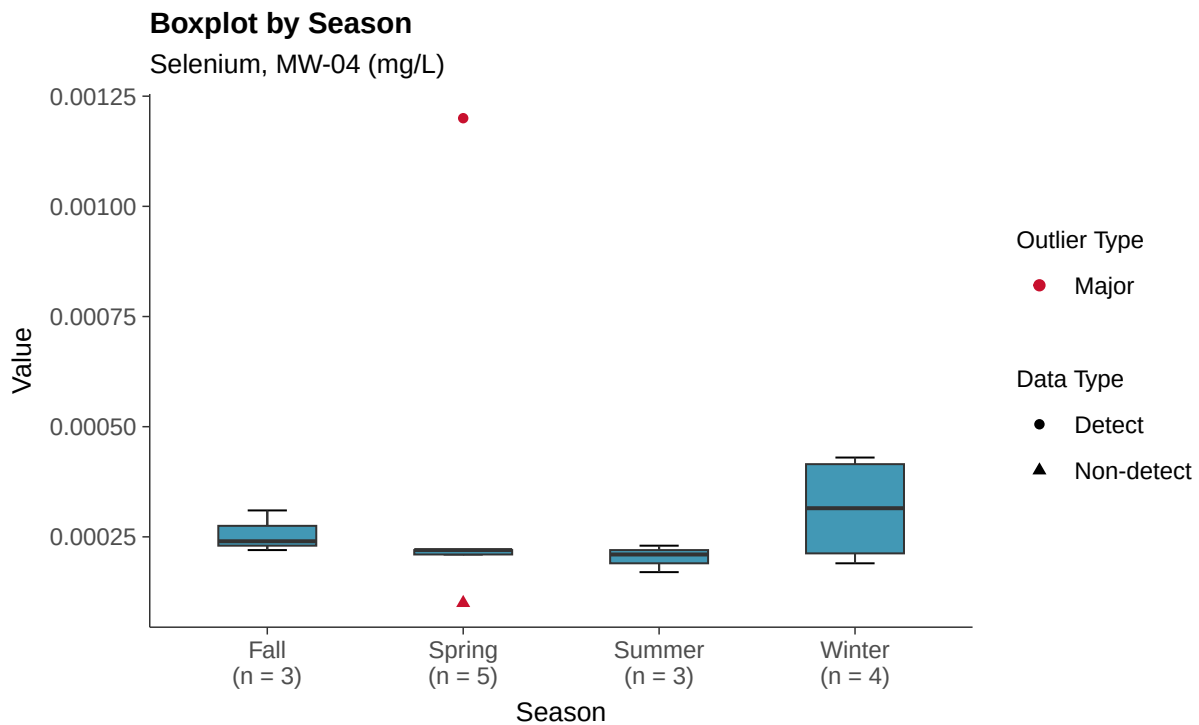
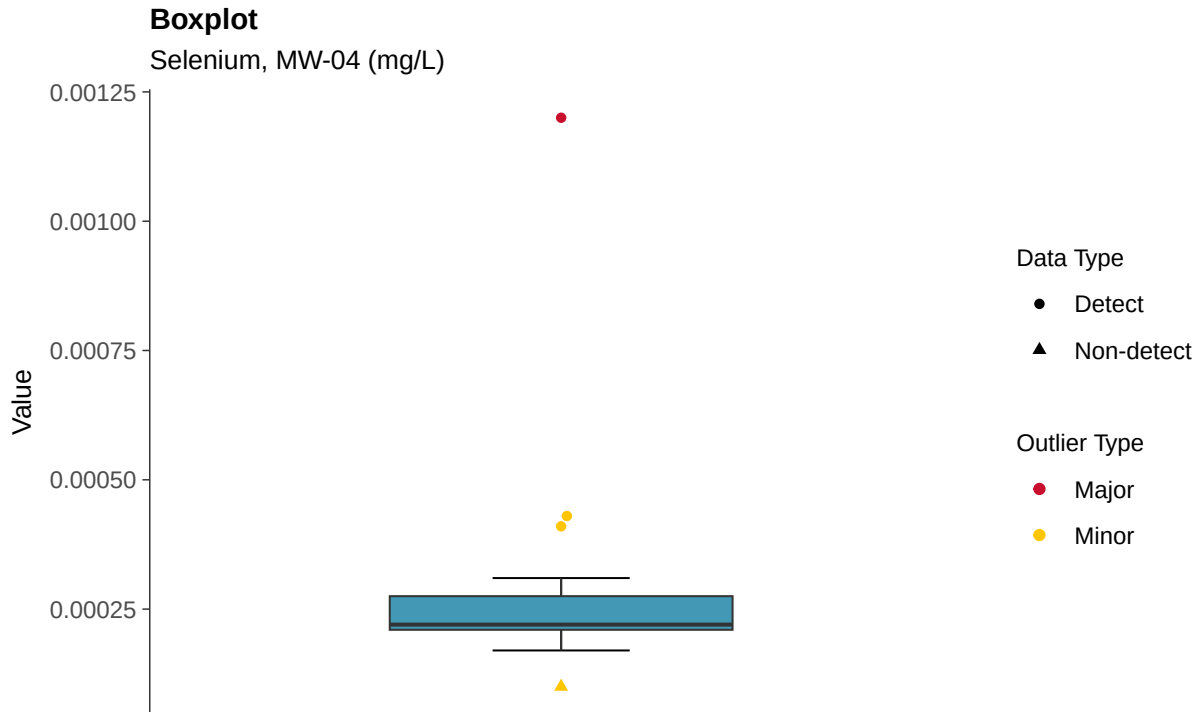
Trend Regression: Piecewise Linear-Linear
Radium 226 and 228, MW-04 (pCi/L)



Appendix IV: Selenium, MW-04

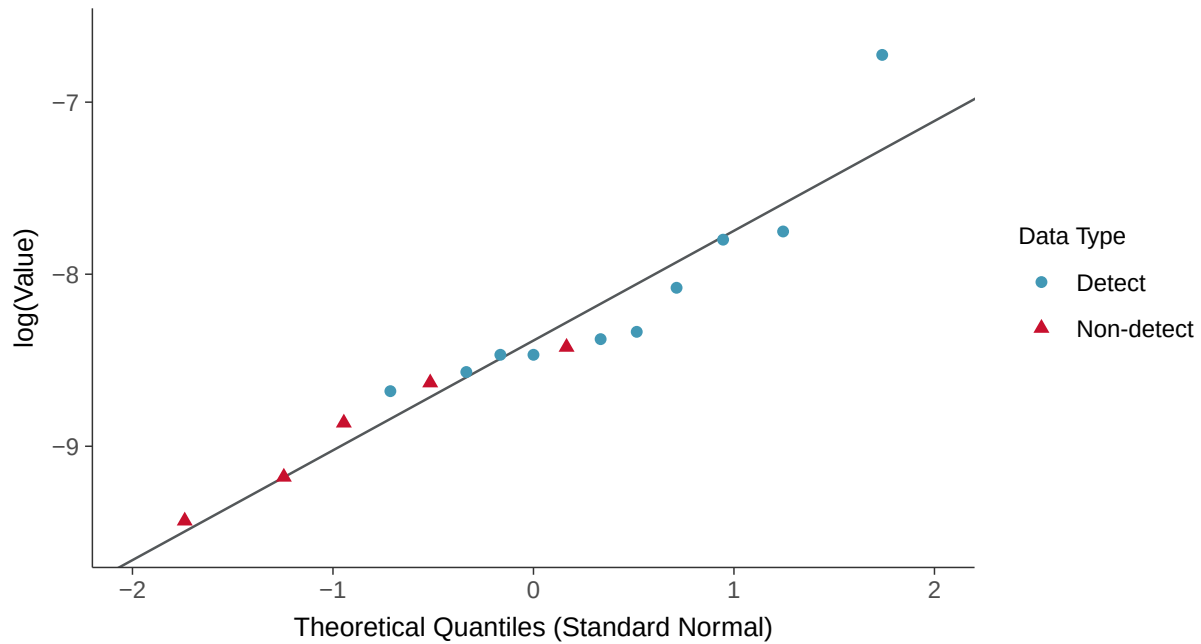
ID: 14_2_4_122





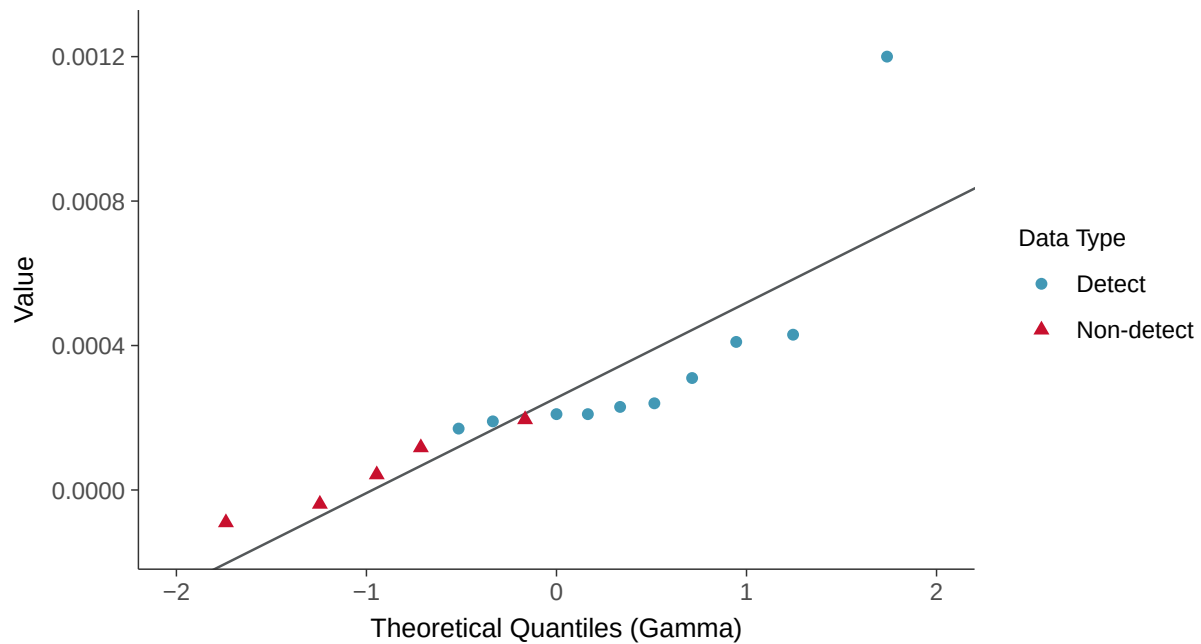
Lognormal Q-Q plot using ROS Imputed Estimates

Selenium, MW-04 (mg/L)



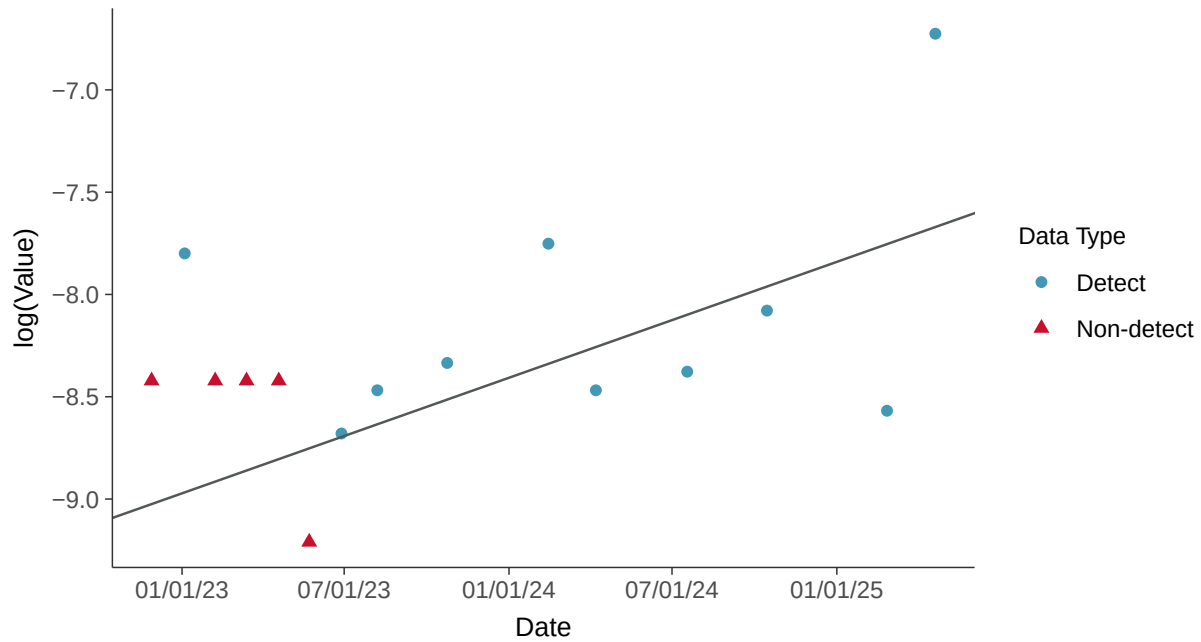
Gamma Q-Q plot using ROS Imputed Estimates

Selenium, MW-04 (mg/L)



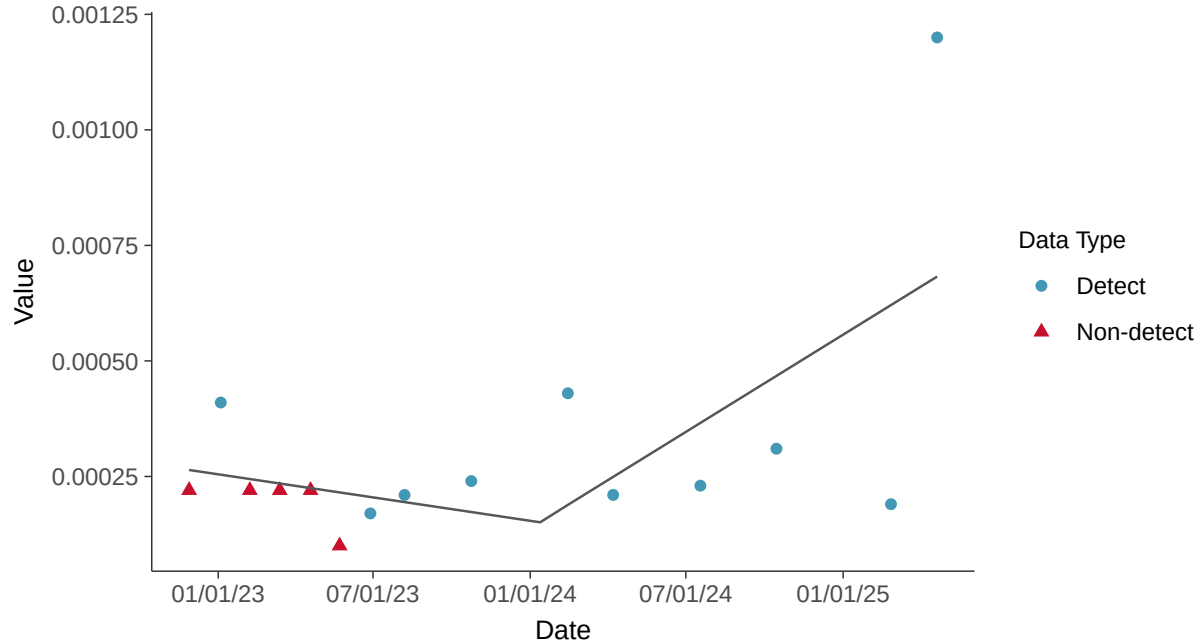
Trend Regression: Lognormal MLE

Selenium, MW-04 (mg/L)



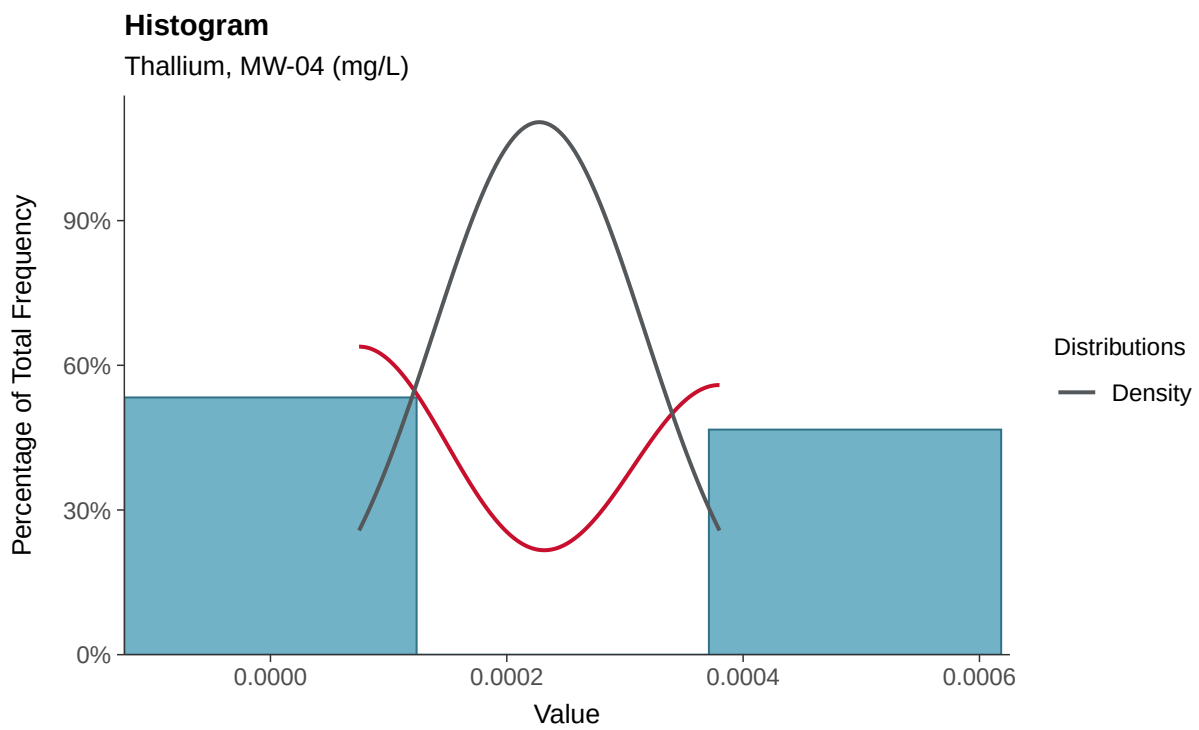
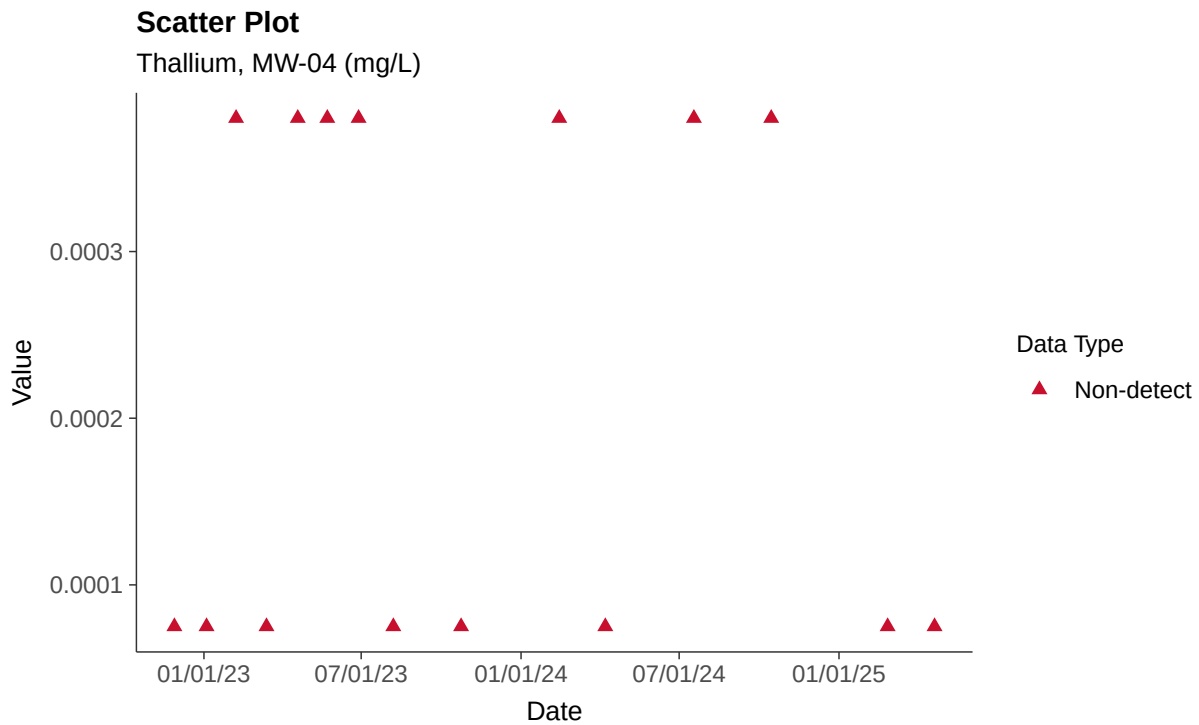
Trend Regression: Piecewise Linear-Linear

Selenium, MW-04 (mg/L)



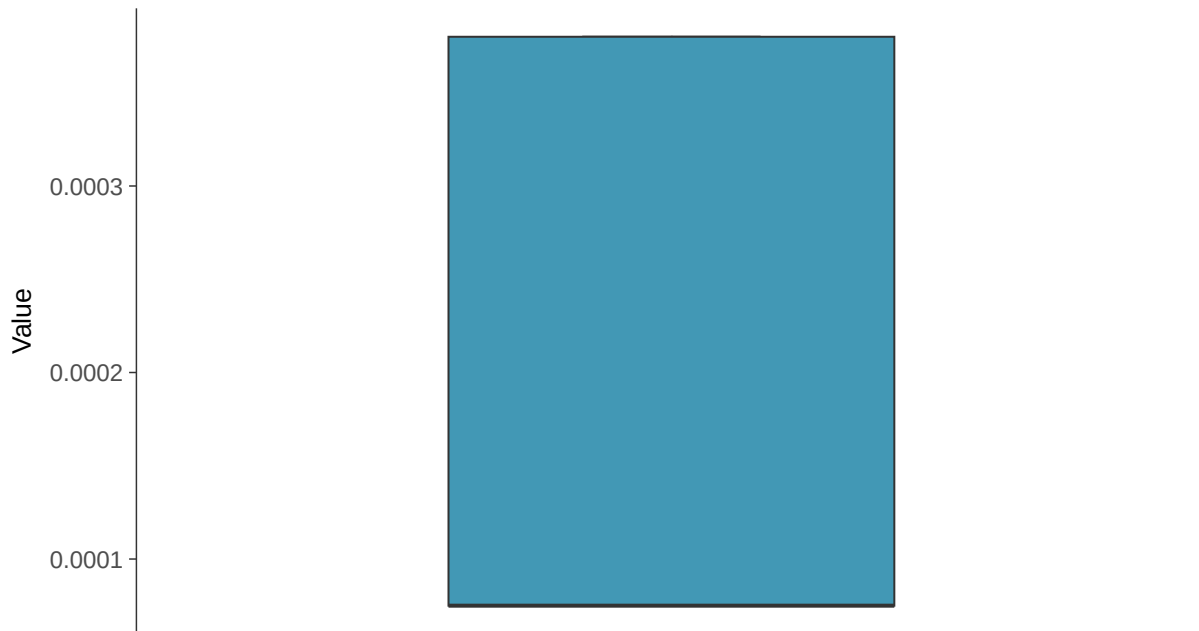
Appendix IV: Thallium, MW-04

ID: 14_2_4_125



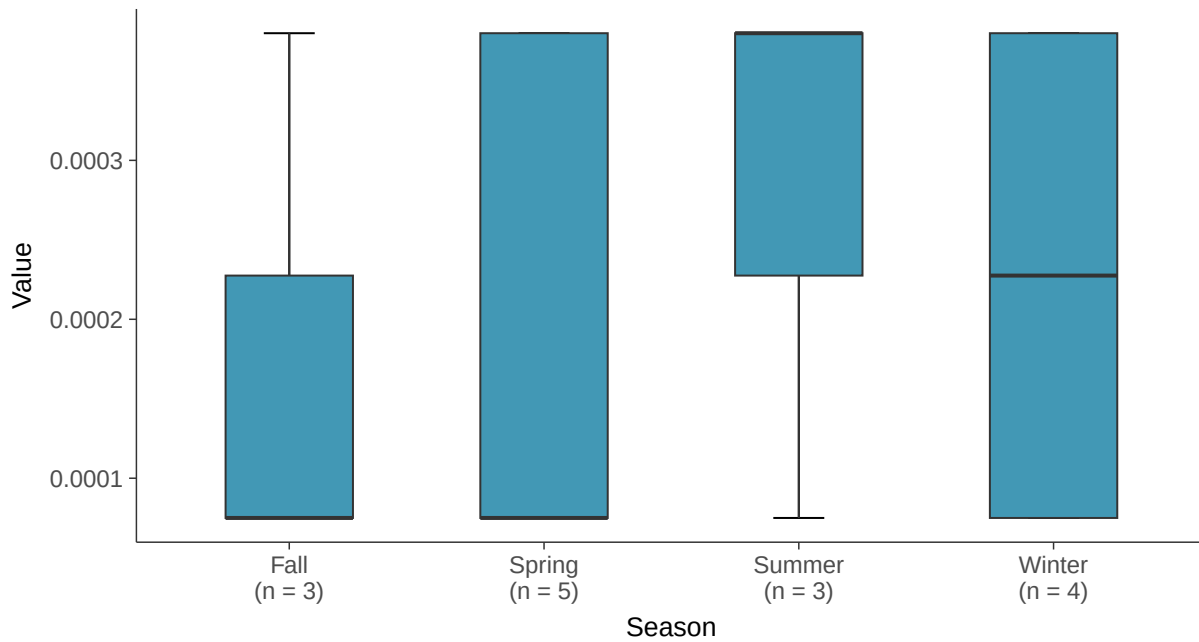
Boxplot

Thallium, MW-04 (mg/L)



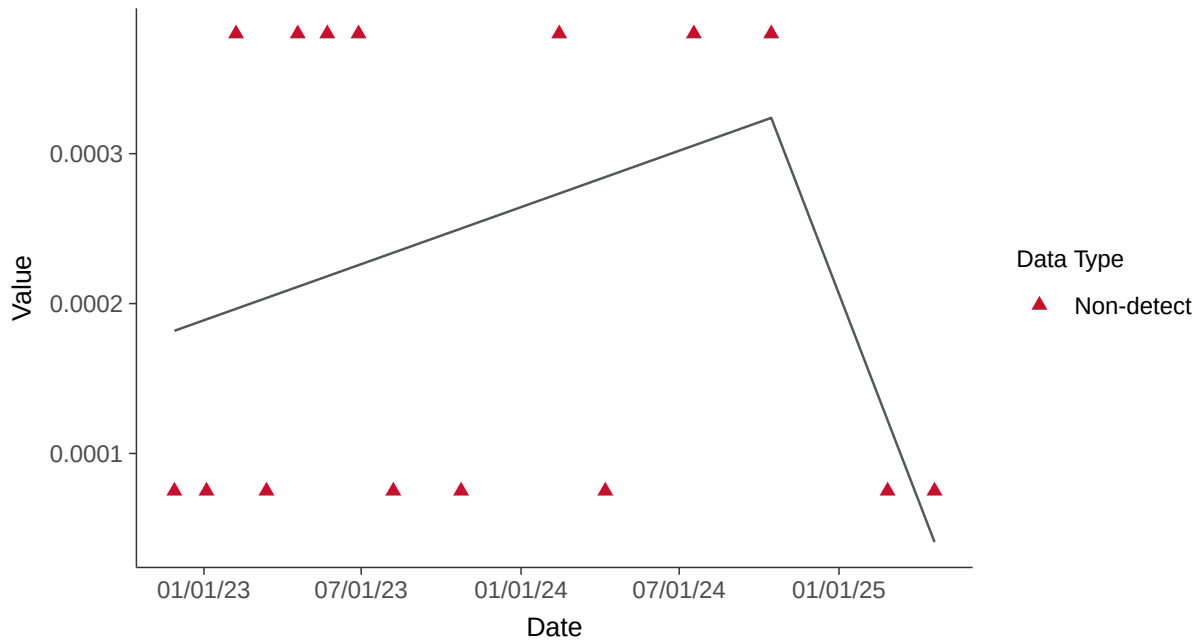
Boxplot by Season

Thallium, MW-04 (mg/L)



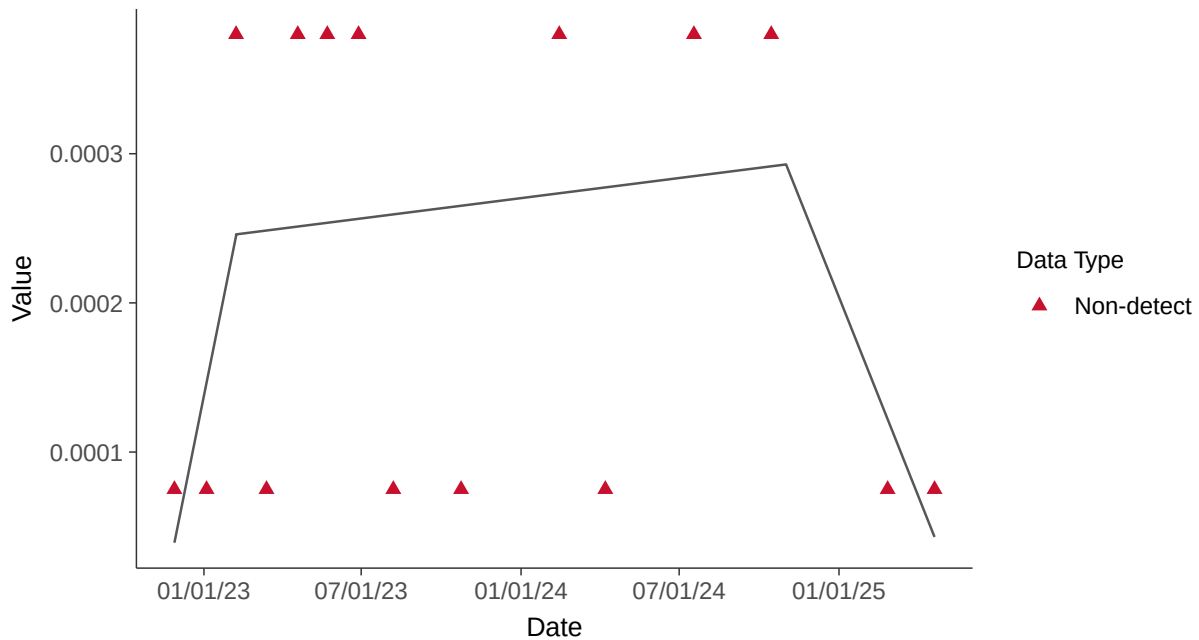
Trend Regression: Piecewise Linear-Linear

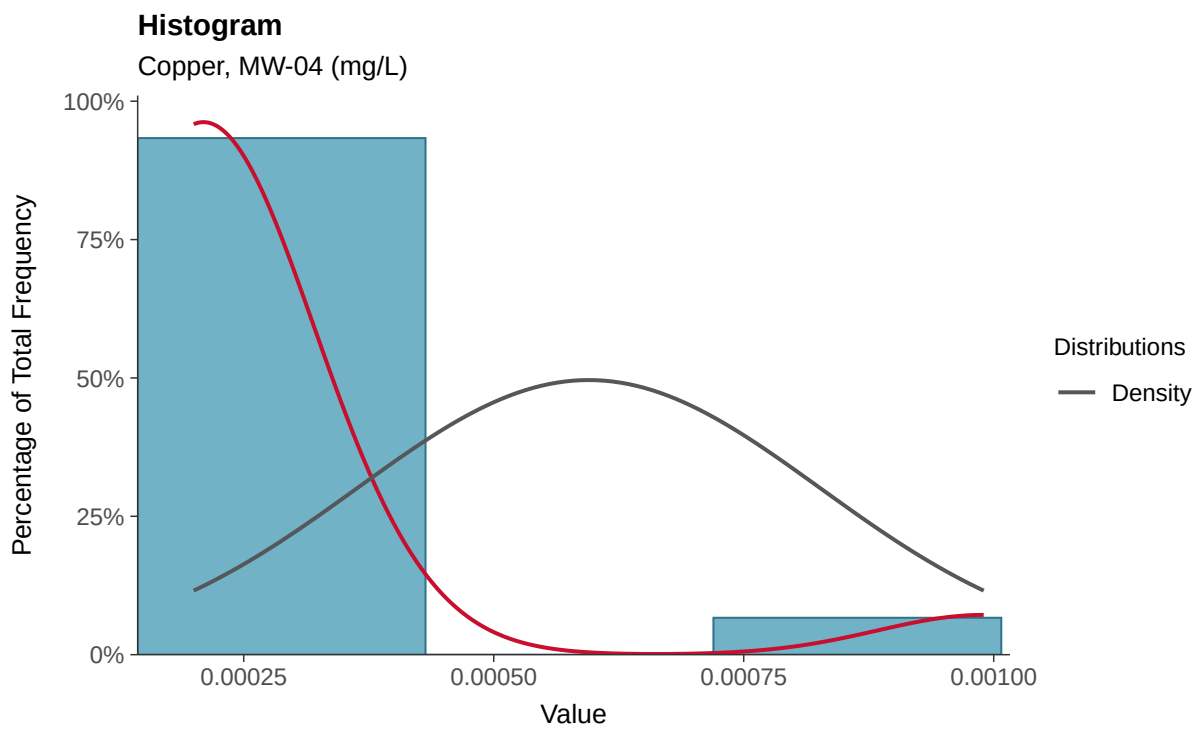
Thallium, MW-04 (mg/L)

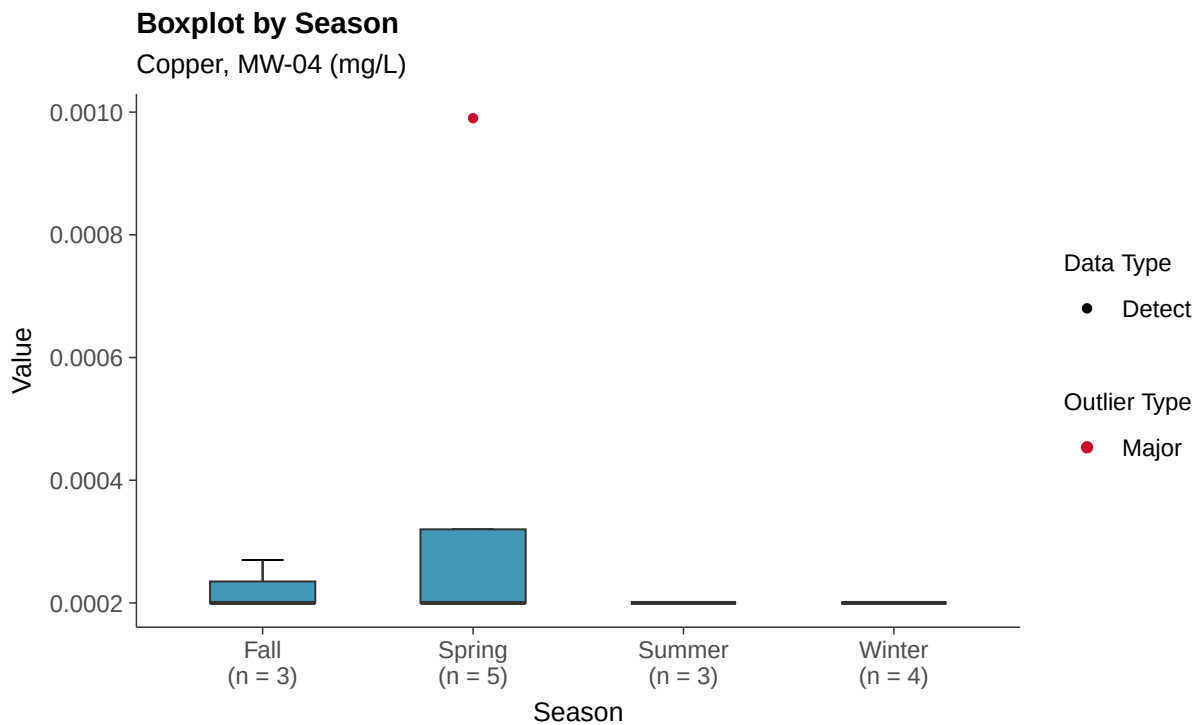
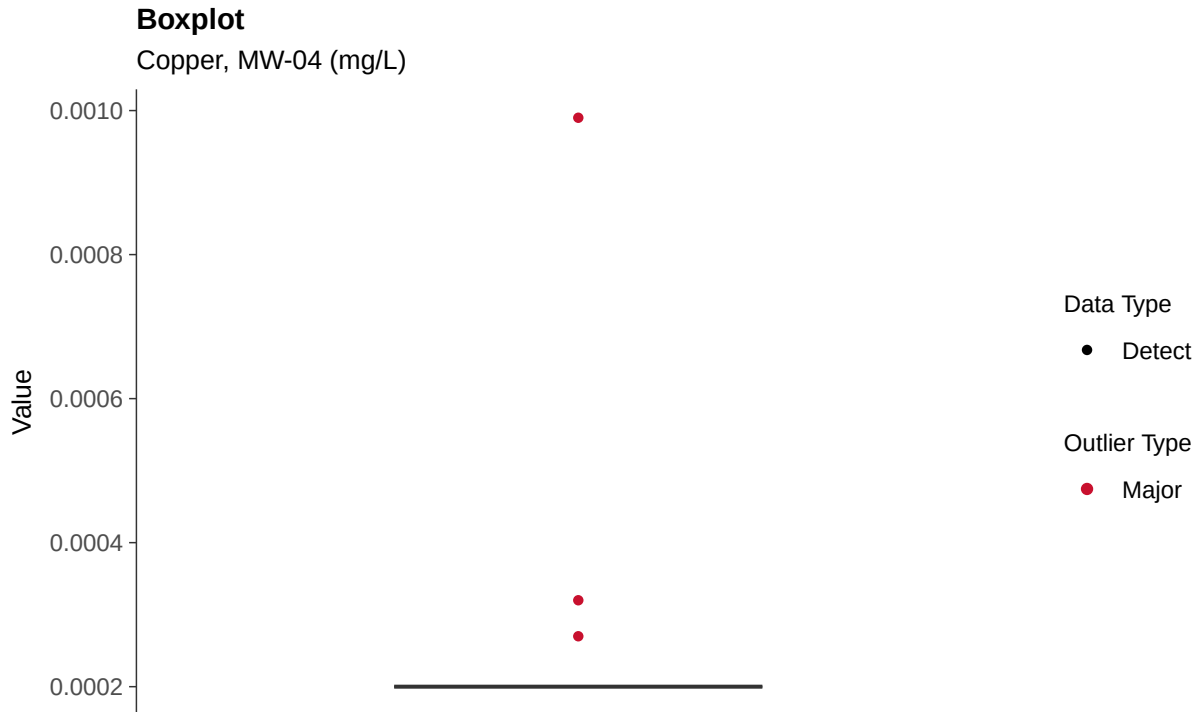


Trend Regression: Piecewise Linear-Linear-Linear

Thallium, MW-04 (mg/L)

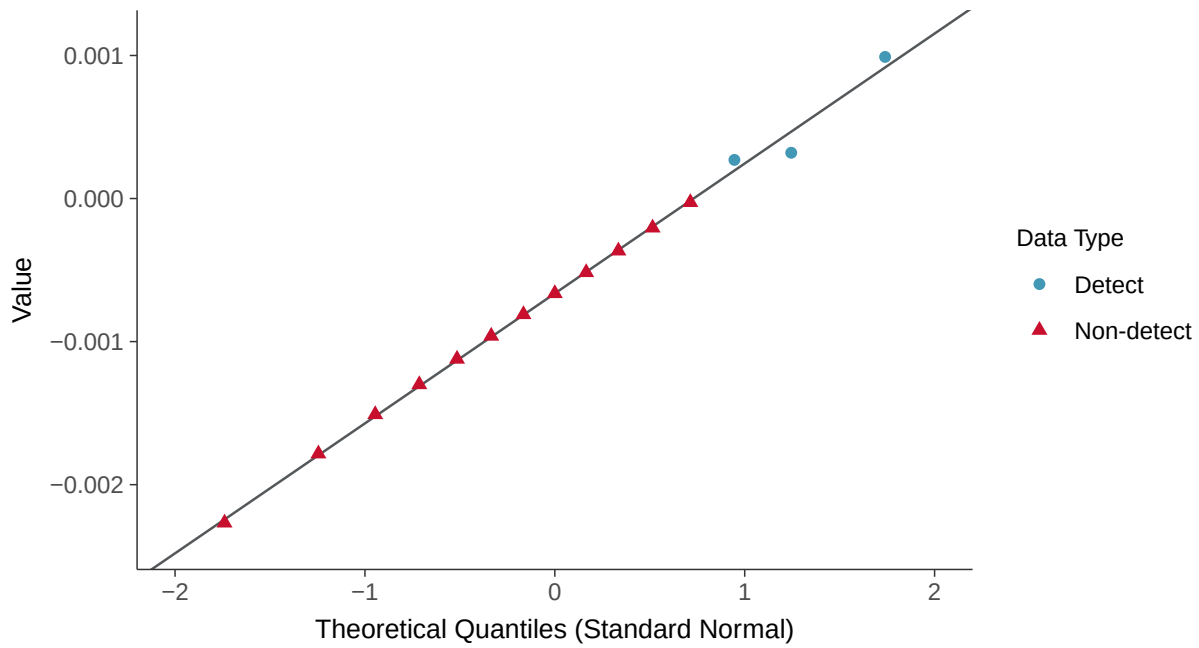






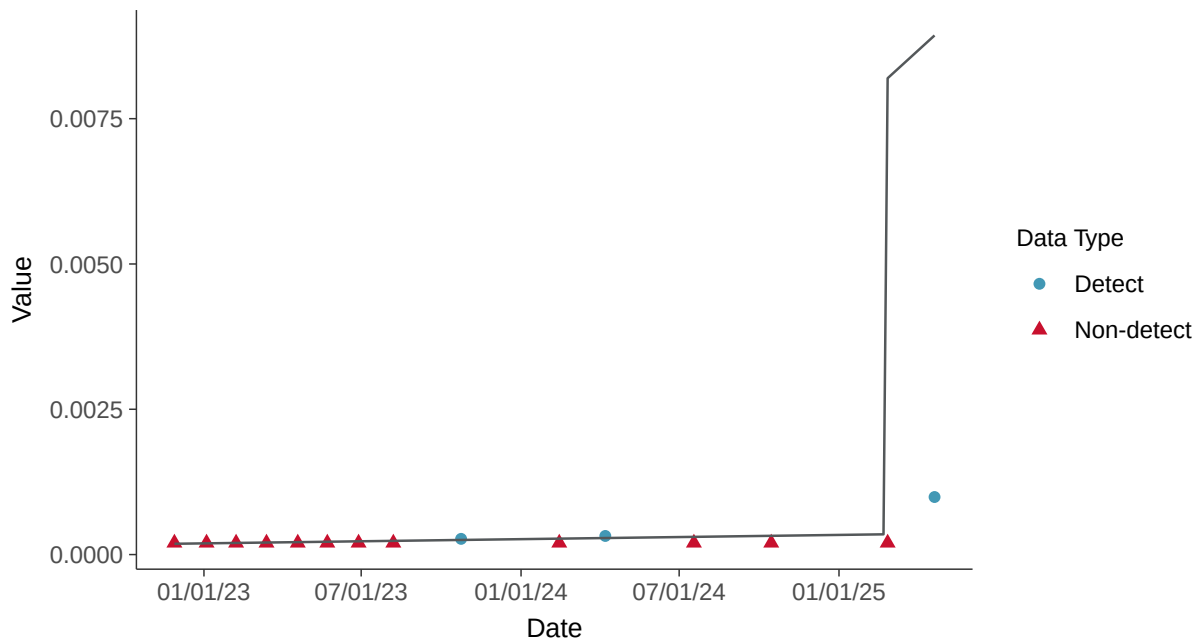
Normal Q-Q plot using ROS Imputed Estimates

Copper, MW-04 (mg/L)



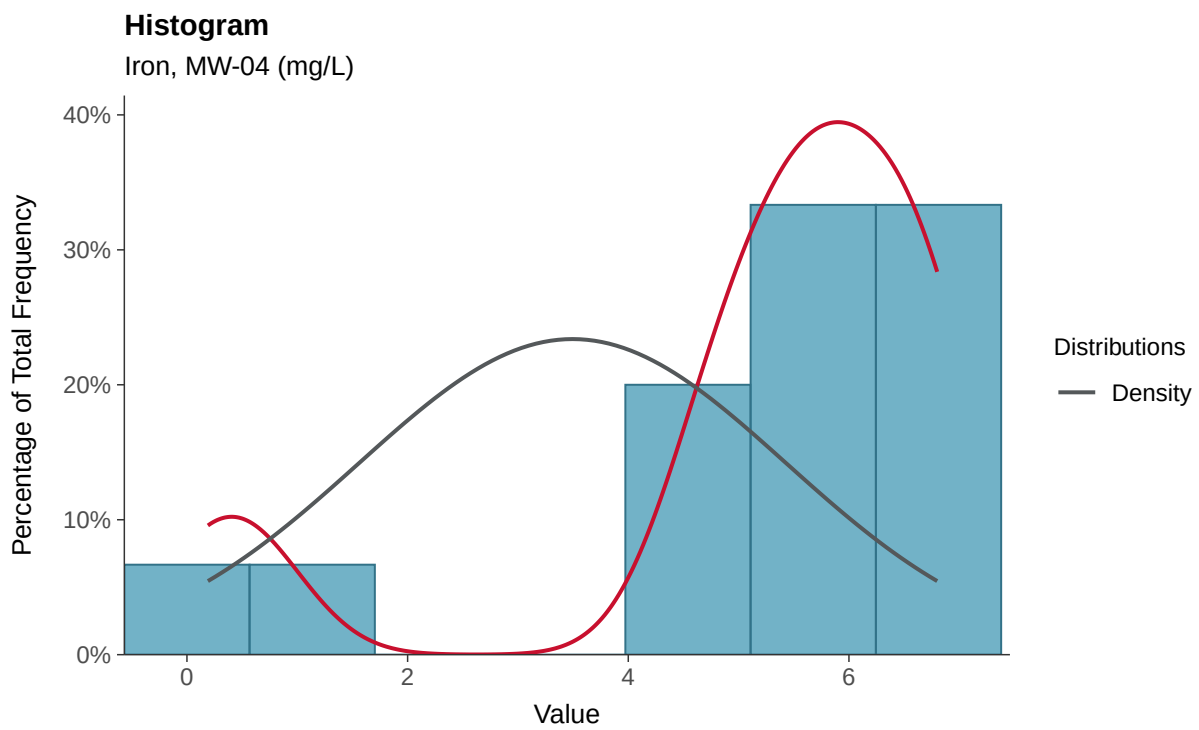
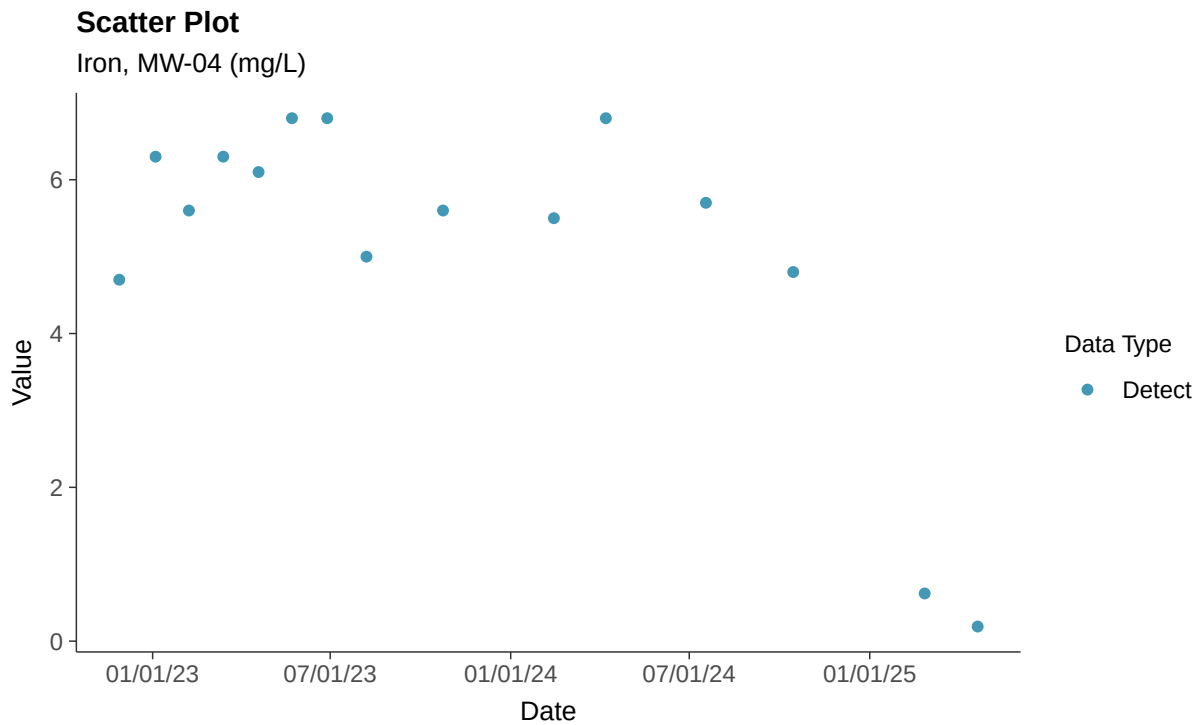
Trend Regression: Piecewise Linear-Linear-Linear

Copper, MW-04 (mg/L)



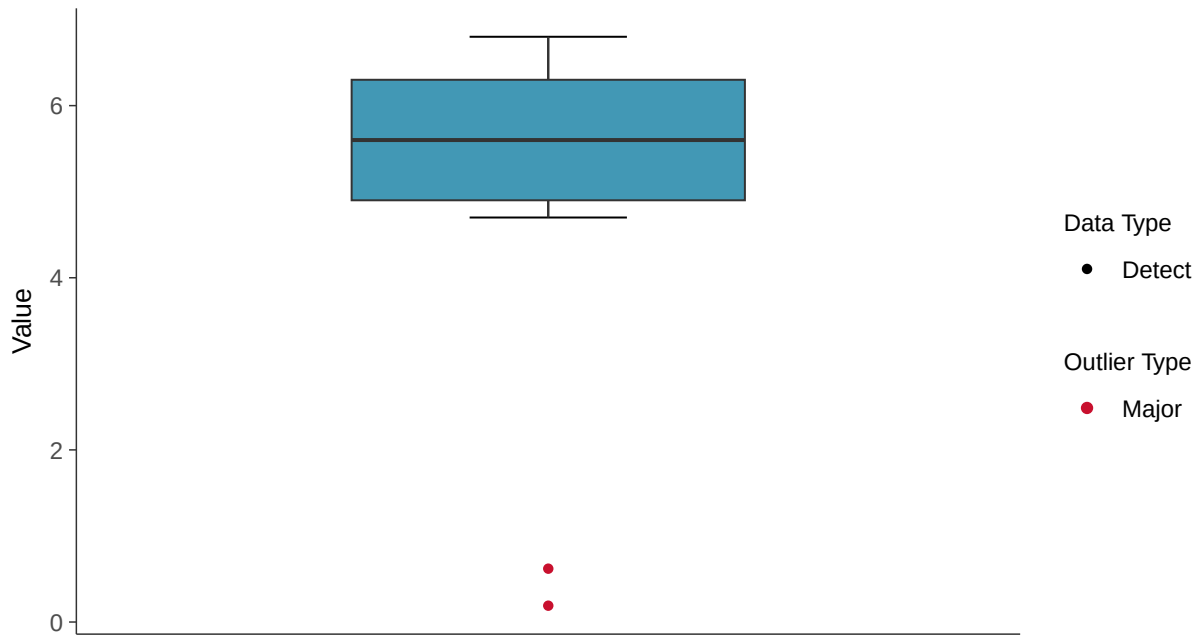
Part 115: Iron, MW-04

ID: 14_2_5_114



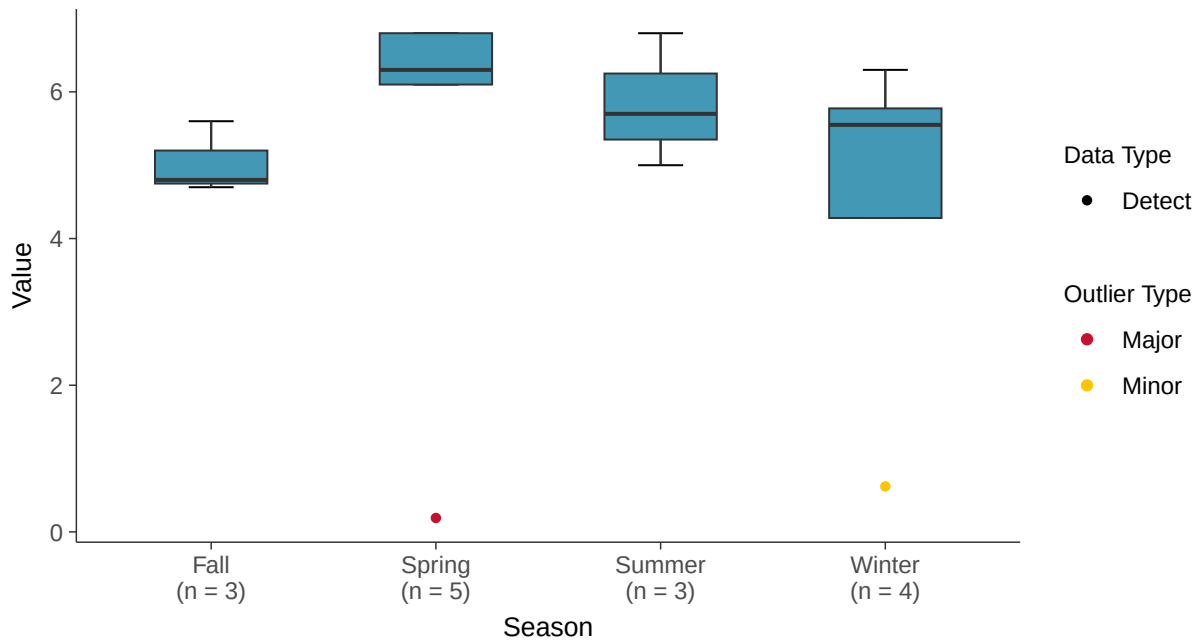
Boxplot

Iron, MW-04 (mg/L)

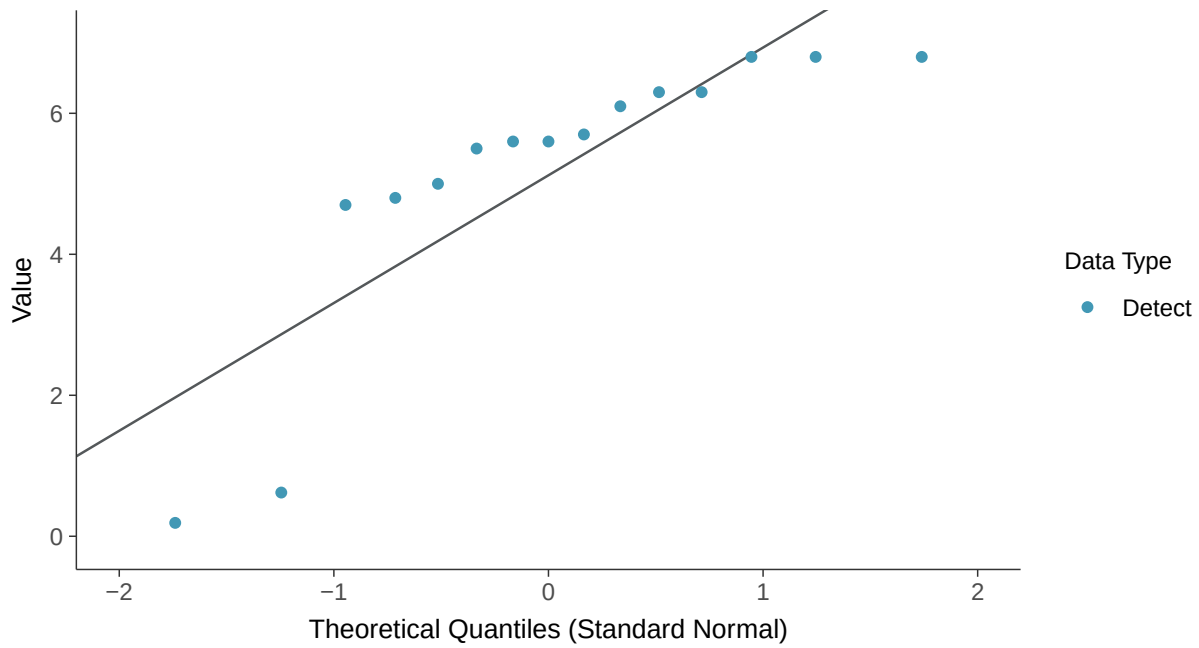


Boxplot by Season

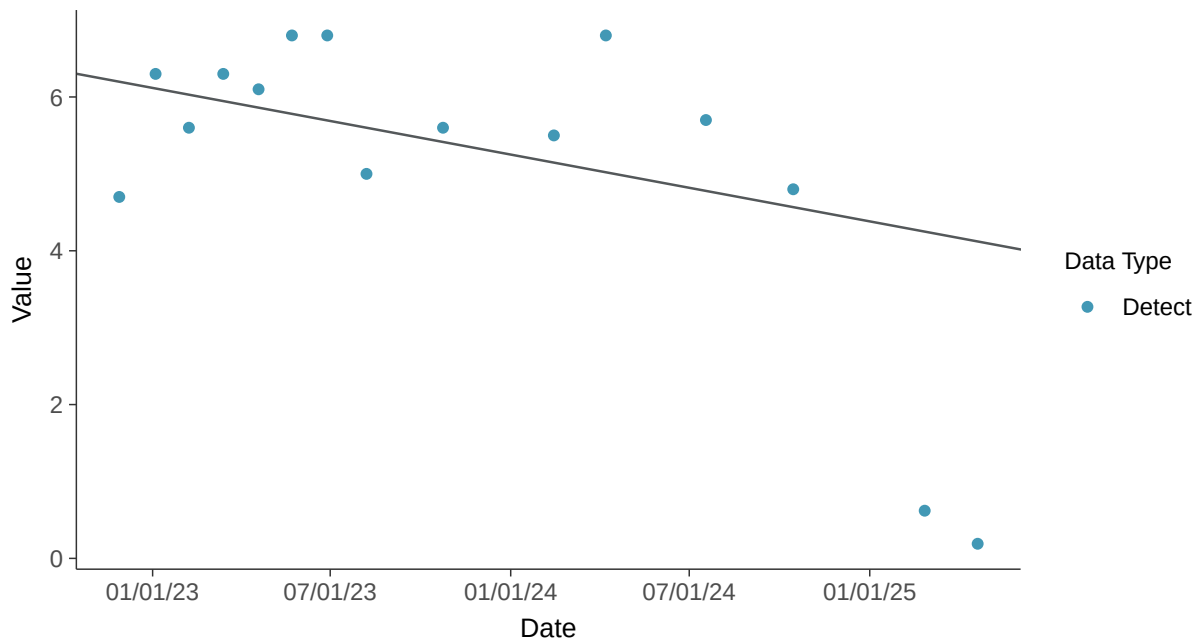
Iron, MW-04 (mg/L)



Normal Q-Q plot
Iron, MW-04 (mg/L)



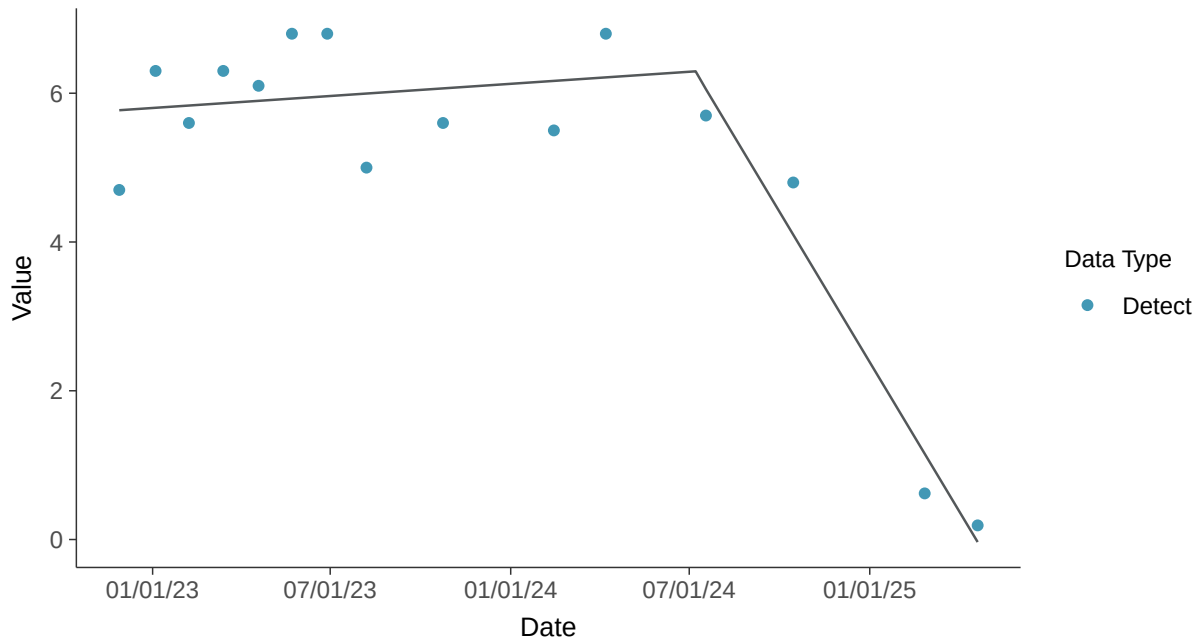
Trend Regression: Mann-Kendall/Theil-Sen Estimate
Iron, MW-04 (mg/L)





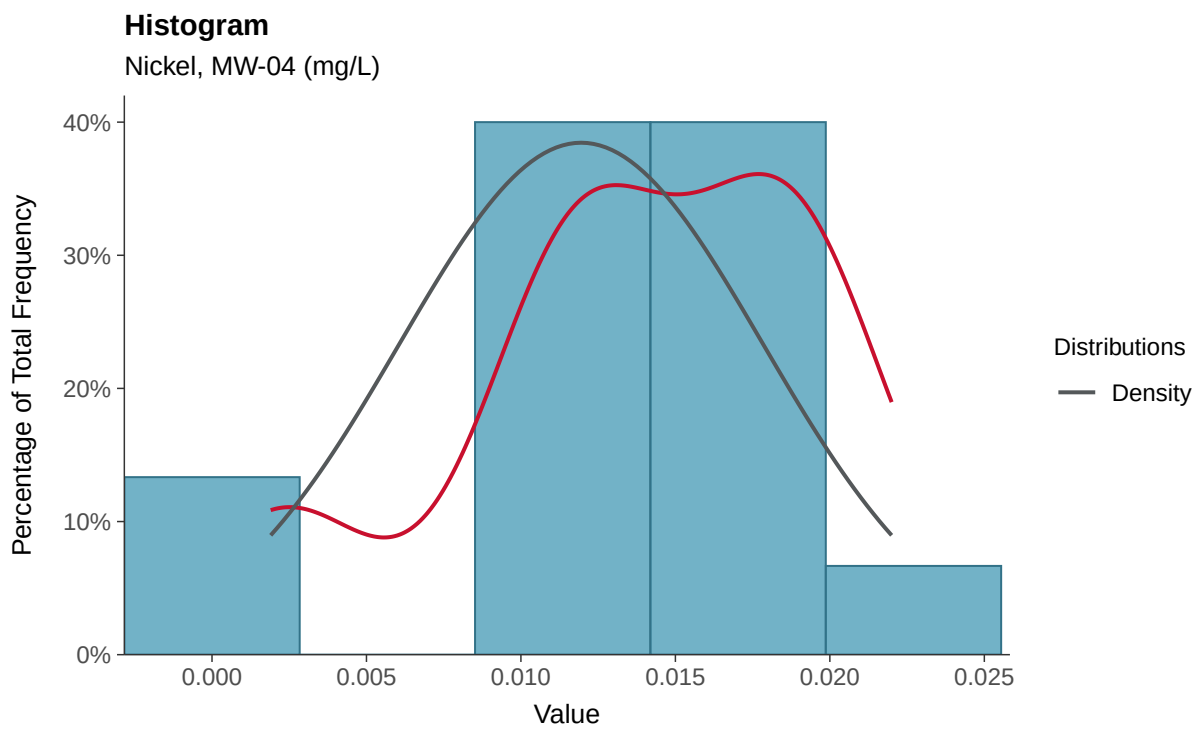
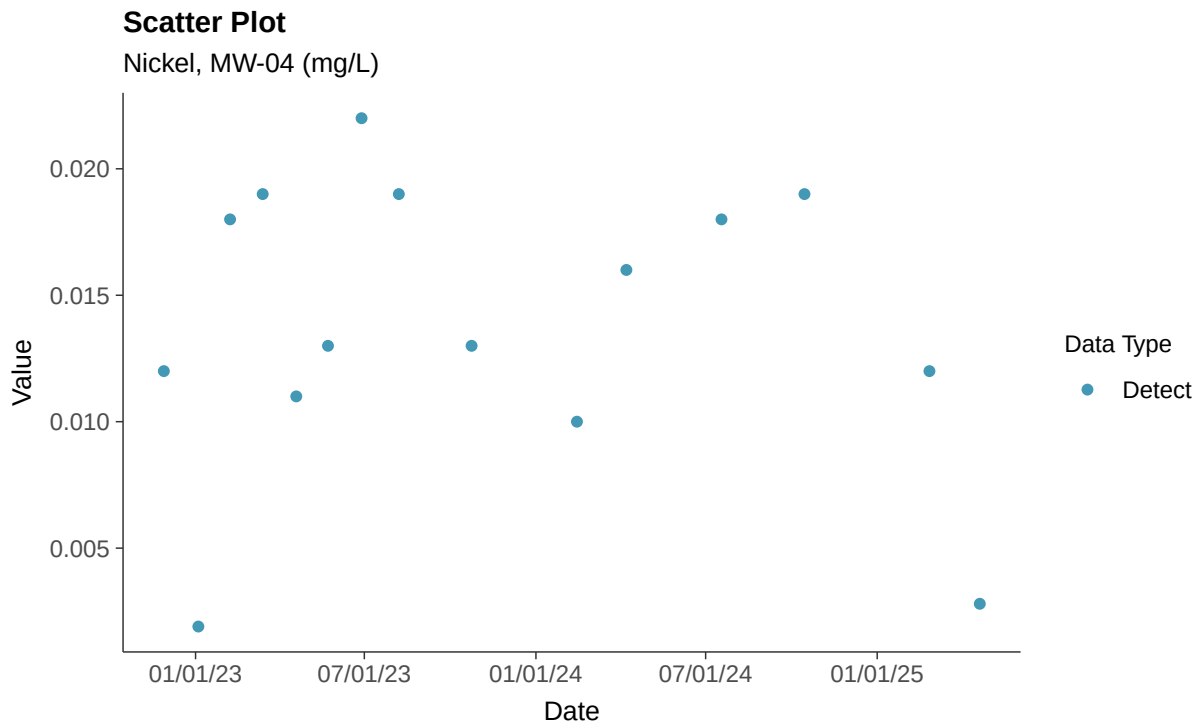
Trend Regression: Piecewise Linear-Linear

Iron, MW-04 (mg/L)



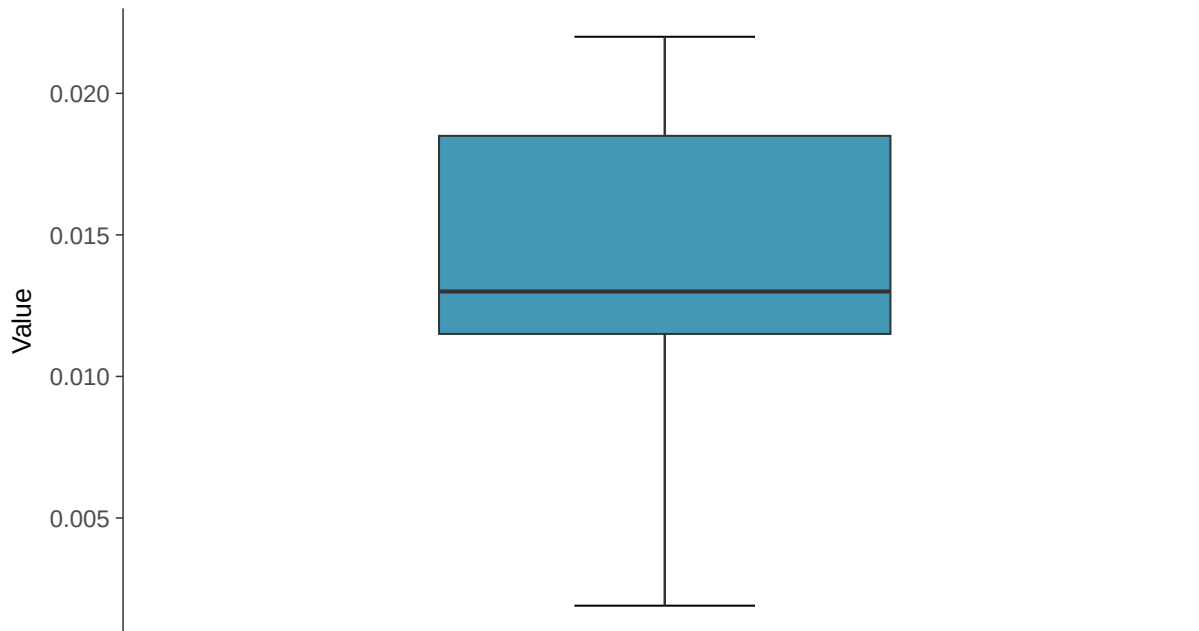
Part 115: Nickel, MW-04

ID: 14_2_5_119



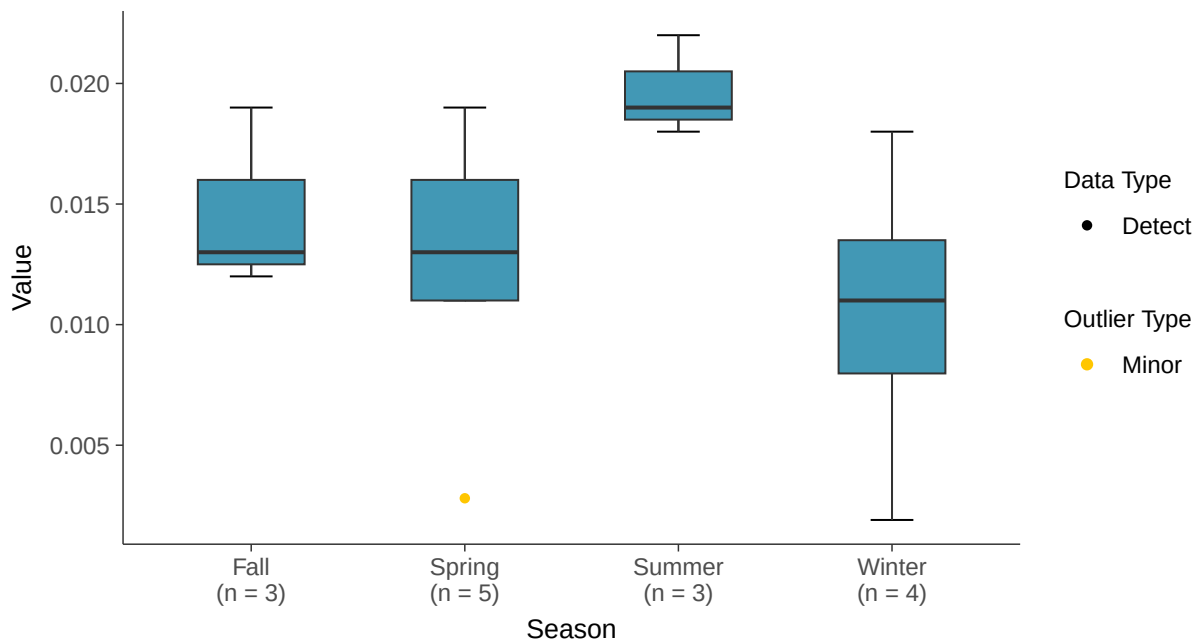
Boxplot

Nickel, MW-04 (mg/L)



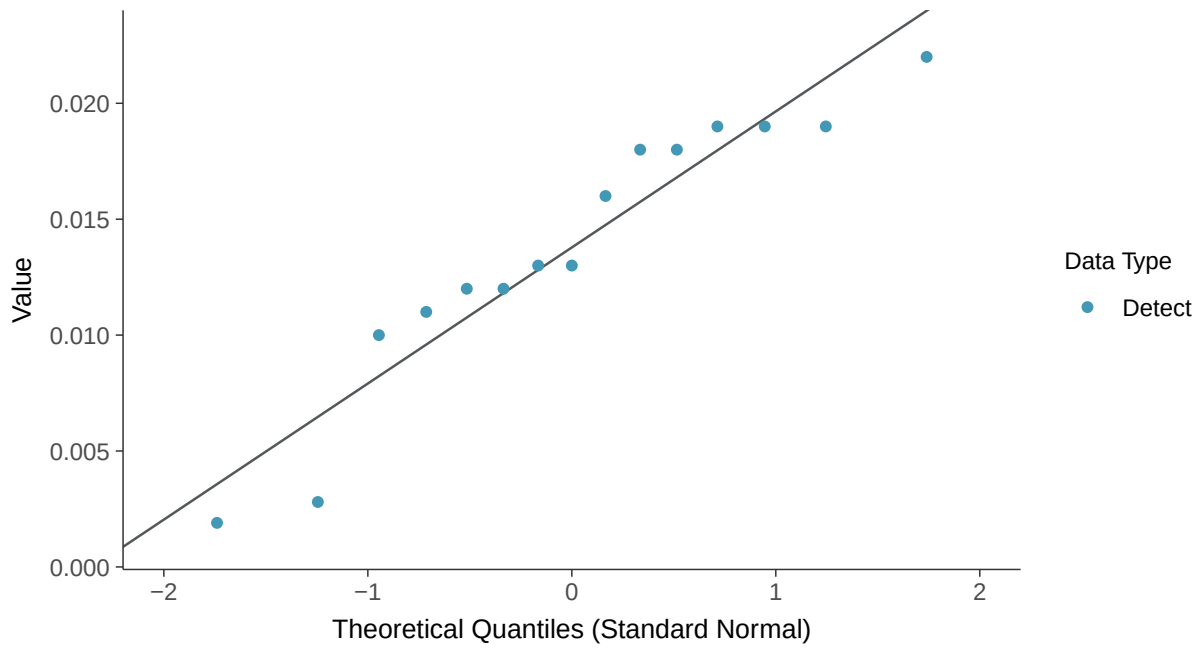
Boxplot by Season

Nickel, MW-04 (mg/L)



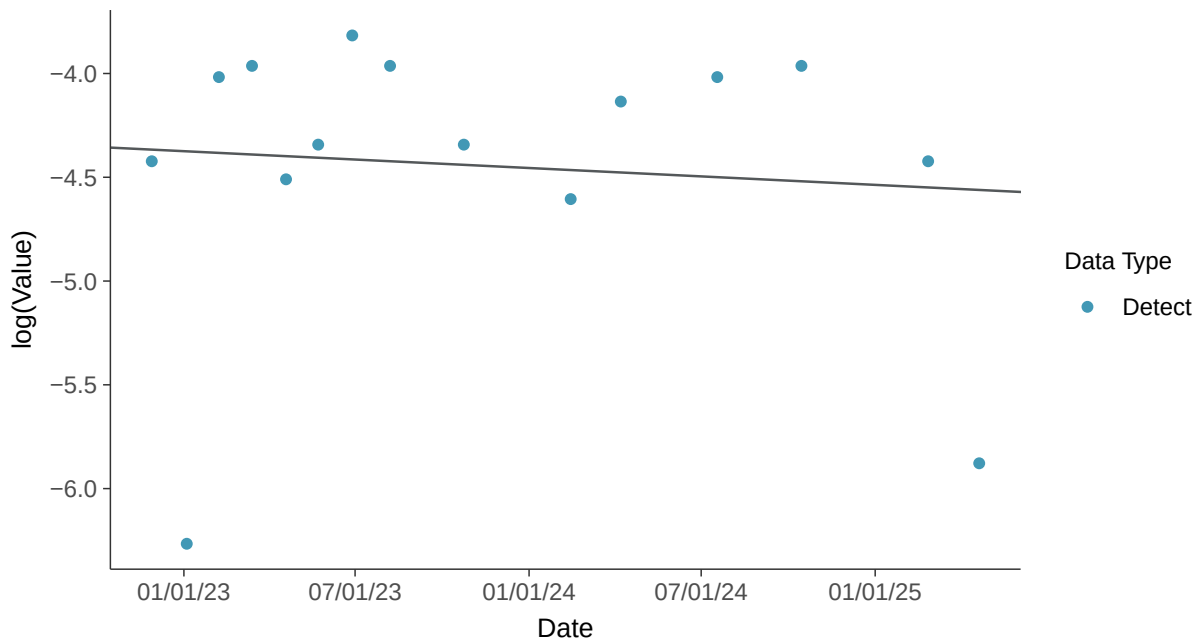
Normal Q-Q plot

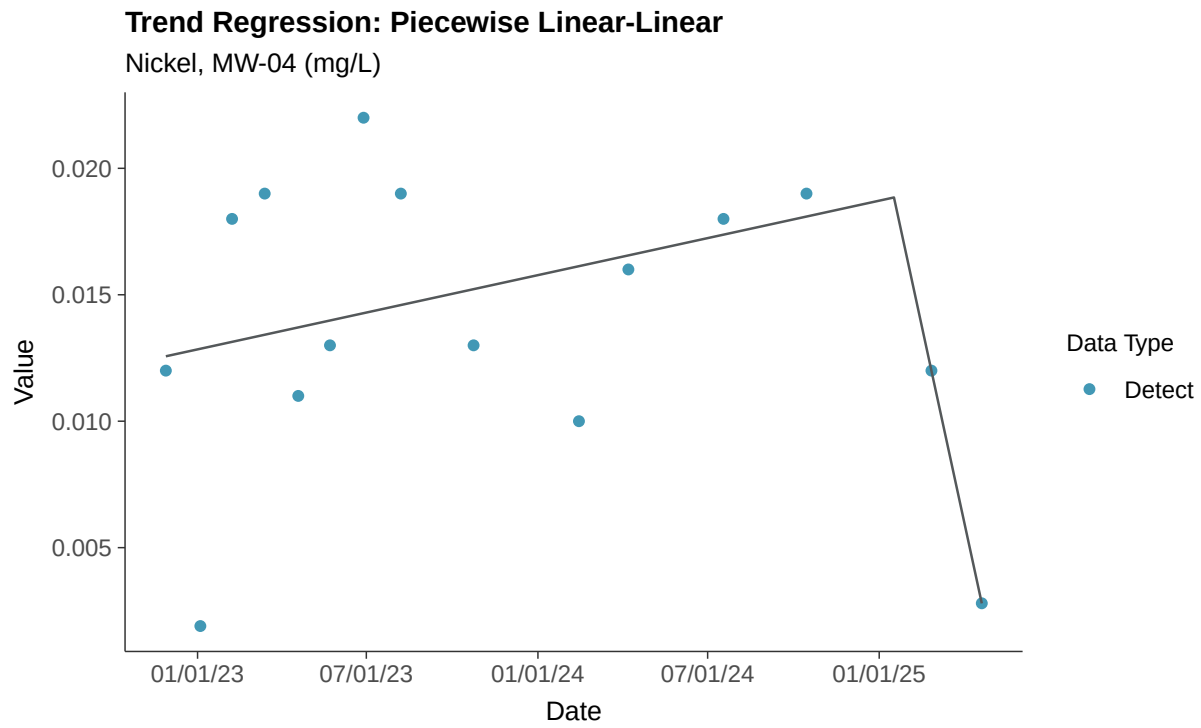
Nickel, MW-04 (mg/L)



Trend Regression: Lognormal MLE

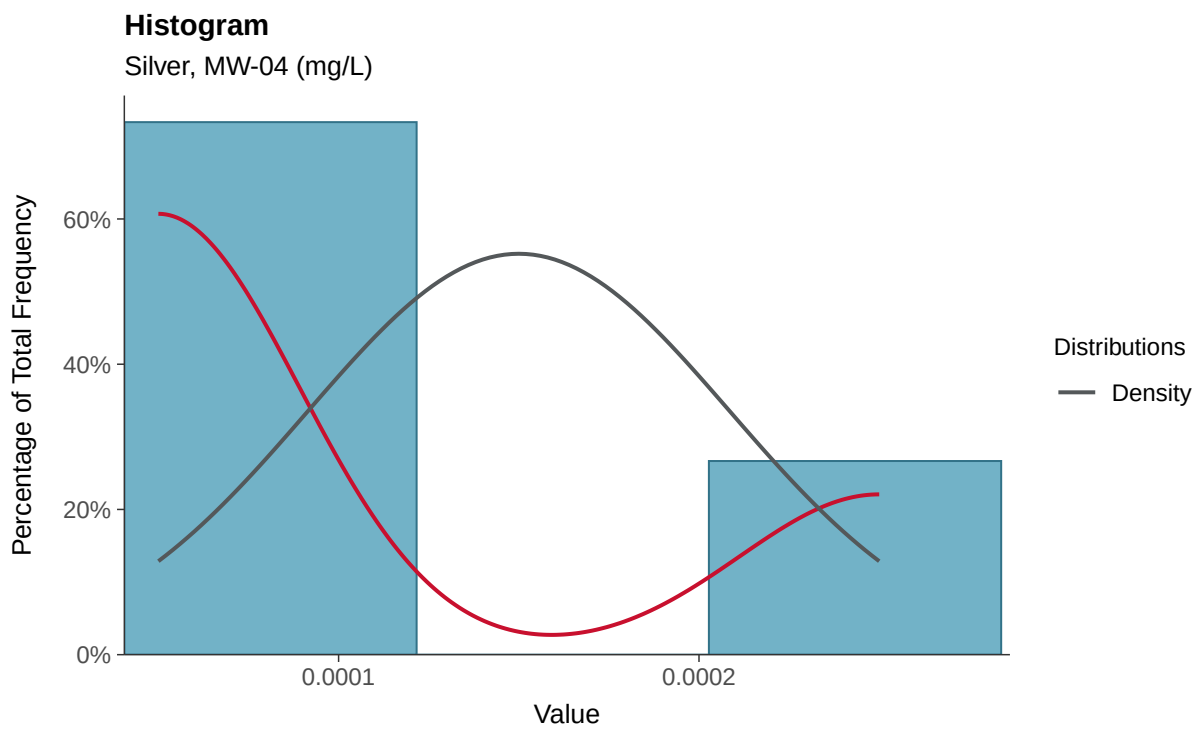
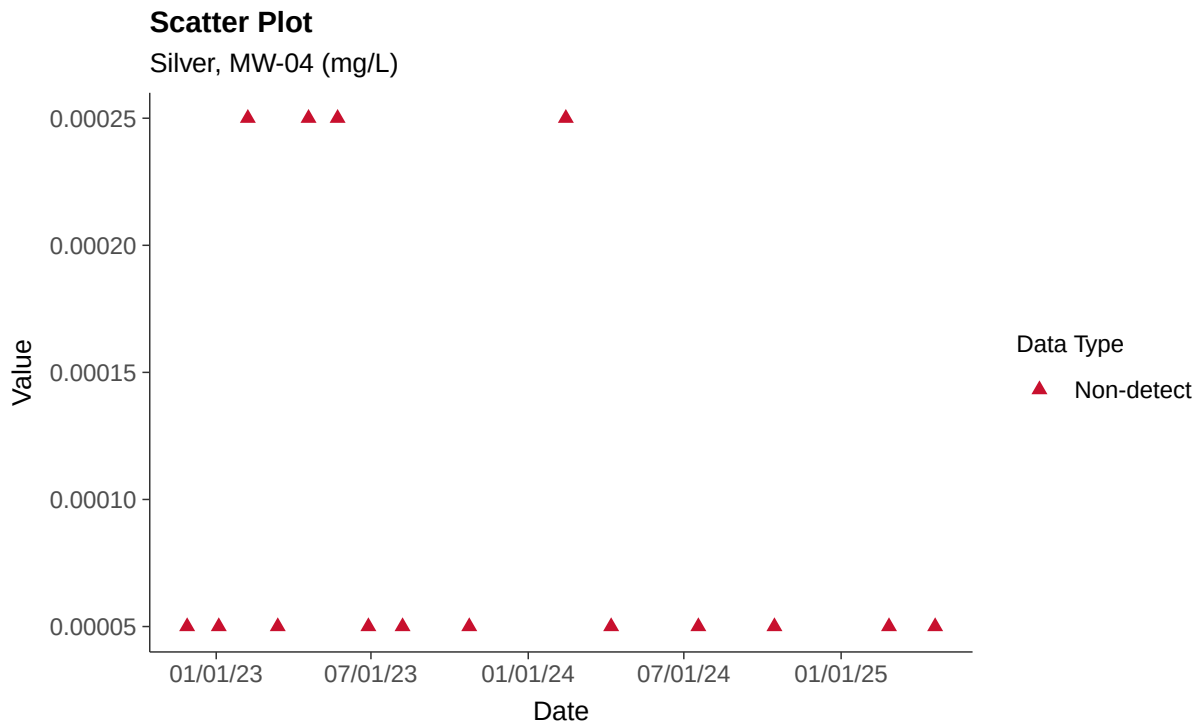
Nickel, MW-04 (mg/L)





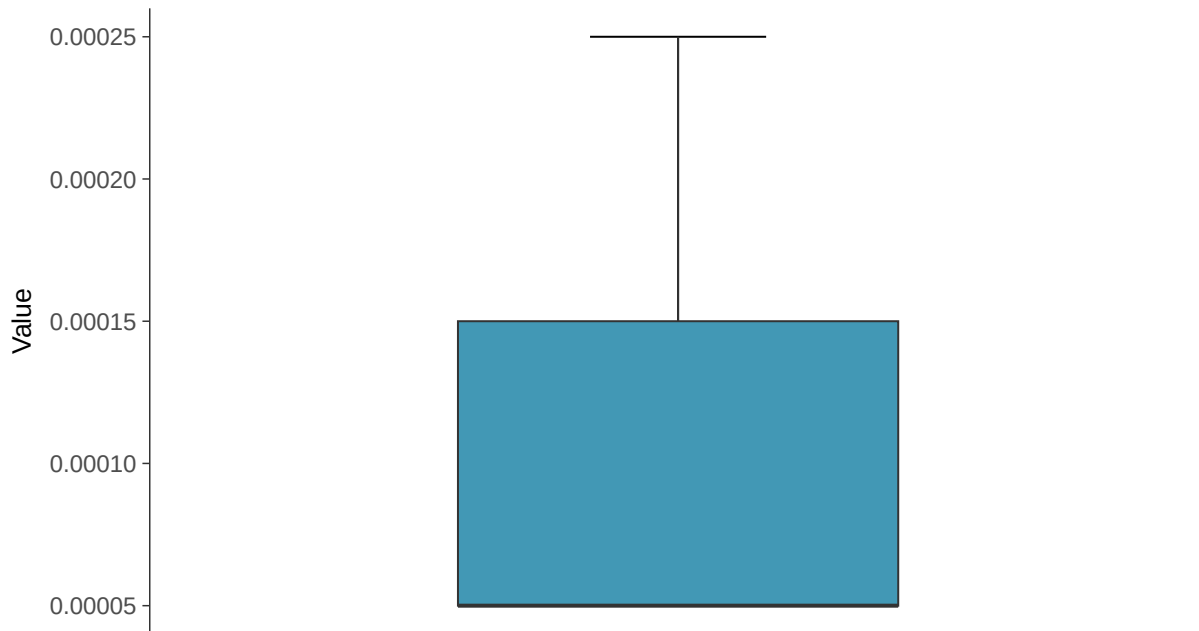
Part 115: Silver, MW-04

ID: 14_2_5_123



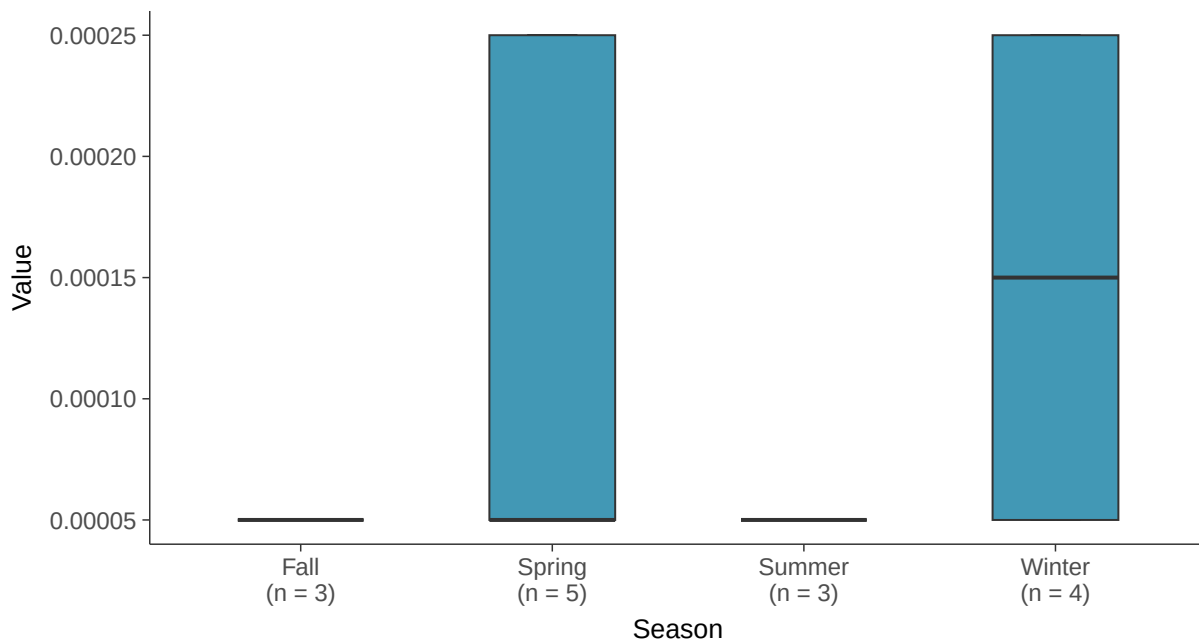
Boxplot

Silver, MW-04 (mg/L)



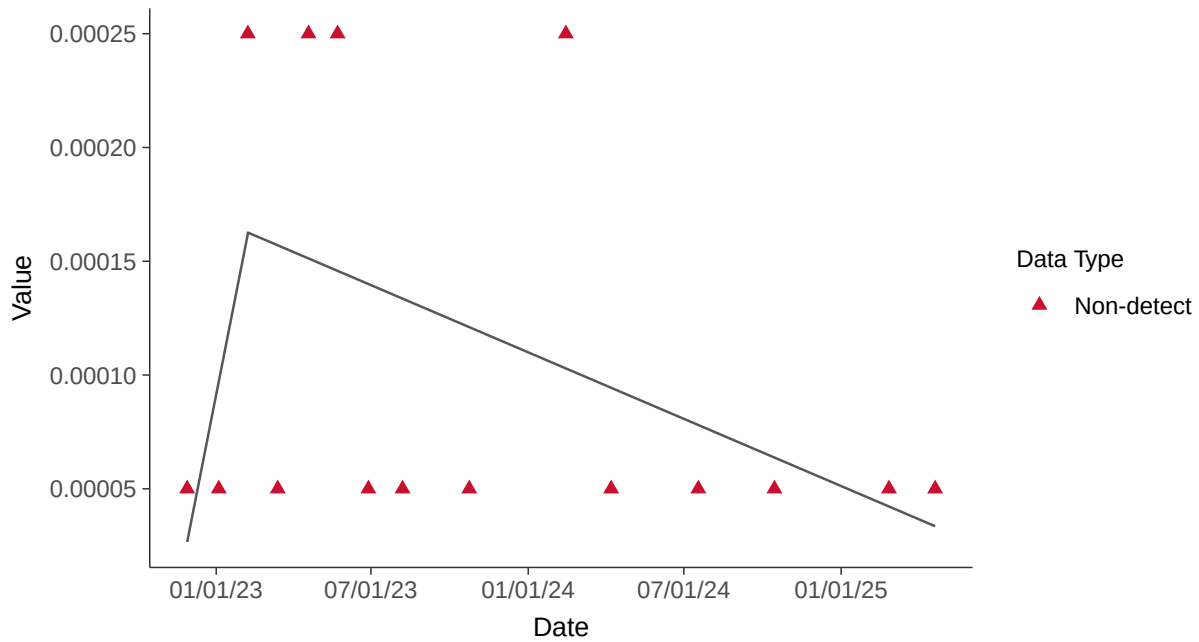
Boxplot by Season

Silver, MW-04 (mg/L)



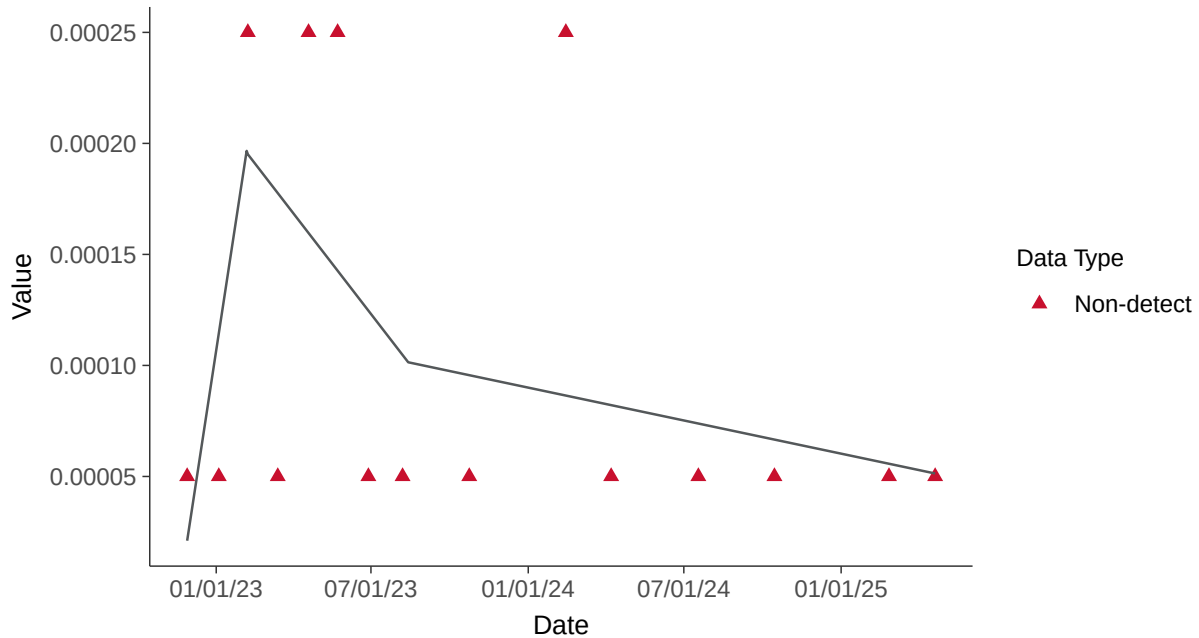
Trend Regression: Piecewise Linear-Linear

Silver, MW-04 (mg/L)



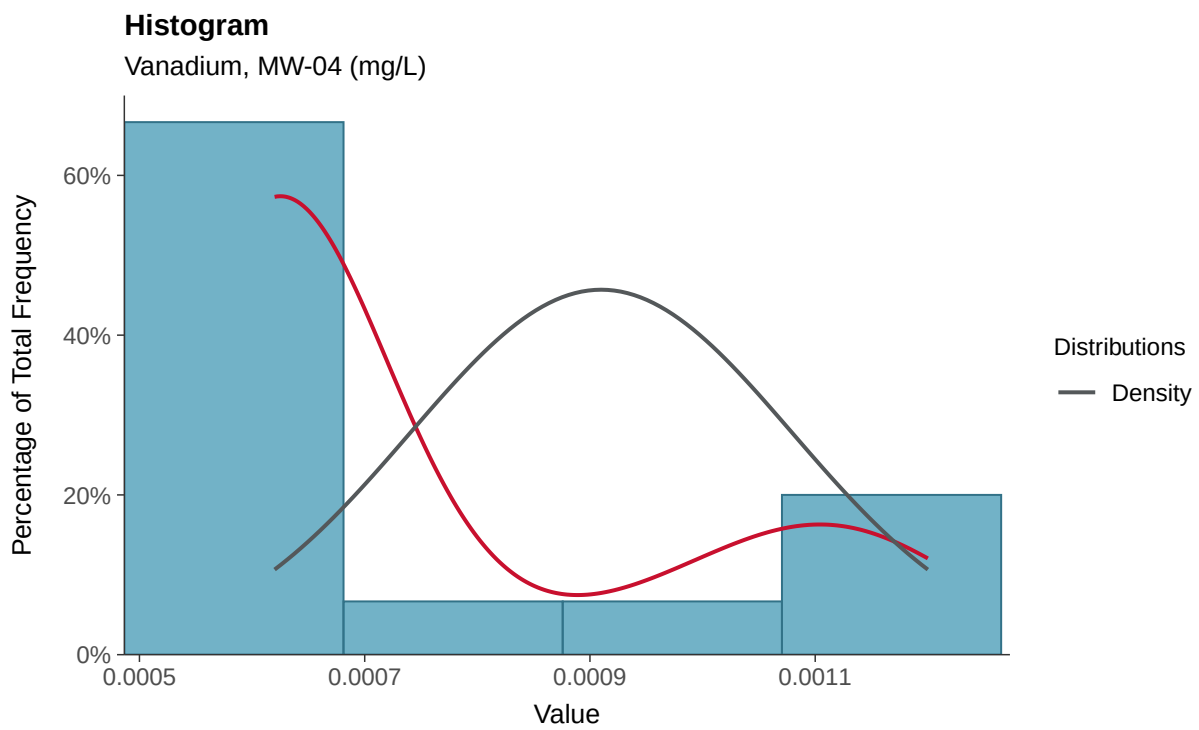
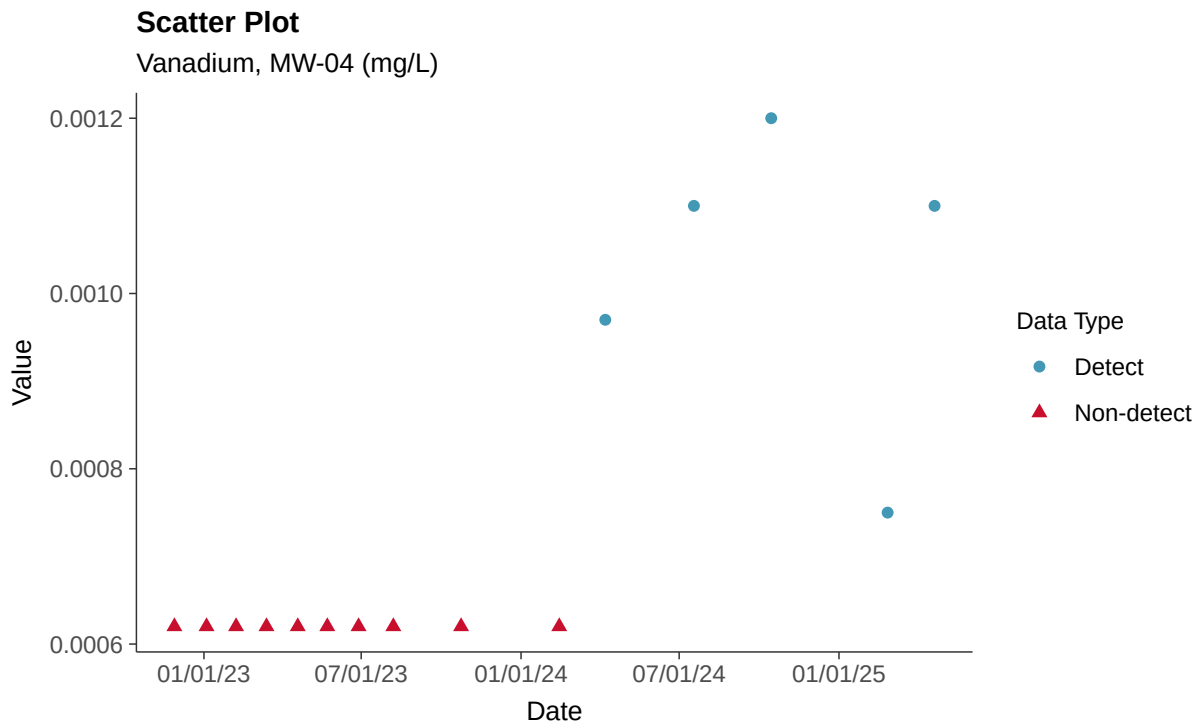
Trend Regression: Piecewise Linear-Linear-Linear

Silver, MW-04 (mg/L)



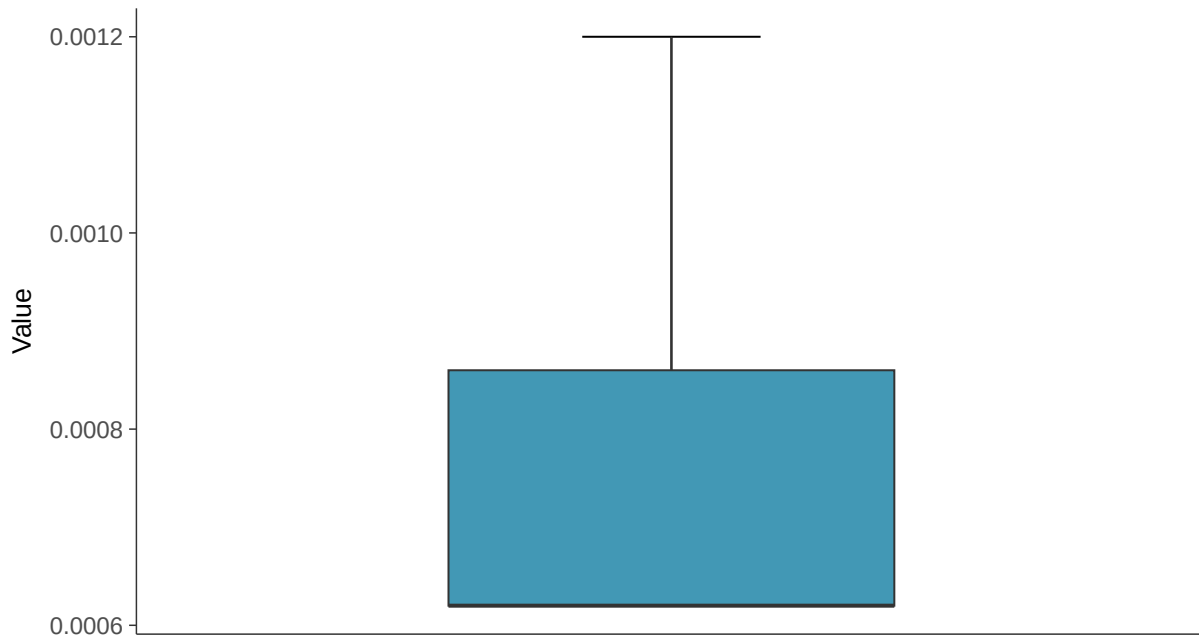
Part 115: Vanadium, MW-04

ID: 14_2_5_128



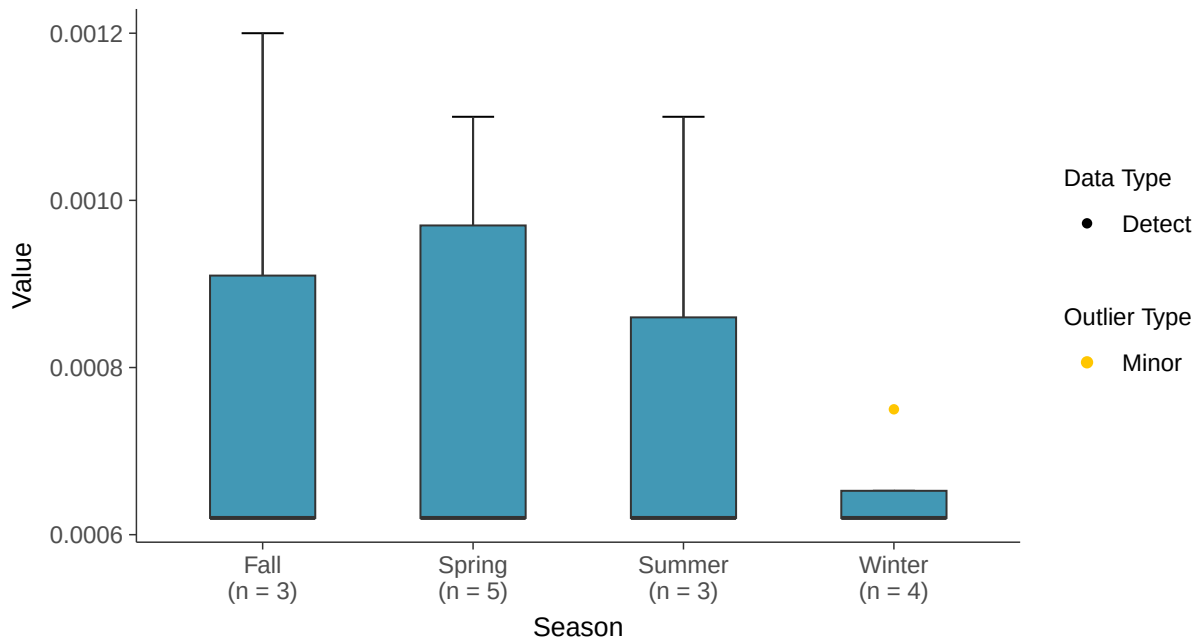
Boxplot

Vanadium, MW-04 (mg/L)



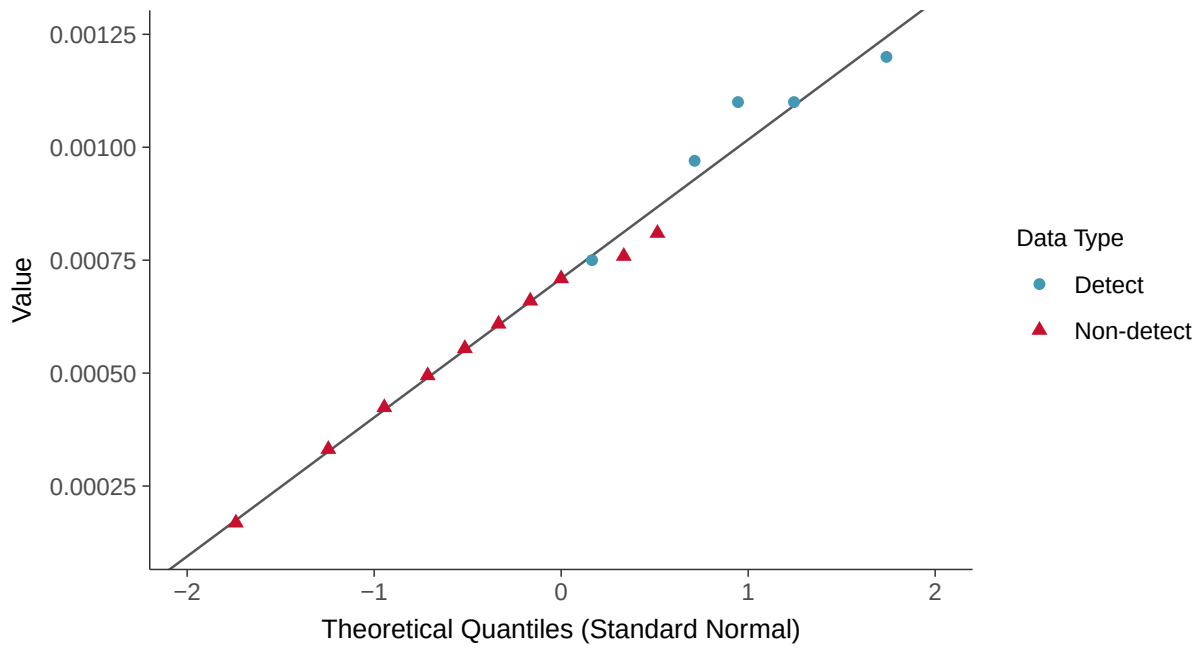
Boxplot by Season

Vanadium, MW-04 (mg/L)



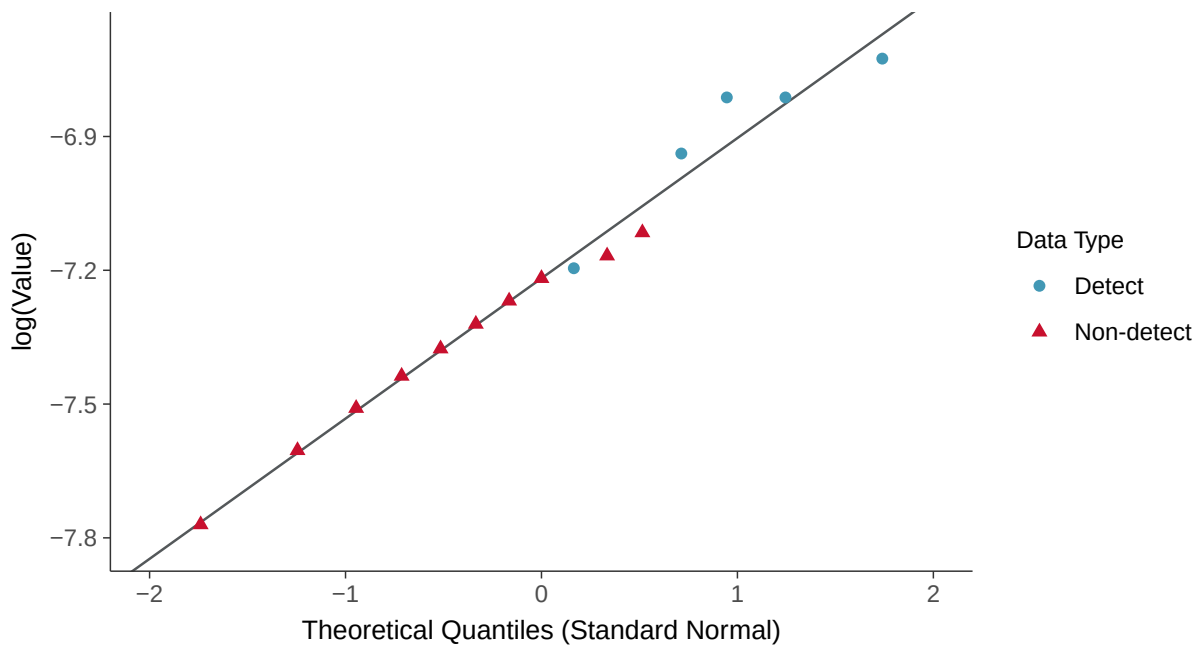
Normal Q-Q plot using ROS Imputed Estimates

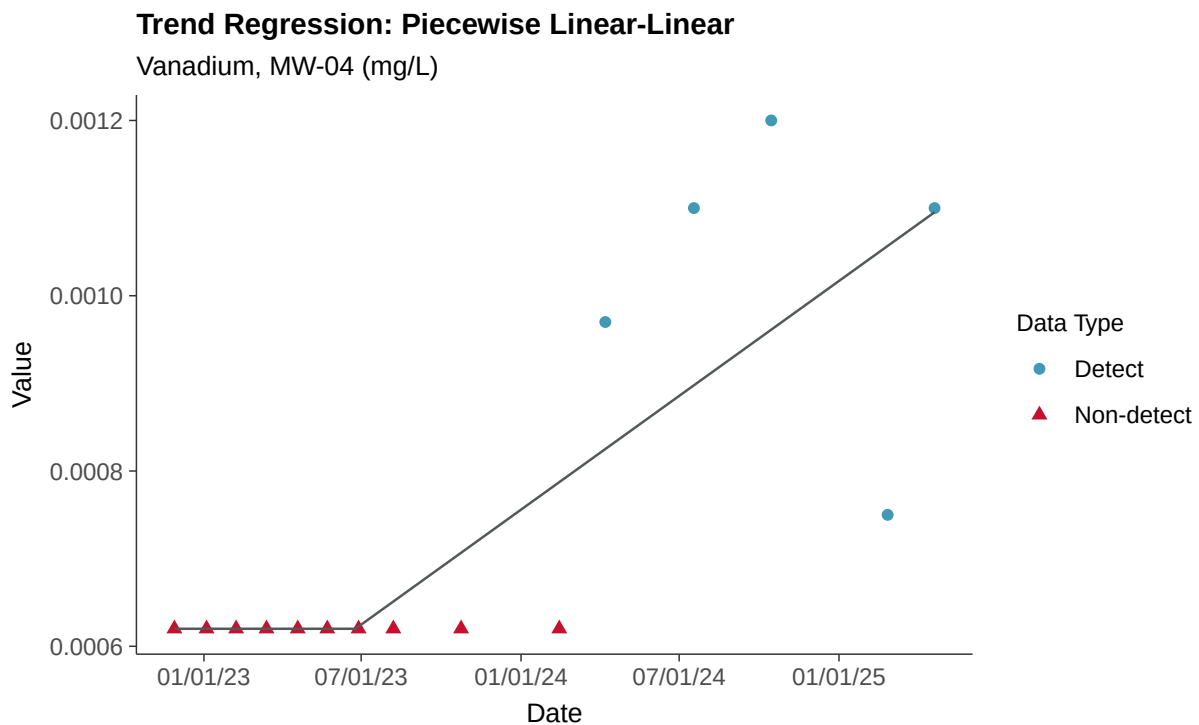
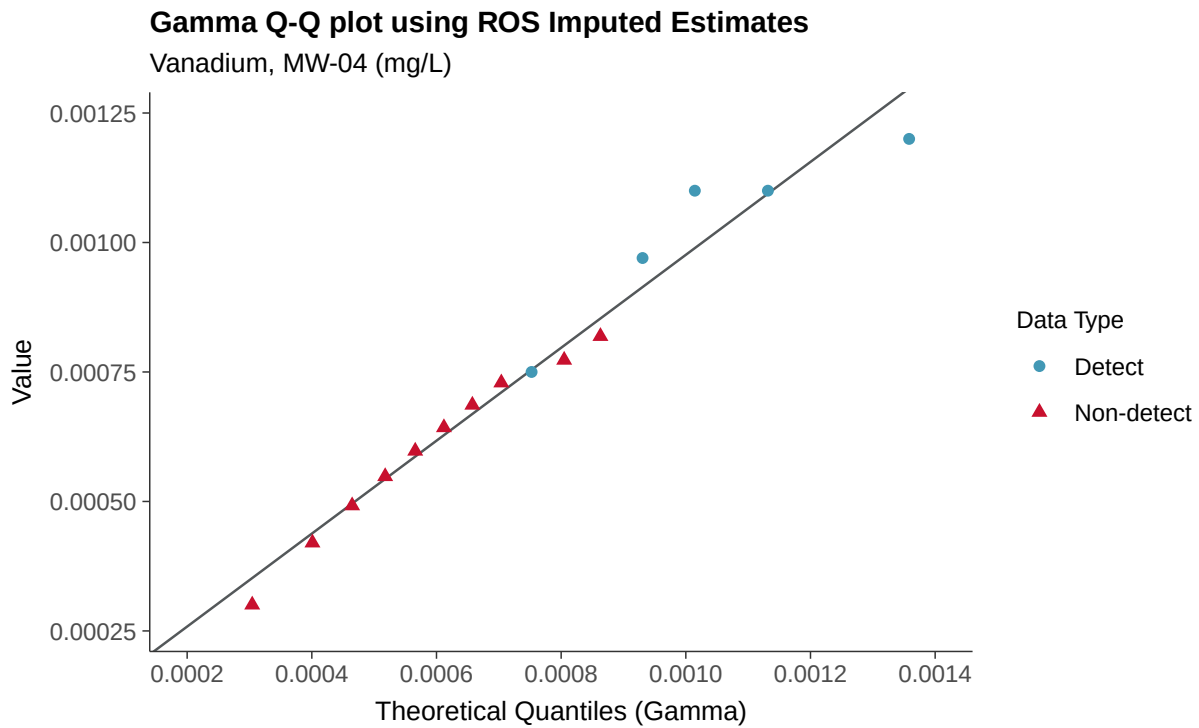
Vanadium, MW-04 (mg/L)



Lognormal Q-Q plot using ROS Imputed Estimates

Vanadium, MW-04 (mg/L)

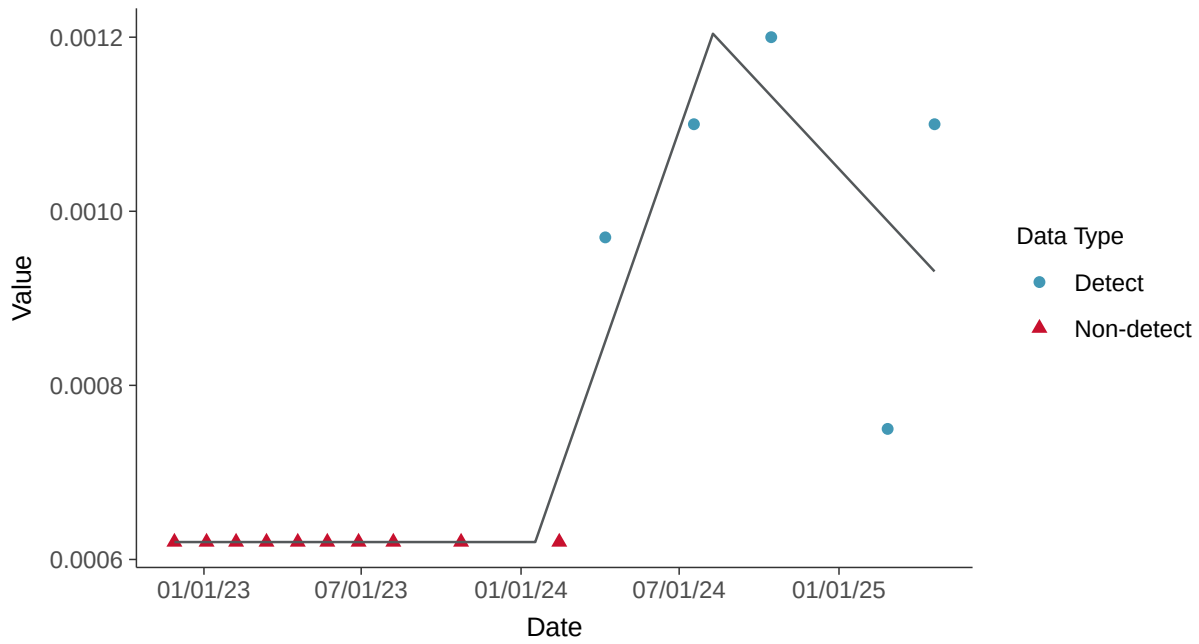






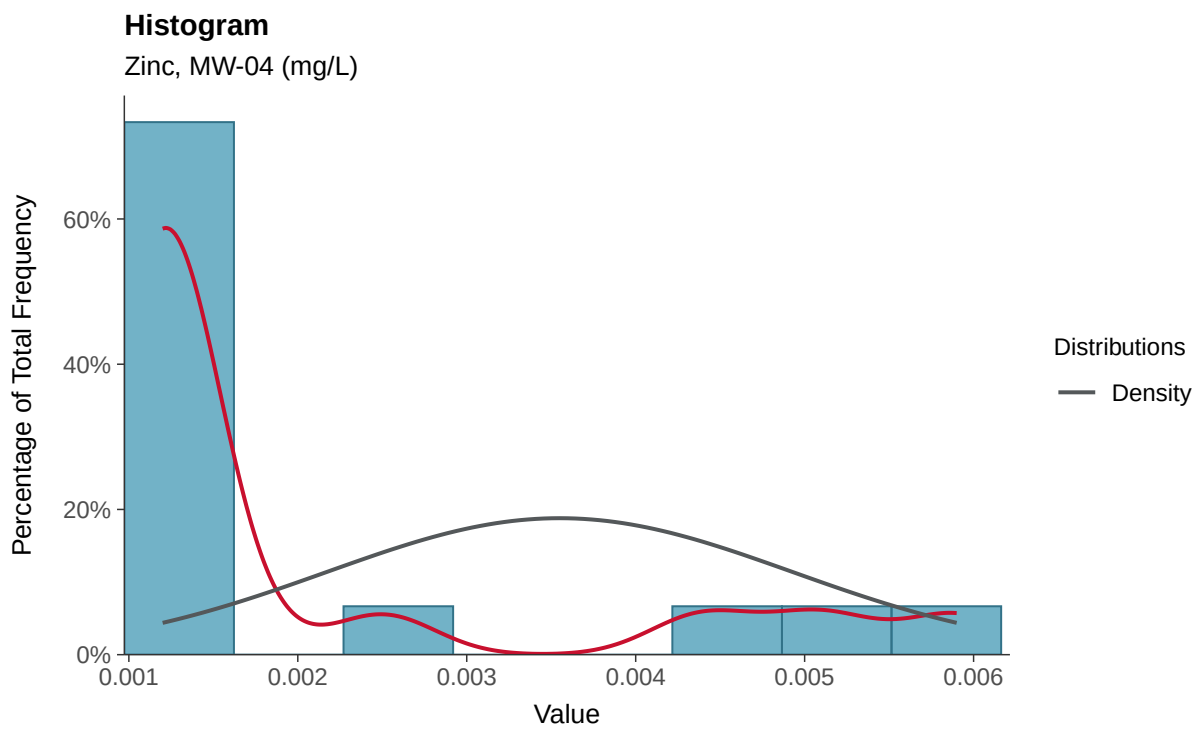
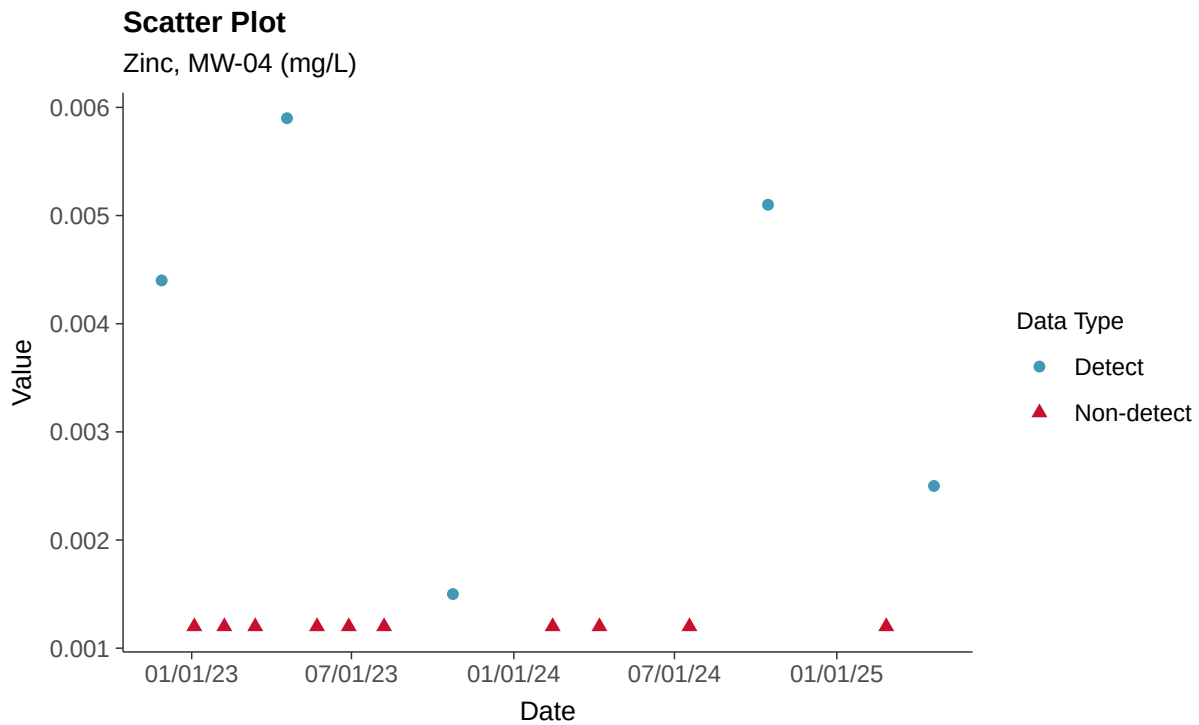
Trend Regression: Piecewise Linear-Linear-Linear

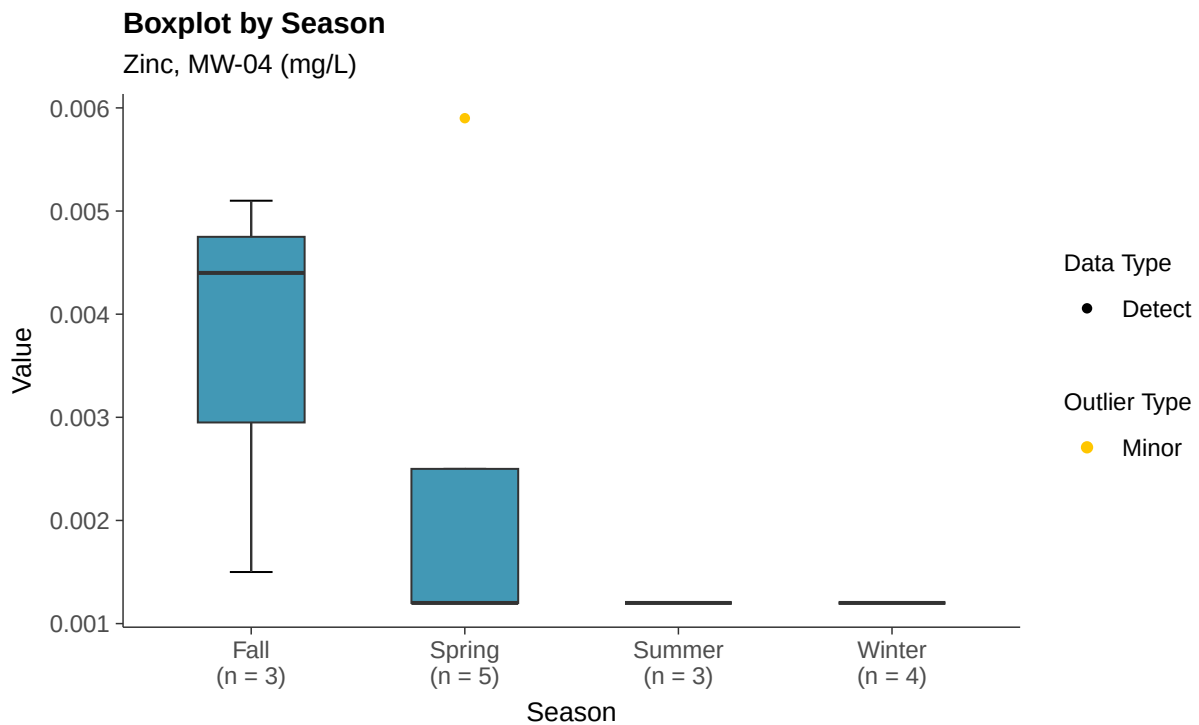
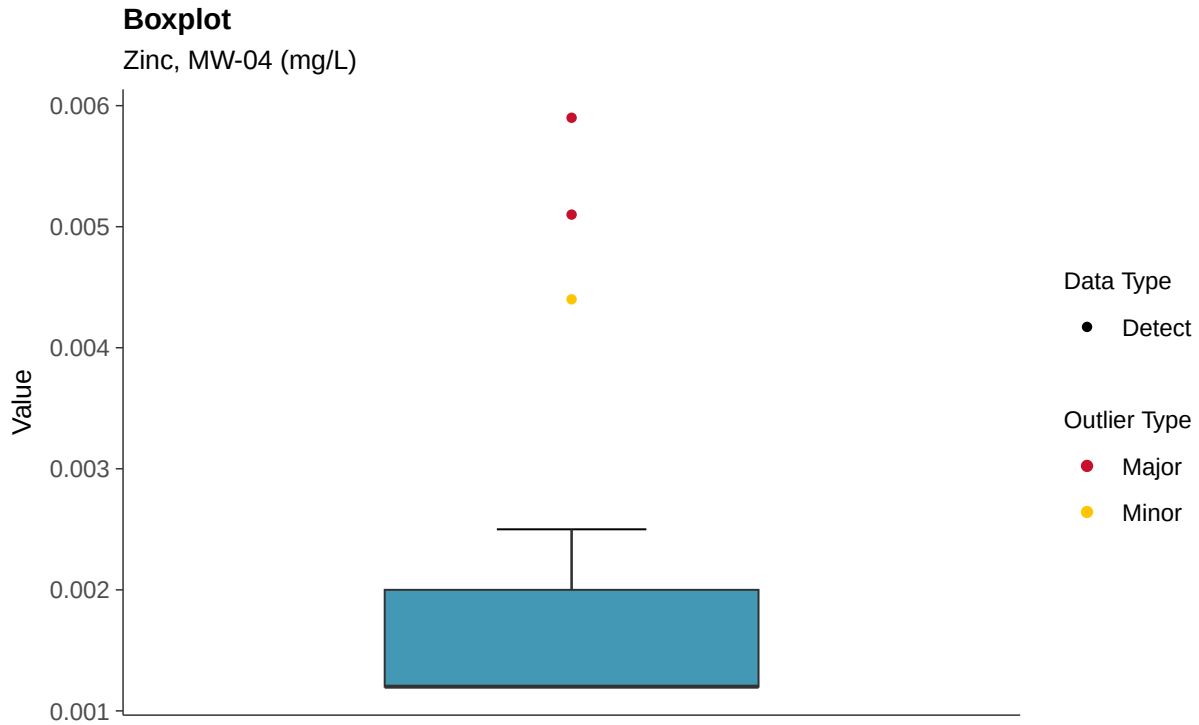
Vanadium, MW-04 (mg/L)



Part 115: Zinc, MW-04

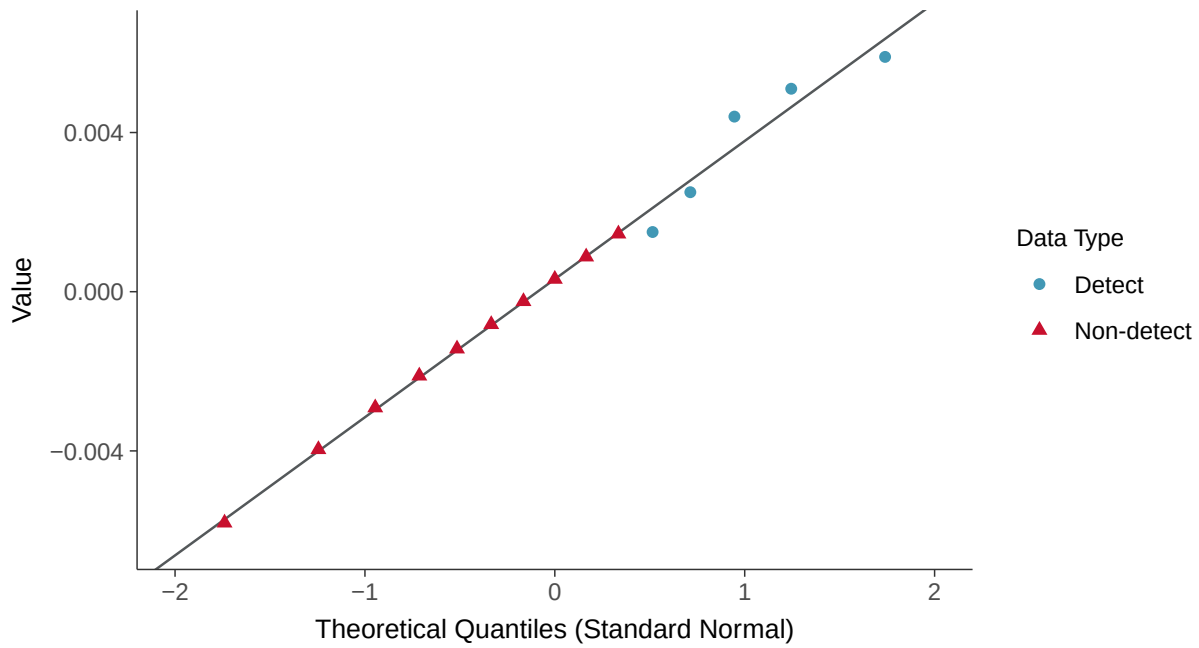
ID: 14_2_5_129





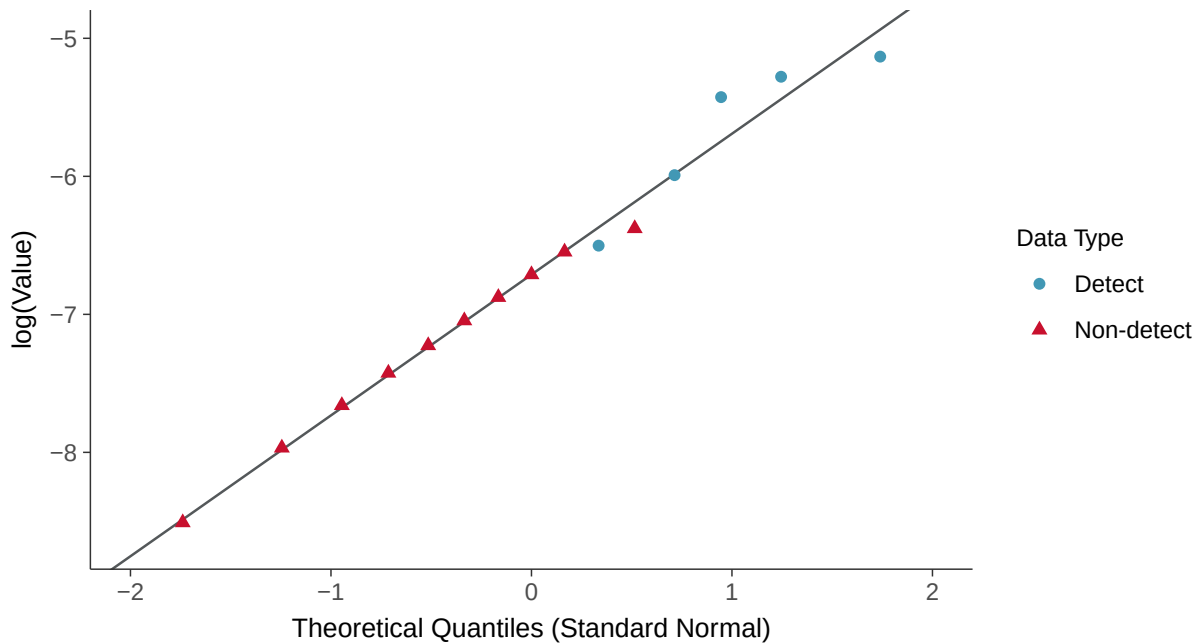
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-04 (mg/L)



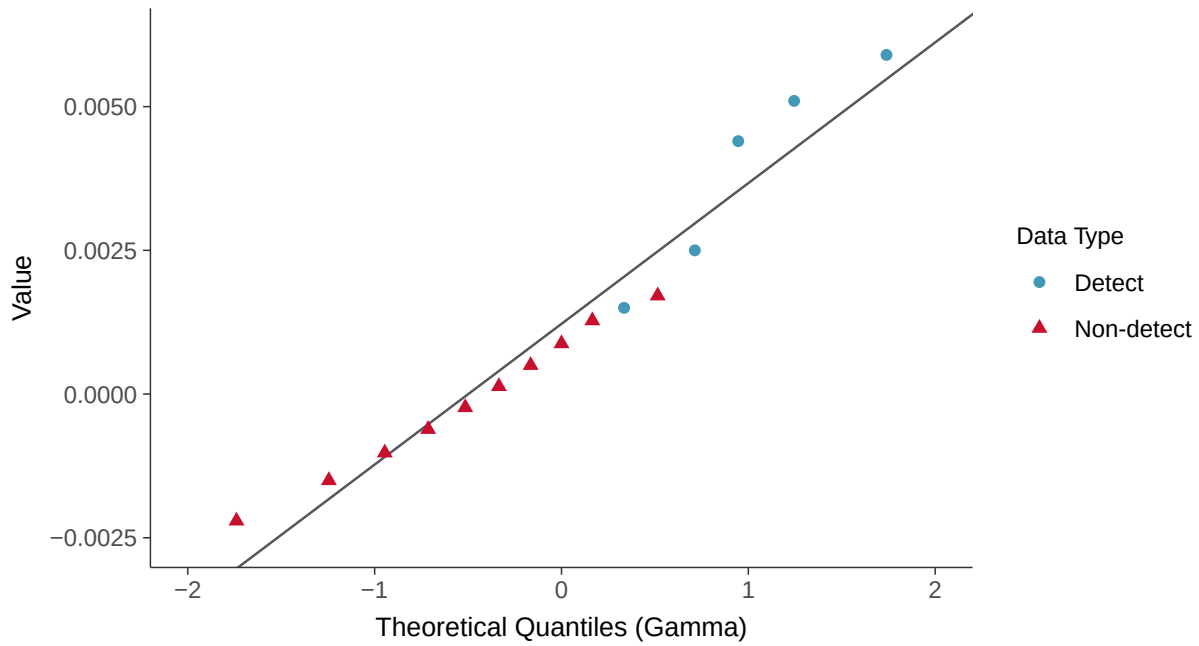
Lognormal Q-Q plot using ROS Imputed Estimates

Zinc, MW-04 (mg/L)



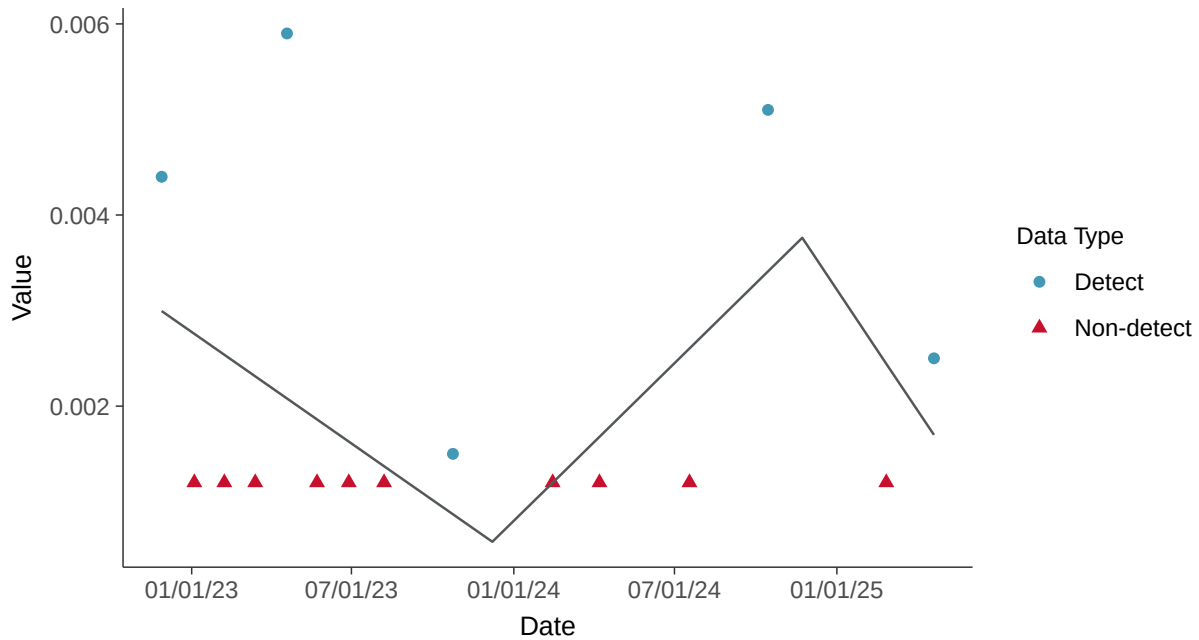
Gamma Q-Q plot using ROS Imputed Estimates

Zinc, MW-04 (mg/L)



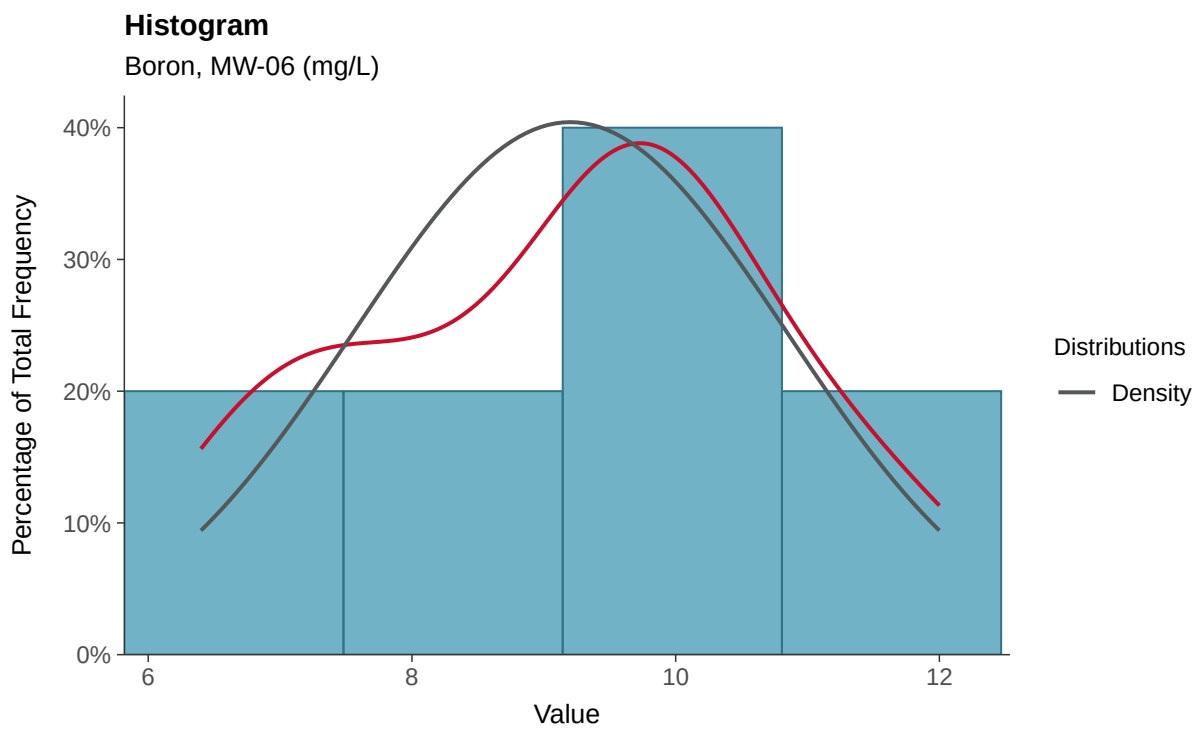
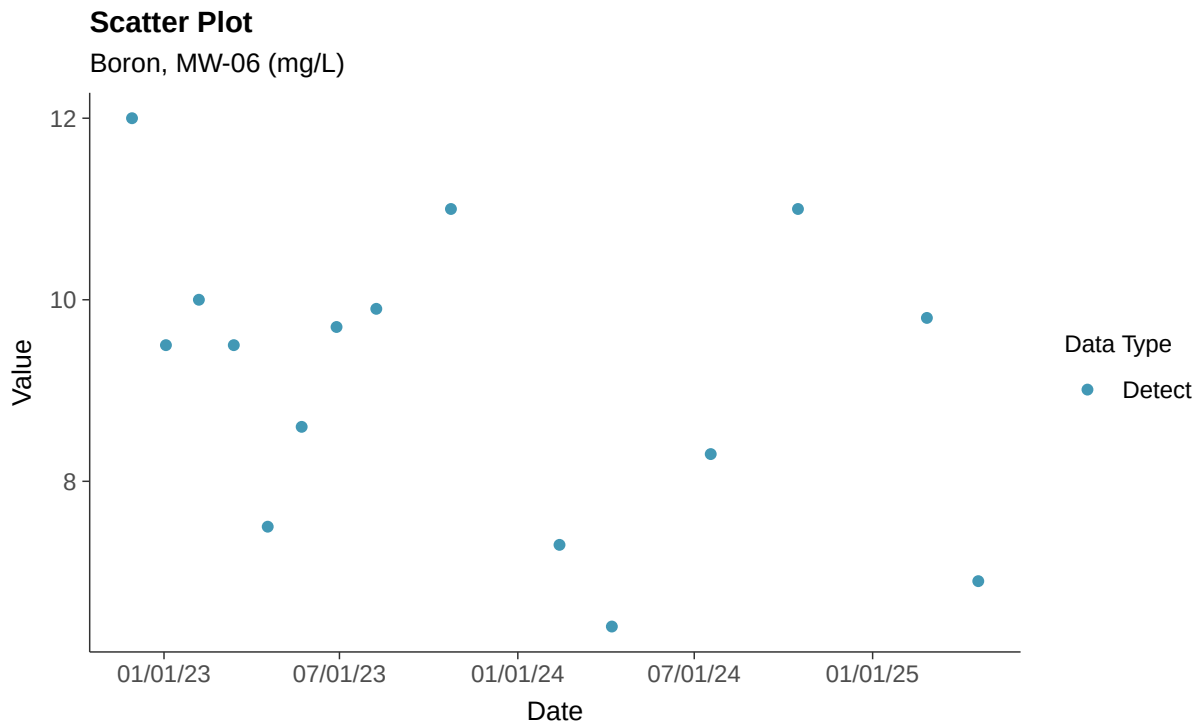
Trend Regression: Piecewise Linear-Linear-Linear

Zinc, MW-04 (mg/L)



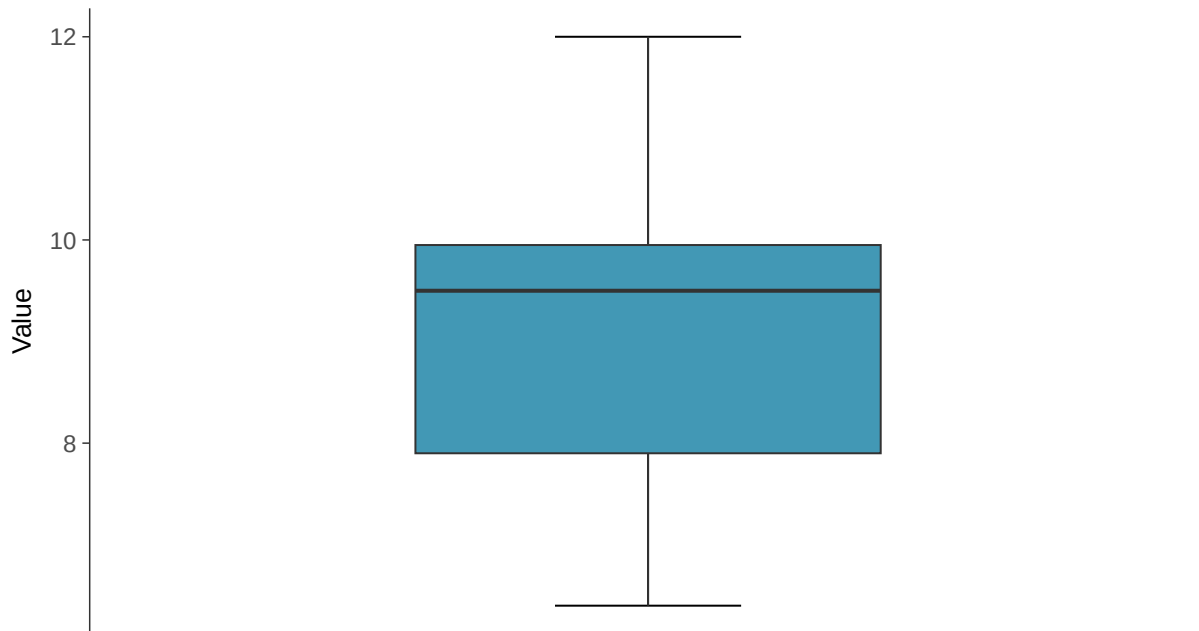
Appendix III: Boron, MW-06

ID: 16_1_3_105



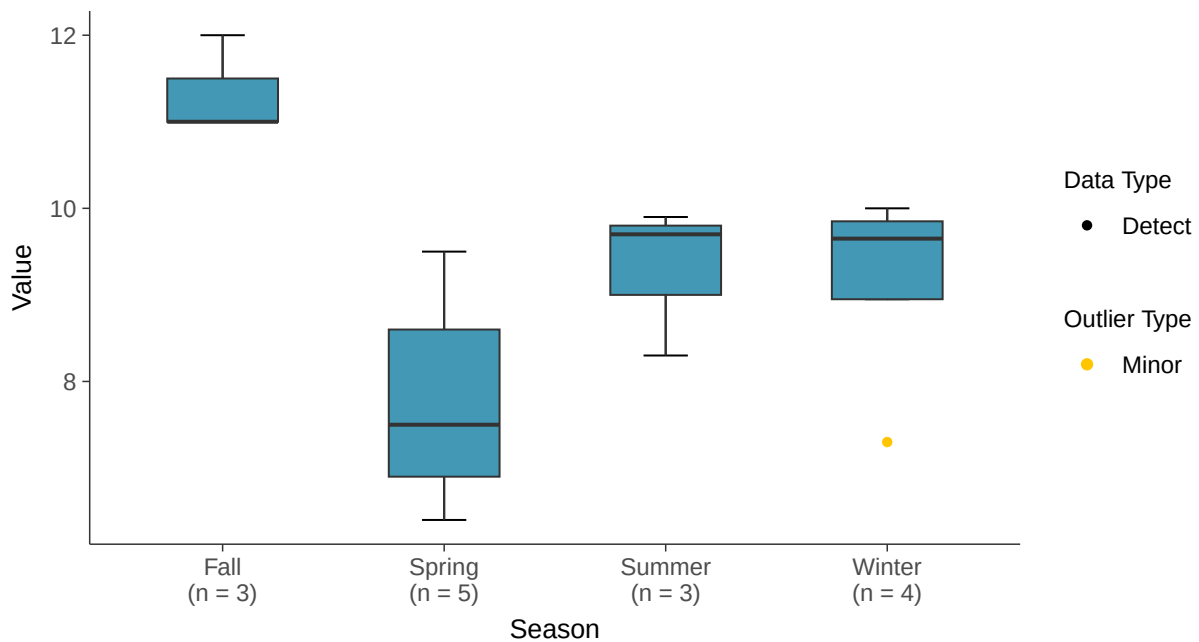
Boxplot

Boron, MW-06 (mg/L)



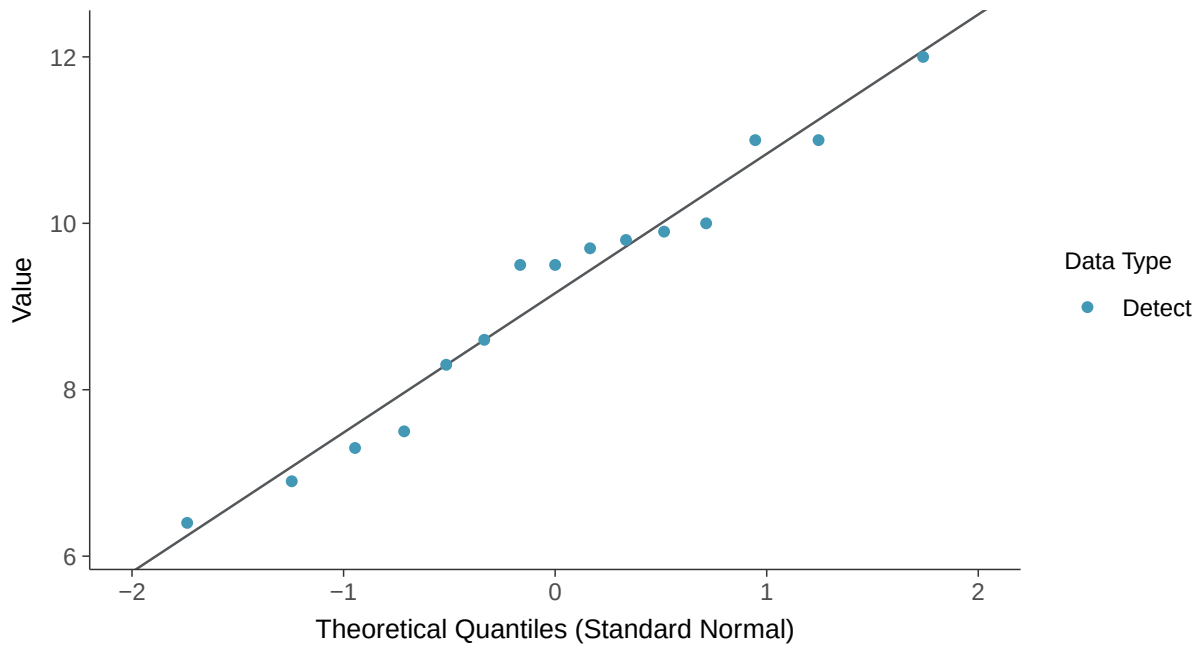
Boxplot by Season

Boron, MW-06 (mg/L)



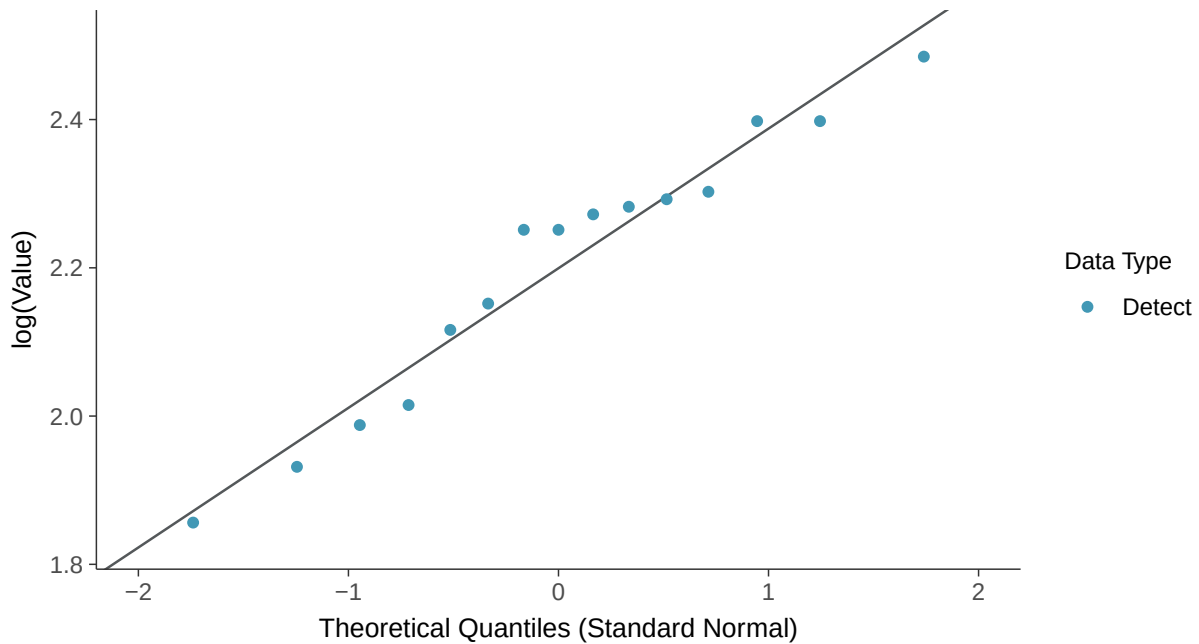
Normal Q-Q plot

Boron, MW-06 (mg/L)

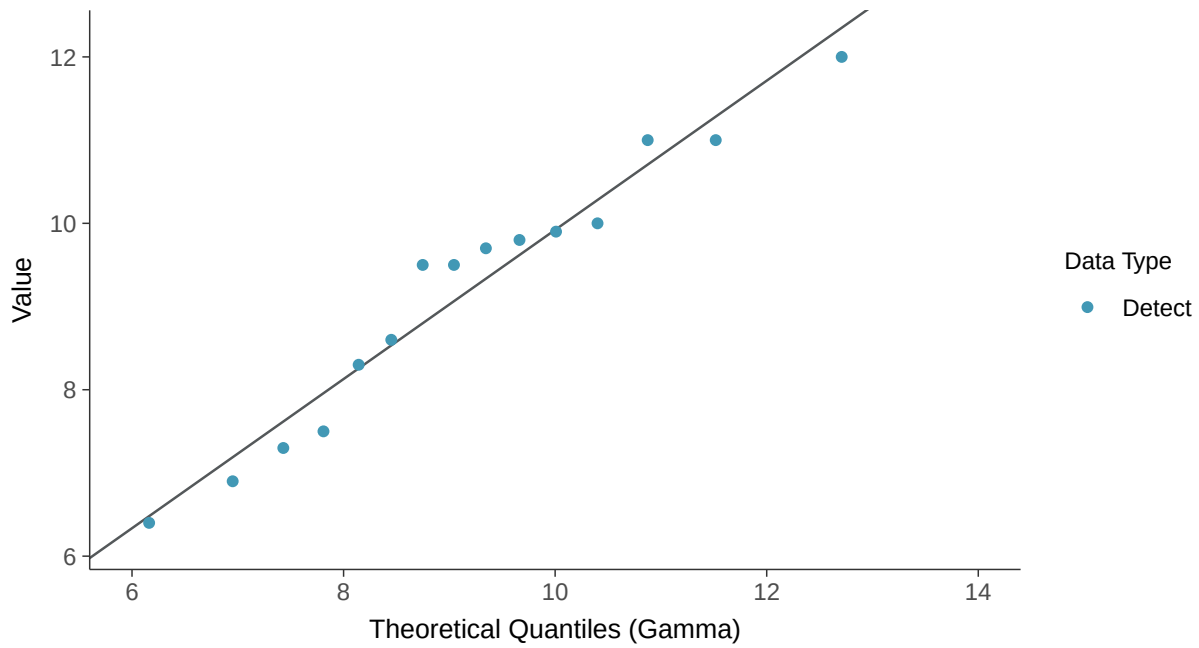


Lognormal Q-Q plot

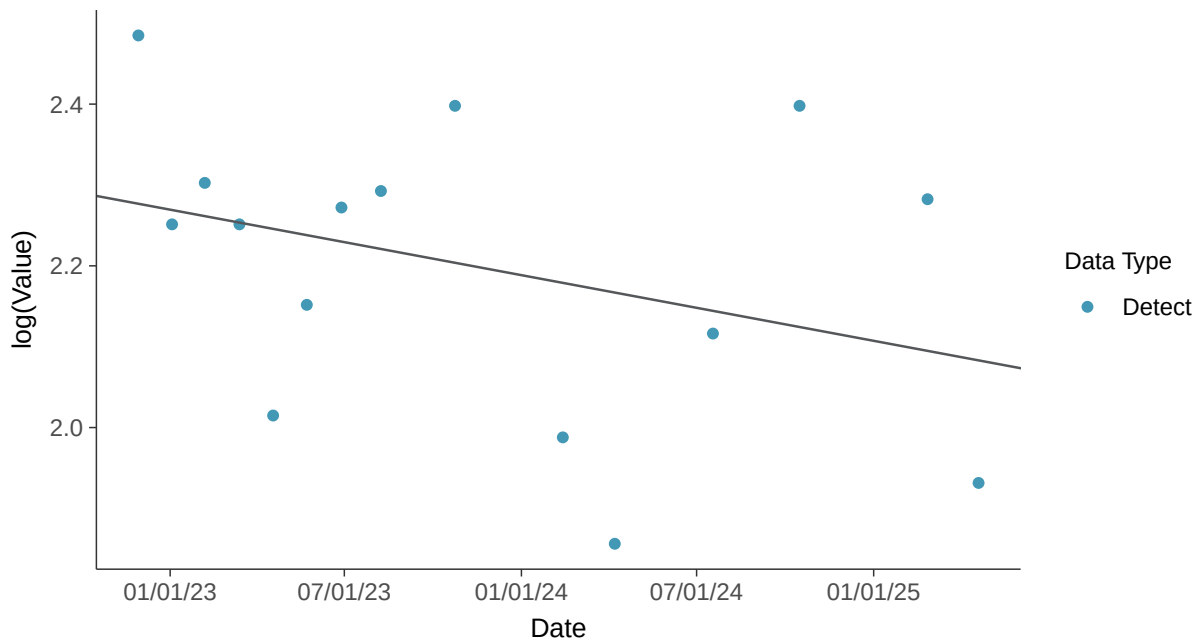
Boron, MW-06 (mg/L)



Gamma Q-Q plot
Boron, MW-06 (mg/L)

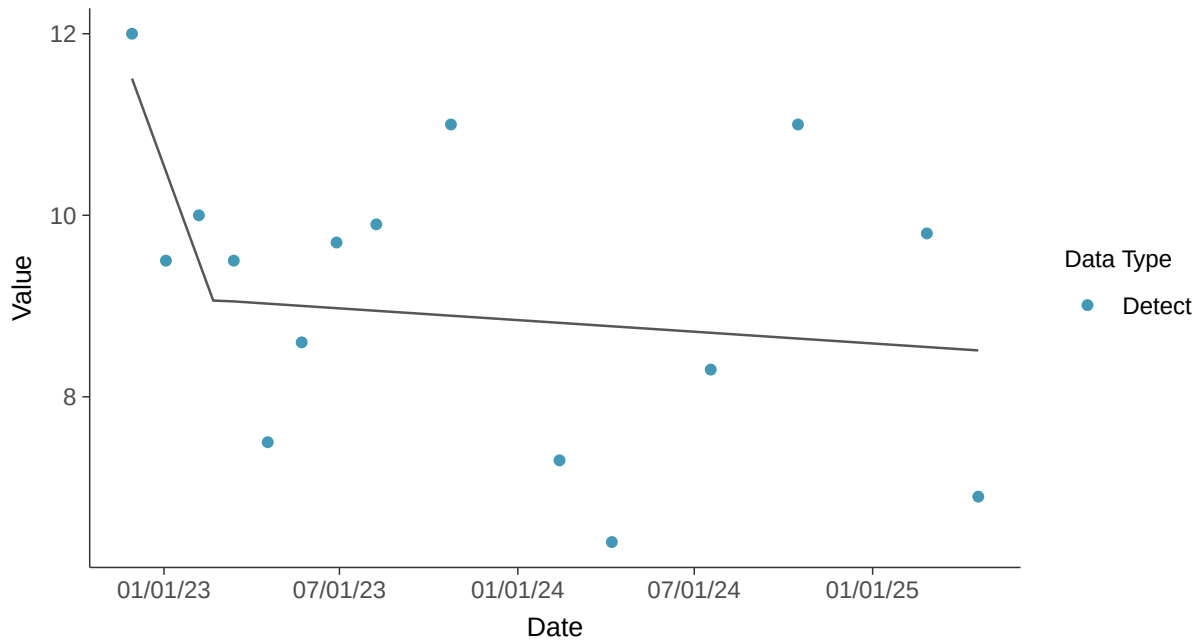


Trend Regression: Lognormal MLE
Boron, MW-06 (mg/L)



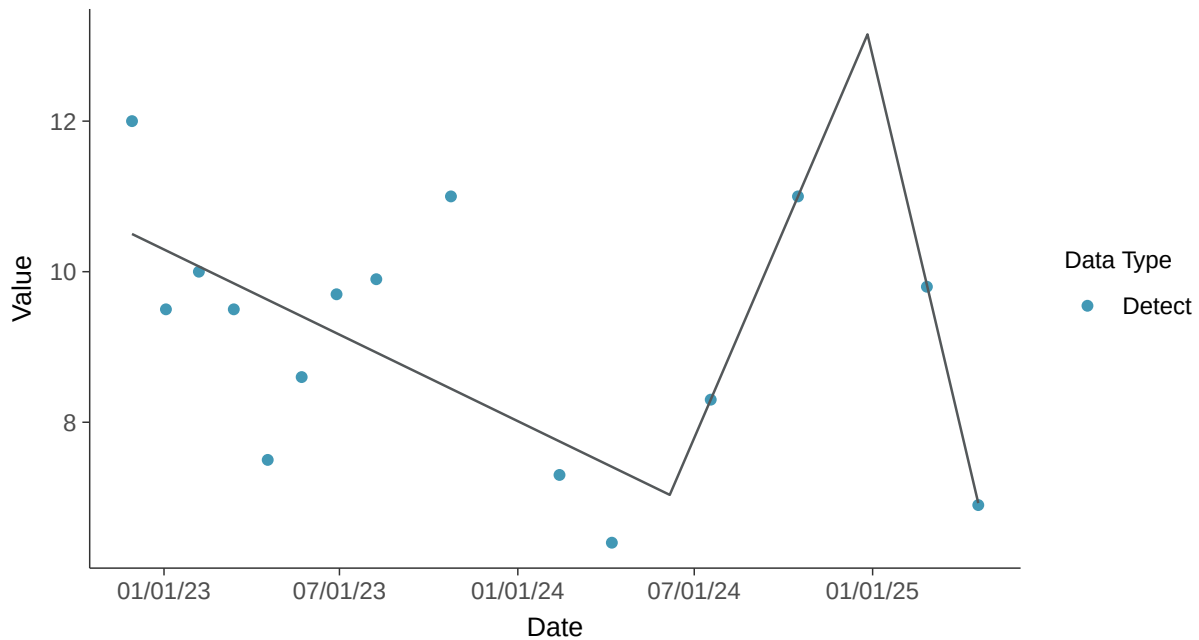
Trend Regression: Piecewise Linear-Linear

Boron, MW-06 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Boron, MW-06 (mg/L)

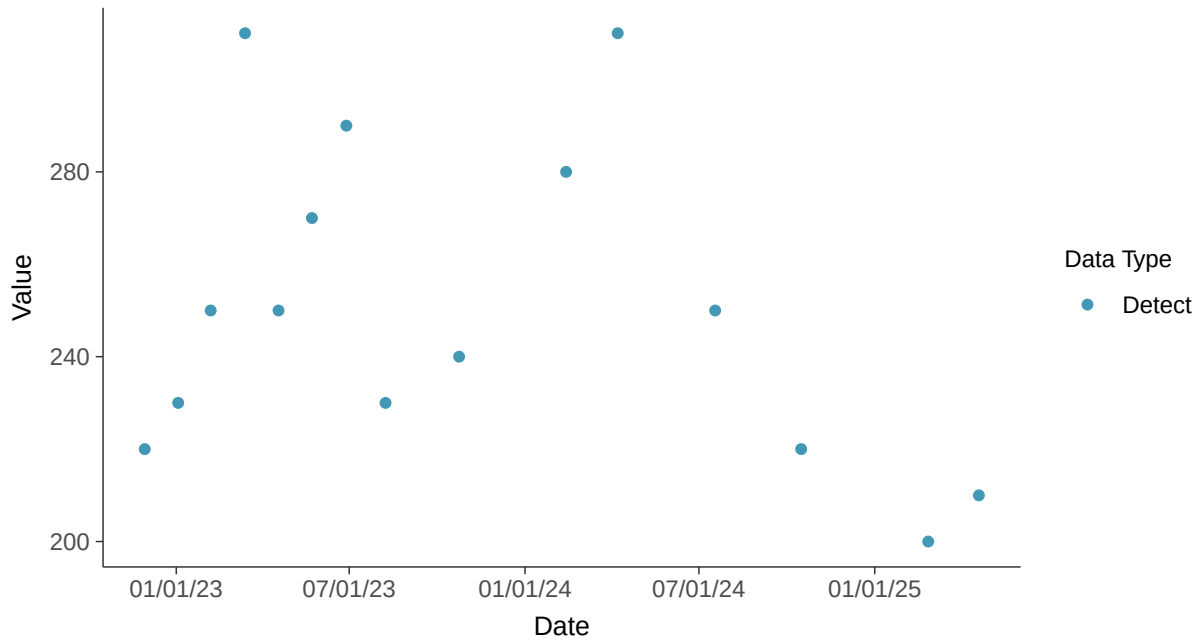


Appendix III: Calcium, MW-06

ID: 16_1_3_107

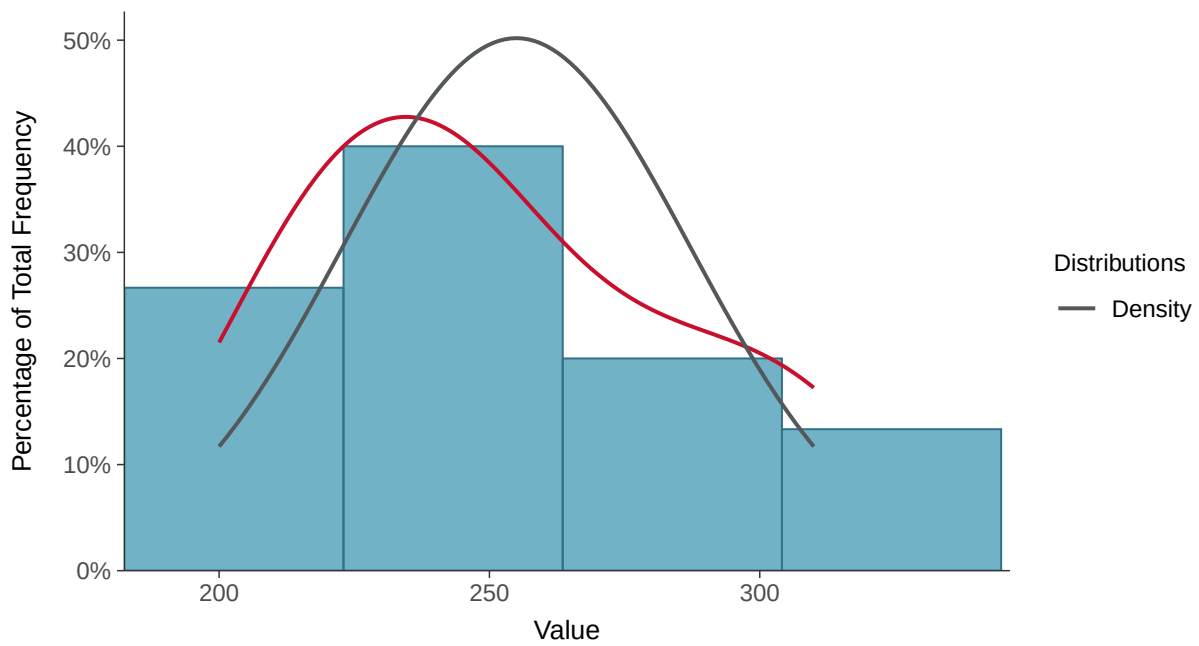
Scatter Plot

Calcium, MW-06 (mg/L)



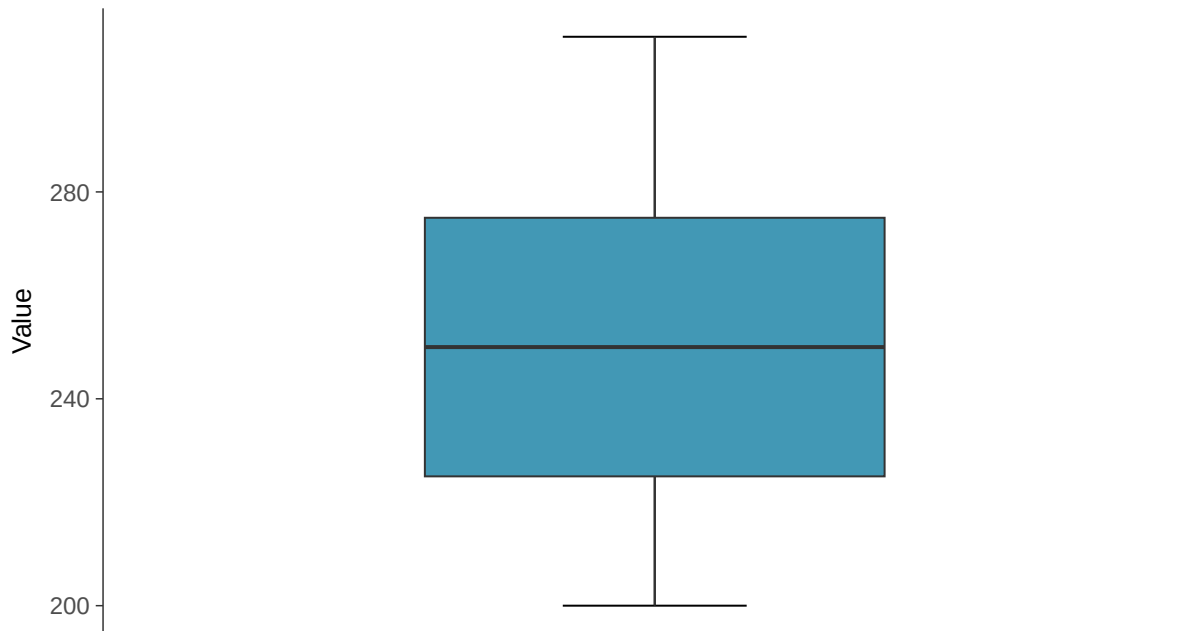
Histogram

Calcium, MW-06 (mg/L)



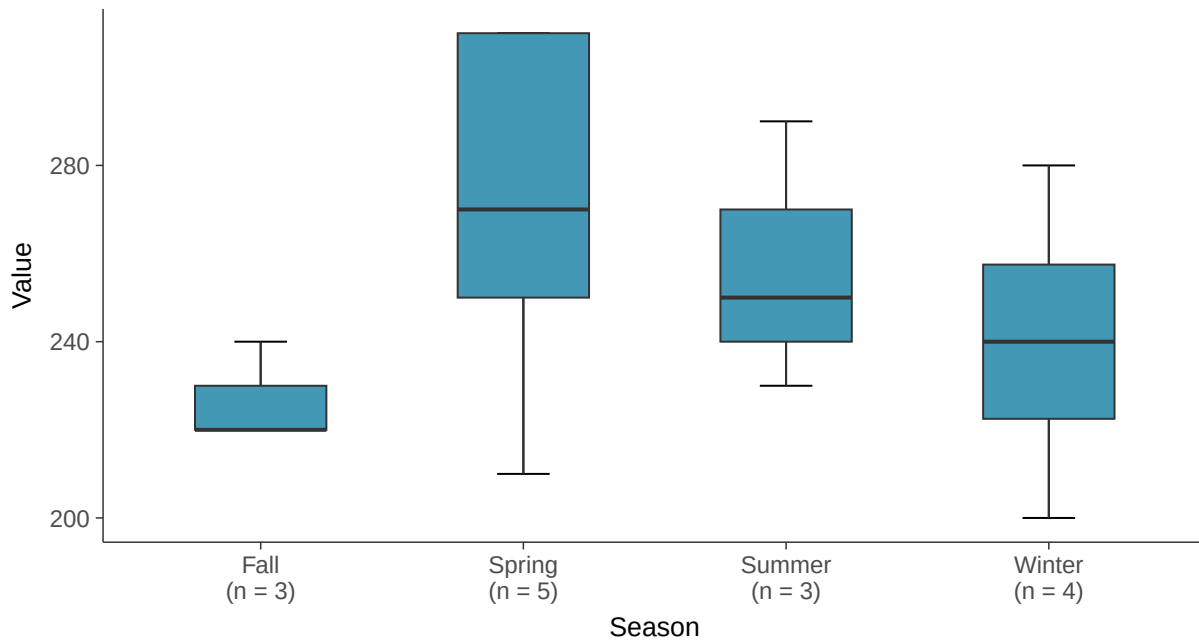
Boxplot

Calcium, MW-06 (mg/L)



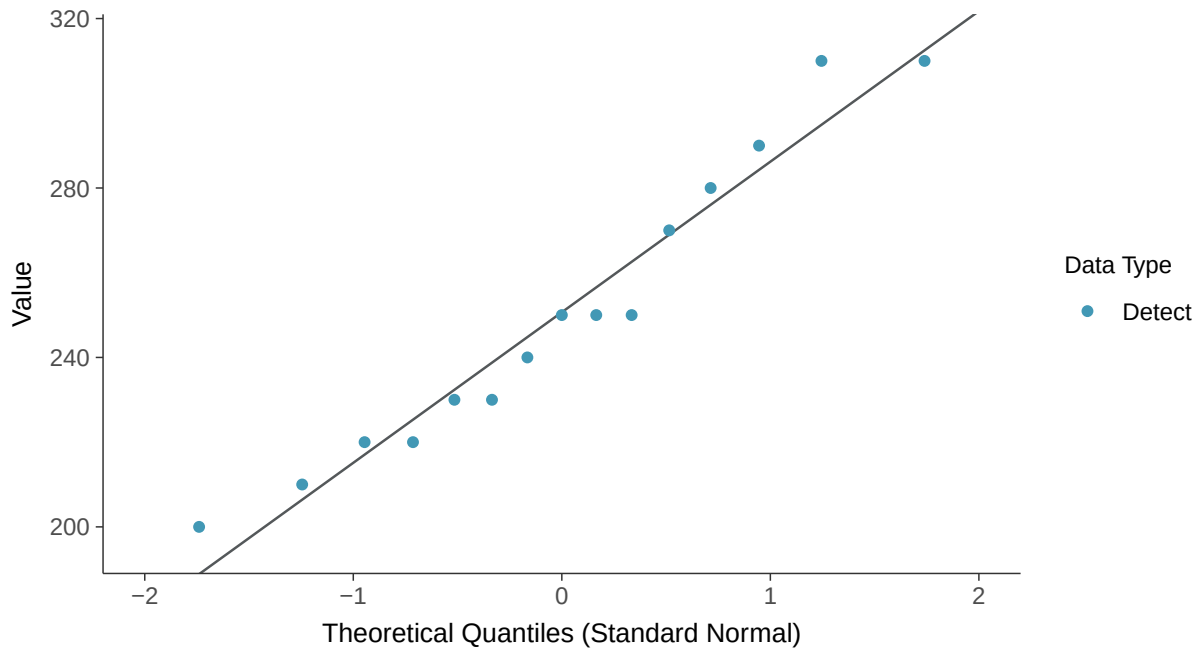
Boxplot by Season

Calcium, MW-06 (mg/L)



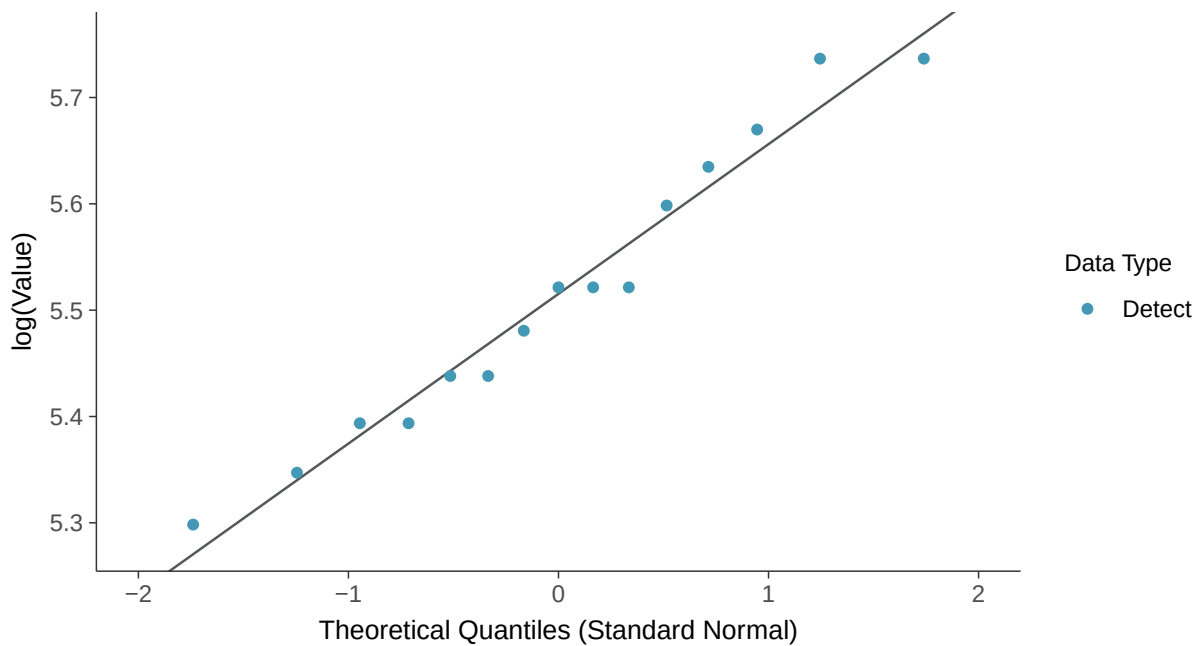
Normal Q-Q plot

Calcium, MW-06 (mg/L)



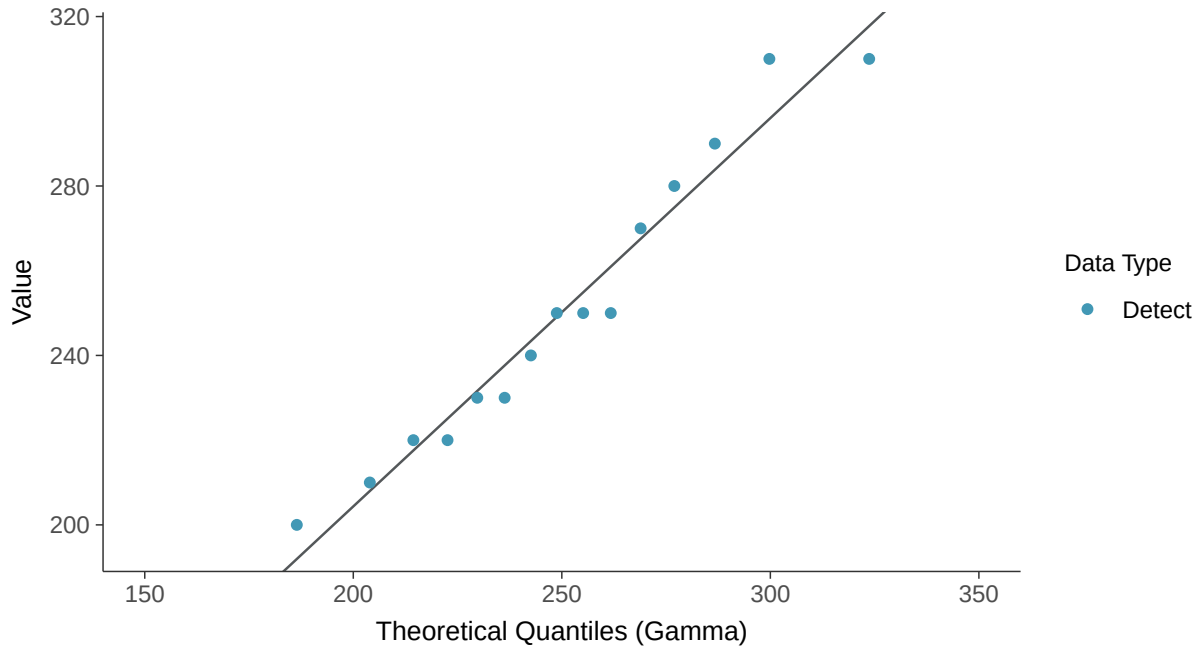
Lognormal Q-Q plot

Calcium, MW-06 (mg/L)



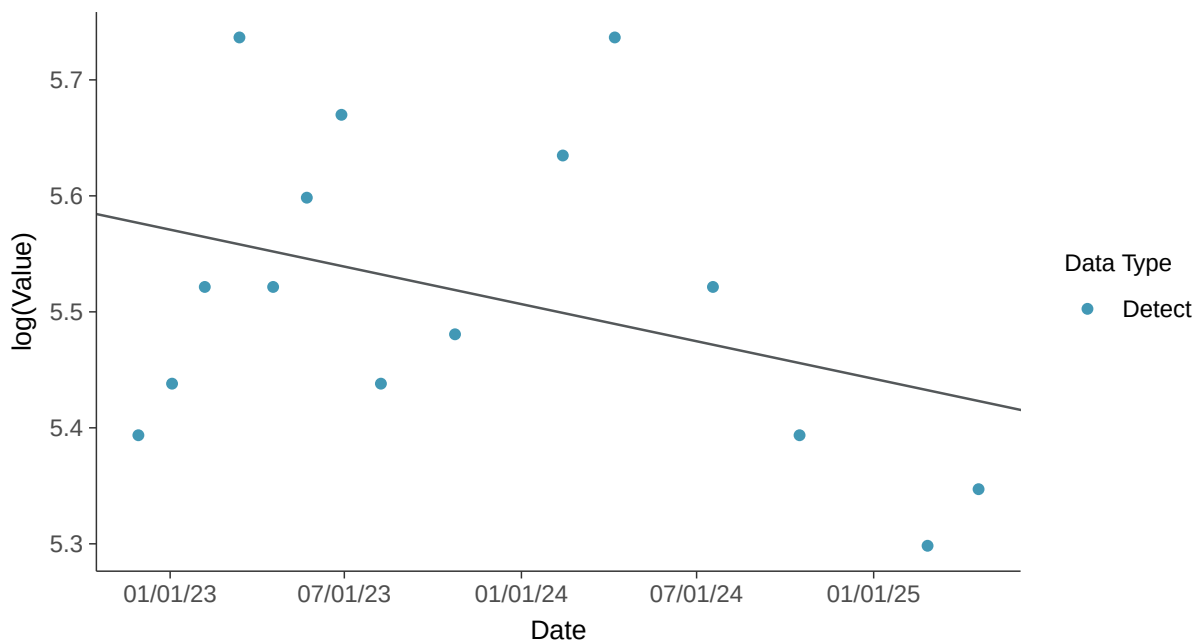
Gamma Q-Q plot

Calcium, MW-06 (mg/L)



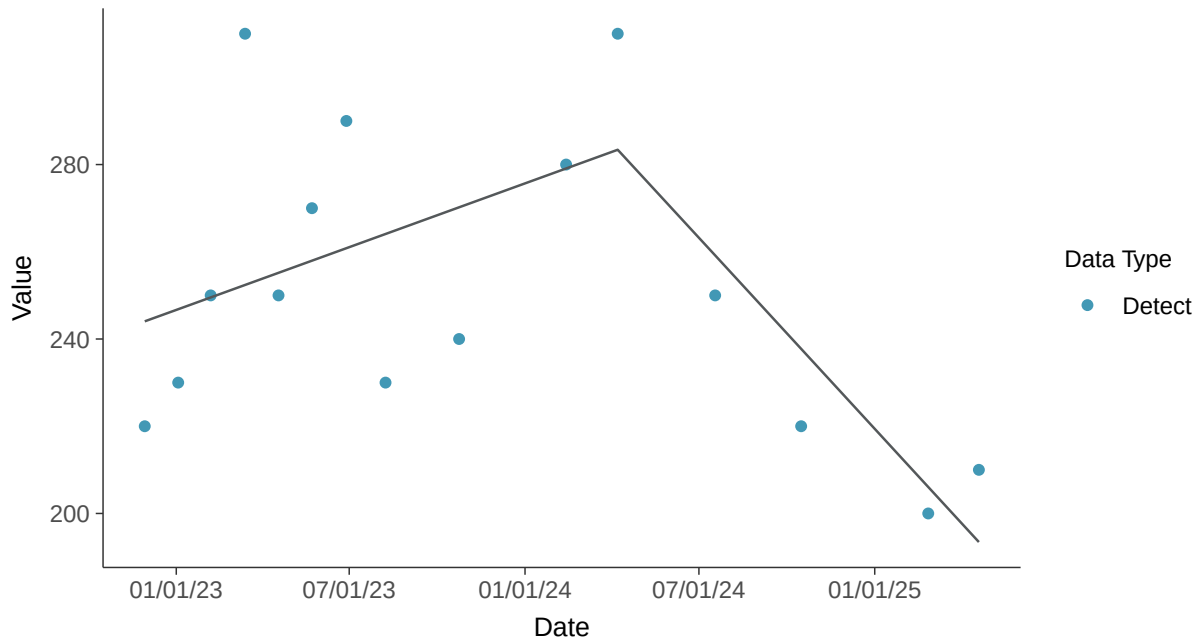
Trend Regression: Lognormal MLE

Calcium, MW-06 (mg/L)



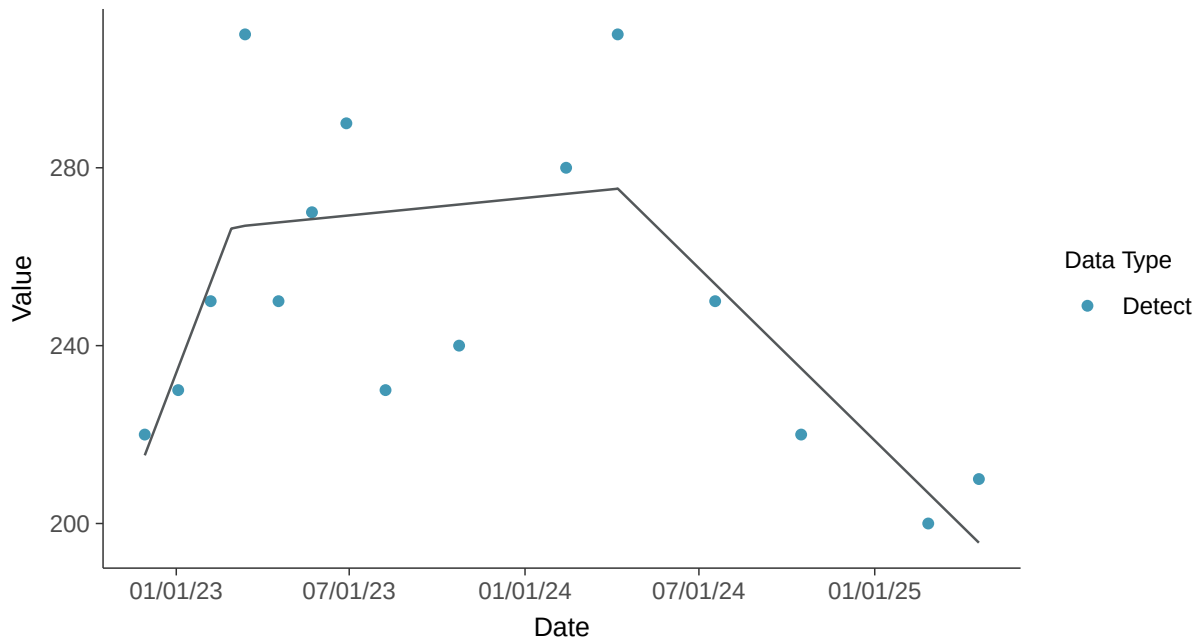
Trend Regression: Piecewise Linear-Linear

Calcium, MW-06 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Calcium, MW-06 (mg/L)

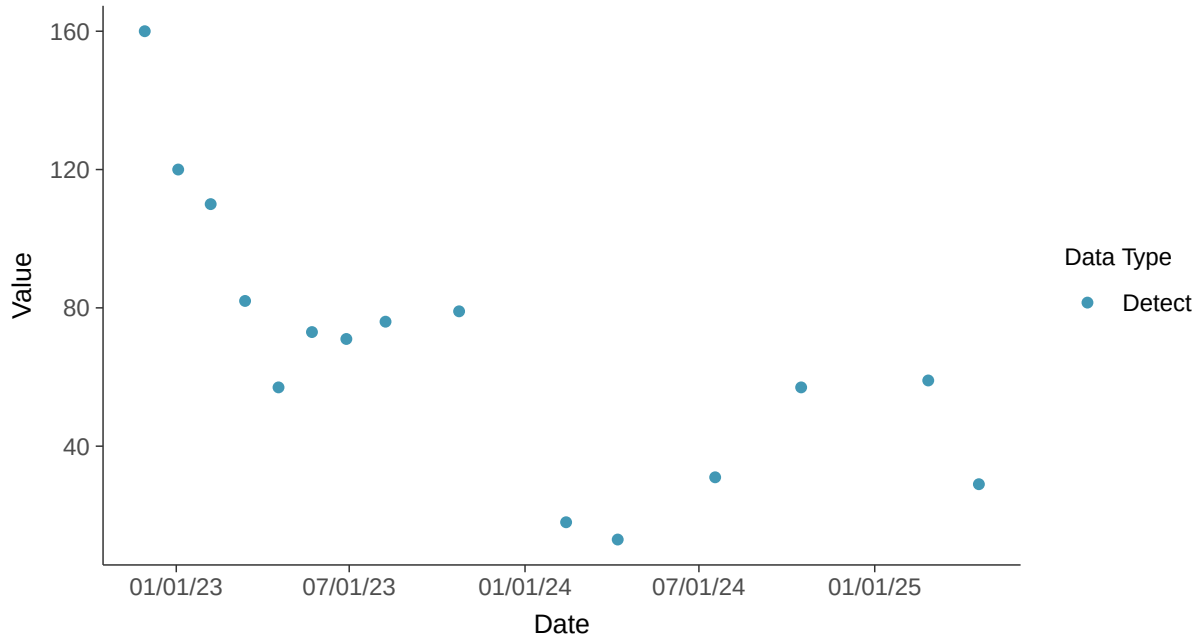


Appendix III: Chloride (as Cl), MW-06

ID: 16_1_3_108

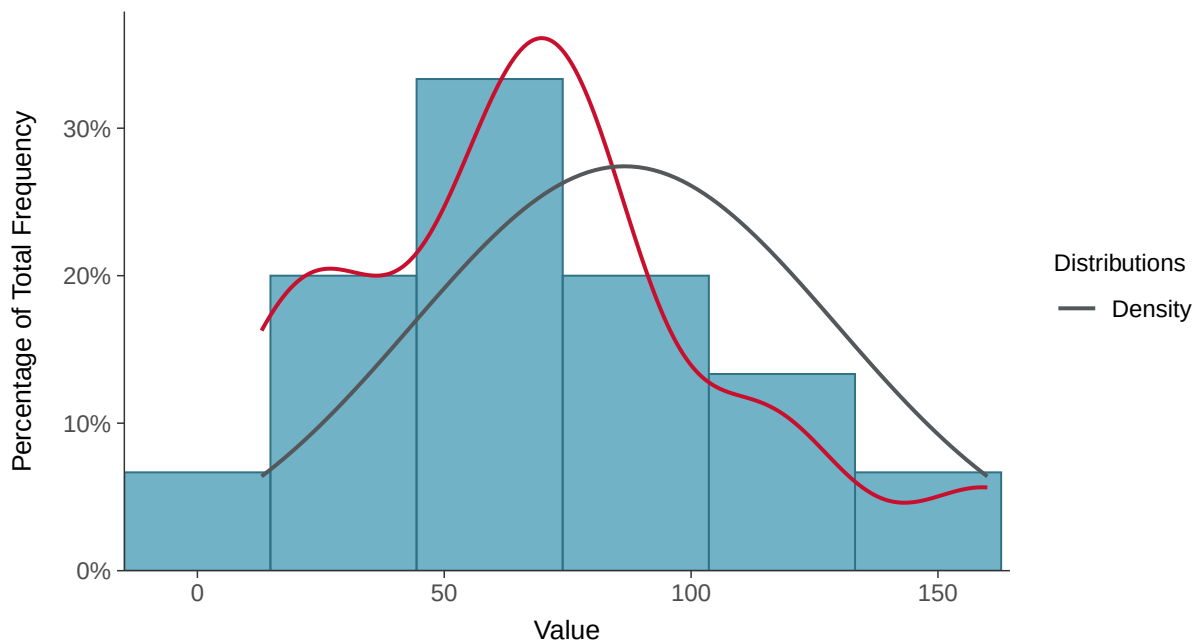
Scatter Plot

Chloride (as Cl), MW-06 (mg/L)



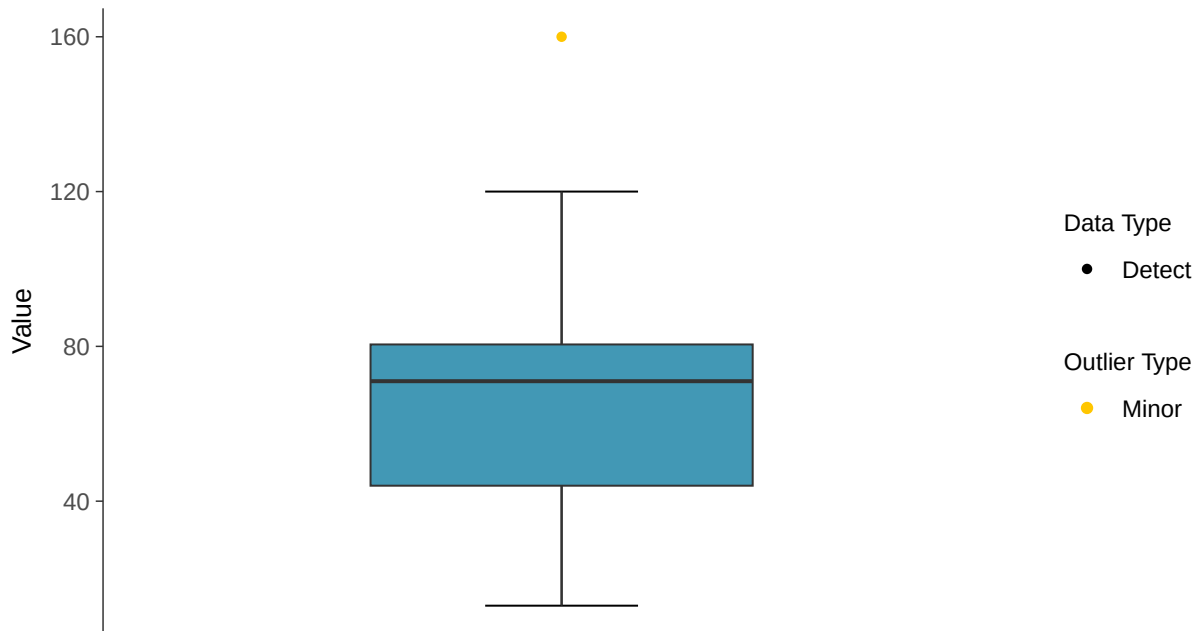
Histogram

Chloride (as Cl), MW-06 (mg/L)



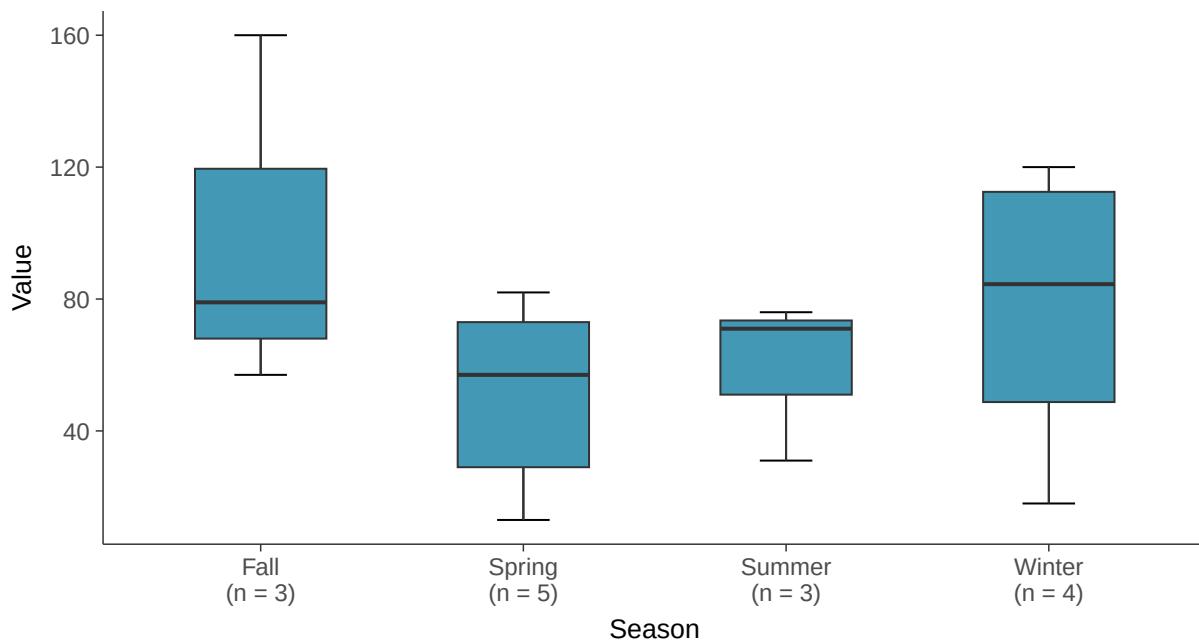
Boxplot

Chloride (as Cl), MW-06 (mg/L)



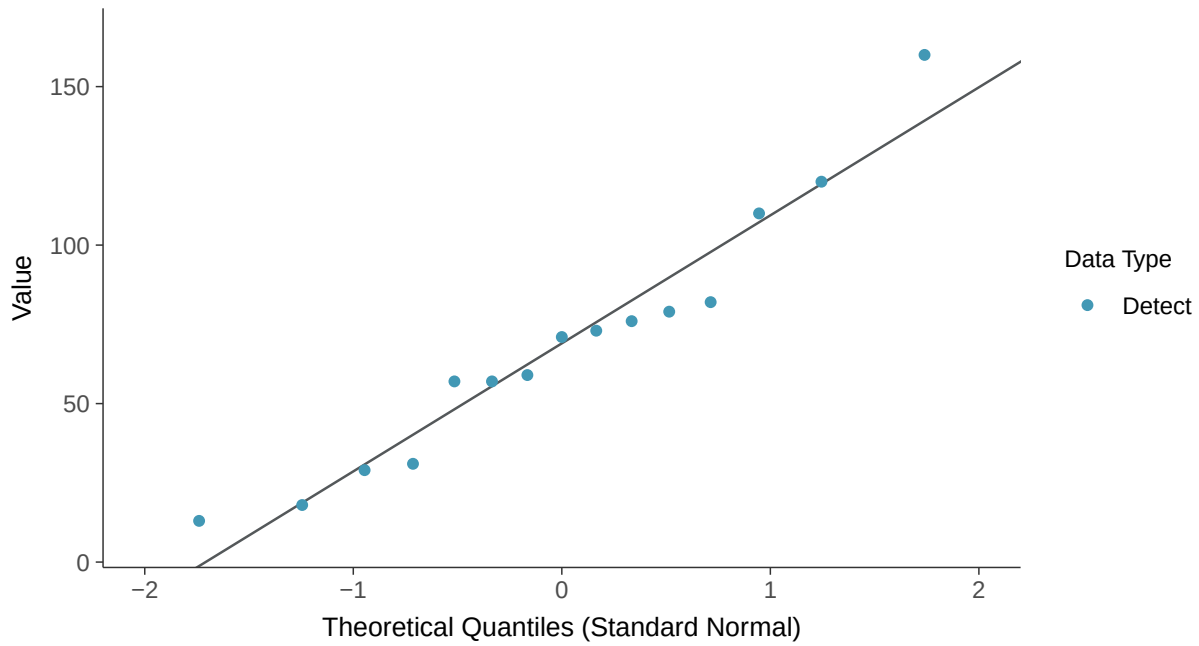
Boxplot by Season

Chloride (as Cl), MW-06 (mg/L)



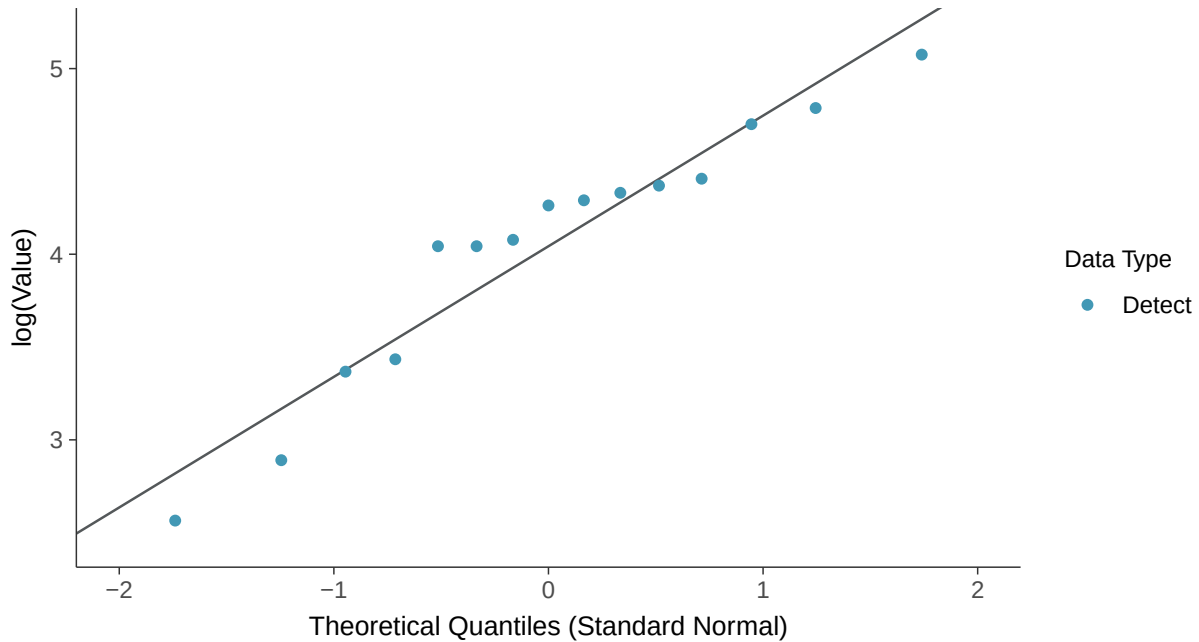
Normal Q-Q plot

Chloride (as Cl), MW-06 (mg/L)



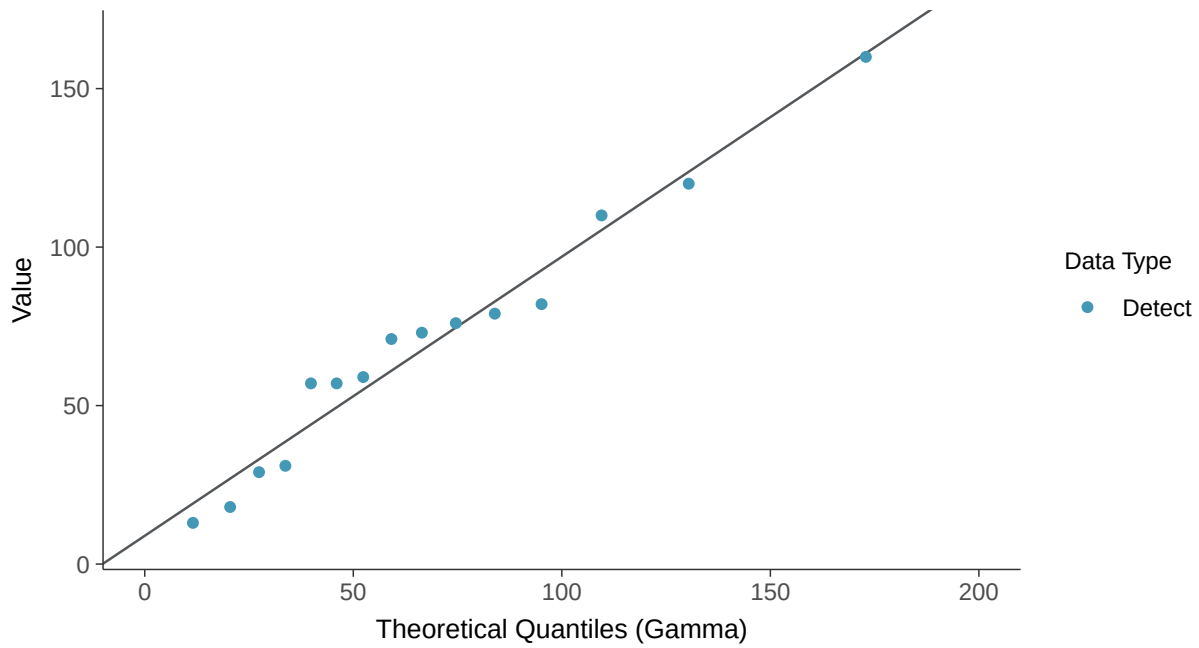
Lognormal Q-Q plot

Chloride (as Cl), MW-06 (mg/L)



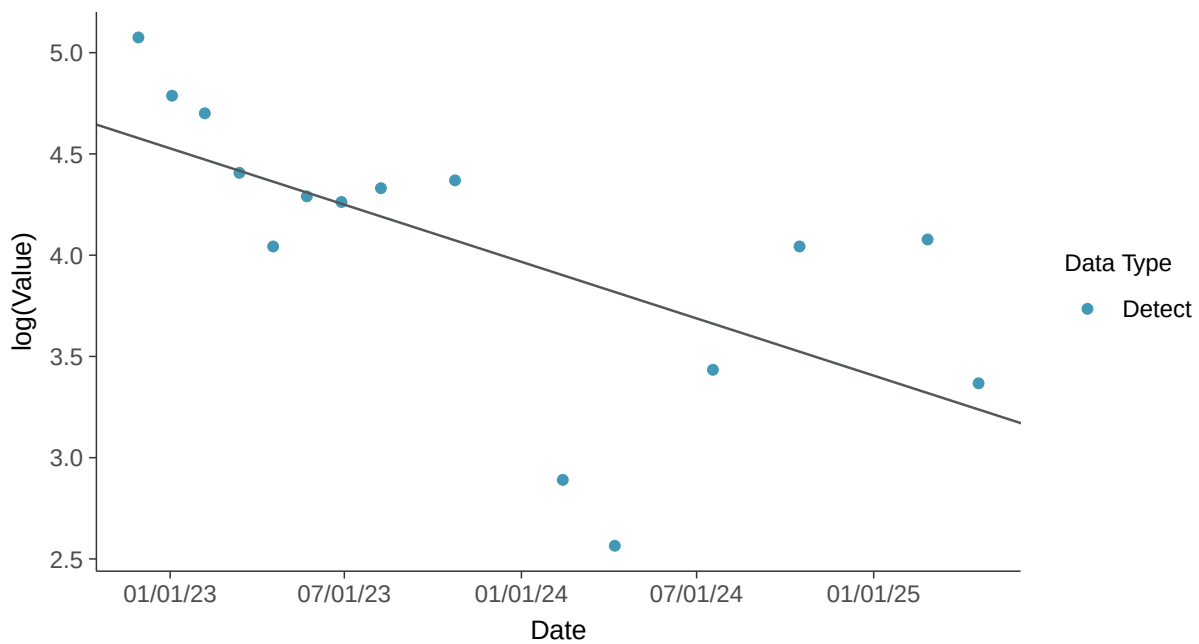
Gamma Q-Q plot

Chloride (as Cl), MW-06 (mg/L)



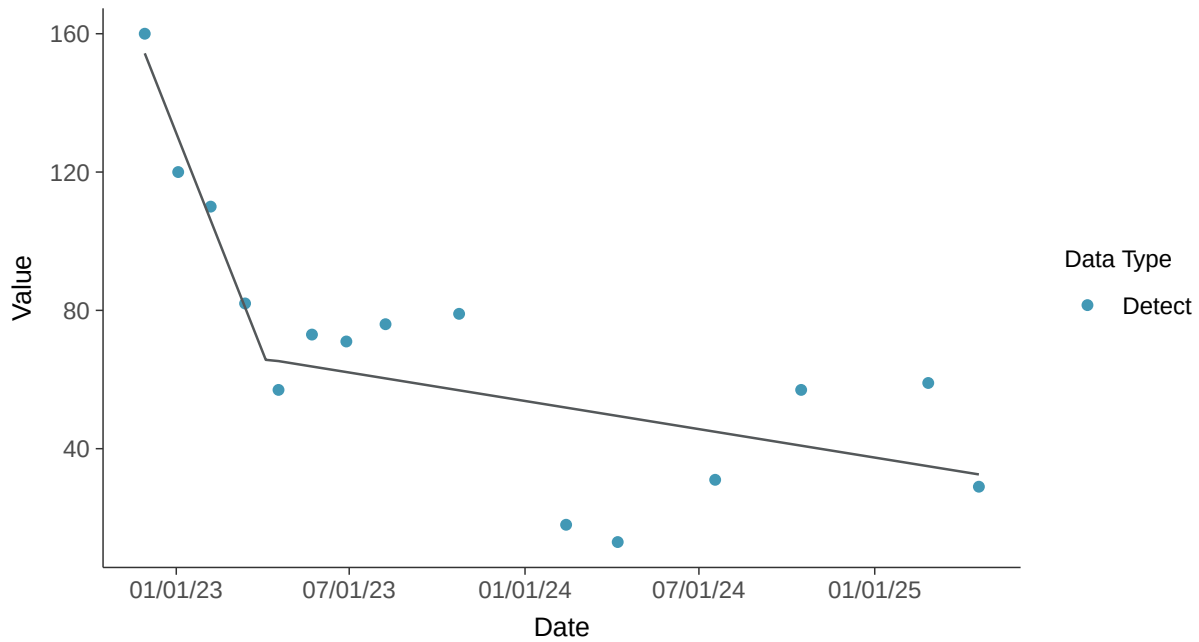
Trend Regression: Lognormal MLE

Chloride (as Cl), MW-06 (mg/L)



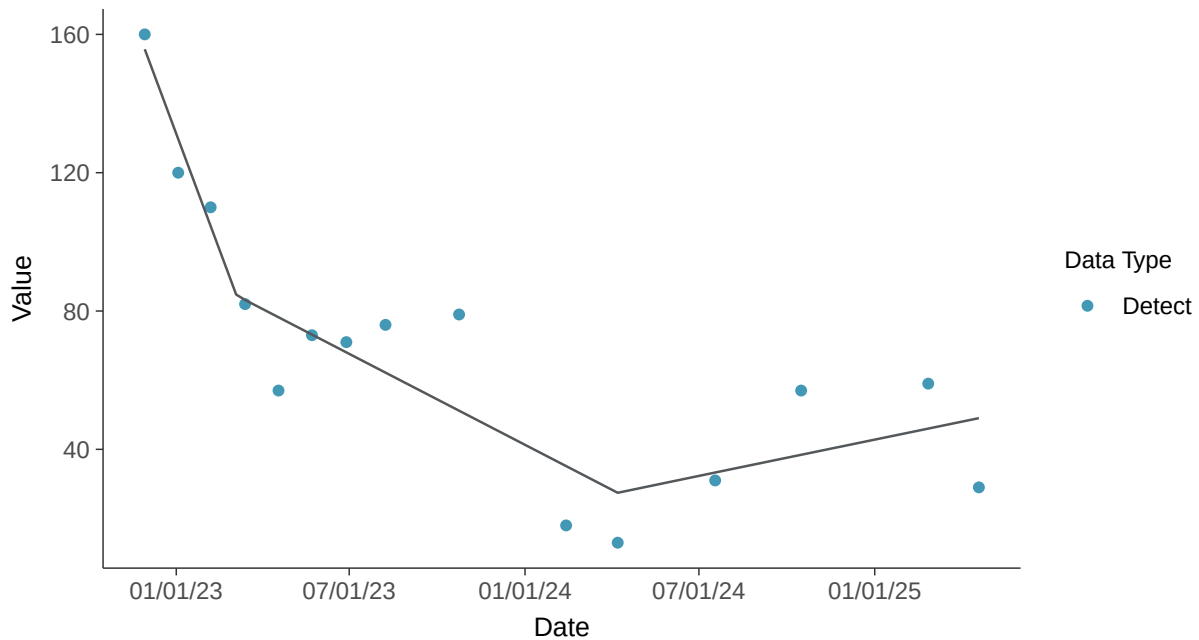
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-06 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Chloride (as Cl), MW-06 (mg/L)

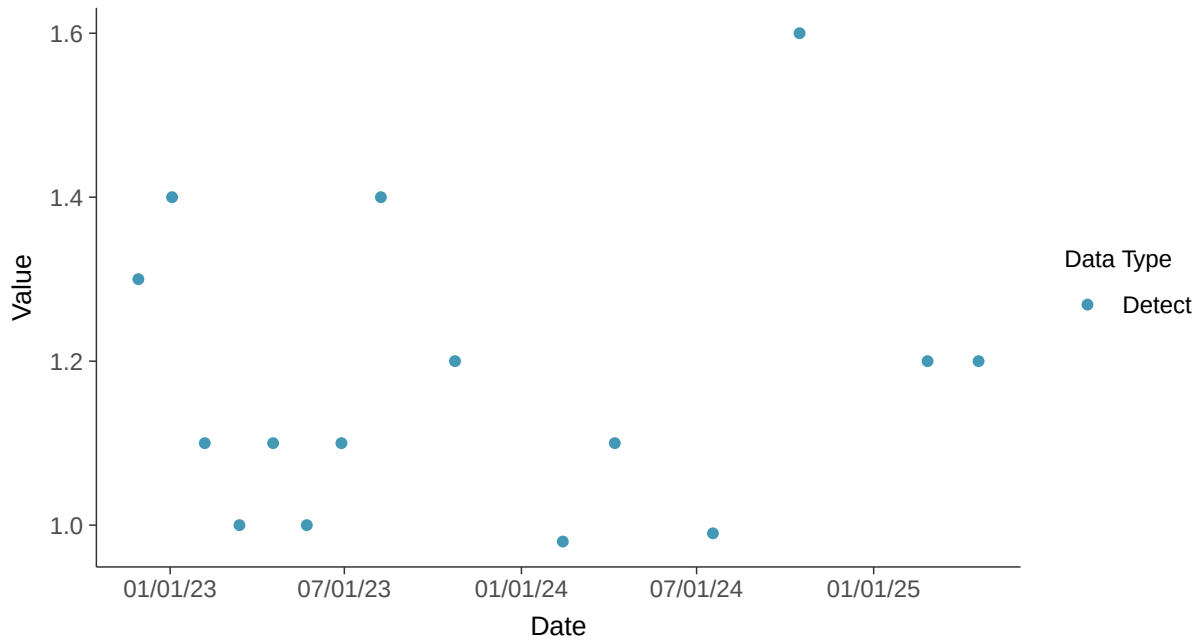


Appendix III: Fluoride, MW-06

ID: 16_1_3_112

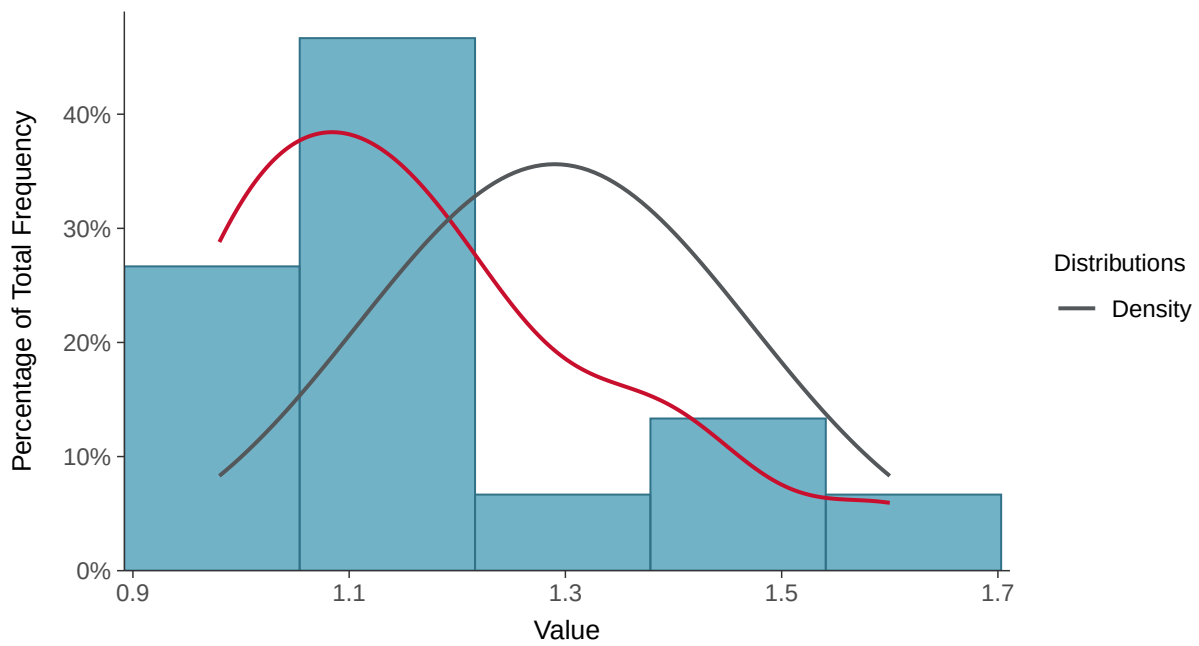
Scatter Plot

Fluoride, MW-06 (mg/L)



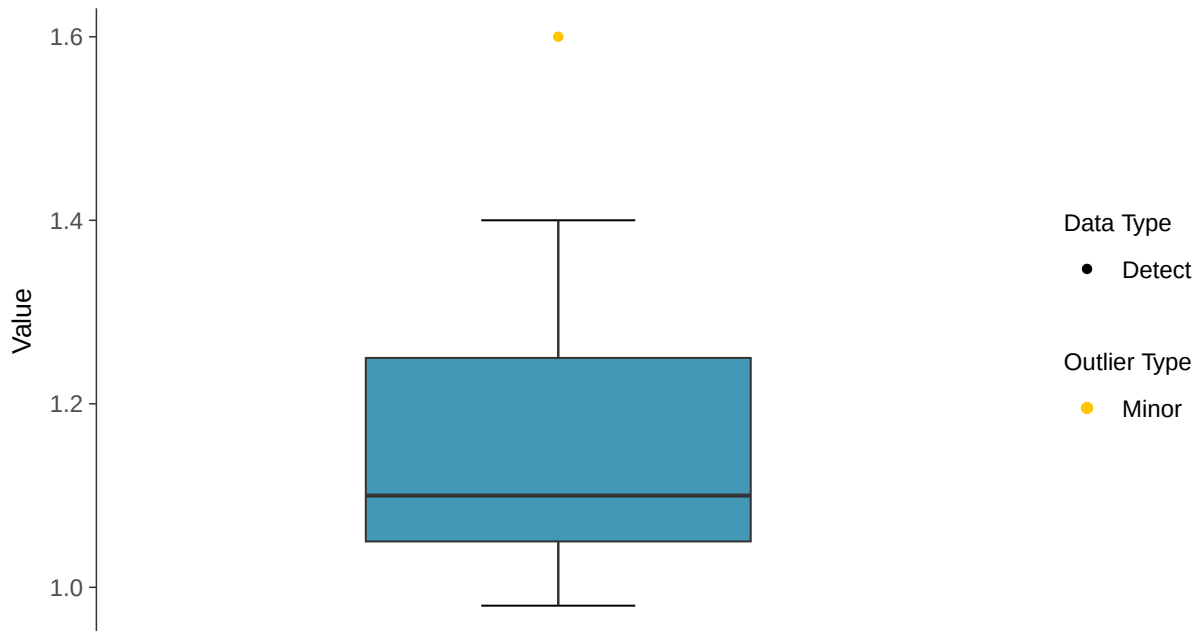
Histogram

Fluoride, MW-06 (mg/L)



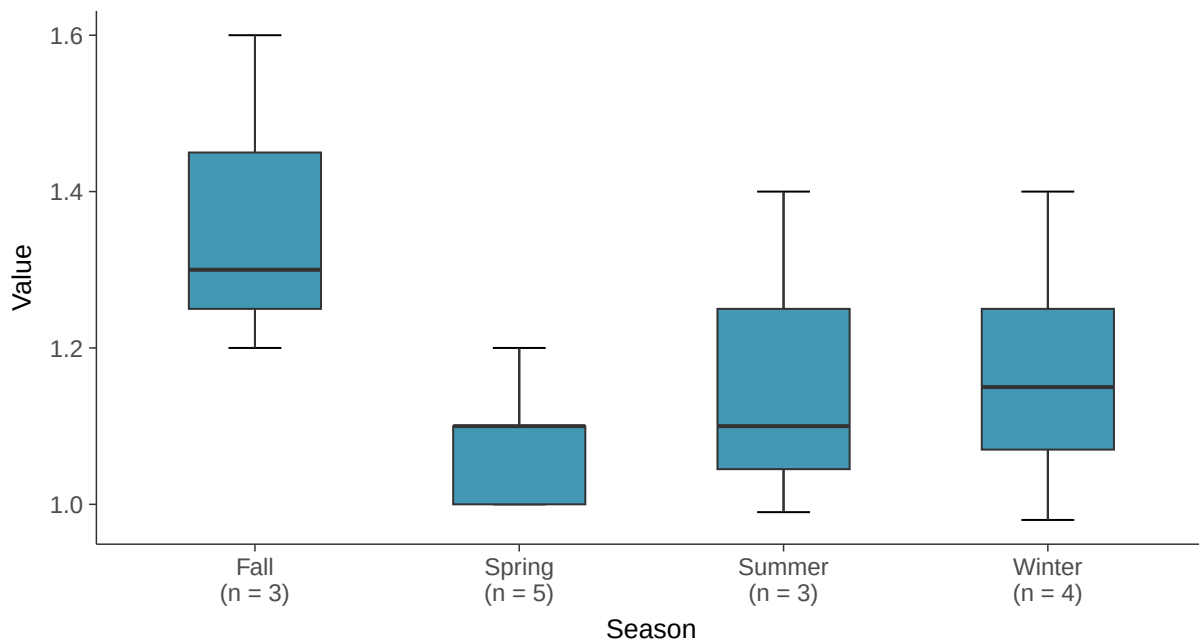
Boxplot

Fluoride, MW-06 (mg/L)



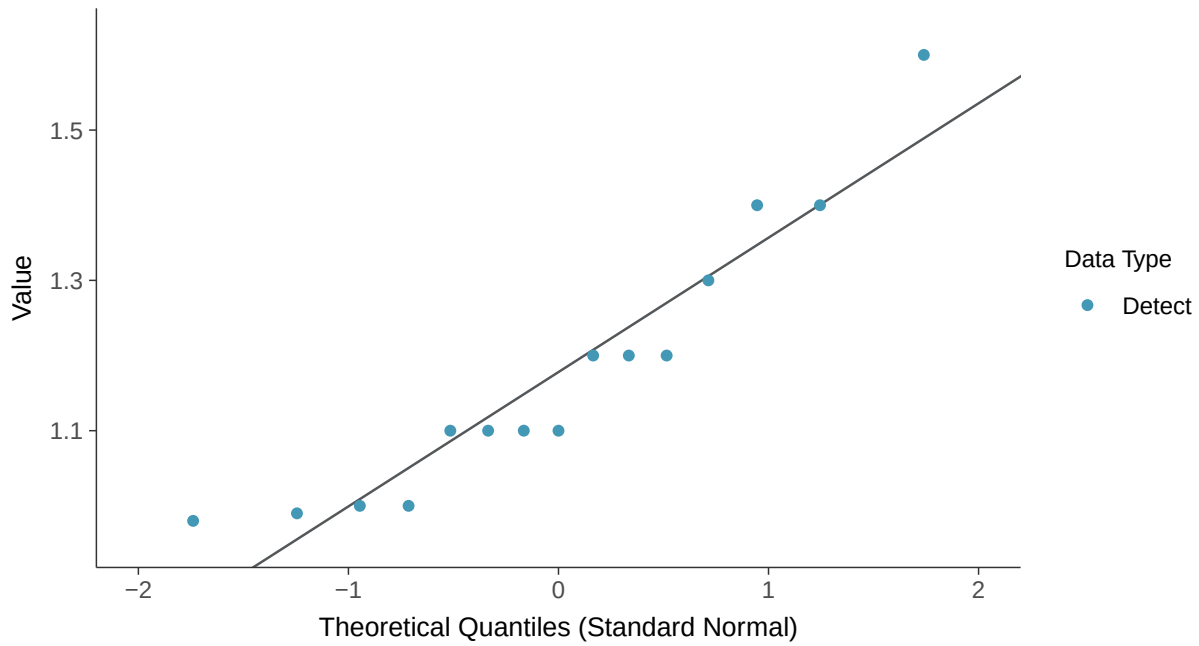
Boxplot by Season

Fluoride, MW-06 (mg/L)



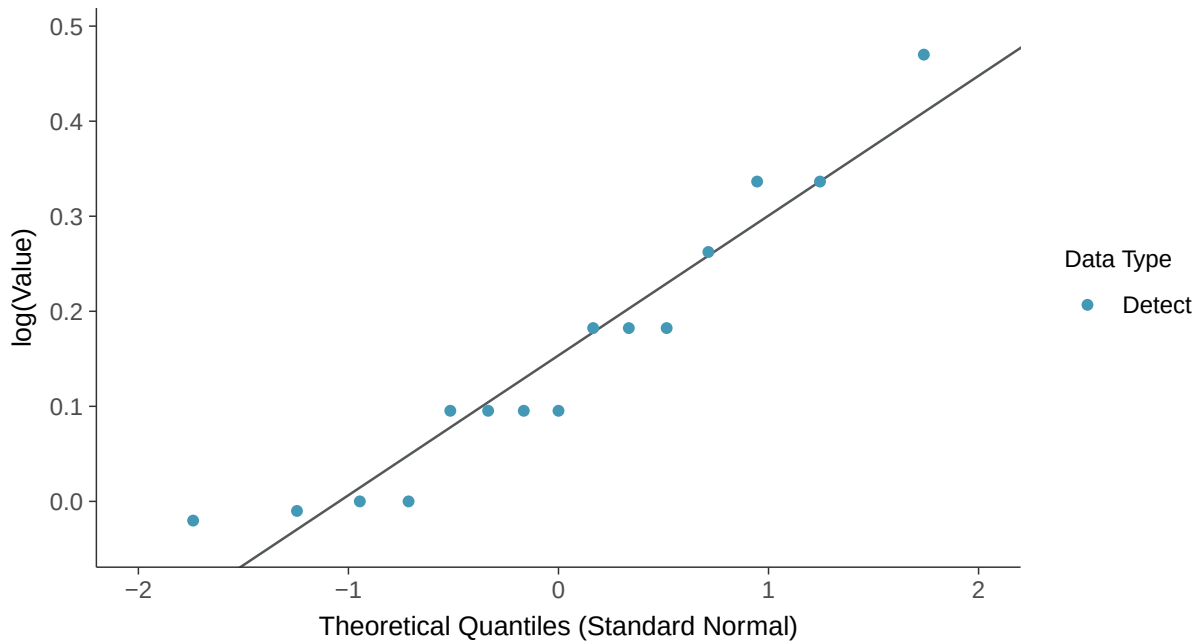
Normal Q-Q plot

Fluoride, MW-06 (mg/L)



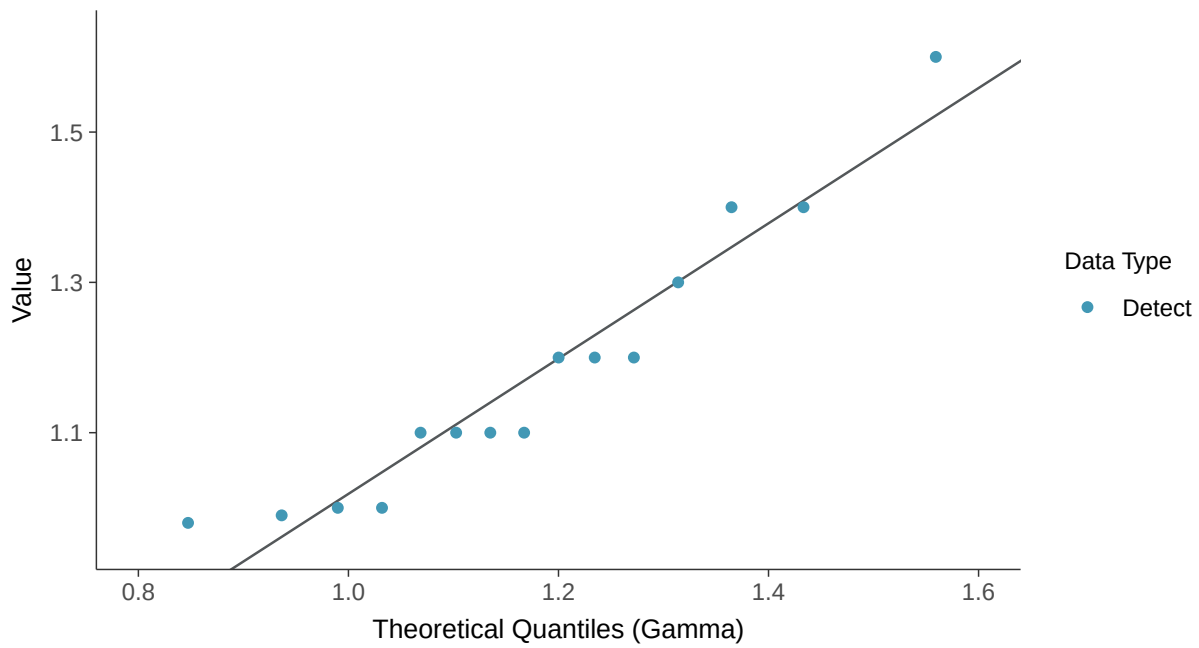
Lognormal Q-Q plot

Fluoride, MW-06 (mg/L)



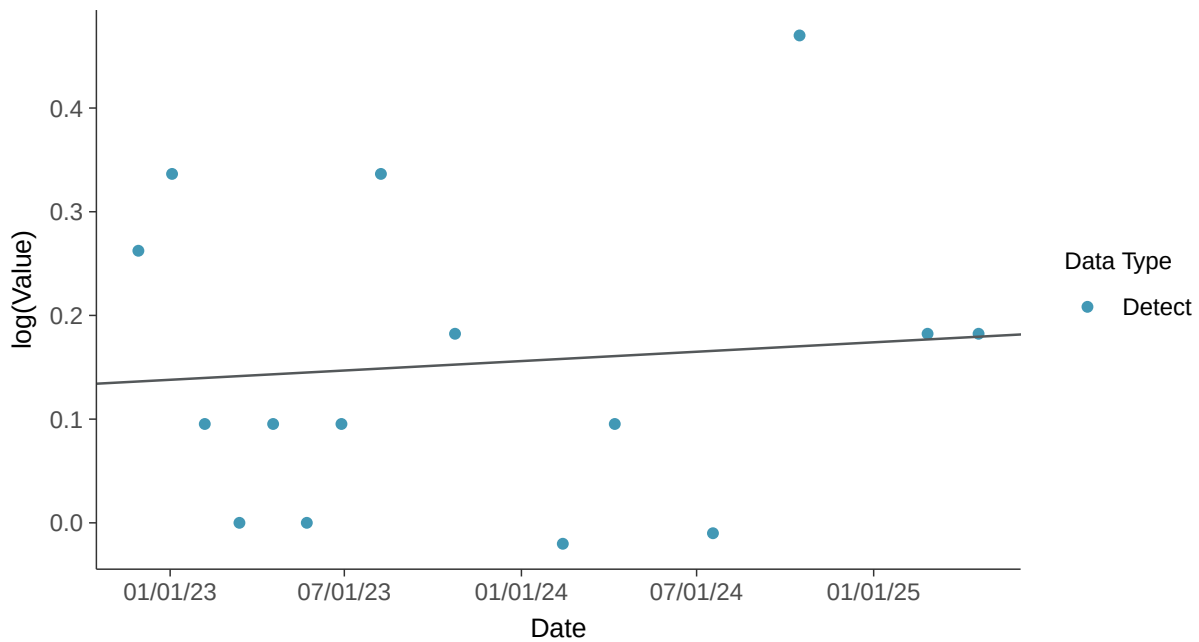
Gamma Q-Q plot

Fluoride, MW-06 (mg/L)



Trend Regression: Lognormal MLE

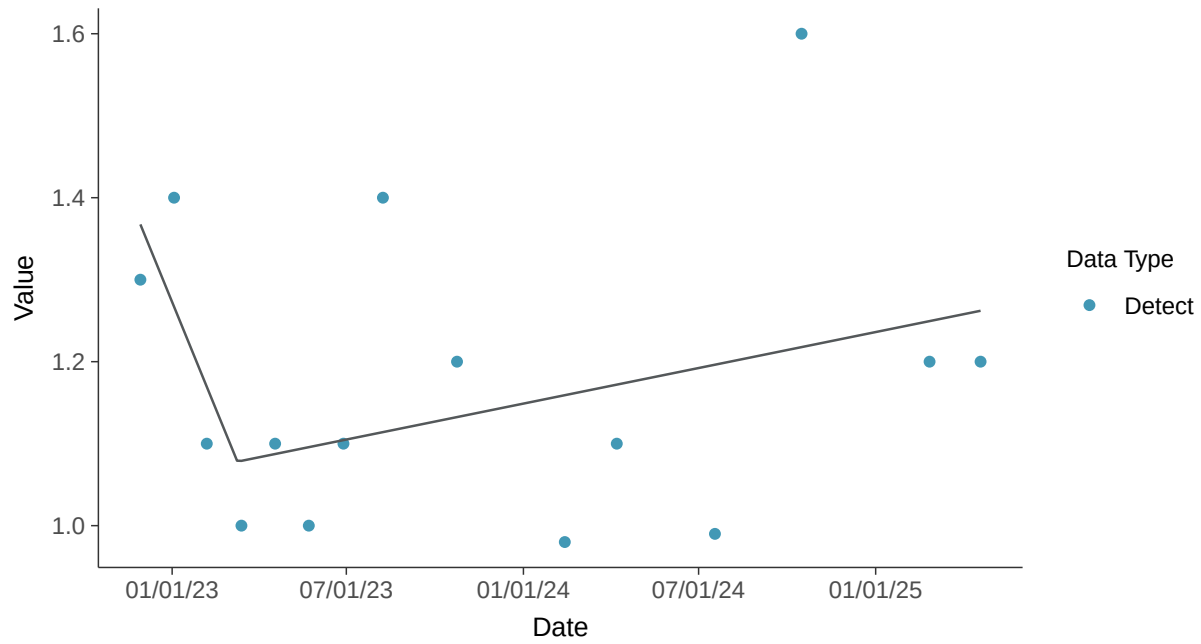
Fluoride, MW-06 (mg/L)





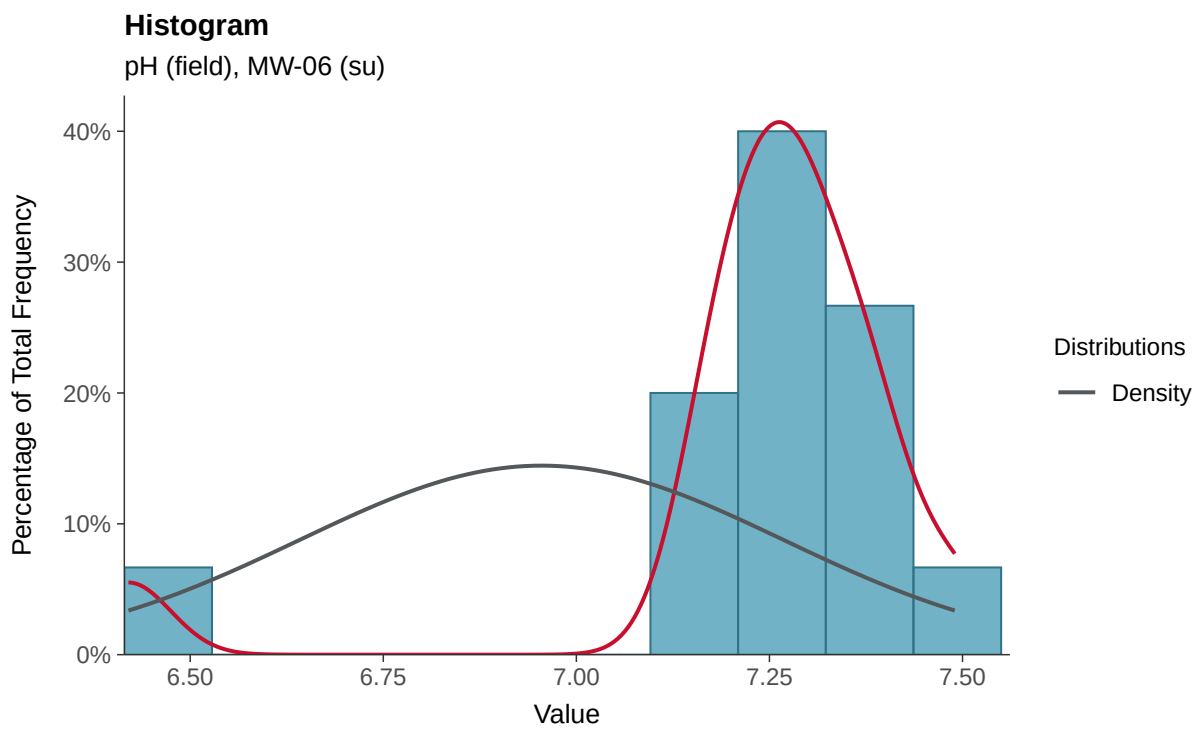
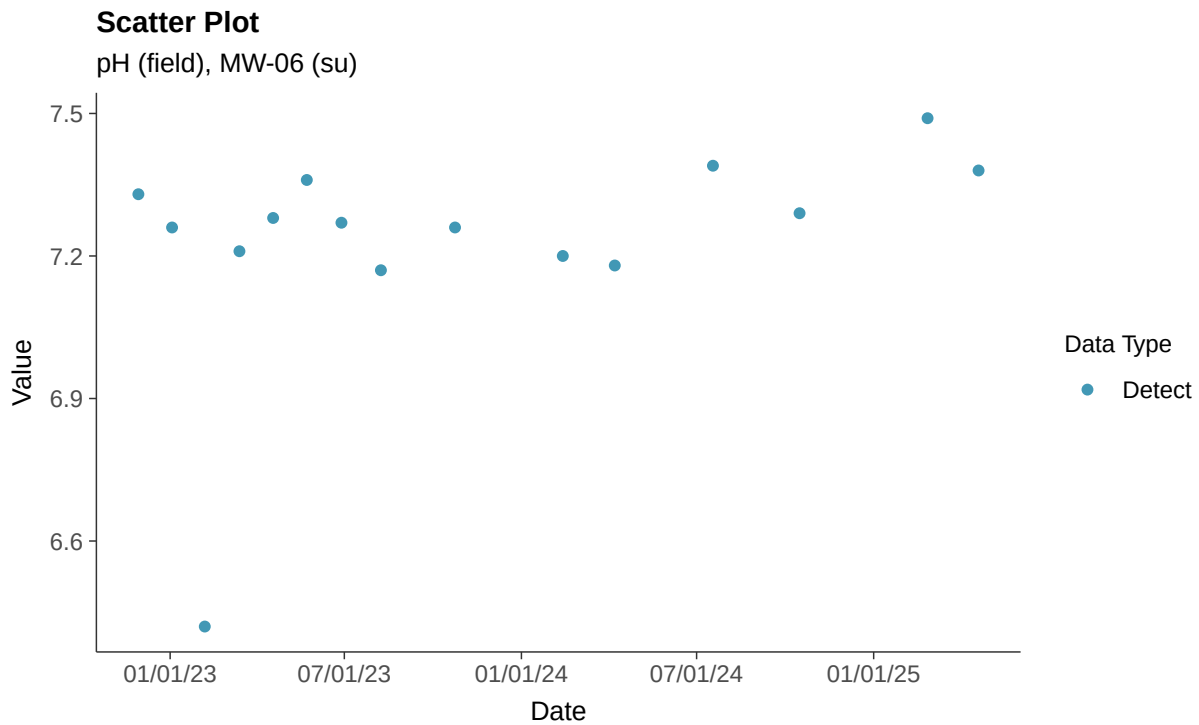
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-06 (mg/L)



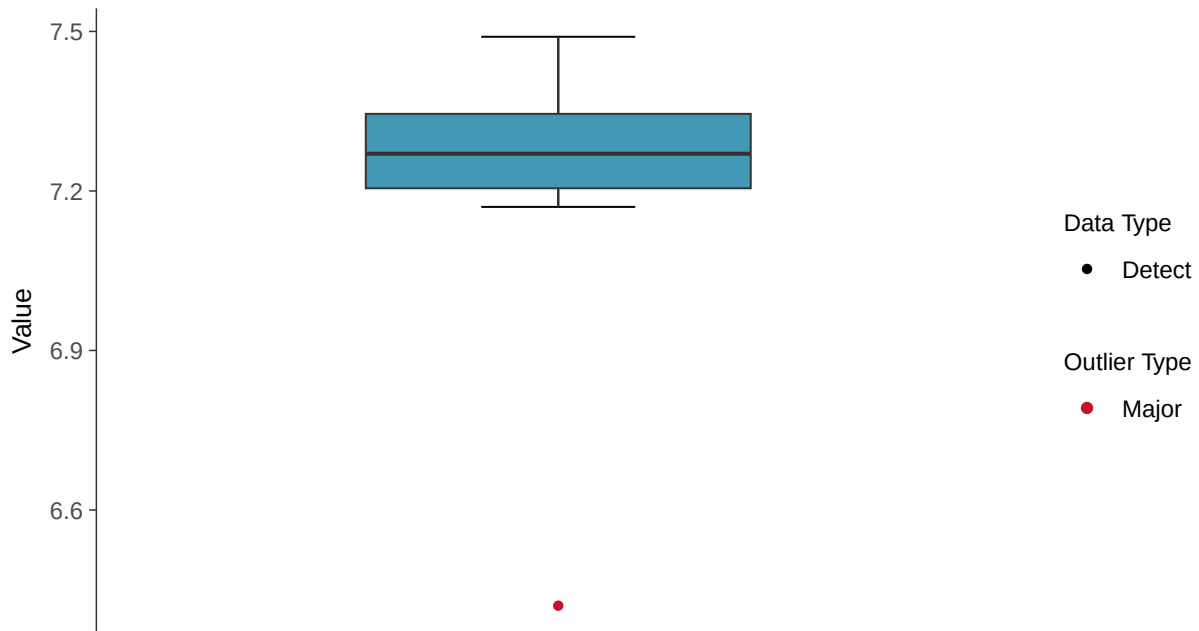
Appendix III: pH (field), MW-06

ID: 16_1_3_120



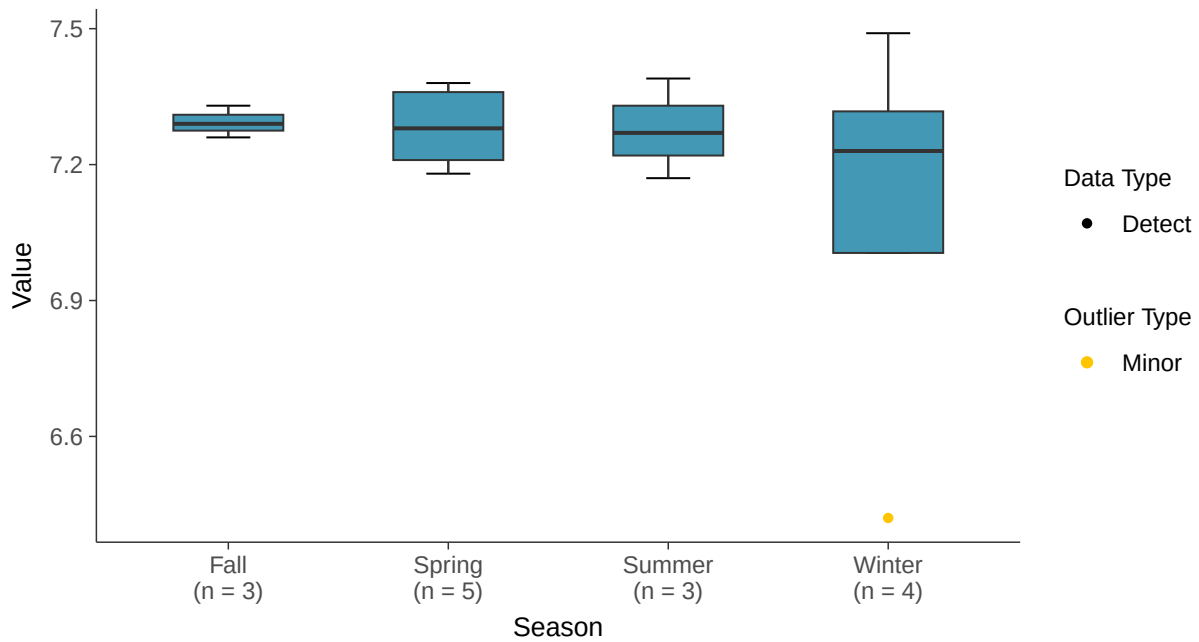
Boxplot

pH (field), MW-06 (su)



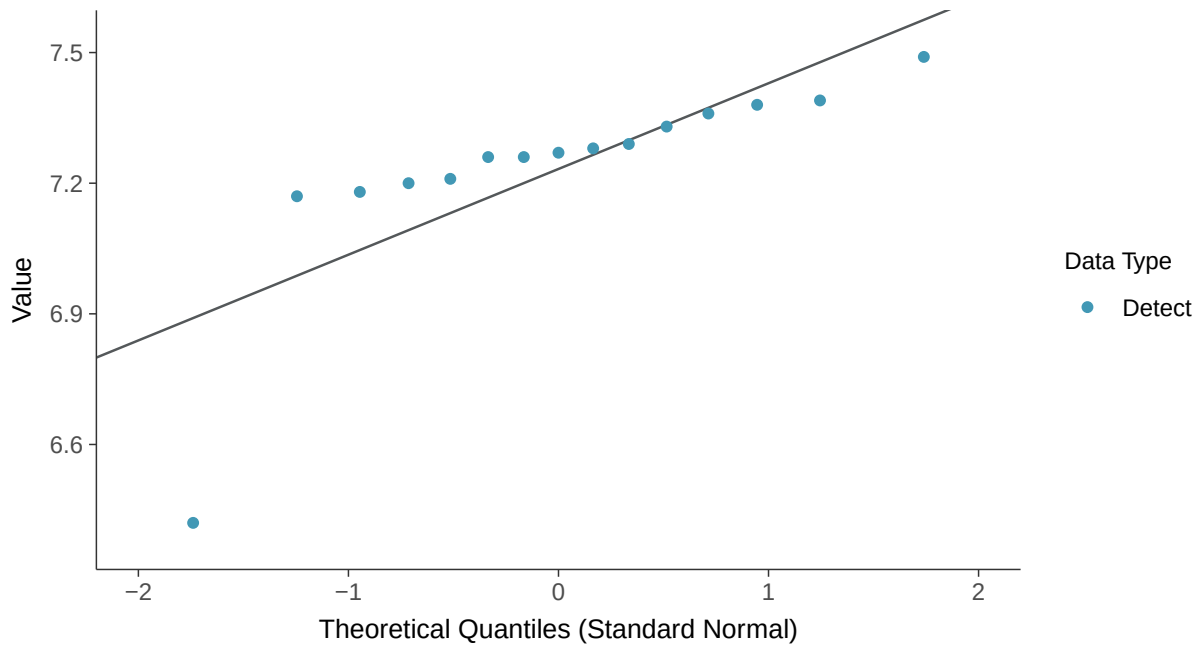
Boxplot by Season

pH (field), MW-06 (su)



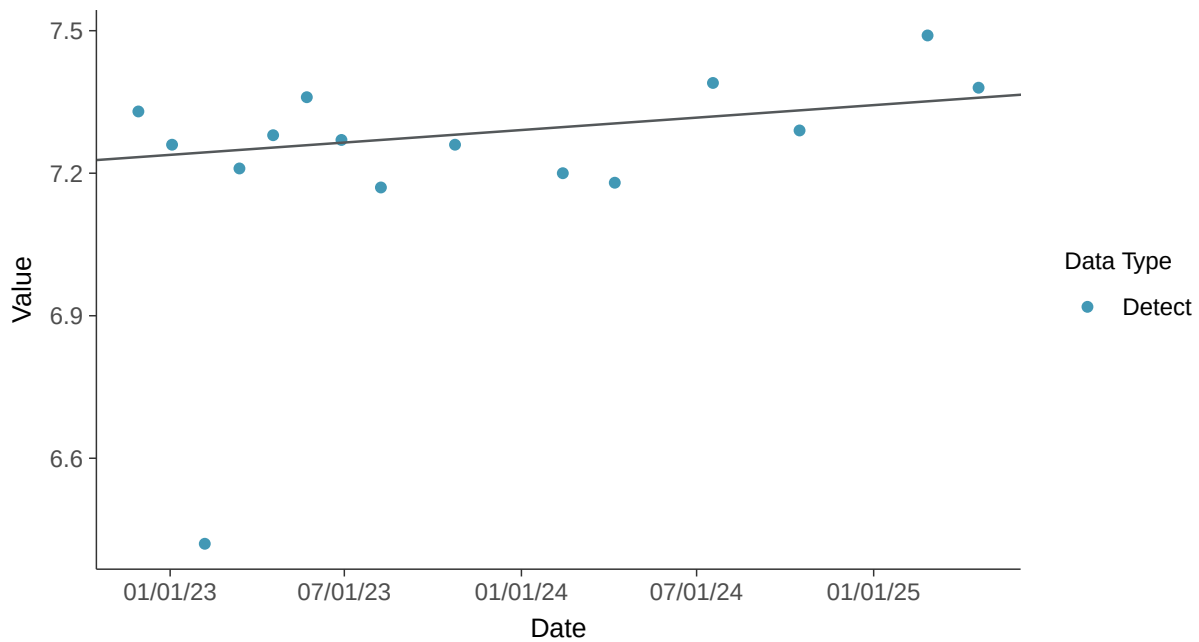
Normal Q-Q plot

pH (field), MW-06 (su)



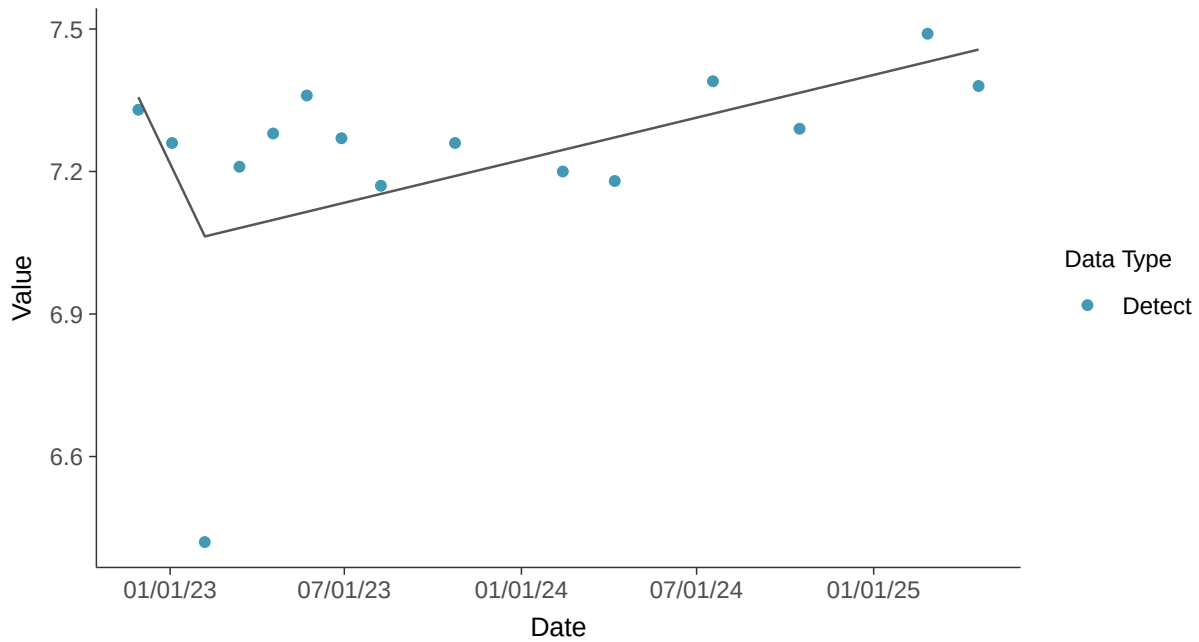
Trend Regression: Mann-Kendall/Theil-Sen Estimate

pH (field), MW-06 (su)



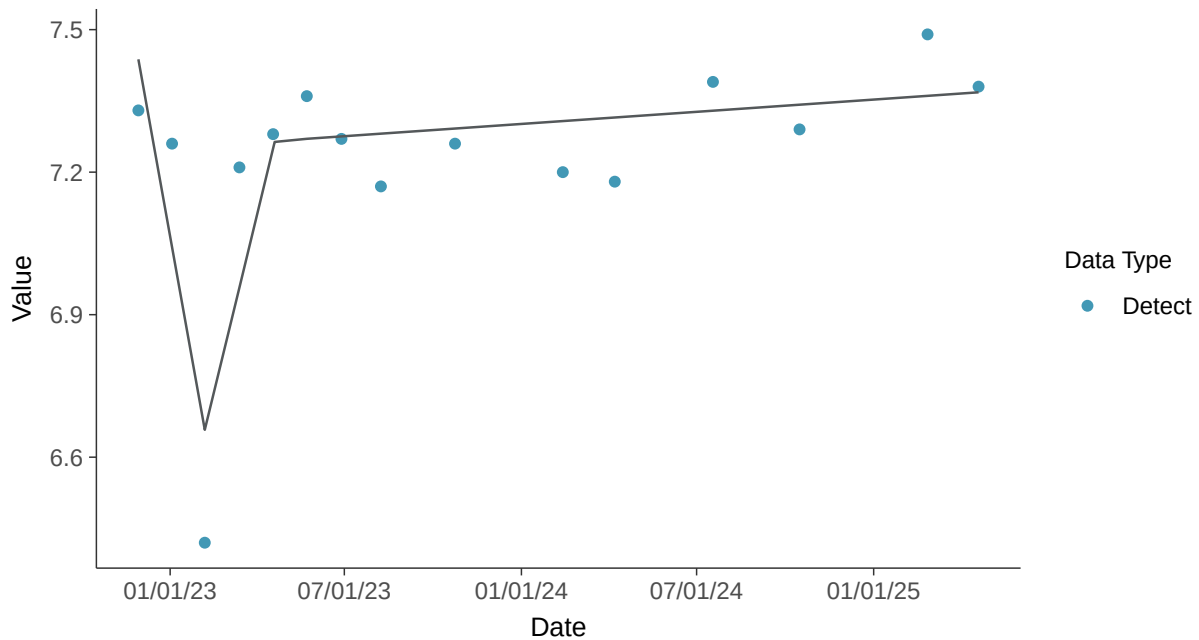
Trend Regression: Piecewise Linear-Linear

pH (field), MW-06 (su)



Trend Regression: Piecewise Linear-Linear-Linear

pH (field), MW-06 (su)

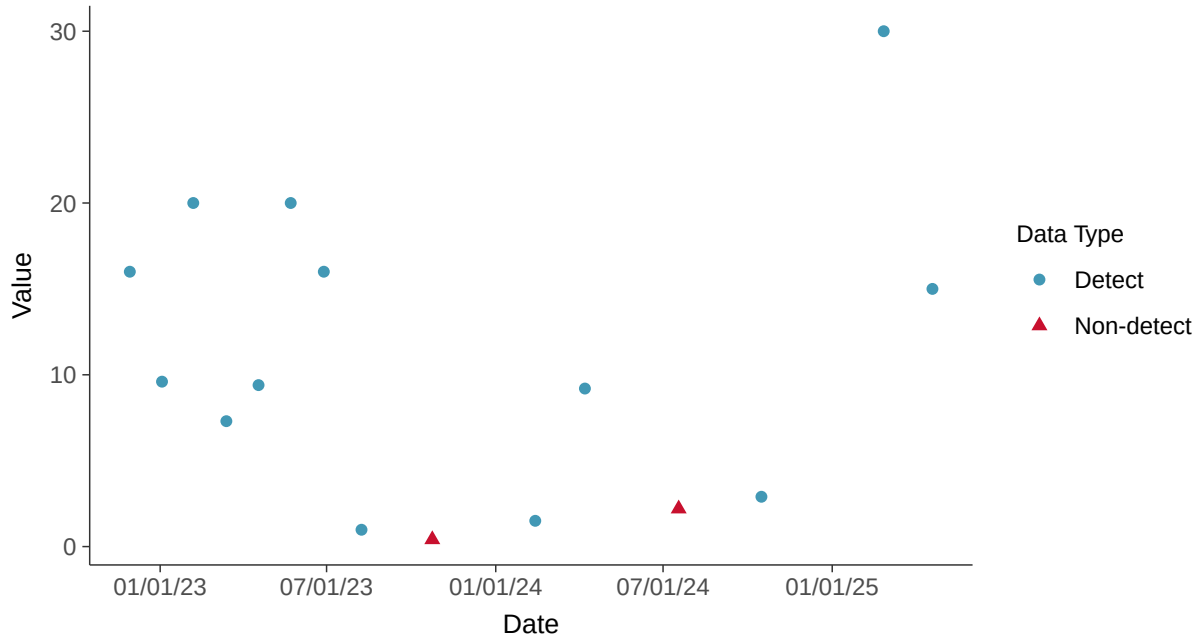


Appendix III: Sulfate (as SO₄), MW-06

ID: 16_1_3_124

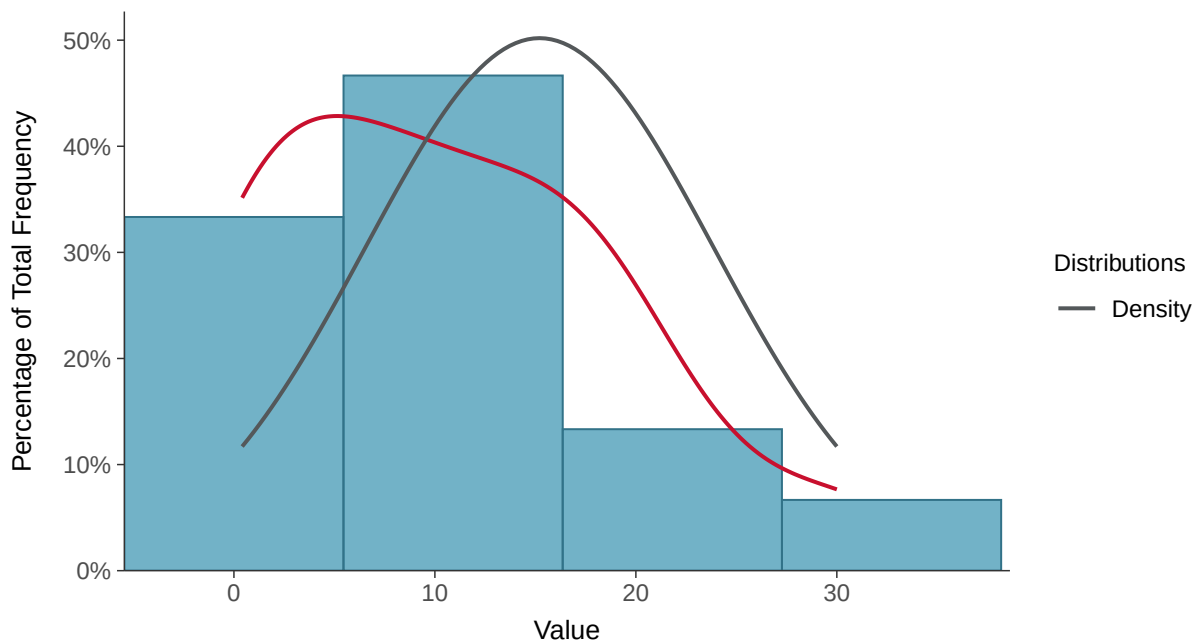
Scatter Plot

Sulfate (as SO₄), MW-06 (mg/L)



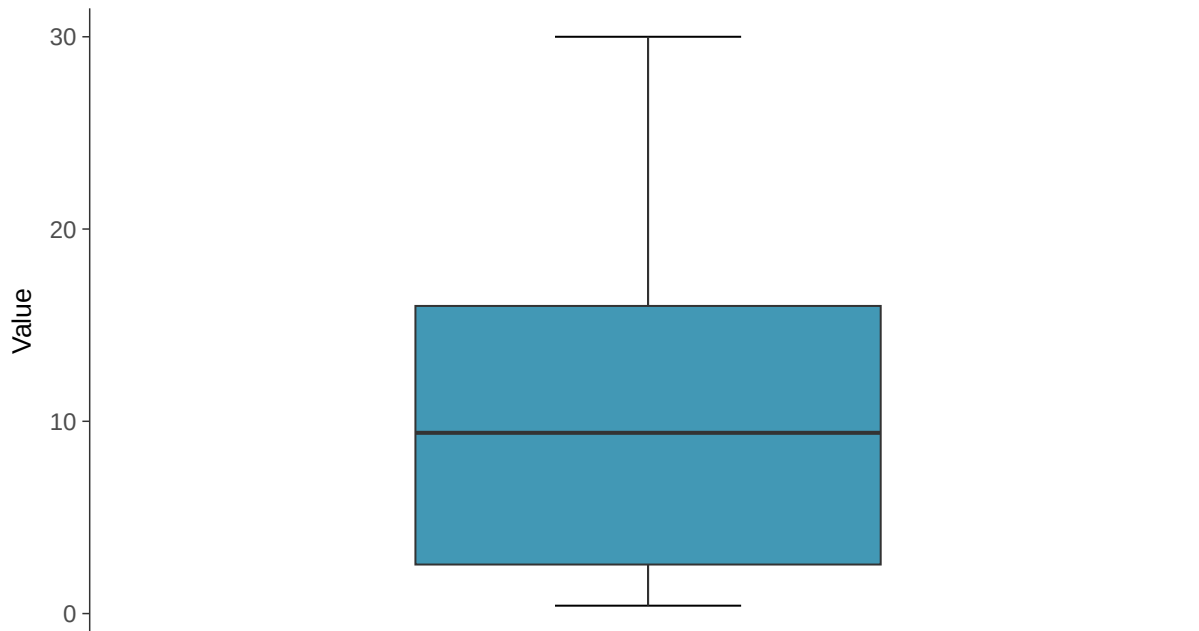
Histogram

Sulfate (as SO₄), MW-06 (mg/L)



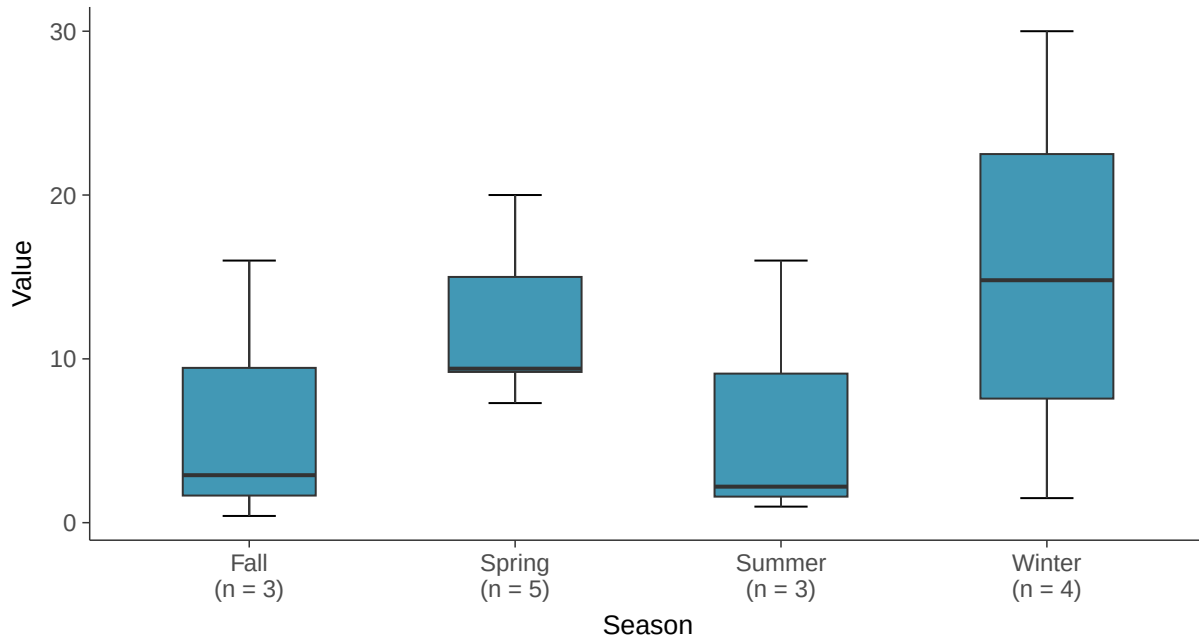
Boxplot

Sulfate (as SO₄), MW-06 (mg/L)



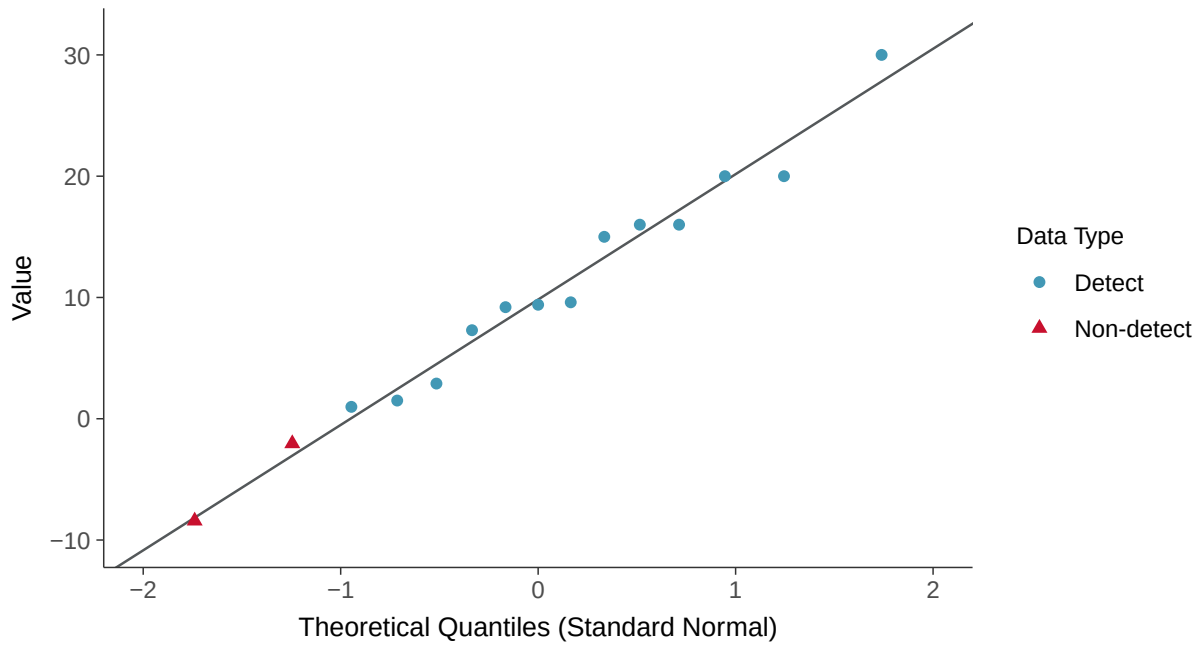
Boxplot by Season

Sulfate (as SO₄), MW-06 (mg/L)



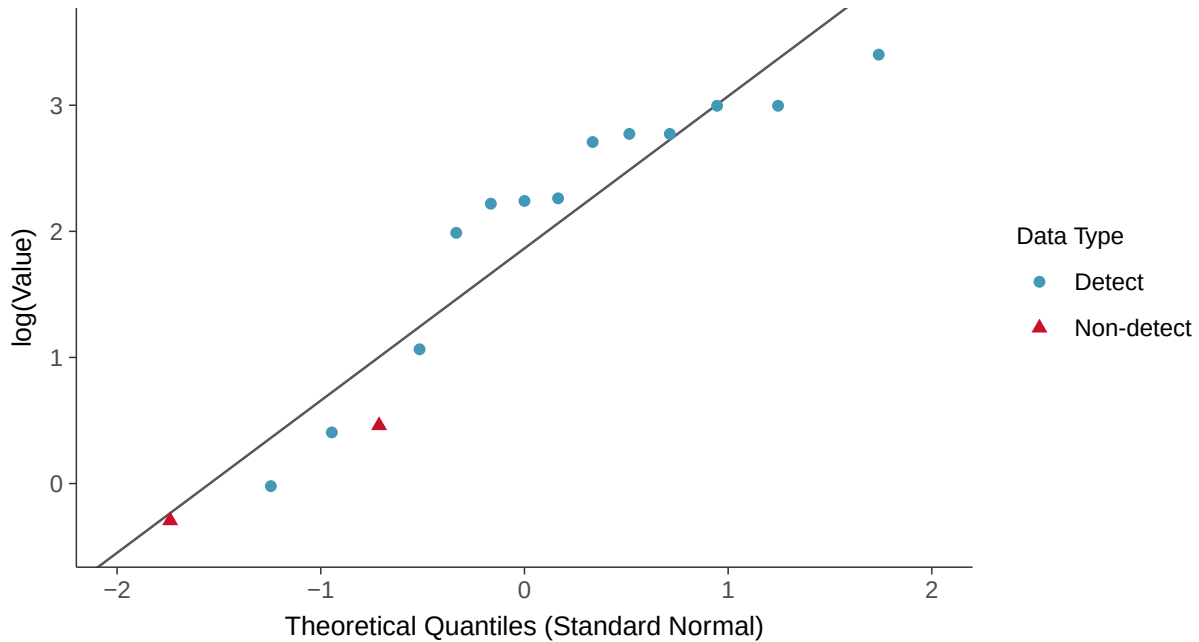
Normal Q-Q plot using ROS Imputed Estimates

Sulfate (as SO₄), MW-06 (mg/L)



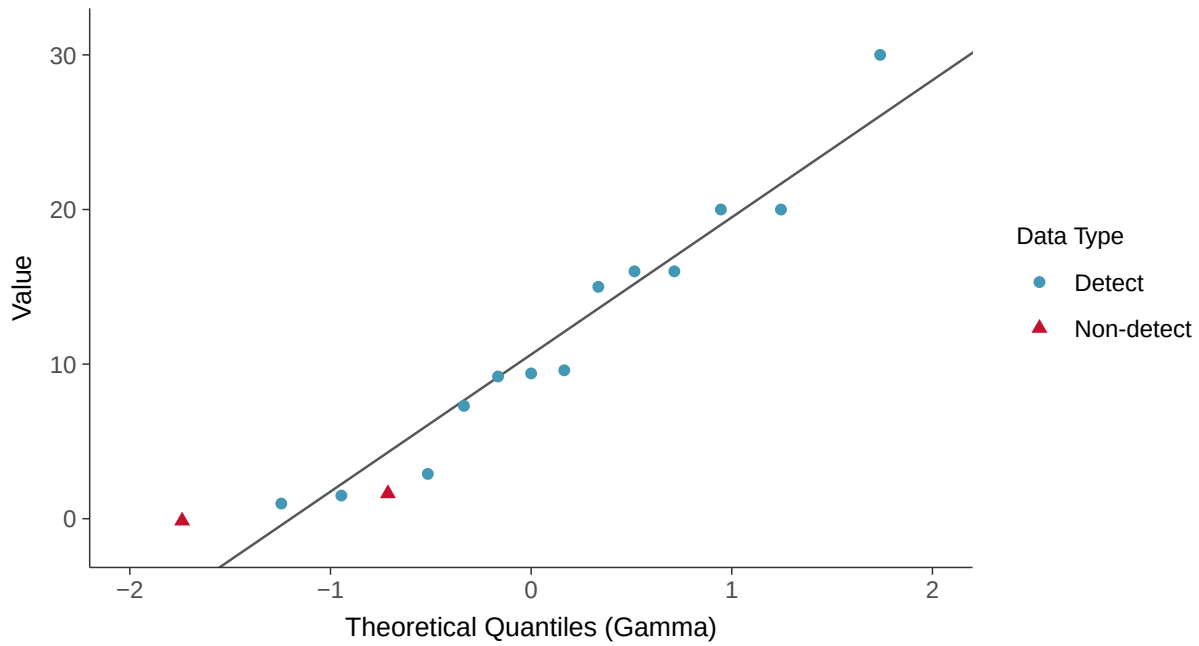
Lognormal Q-Q plot using ROS Imputed Estimates

Sulfate (as SO₄), MW-06 (mg/L)



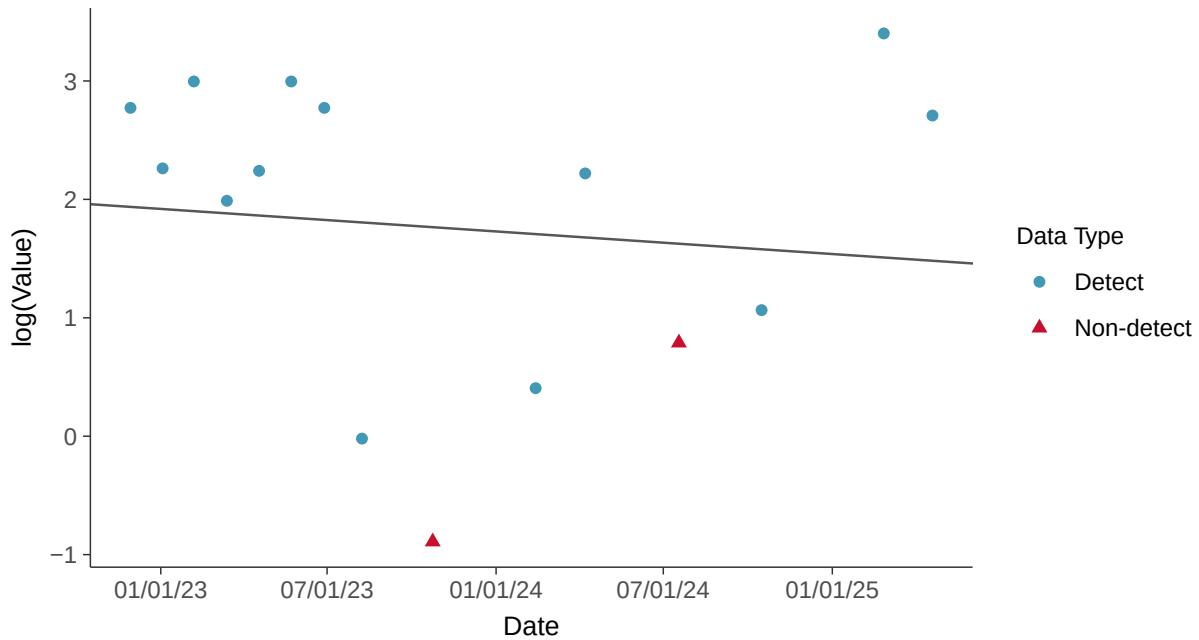
Gamma Q-Q plot using ROS Imputed Estimates

Sulfate (as SO₄), MW-06 (mg/L)



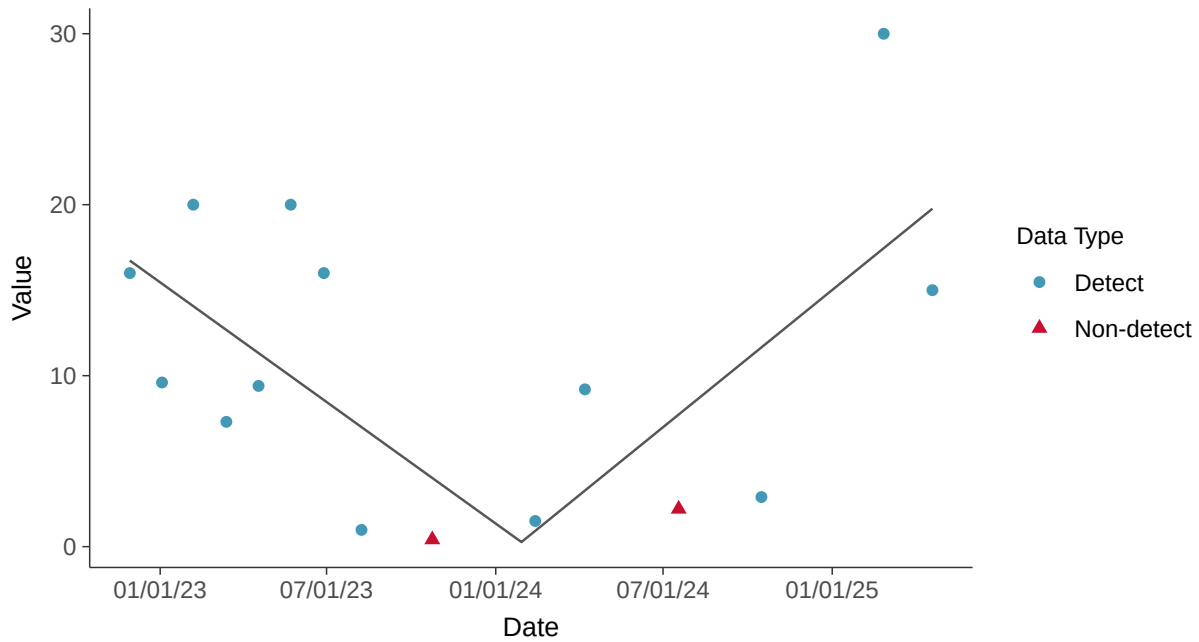
Trend Regression: Lognormal MLE

Sulfate (as SO₄), MW-06 (mg/L)



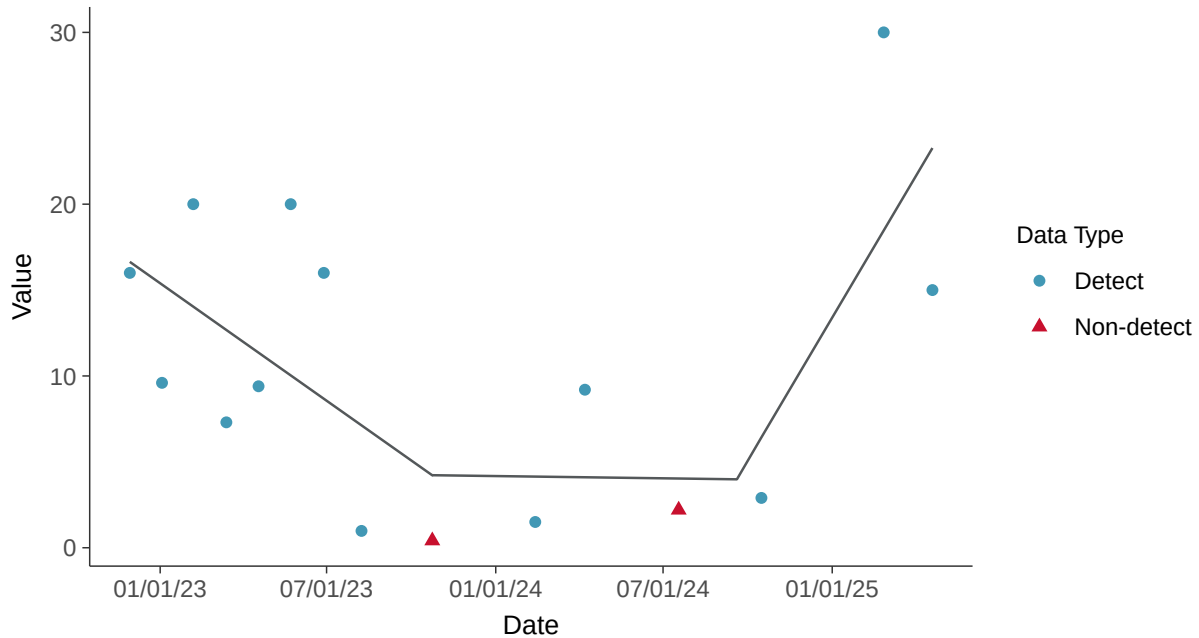
Trend Regression: Piecewise Linear-Linear

Sulfate (as SO₄), MW-06 (mg/L)



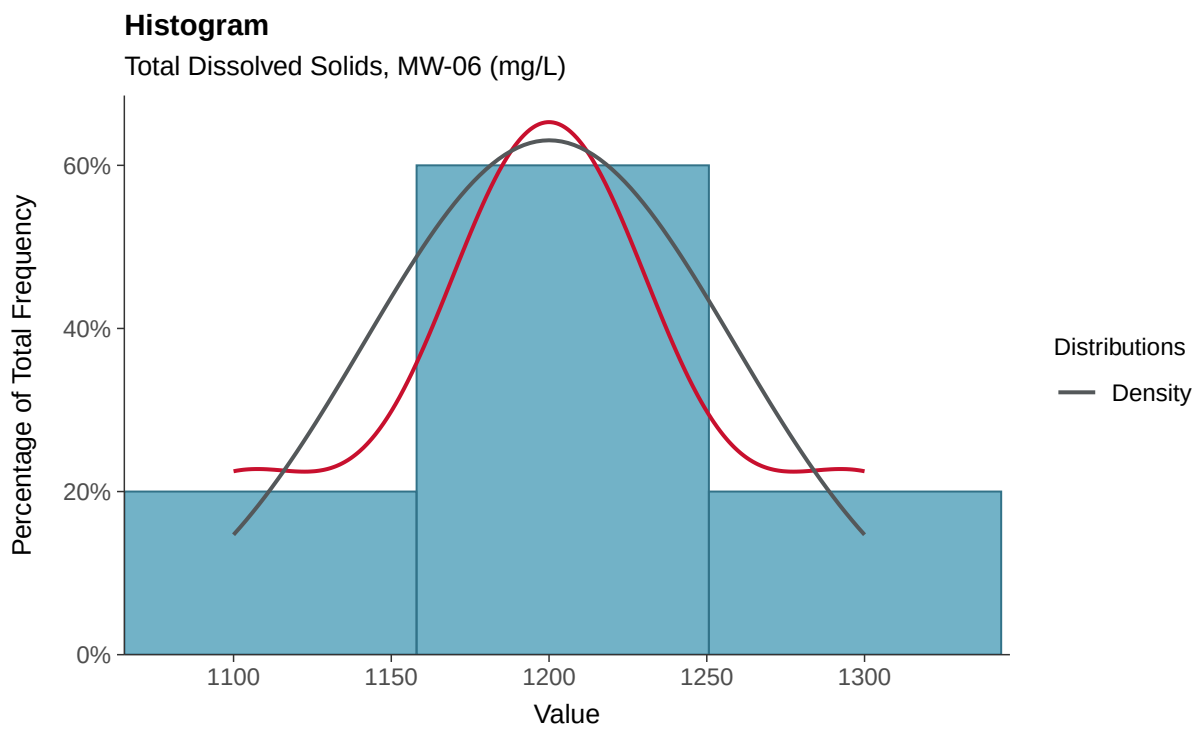
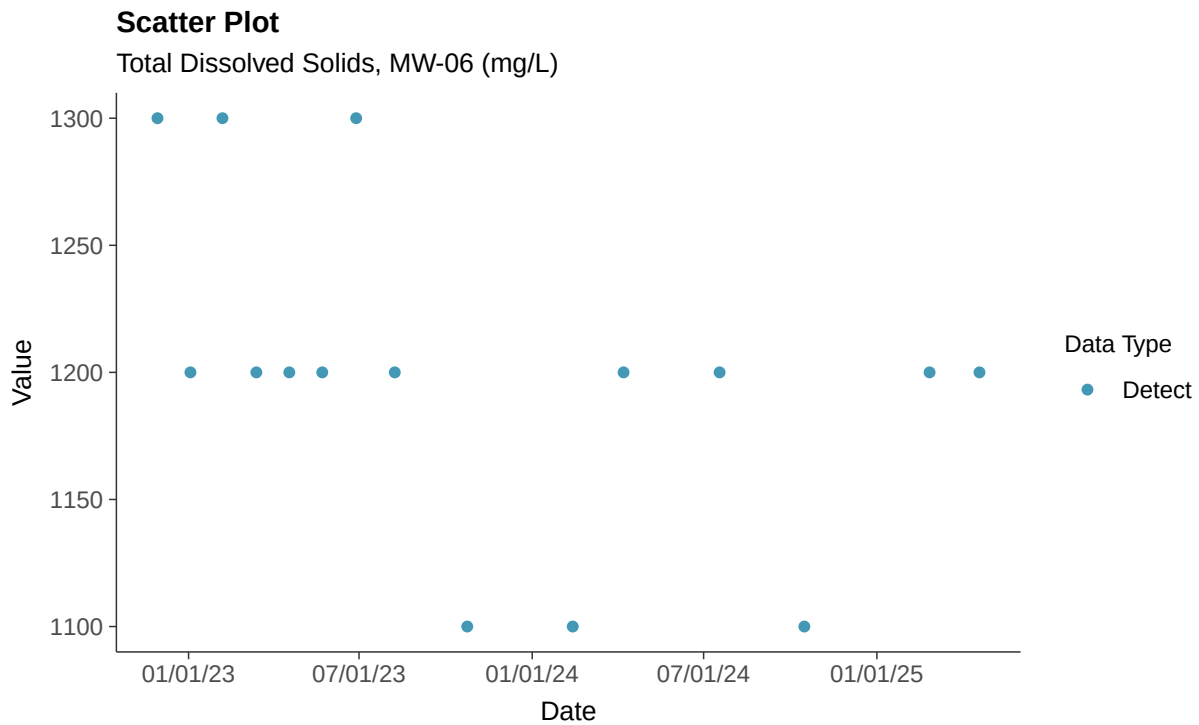
Trend Regression: Piecewise Linear-Linear-Linear

Sulfate (as SO₄), MW-06 (mg/L)



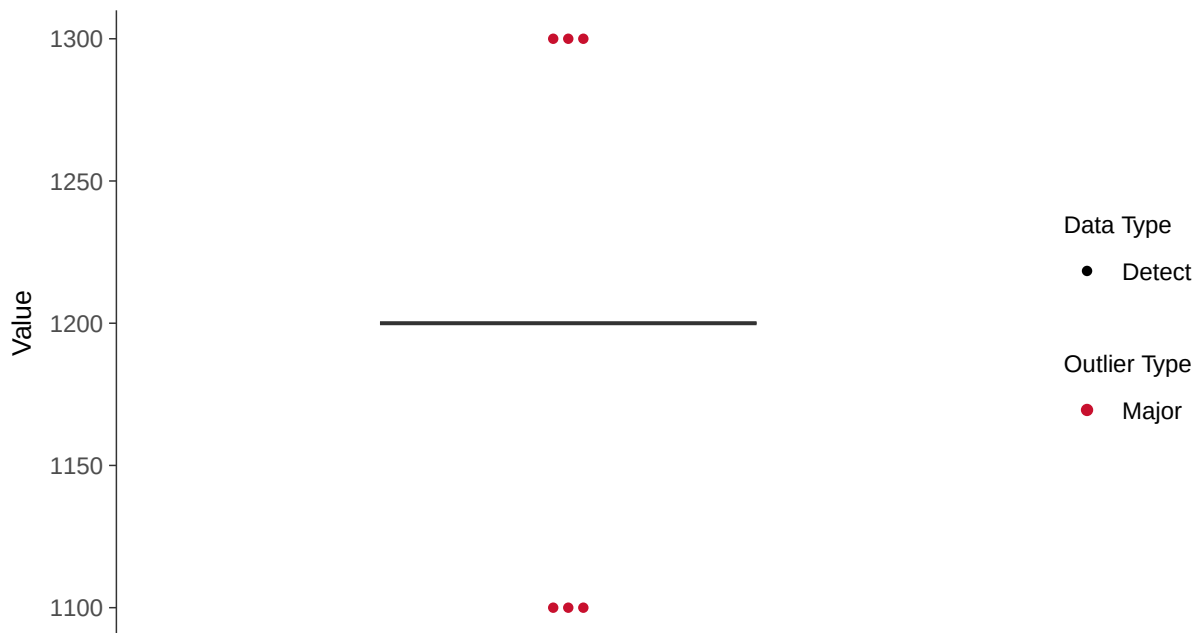
Appendix III: Total Dissolved Solids, MW-06

ID: 16_1_3_126



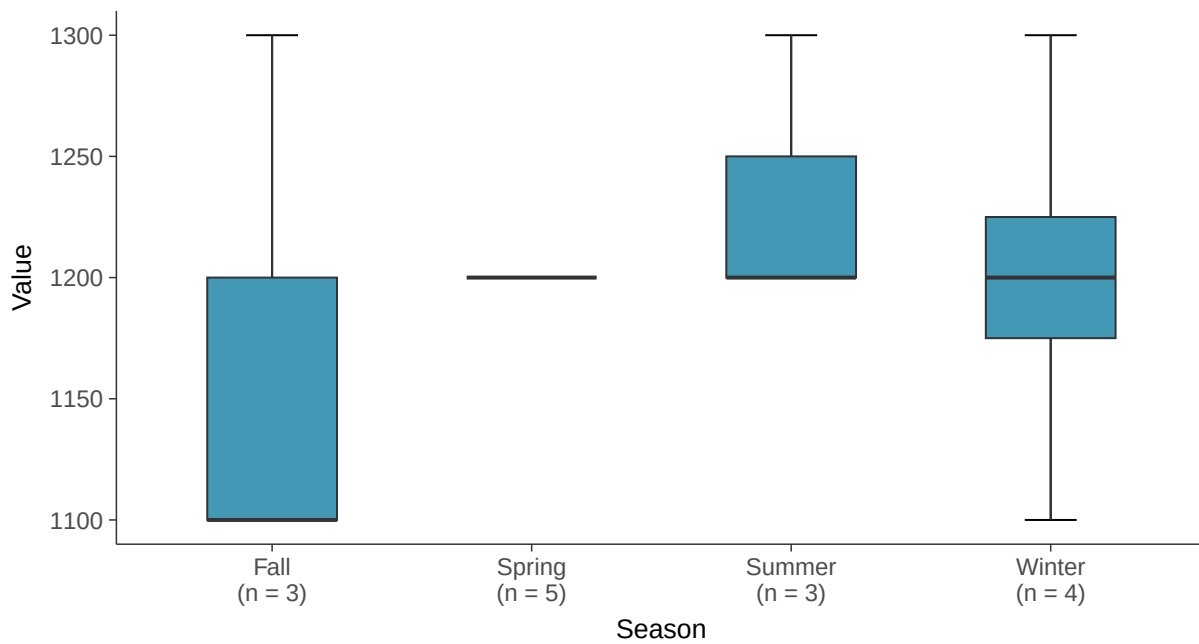
Boxplot

Total Dissolved Solids, MW-06 (mg/L)



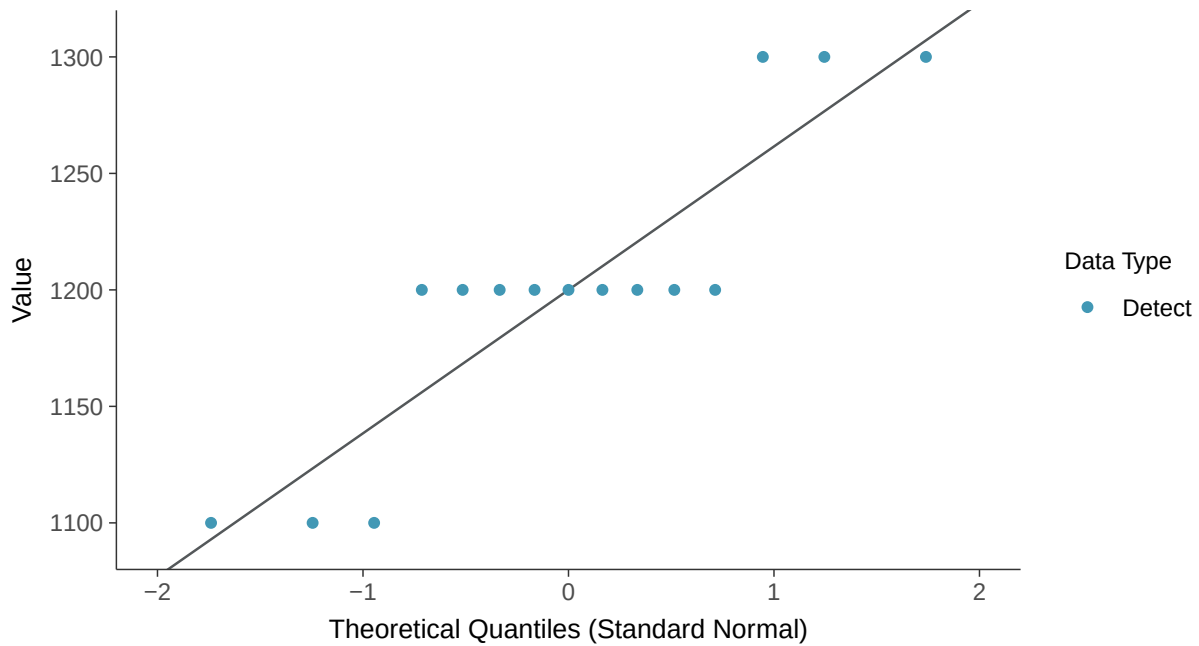
Boxplot by Season

Total Dissolved Solids, MW-06 (mg/L)



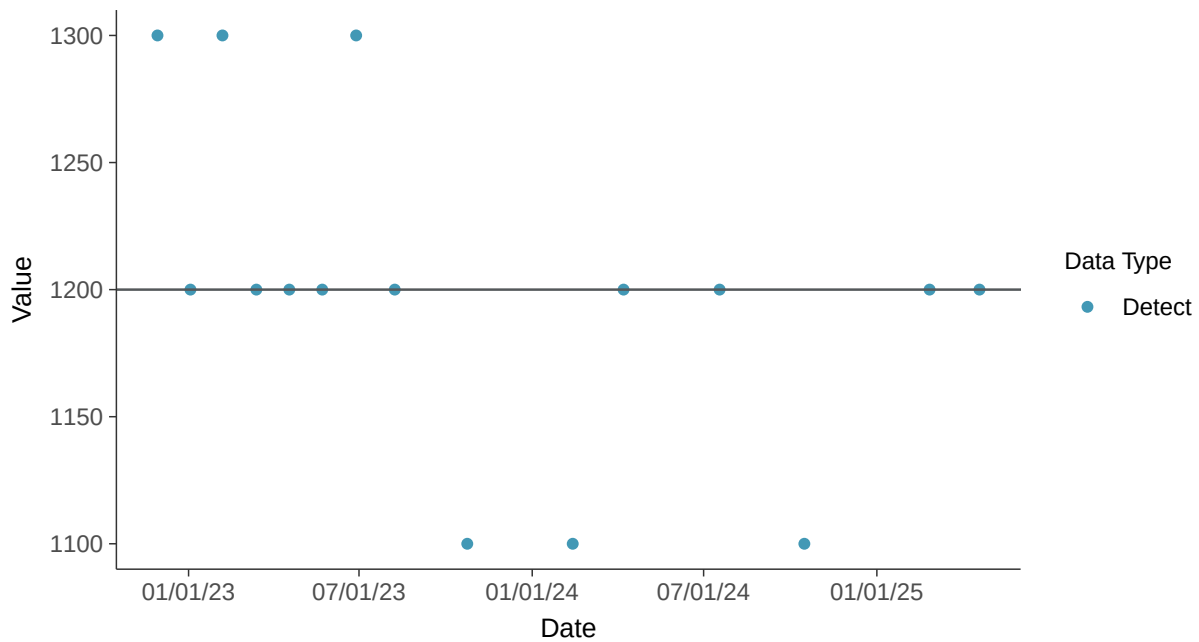
Normal Q-Q plot

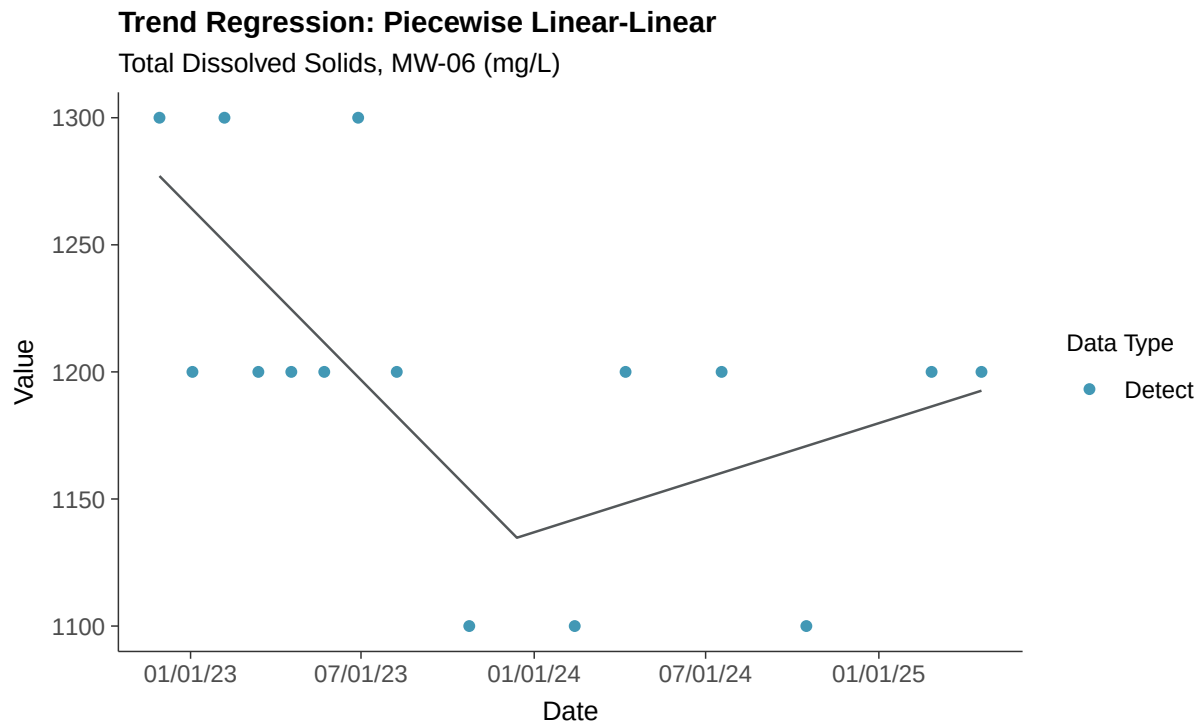
Total Dissolved Solids, MW-06 (mg/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

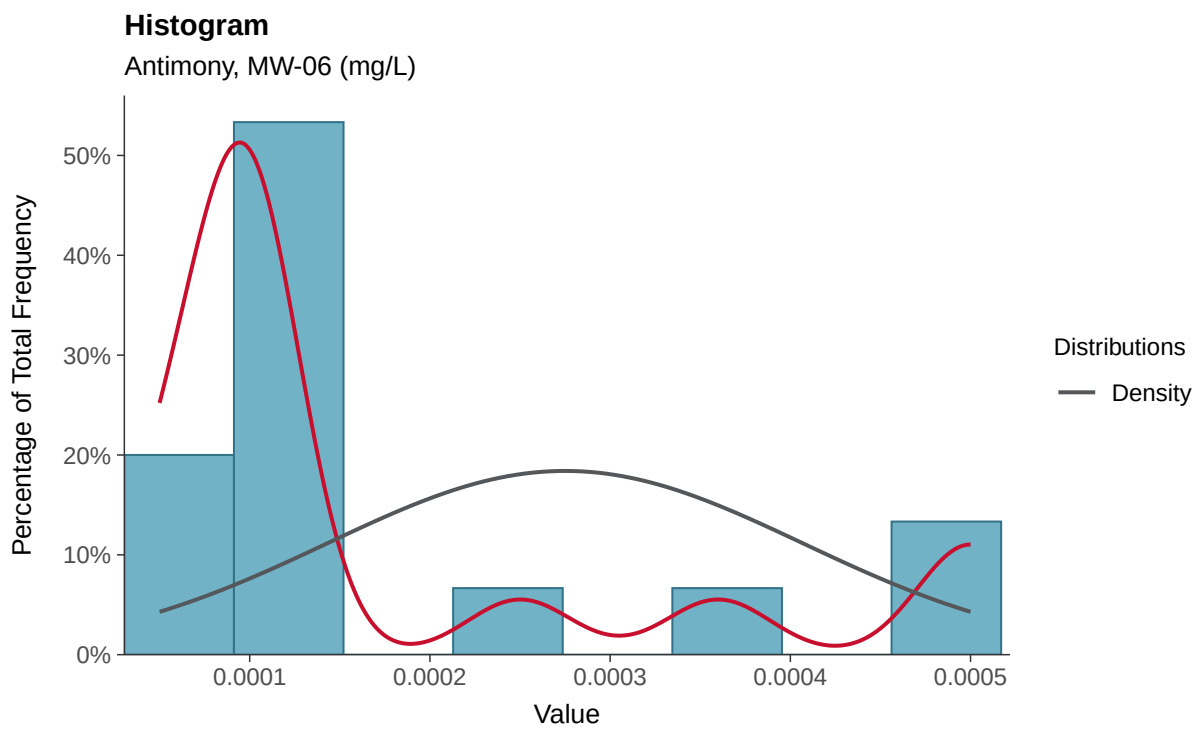
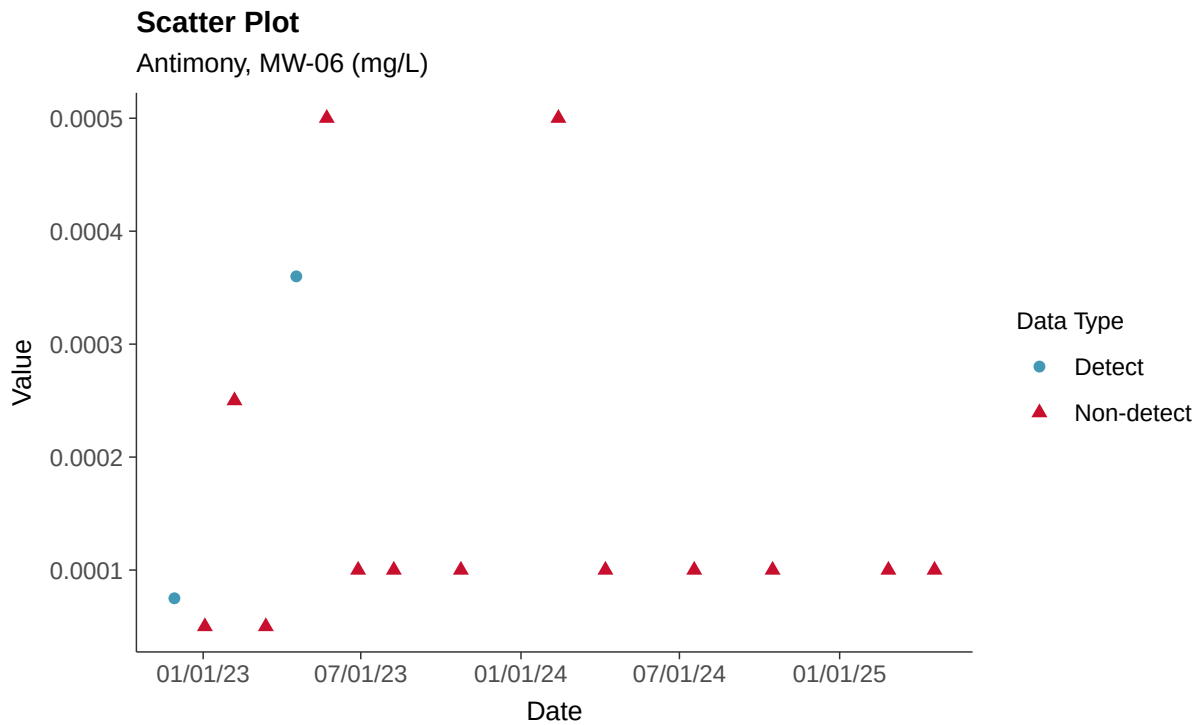
Total Dissolved Solids, MW-06 (mg/L)





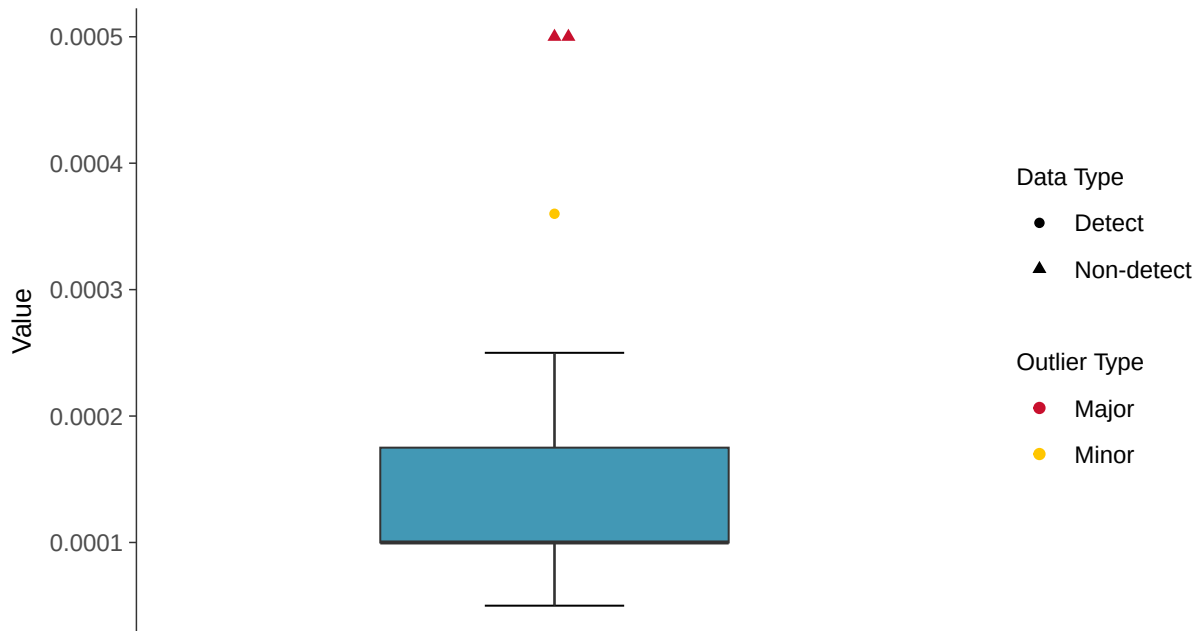
Appendix IV: Antimony, MW-06

ID: 16_1_4_101



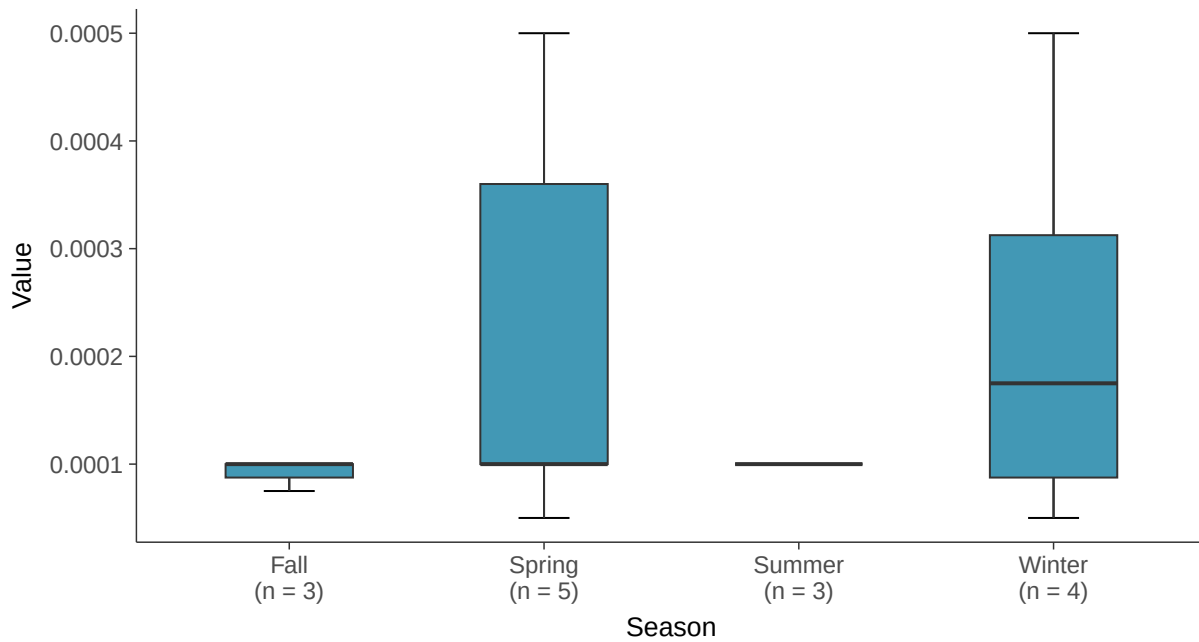
Boxplot

Antimony, MW-06 (mg/L)



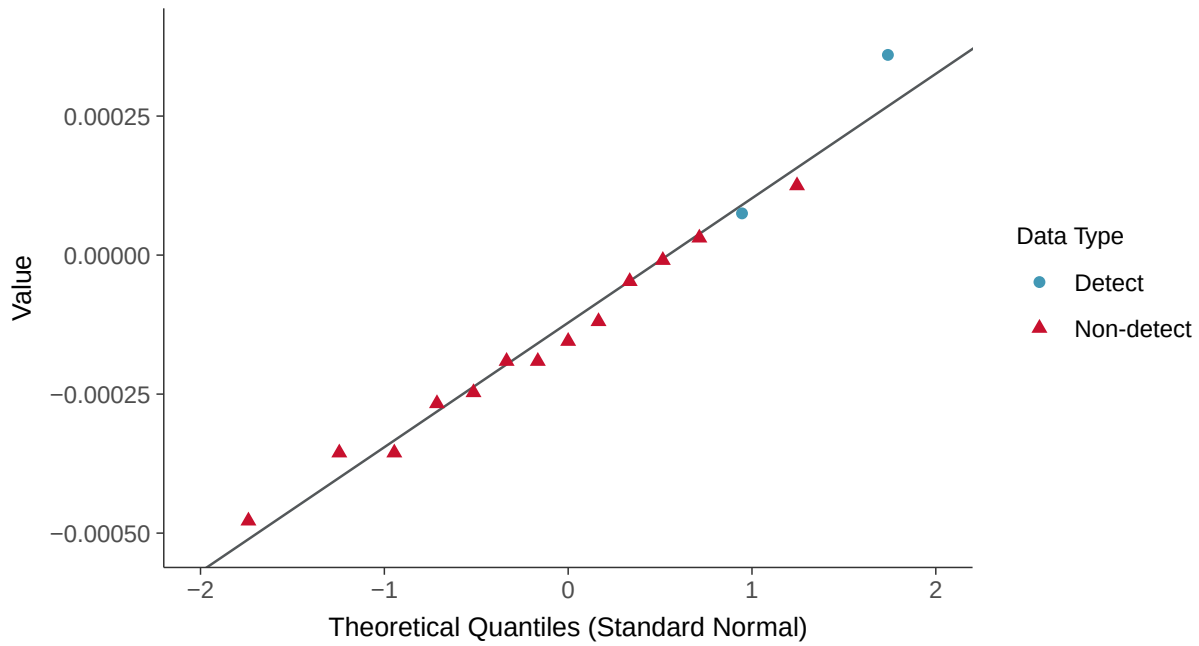
Boxplot by Season

Antimony, MW-06 (mg/L)



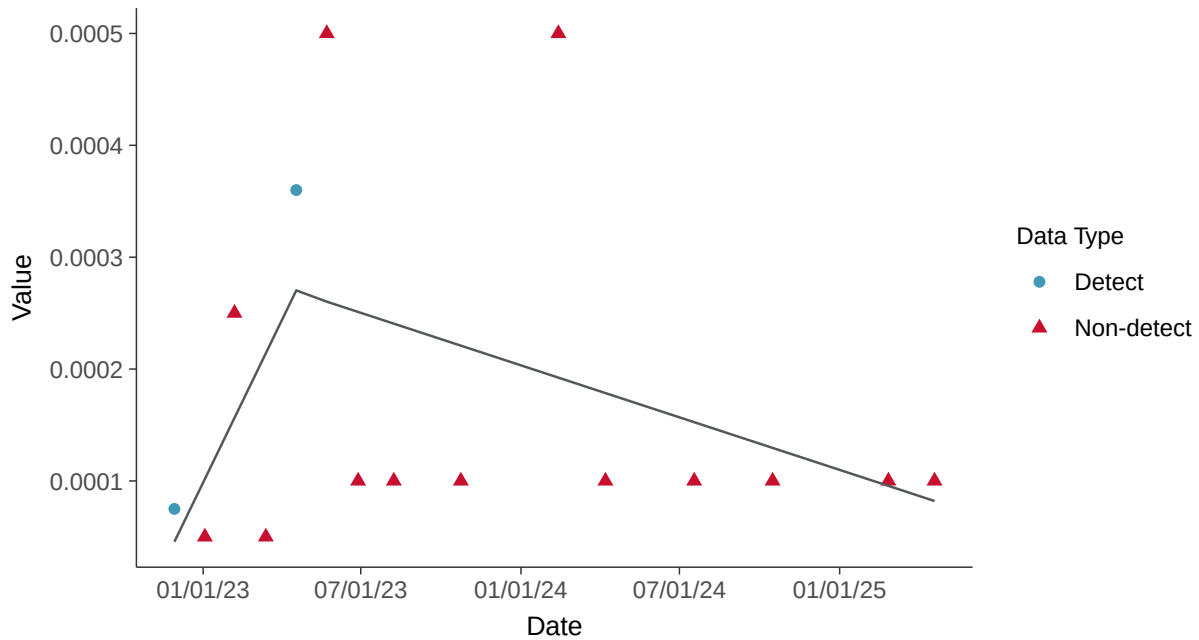
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-06 (mg/L)



Trend Regression: Piecewise Linear-Linear

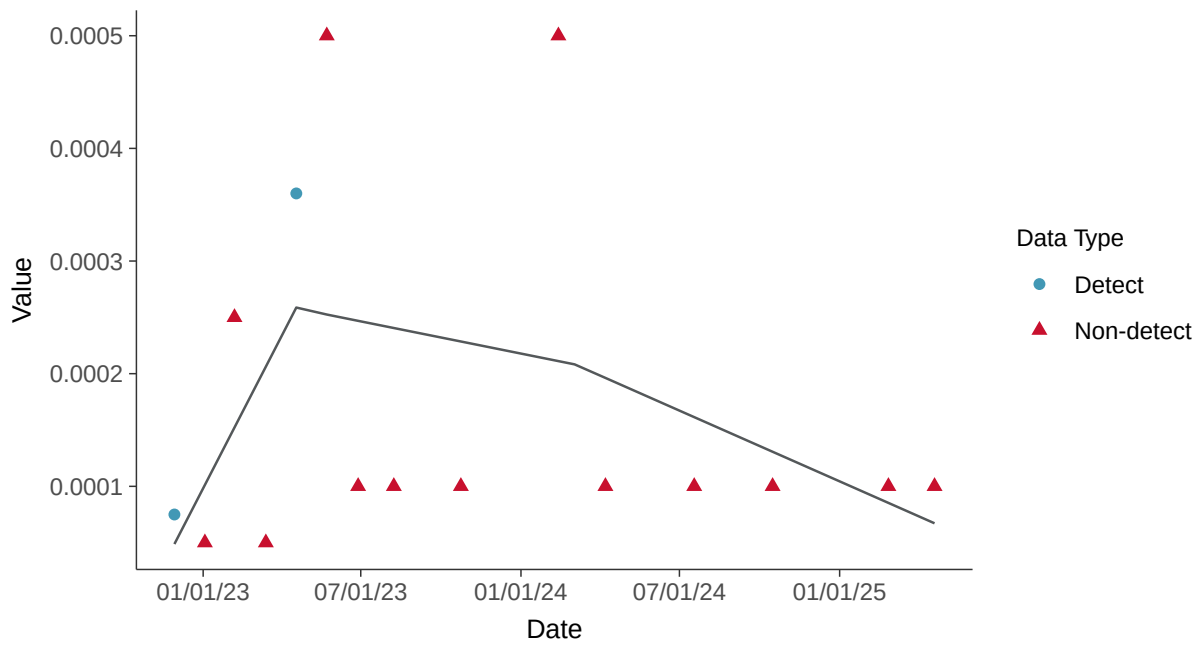
Antimony, MW-06 (mg/L)





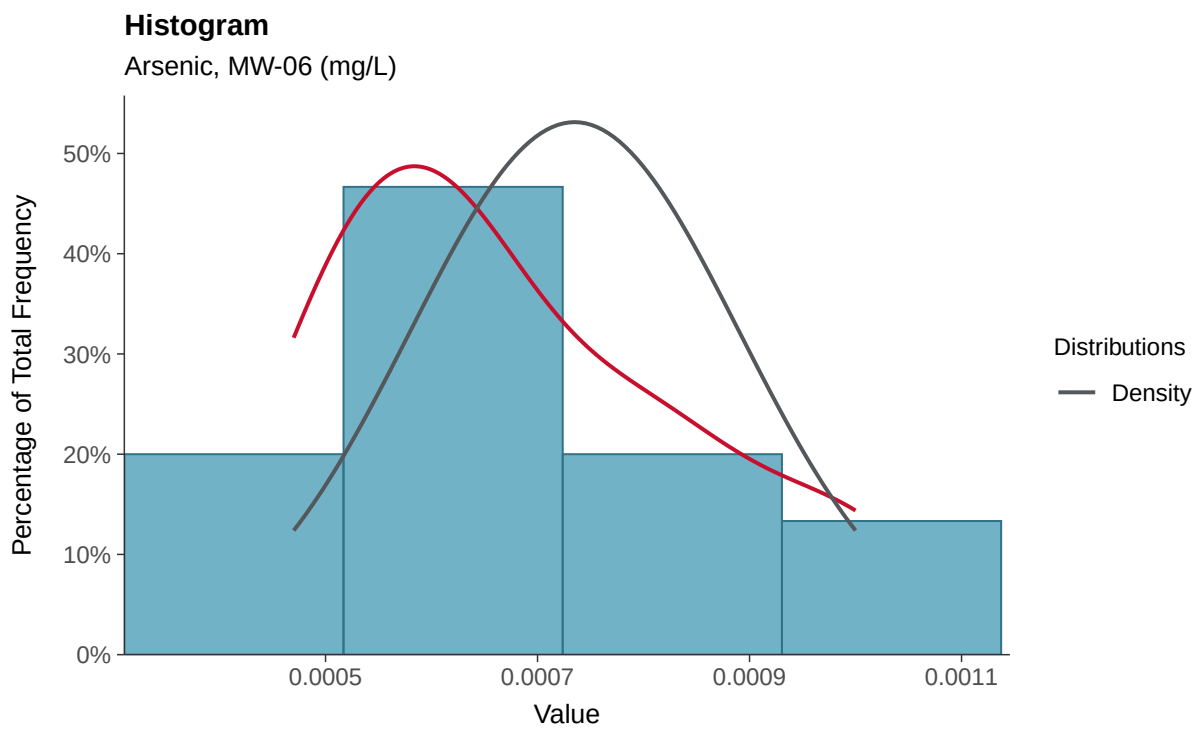
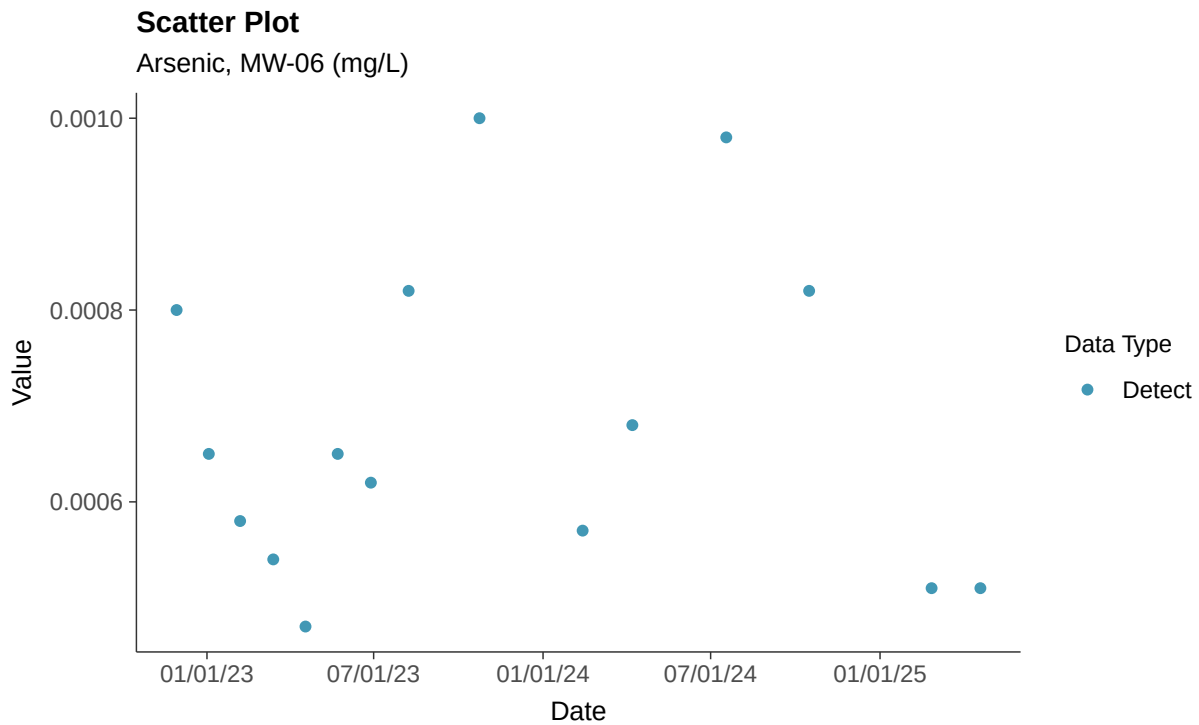
Trend Regression: Piecewise Linear-Linear-Linear

Antimony, MW-06 (mg/L)



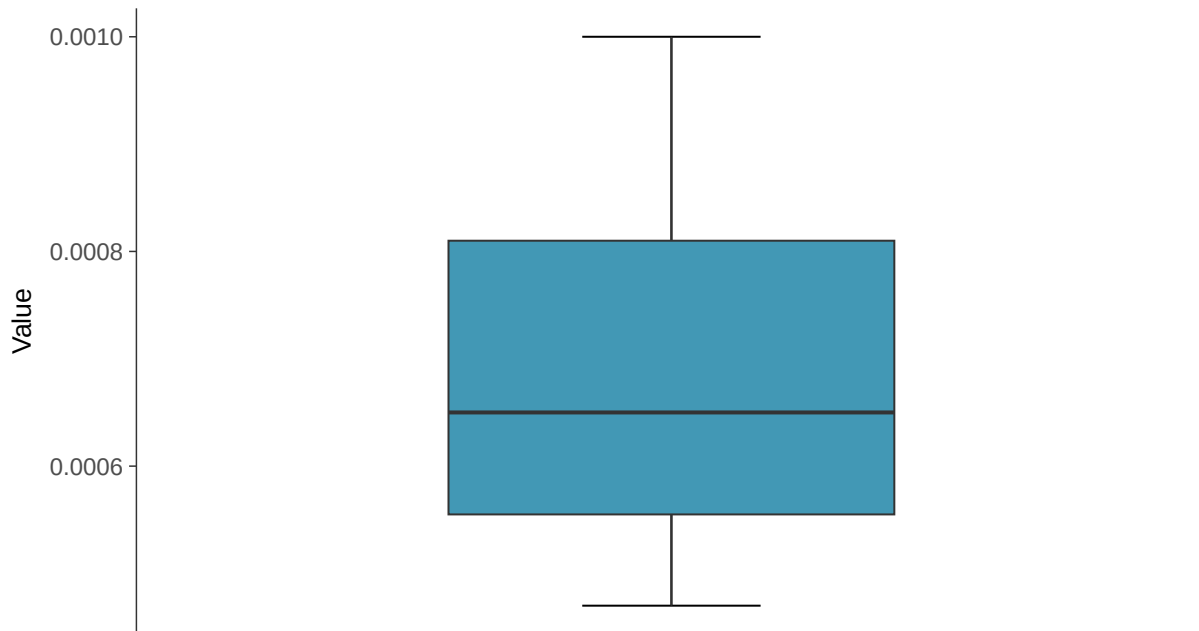
Appendix IV: Arsenic, MW-06

ID: 16_1_4_102



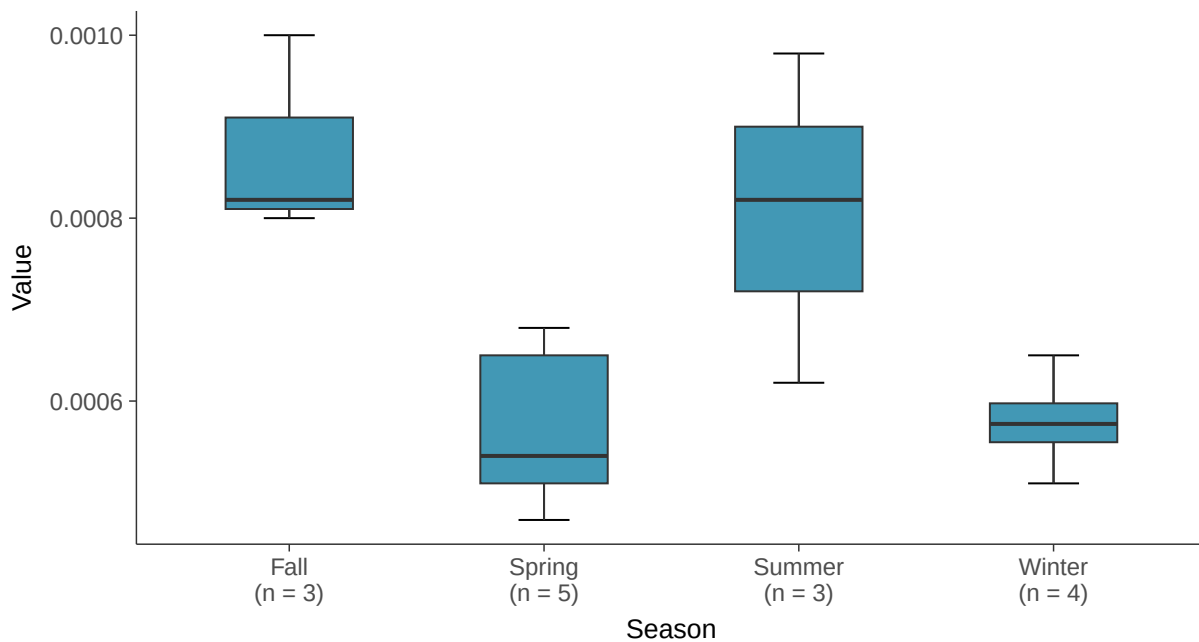
Boxplot

Arsenic, MW-06 (mg/L)



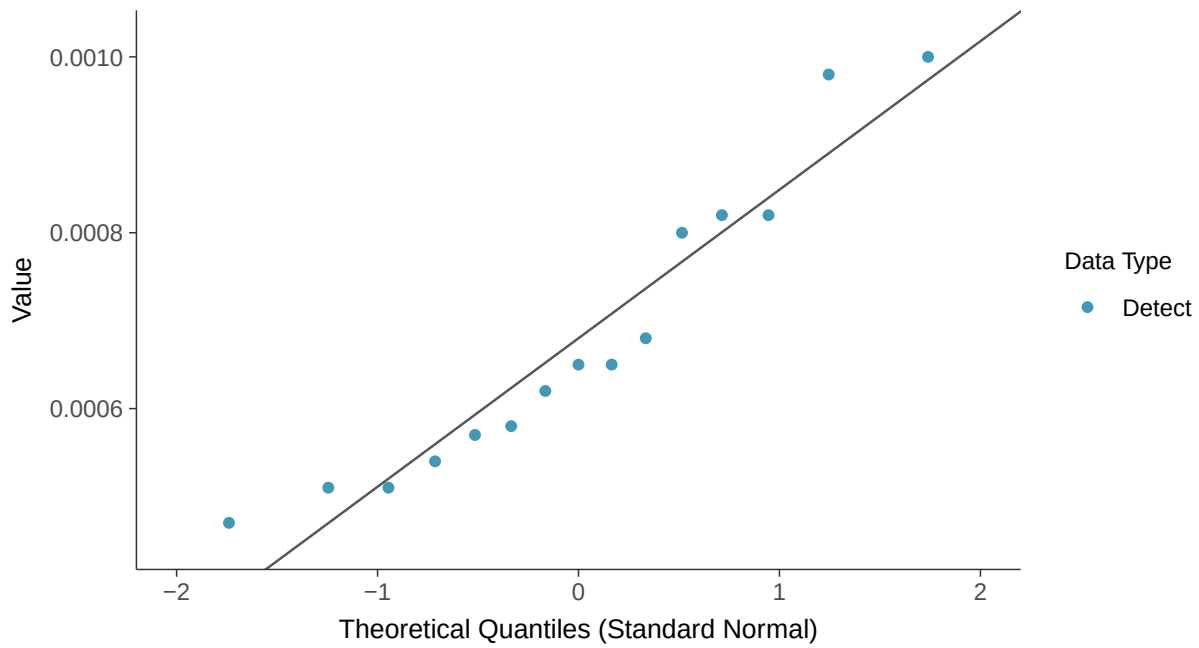
Boxplot by Season

Arsenic, MW-06 (mg/L)



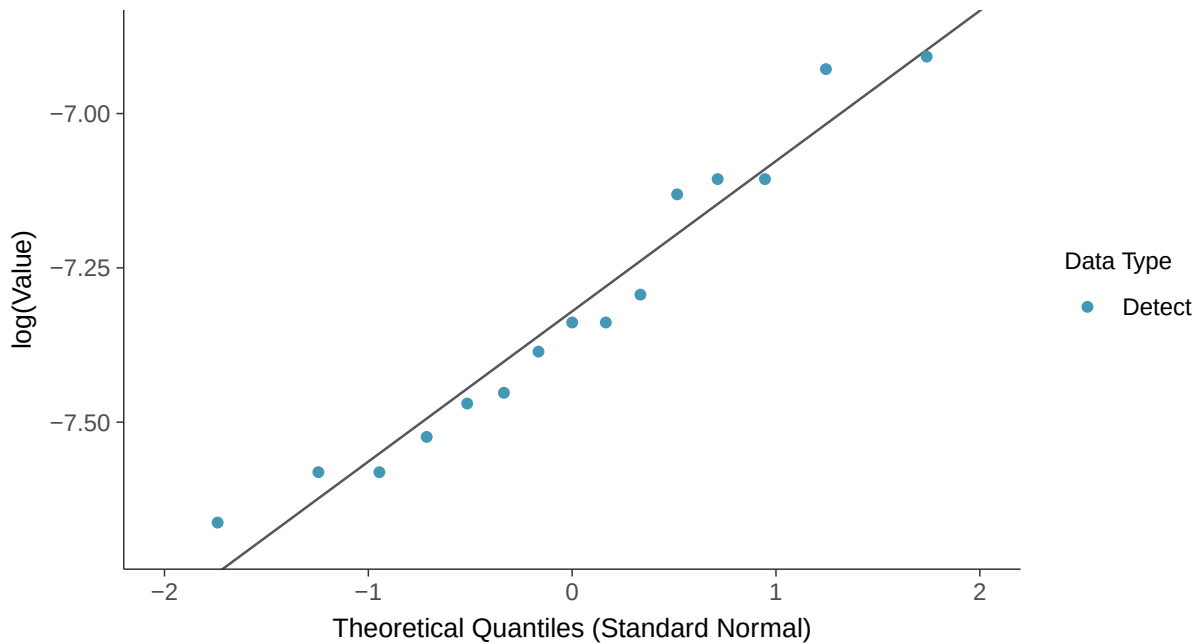
Normal Q-Q plot

Arsenic, MW-06 (mg/L)



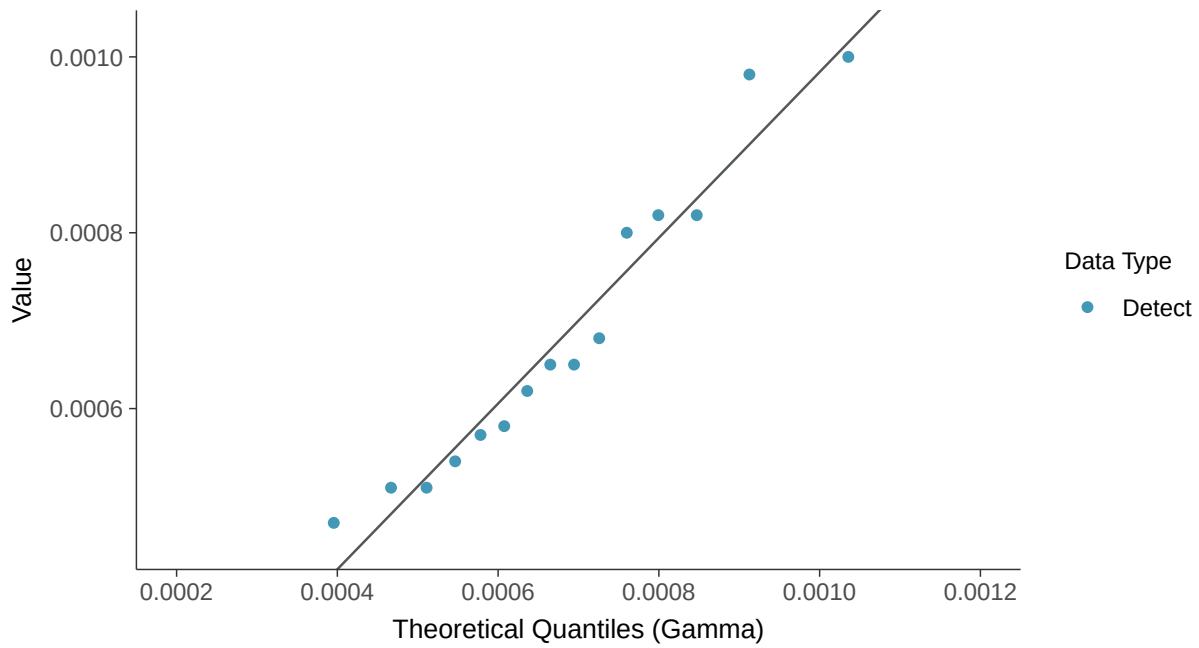
Lognormal Q-Q plot

Arsenic, MW-06 (mg/L)



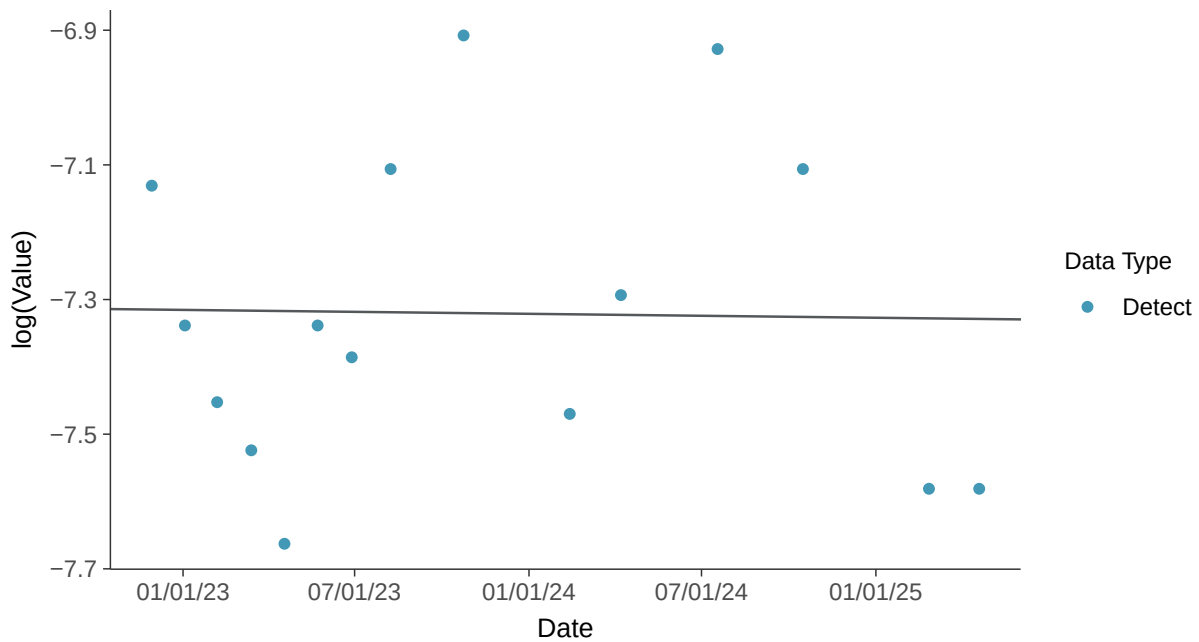
Gamma Q-Q plot

Arsenic, MW-06 (mg/L)



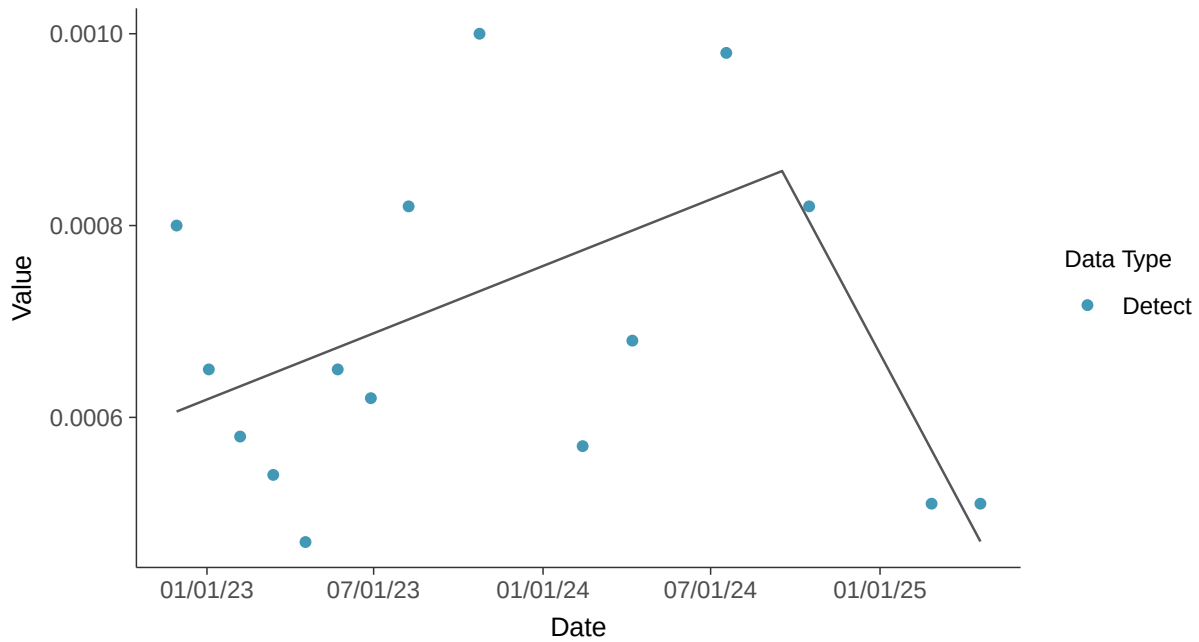
Trend Regression: Lognormal MLE

Arsenic, MW-06 (mg/L)



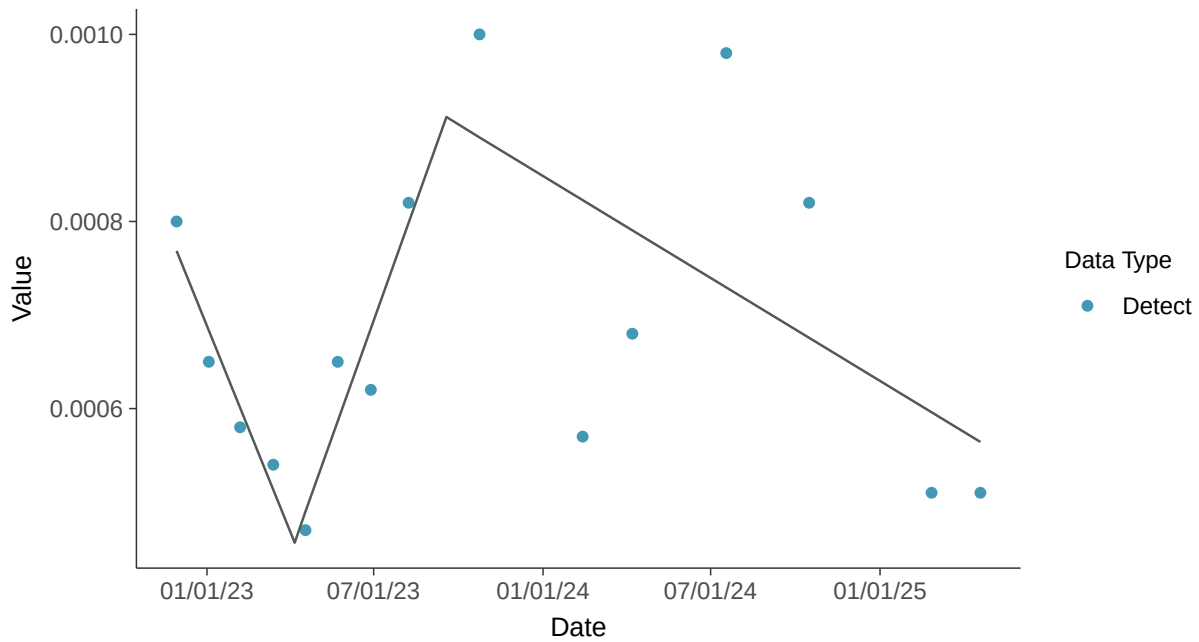
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-06 (mg/L)



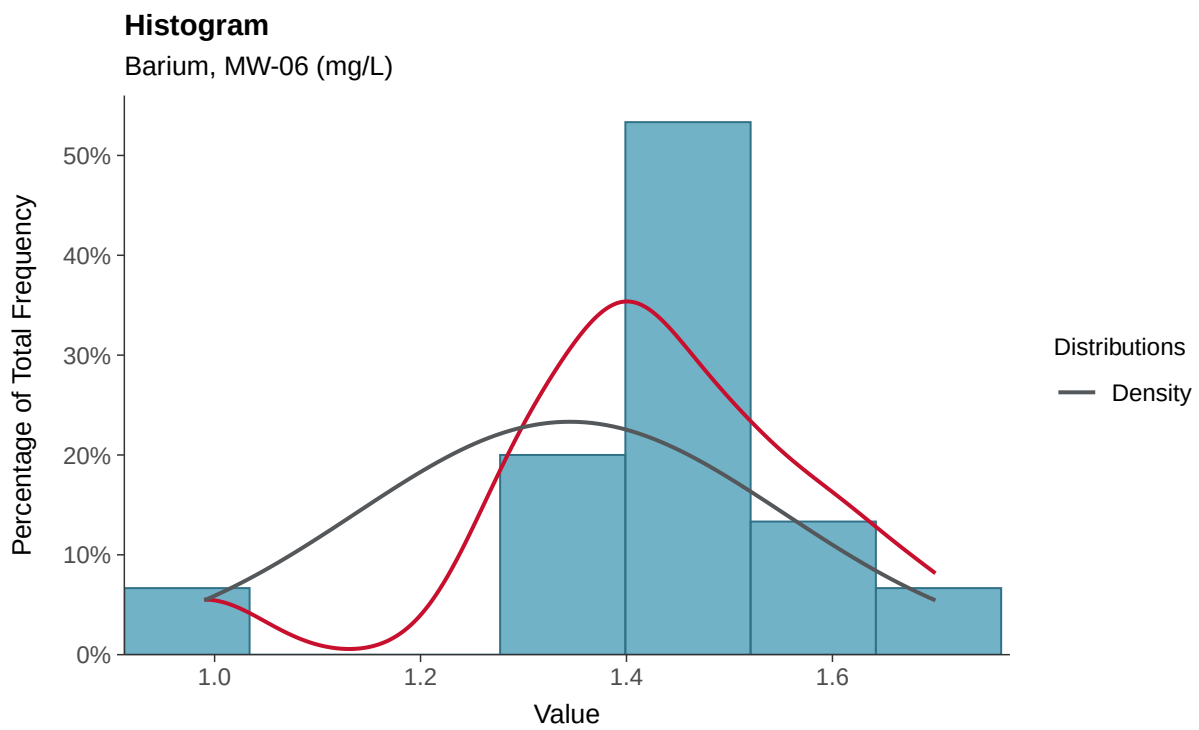
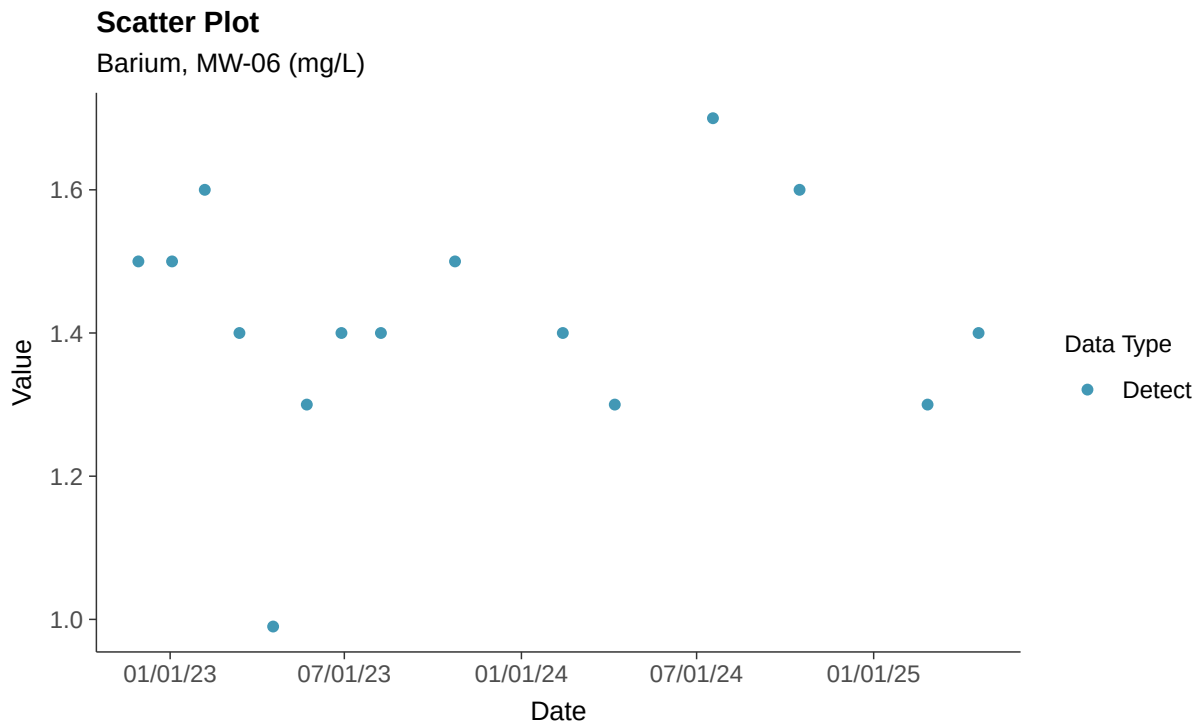
Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-06 (mg/L)



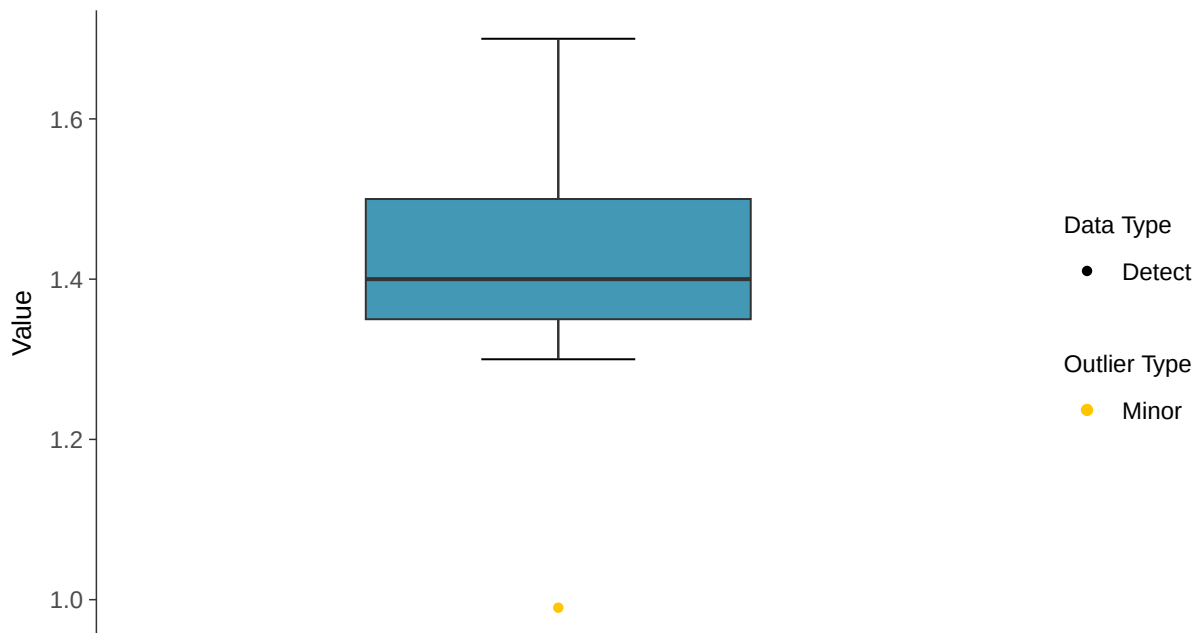
Appendix IV: Barium, MW-06

ID: 16_1_4_103



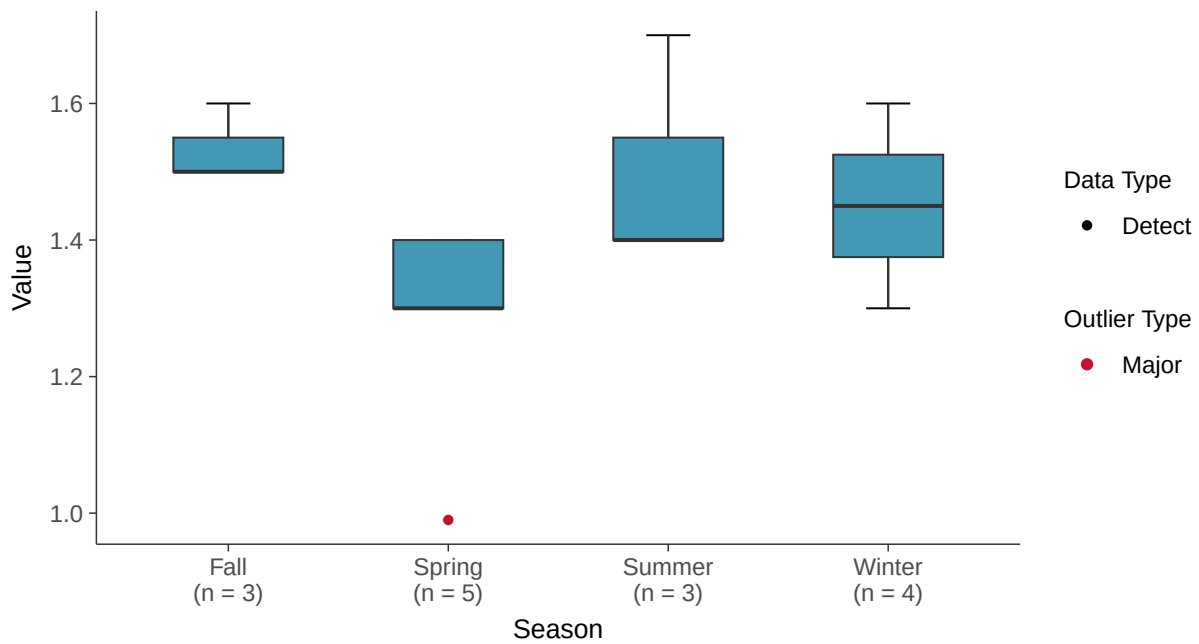
Boxplot

Barium, MW-06 (mg/L)

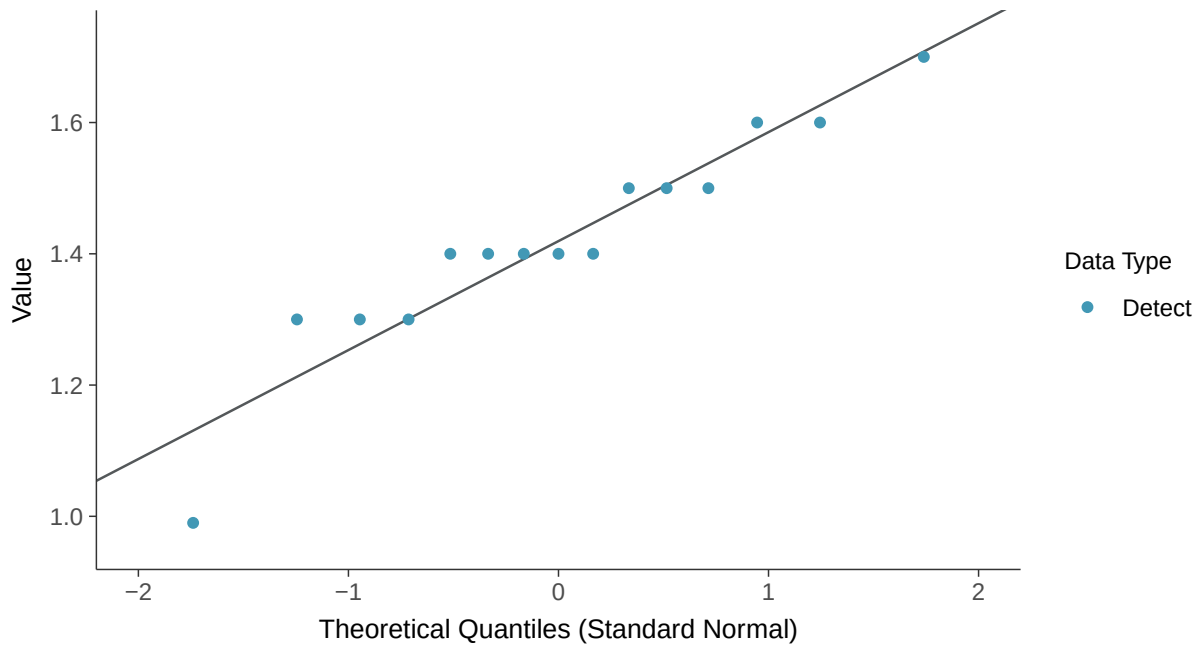


Boxplot by Season

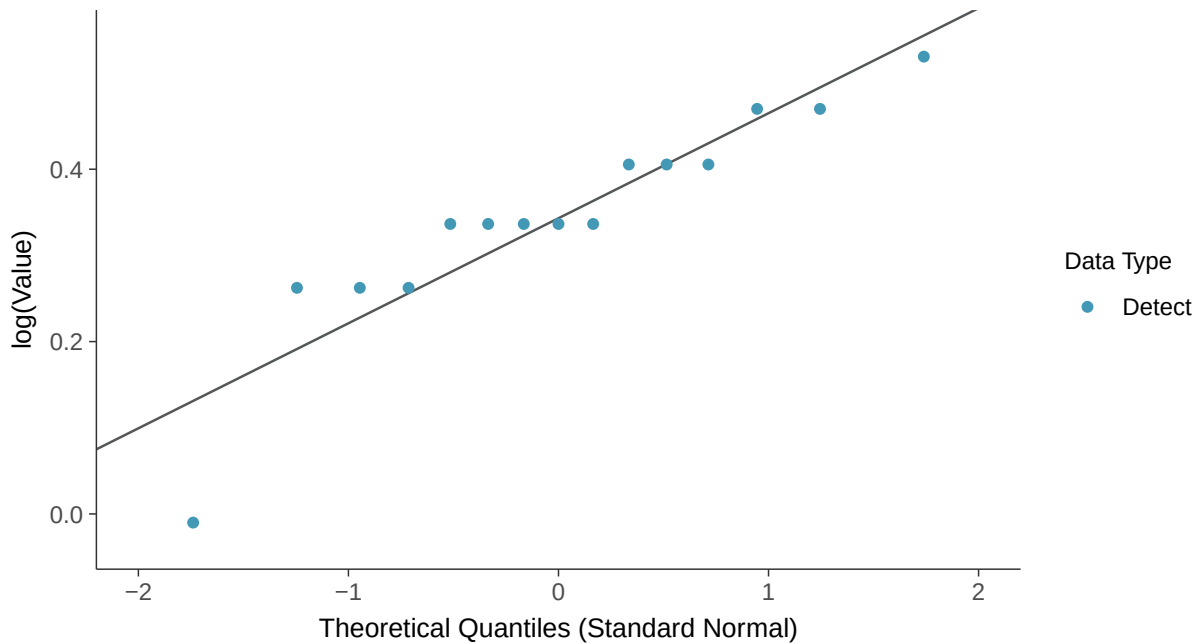
Barium, MW-06 (mg/L)



Normal Q-Q plot
Barium, MW-06 (mg/L)

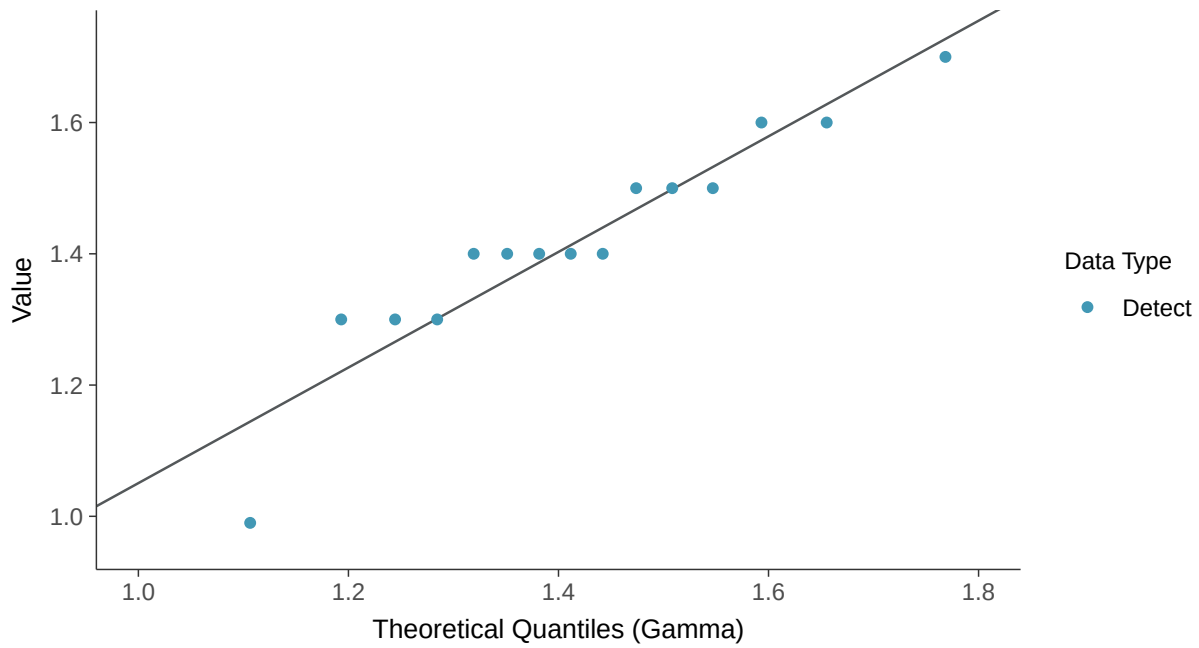


Lognormal Q-Q plot
Barium, MW-06 (mg/L)



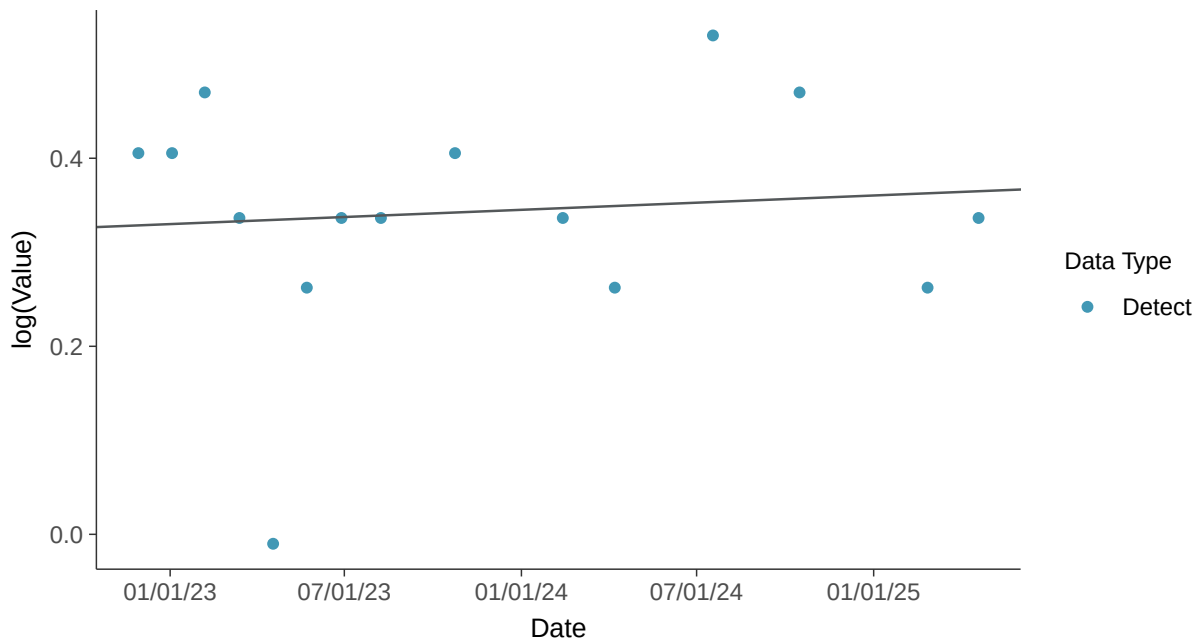
Gamma Q-Q plot

Barium, MW-06 (mg/L)



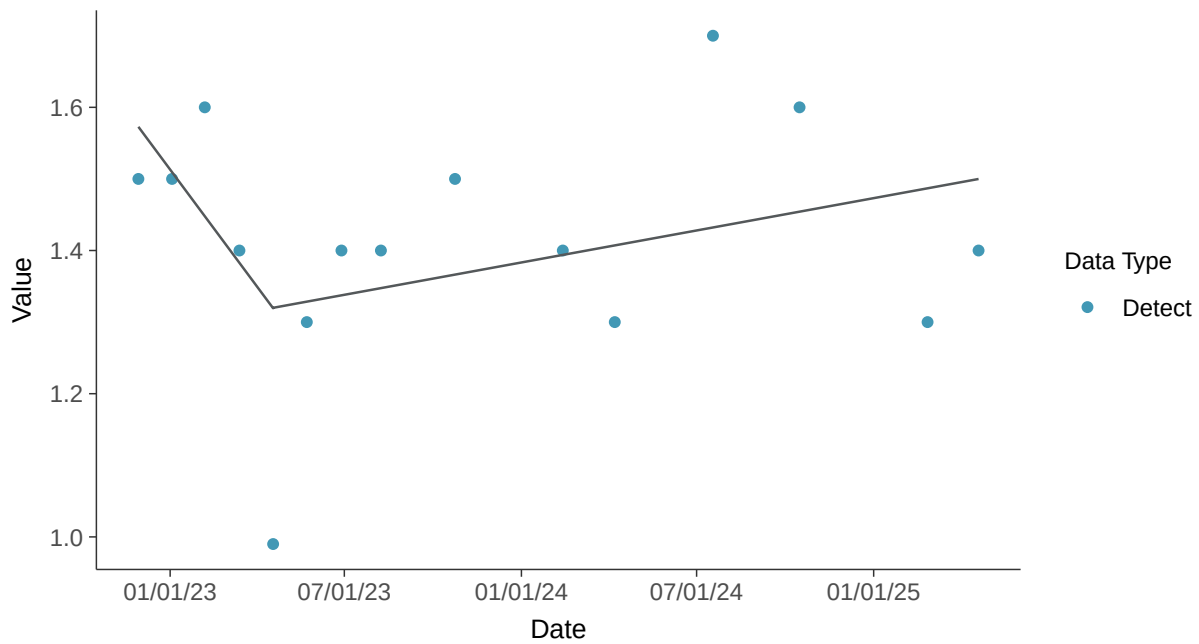
Trend Regression: Lognormal MLE

Barium, MW-06 (mg/L)



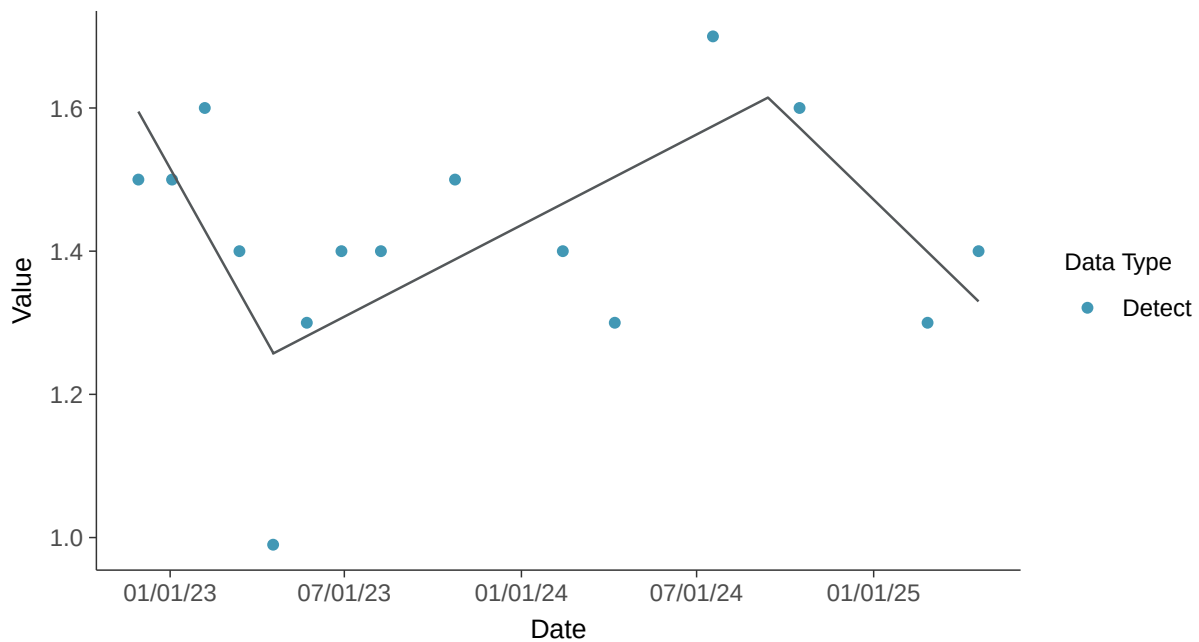
Trend Regression: Piecewise Linear-Linear

Barium, MW-06 (mg/L)



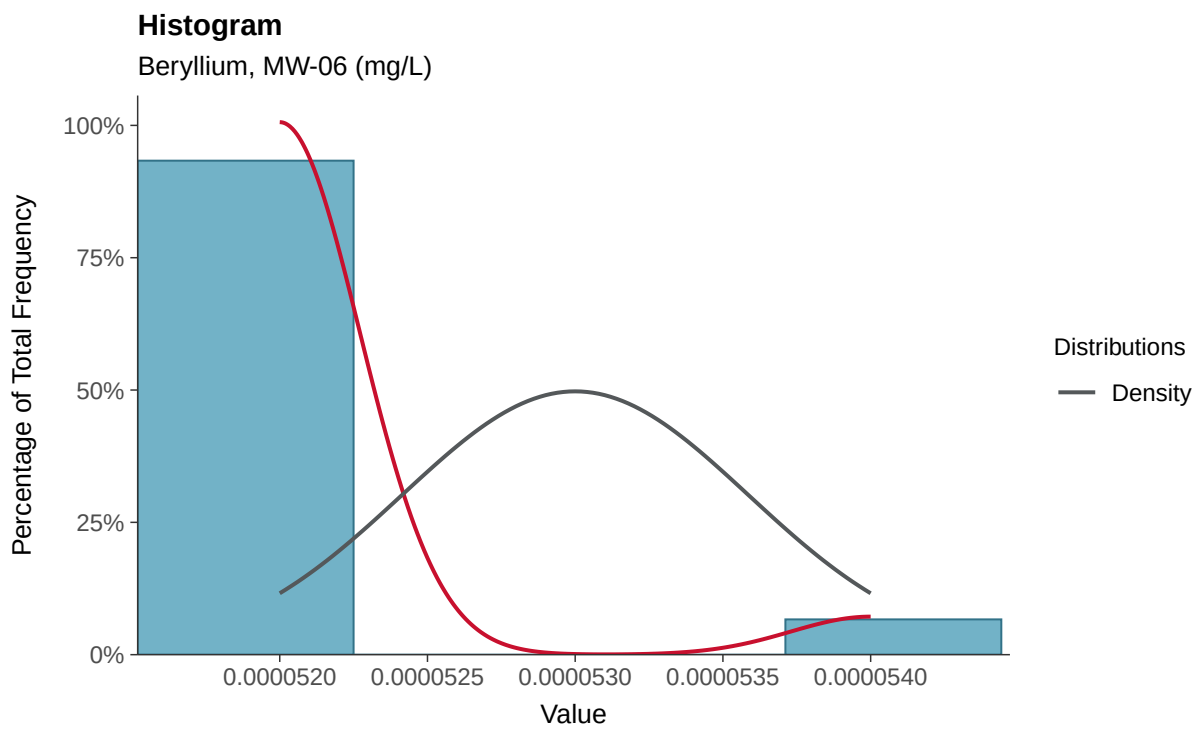
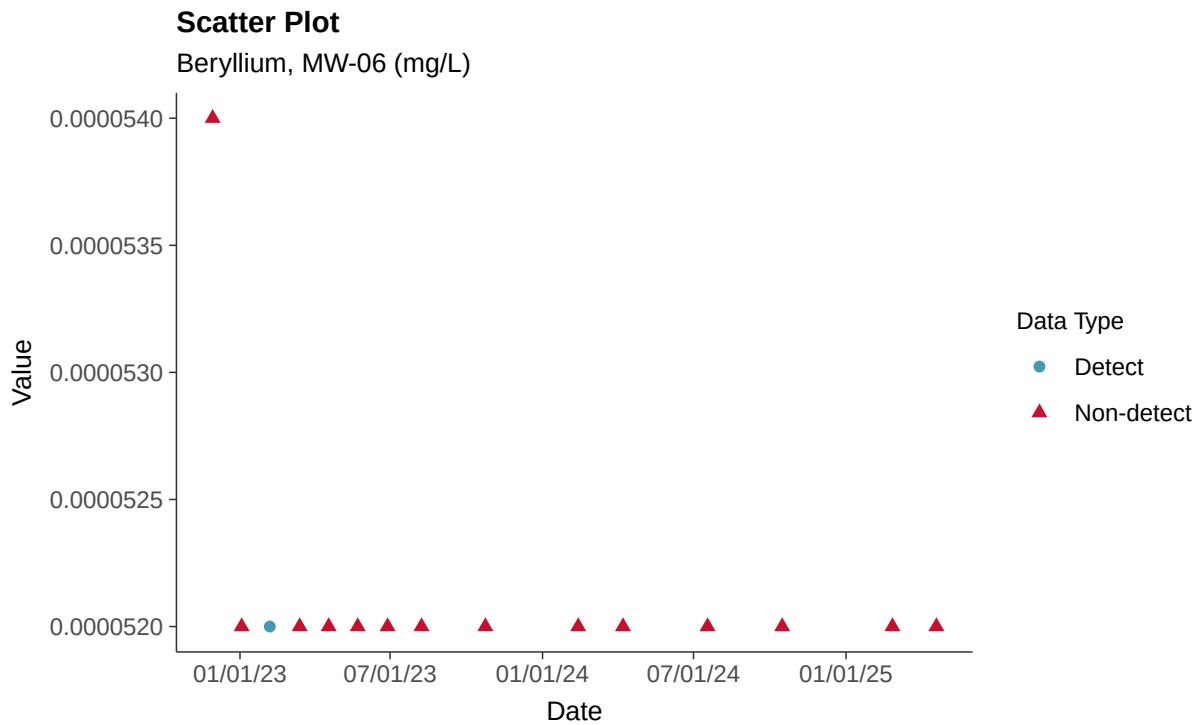
Trend Regression: Piecewise Linear-Linear-Linear

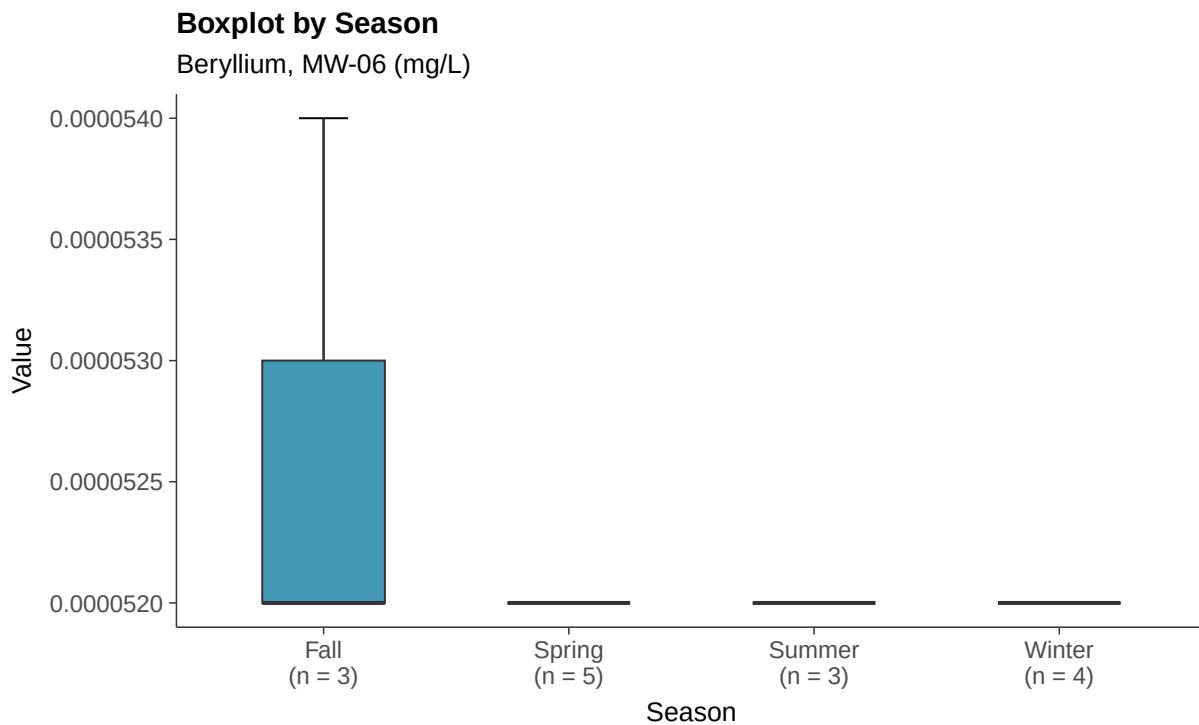
Barium, MW-06 (mg/L)

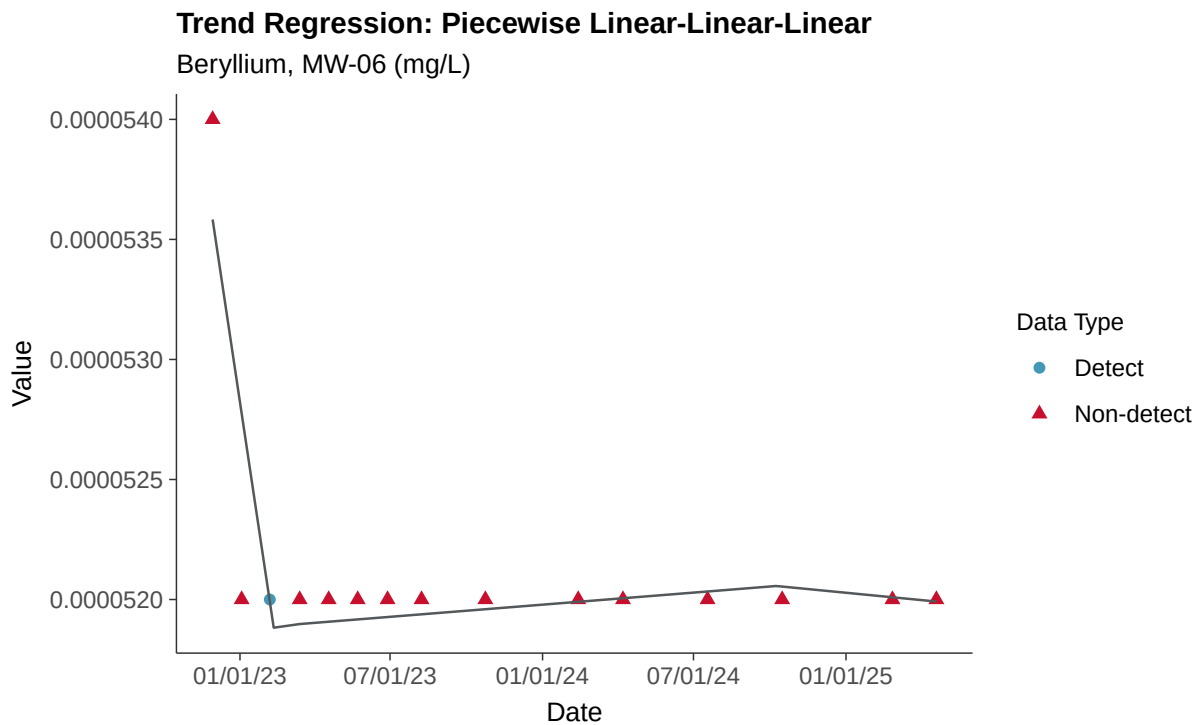
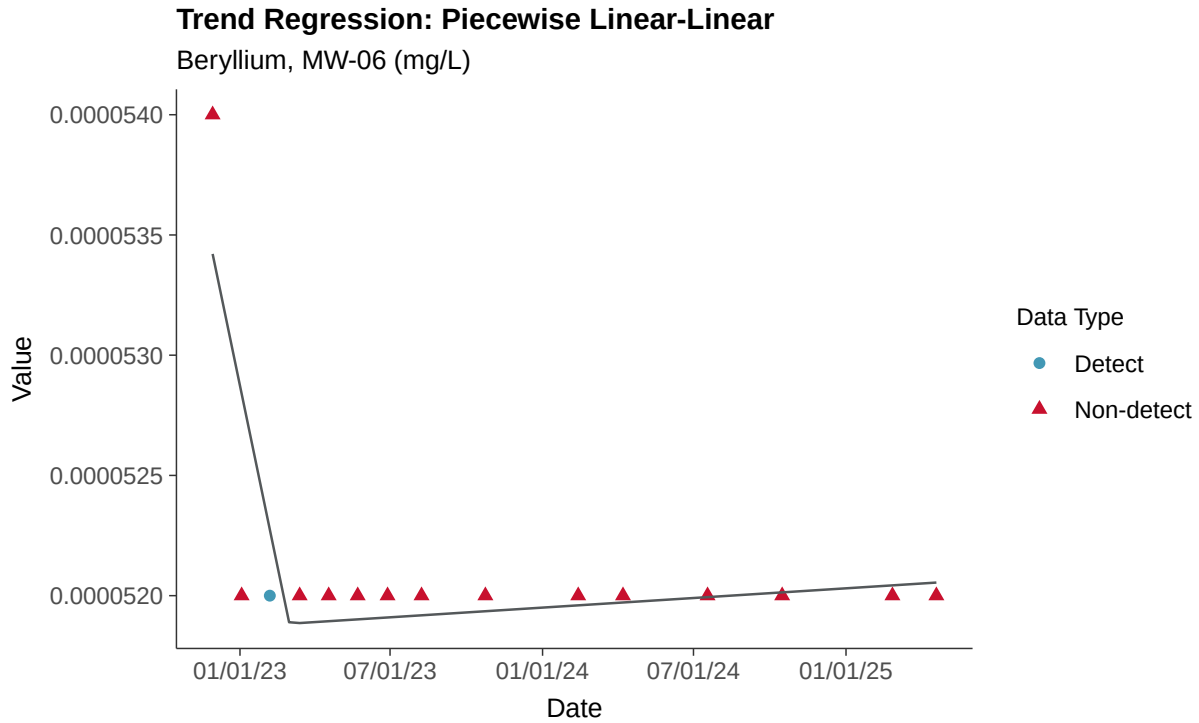


Appendix IV: Beryllium, MW-06

ID: 16_1_4_104

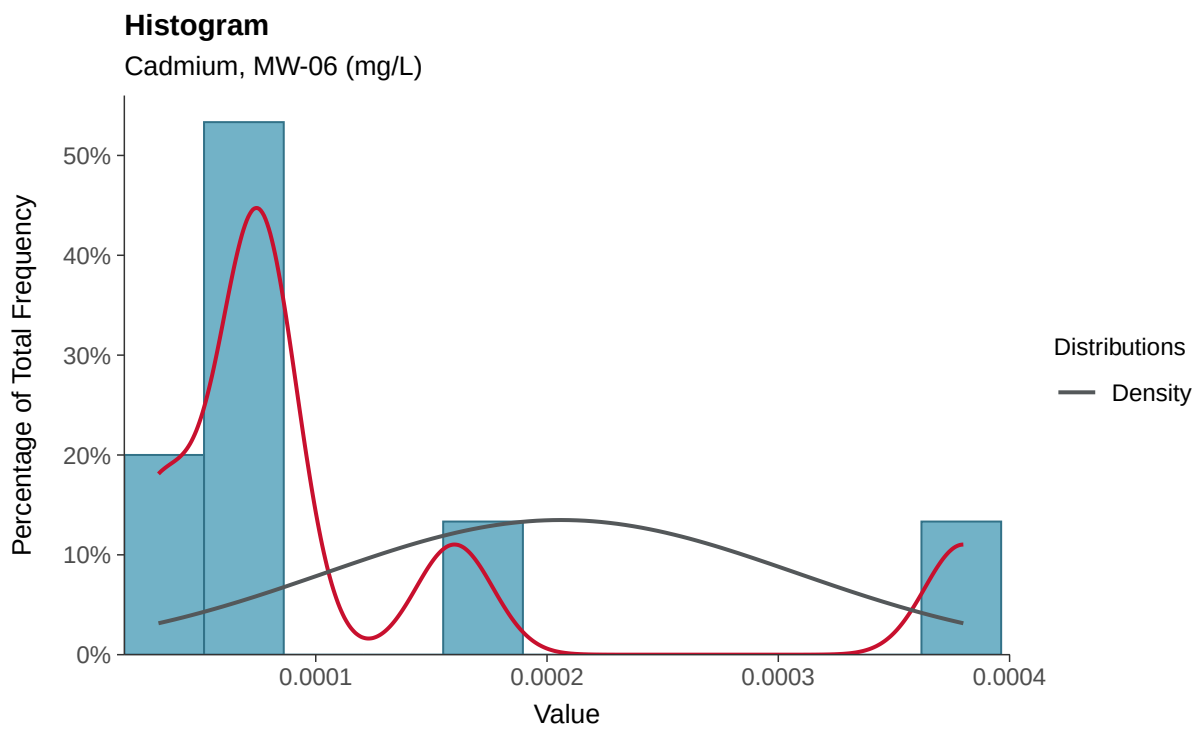
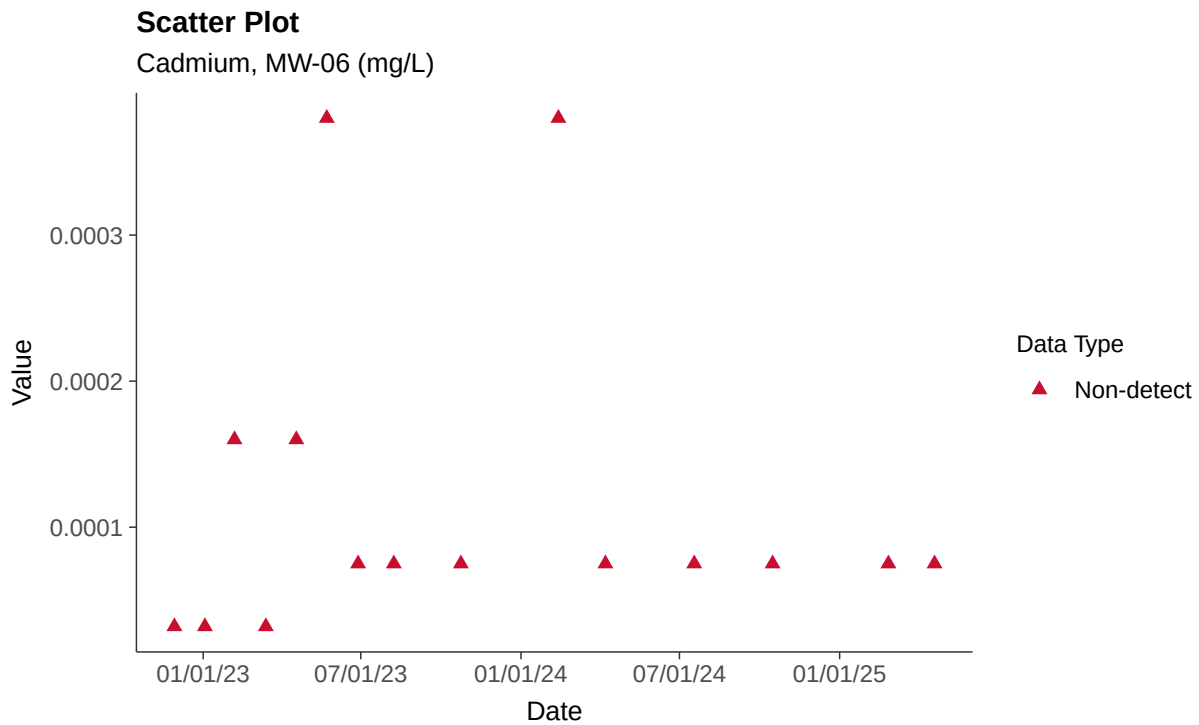






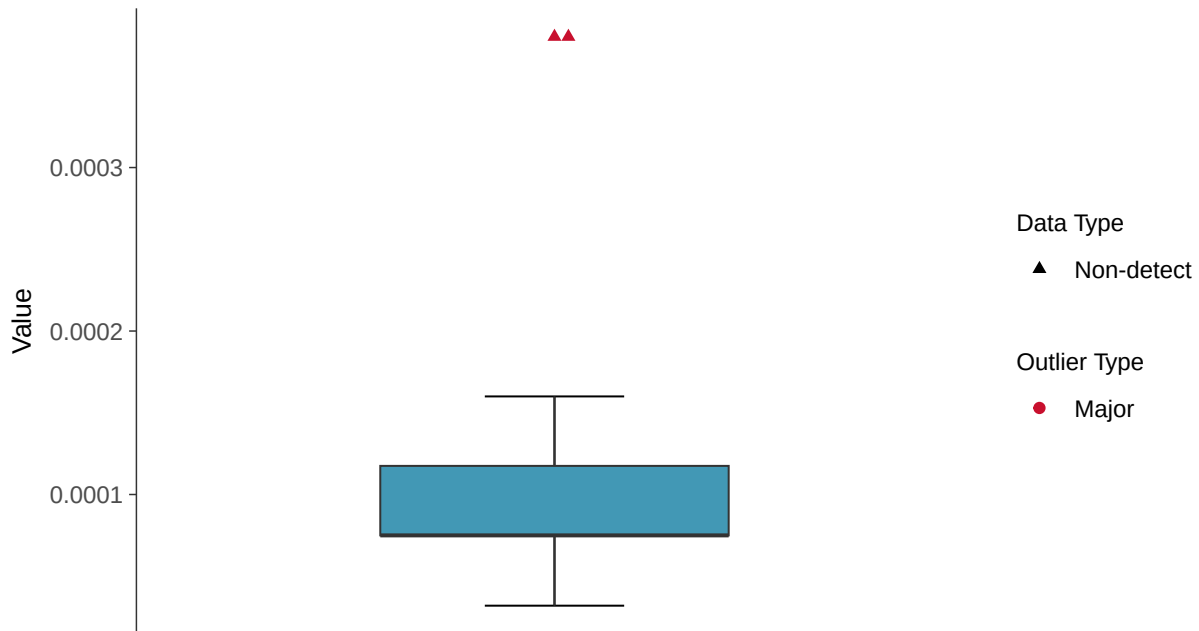
Appendix IV: Cadmium, MW-06

ID: 16_1_4_106



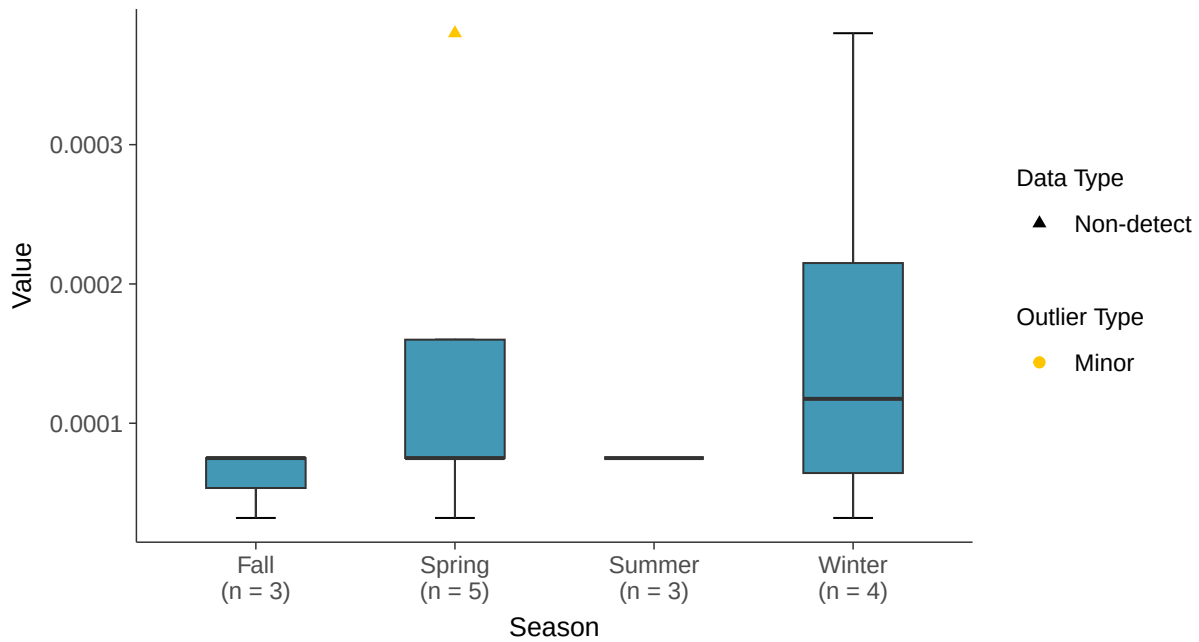
Boxplot

Cadmium, MW-06 (mg/L)



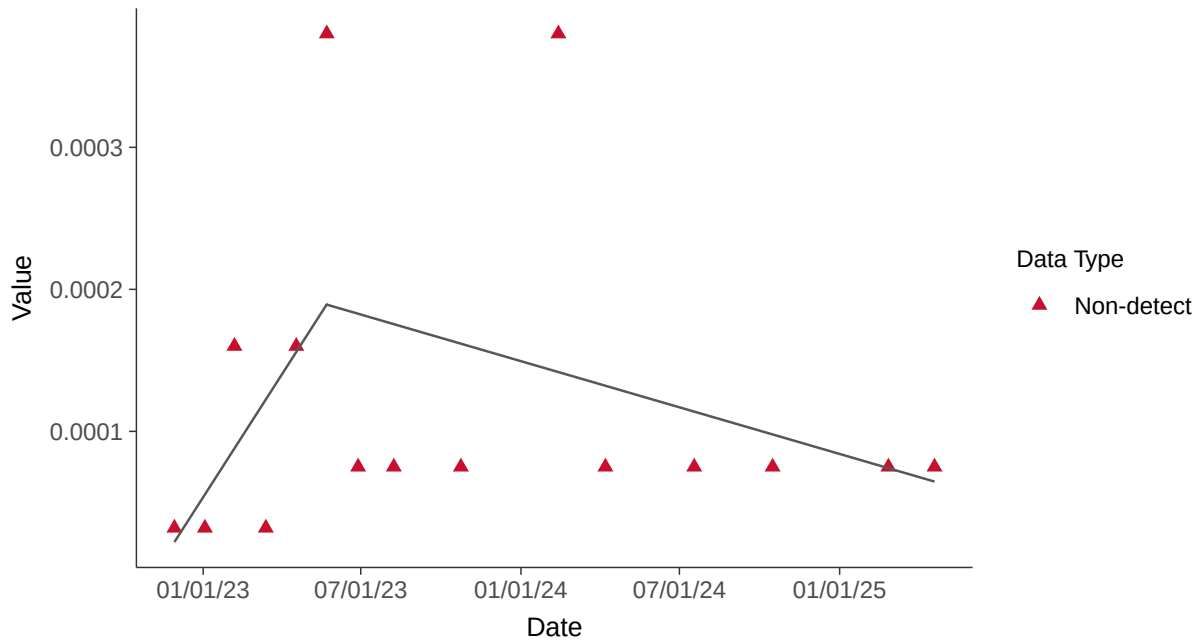
Boxplot by Season

Cadmium, MW-06 (mg/L)



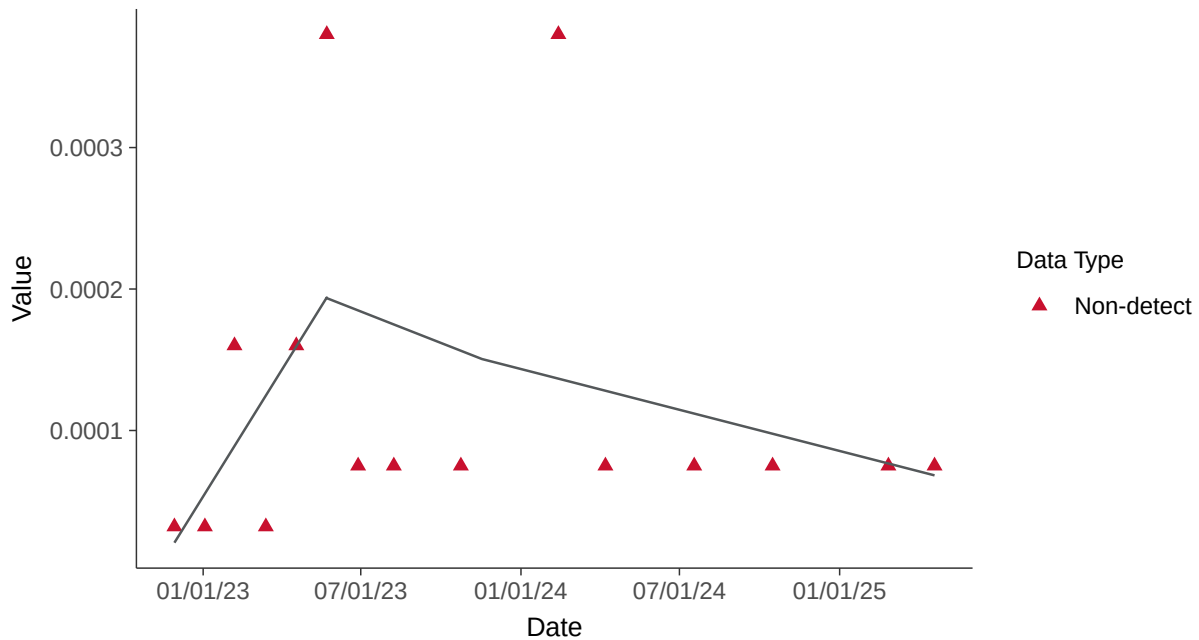
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-06 (mg/L)



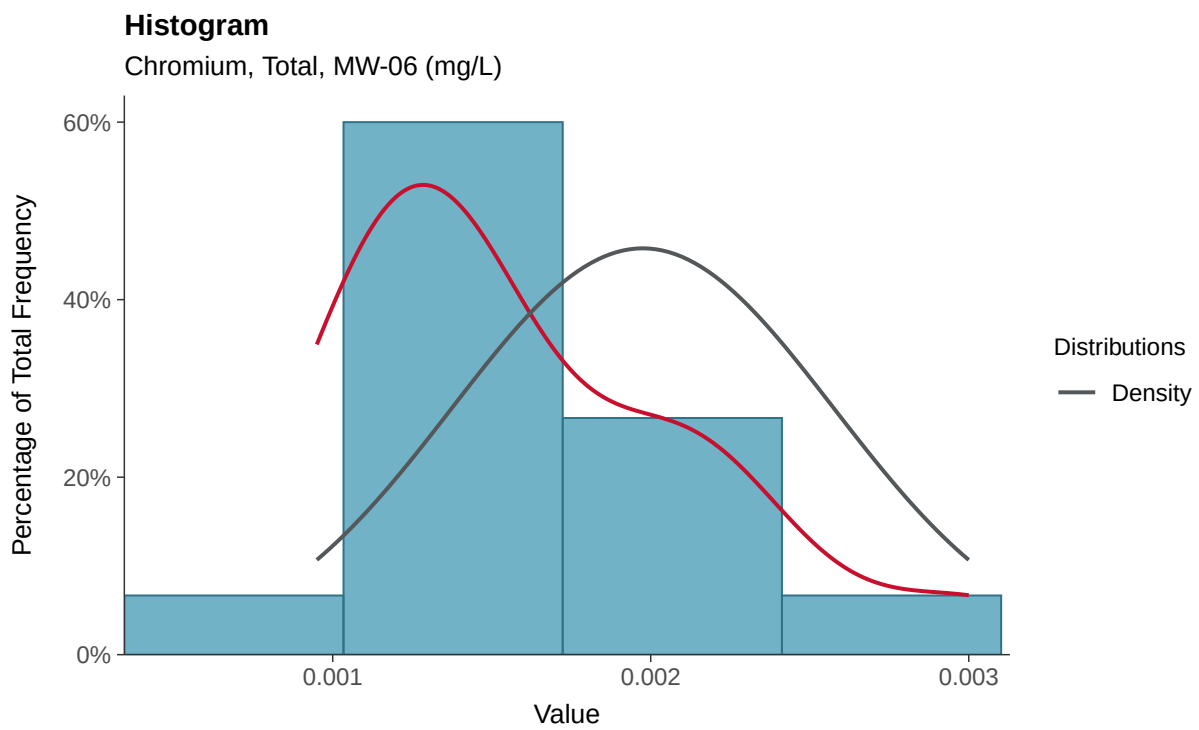
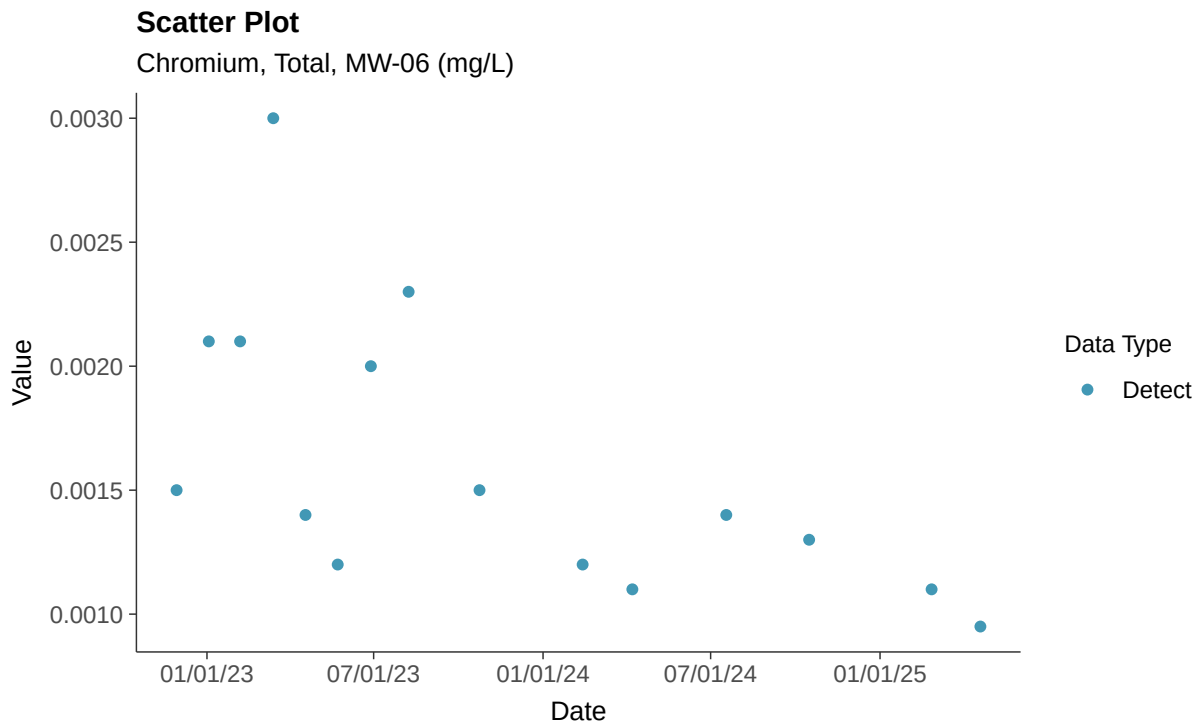
Trend Regression: Piecewise Linear-Linear-Linear

Cadmium, MW-06 (mg/L)



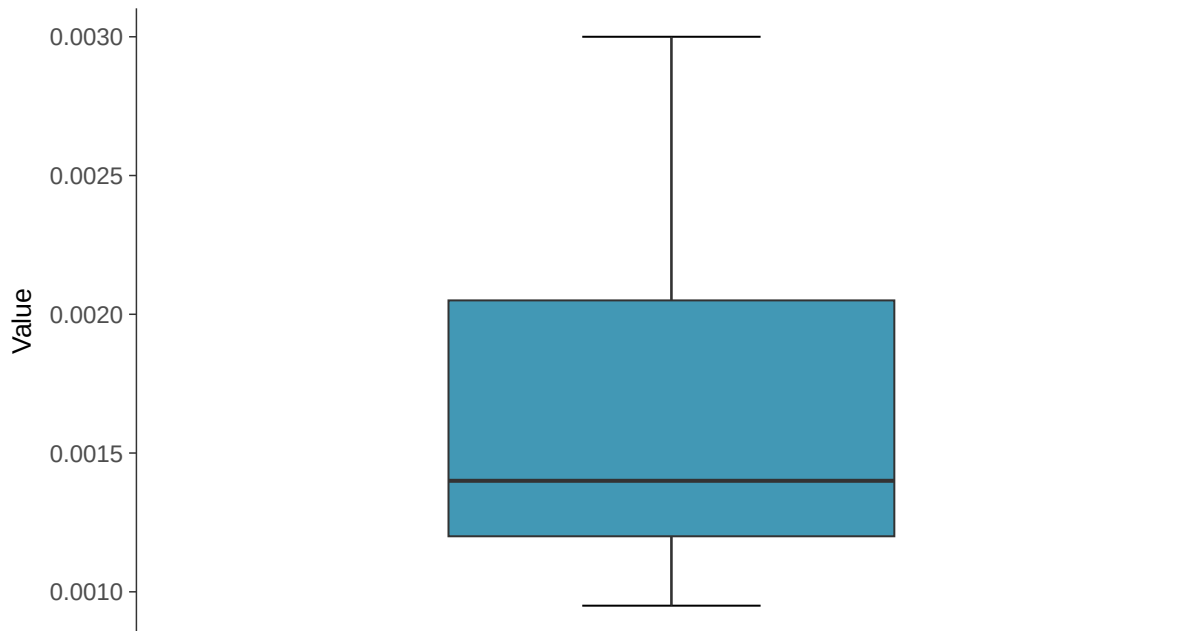
Appendix IV: Chromium, Total, MW-06

ID: 16_1_4_109



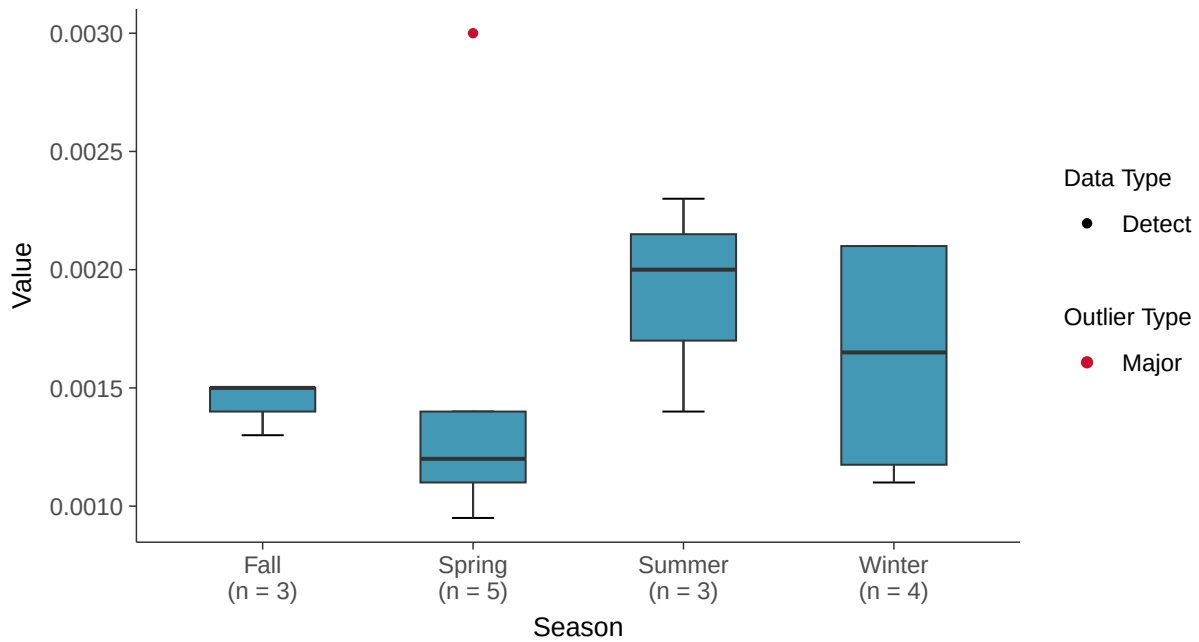
Boxplot

Chromium, Total, MW-06 (mg/L)



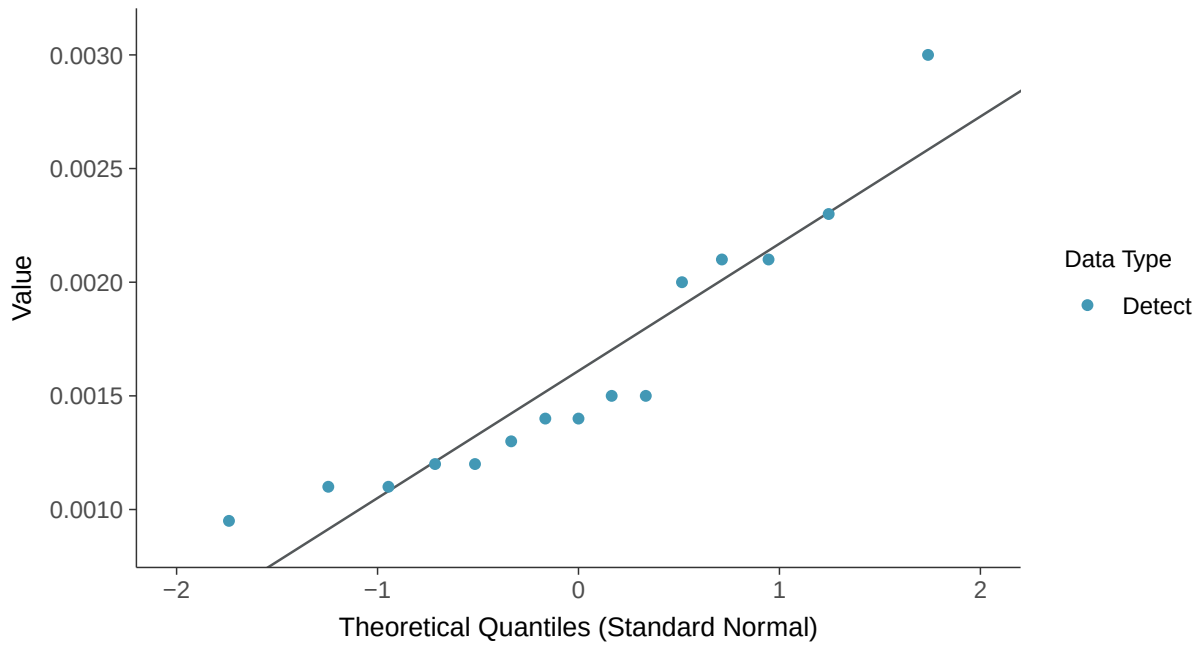
Boxplot by Season

Chromium, Total, MW-06 (mg/L)



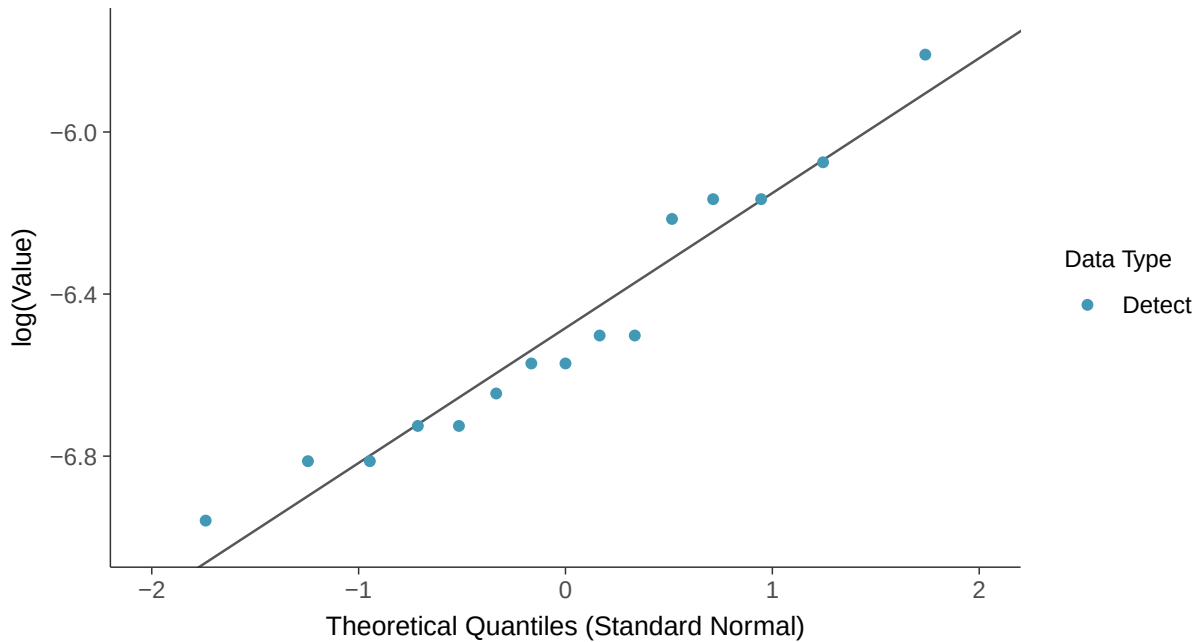
Normal Q-Q plot

Chromium, Total, MW-06 (mg/L)



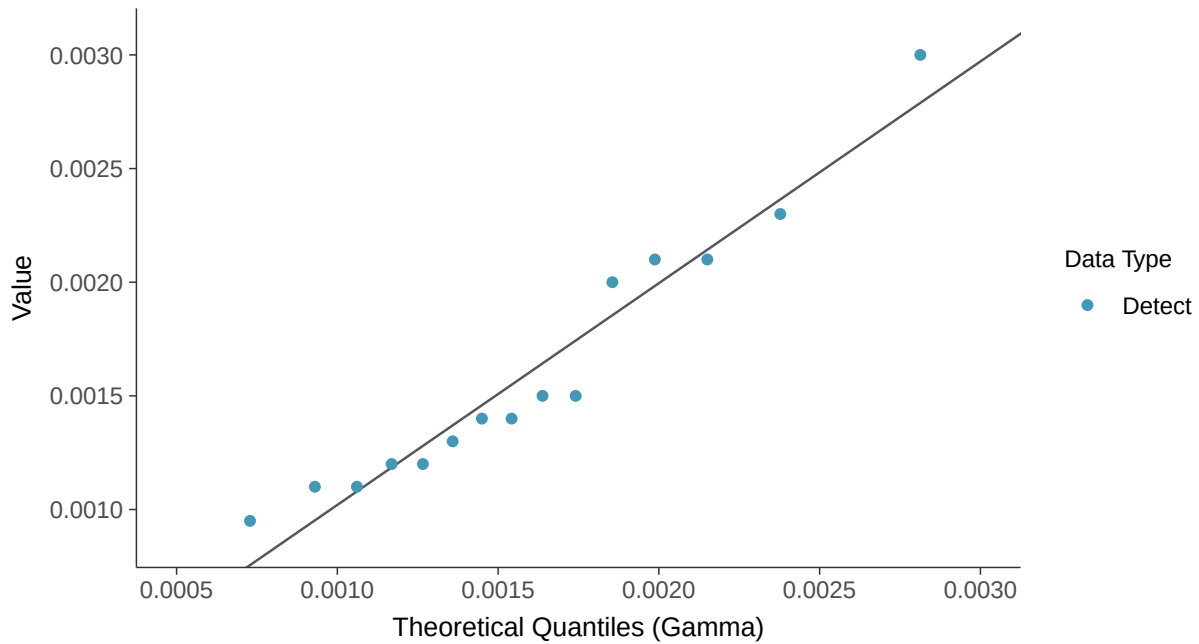
Lognormal Q-Q plot

Chromium, Total, MW-06 (mg/L)



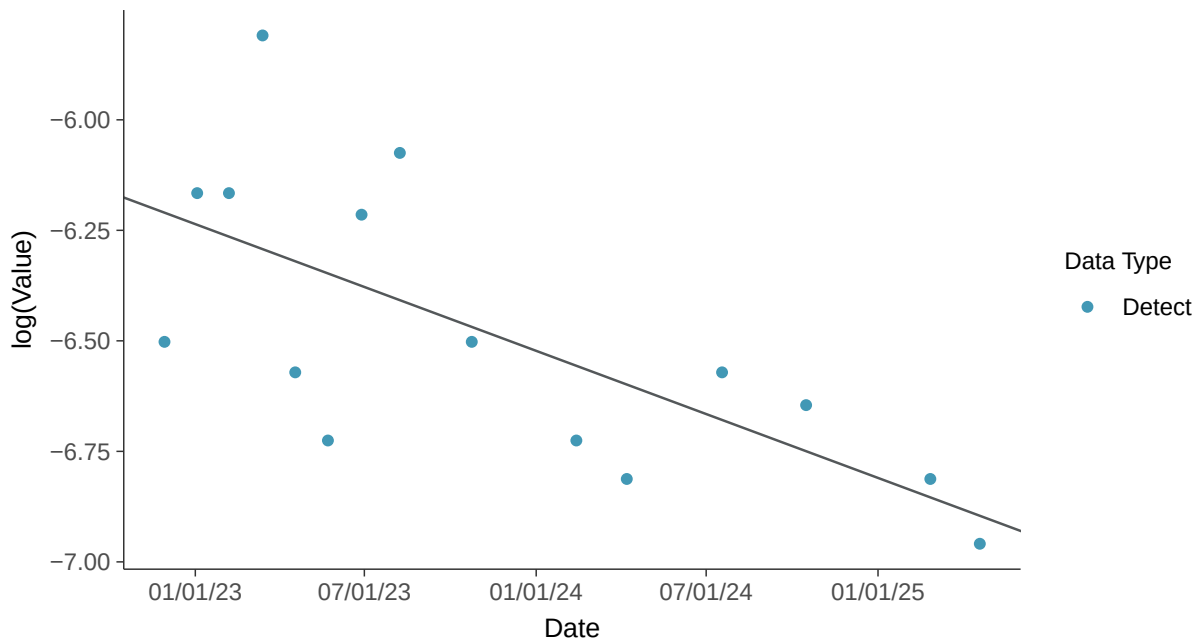
Gamma Q-Q plot

Chromium, Total, MW-06 (mg/L)



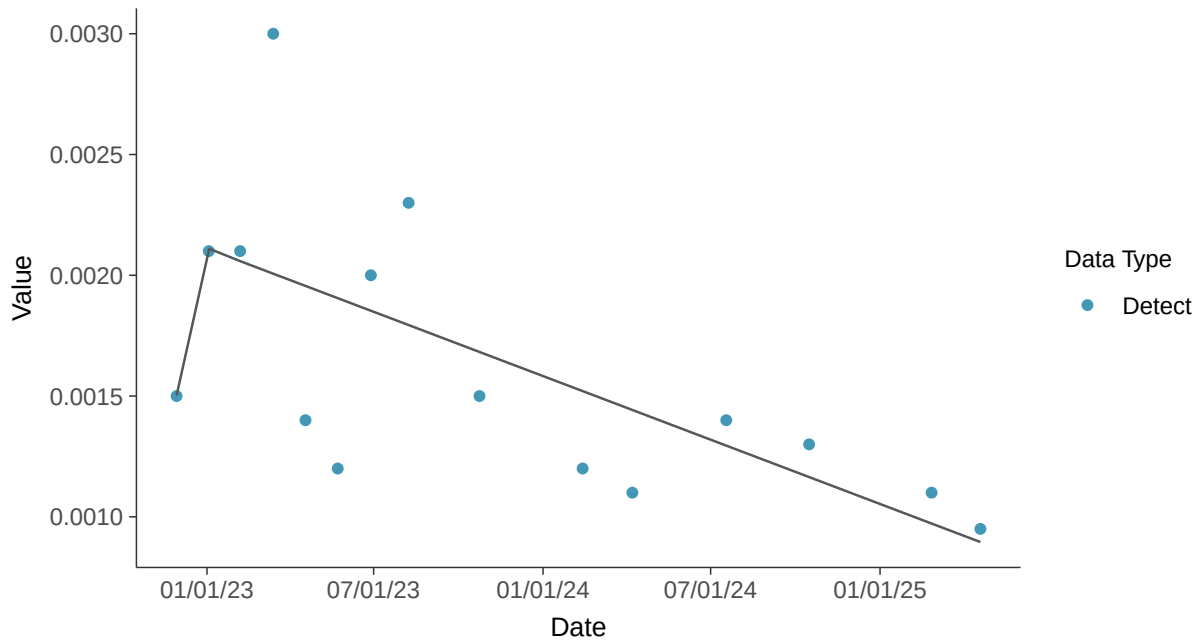
Trend Regression: Lognormal MLE

Chromium, Total, MW-06 (mg/L)



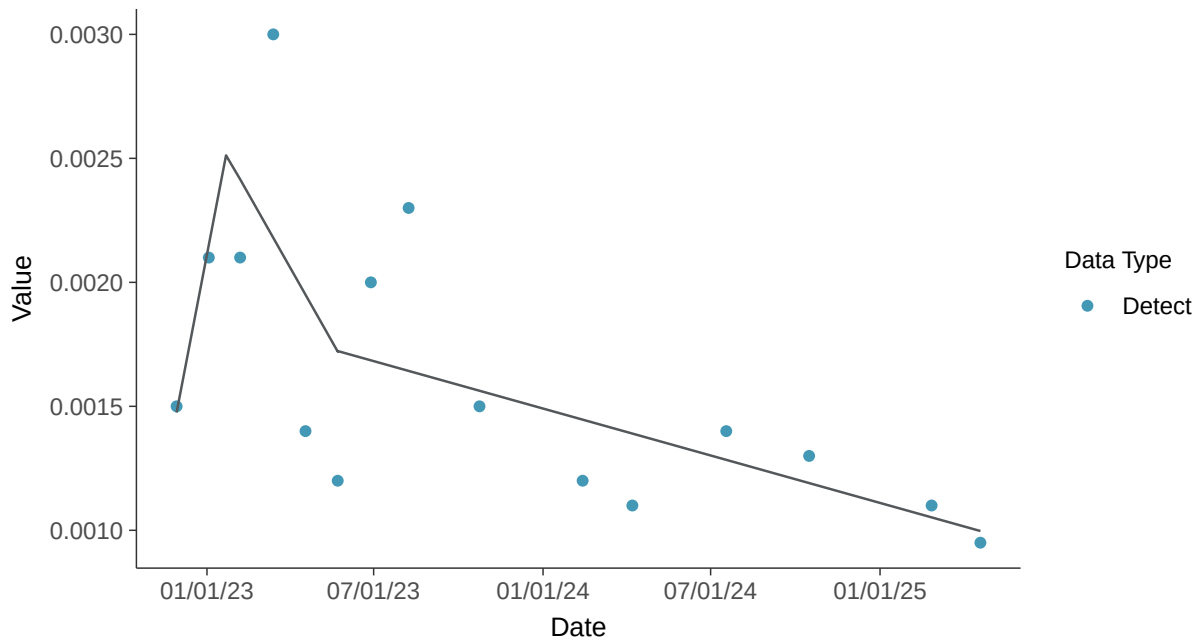
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-06 (mg/L)



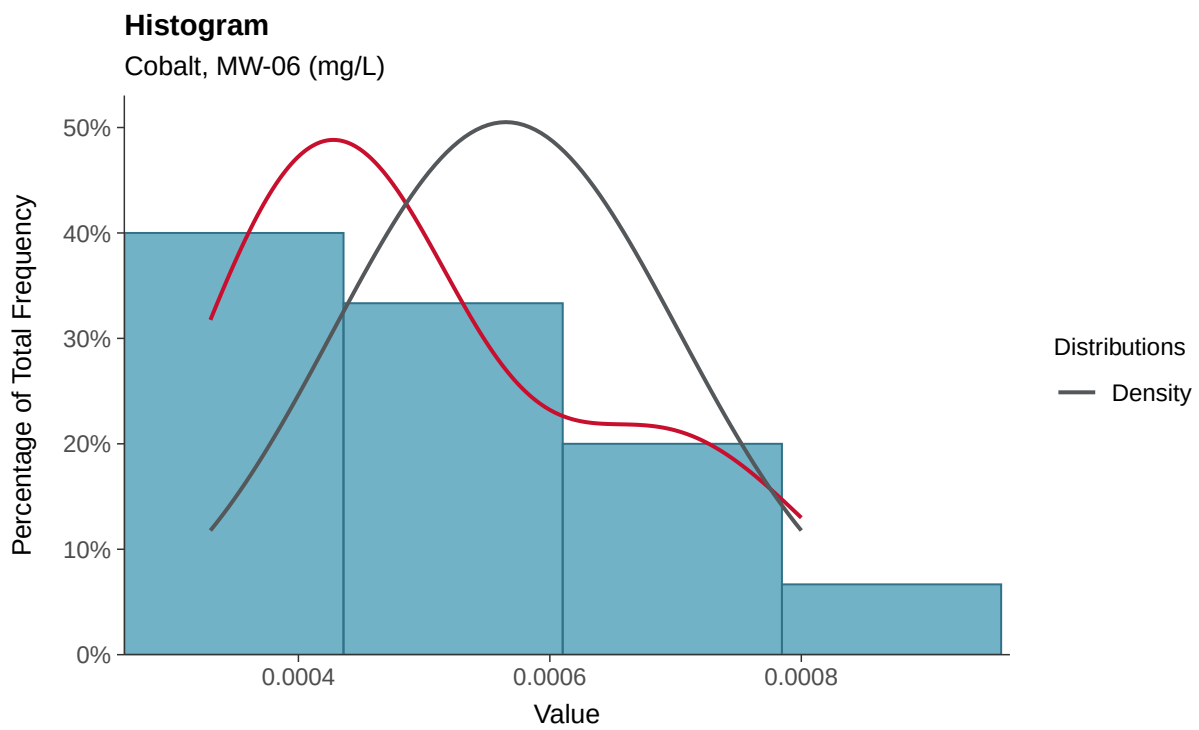
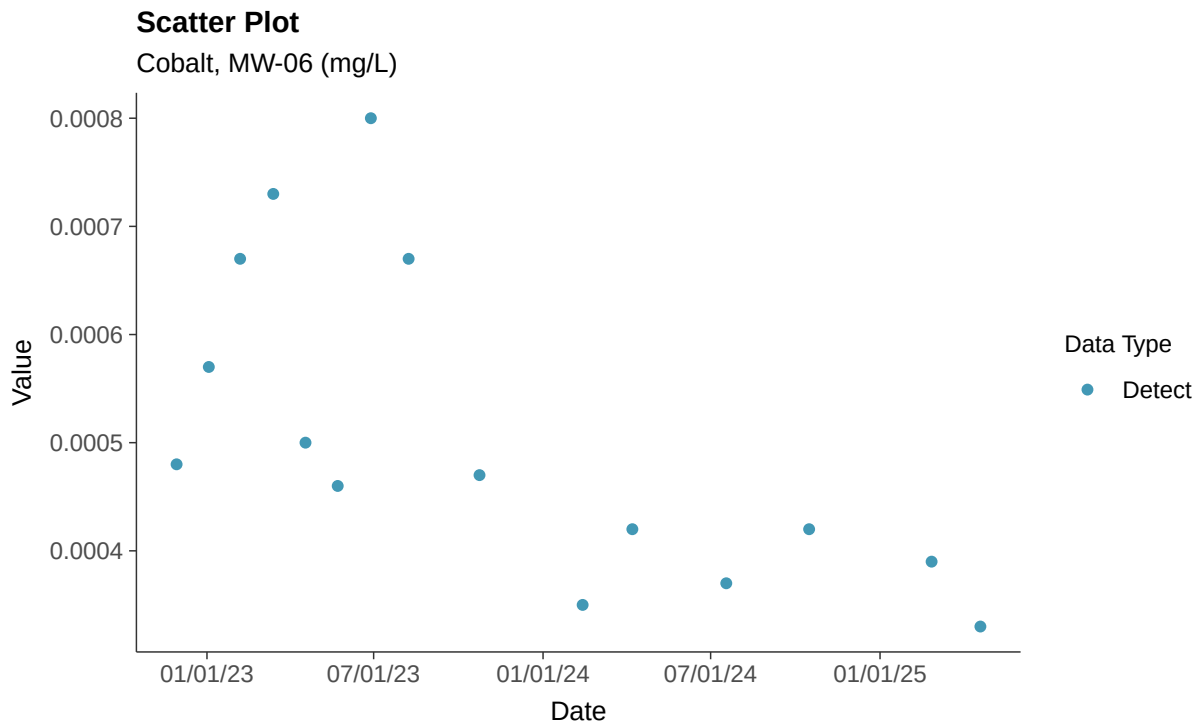
Trend Regression: Piecewise Linear-Linear-Linear

Chromium, Total, MW-06 (mg/L)



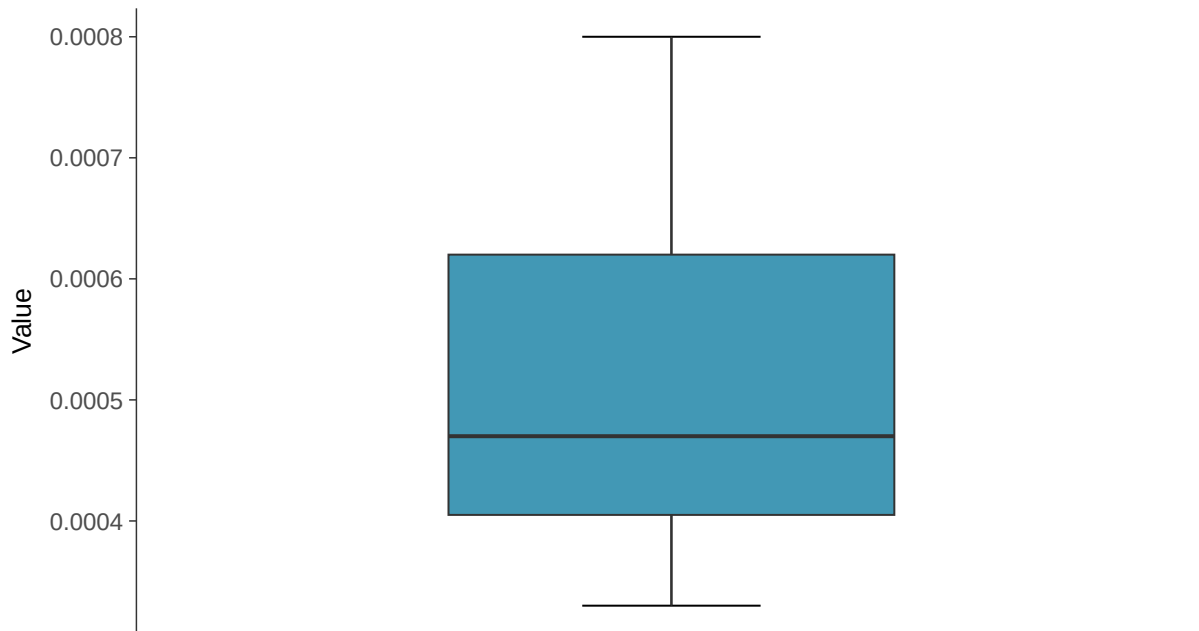
Appendix IV: Cobalt, MW-06

ID: 16_1_4_110



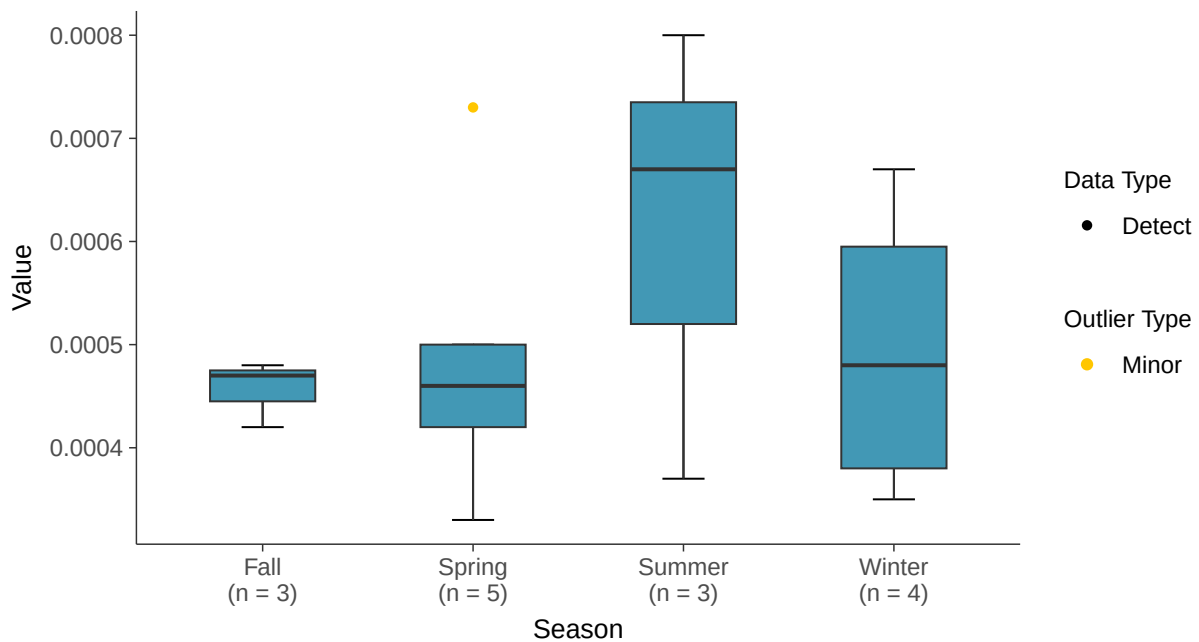
Boxplot

Cobalt, MW-06 (mg/L)

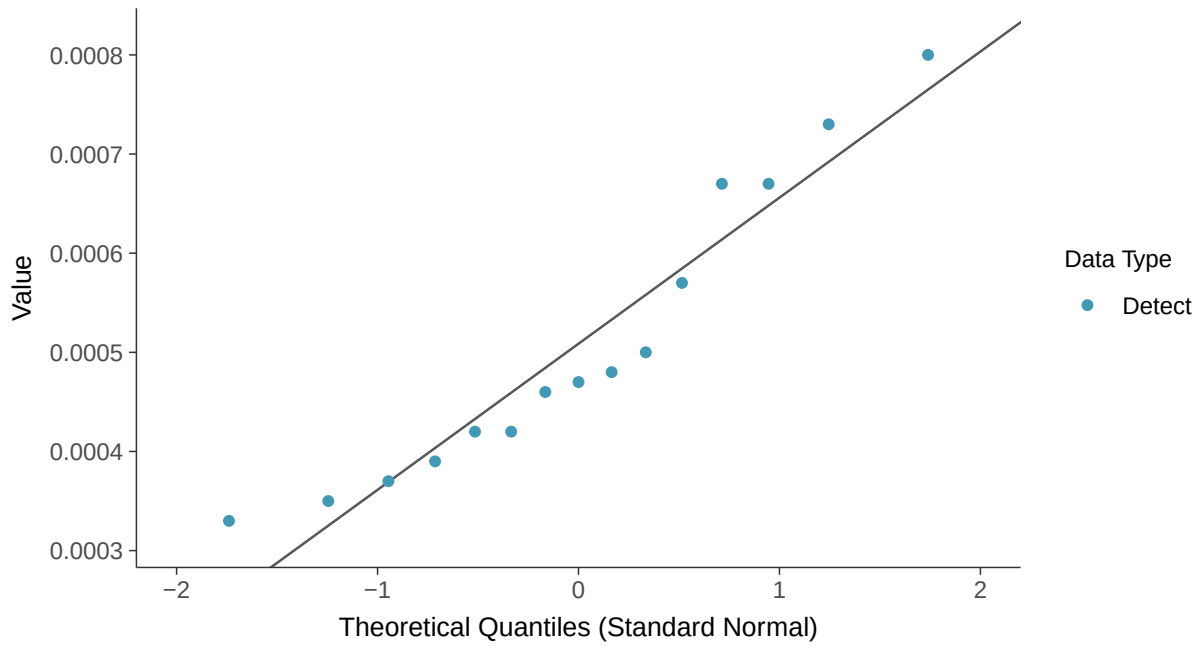


Boxplot by Season

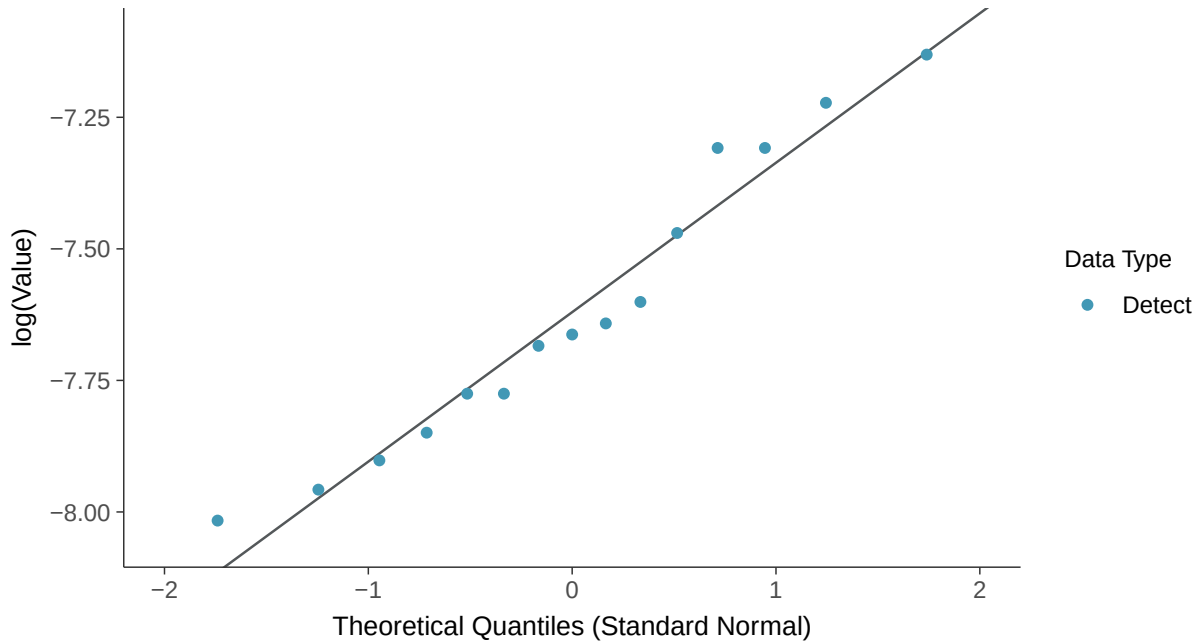
Cobalt, MW-06 (mg/L)



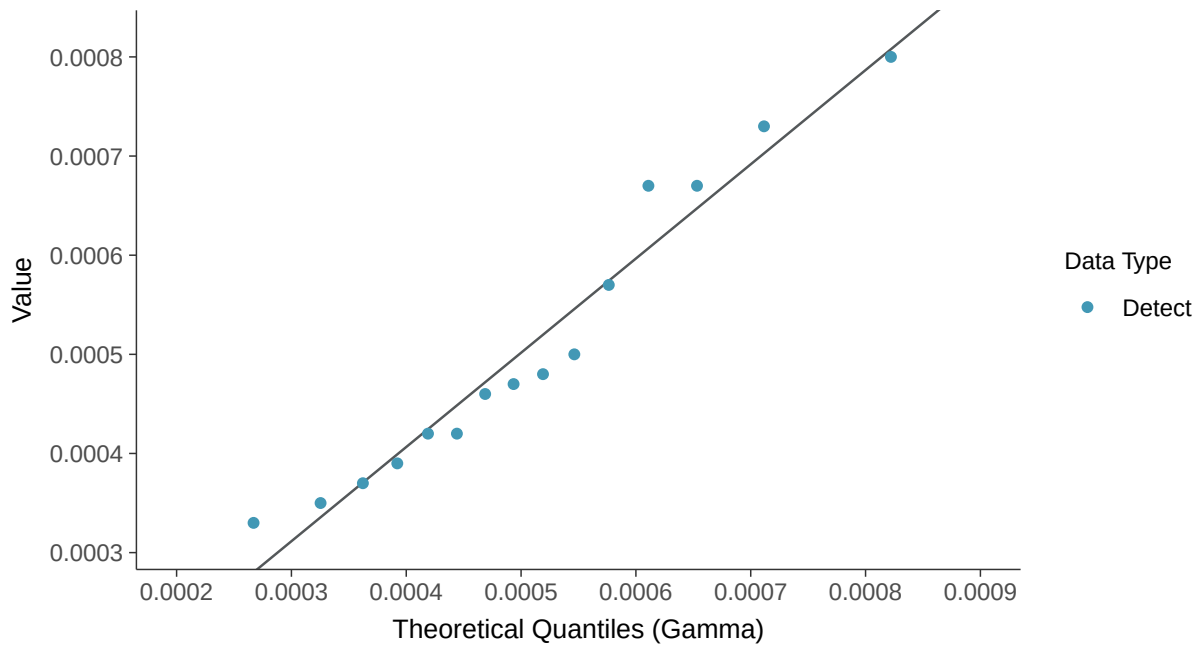
Normal Q-Q plot
Cobalt, MW-06 (mg/L)



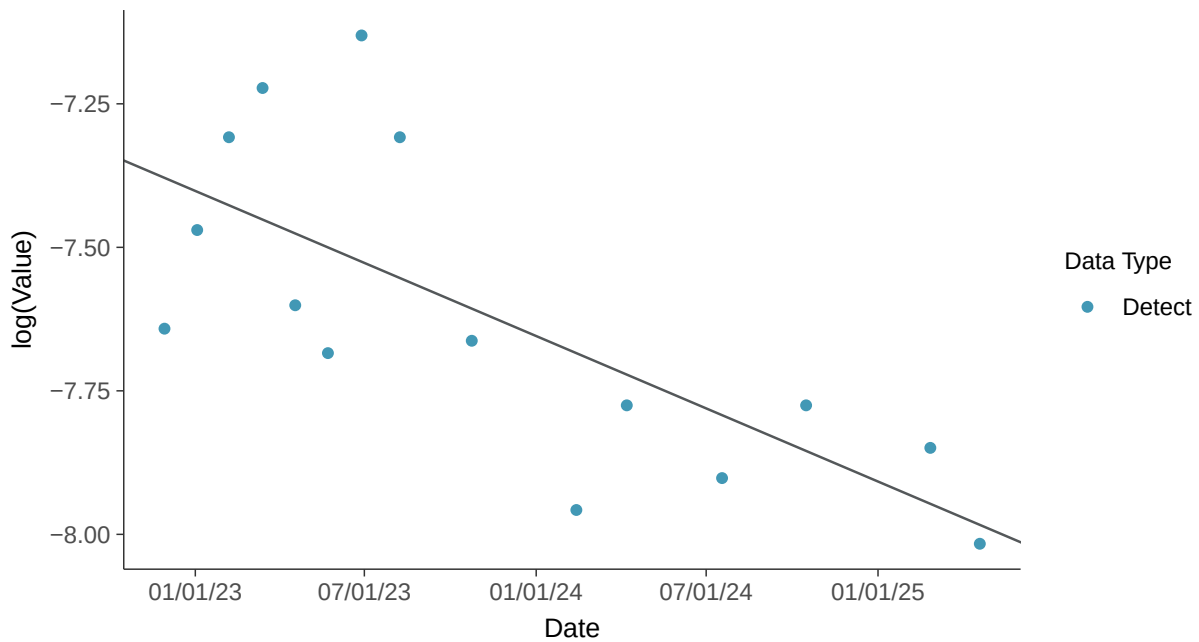
Lognormal Q-Q plot
Cobalt, MW-06 (mg/L)



Gamma Q-Q plot
Cobalt, MW-06 (mg/L)

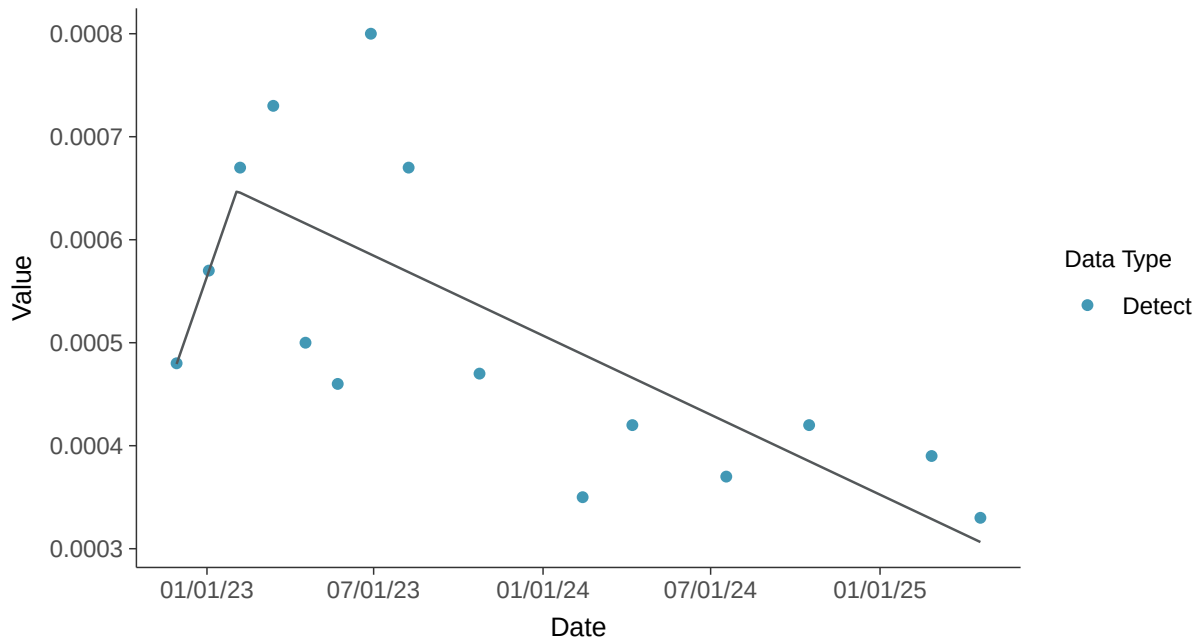


Trend Regression: Lognormal MLE
Cobalt, MW-06 (mg/L)



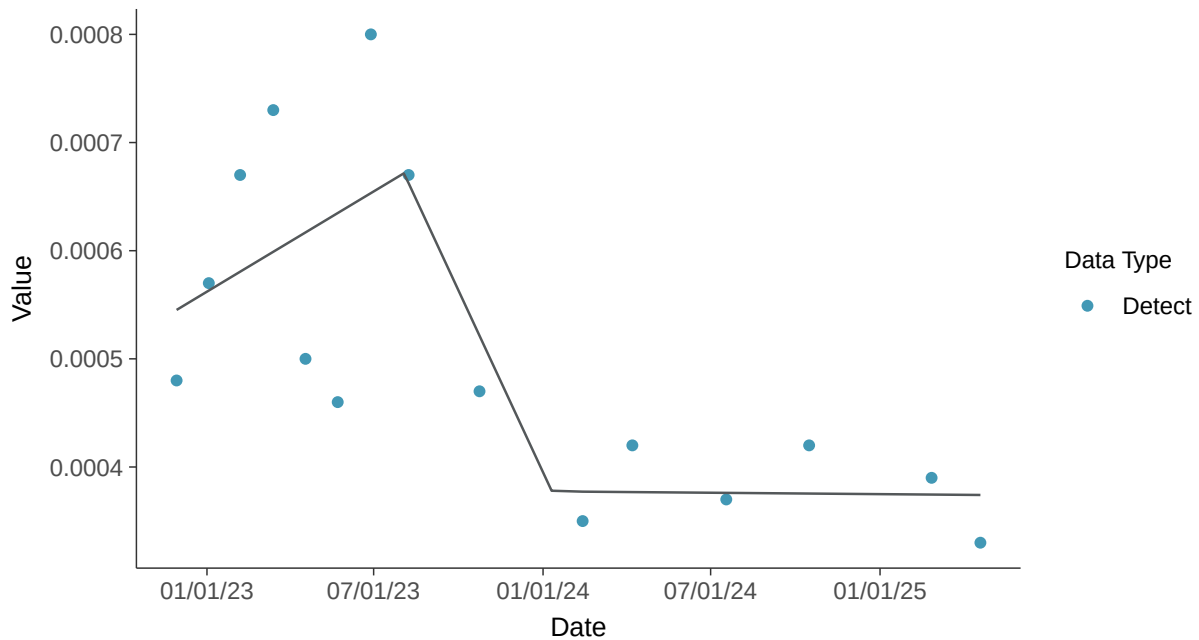
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-06 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cobalt, MW-06 (mg/L)

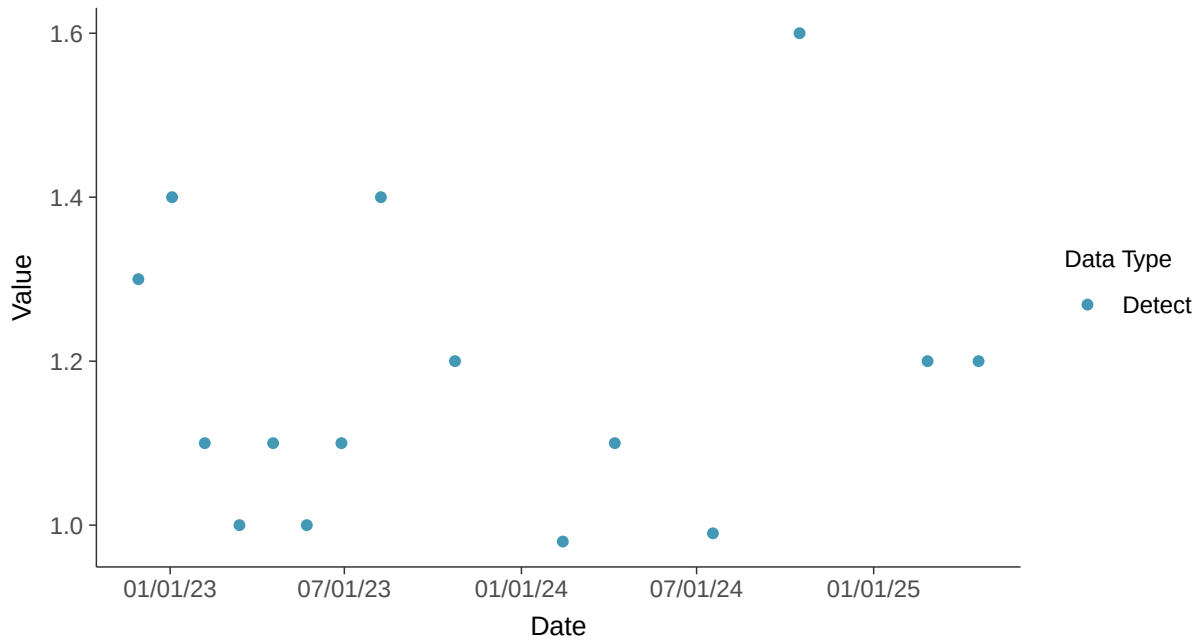


Appendix IV: Fluoride (App IV), MW-06

ID: 16_1_4_113

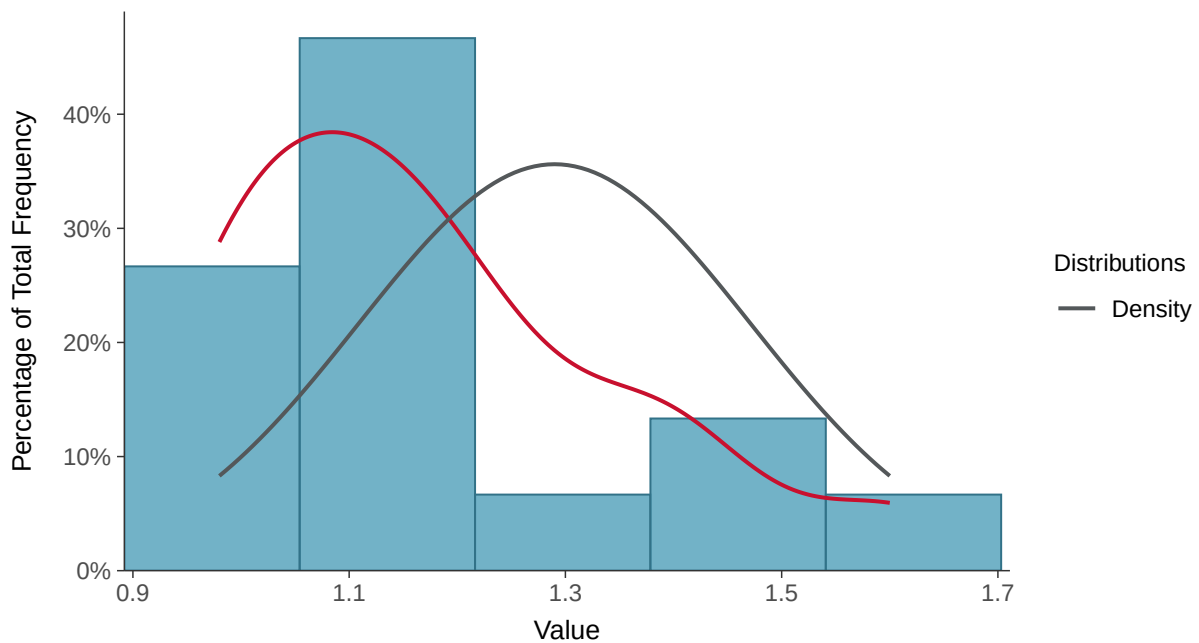
Scatter Plot

Fluoride (App IV), MW-06 (mg/L)



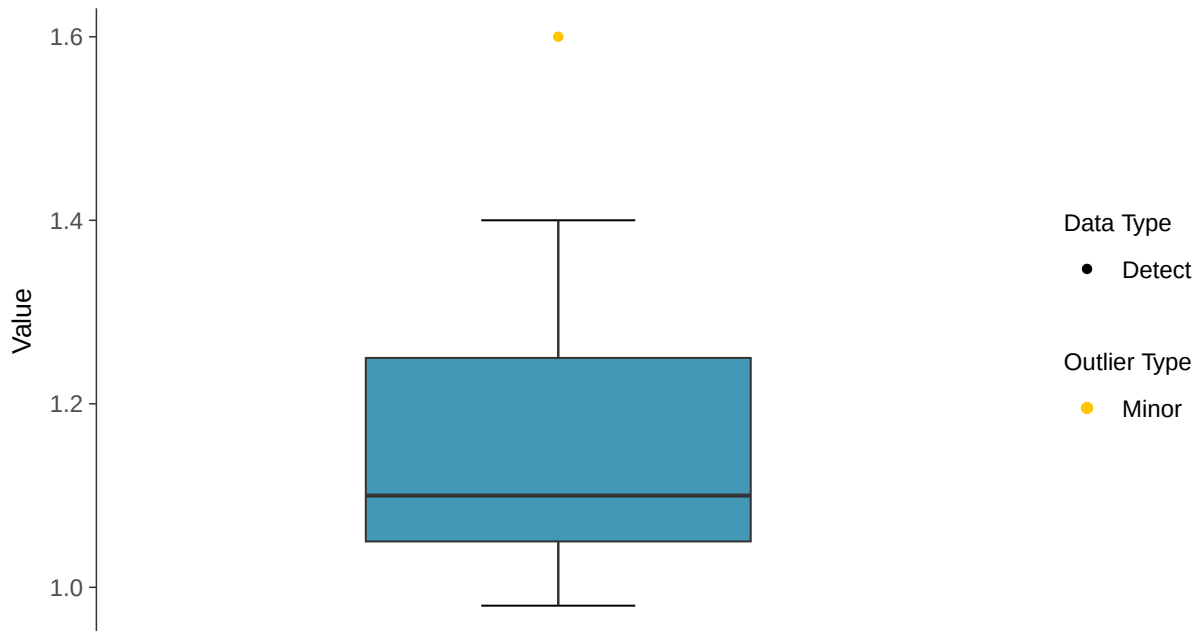
Histogram

Fluoride (App IV), MW-06 (mg/L)



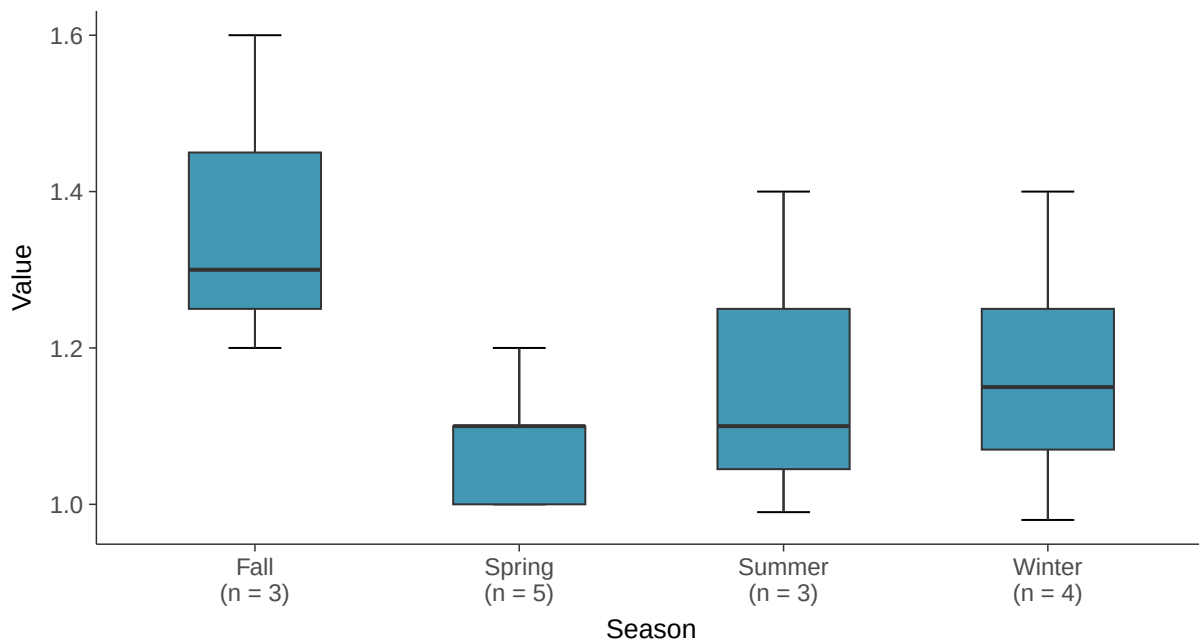
Boxplot

Fluoride (App IV), MW-06 (mg/L)



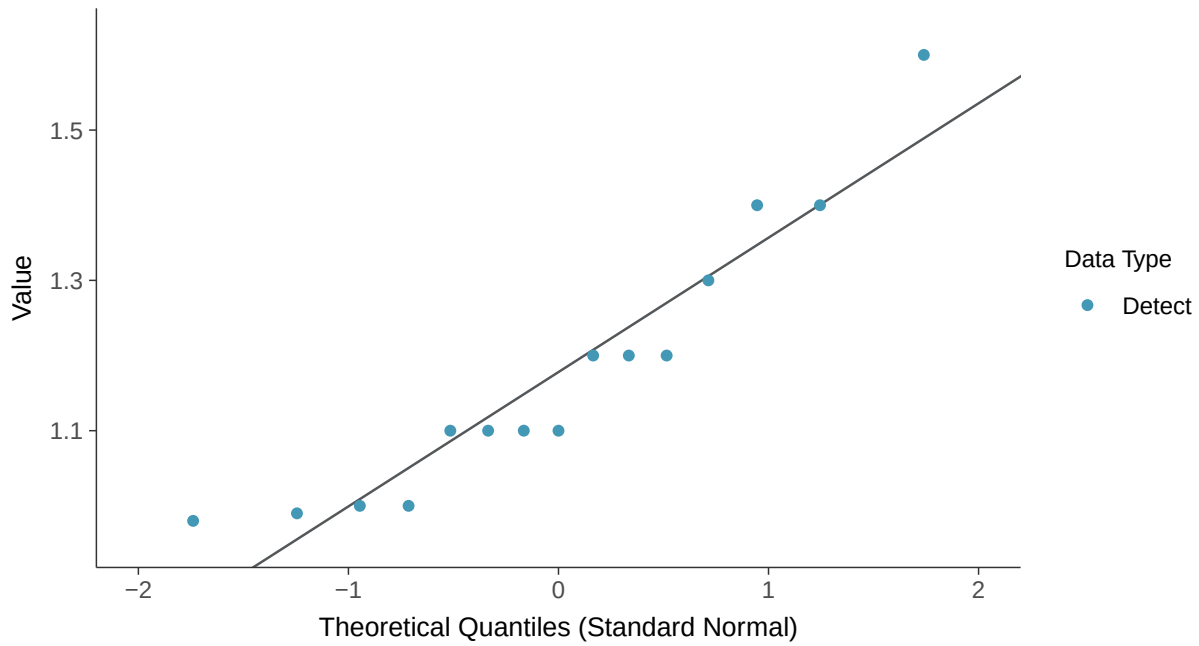
Boxplot by Season

Fluoride (App IV), MW-06 (mg/L)



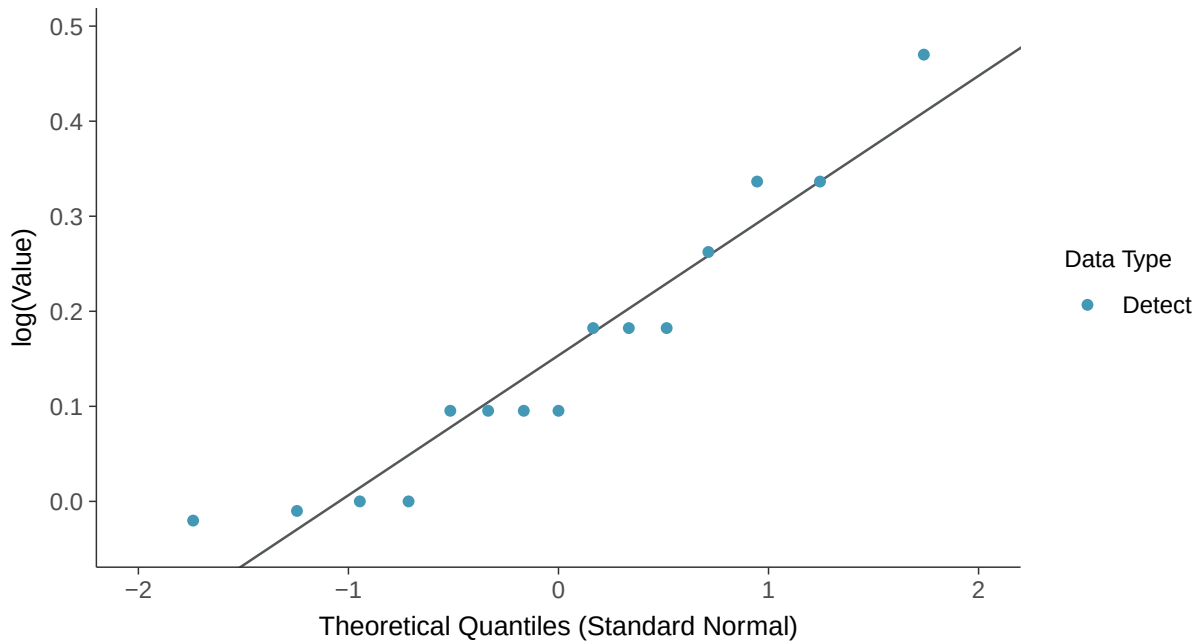
Normal Q-Q plot

Fluoride (App IV), MW-06 (mg/L)



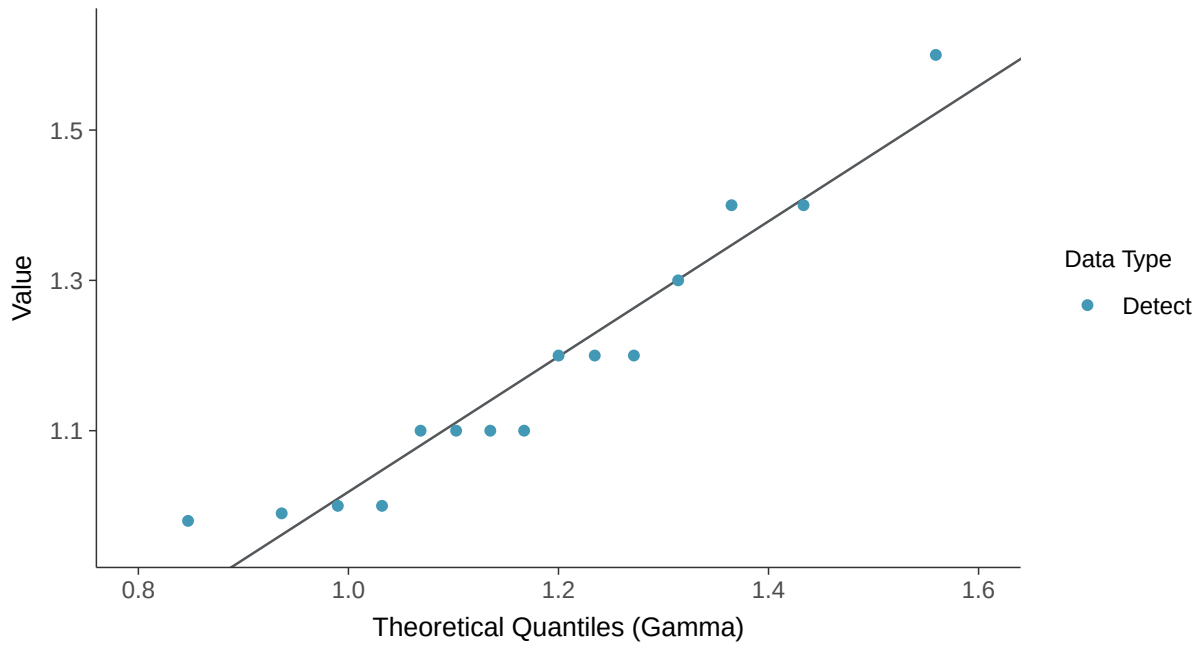
Lognormal Q-Q plot

Fluoride (App IV), MW-06 (mg/L)



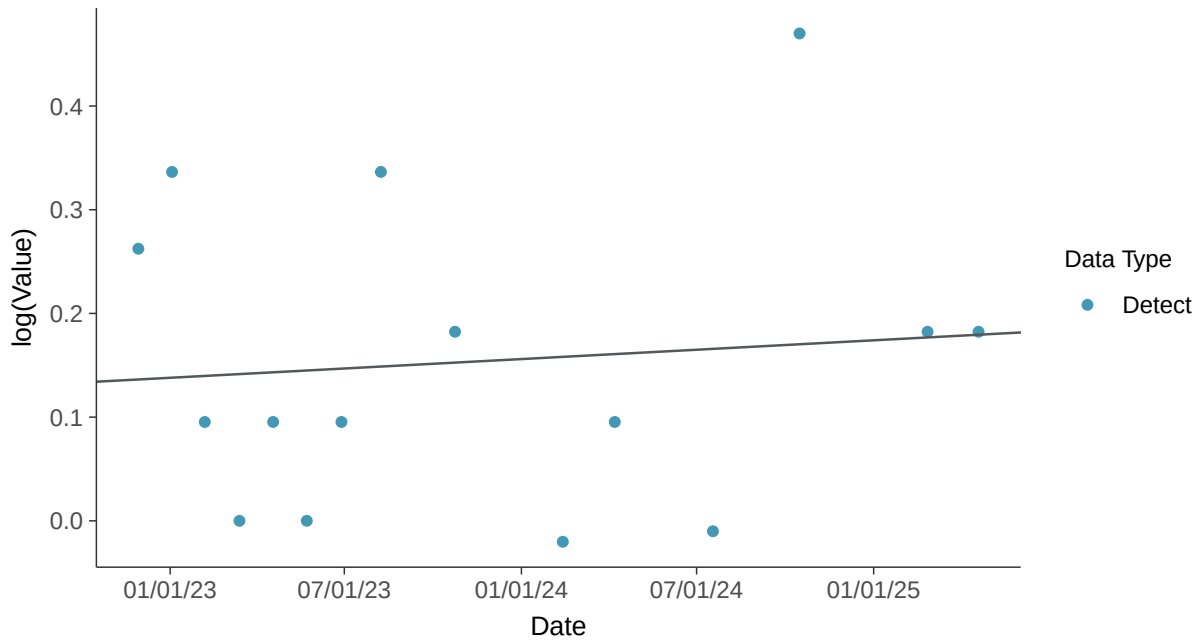
Gamma Q-Q plot

Fluoride (App IV), MW-06 (mg/L)



Trend Regression: Lognormal MLE

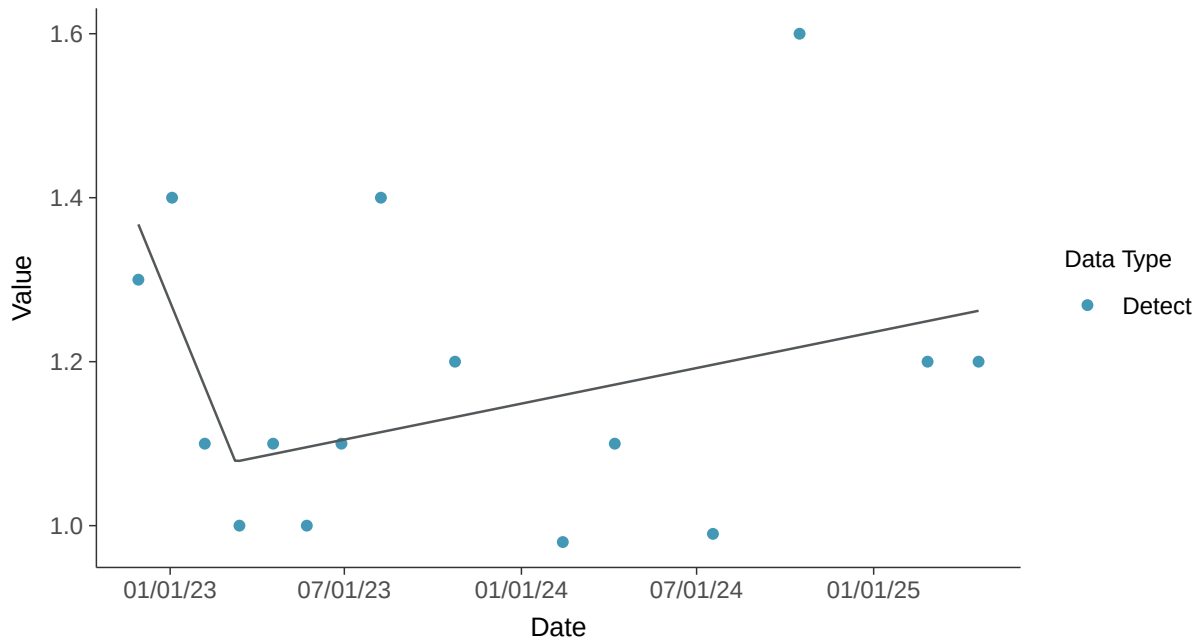
Fluoride (App IV), MW-06 (mg/L)

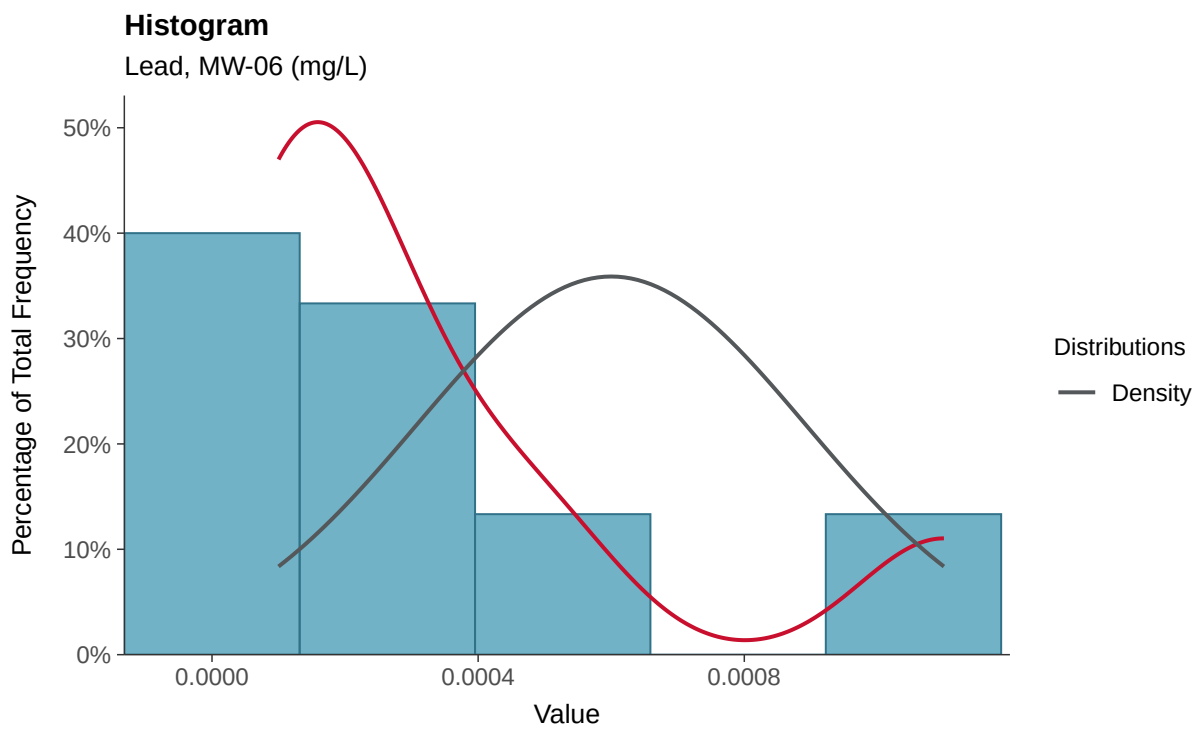




Trend Regression: Piecewise Linear-Linear

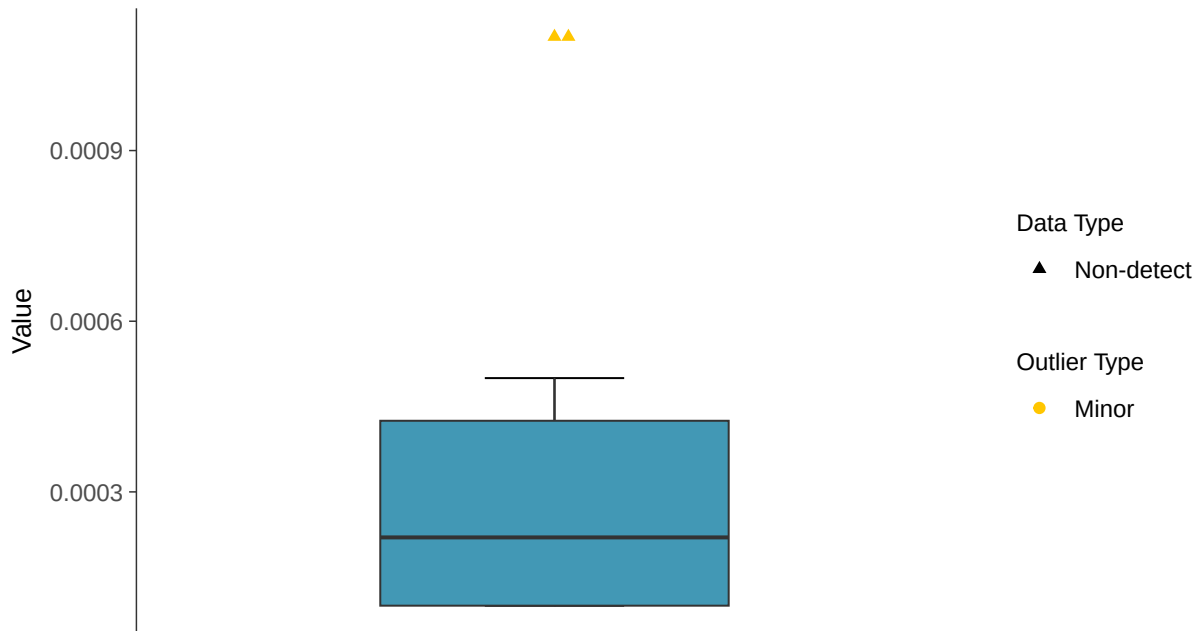
Fluoride (App IV), MW-06 (mg/L)





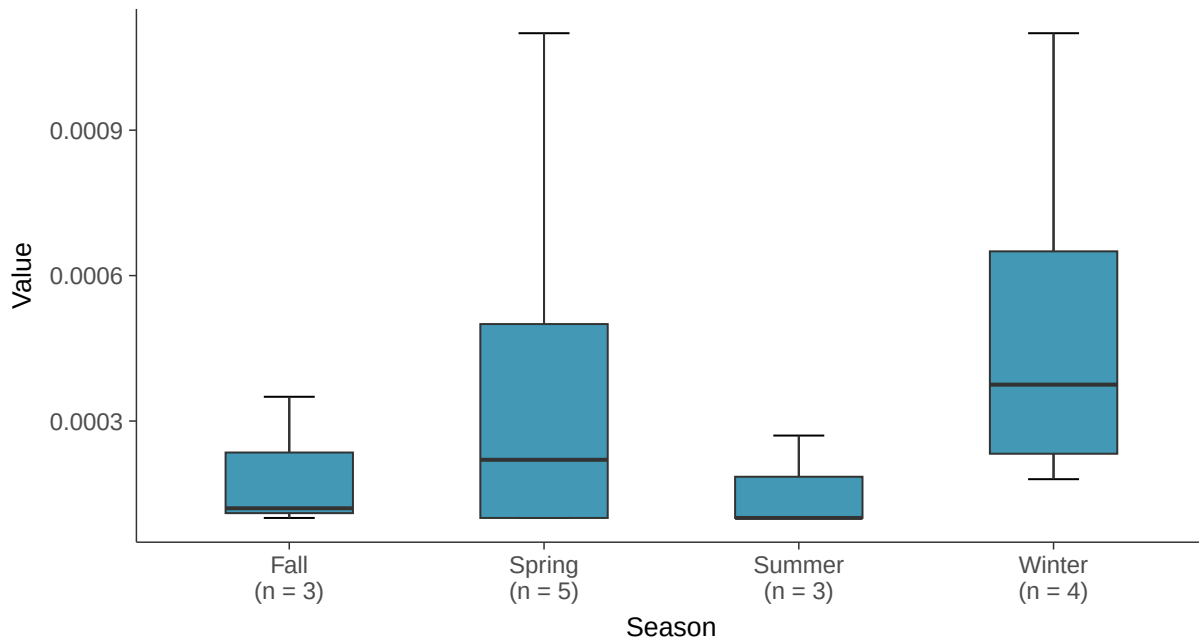
Boxplot

Lead, MW-06 (mg/L)



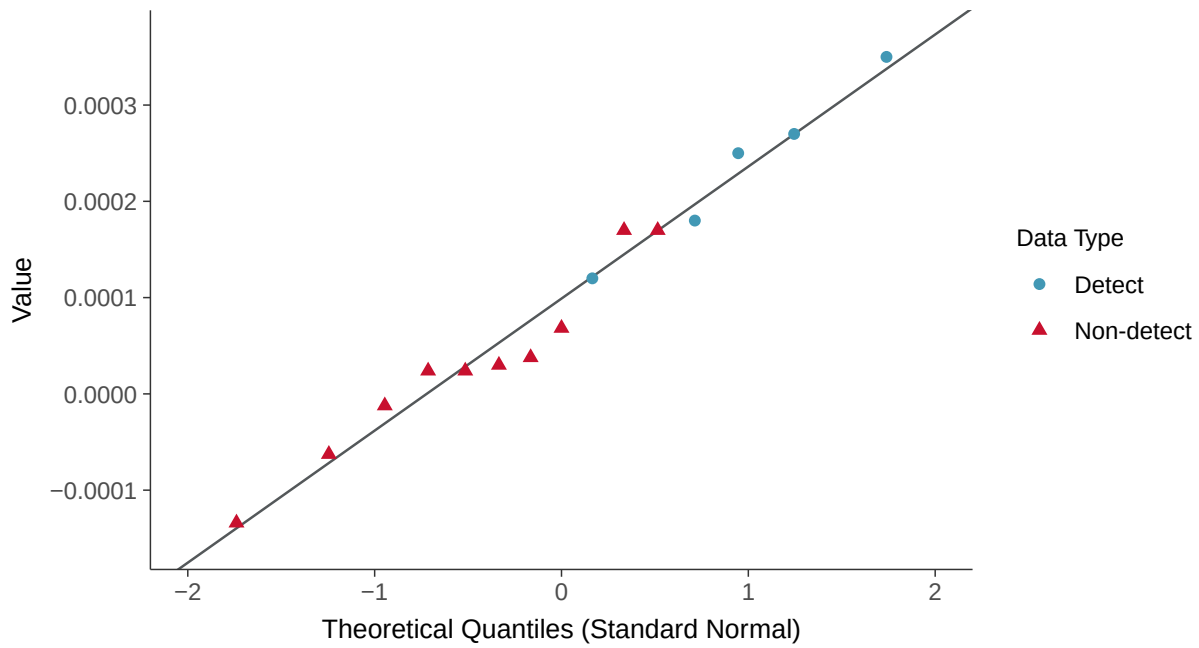
Boxplot by Season

Lead, MW-06 (mg/L)



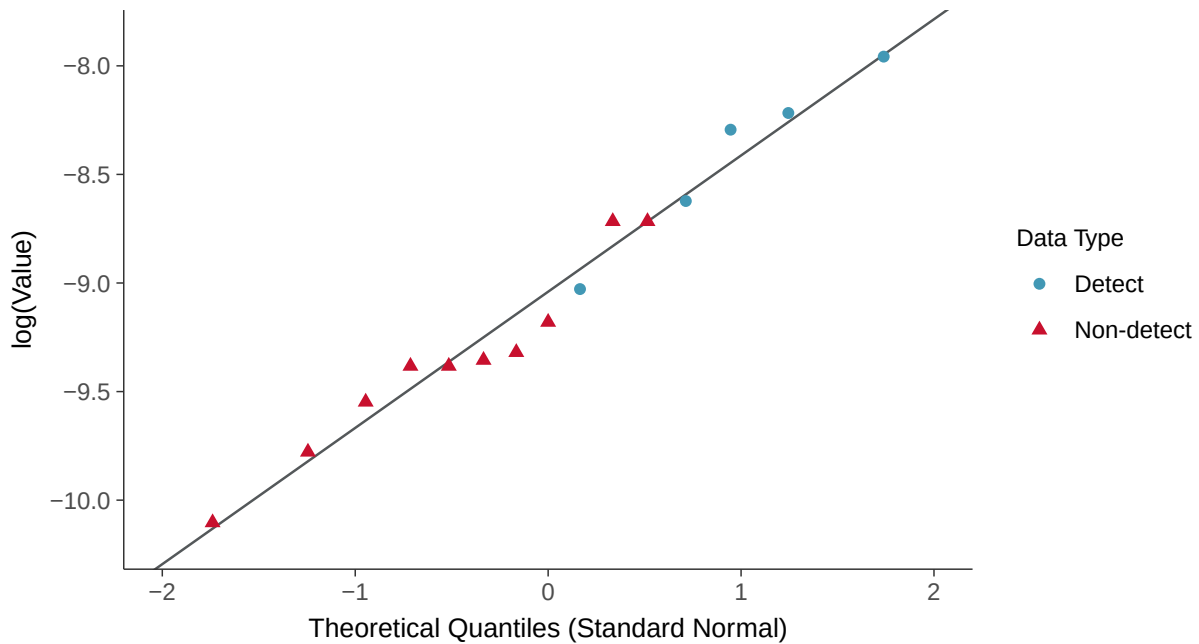
Normal Q-Q plot using ROS Imputed Estimates

Lead, MW-06 (mg/L)



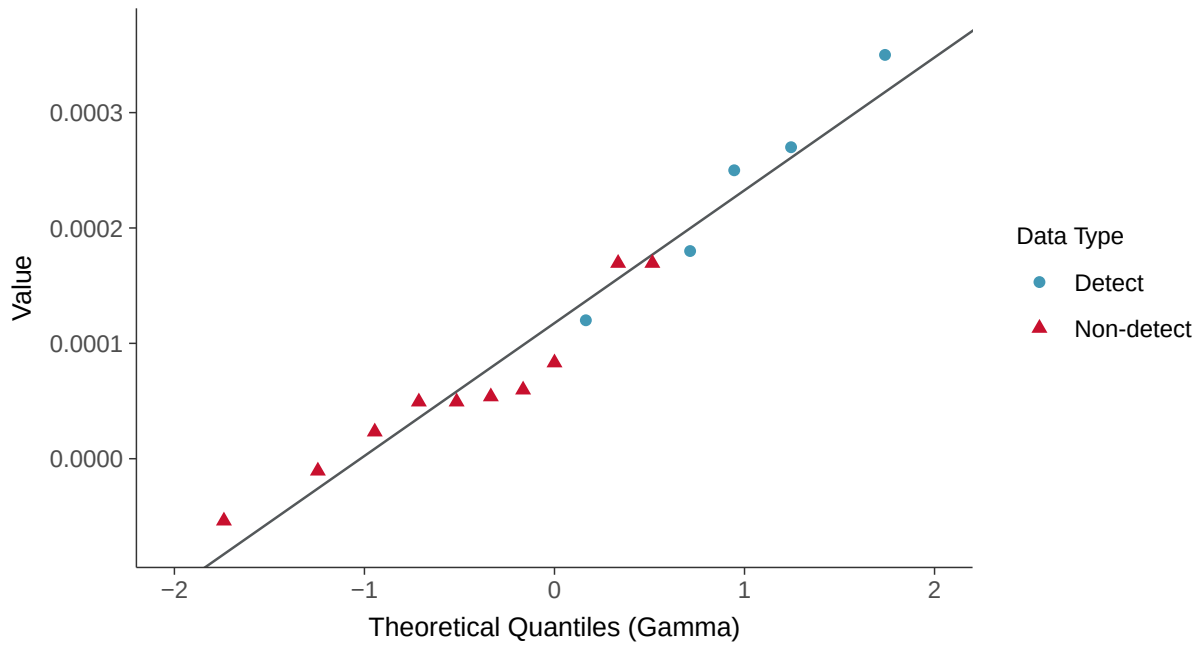
Lognormal Q-Q plot using ROS Imputed Estimates

Lead, MW-06 (mg/L)



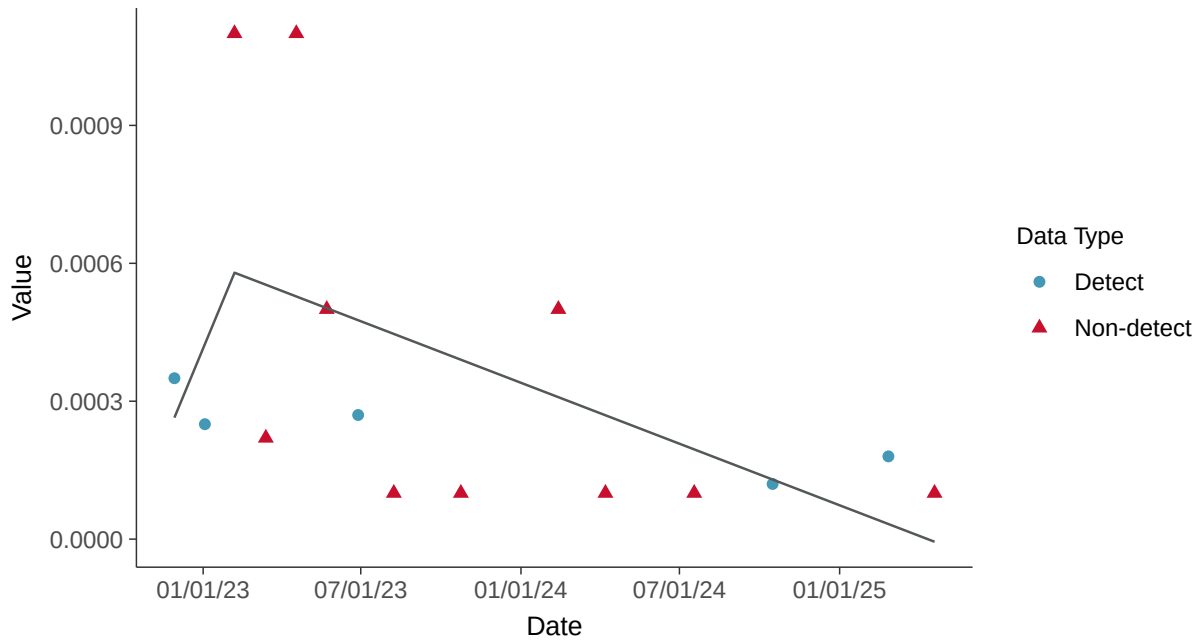
Gamma Q-Q plot using ROS Imputed Estimates

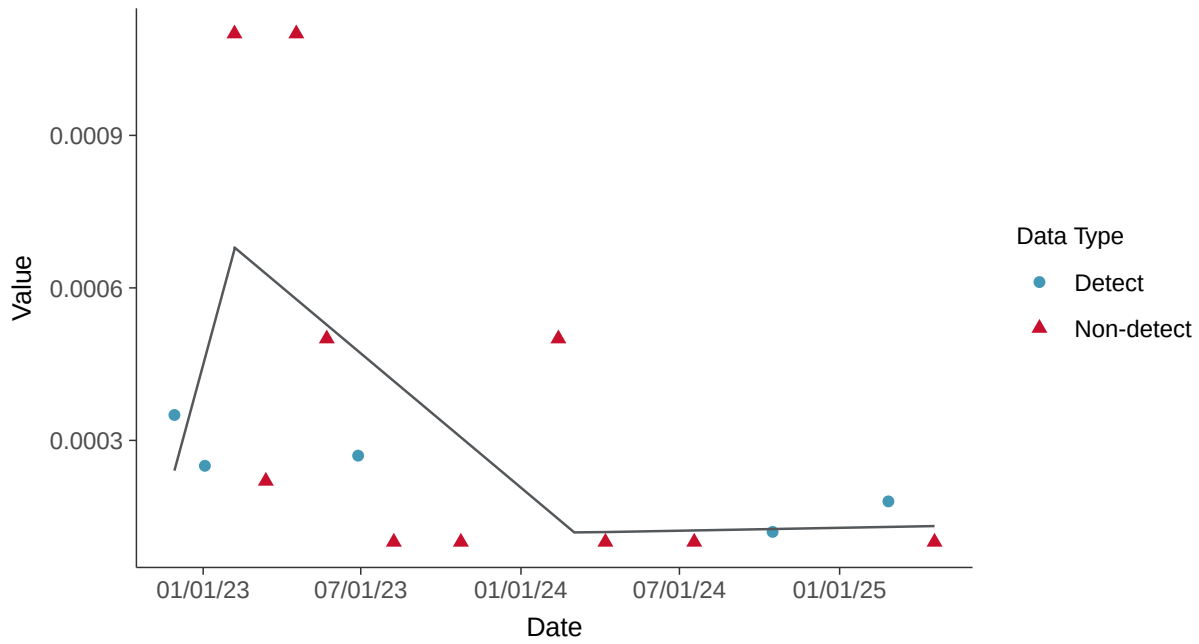
Lead, MW-06 (mg/L)



Trend Regression: Piecewise Linear-Linear

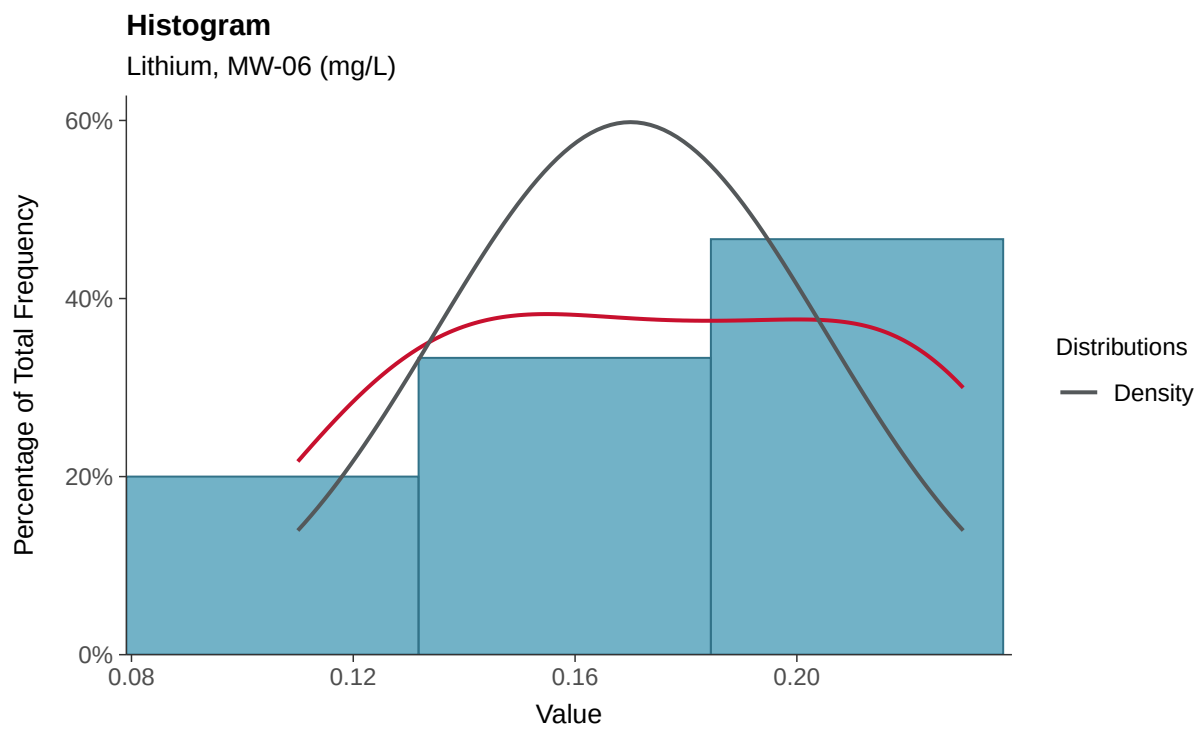
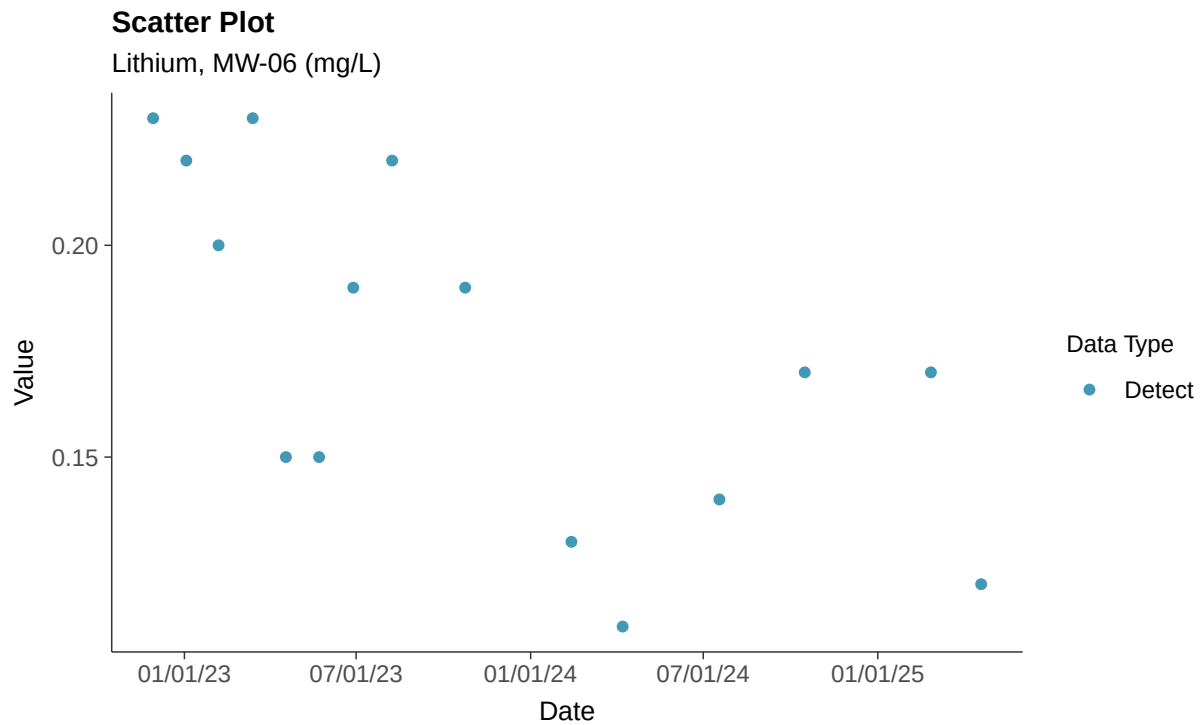
Lead, MW-06 (mg/L)





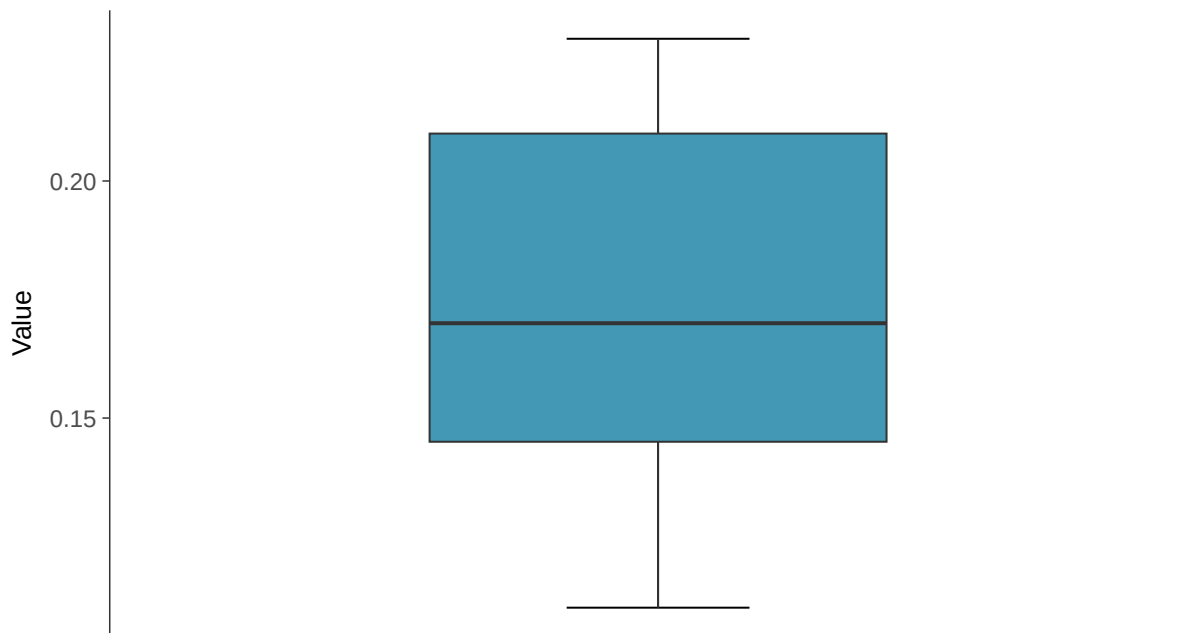
Appendix IV: Lithium, MW-06

ID: 16_1_4_116



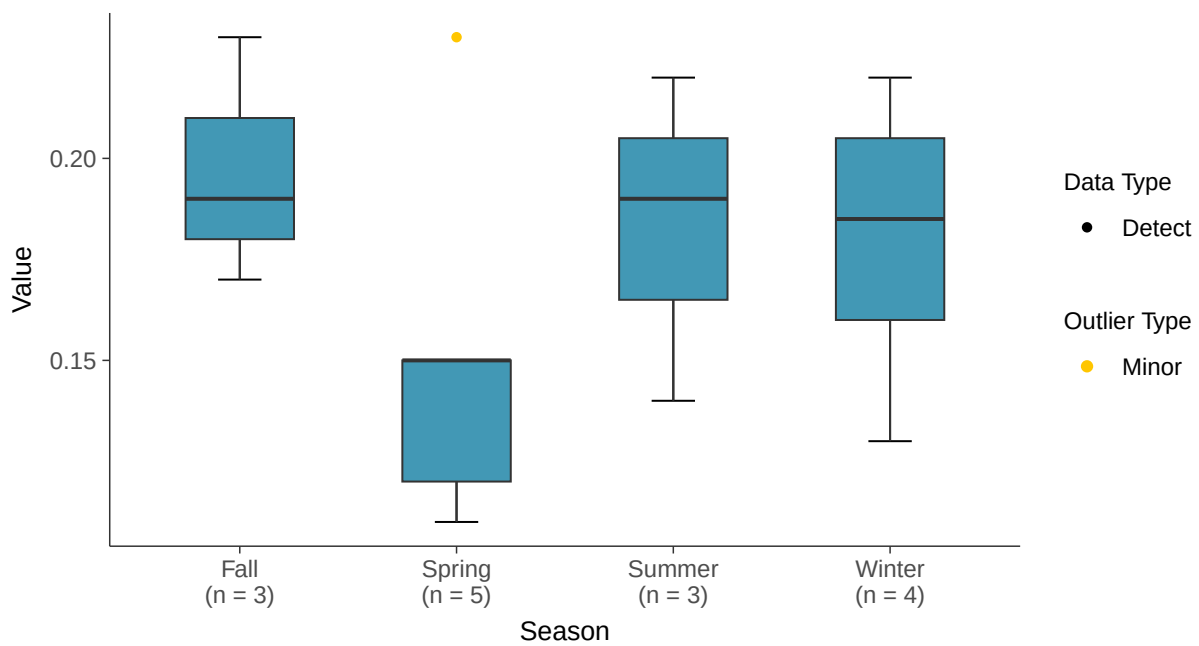
Boxplot

Lithium, MW-06 (mg/L)



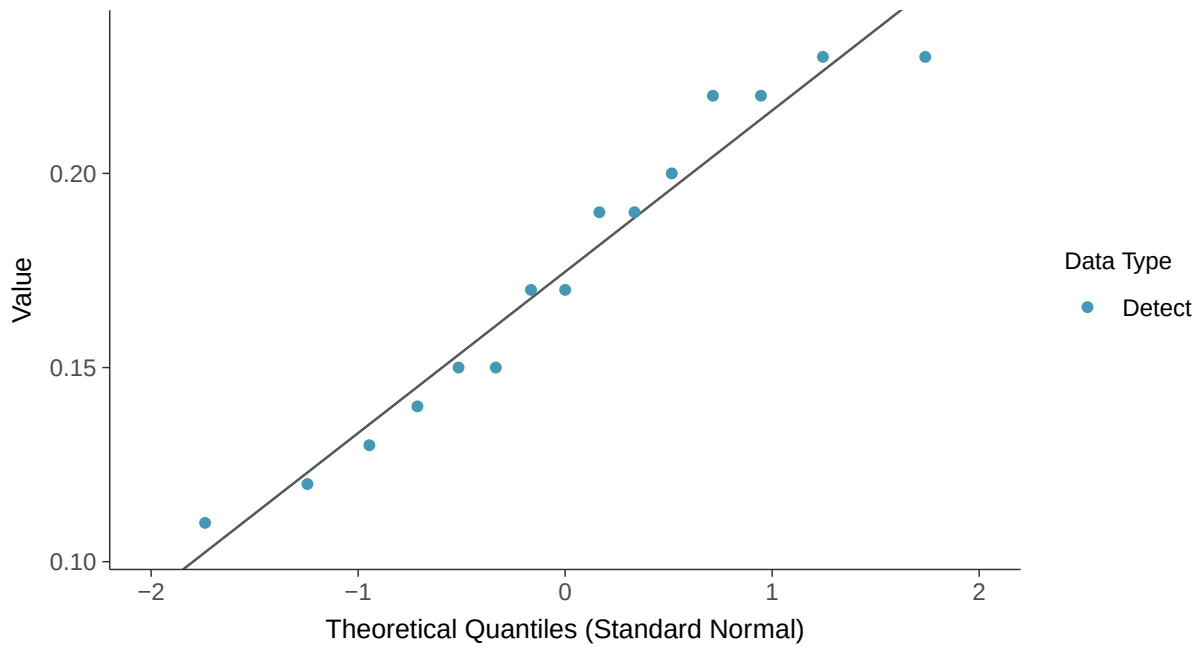
Boxplot by Season

Lithium, MW-06 (mg/L)



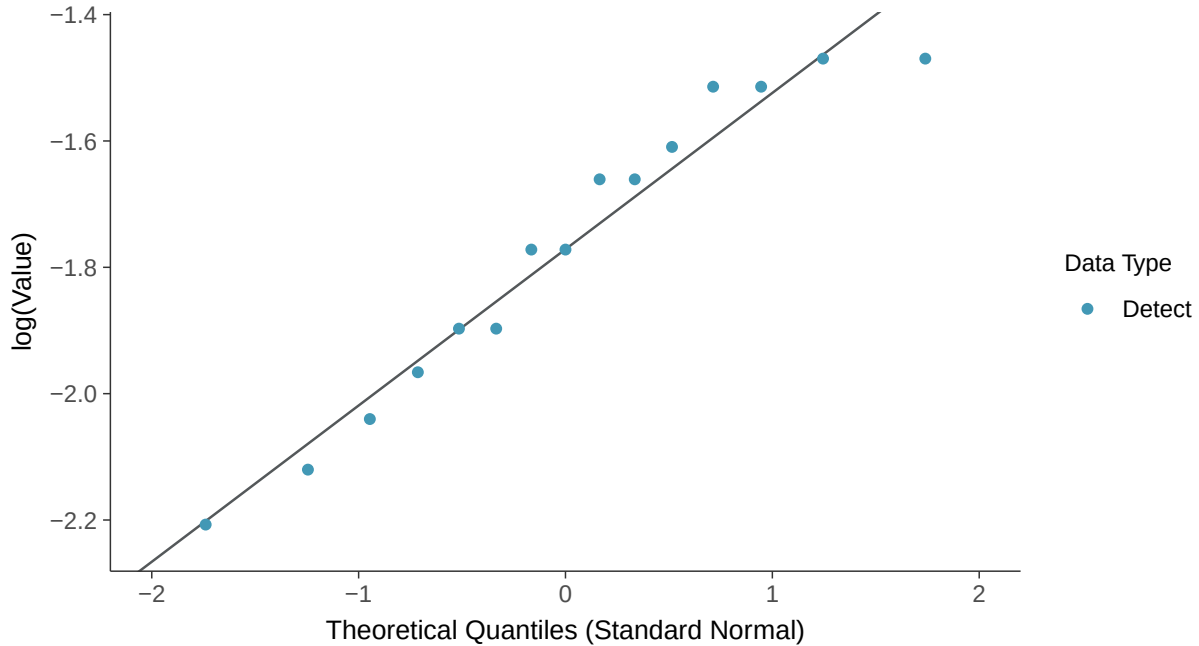
Normal Q-Q plot

Lithium, MW-06 (mg/L)



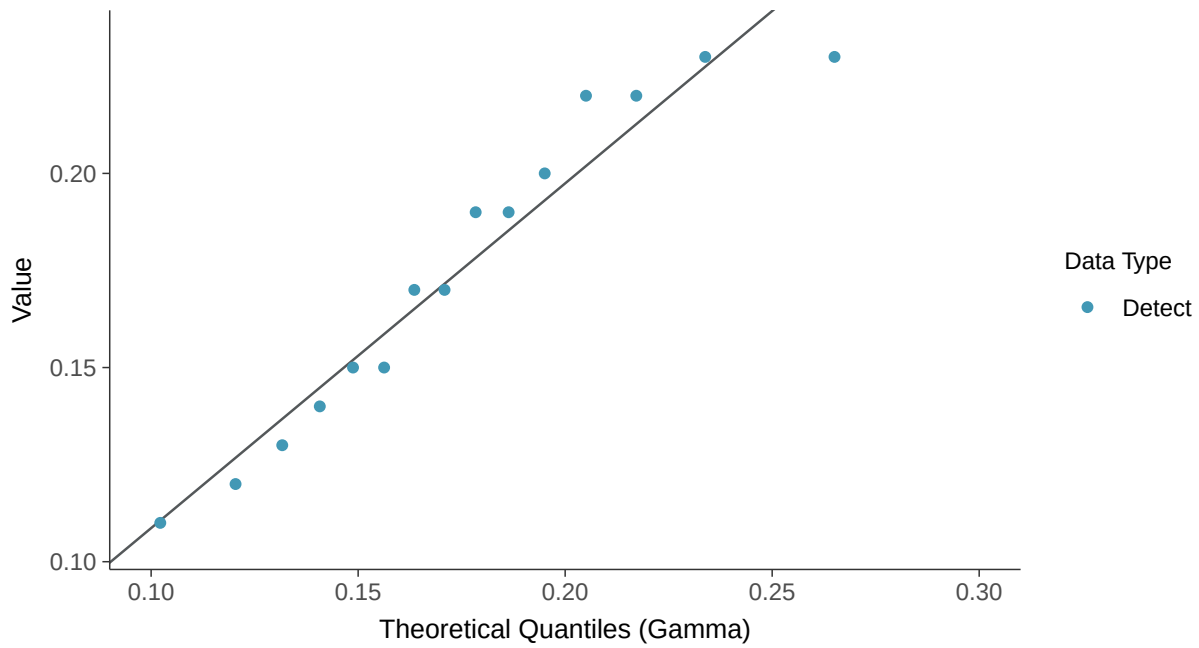
Lognormal Q-Q plot

Lithium, MW-06 (mg/L)



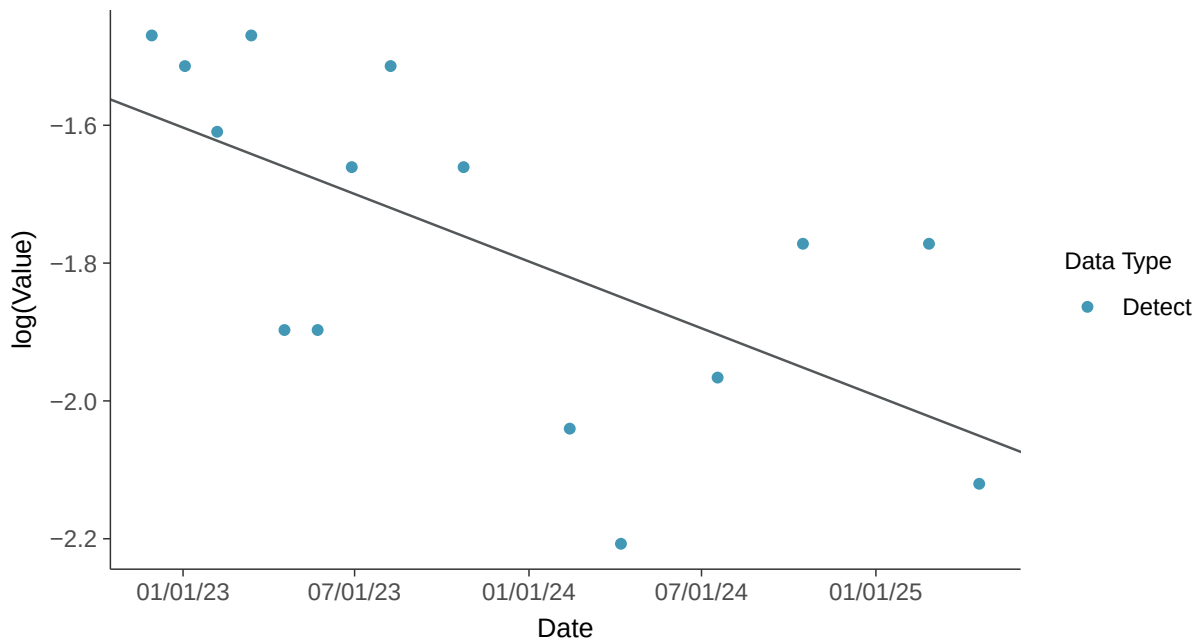
Gamma Q-Q plot

Lithium, MW-06 (mg/L)



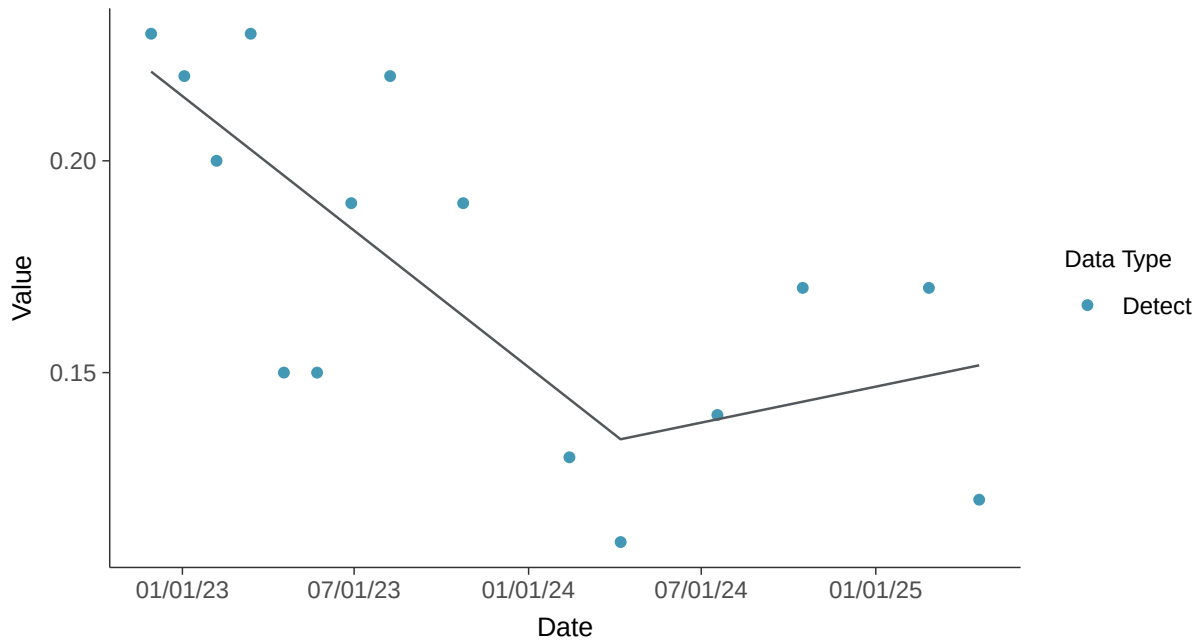
Trend Regression: Lognormal MLE

Lithium, MW-06 (mg/L)



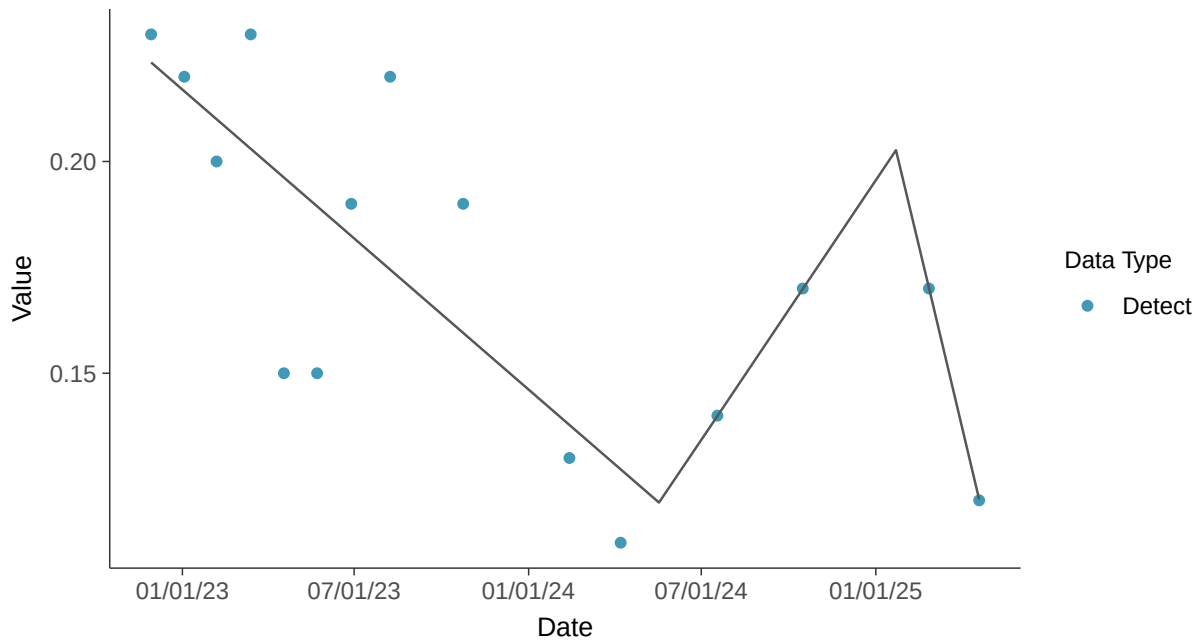
Trend Regression: Piecewise Linear-Linear

Lithium, MW-06 (mg/L)



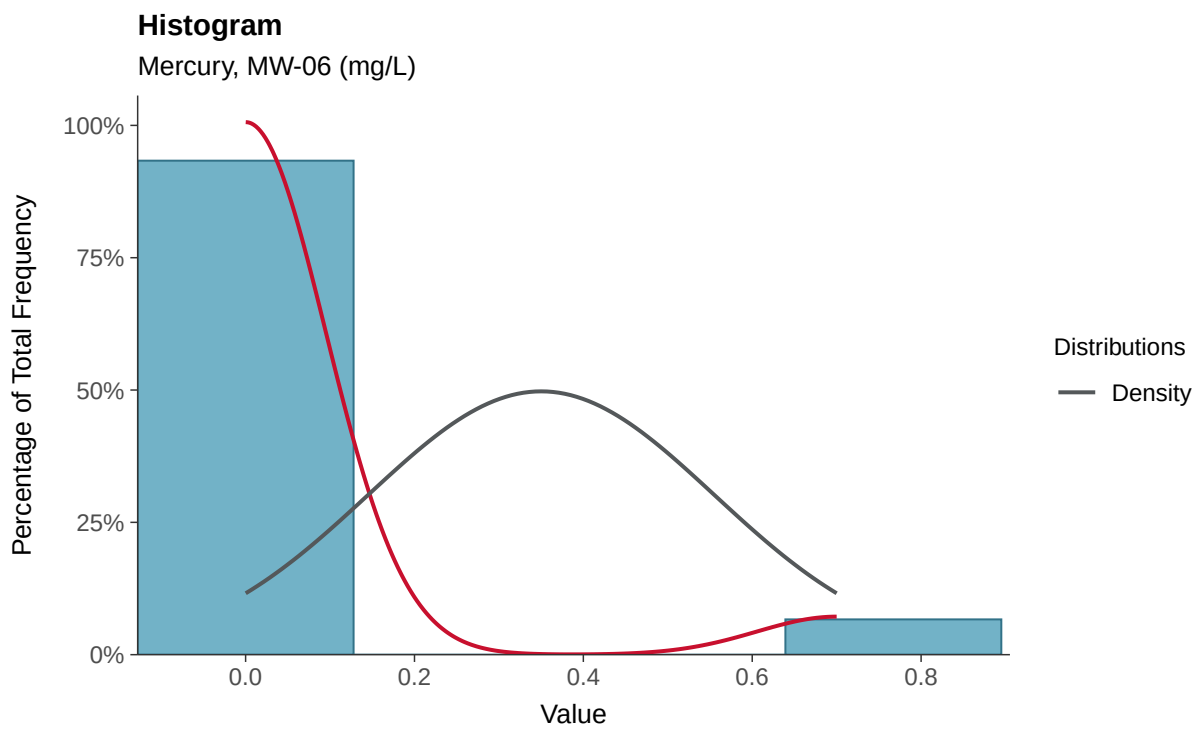
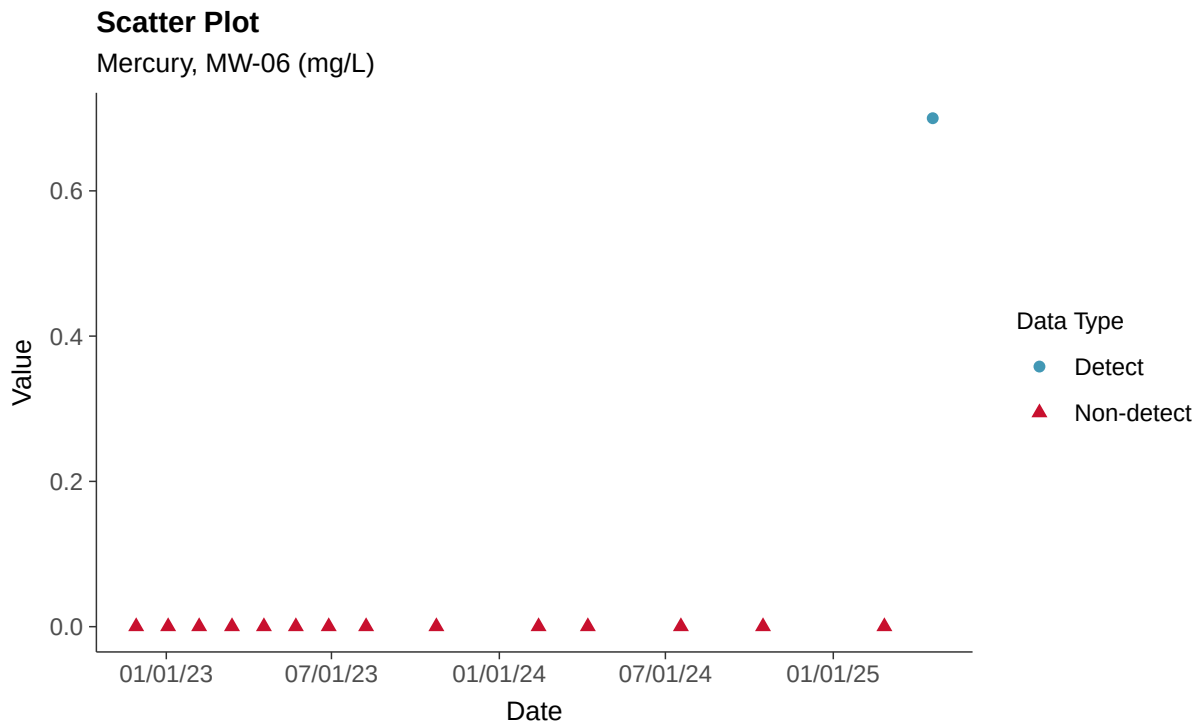
Trend Regression: Piecewise Linear-Linear-Linear

Lithium, MW-06 (mg/L)



Appendix IV: Mercury, MW-06

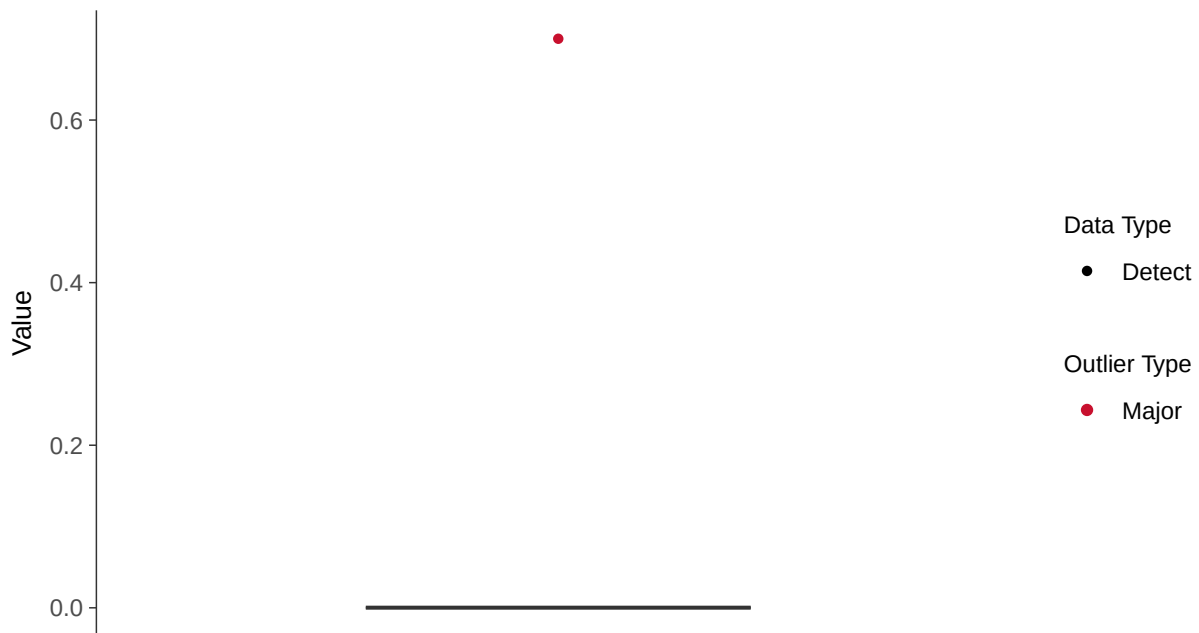
ID: 16_1_4_117





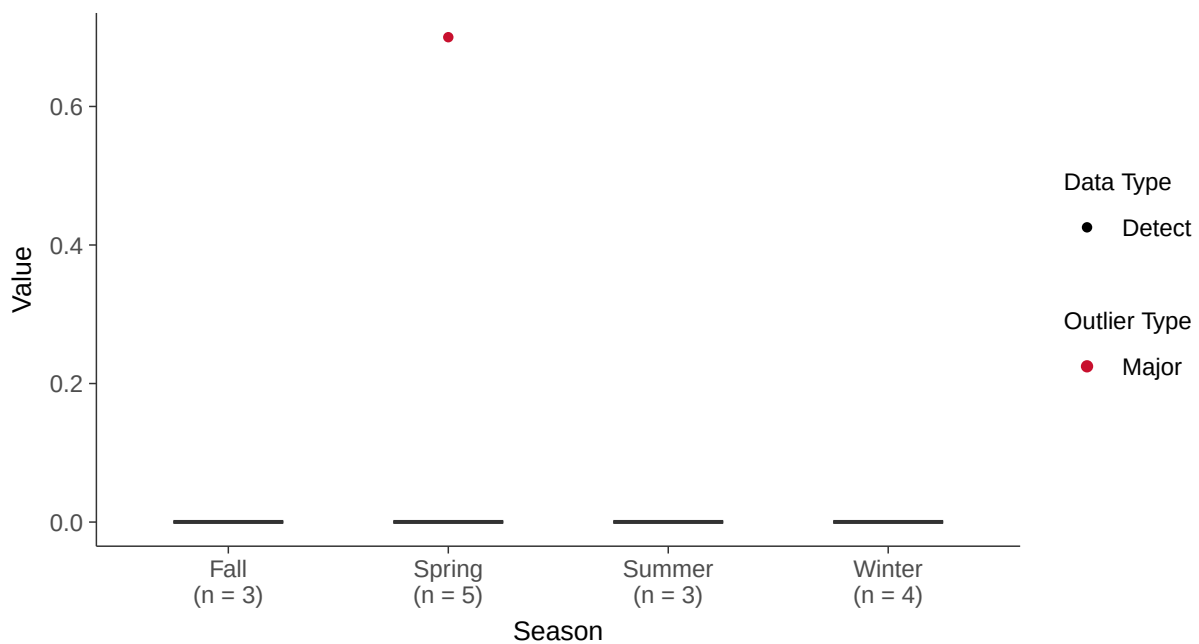
Boxplot

Mercury, MW-06 (mg/L)



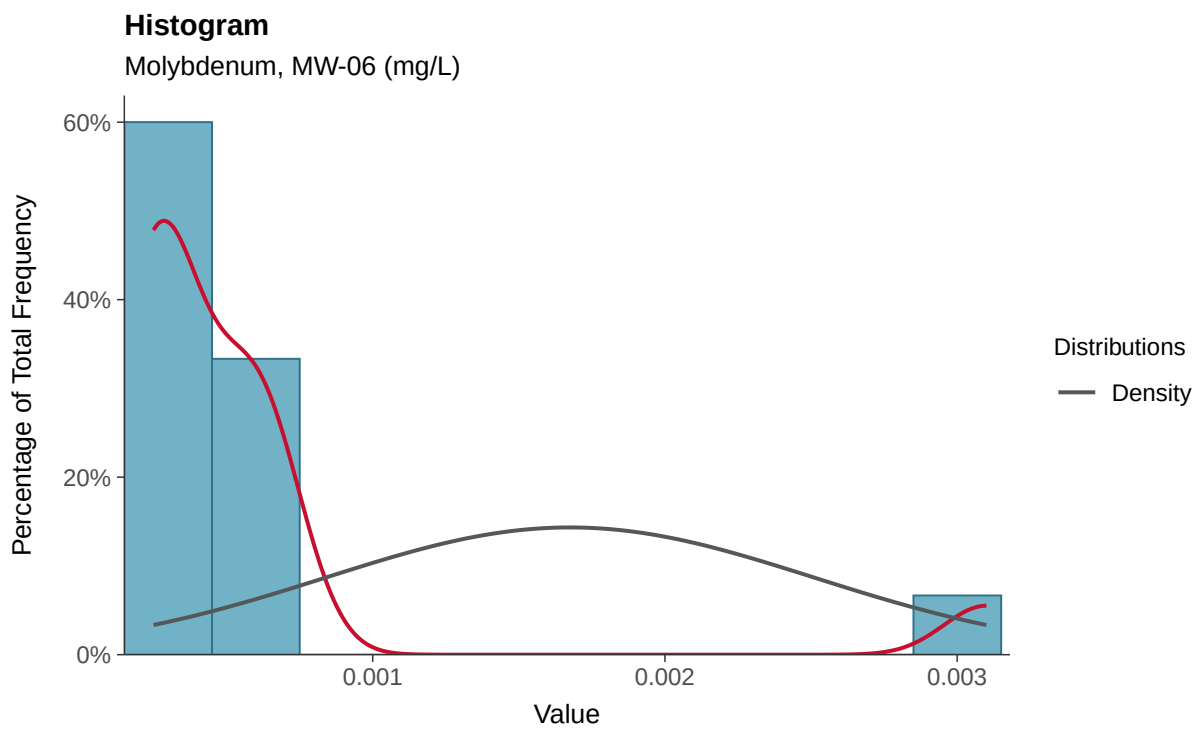
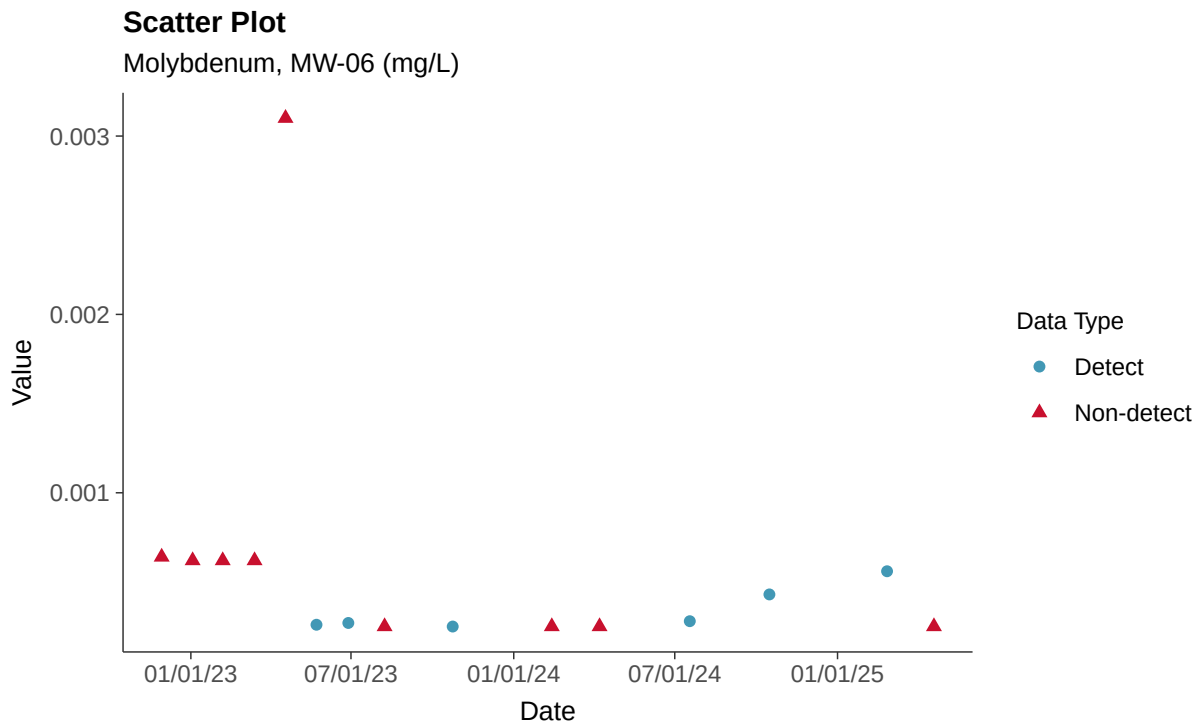
Boxplot by Season

Mercury, MW-06 (mg/L)



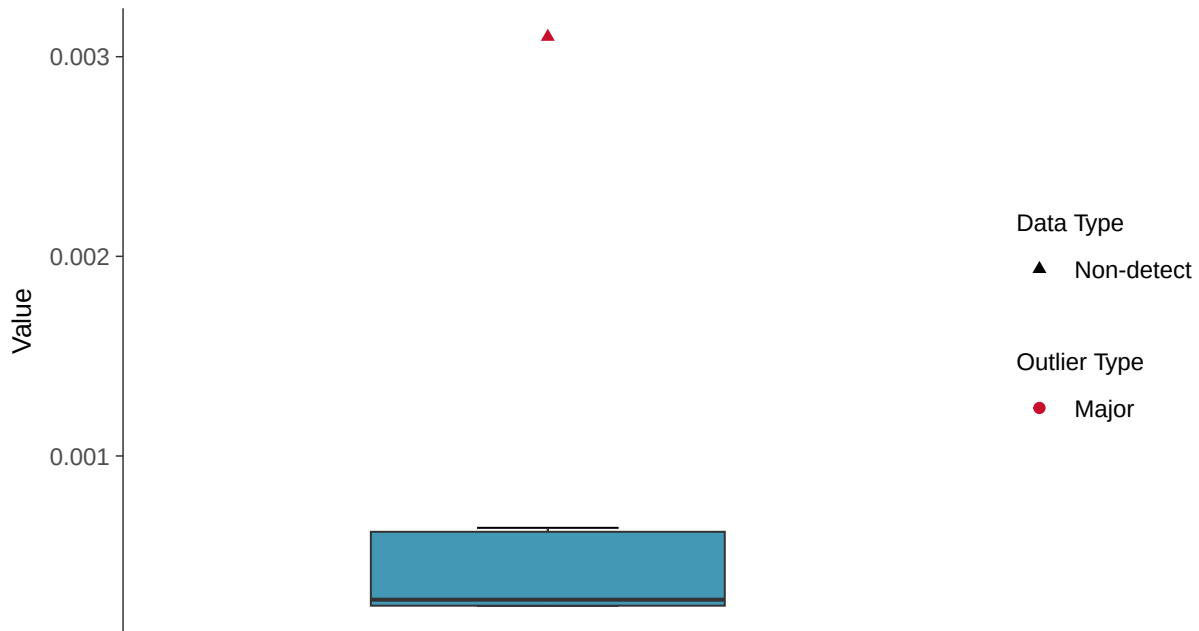
Appendix IV: Molybdenum, MW-06

ID: 16_1_4_118



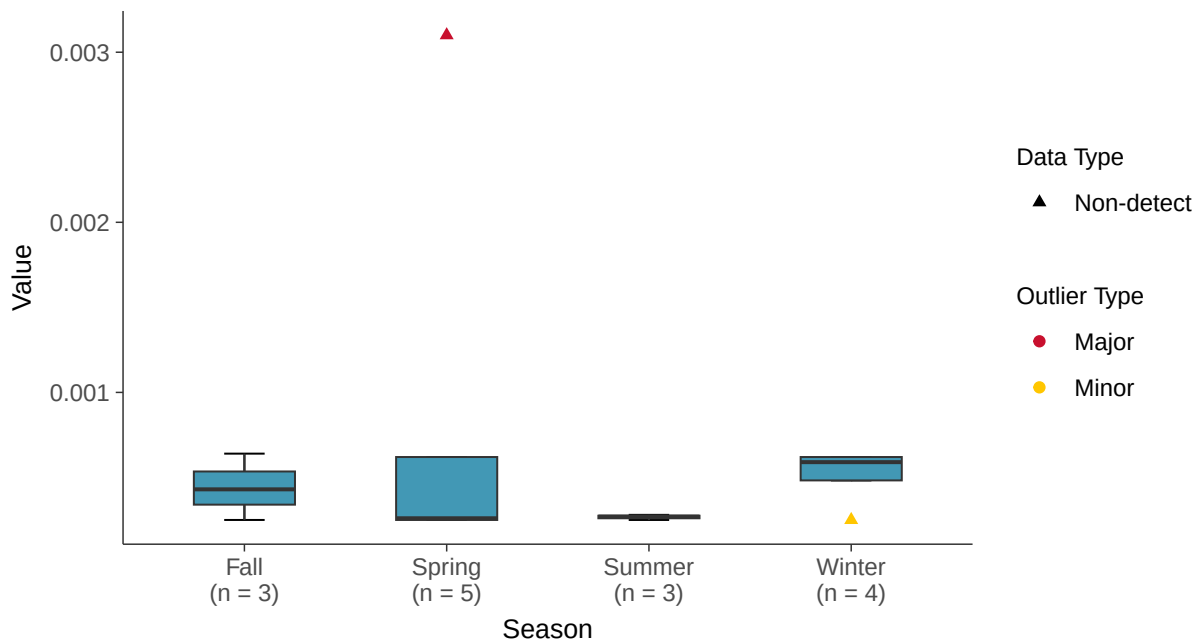
Boxplot

Molybdenum, MW-06 (mg/L)



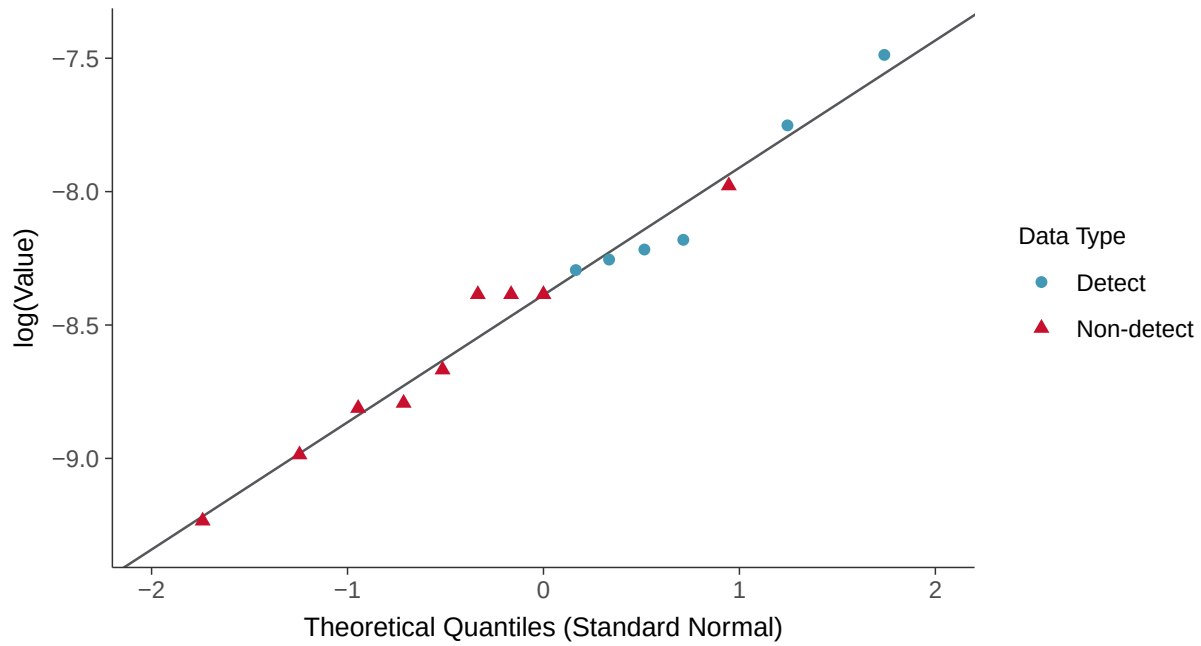
Boxplot by Season

Molybdenum, MW-06 (mg/L)



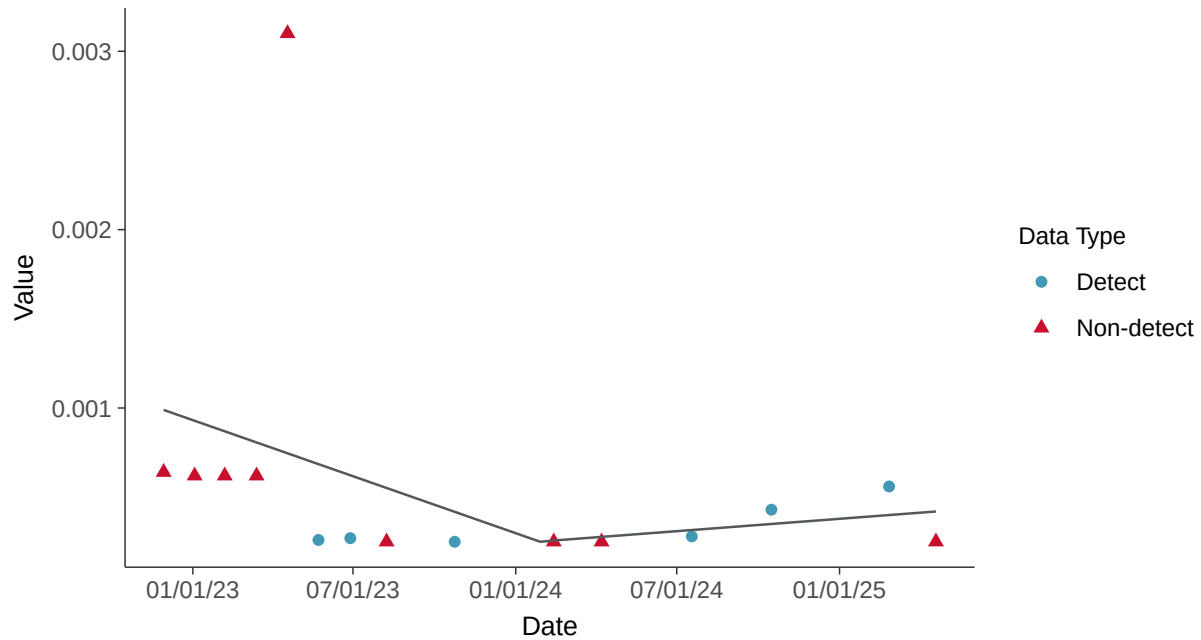
Lognormal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-06 (mg/L)

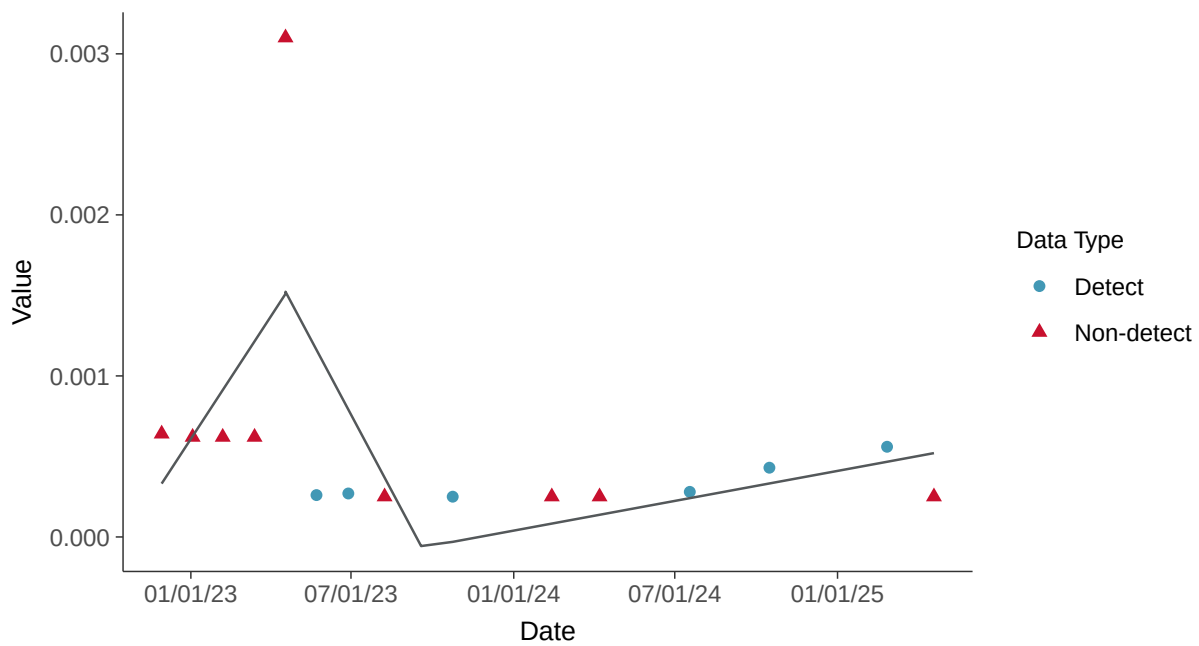


Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-06 (mg/L)



Molybdenum, MW-06 (mg/L)

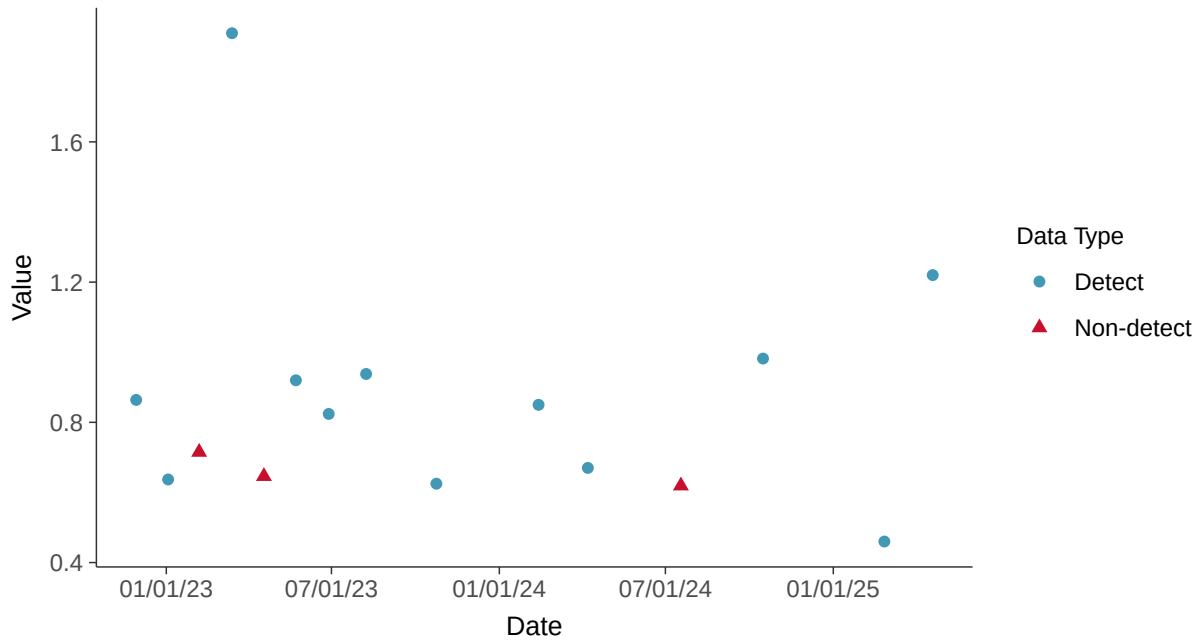


Appendix IV: Radium 226 and 228, MW-06

ID: 16_1_4_121

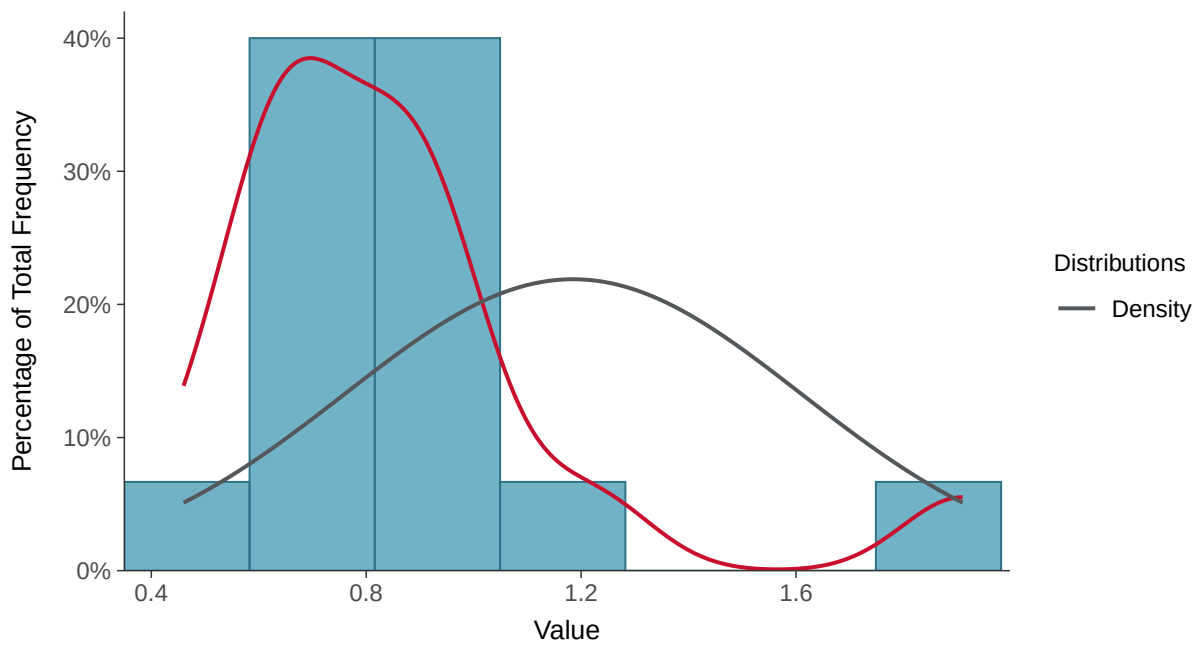
Scatter Plot

Radium 226 and 228, MW-06 (pCi/L)



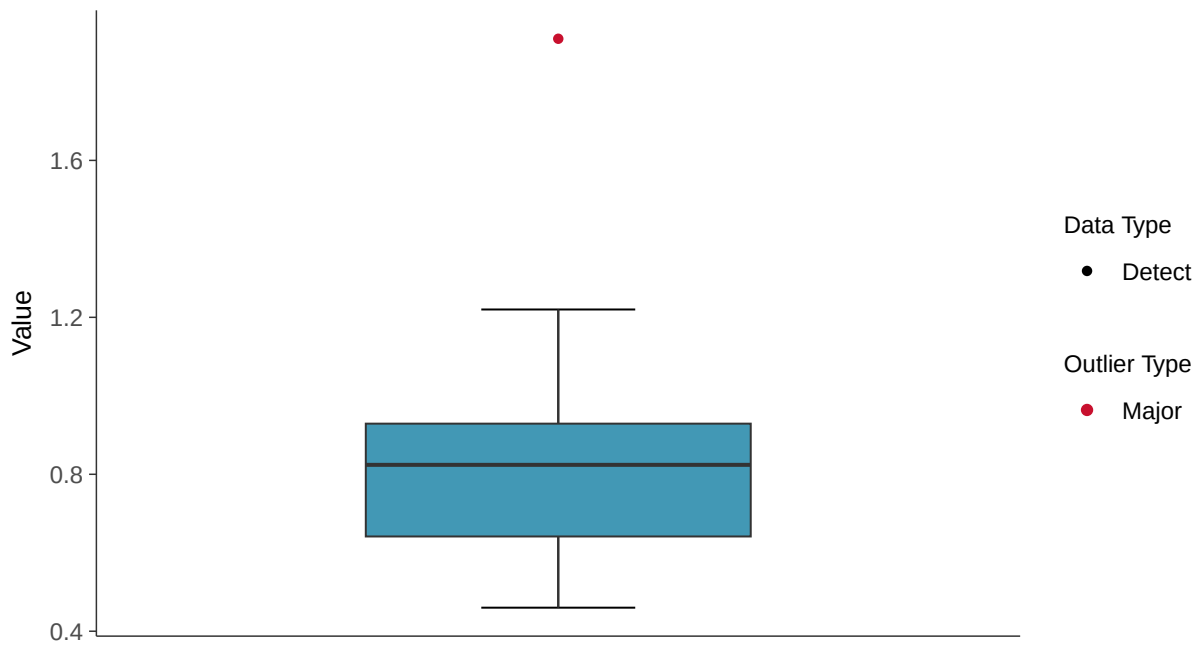
Histogram

Radium 226 and 228, MW-06 (pCi/L)



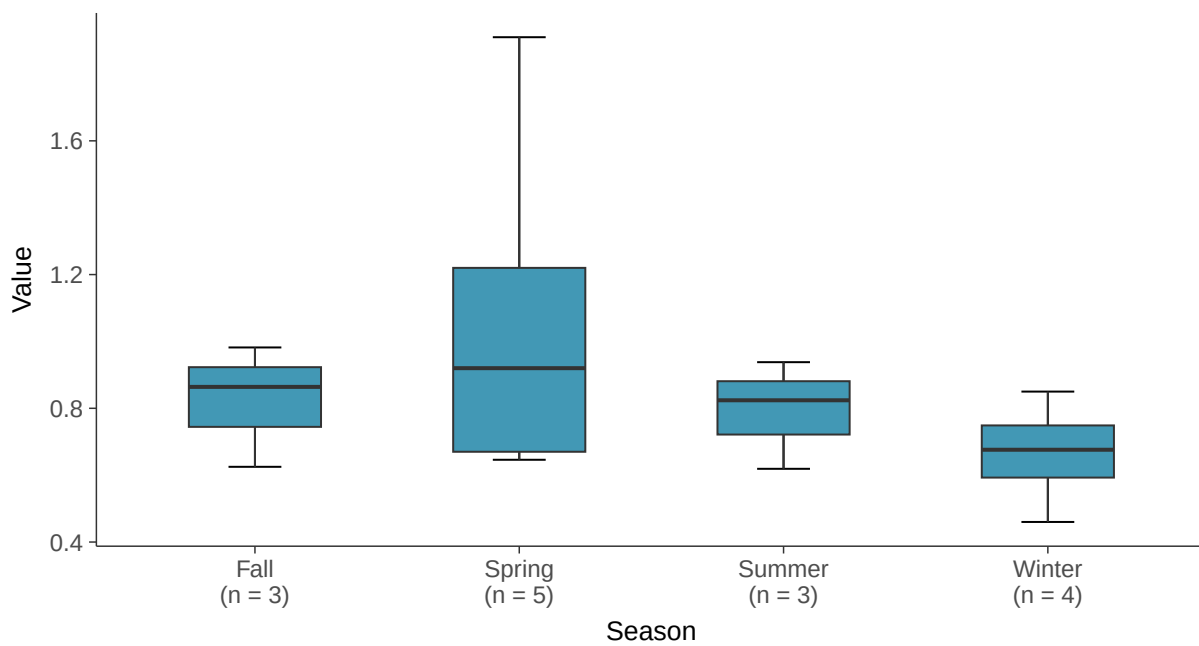
Boxplot

Radium 226 and 228, MW-06 (pCi/L)



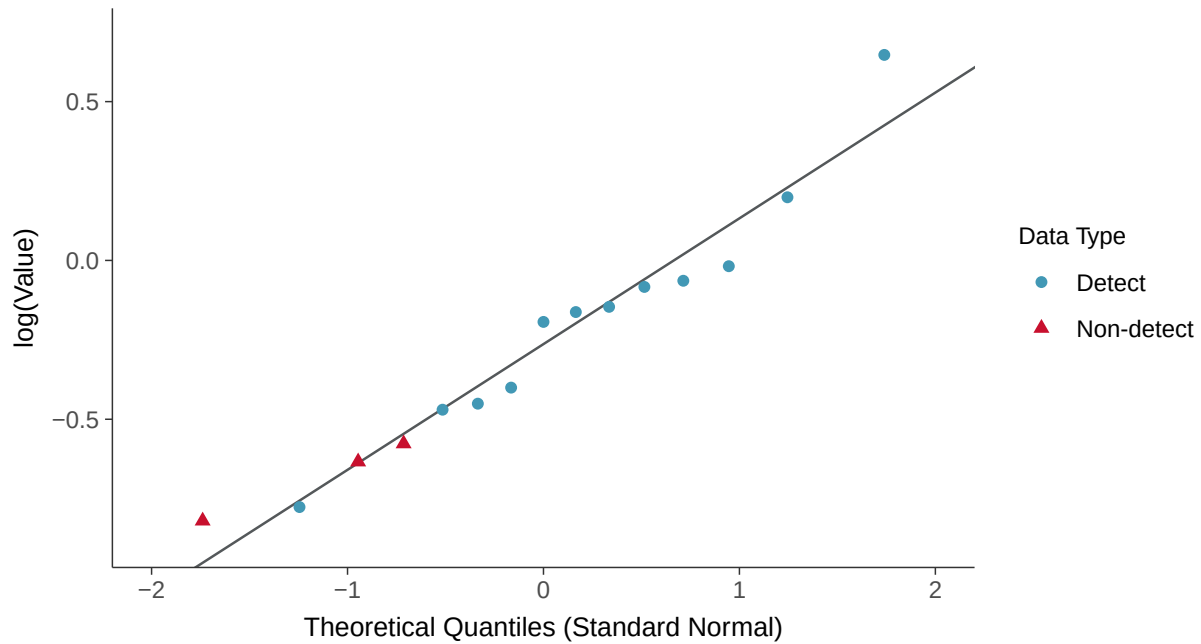
Boxplot by Season

Radium 226 and 228, MW-06 (pCi/L)



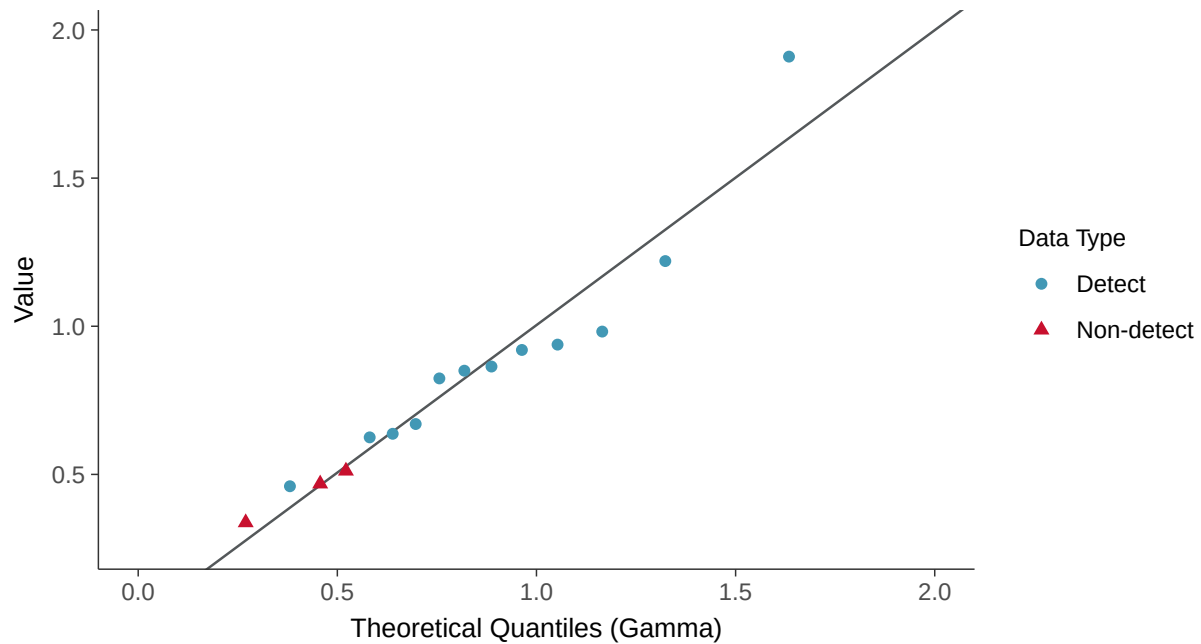
Lognormal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-06 (pCi/L)



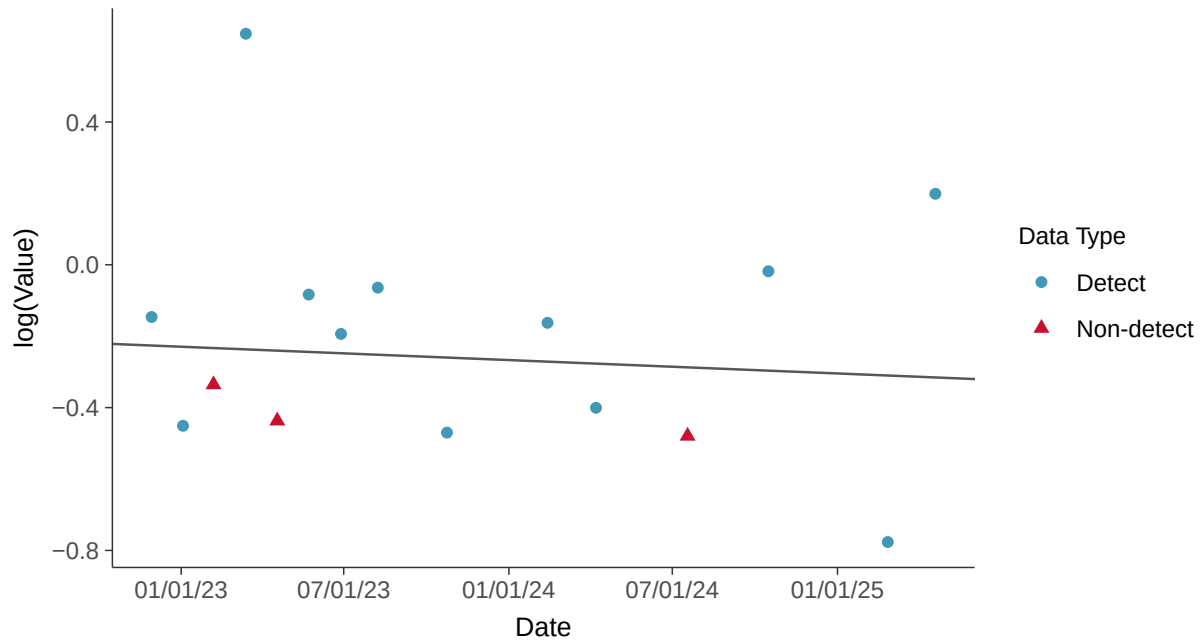
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-06 (pCi/L)



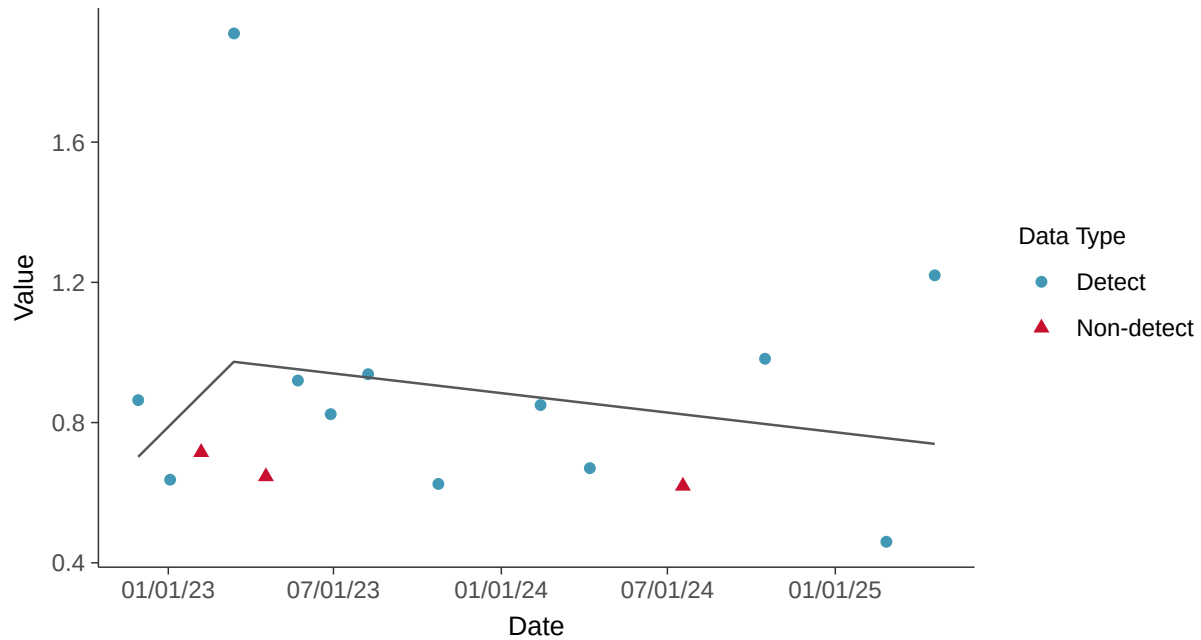
Trend Regression: Lognormal MLE

Radium 226 and 228, MW-06 (pCi/L)



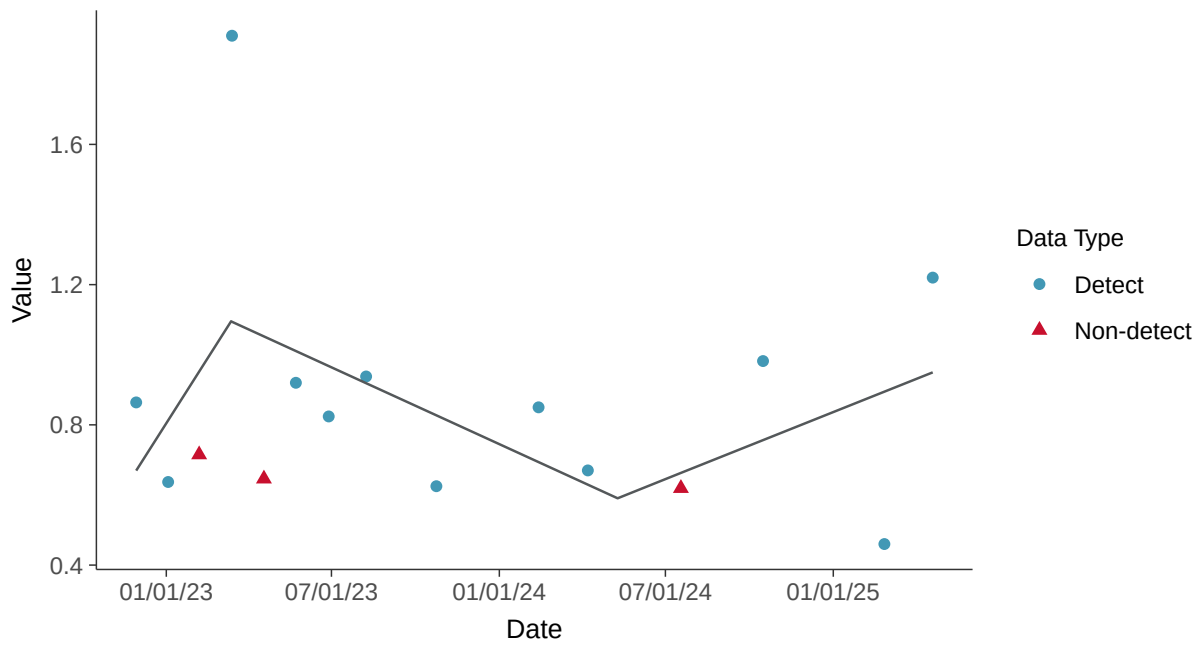
Trend Regression: Piecewise Linear-Linear

Radium 226 and 228, MW-06 (pCi/L)



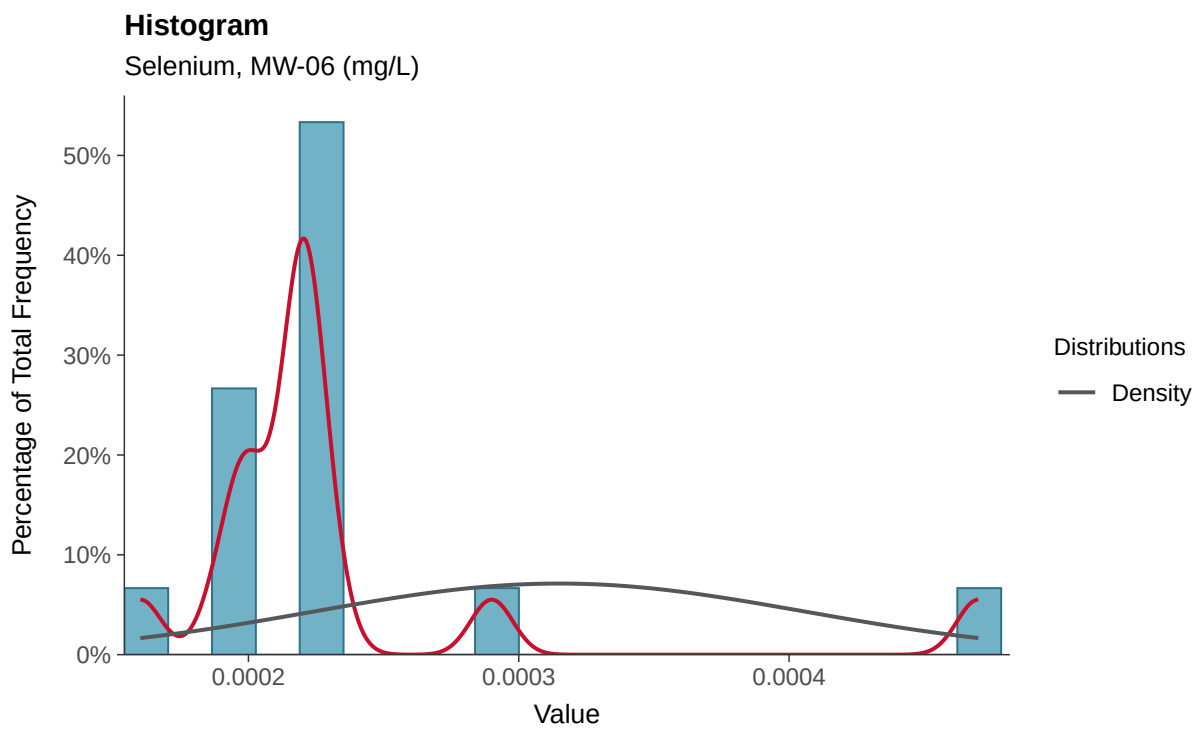
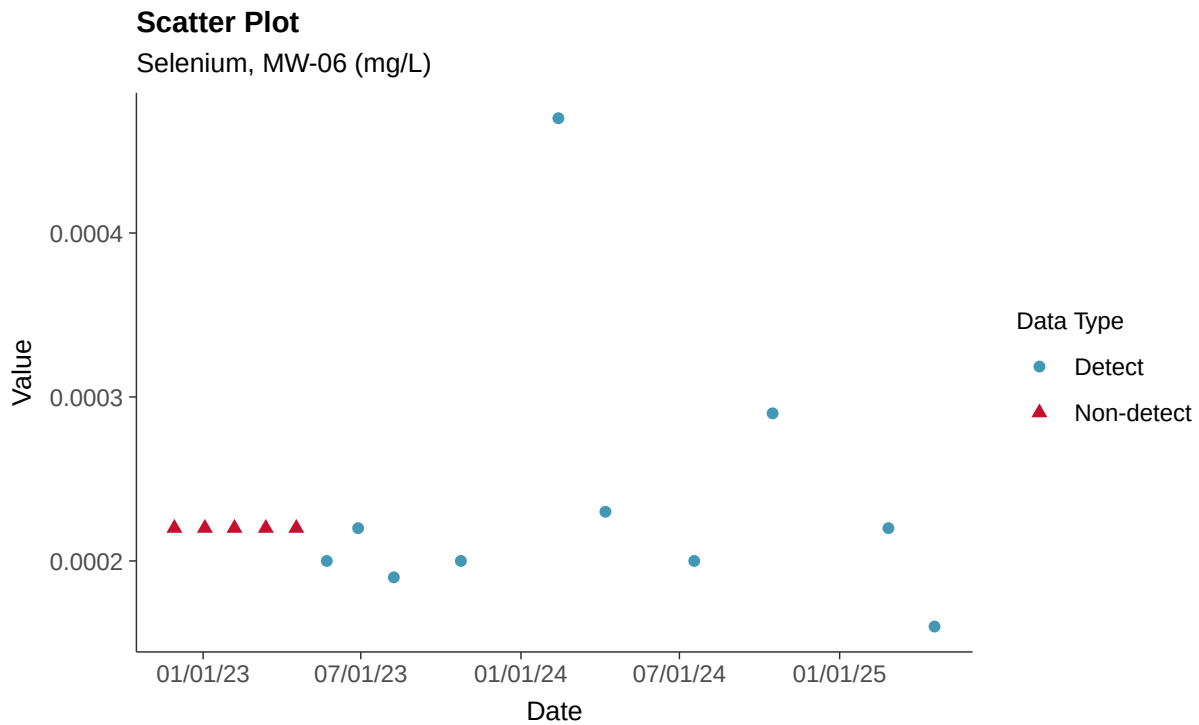


Trend Regression: Piecewise Linear-Linear-Linear
Radium 226 and 228, MW-06 (pCi/L)



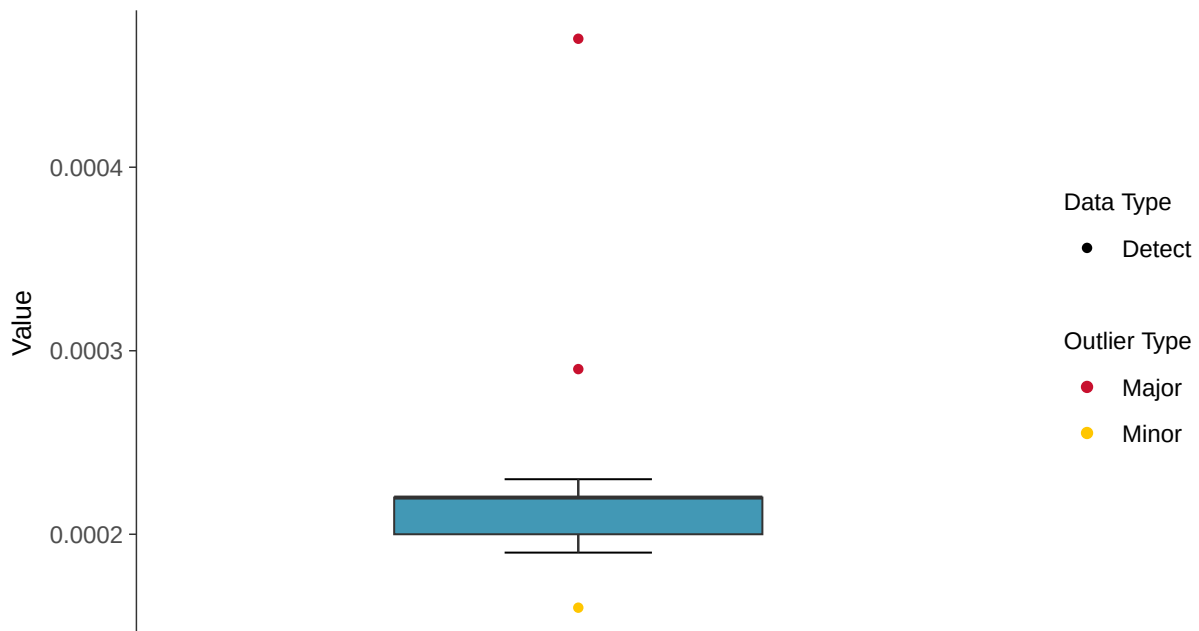
Appendix IV: Selenium, MW-06

ID: 16_1_4_122



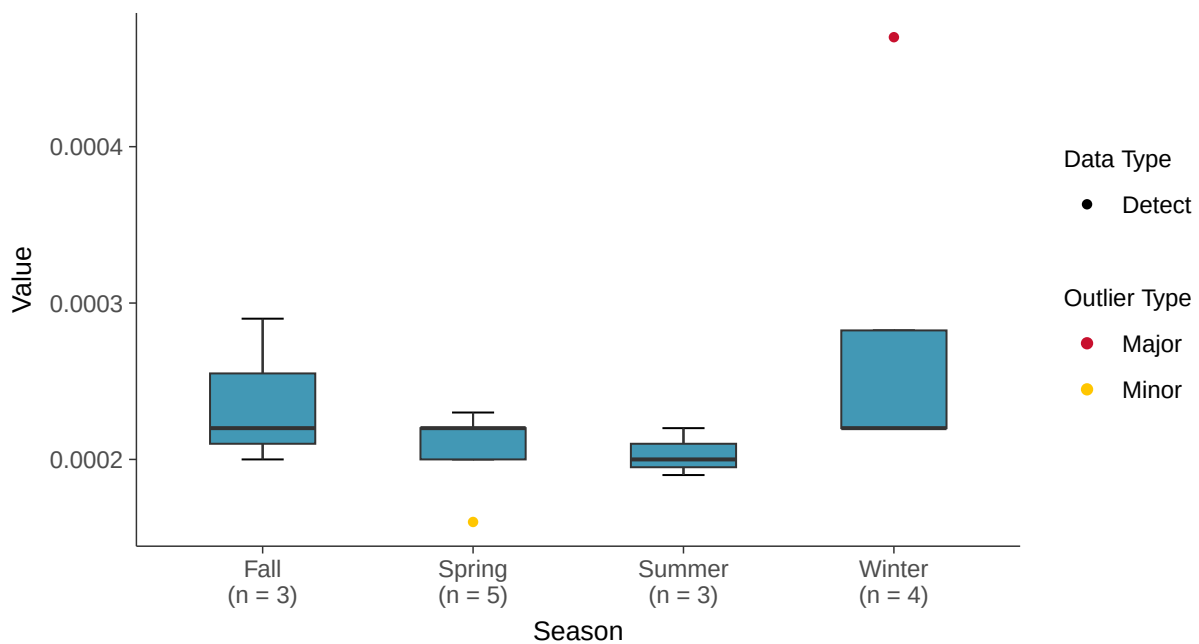
Boxplot

Selenium, MW-06 (mg/L)



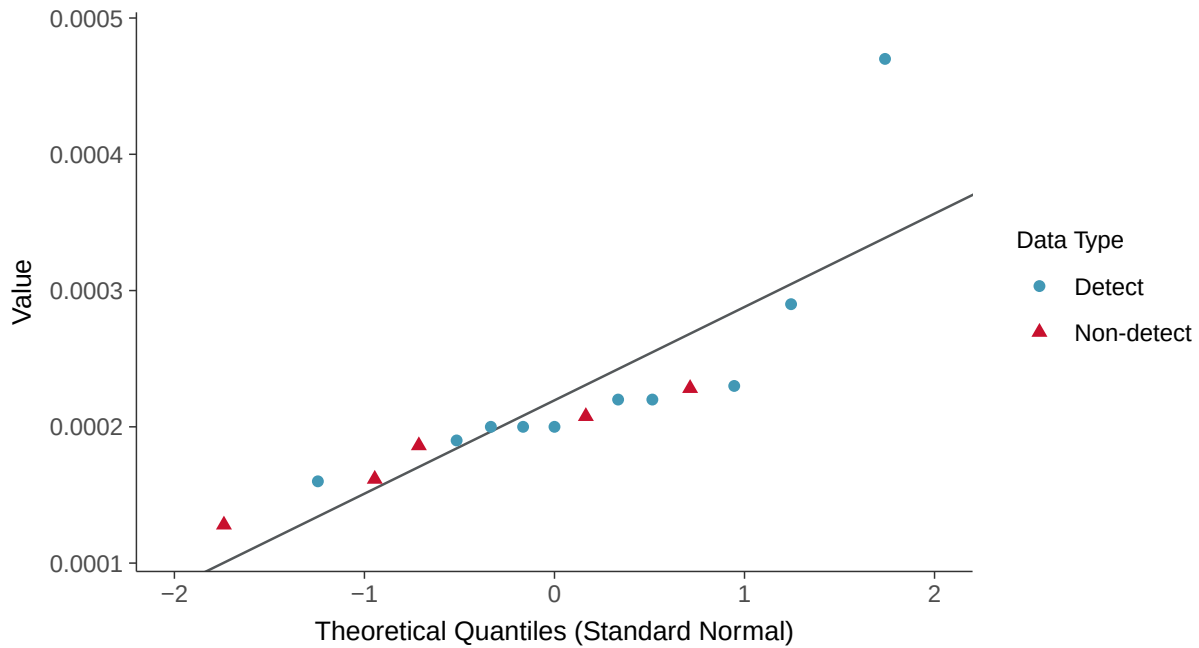
Boxplot by Season

Selenium, MW-06 (mg/L)



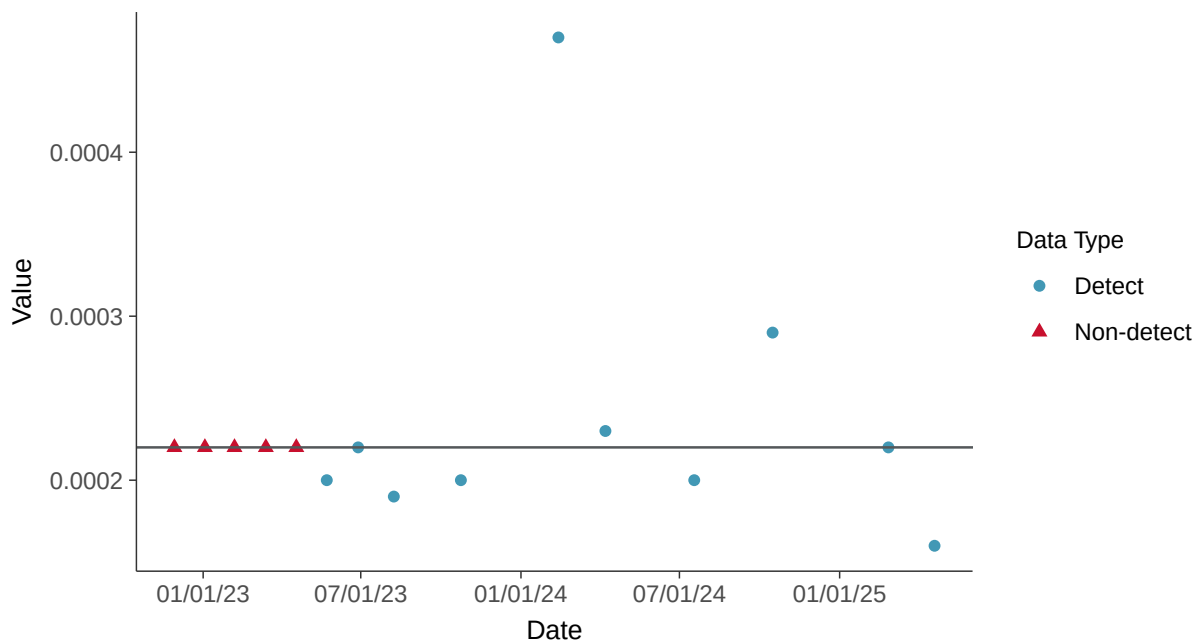
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-06 (mg/L)



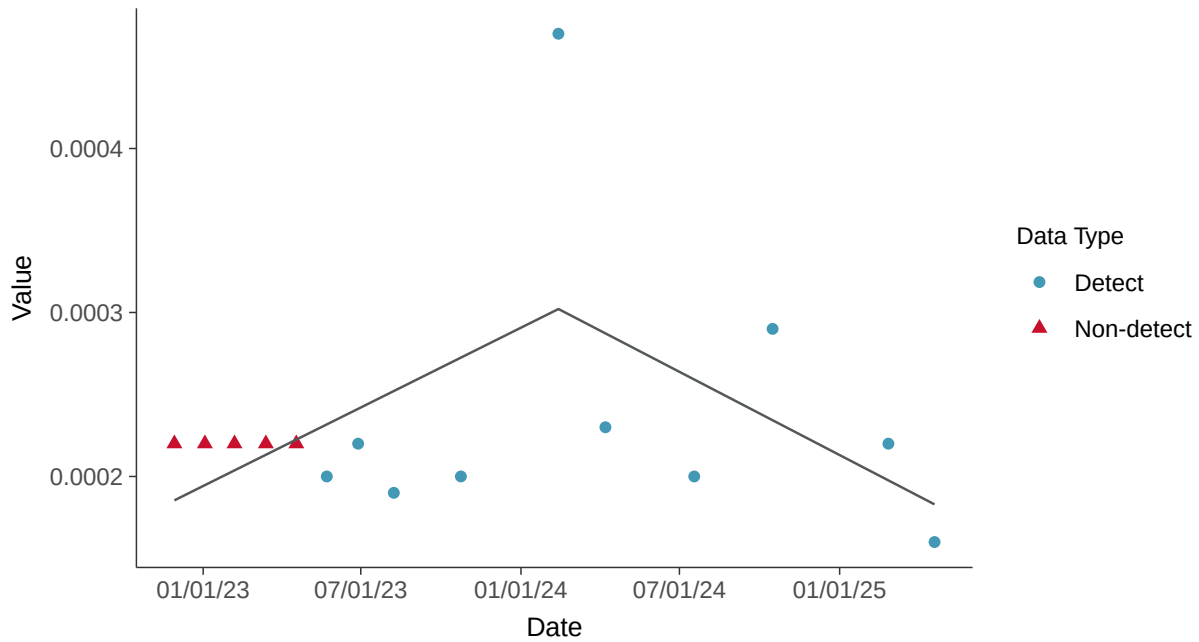
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Selenium, MW-06 (mg/L)



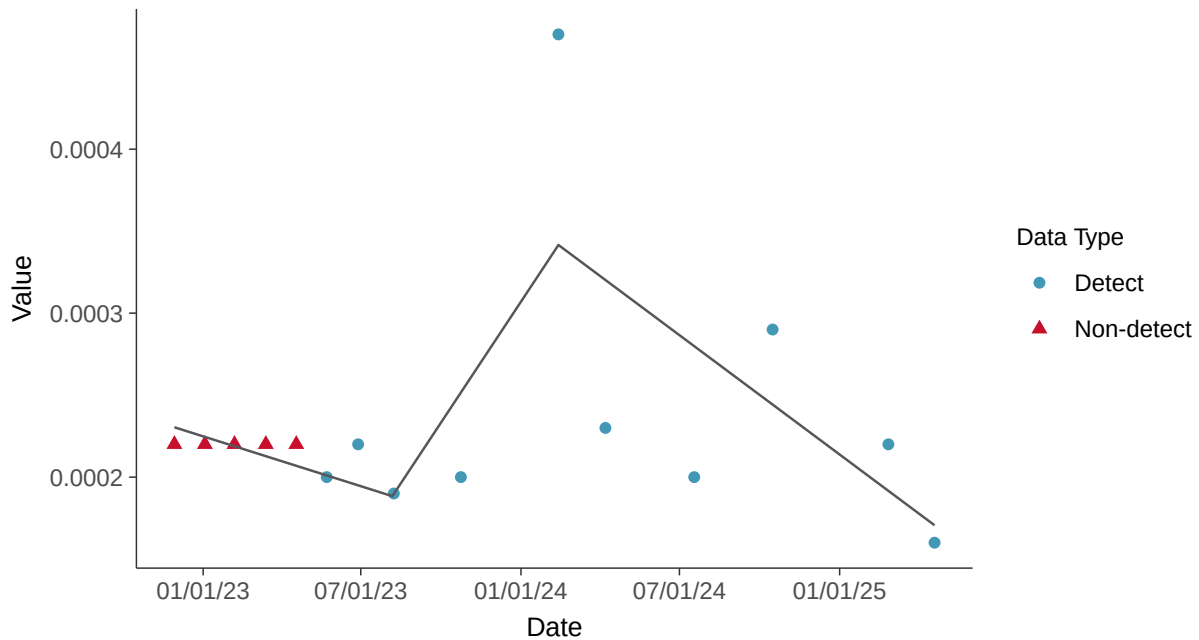
Trend Regression: Piecewise Linear-Linear

Selenium, MW-06 (mg/L)



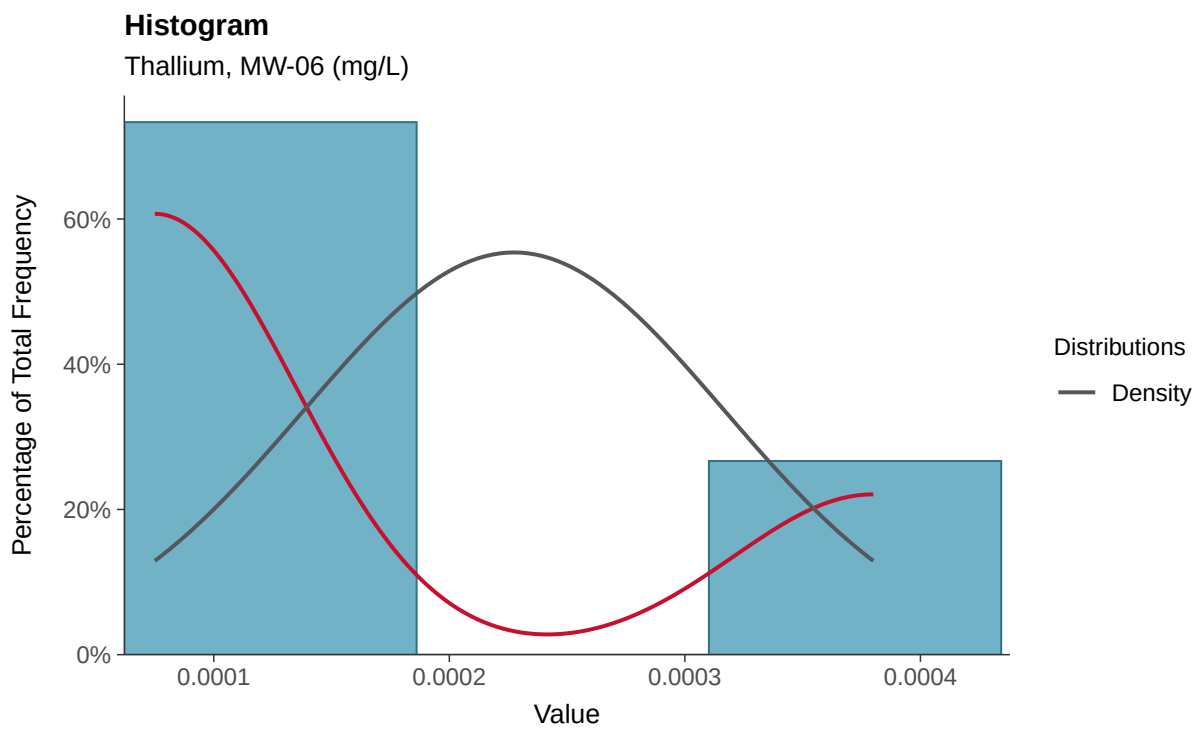
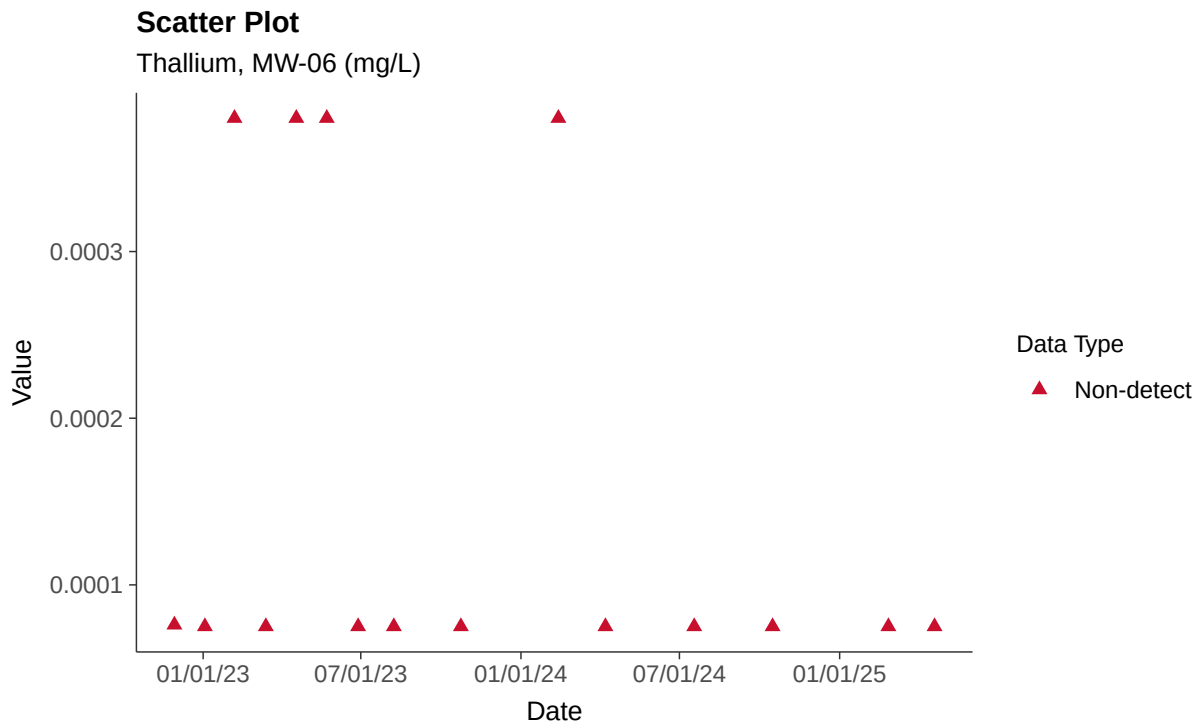
Trend Regression: Piecewise Linear-Linear-Linear

Selenium, MW-06 (mg/L)



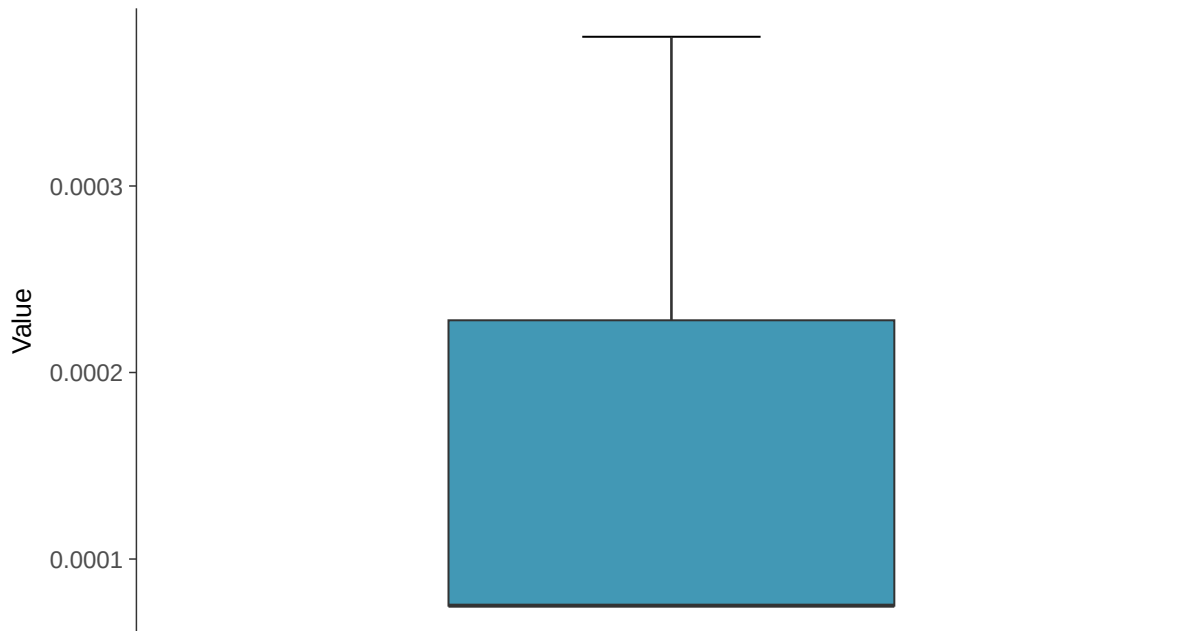
Appendix IV: Thallium, MW-06

ID: 16_1_4_125



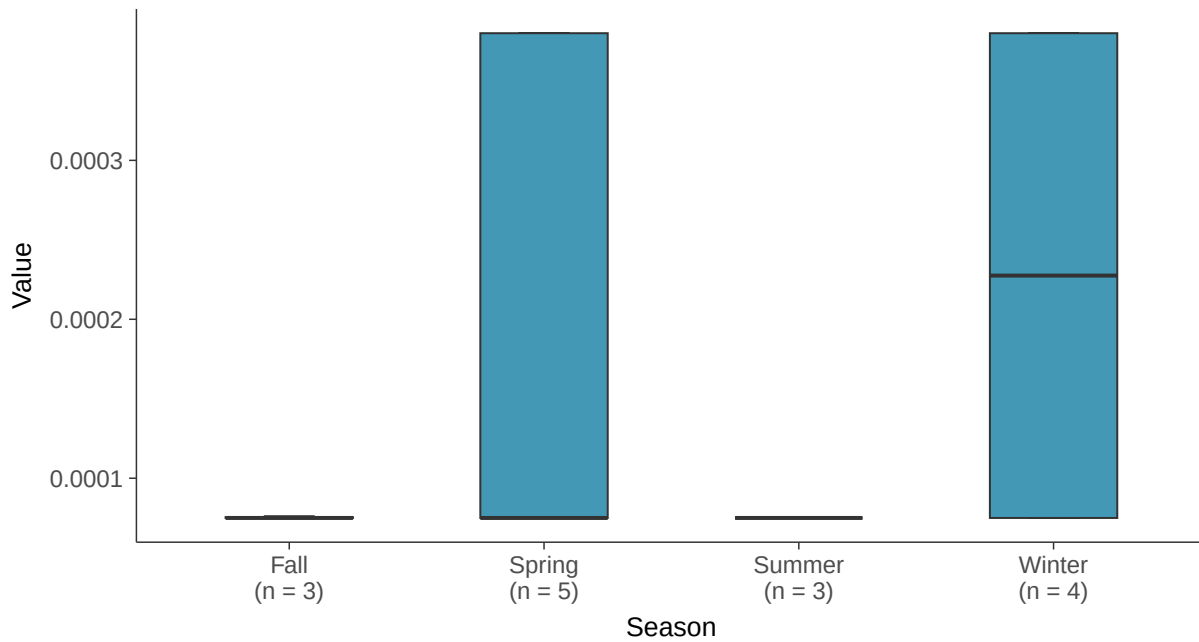
Boxplot

Thallium, MW-06 (mg/L)



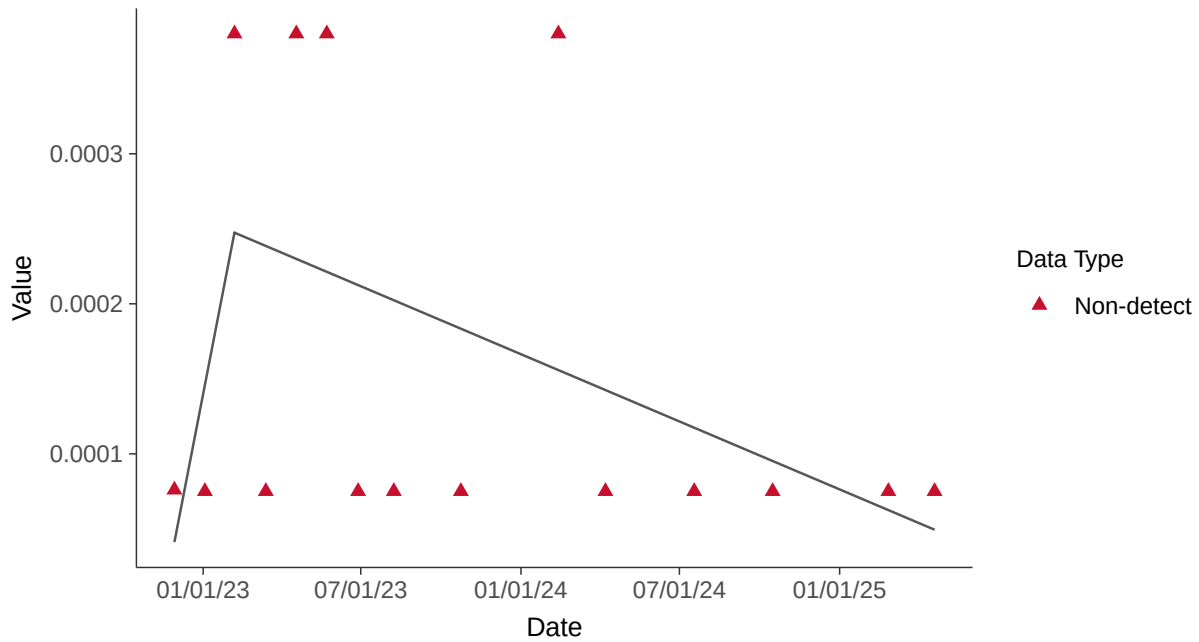
Boxplot by Season

Thallium, MW-06 (mg/L)



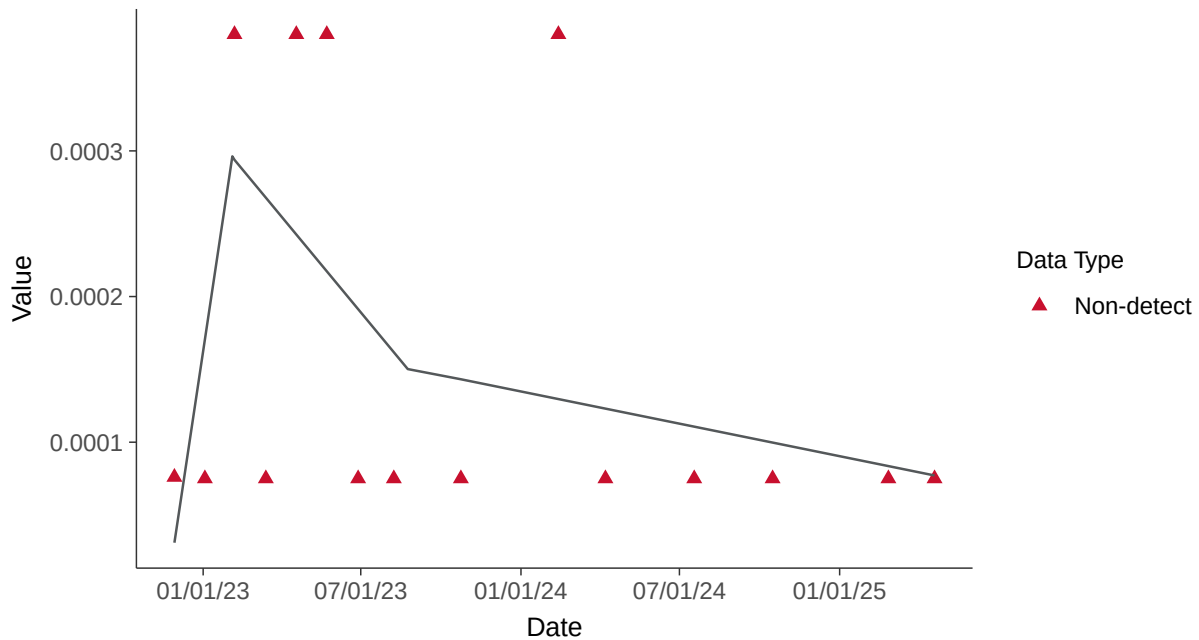
Trend Regression: Piecewise Linear-Linear

Thallium, MW-06 (mg/L)



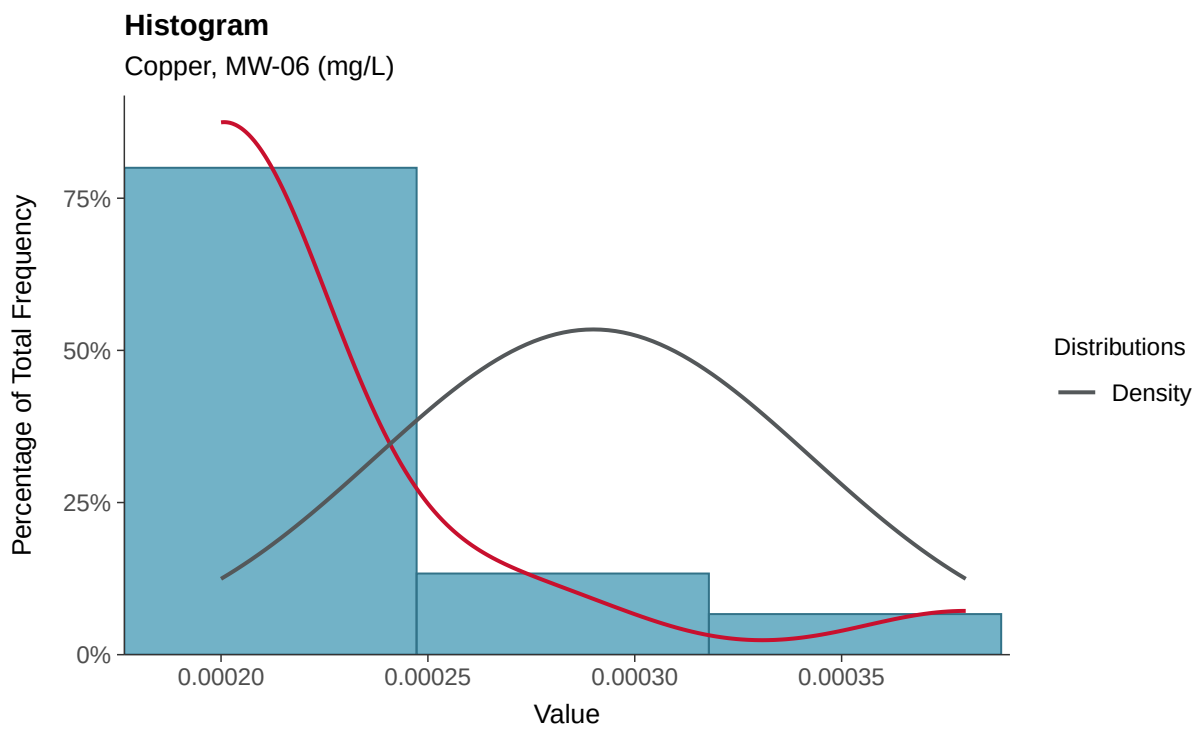
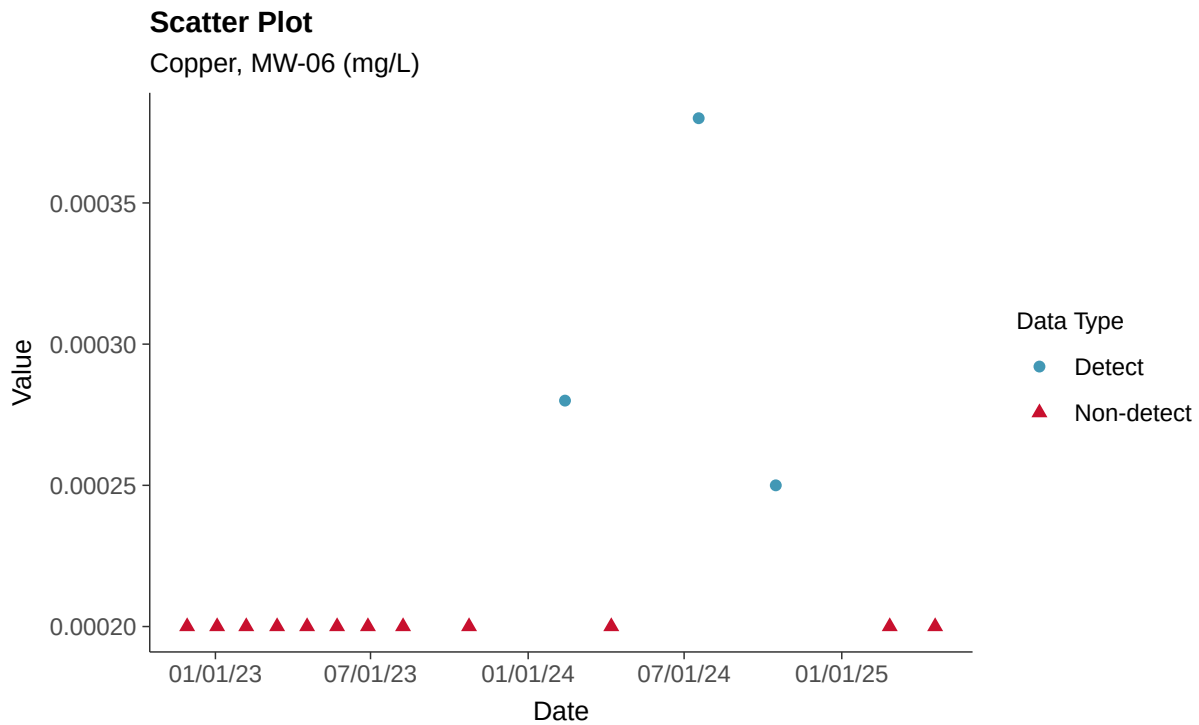
Trend Regression: Piecewise Linear-Linear-Linear

Thallium, MW-06 (mg/L)



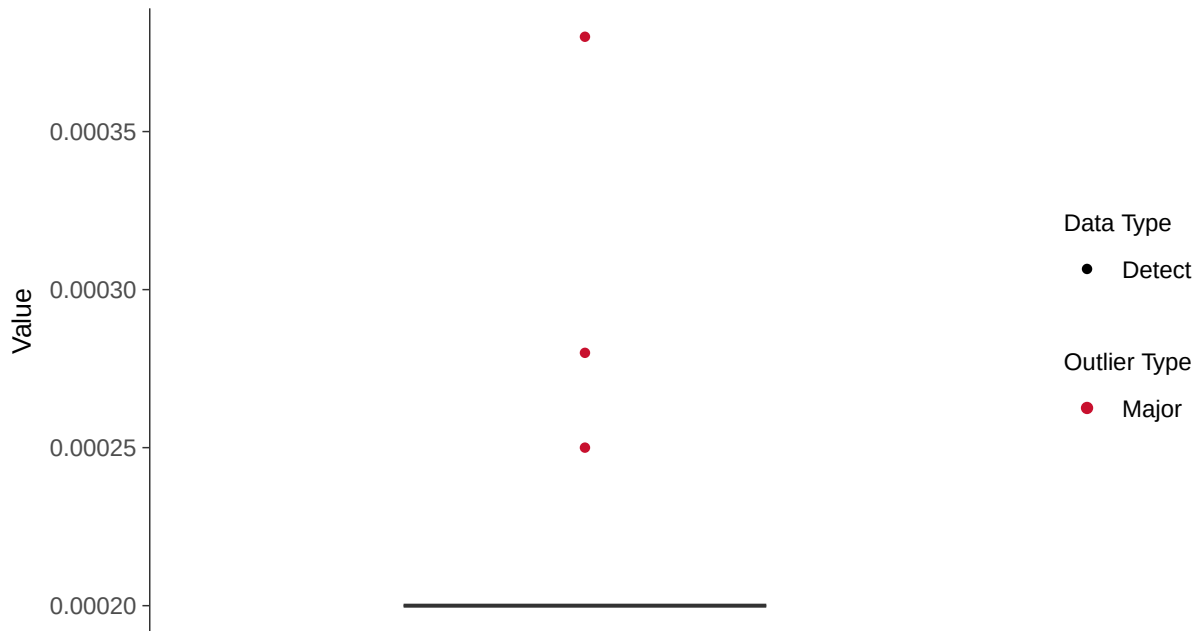
Part 115: Copper, MW-06

ID: 16_1_5_111



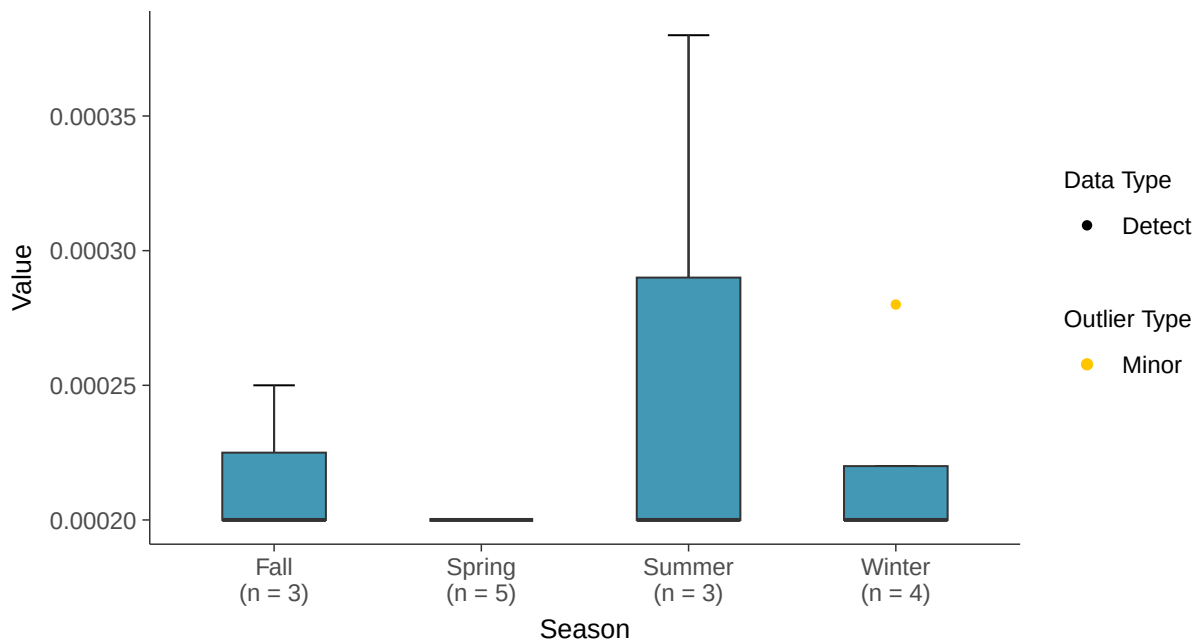
Boxplot

Copper, MW-06 (mg/L)



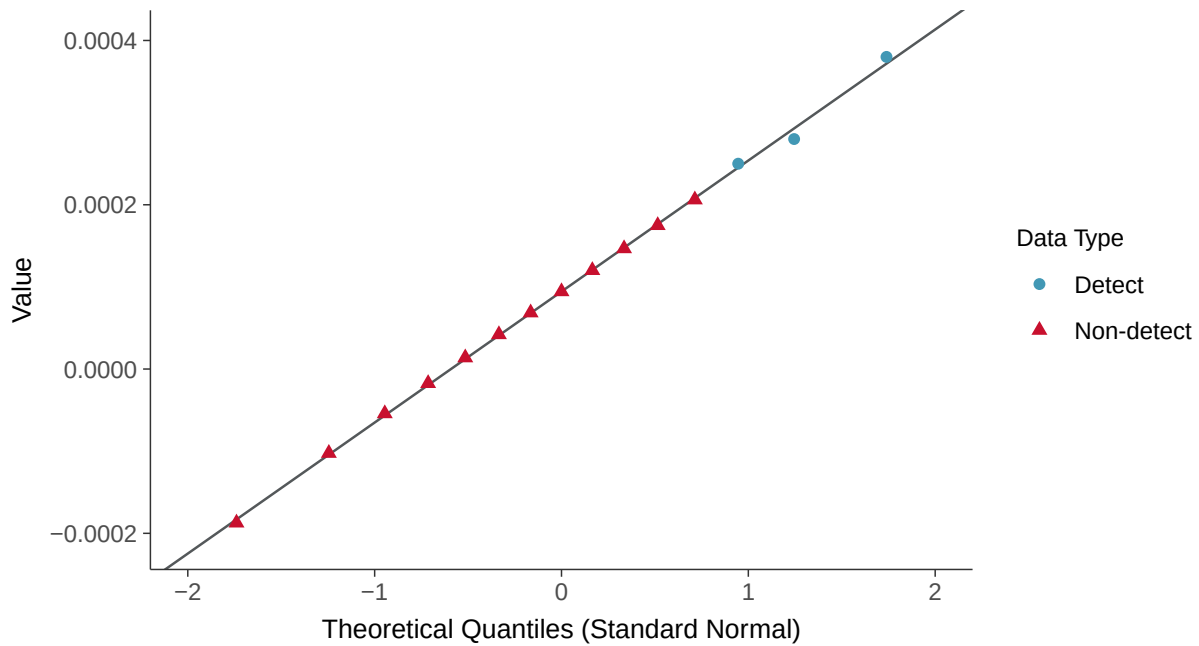
Boxplot by Season

Copper, MW-06 (mg/L)



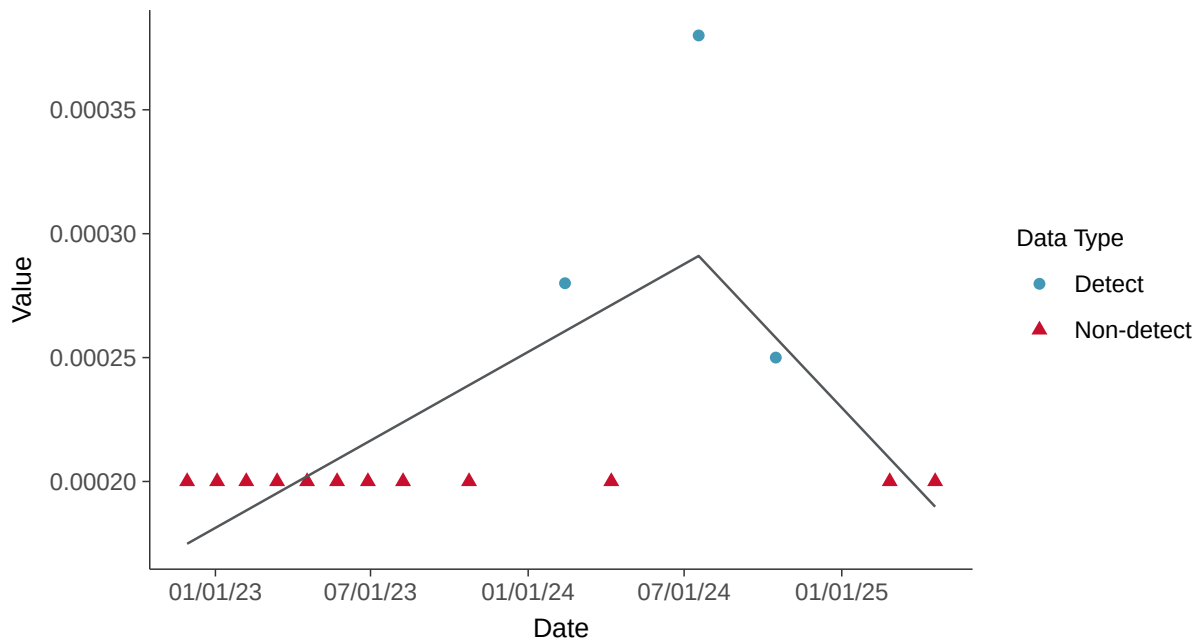
Normal Q-Q plot using ROS Imputed Estimates

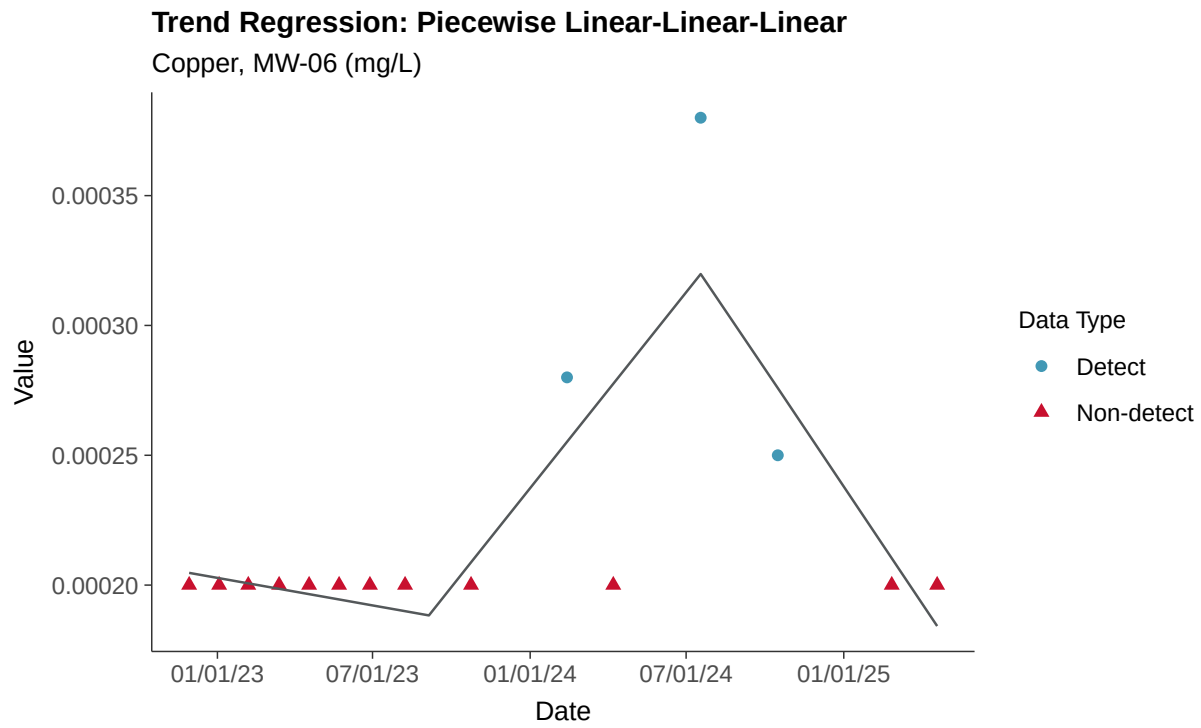
Copper, MW-06 (mg/L)



Trend Regression: Piecewise Linear-Linear

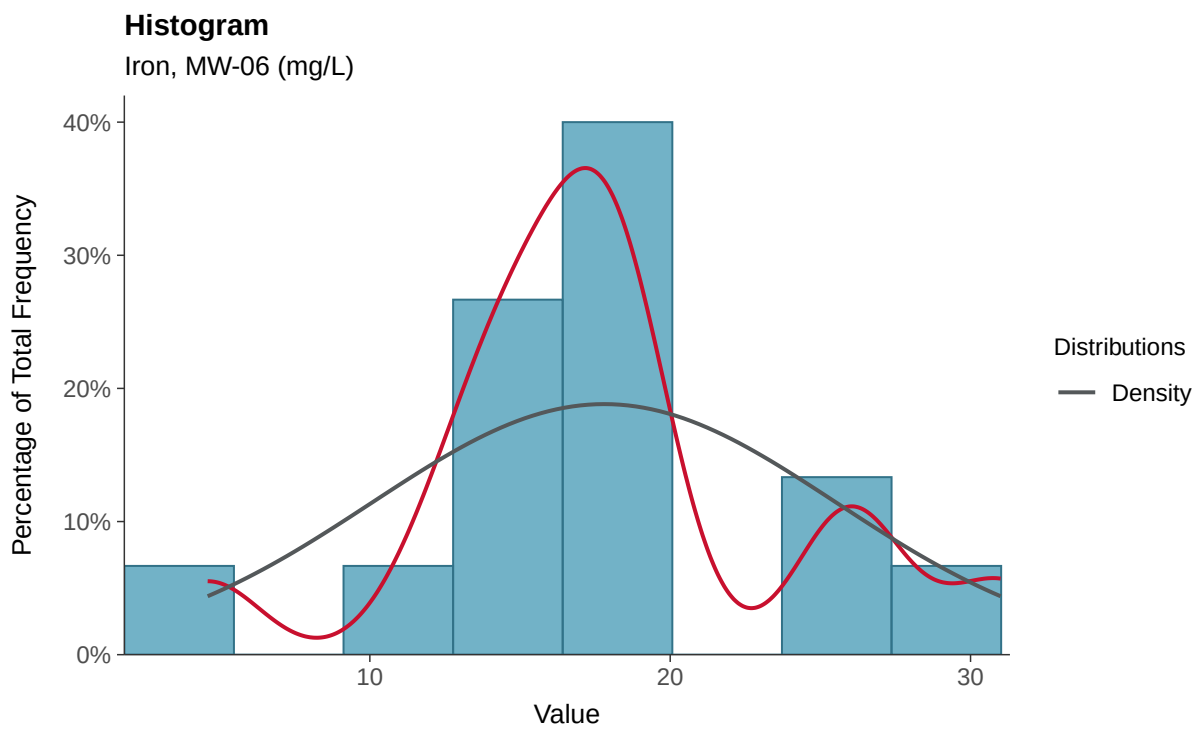
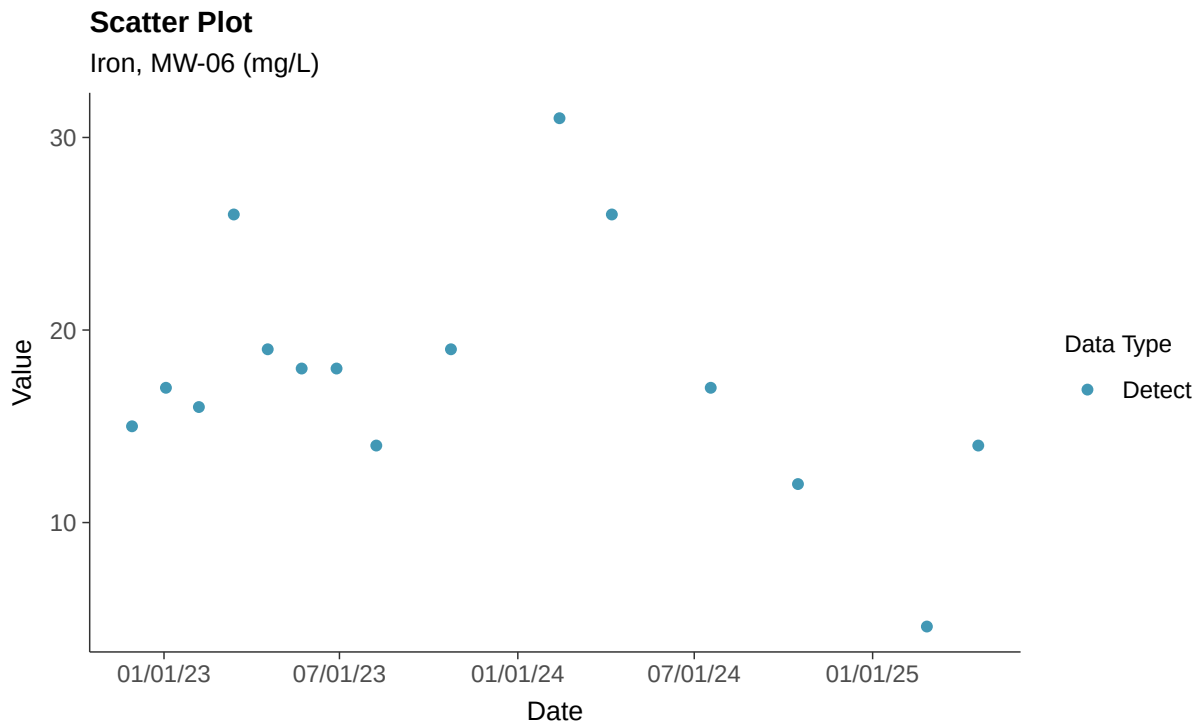
Copper, MW-06 (mg/L)





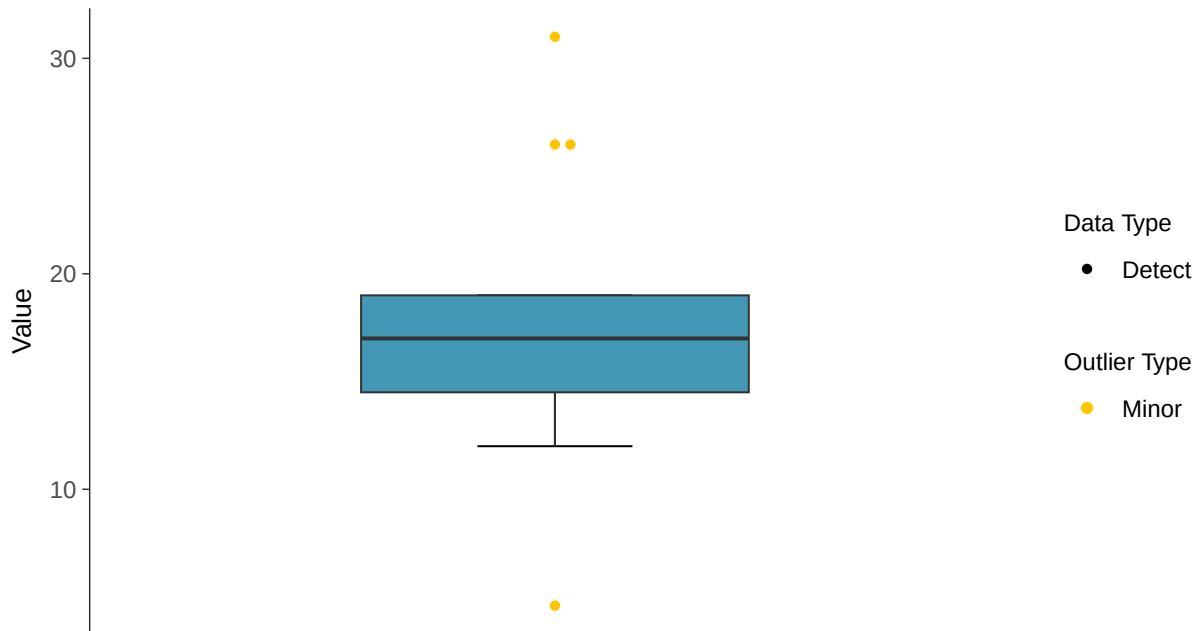
Part 115: Iron, MW-06

ID: 16_1_5_114



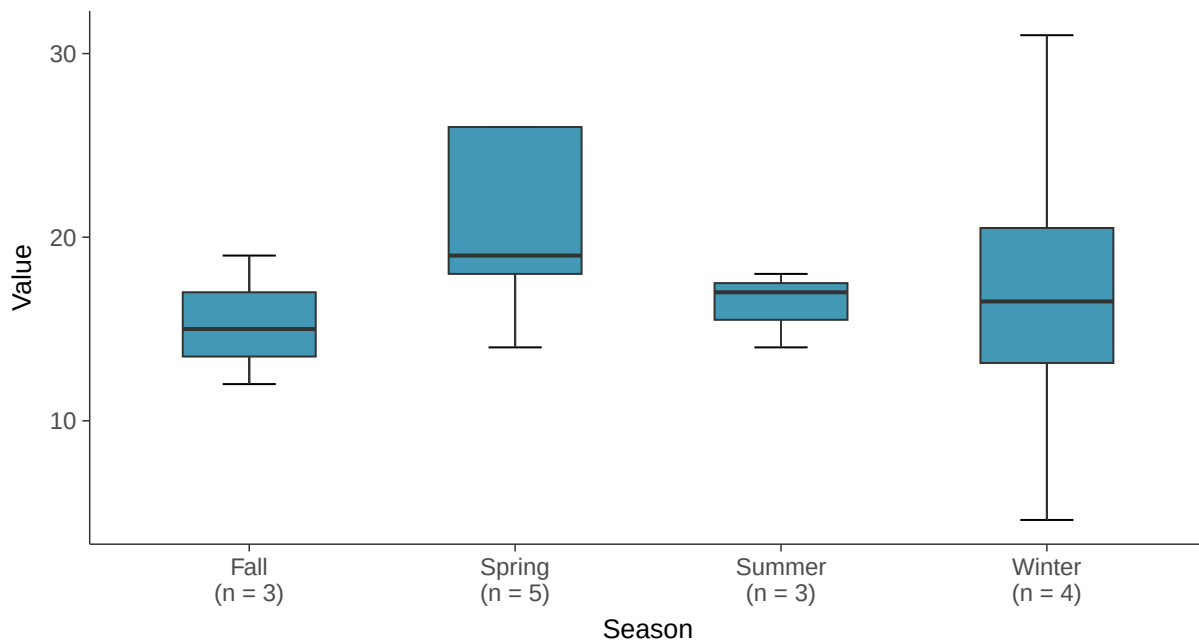
Boxplot

Iron, MW-06 (mg/L)



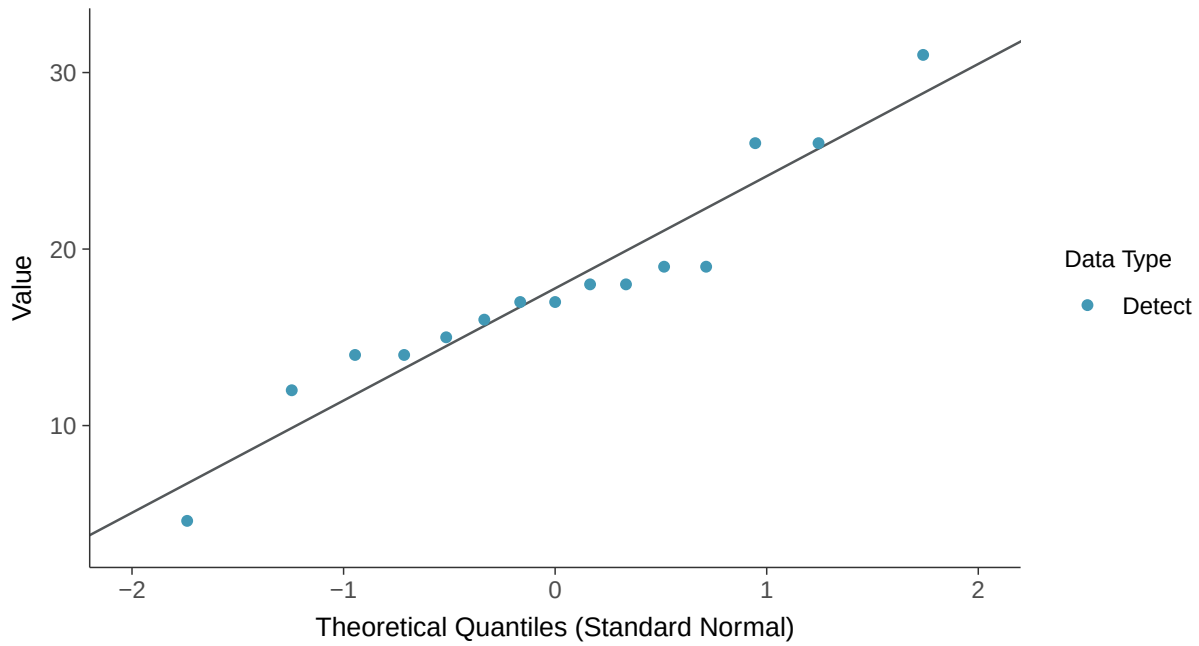
Boxplot by Season

Iron, MW-06 (mg/L)



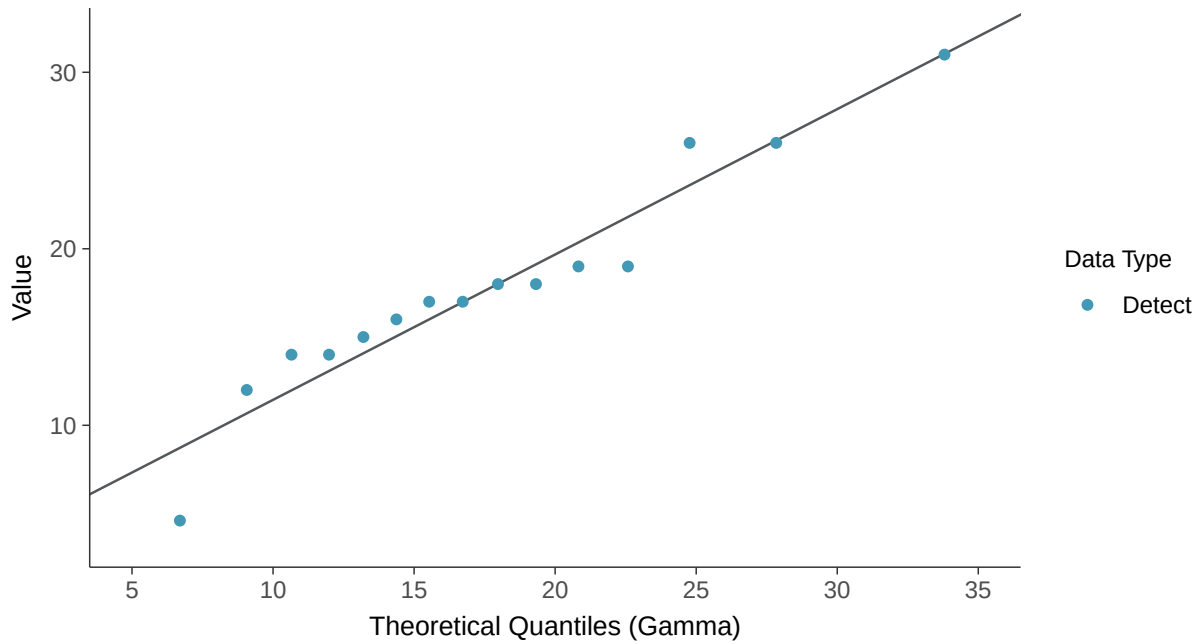
Normal Q-Q plot

Iron, MW-06 (mg/L)



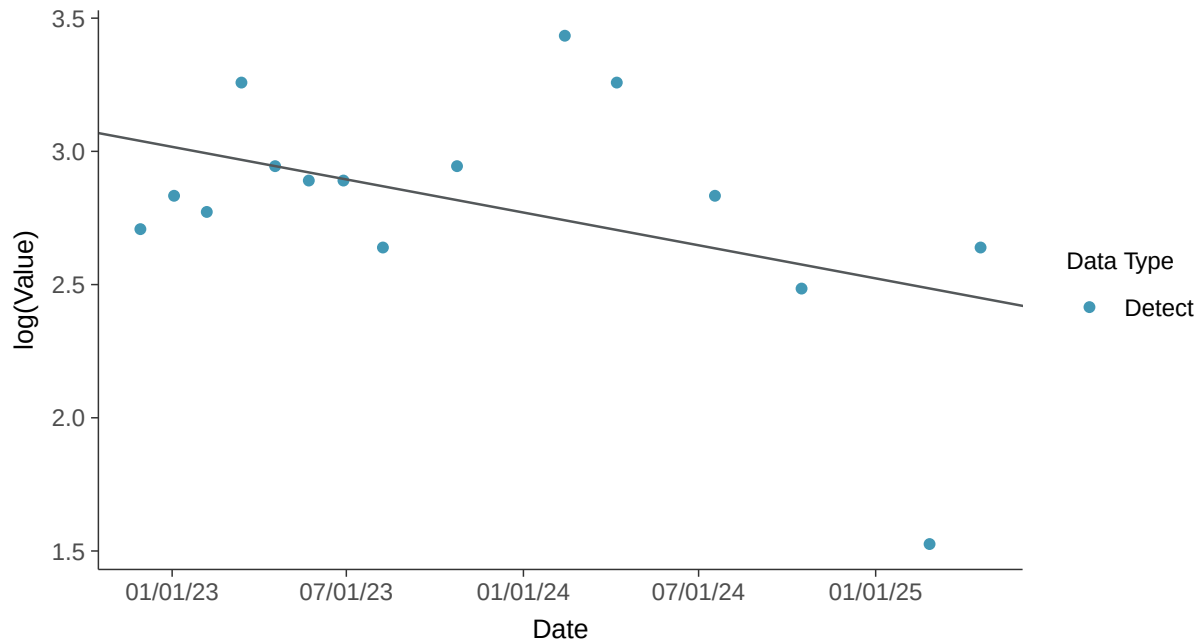
Gamma Q-Q plot

Iron, MW-06 (mg/L)



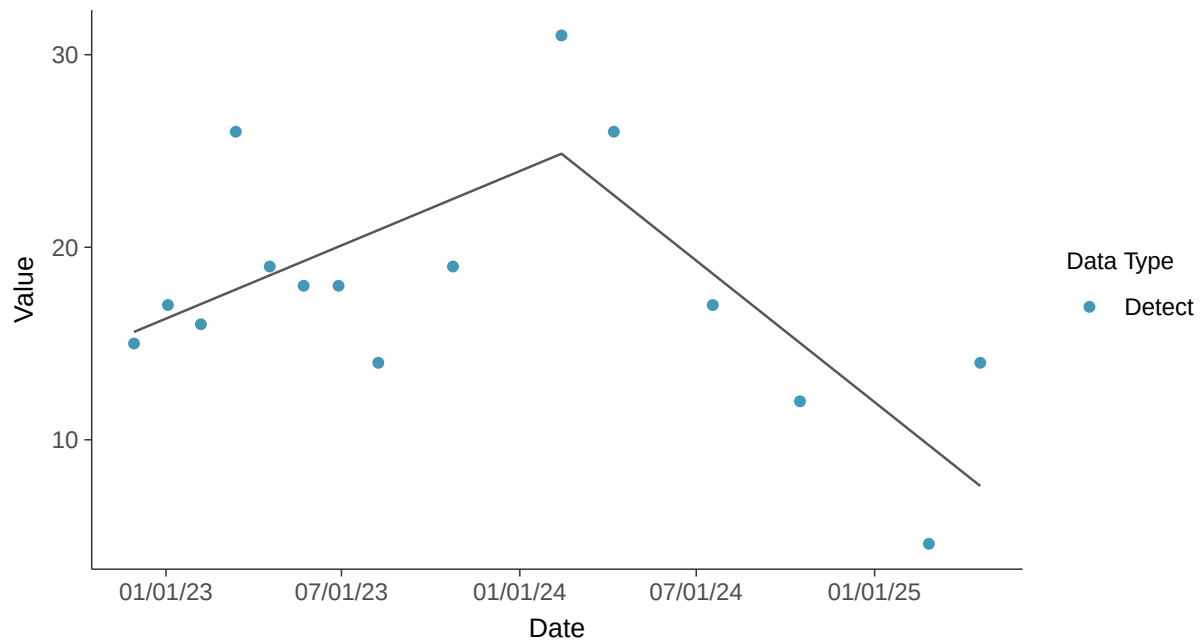
Trend Regression: Lognormal MLE

Iron, MW-06 (mg/L)



Trend Regression: Piecewise Linear-Linear

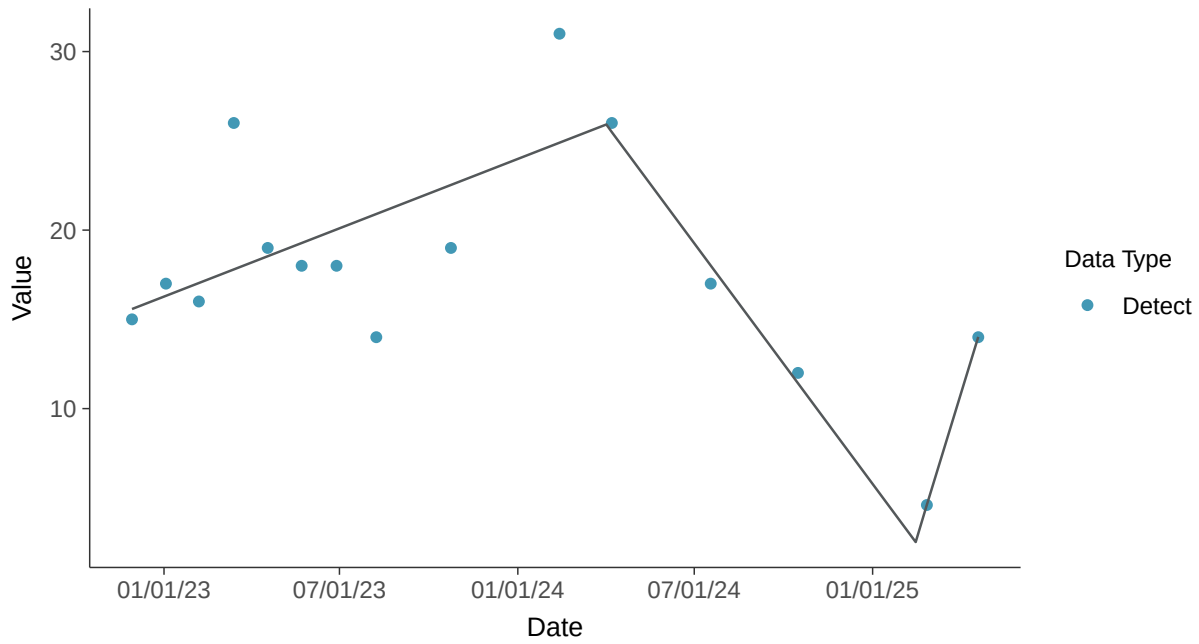
Iron, MW-06 (mg/L)





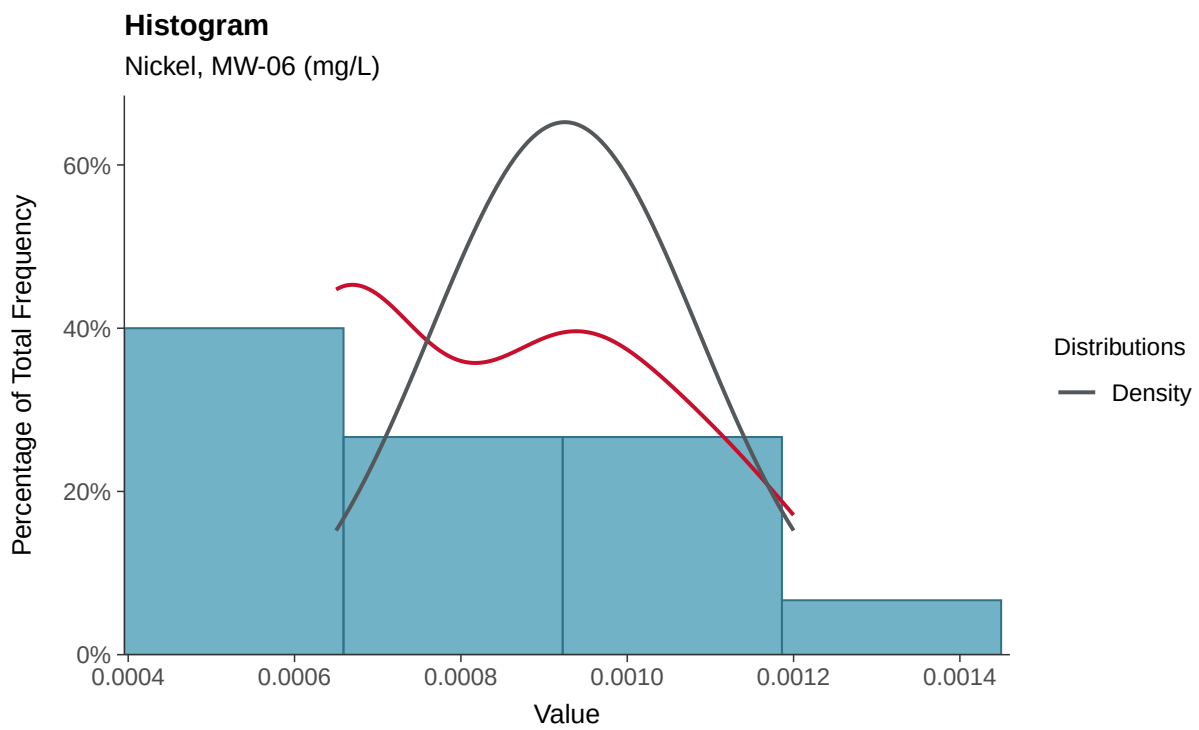
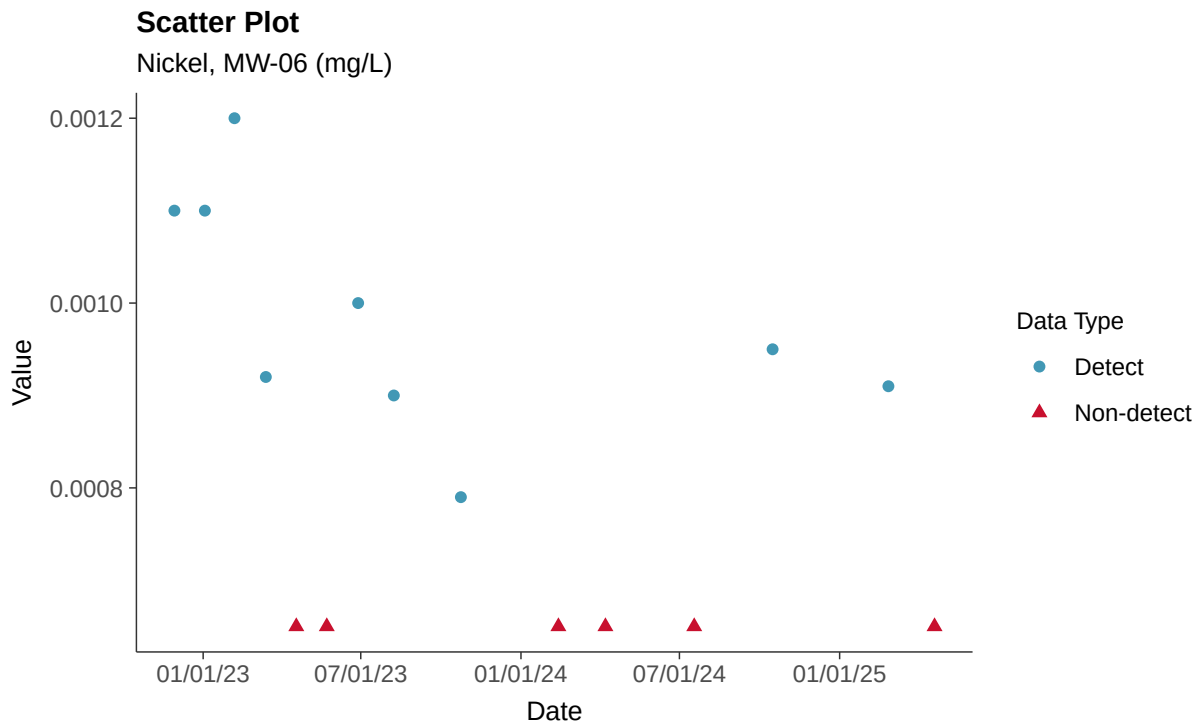
Trend Regression: Piecewise Linear-Linear-Linear

Iron, MW-06 (mg/L)



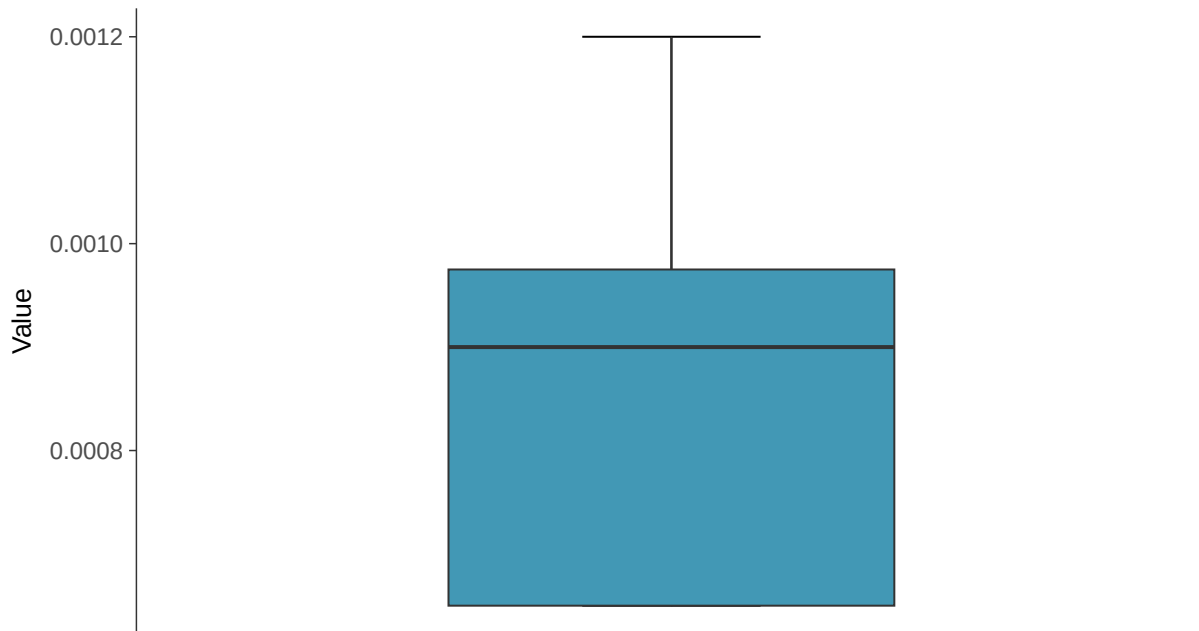
Part 115: Nickel, MW-06

ID: 16_1_5_119



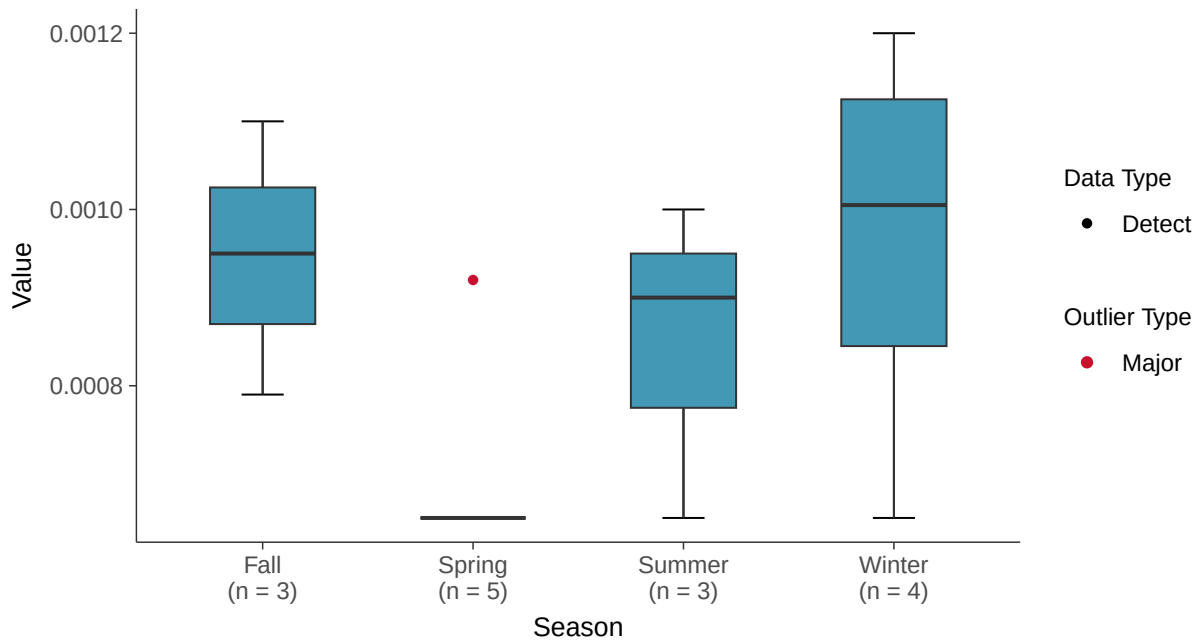
Boxplot

Nickel, MW-06 (mg/L)



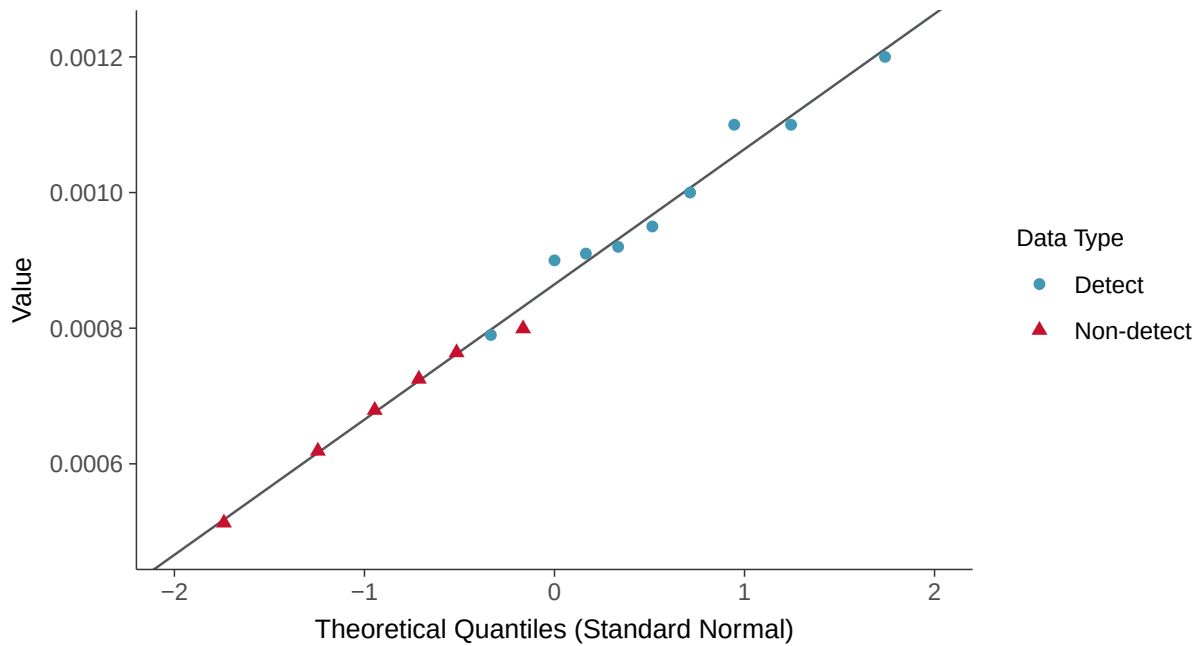
Boxplot by Season

Nickel, MW-06 (mg/L)



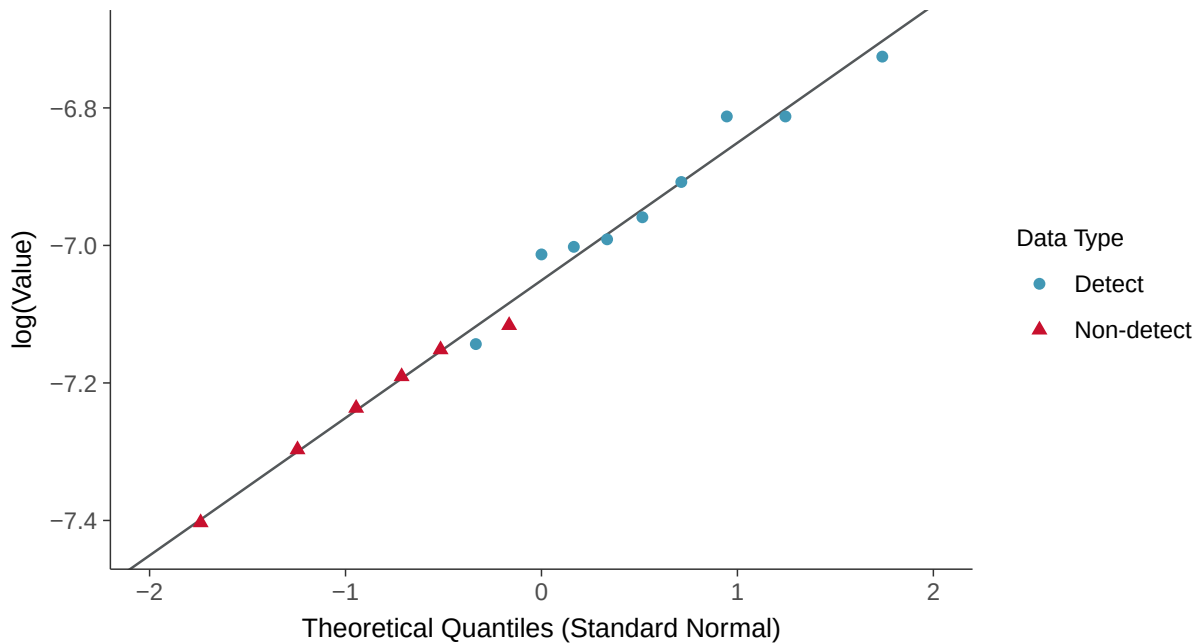
Normal Q-Q plot using ROS Imputed Estimates

Nickel, MW-06 (mg/L)



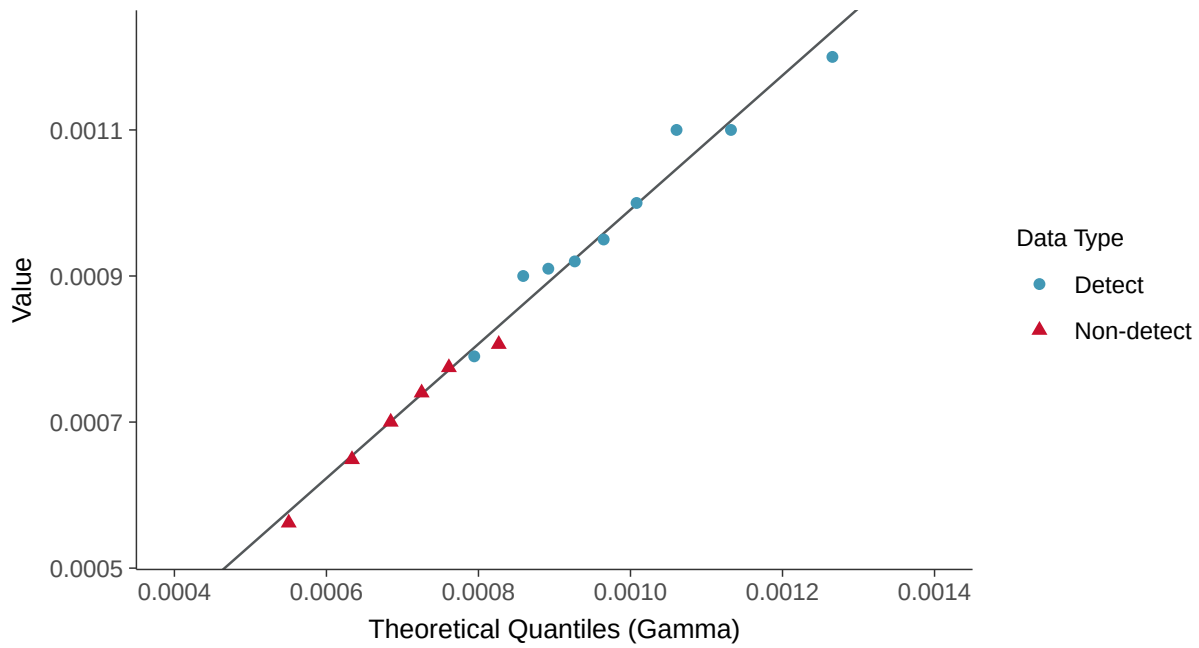
Lognormal Q-Q plot using ROS Imputed Estimates

Nickel, MW-06 (mg/L)



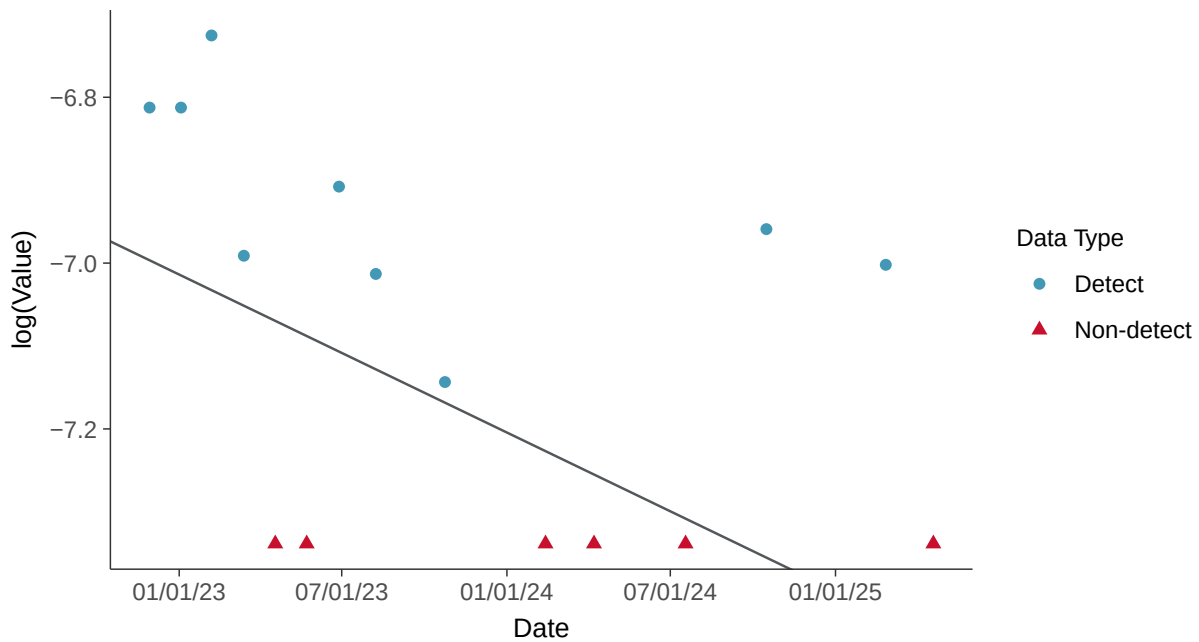
Gamma Q-Q plot using ROS Imputed Estimates

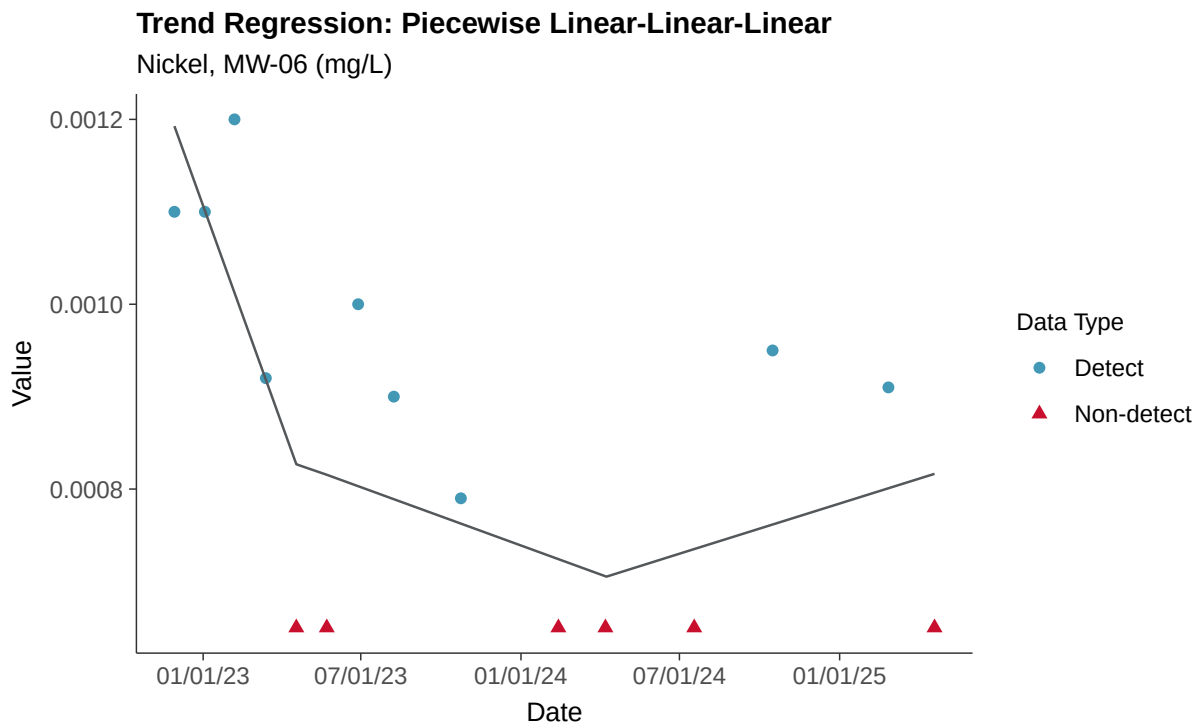
Nickel, MW-06 (mg/L)



Trend Regression: Lognormal MLE

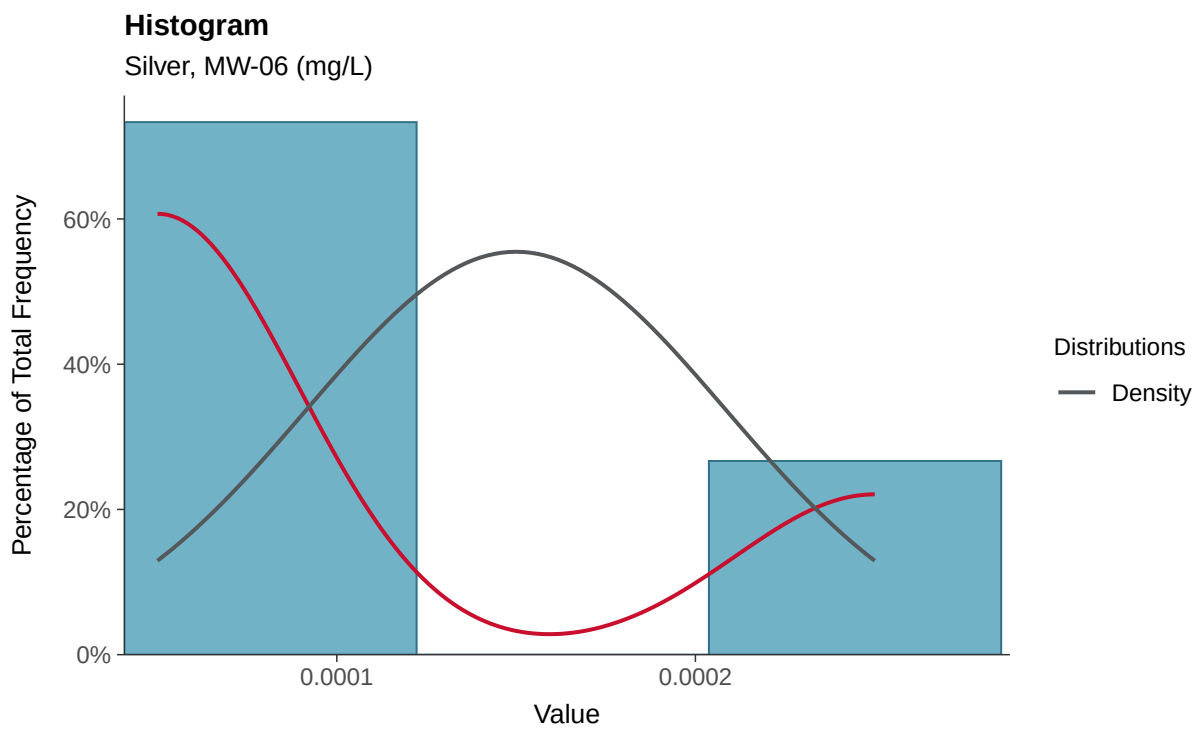
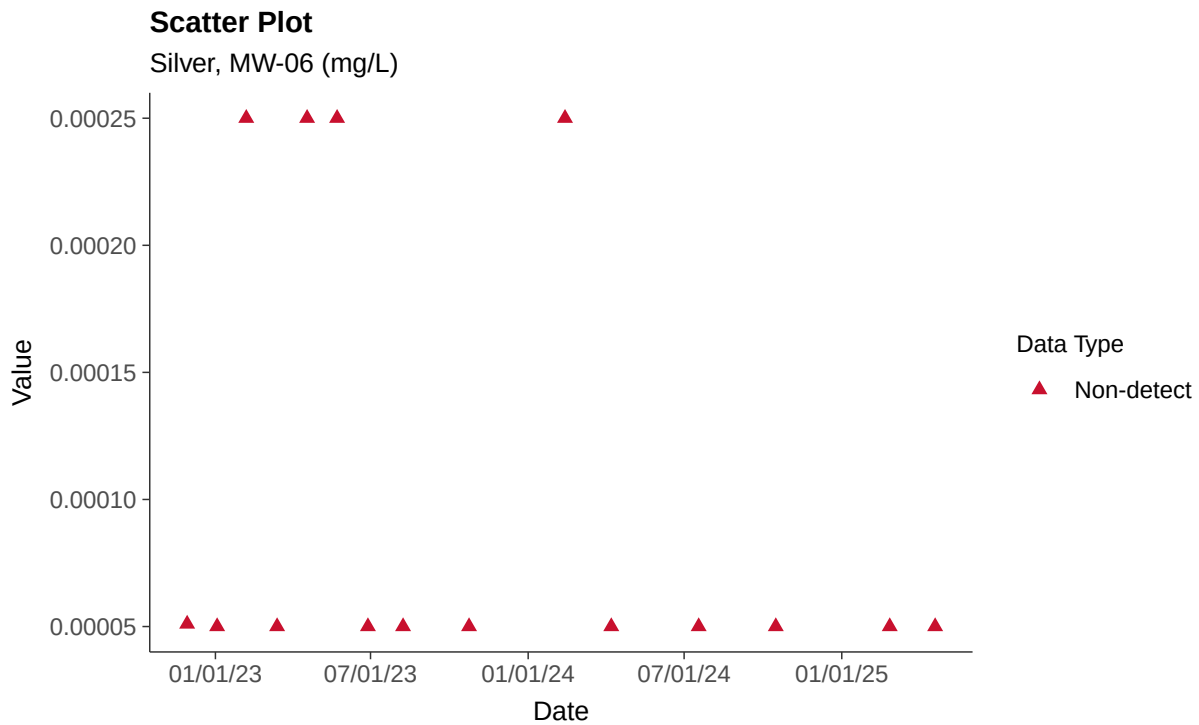
Nickel, MW-06 (mg/L)





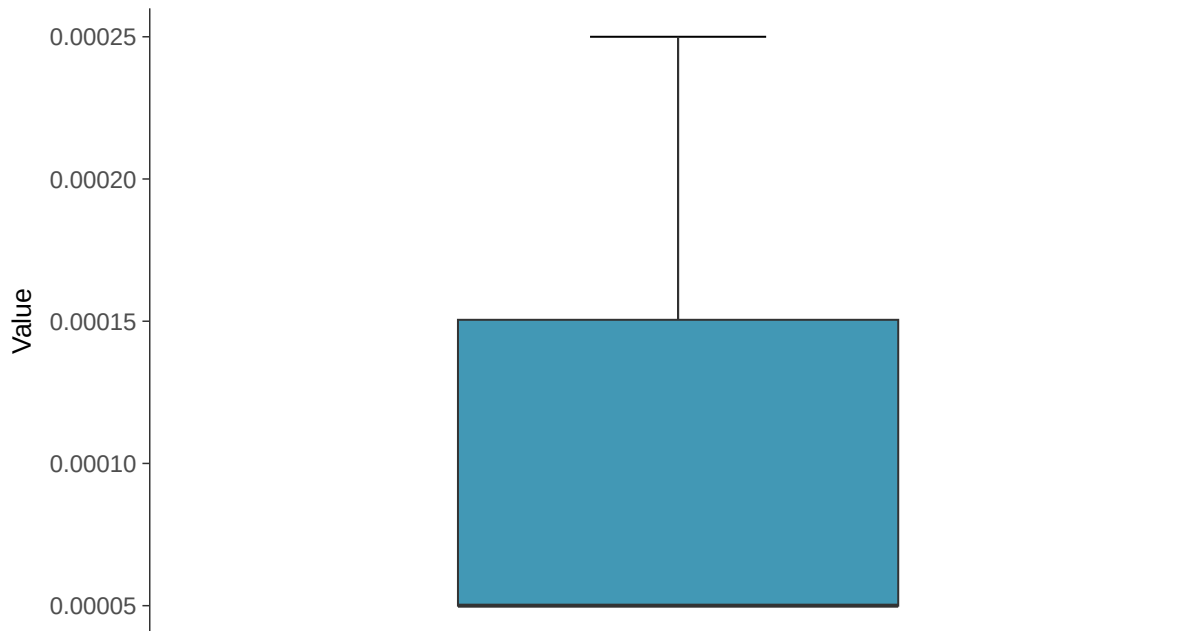
Part 115: Silver, MW-06

ID: 16_1_5_123



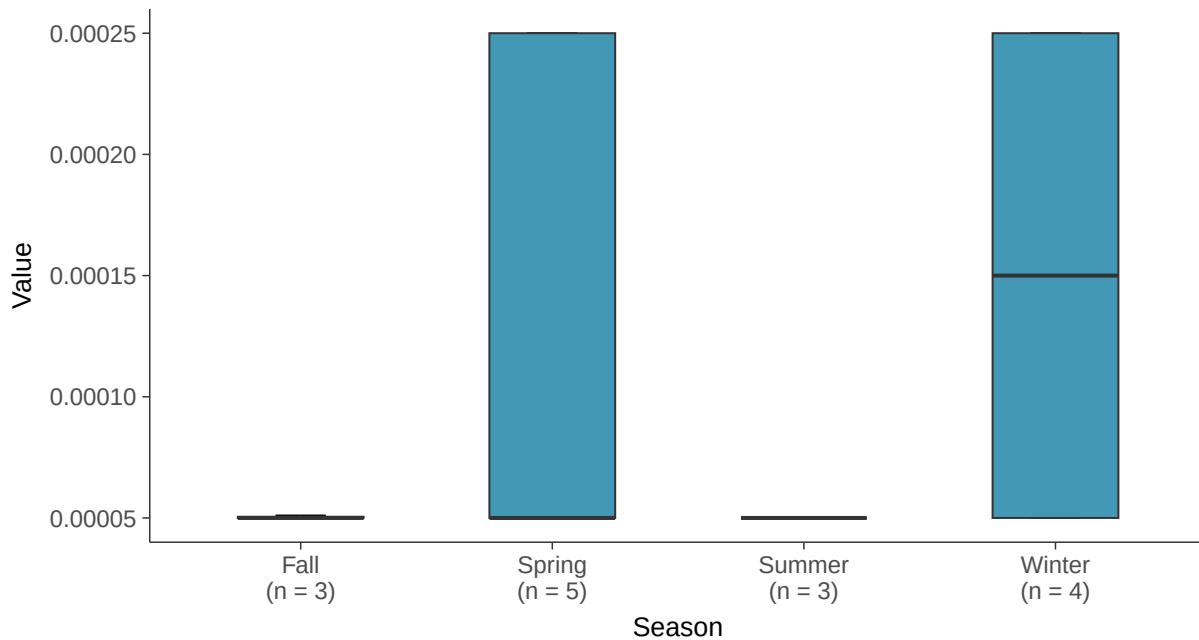
Boxplot

Silver, MW-06 (mg/L)



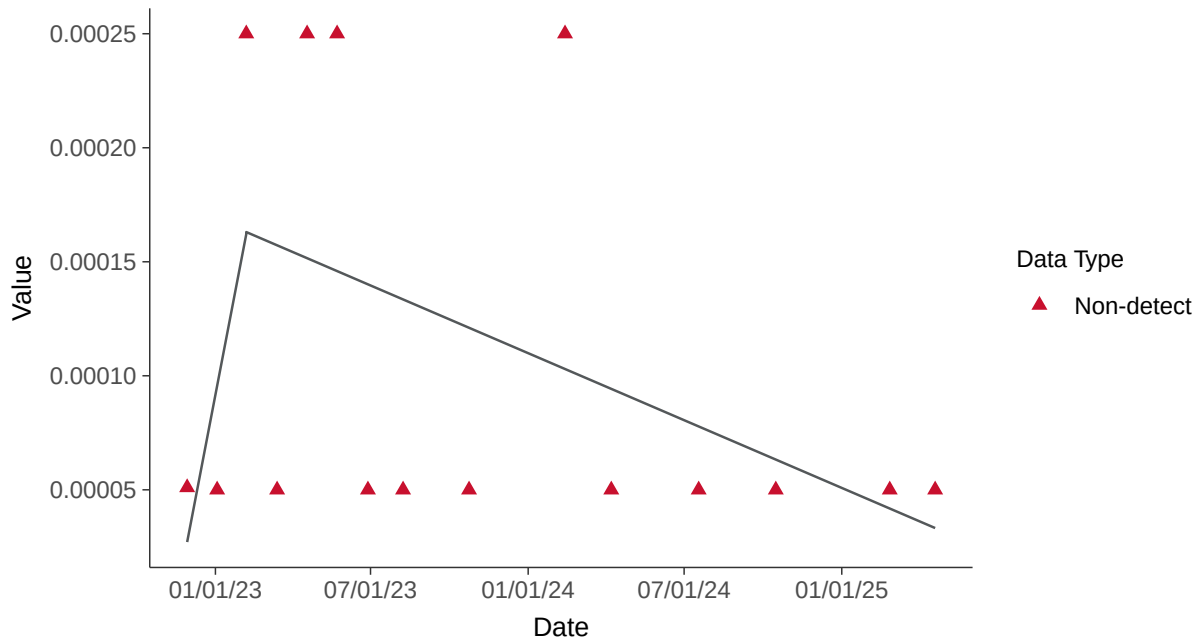
Boxplot by Season

Silver, MW-06 (mg/L)



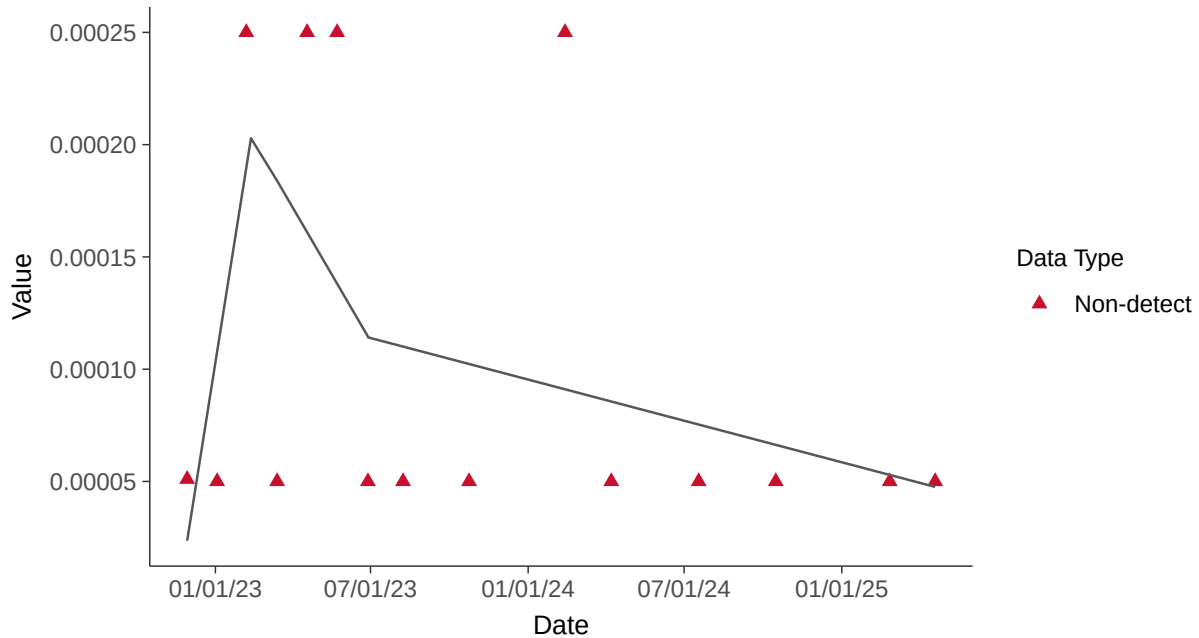
Trend Regression: Piecewise Linear-Linear

Silver, MW-06 (mg/L)



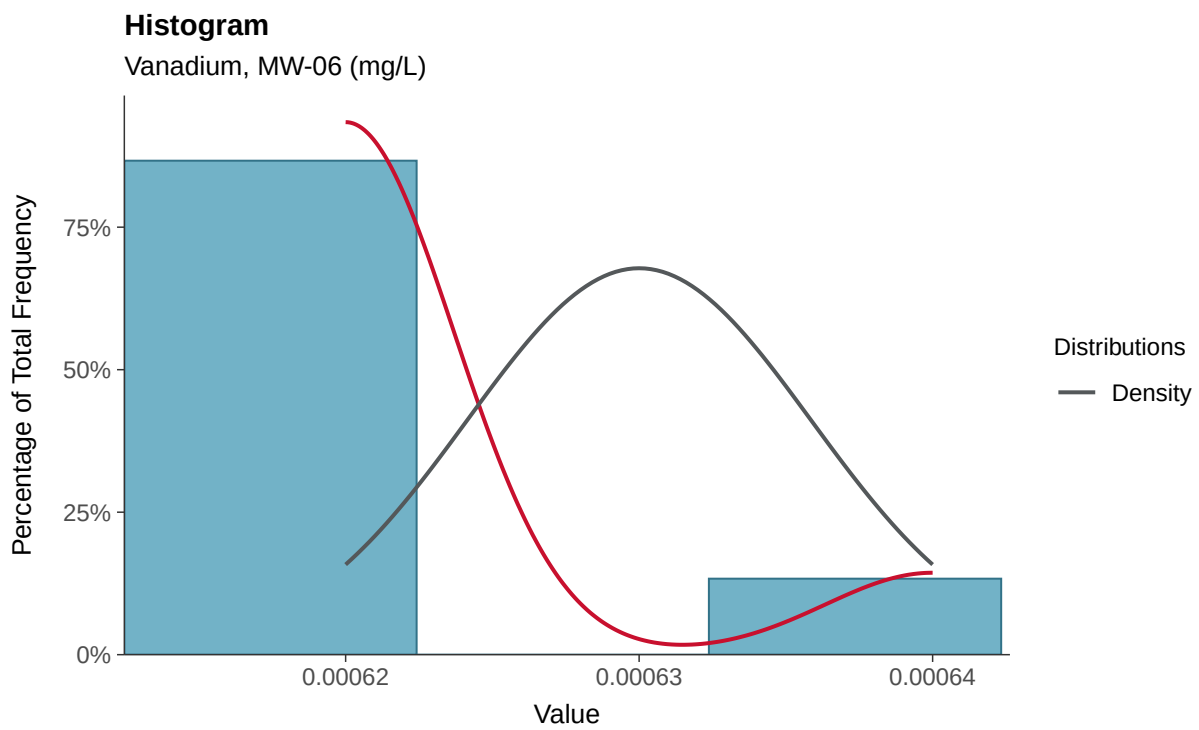
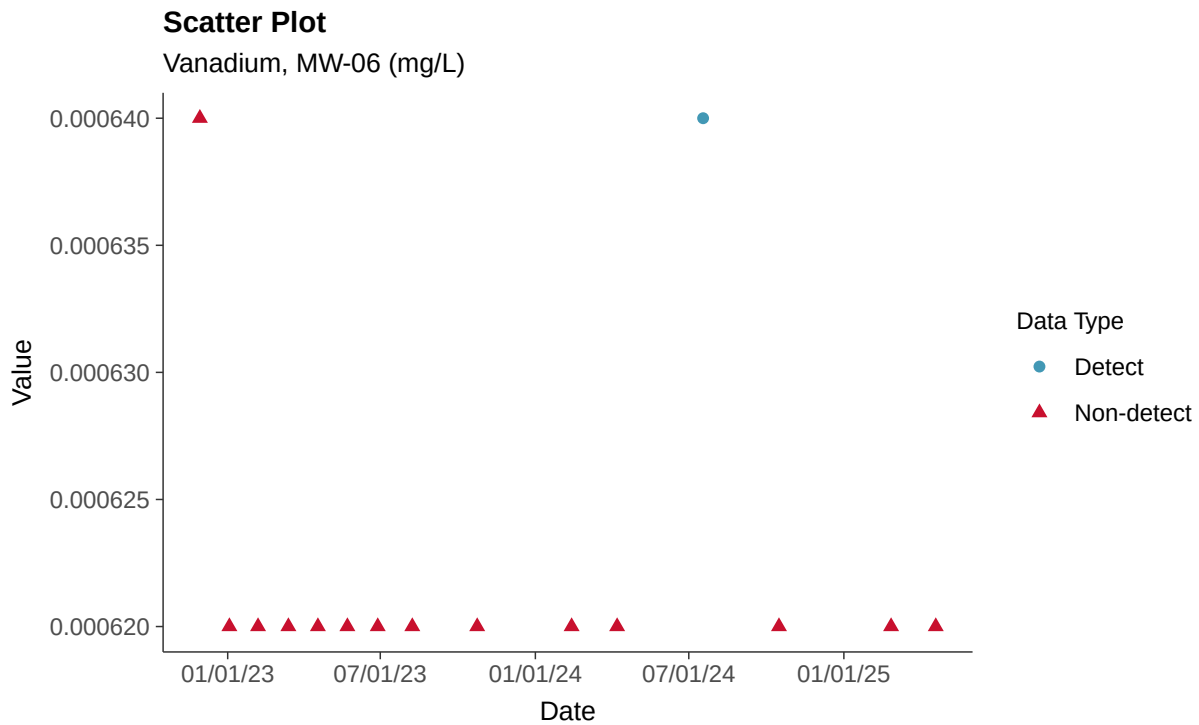
Trend Regression: Piecewise Linear-Linear-Linear

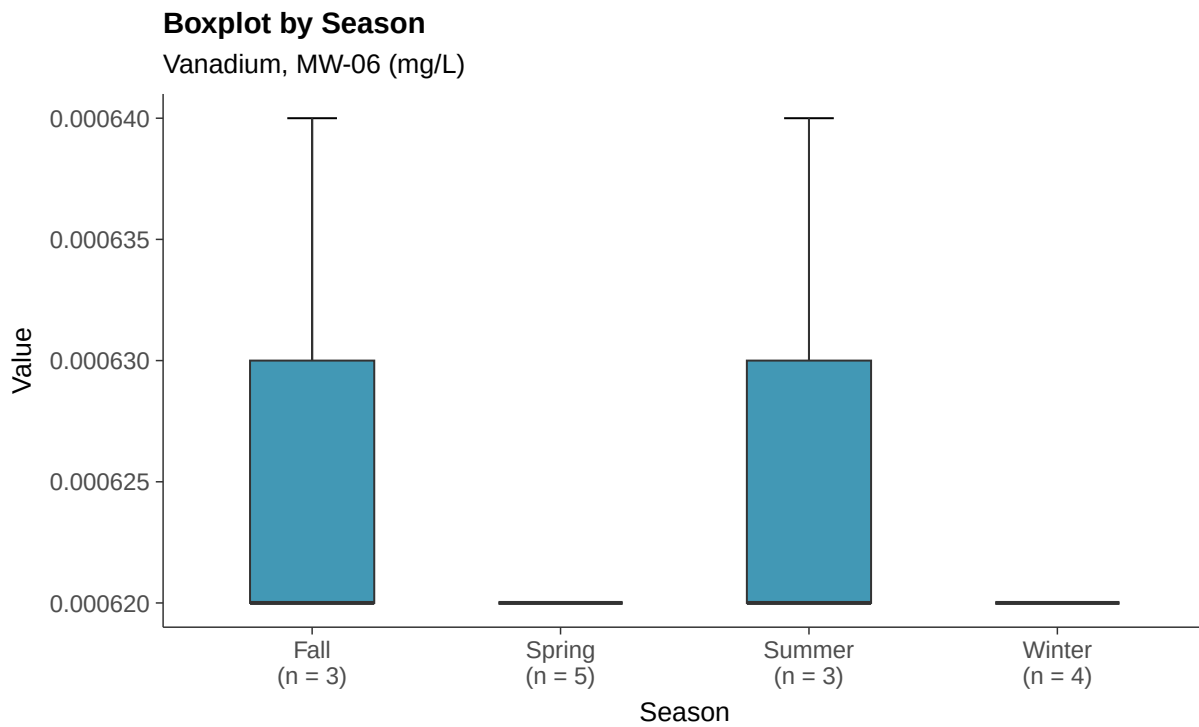
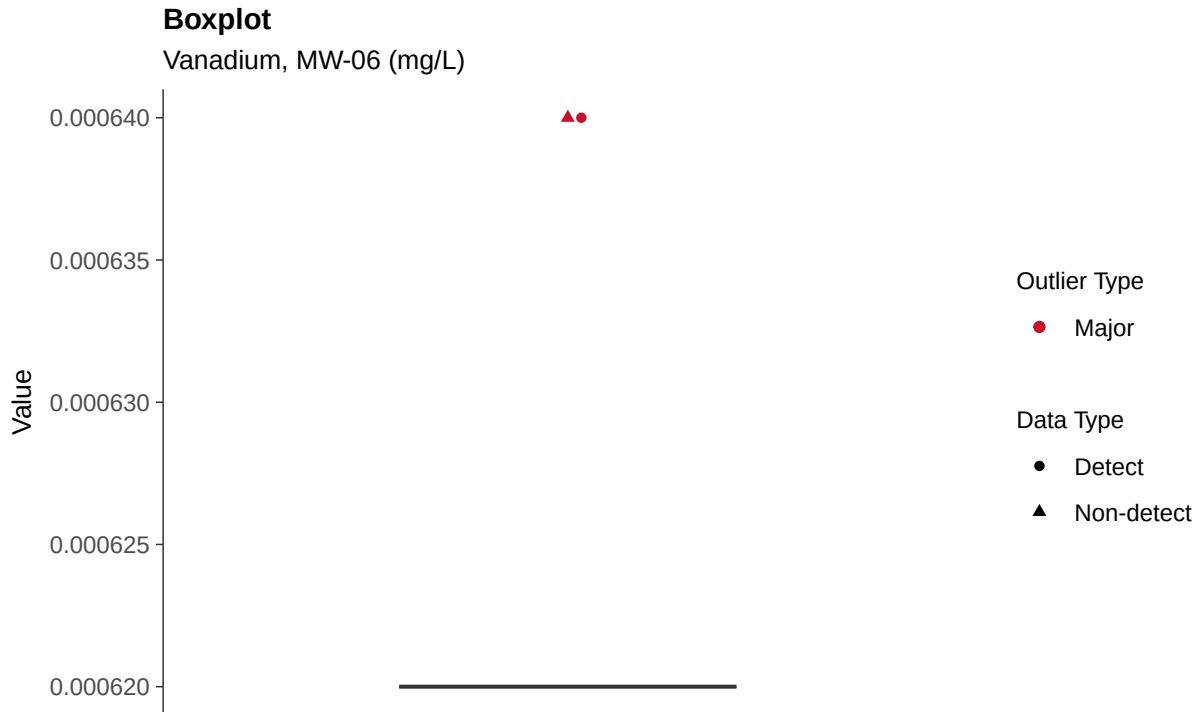
Silver, MW-06 (mg/L)



Part 115: Vanadium, MW-06

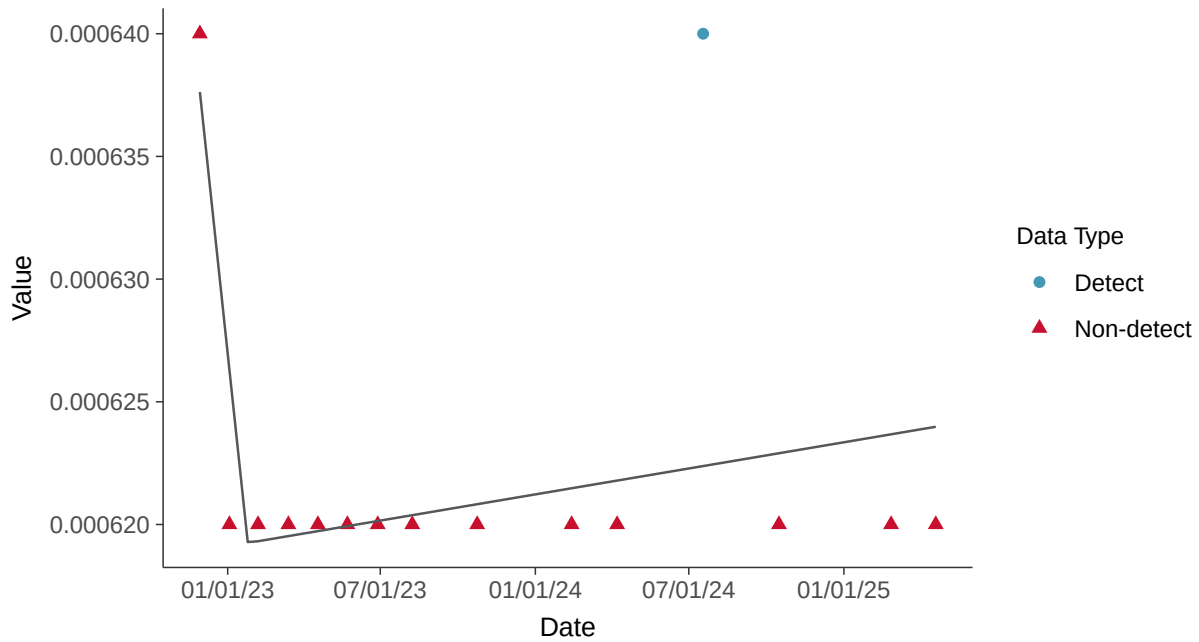
ID: 16_1_5_128





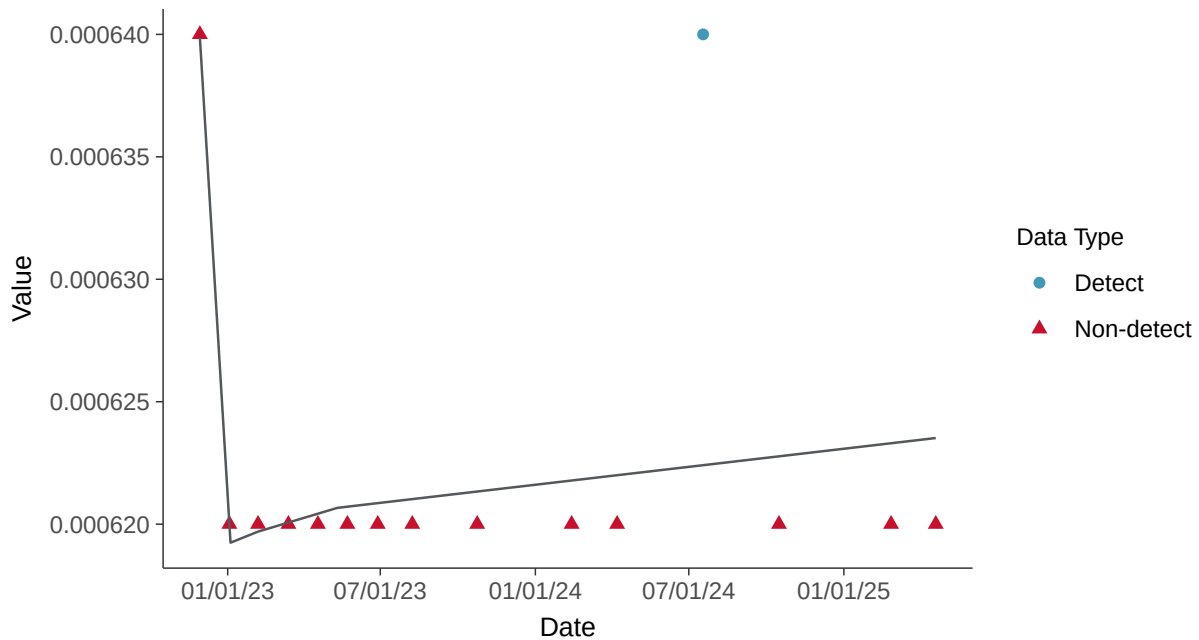
Trend Regression: Piecewise Linear-Linear

Vanadium, MW-06 (mg/L)



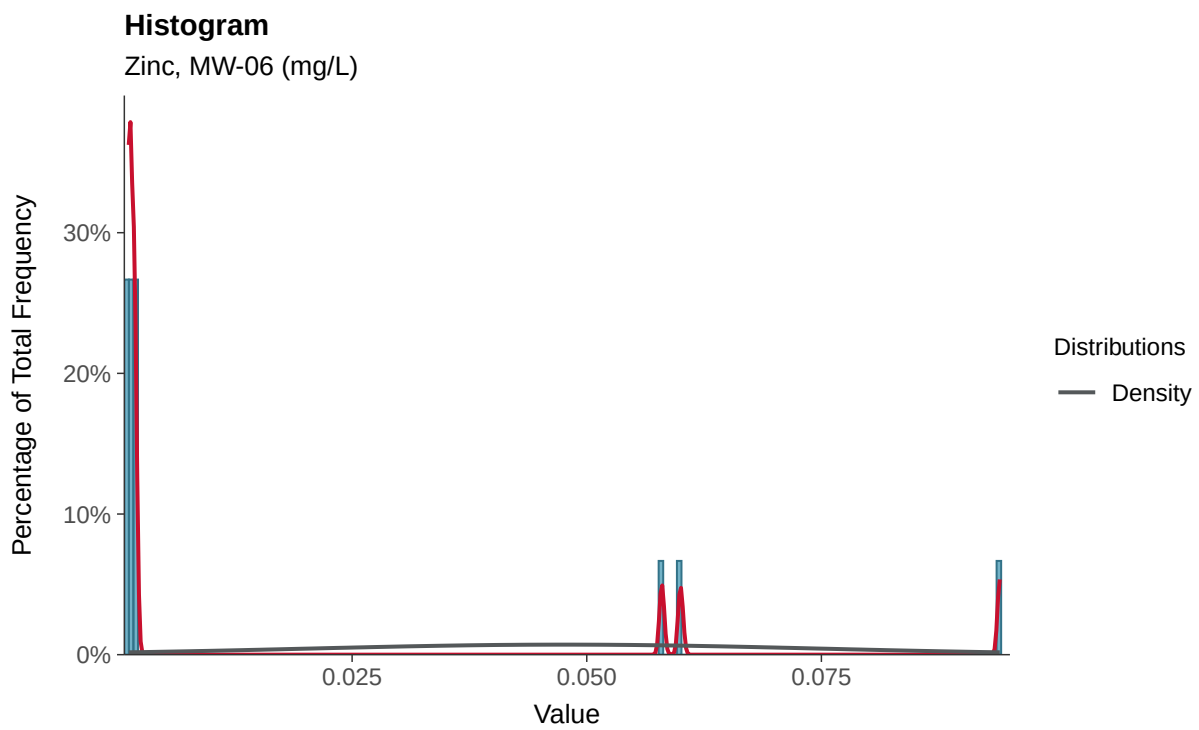
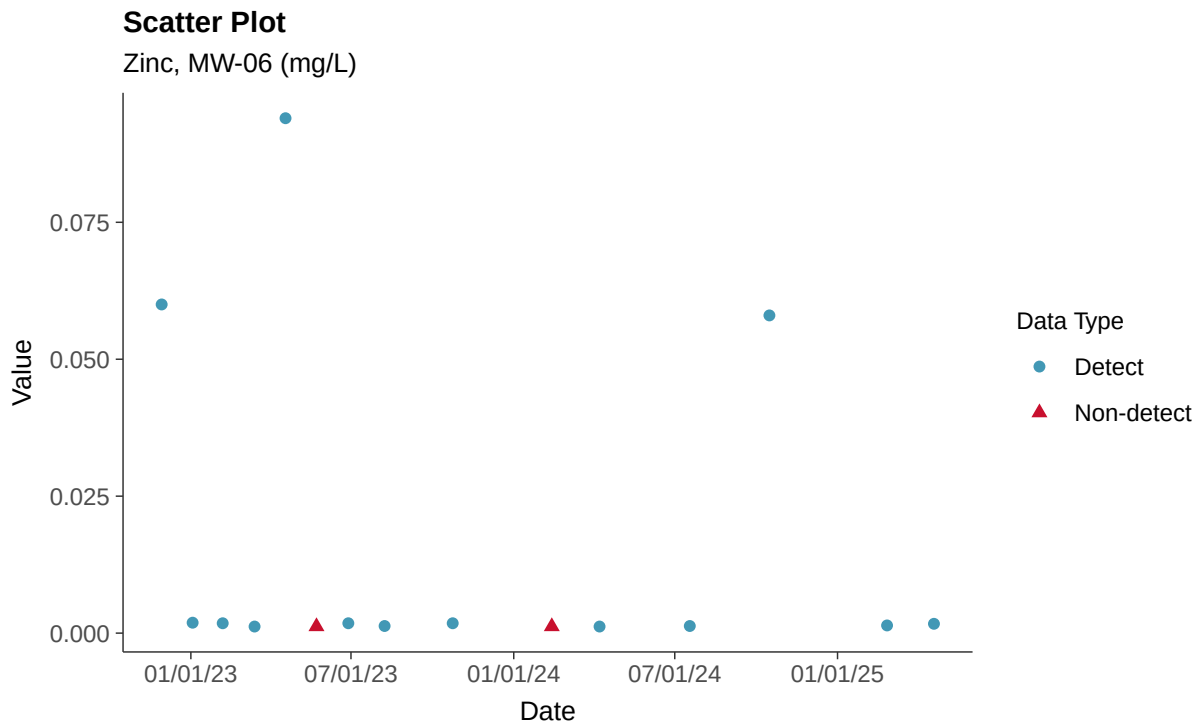
Trend Regression: Piecewise Linear-Linear-Linear

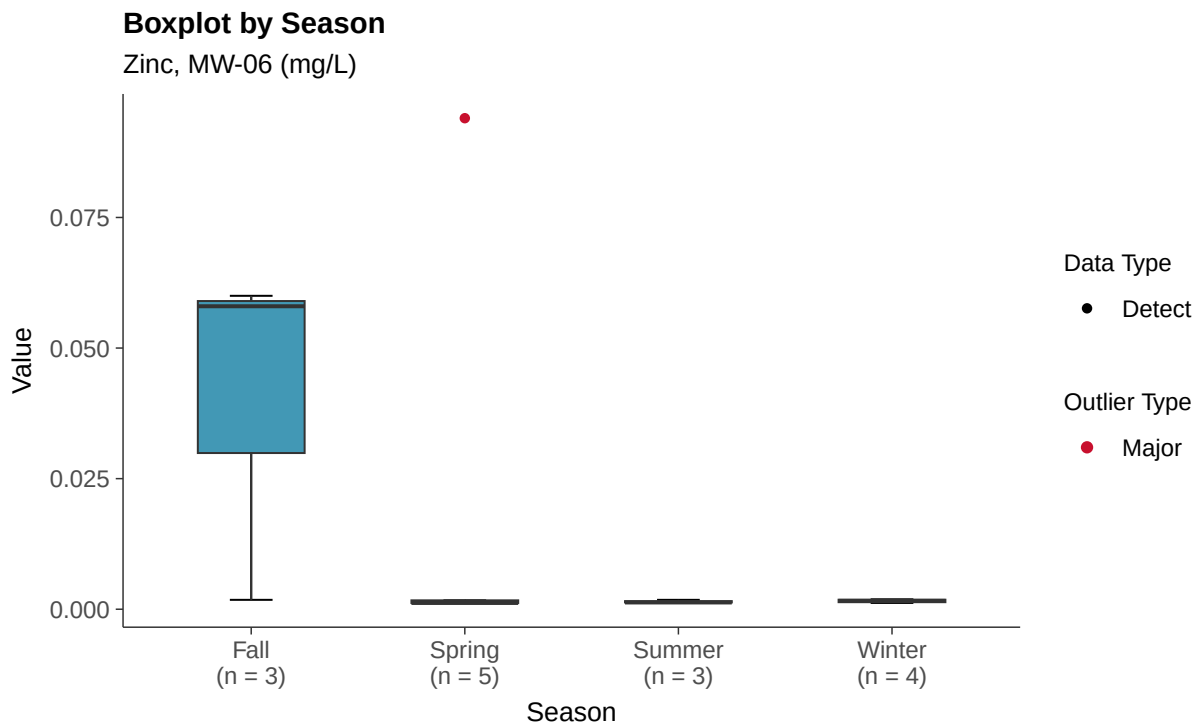
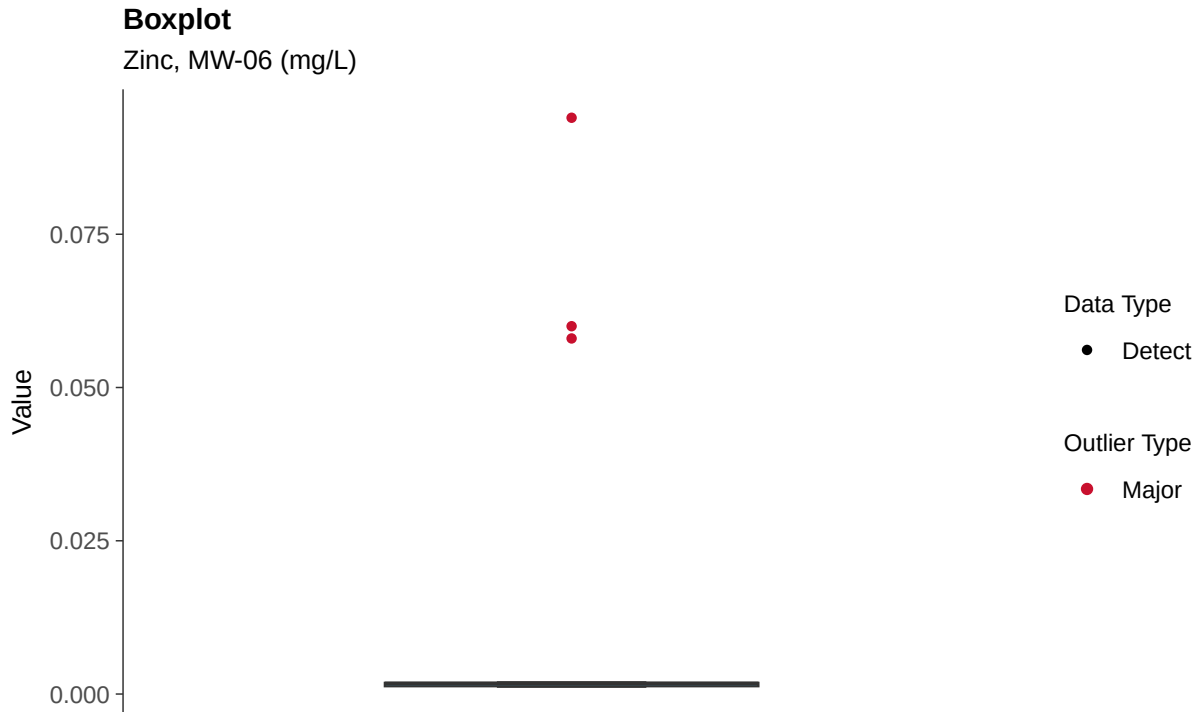
Vanadium, MW-06 (mg/L)



Part 115: Zinc, MW-06

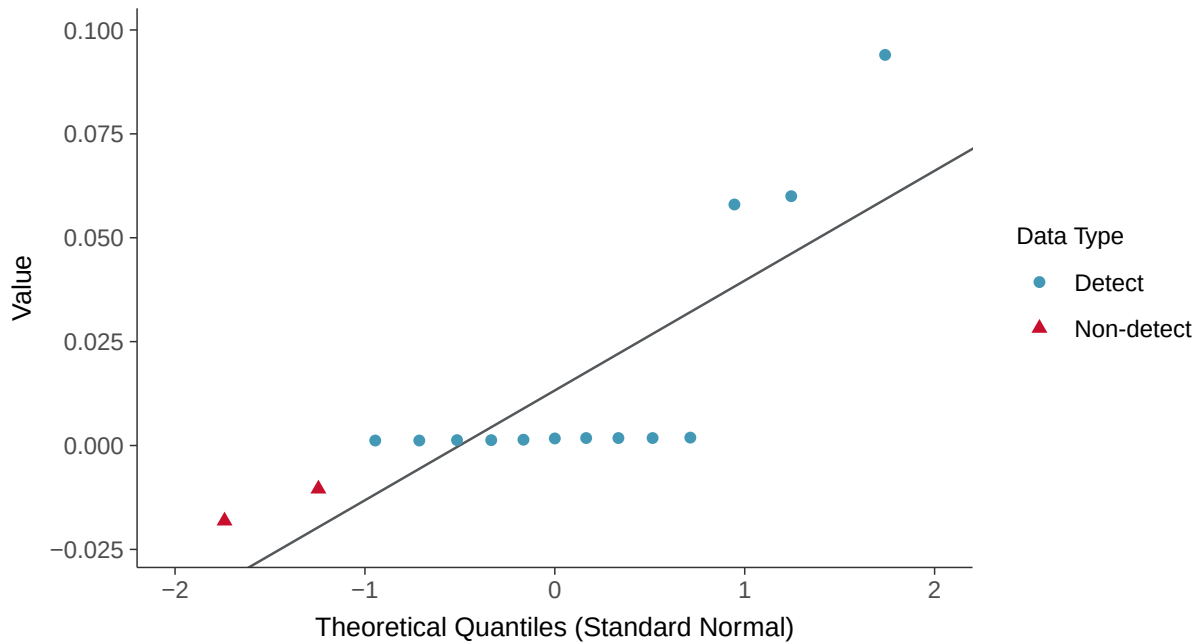
ID: 16_1_5_129





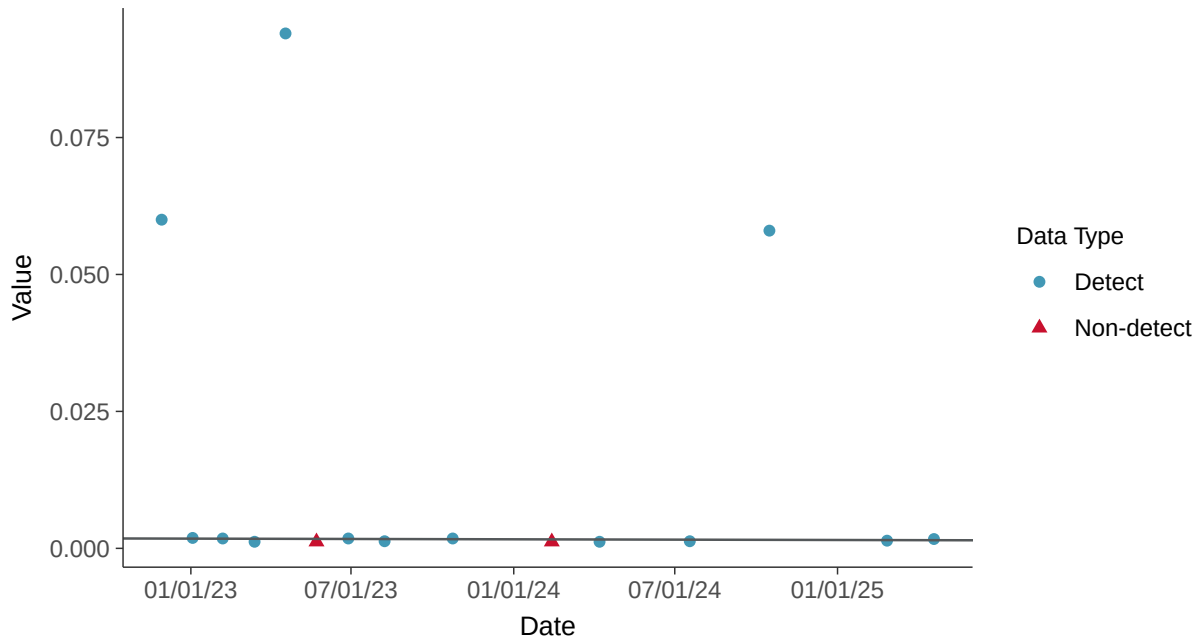
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-06 (mg/L)



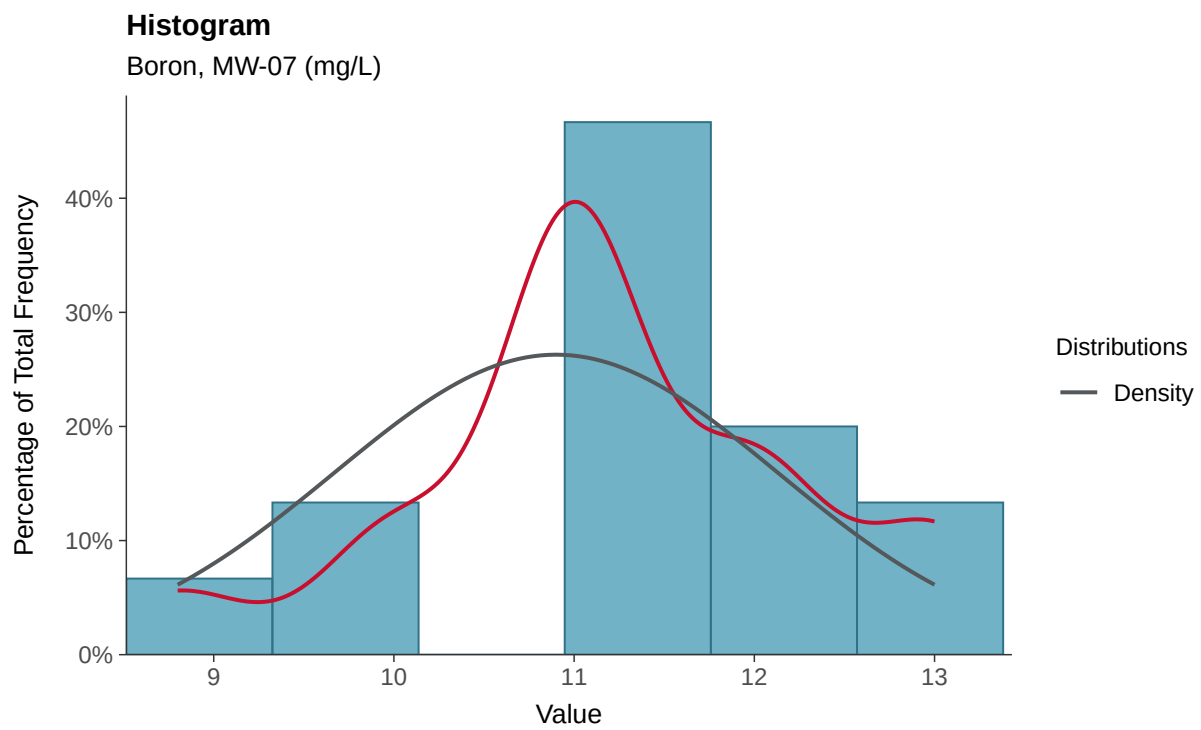
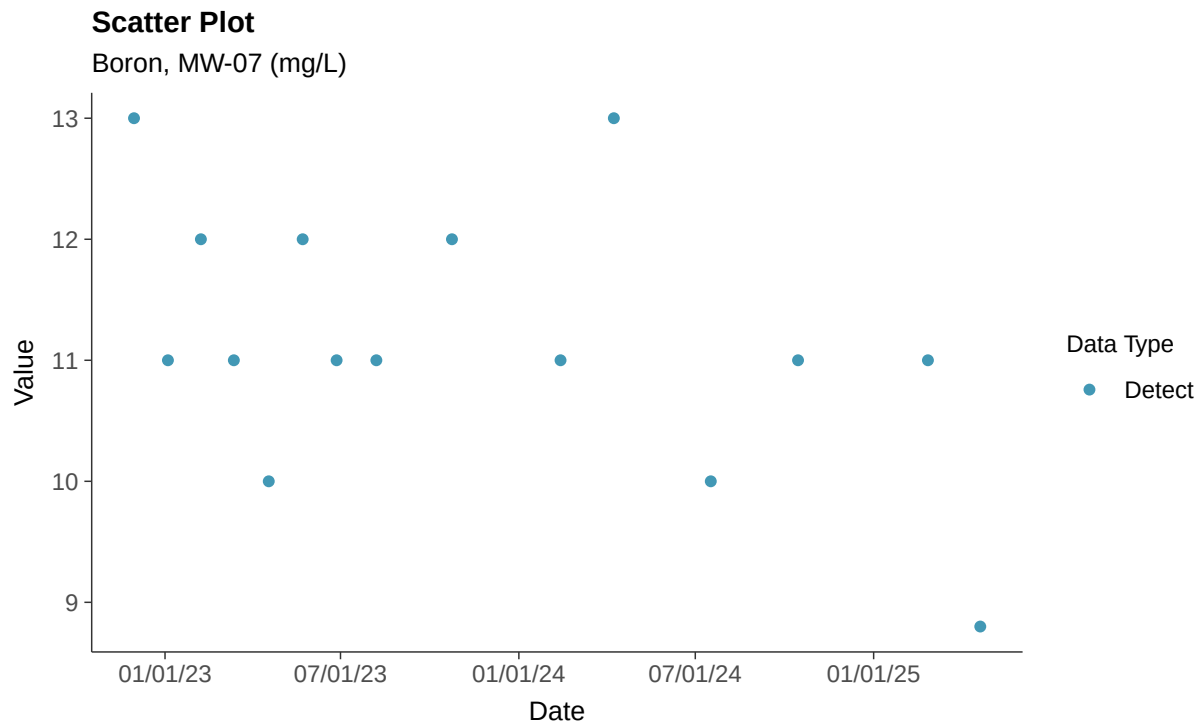
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Zinc, MW-06 (mg/L)



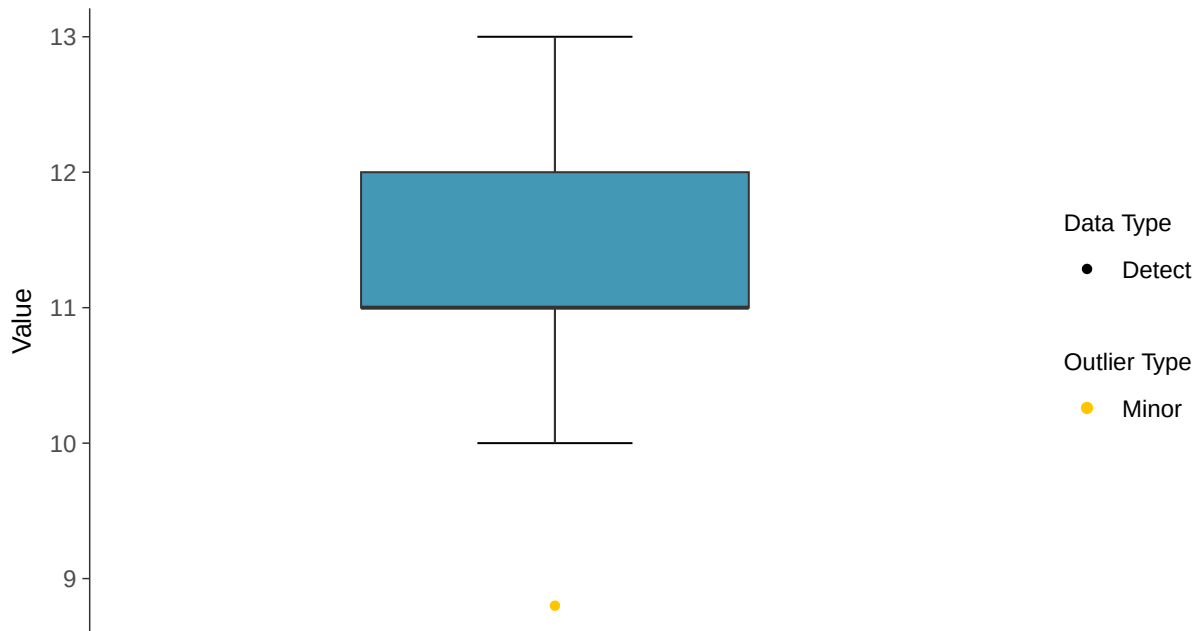
Appendix III: Boron, MW-07

ID: 17_1_3_105



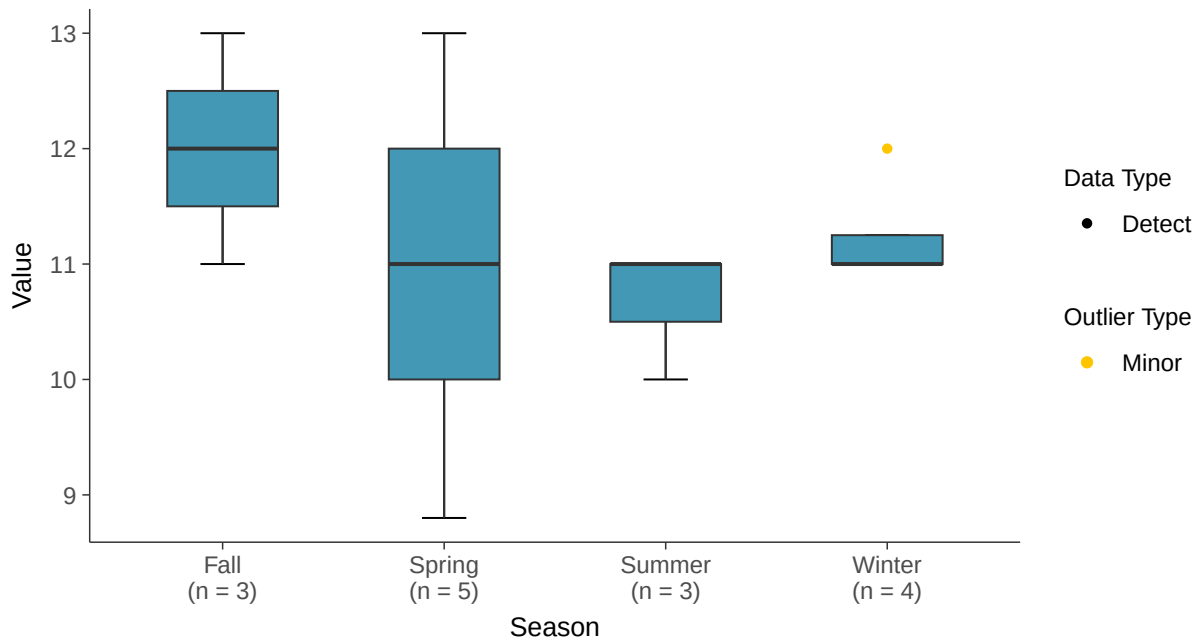
Boxplot

Boron, MW-07 (mg/L)



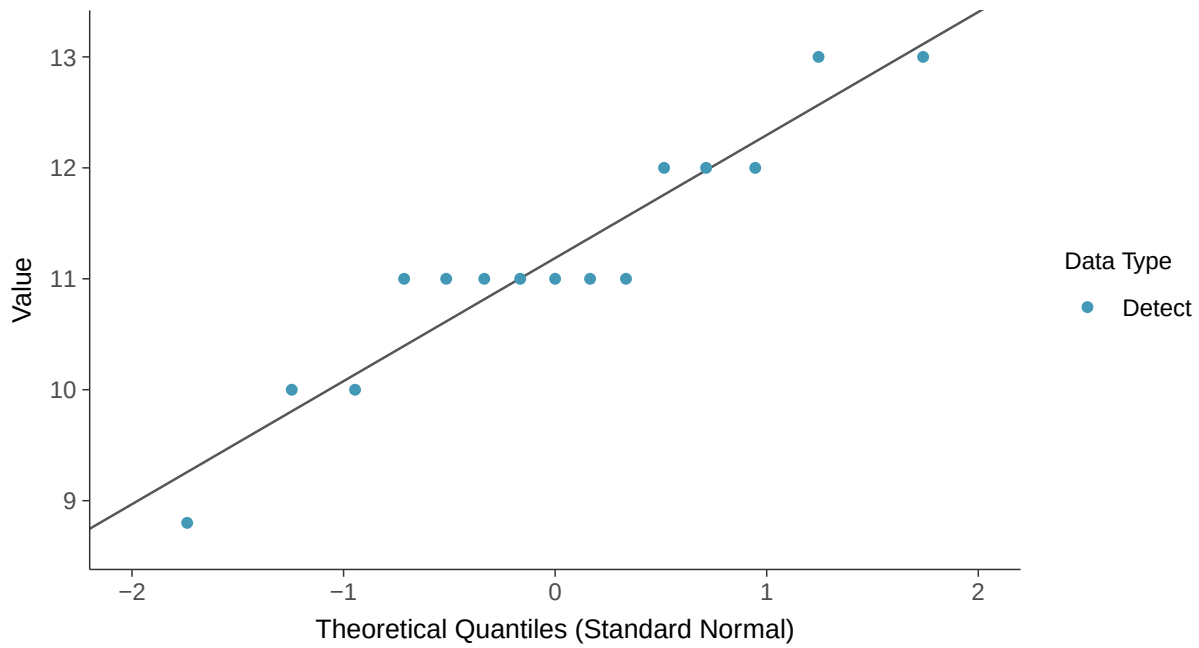
Boxplot by Season

Boron, MW-07 (mg/L)



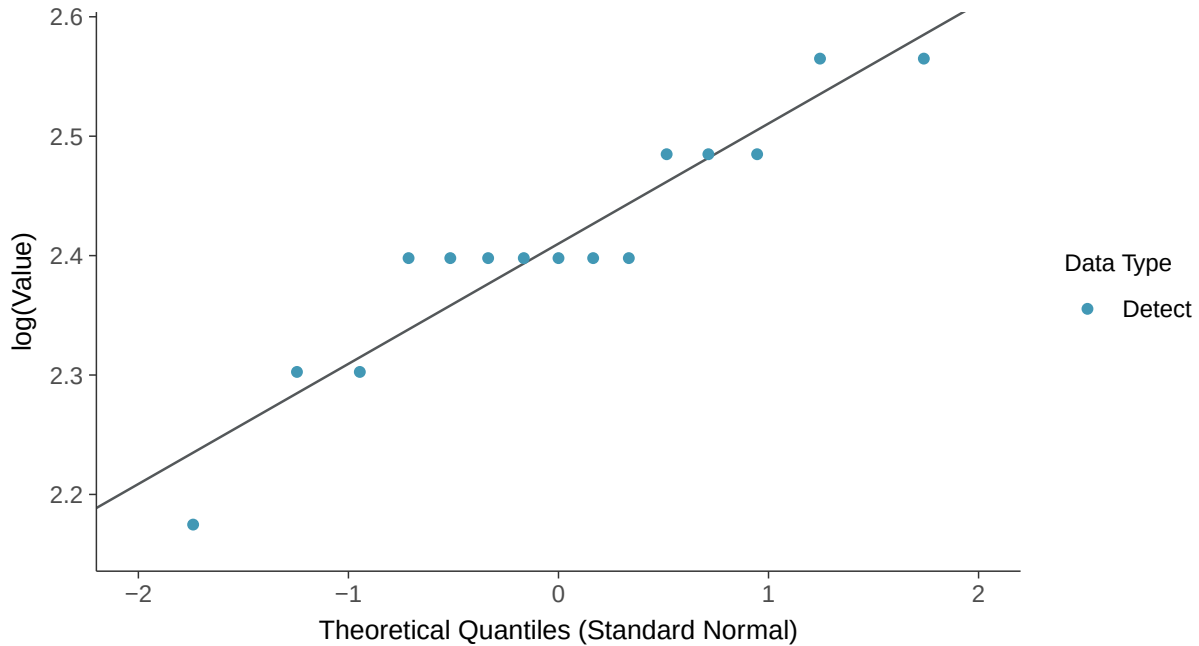
Normal Q-Q plot

Boron, MW-07 (mg/L)



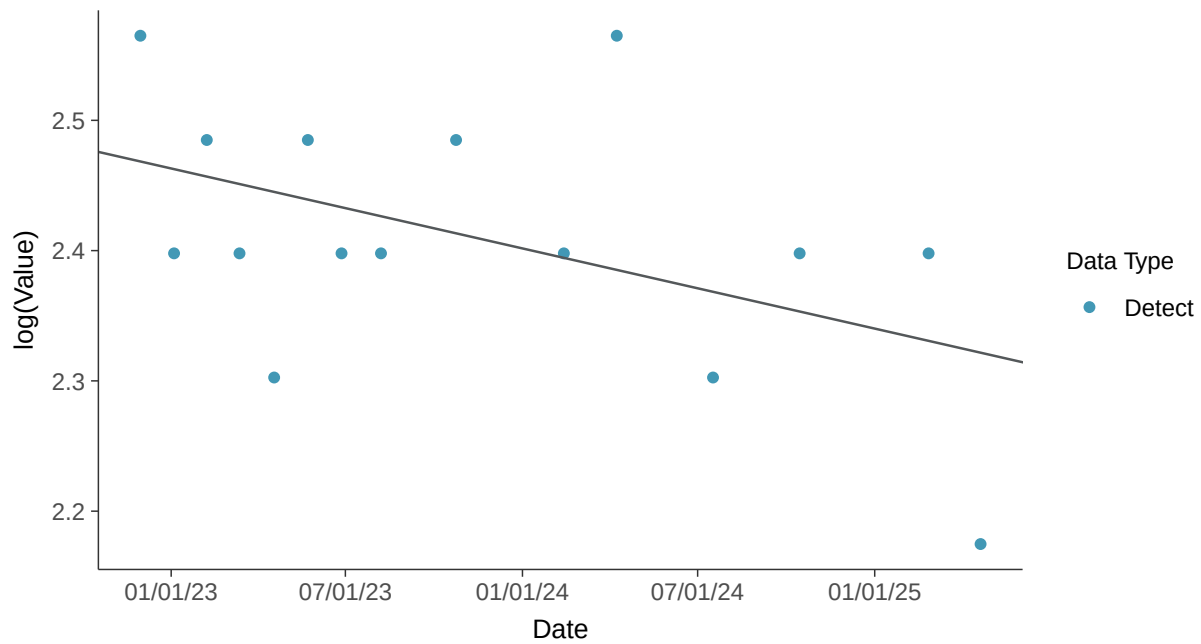
Lognormal Q-Q plot

Boron, MW-07 (mg/L)



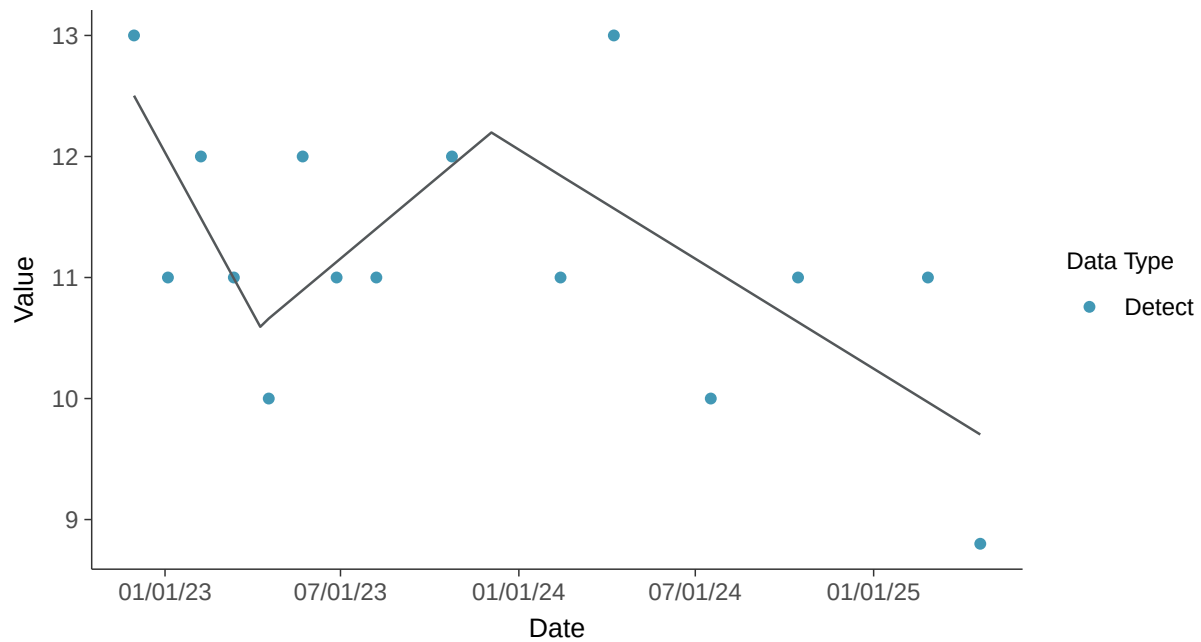
Trend Regression: Lognormal MLE

Boron, MW-07 (mg/L)



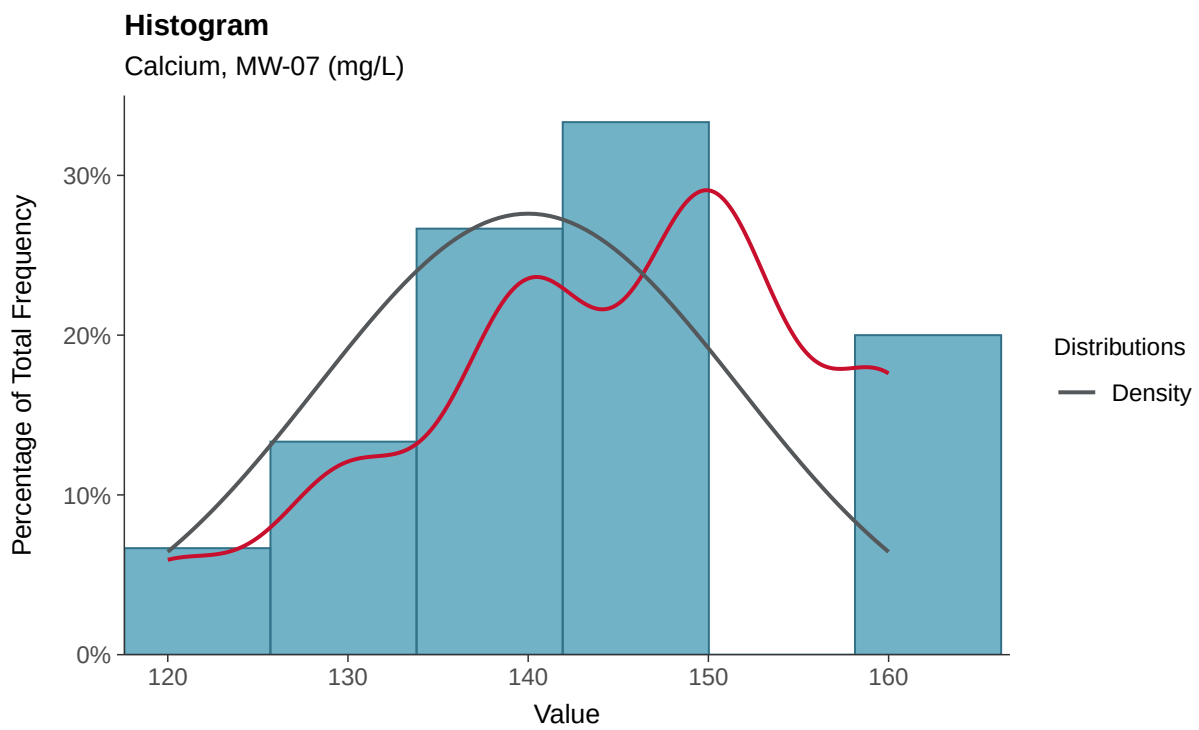
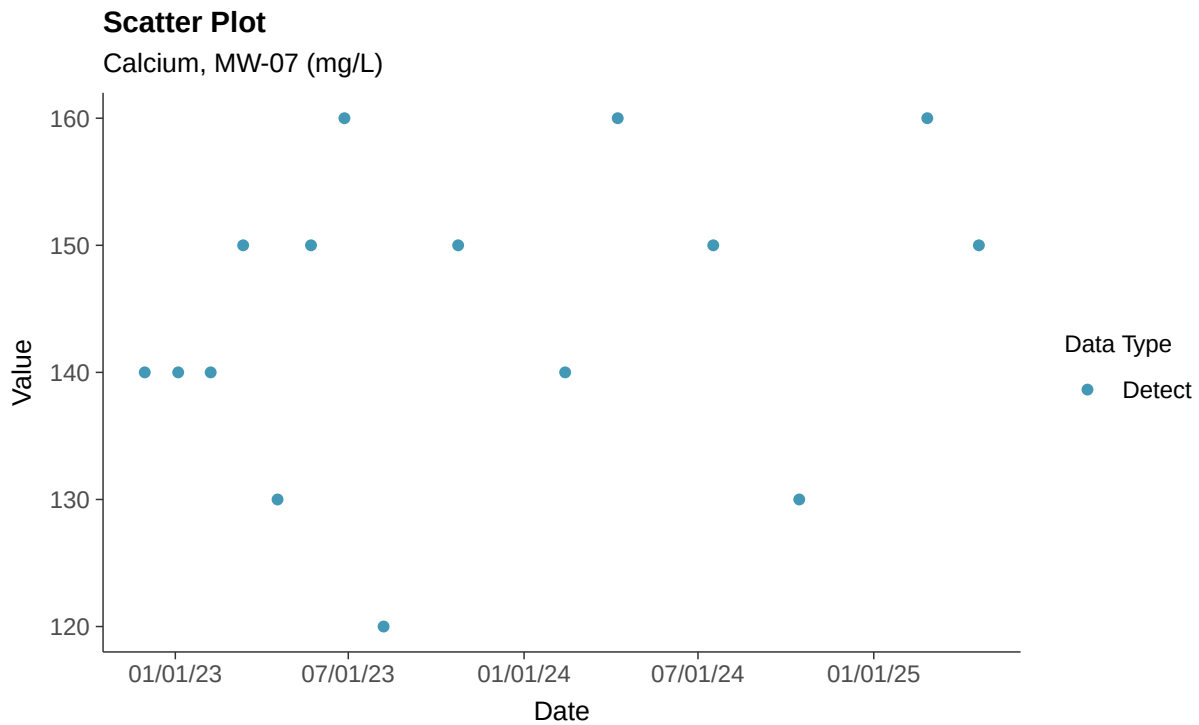
Trend Regression: Piecewise Linear-Linear-Linear

Boron, MW-07 (mg/L)



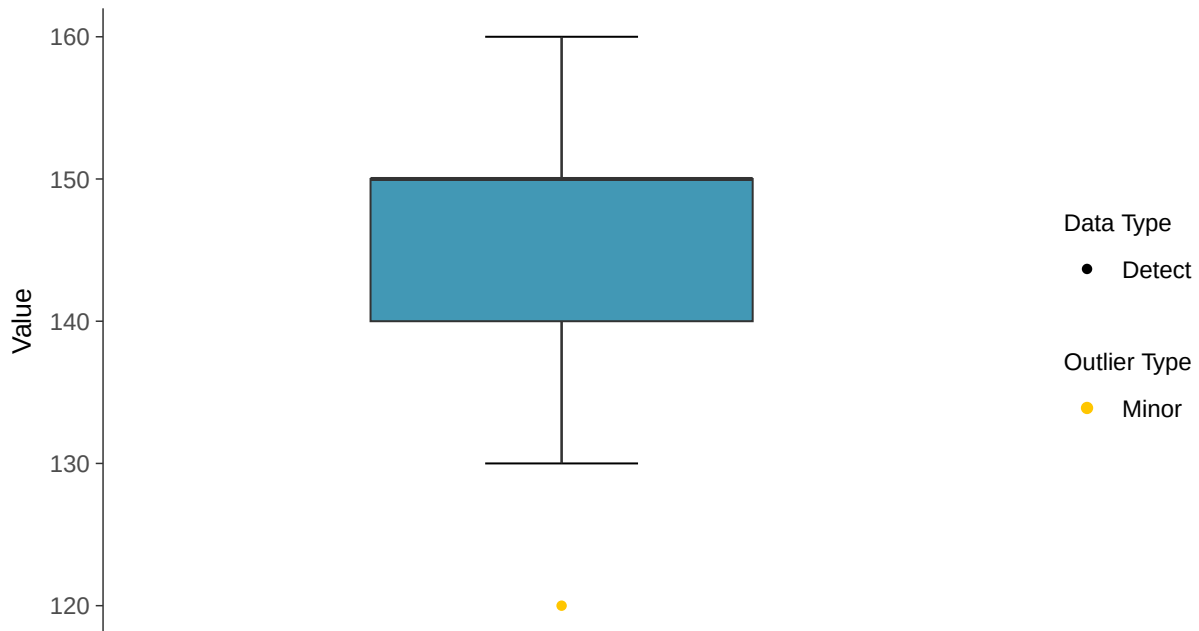
Appendix III: Calcium, MW-07

ID: 17_1_3_107



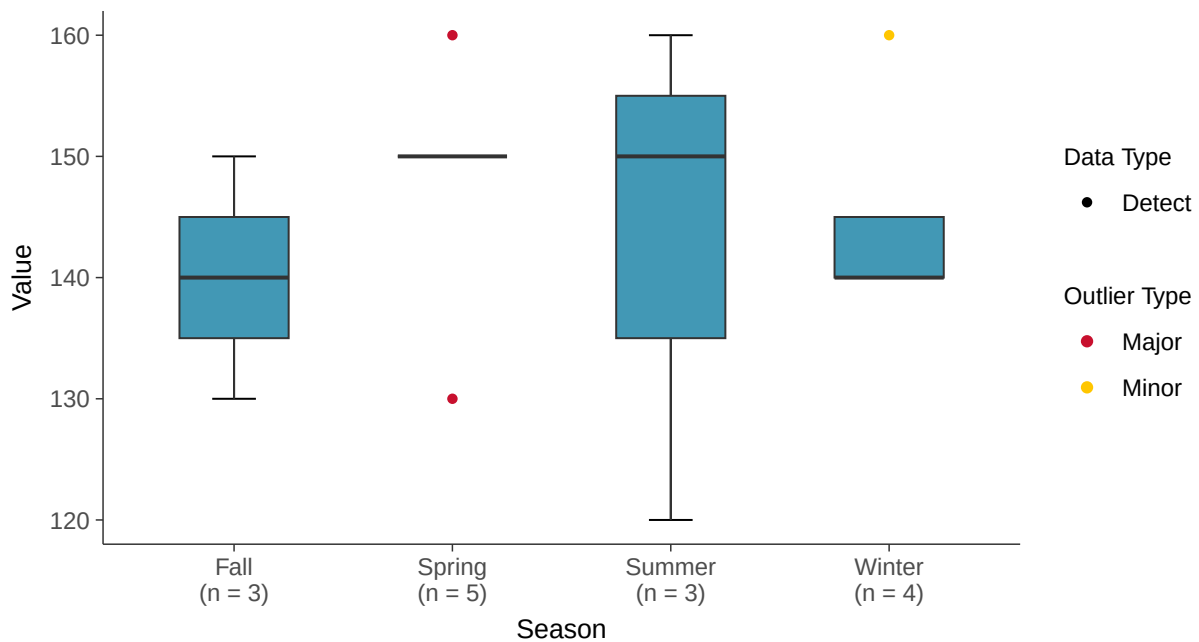
Boxplot

Calcium, MW-07 (mg/L)



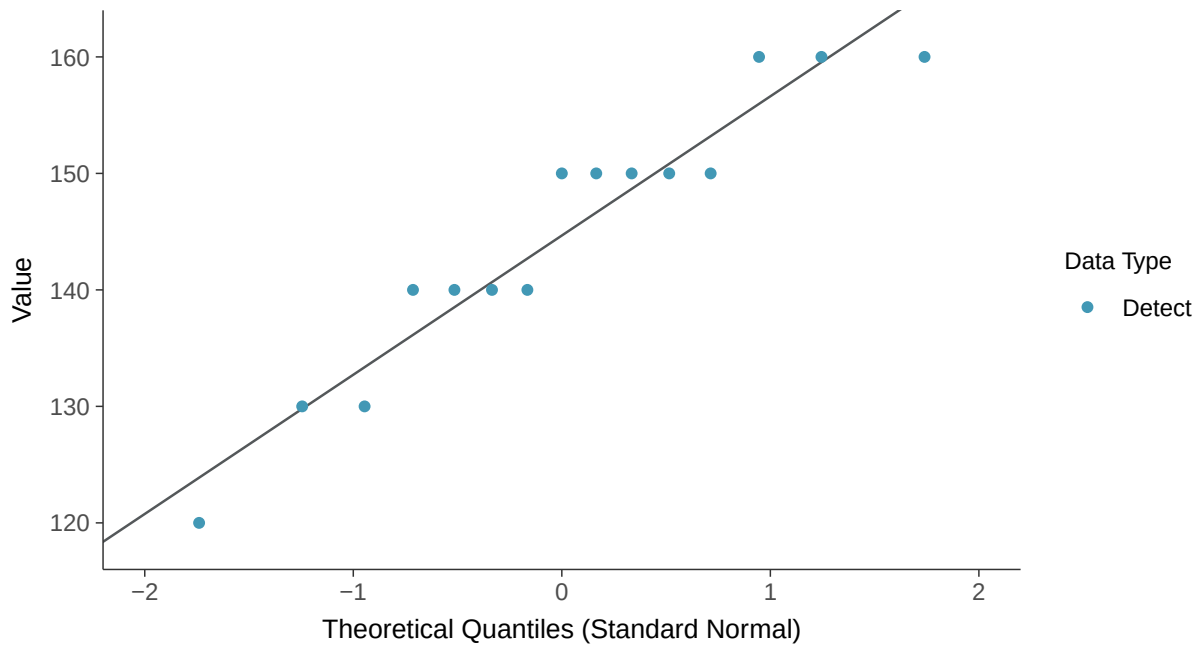
Boxplot by Season

Calcium, MW-07 (mg/L)



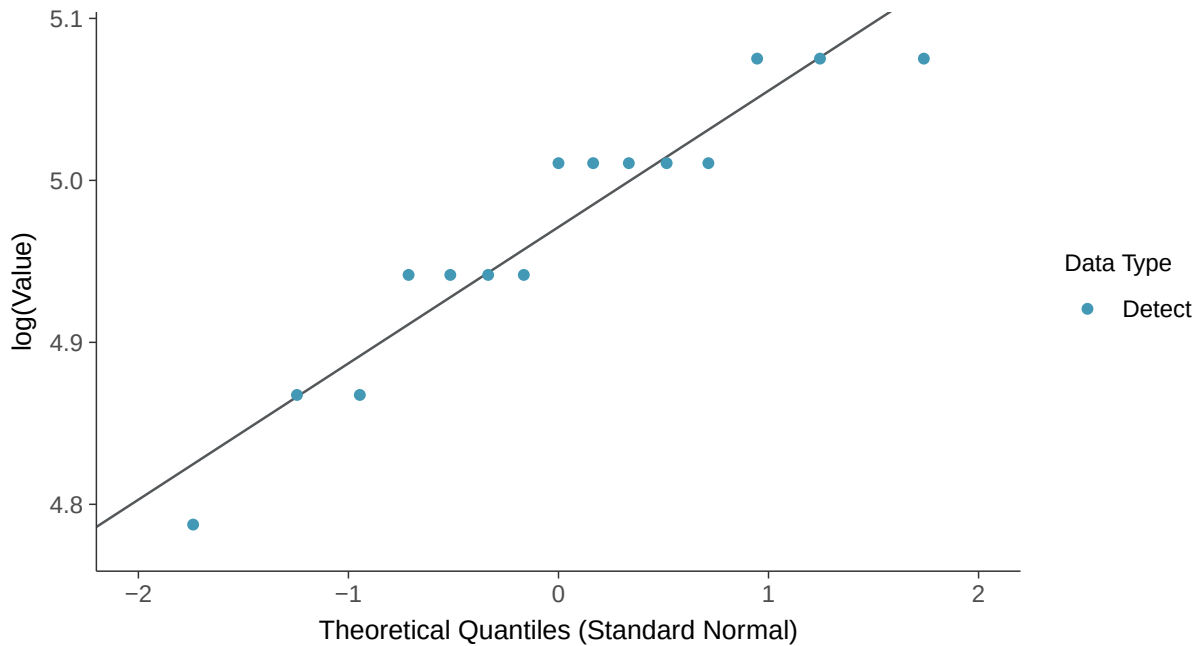
Normal Q-Q plot

Calcium, MW-07 (mg/L)



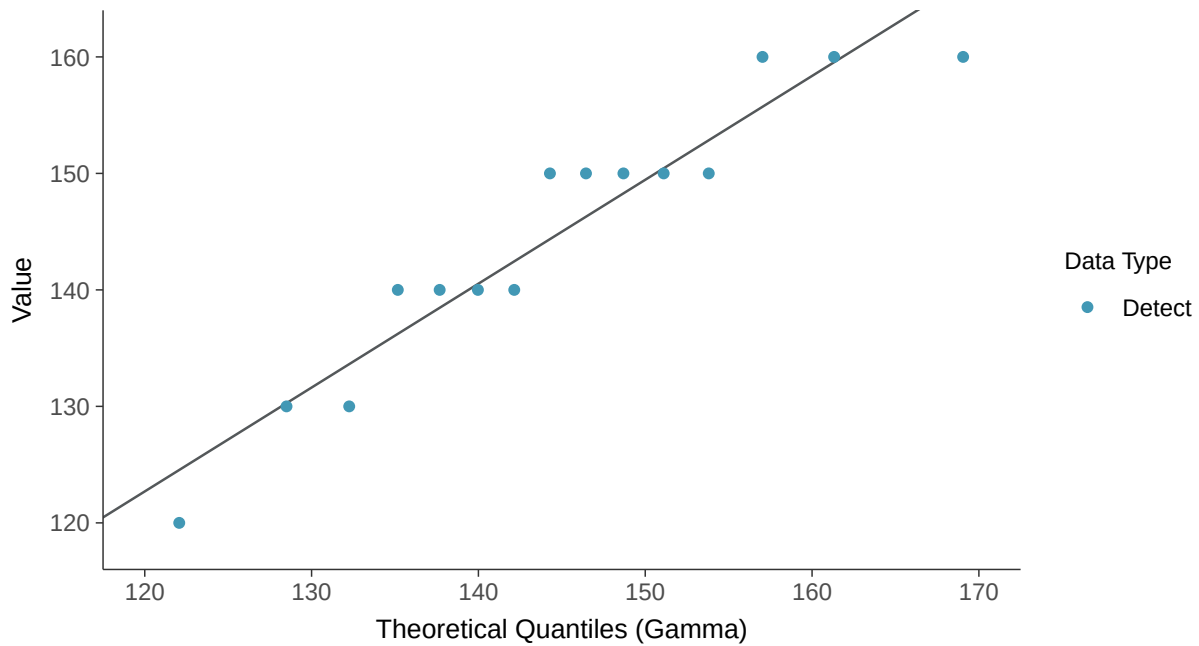
Lognormal Q-Q plot

Calcium, MW-07 (mg/L)



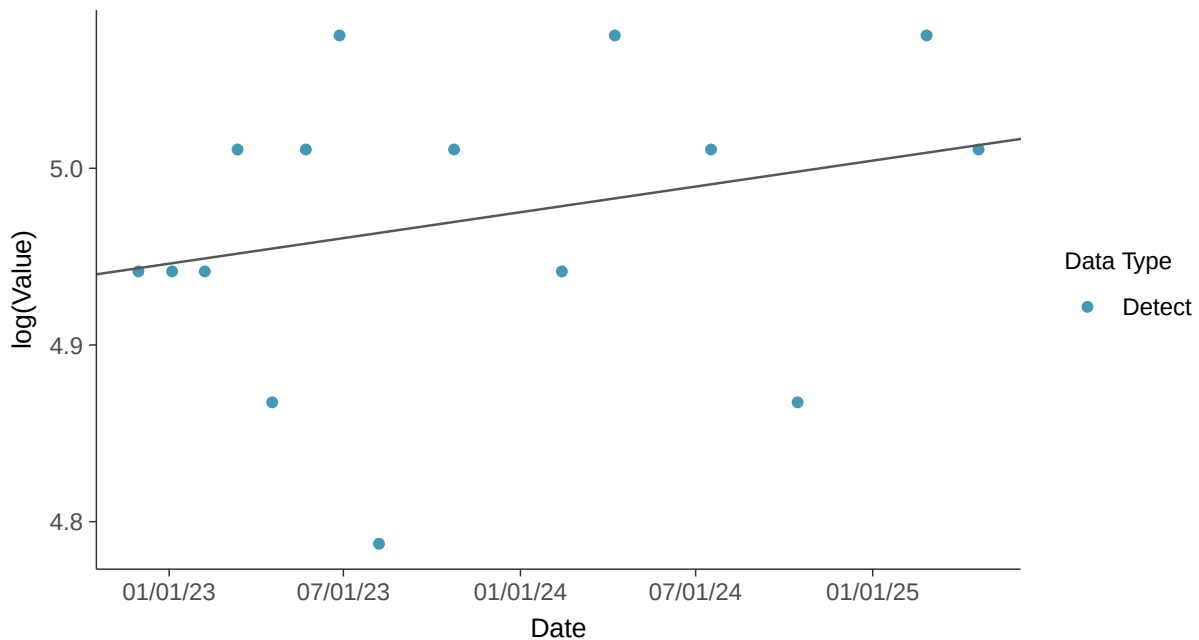
Gamma Q-Q plot

Calcium, MW-07 (mg/L)



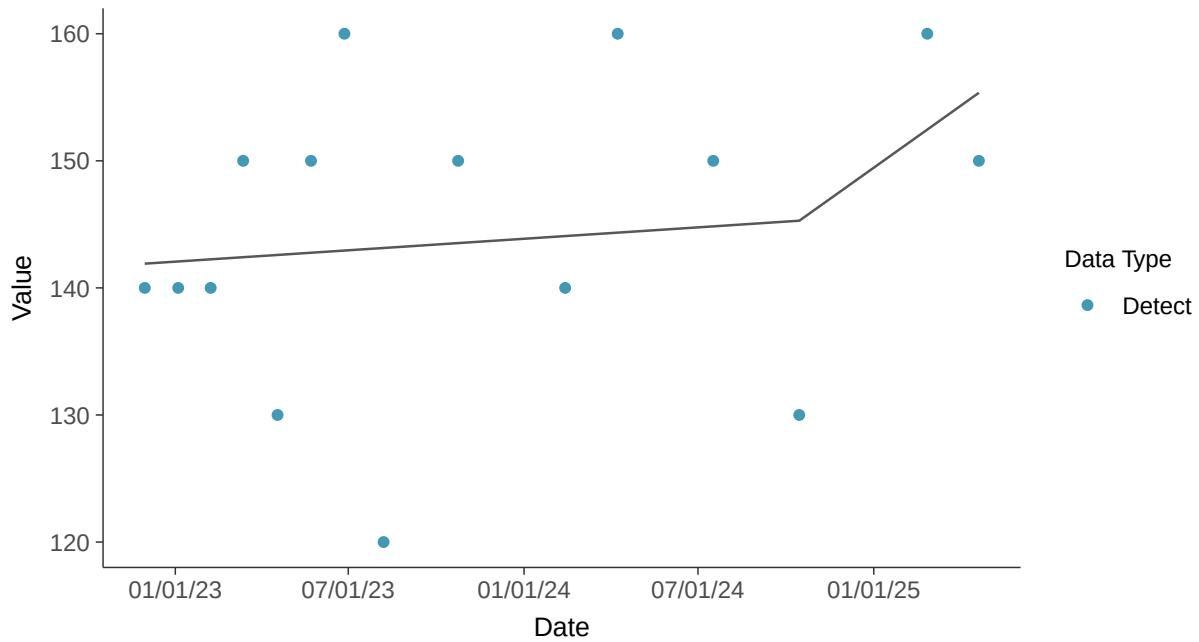
Trend Regression: Lognormal MLE

Calcium, MW-07 (mg/L)



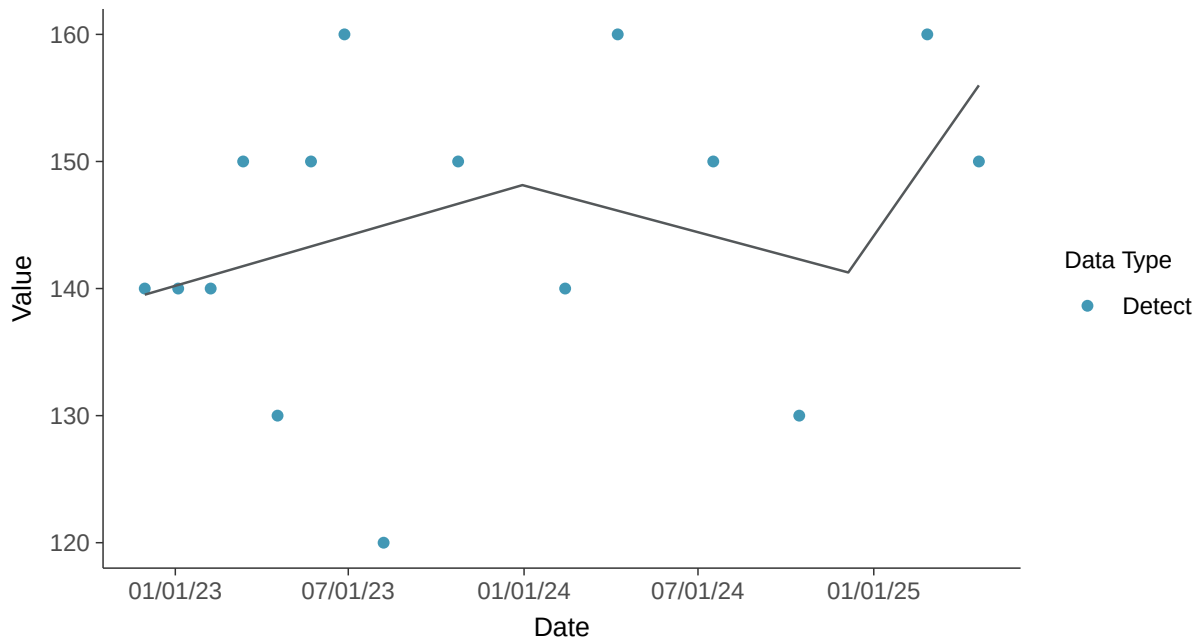
Trend Regression: Piecewise Linear-Linear

Calcium, MW-07 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Calcium, MW-07 (mg/L)

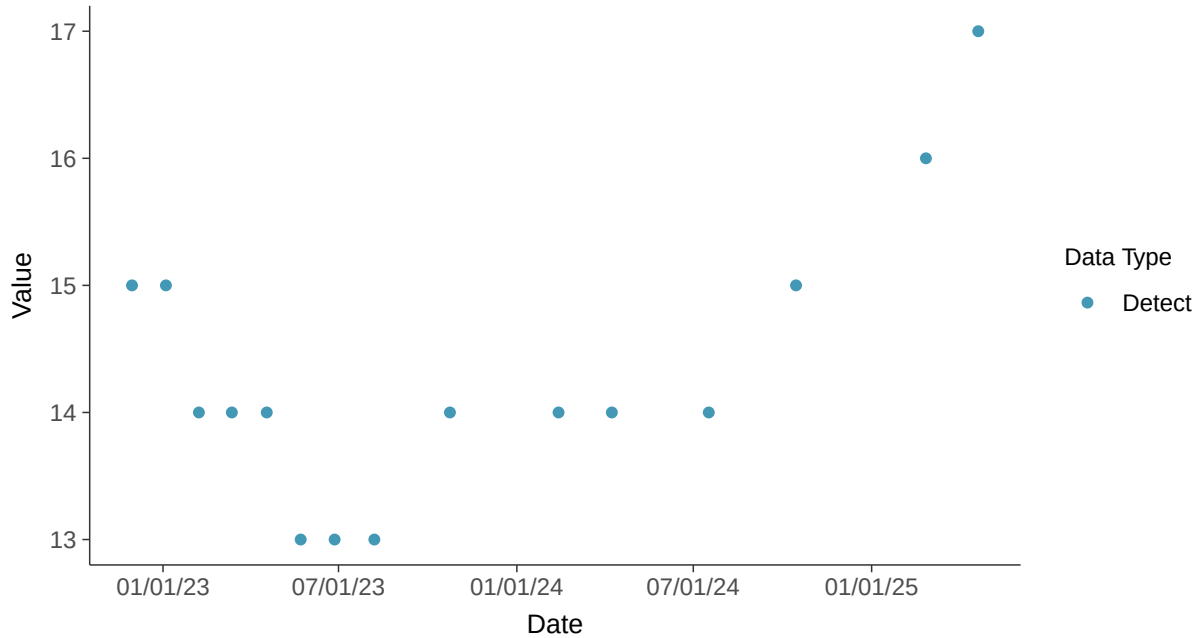


Appendix III: Chloride (as Cl), MW-07

ID: 17_1_3_108

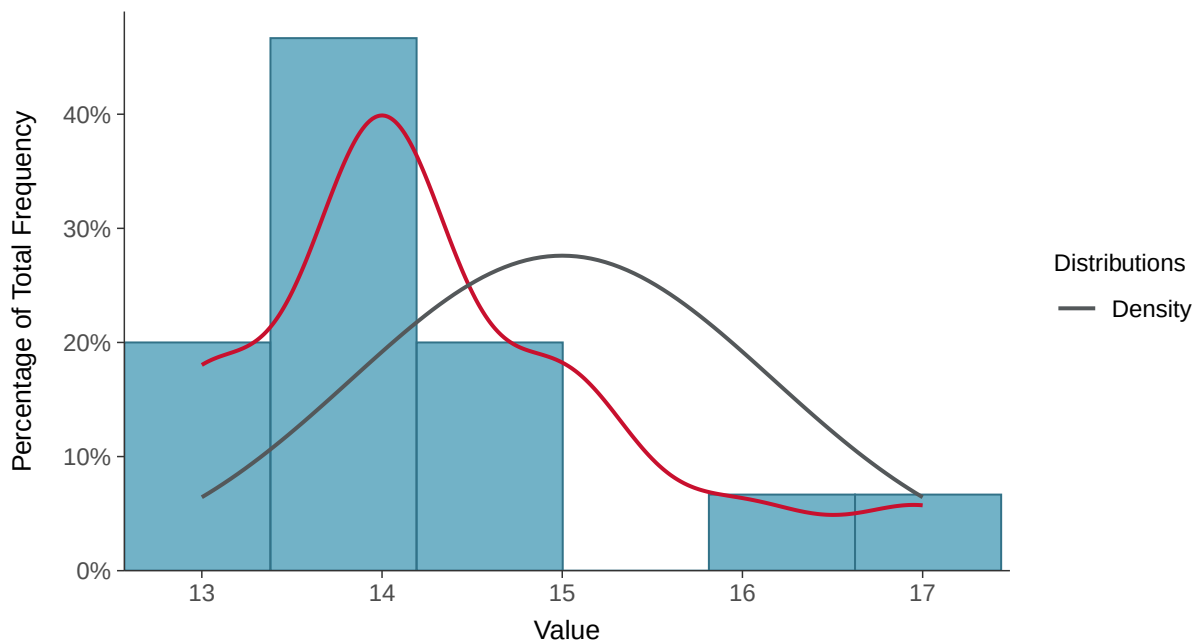
Scatter Plot

Chloride (as Cl), MW-07 (mg/L)



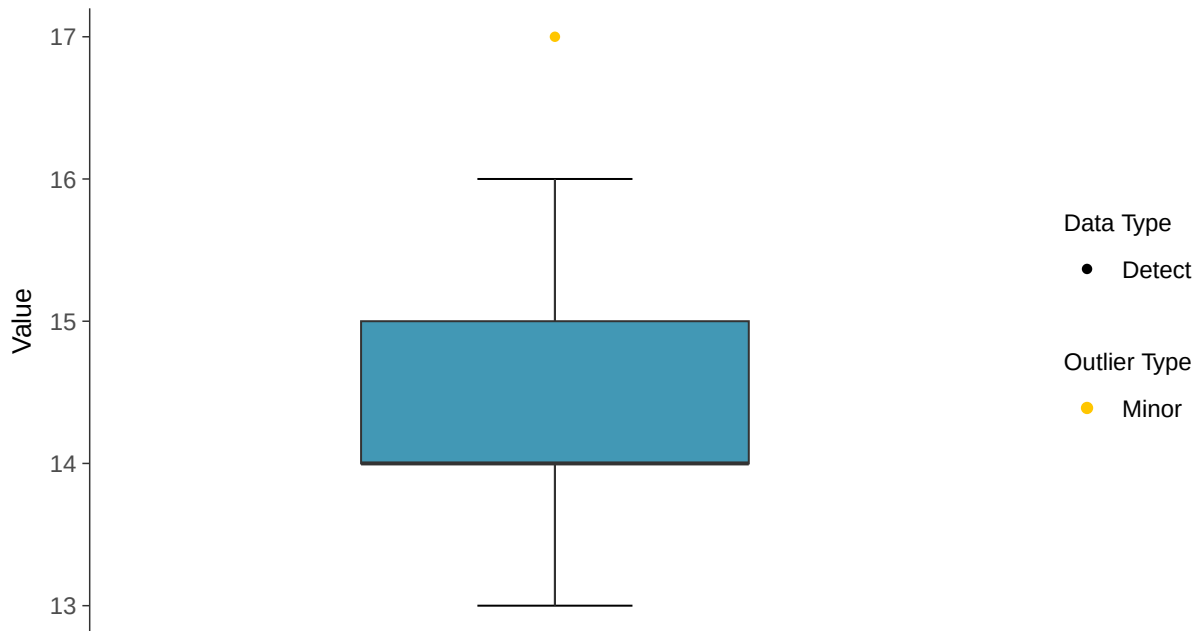
Histogram

Chloride (as Cl), MW-07 (mg/L)



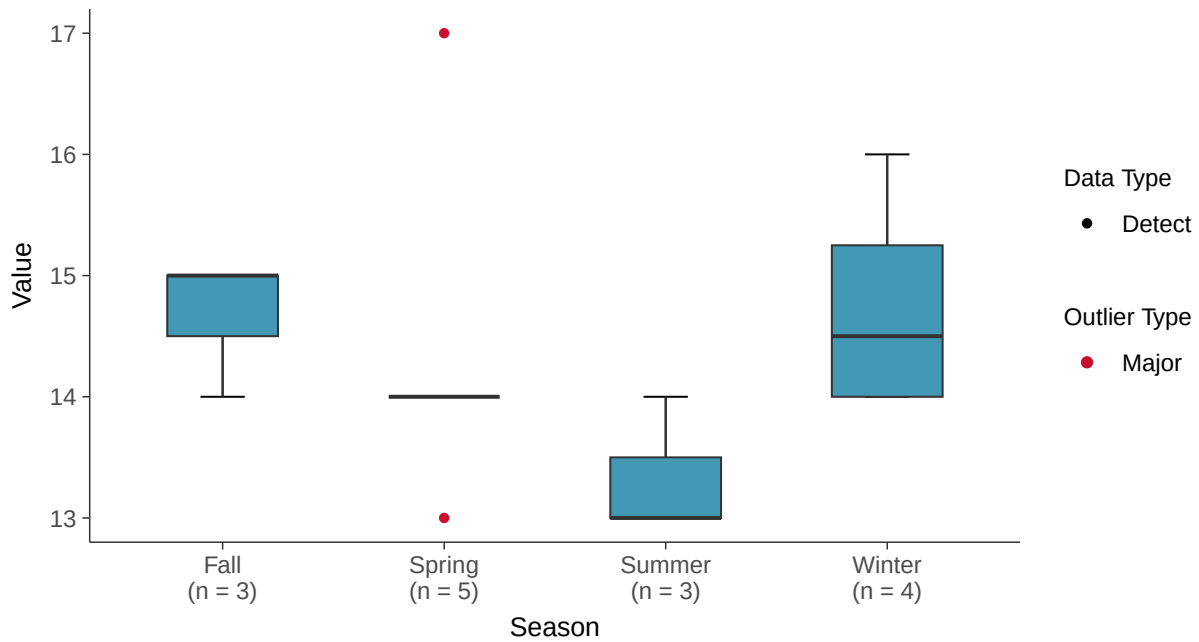
Boxplot

Chloride (as Cl), MW-07 (mg/L)



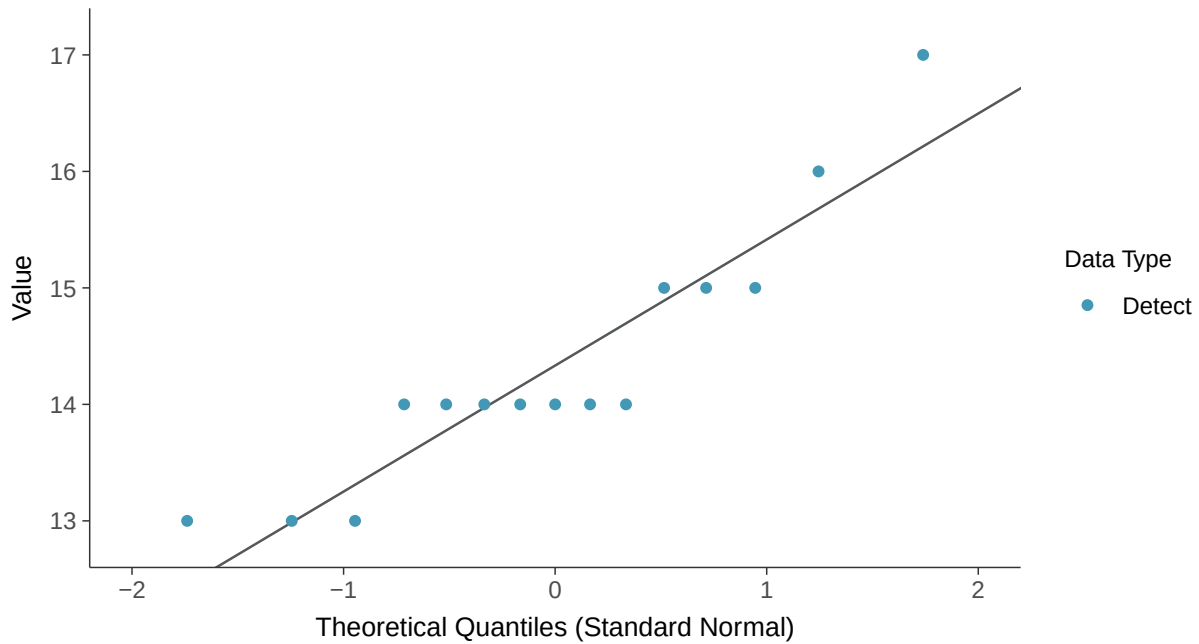
Boxplot by Season

Chloride (as Cl), MW-07 (mg/L)



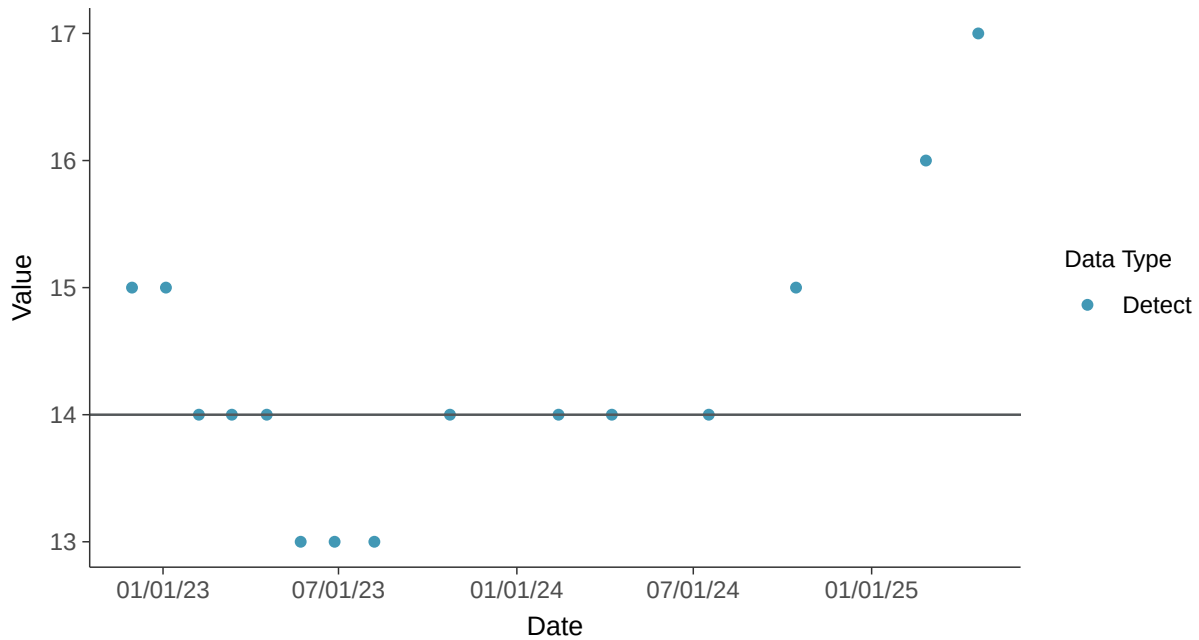
Normal Q-Q plot

Chloride (as Cl), MW-07 (mg/L)



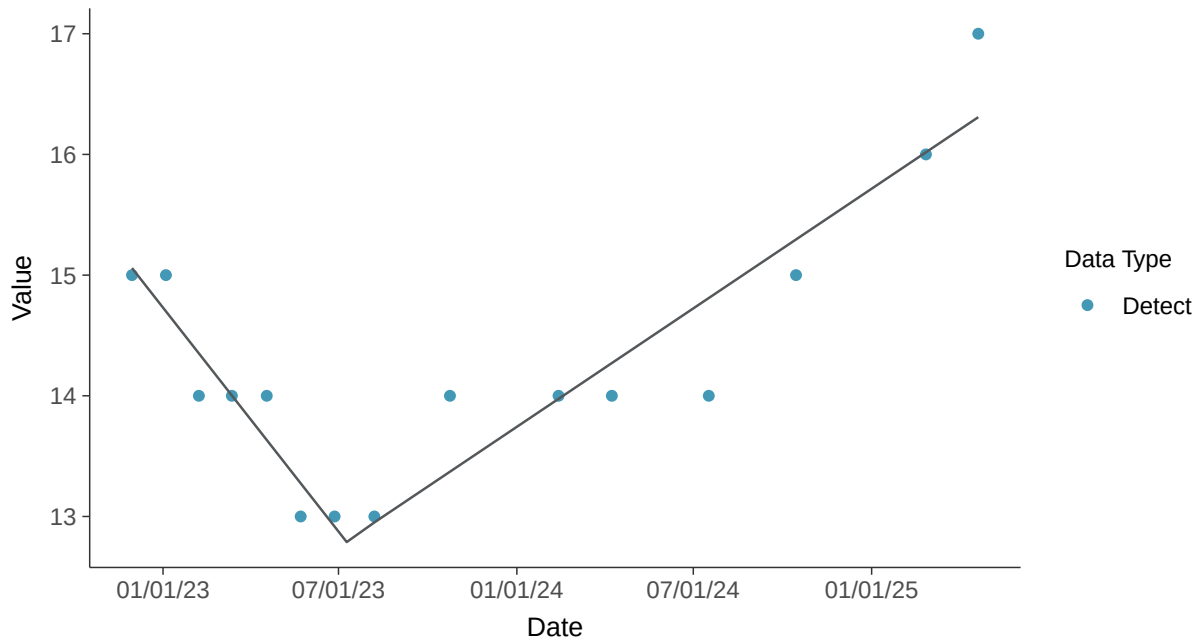
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Chloride (as Cl), MW-07 (mg/L)



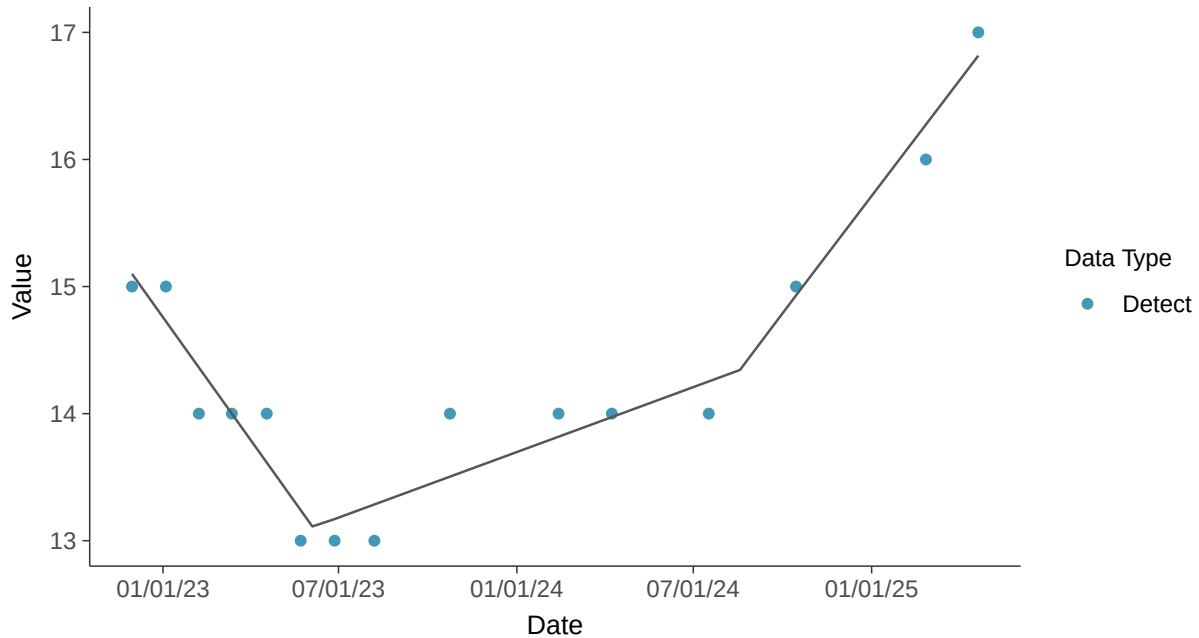
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-07 (mg/L)



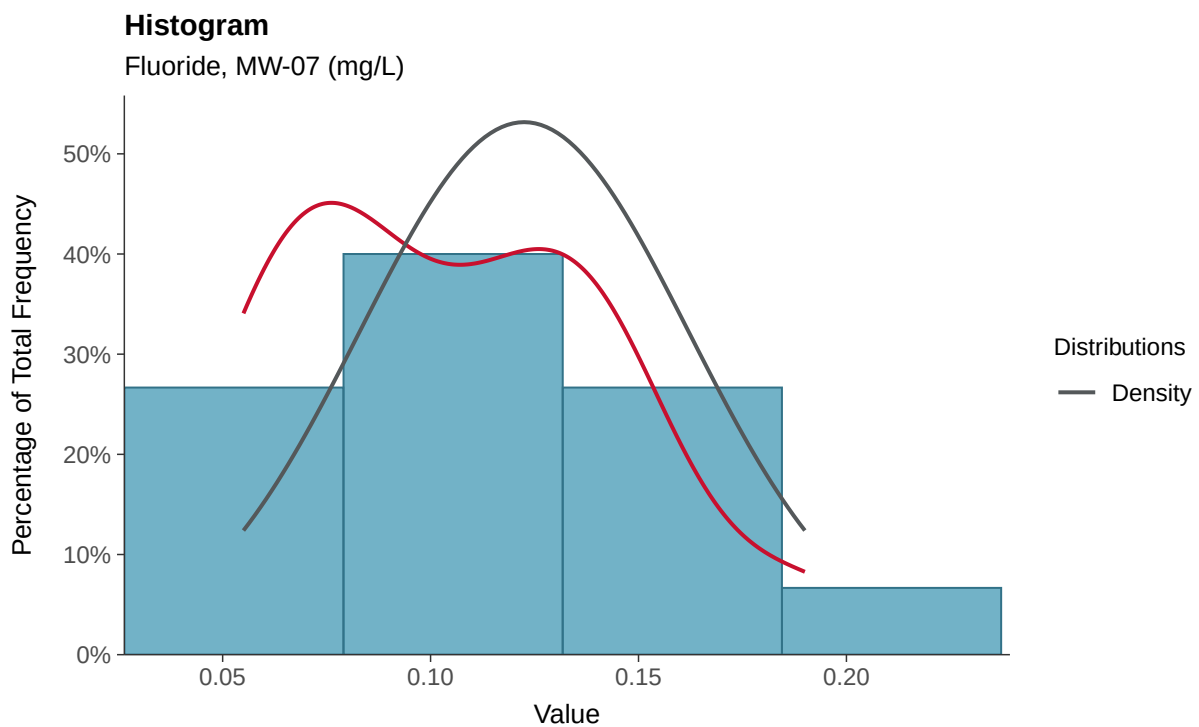
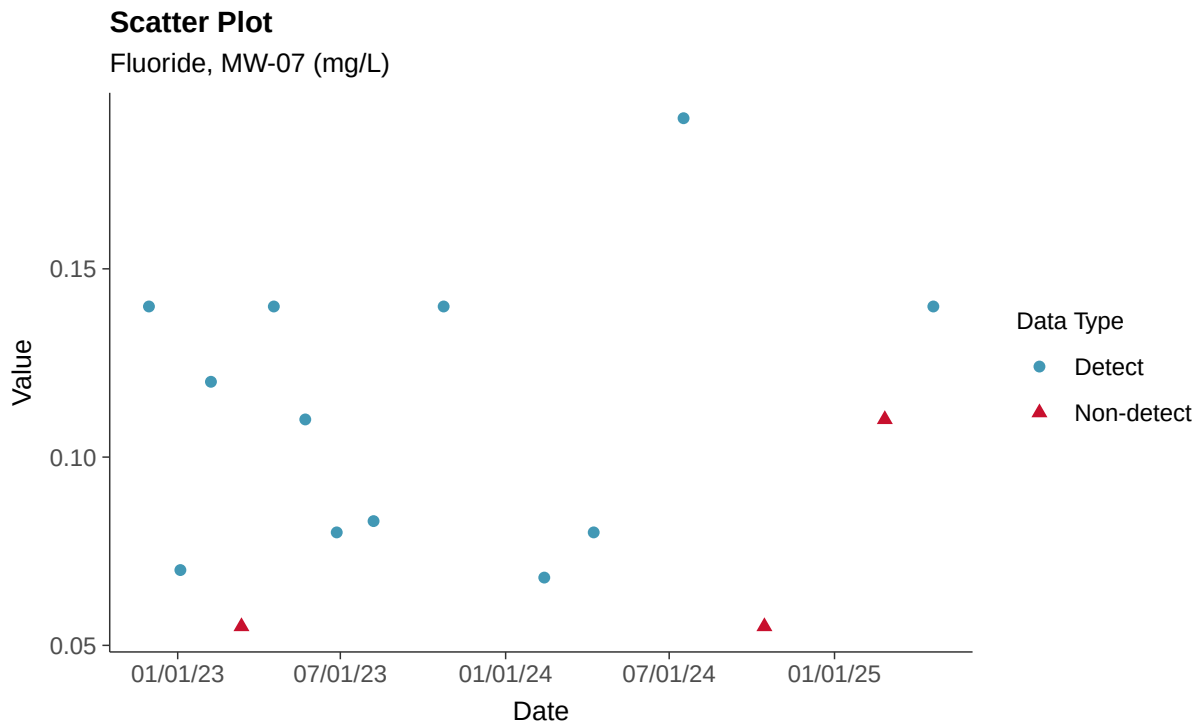
Trend Regression: Piecewise Linear-Linear-Linear

Chloride (as Cl), MW-07 (mg/L)



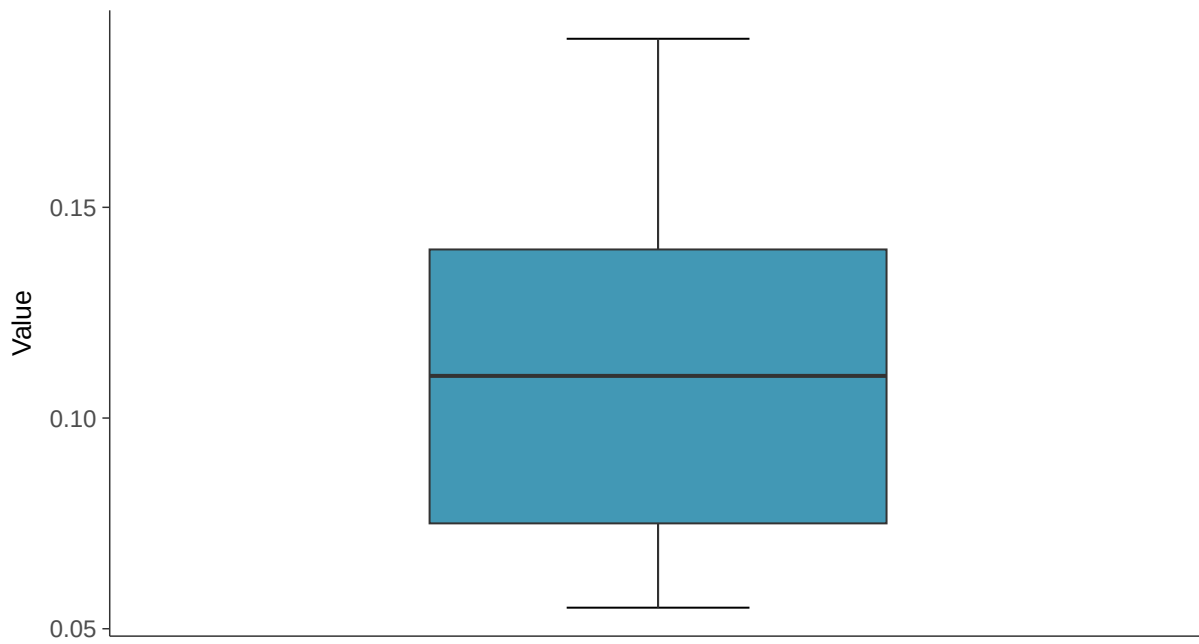
Appendix III: Fluoride, MW-07

ID: 17_1_3_112



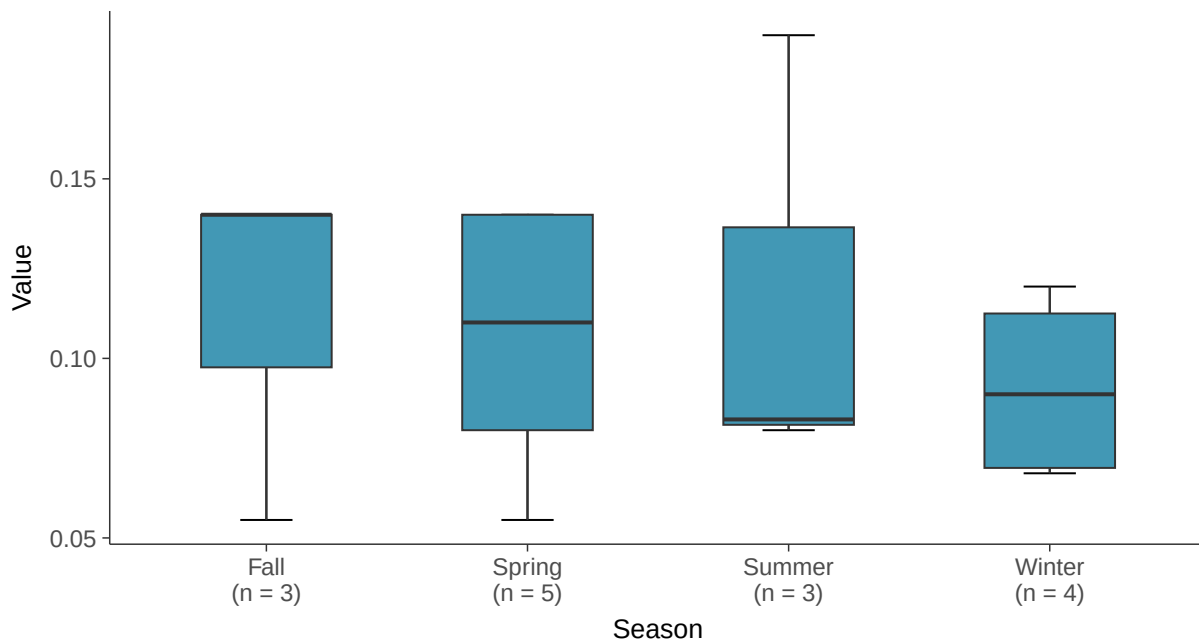
Boxplot

Fluoride, MW-07 (mg/L)



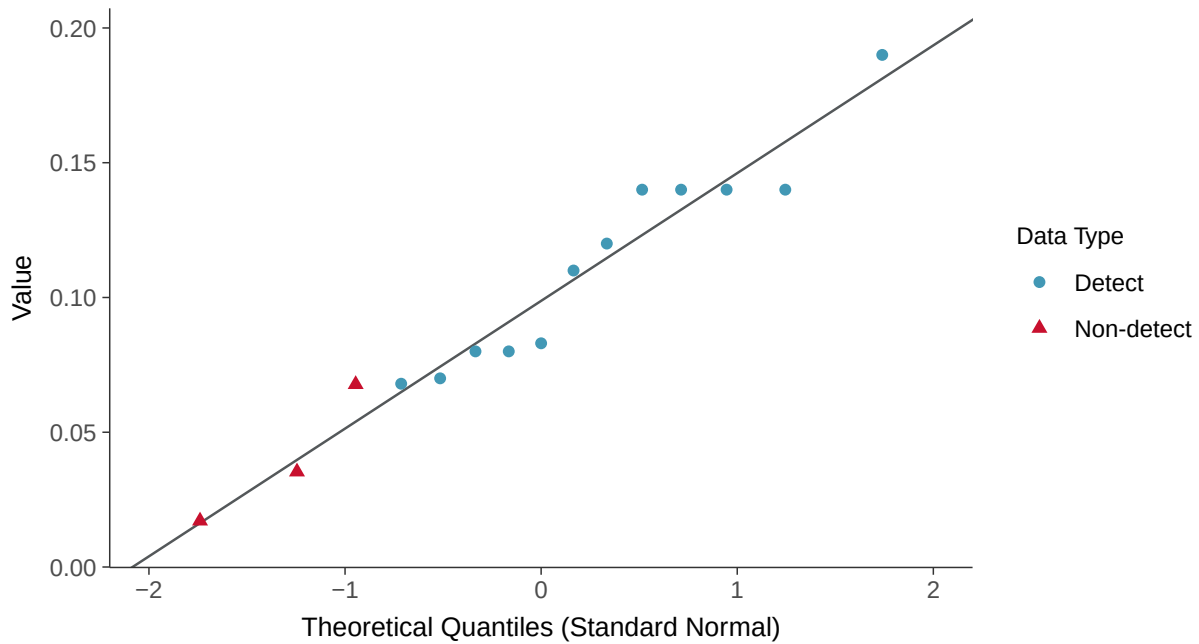
Boxplot by Season

Fluoride, MW-07 (mg/L)



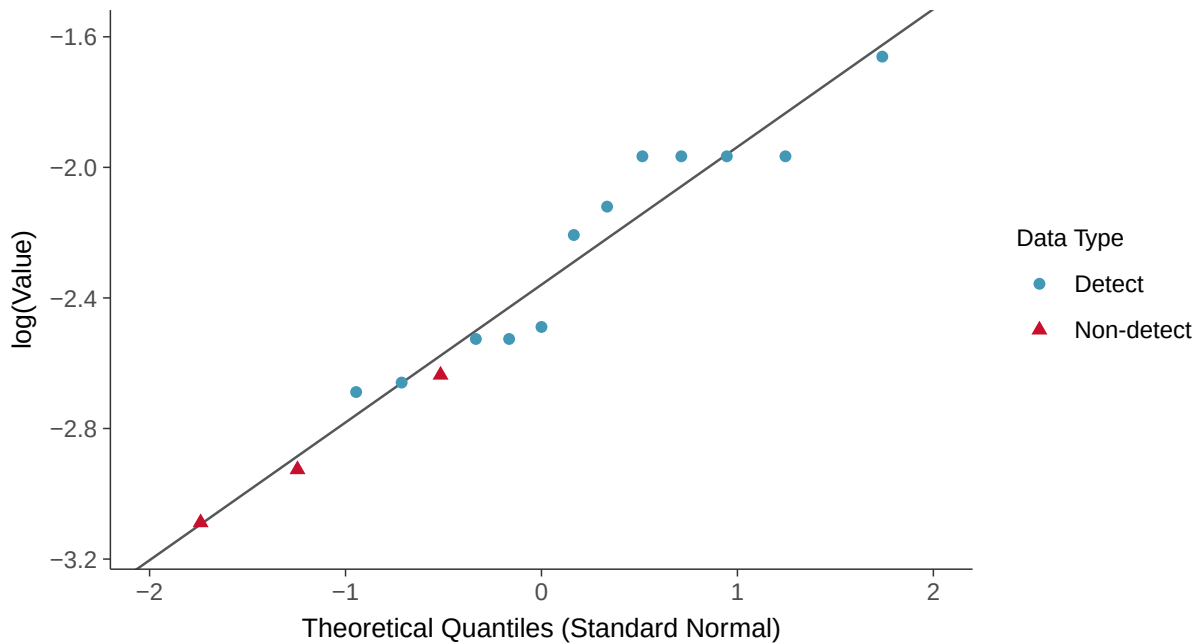
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-07 (mg/L)



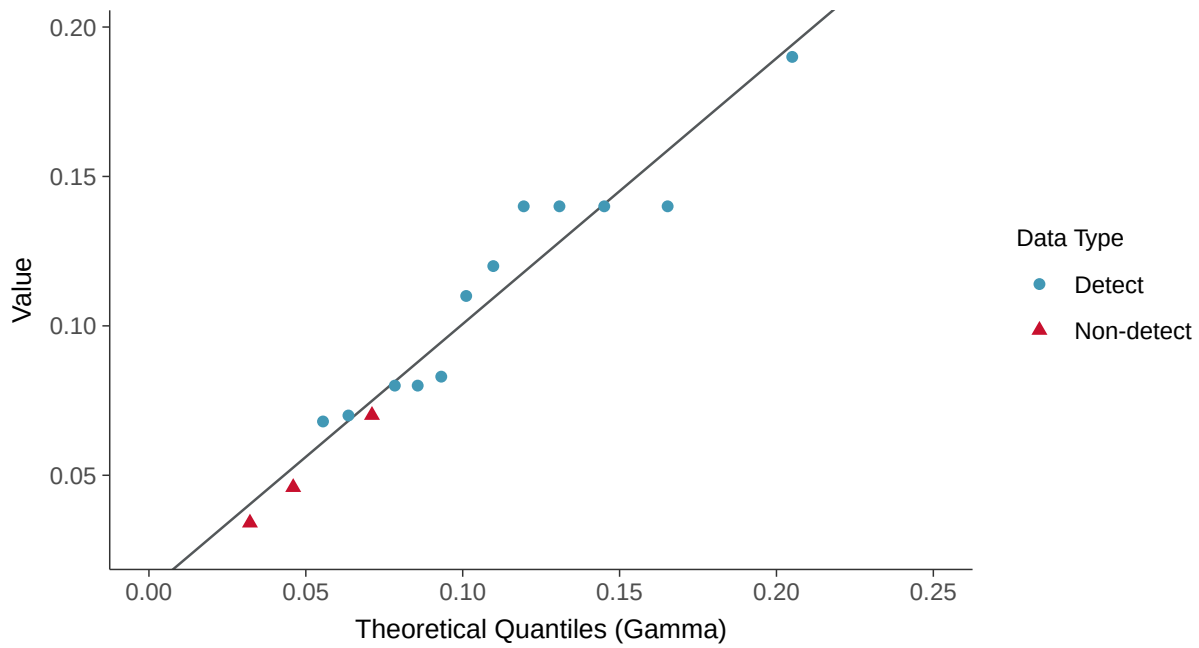
Lognormal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-07 (mg/L)



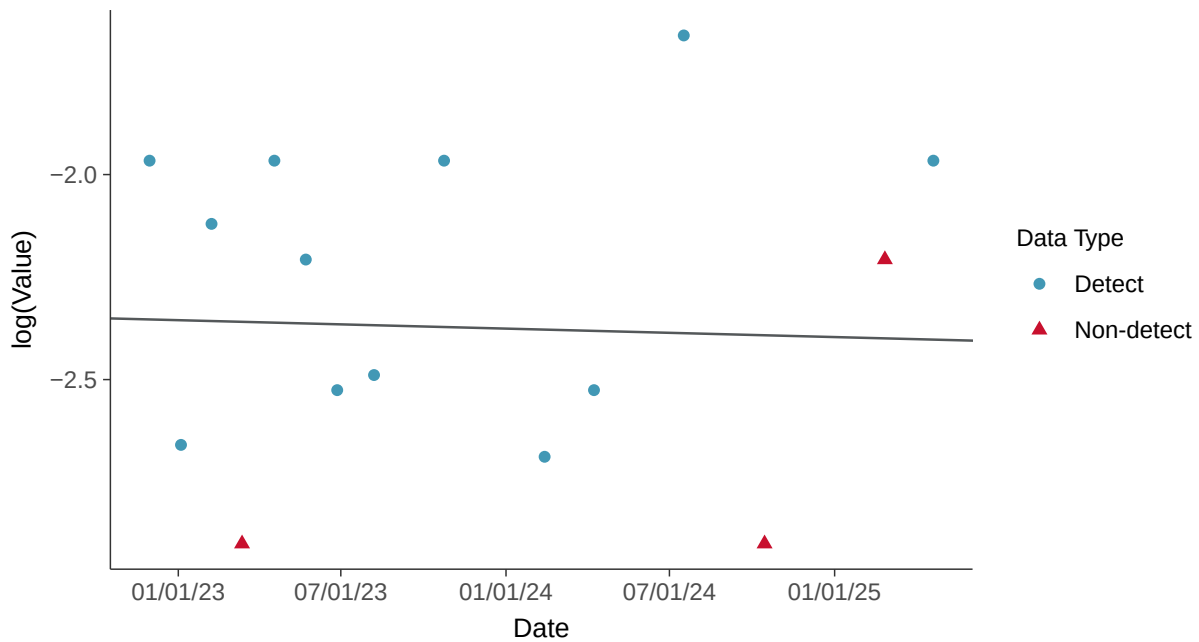
Gamma Q-Q plot using ROS Imputed Estimates

Fluoride, MW-07 (mg/L)



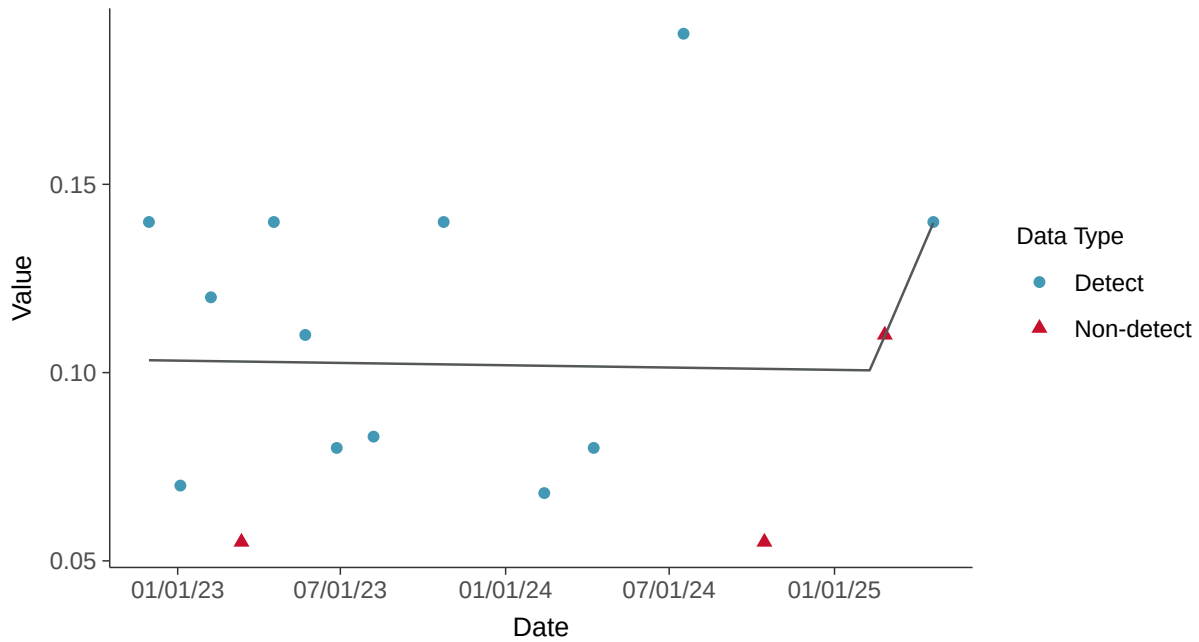
Trend Regression: Lognormal MLE

Fluoride, MW-07 (mg/L)



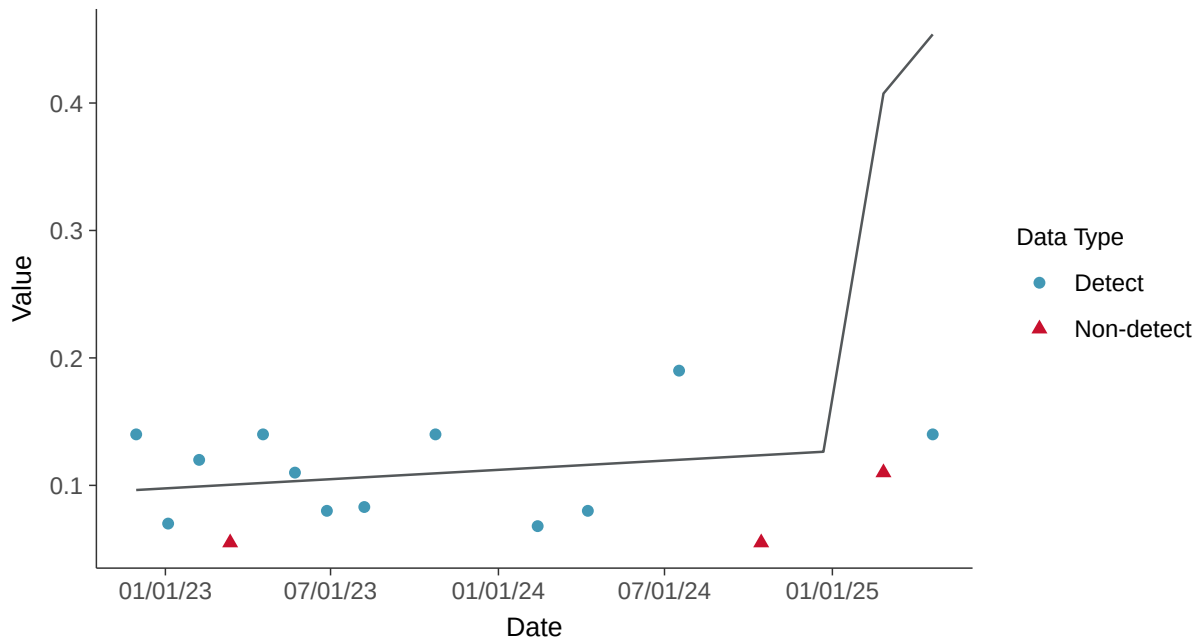
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-07 (mg/L)



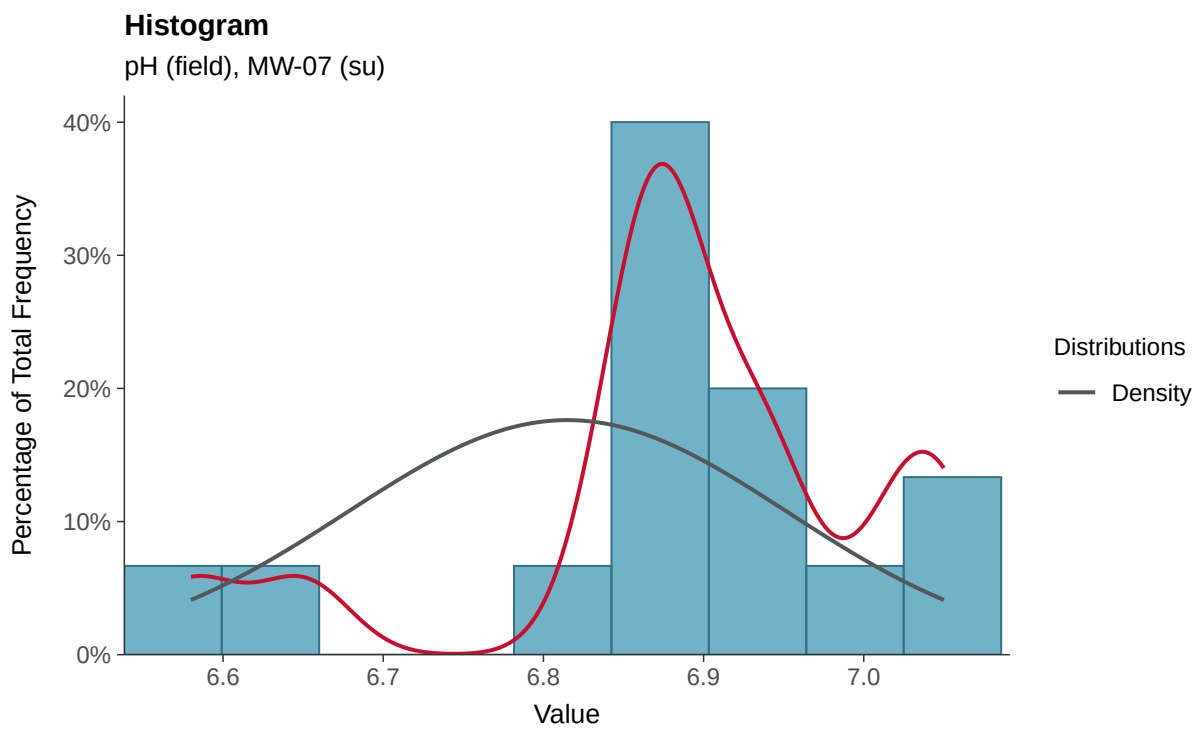
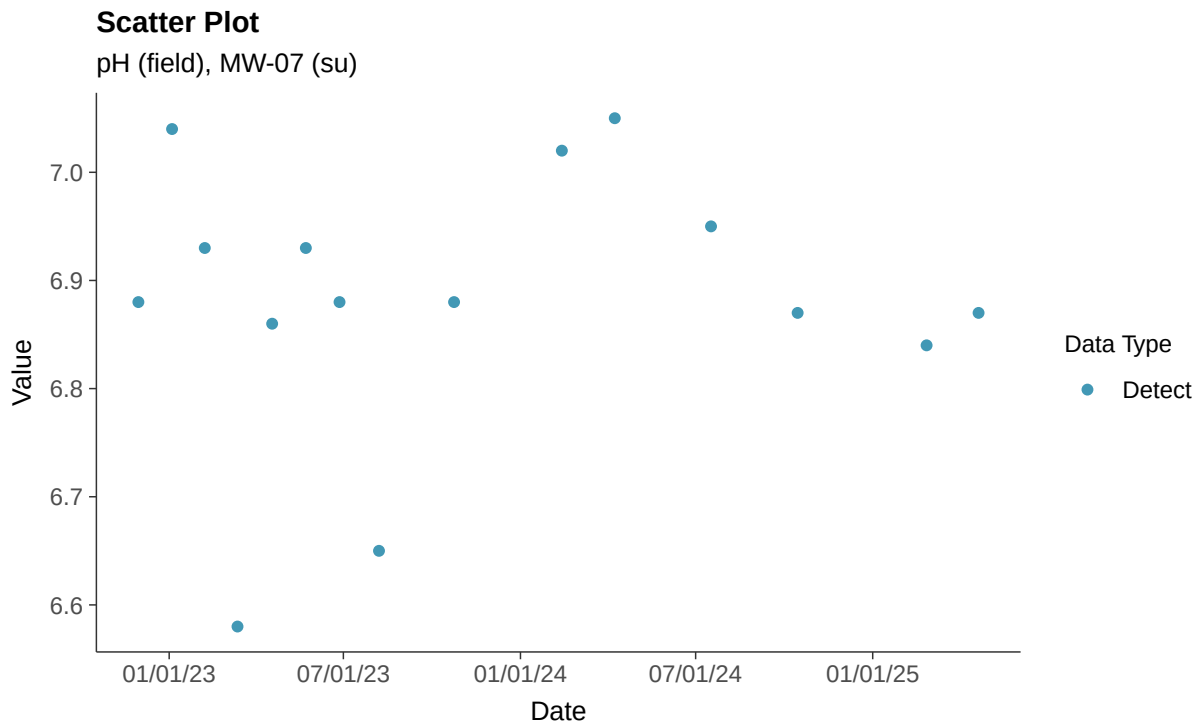
Trend Regression: Piecewise Linear-Linear-Linear

Fluoride, MW-07 (mg/L)



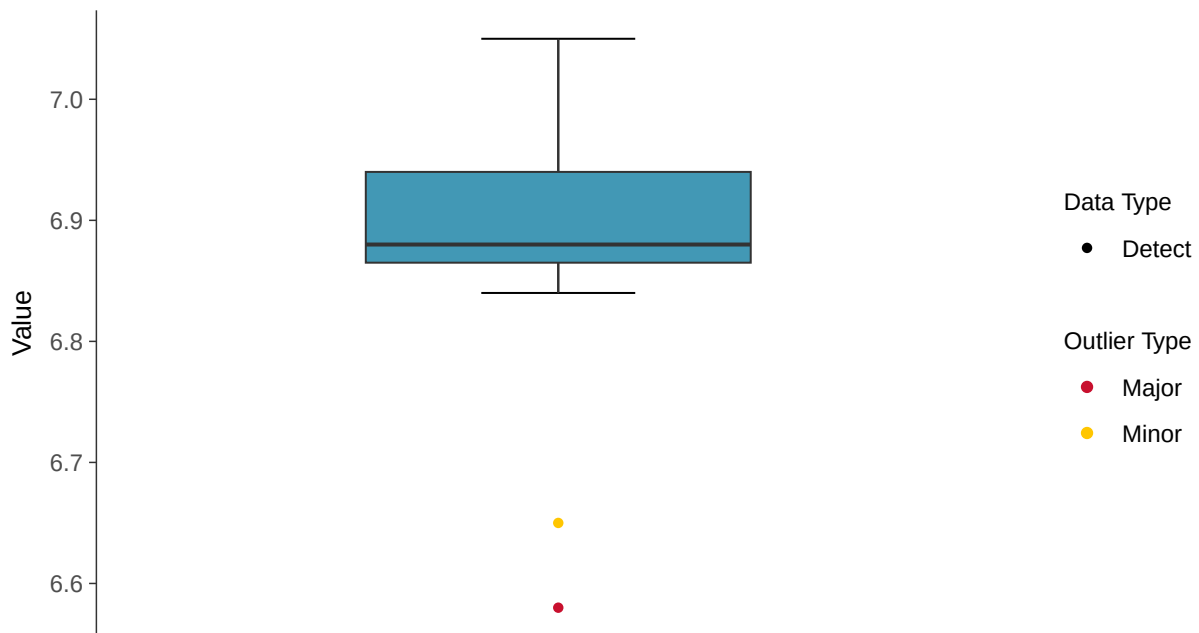
Appendix III: pH (field), MW-07

ID: 17_1_3_120



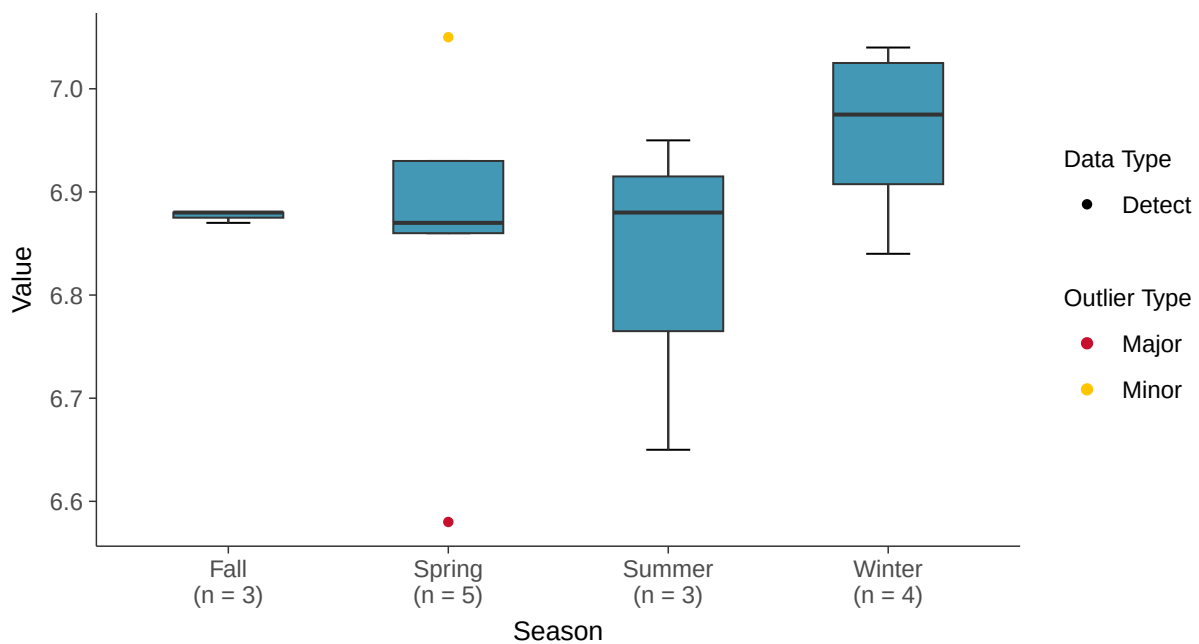
Boxplot

pH (field), MW-07 (su)

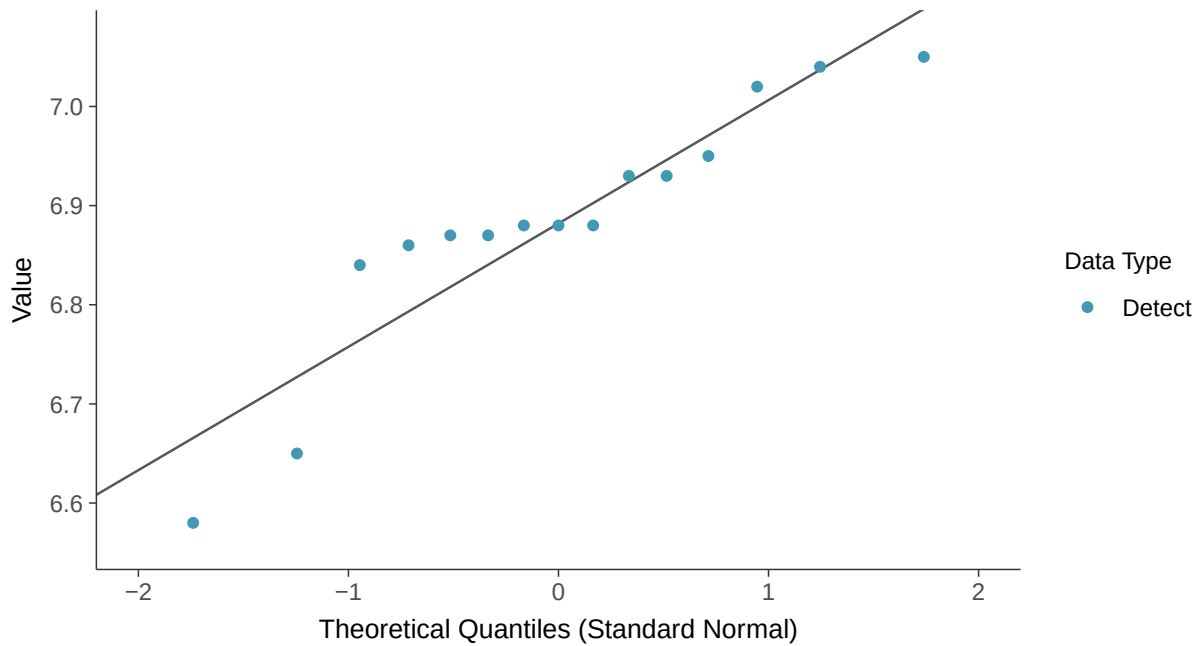


Boxplot by Season

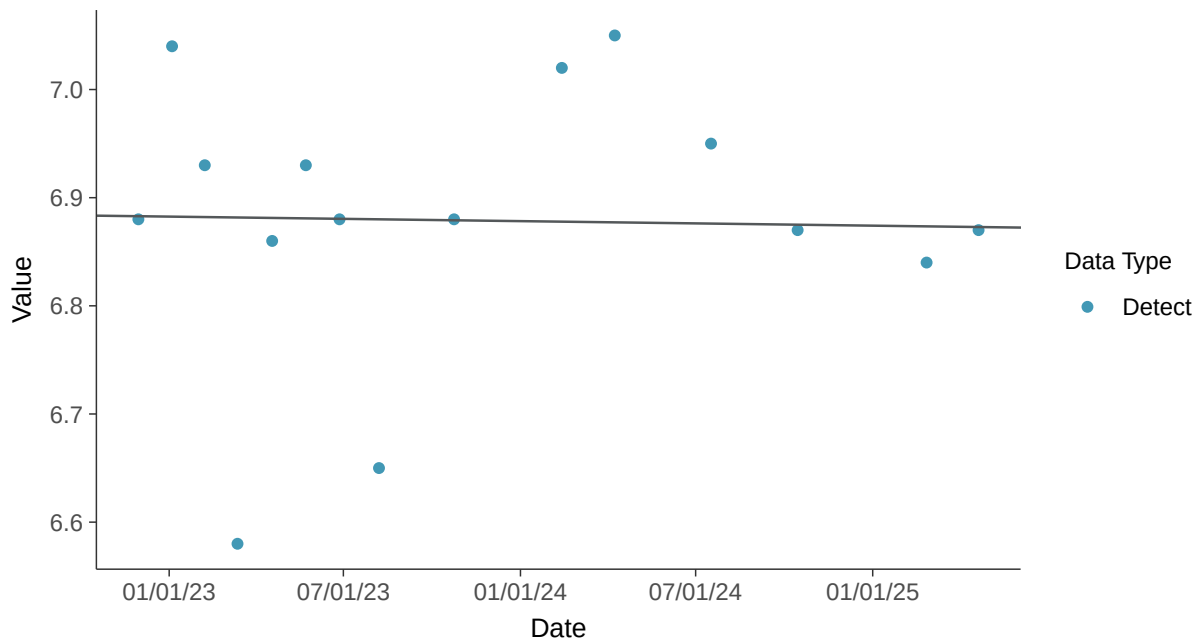
pH (field), MW-07 (su)



Normal Q-Q plot
pH (field), MW-07 (su)

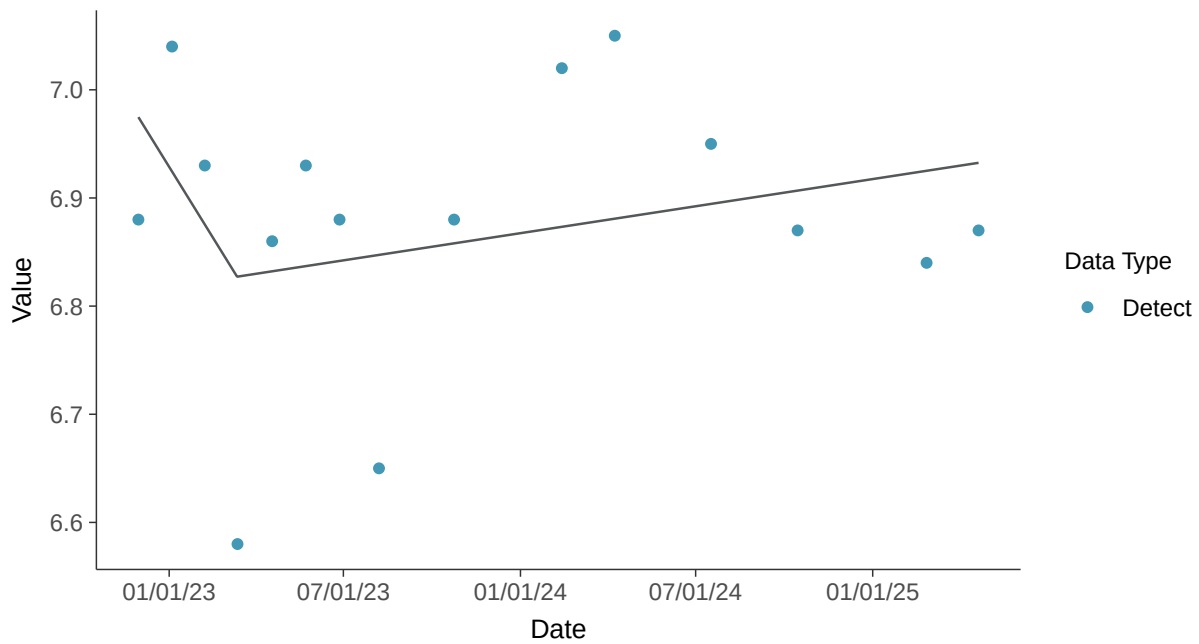


Trend Regression: Mann-Kendall/Theil-Sen Estimate
pH (field), MW-07 (su)



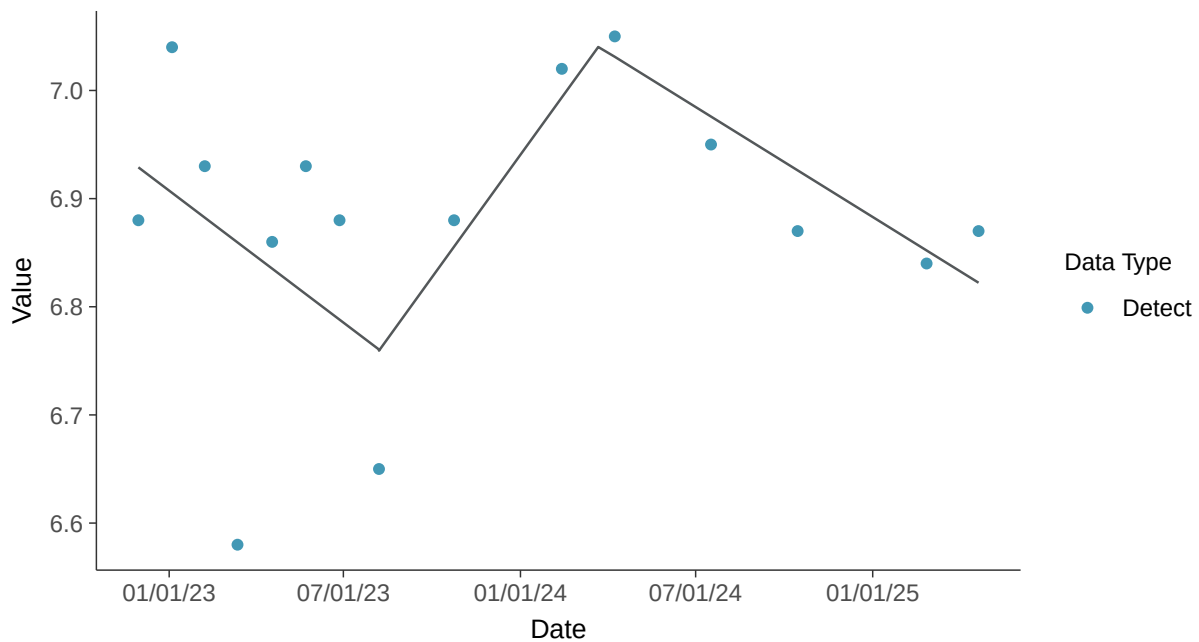
Trend Regression: Piecewise Linear-Linear

pH (field), MW-07 (su)



Trend Regression: Piecewise Linear-Linear-Linear

pH (field), MW-07 (su)

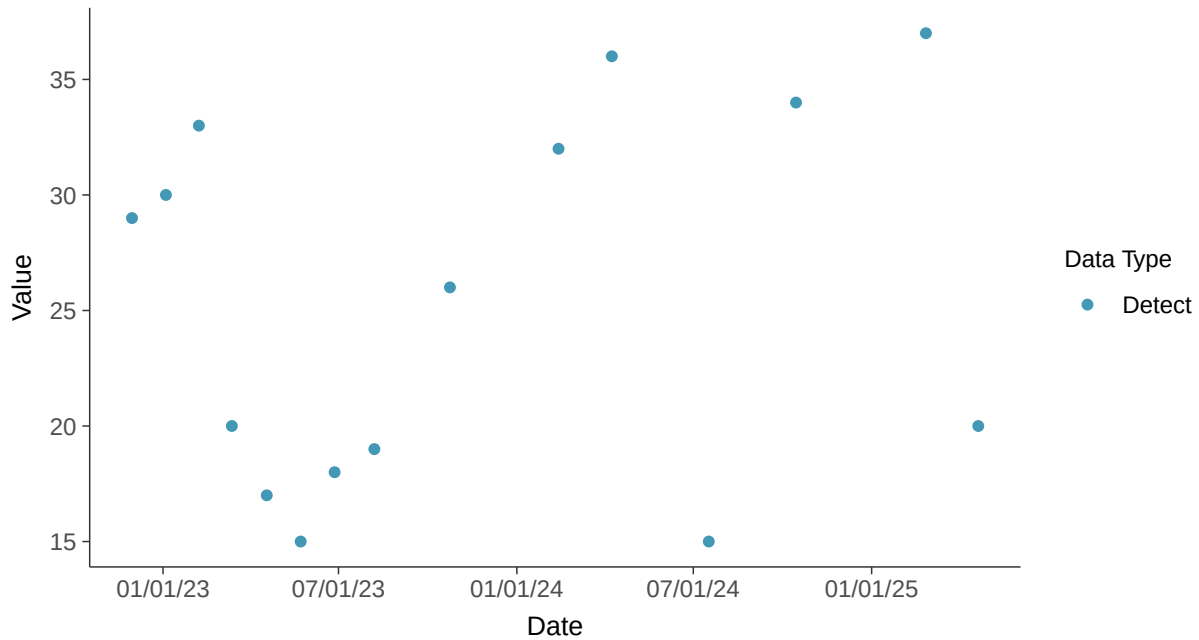


Appendix III: Sulfate (as SO₄), MW-07

ID: 17_1_3_124

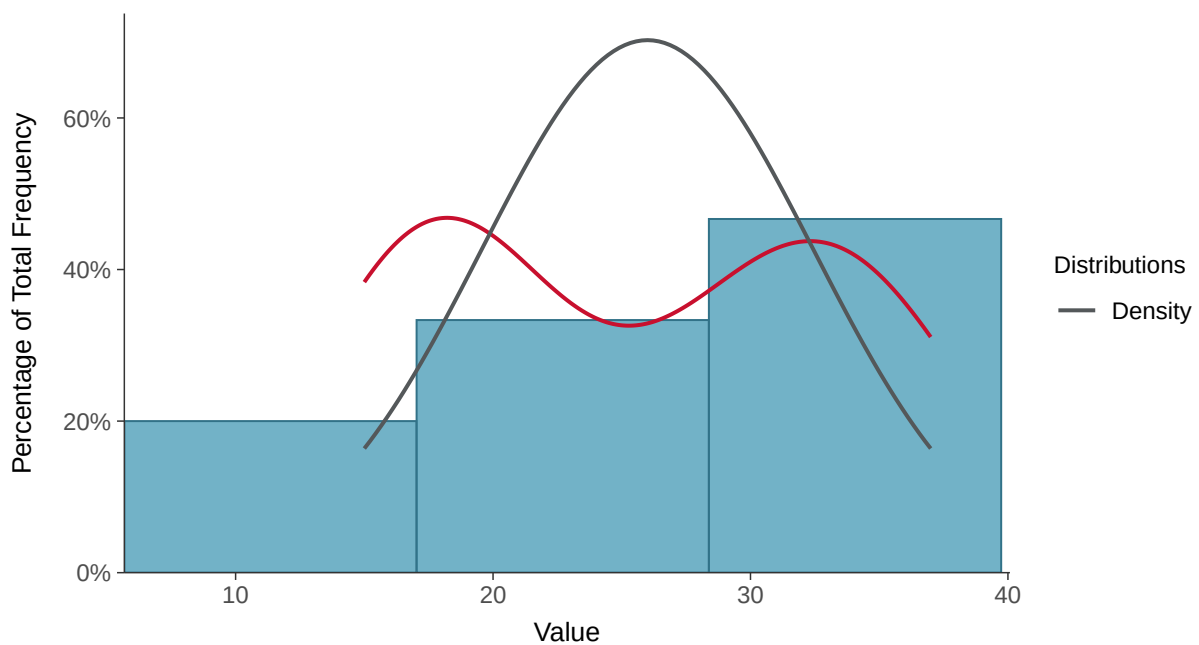
Scatter Plot

Sulfate (as SO₄), MW-07 (mg/L)



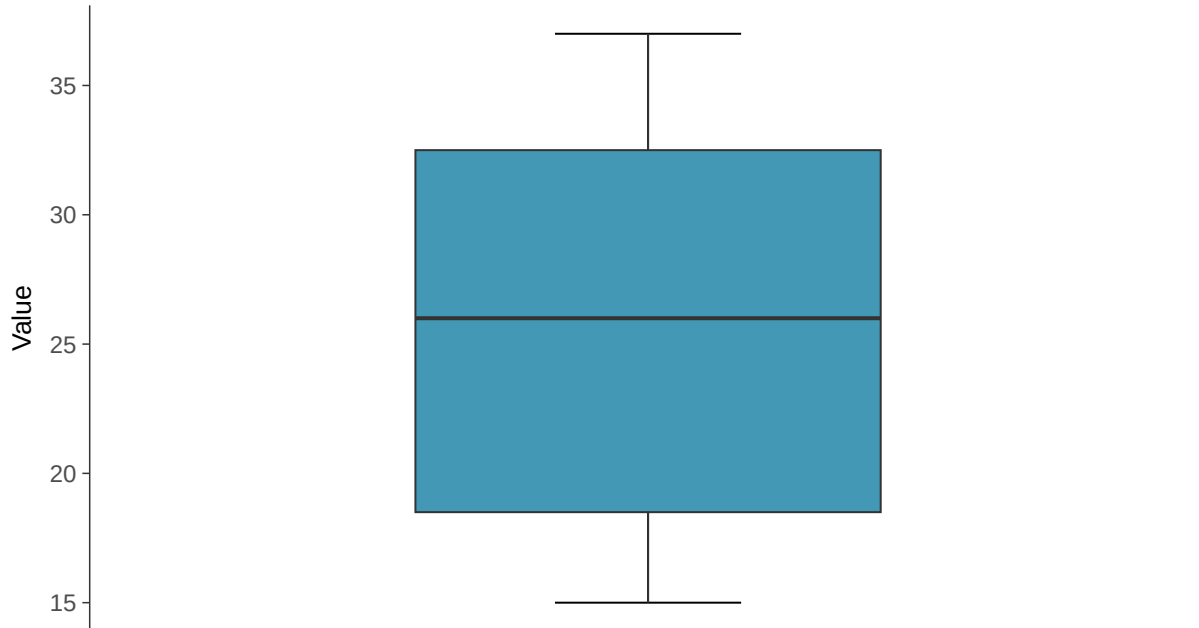
Histogram

Sulfate (as SO₄), MW-07 (mg/L)



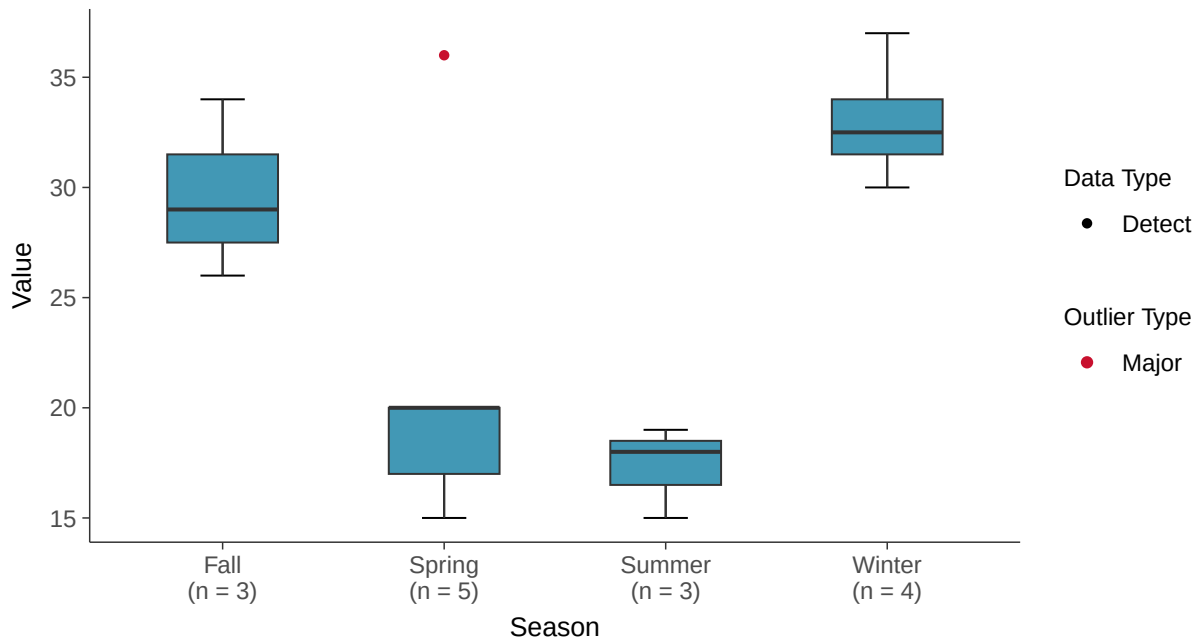
Boxplot

Sulfate (as SO₄), MW-07 (mg/L)



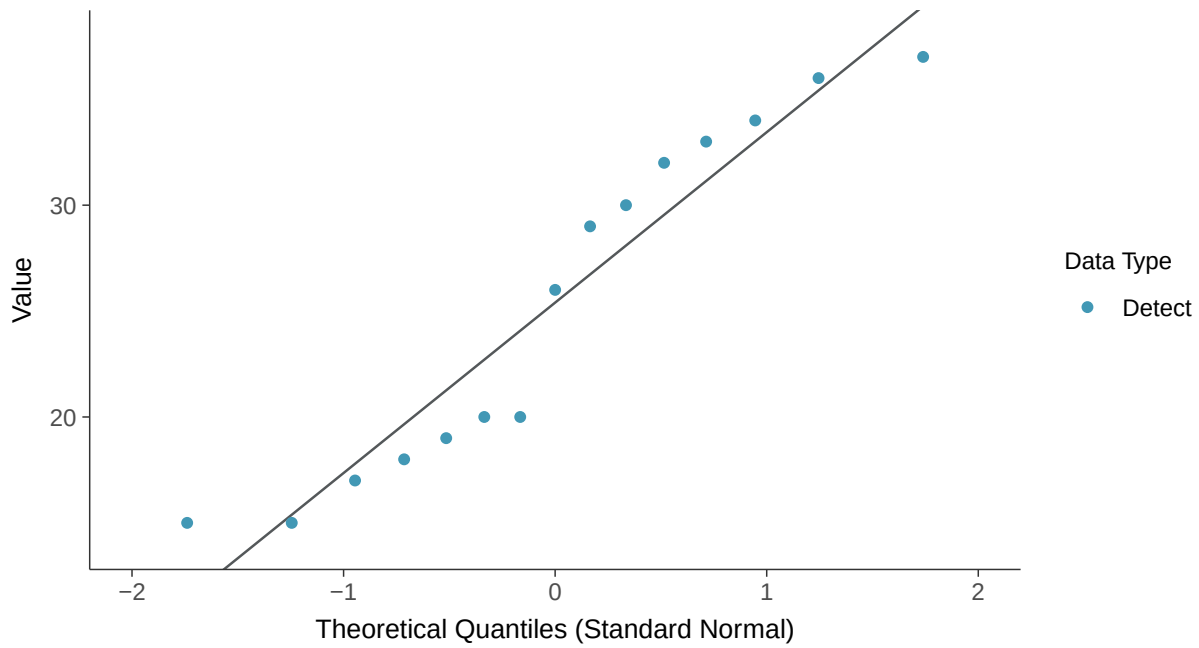
Boxplot by Season

Sulfate (as SO₄), MW-07 (mg/L)



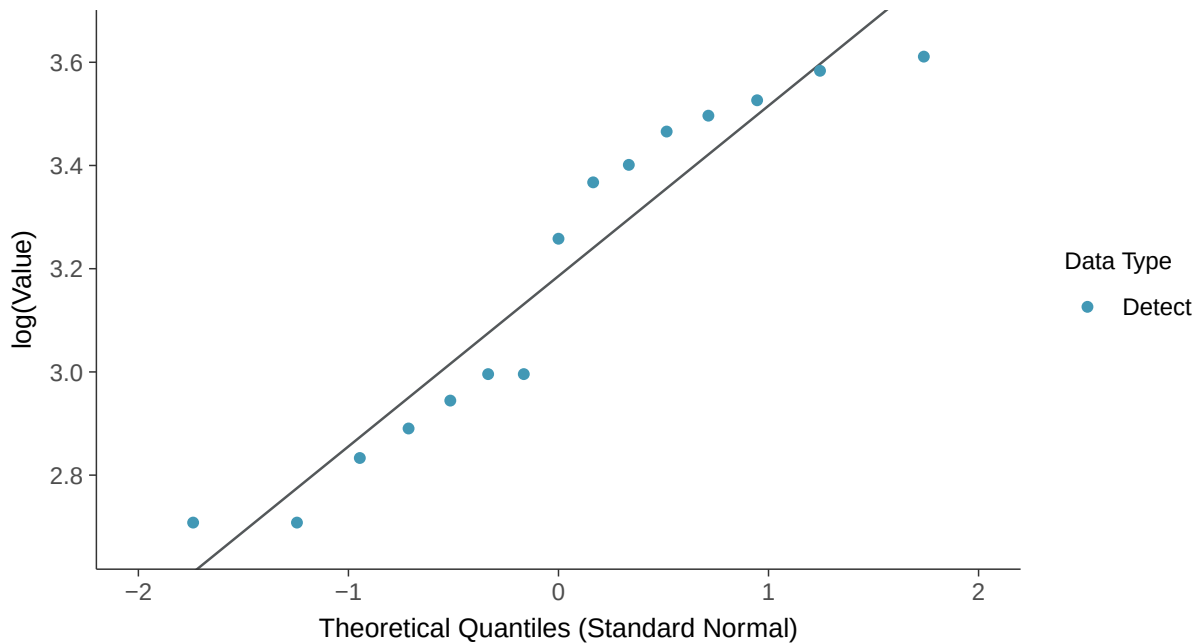
Normal Q-Q plot

Sulfate (as SO₄), MW-07 (mg/L)



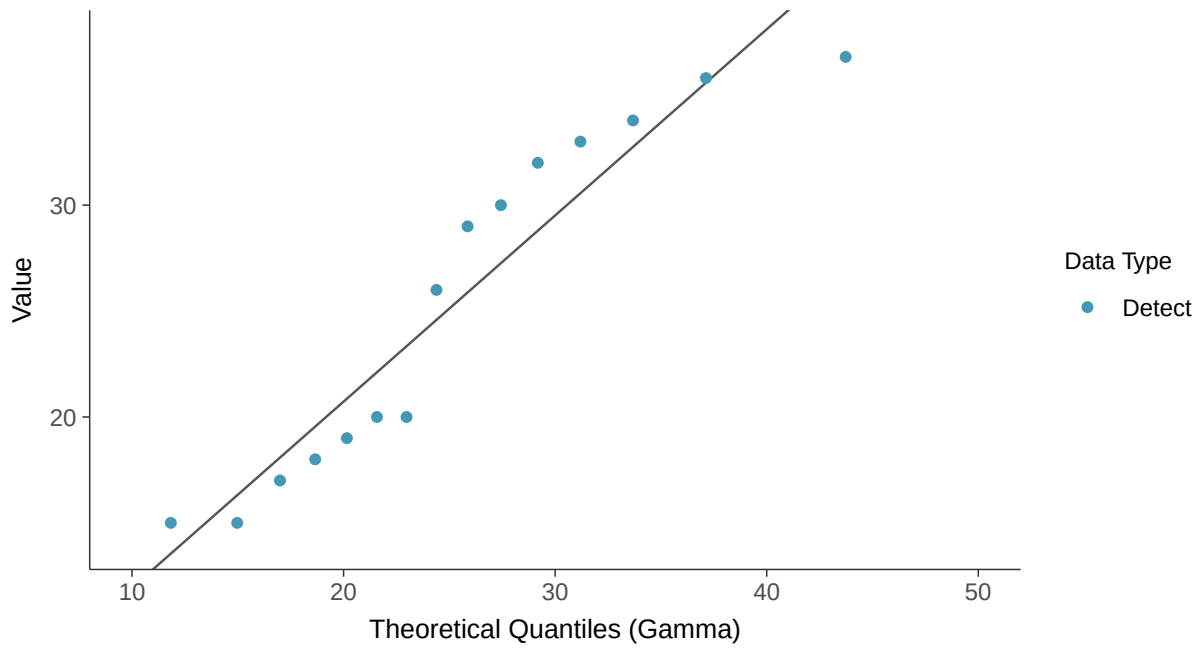
Lognormal Q-Q plot

Sulfate (as SO₄), MW-07 (mg/L)



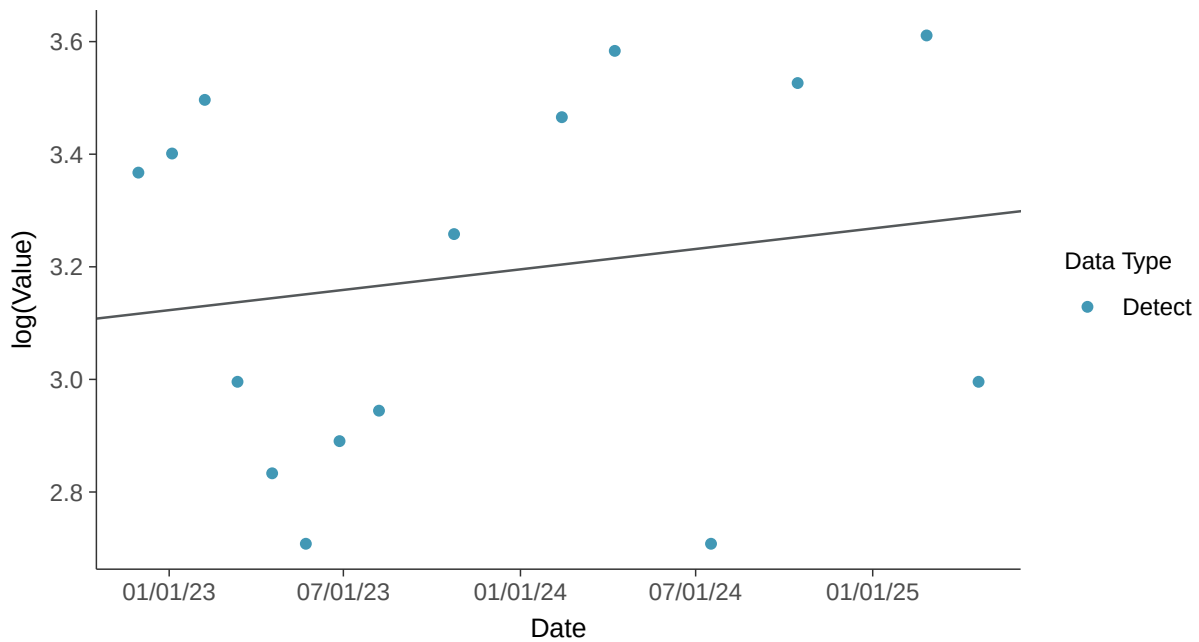
Gamma Q-Q plot

Sulfate (as SO₄), MW-07 (mg/L)



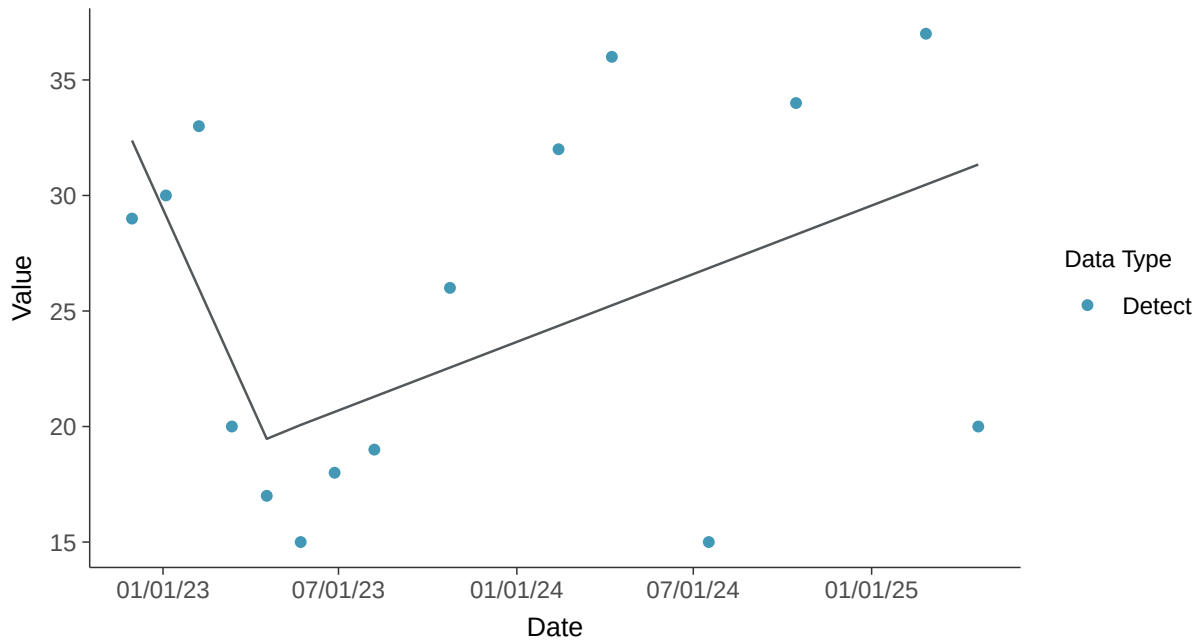
Trend Regression: Lognormal MLE

Sulfate (as SO₄), MW-07 (mg/L)



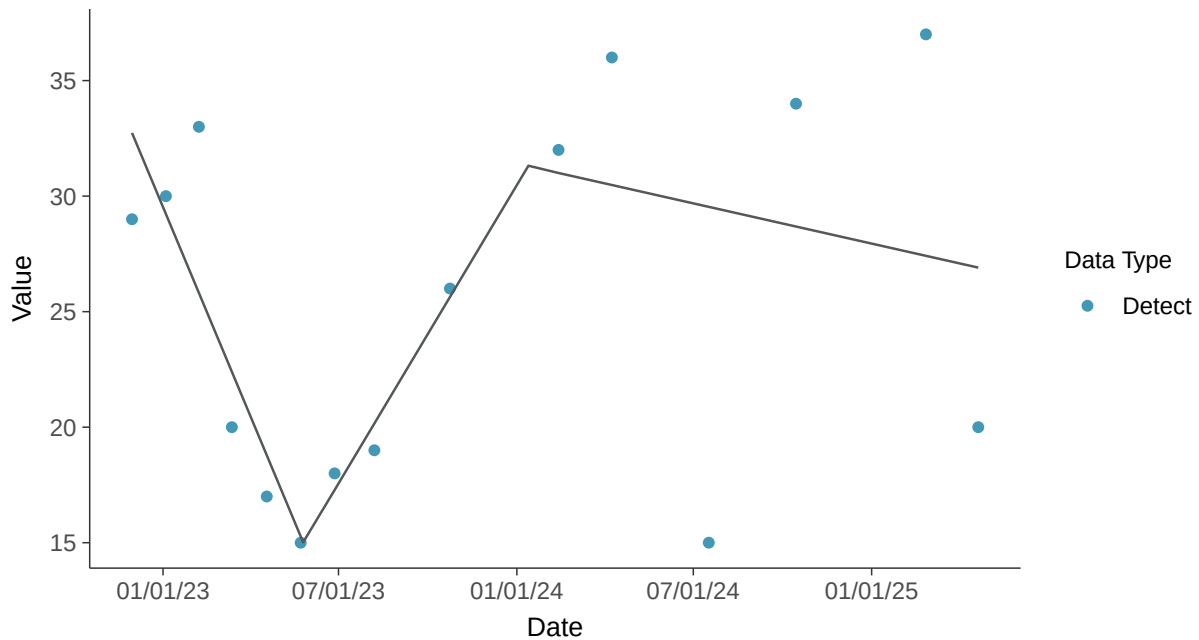
Trend Regression: Piecewise Linear-Linear

Sulfate (as SO₄), MW-07 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Sulfate (as SO₄), MW-07 (mg/L)

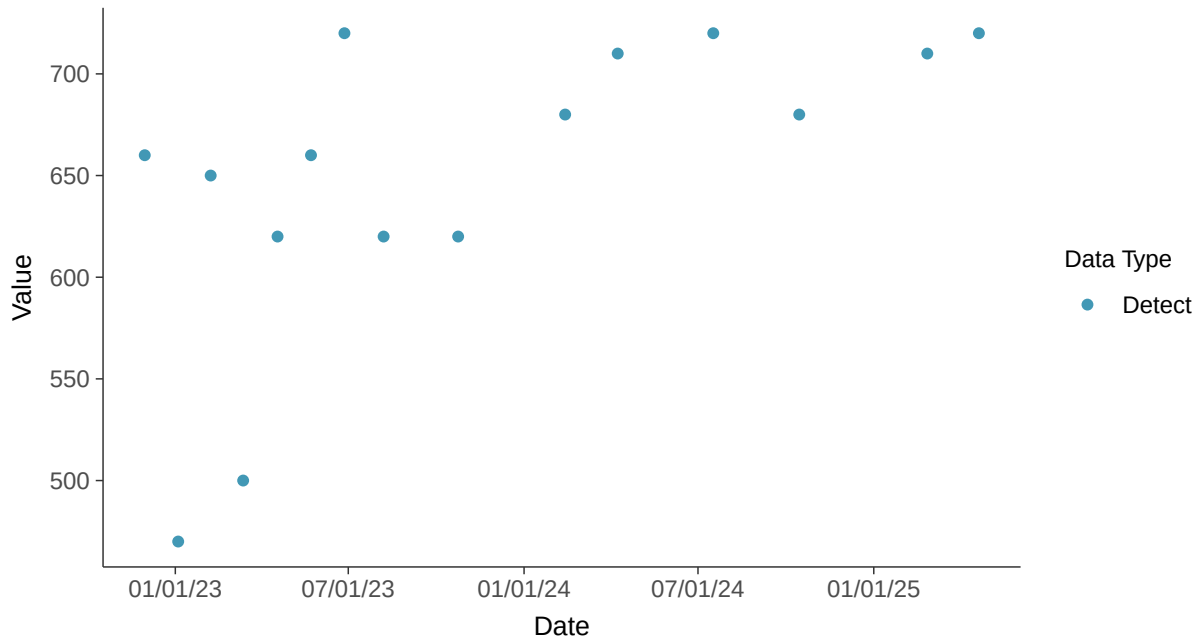


Appendix III: Total Dissolved Solids, MW-07

ID: 17_1_3_126

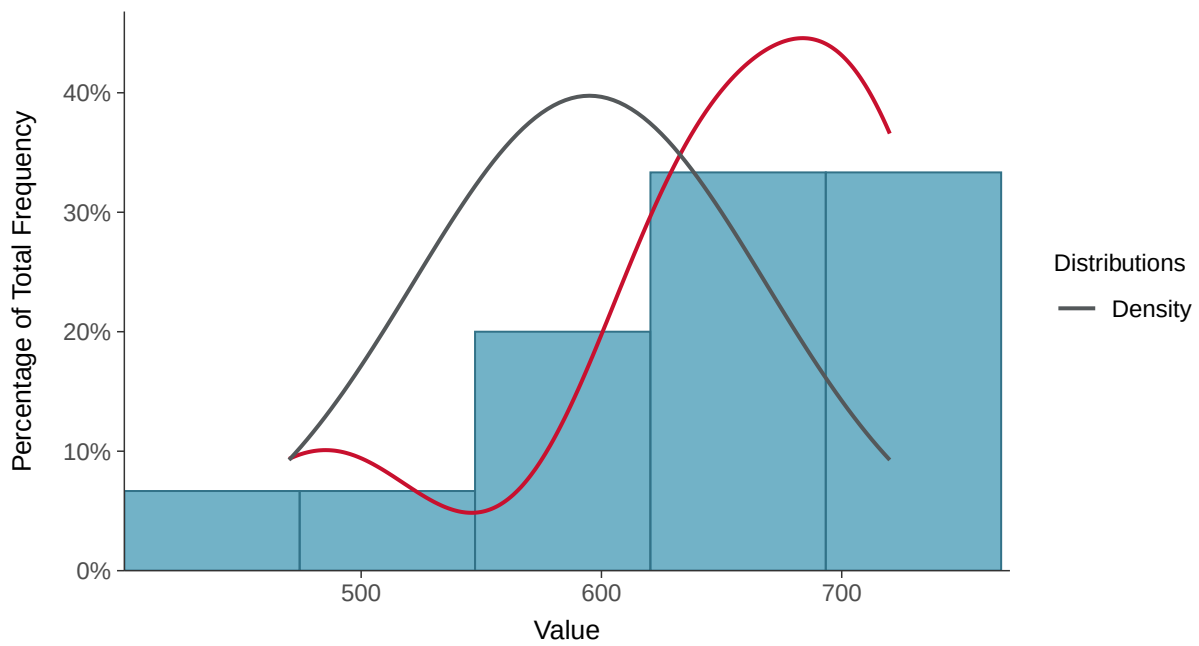
Scatter Plot

Total Dissolved Solids, MW-07 (mg/L)



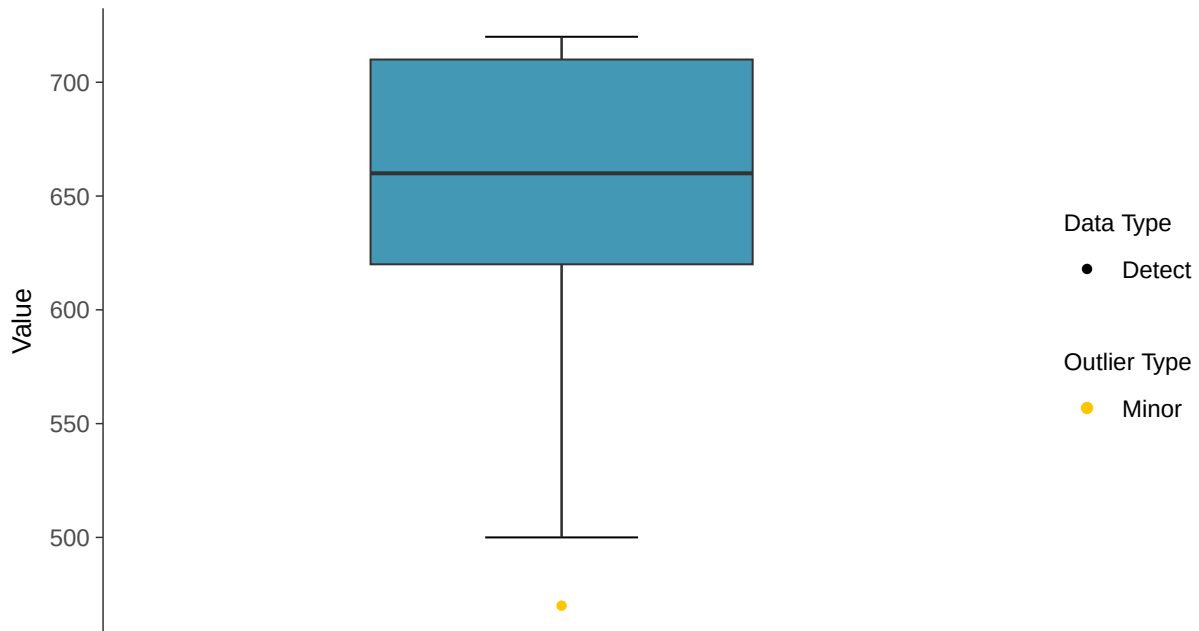
Histogram

Total Dissolved Solids, MW-07 (mg/L)



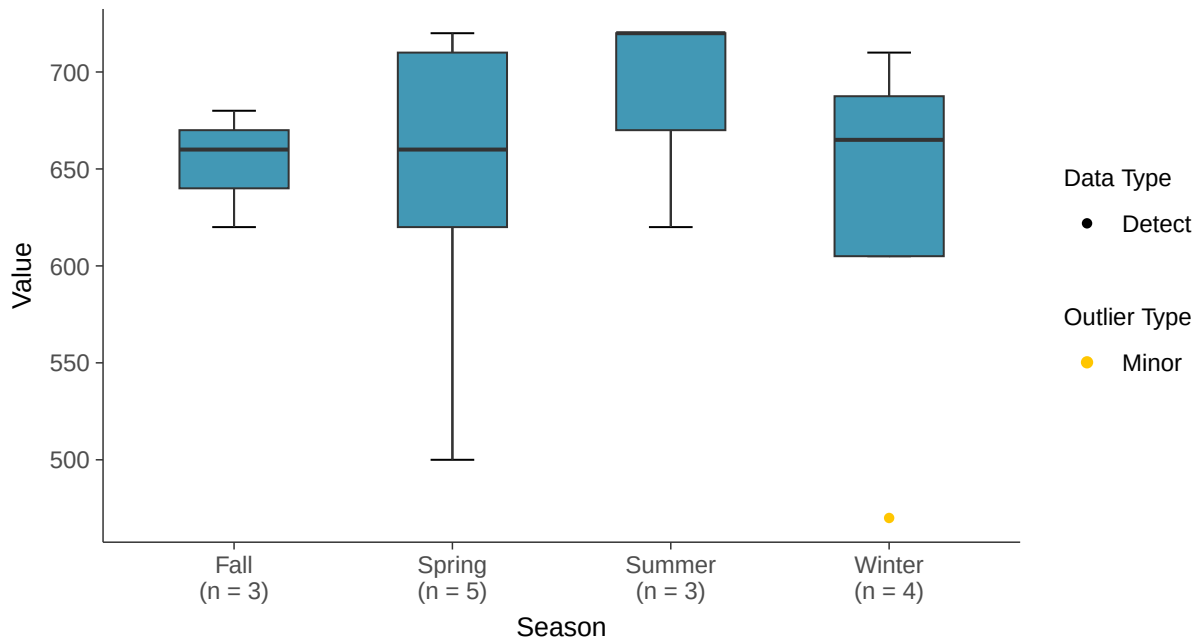
Boxplot

Total Dissolved Solids, MW-07 (mg/L)



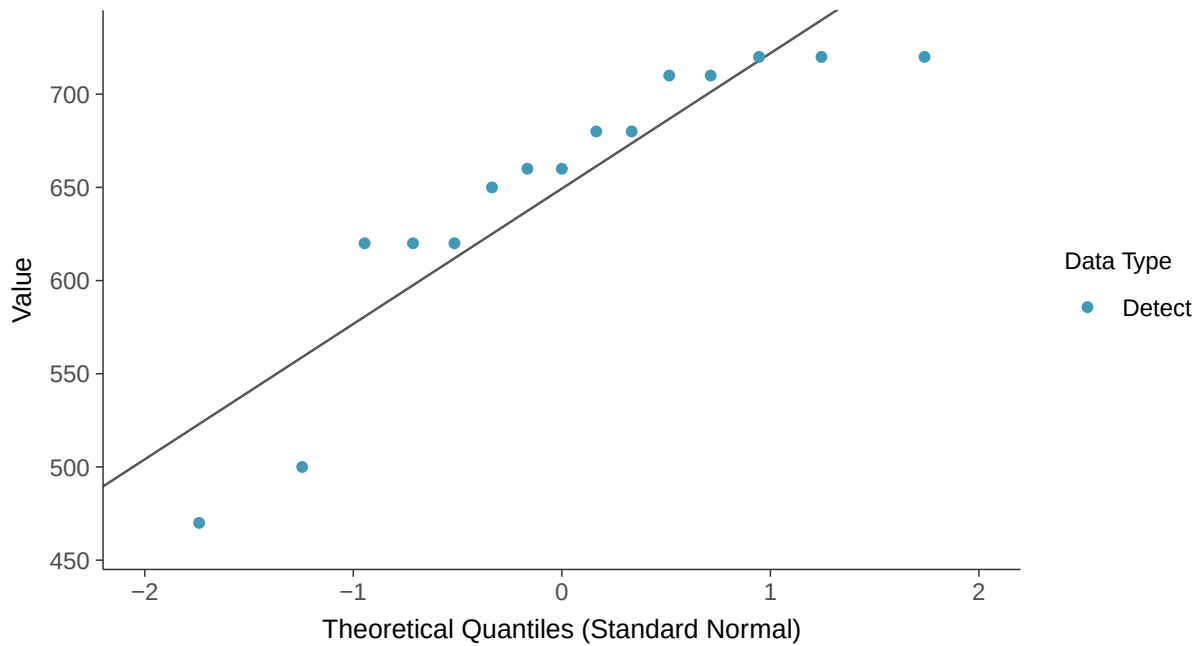
Boxplot by Season

Total Dissolved Solids, MW-07 (mg/L)



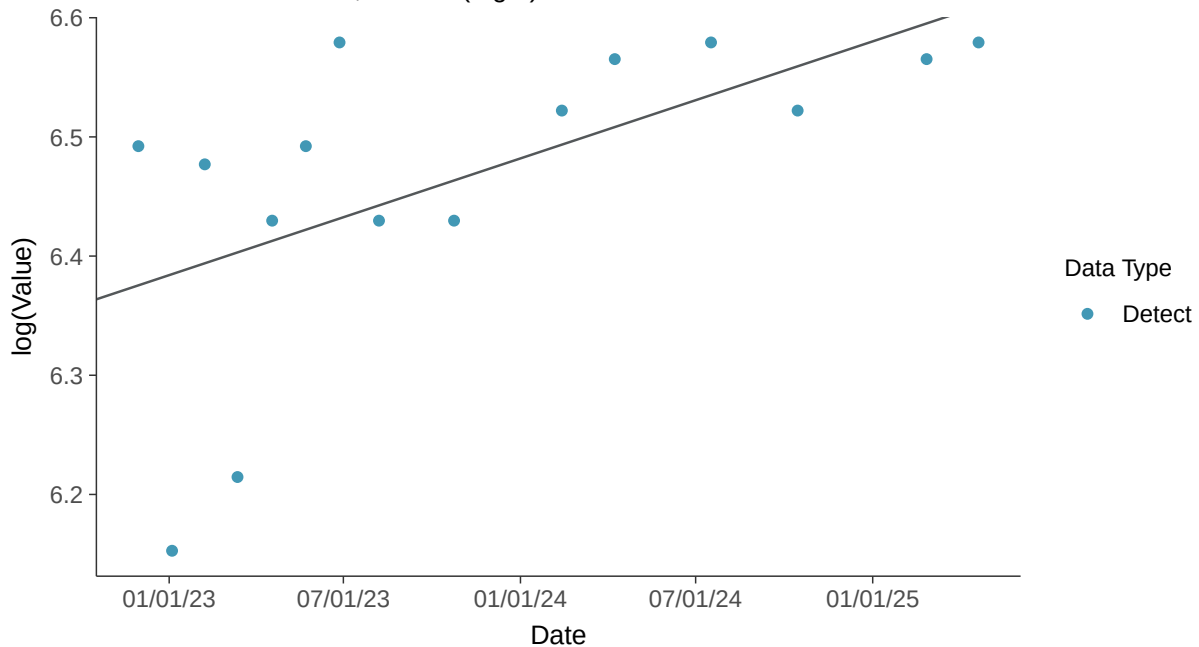
Normal Q-Q plot

Total Dissolved Solids, MW-07 (mg/L)



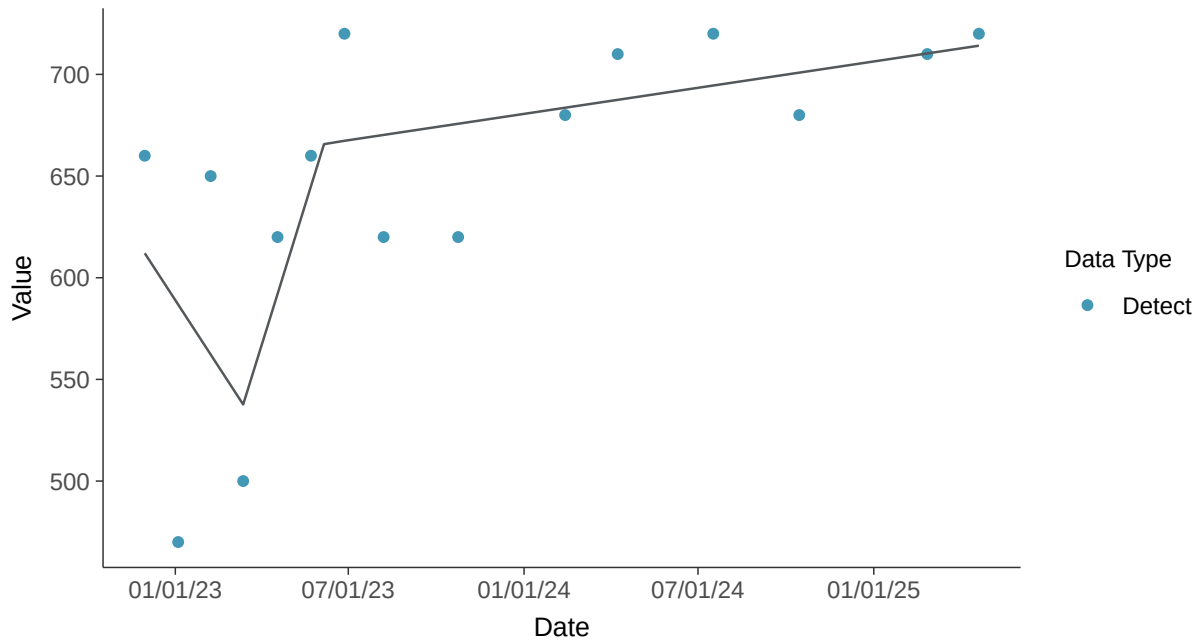
Trend Regression: Lognormal MLE

Total Dissolved Solids, MW-07 (mg/L)



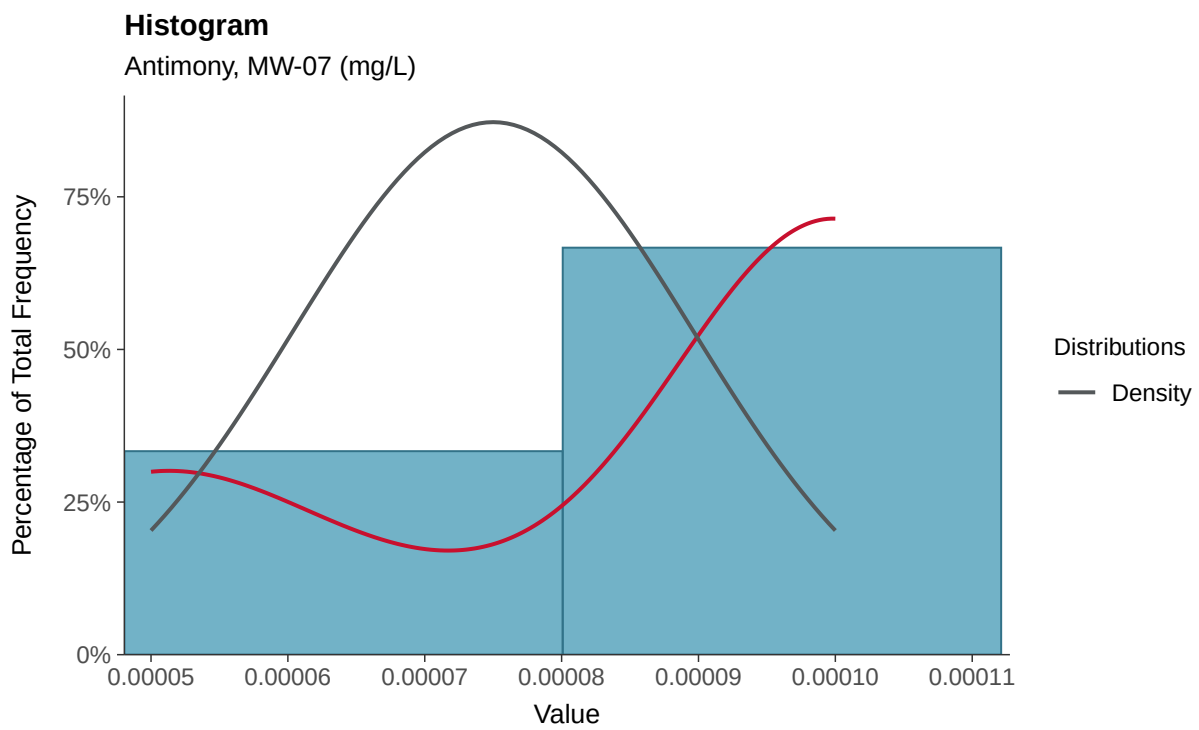
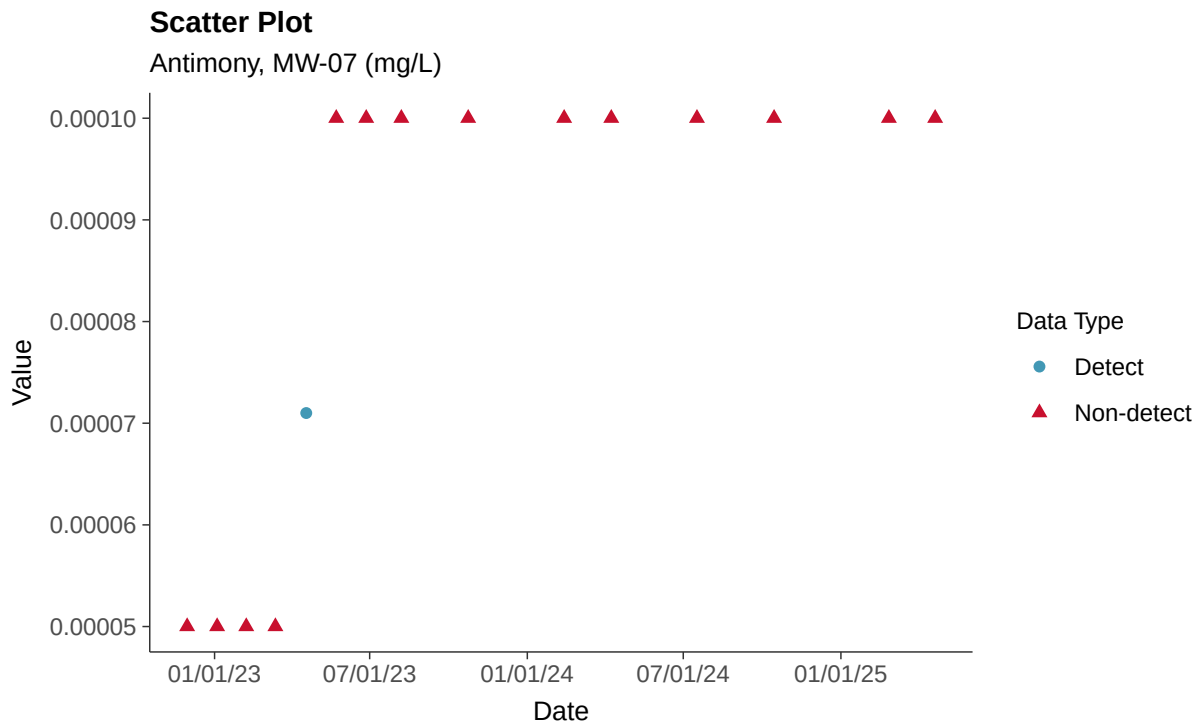
Trend Regression: Piecewise Linear-Linear-Linear

Total Dissolved Solids, MW-07 (mg/L)



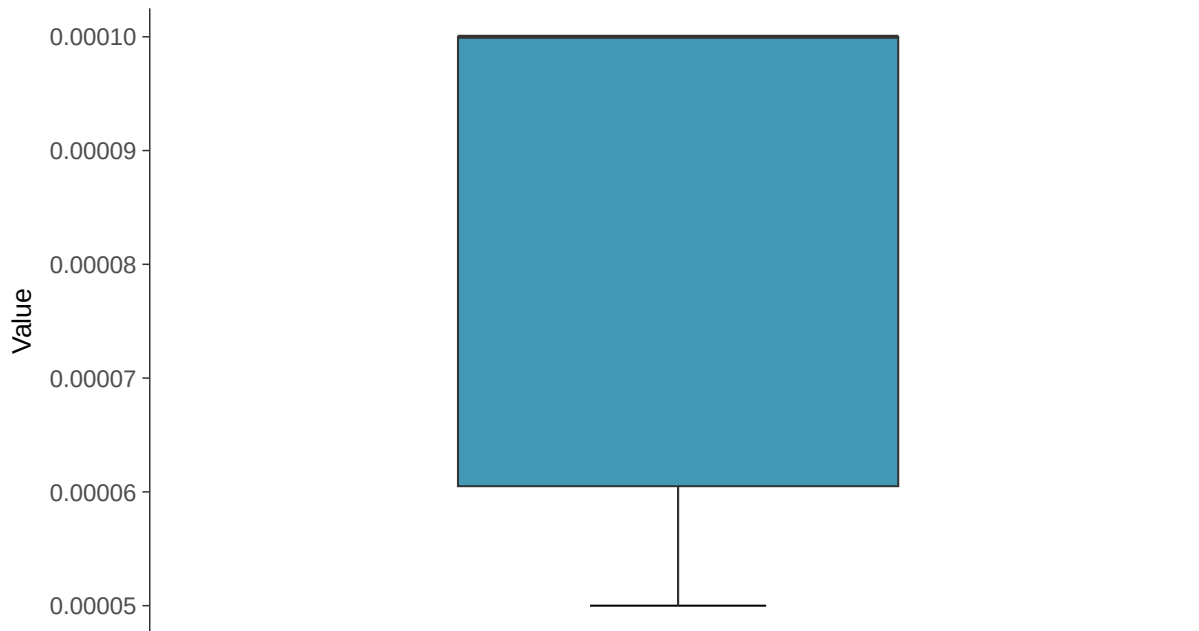
Appendix IV: Antimony, MW-07

ID: 17_1_4_101



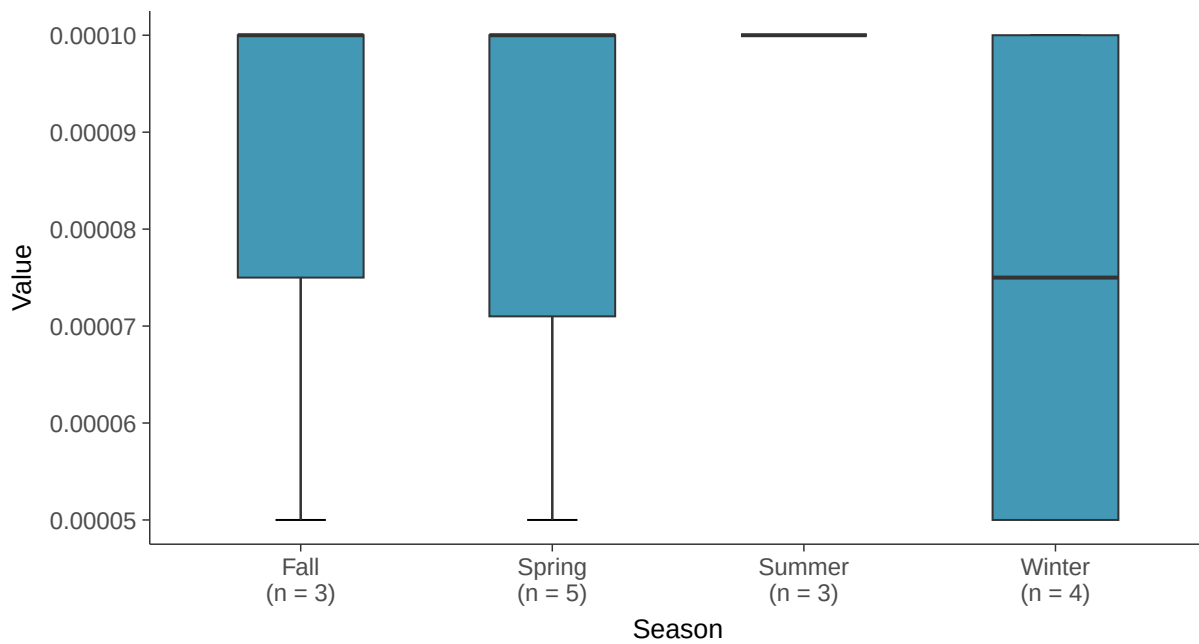
Boxplot

Antimony, MW-07 (mg/L)



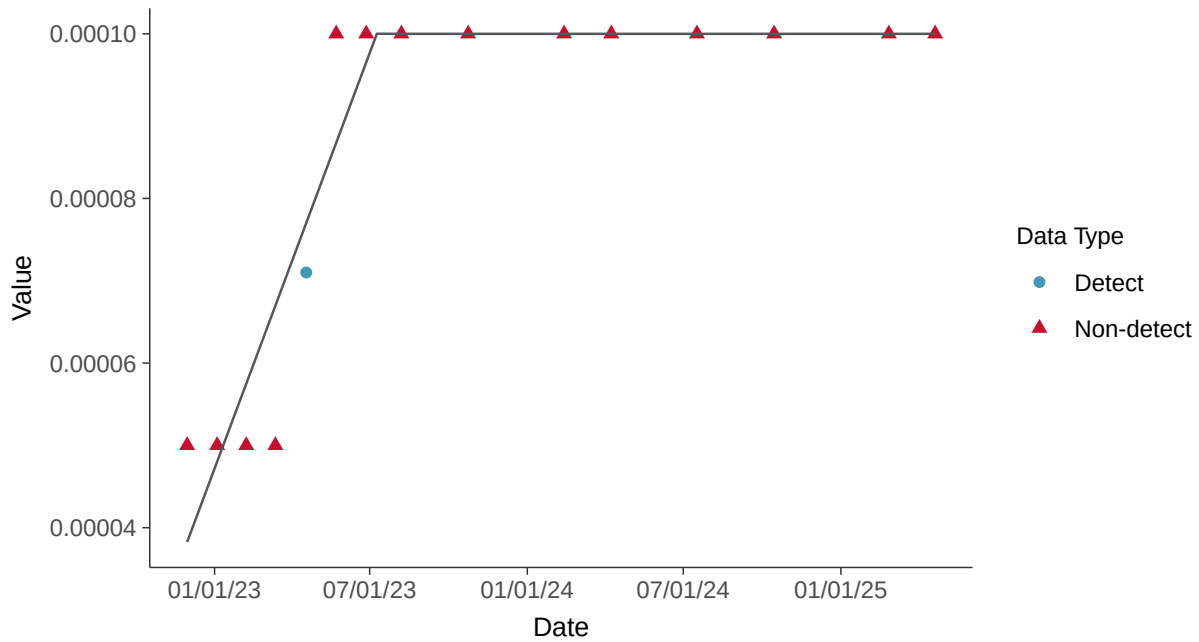
Boxplot by Season

Antimony, MW-07 (mg/L)



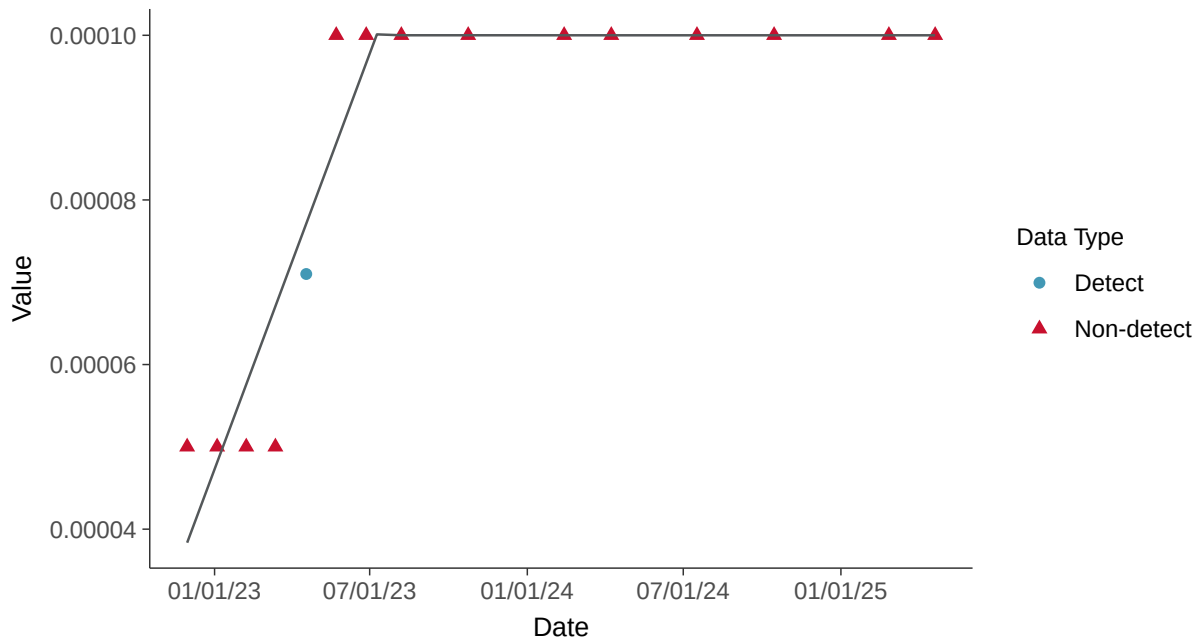
Trend Regression: Piecewise Linear-Linear

Antimony, MW-07 (mg/L)



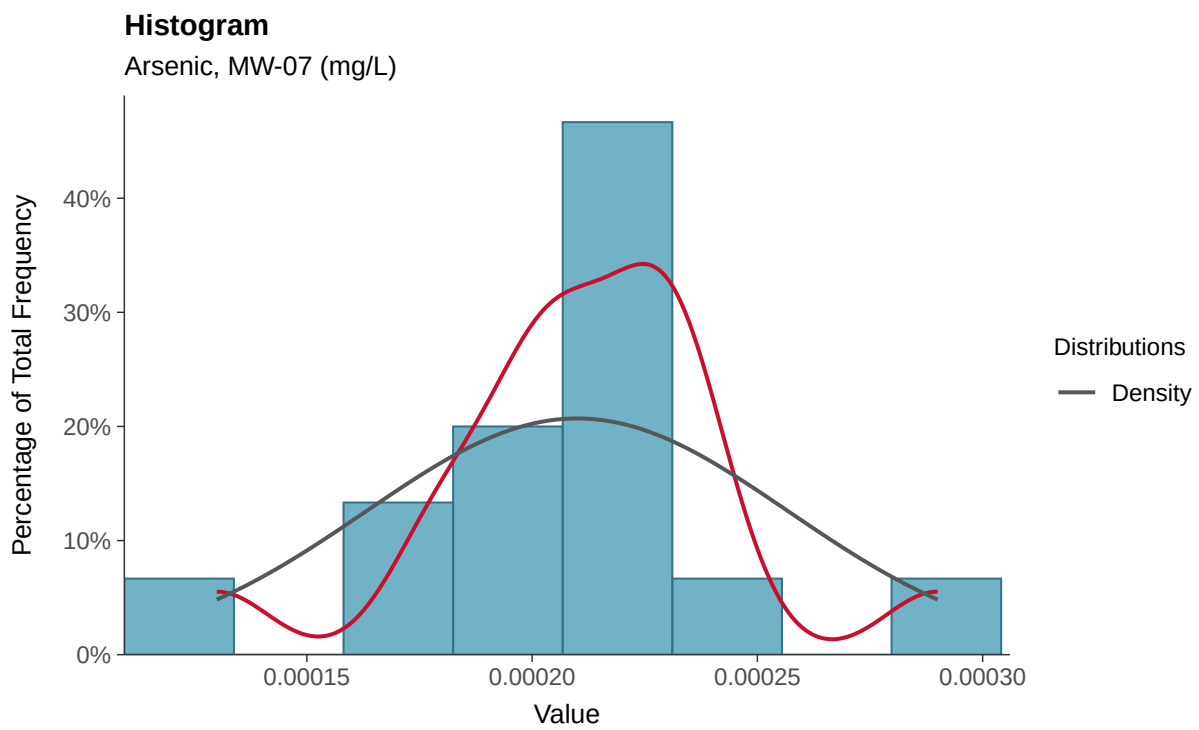
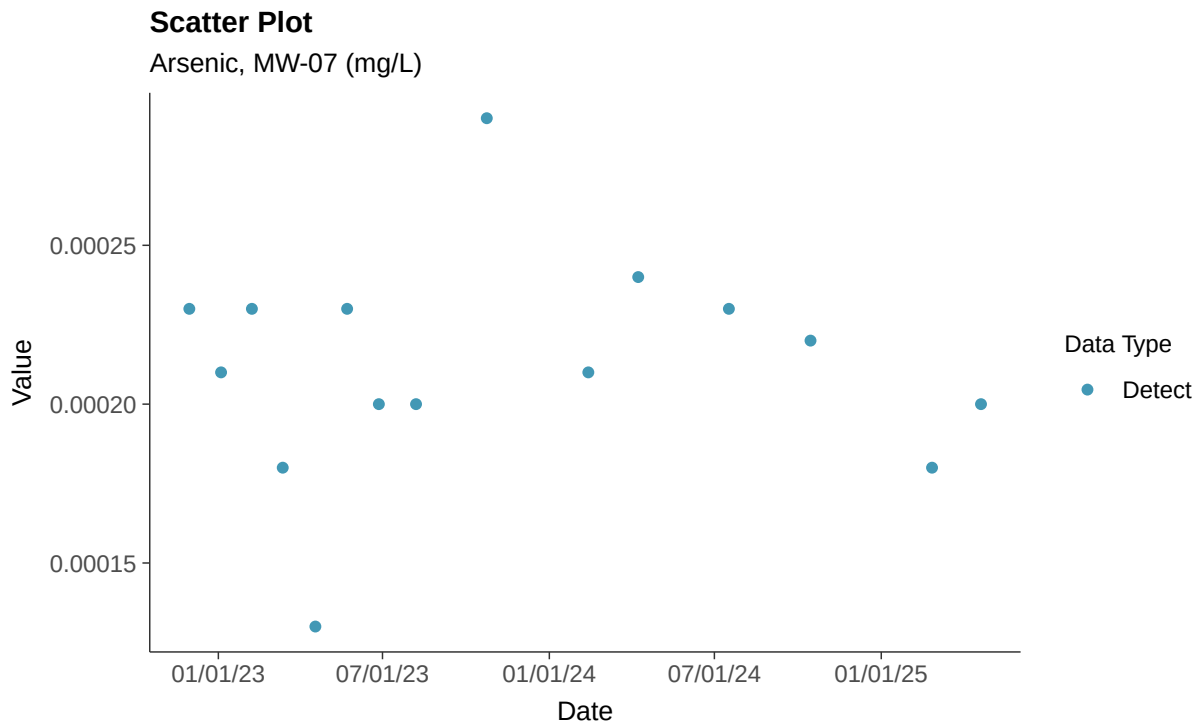
Trend Regression: Piecewise Linear-Linear-Linear

Antimony, MW-07 (mg/L)



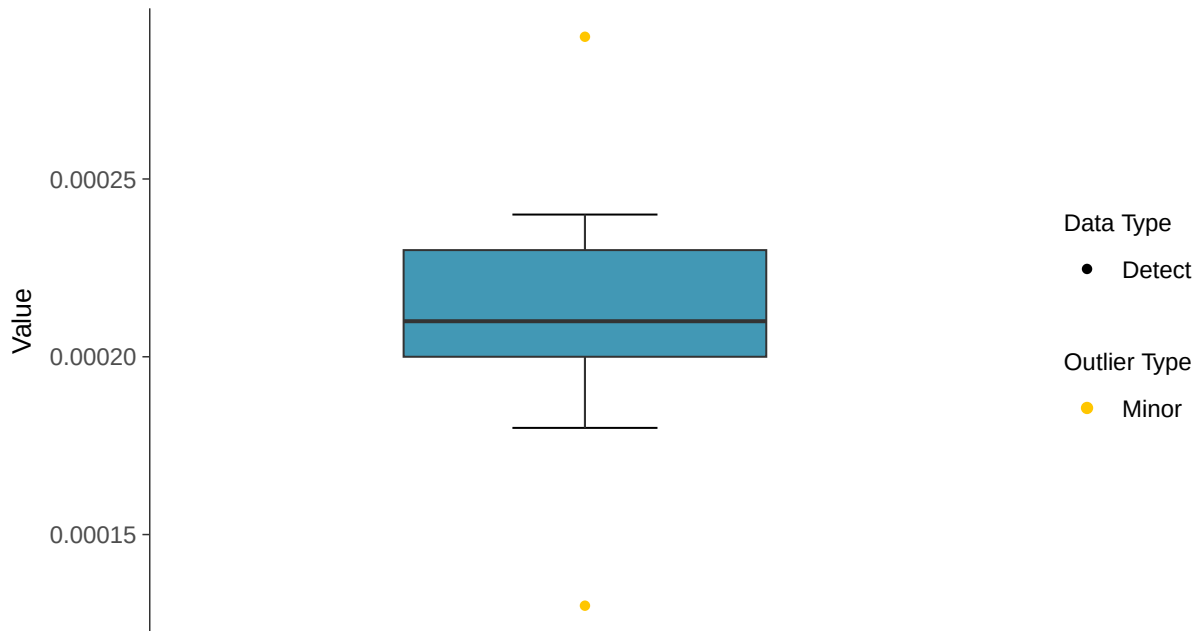
Appendix IV: Arsenic, MW-07

ID: 17_1_4_102



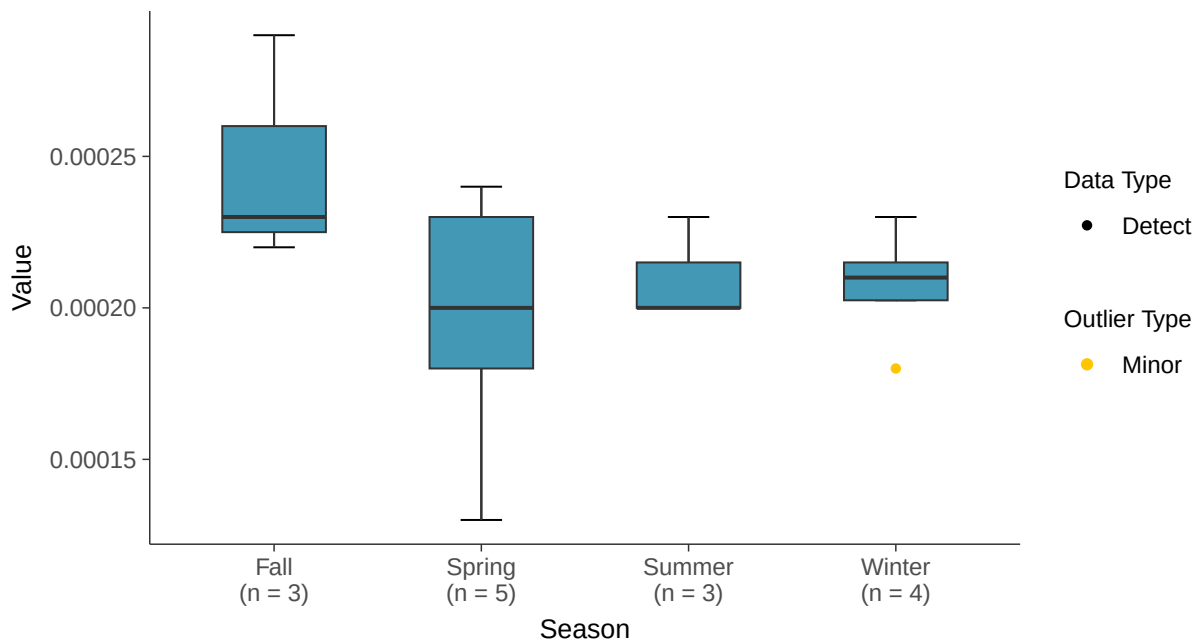
Boxplot

Arsenic, MW-07 (mg/L)



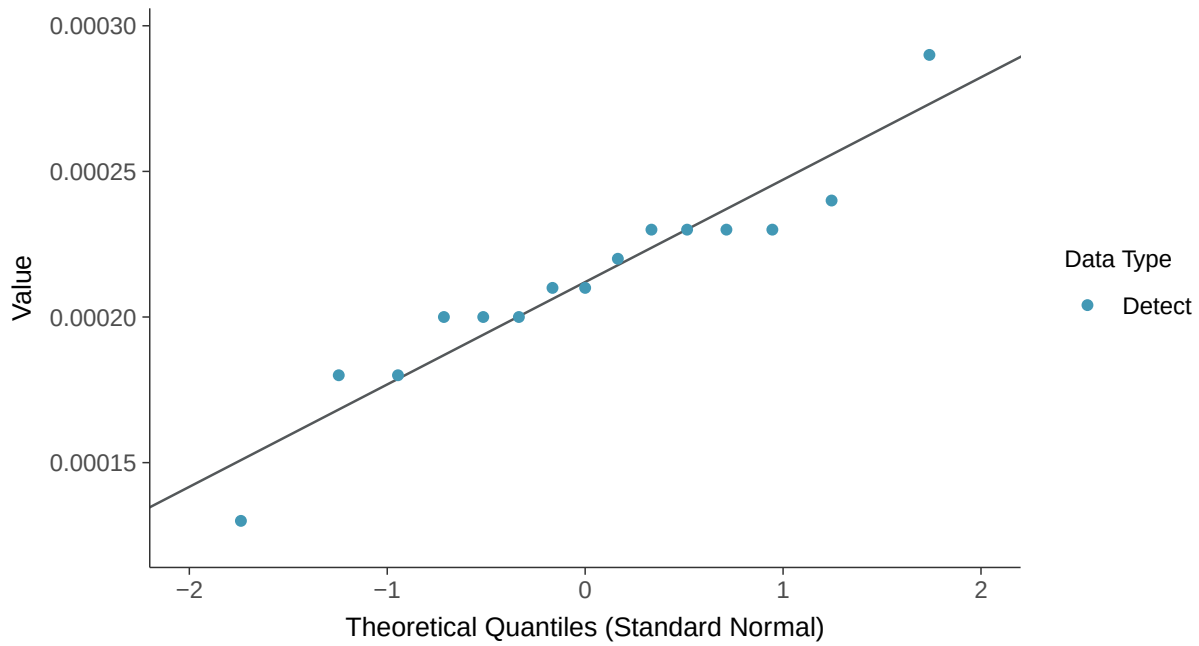
Boxplot by Season

Arsenic, MW-07 (mg/L)



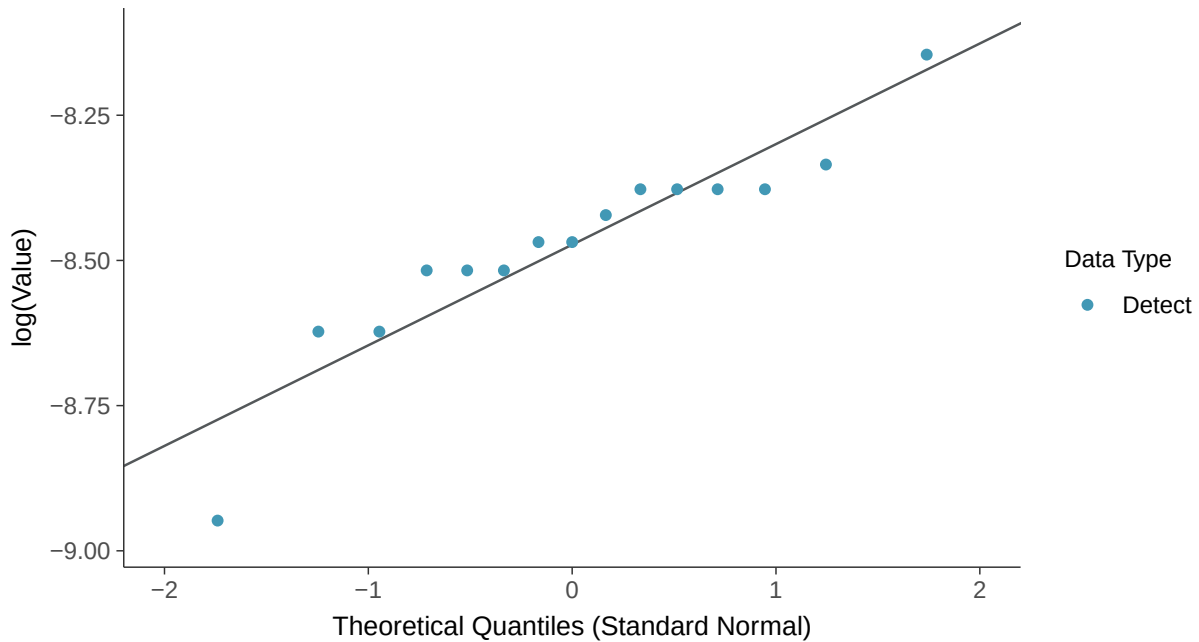
Normal Q-Q plot

Arsenic, MW-07 (mg/L)



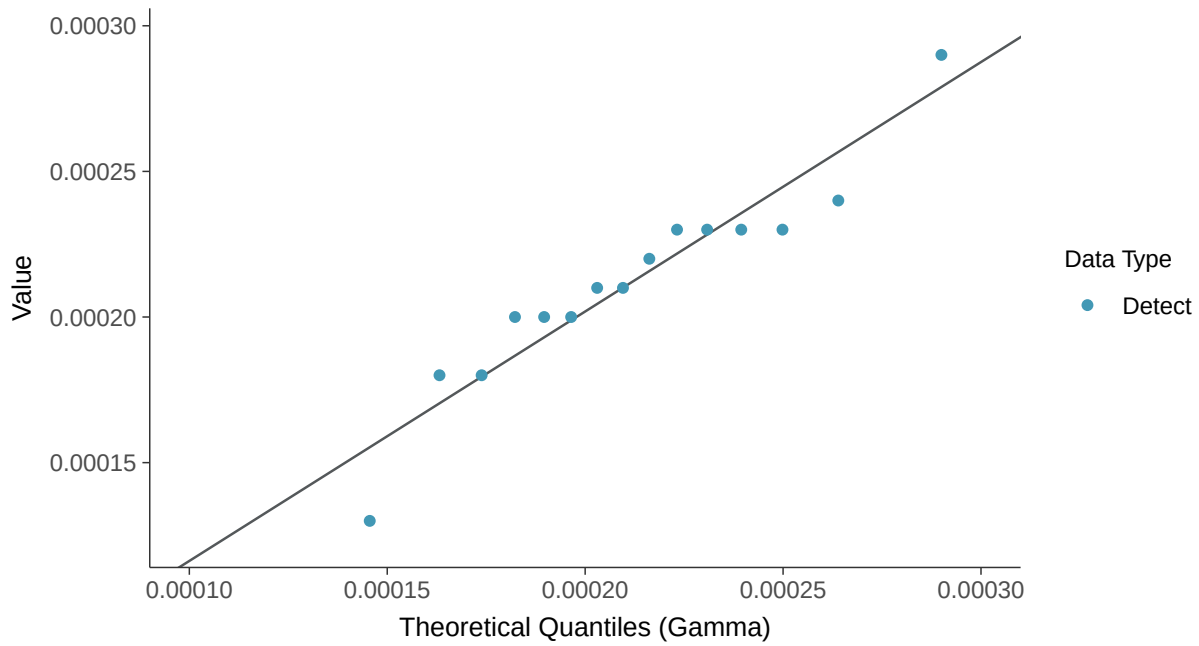
Lognormal Q-Q plot

Arsenic, MW-07 (mg/L)



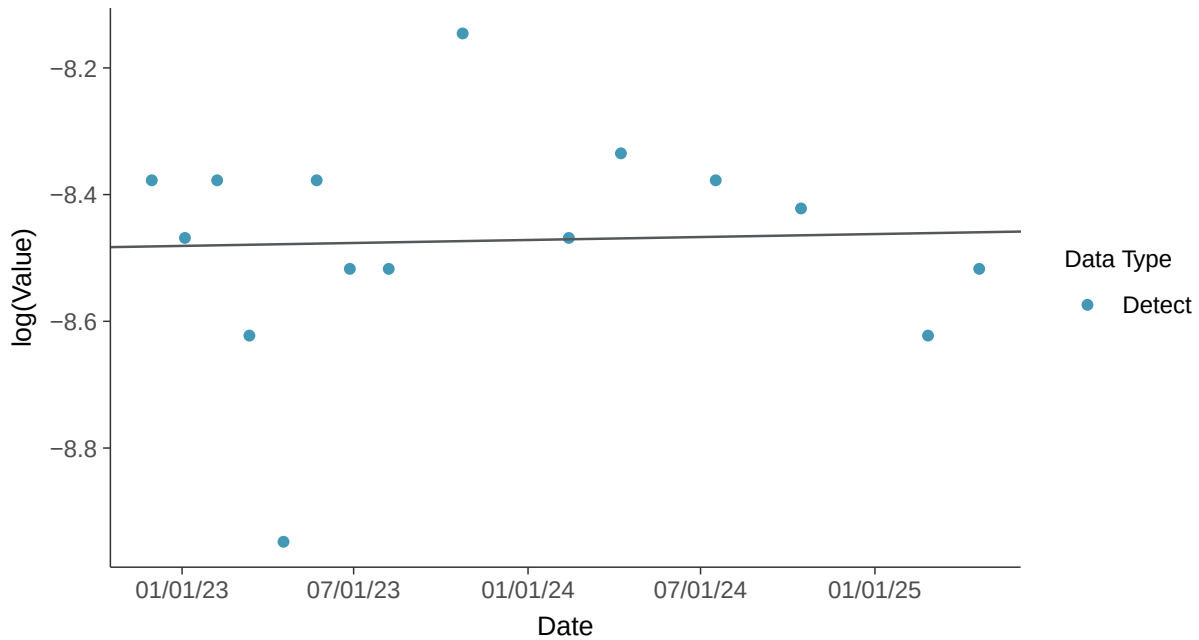
Gamma Q-Q plot

Arsenic, MW-07 (mg/L)



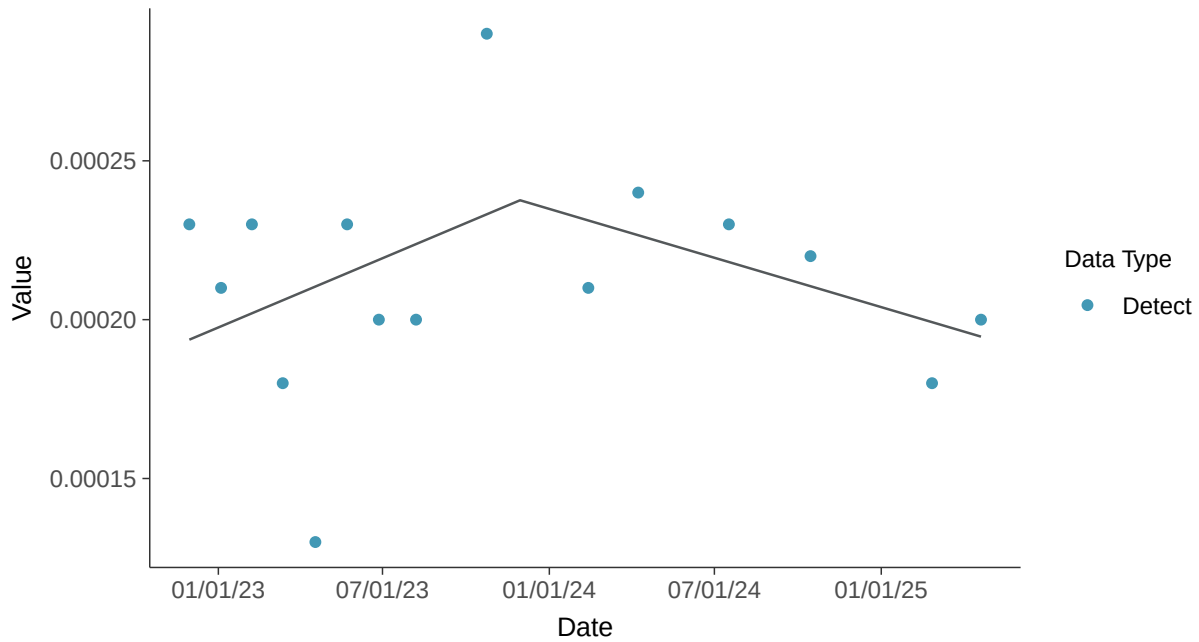
Trend Regression: Lognormal MLE

Arsenic, MW-07 (mg/L)



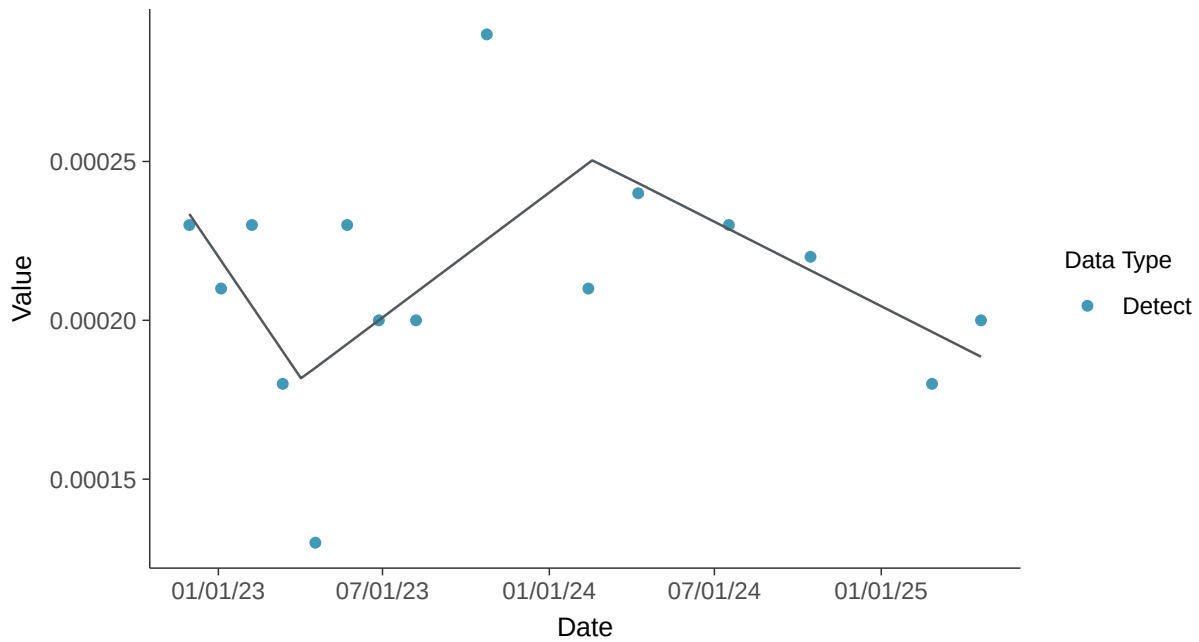
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-07 (mg/L)



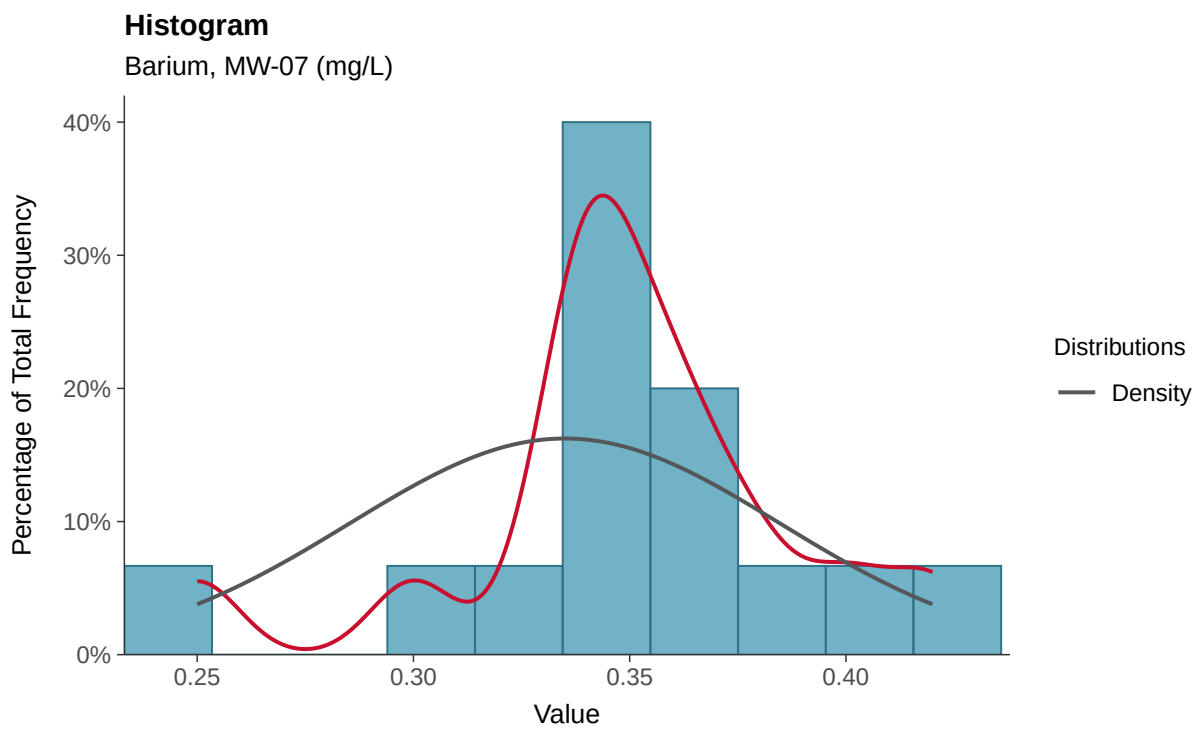
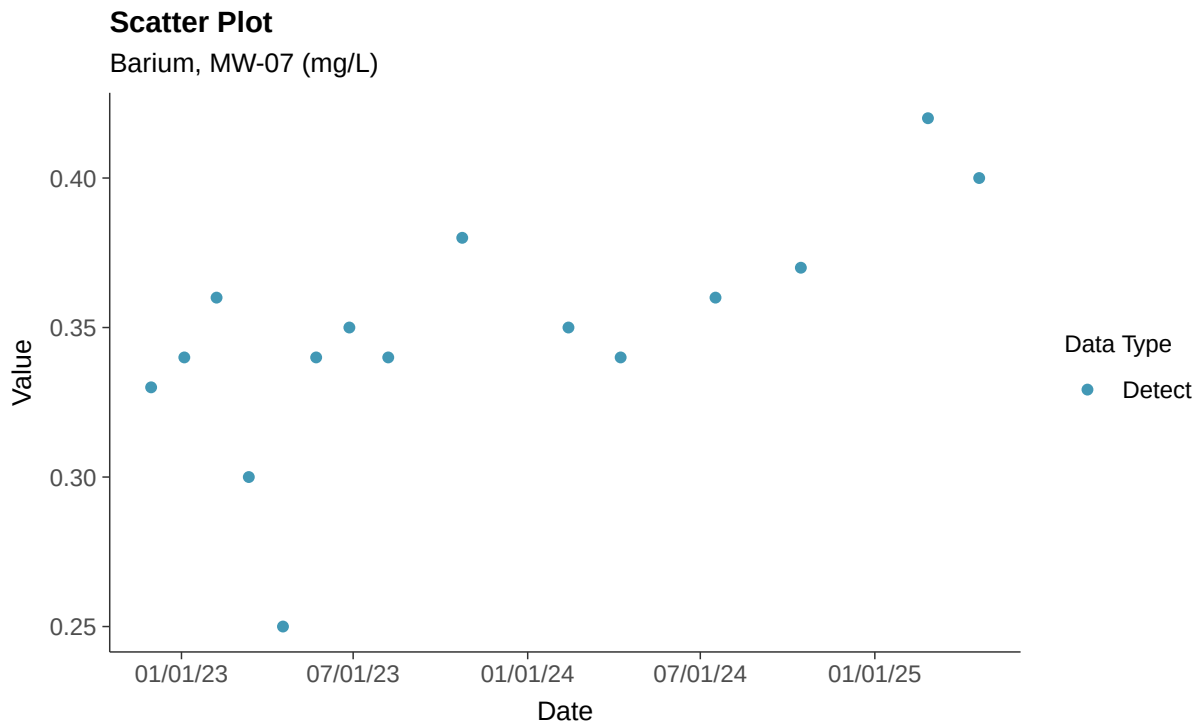
Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-07 (mg/L)



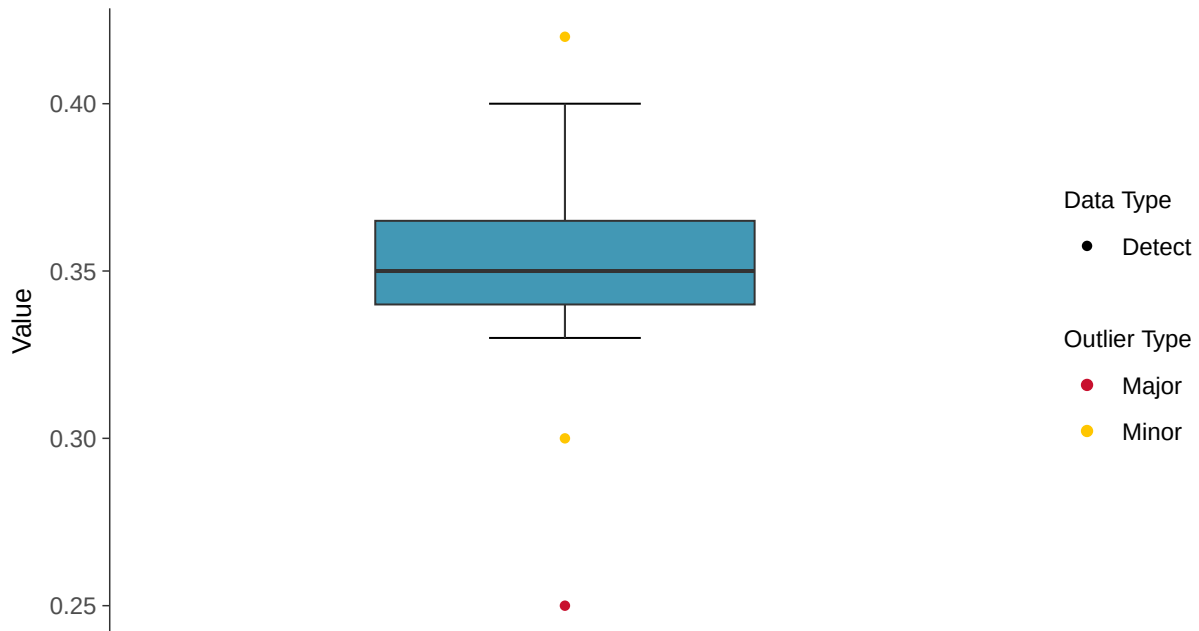
Appendix IV: Barium, MW-07

ID: 17_1_4_103



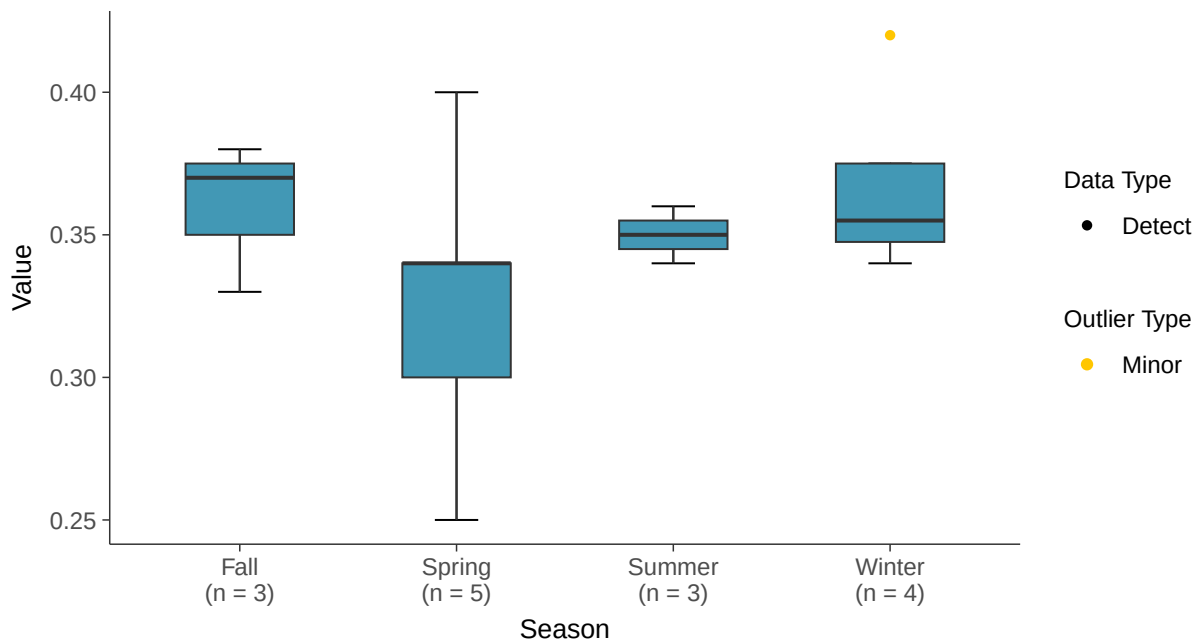
Boxplot

Barium, MW-07 (mg/L)



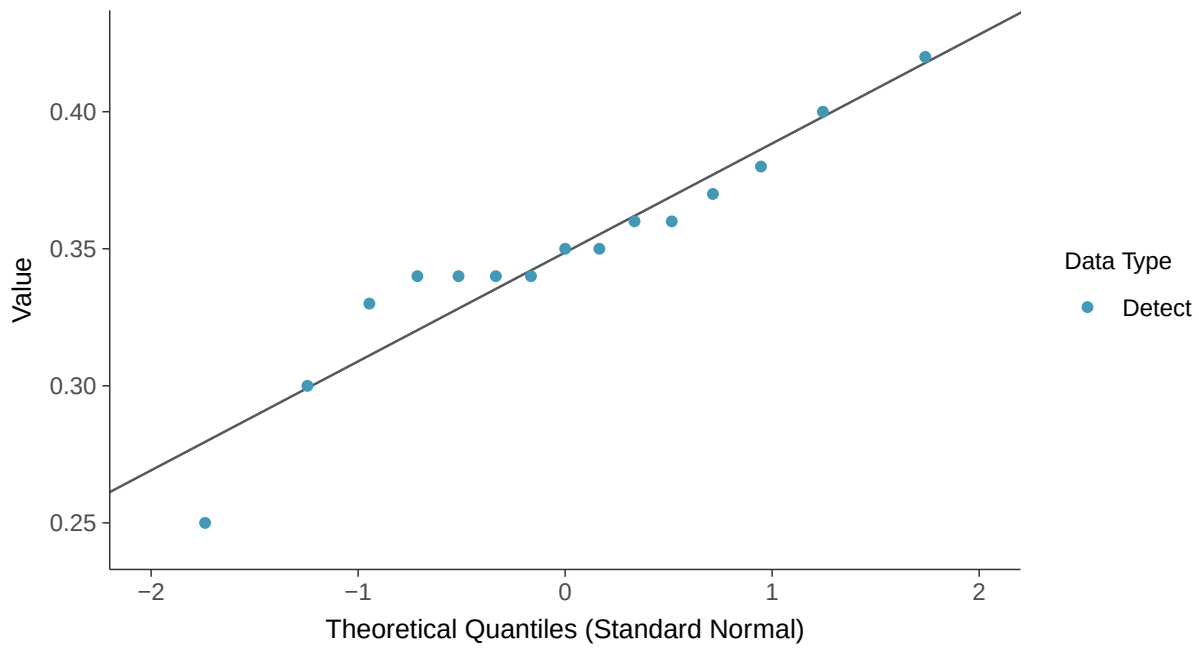
Boxplot by Season

Barium, MW-07 (mg/L)



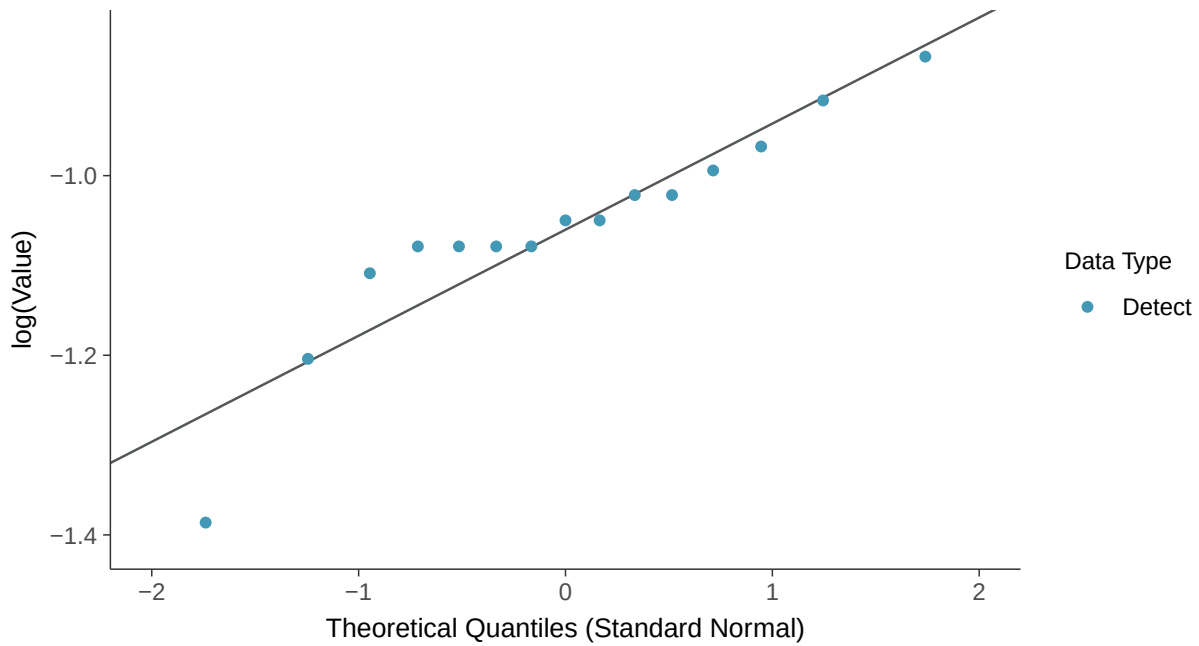
Normal Q-Q plot

Barium, MW-07 (mg/L)



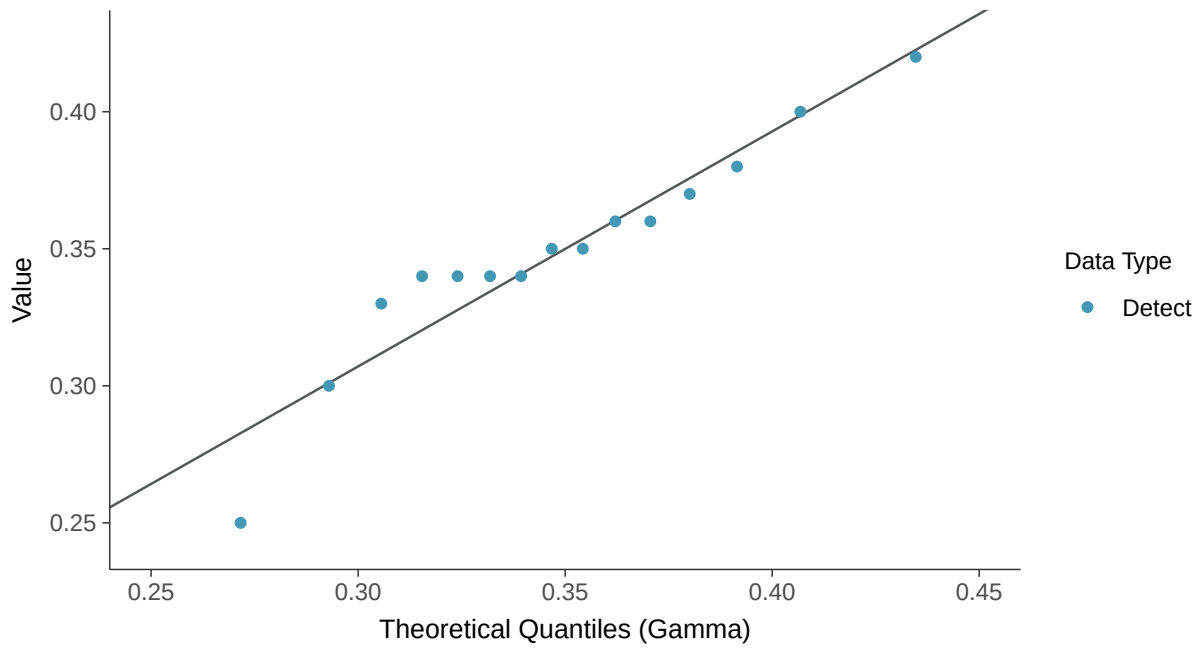
Lognormal Q-Q plot

Barium, MW-07 (mg/L)



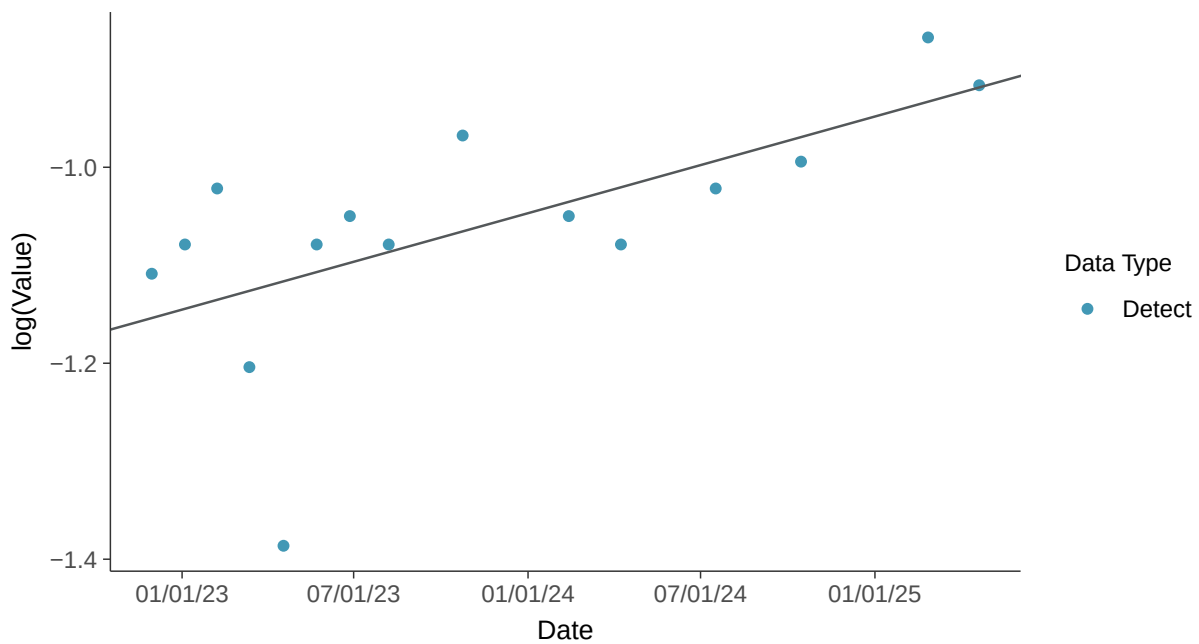
Gamma Q-Q plot

Barium, MW-07 (mg/L)



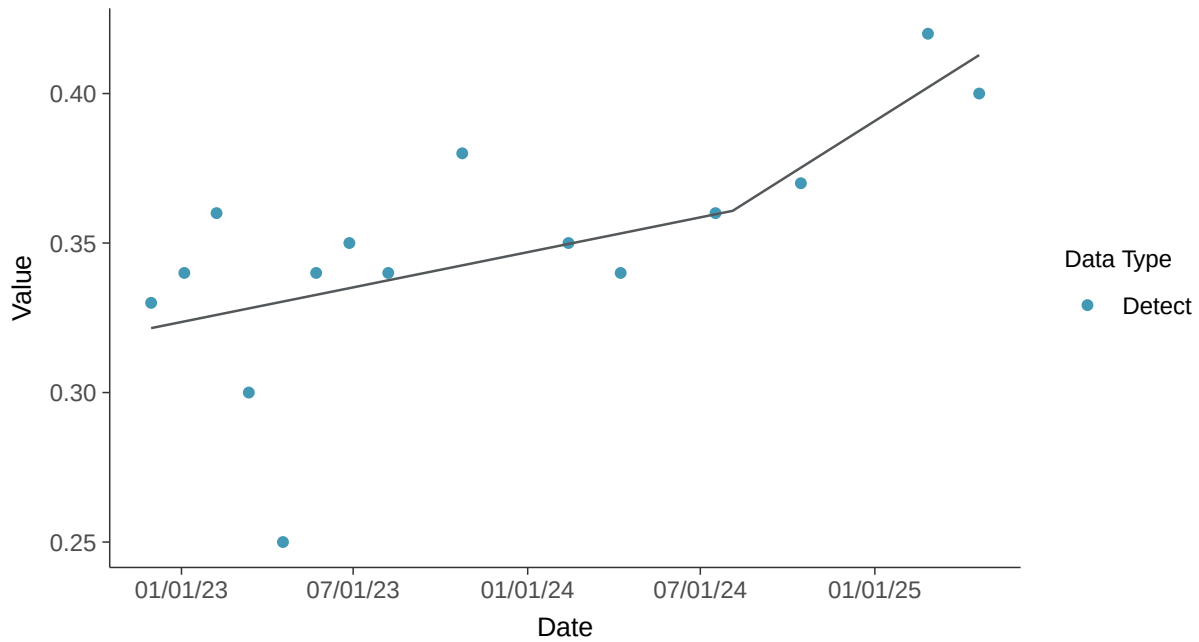
Trend Regression: Lognormal MLE

Barium, MW-07 (mg/L)



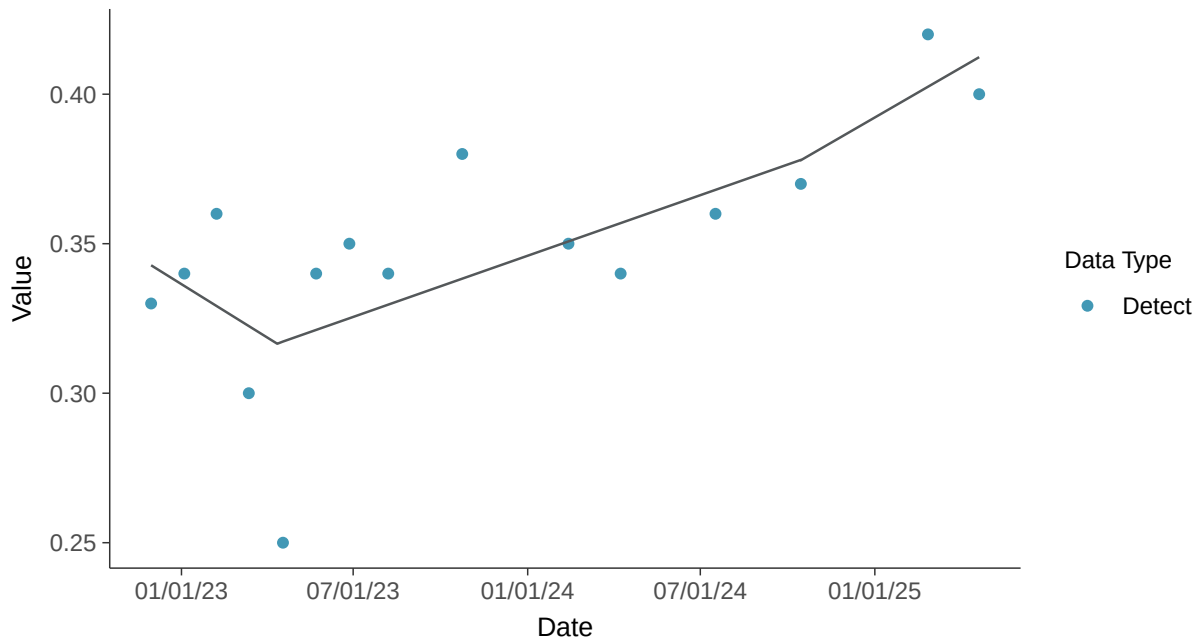
Trend Regression: Piecewise Linear-Linear

Barium, MW-07 (mg/L)



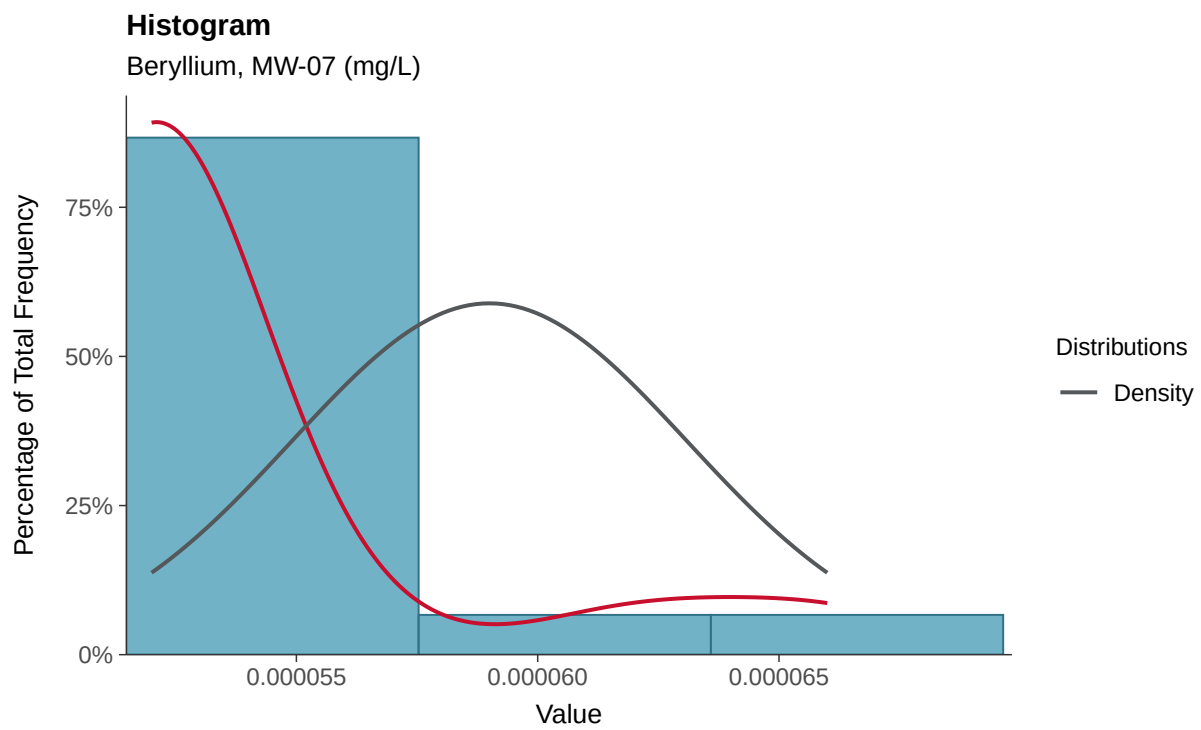
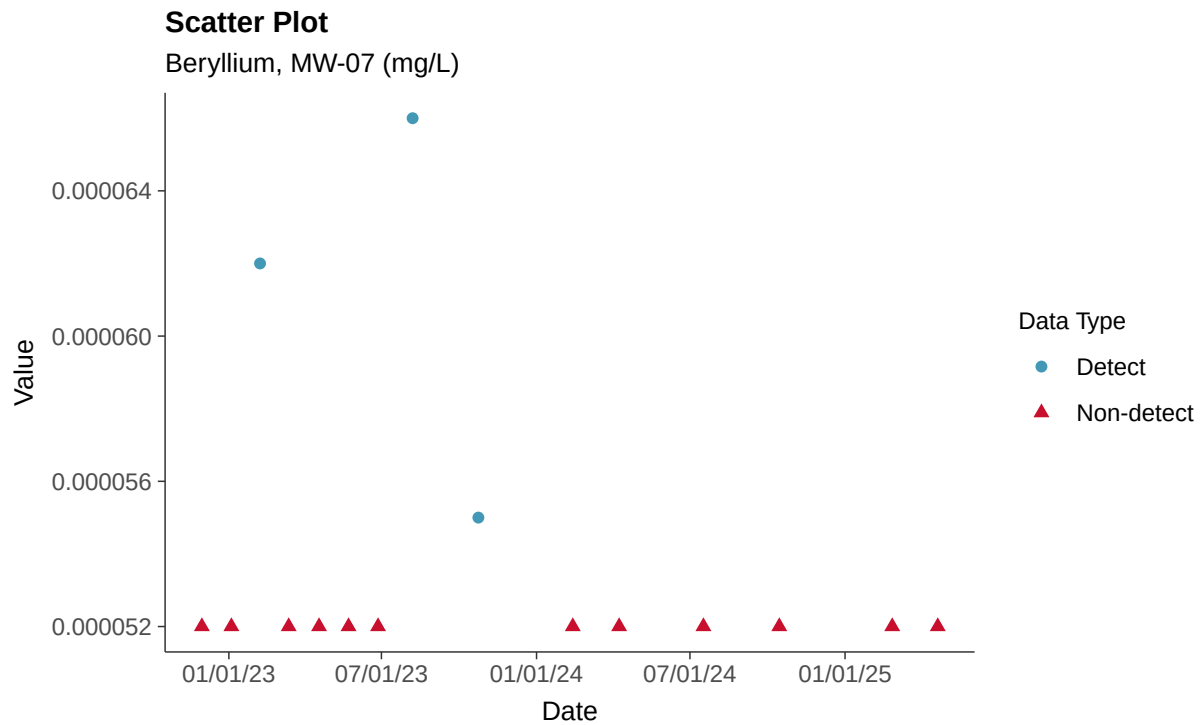
Trend Regression: Piecewise Linear-Linear-Linear

Barium, MW-07 (mg/L)



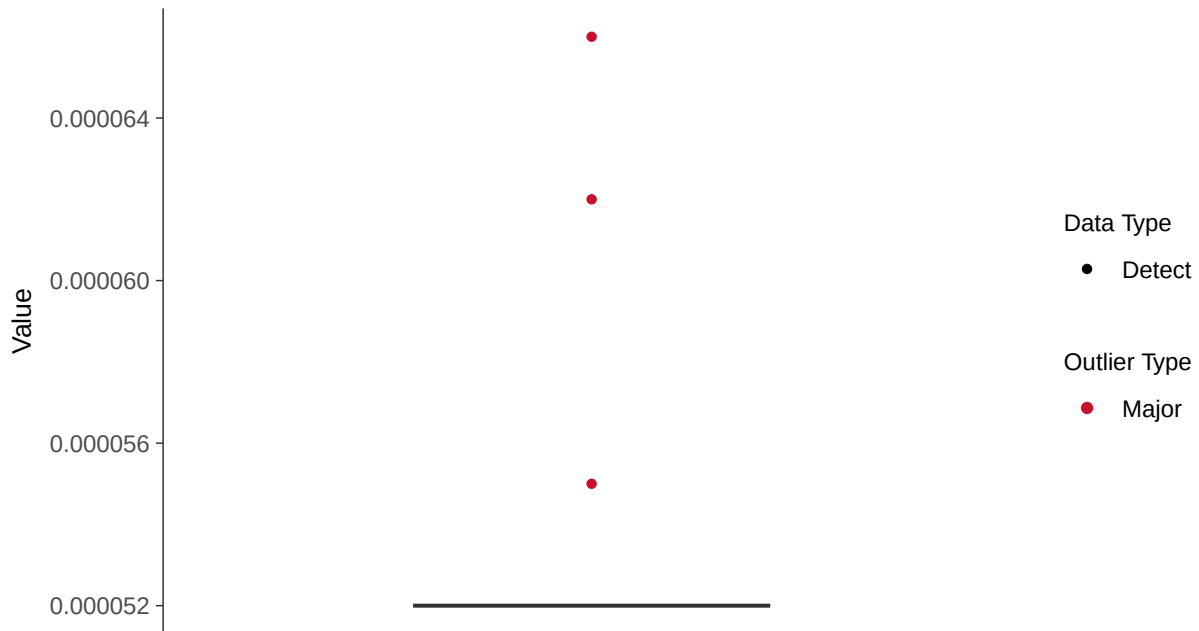
Appendix IV: Beryllium, MW-07

ID: 17_1_4_104



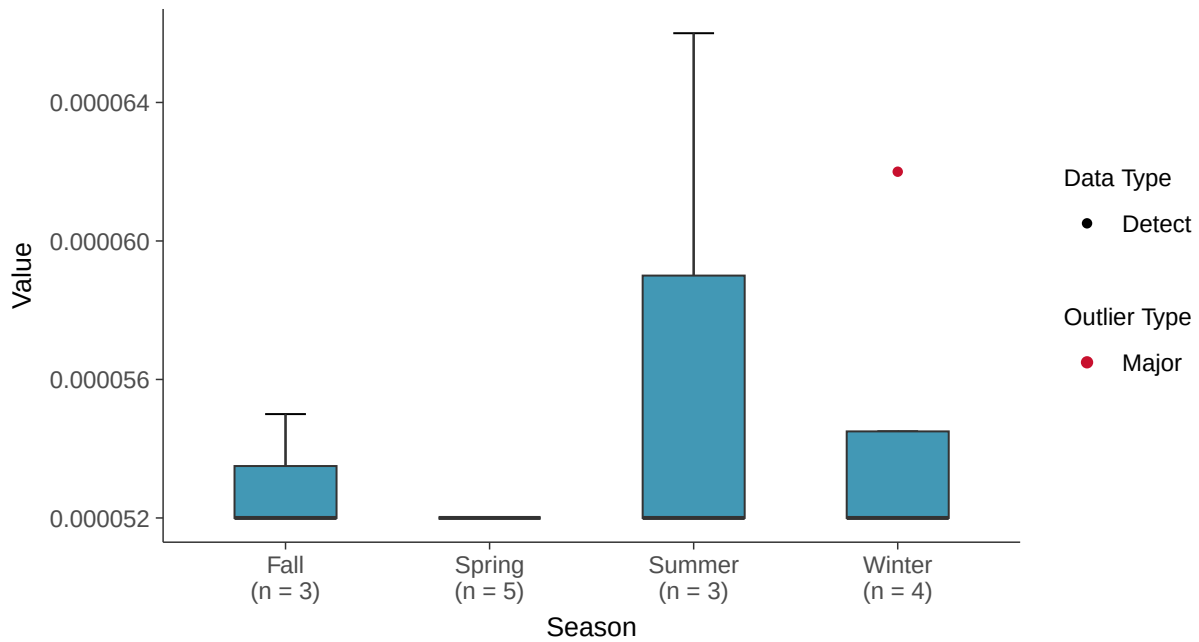
Boxplot

Beryllium, MW-07 (mg/L)



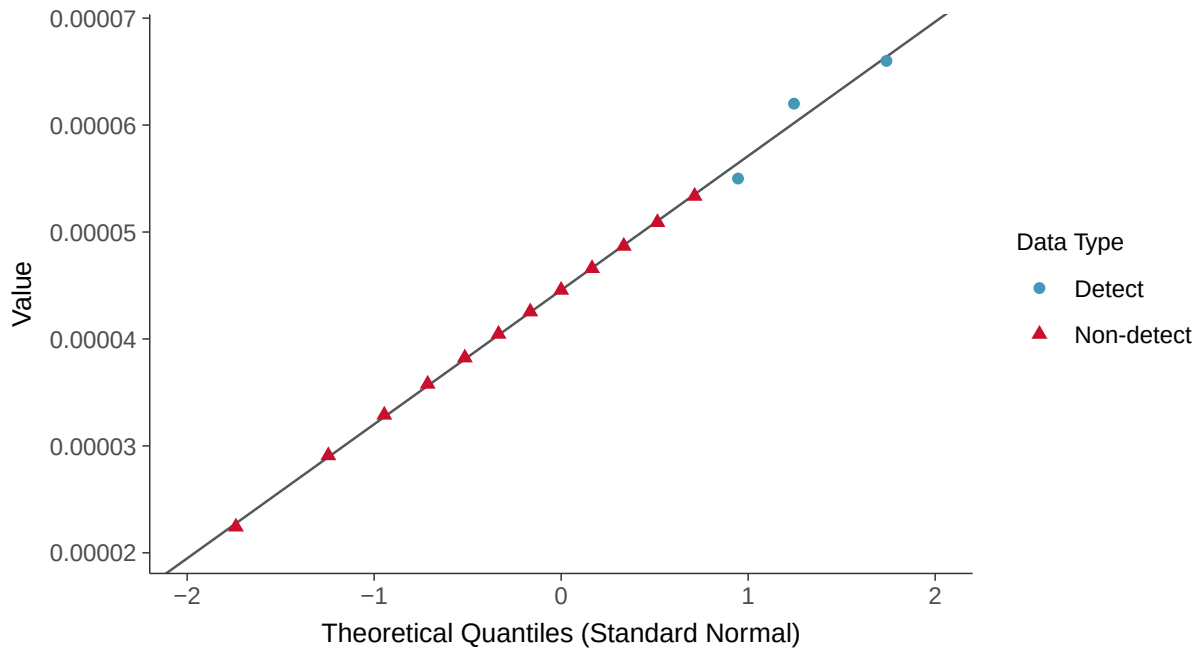
Boxplot by Season

Beryllium, MW-07 (mg/L)



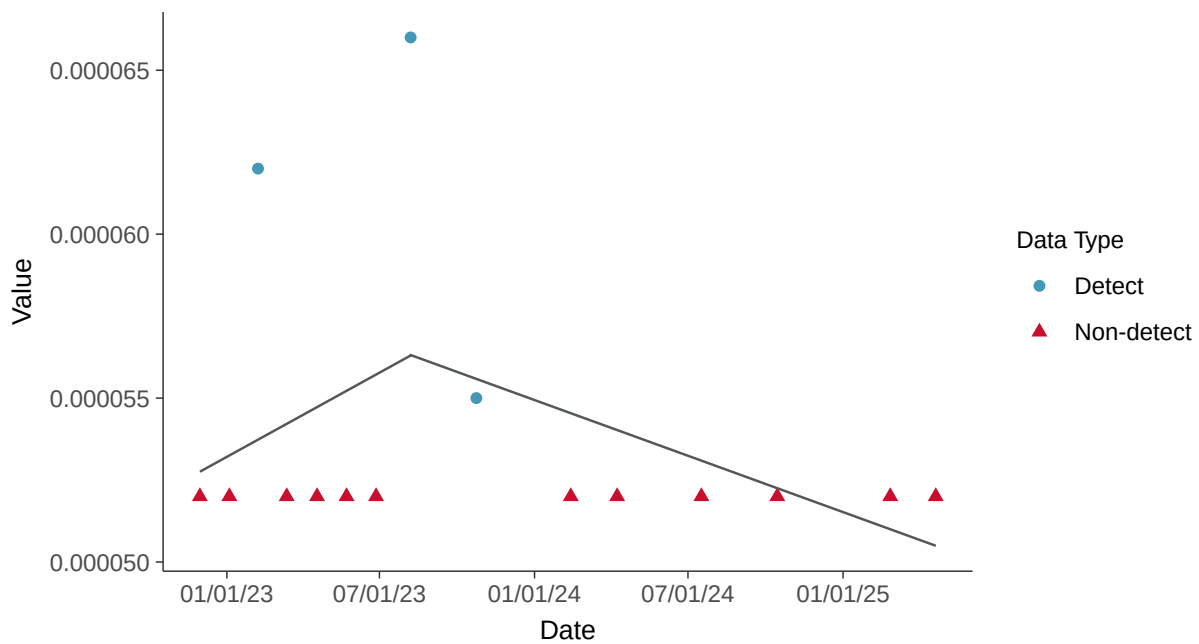
Normal Q-Q plot using ROS Imputed Estimates

Beryllium, MW-07 (mg/L)



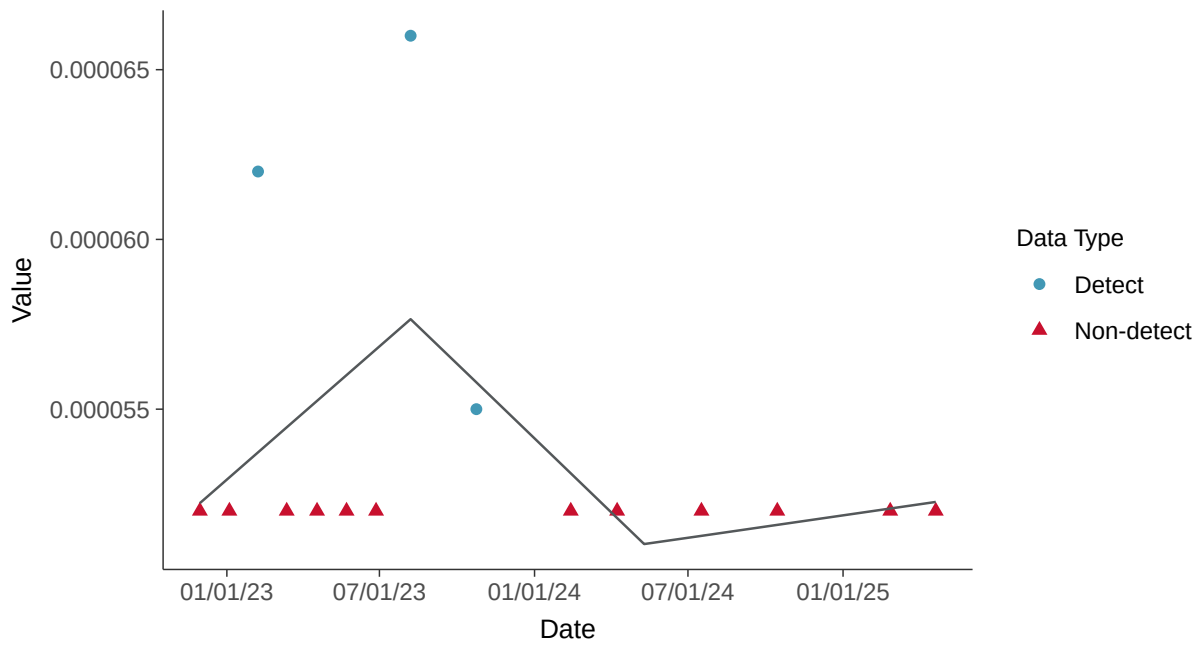
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-07 (mg/L)



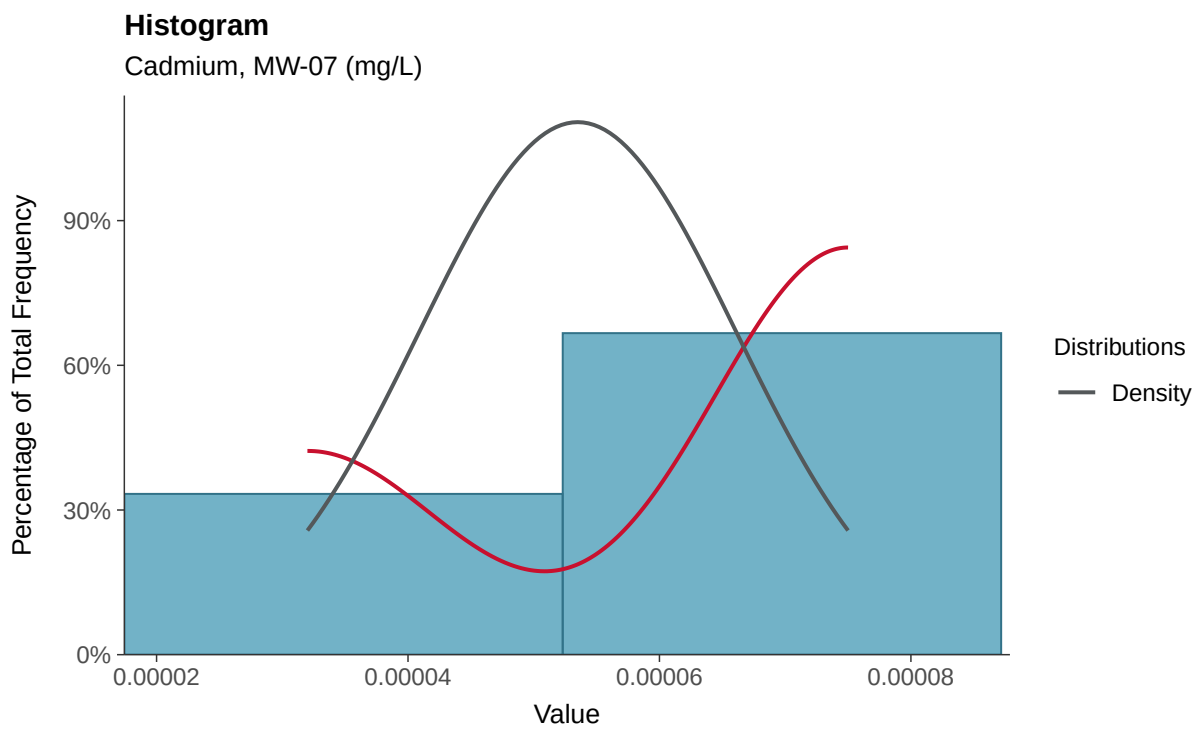
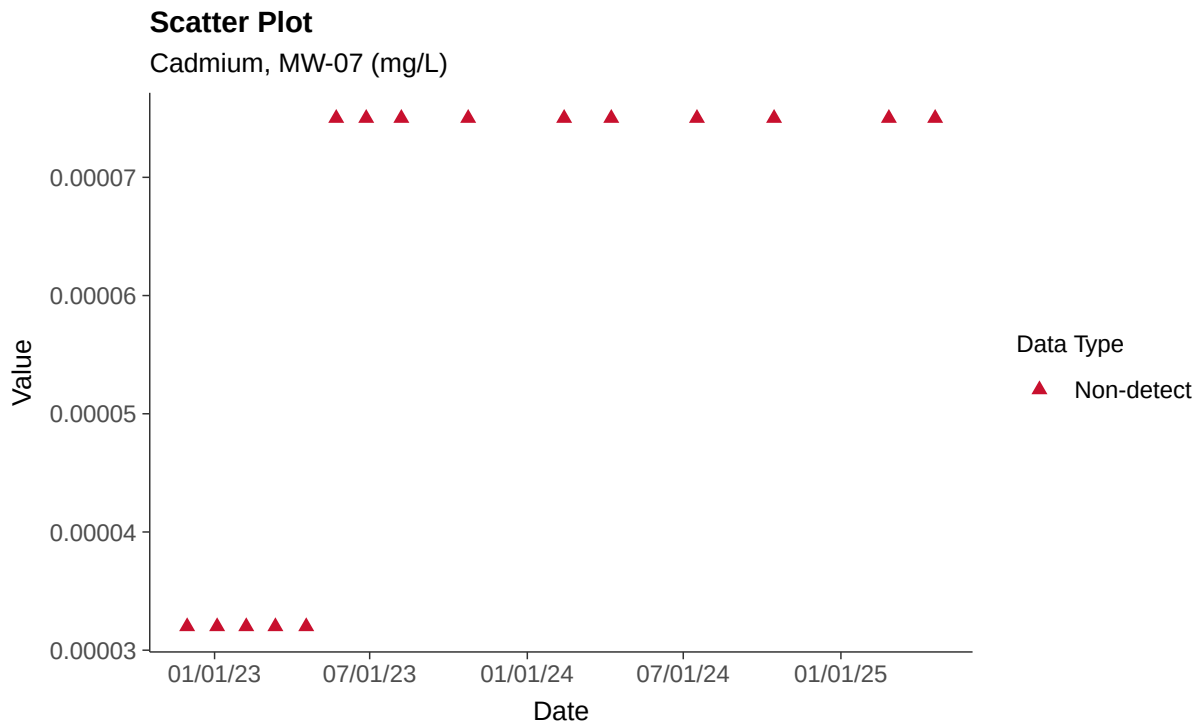
Trend Regression: Piecewise Linear-Linear-Linear

Beryllium, MW-07 (mg/L)



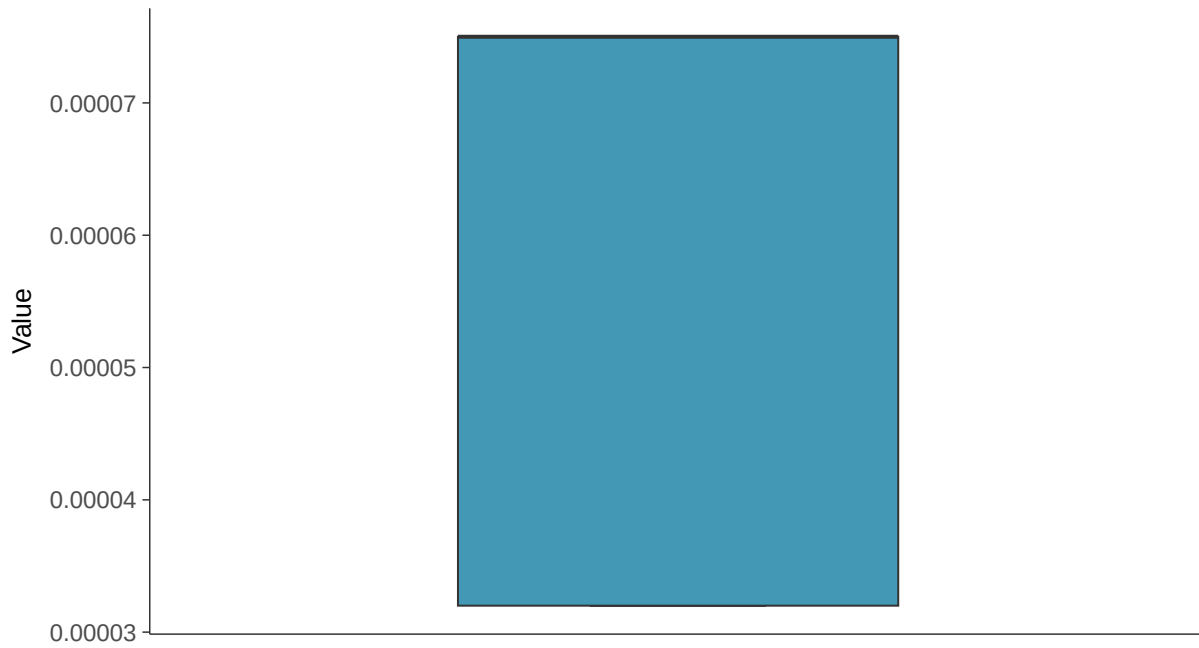
Appendix IV: Cadmium, MW-07

ID: 17_1_4_106



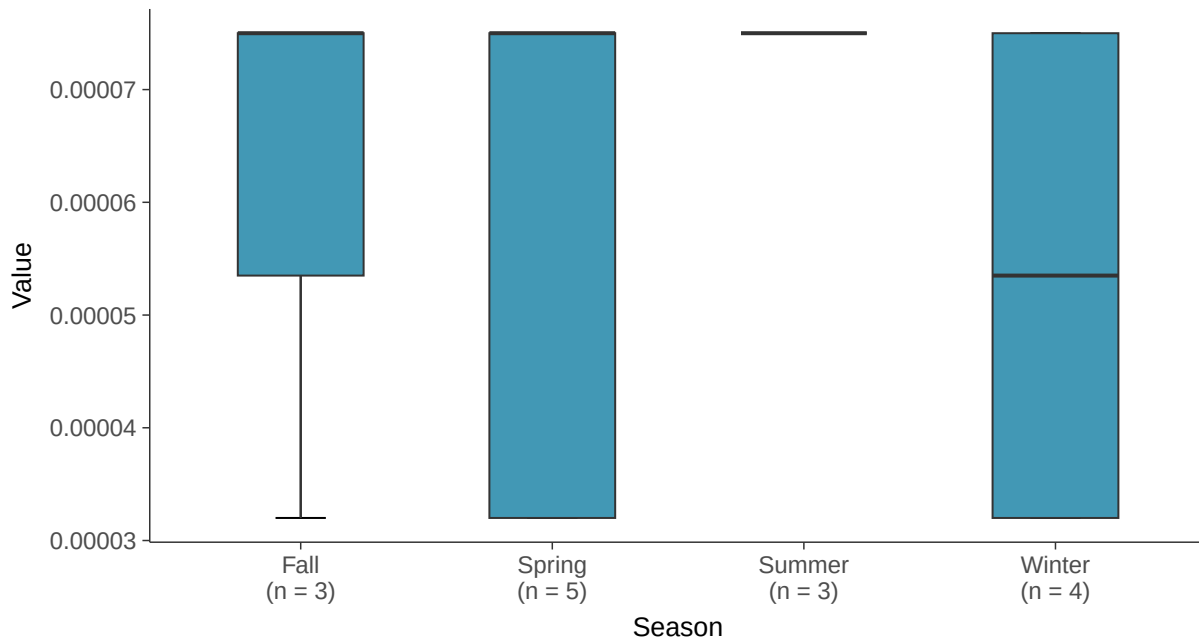
Boxplot

Cadmium, MW-07 (mg/L)



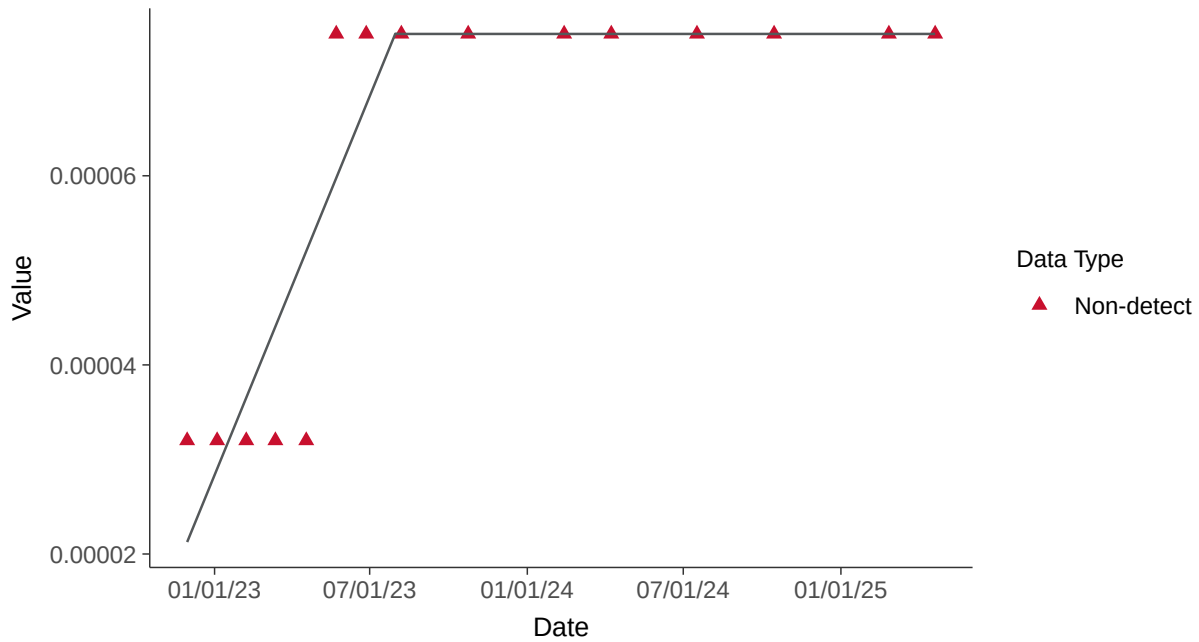
Boxplot by Season

Cadmium, MW-07 (mg/L)



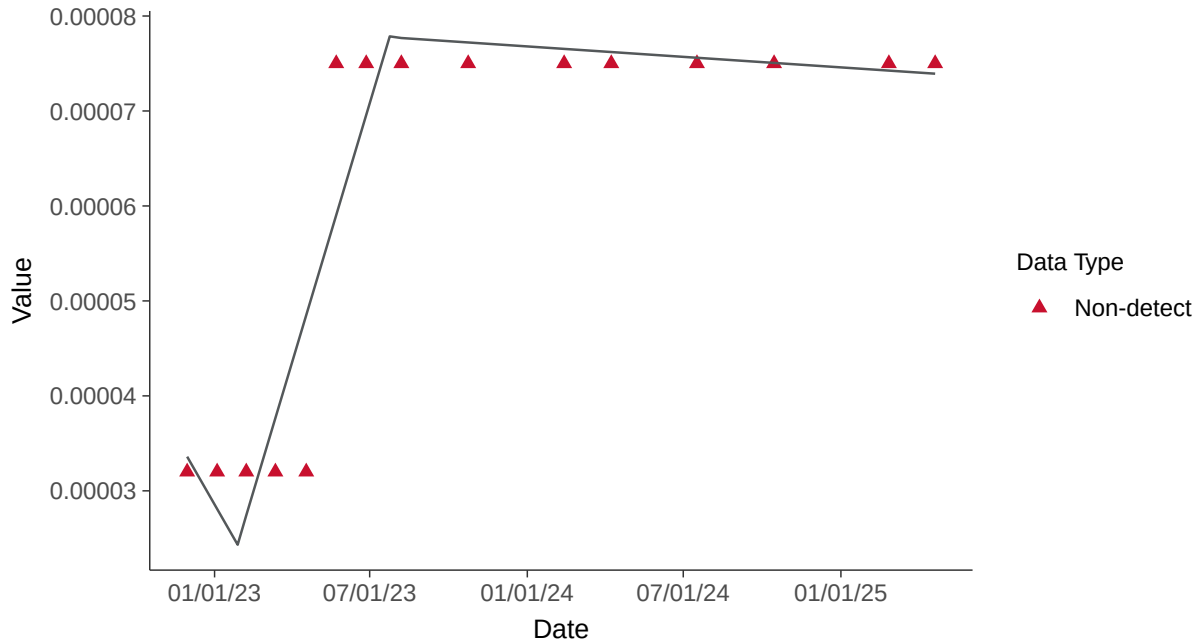
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-07 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cadmium, MW-07 (mg/L)

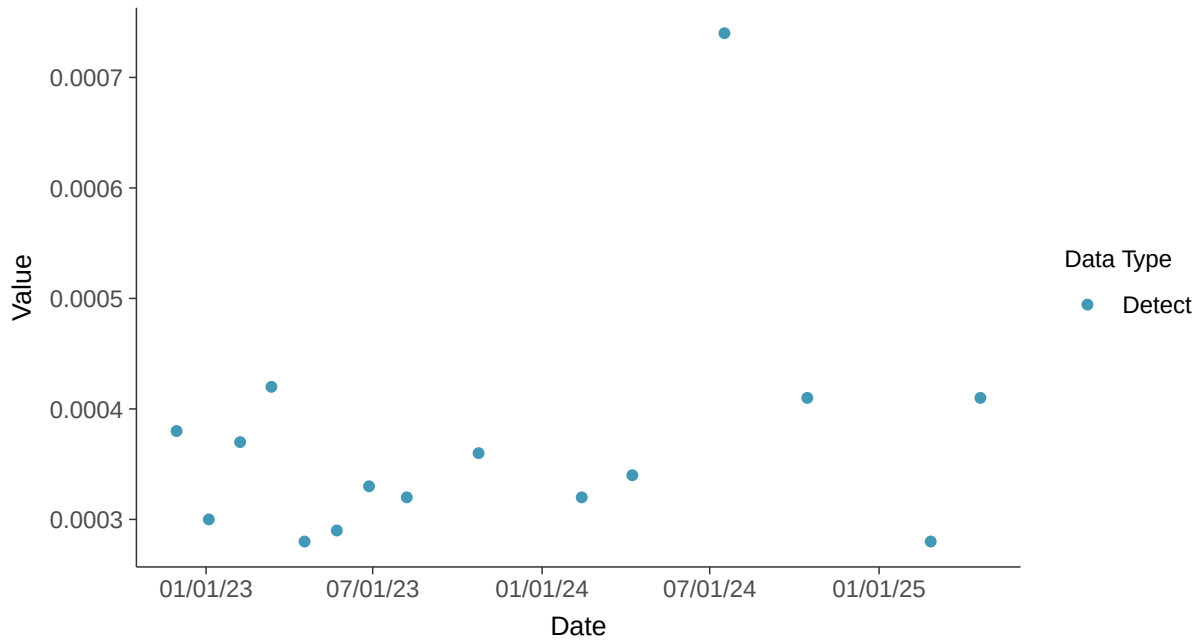


Appendix IV: Chromium, Total, MW-07

ID: 17_1_4_109

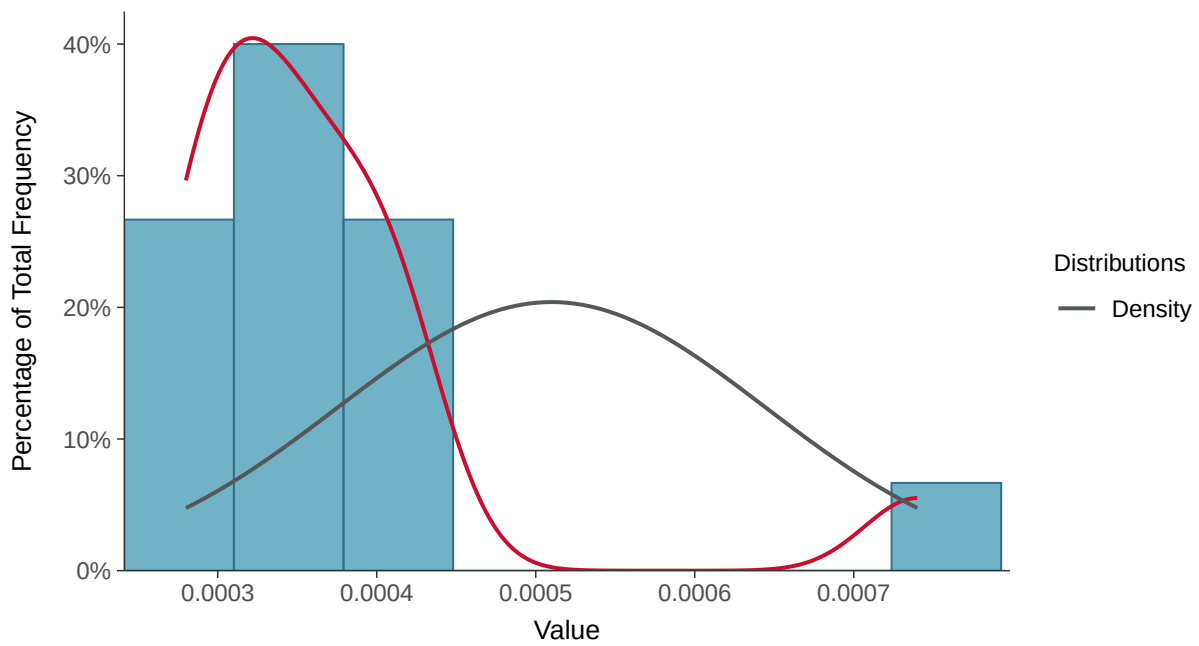
Scatter Plot

Chromium, Total, MW-07 (mg/L)



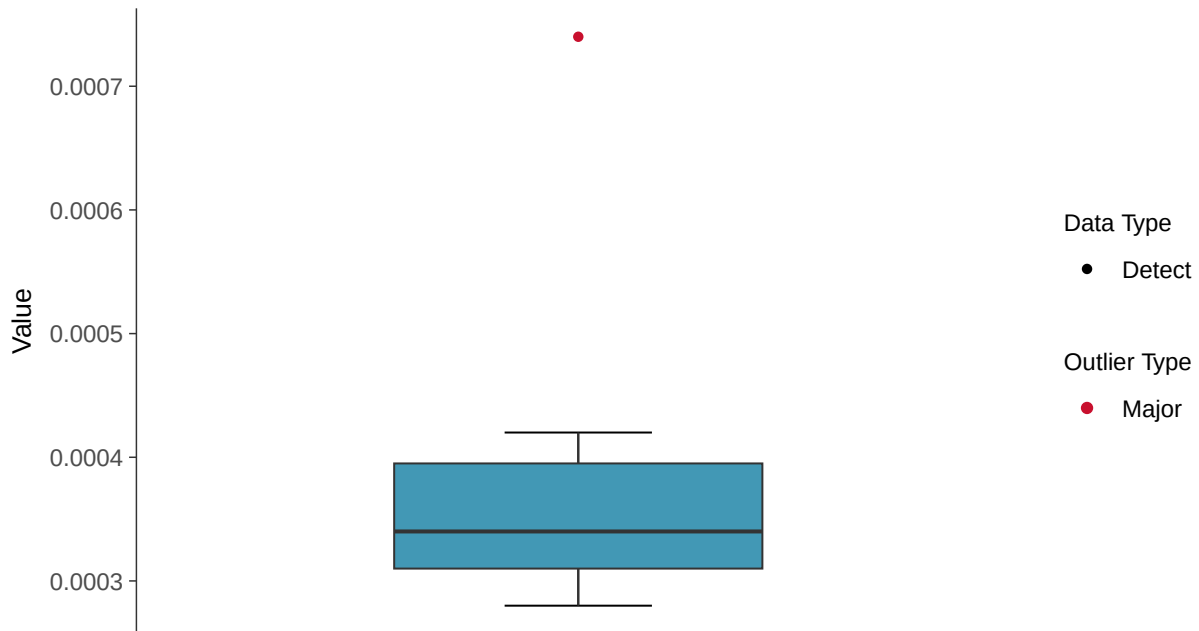
Histogram

Chromium, Total, MW-07 (mg/L)



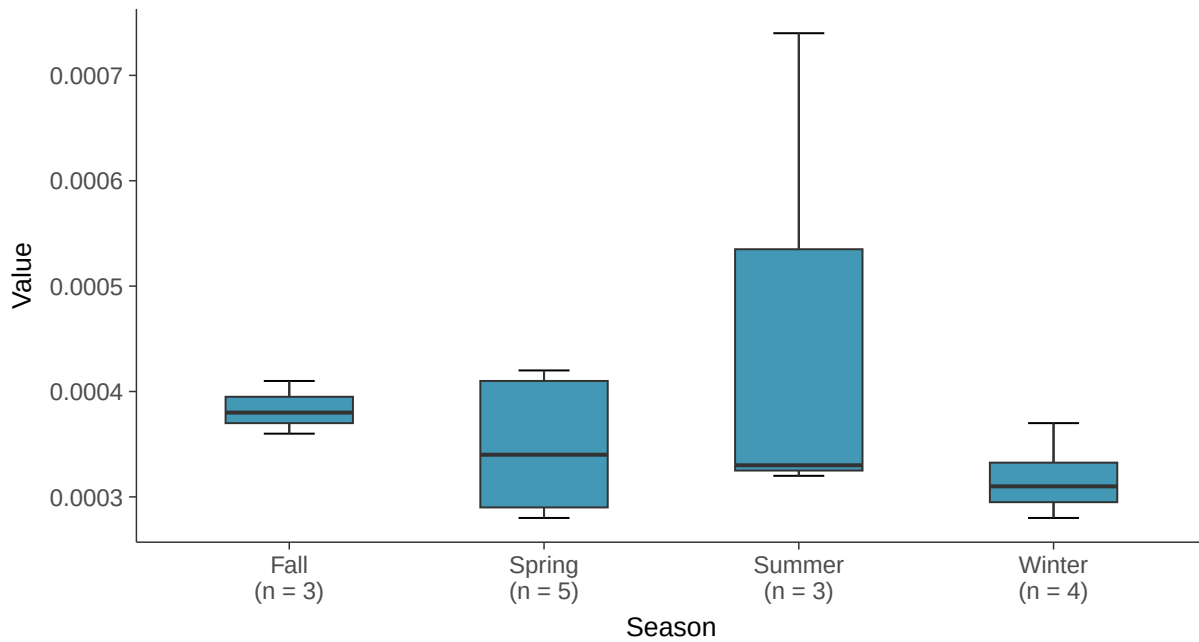
Boxplot

Chromium, Total, MW-07 (mg/L)



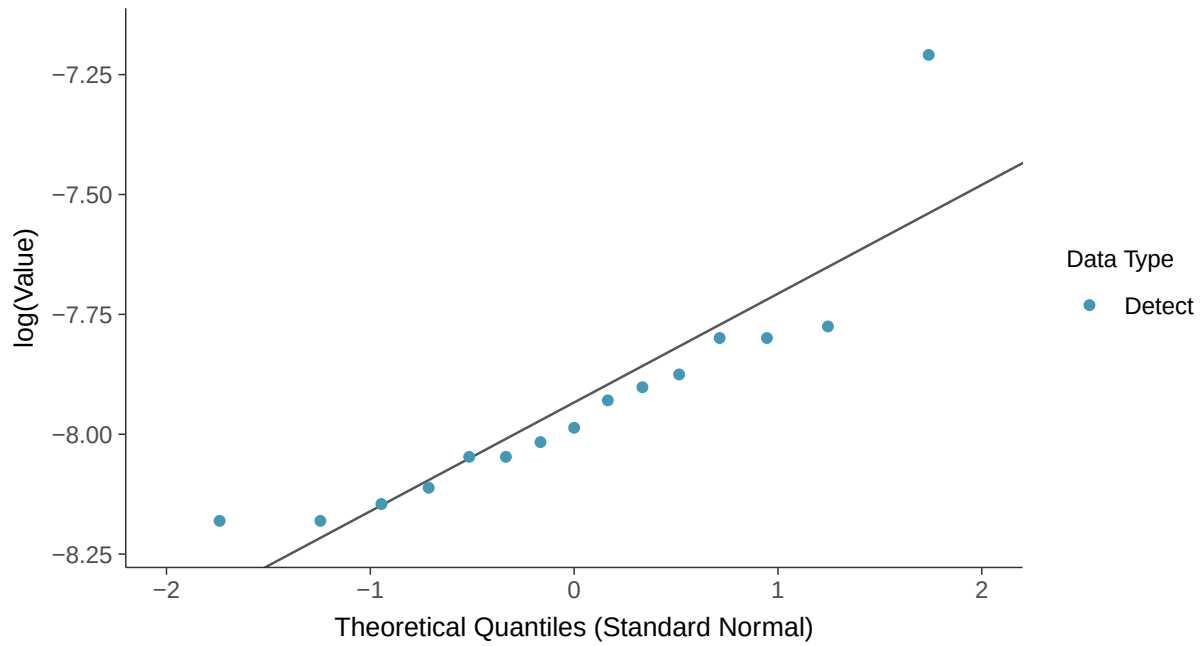
Boxplot by Season

Chromium, Total, MW-07 (mg/L)



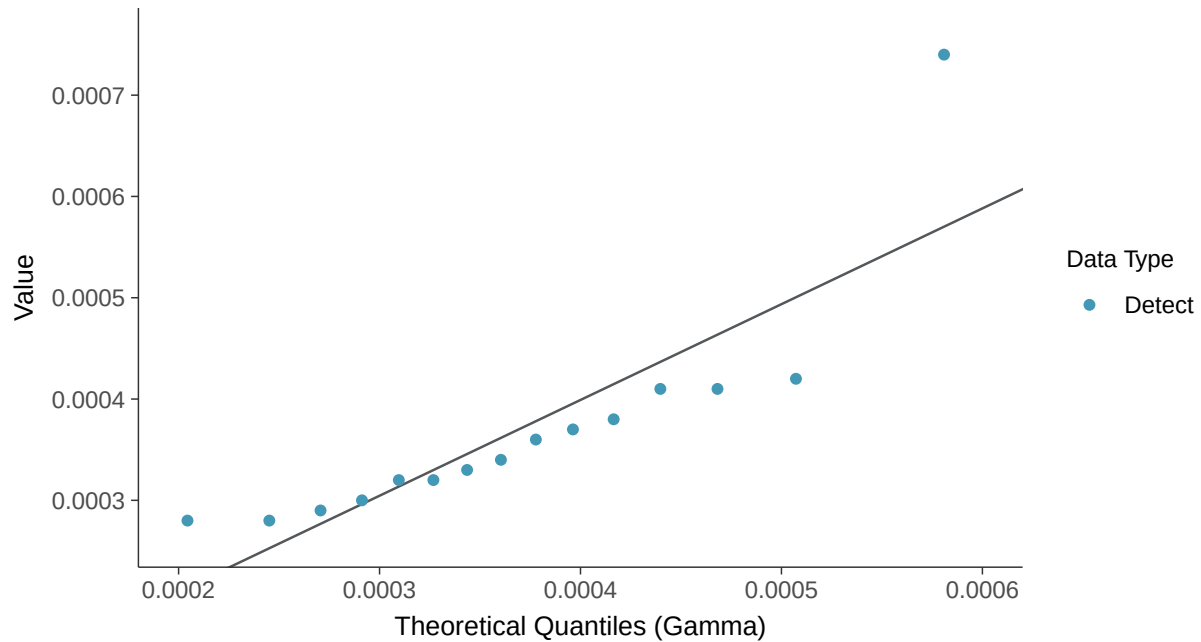
Lognormal Q-Q plot

Chromium, Total, MW-07 (mg/L)



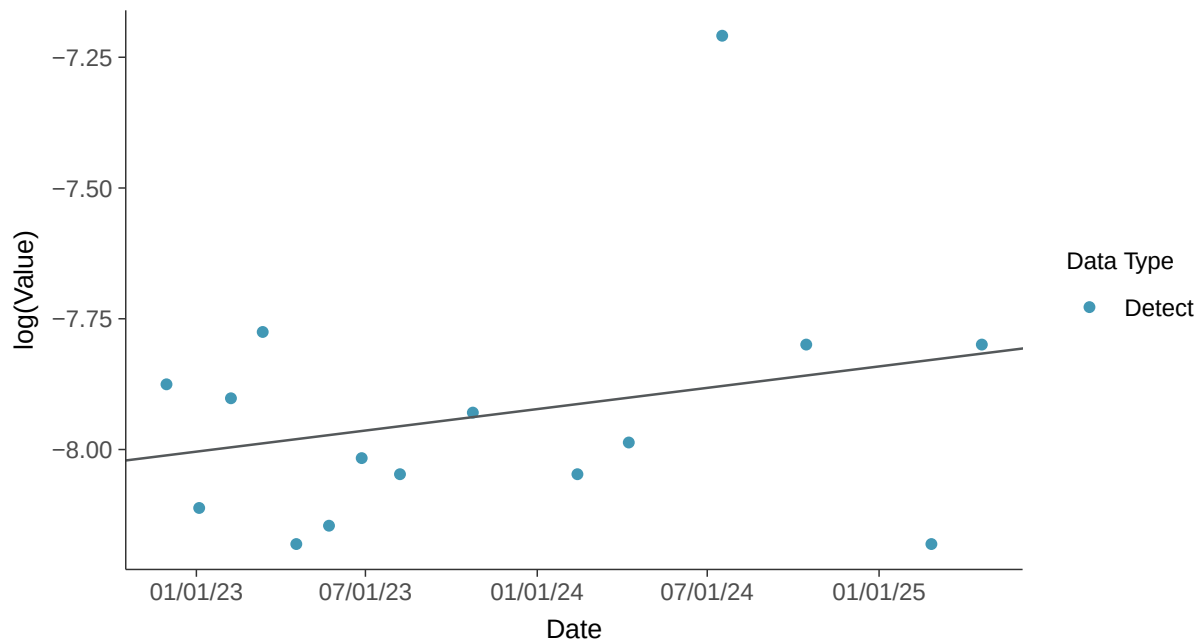
Gamma Q-Q plot

Chromium, Total, MW-07 (mg/L)



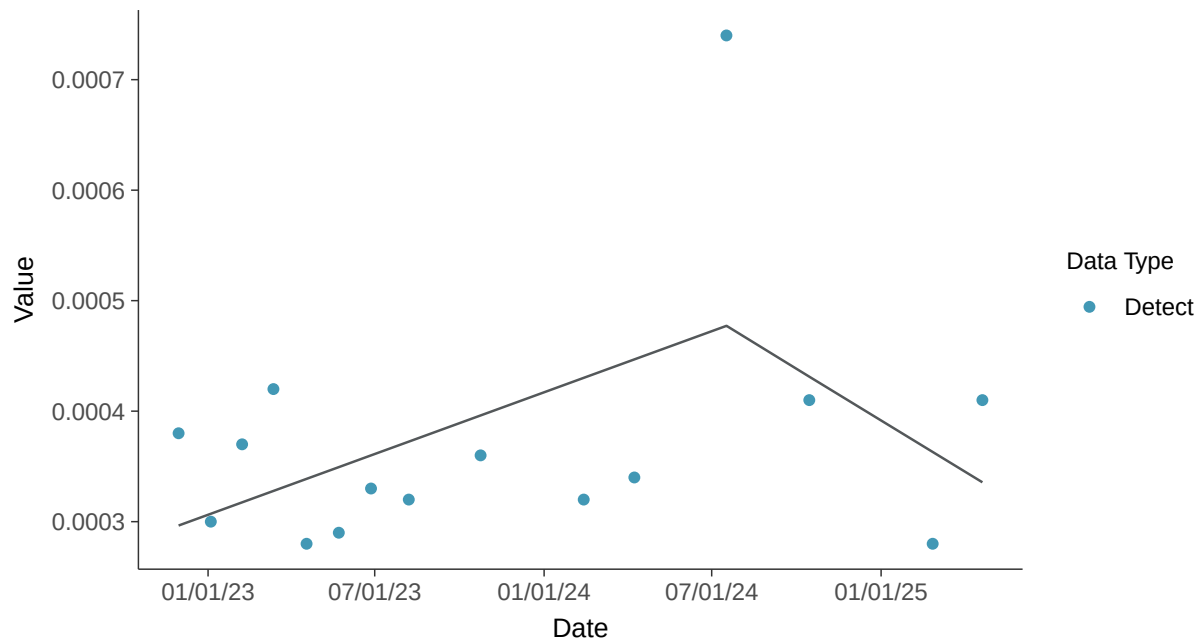
Trend Regression: Lognormal MLE

Chromium, Total, MW-07 (mg/L)



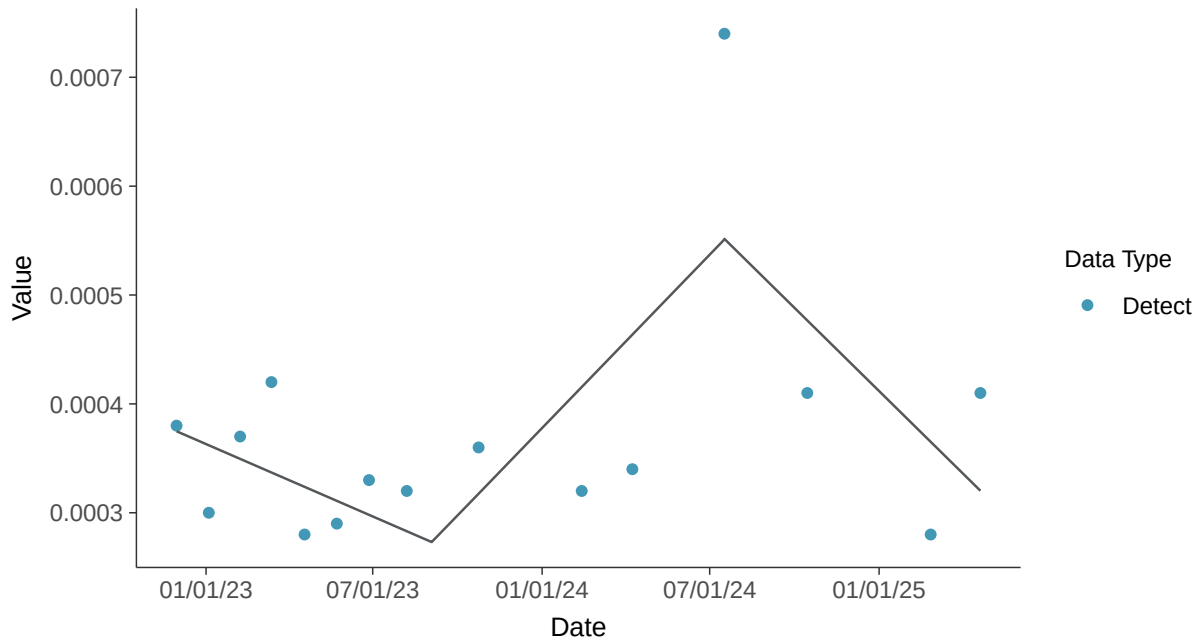
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-07 (mg/L)



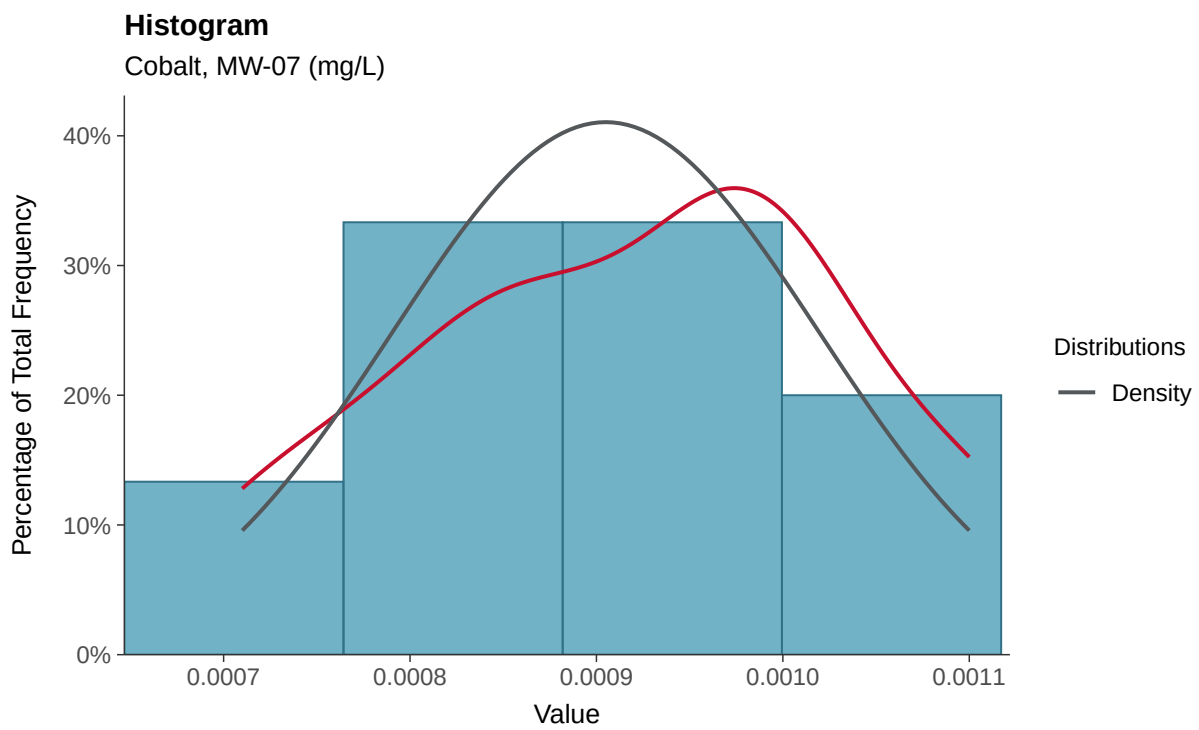
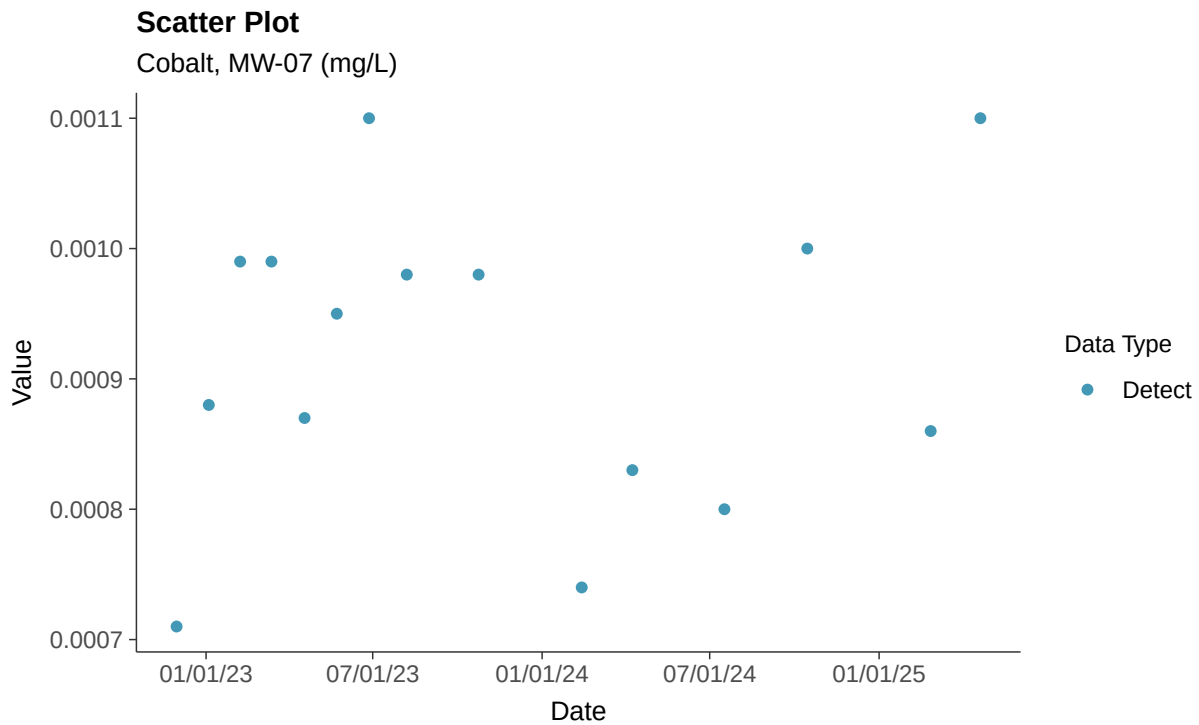


Trend Regression: Piecewise Linear-Linear-Linear
Chromium, Total, MW-07 (mg/L)



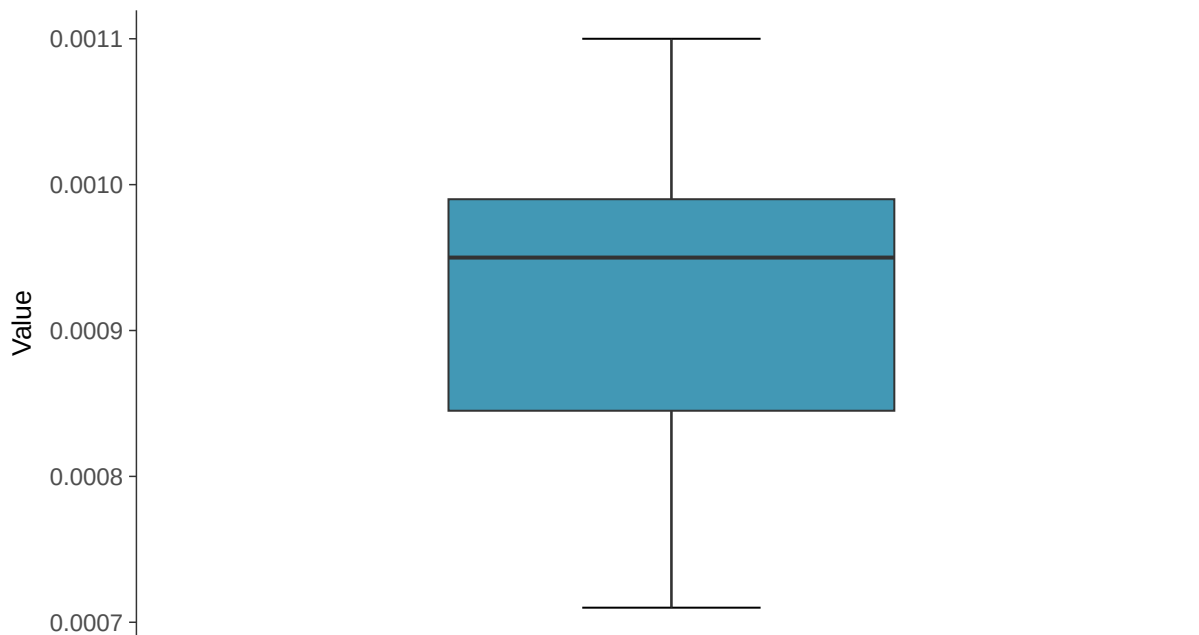
Appendix IV: Cobalt, MW-07

ID: 17_1_4_110



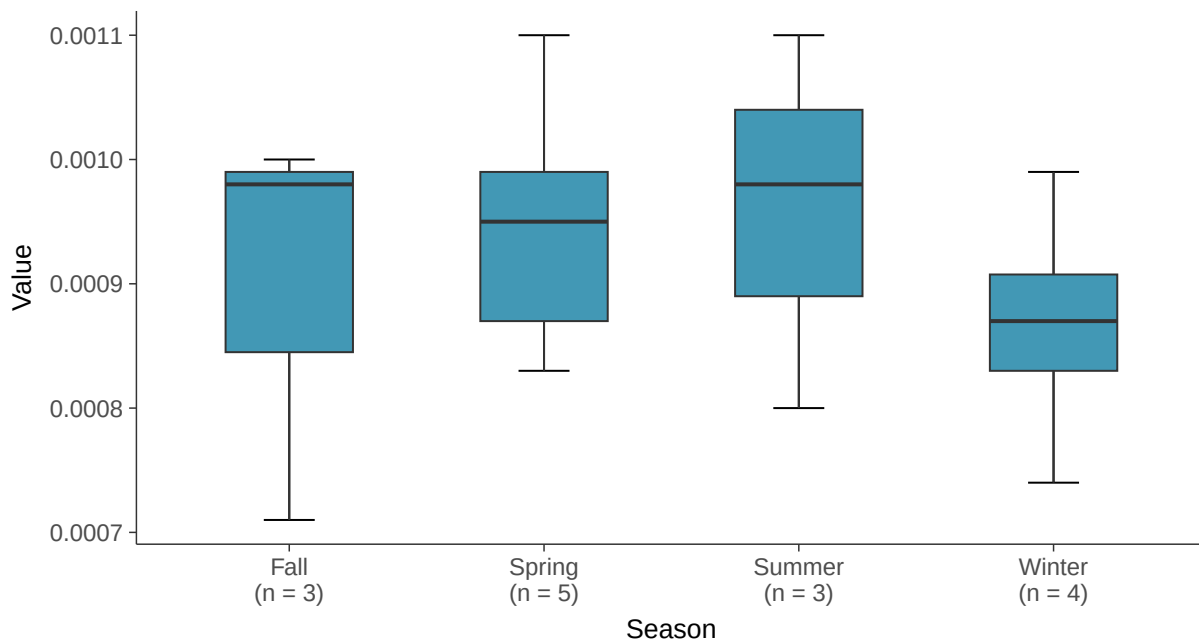
Boxplot

Cobalt, MW-07 (mg/L)

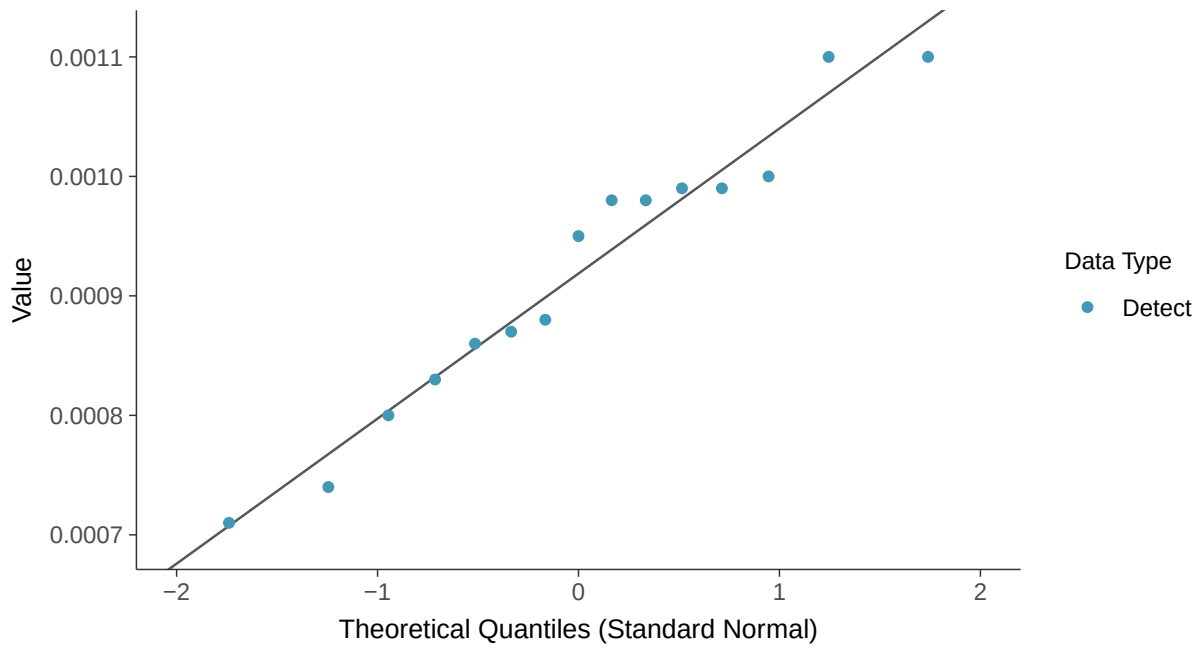


Boxplot by Season

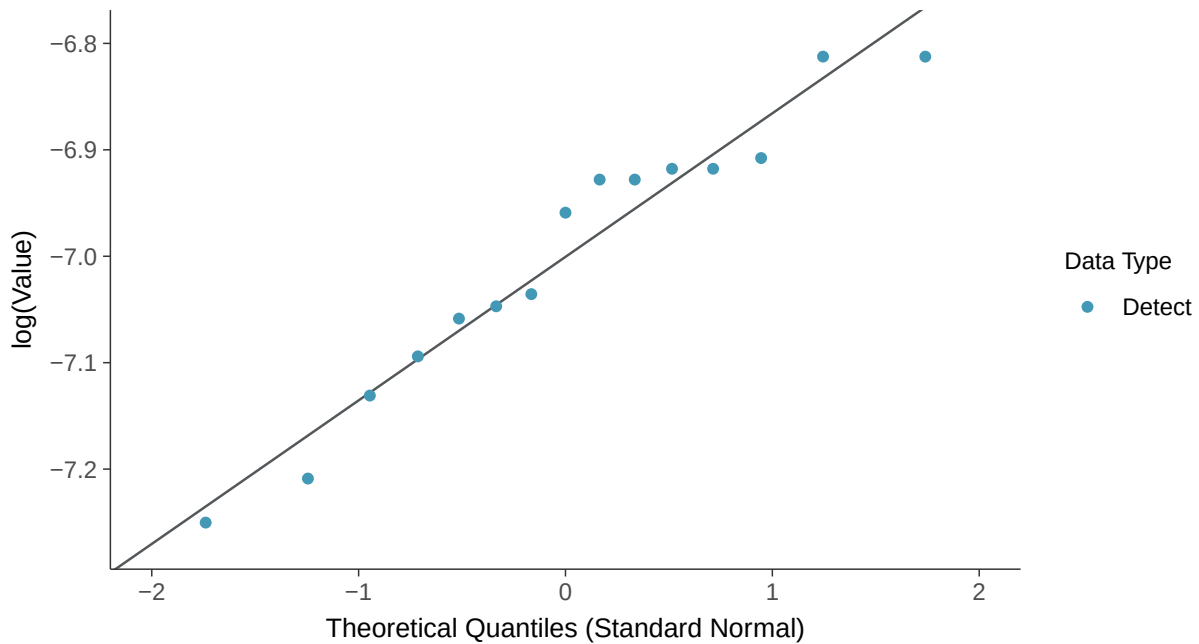
Cobalt, MW-07 (mg/L)

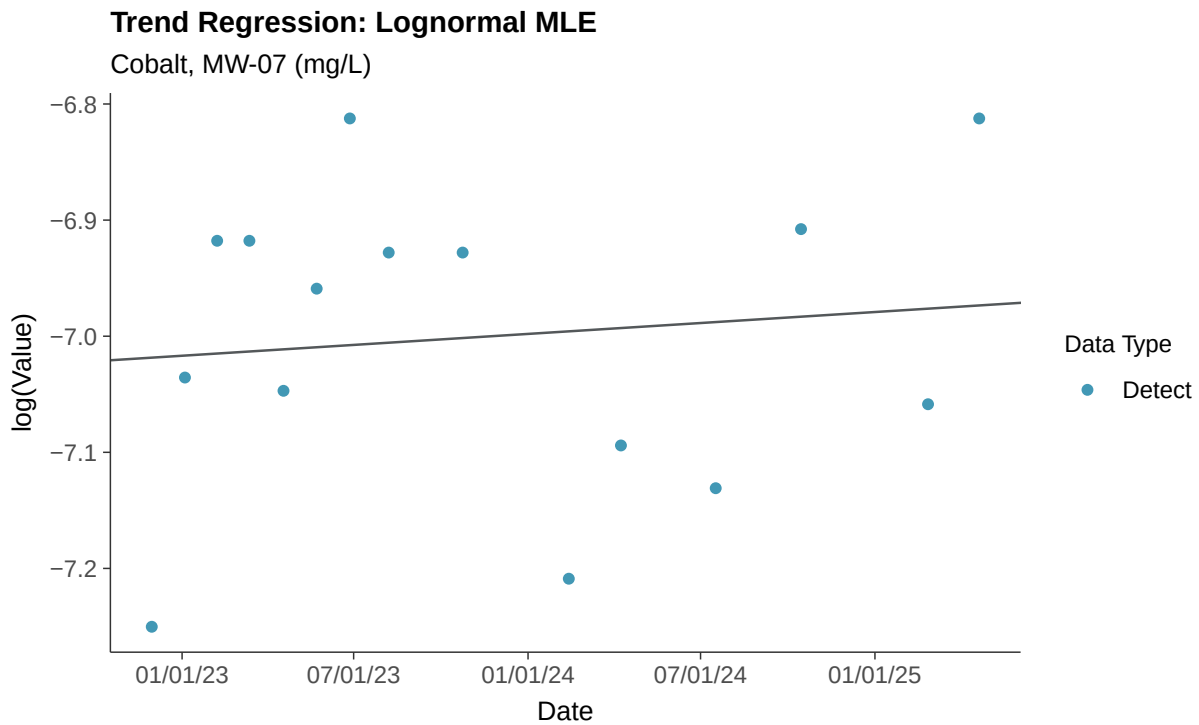
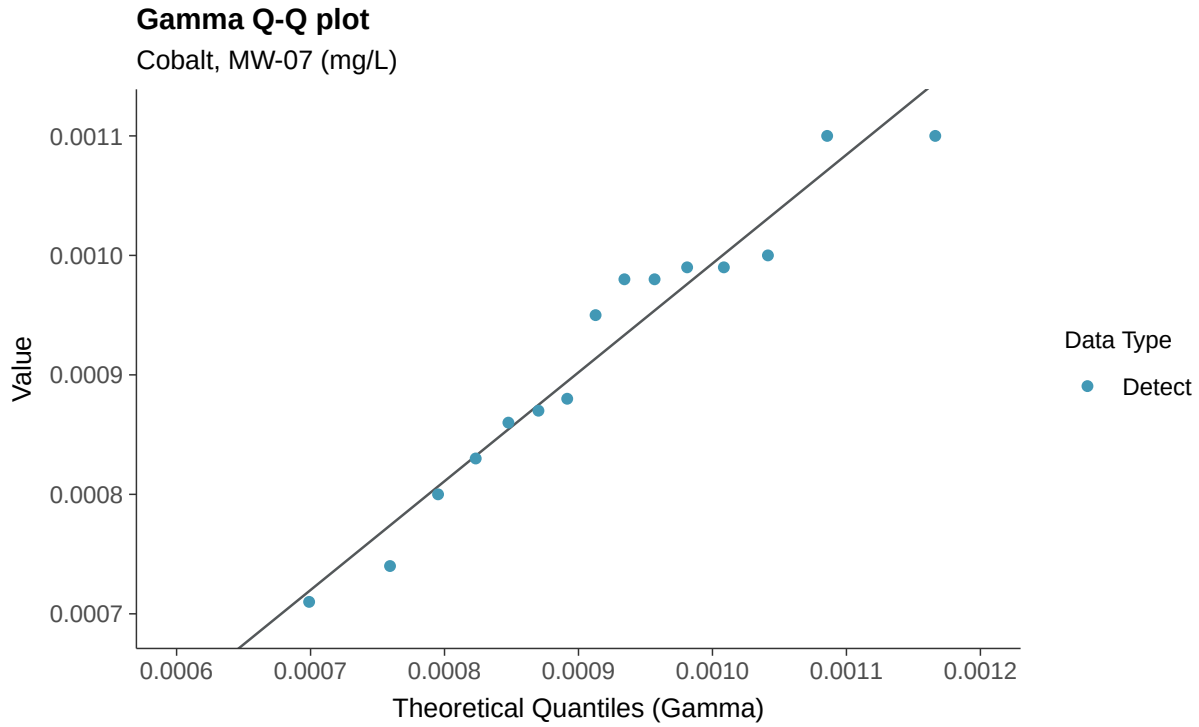


Normal Q-Q plot
Cobalt, MW-07 (mg/L)



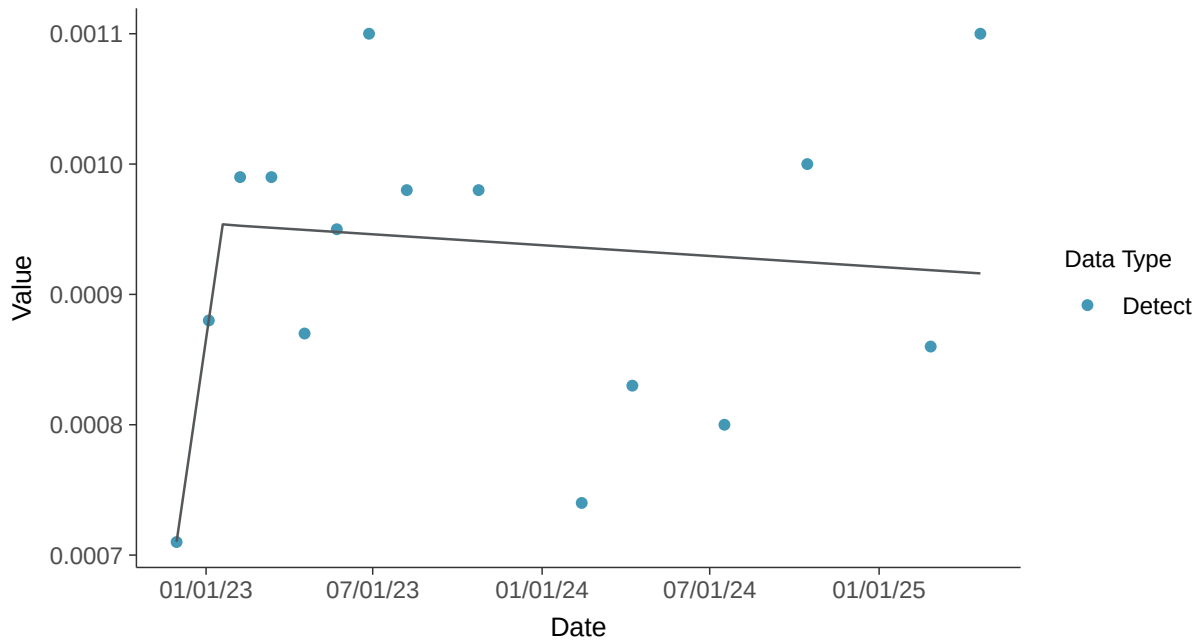
Lognormal Q-Q plot
Cobalt, MW-07 (mg/L)





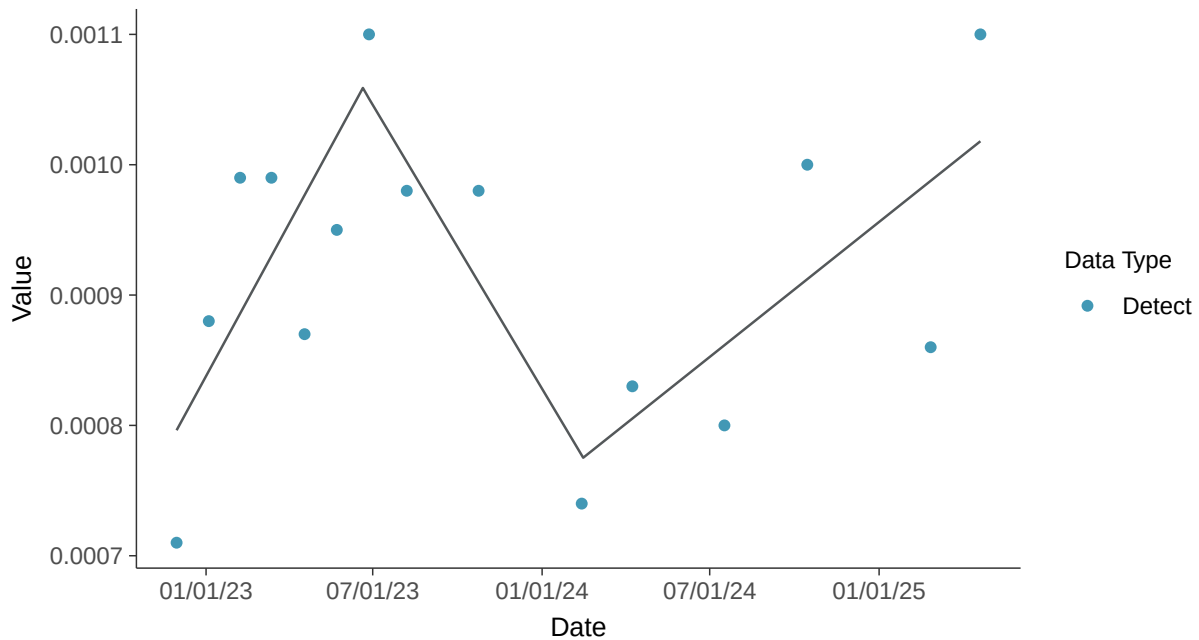
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-07 (mg/L)



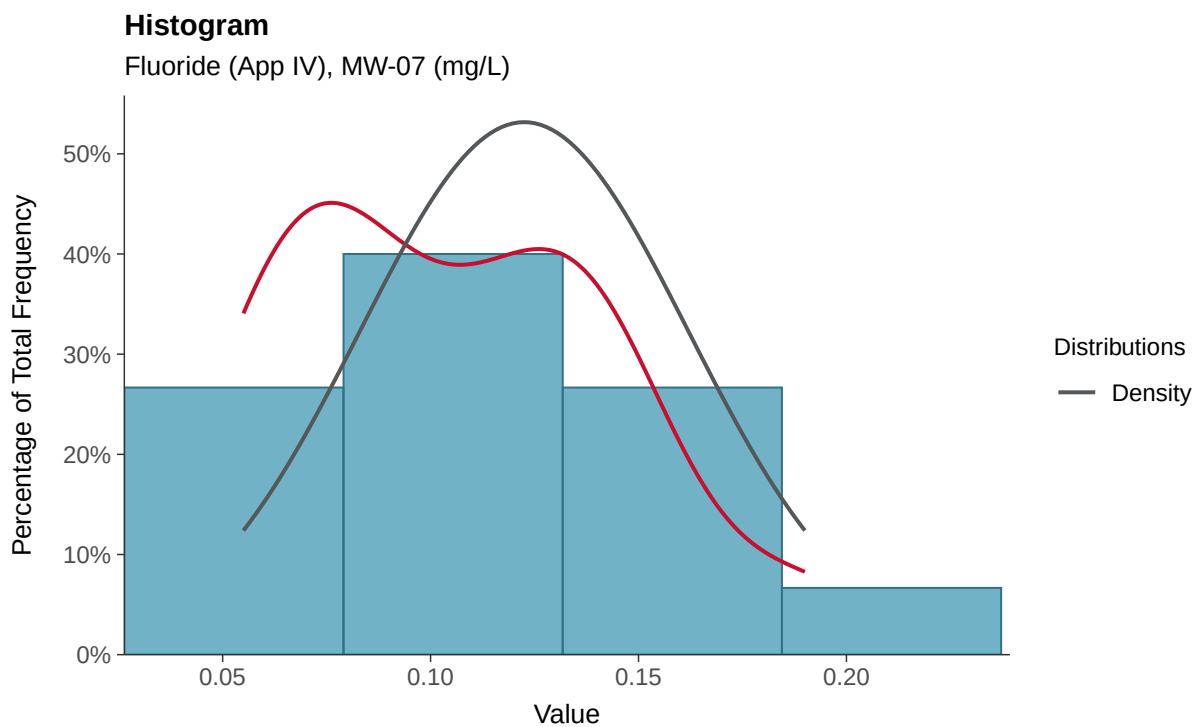
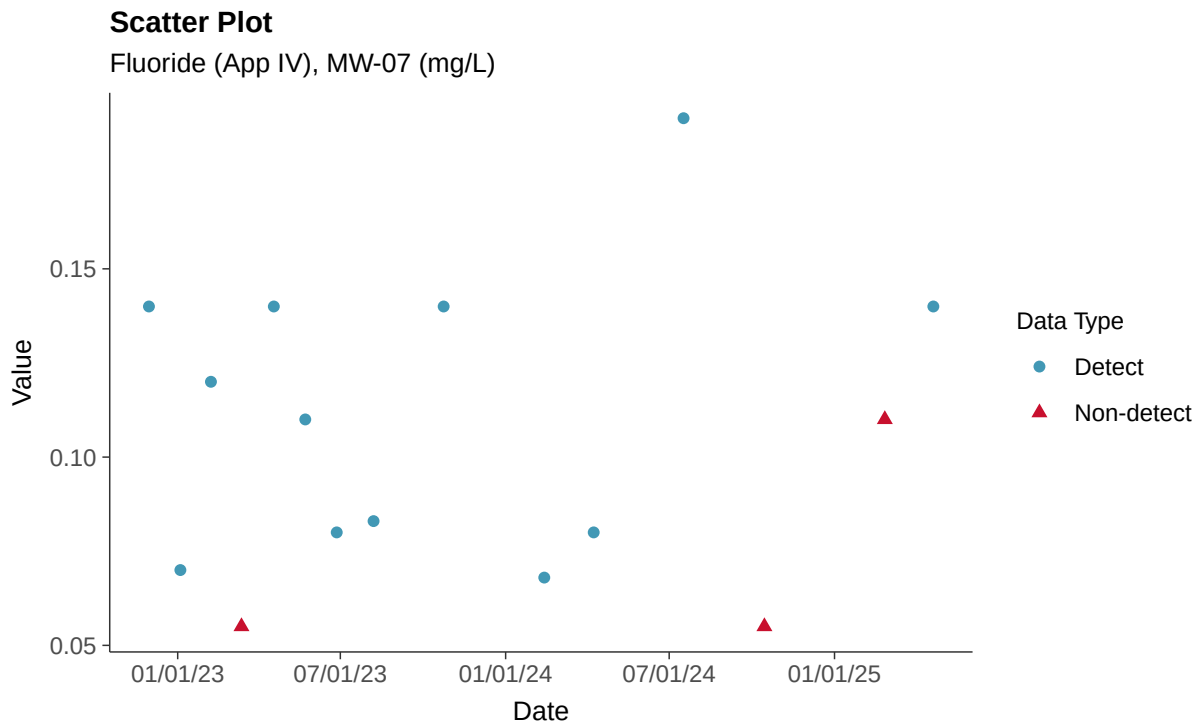
Trend Regression: Piecewise Linear-Linear-Linear

Cobalt, MW-07 (mg/L)



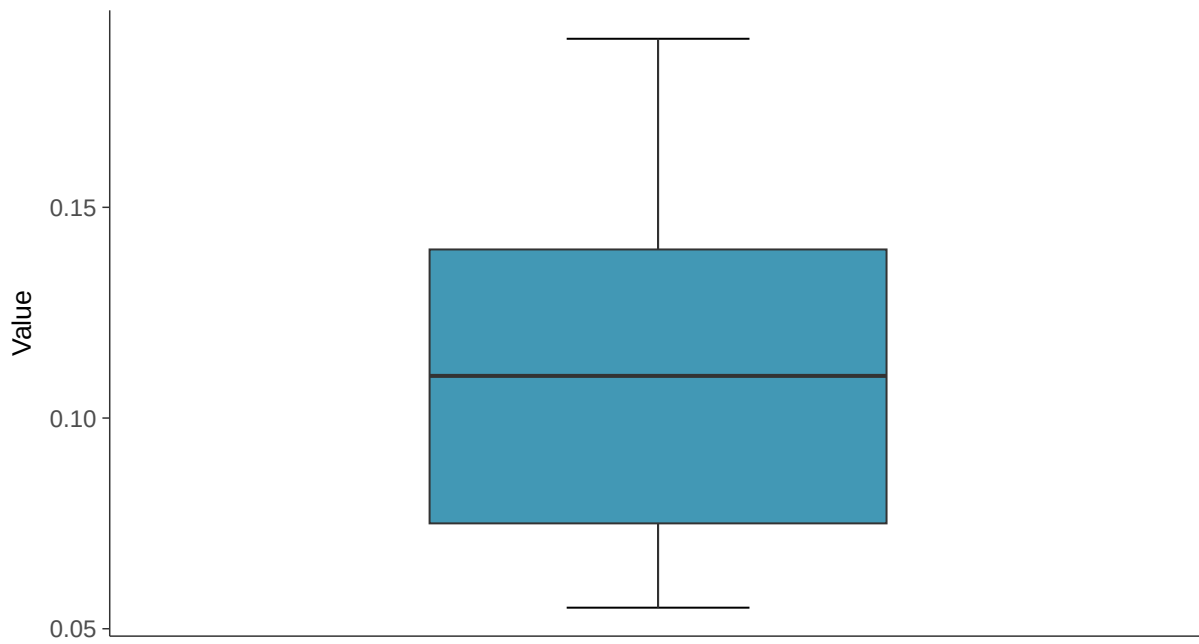
Appendix IV: Fluoride (App IV), MW-07

ID: 17_1_4_113



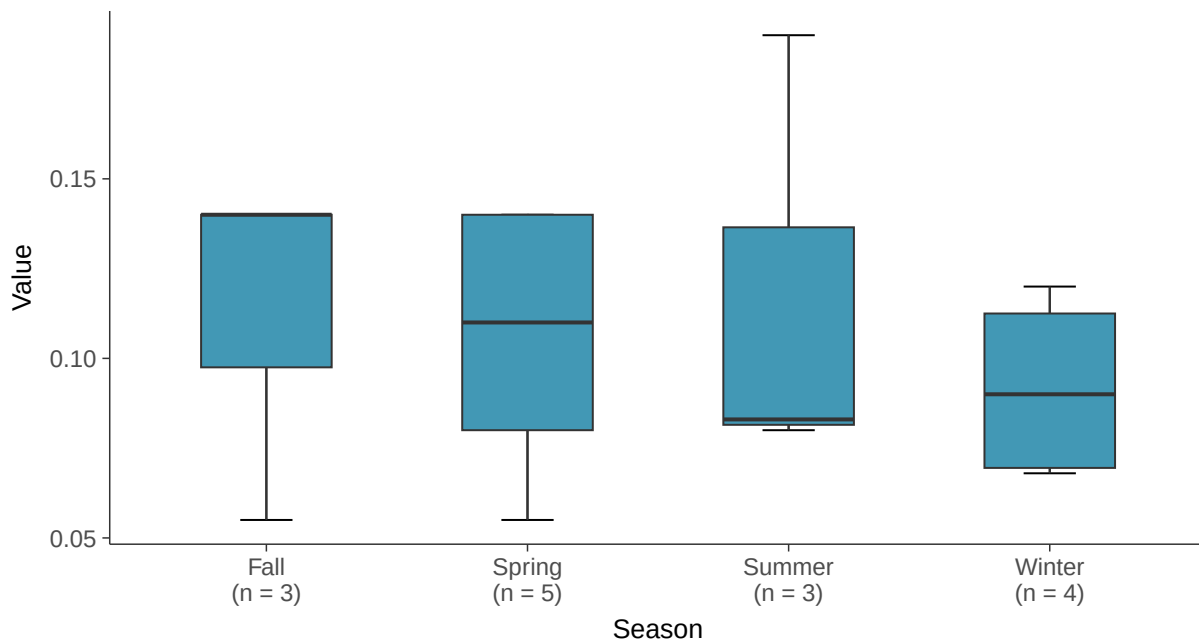
Boxplot

Fluoride (App IV), MW-07 (mg/L)



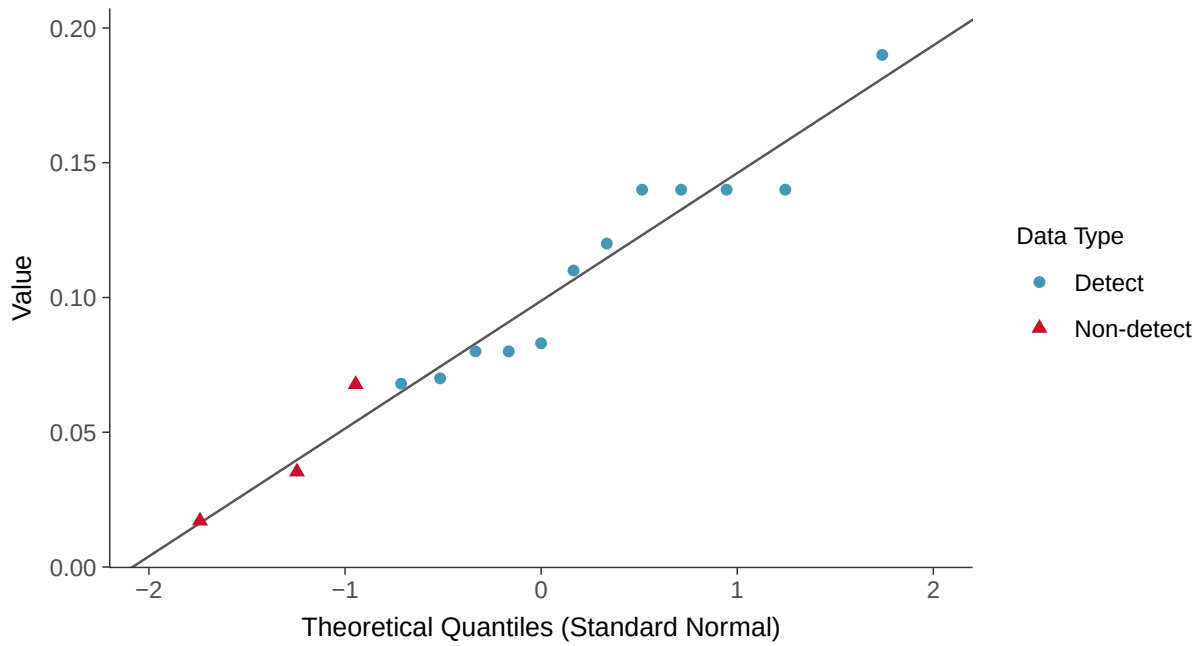
Boxplot by Season

Fluoride (App IV), MW-07 (mg/L)



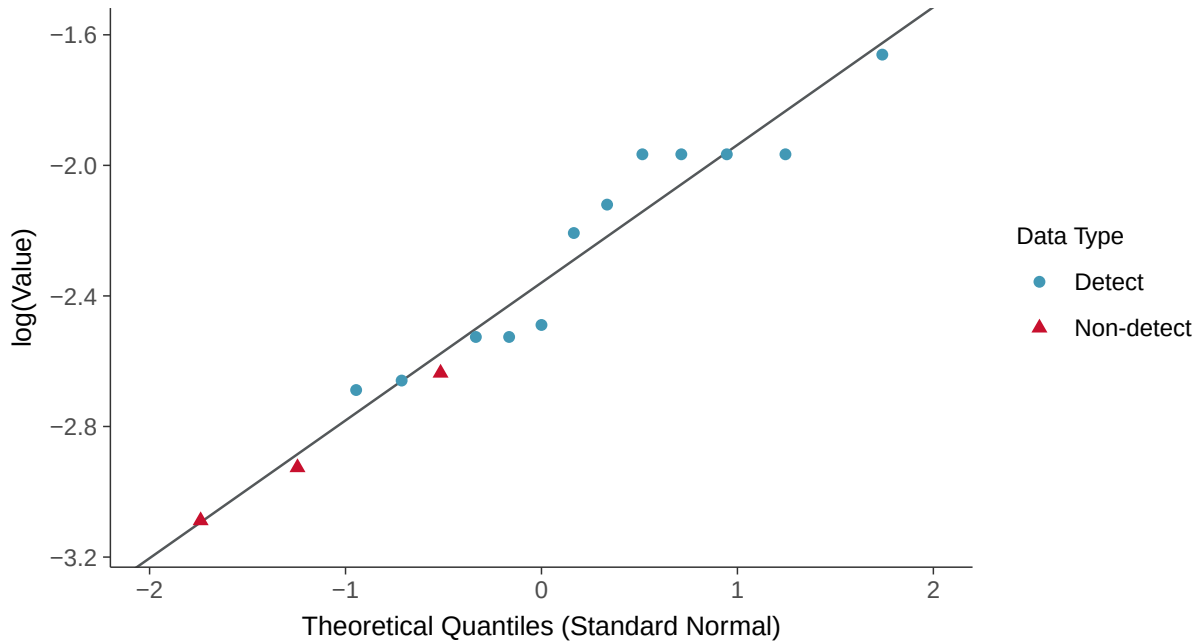
Normal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-07 (mg/L)



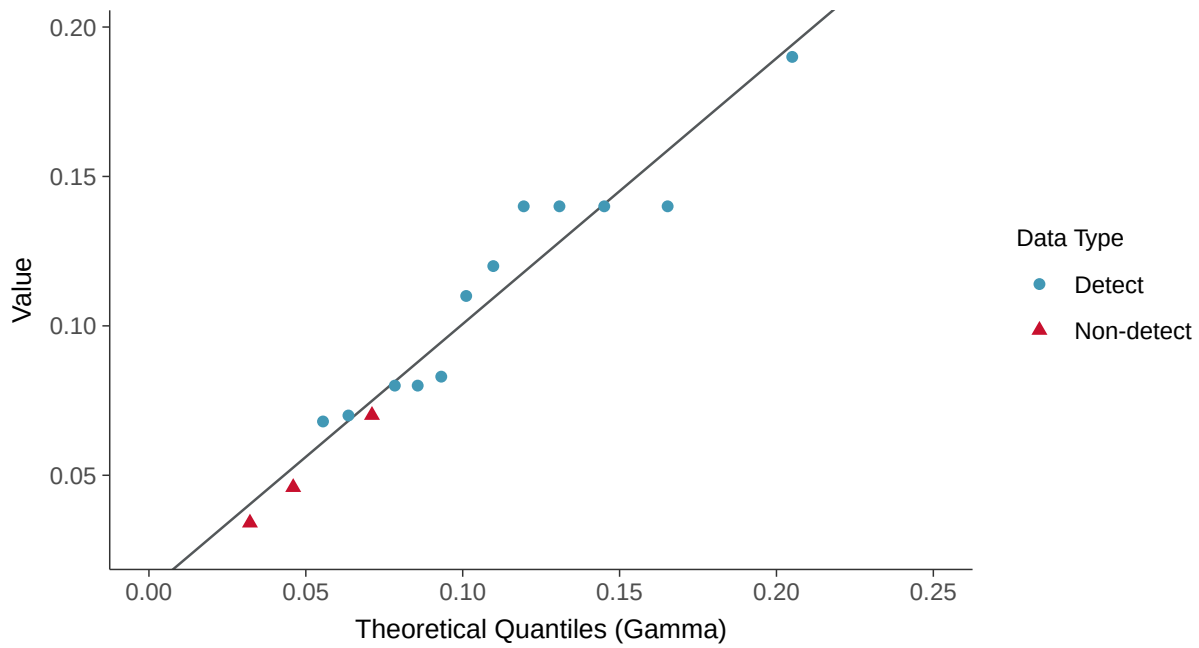
Lognormal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-07 (mg/L)



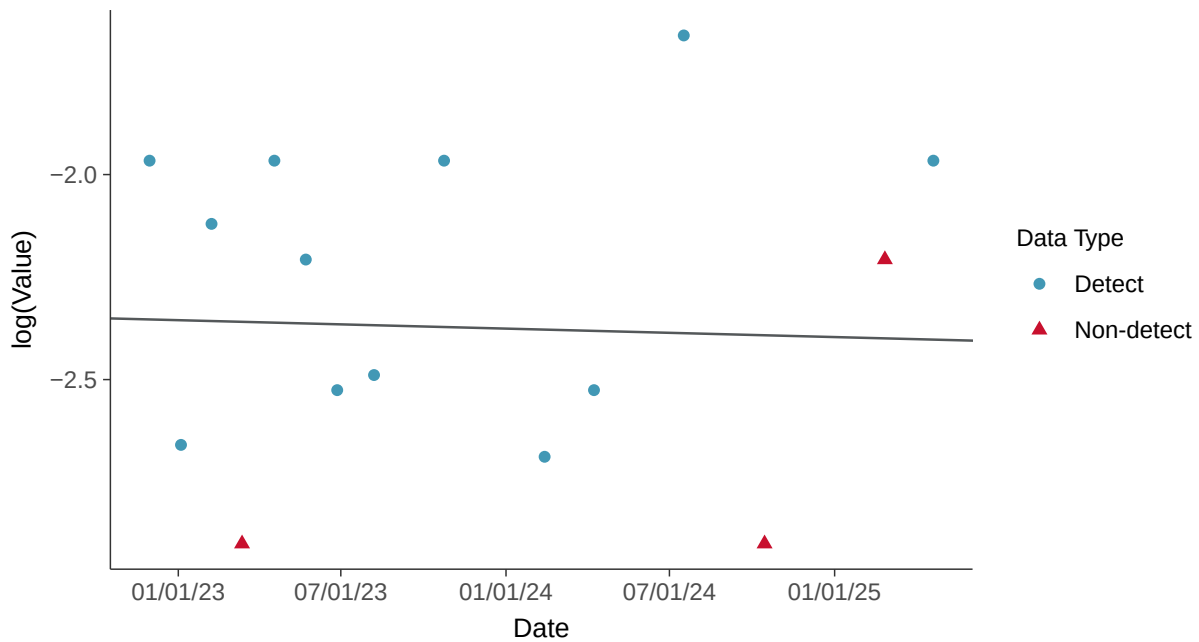
Gamma Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-07 (mg/L)



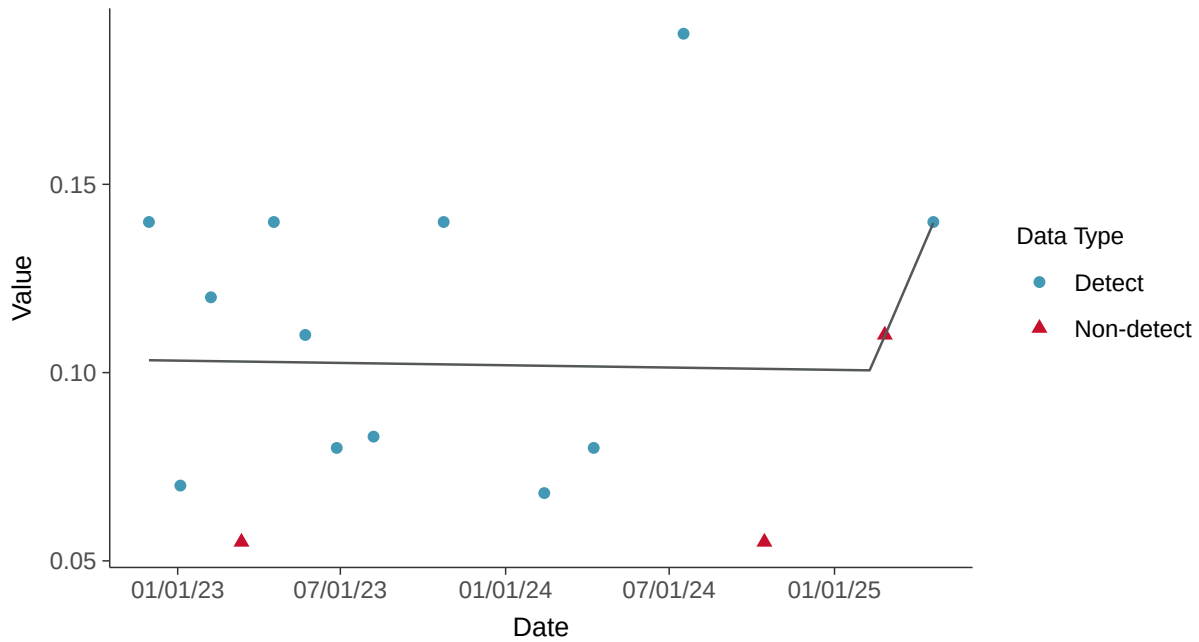
Trend Regression: Lognormal MLE

Fluoride (App IV), MW-07 (mg/L)



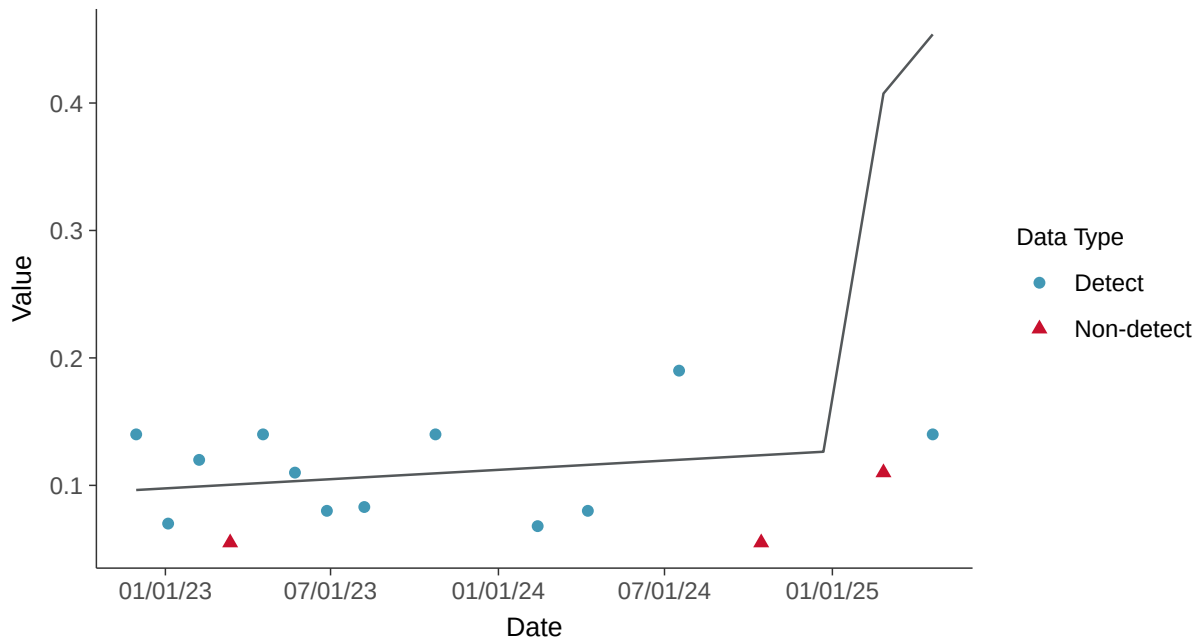
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-07 (mg/L)



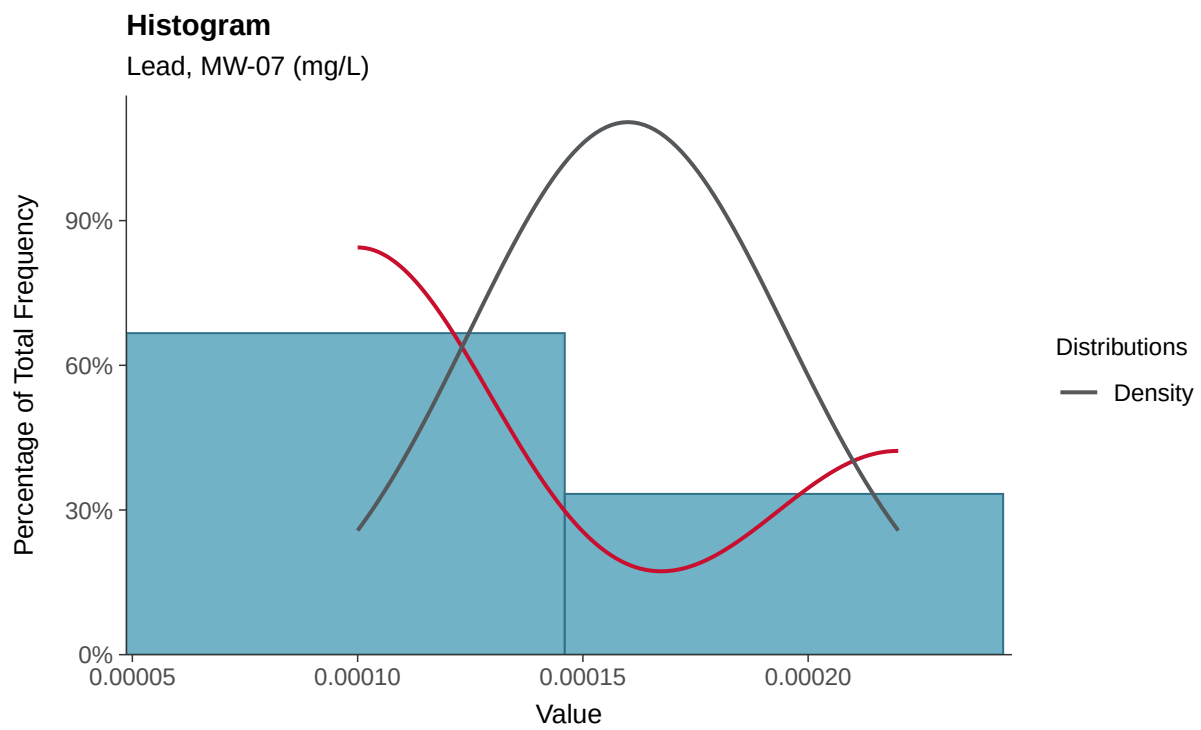
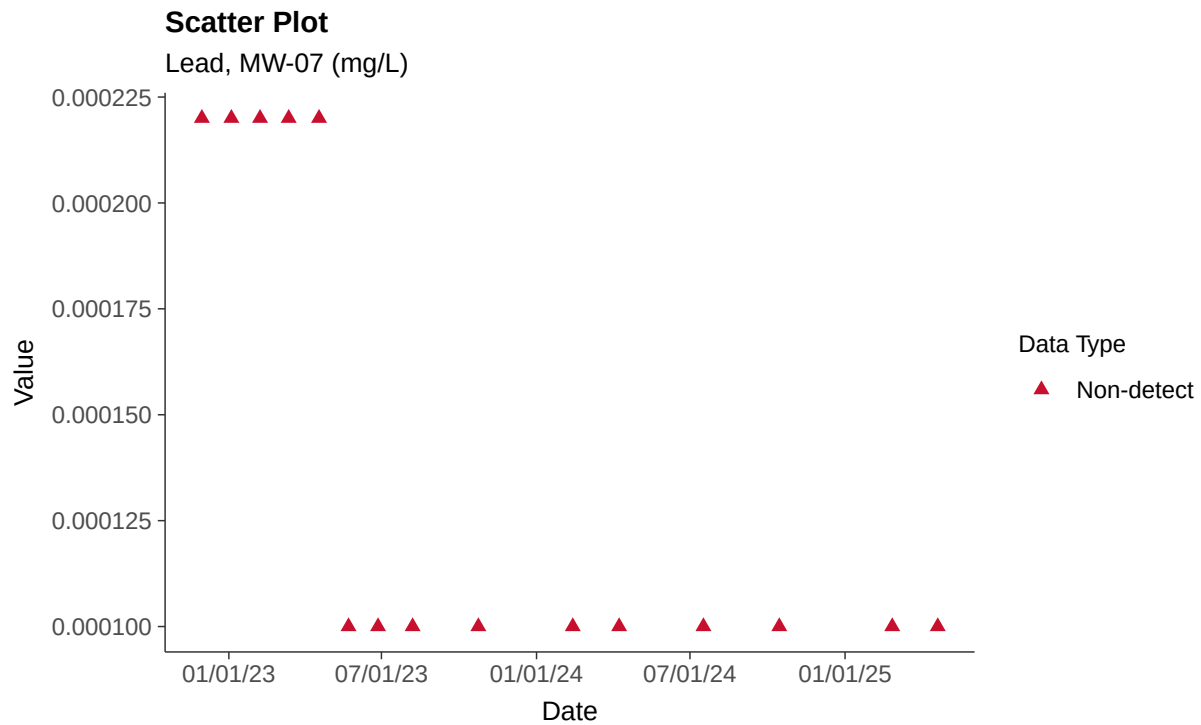
Trend Regression: Piecewise Linear-Linear-Linear

Fluoride (App IV), MW-07 (mg/L)



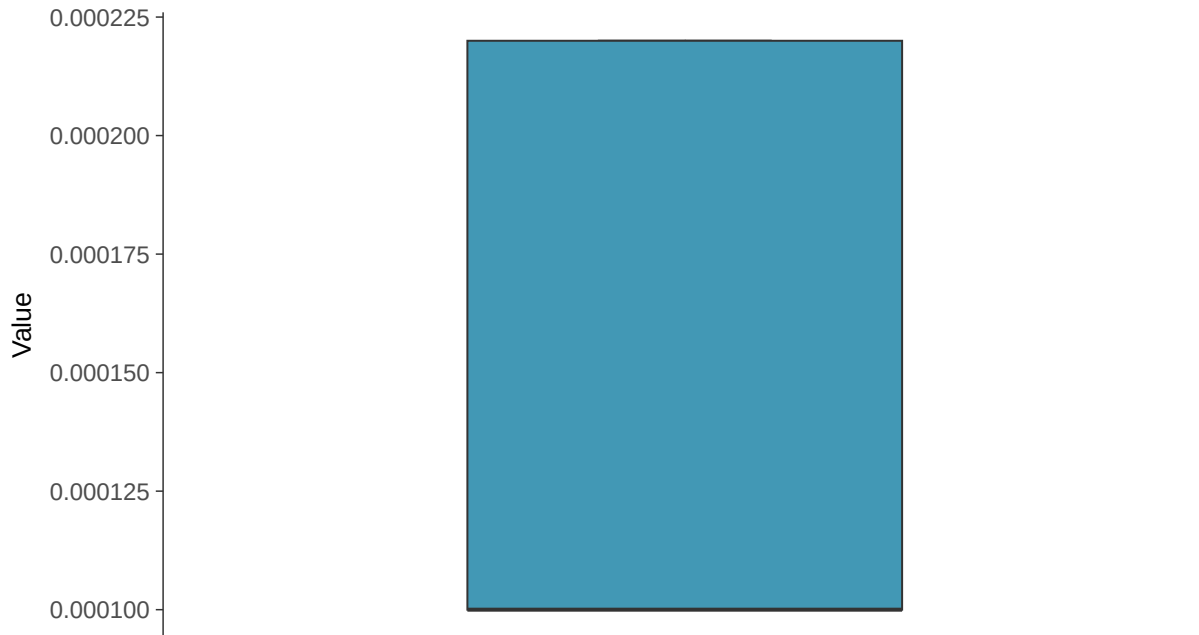
Appendix IV: Lead, MW-07

ID: 17_1_4_115



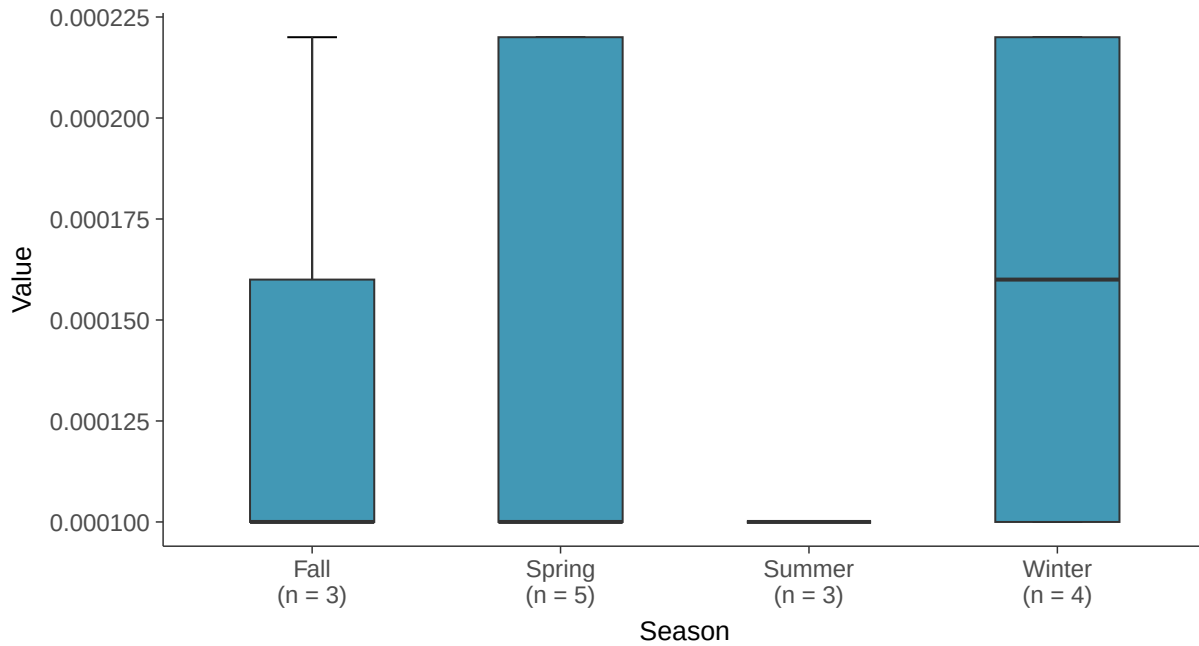
Boxplot

Lead, MW-07 (mg/L)



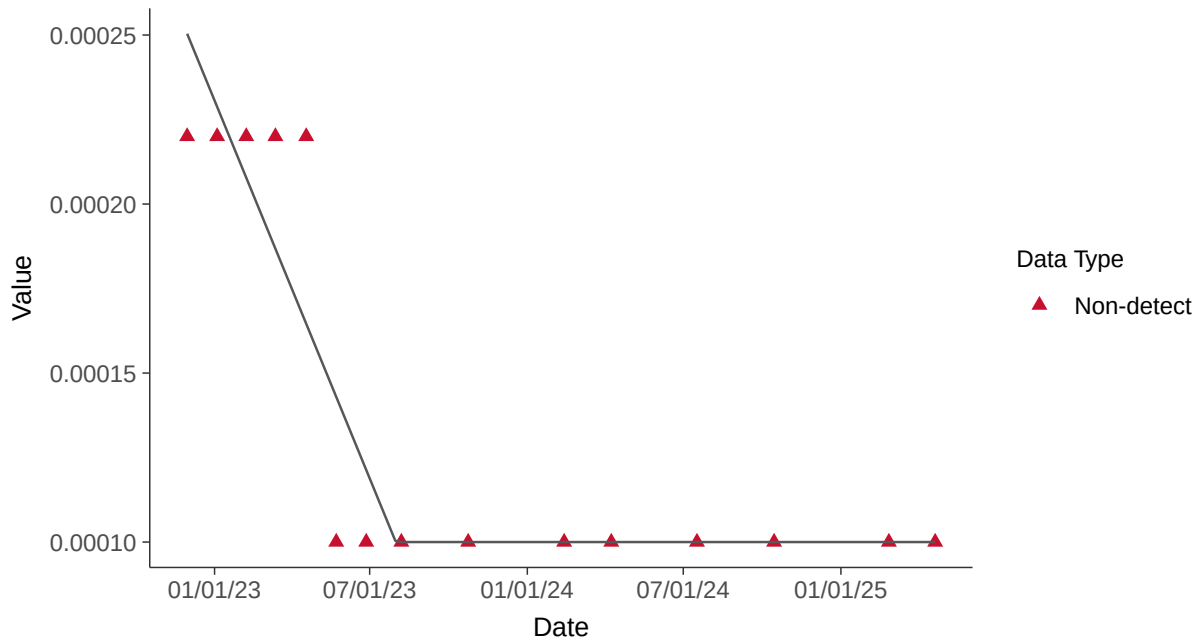
Boxplot by Season

Lead, MW-07 (mg/L)



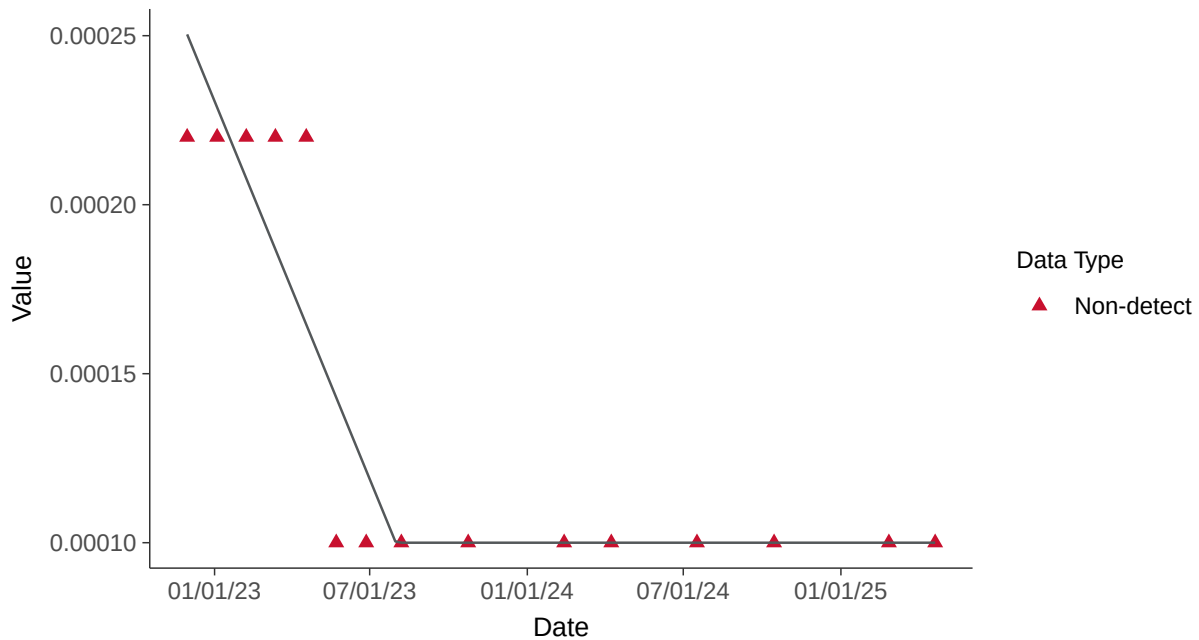
Trend Regression: Piecewise Linear-Linear

Lead, MW-07 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Lead, MW-07 (mg/L)

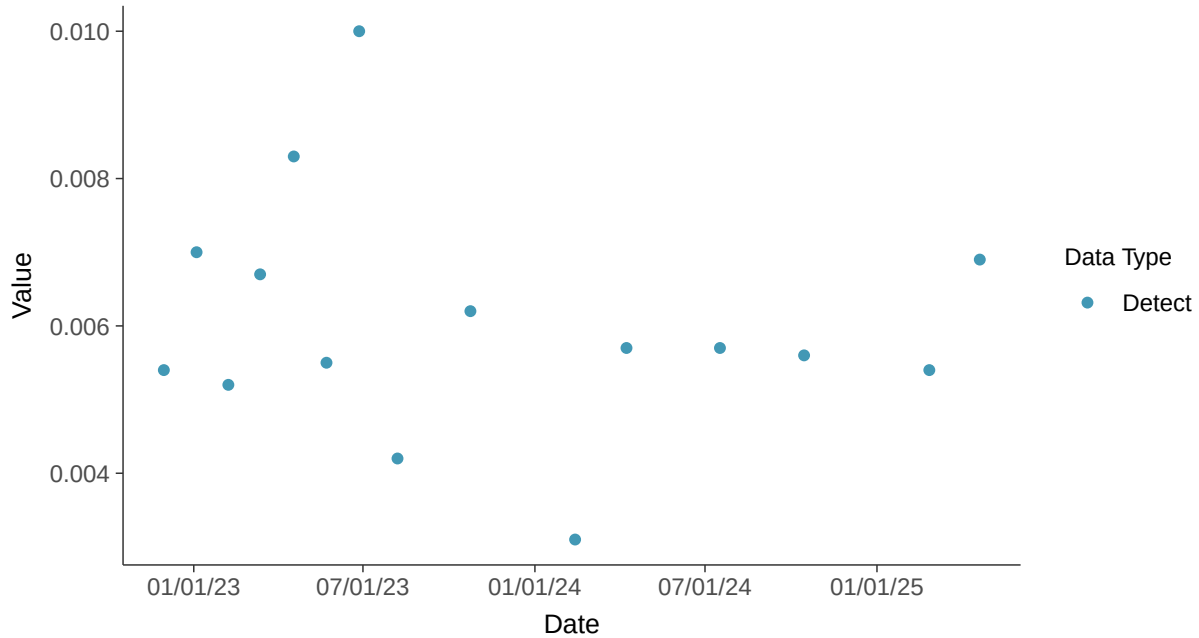


Appendix IV: Lithium, MW-07

ID: 17_1_4_116

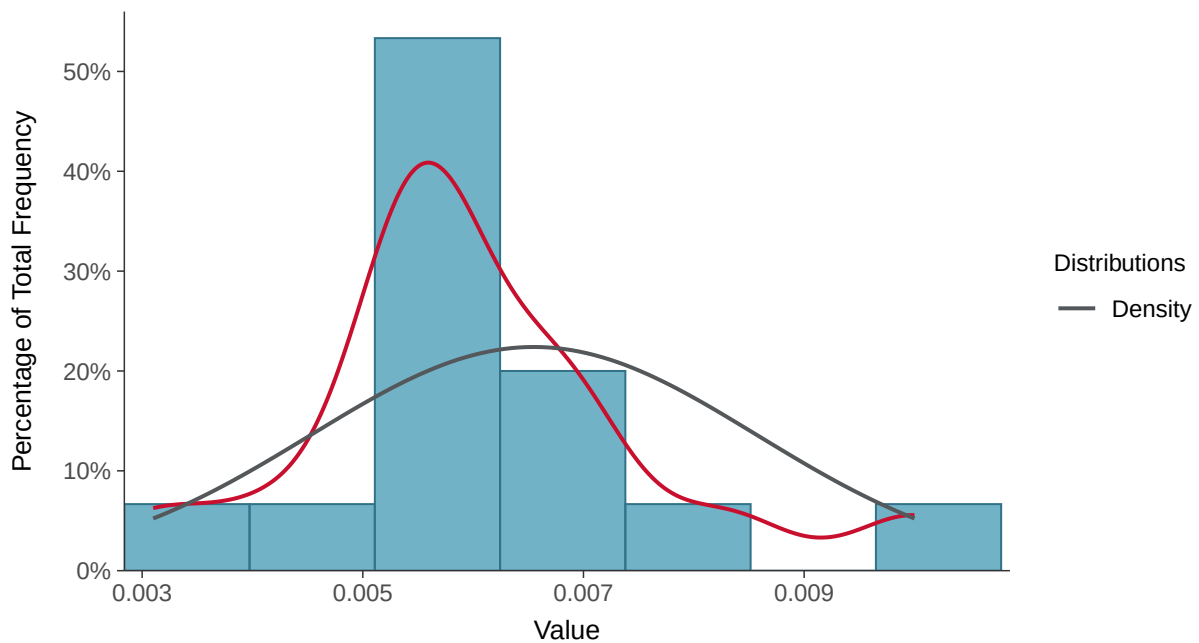
Scatter Plot

Lithium, MW-07 (mg/L)



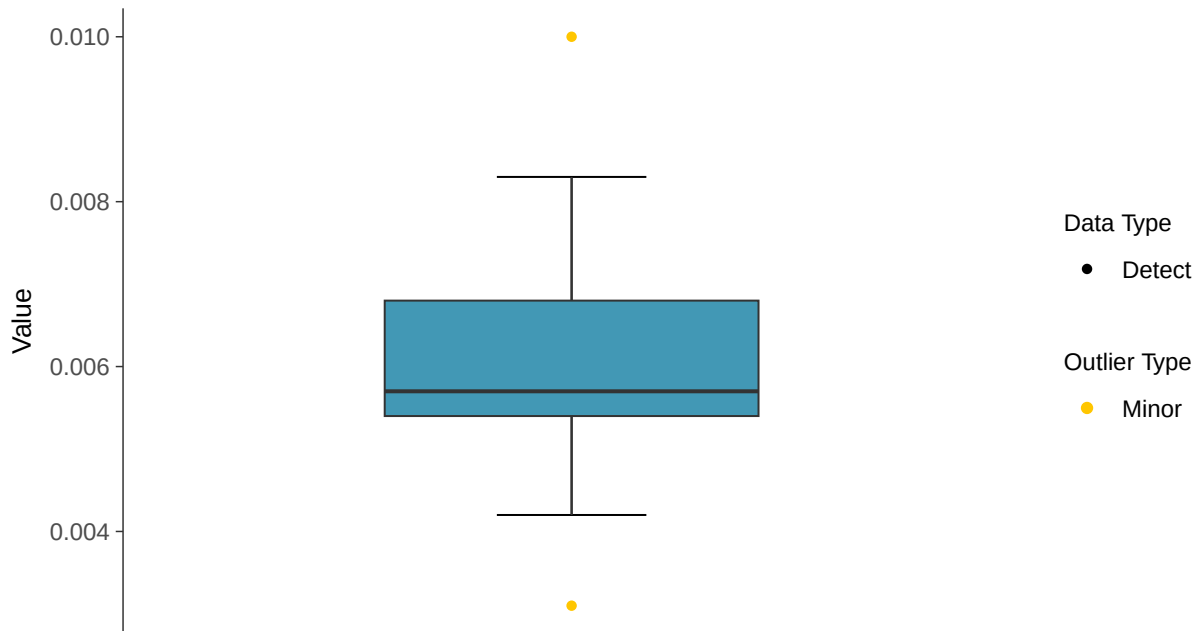
Histogram

Lithium, MW-07 (mg/L)



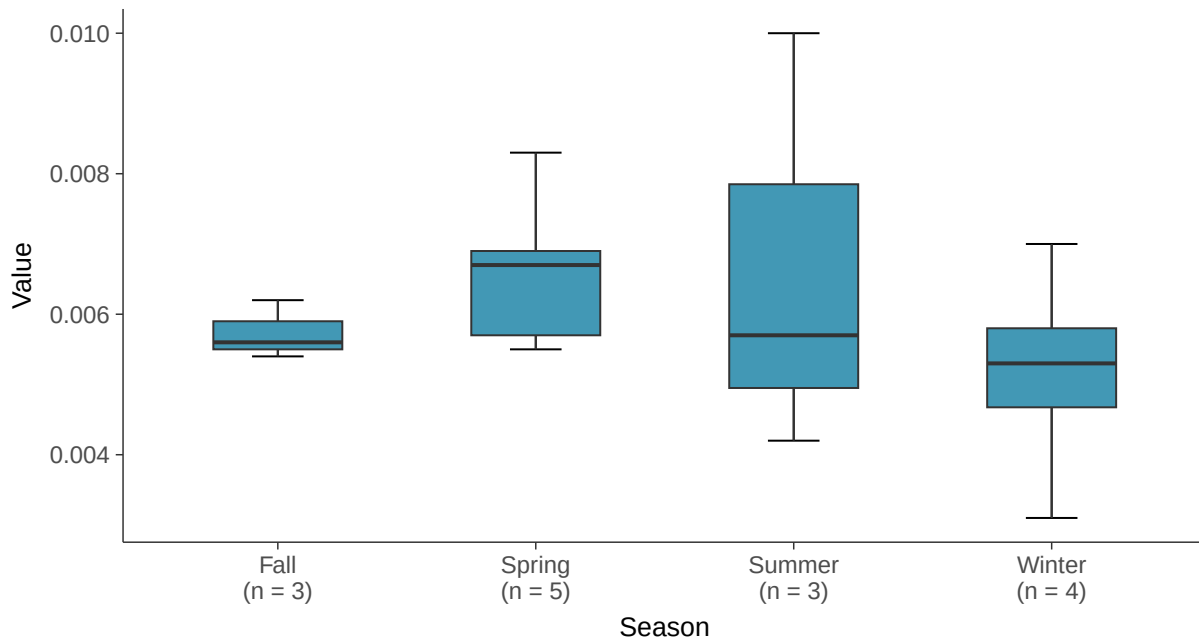
Boxplot

Lithium, MW-07 (mg/L)



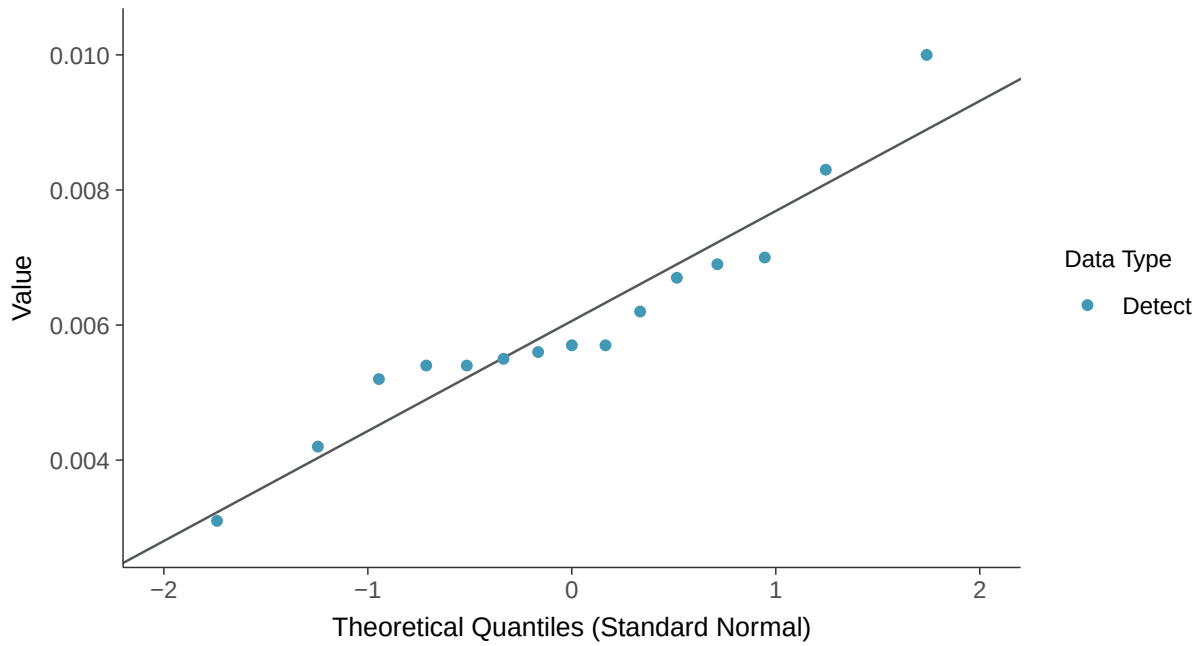
Boxplot by Season

Lithium, MW-07 (mg/L)



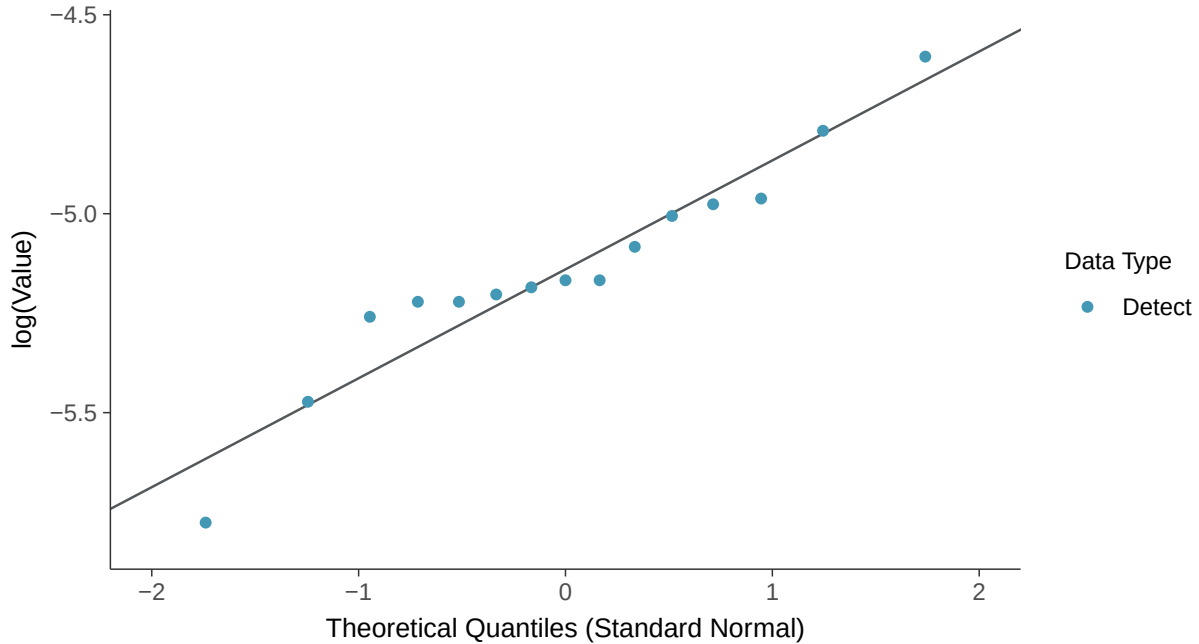
Normal Q-Q plot

Lithium, MW-07 (mg/L)



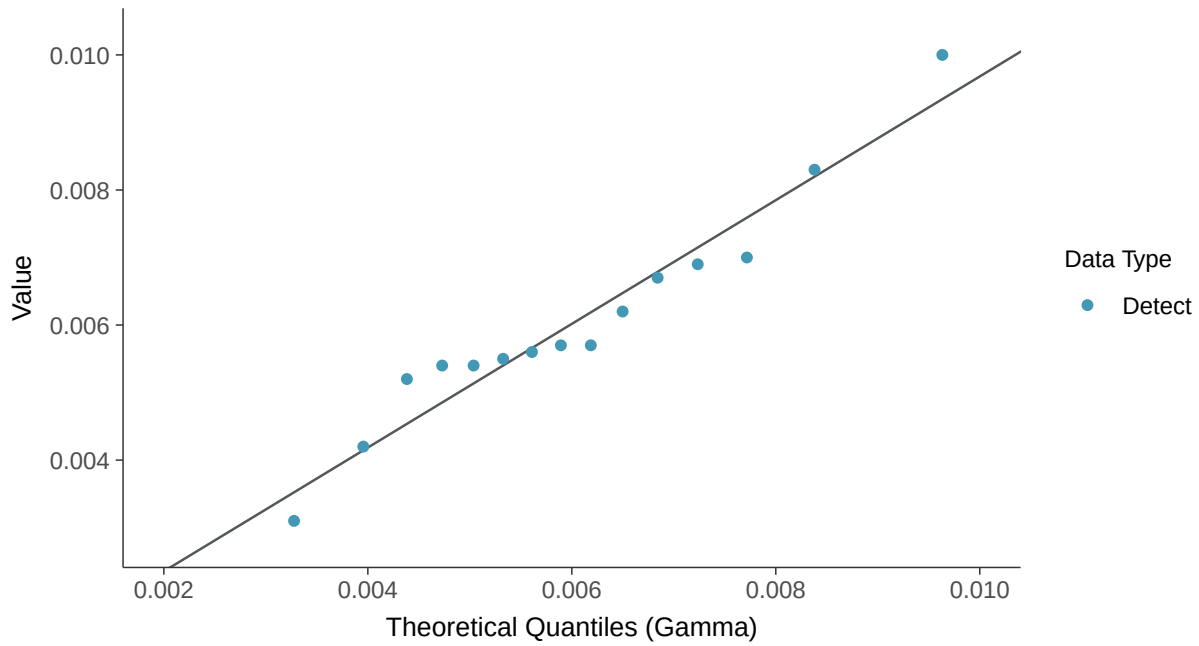
Lognormal Q-Q plot

Lithium, MW-07 (mg/L)



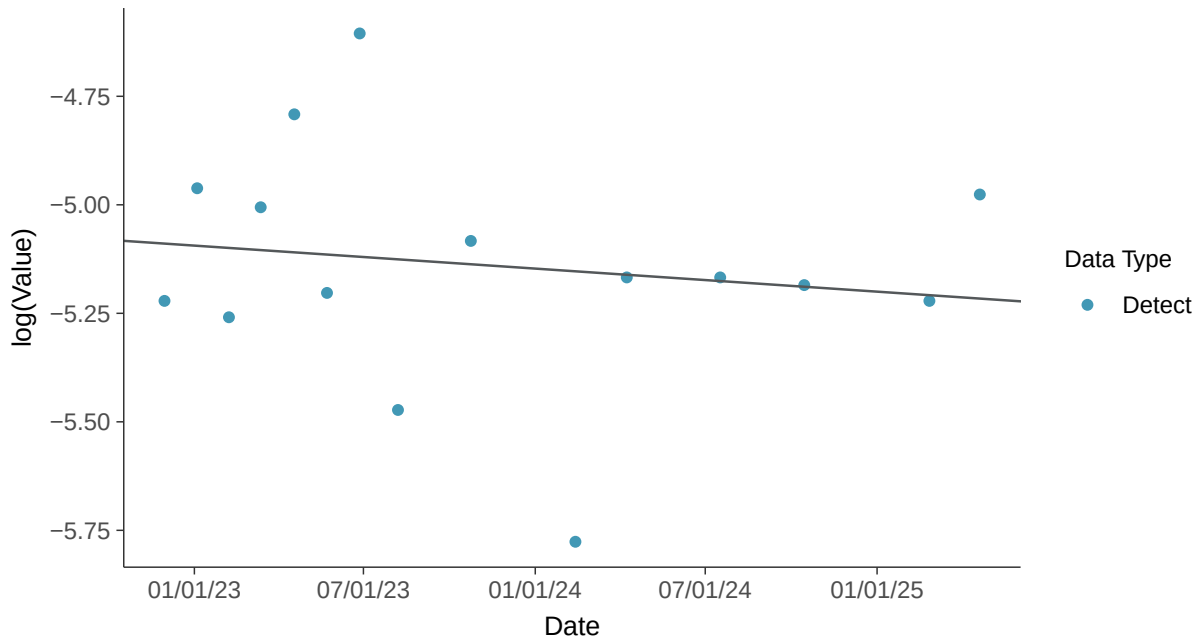
Gamma Q-Q plot

Lithium, MW-07 (mg/L)



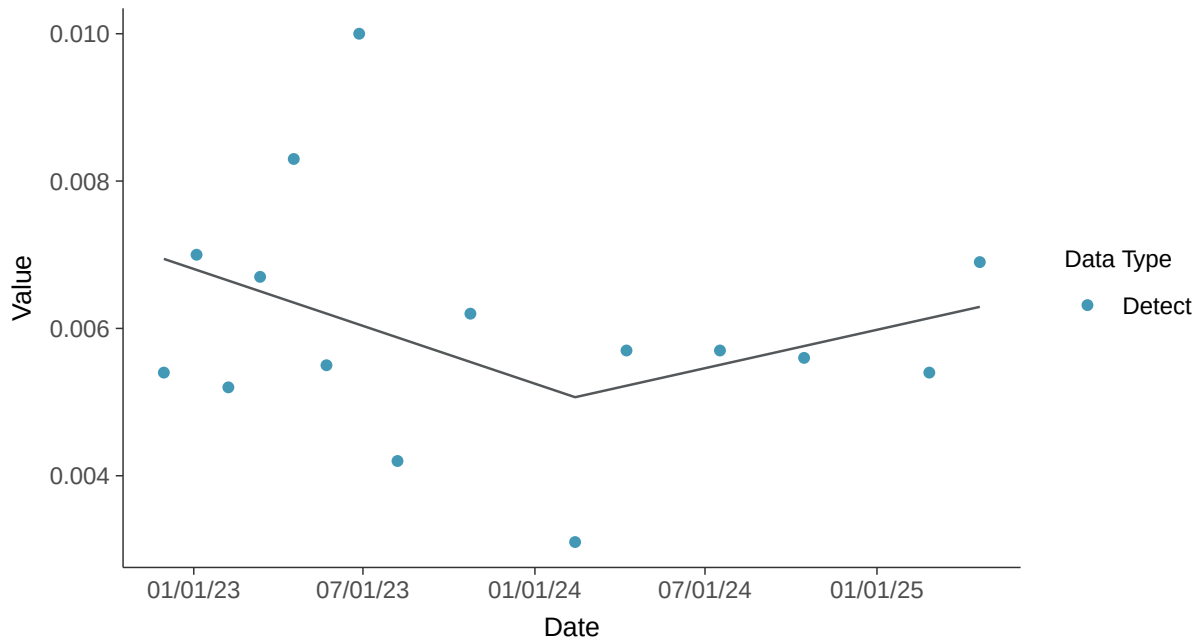
Trend Regression: Lognormal MLE

Lithium, MW-07 (mg/L)



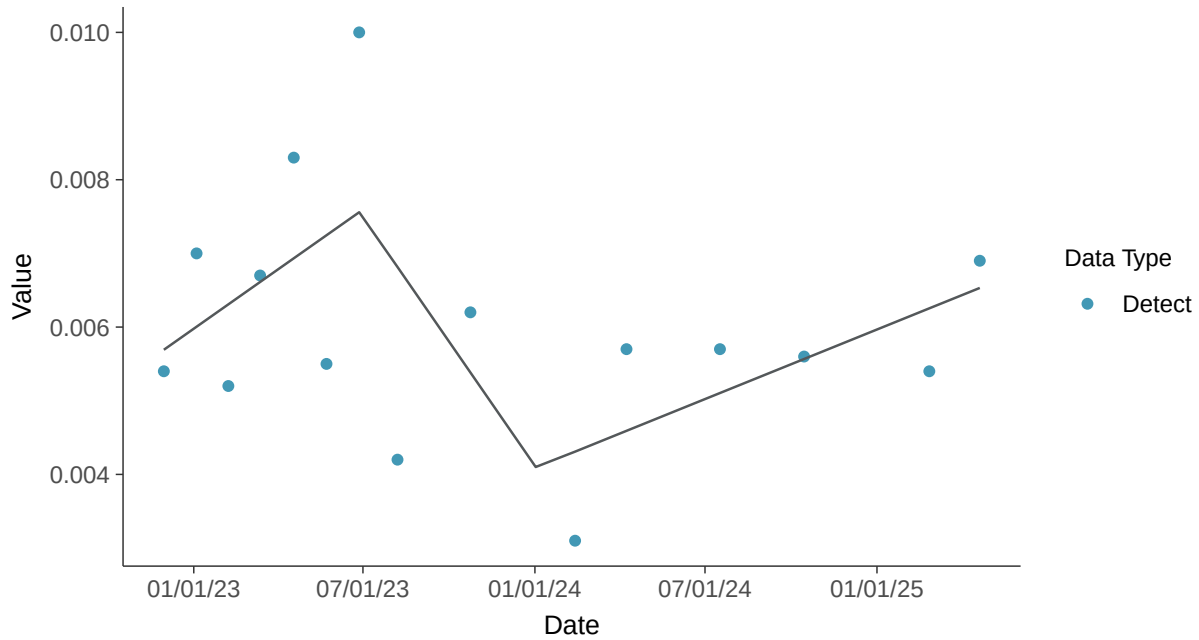
Trend Regression: Piecewise Linear-Linear

Lithium, MW-07 (mg/L)



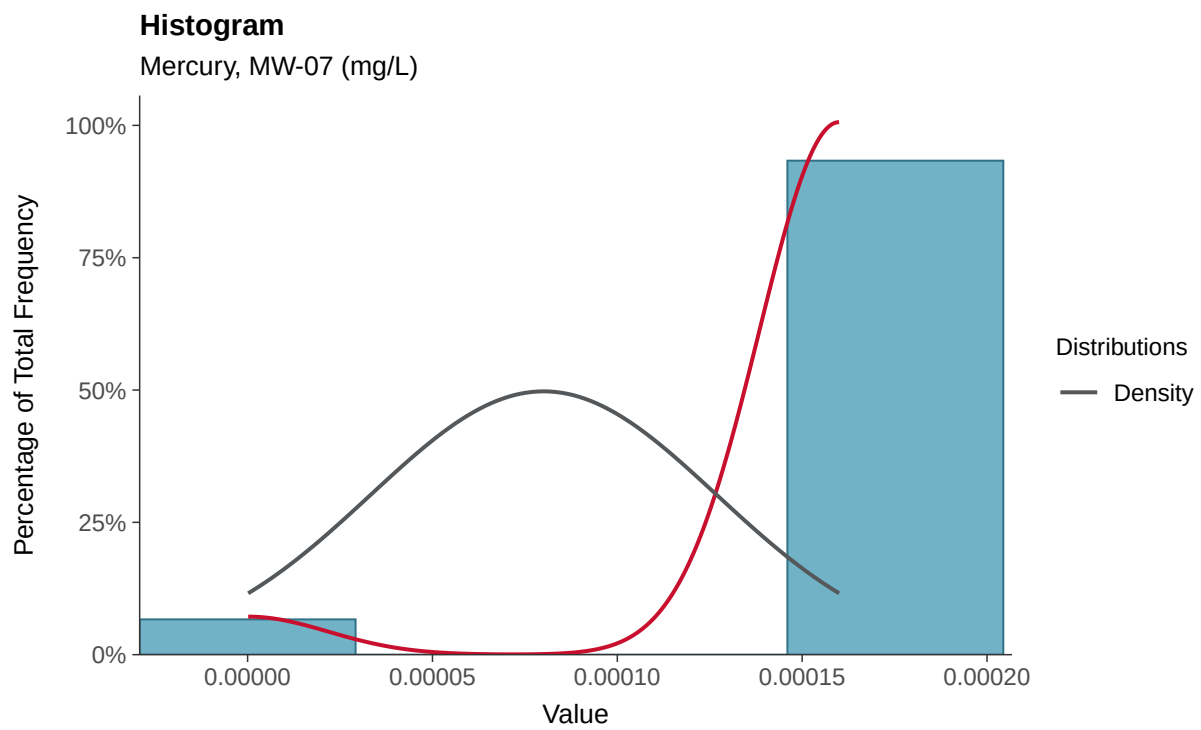
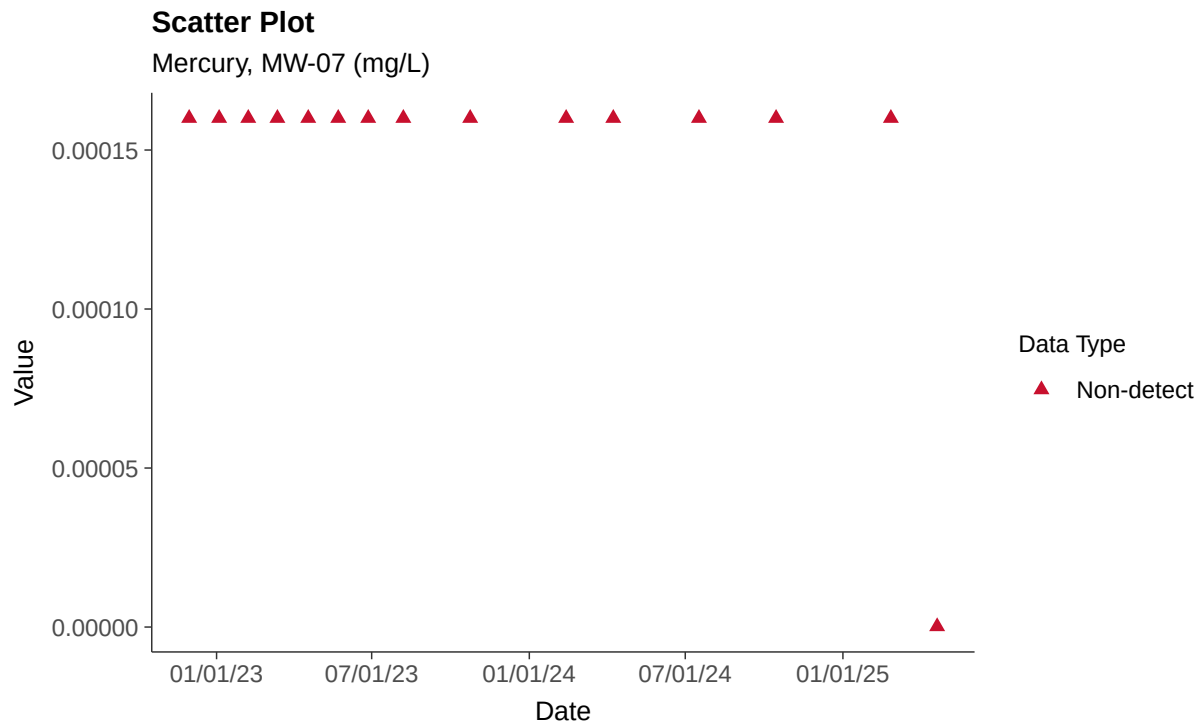
Trend Regression: Piecewise Linear-Linear-Linear

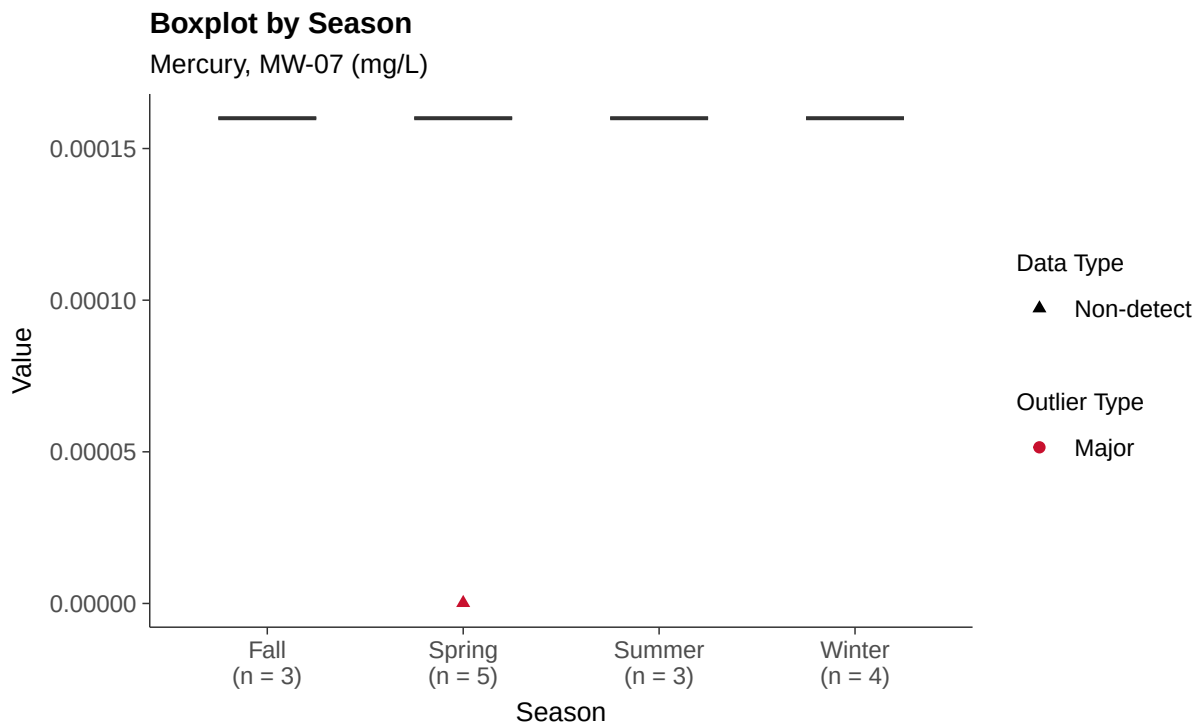
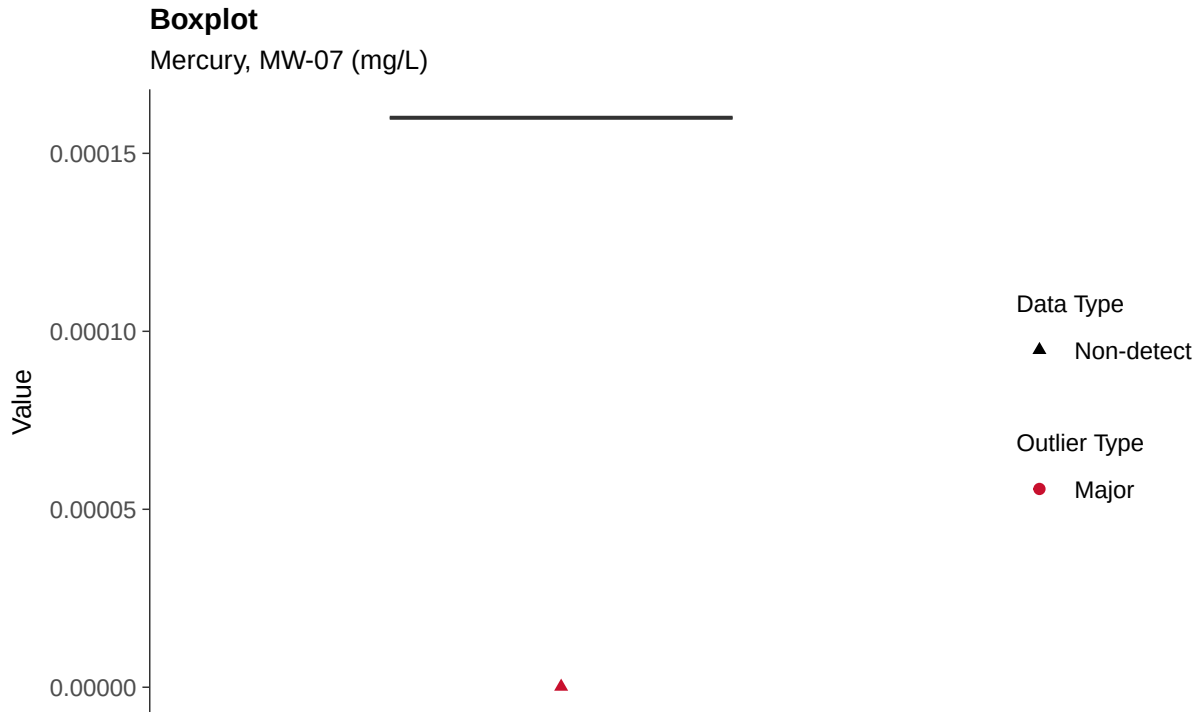
Lithium, MW-07 (mg/L)

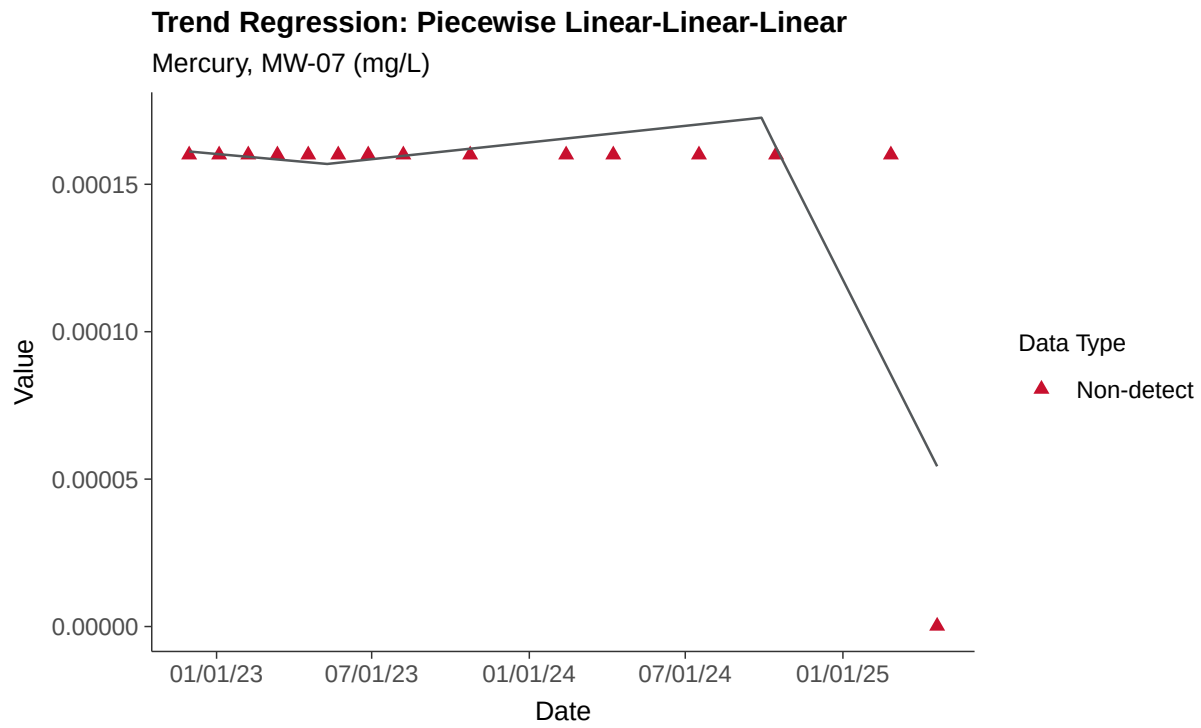


Appendix IV: Mercury, MW-07

ID: 17_1_4_117

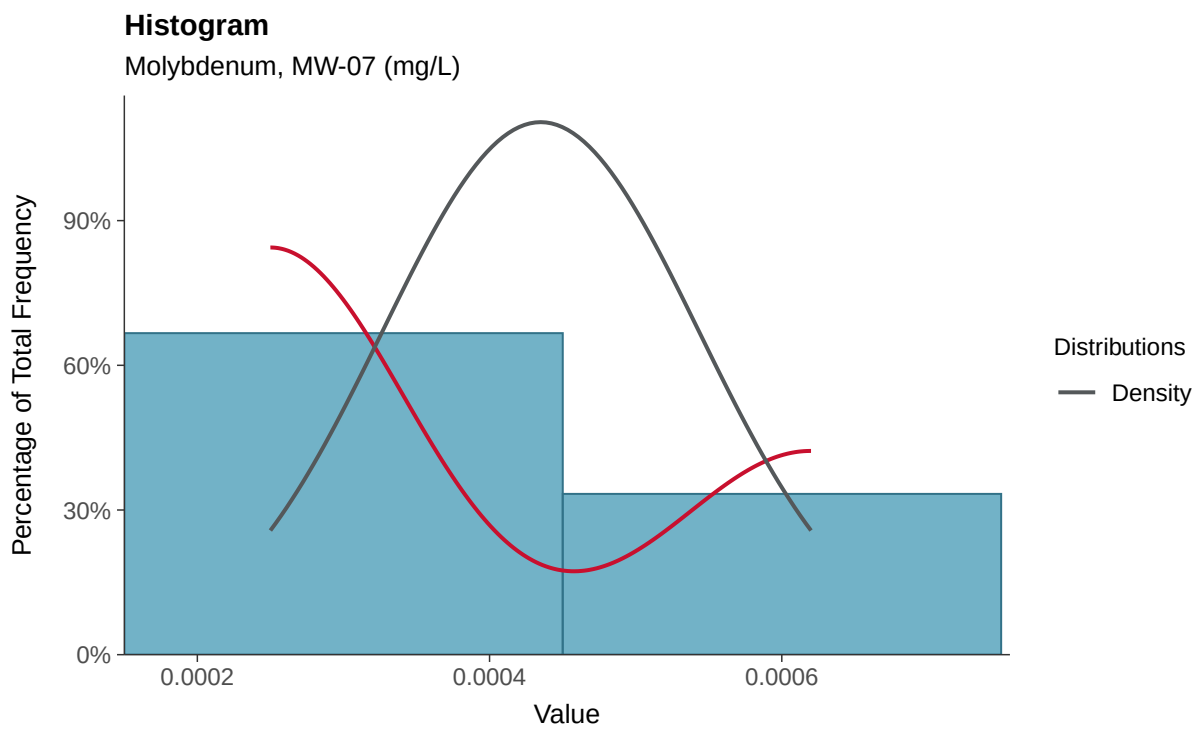
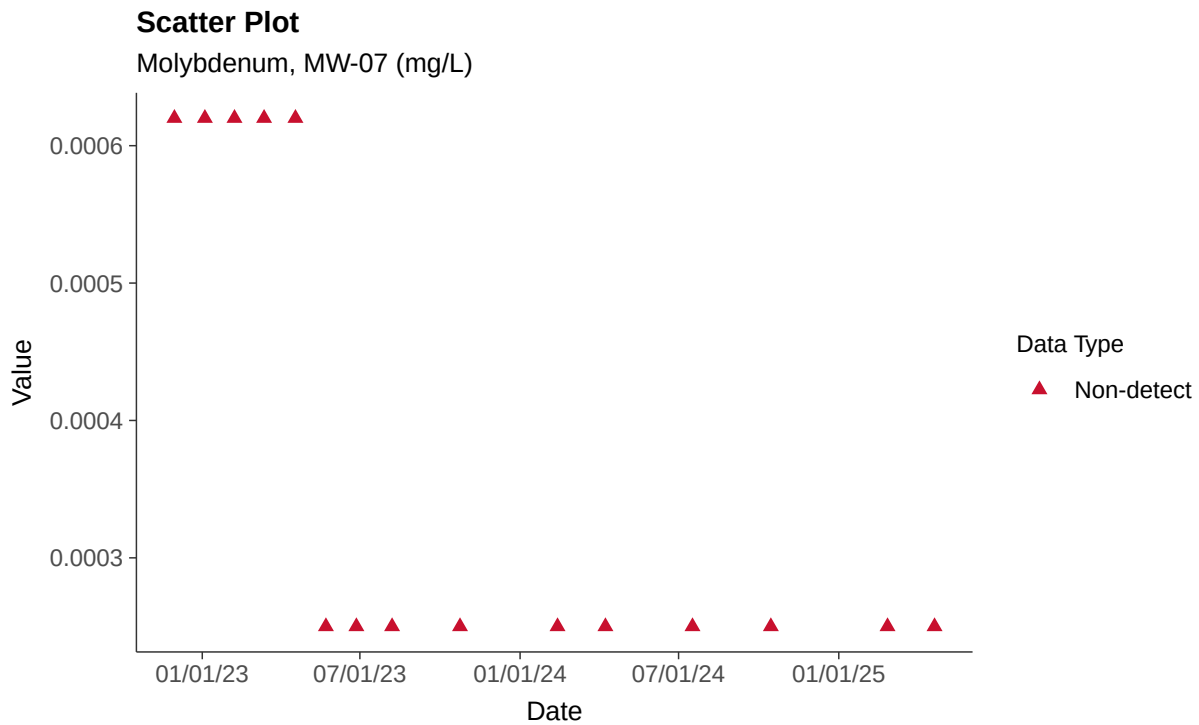






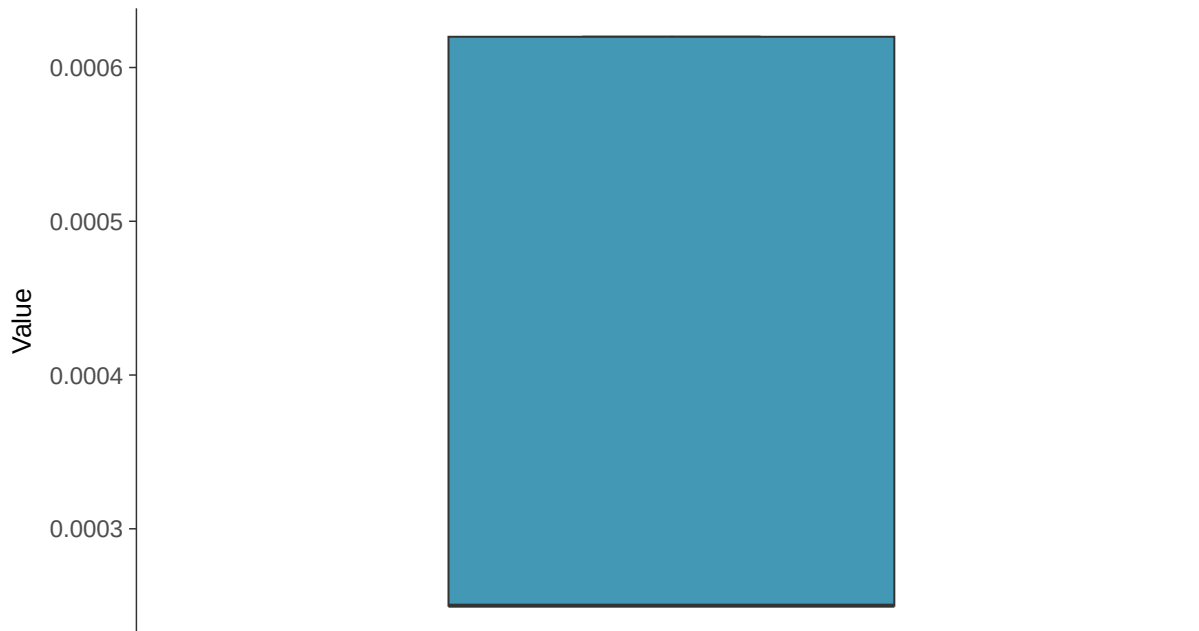
Appendix IV: Molybdenum, MW-07

ID: 17_1_4_118



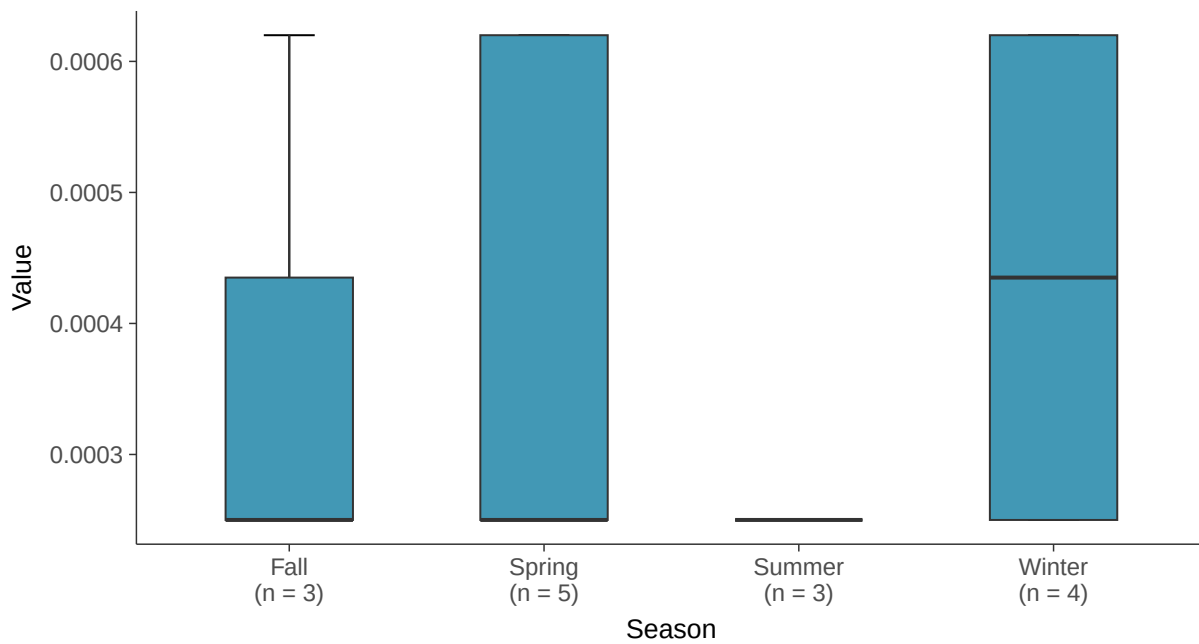
Boxplot

Molybdenum, MW-07 (mg/L)



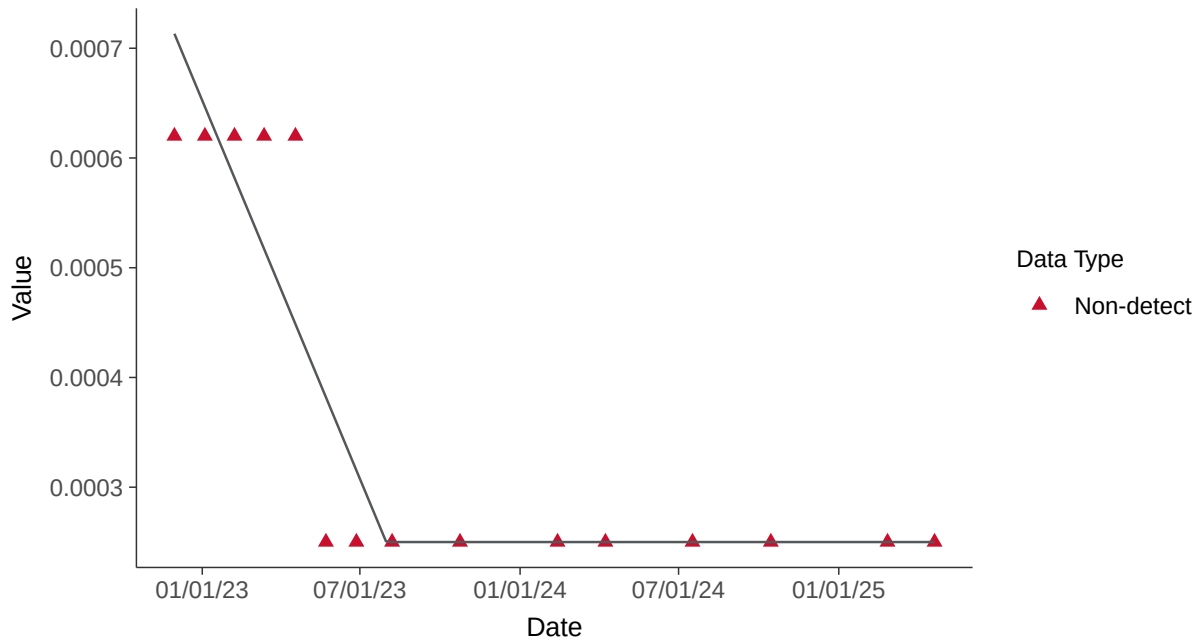
Boxplot by Season

Molybdenum, MW-07 (mg/L)



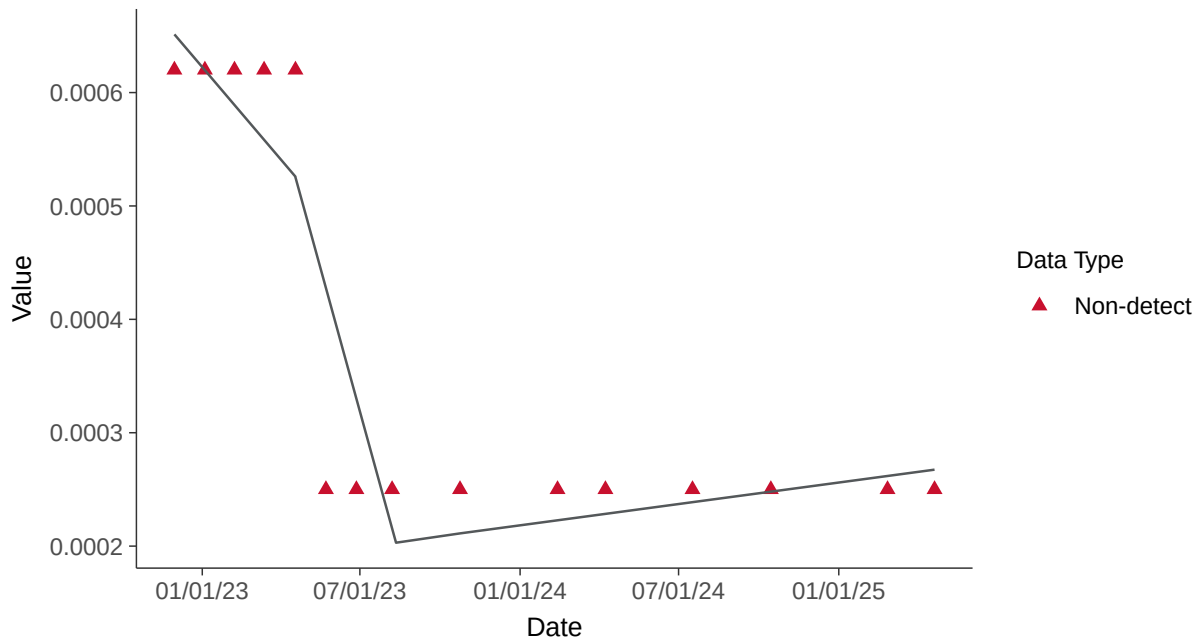
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-07 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-07 (mg/L)

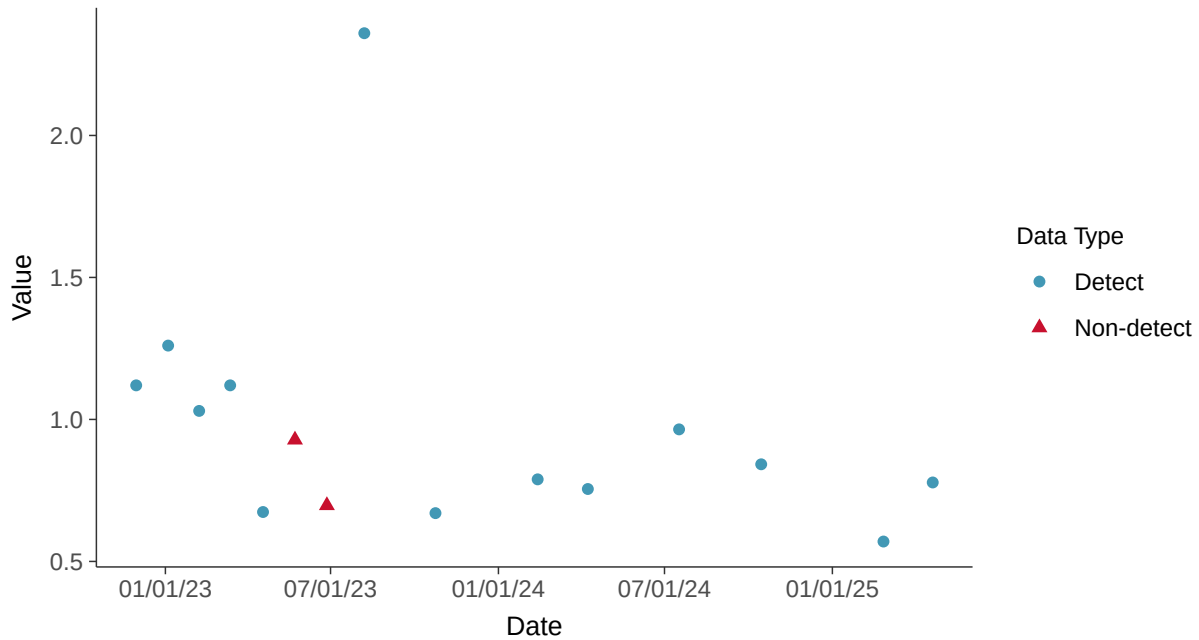


Appendix IV: Radium 226 and 228, MW-07

ID: 17_1_4_121

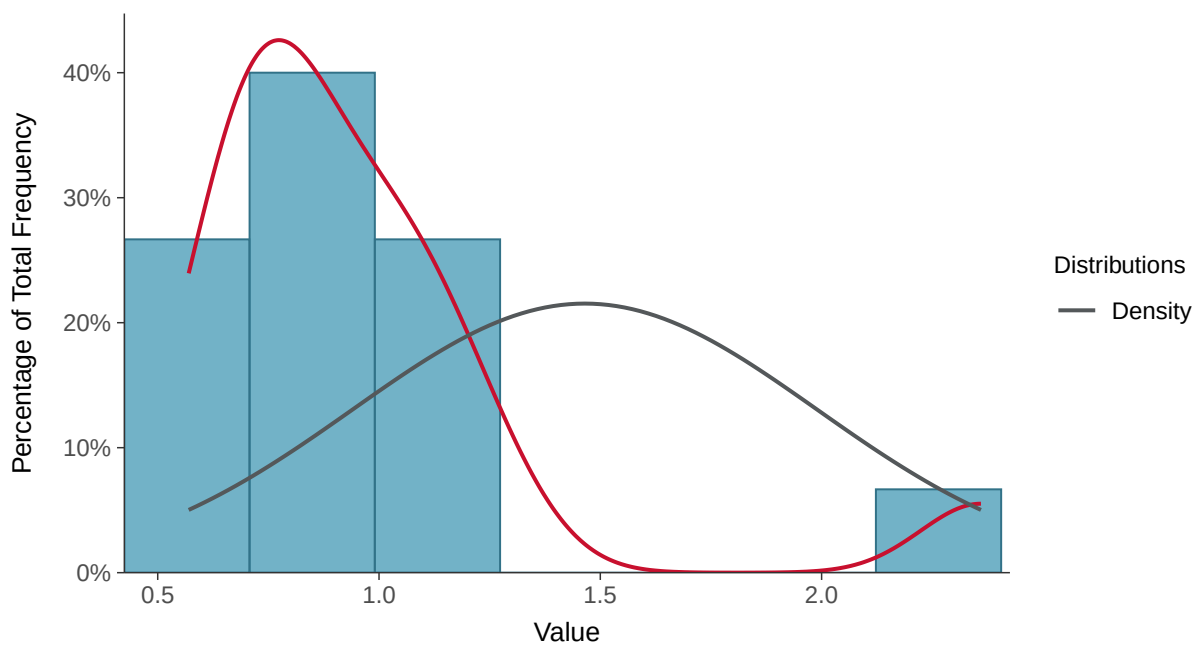
Scatter Plot

Radium 226 and 228, MW-07 (pCi/L)



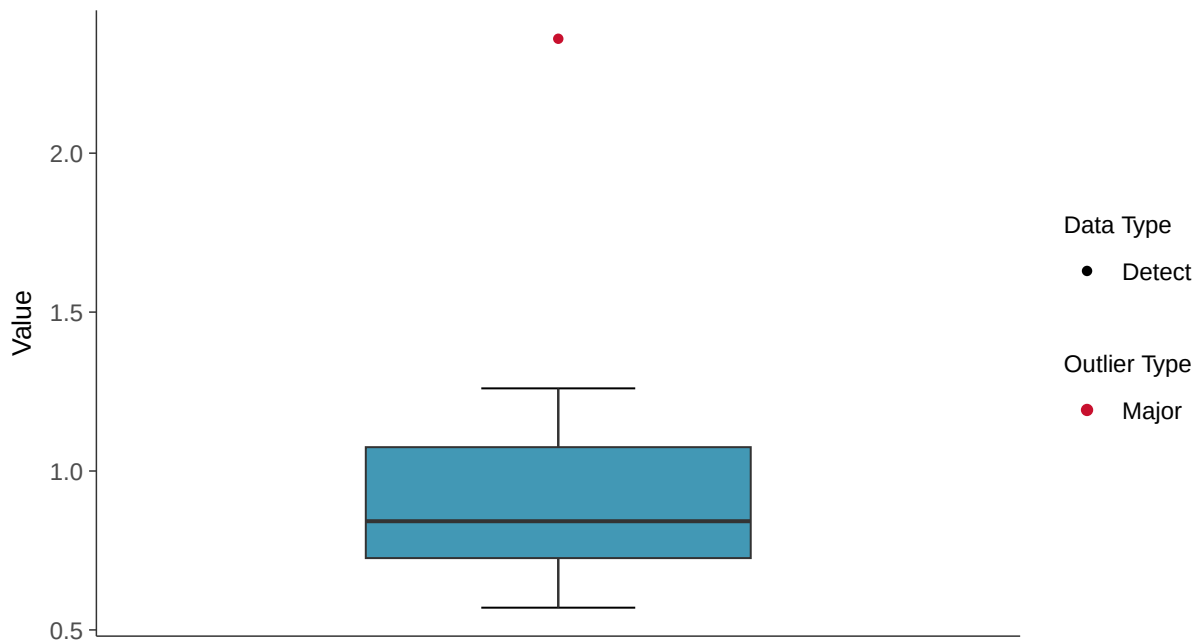
Histogram

Radium 226 and 228, MW-07 (pCi/L)



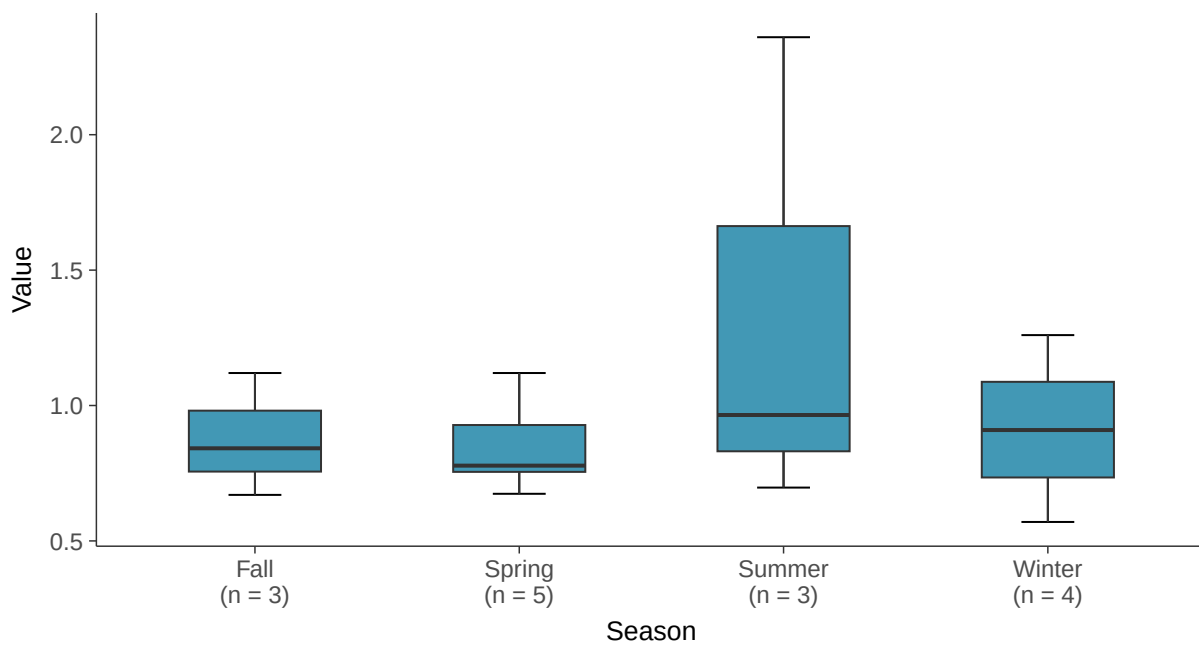
Boxplot

Radium 226 and 228, MW-07 (pCi/L)



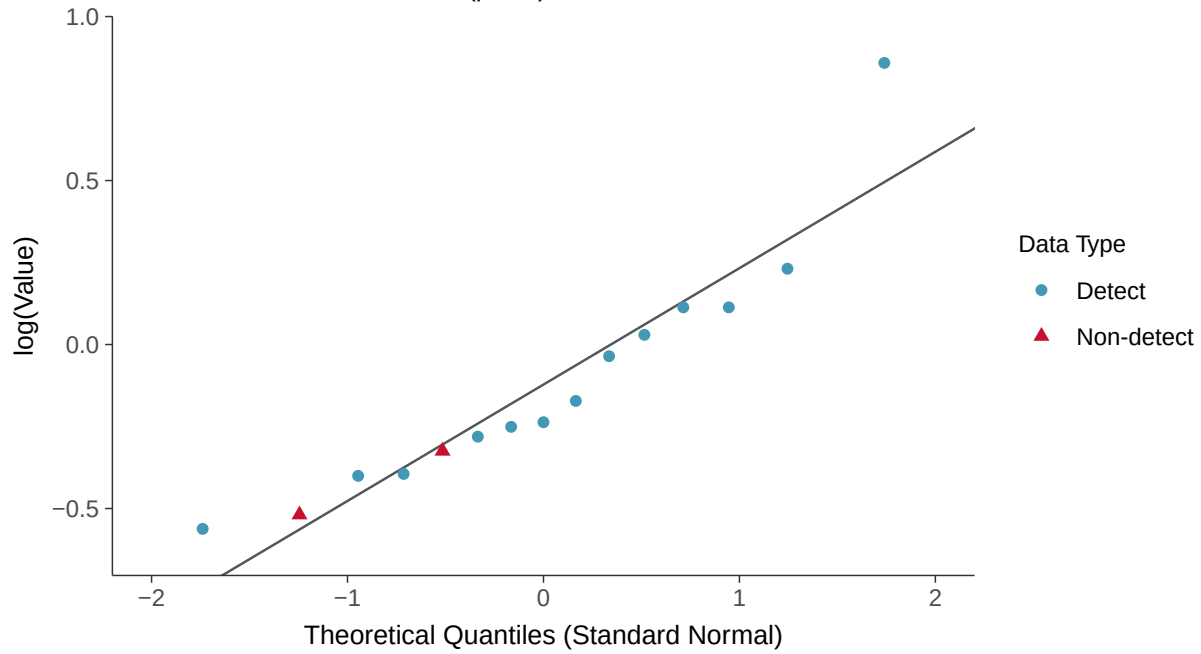
Boxplot by Season

Radium 226 and 228, MW-07 (pCi/L)



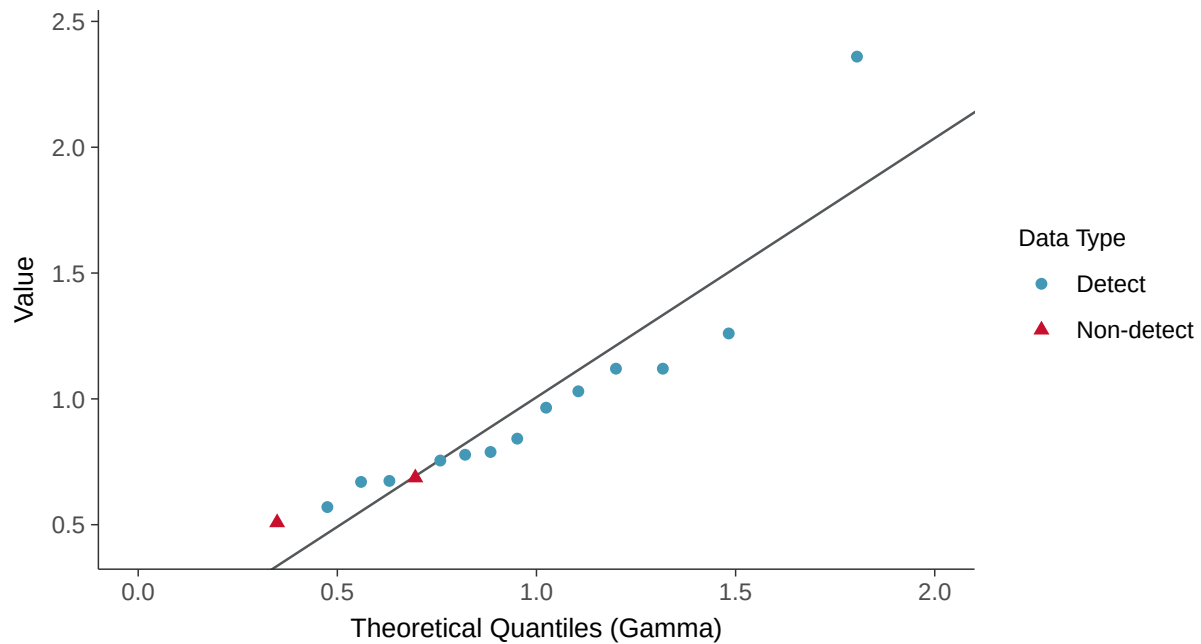
Lognormal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-07 (pCi/L)



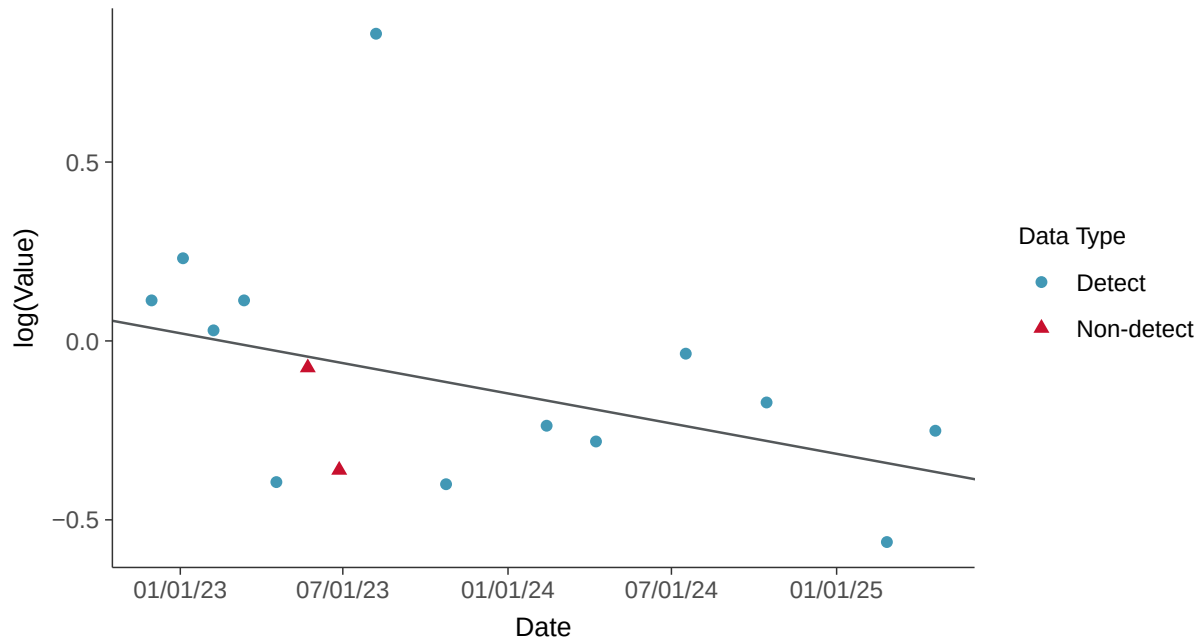
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-07 (pCi/L)



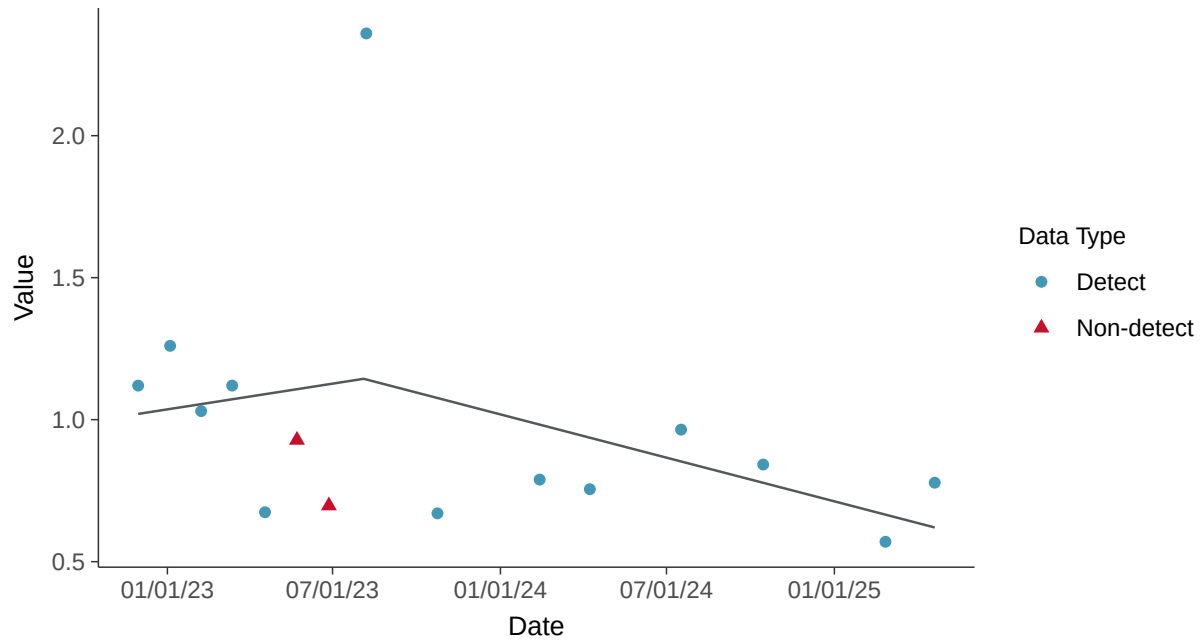
Trend Regression: Lognormal MLE

Radium 226 and 228, MW-07 (pCi/L)



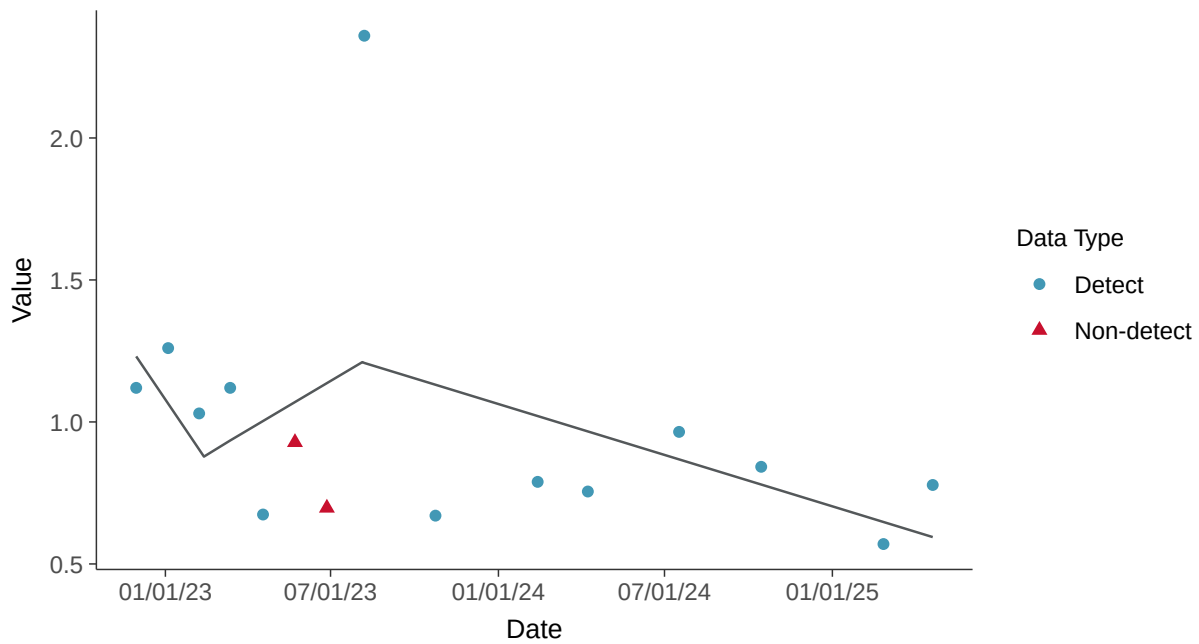
Trend Regression: Piecewise Linear-Linear

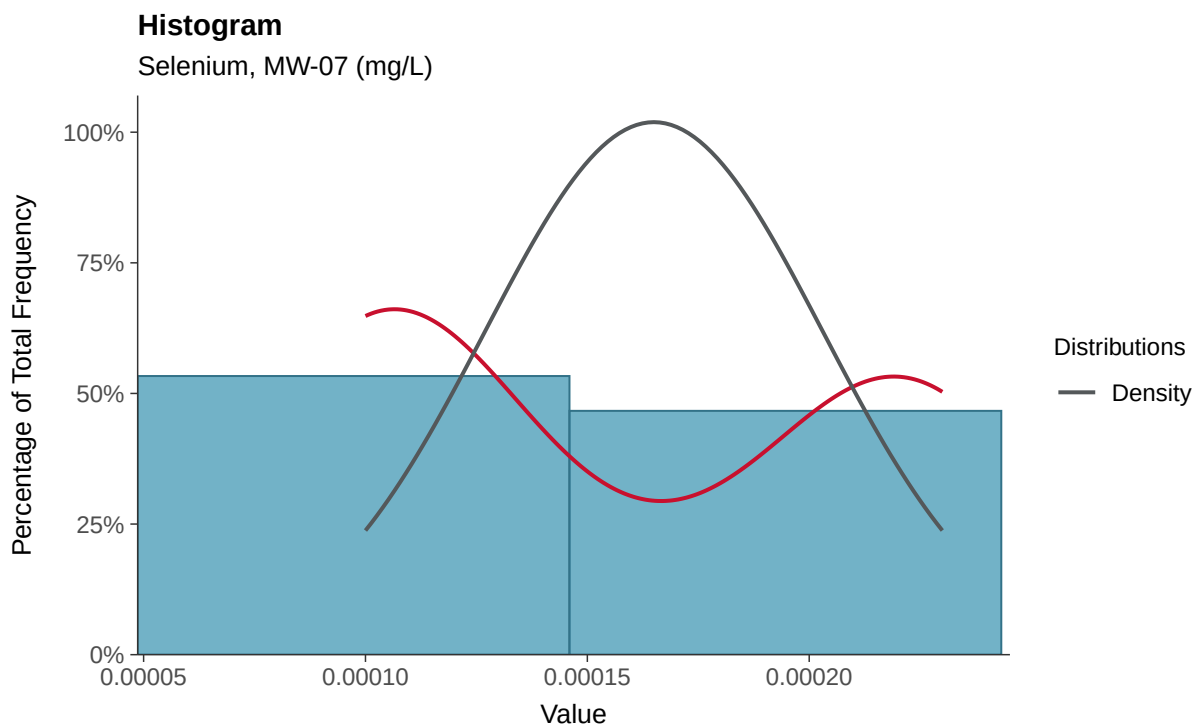
Radium 226 and 228, MW-07 (pCi/L)





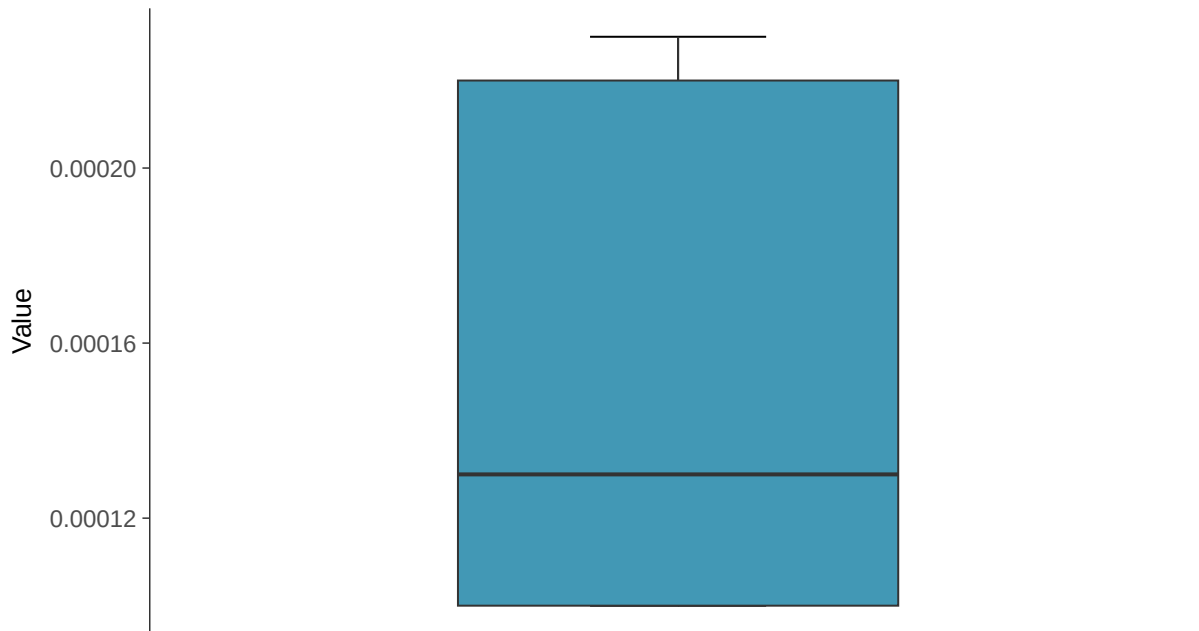
Trend Regression: Piecewise Linear-Linear-Linear
Radium 226 and 228, MW-07 (pCi/L)





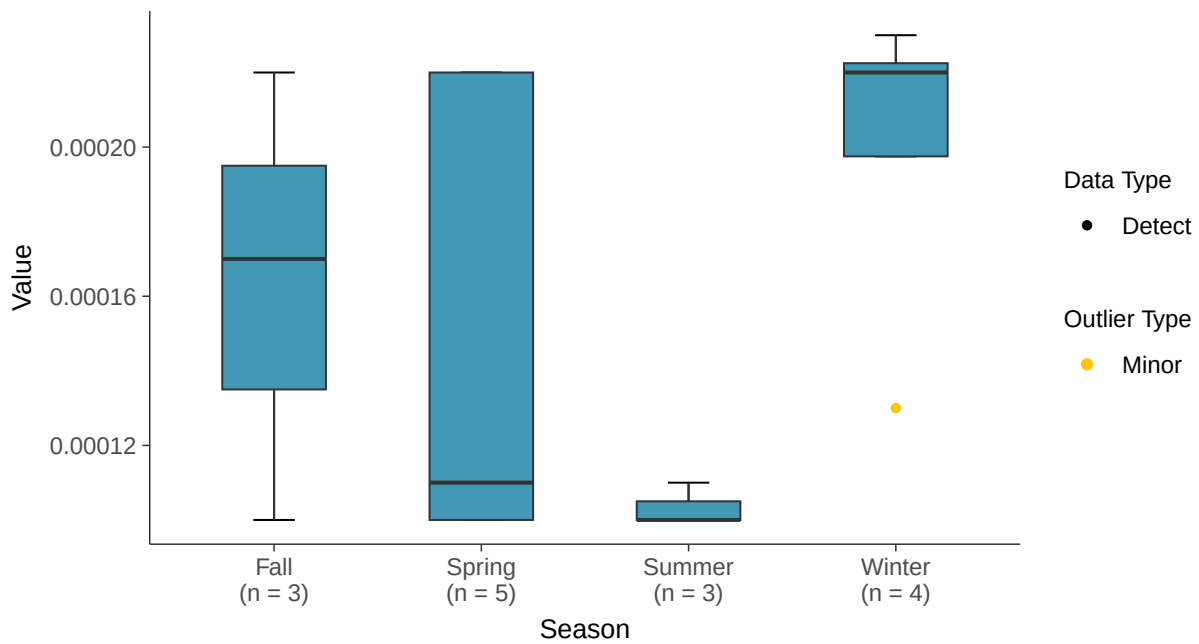
Boxplot

Selenium, MW-07 (mg/L)



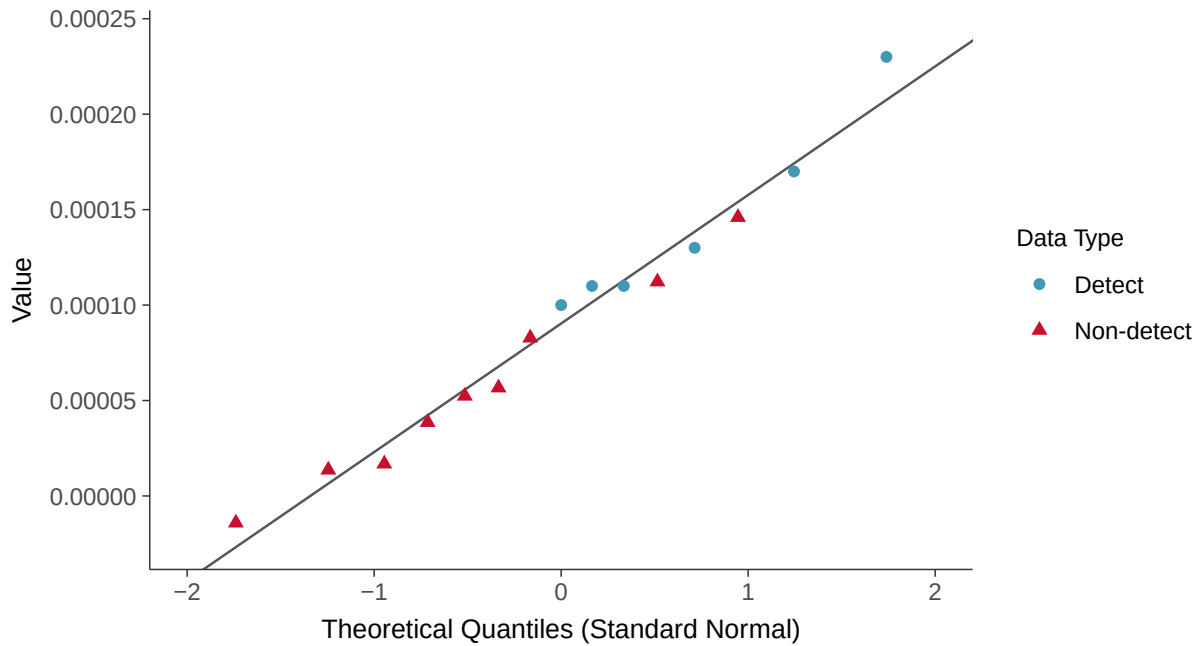
Boxplot by Season

Selenium, MW-07 (mg/L)



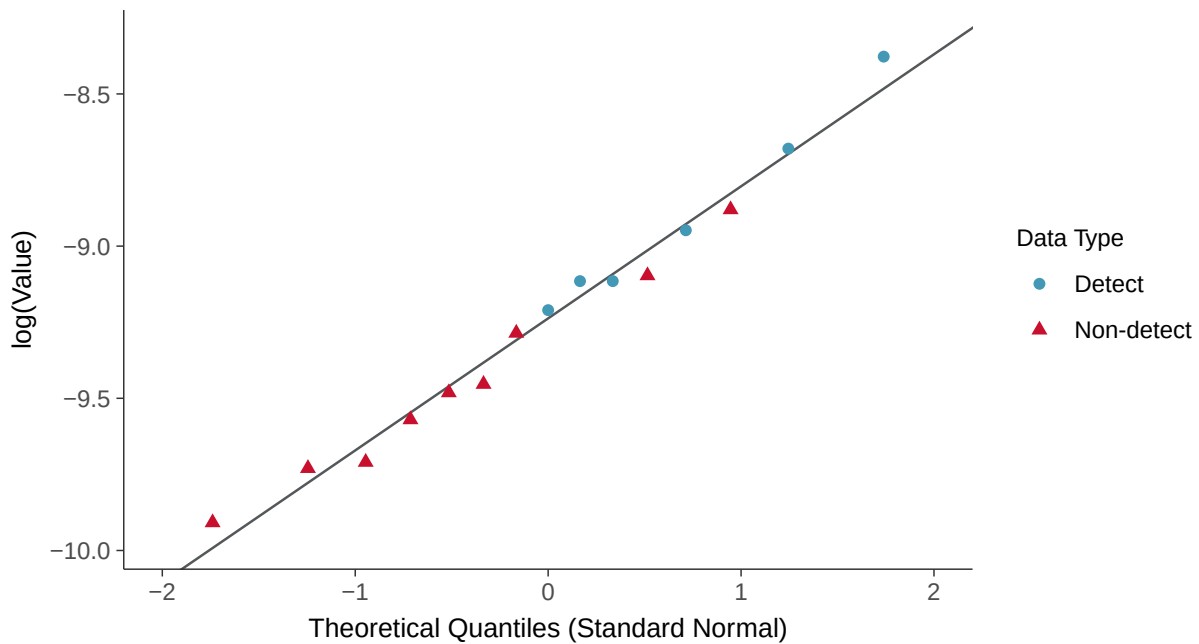
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-07 (mg/L)



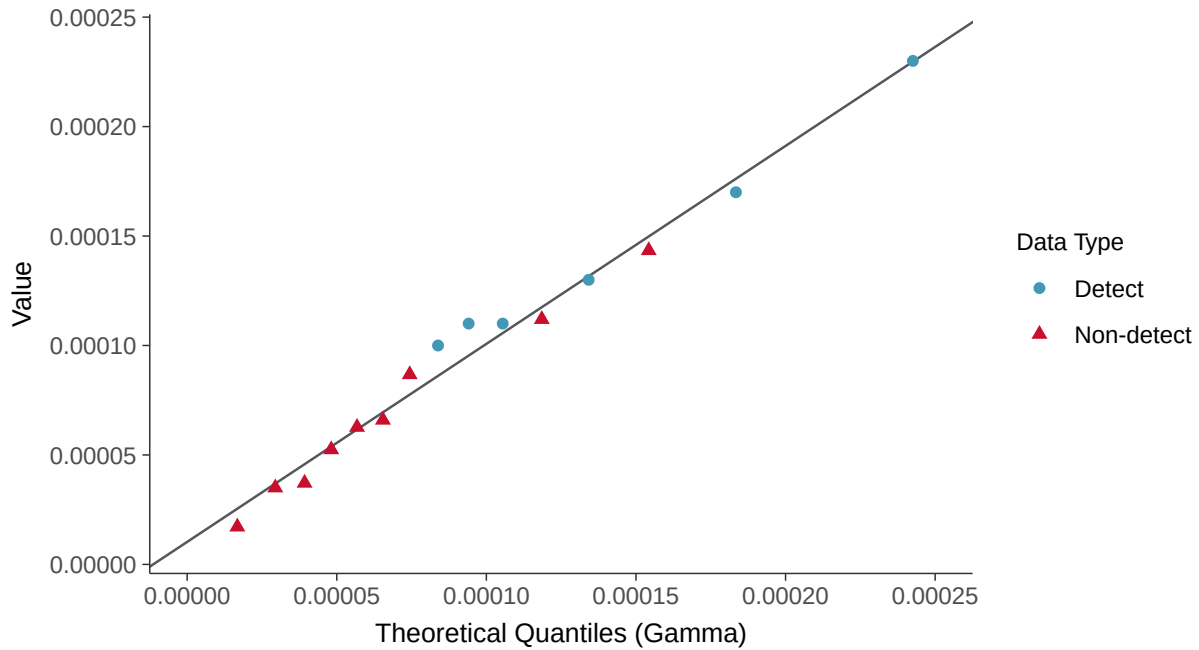
Lognormal Q-Q plot using ROS Imputed Estimates

Selenium, MW-07 (mg/L)



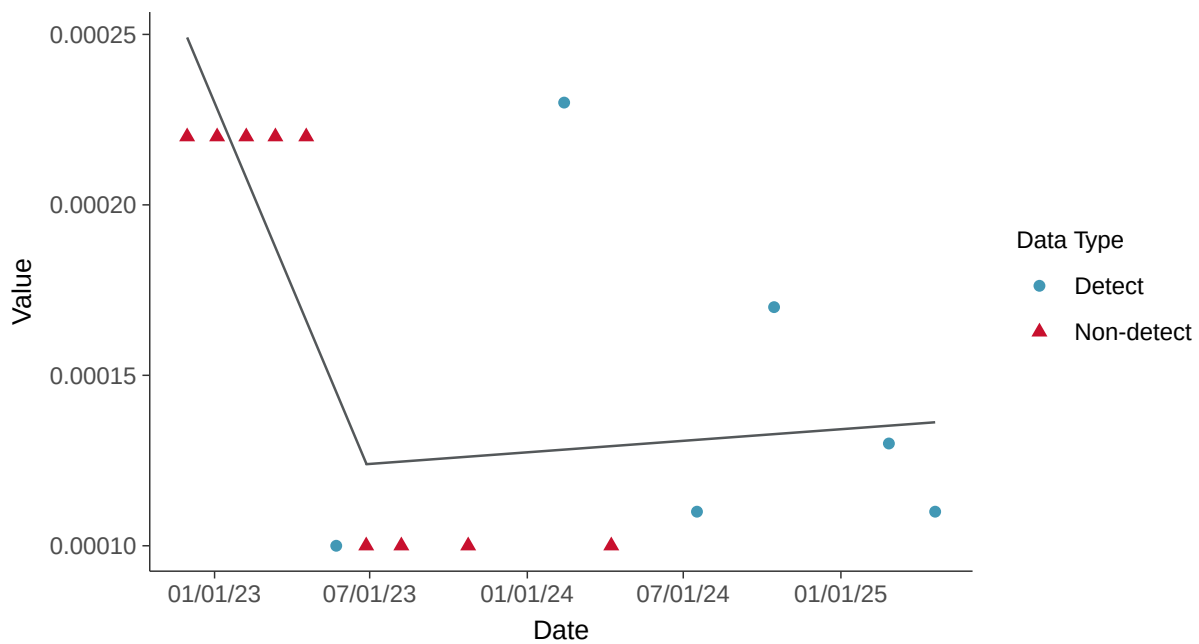
Gamma Q-Q plot using ROS Imputed Estimates

Selenium, MW-07 (mg/L)



Trend Regression: Piecewise Linear-Linear

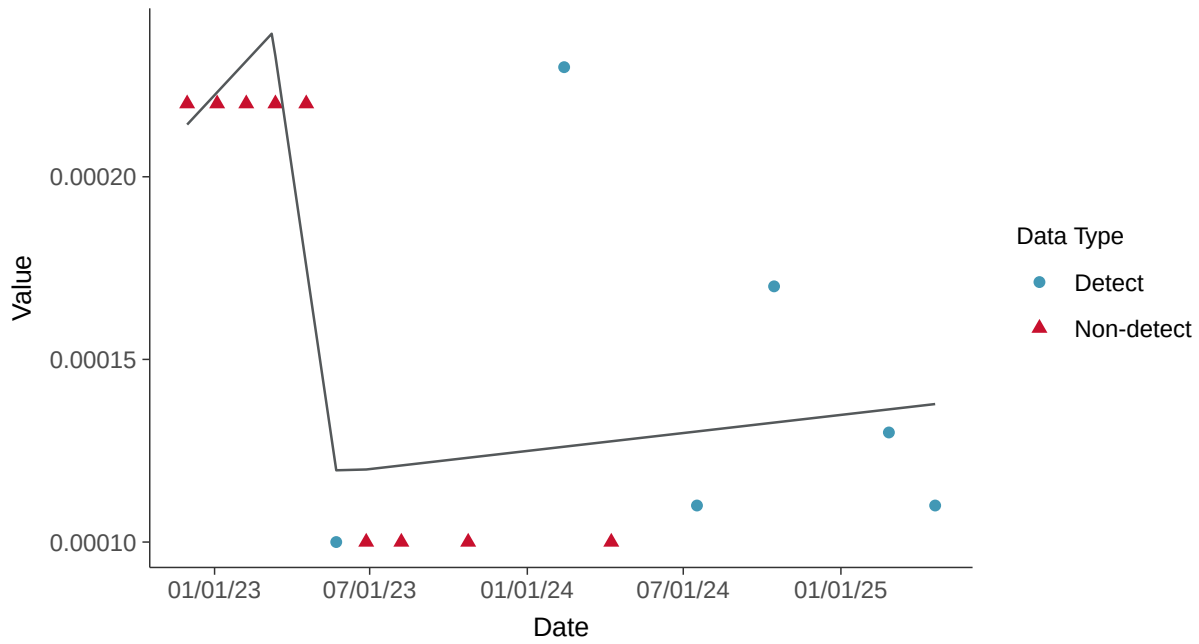
Selenium, MW-07 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

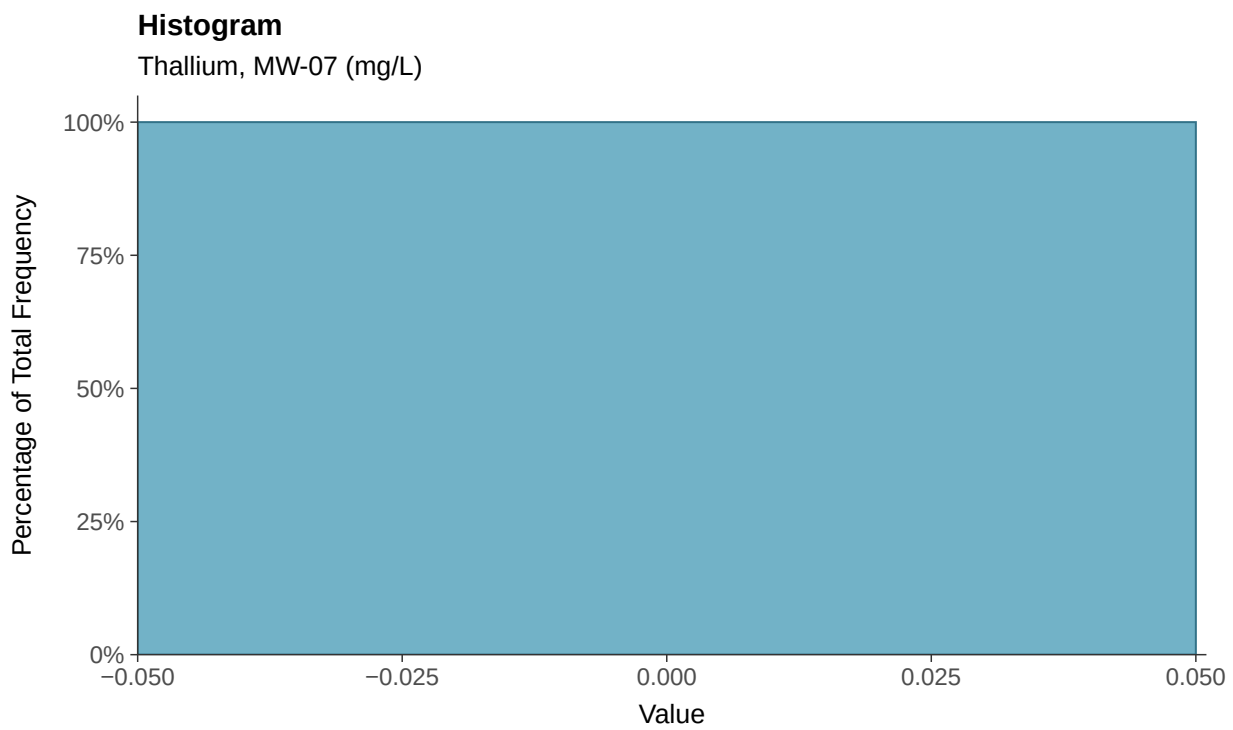
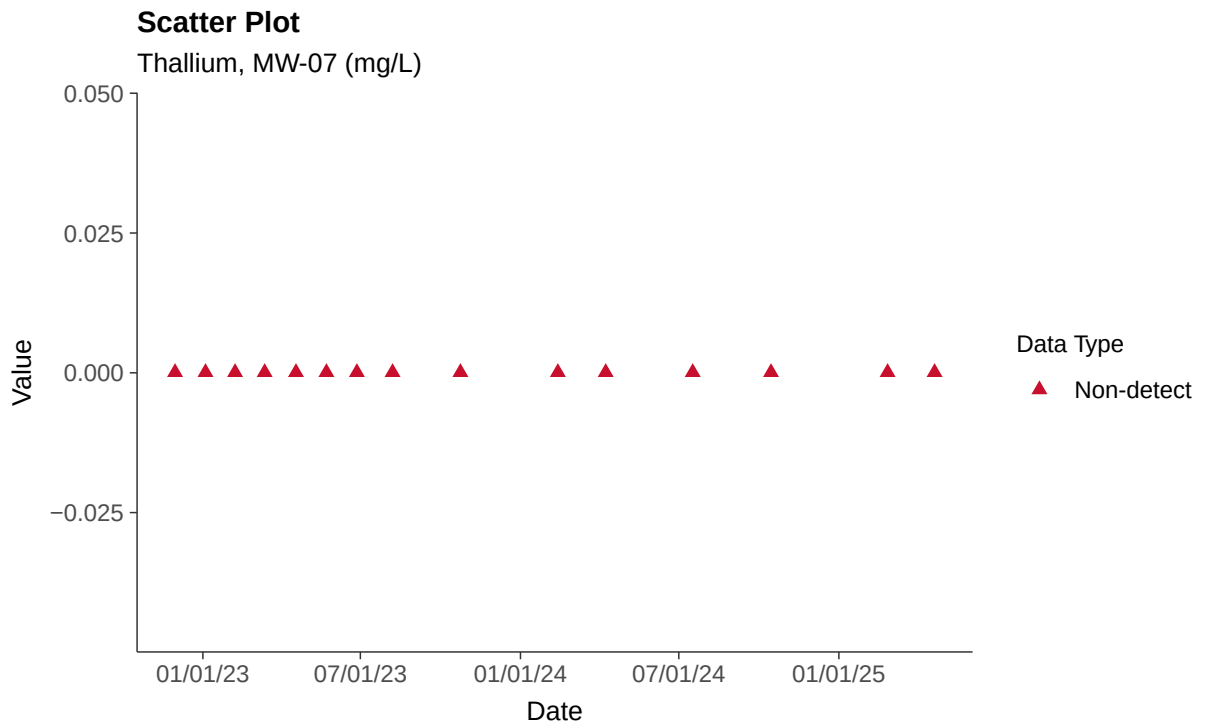
Selenium, MW-07 (mg/L)





Appendix IV: Thallium, MW-07

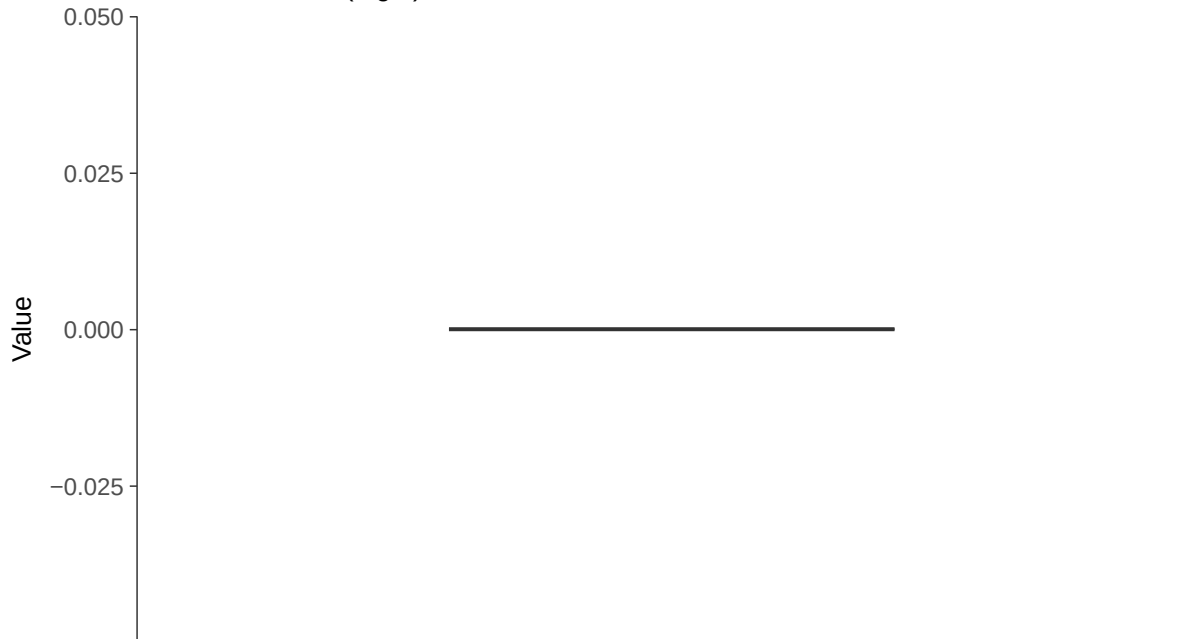
ID: 17_1_4_125





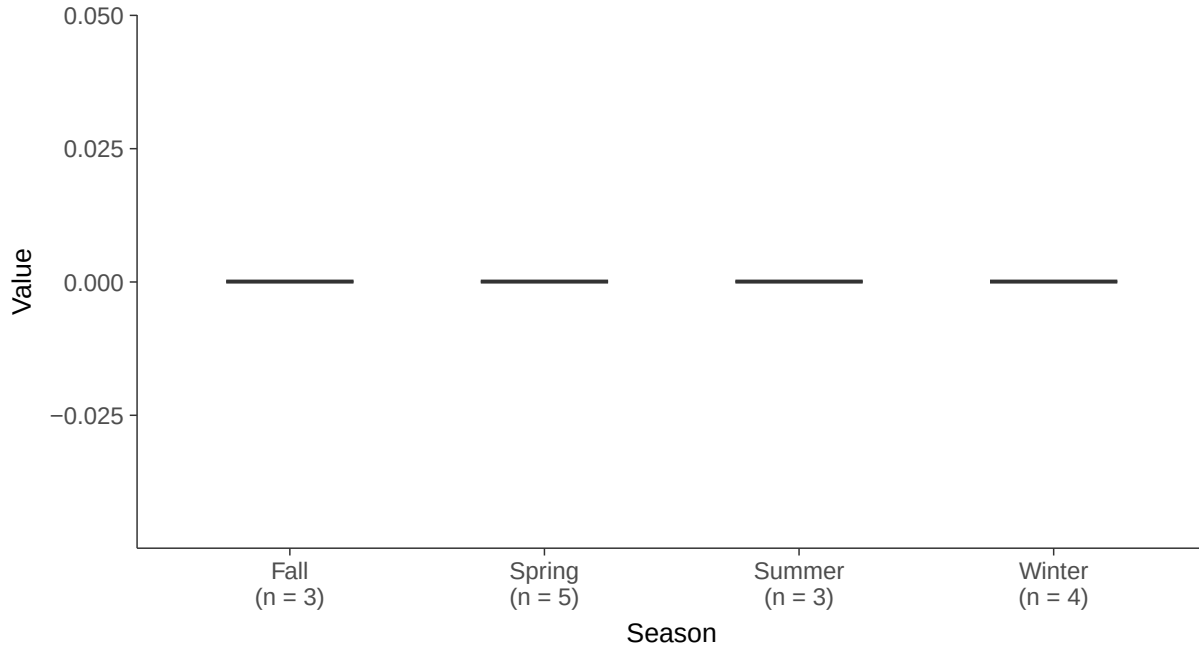
Boxplot

Thallium, MW-07 (mg/L)



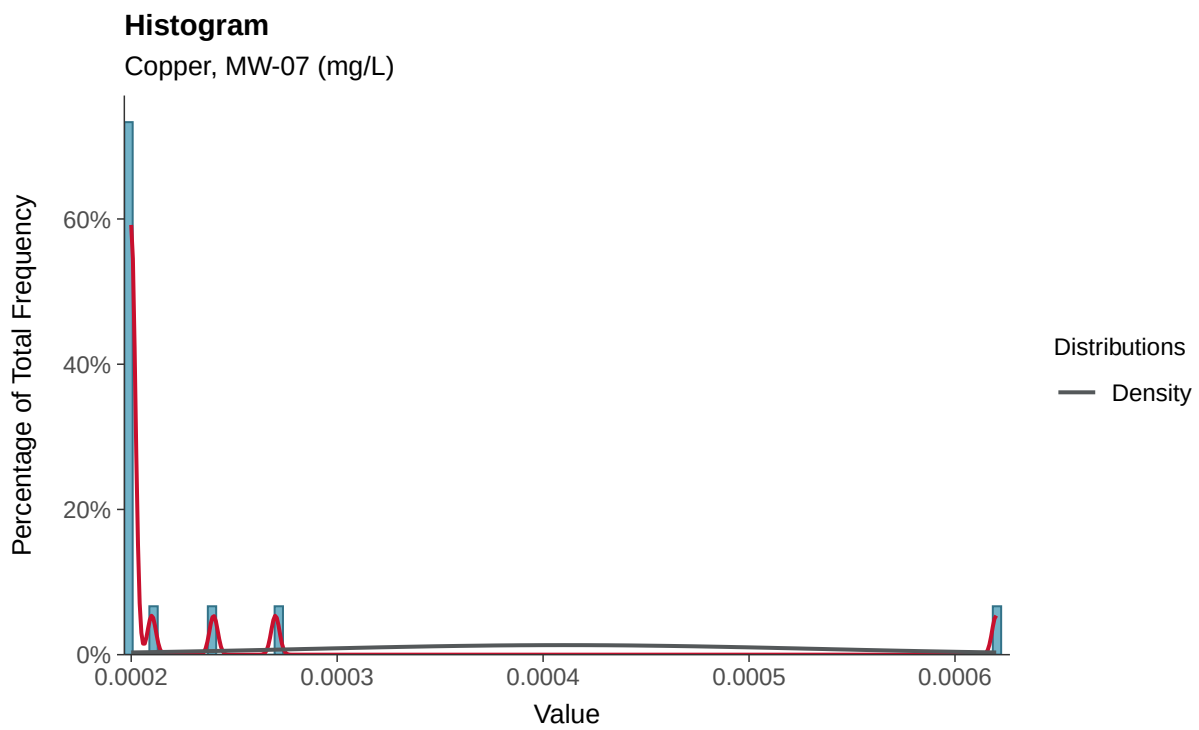
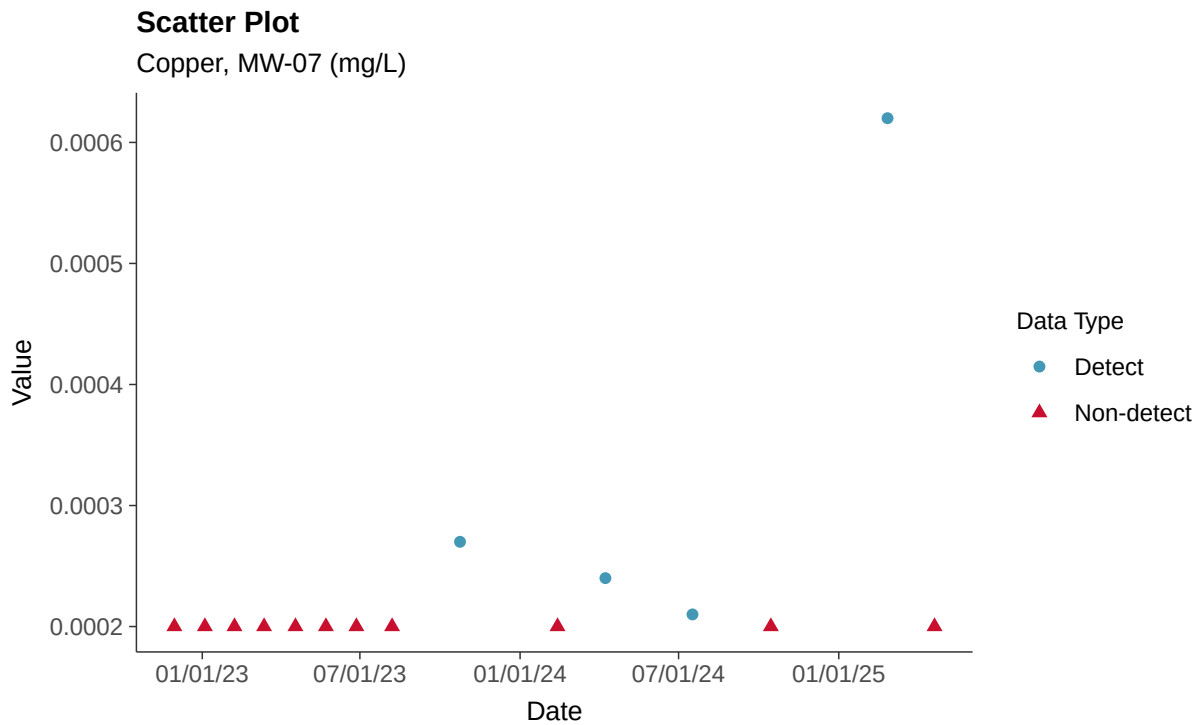
Boxplot by Season

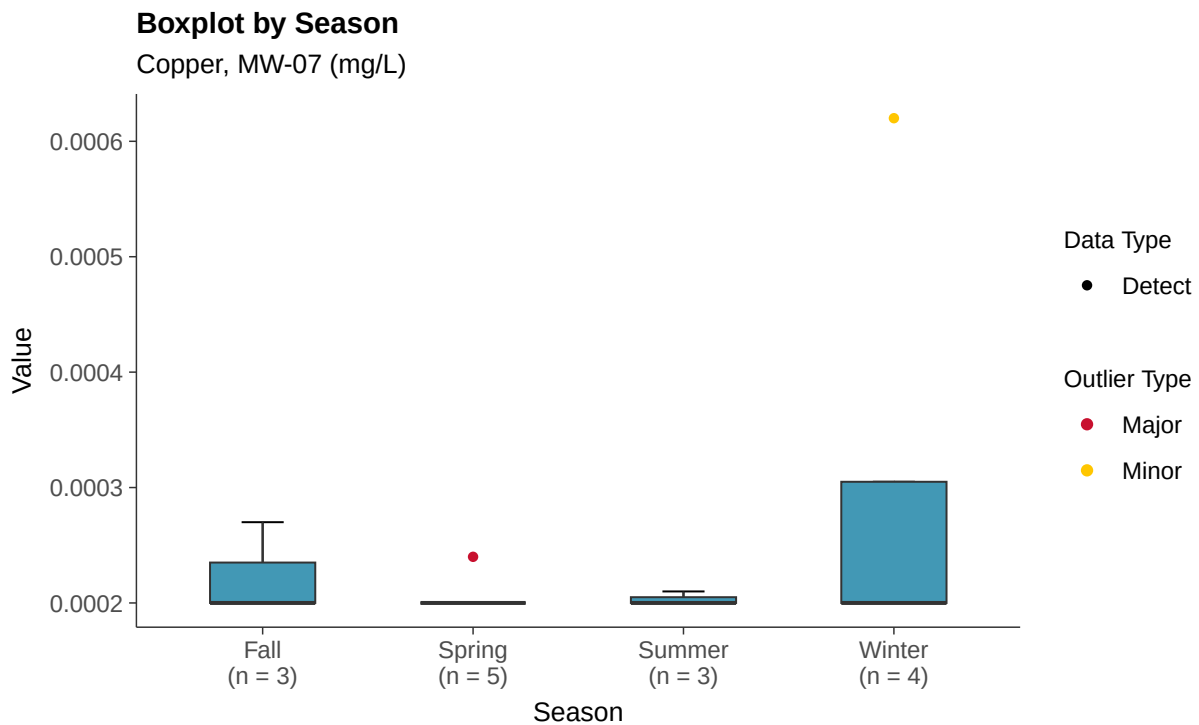
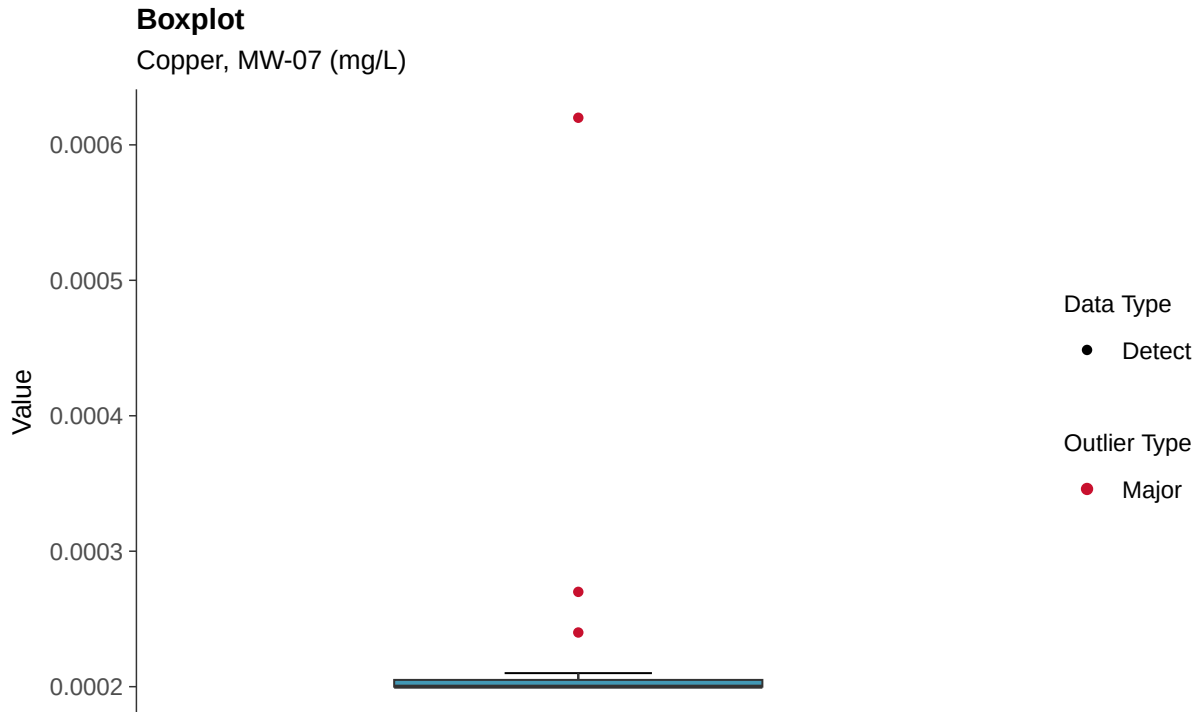
Thallium, MW-07 (mg/L)



Part 115: Copper, MW-07

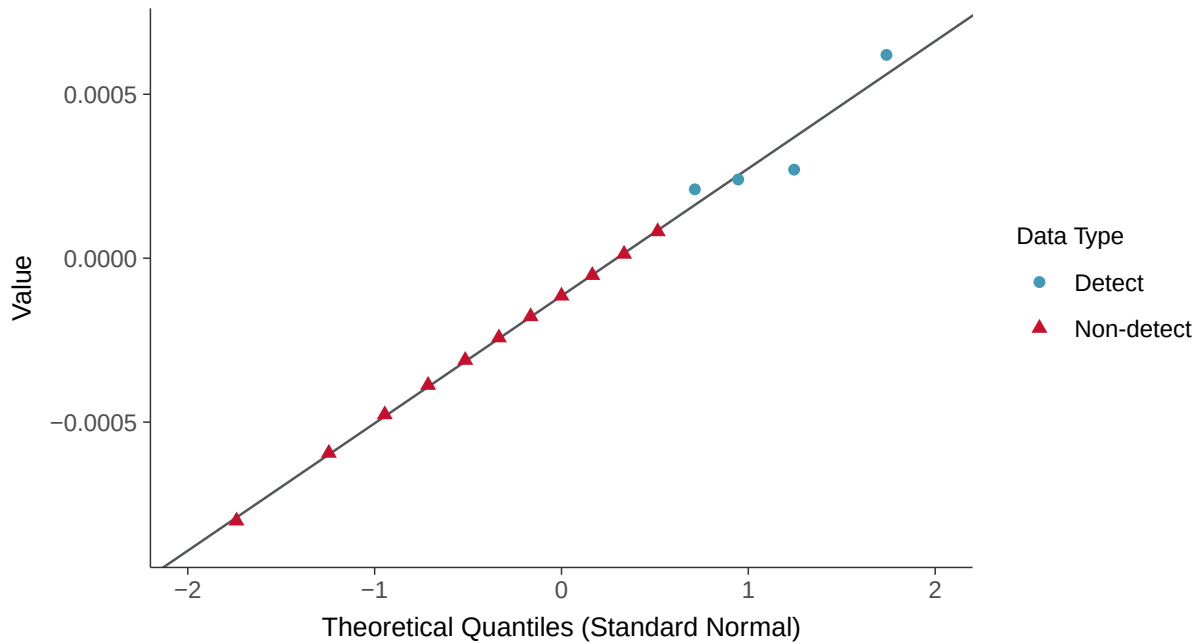
ID: 17_1_5_111





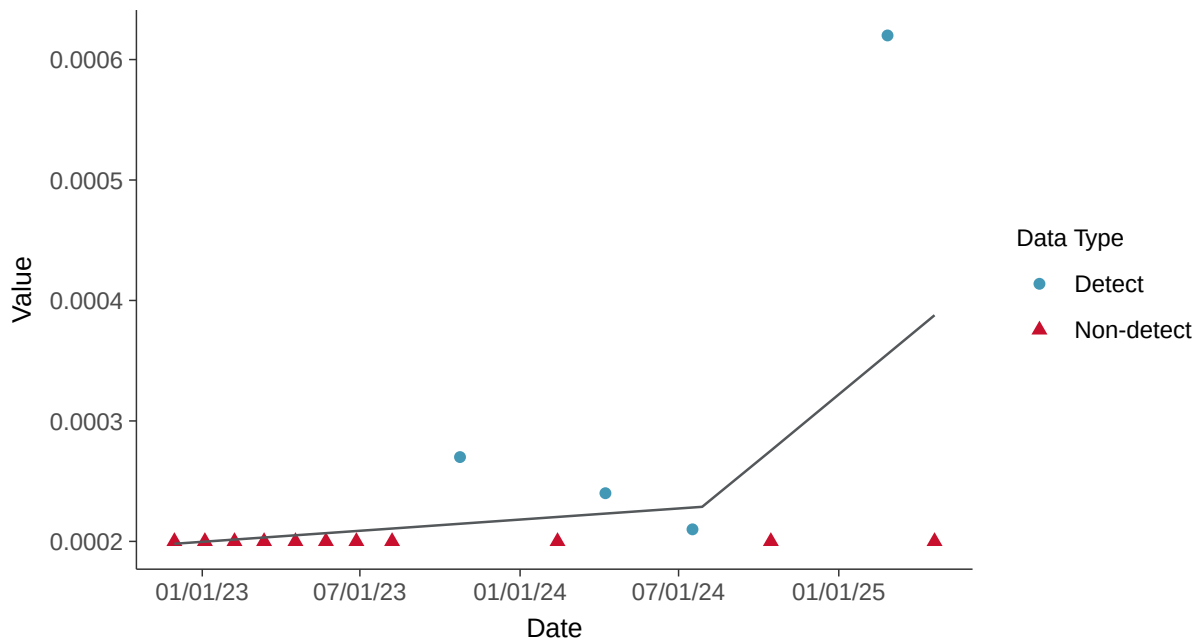
Normal Q-Q plot using ROS Imputed Estimates

Copper, MW-07 (mg/L)



Trend Regression: Piecewise Linear-Linear

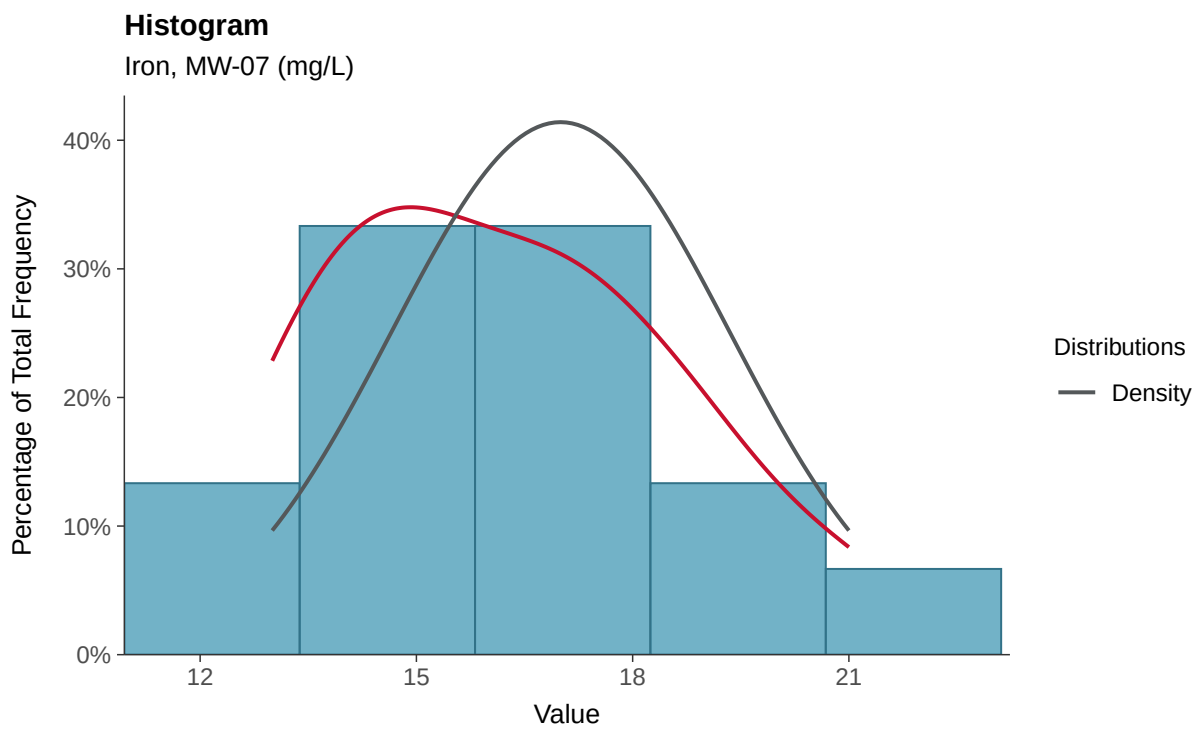
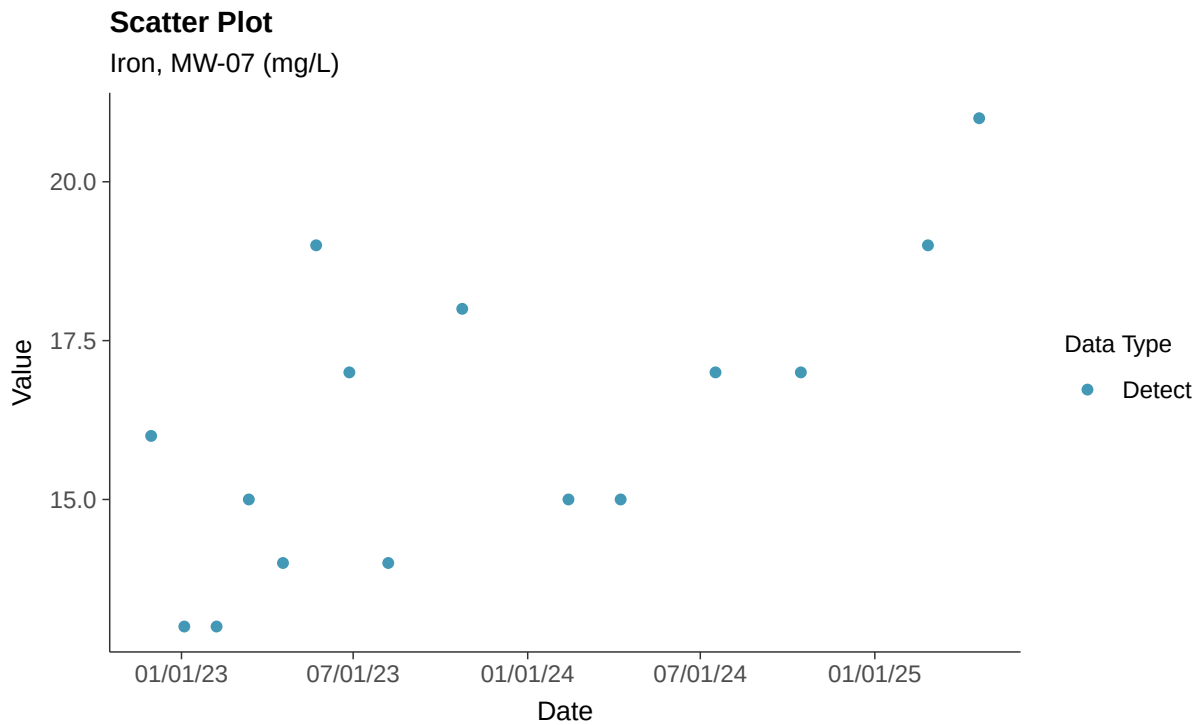
Copper, MW-07 (mg/L)





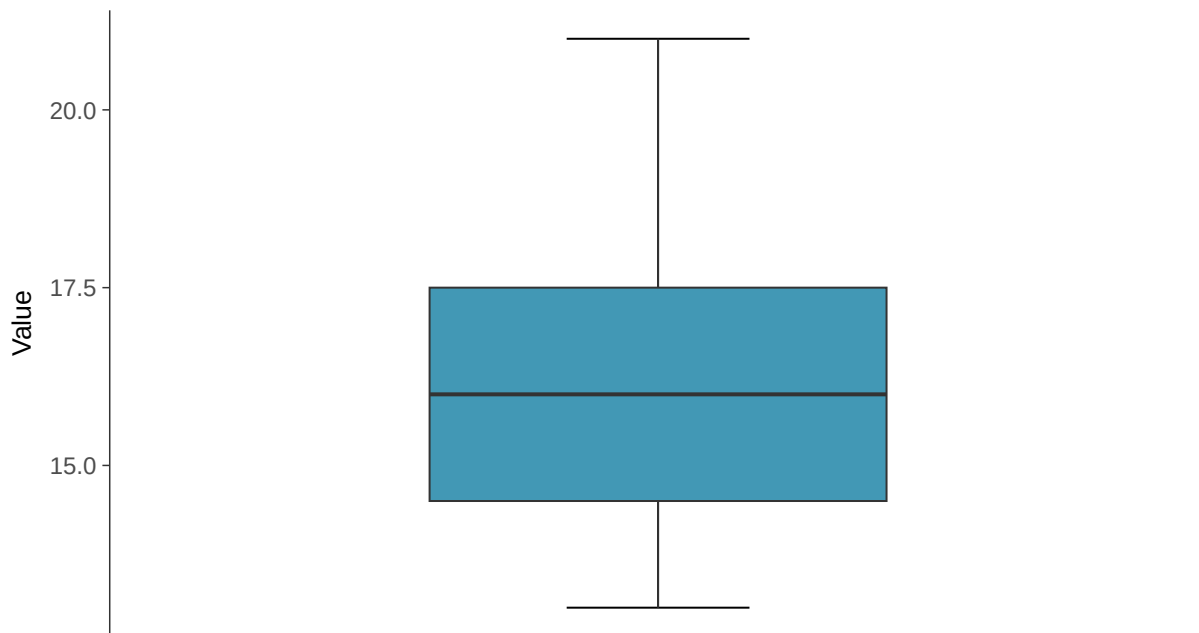
Part 115: Iron, MW-07

ID: 17_1_5_114



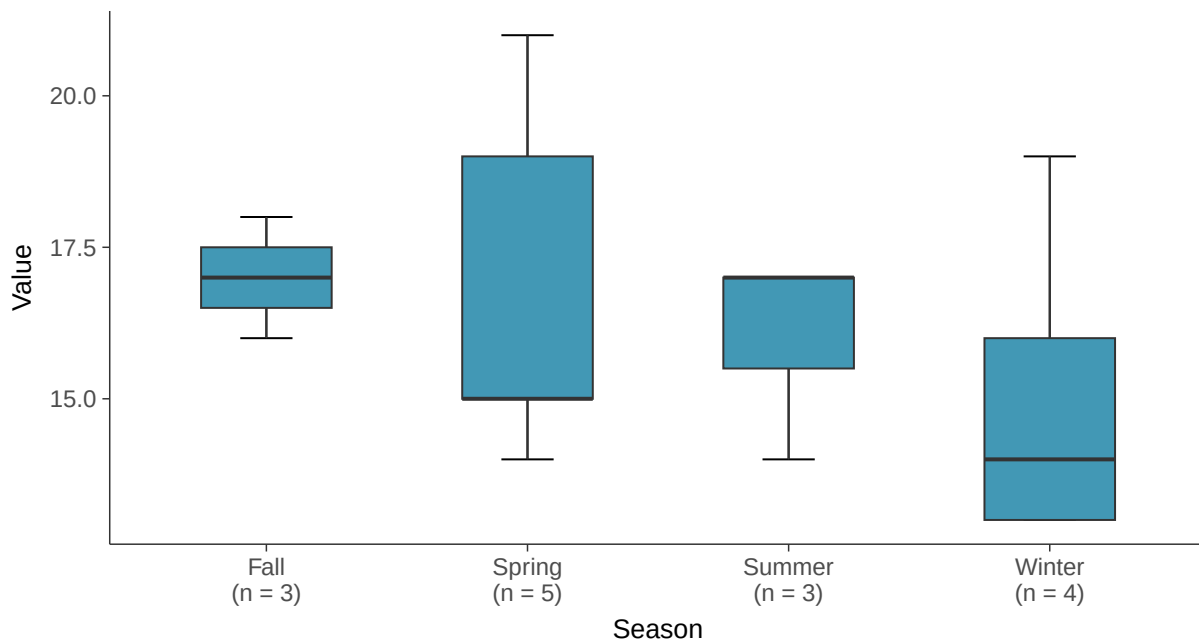
Boxplot

Iron, MW-07 (mg/L)

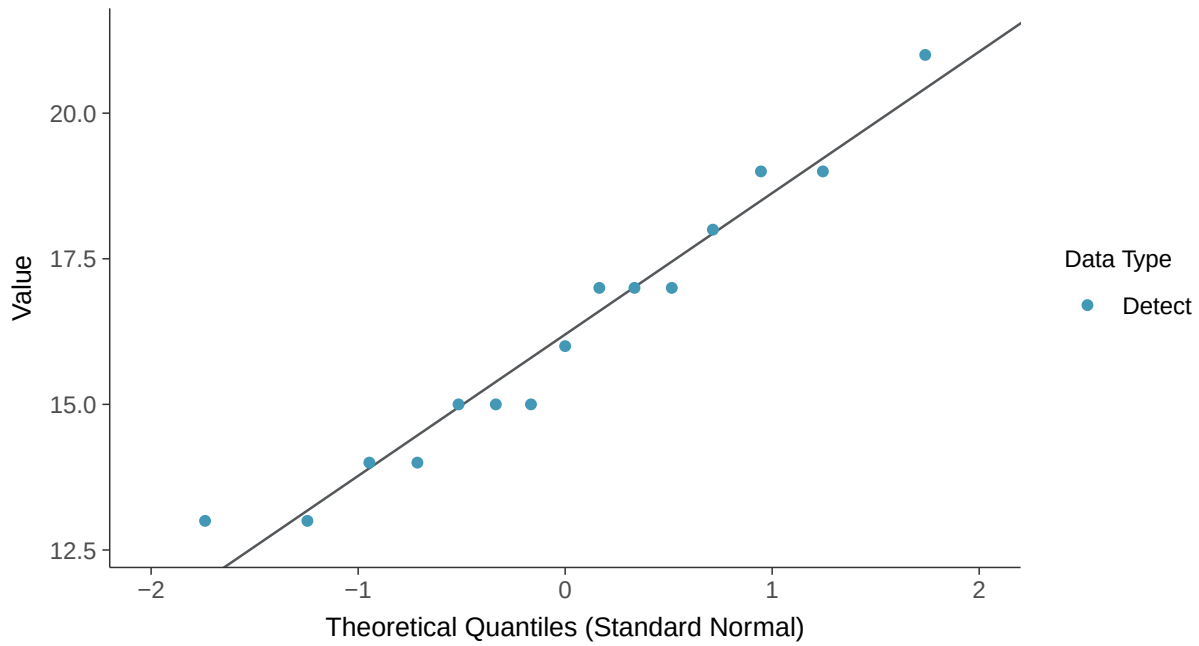


Boxplot by Season

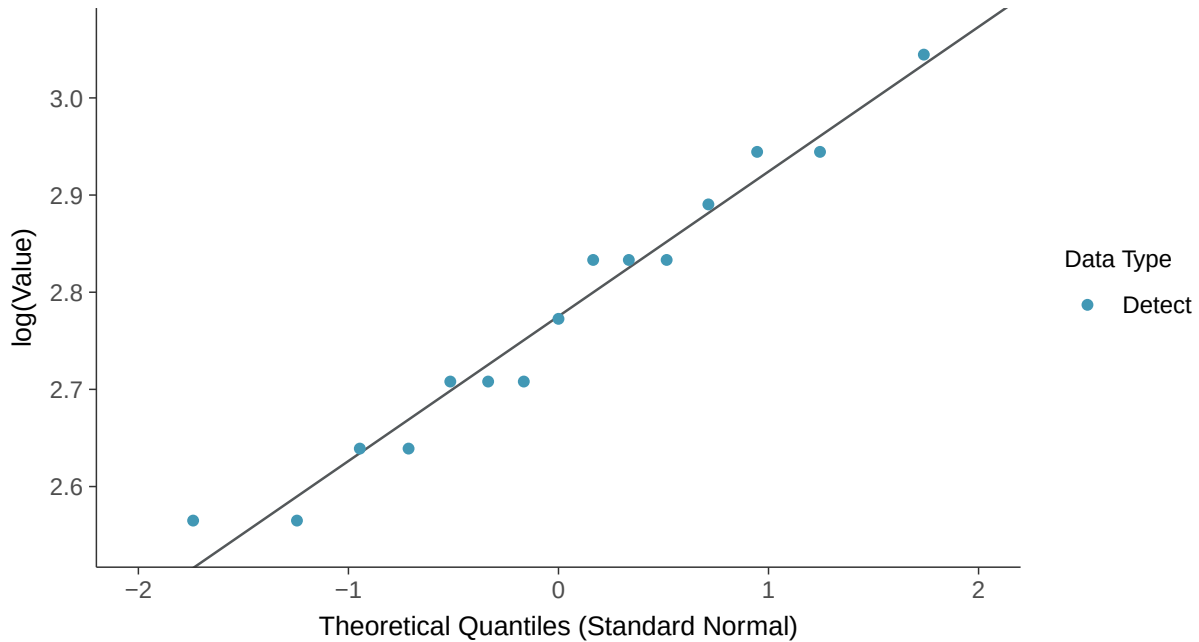
Iron, MW-07 (mg/L)



Normal Q-Q plot
Iron, MW-07 (mg/L)

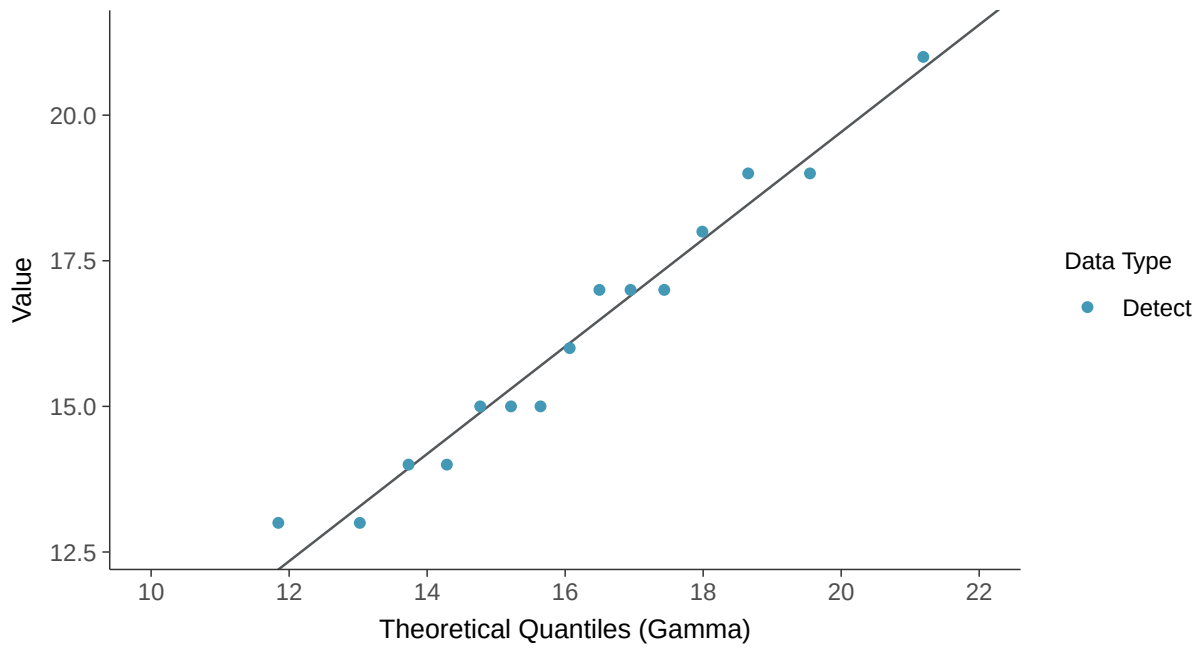


Lognormal Q-Q plot
Iron, MW-07 (mg/L)



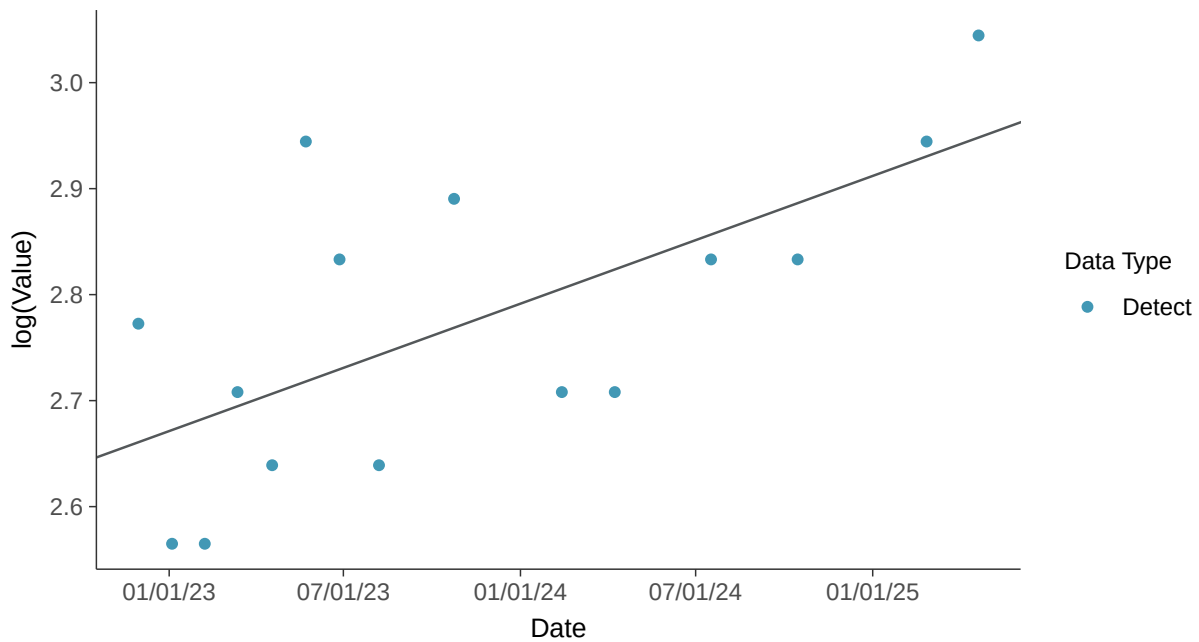
Gamma Q-Q plot

Iron, MW-07 (mg/L)



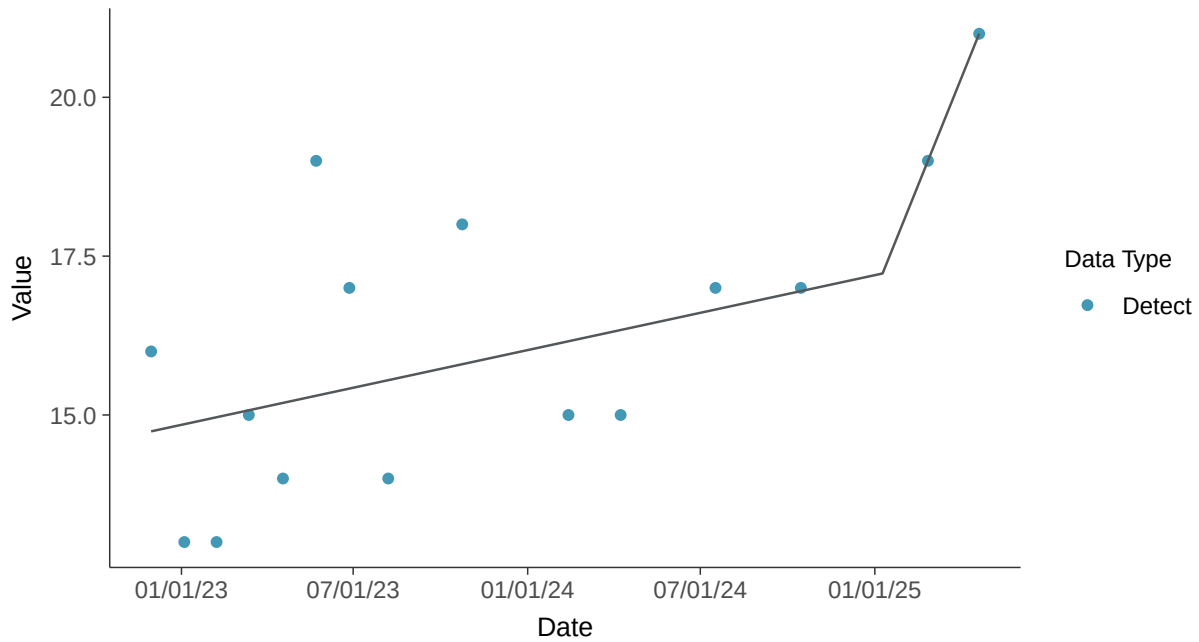
Trend Regression: Lognormal MLE

Iron, MW-07 (mg/L)



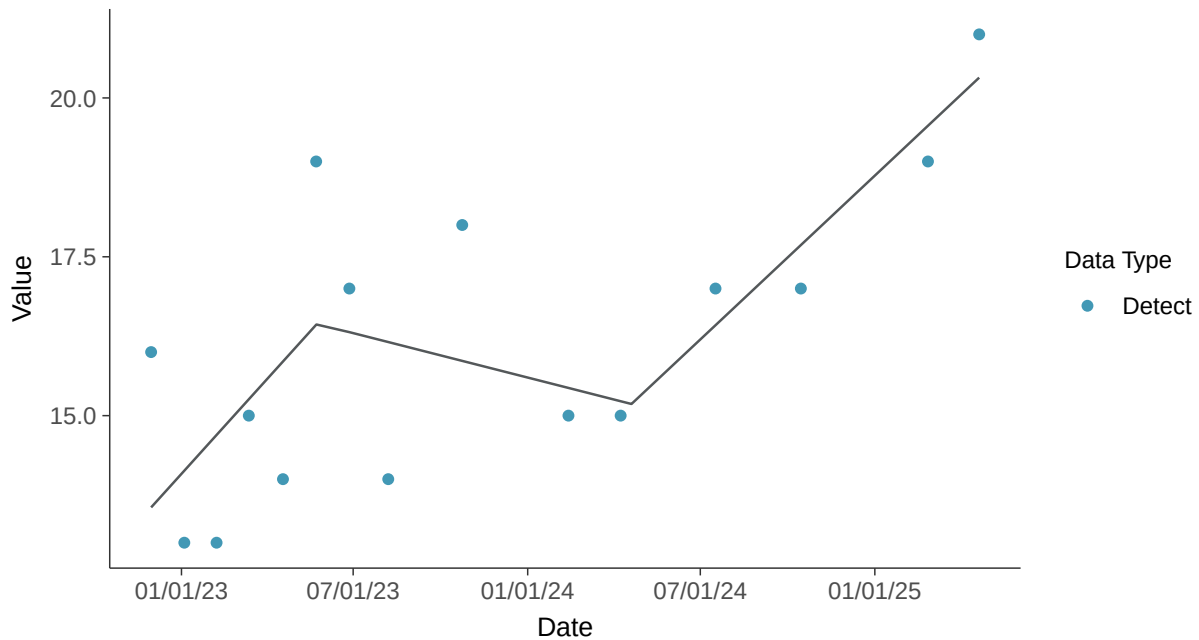
Trend Regression: Piecewise Linear-Linear

Iron, MW-07 (mg/L)



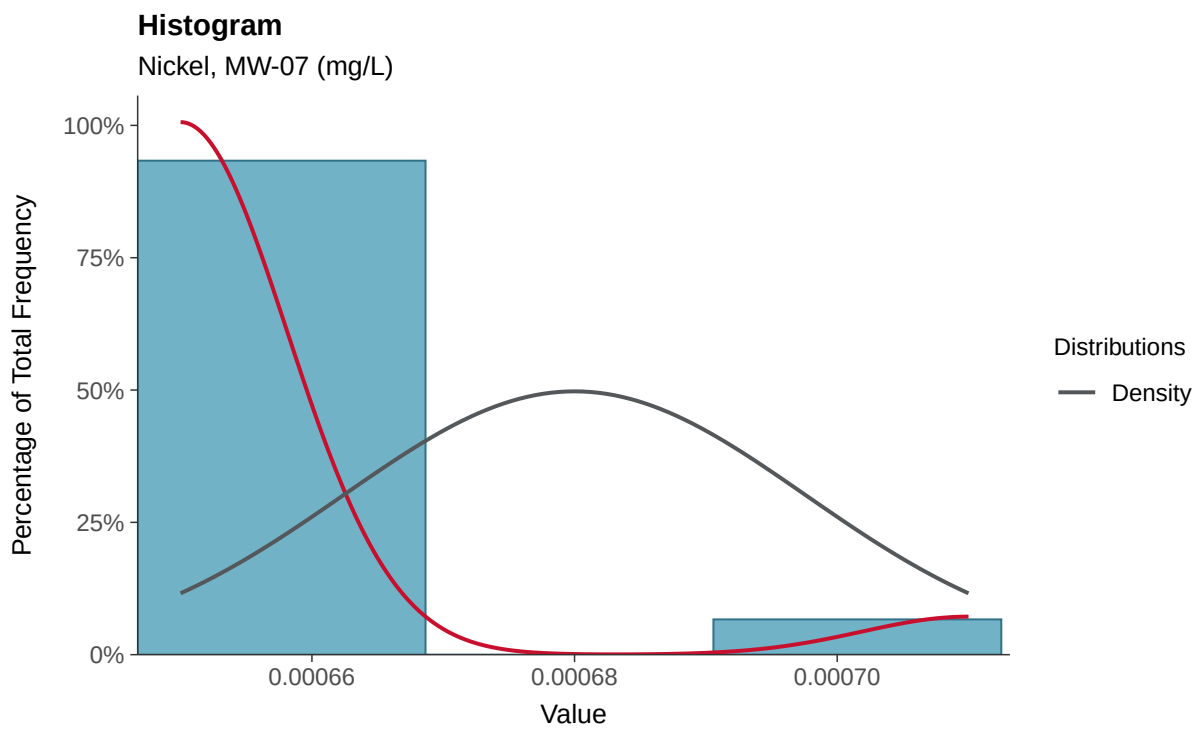
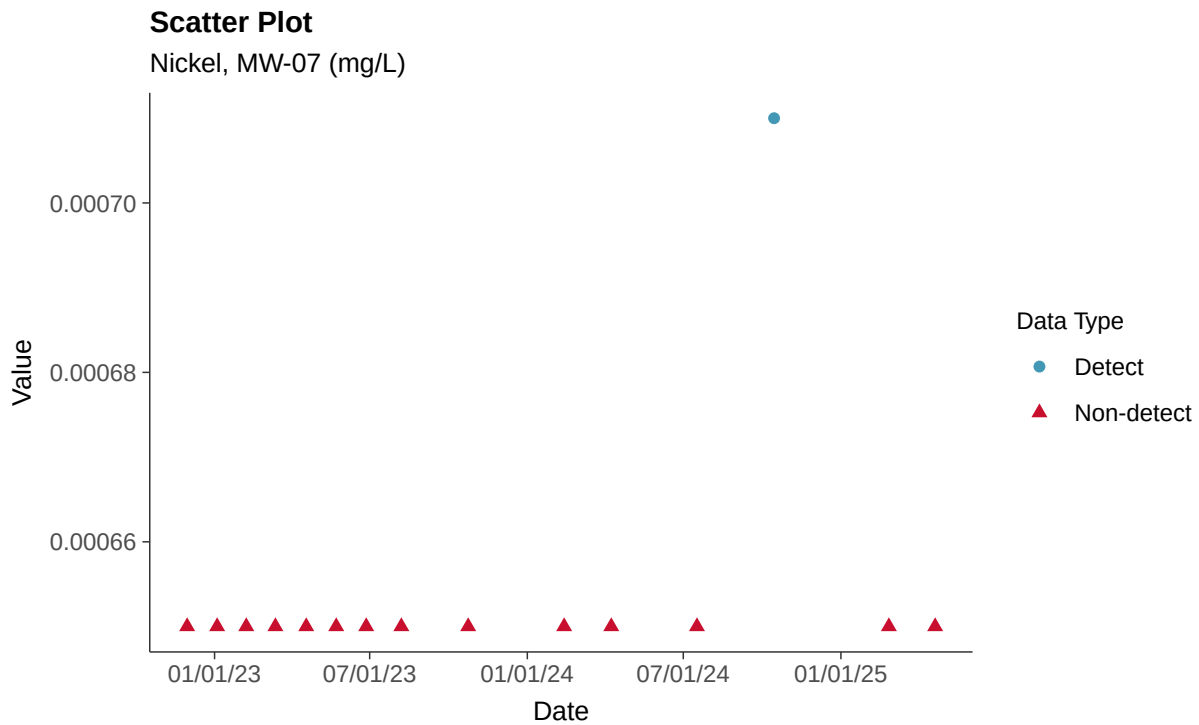
Trend Regression: Piecewise Linear-Linear-Linear

Iron, MW-07 (mg/L)



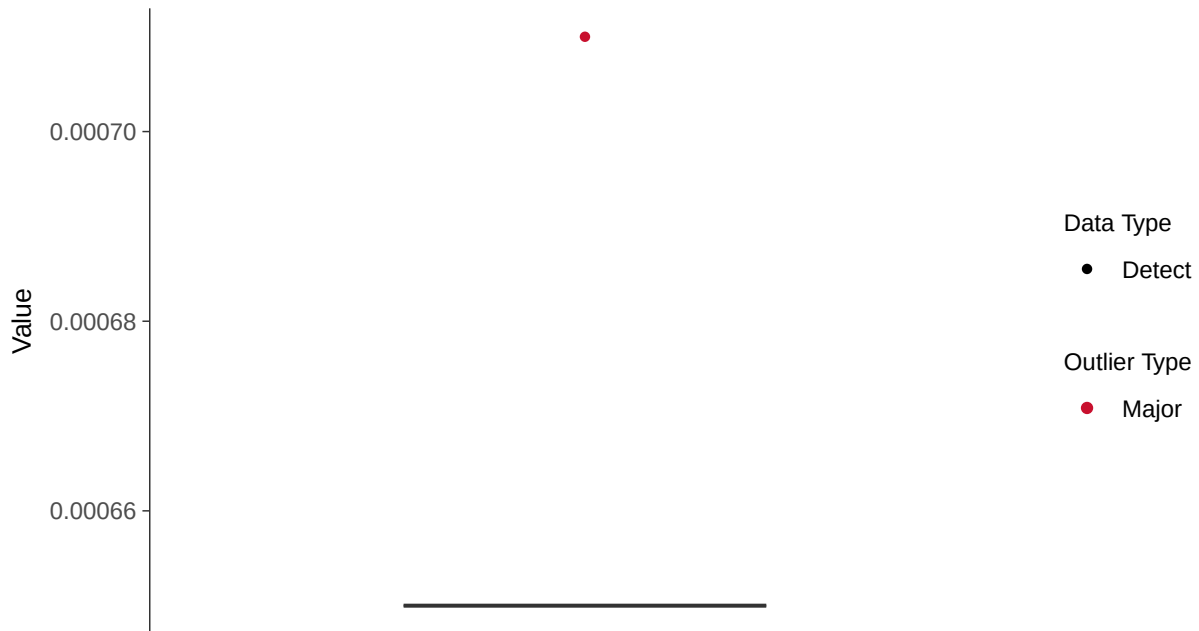
Part 115: Nickel, MW-07

ID: 17_1_5_119



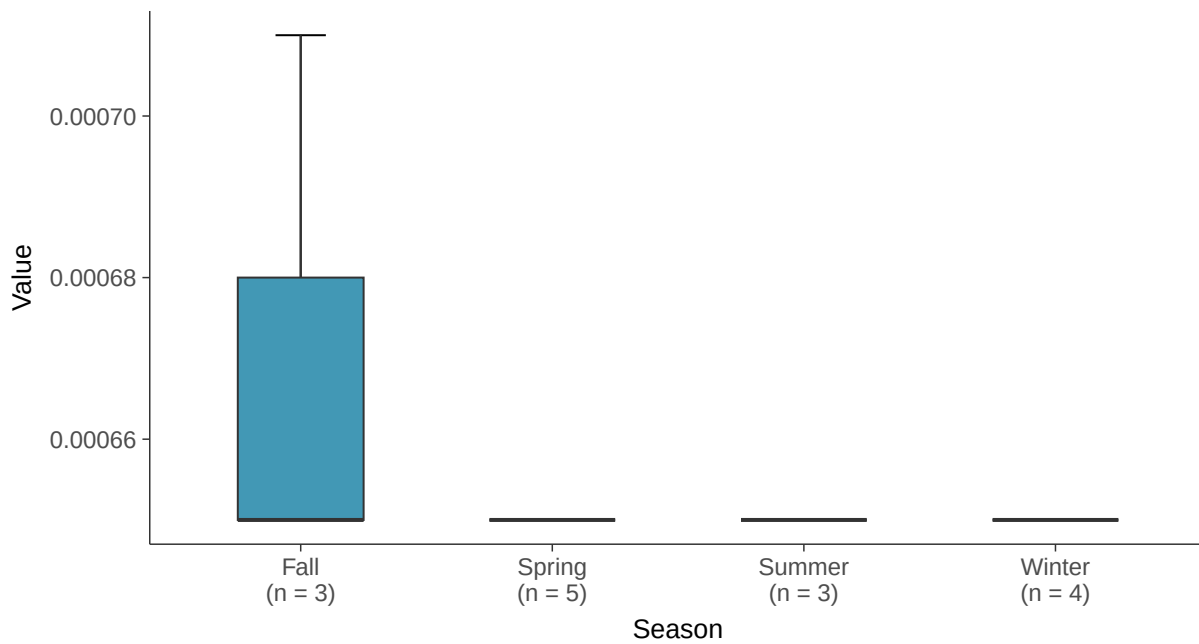
Boxplot

Nickel, MW-07 (mg/L)



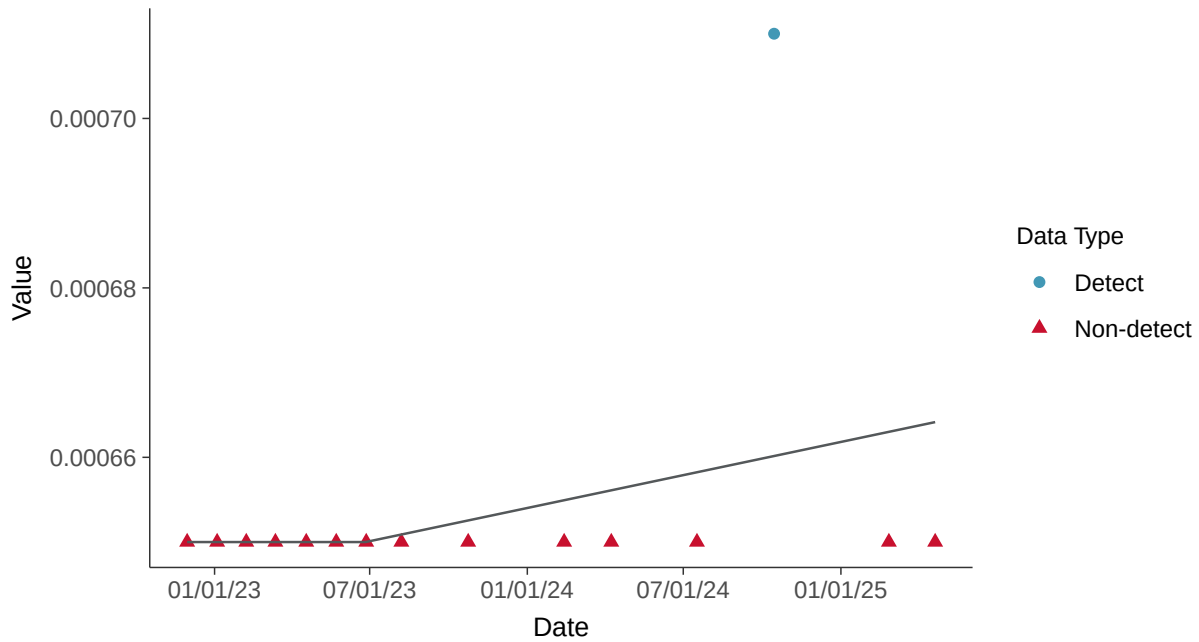
Boxplot by Season

Nickel, MW-07 (mg/L)



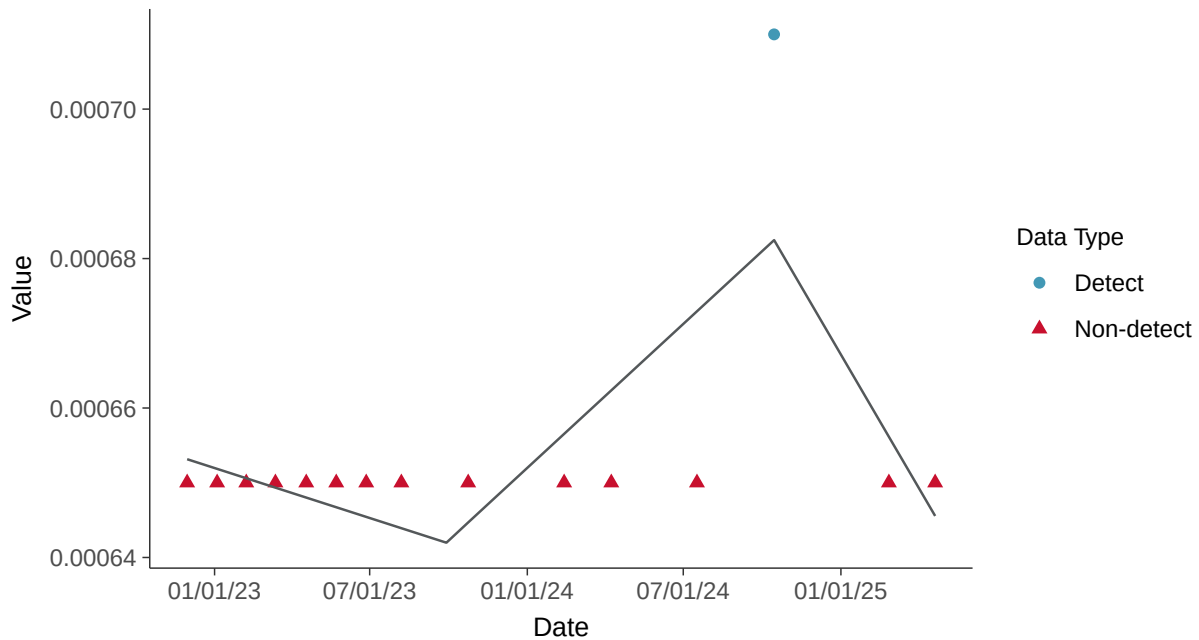
Trend Regression: Piecewise Linear-Linear

Nickel, MW-07 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

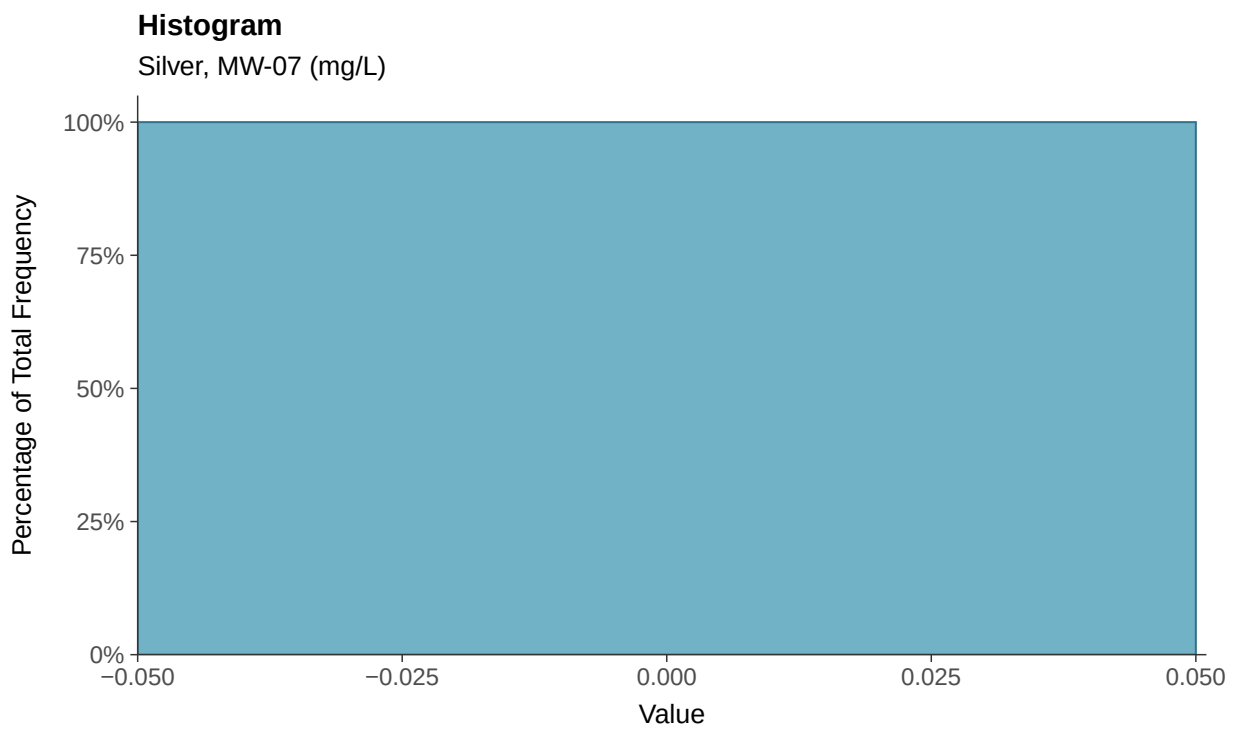
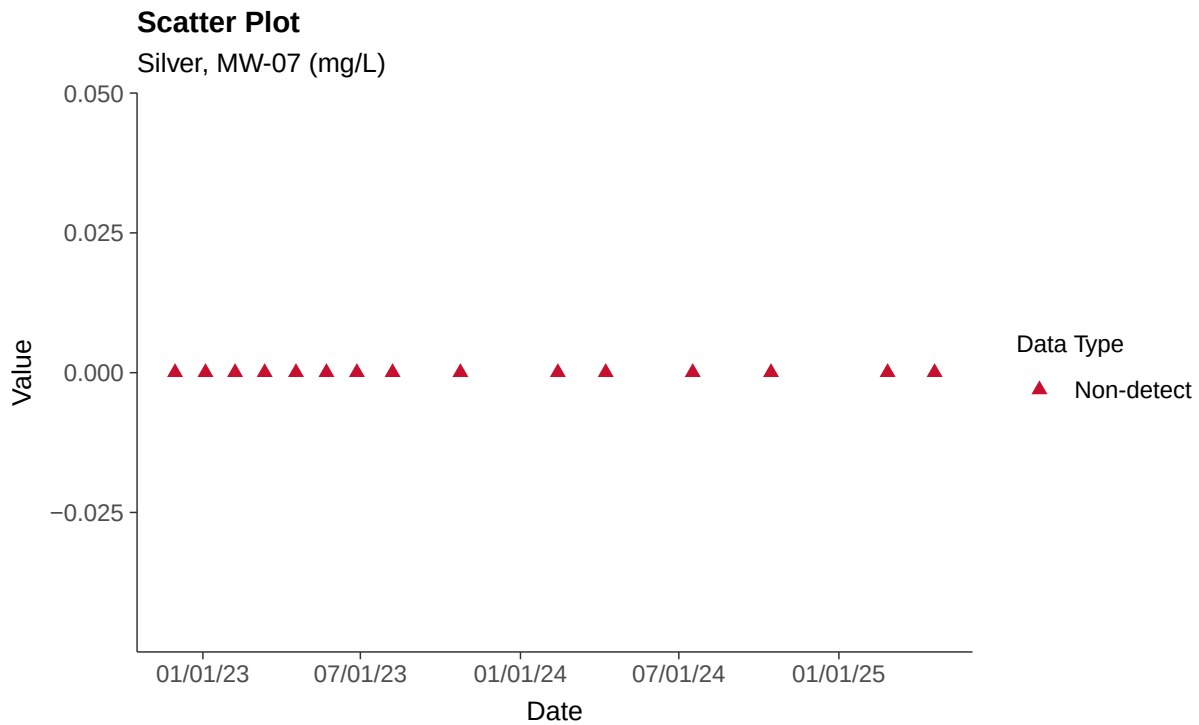
Nickel, MW-07 (mg/L)





Part 115: Silver, MW-07

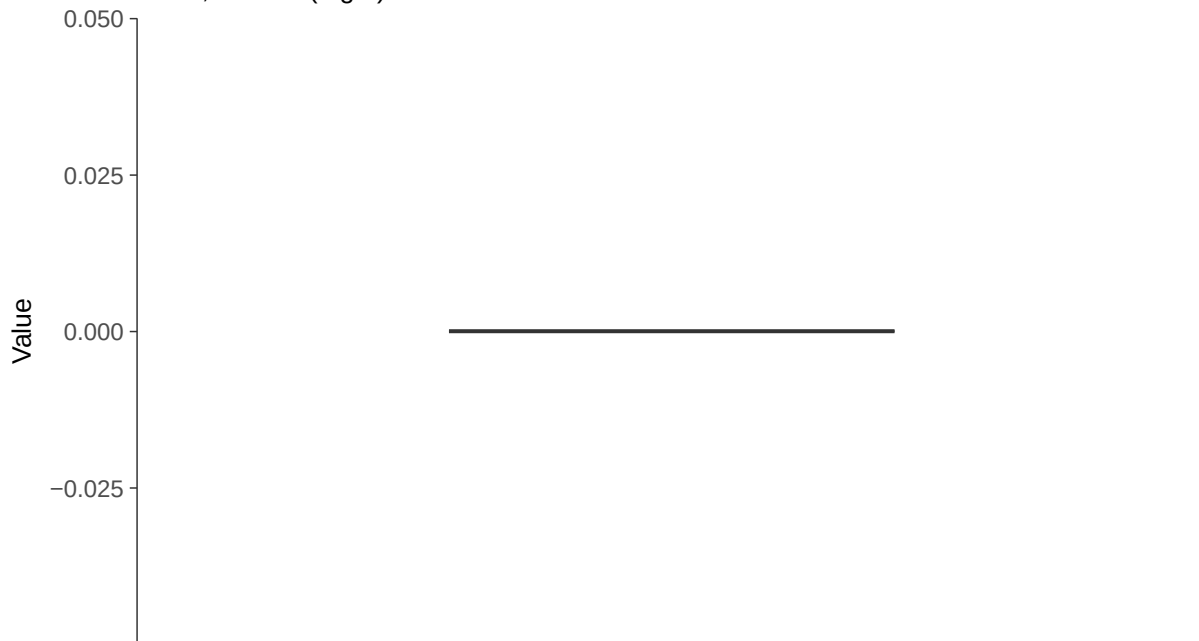
ID: 17_1_5_123





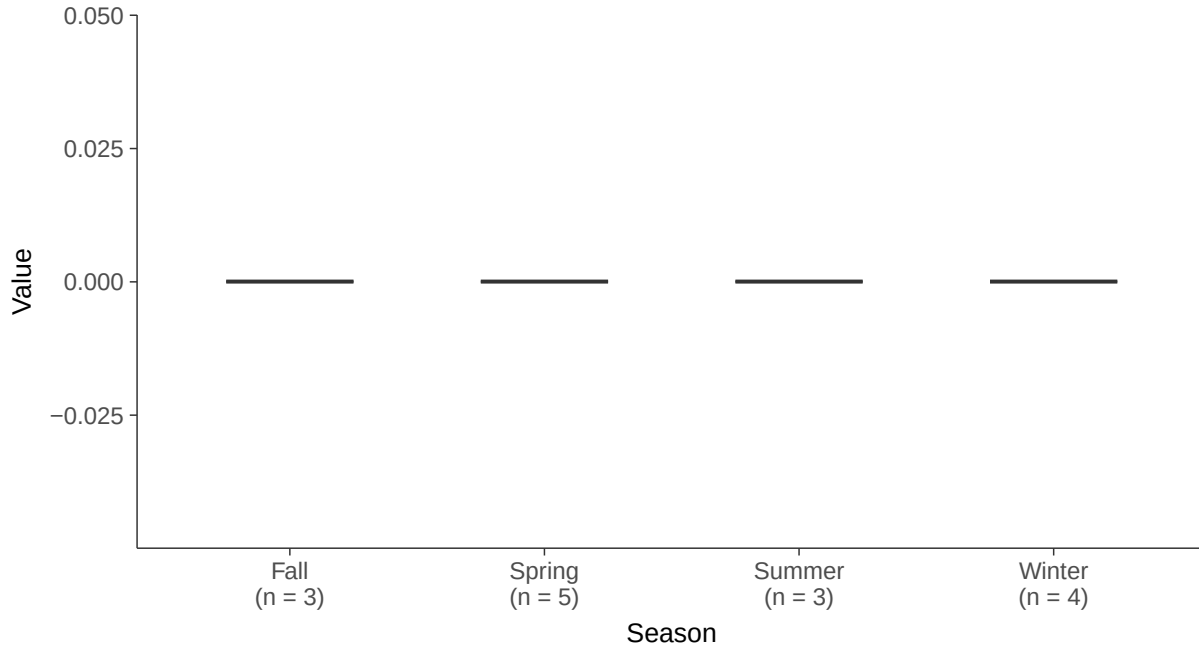
Boxplot

Silver, MW-07 (mg/L)



Boxplot by Season

Silver, MW-07 (mg/L)

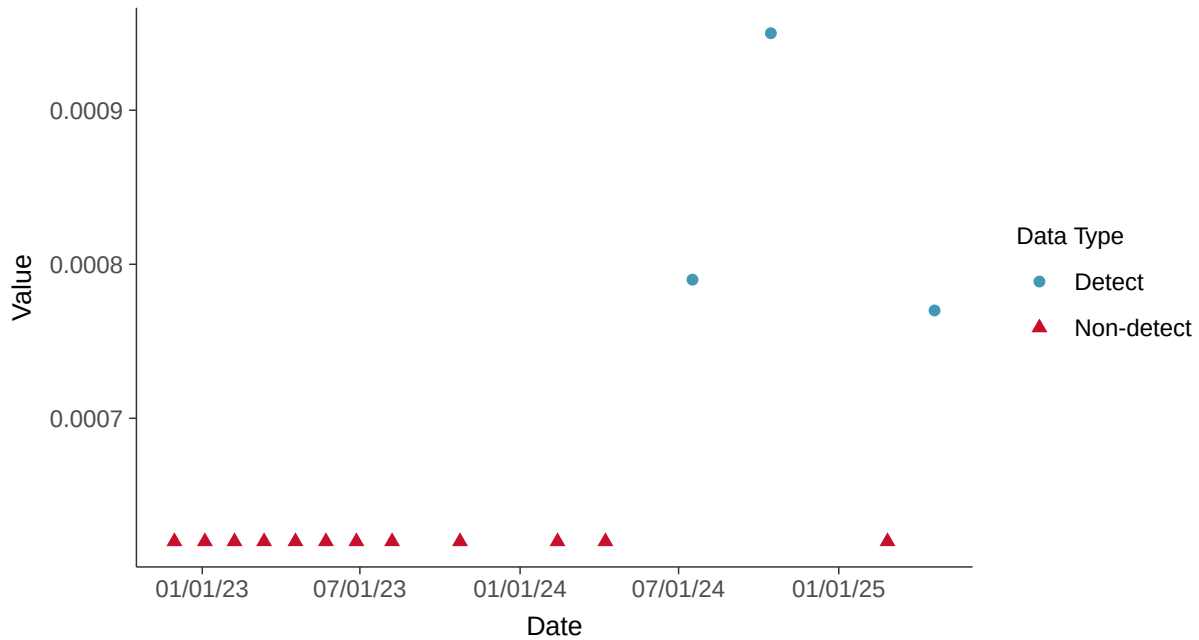


Part 115: Vanadium, MW-07

ID: 17_1_5_128

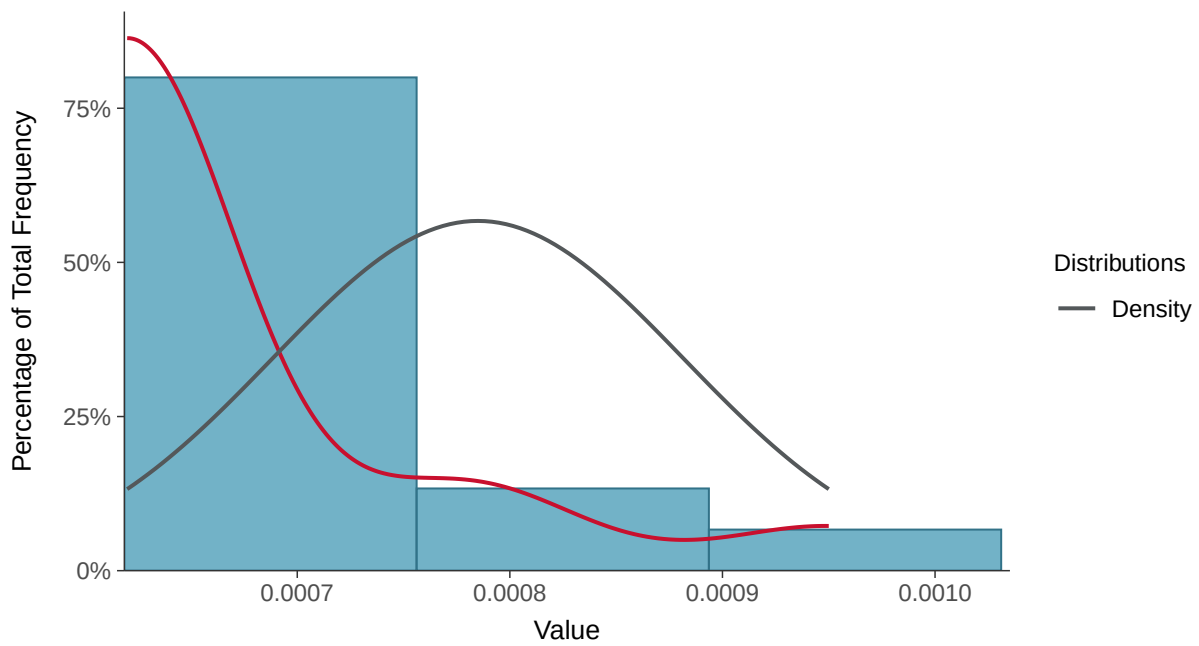
Scatter Plot

Vanadium, MW-07 (mg/L)



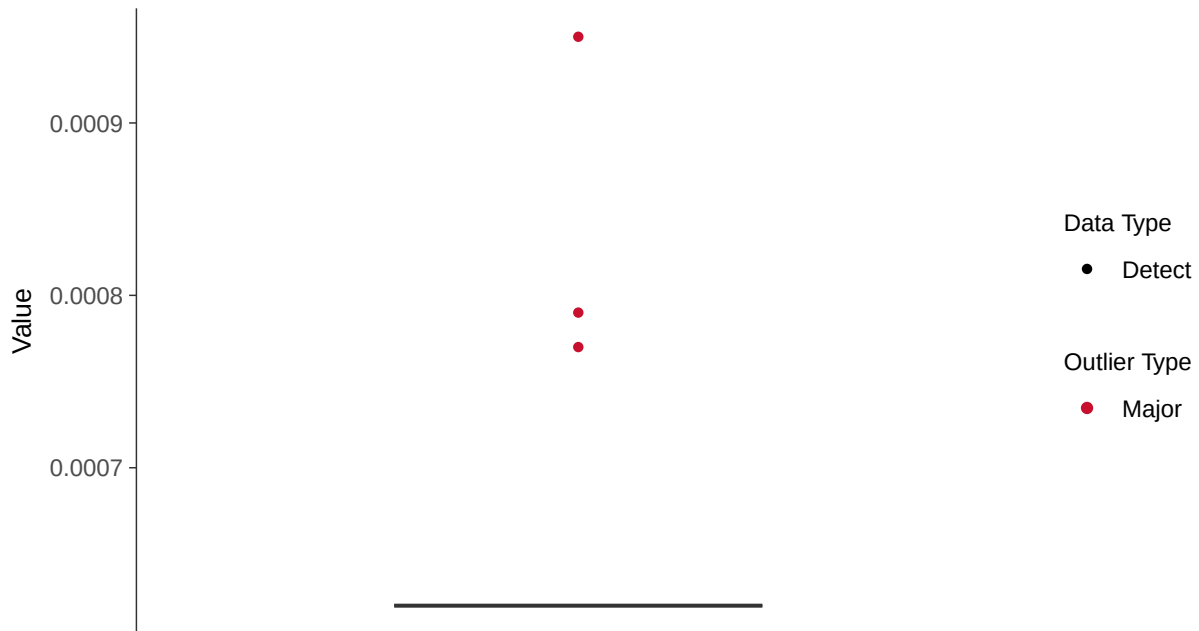
Histogram

Vanadium, MW-07 (mg/L)



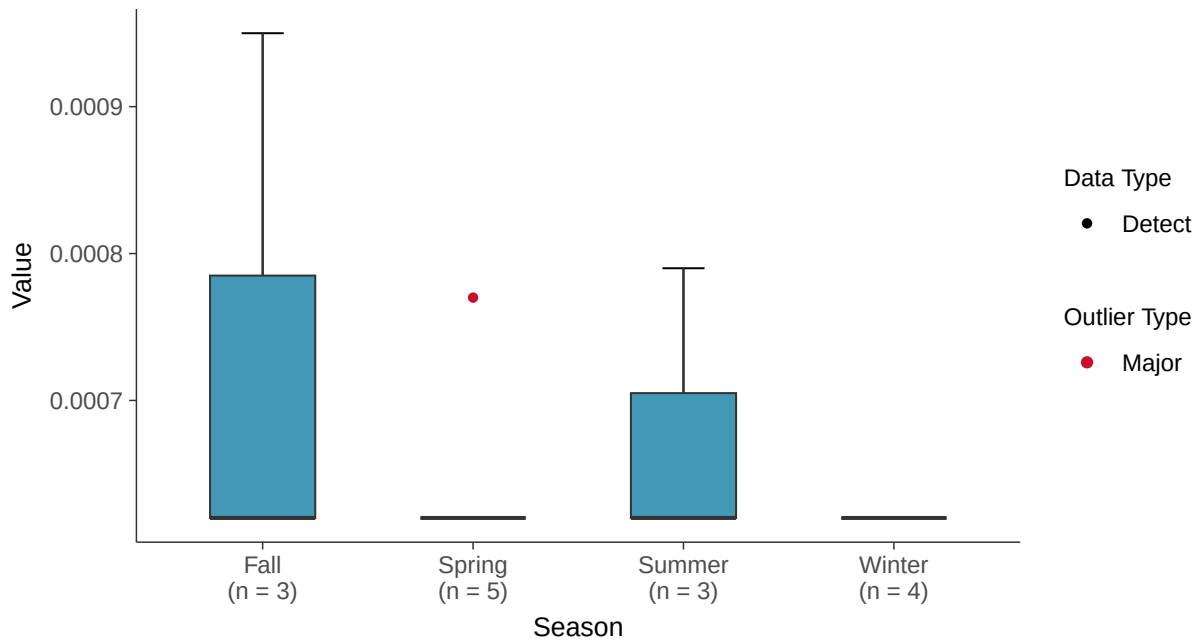
Boxplot

Vanadium, MW-07 (mg/L)



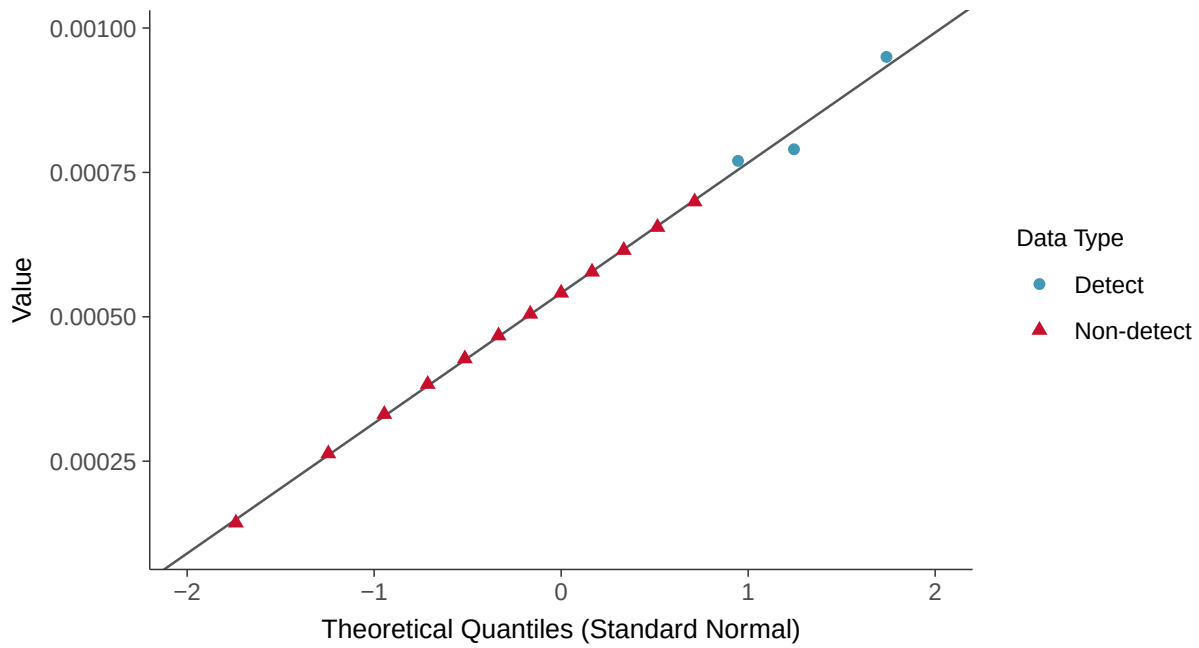
Boxplot by Season

Vanadium, MW-07 (mg/L)



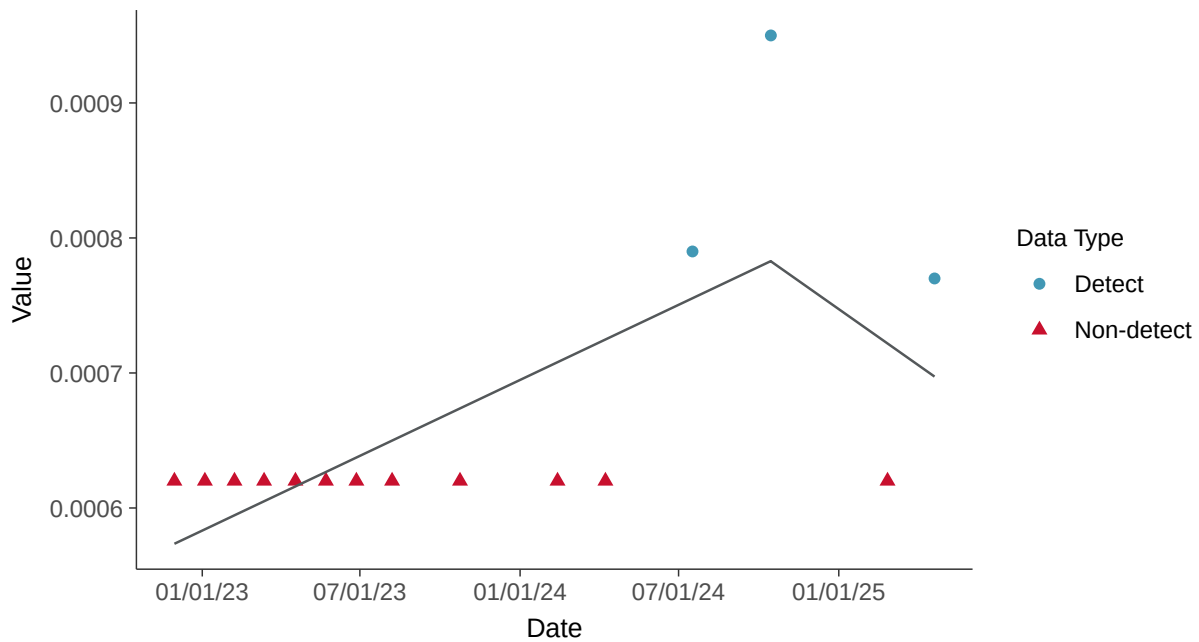
Normal Q-Q plot using ROS Imputed Estimates

Vanadium, MW-07 (mg/L)



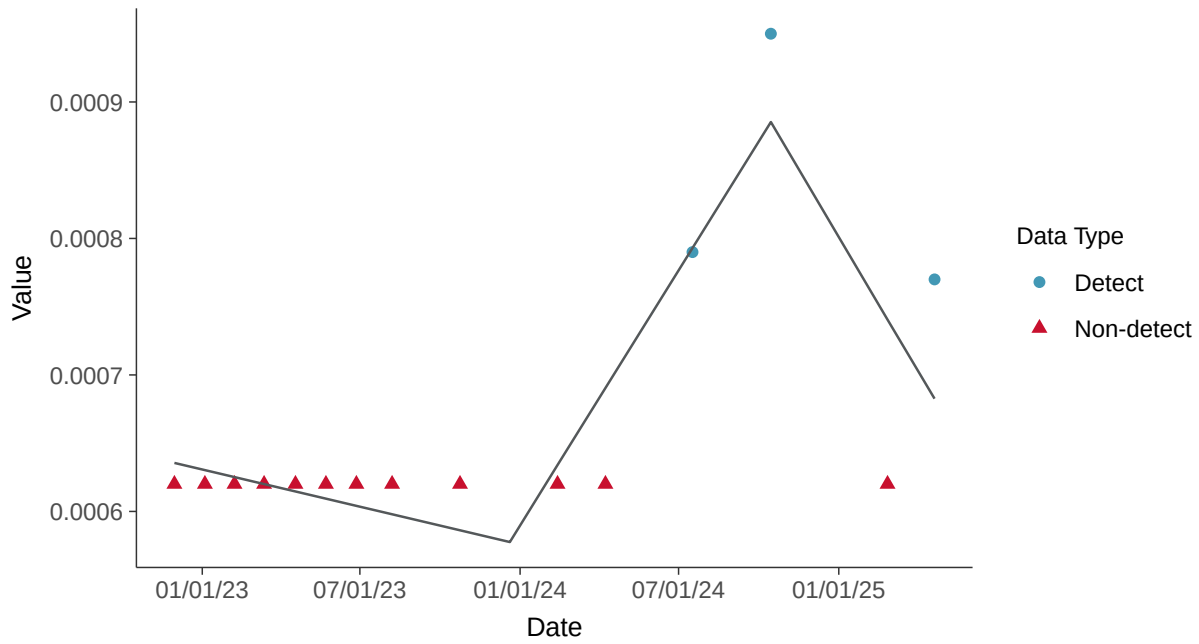
Trend Regression: Piecewise Linear-Linear

Vanadium, MW-07 (mg/L)



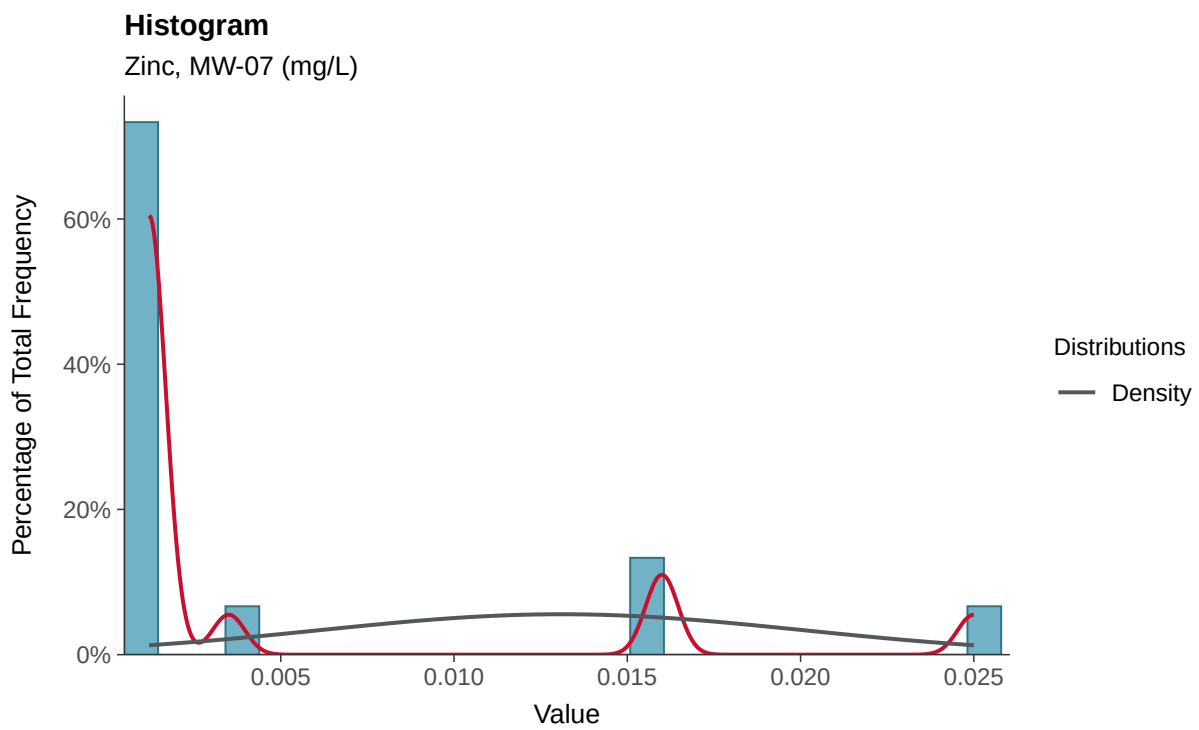
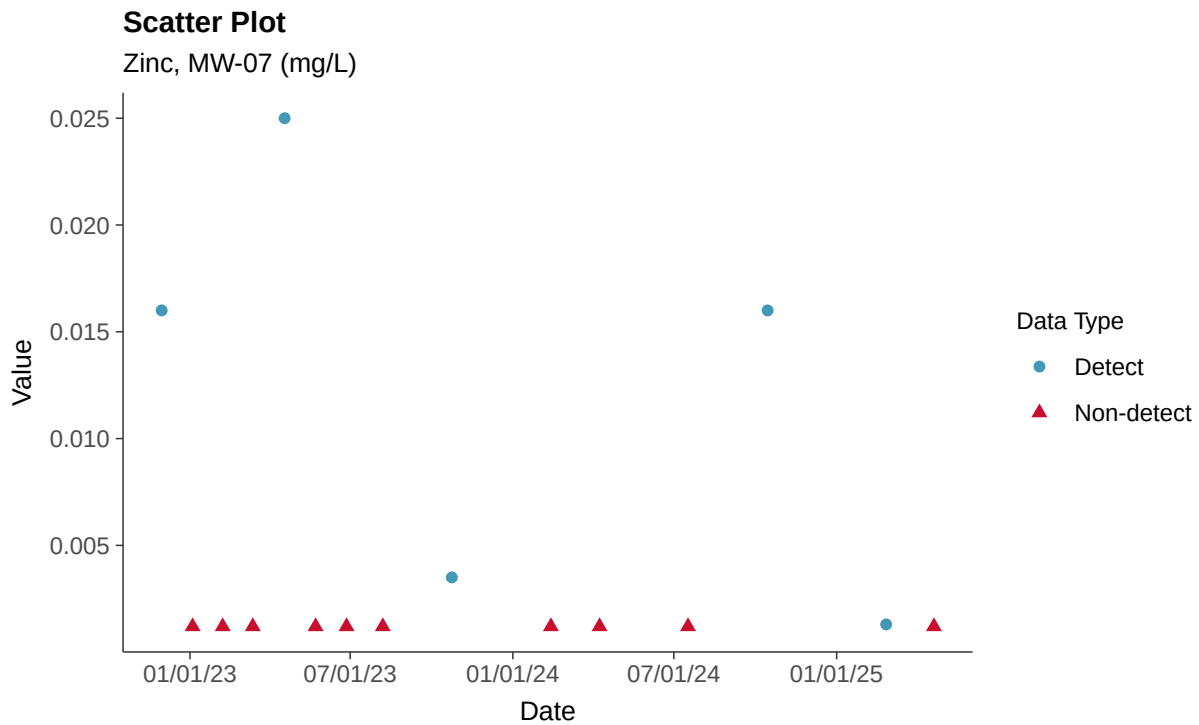
Trend Regression: Piecewise Linear-Linear-Linear

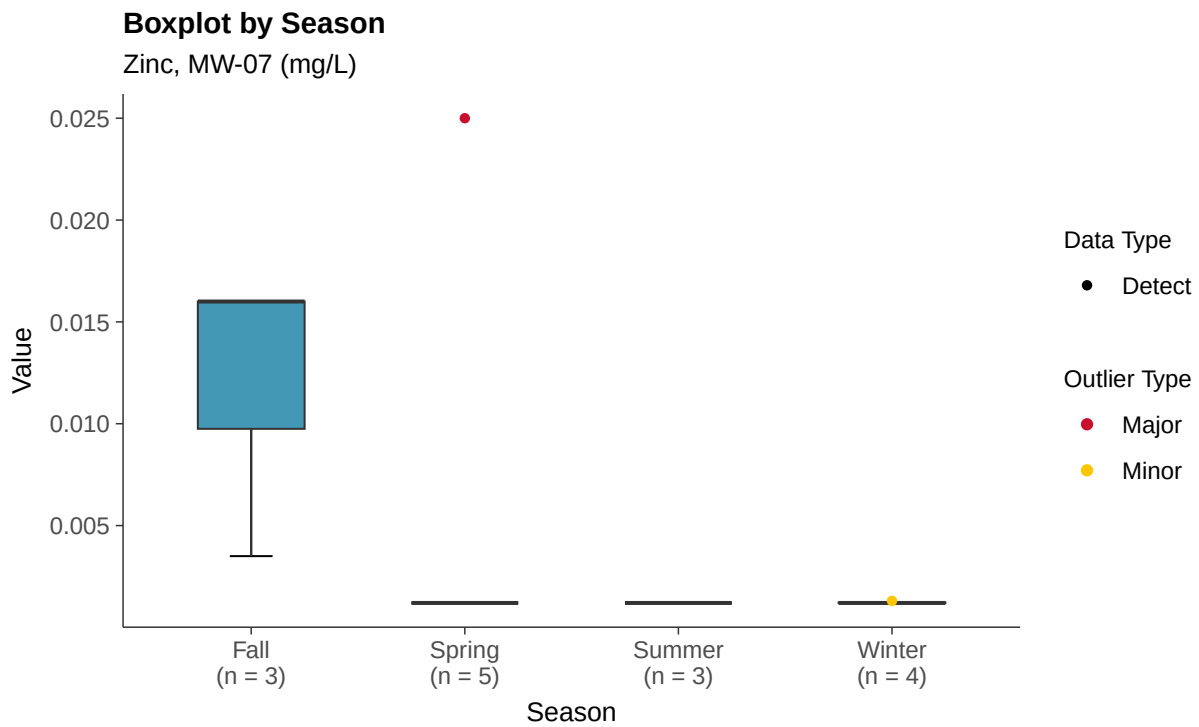
Vanadium, MW-07 (mg/L)



Part 115: Zinc, MW-07

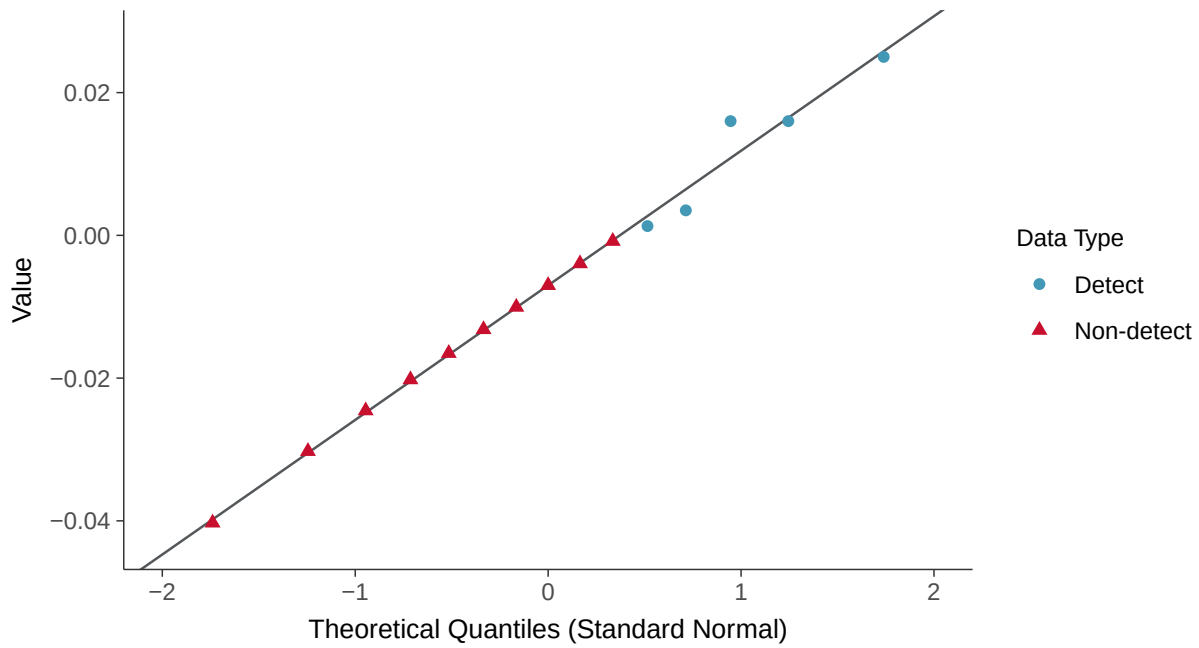
ID: 17_1_5_129





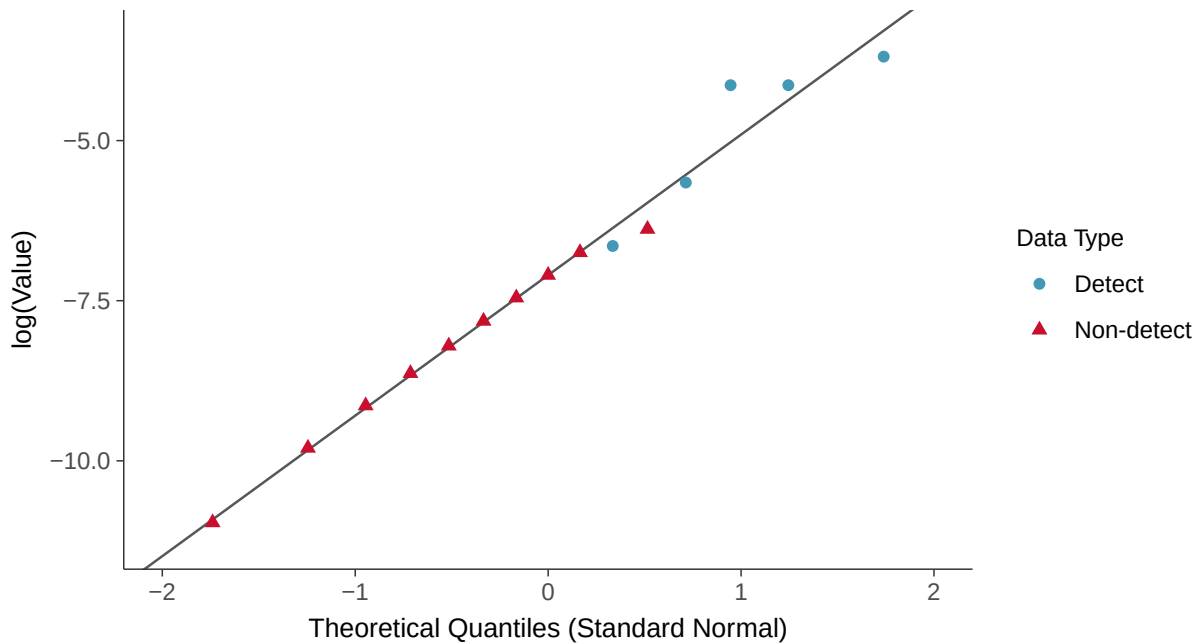
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-07 (mg/L)



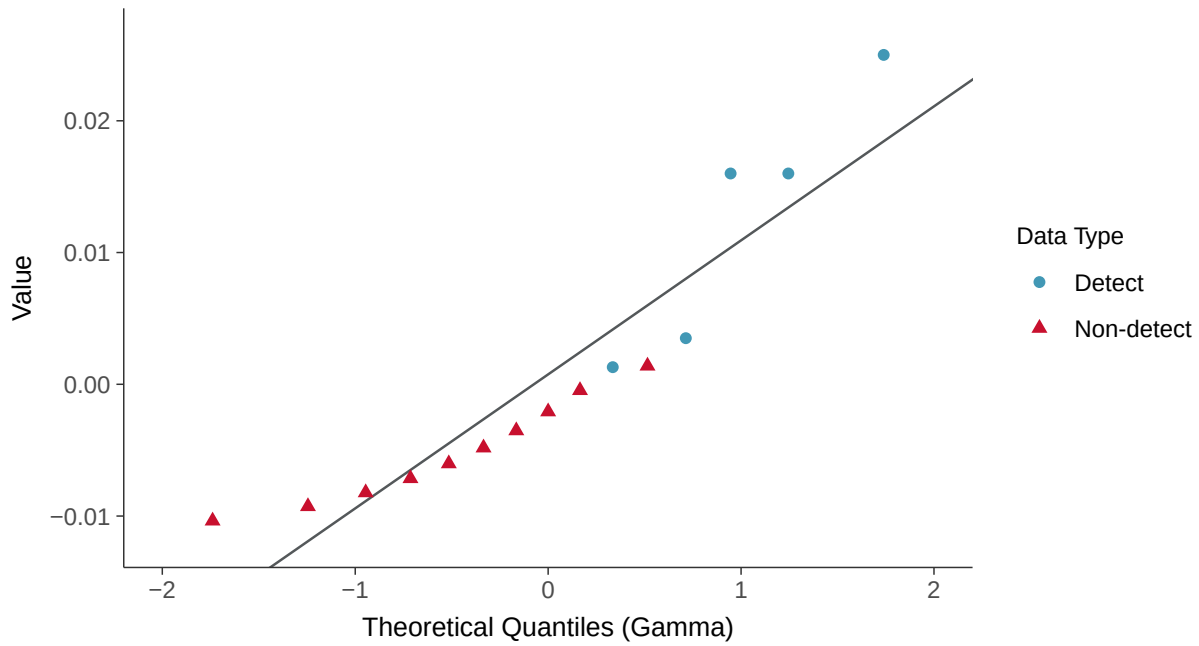
Lognormal Q-Q plot using ROS Imputed Estimates

Zinc, MW-07 (mg/L)



Gamma Q-Q plot using ROS Imputed Estimates

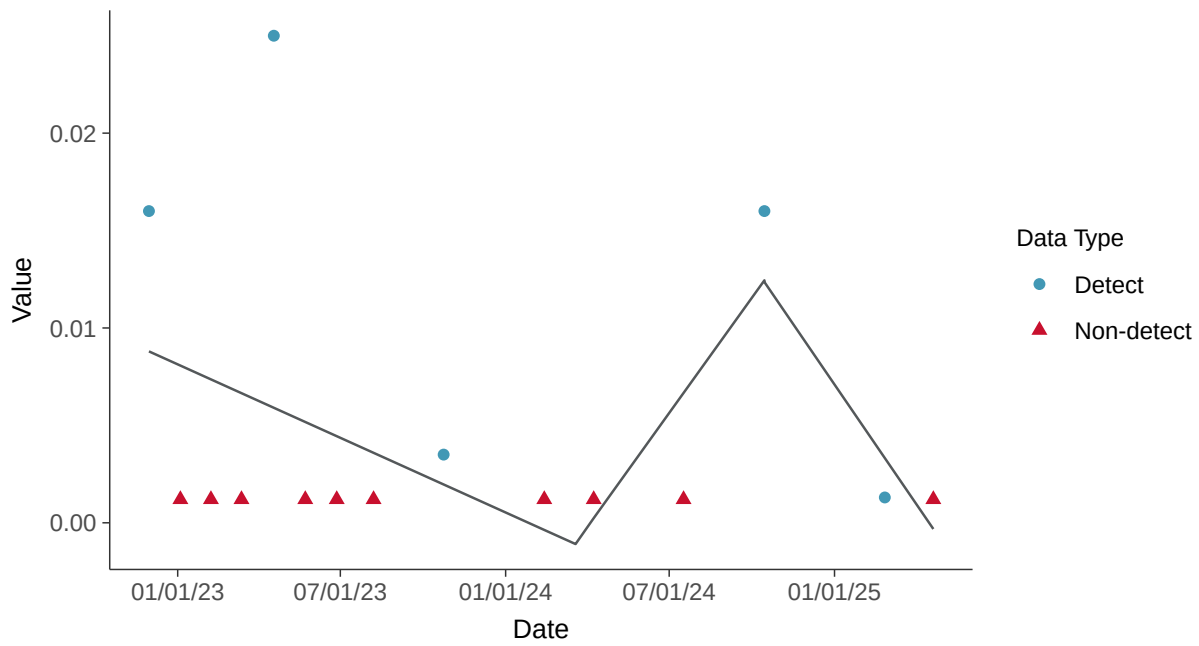
Zinc, MW-07 (mg/L)





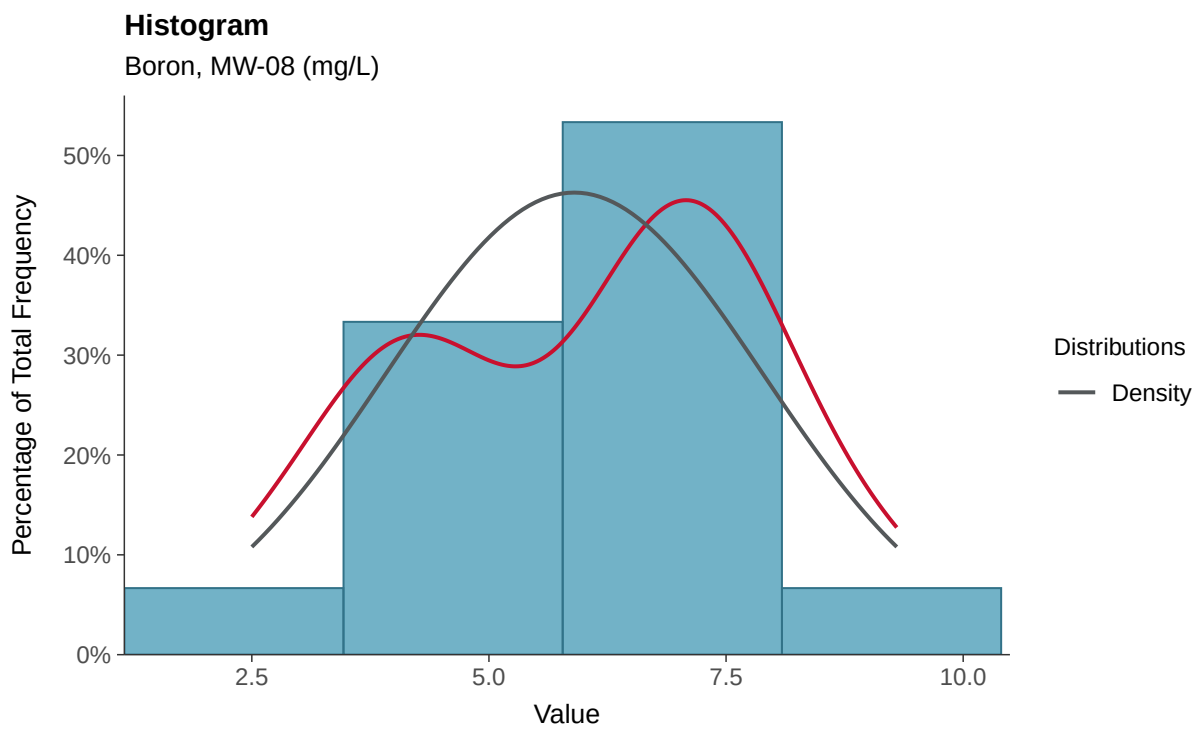
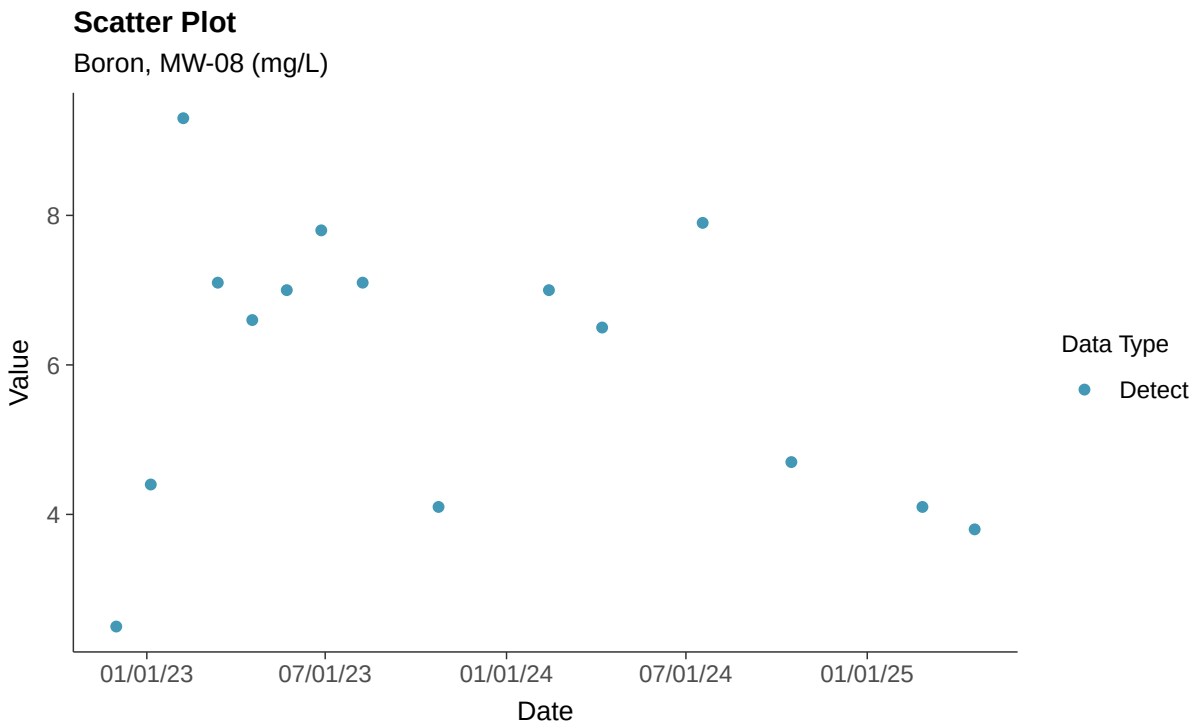
Trend Regression: Piecewise Linear-Linear-Linear

Zinc, MW-07 (mg/L)



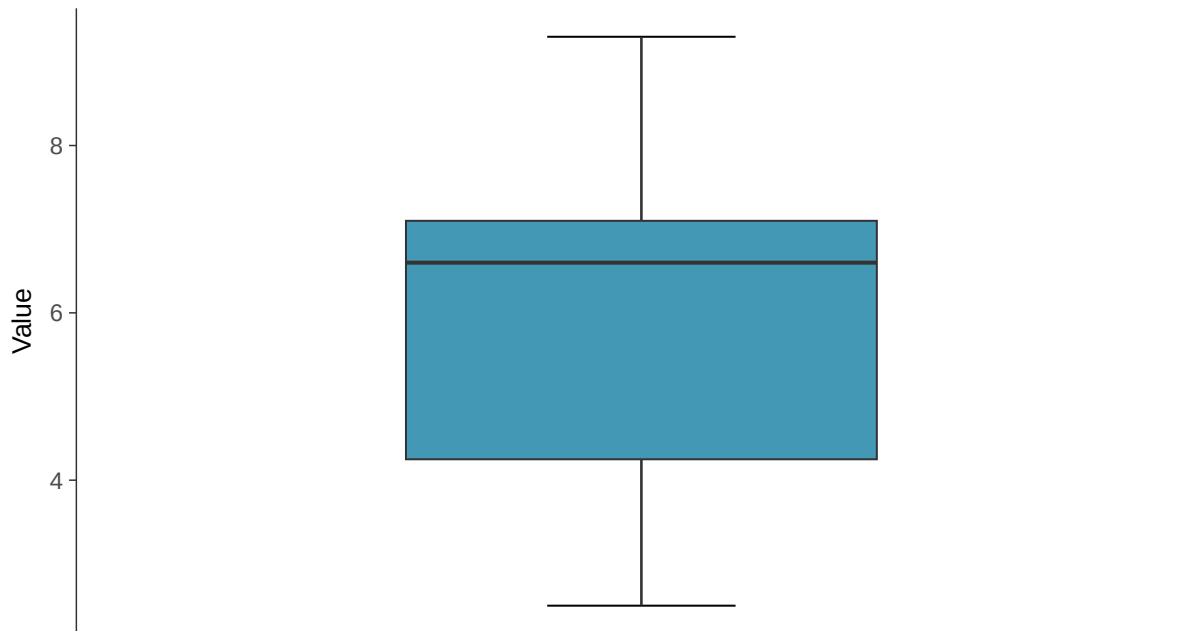
Appendix III: Boron, MW-08

ID: 18_1_3_105



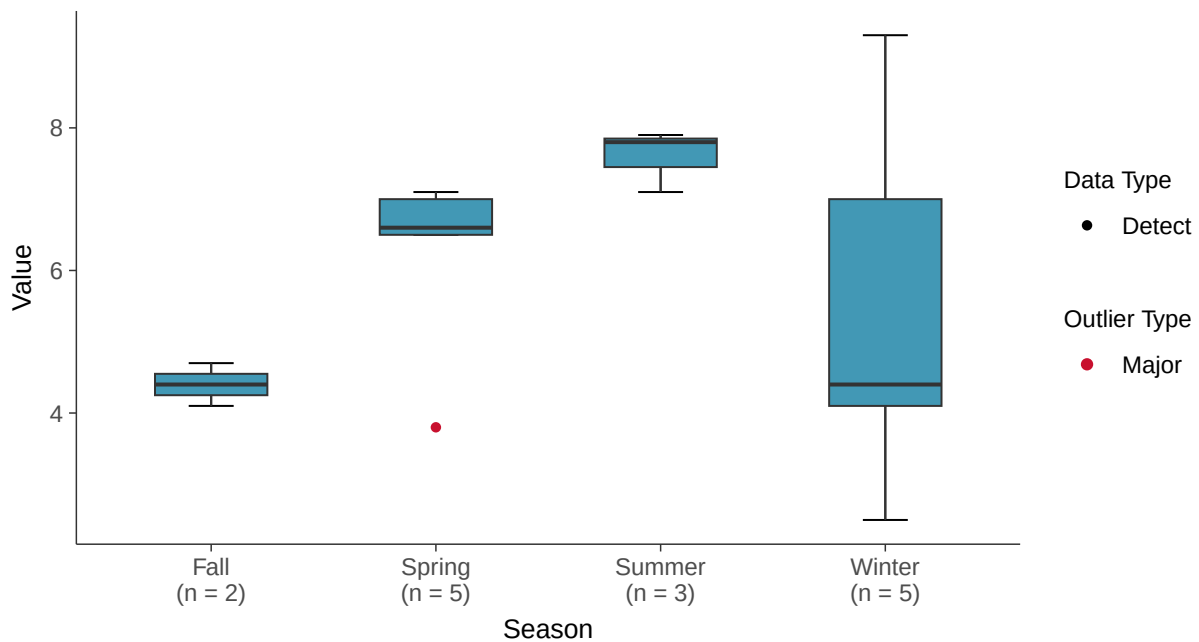
Boxplot

Boron, MW-08 (mg/L)



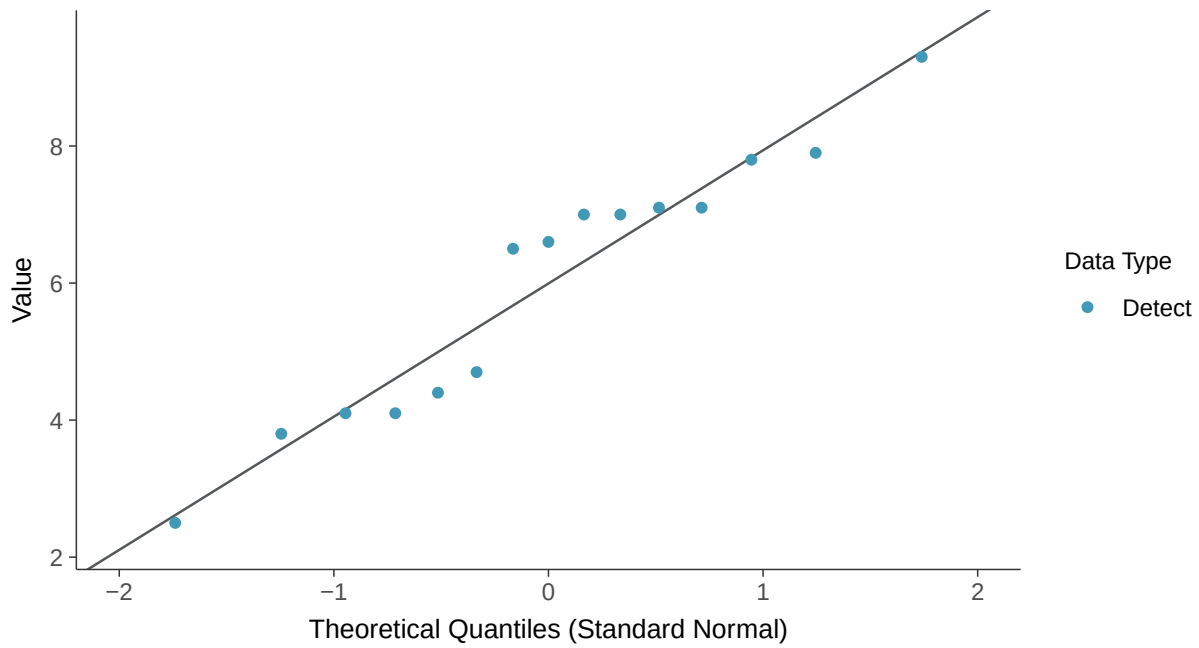
Boxplot by Season

Boron, MW-08 (mg/L)



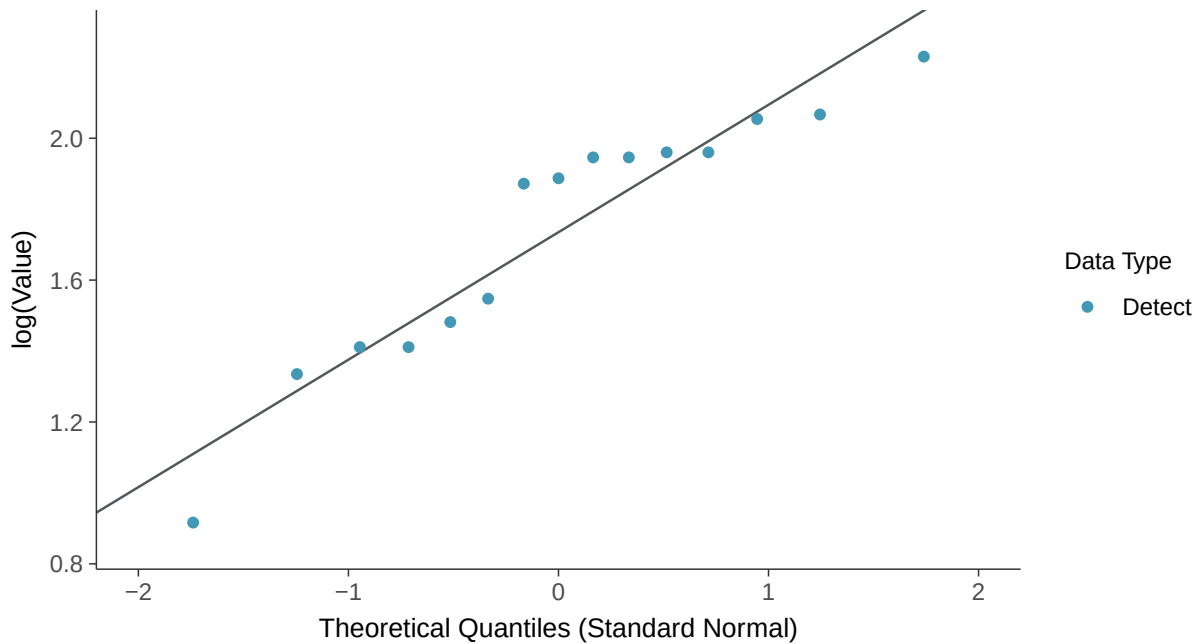
Normal Q-Q plot

Boron, MW-08 (mg/L)



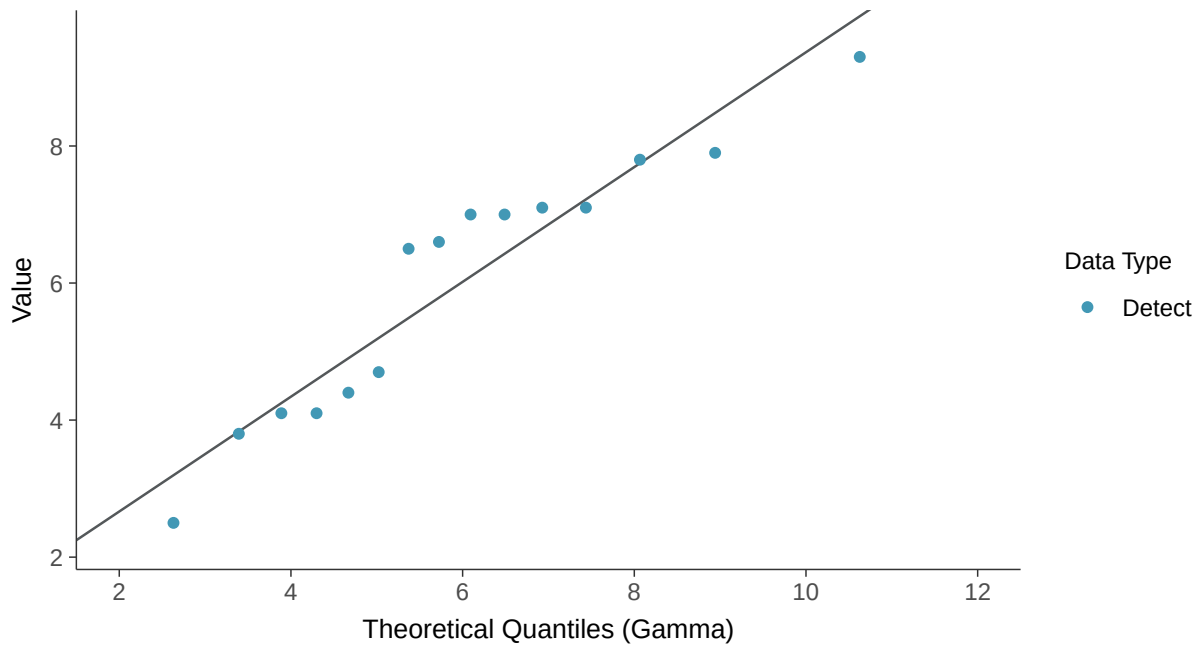
Lognormal Q-Q plot

Boron, MW-08 (mg/L)



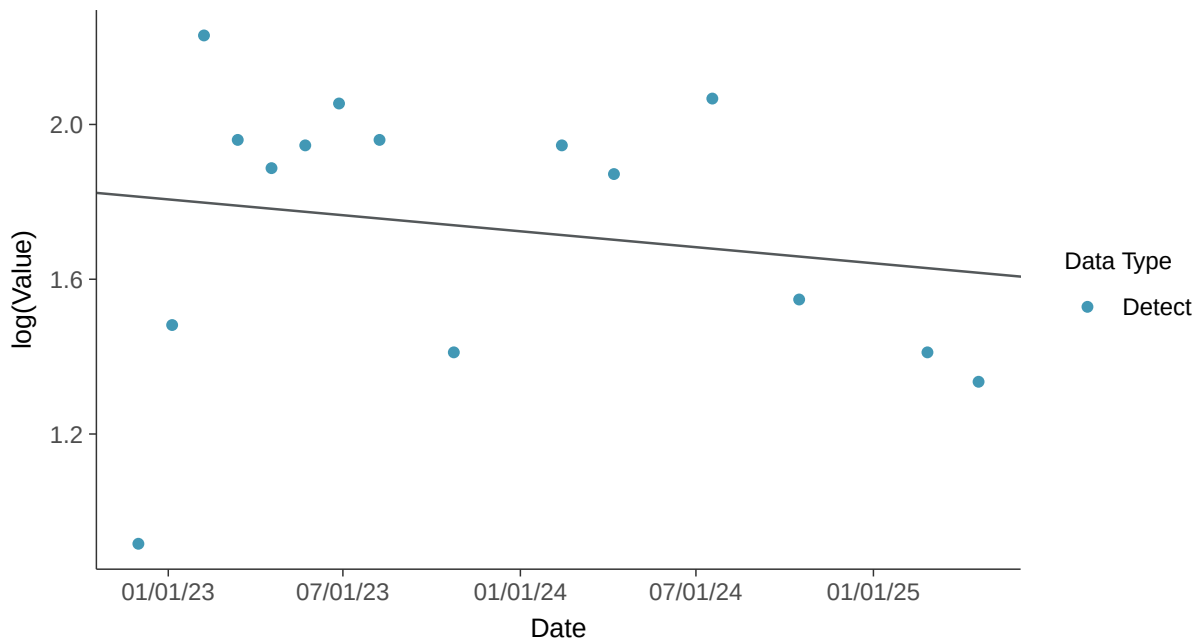
Gamma Q-Q plot

Boron, MW-08 (mg/L)



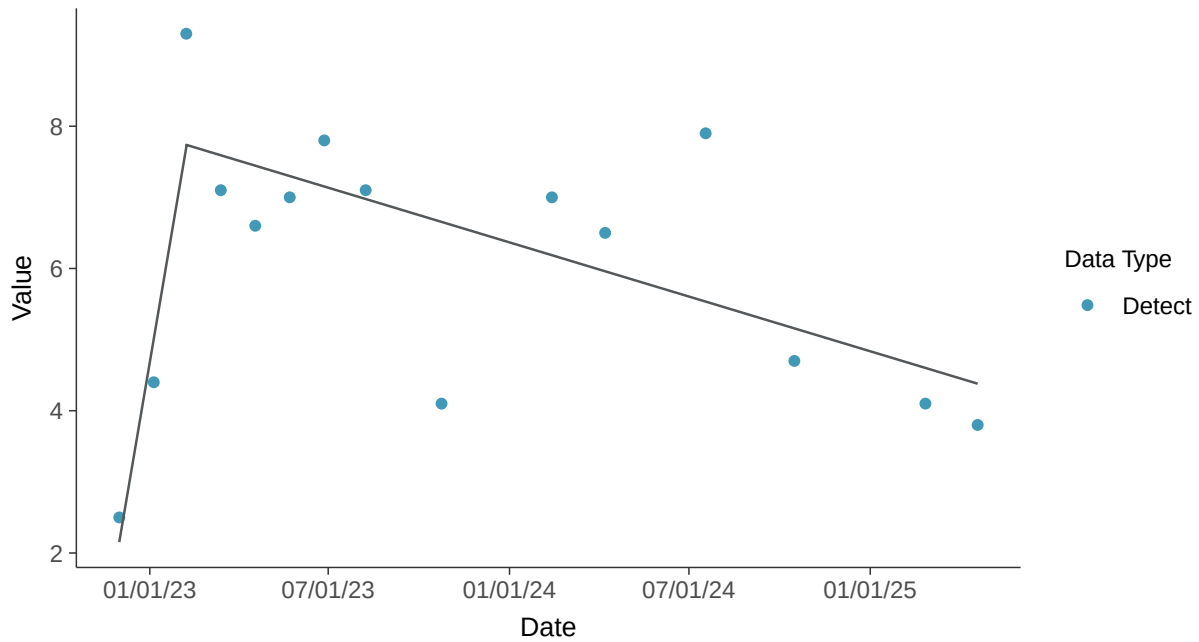
Trend Regression: Lognormal MLE

Boron, MW-08 (mg/L)



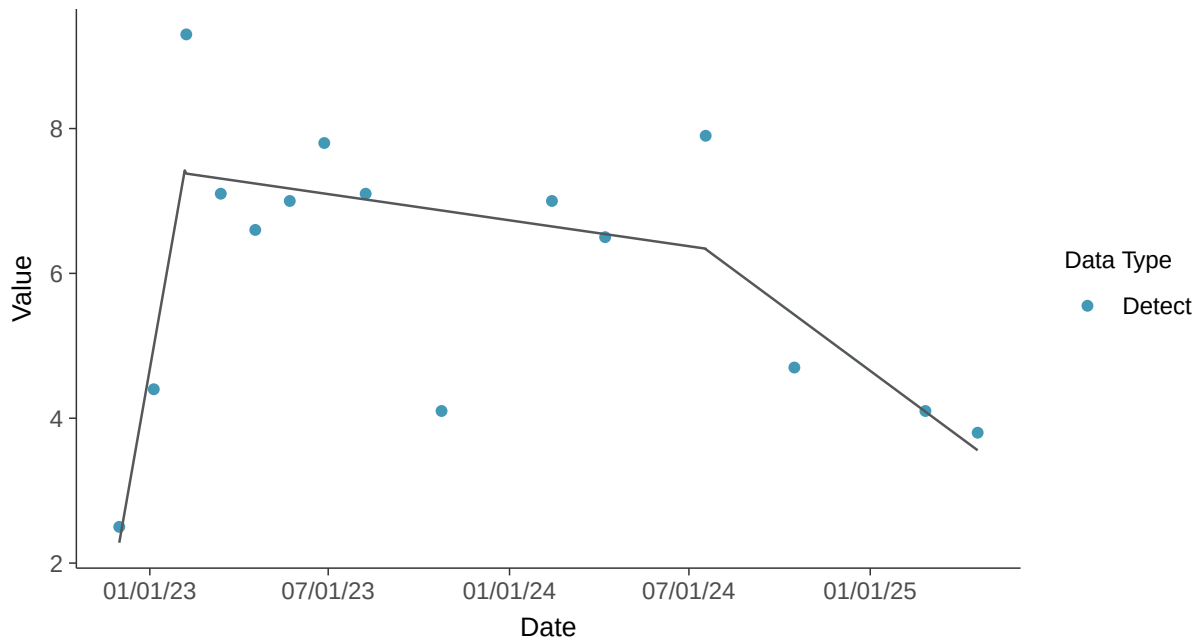
Trend Regression: Piecewise Linear-Linear

Boron, MW-08 (mg/L)



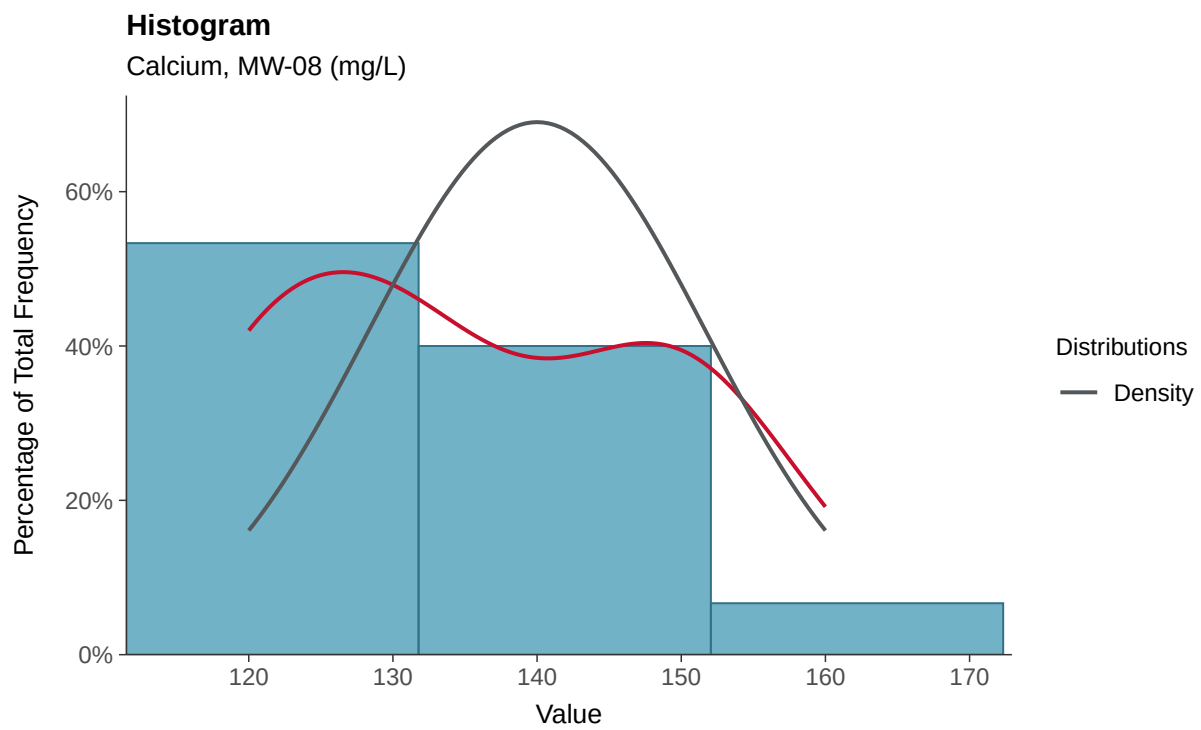
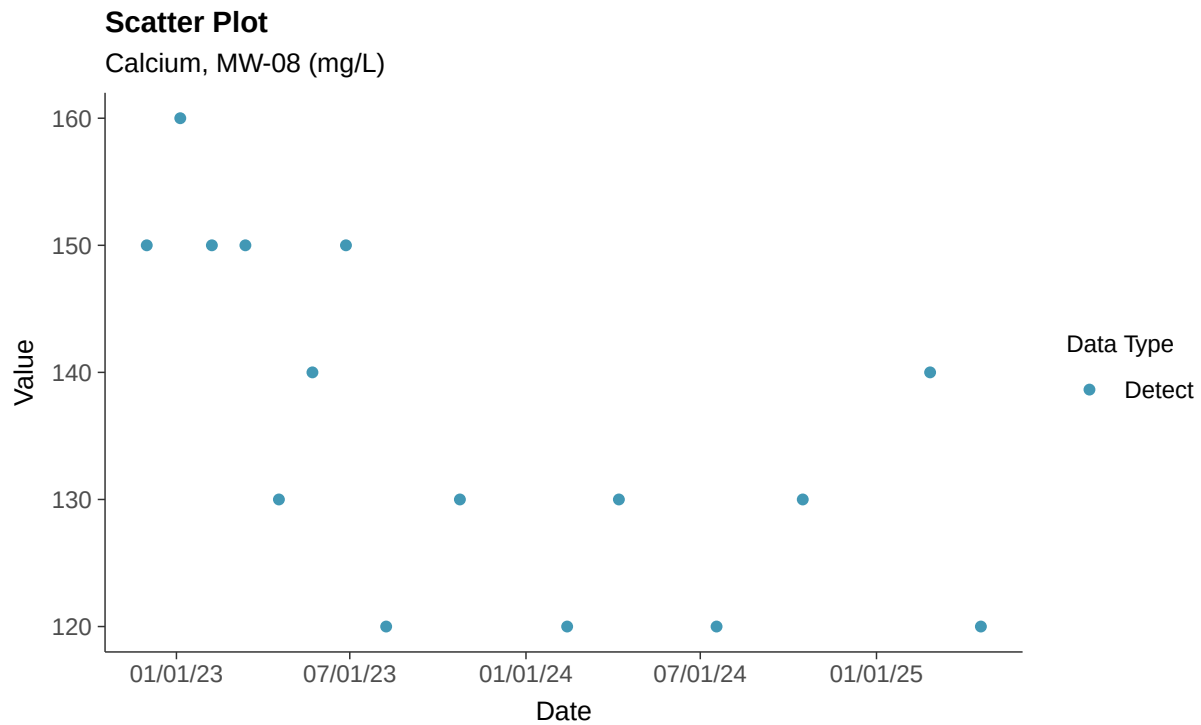
Trend Regression: Piecewise Linear-Linear-Linear

Boron, MW-08 (mg/L)



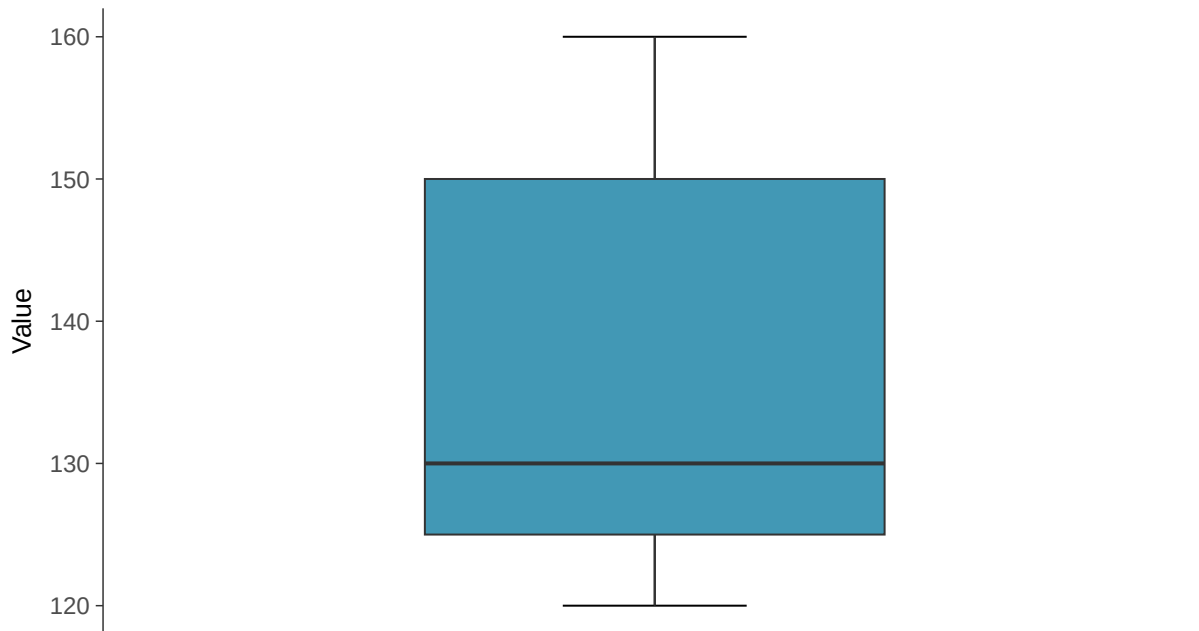
Appendix III: Calcium, MW-08

ID: 18_1_3_107



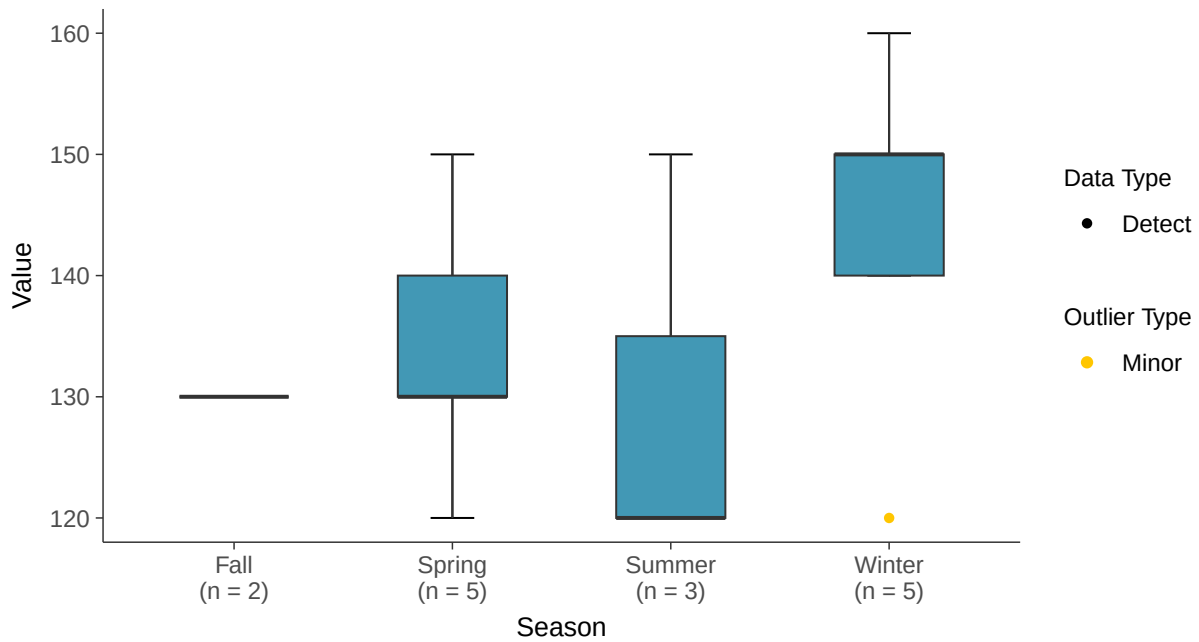
Boxplot

Calcium, MW-08 (mg/L)



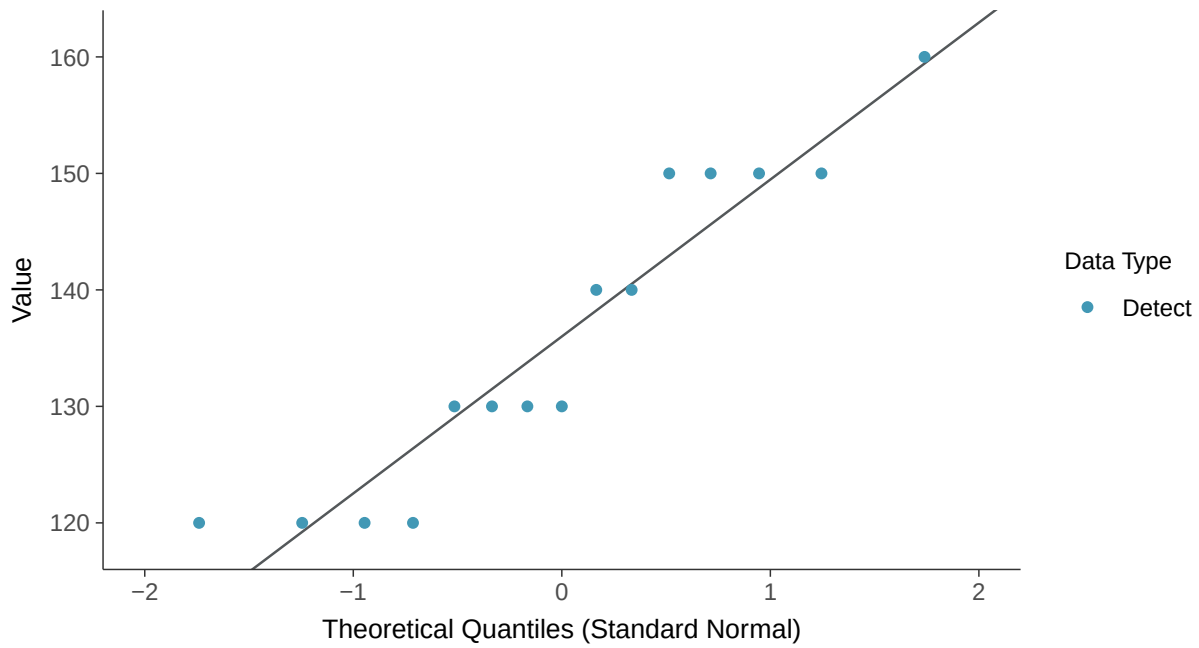
Boxplot by Season

Calcium, MW-08 (mg/L)



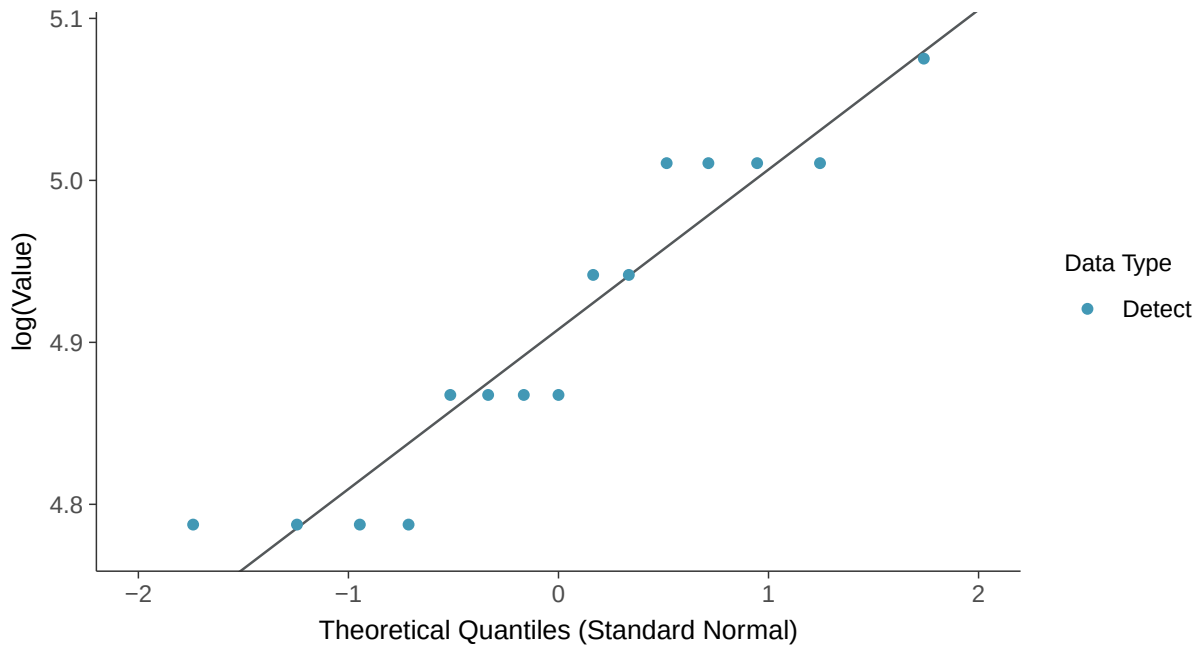
Normal Q-Q plot

Calcium, MW-08 (mg/L)



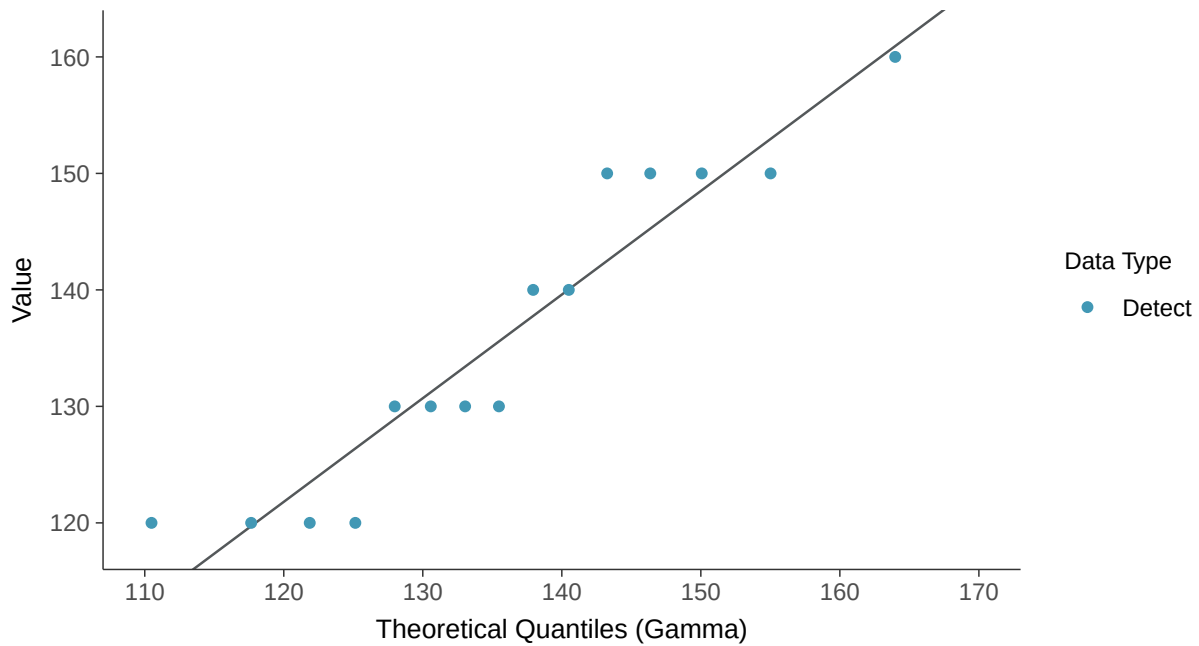
Lognormal Q-Q plot

Calcium, MW-08 (mg/L)



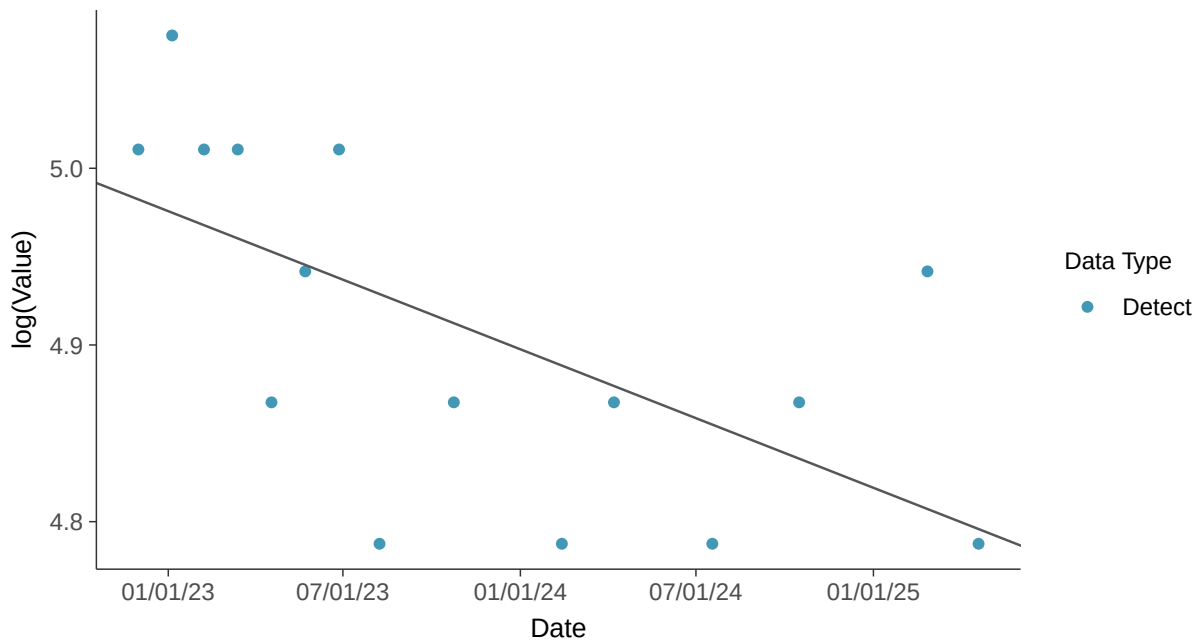
Gamma Q-Q plot

Calcium, MW-08 (mg/L)



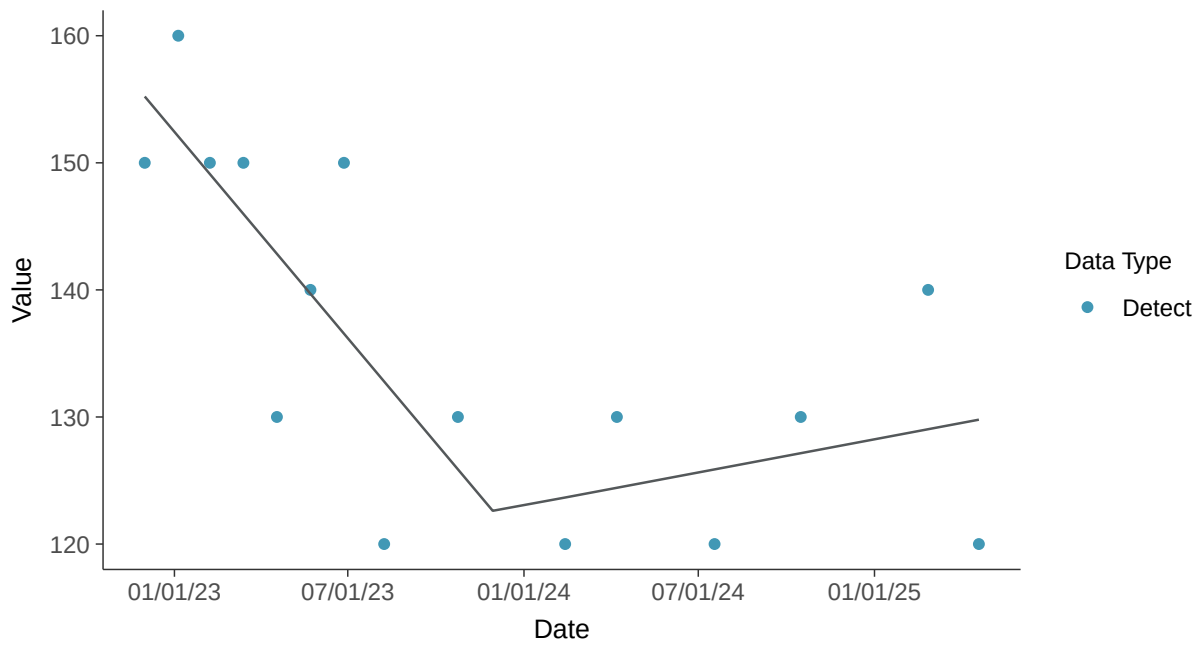
Trend Regression: Lognormal MLE

Calcium, MW-08 (mg/L)





Trend Regression: Piecewise Linear-Linear
Calcium, MW-08 (mg/L)

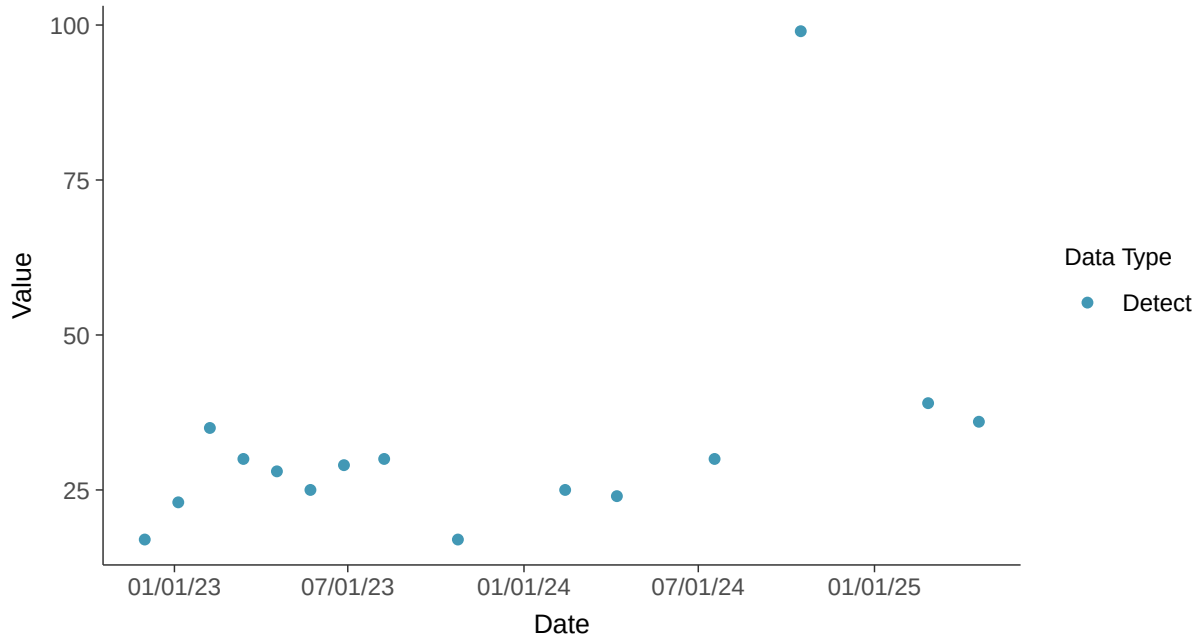


Appendix III: Chloride (as Cl), MW-08

ID: 18_1_3_108

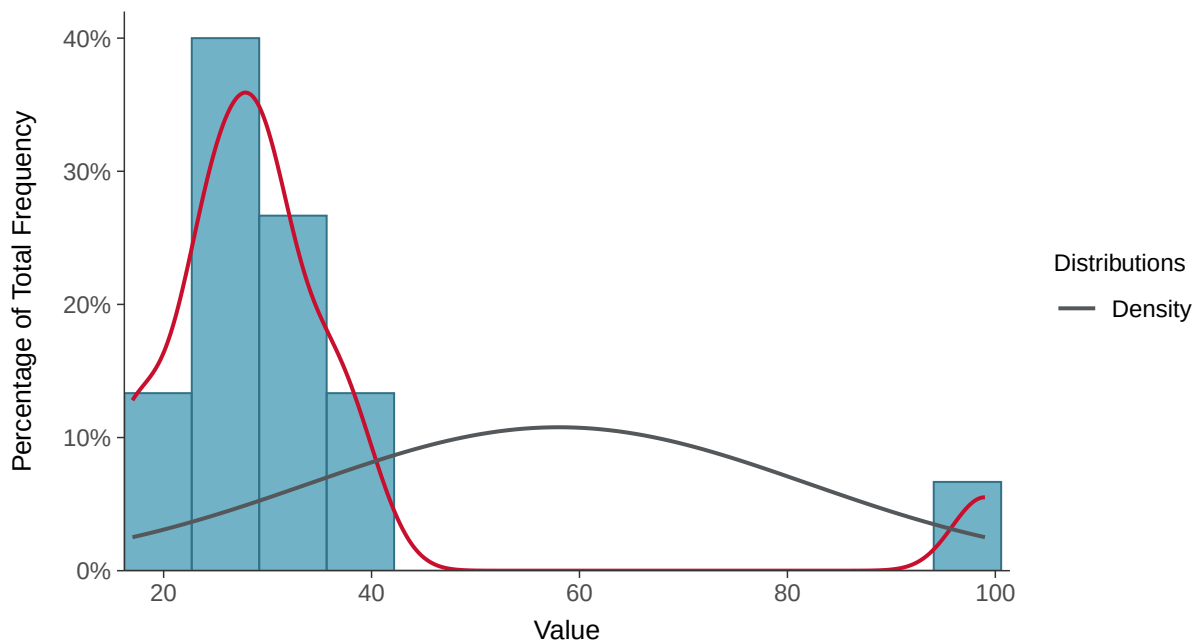
Scatter Plot

Chloride (as Cl), MW-08 (mg/L)



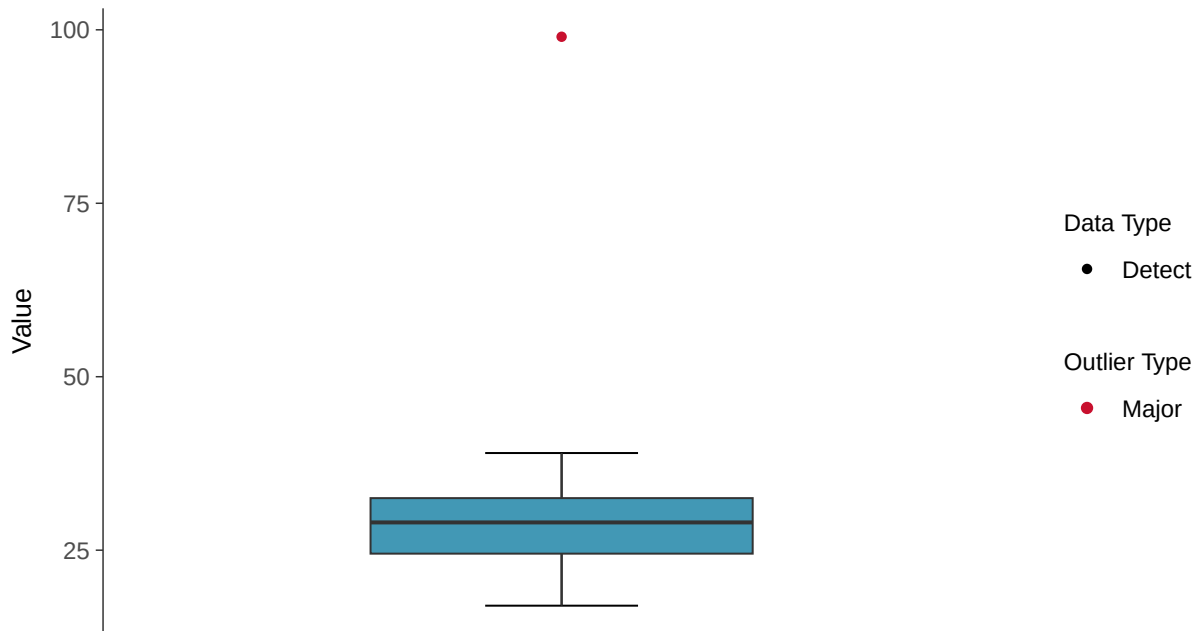
Histogram

Chloride (as Cl), MW-08 (mg/L)



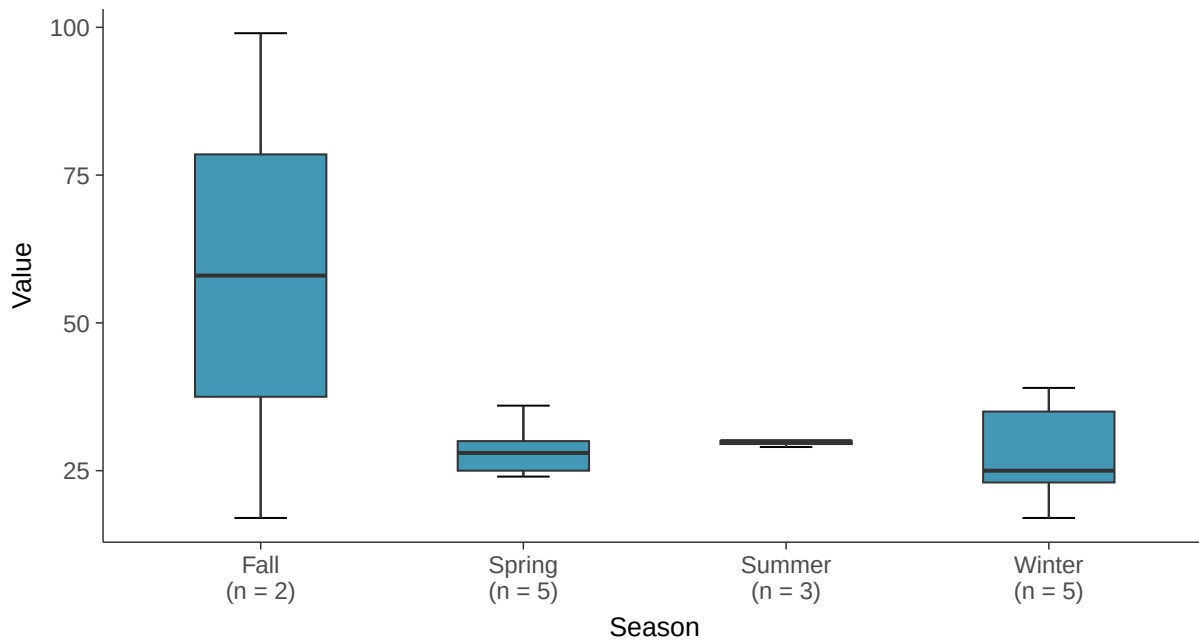
Boxplot

Chloride (as Cl), MW-08 (mg/L)



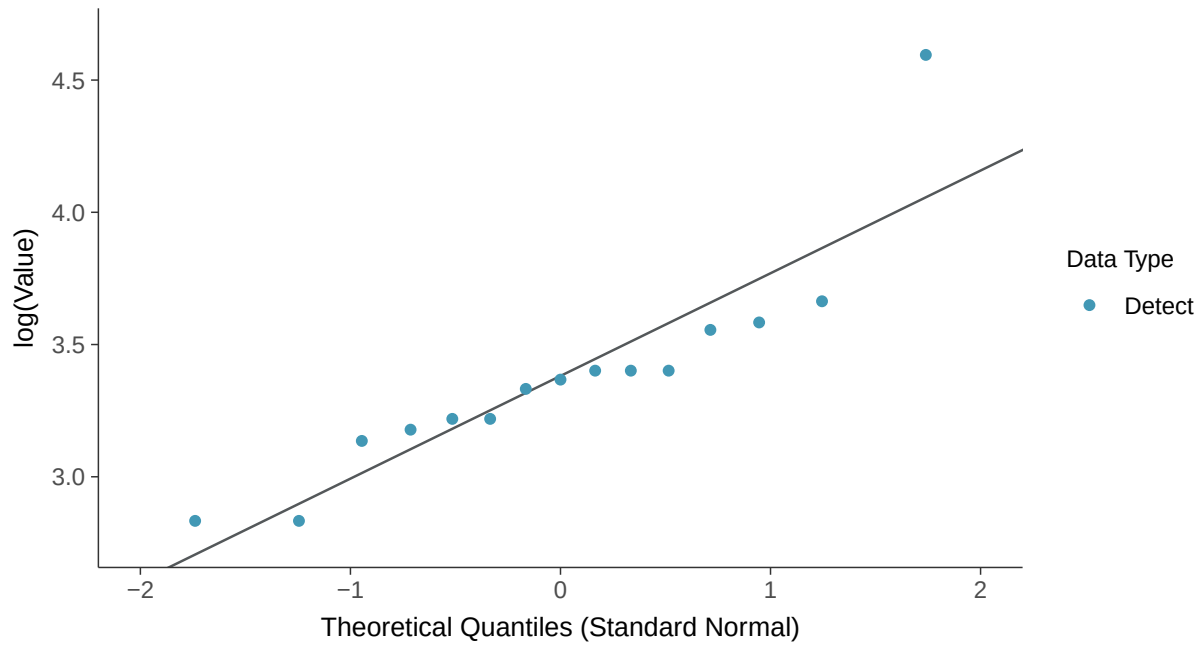
Boxplot by Season

Chloride (as Cl), MW-08 (mg/L)



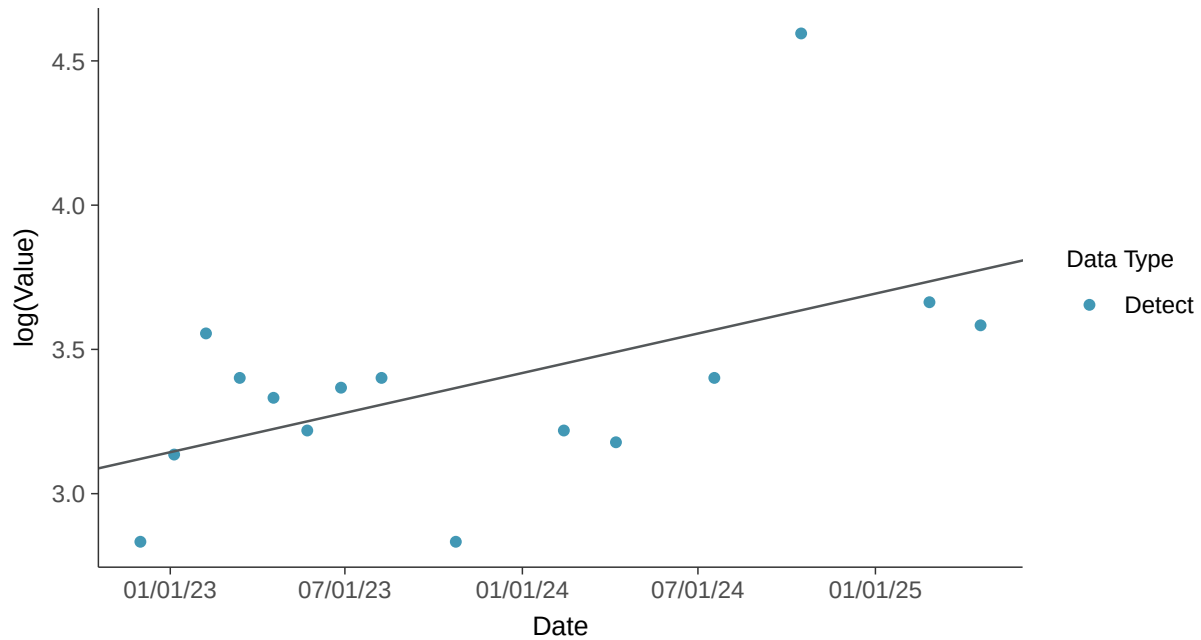
Lognormal Q-Q plot

Chloride (as Cl), MW-08 (mg/L)



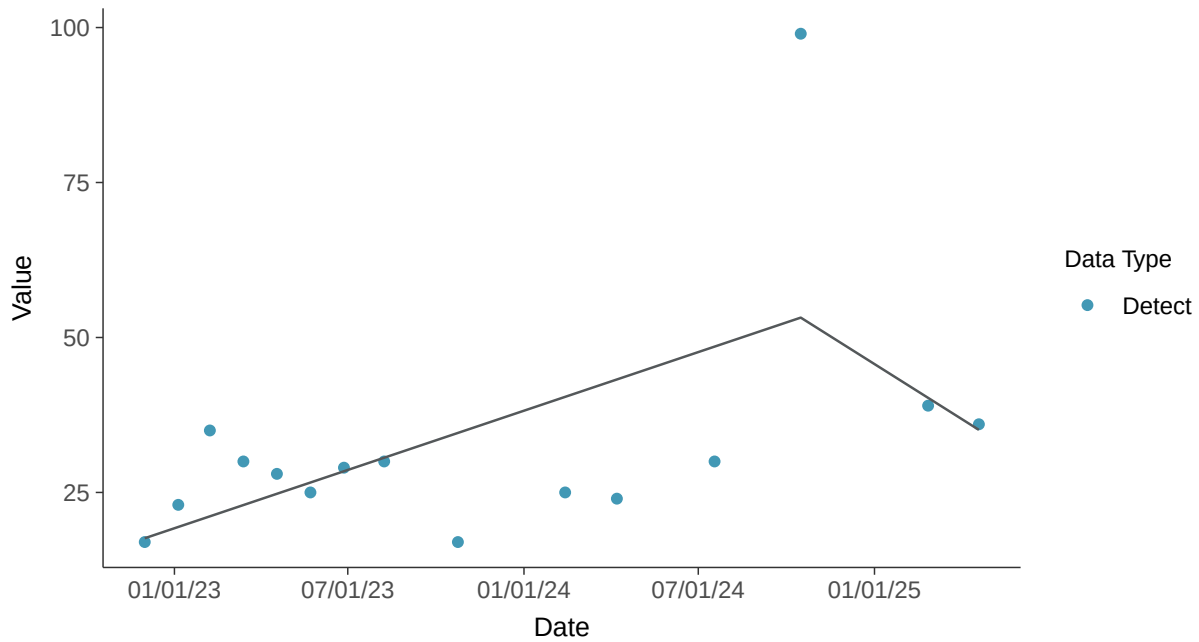
Trend Regression: Lognormal MLE

Chloride (as Cl), MW-08 (mg/L)



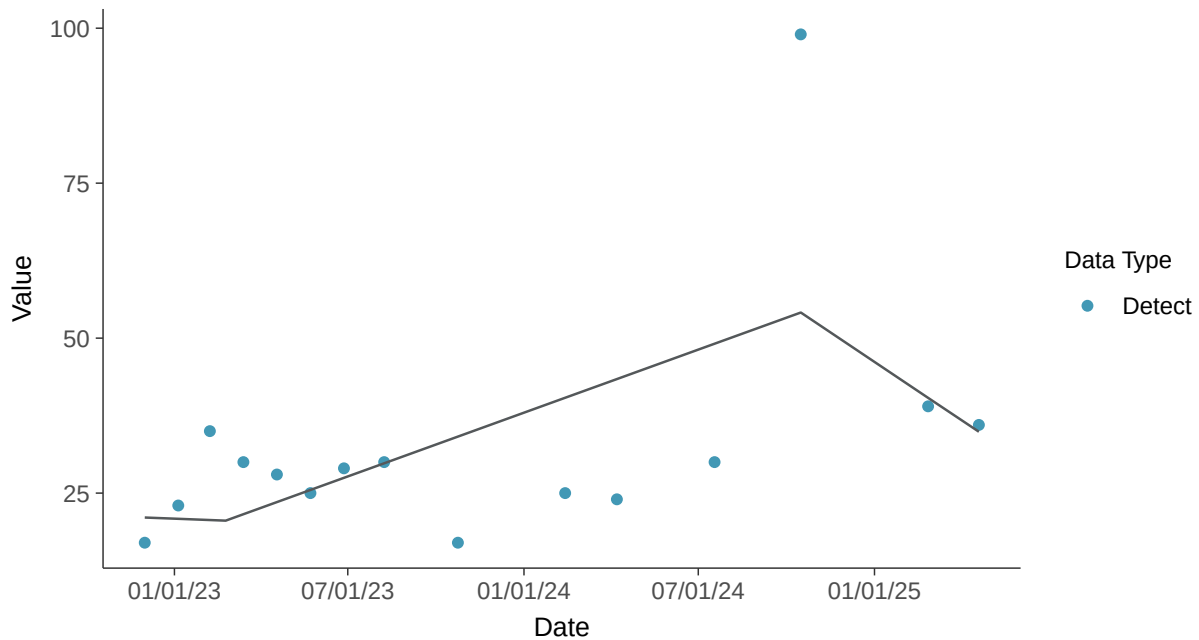
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-08 (mg/L)



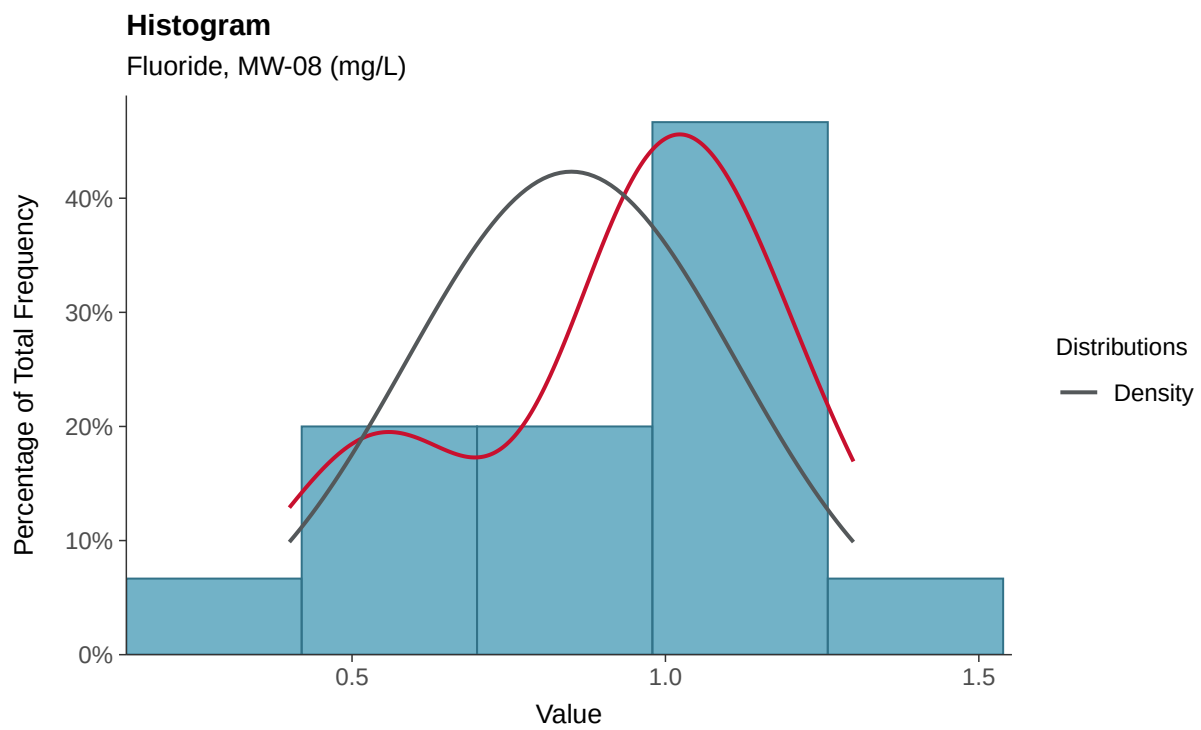
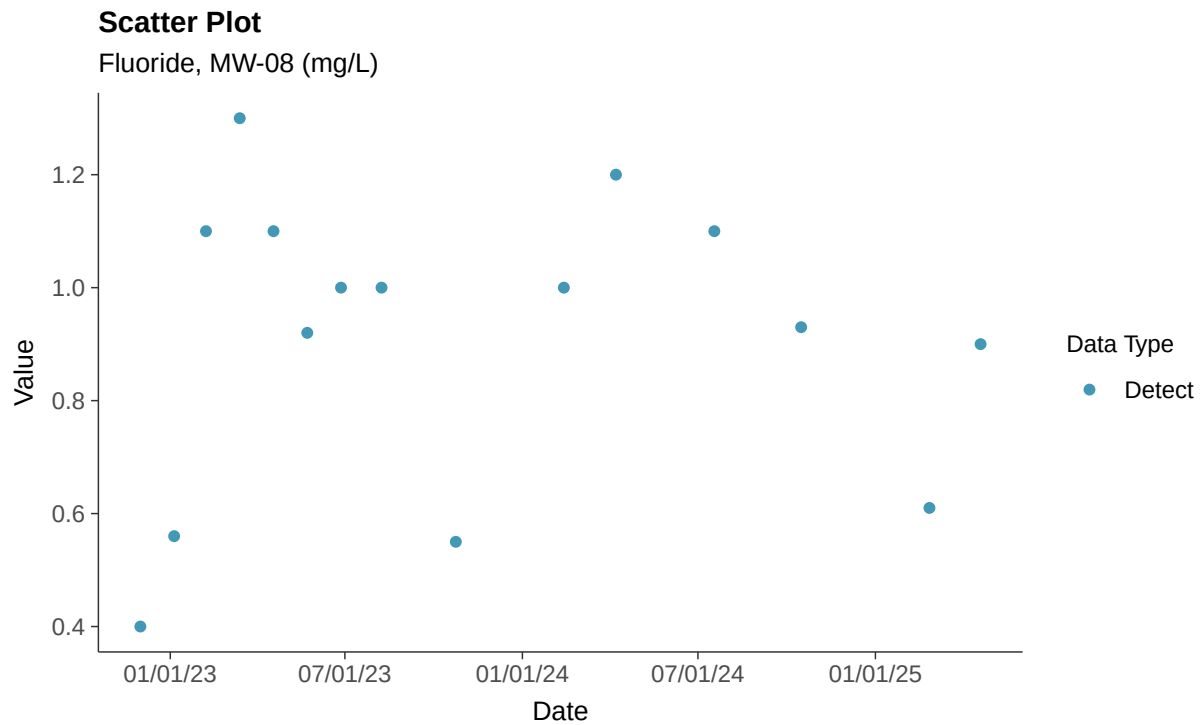
Trend Regression: Piecewise Linear-Linear-Linear

Chloride (as Cl), MW-08 (mg/L)



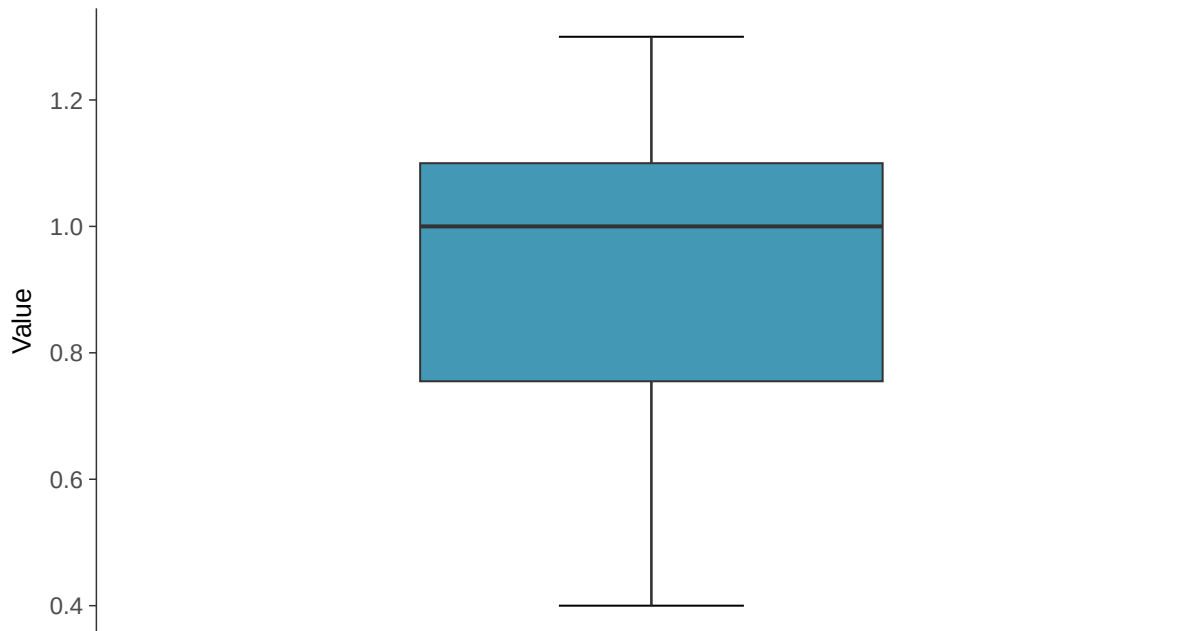
Appendix III: Fluoride, MW-08

ID: 18_1_3_112



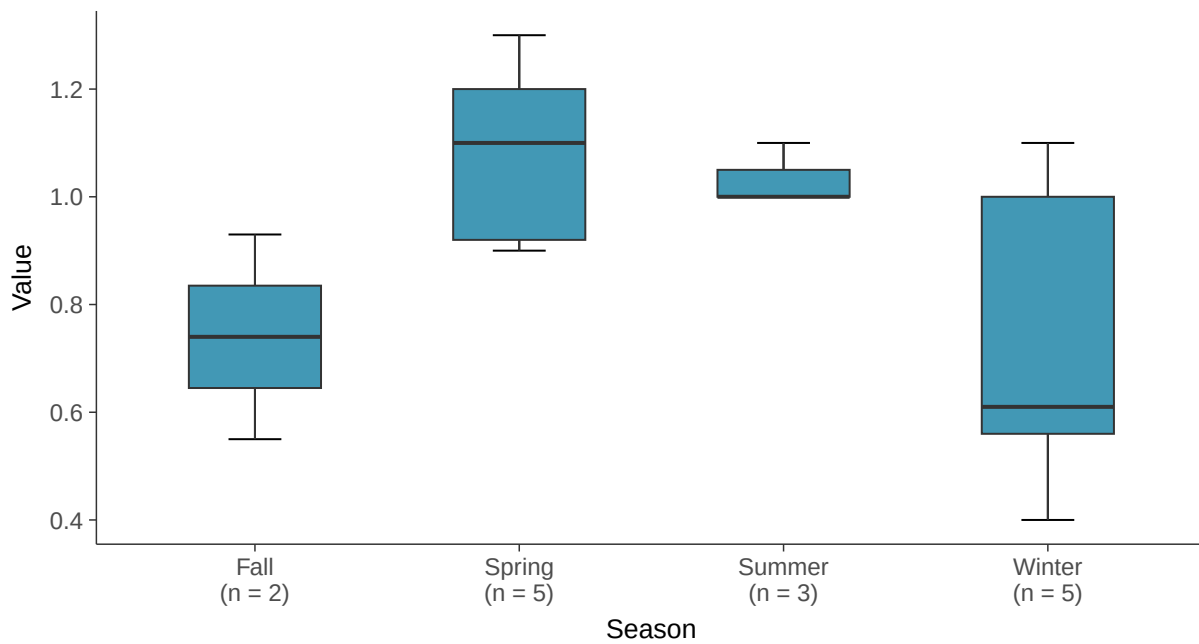
Boxplot

Fluoride, MW-08 (mg/L)



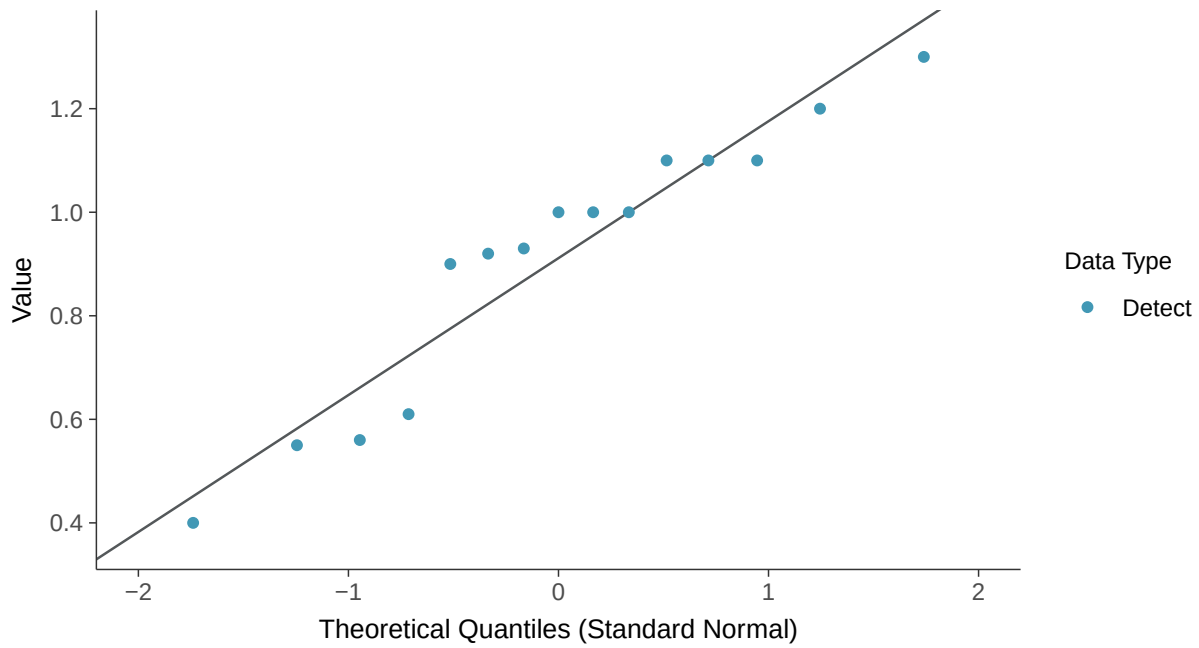
Boxplot by Season

Fluoride, MW-08 (mg/L)



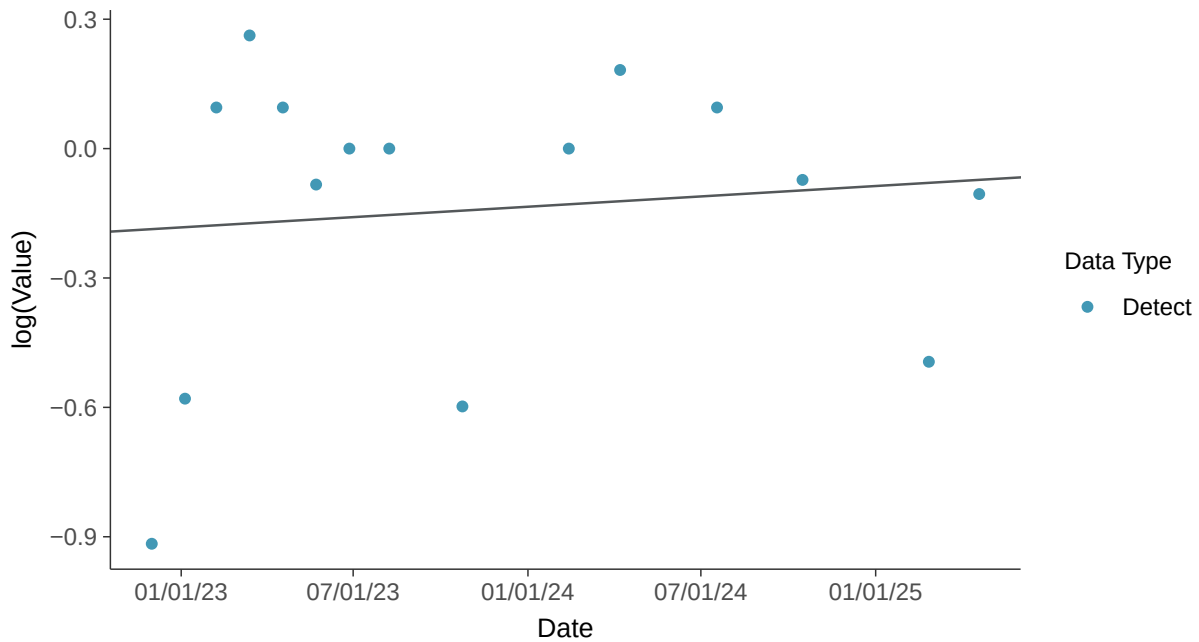
Normal Q-Q plot

Fluoride, MW-08 (mg/L)



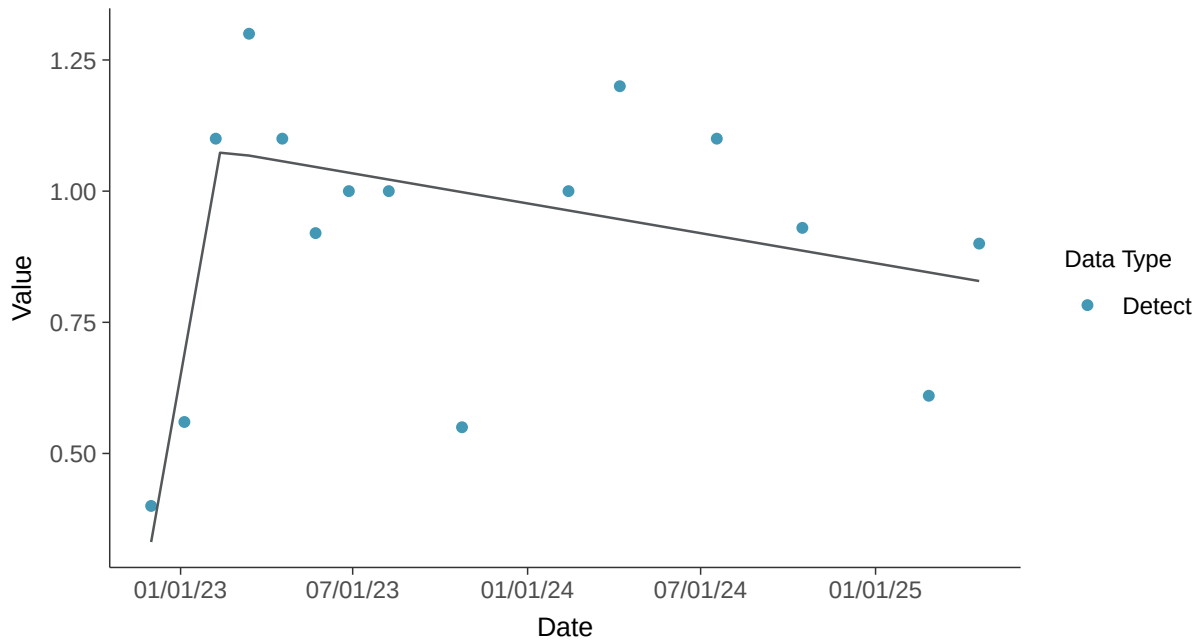
Trend Regression: Lognormal MLE

Fluoride, MW-08 (mg/L)



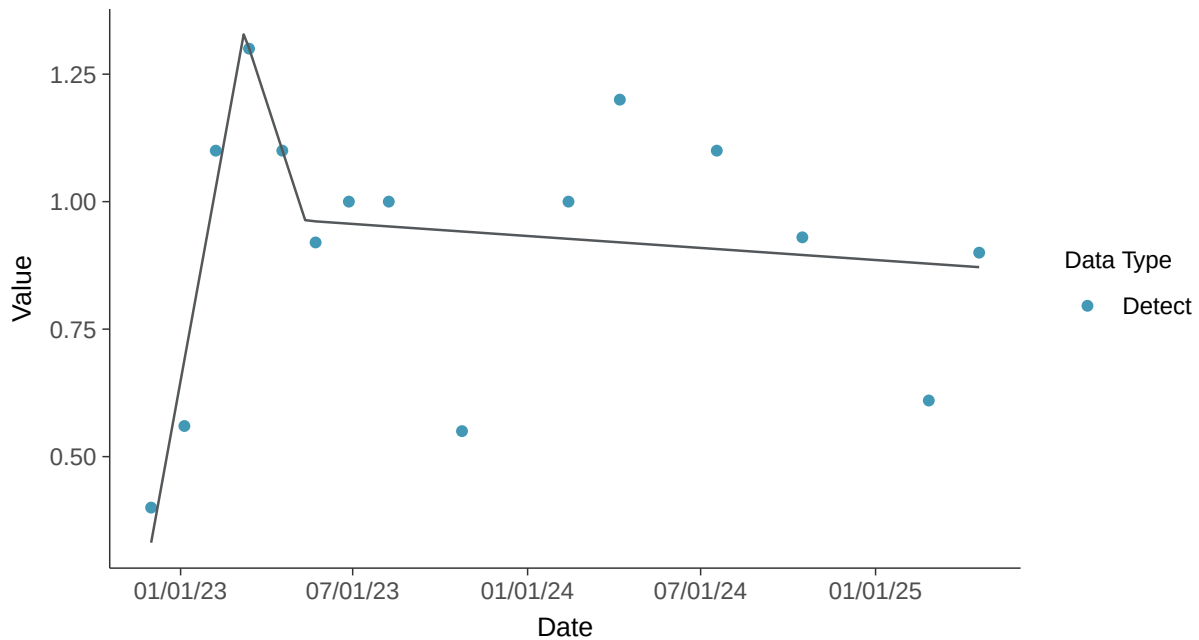
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-08 (mg/L)



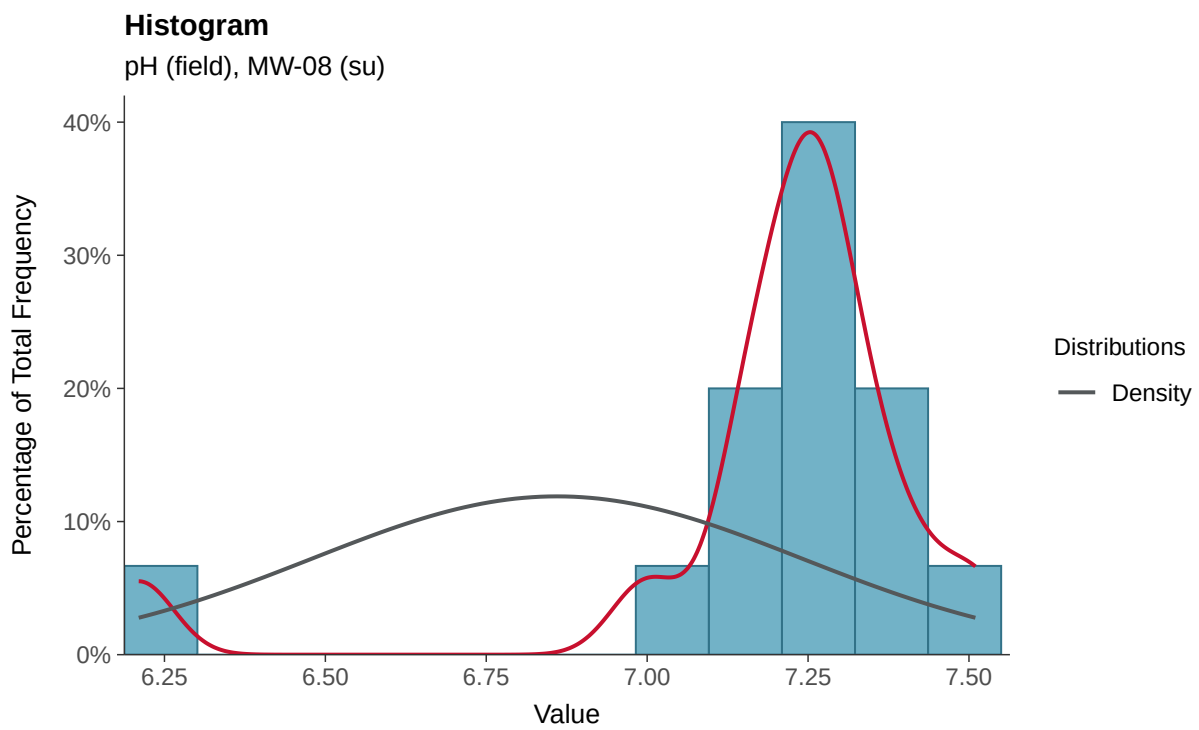
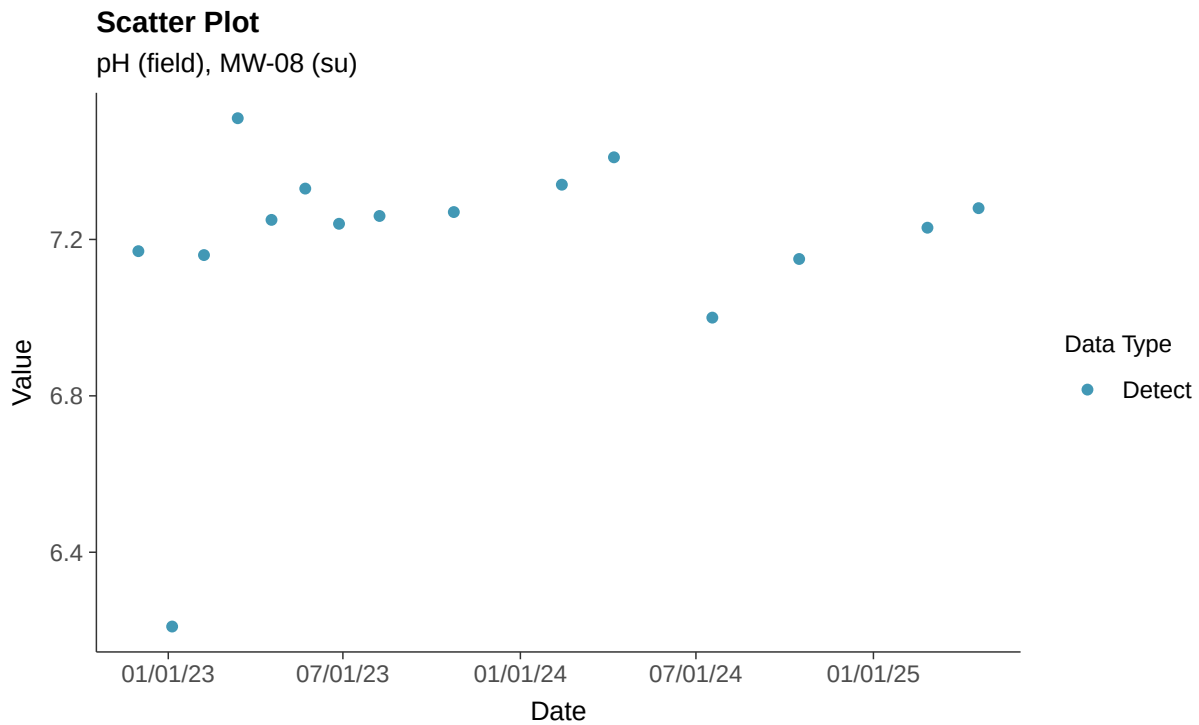
Trend Regression: Piecewise Linear-Linear-Linear

Fluoride, MW-08 (mg/L)



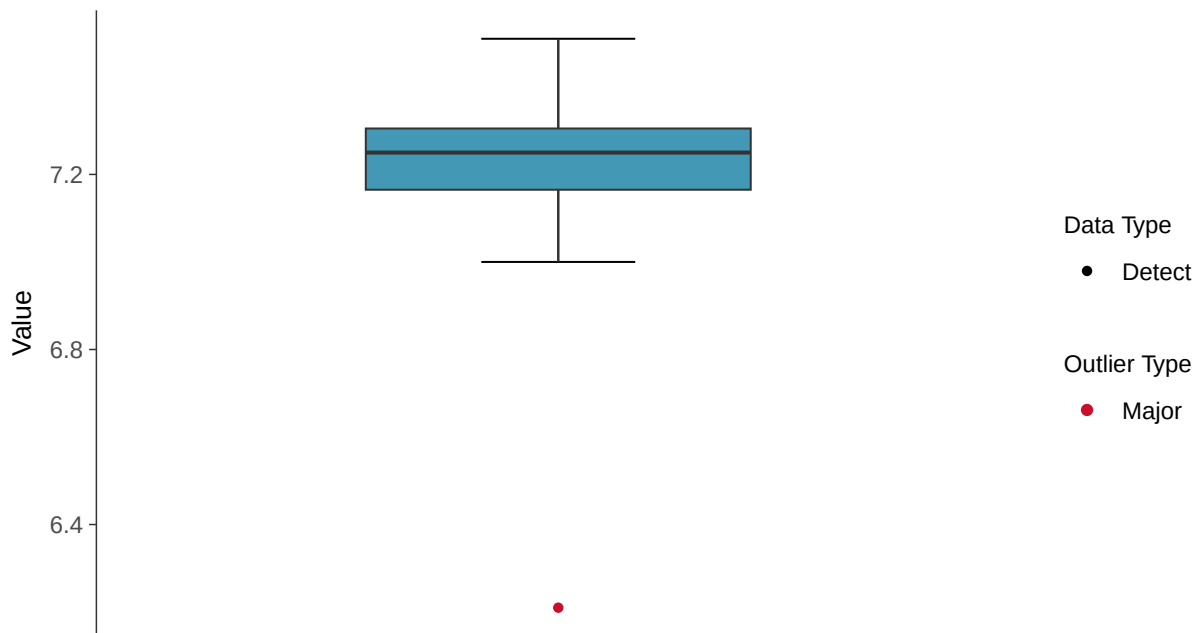
Appendix III: pH (field), MW-08

ID: 18_1_3_120



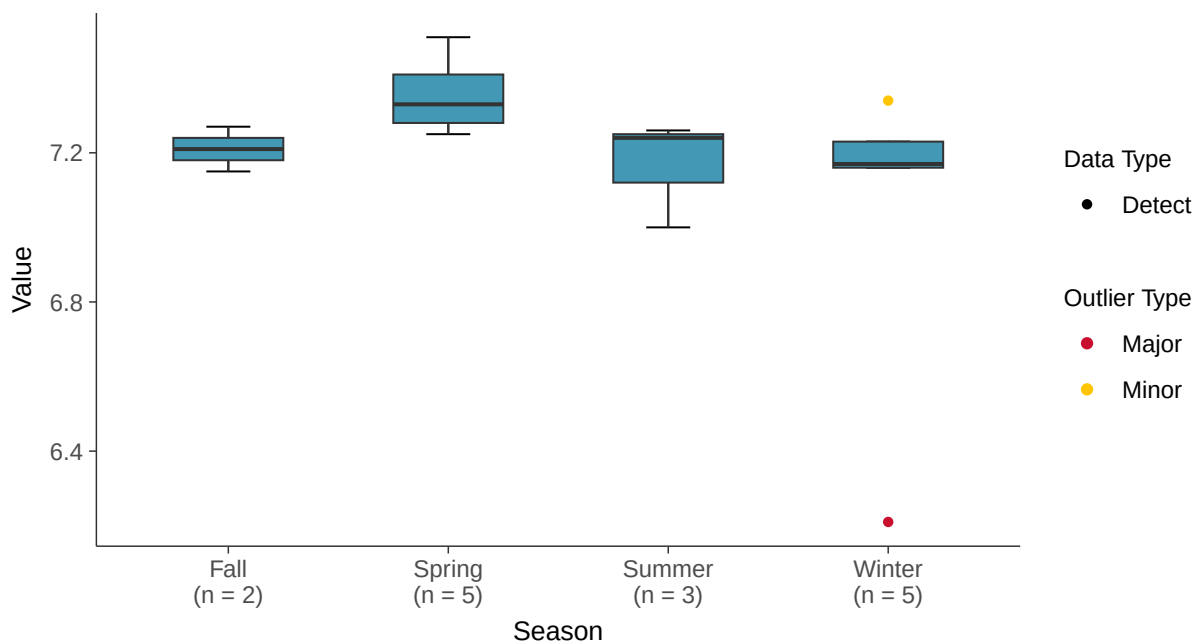
Boxplot

pH (field), MW-08 (su)



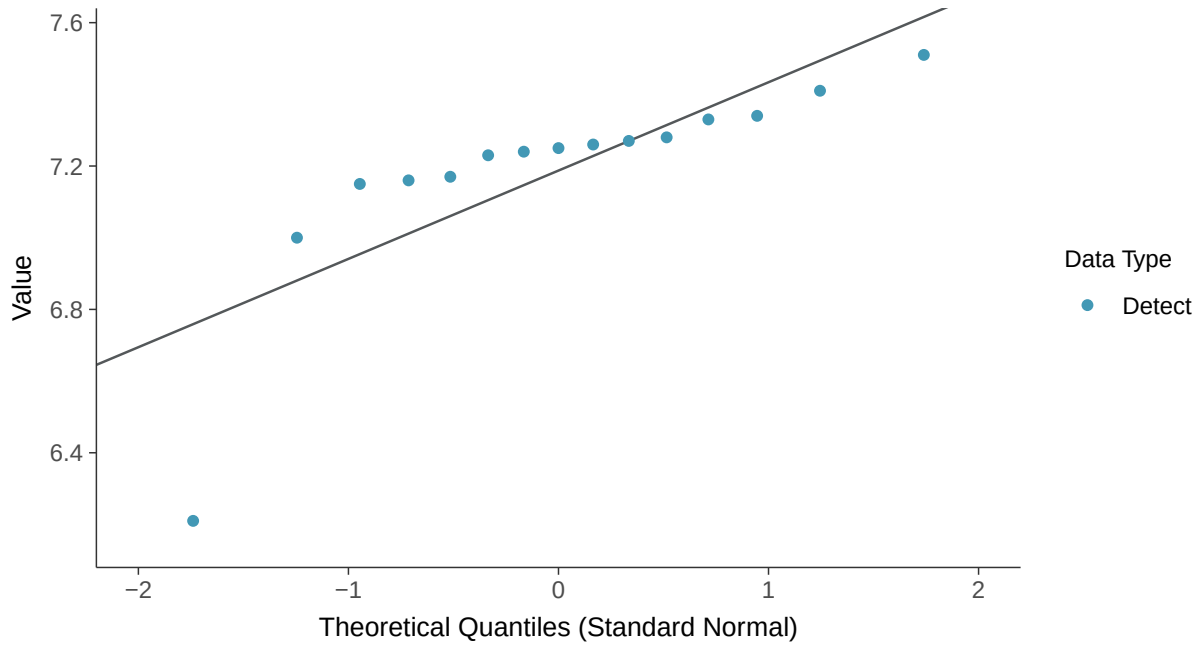
Boxplot by Season

pH (field), MW-08 (su)



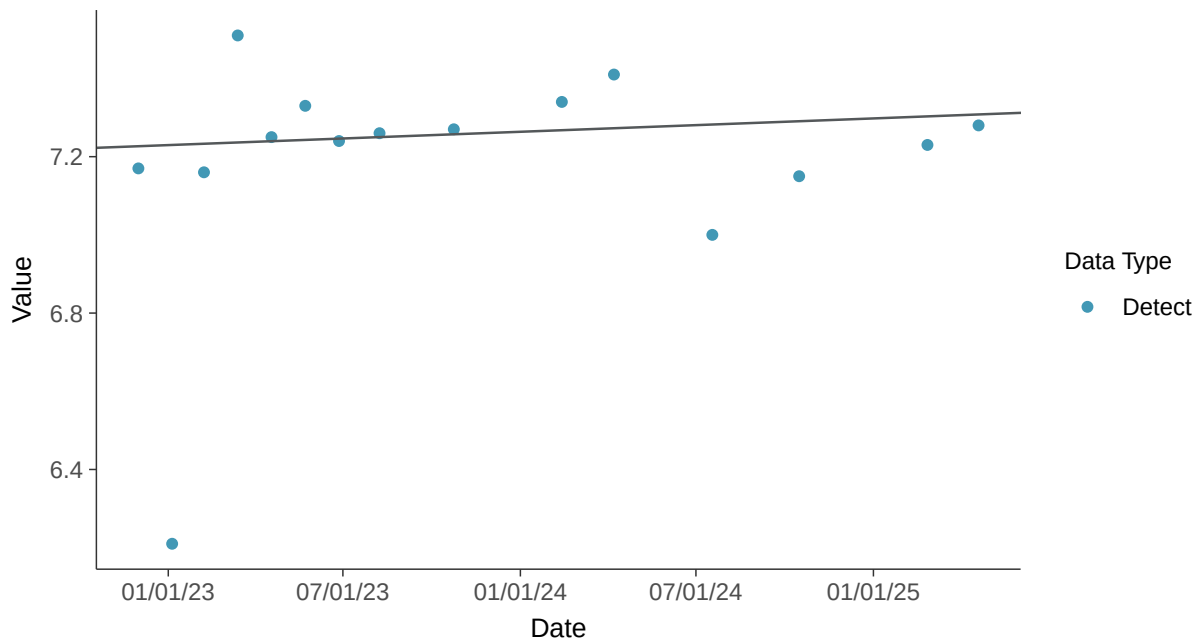
Normal Q-Q plot

pH (field), MW-08 (su)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

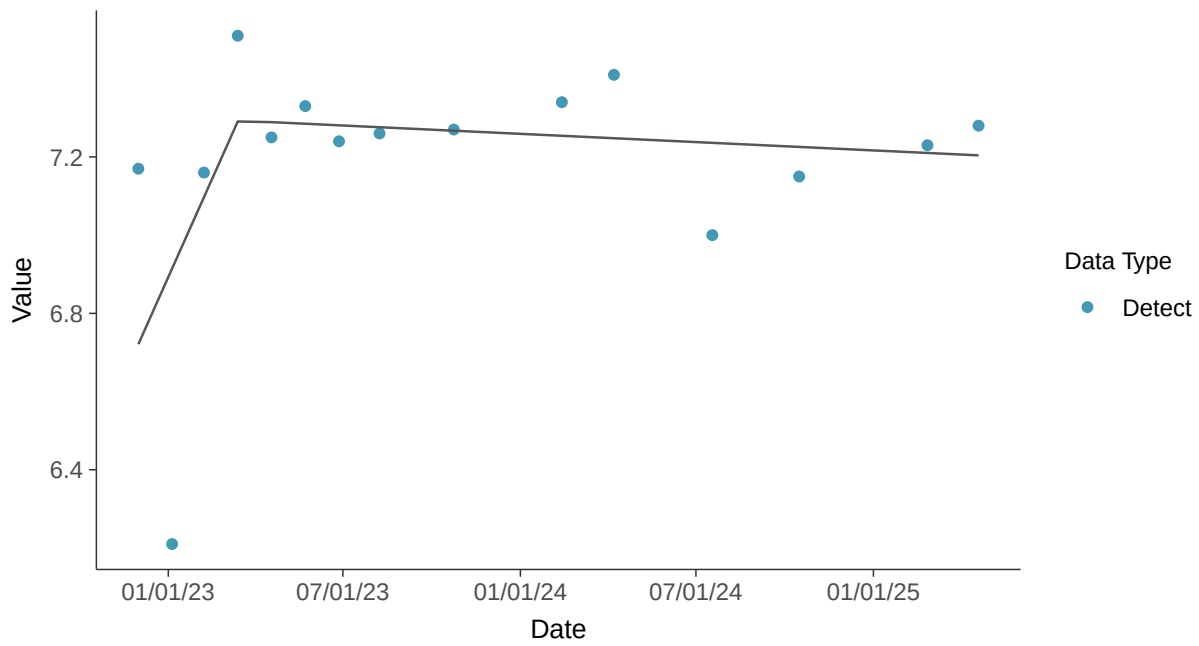
pH (field), MW-08 (su)





Trend Regression: Piecewise Linear-Linear

pH (field), MW-08 (su)

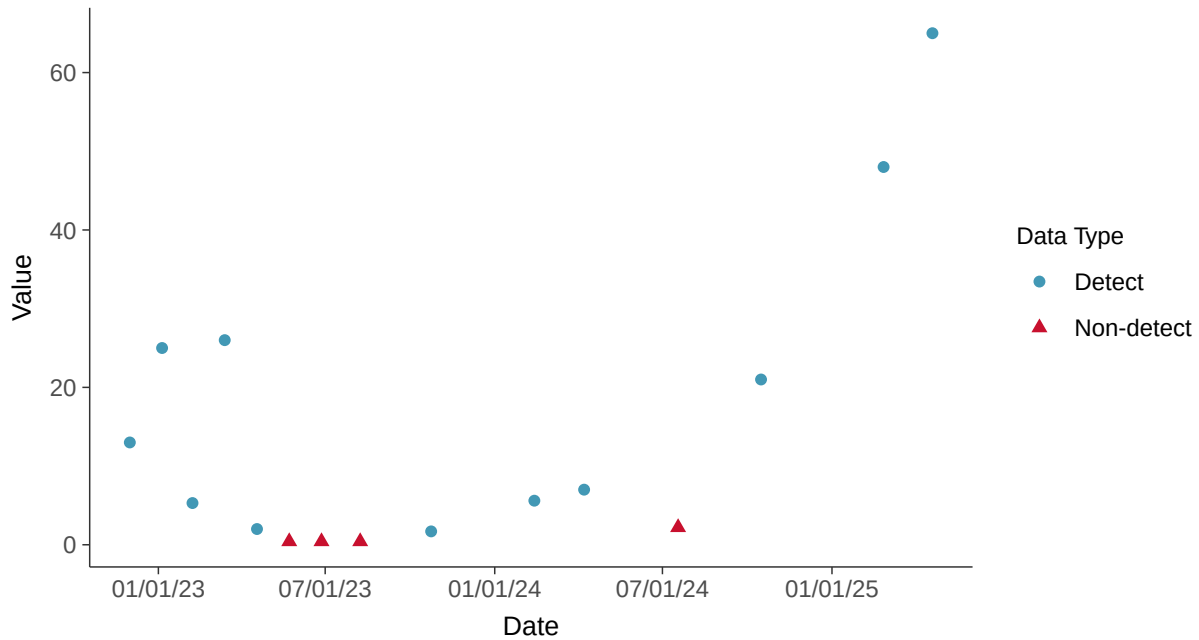


Appendix III: Sulfate (as SO₄), MW-08

ID: 18_1_3_124

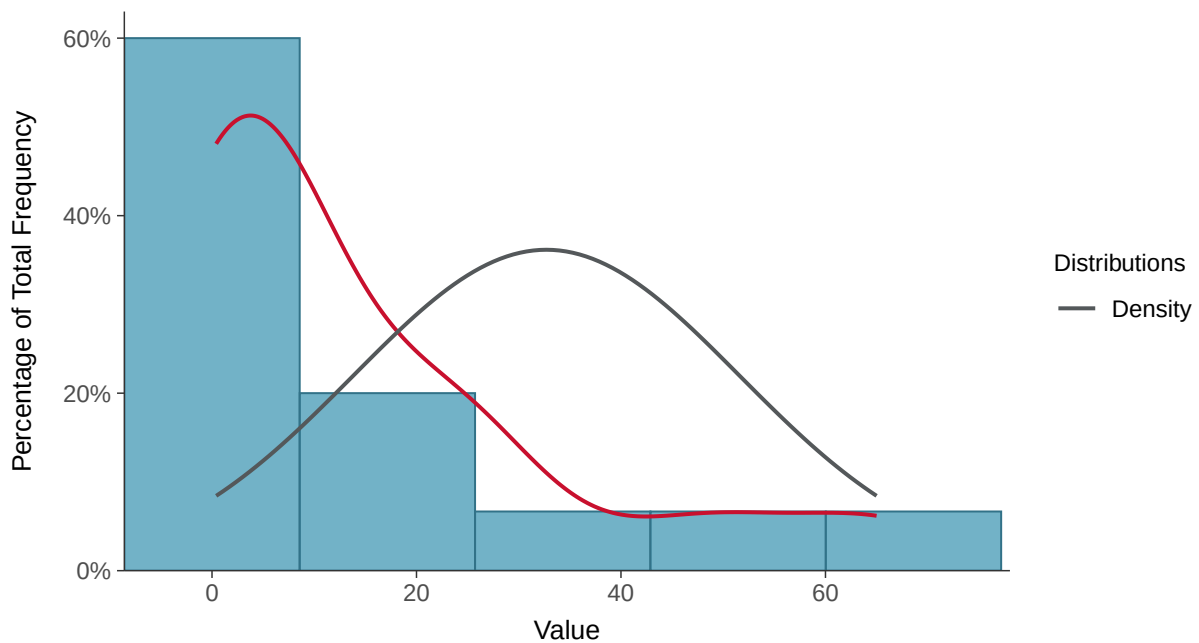
Scatter Plot

Sulfate (as SO₄), MW-08 (mg/L)



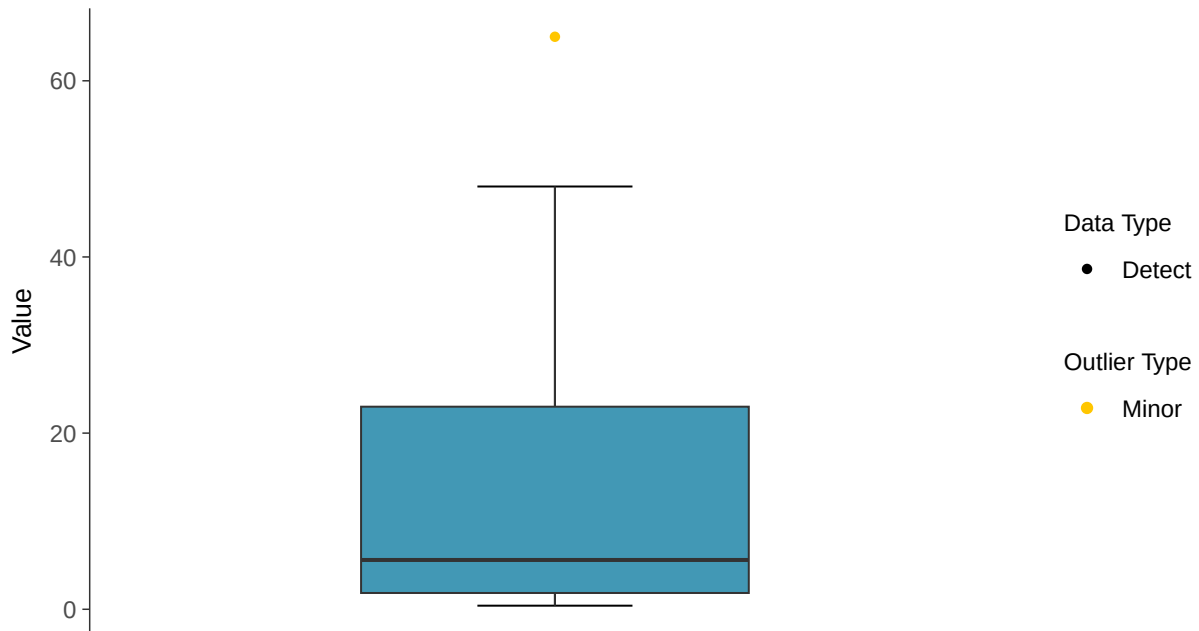
Histogram

Sulfate (as SO₄), MW-08 (mg/L)



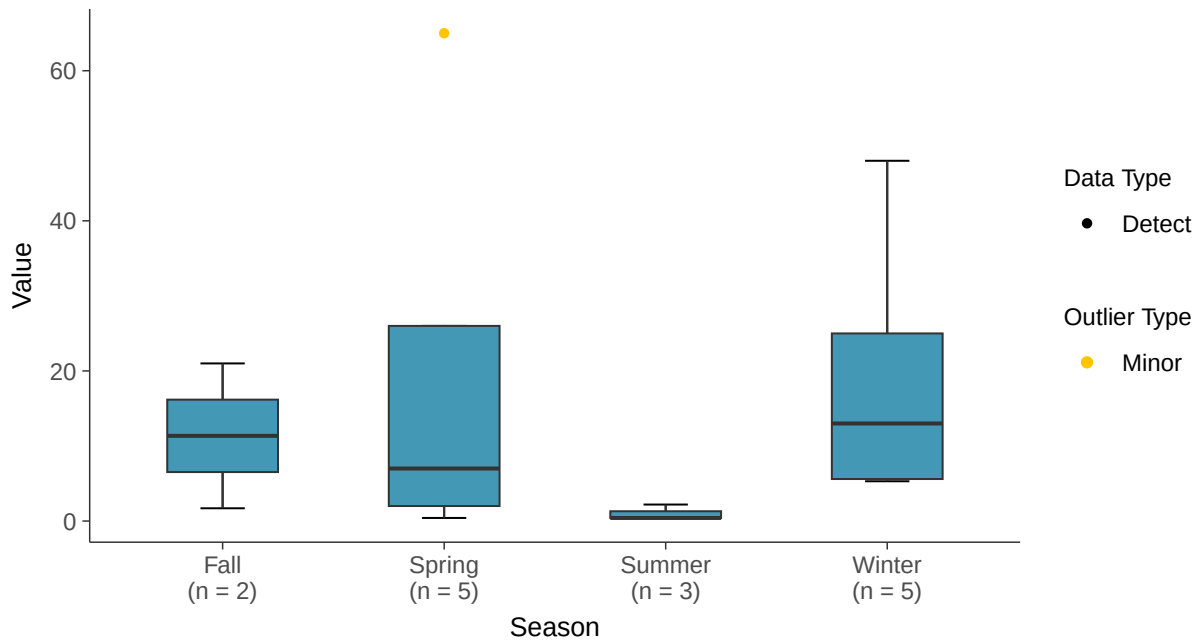
Boxplot

Sulfate (as SO₄), MW-08 (mg/L)



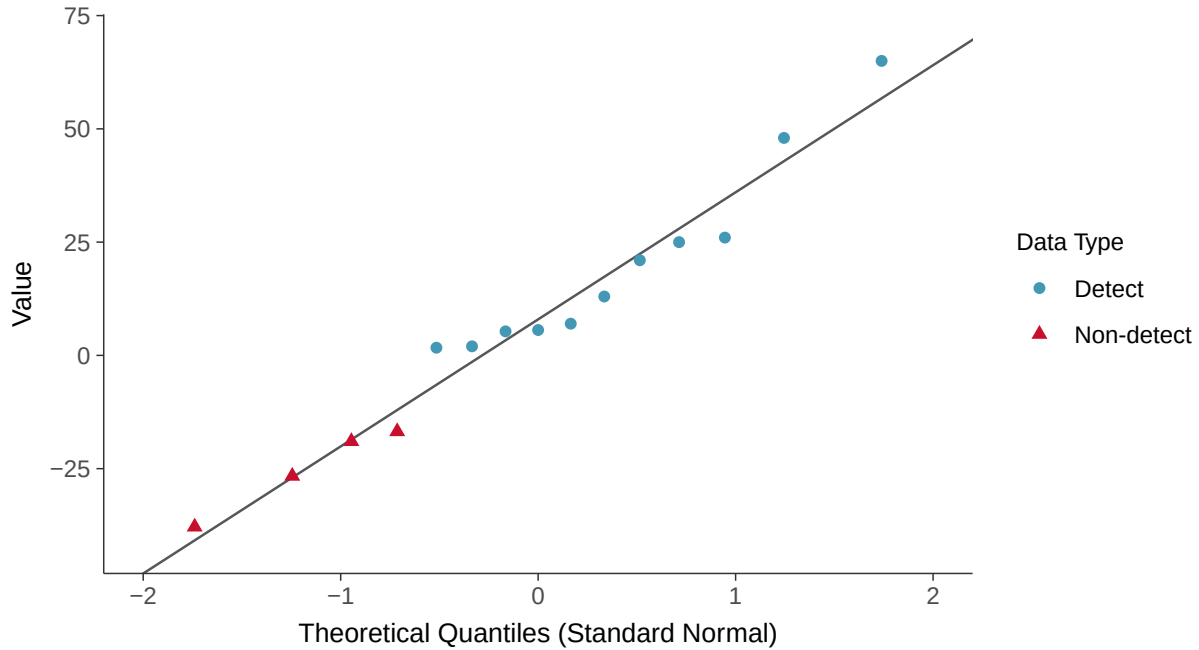
Boxplot by Season

Sulfate (as SO₄), MW-08 (mg/L)



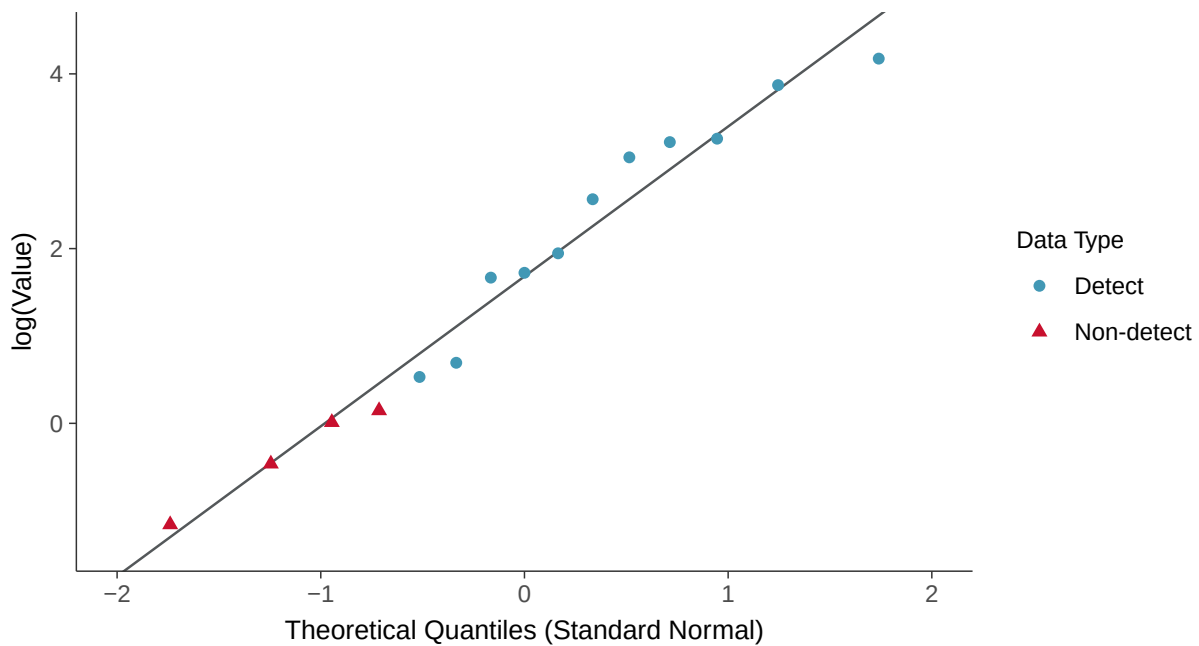
Normal Q-Q plot using ROS Imputed Estimates

Sulfate (as SO₄), MW-08 (mg/L)



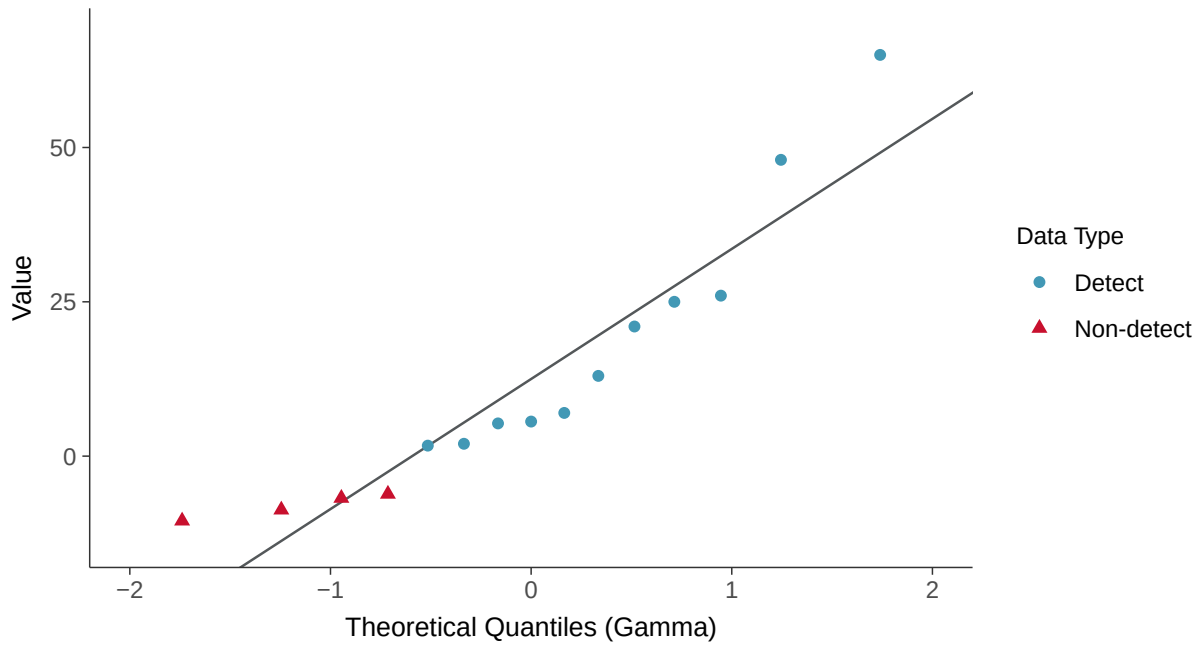
Lognormal Q-Q plot using ROS Imputed Estimates

Sulfate (as SO₄), MW-08 (mg/L)



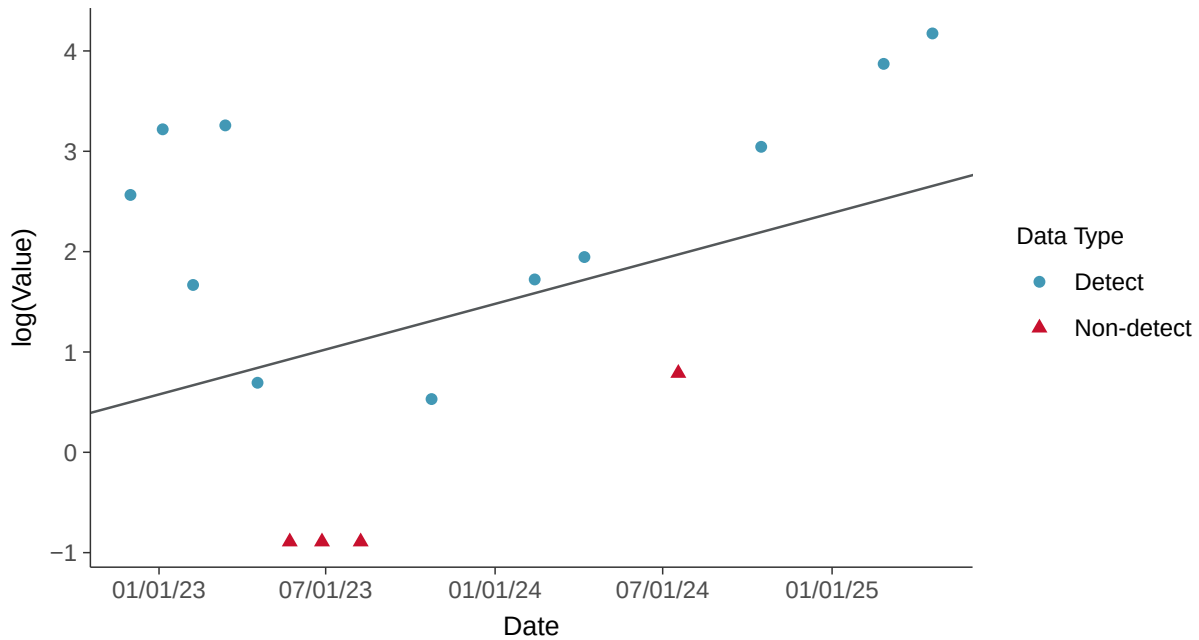
Gamma Q-Q plot using ROS Imputed Estimates

Sulfate (as SO₄), MW-08 (mg/L)



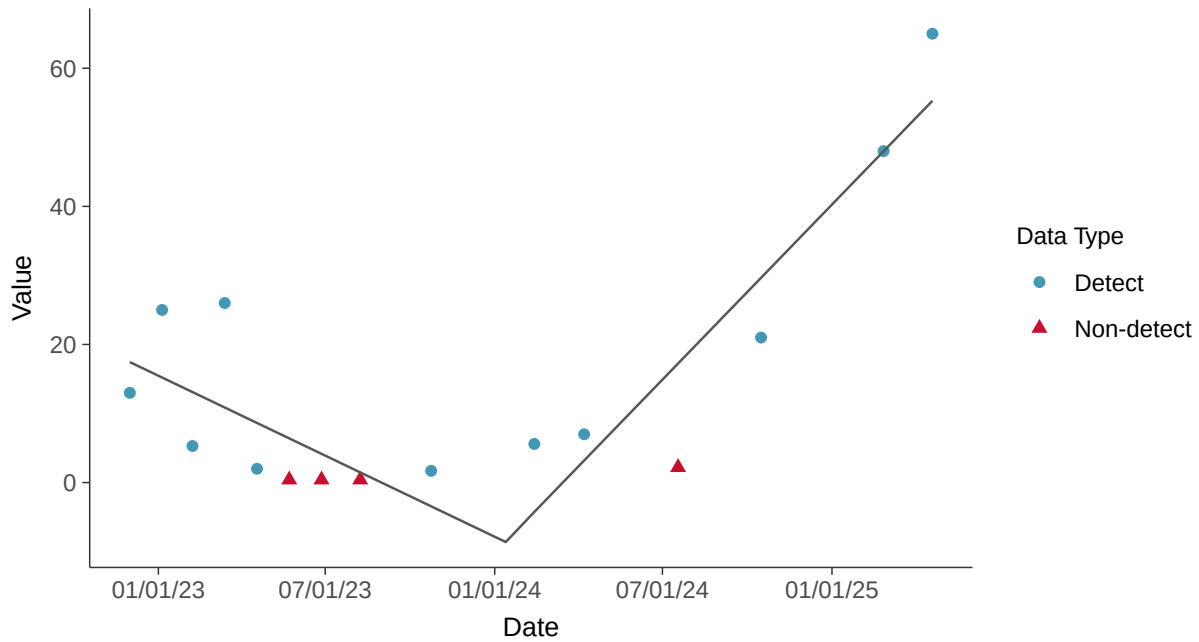
Trend Regression: Lognormal MLE

Sulfate (as SO₄), MW-08 (mg/L)



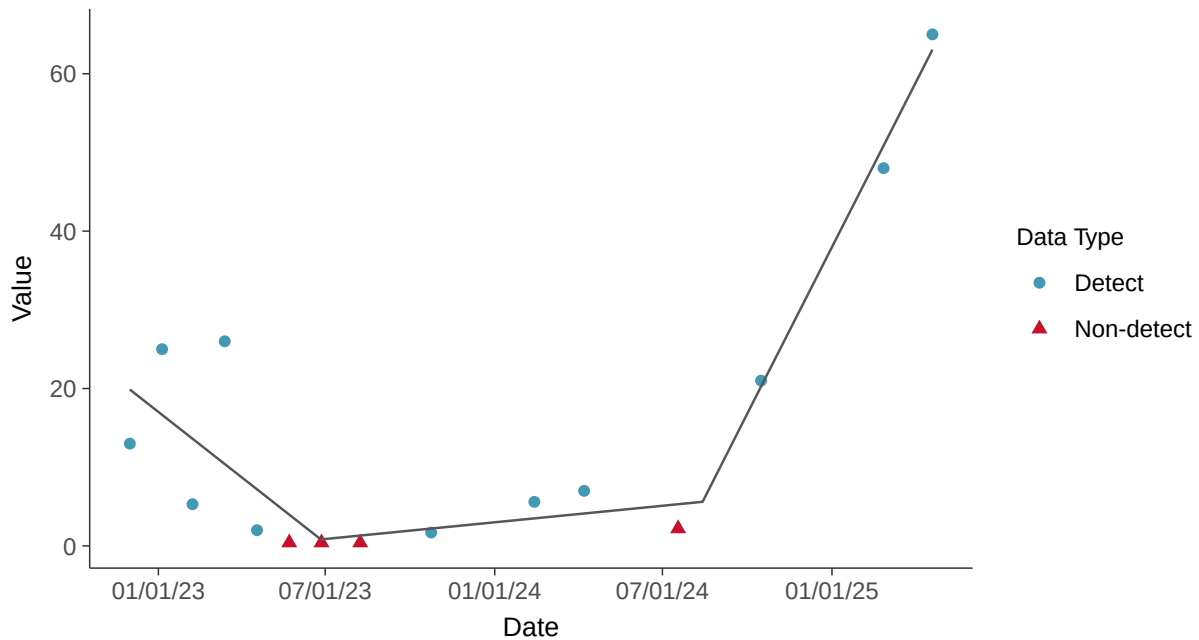
Trend Regression: Piecewise Linear-Linear

Sulfate (as SO₄), MW-08 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Sulfate (as SO₄), MW-08 (mg/L)

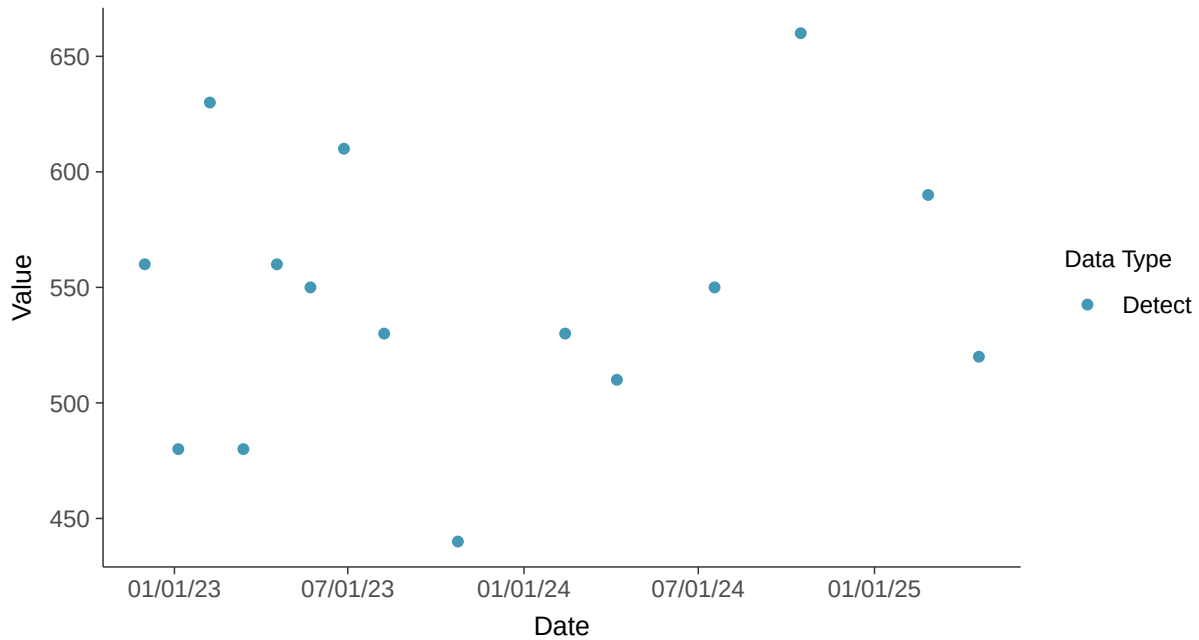


Appendix III: Total Dissolved Solids, MW-08

ID: 18_1_3_126

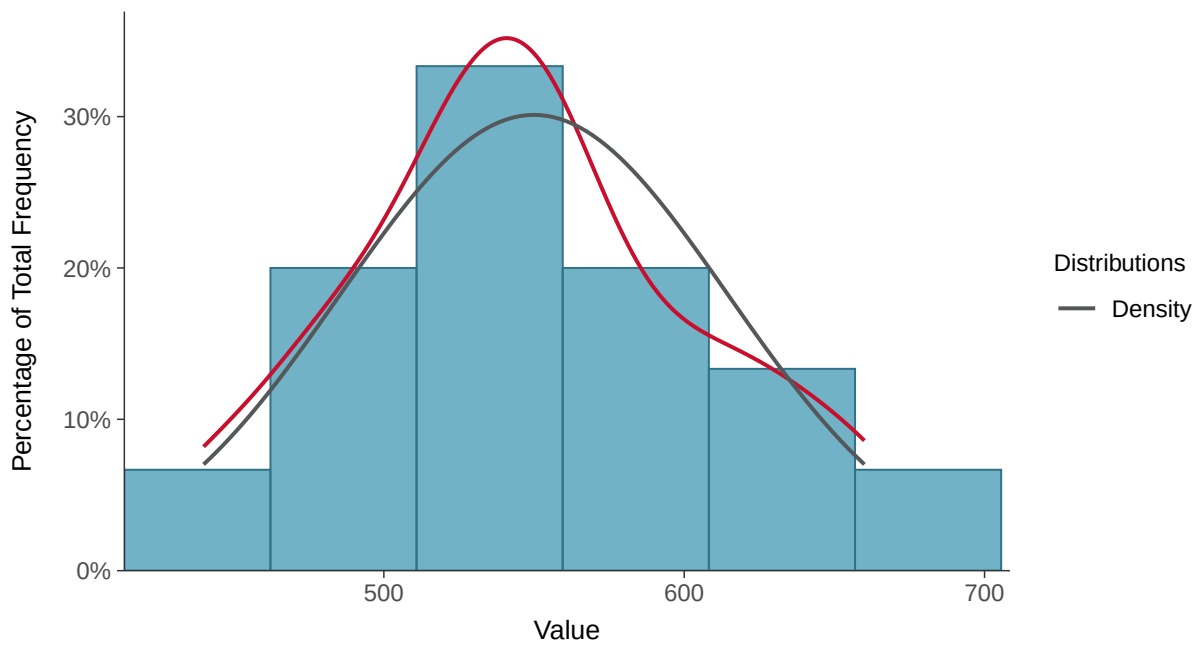
Scatter Plot

Total Dissolved Solids, MW-08 (mg/L)



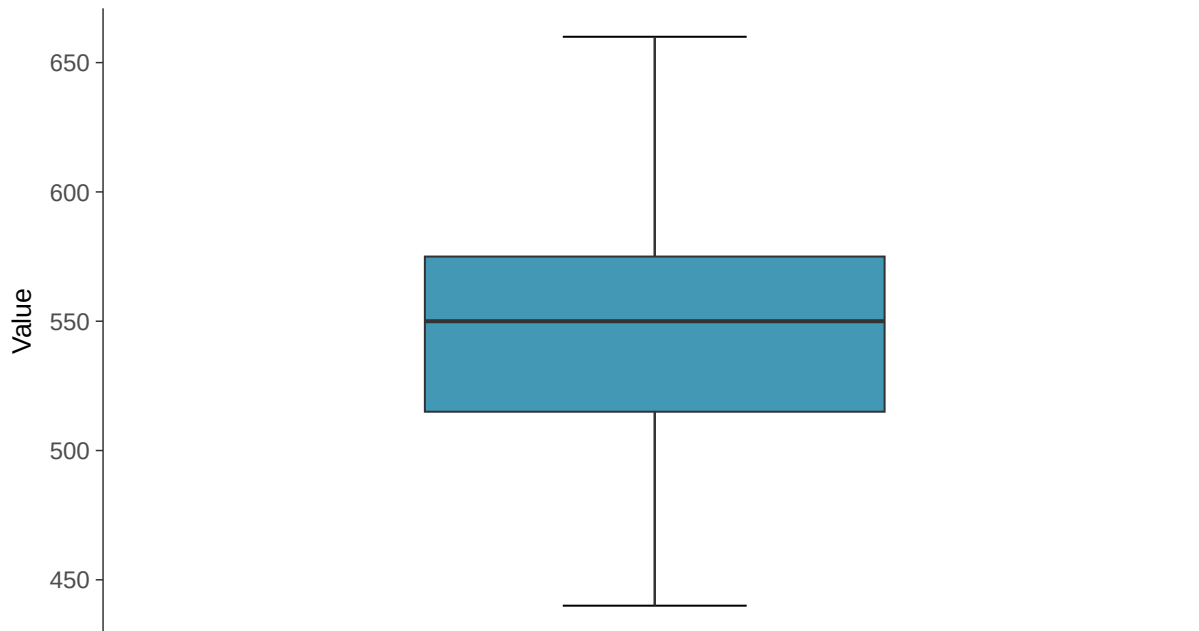
Histogram

Total Dissolved Solids, MW-08 (mg/L)



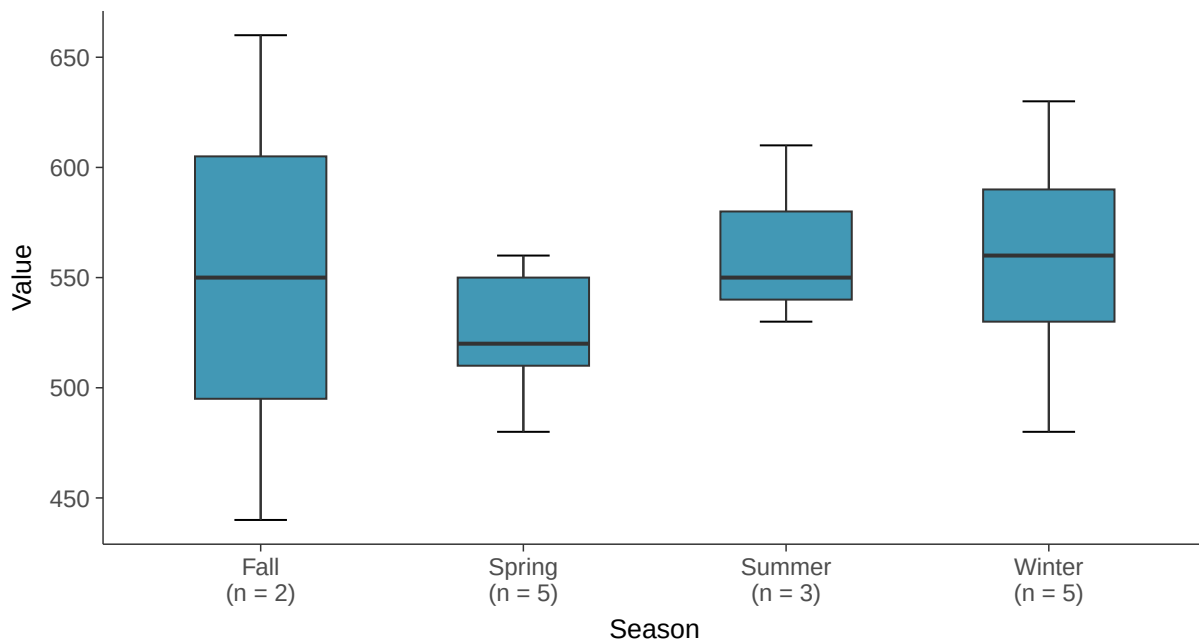
Boxplot

Total Dissolved Solids, MW-08 (mg/L)



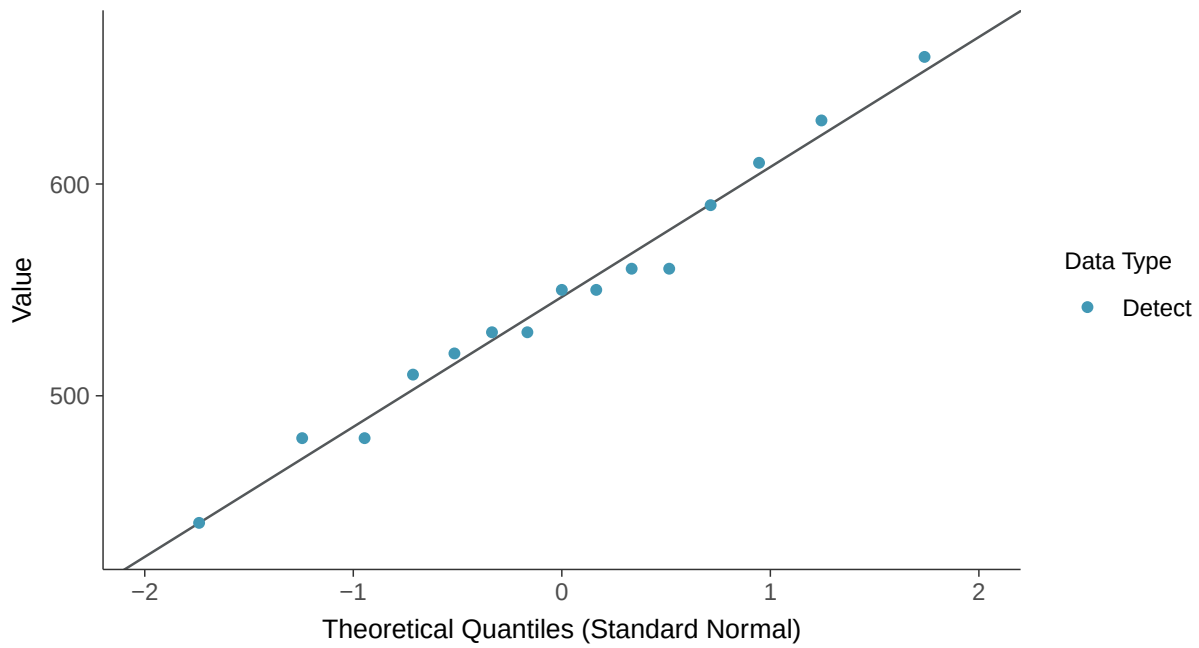
Boxplot by Season

Total Dissolved Solids, MW-08 (mg/L)



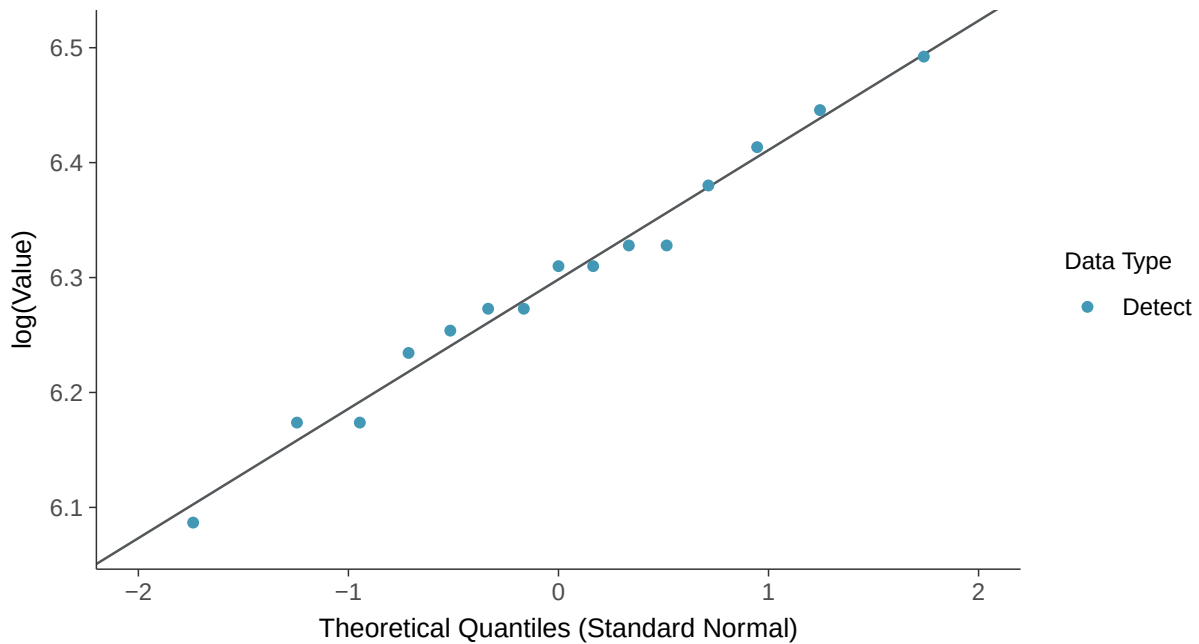
Normal Q-Q plot

Total Dissolved Solids, MW-08 (mg/L)



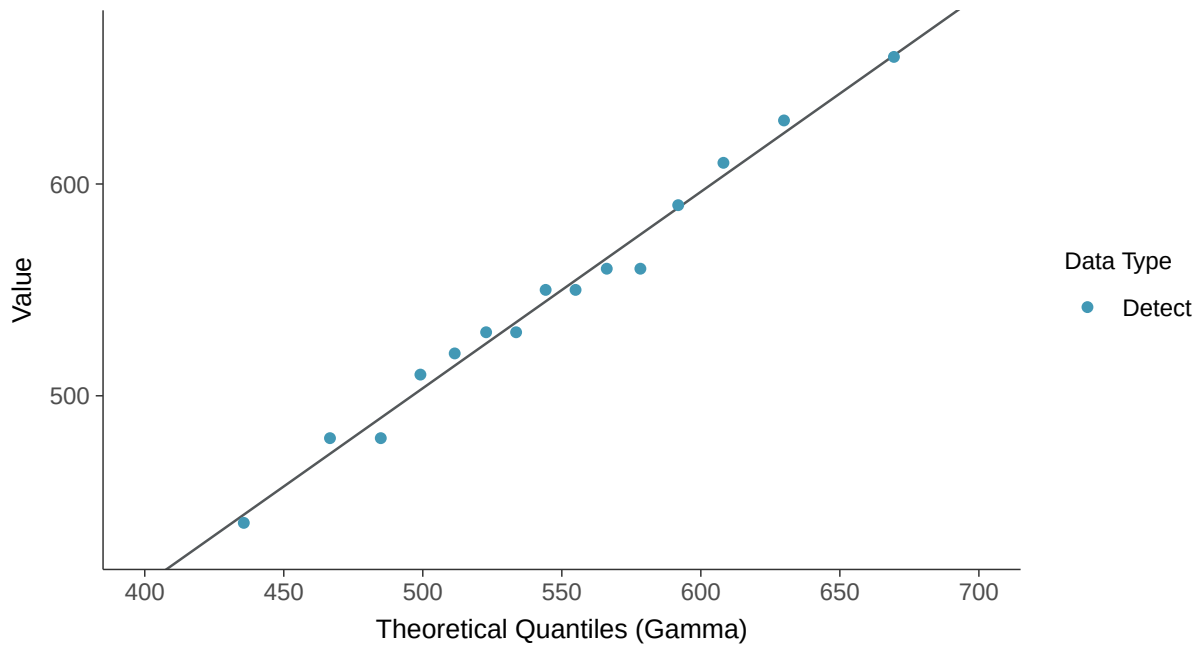
Lognormal Q-Q plot

Total Dissolved Solids, MW-08 (mg/L)



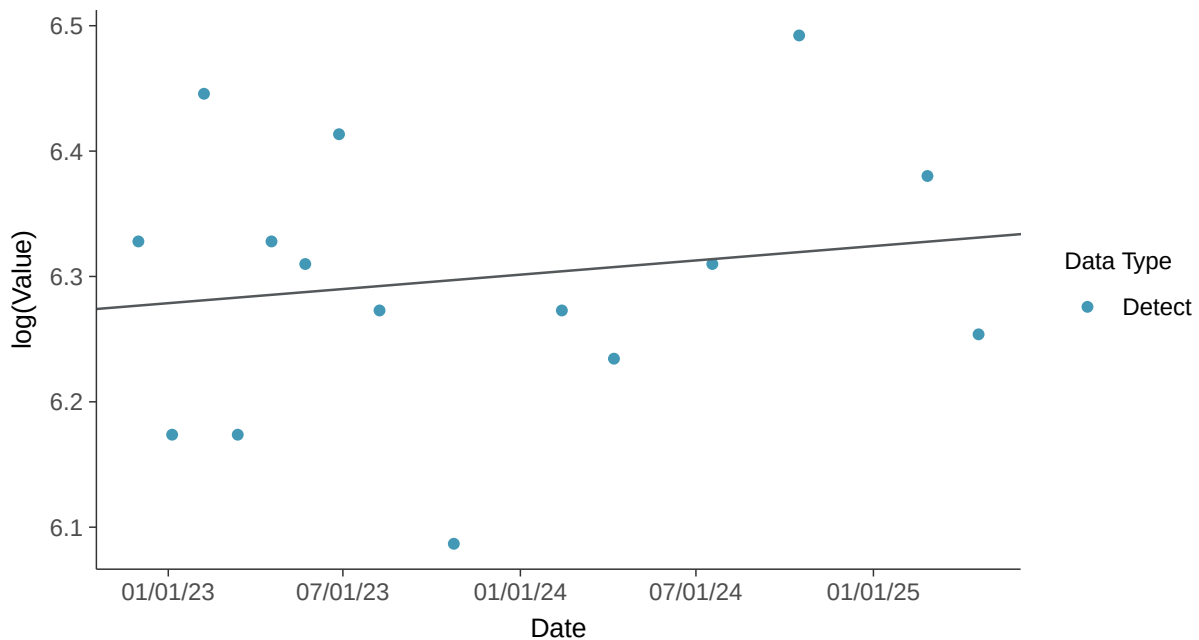
Gamma Q-Q plot

Total Dissolved Solids, MW-08 (mg/L)



Trend Regression: Lognormal MLE

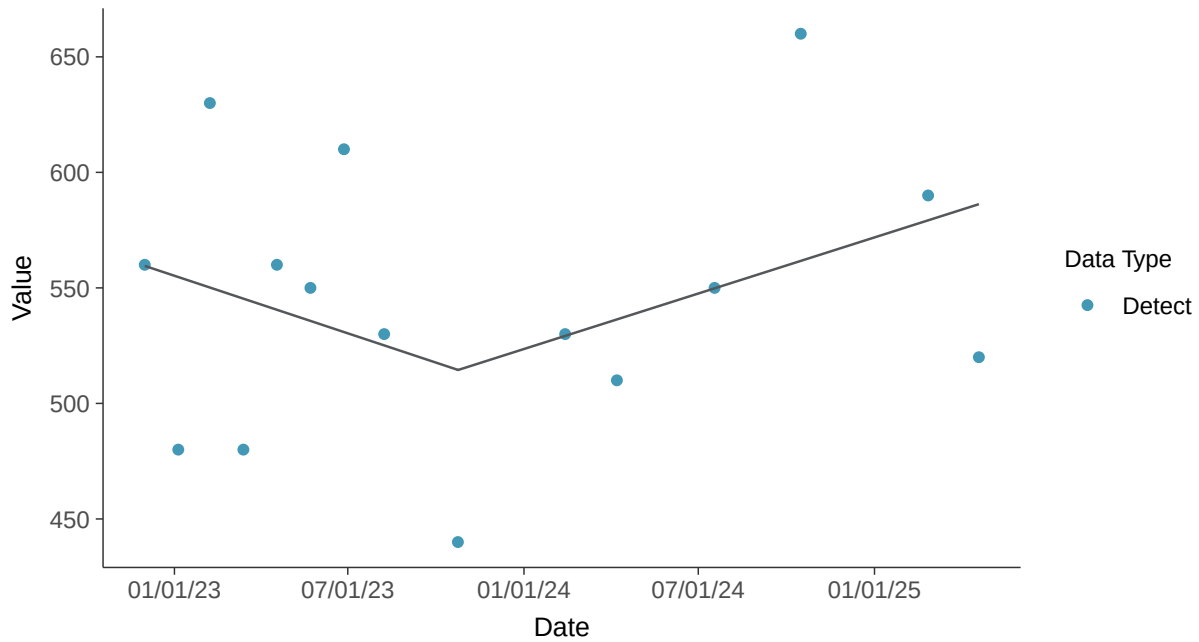
Total Dissolved Solids, MW-08 (mg/L)





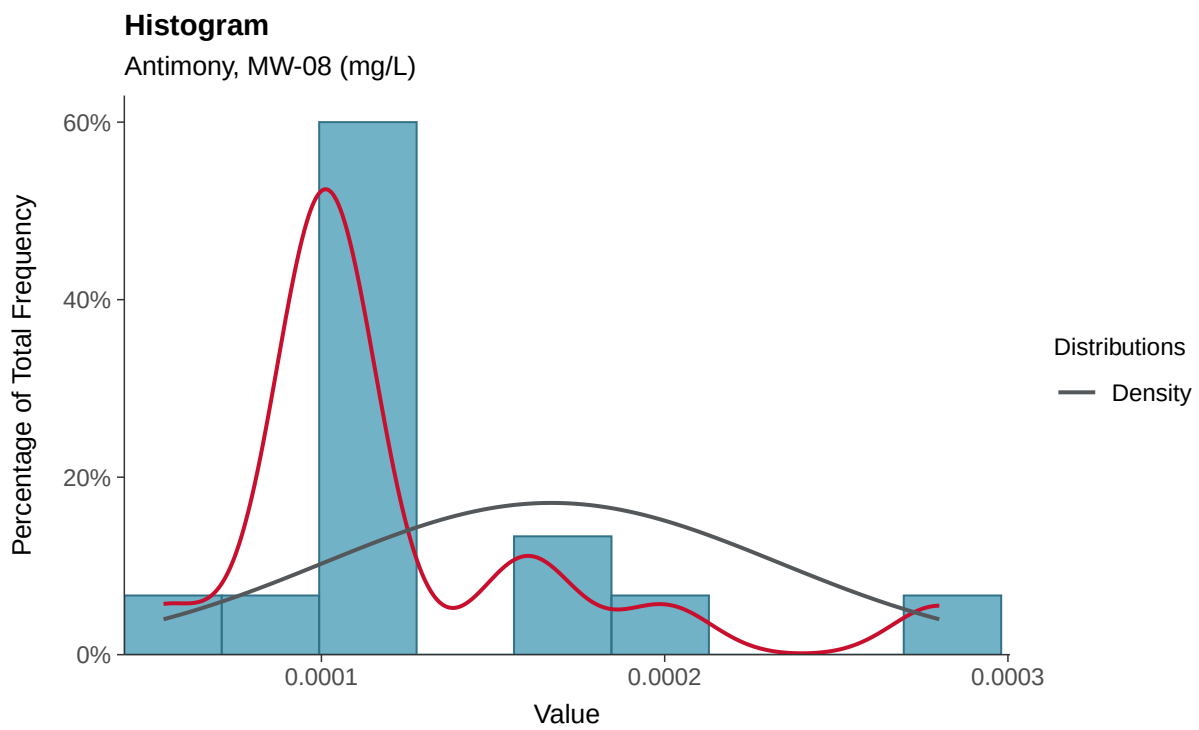
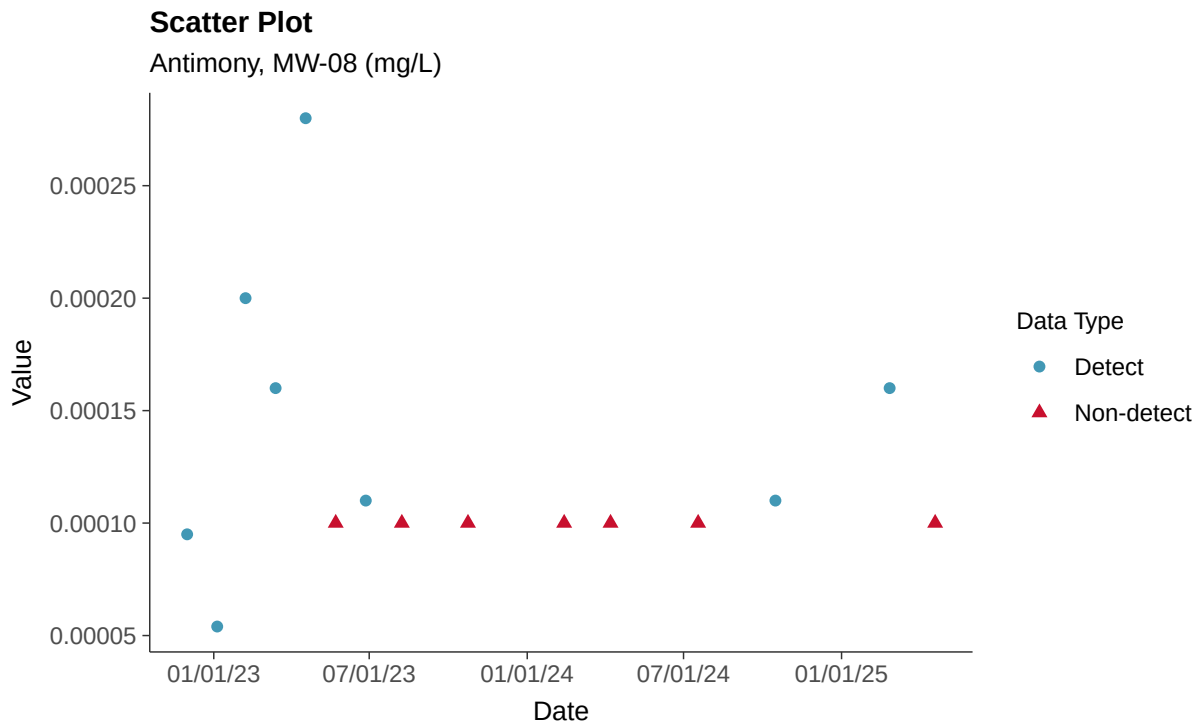
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-08 (mg/L)



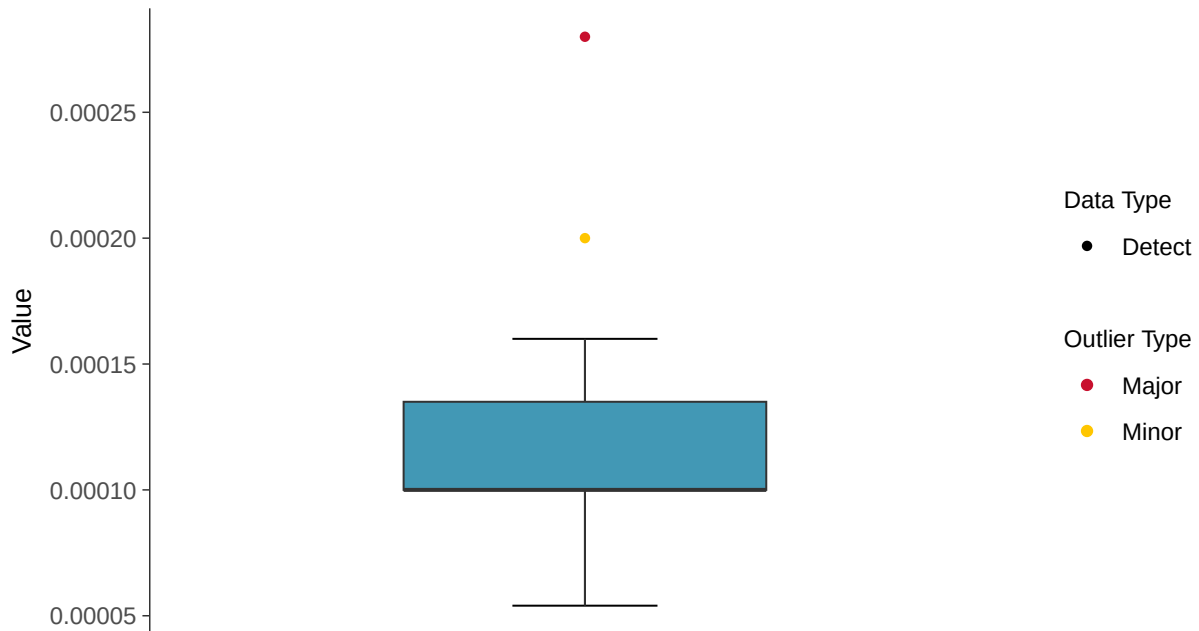
Appendix IV: Antimony, MW-08

ID: 18_1_4_101



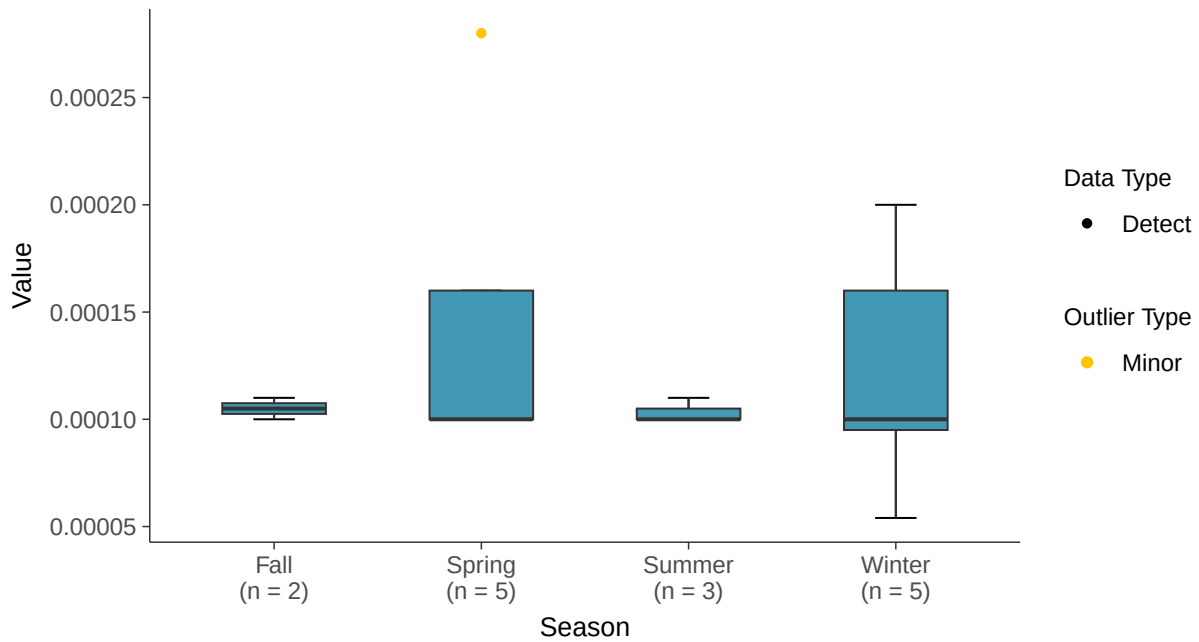
Boxplot

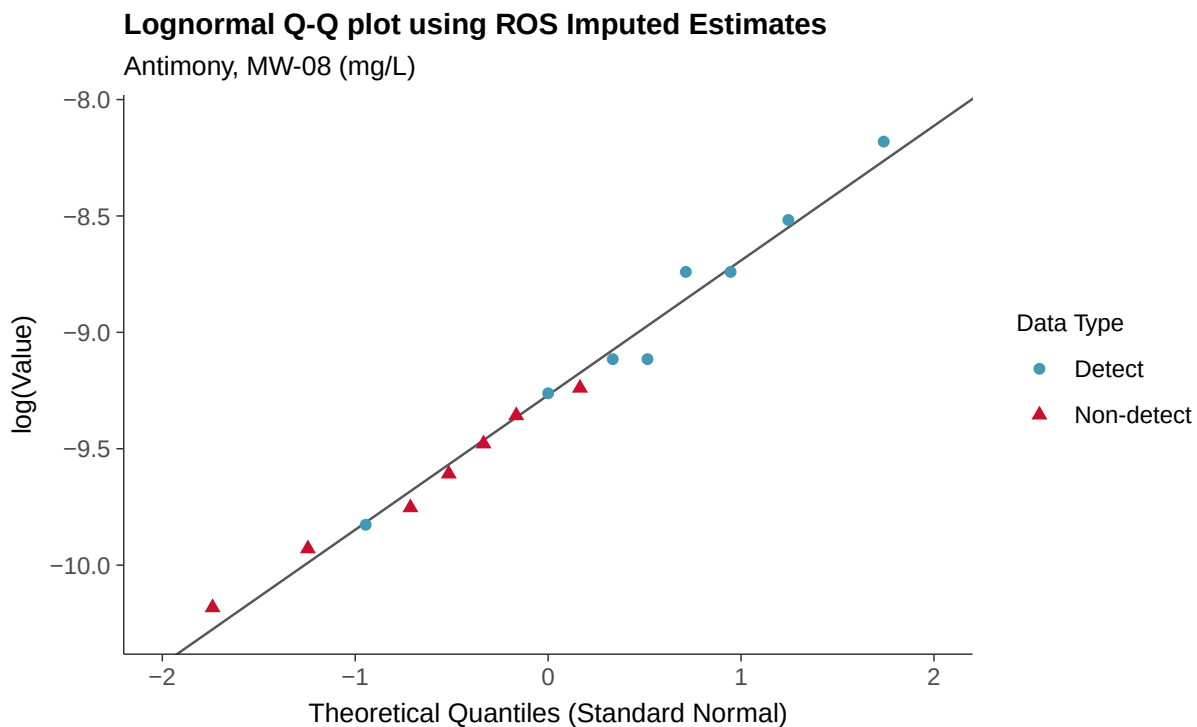
Antimony, MW-08 (mg/L)

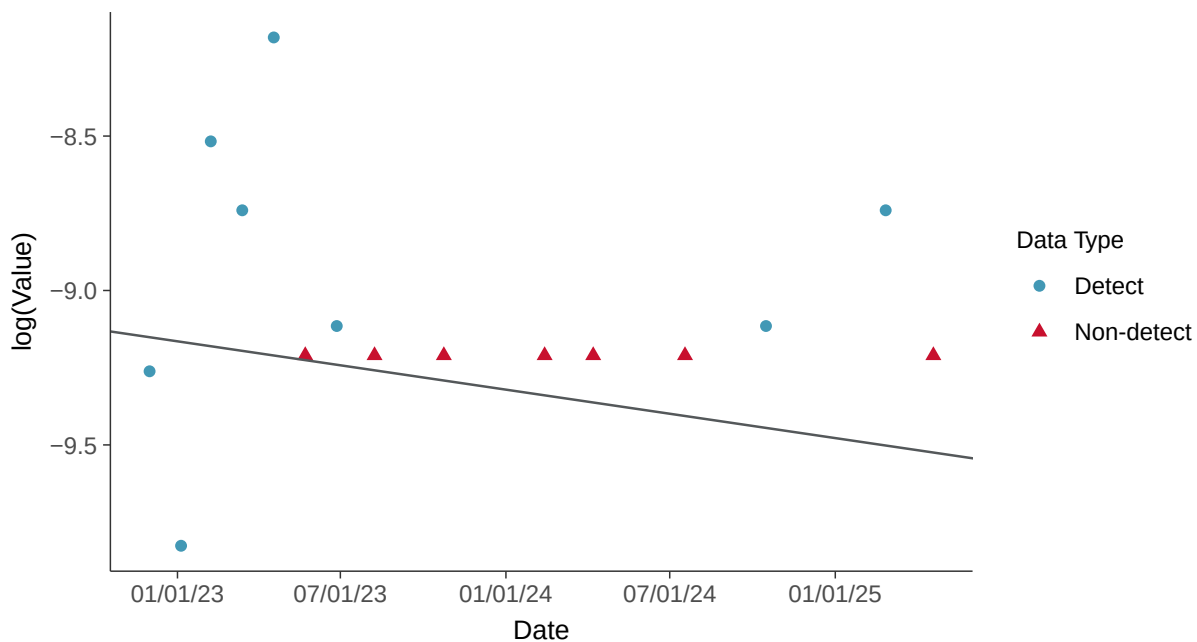


Boxplot by Season

Antimony, MW-08 (mg/L)

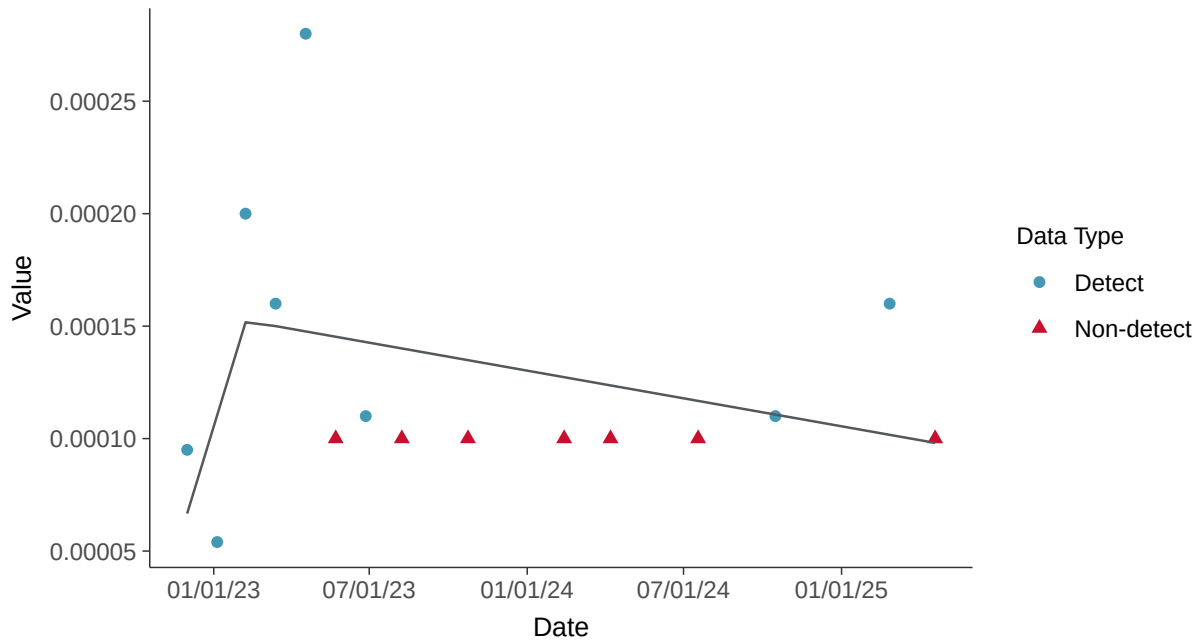






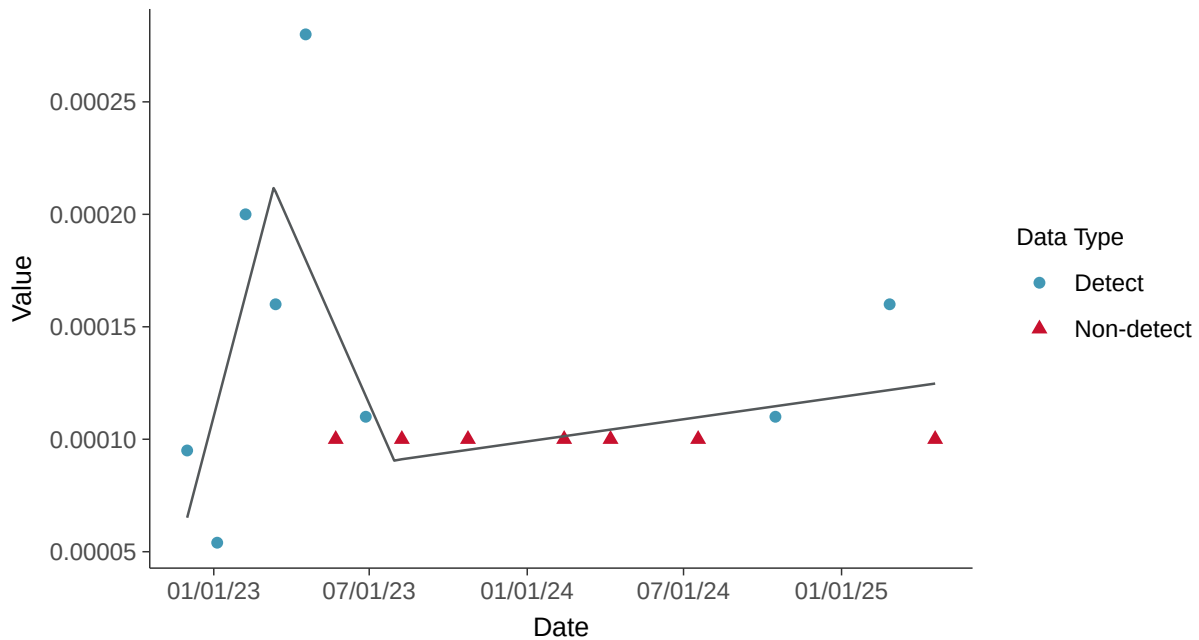
Trend Regression: Piecewise Linear-Linear

Antimony, MW-08 (mg/L)



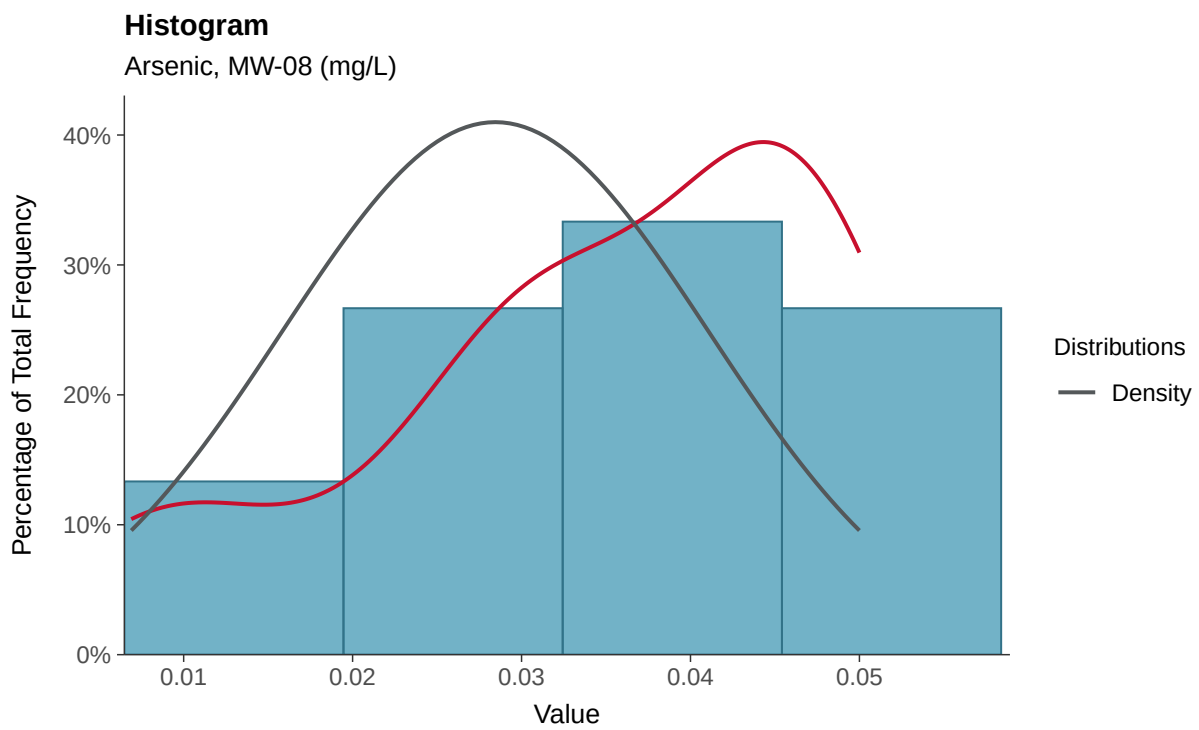
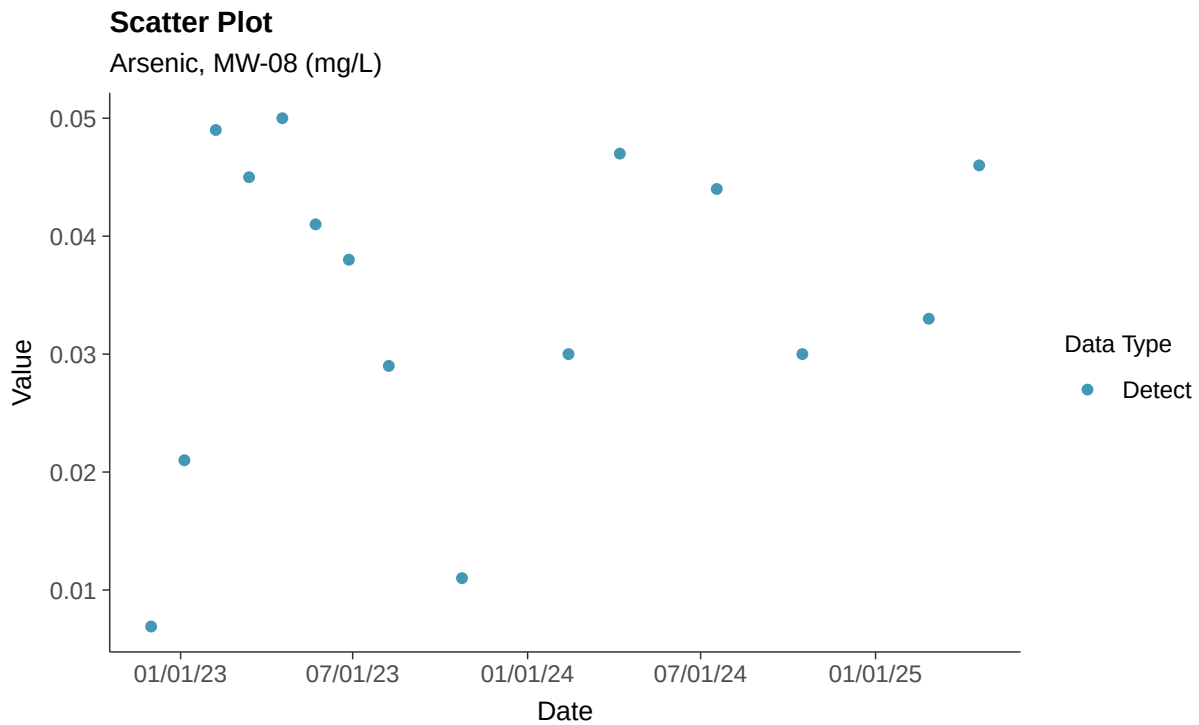
Trend Regression: Piecewise Linear-Linear-Linear

Antimony, MW-08 (mg/L)



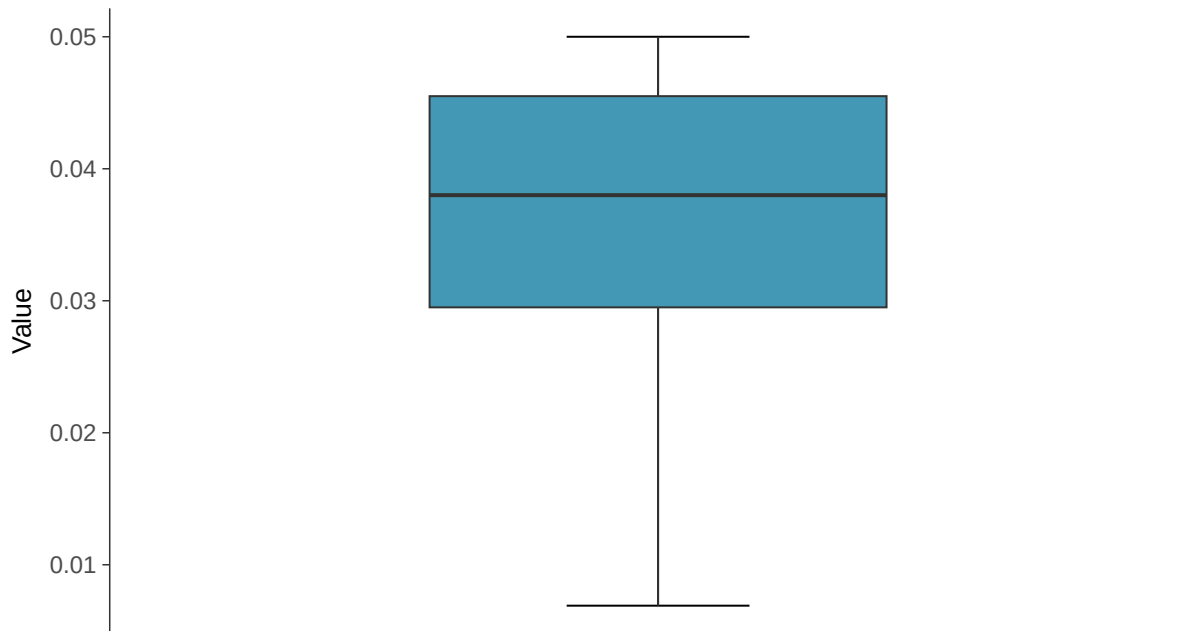
Appendix IV: Arsenic, MW-08

ID: 18_1_4_102



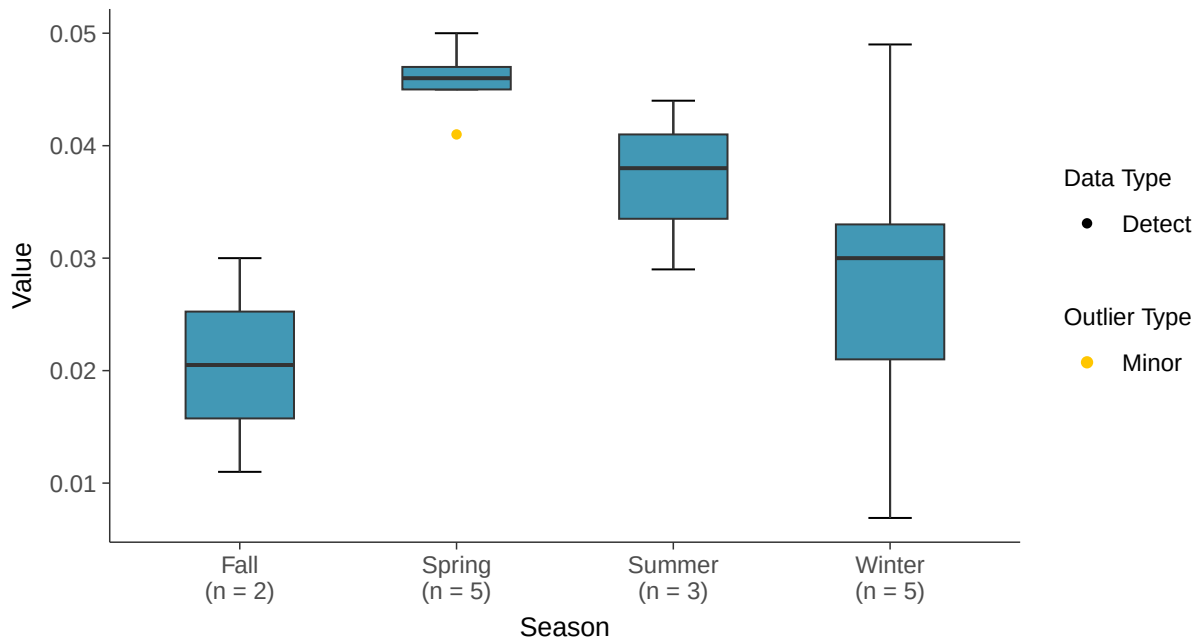
Boxplot

Arsenic, MW-08 (mg/L)



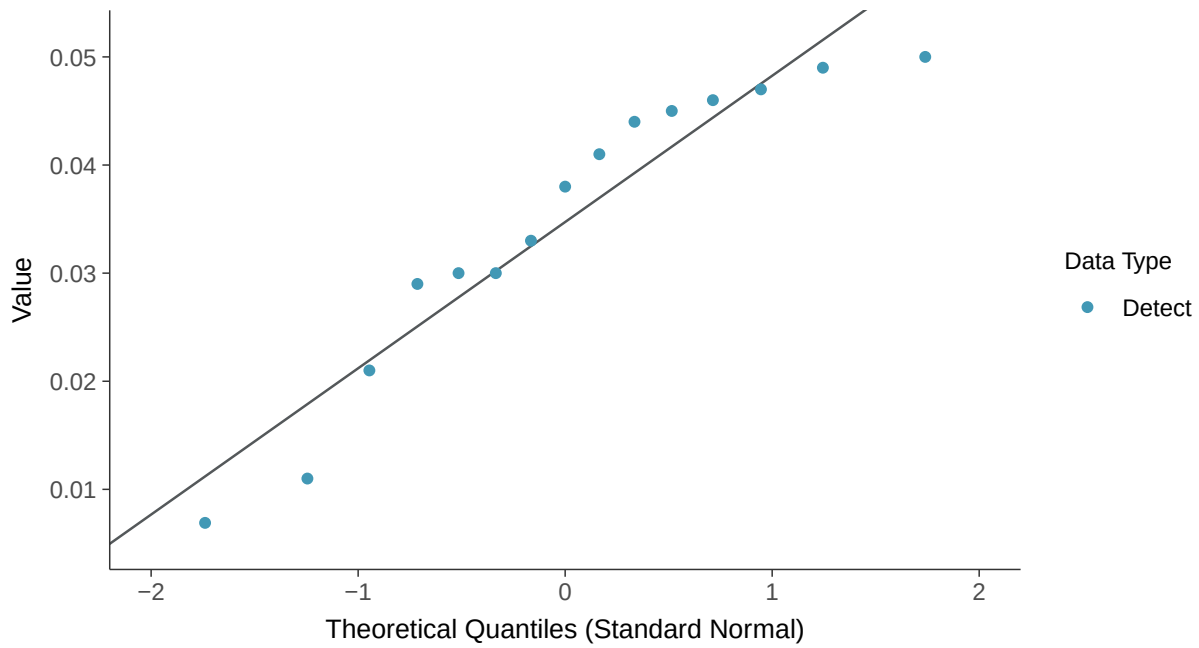
Boxplot by Season

Arsenic, MW-08 (mg/L)



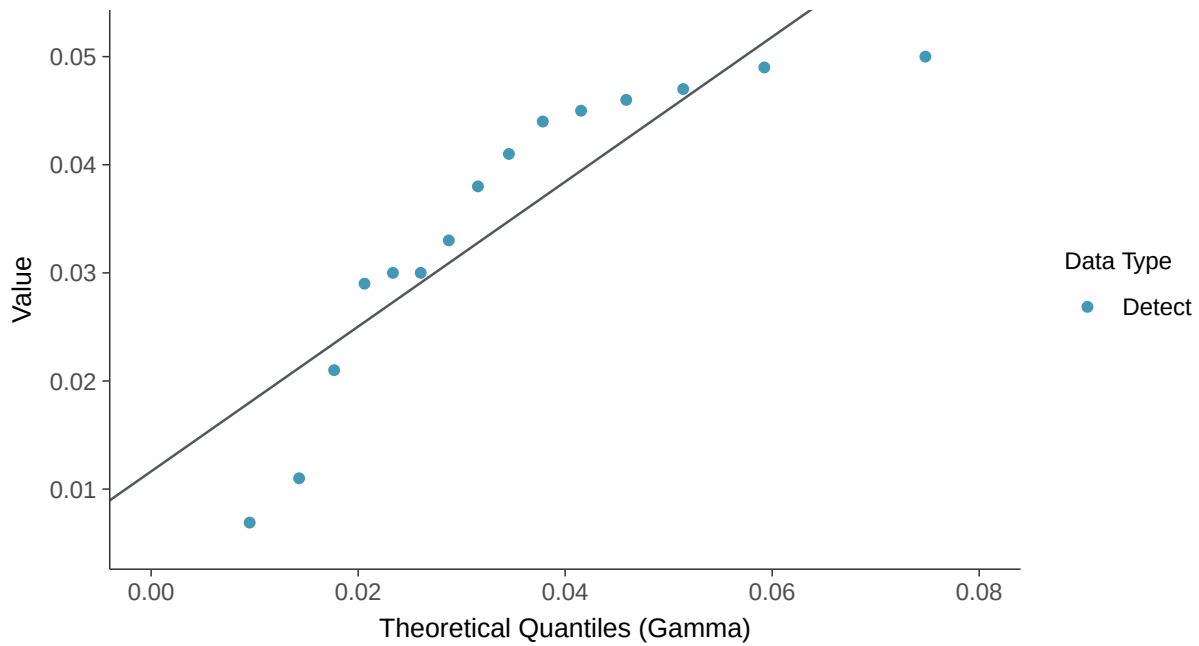
Normal Q-Q plot

Arsenic, MW-08 (mg/L)



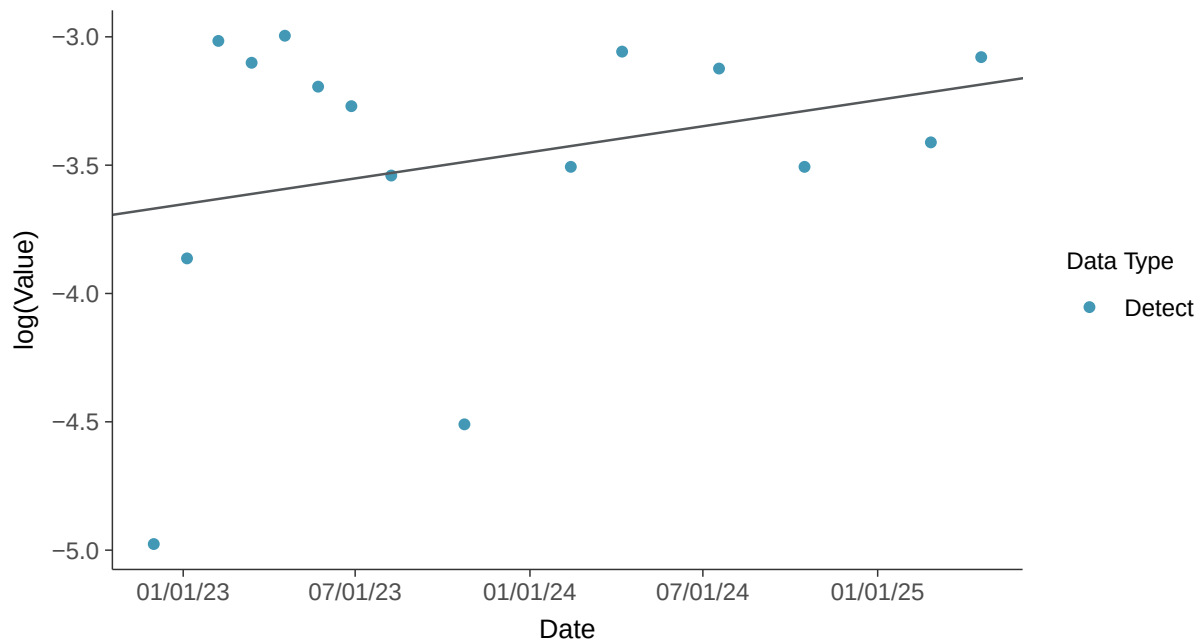
Gamma Q-Q plot

Arsenic, MW-08 (mg/L)



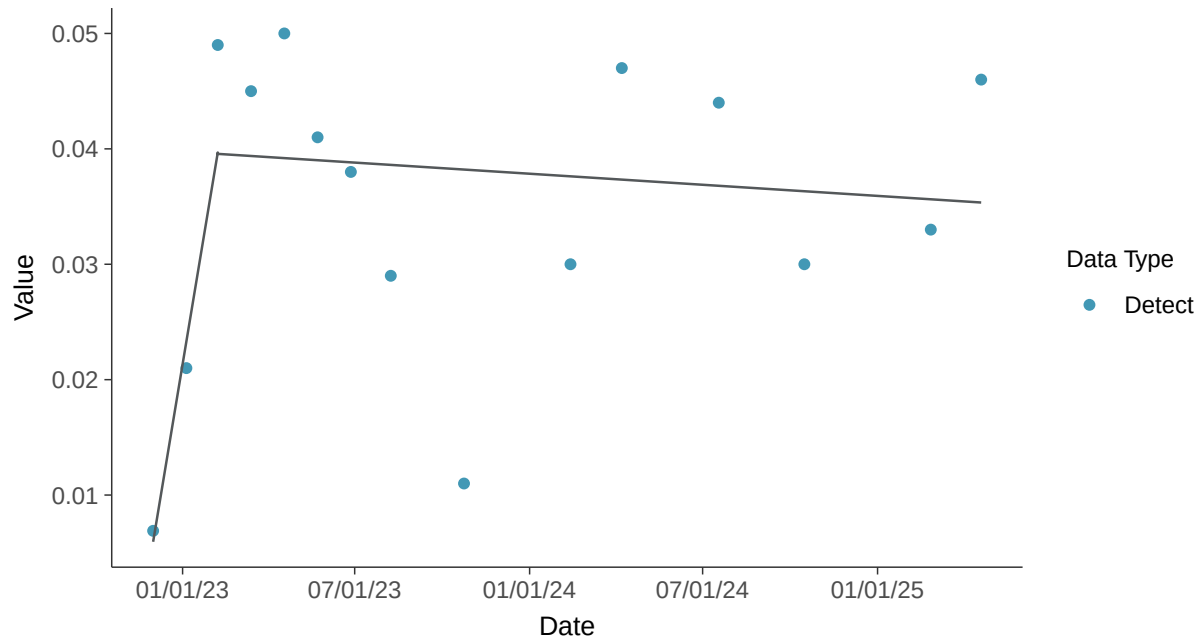
Trend Regression: Lognormal MLE

Arsenic, MW-08 (mg/L)



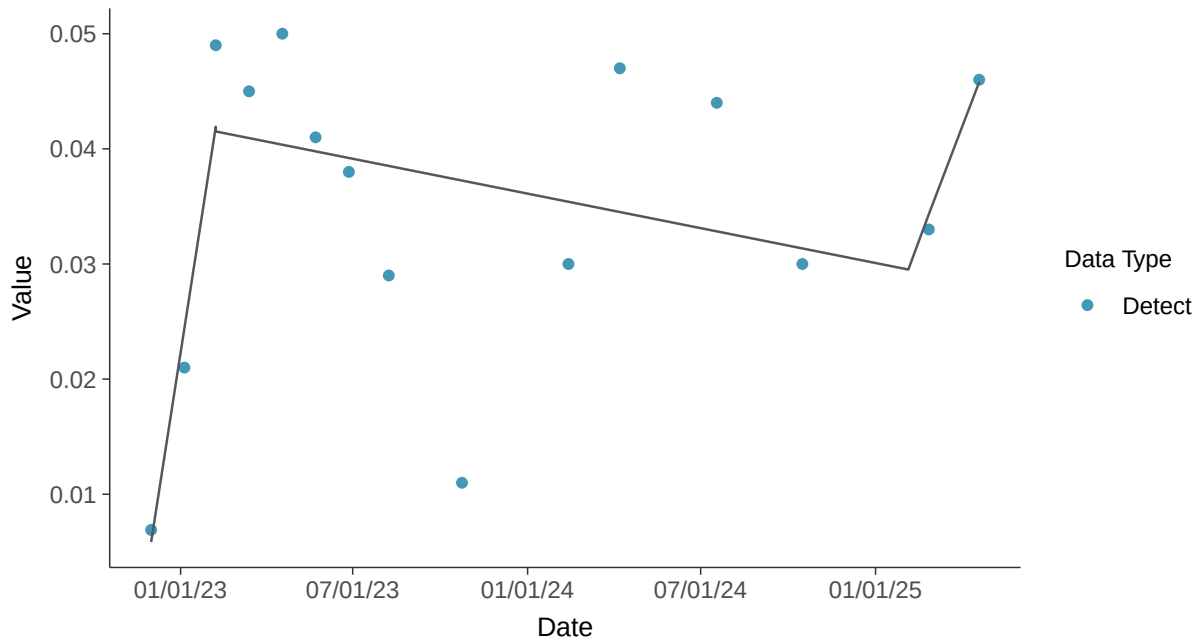
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-08 (mg/L)



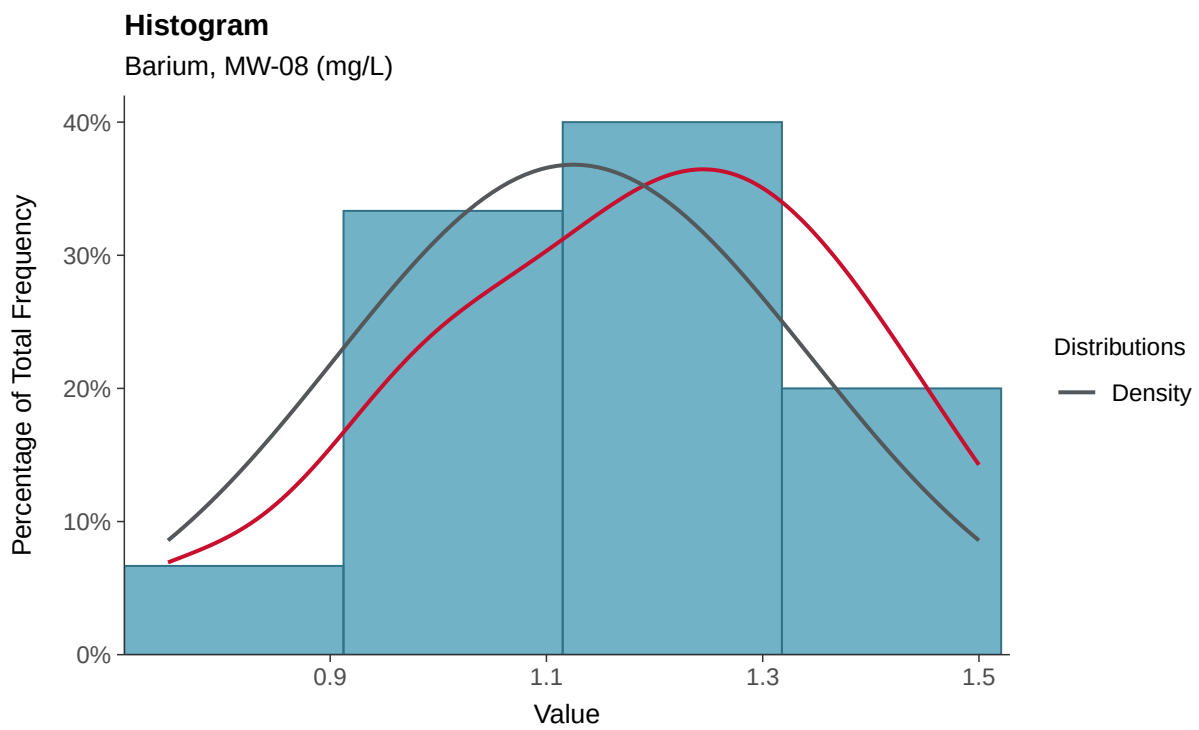
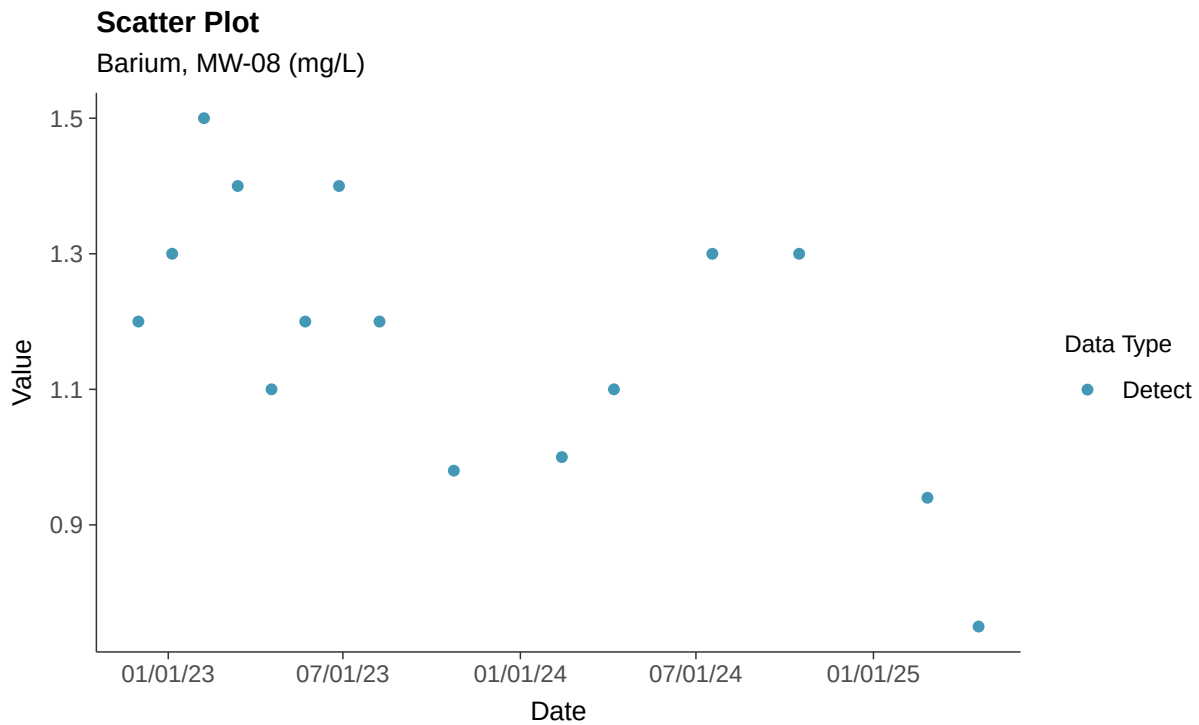
Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-08 (mg/L)



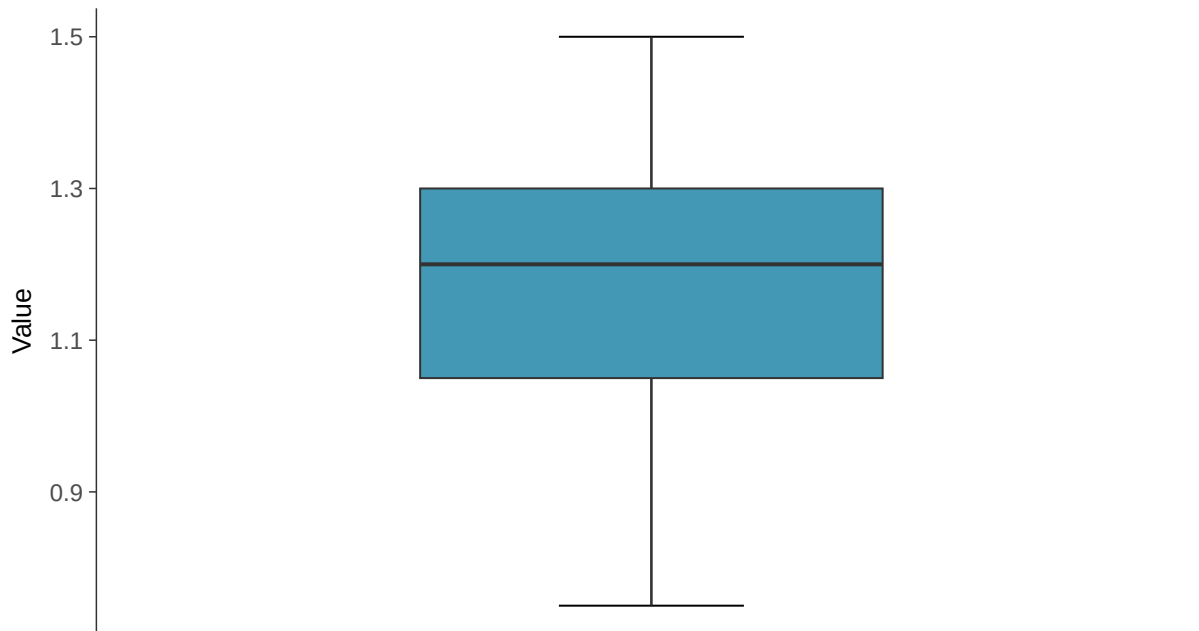
Appendix IV: Barium, MW-08

ID: 18_1_4_103



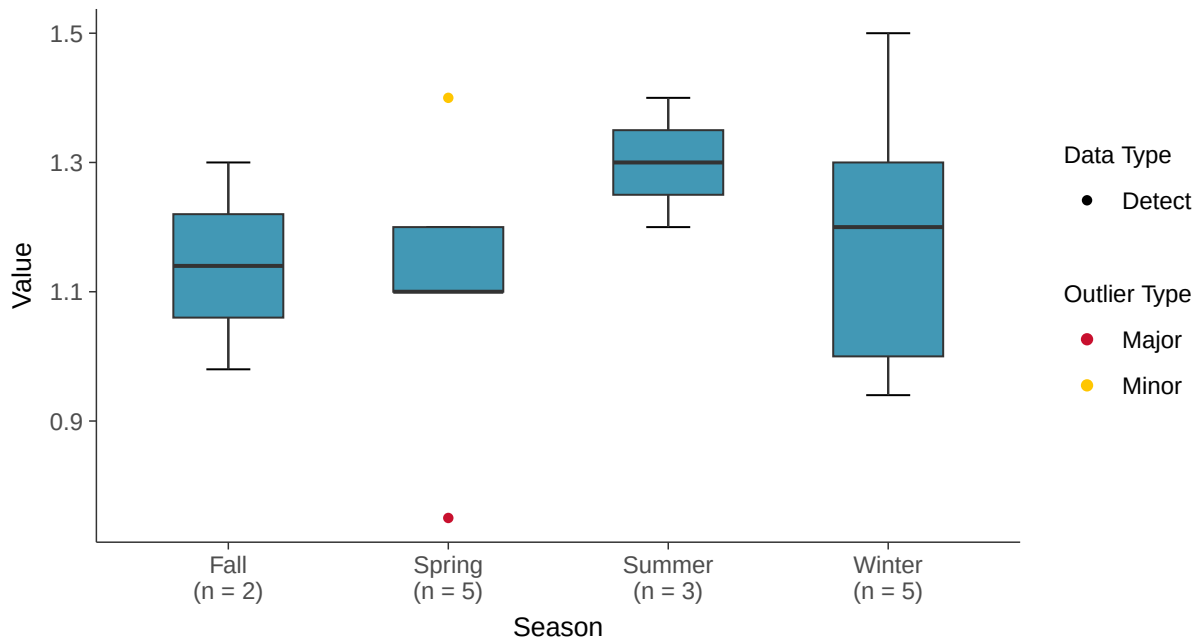
Boxplot

Barium, MW-08 (mg/L)

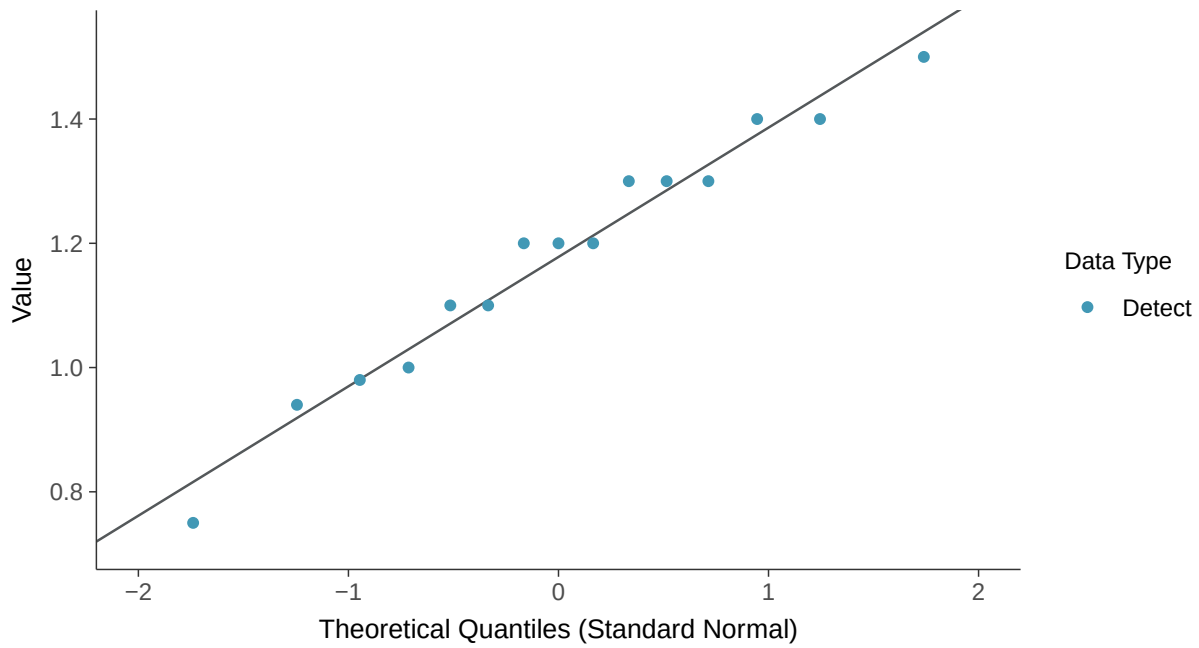


Boxplot by Season

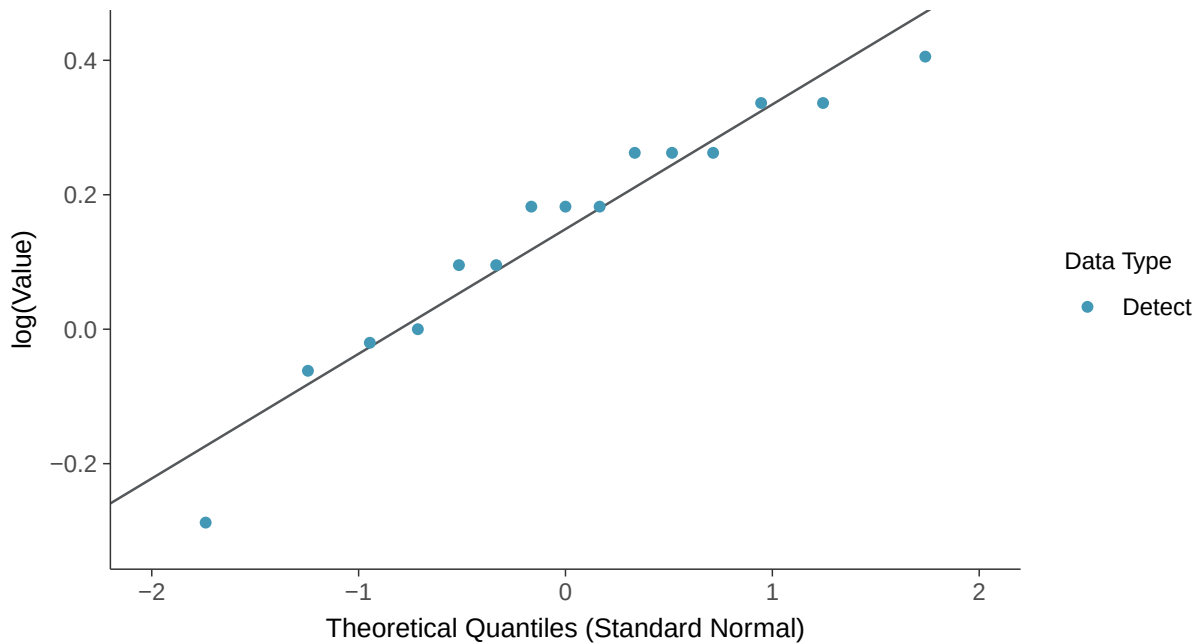
Barium, MW-08 (mg/L)



Normal Q-Q plot
Barium, MW-08 (mg/L)

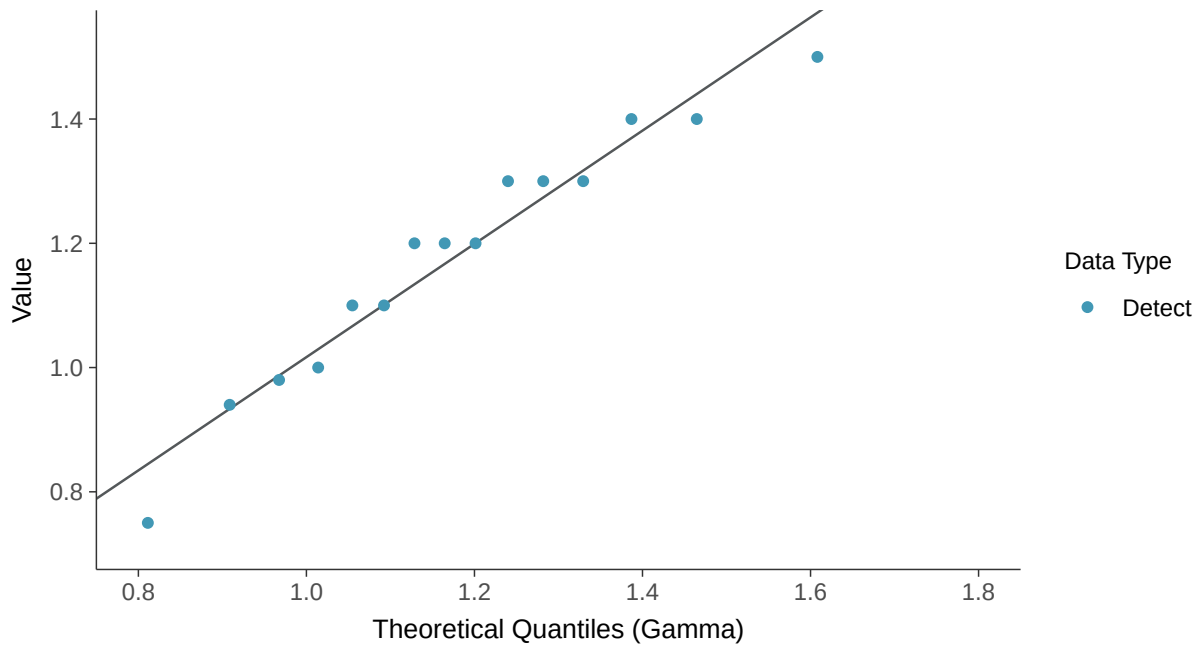


Lognormal Q-Q plot
Barium, MW-08 (mg/L)



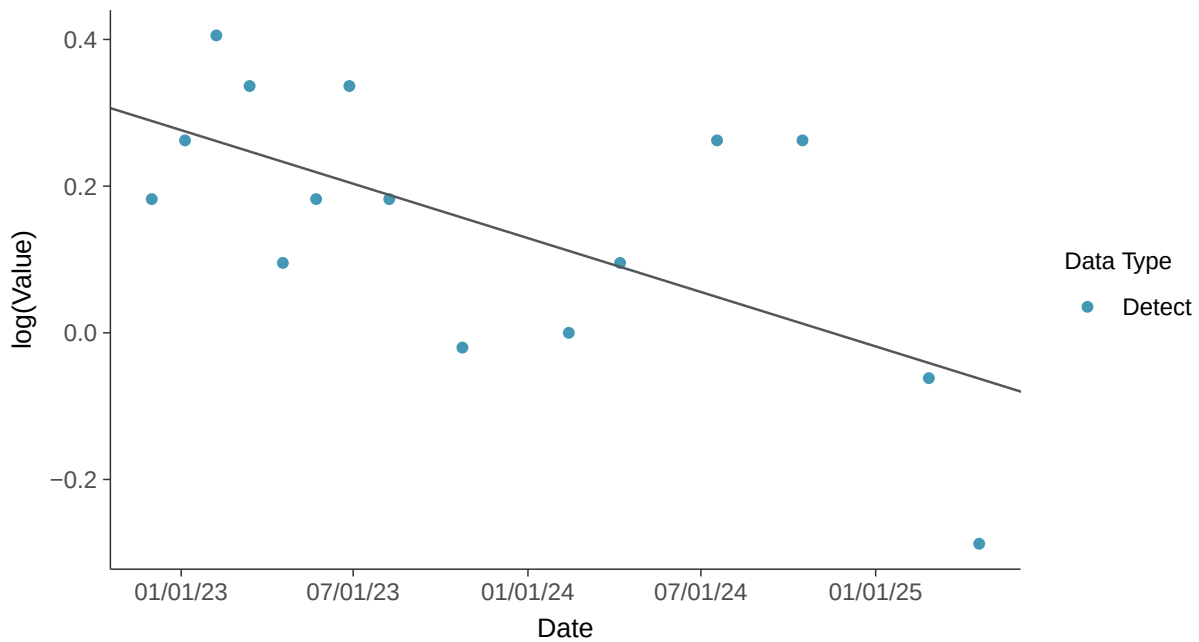
Gamma Q-Q plot

Barium, MW-08 (mg/L)



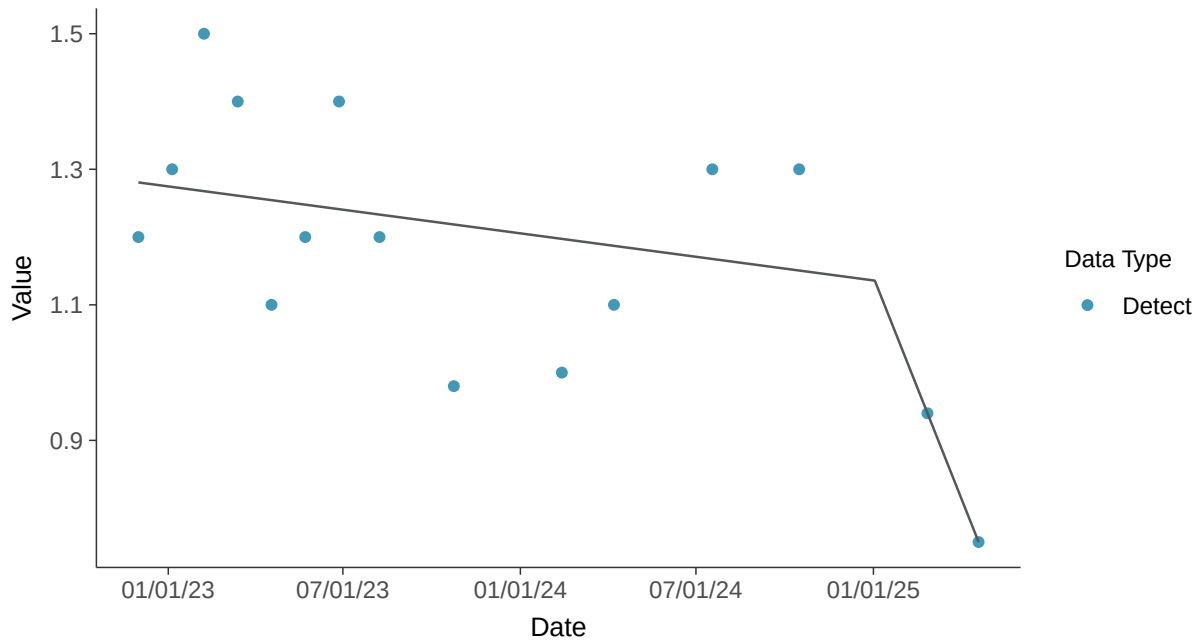
Trend Regression: Lognormal MLE

Barium, MW-08 (mg/L)



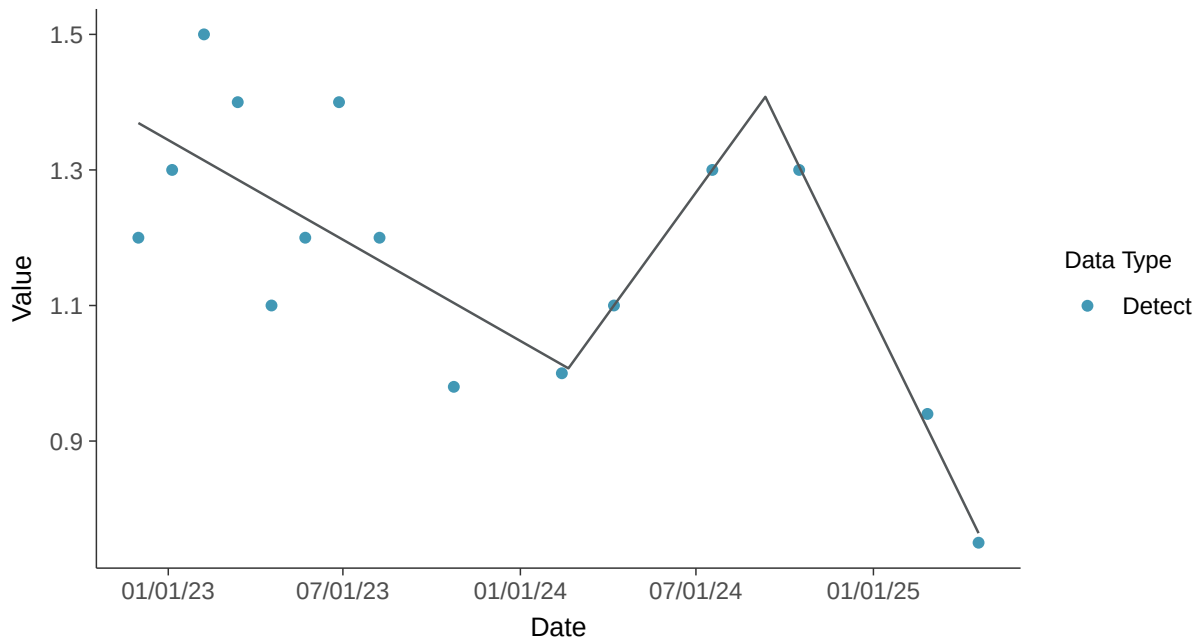
Trend Regression: Piecewise Linear-Linear

Barium, MW-08 (mg/L)



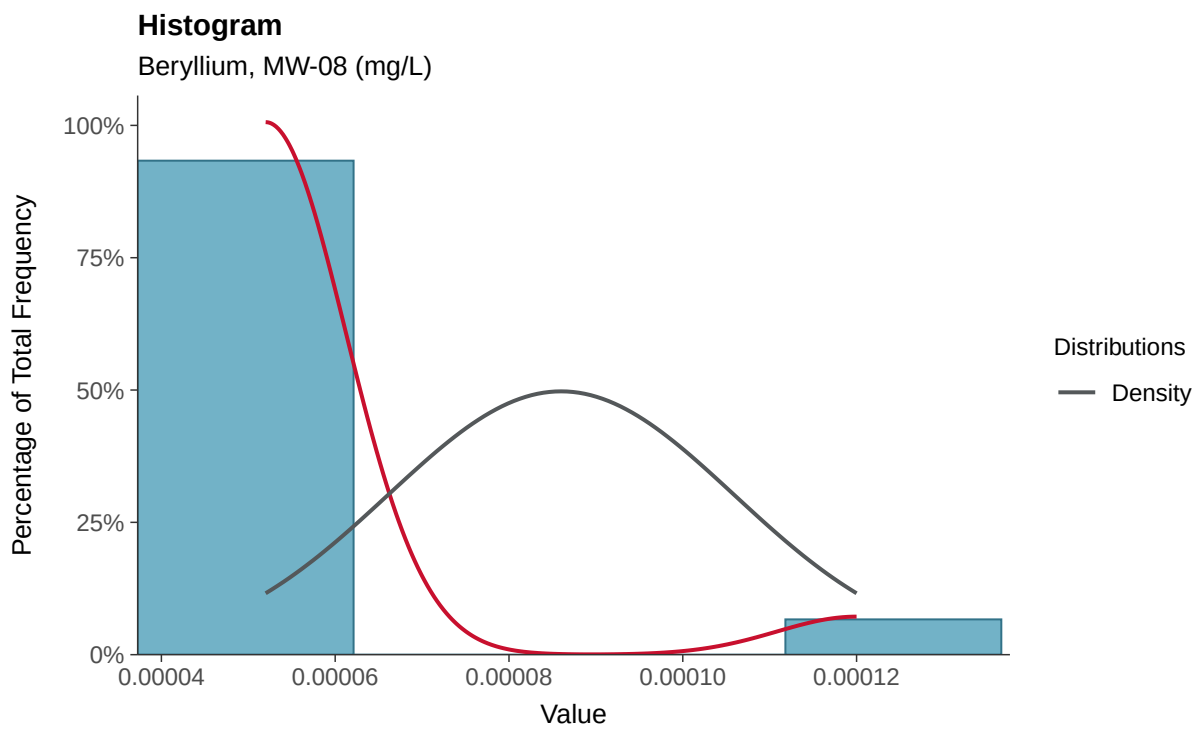
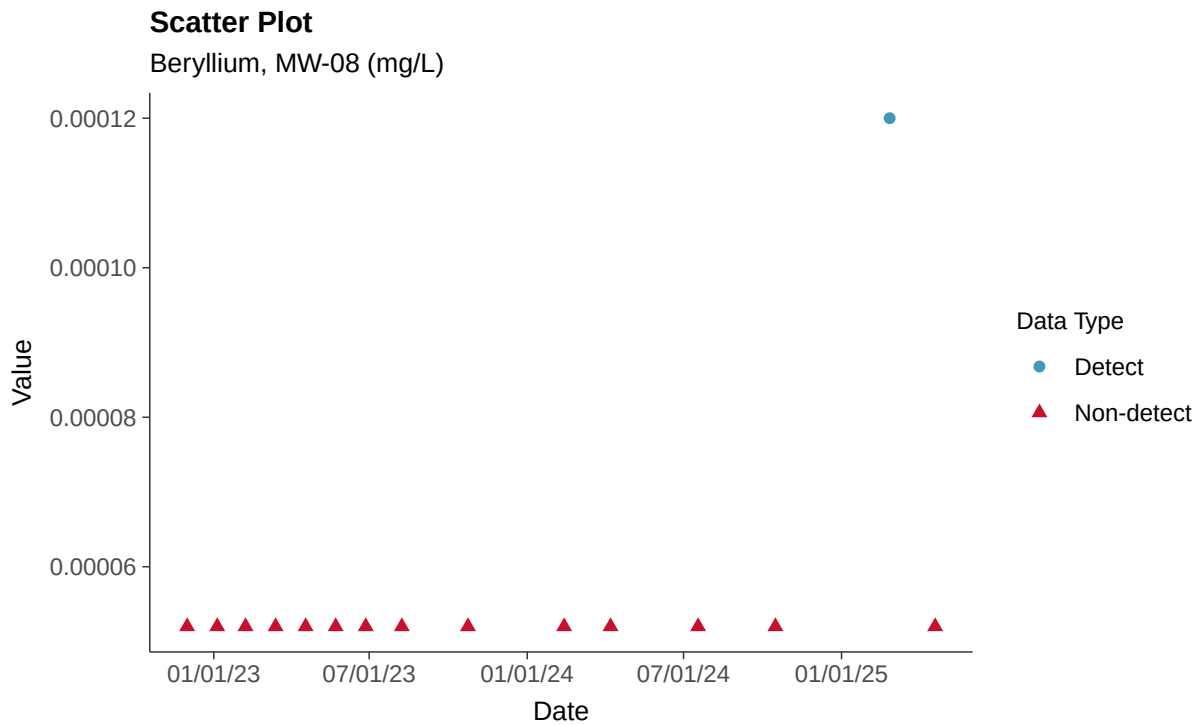
Trend Regression: Piecewise Linear-Linear-Linear

Barium, MW-08 (mg/L)



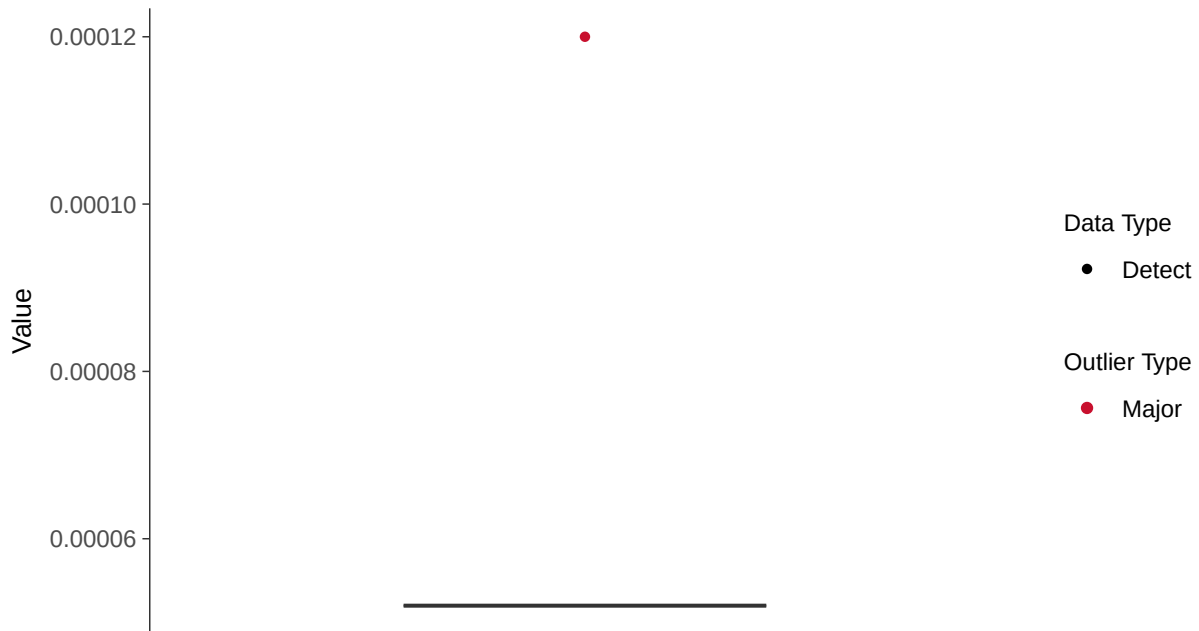
Appendix IV: Beryllium, MW-08

ID: 18_1_4_104



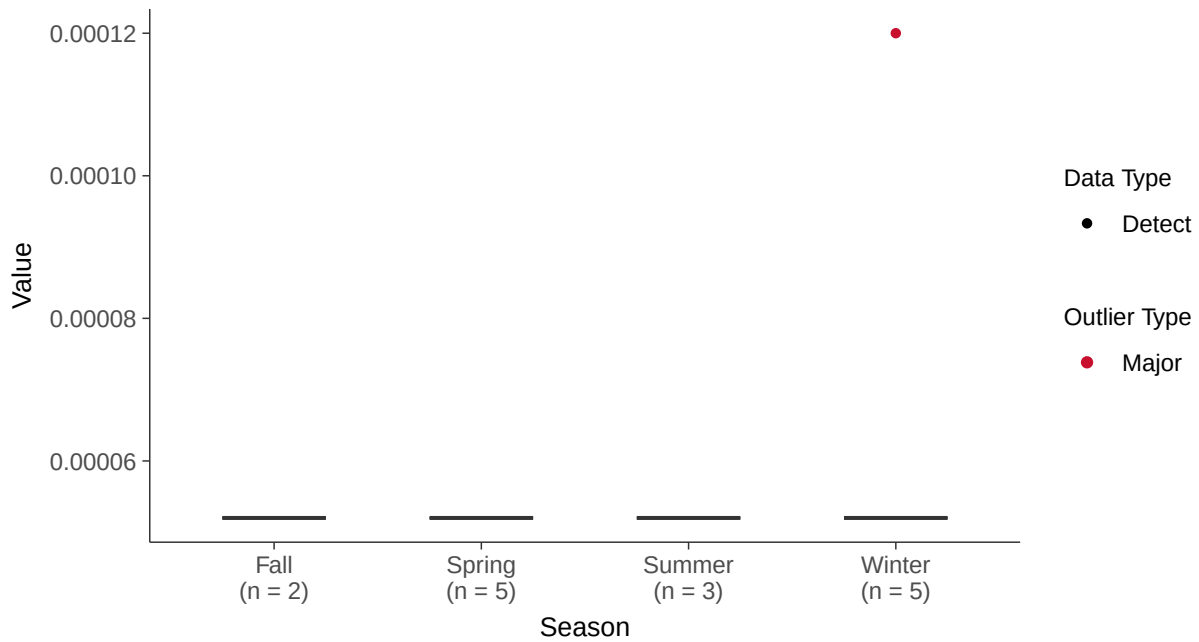
Boxplot

Beryllium, MW-08 (mg/L)



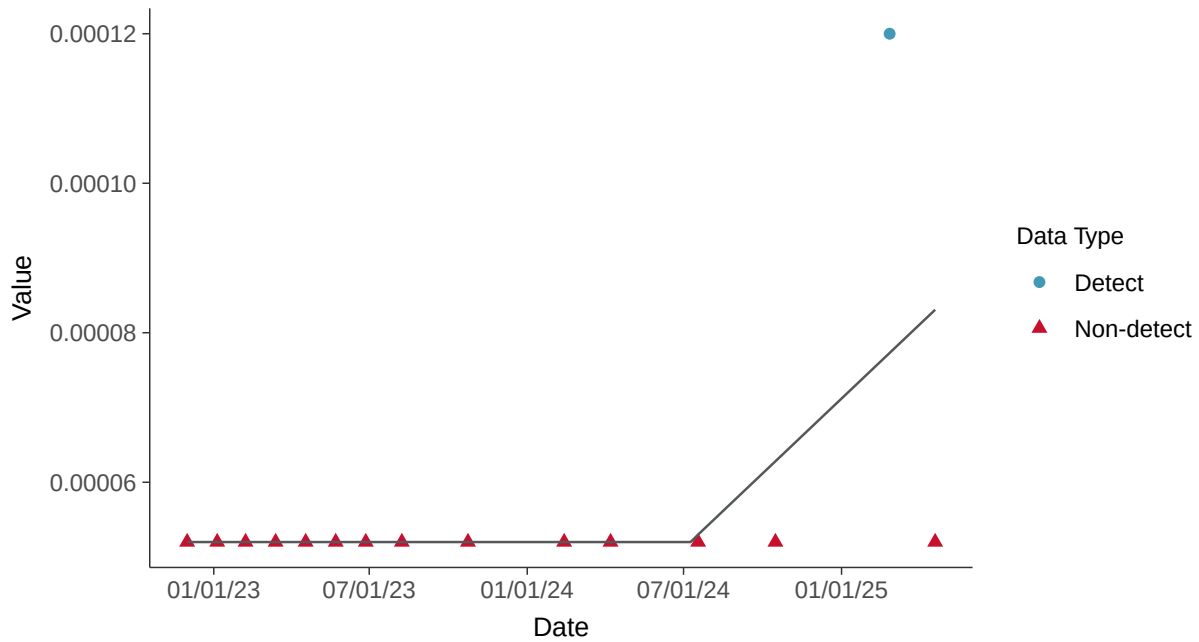
Boxplot by Season

Beryllium, MW-08 (mg/L)



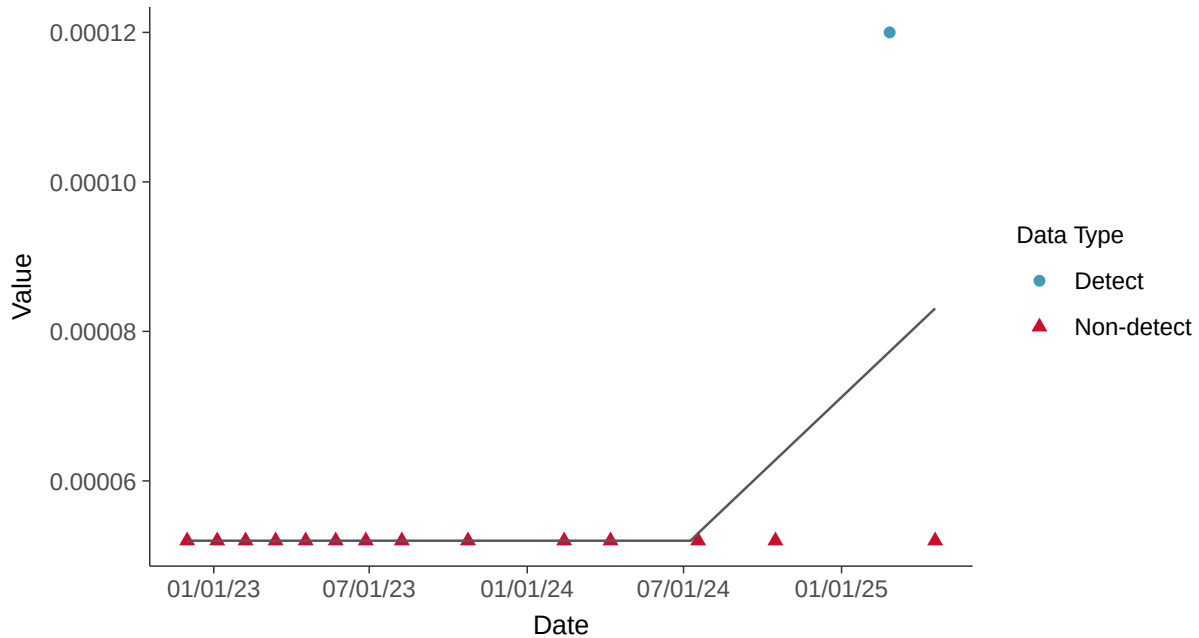
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-08 (mg/L)



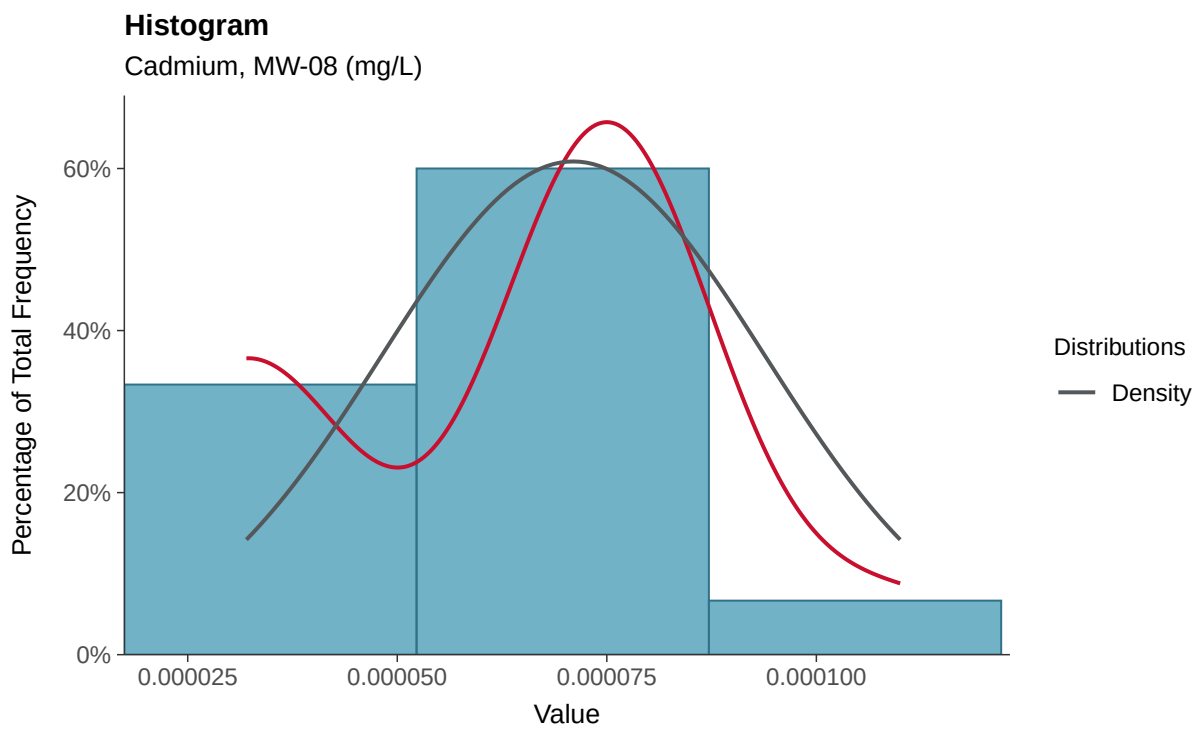
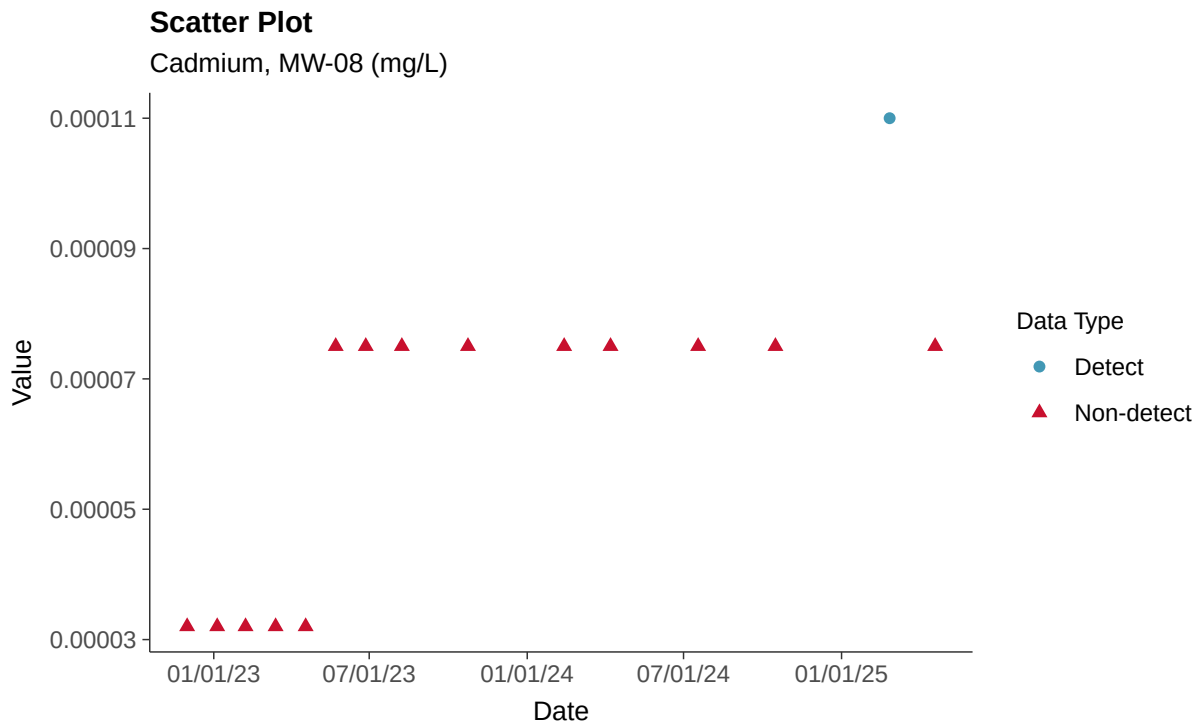
Trend Regression: Piecewise Linear-Linear-Linear

Beryllium, MW-08 (mg/L)



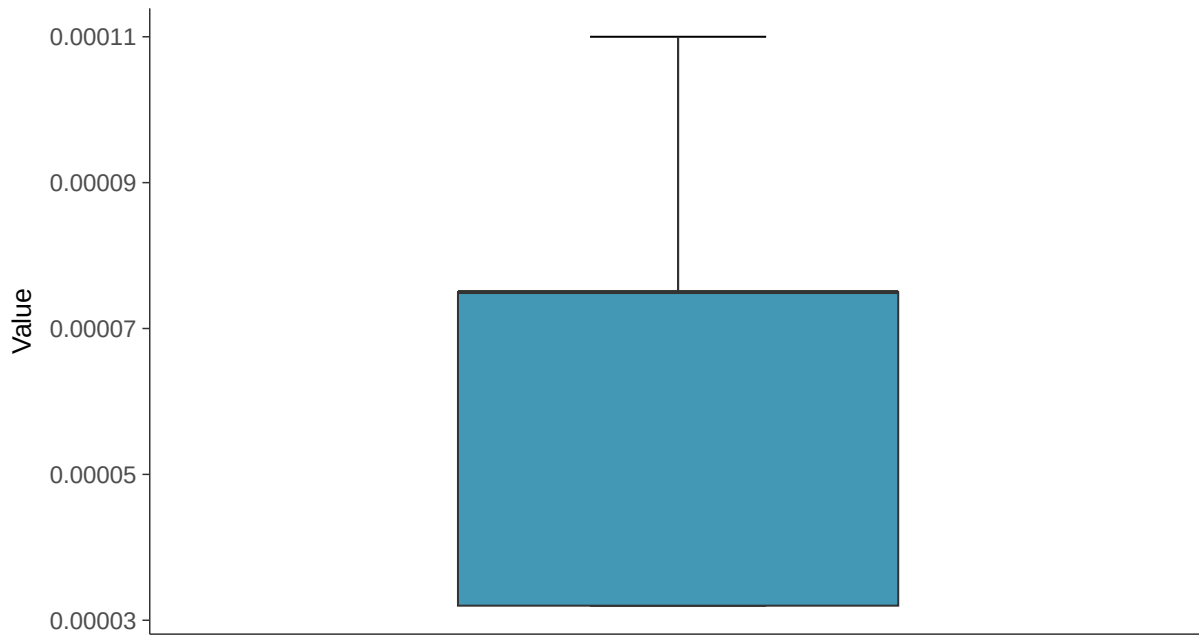
Appendix IV: Cadmium, MW-08

ID: 18_1_4_106



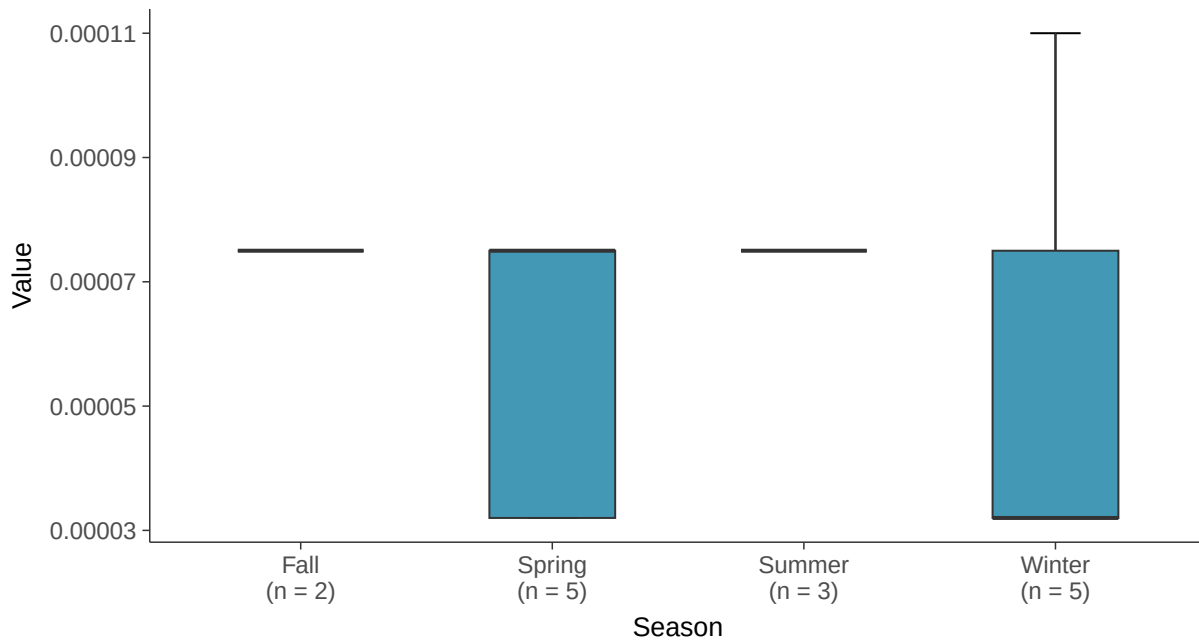
Boxplot

Cadmium, MW-08 (mg/L)



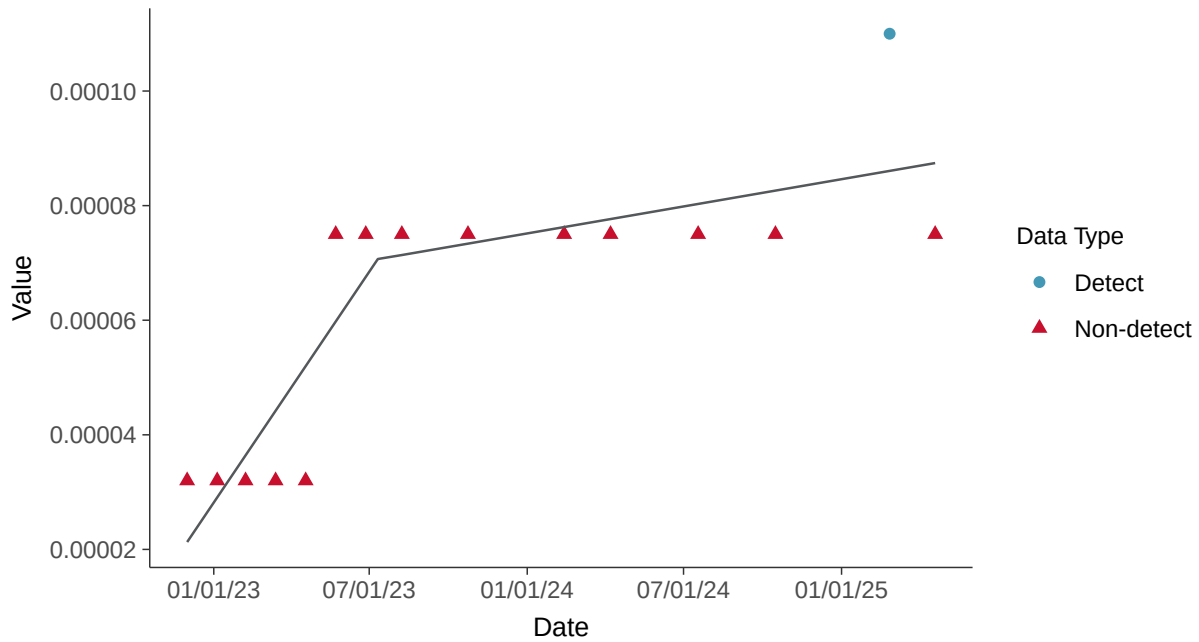
Boxplot by Season

Cadmium, MW-08 (mg/L)



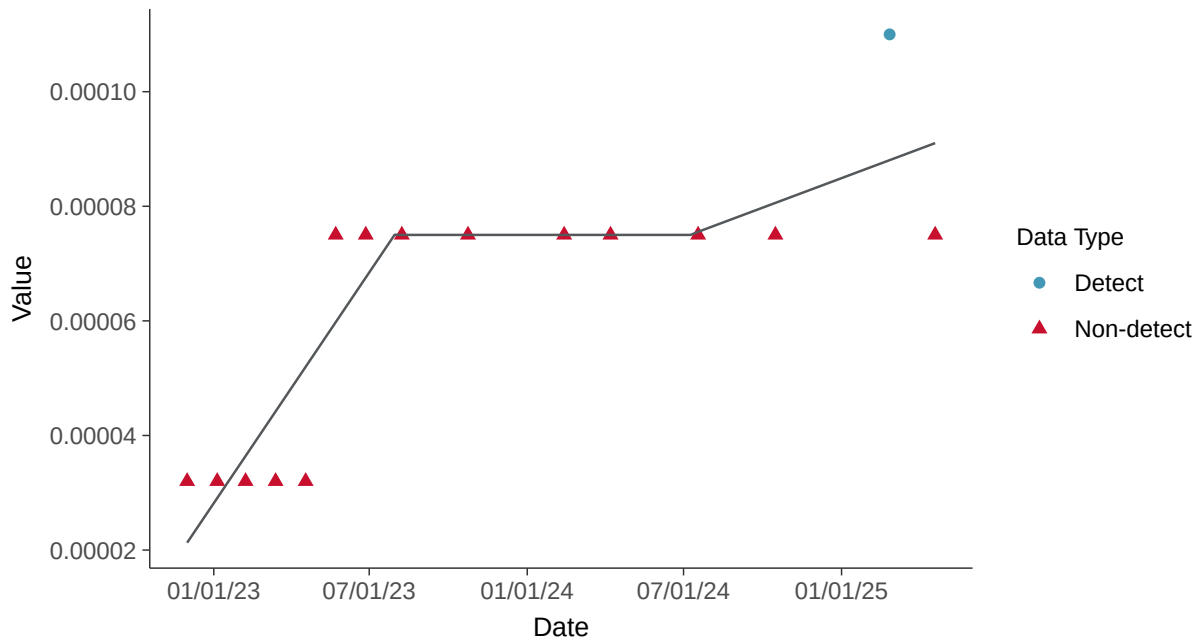
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-08 (mg/L)



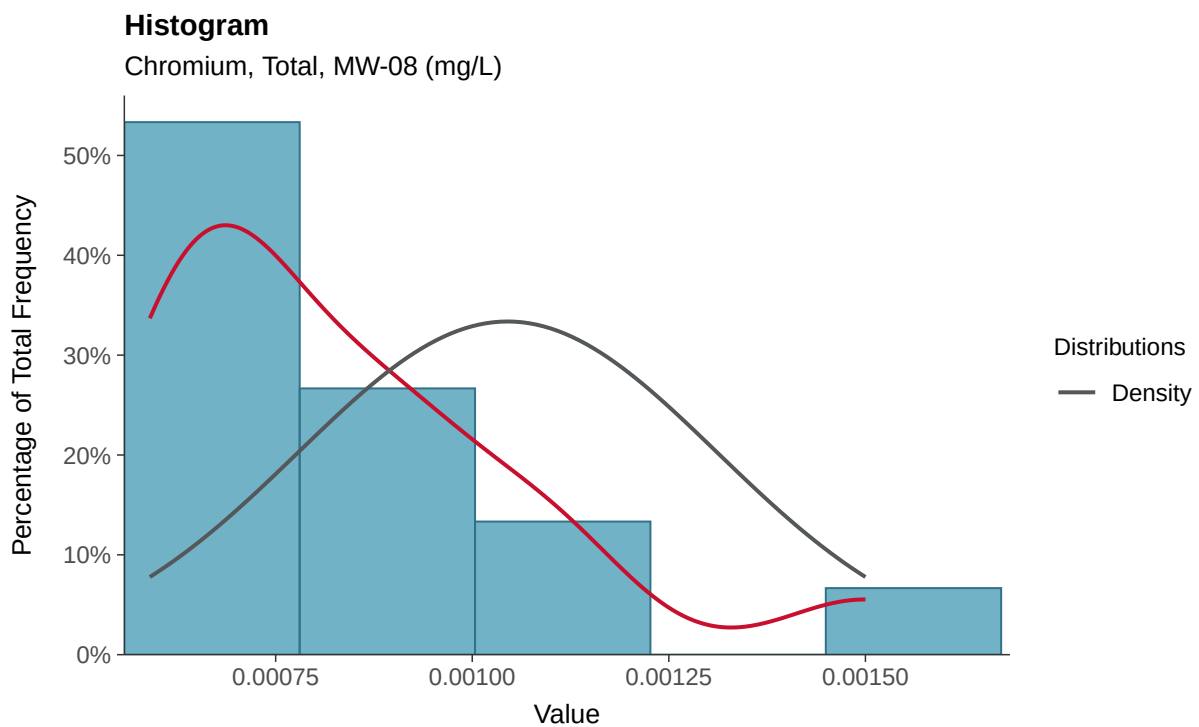
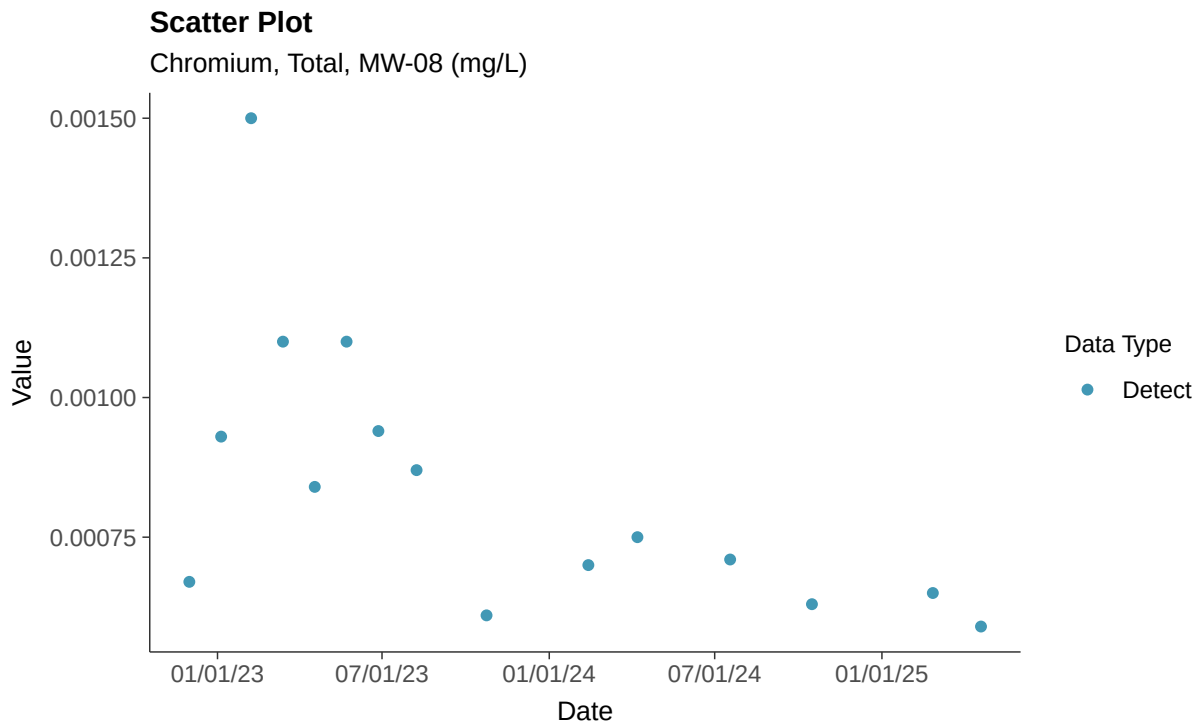
Trend Regression: Piecewise Linear-Linear-Linear

Cadmium, MW-08 (mg/L)



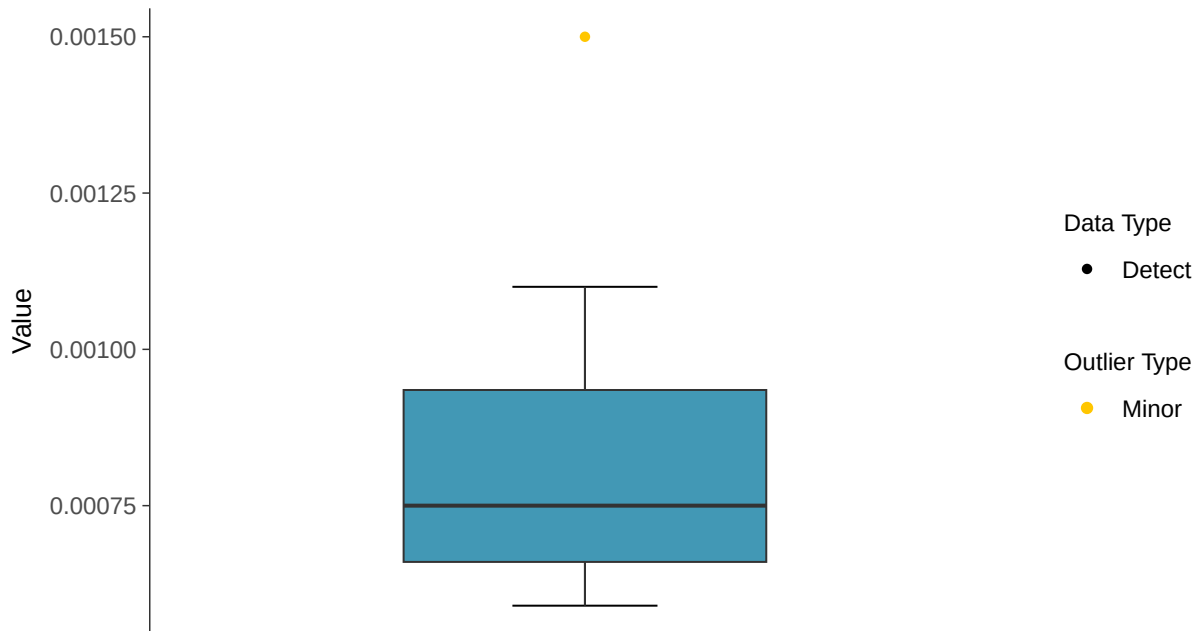
Appendix IV: Chromium, Total, MW-08

ID: 18_1_4_109



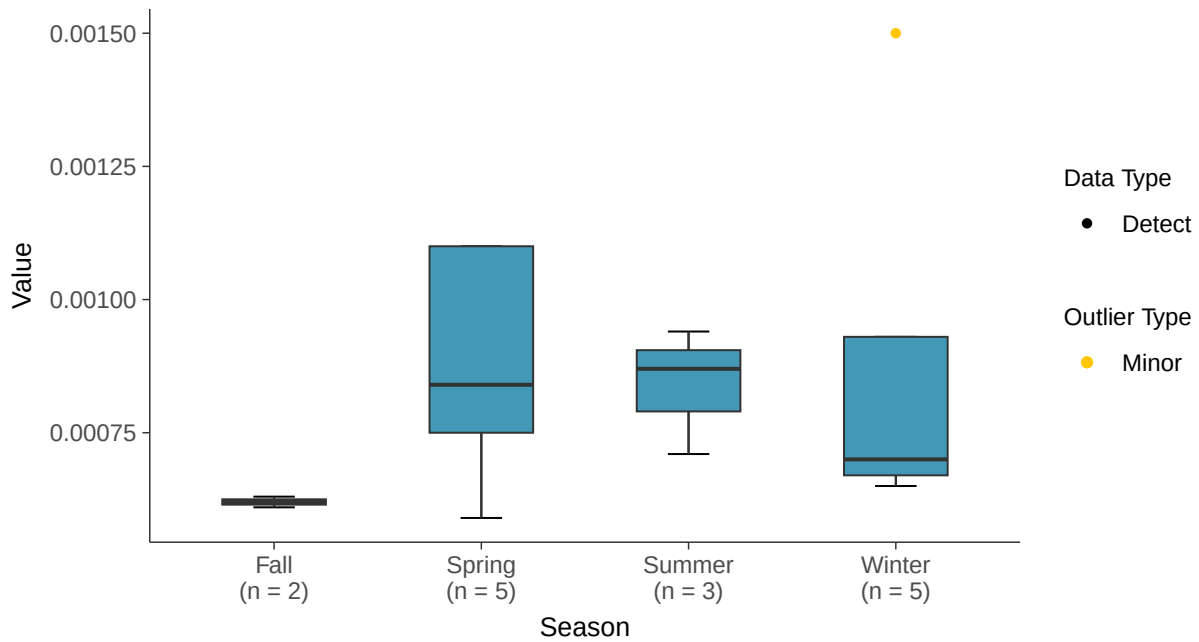
Boxplot

Chromium, Total, MW-08 (mg/L)



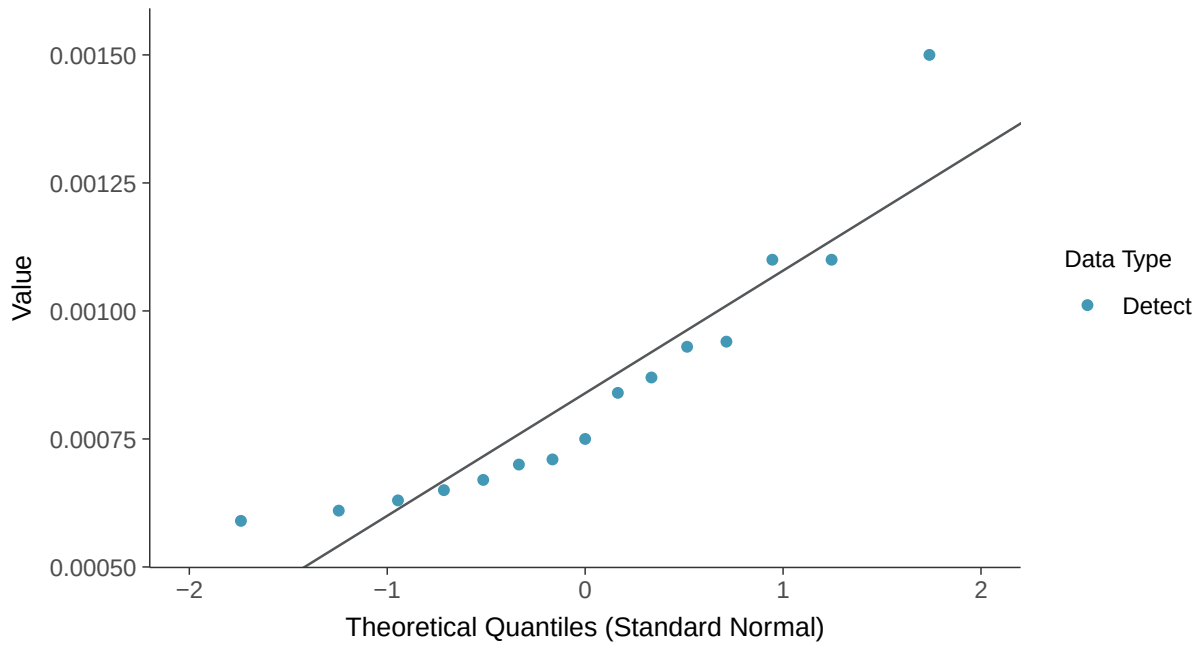
Boxplot by Season

Chromium, Total, MW-08 (mg/L)



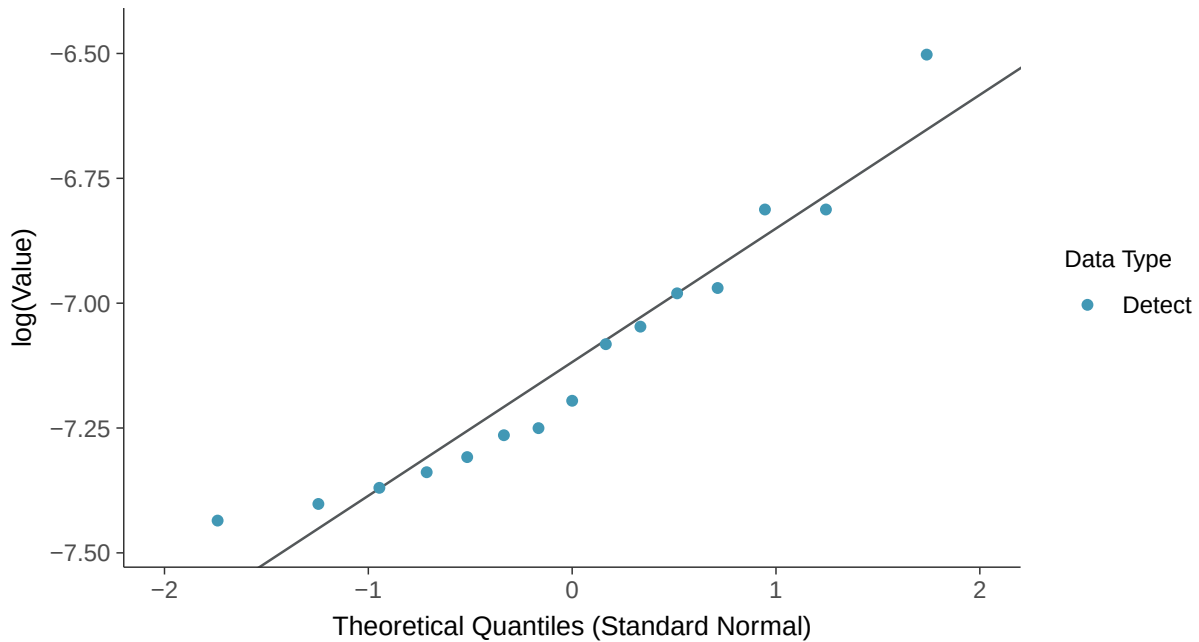
Normal Q-Q plot

Chromium, Total, MW-08 (mg/L)



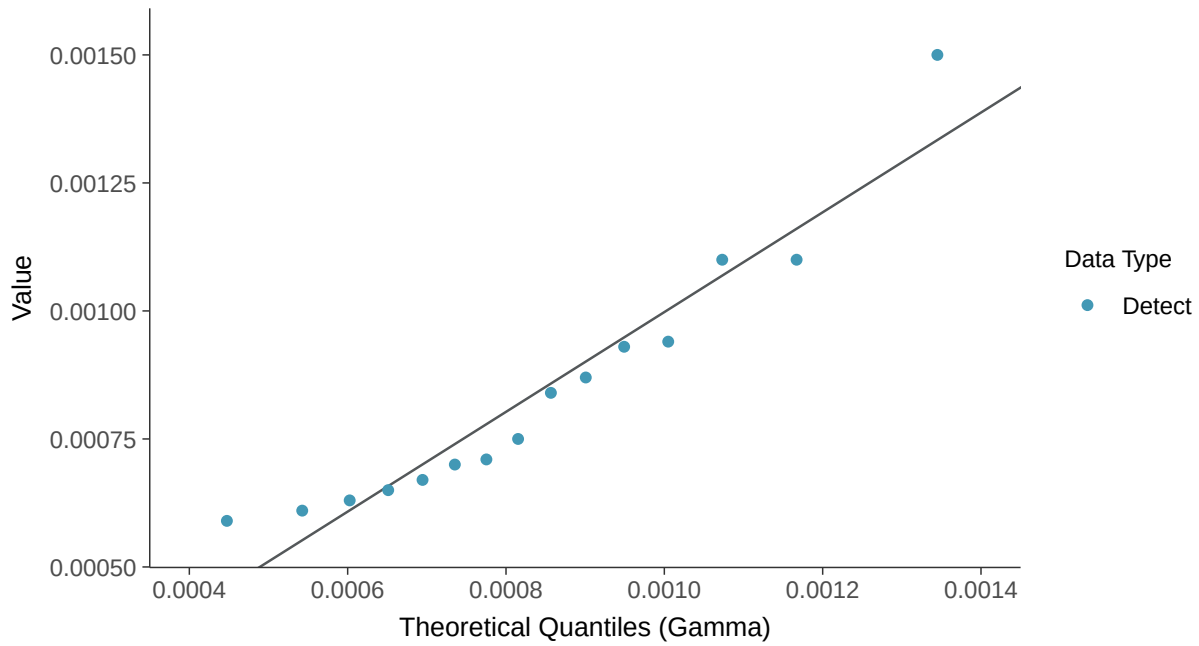
Lognormal Q-Q plot

Chromium, Total, MW-08 (mg/L)



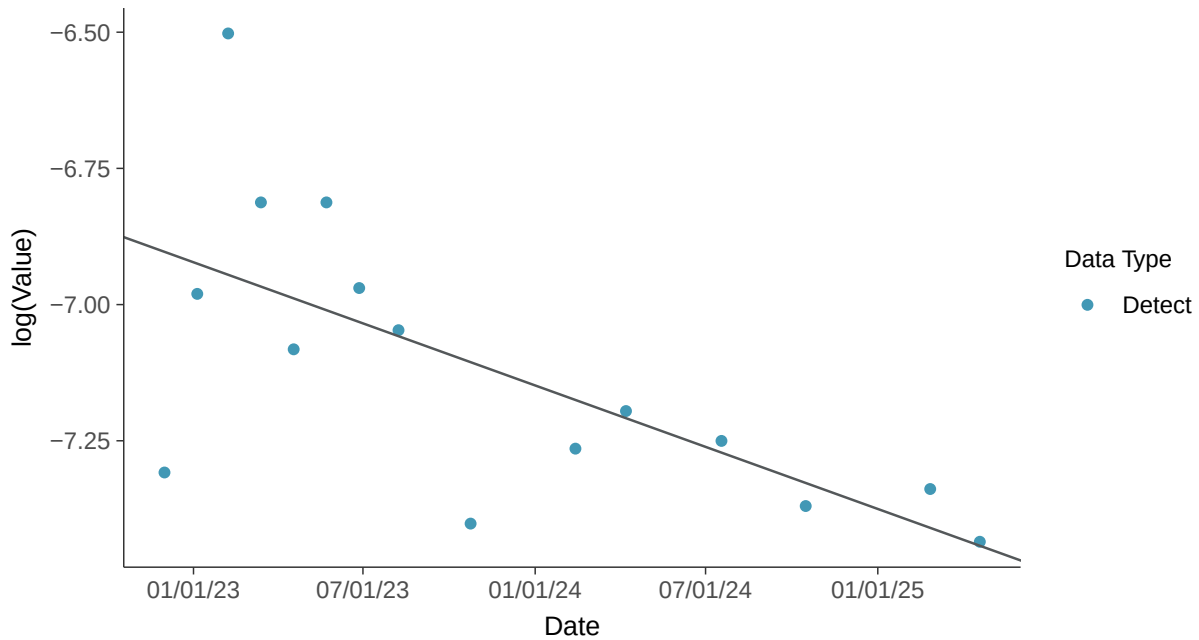
Gamma Q-Q plot

Chromium, Total, MW-08 (mg/L)



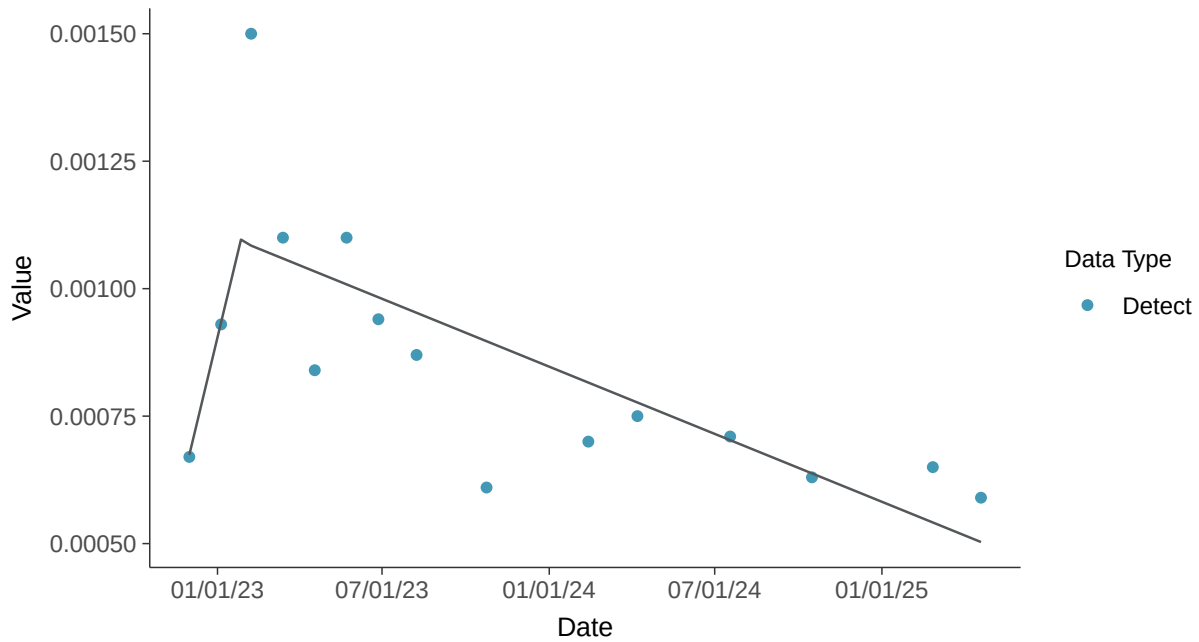
Trend Regression: Lognormal MLE

Chromium, Total, MW-08 (mg/L)



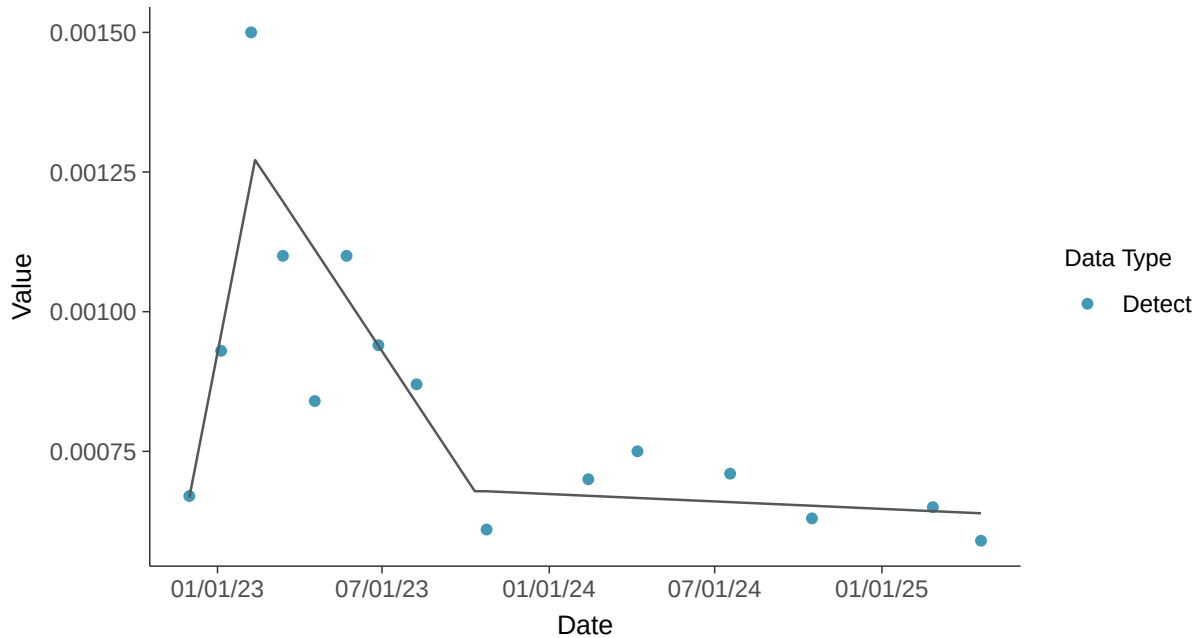
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-08 (mg/L)



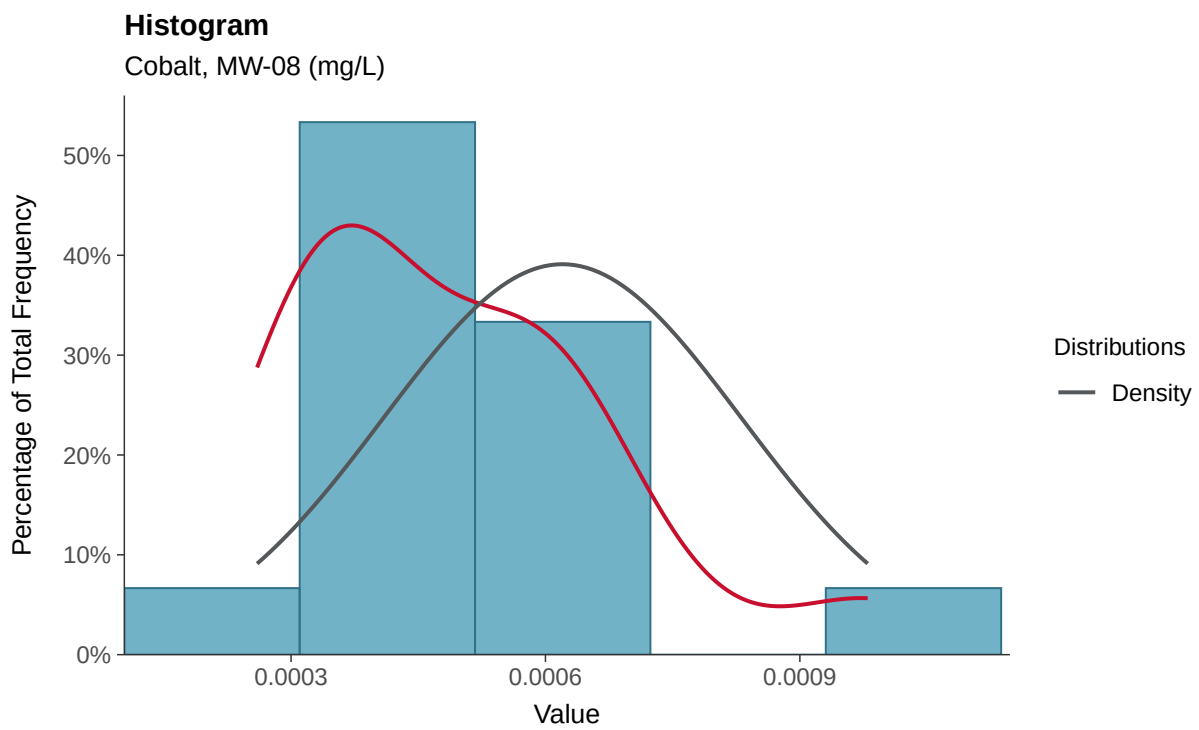
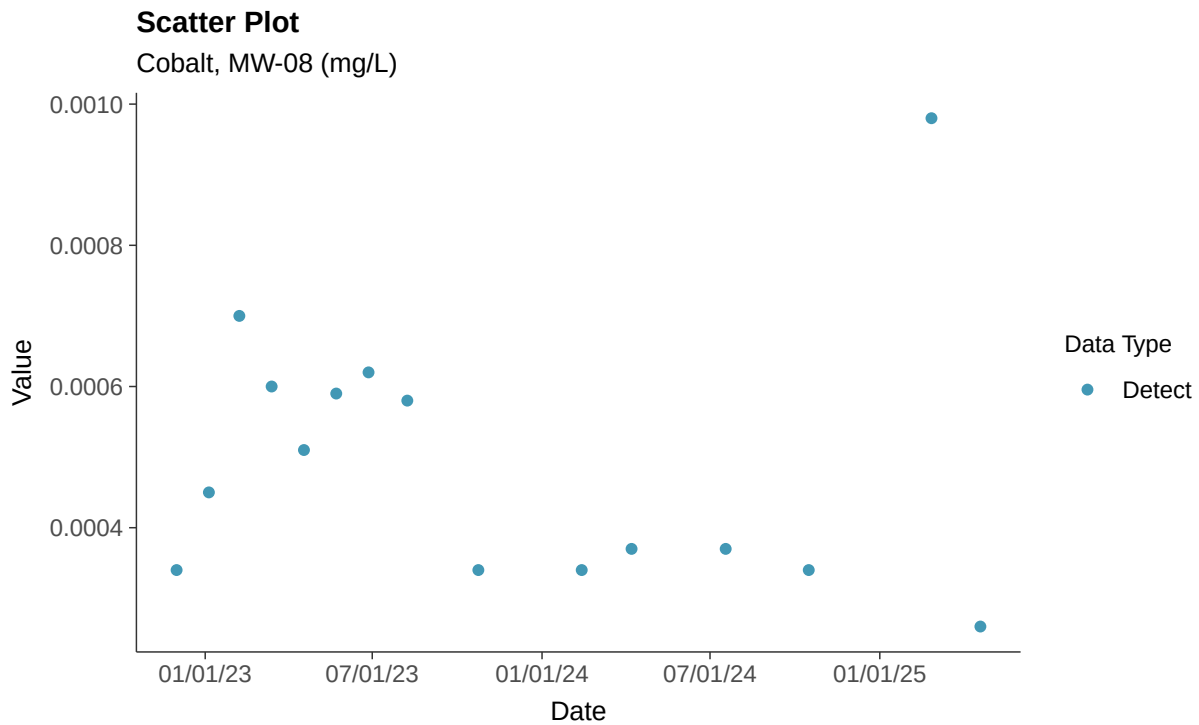
Trend Regression: Piecewise Linear-Linear-Linear

Chromium, Total, MW-08 (mg/L)



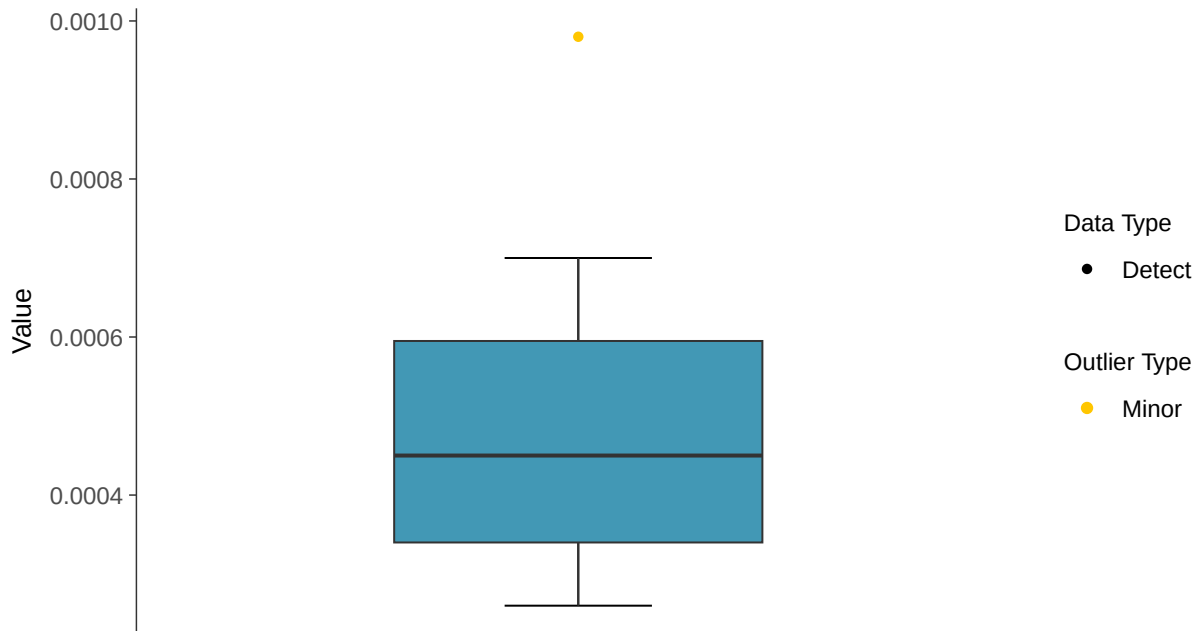
Appendix IV: Cobalt, MW-08

ID: 18_1_4_110



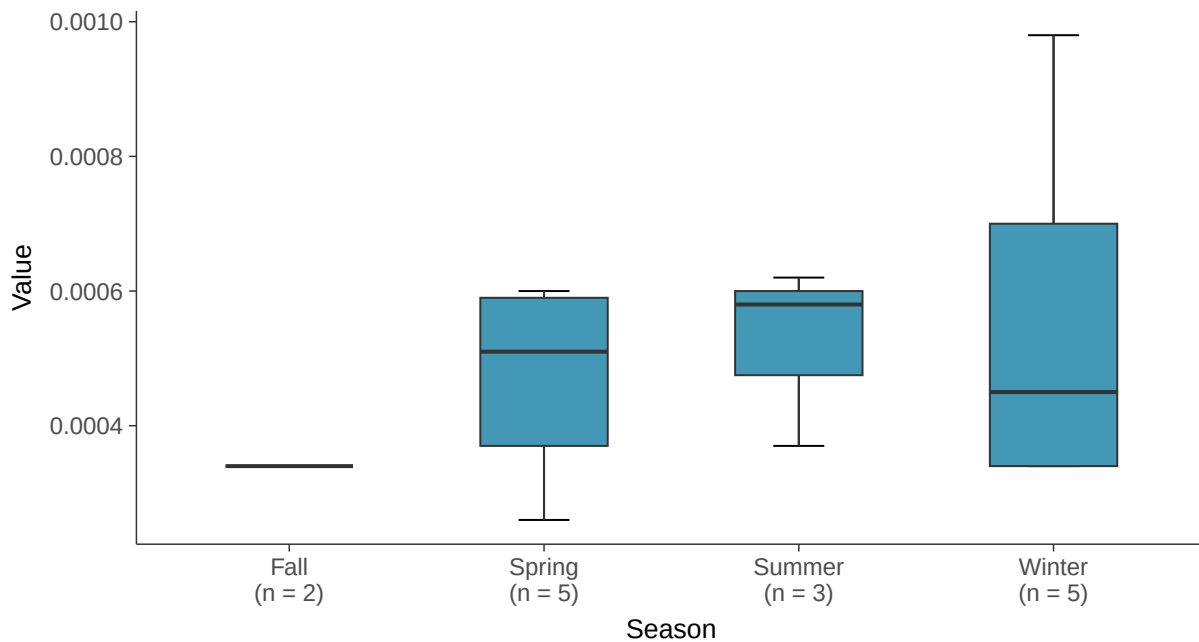
Boxplot

Cobalt, MW-08 (mg/L)

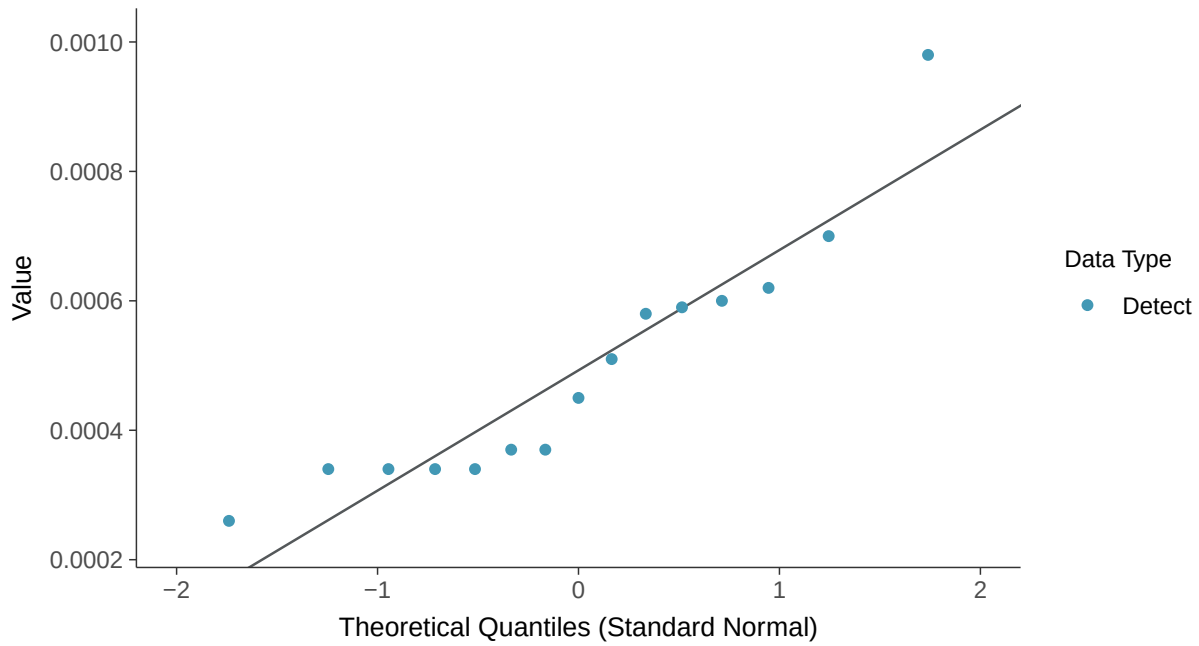


Boxplot by Season

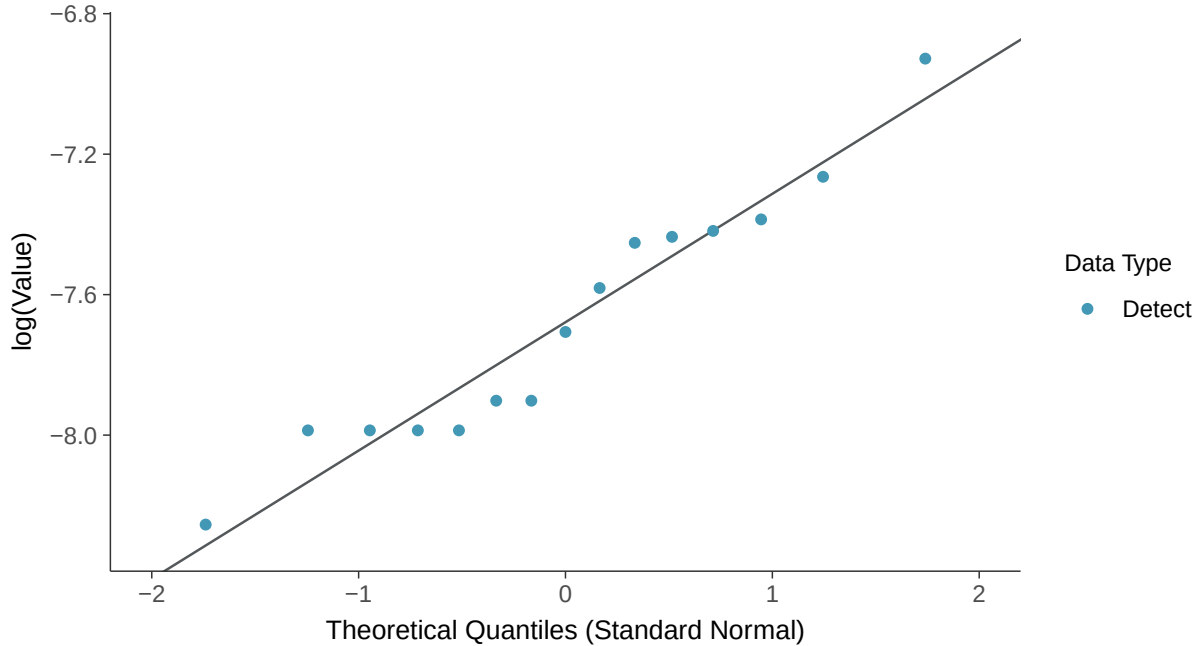
Cobalt, MW-08 (mg/L)

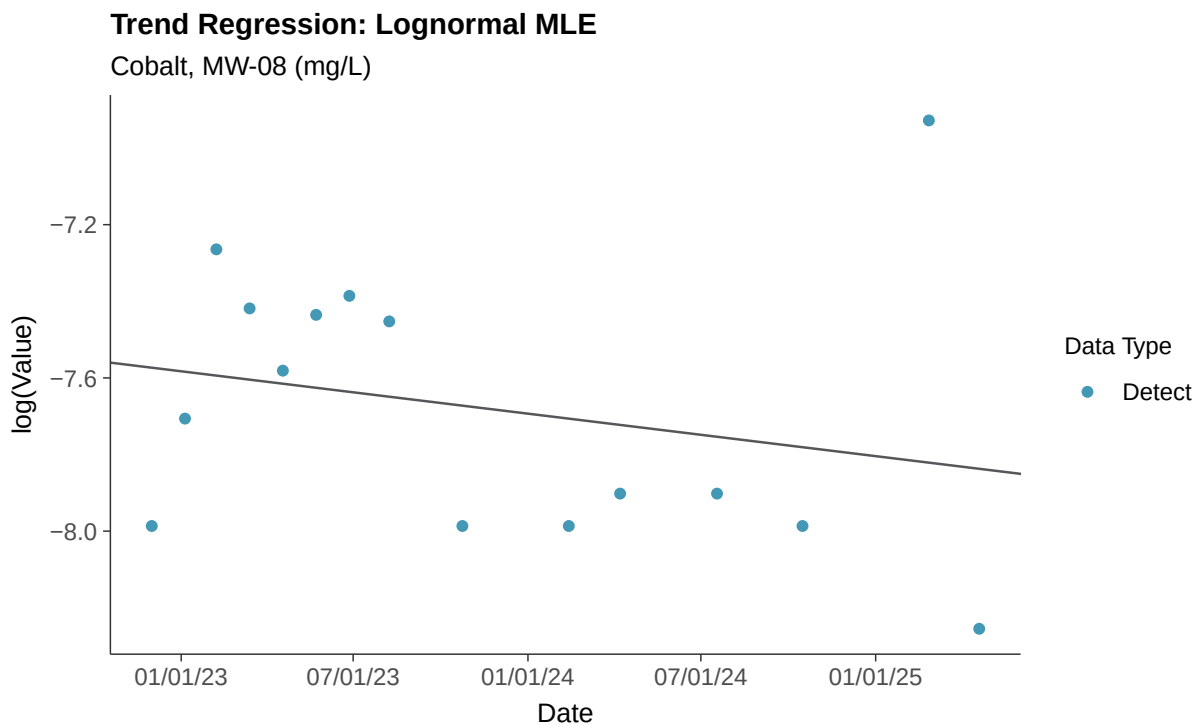
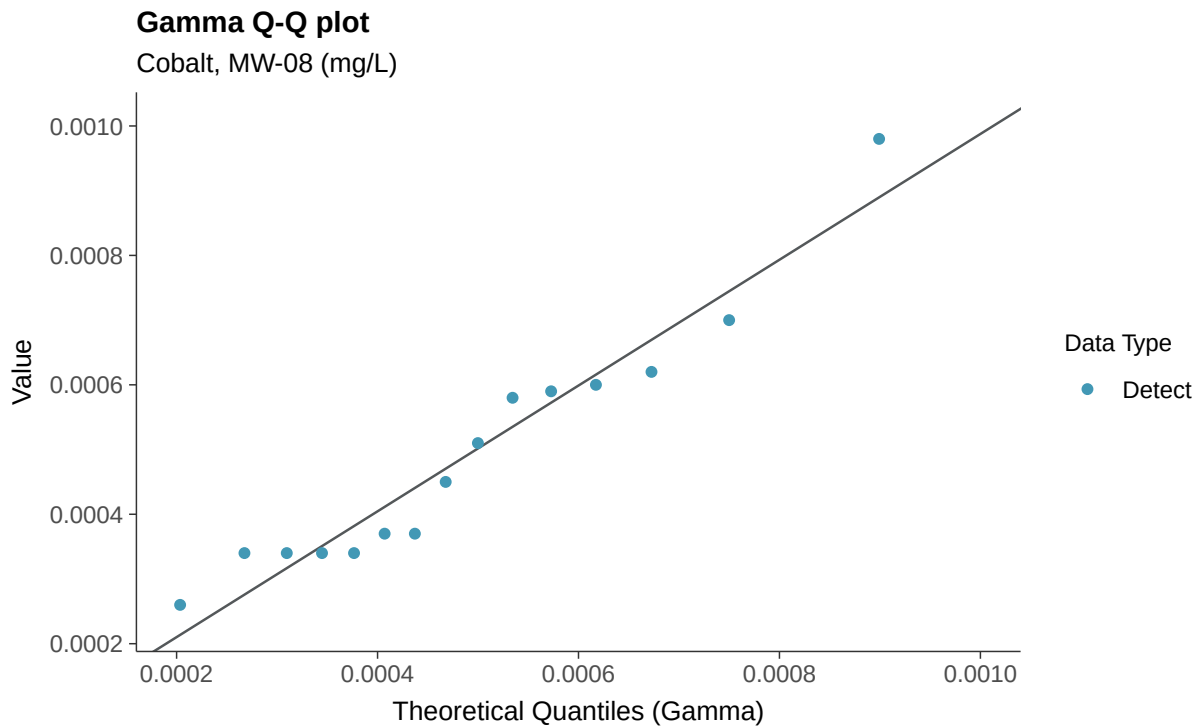


Normal Q-Q plot
Cobalt, MW-08 (mg/L)



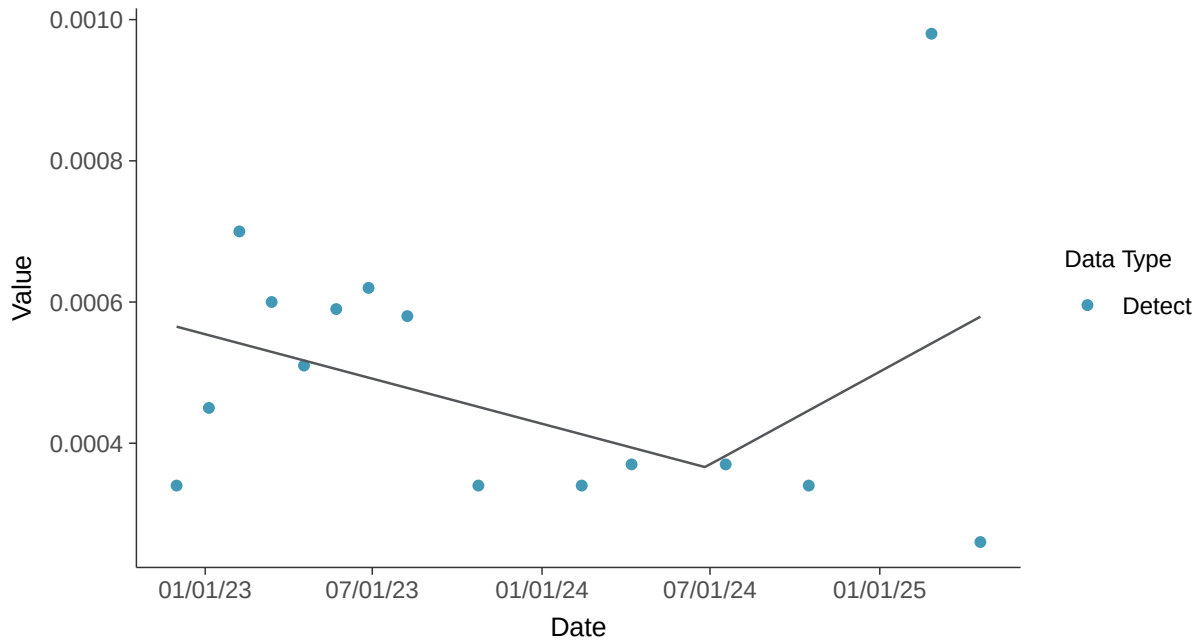
Lognormal Q-Q plot
Cobalt, MW-08 (mg/L)





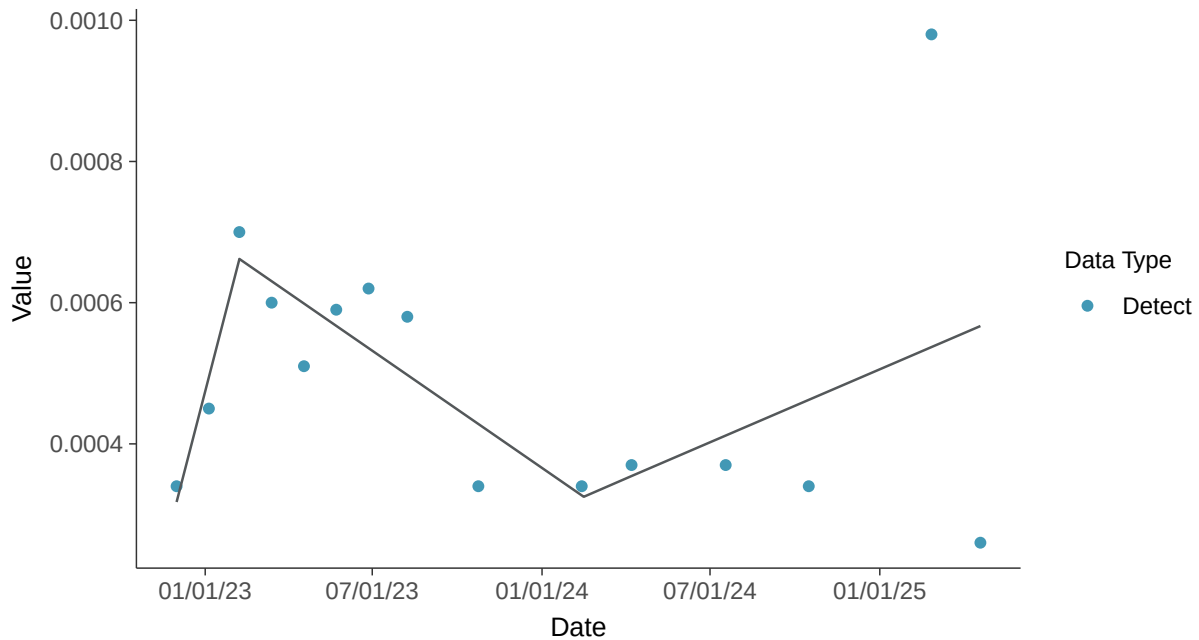
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-08 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cobalt, MW-08 (mg/L)

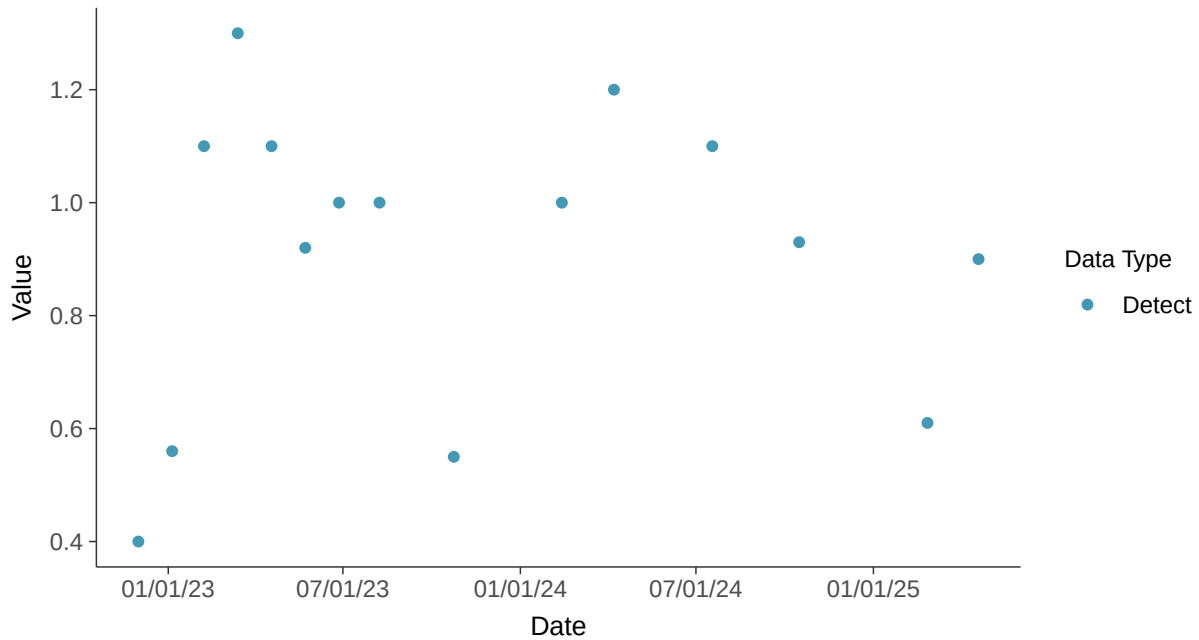


Appendix IV: Fluoride (App IV), MW-08

ID: 18_1_4_113

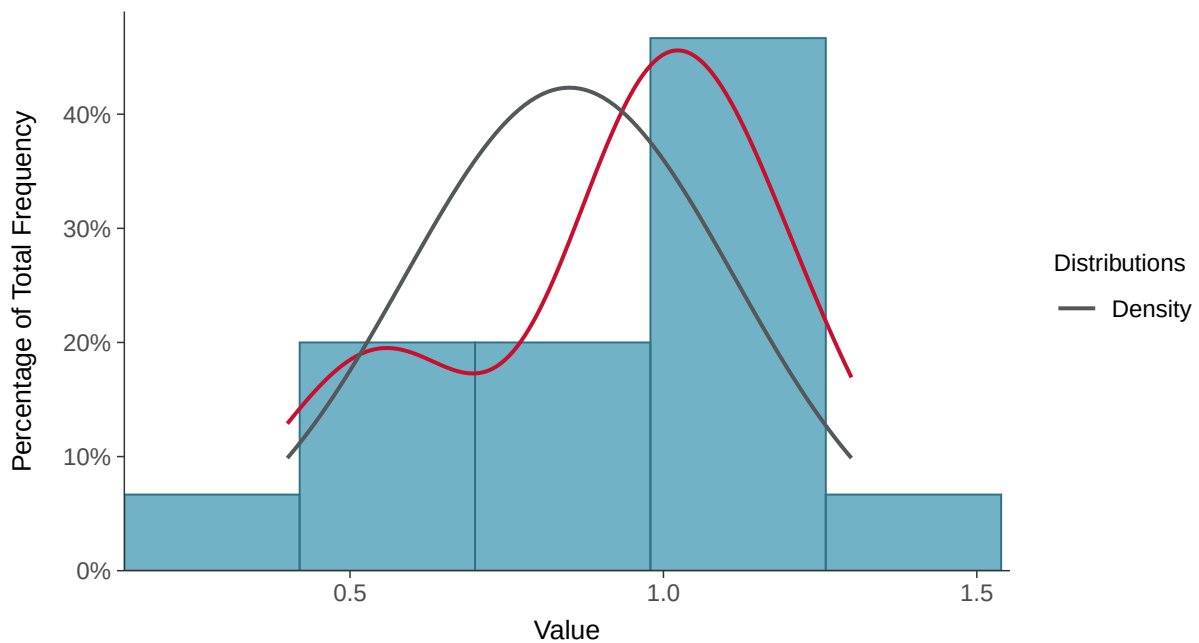
Scatter Plot

Fluoride (App IV), MW-08 (mg/L)



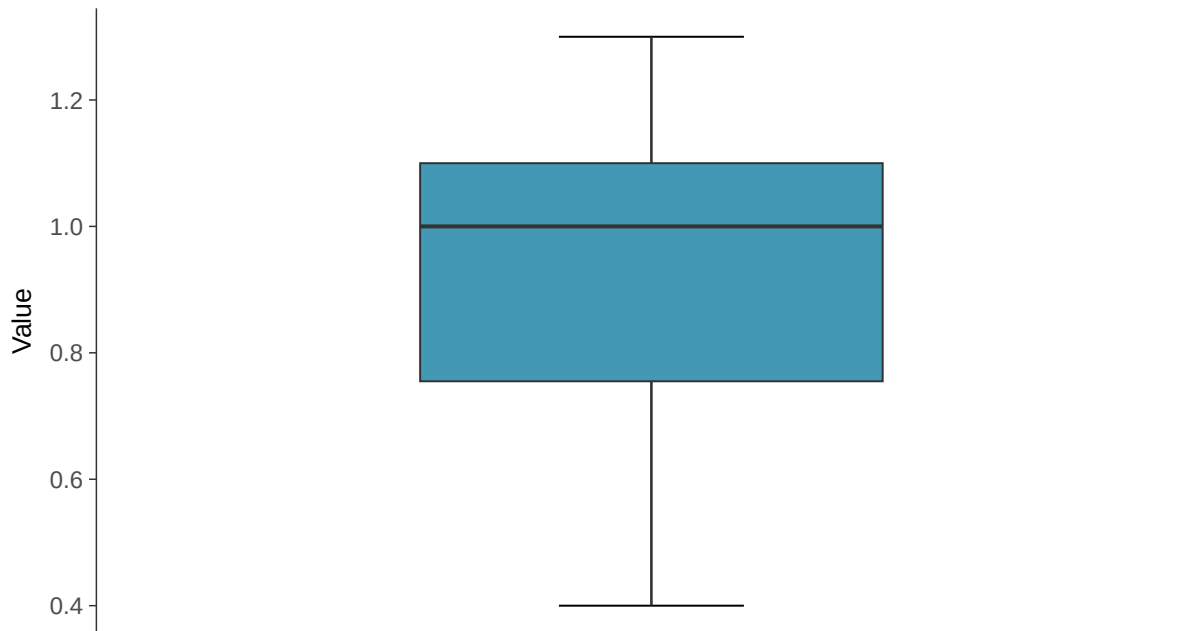
Histogram

Fluoride (App IV), MW-08 (mg/L)



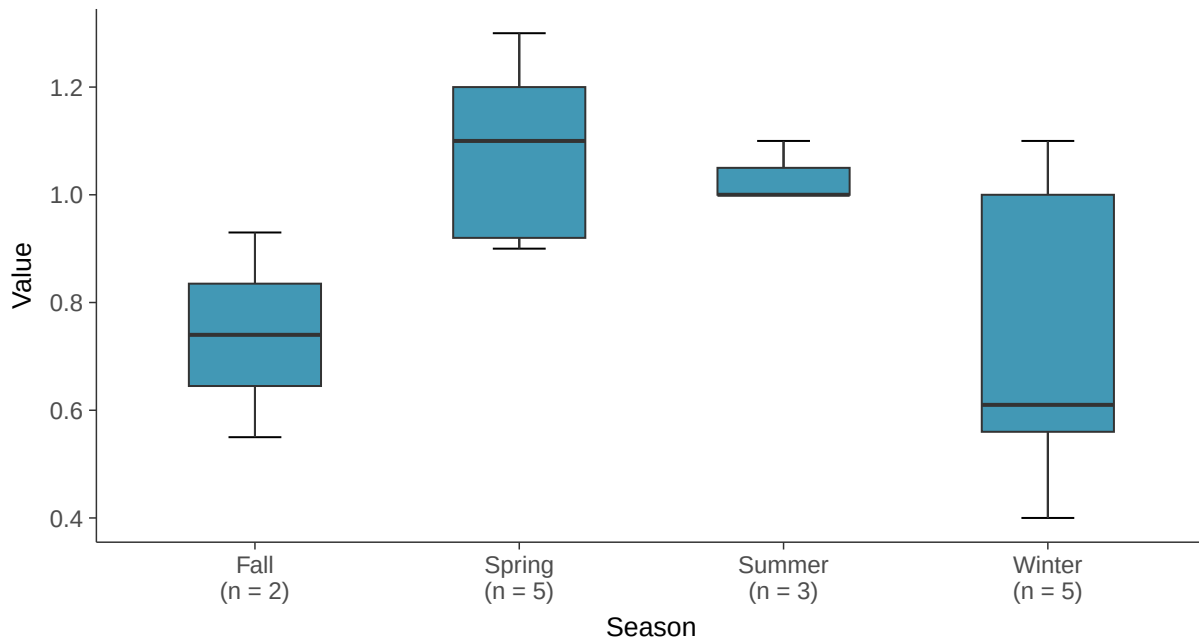
Boxplot

Fluoride (App IV), MW-08 (mg/L)



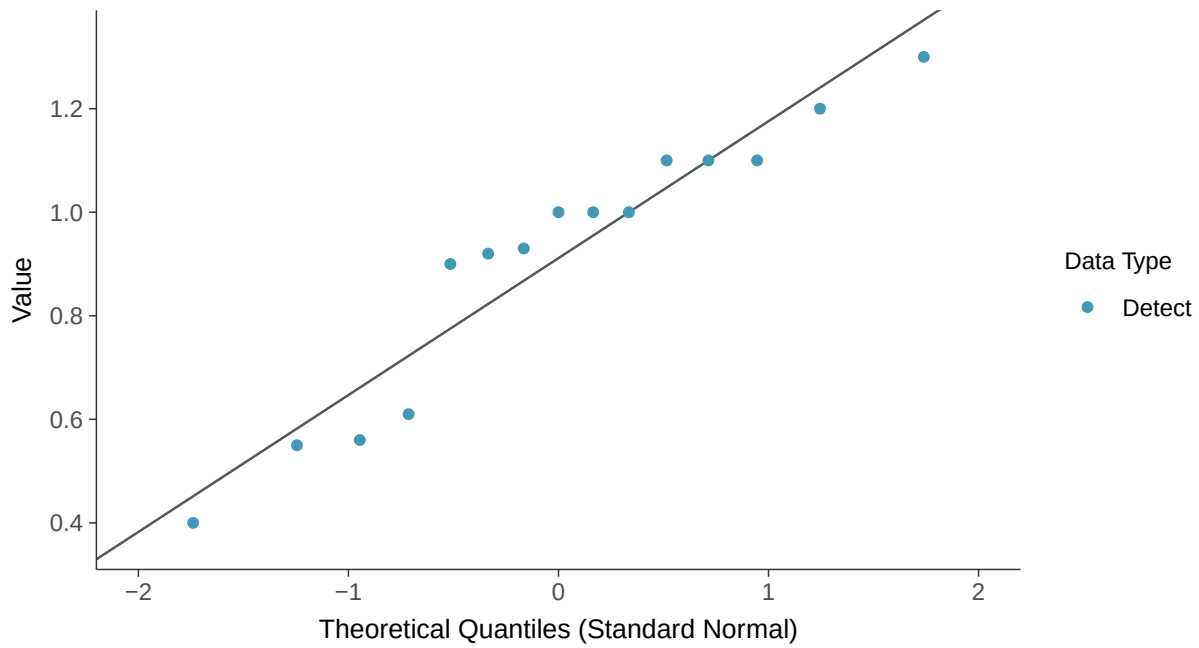
Boxplot by Season

Fluoride (App IV), MW-08 (mg/L)



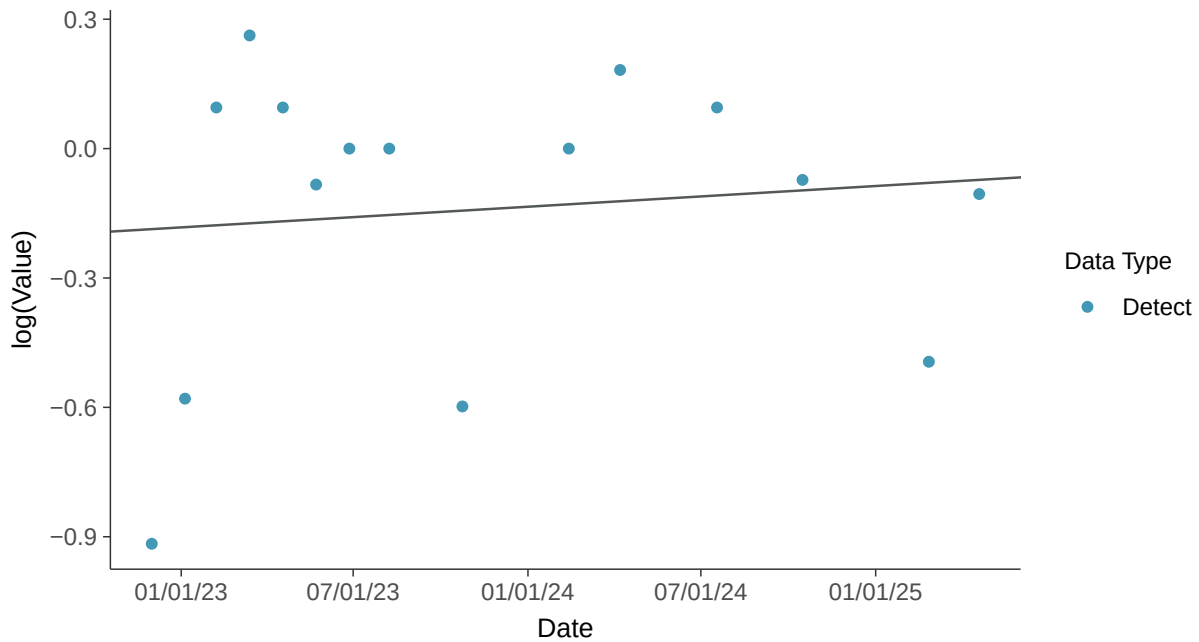
Normal Q-Q plot

Fluoride (App IV), MW-08 (mg/L)



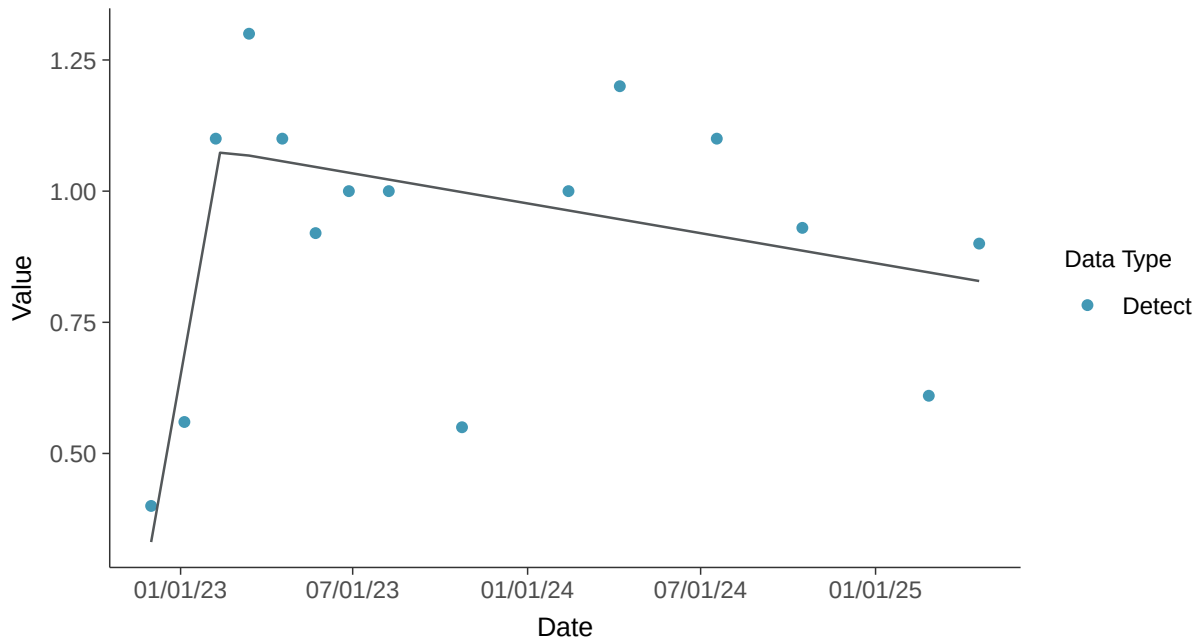
Trend Regression: Lognormal MLE

Fluoride (App IV), MW-08 (mg/L)



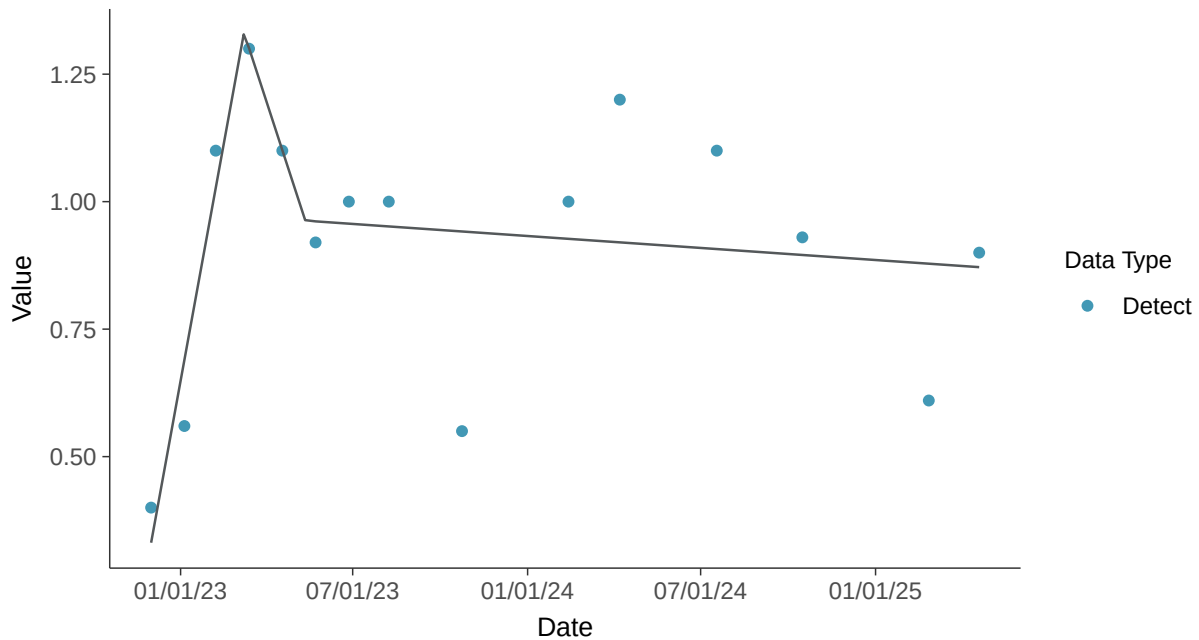
Trend Regression: Piecewise Linear-Linear

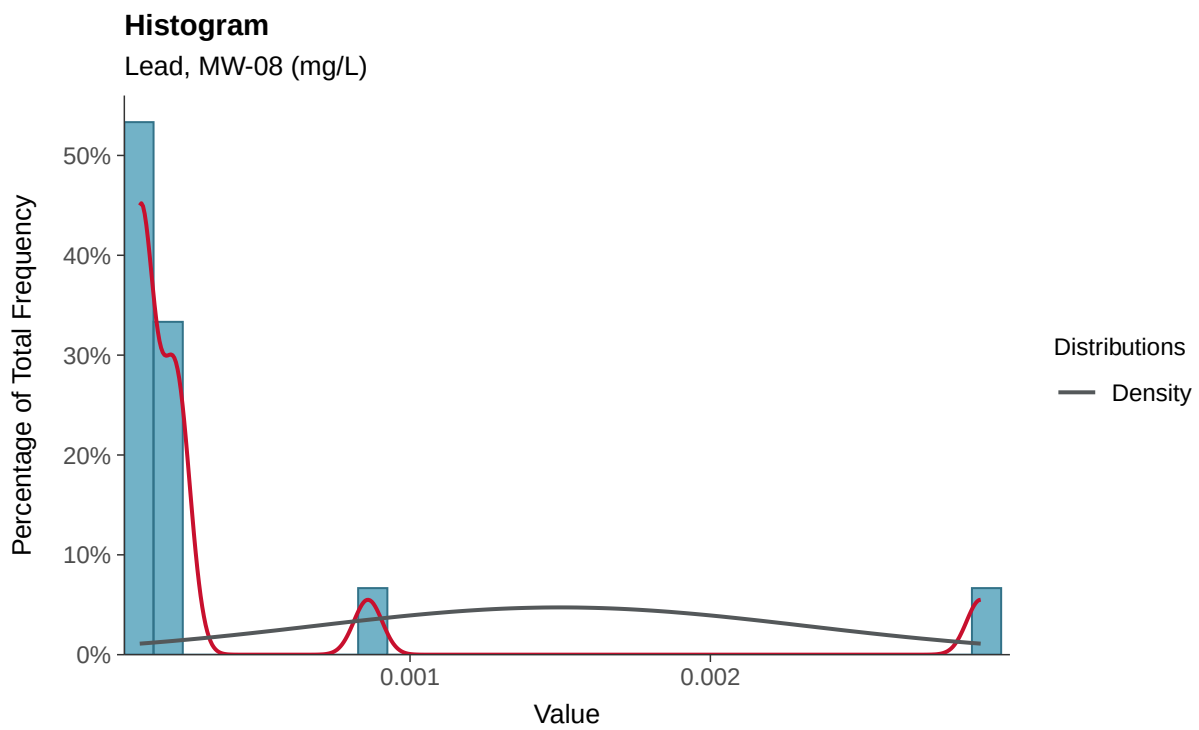
Fluoride (App IV), MW-08 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

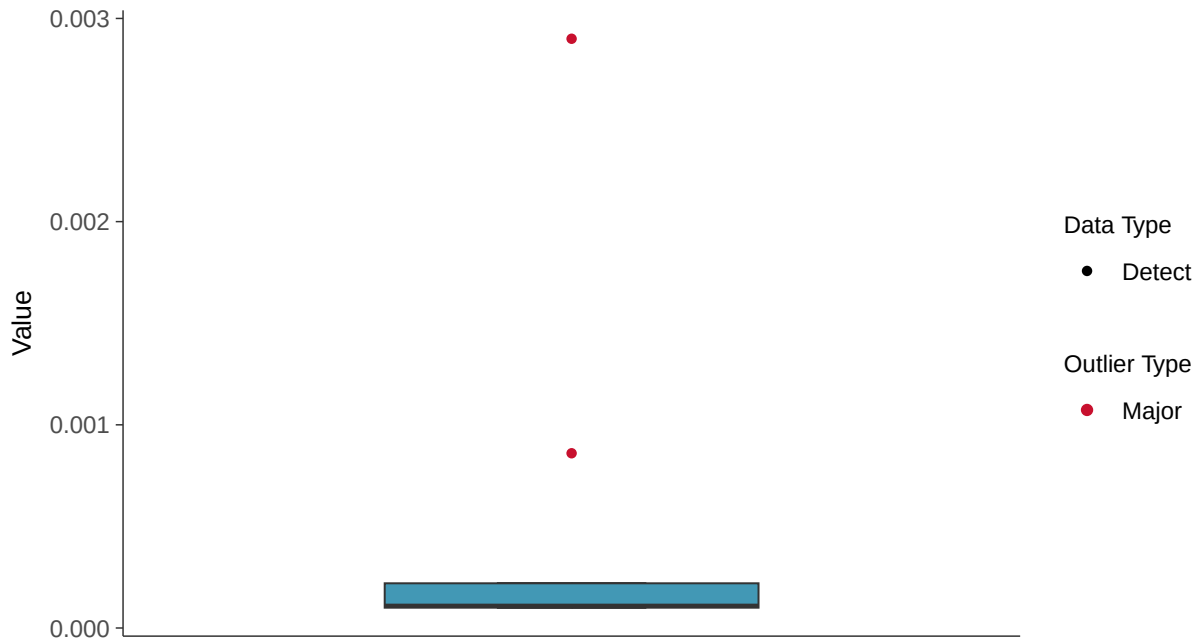
Fluoride (App IV), MW-08 (mg/L)





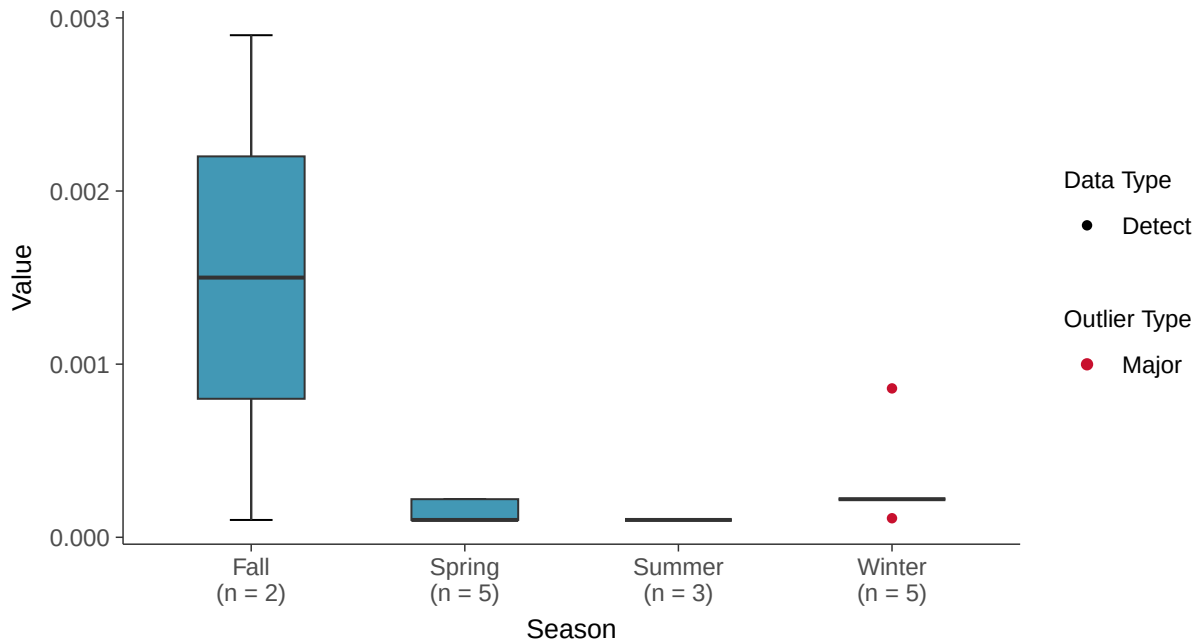
Boxplot

Lead, MW-08 (mg/L)



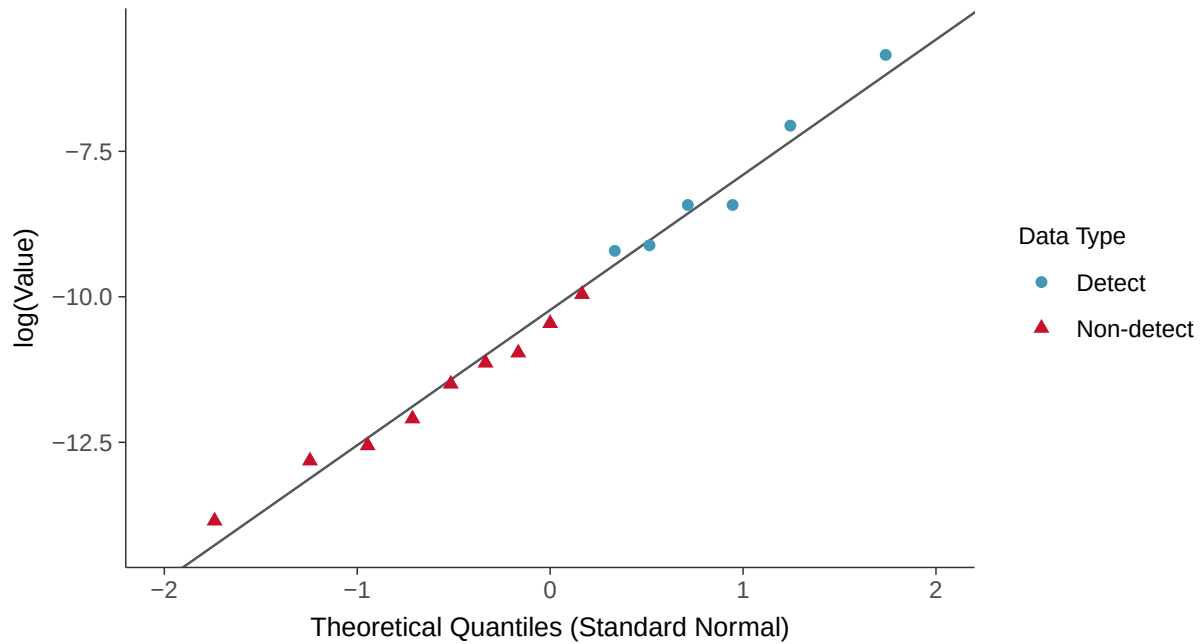
Boxplot by Season

Lead, MW-08 (mg/L)



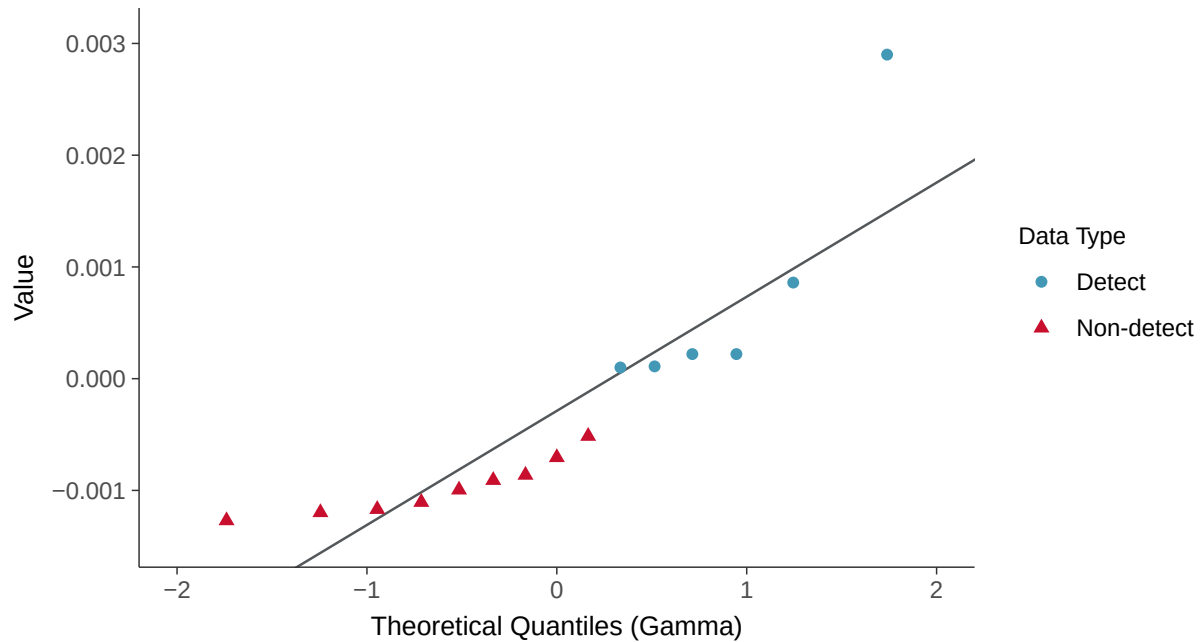
Lognormal Q-Q plot using ROS Imputed Estimates

Lead, MW-08 (mg/L)

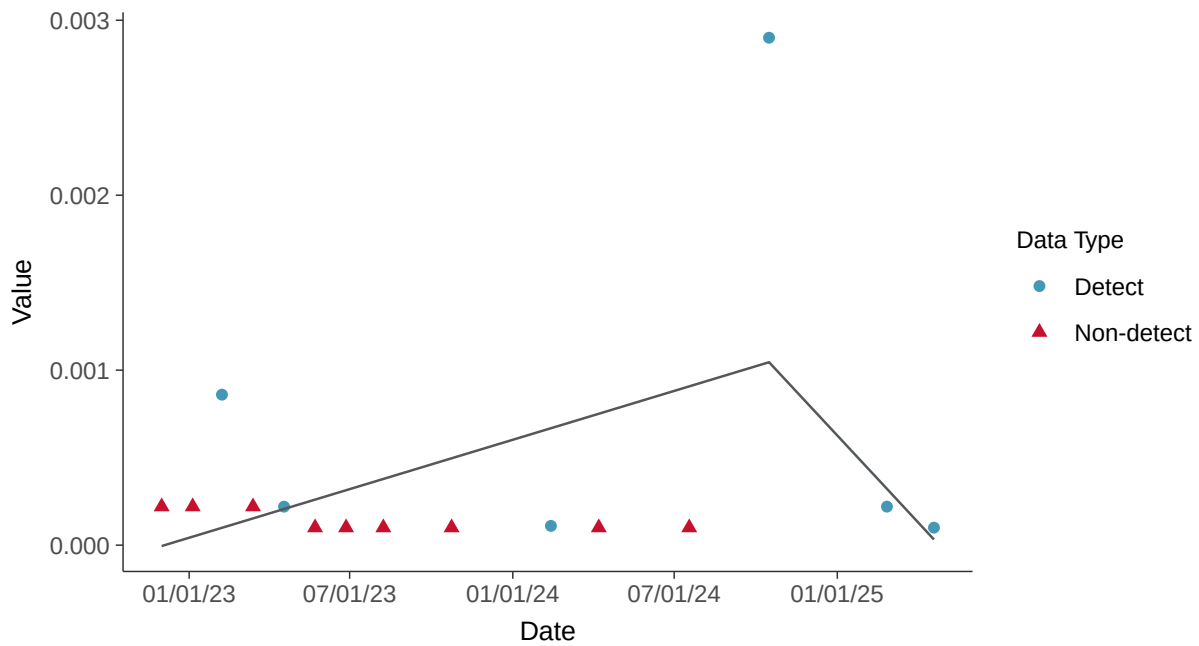


Gamma Q-Q plot using ROS Imputed Estimates

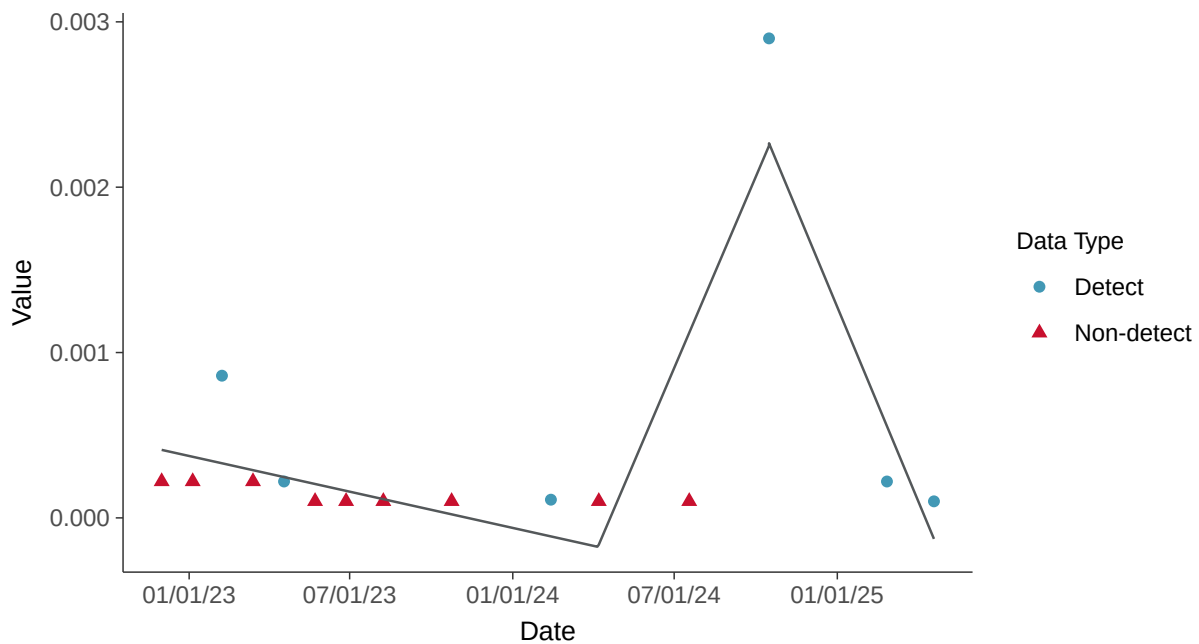
Lead, MW-08 (mg/L)



Lead, MW-08 (mg/L)

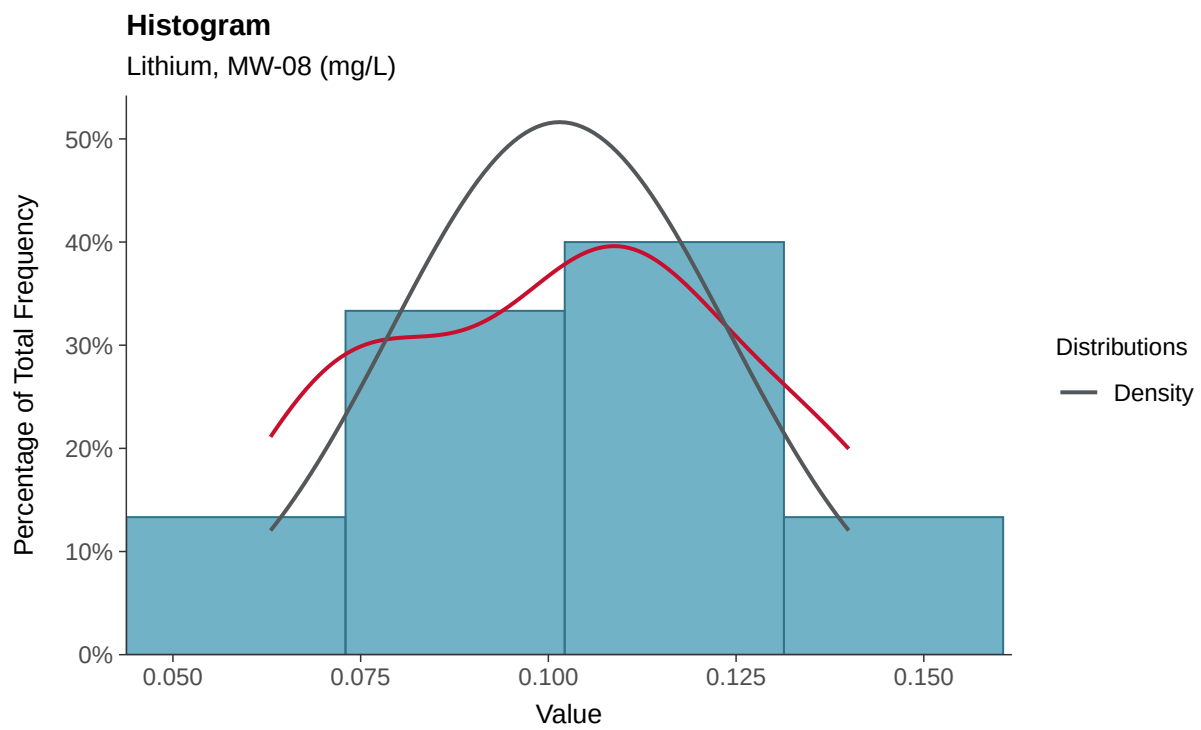
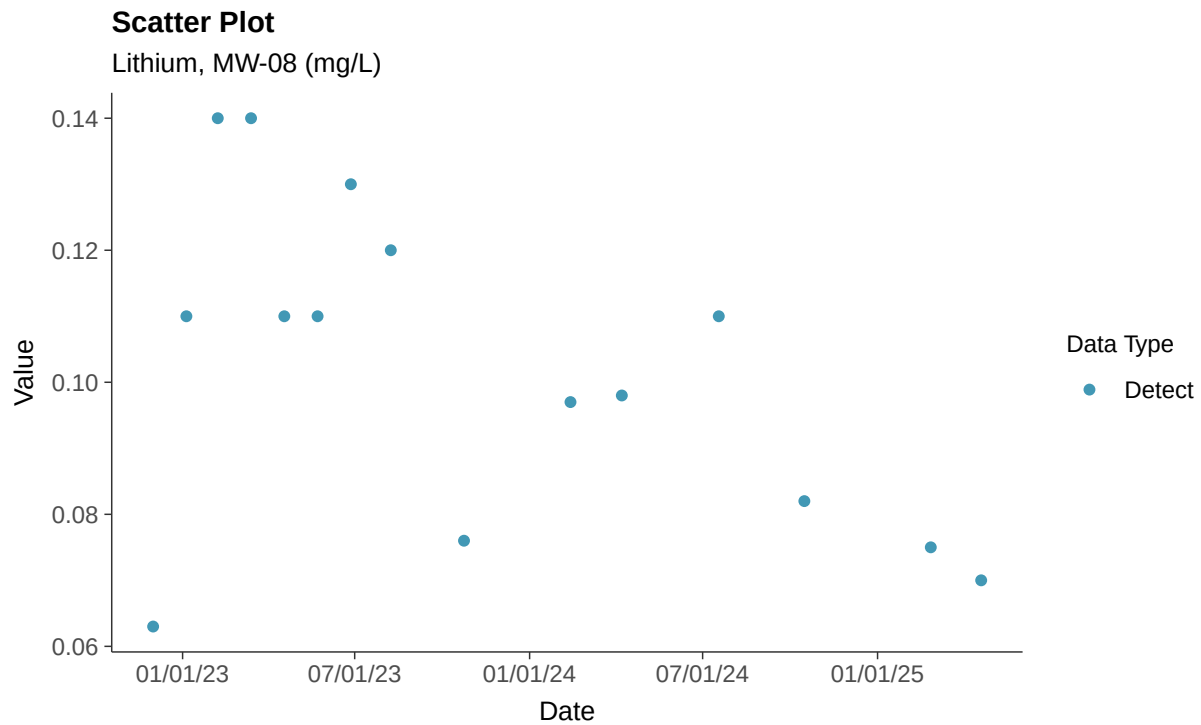


Lead, MW-08 (mg/L)



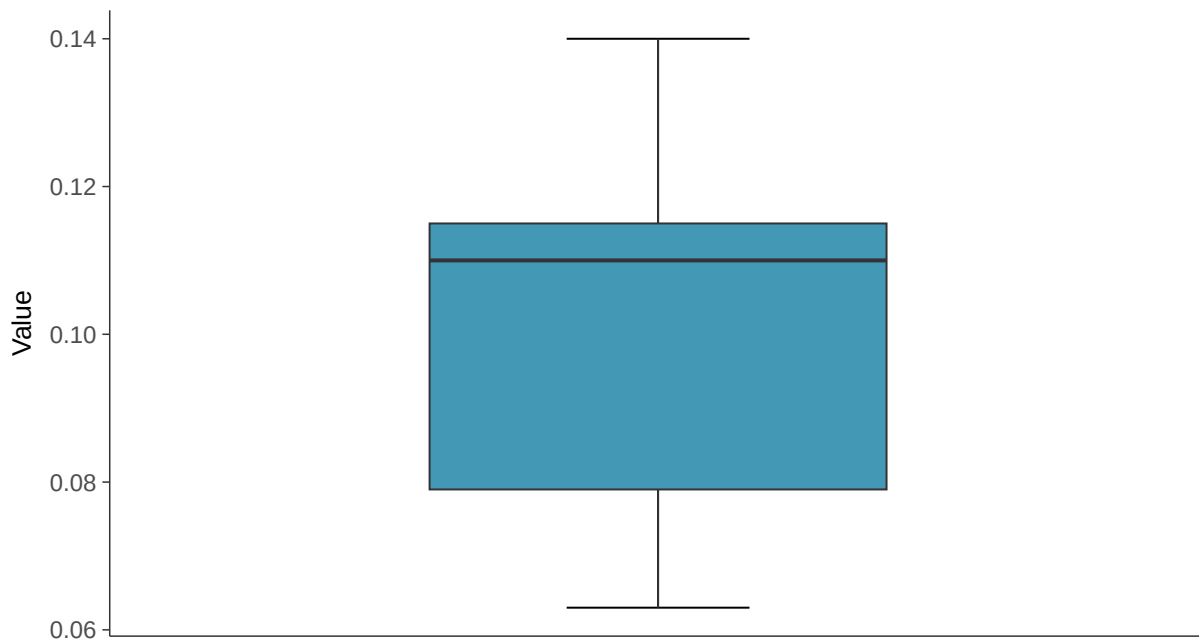
Appendix IV: Lithium, MW-08

ID: 18_1_4_116



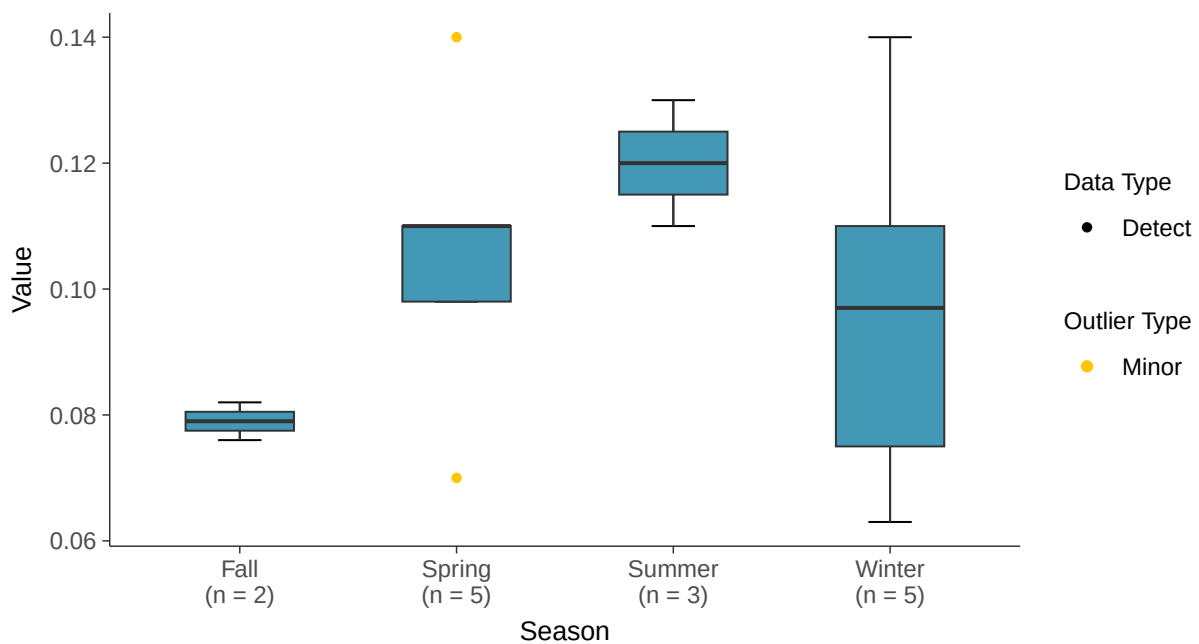
Boxplot

Lithium, MW-08 (mg/L)



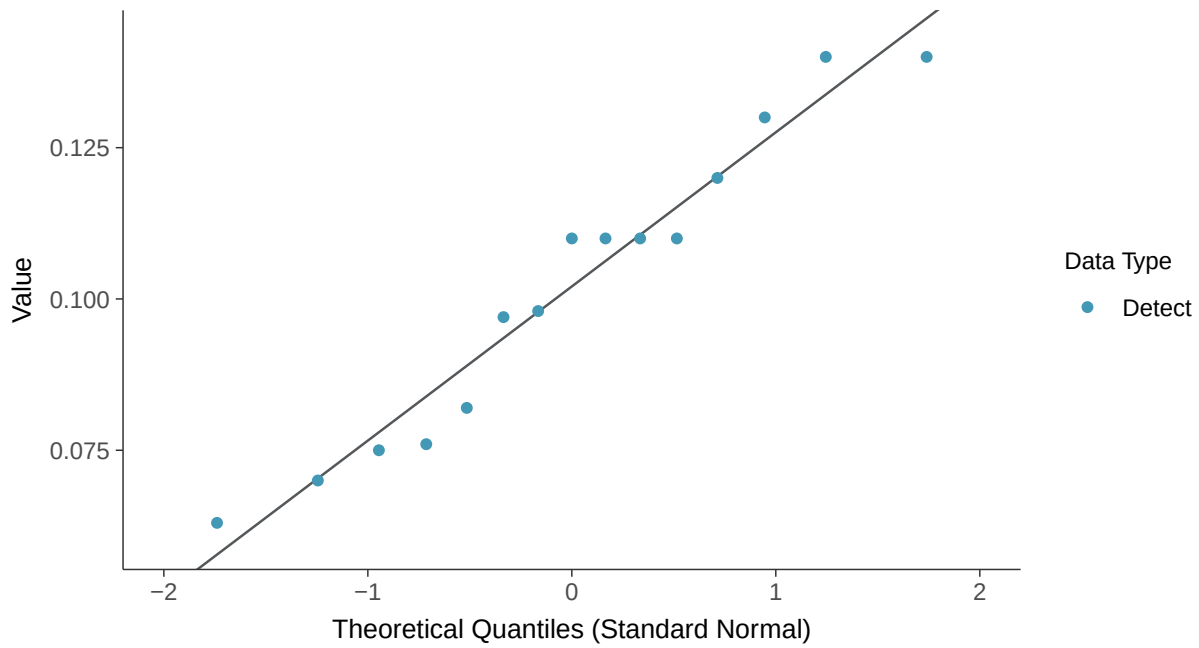
Boxplot by Season

Lithium, MW-08 (mg/L)



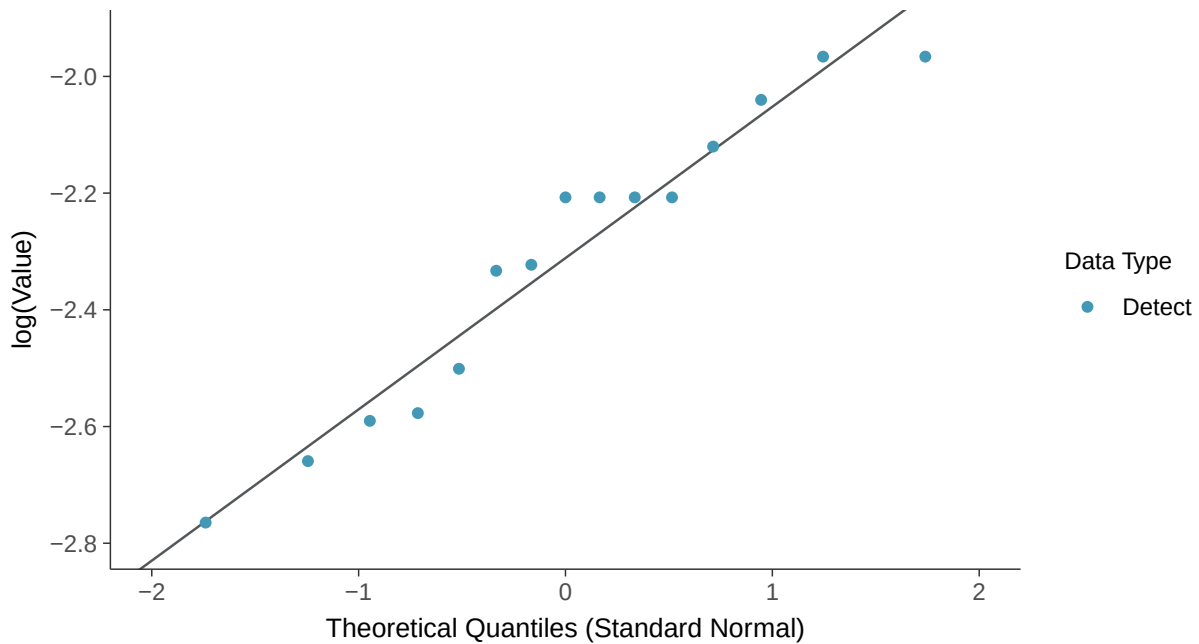
Normal Q-Q plot

Lithium, MW-08 (mg/L)



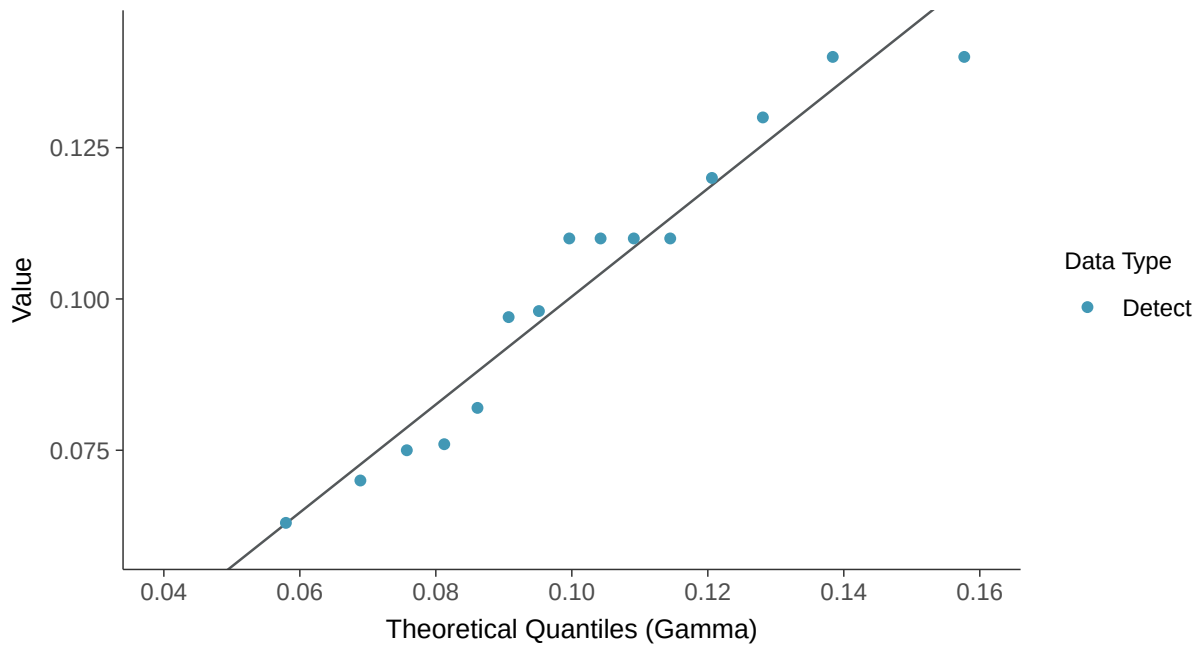
Lognormal Q-Q plot

Lithium, MW-08 (mg/L)



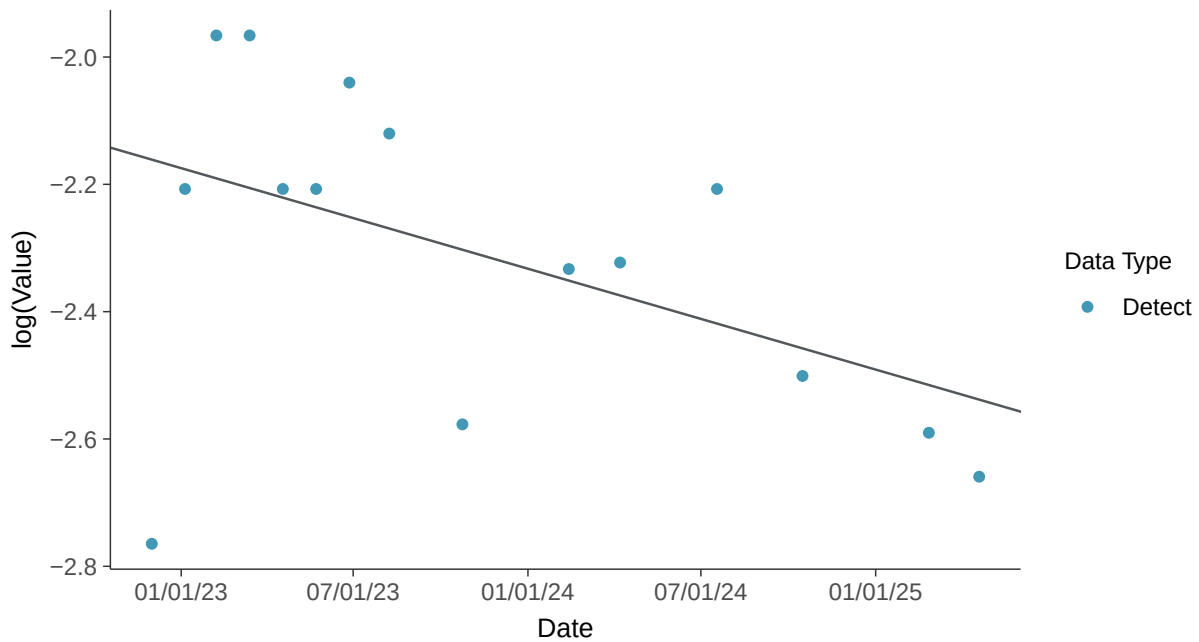
Gamma Q-Q plot

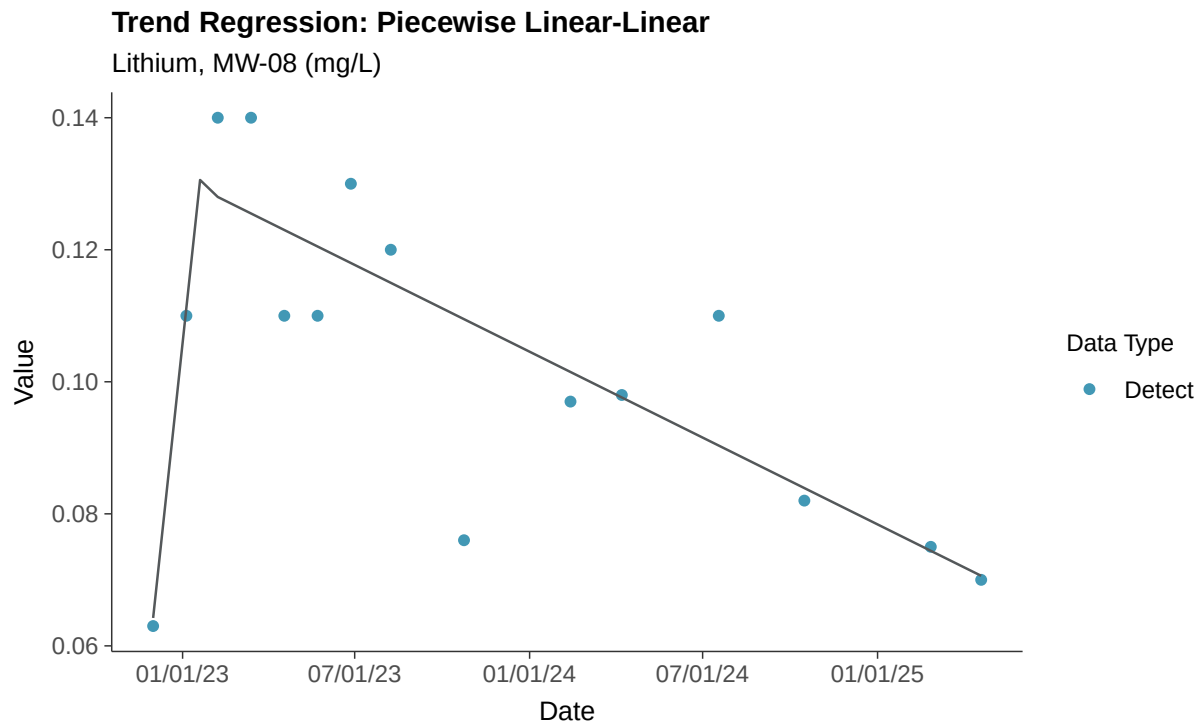
Lithium, MW-08 (mg/L)



Trend Regression: Lognormal MLE

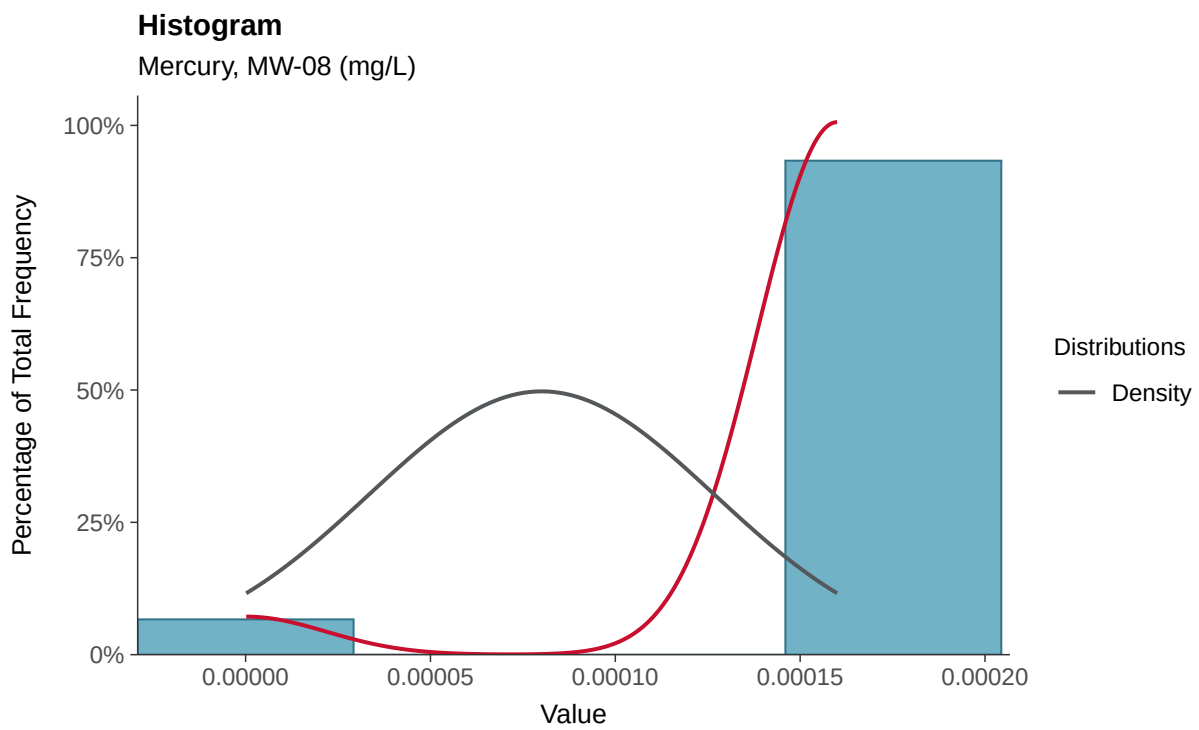
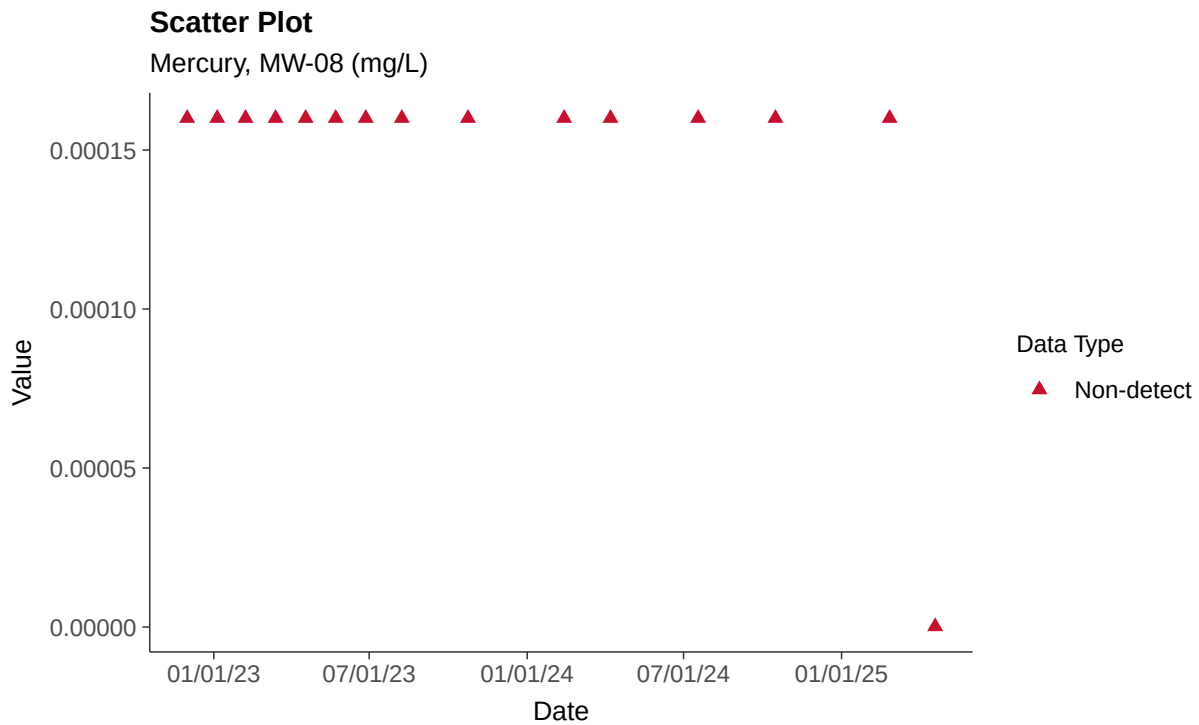
Lithium, MW-08 (mg/L)

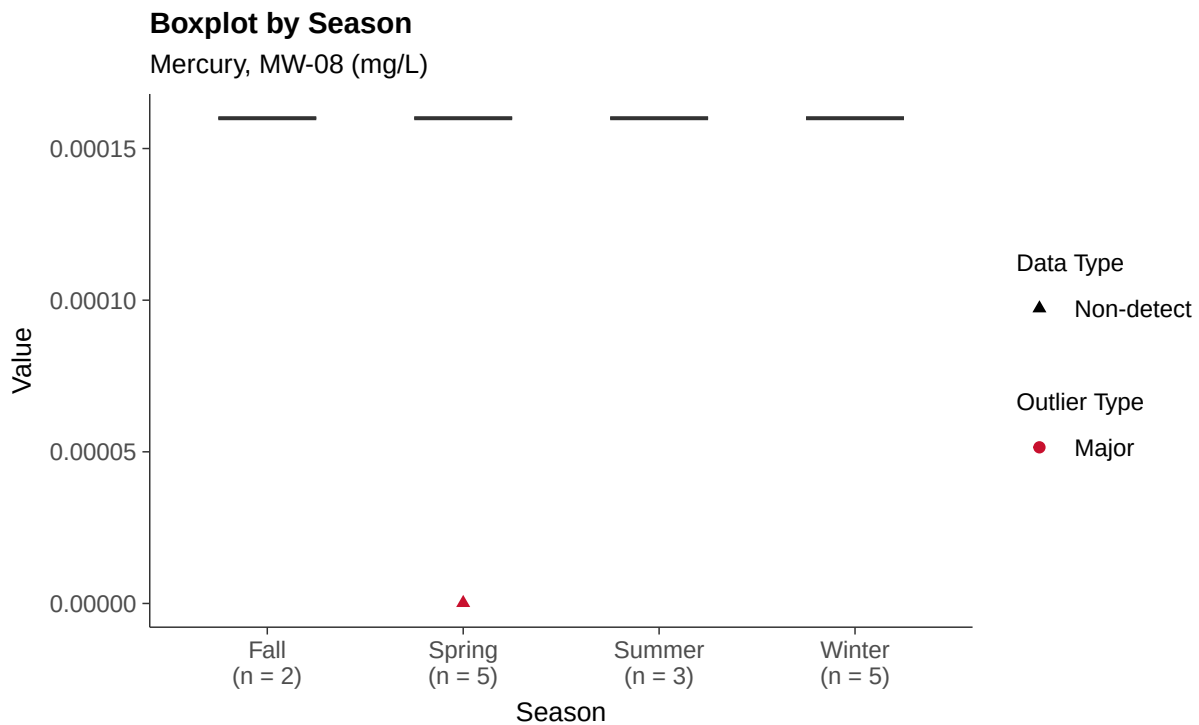
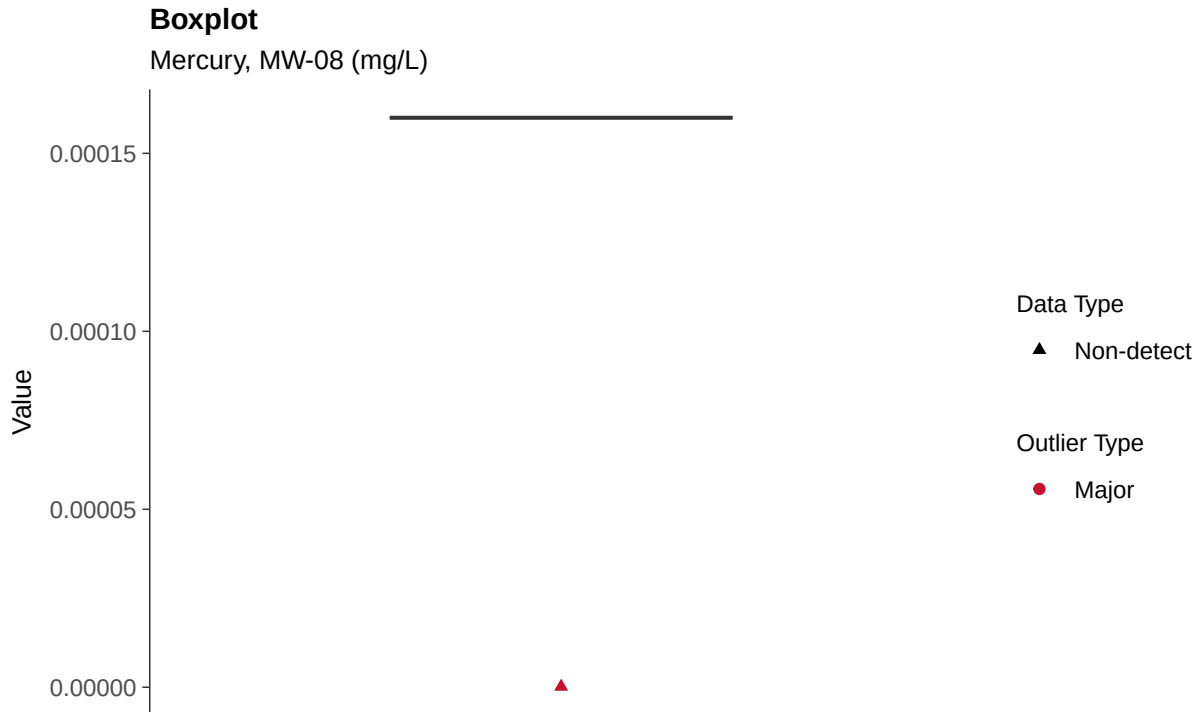


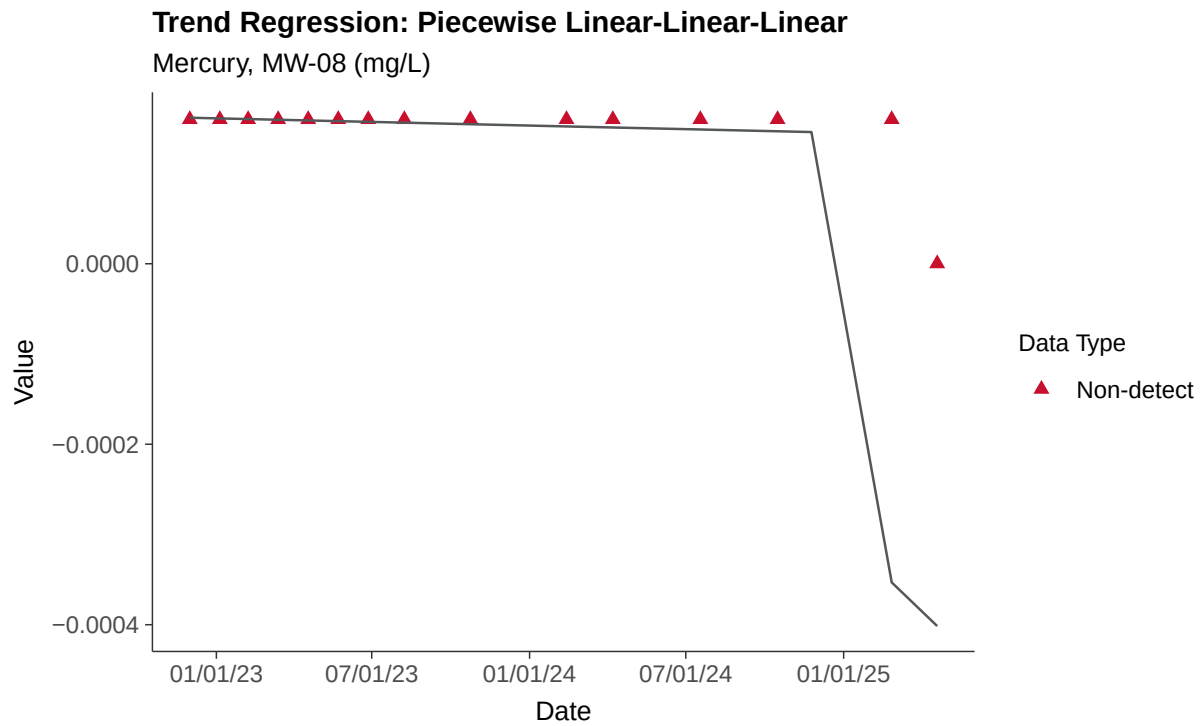


Appendix IV: Mercury, MW-08

ID: 18_1_4_117

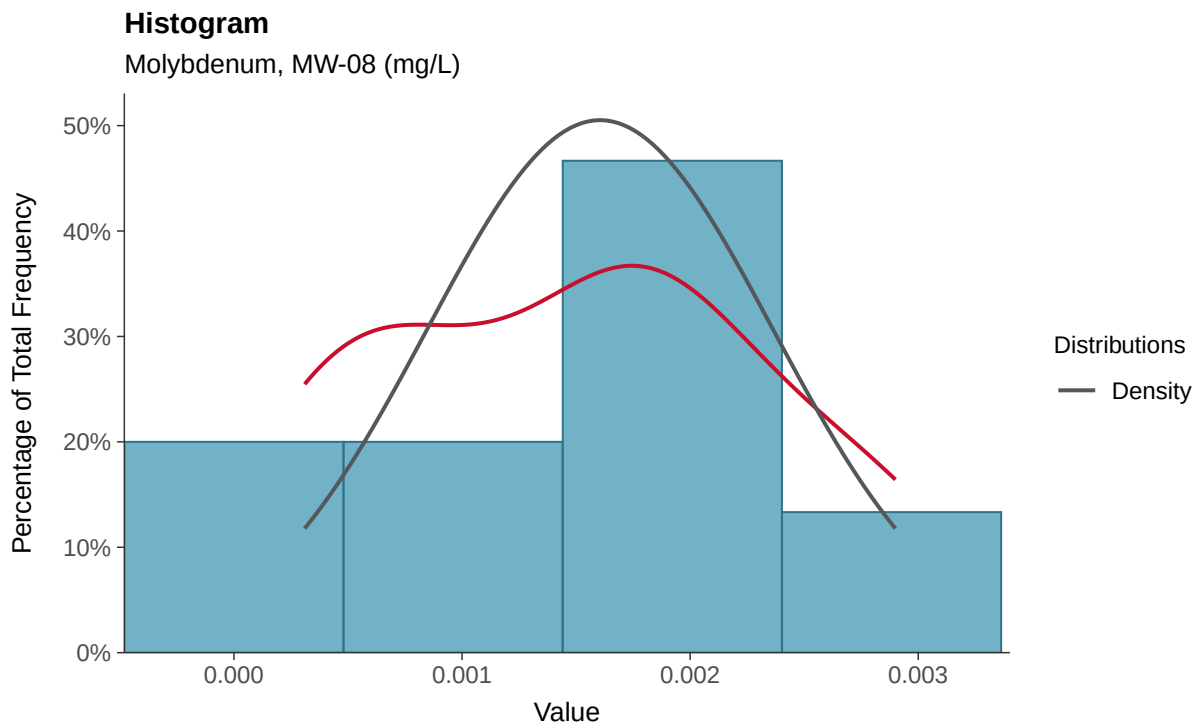
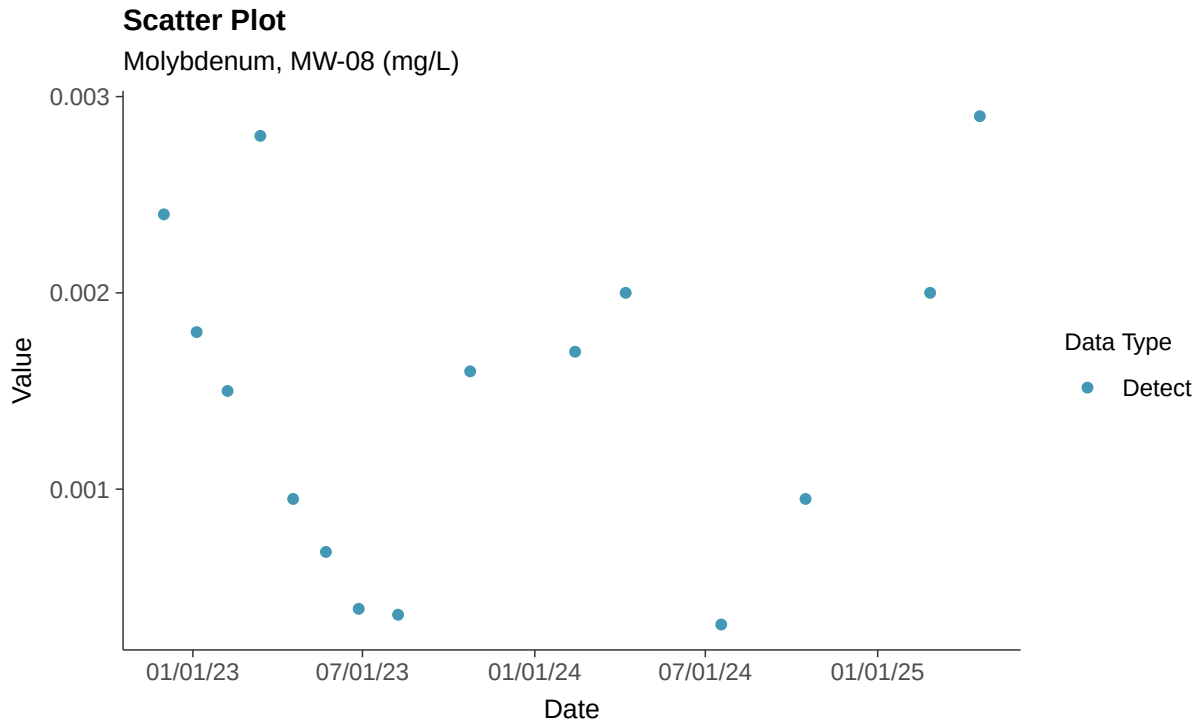






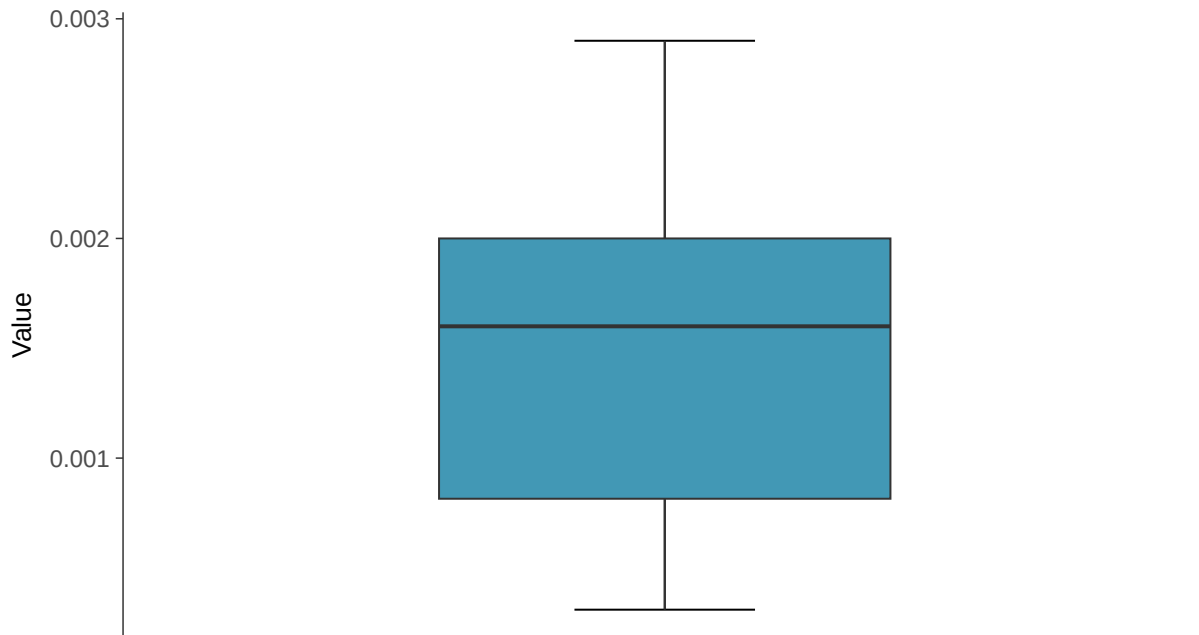
Appendix IV: Molybdenum, MW-08

ID: 18_1_4_118



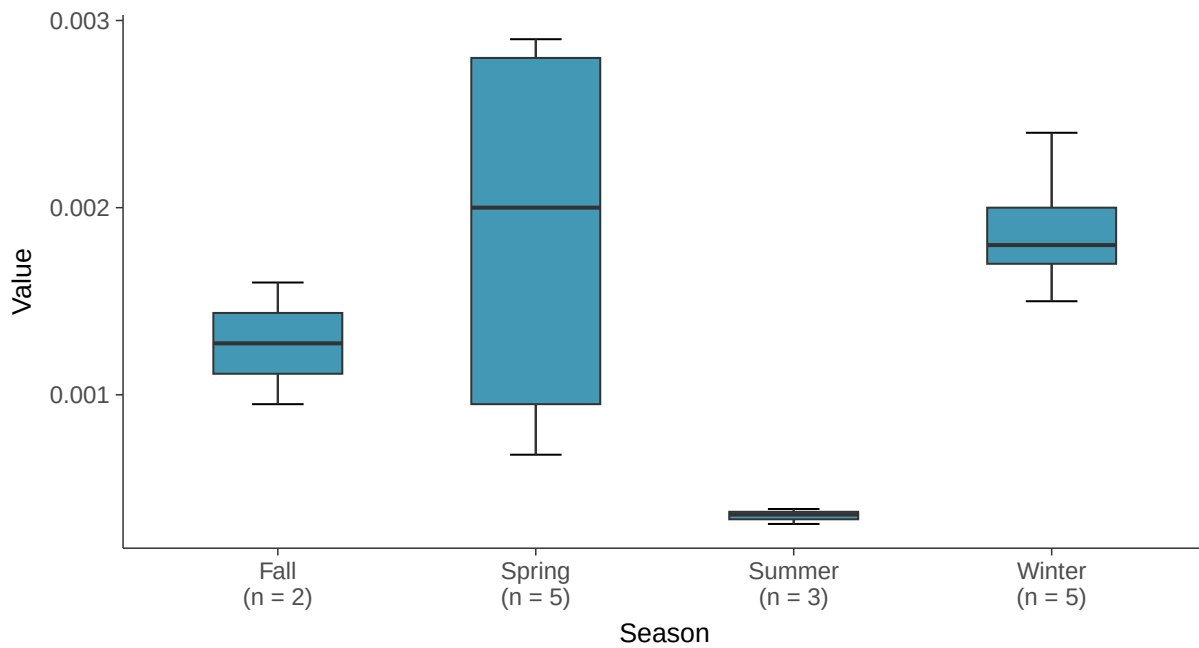
Boxplot

Molybdenum, MW-08 (mg/L)



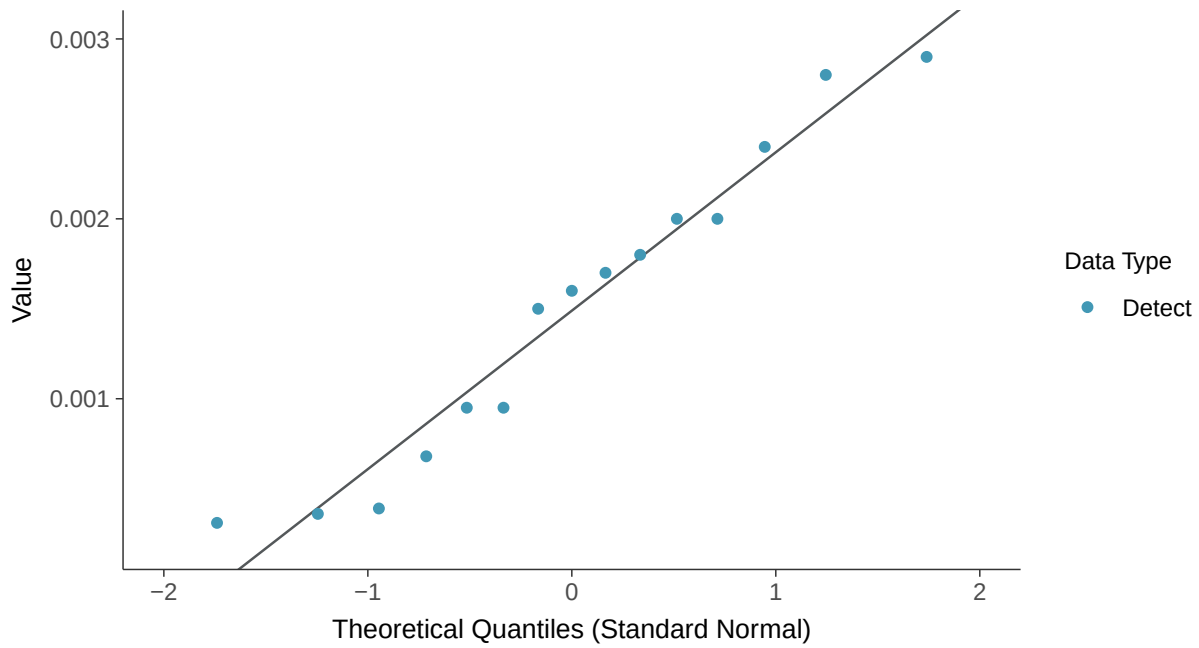
Boxplot by Season

Molybdenum, MW-08 (mg/L)



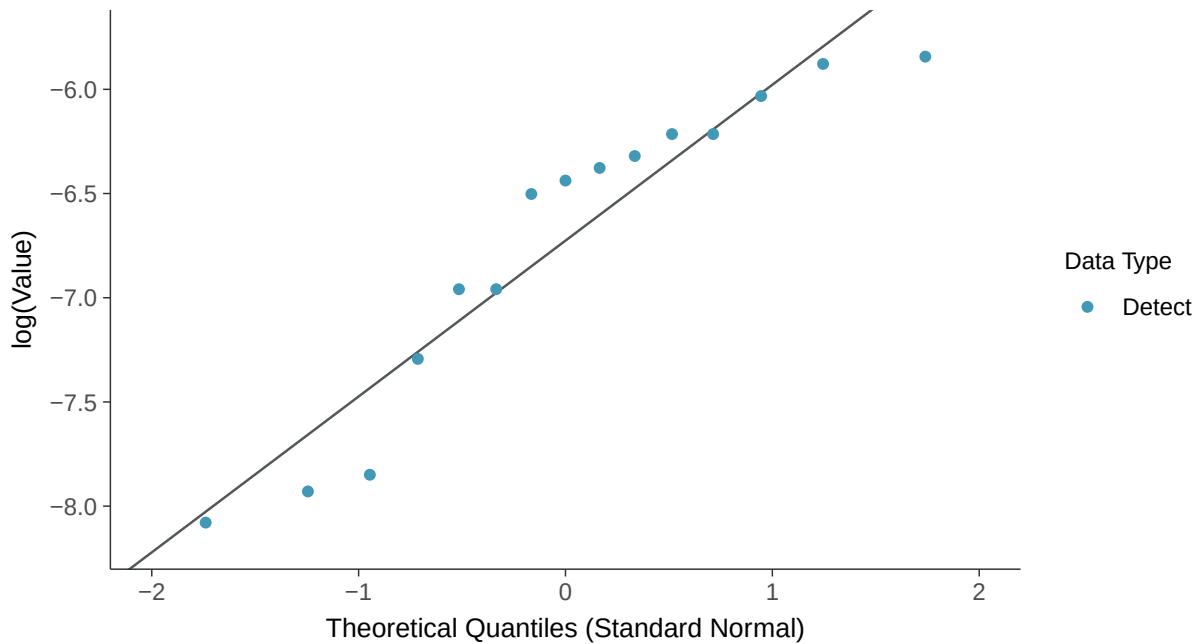
Normal Q-Q plot

Molybdenum, MW-08 (mg/L)



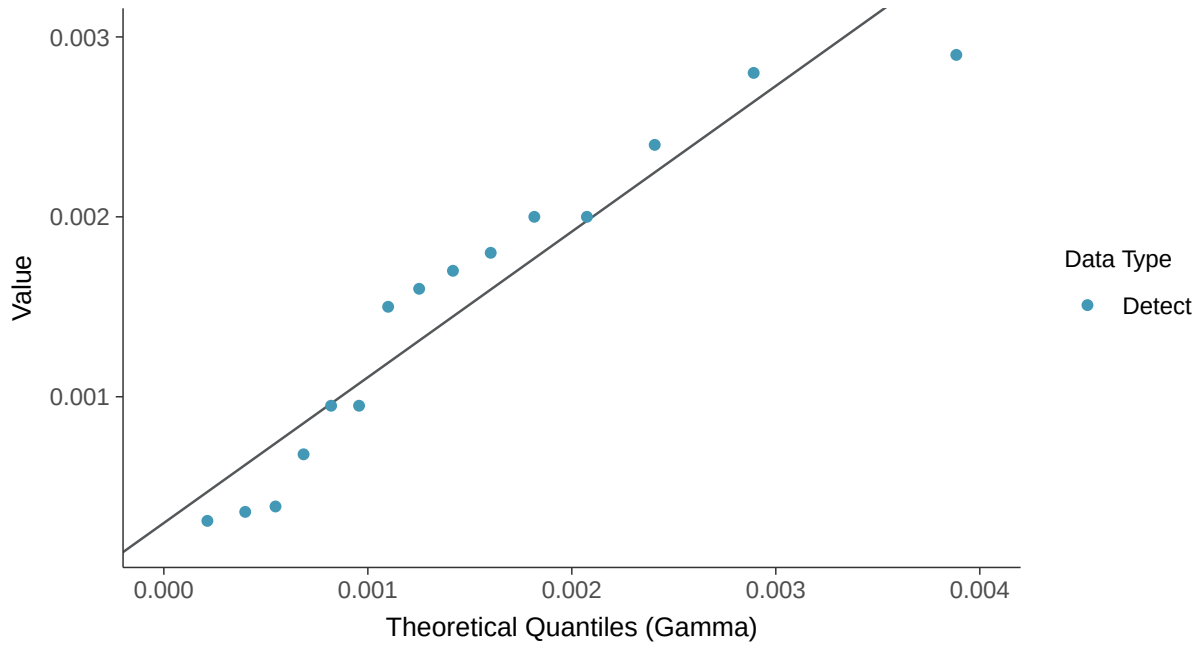
Lognormal Q-Q plot

Molybdenum, MW-08 (mg/L)



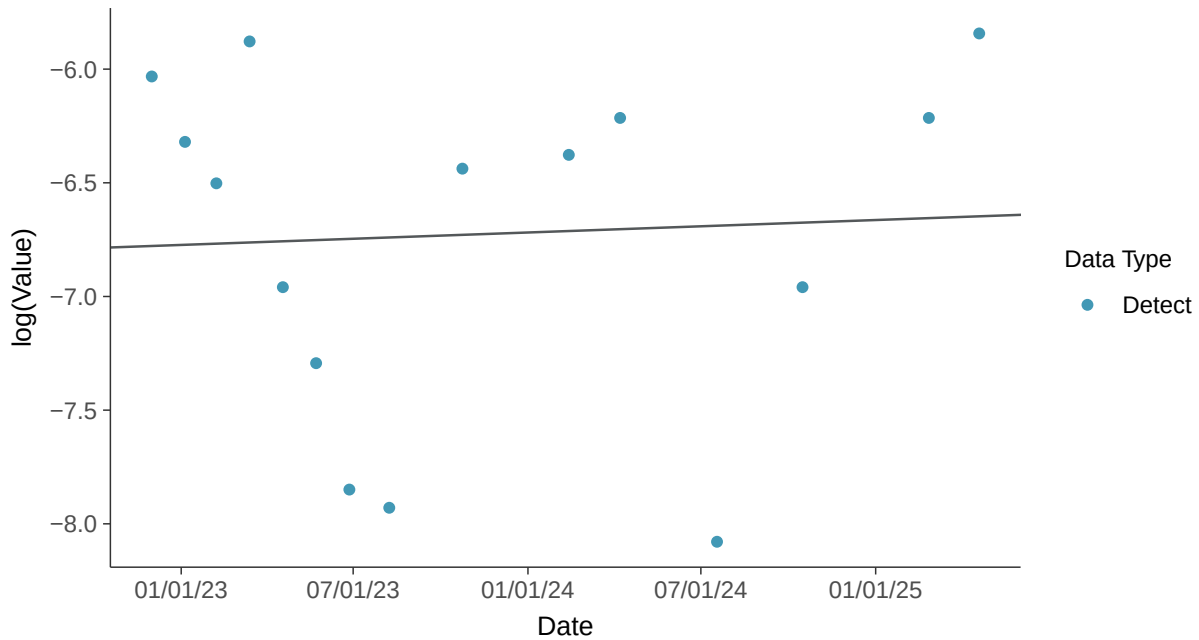
Gamma Q-Q plot

Molybdenum, MW-08 (mg/L)



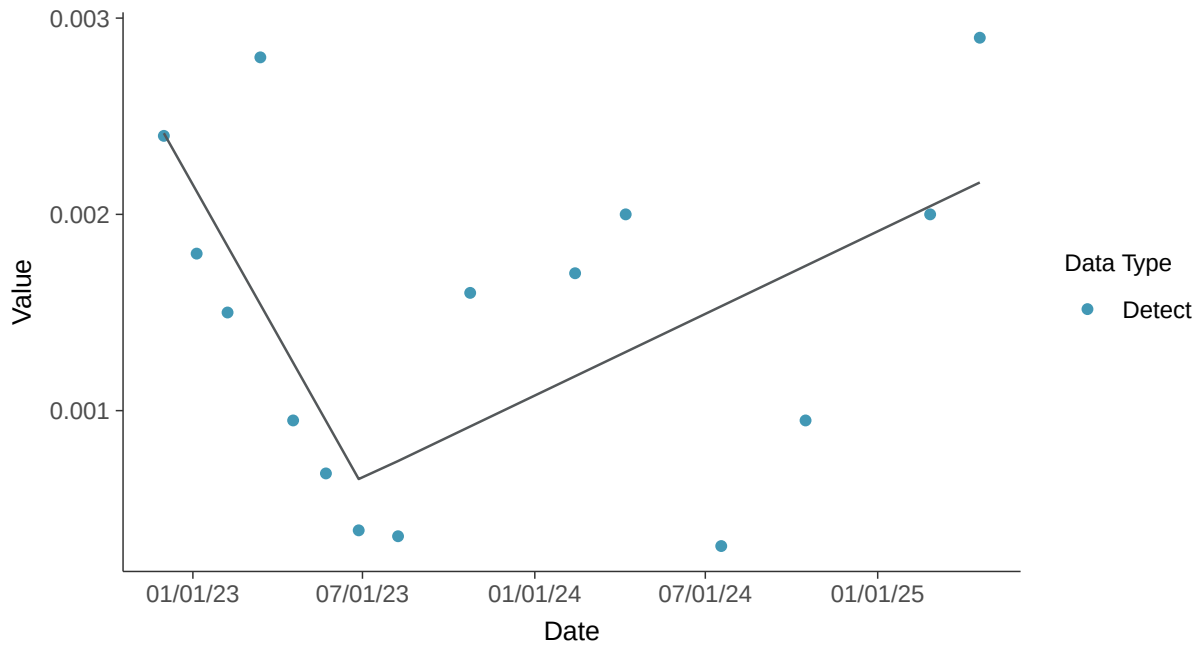
Trend Regression: Lognormal MLE

Molybdenum, MW-08 (mg/L)



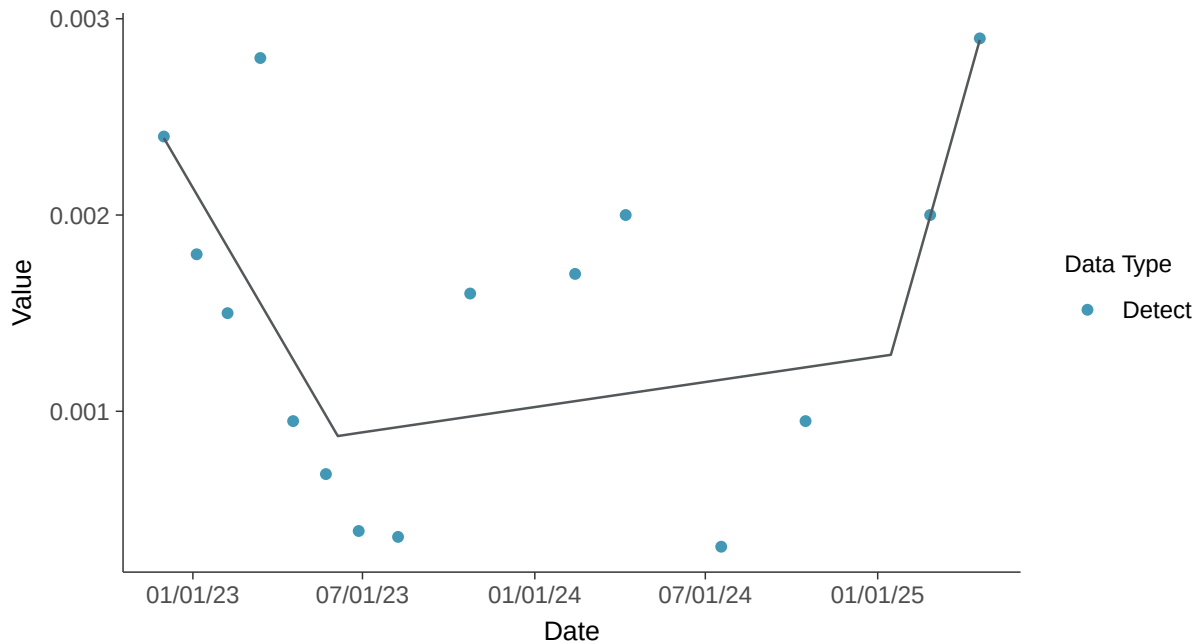
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-08 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-08 (mg/L)

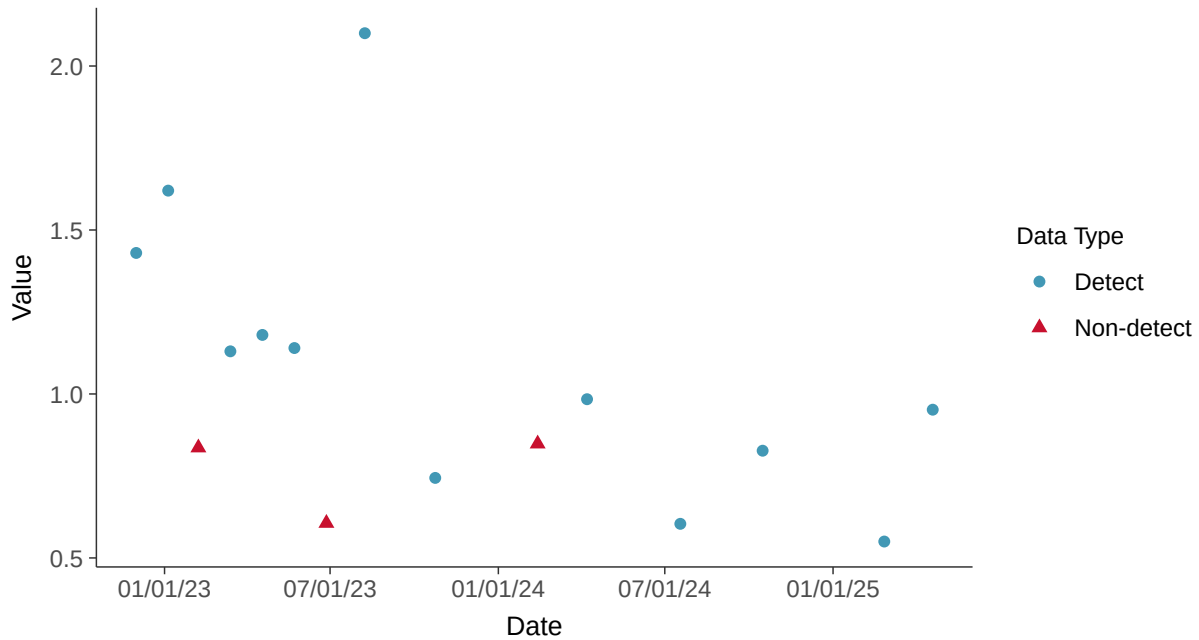


Appendix IV: Radium 226 and 228, MW-08

ID: 18_1_4_121

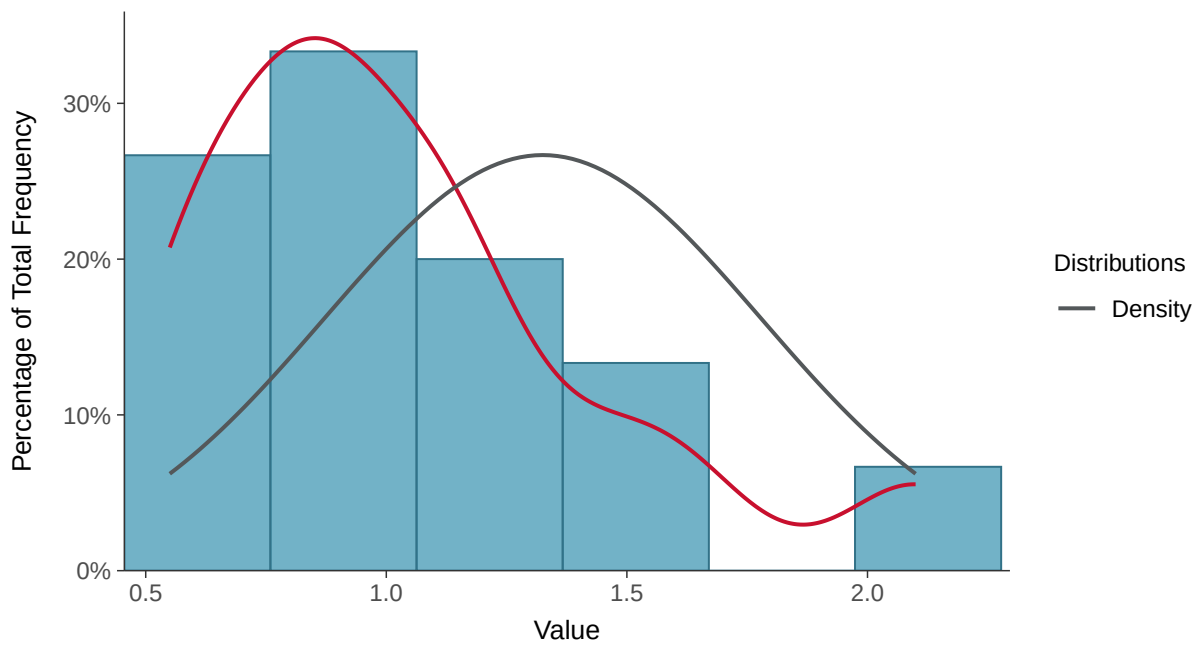
Scatter Plot

Radium 226 and 228, MW-08 (pCi/L)



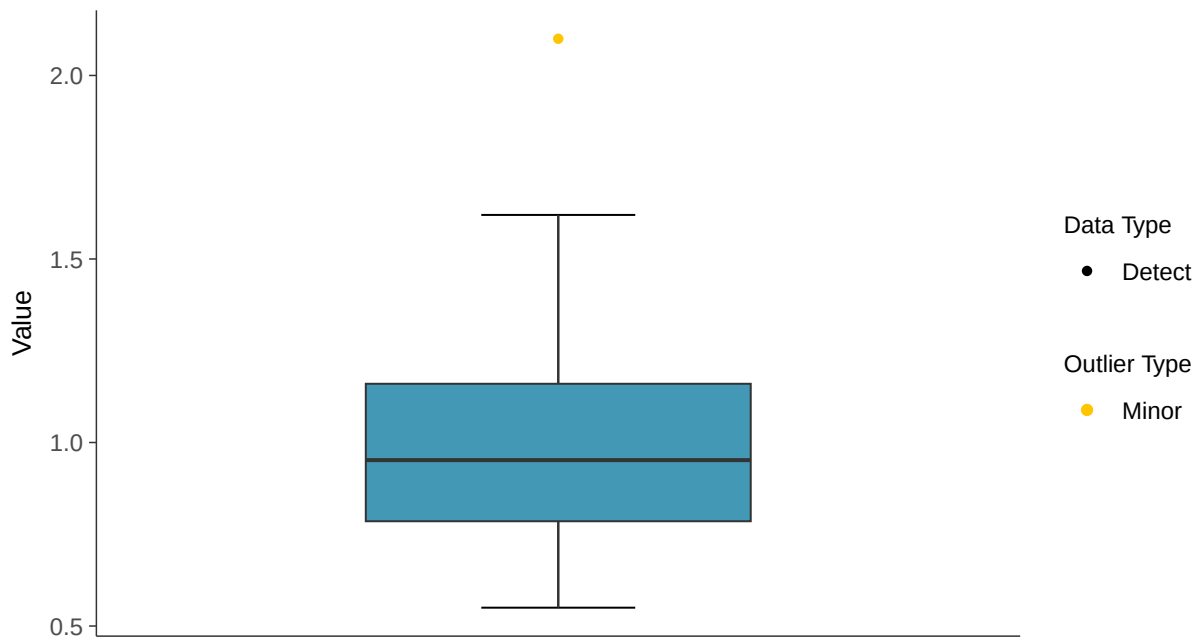
Histogram

Radium 226 and 228, MW-08 (pCi/L)



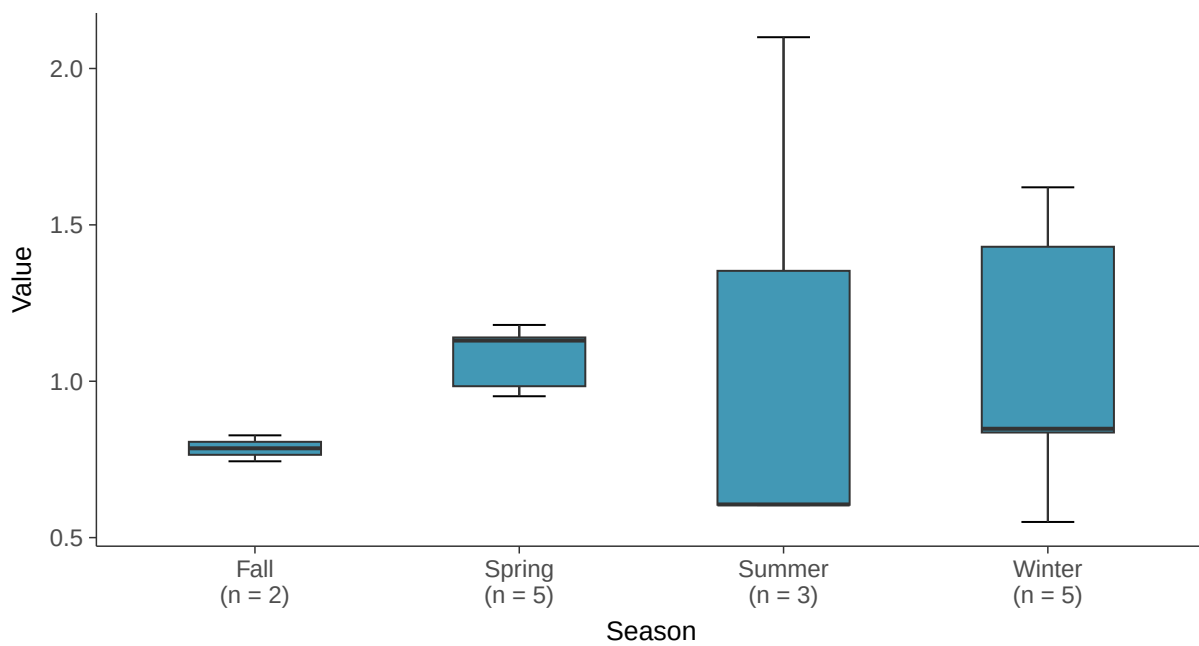
Boxplot

Radium 226 and 228, MW-08 (pCi/L)



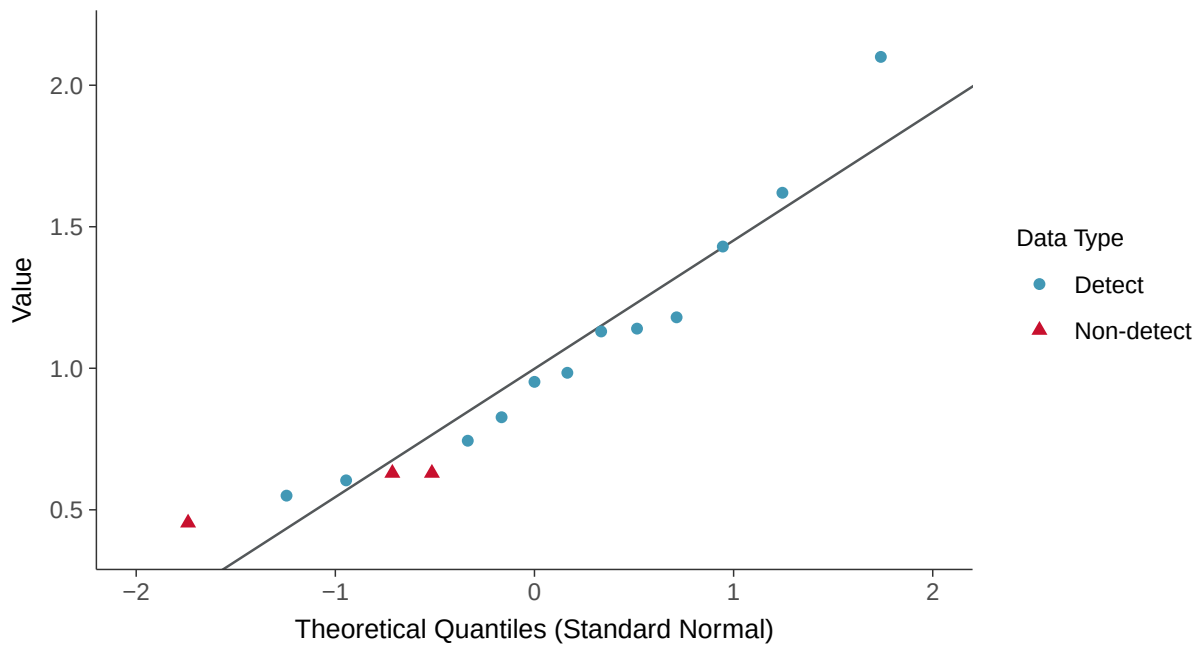
Boxplot by Season

Radium 226 and 228, MW-08 (pCi/L)



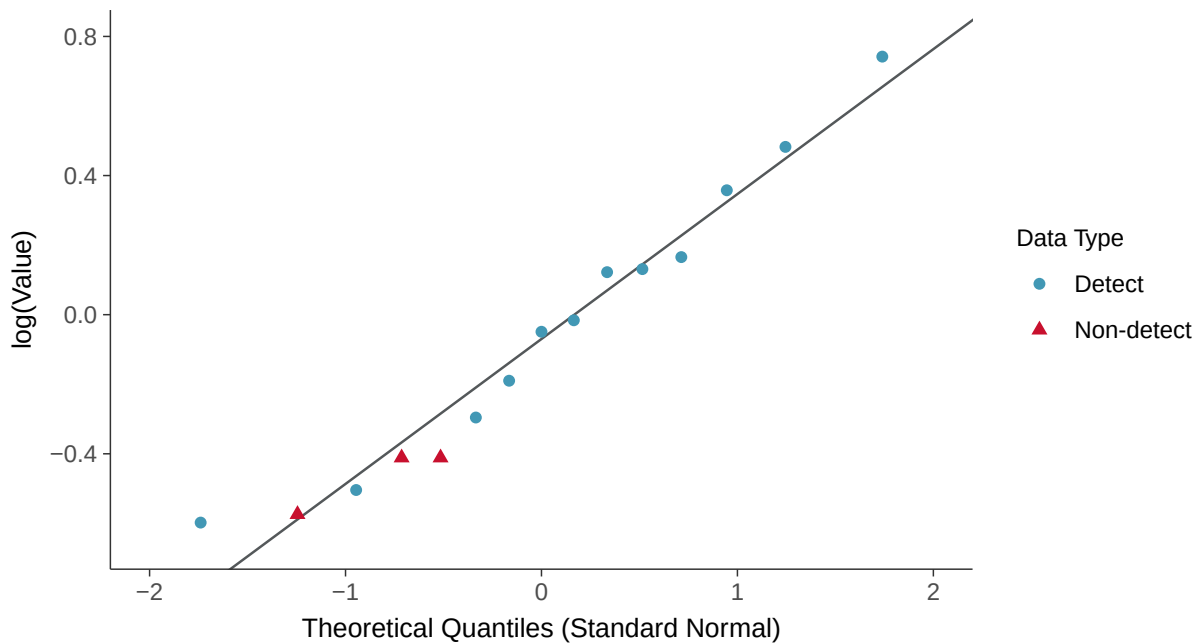
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-08 (pCi/L)



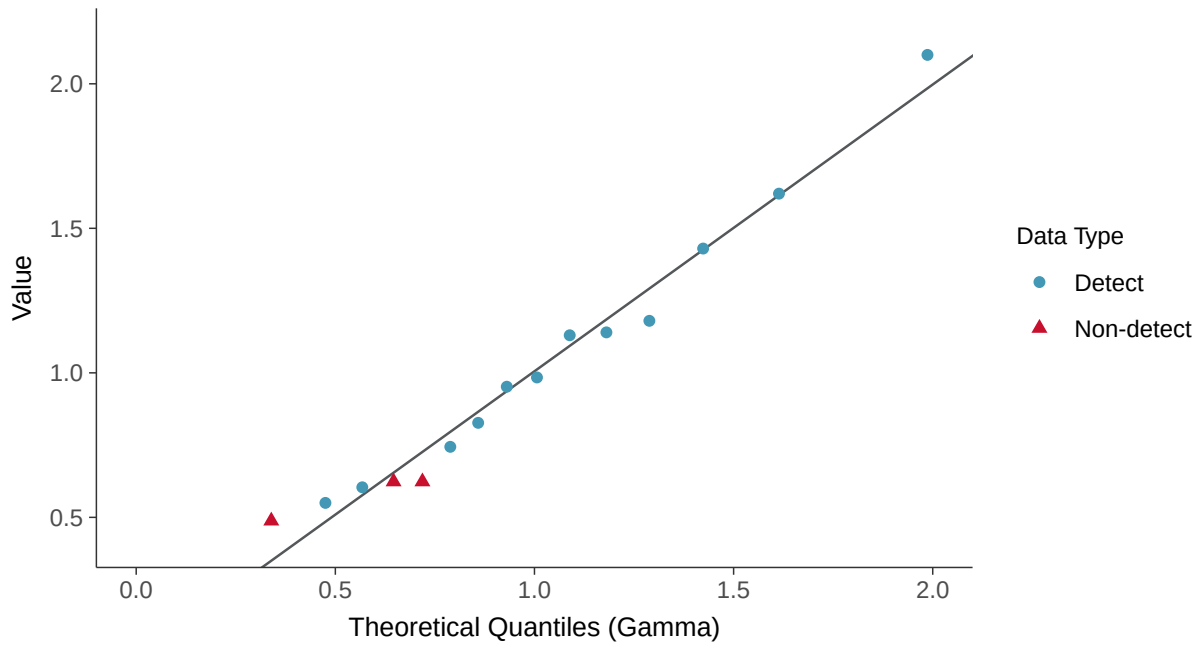
Lognormal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-08 (pCi/L)



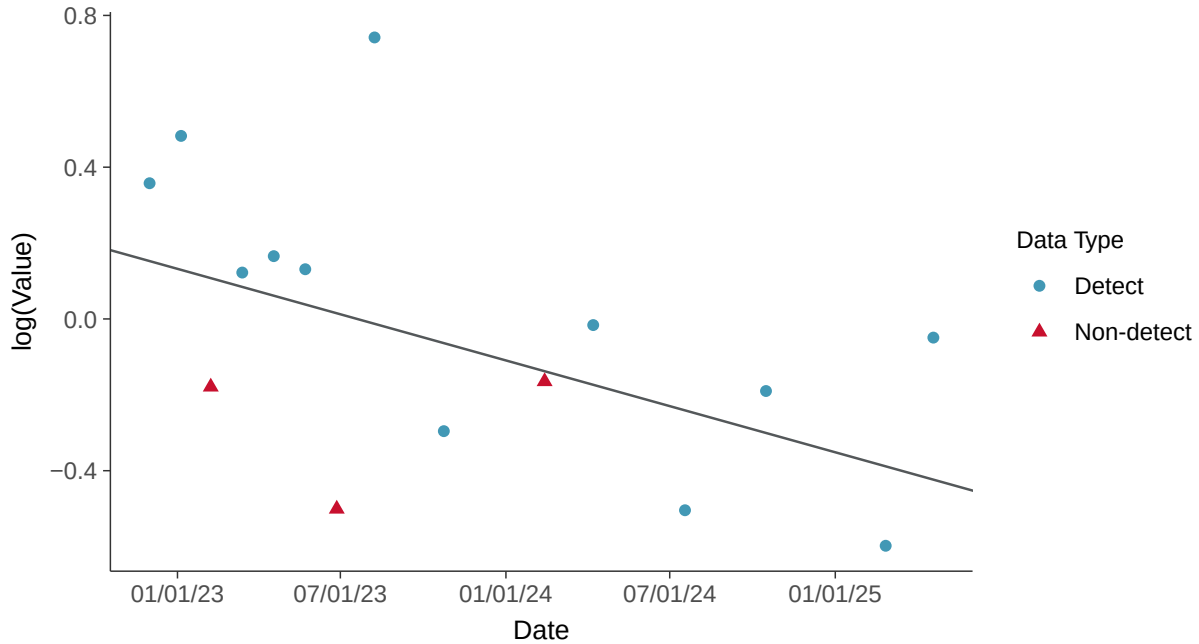
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-08 (pCi/L)



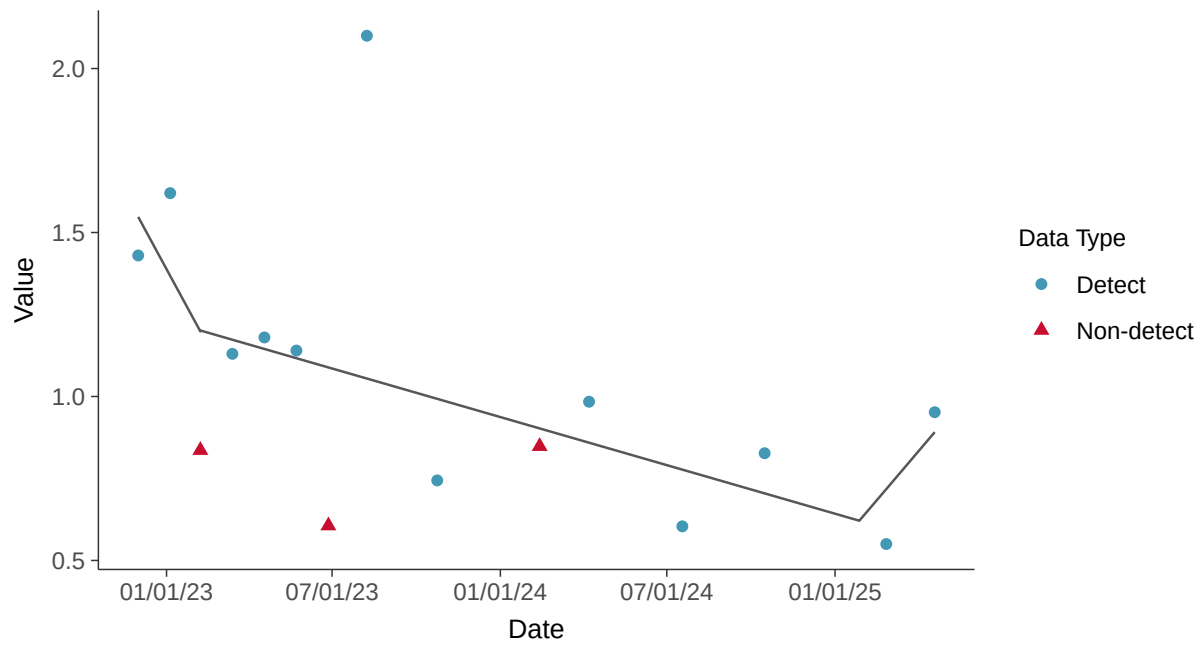
Trend Regression: Lognormal MLE

Radium 226 and 228, MW-08 (pCi/L)



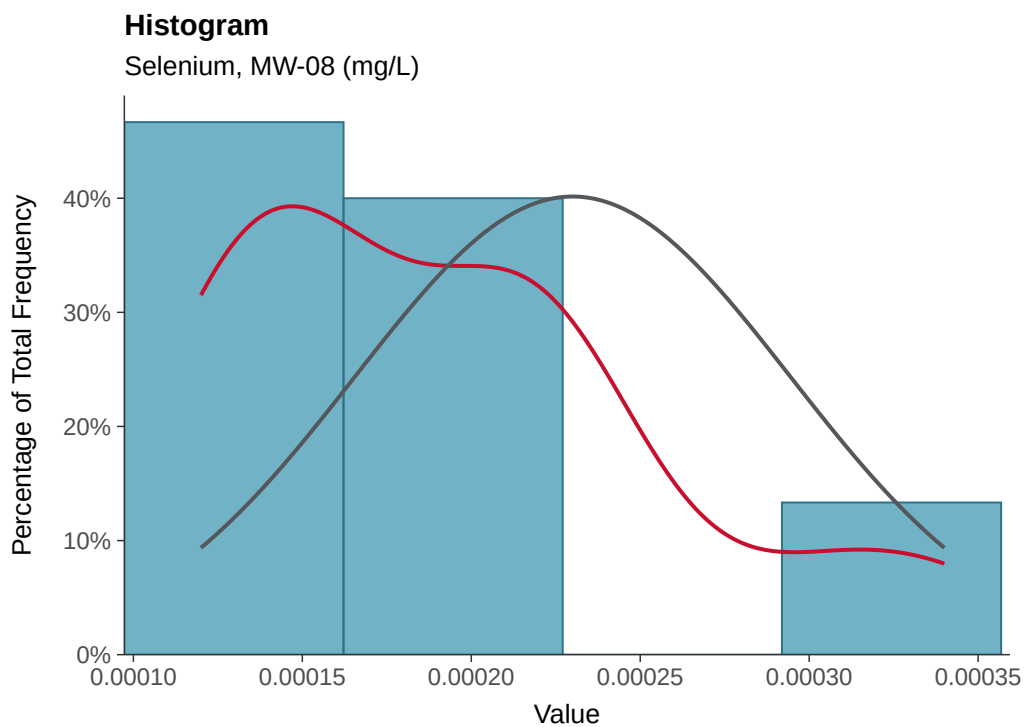
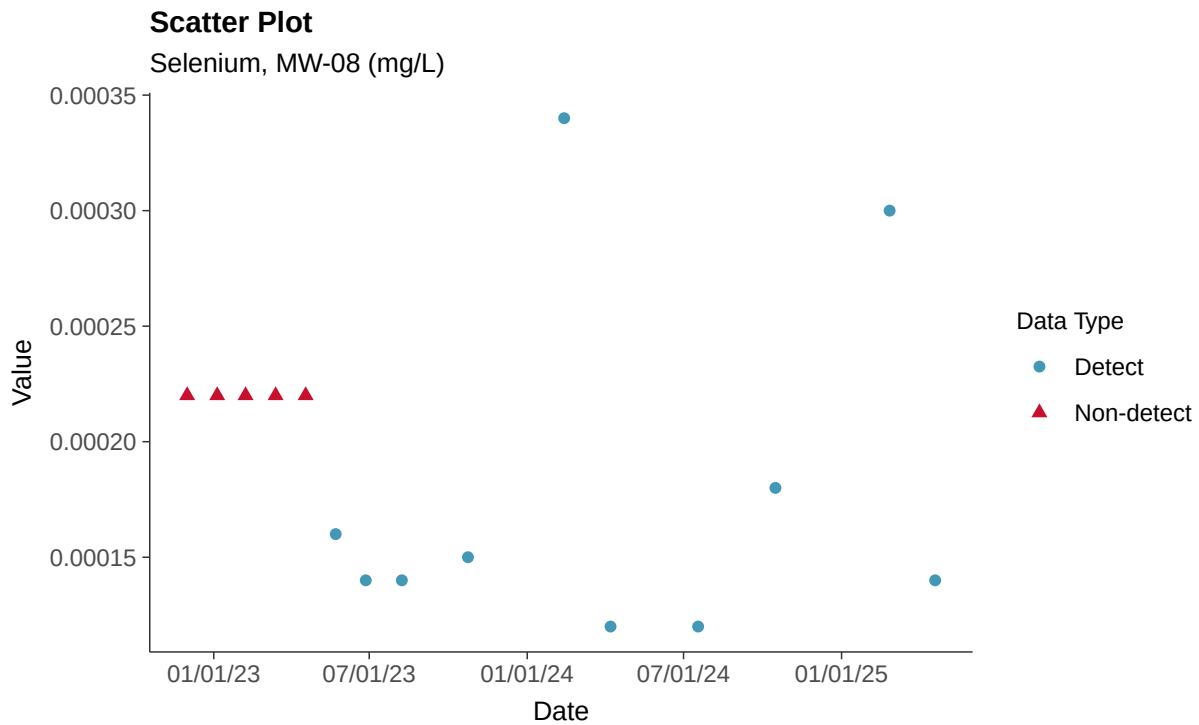
Trend Regression: Piecewise Linear-Linear-Linear

Radium 226 and 228, MW-08 (pCi/L)



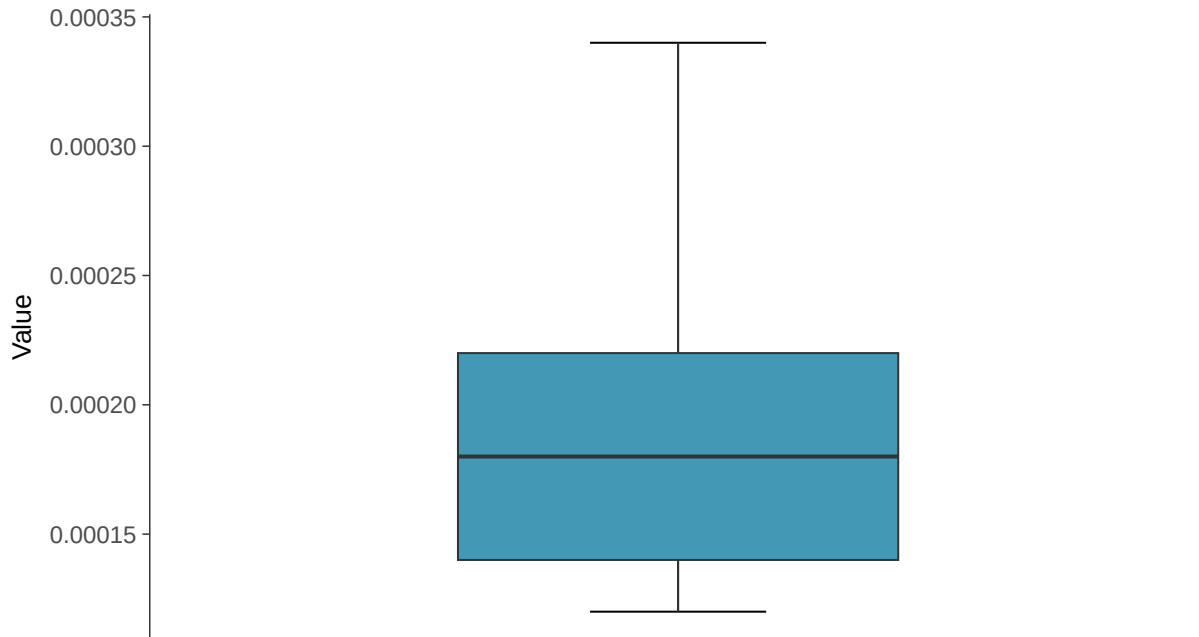
Appendix IV: Selenium, MW-08

ID: 18_1_4_122



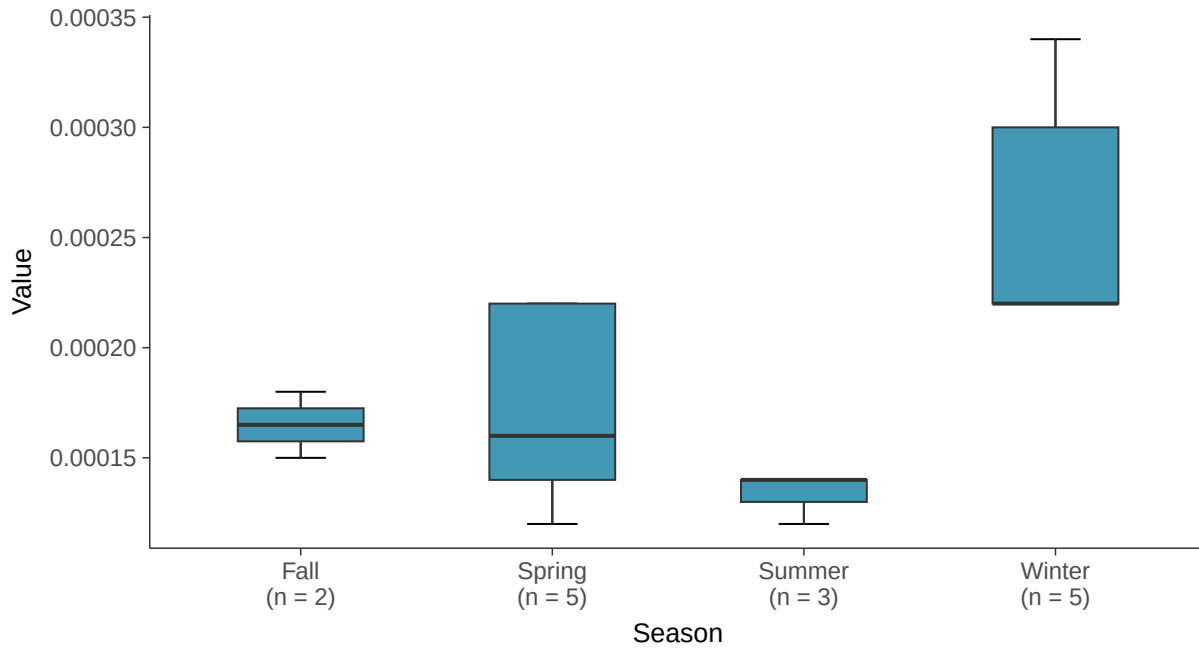
Boxplot

Selenium, MW-08 (mg/L)



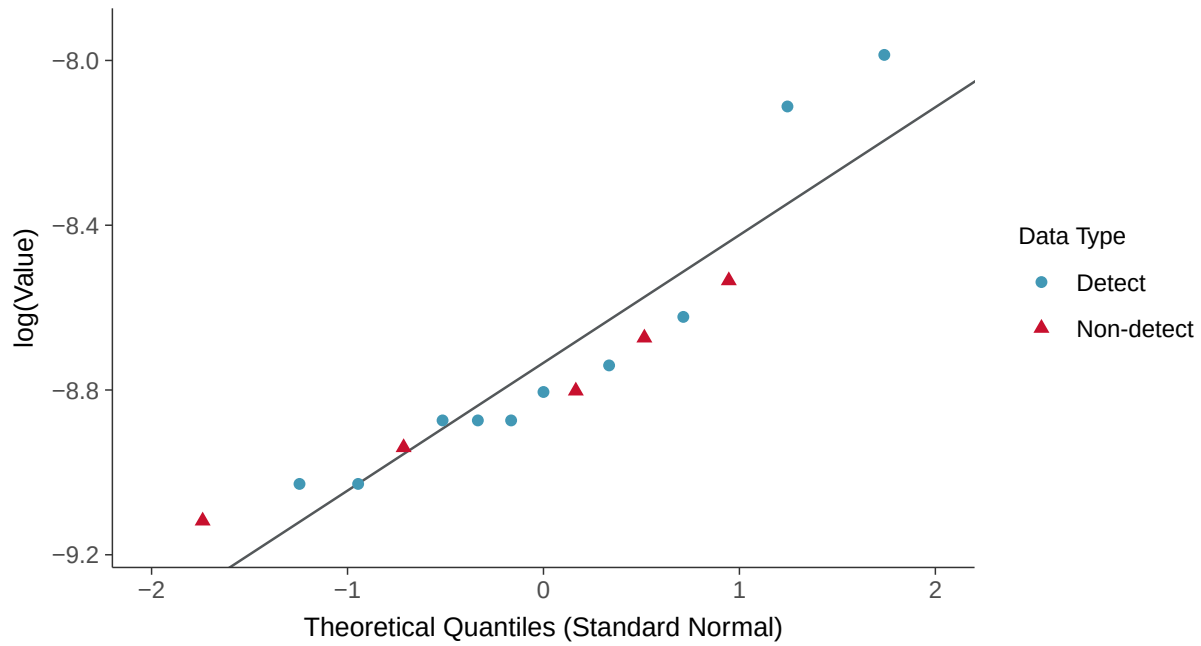
Boxplot by Season

Selenium, MW-08 (mg/L)



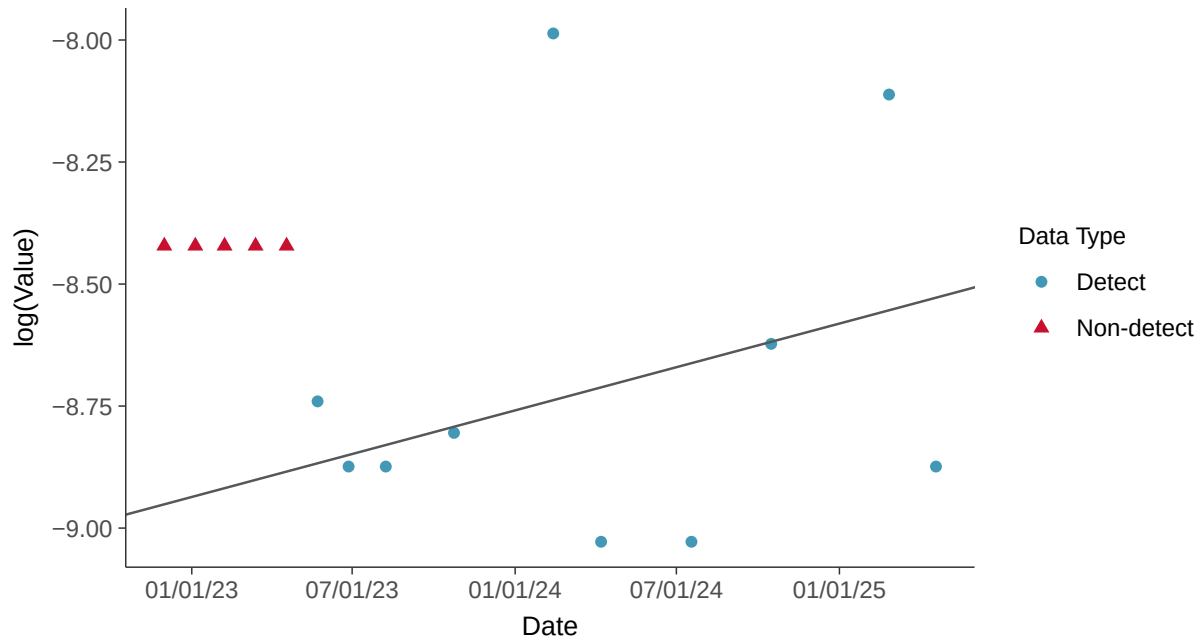
Lognormal Q-Q plot using ROS Imputed Estimates

Selenium, MW-08 (mg/L)



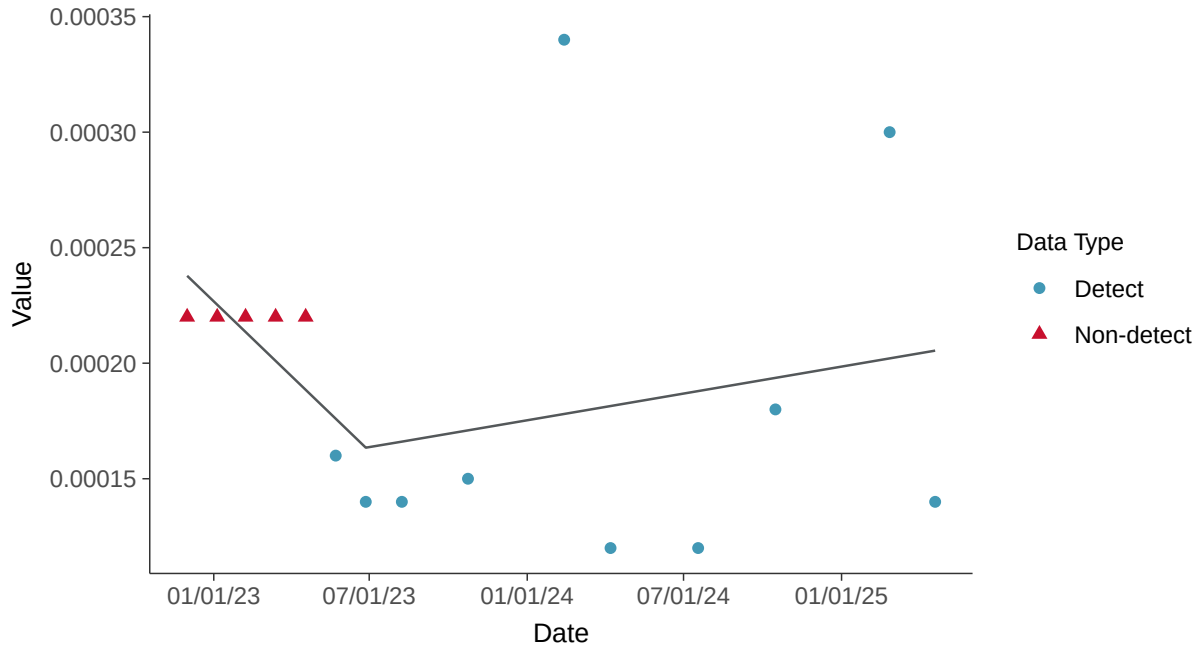
Trend Regression: Lognormal MLE

Selenium, MW-08 (mg/L)



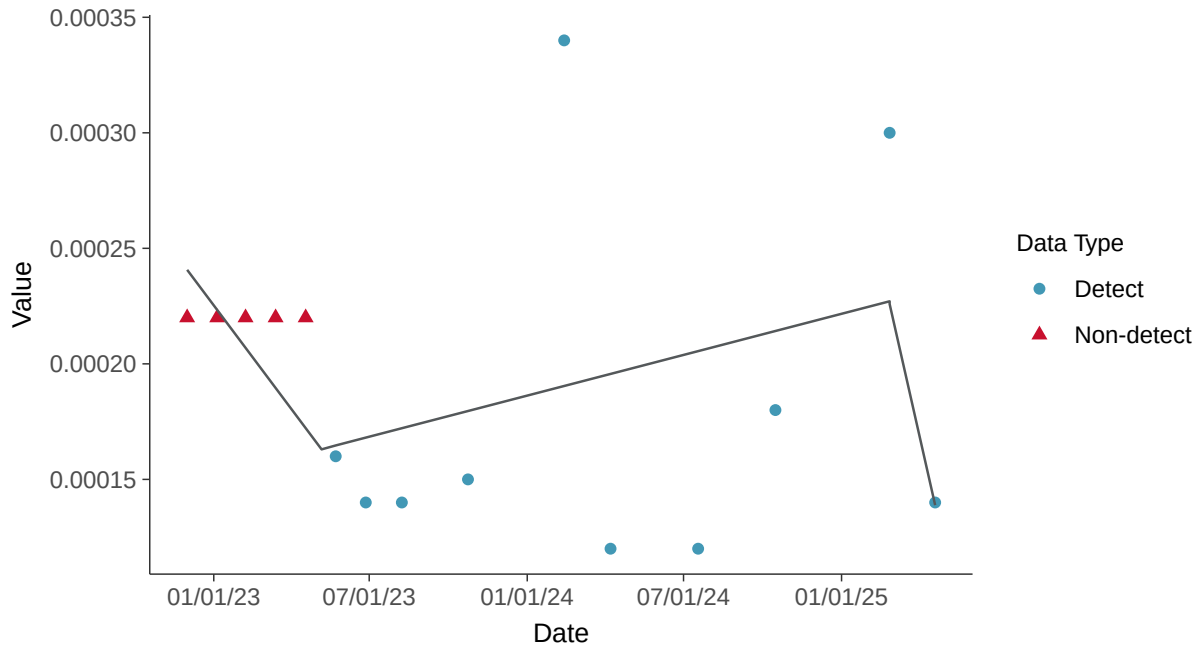
Trend Regression: Piecewise Linear-Linear

Selenium, MW-08 (mg/L)



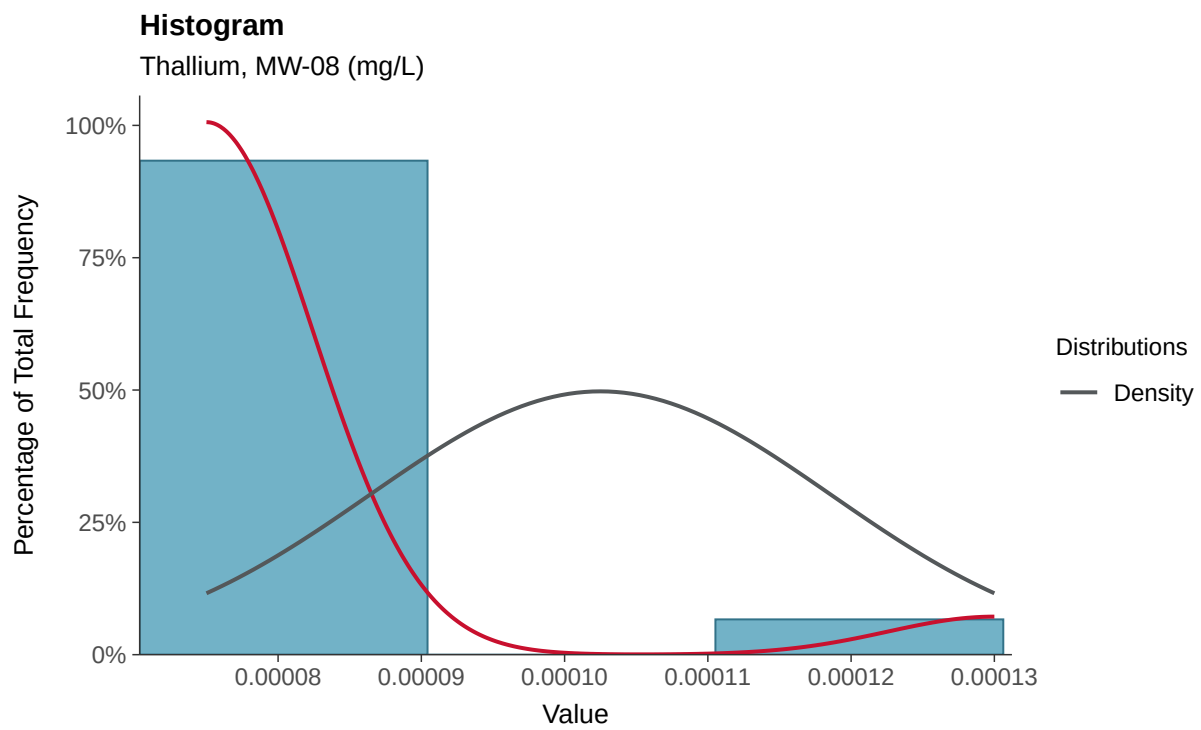
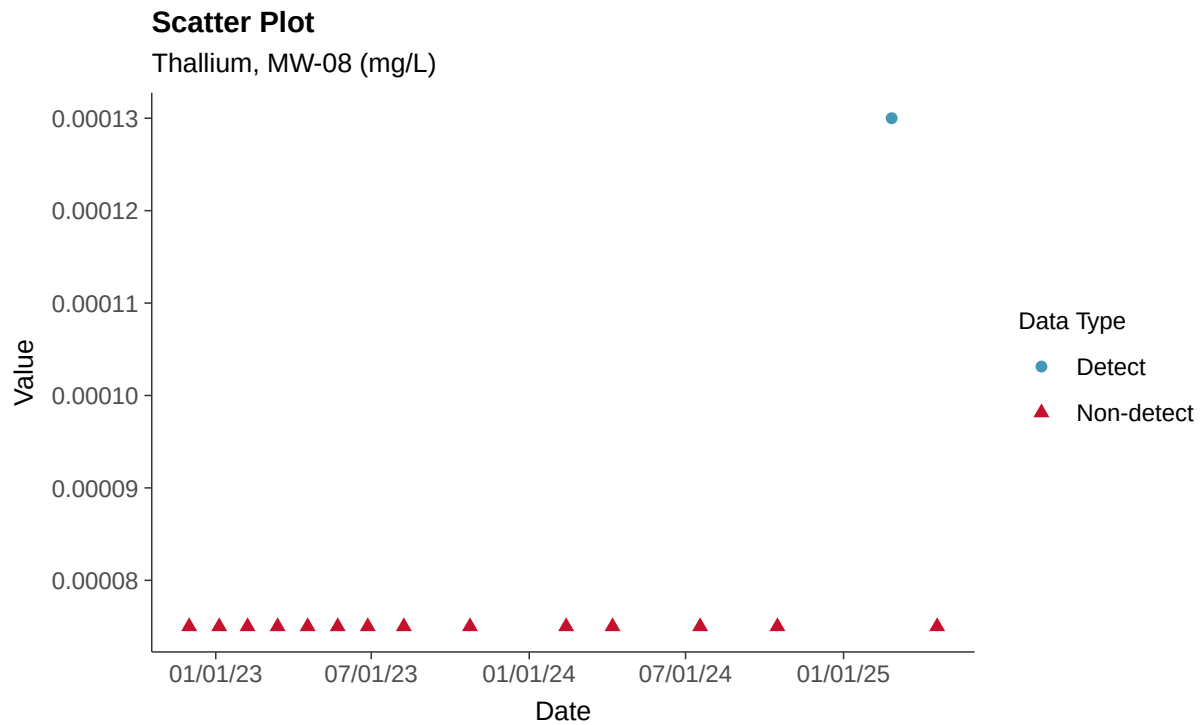
Trend Regression: Piecewise Linear-Linear-Linear

Selenium, MW-08 (mg/L)



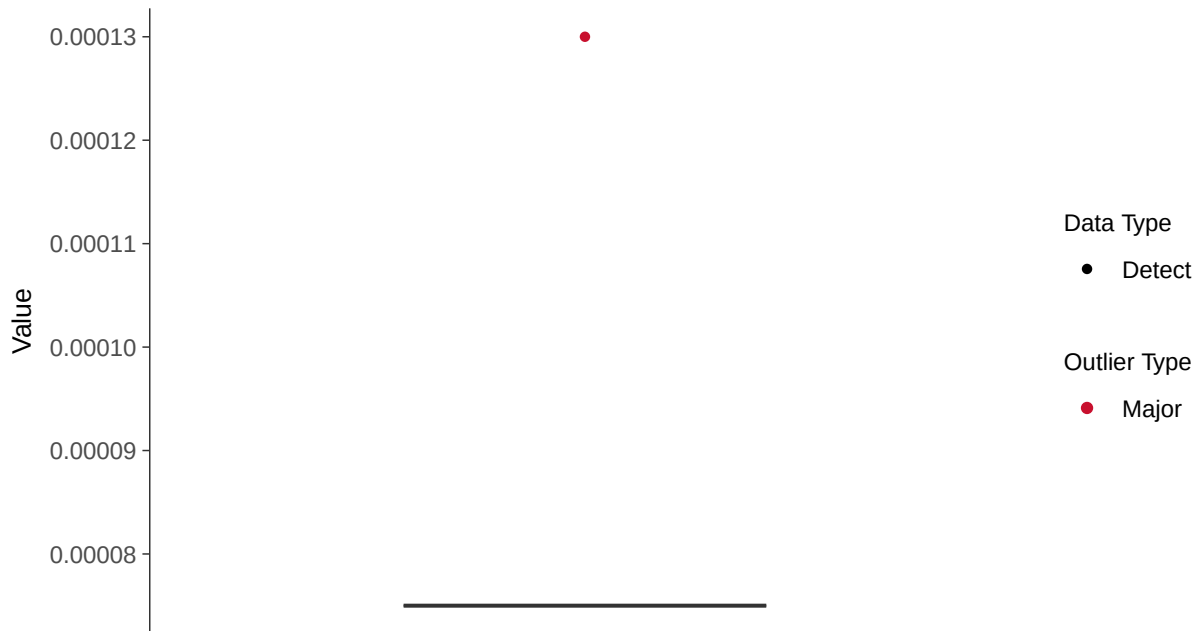
Appendix IV: Thallium, MW-08

ID: 18_1_4_125



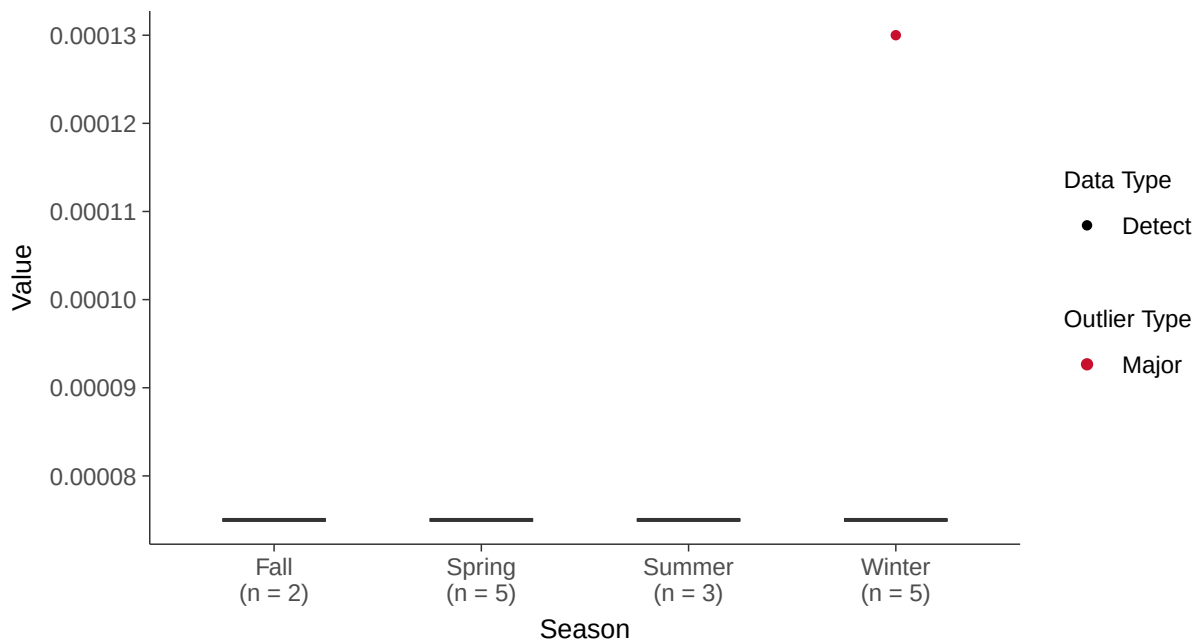
Boxplot

Thallium, MW-08 (mg/L)



Boxplot by Season

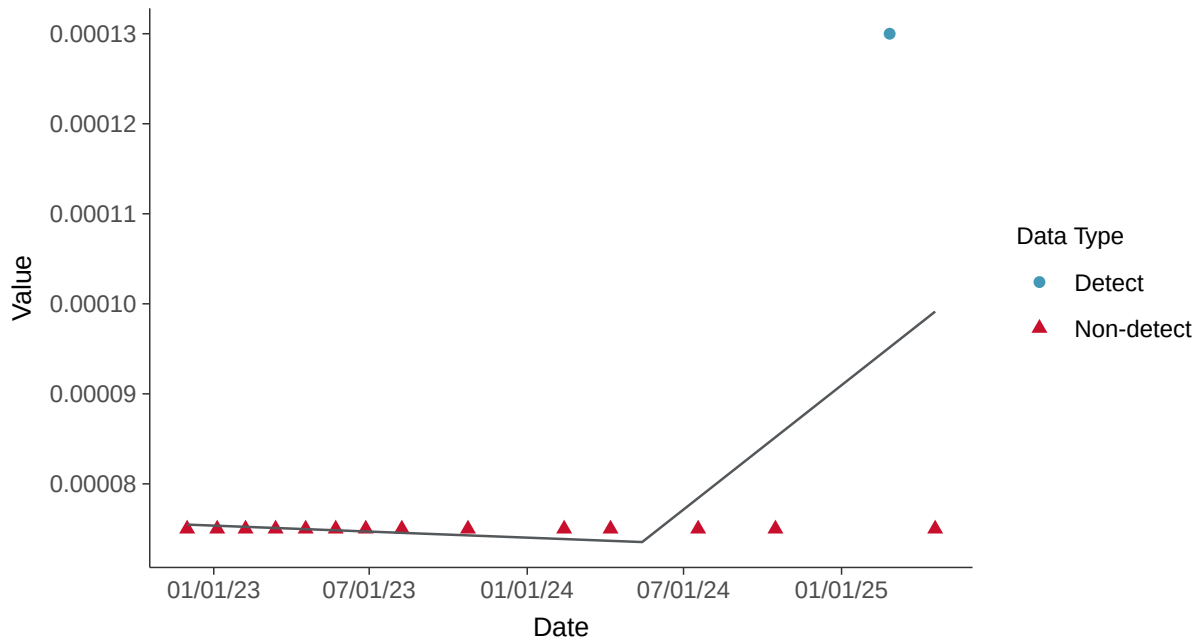
Thallium, MW-08 (mg/L)





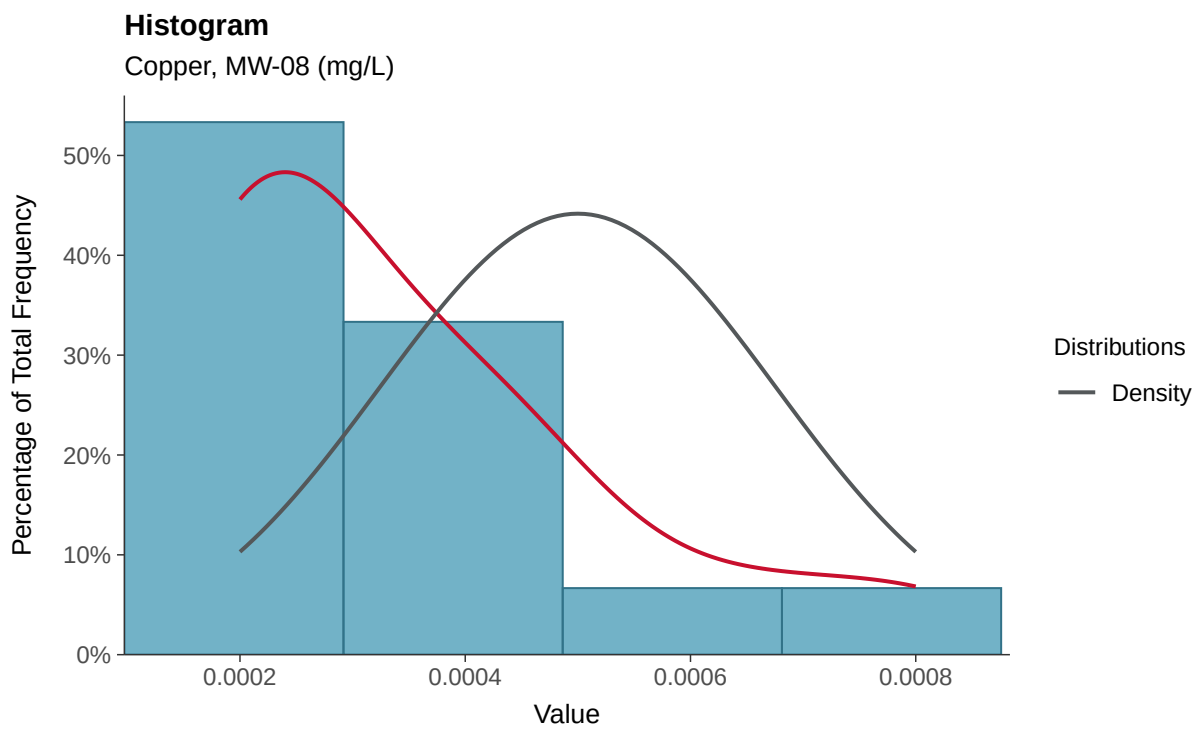
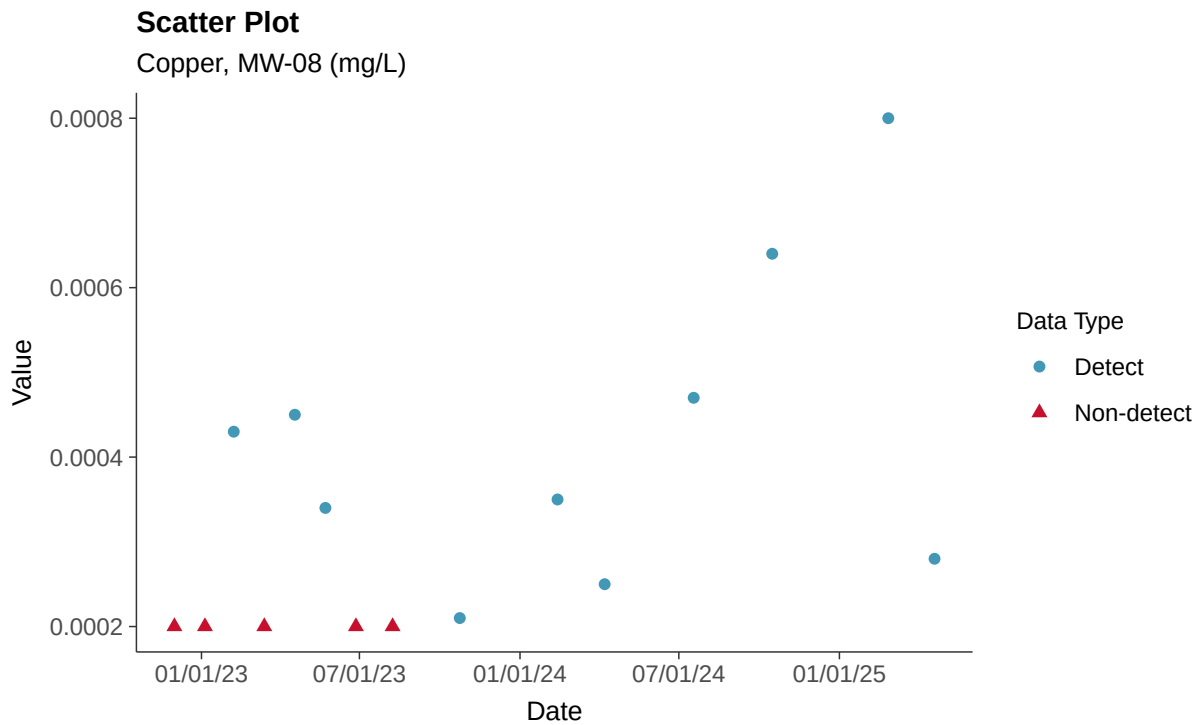
Trend Regression: Piecewise Linear-Linear

Thallium, MW-08 (mg/L)



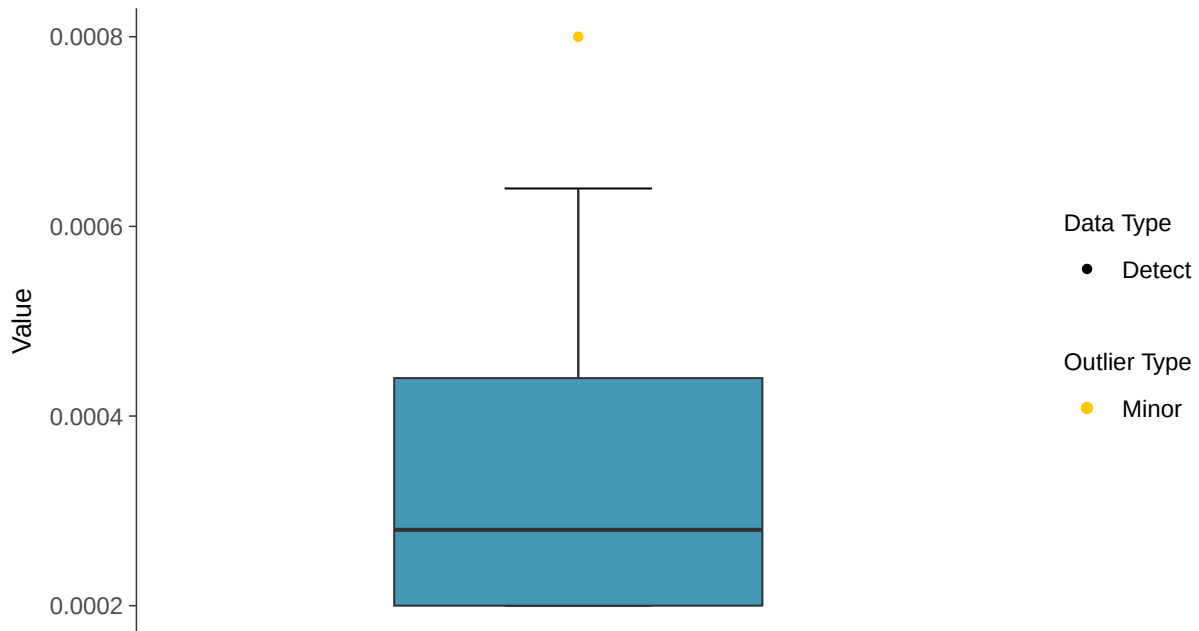
Part 115: Copper, MW-08

ID: 18_1_5_111



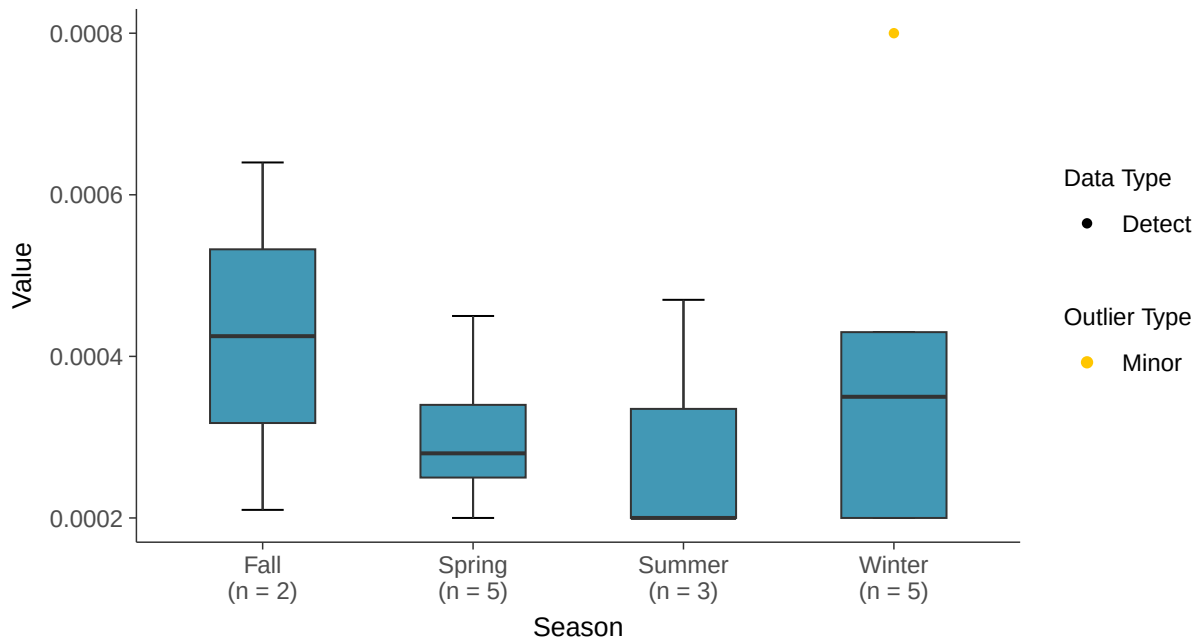
Boxplot

Copper, MW-08 (mg/L)



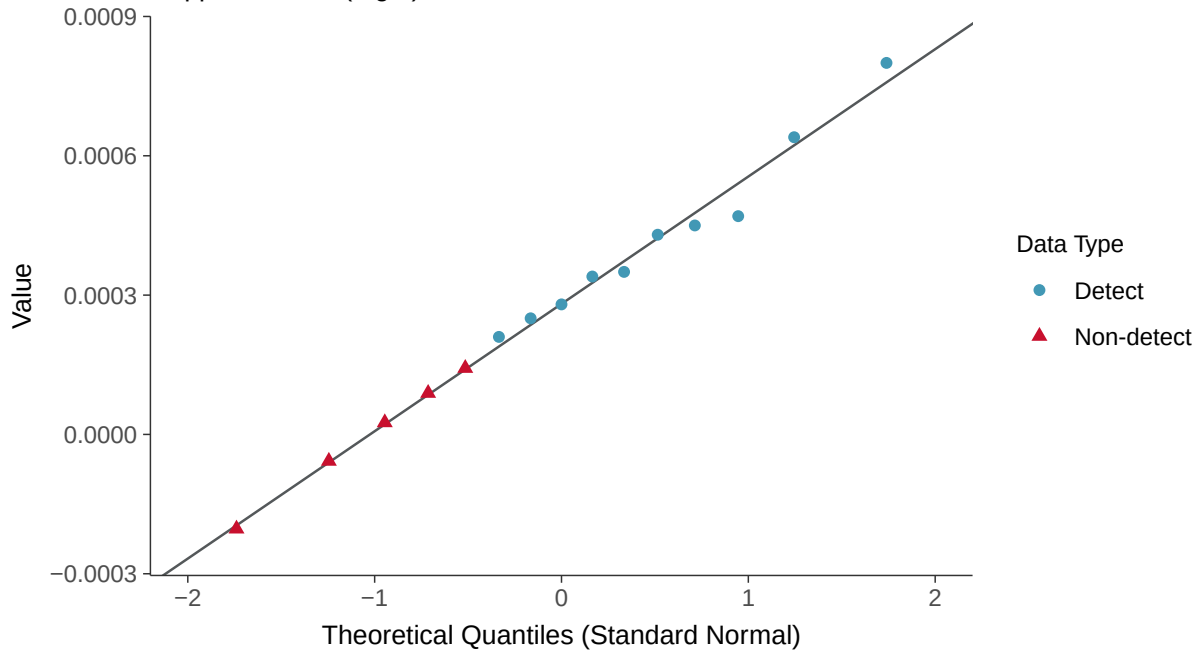
Boxplot by Season

Copper, MW-08 (mg/L)



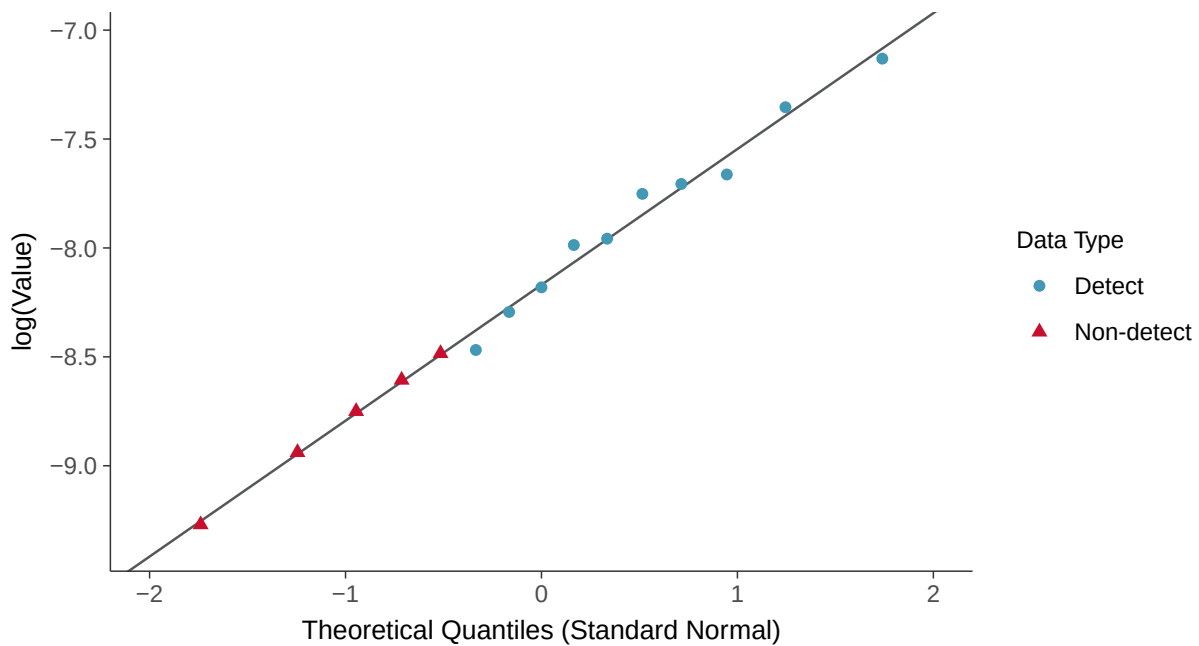
Normal Q-Q plot using ROS Imputed Estimates

Copper, MW-08 (mg/L)



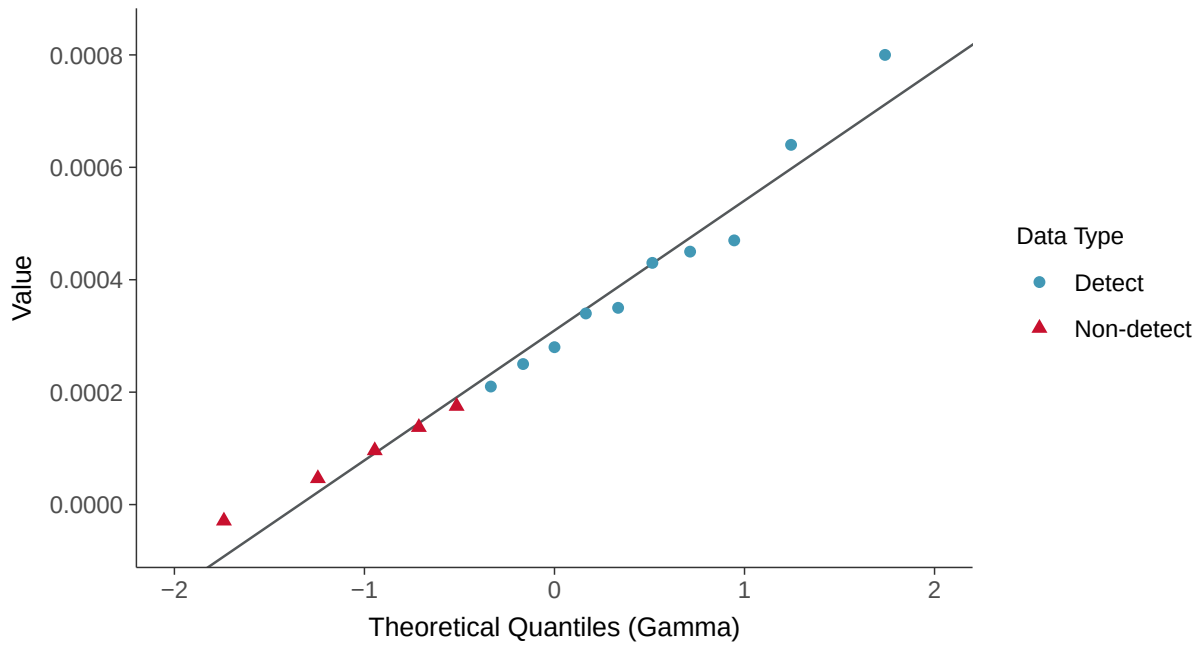
Lognormal Q-Q plot using ROS Imputed Estimates

Copper, MW-08 (mg/L)



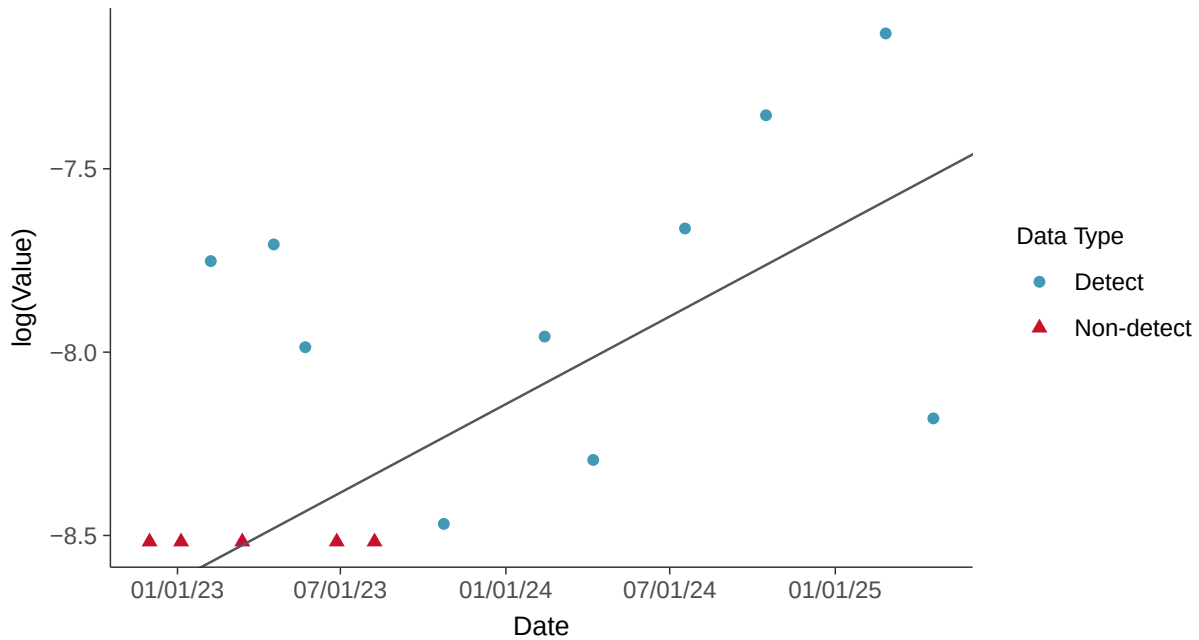
Gamma Q-Q plot using ROS Imputed Estimates

Copper, MW-08 (mg/L)



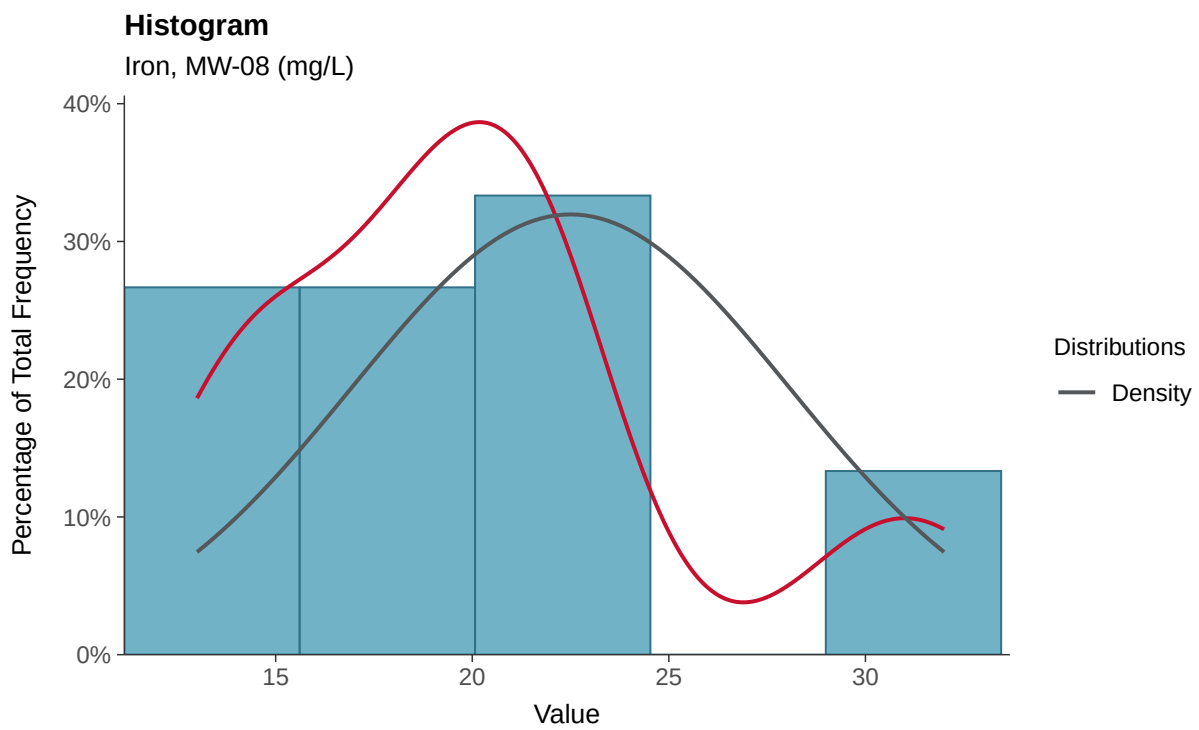
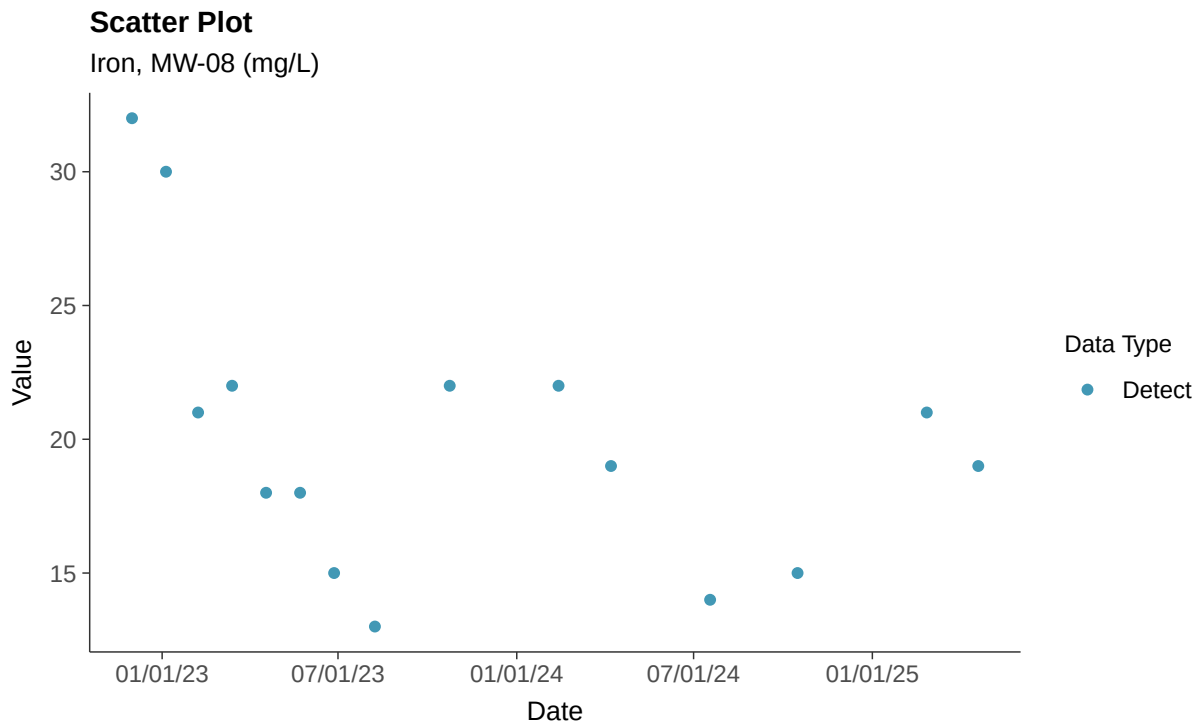
Trend Regression: Lognormal MLE

Copper, MW-08 (mg/L)



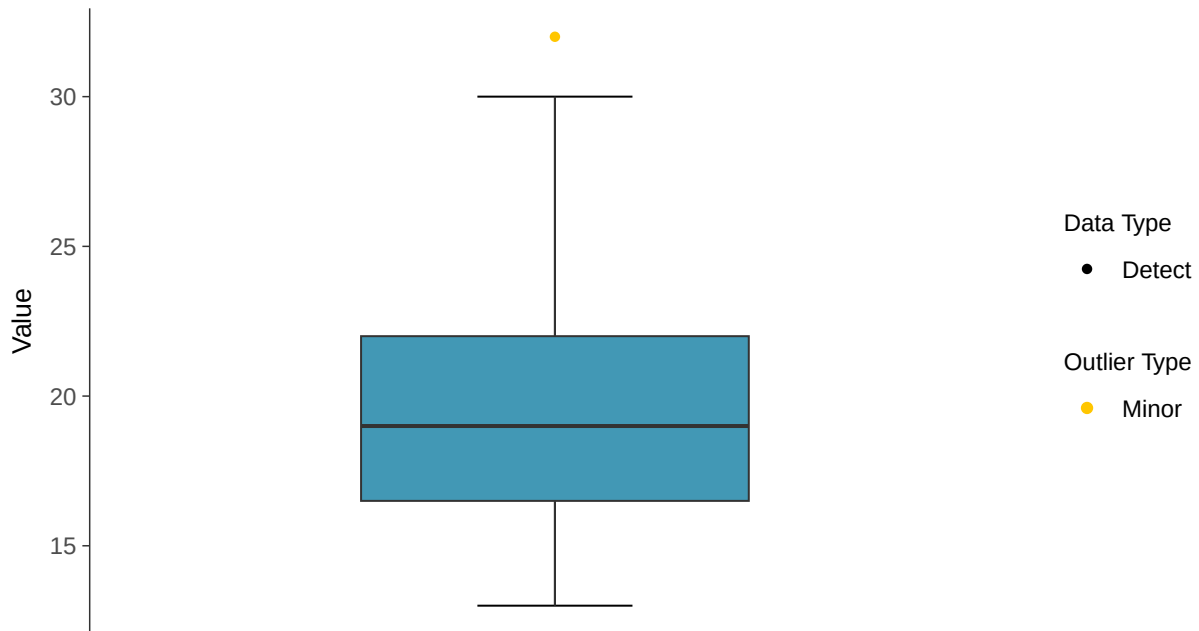
Part 115: Iron, MW-08

ID: 18_1_5_114



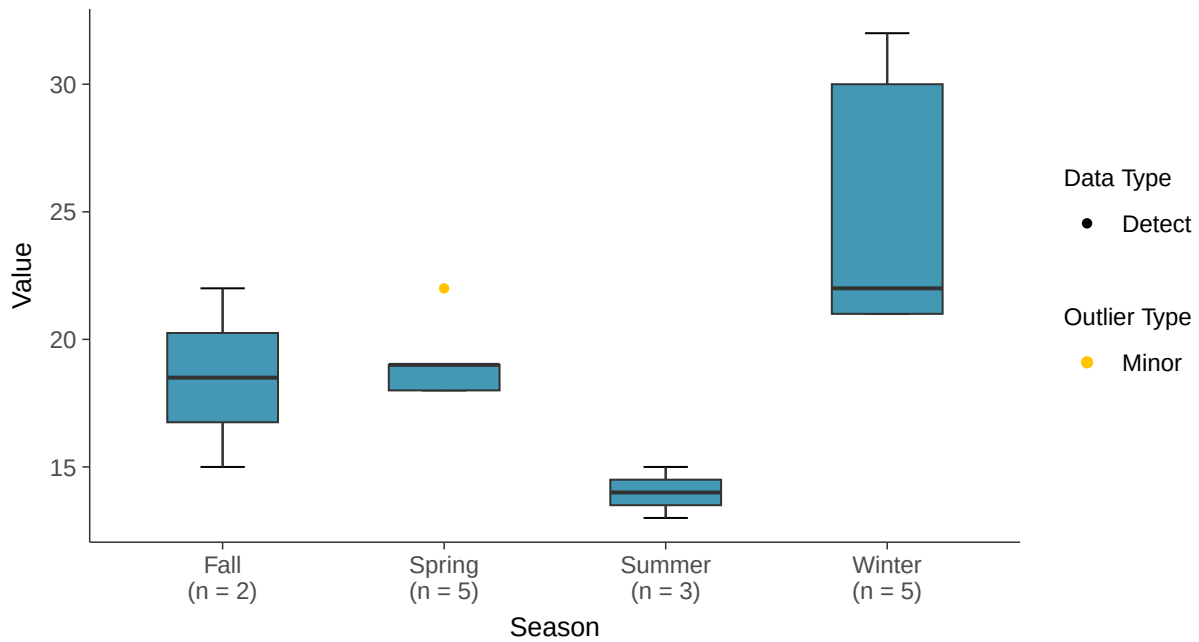
Boxplot

Iron, MW-08 (mg/L)



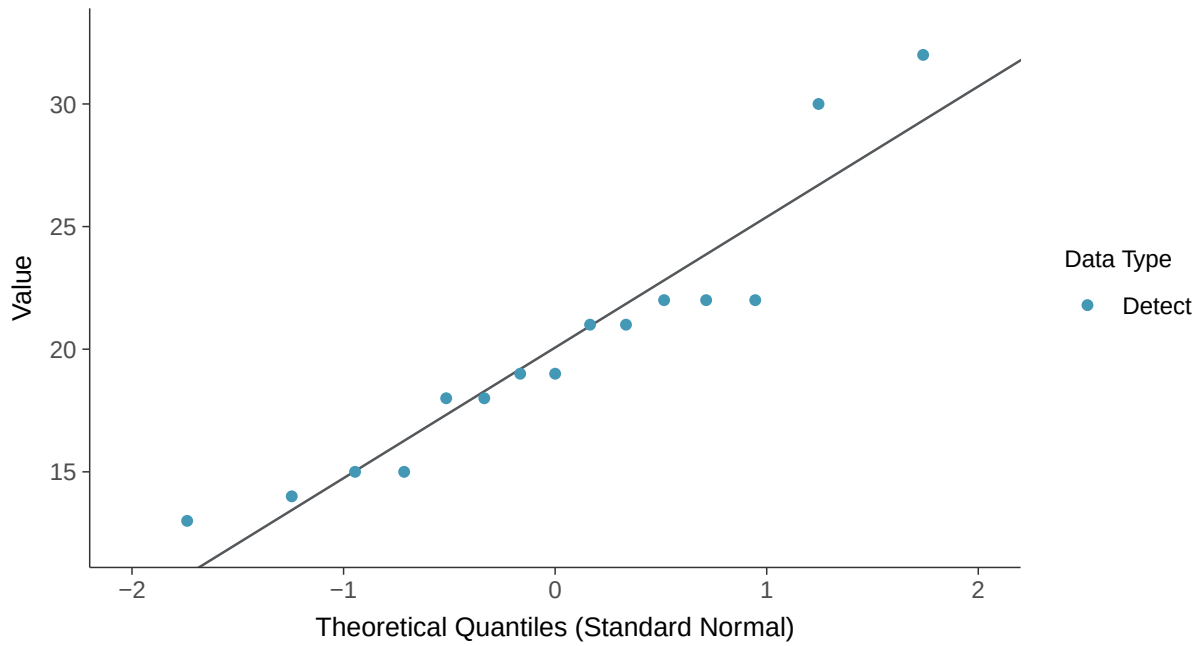
Boxplot by Season

Iron, MW-08 (mg/L)



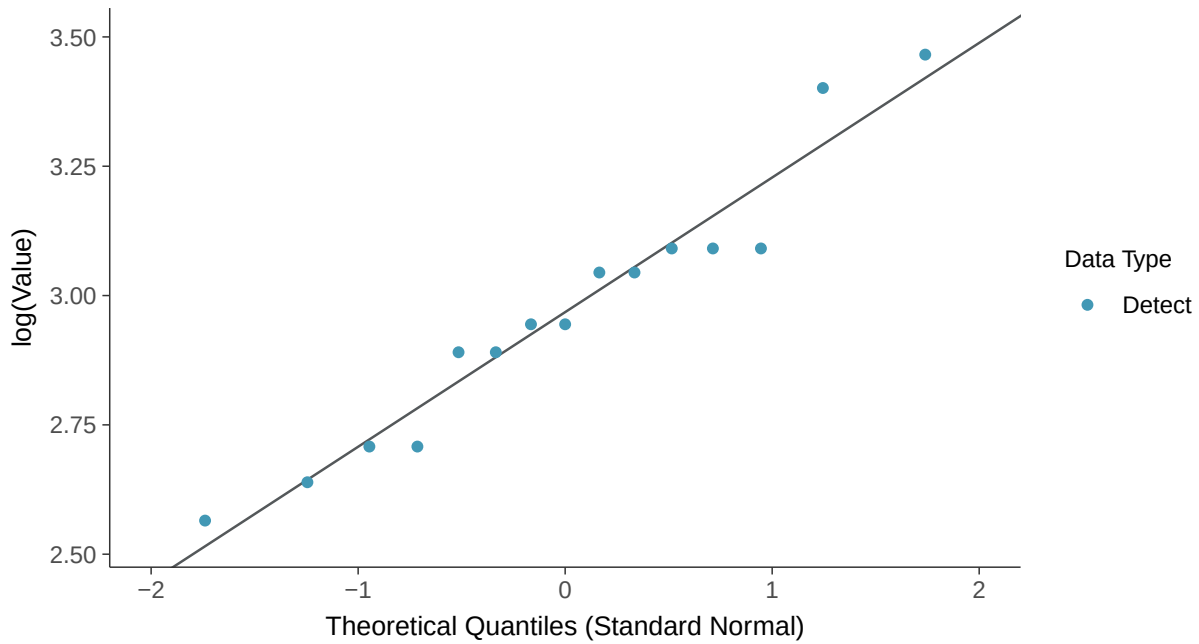
Normal Q-Q plot

Iron, MW-08 (mg/L)



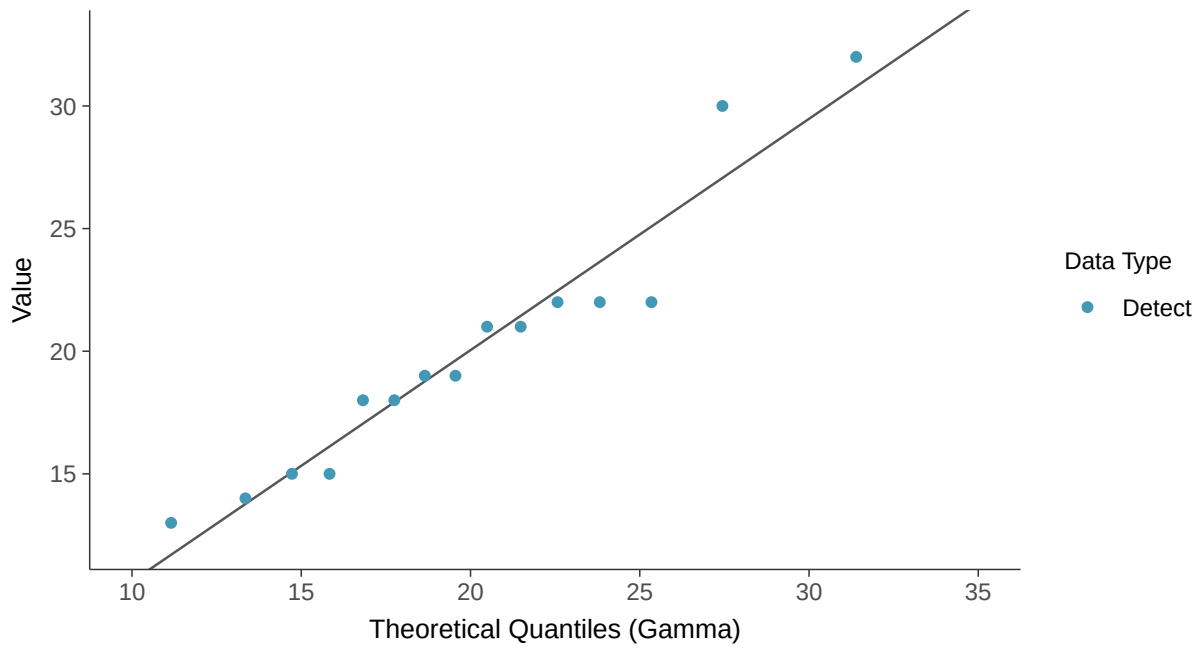
Lognormal Q-Q plot

Iron, MW-08 (mg/L)



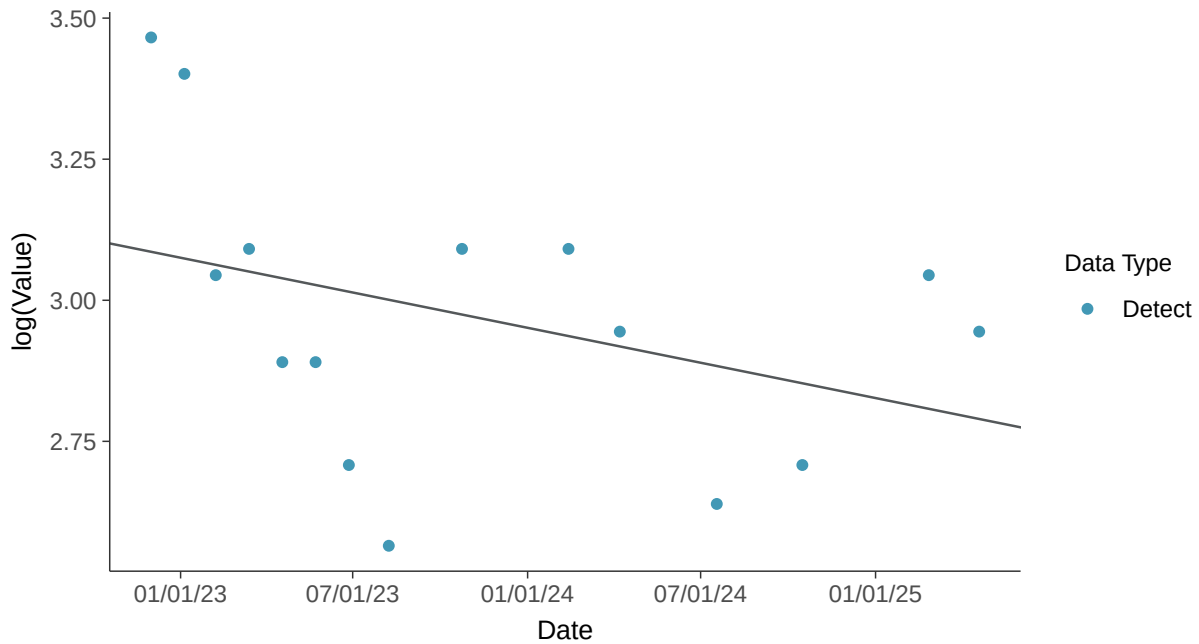
Gamma Q-Q plot

Iron, MW-08 (mg/L)



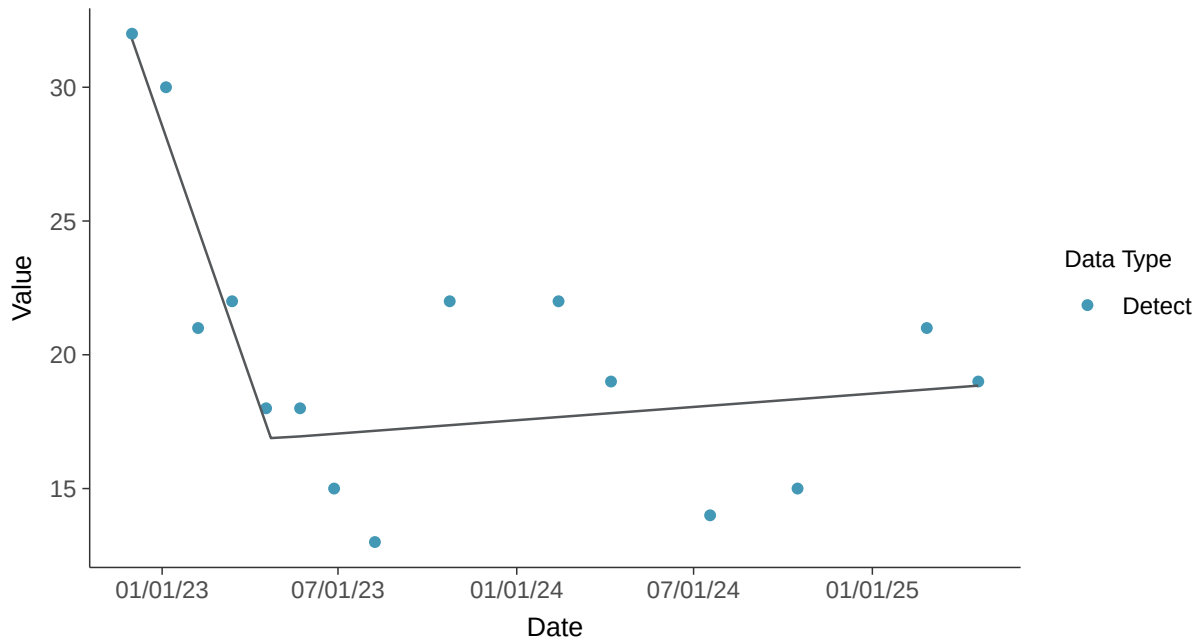
Trend Regression: Lognormal MLE

Iron, MW-08 (mg/L)



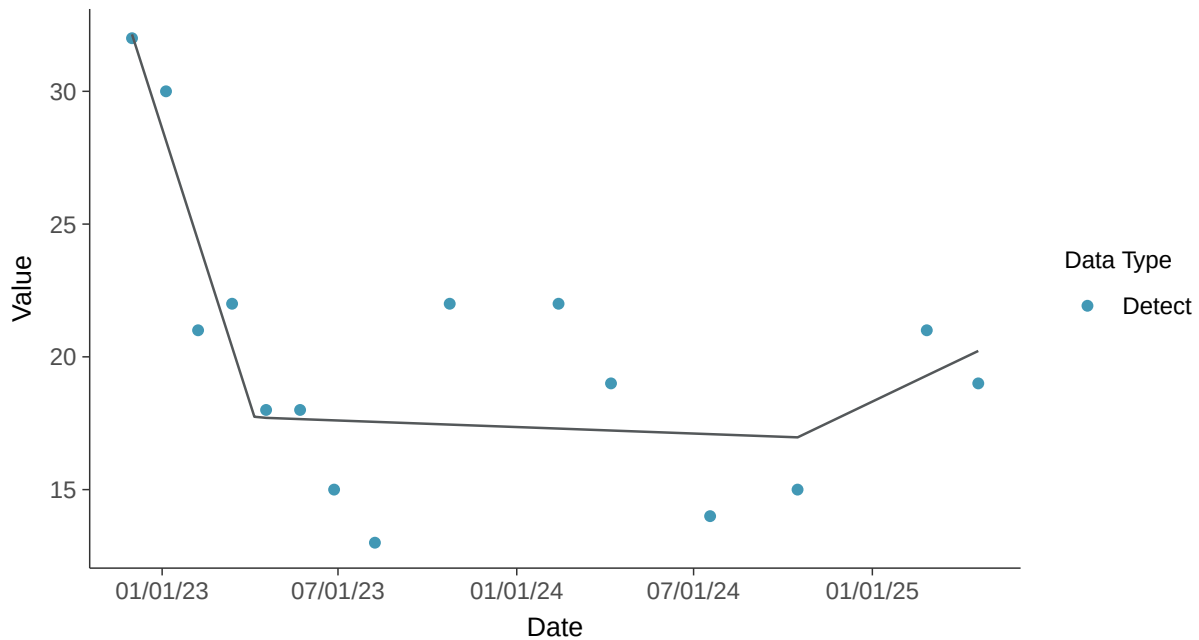
Trend Regression: Piecewise Linear-Linear

Iron, MW-08 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Iron, MW-08 (mg/L)

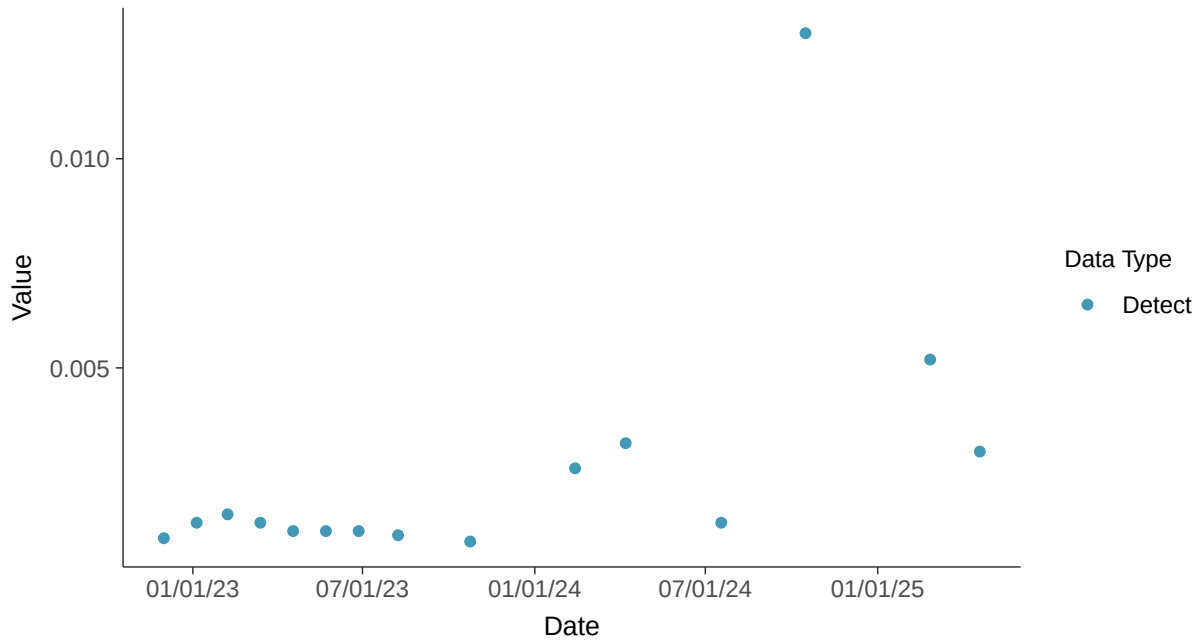


Part 115: Nickel, MW-08

ID: 18_1_5_119

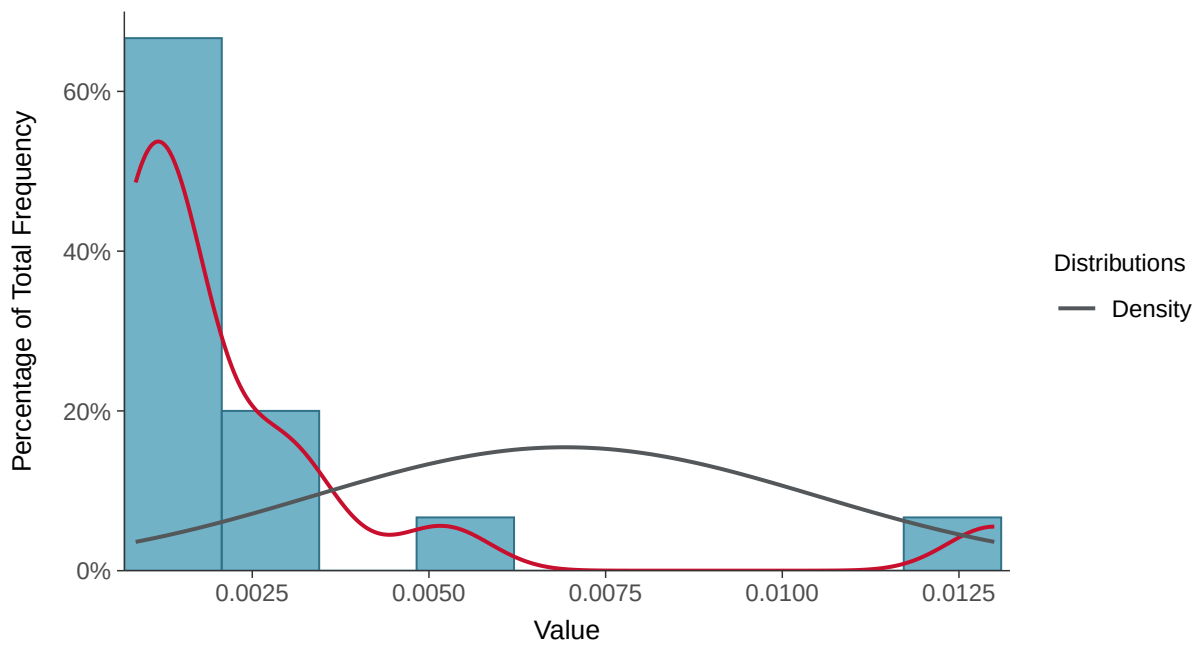
Scatter Plot

Nickel, MW-08 (mg/L)



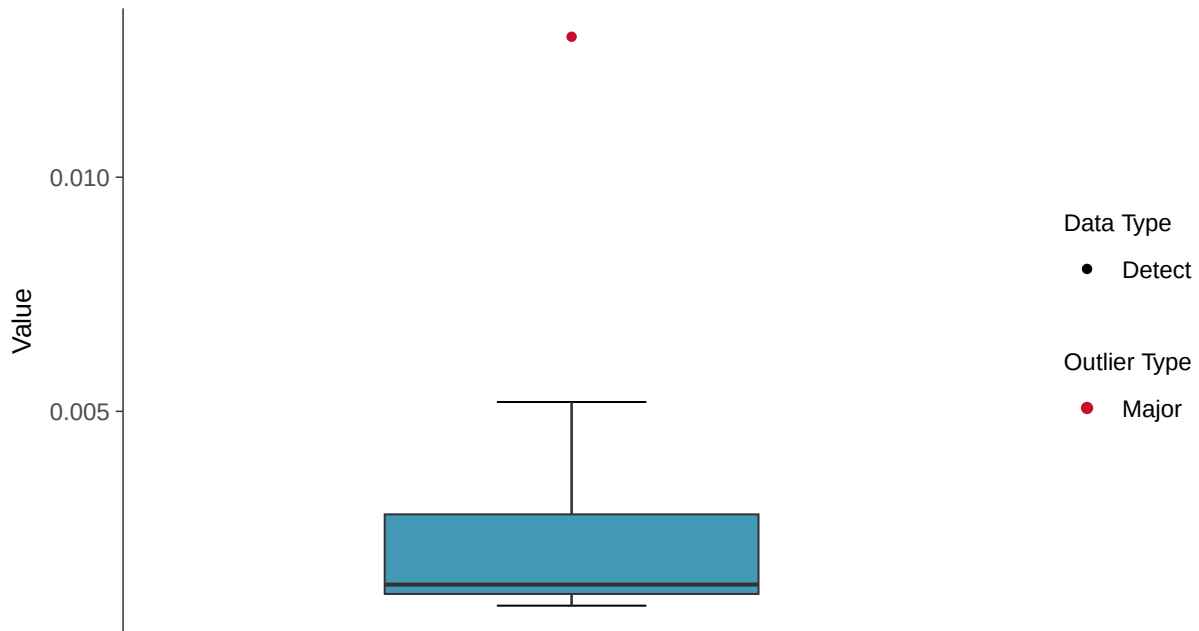
Histogram

Nickel, MW-08 (mg/L)



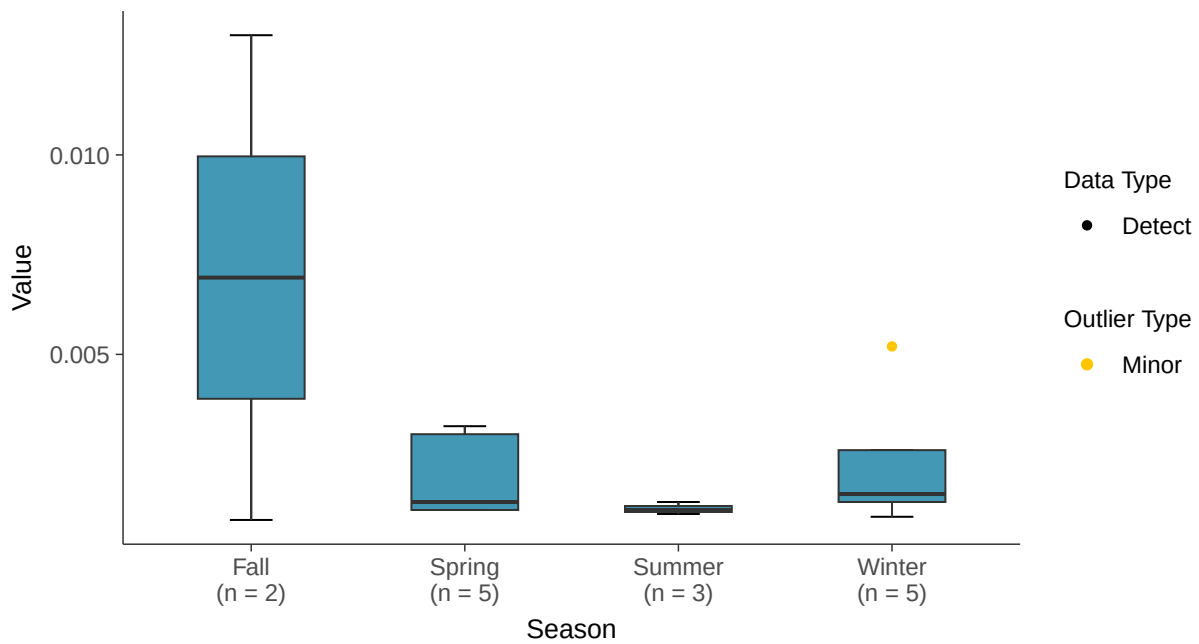
Boxplot

Nickel, MW-08 (mg/L)



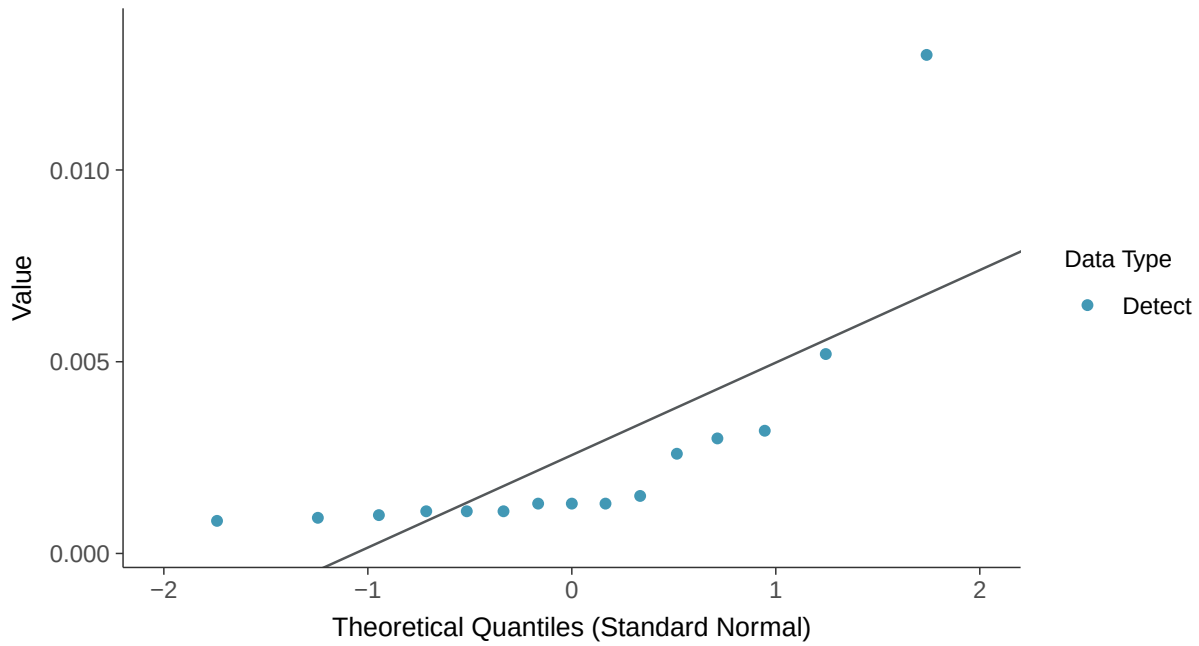
Boxplot by Season

Nickel, MW-08 (mg/L)



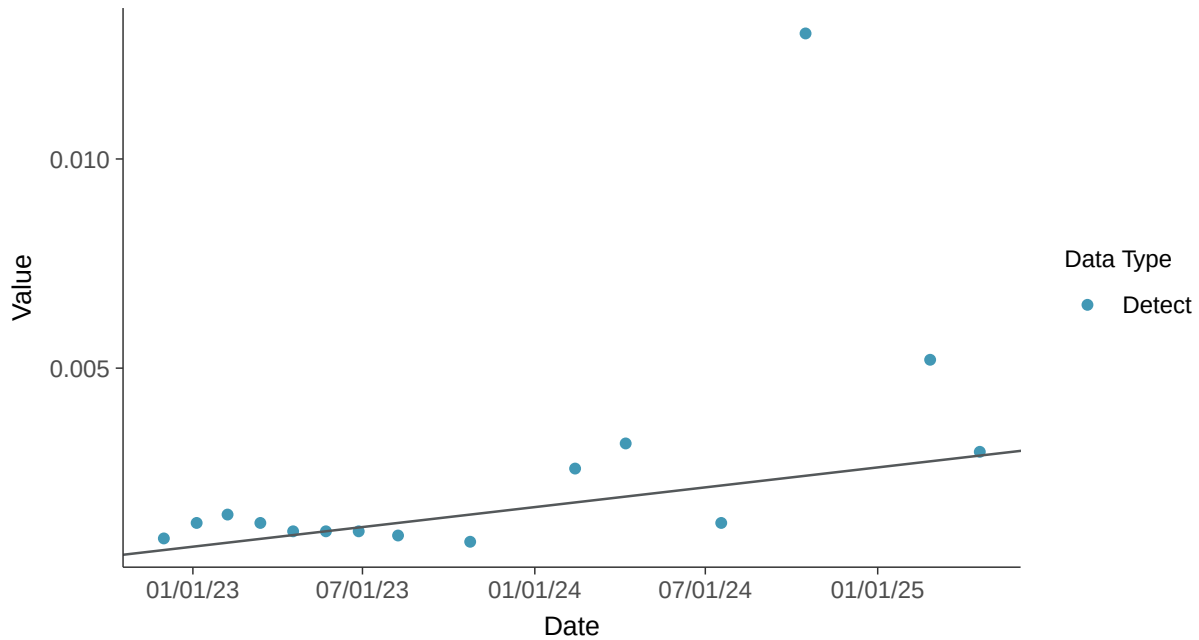
Normal Q-Q plot

Nickel, MW-08 (mg/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

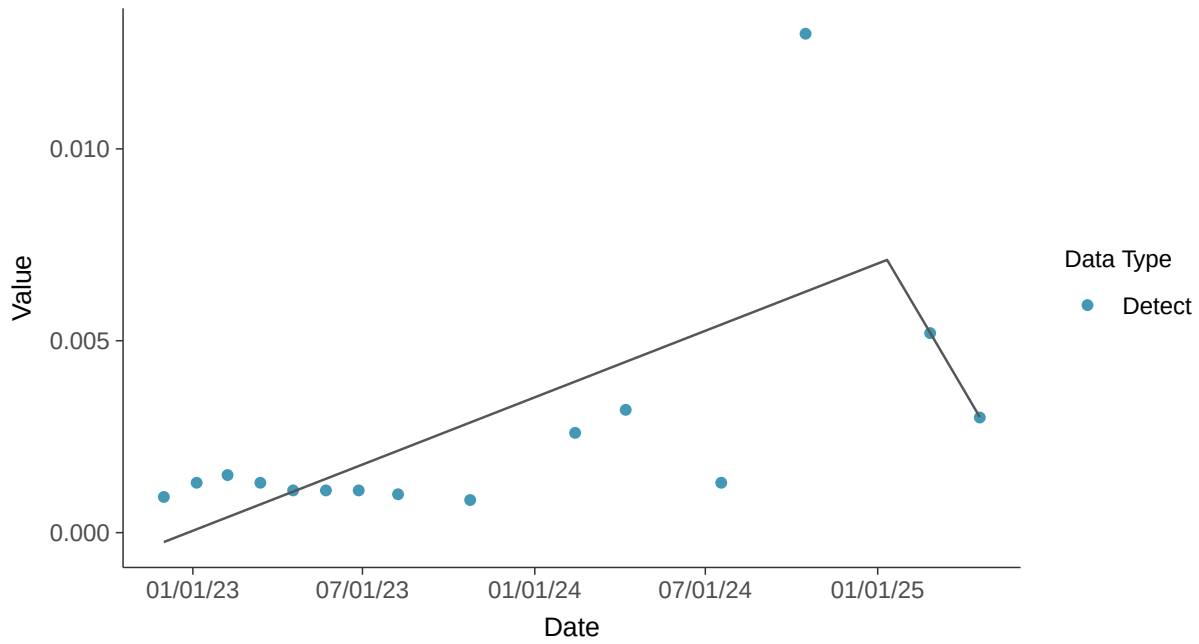
Nickel, MW-08 (mg/L)





Trend Regression: Piecewise Linear-Linear

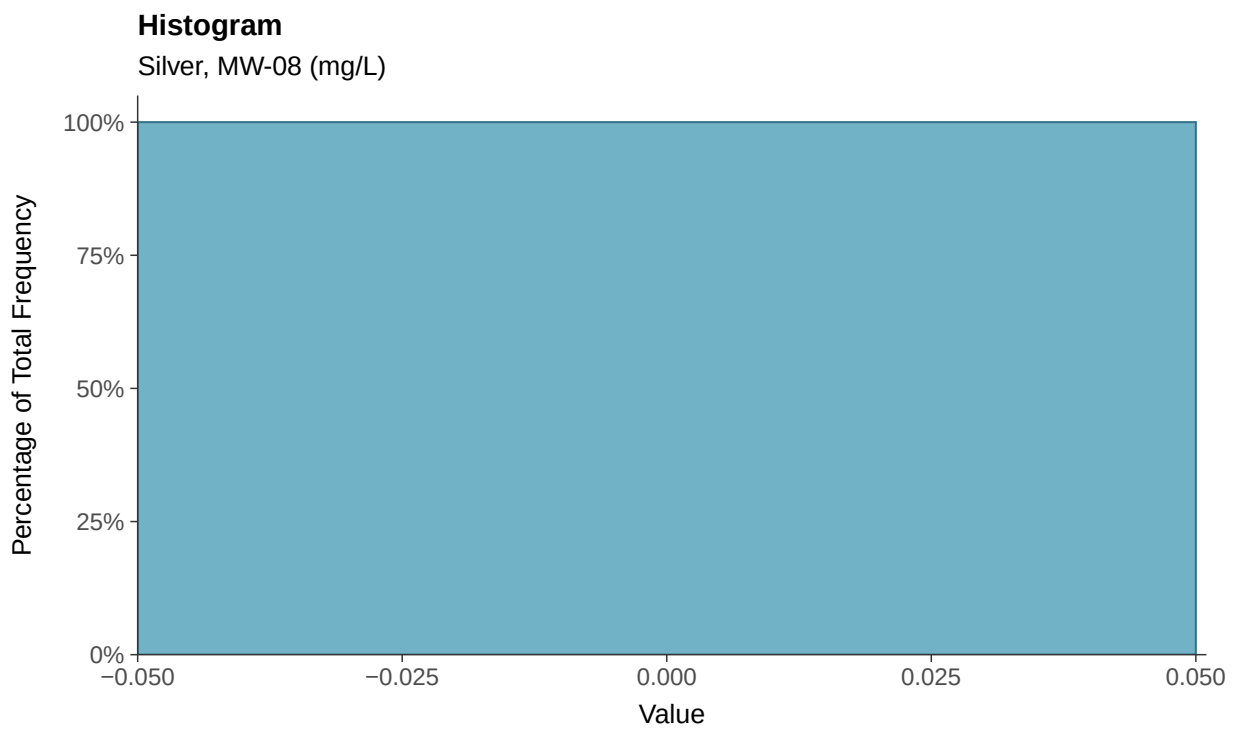
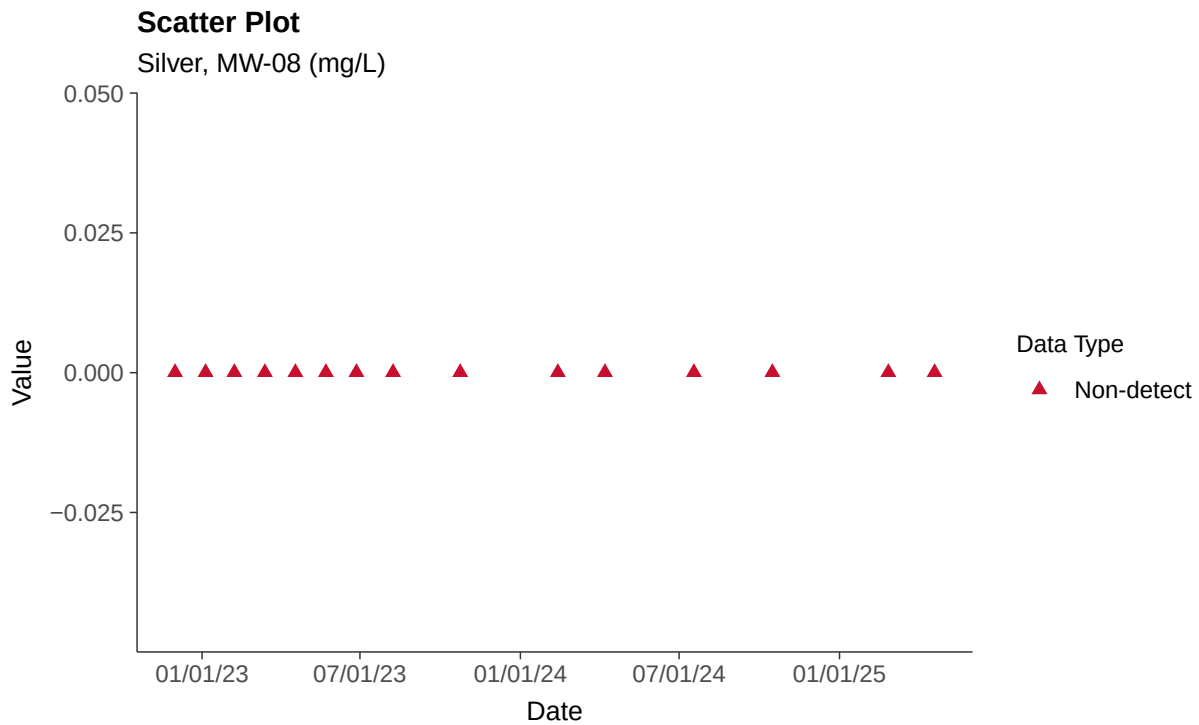
Nickel, MW-08 (mg/L)





Part 115: Silver, MW-08

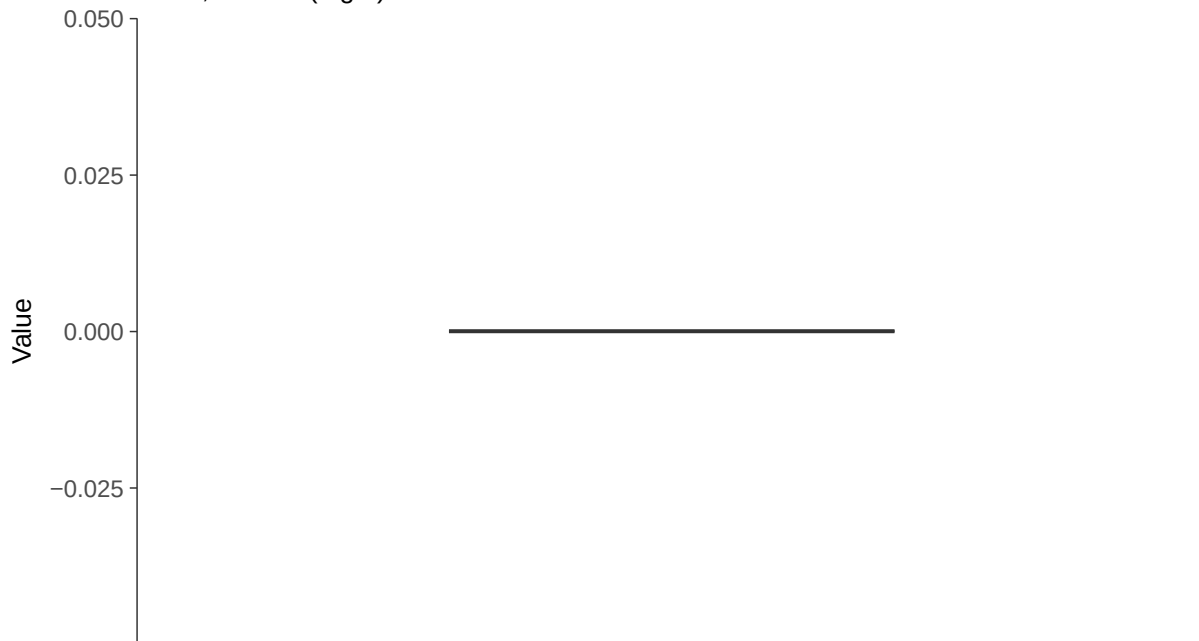
ID: 18_1_5_123





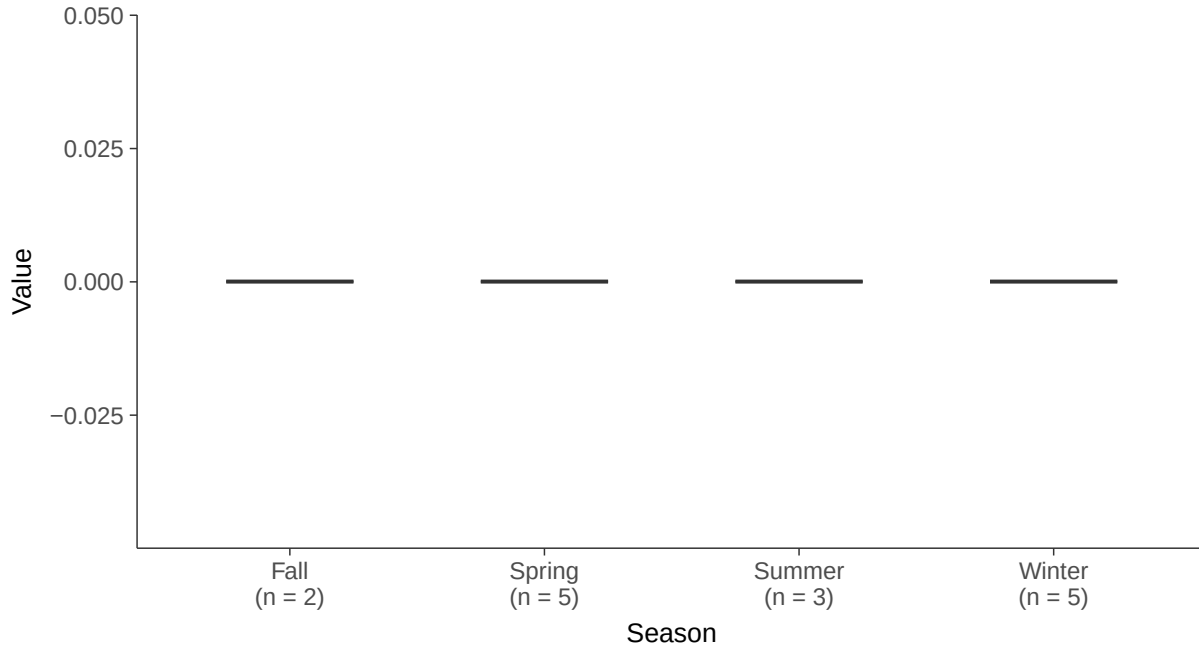
Boxplot

Silver, MW-08 (mg/L)



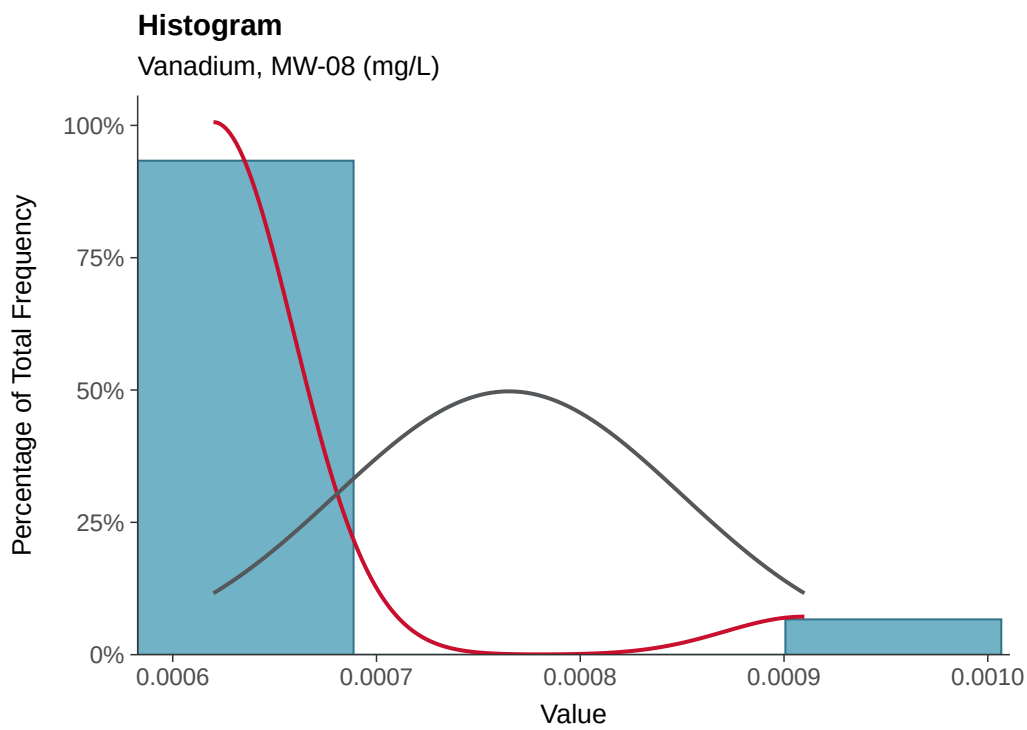
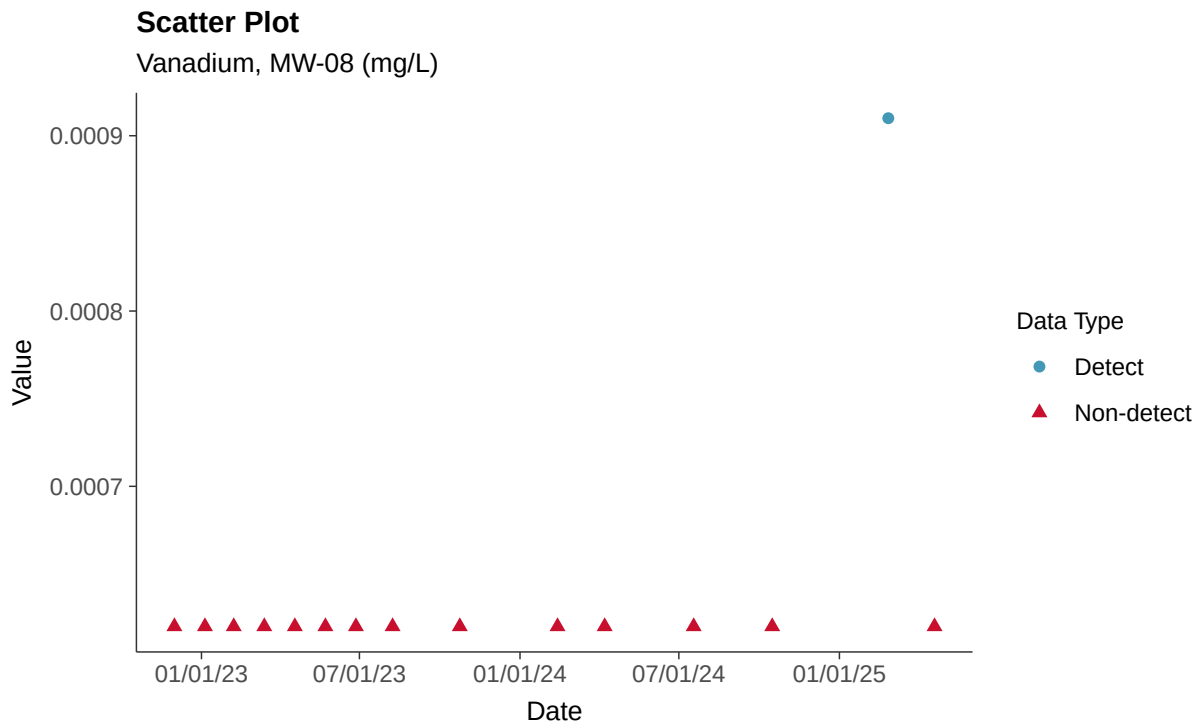
Boxplot by Season

Silver, MW-08 (mg/L)



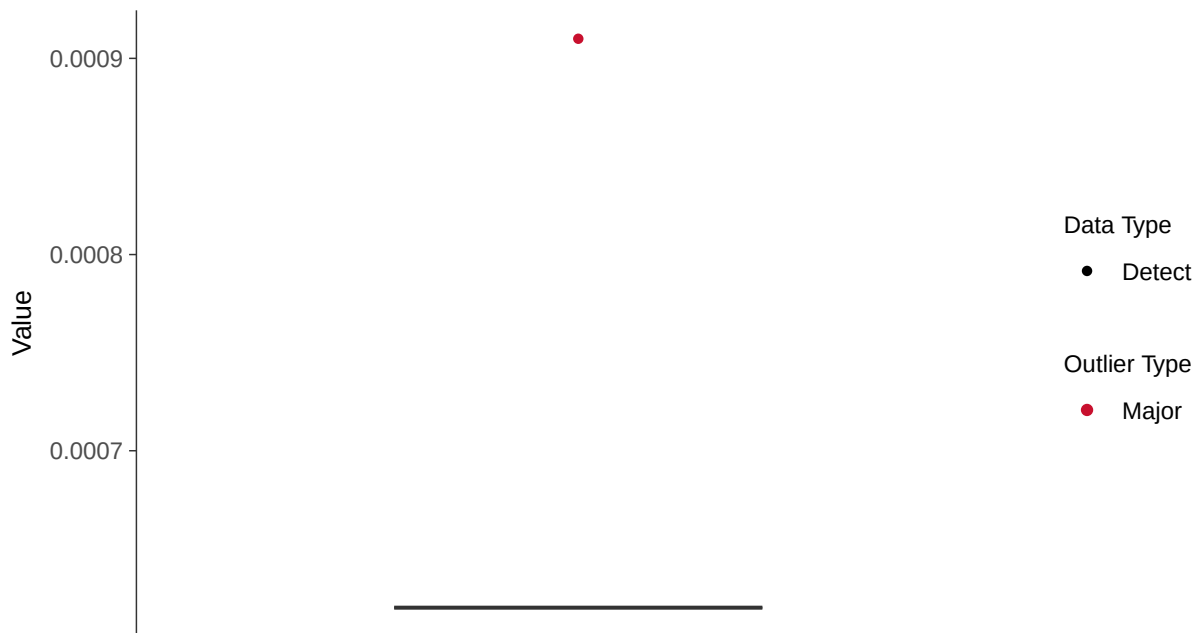
Part 115: Vanadium, MW-08

ID: 18_1_5_128



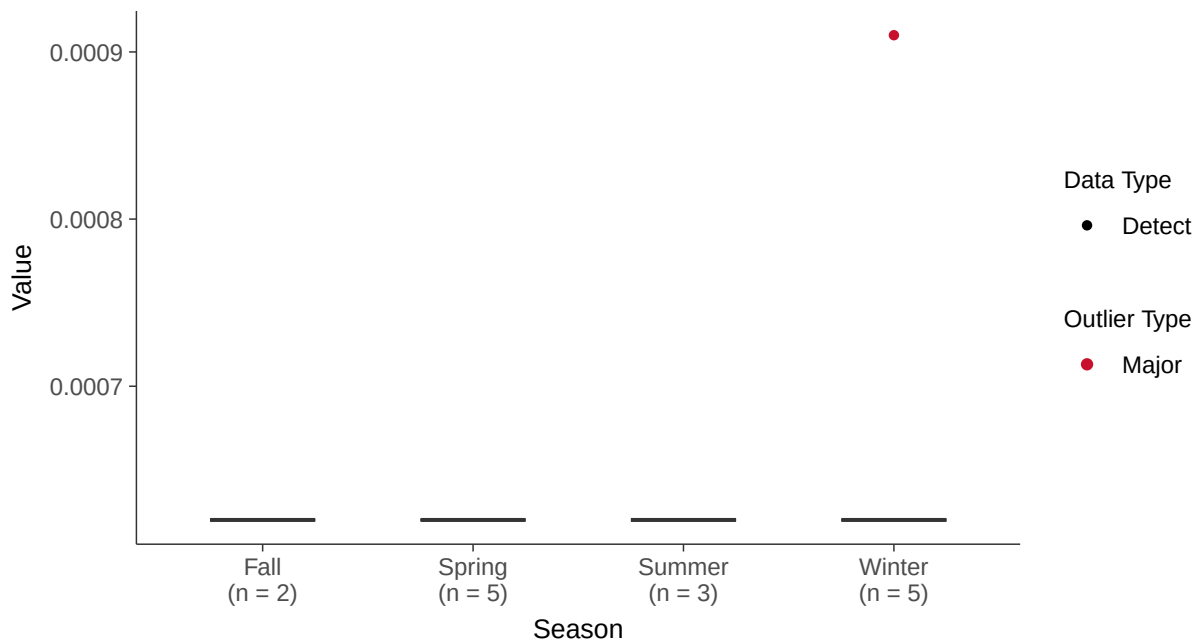
Boxplot

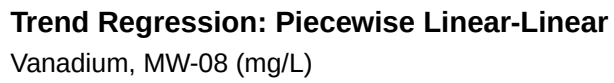
Vanadium, MW-08 (mg/L)



Boxplot by Season

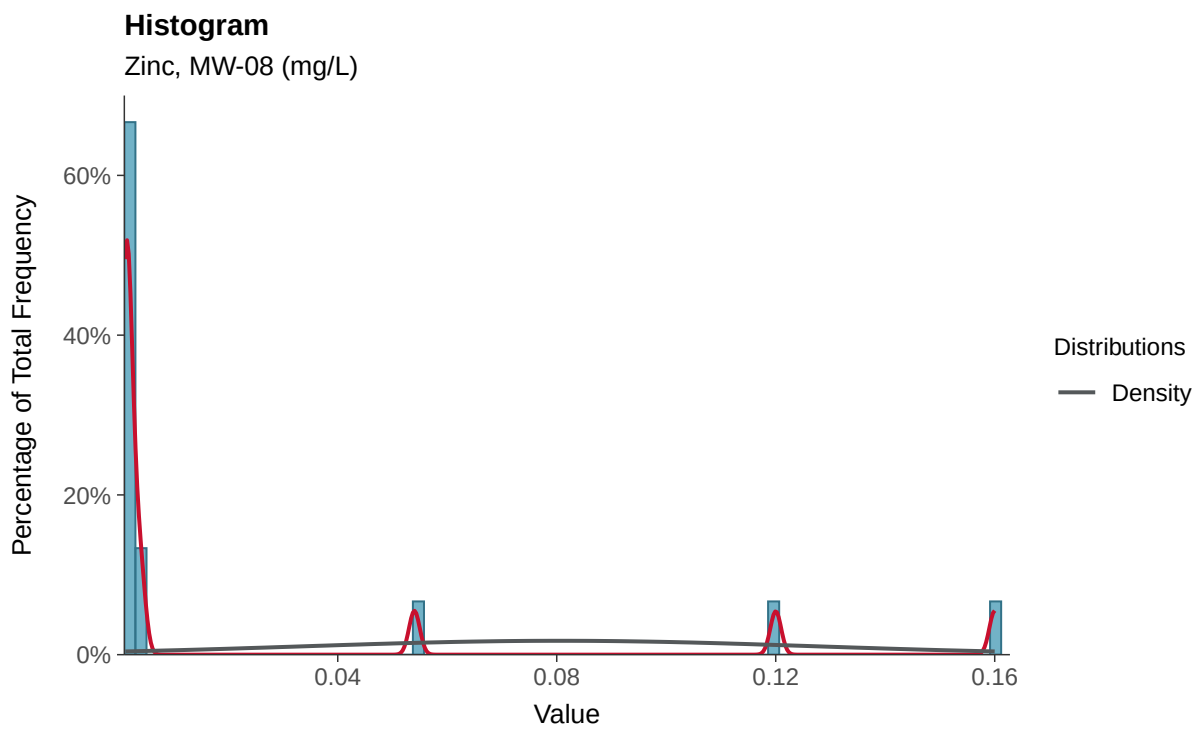
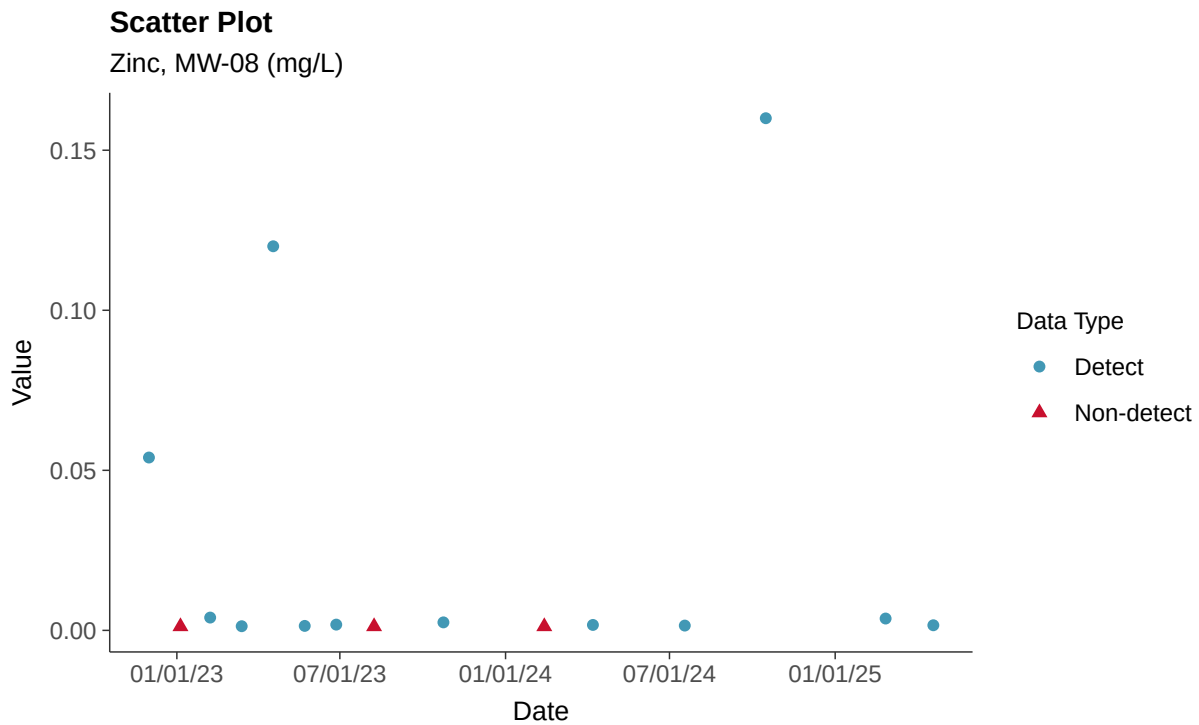
Vanadium, MW-08 (mg/L)

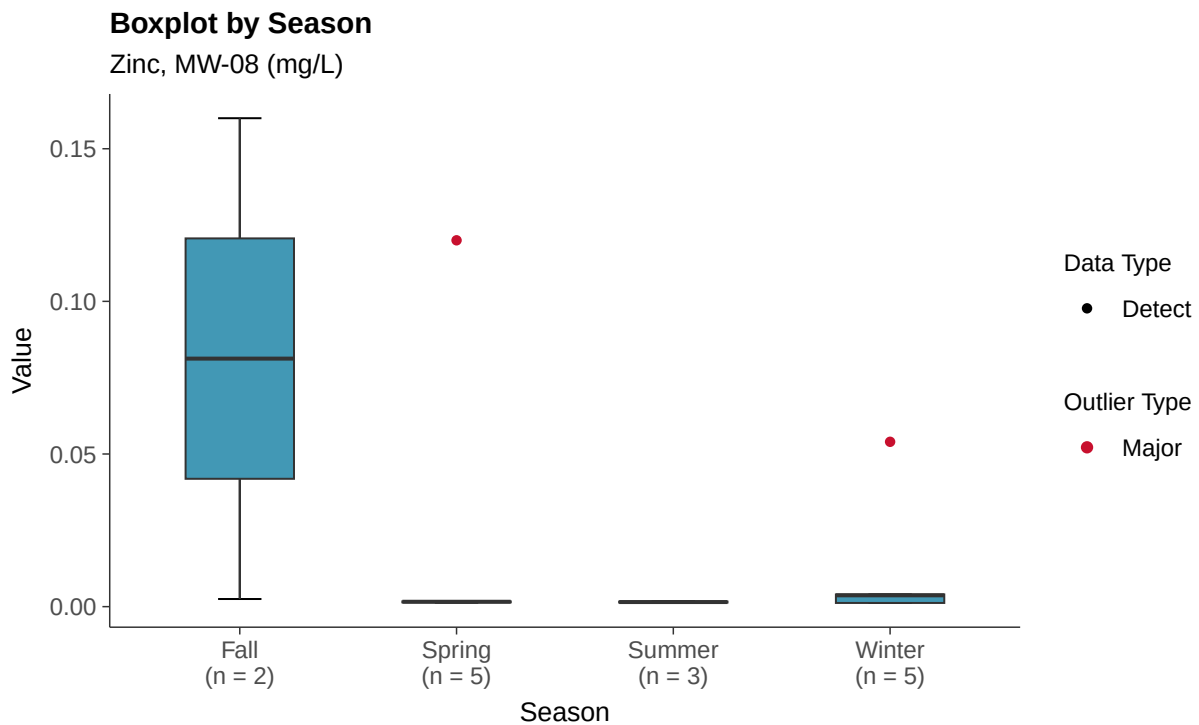
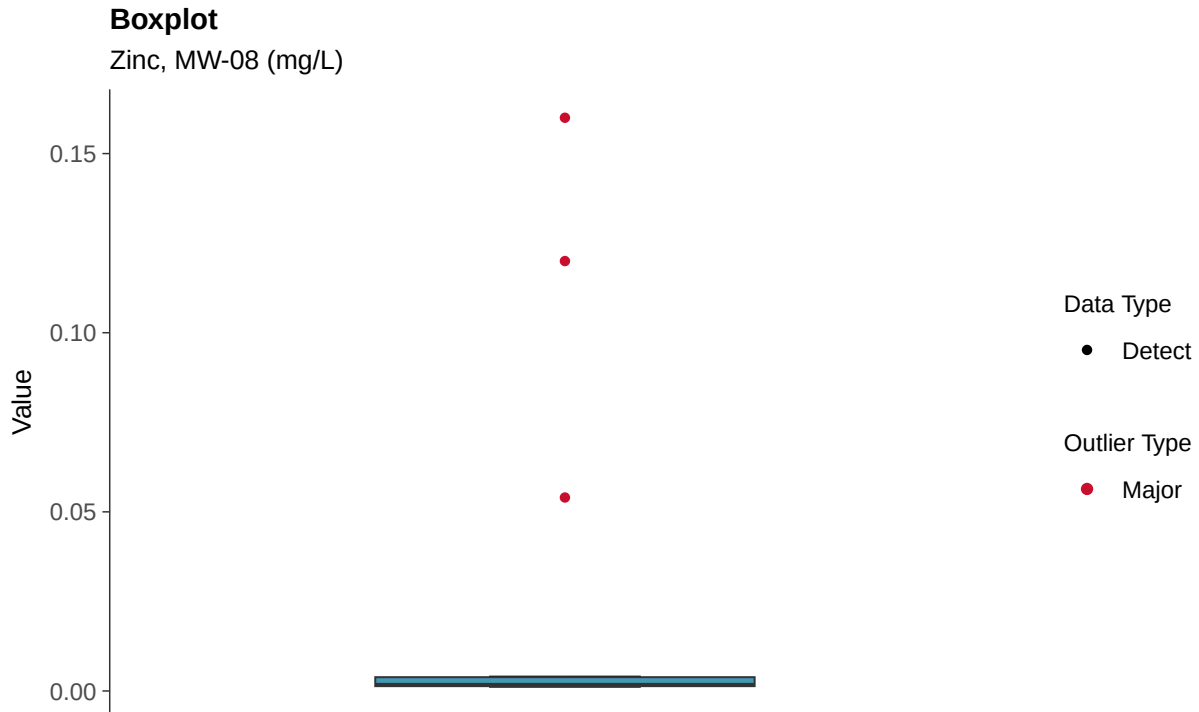




Part 115: Zinc, MW-08

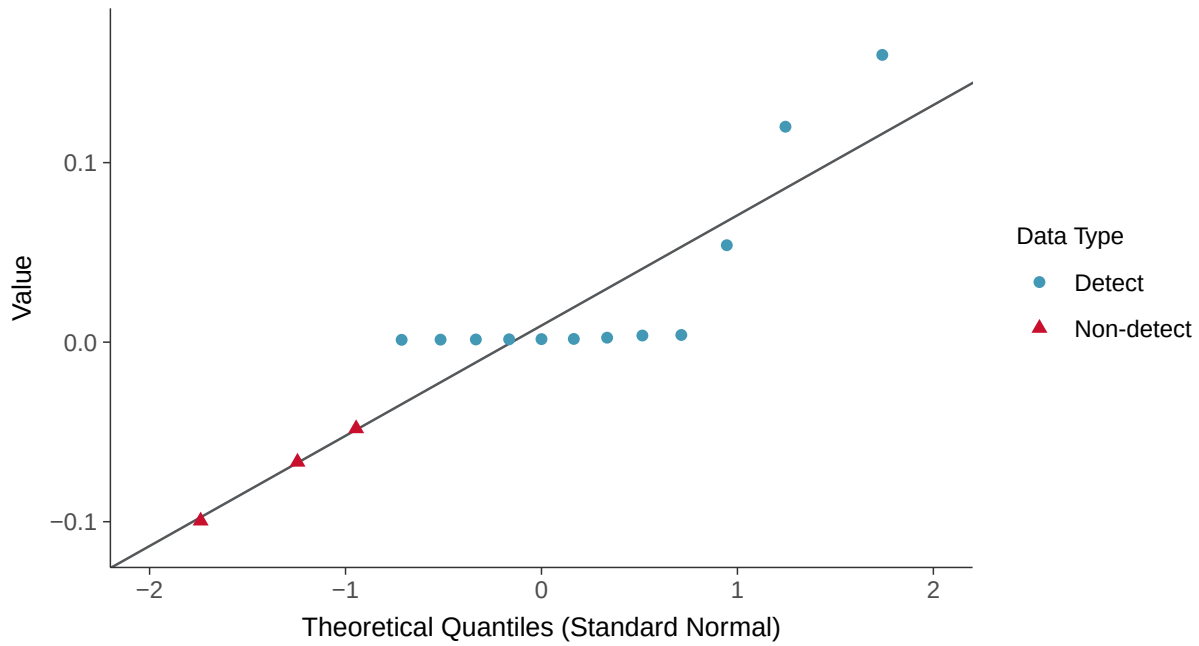
ID: 18_1_5_129





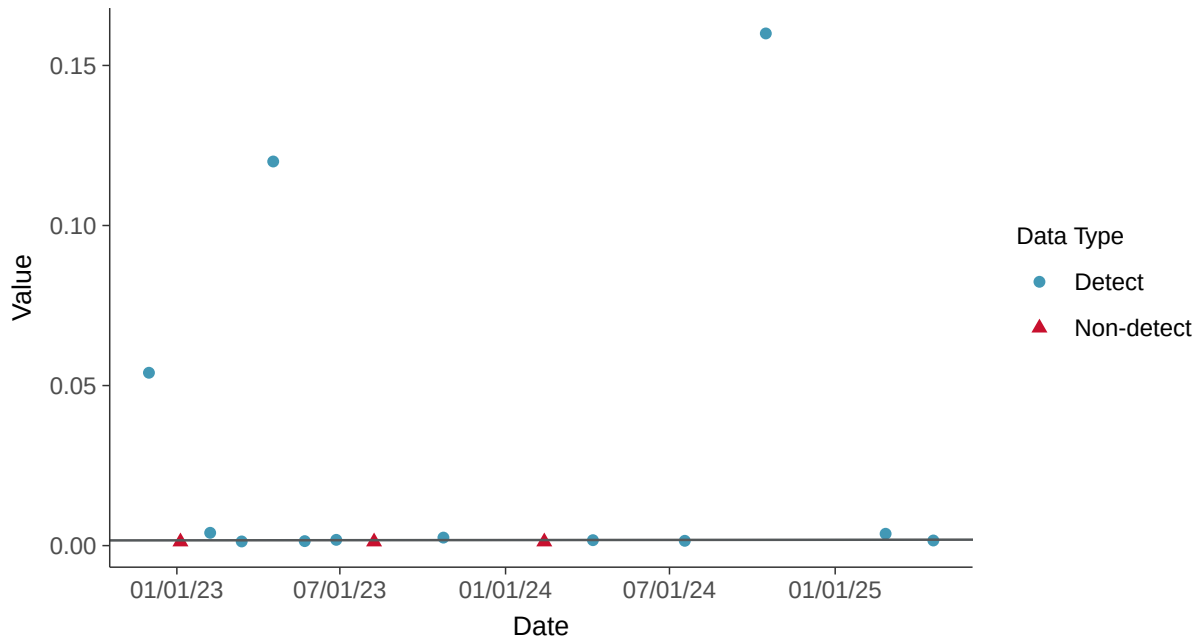
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-08 (mg/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

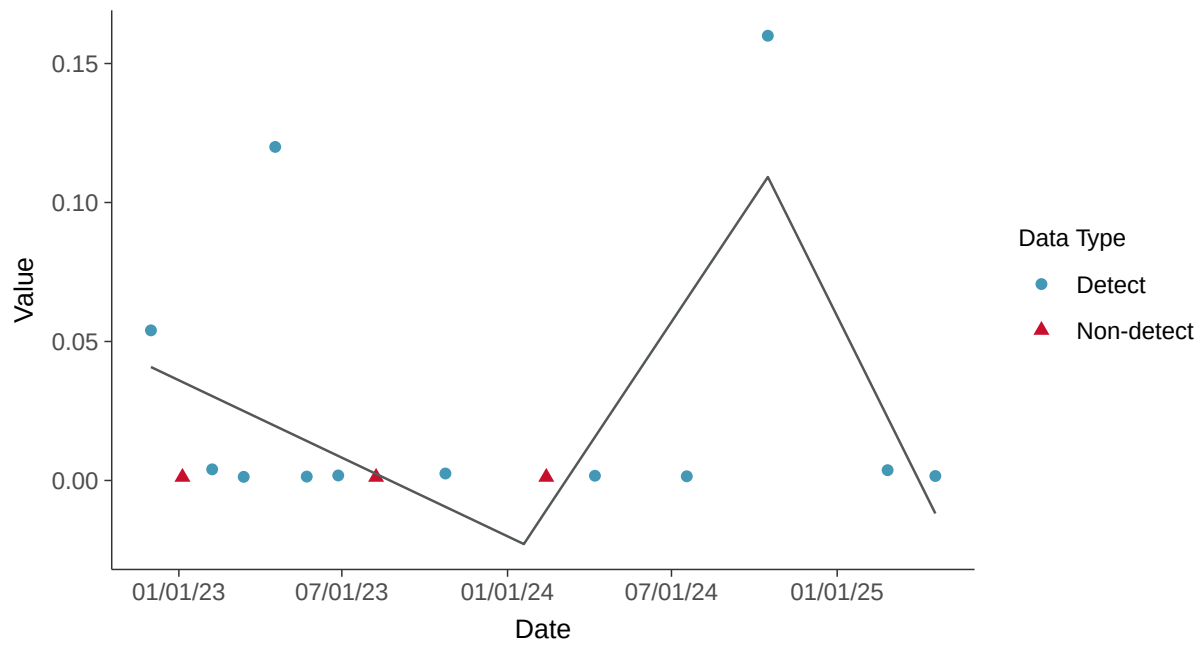
Zinc, MW-08 (mg/L)





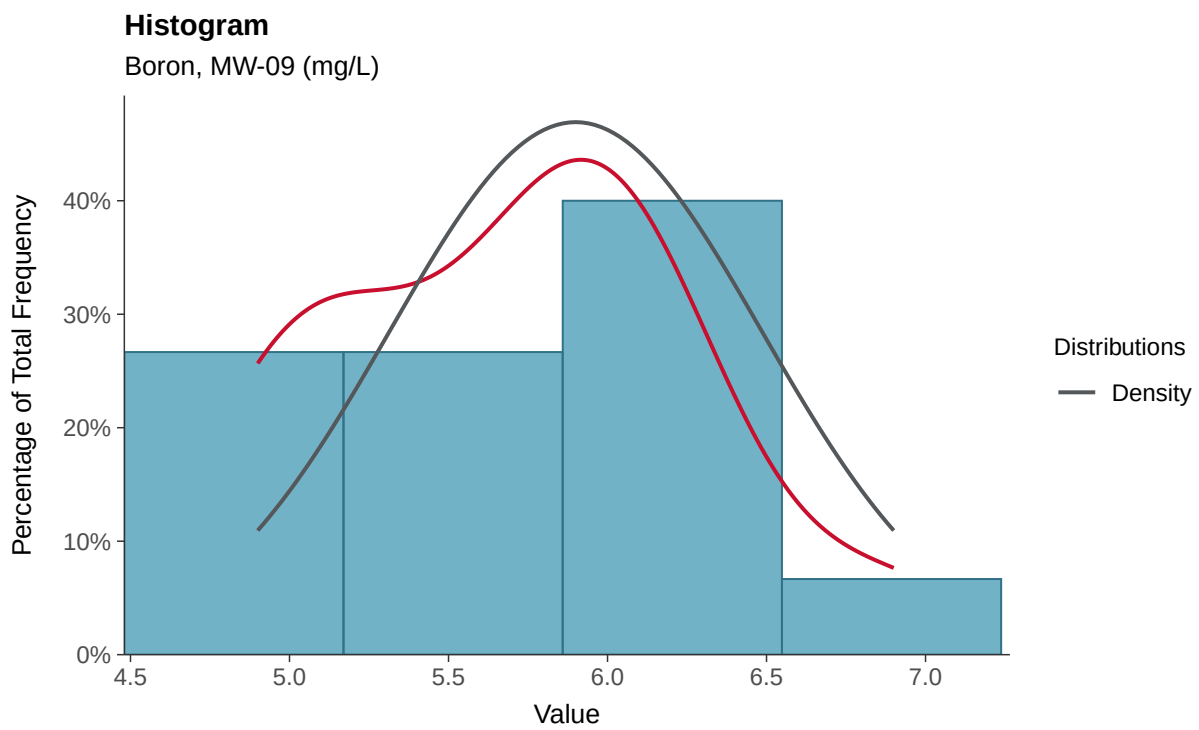
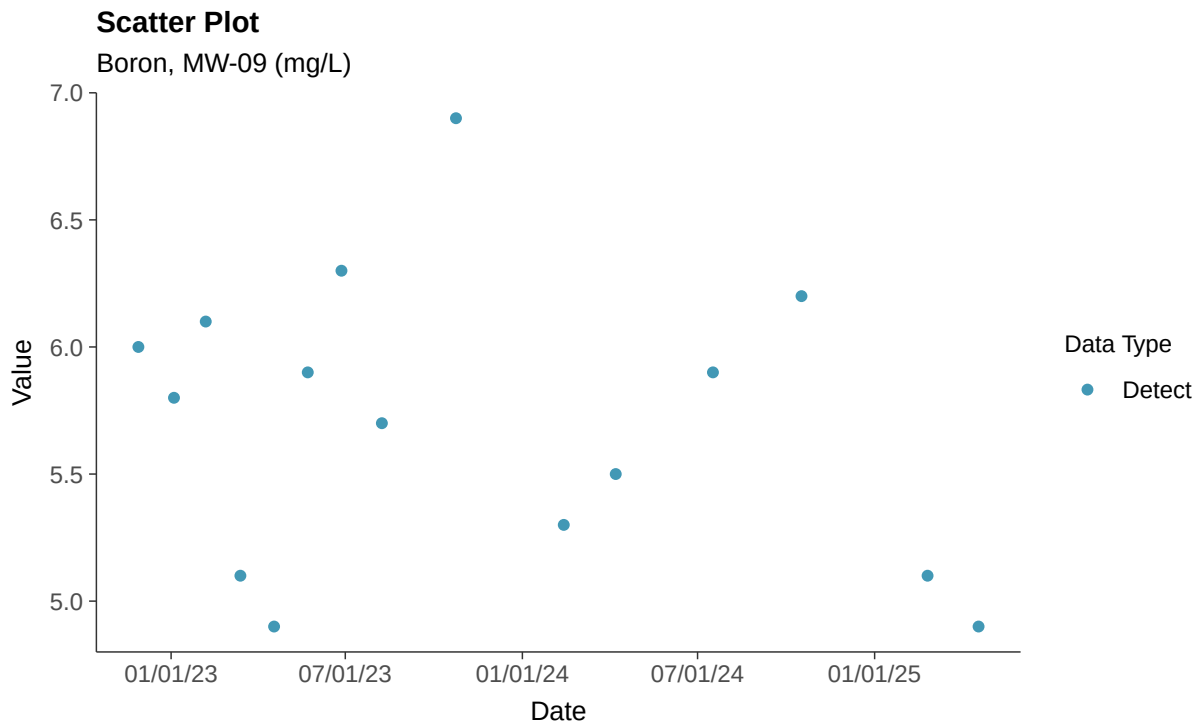
Trend Regression: Piecewise Linear-Linear-Linear

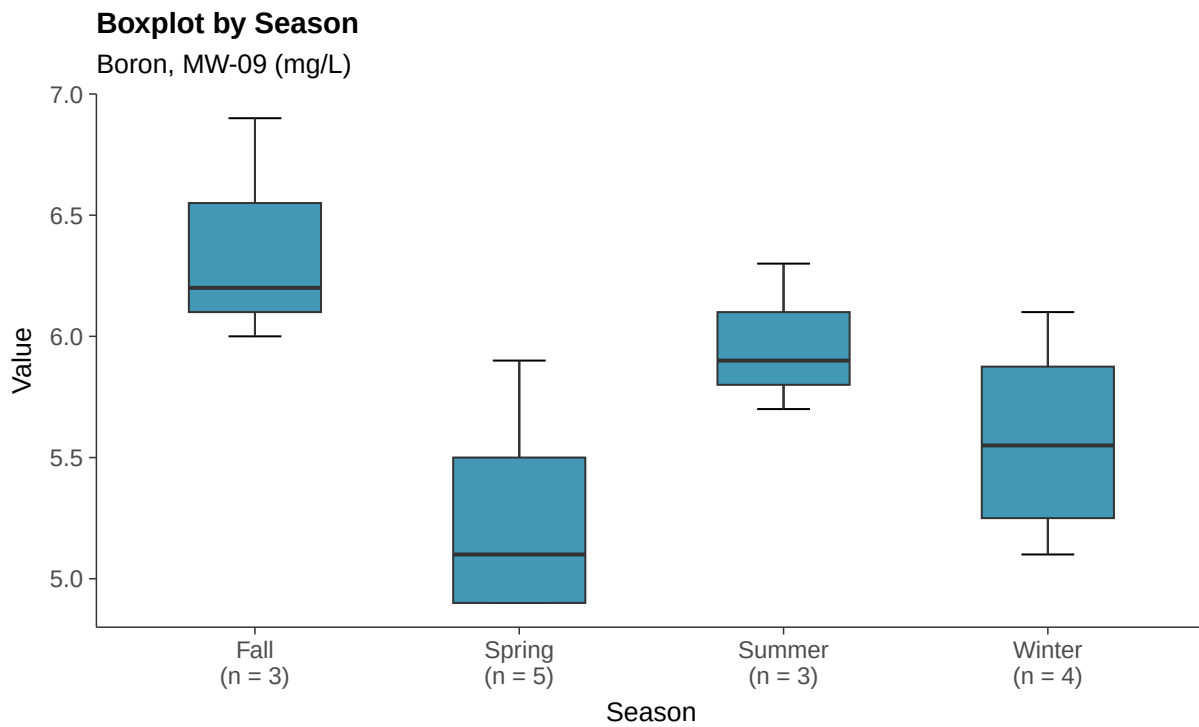
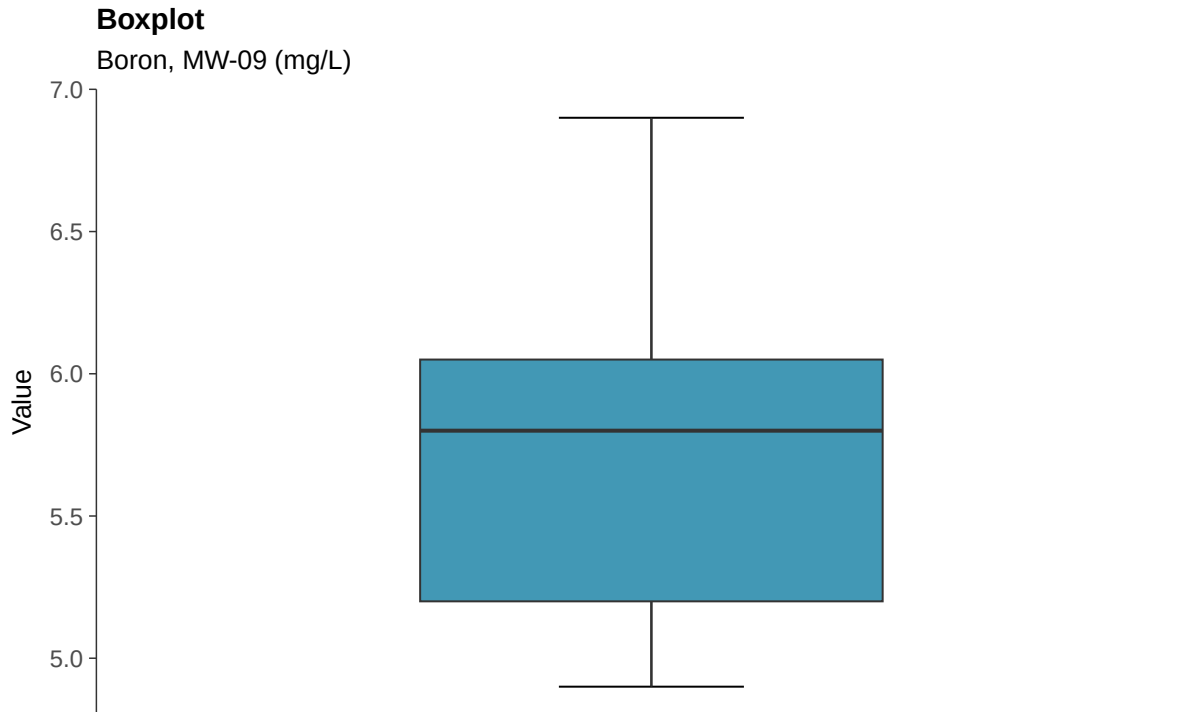
Zinc, MW-08 (mg/L)



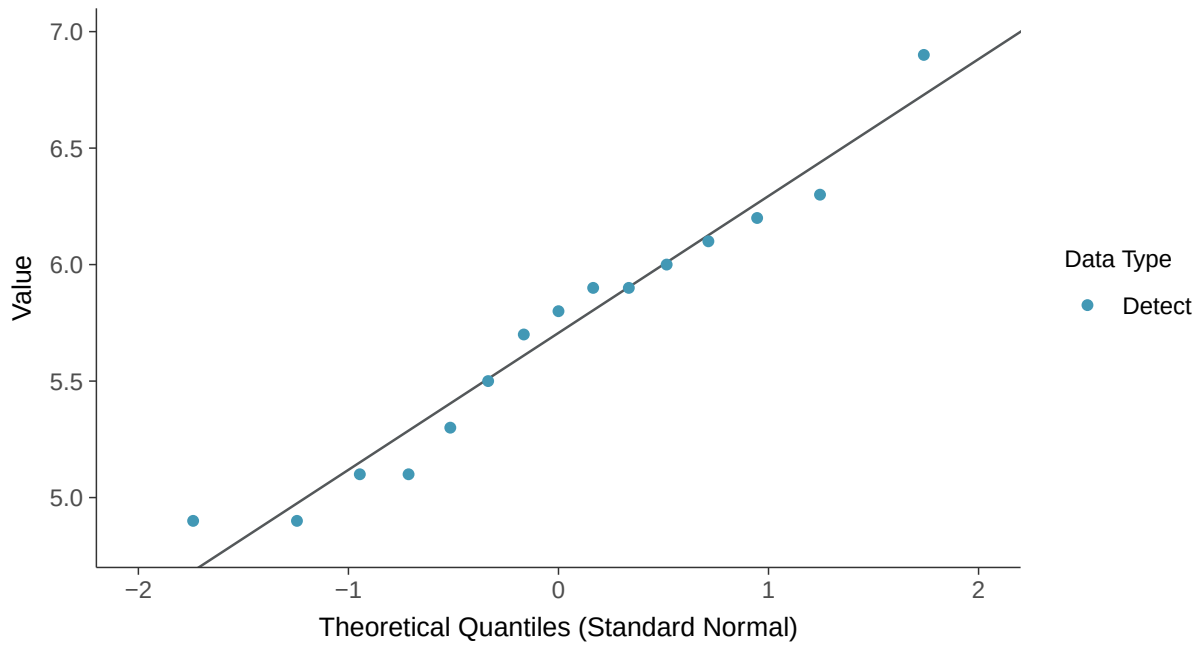
Appendix III: Boron, MW-09

ID: 19_2_3_105

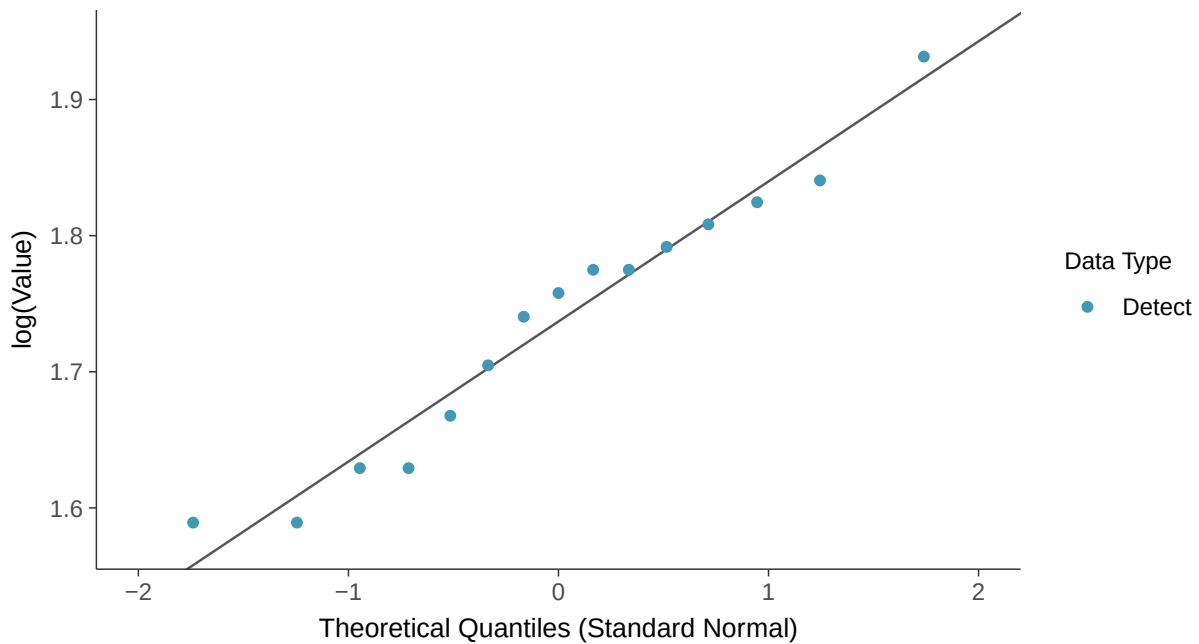




Normal Q-Q plot
Boron, MW-09 (mg/L)

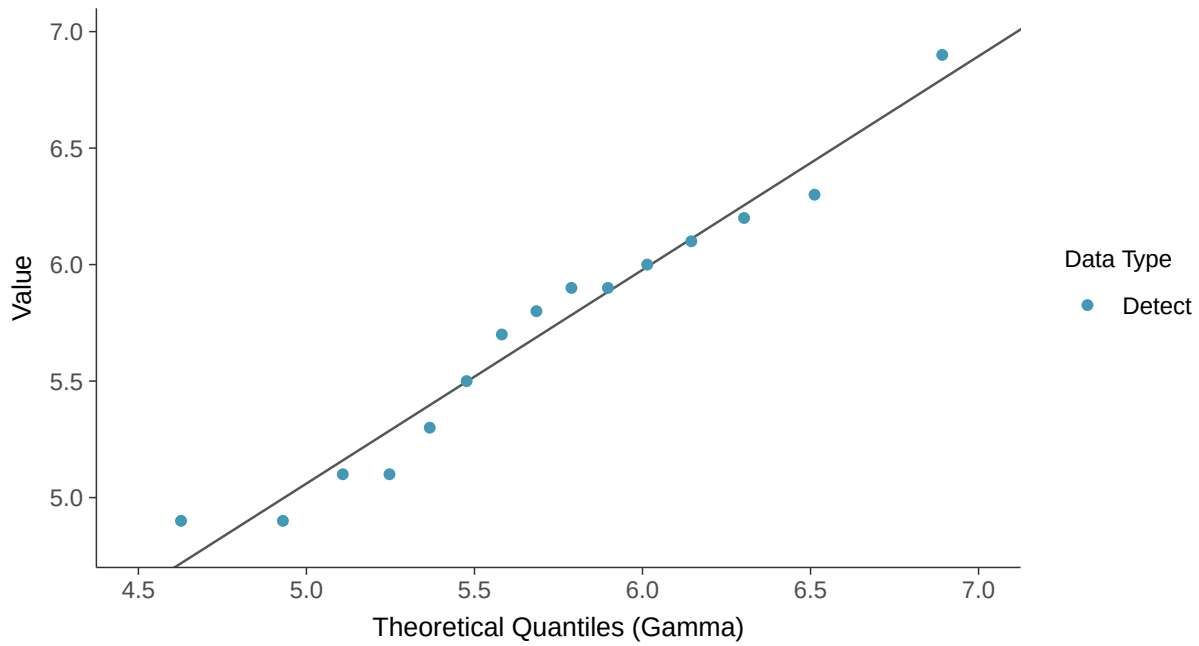


Lognormal Q-Q plot
Boron, MW-09 (mg/L)



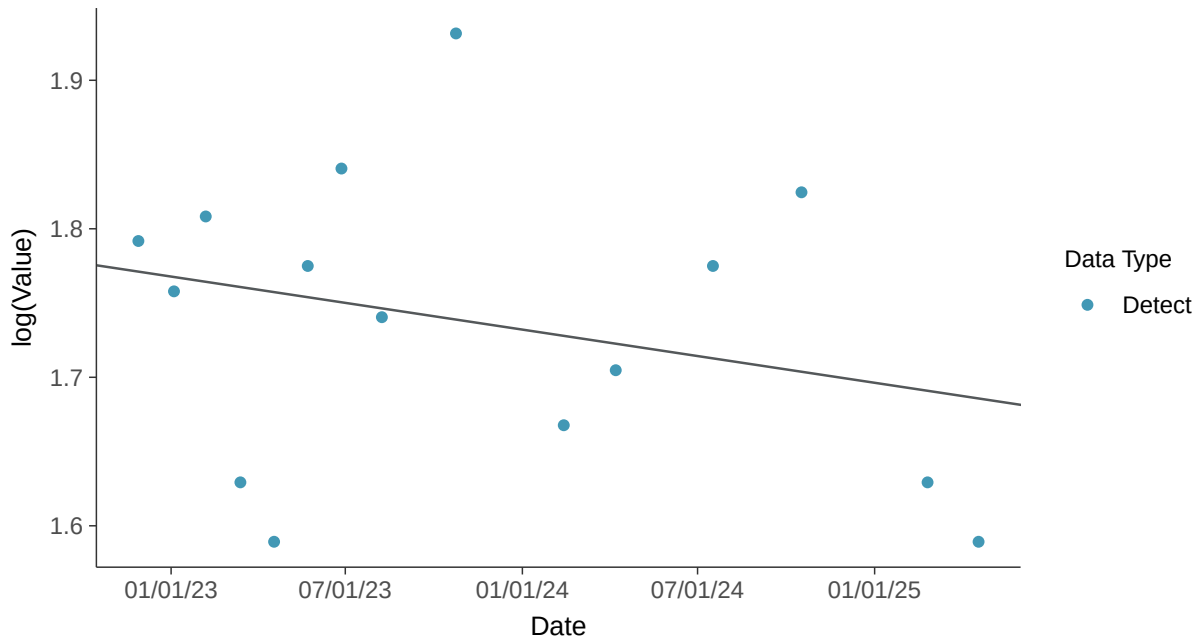
Gamma Q-Q plot

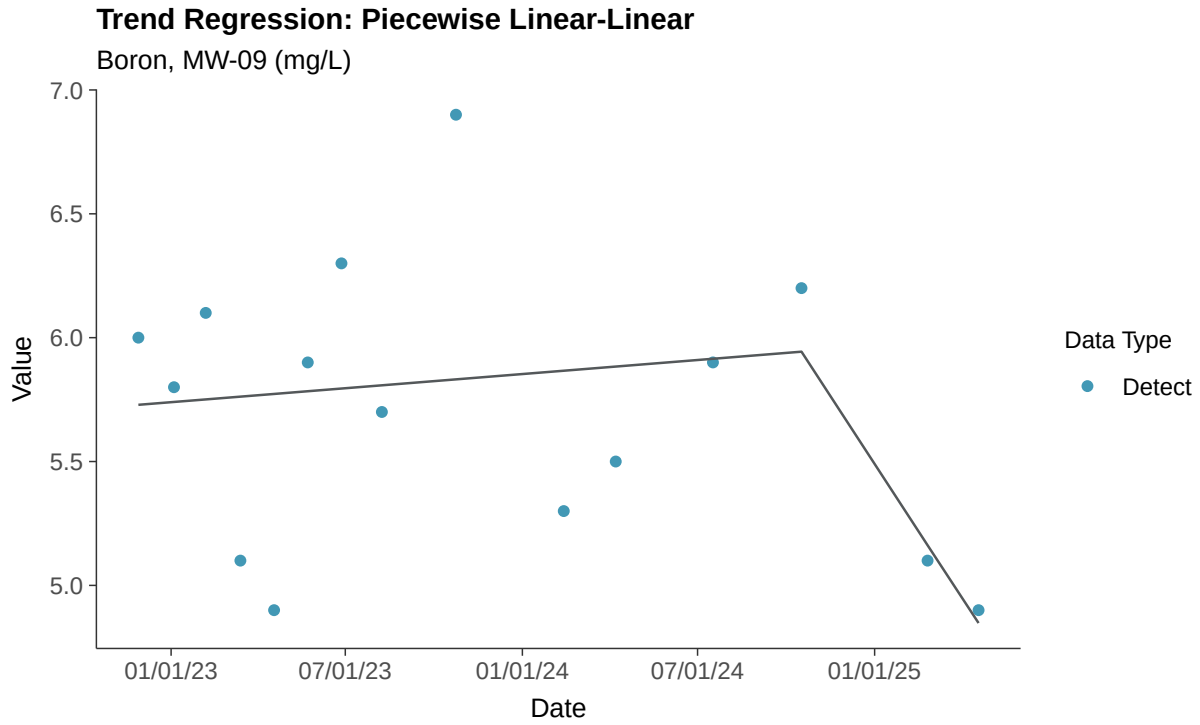
Boron, MW-09 (mg/L)



Trend Regression: Lognormal MLE

Boron, MW-09 (mg/L)



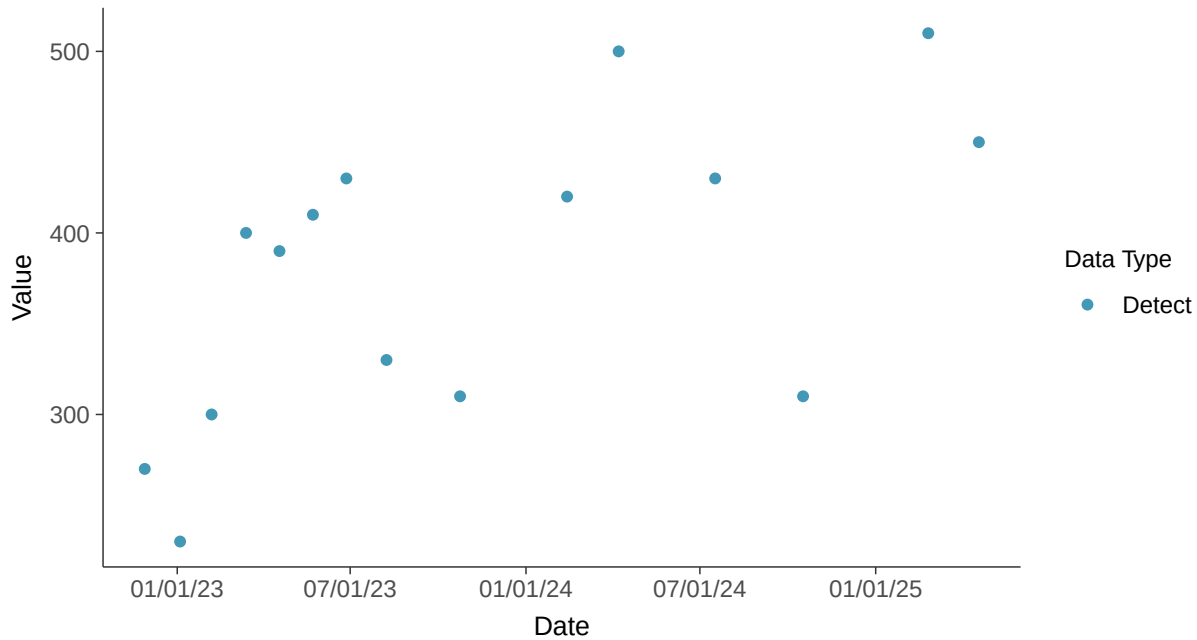


Appendix III: Calcium, MW-09

ID: 19_2_3_107

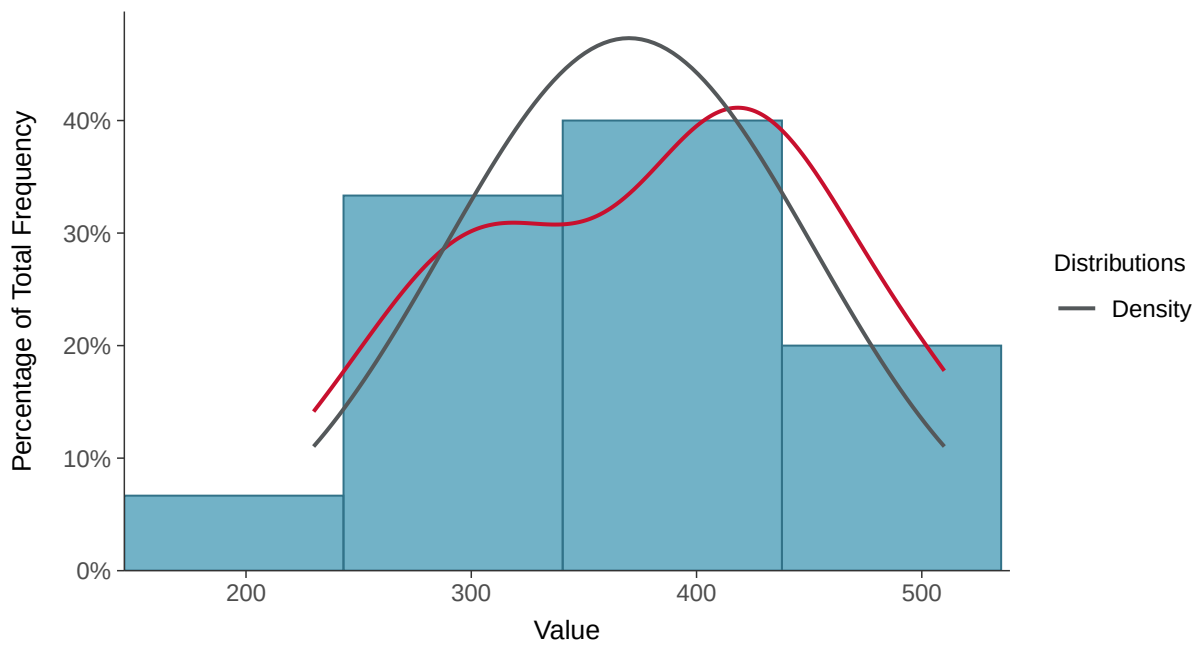
Scatter Plot

Calcium, MW-09 (mg/L)



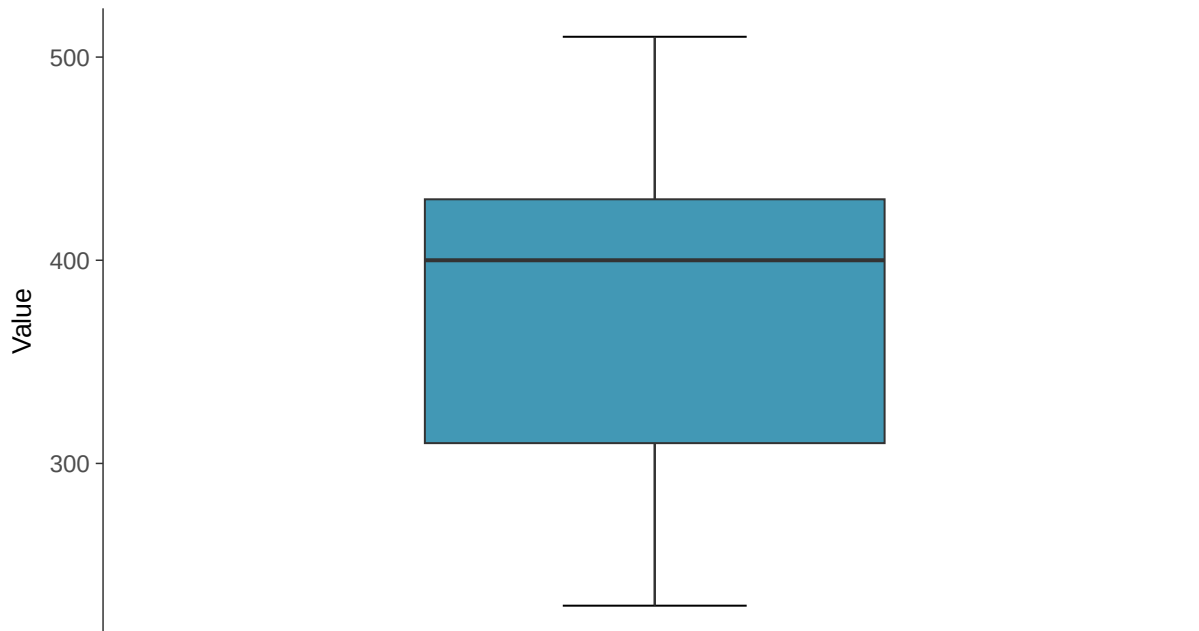
Histogram

Calcium, MW-09 (mg/L)



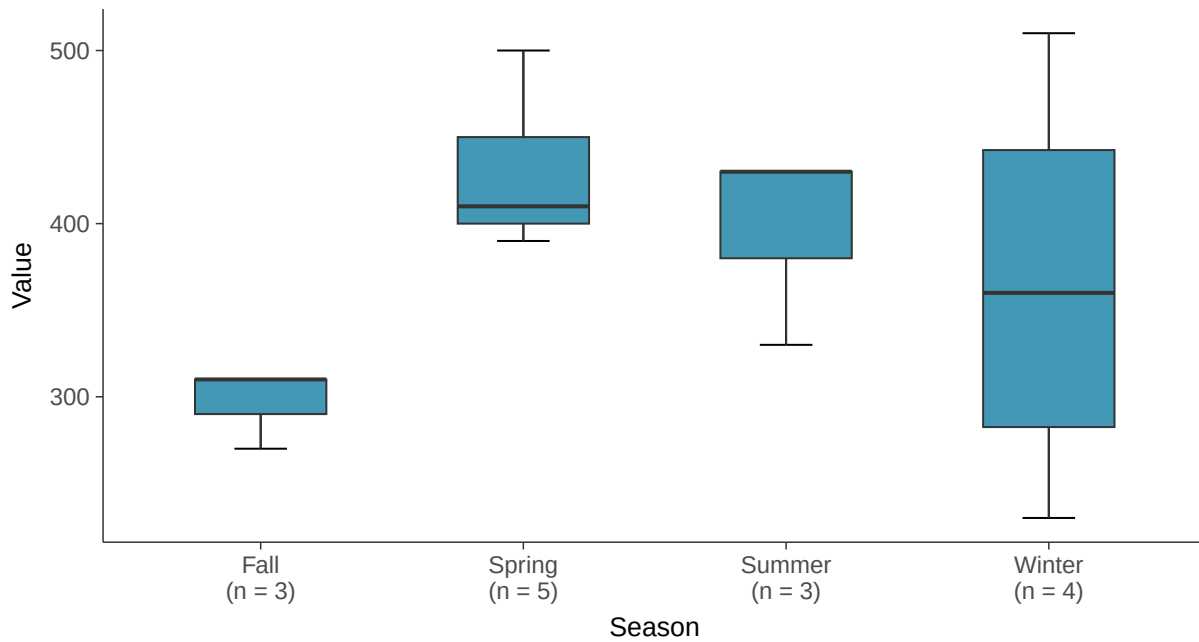
Boxplot

Calcium, MW-09 (mg/L)



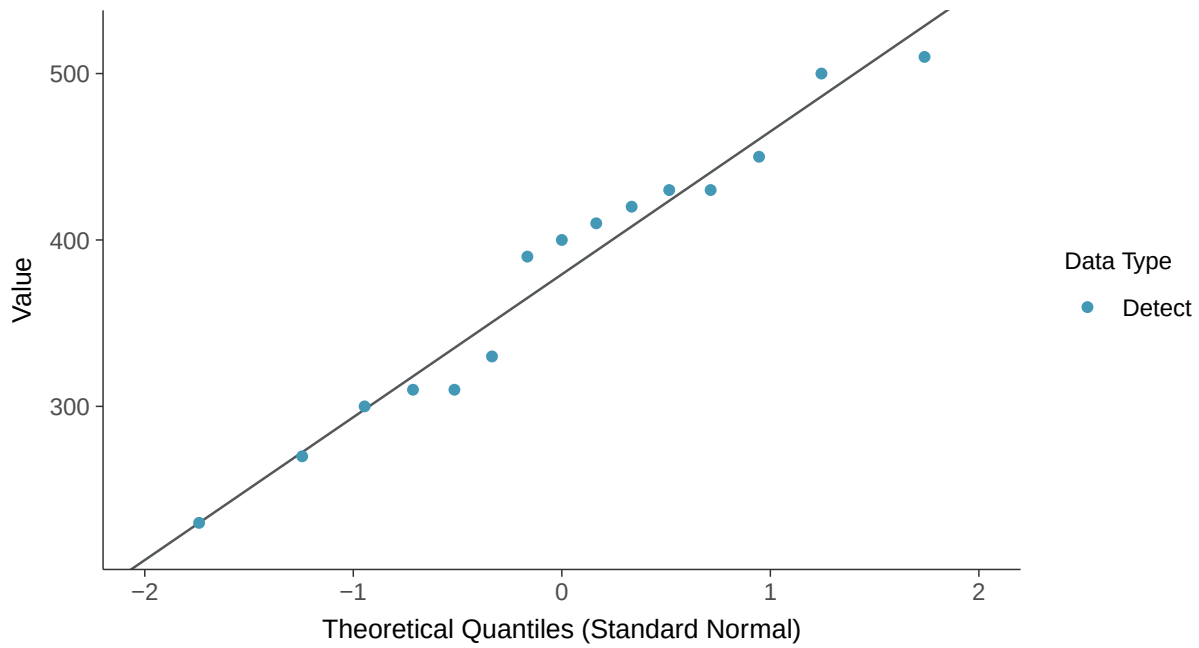
Boxplot by Season

Calcium, MW-09 (mg/L)



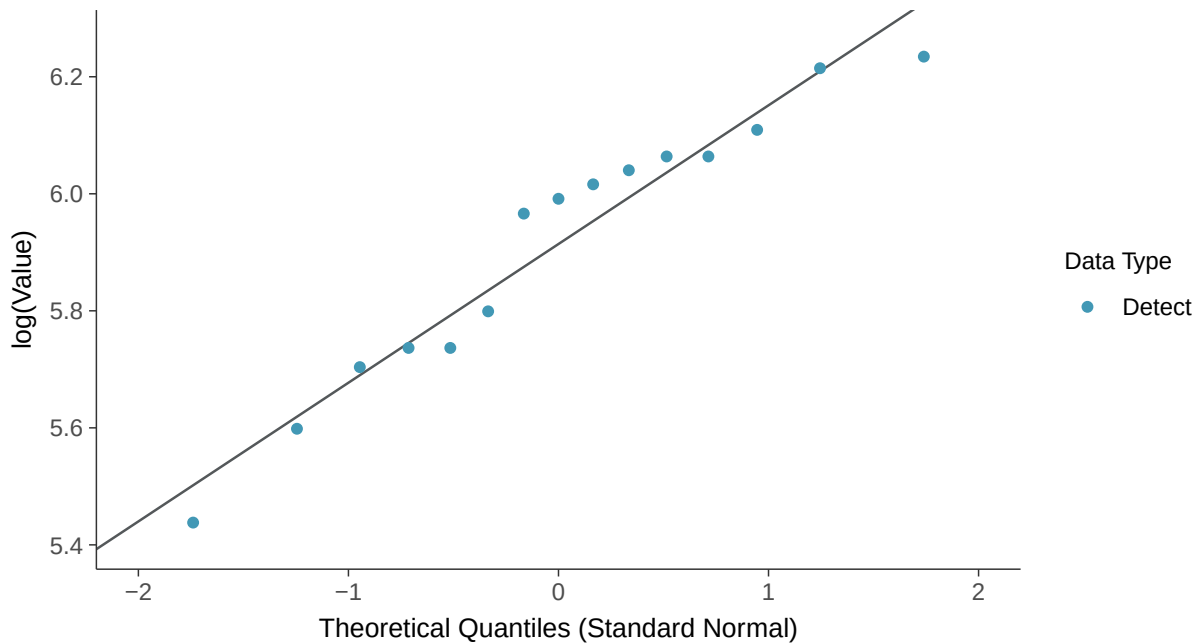
Normal Q-Q plot

Calcium, MW-09 (mg/L)



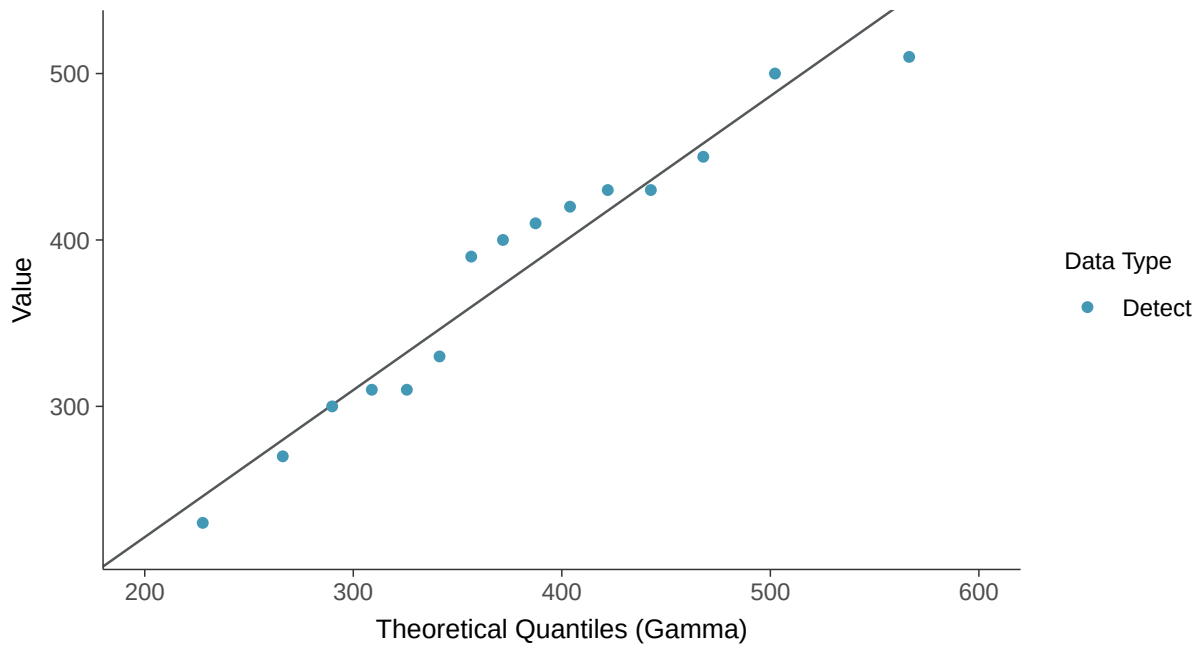
Lognormal Q-Q plot

Calcium, MW-09 (mg/L)



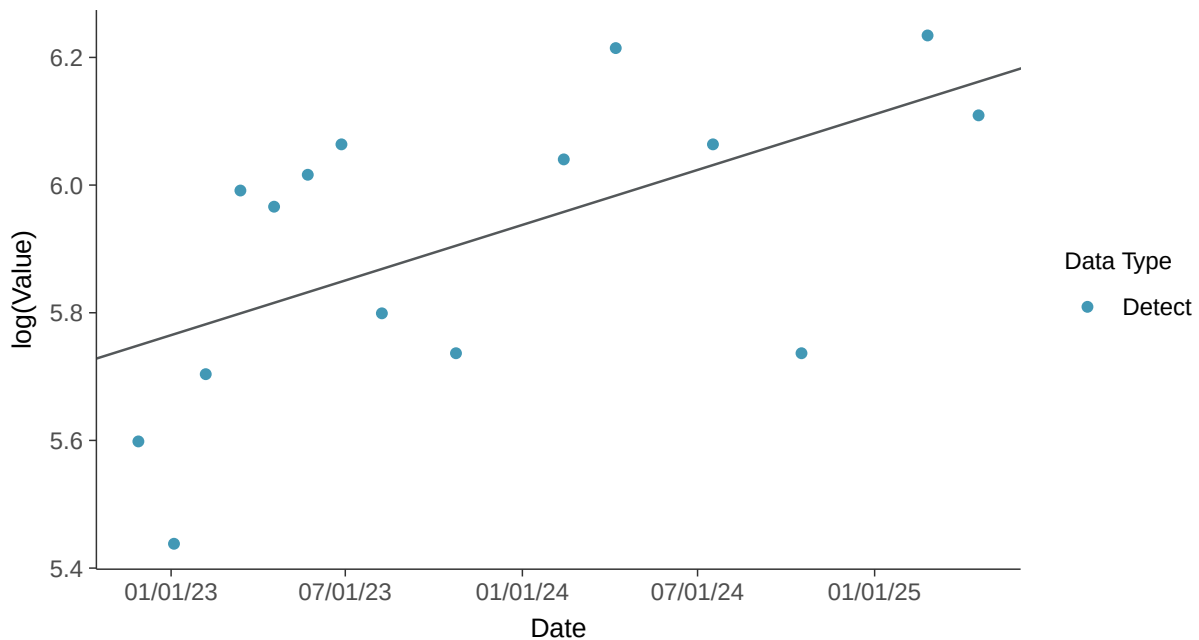
Gamma Q-Q plot

Calcium, MW-09 (mg/L)



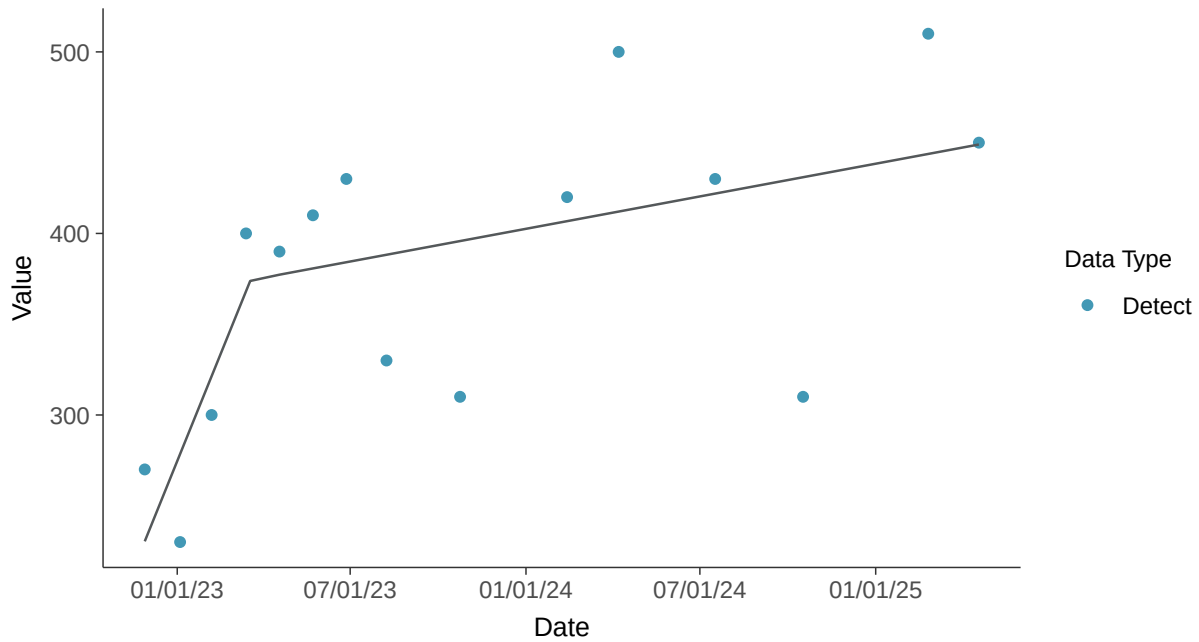
Trend Regression: Lognormal MLE

Calcium, MW-09 (mg/L)



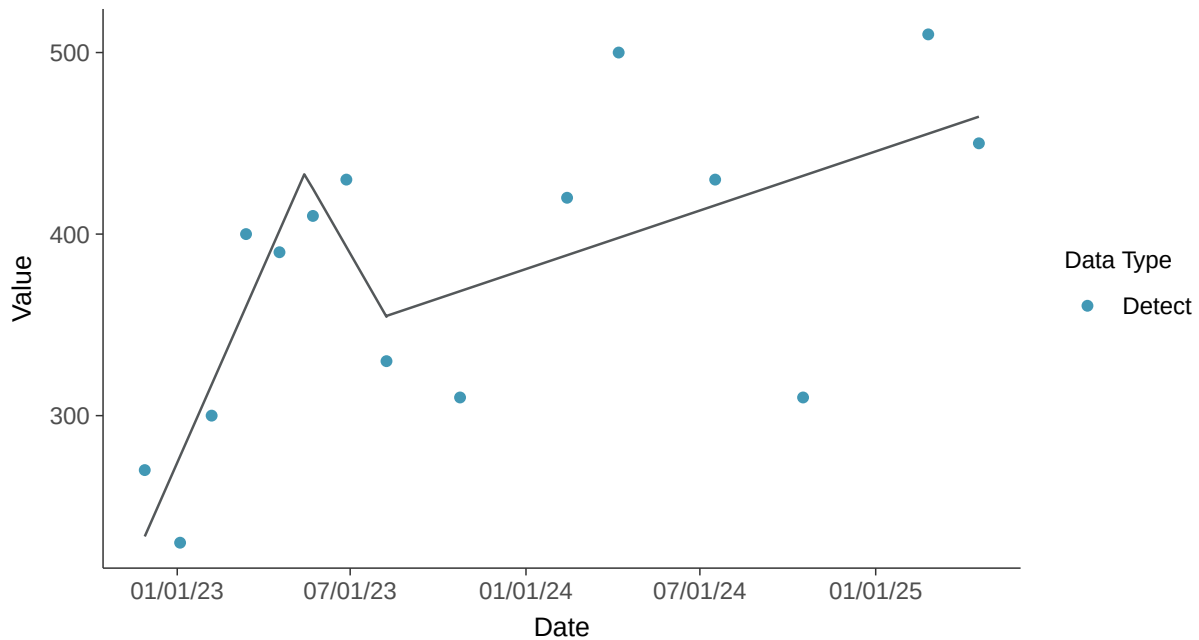
Trend Regression: Piecewise Linear-Linear

Calcium, MW-09 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Calcium, MW-09 (mg/L)

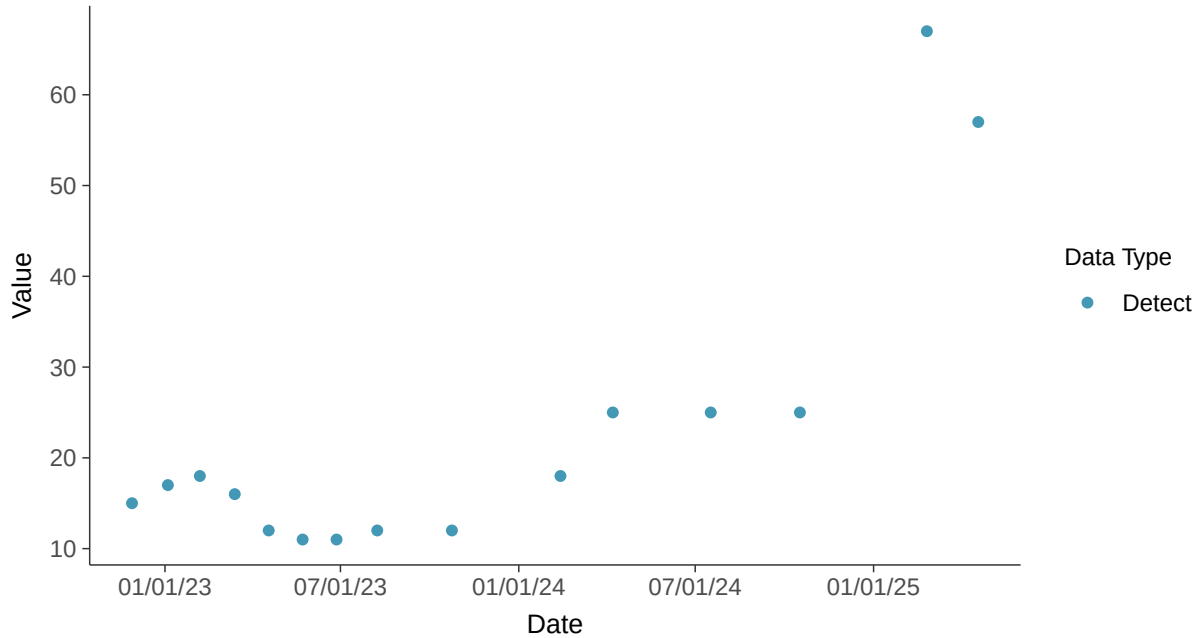


Appendix III: Chloride (as Cl), MW-09

ID: 19_2_3_108

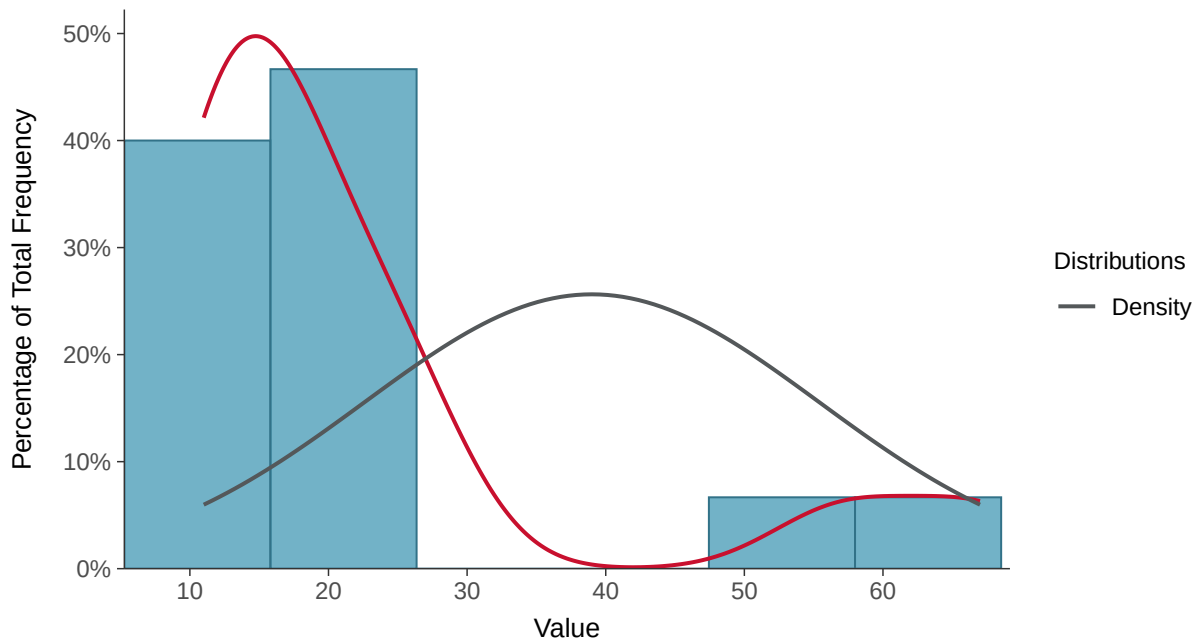
Scatter Plot

Chloride (as Cl), MW-09 (mg/L)



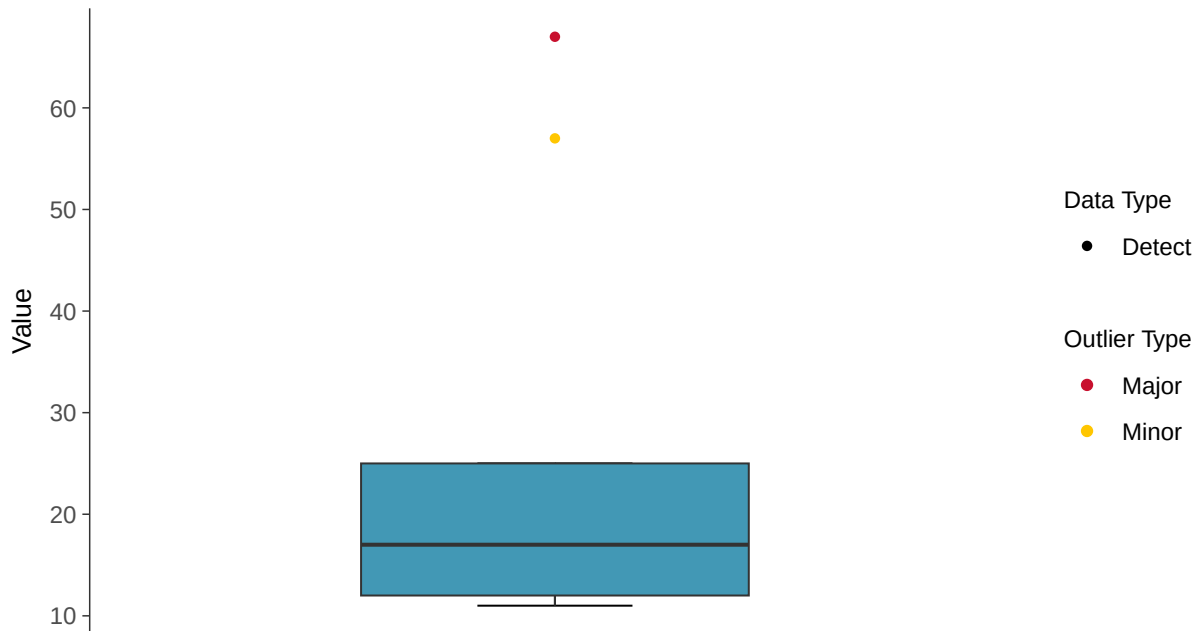
Histogram

Chloride (as Cl), MW-09 (mg/L)



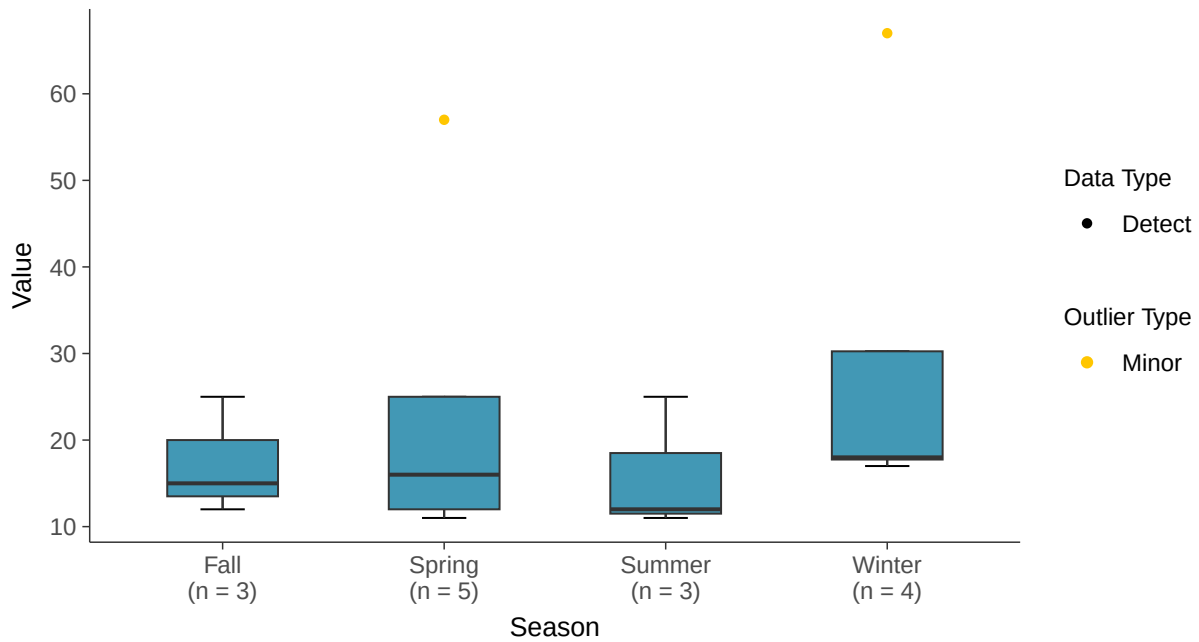
Boxplot

Chloride (as Cl), MW-09 (mg/L)



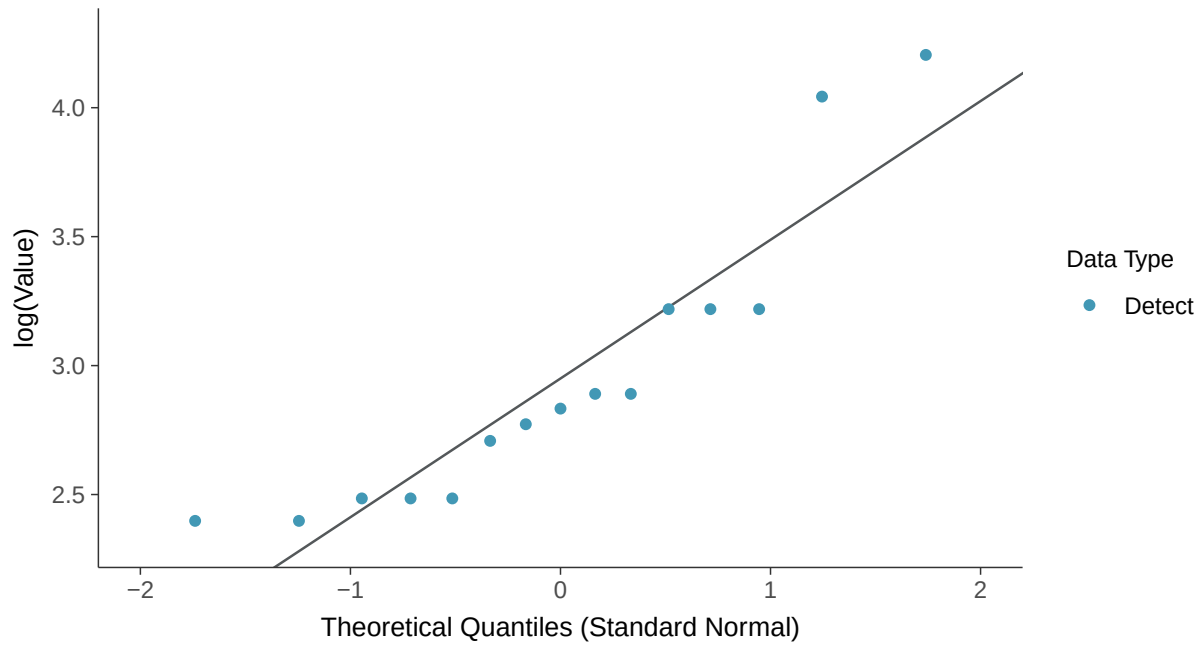
Boxplot by Season

Chloride (as Cl), MW-09 (mg/L)



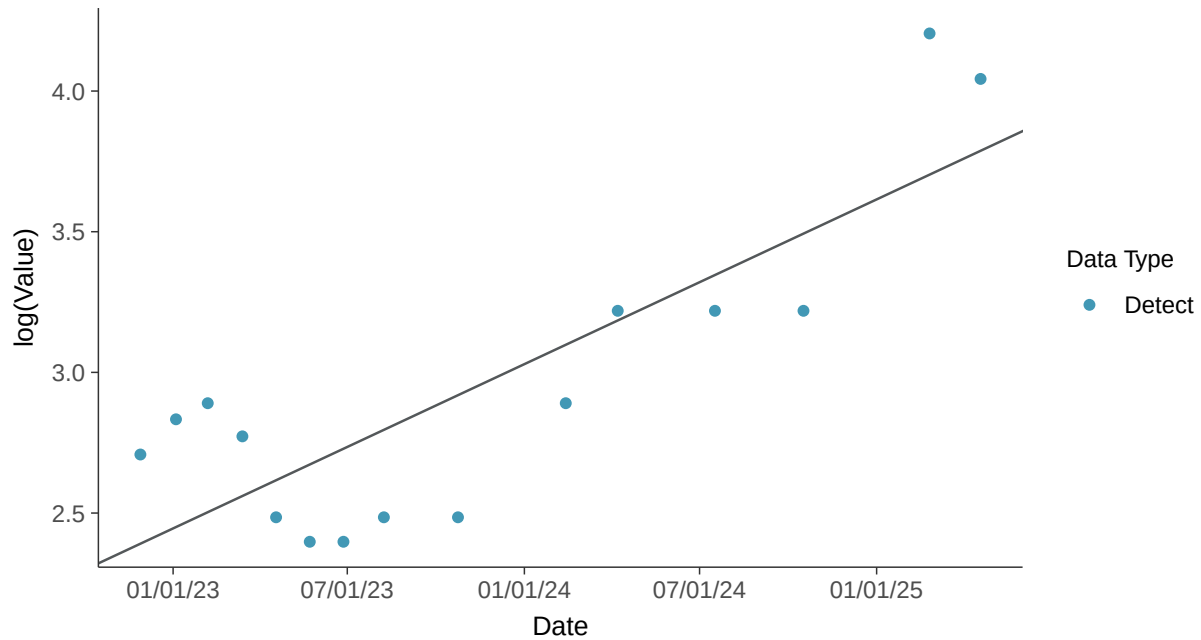
Lognormal Q-Q plot

Chloride (as Cl), MW-09 (mg/L)



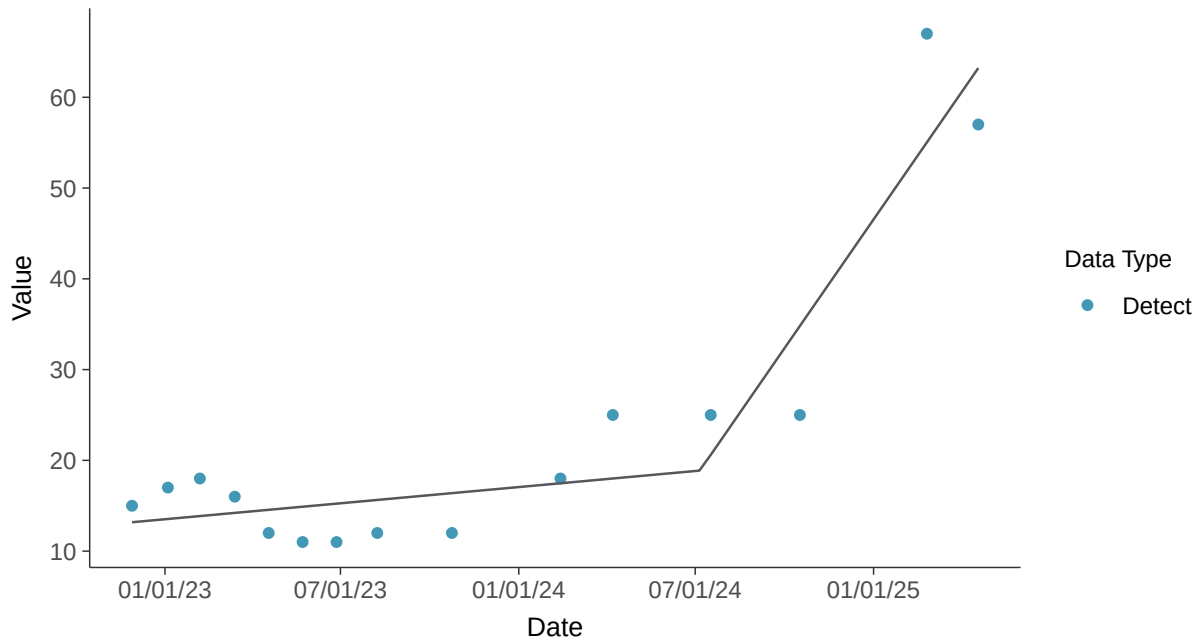
Trend Regression: Lognormal MLE

Chloride (as Cl), MW-09 (mg/L)



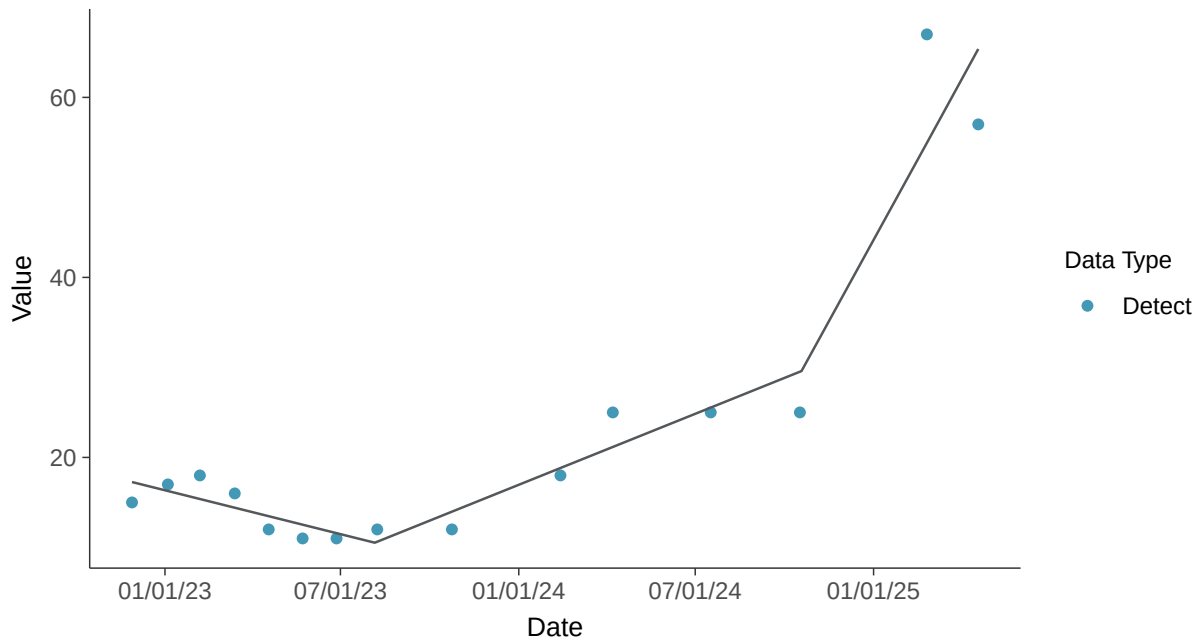
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-09 (mg/L)



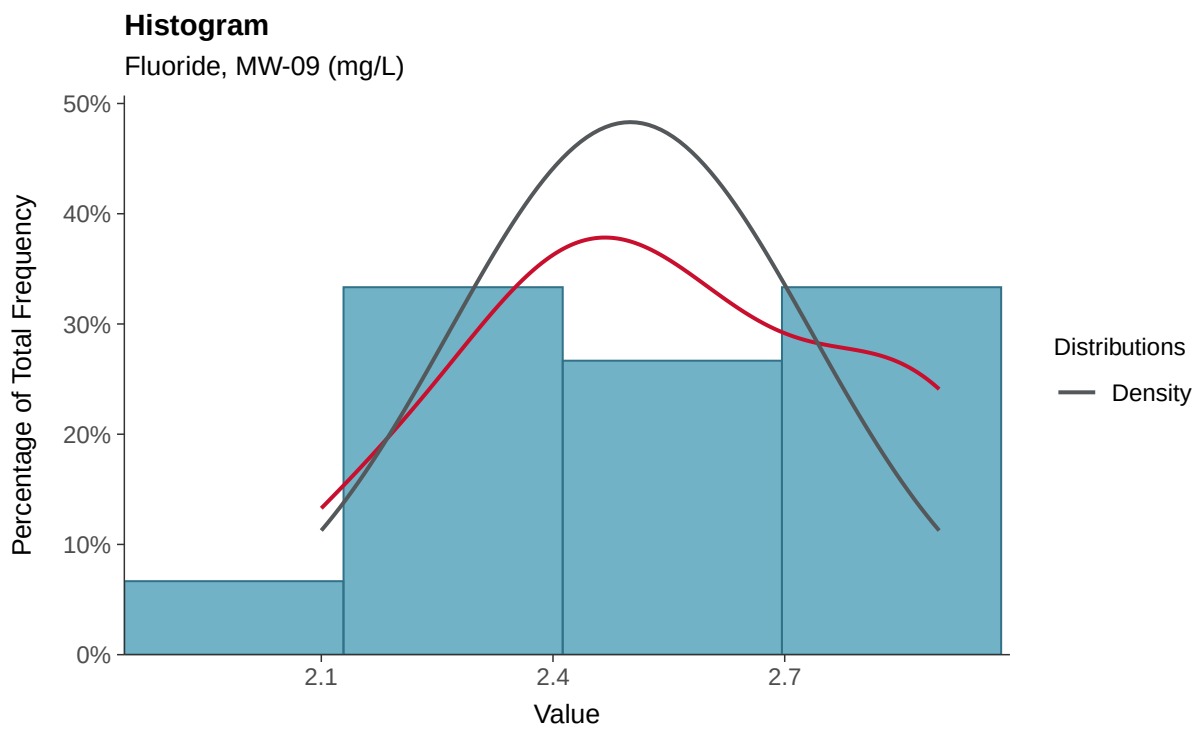
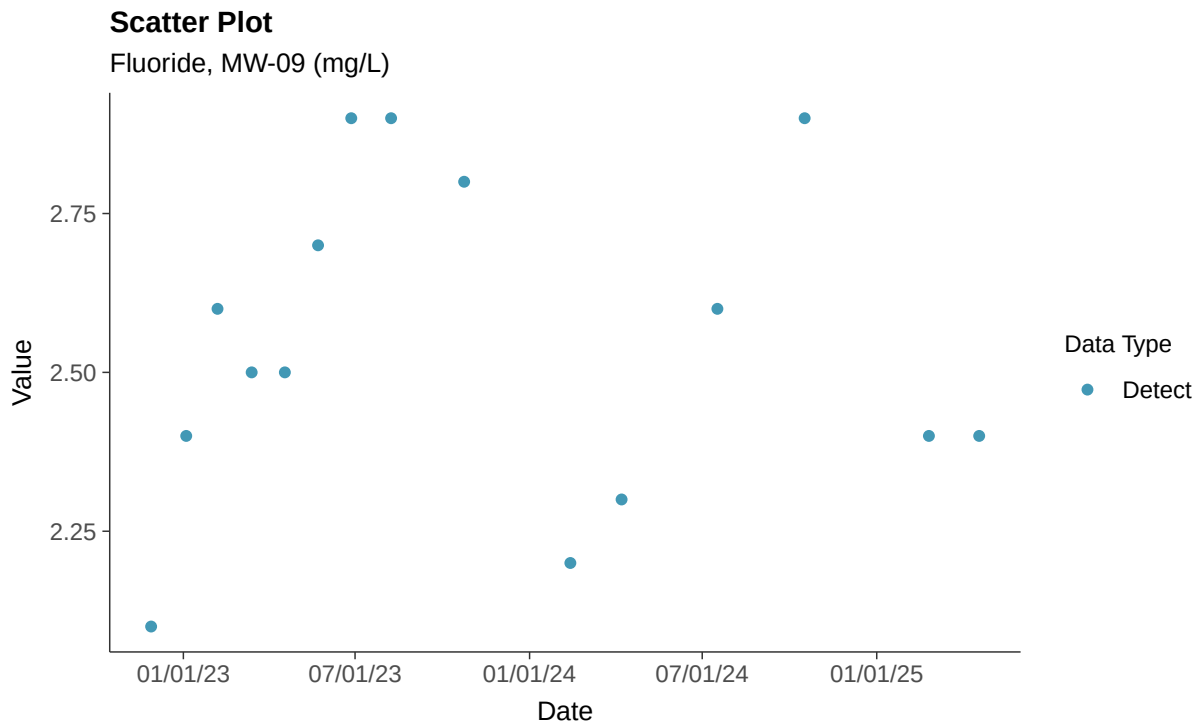
Trend Regression: Piecewise Linear-Linear-Linear

Chloride (as Cl), MW-09 (mg/L)



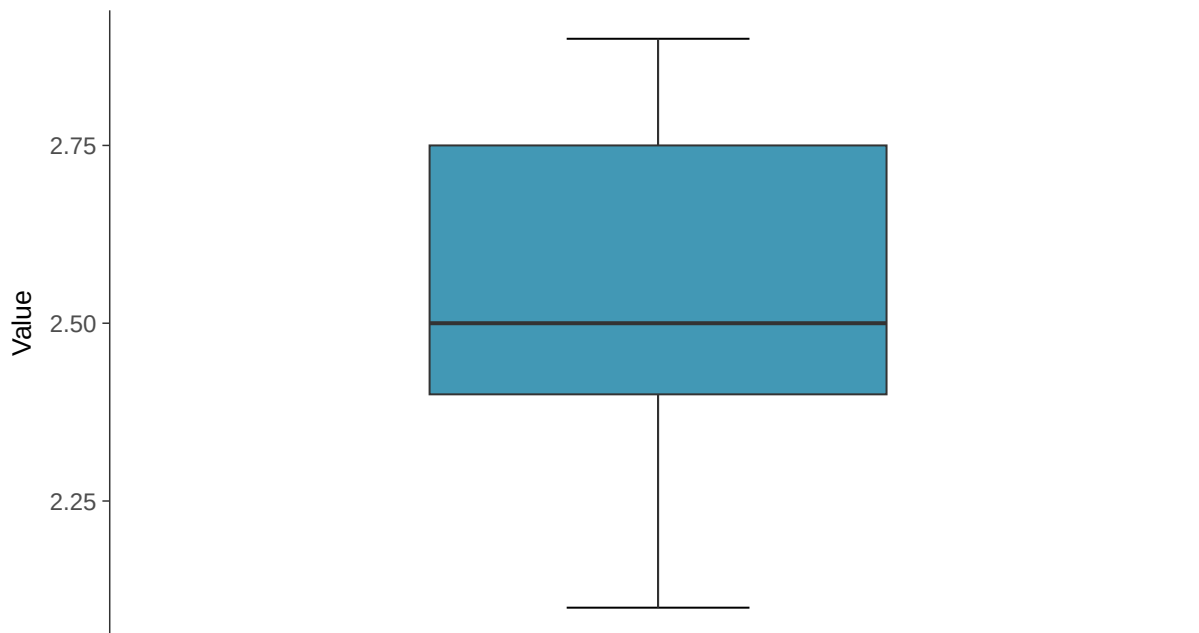
Appendix III: Fluoride, MW-09

ID: 19_2_3_112



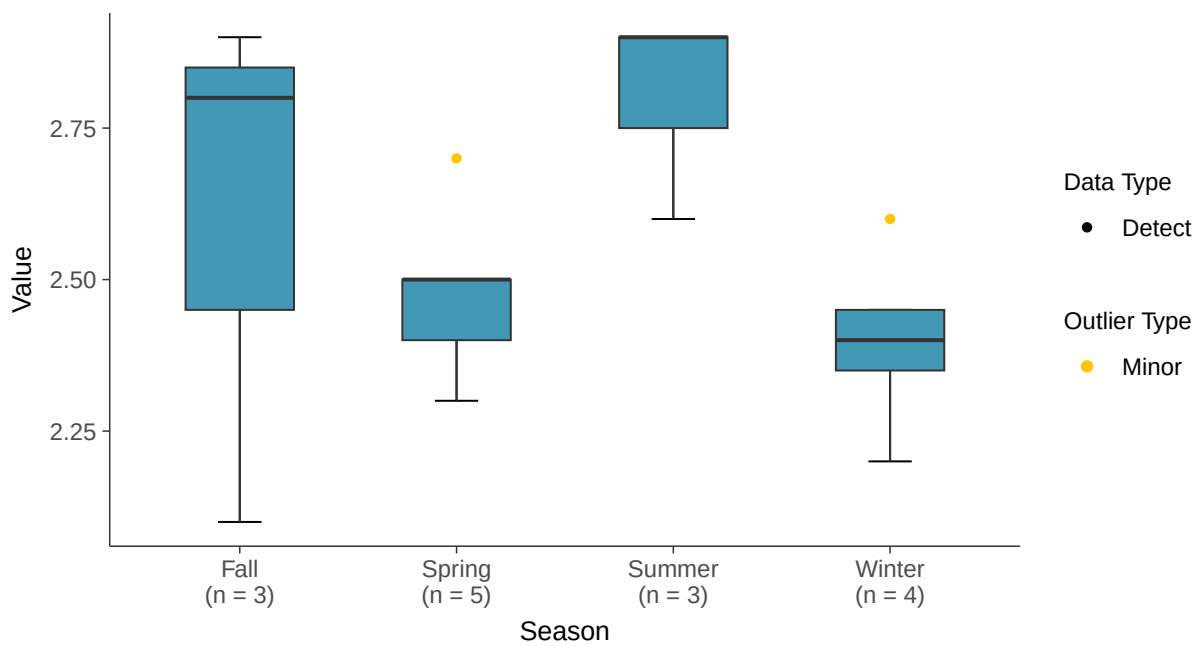
Boxplot

Fluoride, MW-09 (mg/L)



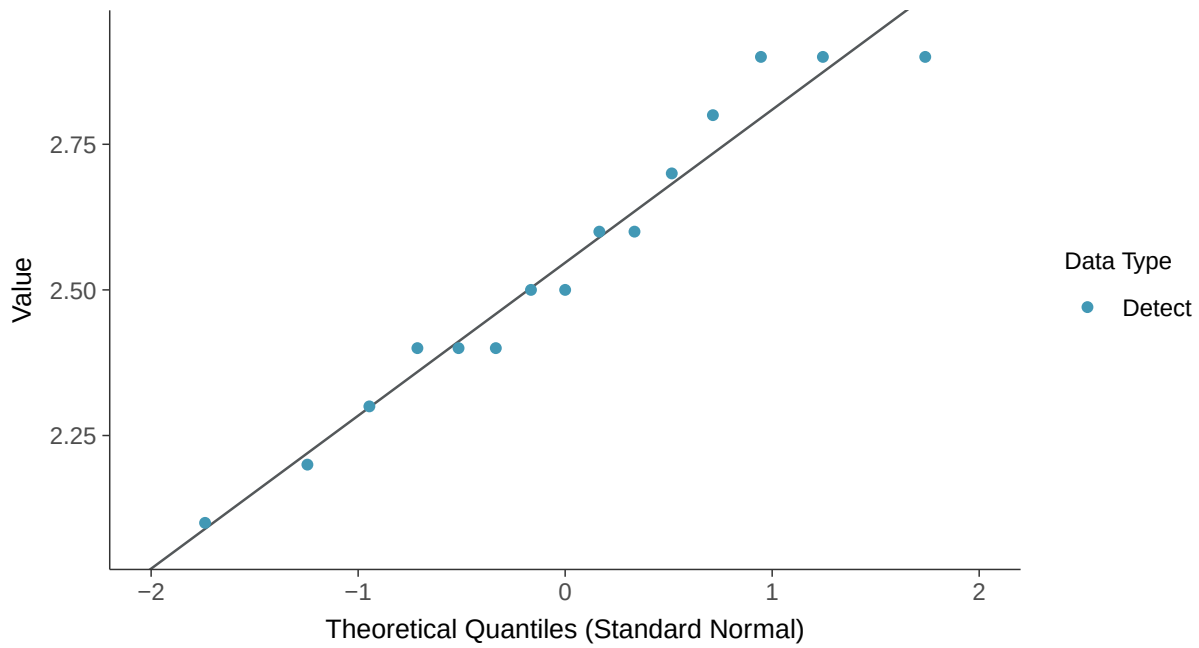
Boxplot by Season

Fluoride, MW-09 (mg/L)



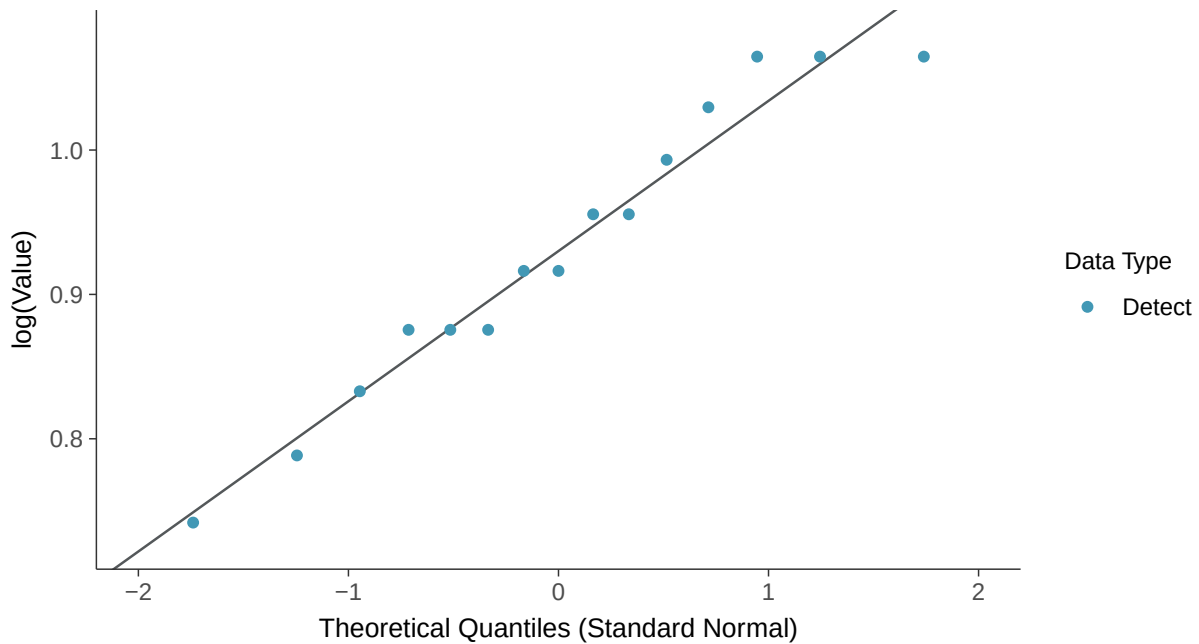
Normal Q-Q plot

Fluoride, MW-09 (mg/L)



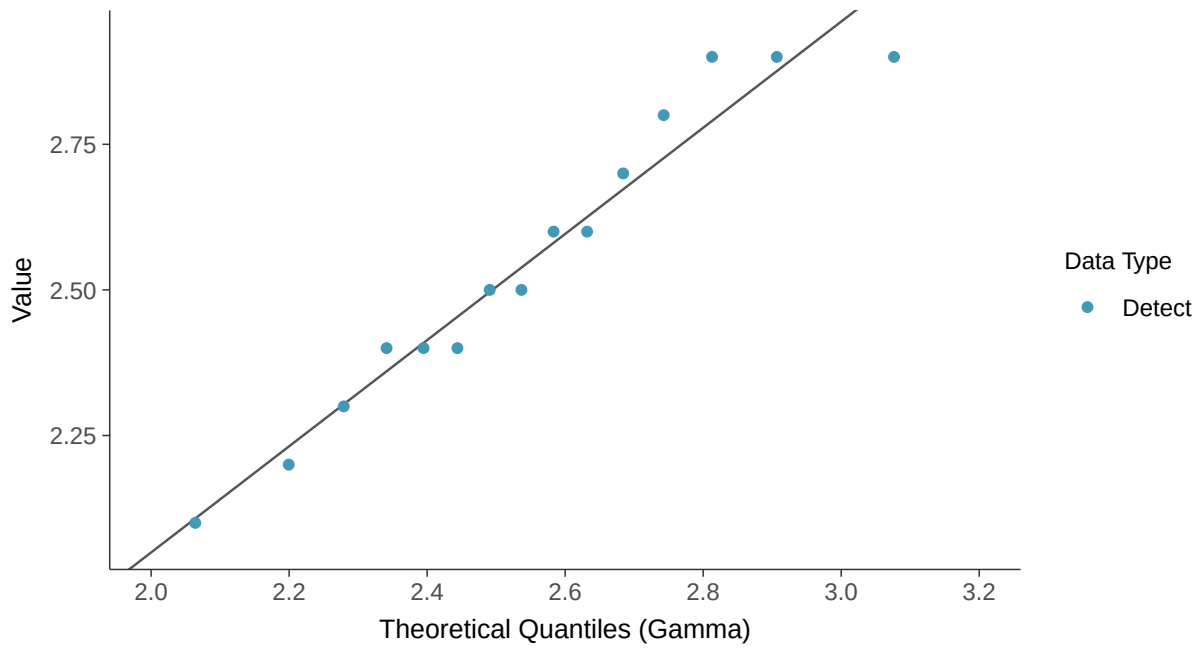
Lognormal Q-Q plot

Fluoride, MW-09 (mg/L)



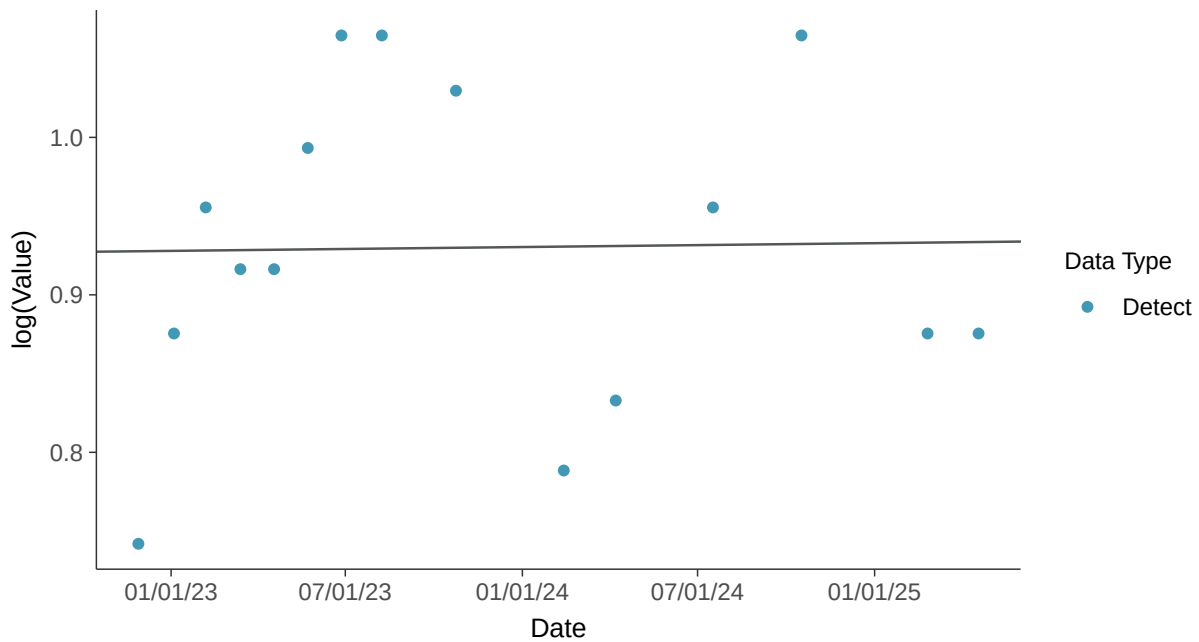
Gamma Q-Q plot

Fluoride, MW-09 (mg/L)



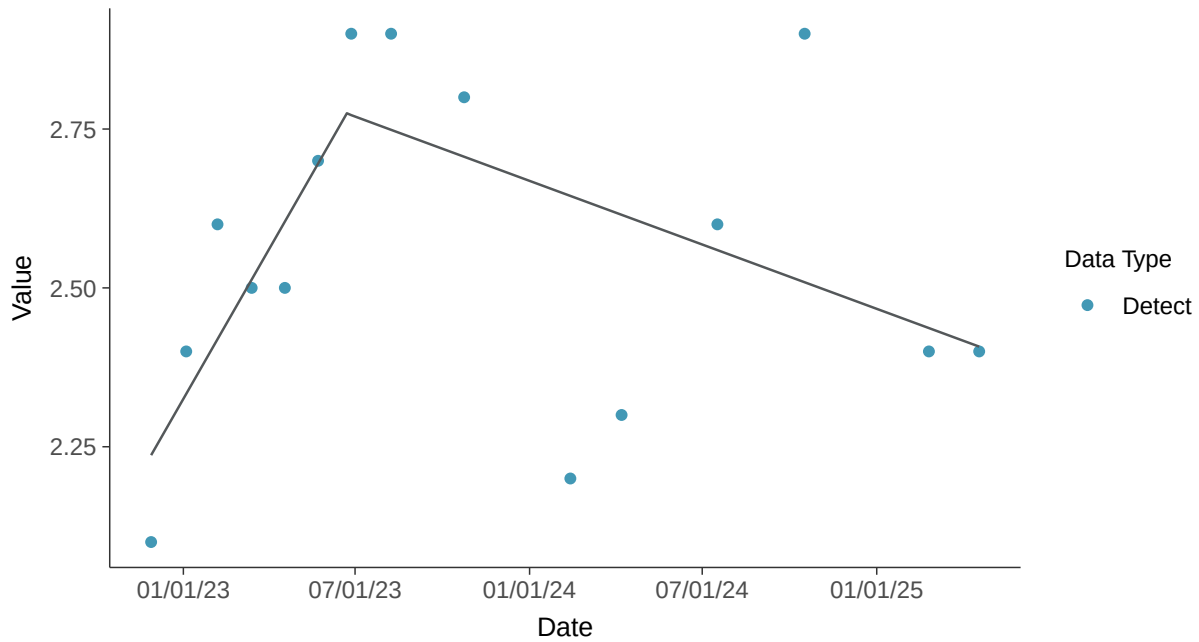
Trend Regression: Lognormal MLE

Fluoride, MW-09 (mg/L)



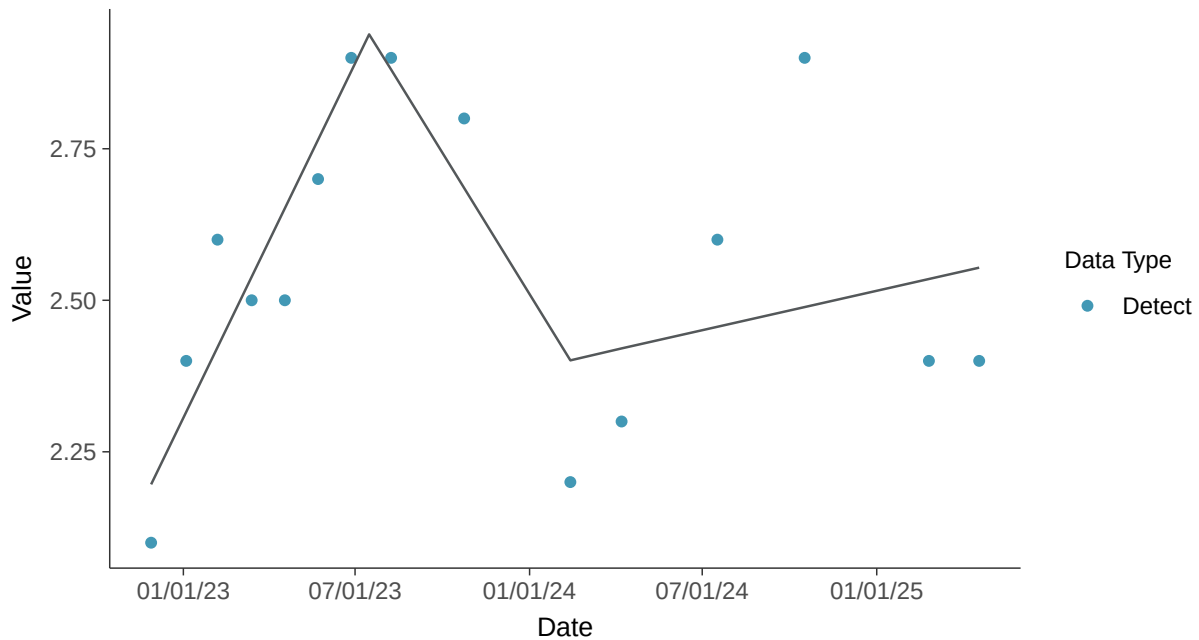
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-09 (mg/L)



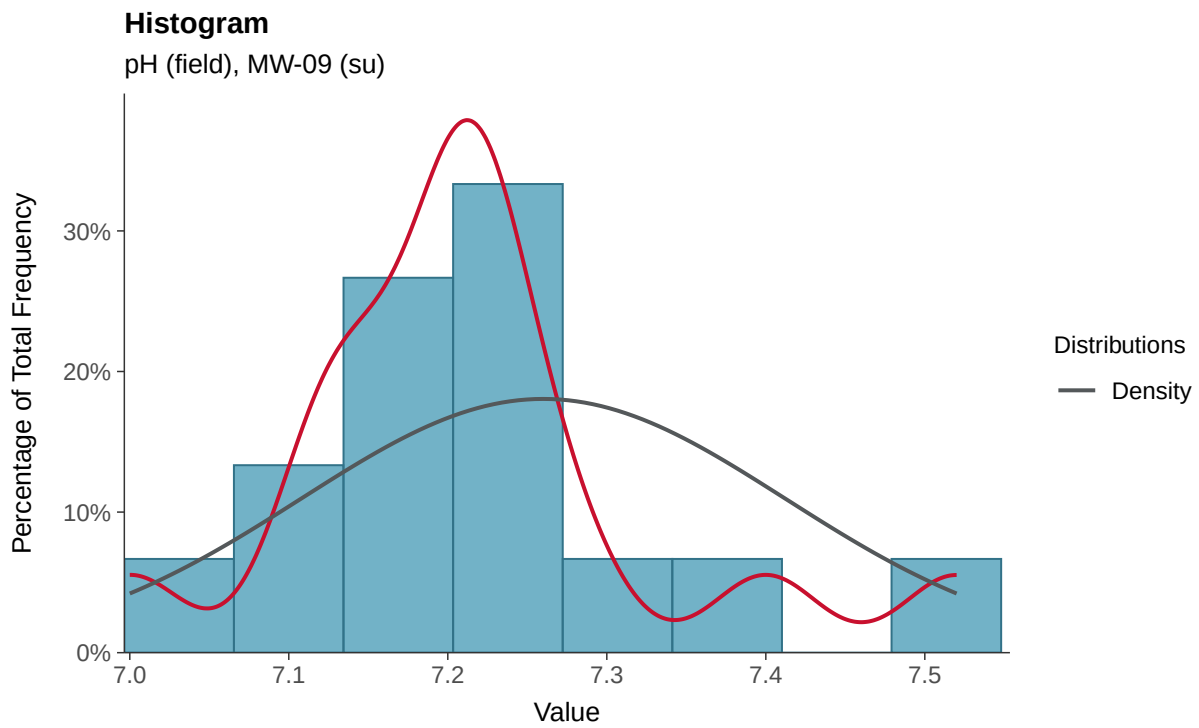
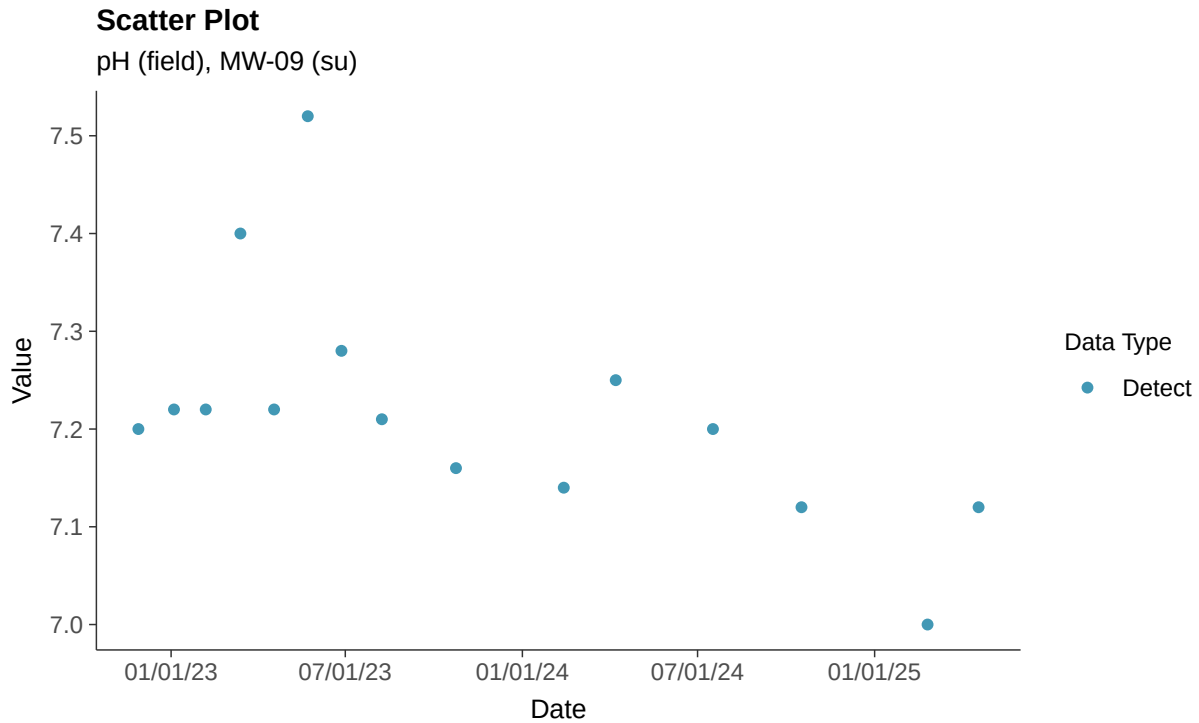
Trend Regression: Piecewise Linear-Linear-Linear

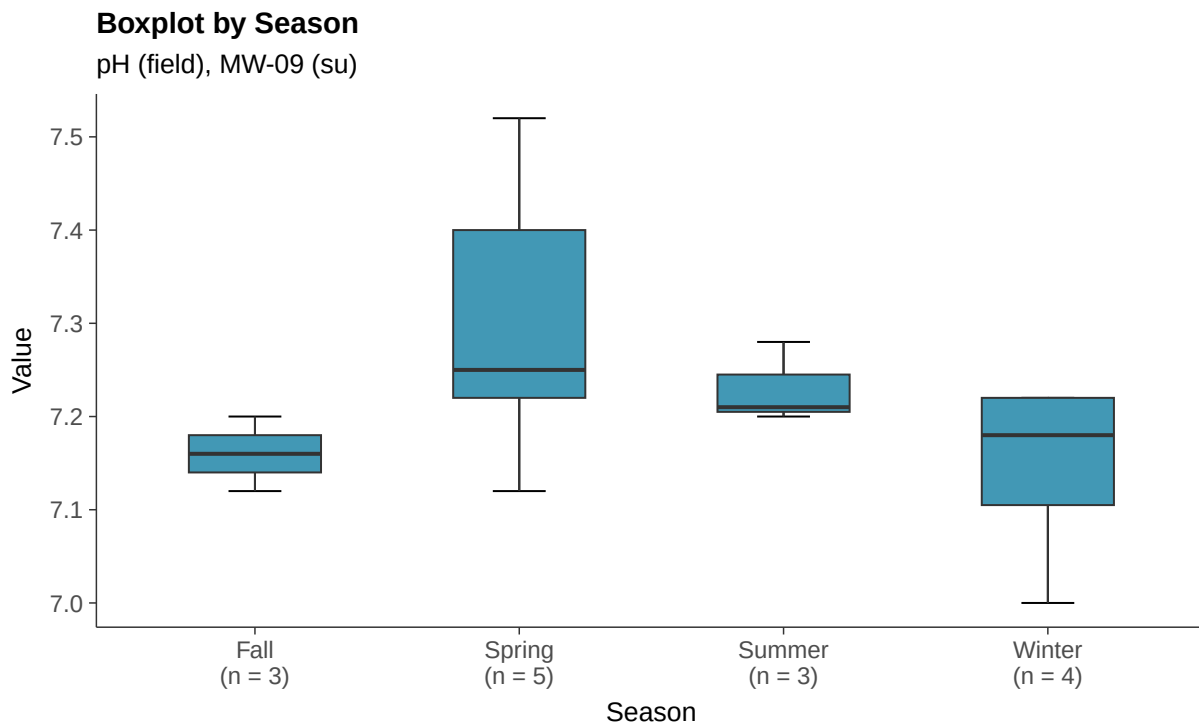
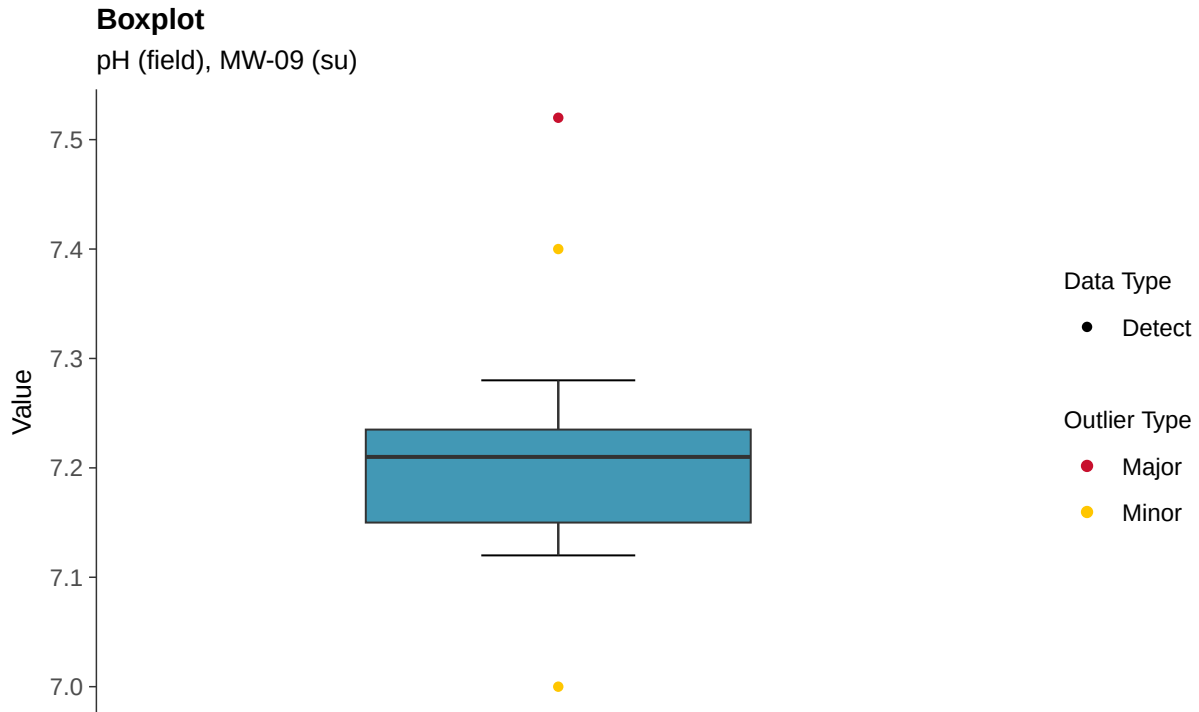
Fluoride, MW-09 (mg/L)



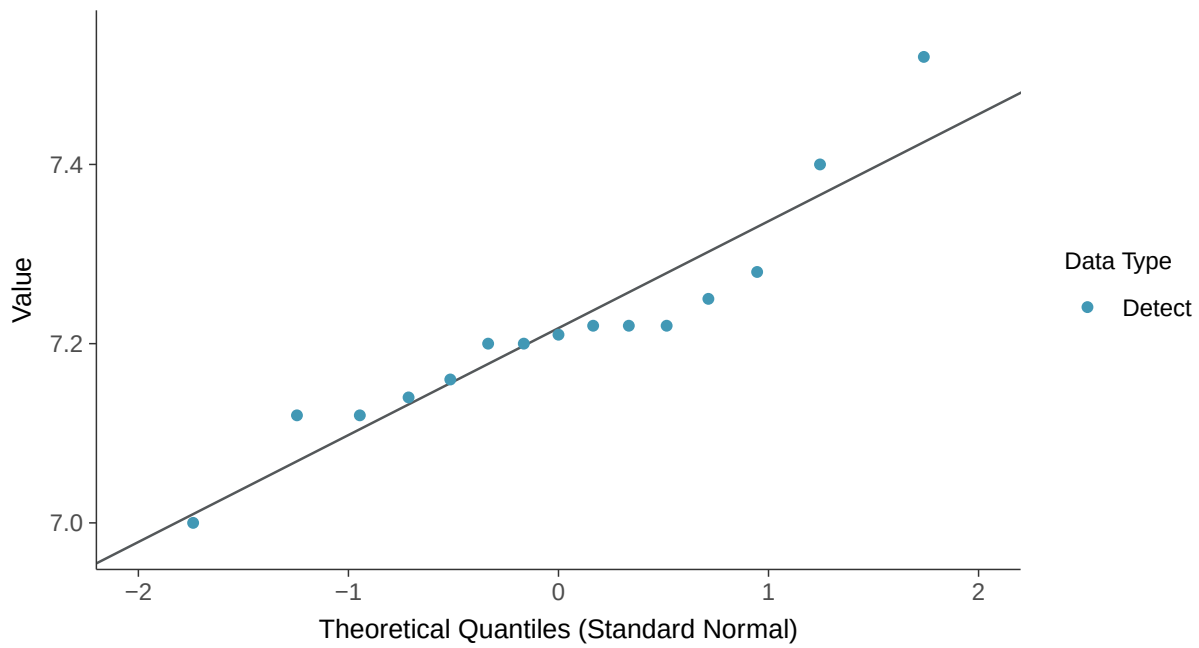
Appendix III: pH (field), MW-09

ID: 19_2_3_120

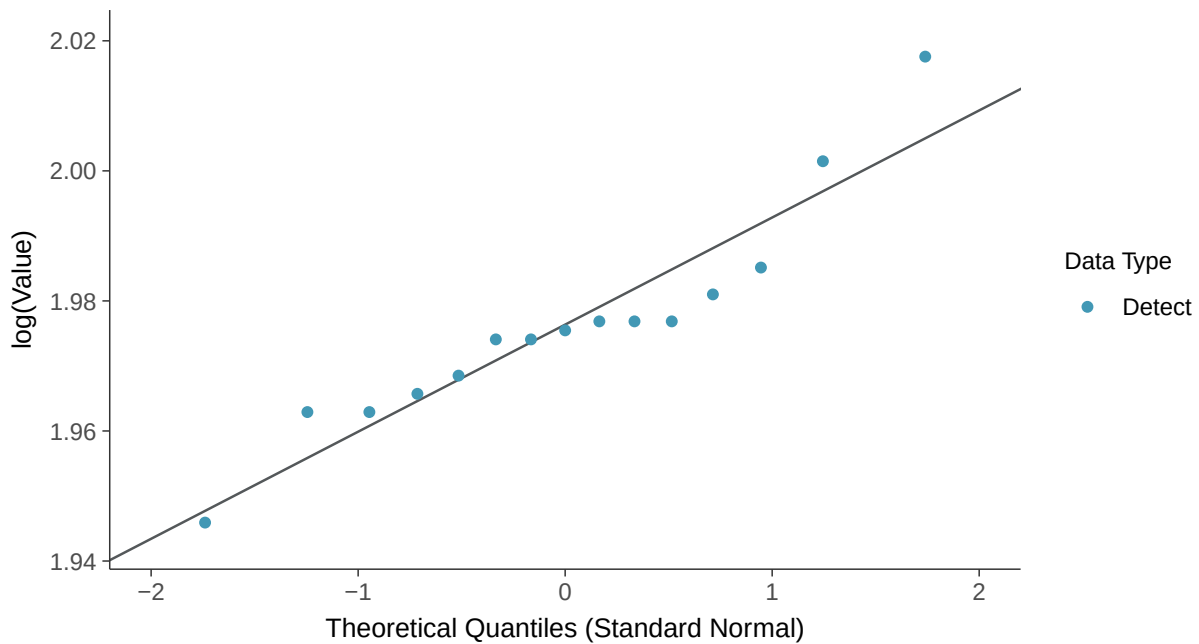




Normal Q-Q plot
pH (field), MW-09 (su)

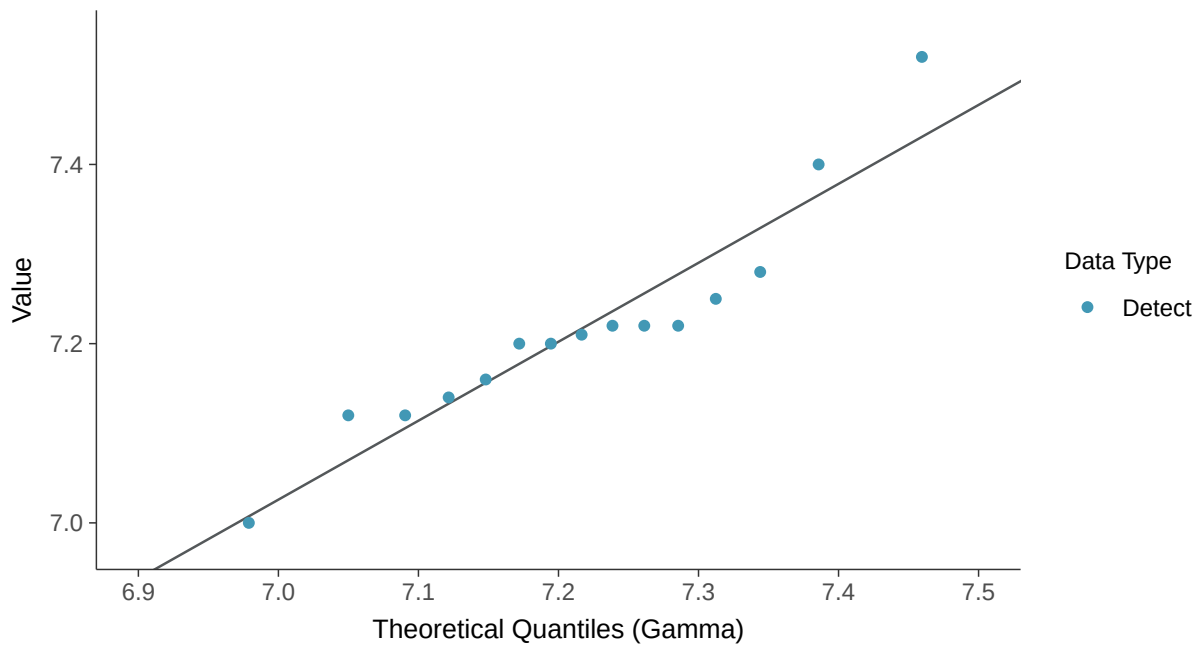


Lognormal Q-Q plot
pH (field), MW-09 (su)



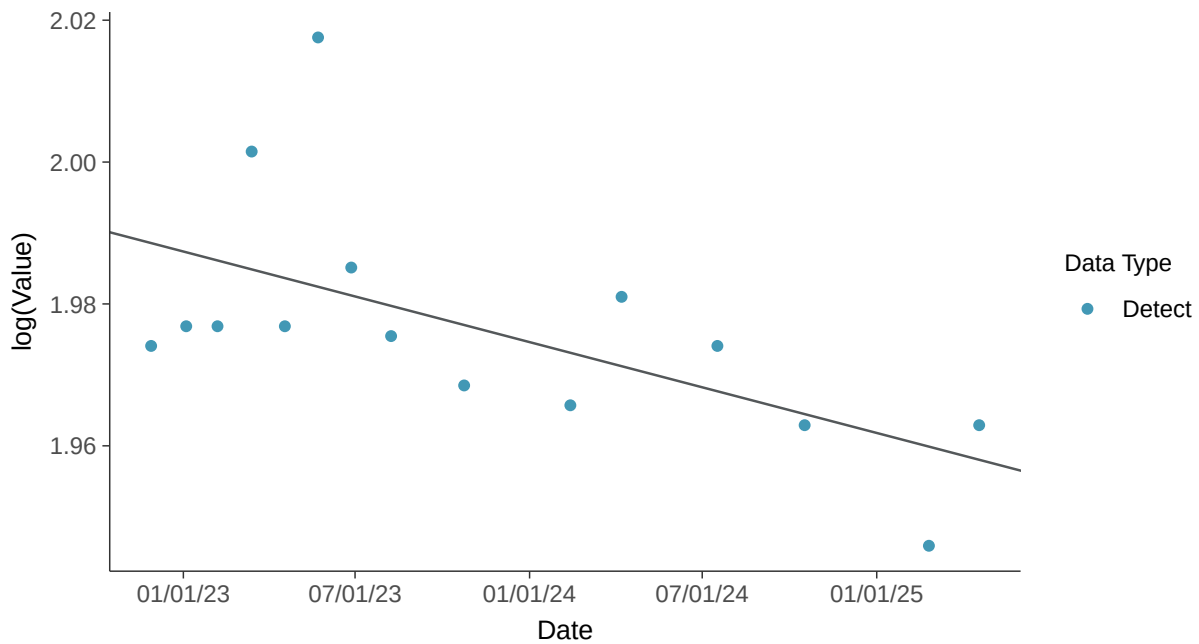
Gamma Q-Q plot

pH (field), MW-09 (su)



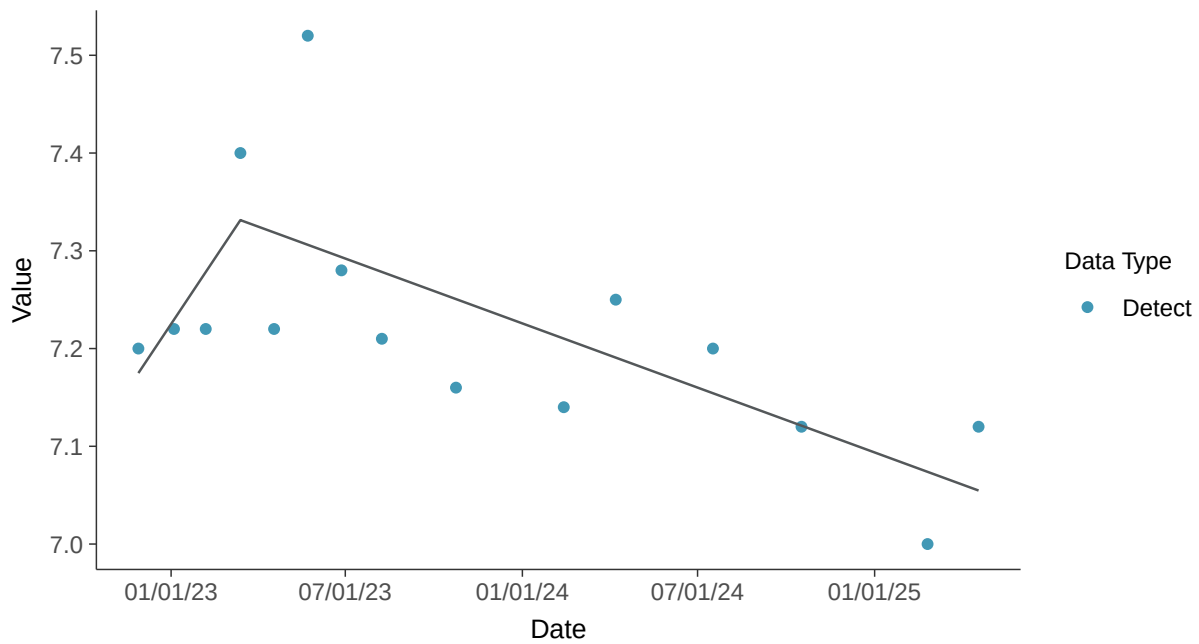
Trend Regression: Lognormal MLE

pH (field), MW-09 (su)



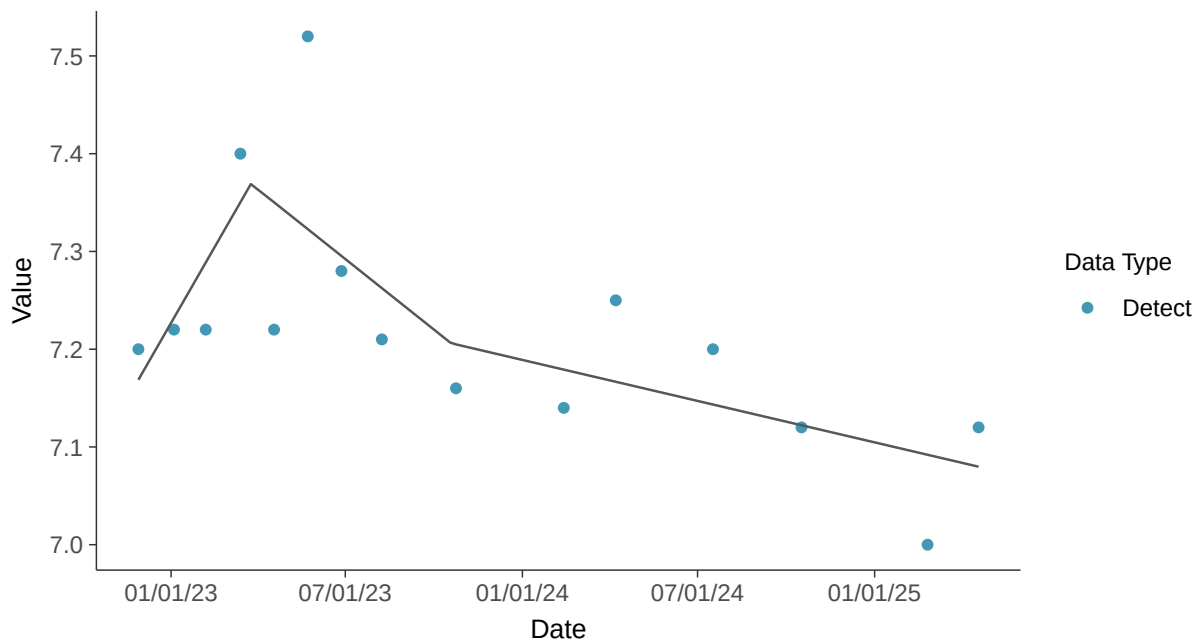
Trend Regression: Piecewise Linear-Linear

pH (field), MW-09 (su)



Trend Regression: Piecewise Linear-Linear-Linear

pH (field), MW-09 (su)

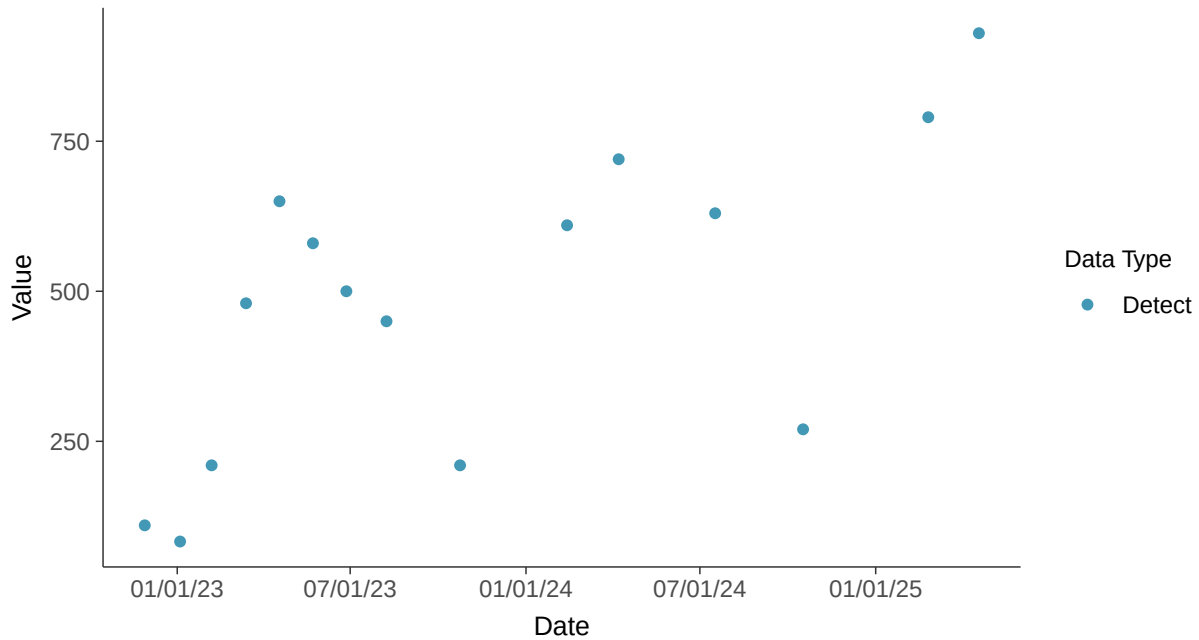


Appendix III: Sulfate (as SO₄), MW-09

ID: 19_2_3_124

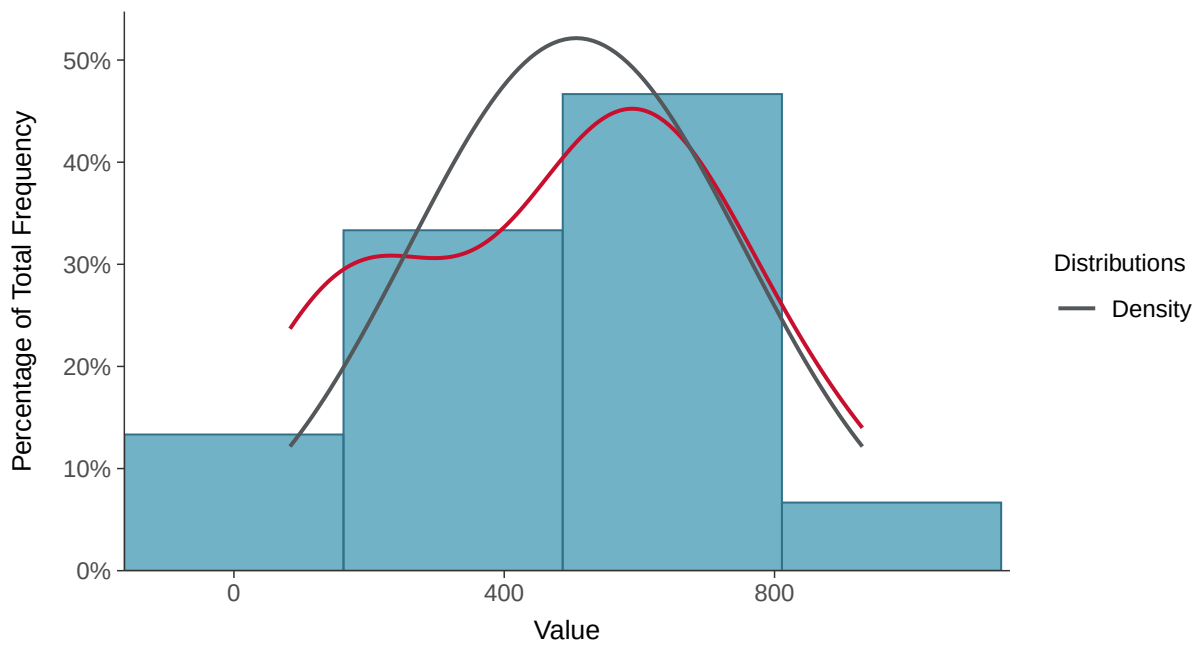
Scatter Plot

Sulfate (as SO₄), MW-09 (mg/L)



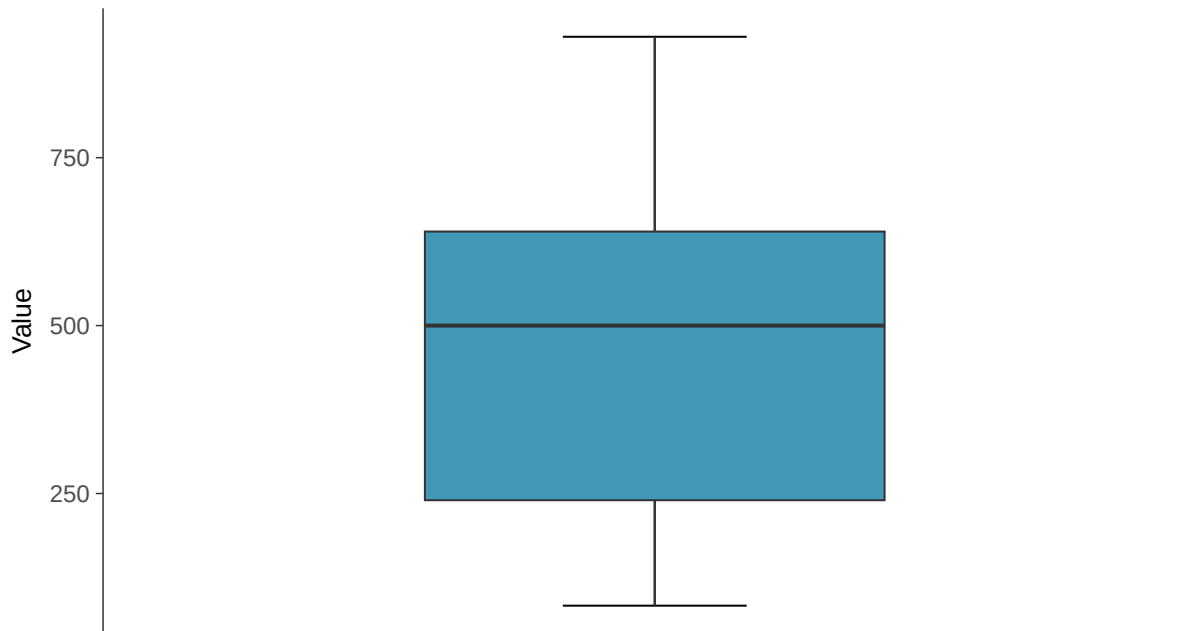
Histogram

Sulfate (as SO₄), MW-09 (mg/L)



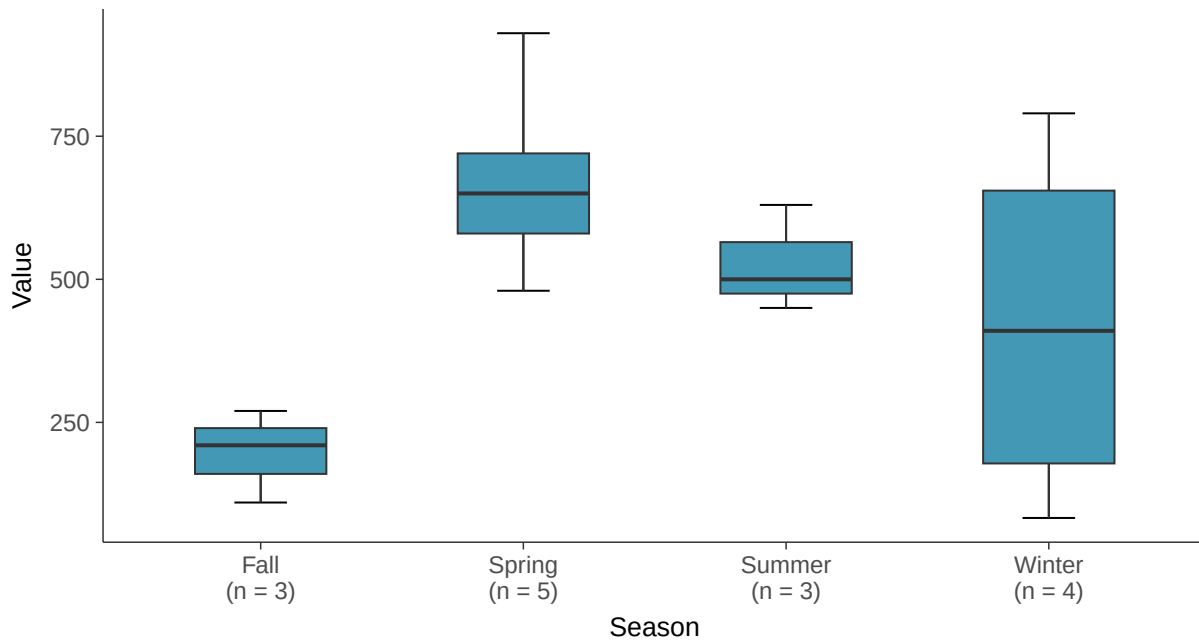
Boxplot

Sulfate (as SO₄), MW-09 (mg/L)



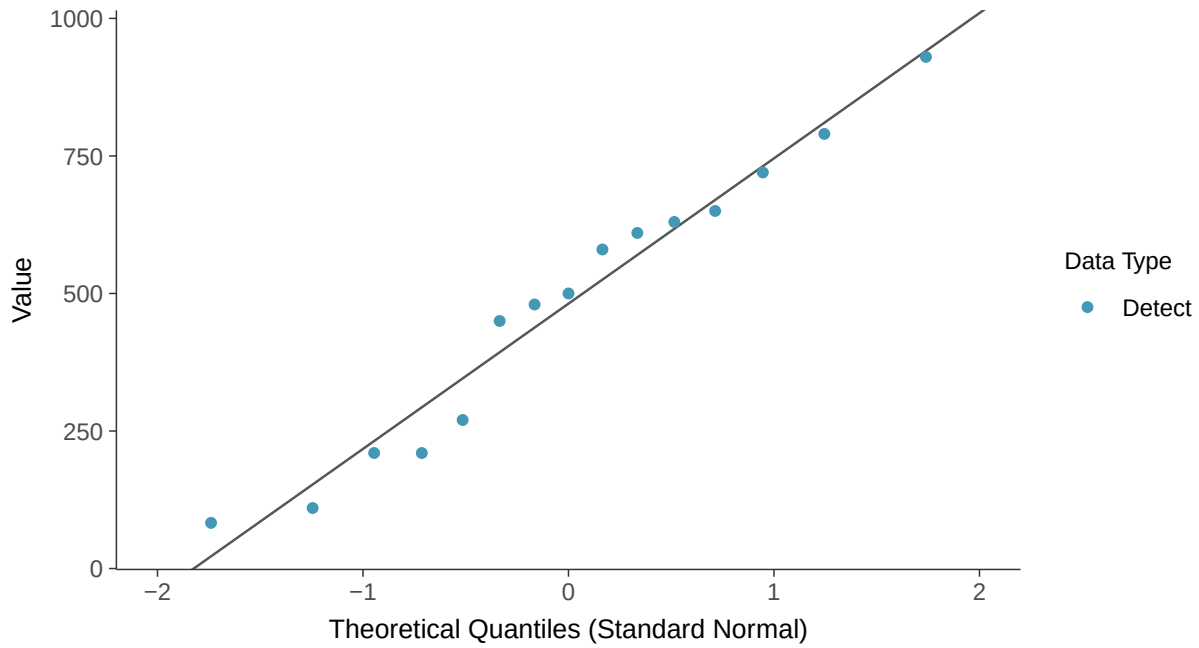
Boxplot by Season

Sulfate (as SO₄), MW-09 (mg/L)



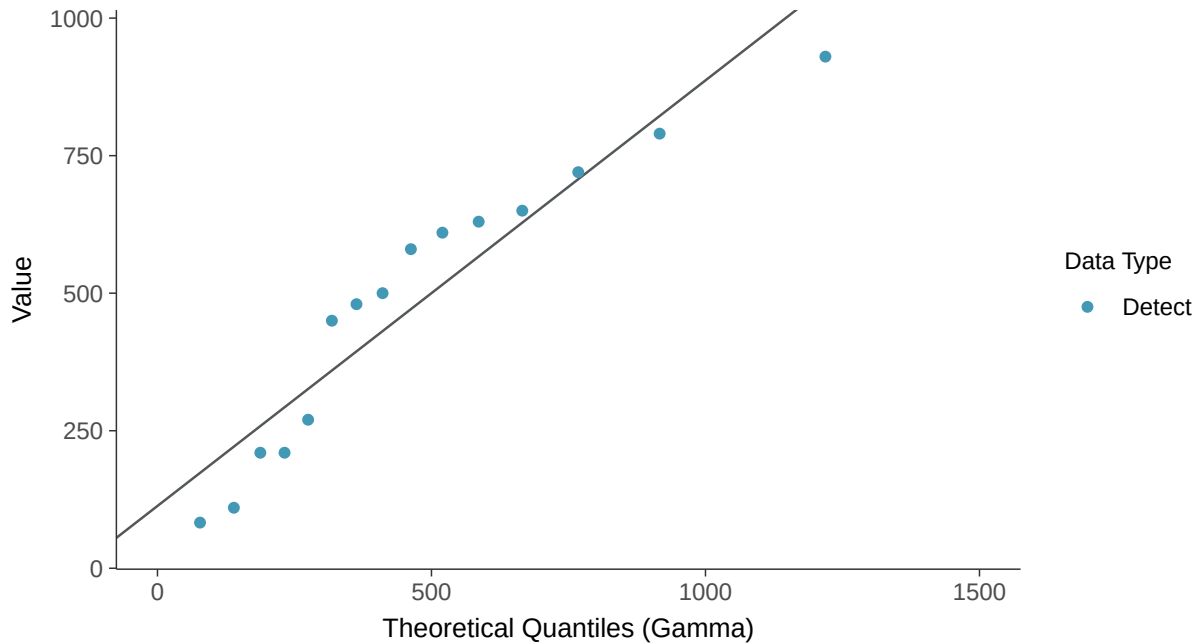
Normal Q-Q plot

Sulfate (as SO₄), MW-09 (mg/L)



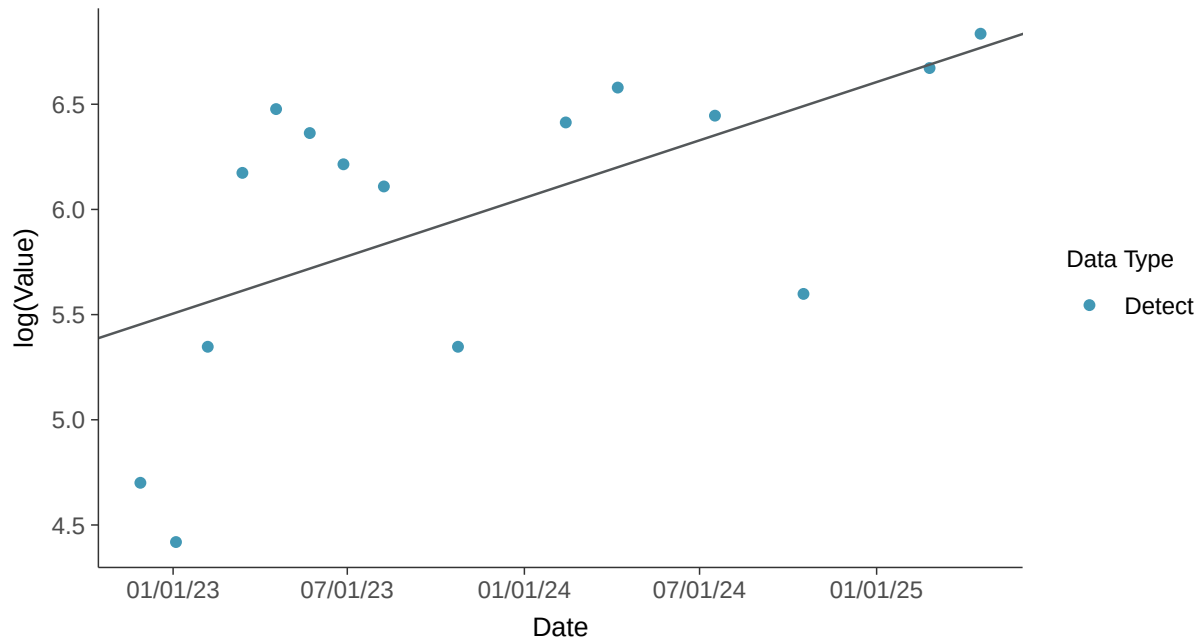
Gamma Q-Q plot

Sulfate (as SO₄), MW-09 (mg/L)



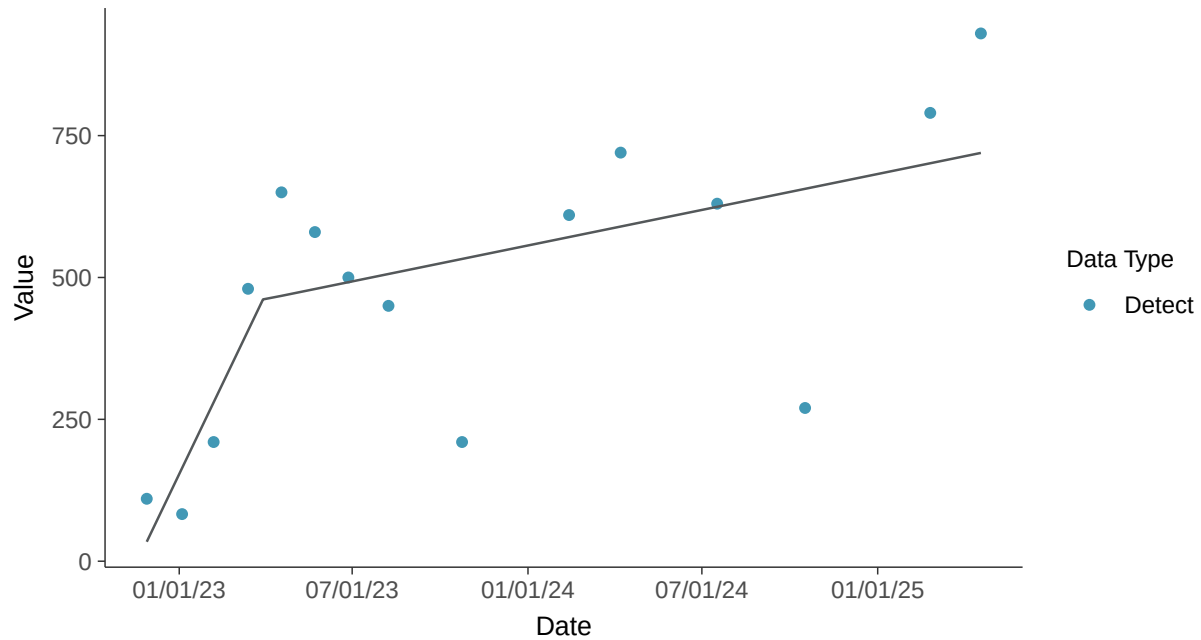
Trend Regression: Lognormal MLE

Sulfate (as SO₄), MW-09 (mg/L)



Trend Regression: Piecewise Linear-Linear

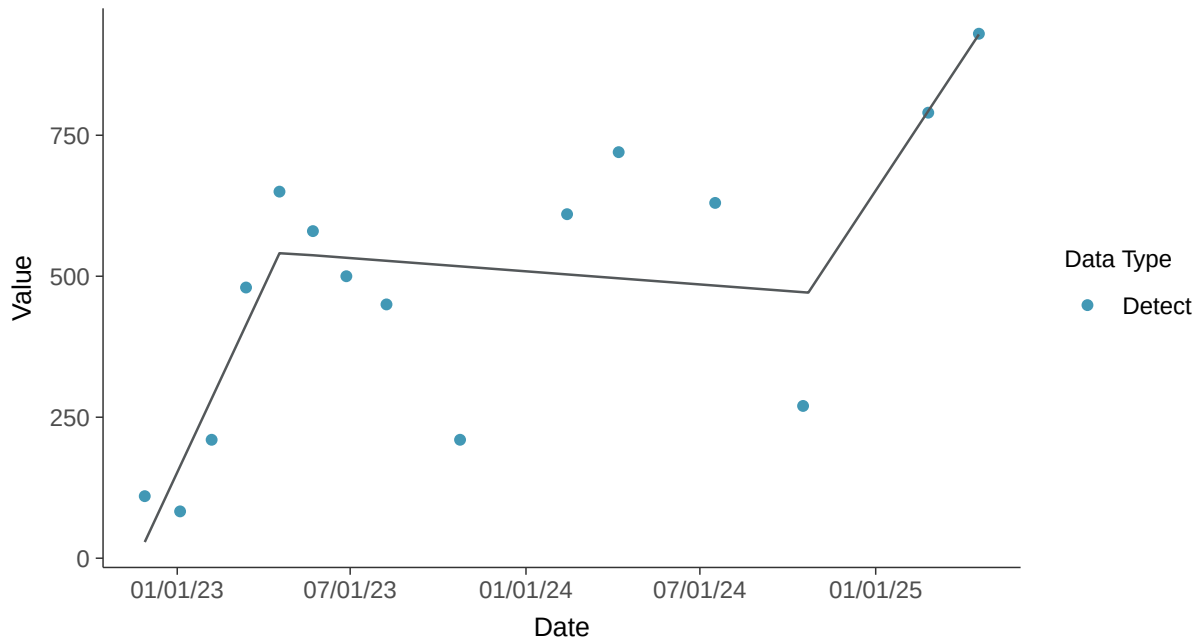
Sulfate (as SO₄), MW-09 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

Sulfate (as SO₄), MW-09 (mg/L)

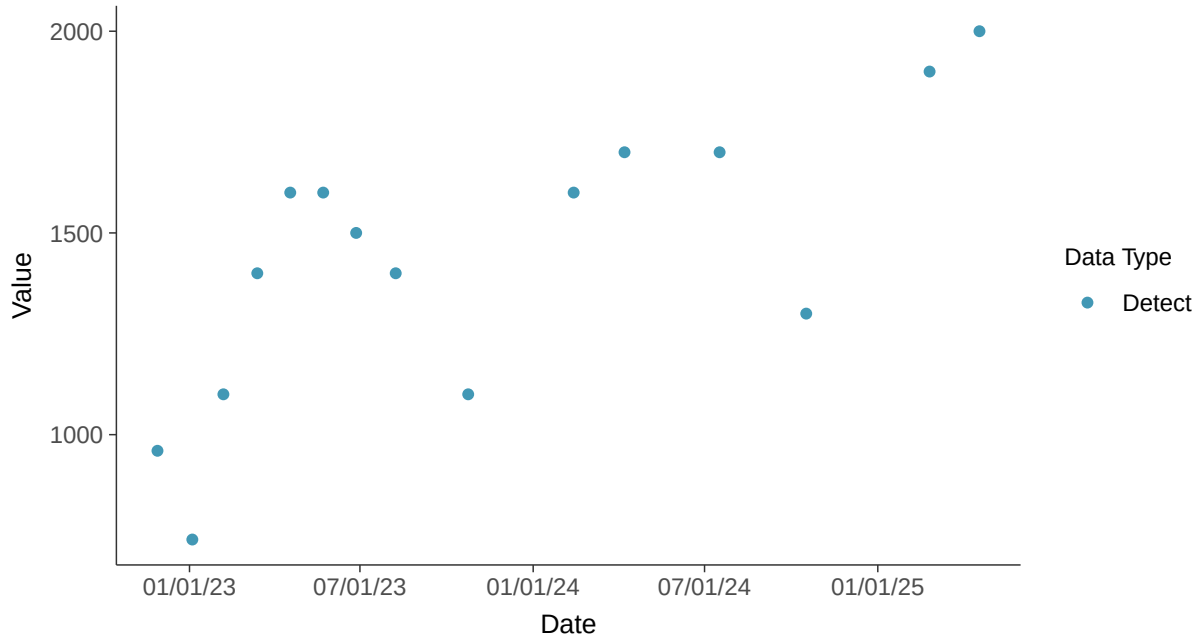


Appendix III: Total Dissolved Solids, MW-09

ID: 19_2_3_126

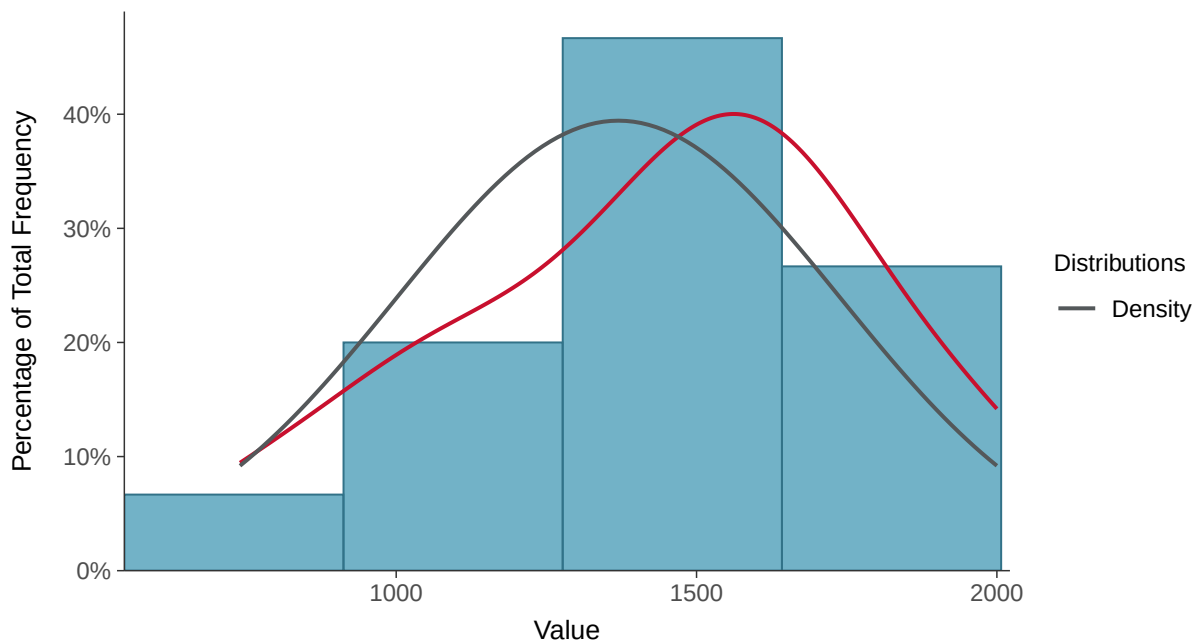
Scatter Plot

Total Dissolved Solids, MW-09 (mg/L)



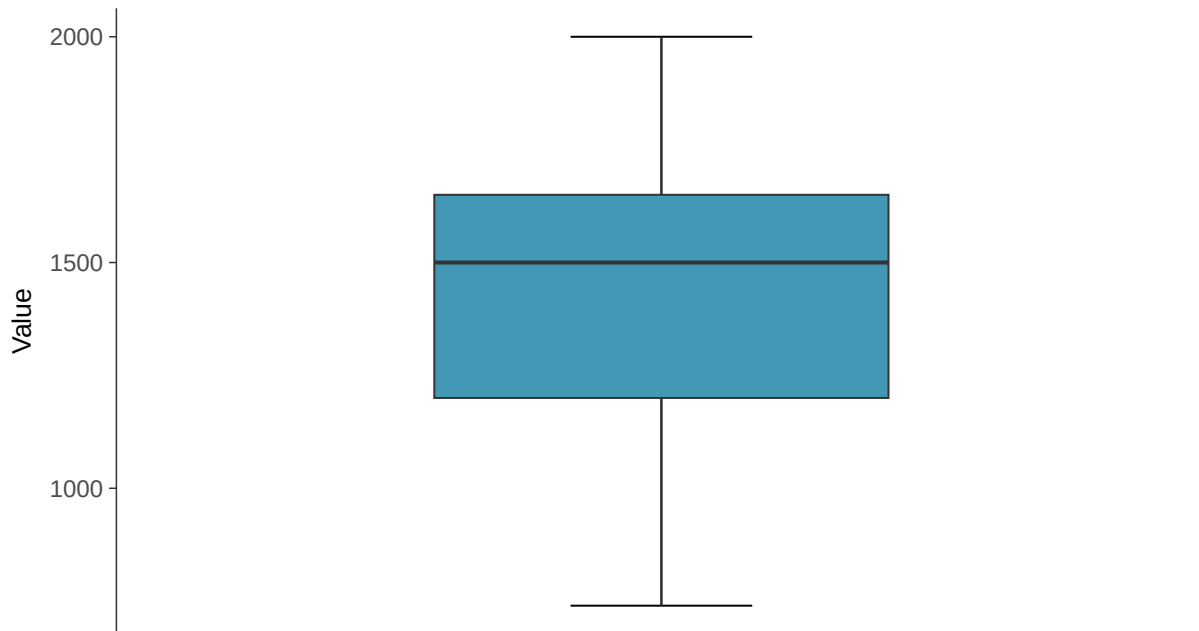
Histogram

Total Dissolved Solids, MW-09 (mg/L)



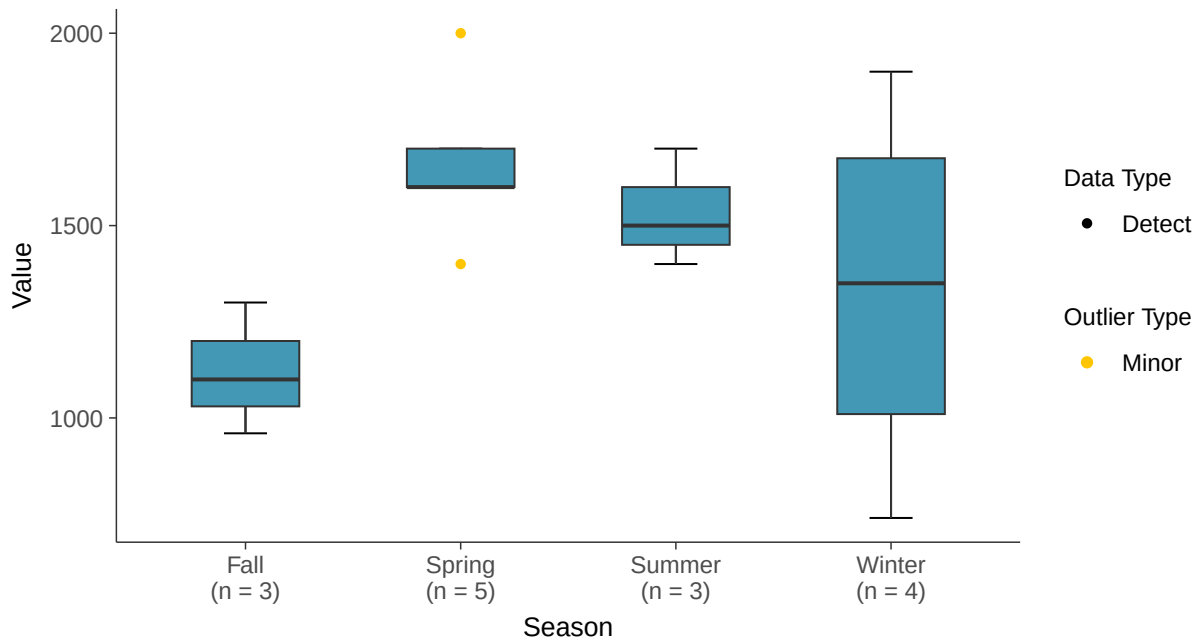
Boxplot

Total Dissolved Solids, MW-09 (mg/L)



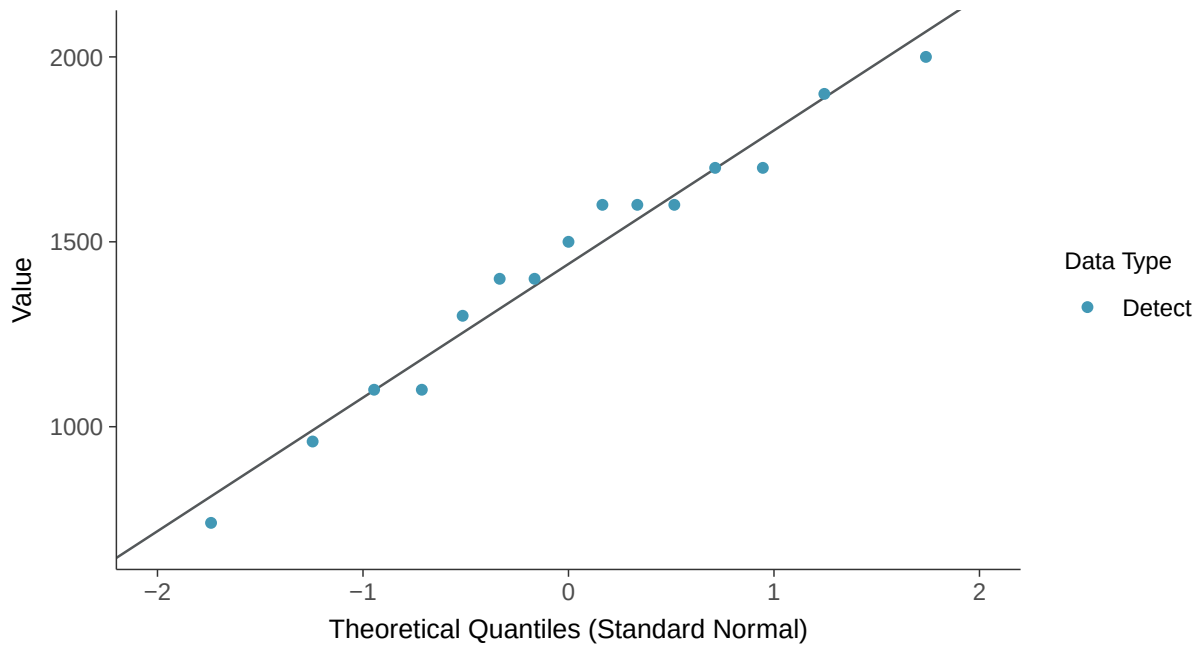
Boxplot by Season

Total Dissolved Solids, MW-09 (mg/L)



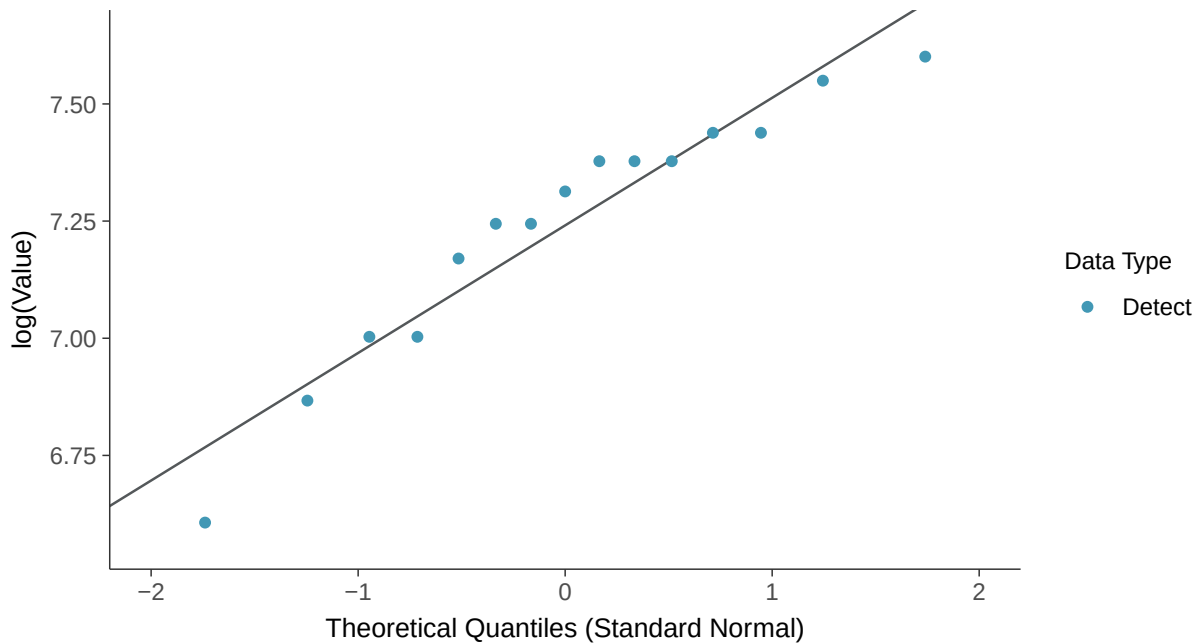
Normal Q-Q plot

Total Dissolved Solids, MW-09 (mg/L)



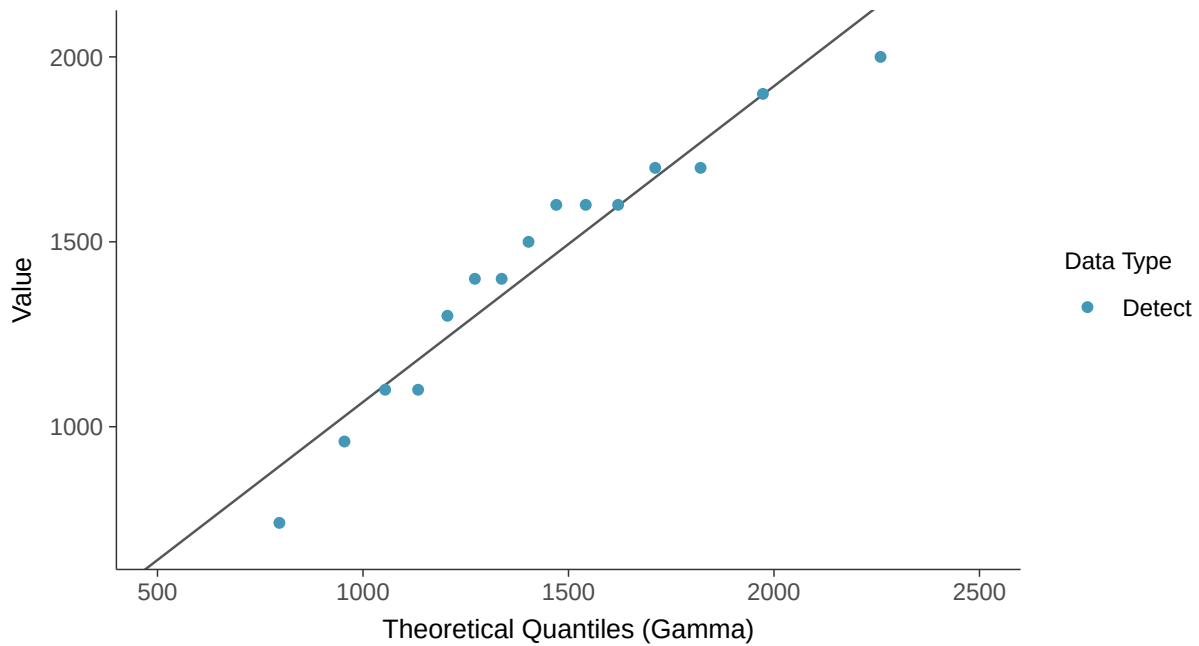
Lognormal Q-Q plot

Total Dissolved Solids, MW-09 (mg/L)



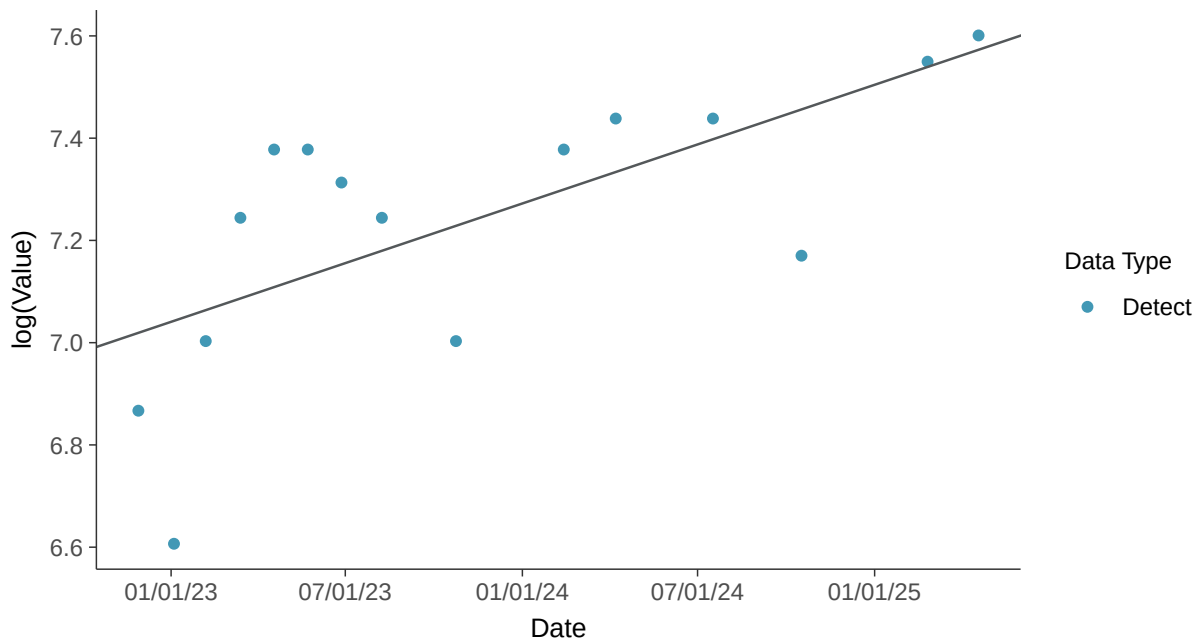
Gamma Q-Q plot

Total Dissolved Solids, MW-09 (mg/L)



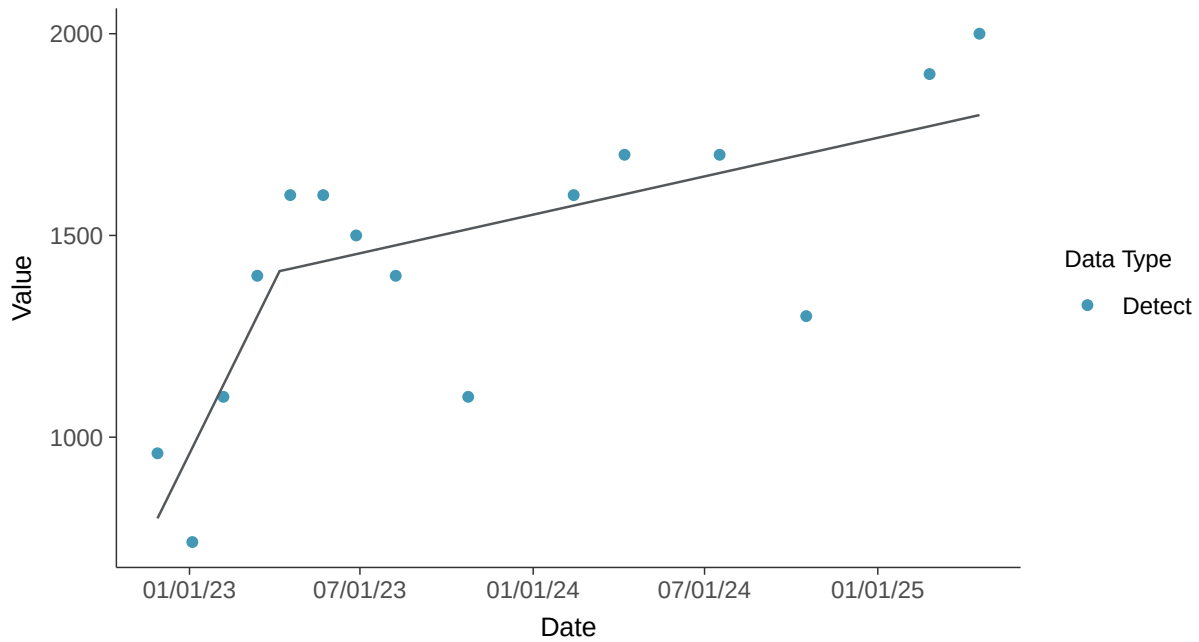
Trend Regression: Lognormal MLE

Total Dissolved Solids, MW-09 (mg/L)



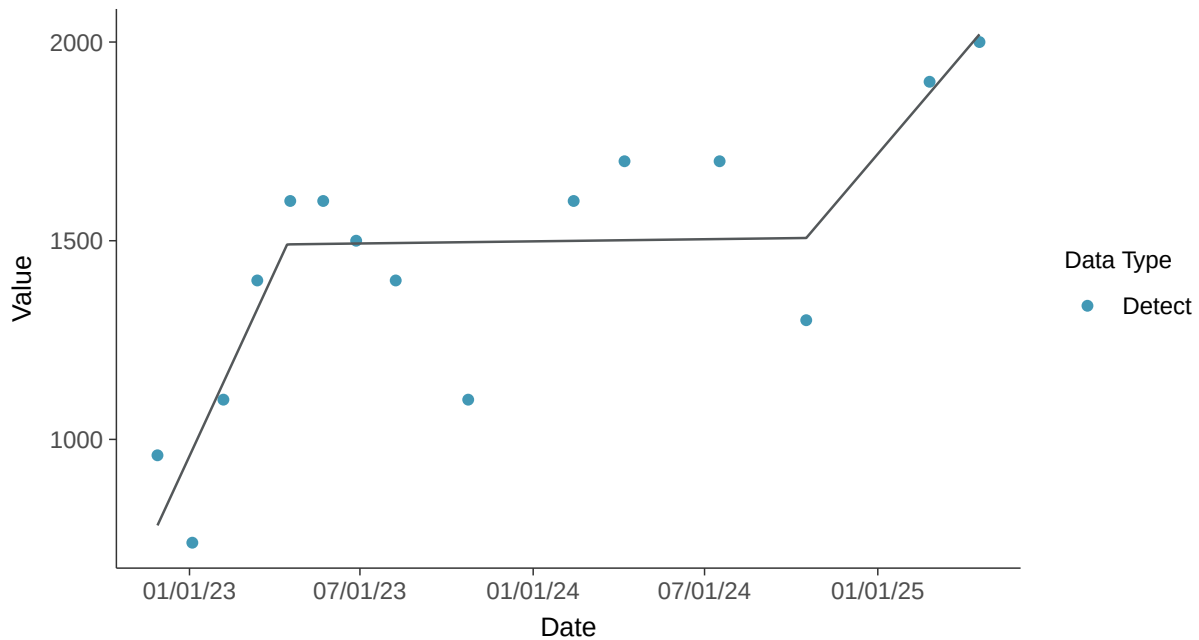
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-09 (mg/L)



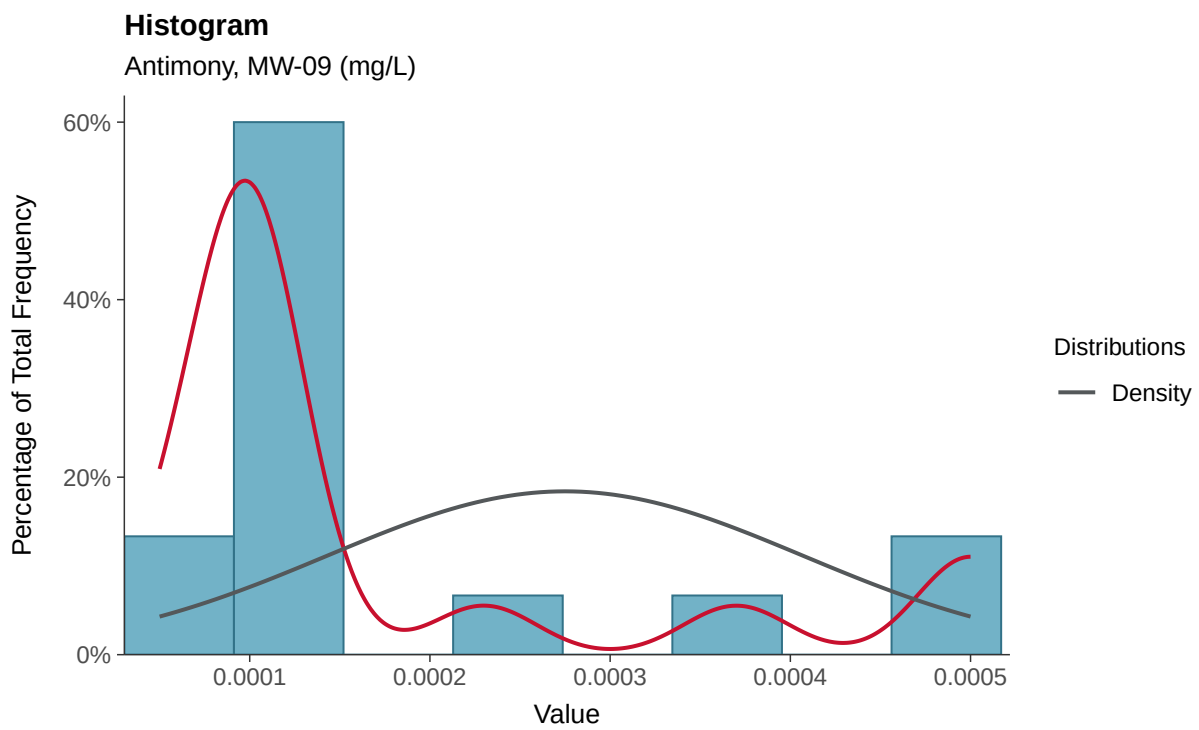
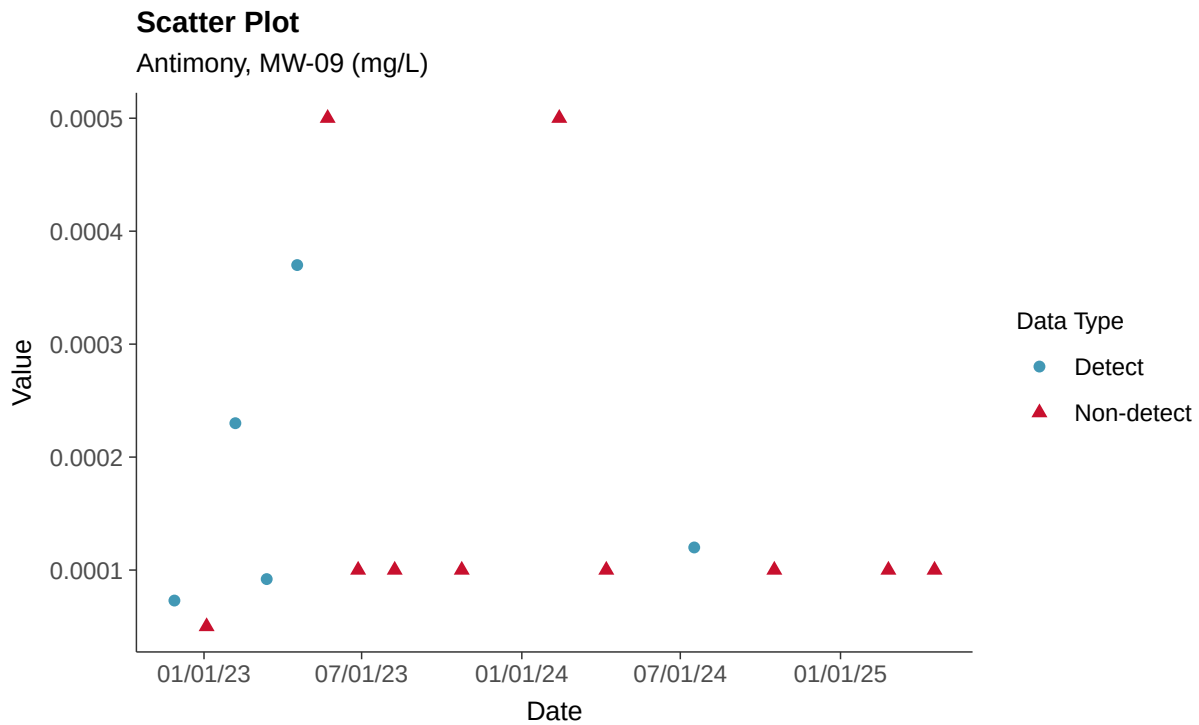
Trend Regression: Piecewise Linear-Linear-Linear

Total Dissolved Solids, MW-09 (mg/L)



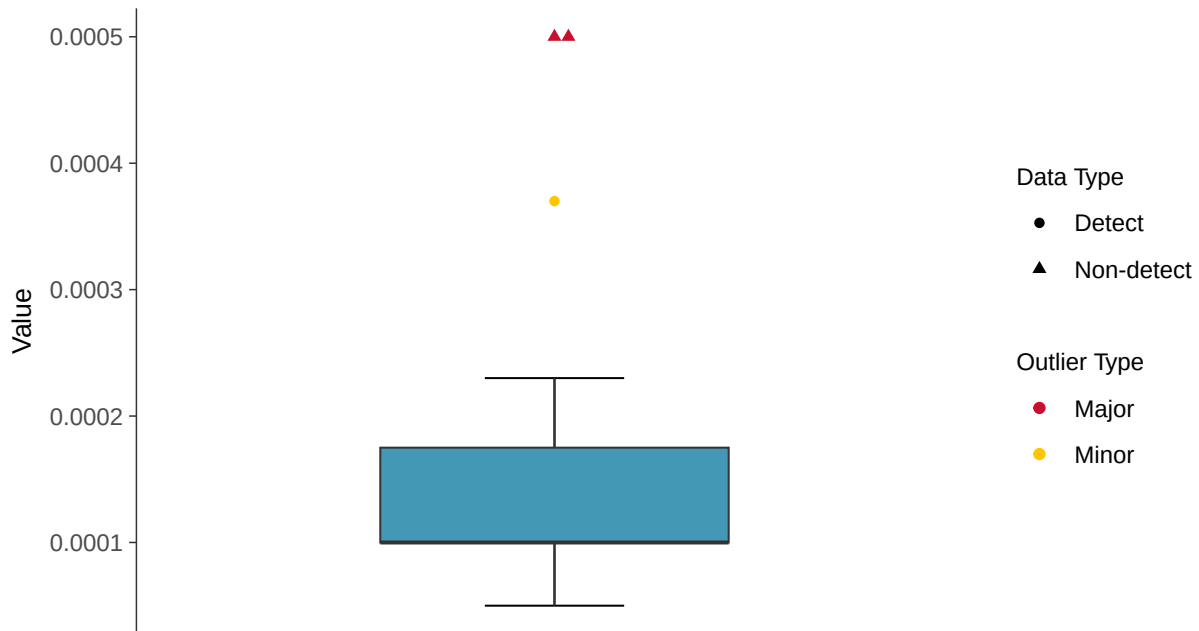
Appendix IV: Antimony, MW-09

ID: 19_2_4_101



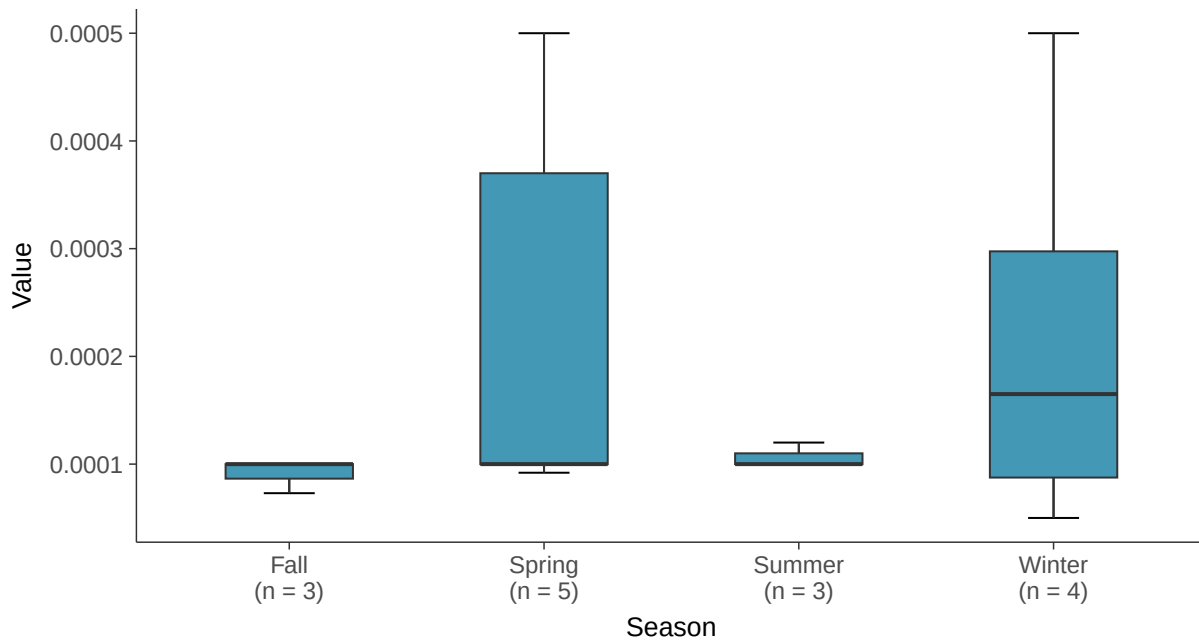
Boxplot

Antimony, MW-09 (mg/L)



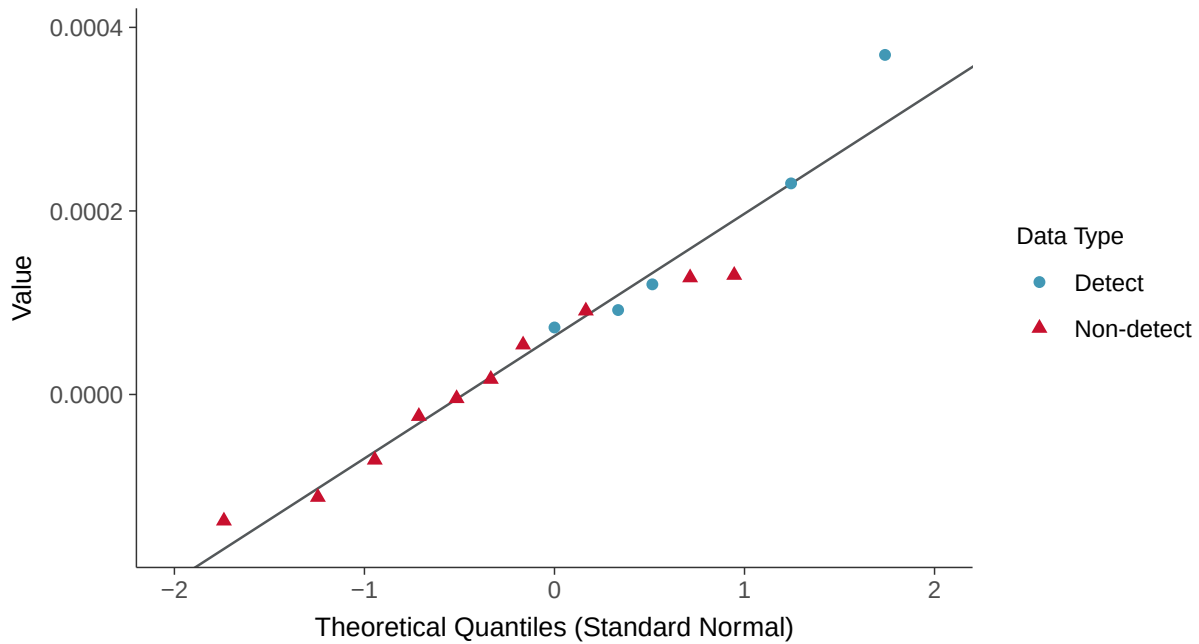
Boxplot by Season

Antimony, MW-09 (mg/L)



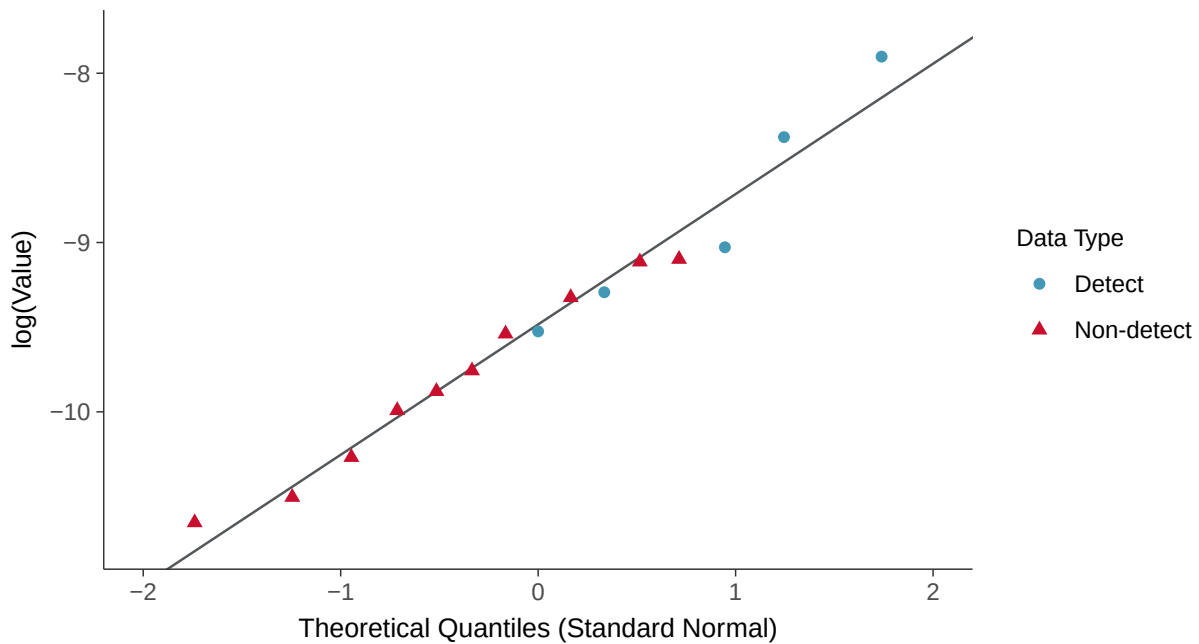
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-09 (mg/L)



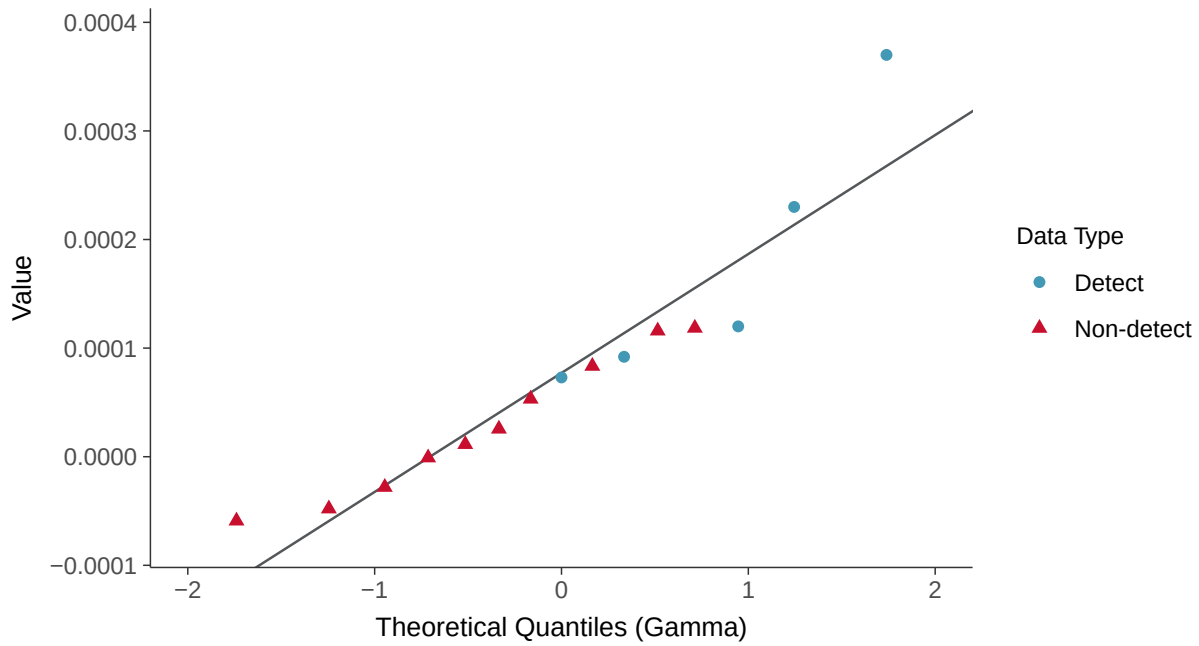
Lognormal Q-Q plot using ROS Imputed Estimates

Antimony, MW-09 (mg/L)



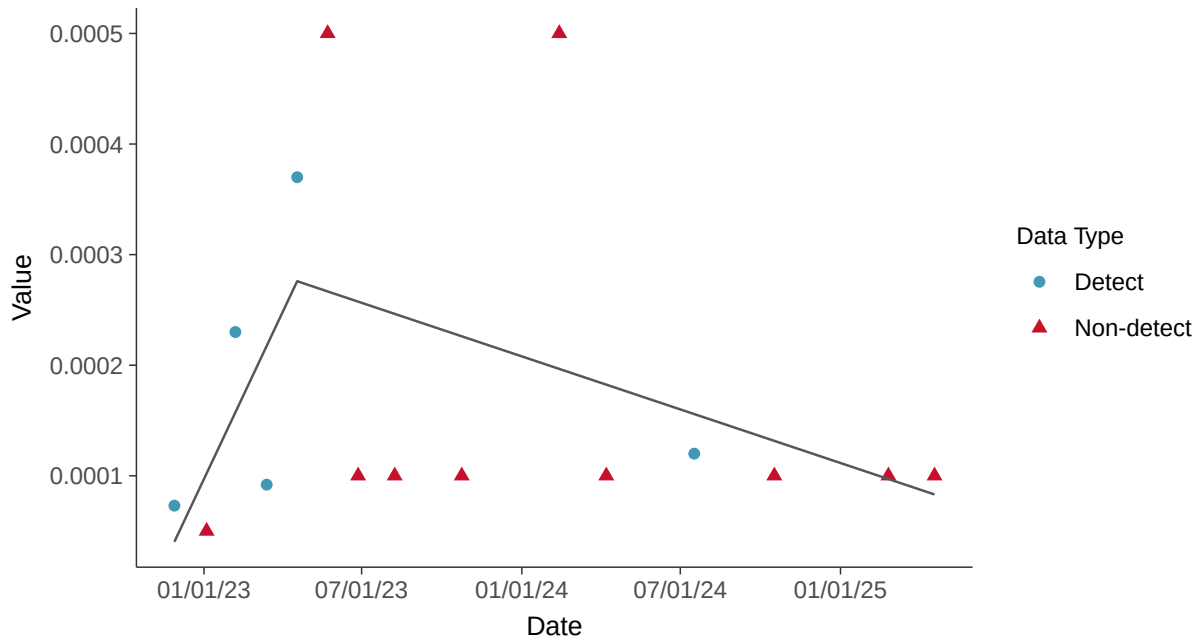
Gamma Q-Q plot using ROS Imputed Estimates

Antimony, MW-09 (mg/L)



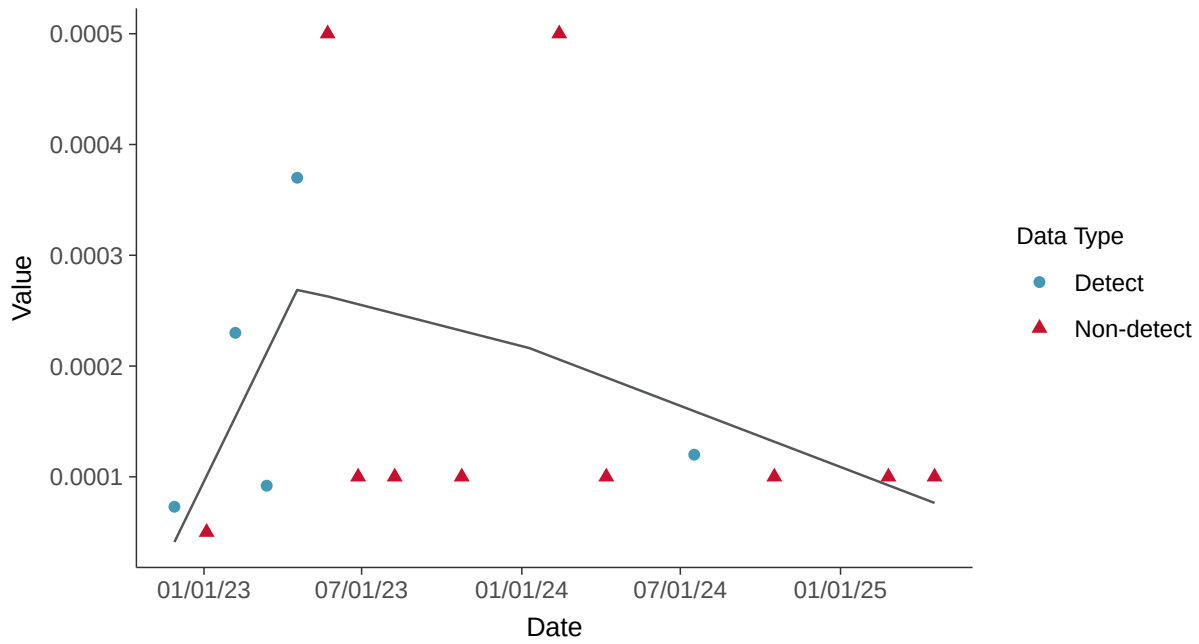
Trend Regression: Piecewise Linear-Linear

Antimony, MW-09 (mg/L)



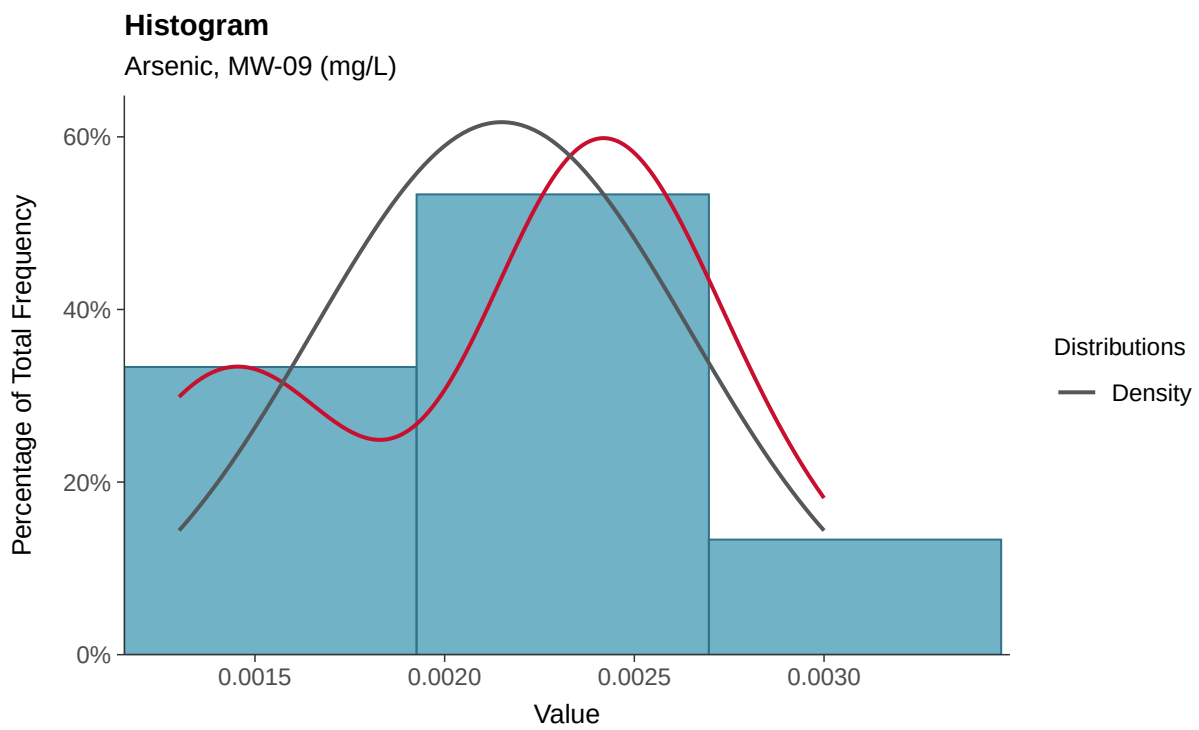
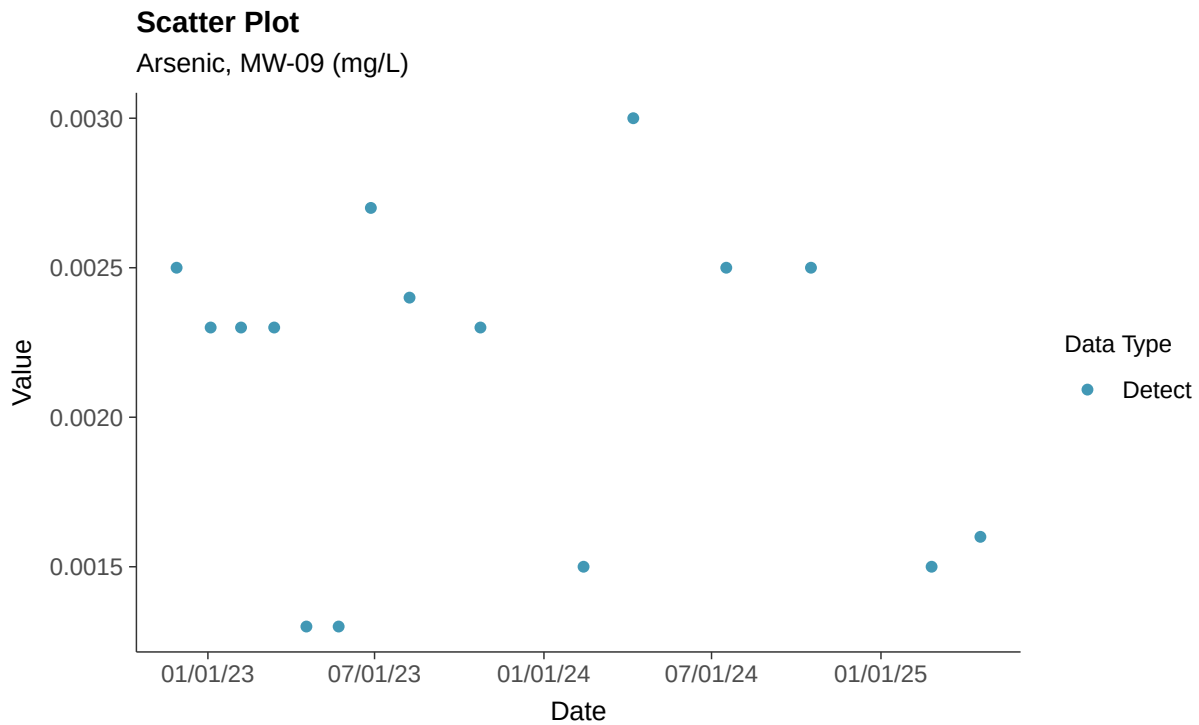
Trend Regression: Piecewise Linear-Linear-Linear

Antimony, MW-09 (mg/L)



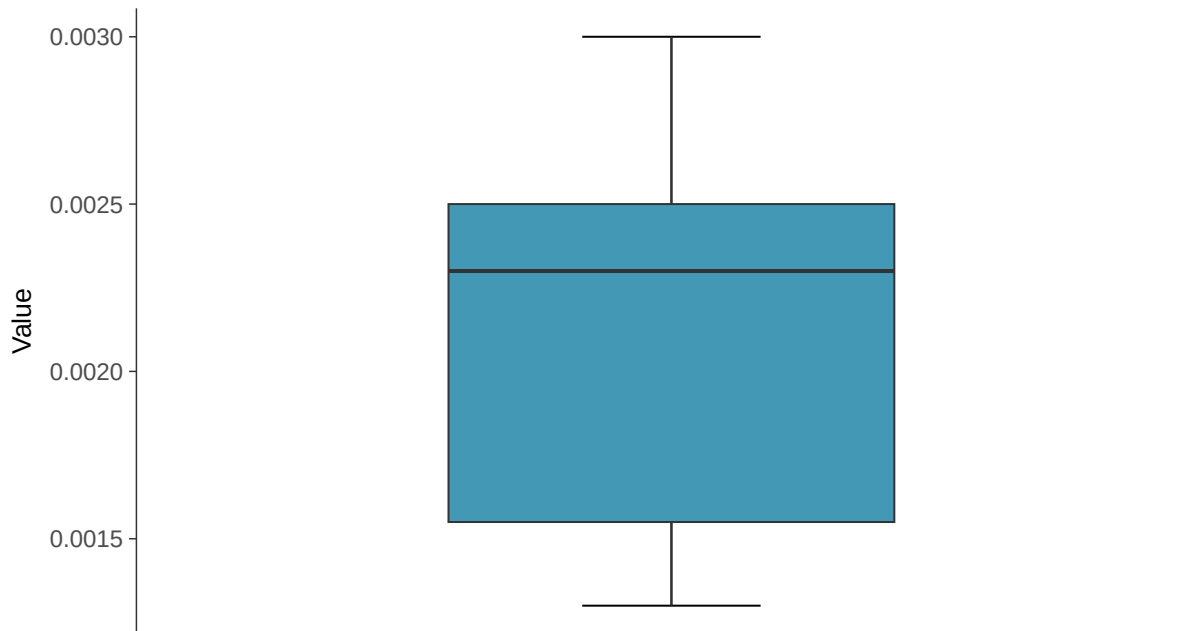
Appendix IV: Arsenic, MW-09

ID: 19_2_4_102



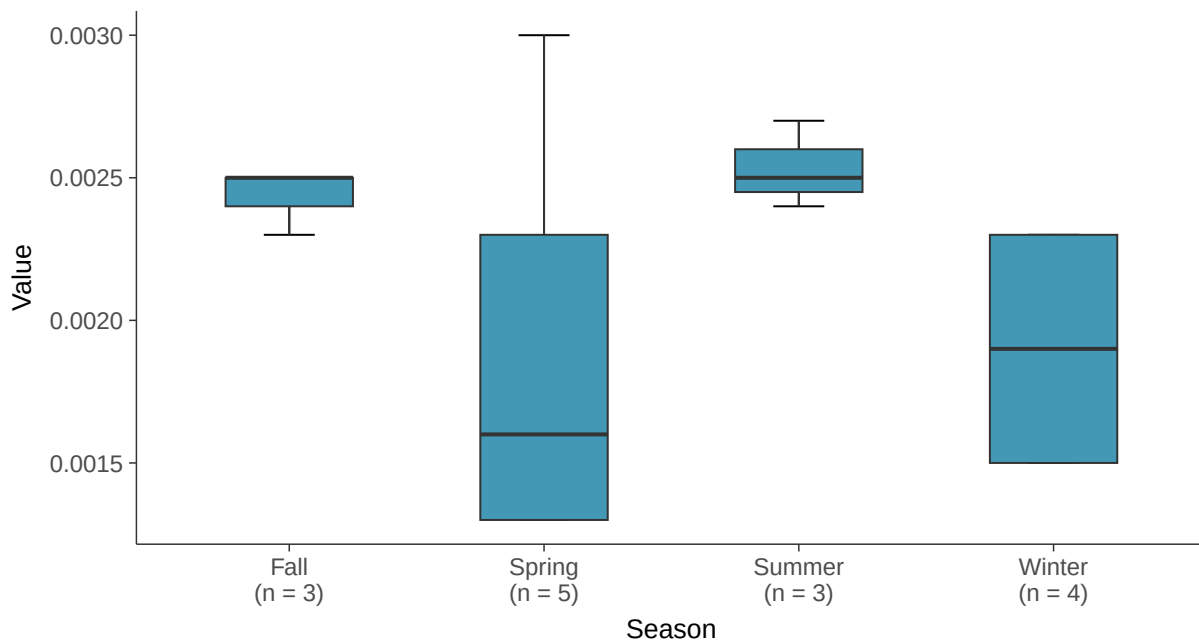
Boxplot

Arsenic, MW-09 (mg/L)



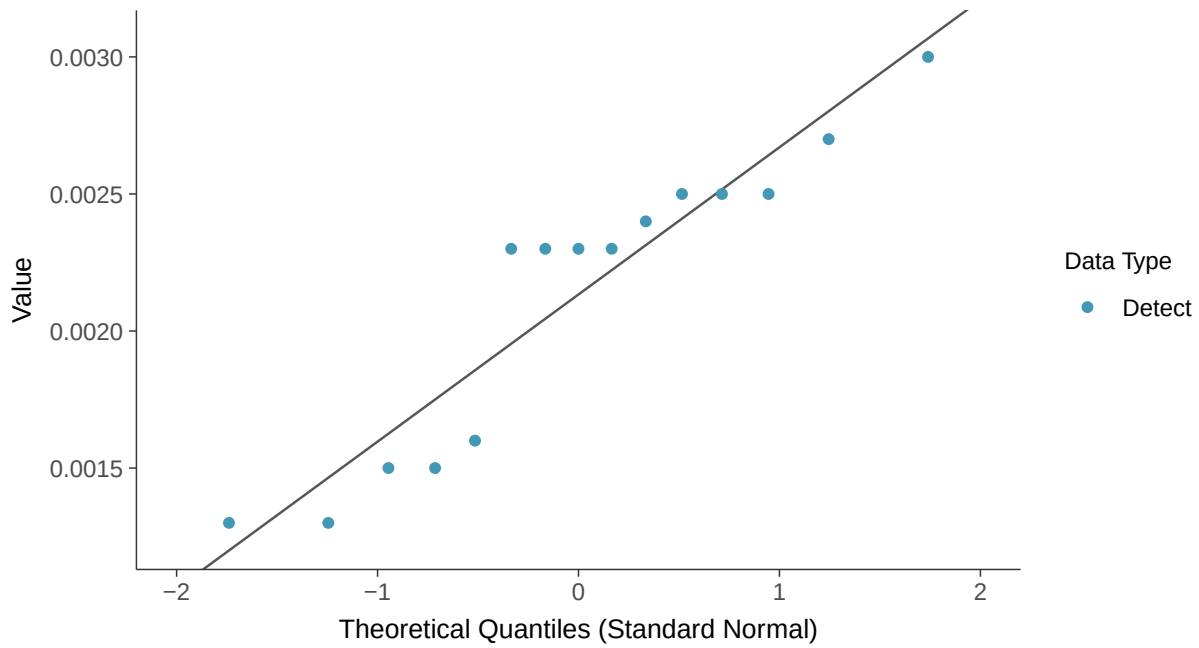
Boxplot by Season

Arsenic, MW-09 (mg/L)



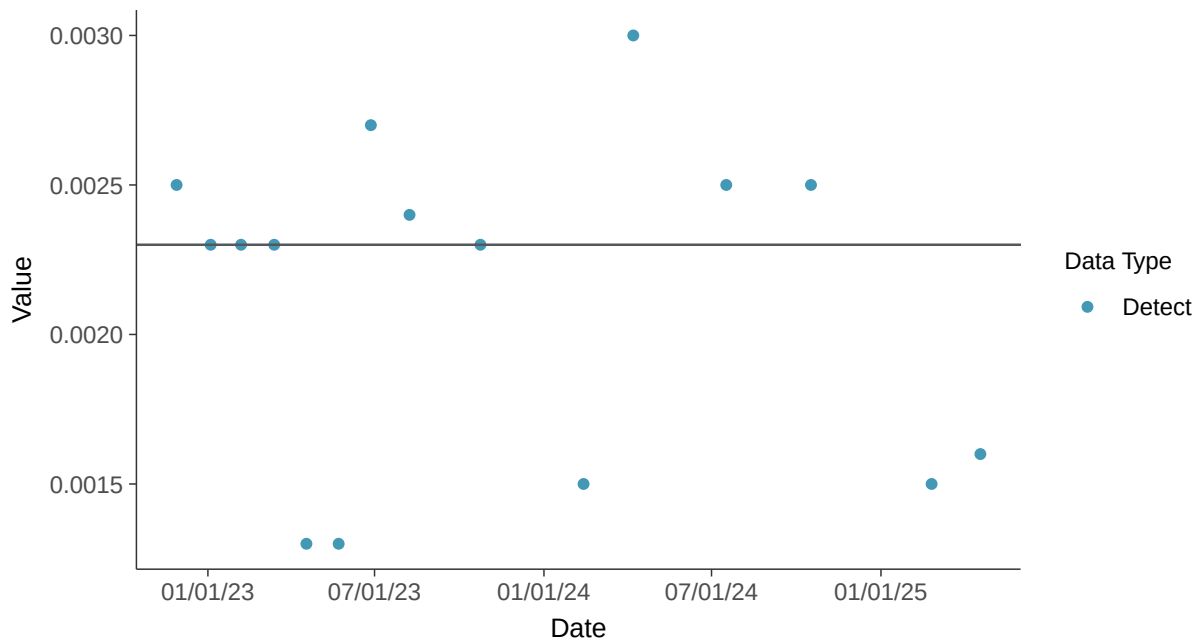
Normal Q-Q plot

Arsenic, MW-09 (mg/L)



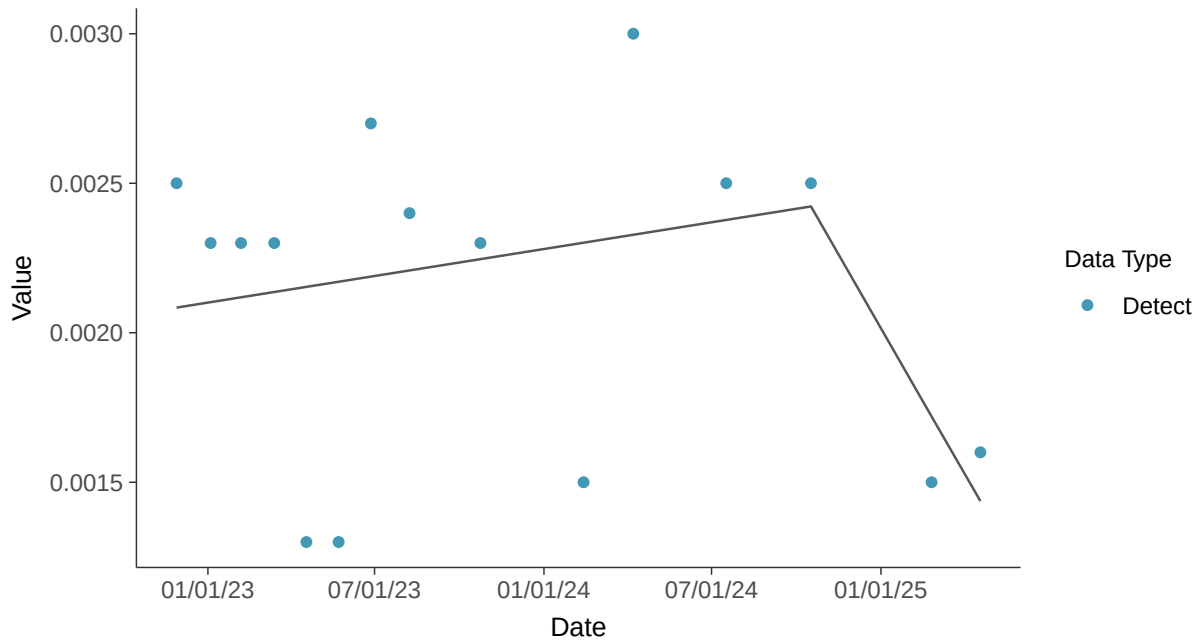
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Arsenic, MW-09 (mg/L)



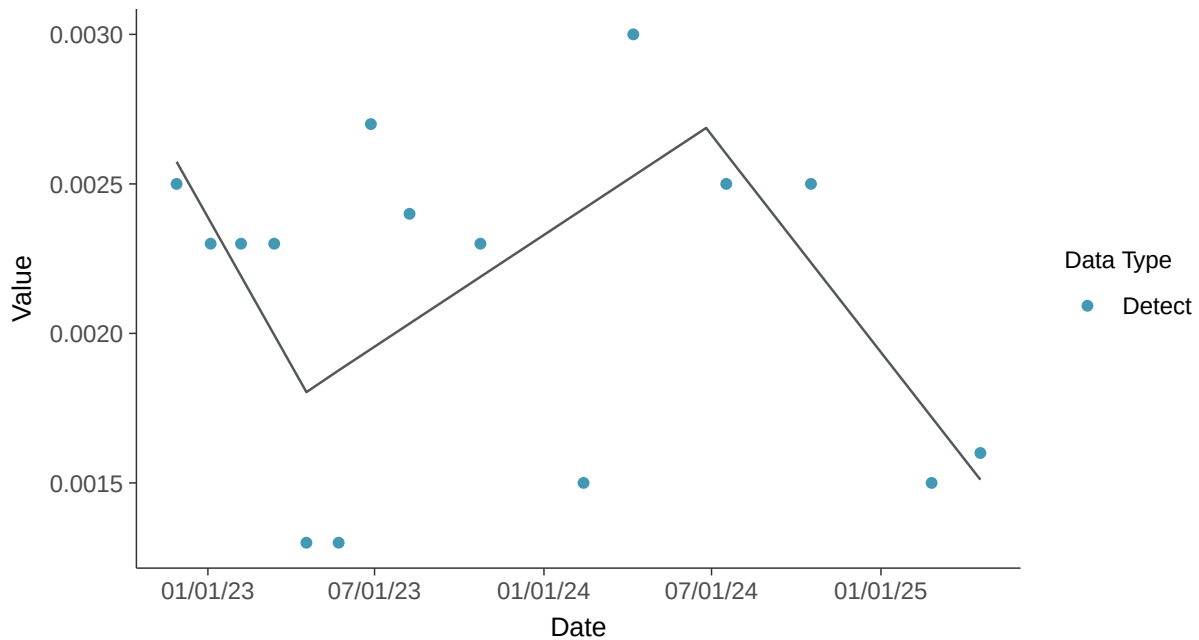
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-09 (mg/L)



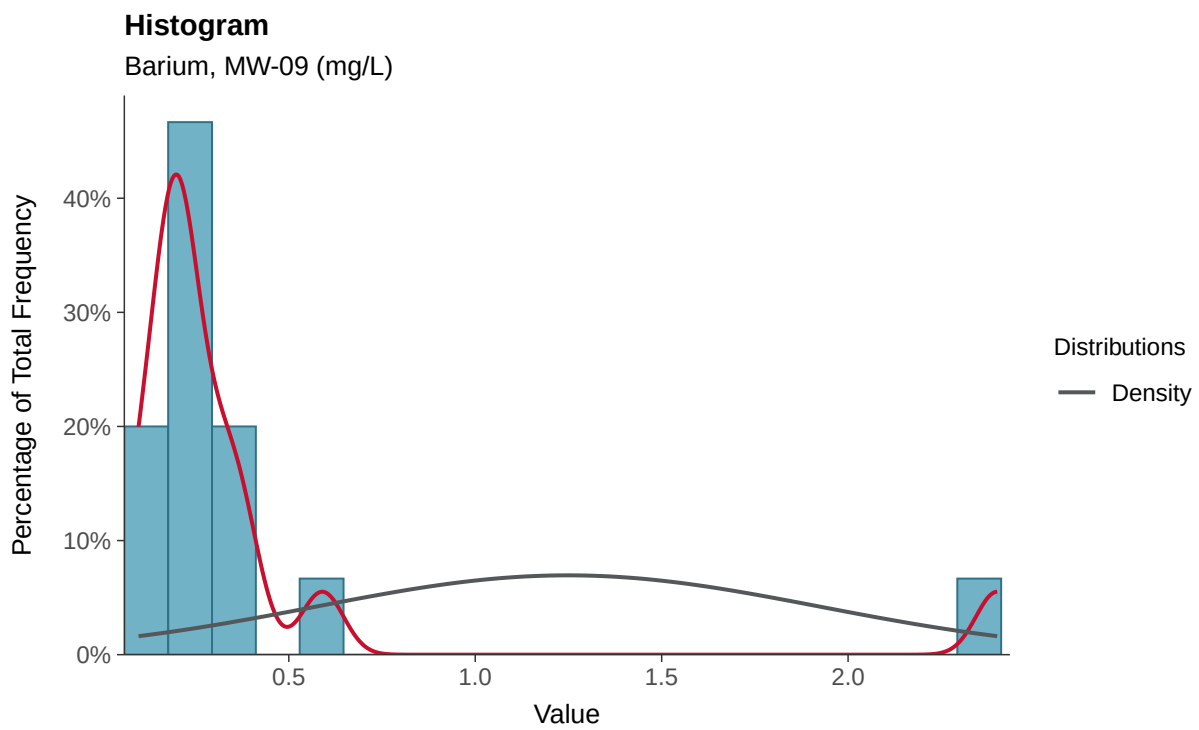
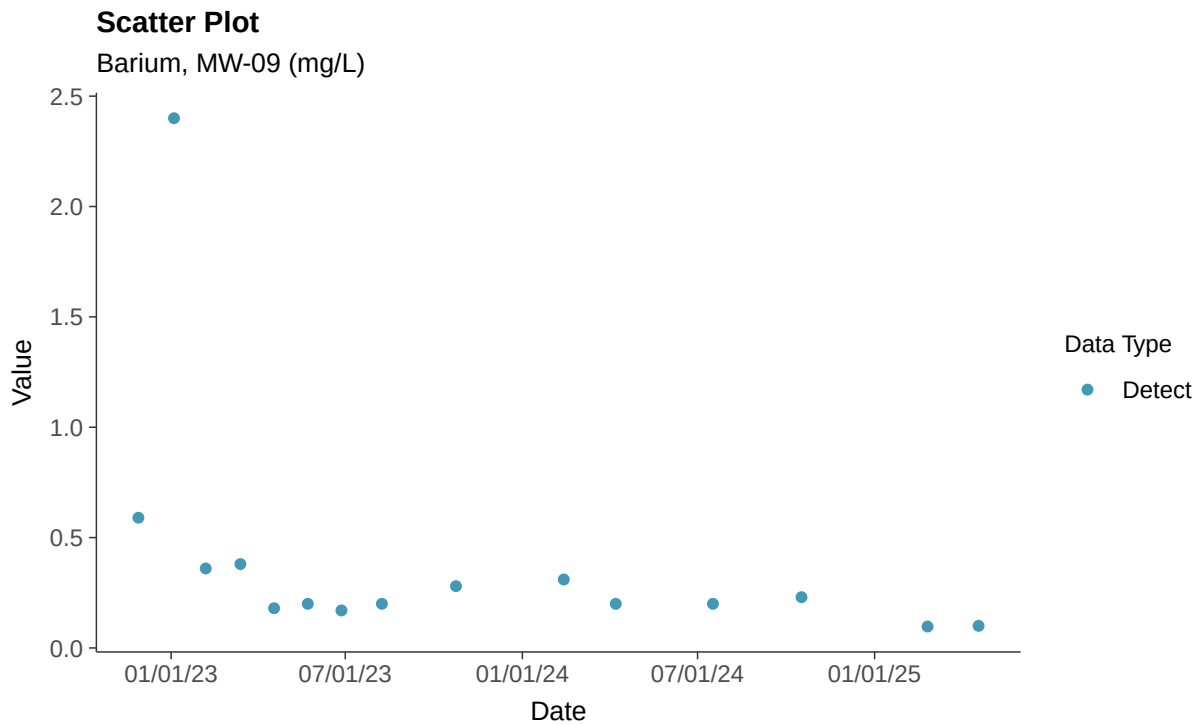
Trend Regression: Piecewise Linear-Linear-Linear

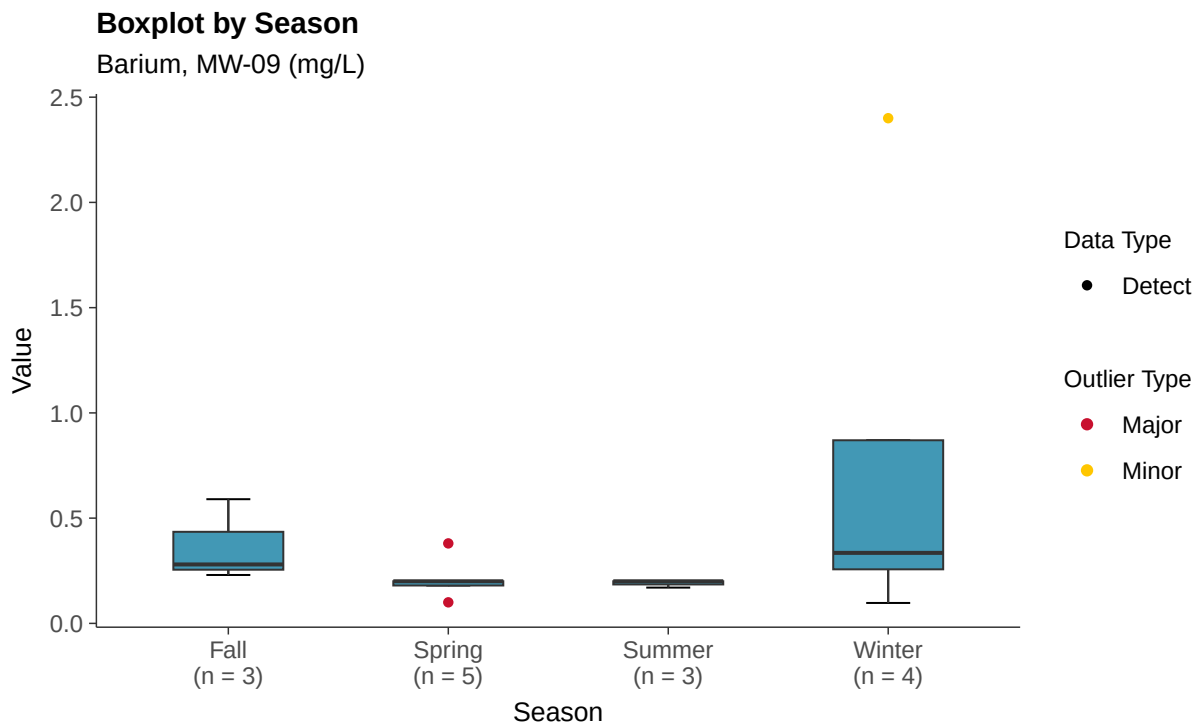
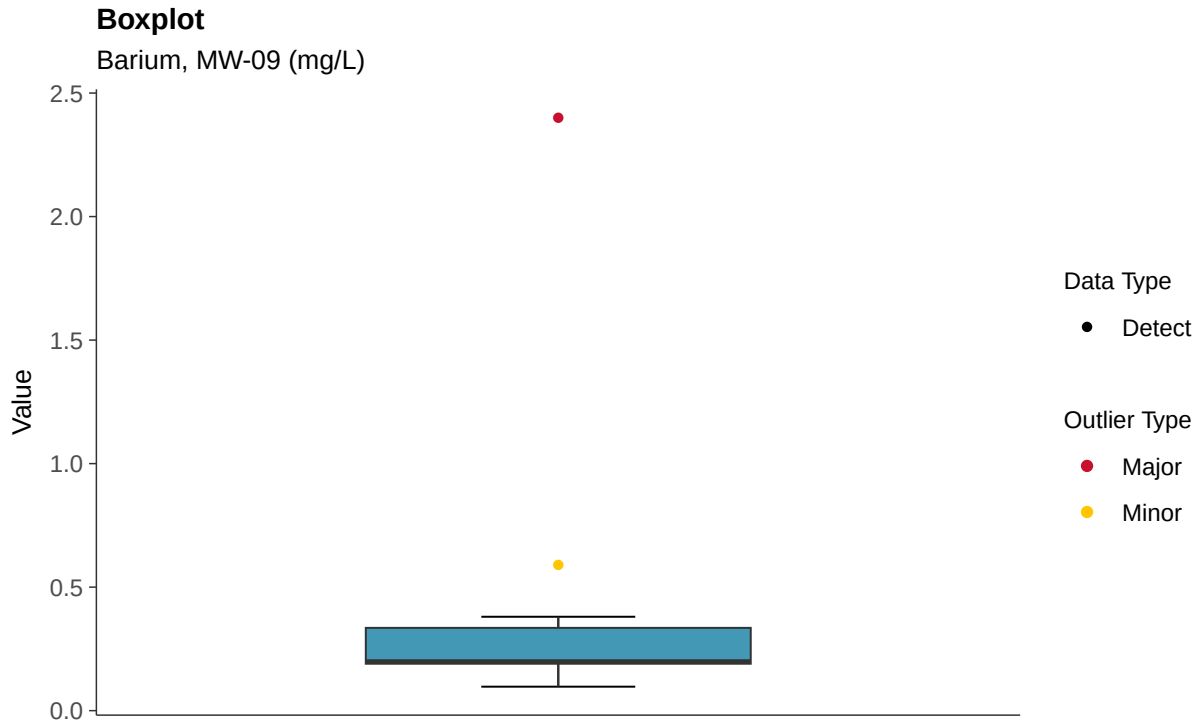
Arsenic, MW-09 (mg/L)



Appendix IV: Barium, MW-09

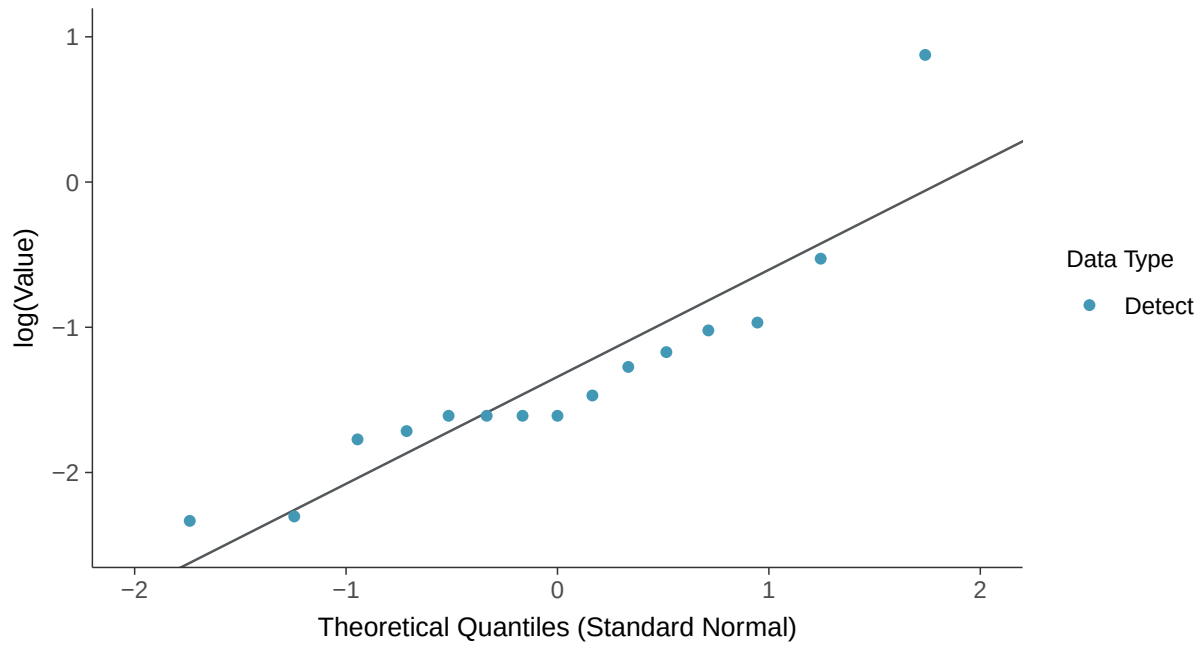
ID: 19_2_4_103





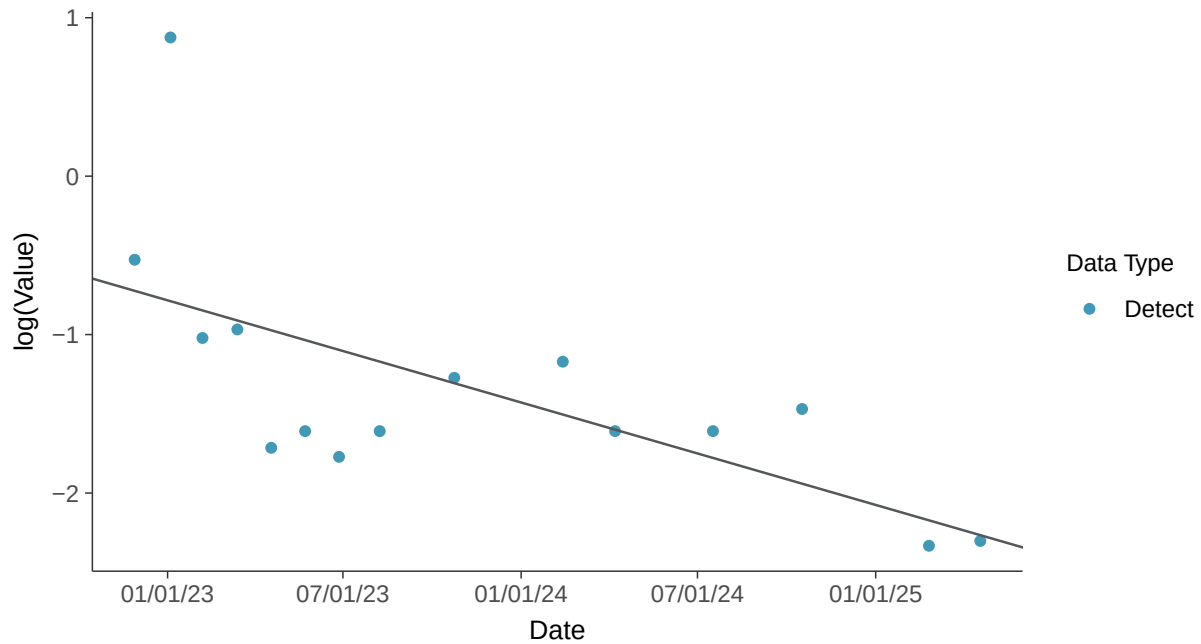
Lognormal Q-Q plot

Barium, MW-09 (mg/L)



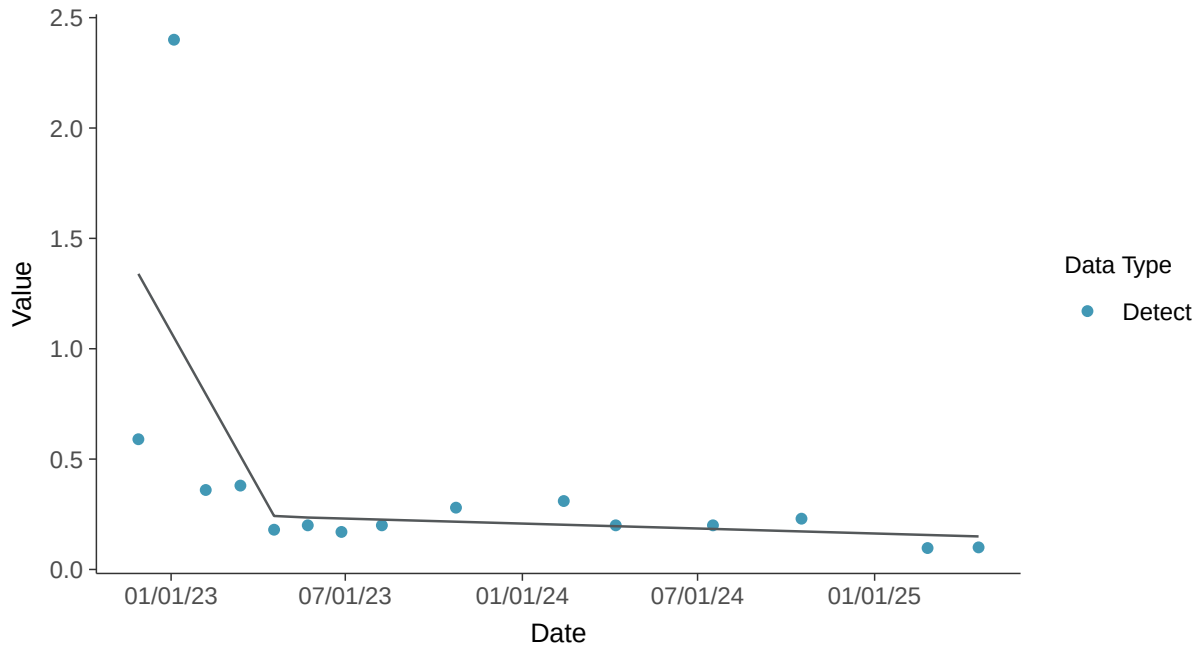
Trend Regression: Lognormal MLE

Barium, MW-09 (mg/L)



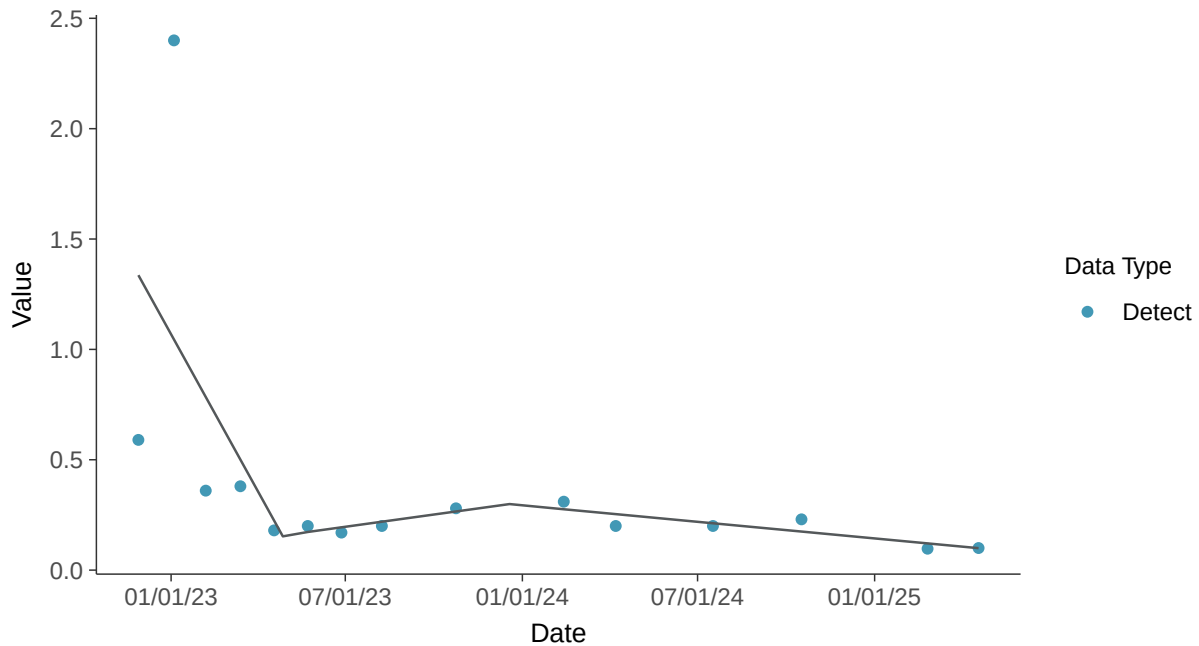
Trend Regression: Piecewise Linear-Linear

Barium, MW-09 (mg/L)



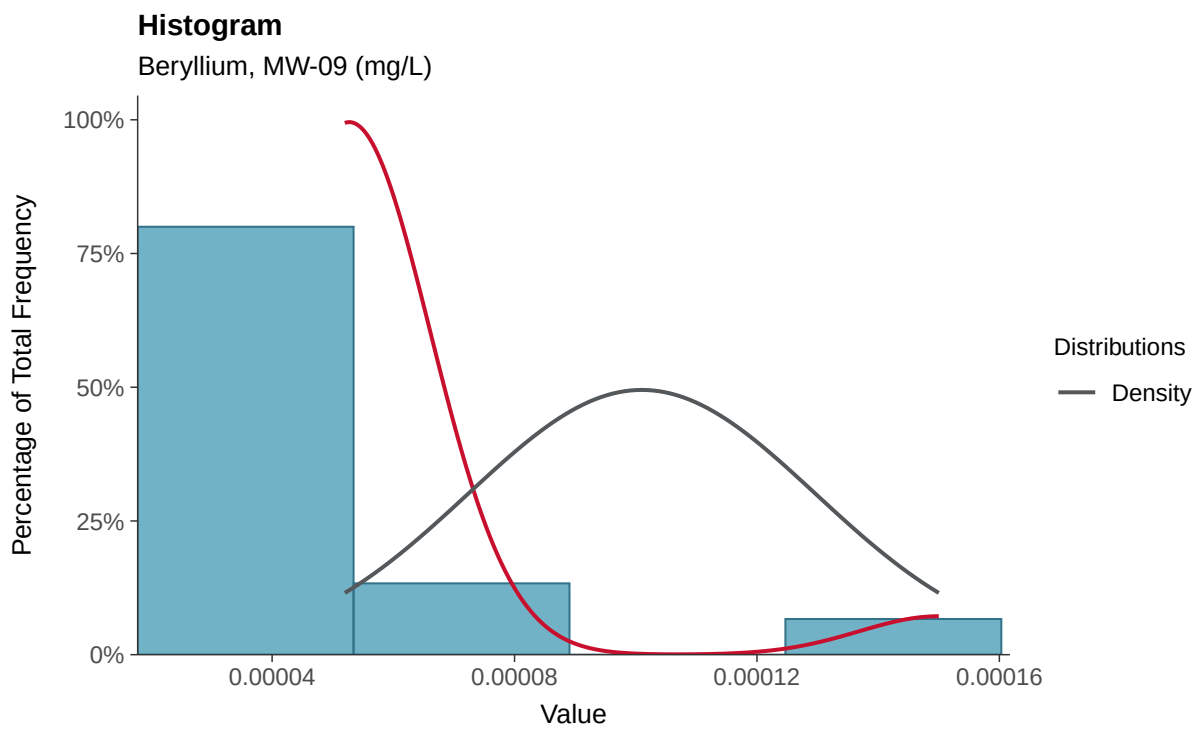
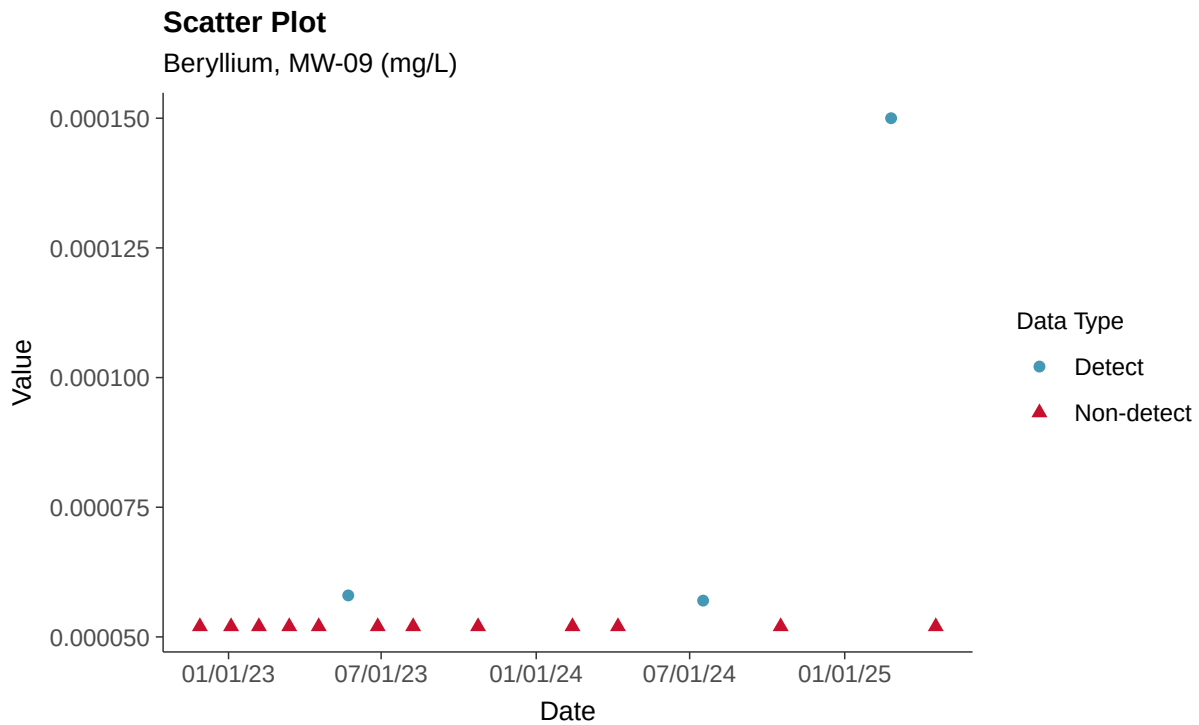
Trend Regression: Piecewise Linear-Linear-Linear

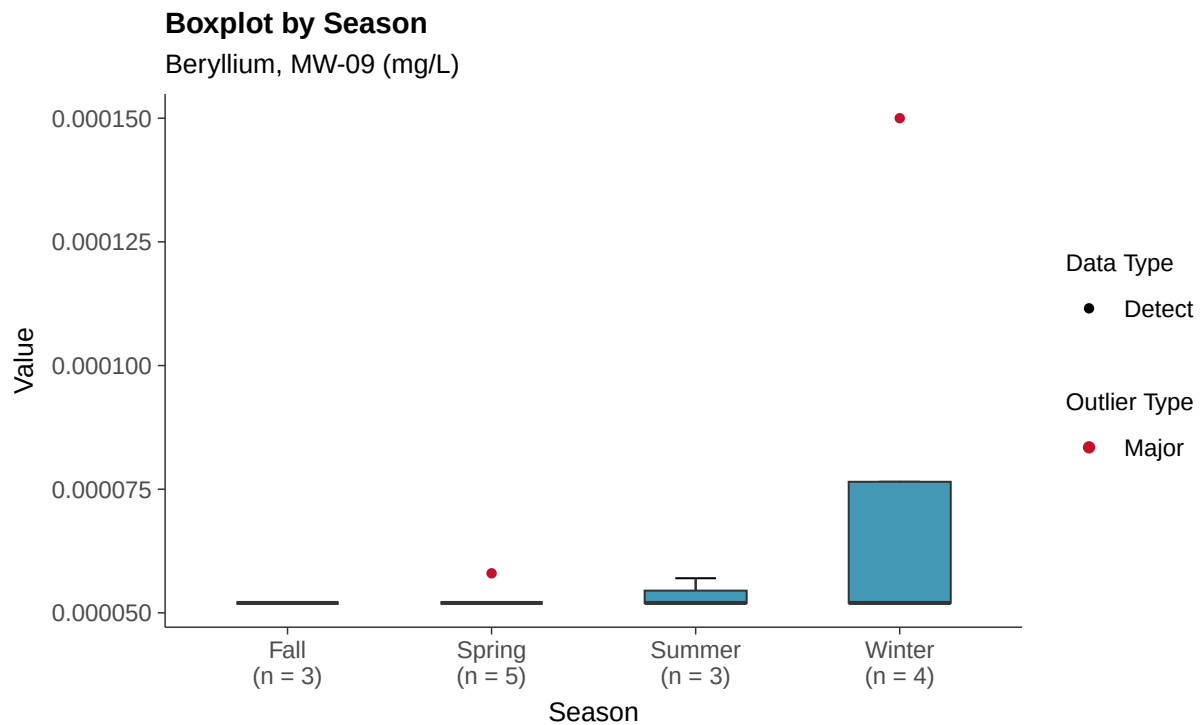
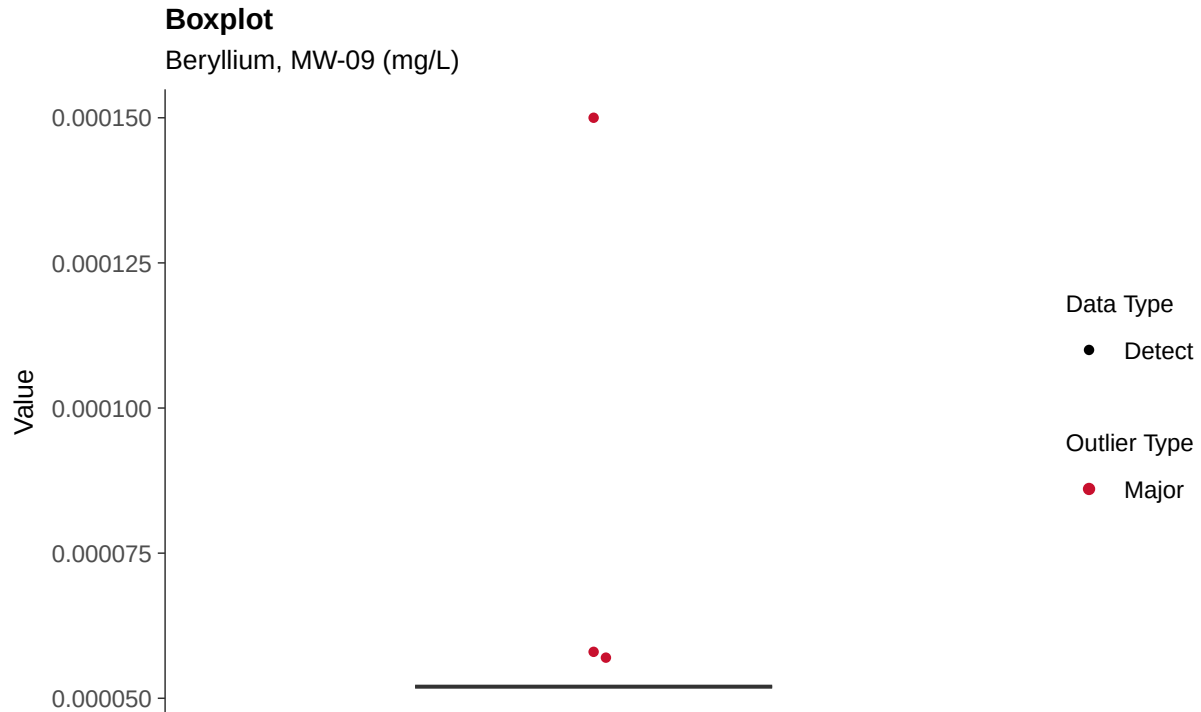
Barium, MW-09 (mg/L)



Appendix IV: Beryllium, MW-09

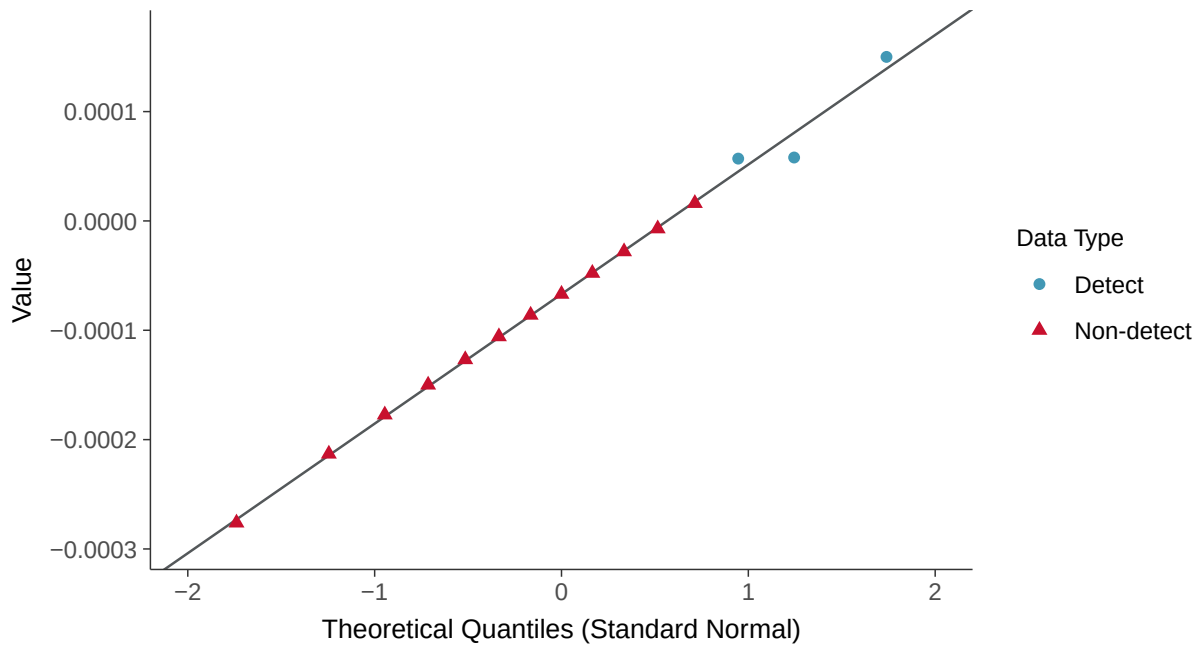
ID: 19_2_4_104





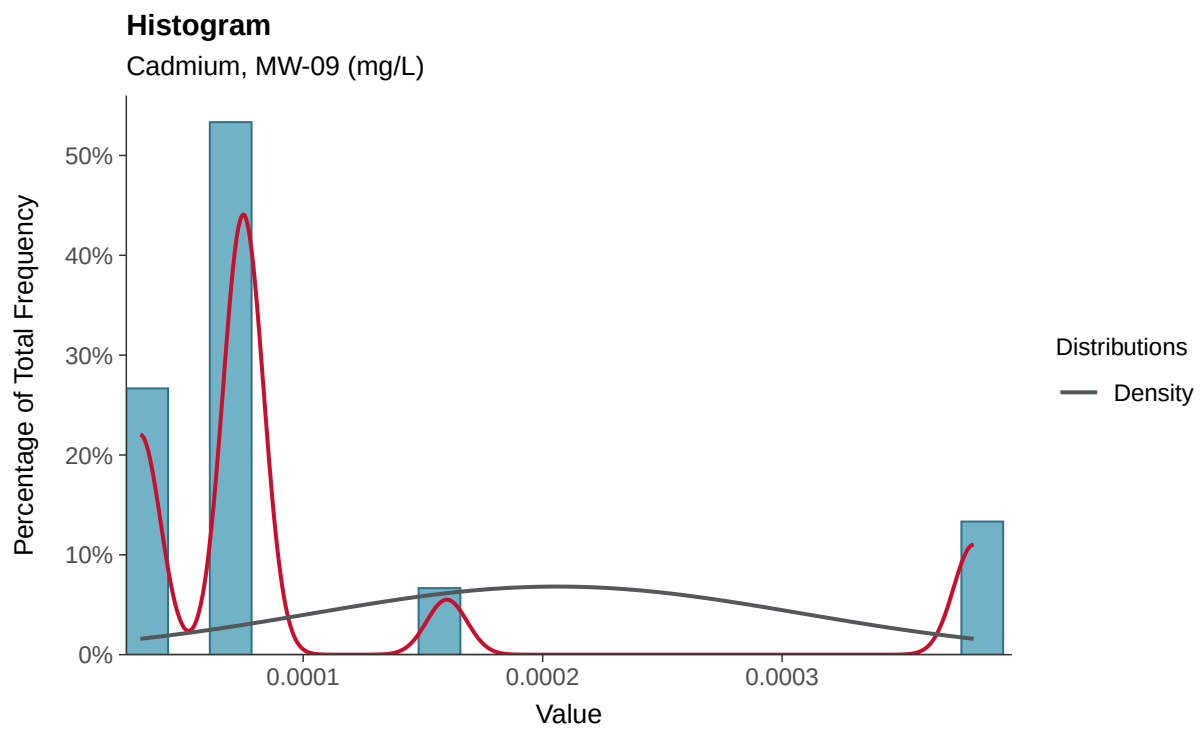
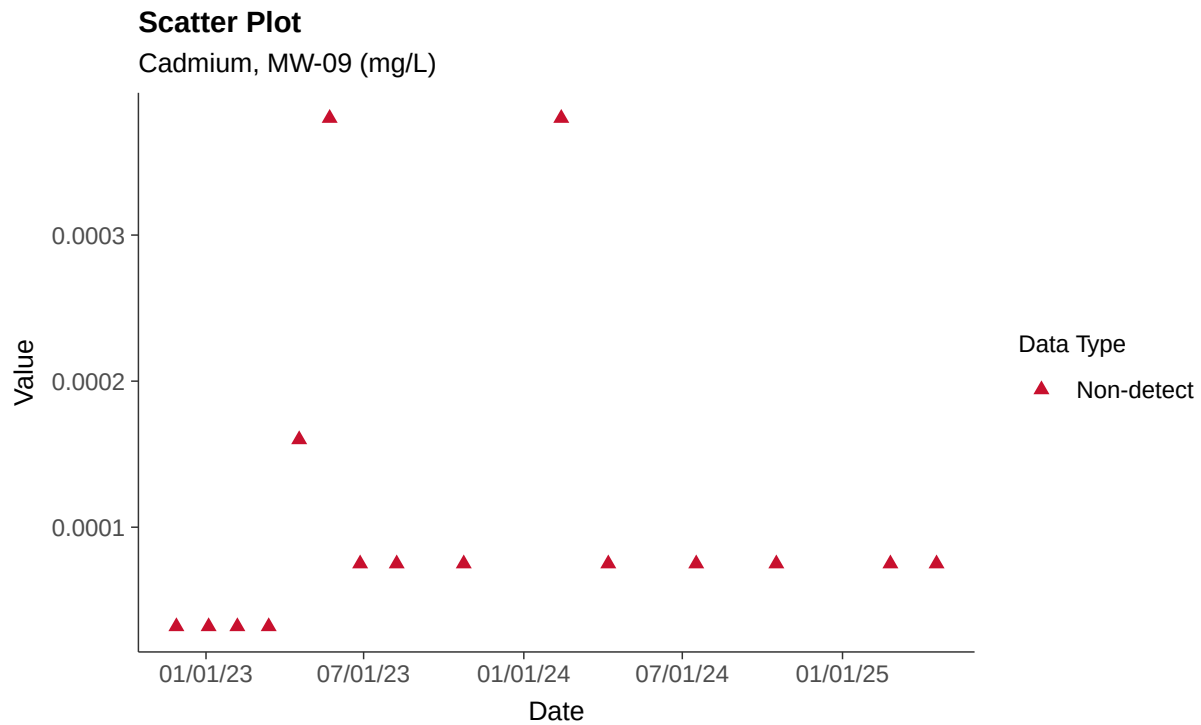
Normal Q-Q plot using ROS Imputed Estimates

Beryllium, MW-09 (mg/L)



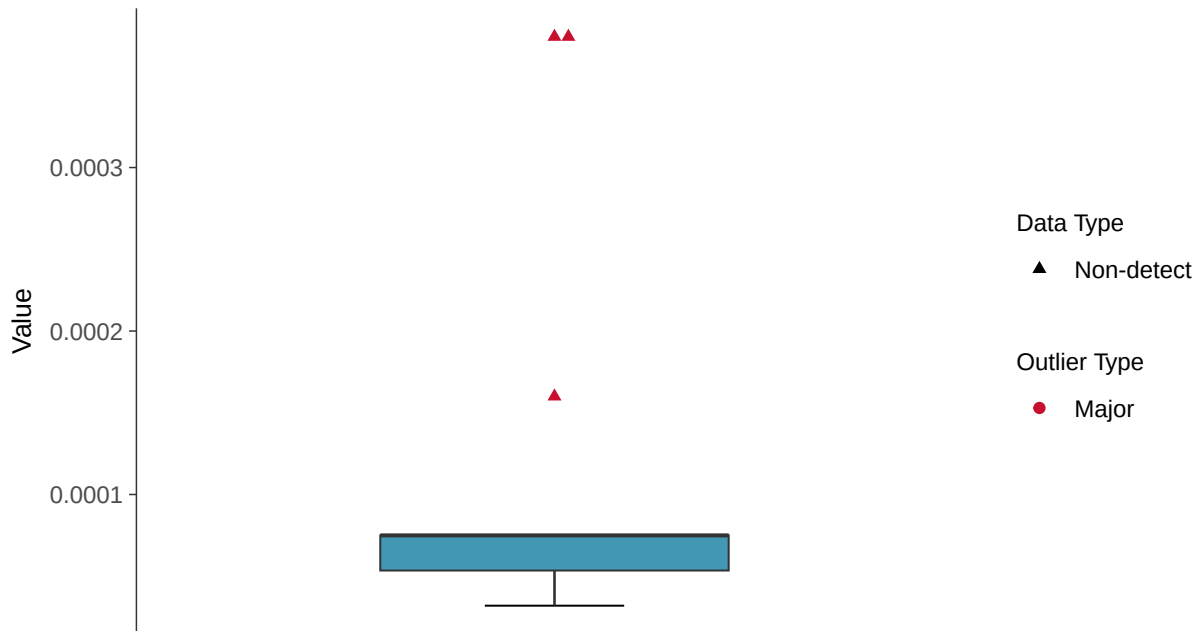
Appendix IV: Cadmium, MW-09

ID: 19_2_4_106



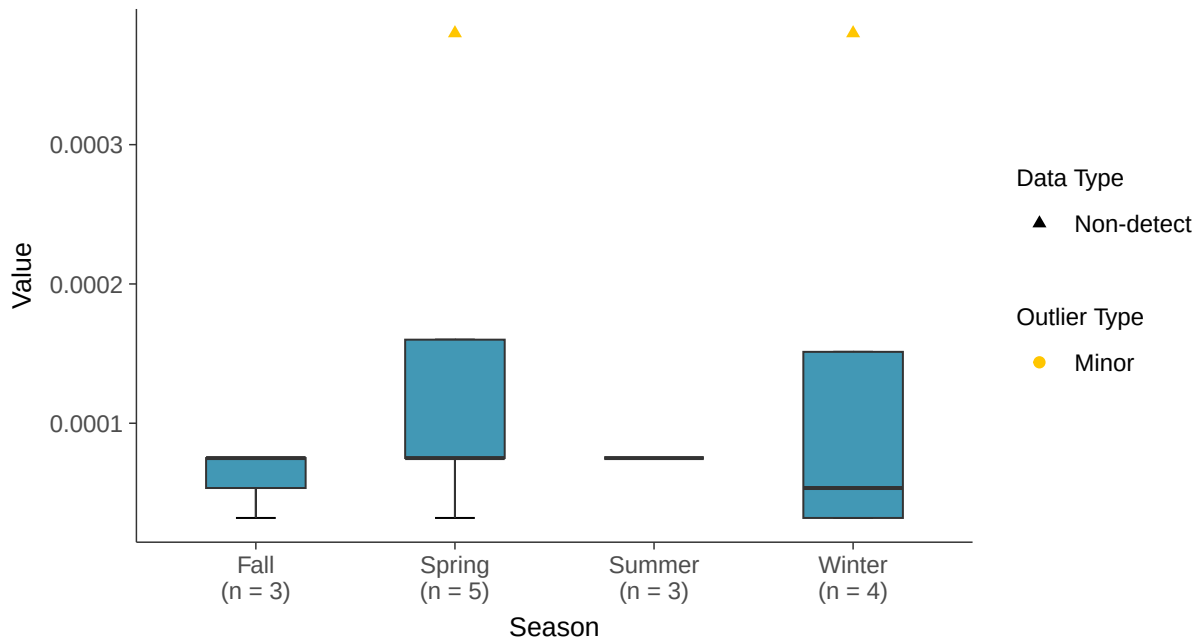
Boxplot

Cadmium, MW-09 (mg/L)



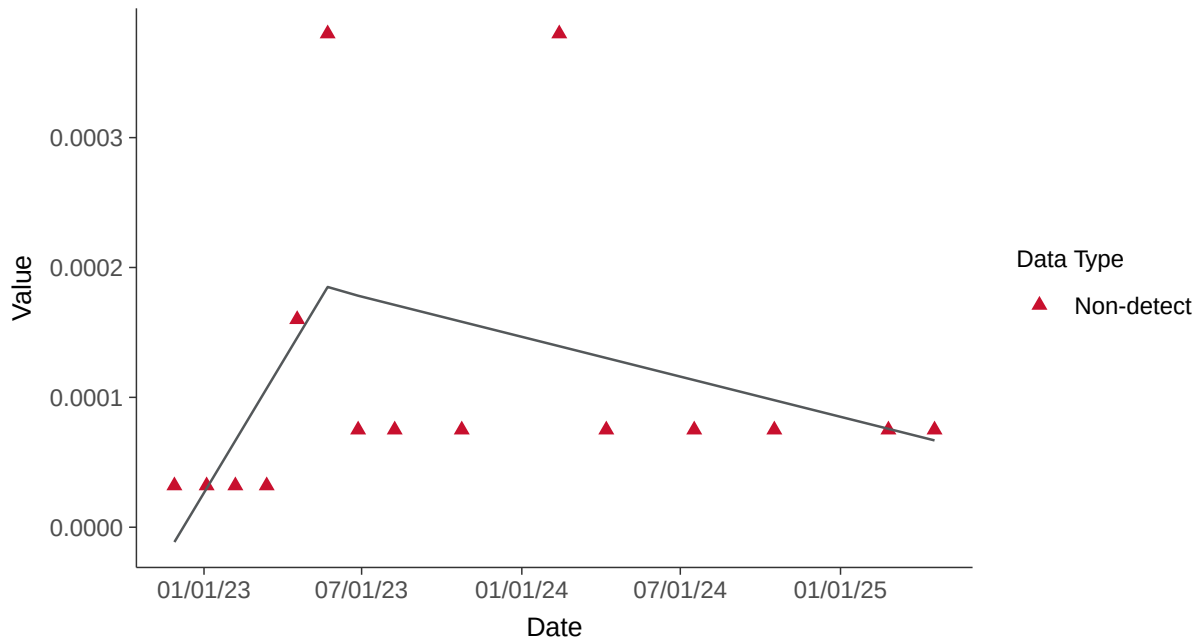
Boxplot by Season

Cadmium, MW-09 (mg/L)



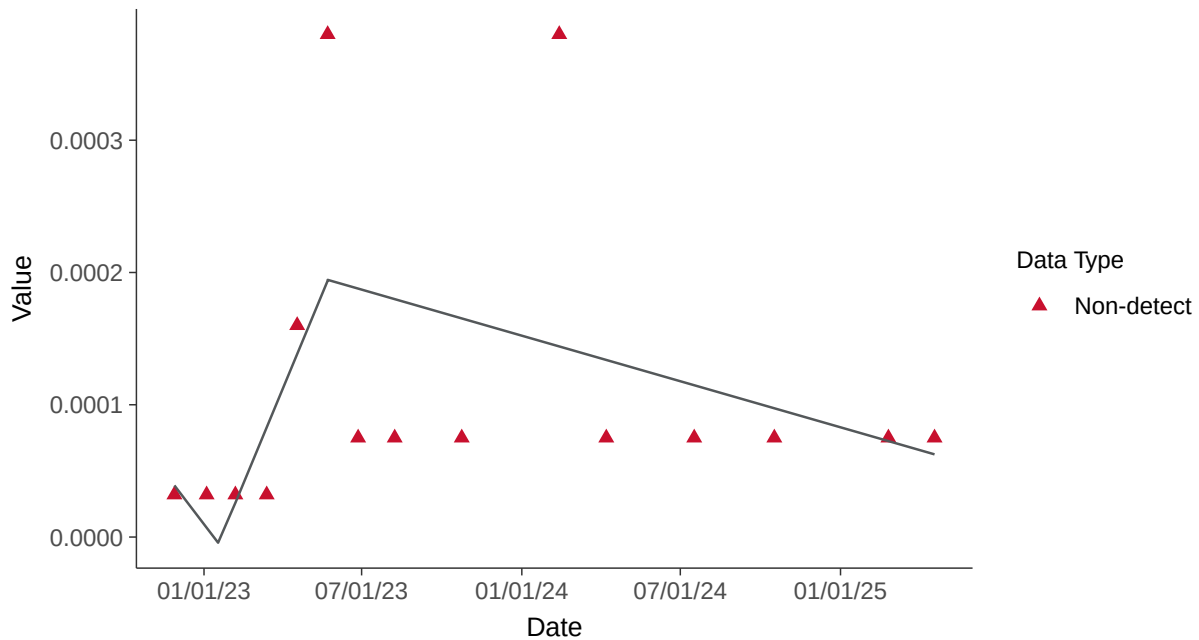
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-09 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cadmium, MW-09 (mg/L)

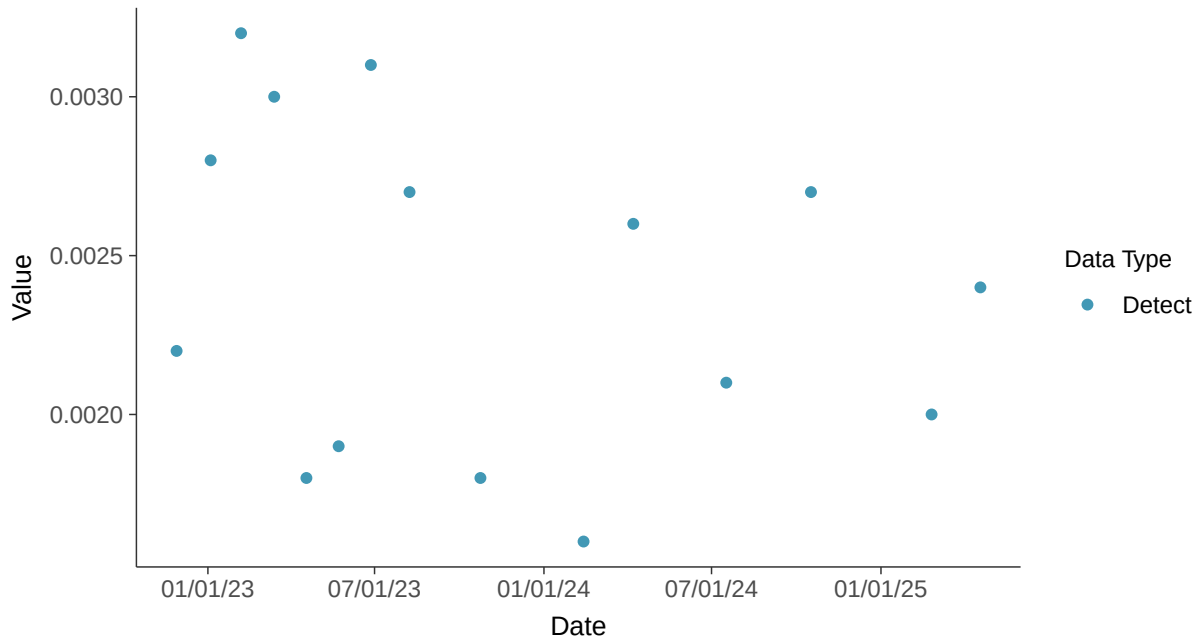


Appendix IV: Chromium, Total, MW-09

ID: 19_2_4_109

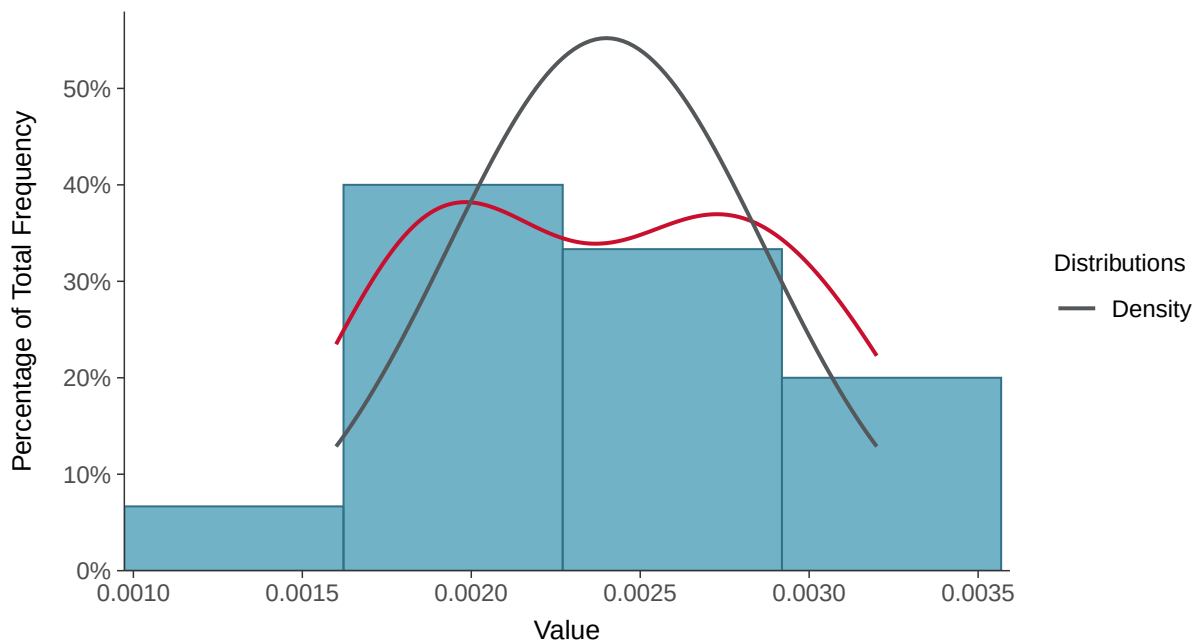
Scatter Plot

Chromium, Total, MW-09 (mg/L)



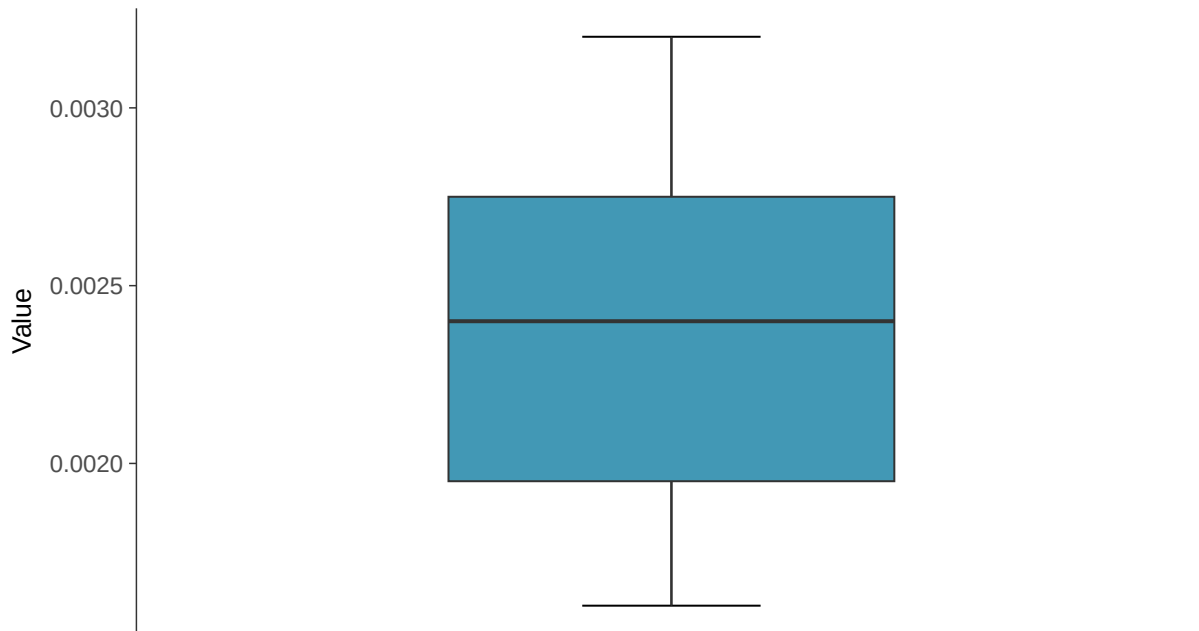
Histogram

Chromium, Total, MW-09 (mg/L)



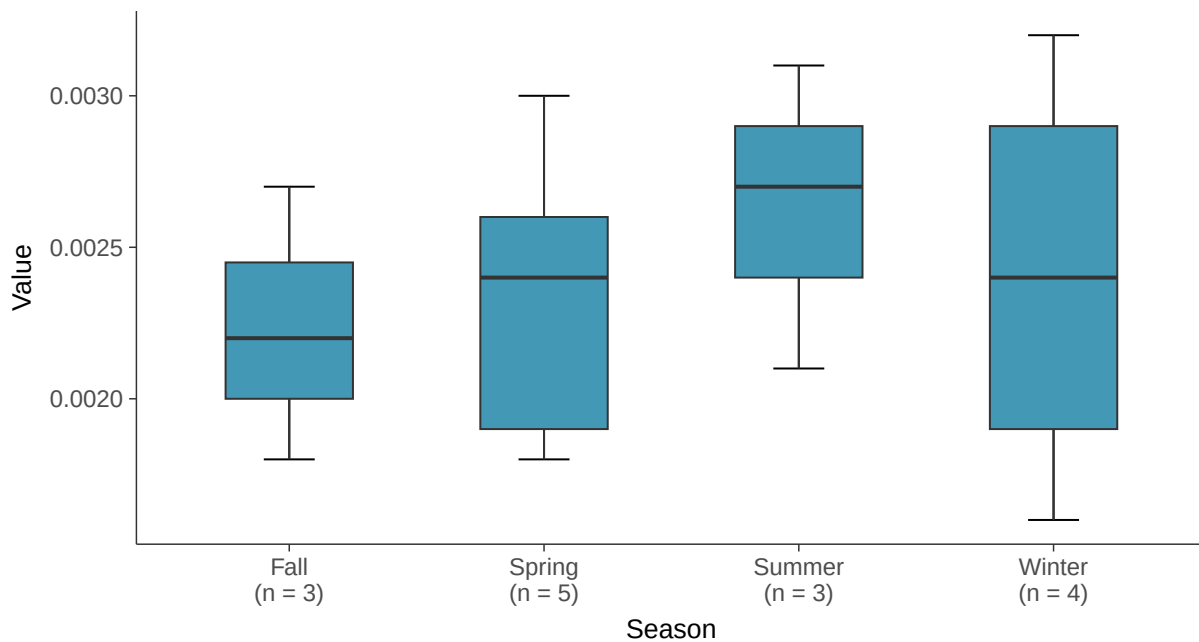
Boxplot

Chromium, Total, MW-09 (mg/L)



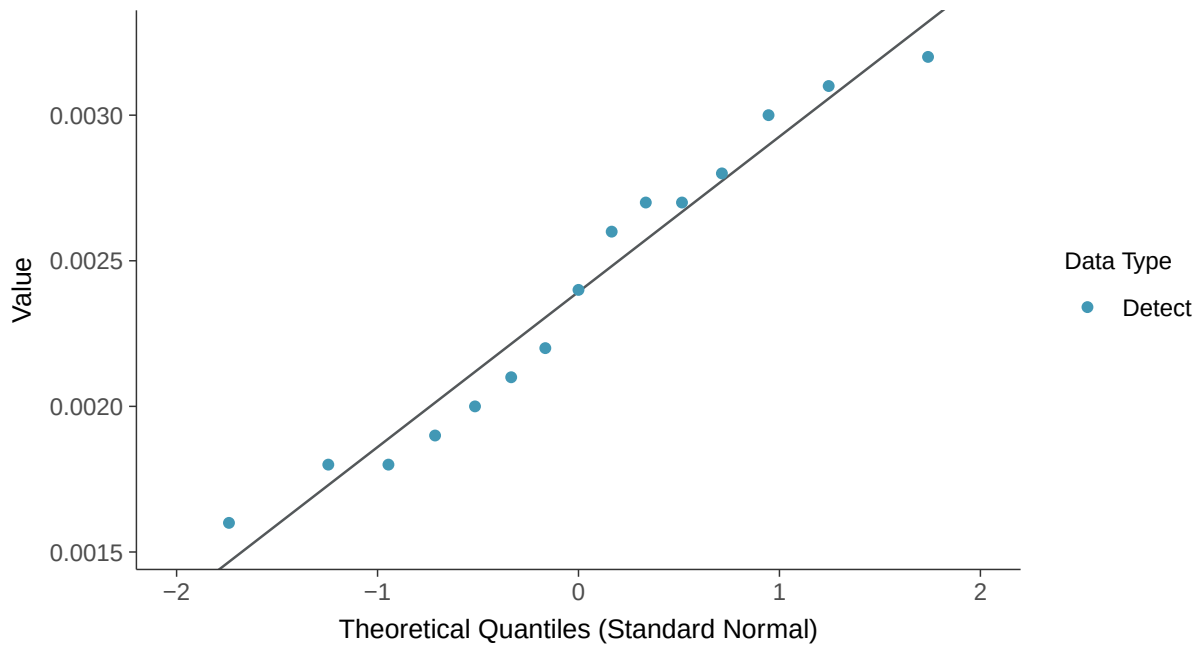
Boxplot by Season

Chromium, Total, MW-09 (mg/L)



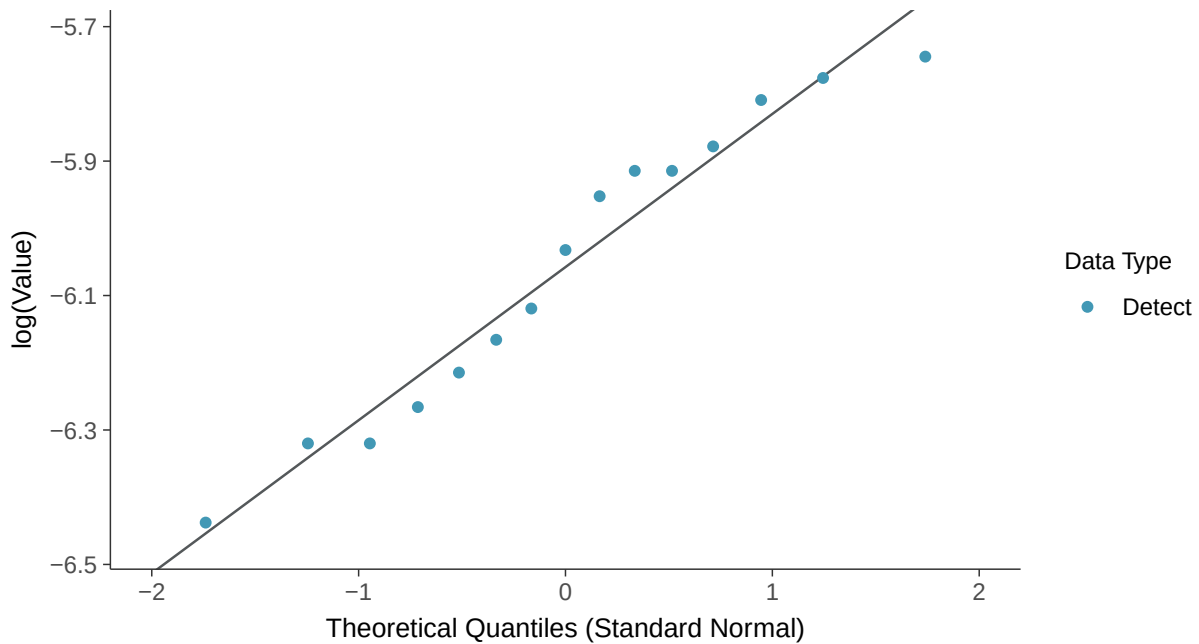
Normal Q-Q plot

Chromium, Total, MW-09 (mg/L)



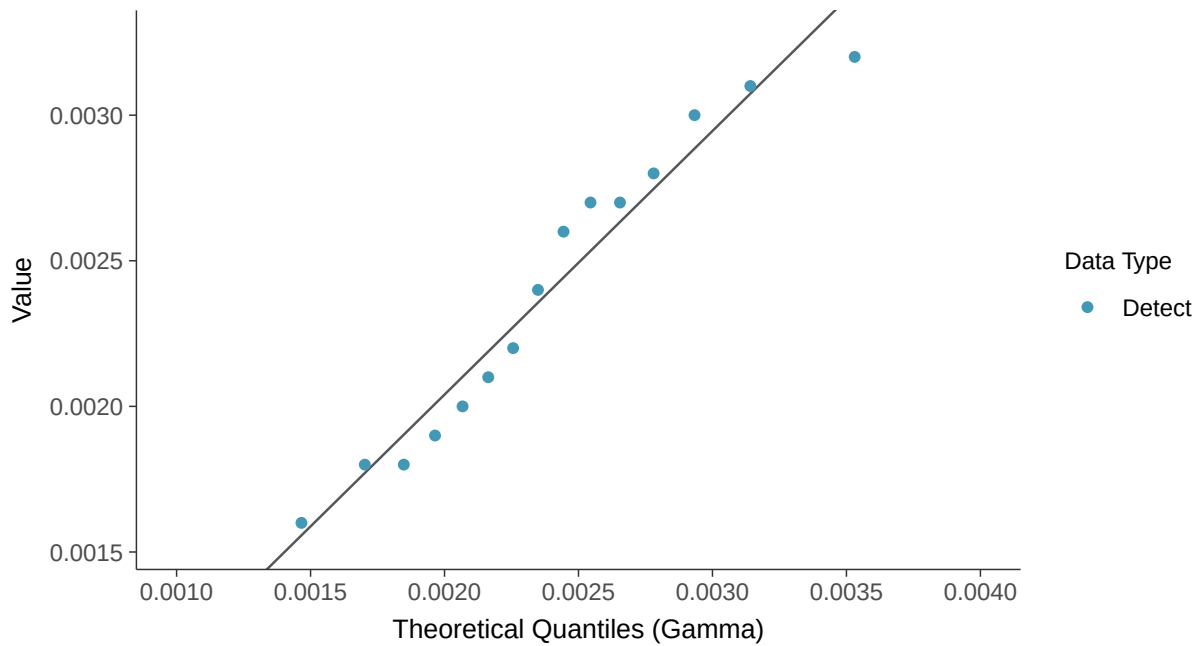
Lognormal Q-Q plot

Chromium, Total, MW-09 (mg/L)



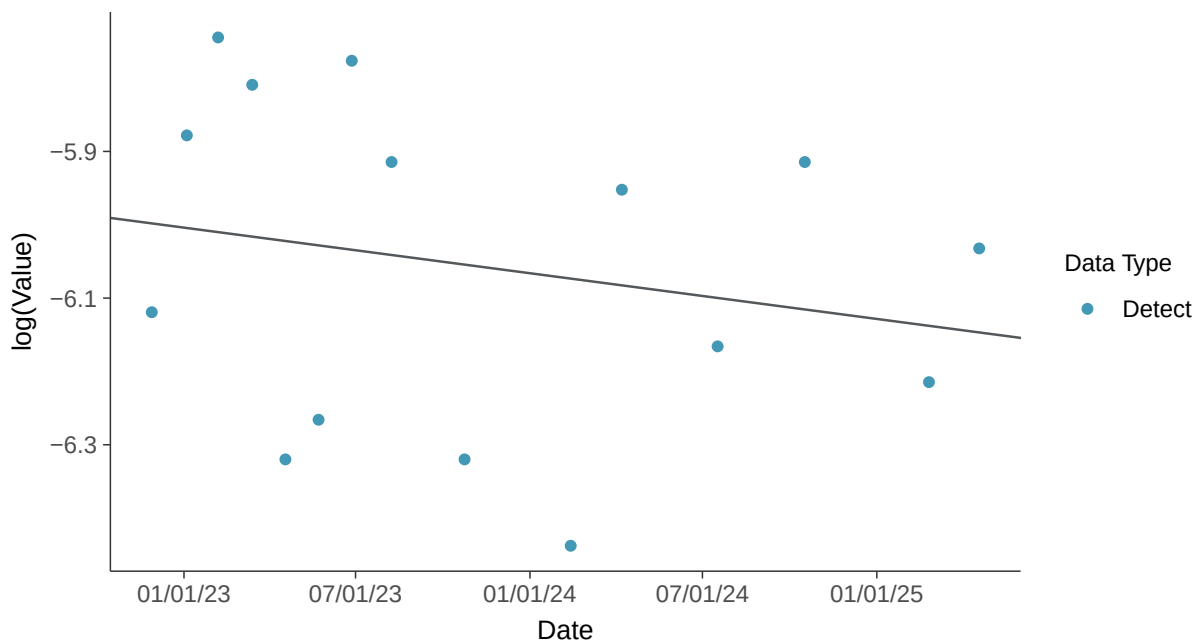
Gamma Q-Q plot

Chromium, Total, MW-09 (mg/L)



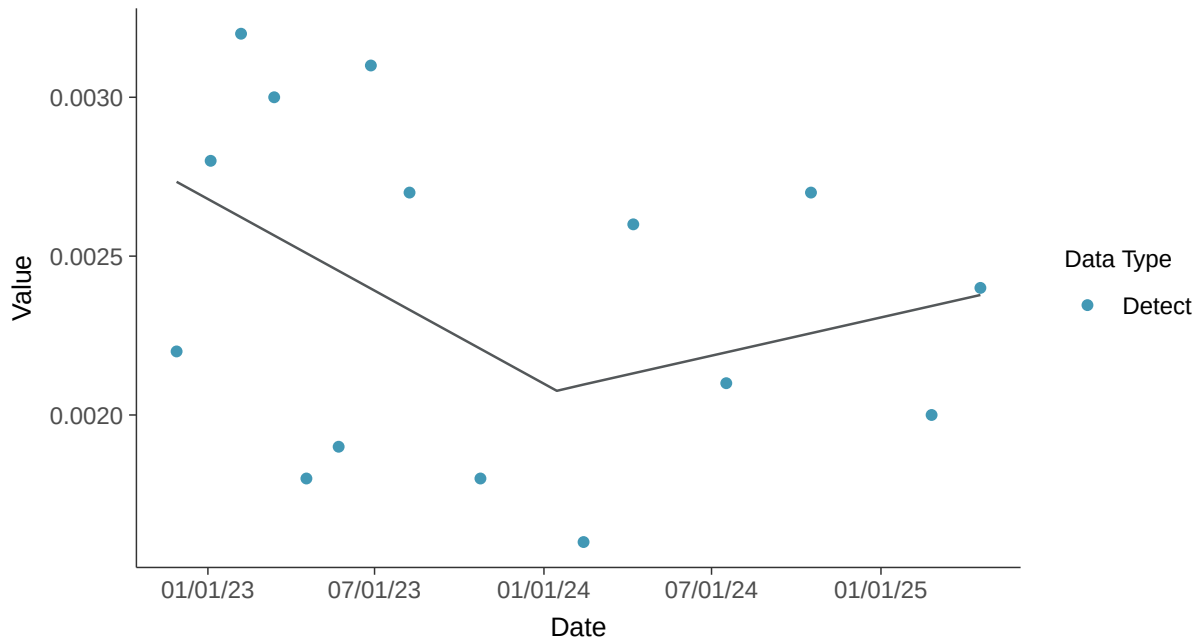
Trend Regression: Lognormal MLE

Chromium, Total, MW-09 (mg/L)



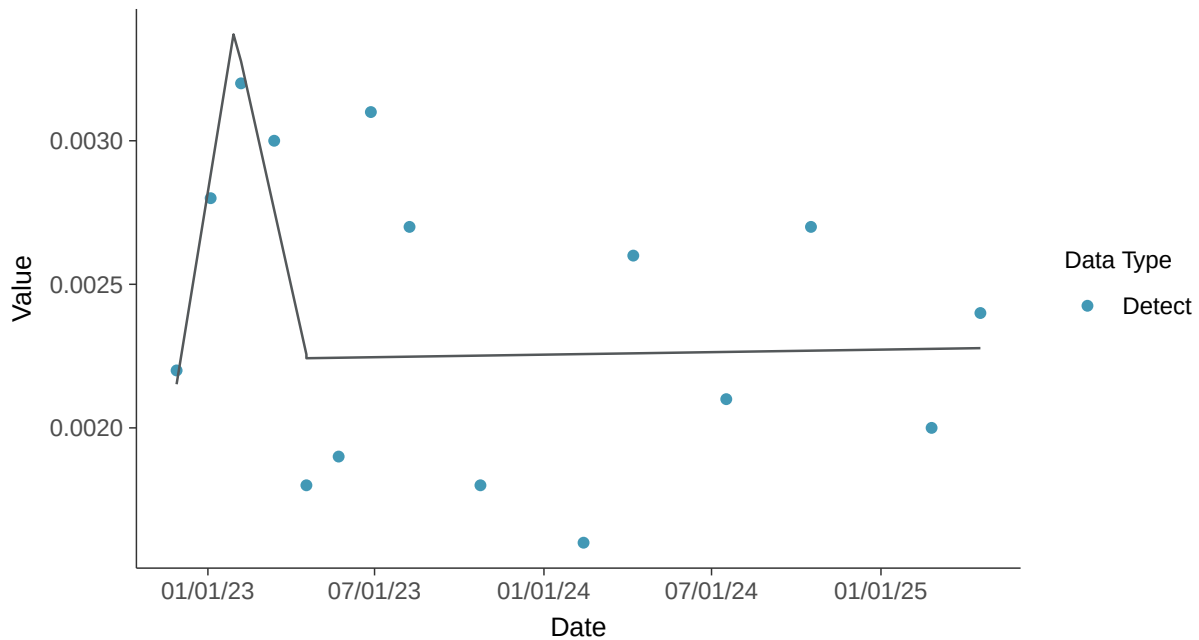
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-09 (mg/L)



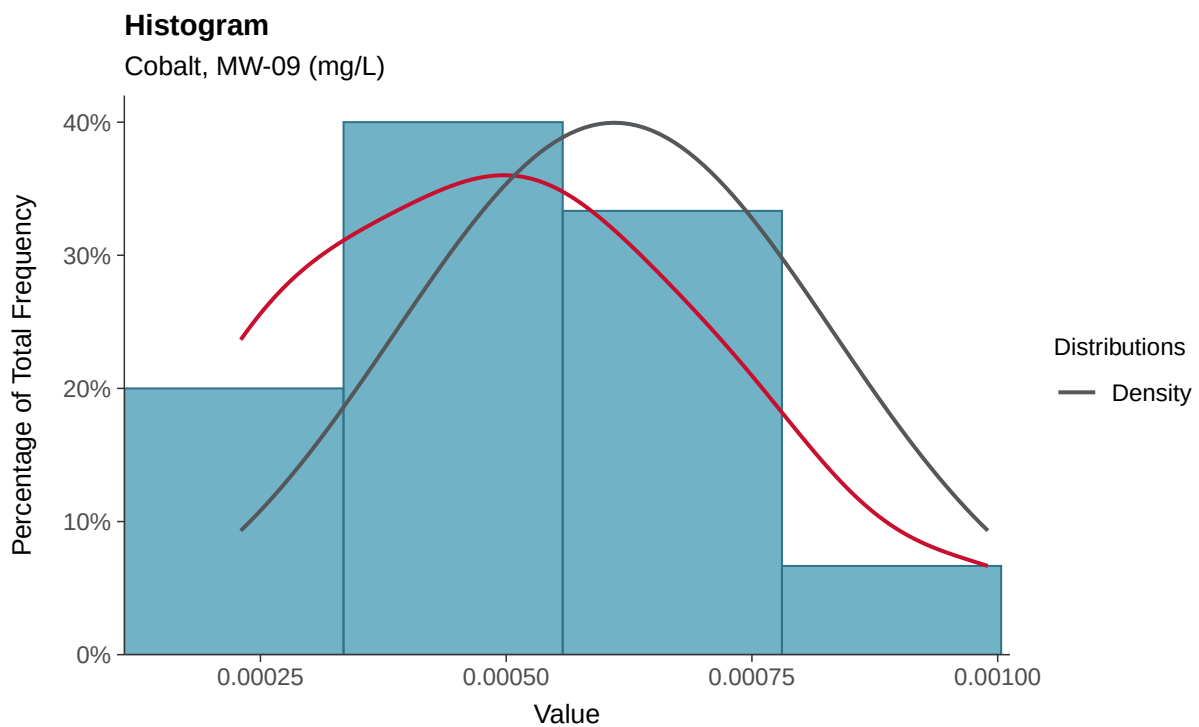
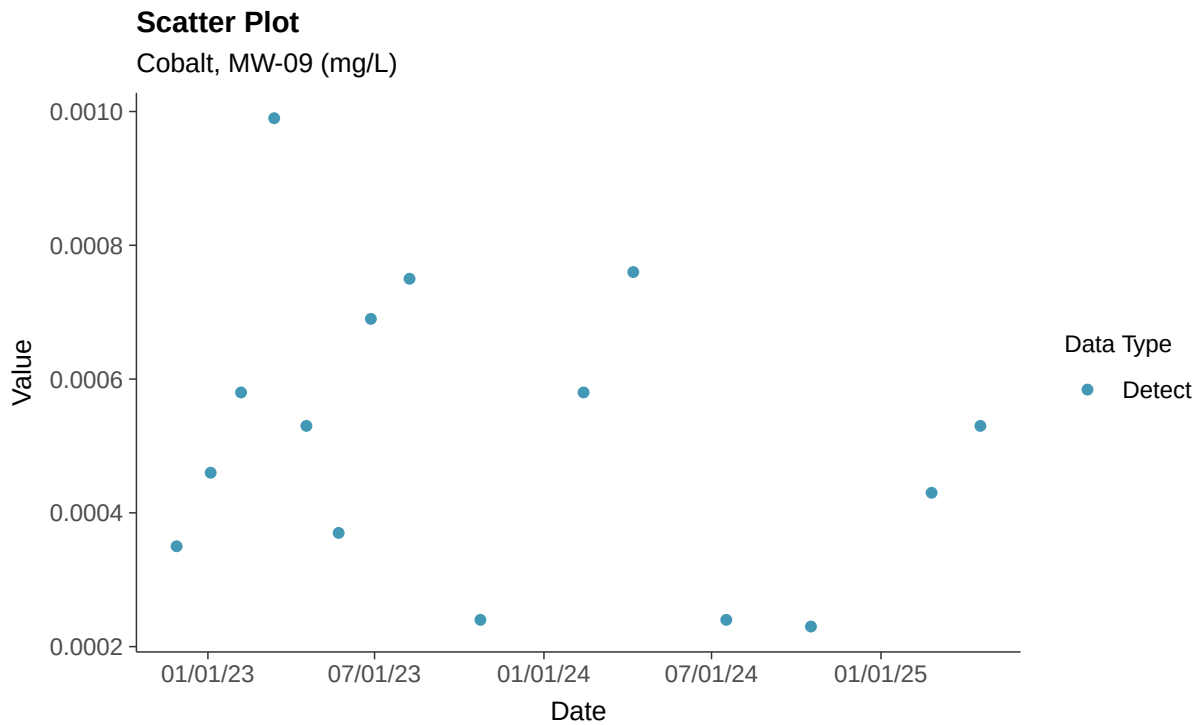
Trend Regression: Piecewise Linear-Linear-Linear

Chromium, Total, MW-09 (mg/L)



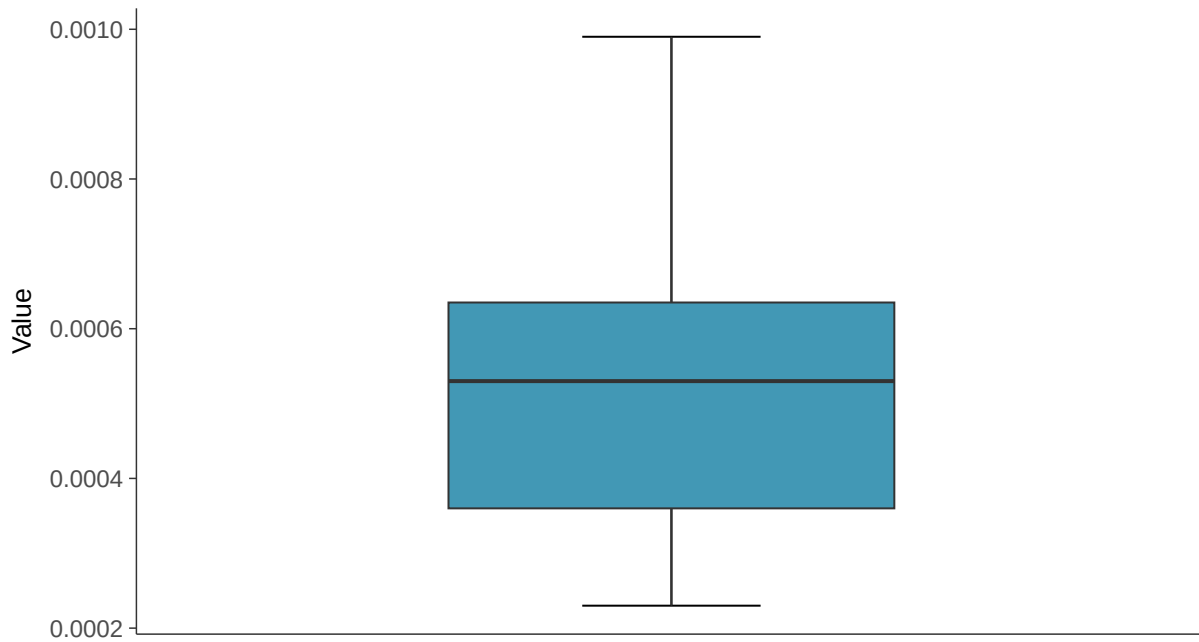
Appendix IV: Cobalt, MW-09

ID: 19_2_4_110



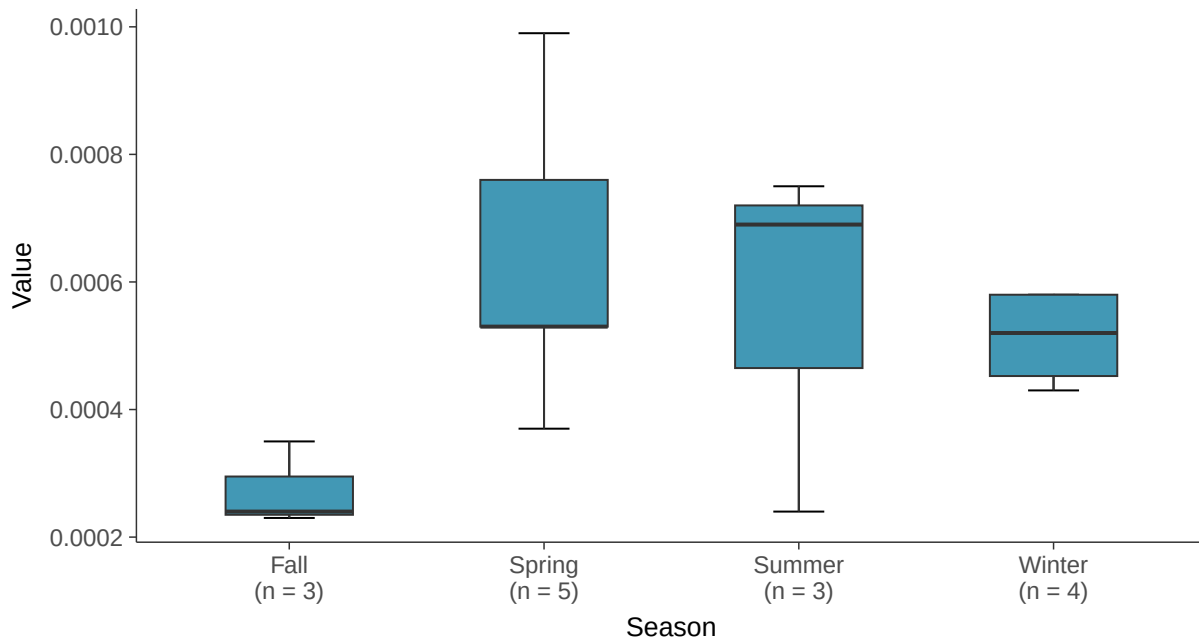
Boxplot

Cobalt, MW-09 (mg/L)

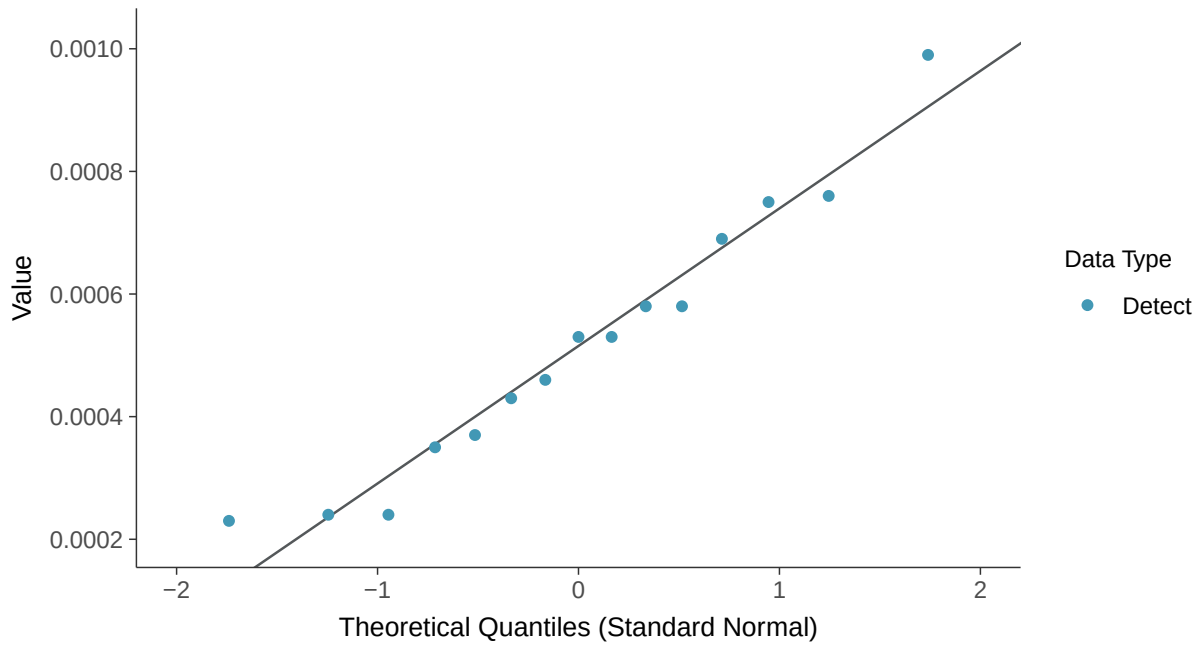


Boxplot by Season

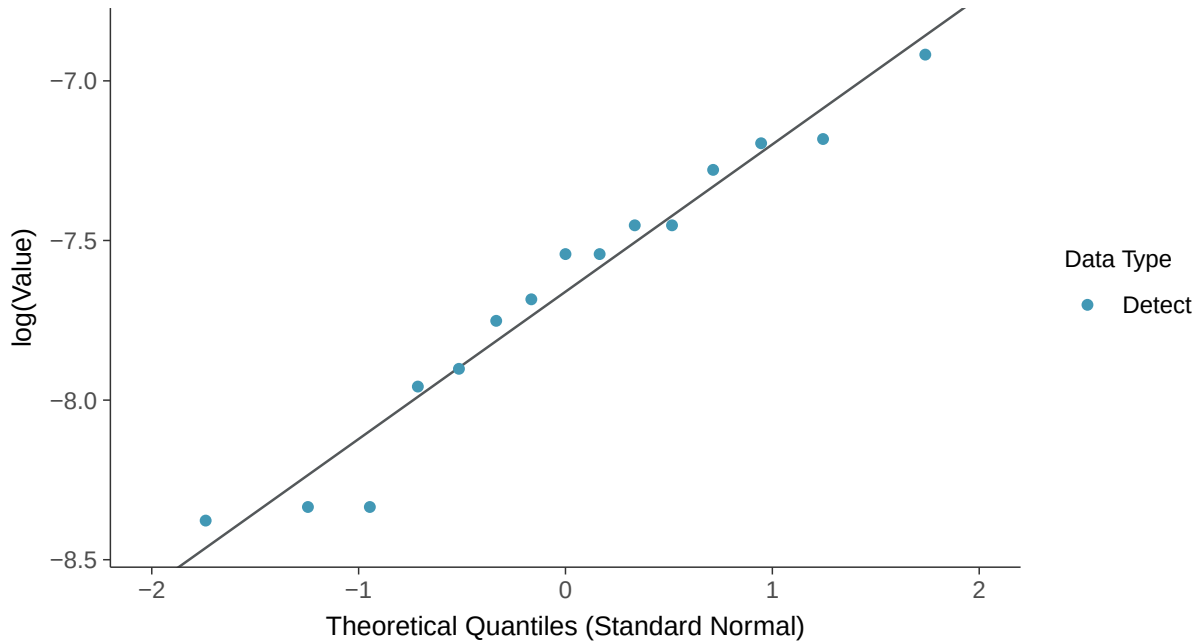
Cobalt, MW-09 (mg/L)



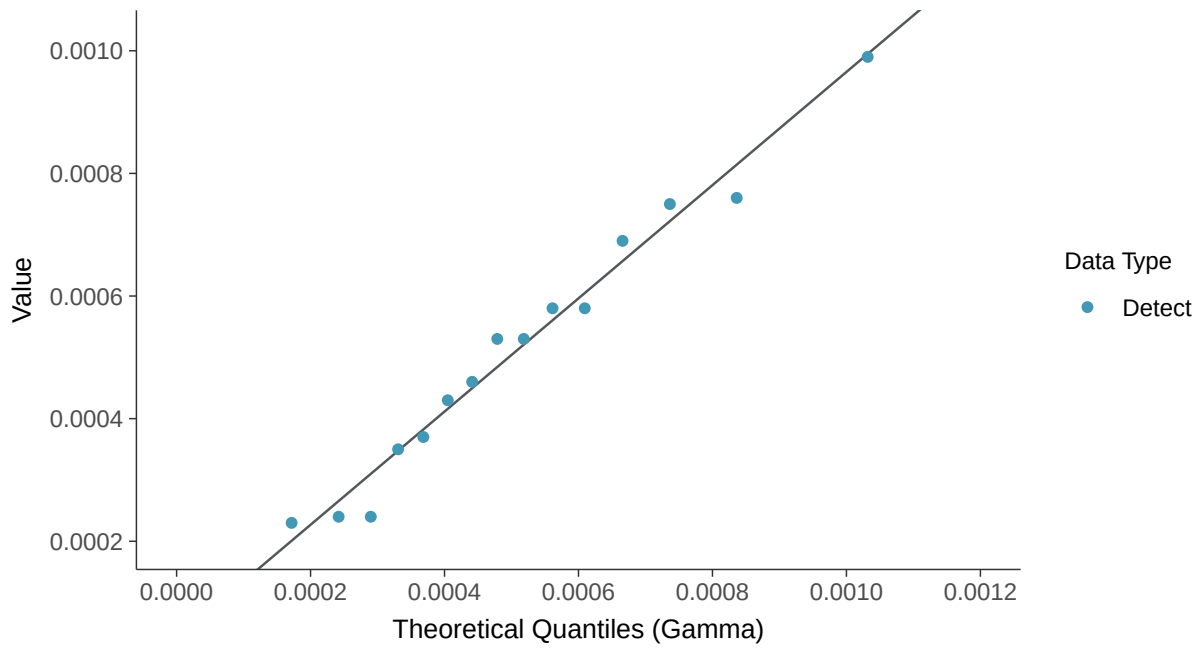
Normal Q-Q plot
Cobalt, MW-09 (mg/L)



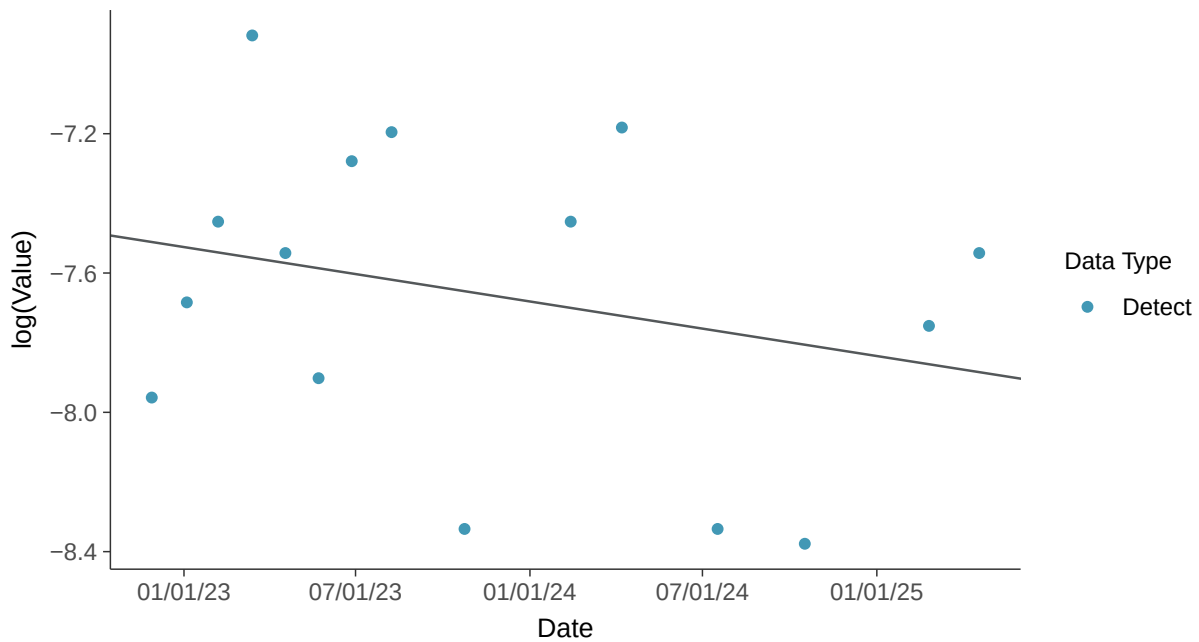
Lognormal Q-Q plot
Cobalt, MW-09 (mg/L)



Gamma Q-Q plot
Cobalt, MW-09 (mg/L)

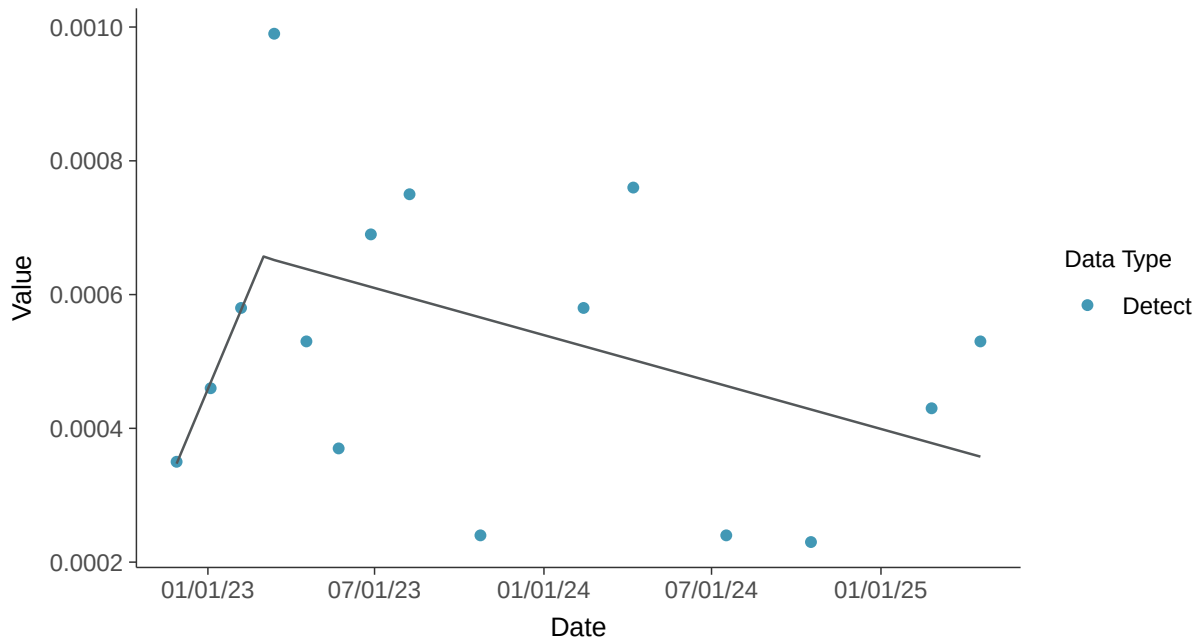


Trend Regression: Lognormal MLE
Cobalt, MW-09 (mg/L)



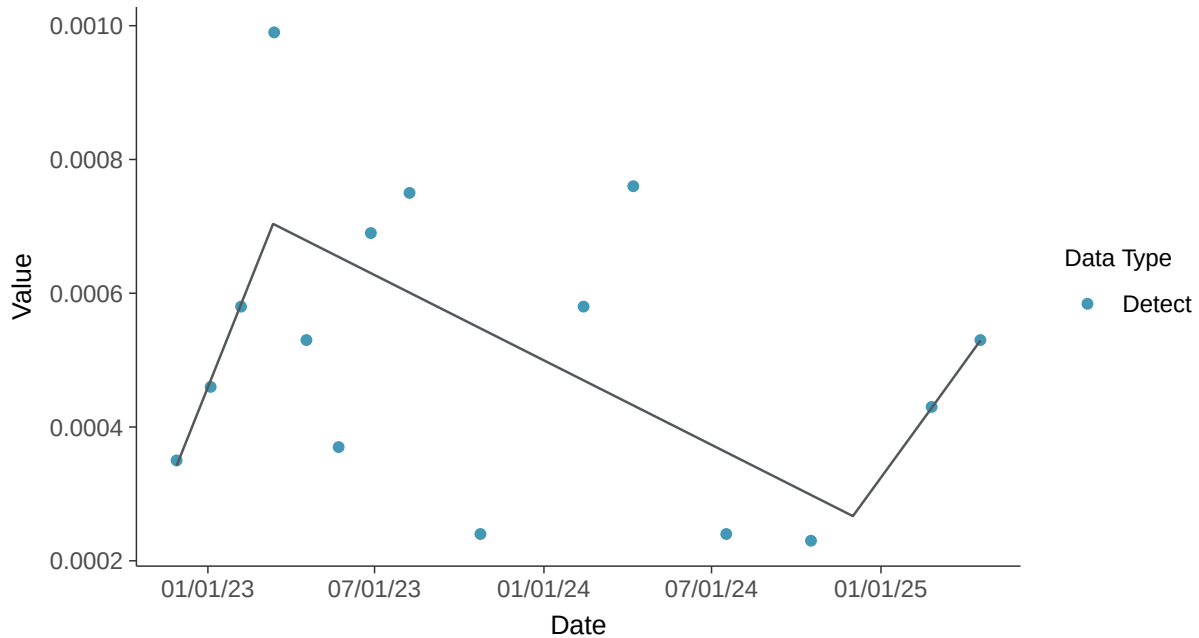
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-09 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cobalt, MW-09 (mg/L)

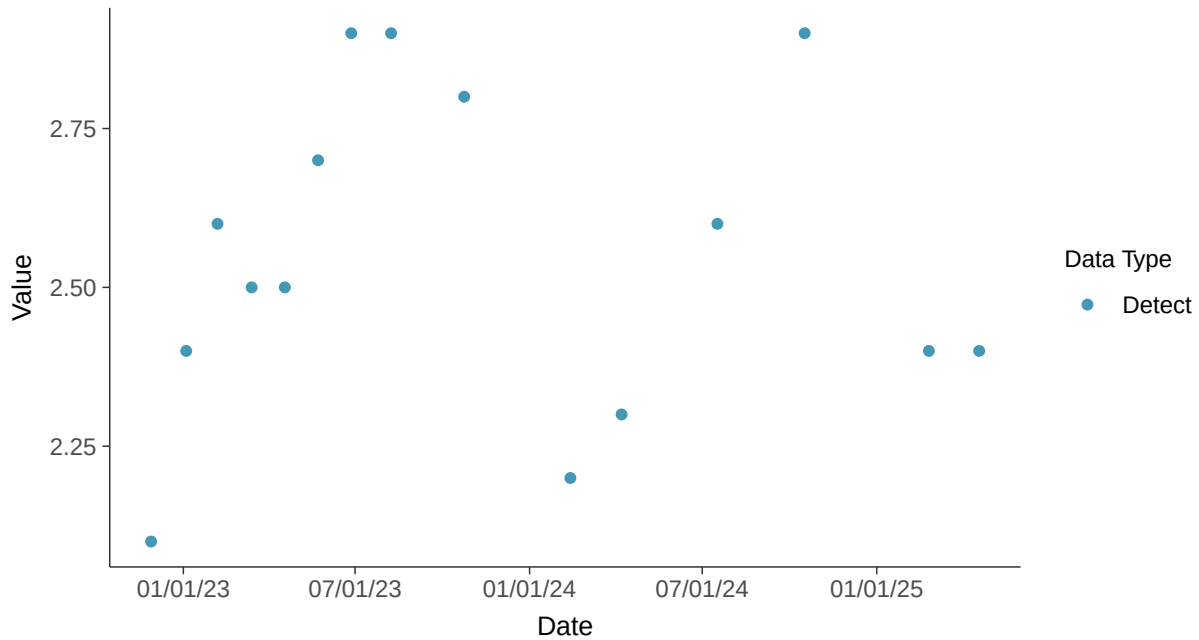


Appendix IV: Fluoride (App IV), MW-09

ID: 19_2_4_113

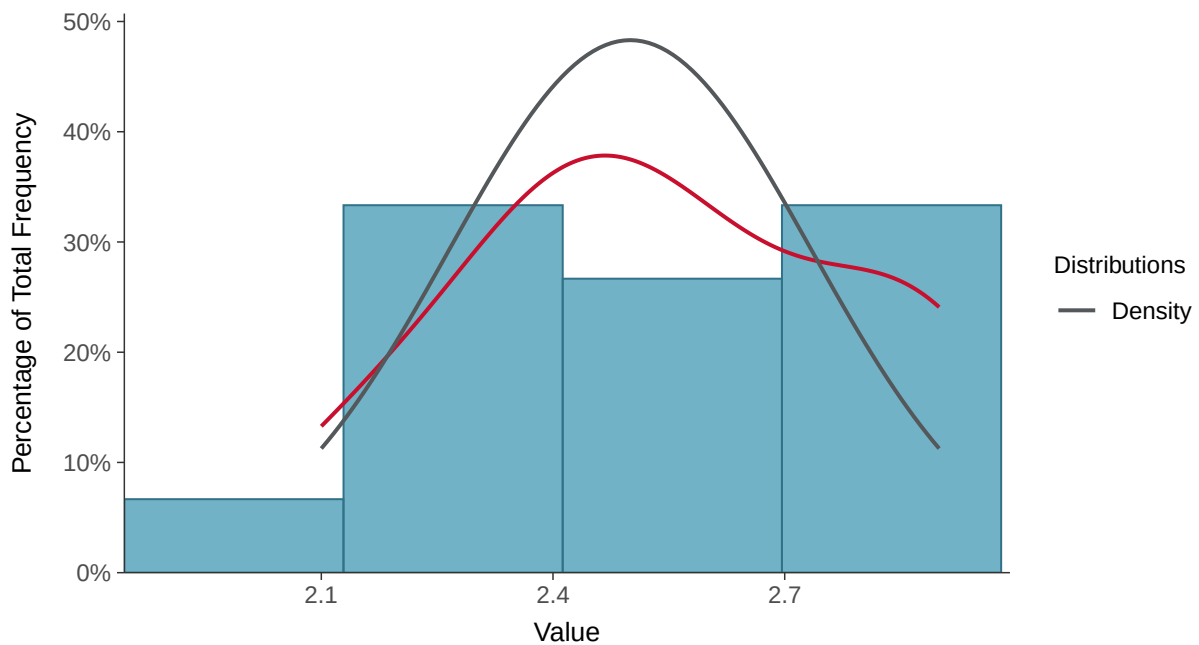
Scatter Plot

Fluoride (App IV), MW-09 (mg/L)



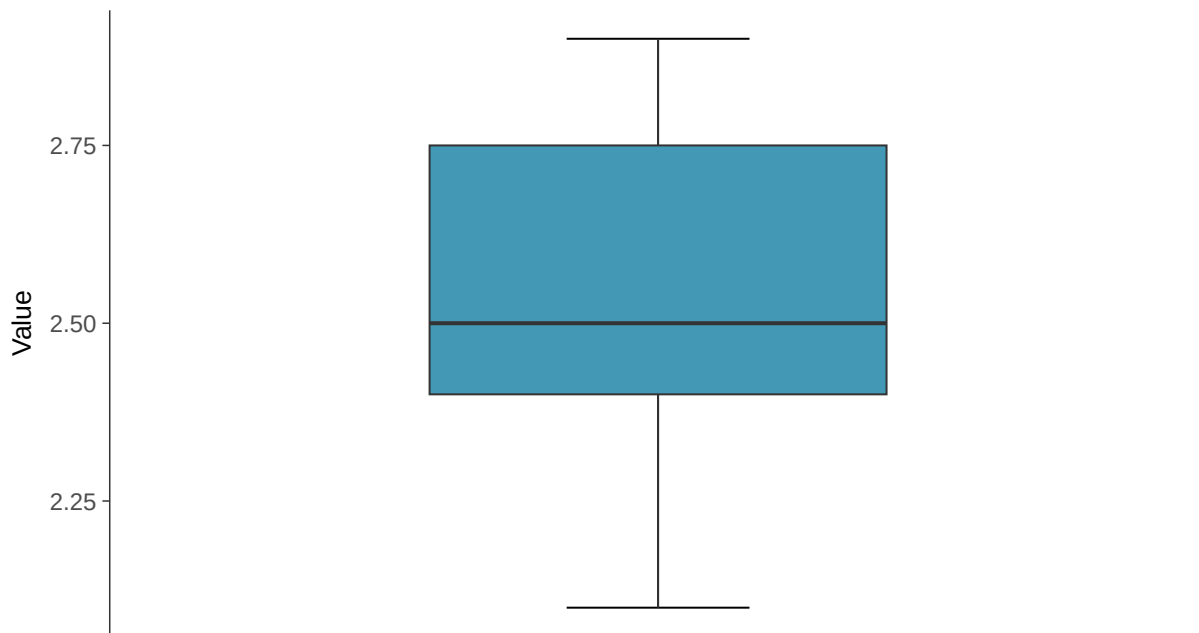
Histogram

Fluoride (App IV), MW-09 (mg/L)



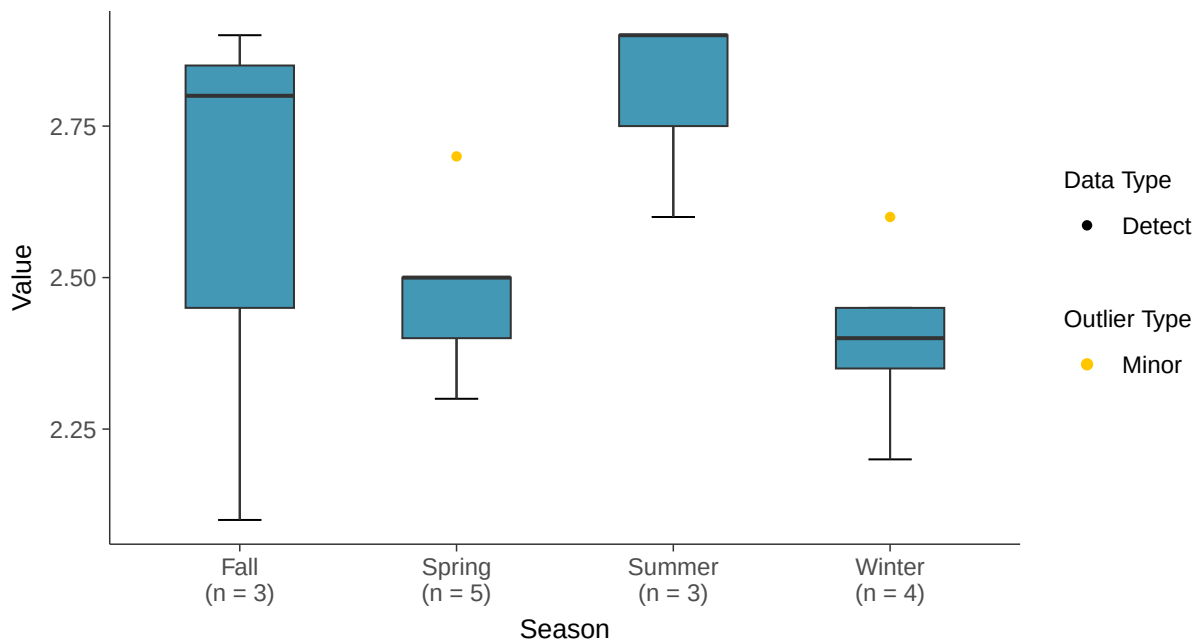
Boxplot

Fluoride (App IV), MW-09 (mg/L)



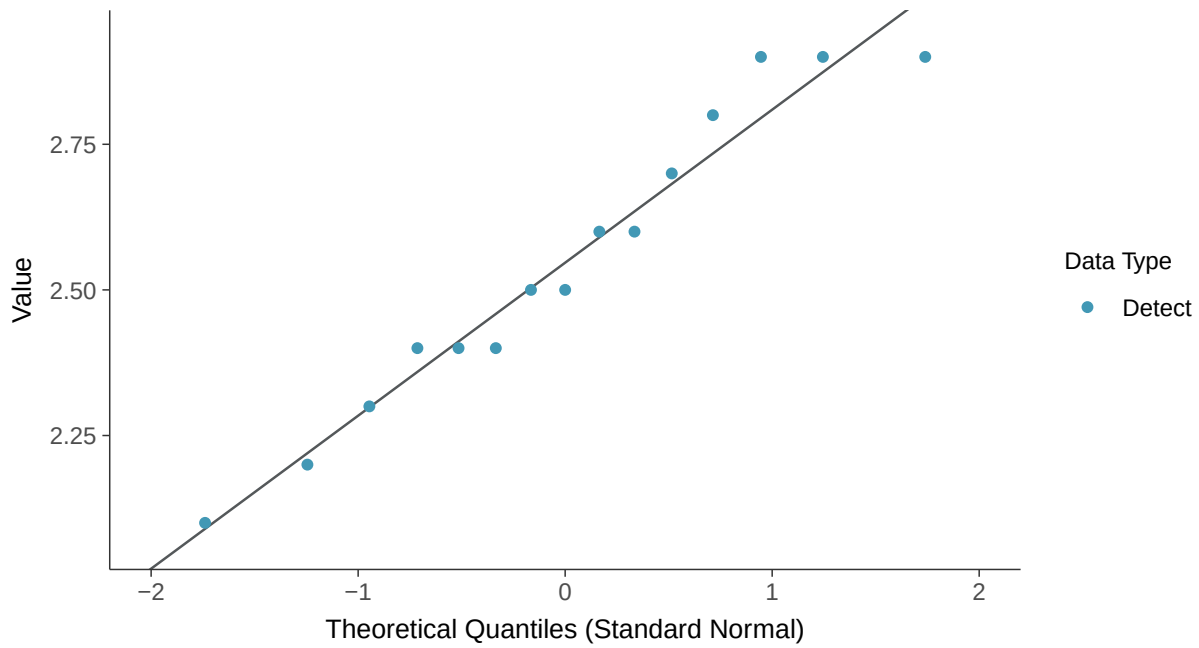
Boxplot by Season

Fluoride (App IV), MW-09 (mg/L)



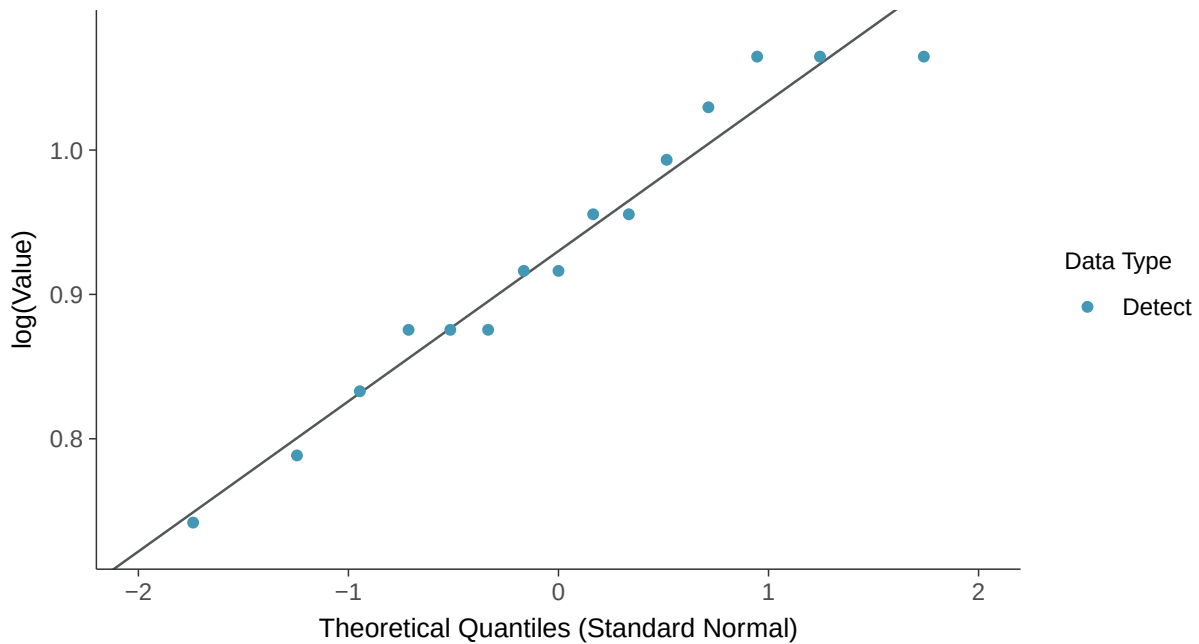
Normal Q-Q plot

Fluoride (App IV), MW-09 (mg/L)



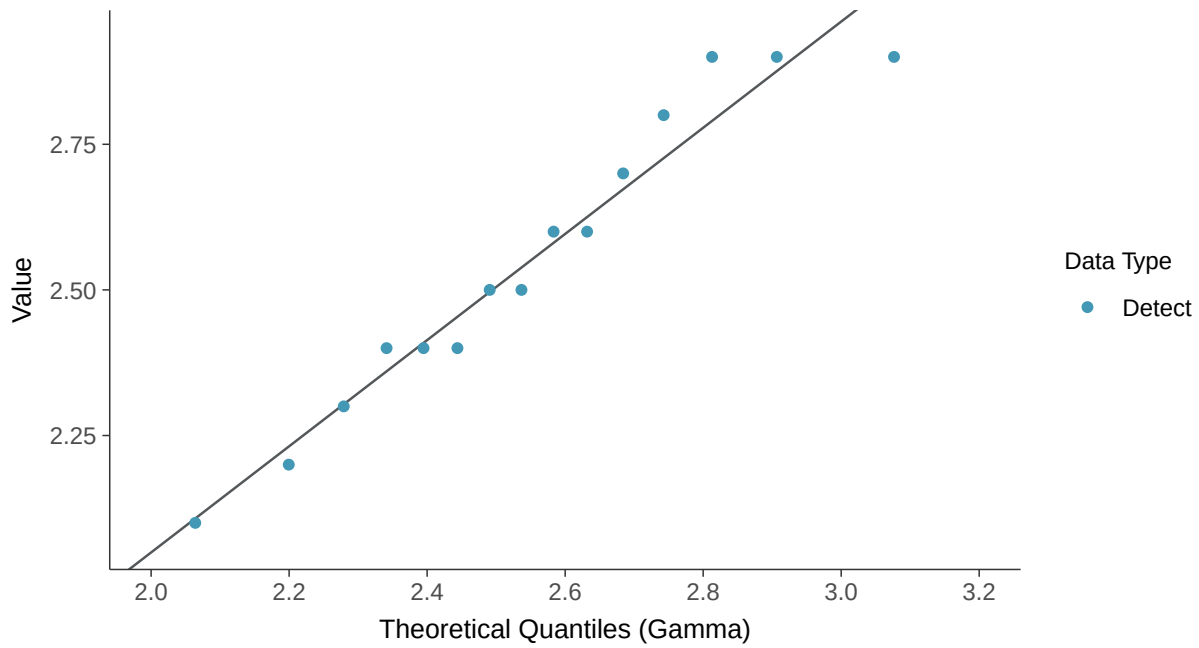
Lognormal Q-Q plot

Fluoride (App IV), MW-09 (mg/L)



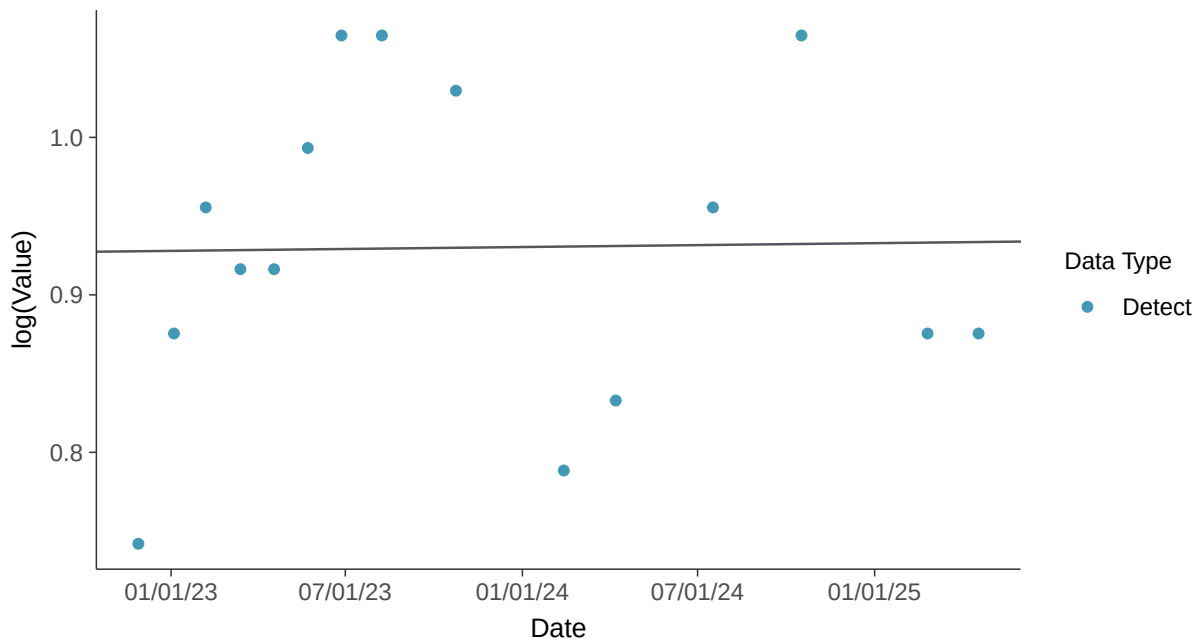
Gamma Q-Q plot

Fluoride (App IV), MW-09 (mg/L)



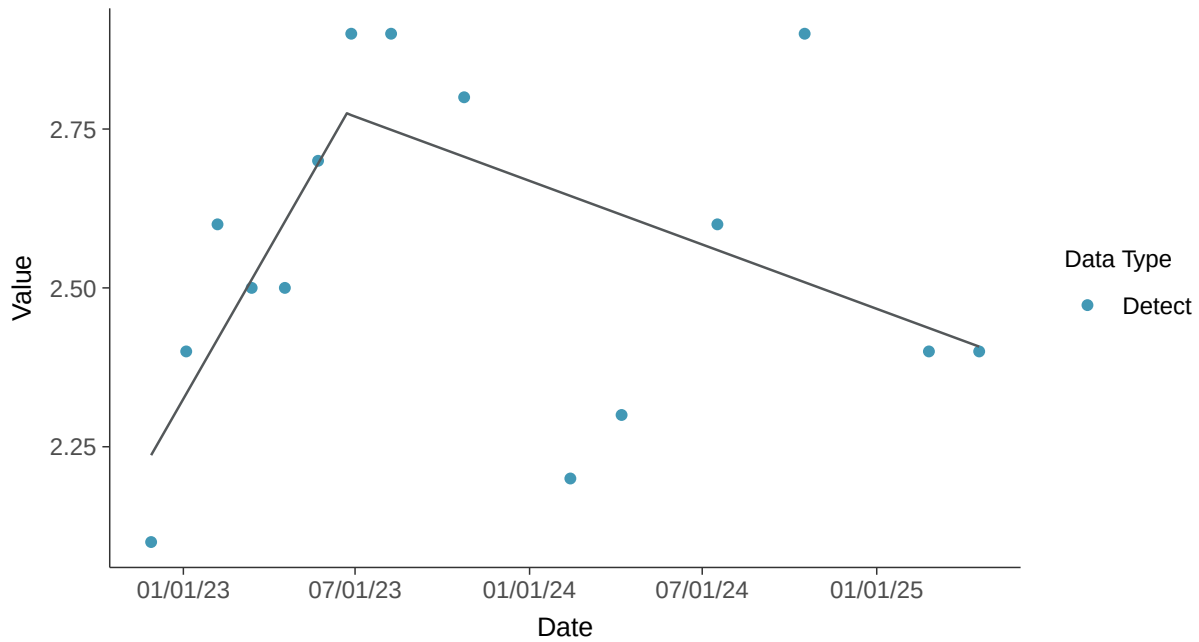
Trend Regression: Lognormal MLE

Fluoride (App IV), MW-09 (mg/L)



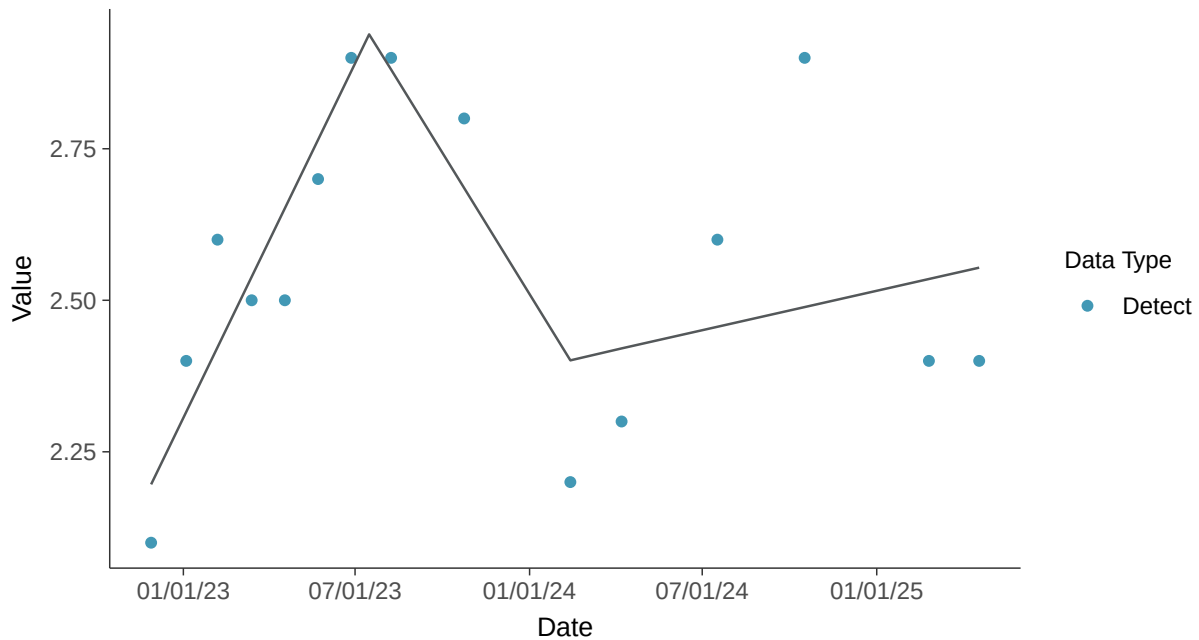
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-09 (mg/L)



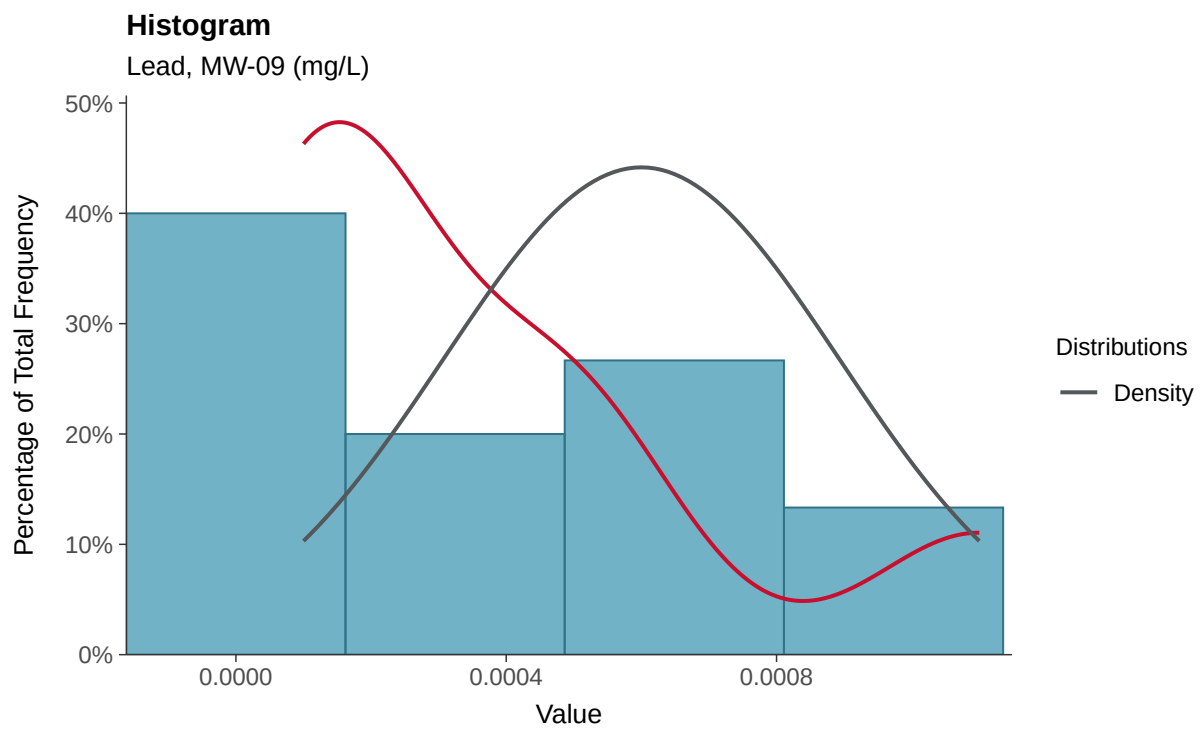
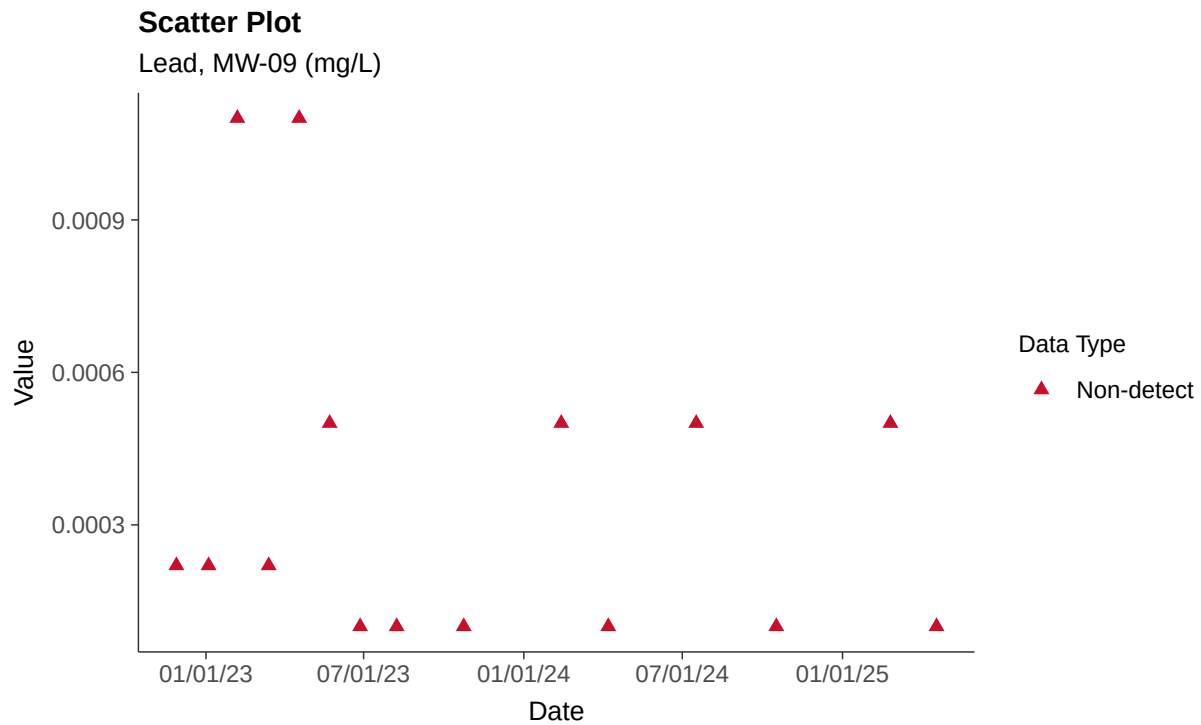
Trend Regression: Piecewise Linear-Linear-Linear

Fluoride (App IV), MW-09 (mg/L)



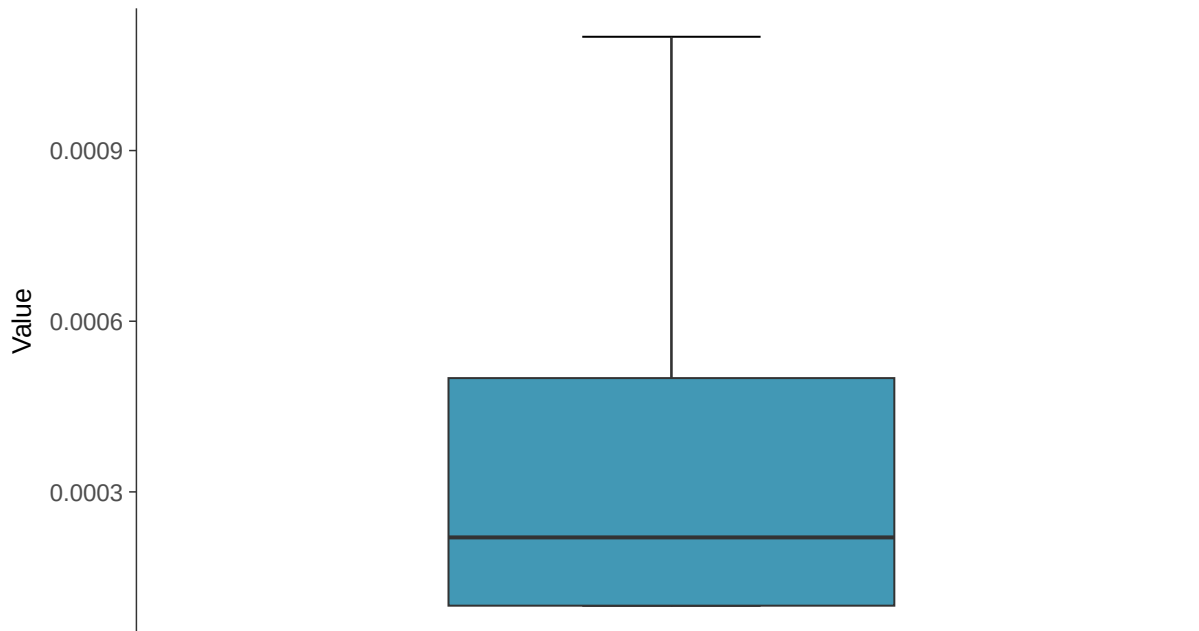
Appendix IV: Lead, MW-09

ID: 19_2_4_115



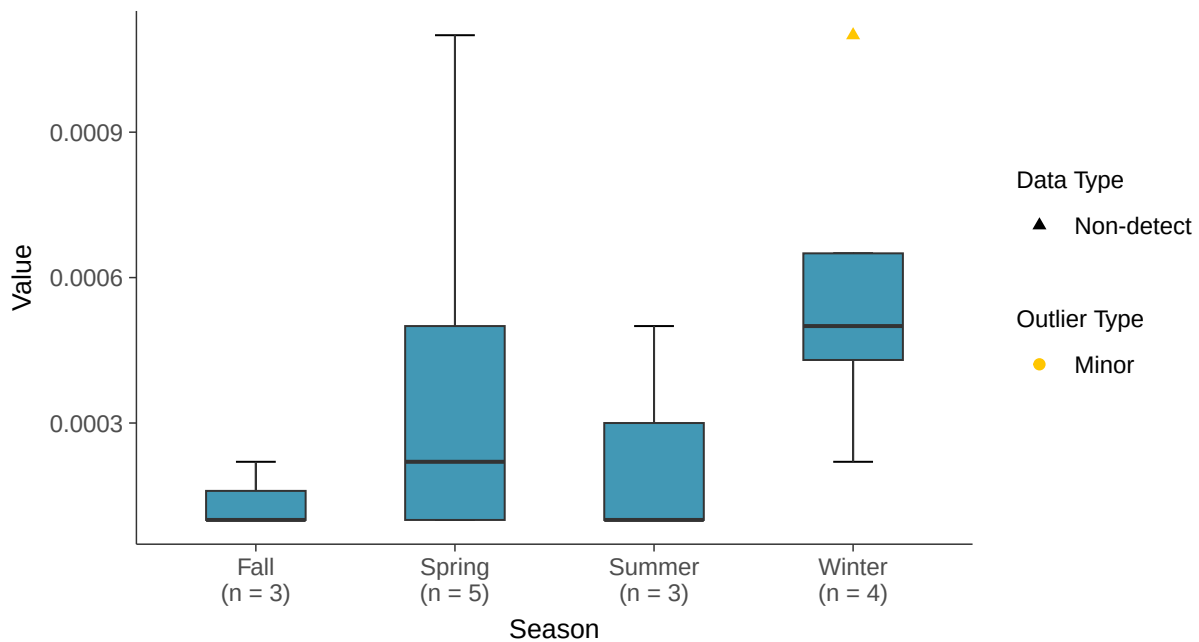
Boxplot

Lead, MW-09 (mg/L)



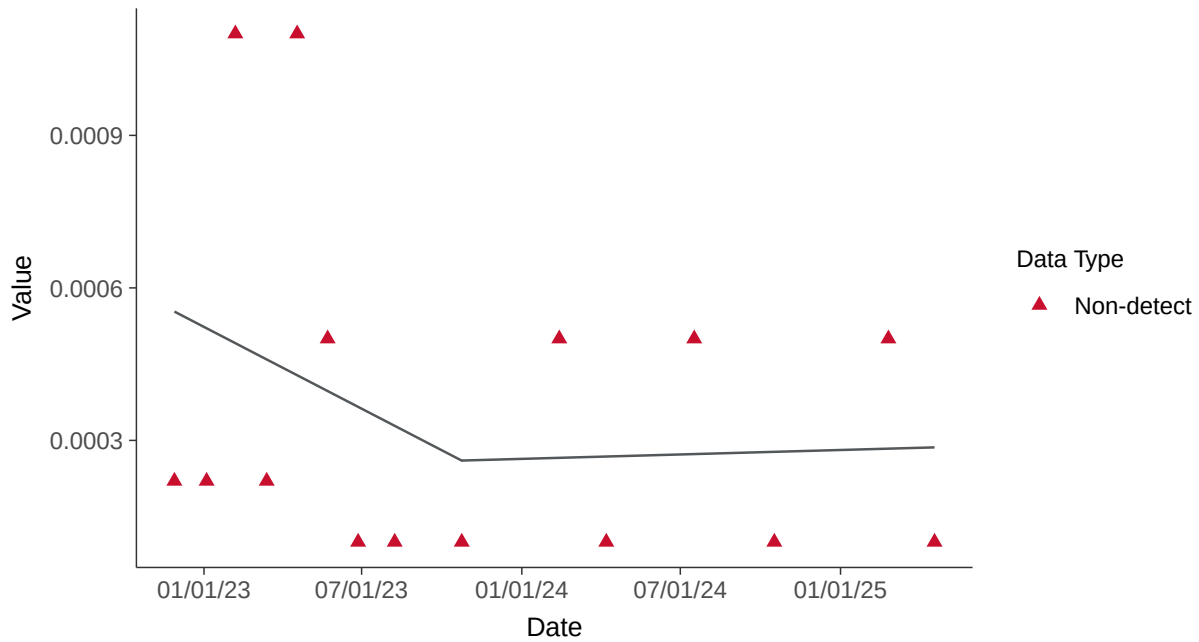
Boxplot by Season

Lead, MW-09 (mg/L)



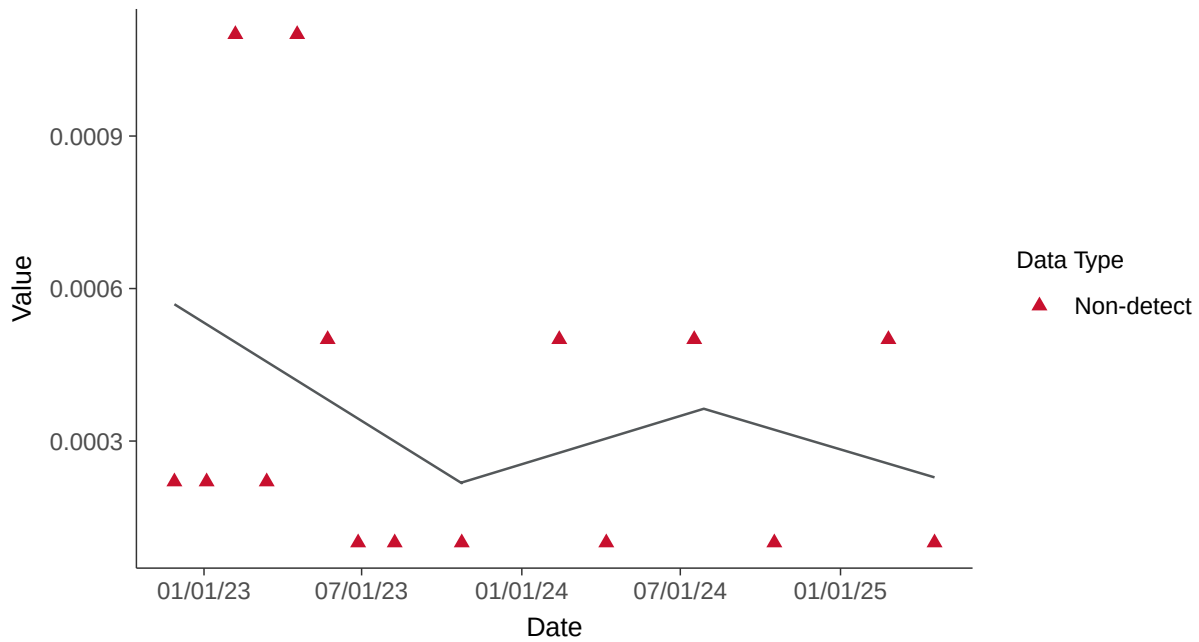
Trend Regression: Piecewise Linear-Linear

Lead, MW-09 (mg/L)



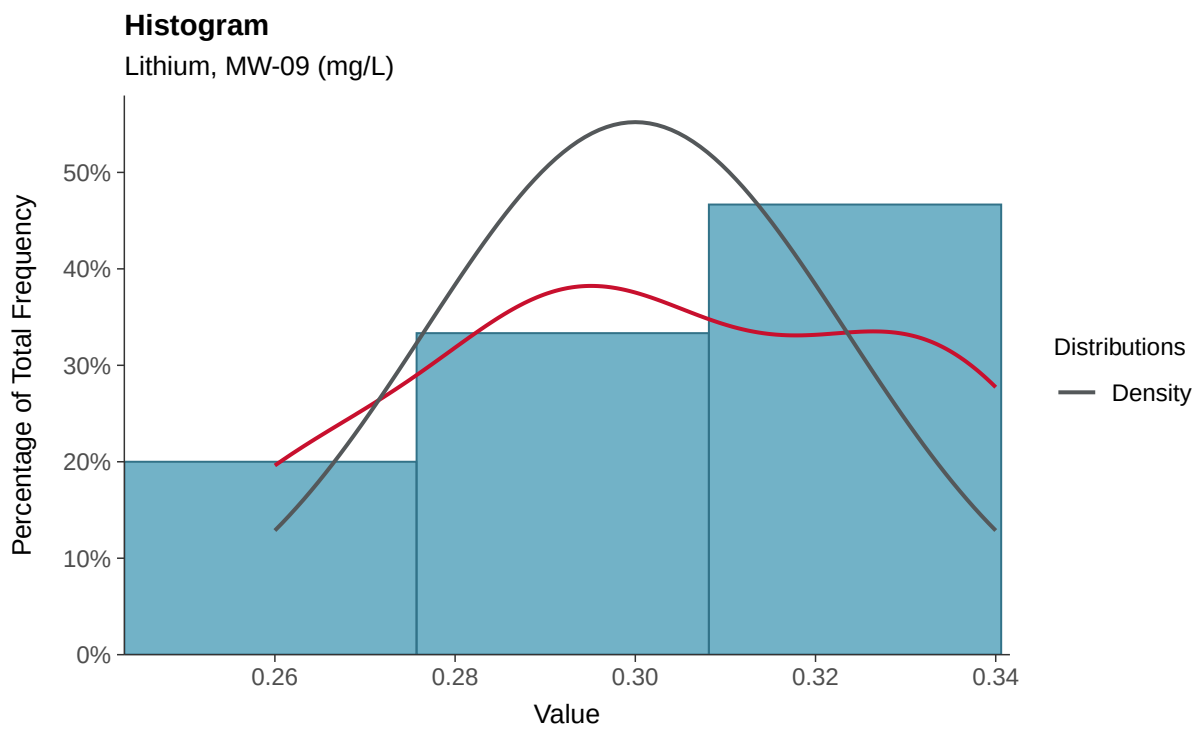
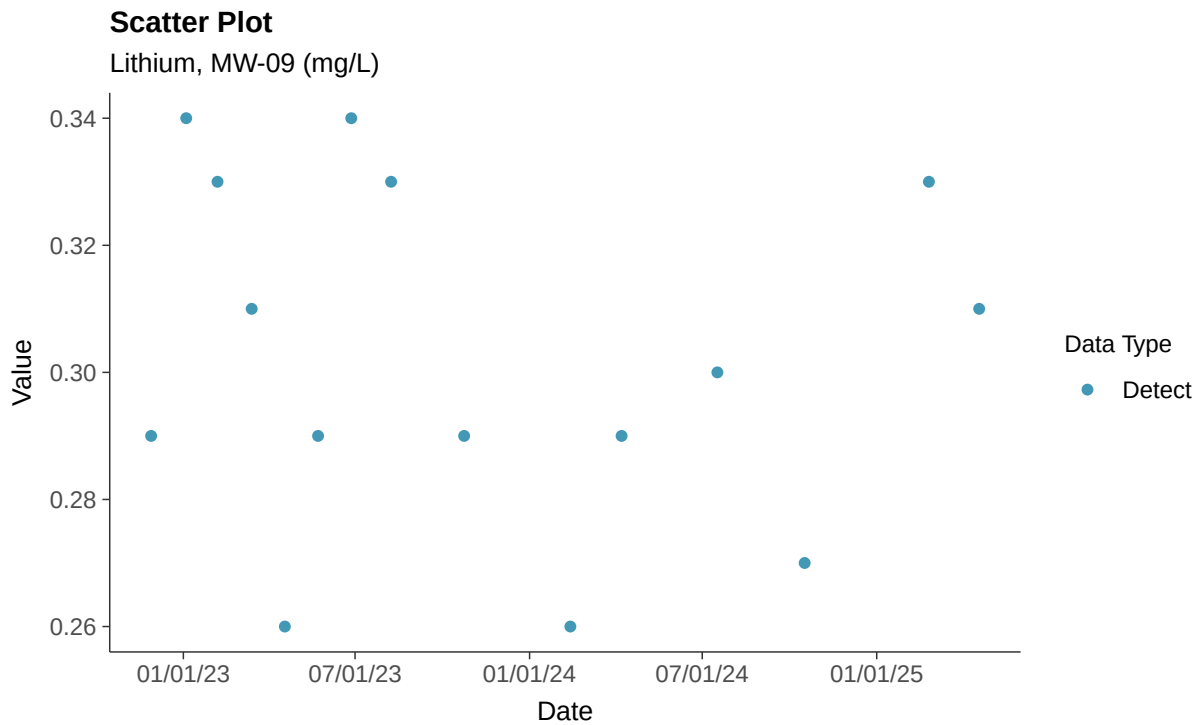
Trend Regression: Piecewise Linear-Linear-Linear

Lead, MW-09 (mg/L)



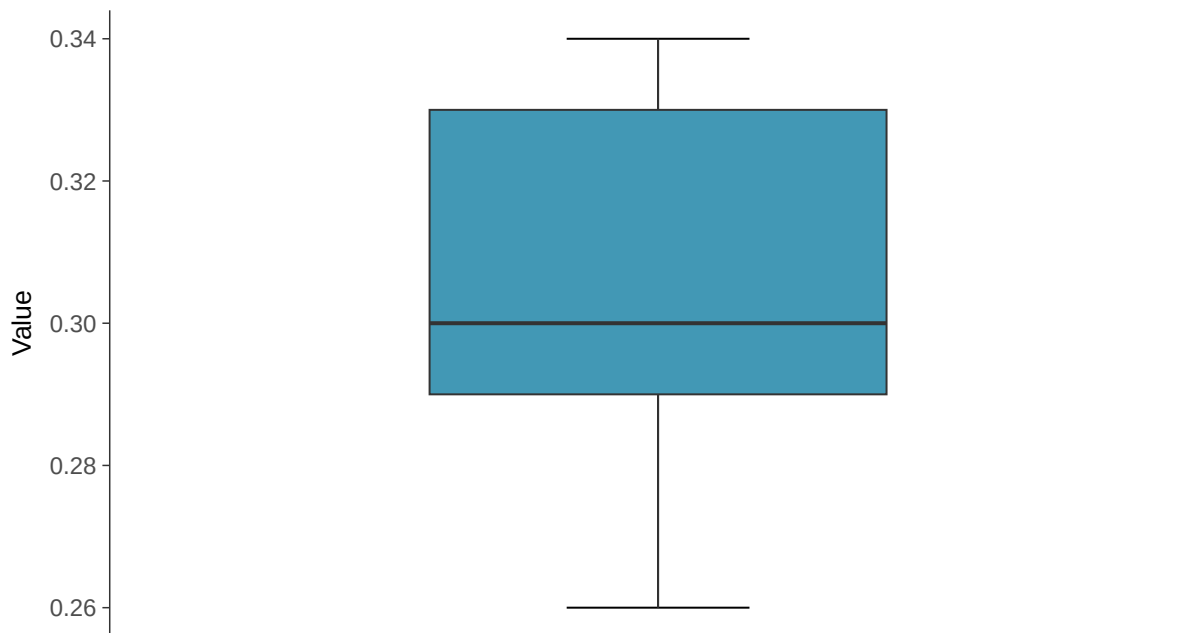
Appendix IV: Lithium, MW-09

ID: 19_2_4_116



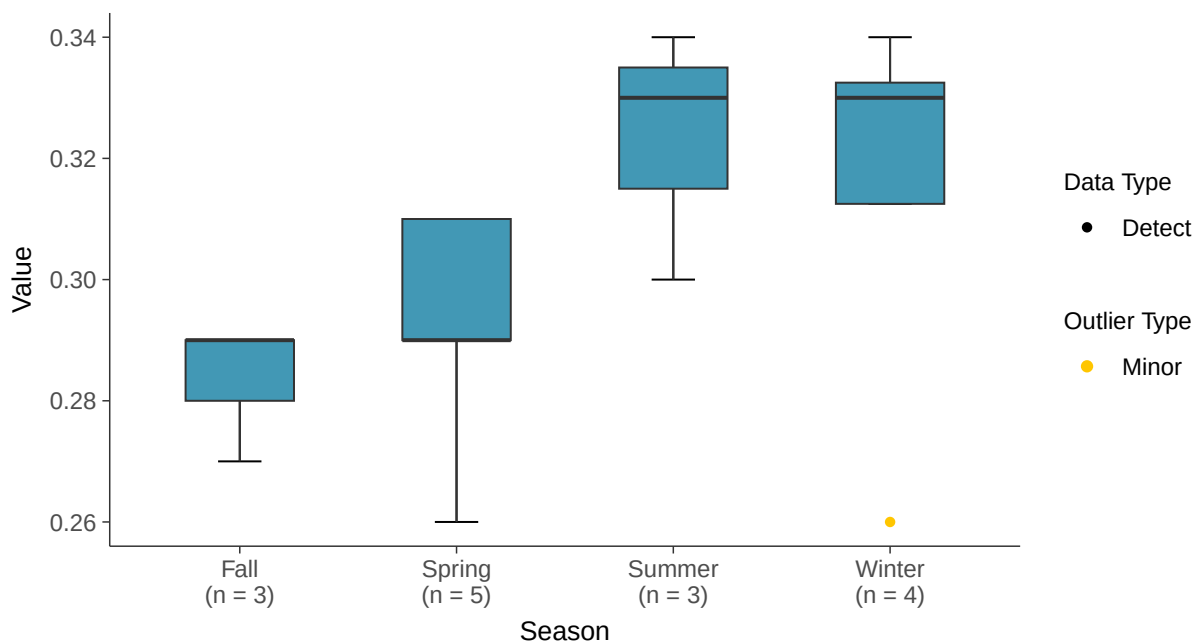
Boxplot

Lithium, MW-09 (mg/L)



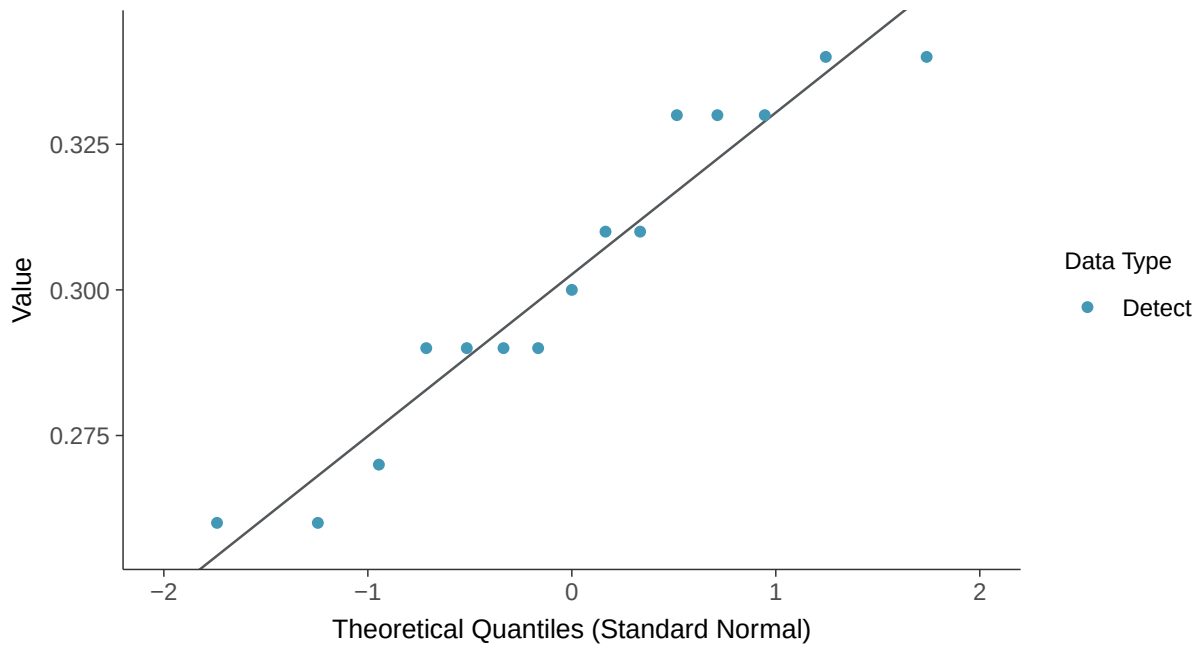
Boxplot by Season

Lithium, MW-09 (mg/L)



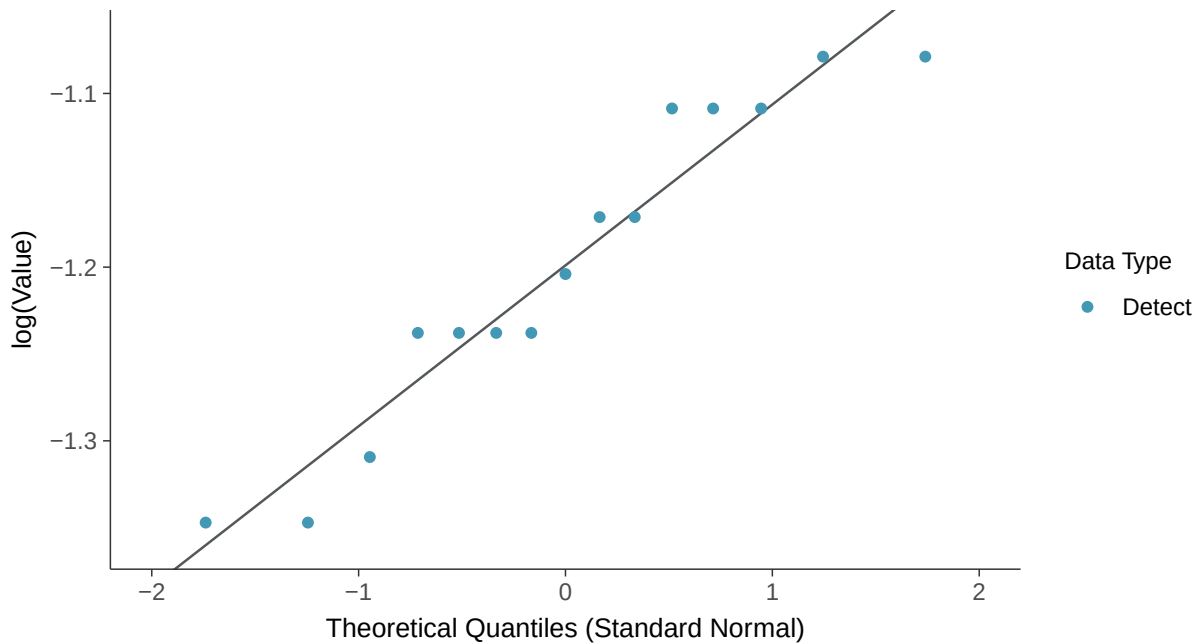
Normal Q-Q plot

Lithium, MW-09 (mg/L)



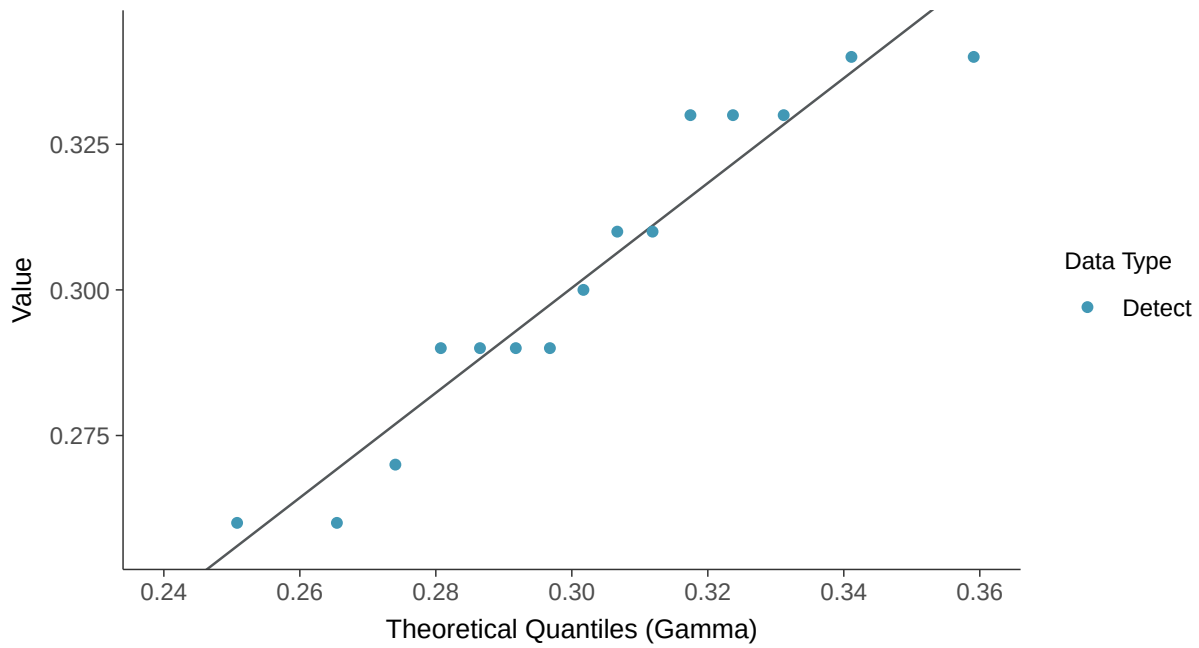
Lognormal Q-Q plot

Lithium, MW-09 (mg/L)



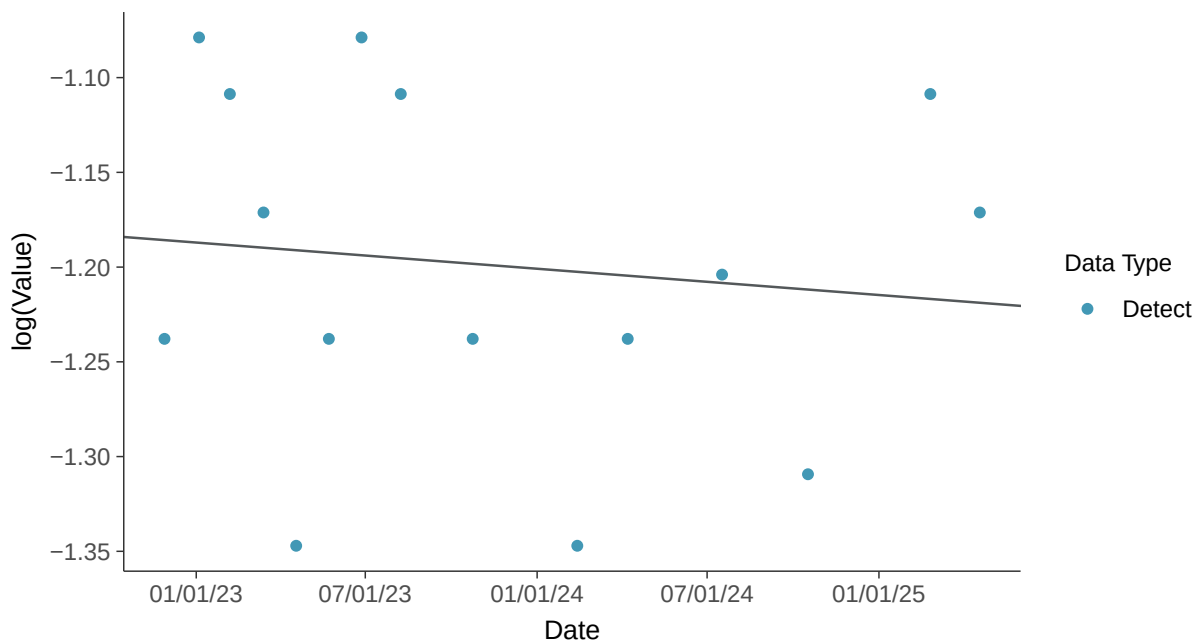
Gamma Q-Q plot

Lithium, MW-09 (mg/L)



Trend Regression: Lognormal MLE

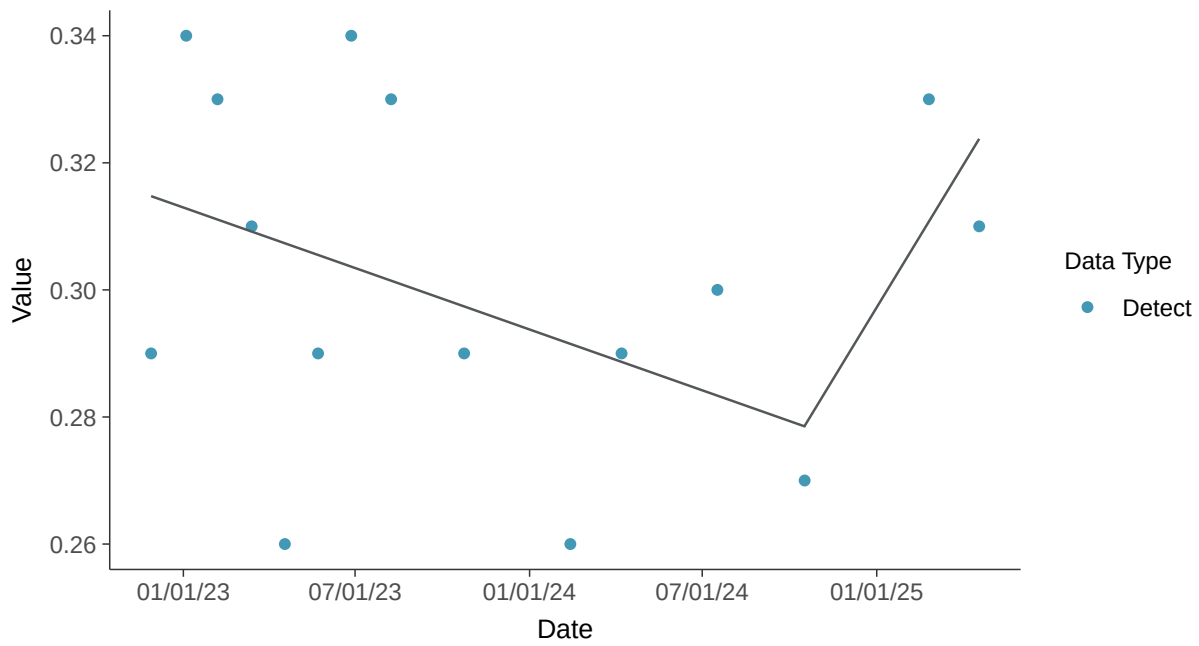
Lithium, MW-09 (mg/L)

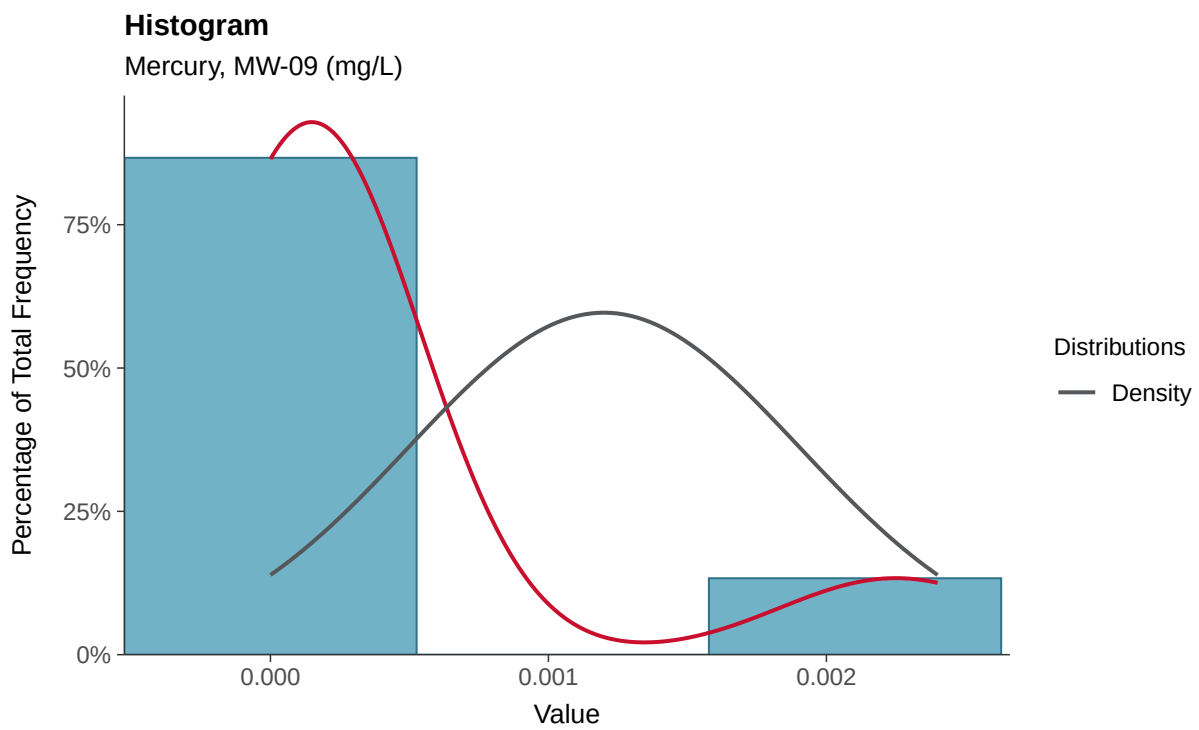


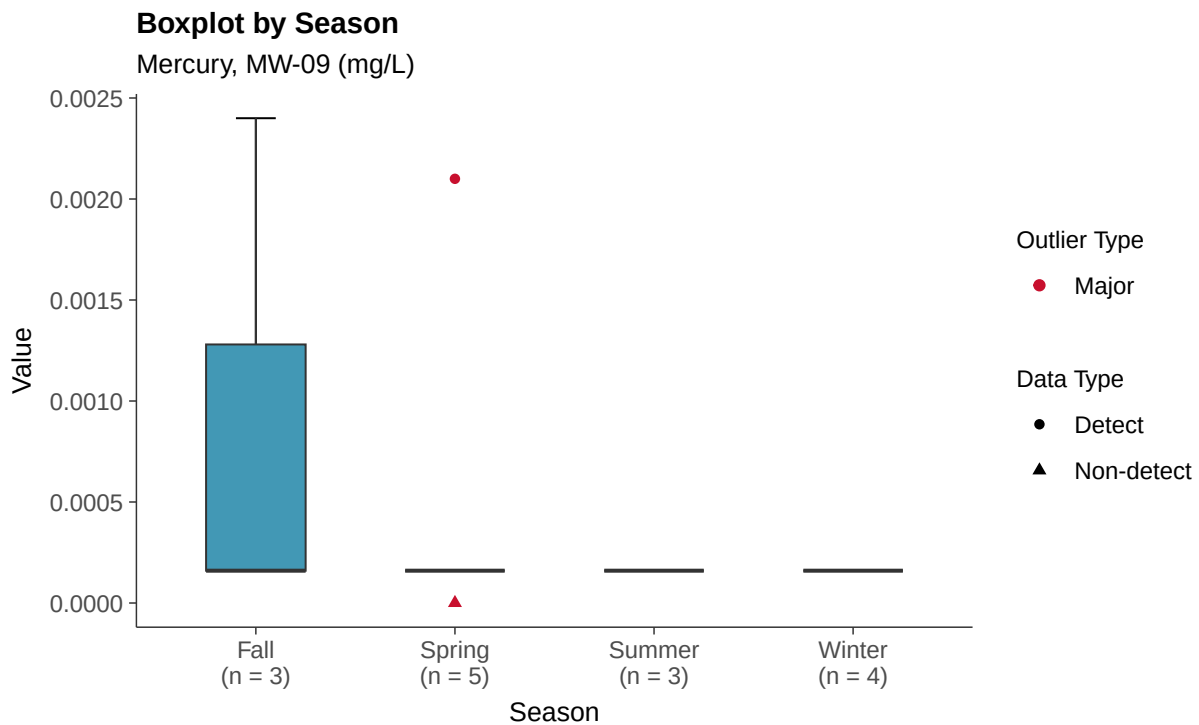
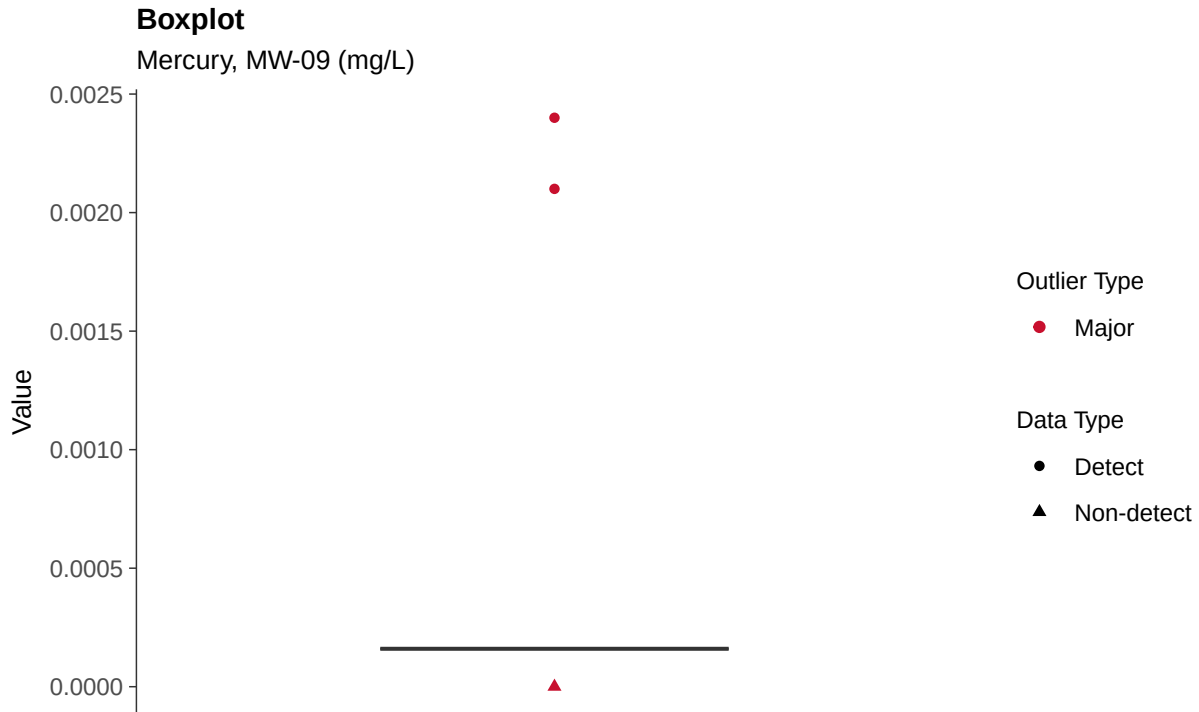


Trend Regression: Piecewise Linear-Linear

Lithium, MW-09 (mg/L)

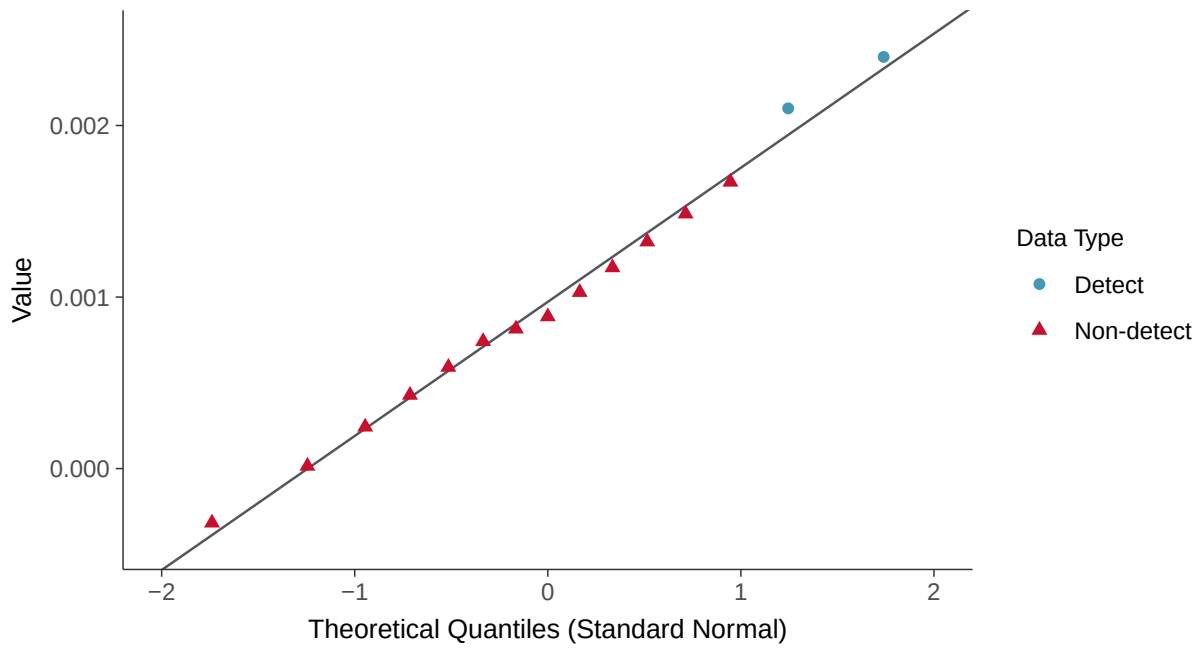


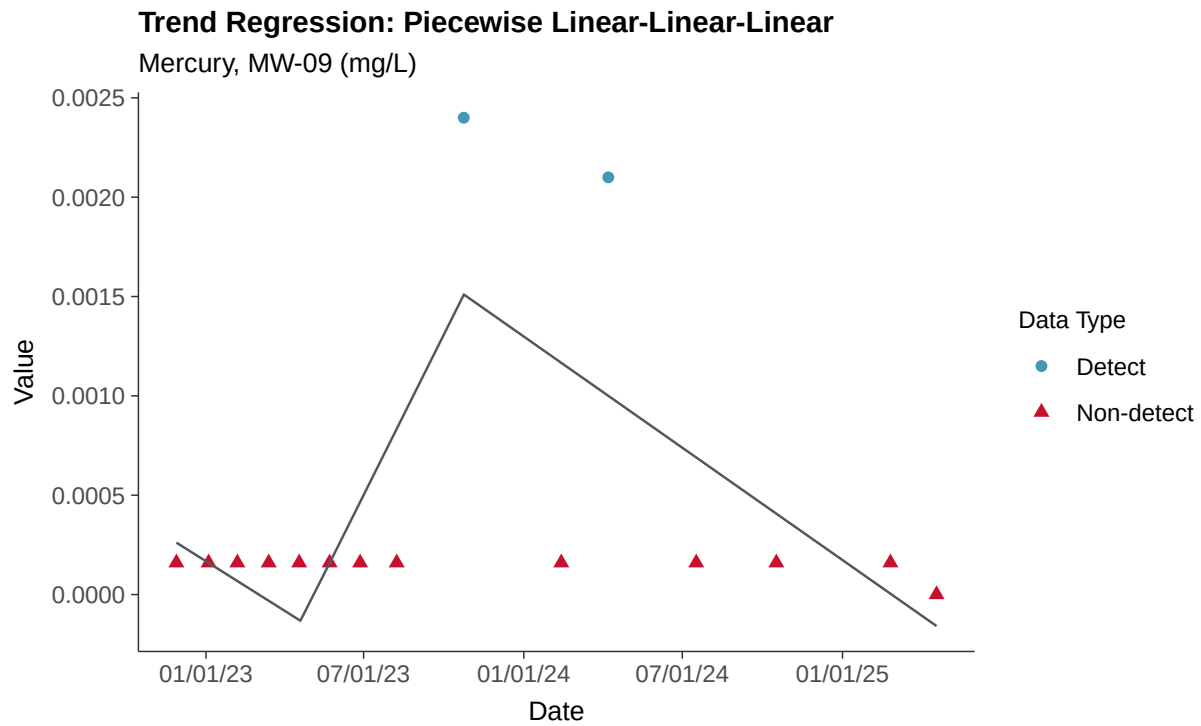




Normal Q-Q plot using ROS Imputed Estimates

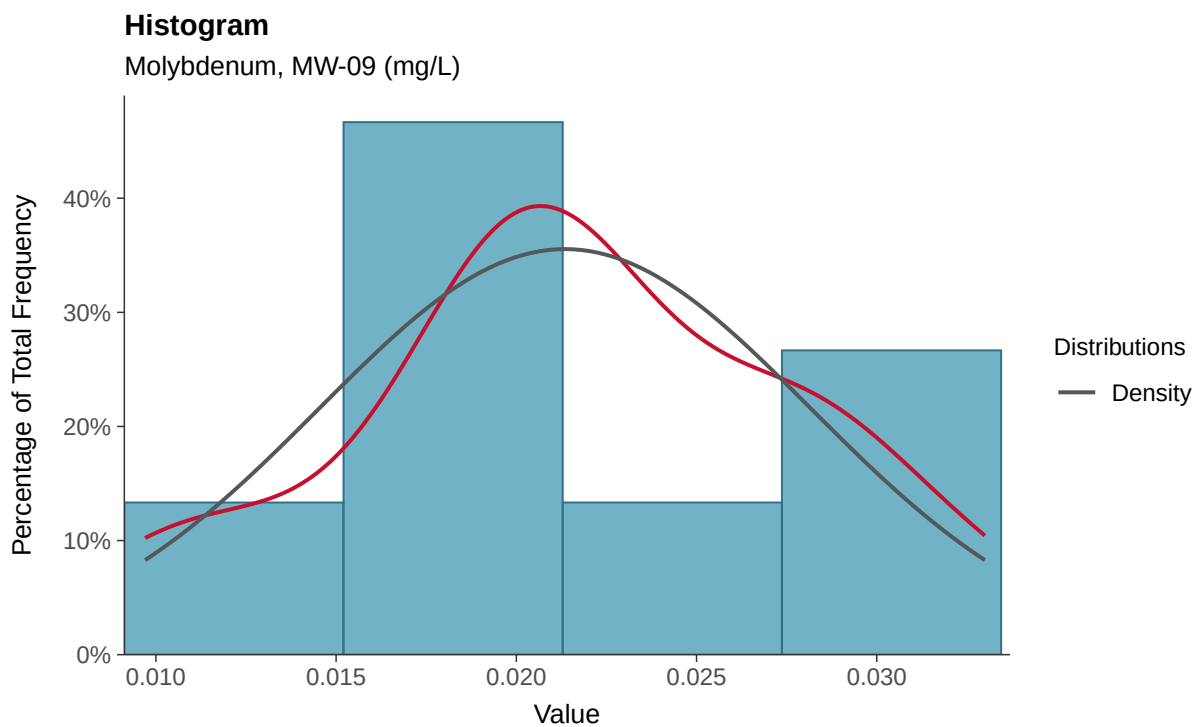
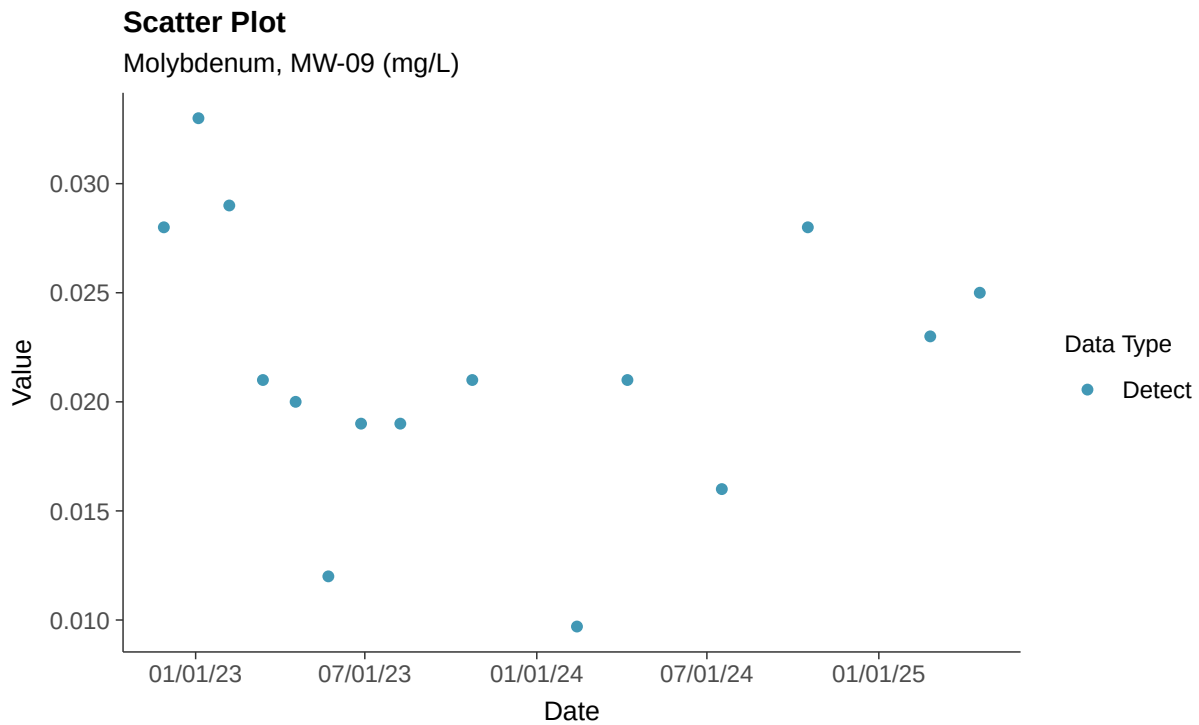
Mercury, MW-09 (mg/L)





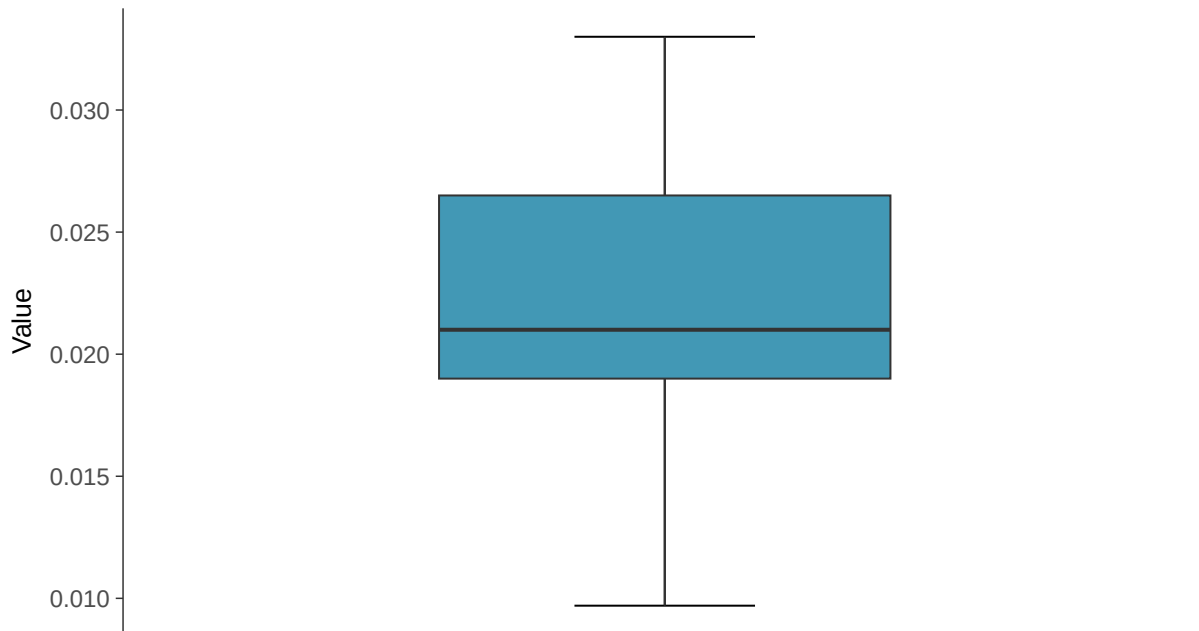
Appendix IV: Molybdenum, MW-09

ID: 19_2_4_118



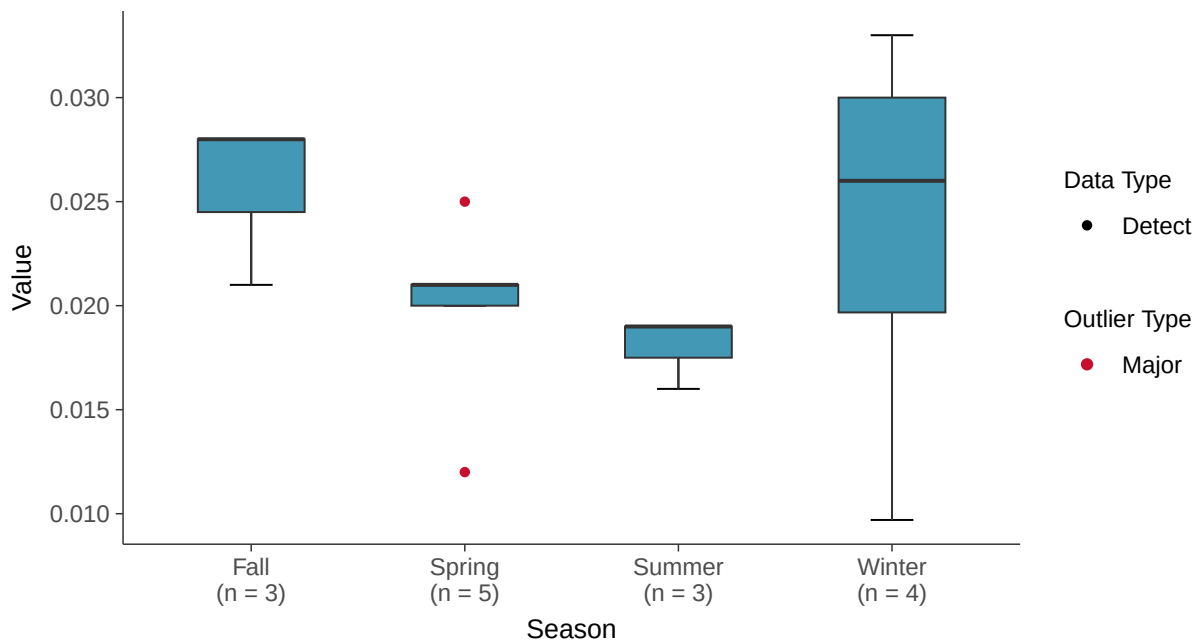
Boxplot

Molybdenum, MW-09 (mg/L)



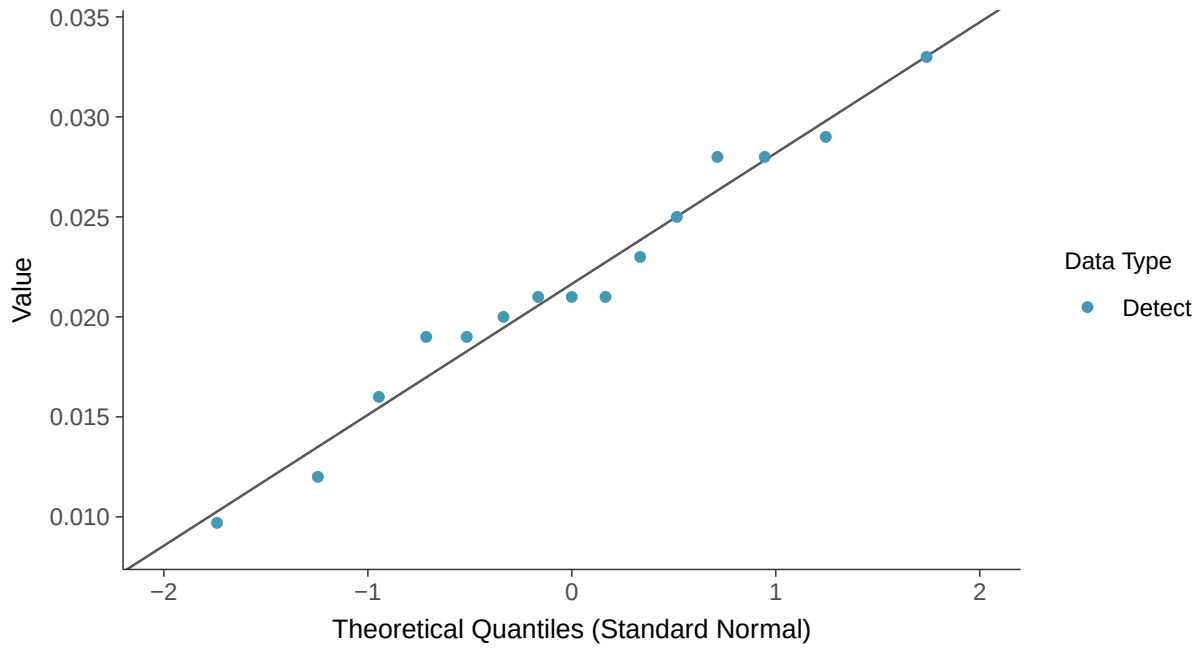
Boxplot by Season

Molybdenum, MW-09 (mg/L)



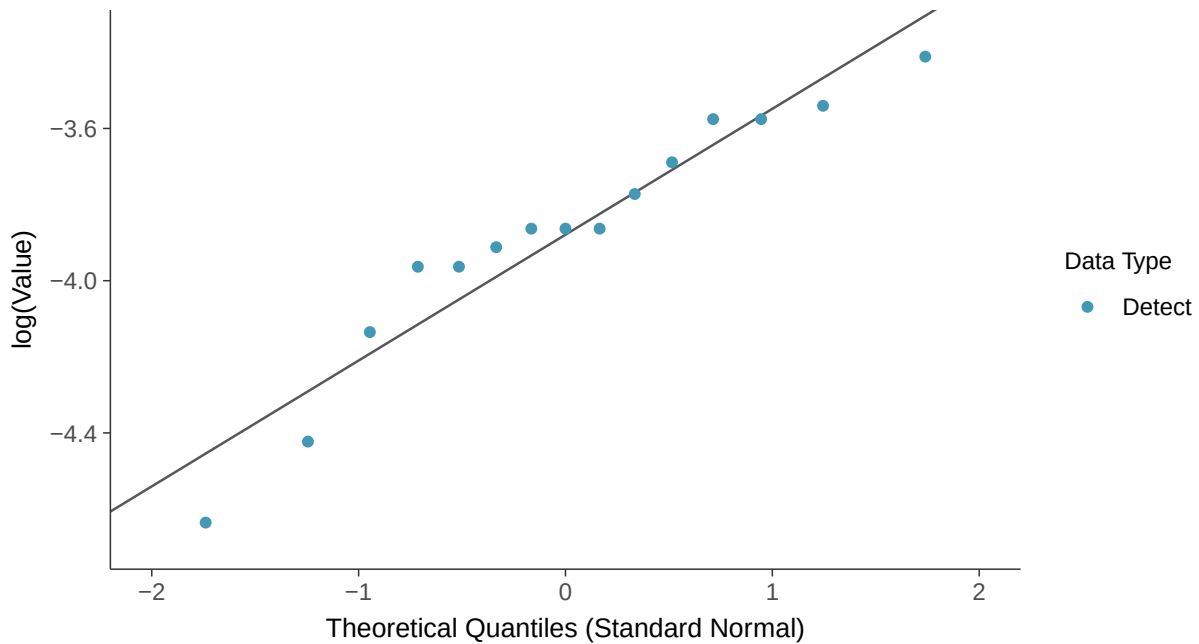
Normal Q-Q plot

Molybdenum, MW-09 (mg/L)



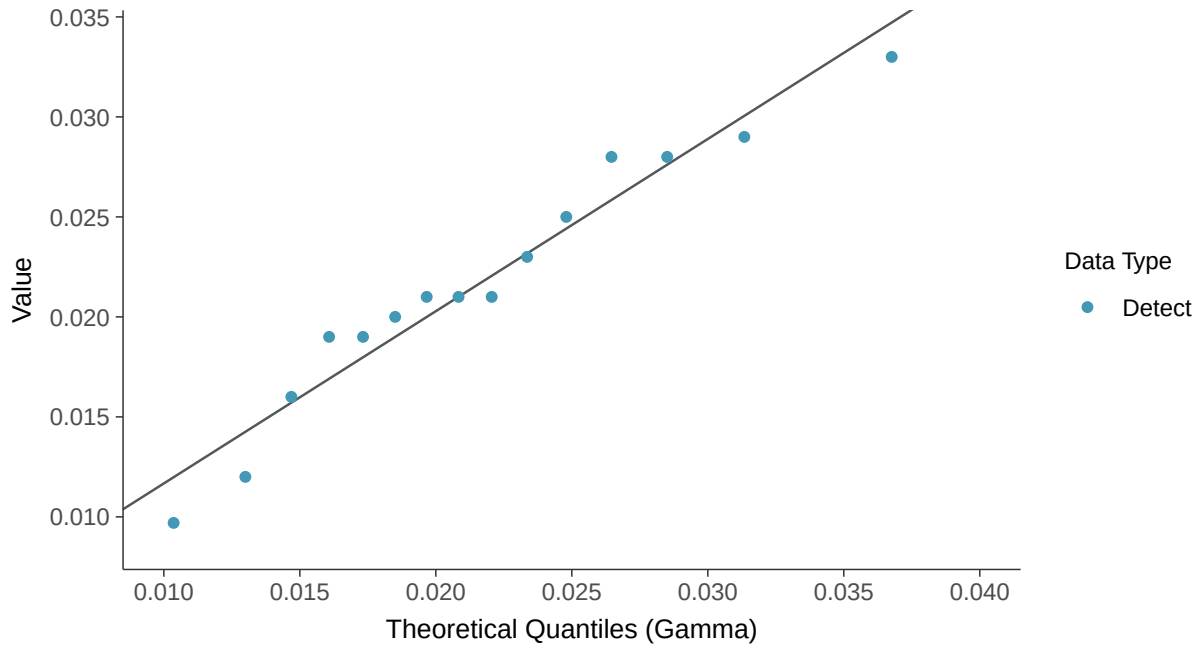
Lognormal Q-Q plot

Molybdenum, MW-09 (mg/L)



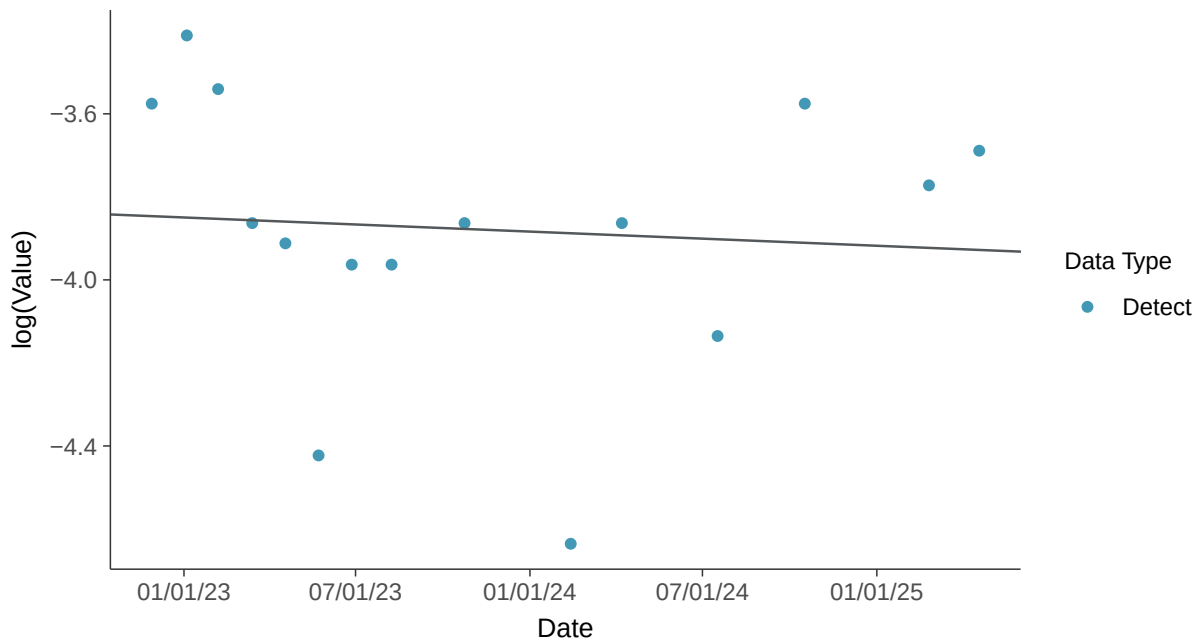
Gamma Q-Q plot

Molybdenum, MW-09 (mg/L)



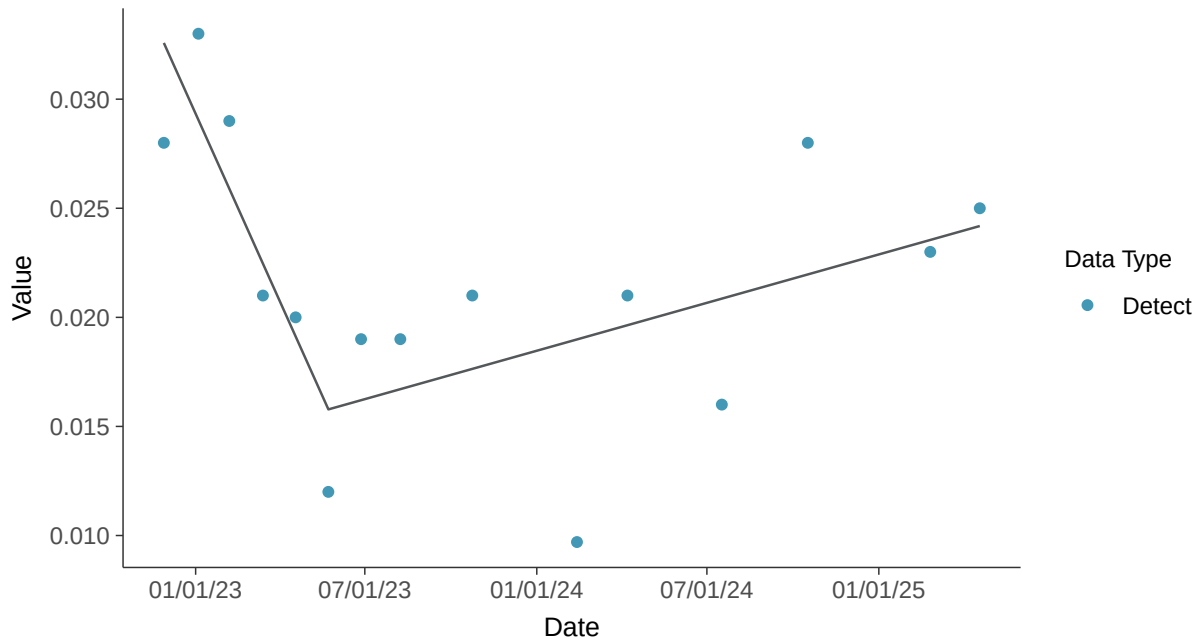
Trend Regression: Lognormal MLE

Molybdenum, MW-09 (mg/L)



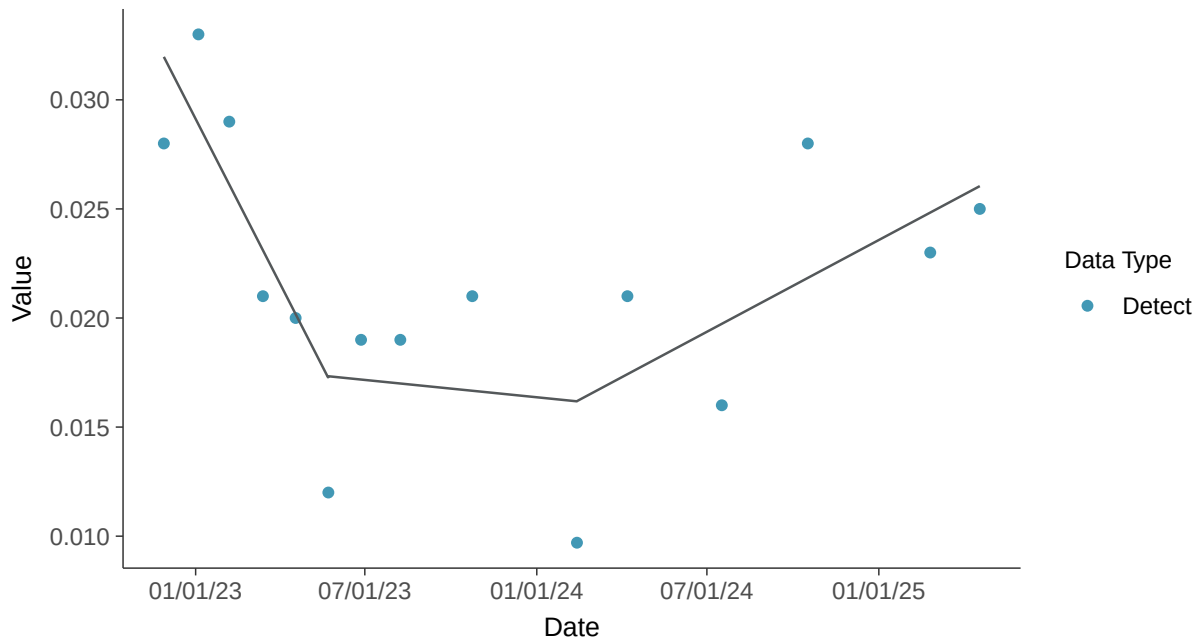
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-09 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-09 (mg/L)

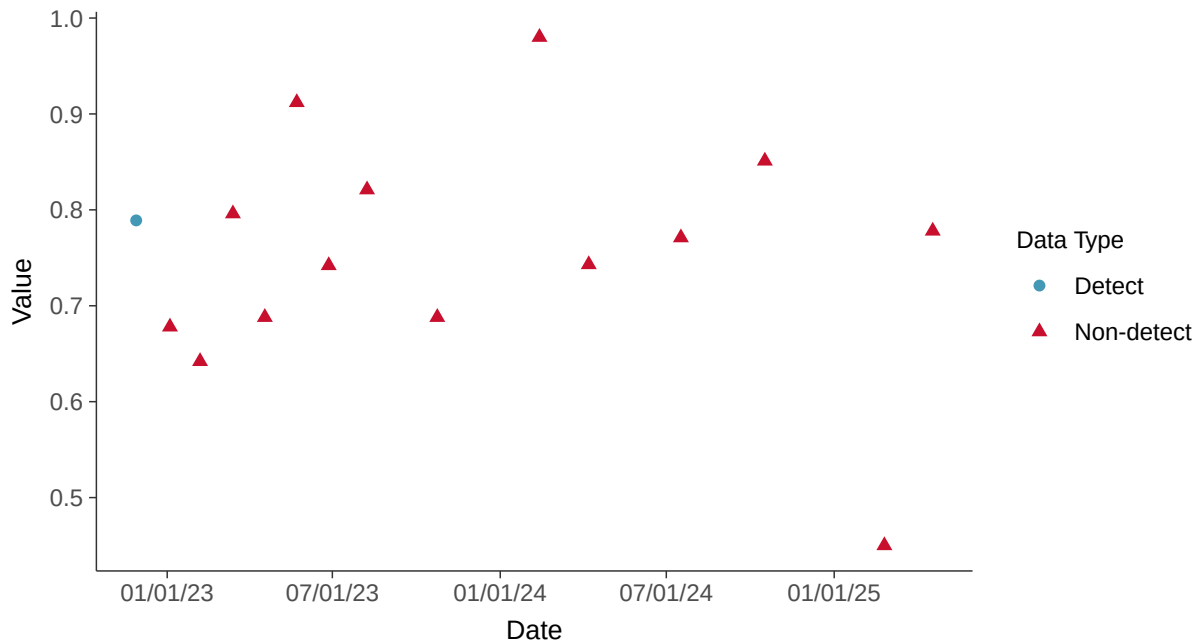


Appendix IV: Radium 226 and 228, MW-09

ID: 19_2_4_121

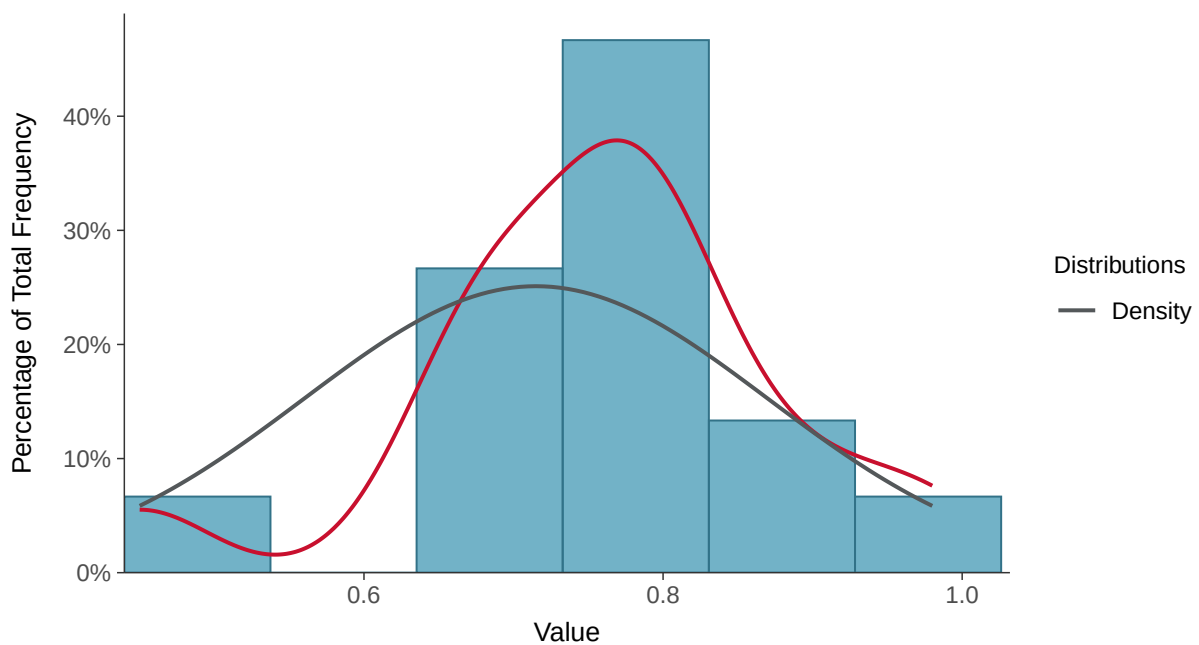
Scatter Plot

Radium 226 and 228, MW-09 (pCi/L)



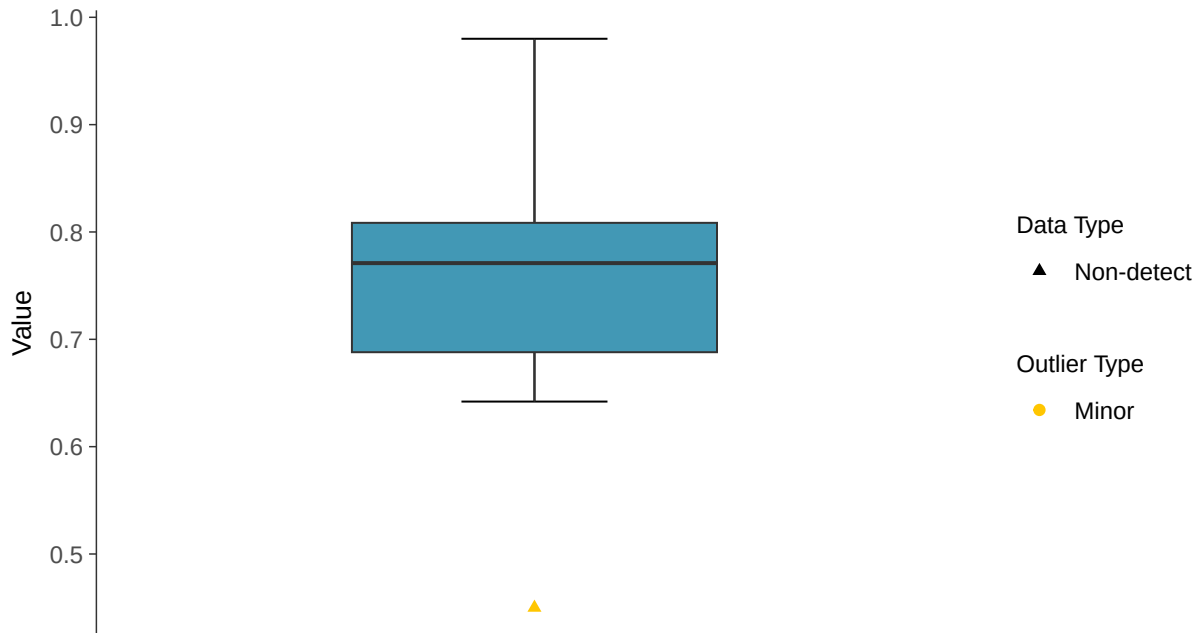
Histogram

Radium 226 and 228, MW-09 (pCi/L)



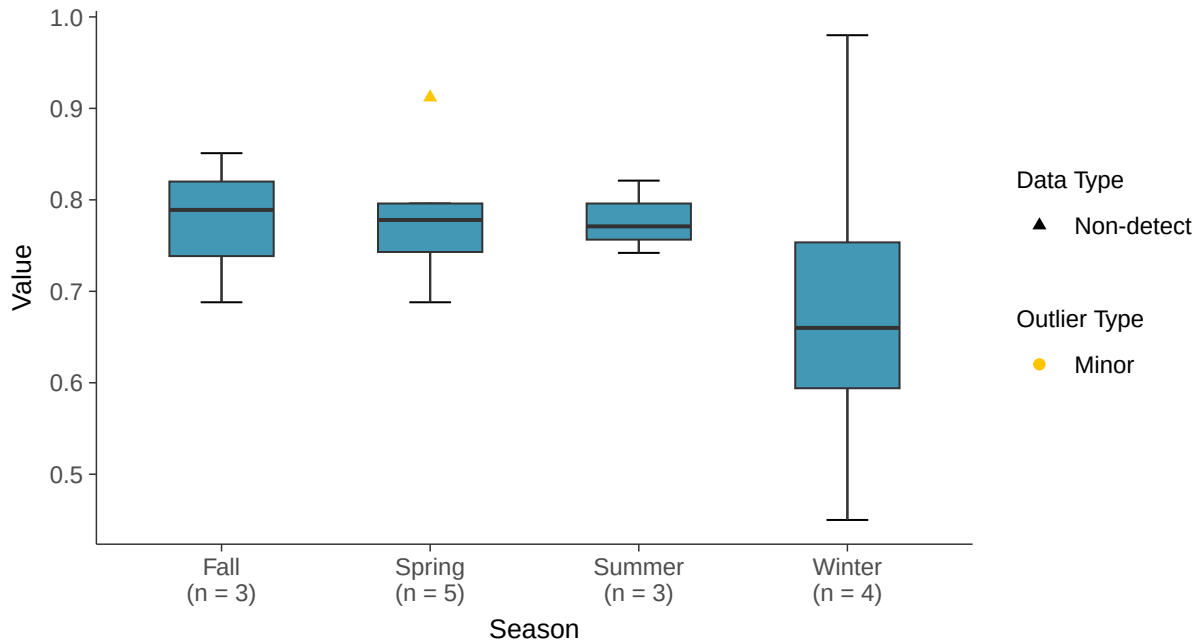
Boxplot

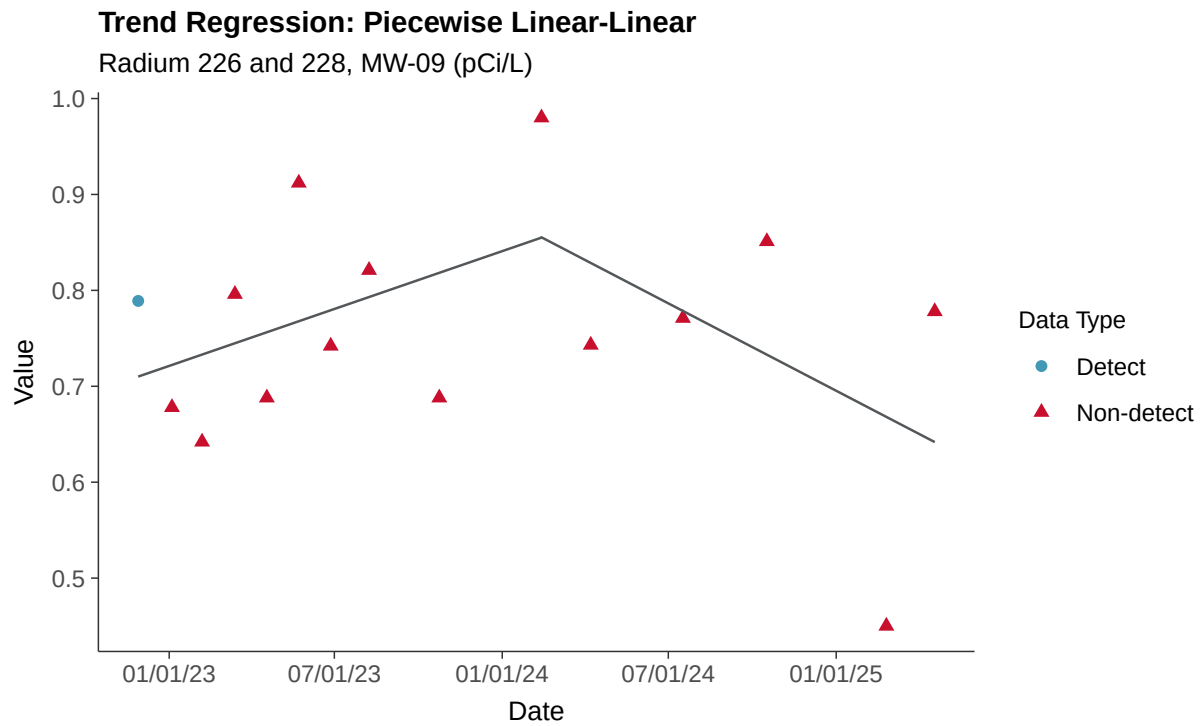
Radium 226 and 228, MW-09 (pCi/L)



Boxplot by Season

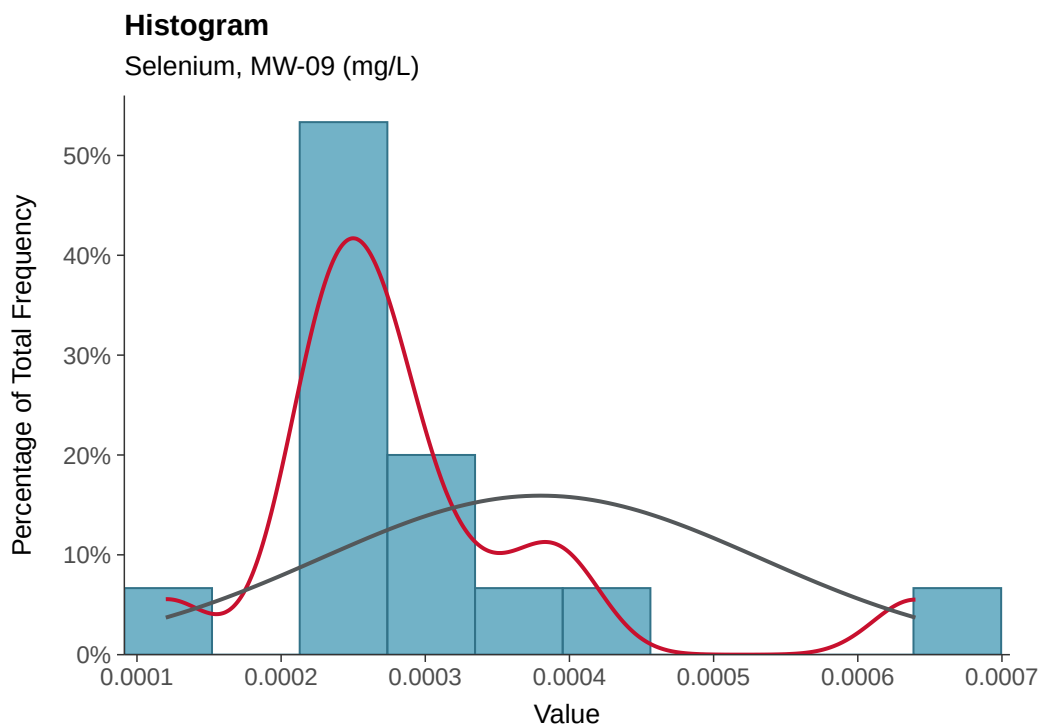
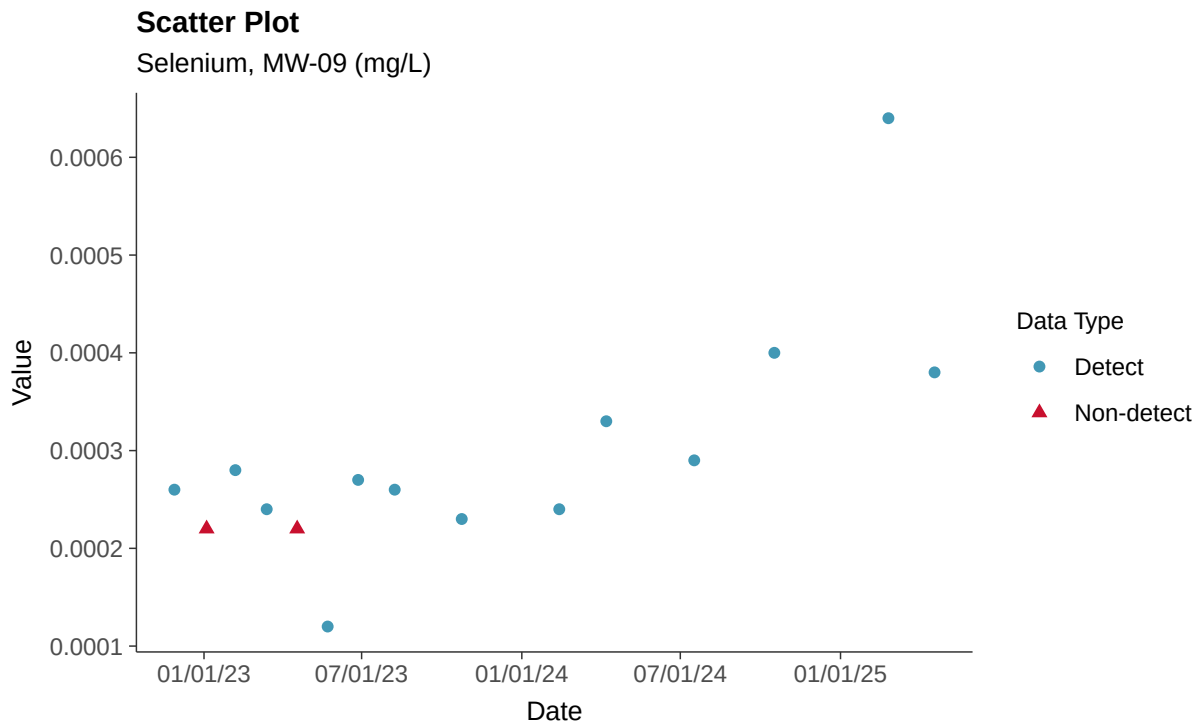
Radium 226 and 228, MW-09 (pCi/L)





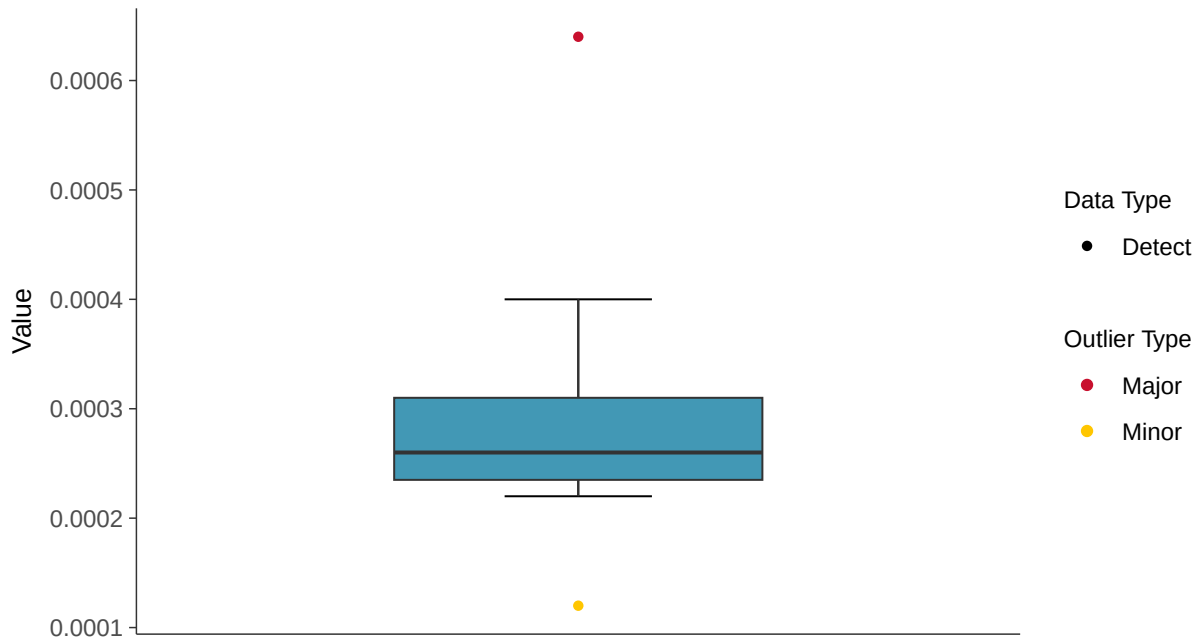
Appendix IV: Selenium, MW-09

ID: 19_2_4_122



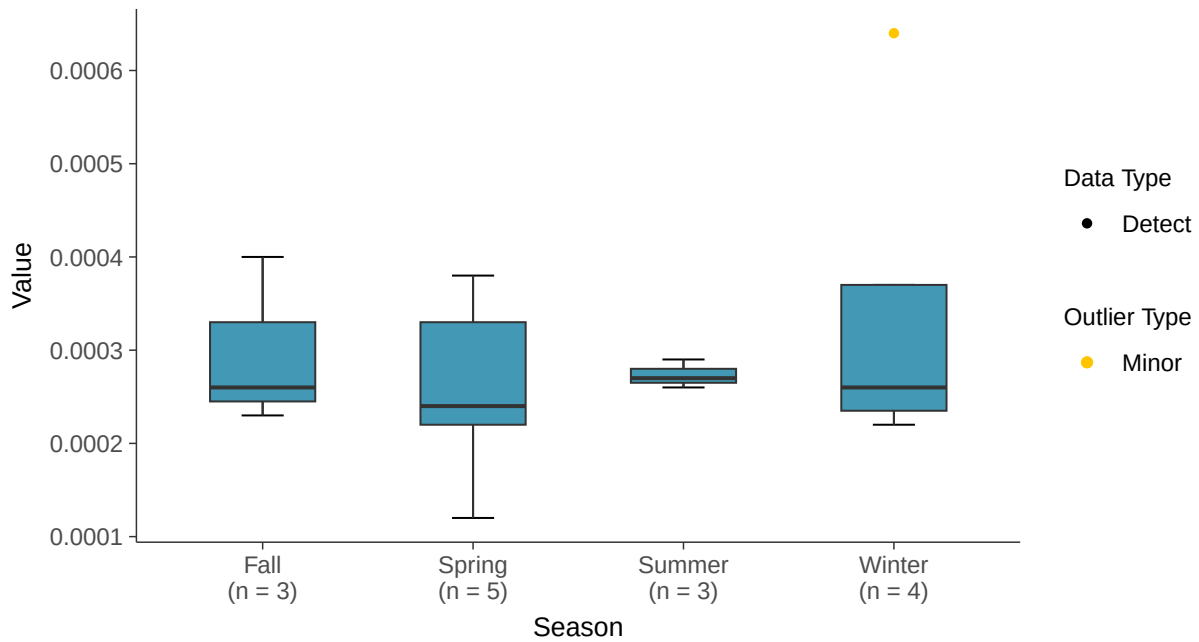
Boxplot

Selenium, MW-09 (mg/L)



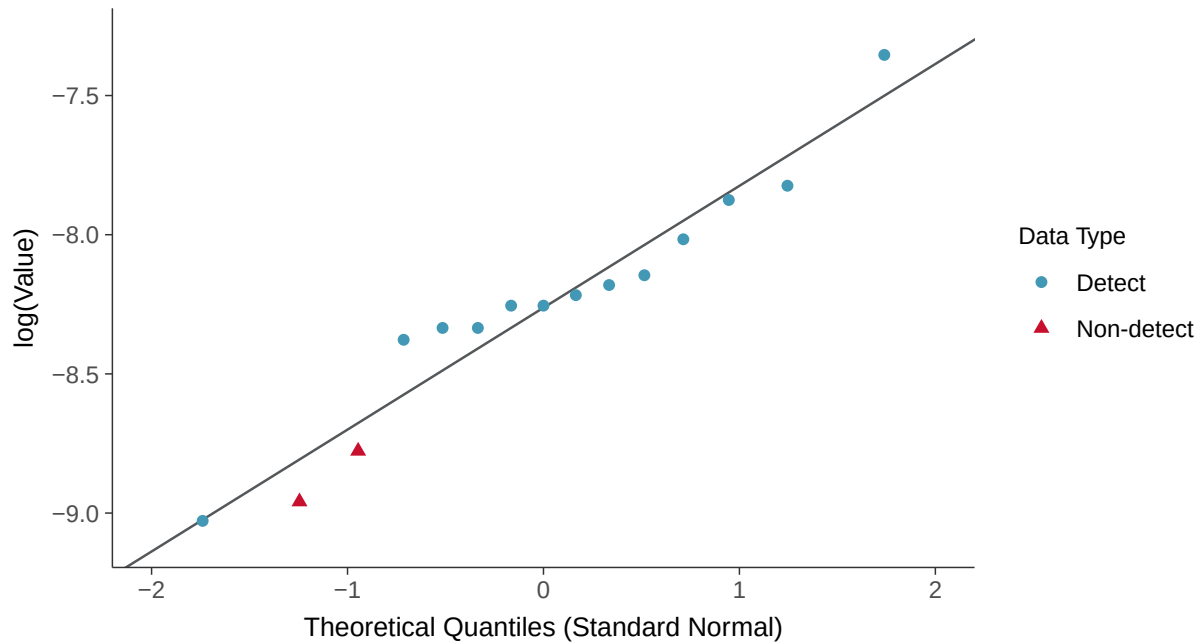
Boxplot by Season

Selenium, MW-09 (mg/L)



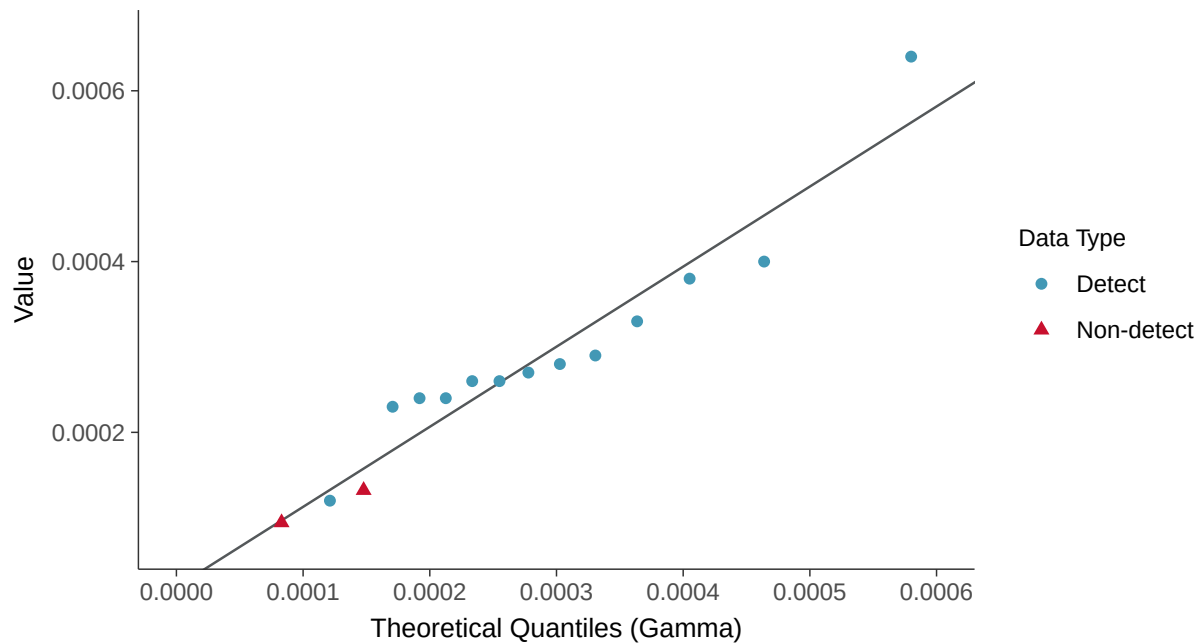
Lognormal Q-Q plot using ROS Imputed Estimates

Selenium, MW-09 (mg/L)



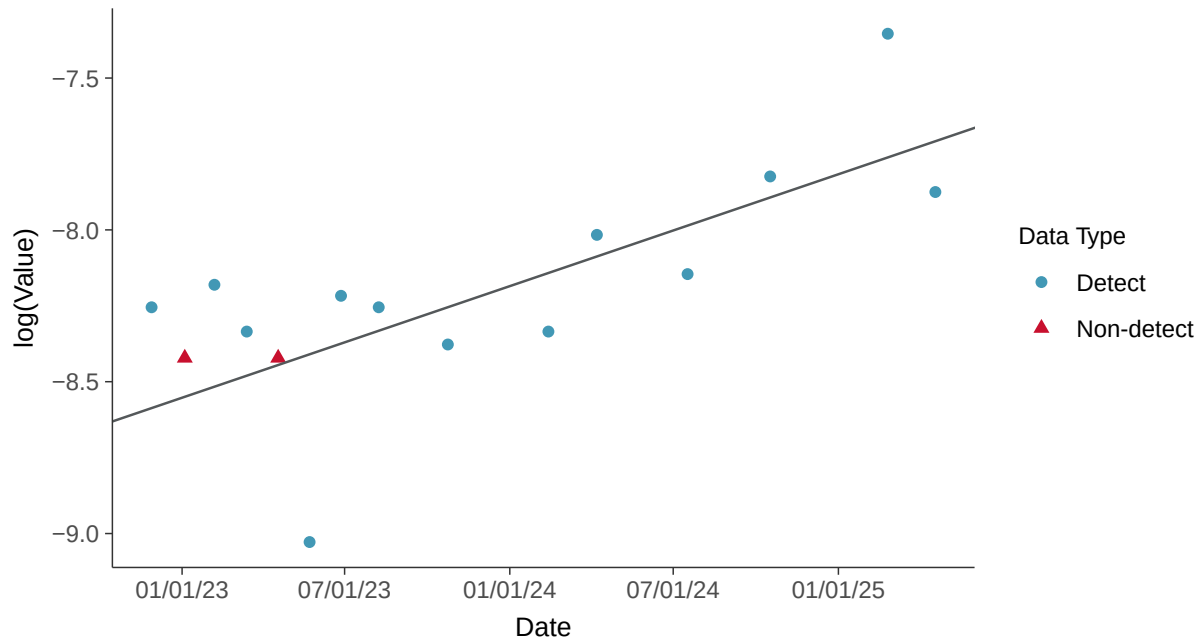
Gamma Q-Q plot using ROS Imputed Estimates

Selenium, MW-09 (mg/L)



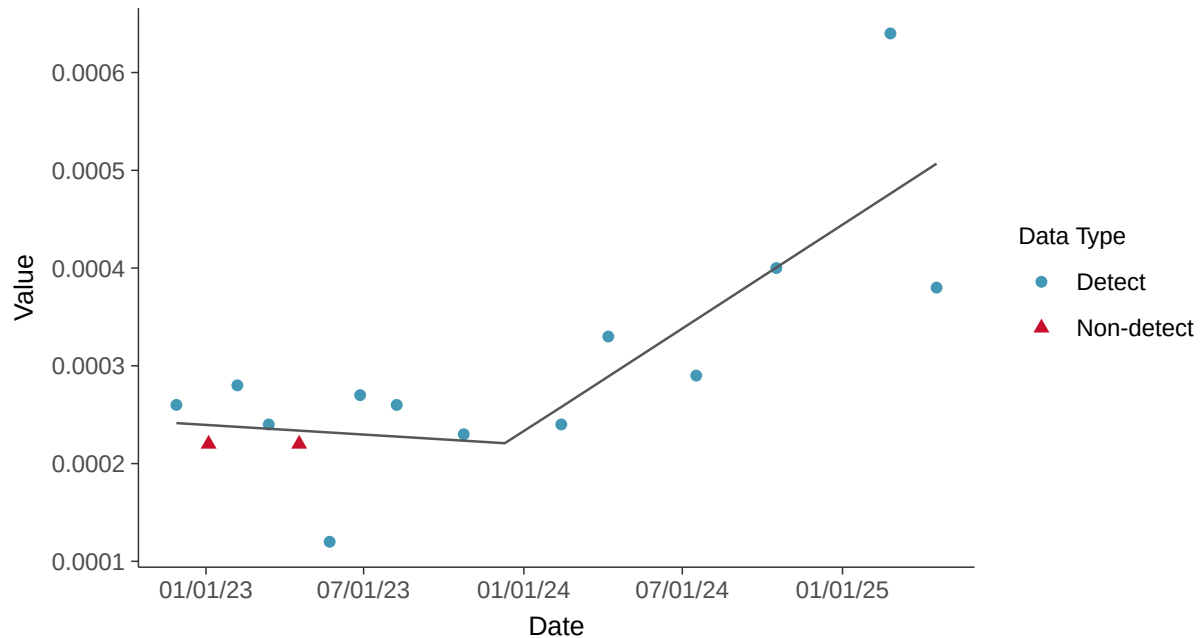
Trend Regression: Lognormal MLE

Selenium, MW-09 (mg/L)



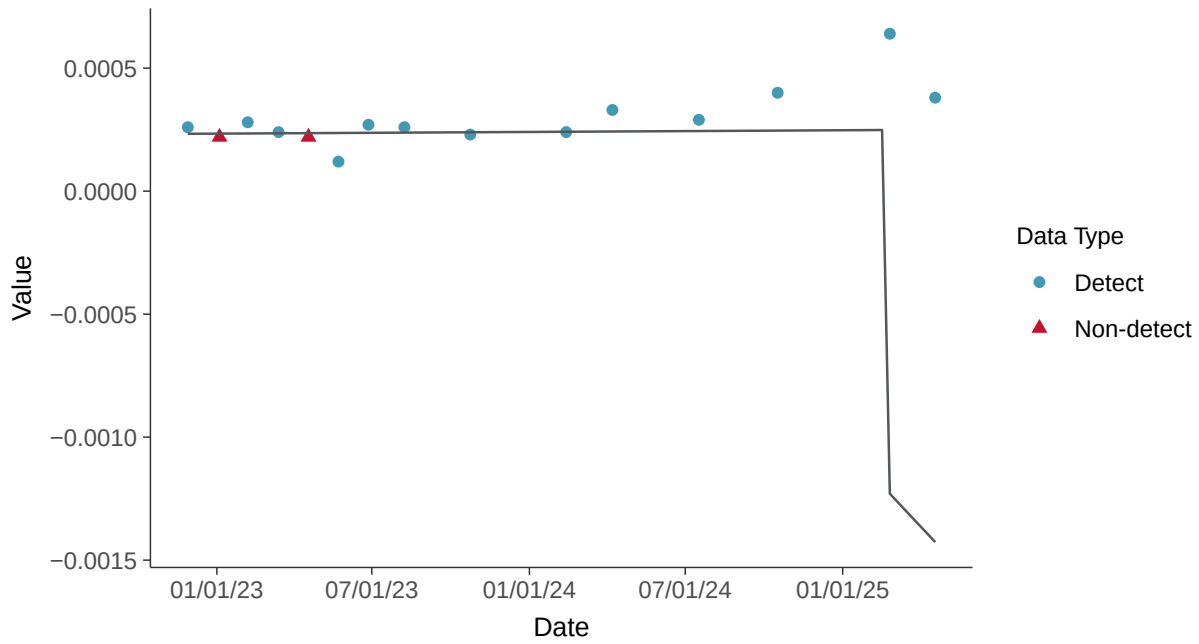
Trend Regression: Piecewise Linear-Linear

Selenium, MW-09 (mg/L)



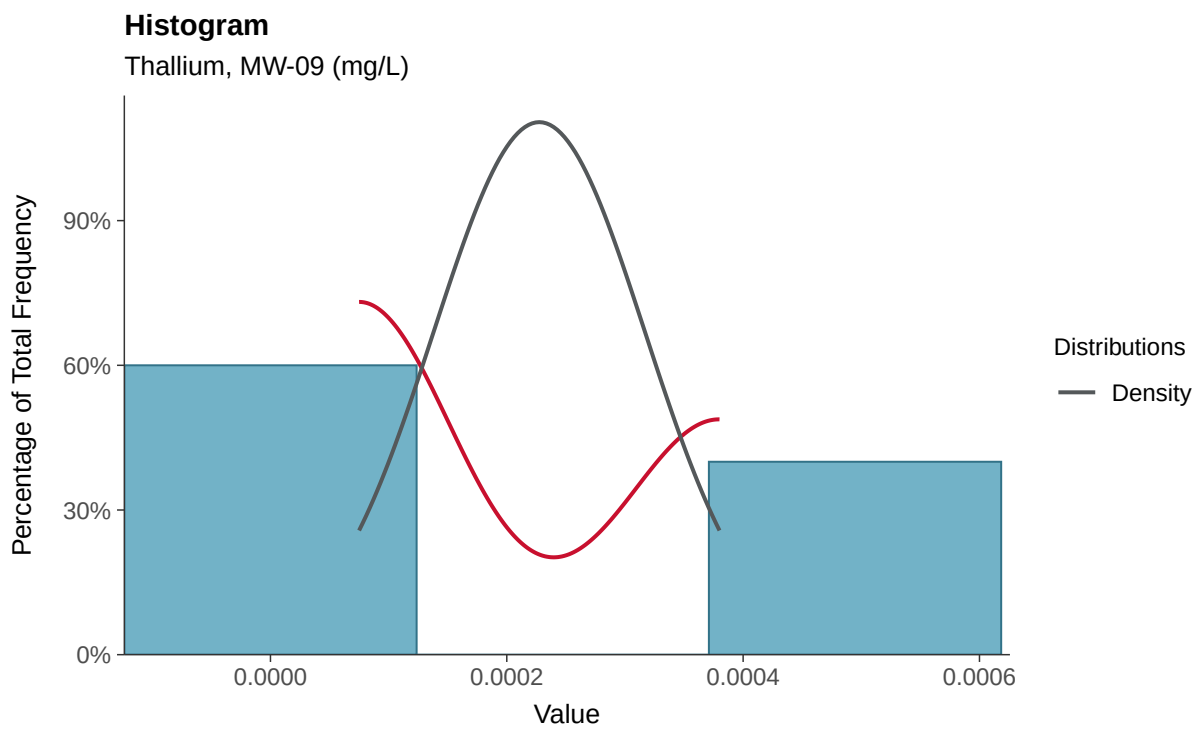
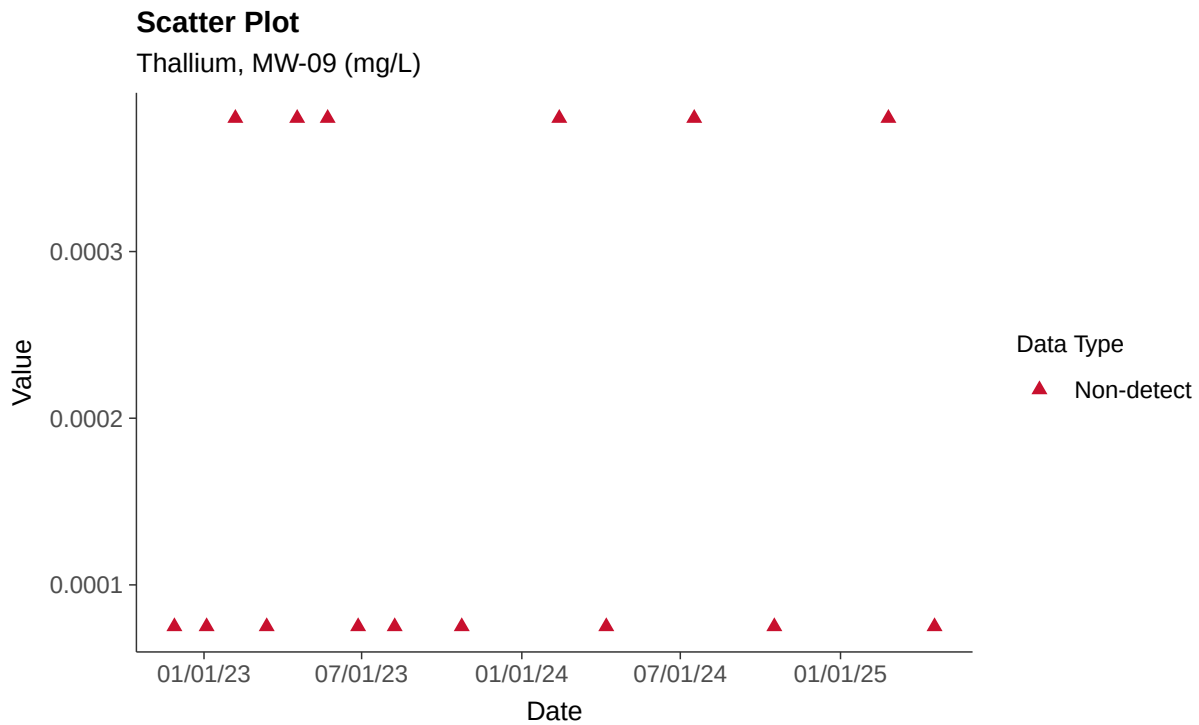


Trend Regression: Piecewise Linear-Linear-Linear
Selenium, MW-09 (mg/L)



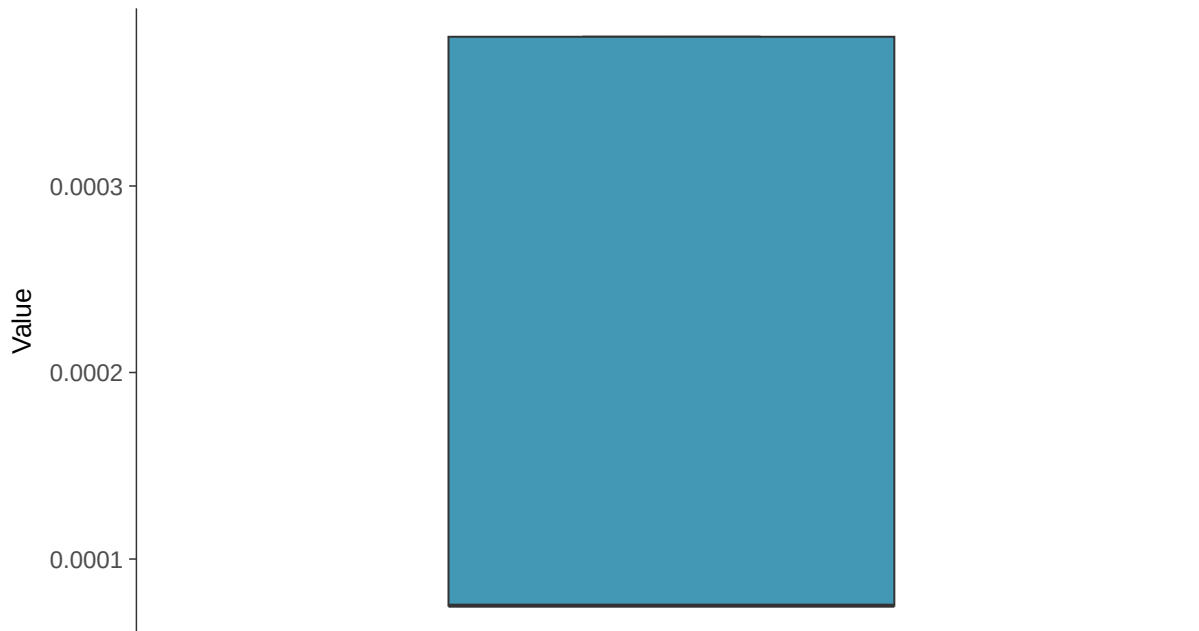
Appendix IV: Thallium, MW-09

ID: 19_2_4_125



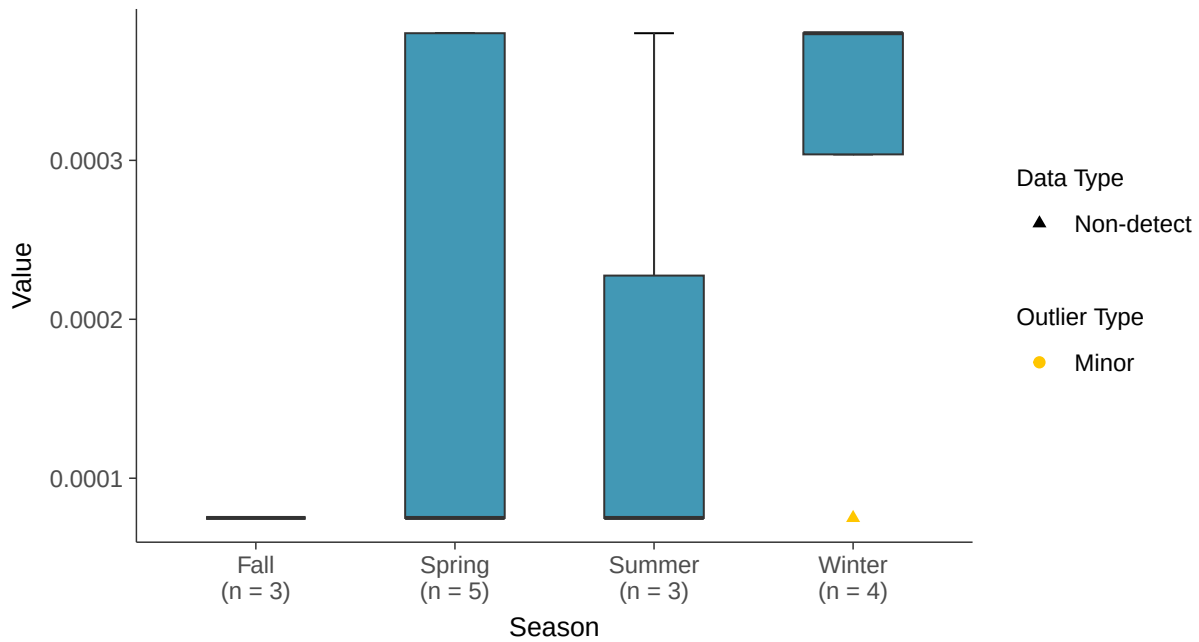
Boxplot

Thallium, MW-09 (mg/L)



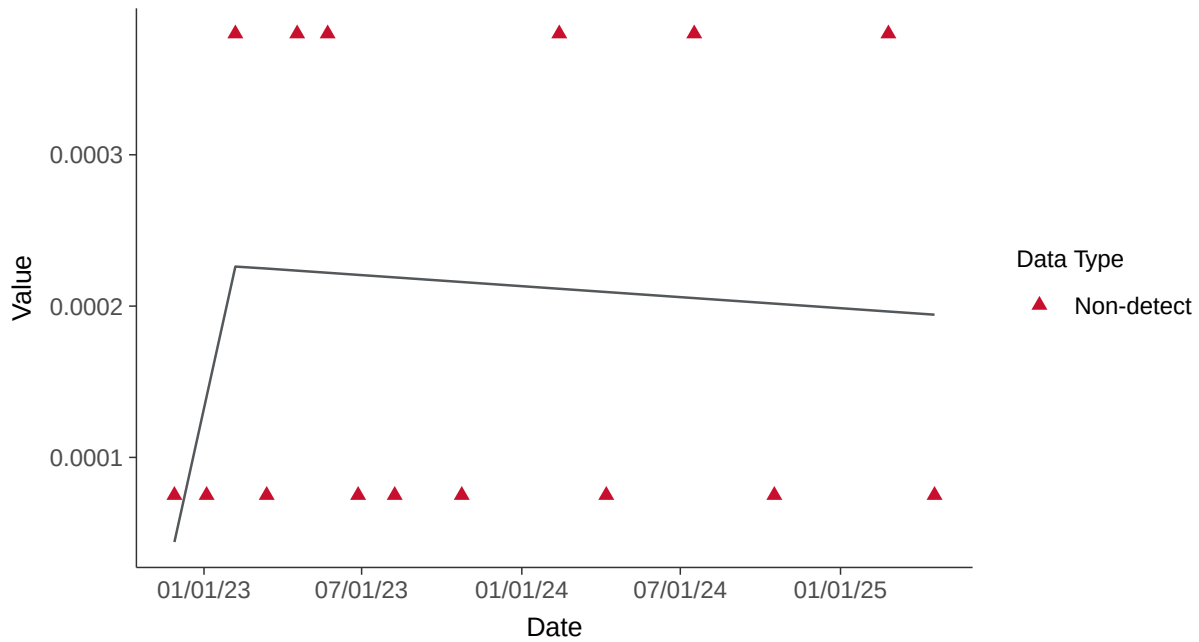
Boxplot by Season

Thallium, MW-09 (mg/L)



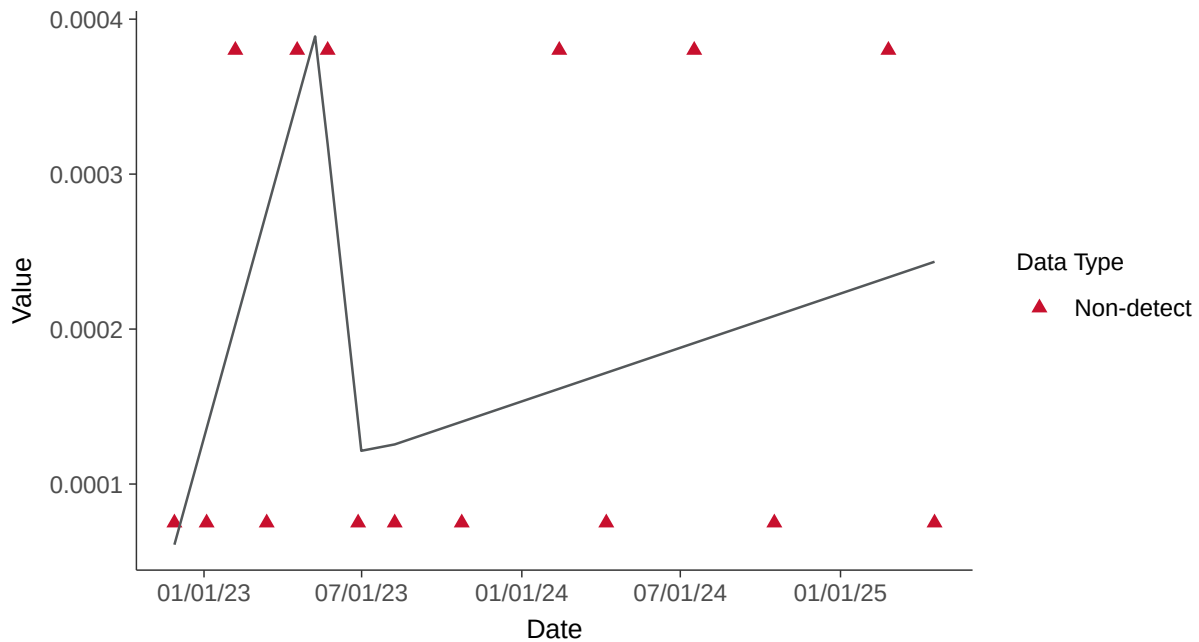
Trend Regression: Piecewise Linear-Linear

Thallium, MW-09 (mg/L)



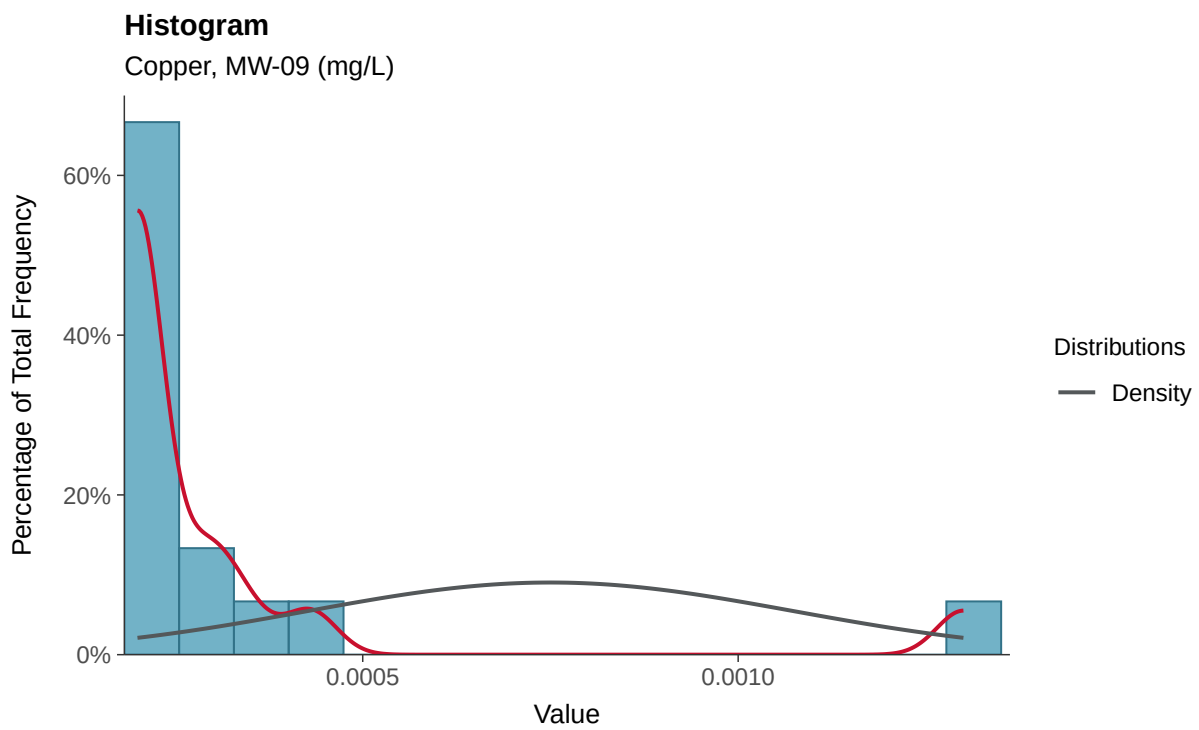
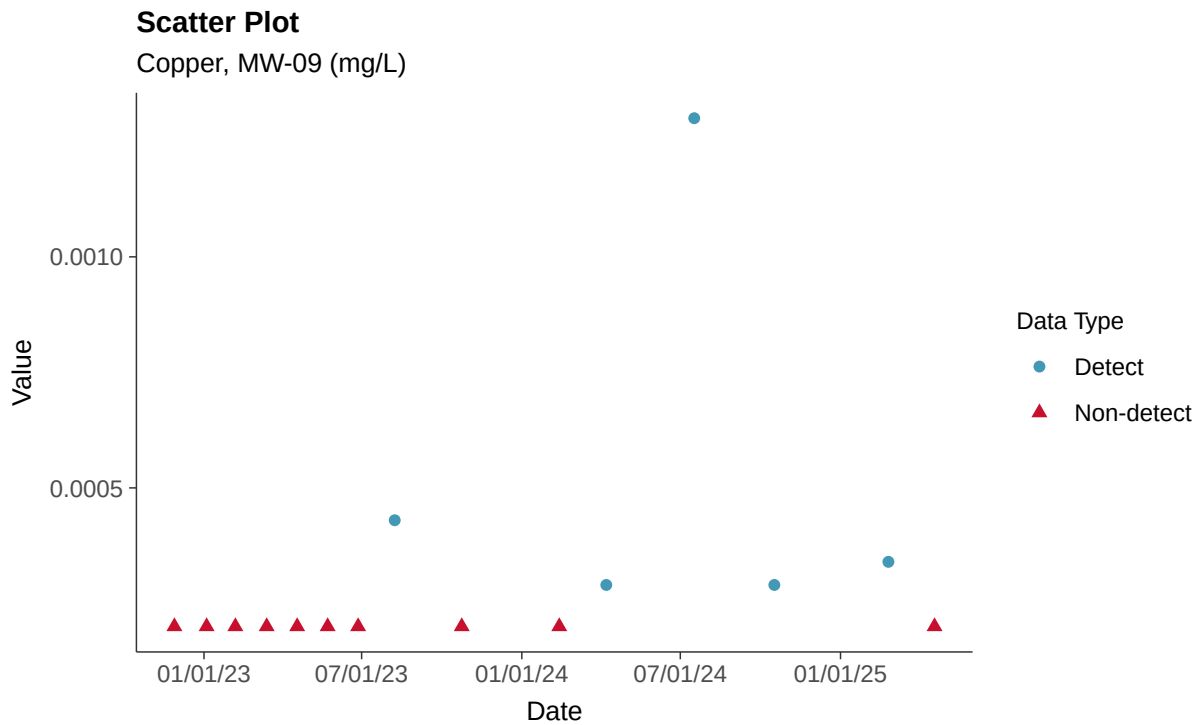
Trend Regression: Piecewise Linear-Linear-Linear

Thallium, MW-09 (mg/L)



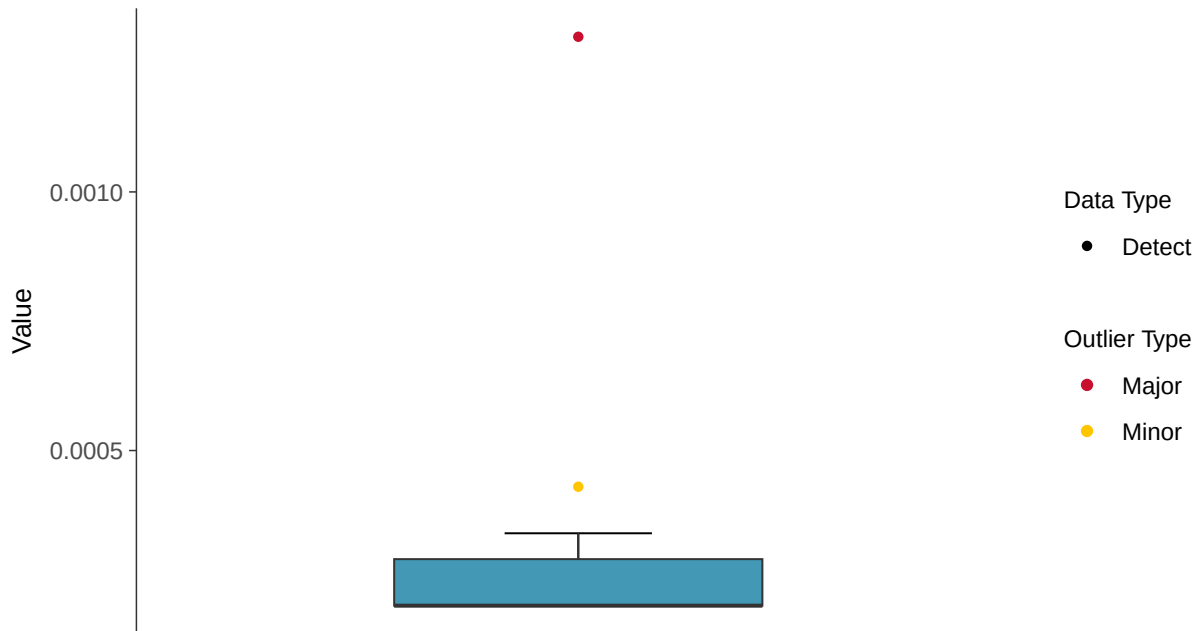
Part 115: Copper, MW-09

ID: 19_2_5_111



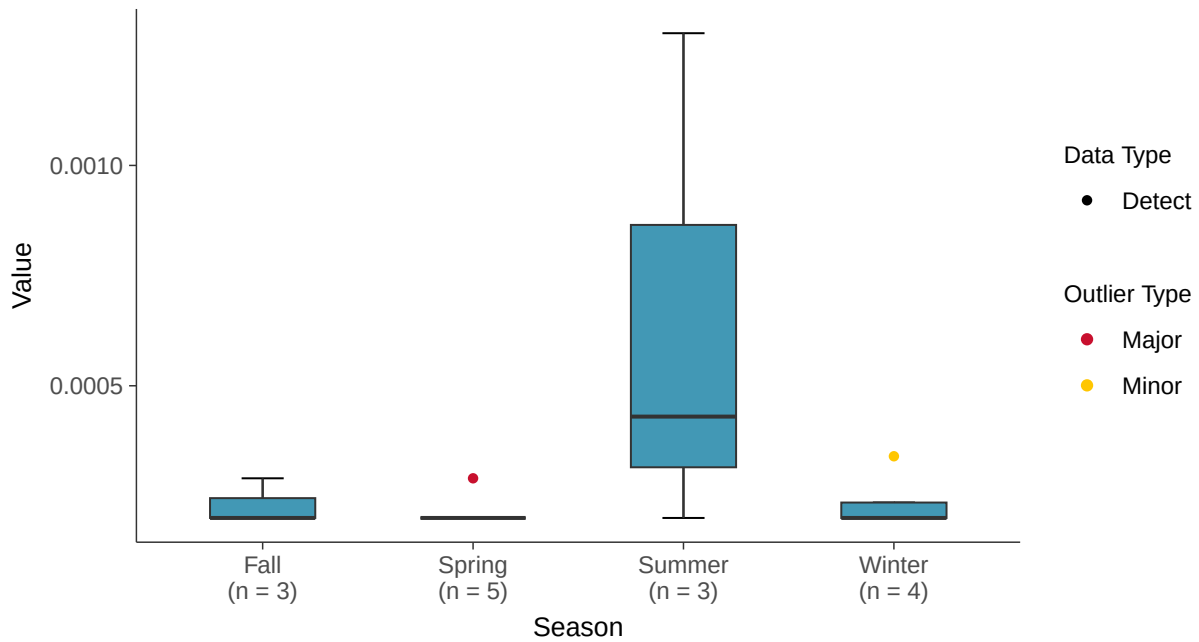
Boxplot

Copper, MW-09 (mg/L)



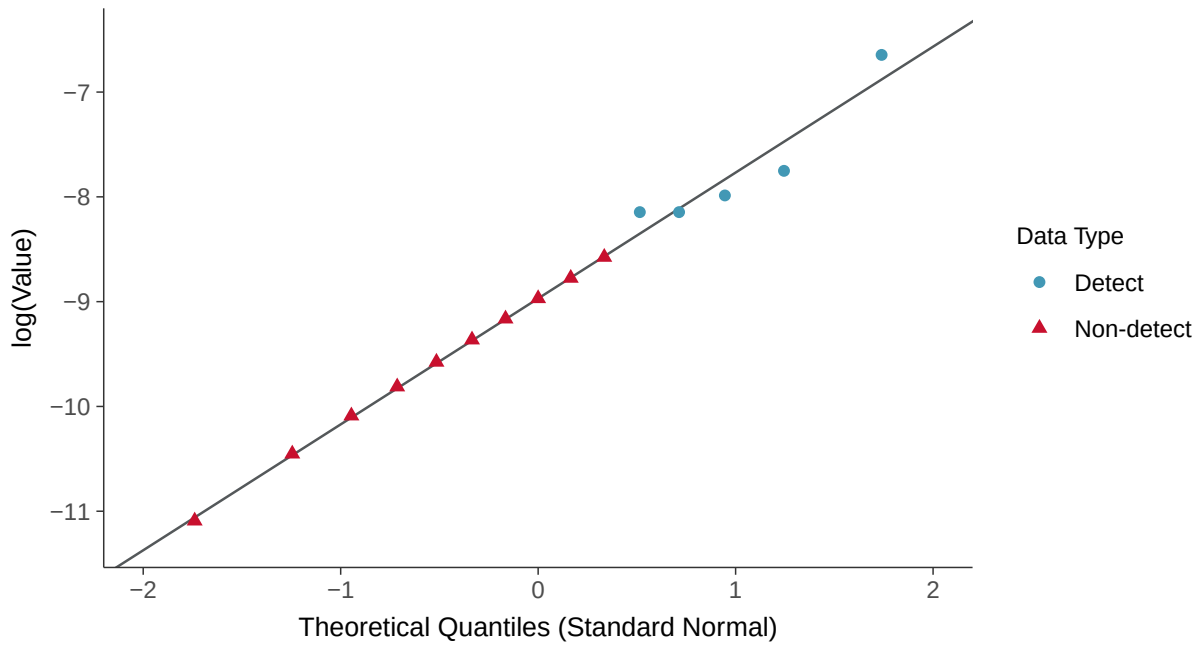
Boxplot by Season

Copper, MW-09 (mg/L)



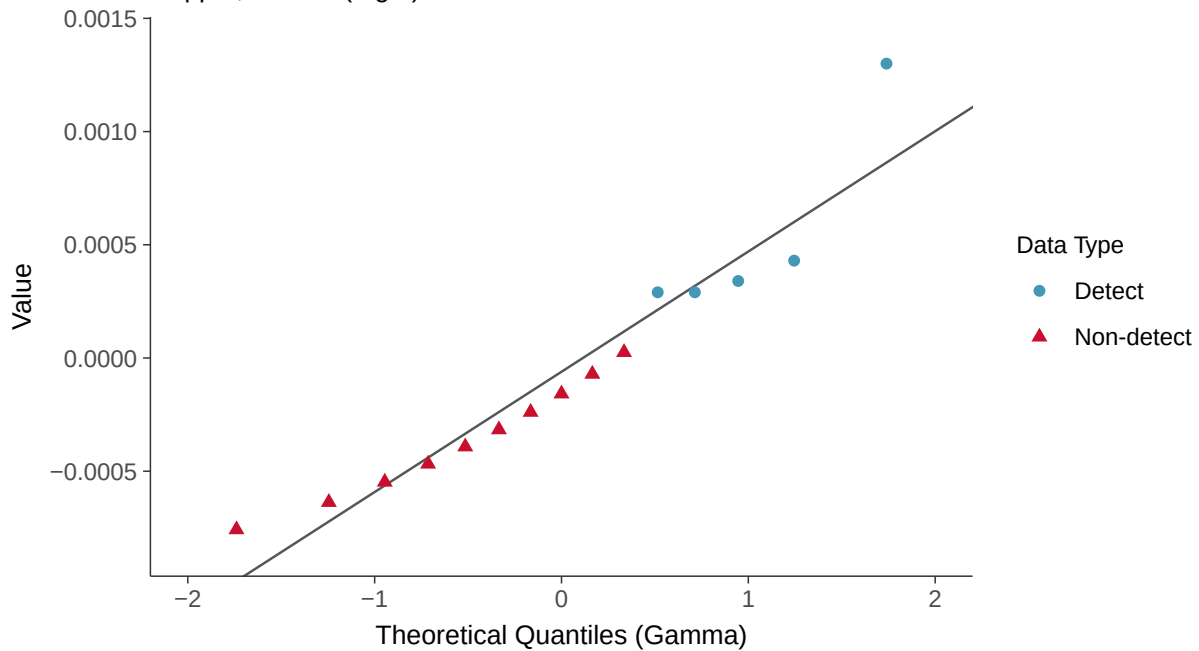
Lognormal Q-Q plot using ROS Imputed Estimates

Copper, MW-09 (mg/L)



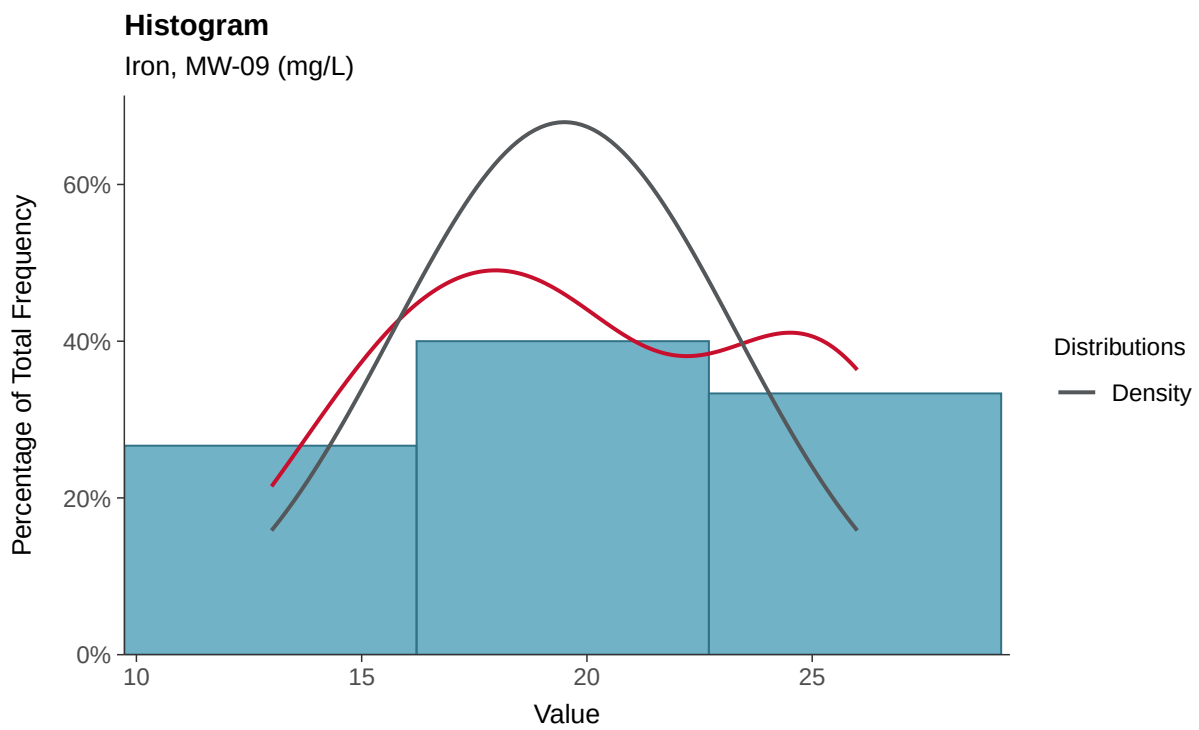
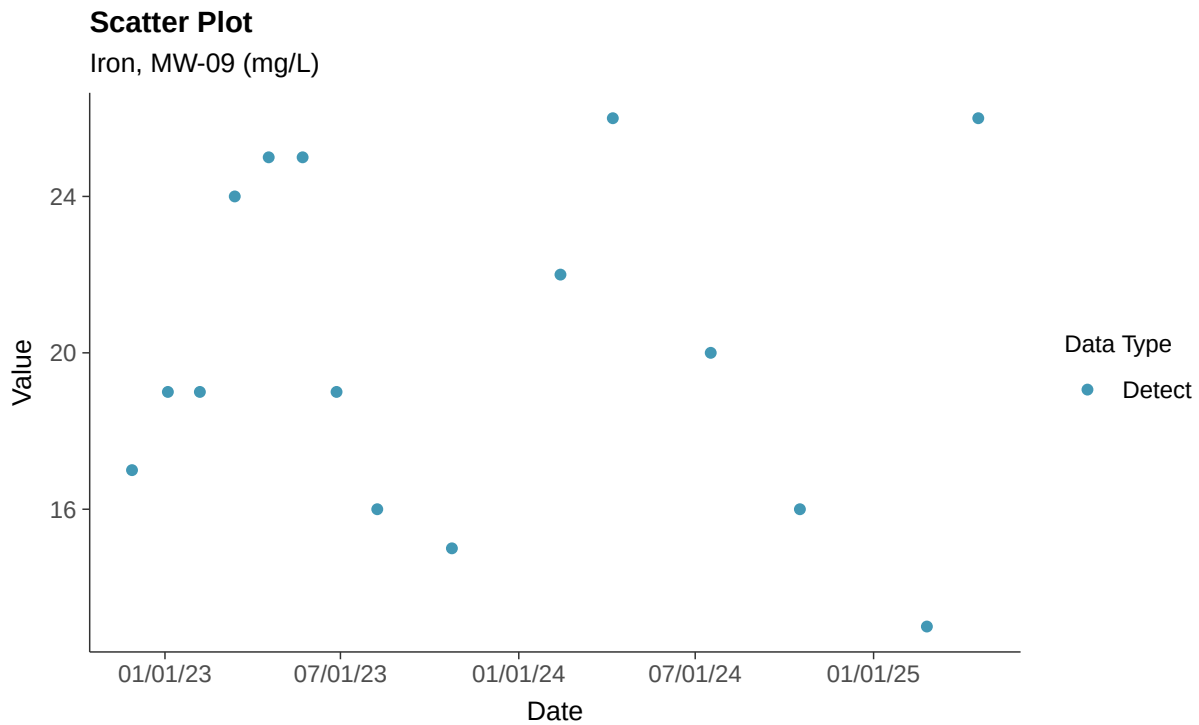
Gamma Q-Q plot using ROS Imputed Estimates

Copper, MW-09 (mg/L)



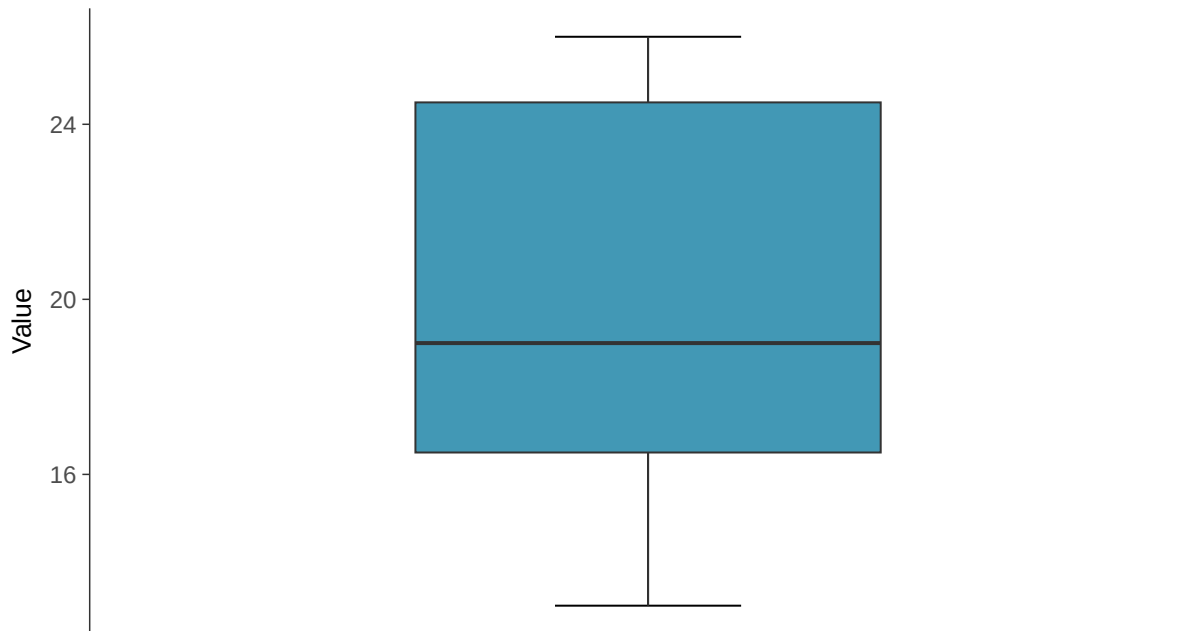
Part 115: Iron, MW-09

ID: 19_2_5_114



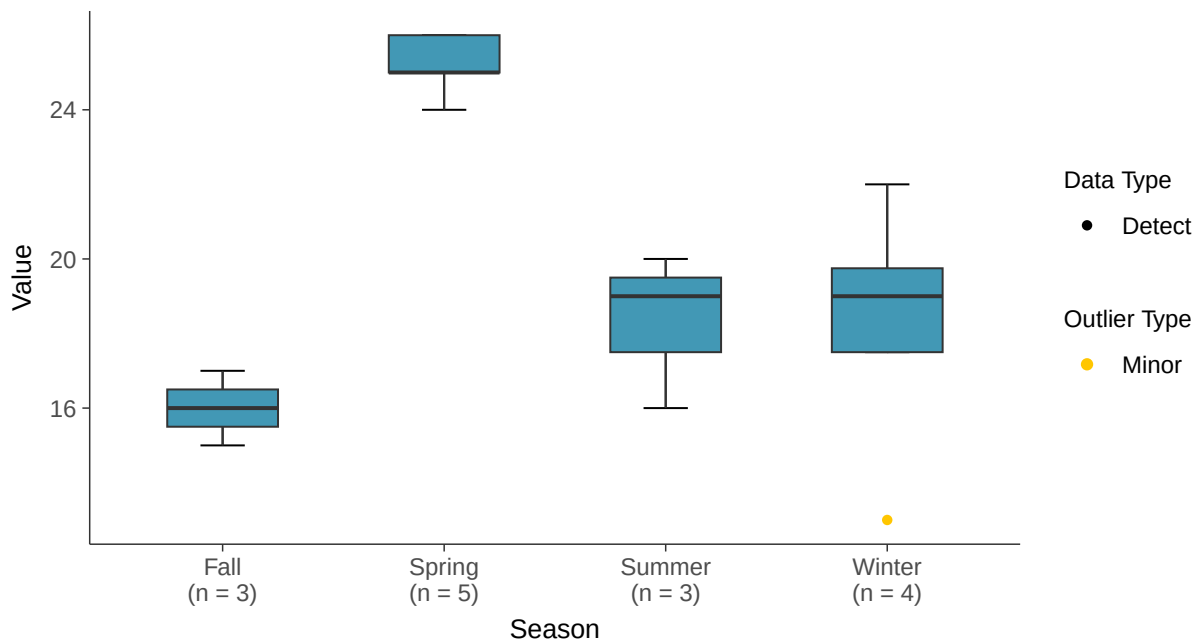
Boxplot

Iron, MW-09 (mg/L)



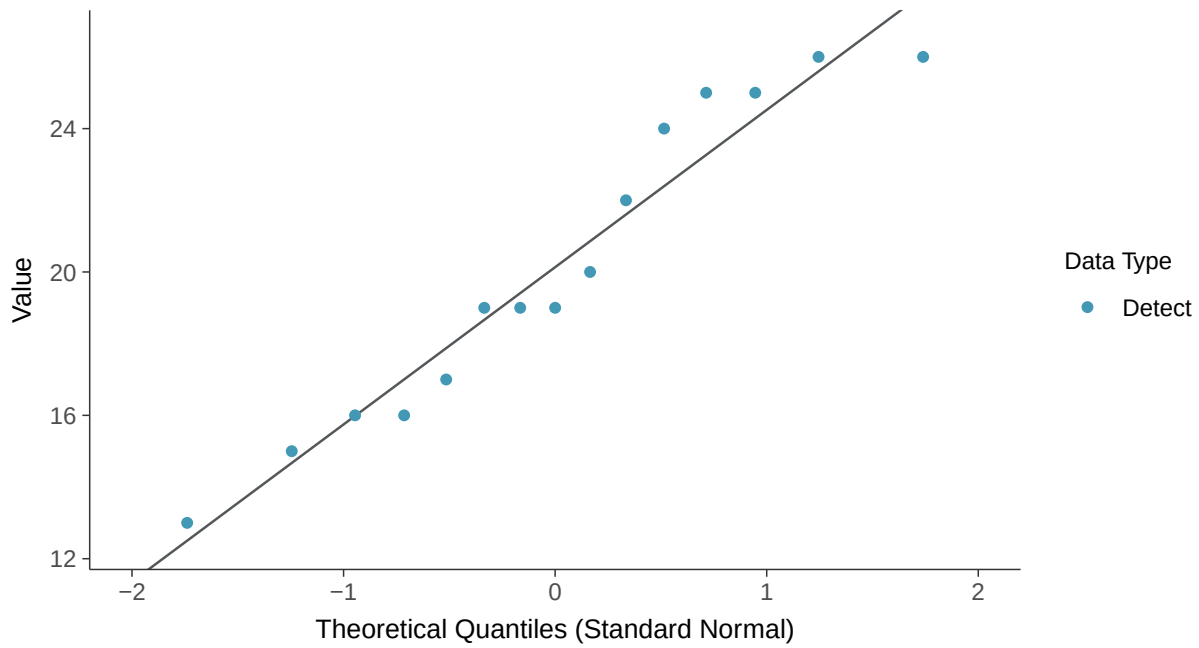
Boxplot by Season

Iron, MW-09 (mg/L)



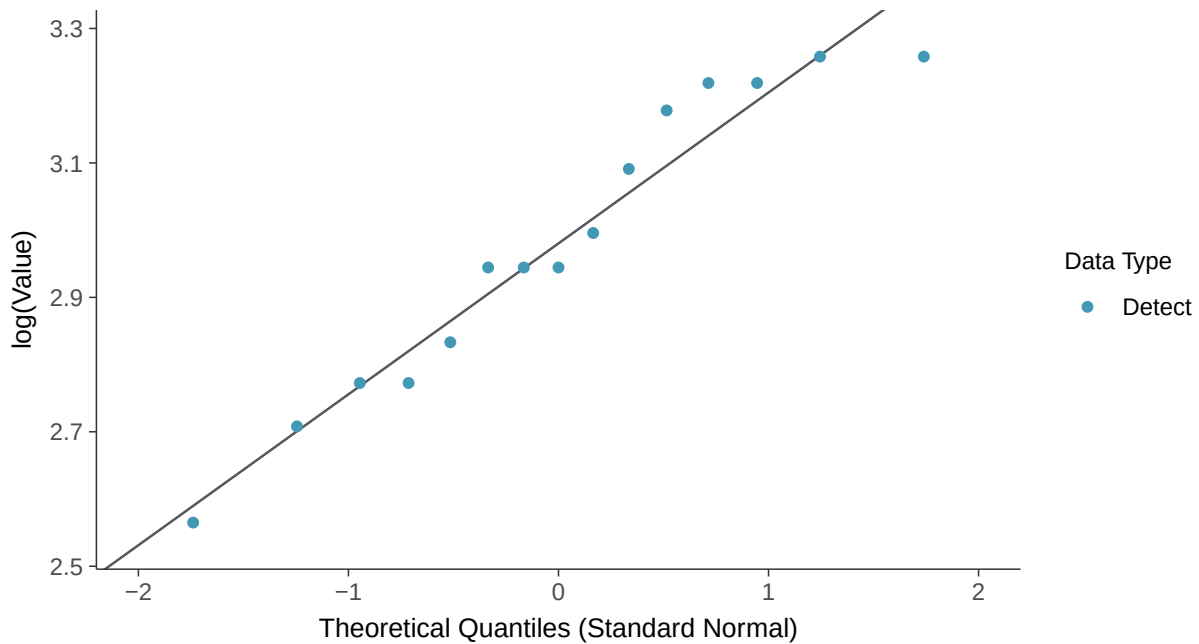
Normal Q-Q plot

Iron, MW-09 (mg/L)



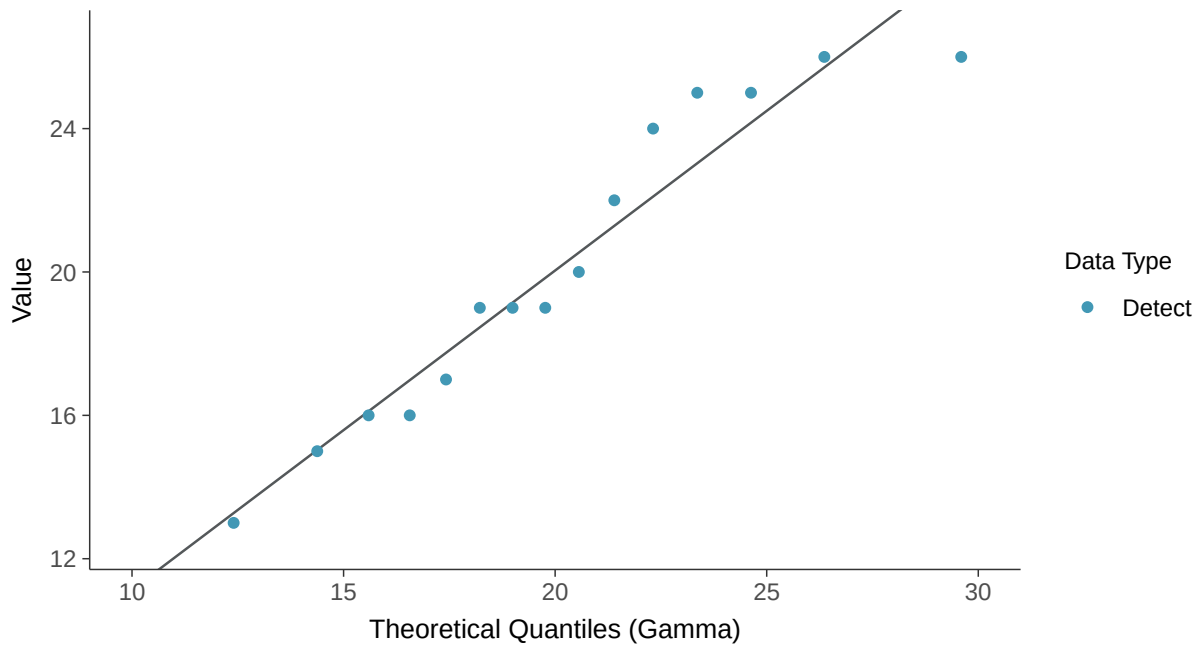
Lognormal Q-Q plot

Iron, MW-09 (mg/L)



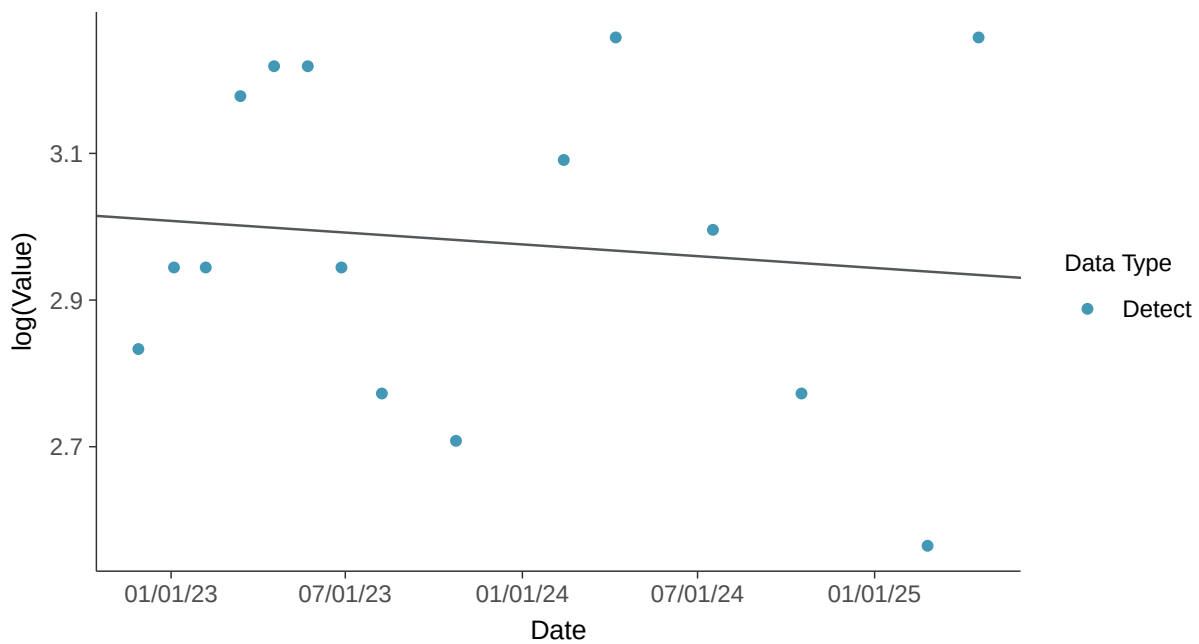
Gamma Q-Q plot

Iron, MW-09 (mg/L)



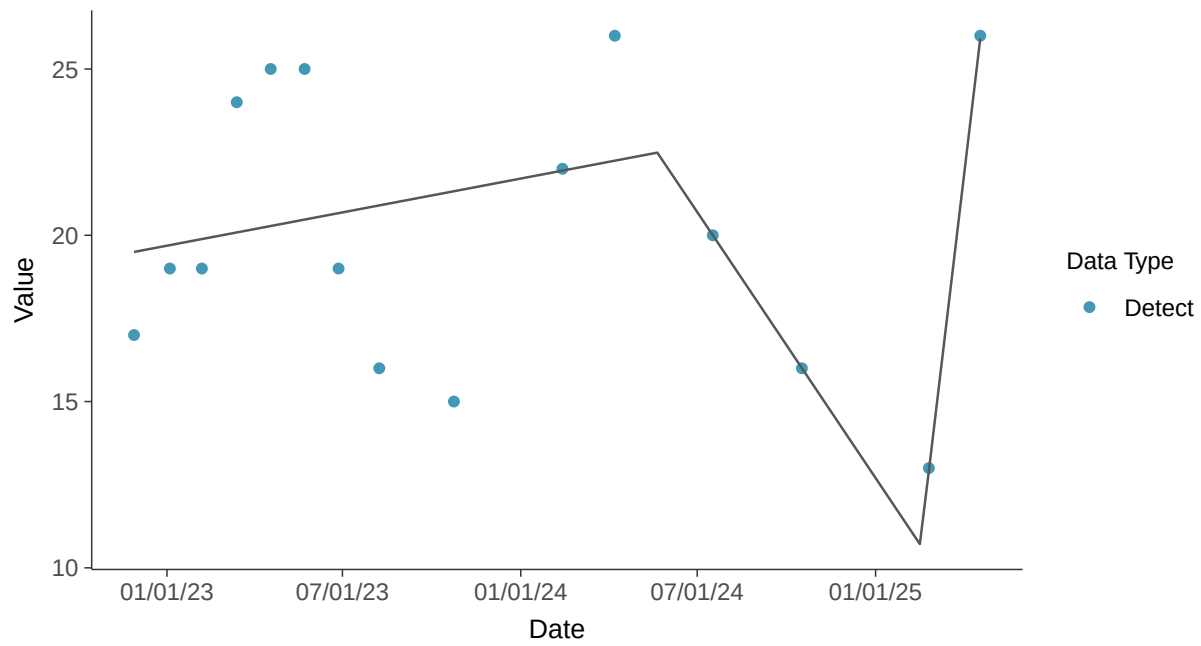
Trend Regression: Lognormal MLE

Iron, MW-09 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Iron, MW-09 (mg/L)

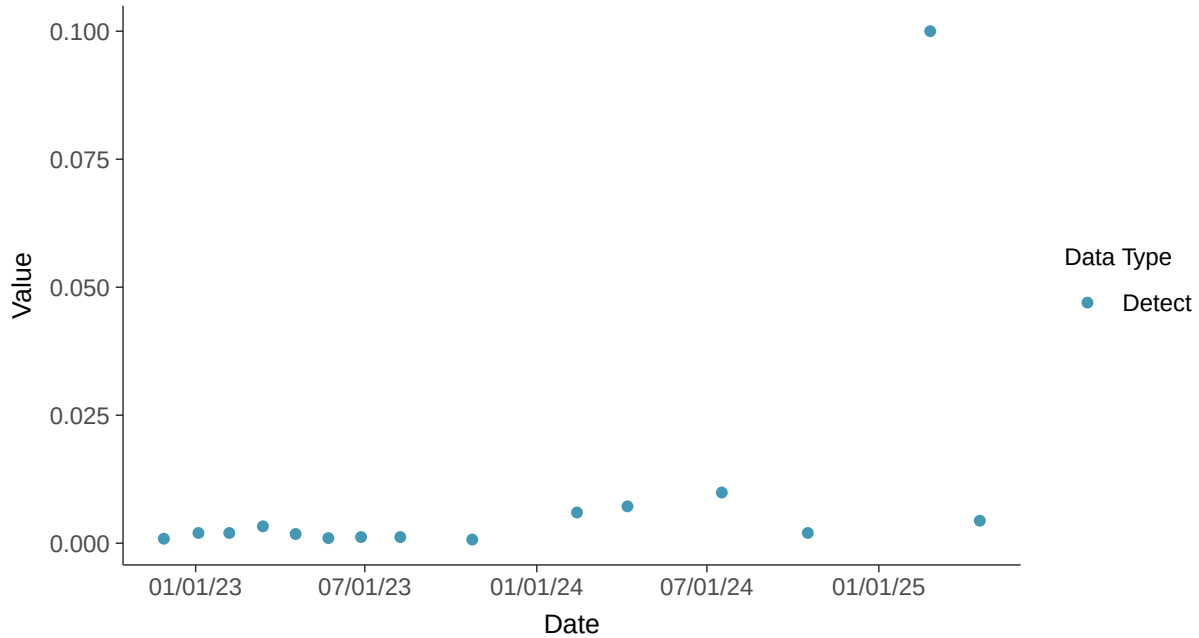


Part 115: Nickel, MW-09

ID: 19_2_5_119

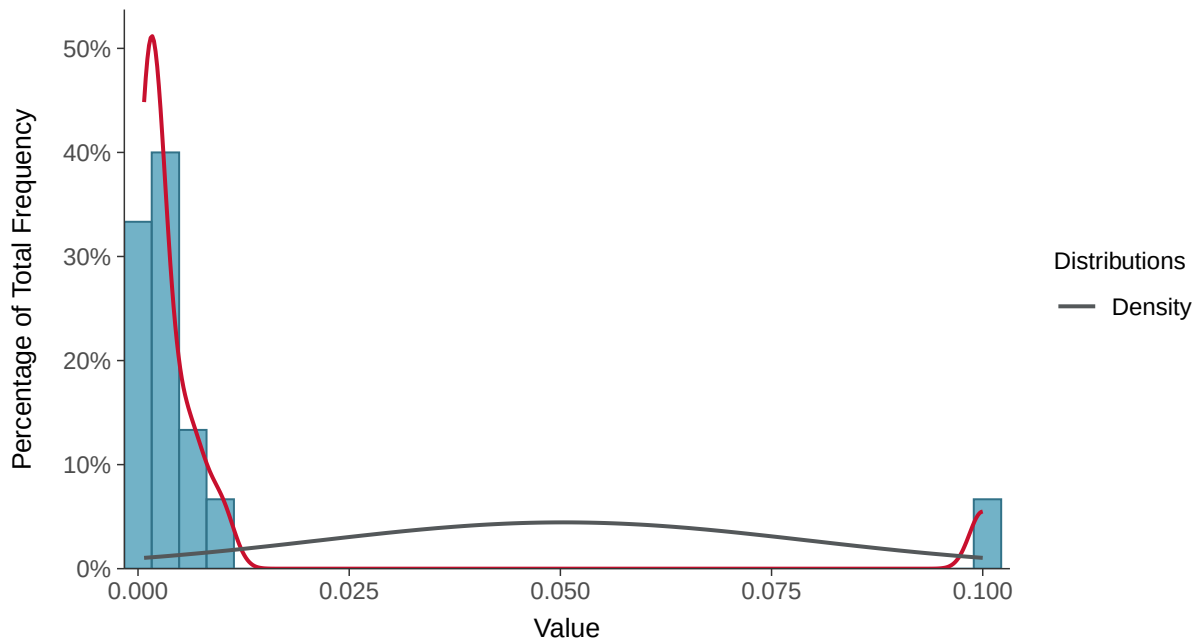
Scatter Plot

Nickel, MW-09 (mg/L)



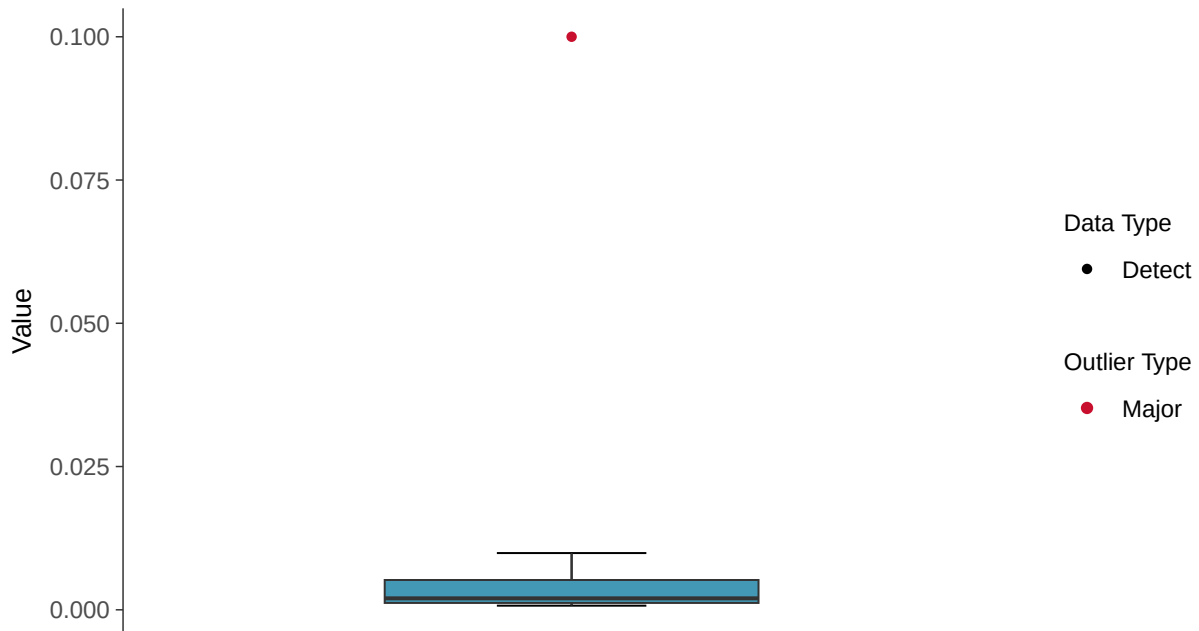
Histogram

Nickel, MW-09 (mg/L)



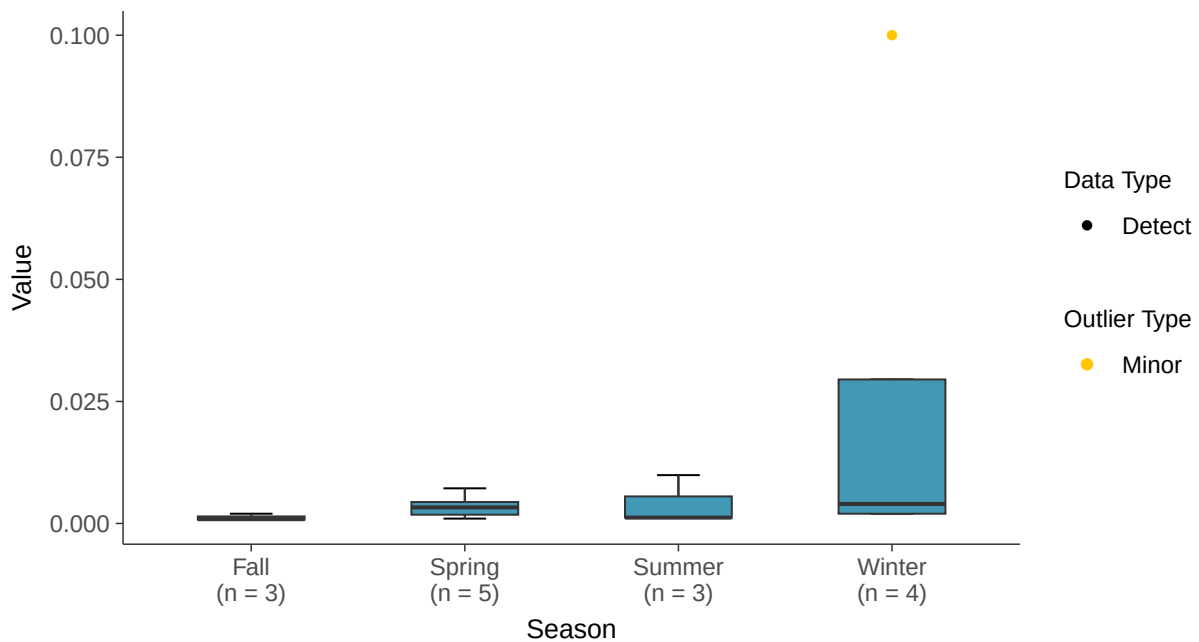
Boxplot

Nickel, MW-09 (mg/L)



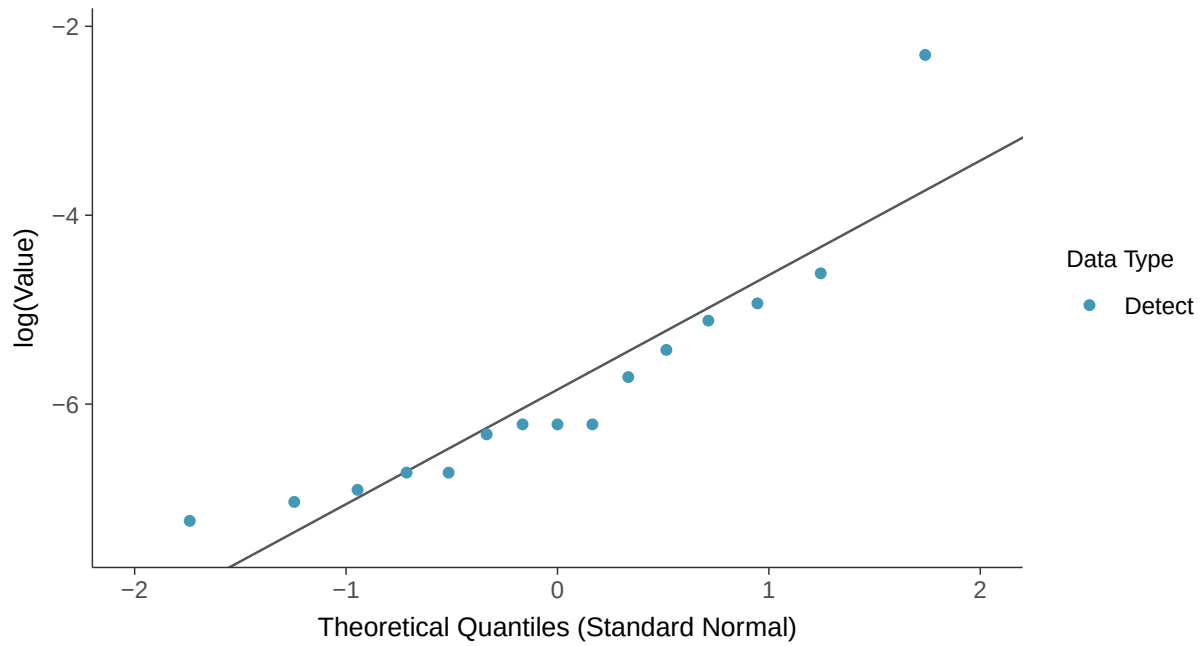
Boxplot by Season

Nickel, MW-09 (mg/L)



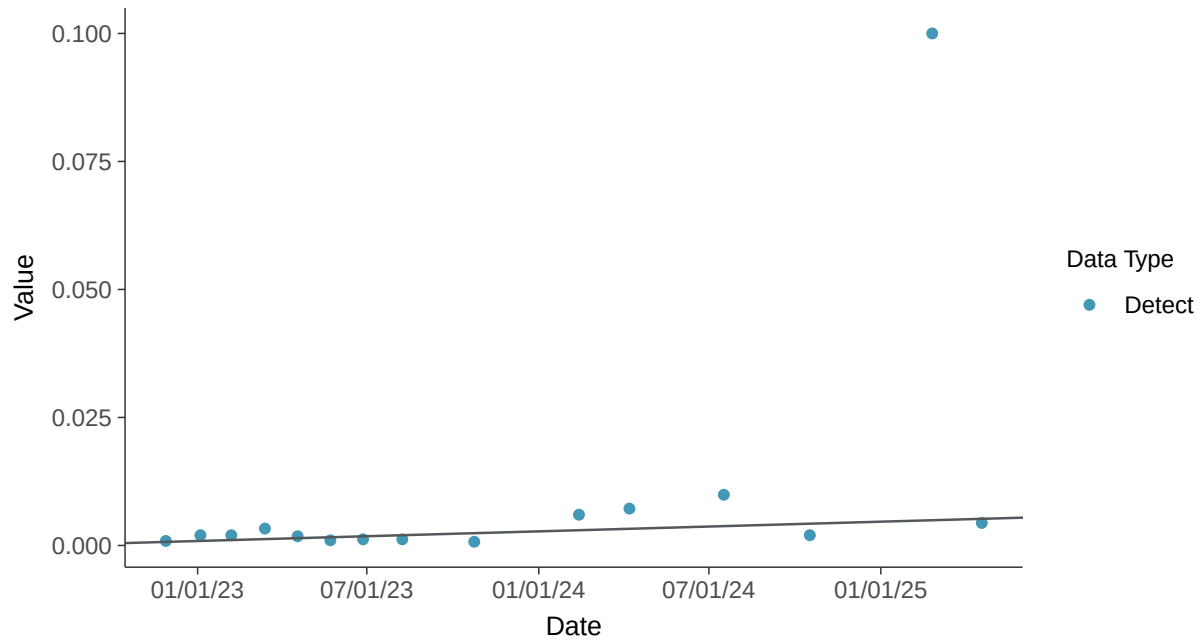
Lognormal Q-Q plot

Nickel, MW-09 (mg/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

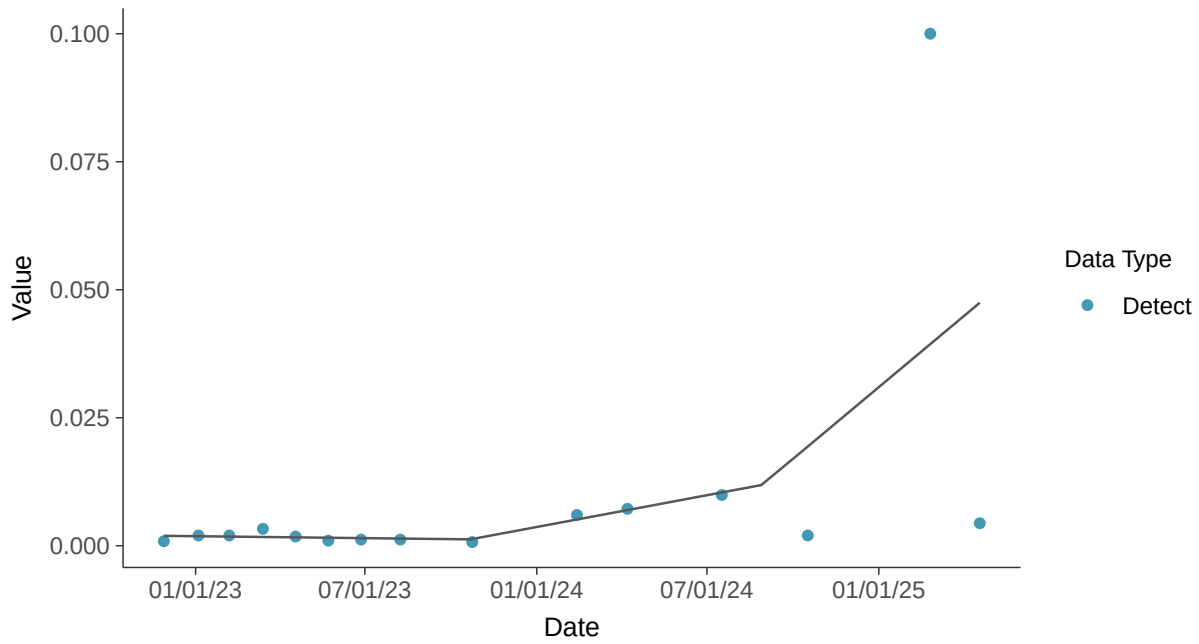
Nickel, MW-09 (mg/L)





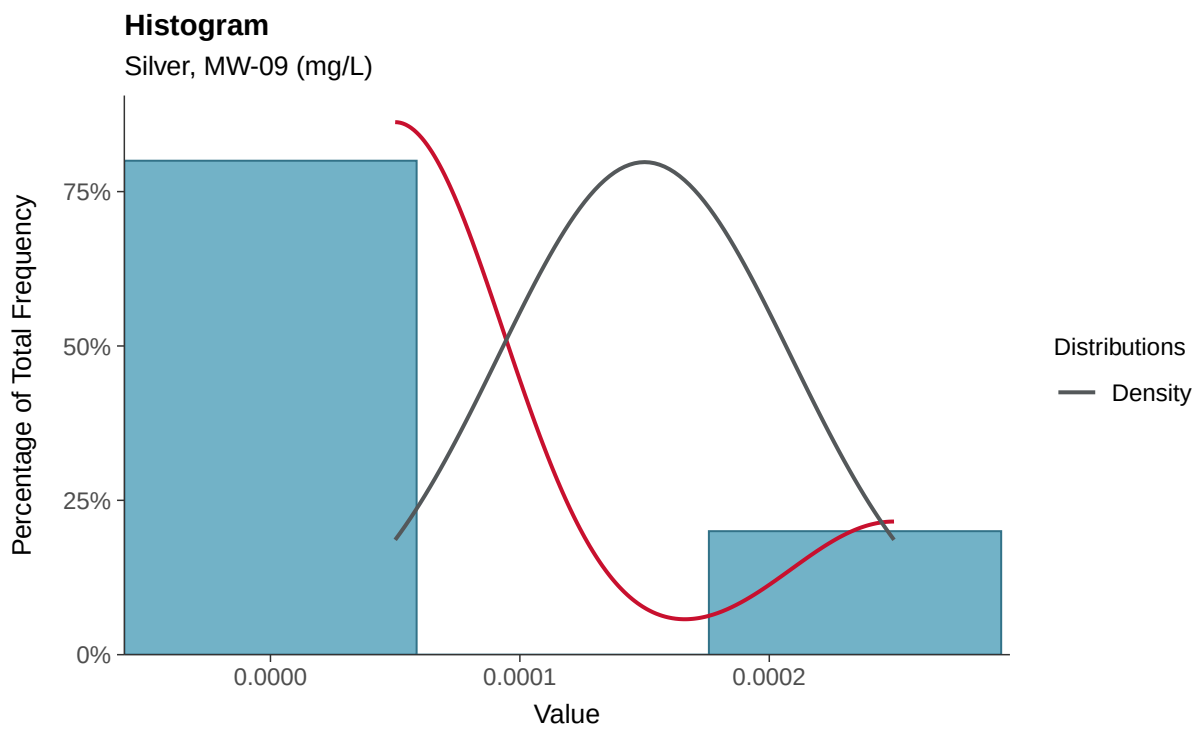
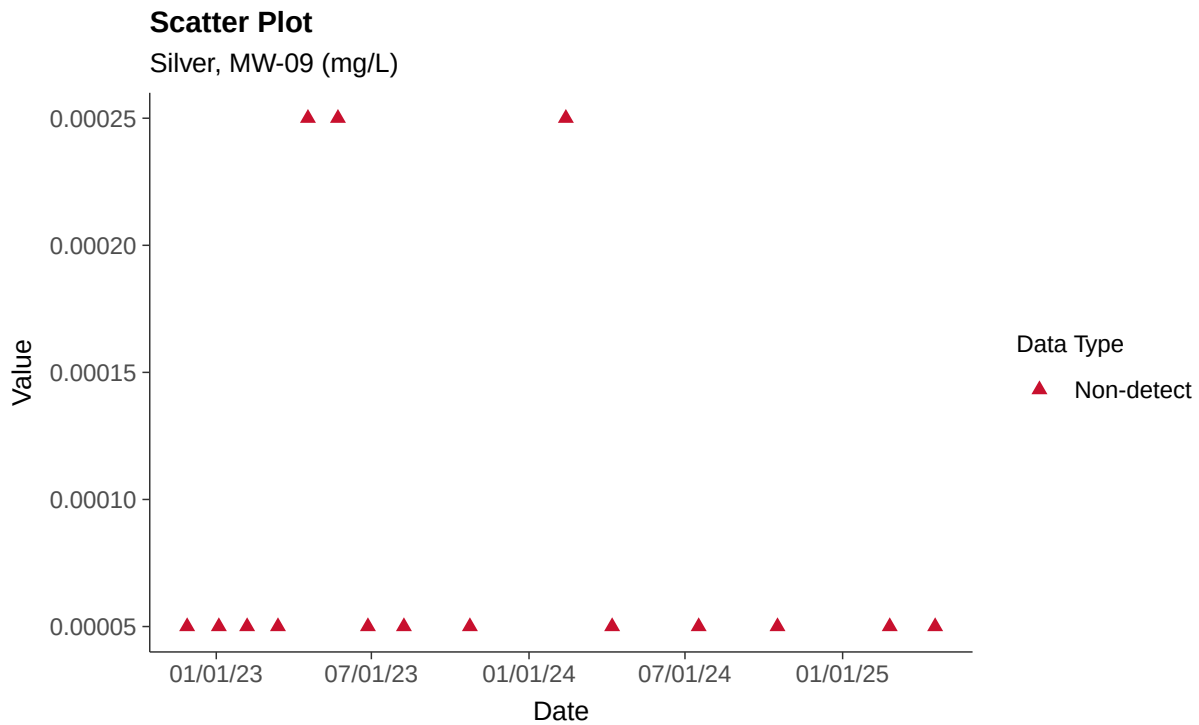
Trend Regression: Piecewise Linear-Linear-Linear

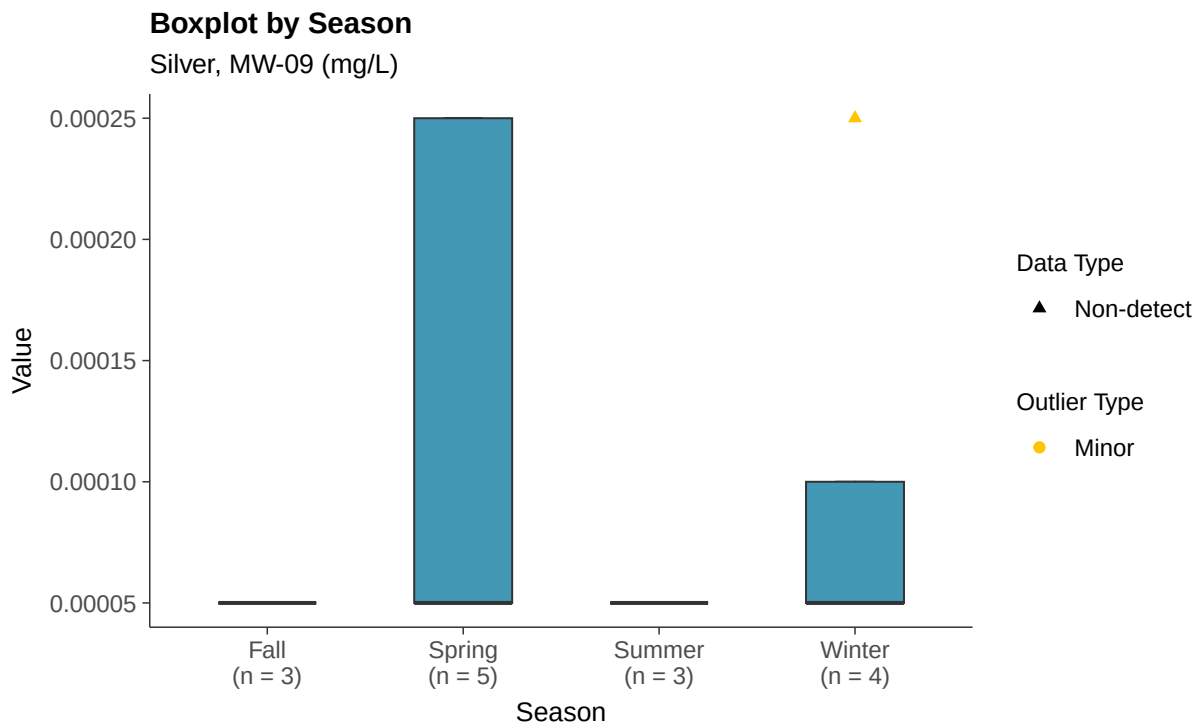
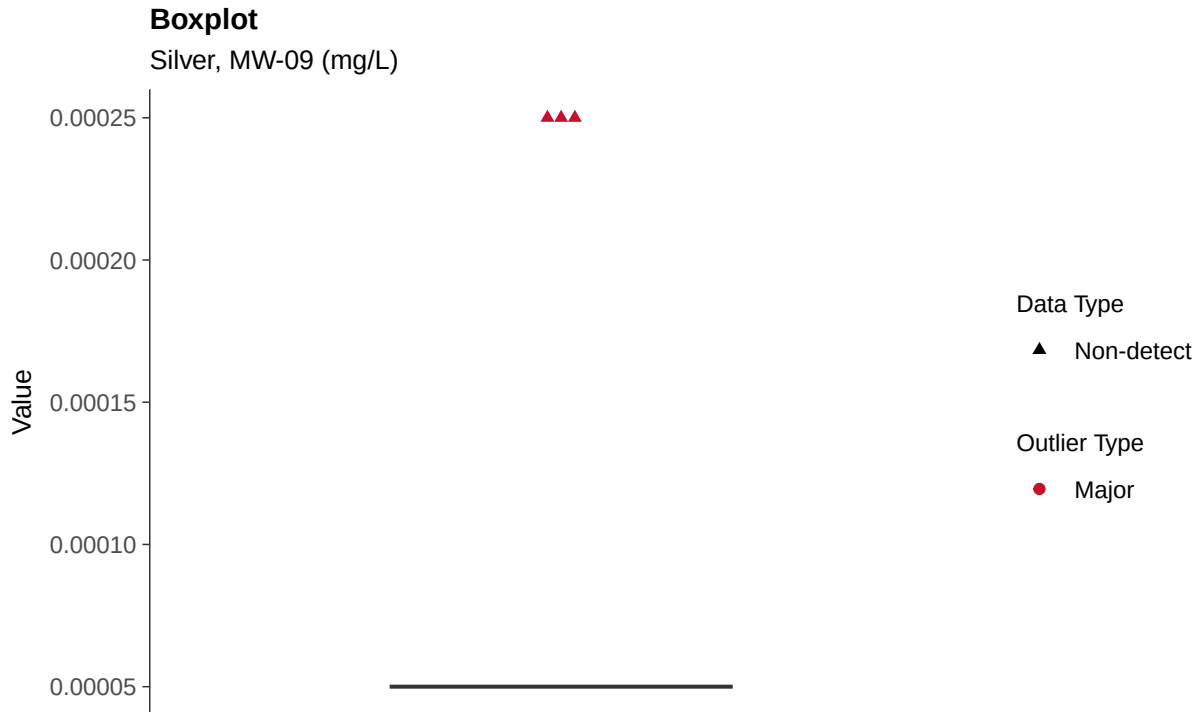
Nickel, MW-09 (mg/L)



Part 115: Silver, MW-09

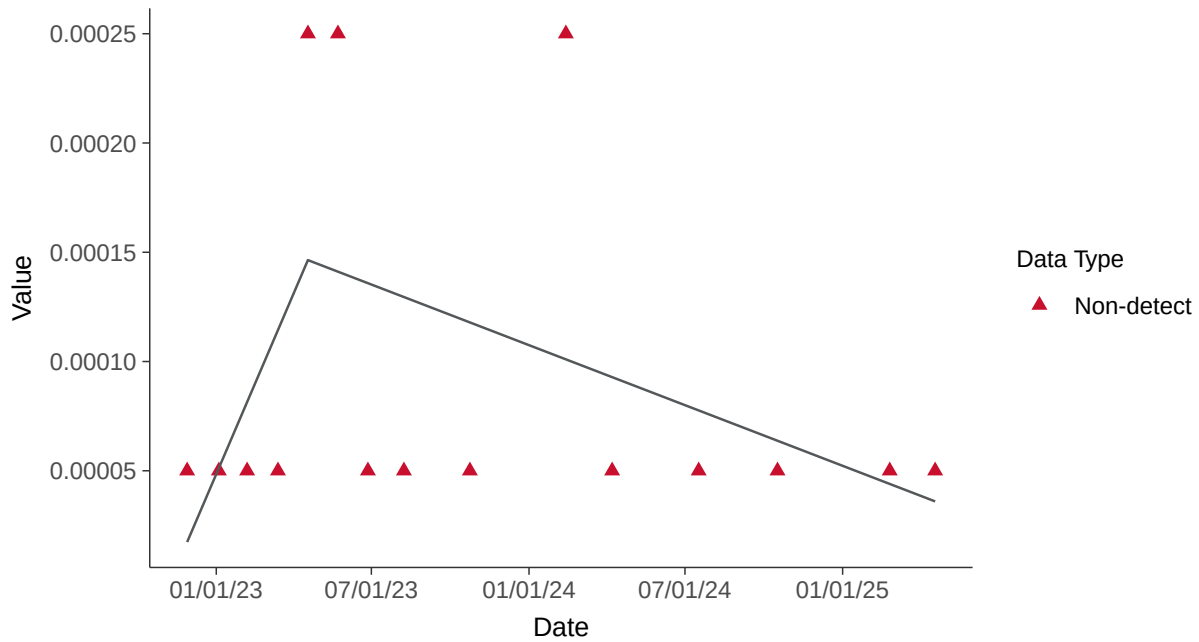
ID: 19_2_5_123





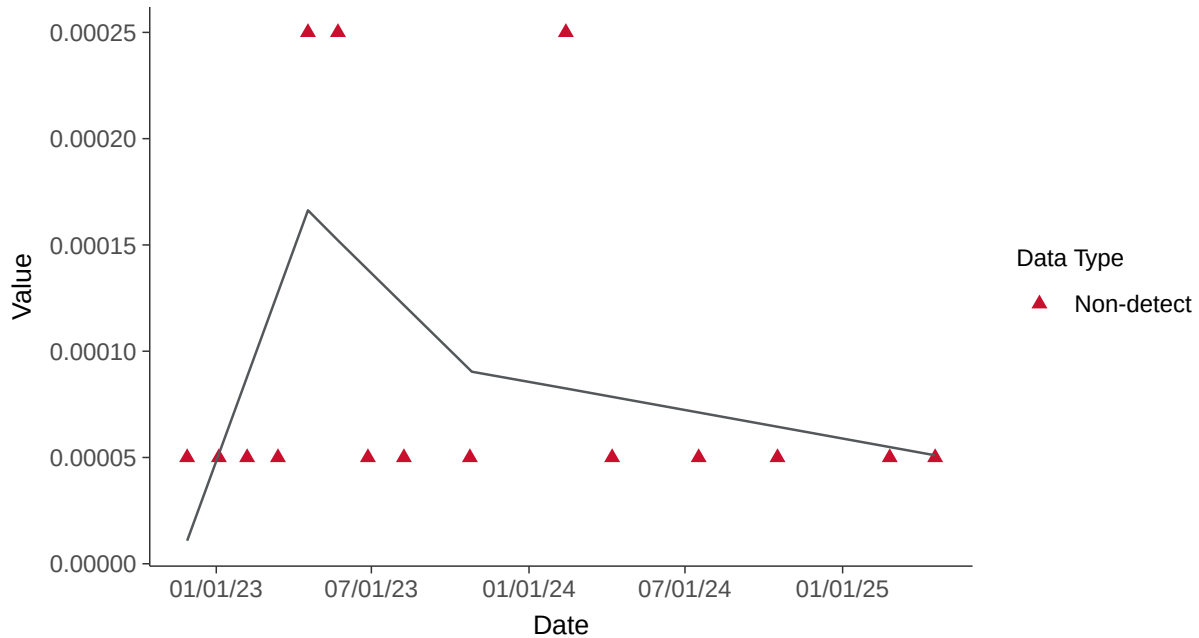
Trend Regression: Piecewise Linear-Linear

Silver, MW-09 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

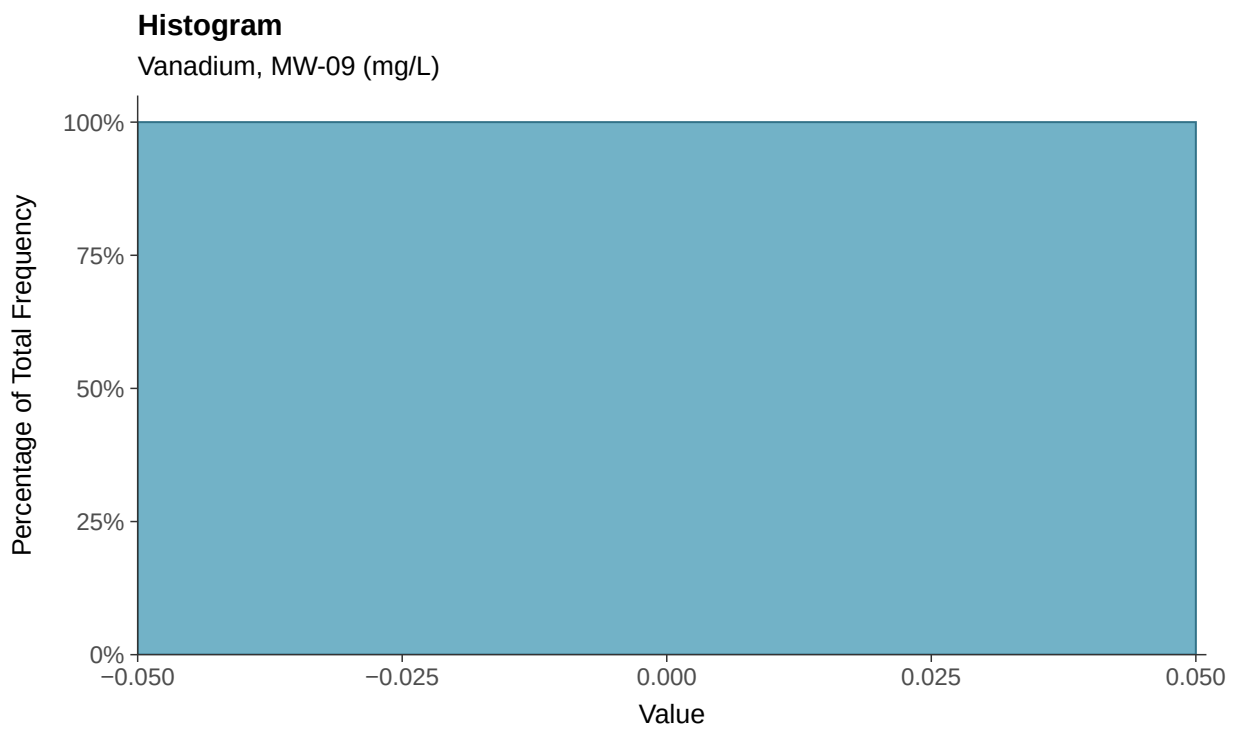
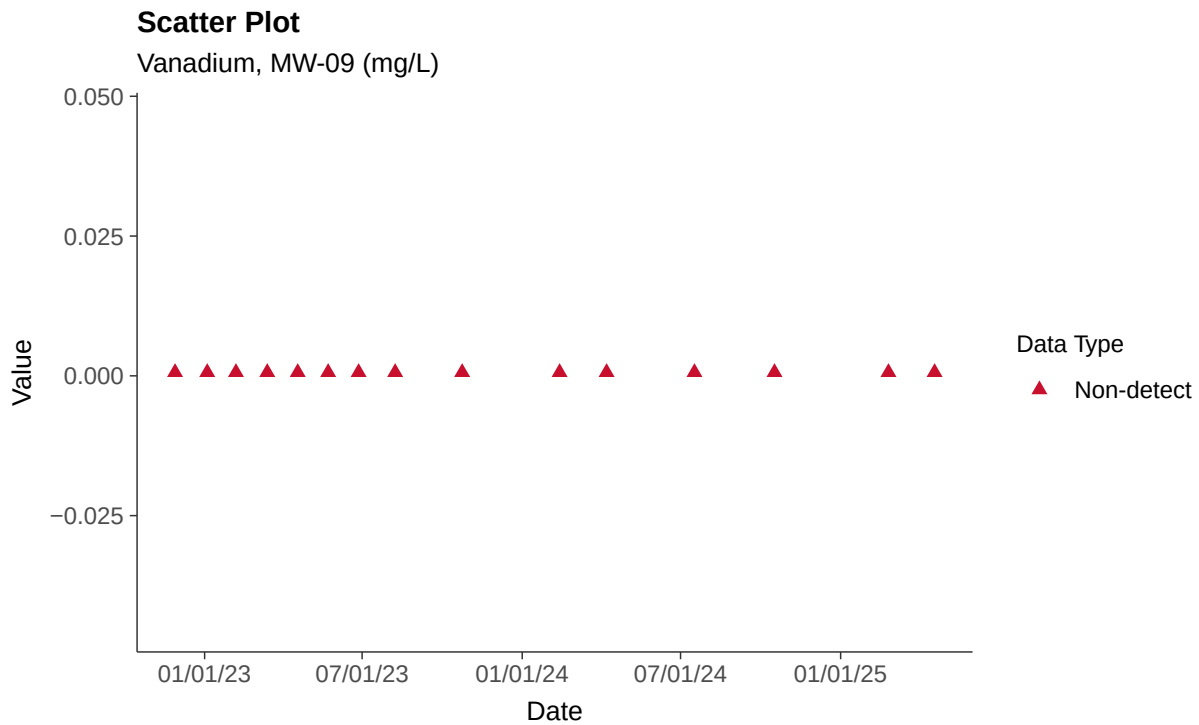
Silver, MW-09 (mg/L)





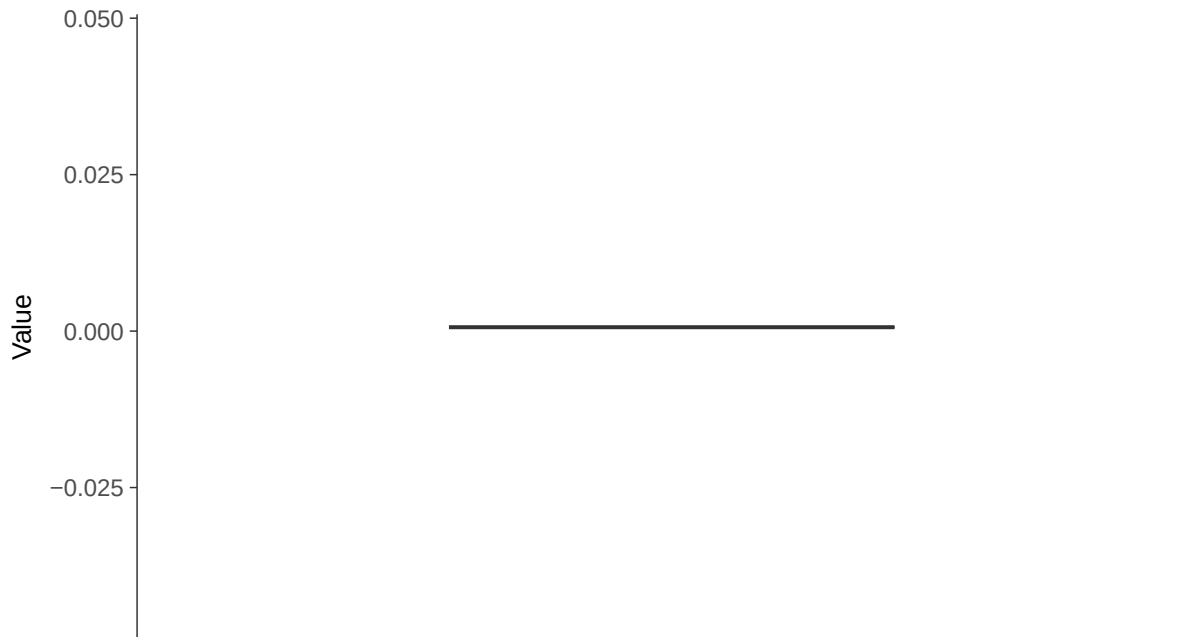
Part 115: Vanadium, MW-09

ID: 19_2_5_128



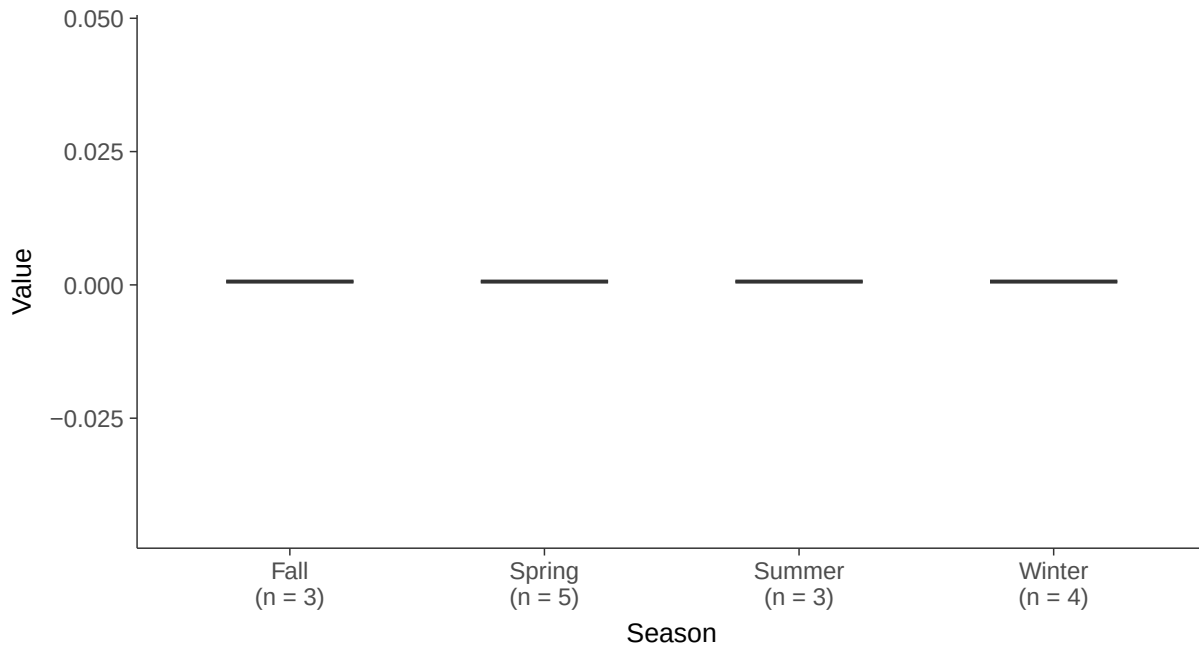
Boxplot

Vanadium, MW-09 (mg/L)



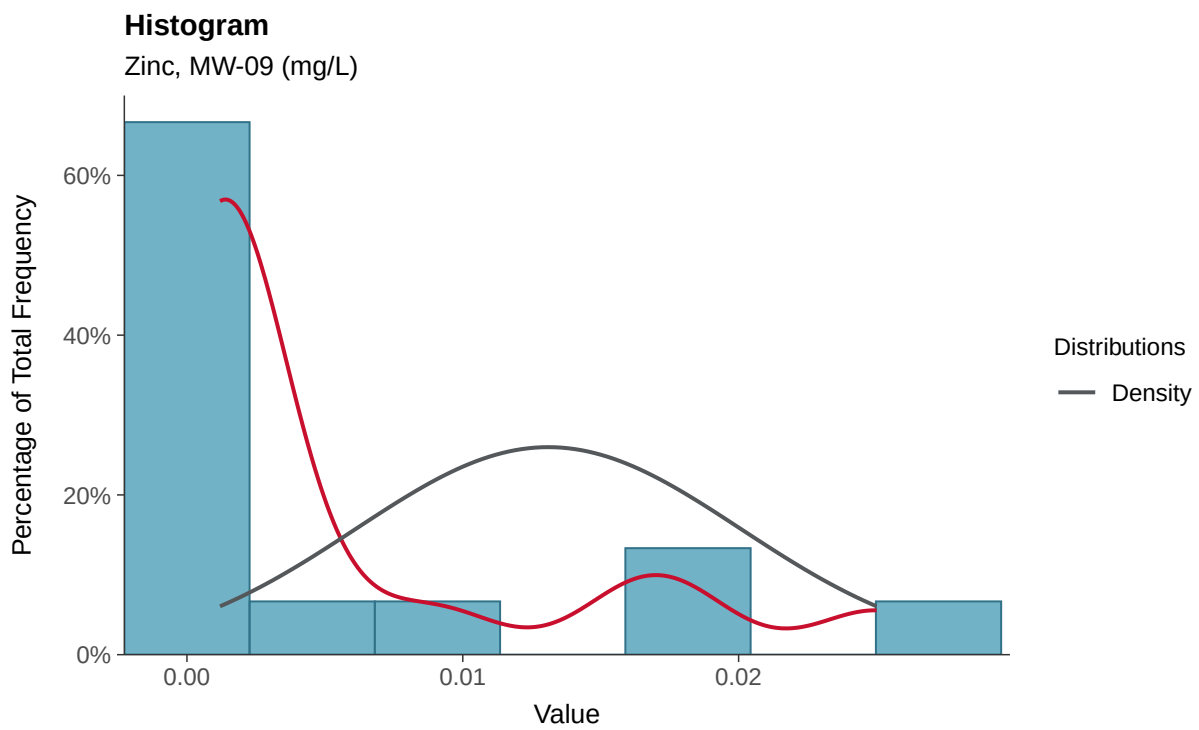
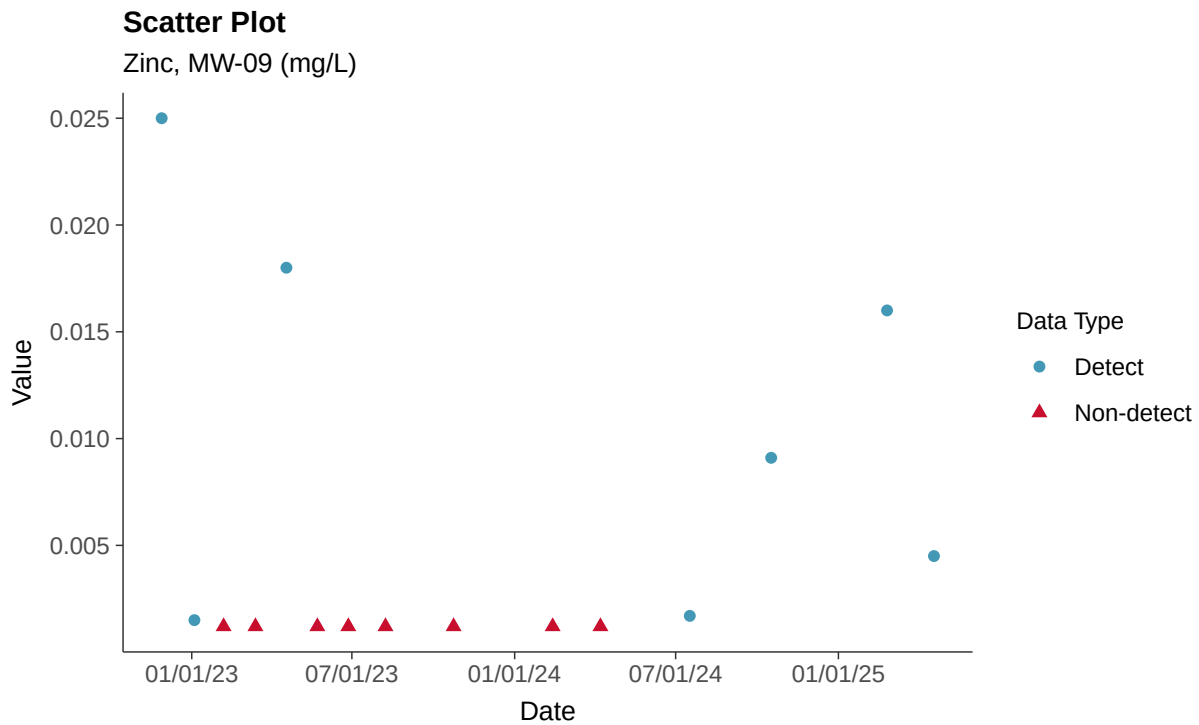
Boxplot by Season

Vanadium, MW-09 (mg/L)



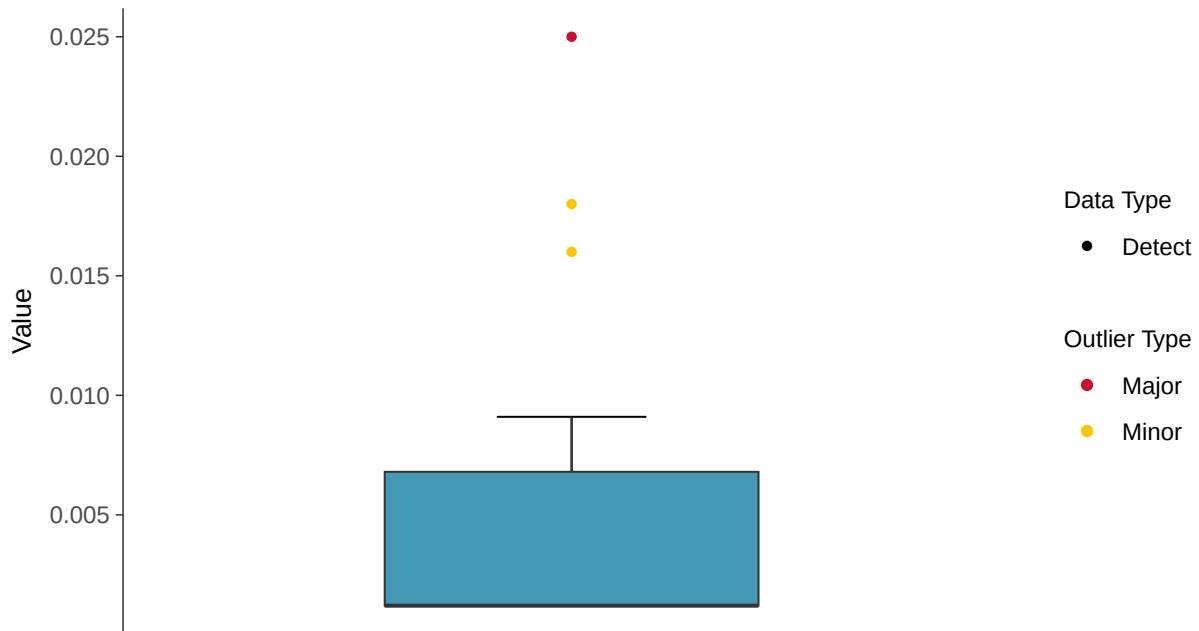
Part 115: Zinc, MW-09

ID: 19_2_5_129



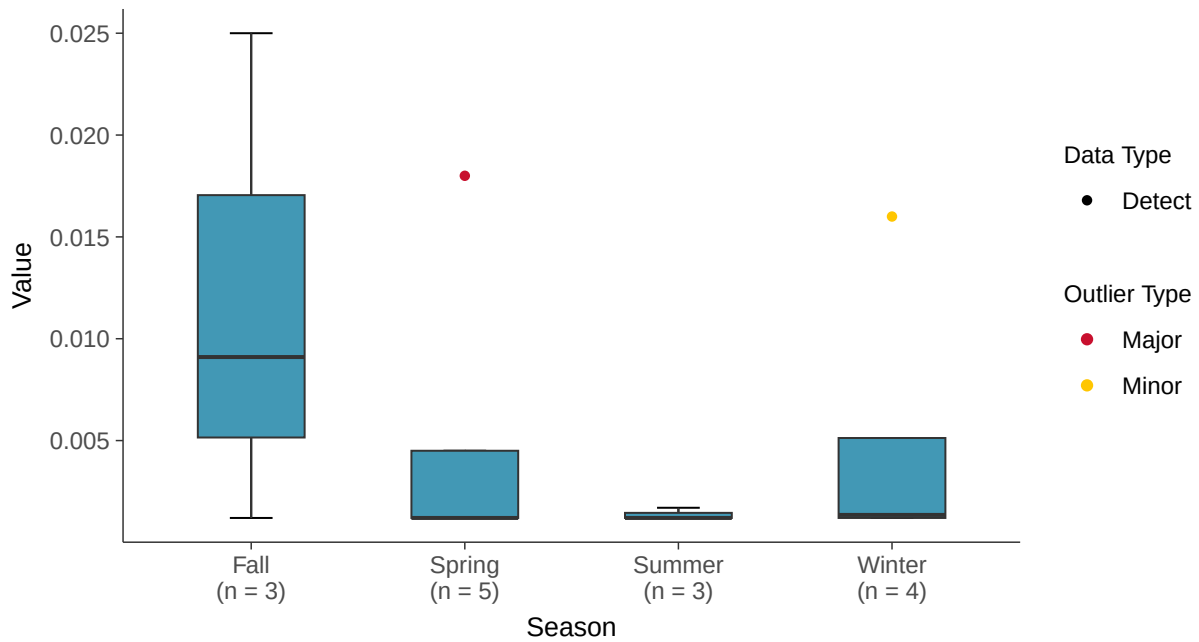
Boxplot

Zinc, MW-09 (mg/L)



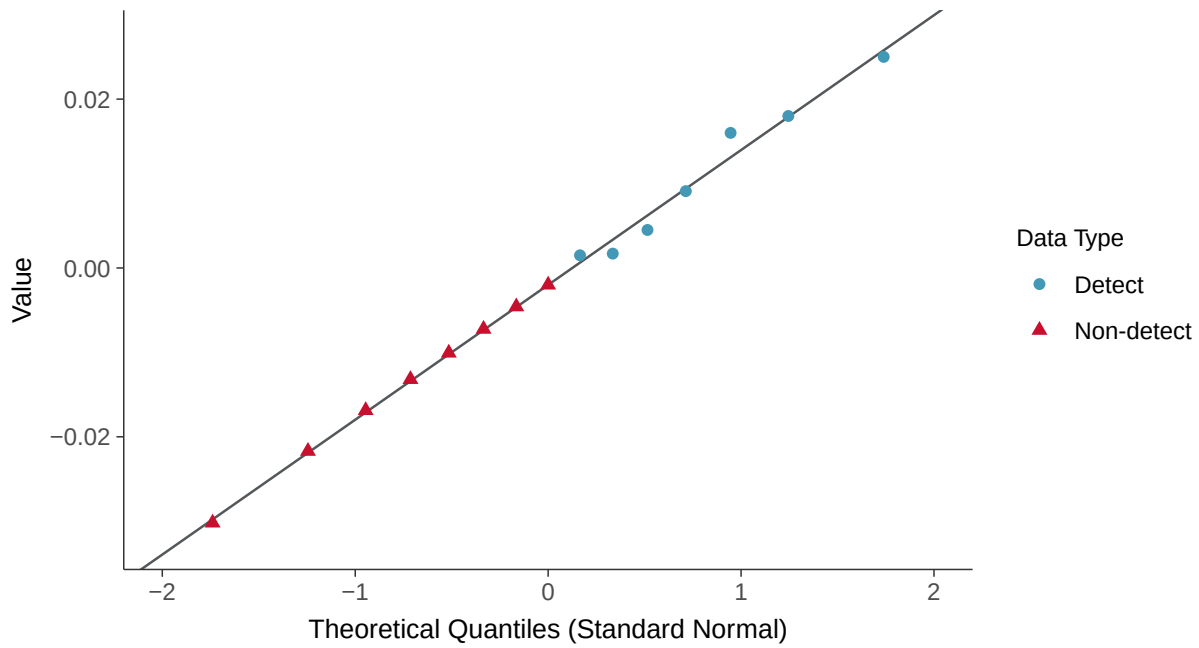
Boxplot by Season

Zinc, MW-09 (mg/L)



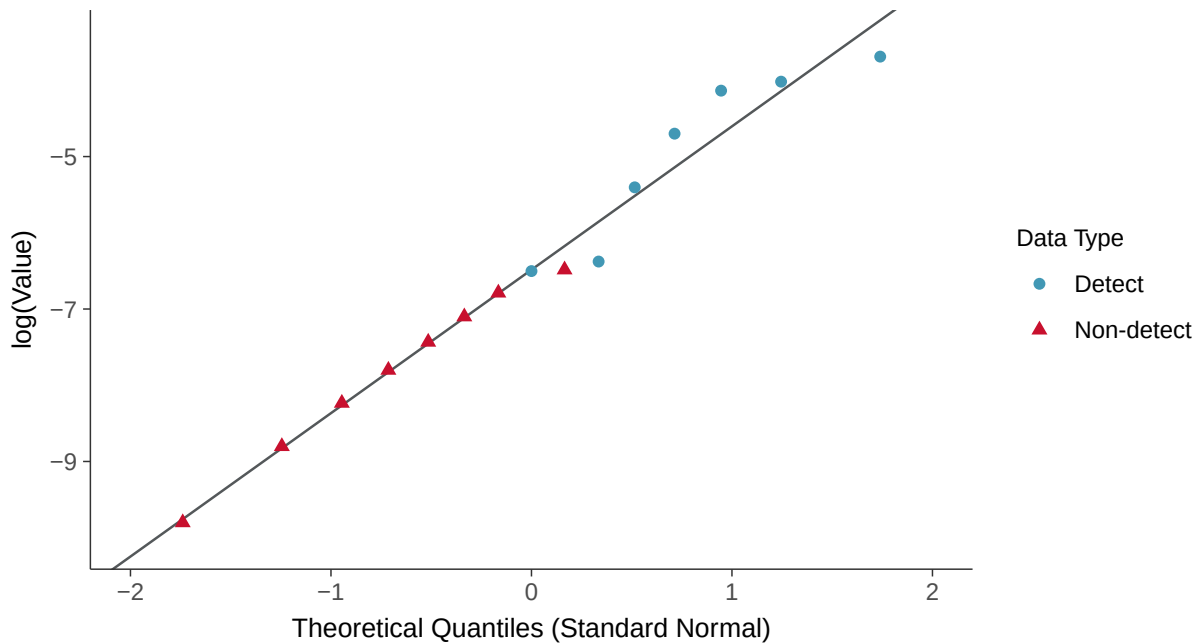
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-09 (mg/L)



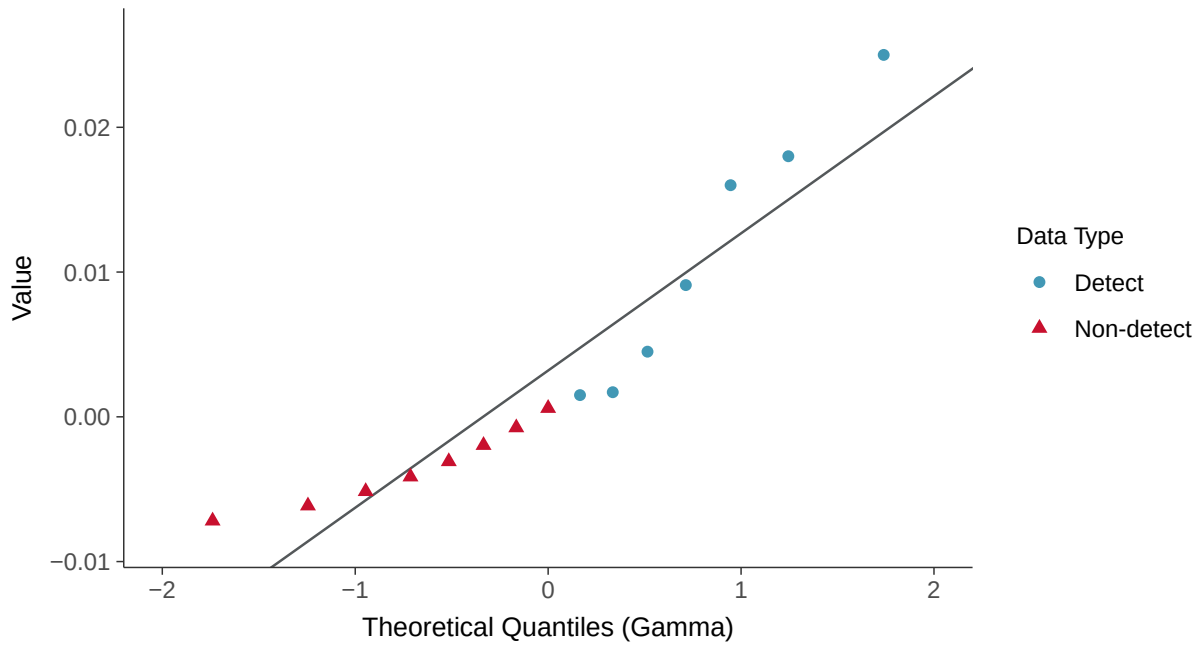
Lognormal Q-Q plot using ROS Imputed Estimates

Zinc, MW-09 (mg/L)



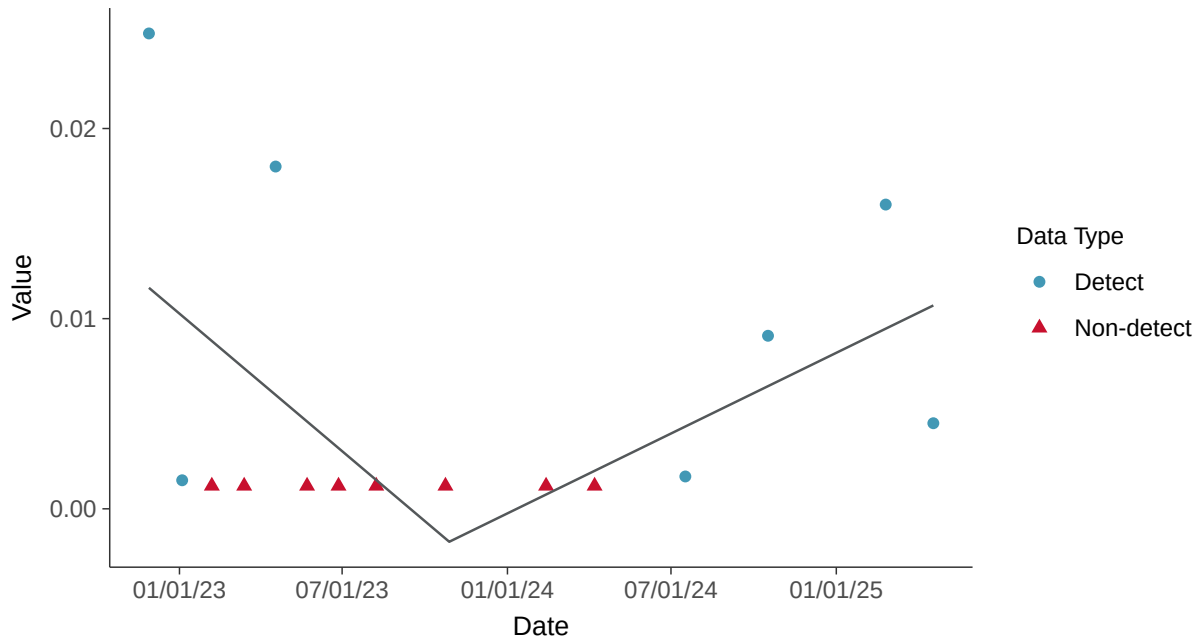
Gamma Q-Q plot using ROS Imputed Estimates

Zinc, MW-09 (mg/L)



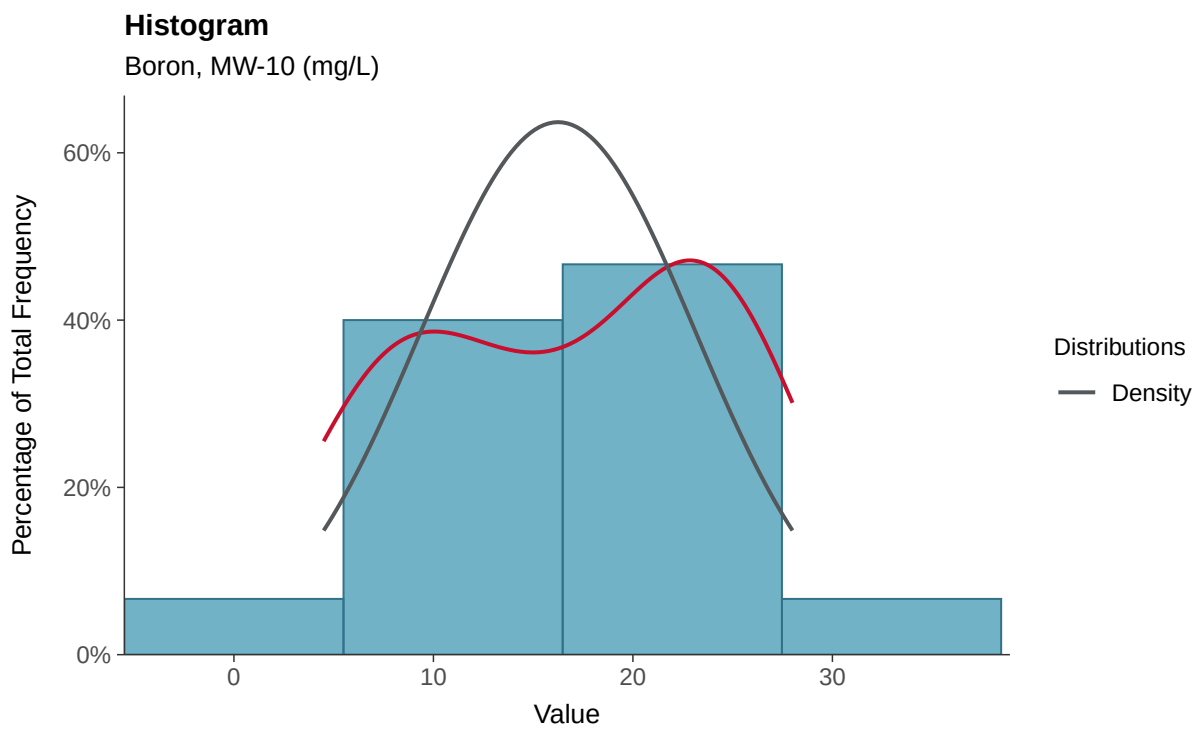
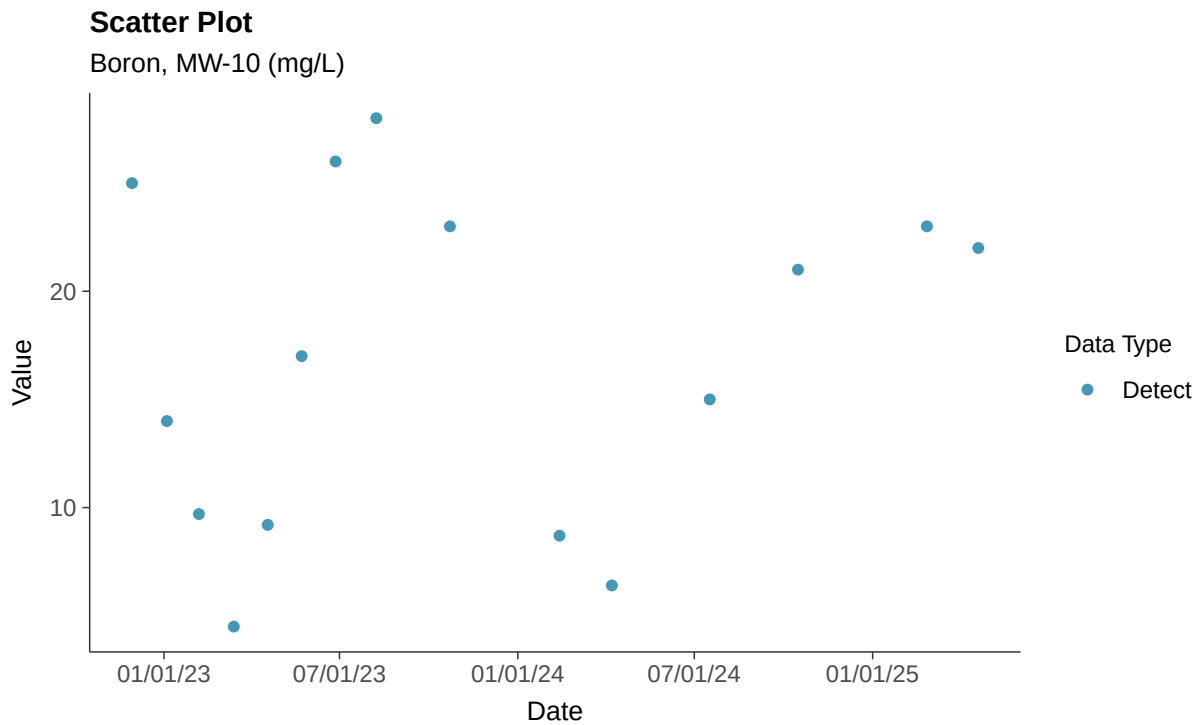
Trend Regression: Piecewise Linear-Linear

Zinc, MW-09 (mg/L)



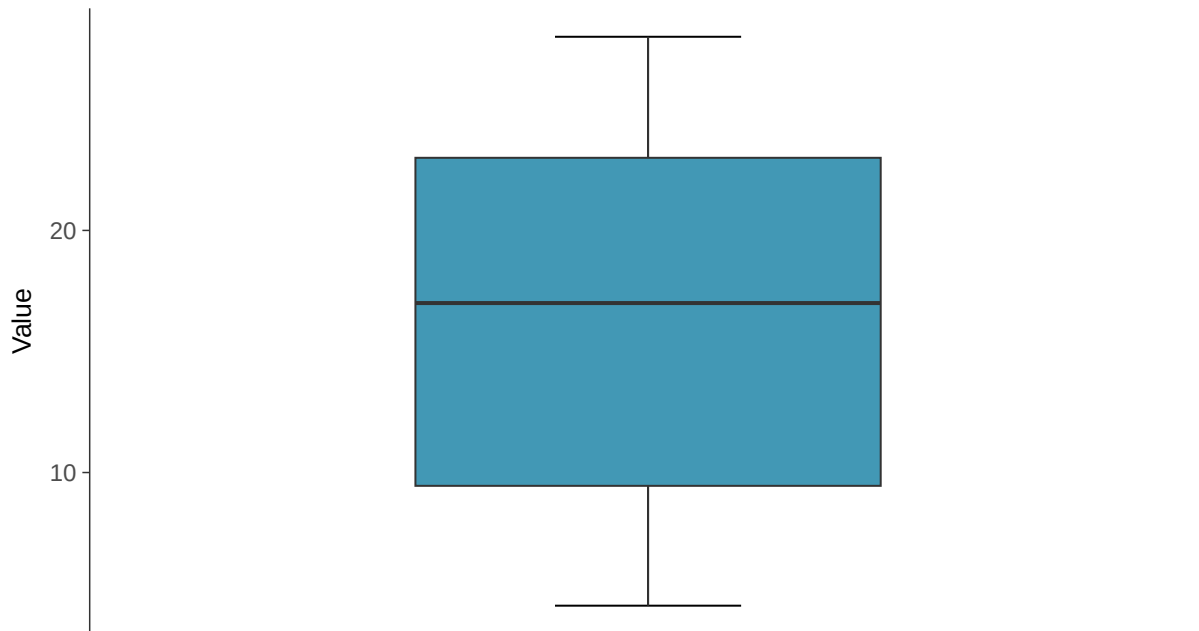
Appendix III: Boron, MW-10

ID: 20_3_3_105



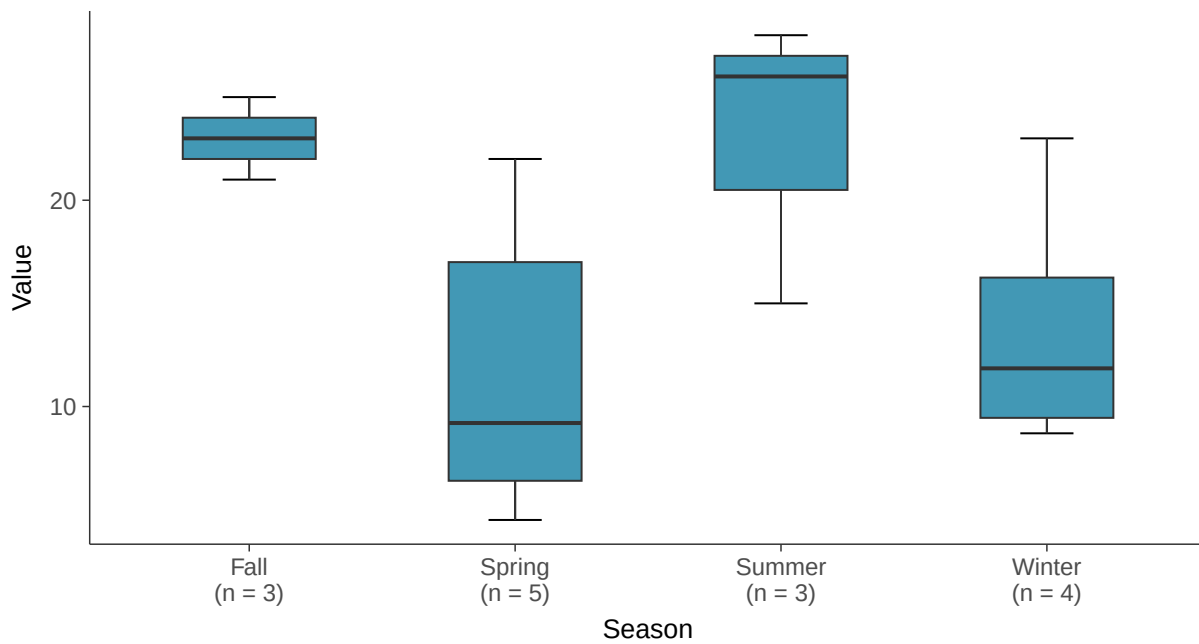
Boxplot

Boron, MW-10 (mg/L)



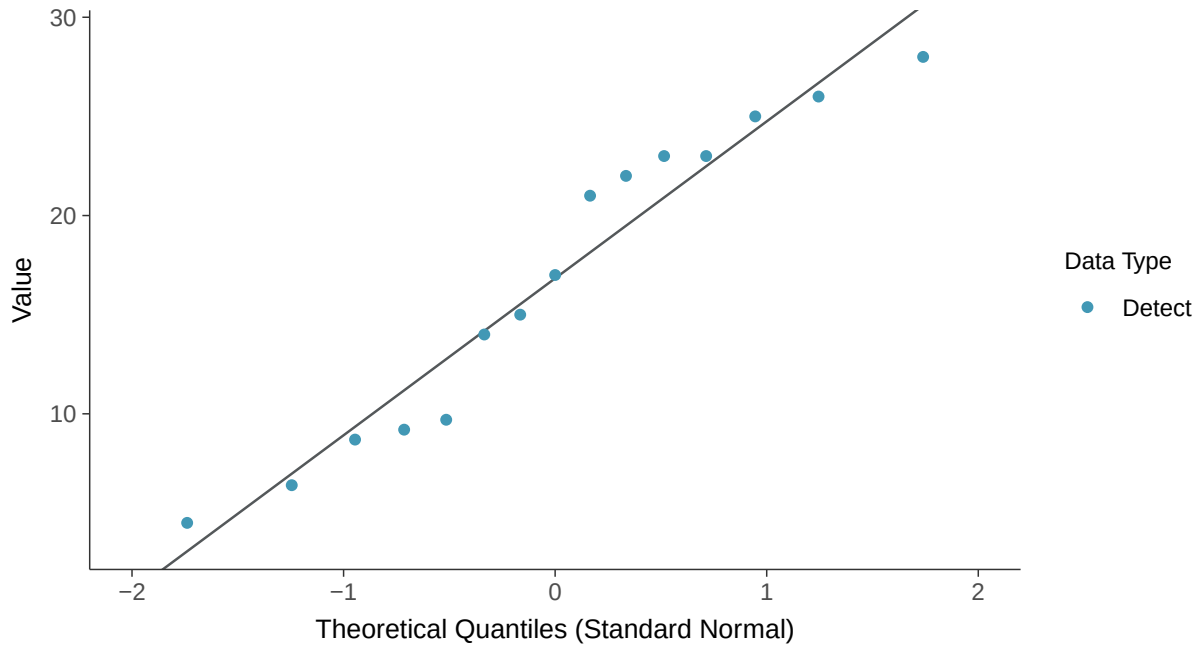
Boxplot by Season

Boron, MW-10 (mg/L)



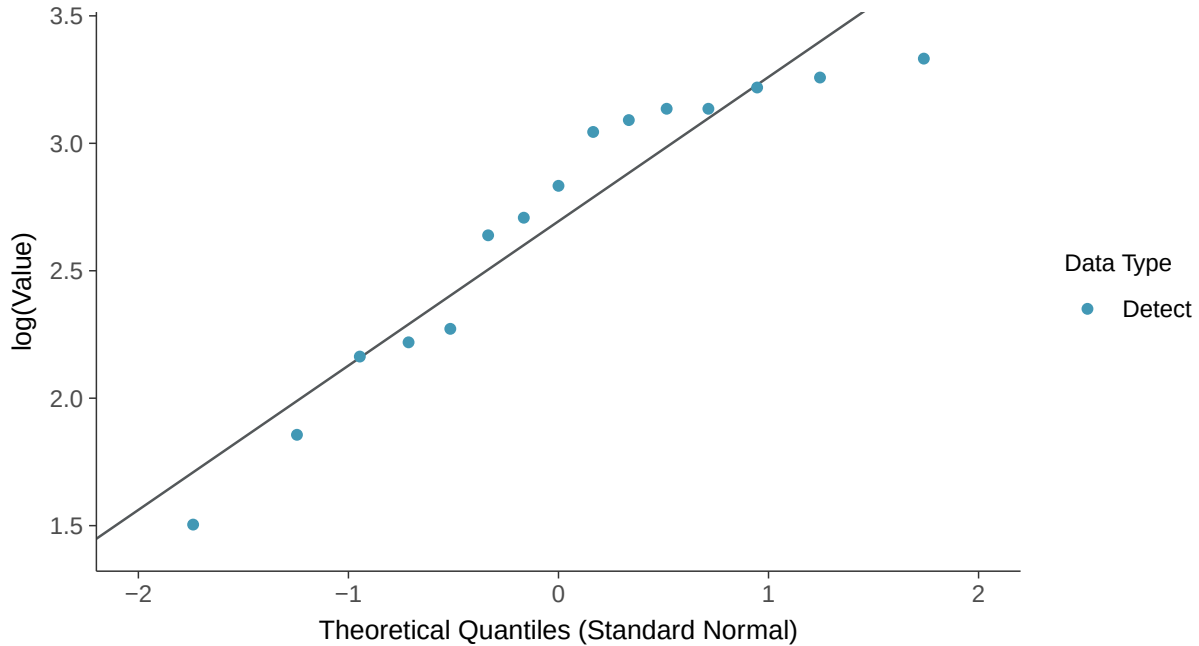
Normal Q-Q plot

Boron, MW-10 (mg/L)

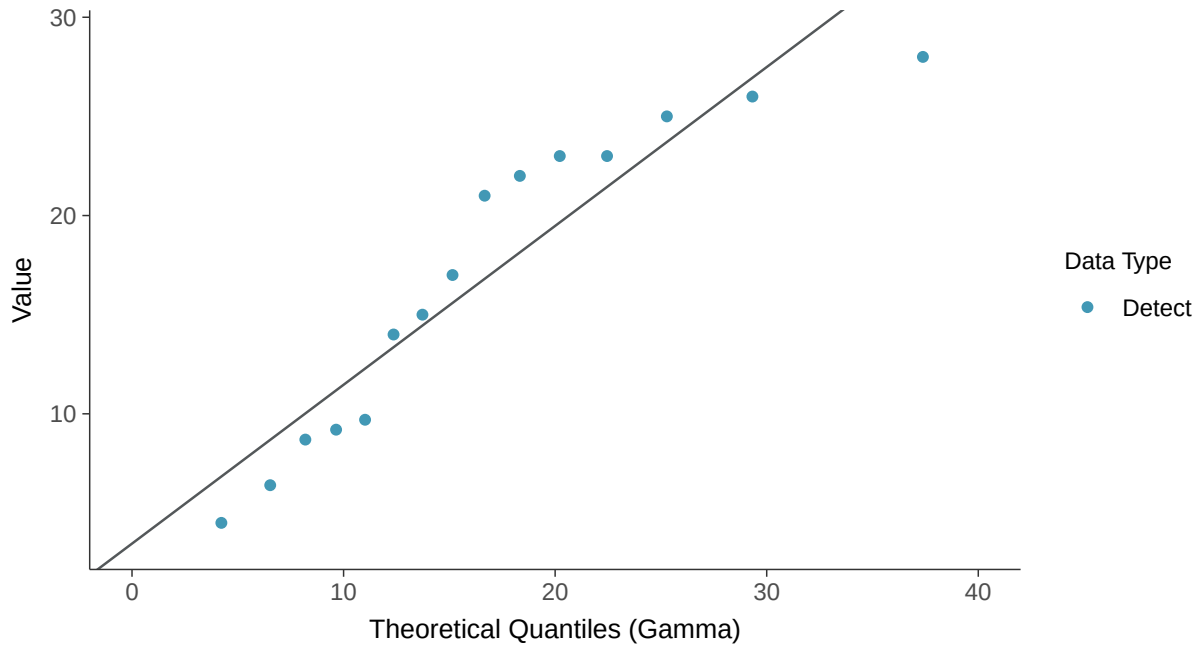


Lognormal Q-Q plot

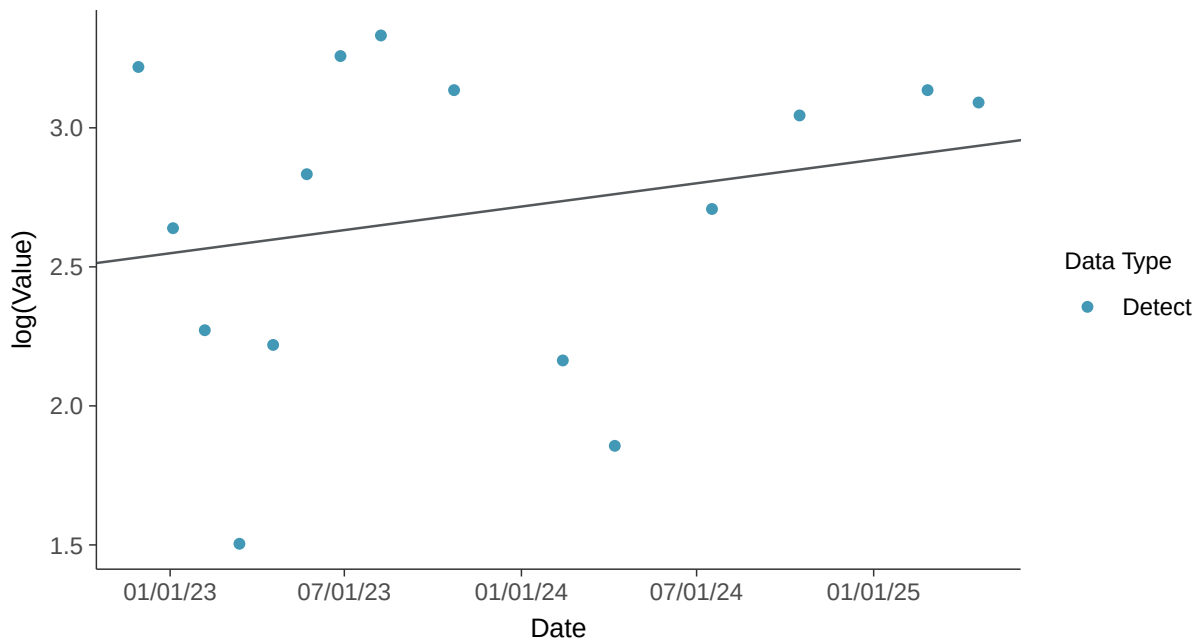
Boron, MW-10 (mg/L)



Gamma Q-Q plot
Boron, MW-10 (mg/L)

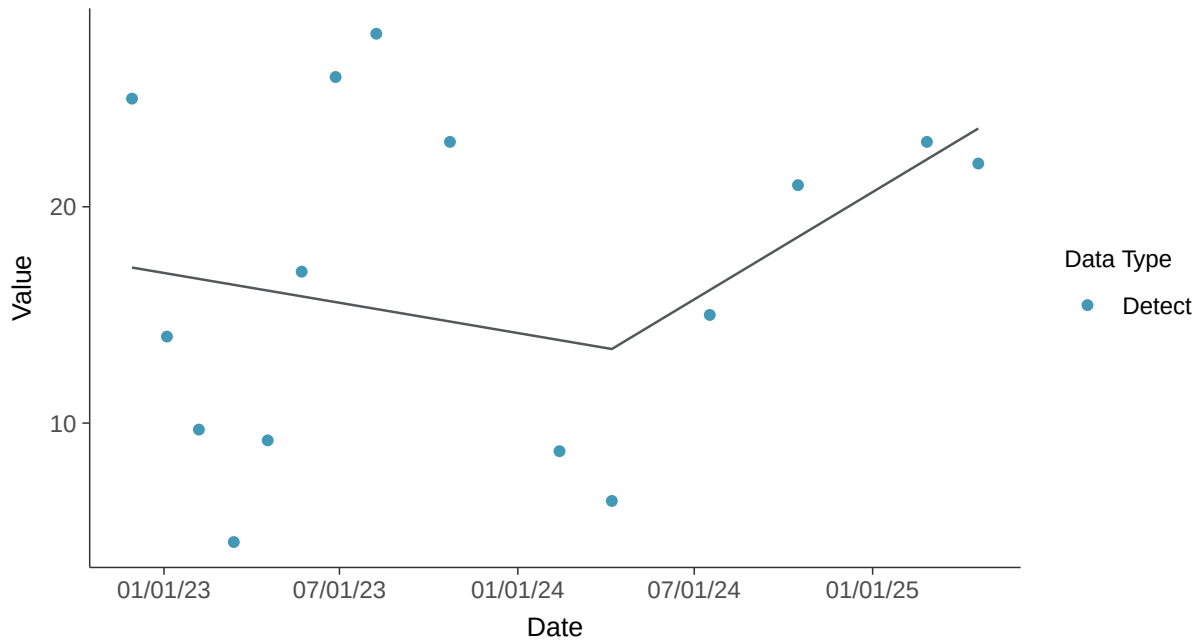


Trend Regression: Lognormal MLE
Boron, MW-10 (mg/L)



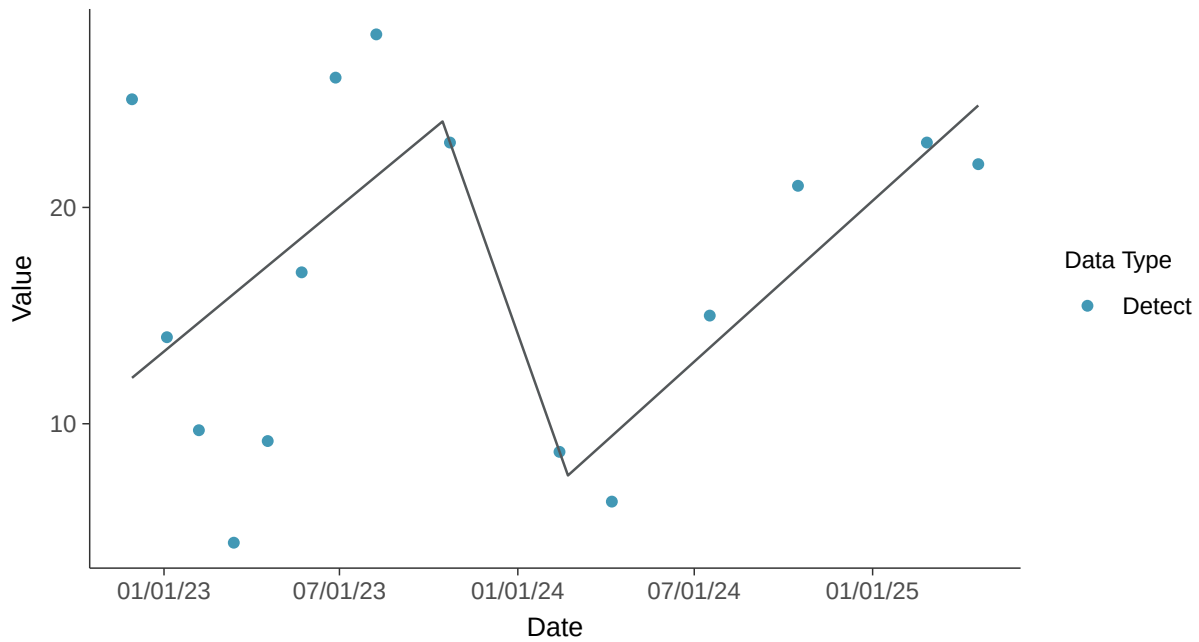
Trend Regression: Piecewise Linear-Linear

Boron, MW-10 (mg/L)



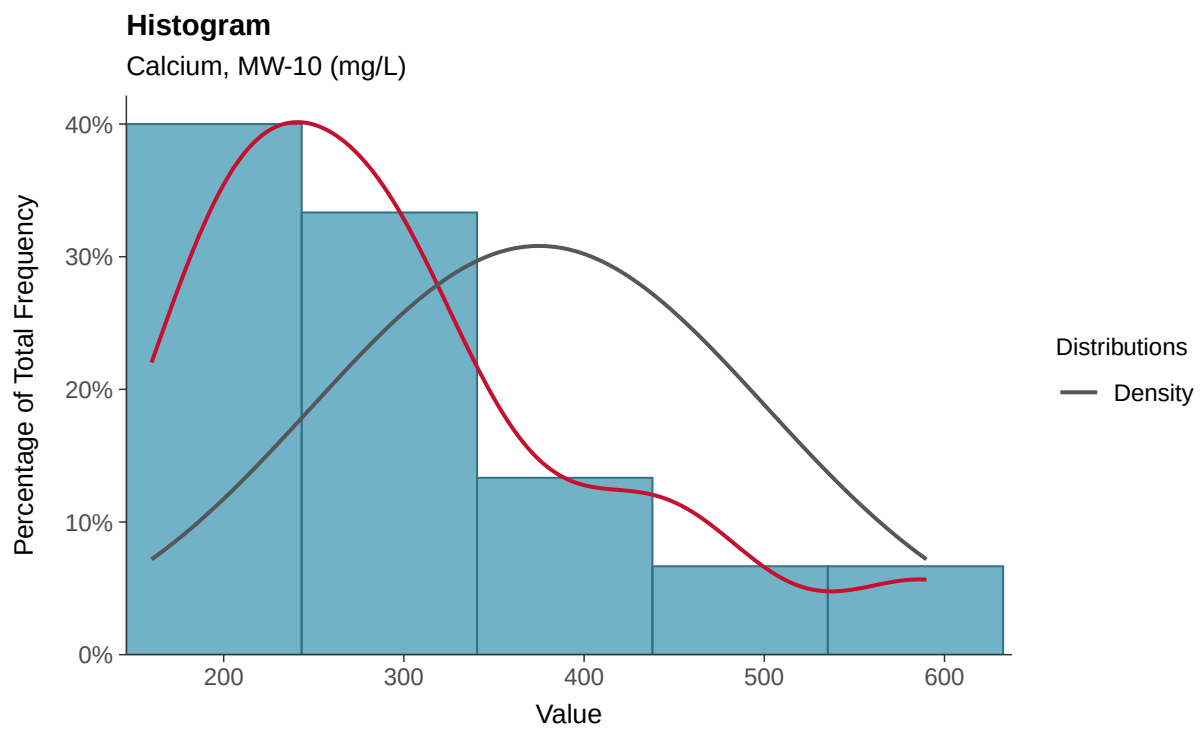
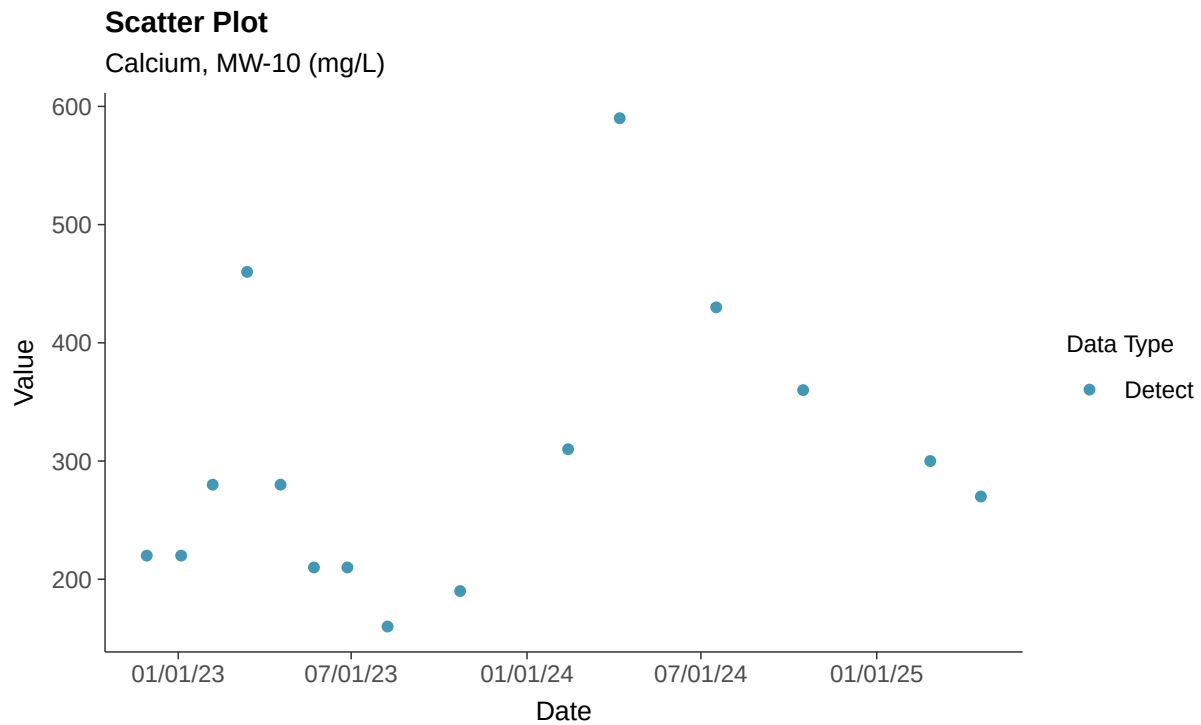
Trend Regression: Piecewise Linear-Linear-Linear

Boron, MW-10 (mg/L)



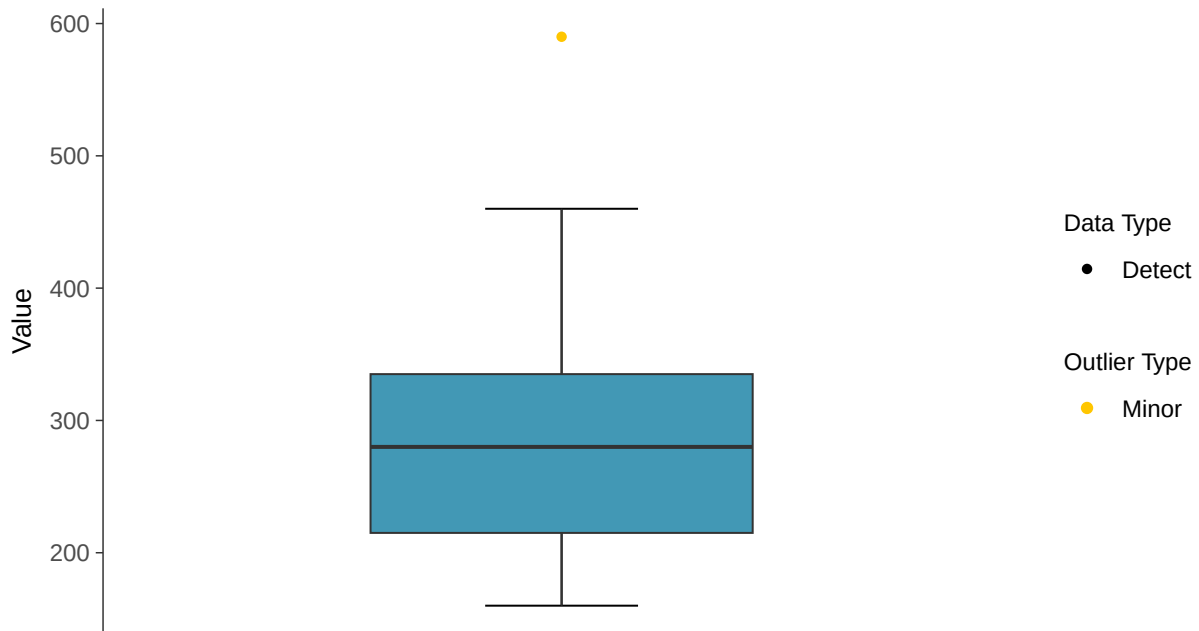
Appendix III: Calcium, MW-10

ID: 20_3_3_107



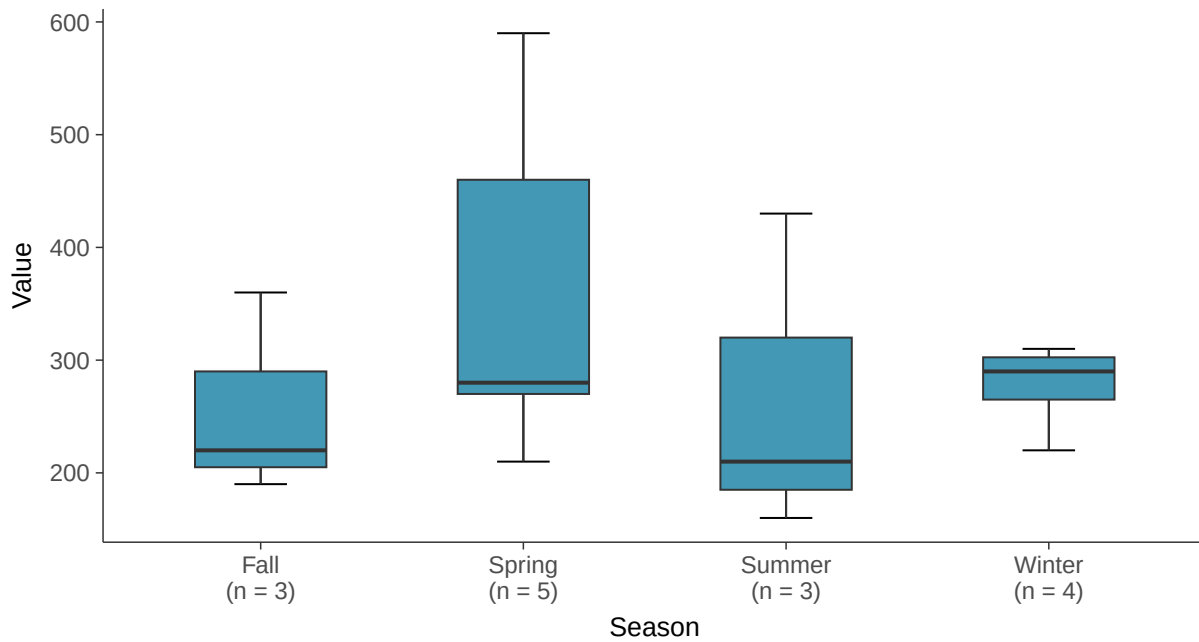
Boxplot

Calcium, MW-10 (mg/L)



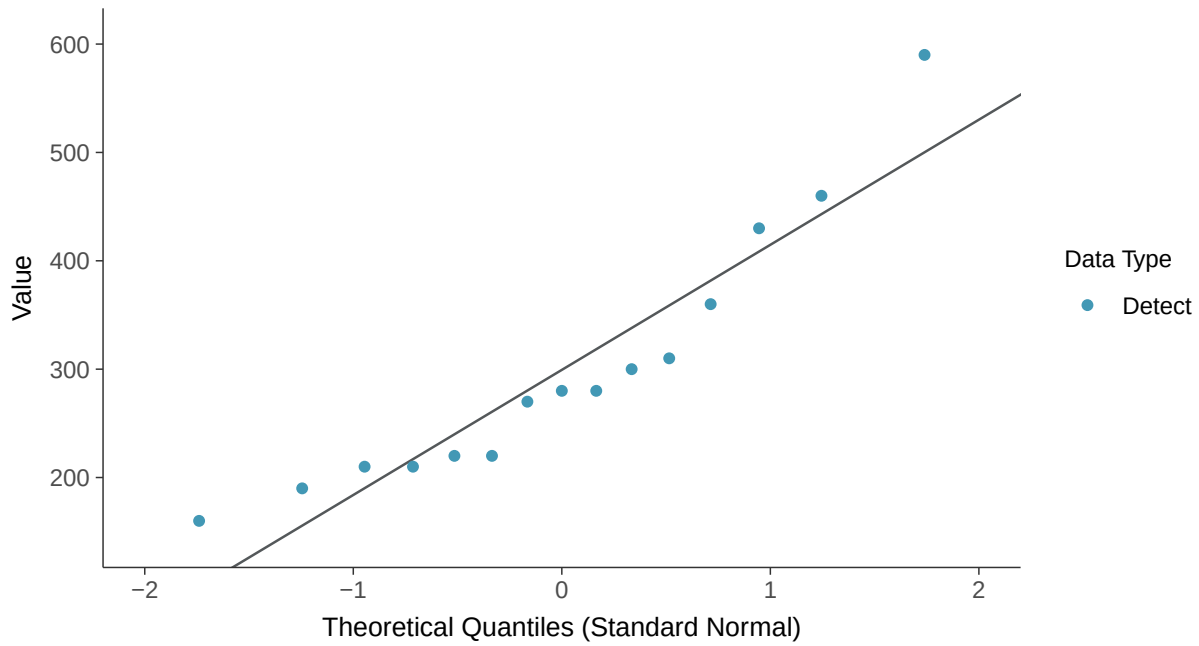
Boxplot by Season

Calcium, MW-10 (mg/L)



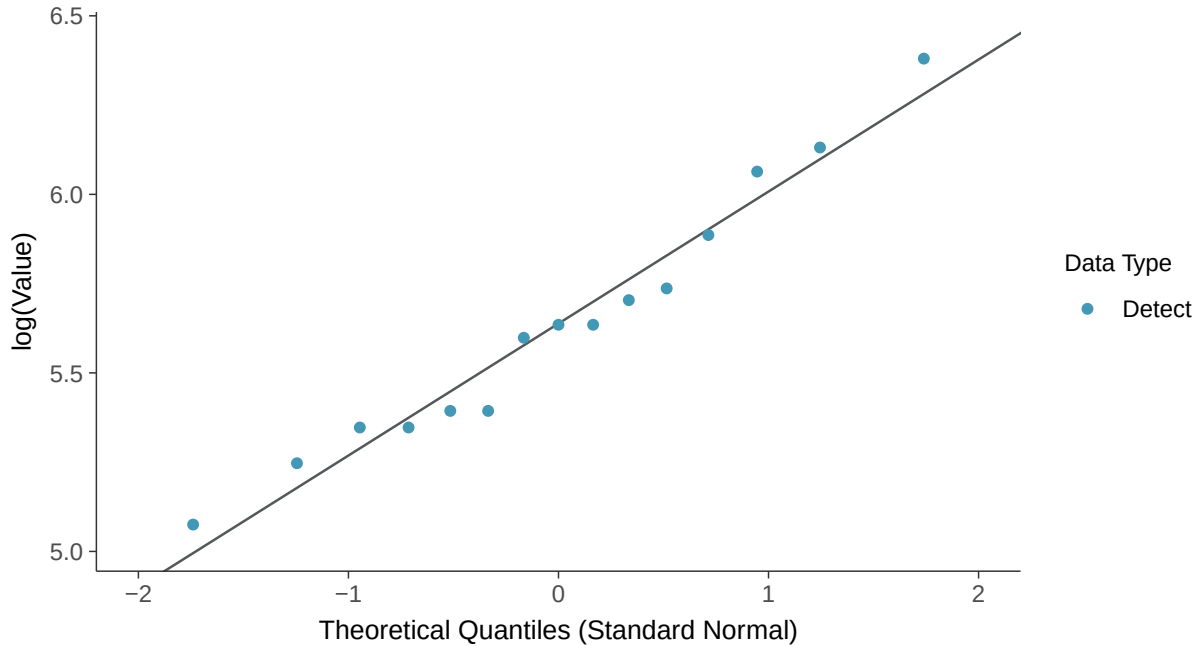
Normal Q-Q plot

Calcium, MW-10 (mg/L)



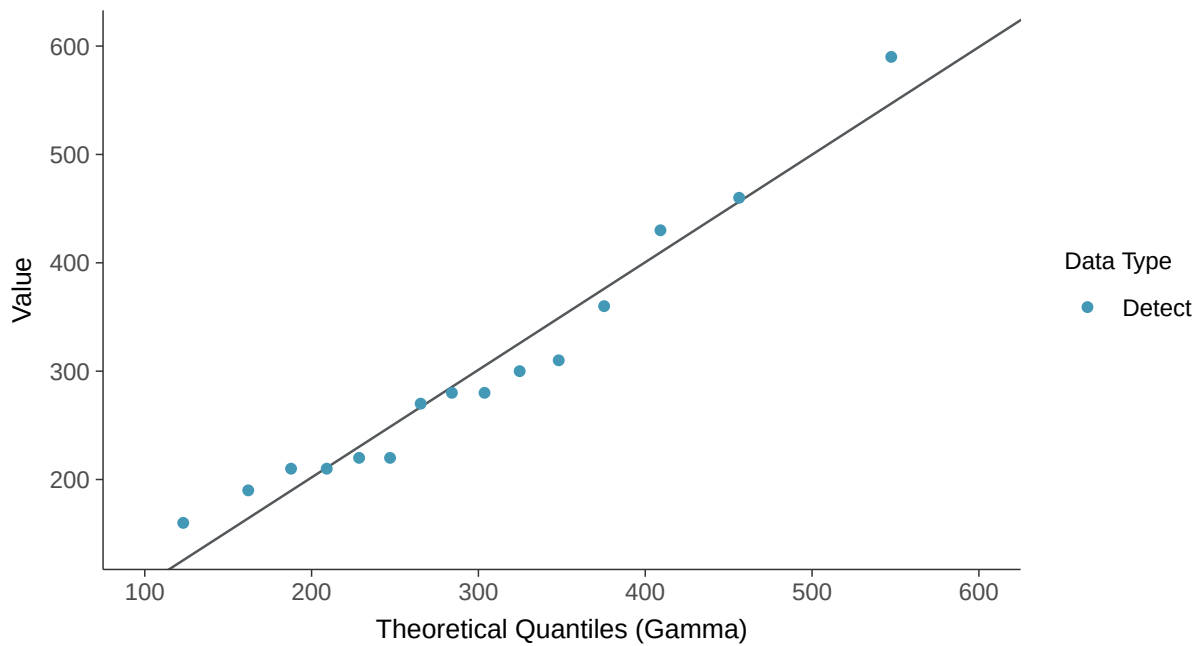
Lognormal Q-Q plot

Calcium, MW-10 (mg/L)



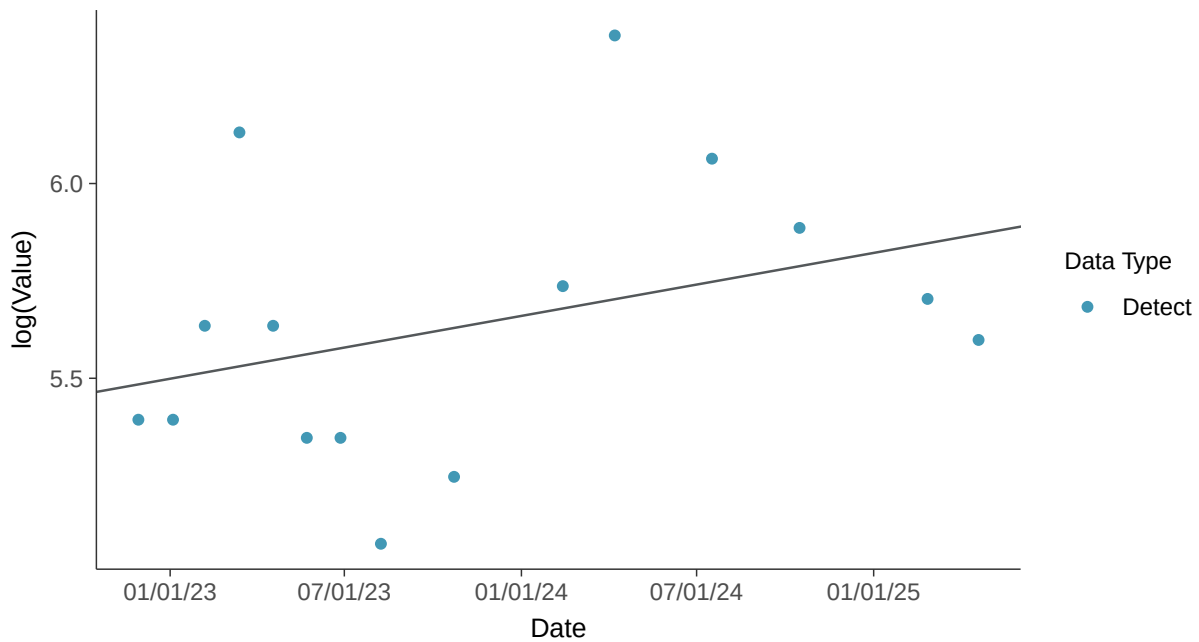
Gamma Q-Q plot

Calcium, MW-10 (mg/L)



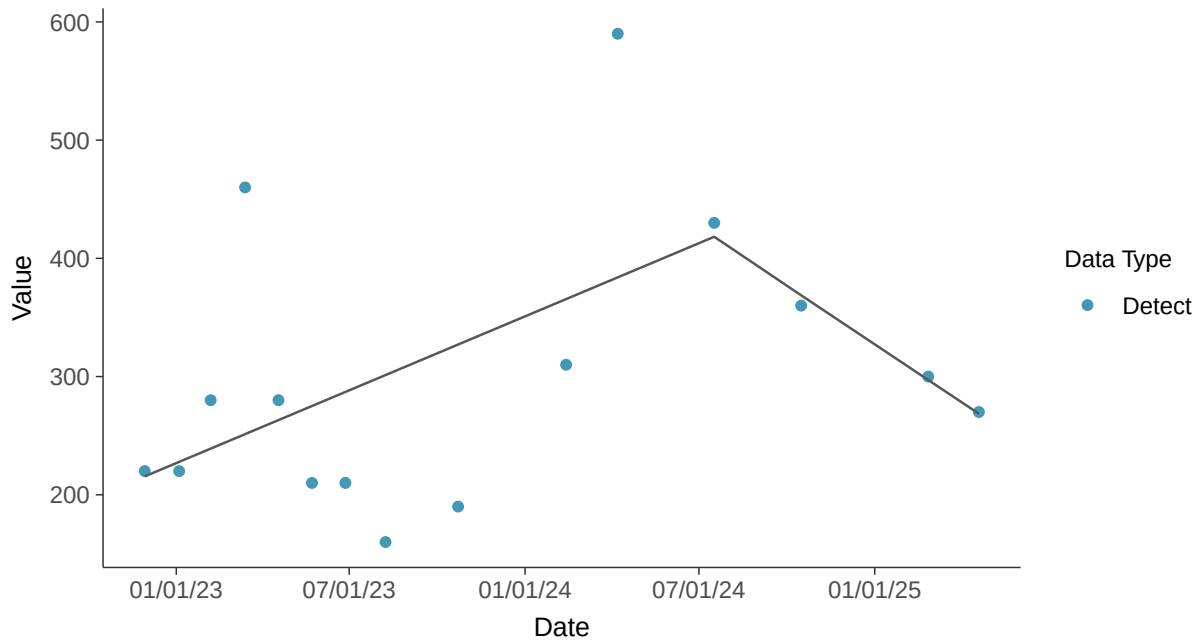
Trend Regression: Lognormal MLE

Calcium, MW-10 (mg/L)





Trend Regression: Piecewise Linear-Linear
Calcium, MW-10 (mg/L)

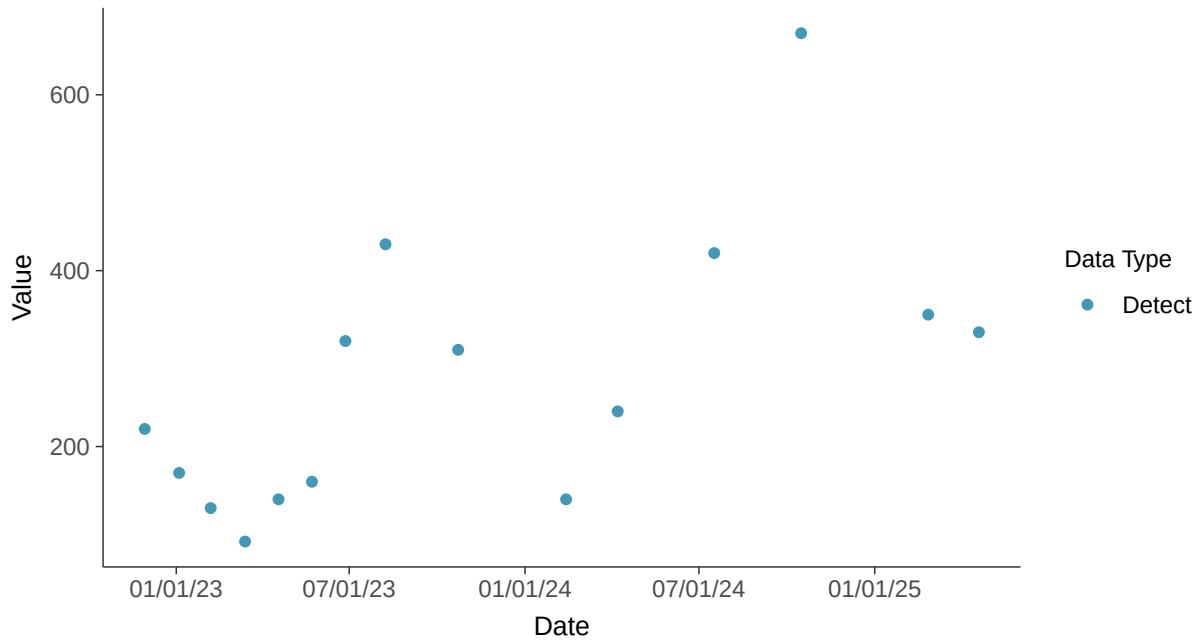


Appendix III: Chloride (as Cl), MW-10

ID: 20_3_3_108

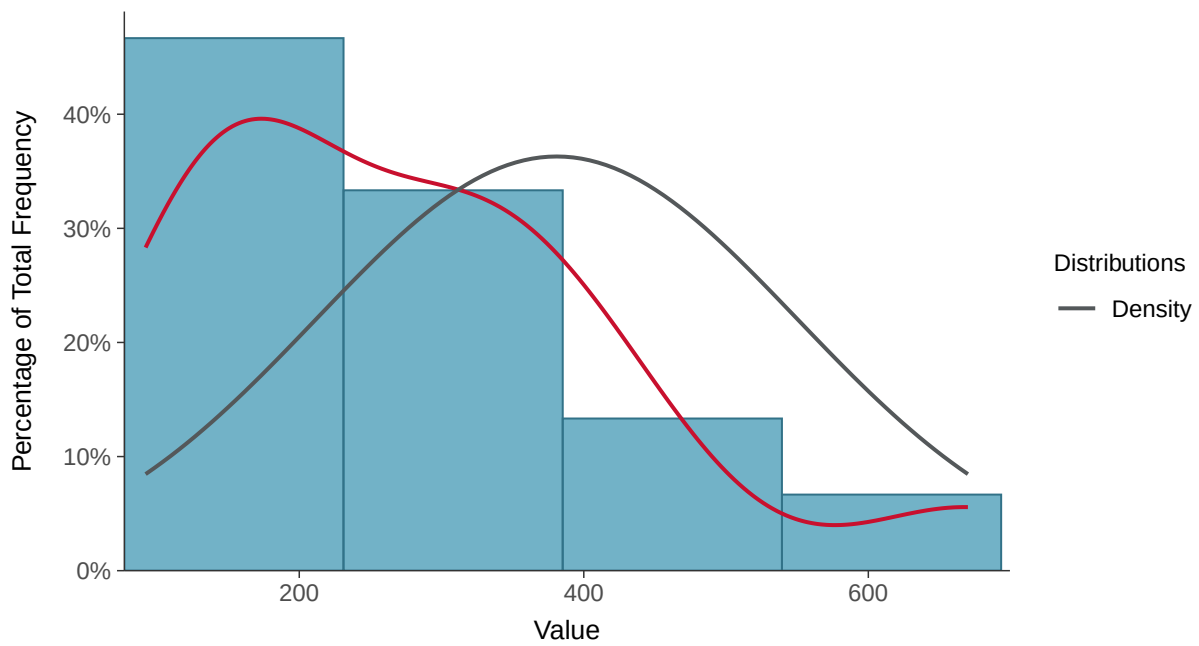
Scatter Plot

Chloride (as Cl), MW-10 (mg/L)



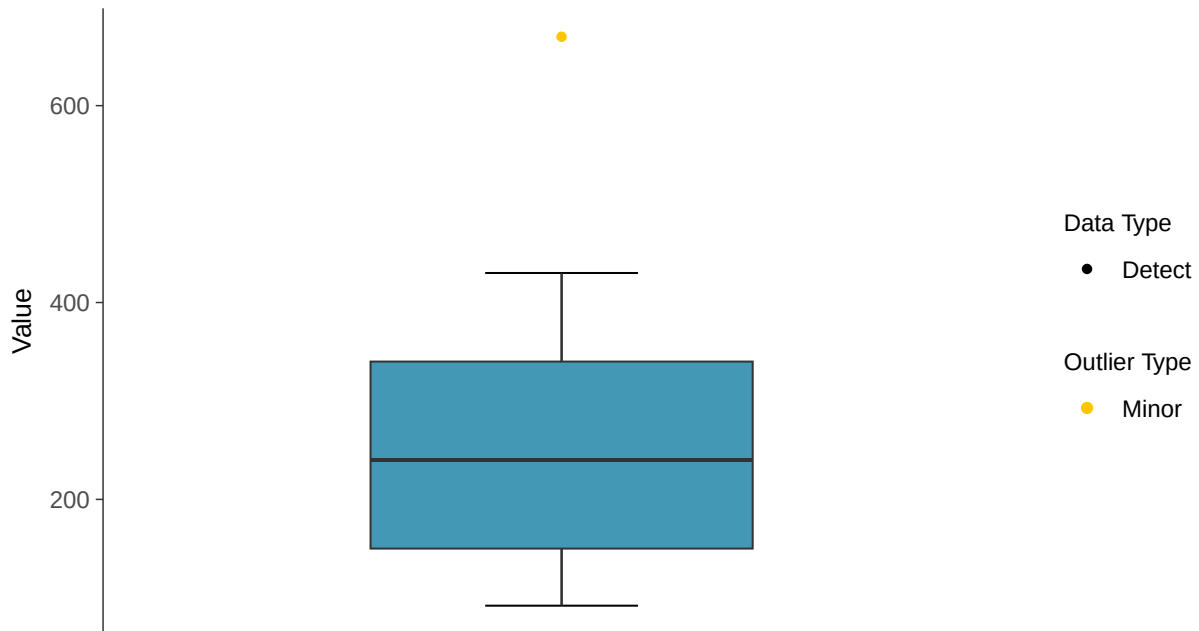
Histogram

Chloride (as Cl), MW-10 (mg/L)



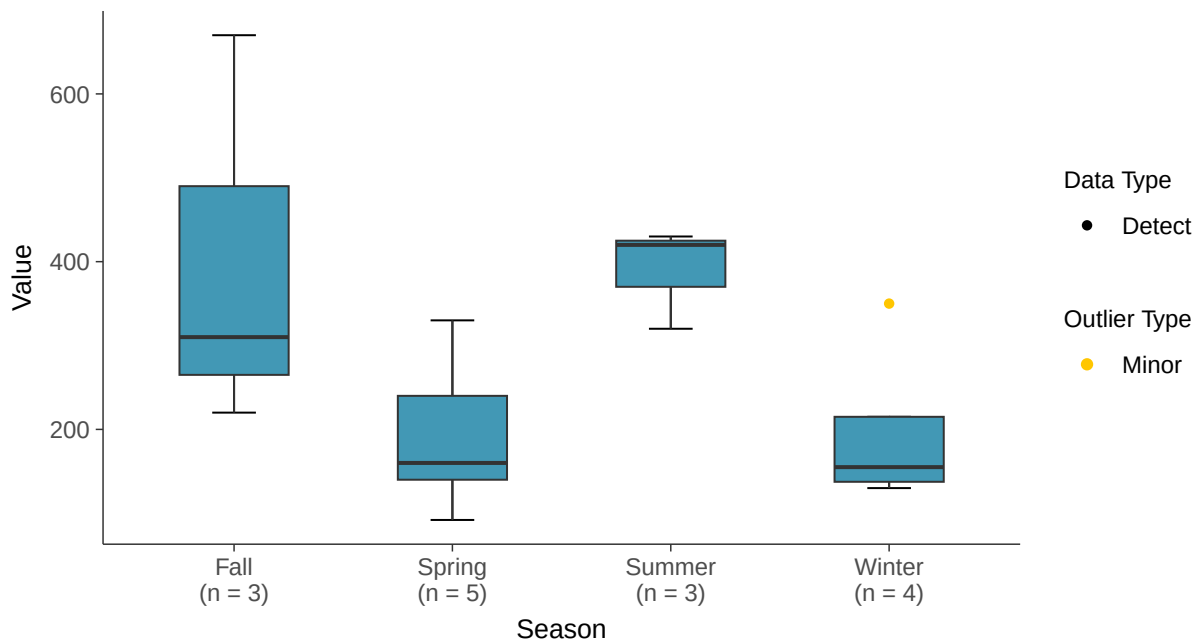
Boxplot

Chloride (as Cl), MW-10 (mg/L)



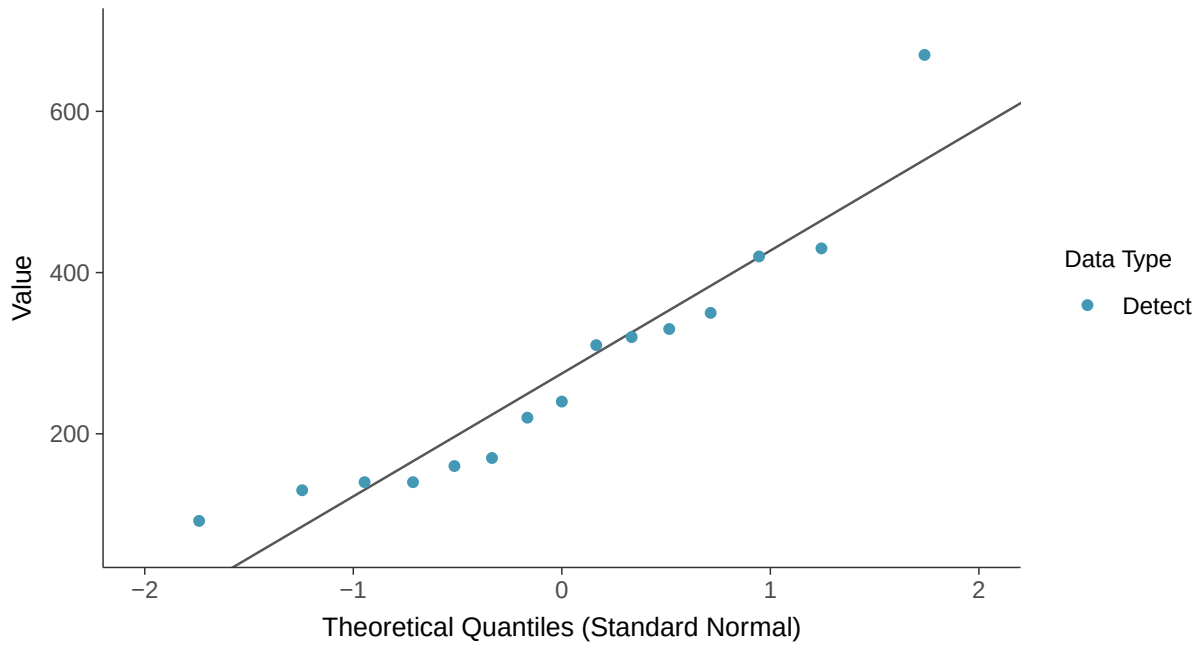
Boxplot by Season

Chloride (as Cl), MW-10 (mg/L)



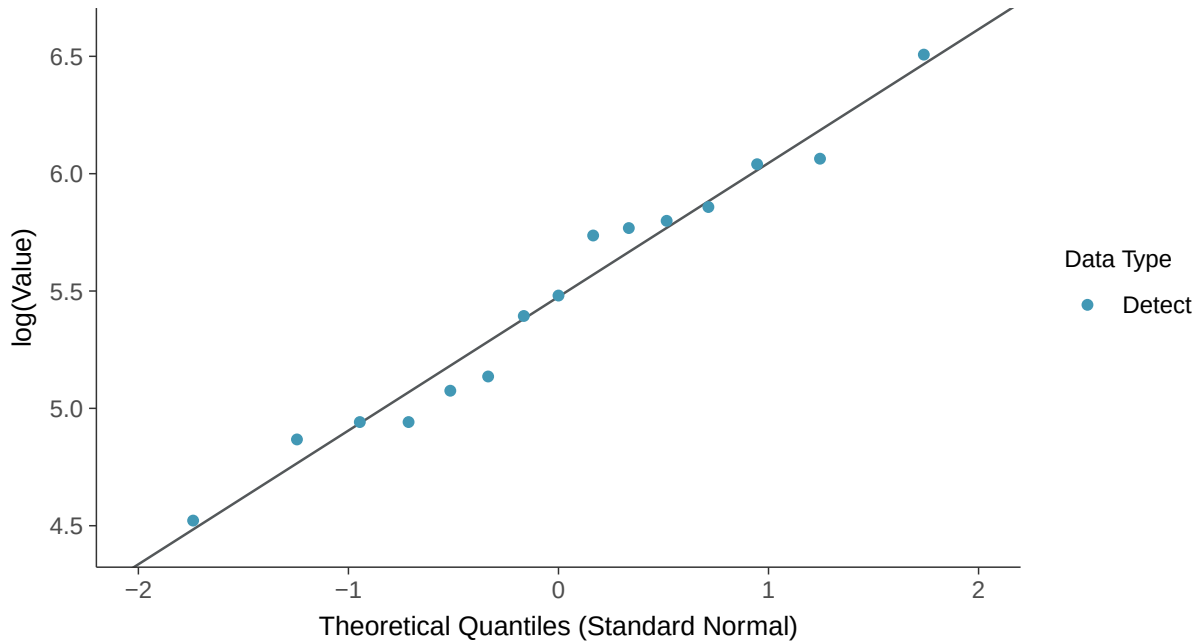
Normal Q-Q plot

Chloride (as Cl), MW-10 (mg/L)



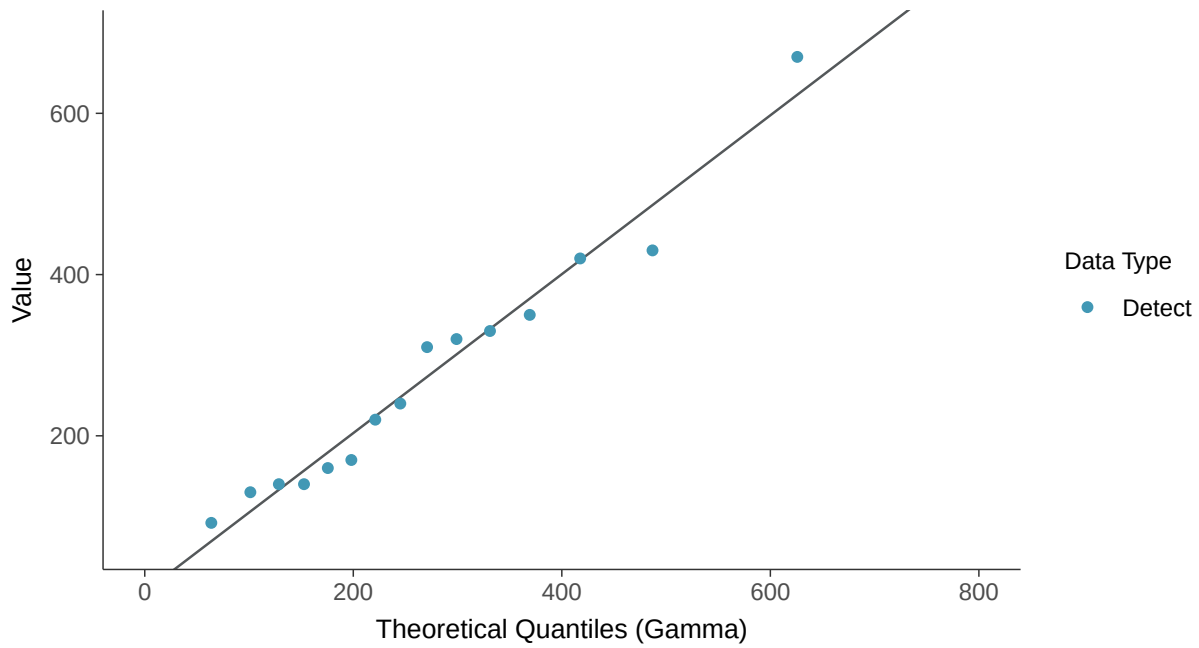
Lognormal Q-Q plot

Chloride (as Cl), MW-10 (mg/L)



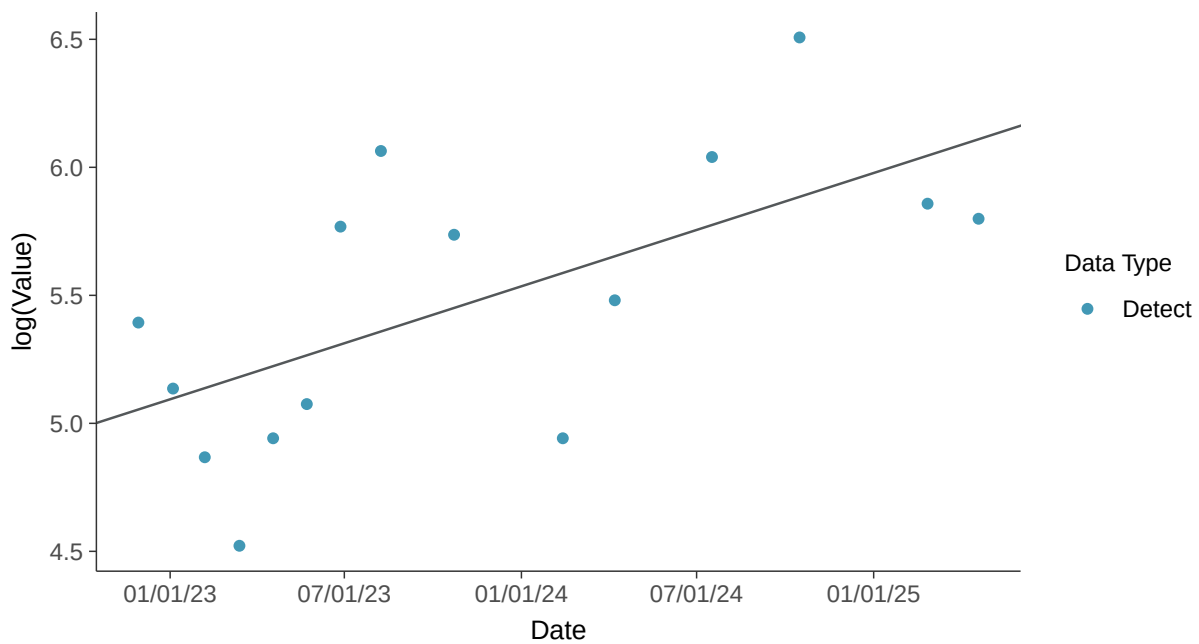
Gamma Q-Q plot

Chloride (as Cl), MW-10 (mg/L)



Trend Regression: Lognormal MLE

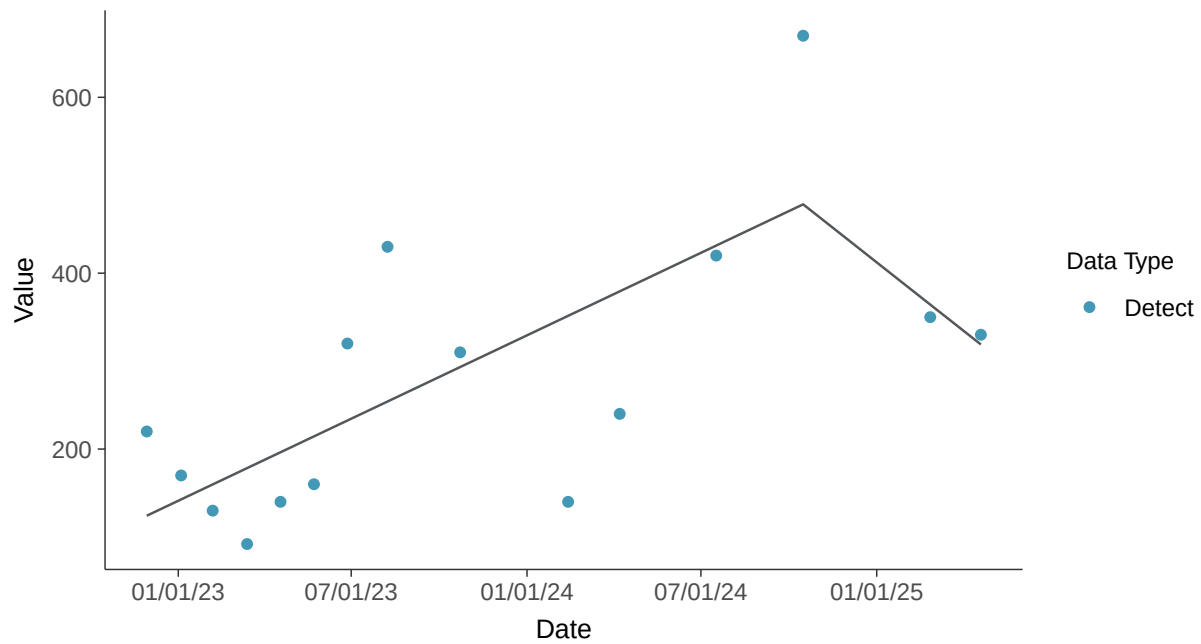
Chloride (as Cl), MW-10 (mg/L)





Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-10 (mg/L)

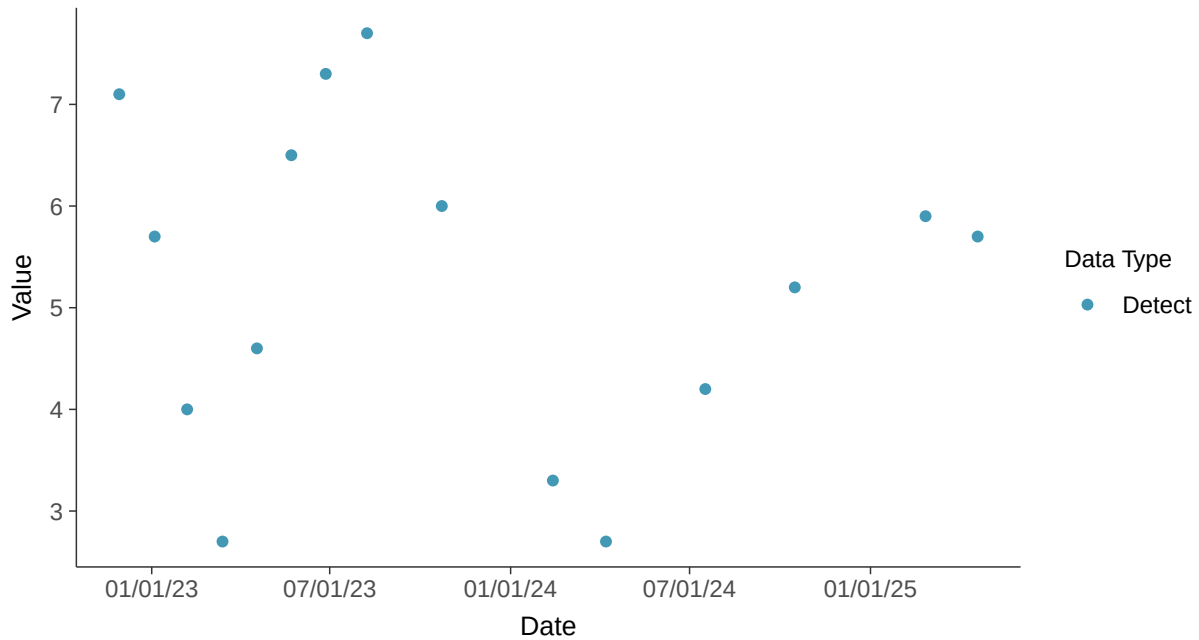


Appendix III: Fluoride, MW-10

ID: 20_3_3_112

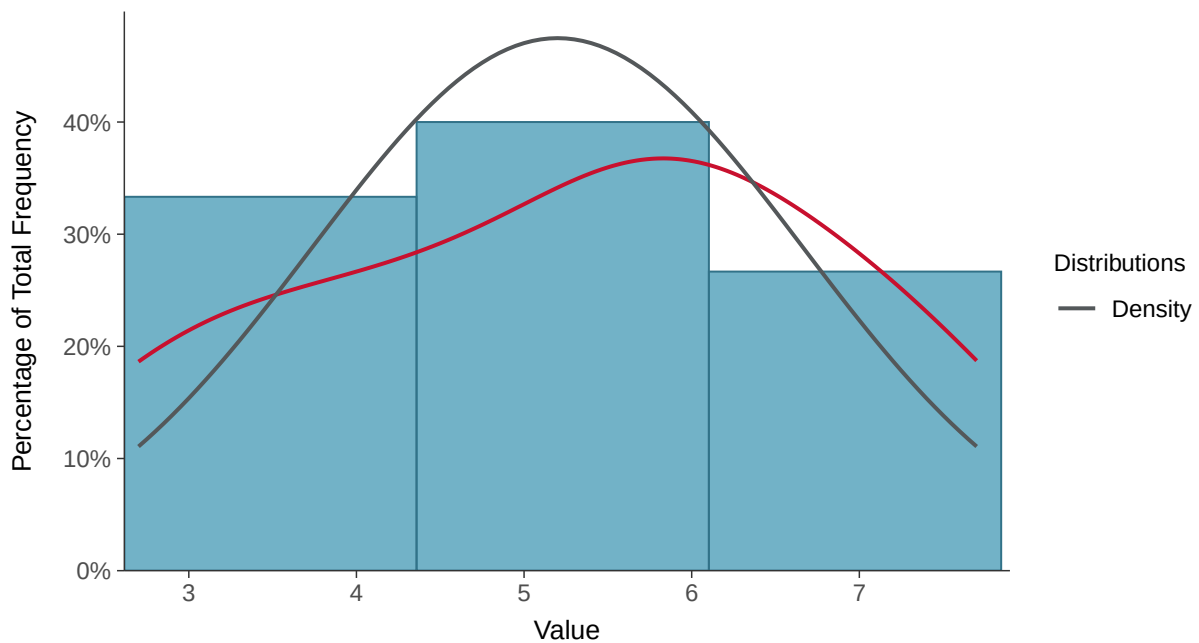
Scatter Plot

Fluoride, MW-10 (mg/L)



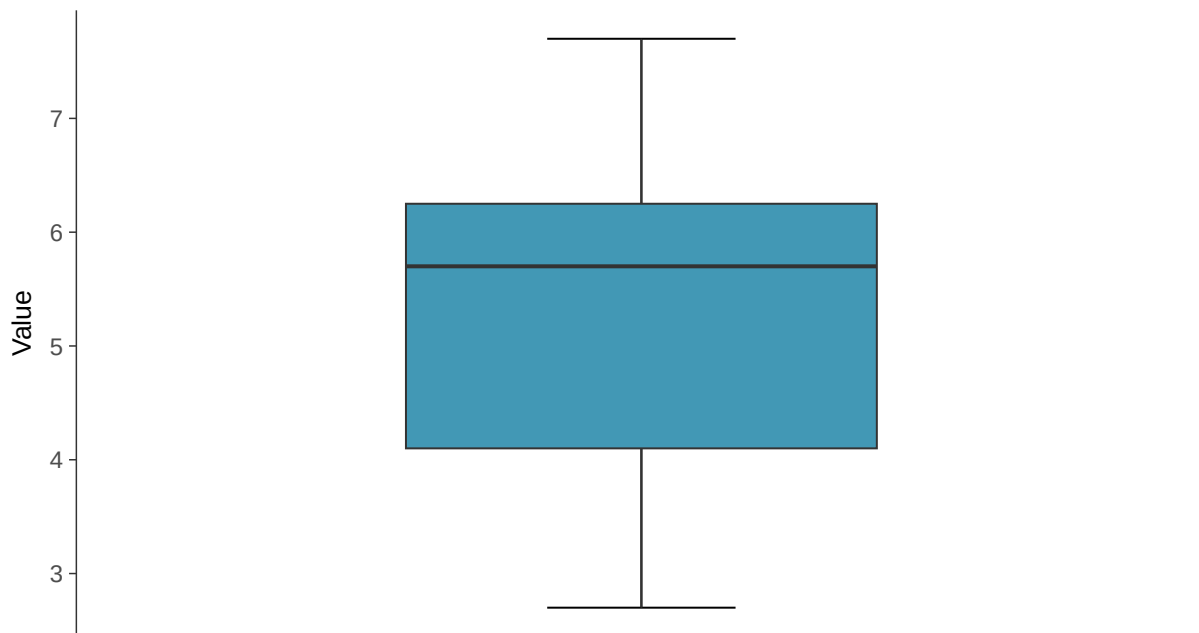
Histogram

Fluoride, MW-10 (mg/L)



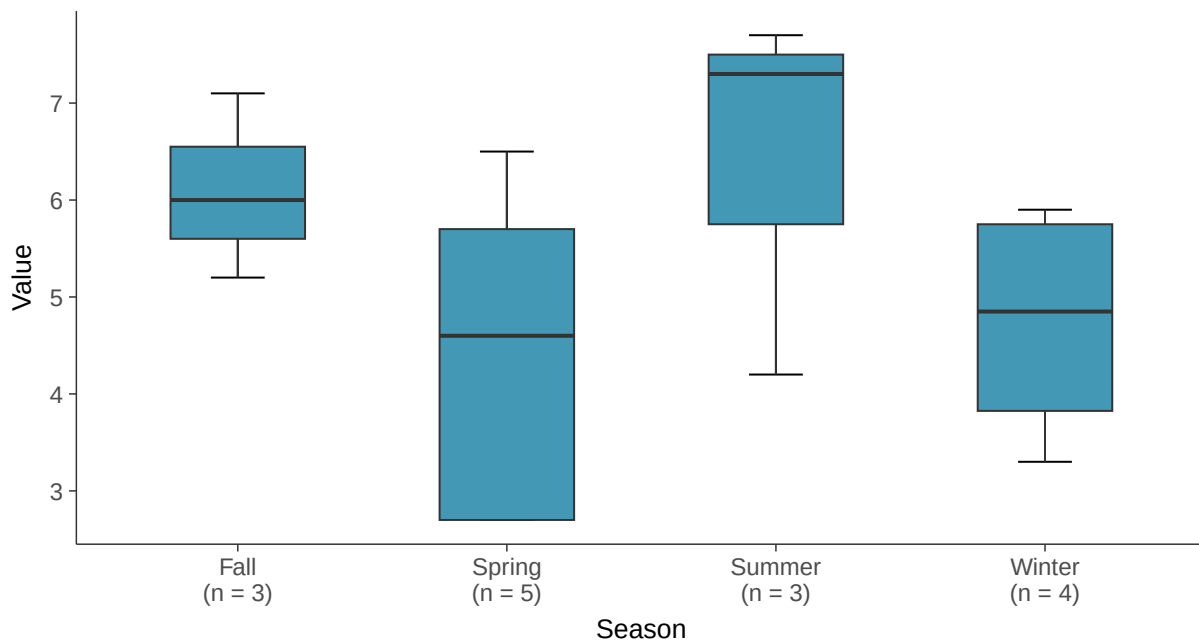
Boxplot

Fluoride, MW-10 (mg/L)



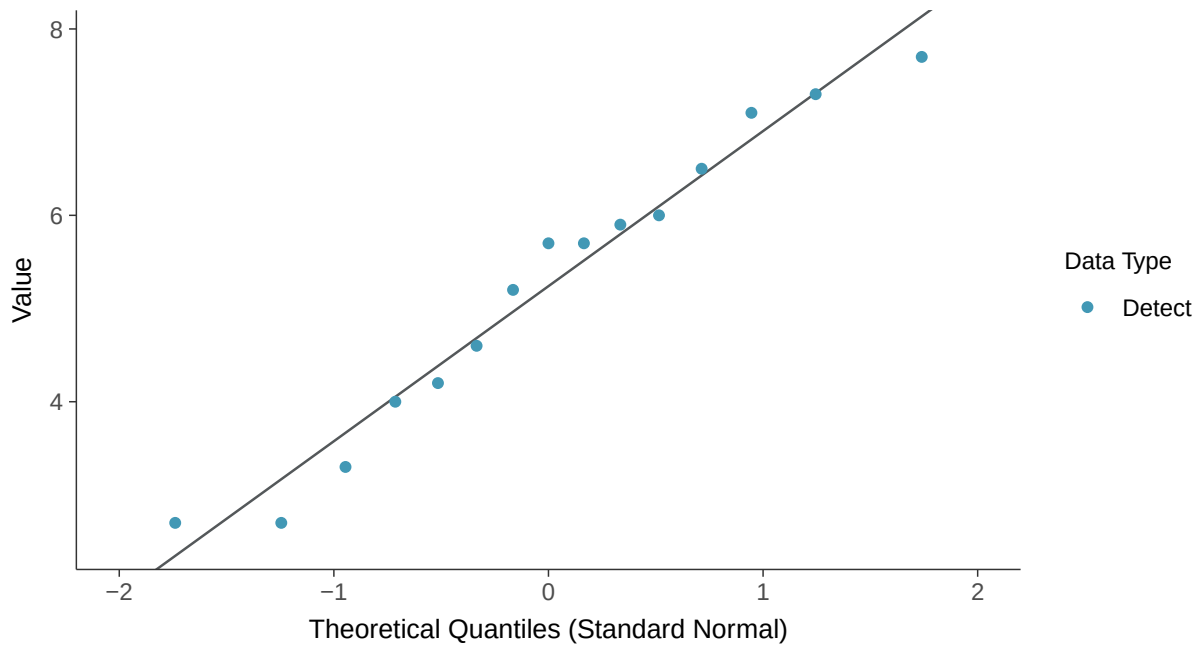
Boxplot by Season

Fluoride, MW-10 (mg/L)



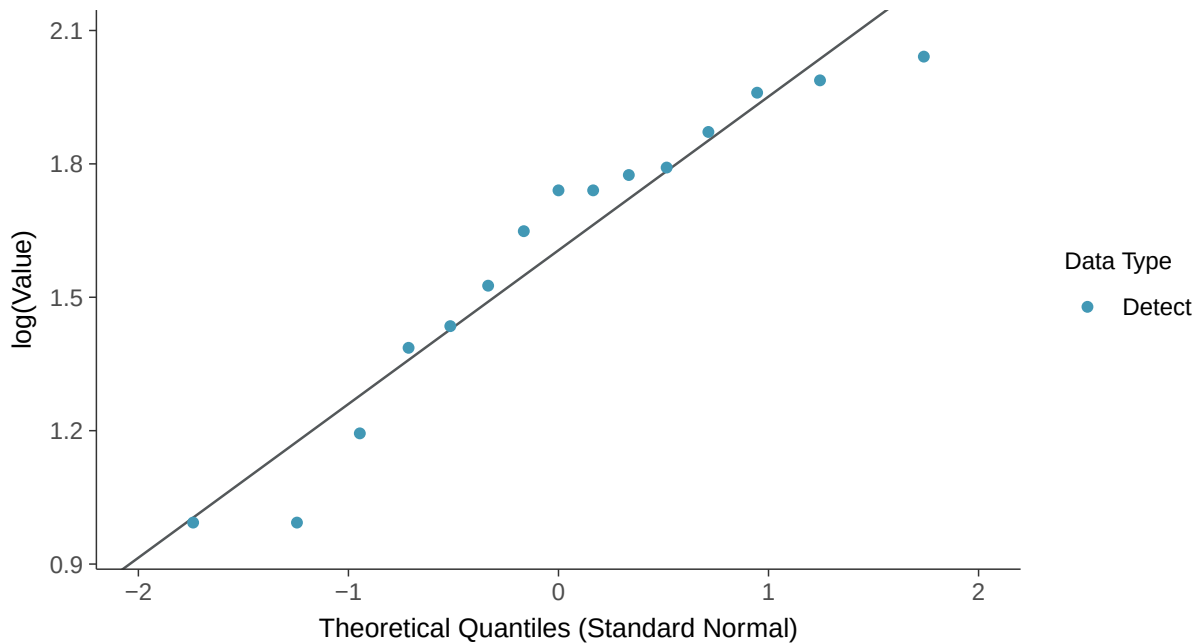
Normal Q-Q plot

Fluoride, MW-10 (mg/L)



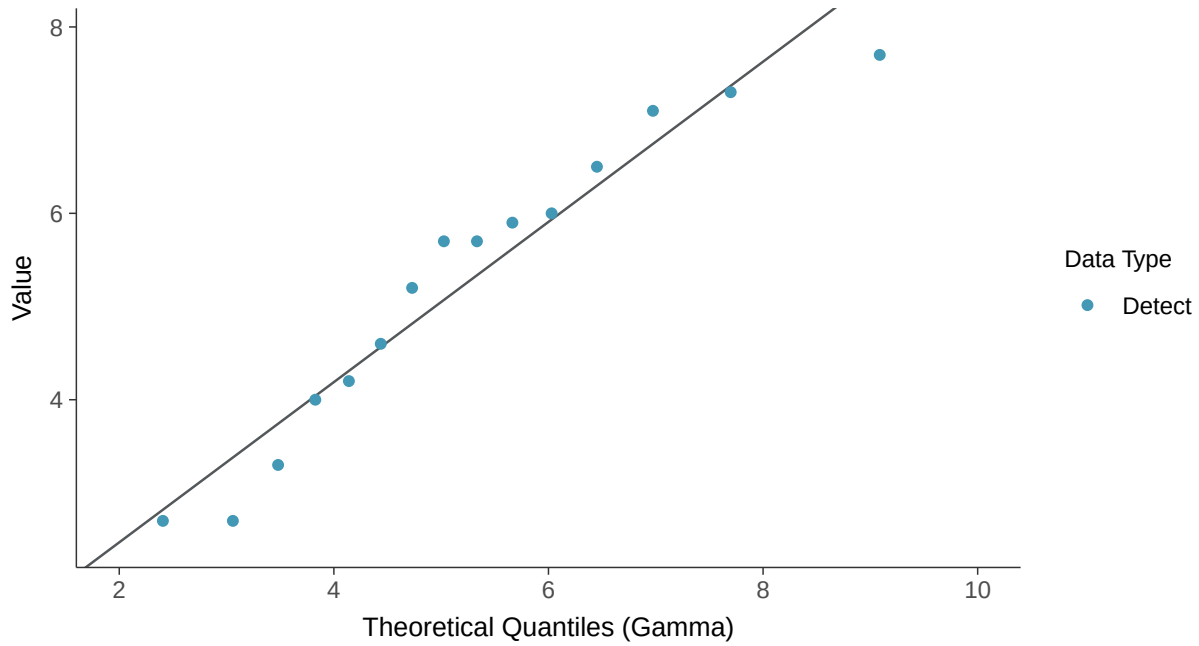
Lognormal Q-Q plot

Fluoride, MW-10 (mg/L)



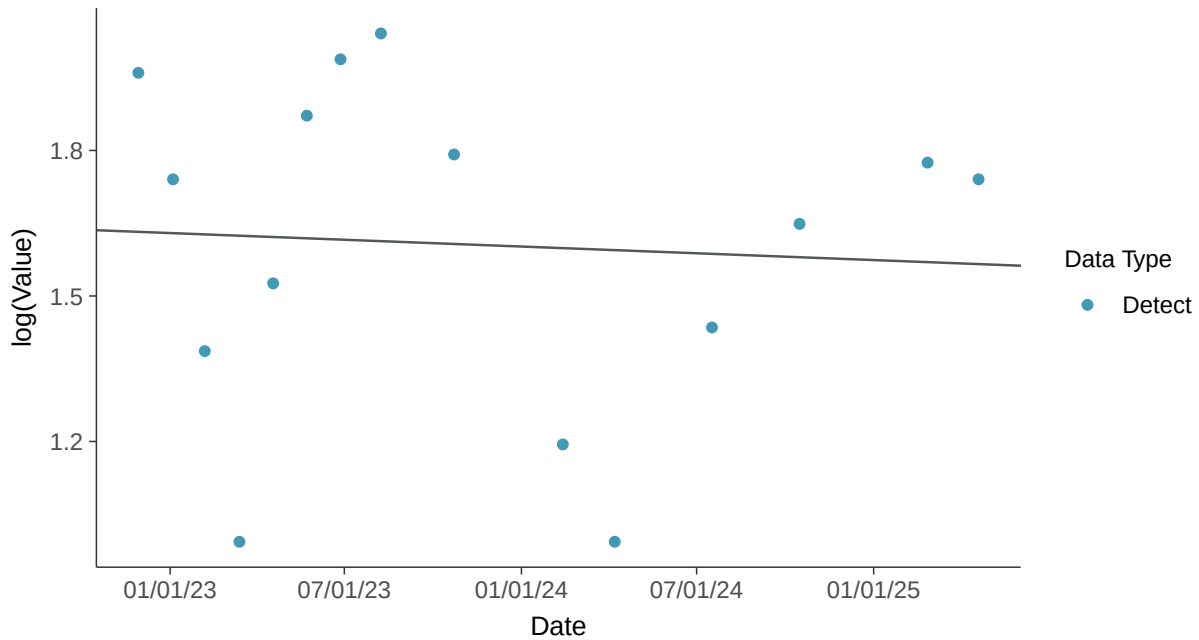
Gamma Q-Q plot

Fluoride, MW-10 (mg/L)



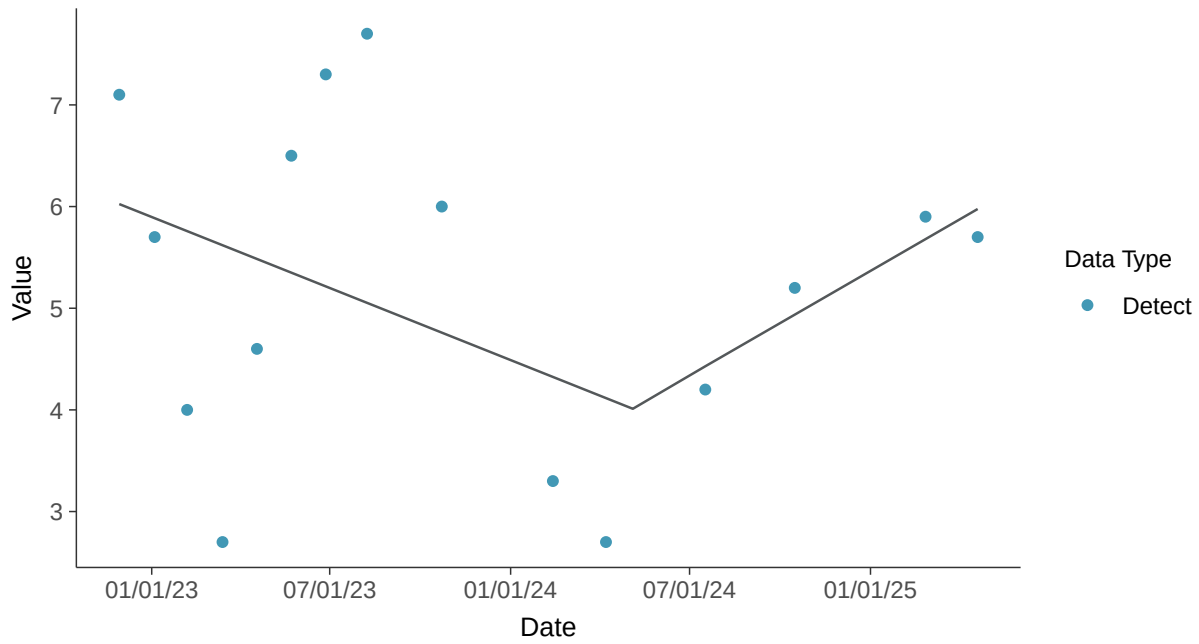
Trend Regression: Lognormal MLE

Fluoride, MW-10 (mg/L)



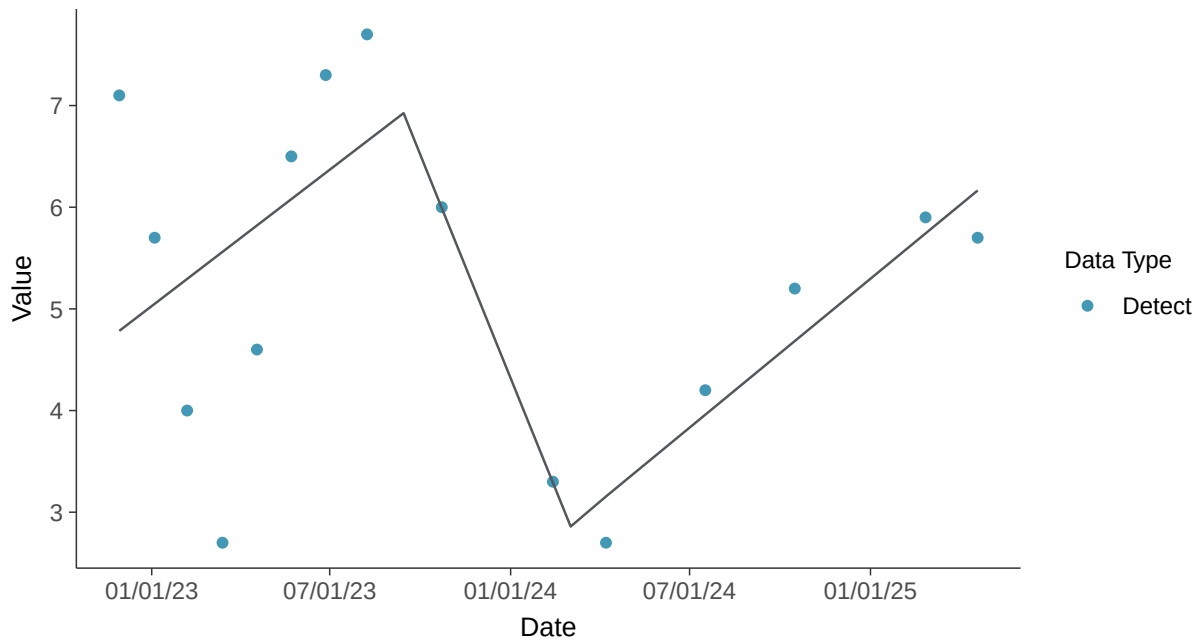
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-10 (mg/L)



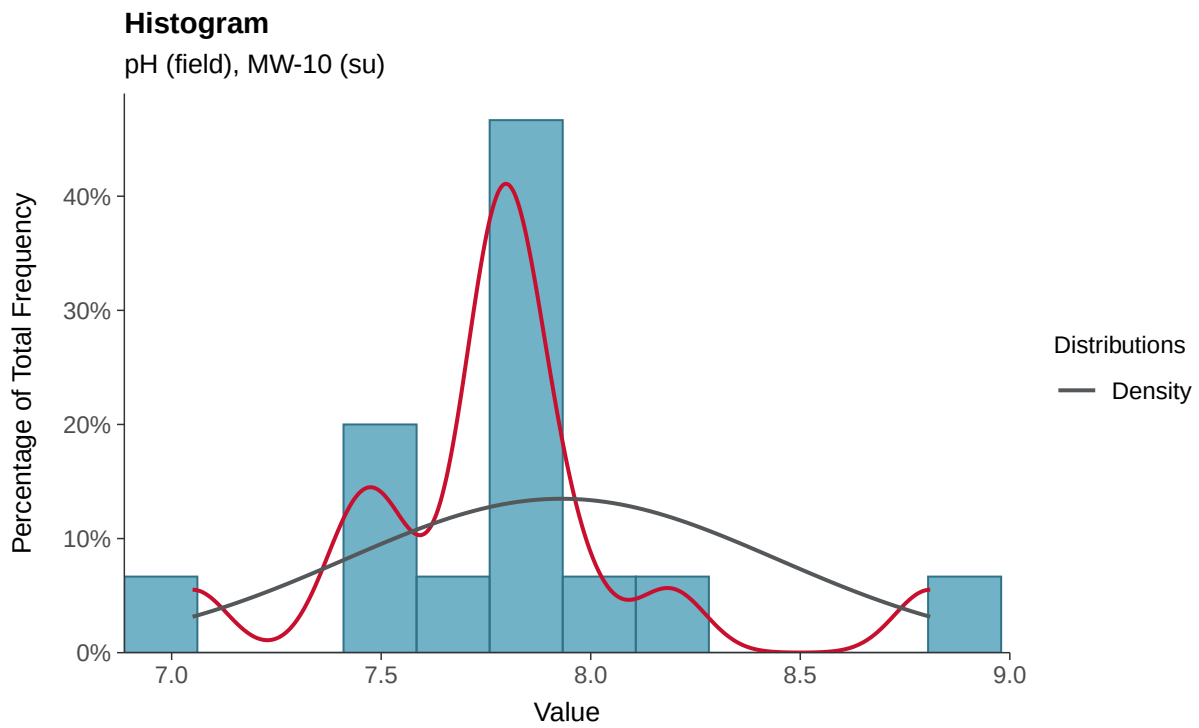
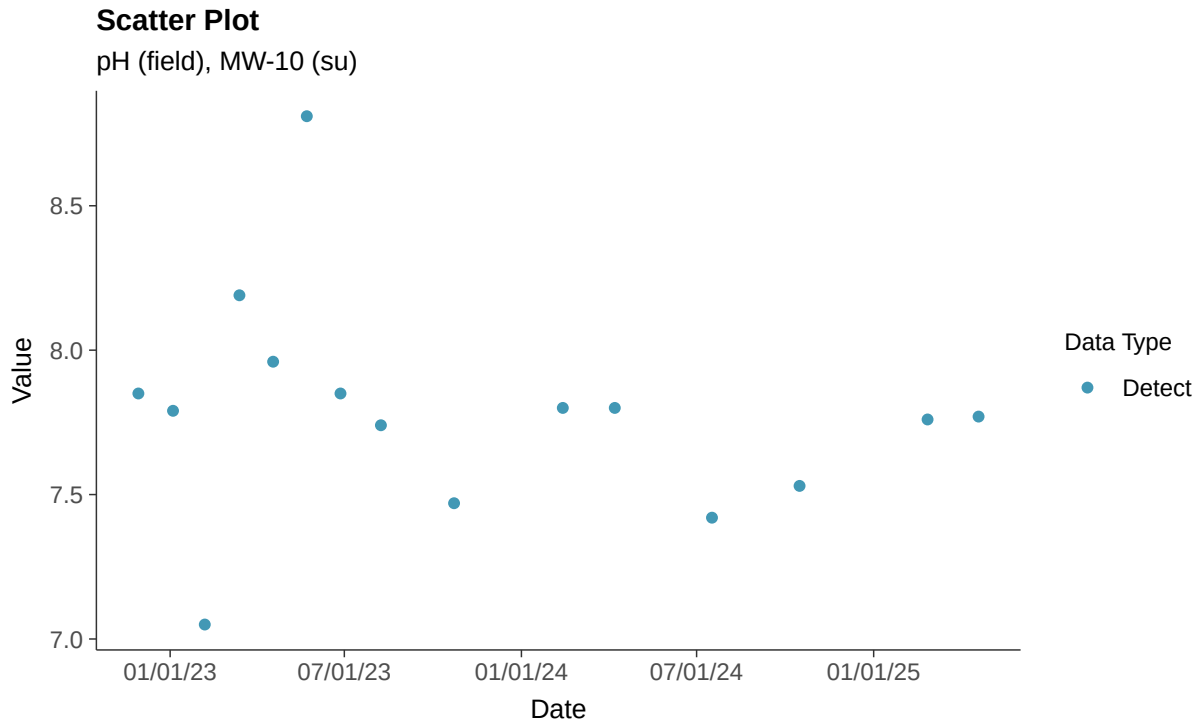
Trend Regression: Piecewise Linear-Linear-Linear

Fluoride, MW-10 (mg/L)



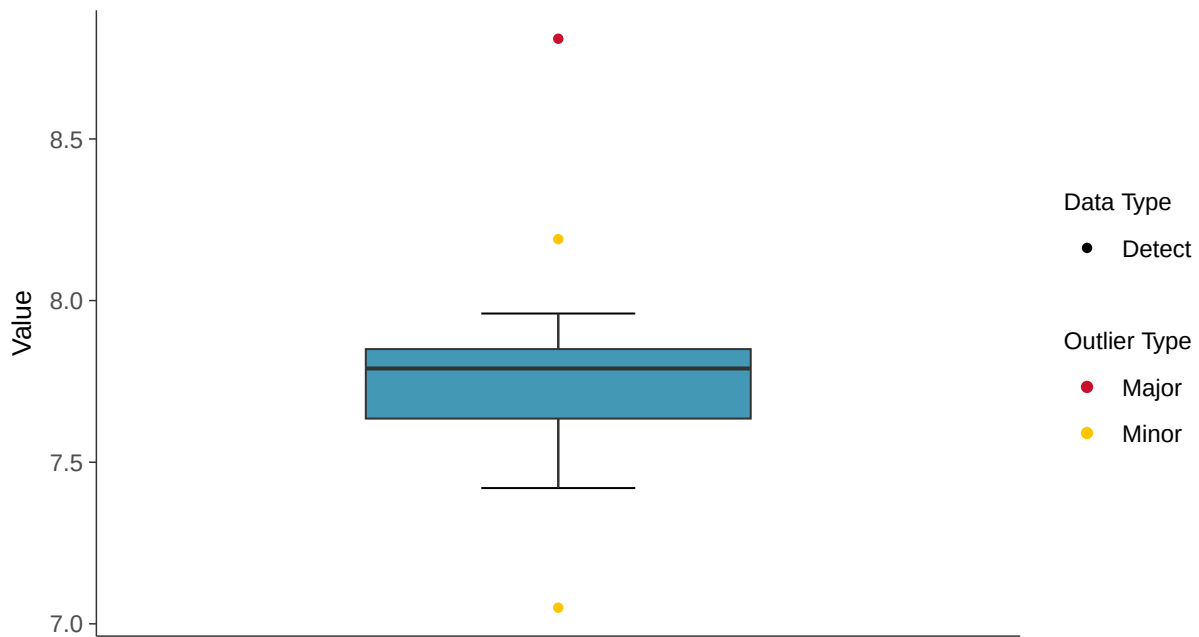
Appendix III: pH (field), MW-10

ID: 20_3_3_120



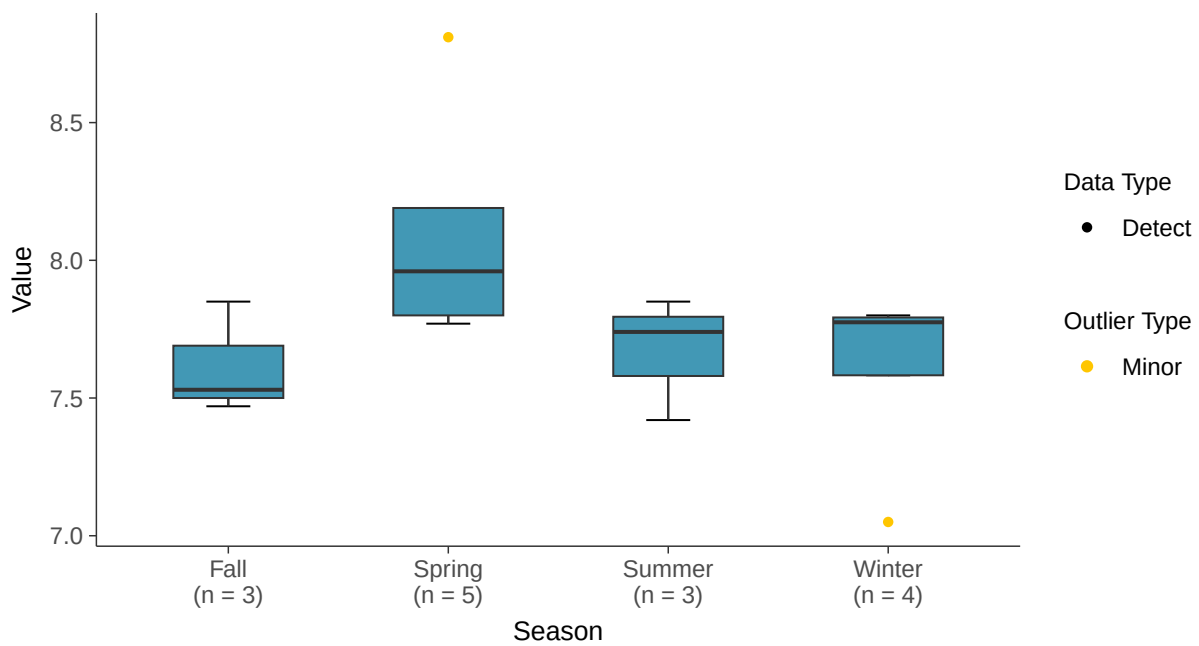
Boxplot

pH (field), MW-10 (su)

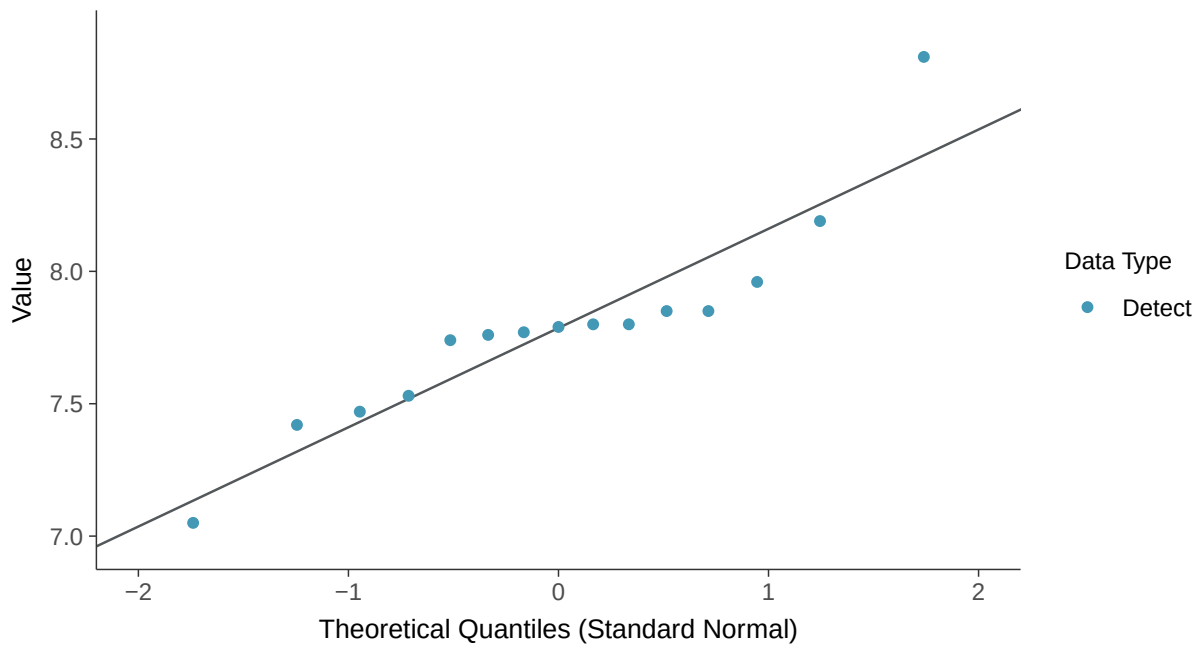


Boxplot by Season

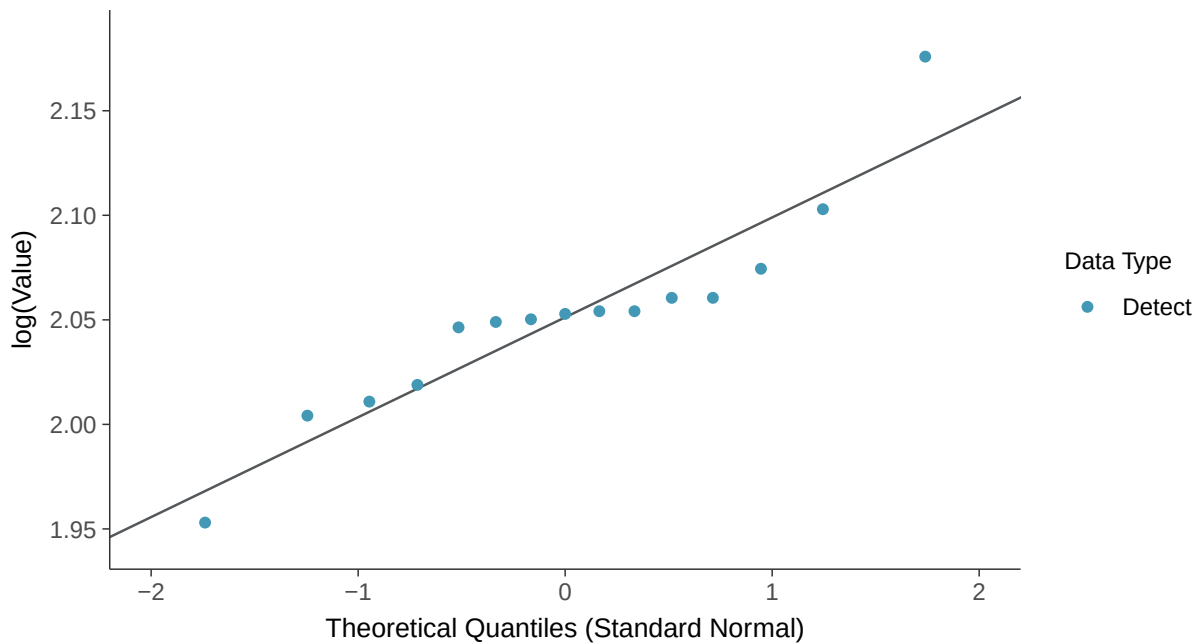
pH (field), MW-10 (su)



Normal Q-Q plot
pH (field), MW-10 (su)

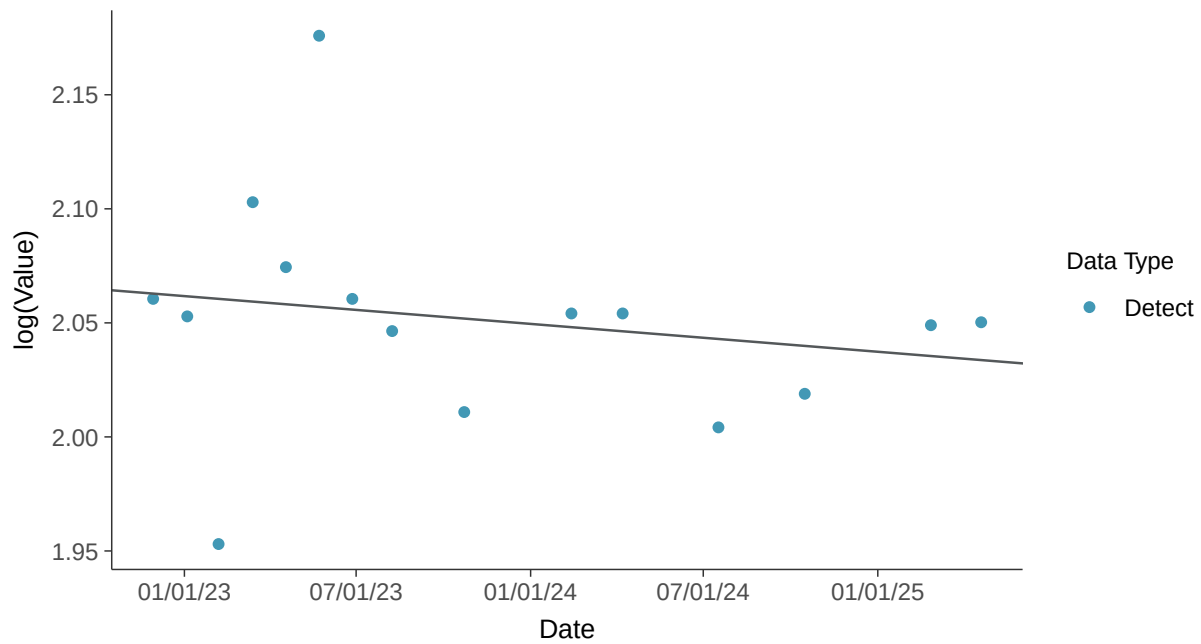


Lognormal Q-Q plot
pH (field), MW-10 (su)



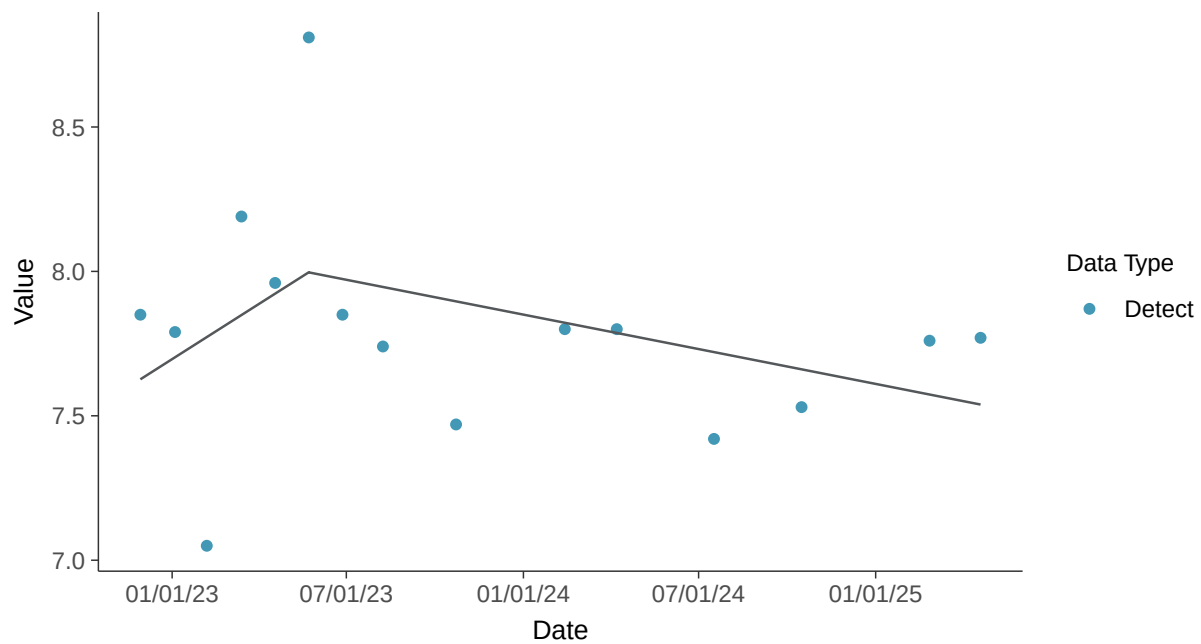
Trend Regression: Lognormal MLE

pH (field), MW-10 (su)



Trend Regression: Piecewise Linear-Linear

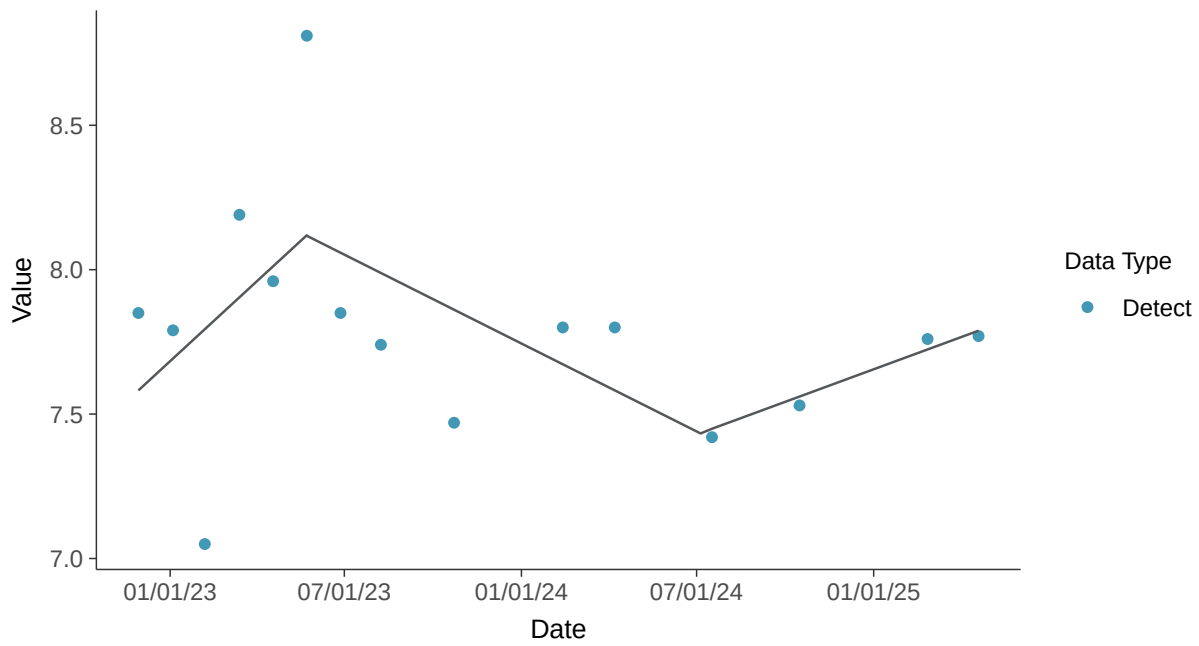
pH (field), MW-10 (su)





Trend Regression: Piecewise Linear-Linear-Linear

pH (field), MW-10 (su)

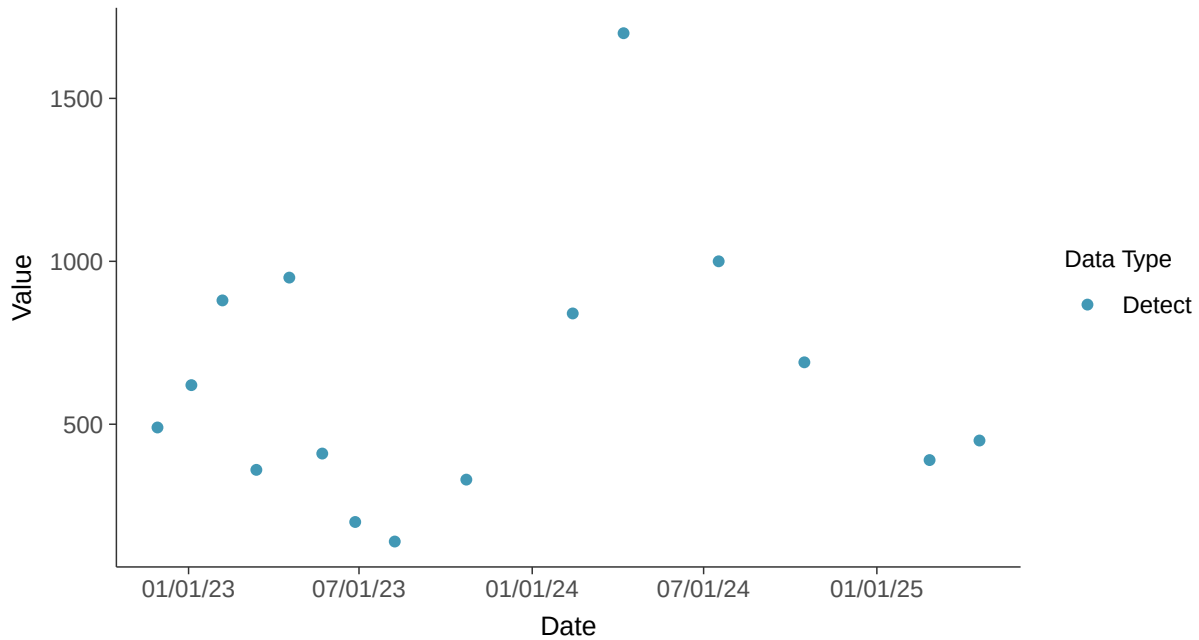


Appendix III: Sulfate (as SO₄), MW-10

ID: 20_3_3_124

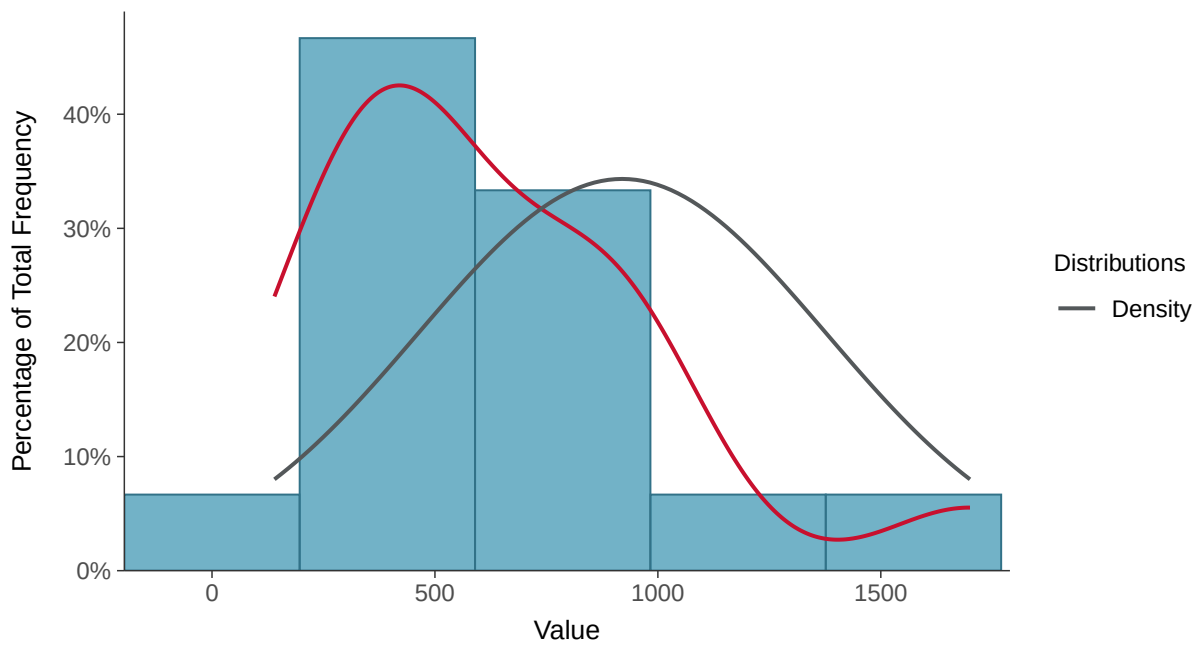
Scatter Plot

Sulfate (as SO₄), MW-10 (mg/L)



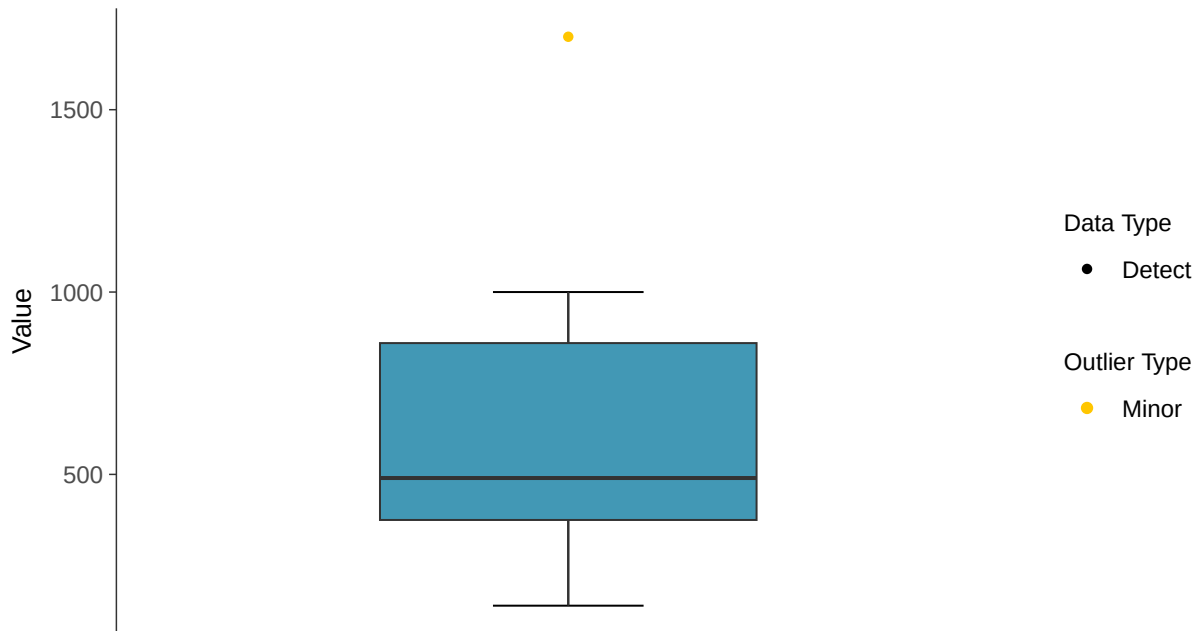
Histogram

Sulfate (as SO₄), MW-10 (mg/L)



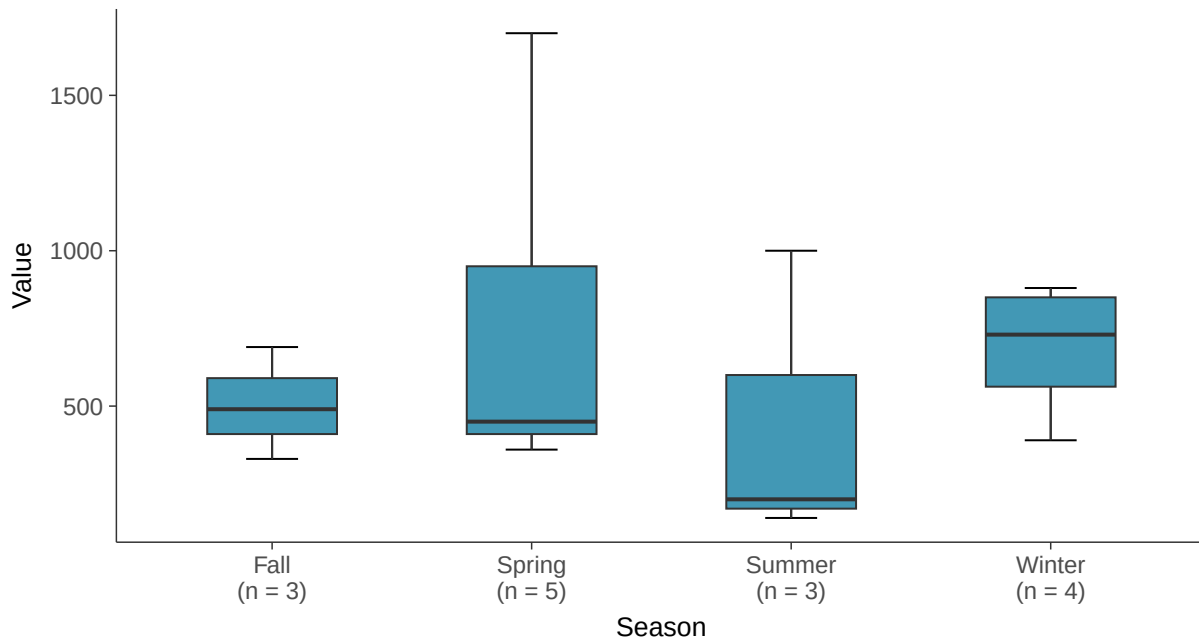
Boxplot

Sulfate (as SO₄), MW-10 (mg/L)



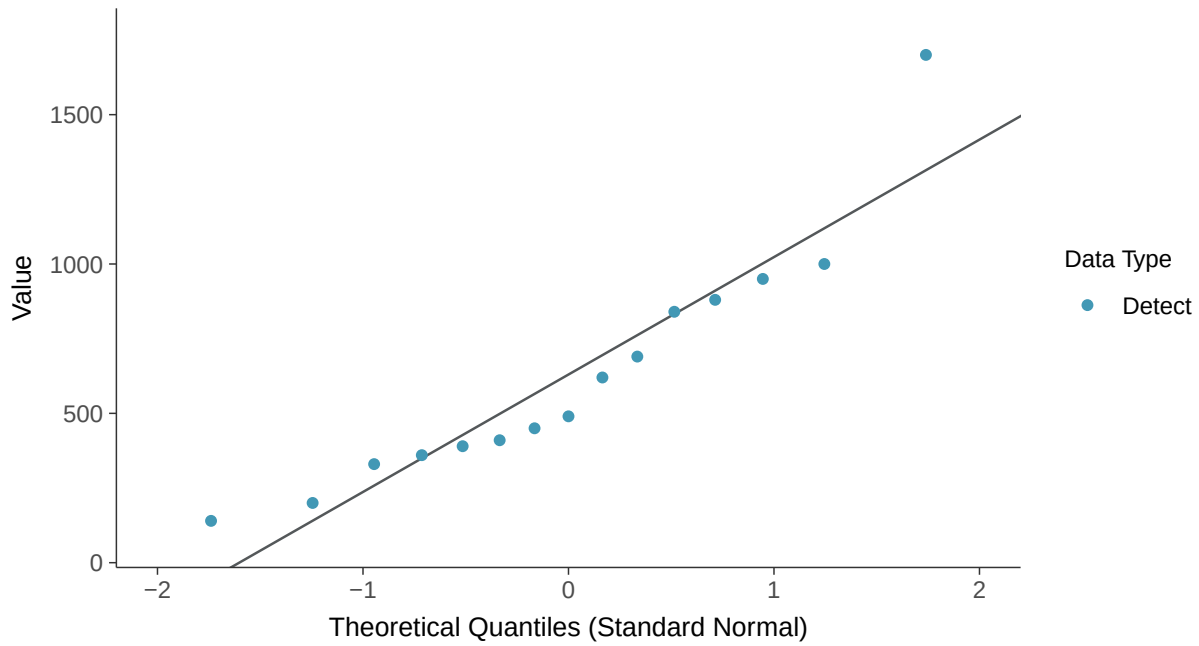
Boxplot by Season

Sulfate (as SO₄), MW-10 (mg/L)



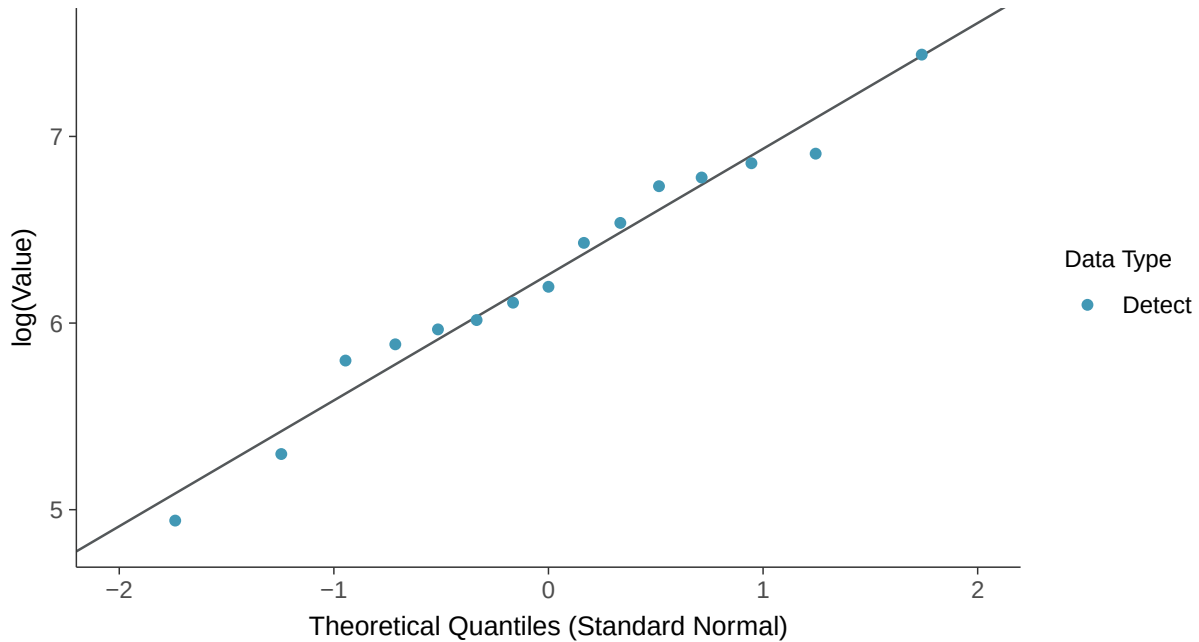
Normal Q-Q plot

Sulfate (as SO₄), MW-10 (mg/L)



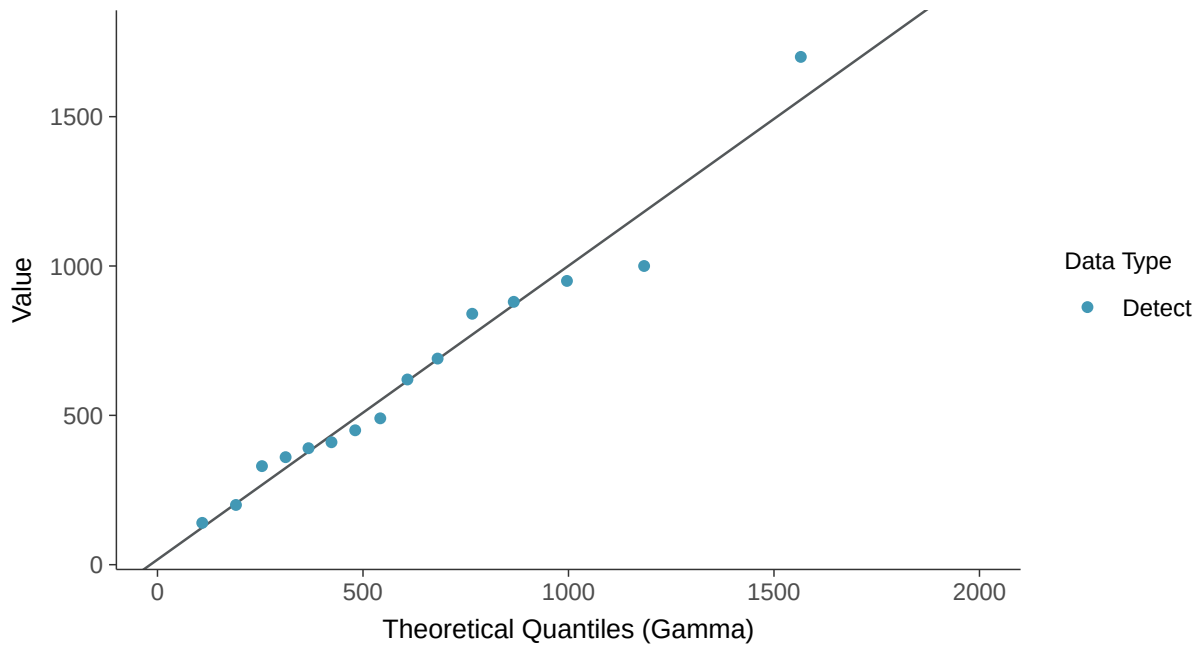
Lognormal Q-Q plot

Sulfate (as SO₄), MW-10 (mg/L)



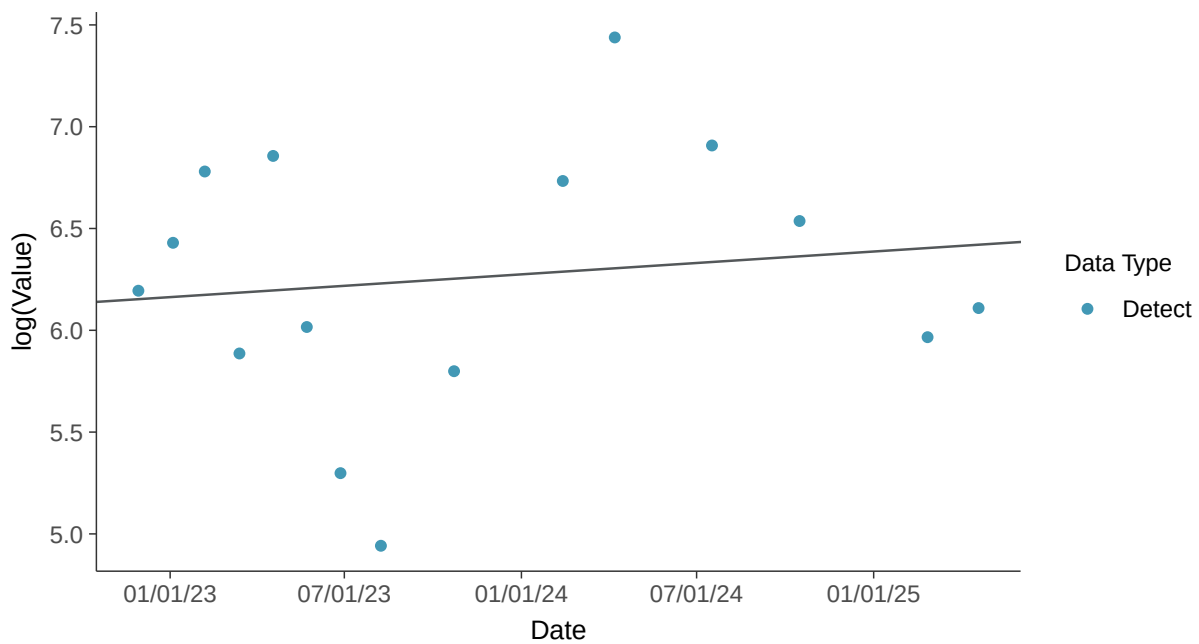
Gamma Q-Q plot

Sulfate (as SO₄), MW-10 (mg/L)



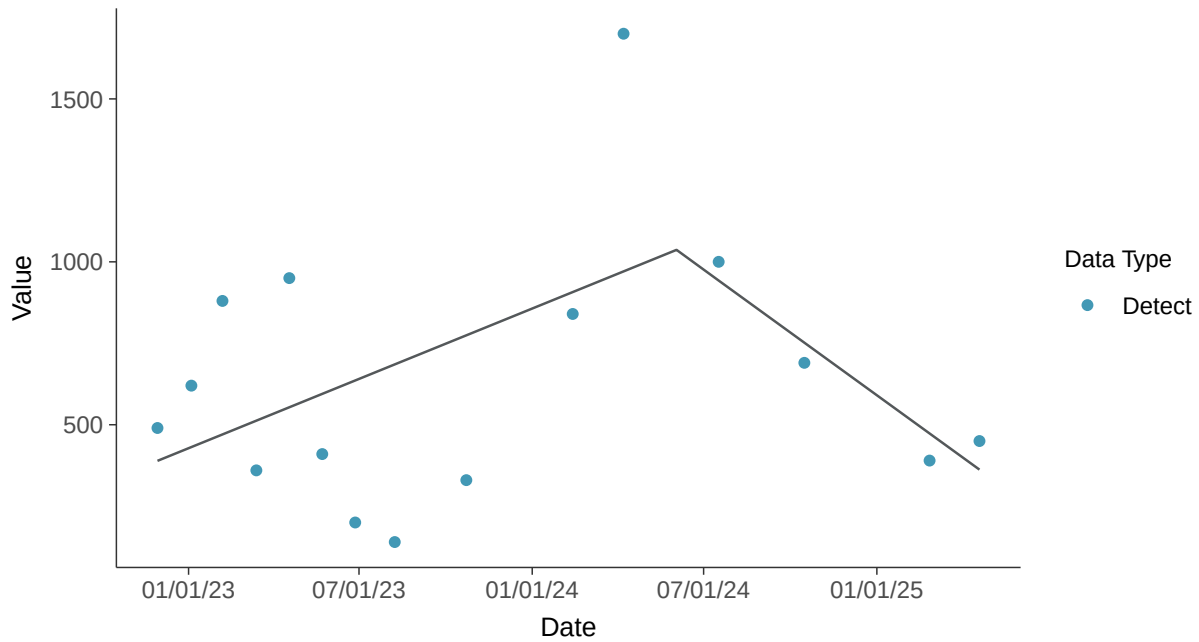
Trend Regression: Lognormal MLE

Sulfate (as SO₄), MW-10 (mg/L)



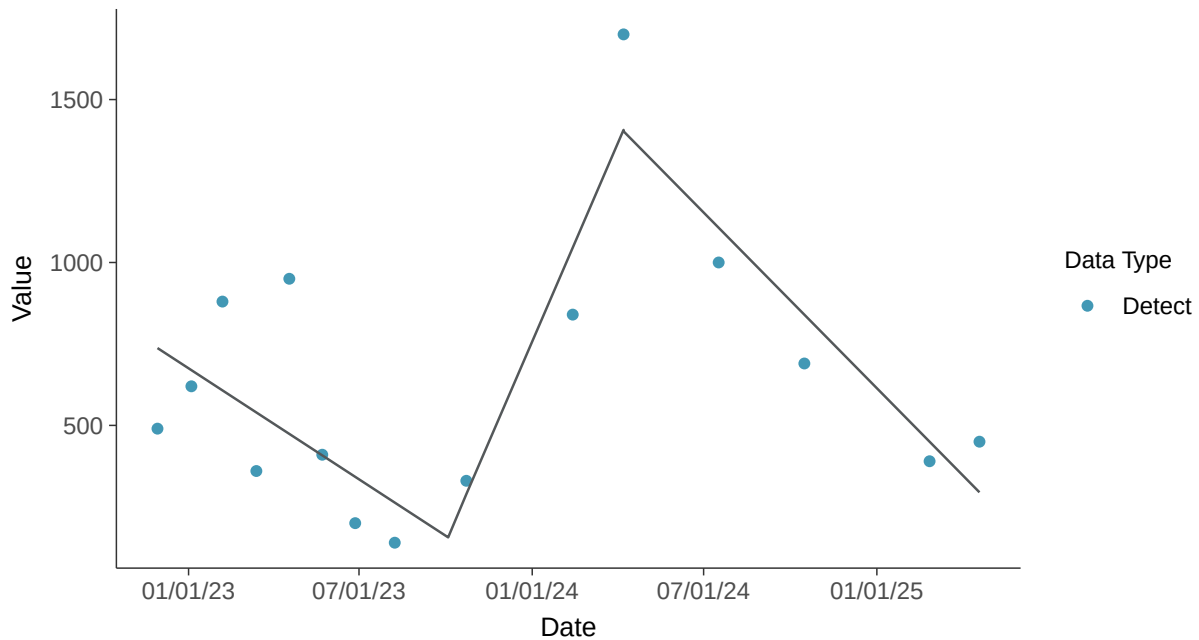
Trend Regression: Piecewise Linear-Linear

Sulfate (as SO₄), MW-10 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Sulfate (as SO₄), MW-10 (mg/L)

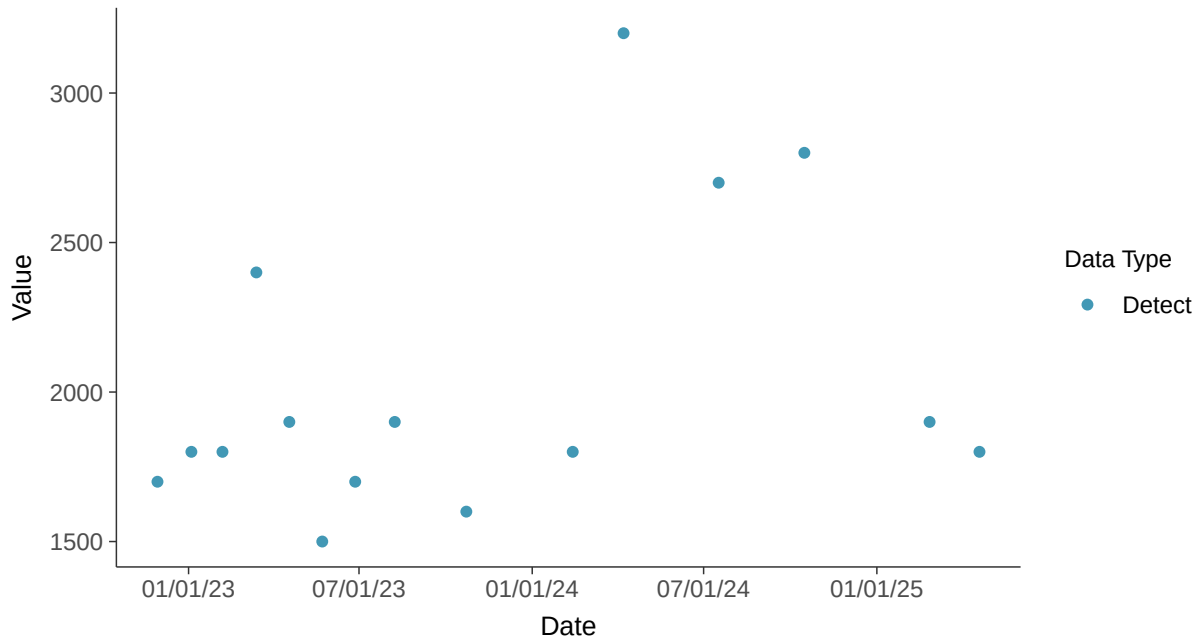


Appendix III: Total Dissolved Solids, MW-10

ID: 20_3_3_126

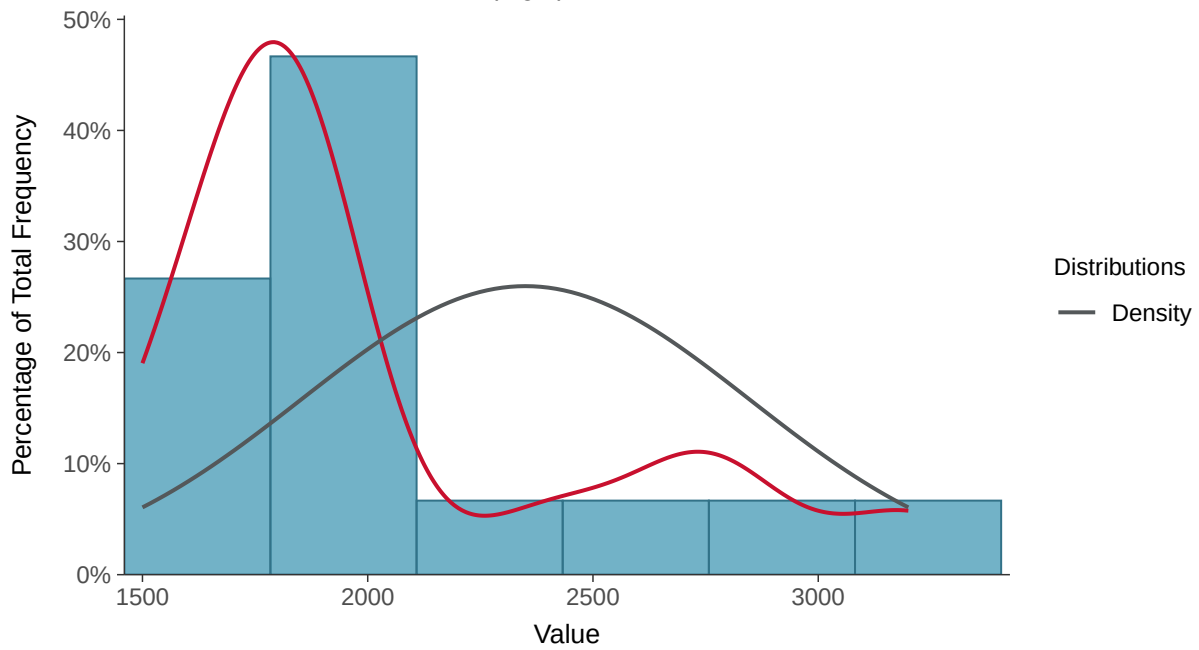
Scatter Plot

Total Dissolved Solids, MW-10 (mg/L)



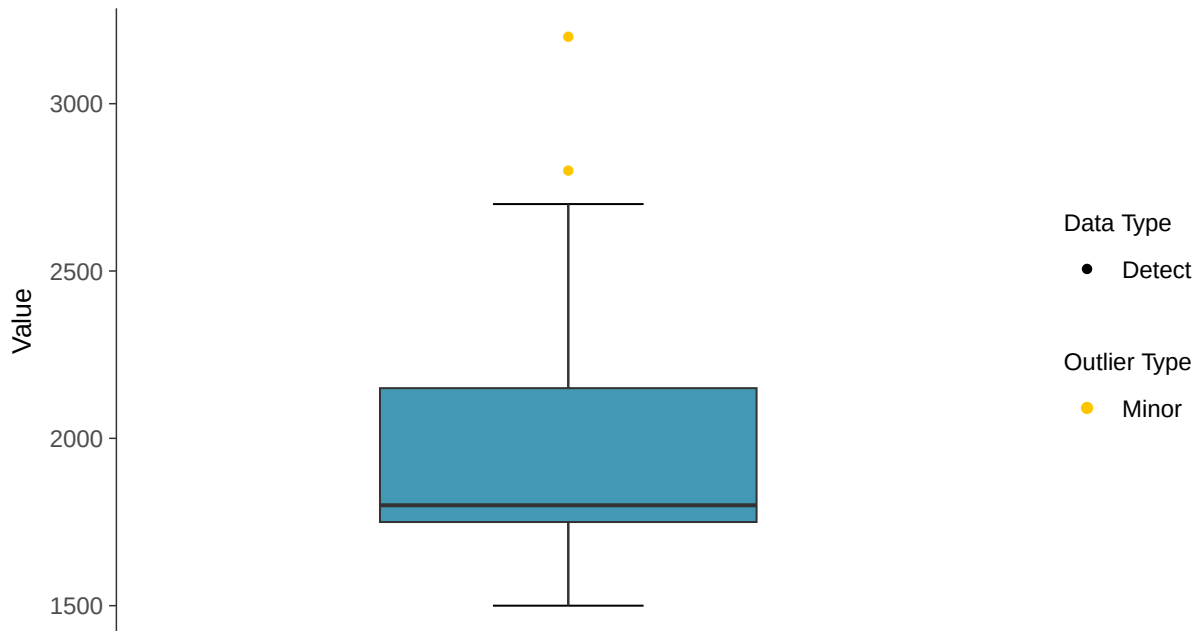
Histogram

Total Dissolved Solids, MW-10 (mg/L)



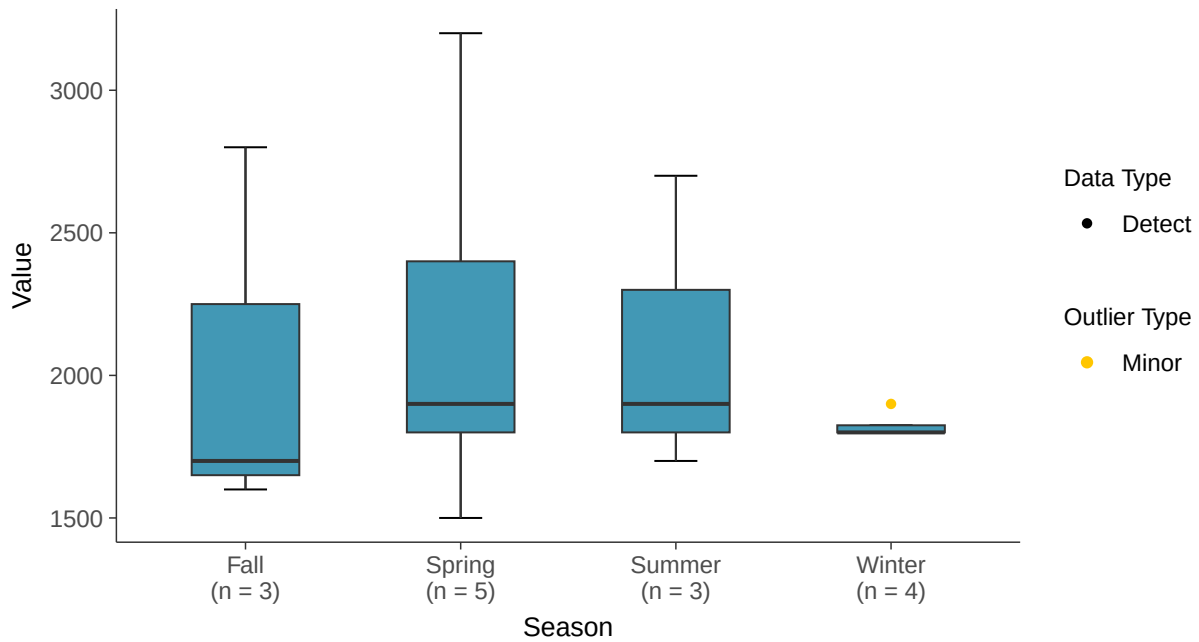
Boxplot

Total Dissolved Solids, MW-10 (mg/L)



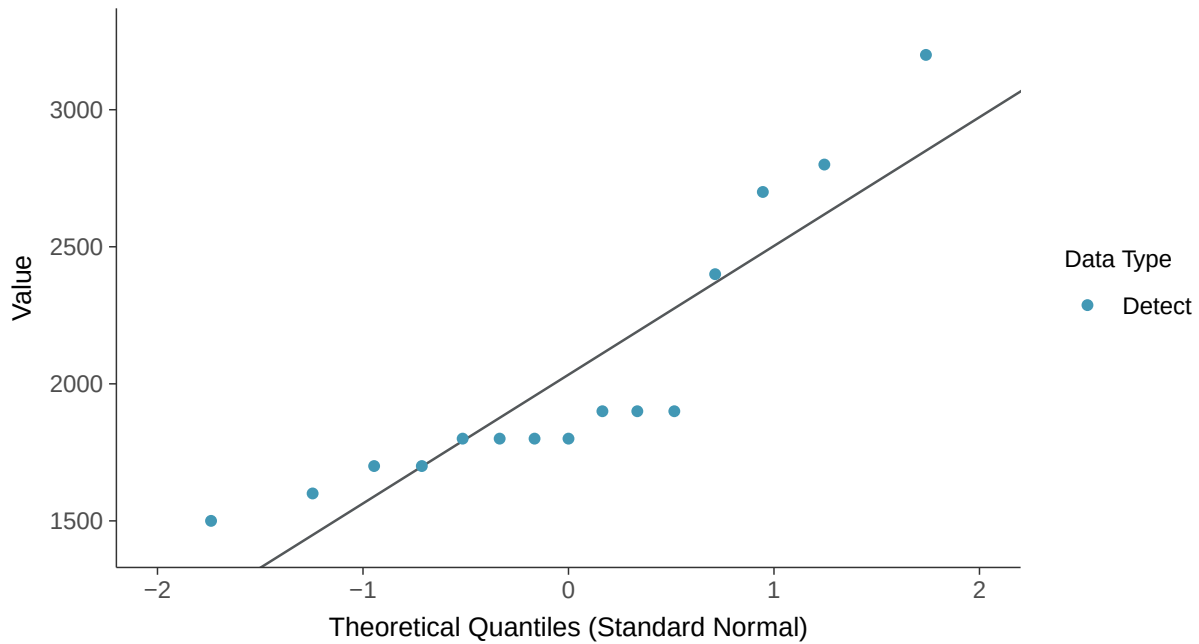
Boxplot by Season

Total Dissolved Solids, MW-10 (mg/L)



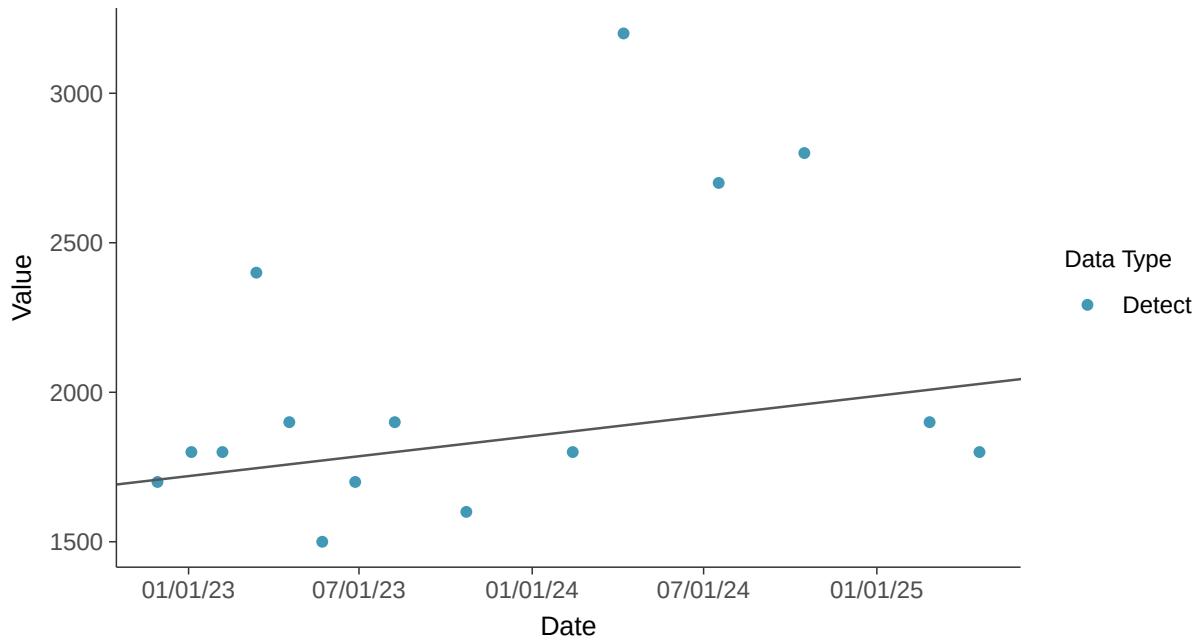
Normal Q-Q plot

Total Dissolved Solids, MW-10 (mg/L)



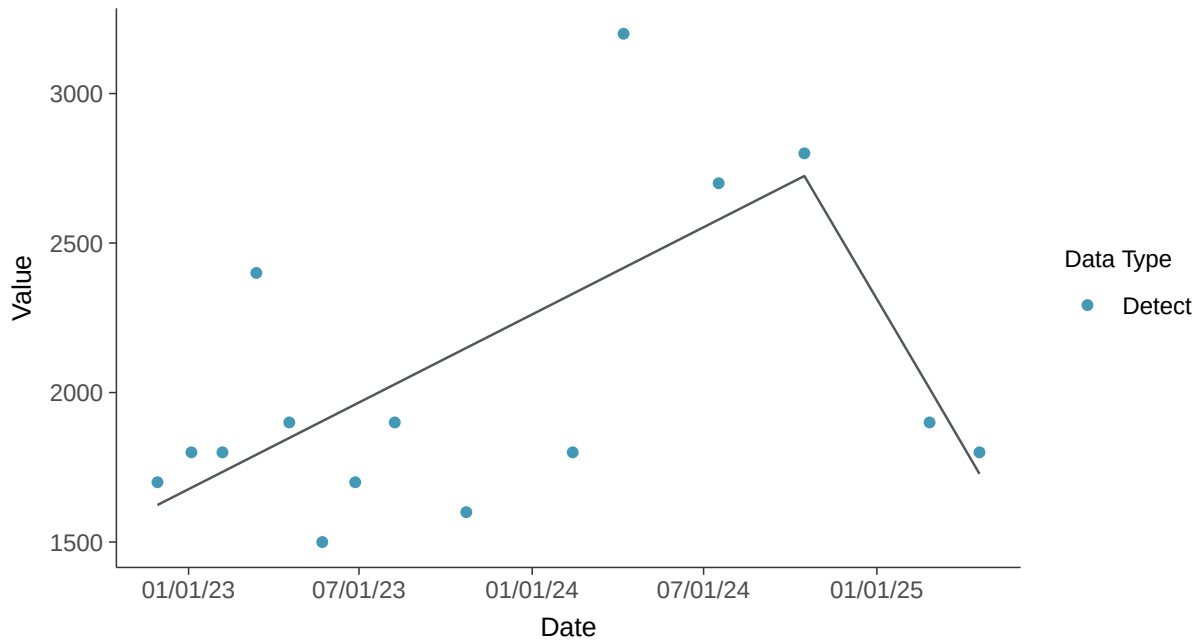
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Total Dissolved Solids, MW-10 (mg/L)



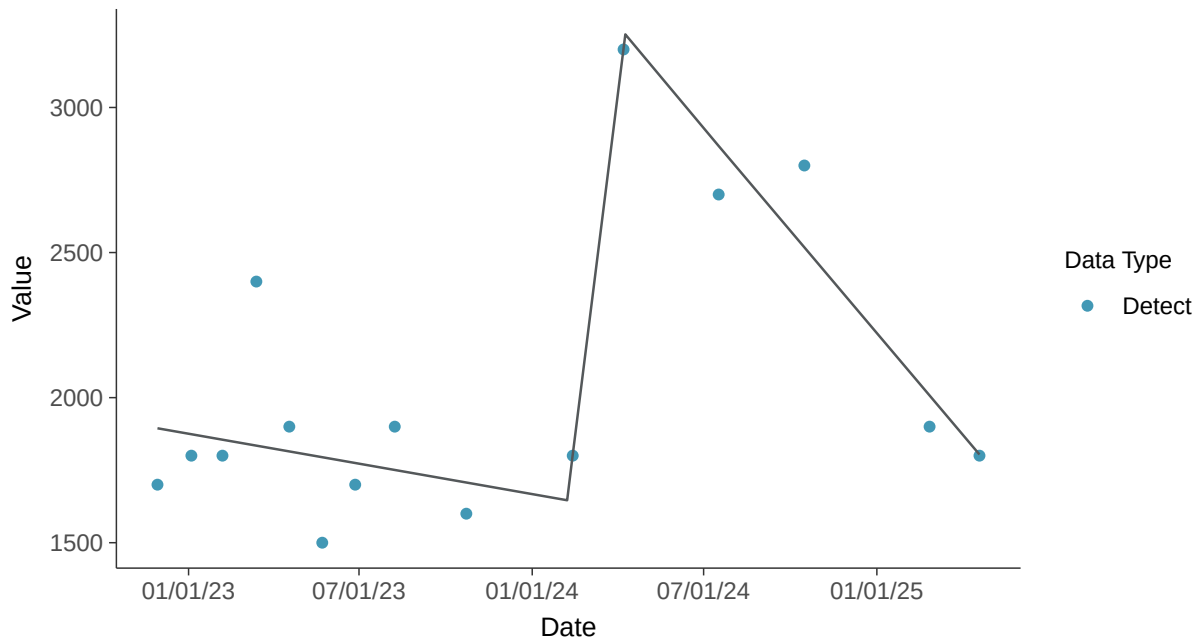
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-10 (mg/L)



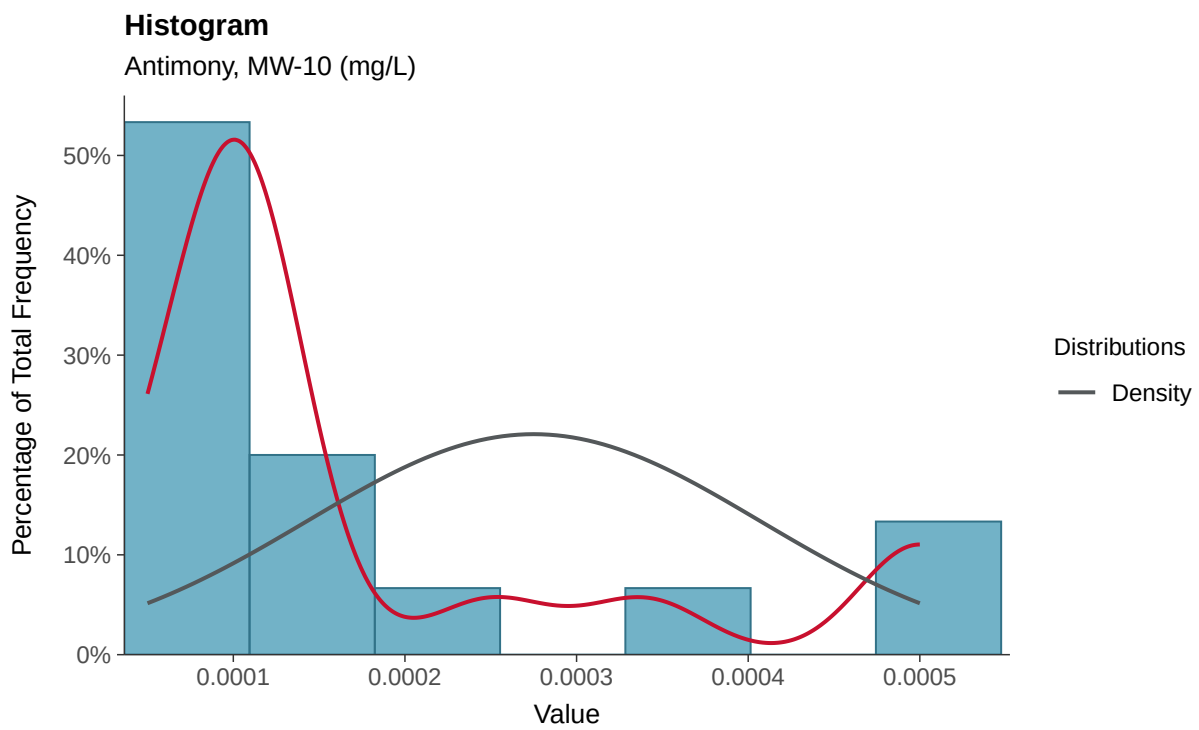
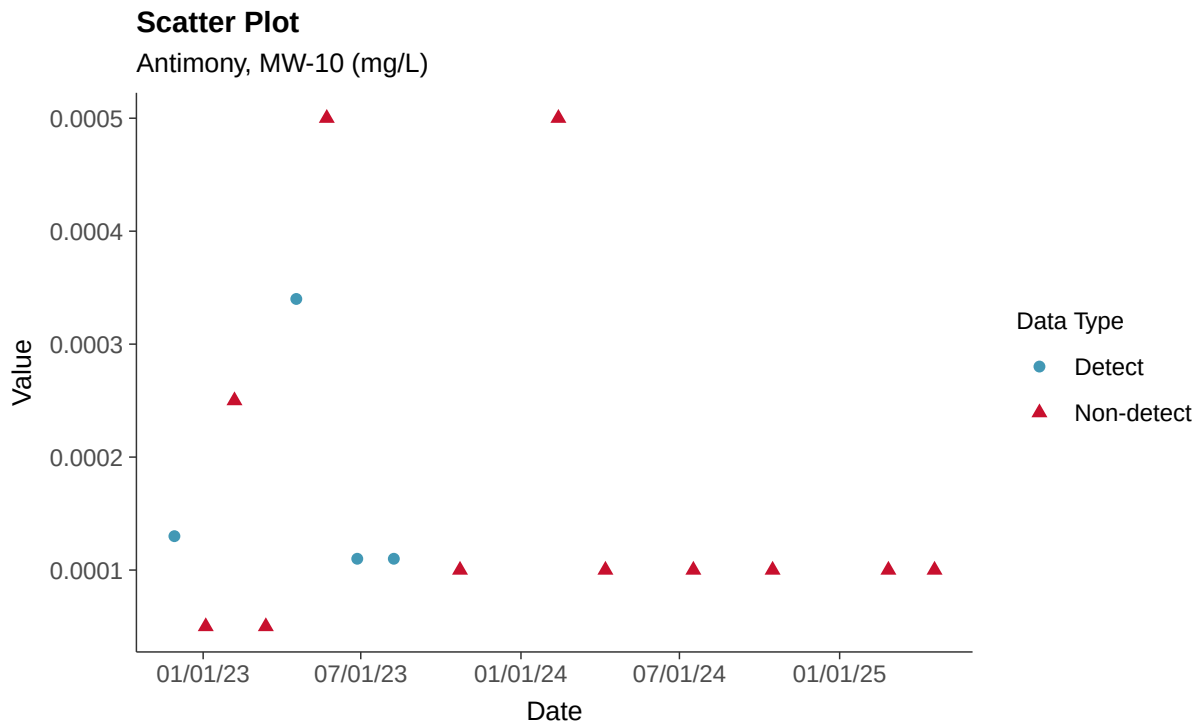
Trend Regression: Piecewise Linear-Linear-Linear

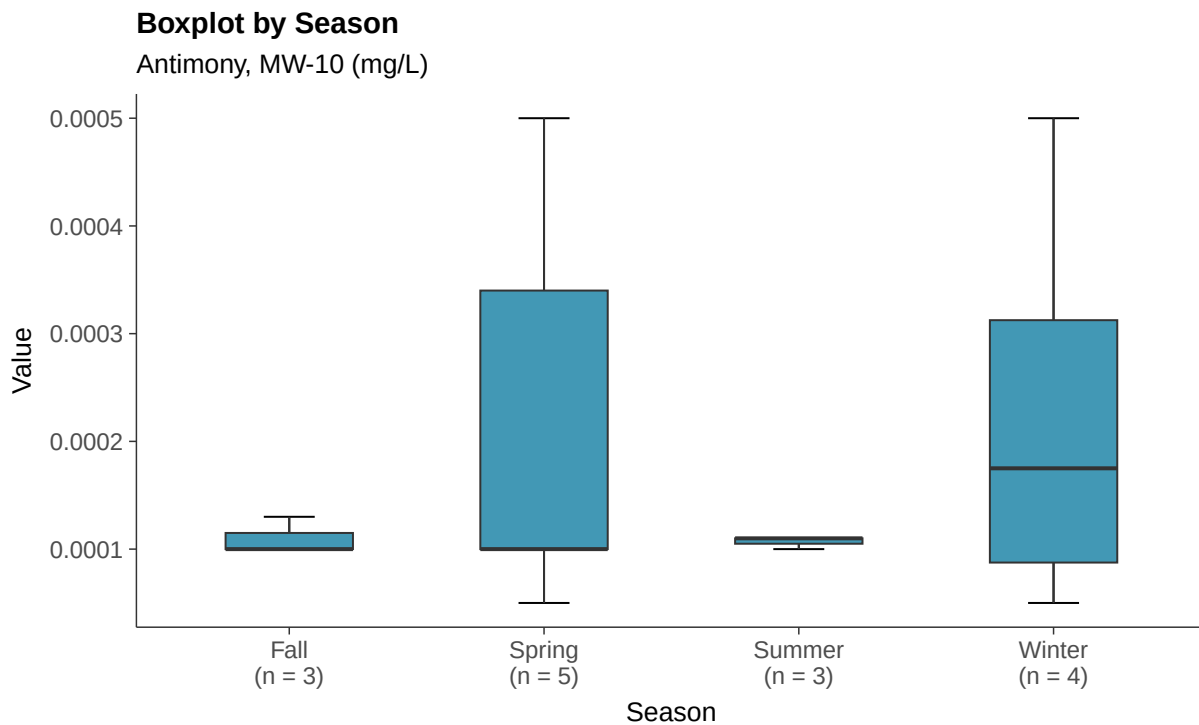
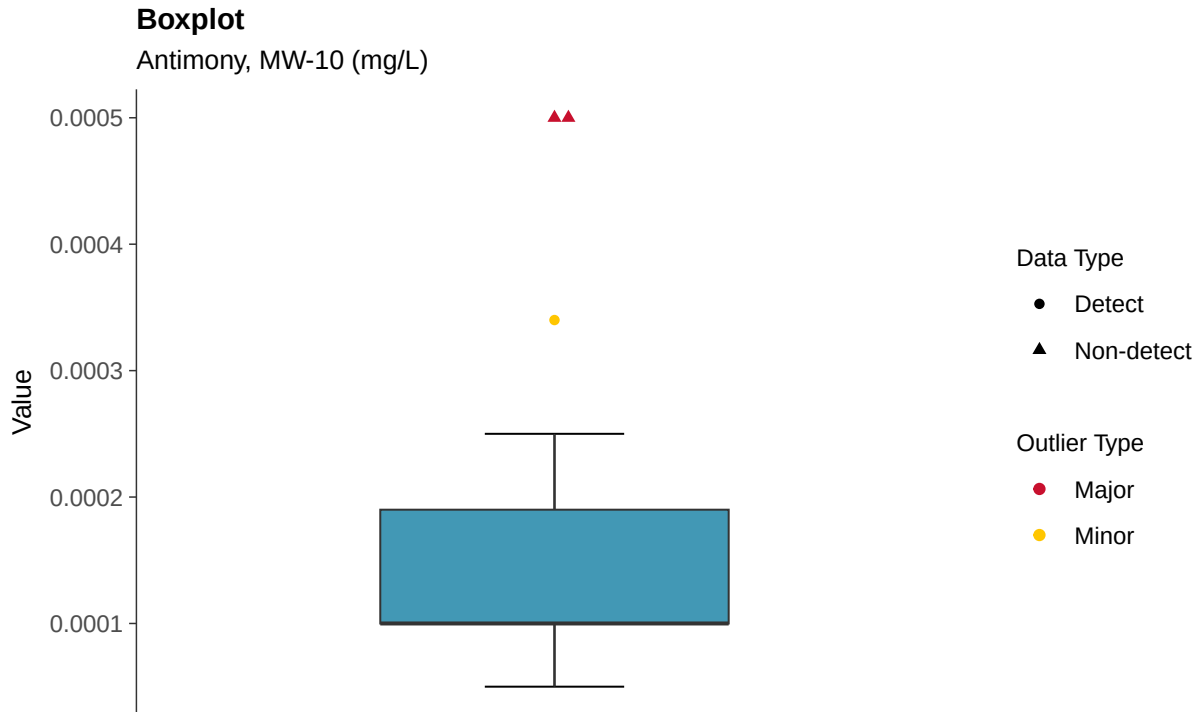
Total Dissolved Solids, MW-10 (mg/L)



Appendix IV: Antimony, MW-10

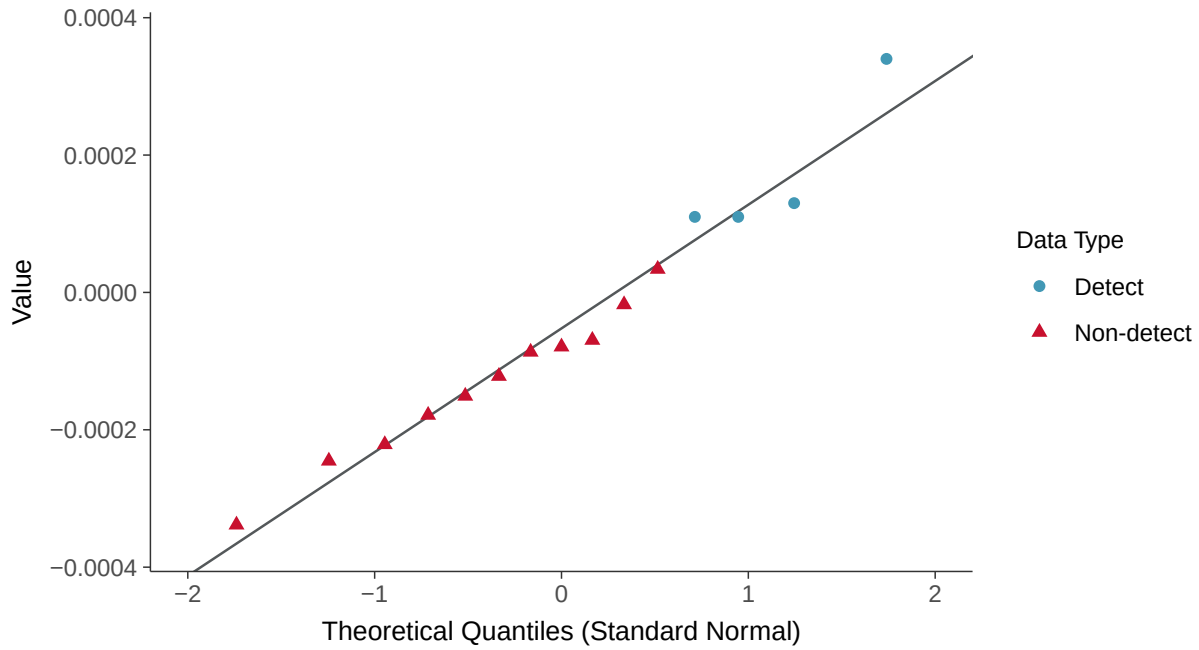
ID: 20_3_4_101





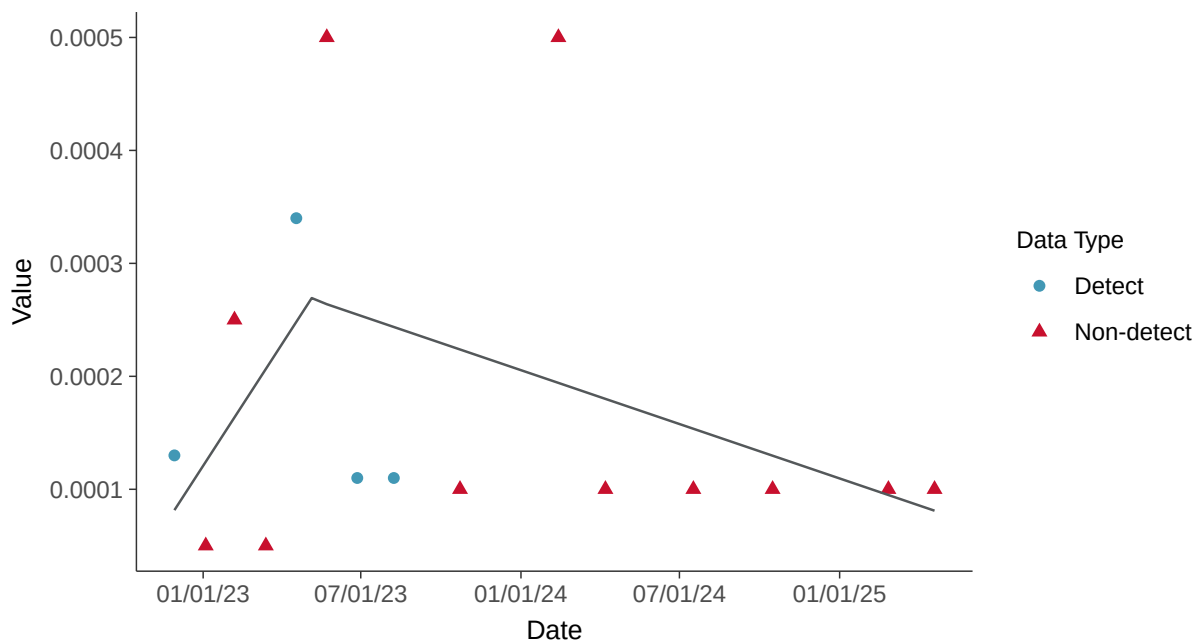
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-10 (mg/L)



Trend Regression: Piecewise Linear-Linear

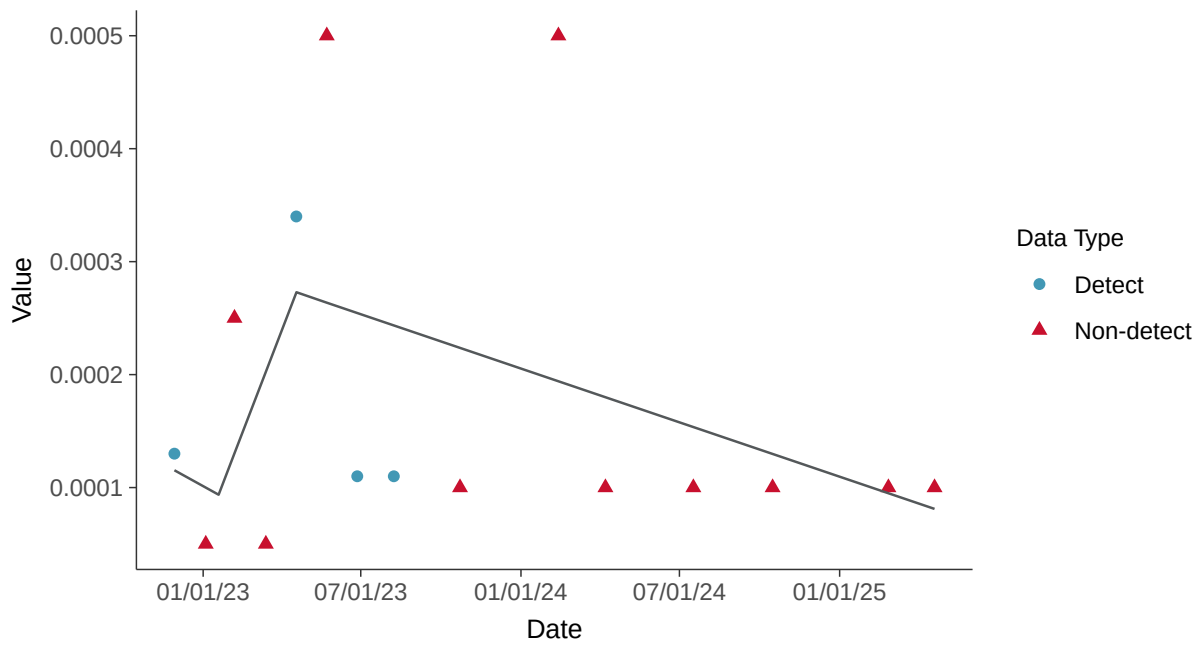
Antimony, MW-10 (mg/L)





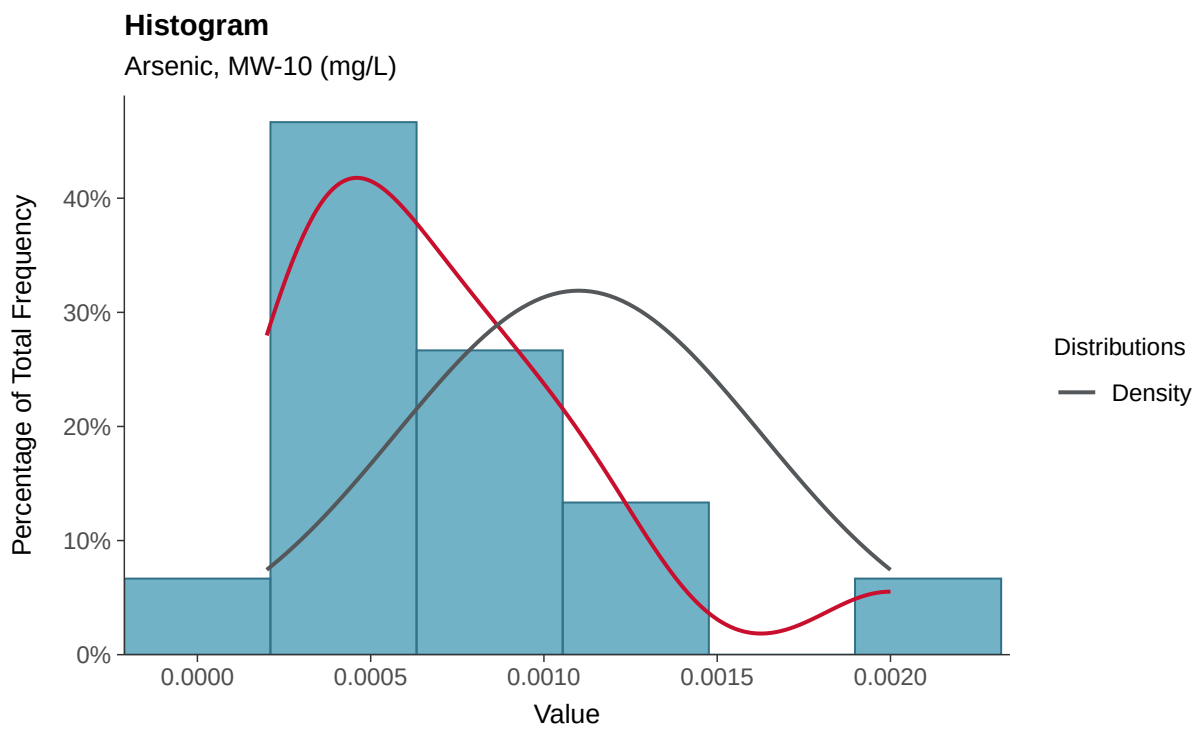
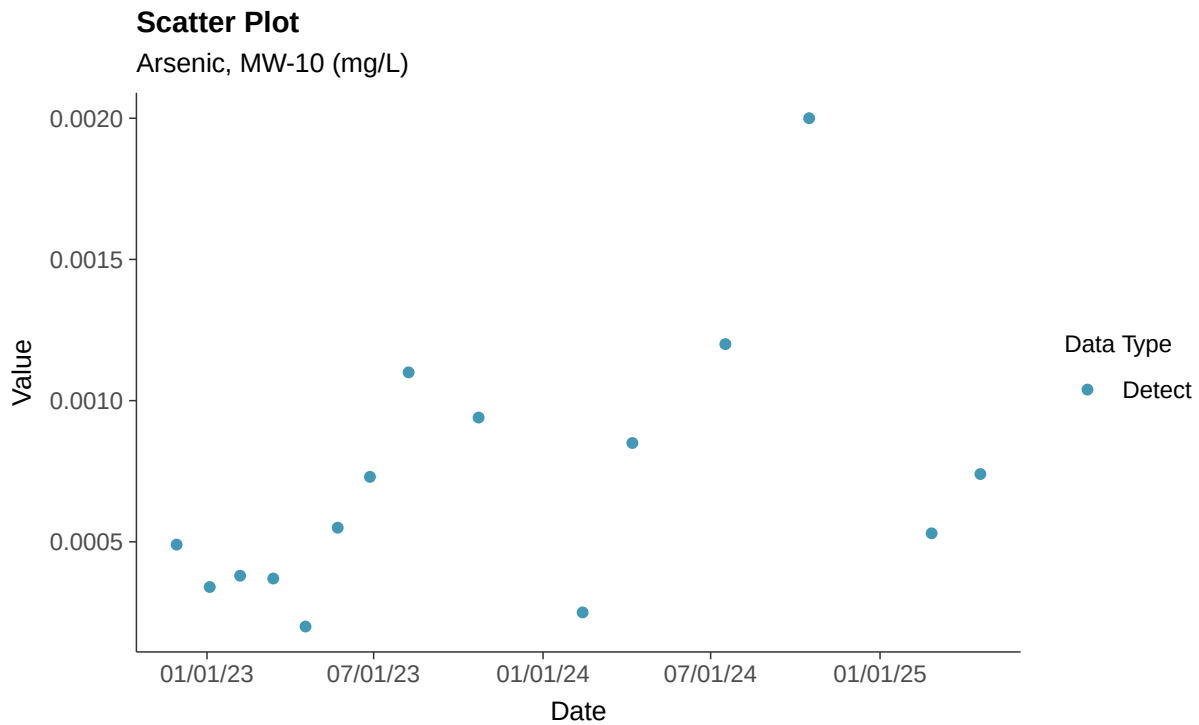
Trend Regression: Piecewise Linear-Linear-Linear

Antimony, MW-10 (mg/L)



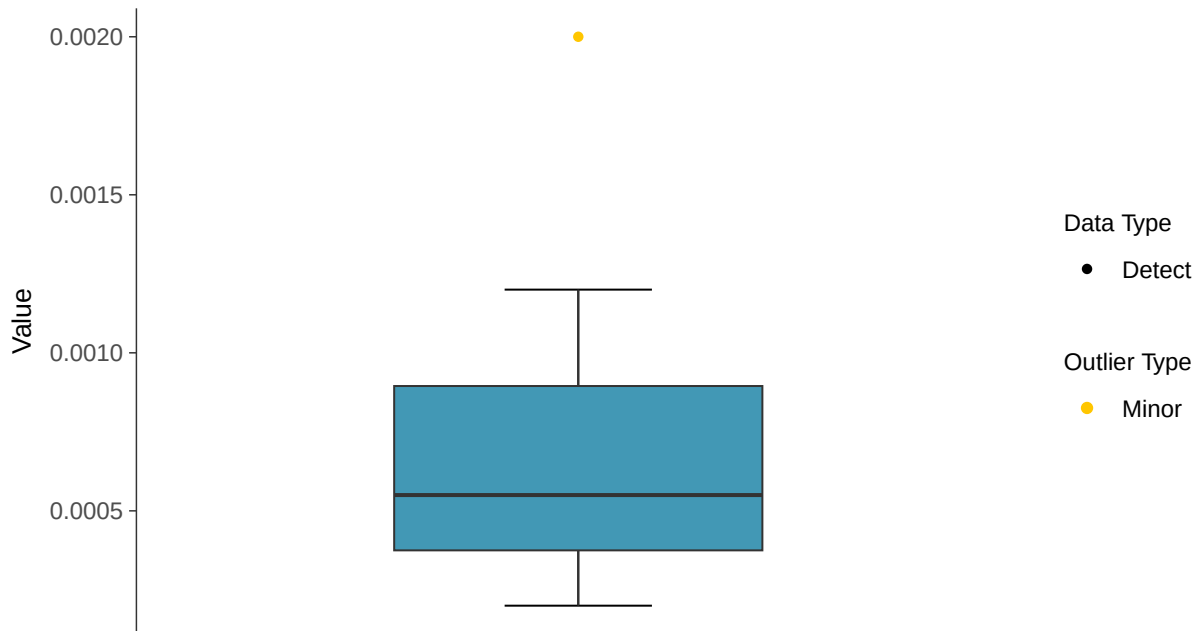
Appendix IV: Arsenic, MW-10

ID: 20_3_4_102



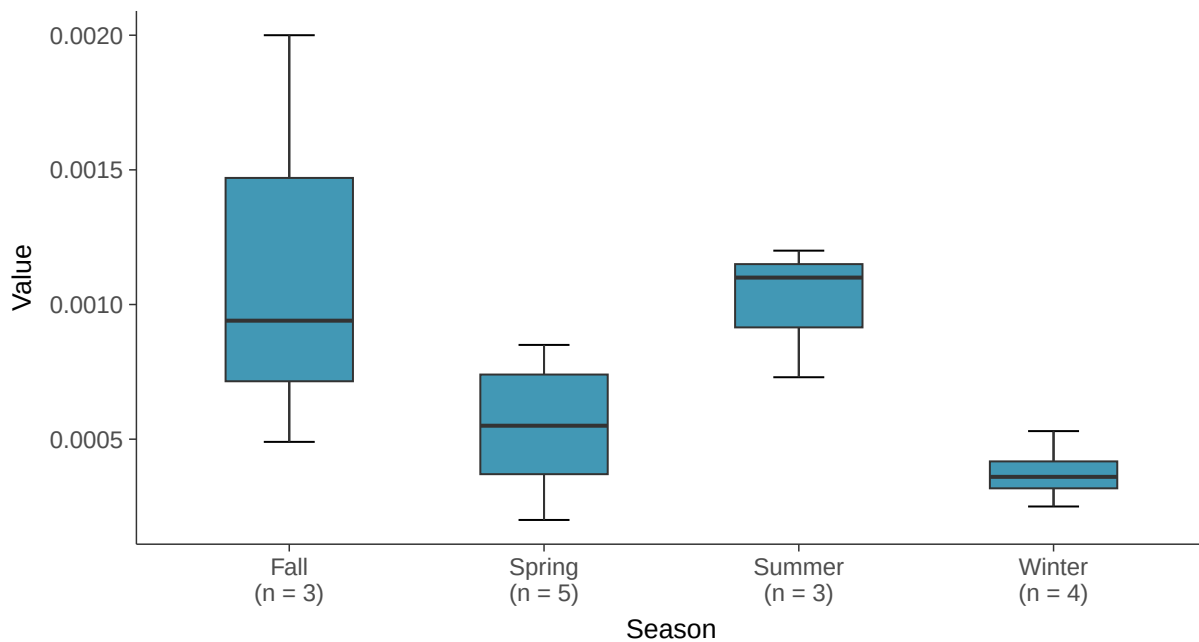
Boxplot

Arsenic, MW-10 (mg/L)



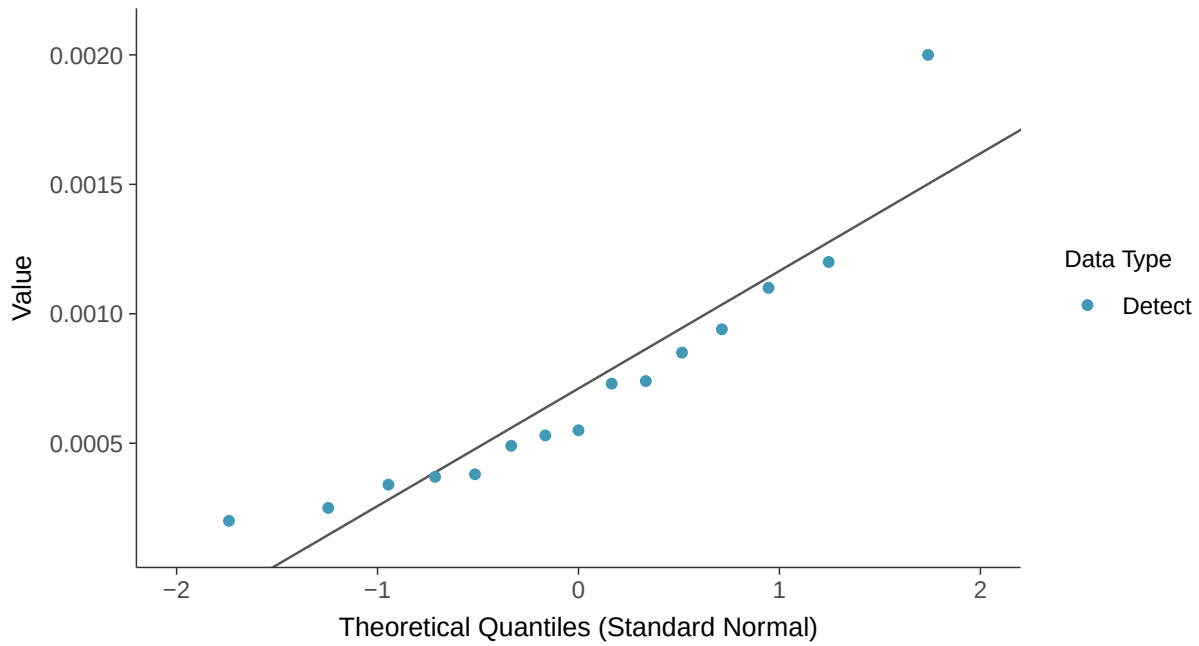
Boxplot by Season

Arsenic, MW-10 (mg/L)



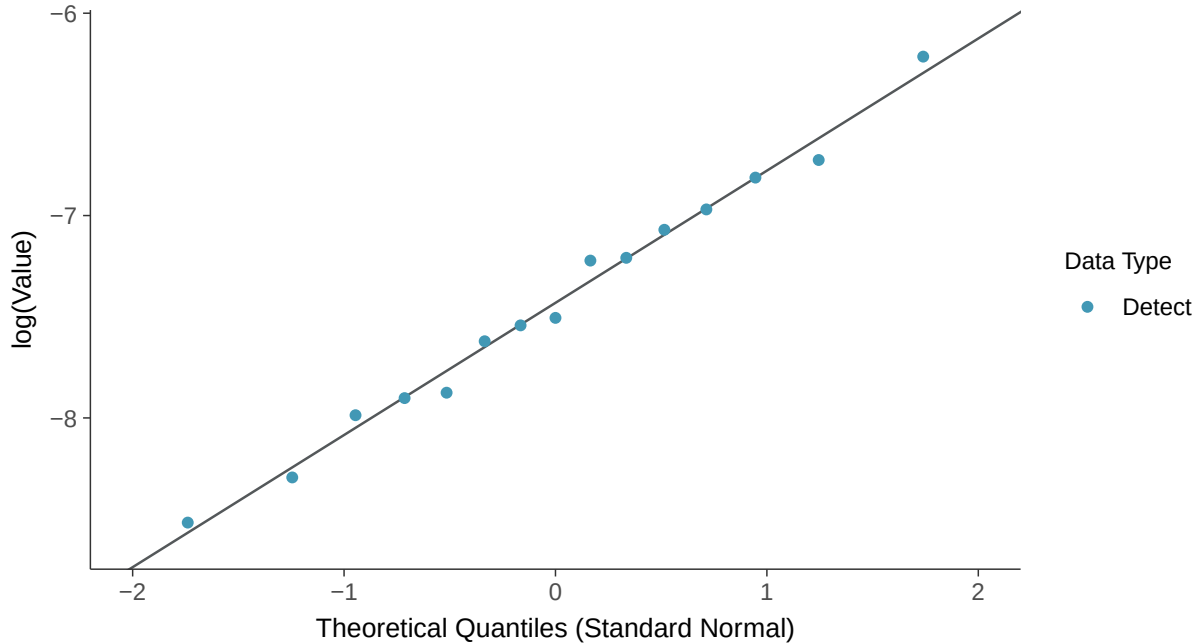
Normal Q-Q plot

Arsenic, MW-10 (mg/L)



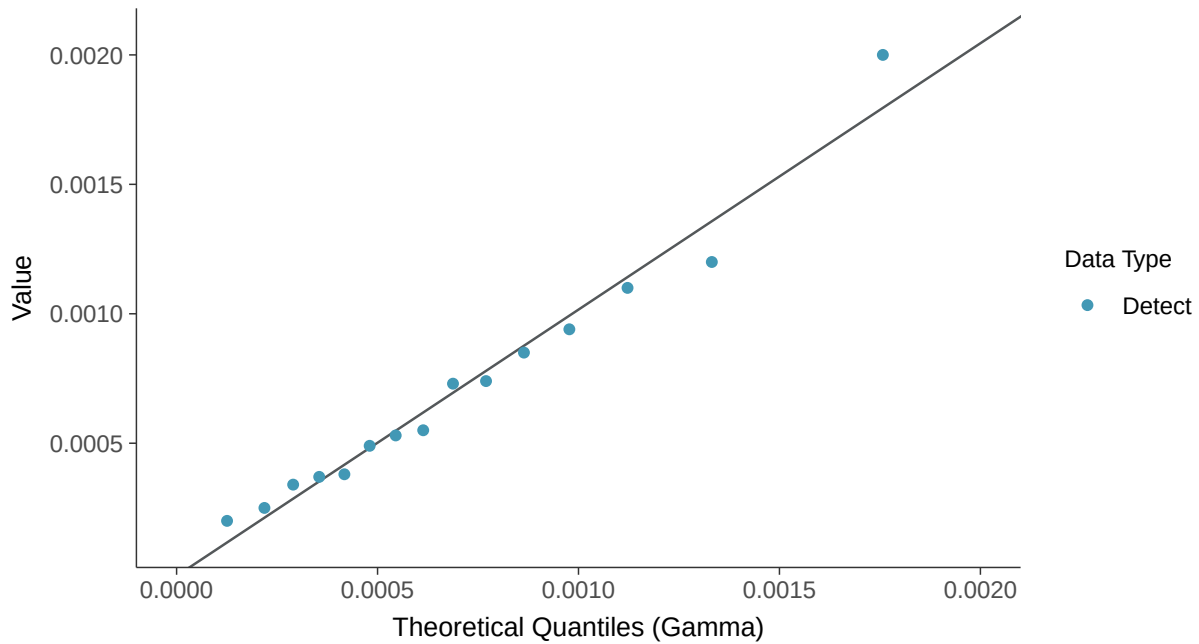
Lognormal Q-Q plot

Arsenic, MW-10 (mg/L)



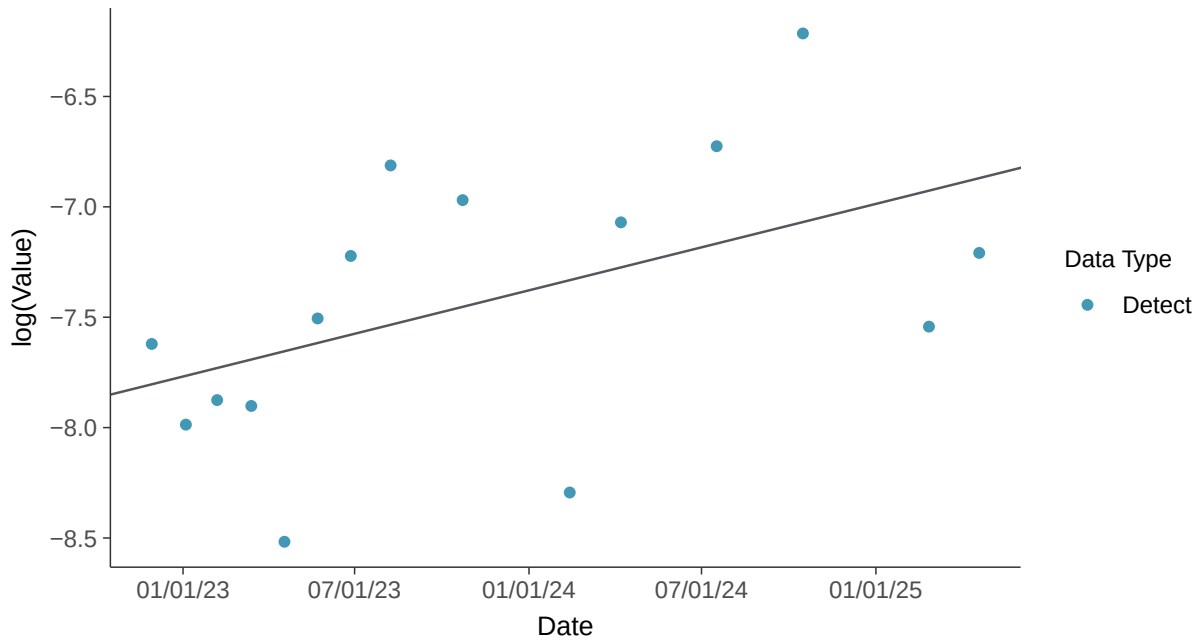
Gamma Q-Q plot

Arsenic, MW-10 (mg/L)



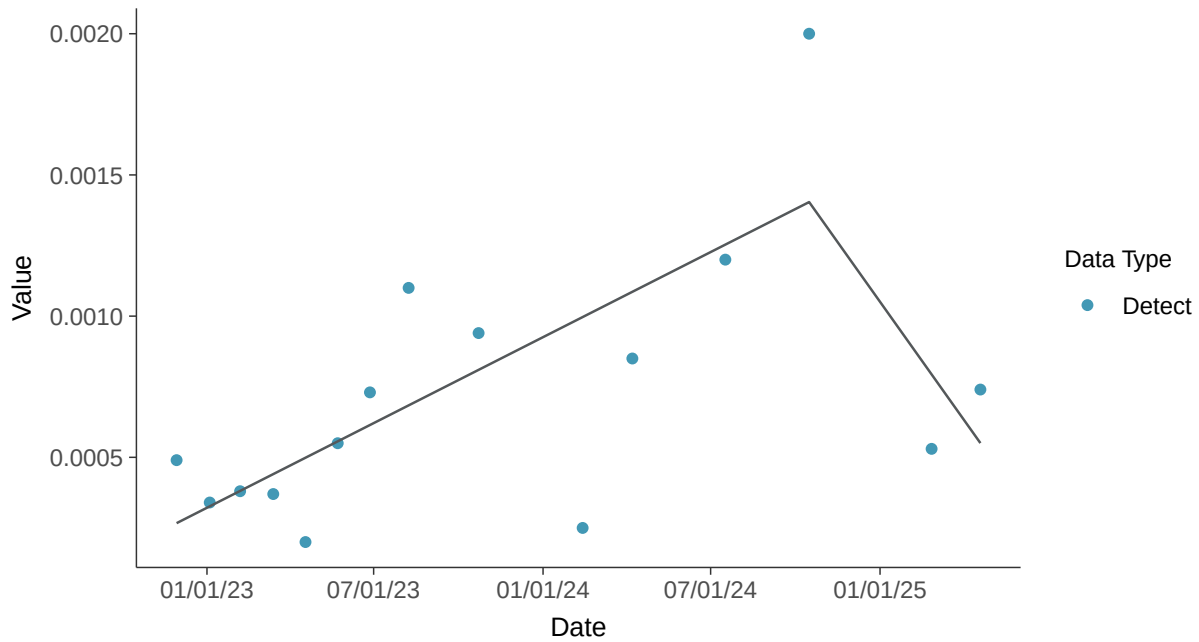
Trend Regression: Lognormal MLE

Arsenic, MW-10 (mg/L)



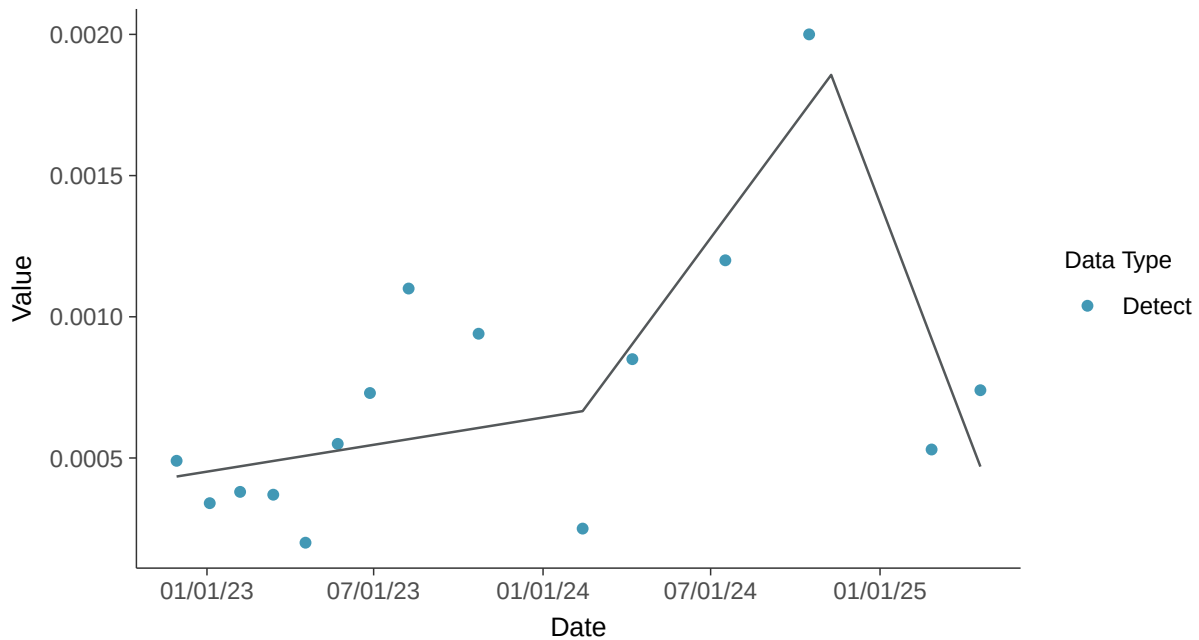
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-10 (mg/L)



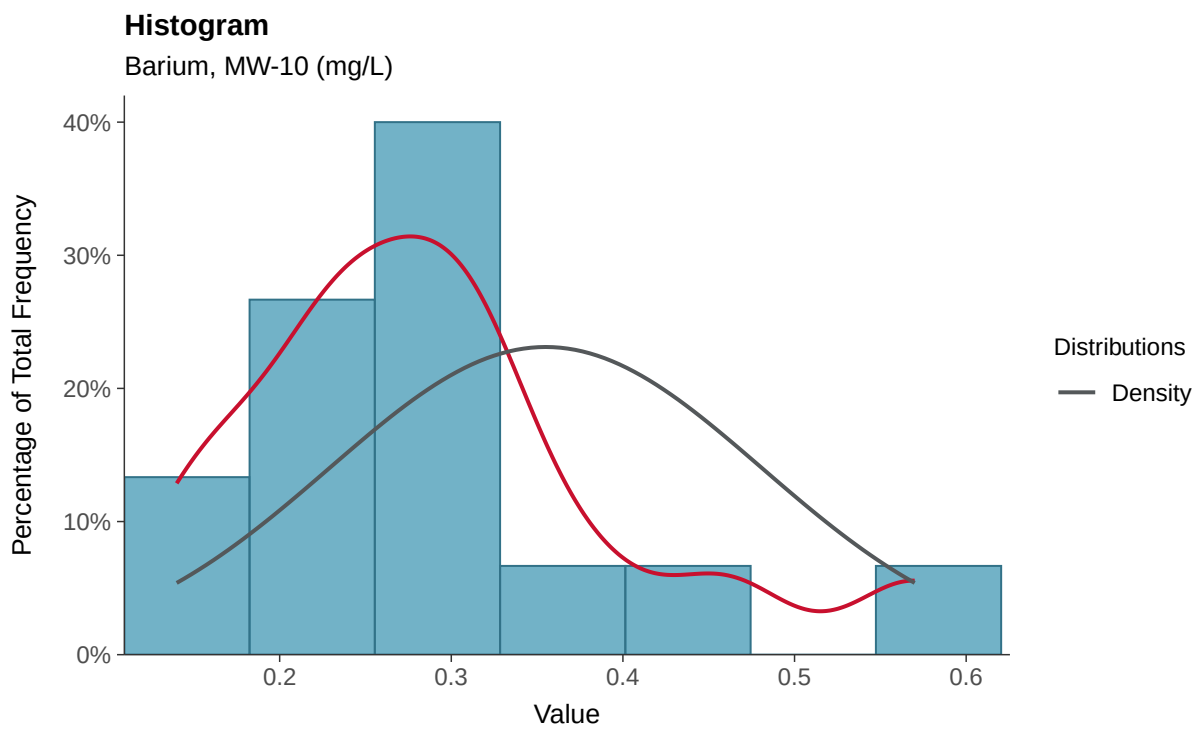
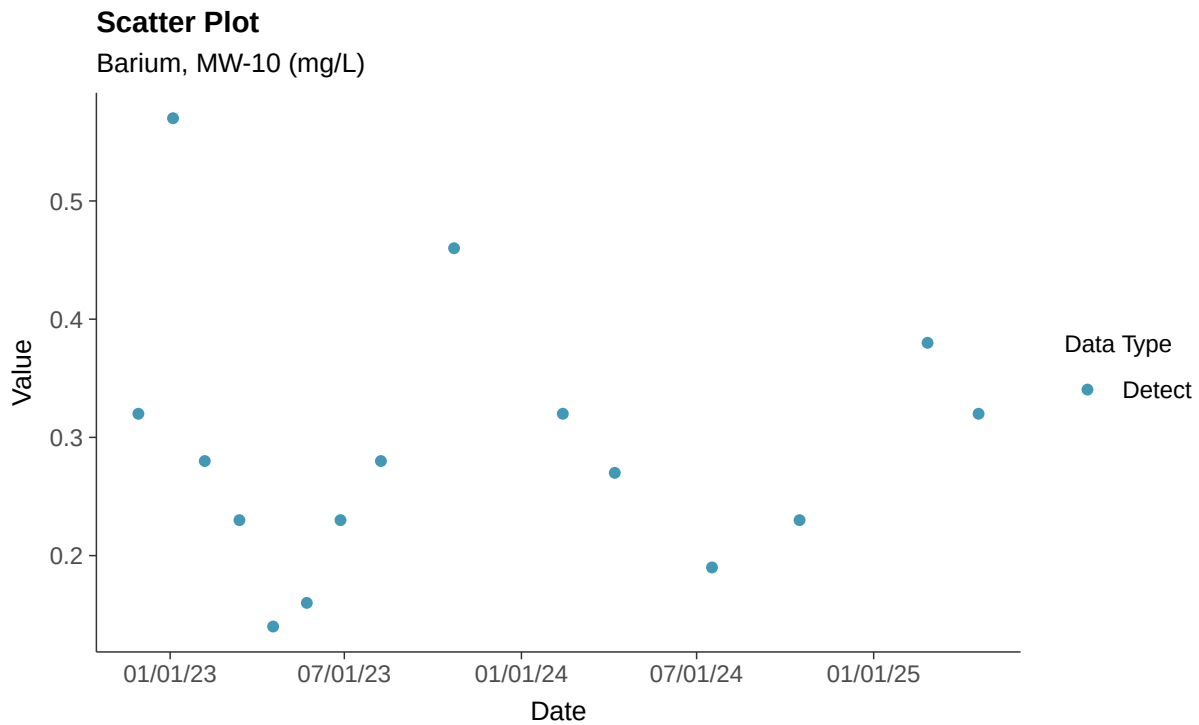
Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-10 (mg/L)



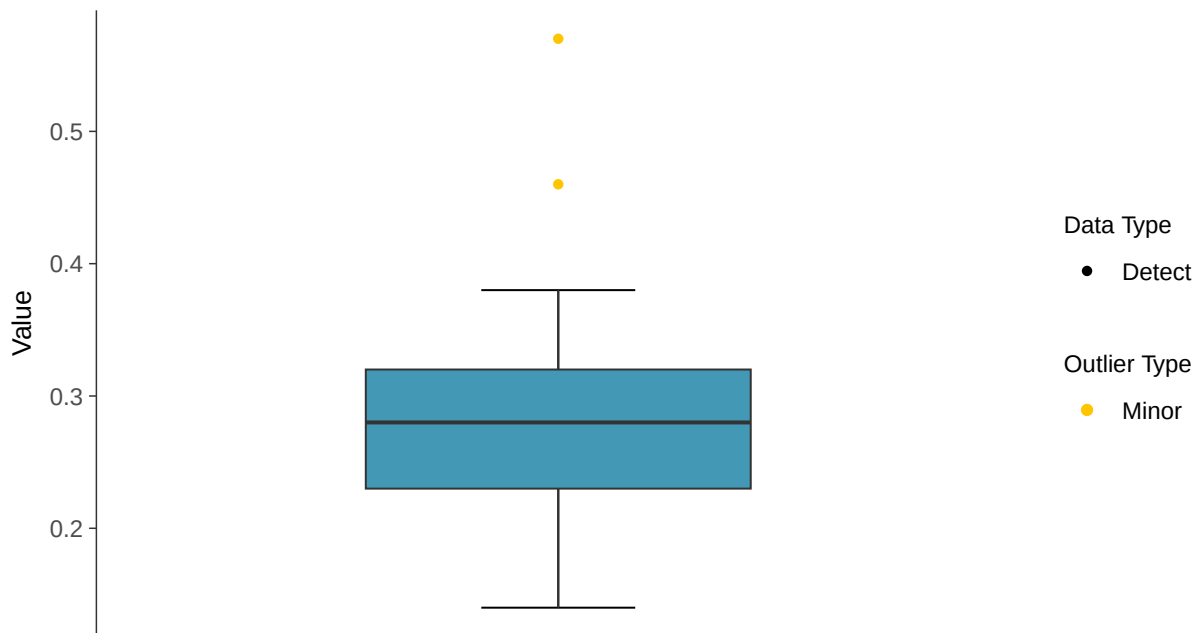
Appendix IV: Barium, MW-10

ID: 20_3_4_103



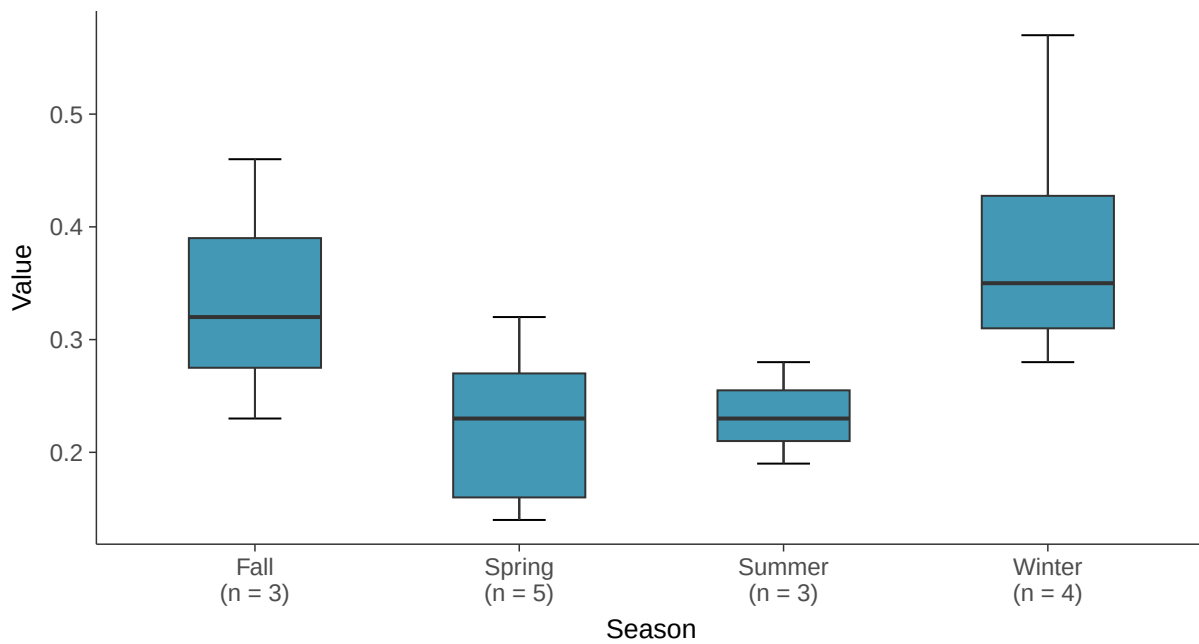
Boxplot

Barium, MW-10 (mg/L)



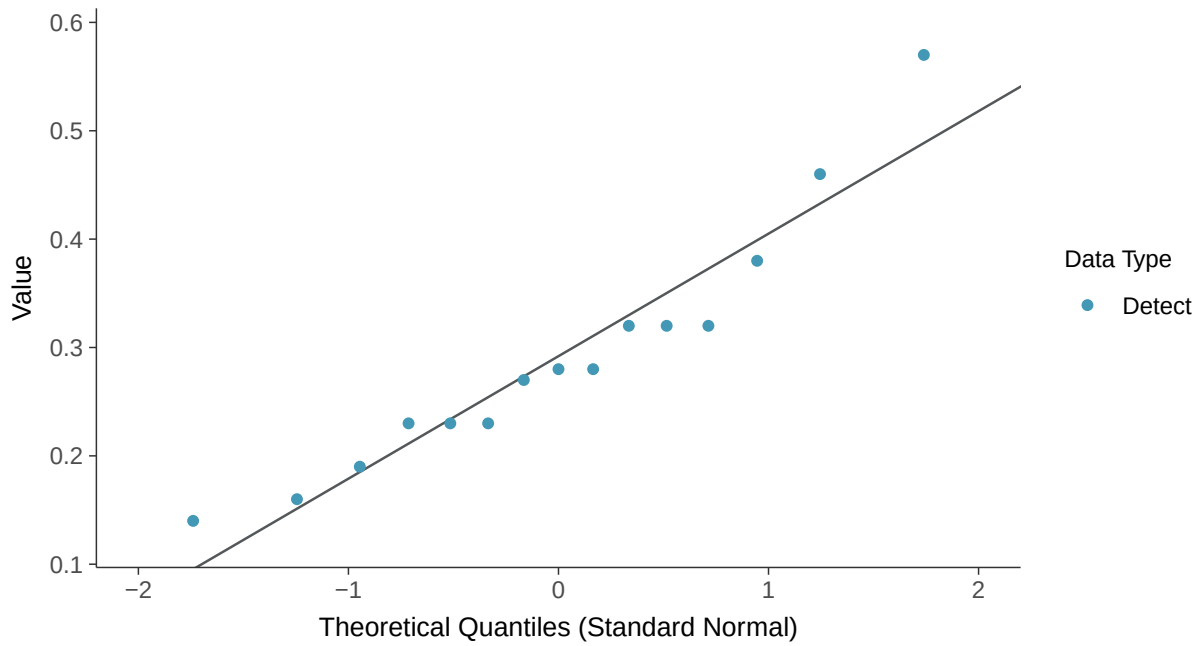
Boxplot by Season

Barium, MW-10 (mg/L)



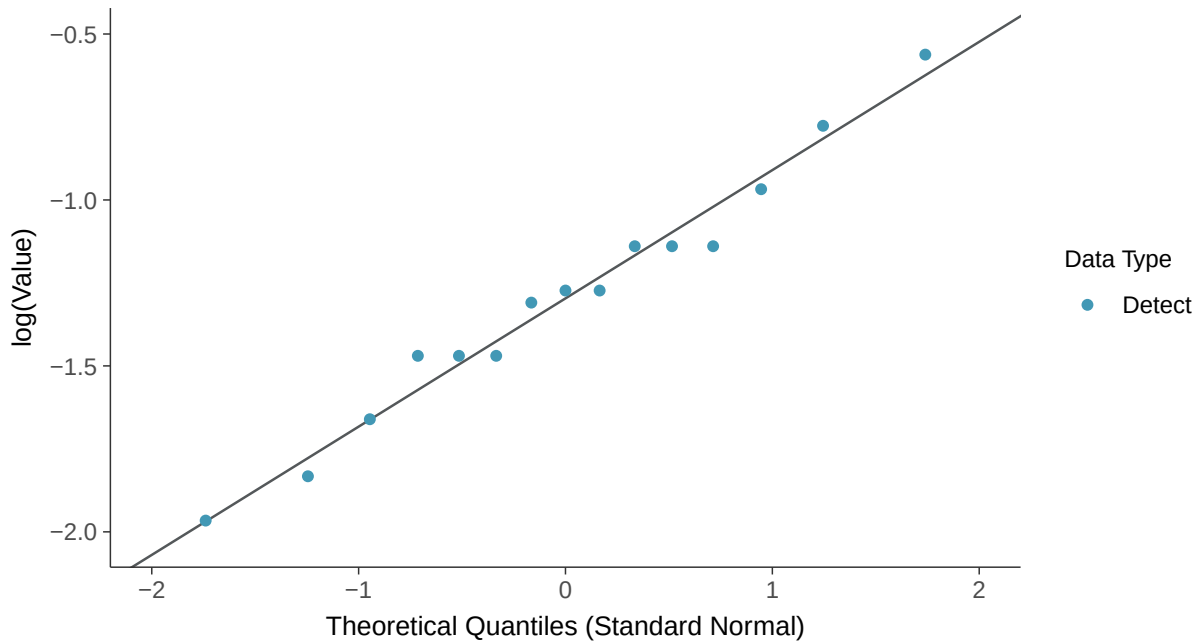
Normal Q-Q plot

Barium, MW-10 (mg/L)



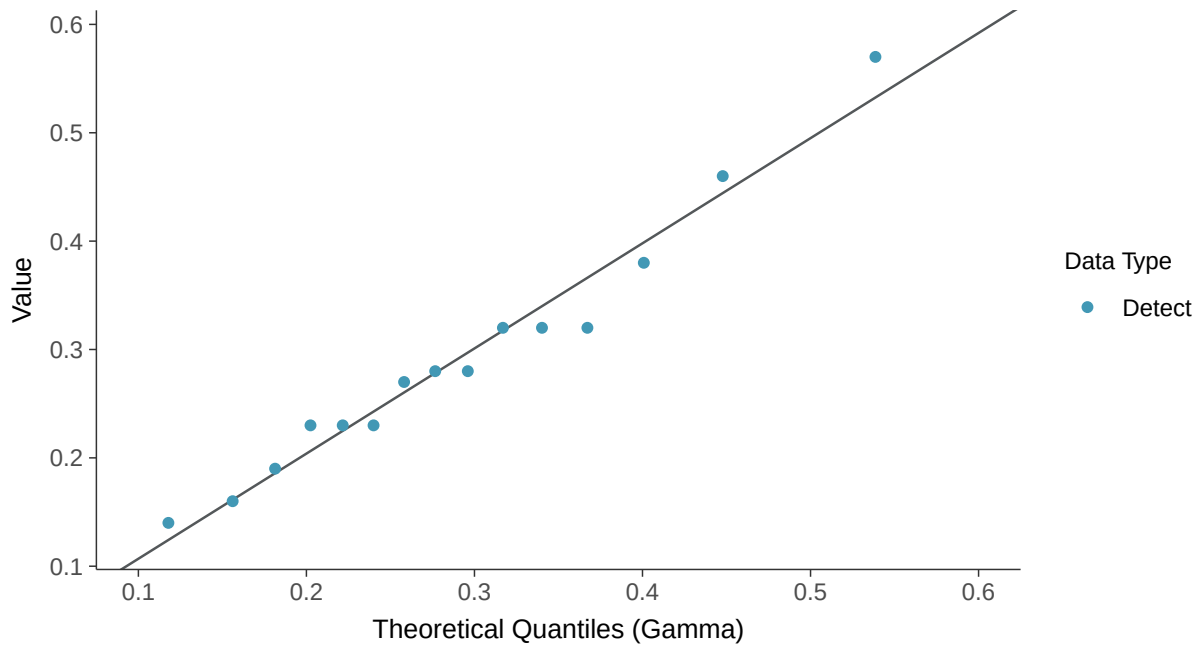
Lognormal Q-Q plot

Barium, MW-10 (mg/L)



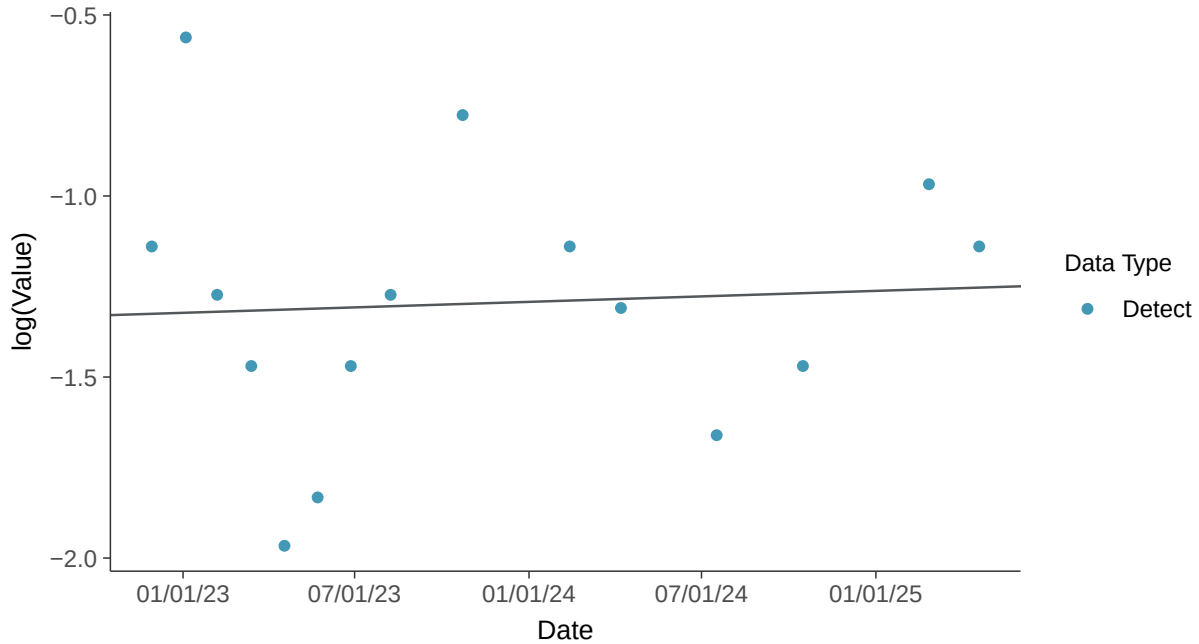
Gamma Q-Q plot

Barium, MW-10 (mg/L)



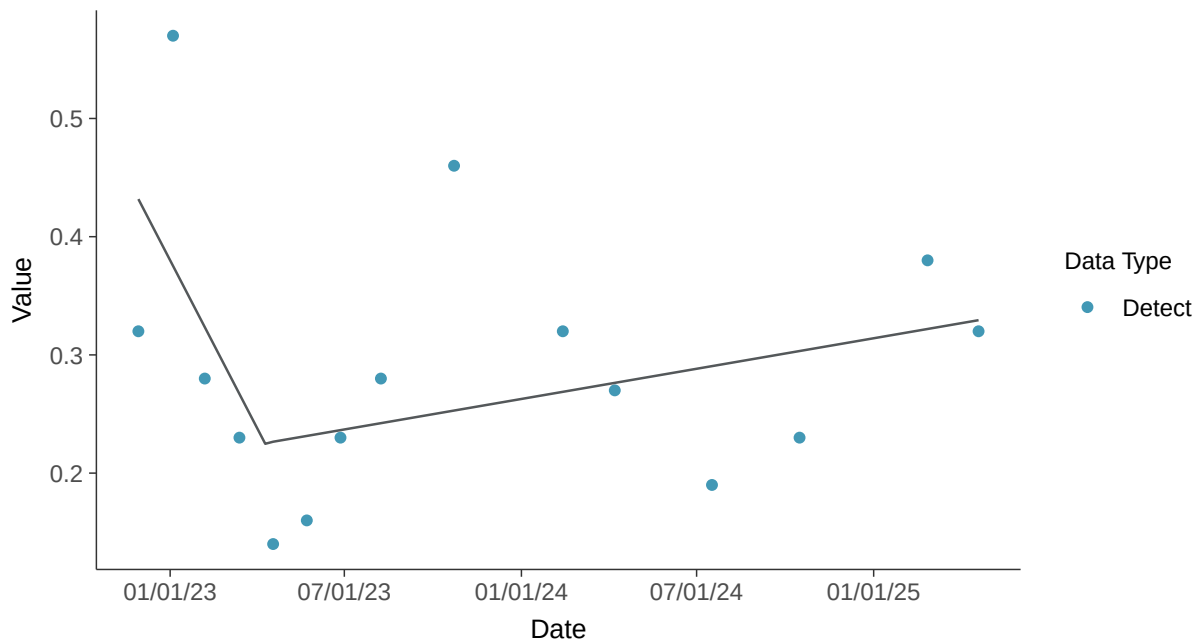
Trend Regression: Lognormal MLE

Barium, MW-10 (mg/L)



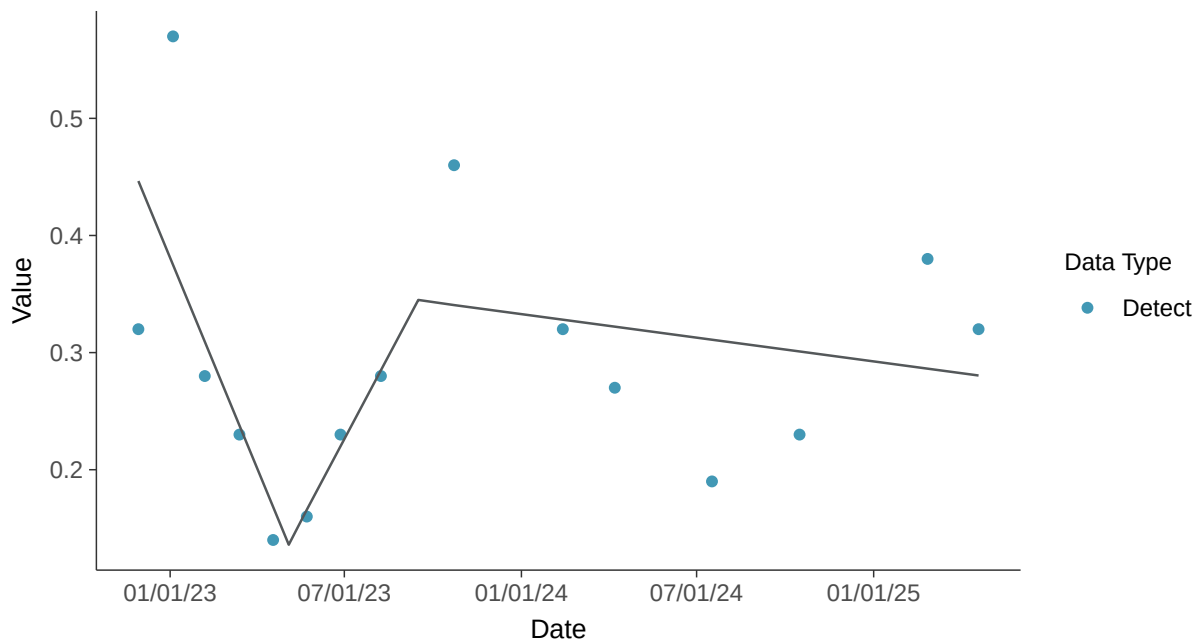
Trend Regression: Piecewise Linear-Linear

Barium, MW-10 (mg/L)



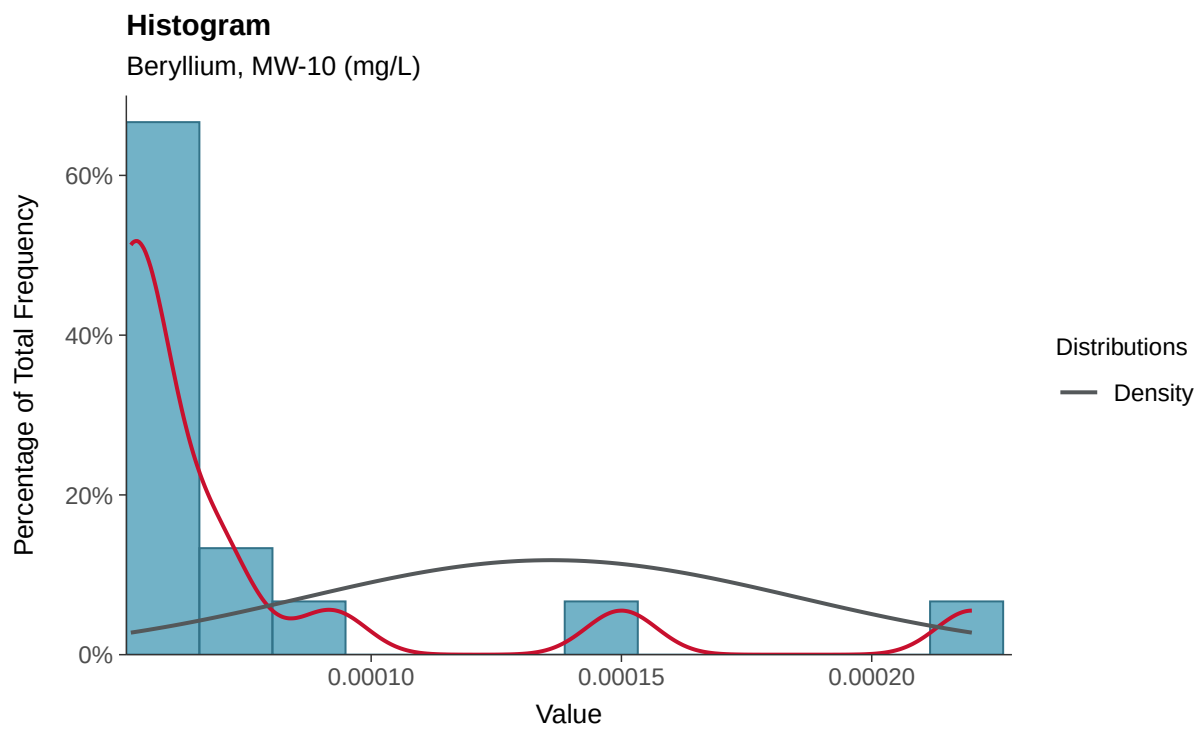
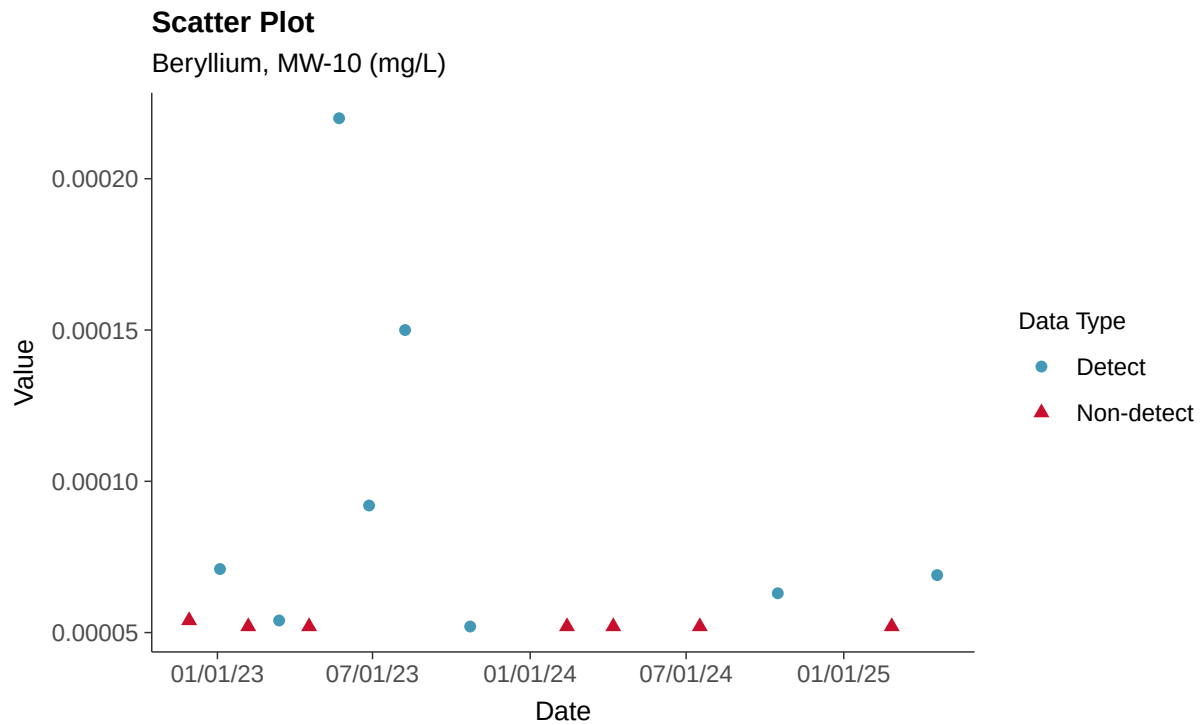
Trend Regression: Piecewise Linear-Linear-Linear

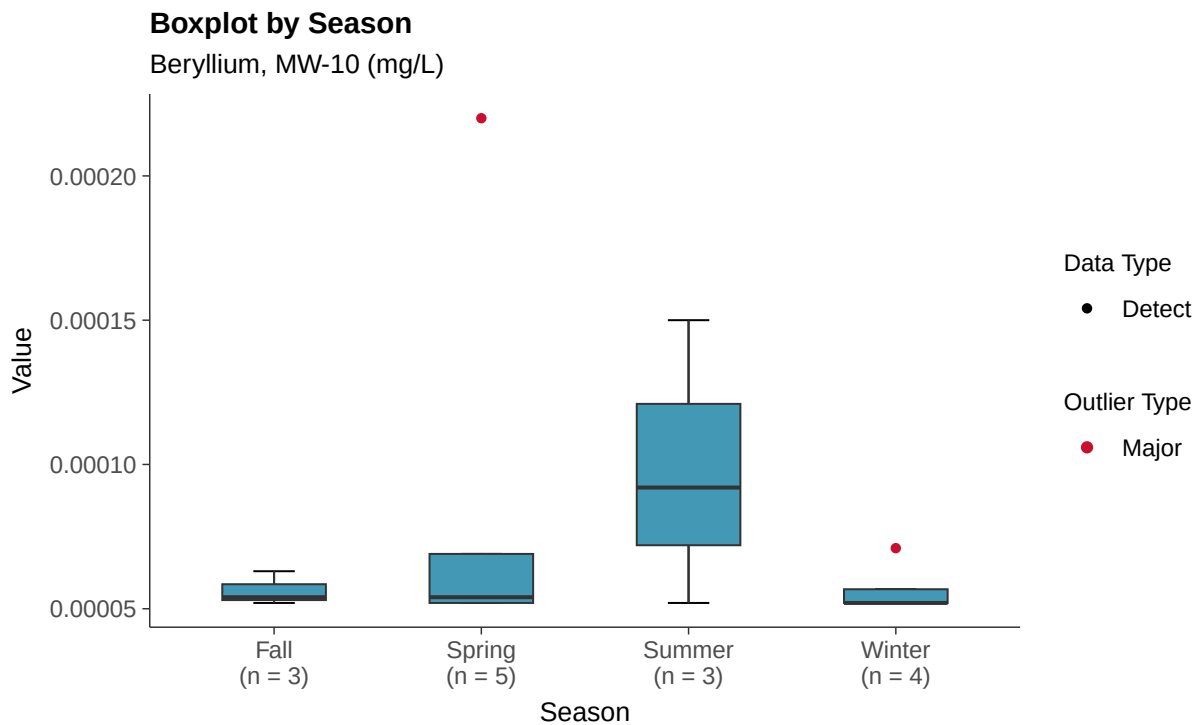
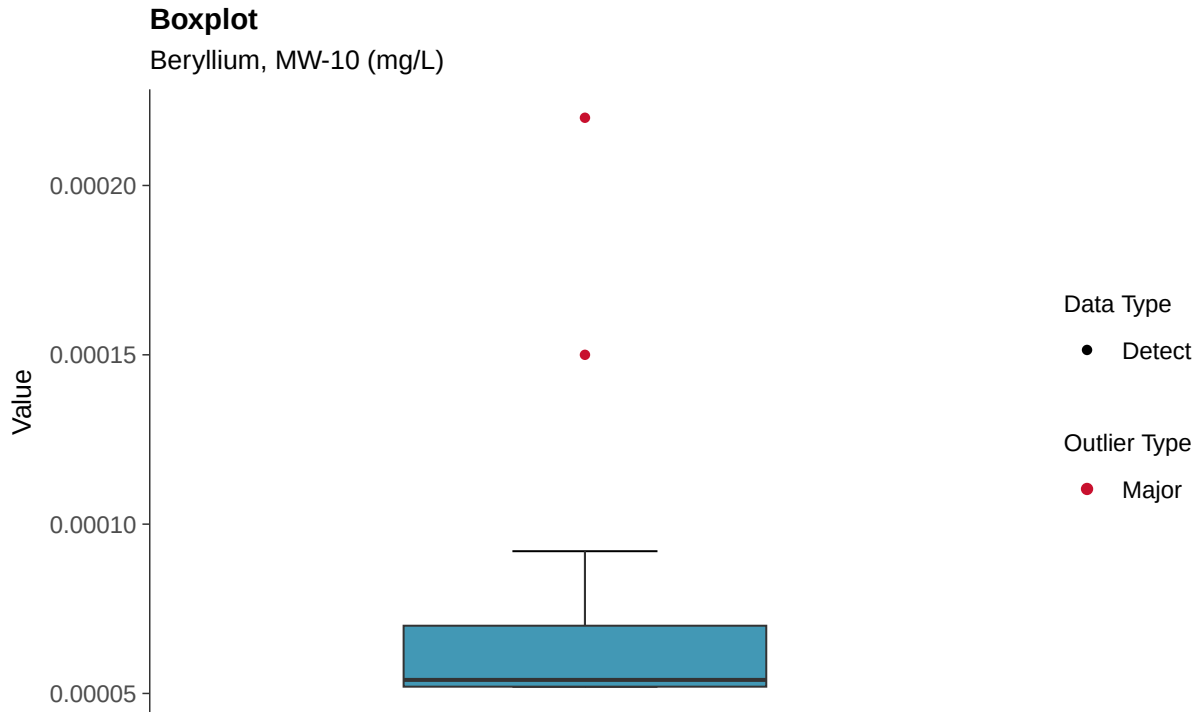
Barium, MW-10 (mg/L)



Appendix IV: Beryllium, MW-10

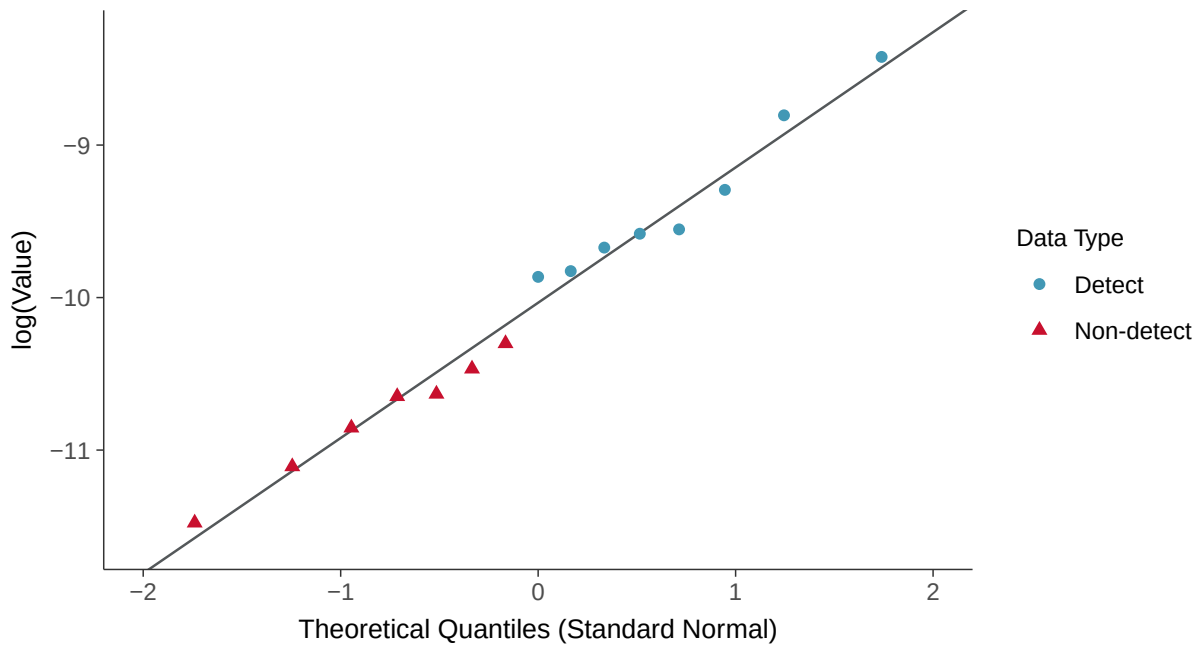
ID: 20_3_4_104





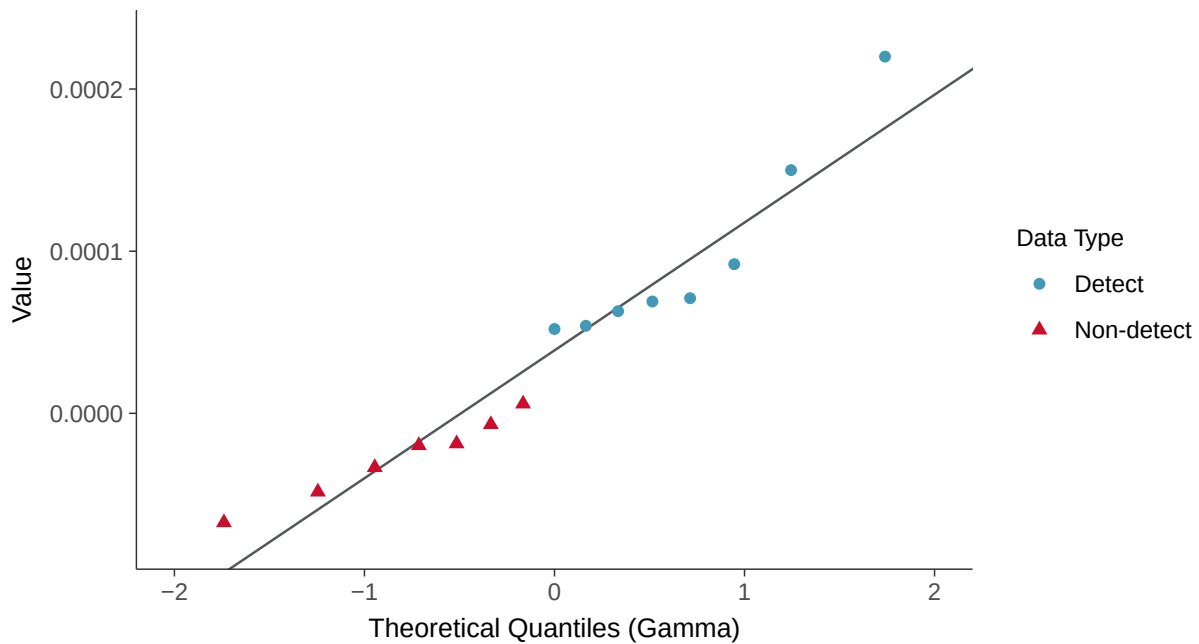
Lognormal Q-Q plot using ROS Imputed Estimates

Beryllium, MW-10 (mg/L)



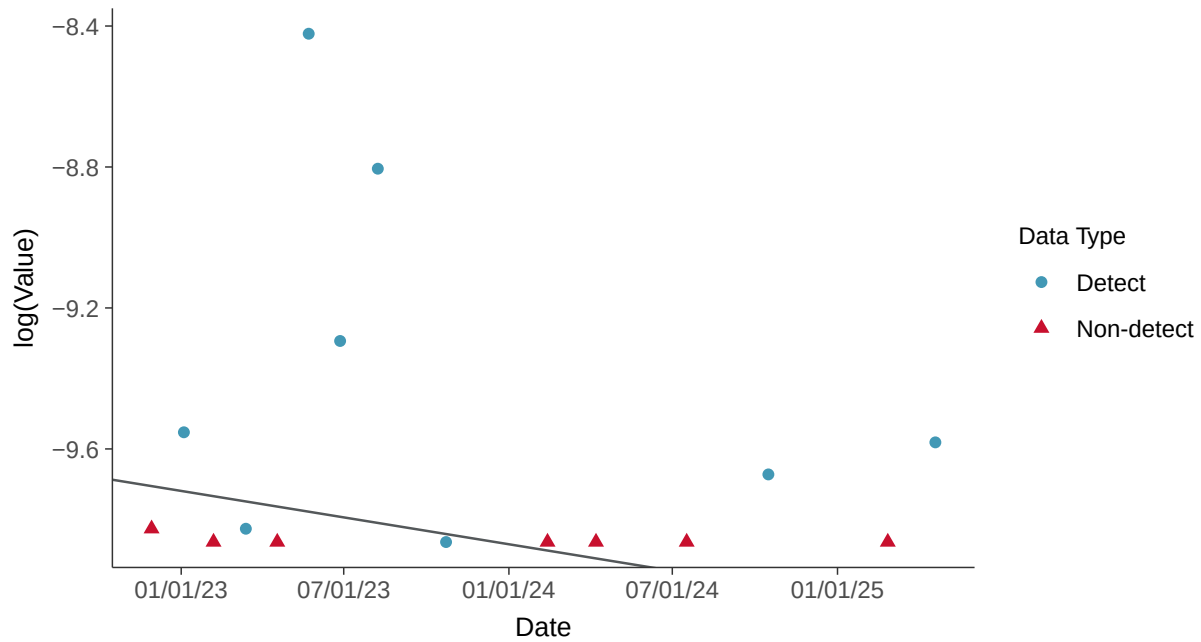
Gamma Q-Q plot using ROS Imputed Estimates

Beryllium, MW-10 (mg/L)



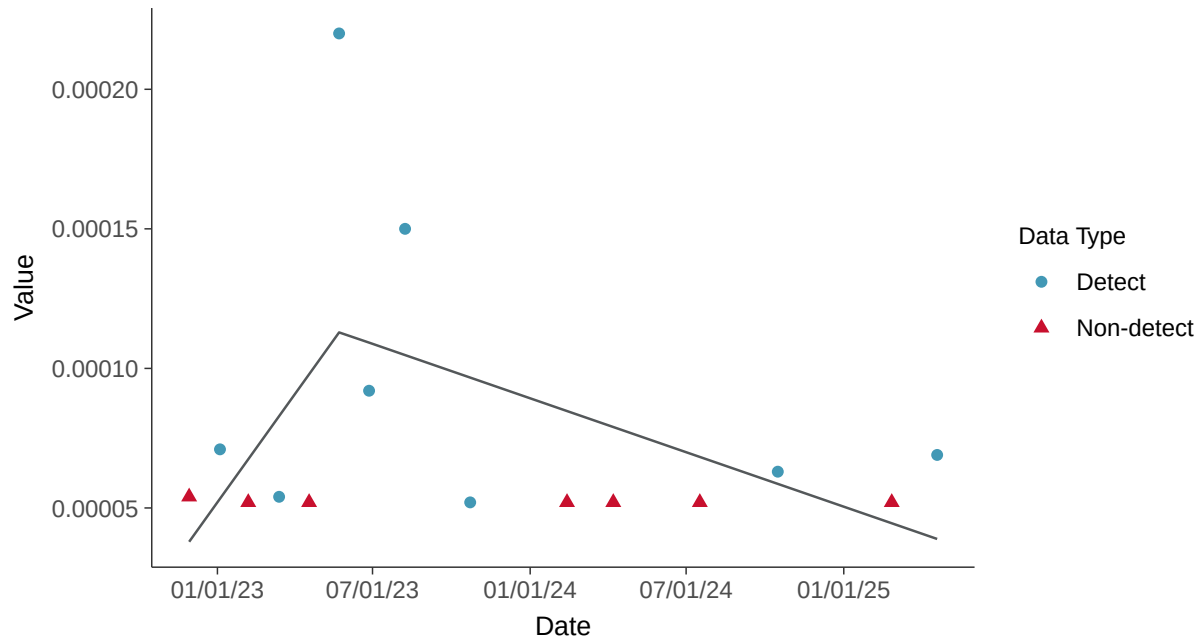
Trend Regression: Lognormal MLE

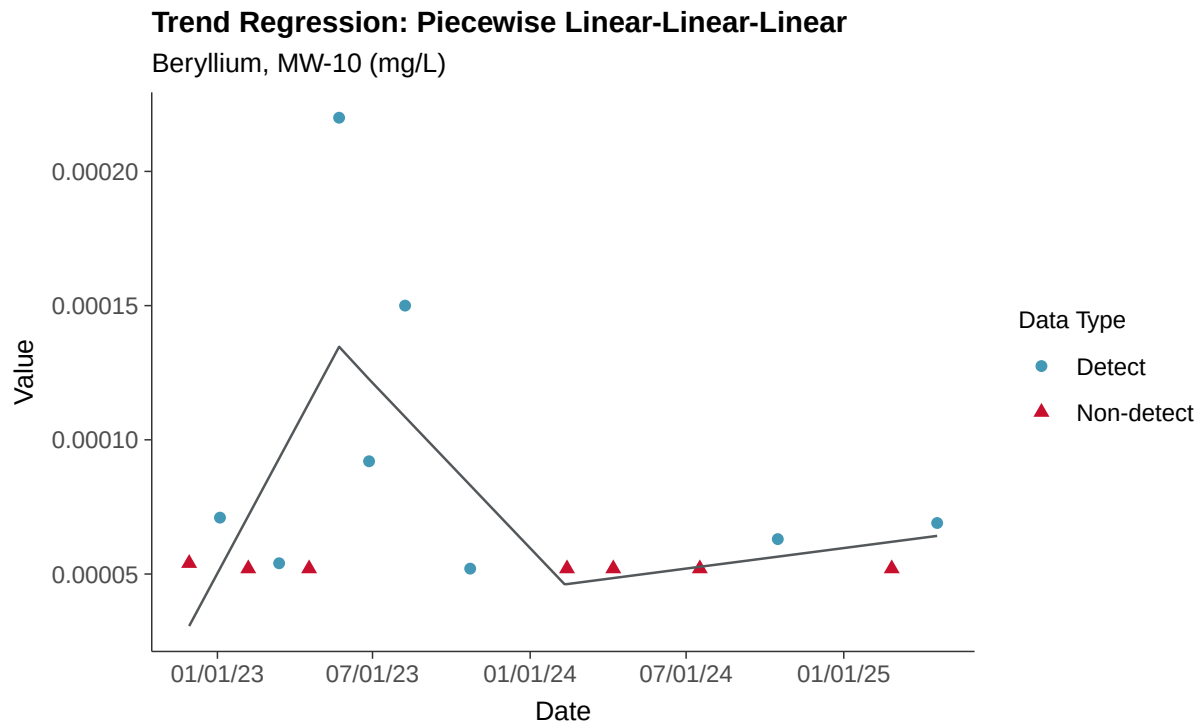
Beryllium, MW-10 (mg/L)



Trend Regression: Piecewise Linear-Linear

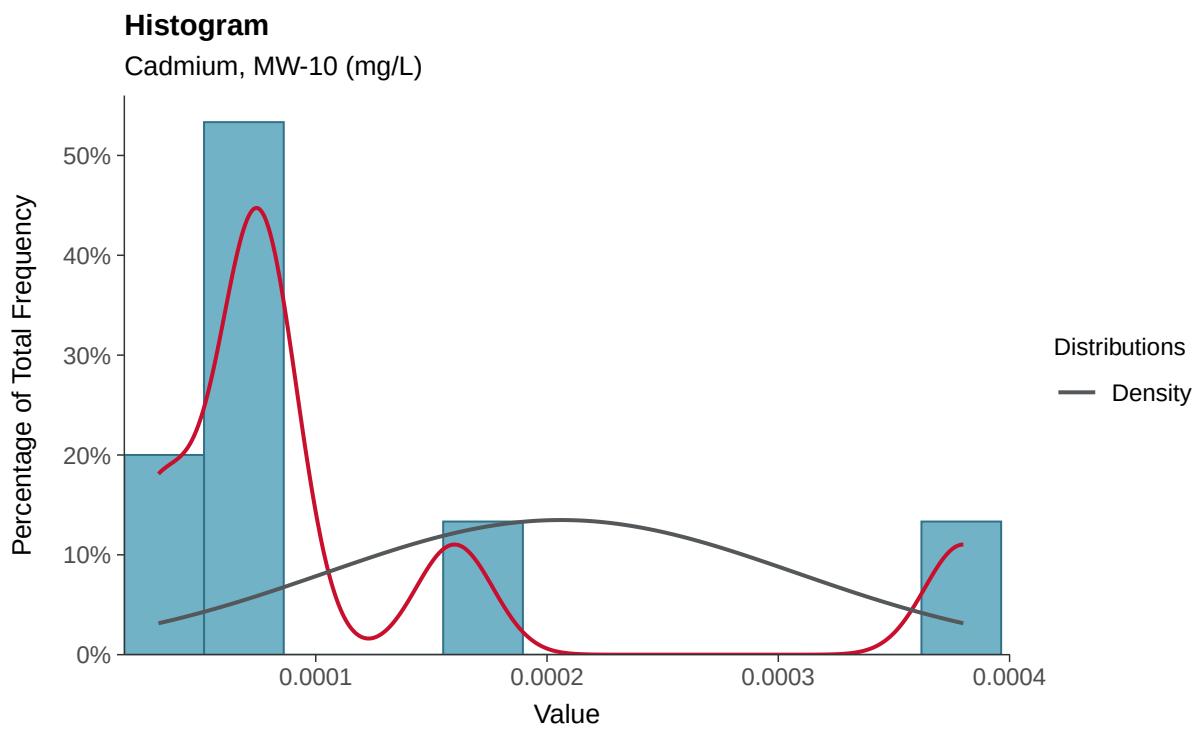
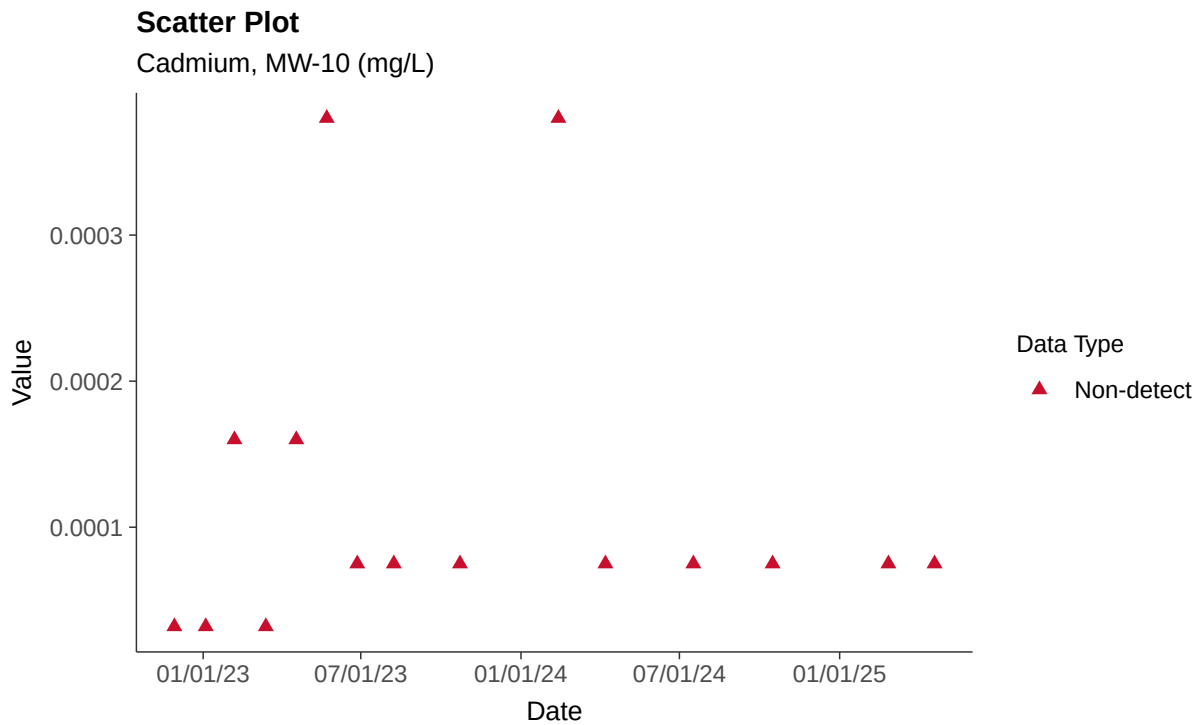
Beryllium, MW-10 (mg/L)





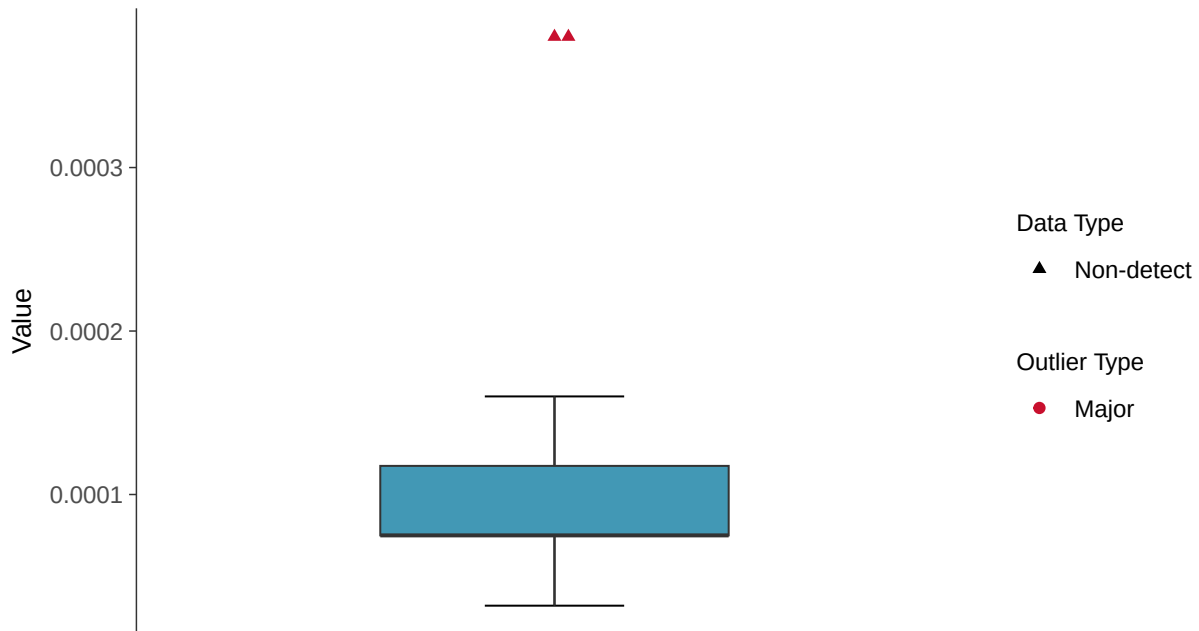
Appendix IV: Cadmium, MW-10

ID: 20_3_4_106



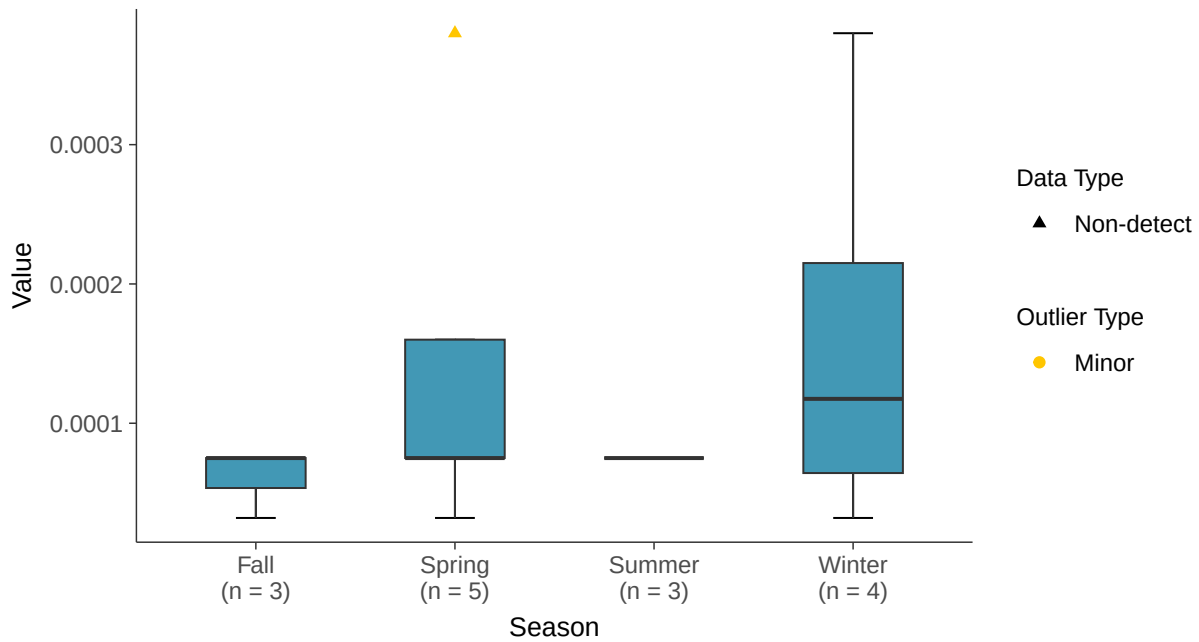
Boxplot

Cadmium, MW-10 (mg/L)



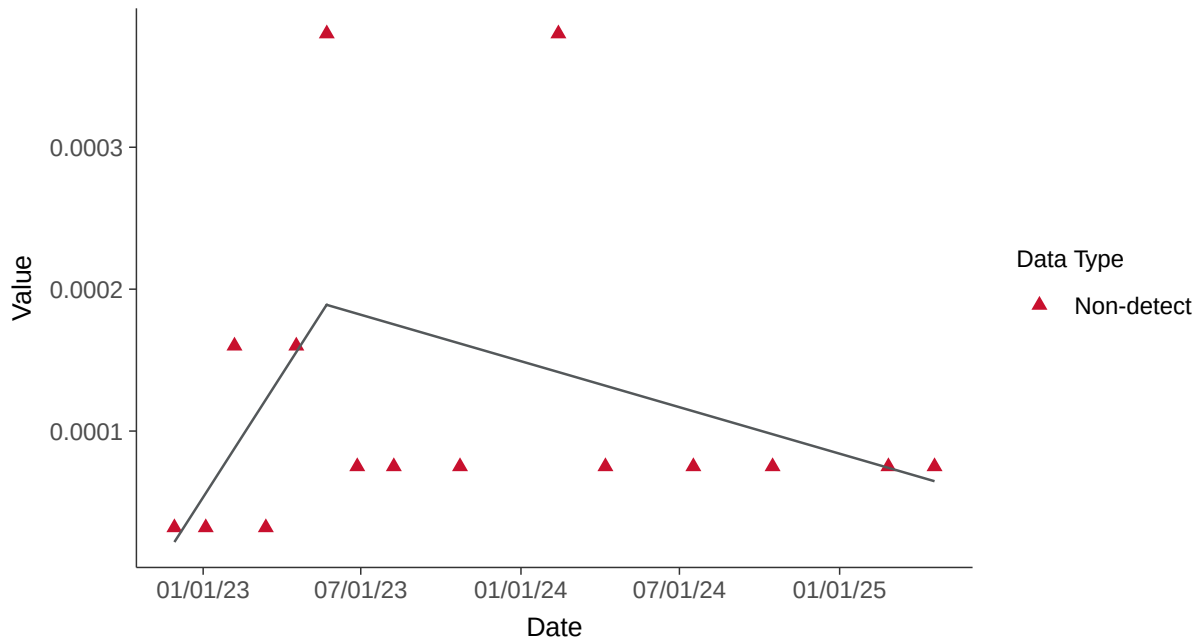
Boxplot by Season

Cadmium, MW-10 (mg/L)



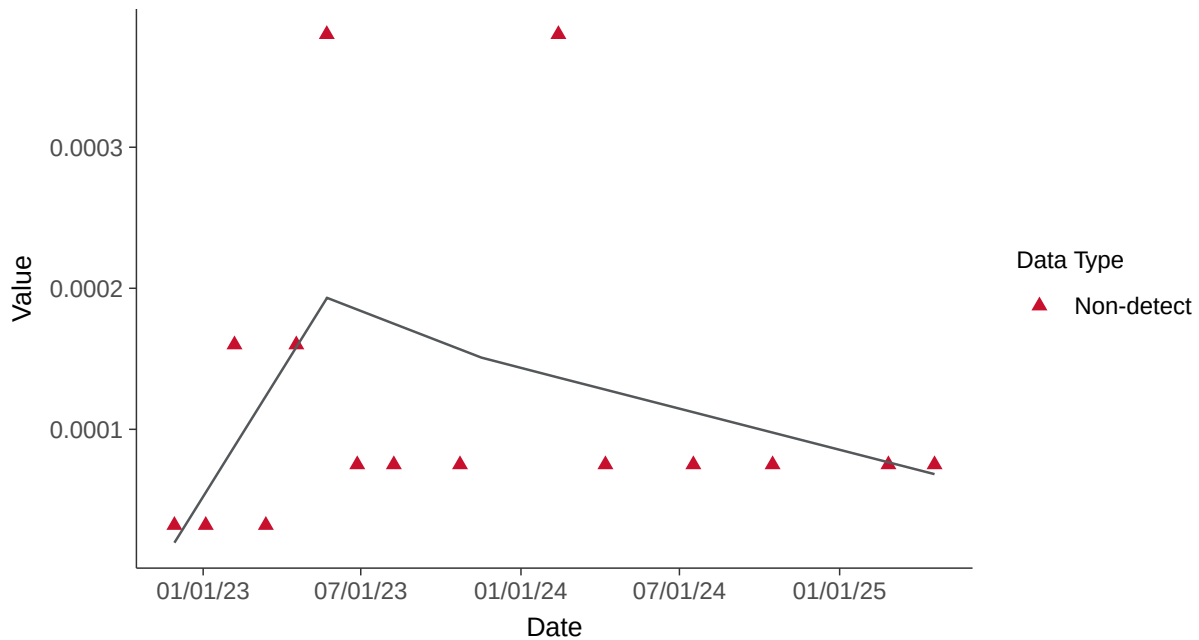
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-10 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cadmium, MW-10 (mg/L)

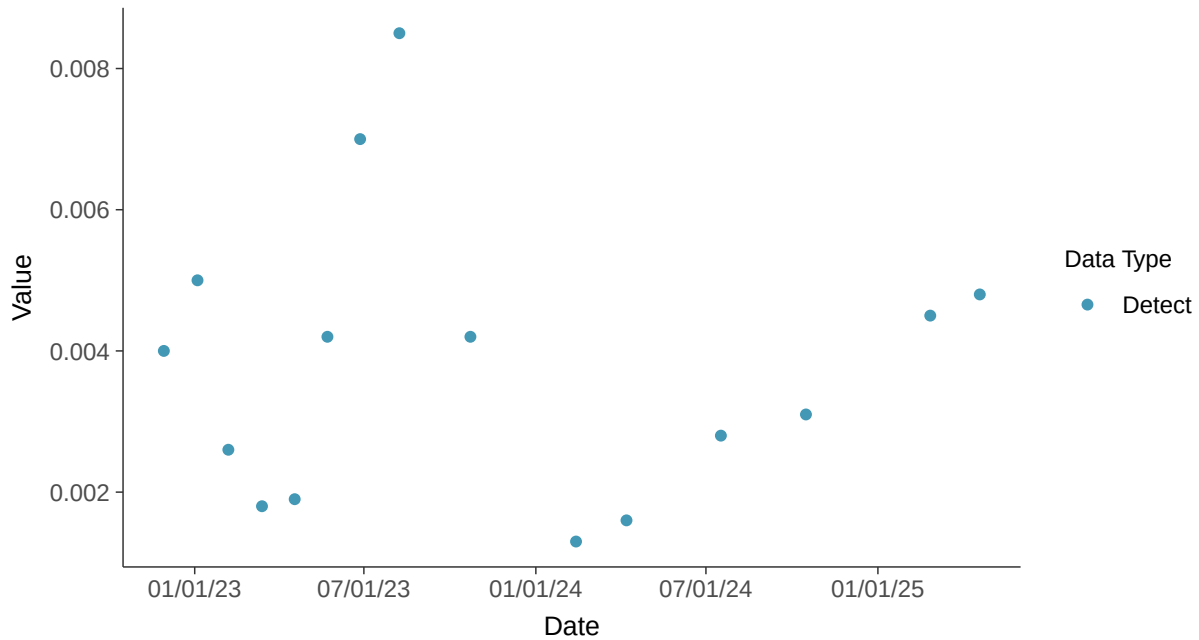


Appendix IV: Chromium, Total, MW-10

ID: 20_3_4_109

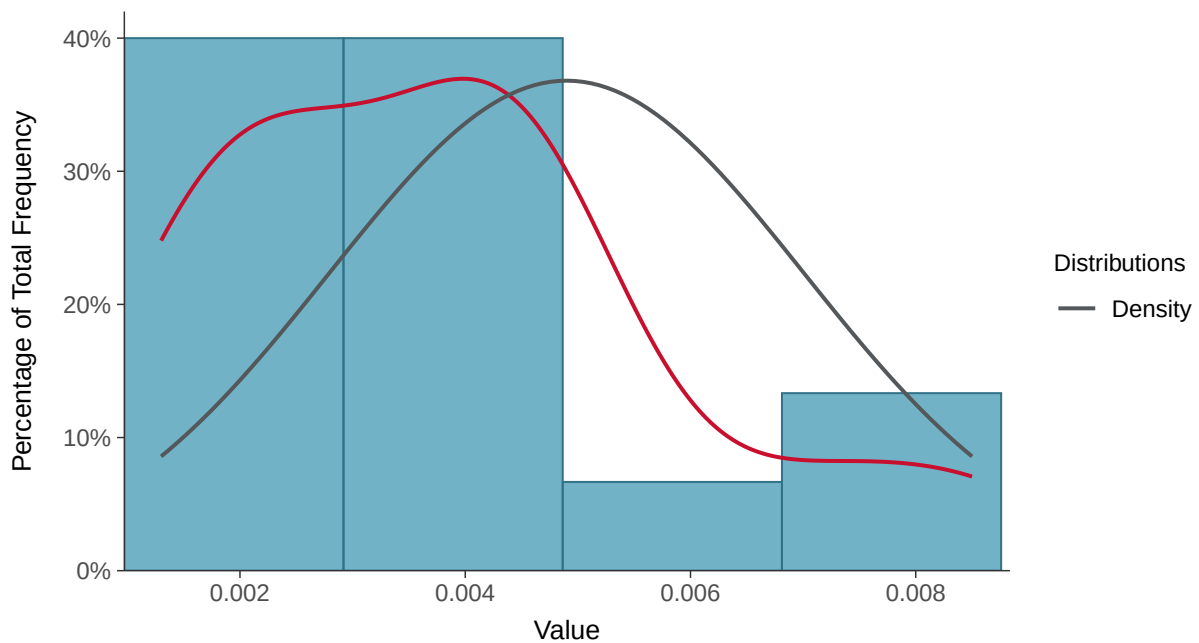
Scatter Plot

Chromium, Total, MW-10 (mg/L)



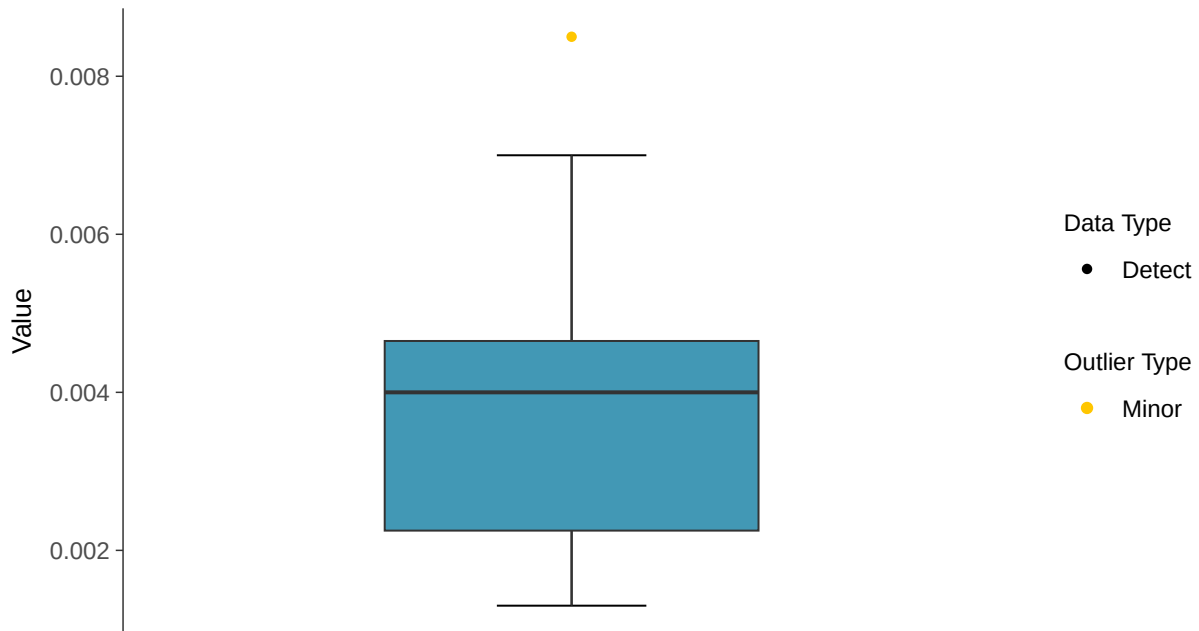
Histogram

Chromium, Total, MW-10 (mg/L)



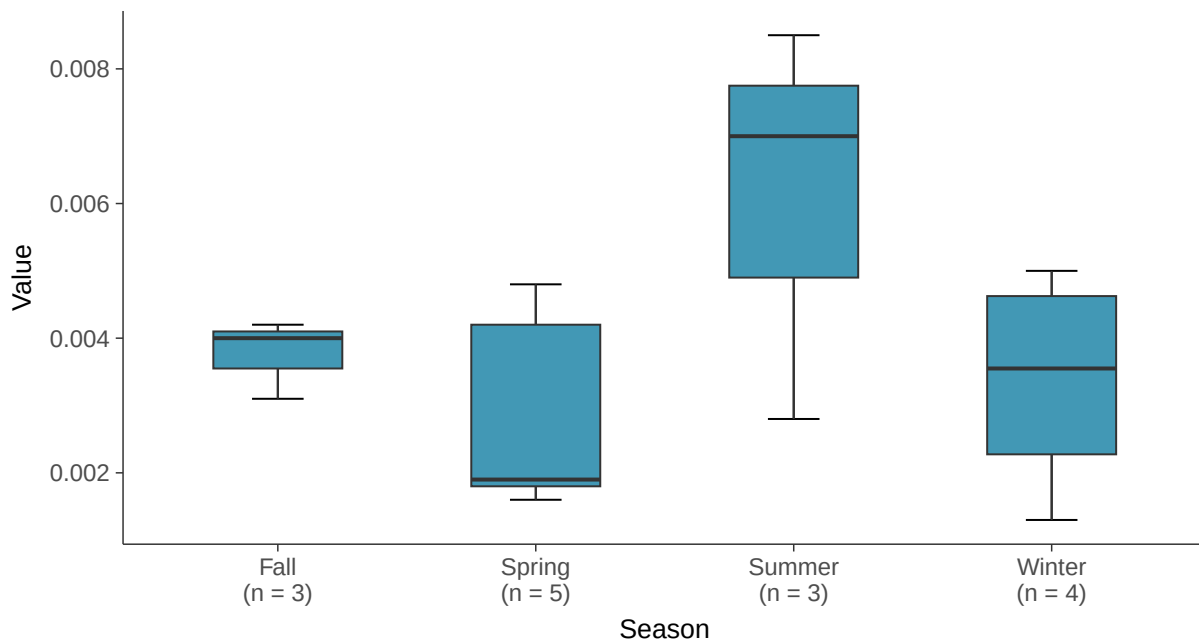
Boxplot

Chromium, Total, MW-10 (mg/L)



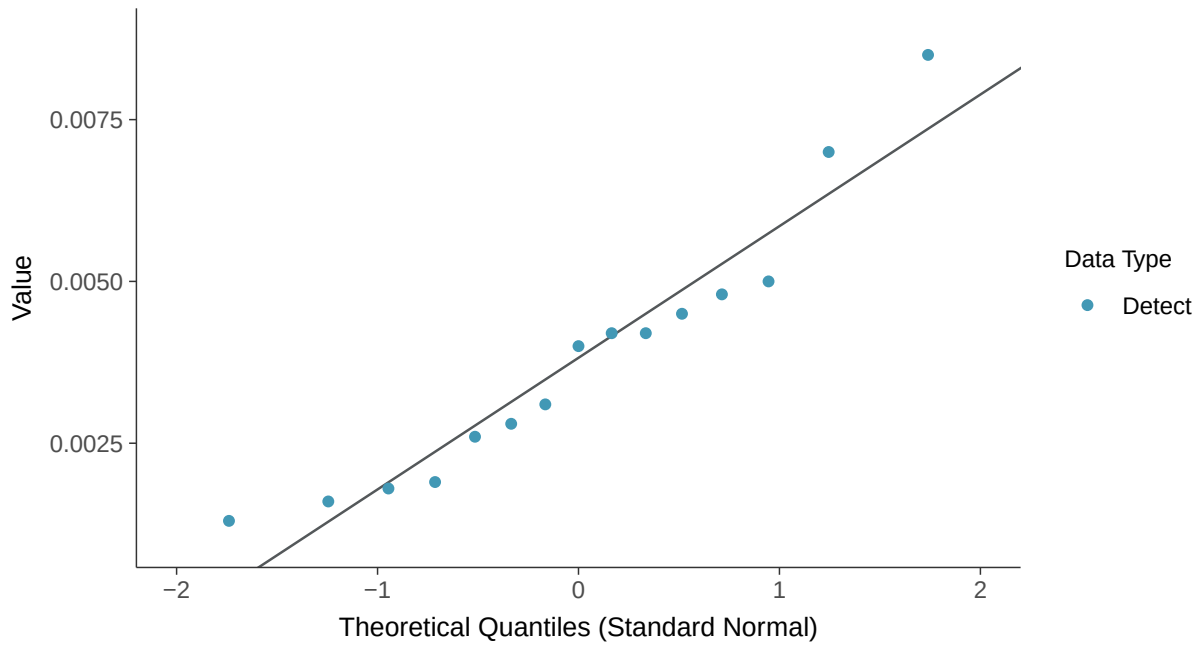
Boxplot by Season

Chromium, Total, MW-10 (mg/L)



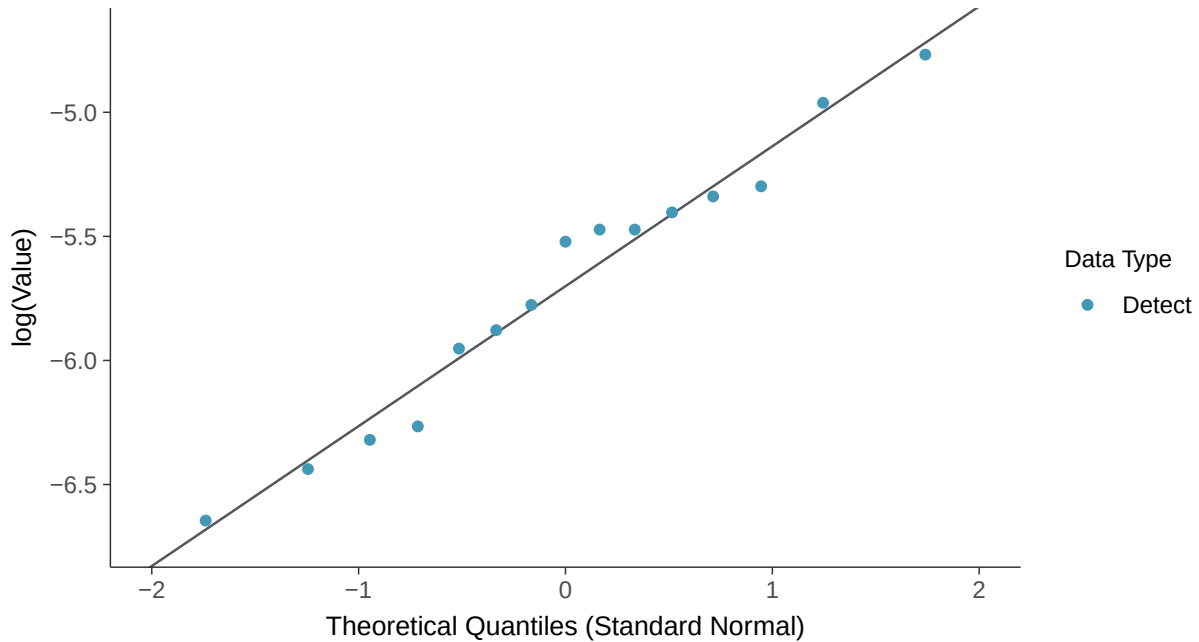
Normal Q-Q plot

Chromium, Total, MW-10 (mg/L)



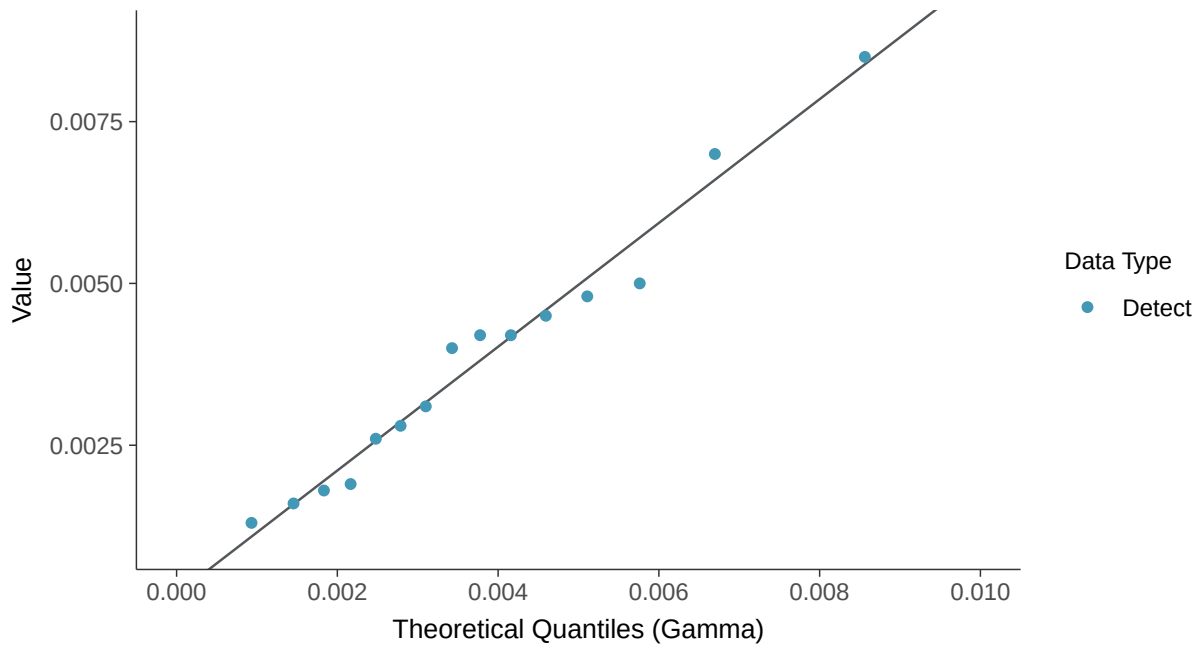
Lognormal Q-Q plot

Chromium, Total, MW-10 (mg/L)



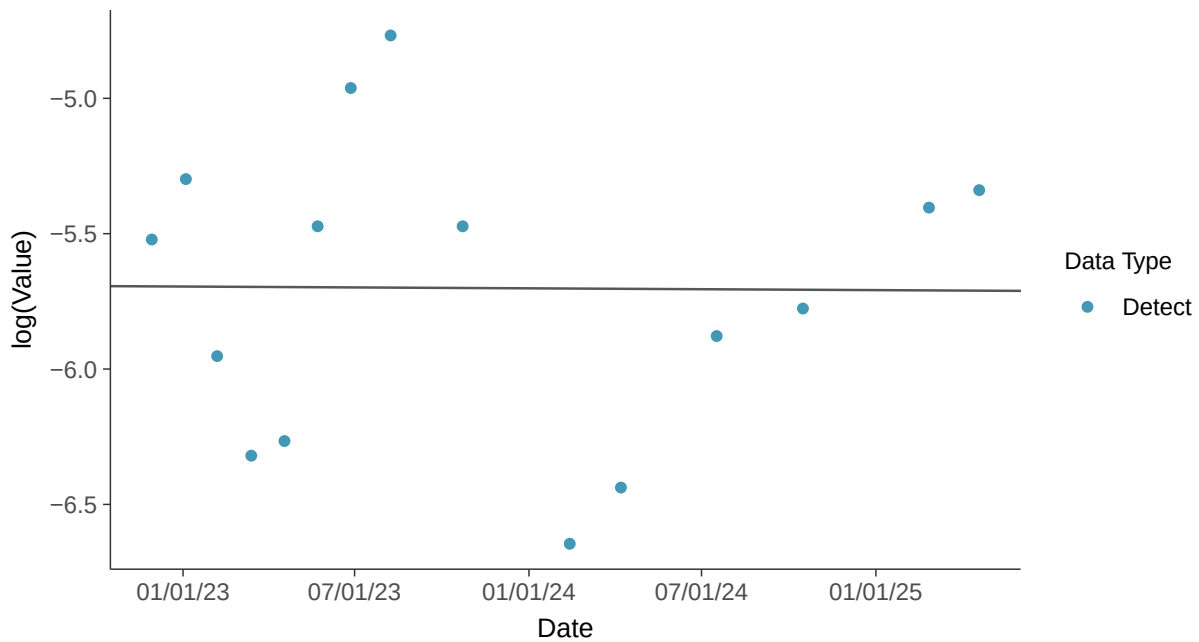
Gamma Q-Q plot

Chromium, Total, MW-10 (mg/L)



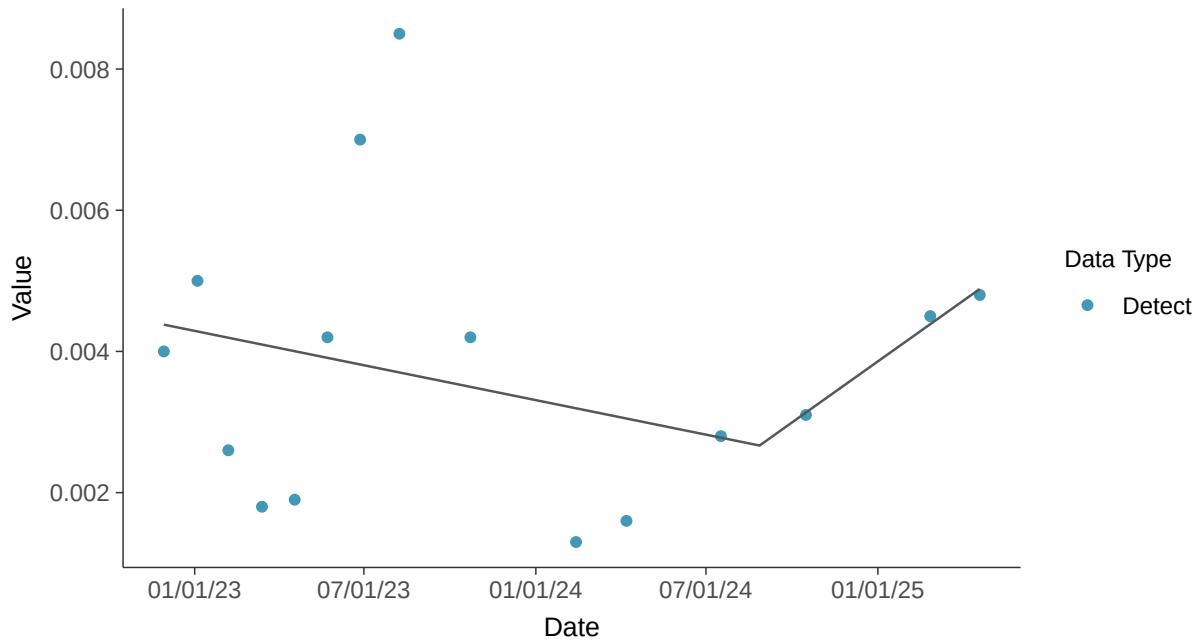
Trend Regression: Lognormal MLE

Chromium, Total, MW-10 (mg/L)



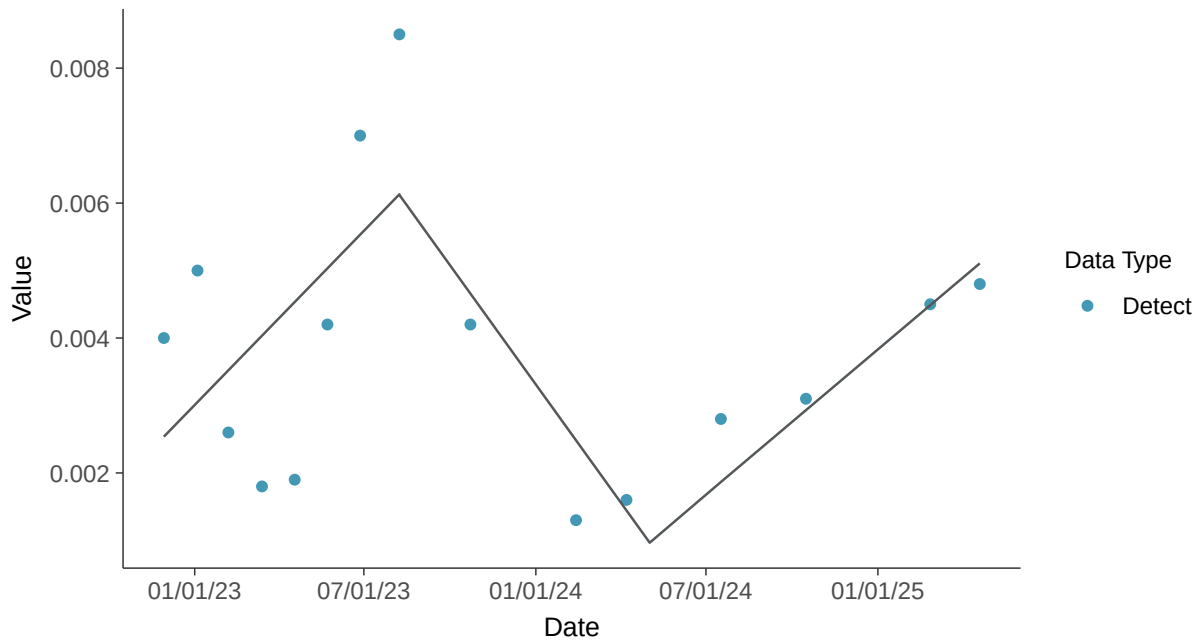
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-10 (mg/L)



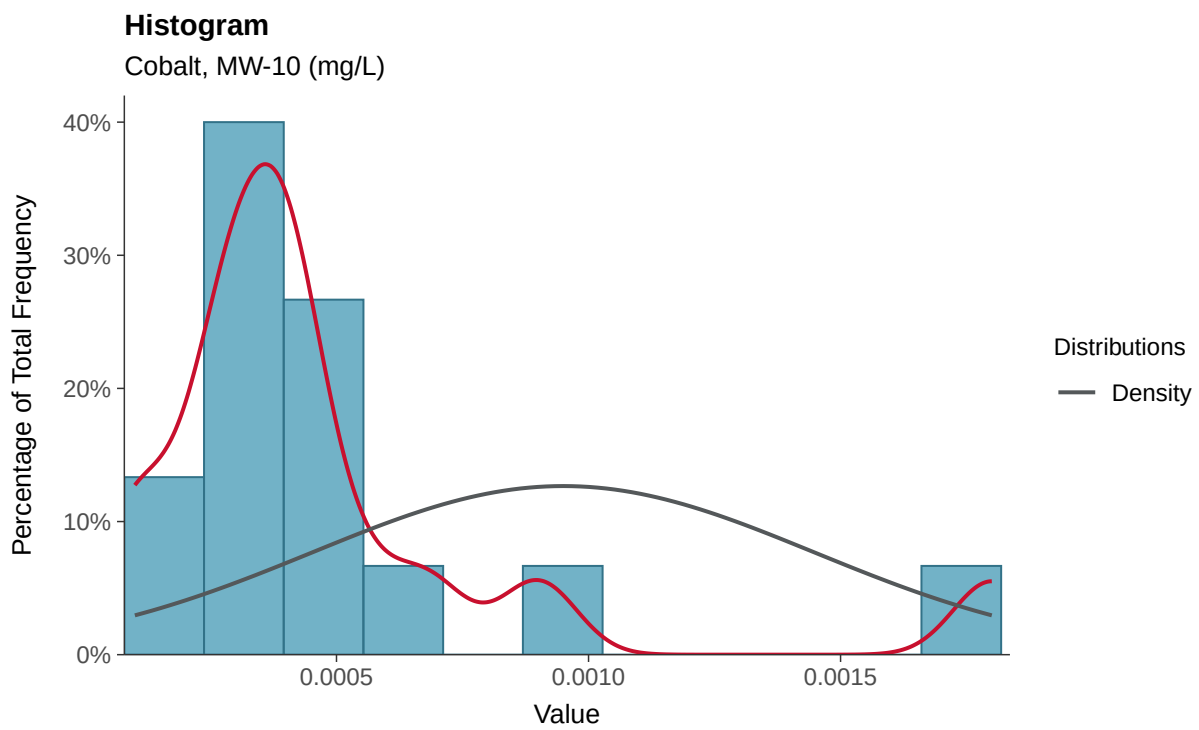
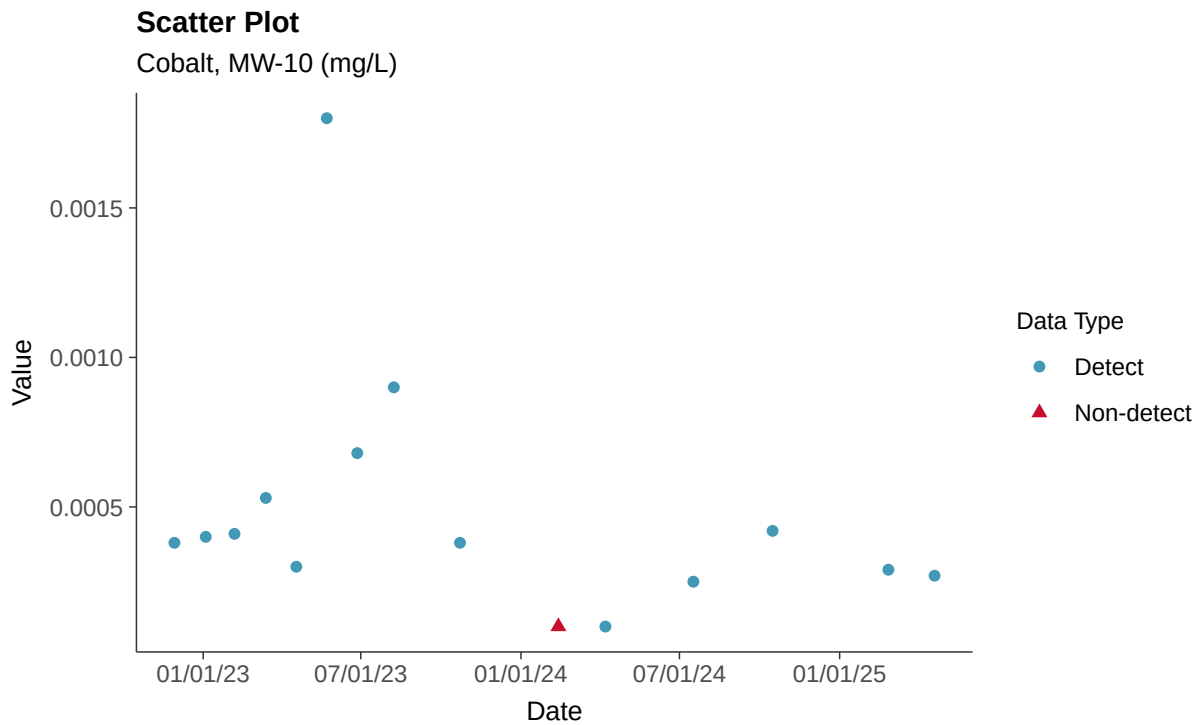
Trend Regression: Piecewise Linear-Linear-Linear

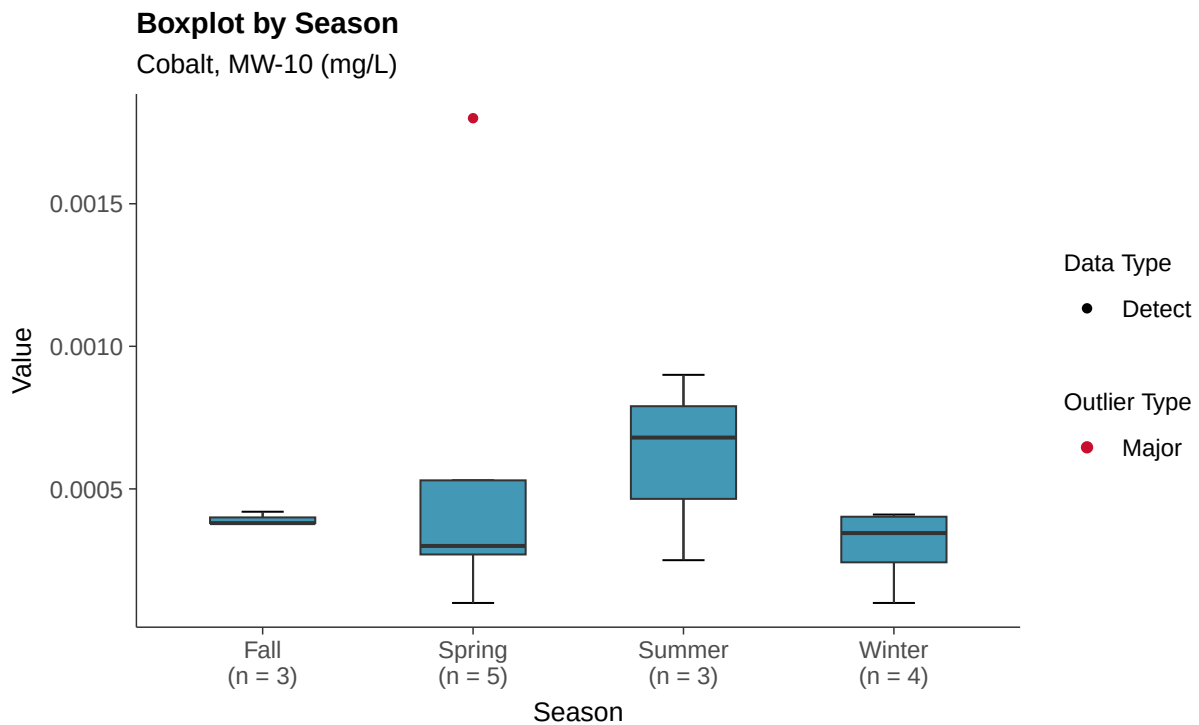
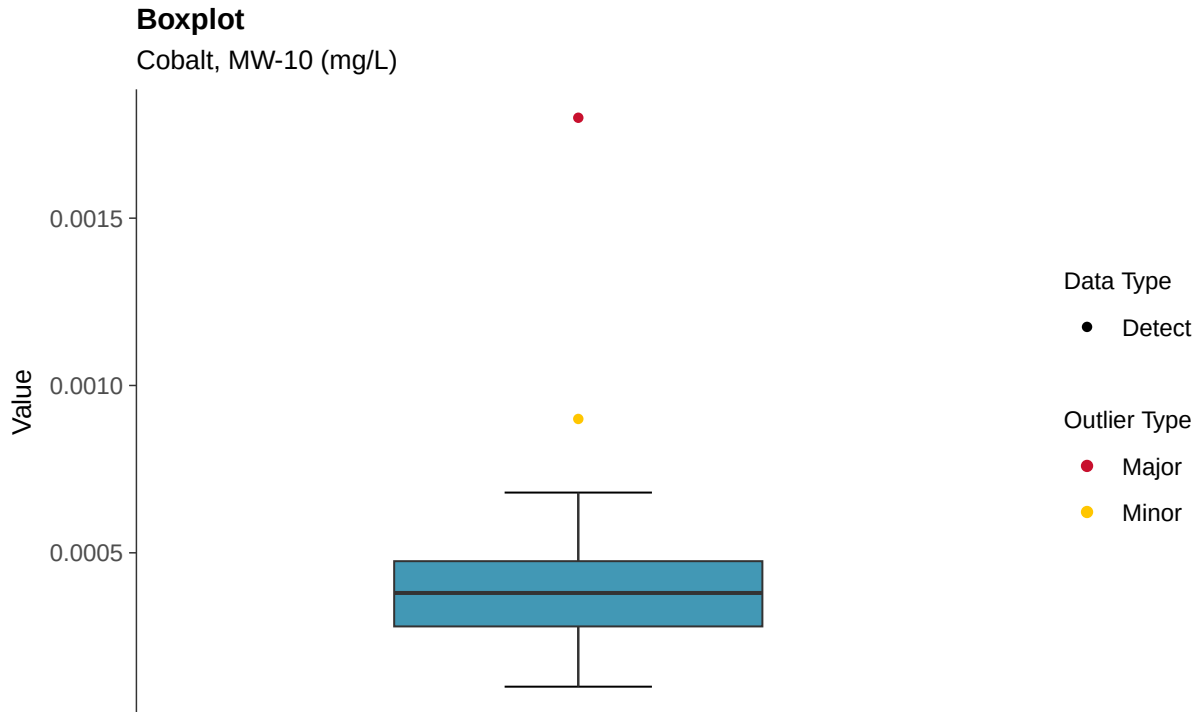
Chromium, Total, MW-10 (mg/L)



Appendix IV: Cobalt, MW-10

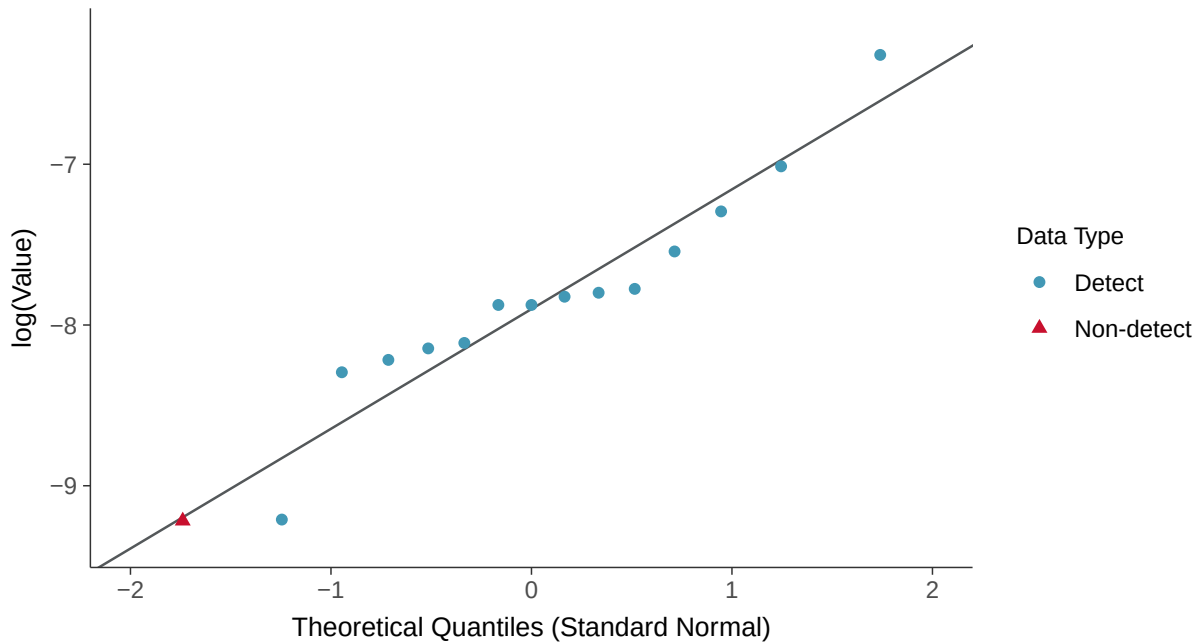
ID: 20_3_4_110





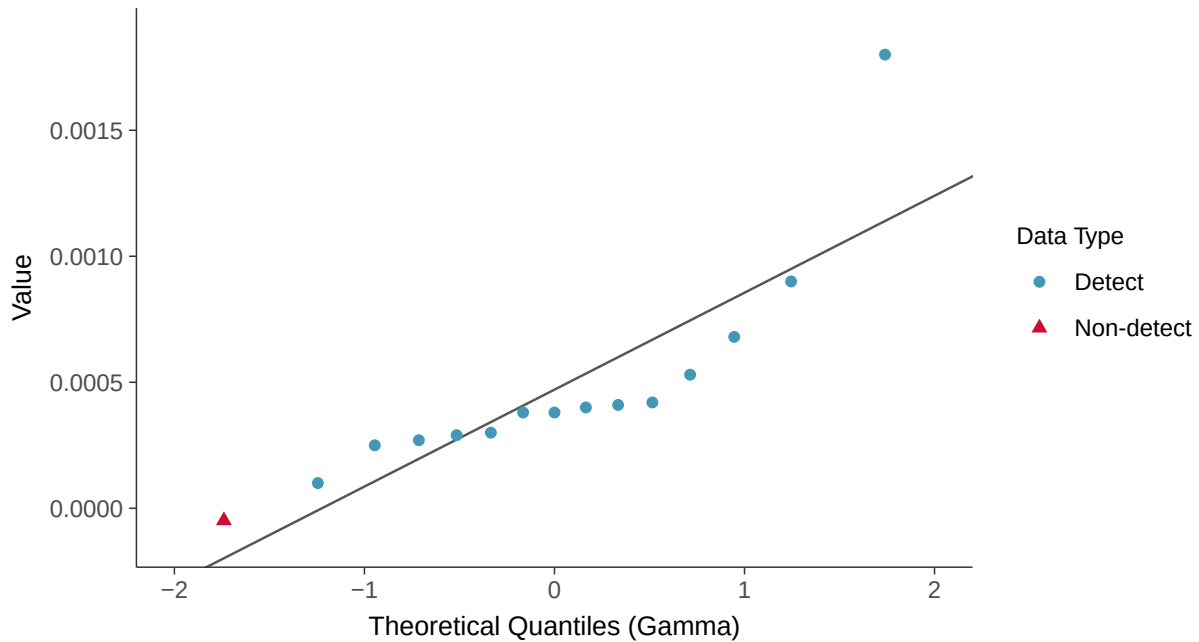
Lognormal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-10 (mg/L)



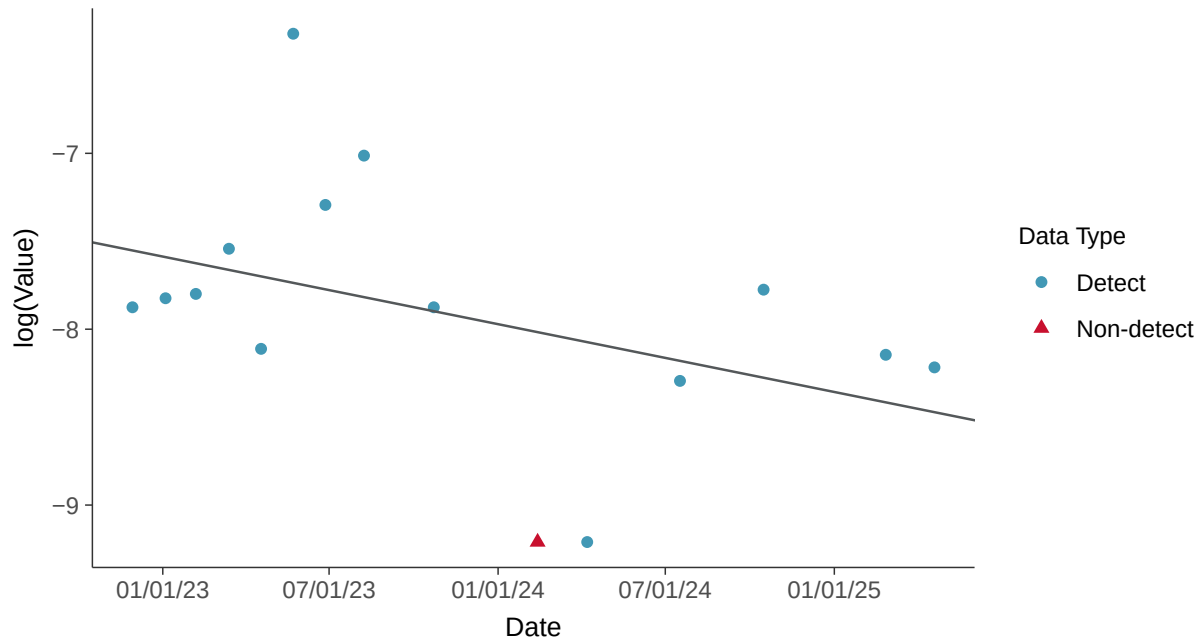
Gamma Q-Q plot using ROS Imputed Estimates

Cobalt, MW-10 (mg/L)



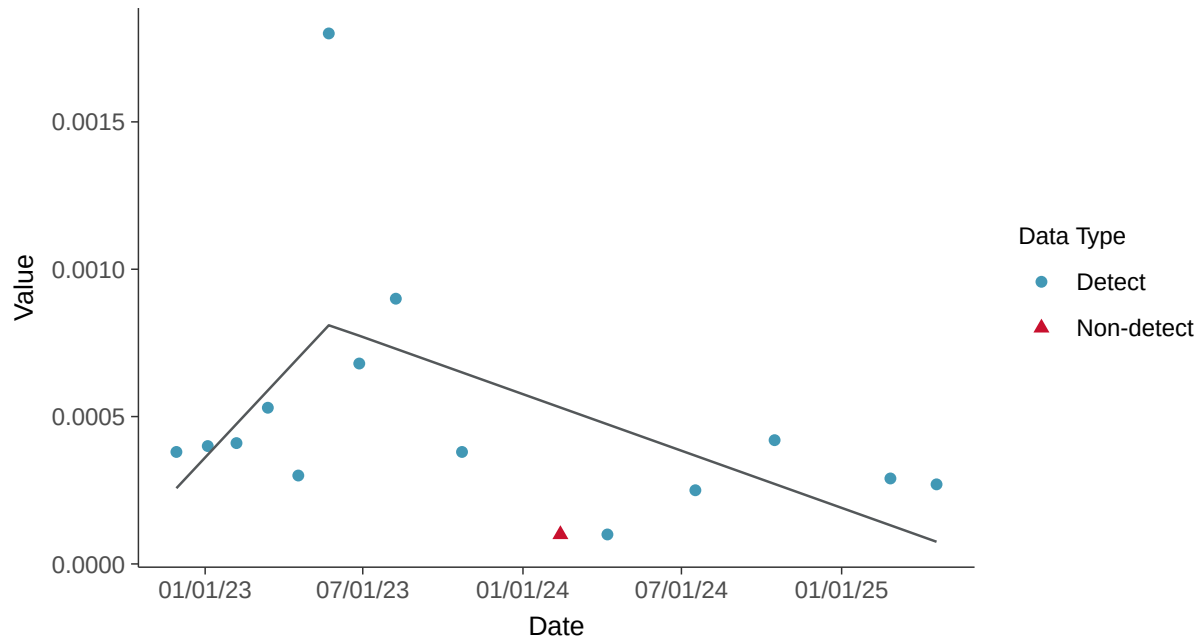
Trend Regression: Lognormal MLE

Cobalt, MW-10 (mg/L)



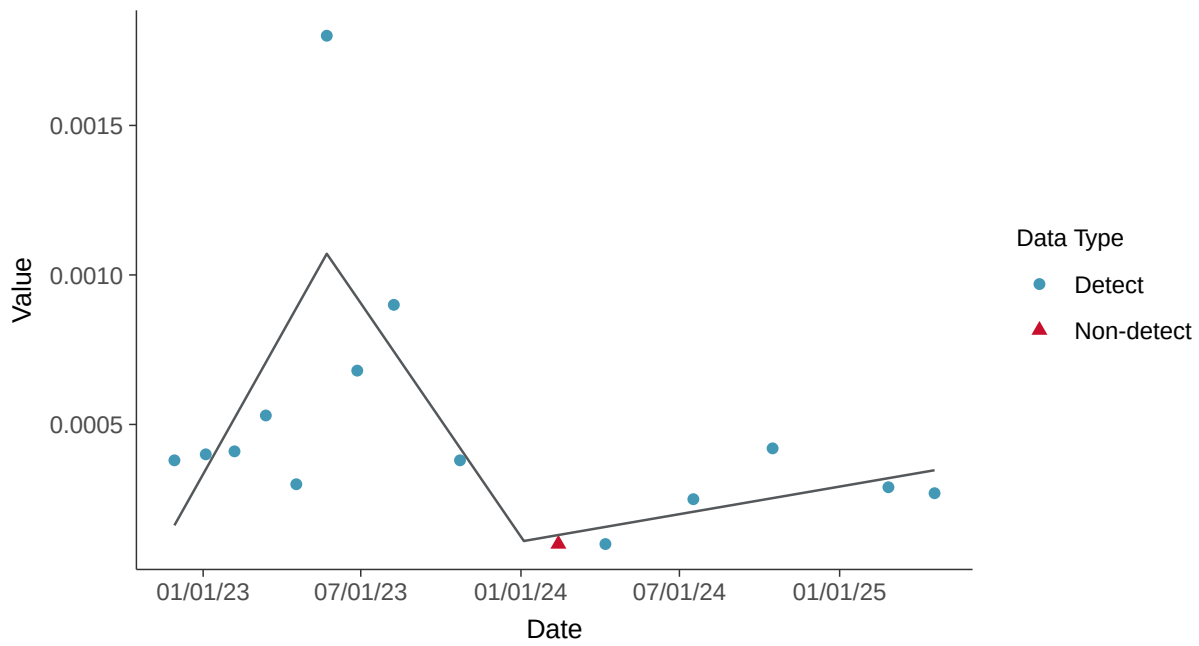
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-10 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear
Cobalt, MW-10 (mg/L)

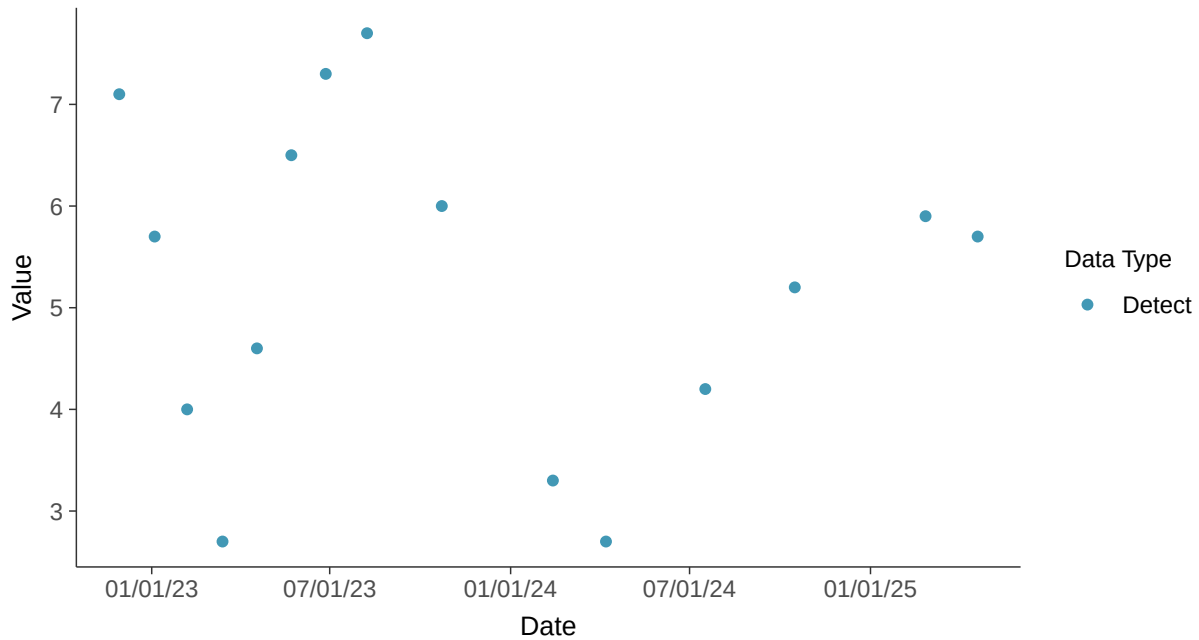


Appendix IV: Fluoride (App IV), MW-10

ID: 20_3_4_113

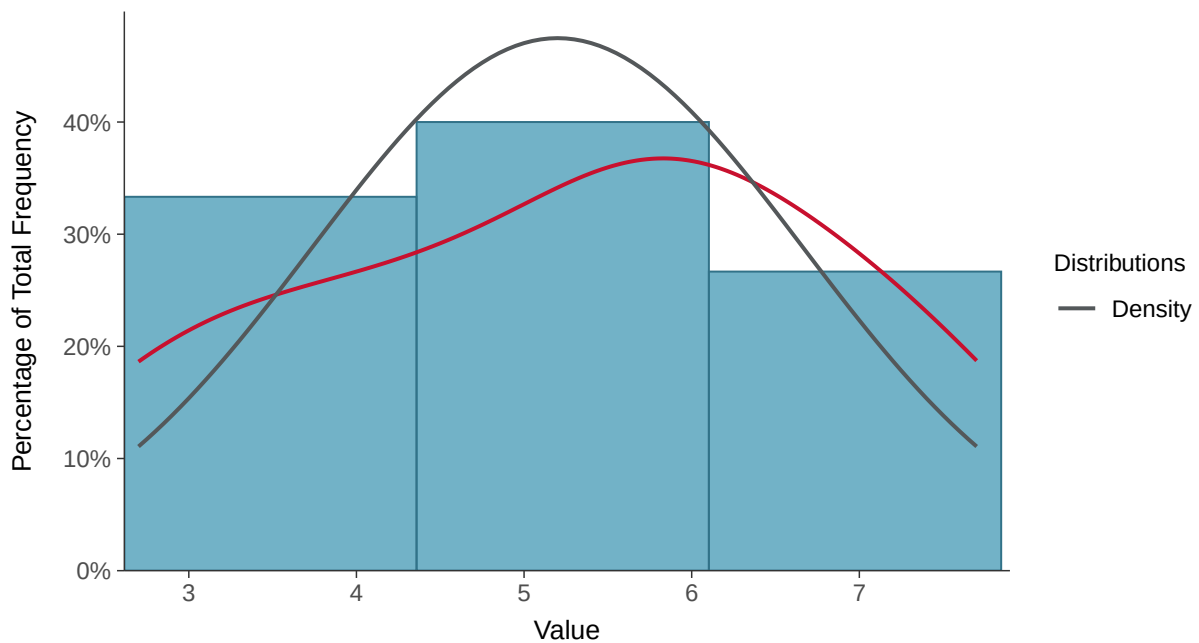
Scatter Plot

Fluoride (App IV), MW-10 (mg/L)



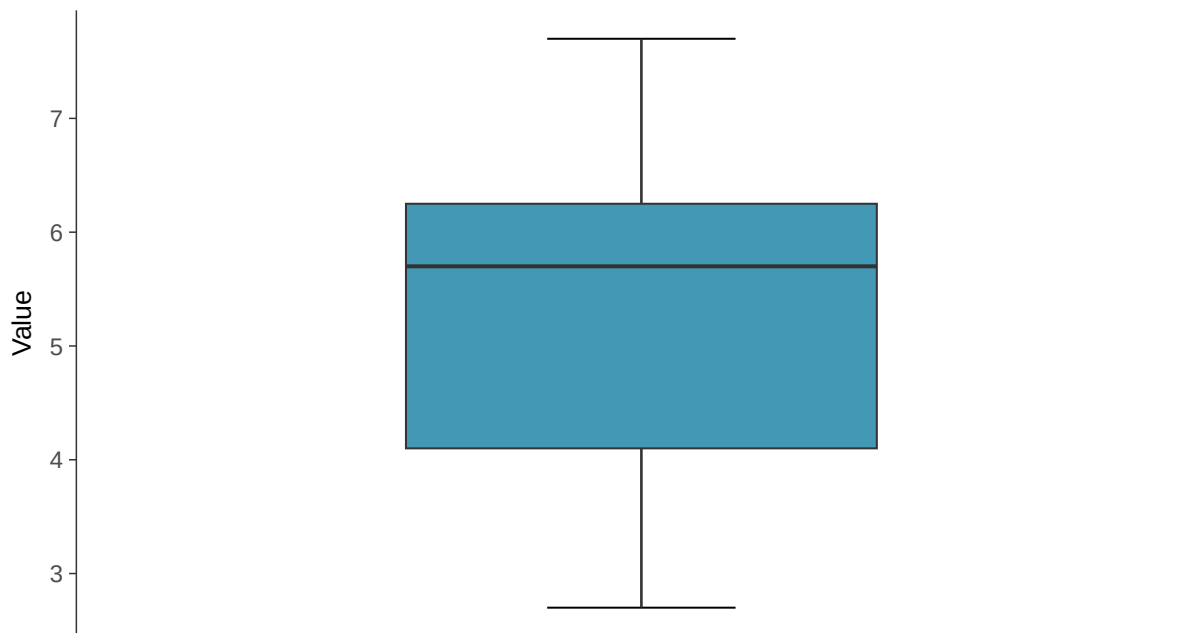
Histogram

Fluoride (App IV), MW-10 (mg/L)



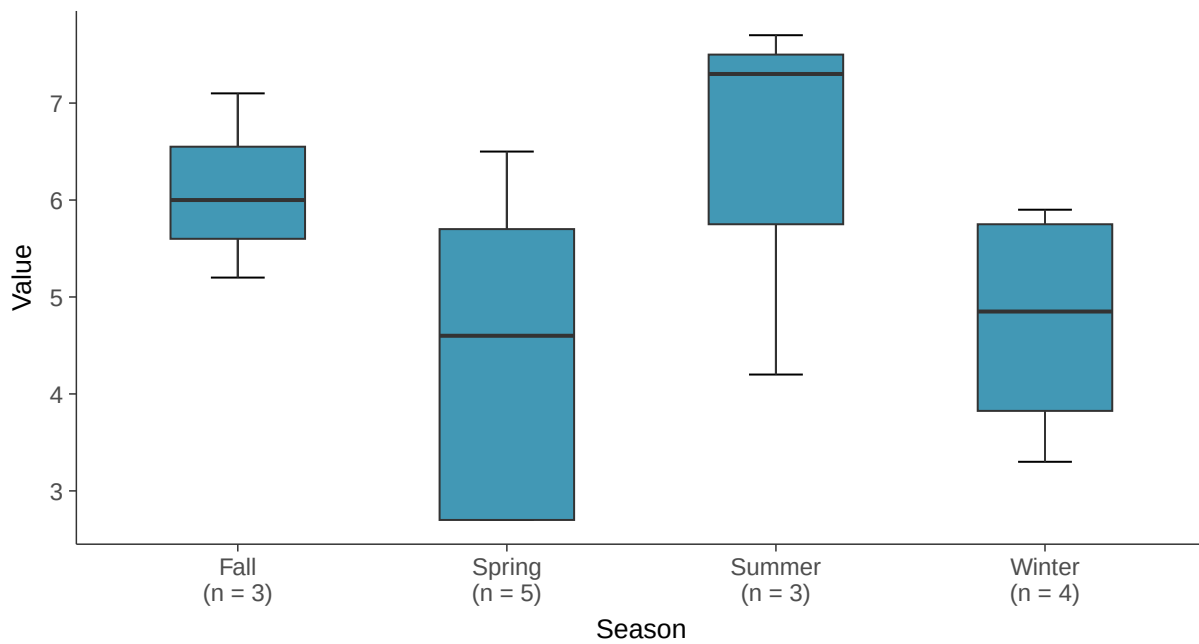
Boxplot

Fluoride (App IV), MW-10 (mg/L)



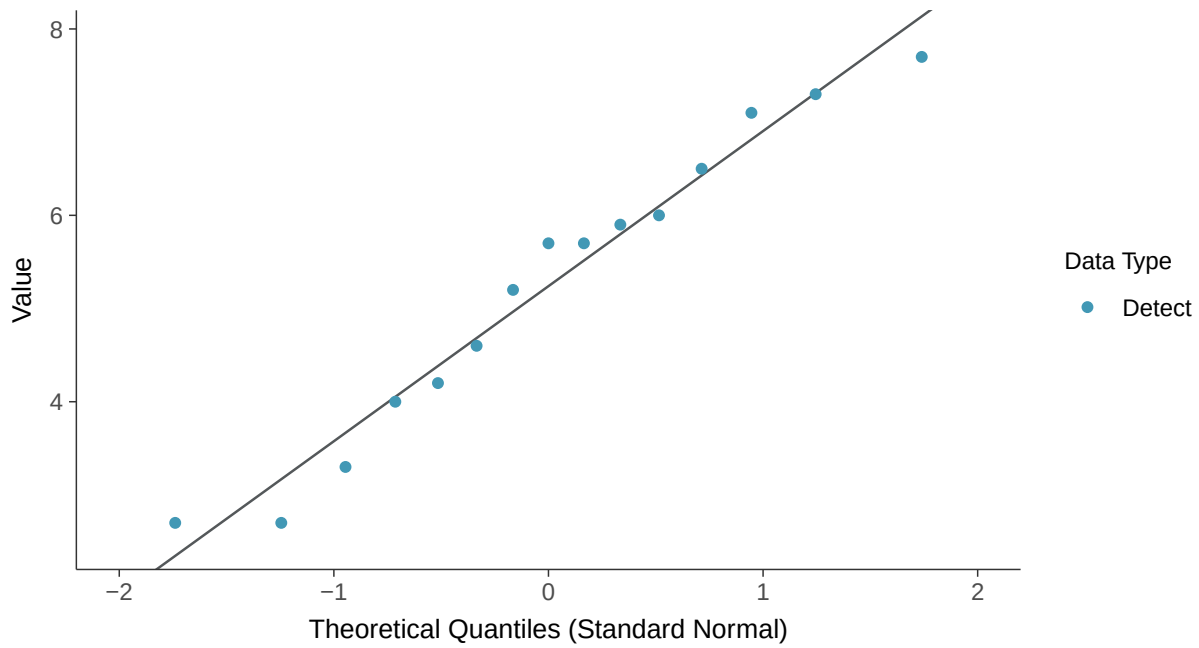
Boxplot by Season

Fluoride (App IV), MW-10 (mg/L)



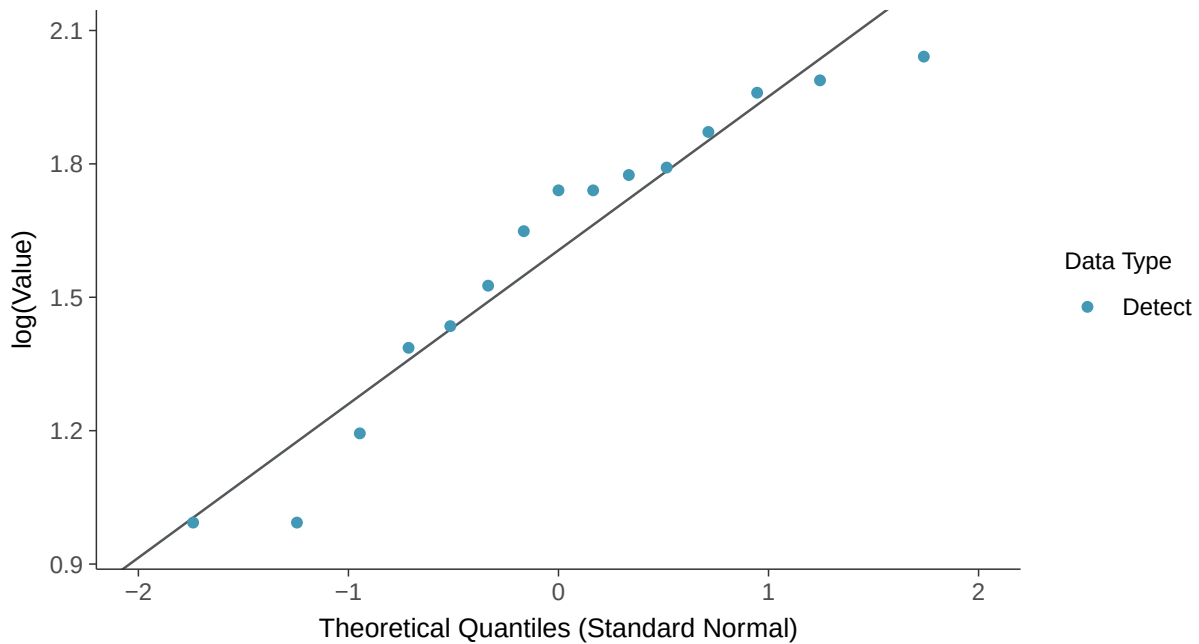
Normal Q-Q plot

Fluoride (App IV), MW-10 (mg/L)



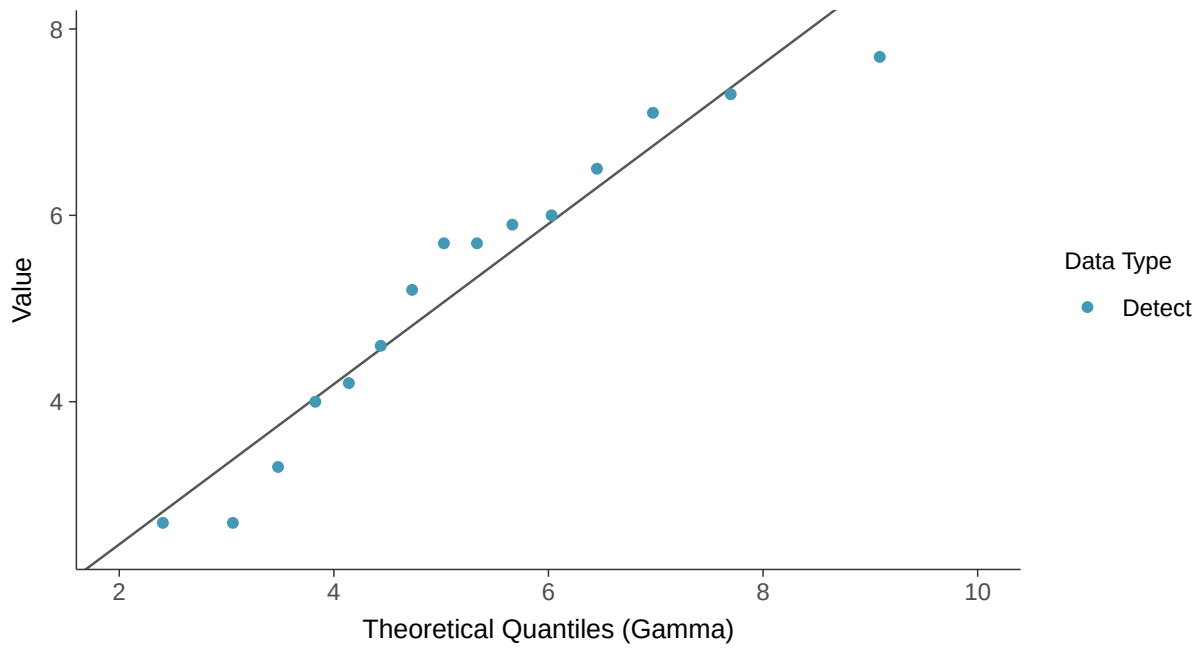
Lognormal Q-Q plot

Fluoride (App IV), MW-10 (mg/L)



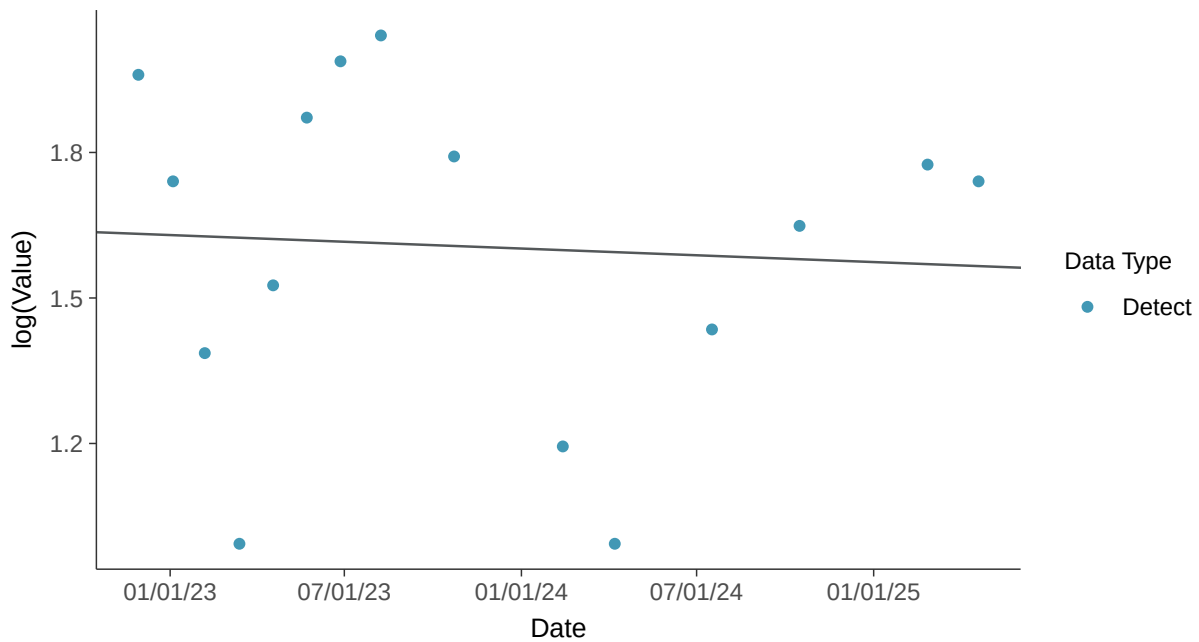
Gamma Q-Q plot

Fluoride (App IV), MW-10 (mg/L)



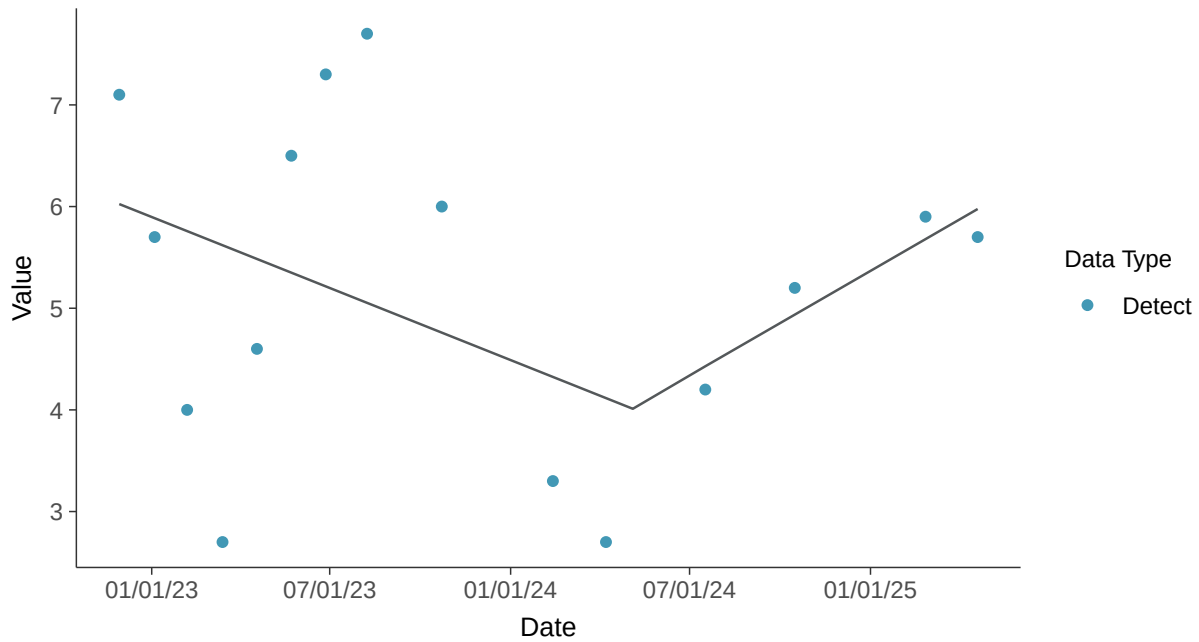
Trend Regression: Lognormal MLE

Fluoride (App IV), MW-10 (mg/L)



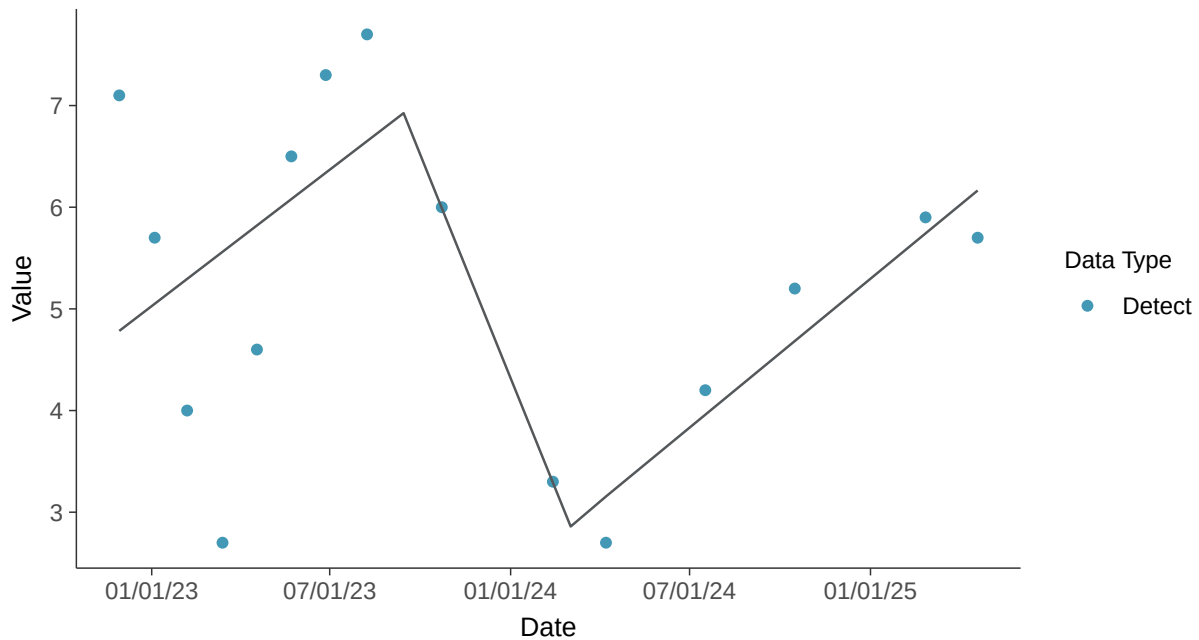
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-10 (mg/L)



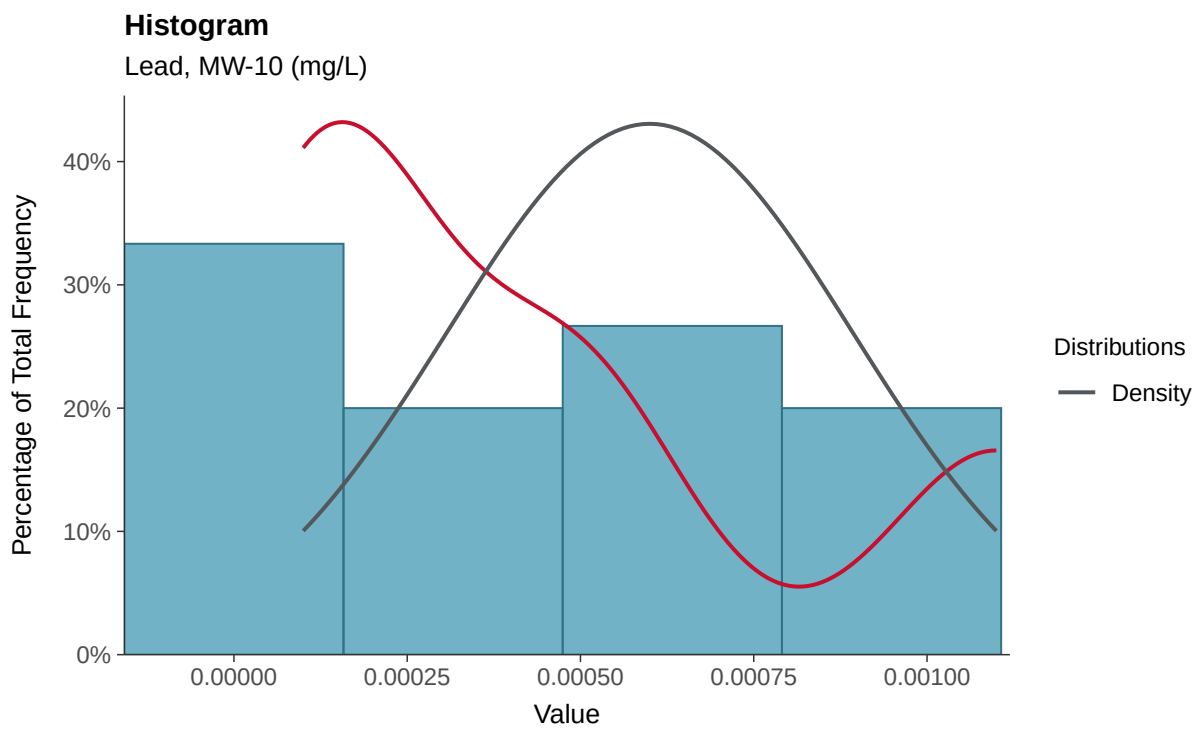
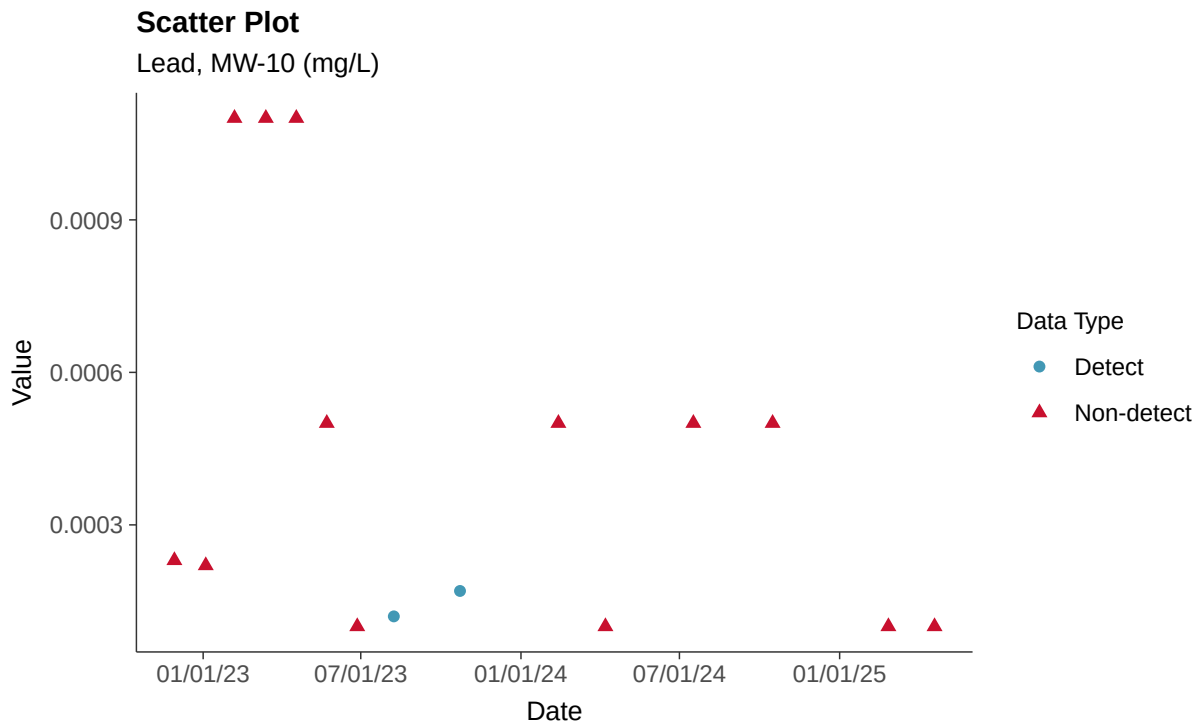
Trend Regression: Piecewise Linear-Linear-Linear

Fluoride (App IV), MW-10 (mg/L)



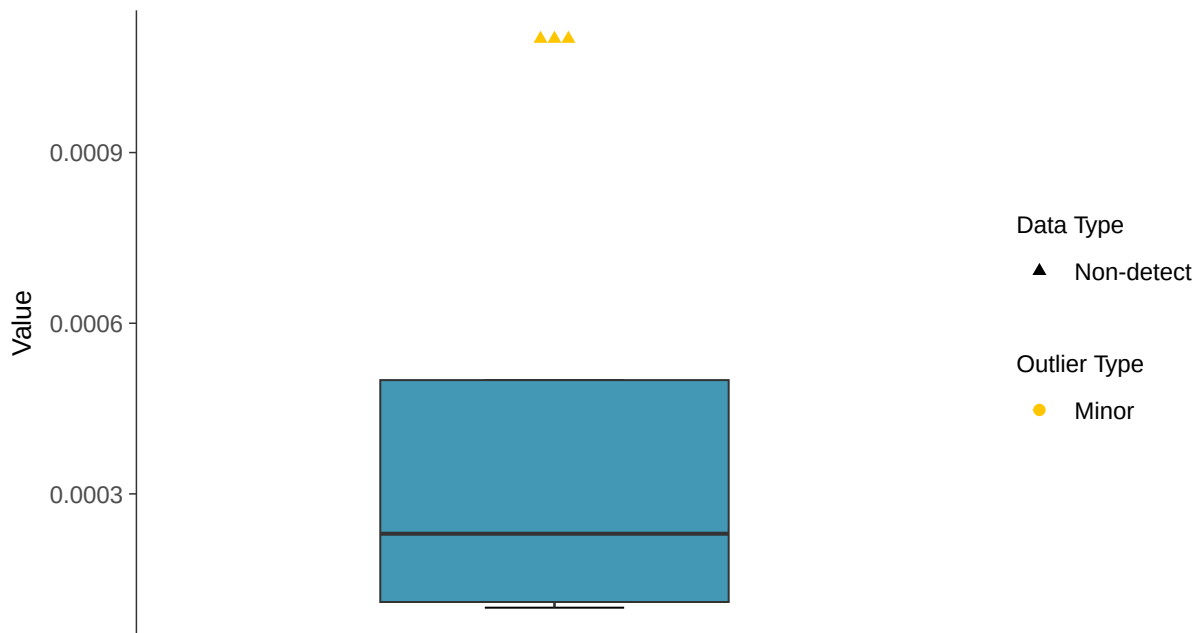
Appendix IV: Lead, MW-10

ID: 20_3_4_115



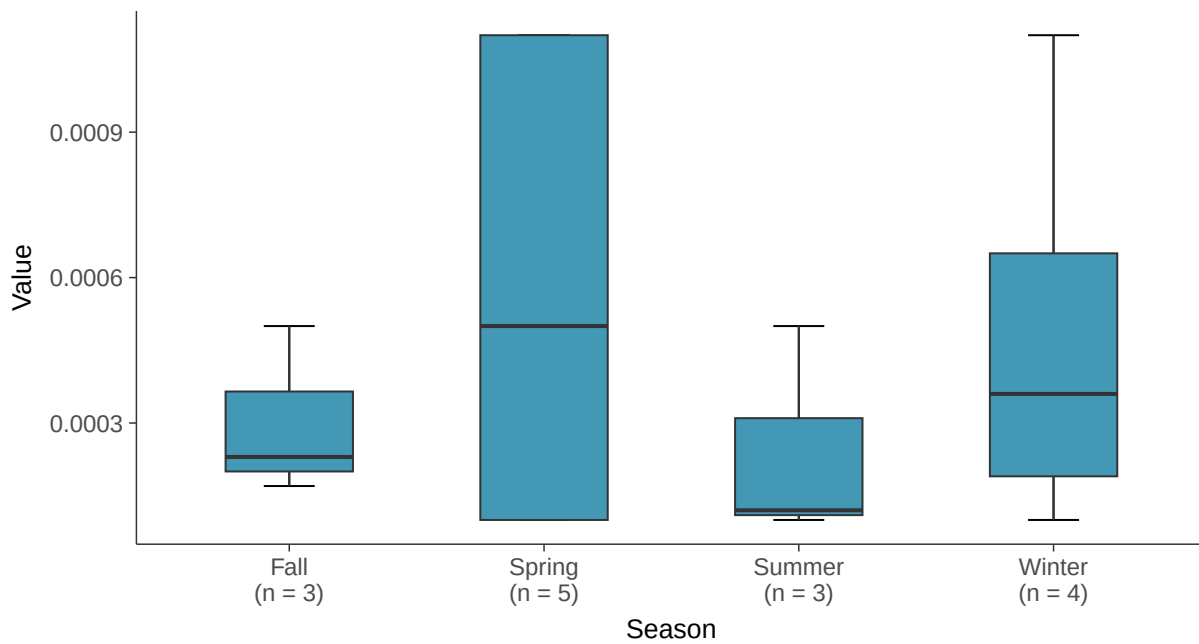
Boxplot

Lead, MW-10 (mg/L)



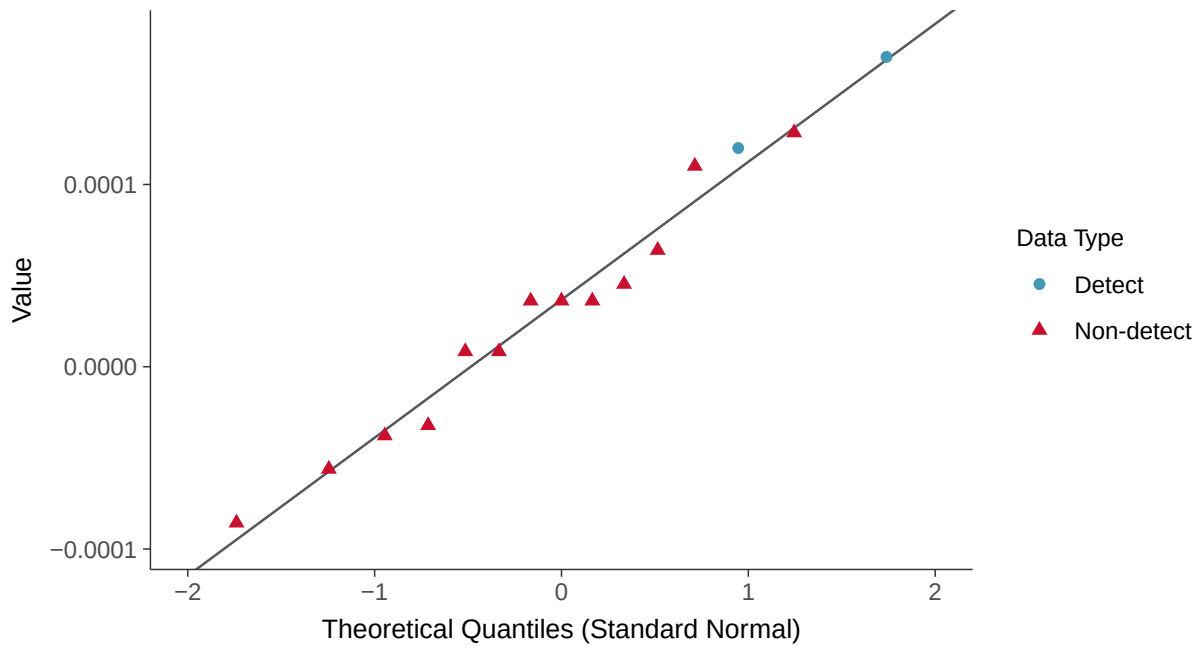
Boxplot by Season

Lead, MW-10 (mg/L)



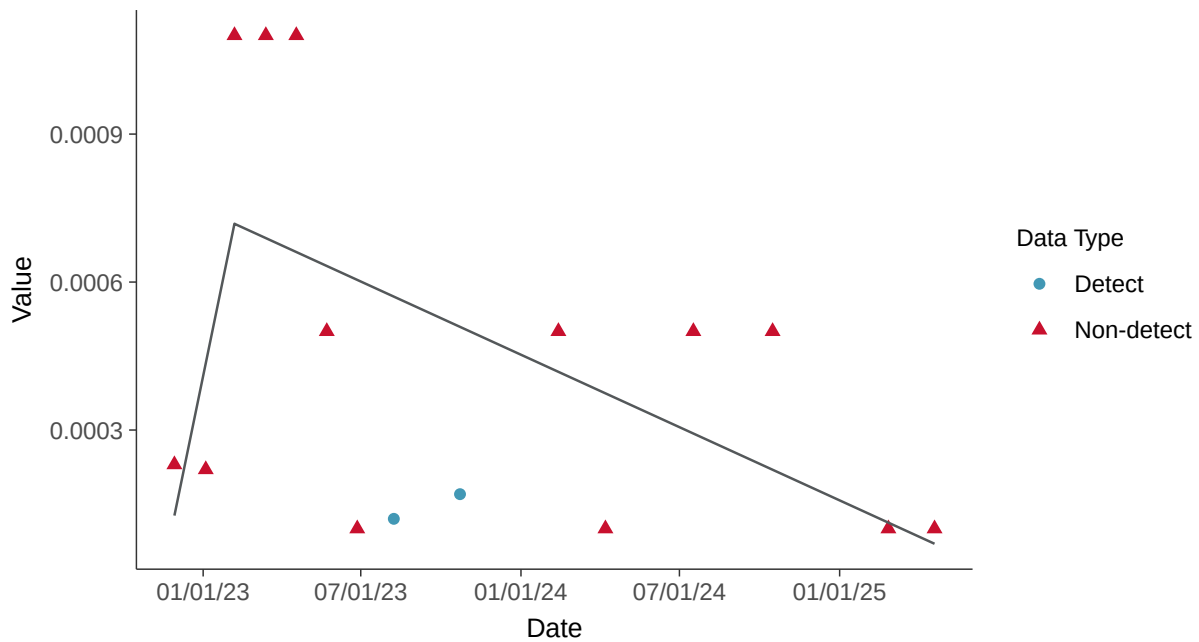
Normal Q-Q plot using ROS Imputed Estimates

Lead, MW-10 (mg/L)



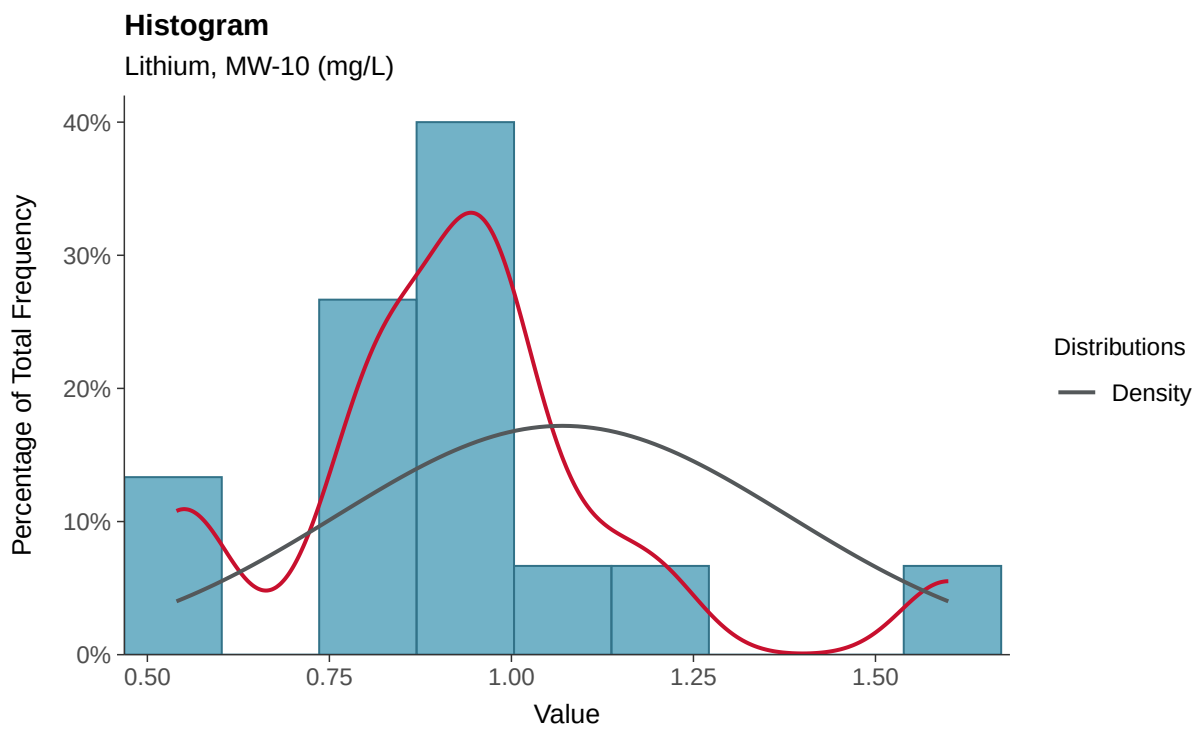
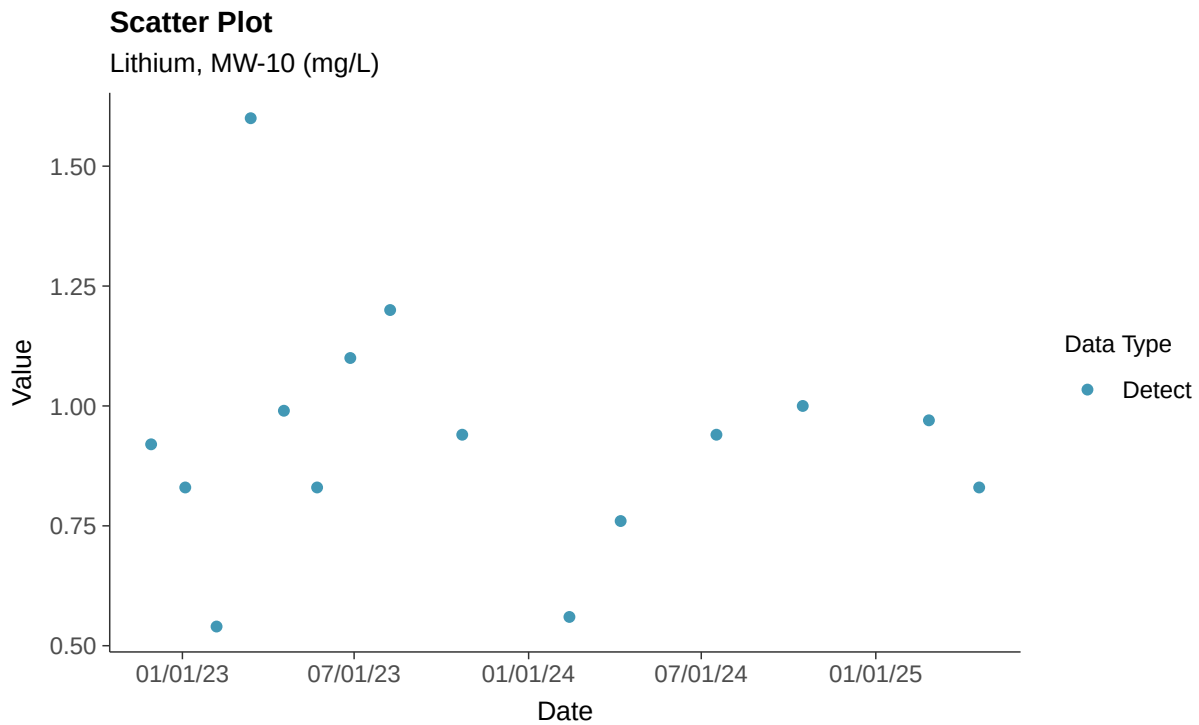
Trend Regression: Piecewise Linear-Linear

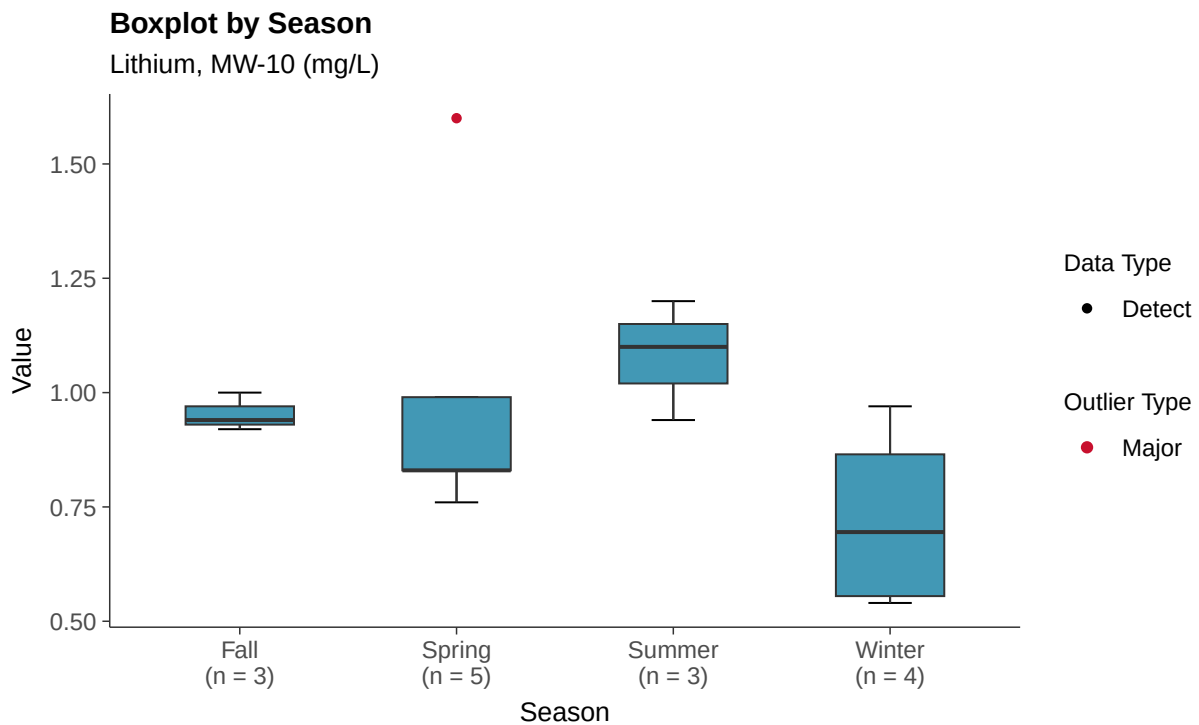
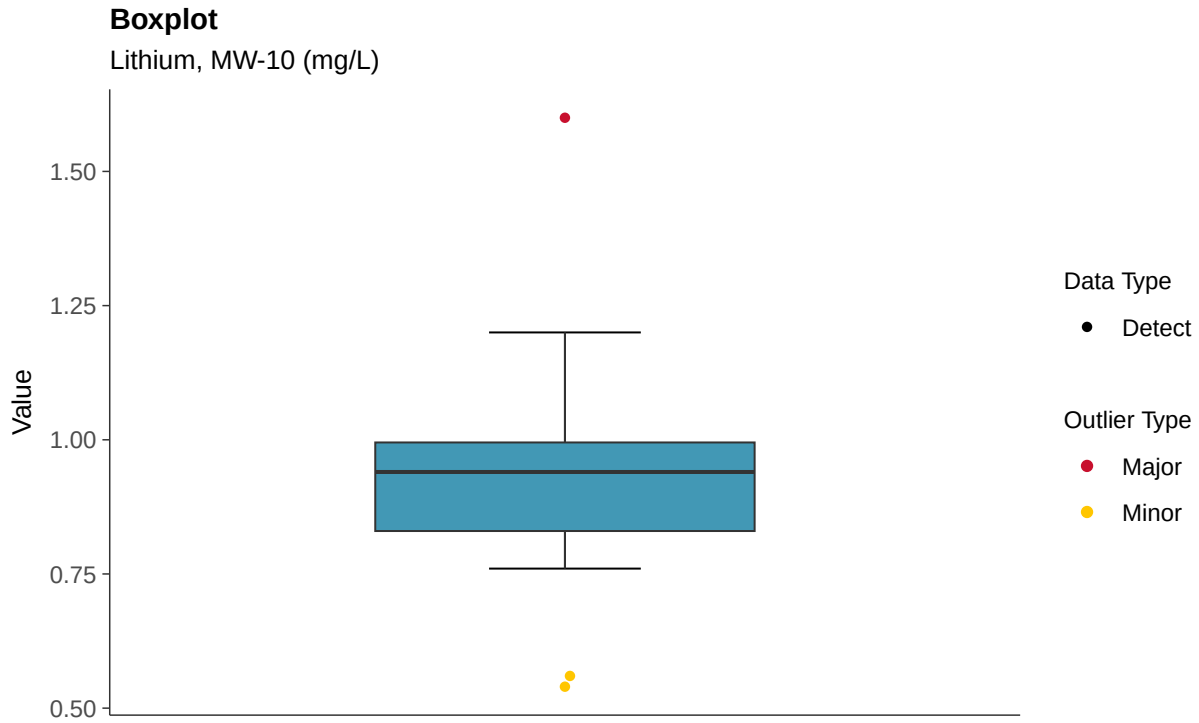
Lead, MW-10 (mg/L)



Appendix IV: Lithium, MW-10

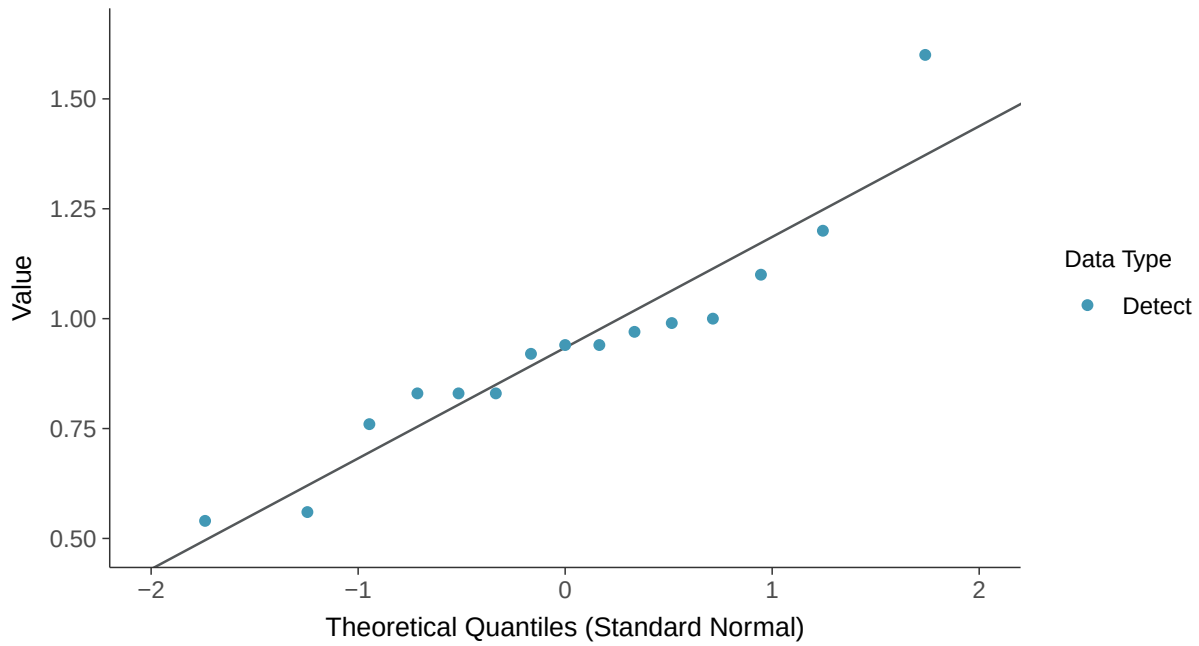
ID: 20_3_4_116





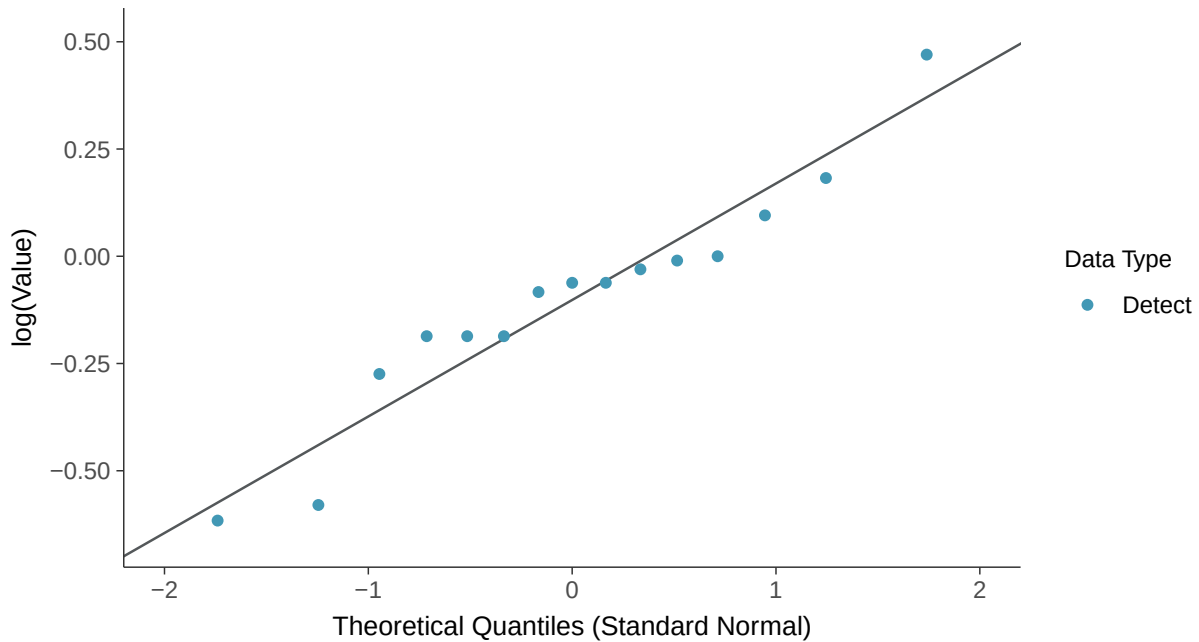
Normal Q-Q plot

Lithium, MW-10 (mg/L)



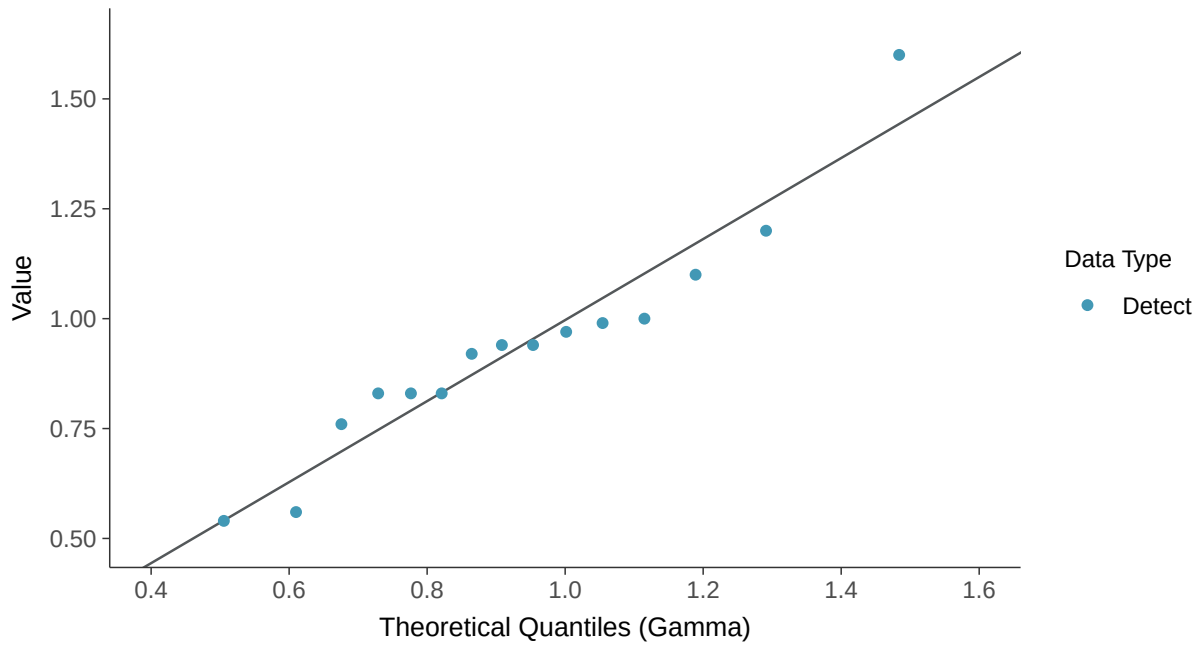
Lognormal Q-Q plot

Lithium, MW-10 (mg/L)



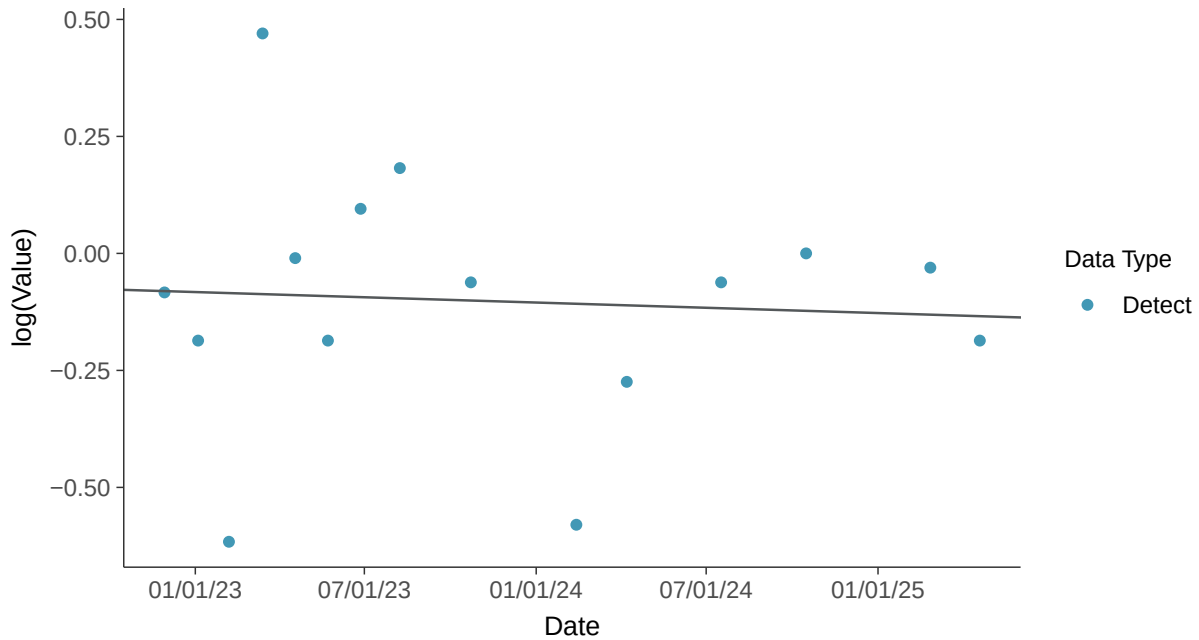
Gamma Q-Q plot

Lithium, MW-10 (mg/L)



Trend Regression: Lognormal MLE

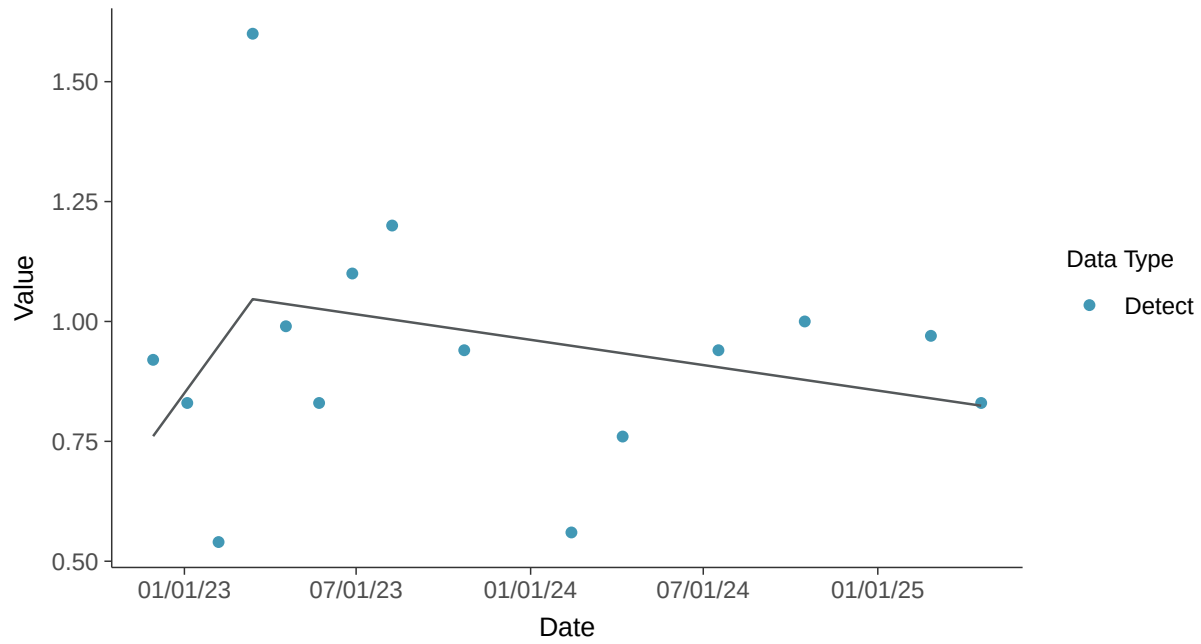
Lithium, MW-10 (mg/L)





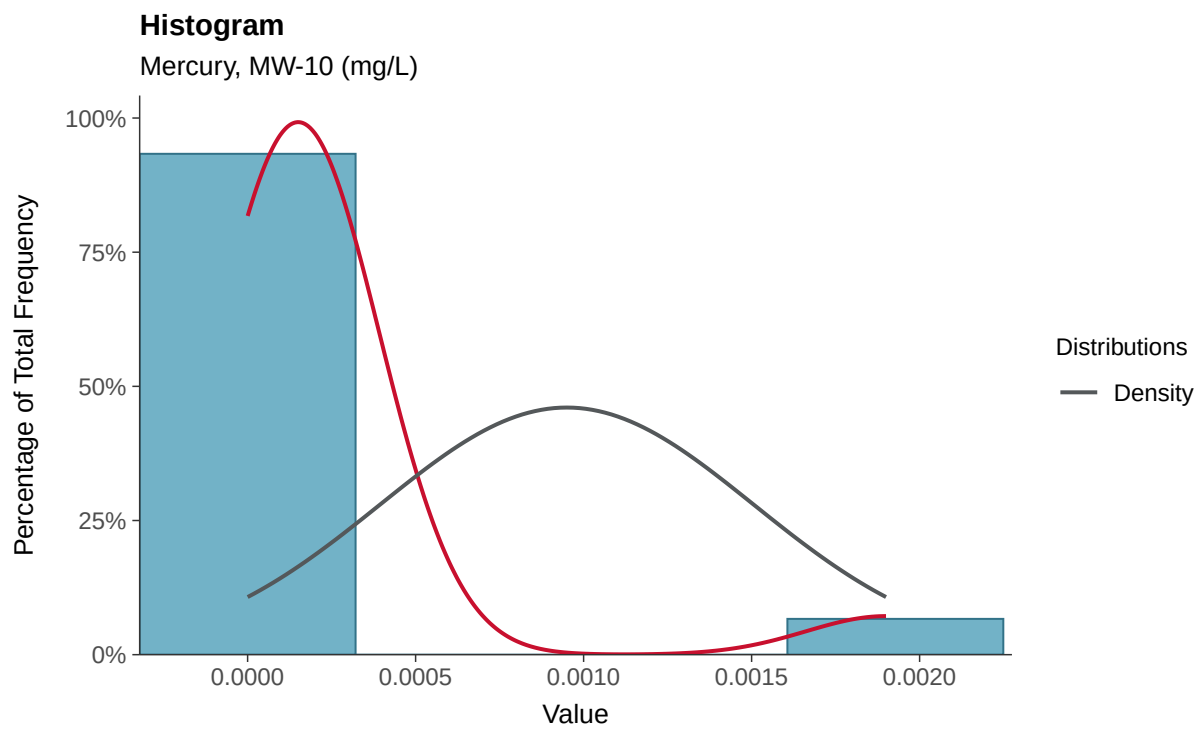
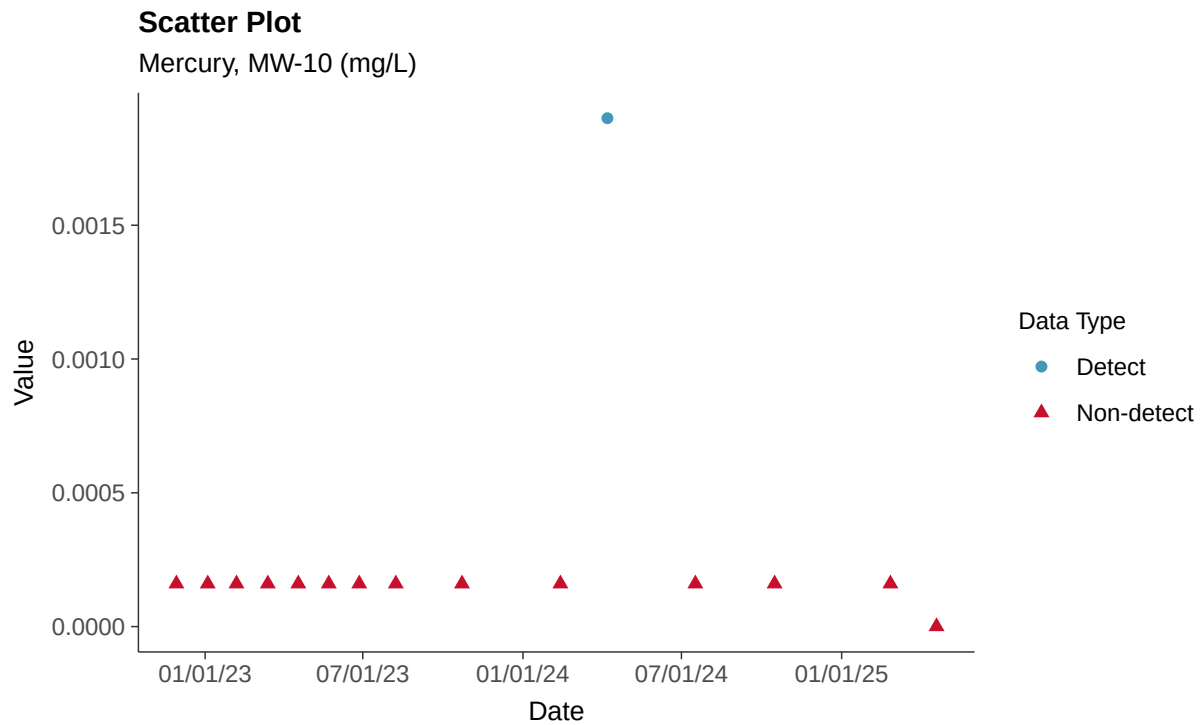
Trend Regression: Piecewise Linear-Linear

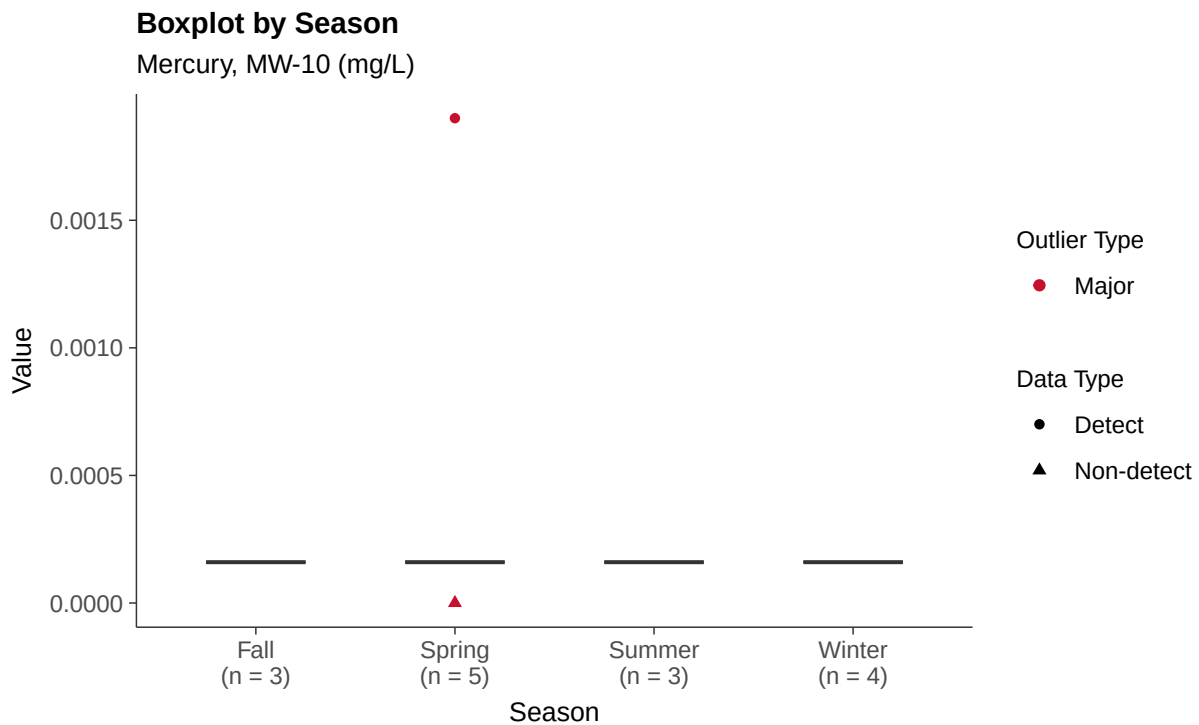
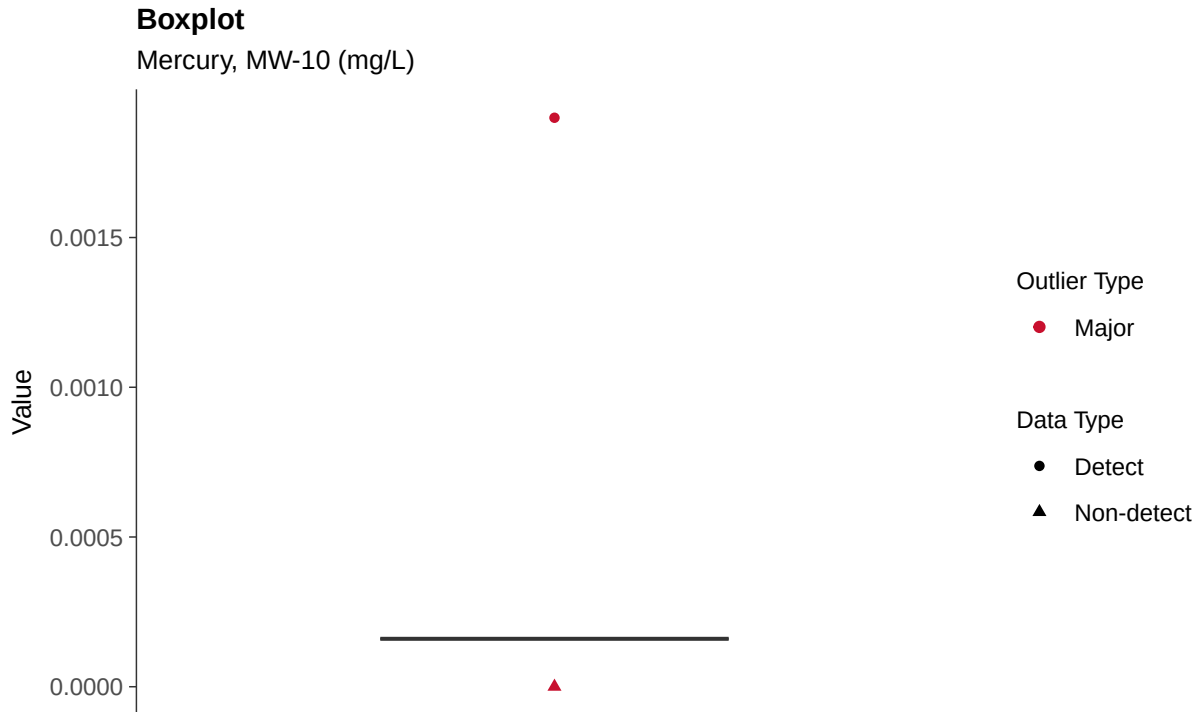
Lithium, MW-10 (mg/L)



Appendix IV: Mercury, MW-10

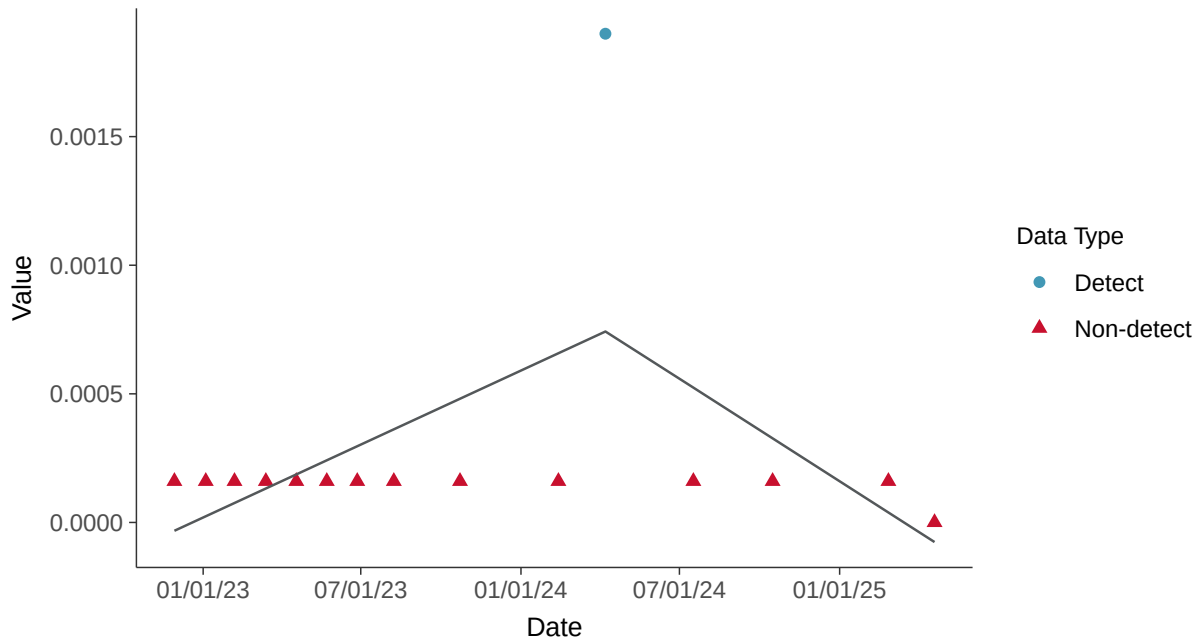
ID: 20_3_4_117





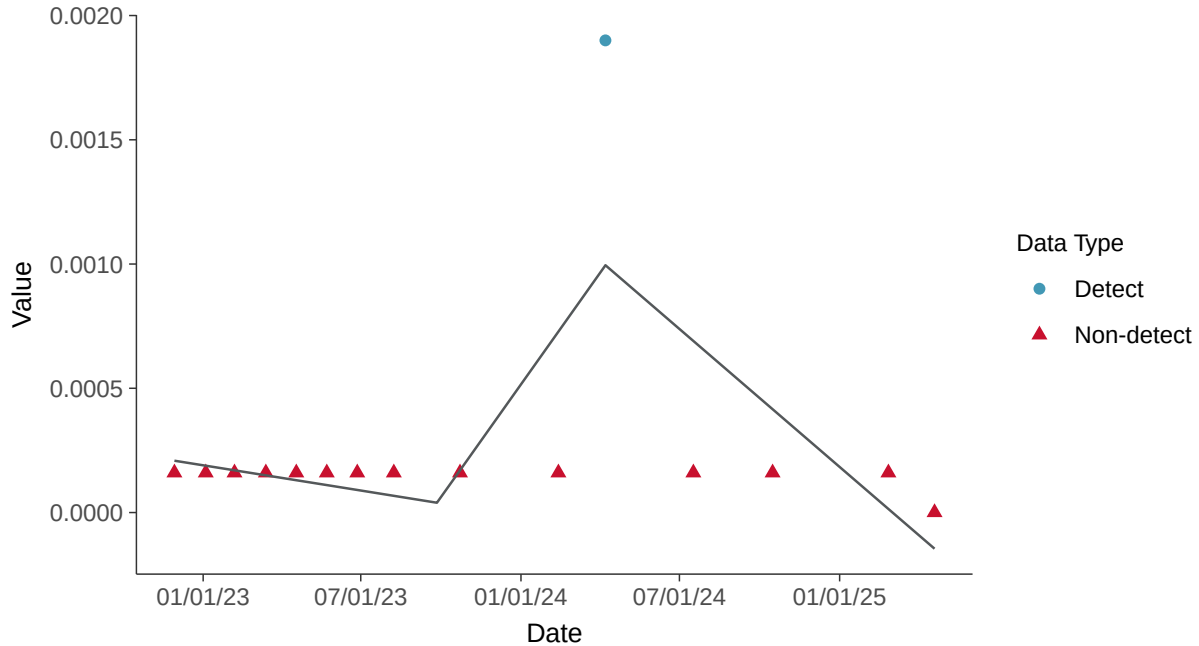
Trend Regression: Piecewise Linear-Linear

Mercury, MW-10 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Mercury, MW-10 (mg/L)

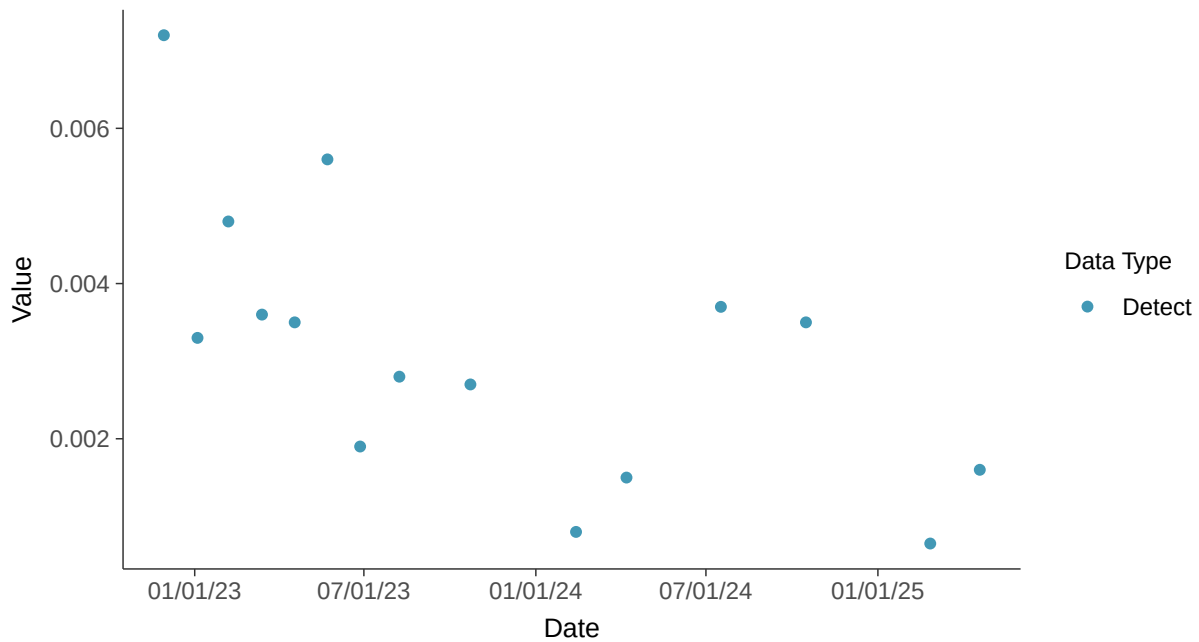


Appendix IV: Molybdenum, MW-10

ID: 20_3_4_118

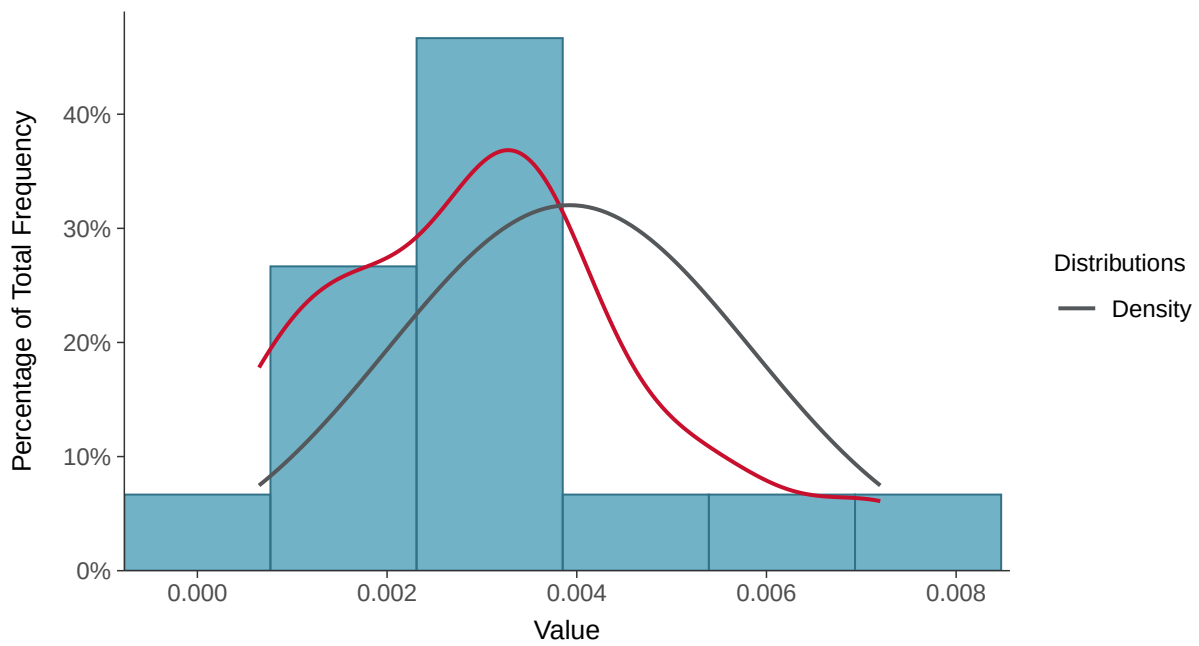
Scatter Plot

Molybdenum, MW-10 (mg/L)



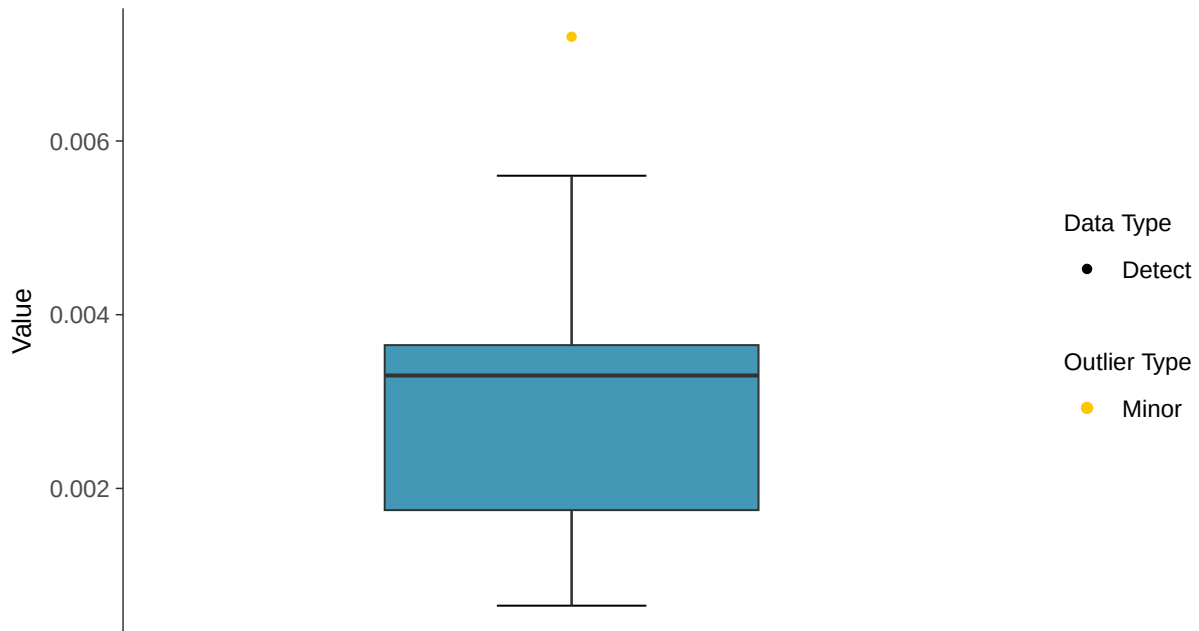
Histogram

Molybdenum, MW-10 (mg/L)



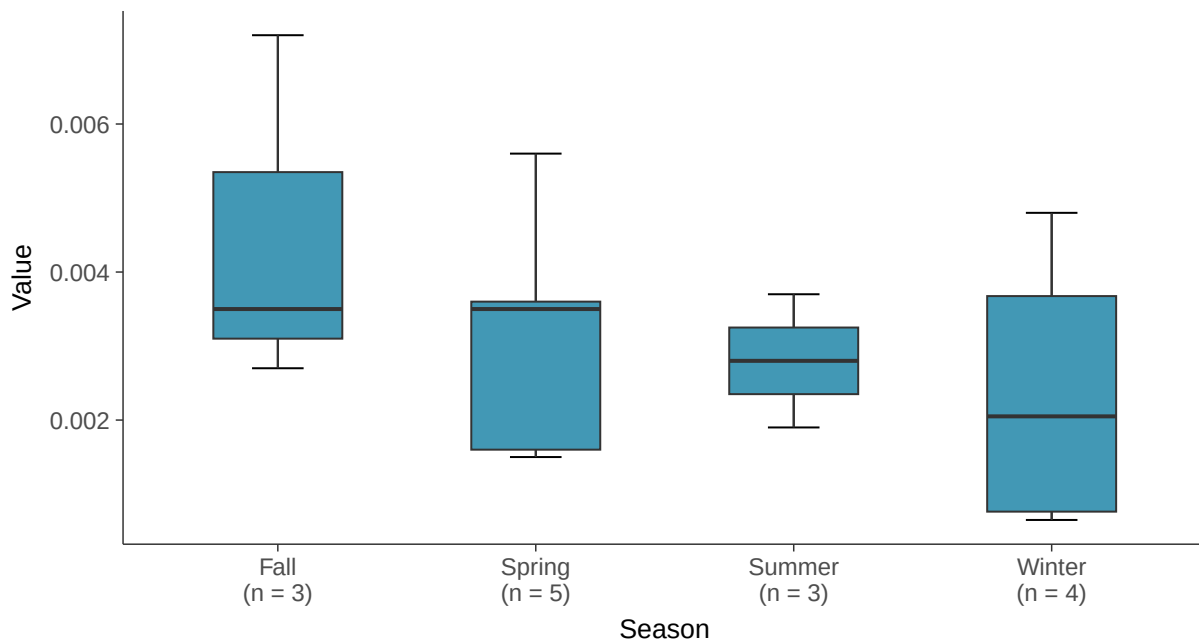
Boxplot

Molybdenum, MW-10 (mg/L)



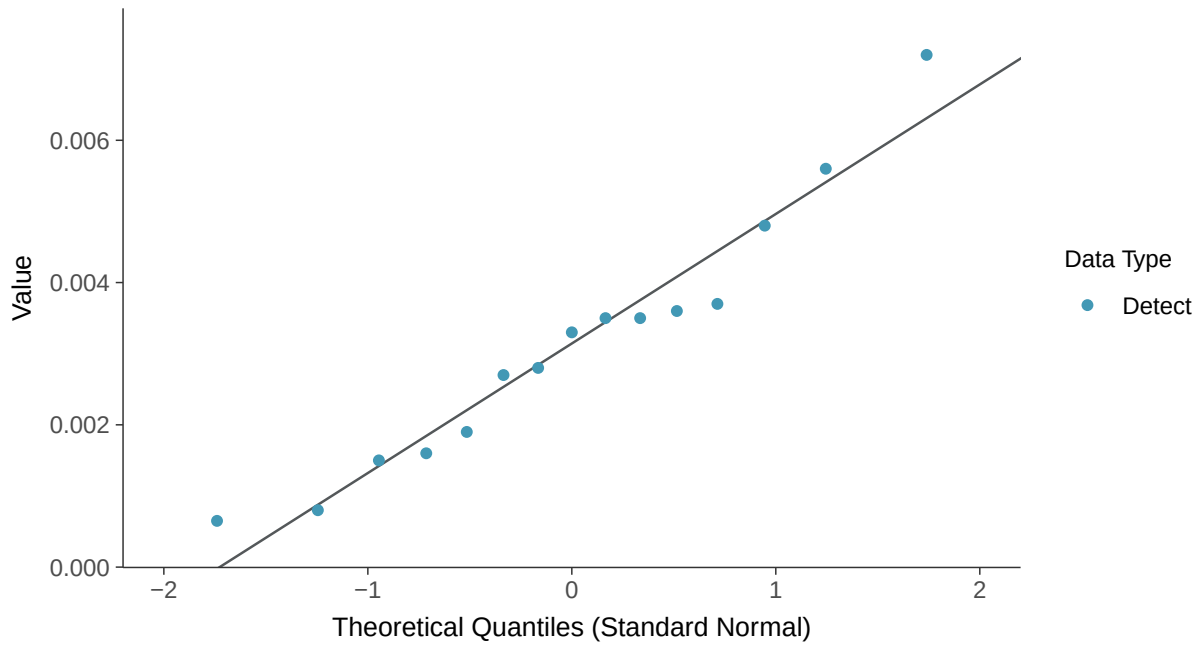
Boxplot by Season

Molybdenum, MW-10 (mg/L)



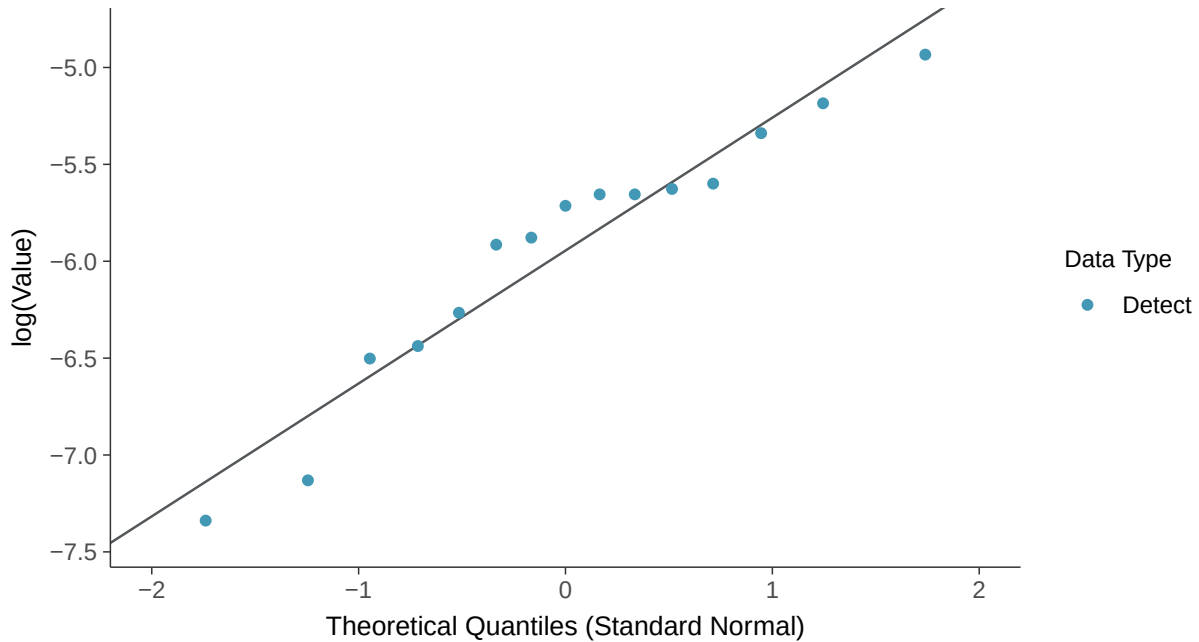
Normal Q-Q plot

Molybdenum, MW-10 (mg/L)



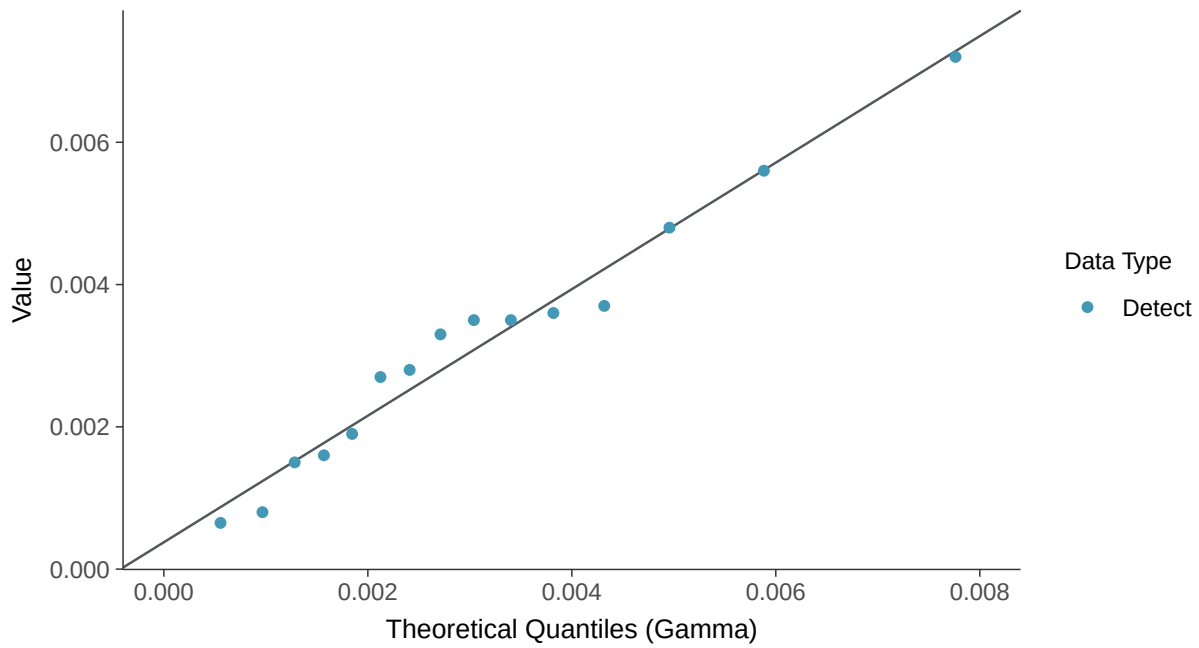
Lognormal Q-Q plot

Molybdenum, MW-10 (mg/L)



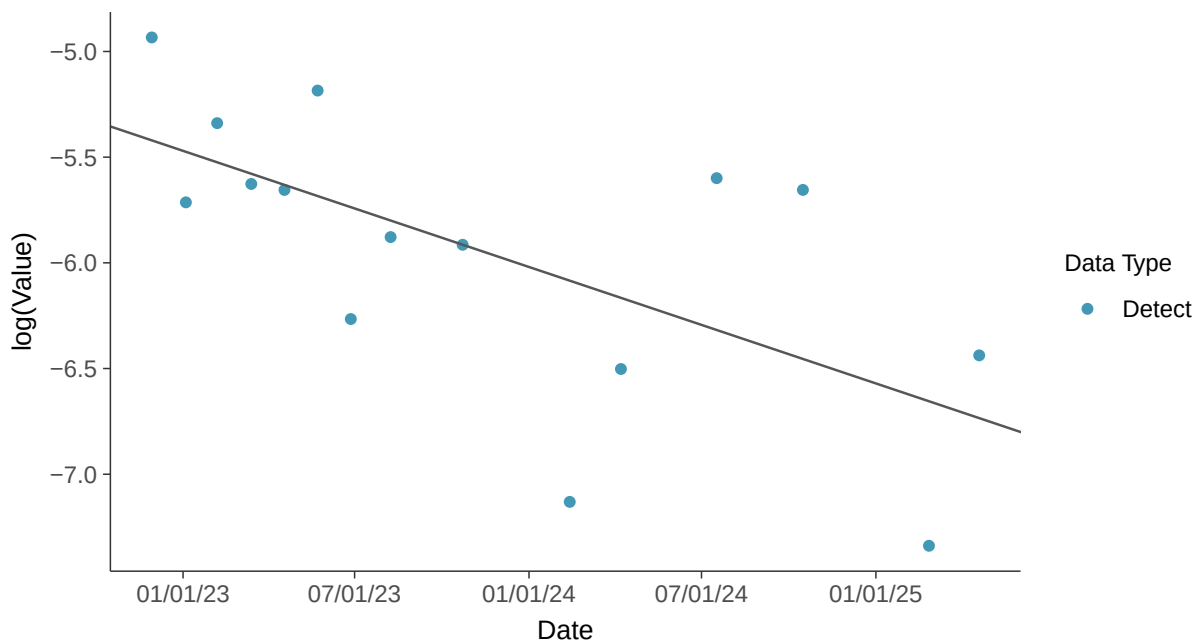
Gamma Q-Q plot

Molybdenum, MW-10 (mg/L)



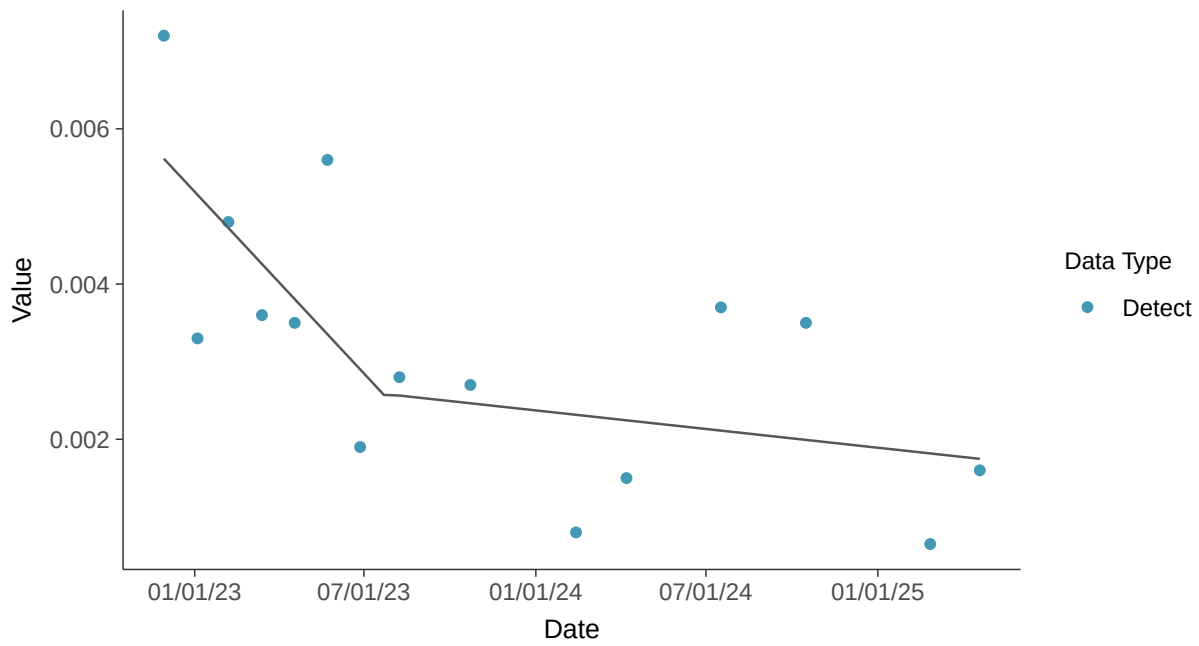
Trend Regression: Lognormal MLE

Molybdenum, MW-10 (mg/L)



Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-10 (mg/L)

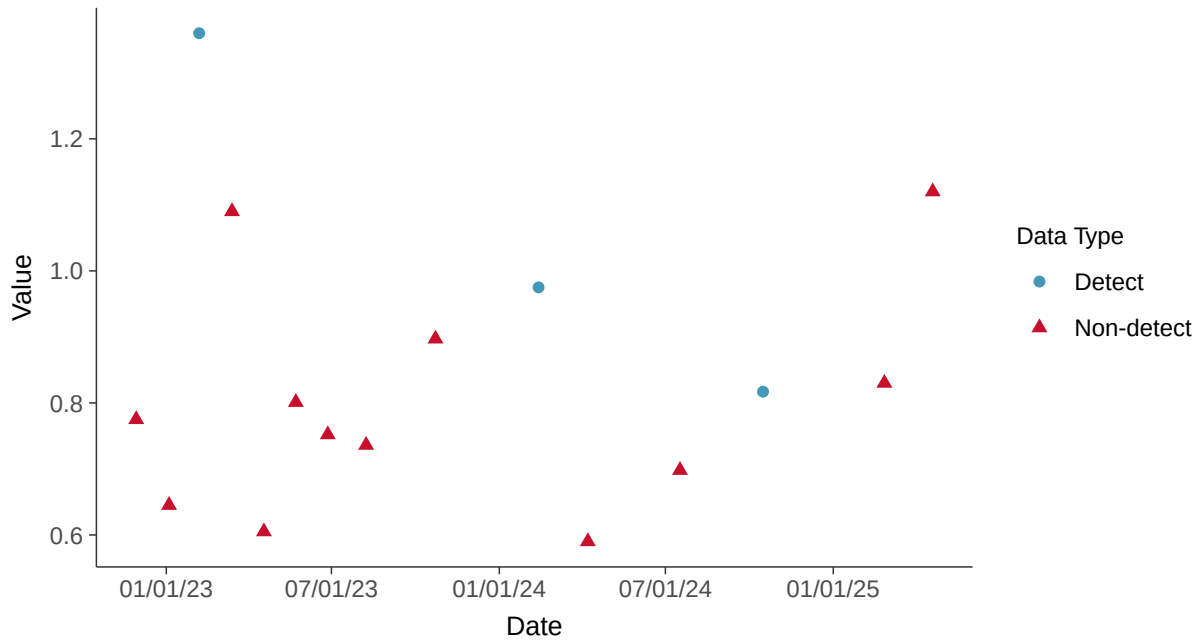


Appendix IV: Radium 226 and 228, MW-10

ID: 20_3_4_121

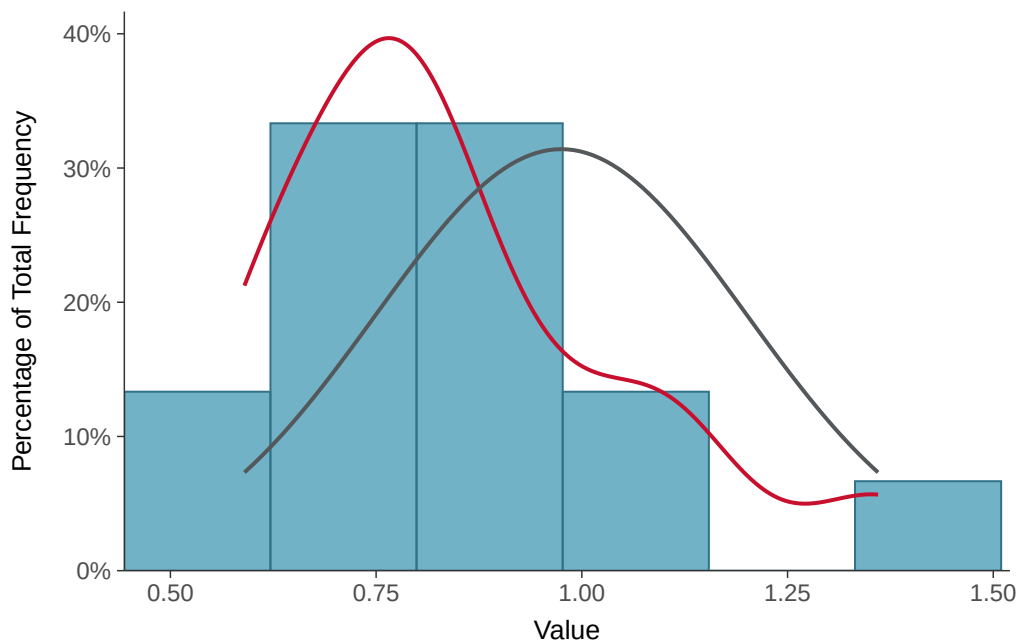
Scatter Plot

Radium 226 and 228, MW-10 (pCi/L)



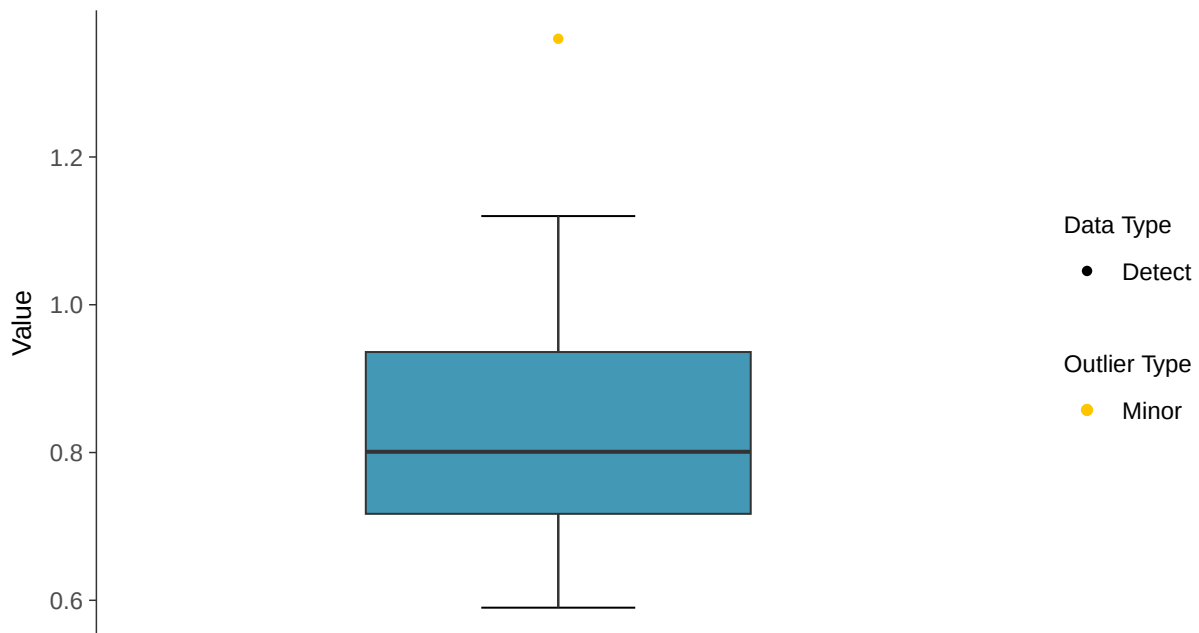
Histogram

Radium 226 and 228, MW-10 (pCi/L)



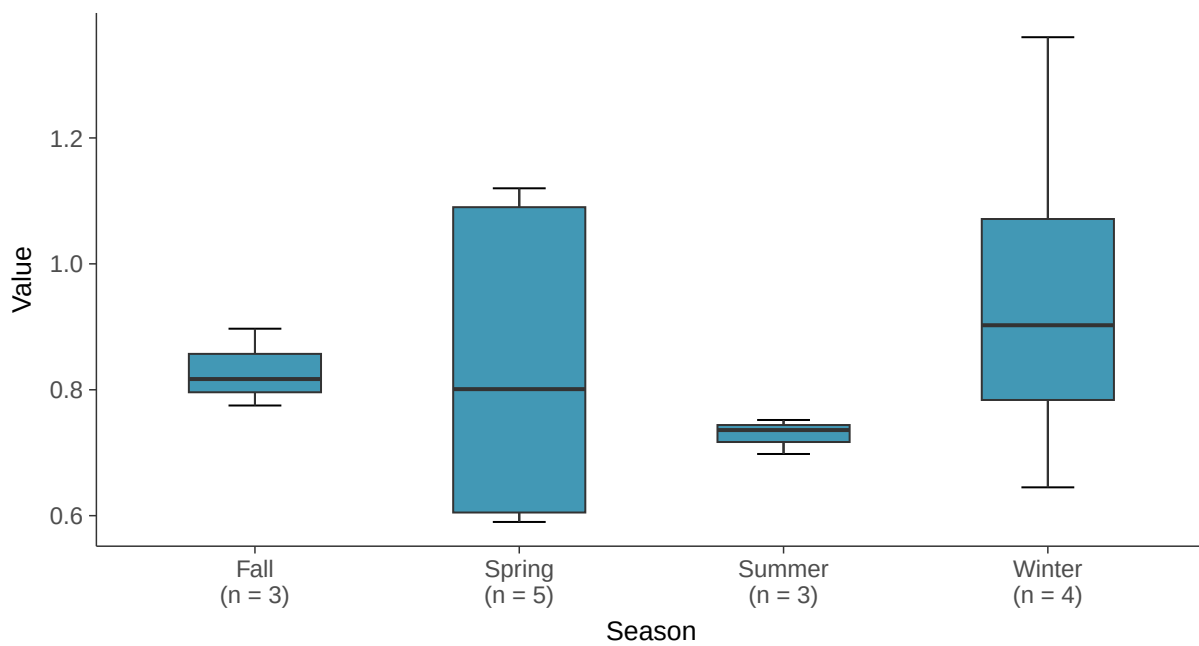
Boxplot

Radium 226 and 228, MW-10 (pCi/L)



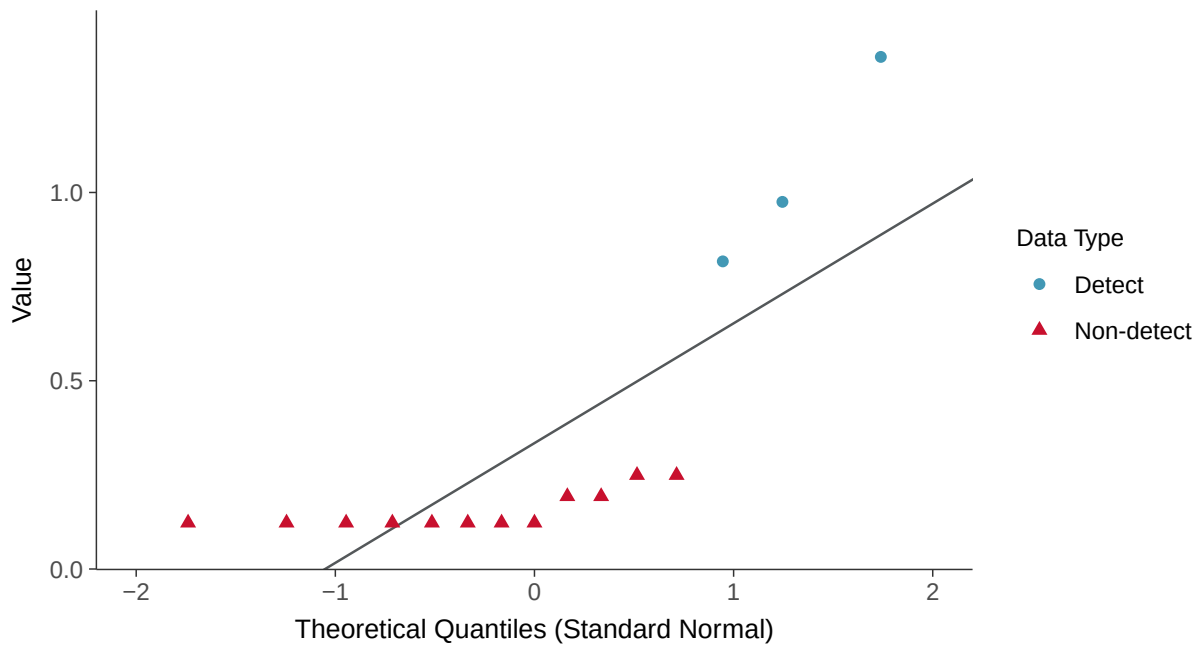
Boxplot by Season

Radium 226 and 228, MW-10 (pCi/L)



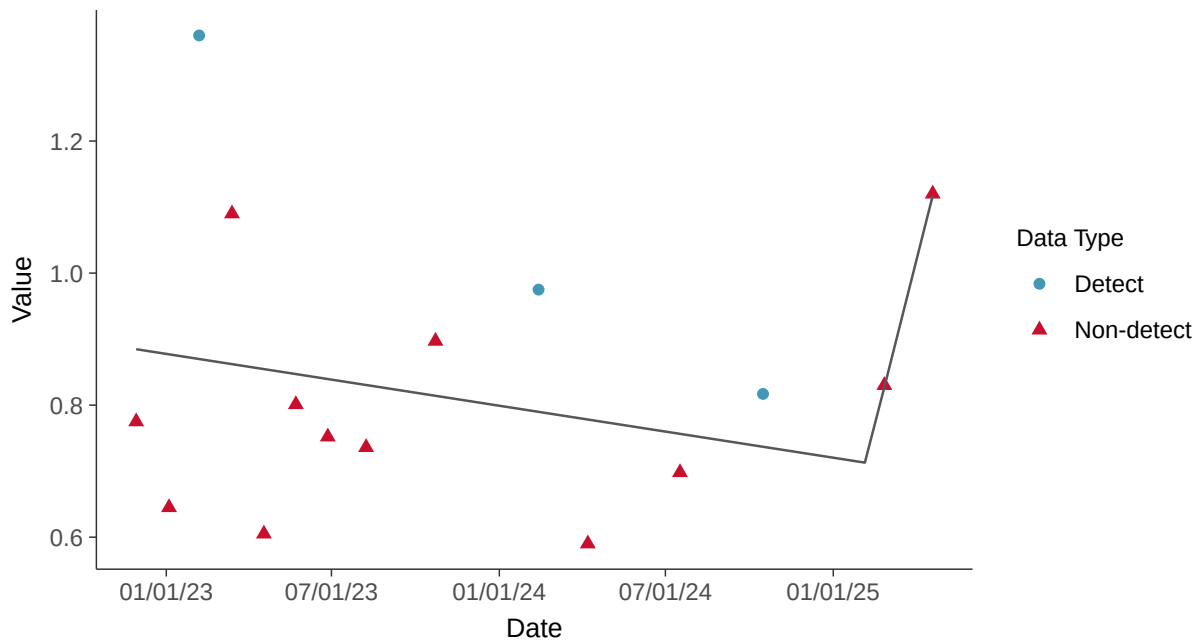
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-10 (pCi/L)

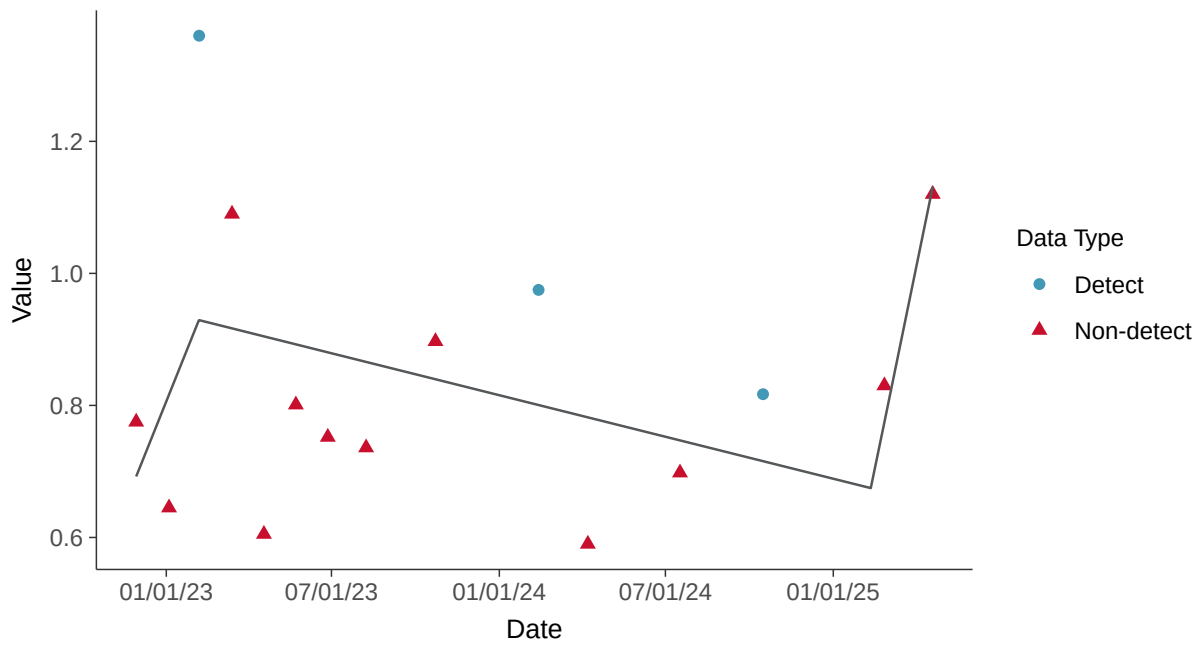


Trend Regression: Piecewise Linear-Linear

Radium 226 and 228, MW-10 (pCi/L)

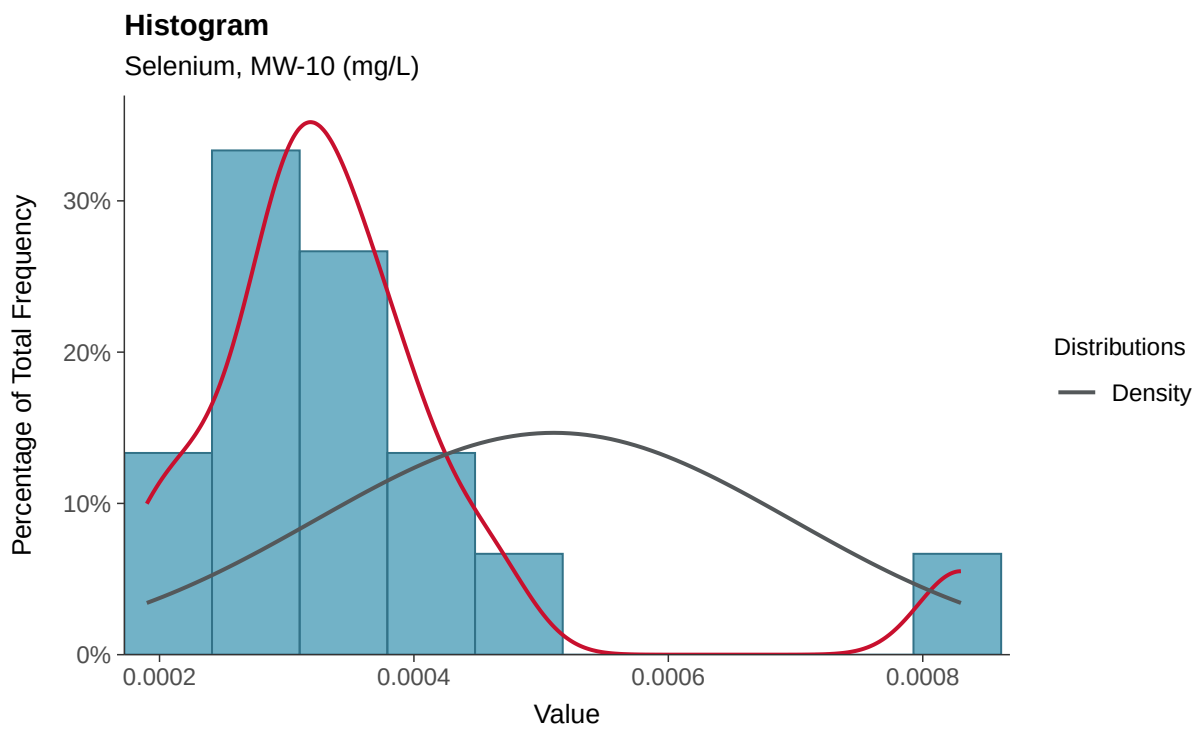
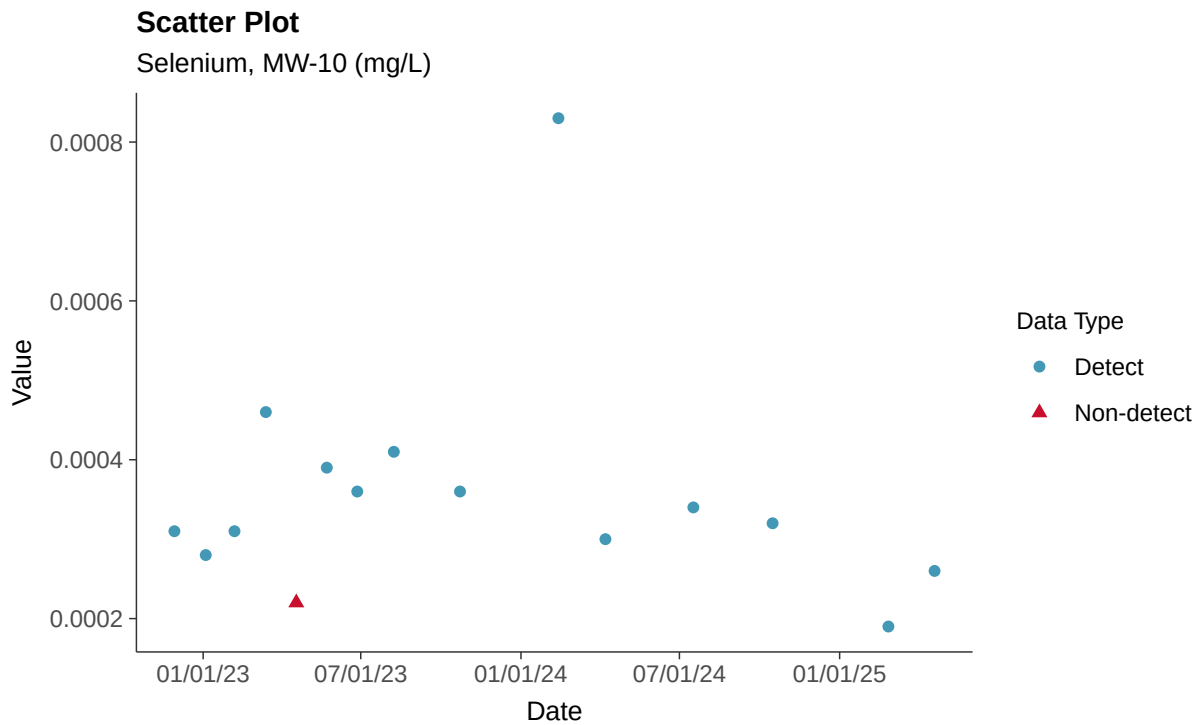


Trend Regression: Piecewise Linear-Linear-Linear
Radium 226 and 228, MW-10 (pCi/L)



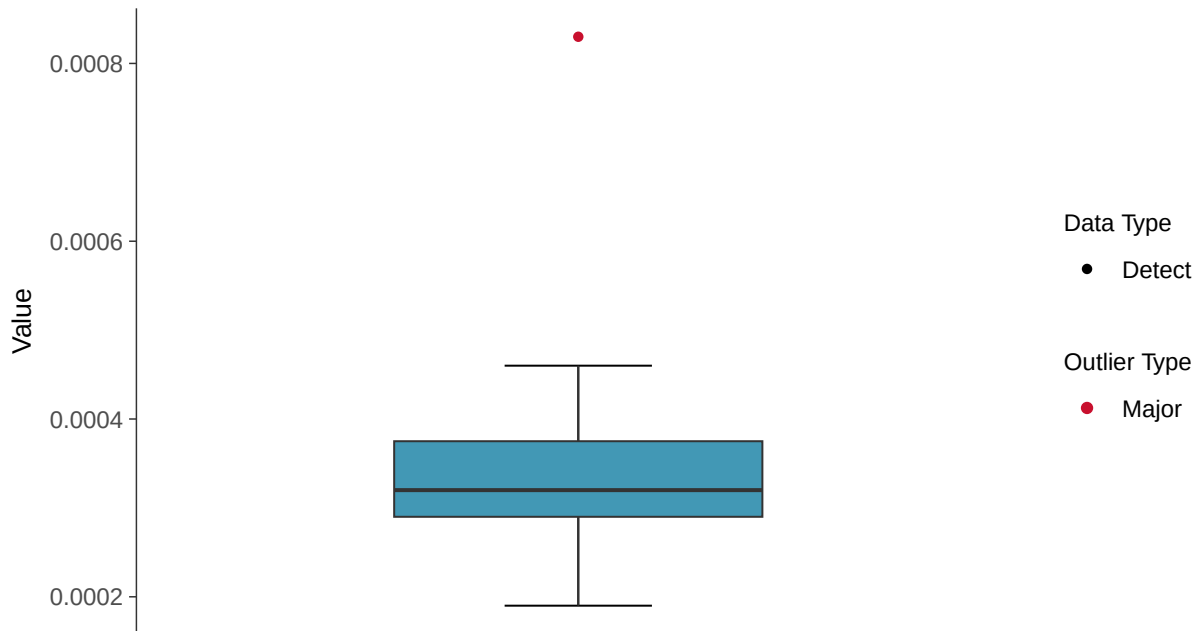
Appendix IV: Selenium, MW-10

ID: 20_3_4_122



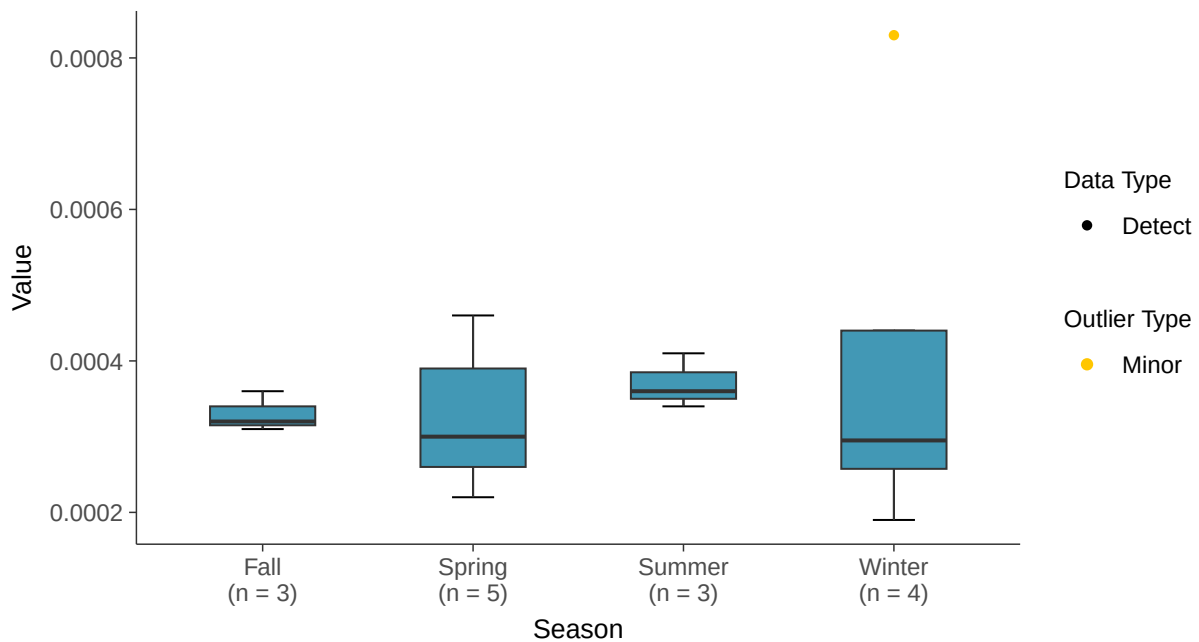
Boxplot

Selenium, MW-10 (mg/L)



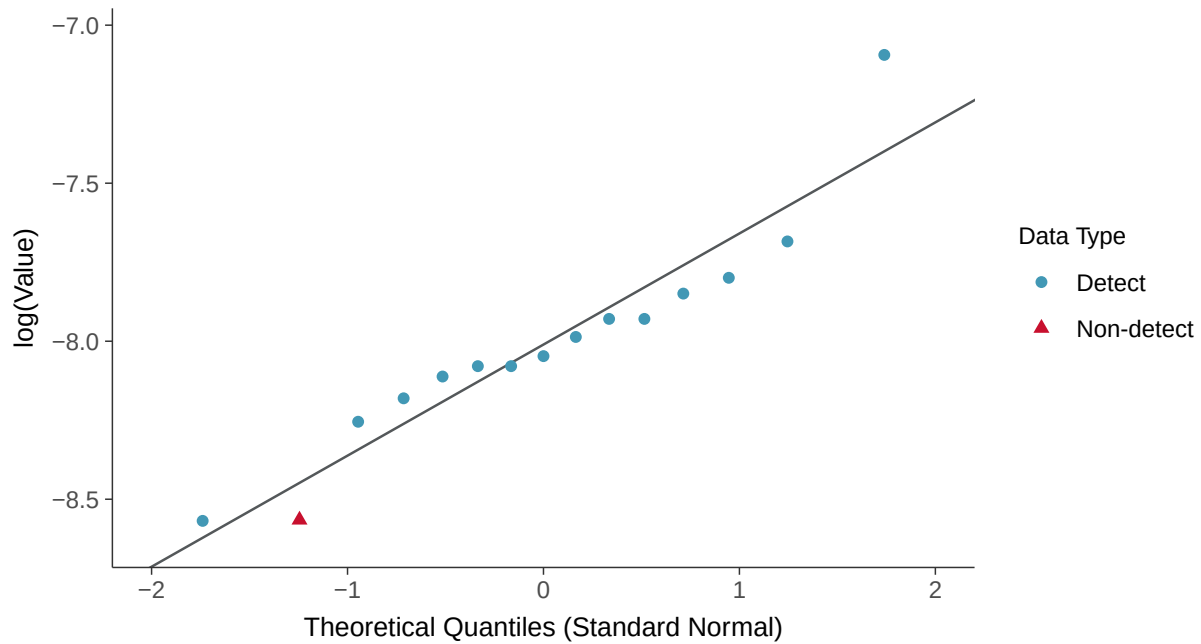
Boxplot by Season

Selenium, MW-10 (mg/L)



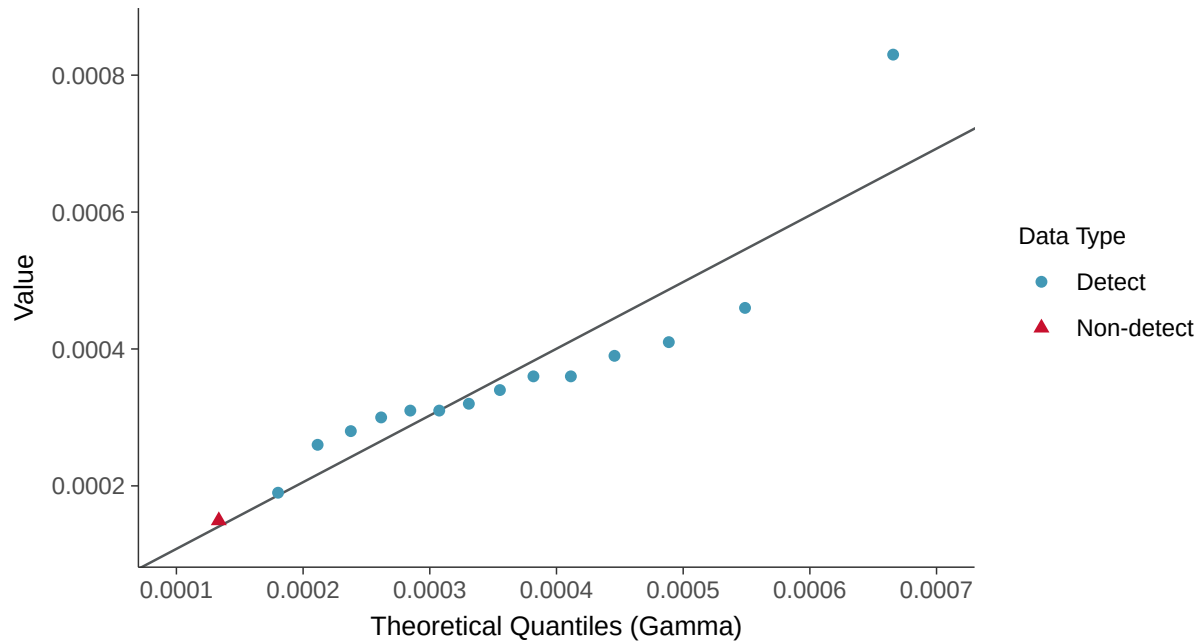
Lognormal Q-Q plot using ROS Imputed Estimates

Selenium, MW-10 (mg/L)



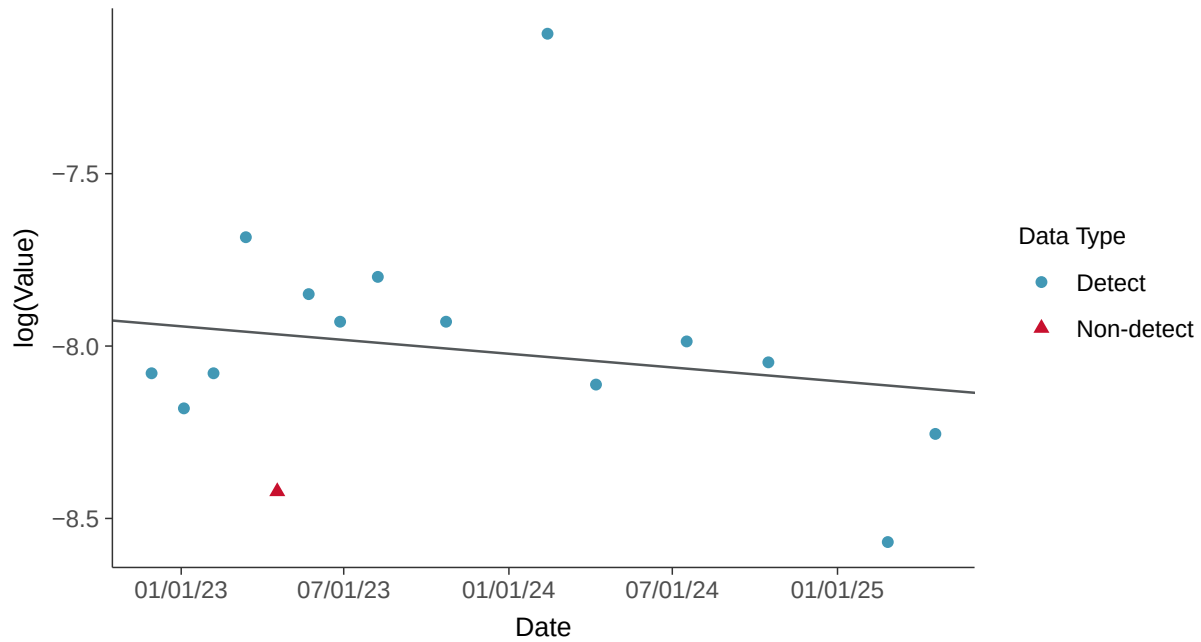
Gamma Q-Q plot using ROS Imputed Estimates

Selenium, MW-10 (mg/L)



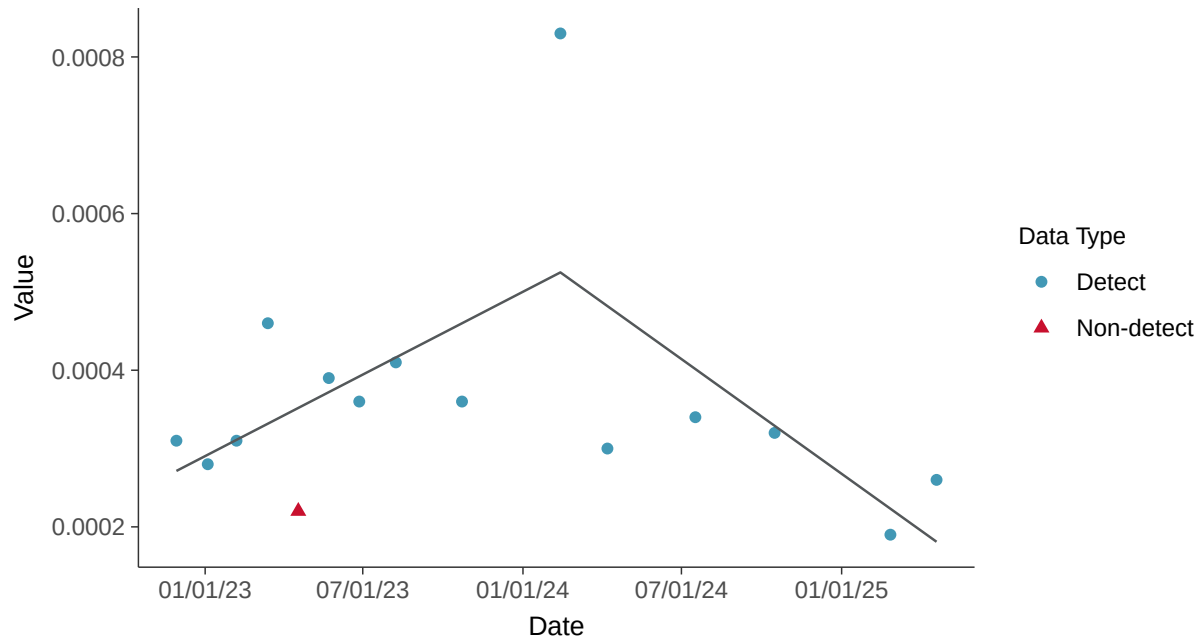
Trend Regression: Lognormal MLE

Selenium, MW-10 (mg/L)

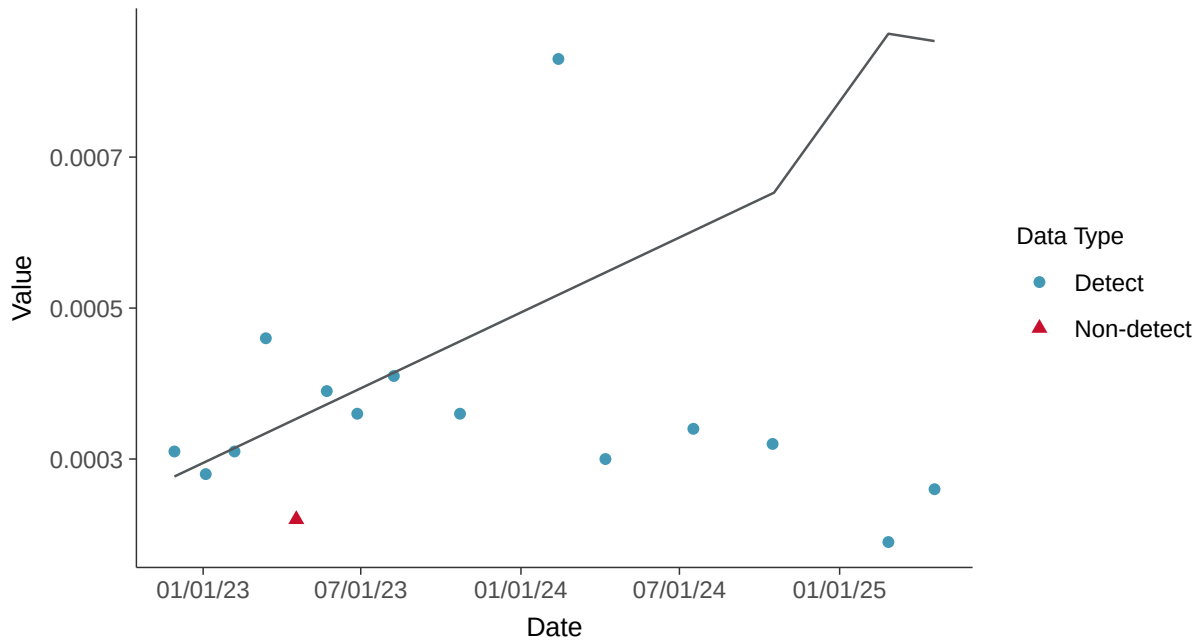


Trend Regression: Piecewise Linear-Linear

Selenium, MW-10 (mg/L)

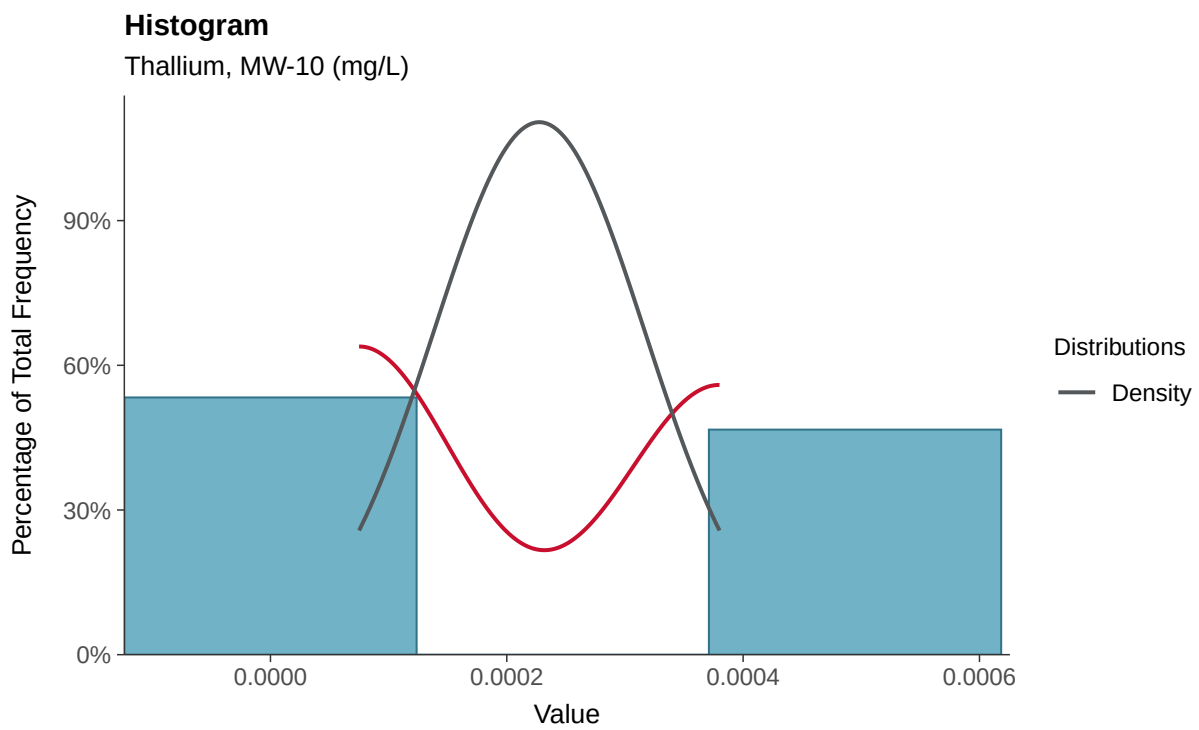
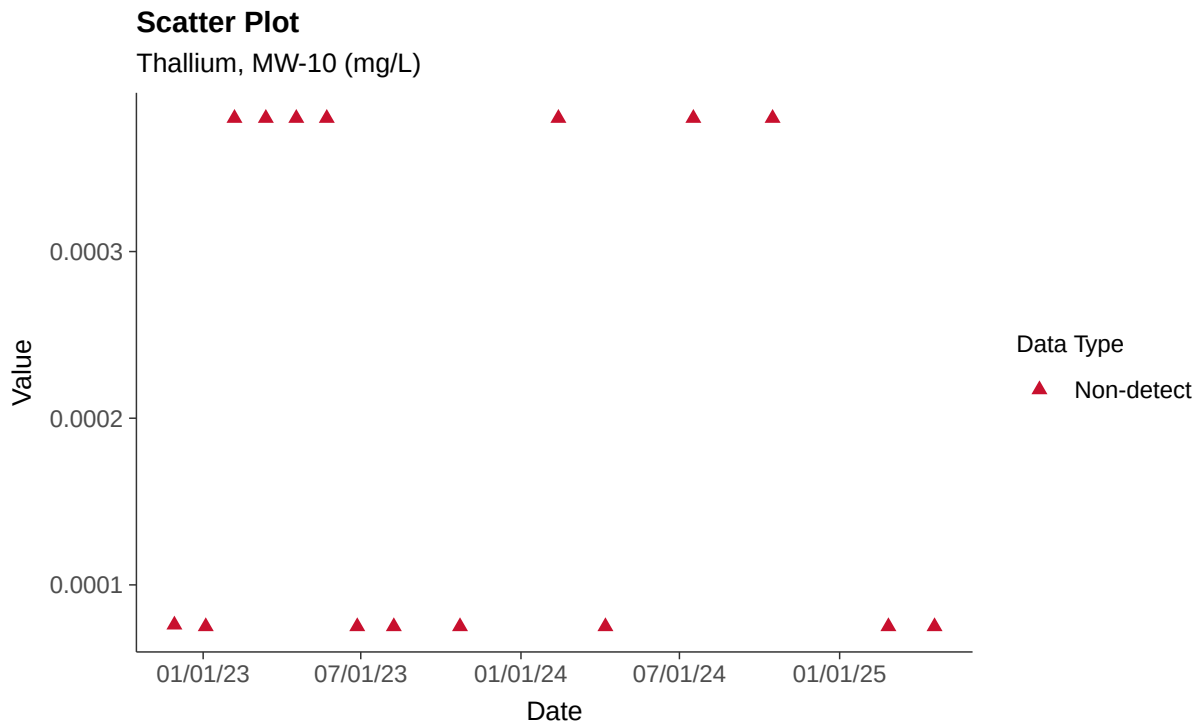


Trend Regression: Piecewise Linear-Linear-Linear
Selenium, MW-10 (mg/L)



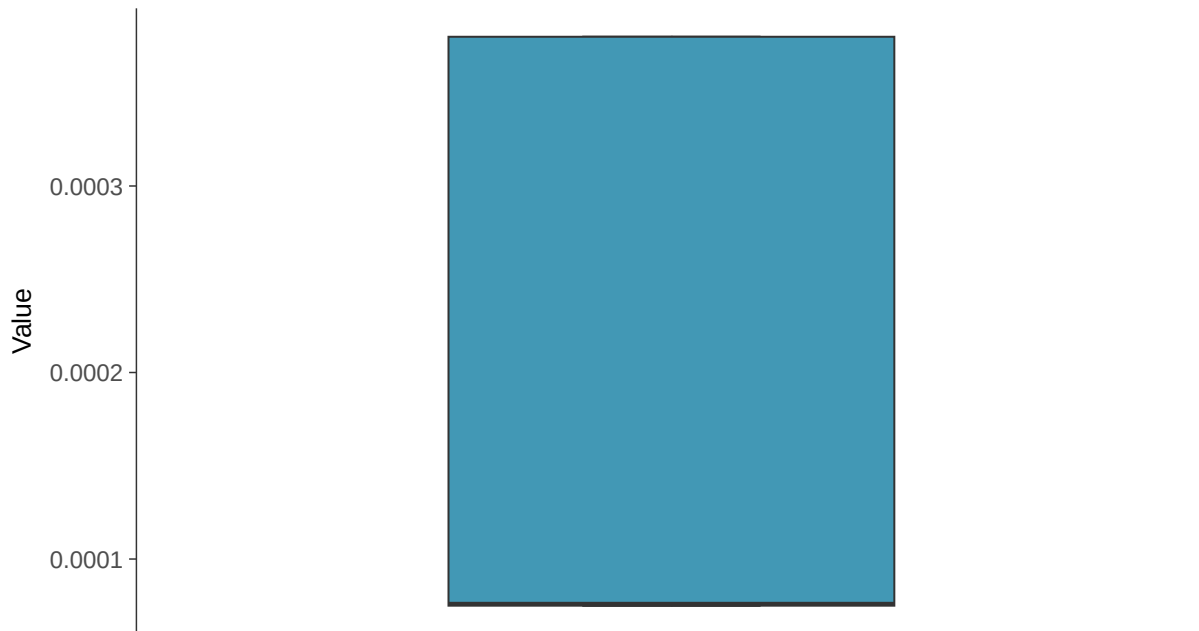
Appendix IV: Thallium, MW-10

ID: 20_3_4_125



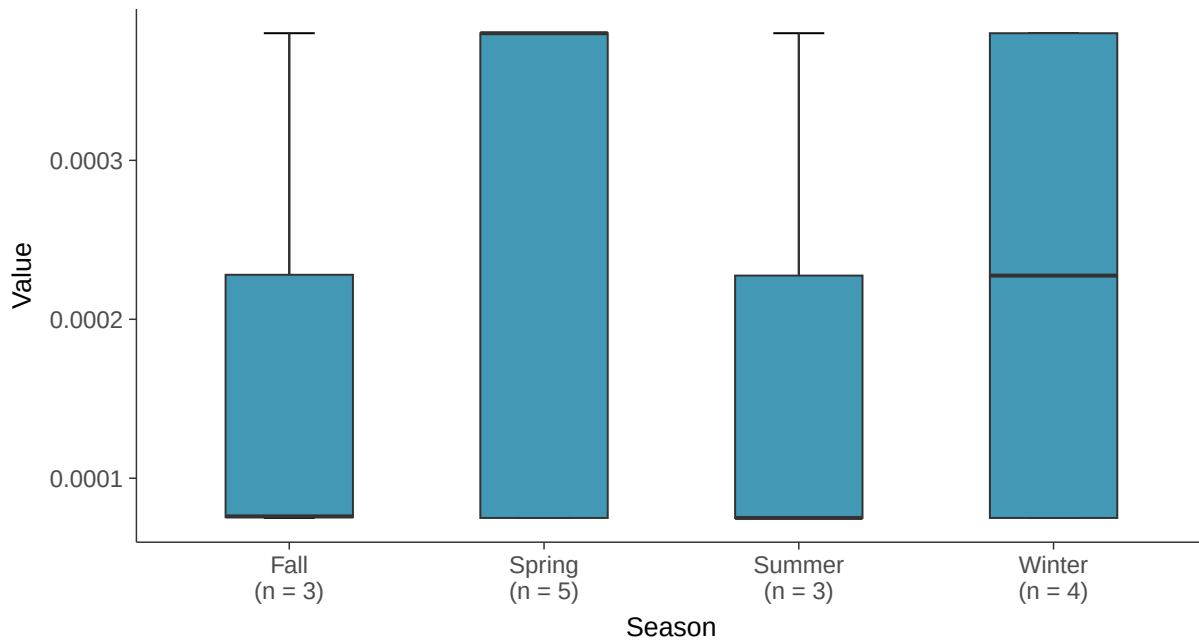
Boxplot

Thallium, MW-10 (mg/L)



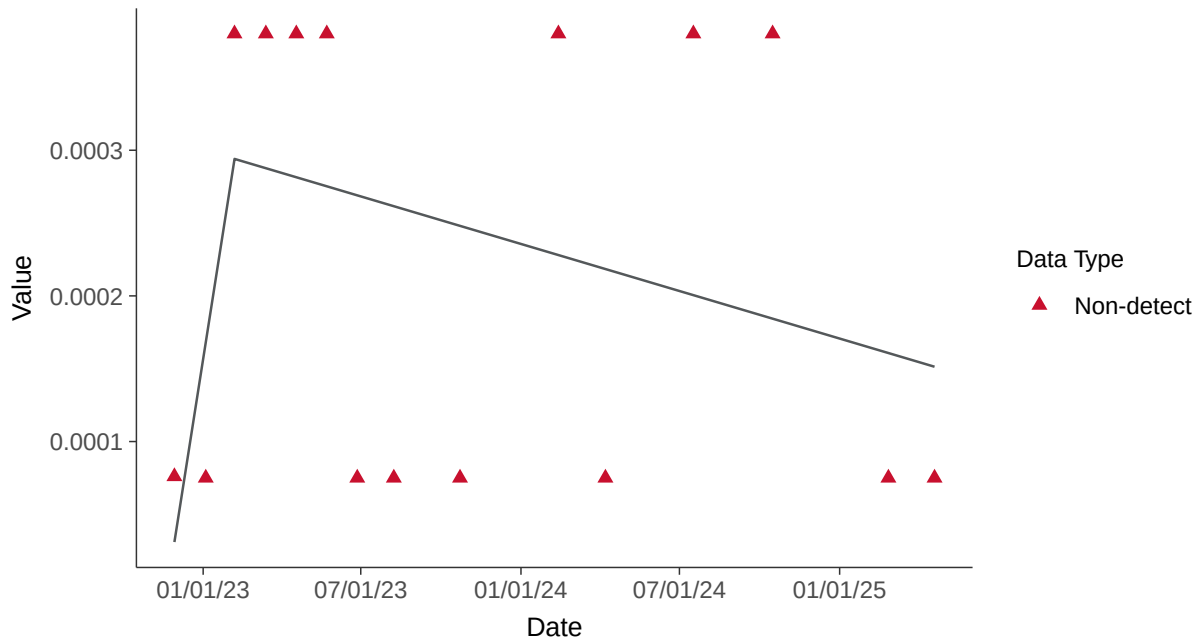
Boxplot by Season

Thallium, MW-10 (mg/L)



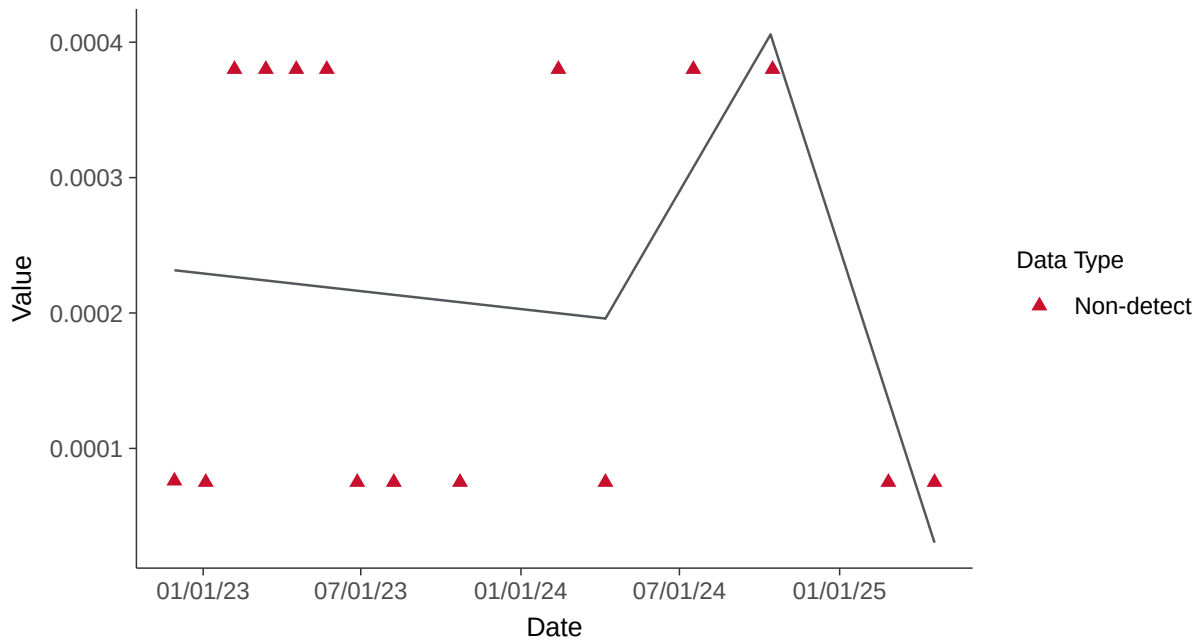
Trend Regression: Piecewise Linear-Linear

Thallium, MW-10 (mg/L)



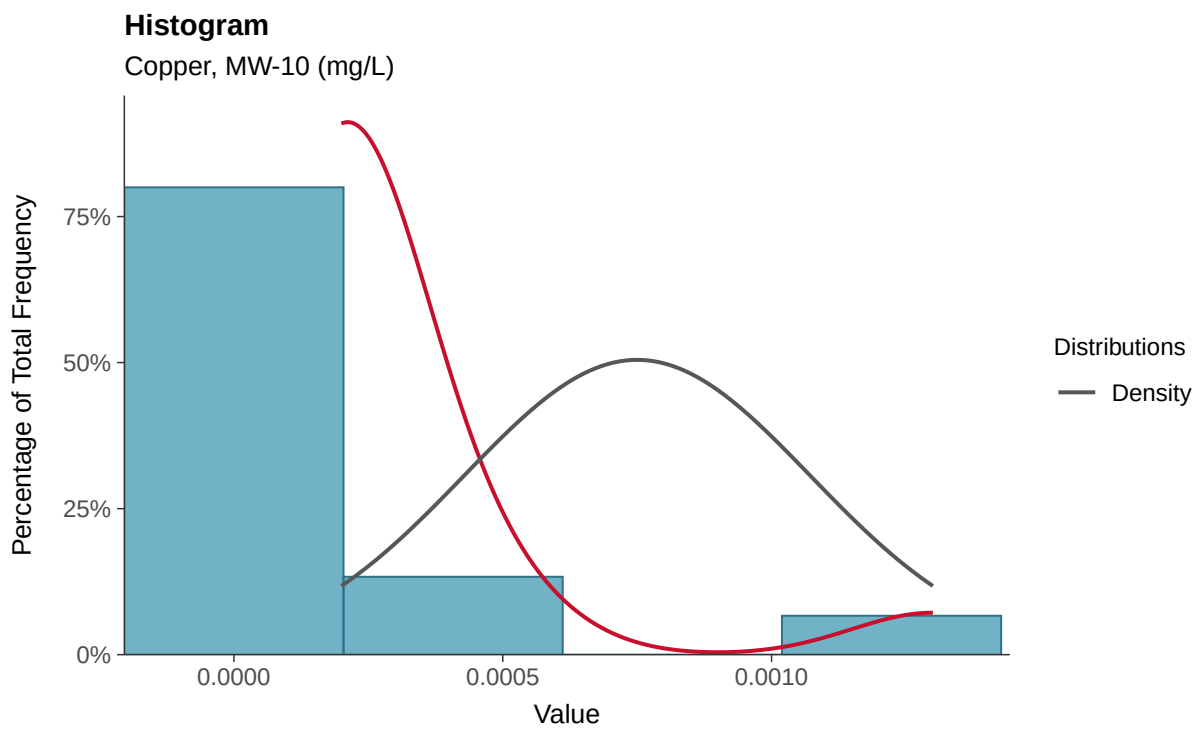
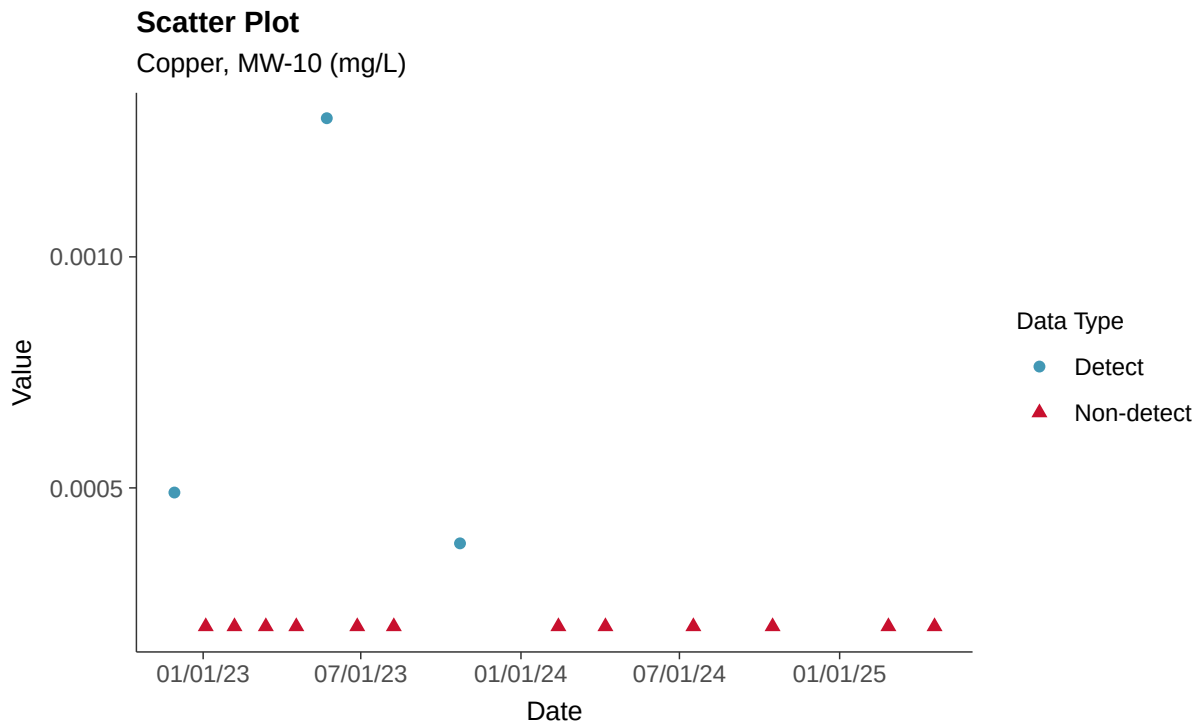
Trend Regression: Piecewise Linear-Linear-Linear

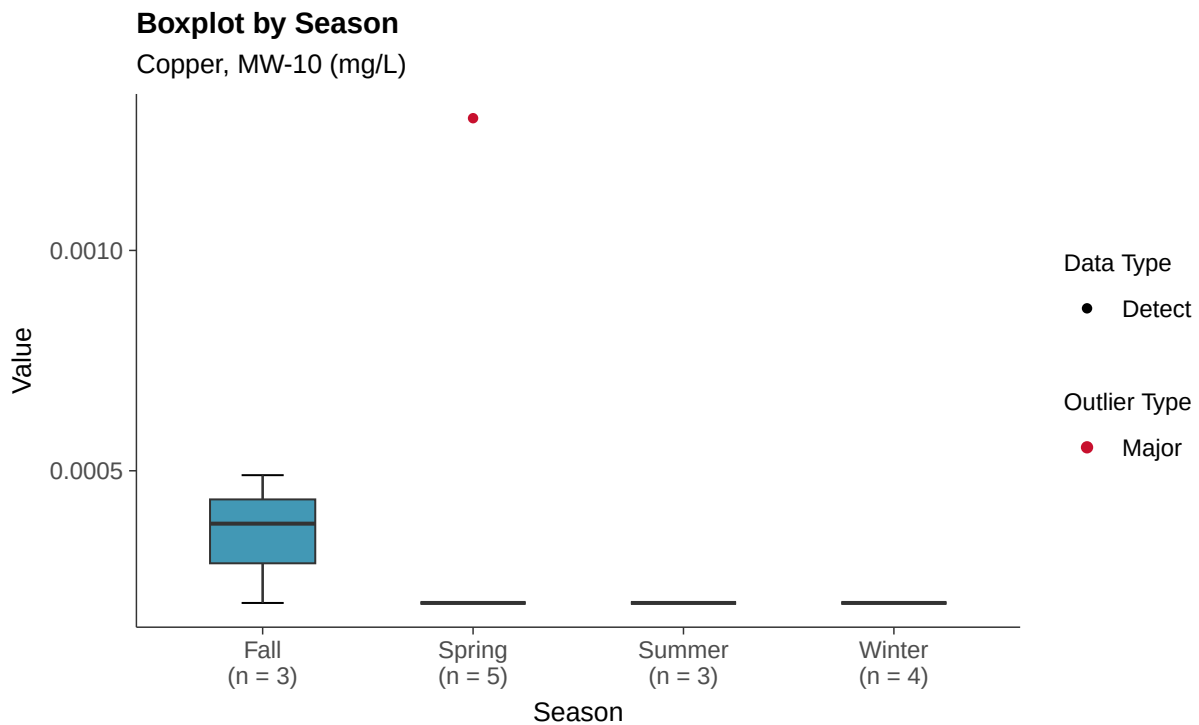
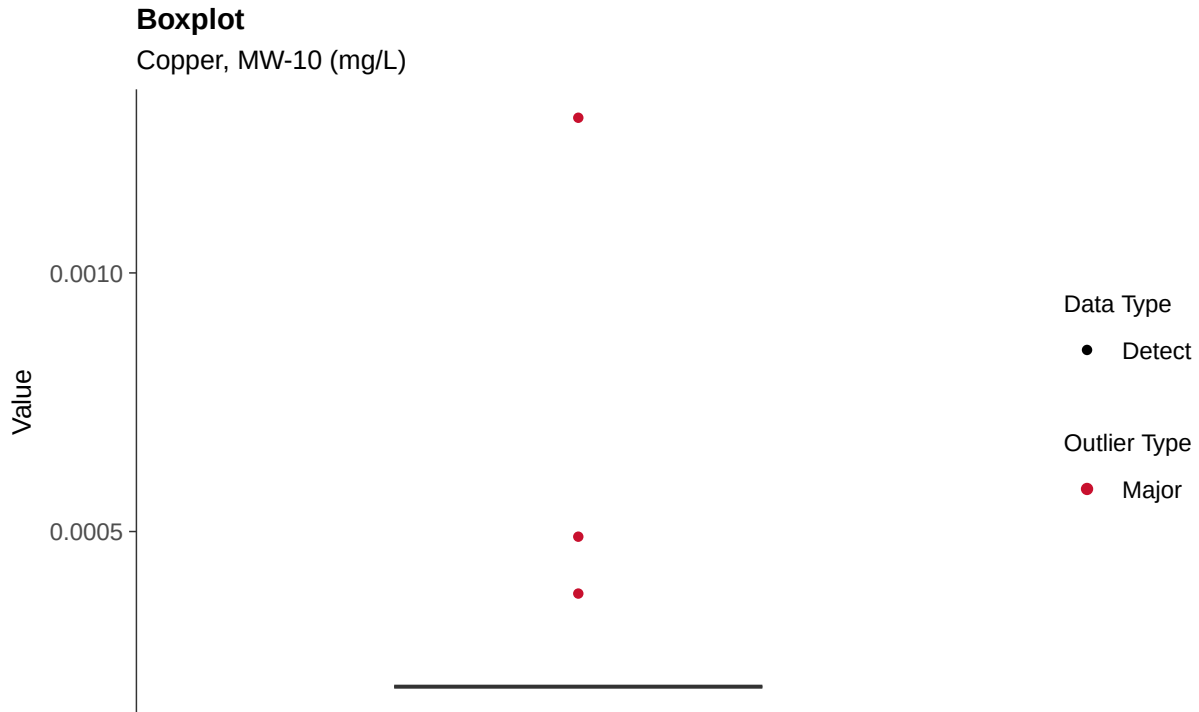
Thallium, MW-10 (mg/L)



Part 115: Copper, MW-10

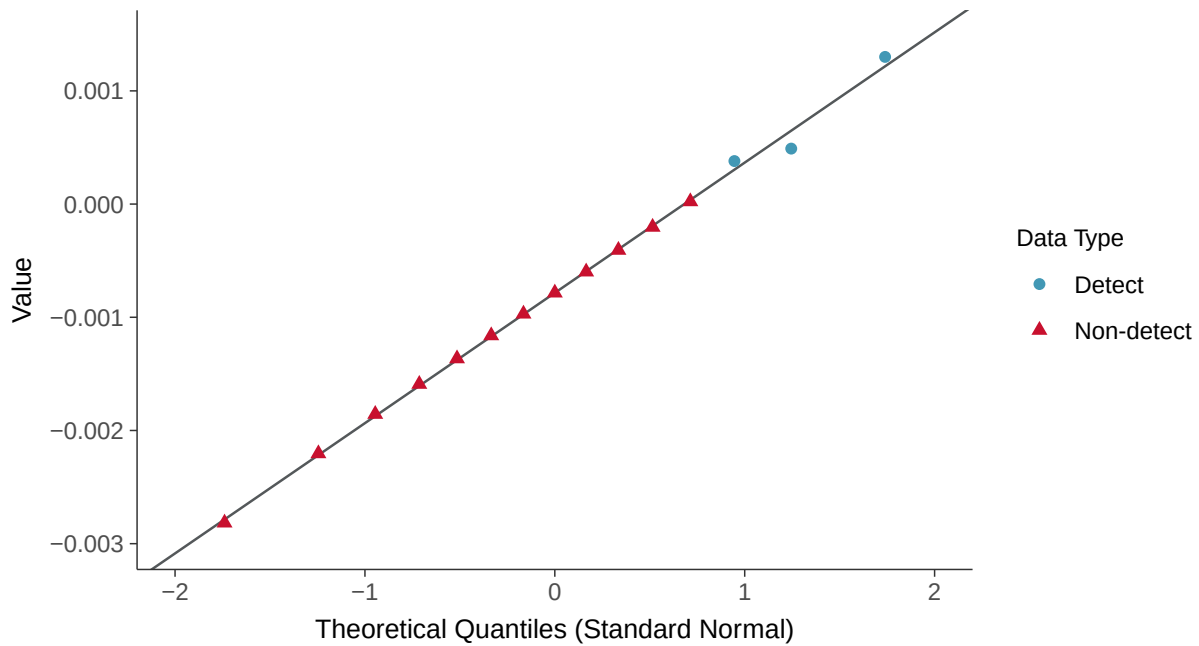
ID: 20_3_5_111





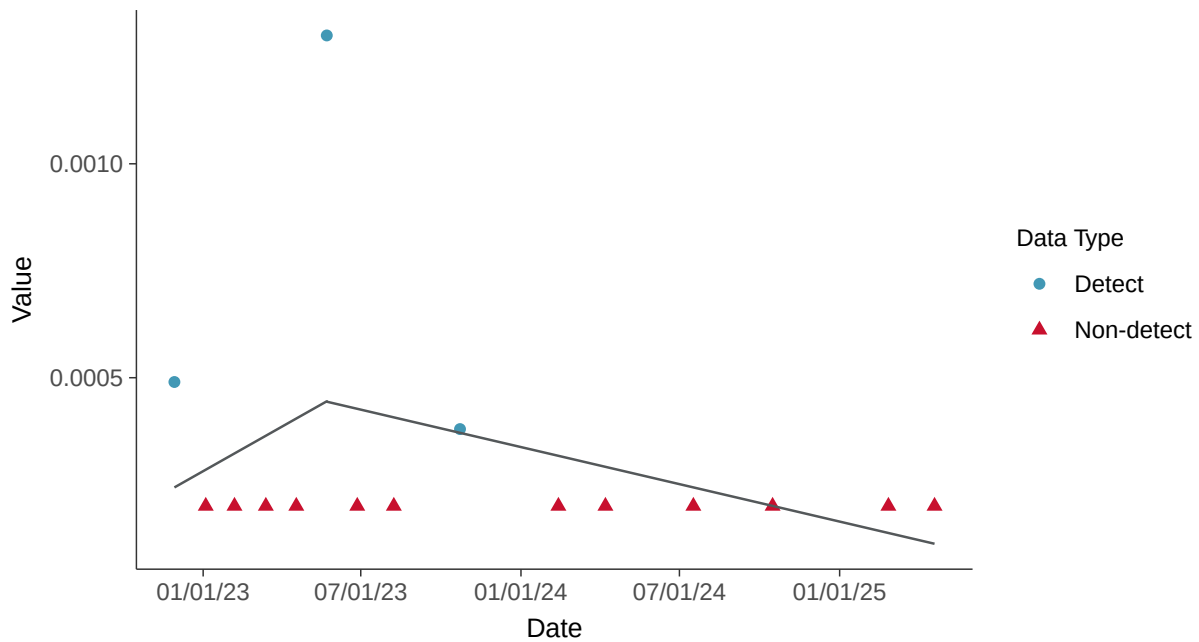
Normal Q-Q plot using ROS Imputed Estimates

Copper, MW-10 (mg/L)



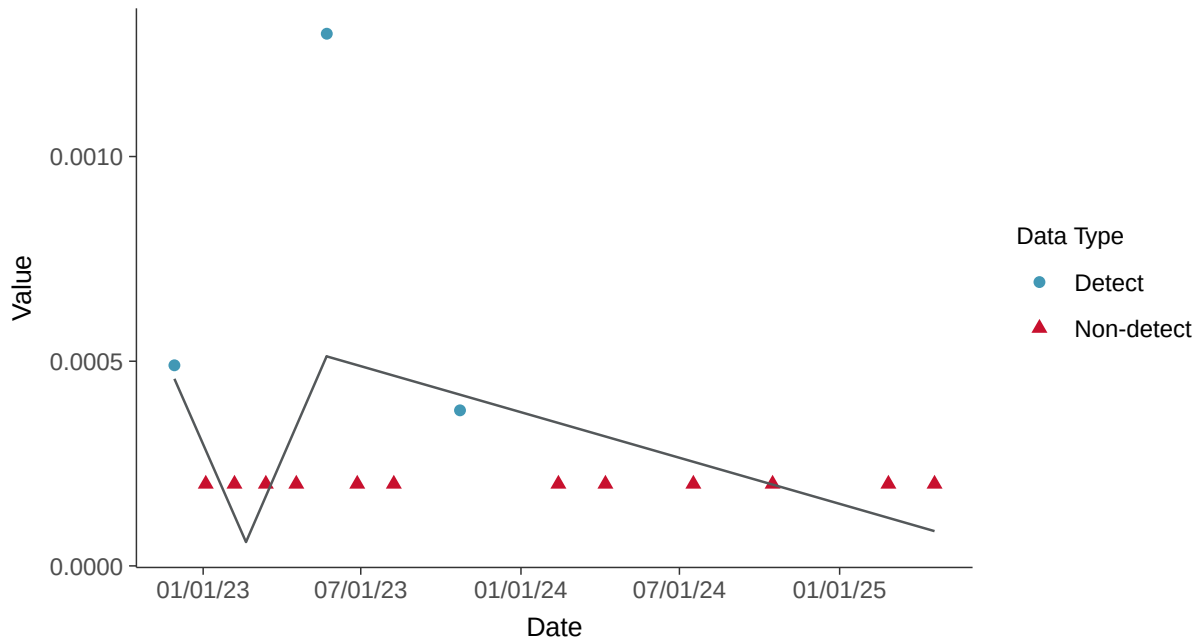
Trend Regression: Piecewise Linear-Linear

Copper, MW-10 (mg/L)



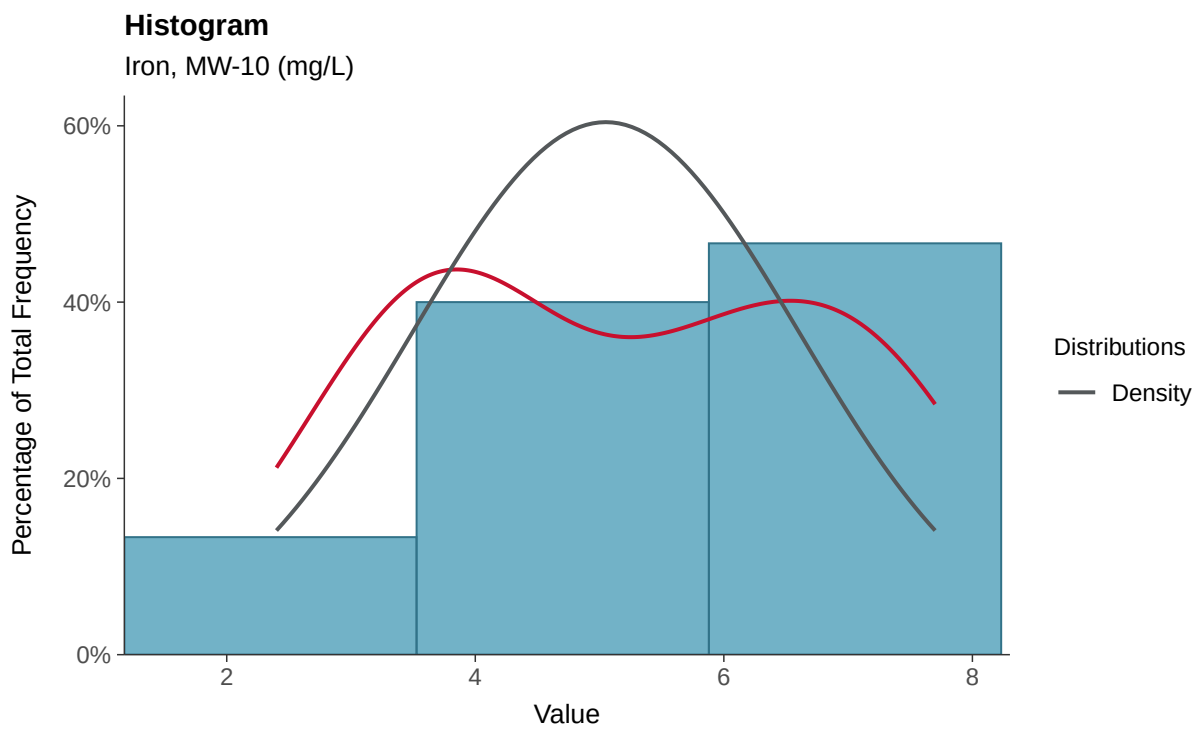
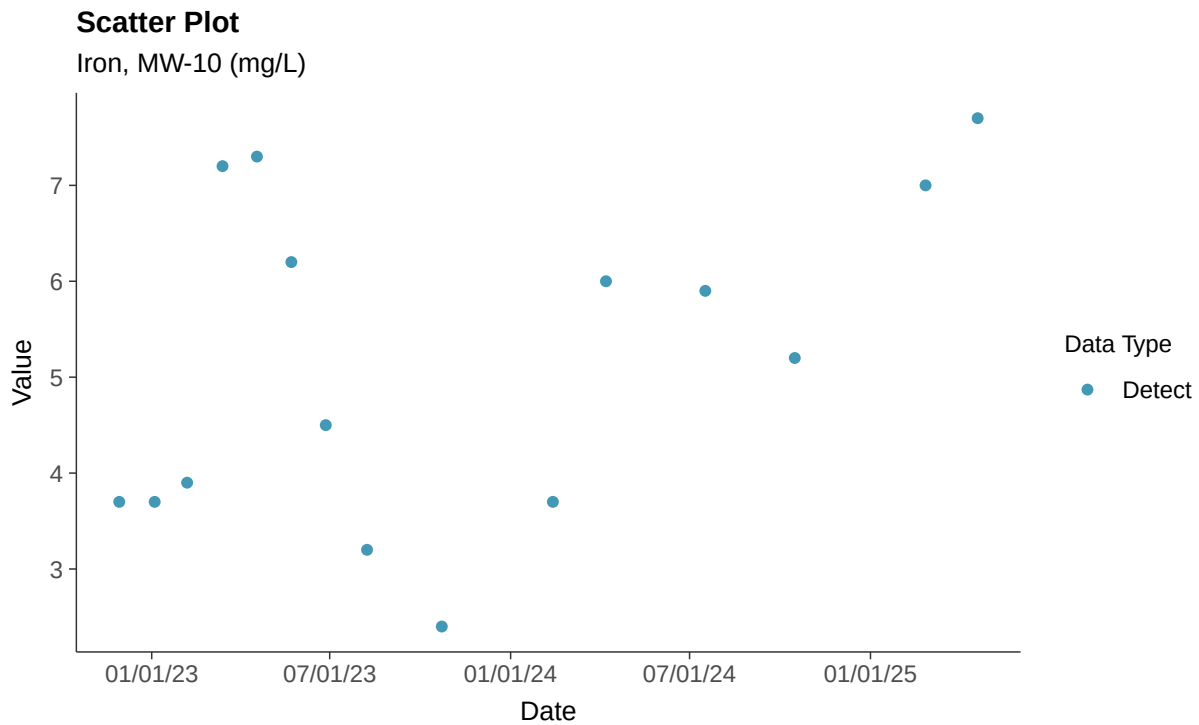


Trend Regression: Piecewise Linear-Linear-Linear
Copper, MW-10 (mg/L)



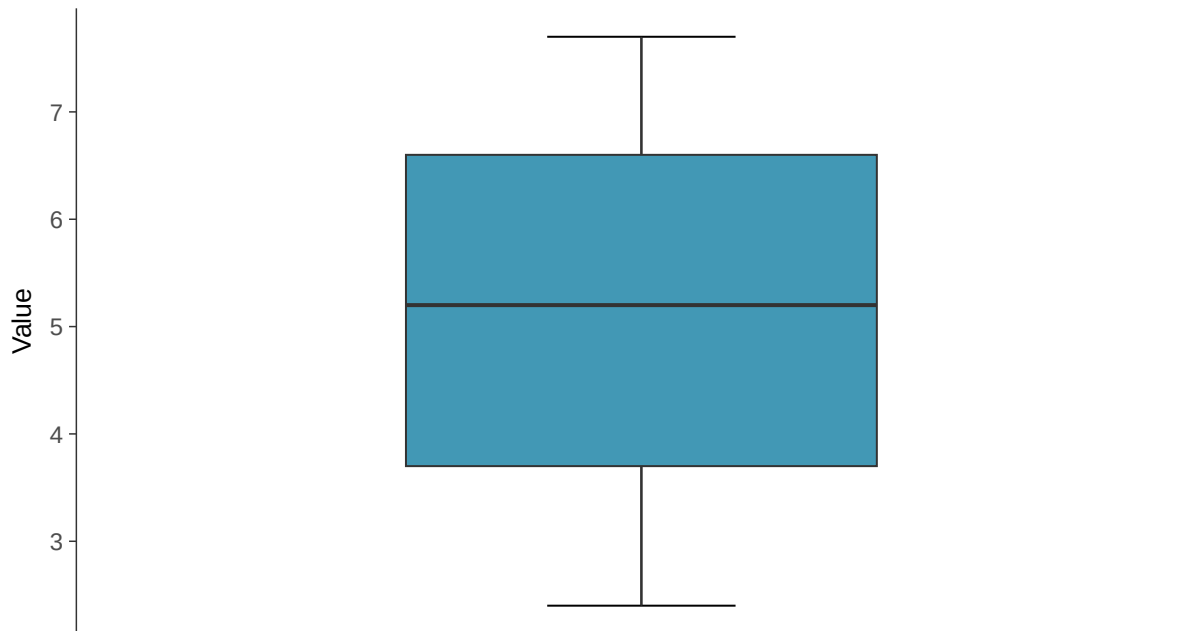
Part 115: Iron, MW-10

ID: 20_3_5_114



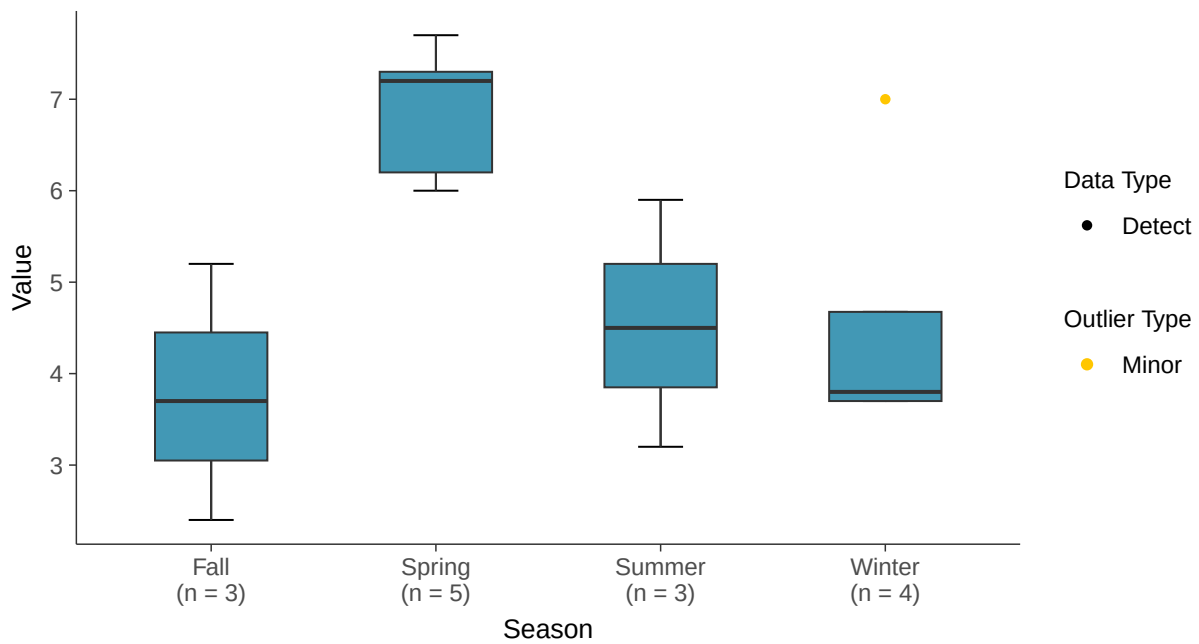
Boxplot

Iron, MW-10 (mg/L)

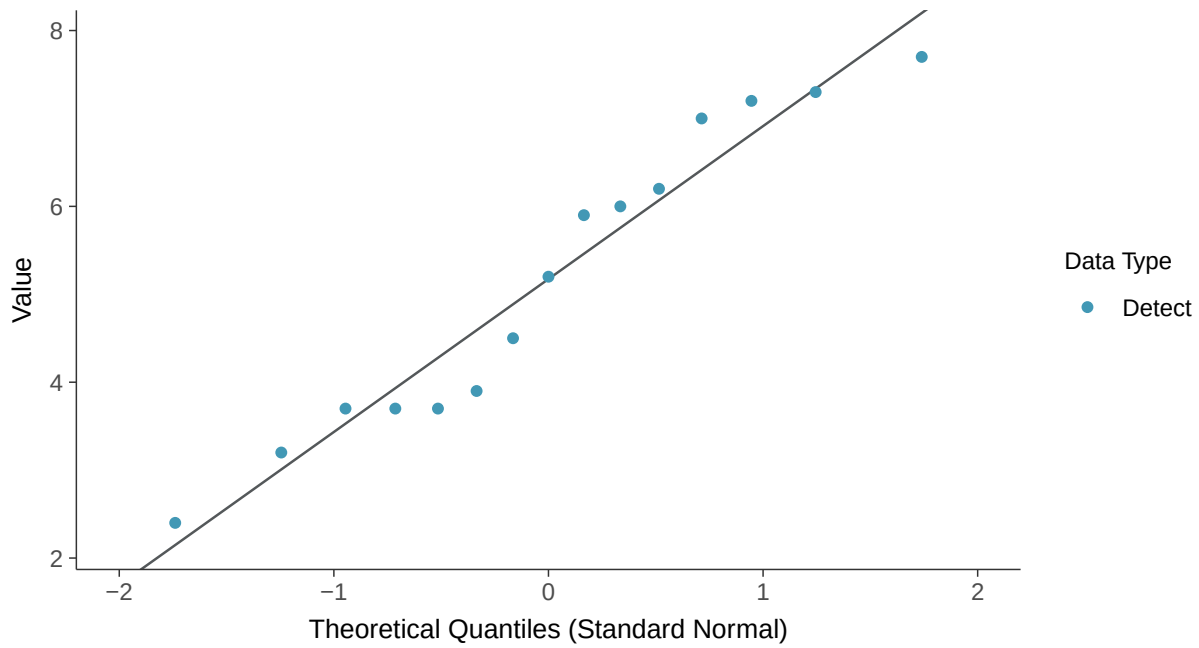


Boxplot by Season

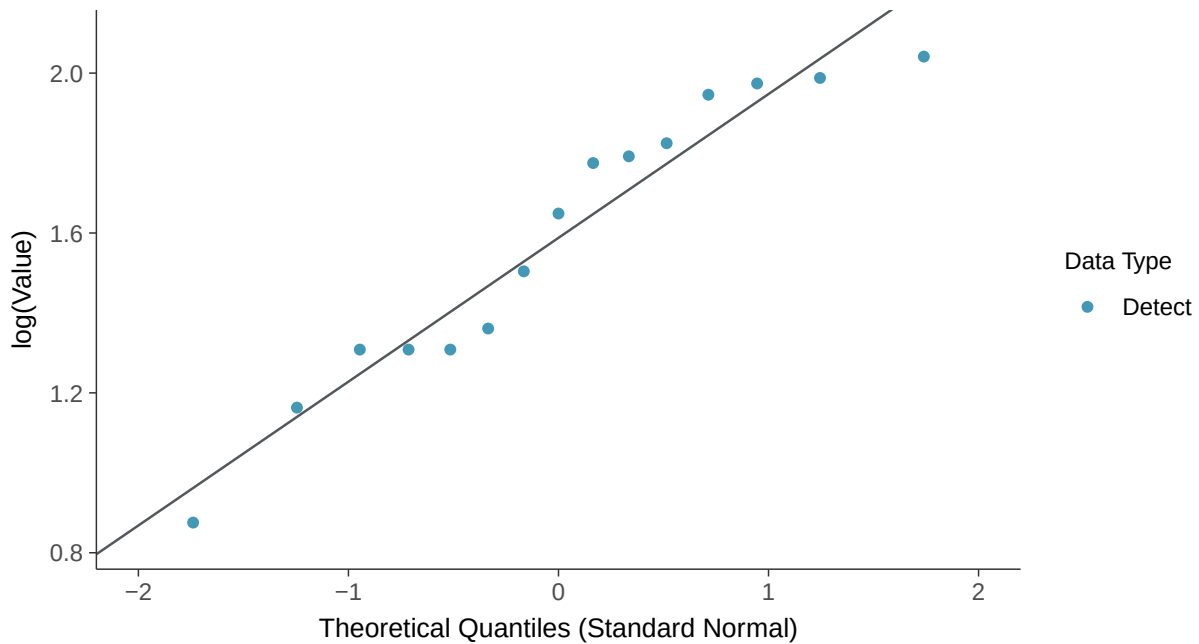
Iron, MW-10 (mg/L)



Normal Q-Q plot
Iron, MW-10 (mg/L)

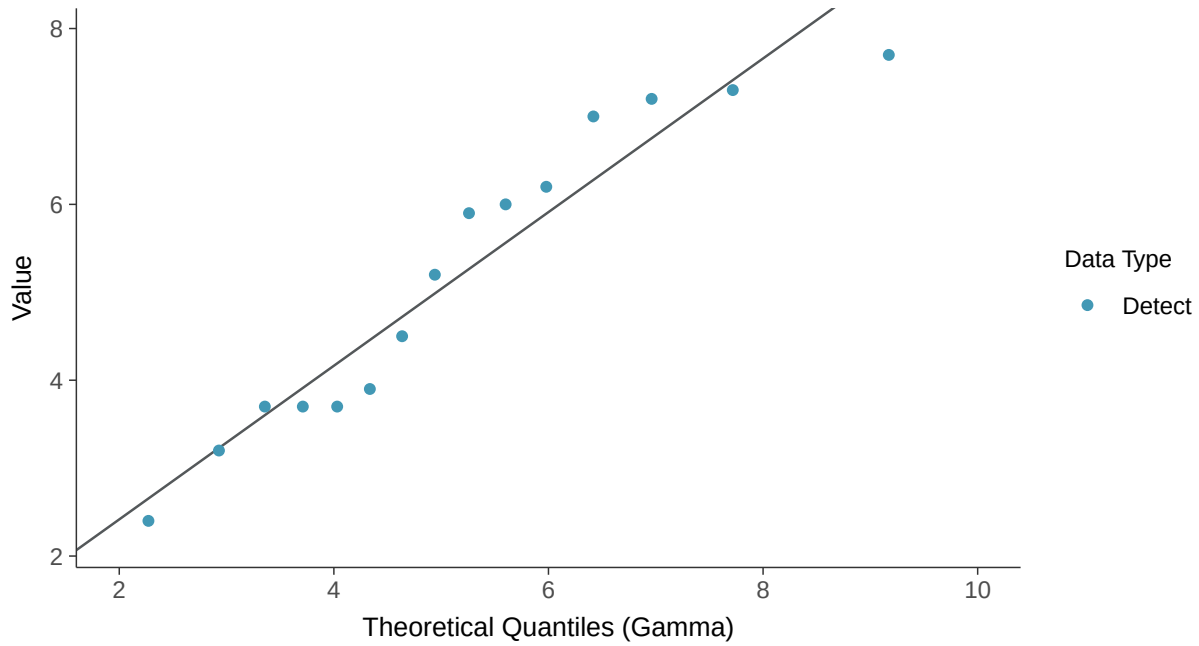


Lognormal Q-Q plot
Iron, MW-10 (mg/L)



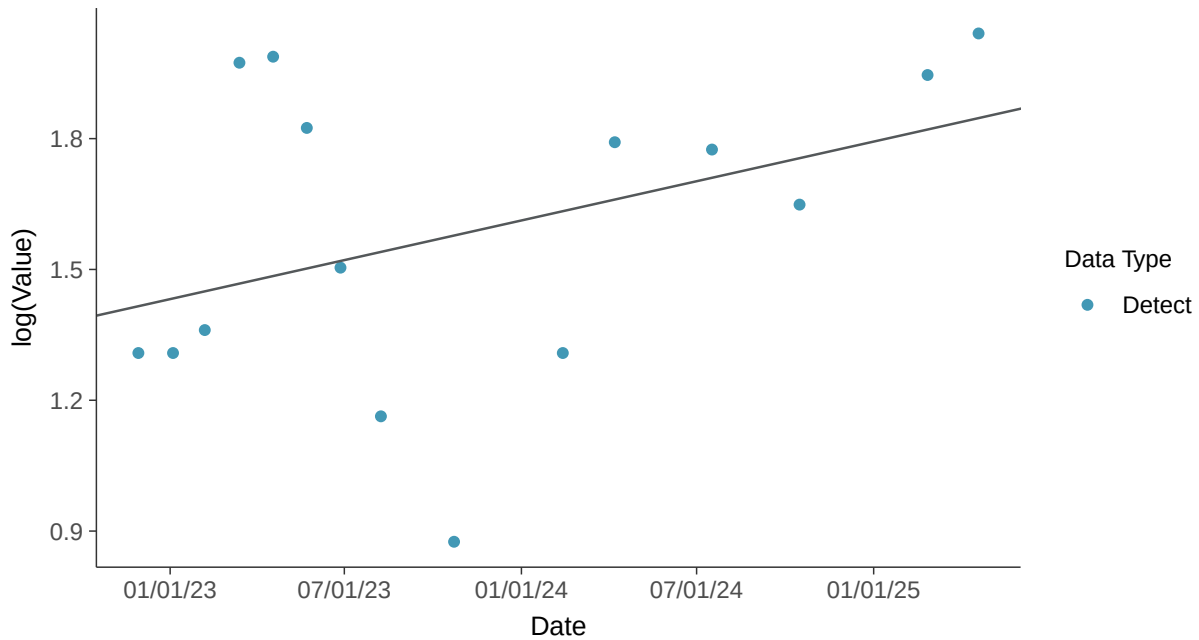
Gamma Q-Q plot

Iron, MW-10 (mg/L)



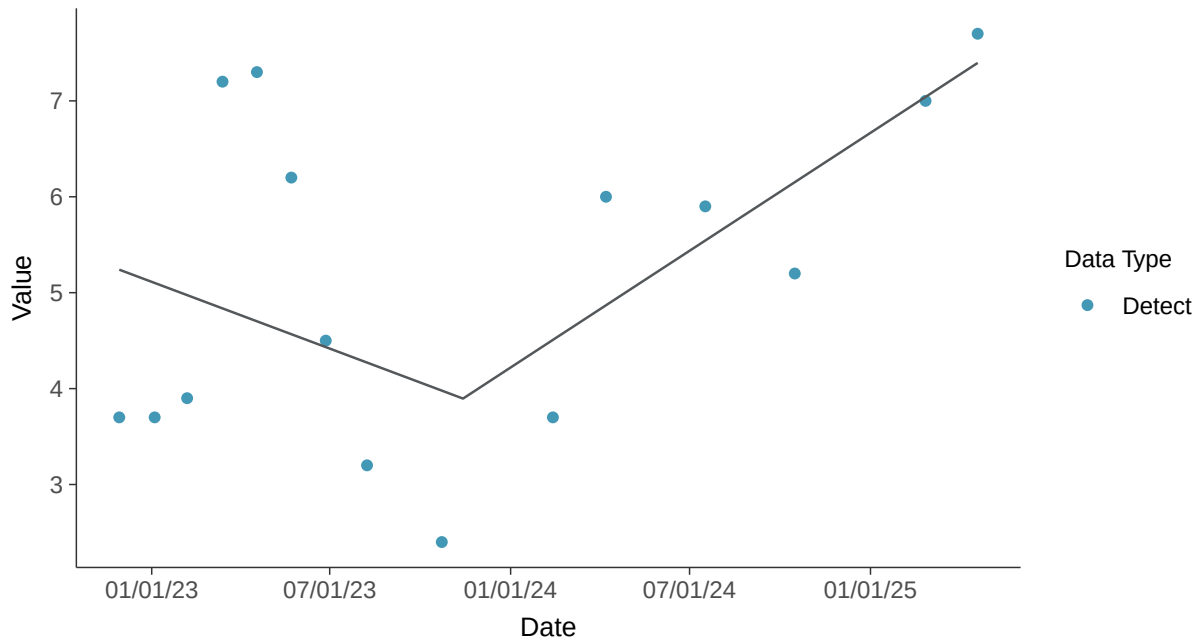
Trend Regression: Lognormal MLE

Iron, MW-10 (mg/L)



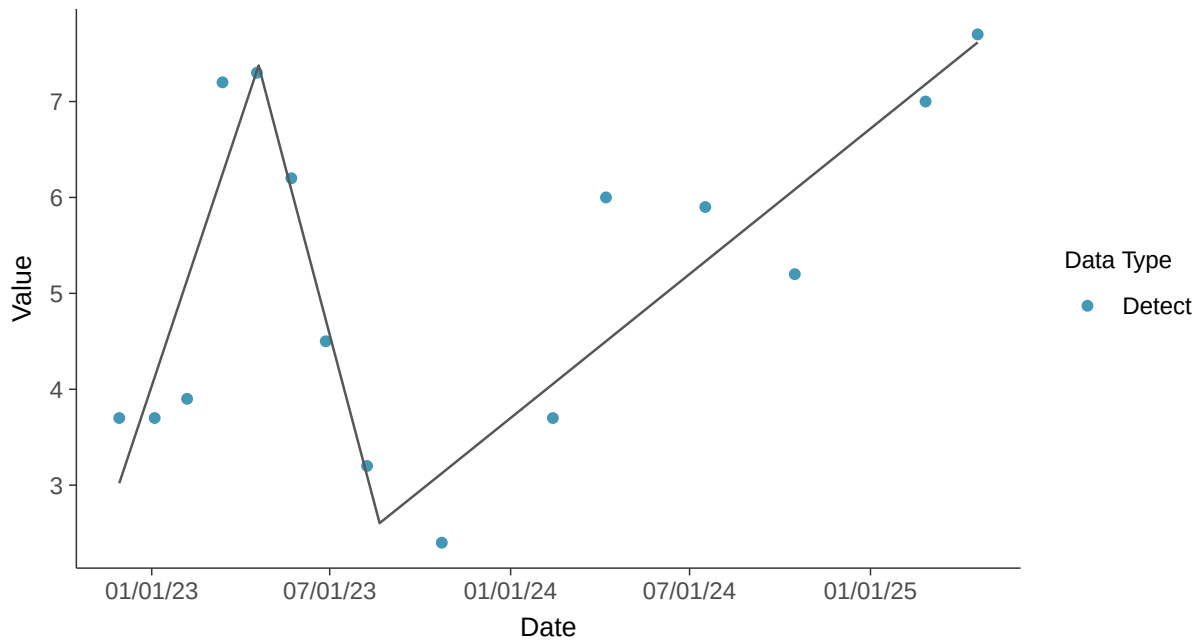
Trend Regression: Piecewise Linear-Linear

Iron, MW-10 (mg/L)



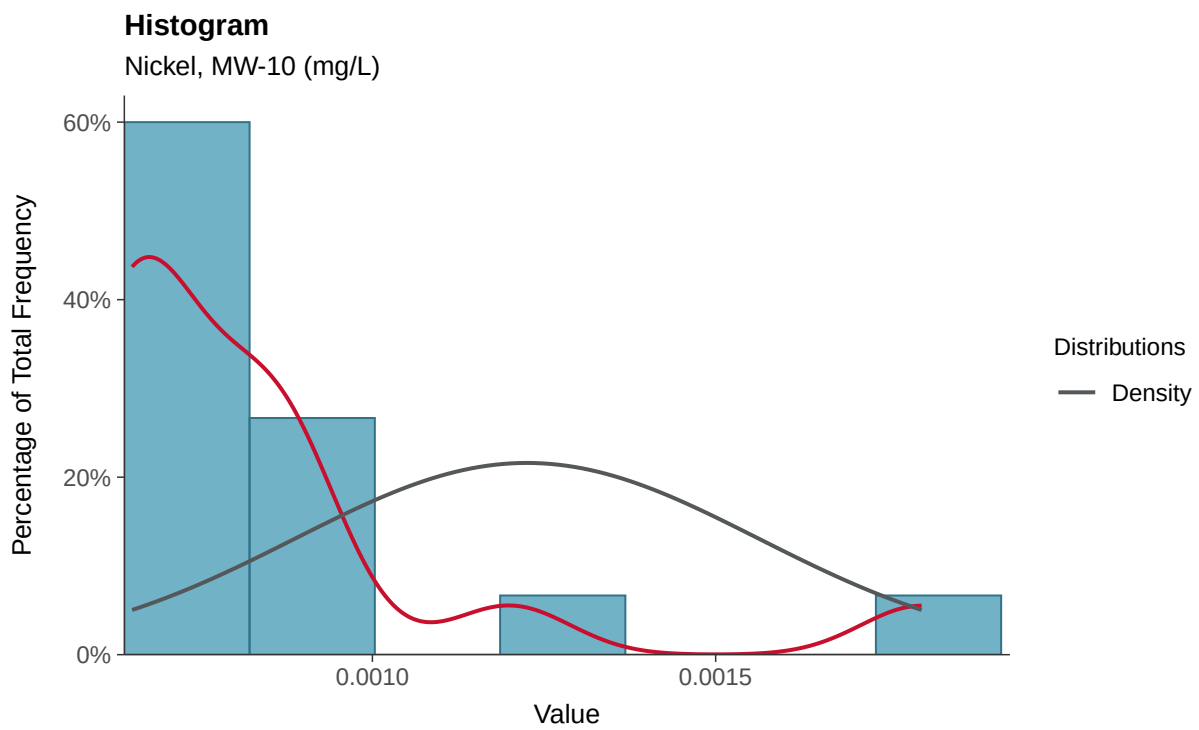
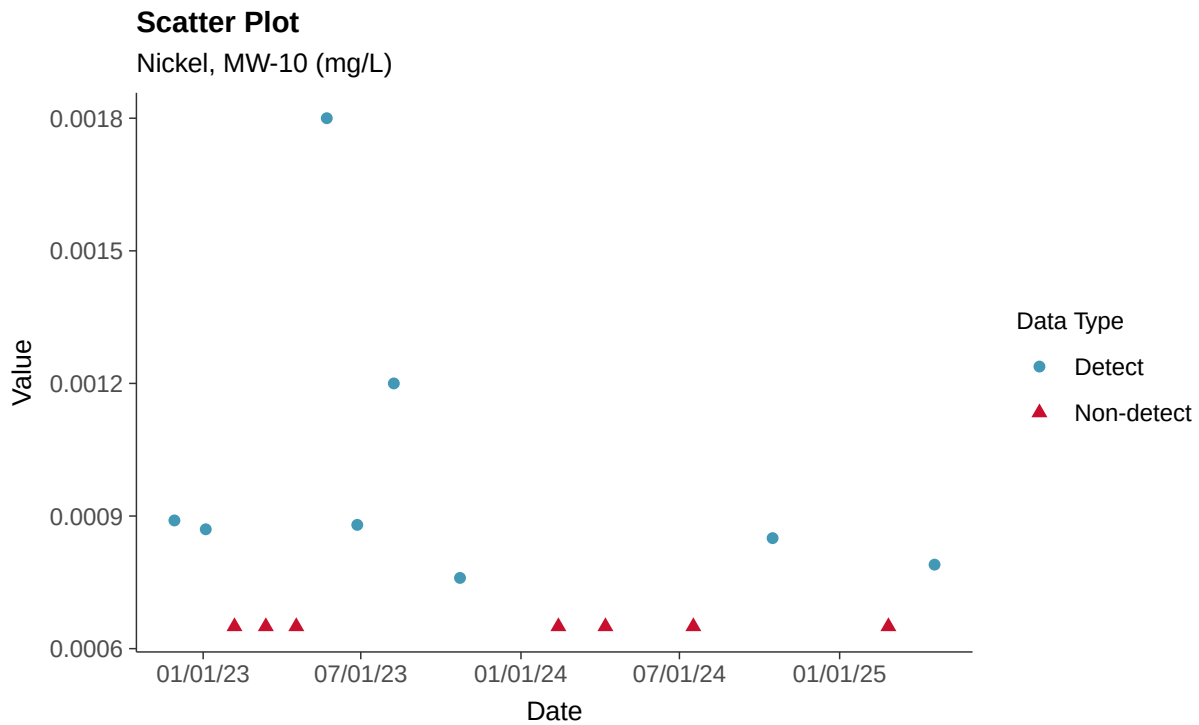
Trend Regression: Piecewise Linear-Linear-Linear

Iron, MW-10 (mg/L)



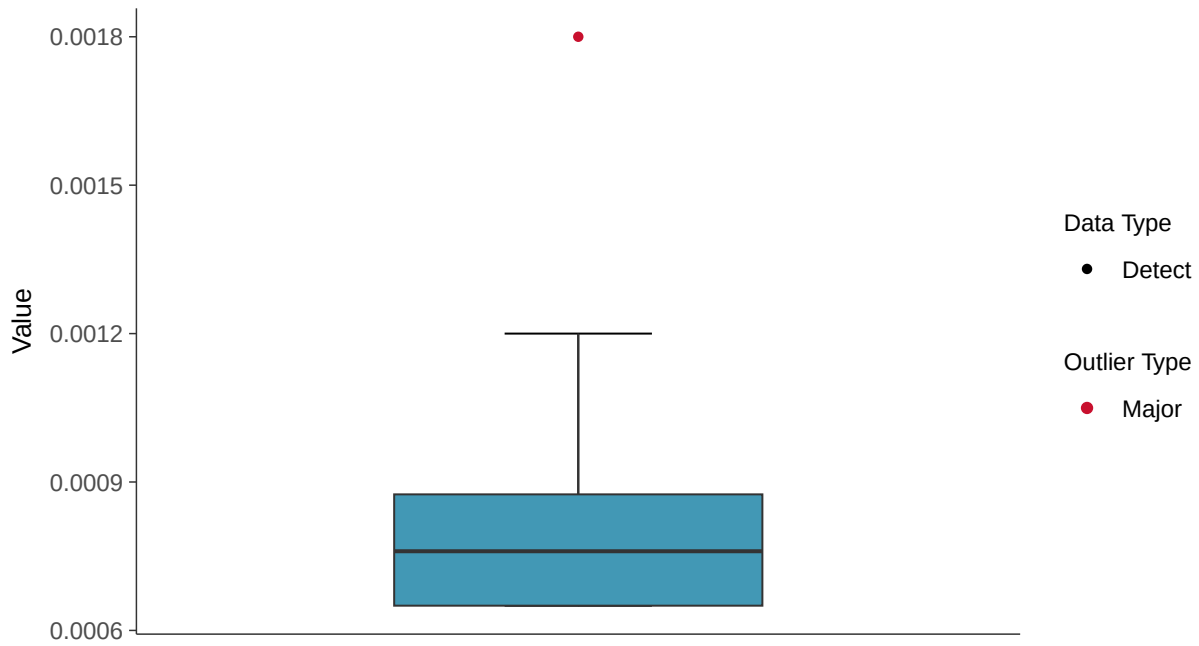
Part 115: Nickel, MW-10

ID: 20_3_5_119



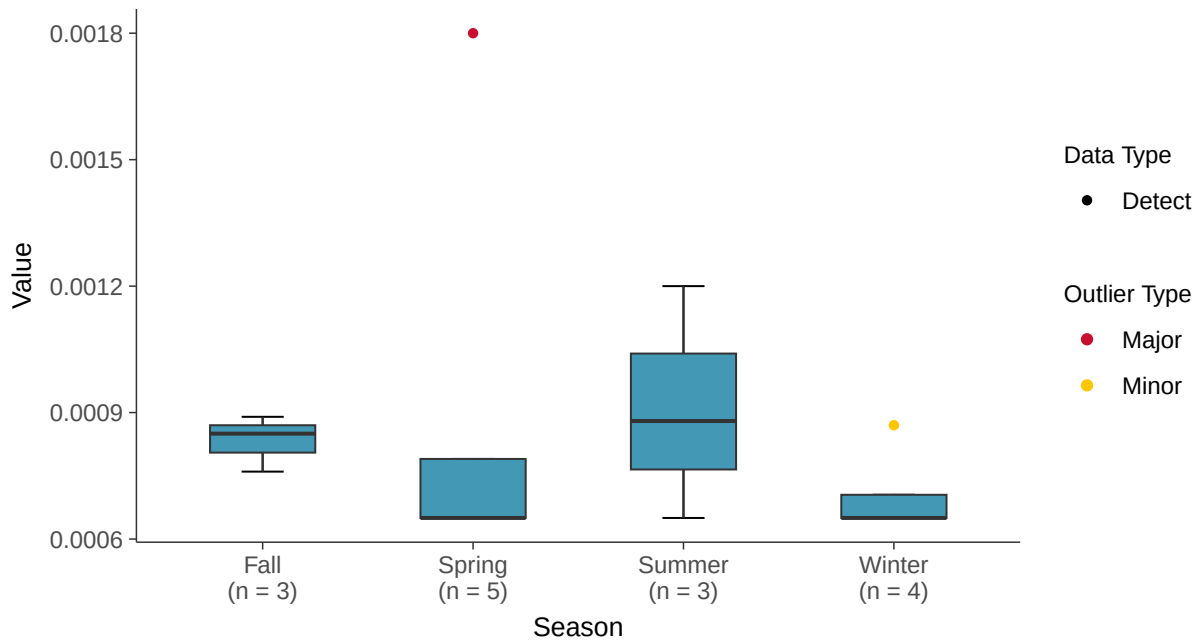
Boxplot

Nickel, MW-10 (mg/L)



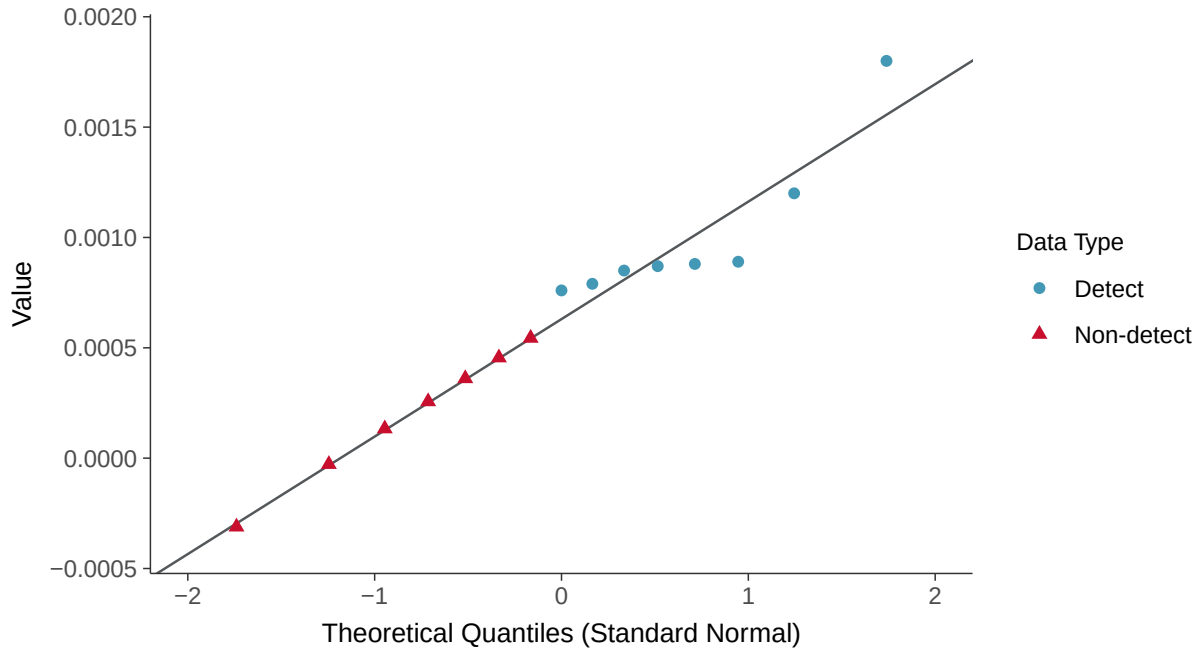
Boxplot by Season

Nickel, MW-10 (mg/L)



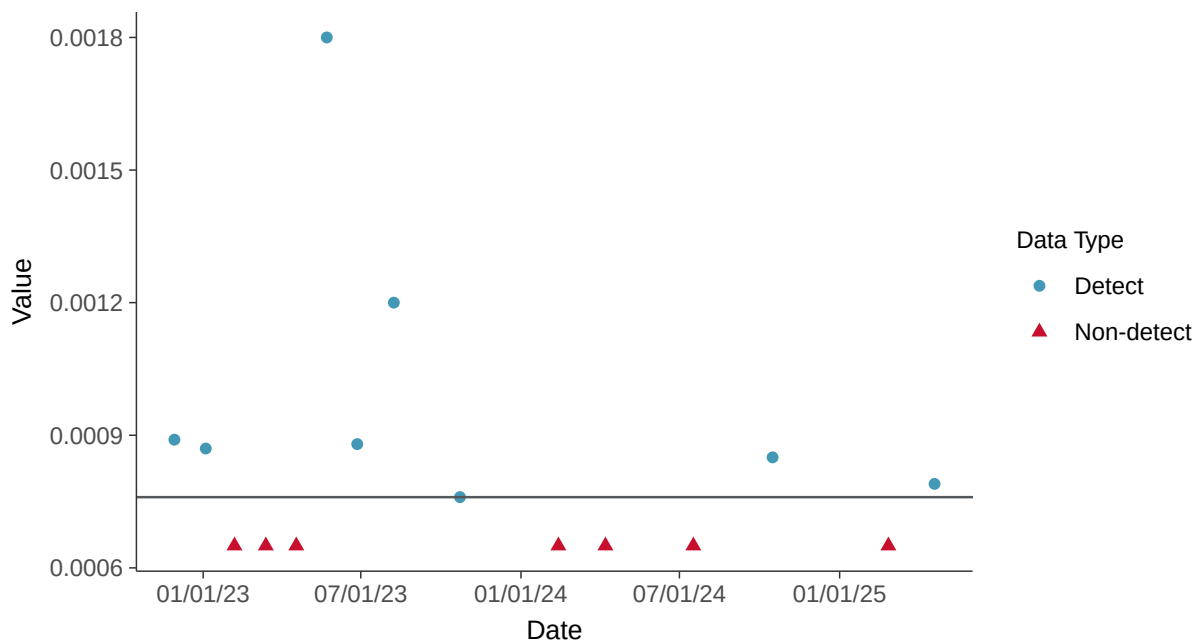
Normal Q-Q plot using ROS Imputed Estimates

Nickel, MW-10 (mg/L)



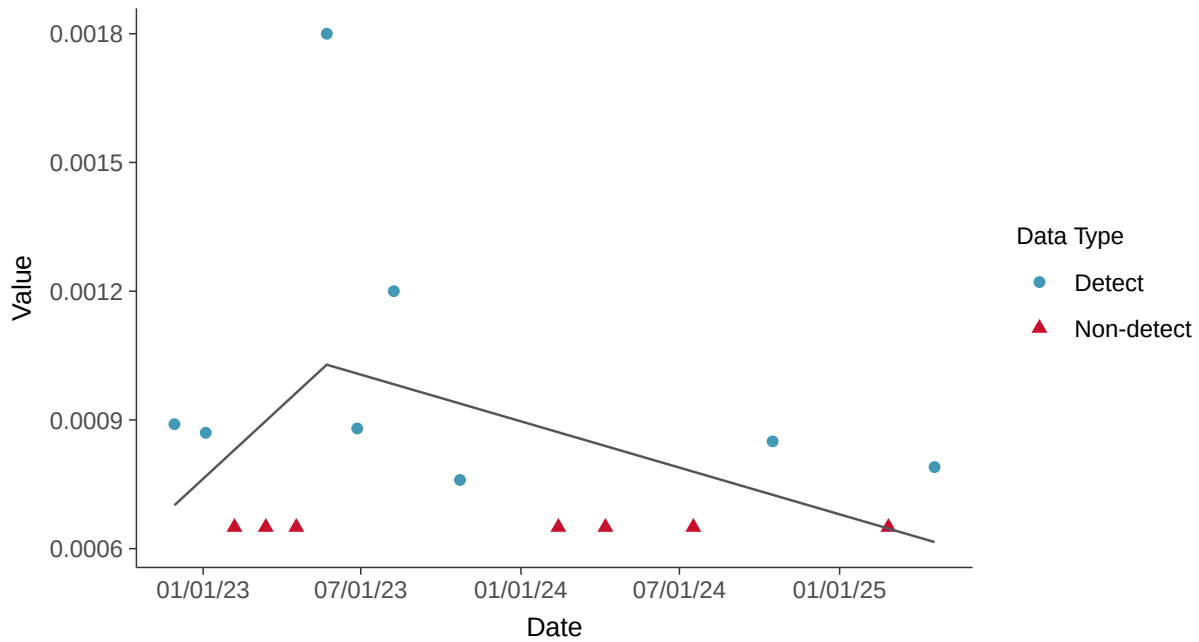
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Nickel, MW-10 (mg/L)



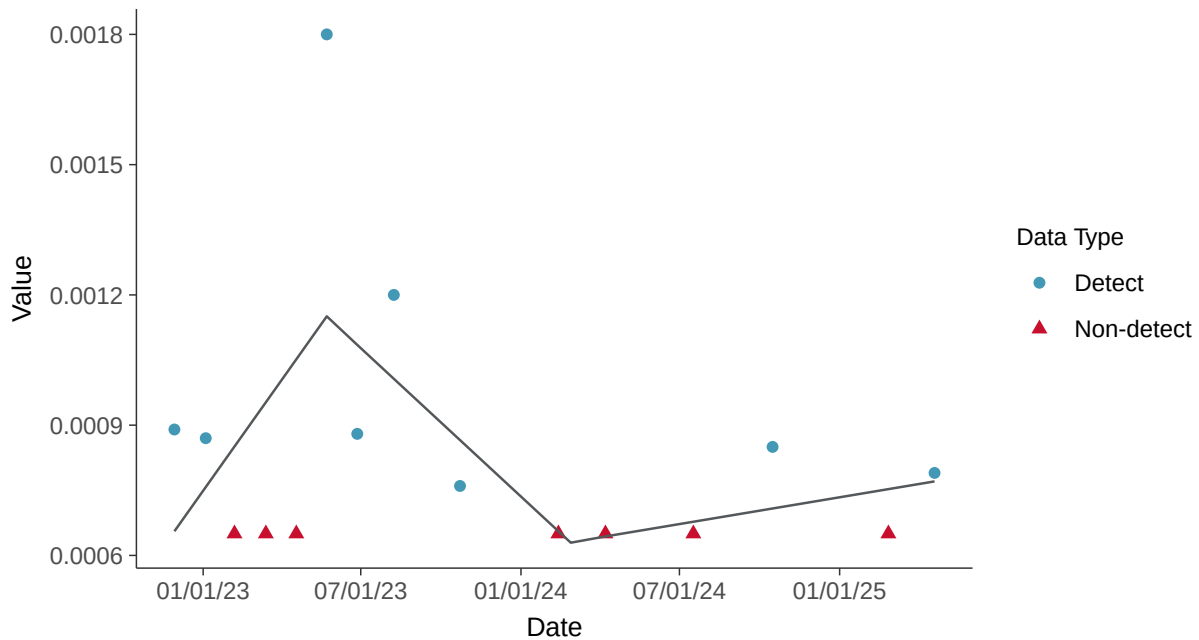
Trend Regression: Piecewise Linear-Linear

Nickel, MW-10 (mg/L)



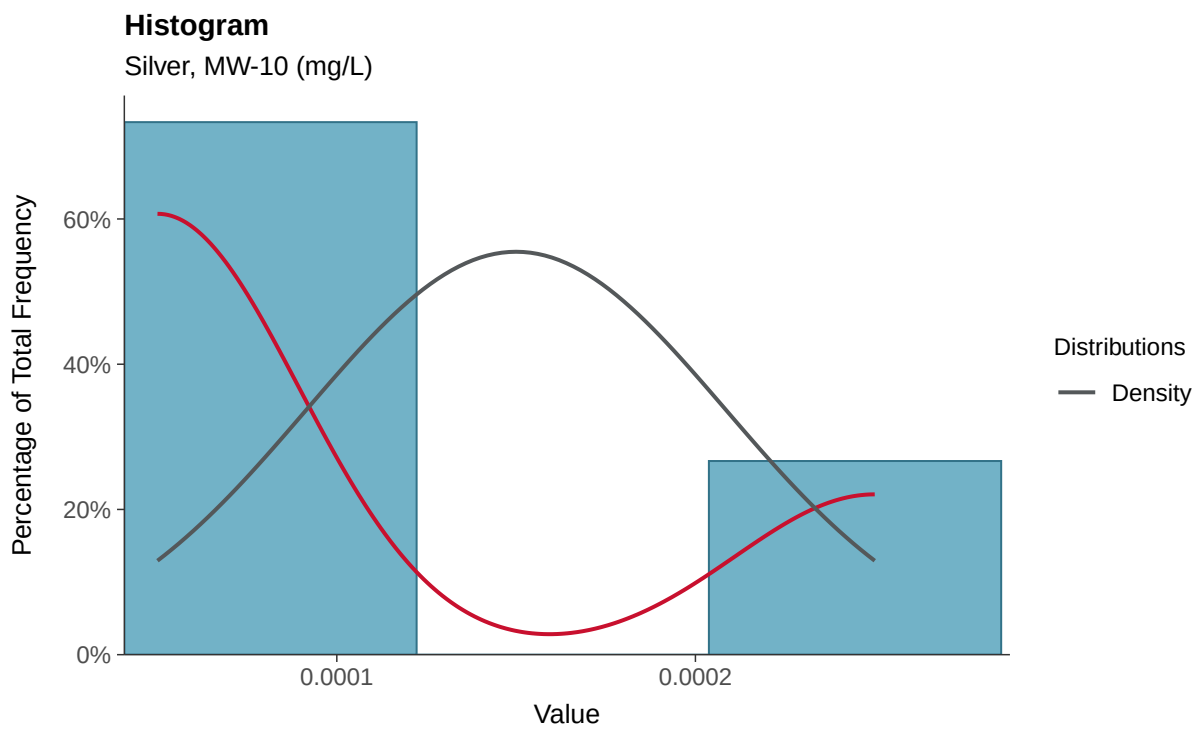
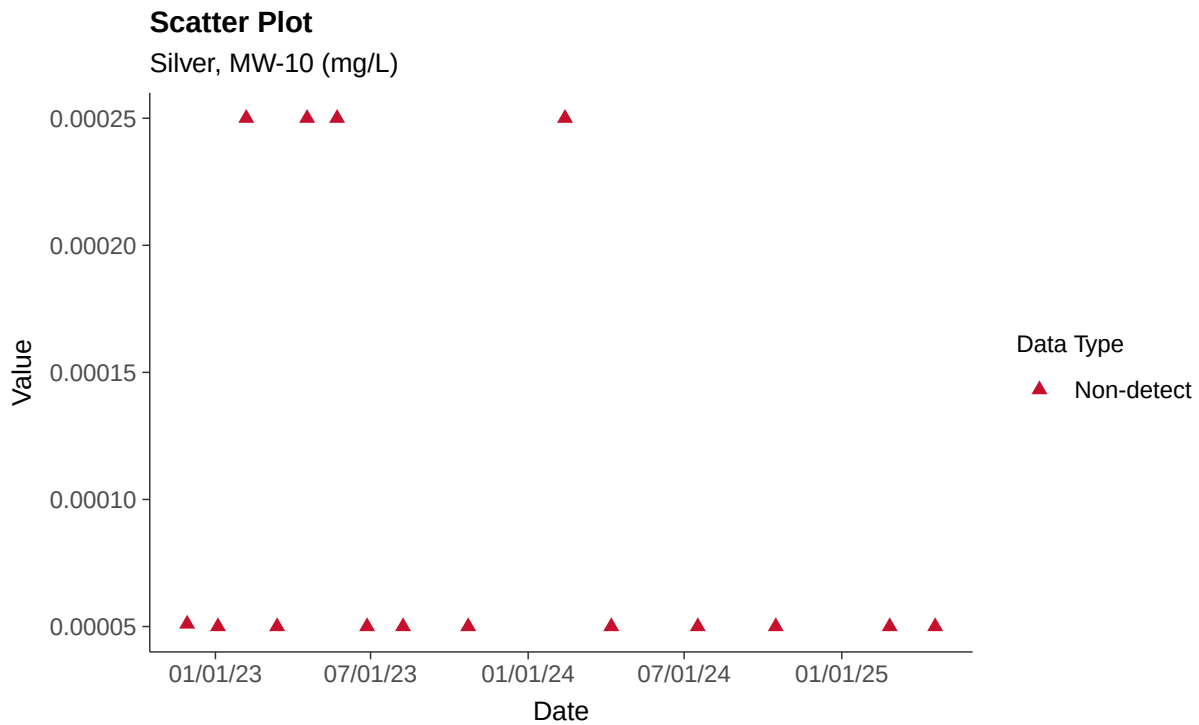
Trend Regression: Piecewise Linear-Linear-Linear

Nickel, MW-10 (mg/L)



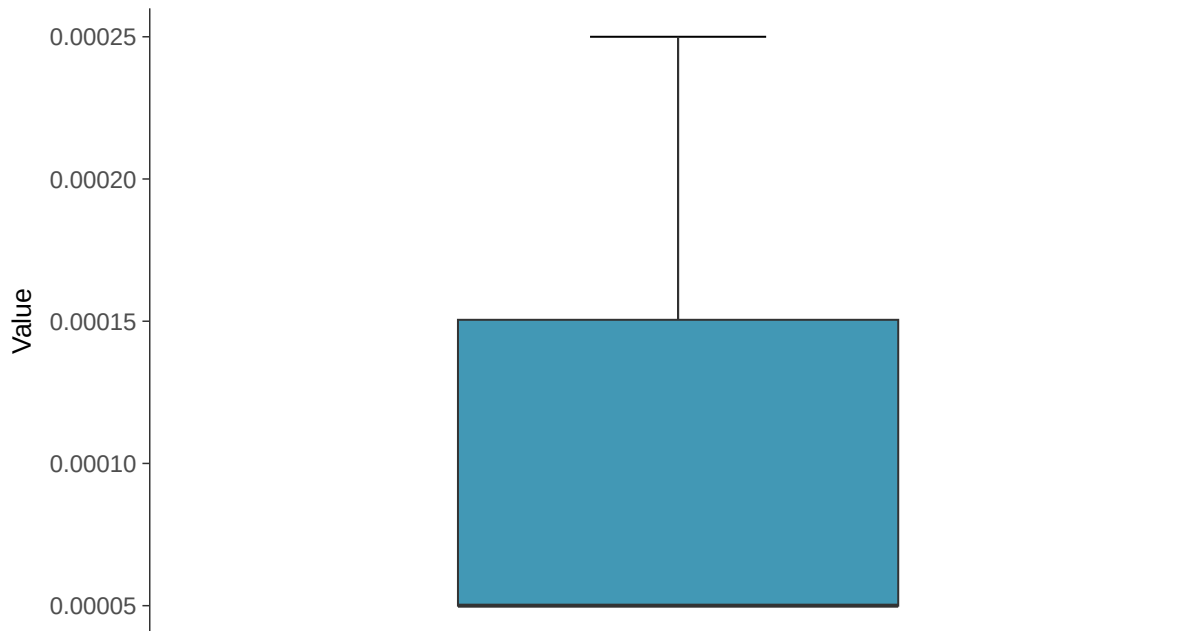
Part 115: Silver, MW-10

ID: 20_3_5_123



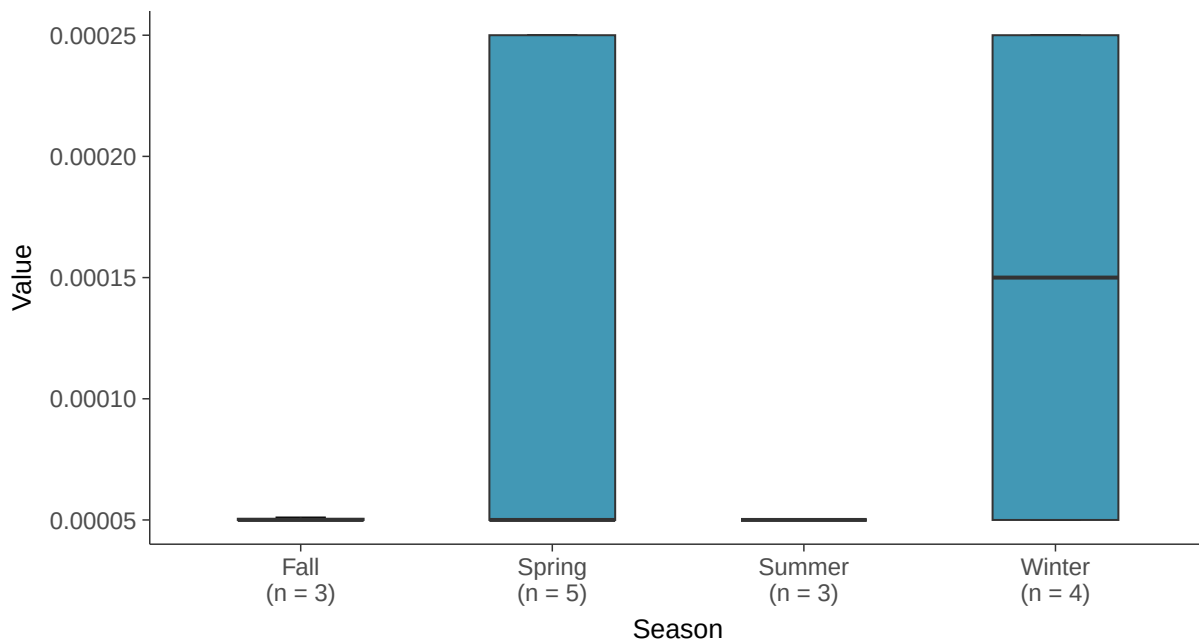
Boxplot

Silver, MW-10 (mg/L)



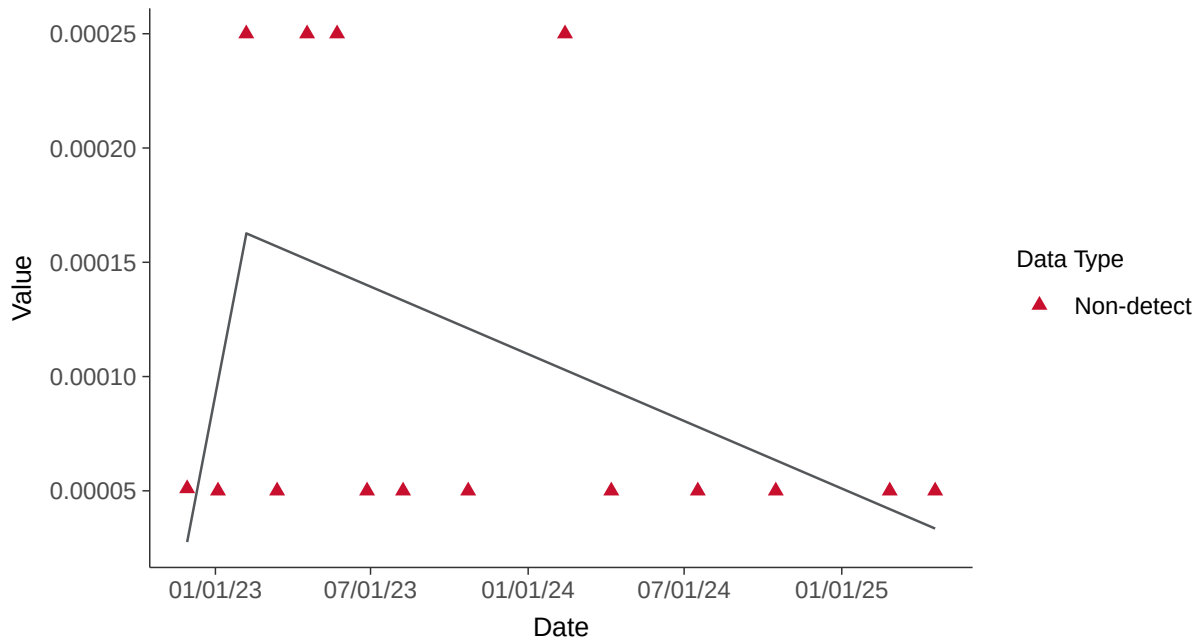
Boxplot by Season

Silver, MW-10 (mg/L)



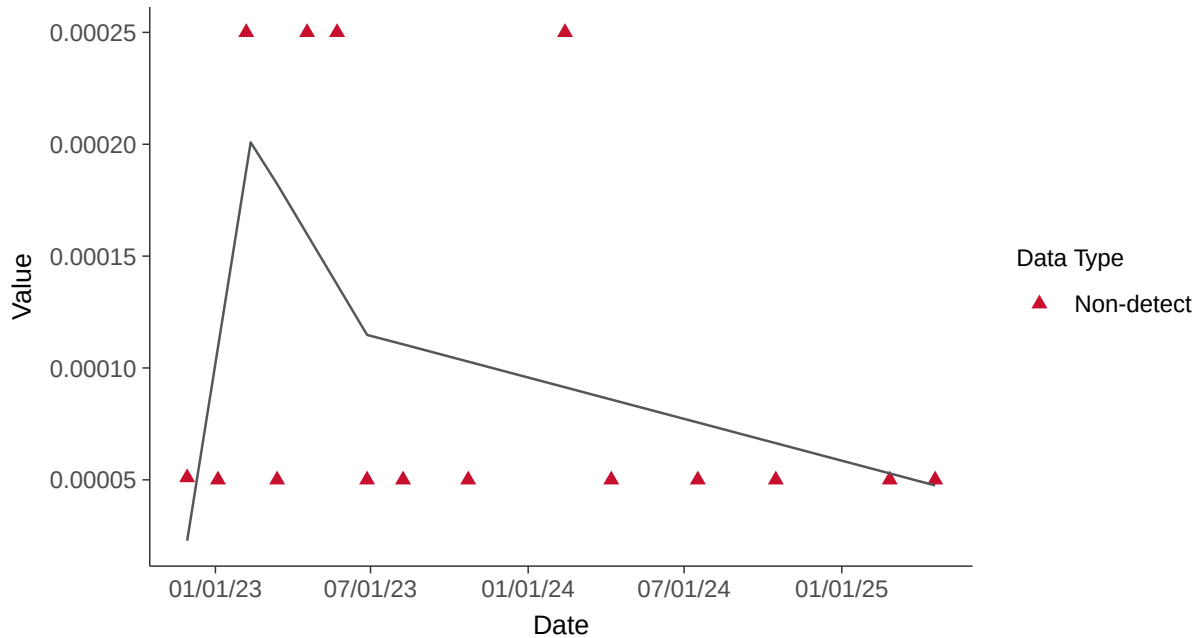
Trend Regression: Piecewise Linear-Linear

Silver, MW-10 (mg/L)



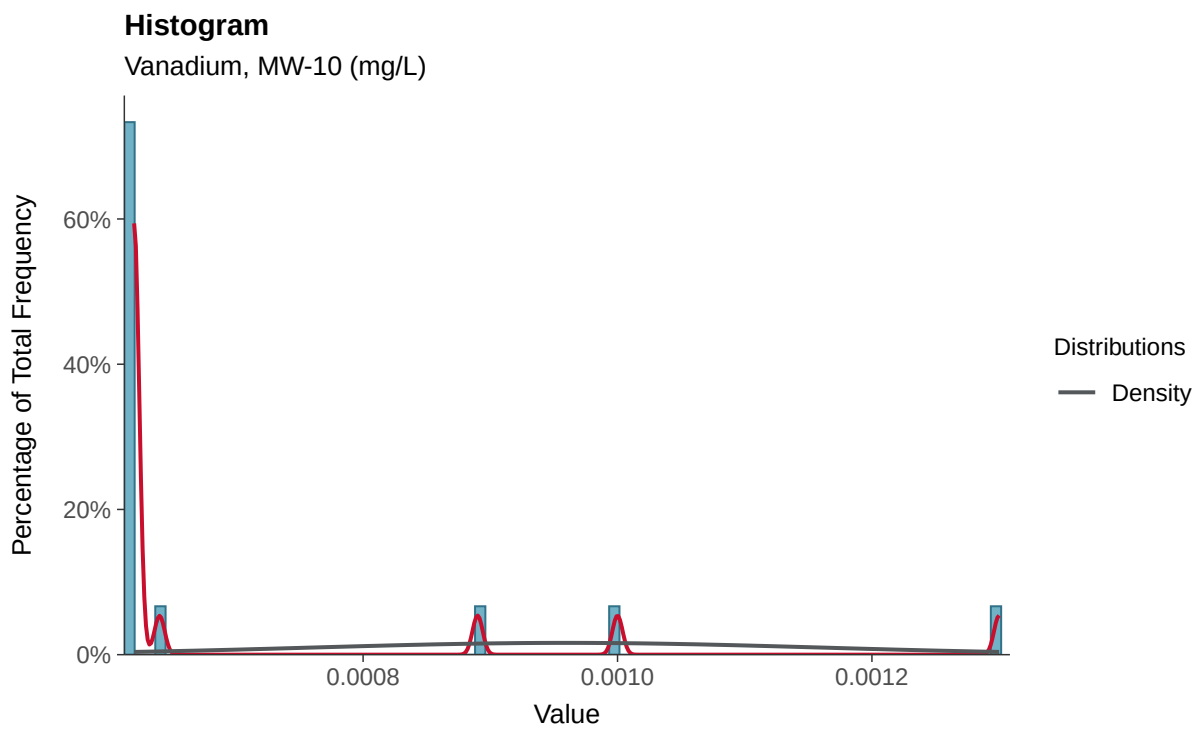
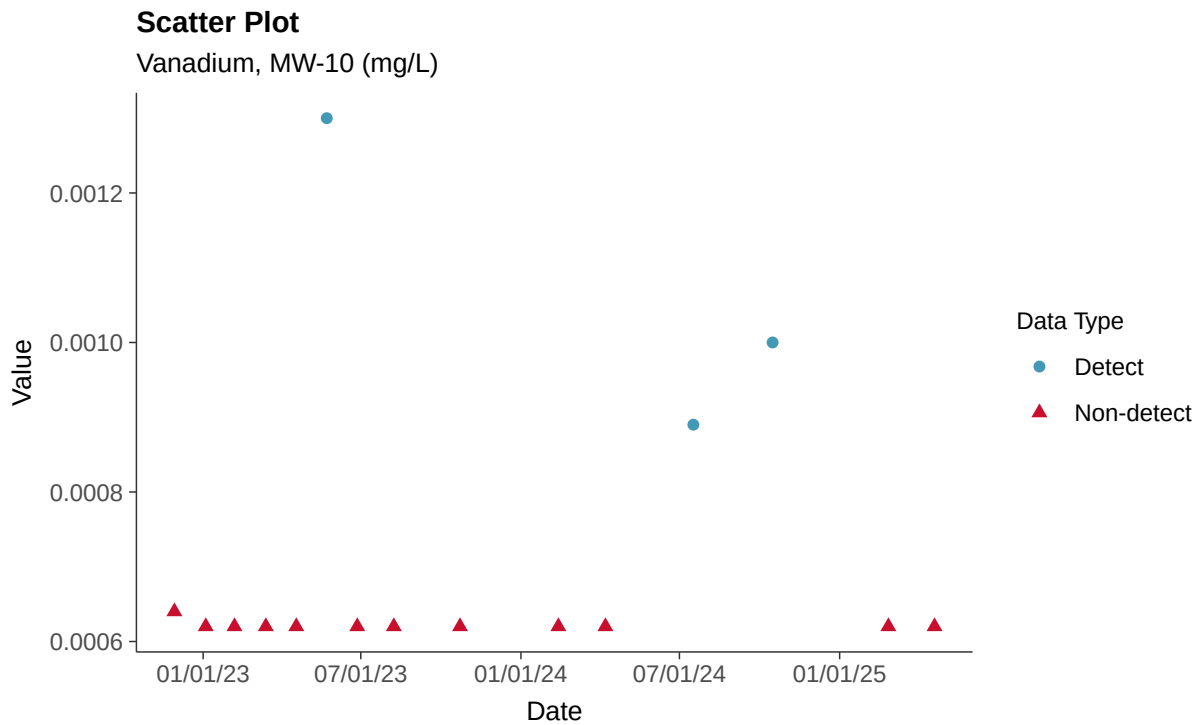
Trend Regression: Piecewise Linear-Linear-Linear

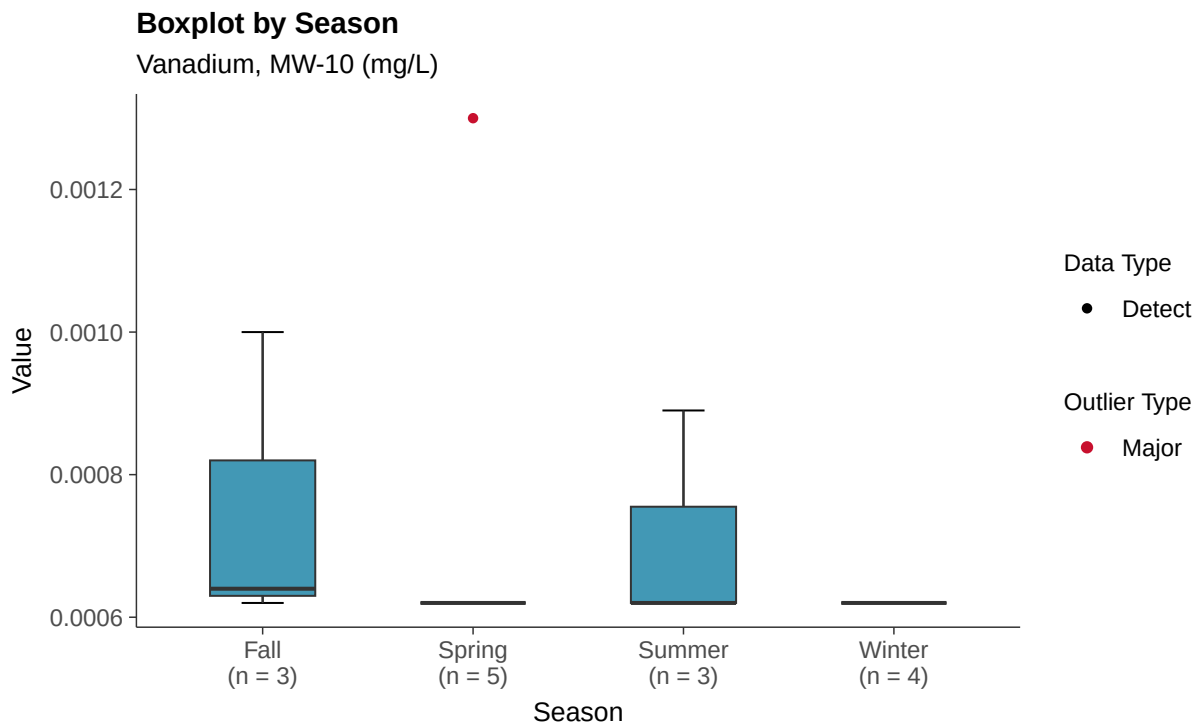
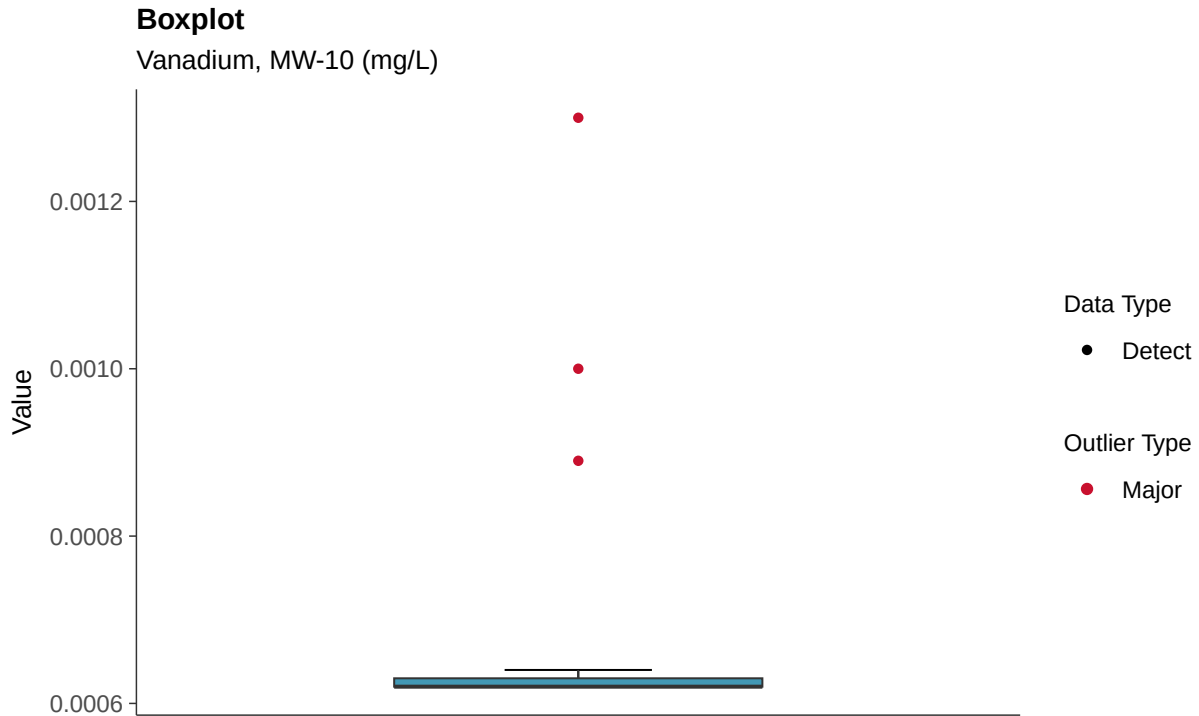
Silver, MW-10 (mg/L)



Part 115: Vanadium, MW-10

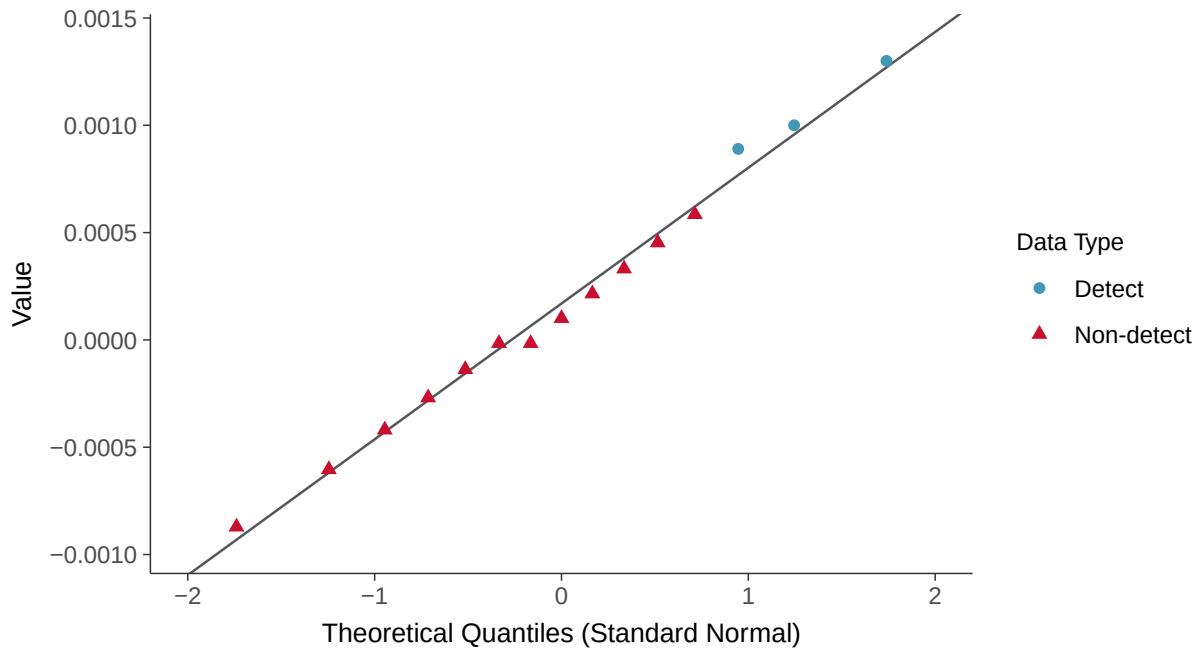
ID: 20_3_5_128





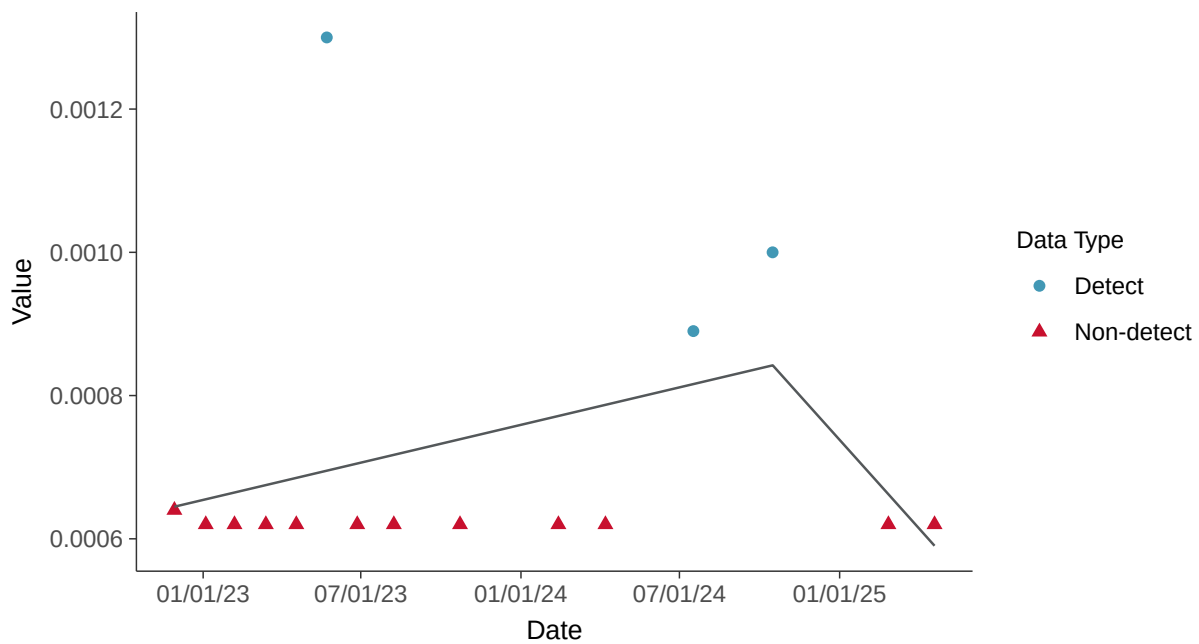
Normal Q-Q plot using ROS Imputed Estimates

Vanadium, MW-10 (mg/L)



Trend Regression: Piecewise Linear-Linear

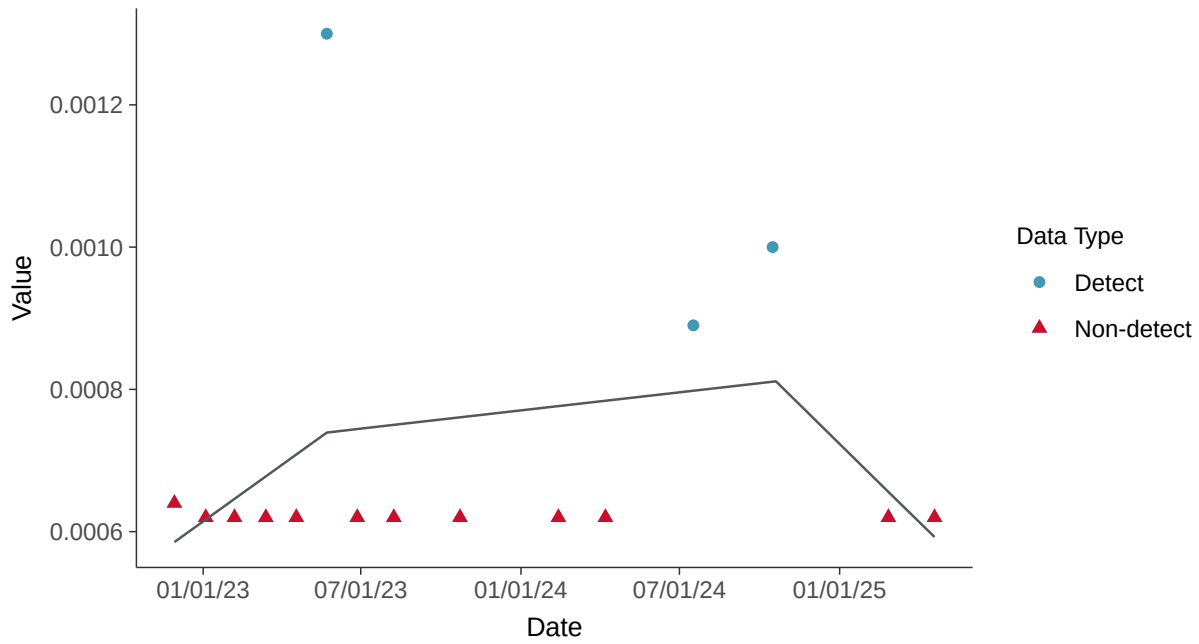
Vanadium, MW-10 (mg/L)





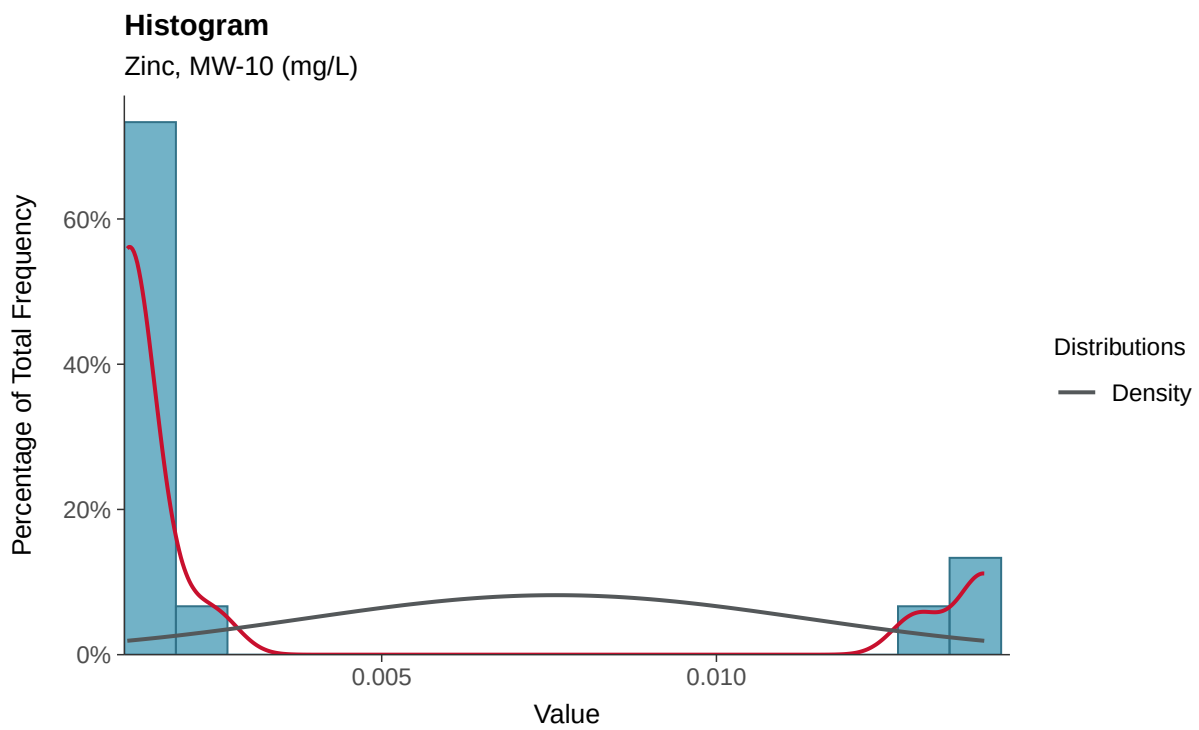
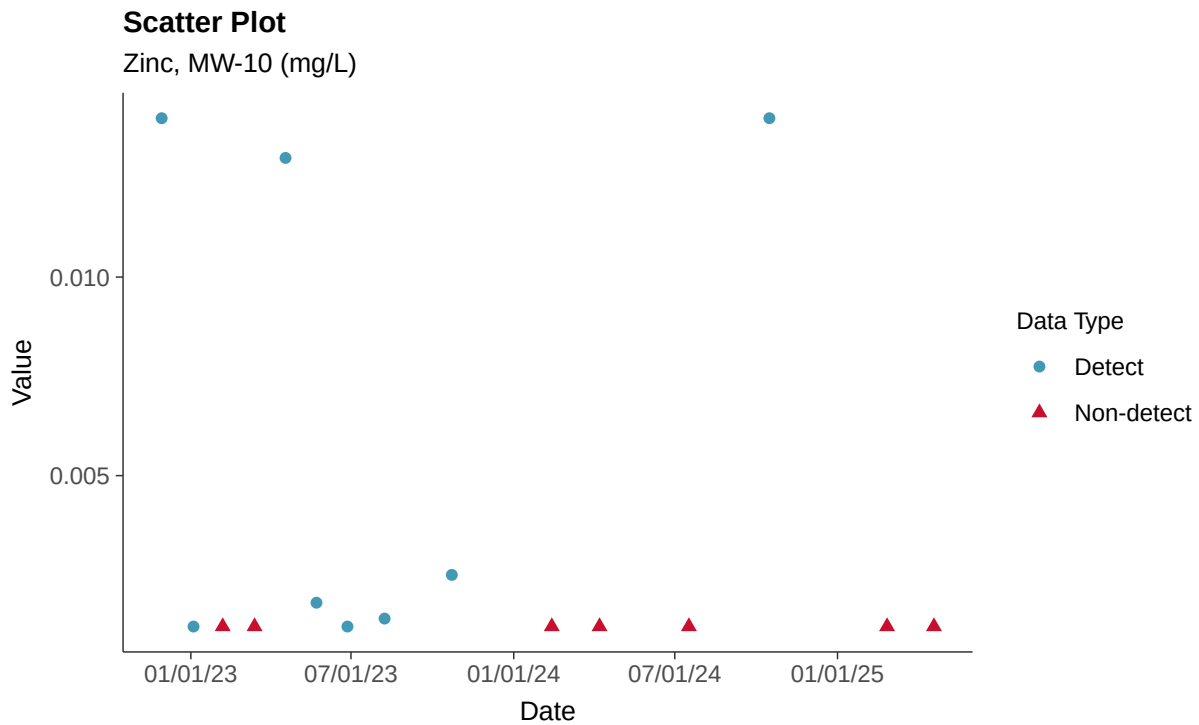
Trend Regression: Piecewise Linear-Linear-Linear

Vanadium, MW-10 (mg/L)



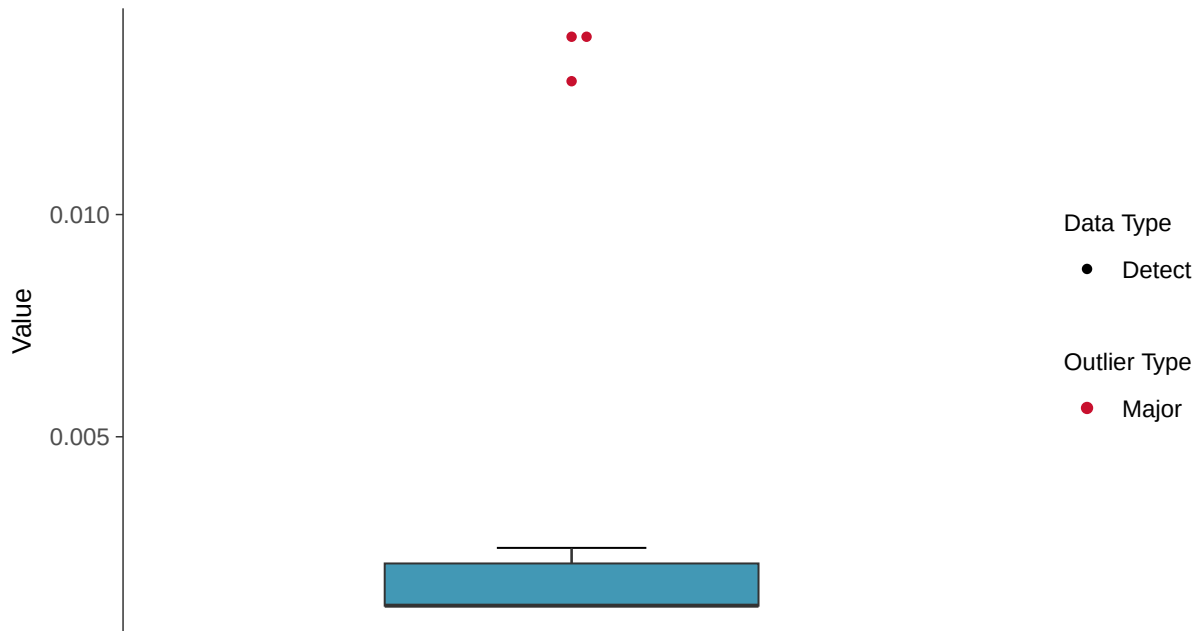
Part 115: Zinc, MW-10

ID: 20_3_5_129



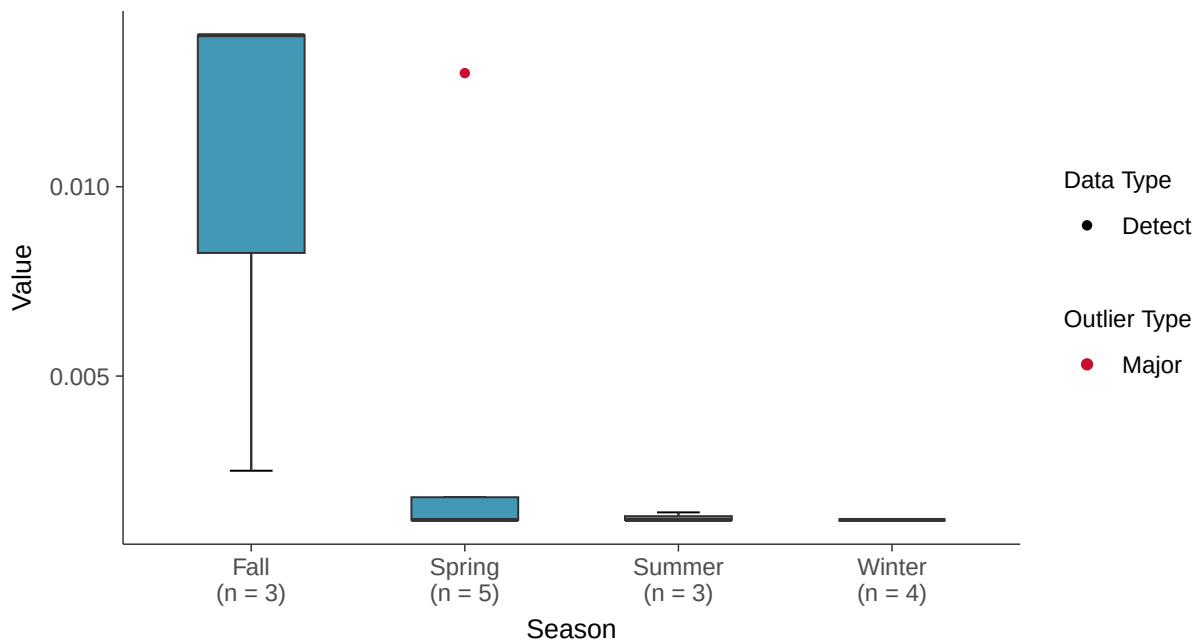
Boxplot

Zinc, MW-10 (mg/L)



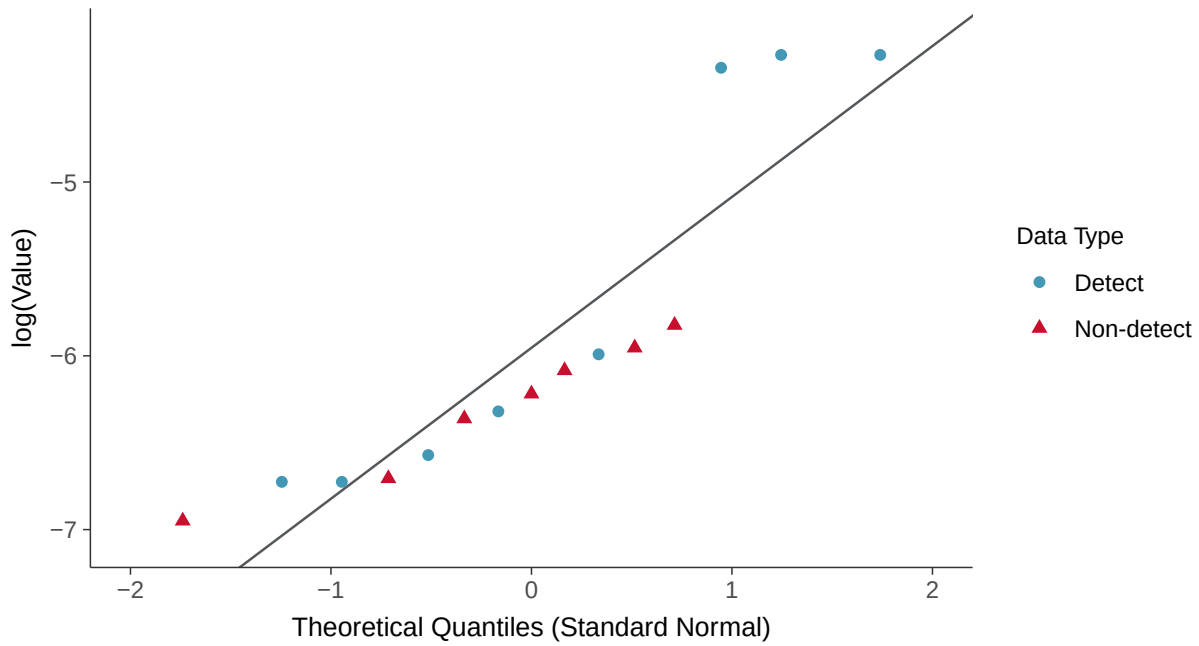
Boxplot by Season

Zinc, MW-10 (mg/L)



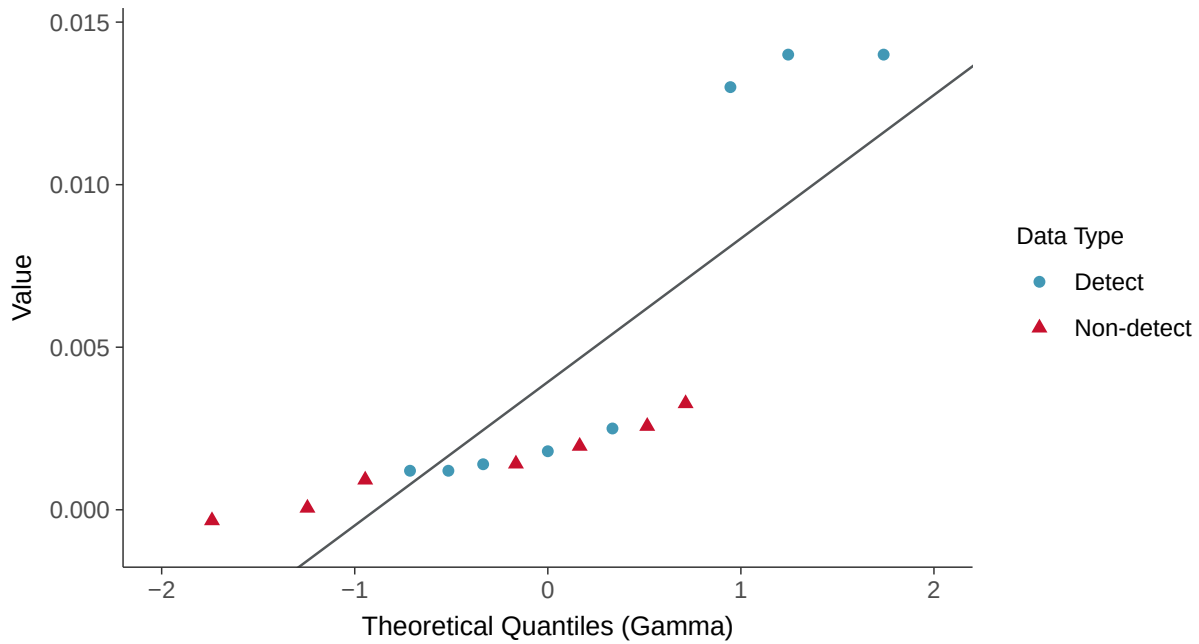
Lognormal Q-Q plot using ROS Imputed Estimates

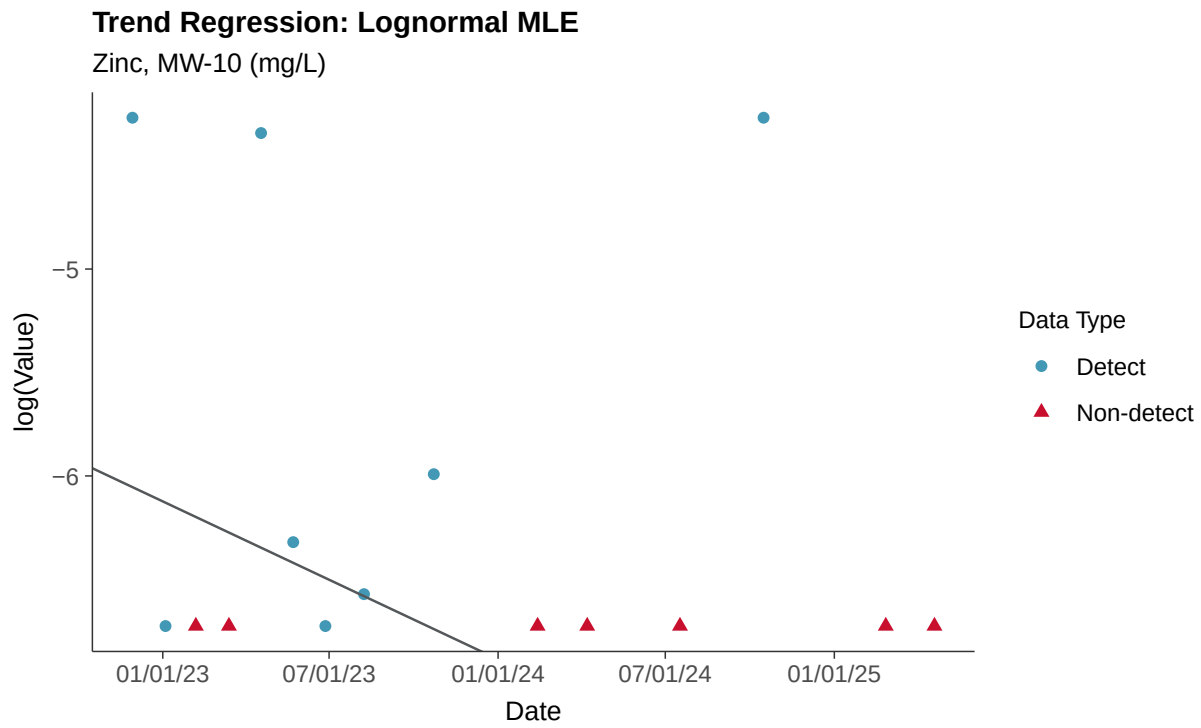
Zinc, MW-10 (mg/L)



Gamma Q-Q plot using ROS Imputed Estimates

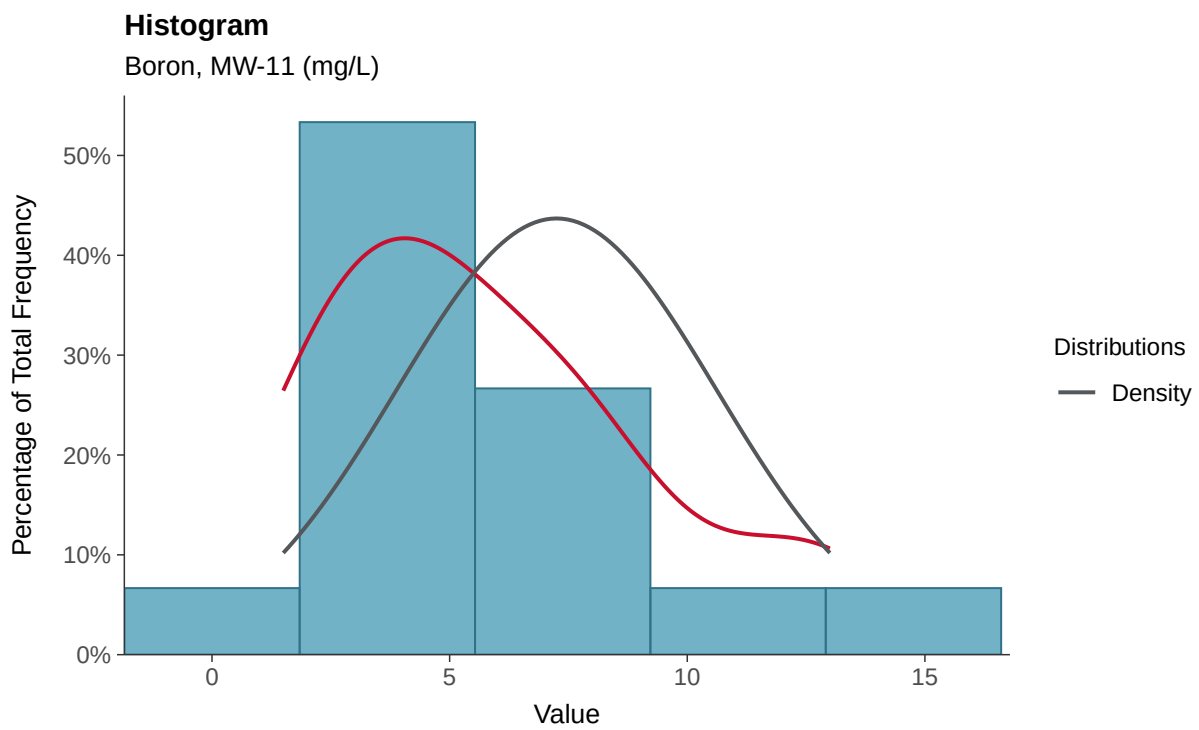
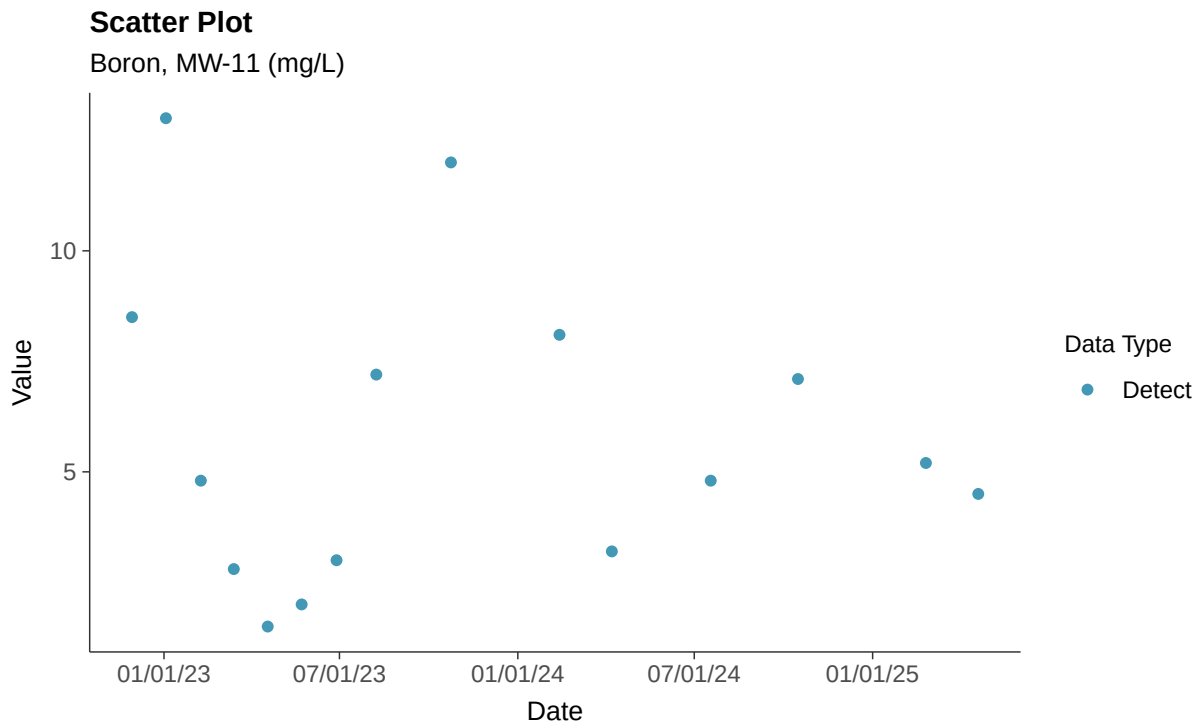
Zinc, MW-10 (mg/L)





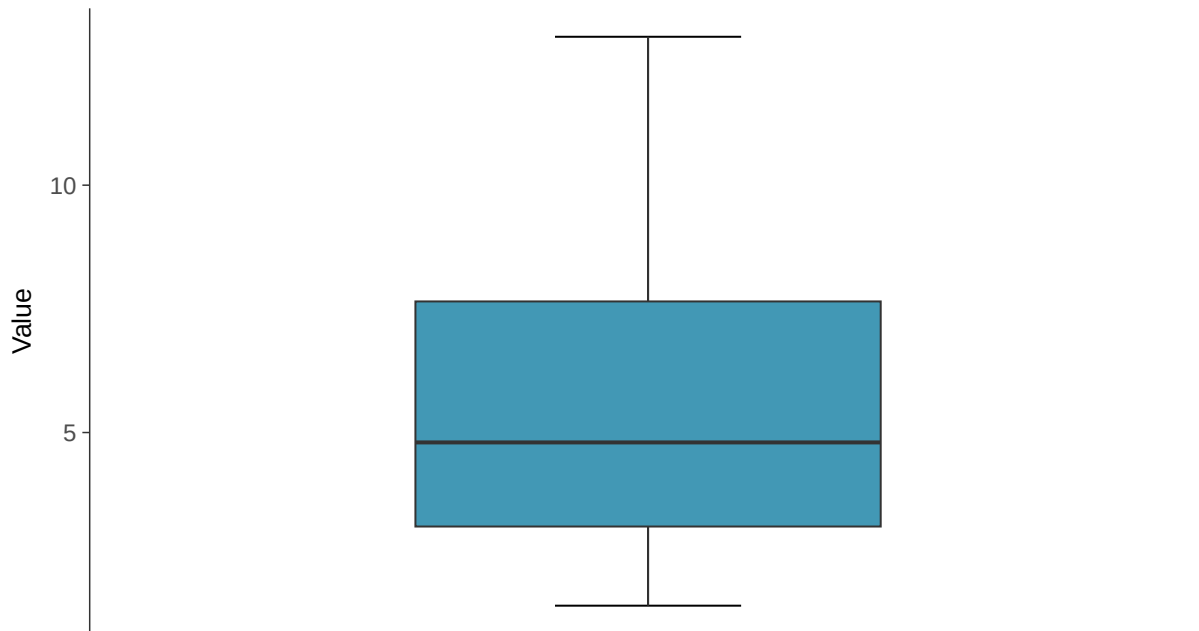
Appendix III: Boron, MW-11

ID: 21_2_3_105



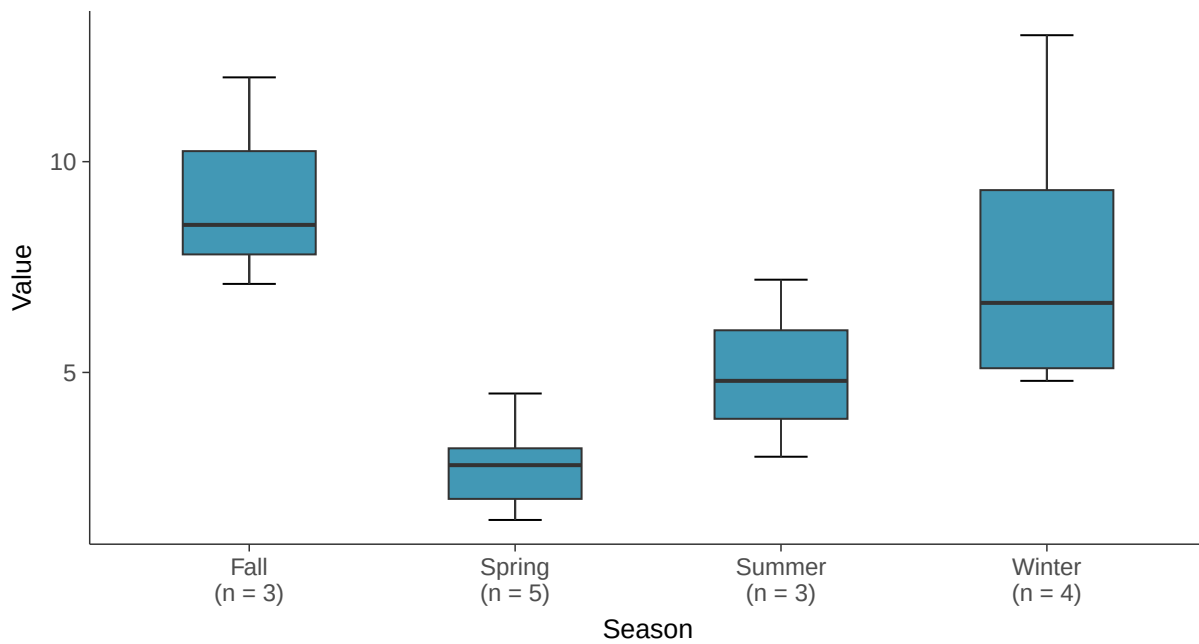
Boxplot

Boron, MW-11 (mg/L)



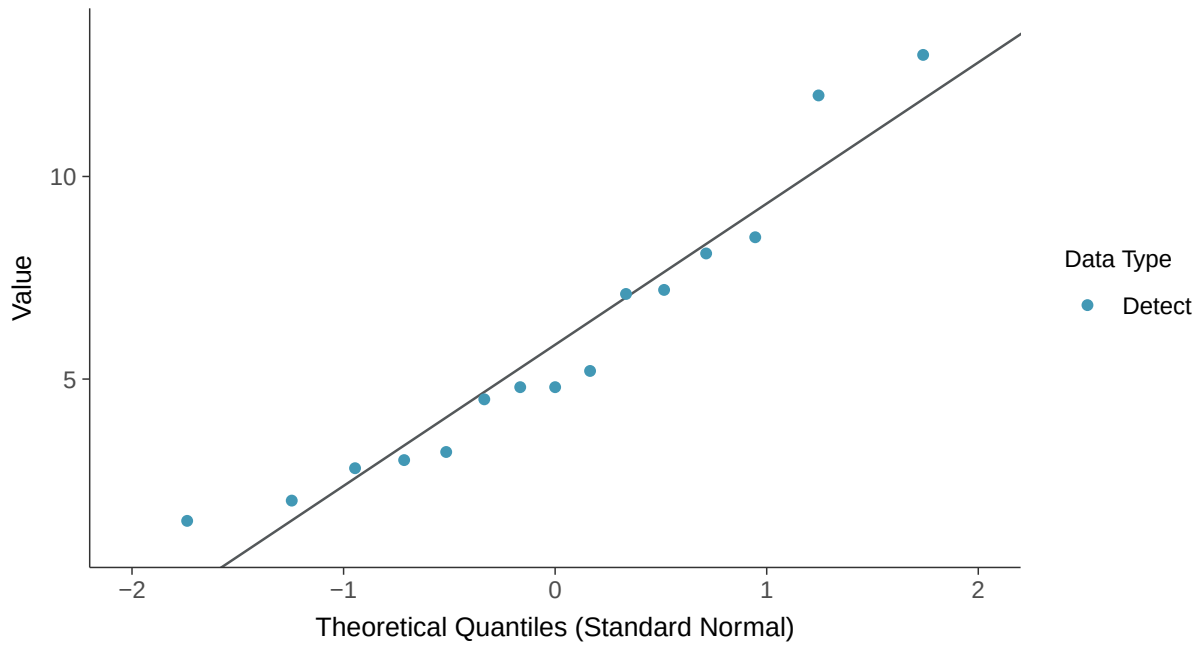
Boxplot by Season

Boron, MW-11 (mg/L)



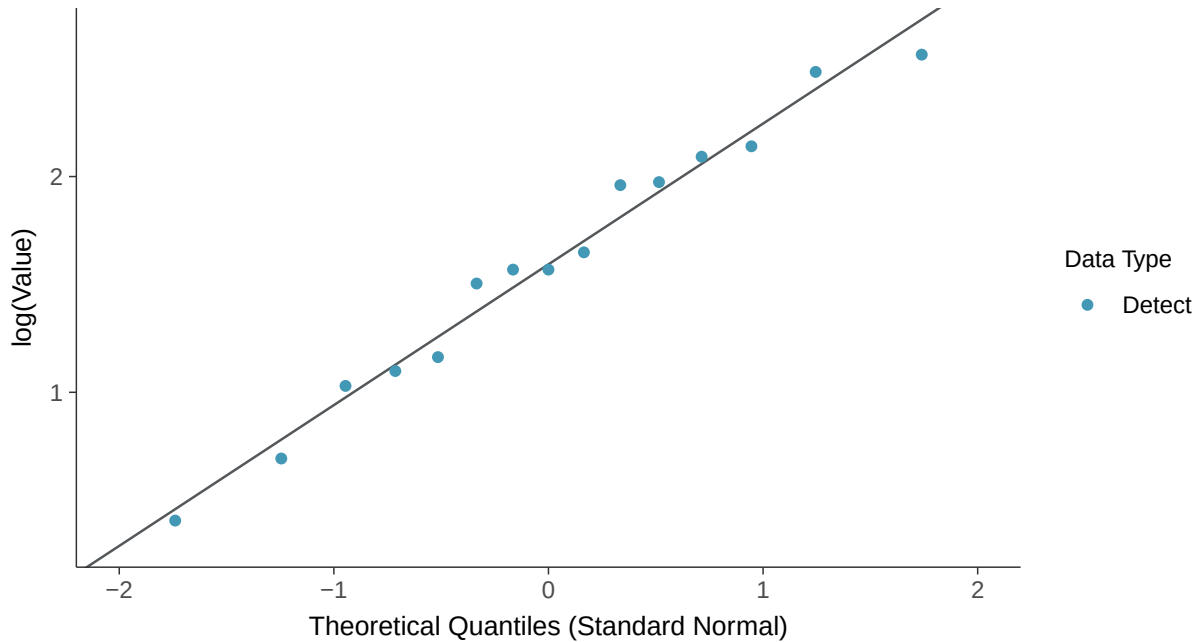
Normal Q-Q plot

Boron, MW-11 (mg/L)

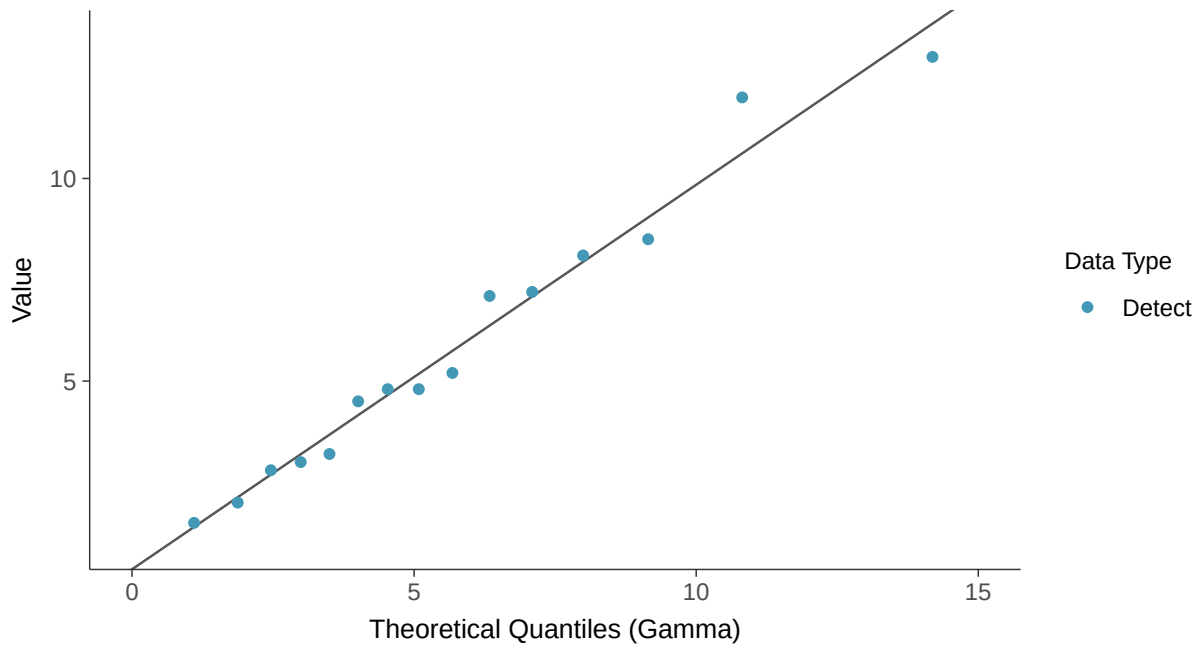


Lognormal Q-Q plot

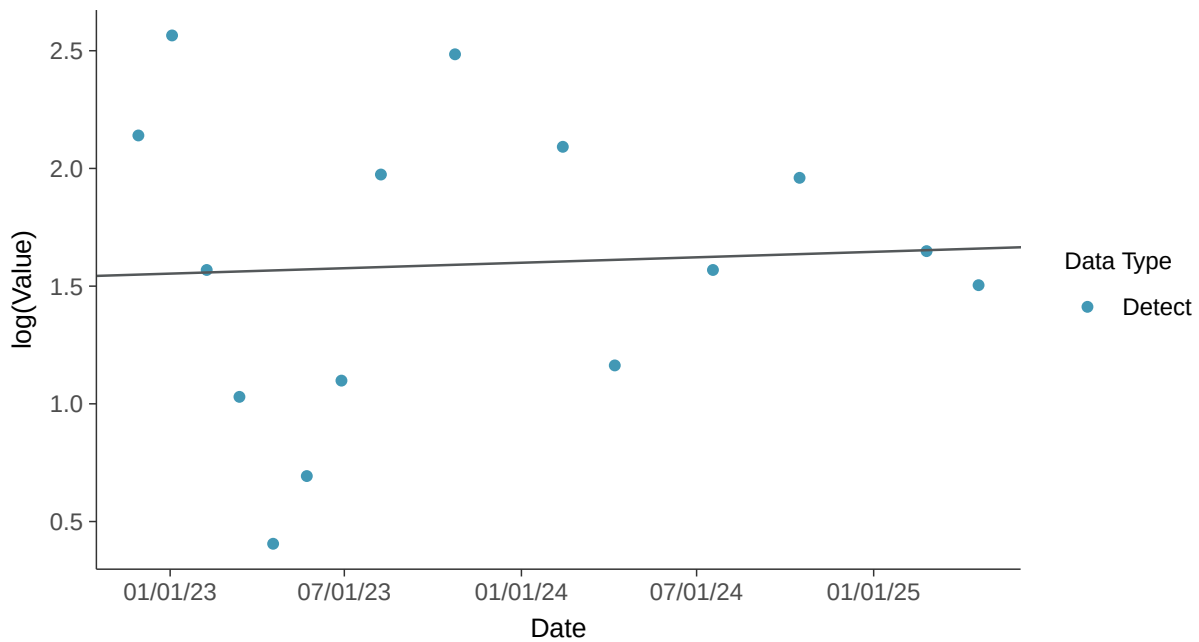
Boron, MW-11 (mg/L)



Gamma Q-Q plot
Boron, MW-11 (mg/L)

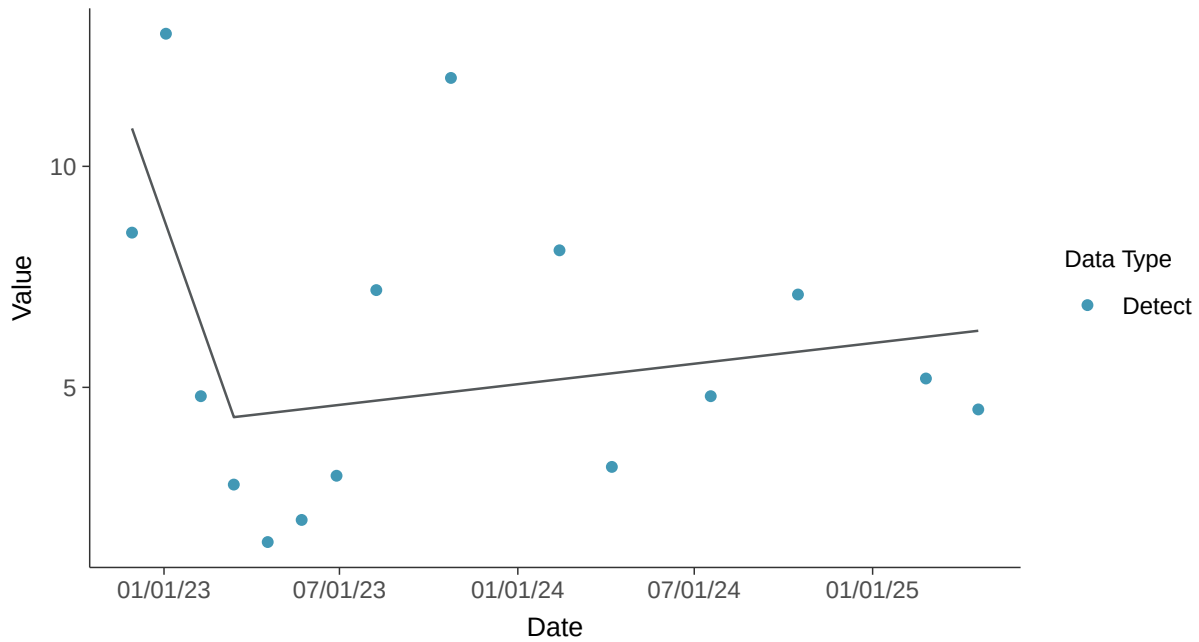


Trend Regression: Lognormal MLE
Boron, MW-11 (mg/L)



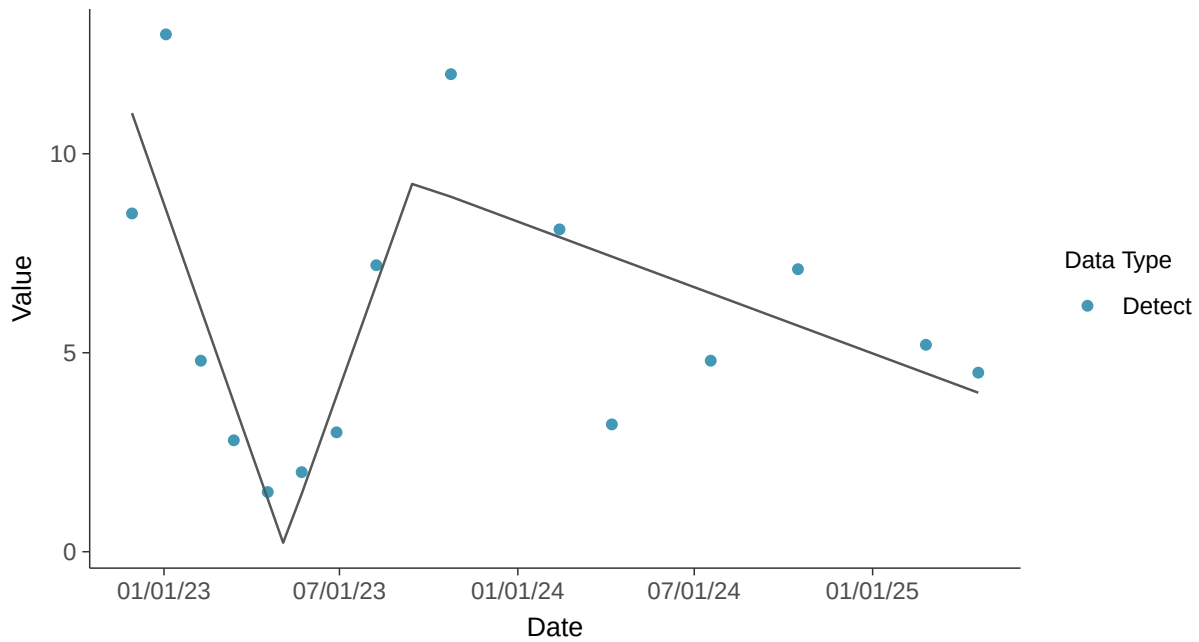
Trend Regression: Piecewise Linear-Linear

Boron, MW-11 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Boron, MW-11 (mg/L)

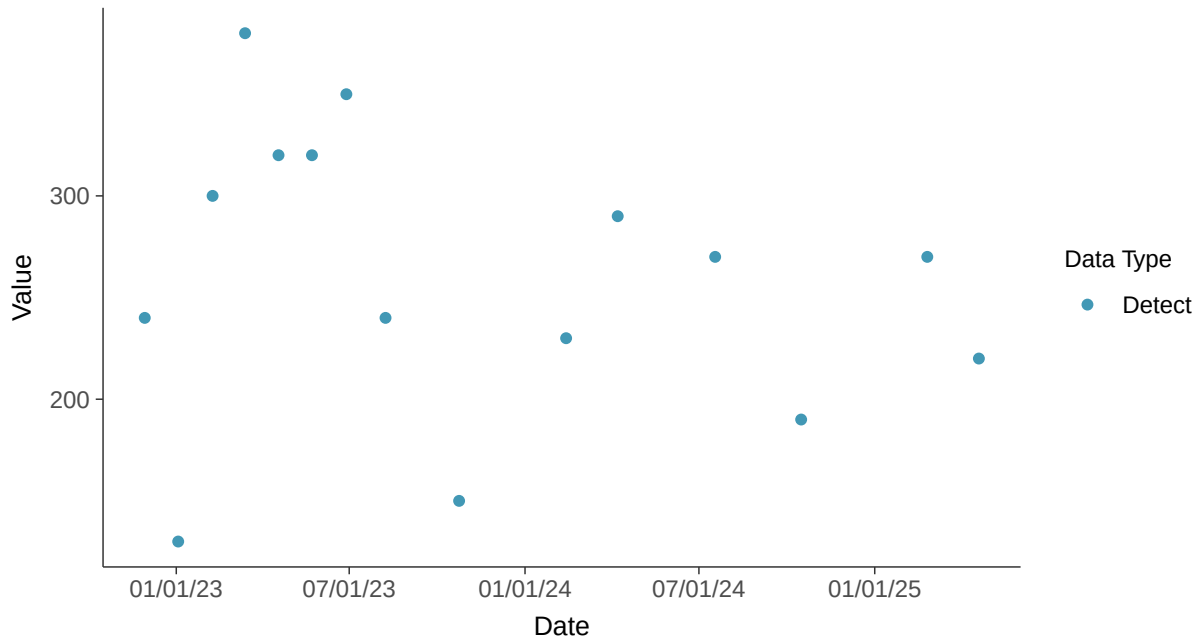


Appendix III: Calcium, MW-11

ID: 21_2_3_107

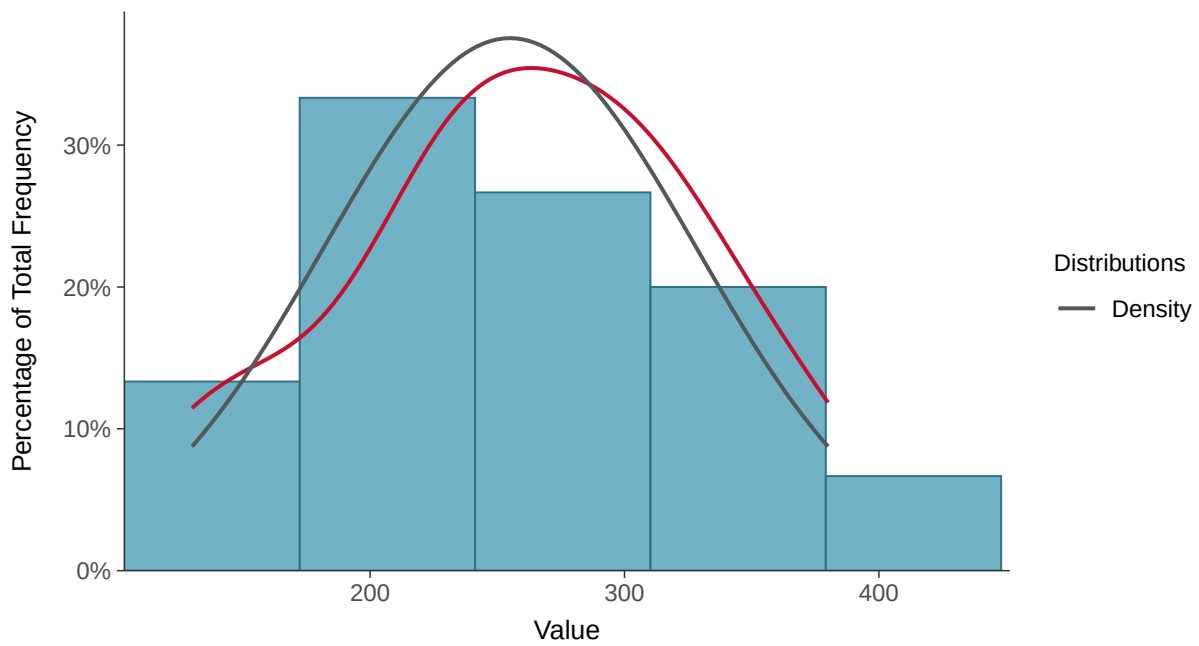
Scatter Plot

Calcium, MW-11 (mg/L)



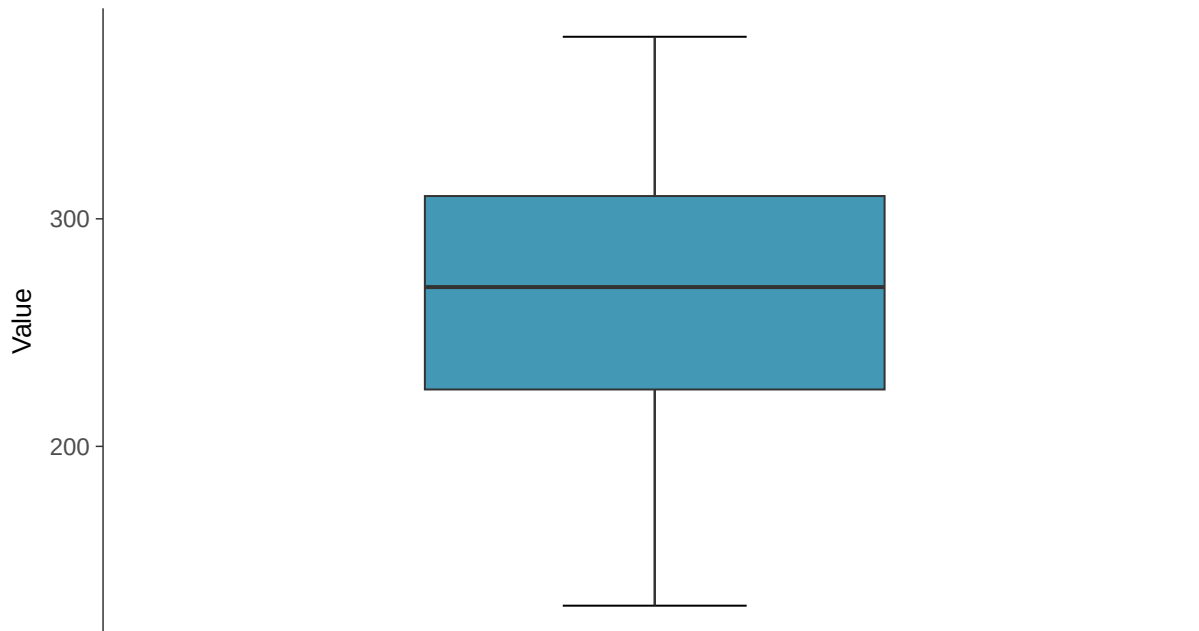
Histogram

Calcium, MW-11 (mg/L)



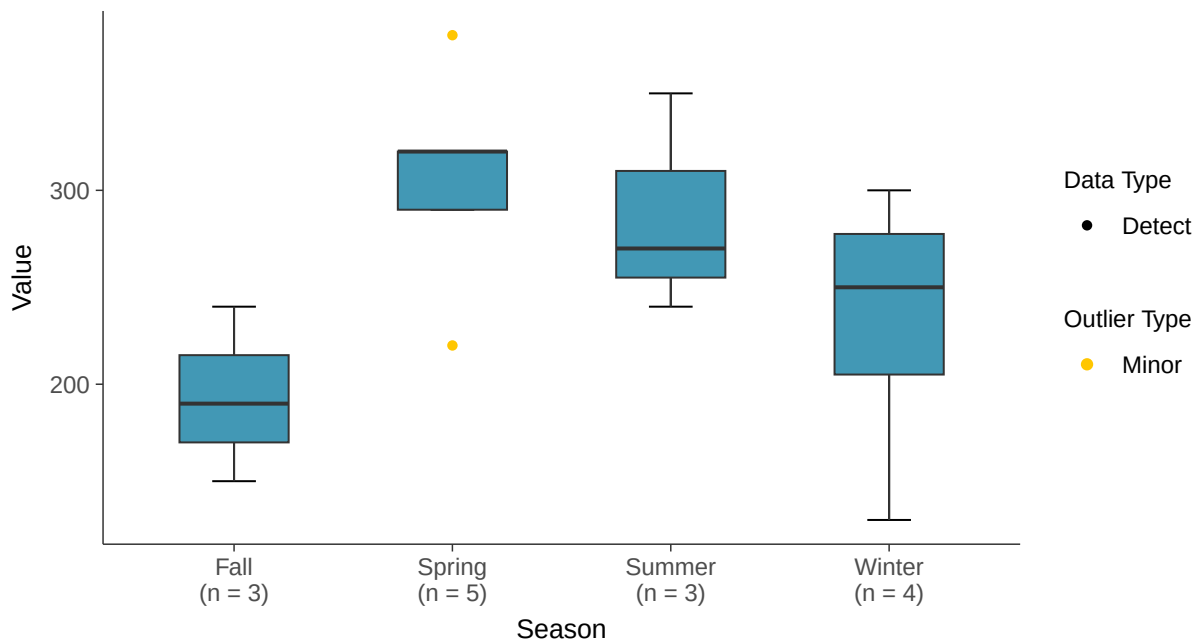
Boxplot

Calcium, MW-11 (mg/L)



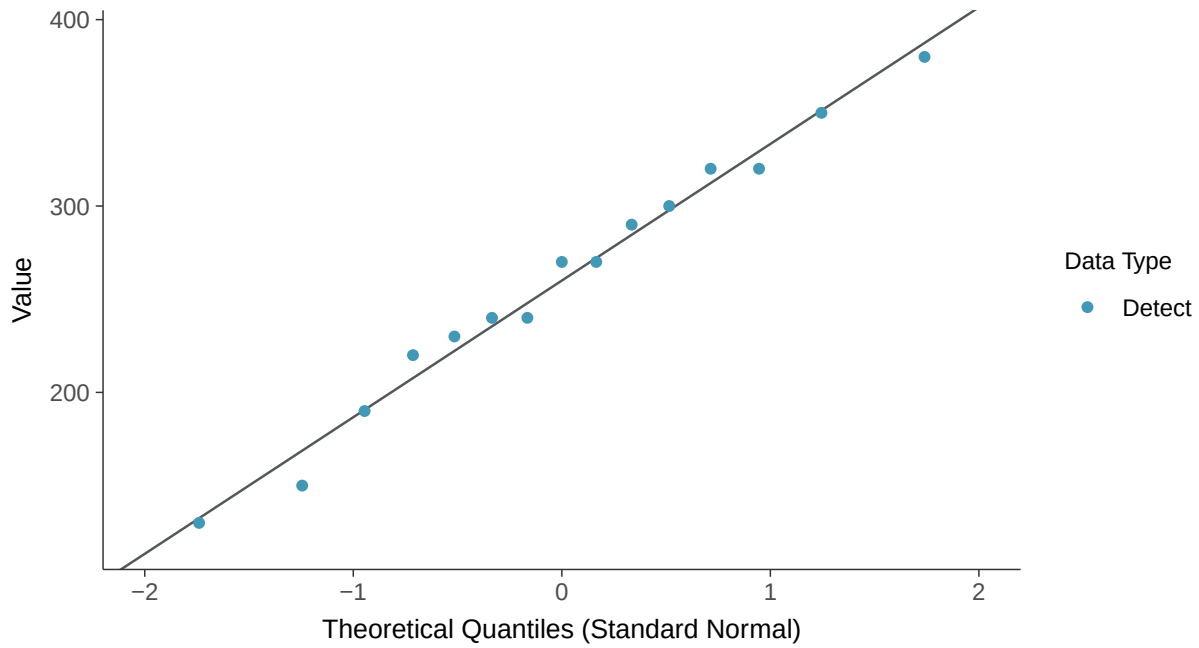
Boxplot by Season

Calcium, MW-11 (mg/L)



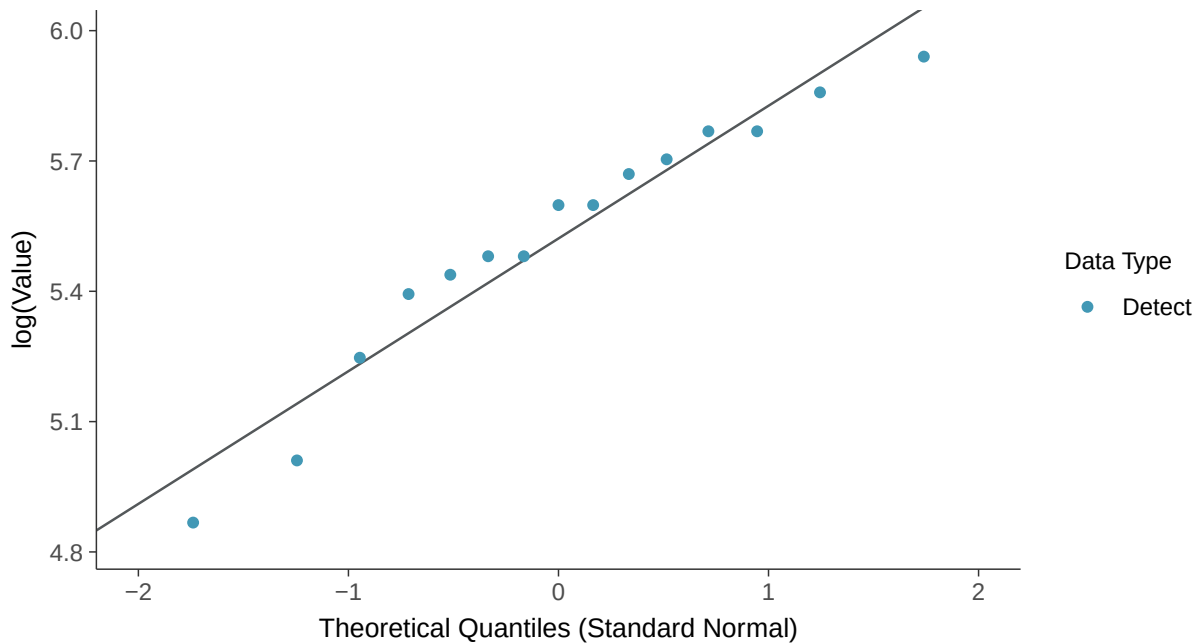
Normal Q-Q plot

Calcium, MW-11 (mg/L)



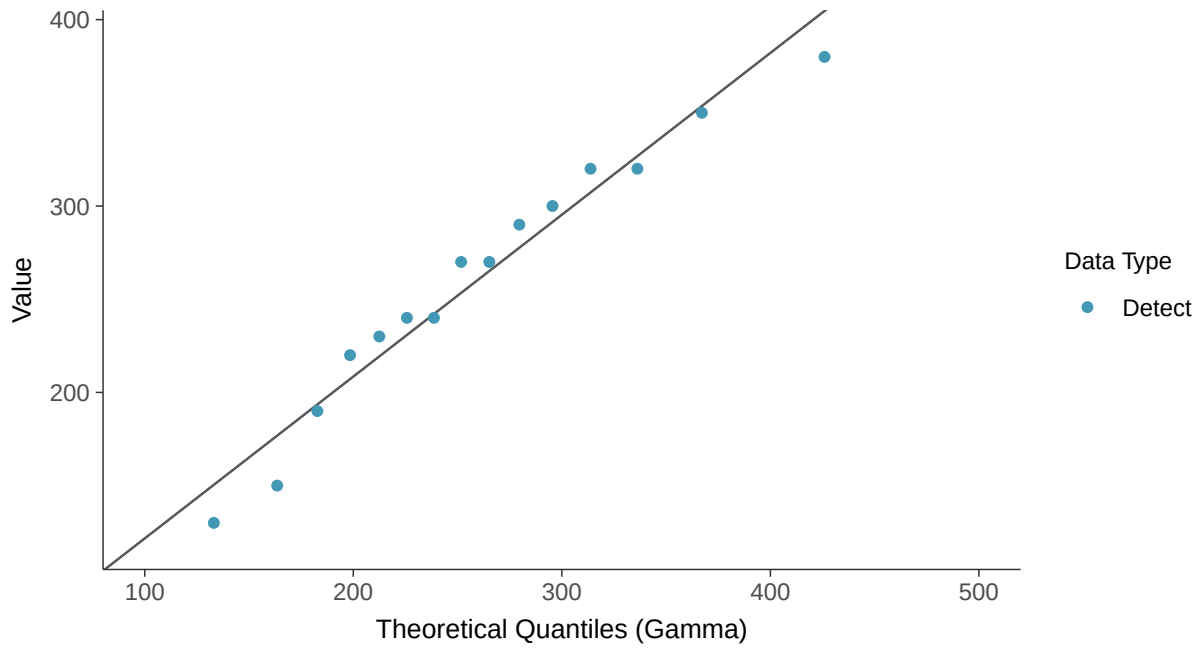
Lognormal Q-Q plot

Calcium, MW-11 (mg/L)



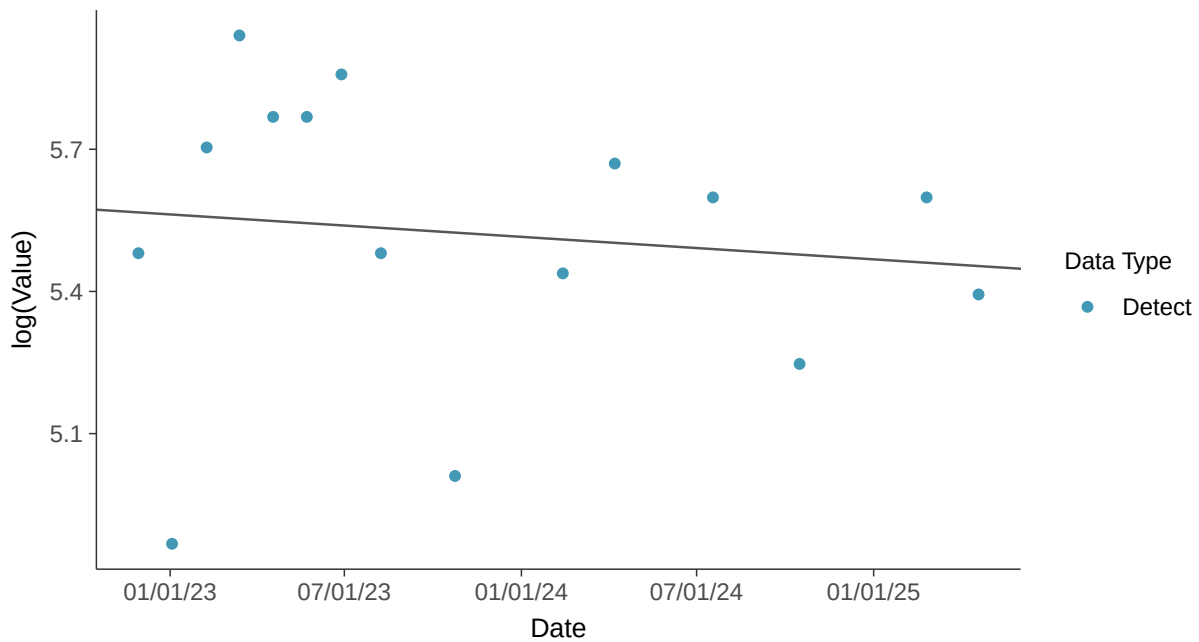
Gamma Q-Q plot

Calcium, MW-11 (mg/L)



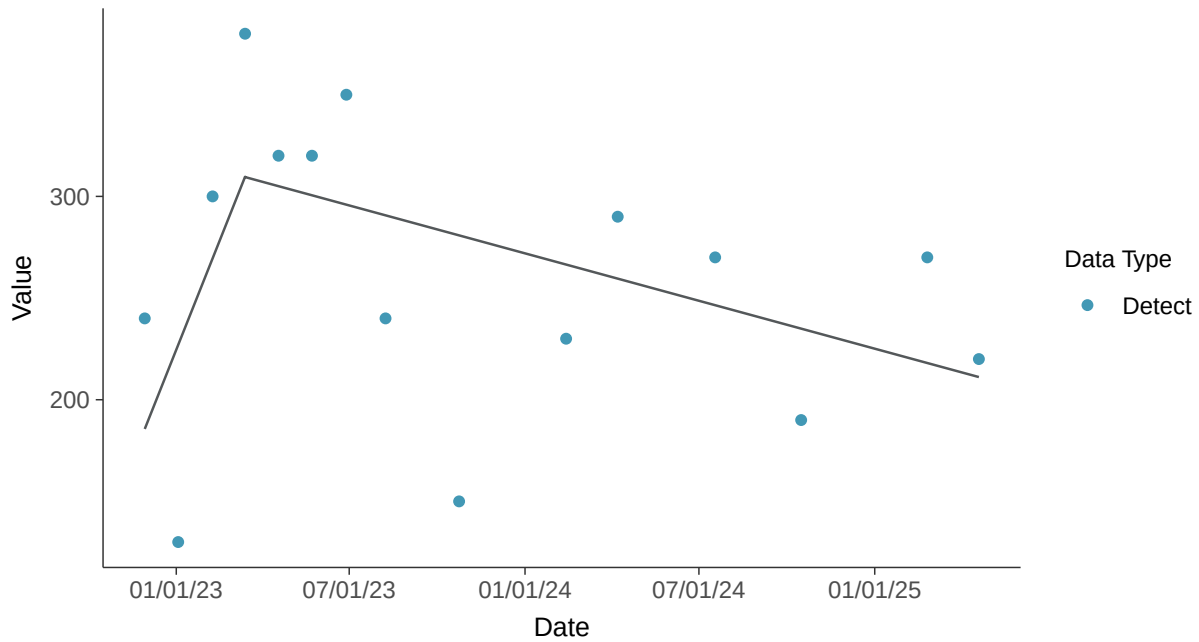
Trend Regression: Lognormal MLE

Calcium, MW-11 (mg/L)



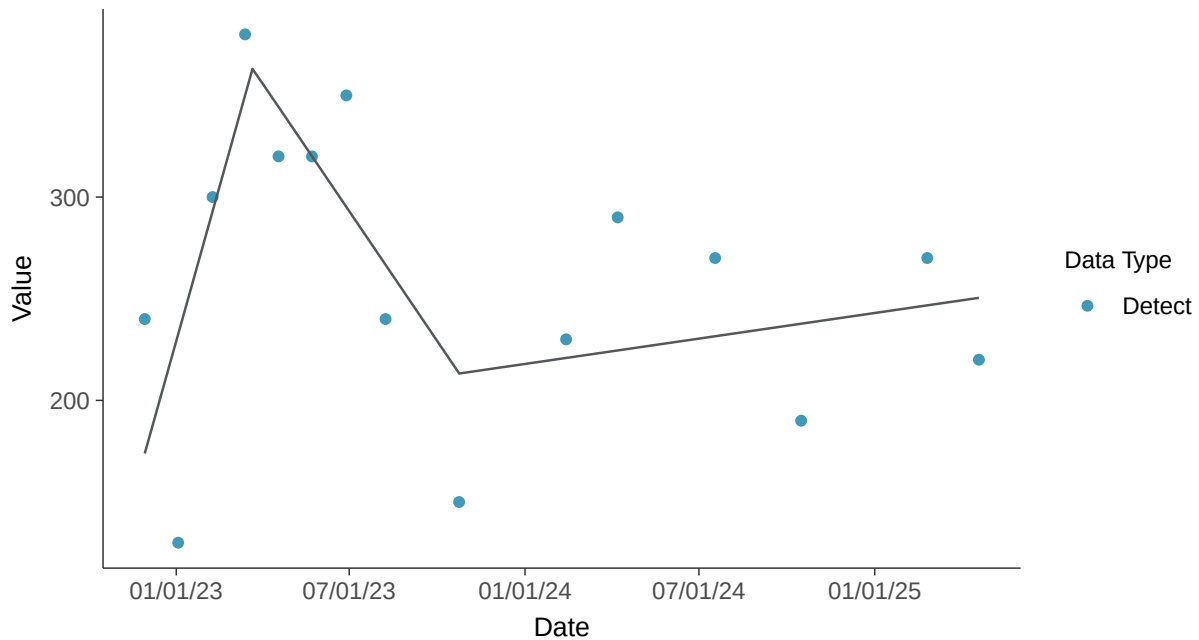
Trend Regression: Piecewise Linear-Linear

Calcium, MW-11 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Calcium, MW-11 (mg/L)

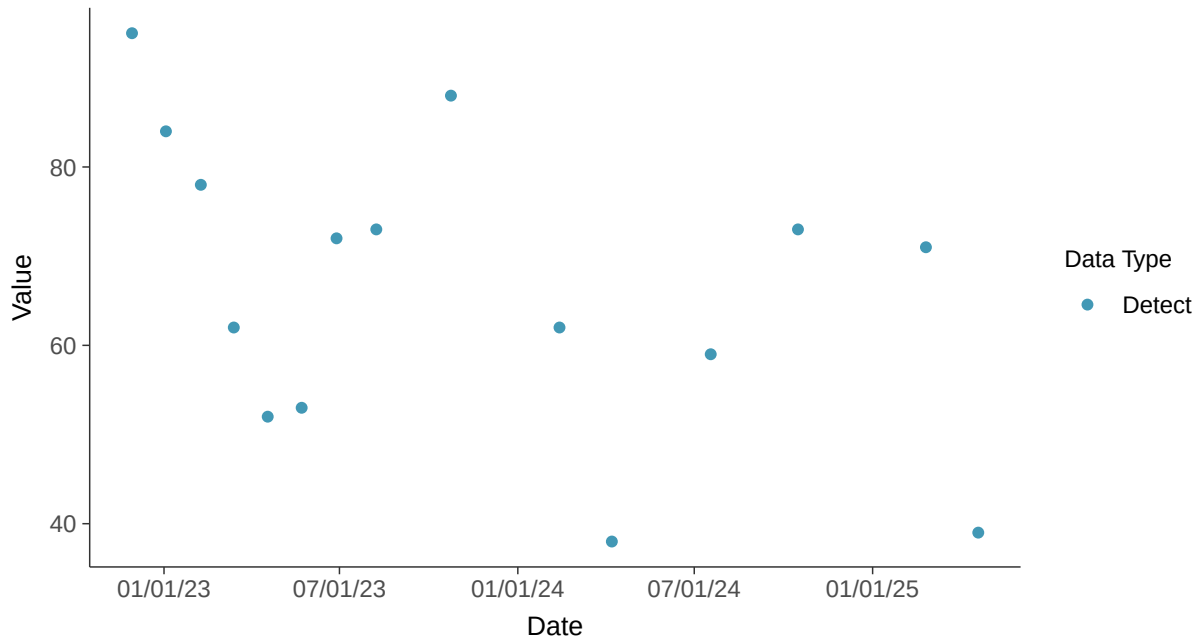


Appendix III: Chloride (as Cl), MW-11

ID: 21_2_3_108

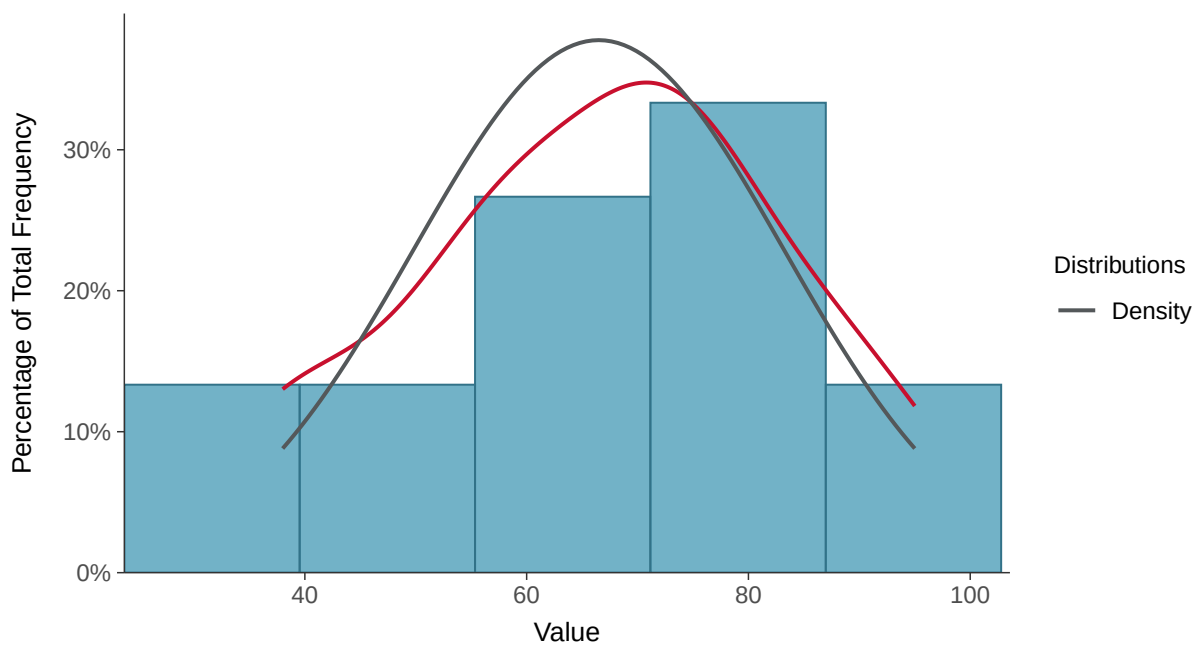
Scatter Plot

Chloride (as Cl), MW-11 (mg/L)



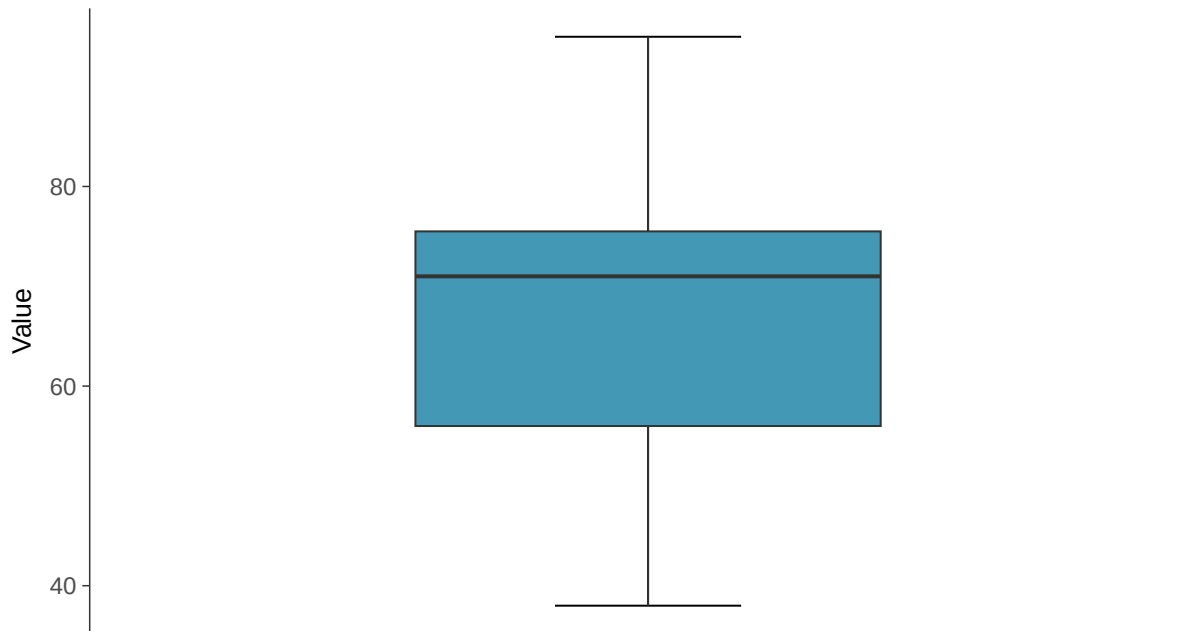
Histogram

Chloride (as Cl), MW-11 (mg/L)



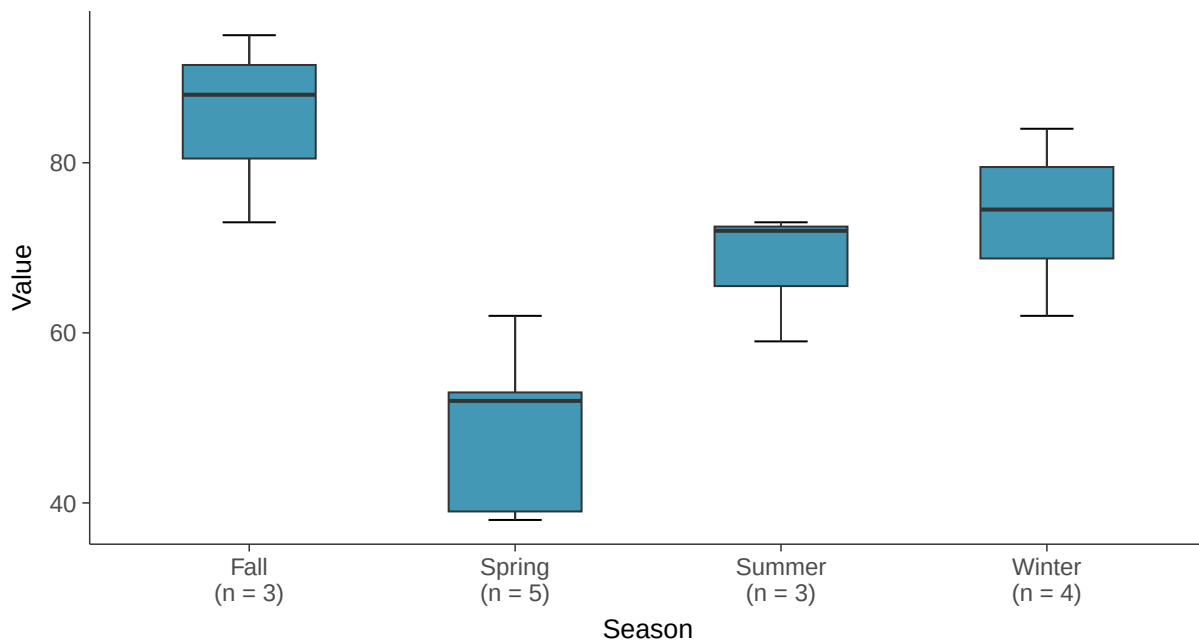
Boxplot

Chloride (as Cl), MW-11 (mg/L)



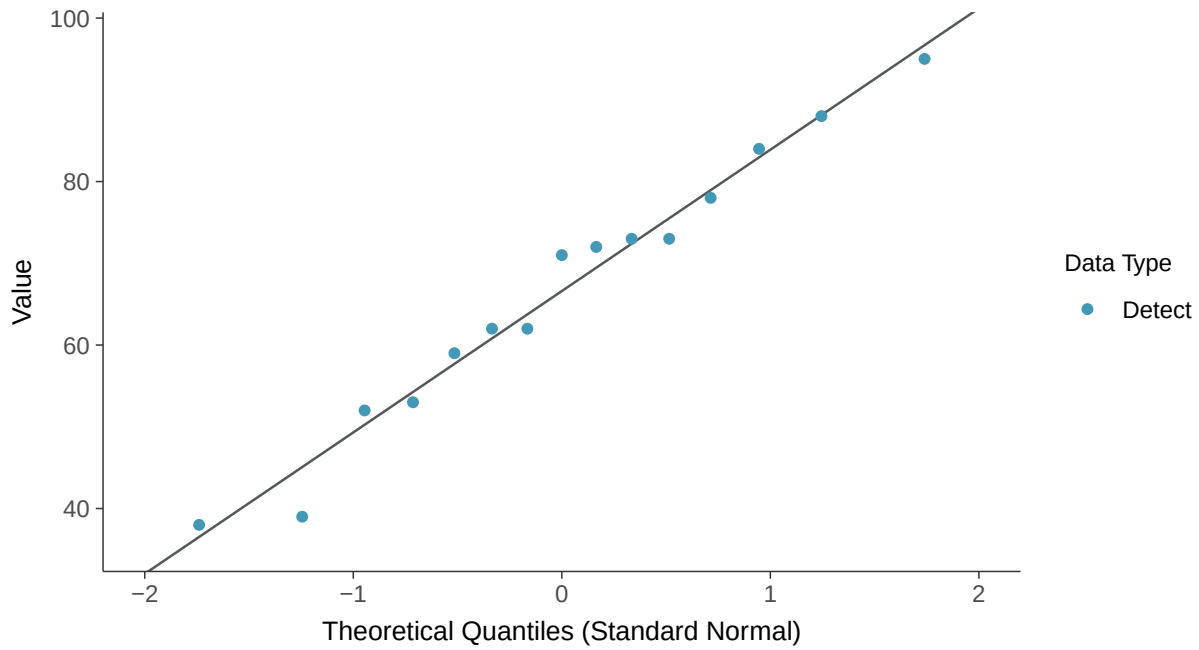
Boxplot by Season

Chloride (as Cl), MW-11 (mg/L)



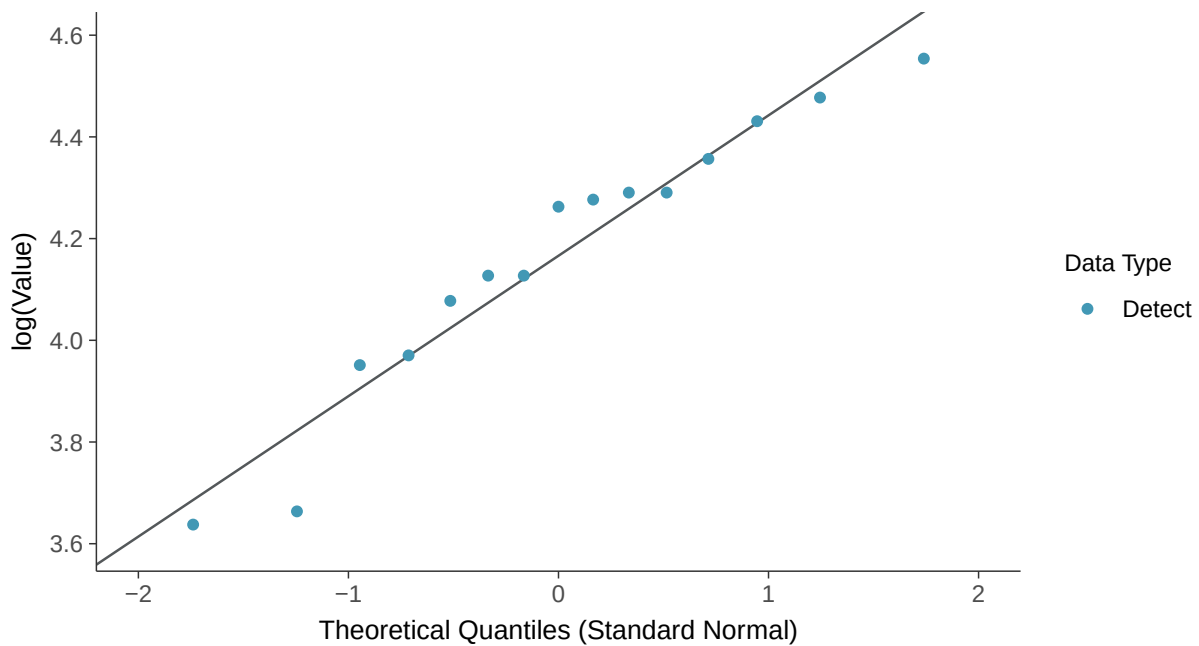
Normal Q-Q plot

Chloride (as Cl), MW-11 (mg/L)



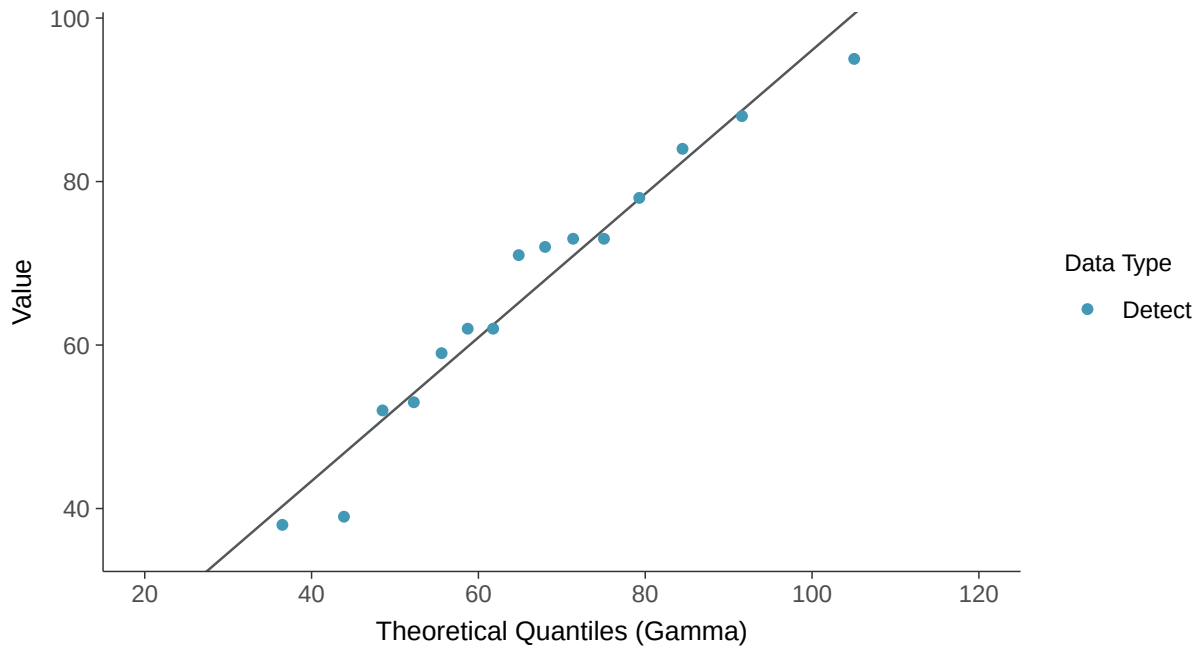
Lognormal Q-Q plot

Chloride (as Cl), MW-11 (mg/L)



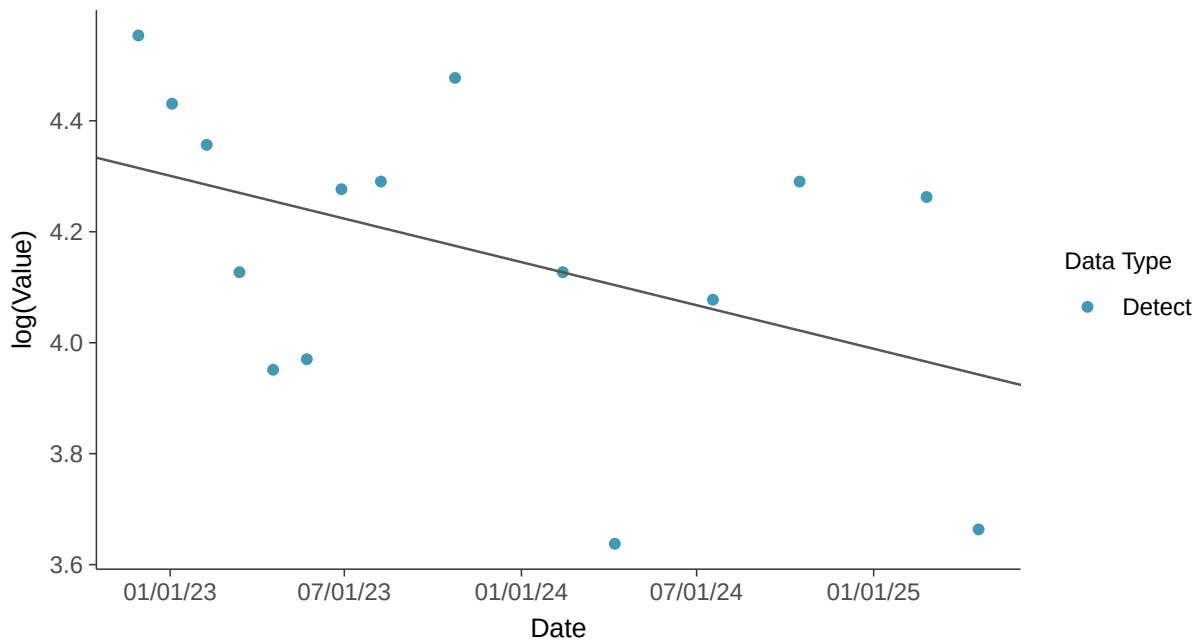
Gamma Q-Q plot

Chloride (as Cl), MW-11 (mg/L)



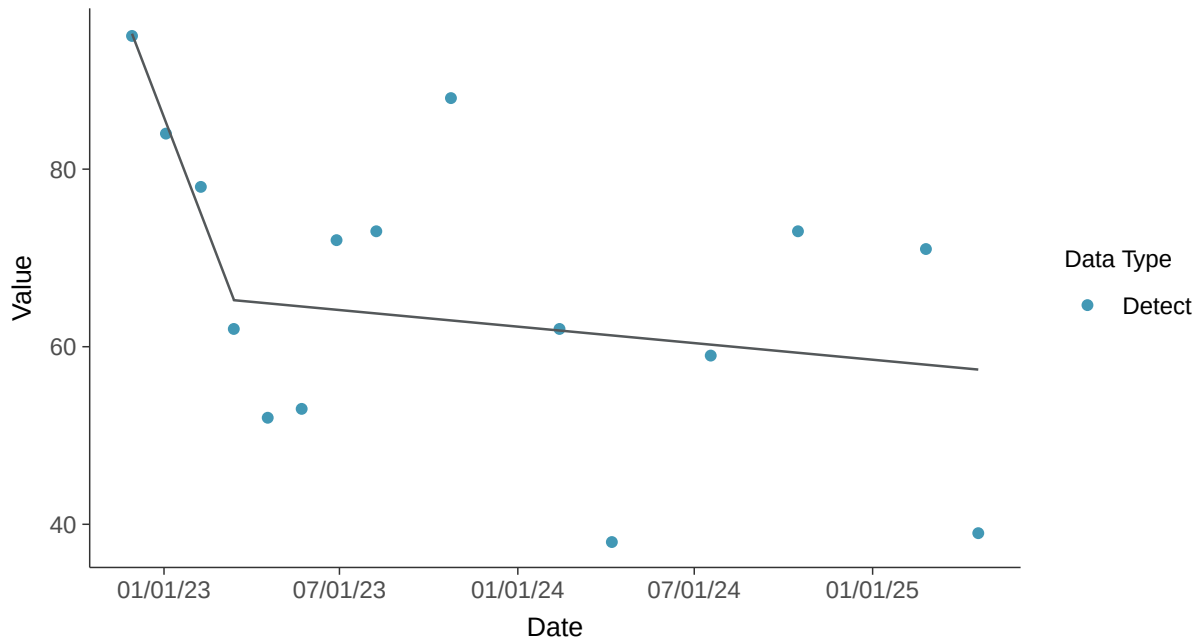
Trend Regression: Lognormal MLE

Chloride (as Cl), MW-11 (mg/L)



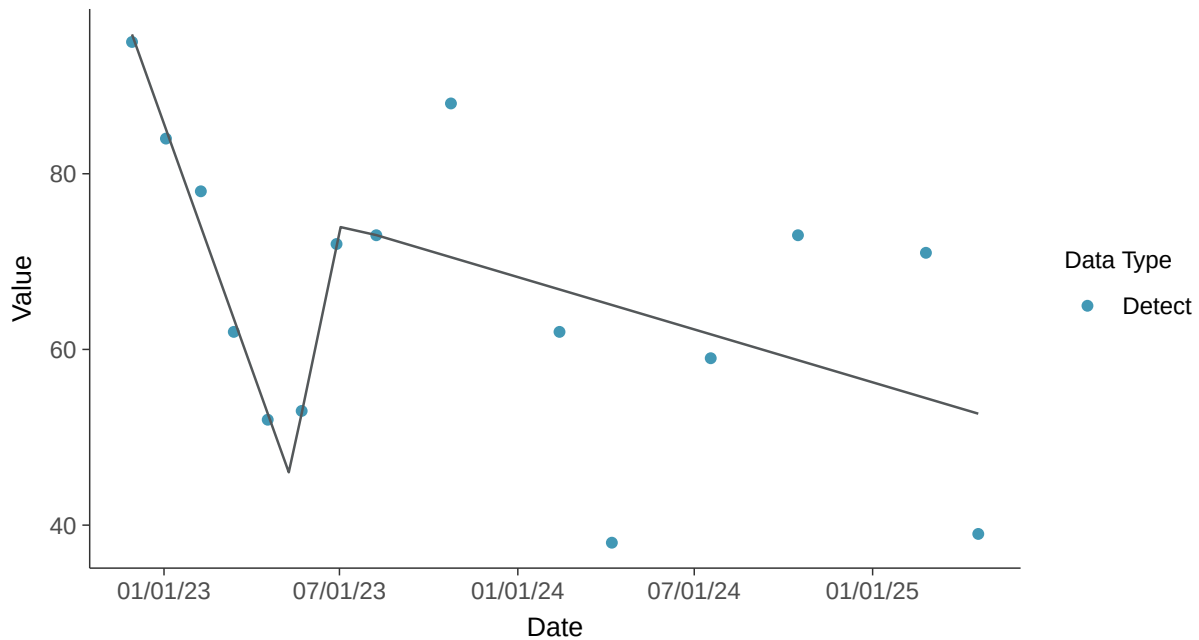
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-11 (mg/L)



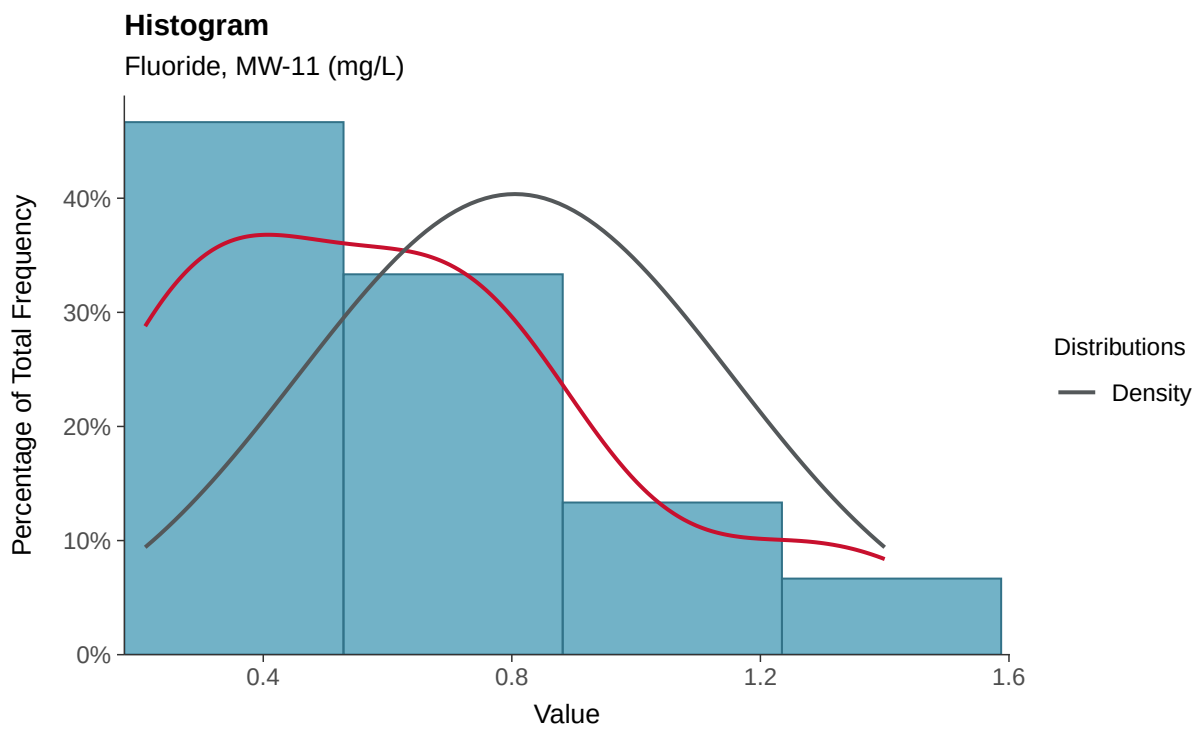
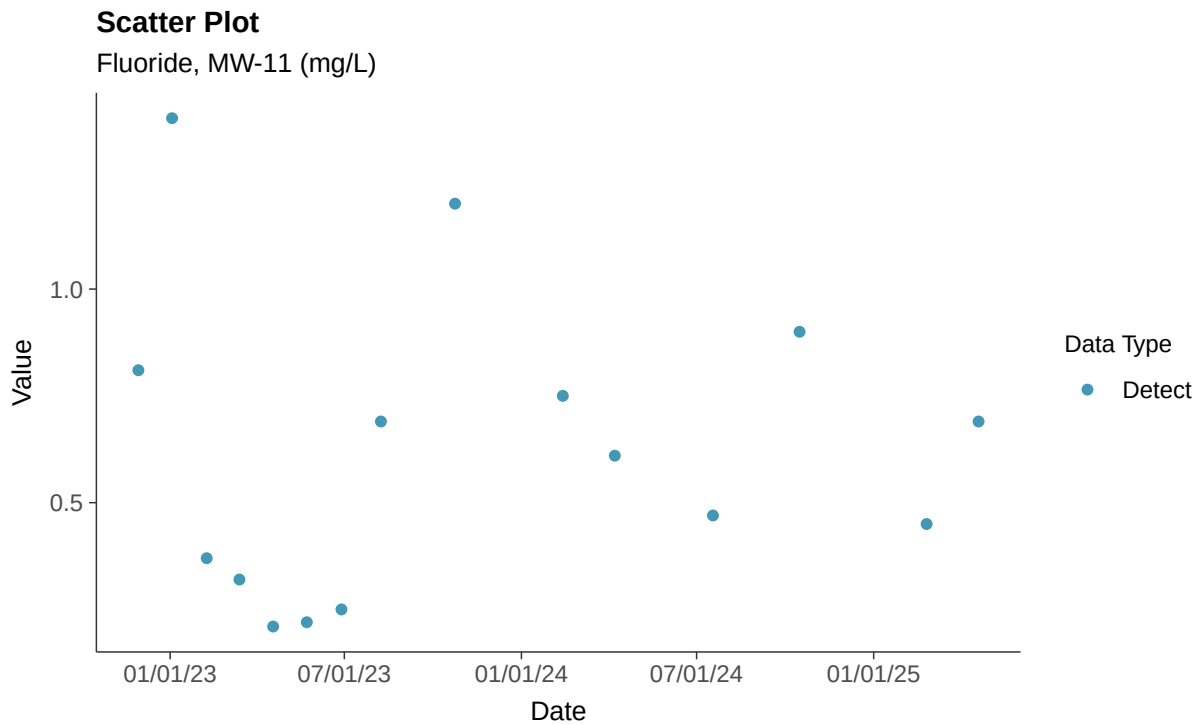
Trend Regression: Piecewise Linear-Linear-Linear

Chloride (as Cl), MW-11 (mg/L)



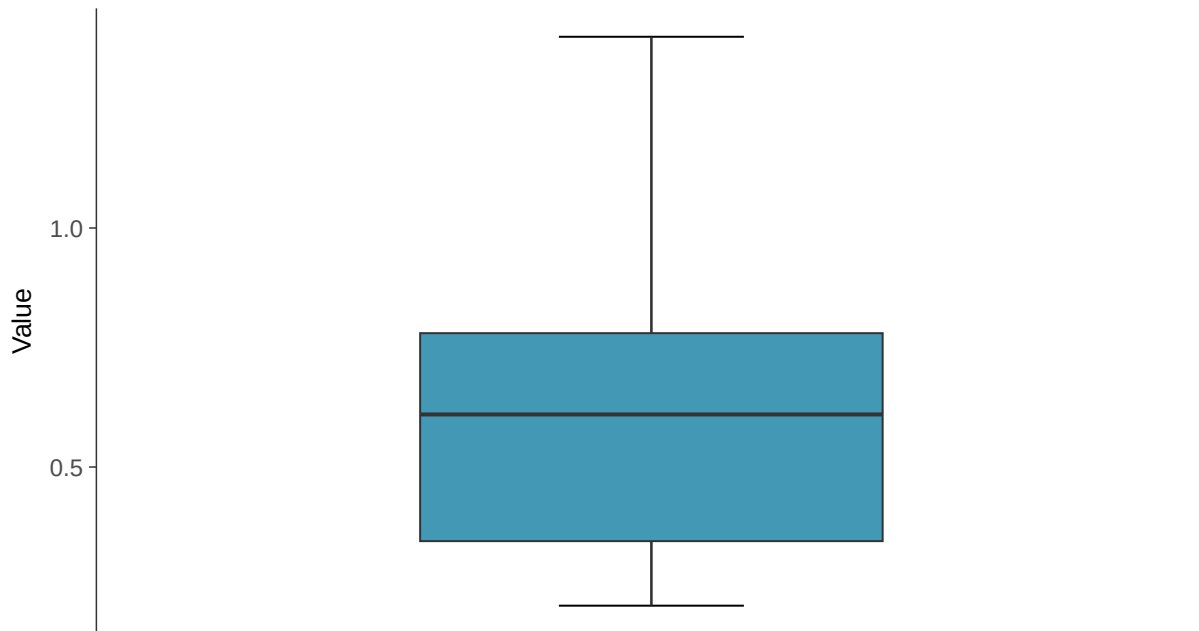
Appendix III: Fluoride, MW-11

ID: 21_2_3_112



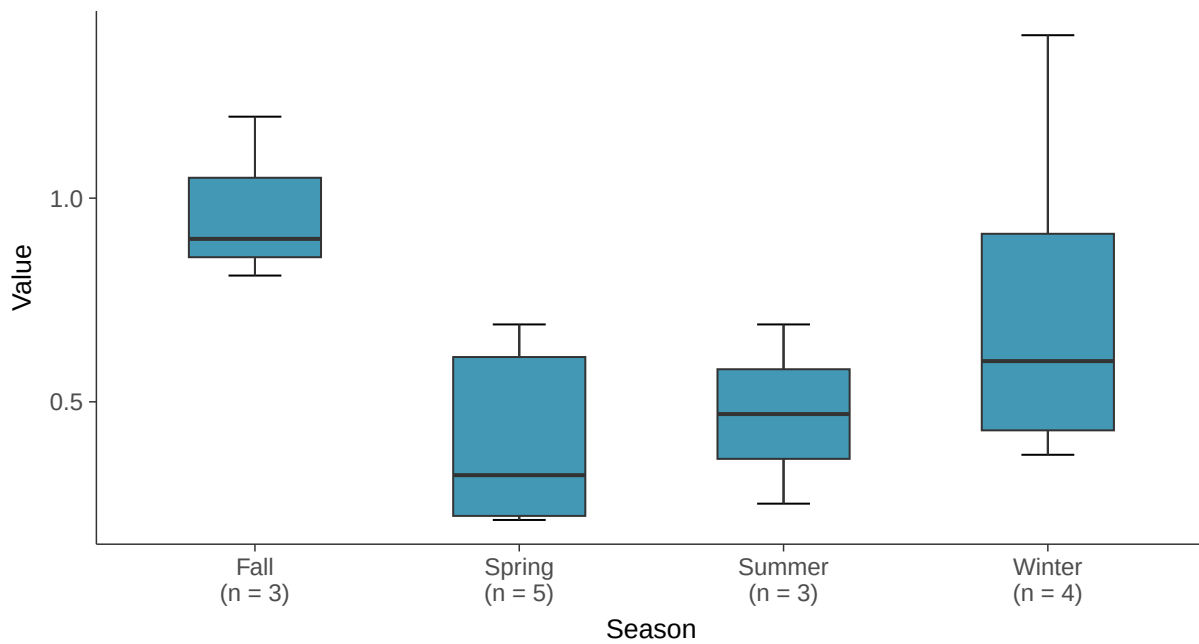
Boxplot

Fluoride, MW-11 (mg/L)



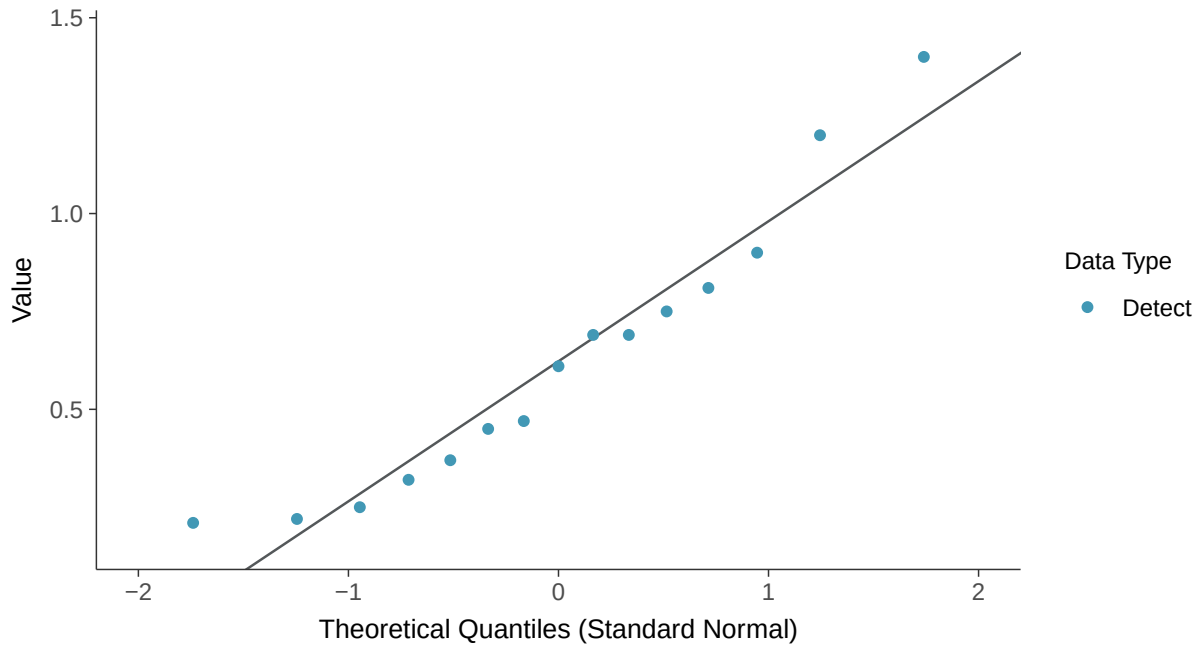
Boxplot by Season

Fluoride, MW-11 (mg/L)



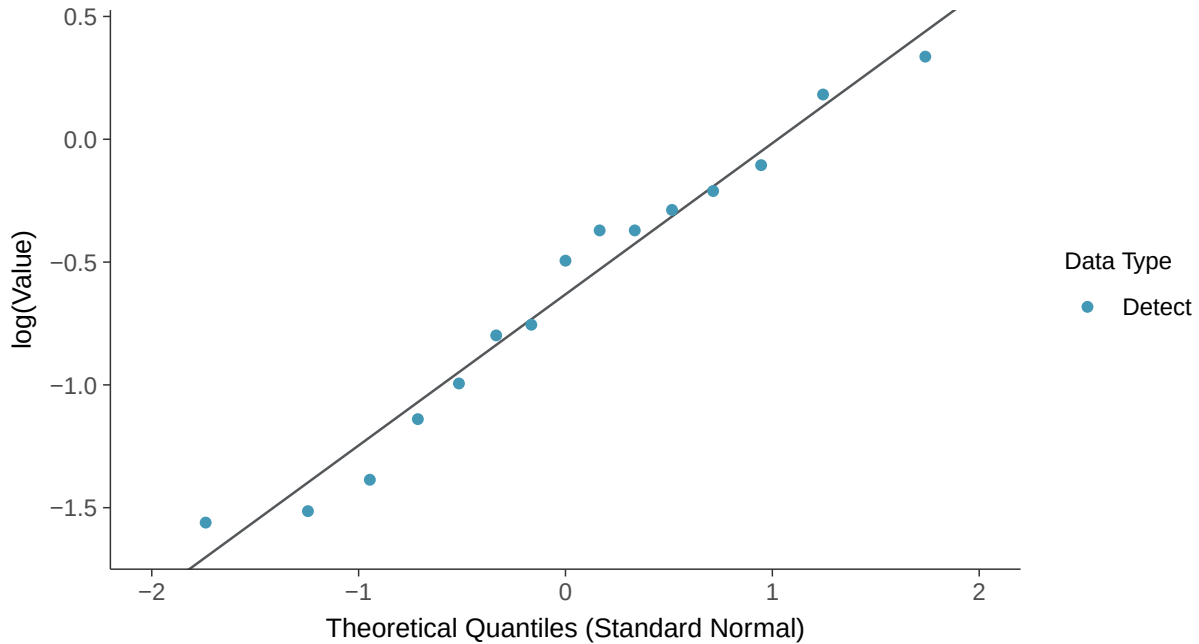
Normal Q-Q plot

Fluoride, MW-11 (mg/L)



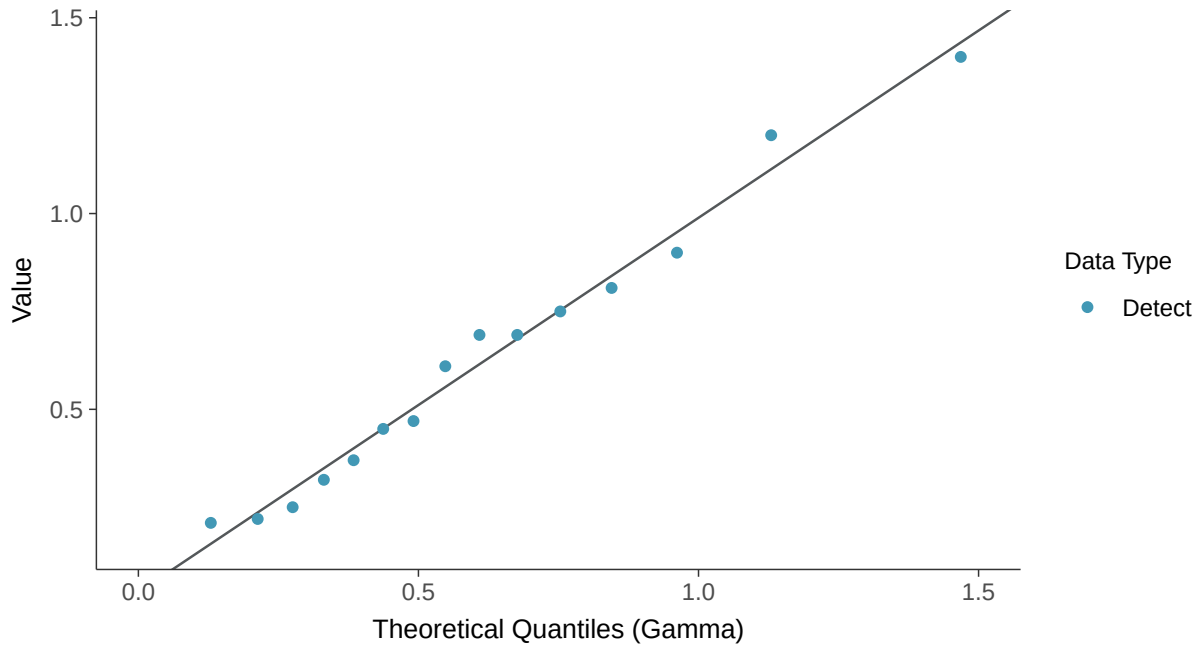
Lognormal Q-Q plot

Fluoride, MW-11 (mg/L)



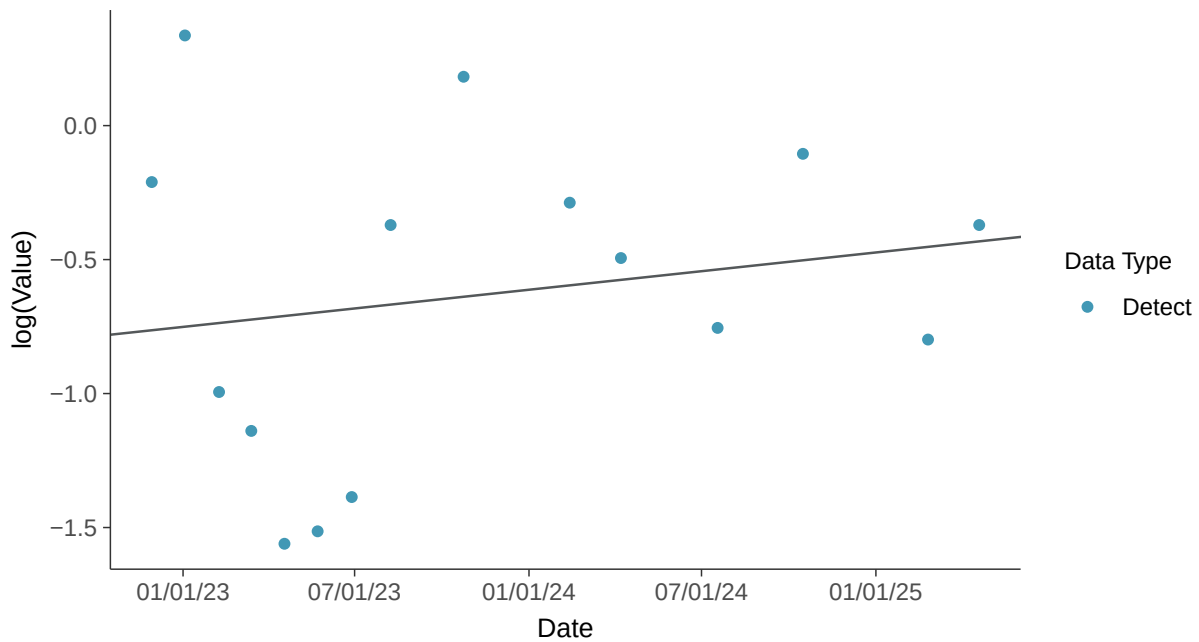
Gamma Q-Q plot

Fluoride, MW-11 (mg/L)



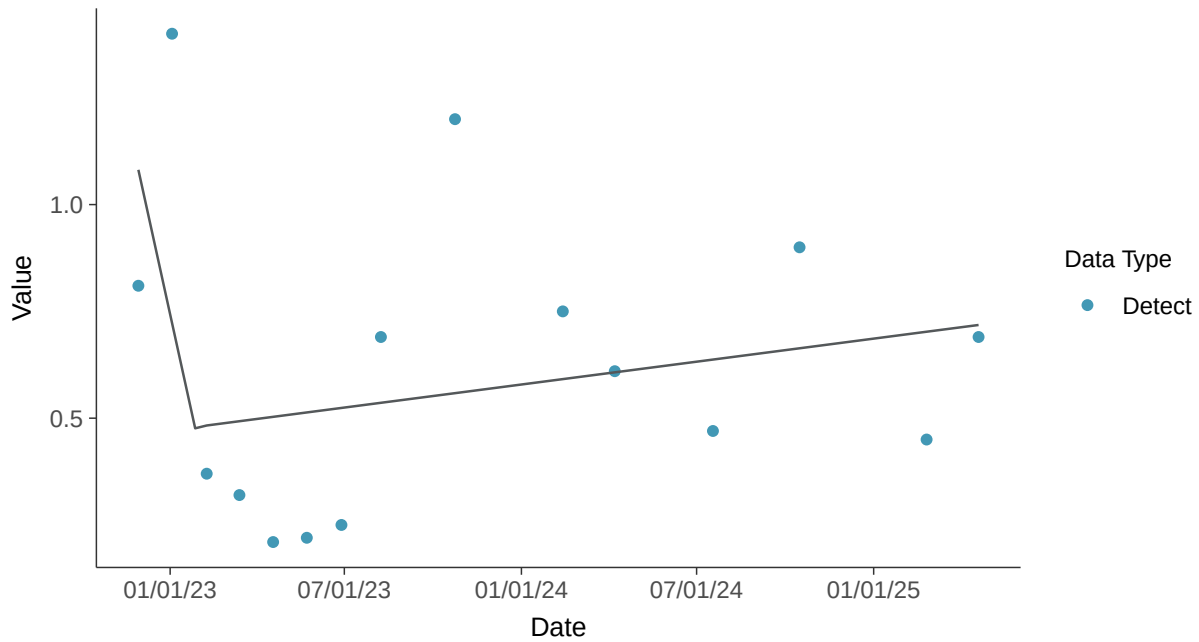
Trend Regression: Lognormal MLE

Fluoride, MW-11 (mg/L)



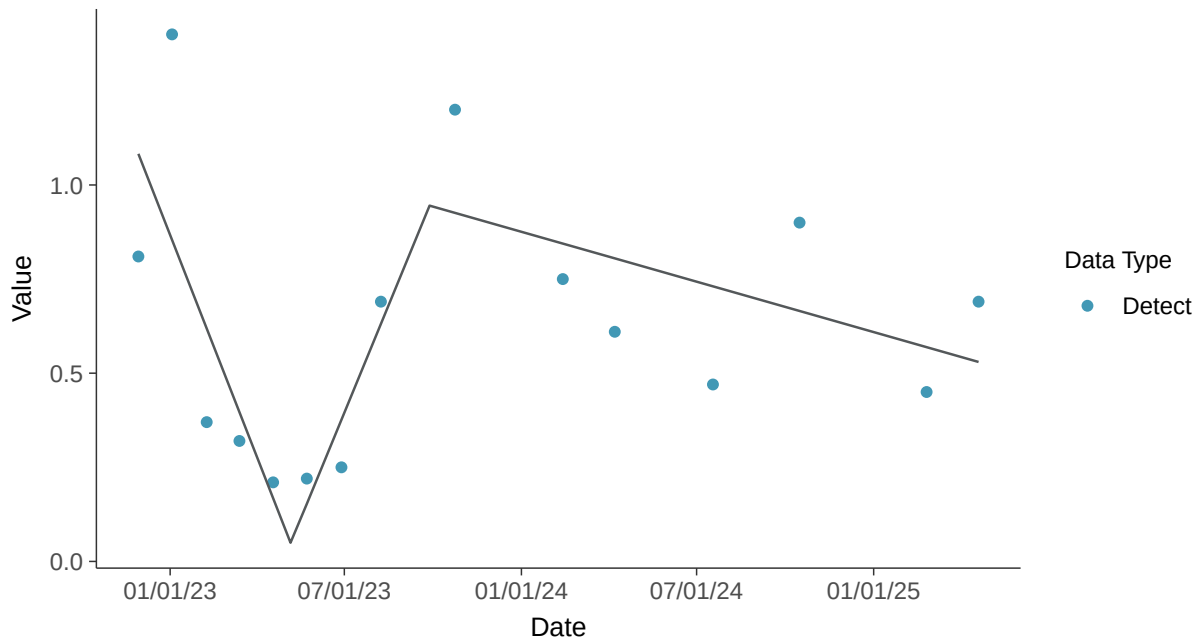
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-11 (mg/L)



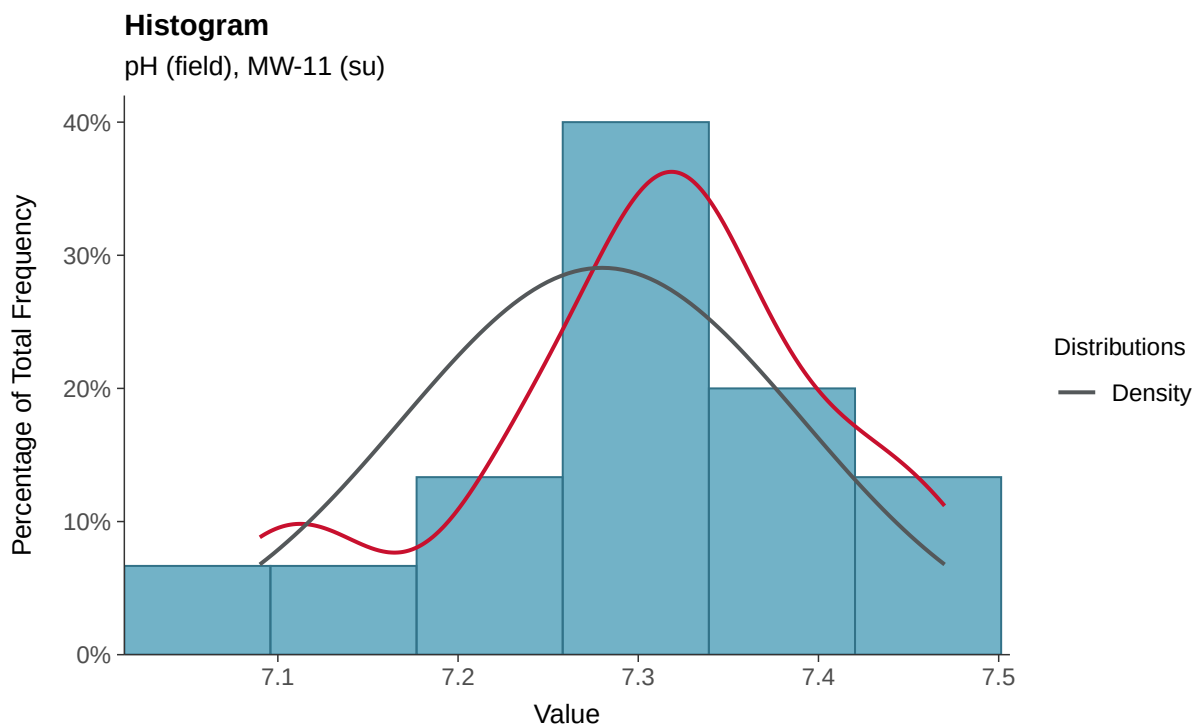
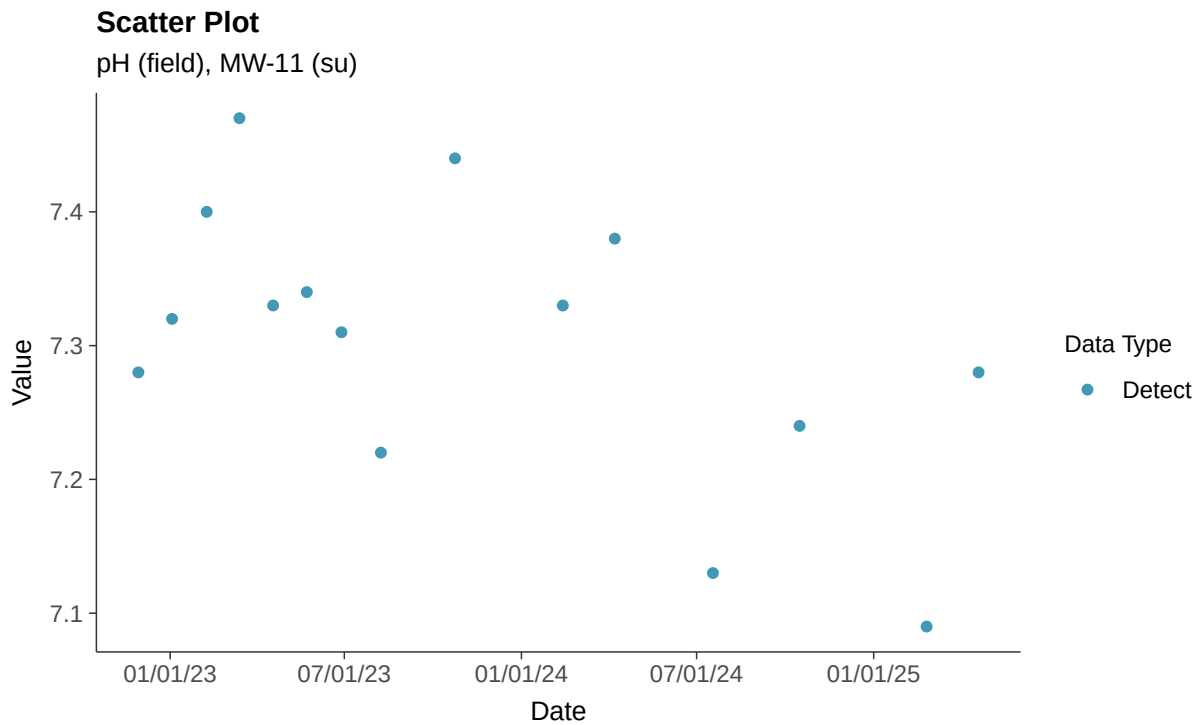
Trend Regression: Piecewise Linear-Linear-Linear

Fluoride, MW-11 (mg/L)



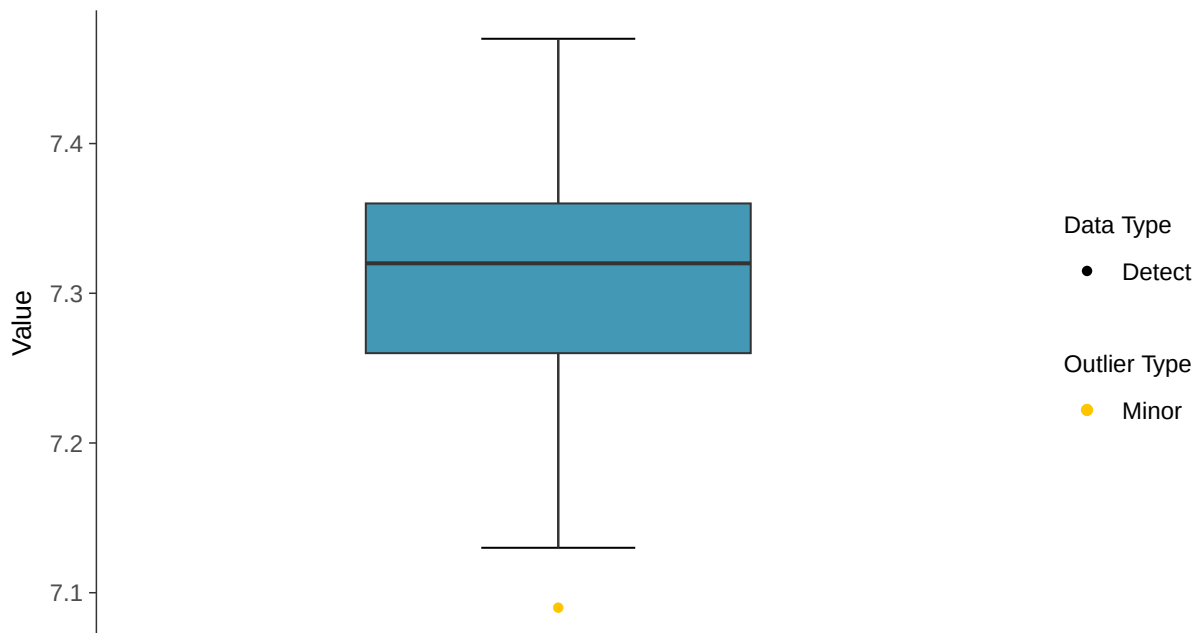
Appendix III: pH (field), MW-11

ID: 21_2_3_120



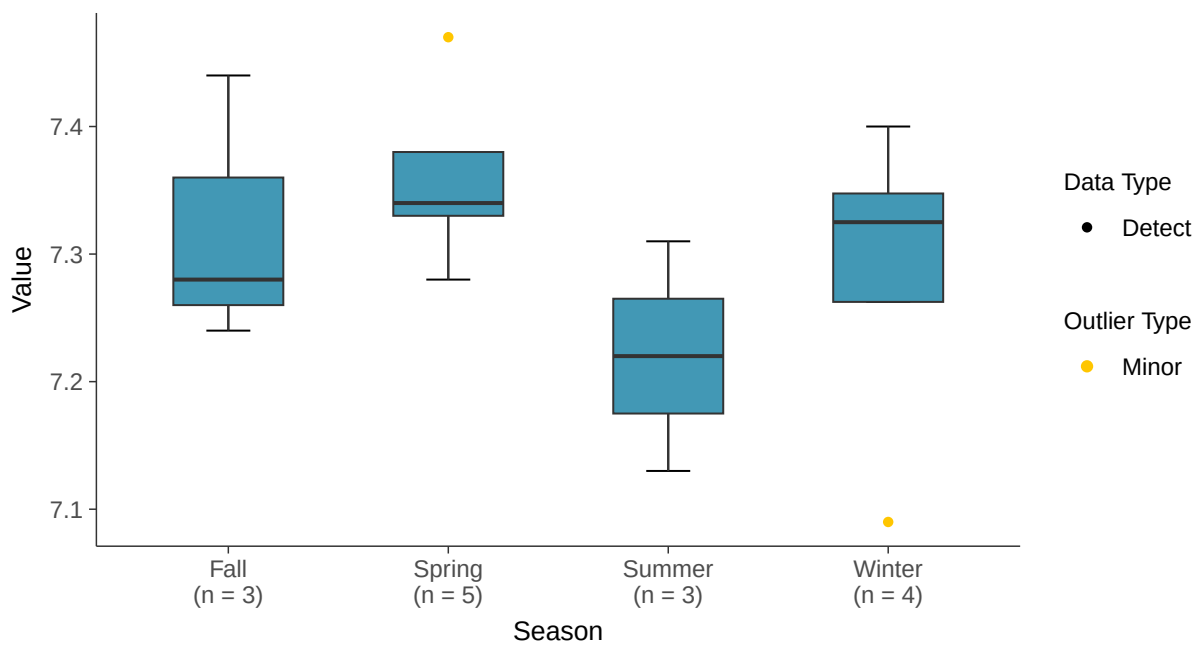
Boxplot

pH (field), MW-11 (su)

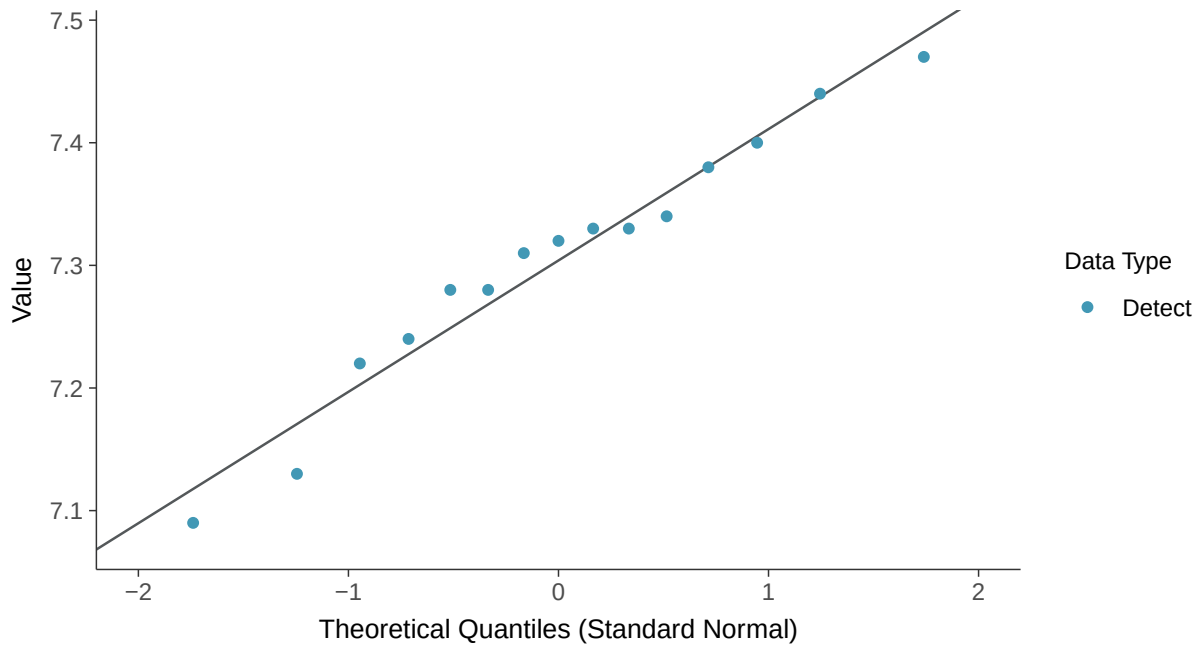


Boxplot by Season

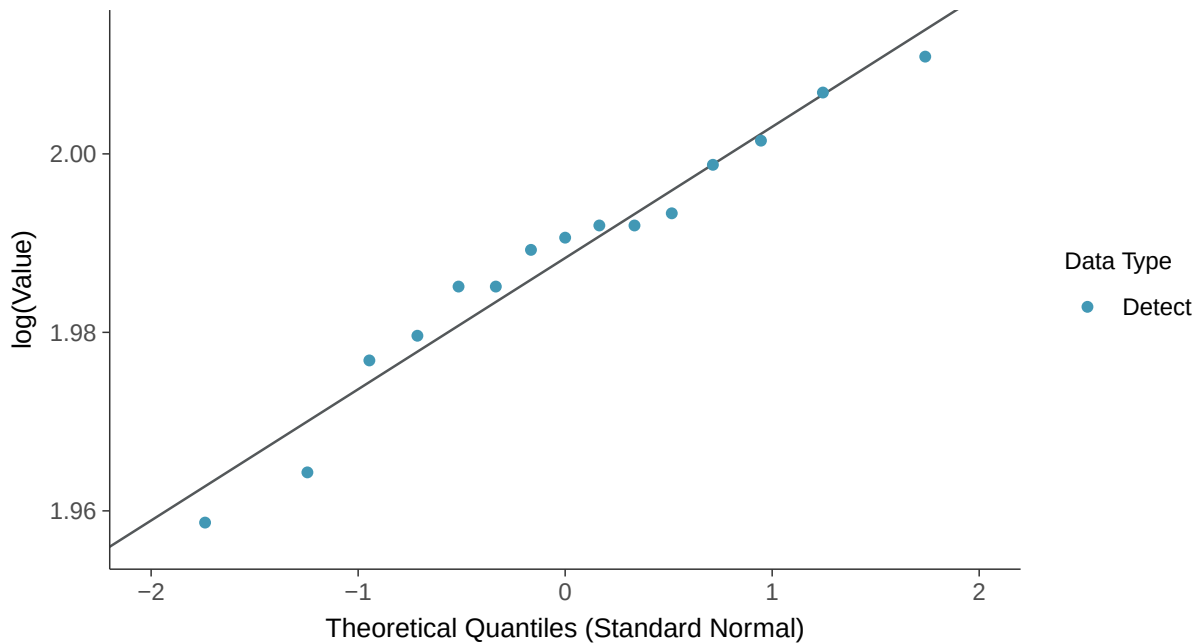
pH (field), MW-11 (su)



Normal Q-Q plot
pH (field), MW-11 (su)

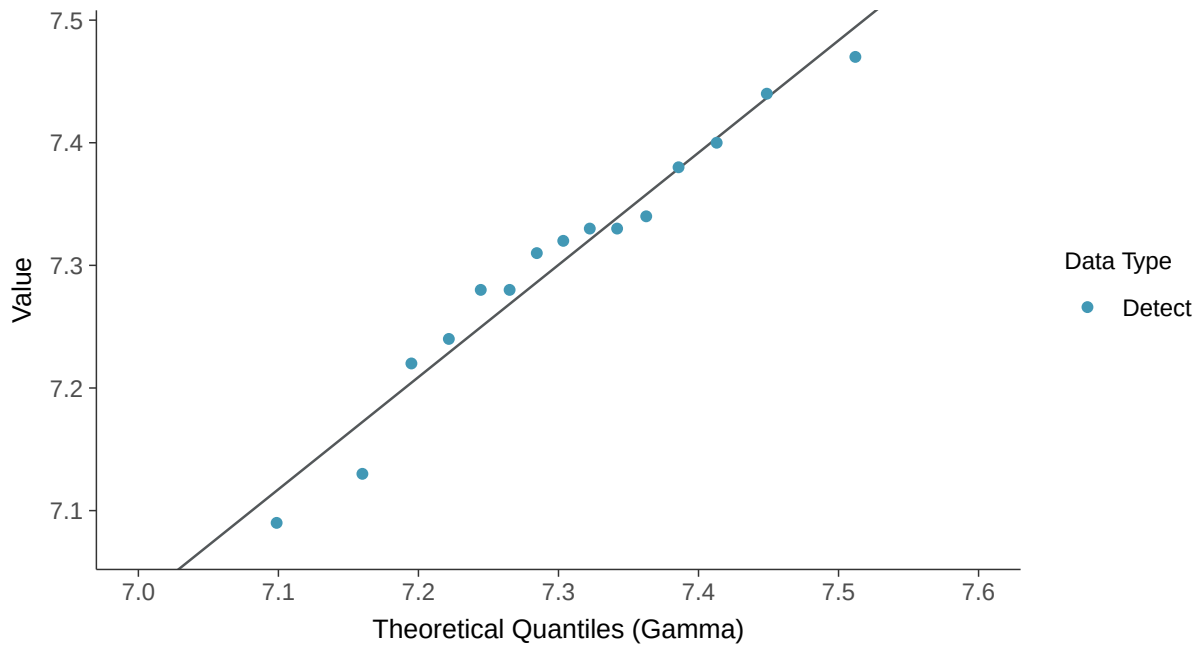


Lognormal Q-Q plot
pH (field), MW-11 (su)



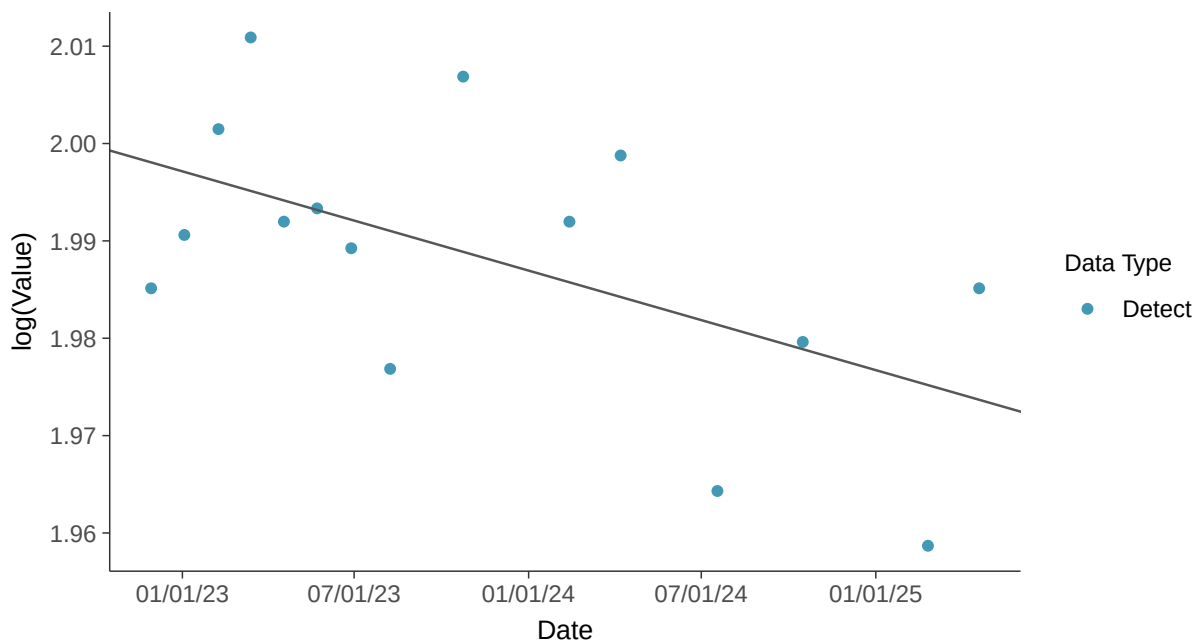
Gamma Q-Q plot

pH (field), MW-11 (su)



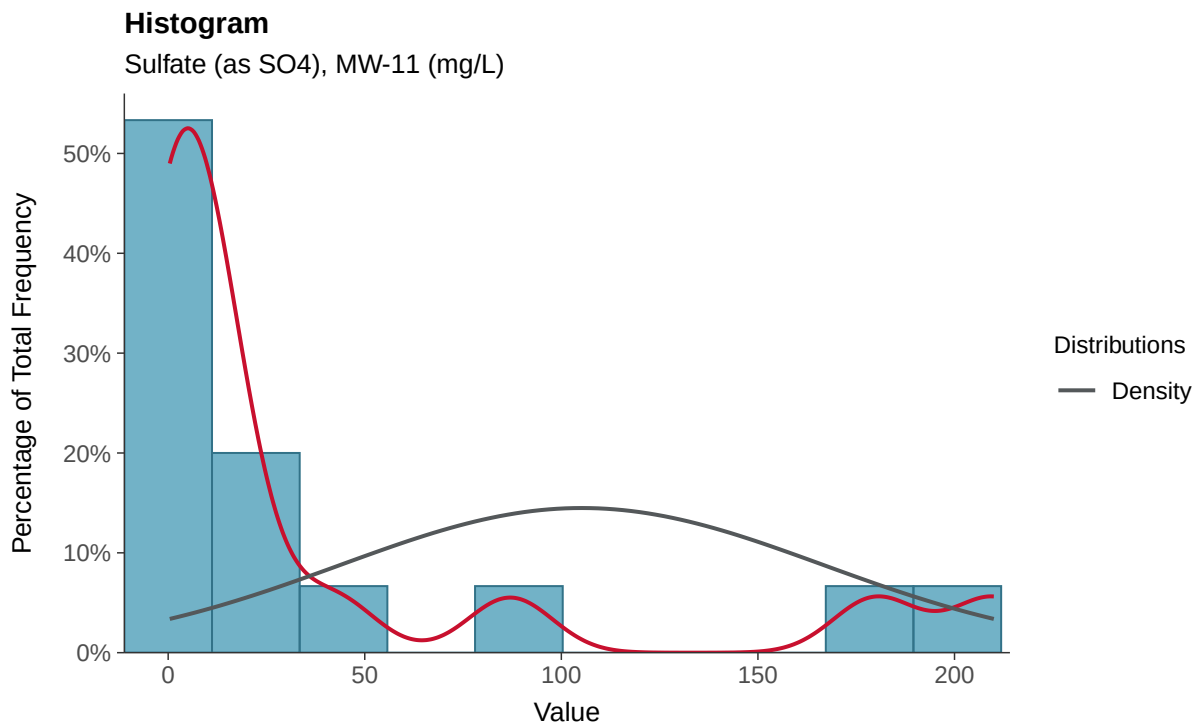
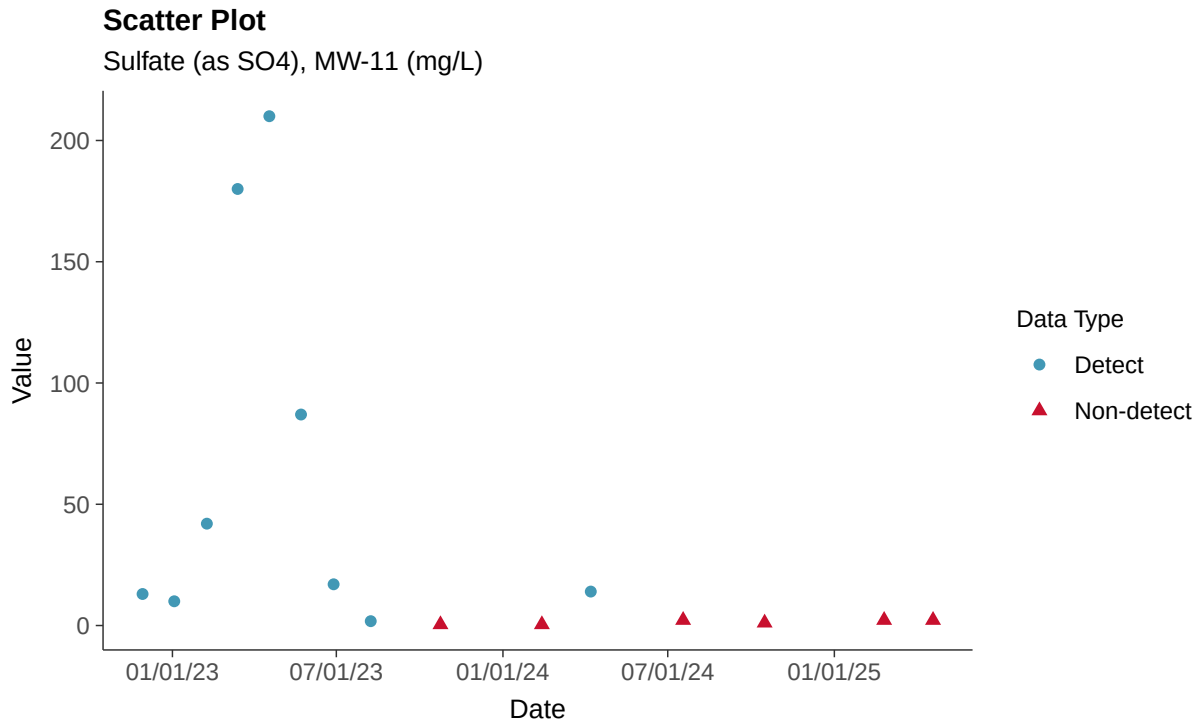
Trend Regression: Lognormal MLE

pH (field), MW-11 (su)



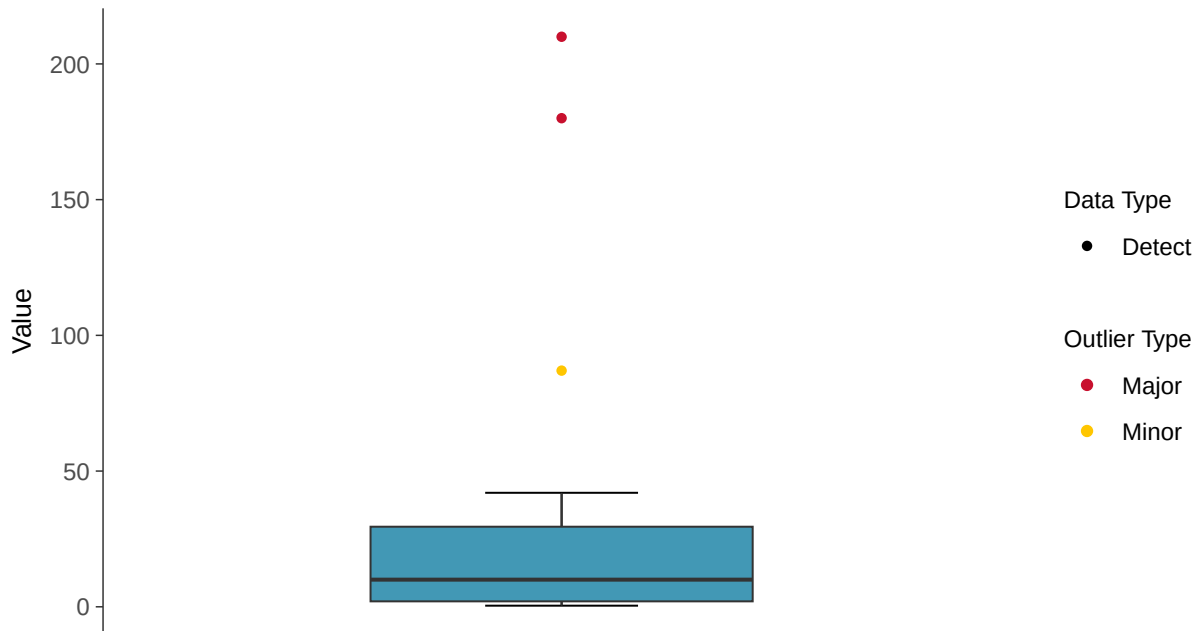
Appendix III: Sulfate (as SO₄), MW-11

ID: 21_2_3_124



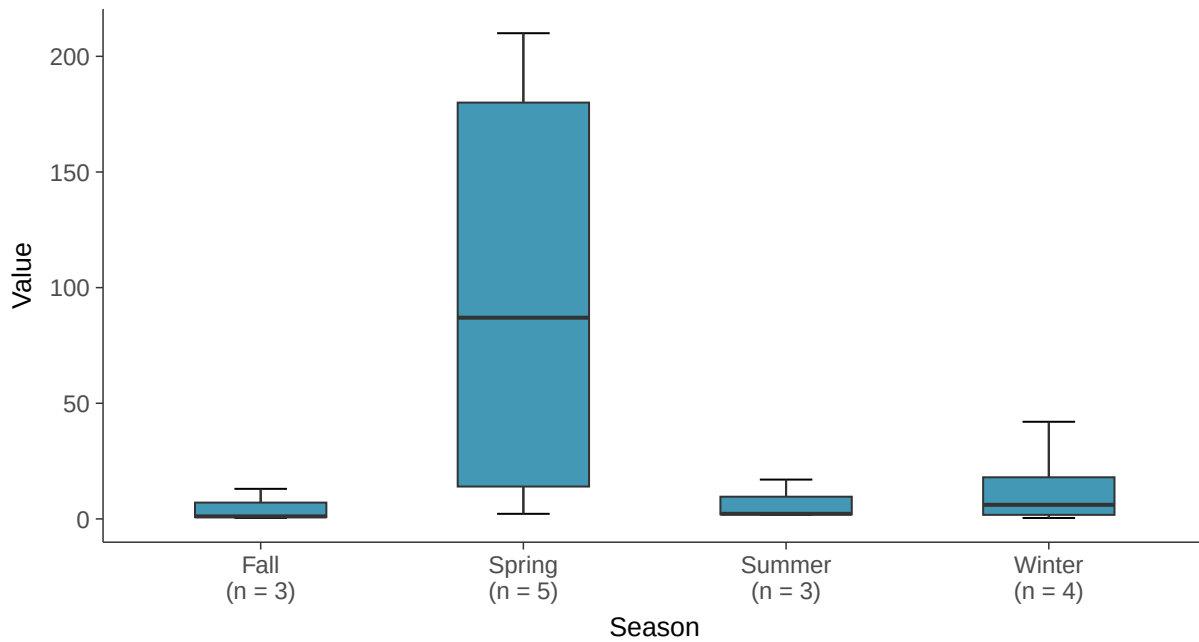
Boxplot

Sulfate (as SO₄), MW-11 (mg/L)



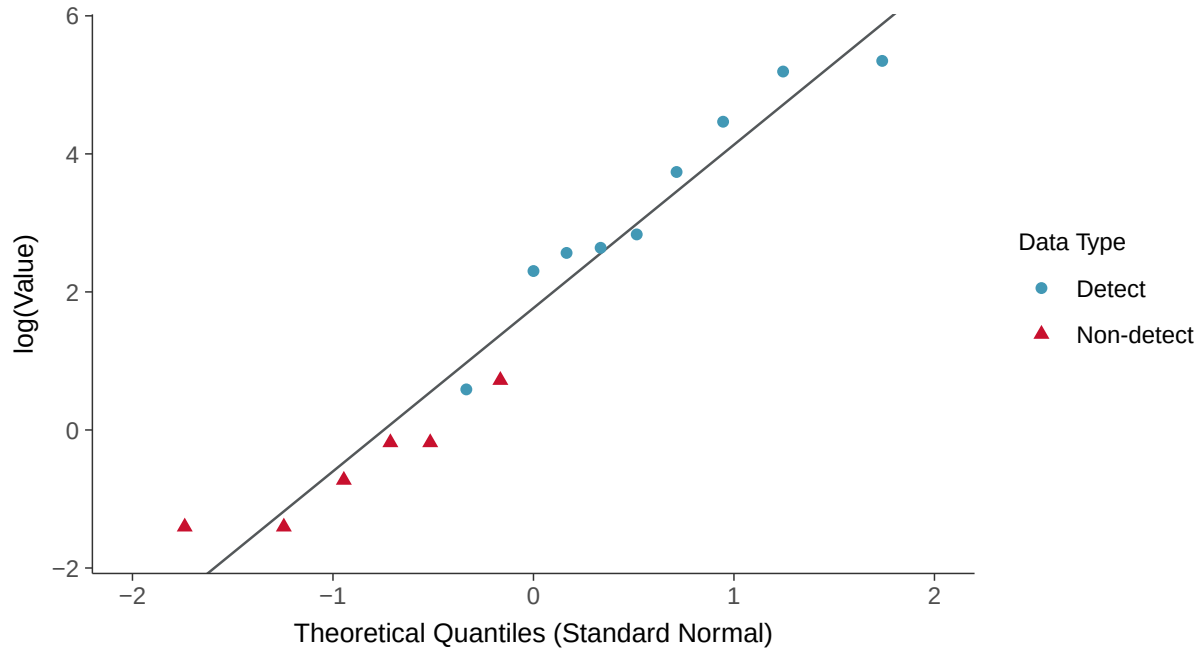
Boxplot by Season

Sulfate (as SO₄), MW-11 (mg/L)



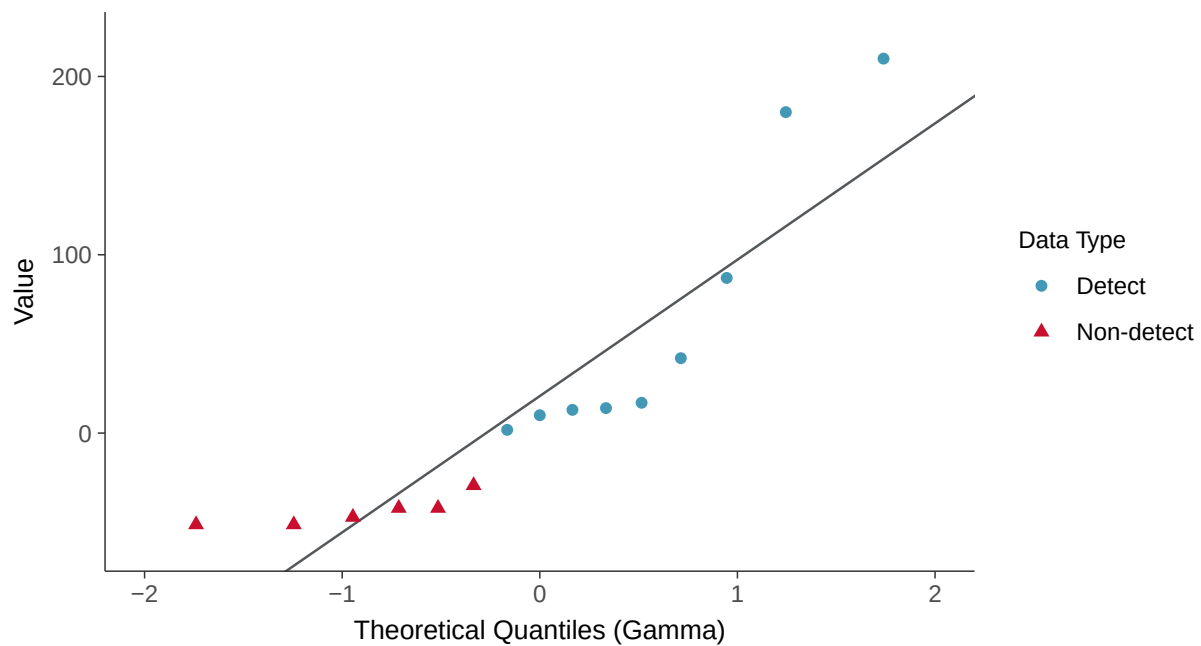
Lognormal Q-Q plot using ROS Imputed Estimates

Sulfate (as SO₄), MW-11 (mg/L)



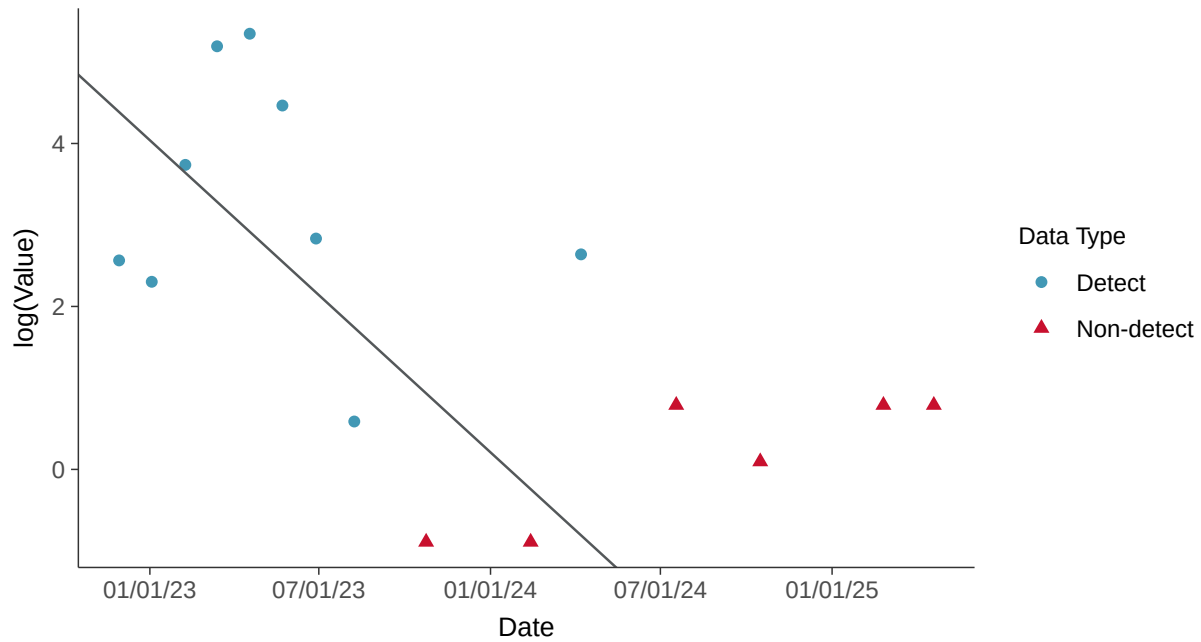
Gamma Q-Q plot using ROS Imputed Estimates

Sulfate (as SO₄), MW-11 (mg/L)



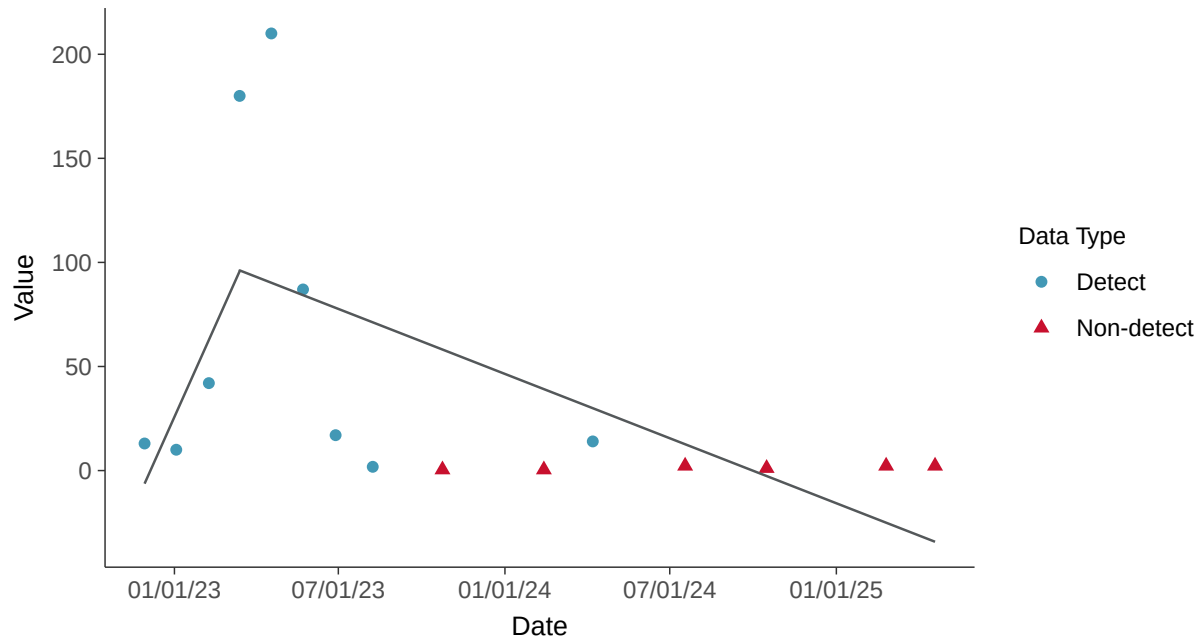
Trend Regression: Lognormal MLE

Sulfate (as SO₄), MW-11 (mg/L)



Trend Regression: Piecewise Linear-Linear

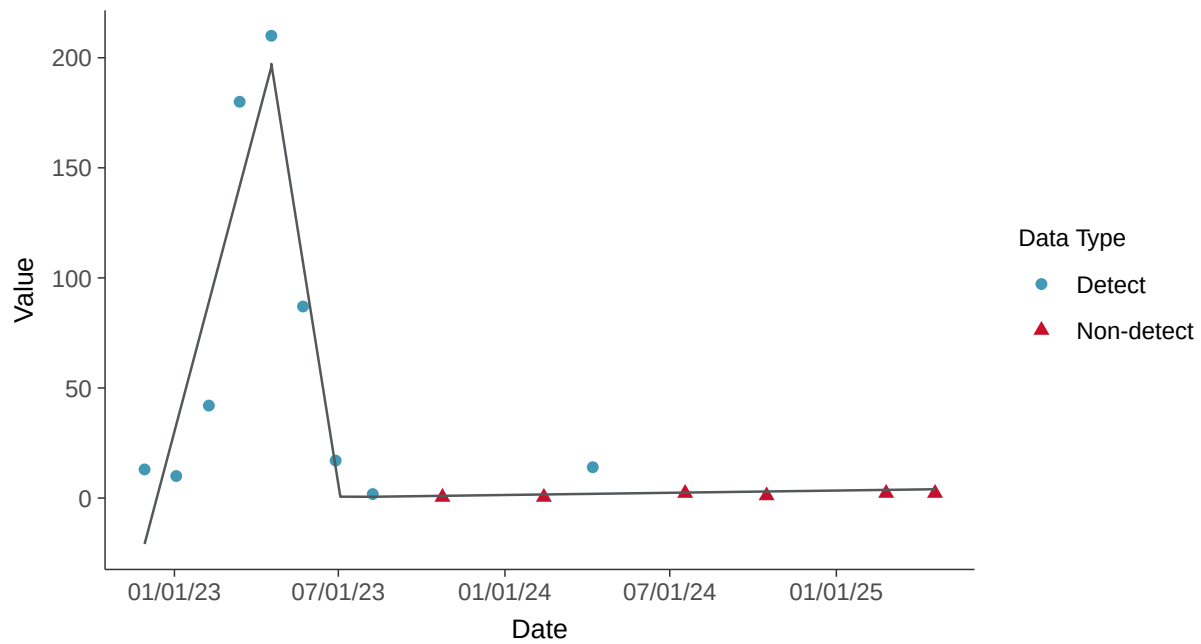
Sulfate (as SO₄), MW-11 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

Sulfate (as SO₄), MW-11 (mg/L)

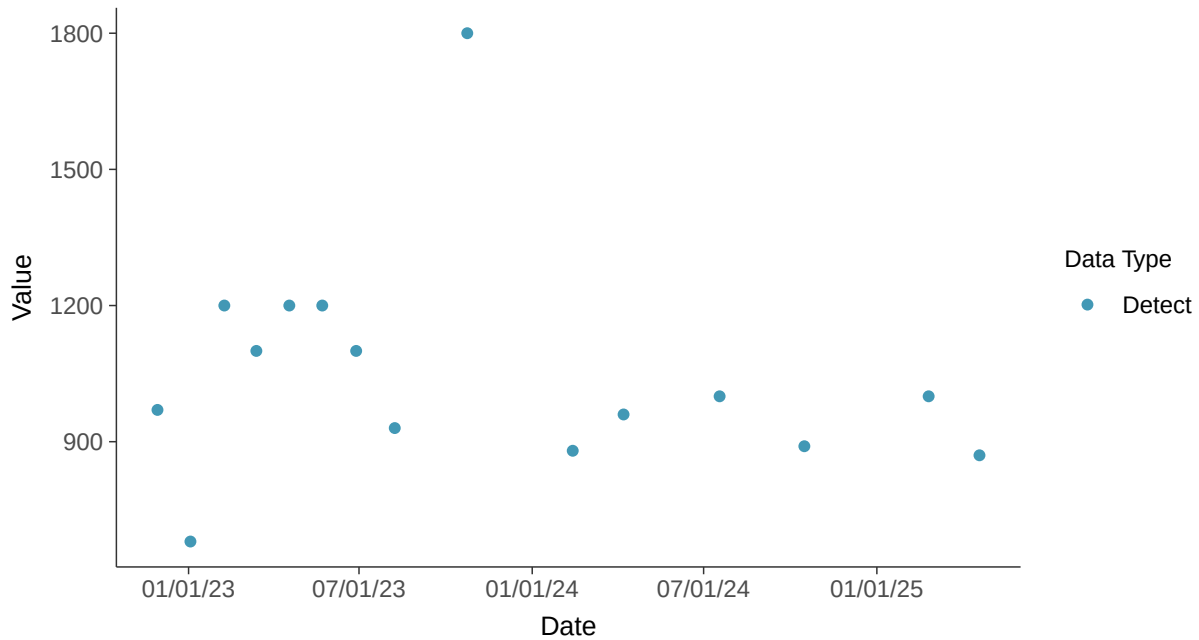


Appendix III: Total Dissolved Solids, MW-11

ID: 21_2_3_126

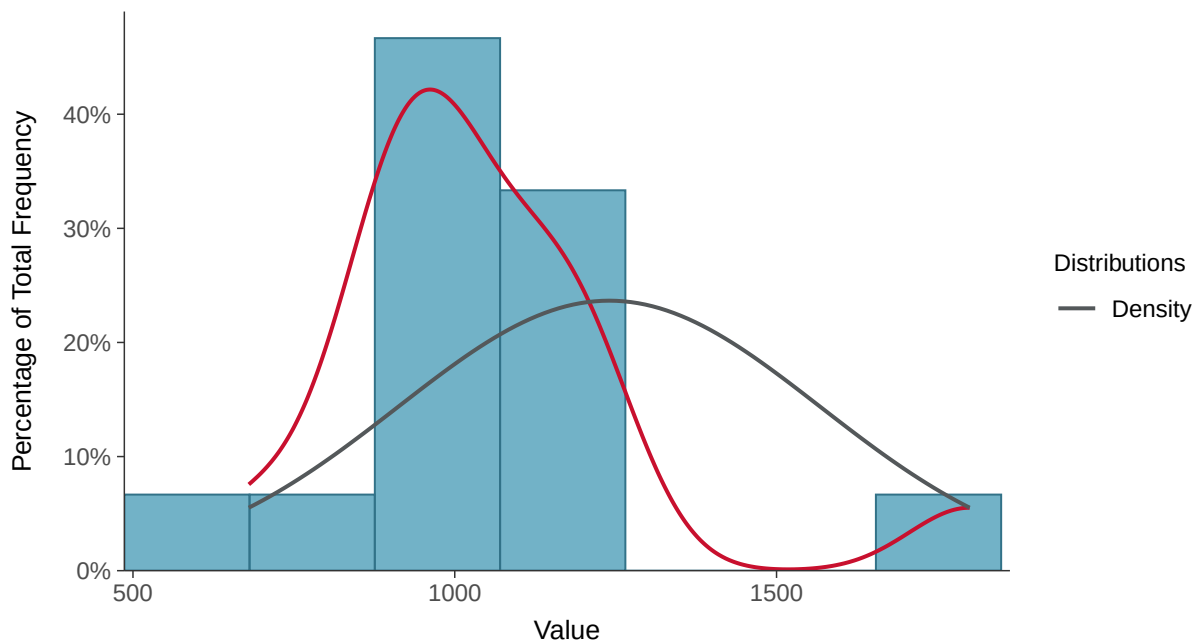
Scatter Plot

Total Dissolved Solids, MW-11 (mg/L)



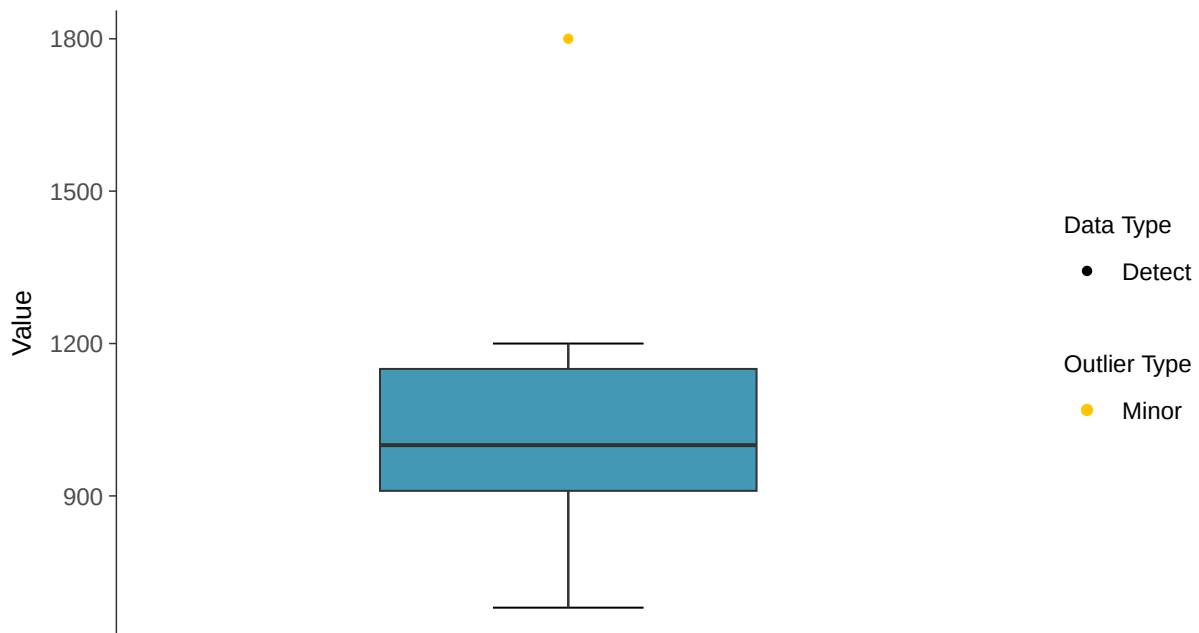
Histogram

Total Dissolved Solids, MW-11 (mg/L)



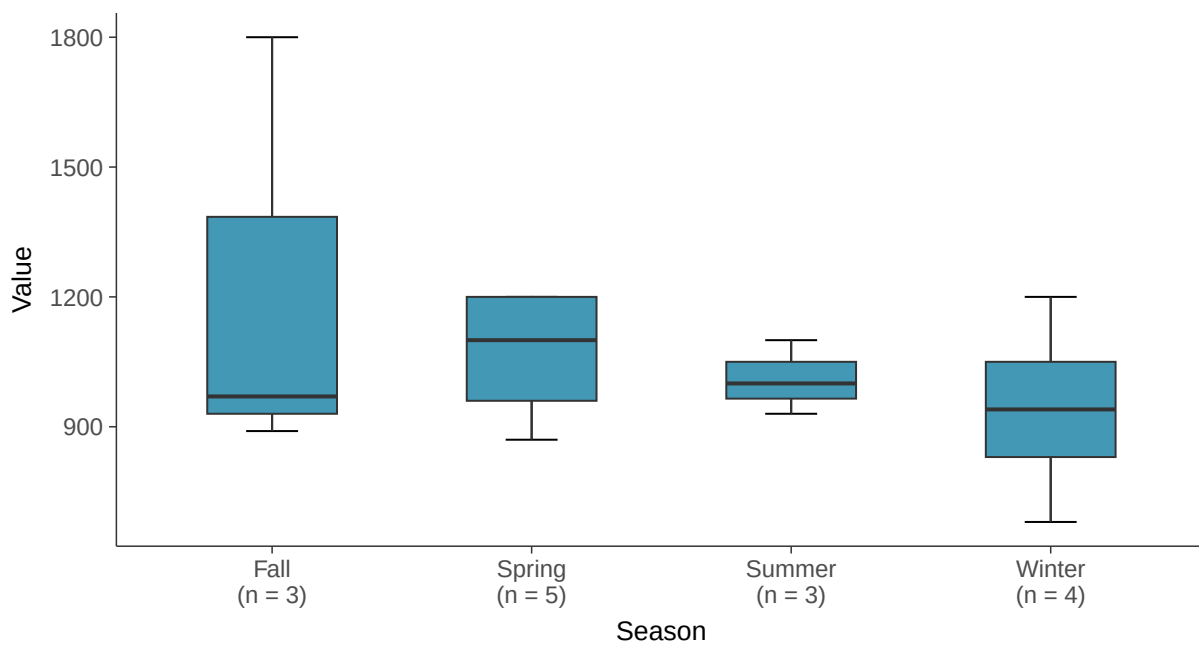
Boxplot

Total Dissolved Solids, MW-11 (mg/L)



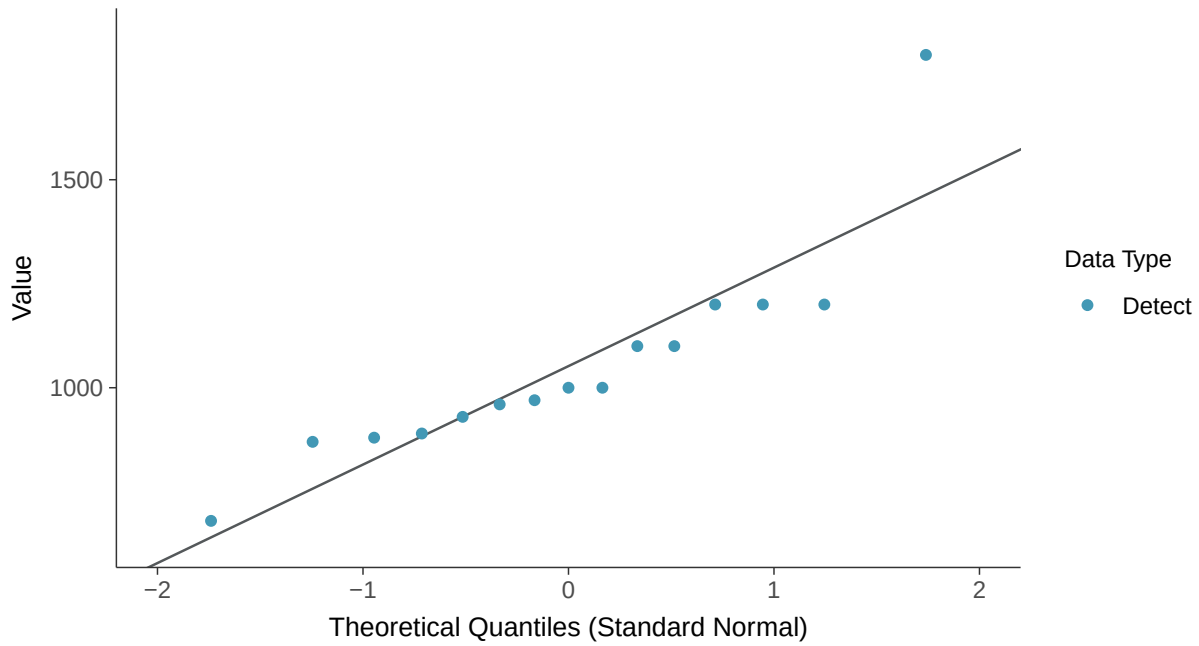
Boxplot by Season

Total Dissolved Solids, MW-11 (mg/L)



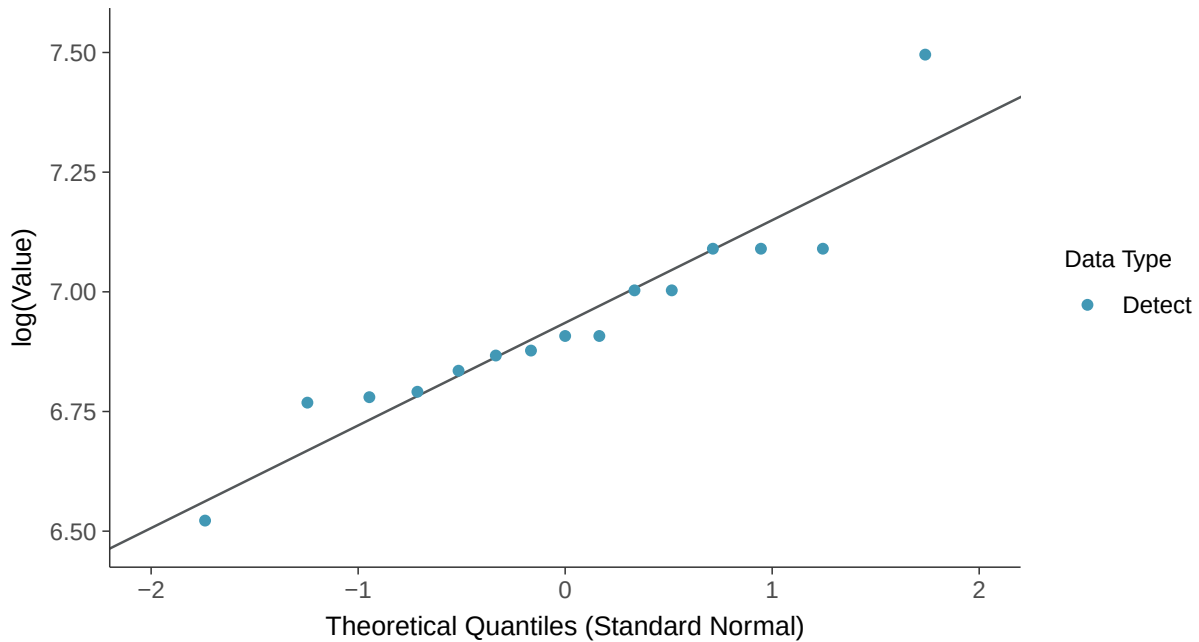
Normal Q-Q plot

Total Dissolved Solids, MW-11 (mg/L)



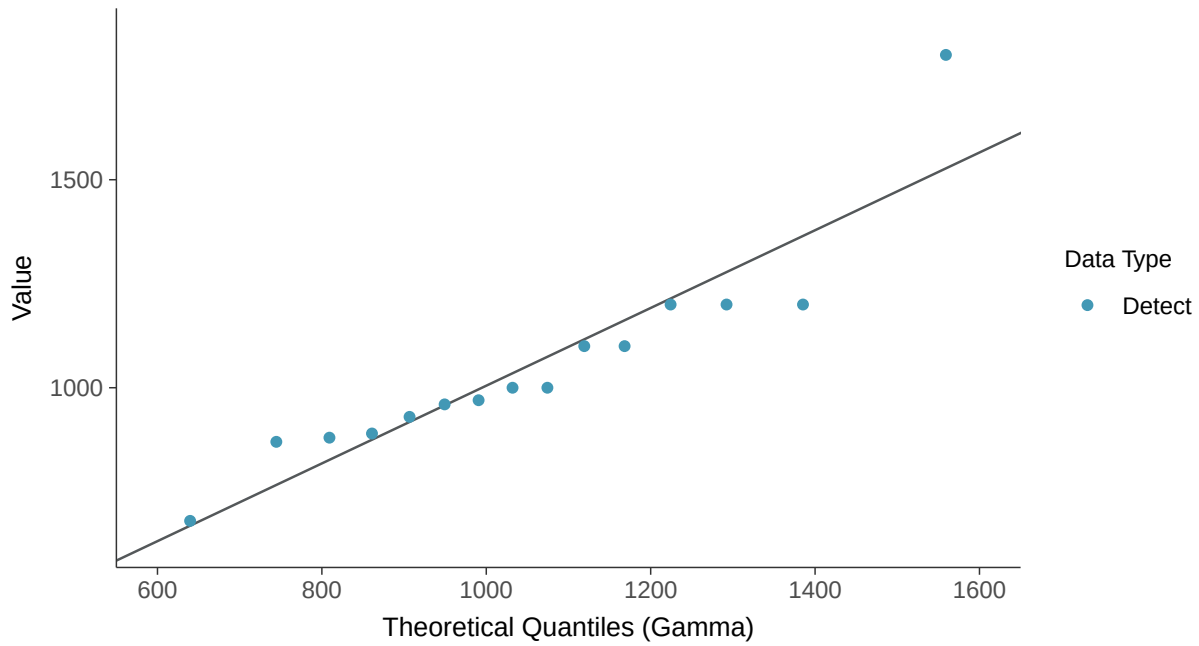
Lognormal Q-Q plot

Total Dissolved Solids, MW-11 (mg/L)



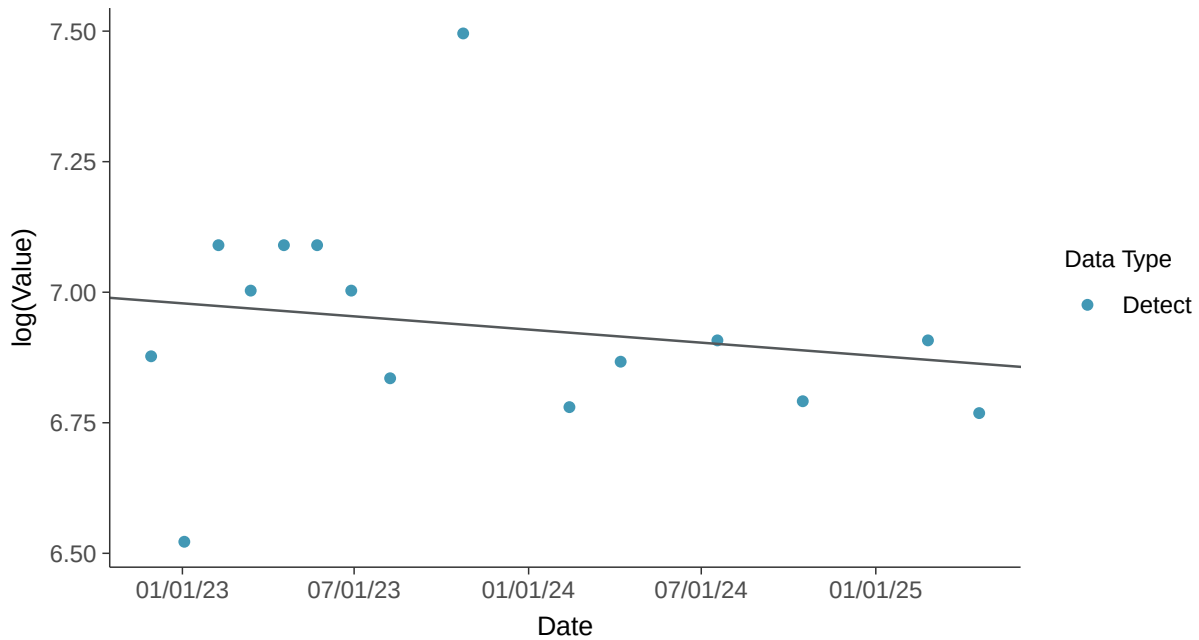
Gamma Q-Q plot

Total Dissolved Solids, MW-11 (mg/L)



Trend Regression: Lognormal MLE

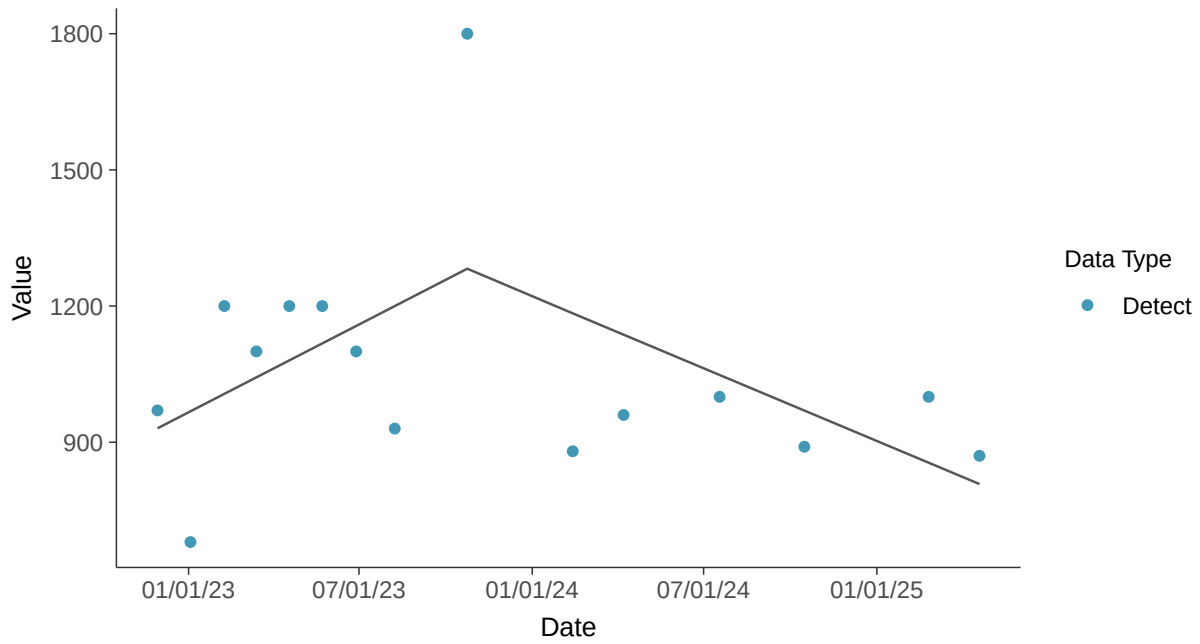
Total Dissolved Solids, MW-11 (mg/L)





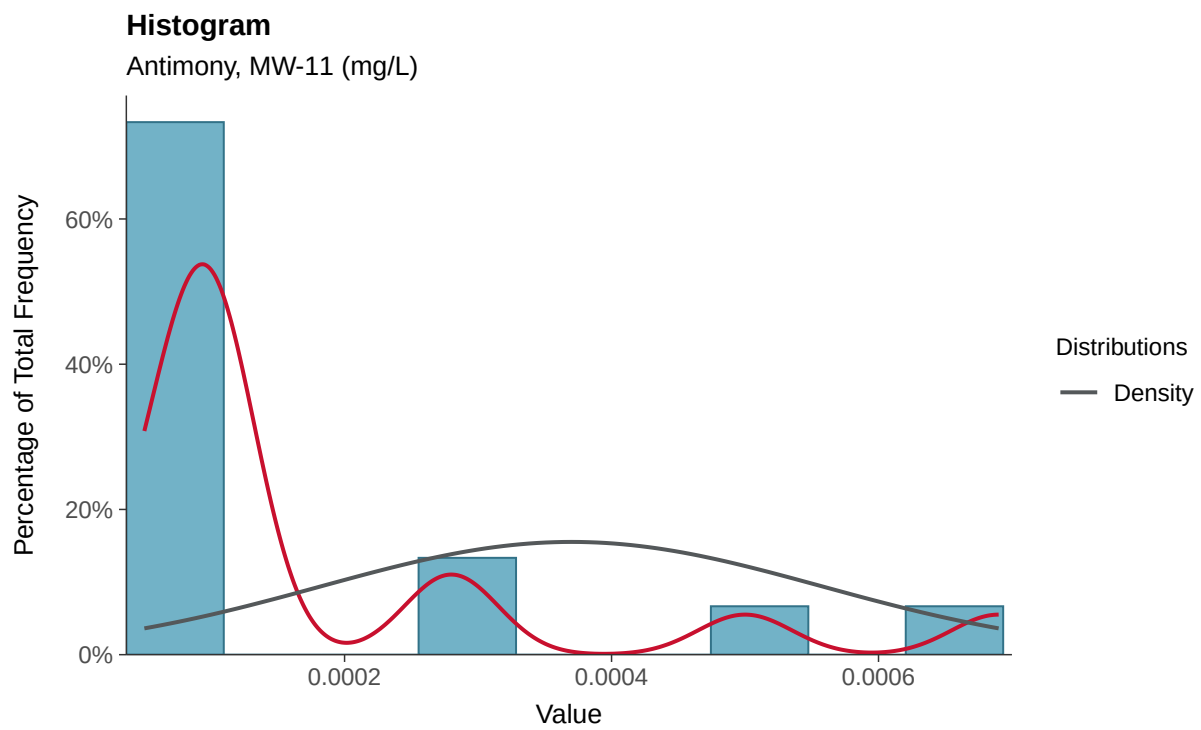
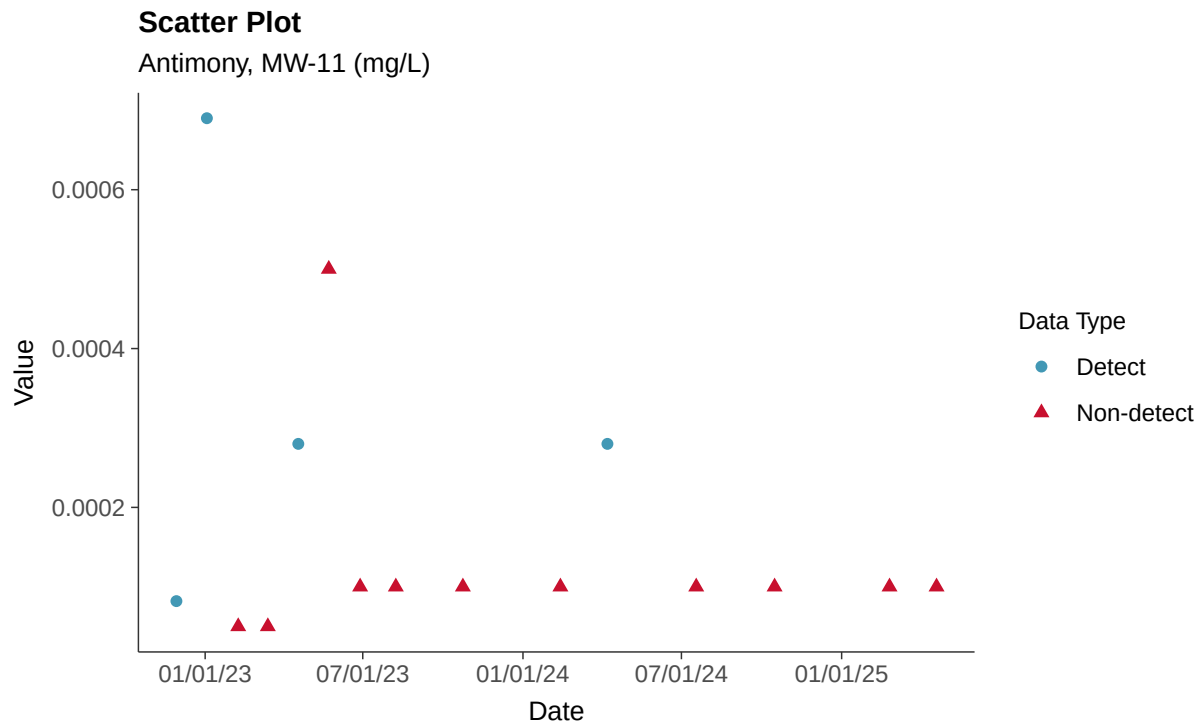
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-11 (mg/L)



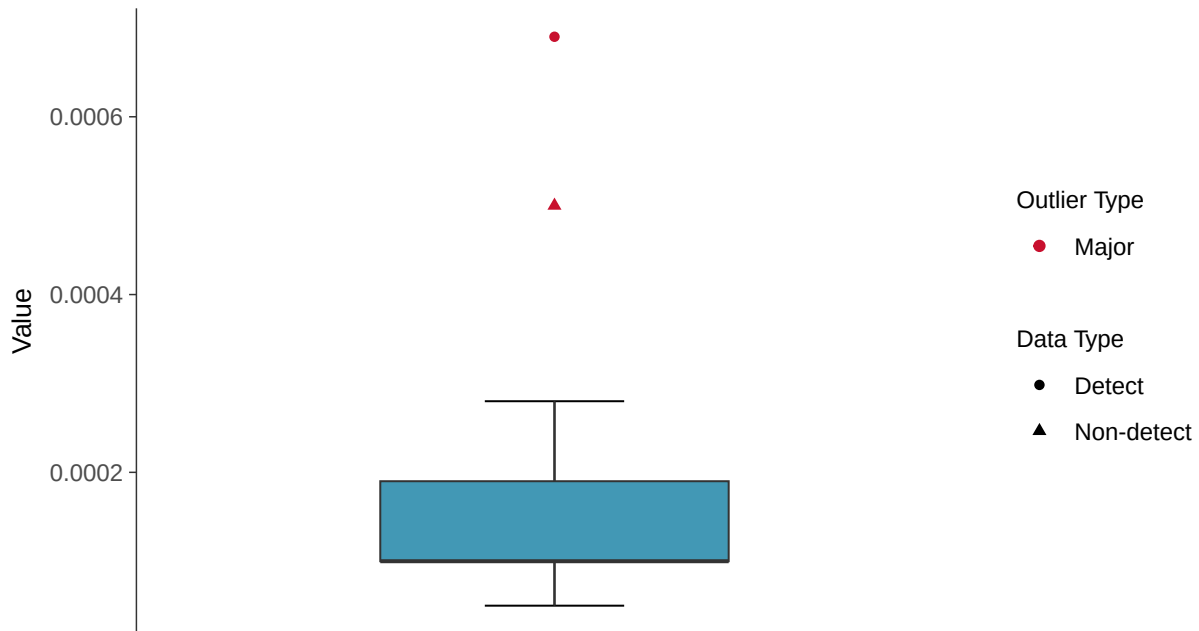
Appendix IV: Antimony, MW-11

ID: 21_2_4_101



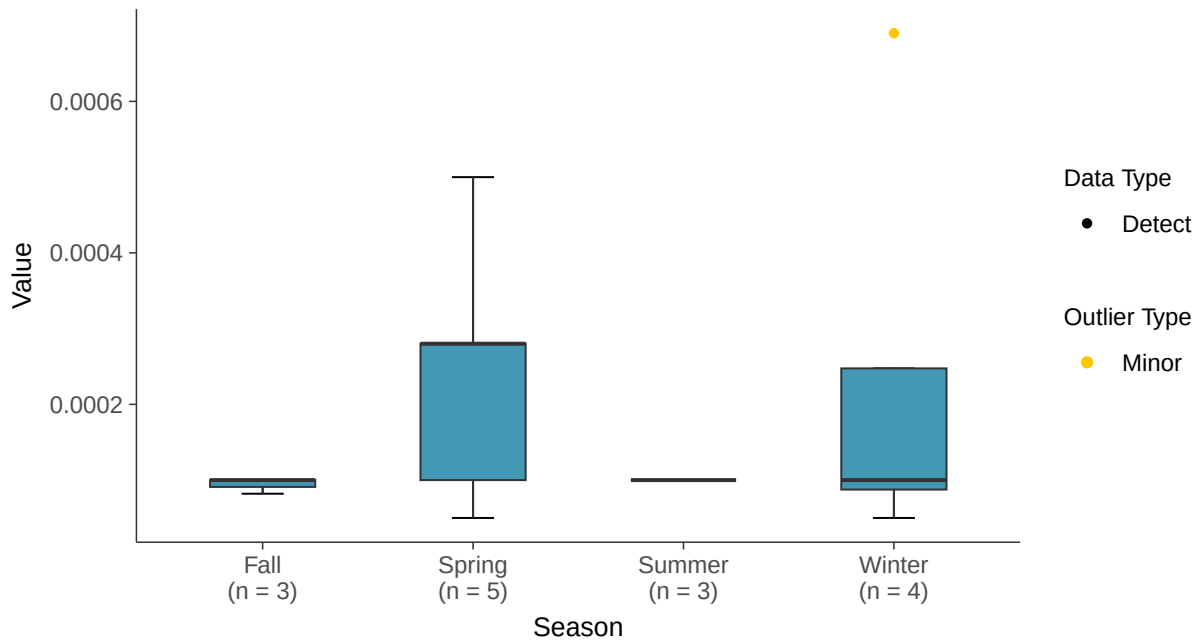
Boxplot

Antimony, MW-11 (mg/L)



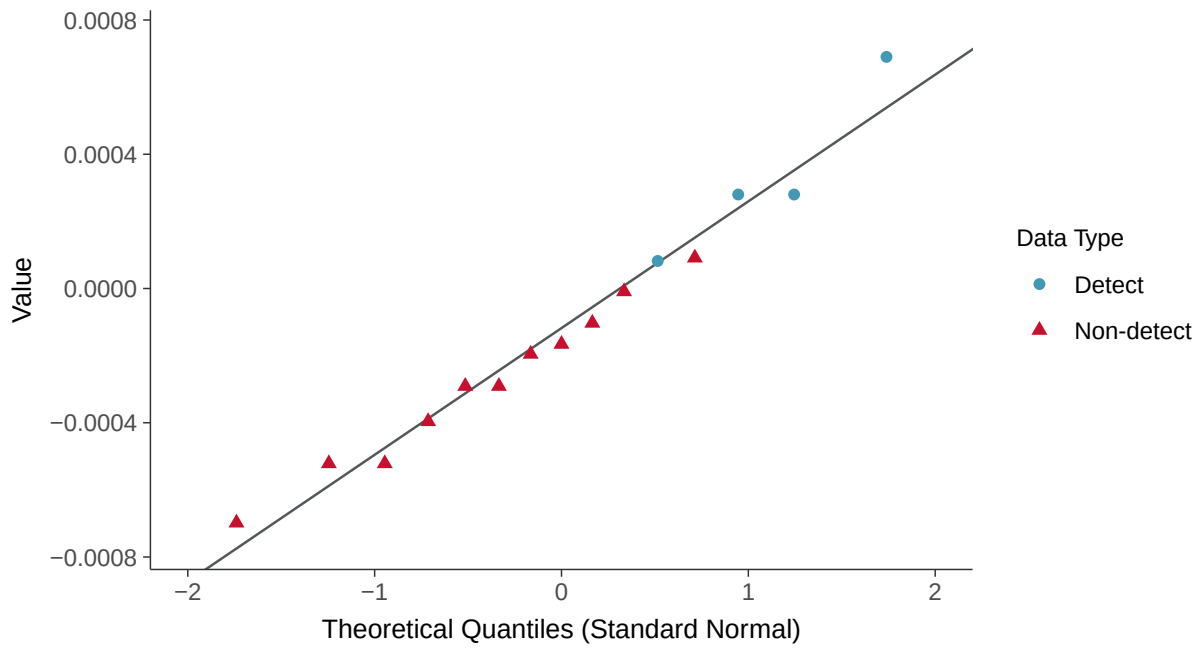
Boxplot by Season

Antimony, MW-11 (mg/L)



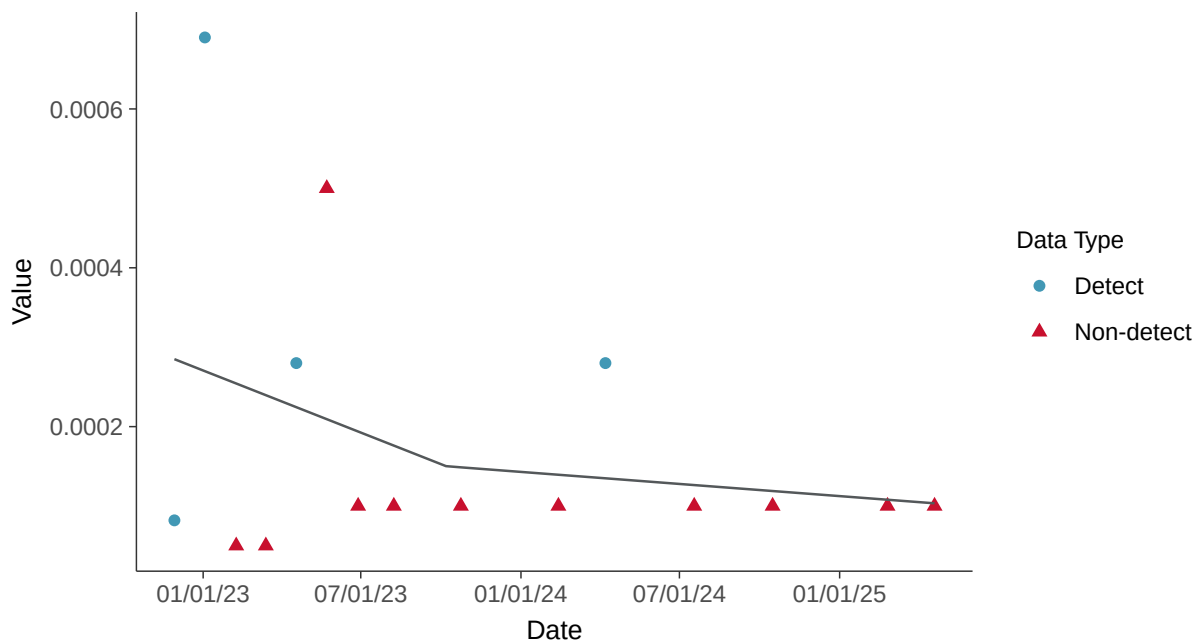
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-11 (mg/L)



Trend Regression: Piecewise Linear-Linear

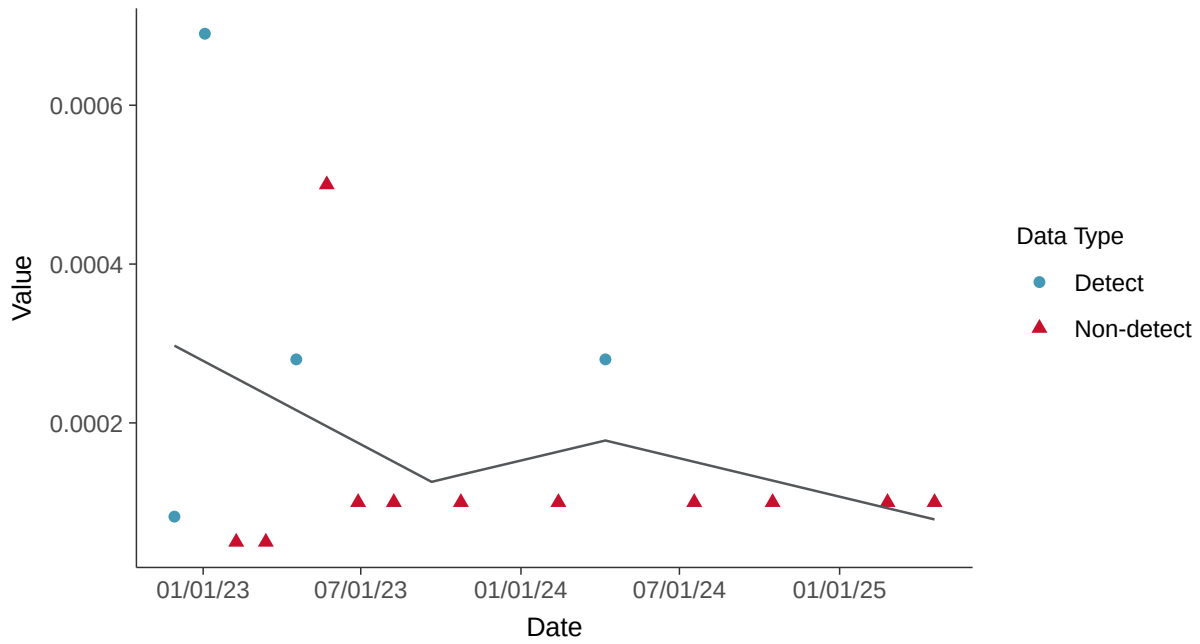
Antimony, MW-11 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

Antimony, MW-11 (mg/L)

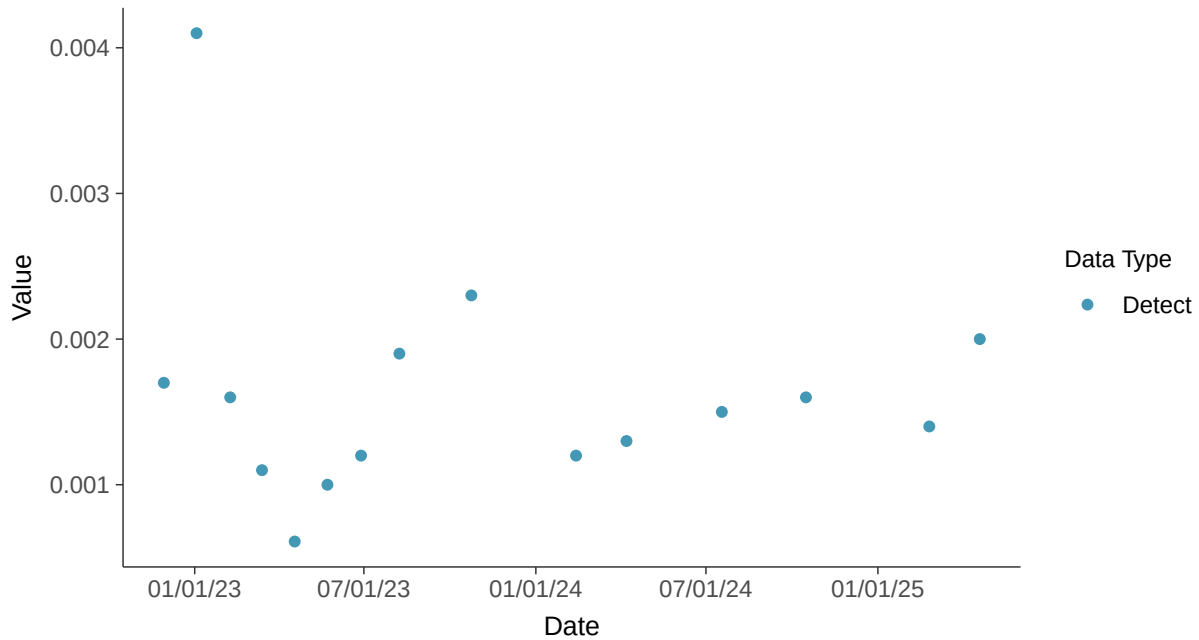


Appendix IV: Arsenic, MW-11

ID: 21_2_4_102

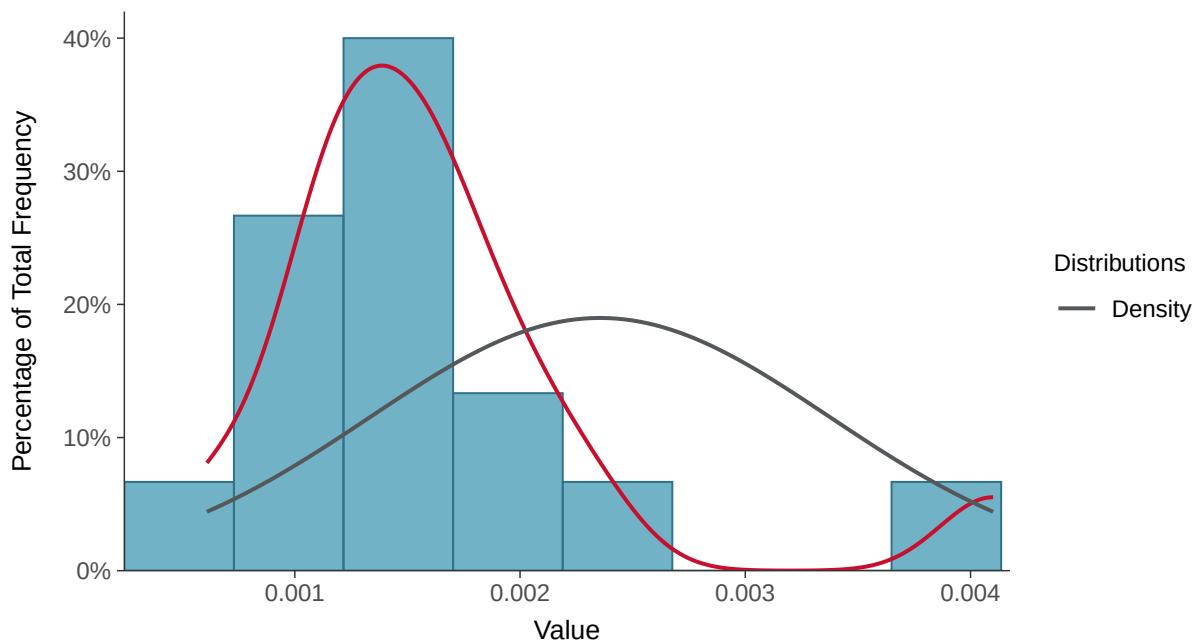
Scatter Plot

Arsenic, MW-11 (mg/L)



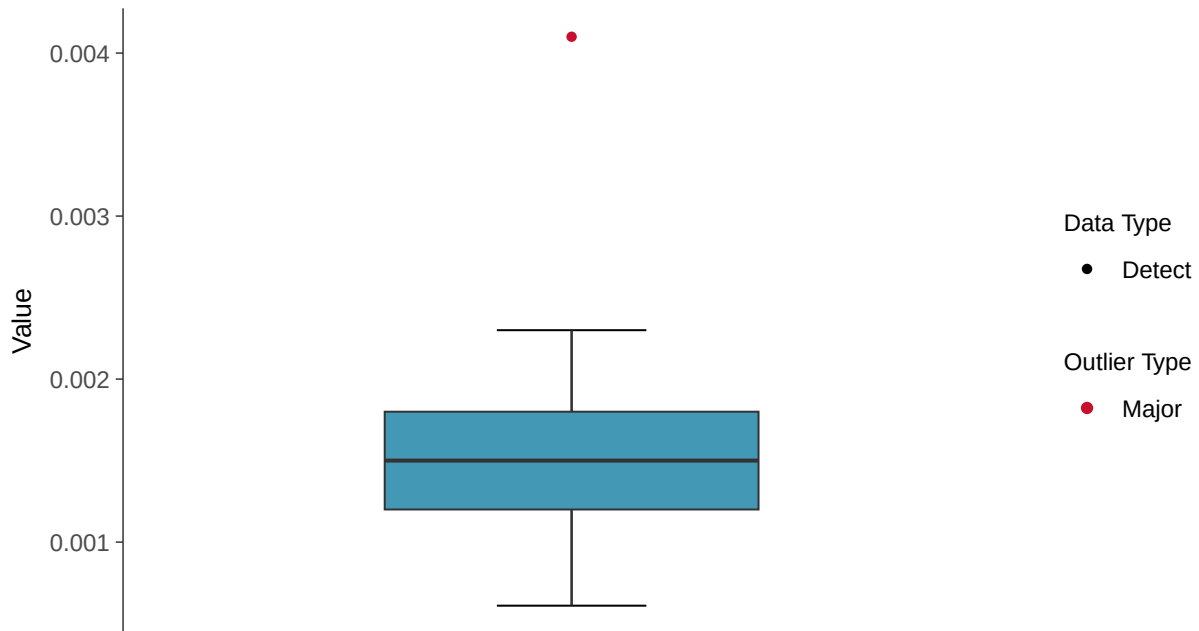
Histogram

Arsenic, MW-11 (mg/L)



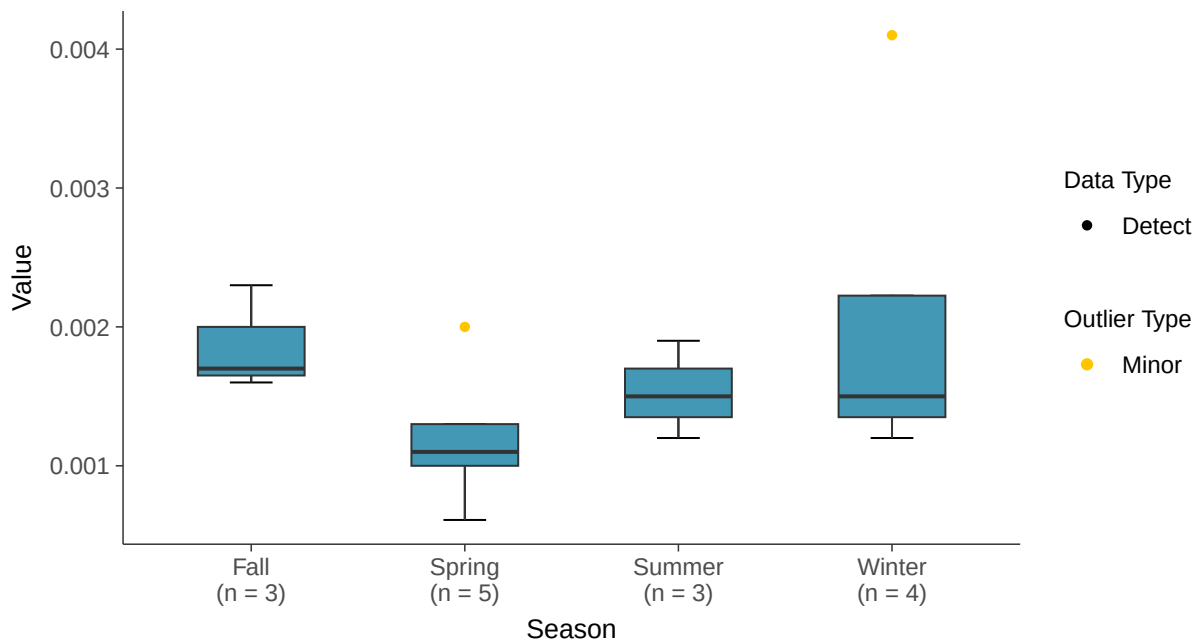
Boxplot

Arsenic, MW-11 (mg/L)



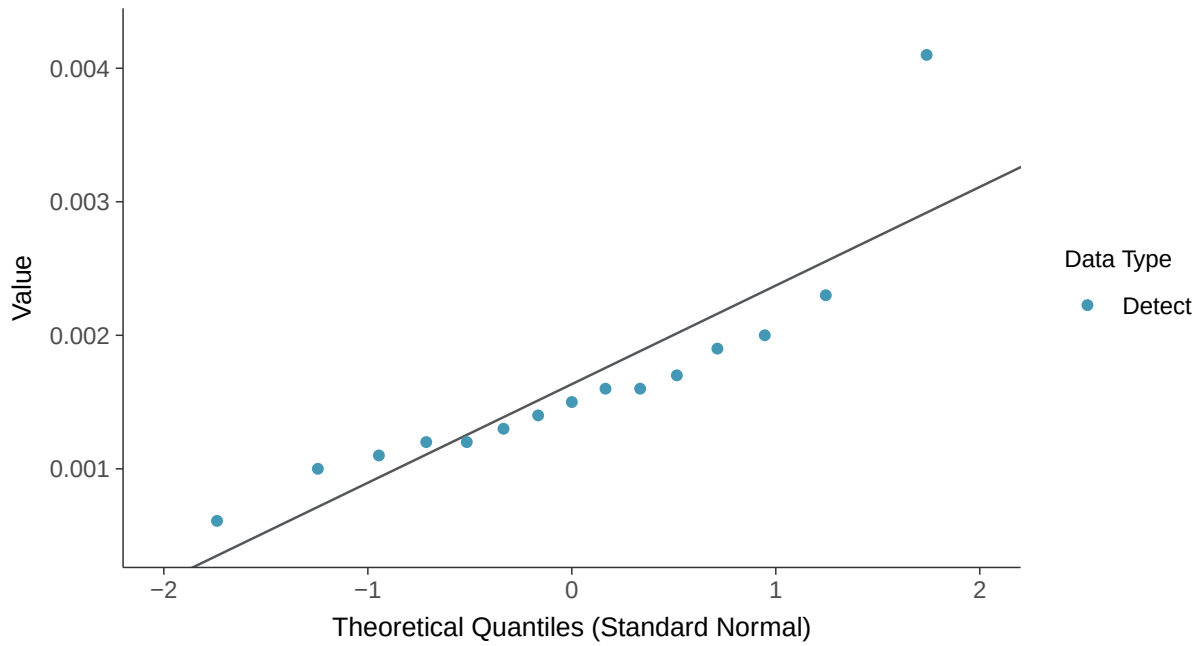
Boxplot by Season

Arsenic, MW-11 (mg/L)



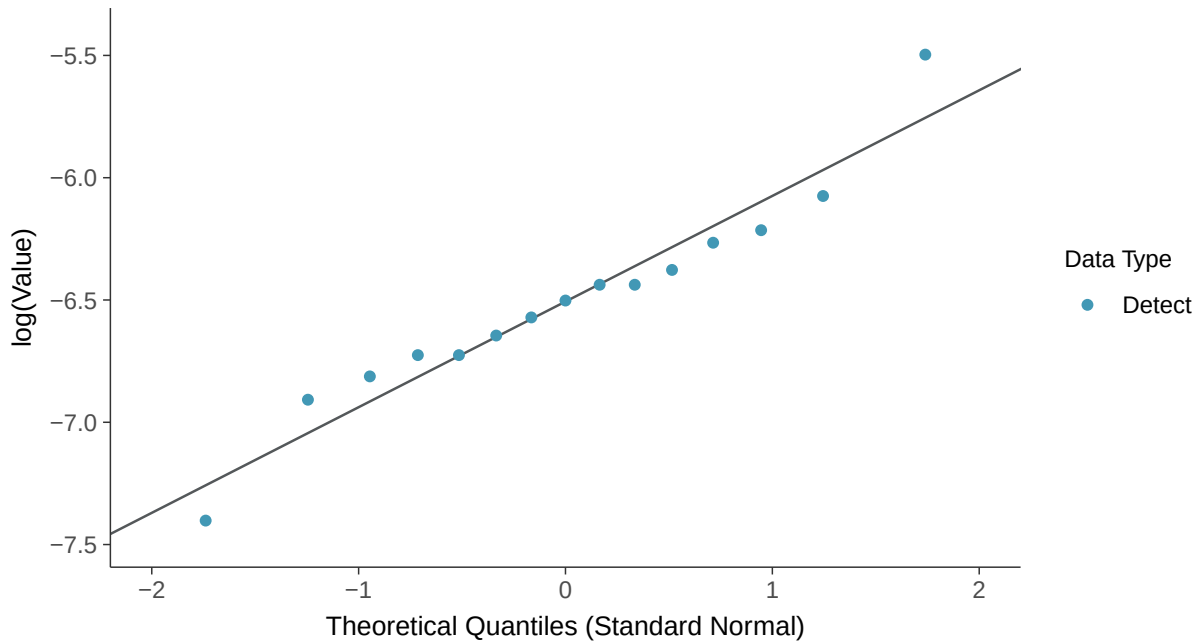
Normal Q-Q plot

Arsenic, MW-11 (mg/L)

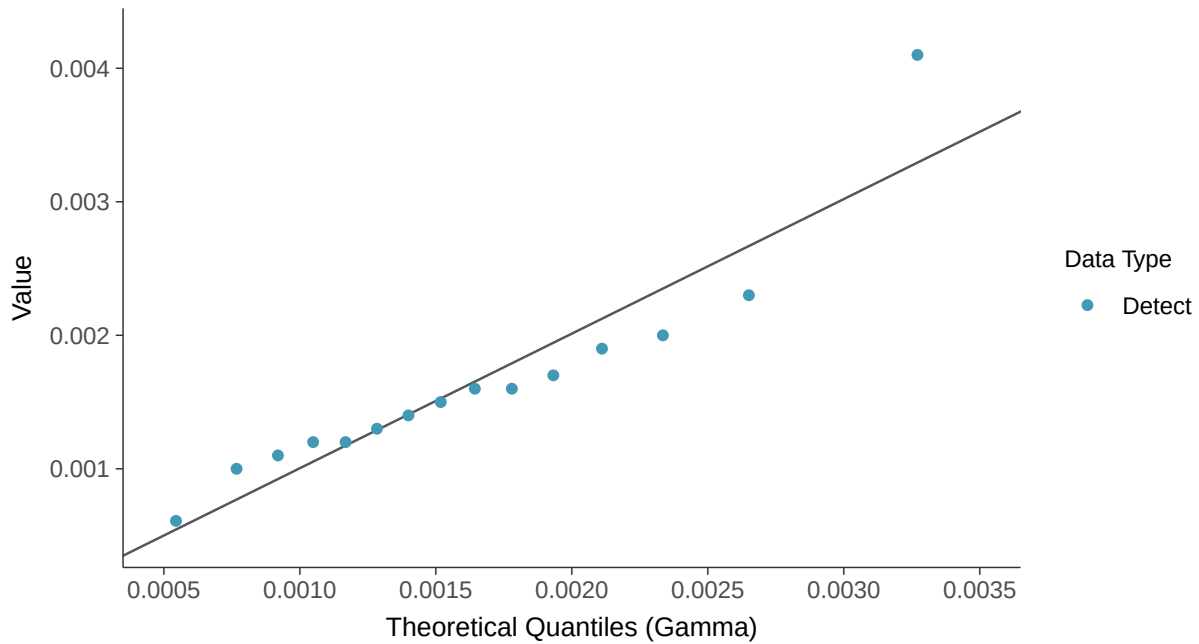


Lognormal Q-Q plot

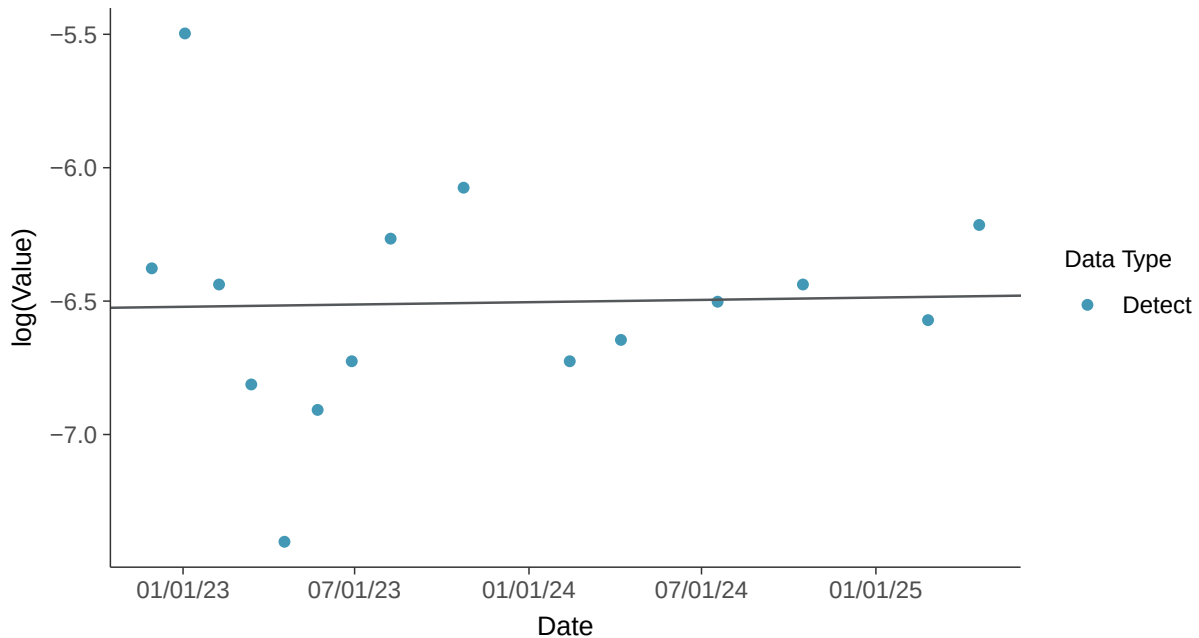
Arsenic, MW-11 (mg/L)



Gamma Q-Q plot
Arsenic, MW-11 (mg/L)

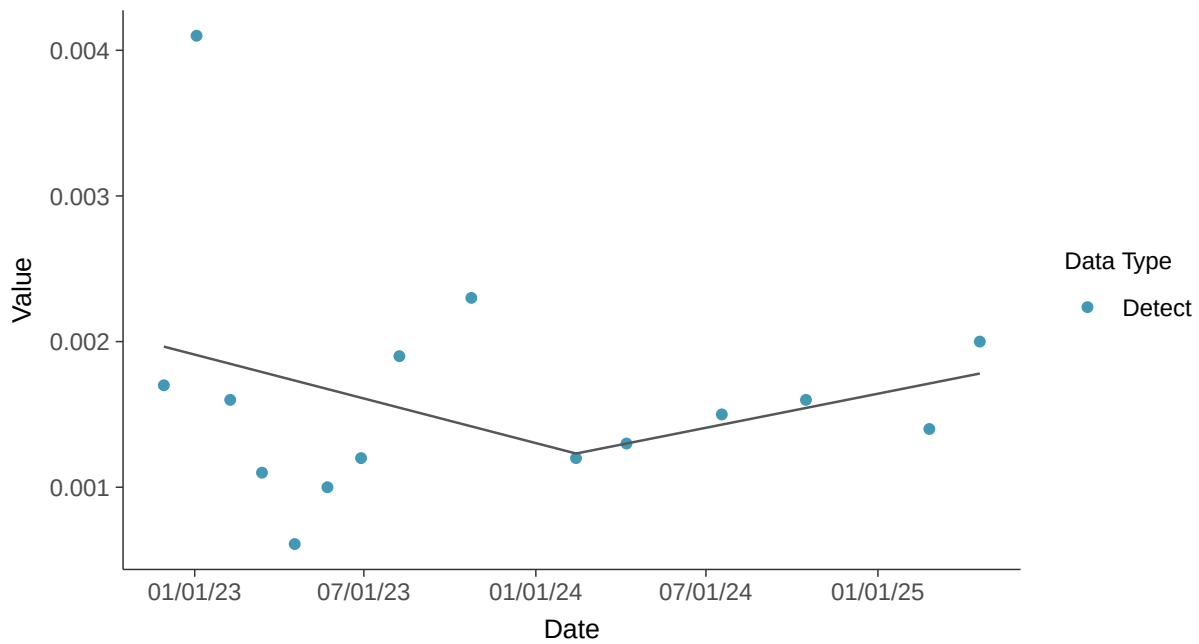


Trend Regression: Lognormal MLE
Arsenic, MW-11 (mg/L)



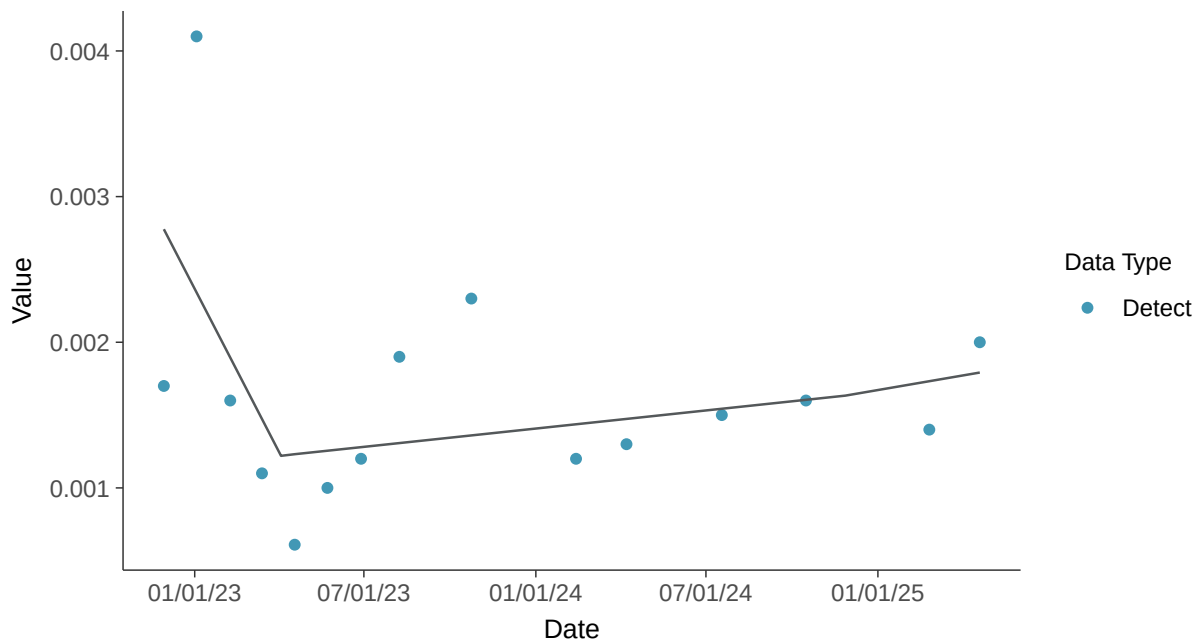
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-11 (mg/L)



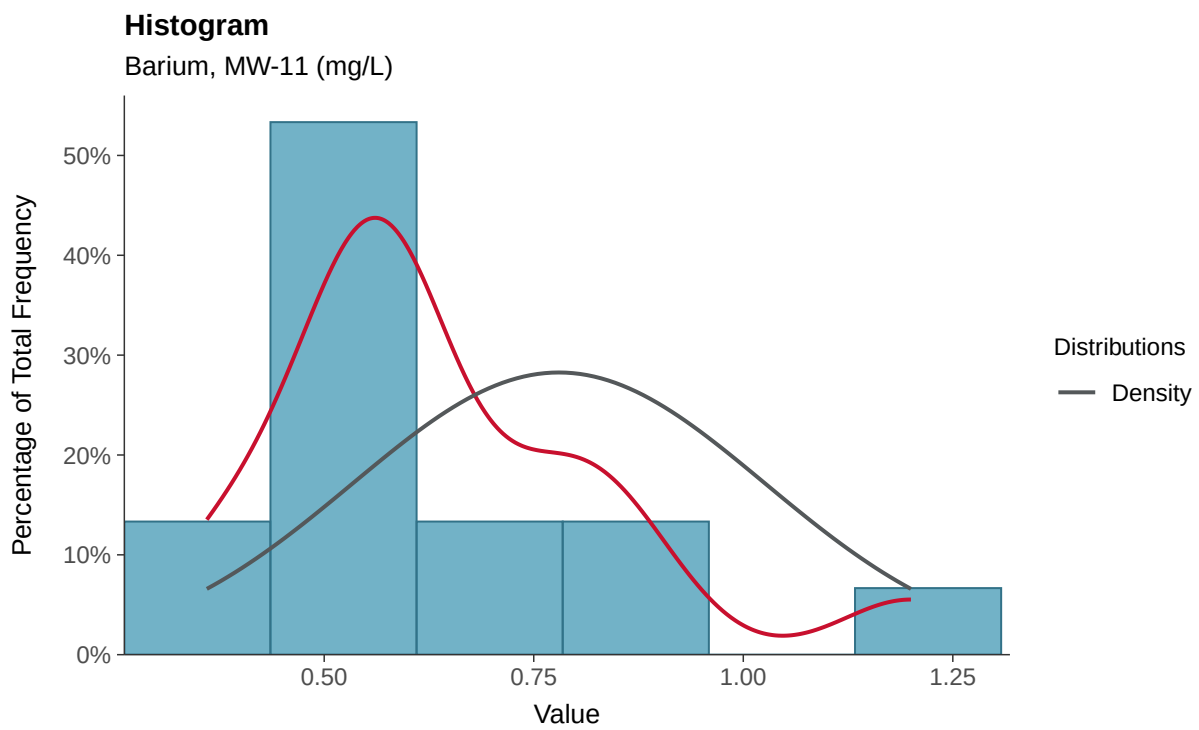
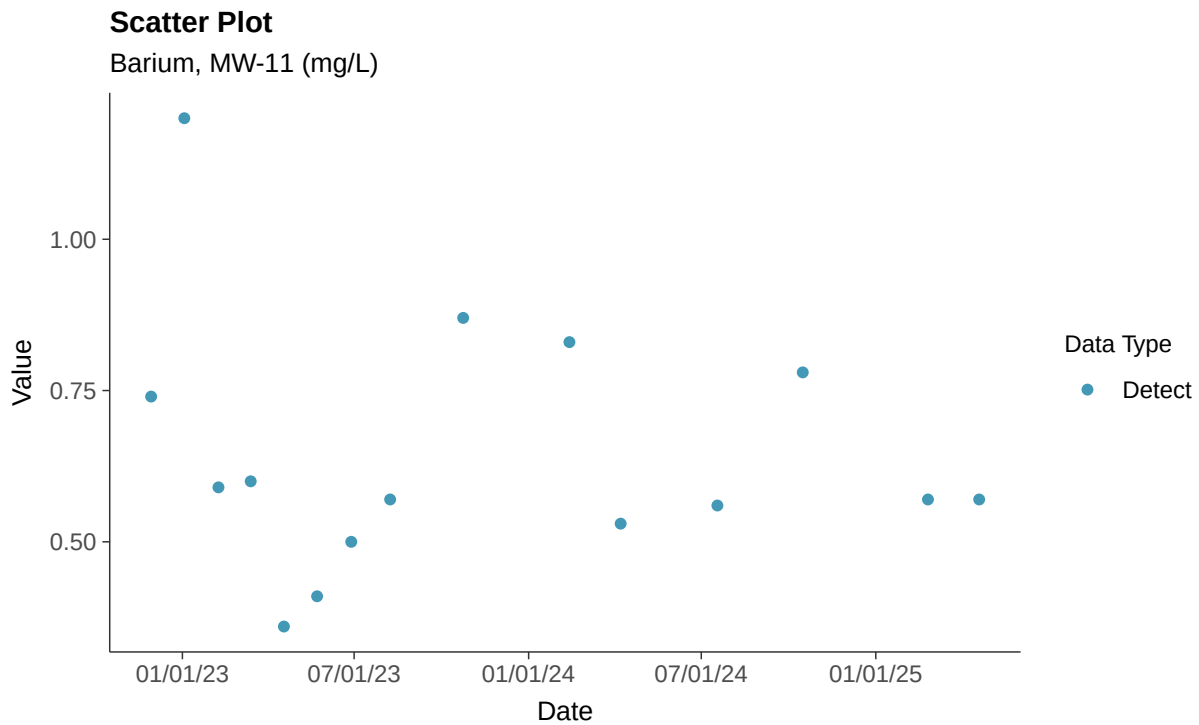
Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-11 (mg/L)



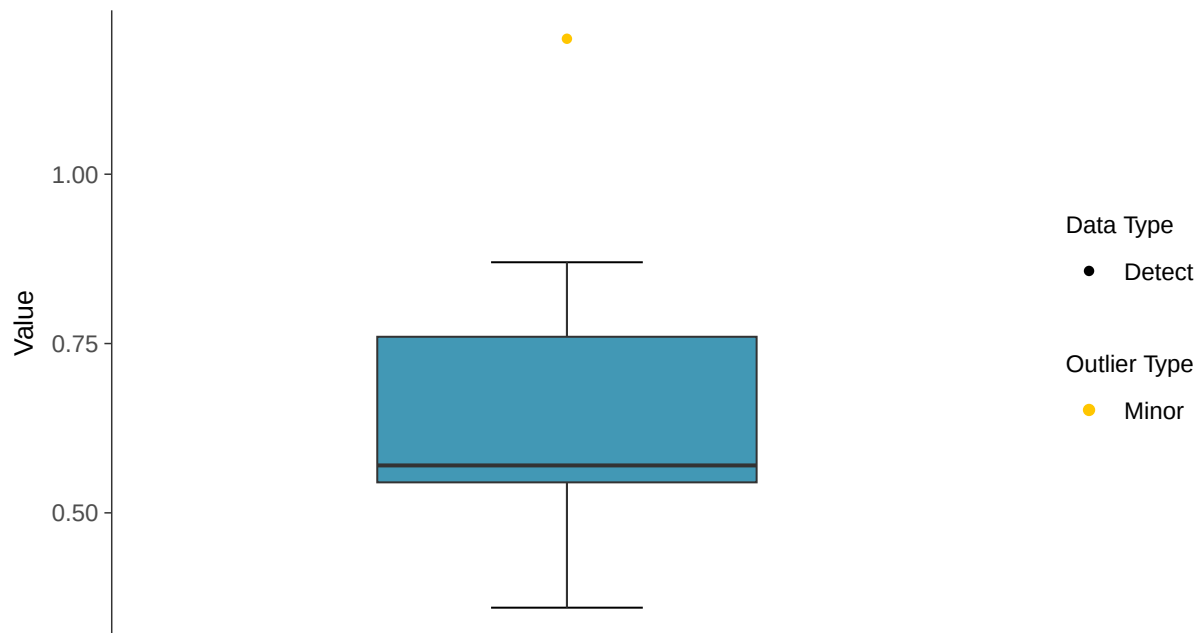
Appendix IV: Barium, MW-11

ID: 21_2_4_103



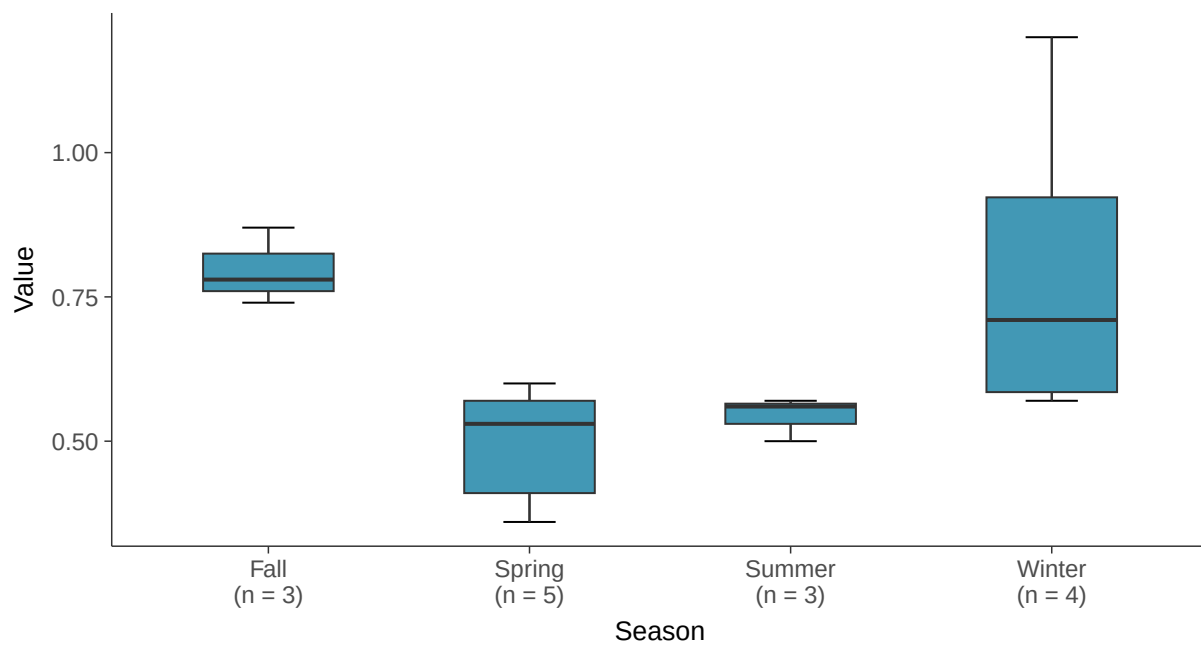
Boxplot

Barium, MW-11 (mg/L)



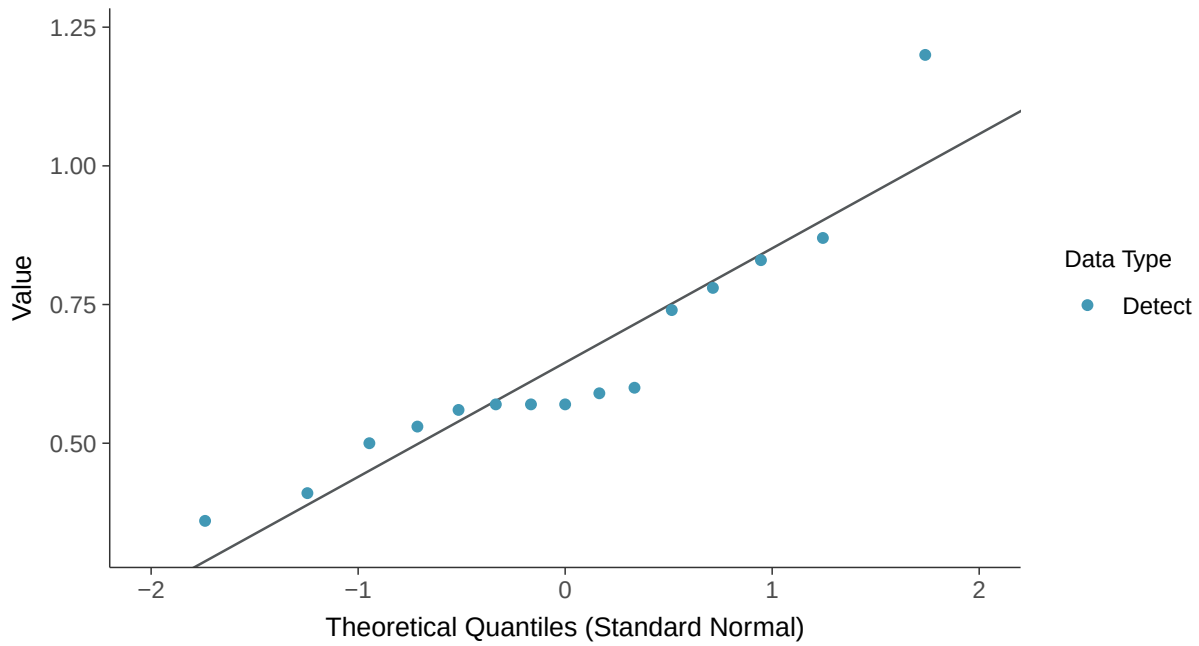
Boxplot by Season

Barium, MW-11 (mg/L)



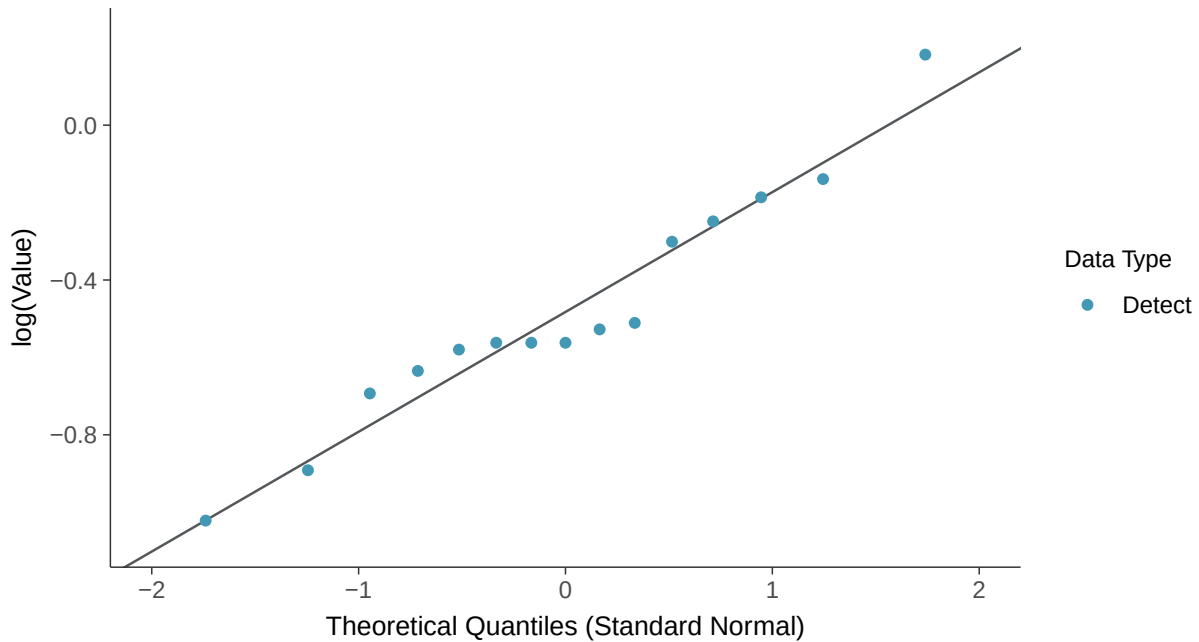
Normal Q-Q plot

Barium, MW-11 (mg/L)



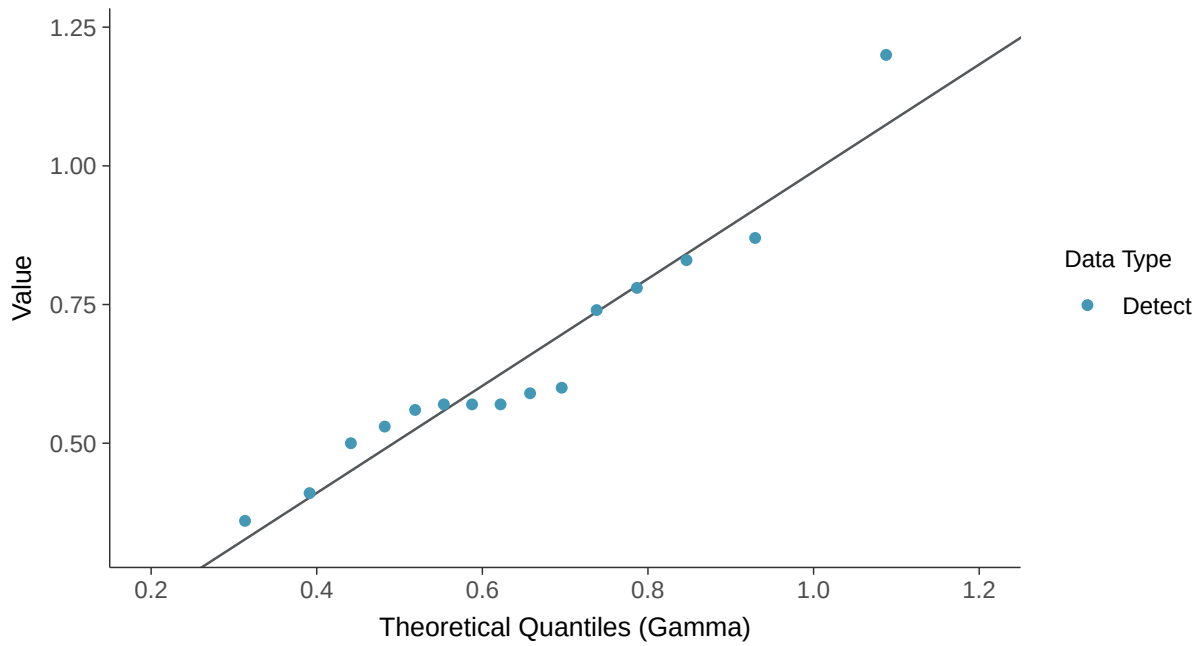
Lognormal Q-Q plot

Barium, MW-11 (mg/L)



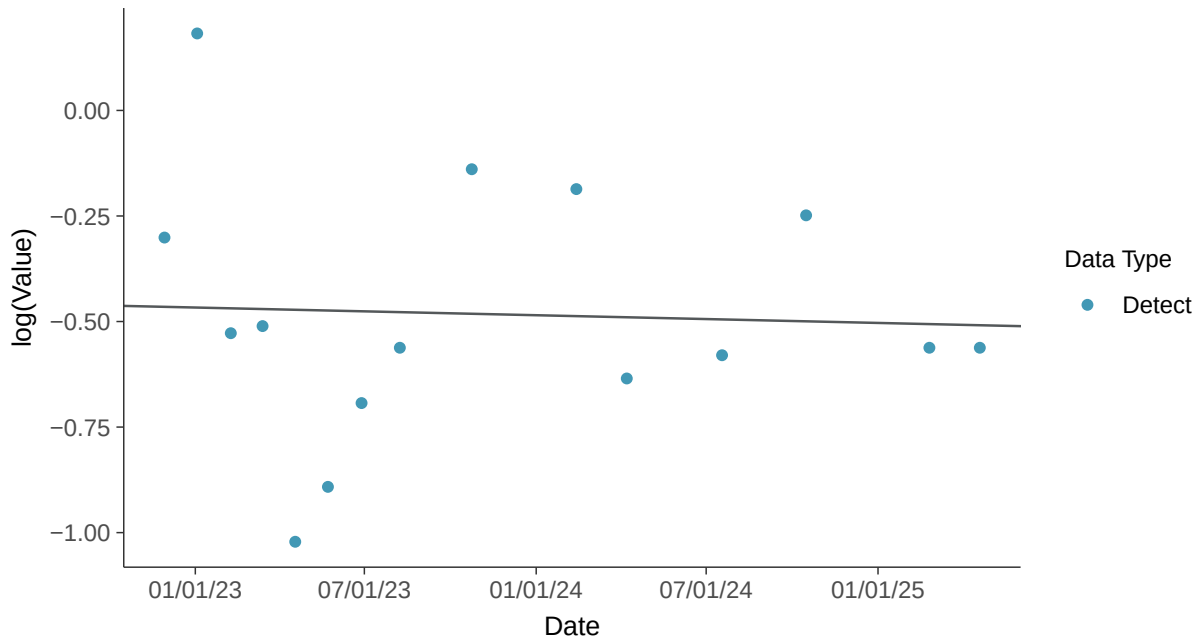
Gamma Q-Q plot

Barium, MW-11 (mg/L)



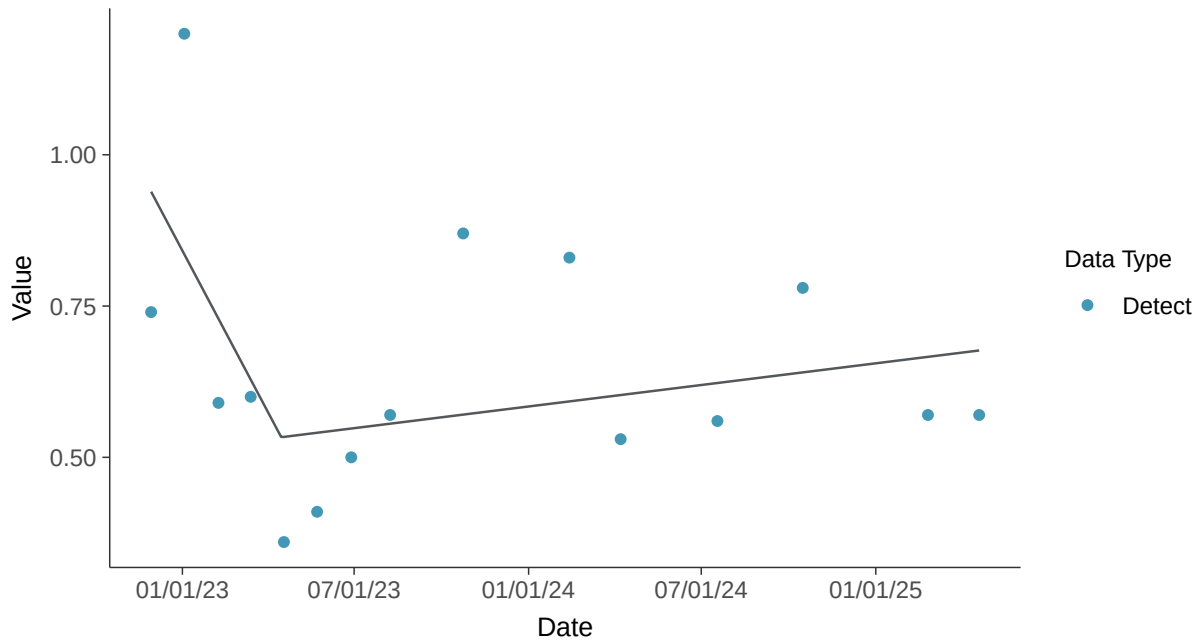
Trend Regression: Lognormal MLE

Barium, MW-11 (mg/L)



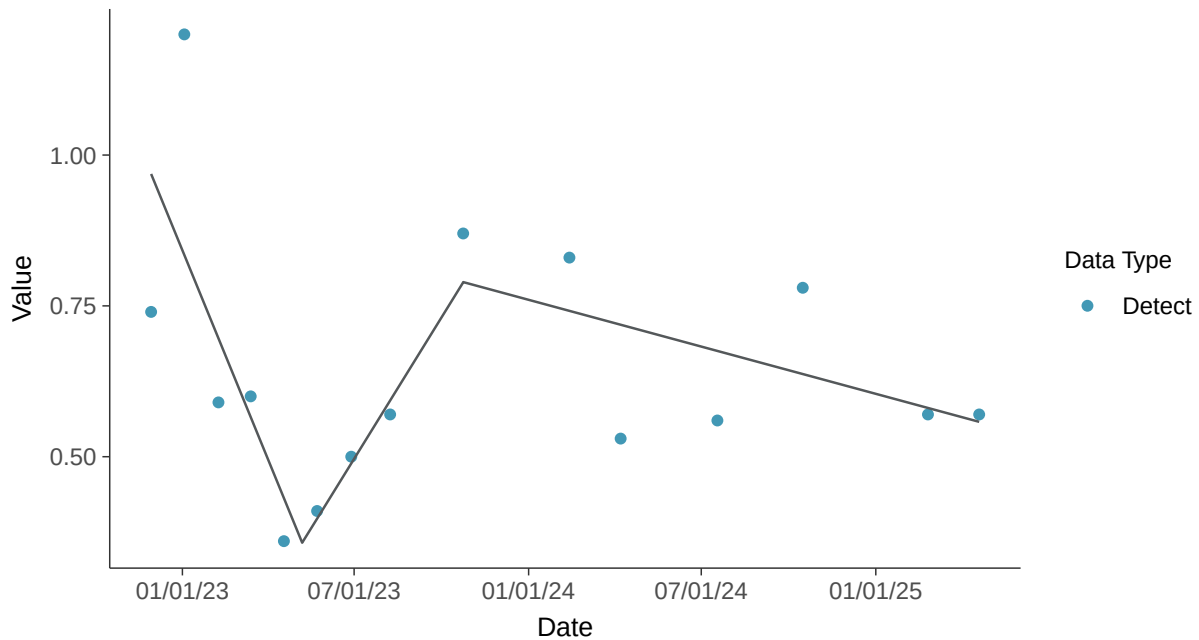
Trend Regression: Piecewise Linear-Linear

Barium, MW-11 (mg/L)



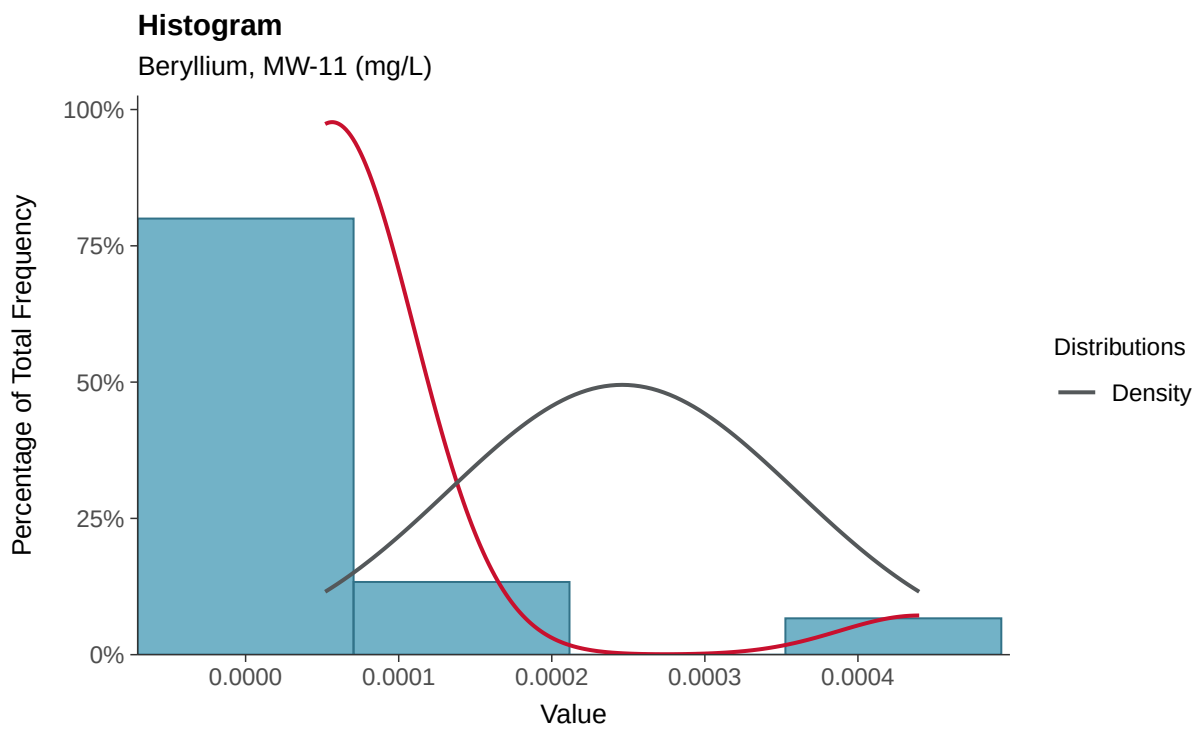
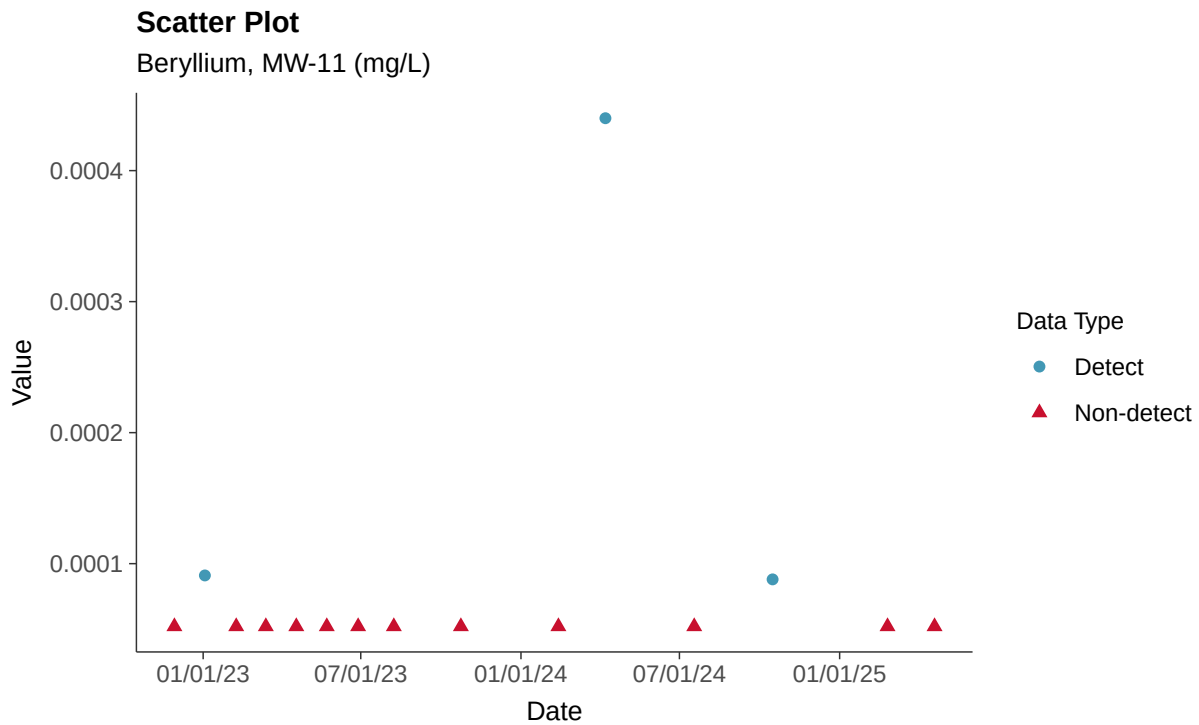
Trend Regression: Piecewise Linear-Linear-Linear

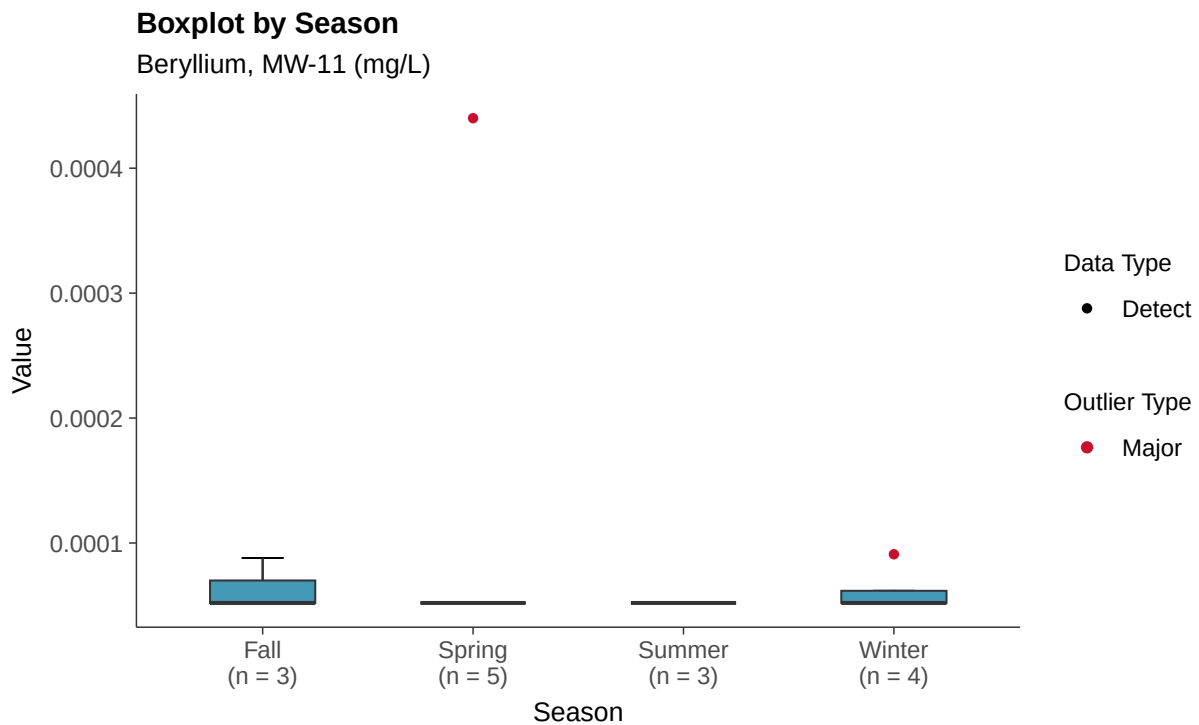
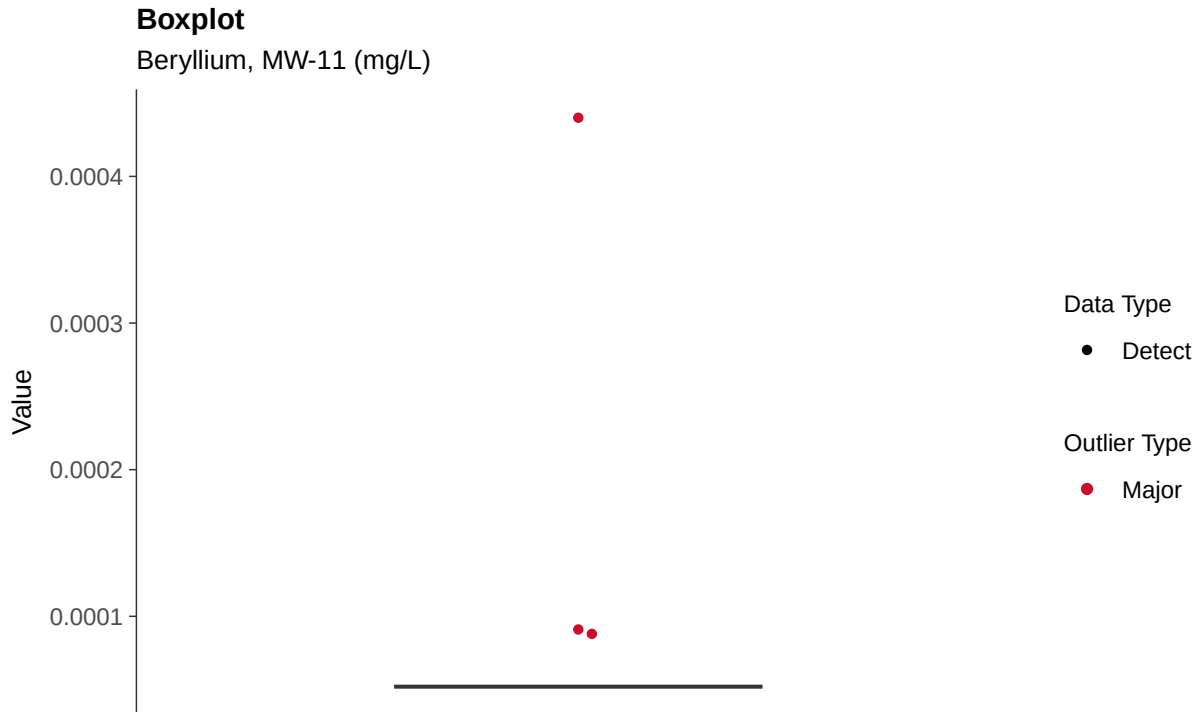
Barium, MW-11 (mg/L)



Appendix IV: Beryllium, MW-11

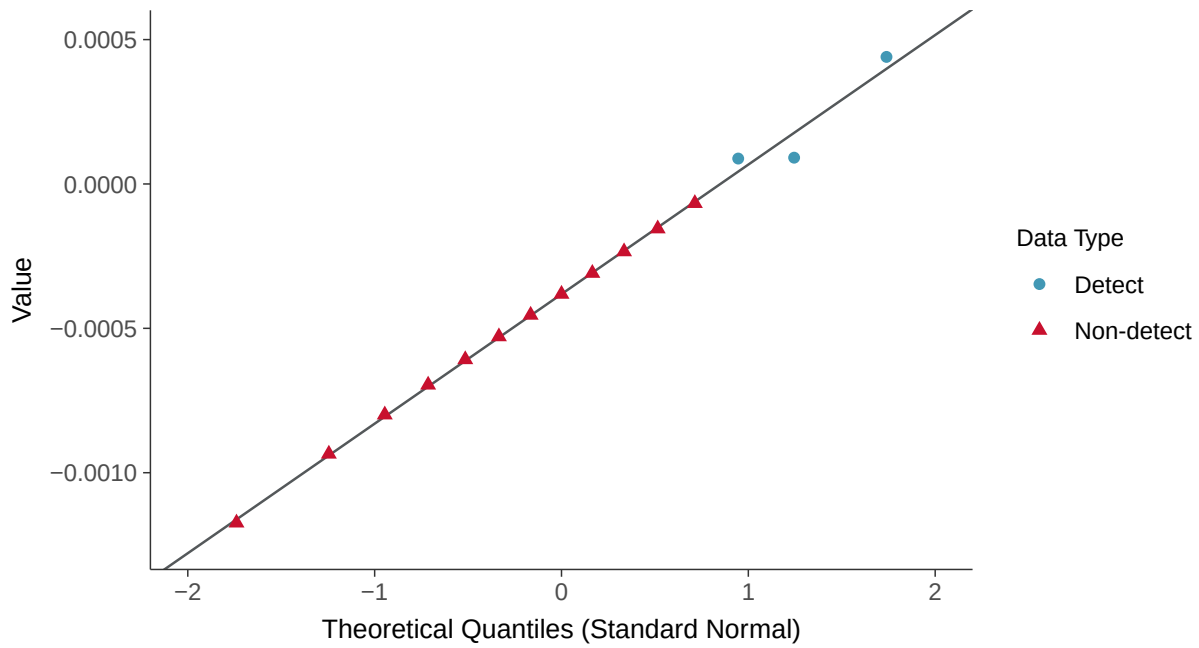
ID: 21_2_4_104





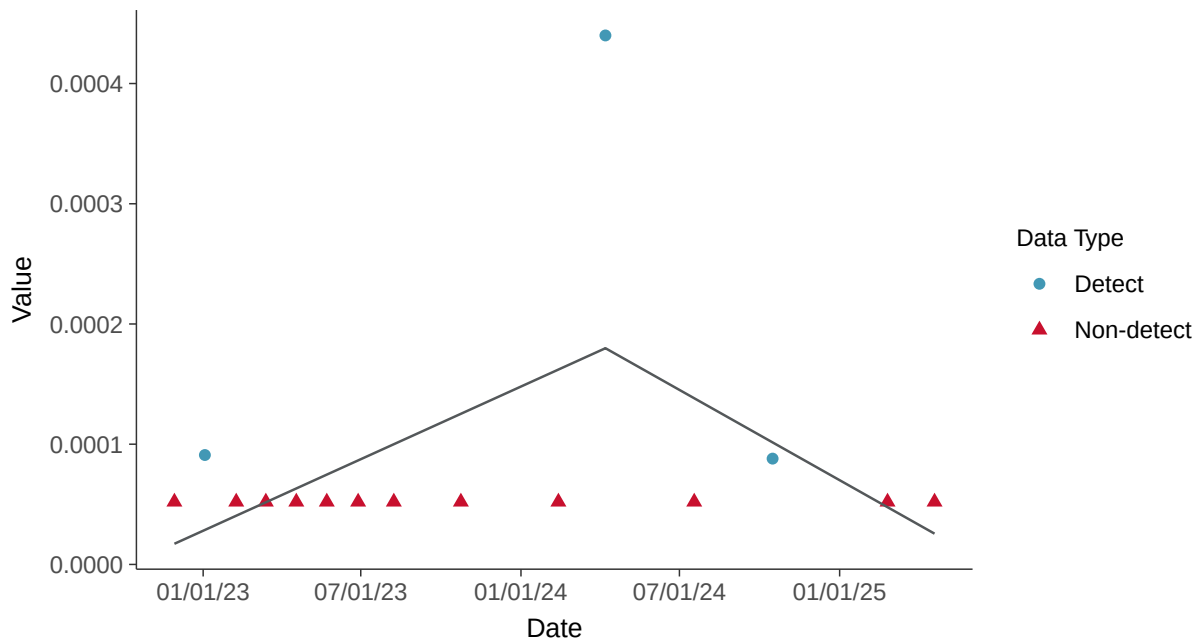
Normal Q-Q plot using ROS Imputed Estimates

Beryllium, MW-11 (mg/L)



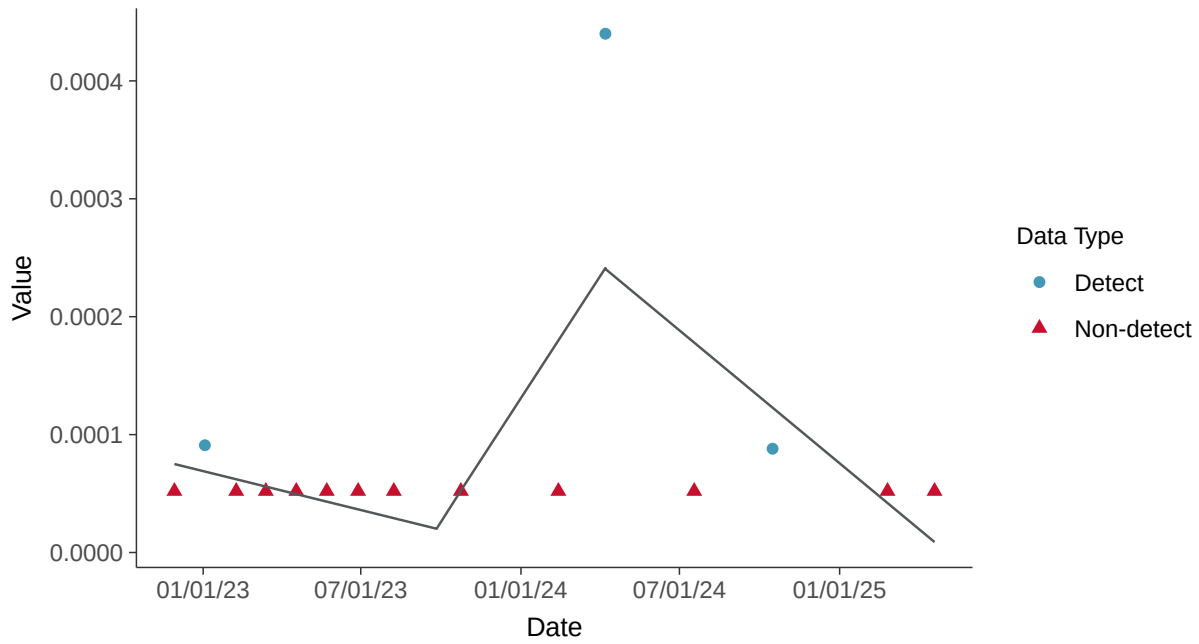
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-11 (mg/L)



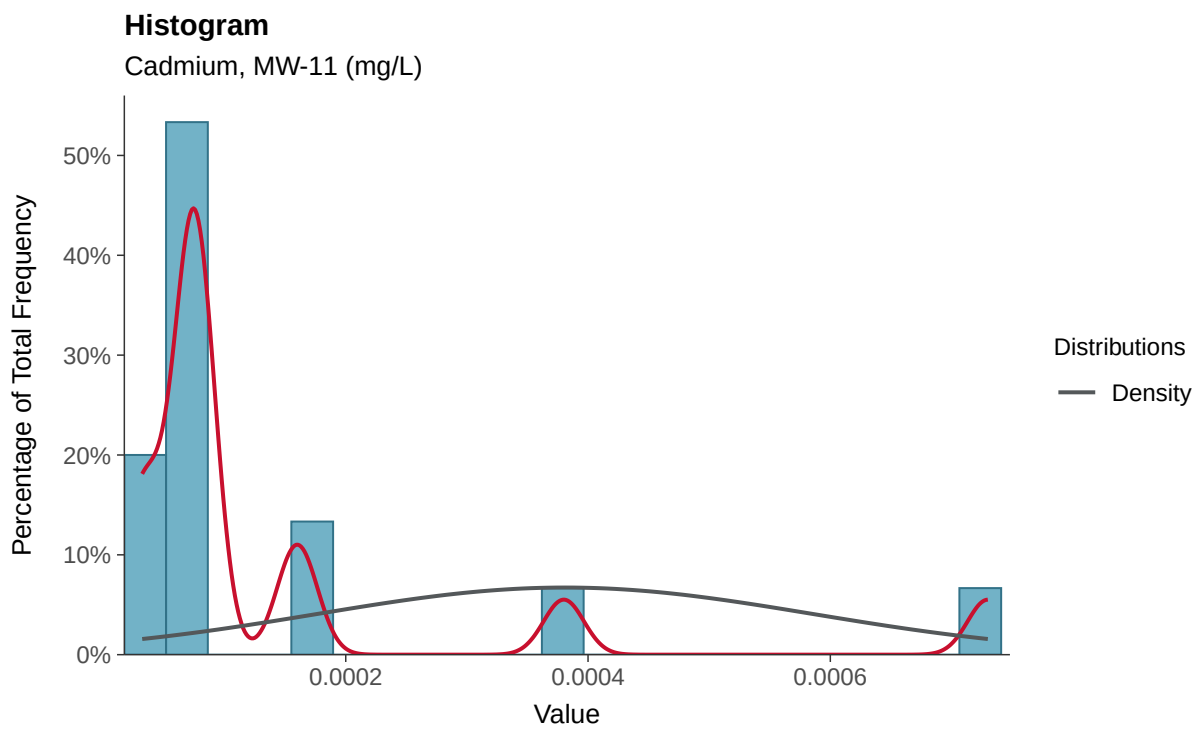
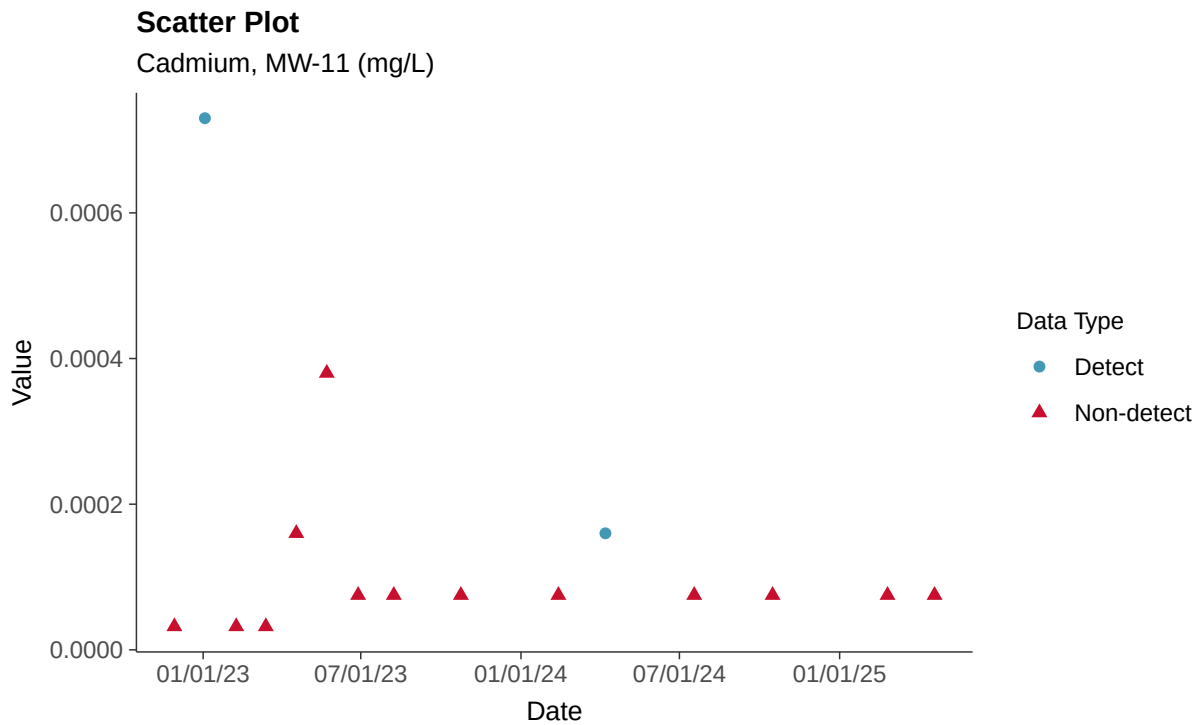


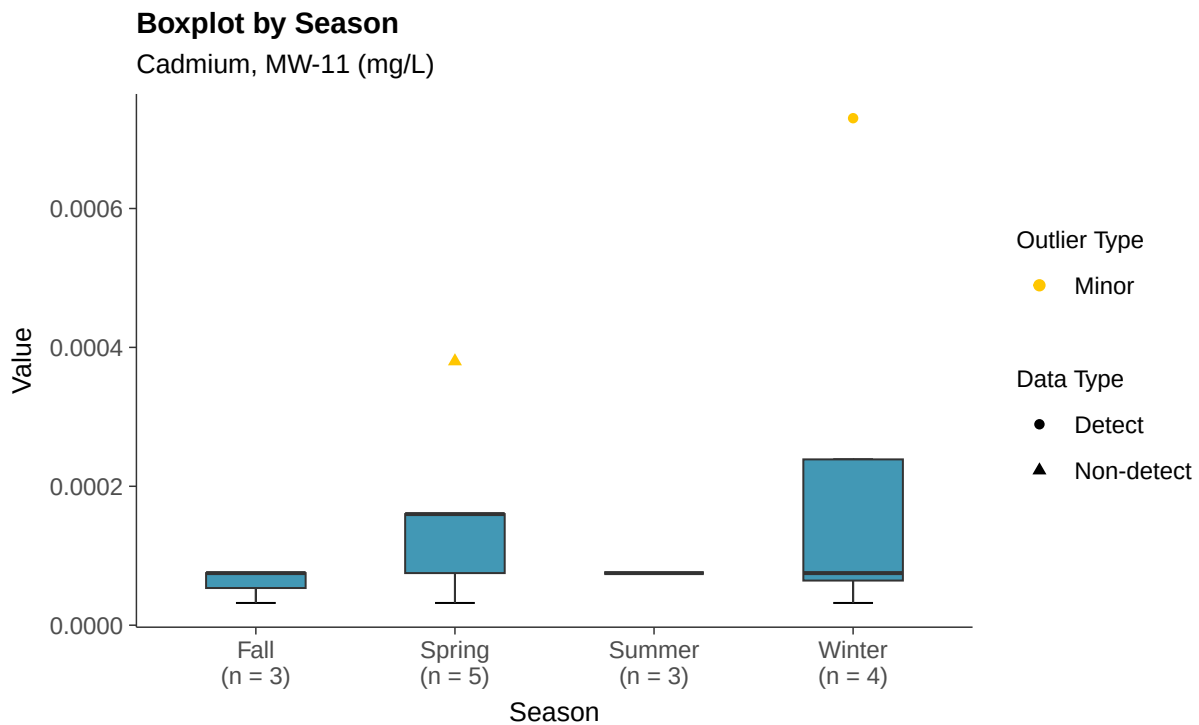
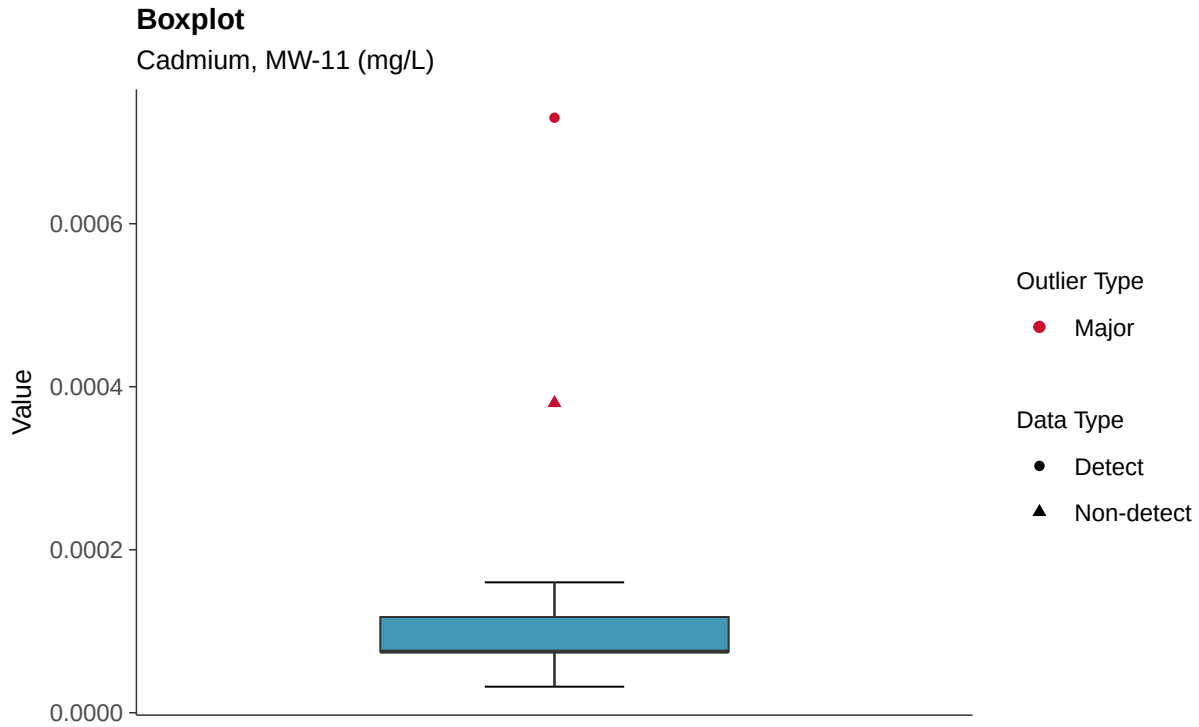
Trend Regression: Piecewise Linear-Linear-Linear
Beryllium, MW-11 (mg/L)



Appendix IV: Cadmium, MW-11

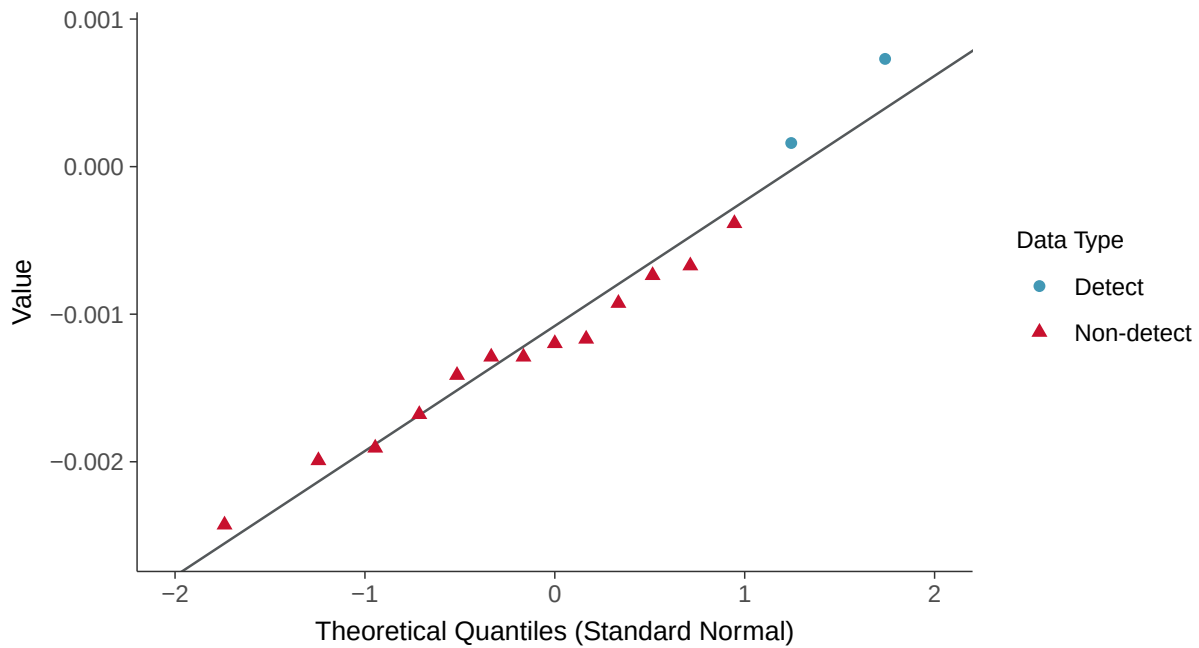
ID: 21_2_4_106





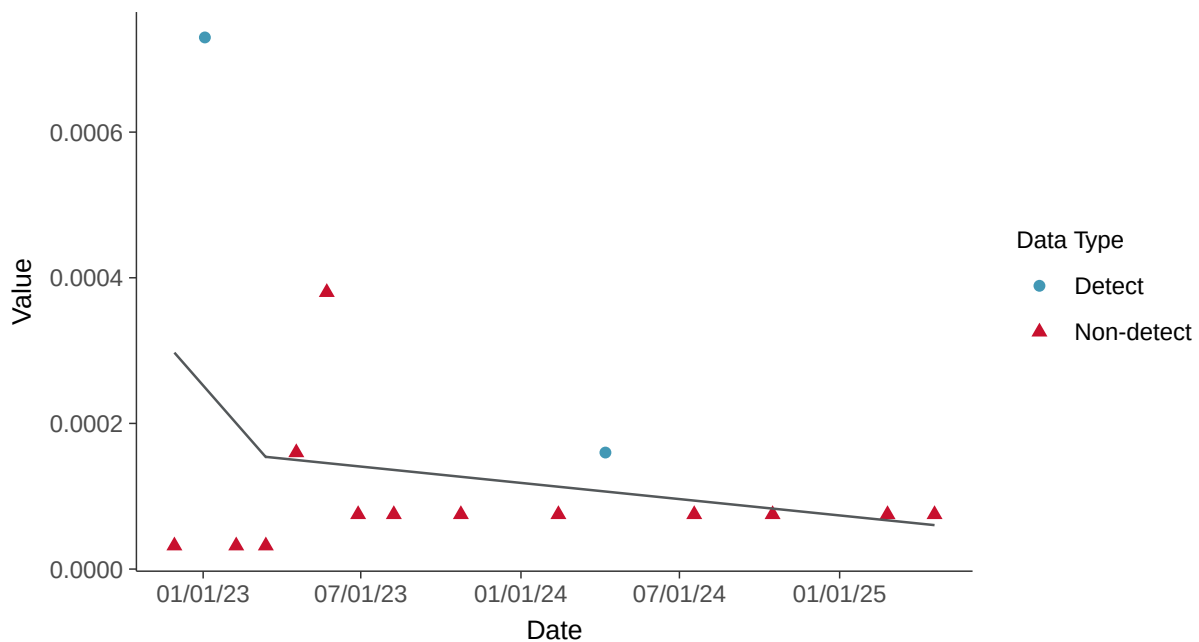
Normal Q-Q plot using ROS Imputed Estimates

Cadmium, MW-11 (mg/L)



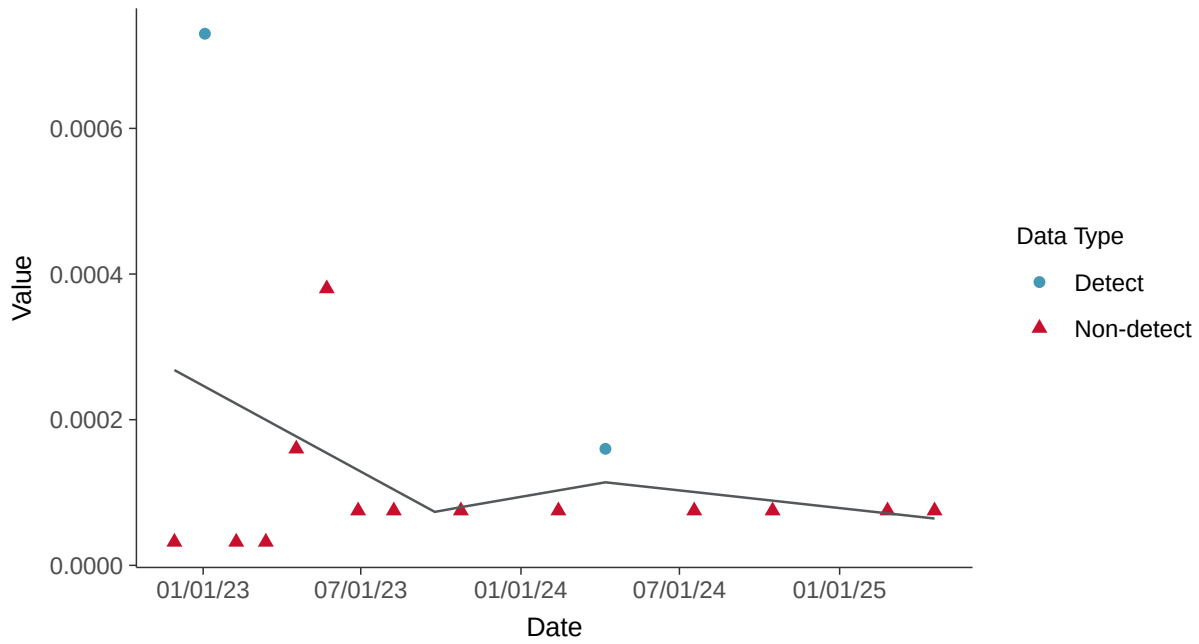
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-11 (mg/L)



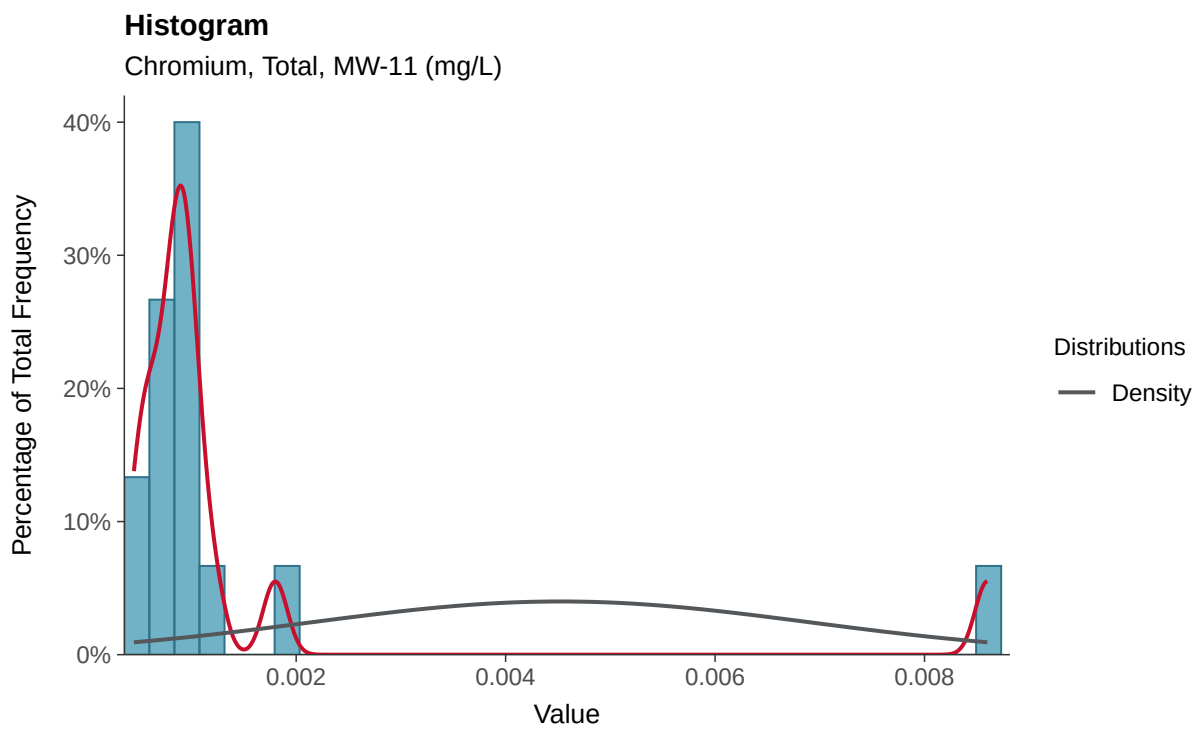
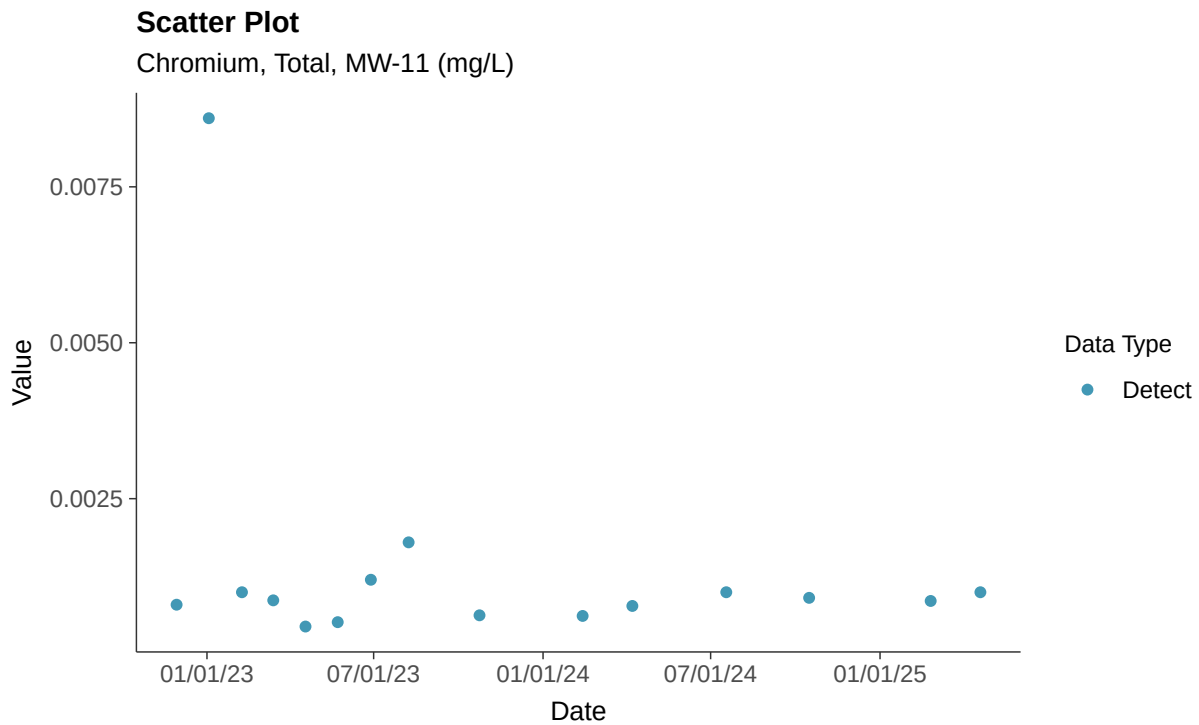


Trend Regression: Piecewise Linear-Linear-Linear
Cadmium, MW-11 (mg/L)



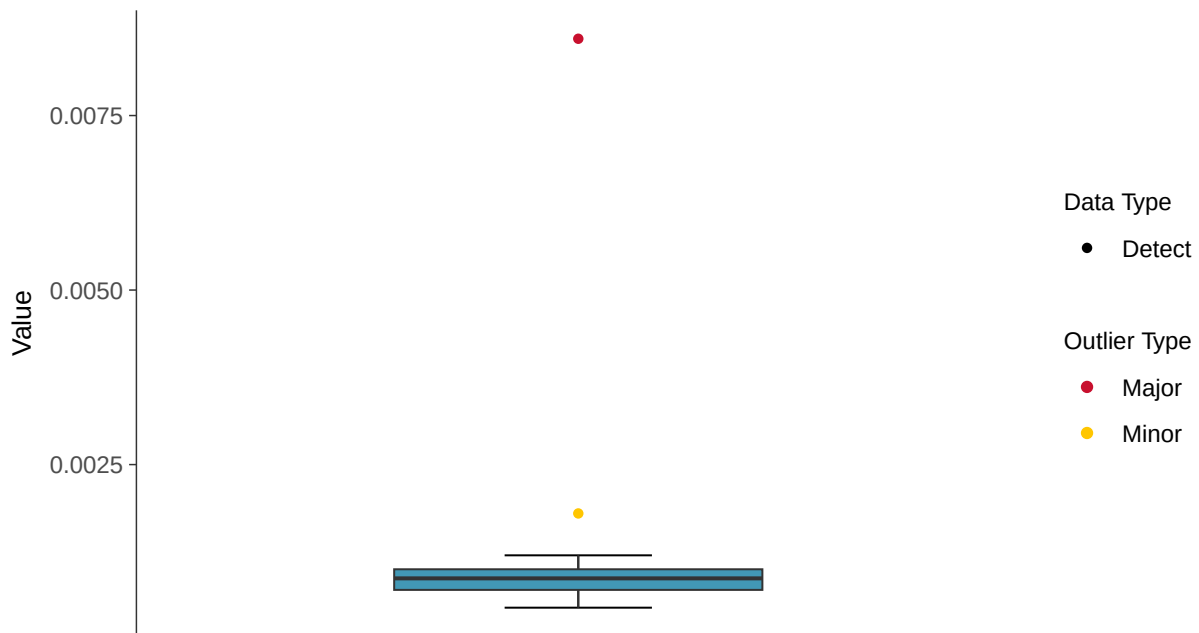
Appendix IV: Chromium, Total, MW-11

ID: 21_2_4_109



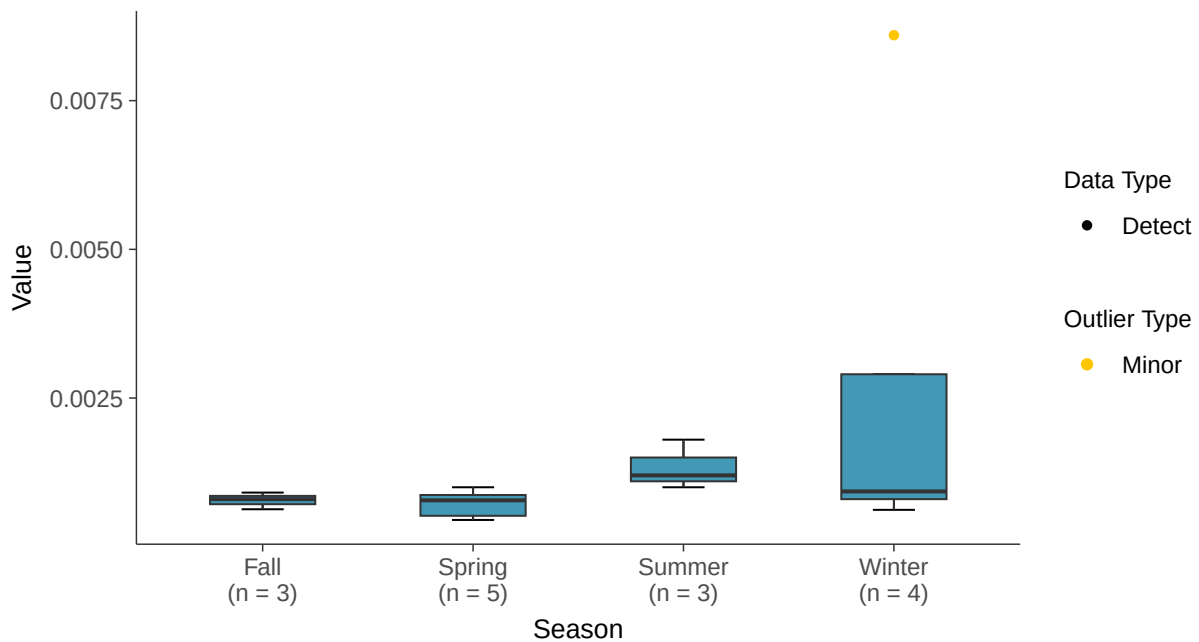
Boxplot

Chromium, Total, MW-11 (mg/L)



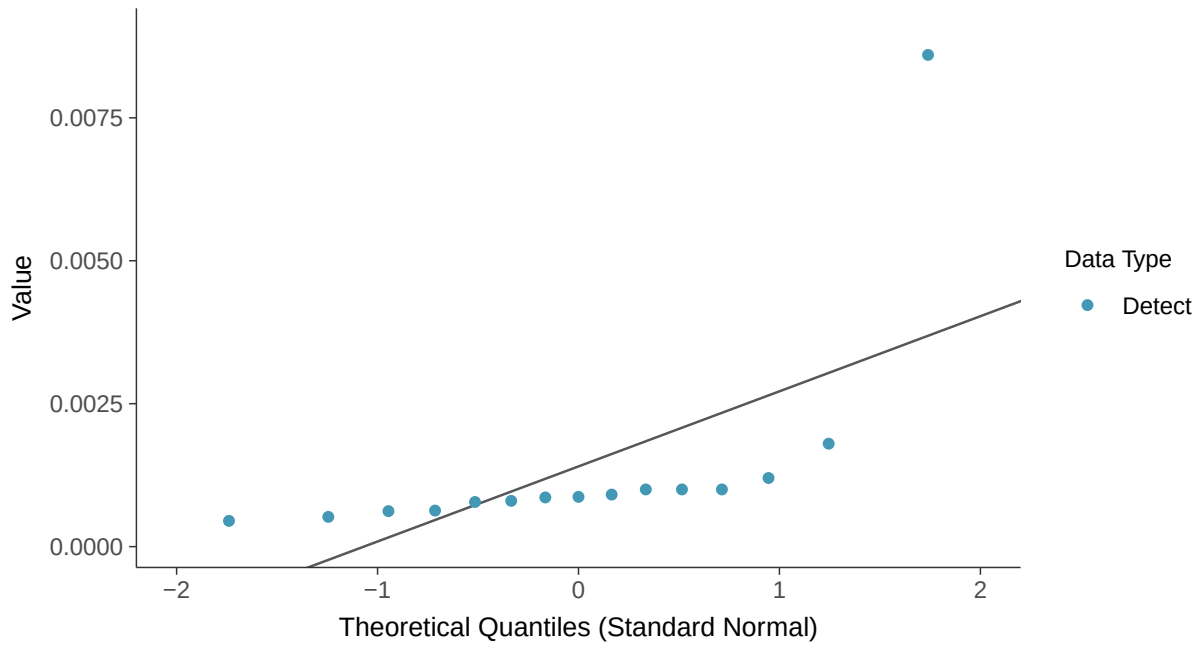
Boxplot by Season

Chromium, Total, MW-11 (mg/L)



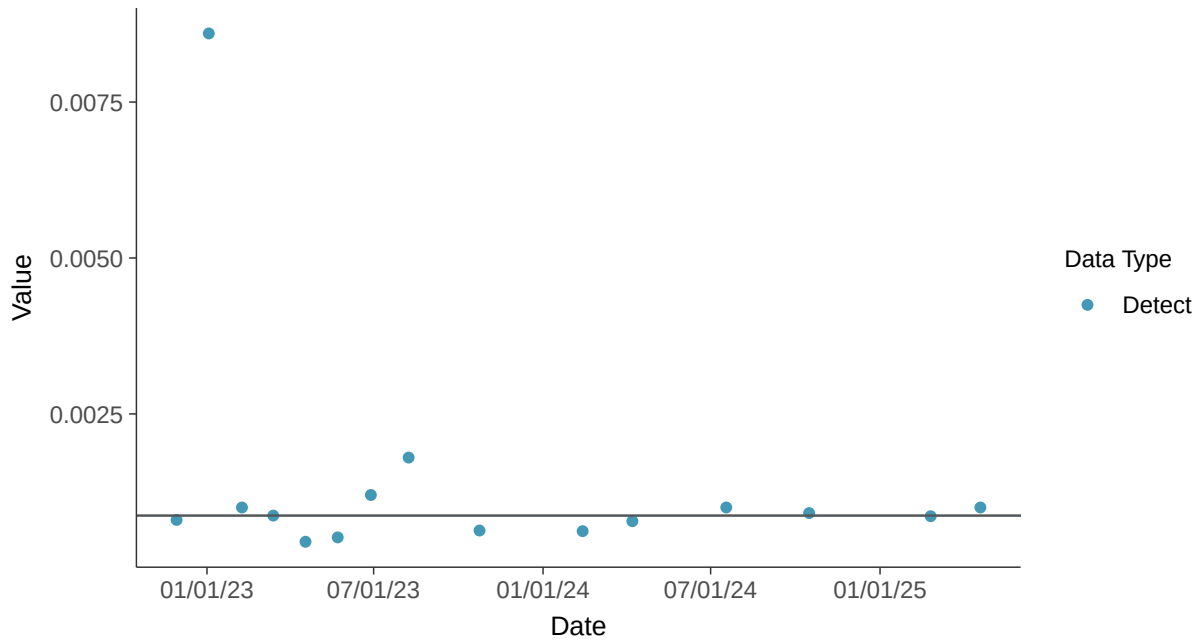
Normal Q-Q plot

Chromium, Total, MW-11 (mg/L)



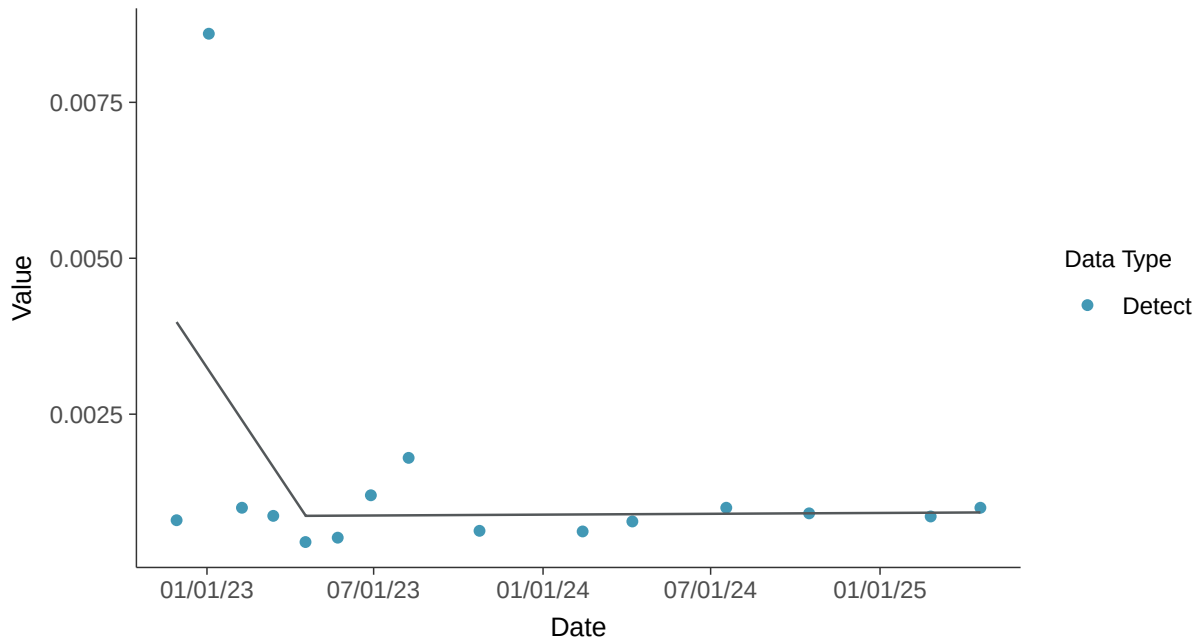
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Chromium, Total, MW-11 (mg/L)



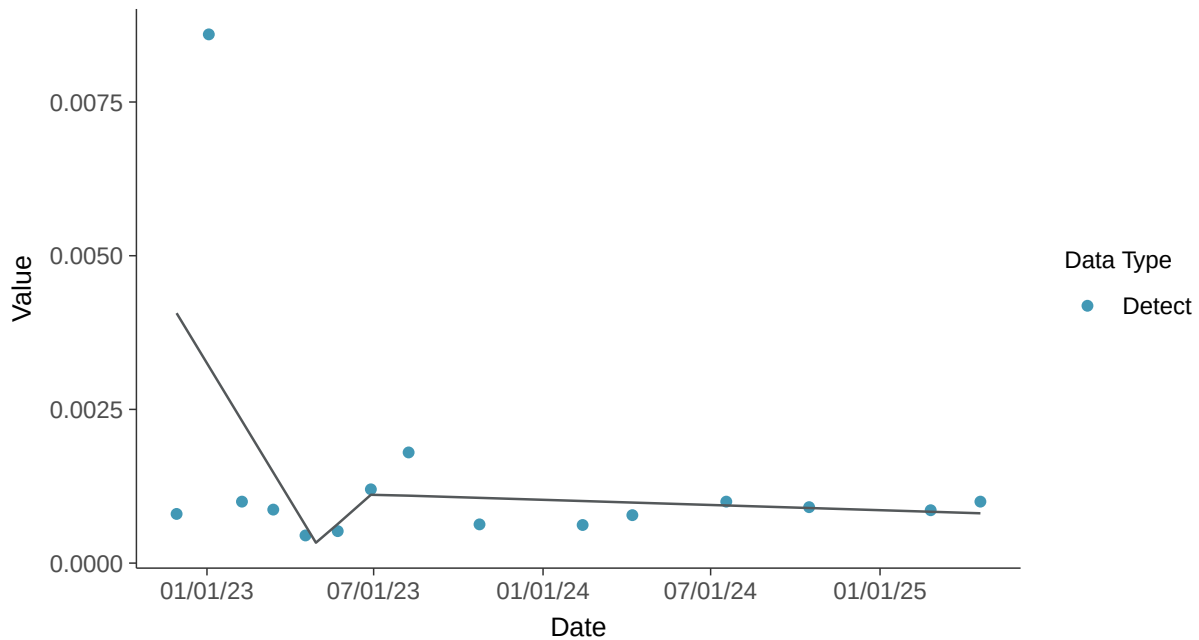
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-11 (mg/L)



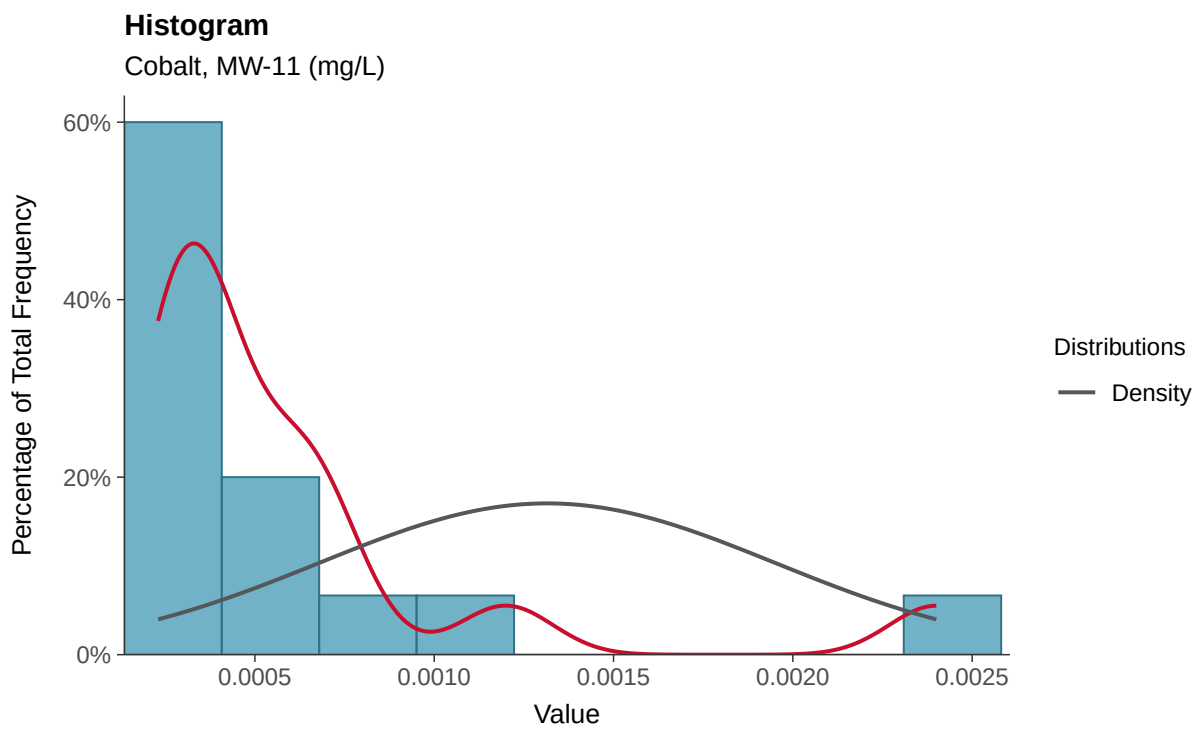
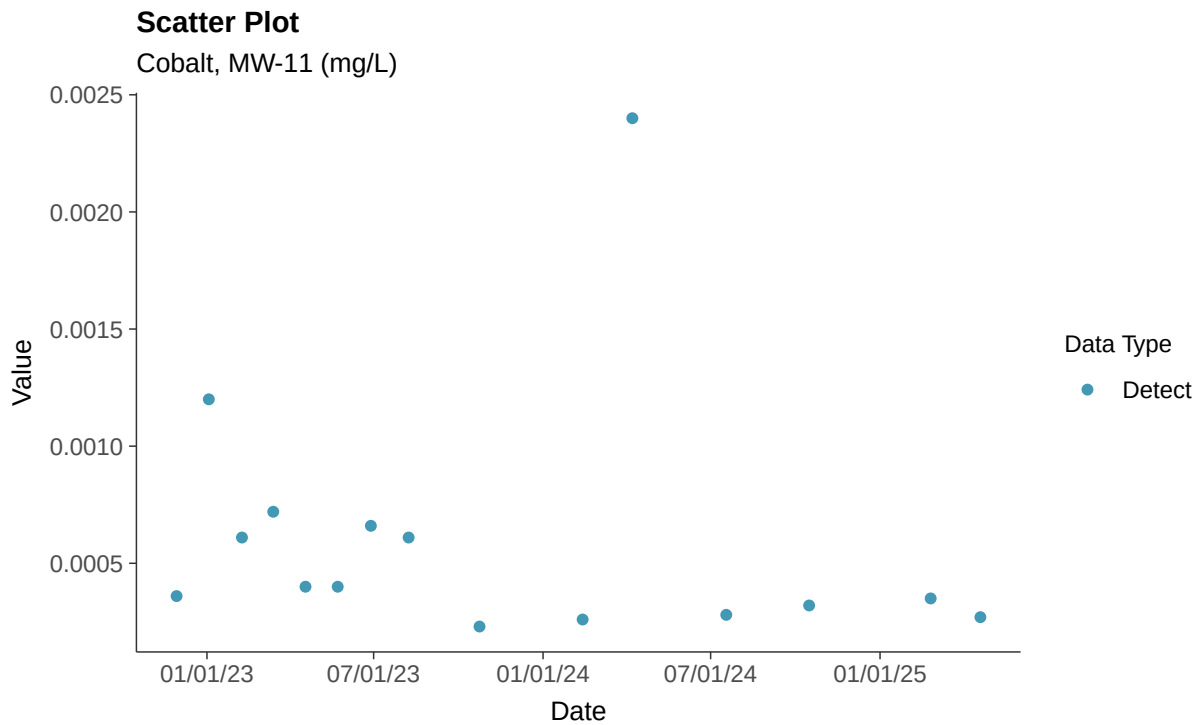
Trend Regression: Piecewise Linear-Linear-Linear

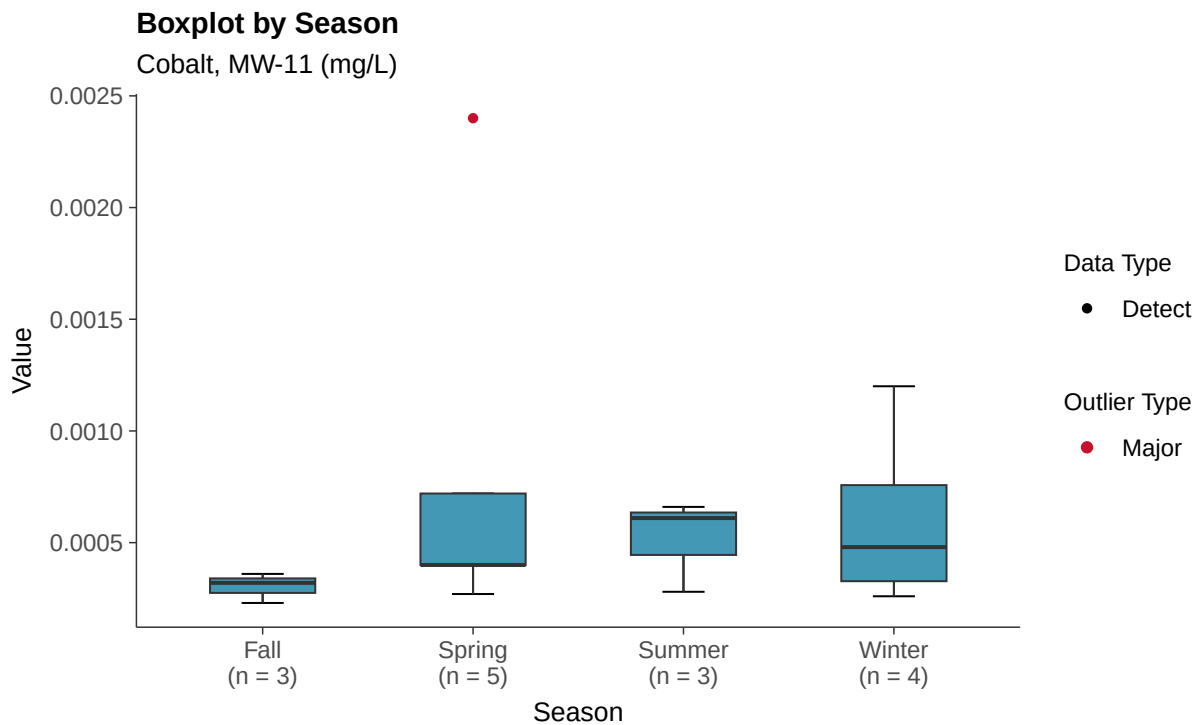
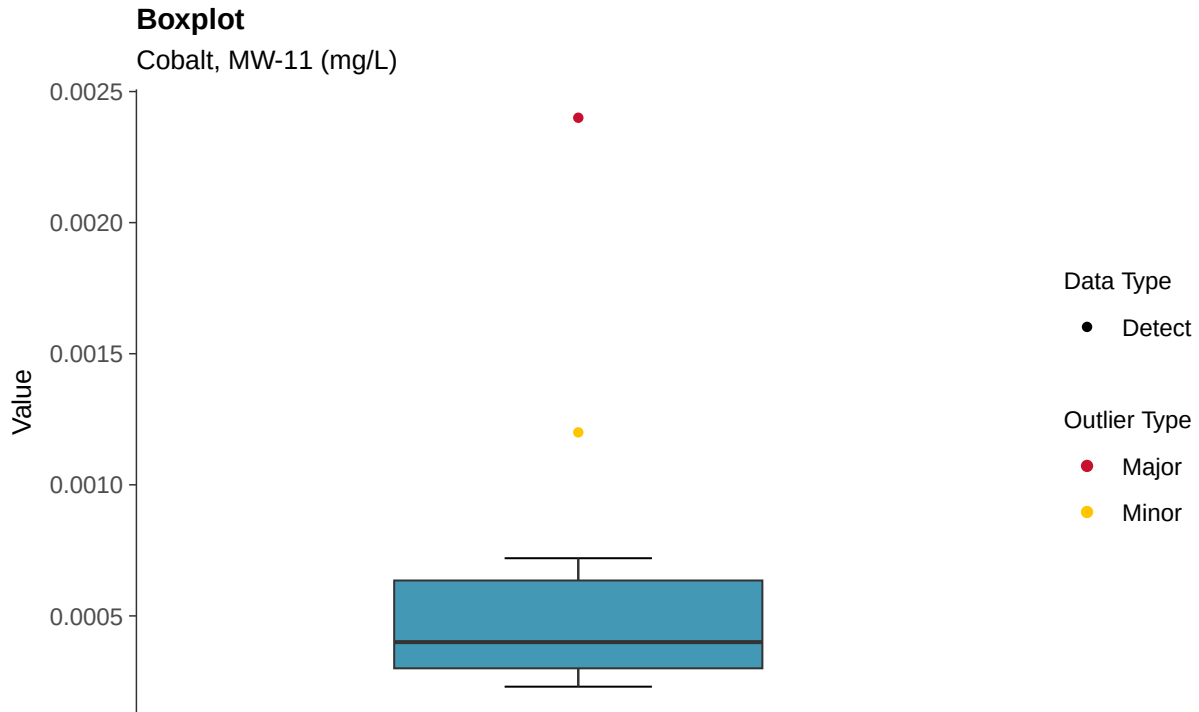
Chromium, Total, MW-11 (mg/L)



Appendix IV: Cobalt, MW-11

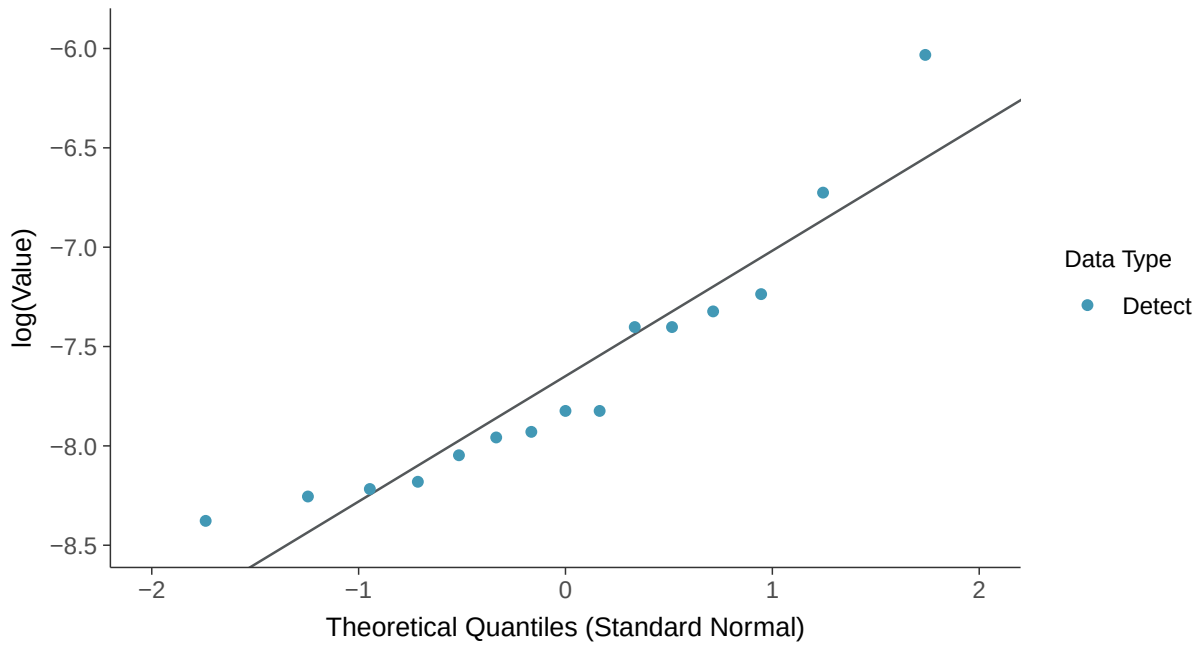
ID: 21_2_4_110





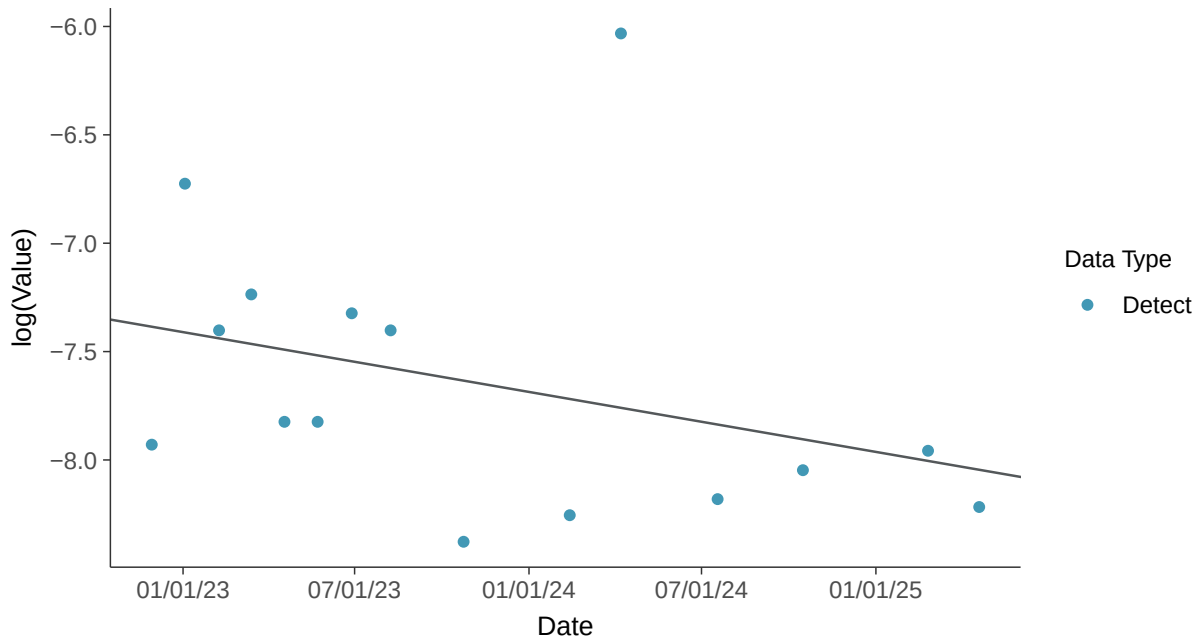
Lognormal Q-Q plot

Cobalt, MW-11 (mg/L)



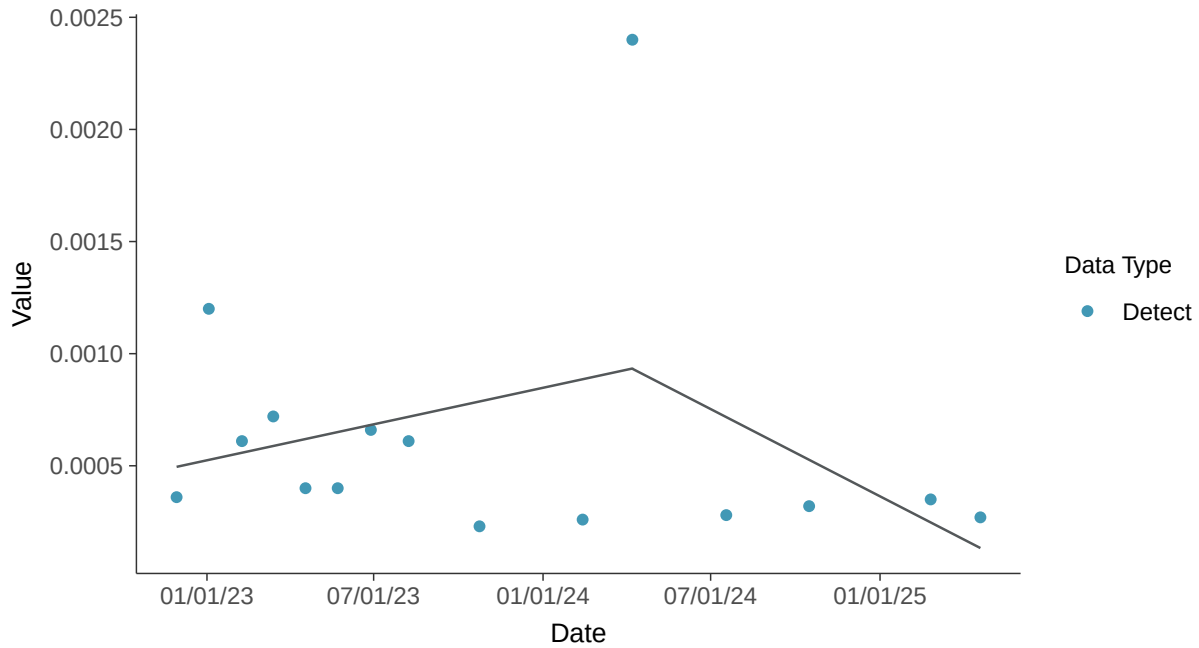
Trend Regression: Lognormal MLE

Cobalt, MW-11 (mg/L)



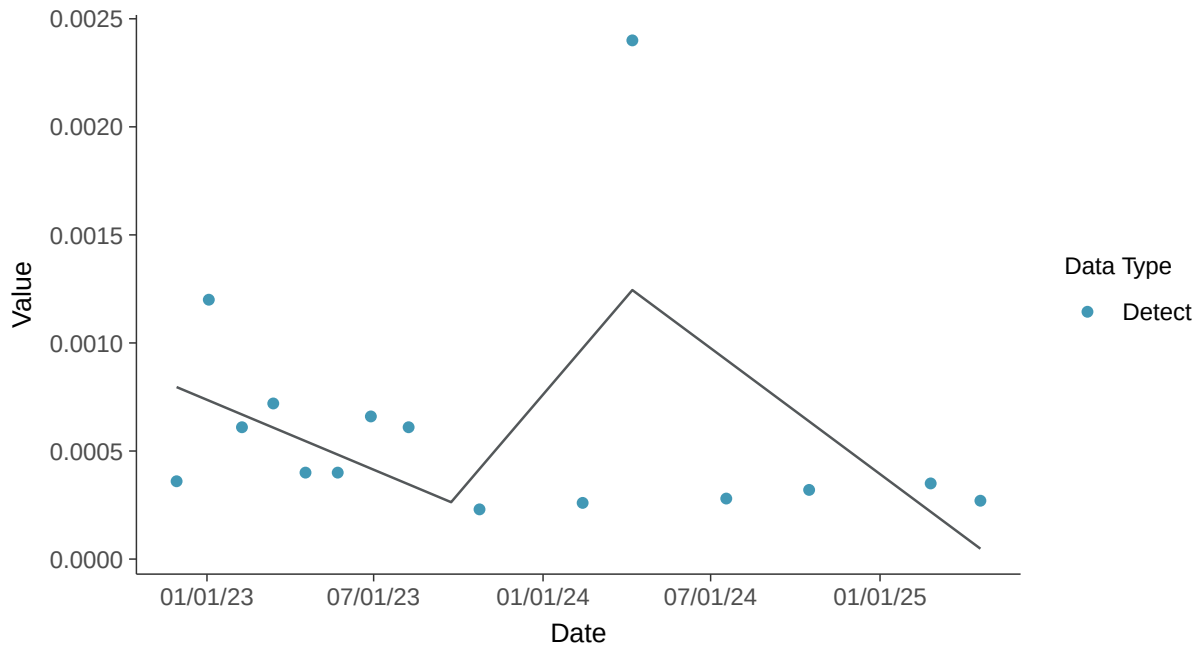
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-11 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cobalt, MW-11 (mg/L)

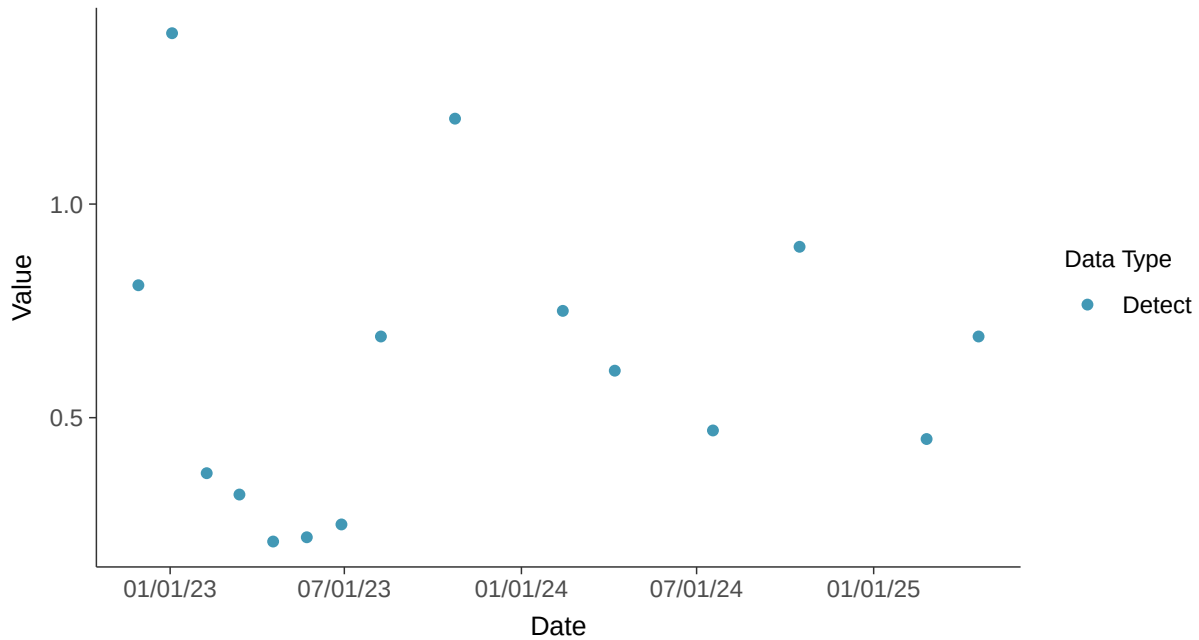


Appendix IV: Fluoride (App IV), MW-11

ID: 21_2_4_113

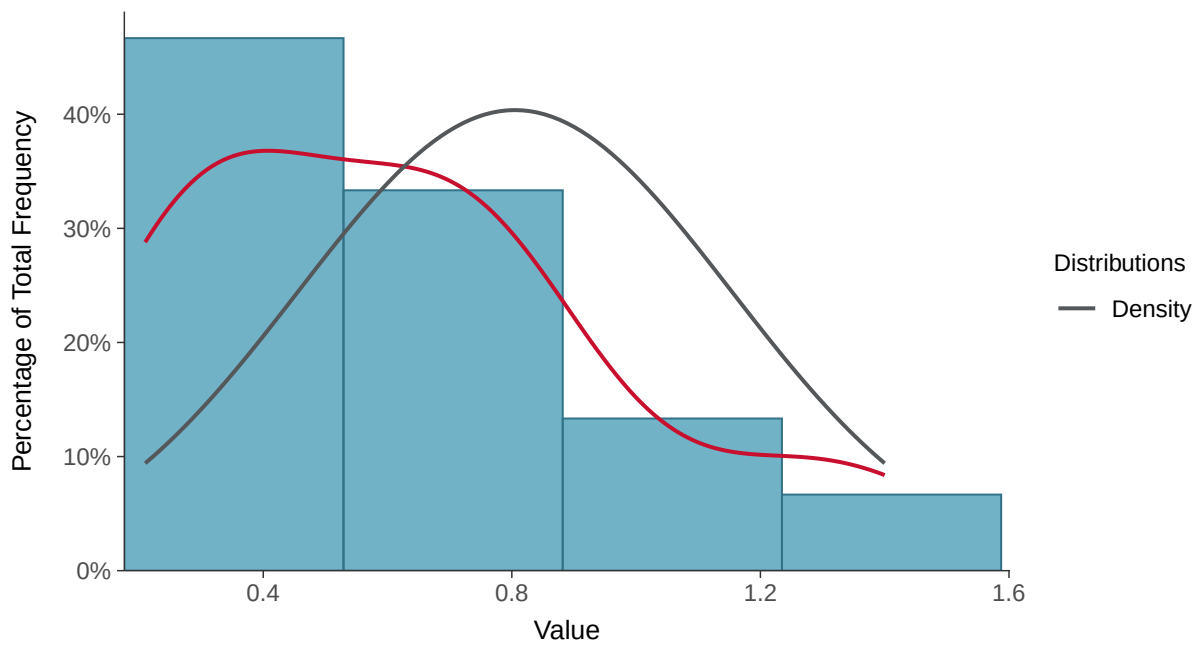
Scatter Plot

Fluoride (App IV), MW-11 (mg/L)



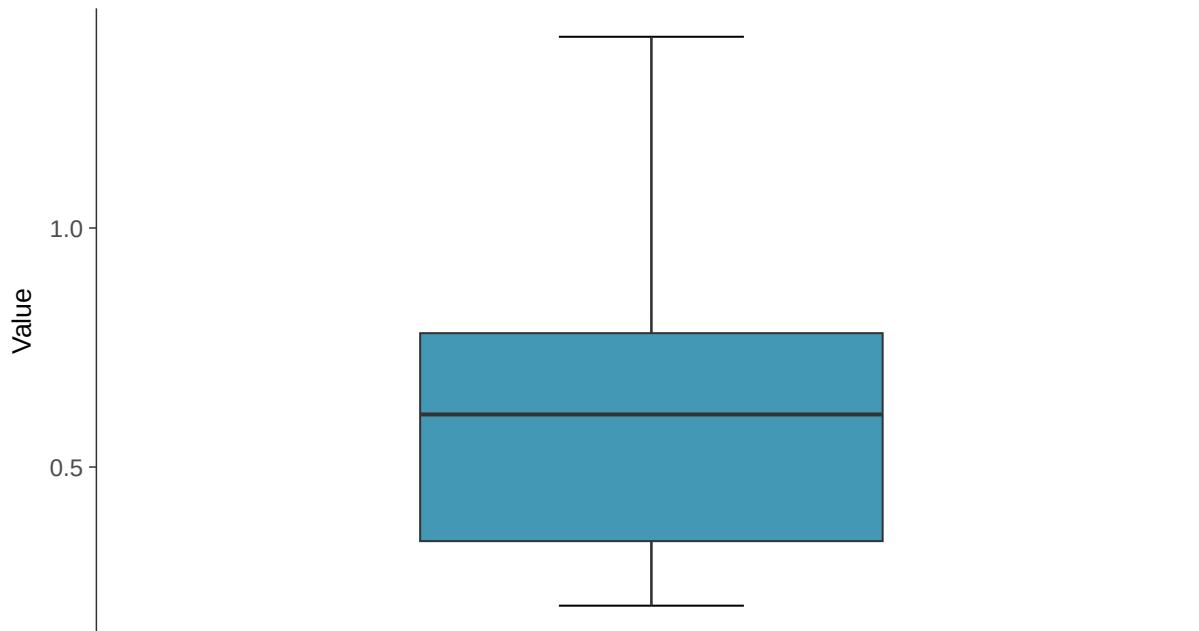
Histogram

Fluoride (App IV), MW-11 (mg/L)



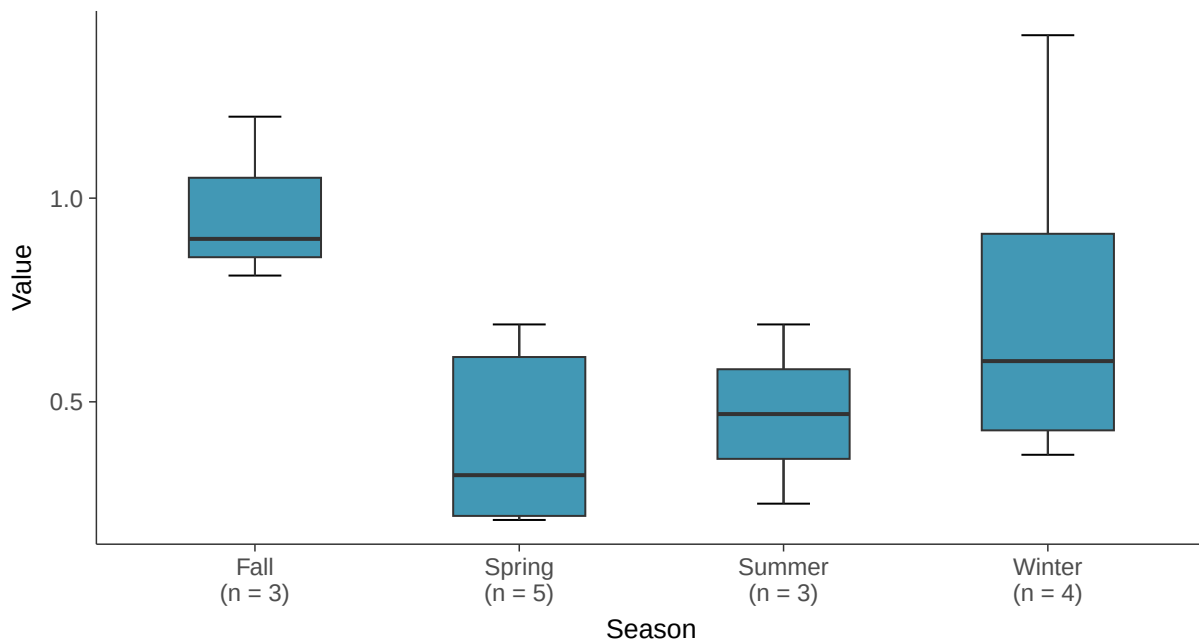
Boxplot

Fluoride (App IV), MW-11 (mg/L)



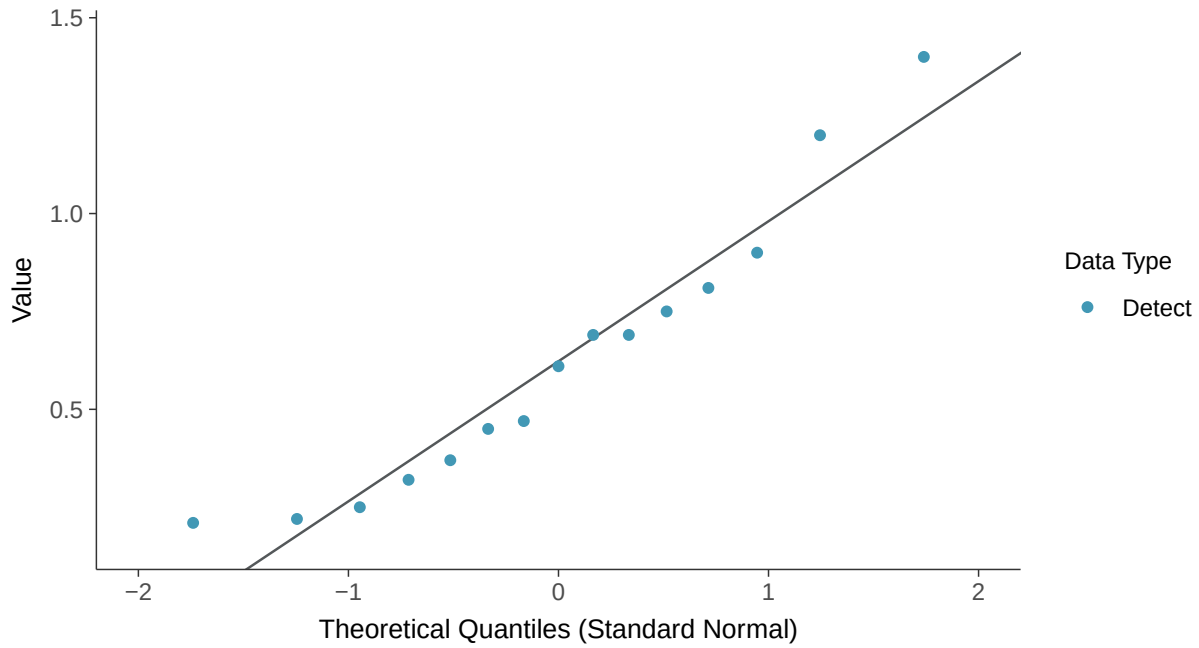
Boxplot by Season

Fluoride (App IV), MW-11 (mg/L)



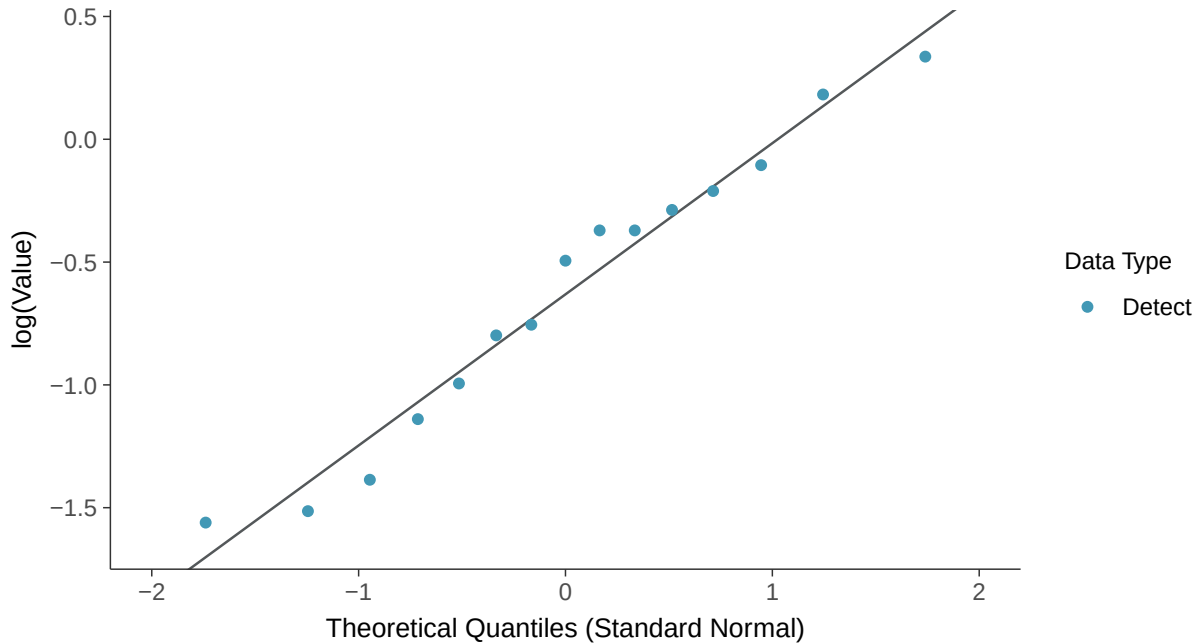
Normal Q-Q plot

Fluoride (App IV), MW-11 (mg/L)



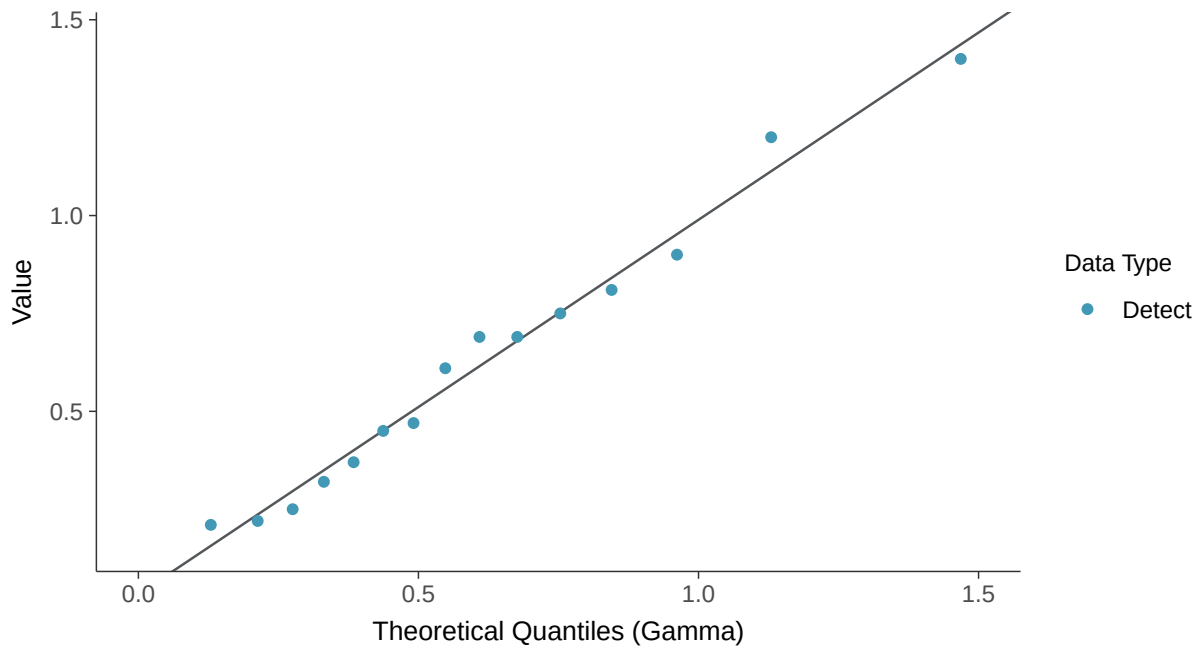
Lognormal Q-Q plot

Fluoride (App IV), MW-11 (mg/L)



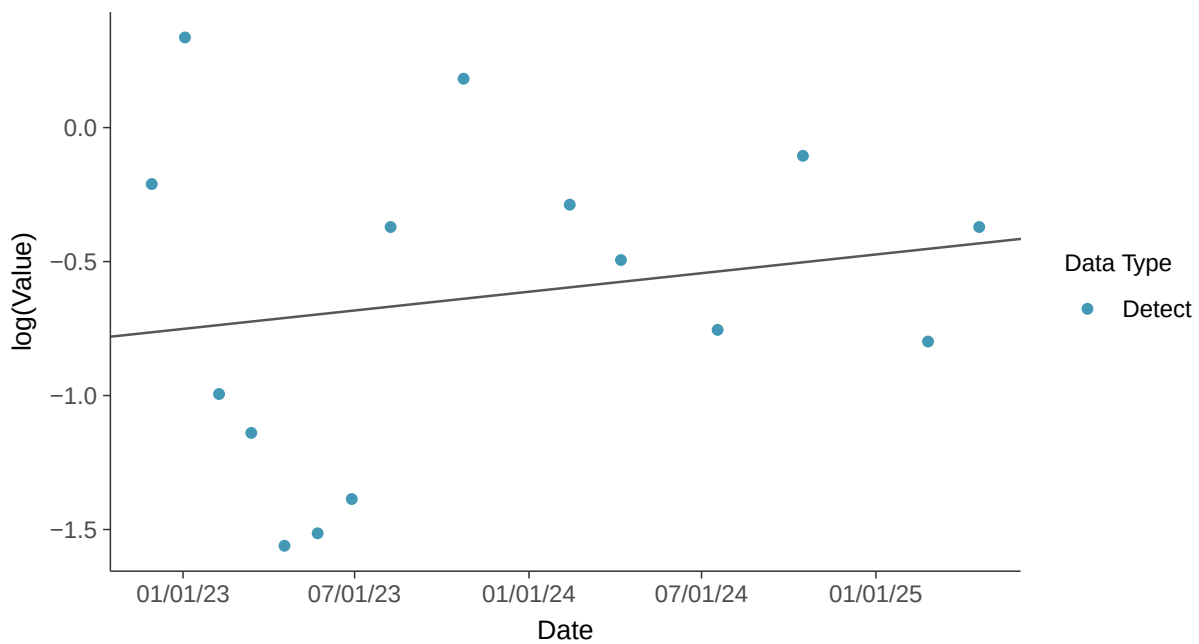
Gamma Q-Q plot

Fluoride (App IV), MW-11 (mg/L)



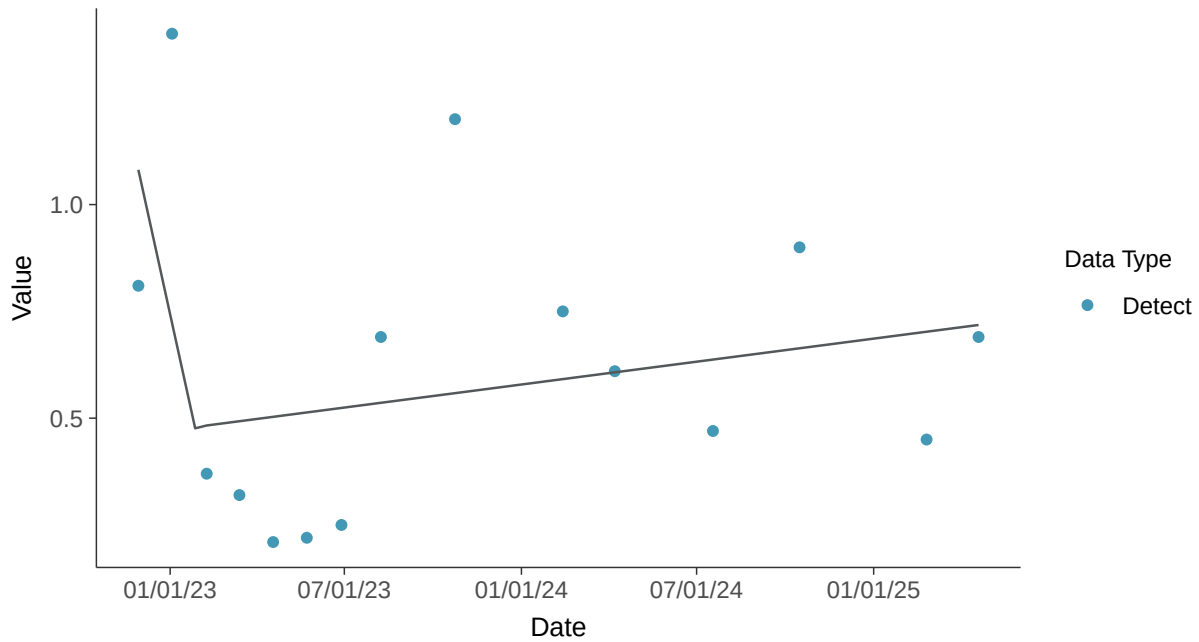
Trend Regression: Lognormal MLE

Fluoride (App IV), MW-11 (mg/L)



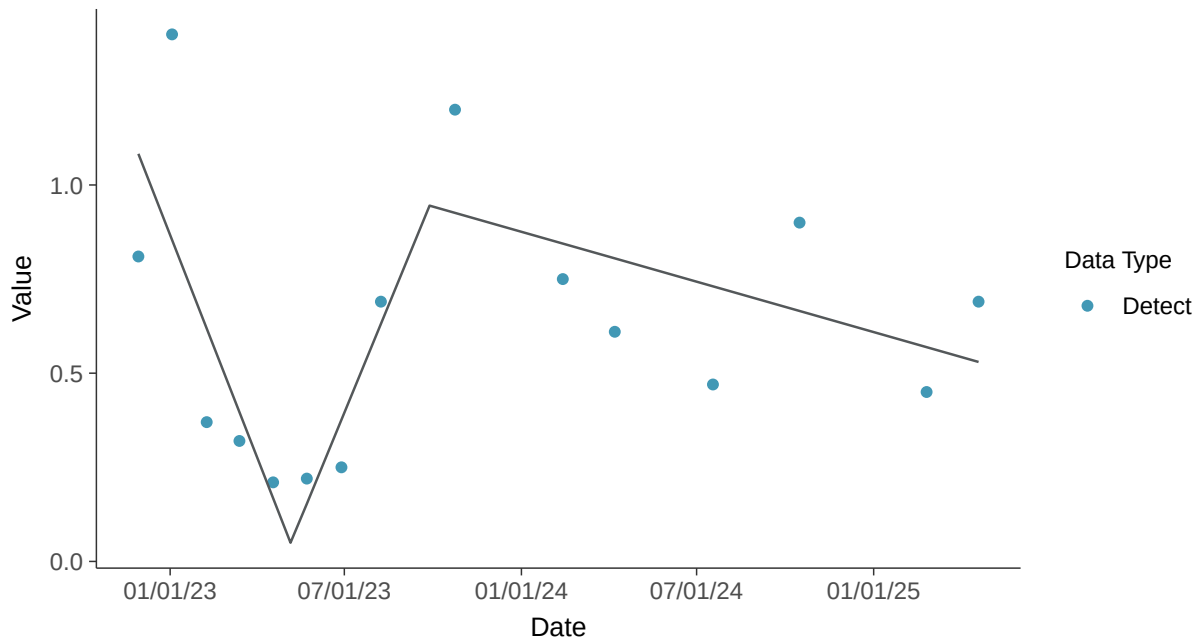
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-11 (mg/L)



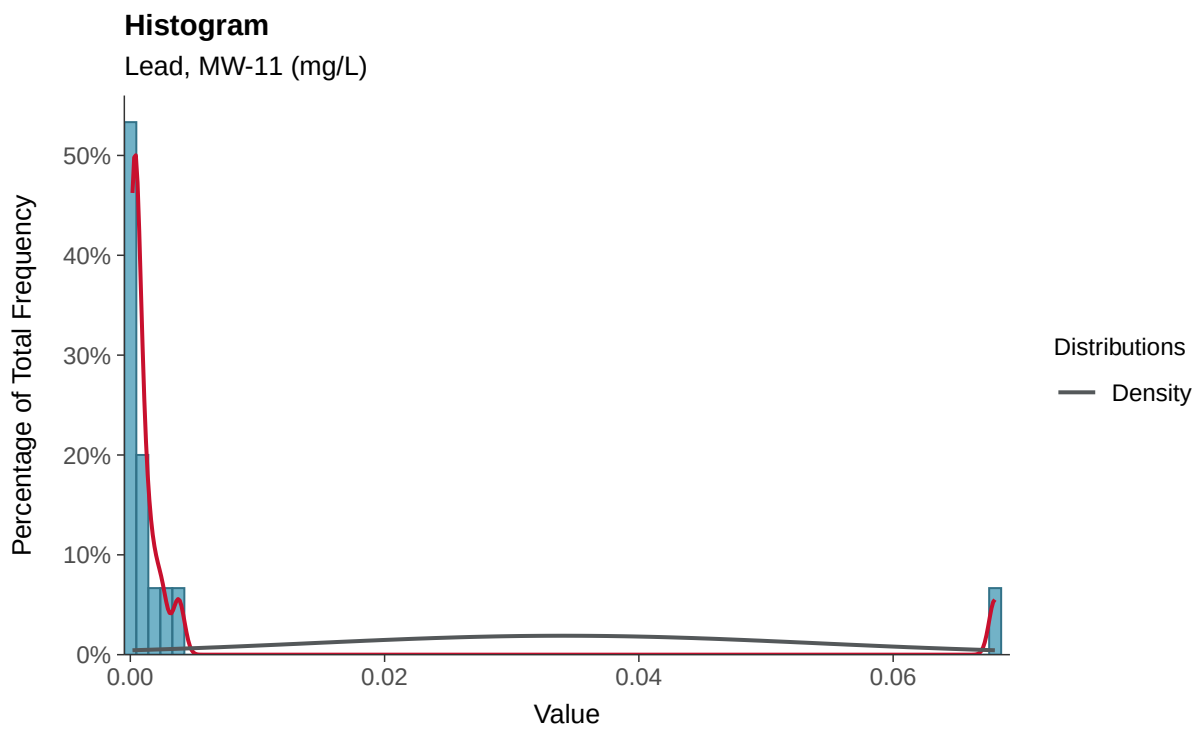
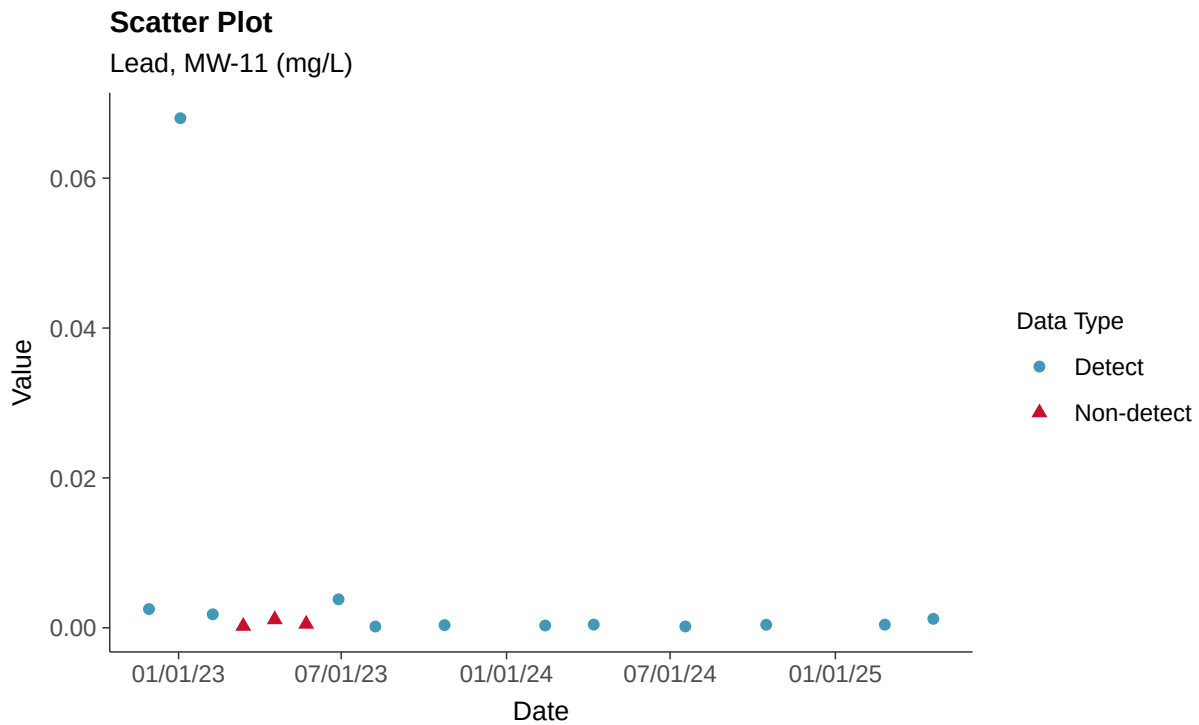
Trend Regression: Piecewise Linear-Linear-Linear

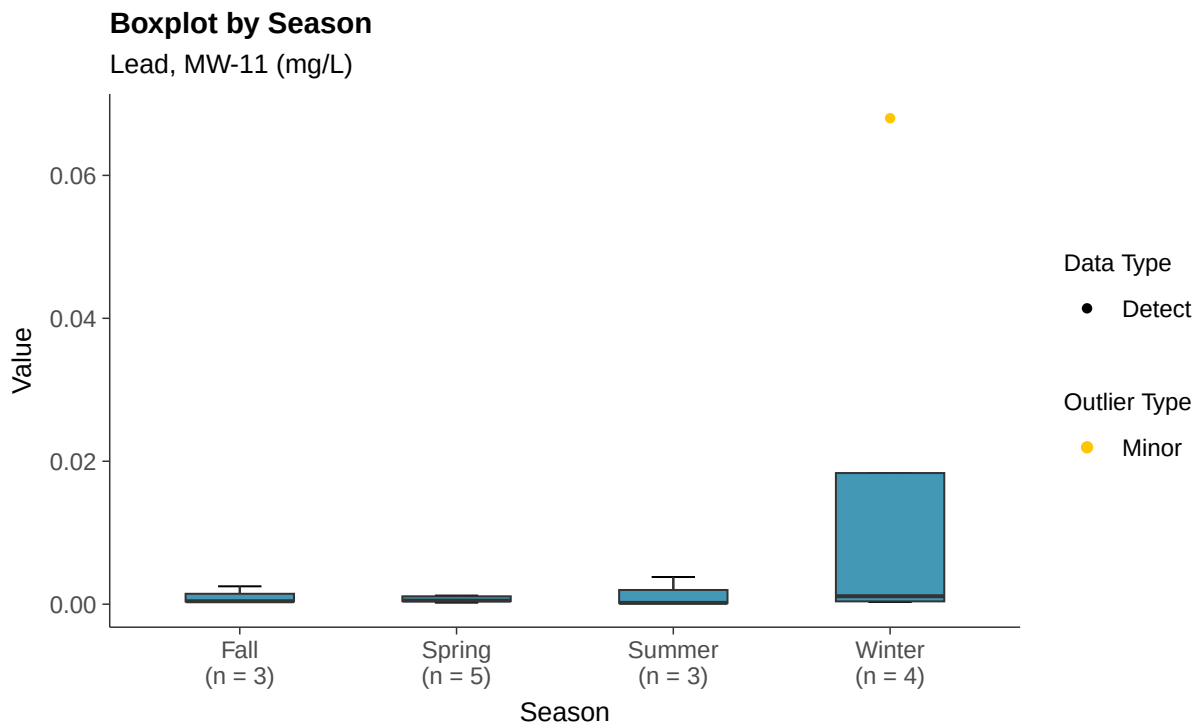
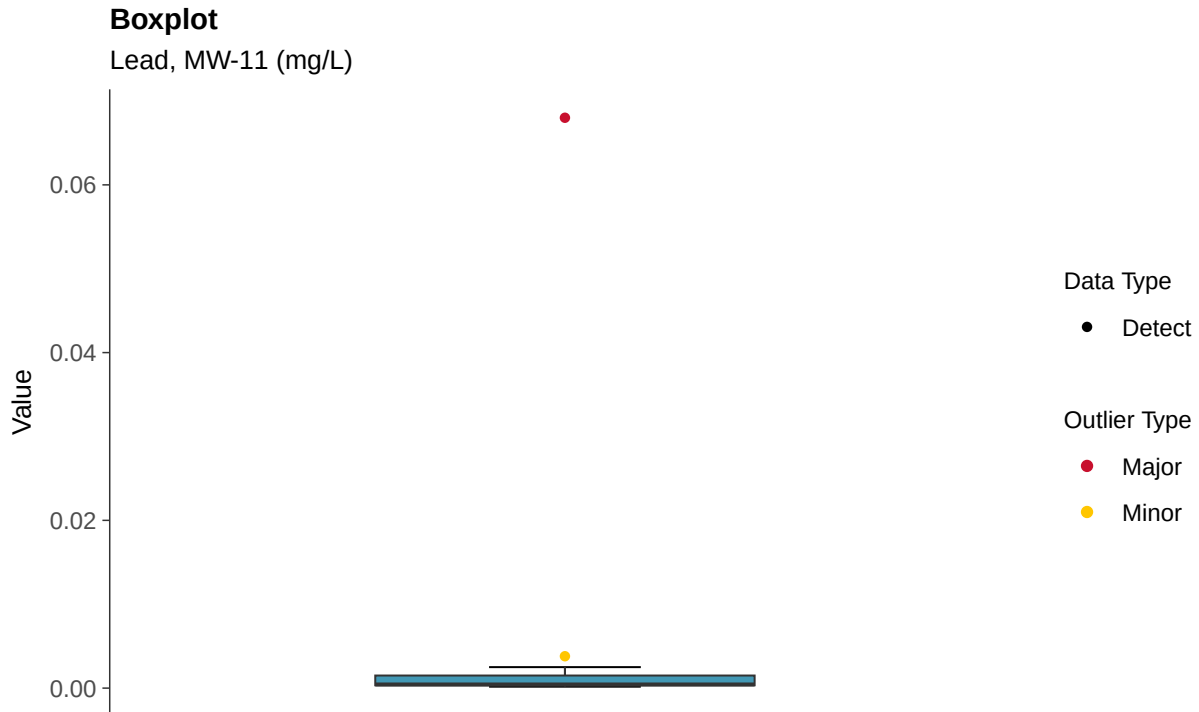
Fluoride (App IV), MW-11 (mg/L)



Appendix IV: Lead, MW-11

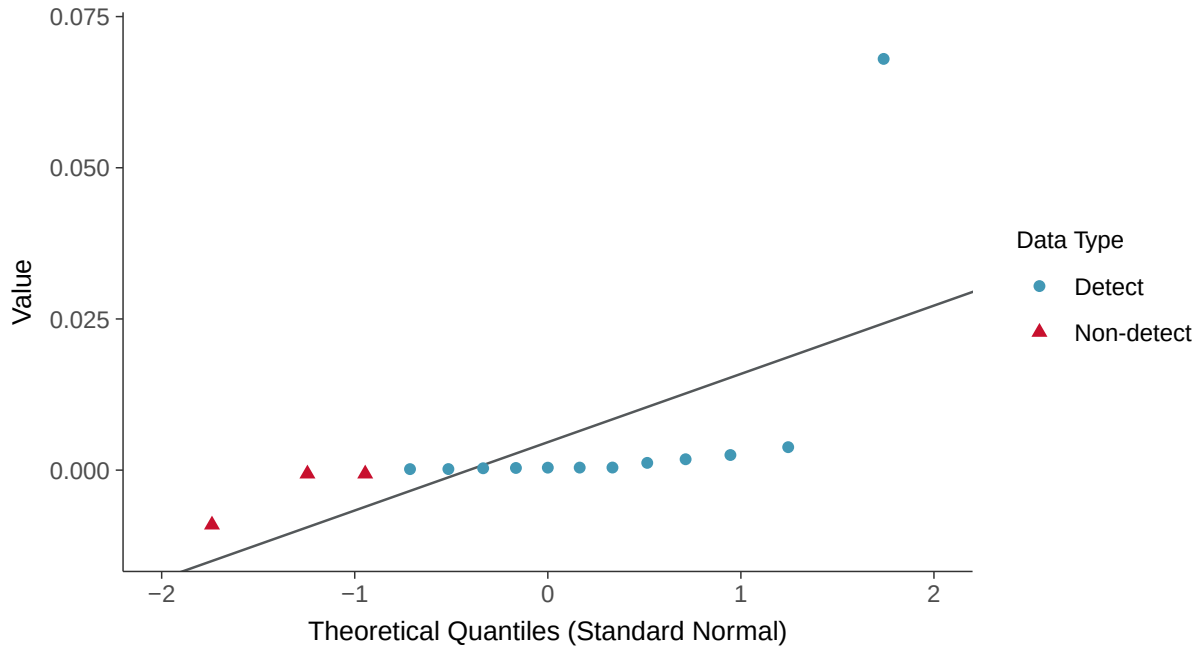
ID: 21_2_4_115





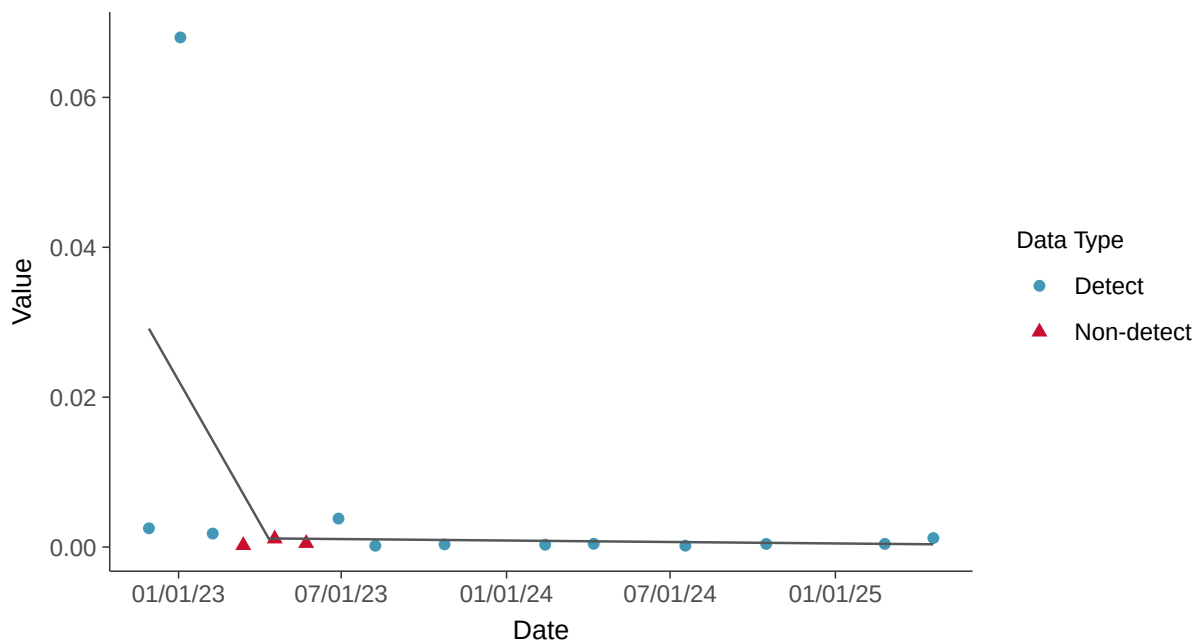
Normal Q-Q plot using ROS Imputed Estimates

Lead, MW-11 (mg/L)



Trend Regression: Piecewise Linear-Linear

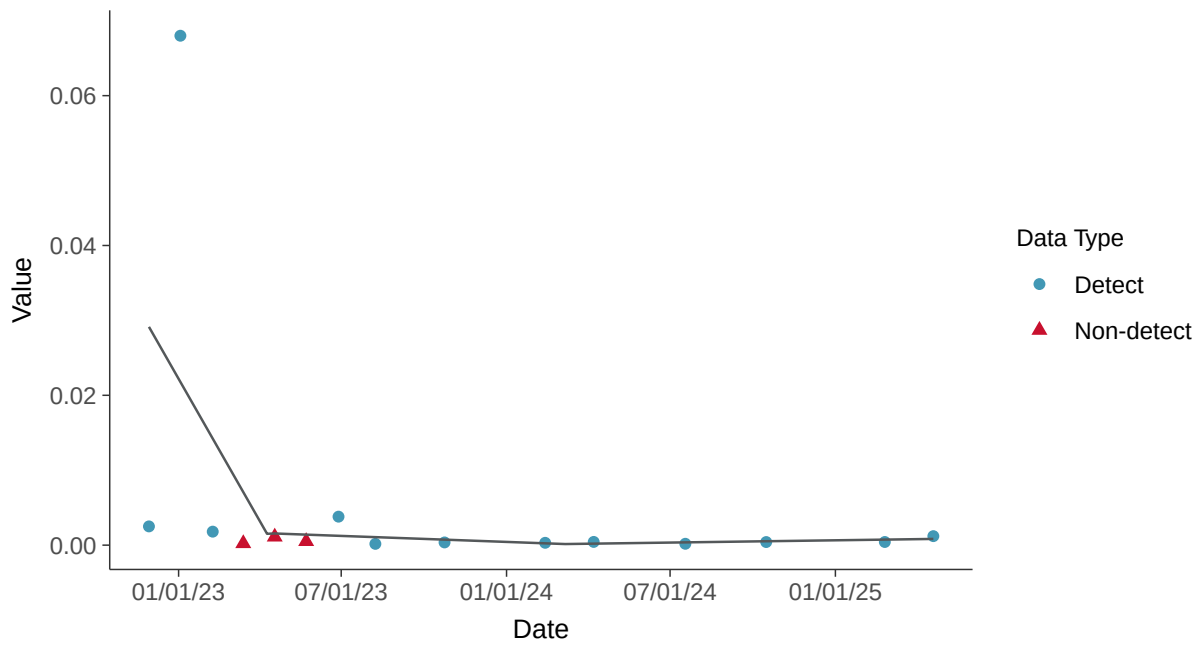
Lead, MW-11 (mg/L)





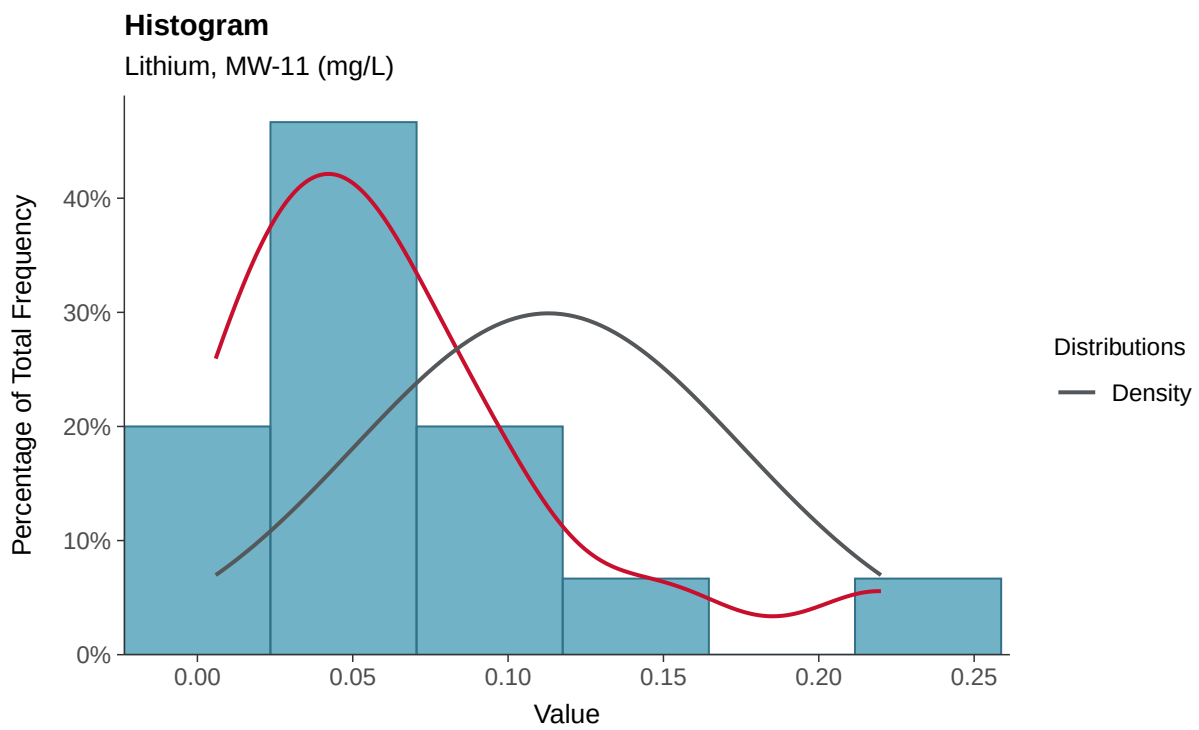
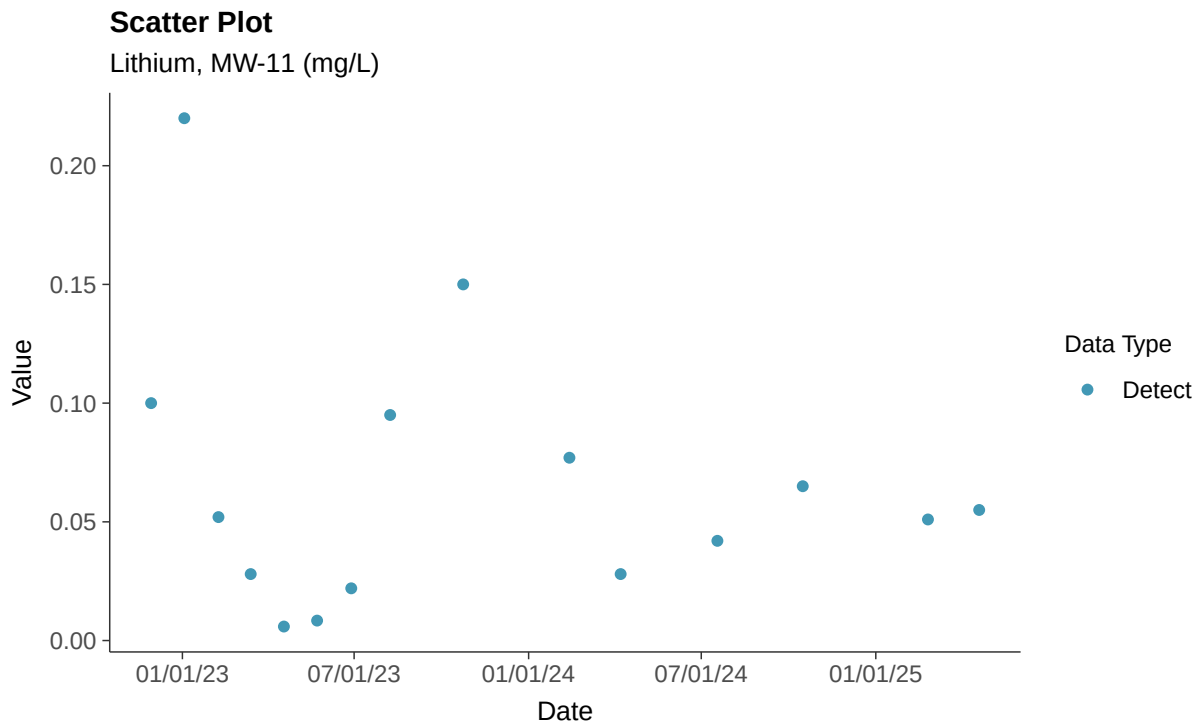
Trend Regression: Piecewise Linear-Linear-Linear

Lead, MW-11 (mg/L)



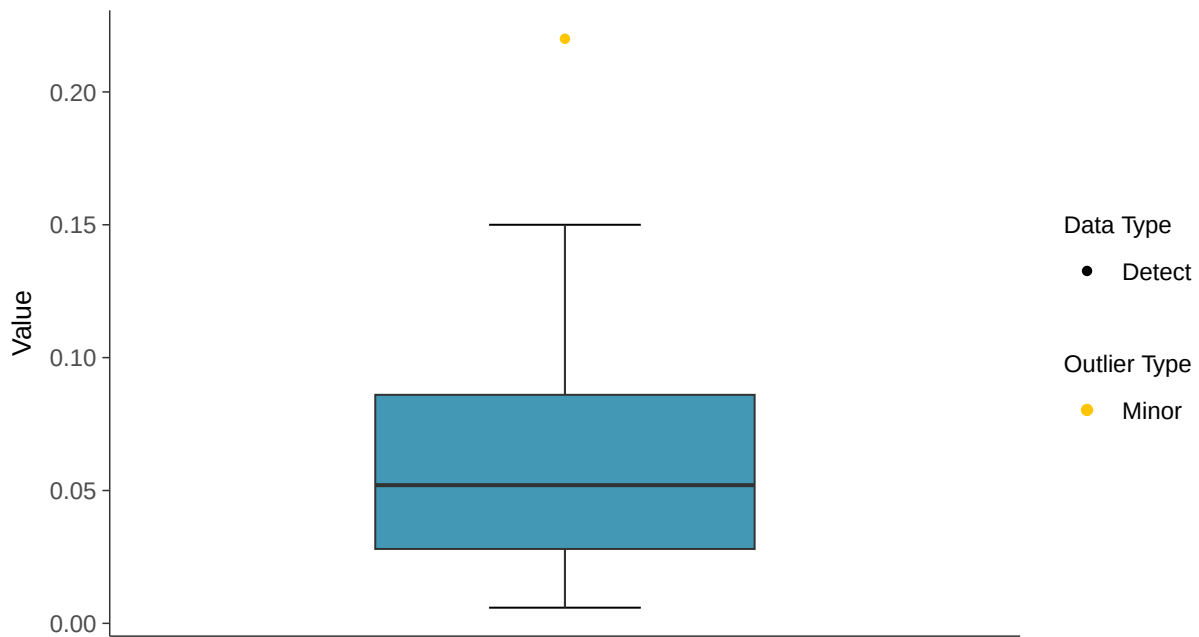
Appendix IV: Lithium, MW-11

ID: 21_2_4_116



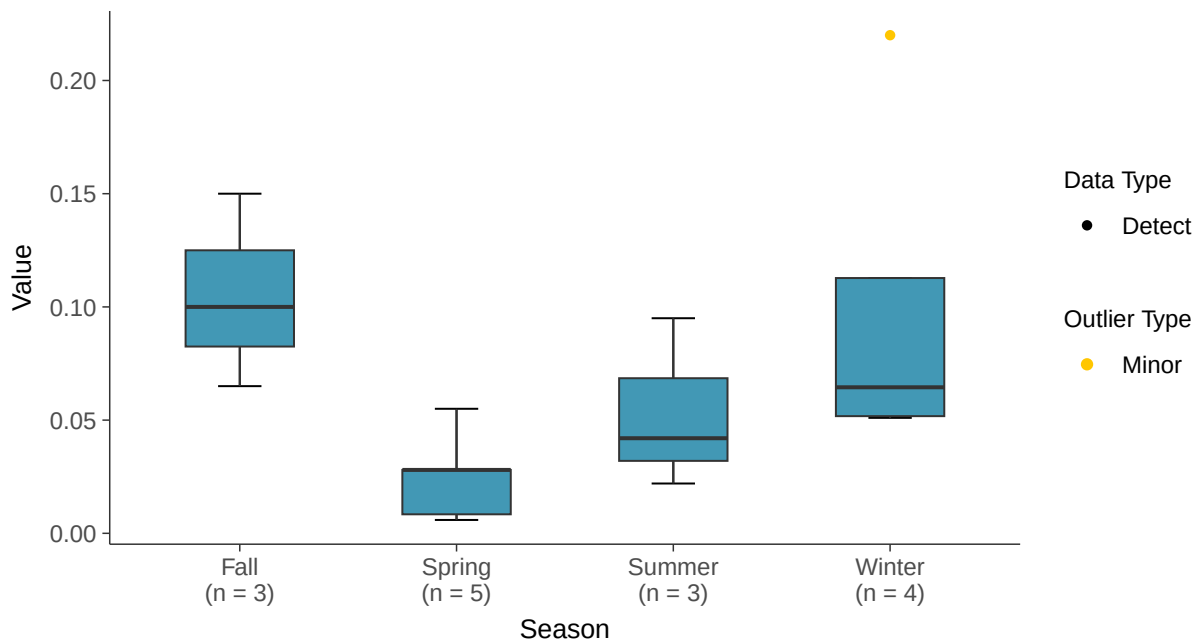
Boxplot

Lithium, MW-11 (mg/L)



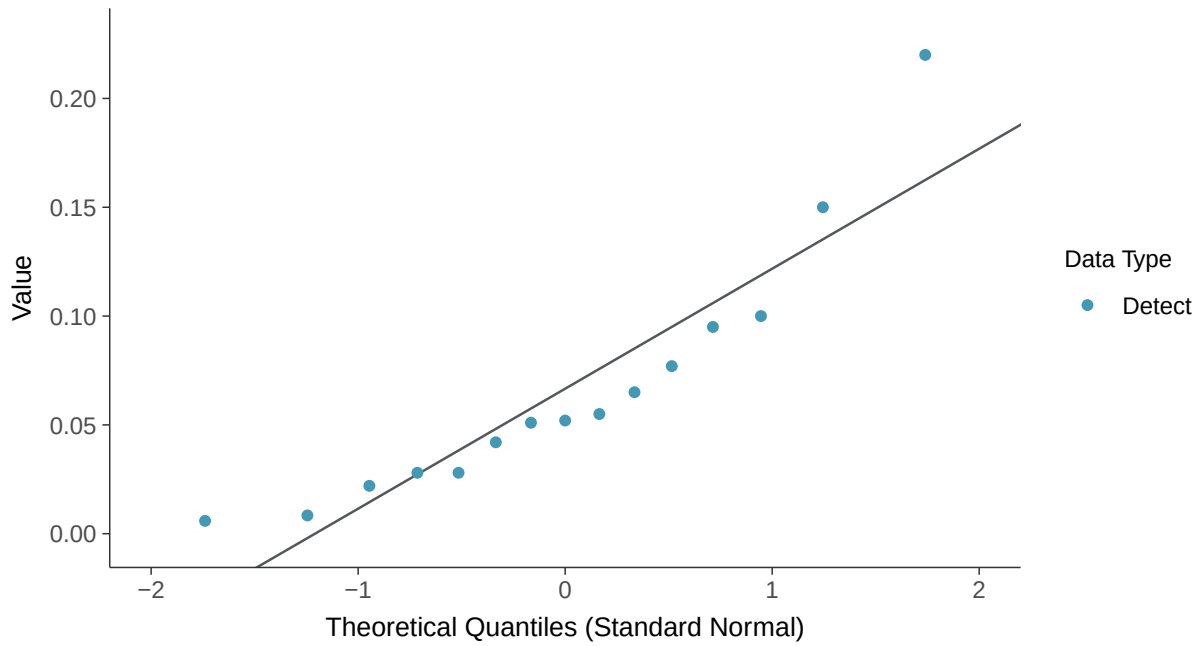
Boxplot by Season

Lithium, MW-11 (mg/L)



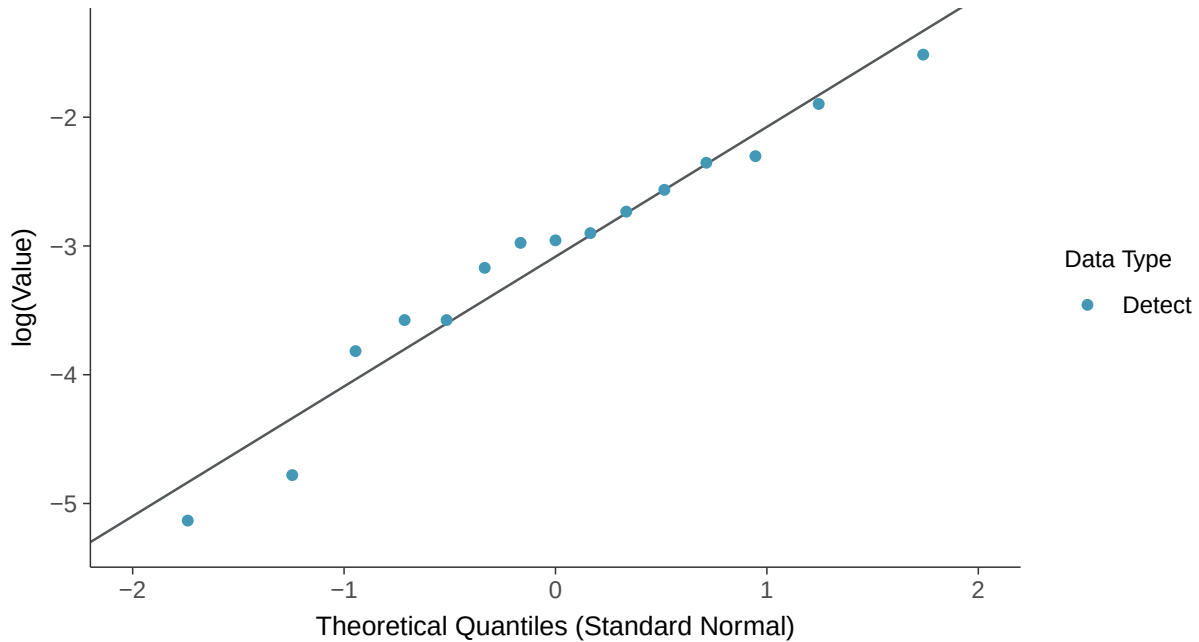
Normal Q-Q plot

Lithium, MW-11 (mg/L)



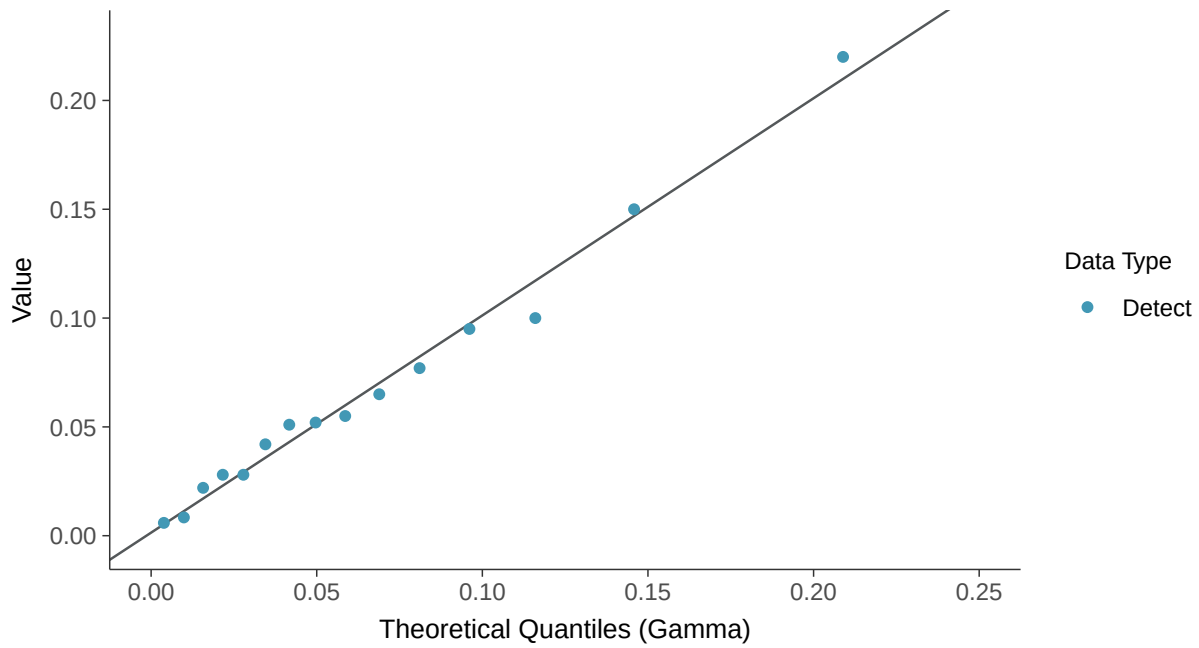
Lognormal Q-Q plot

Lithium, MW-11 (mg/L)



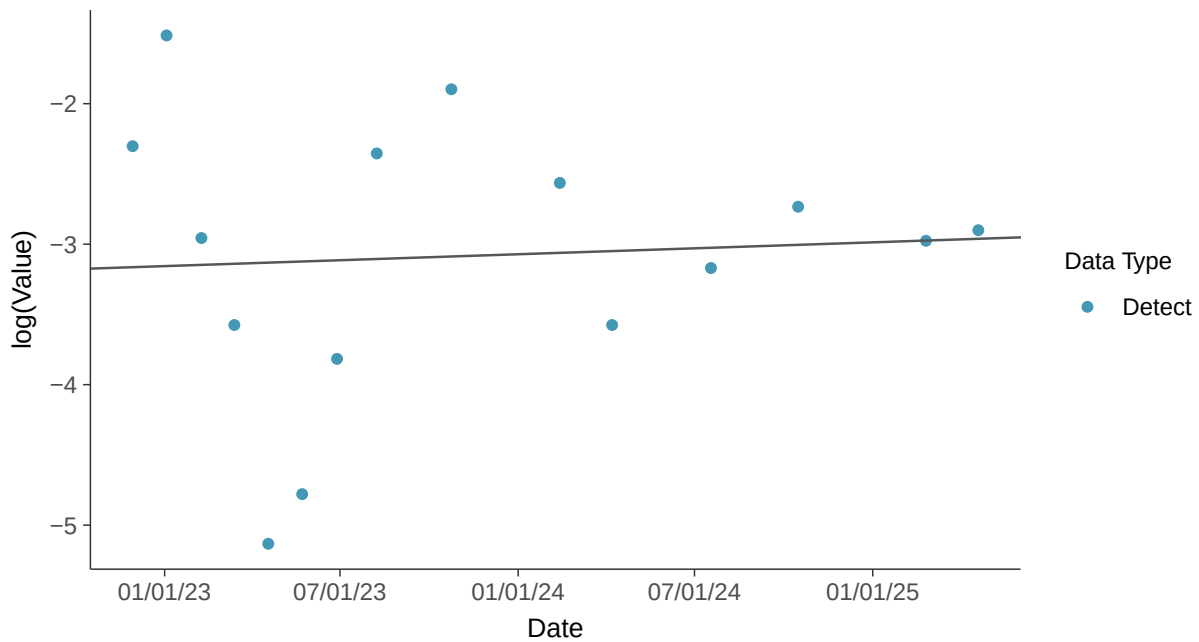
Gamma Q-Q plot

Lithium, MW-11 (mg/L)



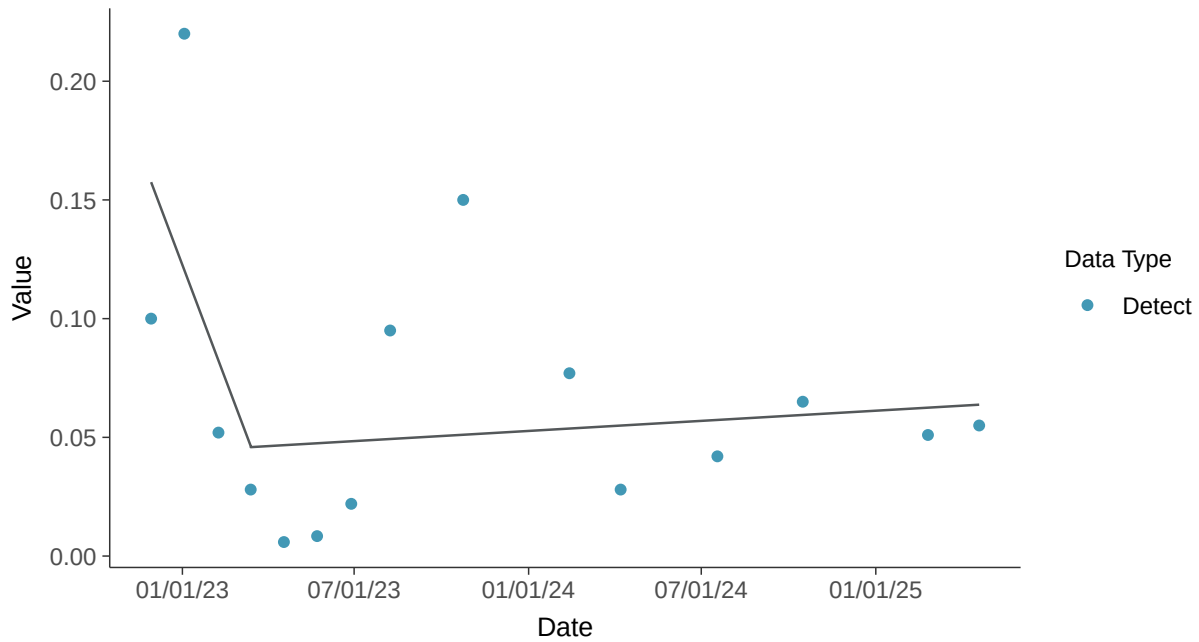
Trend Regression: Lognormal MLE

Lithium, MW-11 (mg/L)



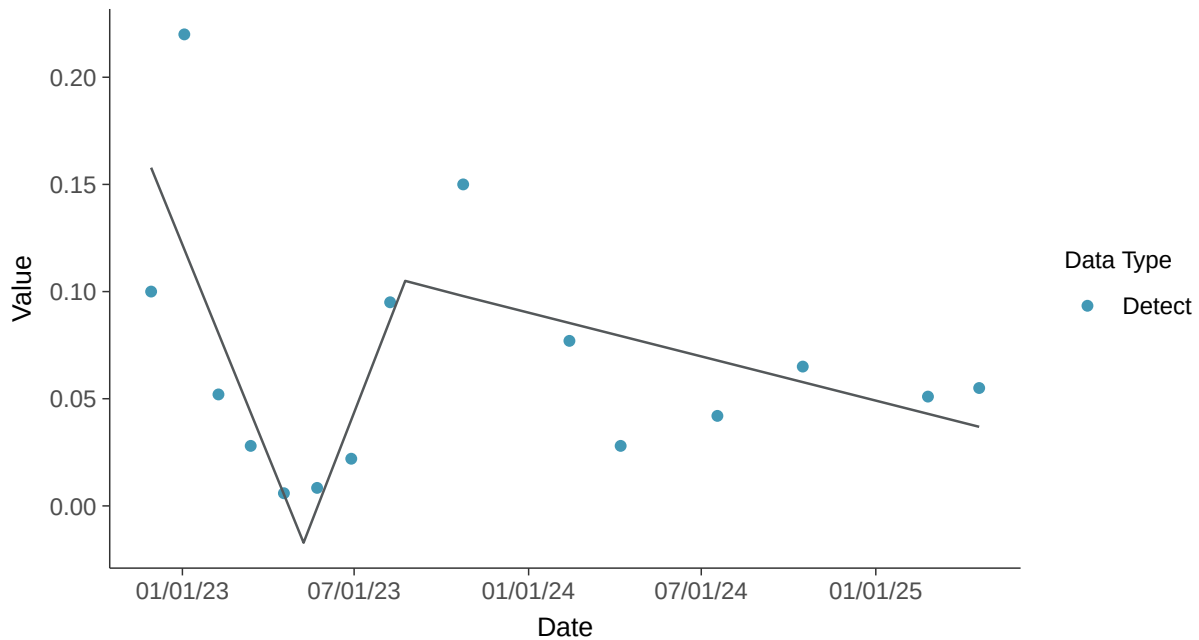
Trend Regression: Piecewise Linear-Linear

Lithium, MW-11 (mg/L)



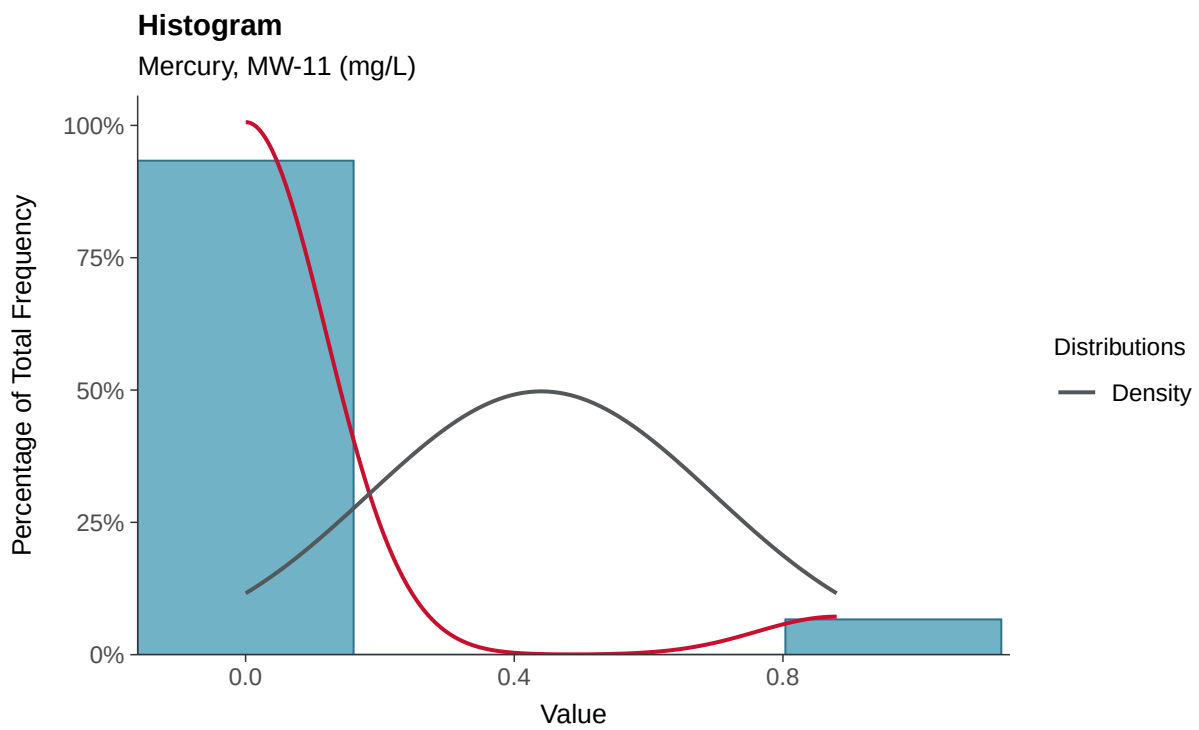
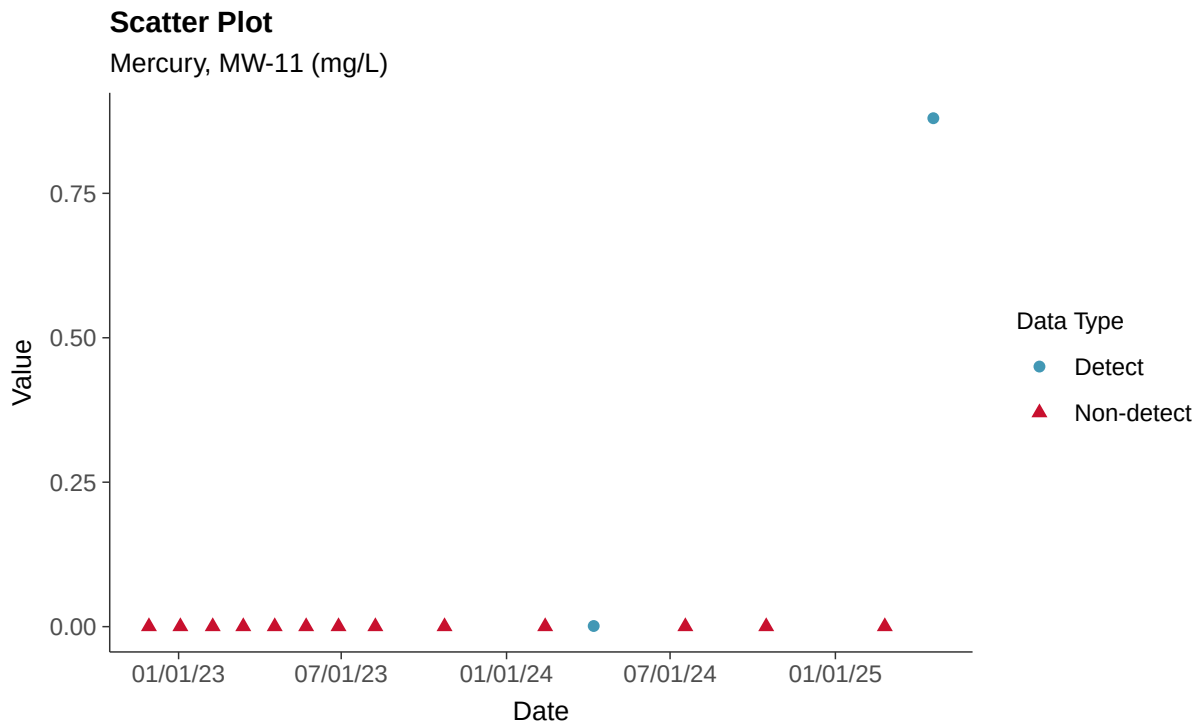
Trend Regression: Piecewise Linear-Linear-Linear

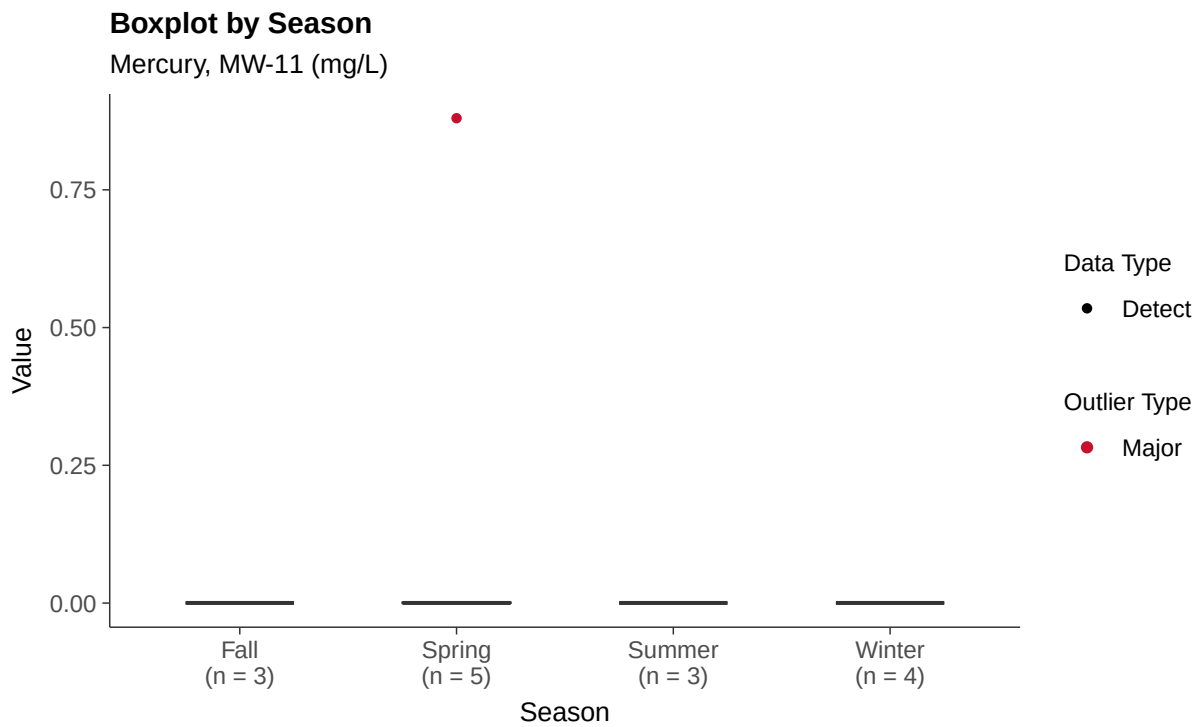
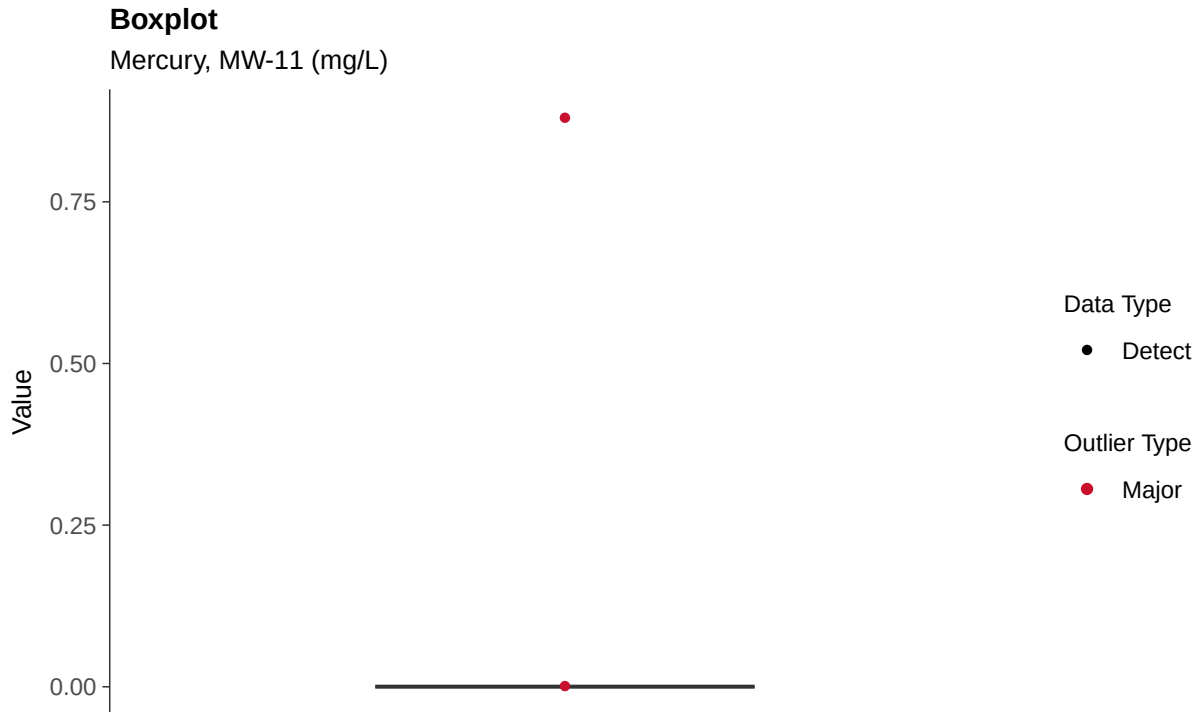
Lithium, MW-11 (mg/L)



Appendix IV: Mercury, MW-11

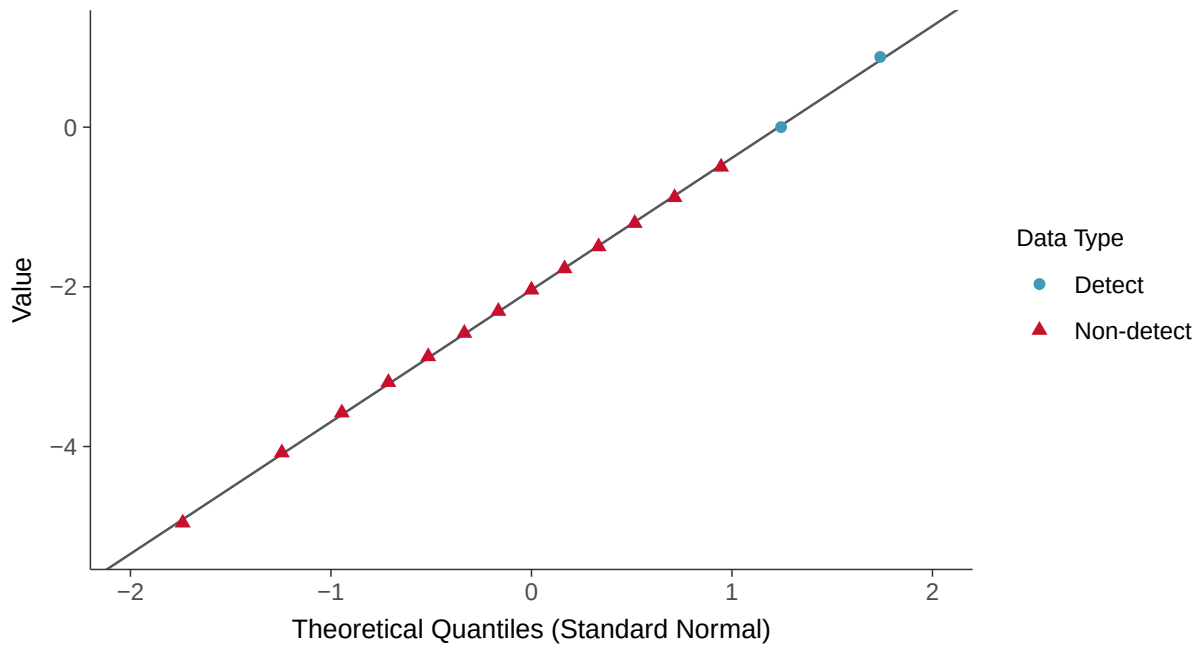
ID: 21_2_4_117





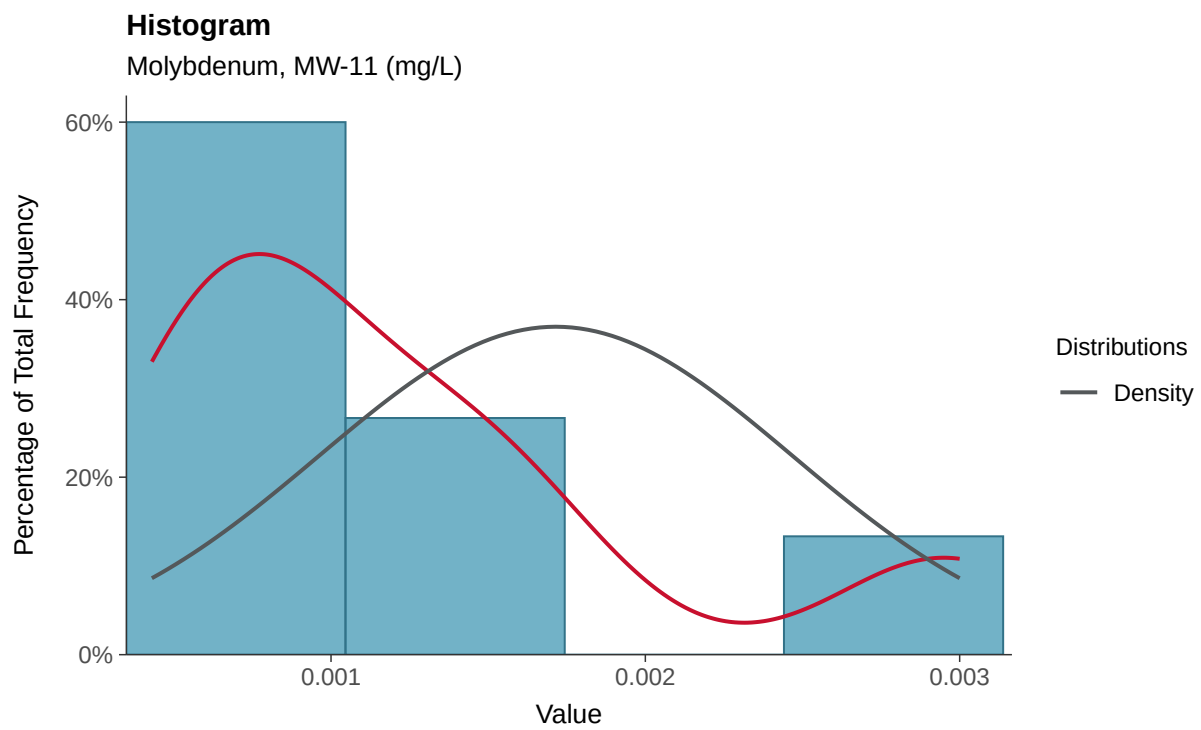
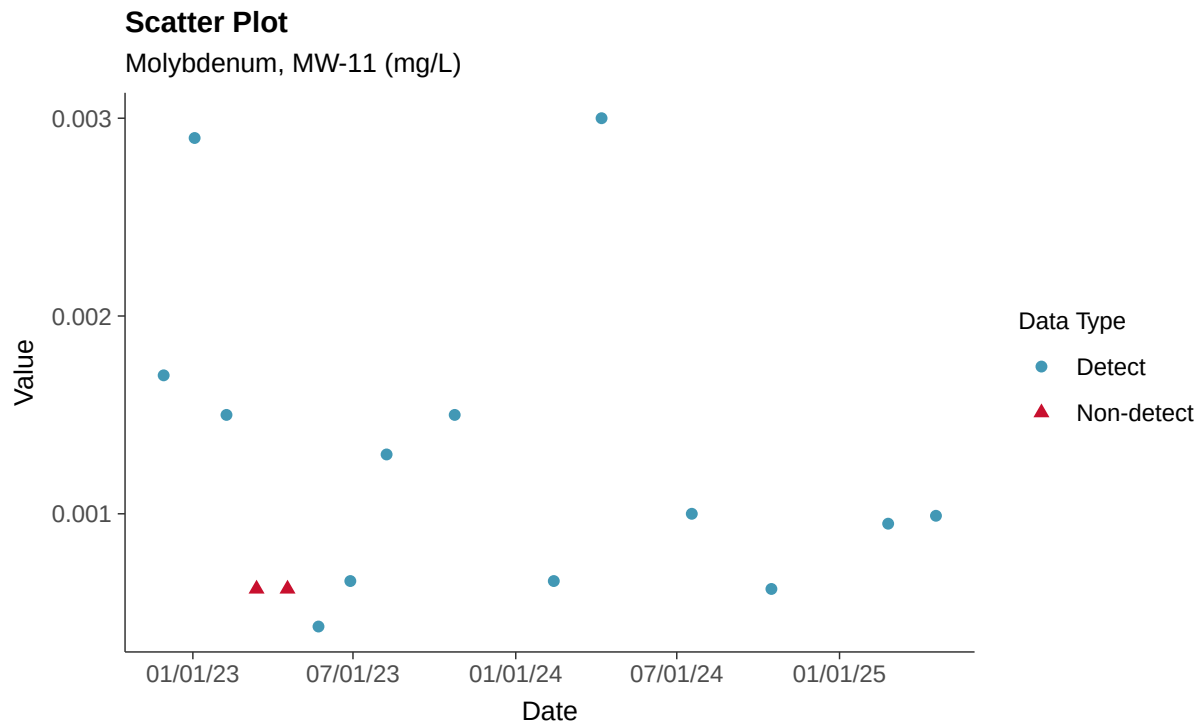
Normal Q-Q plot using ROS Imputed Estimates

Mercury, MW-11 (mg/L)



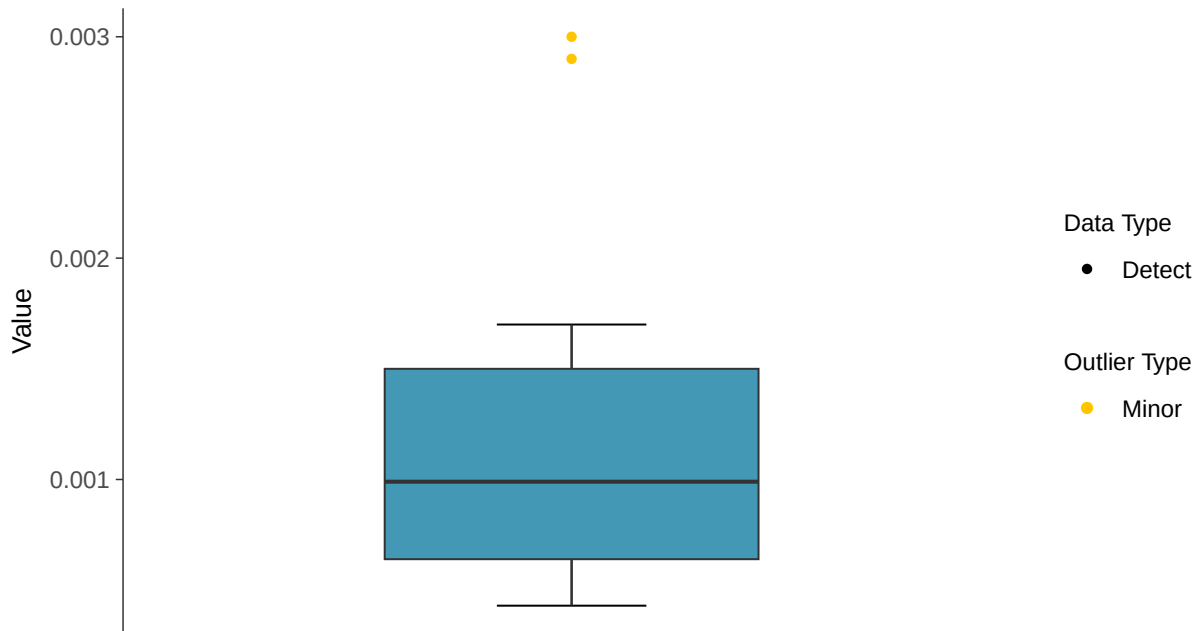
Appendix IV: Molybdenum, MW-11

ID: 21_2_4_118



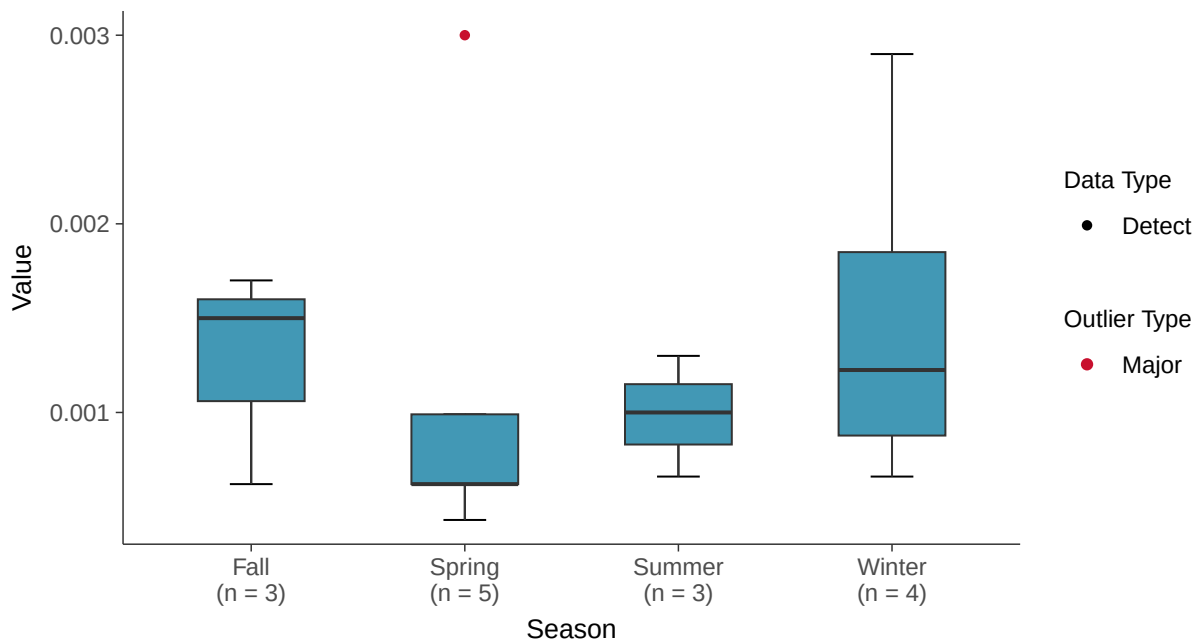
Boxplot

Molybdenum, MW-11 (mg/L)



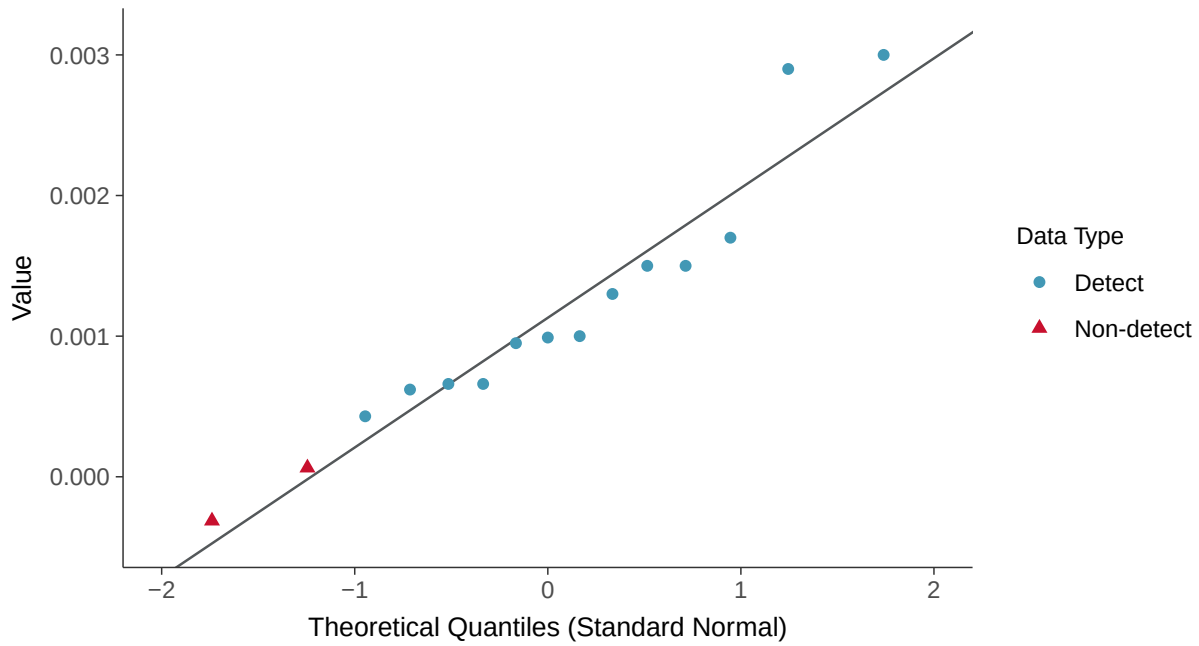
Boxplot by Season

Molybdenum, MW-11 (mg/L)



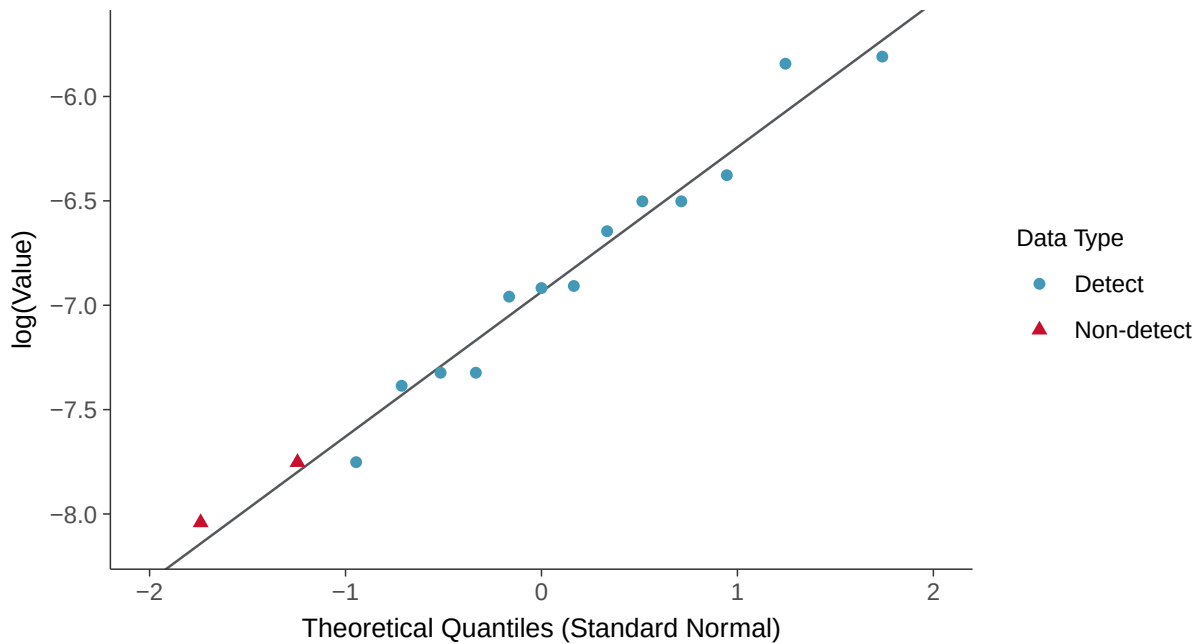
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-11 (mg/L)



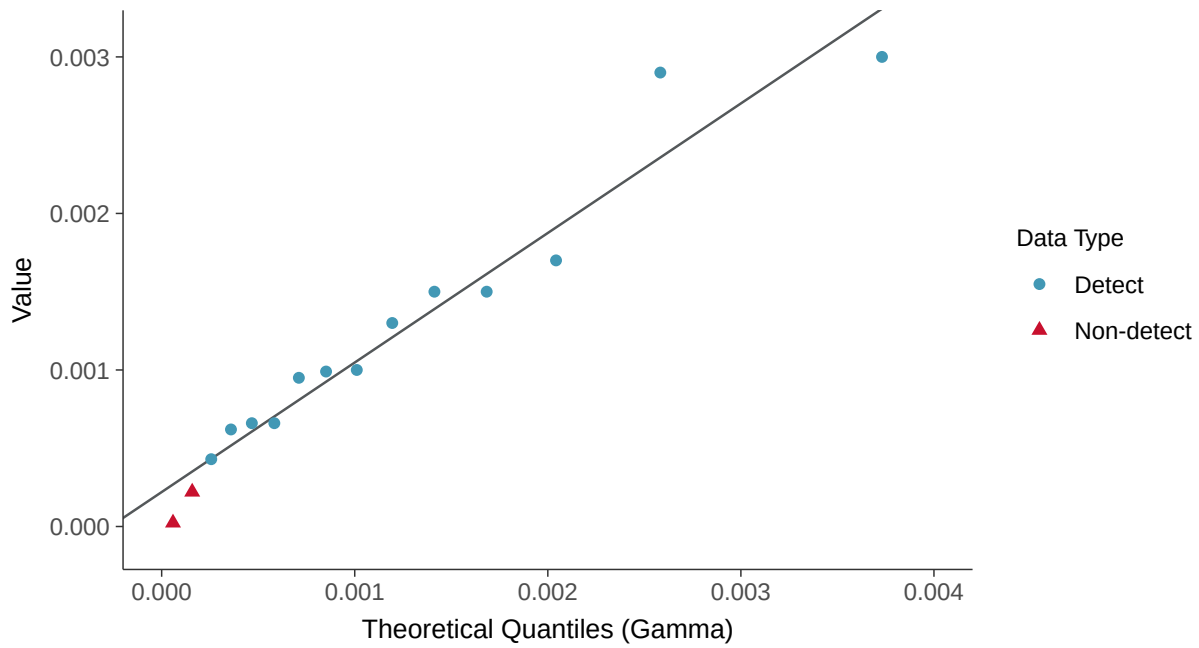
Lognormal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-11 (mg/L)



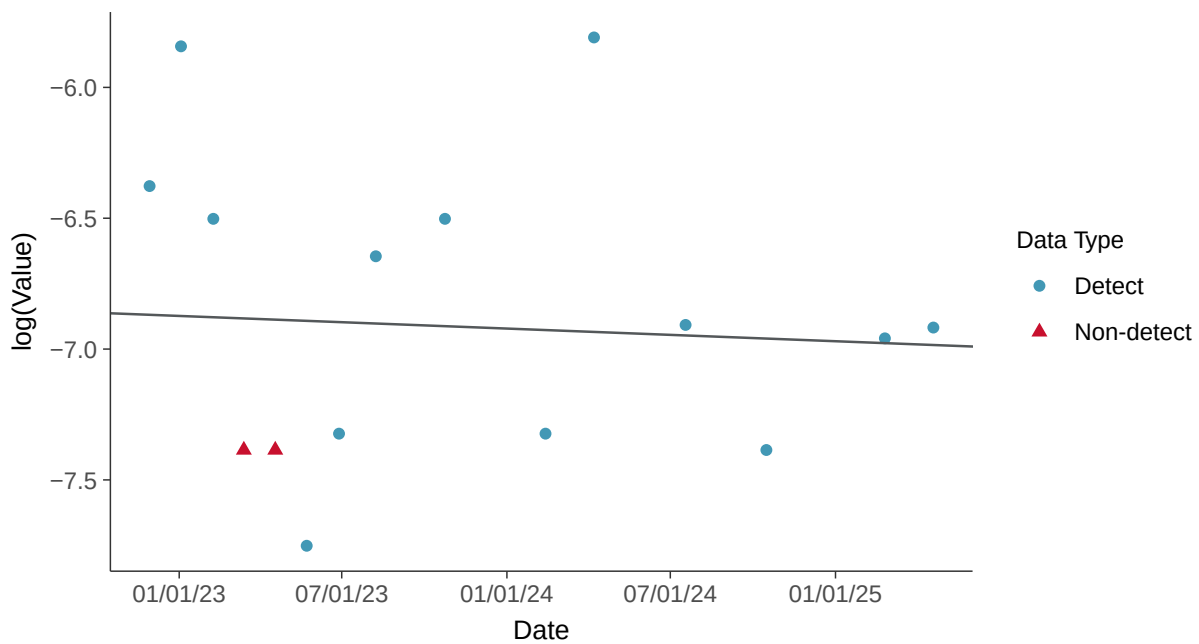
Gamma Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-11 (mg/L)



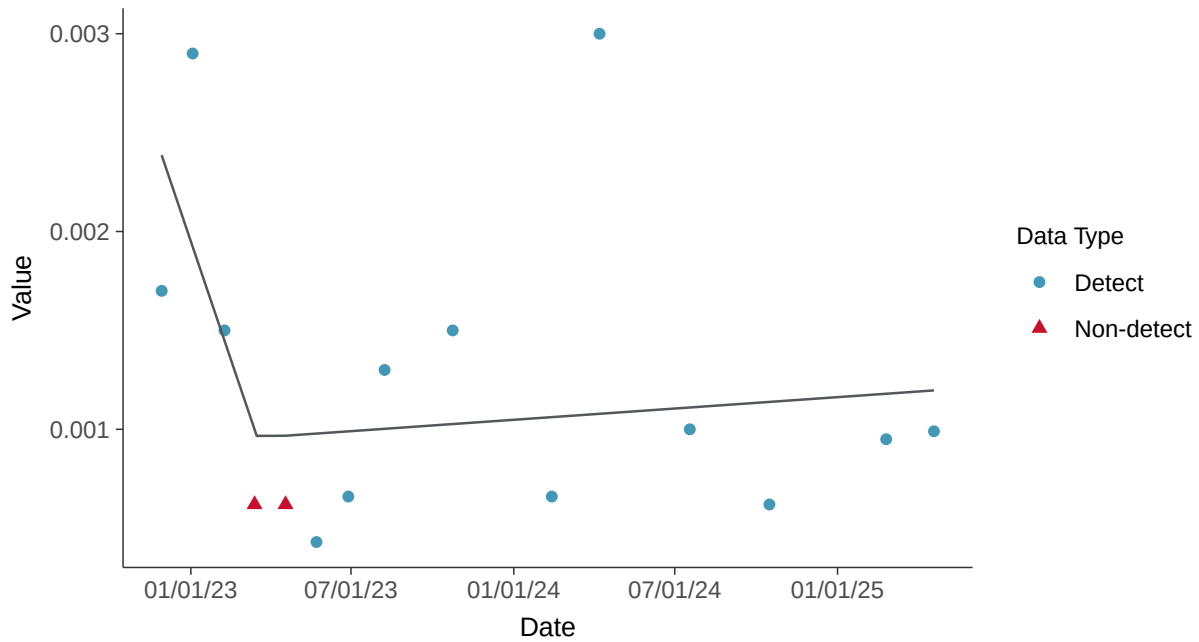
Trend Regression: Lognormal MLE

Molybdenum, MW-11 (mg/L)



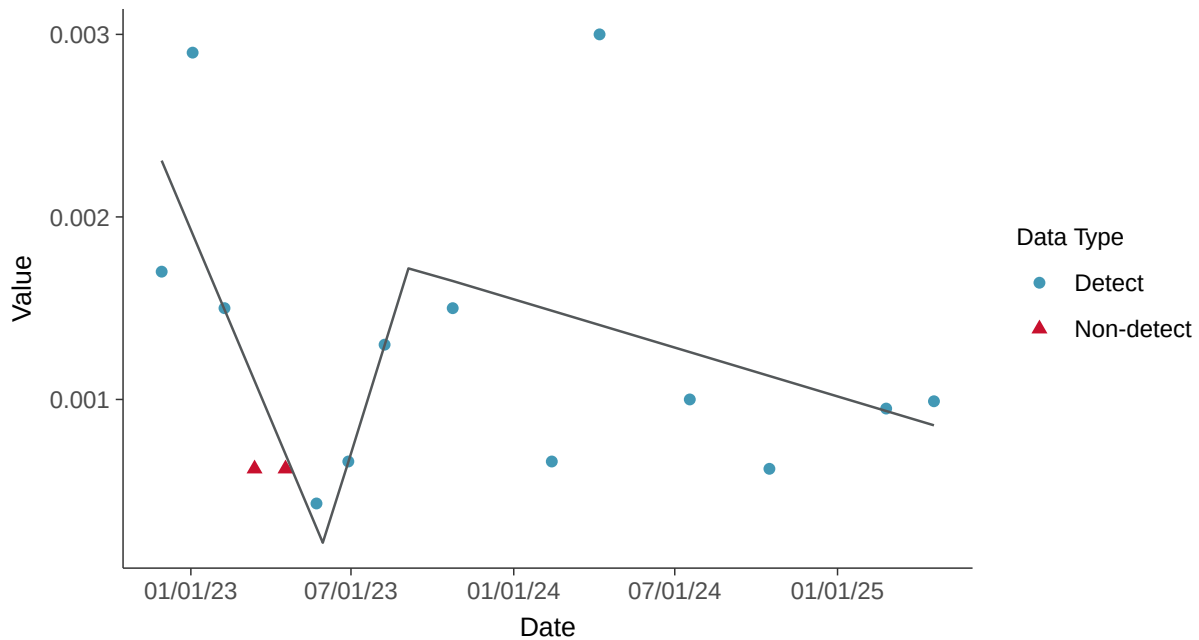
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-11 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-11 (mg/L)

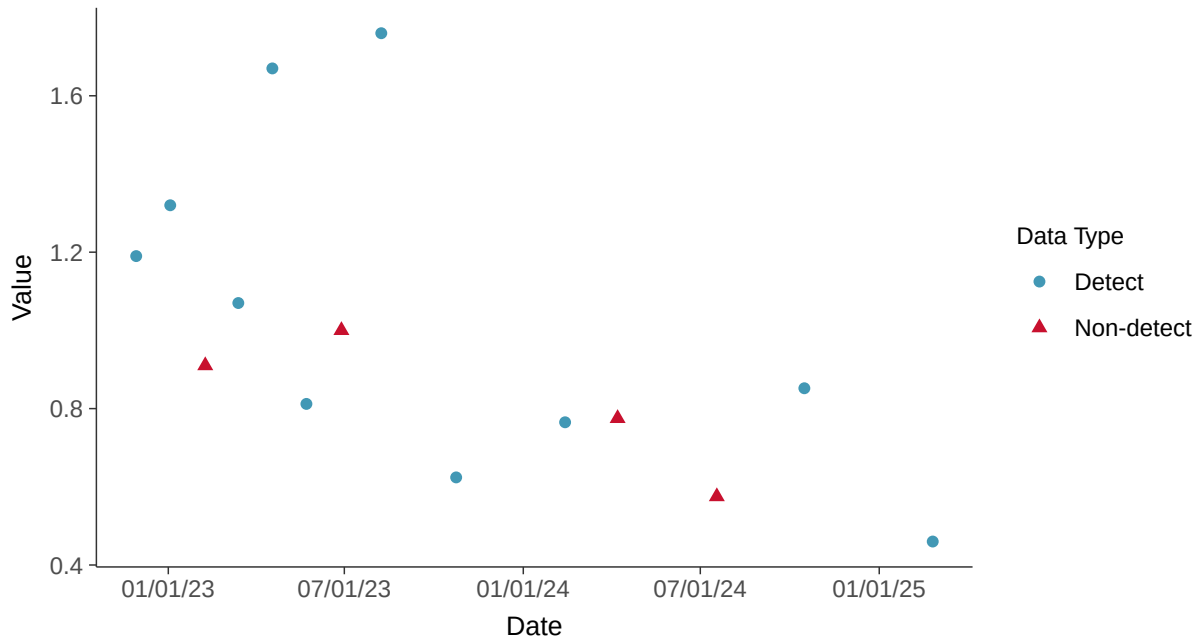


Appendix IV: Radium 226 and 228, MW-11

ID: 21_2_4_121

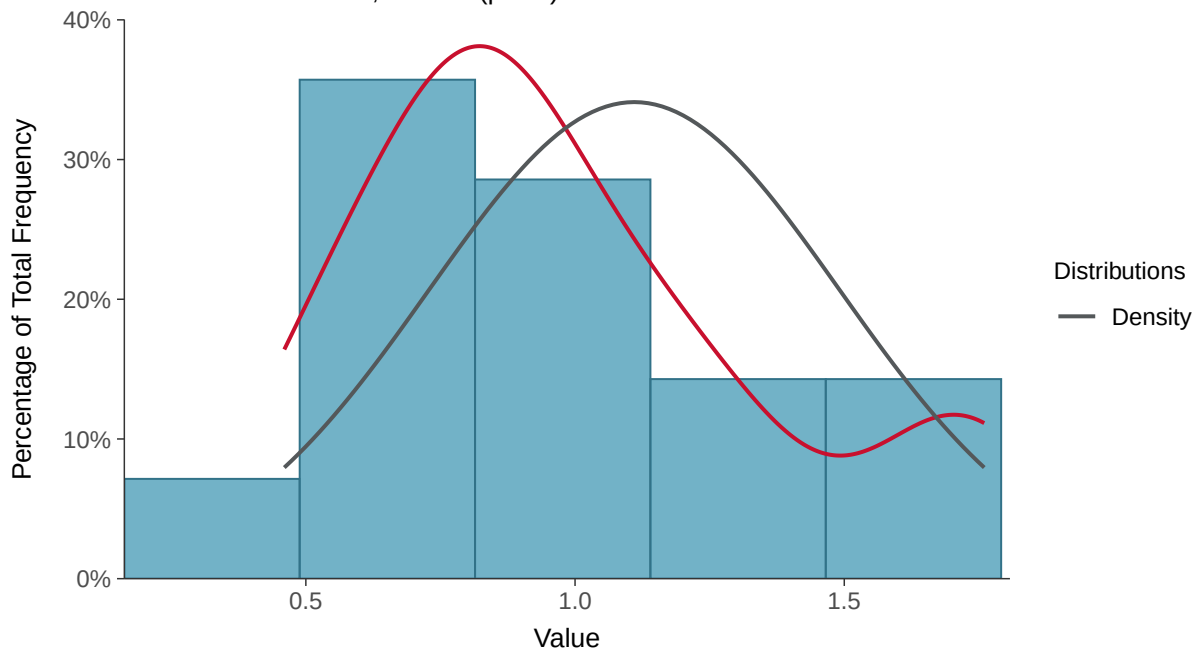
Scatter Plot

Radium 226 and 228, MW-11 (pCi/L)



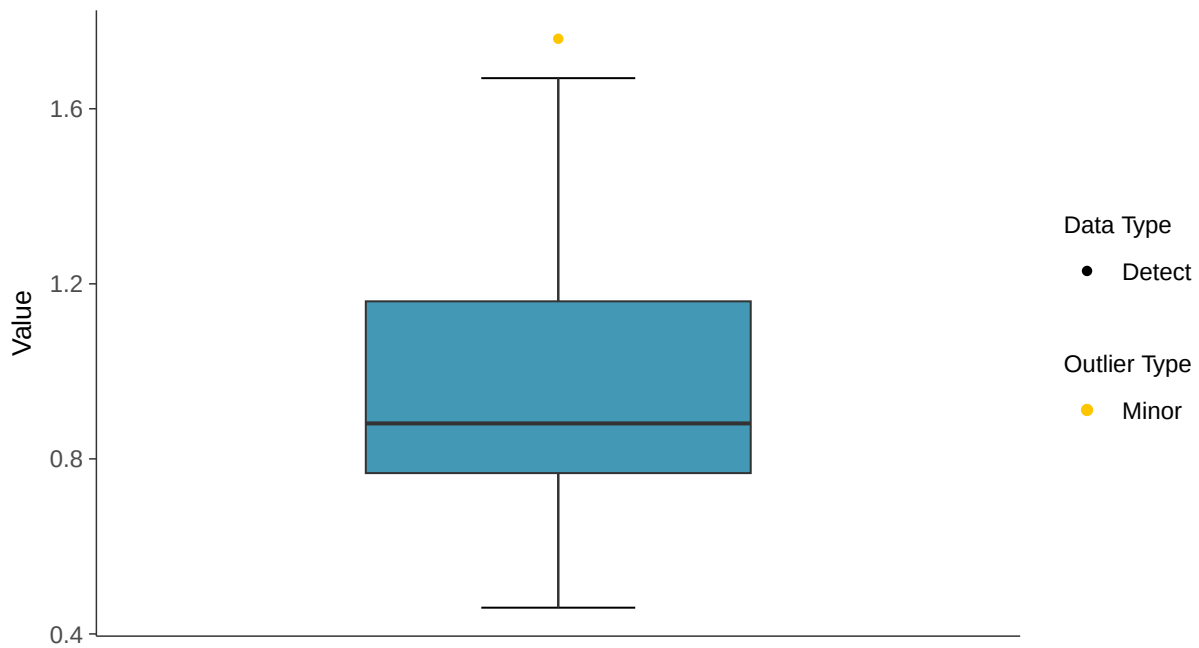
Histogram

Radium 226 and 228, MW-11 (pCi/L)



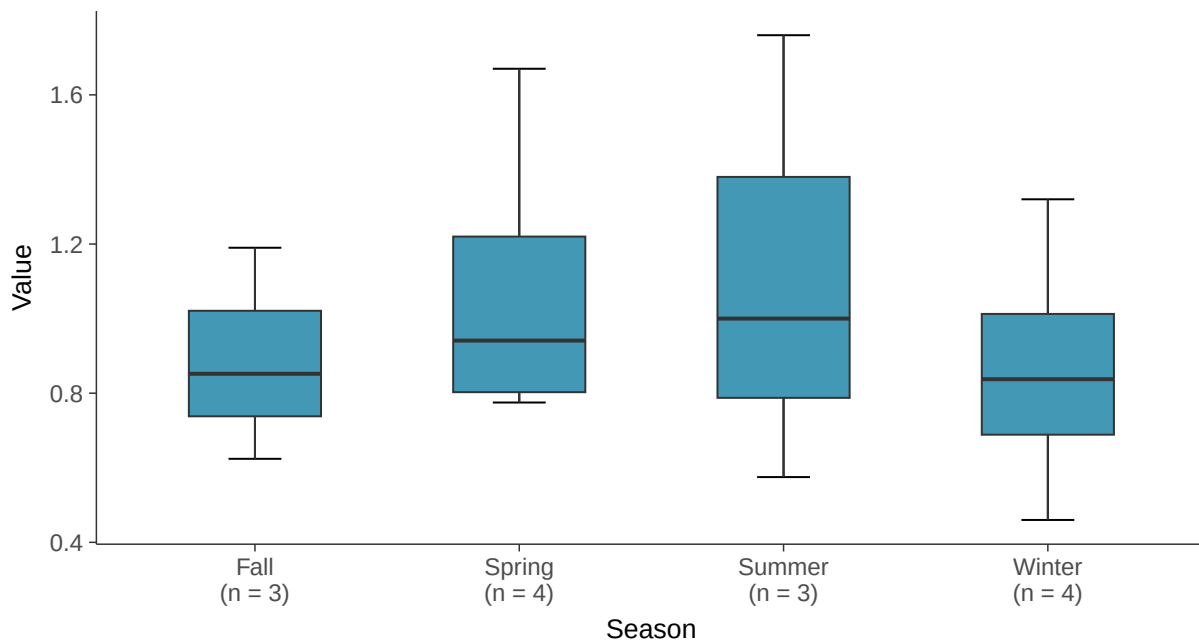
Boxplot

Radium 226 and 228, MW-11 (pCi/L)



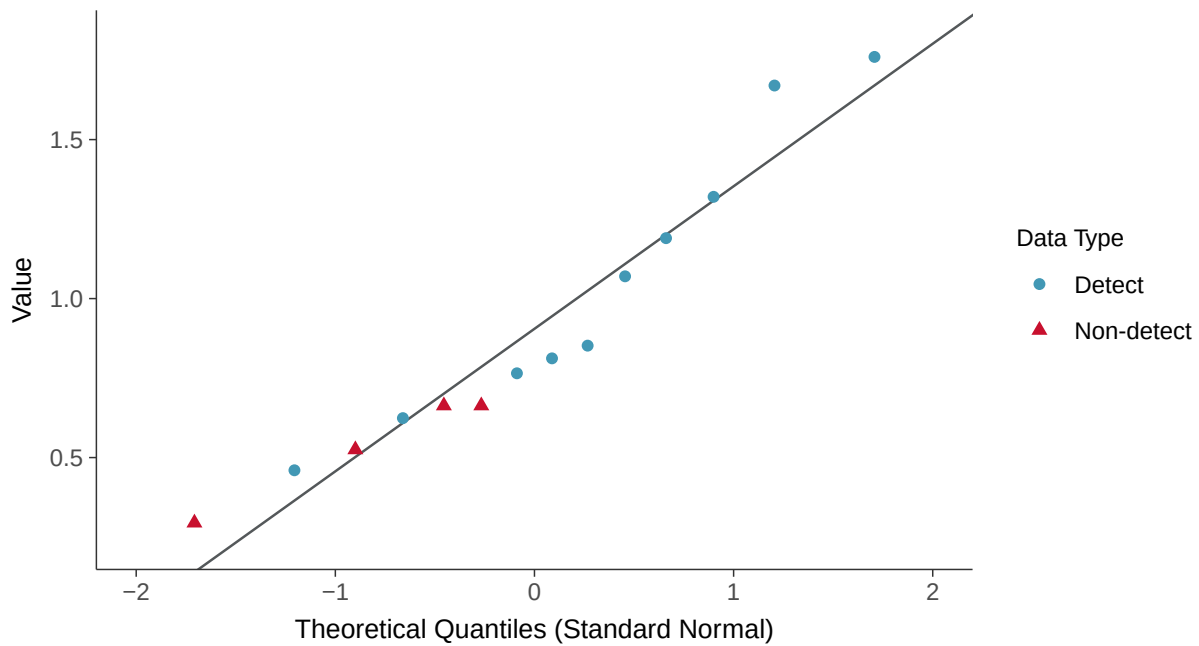
Boxplot by Season

Radium 226 and 228, MW-11 (pCi/L)



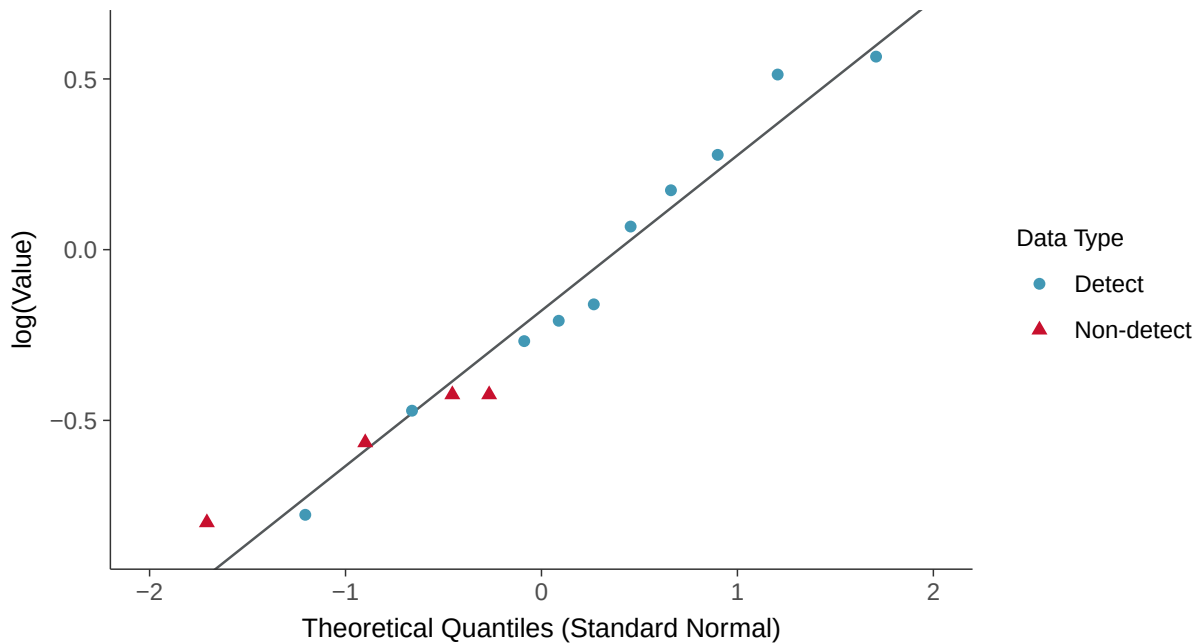
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-11 (pCi/L)



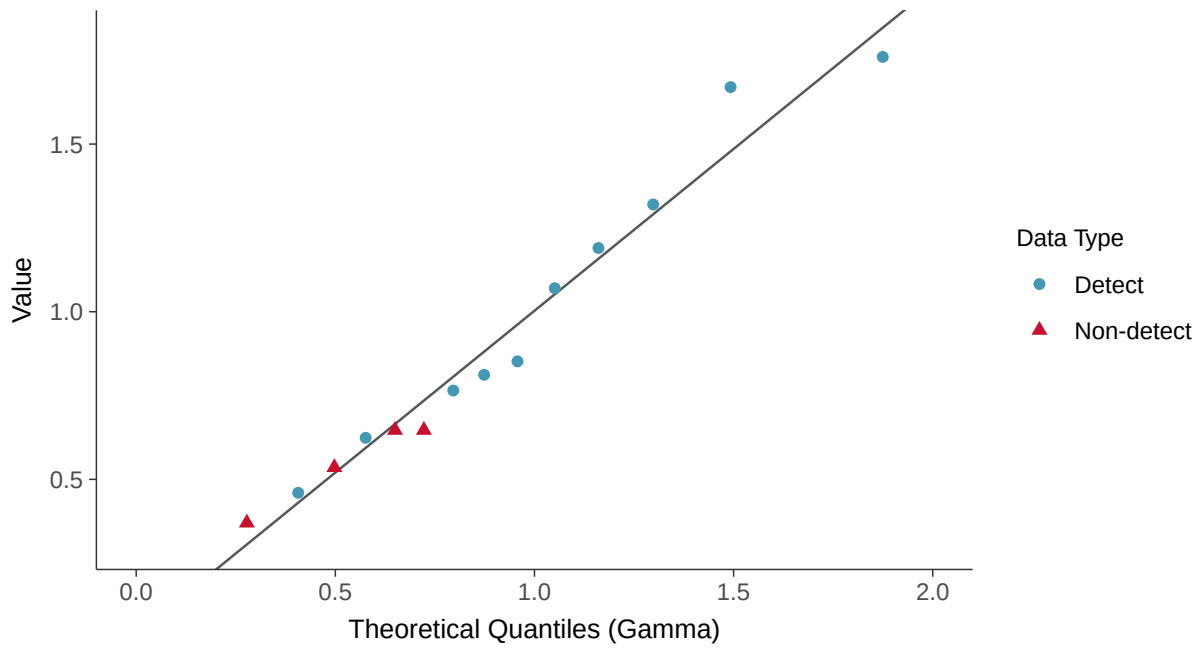
Lognormal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-11 (pCi/L)



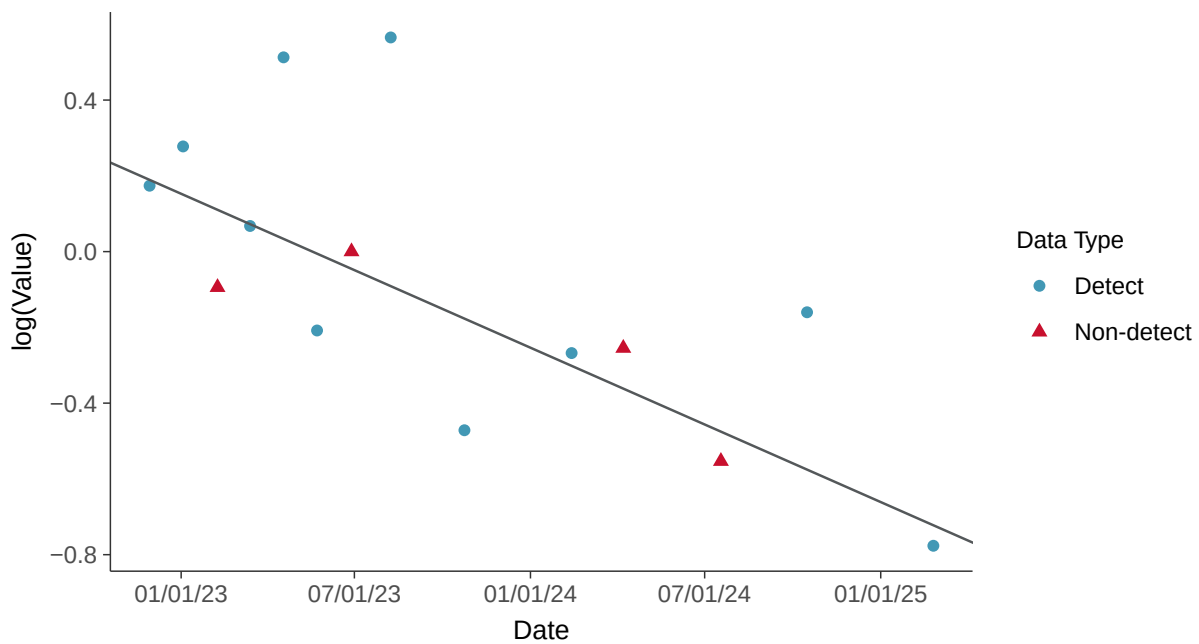
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-11 (pCi/L)



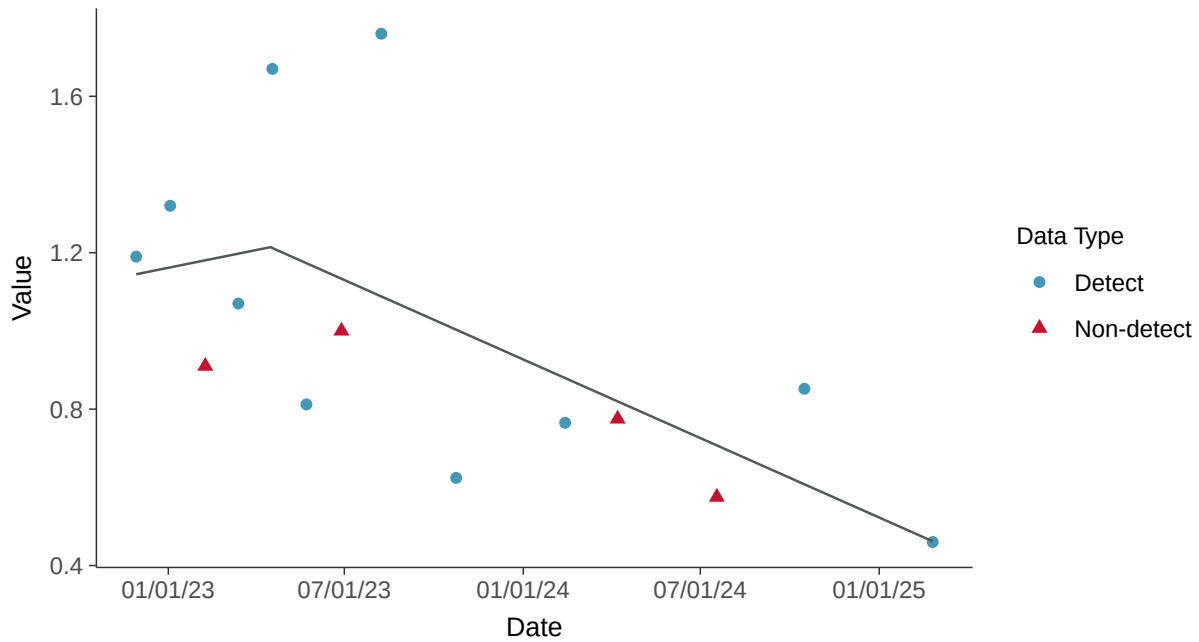
Trend Regression: Lognormal MLE

Radium 226 and 228, MW-11 (pCi/L)



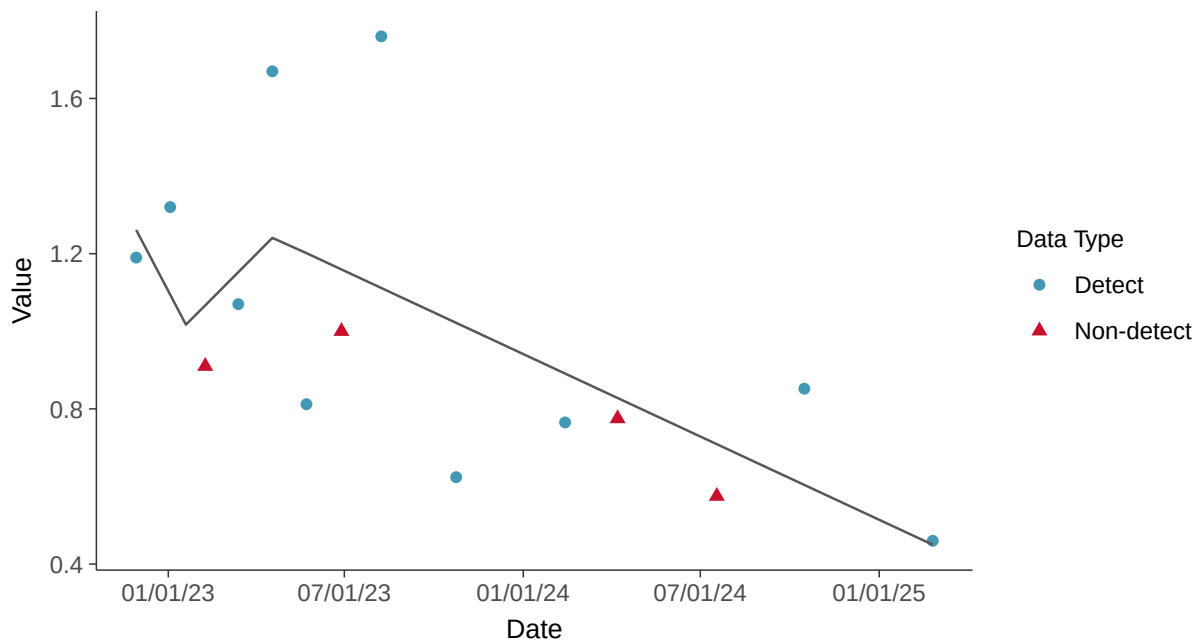
Trend Regression: Piecewise Linear-Linear

Radium 226 and 228, MW-11 (pCi/L)



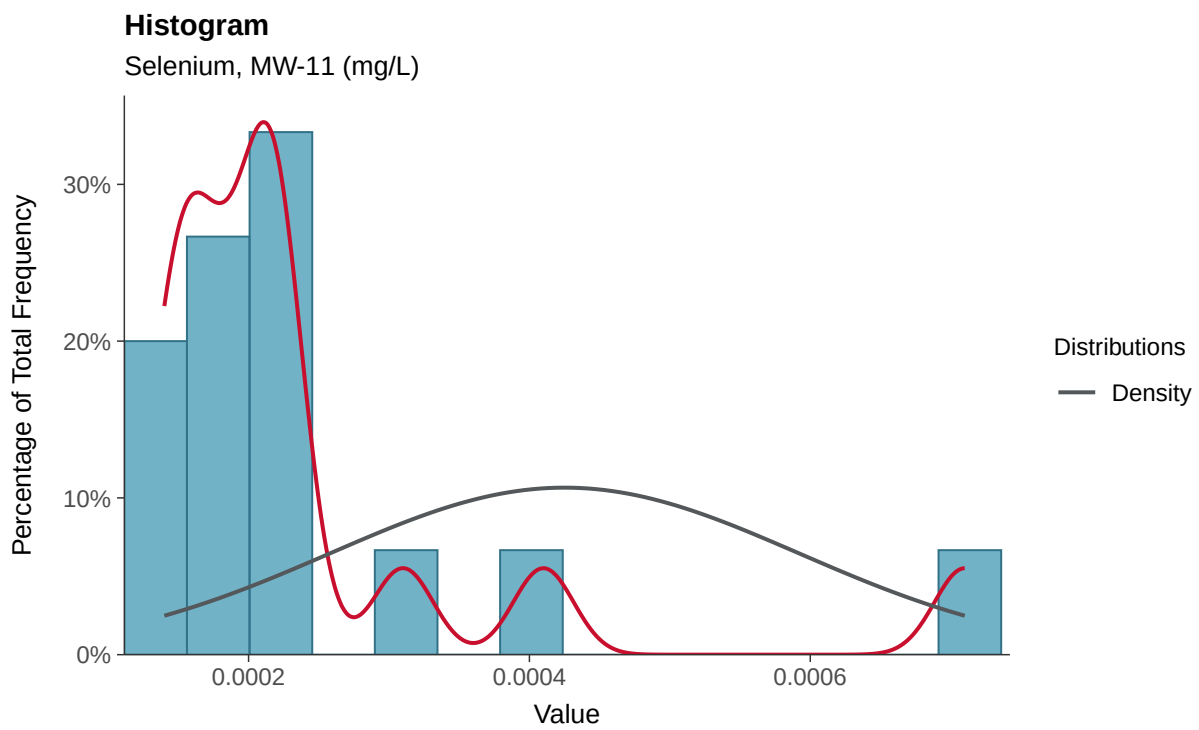
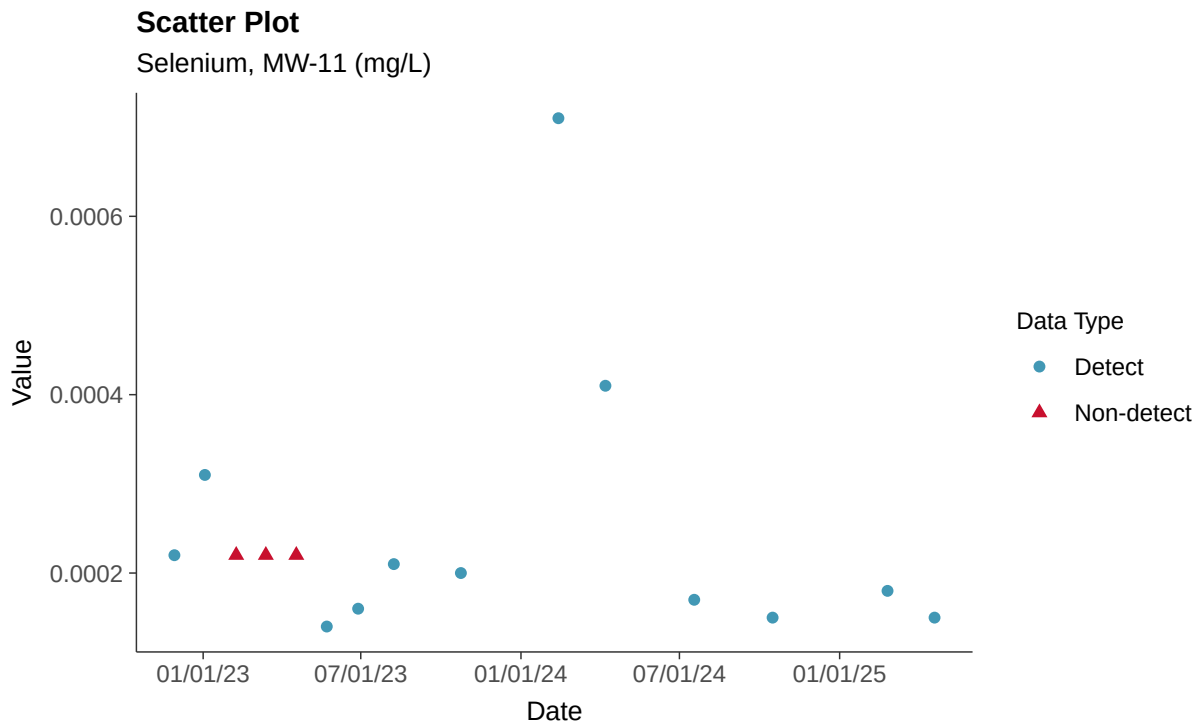
Trend Regression: Piecewise Linear-Linear-Linear

Radium 226 and 228, MW-11 (pCi/L)



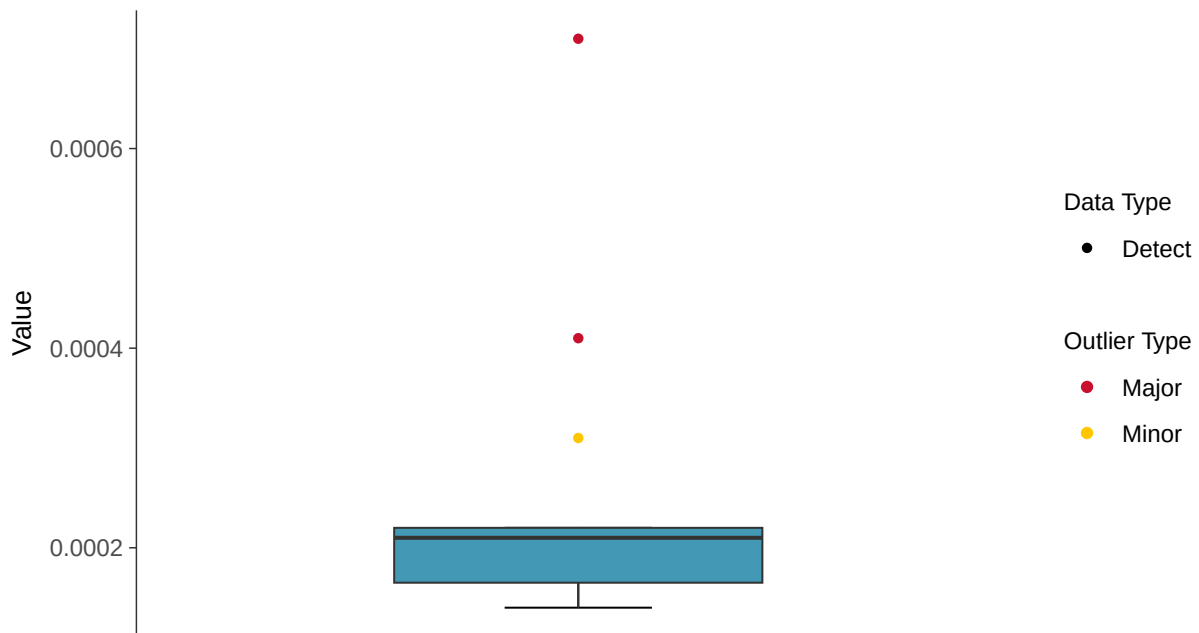
Appendix IV: Selenium, MW-11

ID: 21_2_4_122



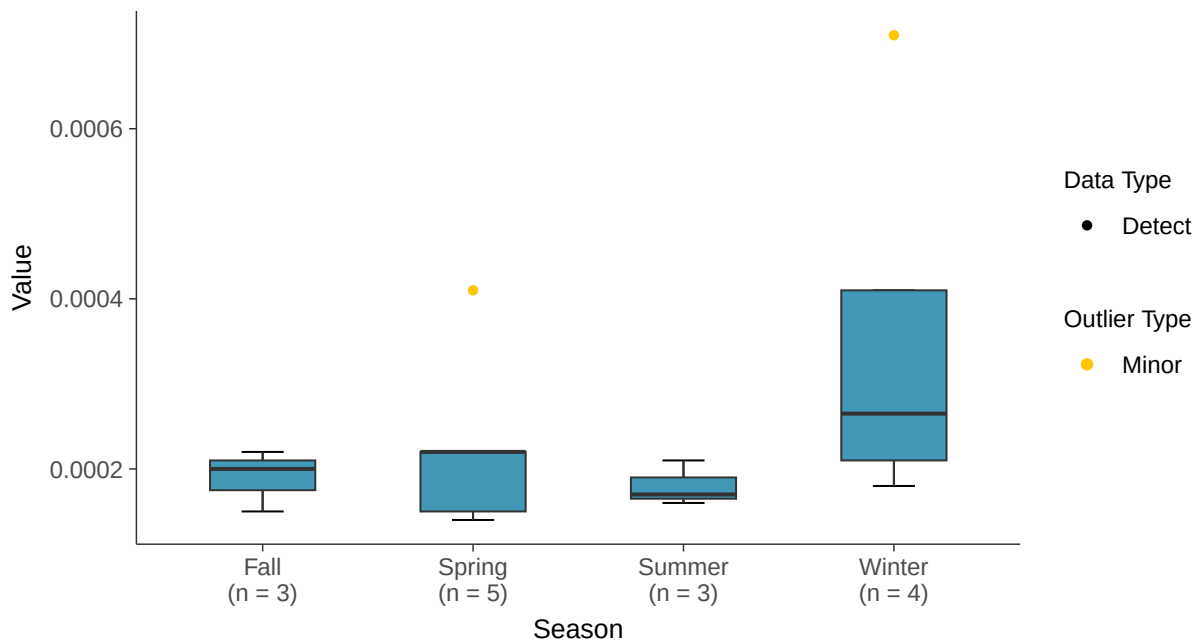
Boxplot

Selenium, MW-11 (mg/L)



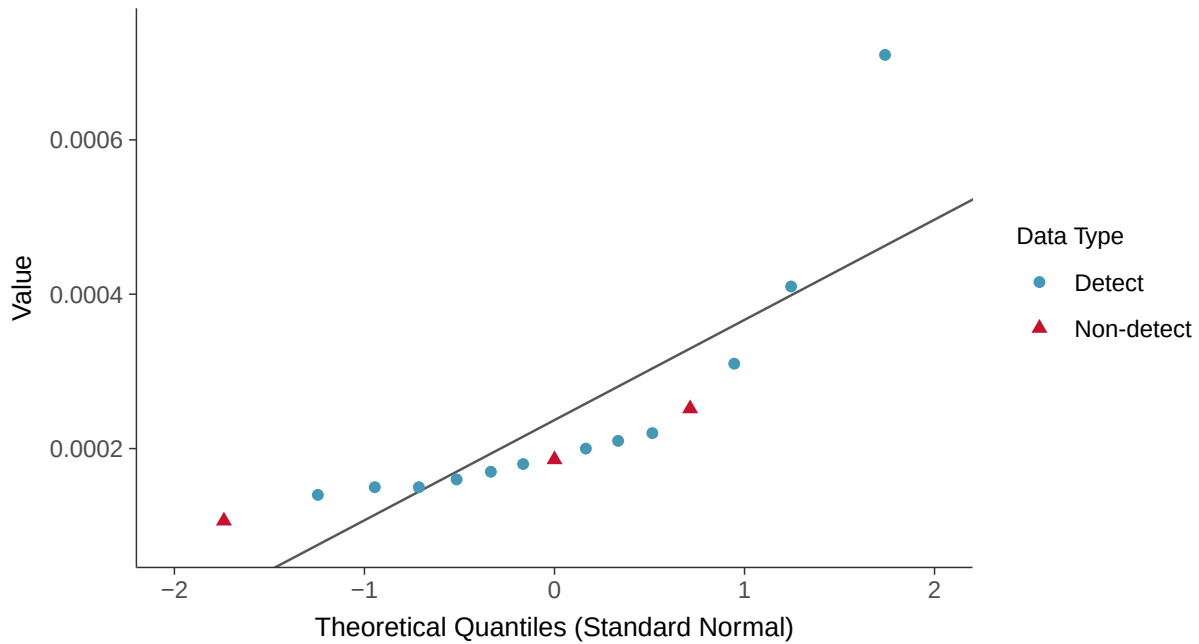
Boxplot by Season

Selenium, MW-11 (mg/L)



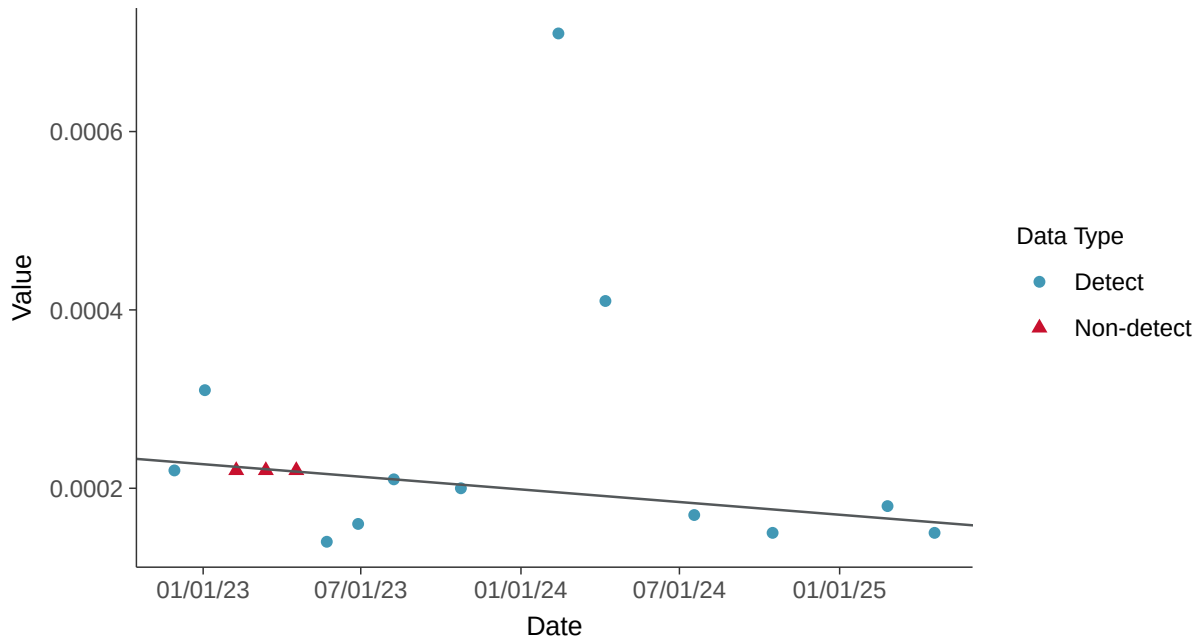
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-11 (mg/L)



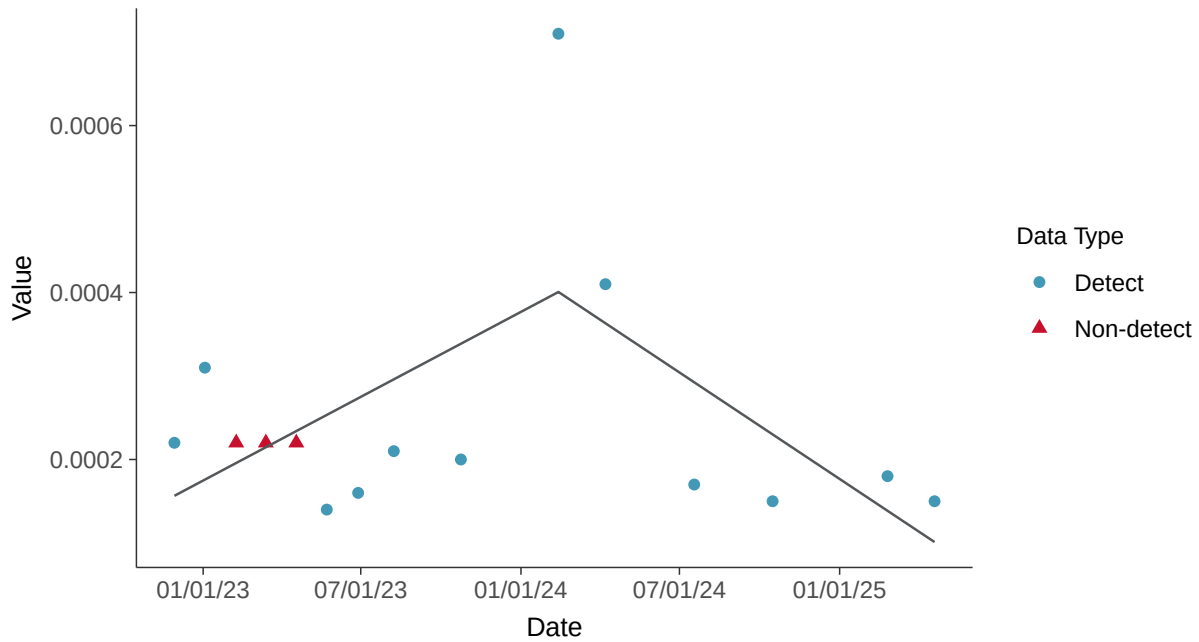
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Selenium, MW-11 (mg/L)



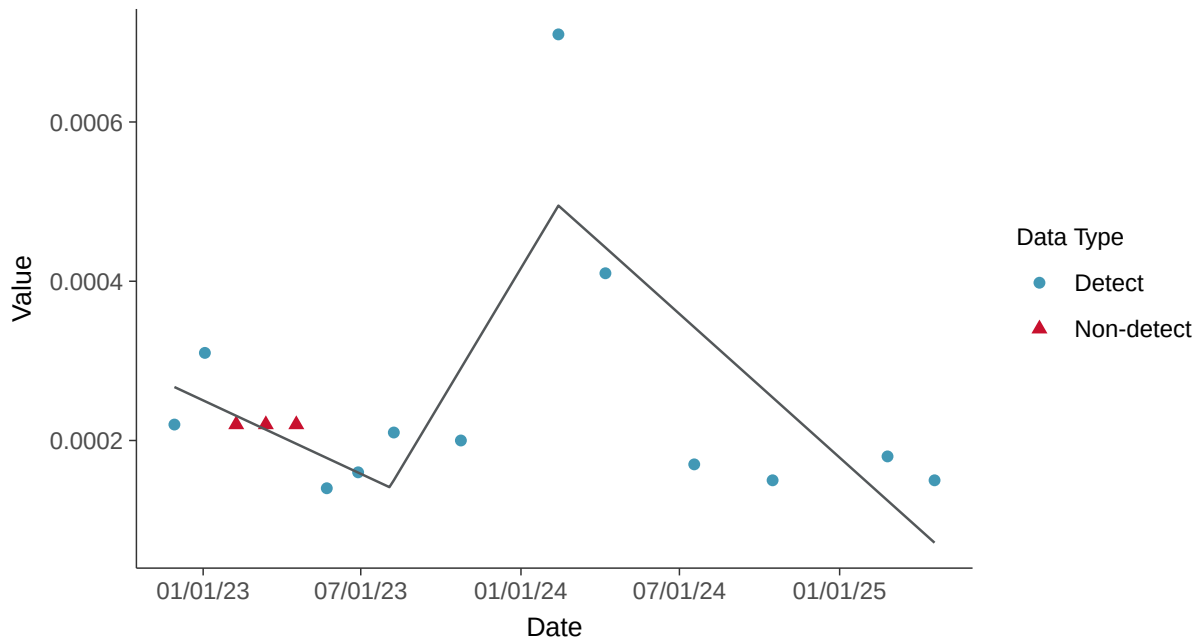
Trend Regression: Piecewise Linear-Linear

Selenium, MW-11 (mg/L)



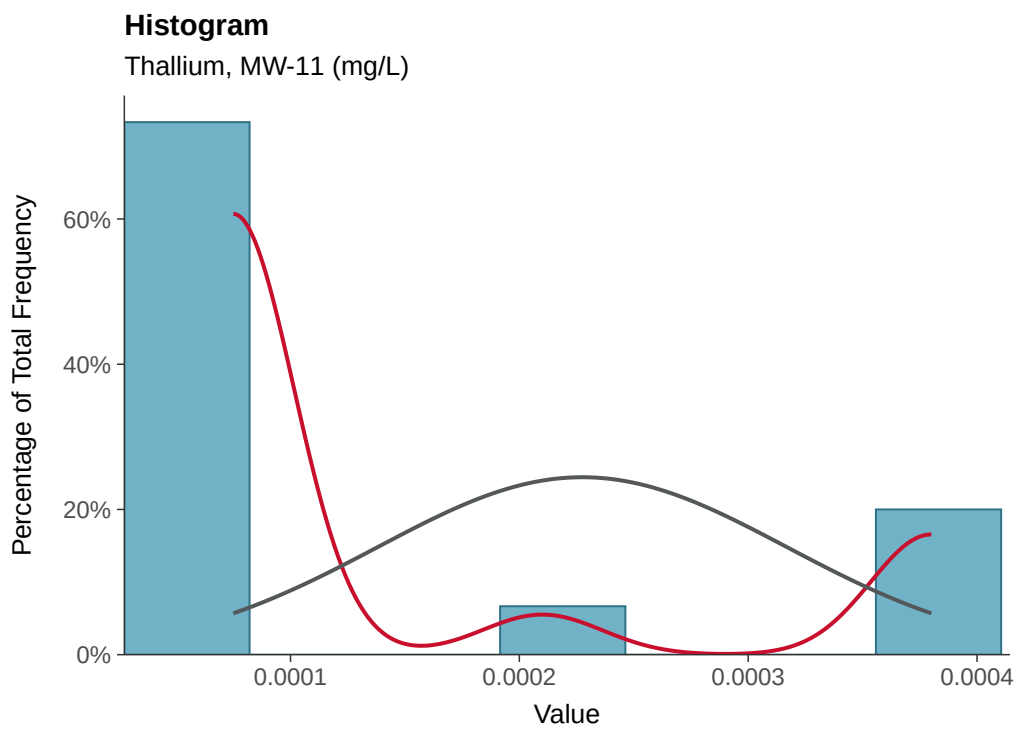
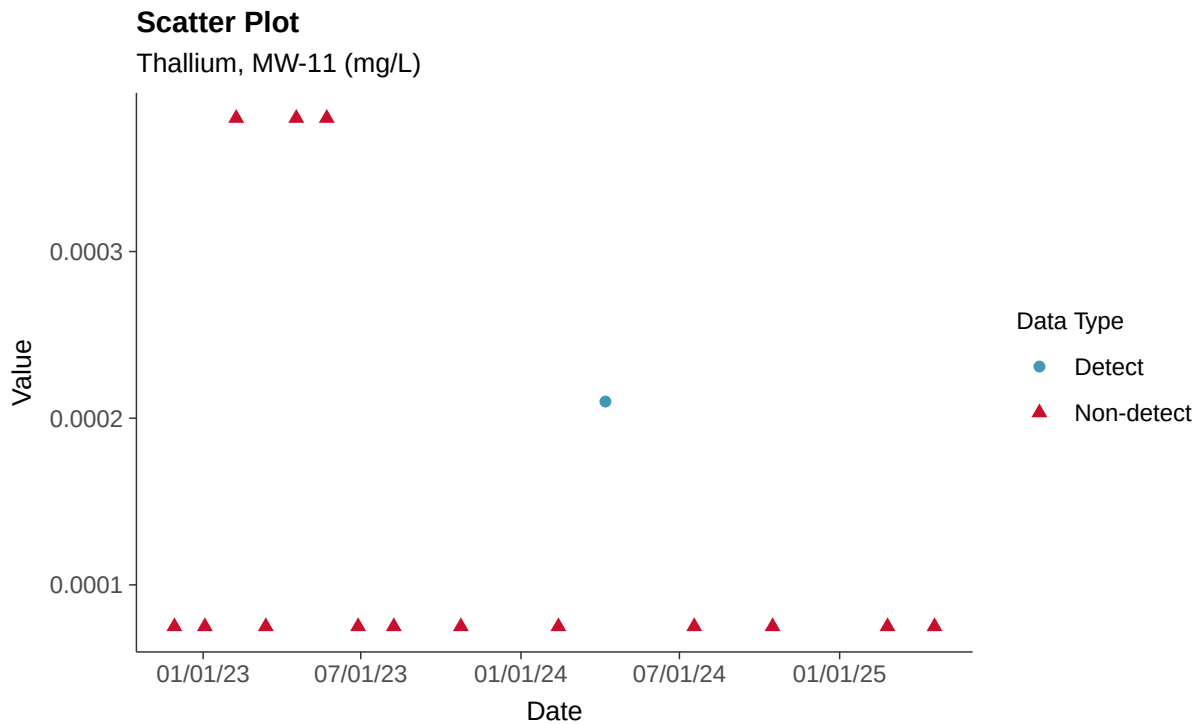
Trend Regression: Piecewise Linear-Linear-Linear

Selenium, MW-11 (mg/L)



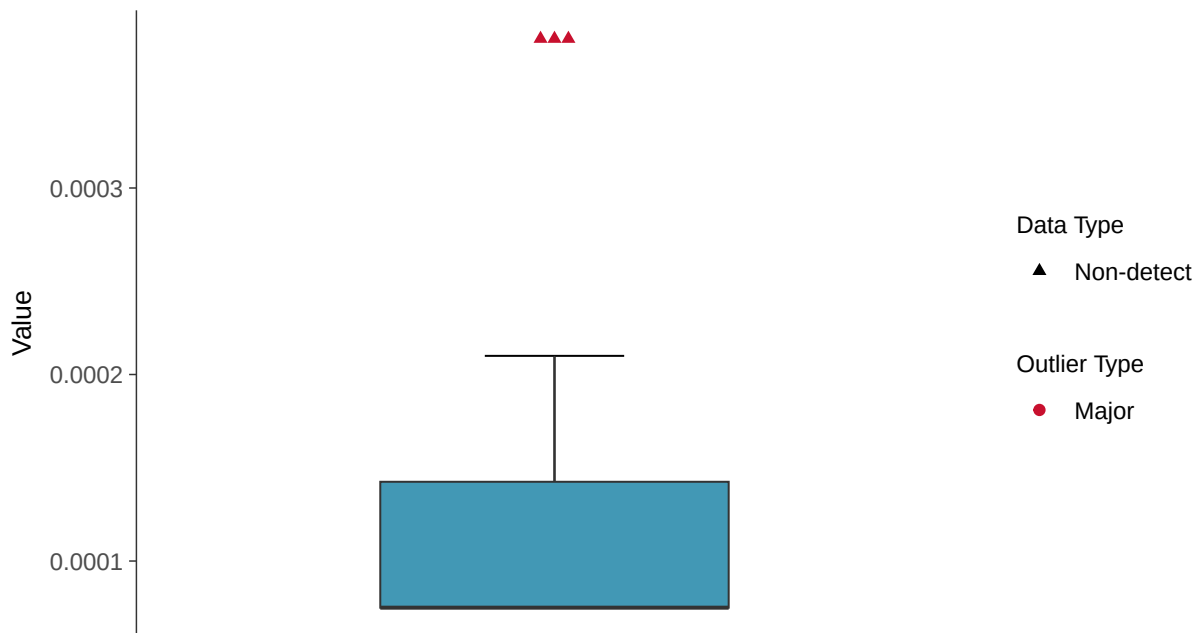
Appendix IV: Thallium, MW-11

ID: 21_2_4_125



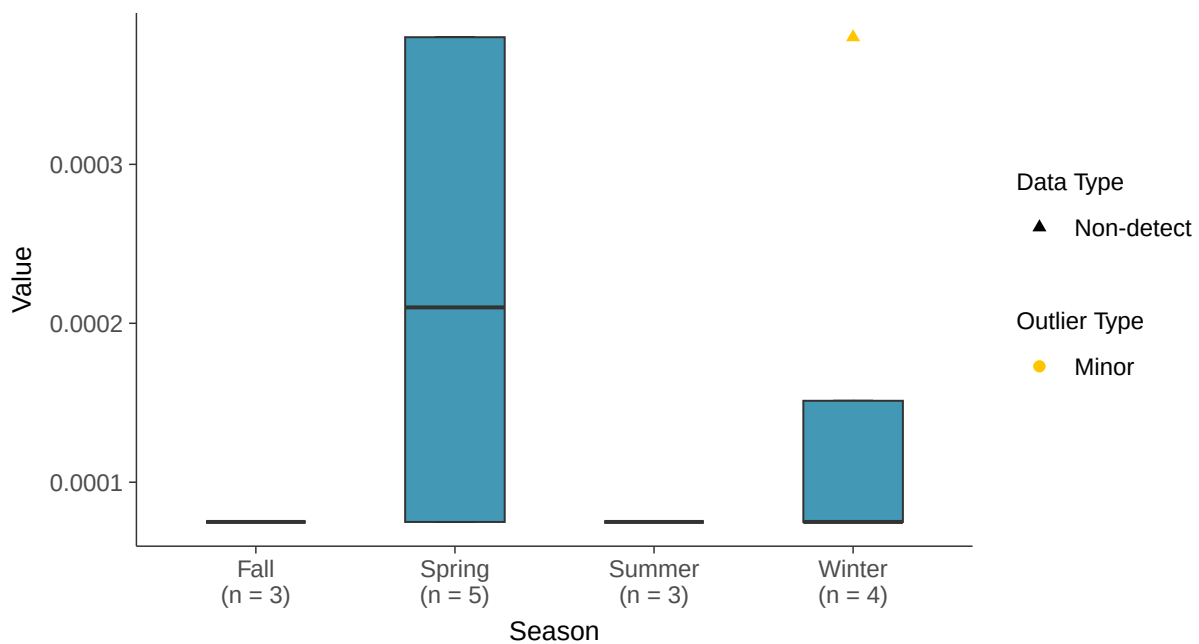
Boxplot

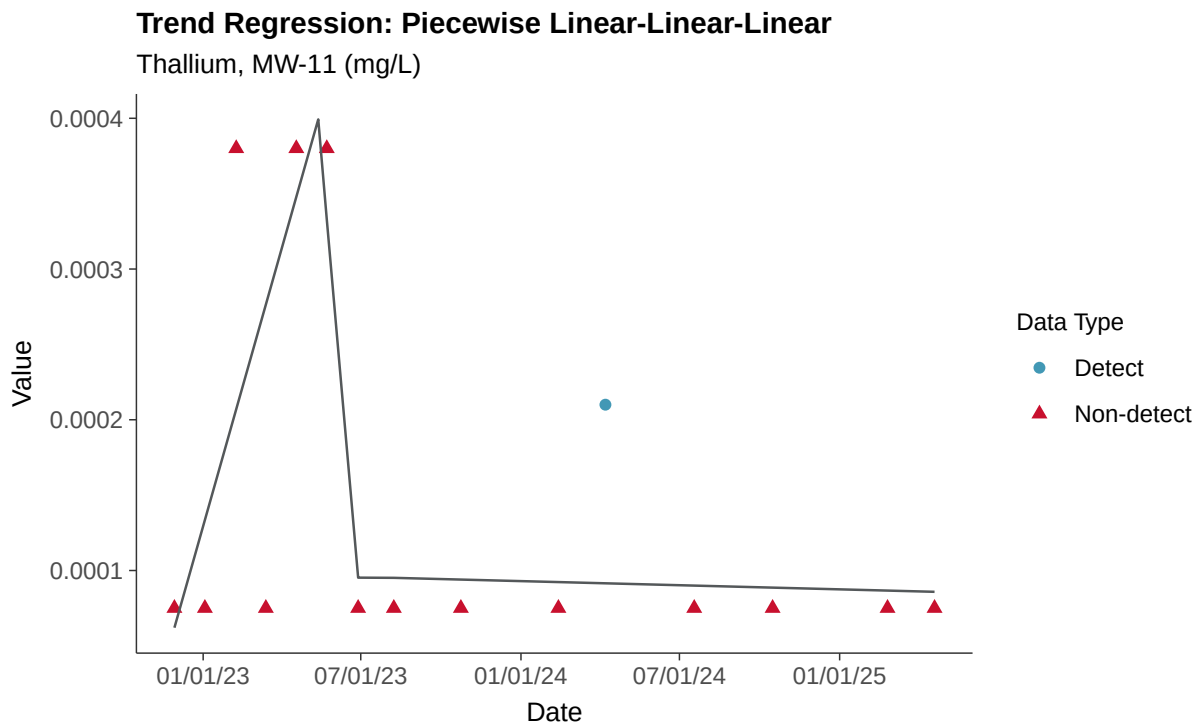
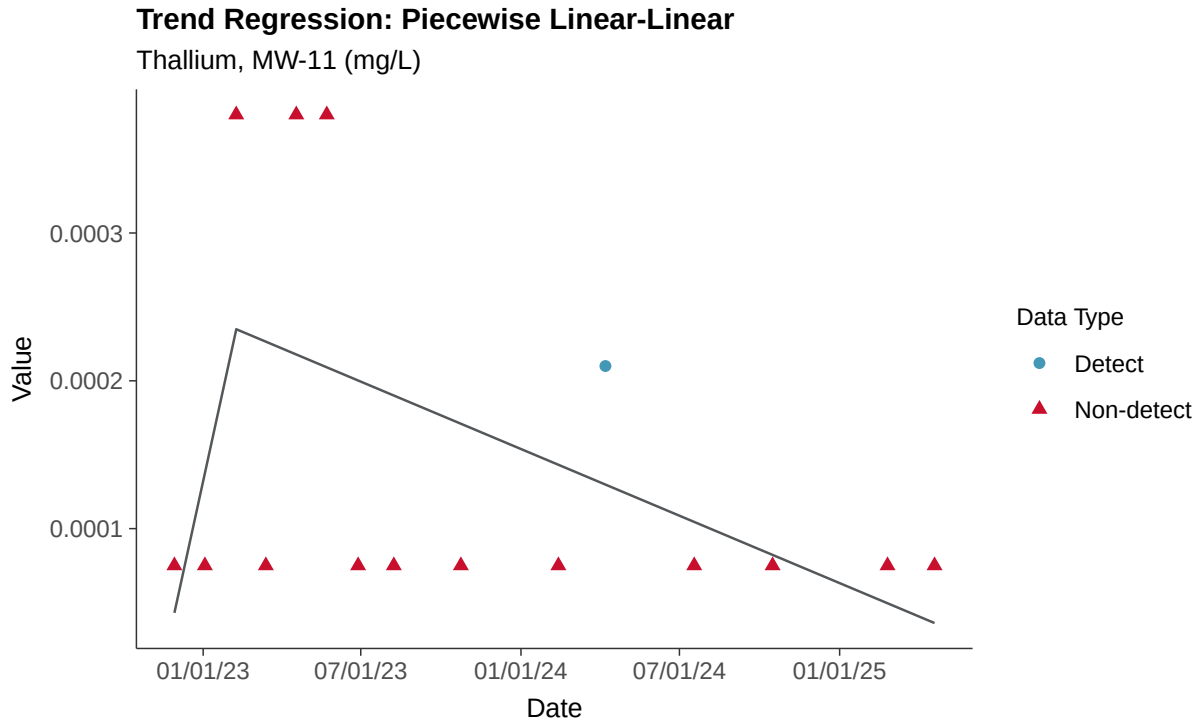
Thallium, MW-11 (mg/L)



Boxplot by Season

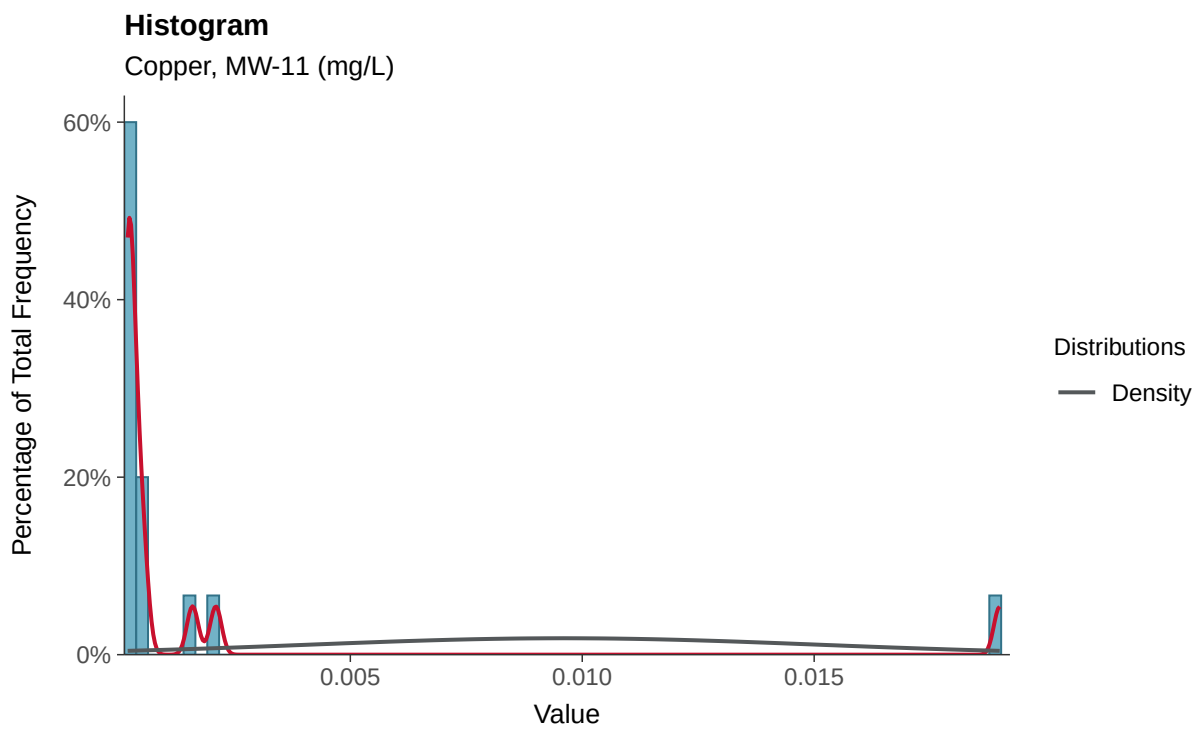
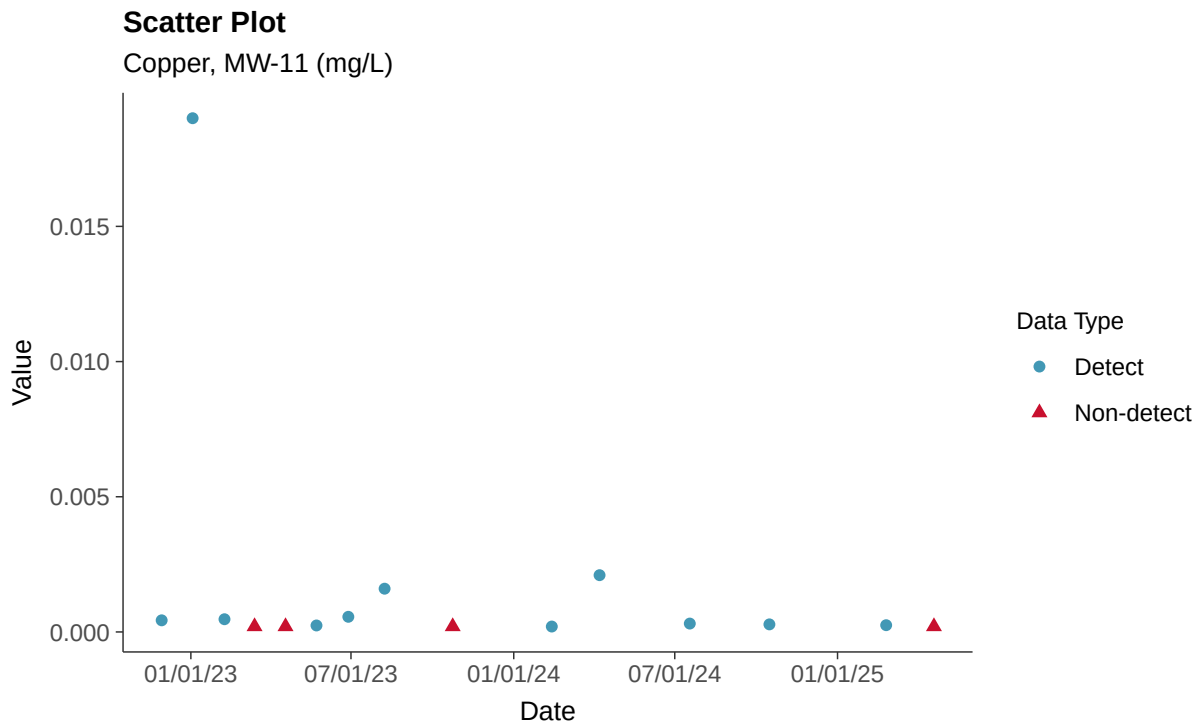
Thallium, MW-11 (mg/L)

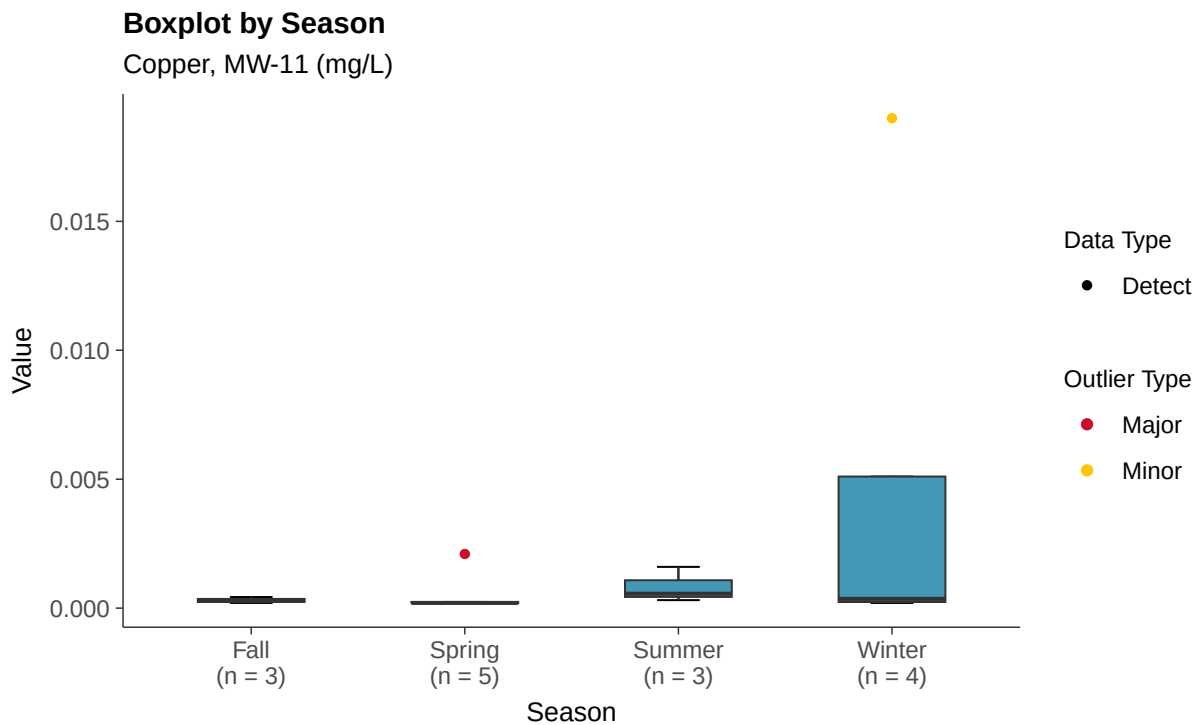
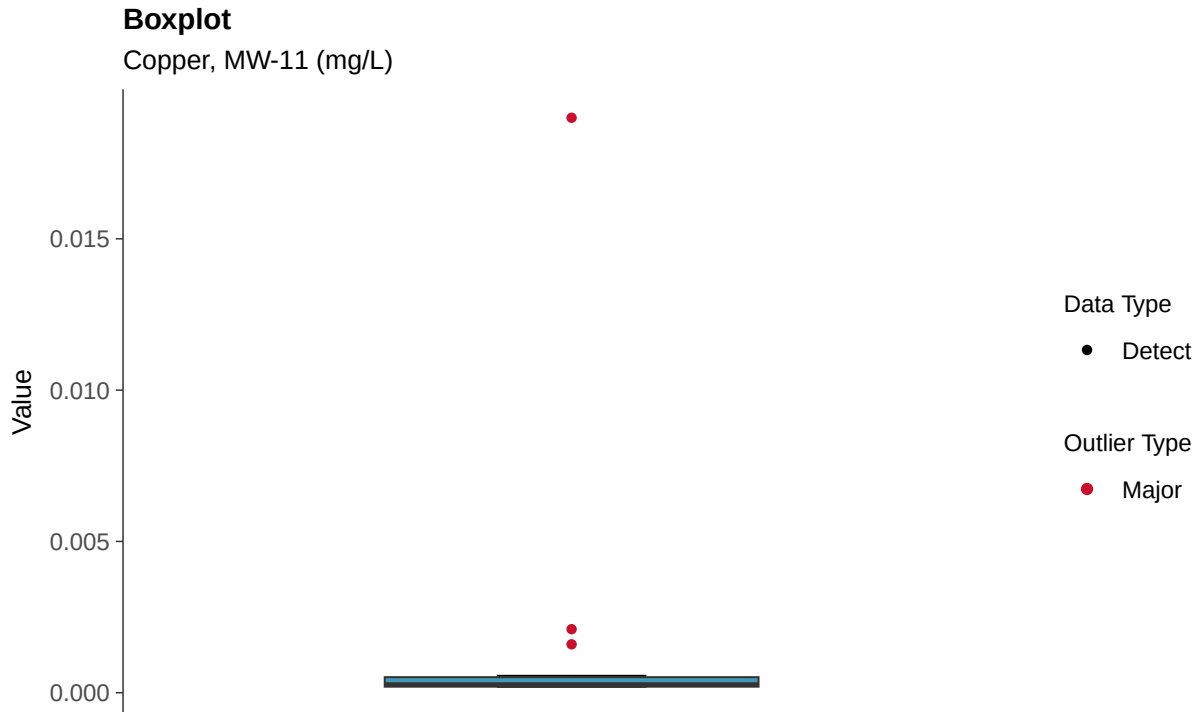




Part 115: Copper, MW-11

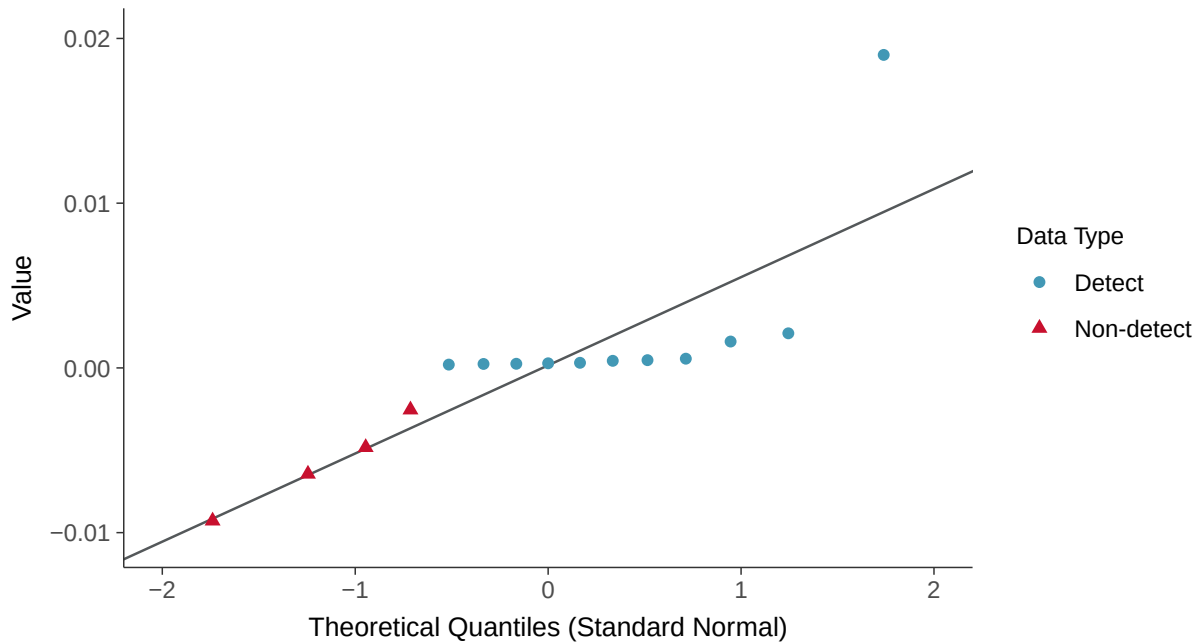
ID: 21_2_5_111





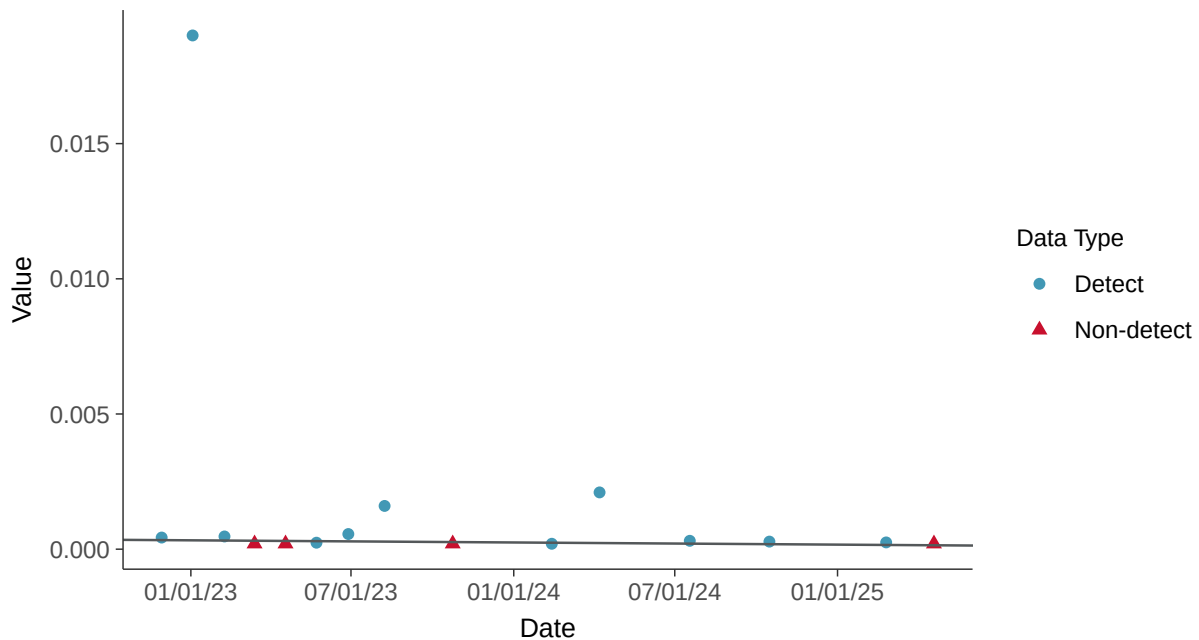
Normal Q-Q plot using ROS Imputed Estimates

Copper, MW-11 (mg/L)



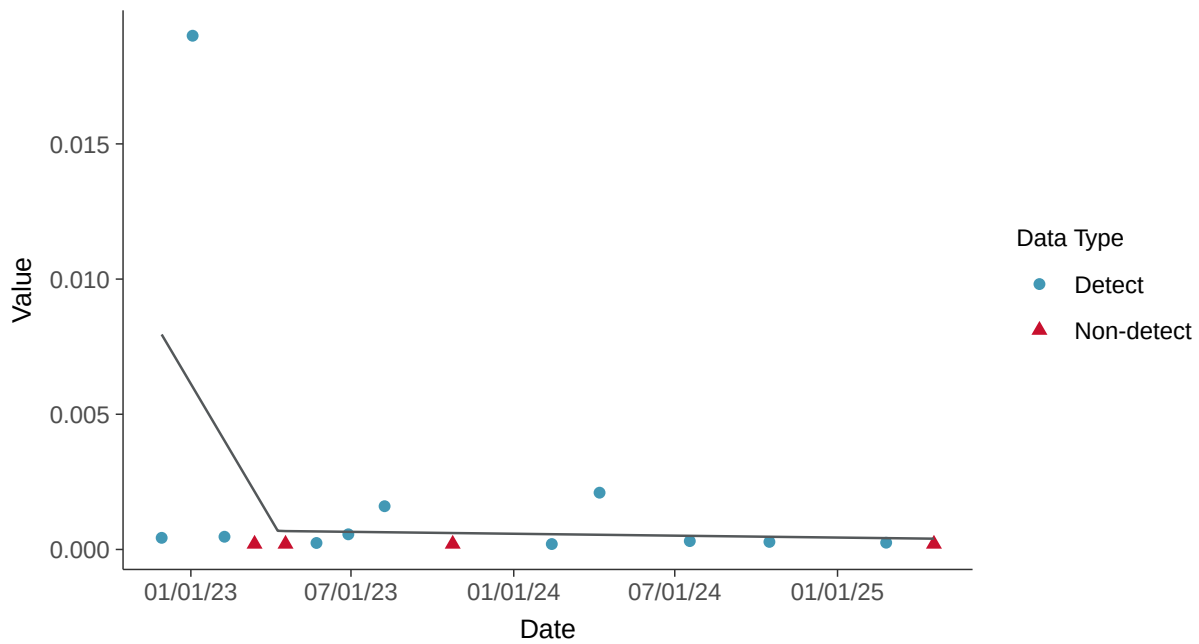
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Copper, MW-11 (mg/L)



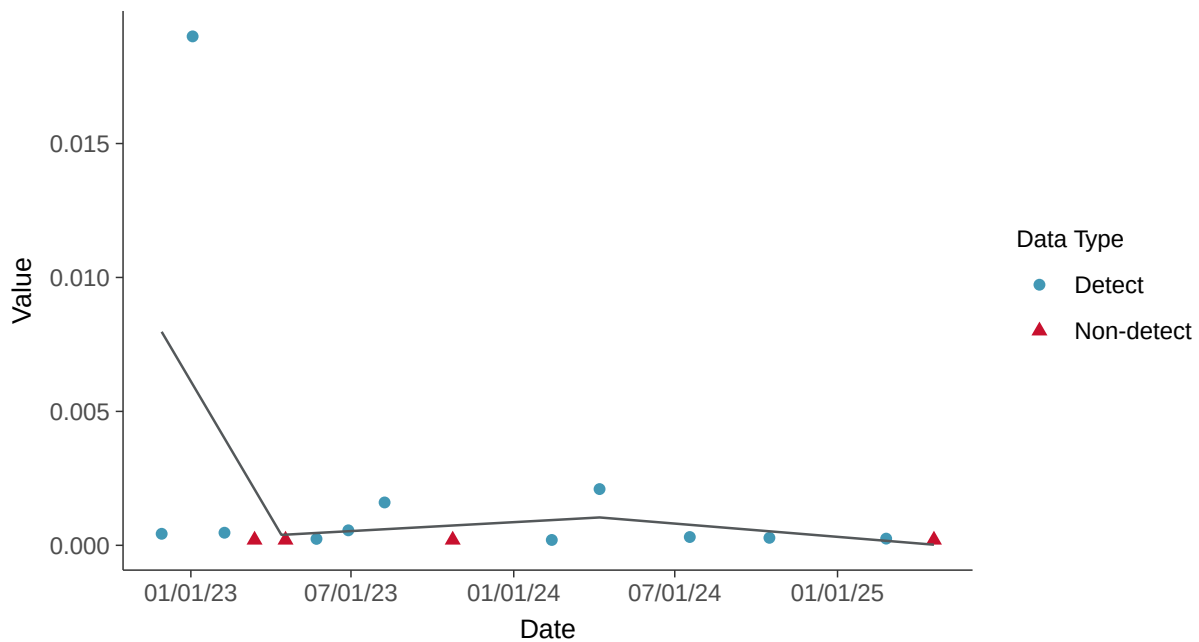
Trend Regression: Piecewise Linear-Linear

Copper, MW-11 (mg/L)



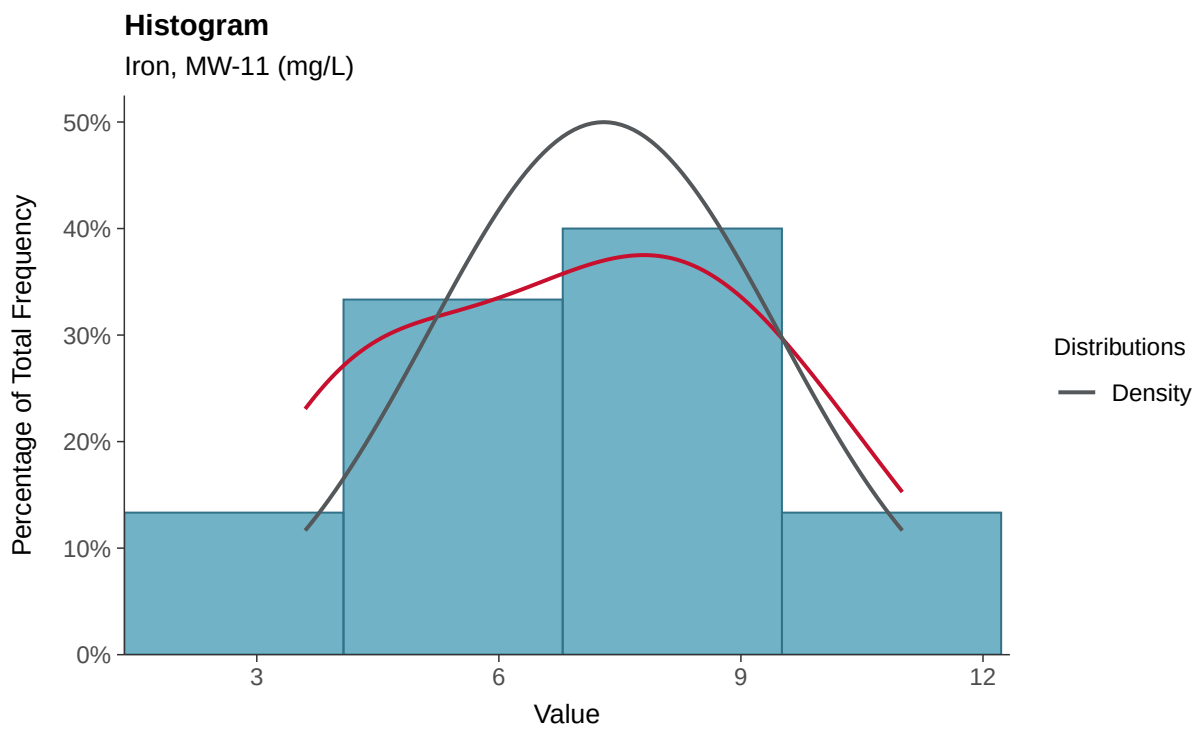
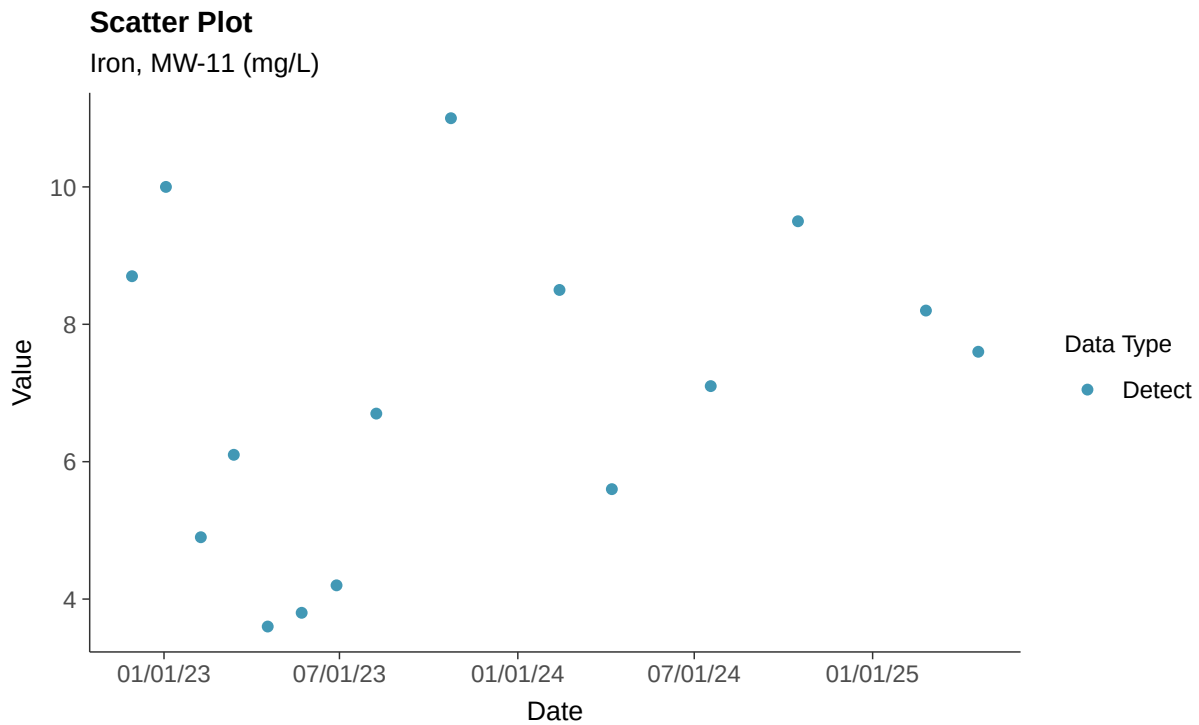
Trend Regression: Piecewise Linear-Linear-Linear

Copper, MW-11 (mg/L)



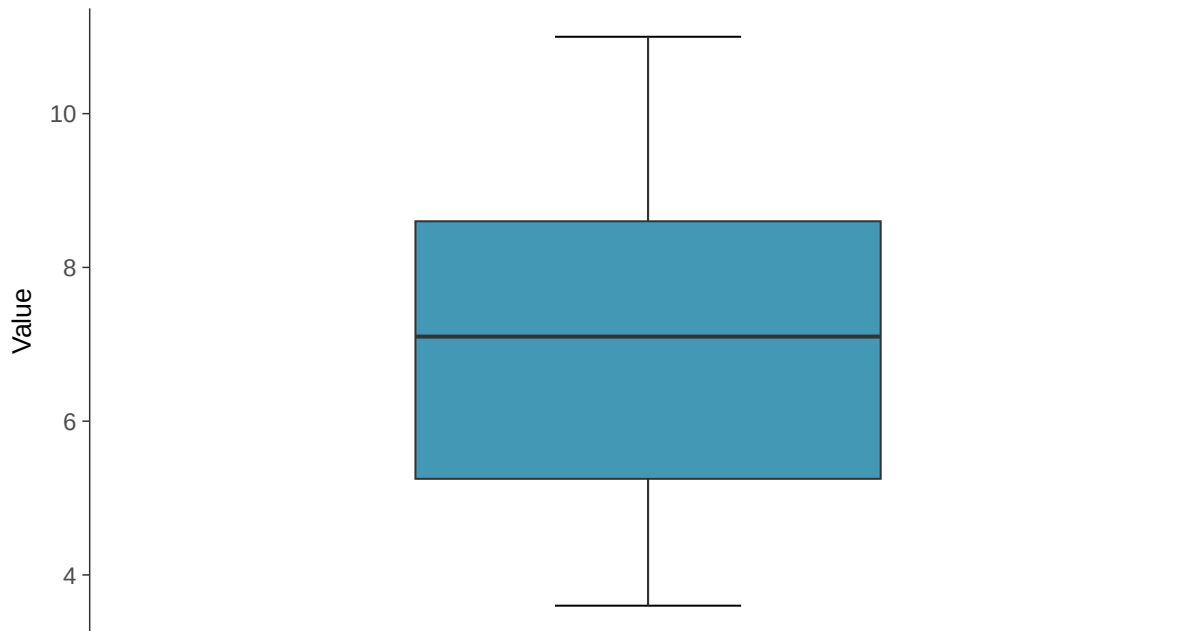
Part 115: Iron, MW-11

ID: 21_2_5_114



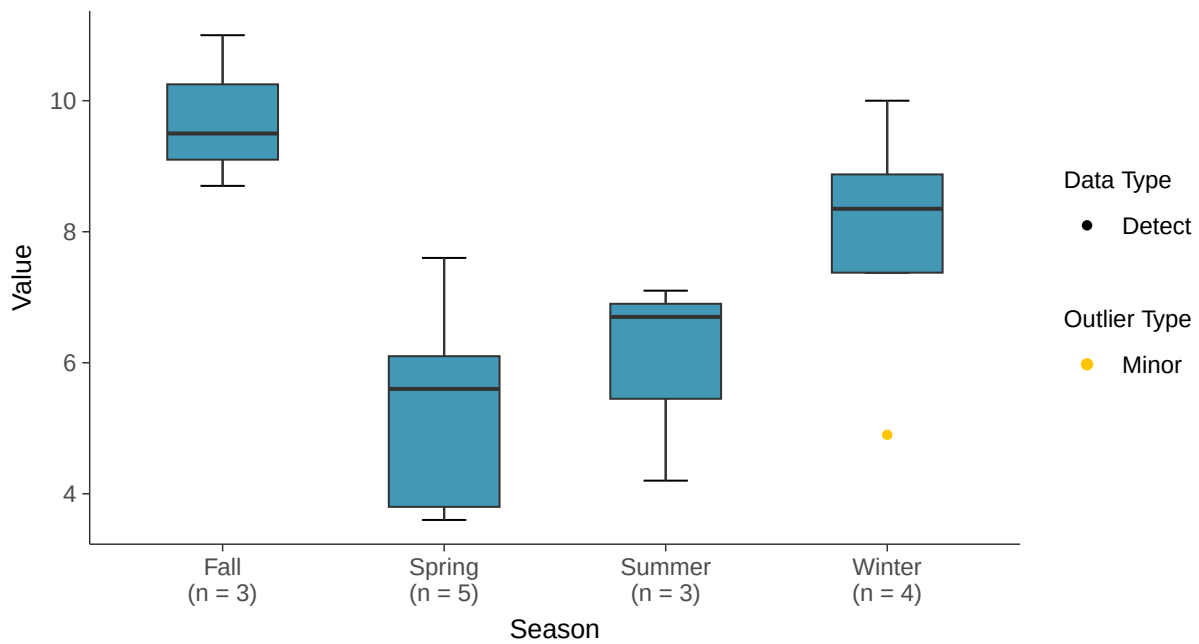
Boxplot

Iron, MW-11 (mg/L)

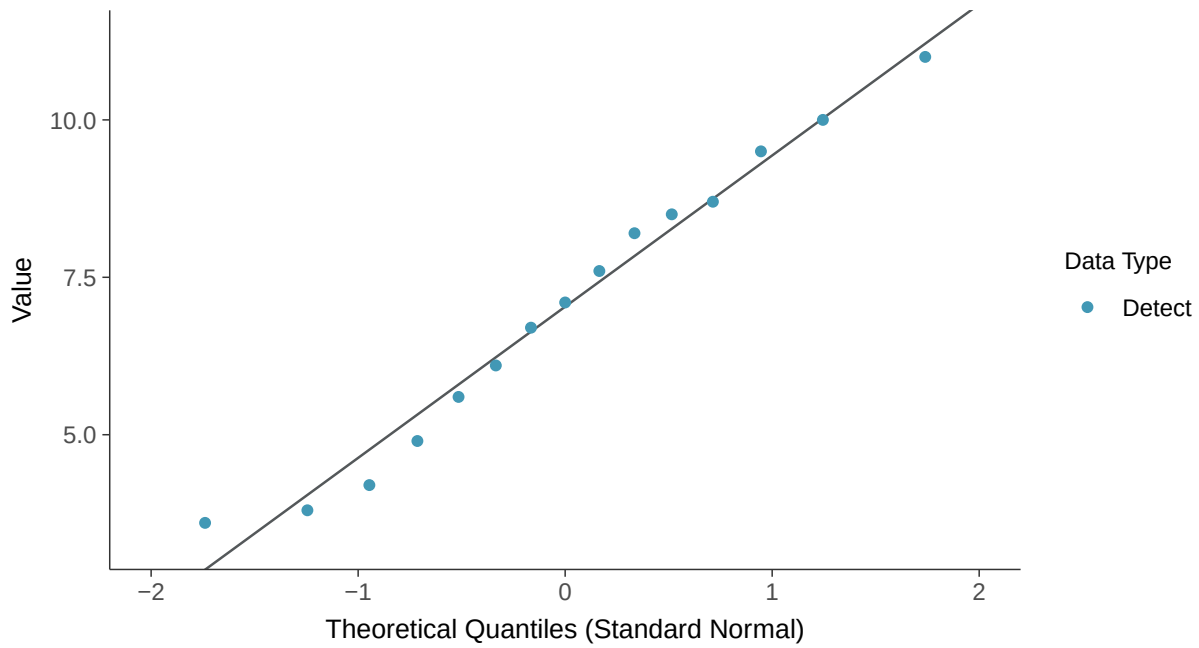


Boxplot by Season

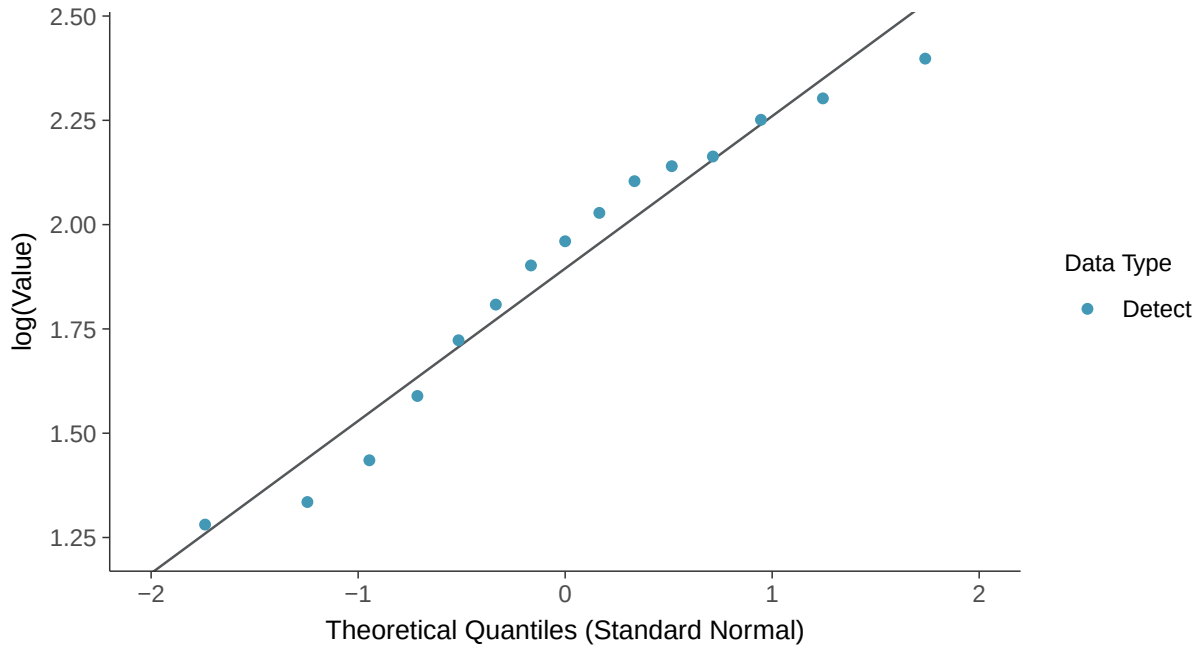
Iron, MW-11 (mg/L)

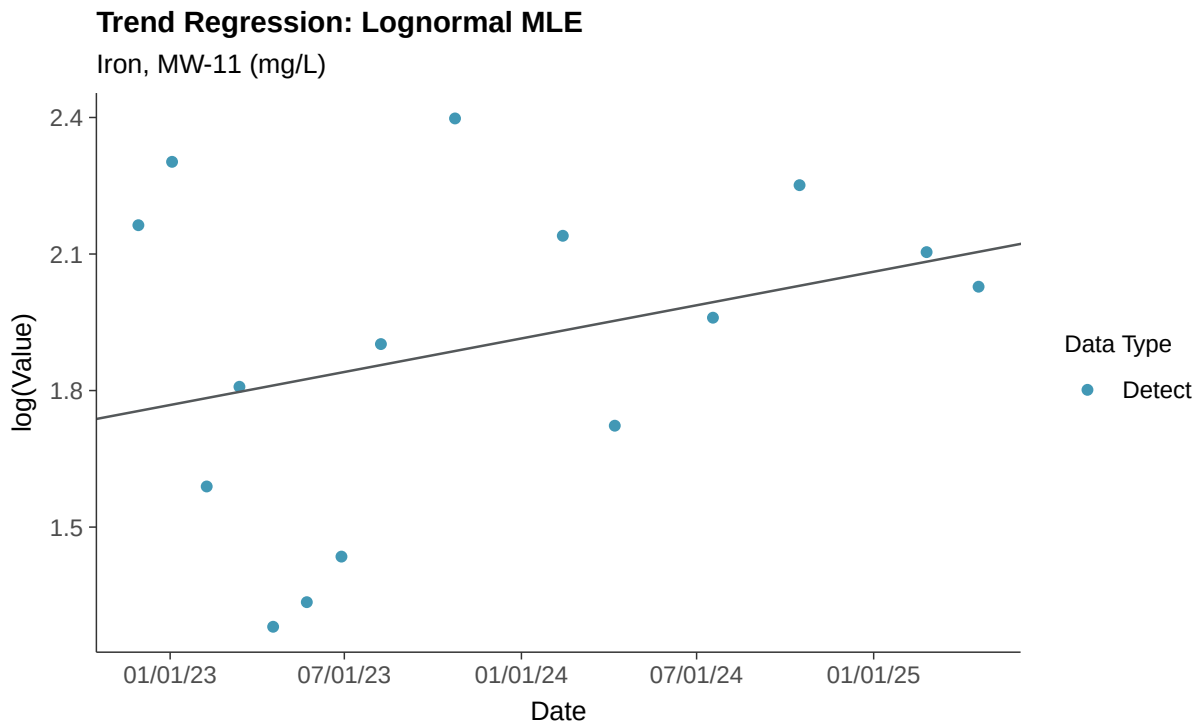
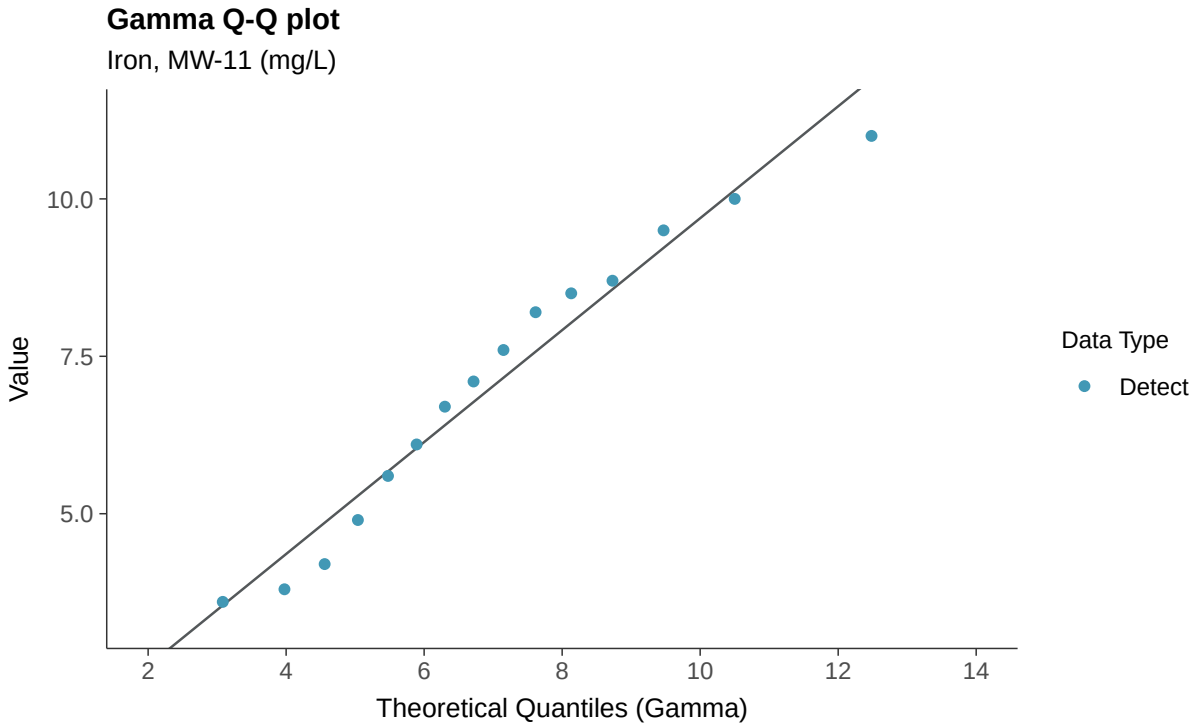


Normal Q-Q plot
Iron, MW-11 (mg/L)



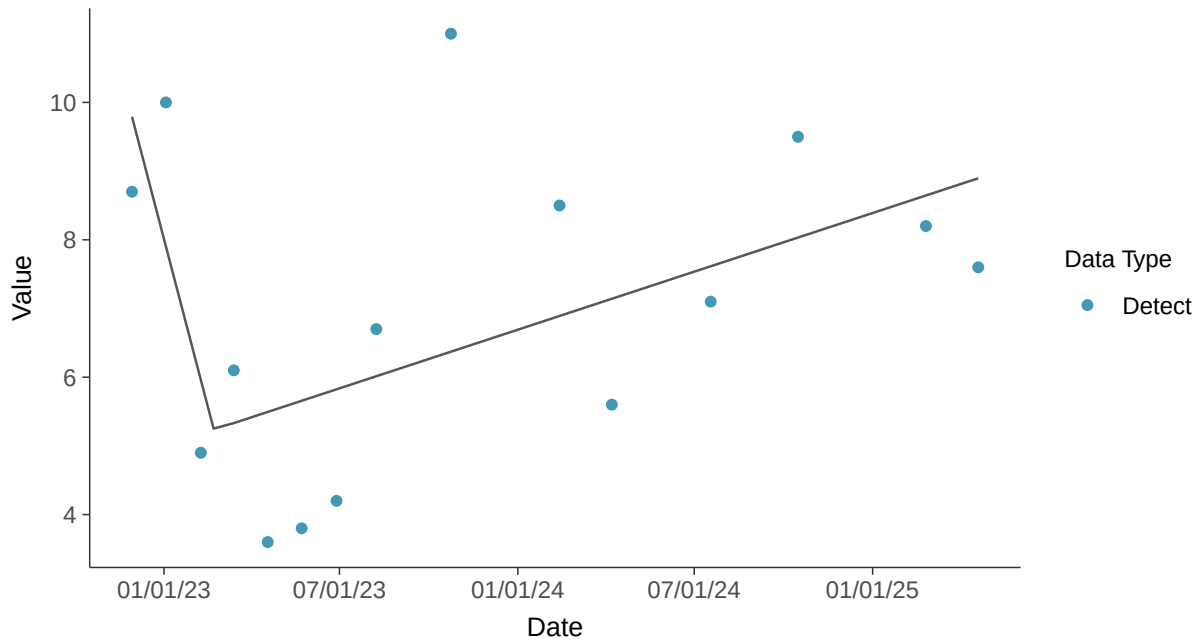
Lognormal Q-Q plot
Iron, MW-11 (mg/L)





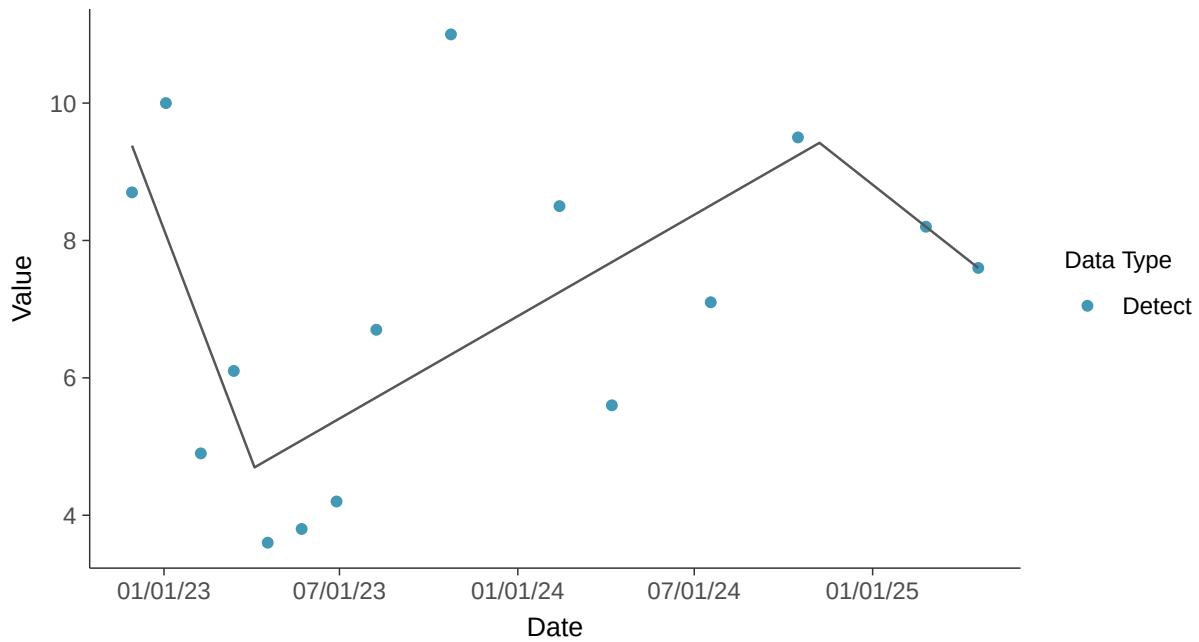
Trend Regression: Piecewise Linear-Linear

Iron, MW-11 (mg/L)



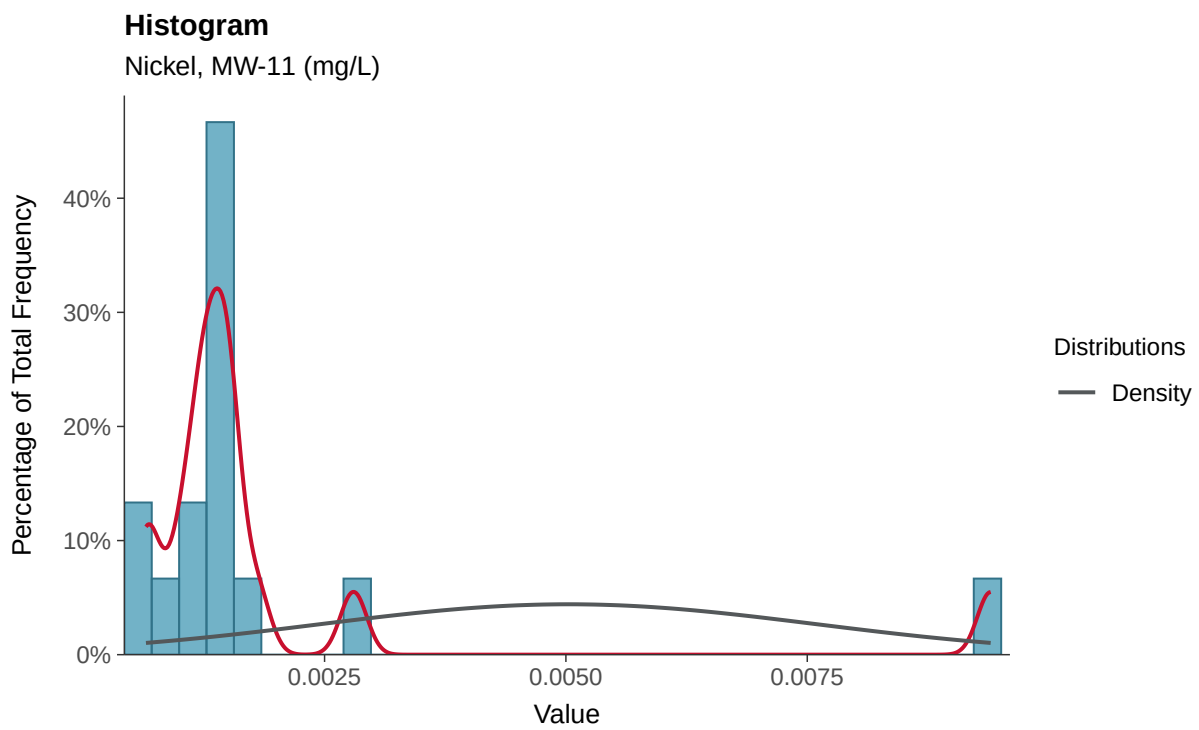
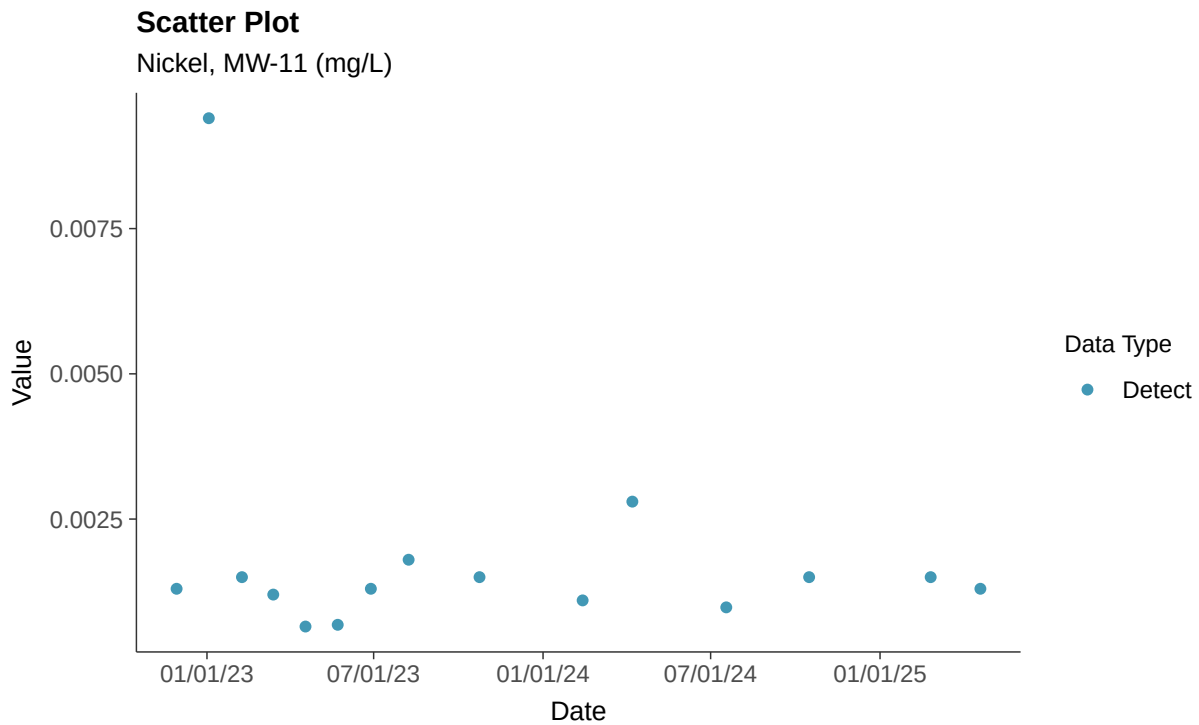
Trend Regression: Piecewise Linear-Linear-Linear

Iron, MW-11 (mg/L)



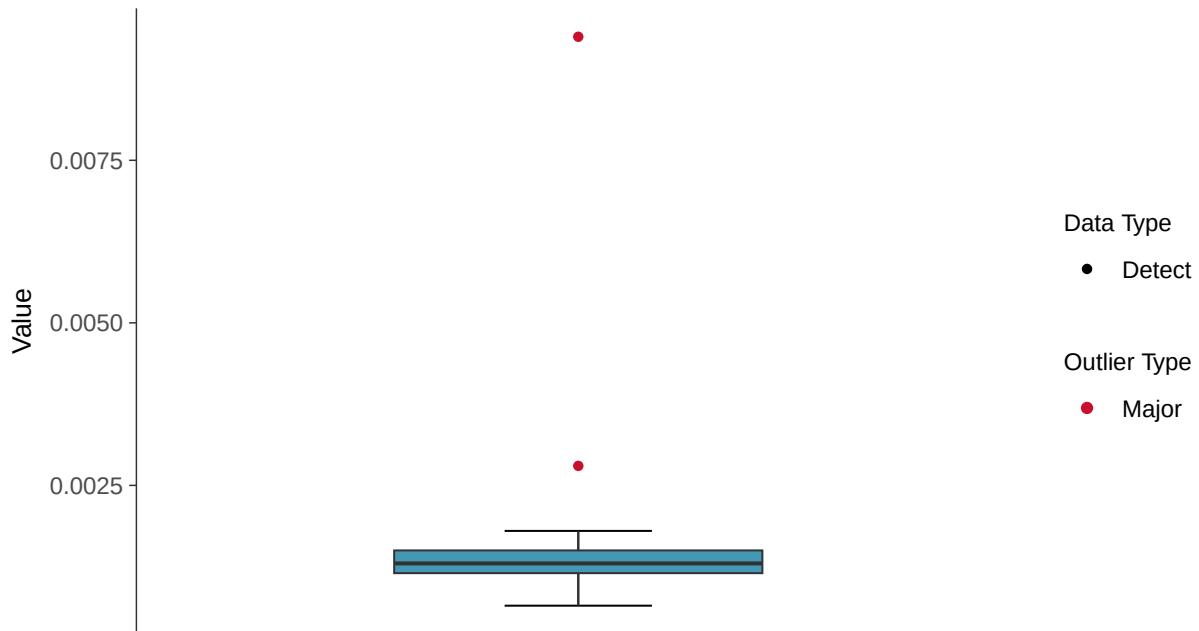
Part 115: Nickel, MW-11

ID: 21_2_5_119



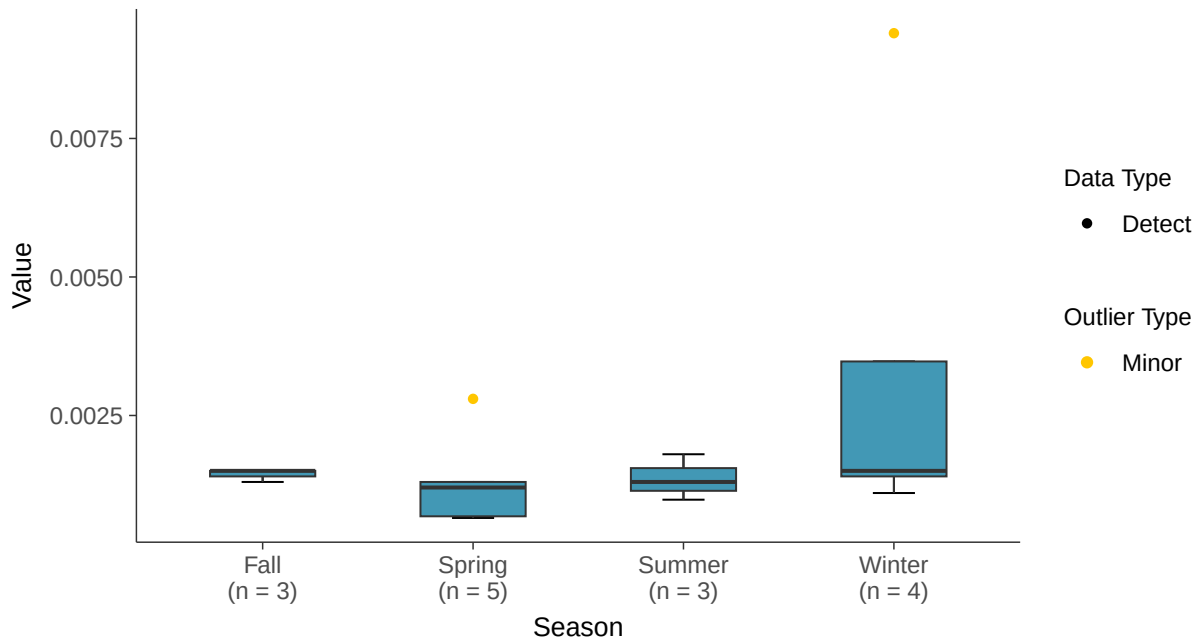
Boxplot

Nickel, MW-11 (mg/L)



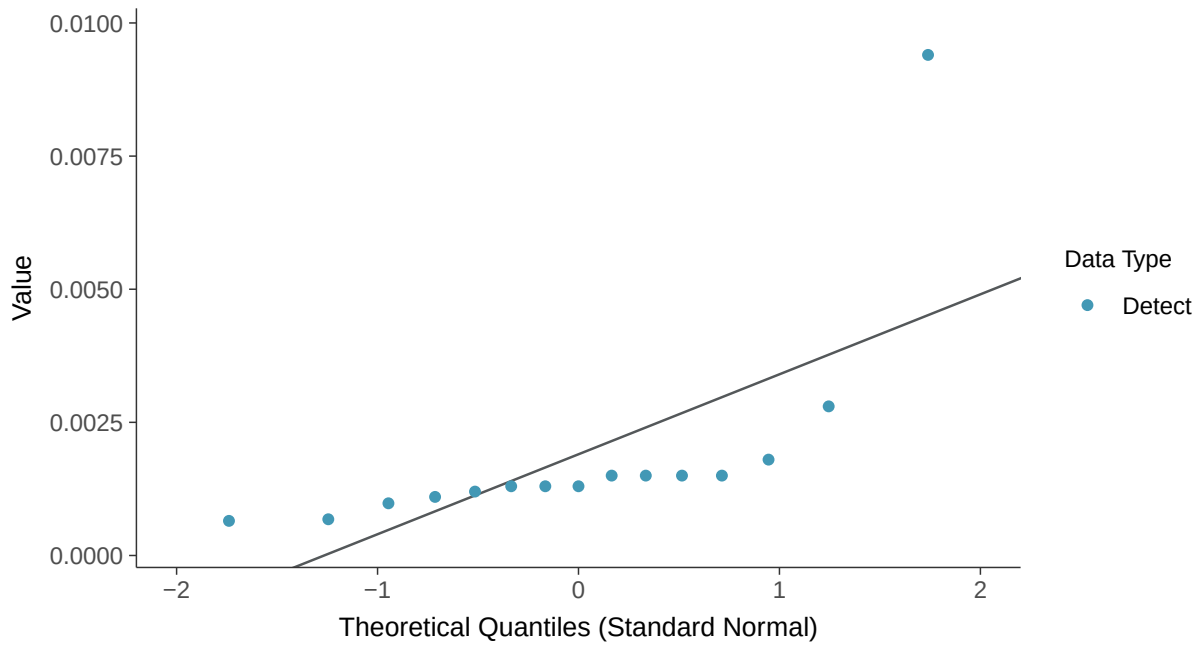
Boxplot by Season

Nickel, MW-11 (mg/L)



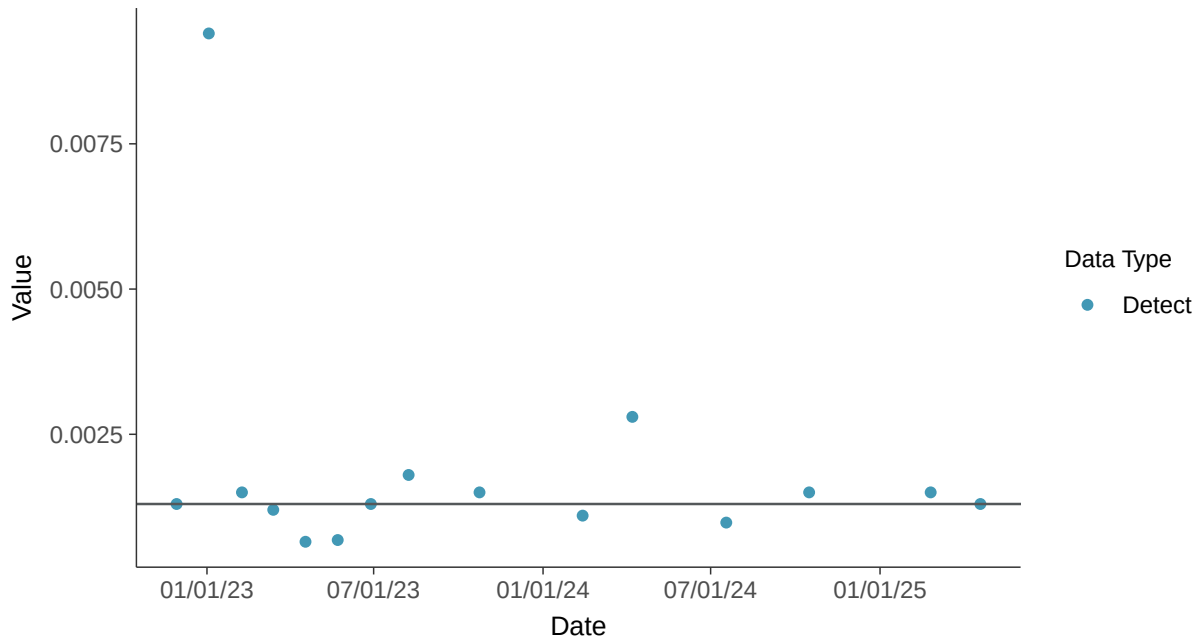
Normal Q-Q plot

Nickel, MW-11 (mg/L)



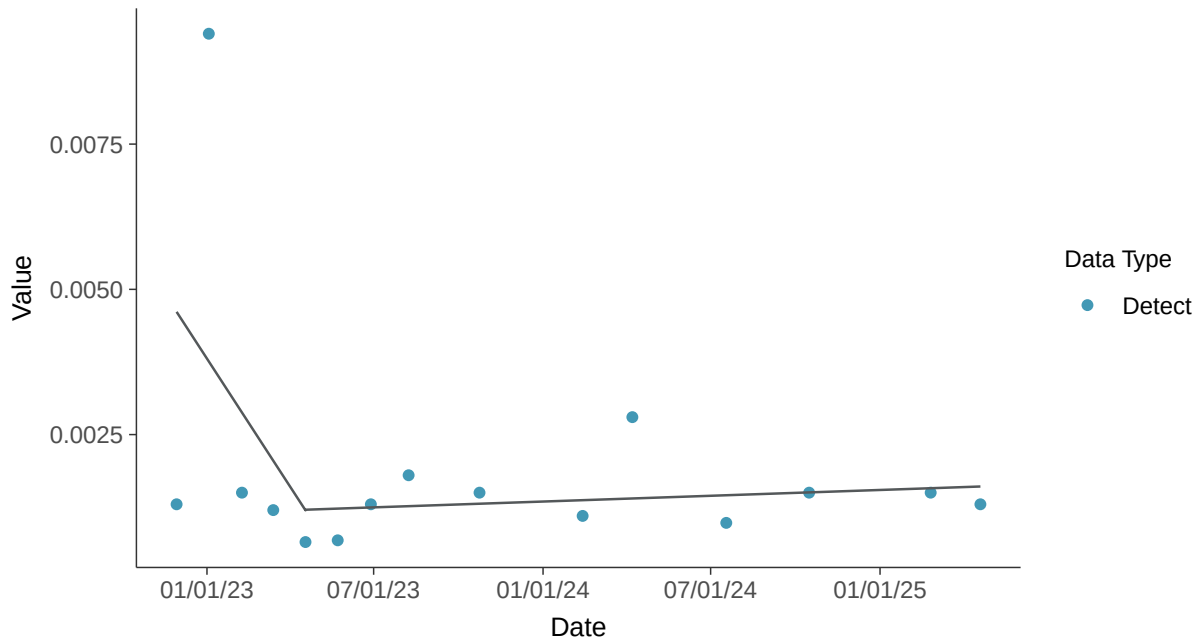
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Nickel, MW-11 (mg/L)



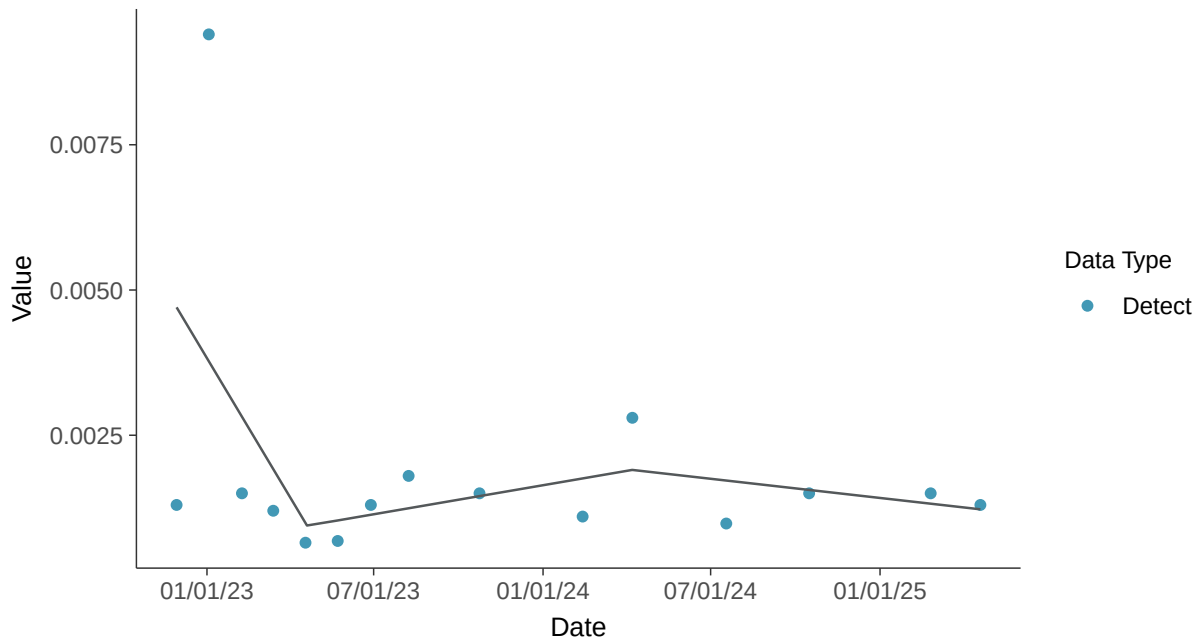
Trend Regression: Piecewise Linear-Linear

Nickel, MW-11 (mg/L)



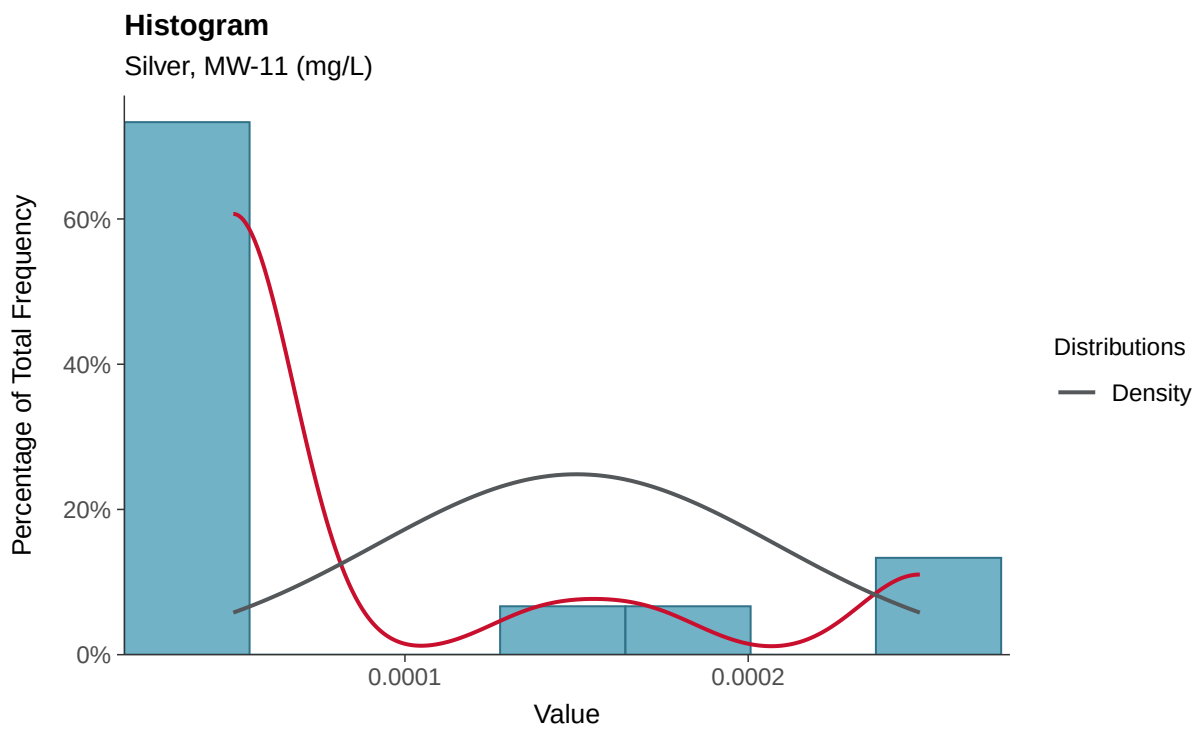
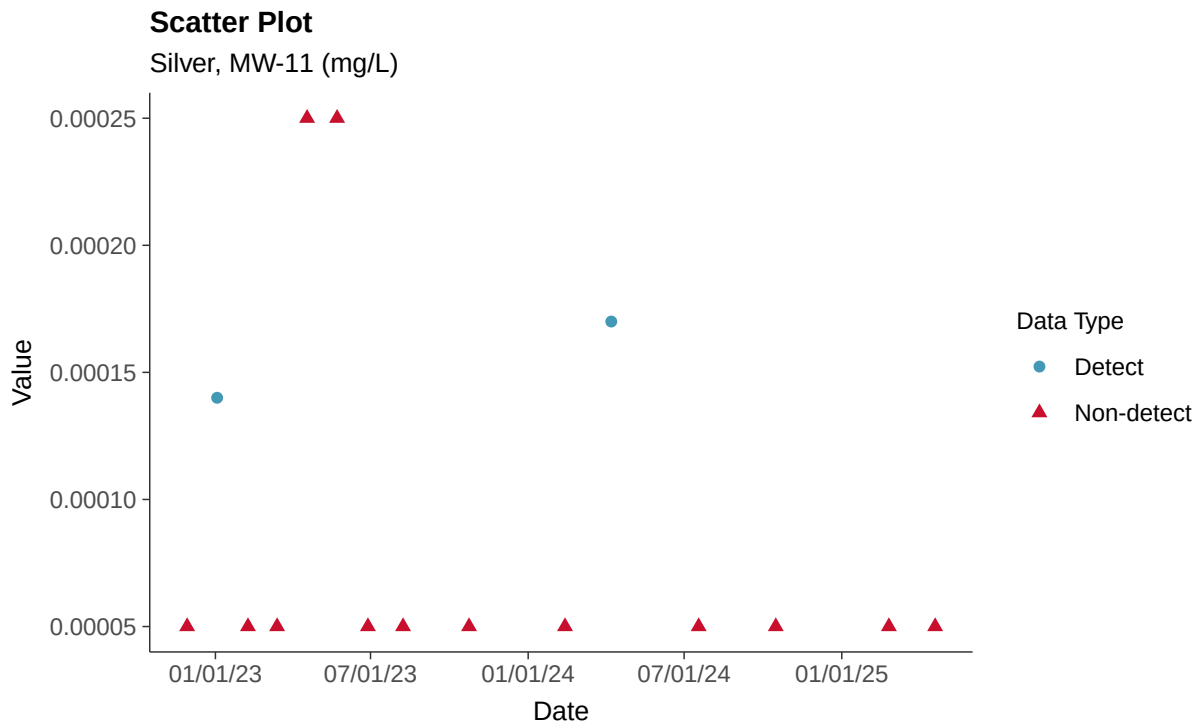
Trend Regression: Piecewise Linear-Linear-Linear

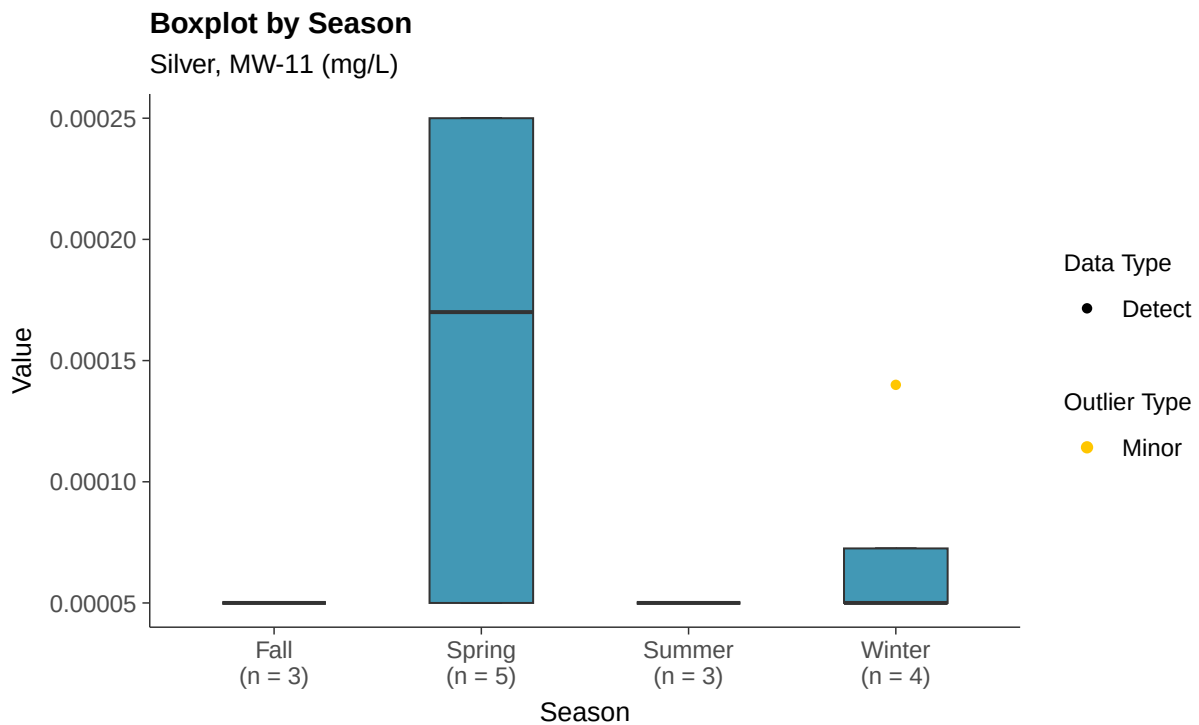
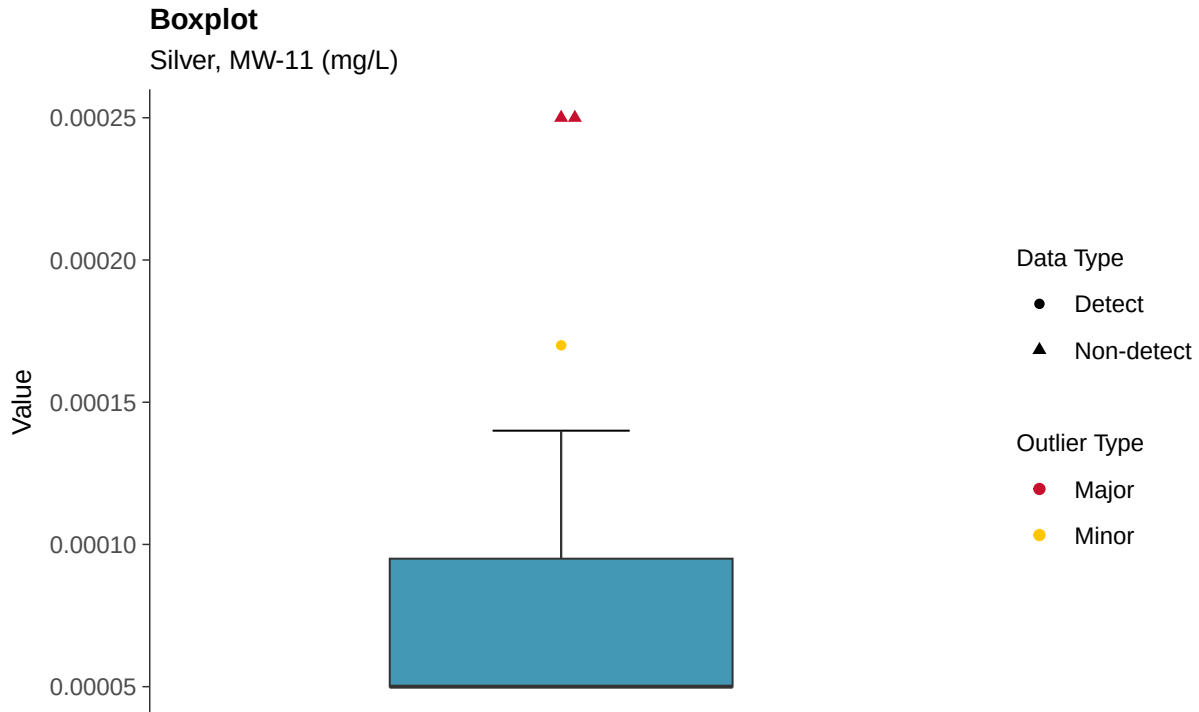
Nickel, MW-11 (mg/L)



Part 115: Silver, MW-11

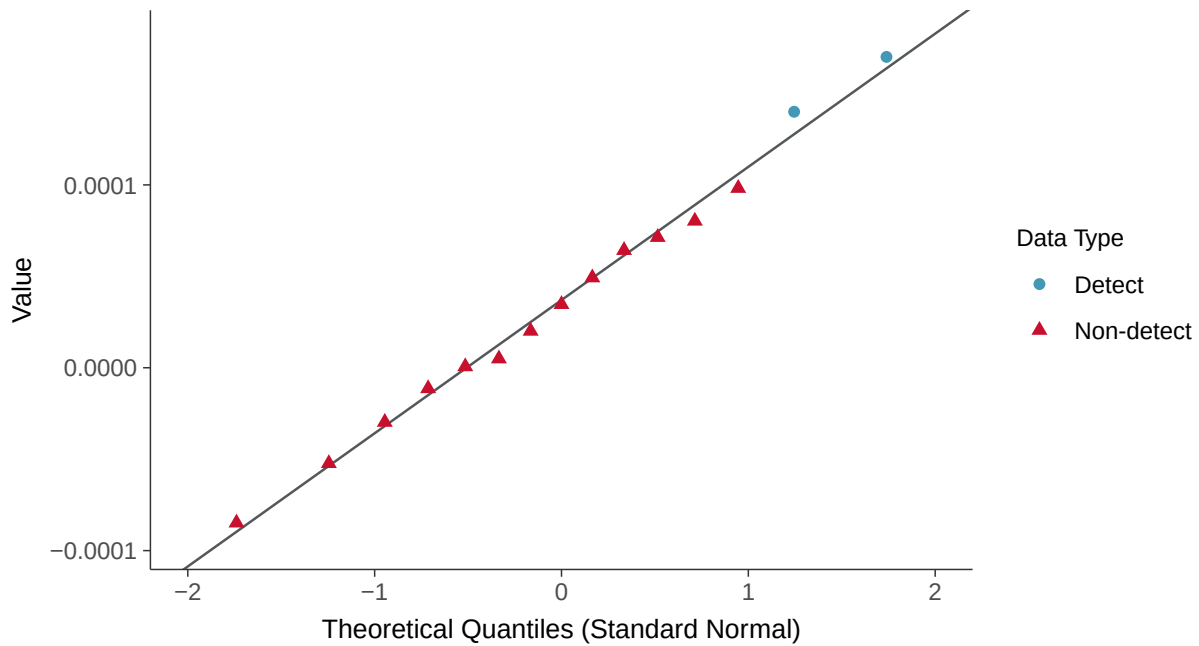
ID: 21_2_5_123





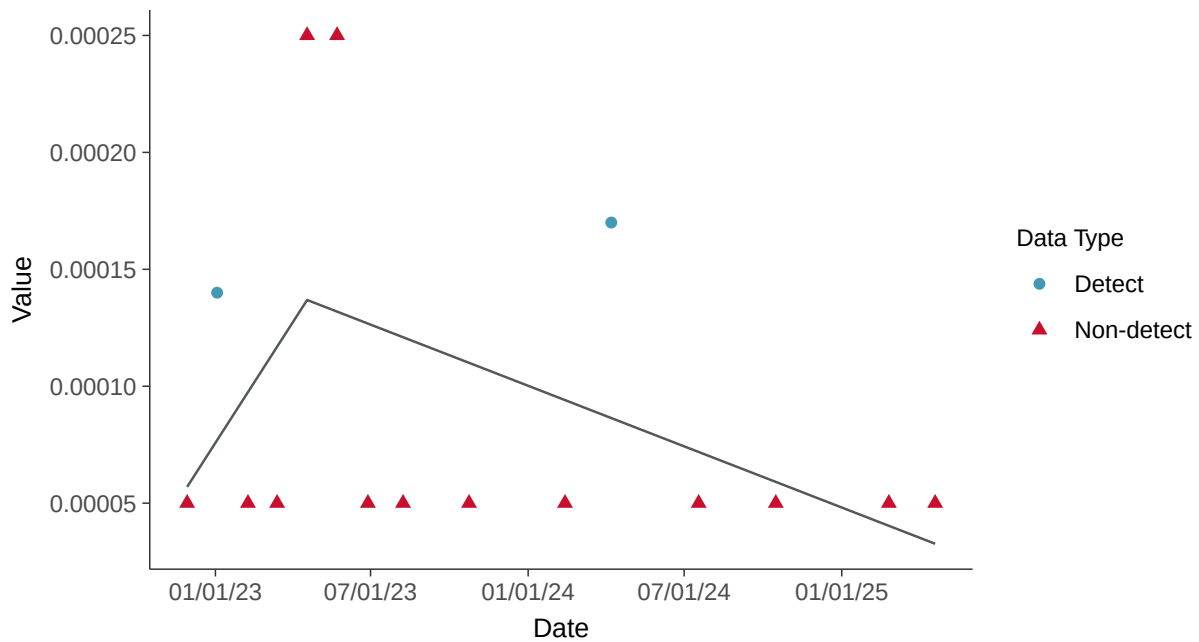
Normal Q-Q plot using ROS Imputed Estimates

Silver, MW-11 (mg/L)



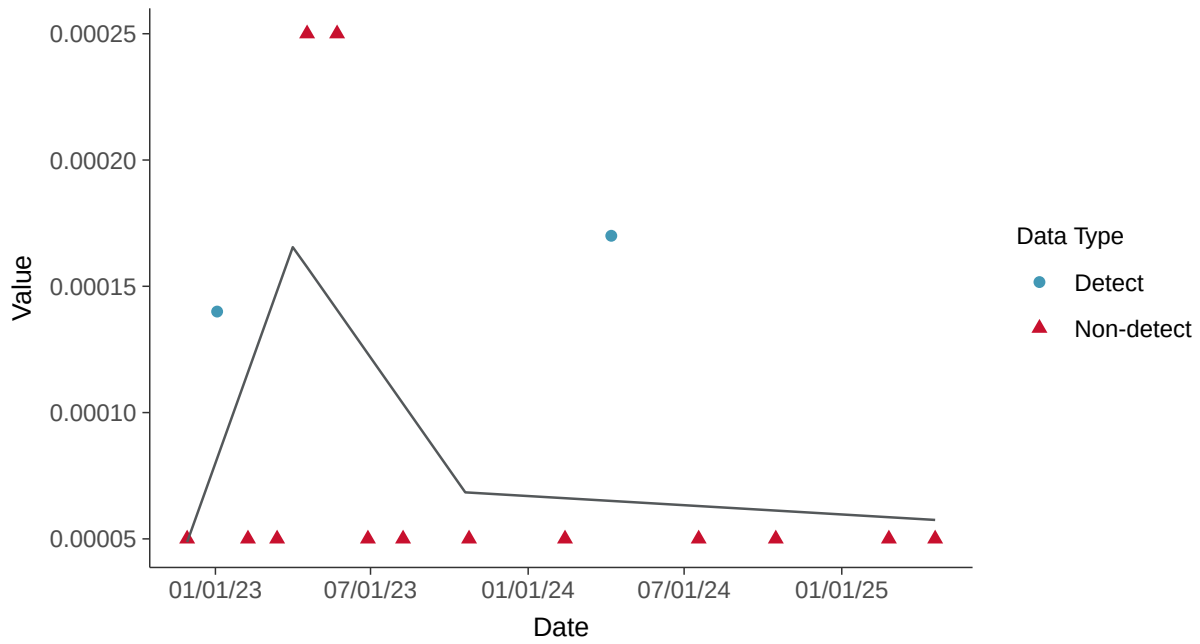
Trend Regression: Piecewise Linear-Linear

Silver, MW-11 (mg/L)



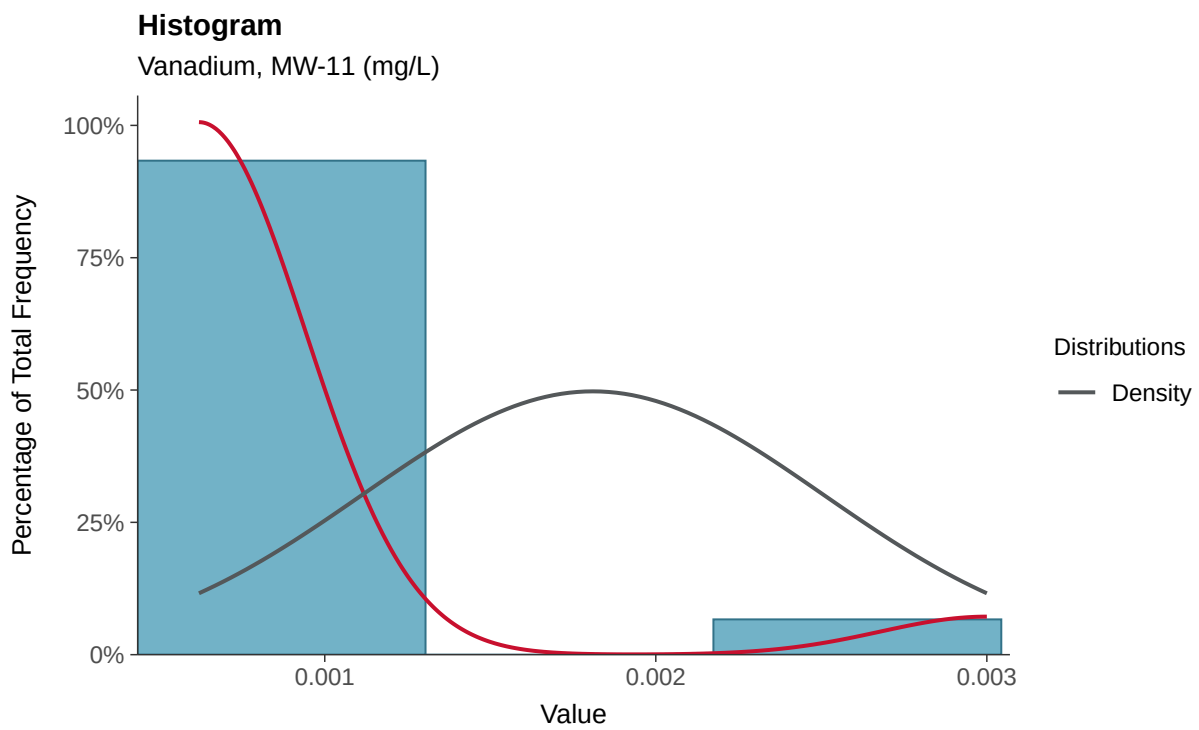
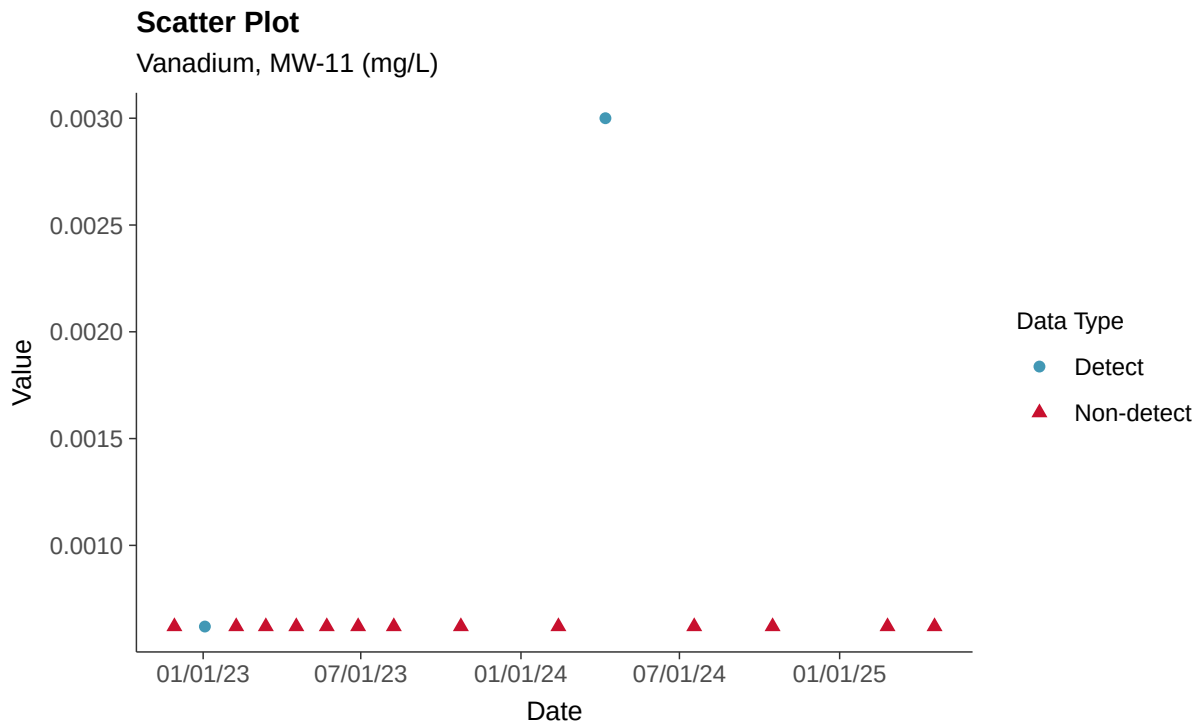


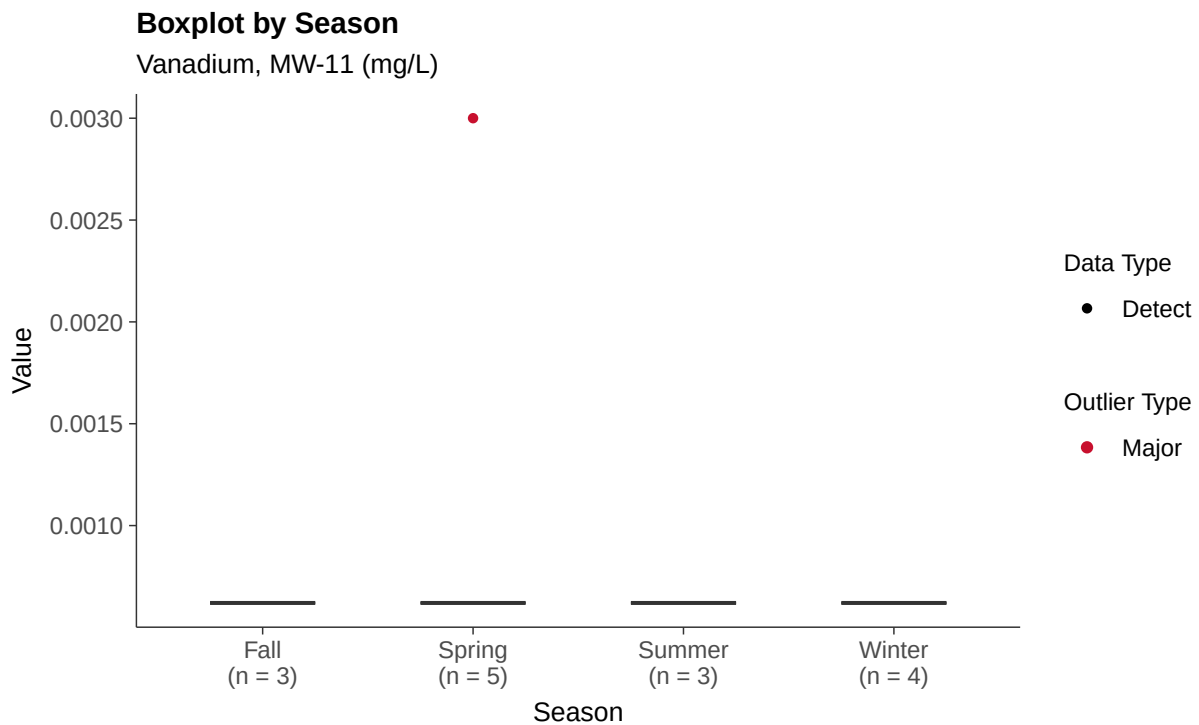
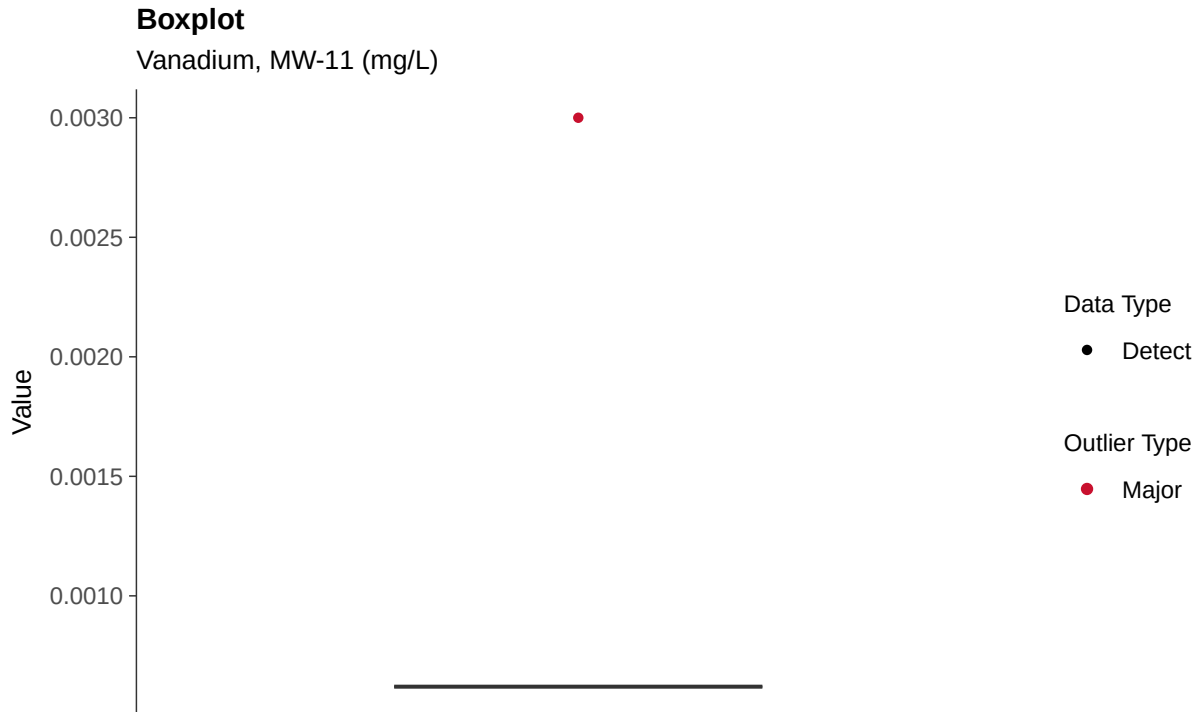
Trend Regression: Piecewise Linear-Linear-Linear
Silver, MW-11 (mg/L)



Part 115: Vanadium, MW-11

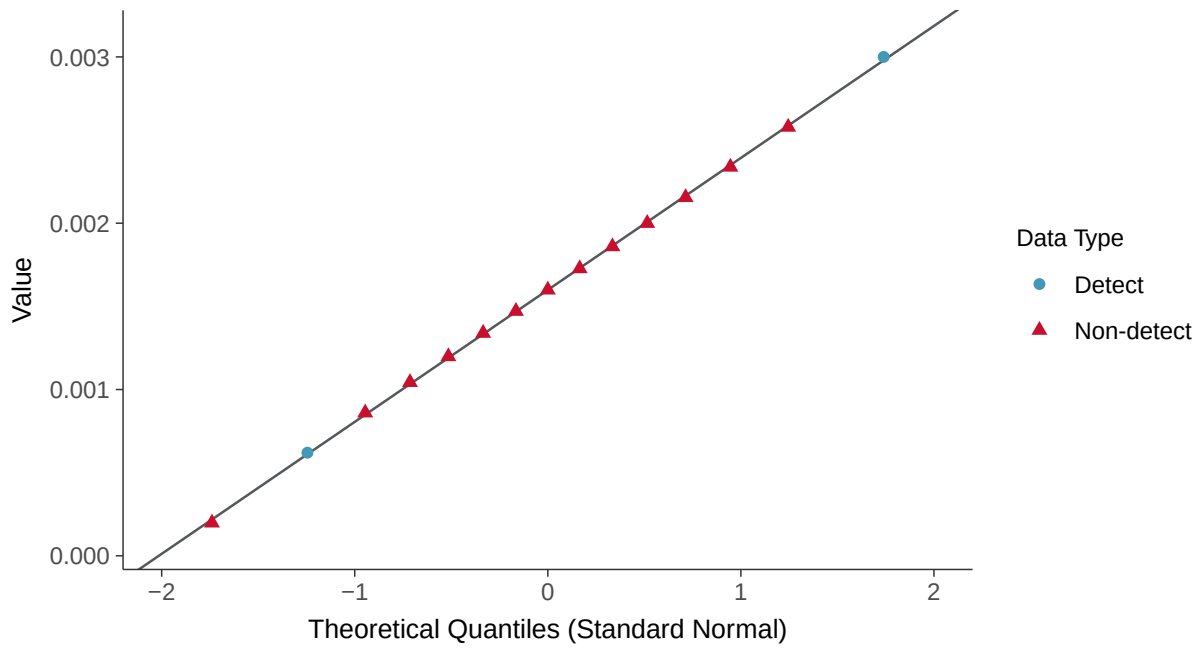
ID: 21_2_5_128





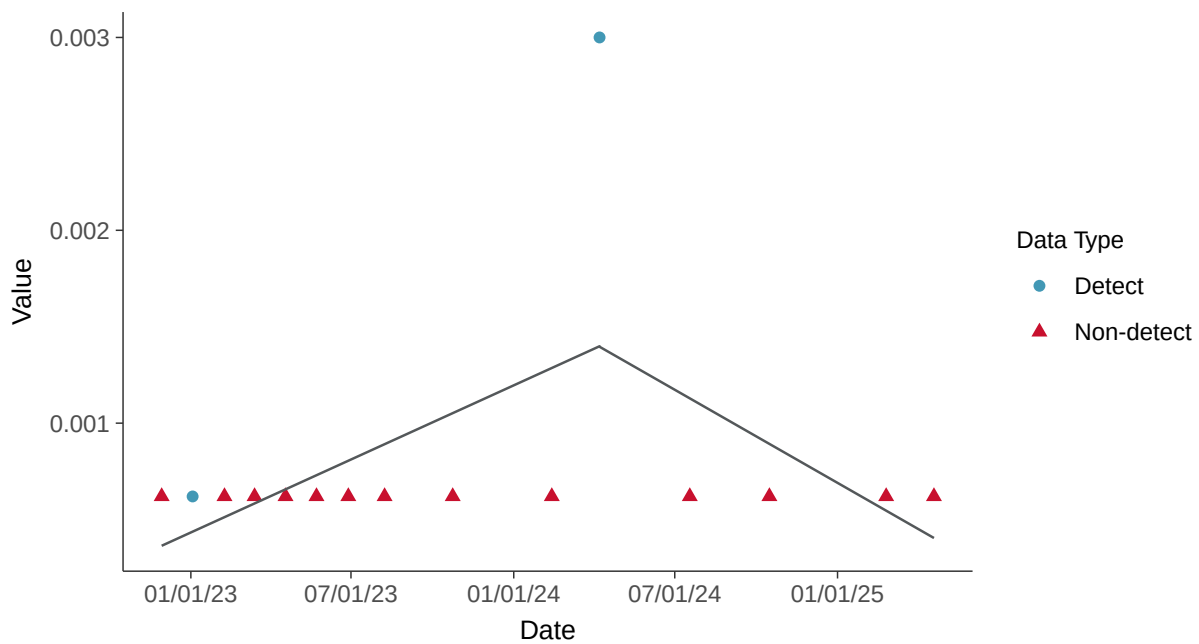
Normal Q-Q plot using ROS Imputed Estimates

Vanadium, MW-11 (mg/L)



Trend Regression: Piecewise Linear-Linear

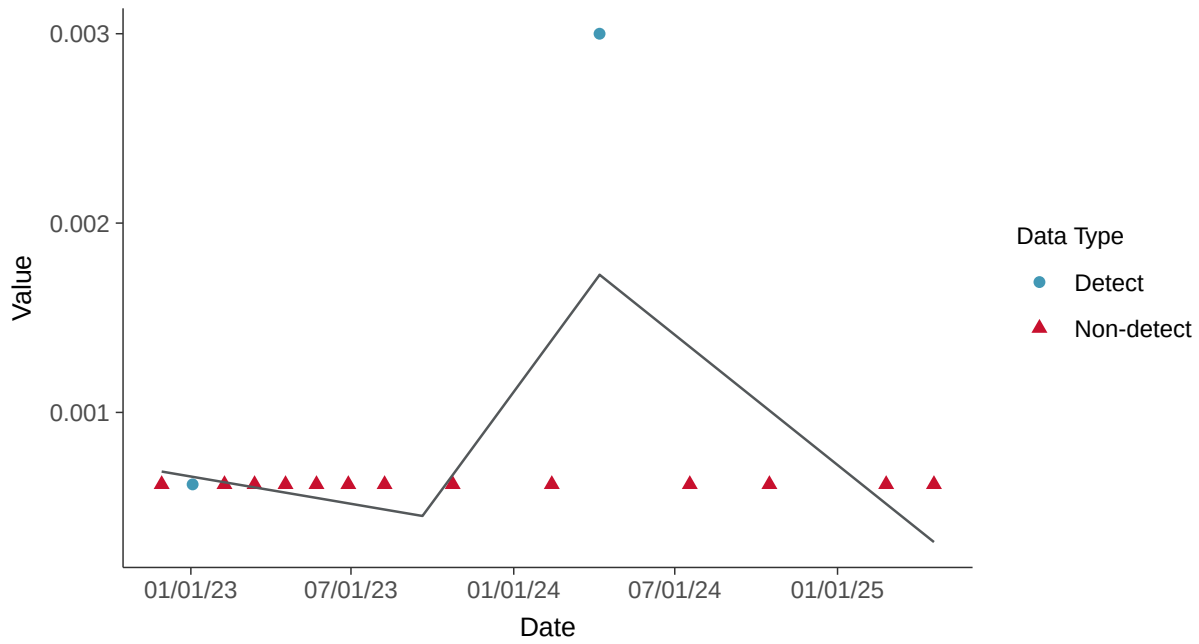
Vanadium, MW-11 (mg/L)





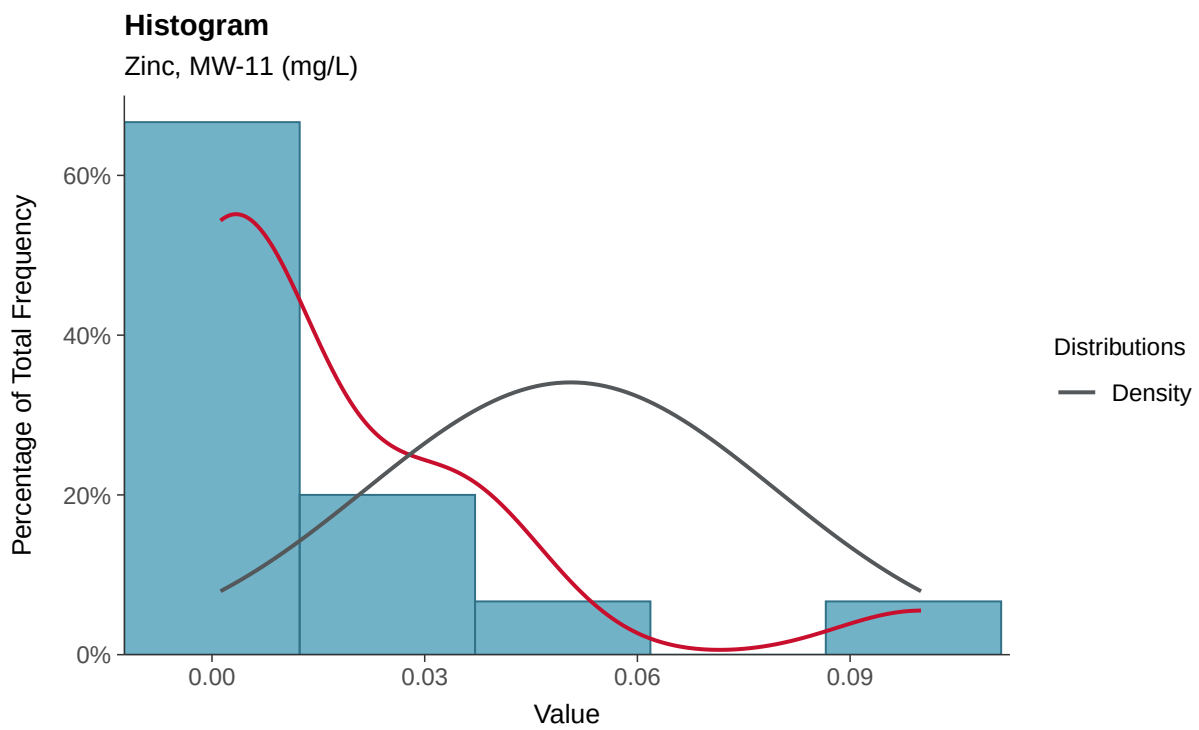
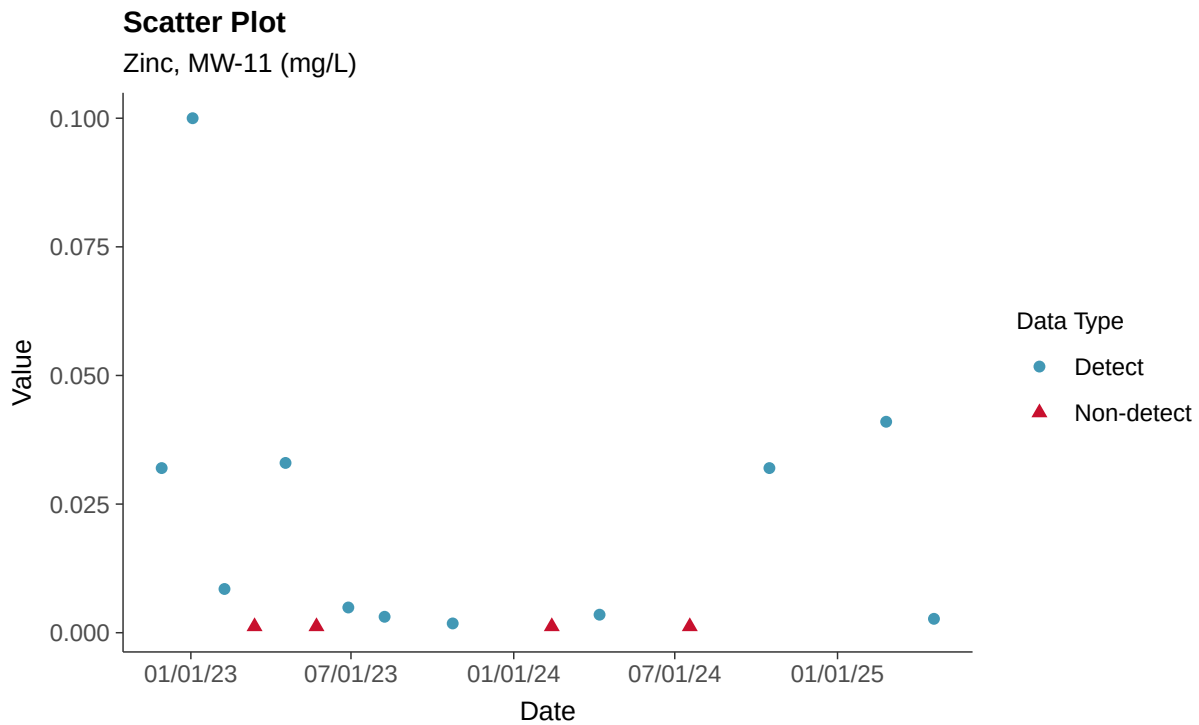
Trend Regression: Piecewise Linear-Linear-Linear

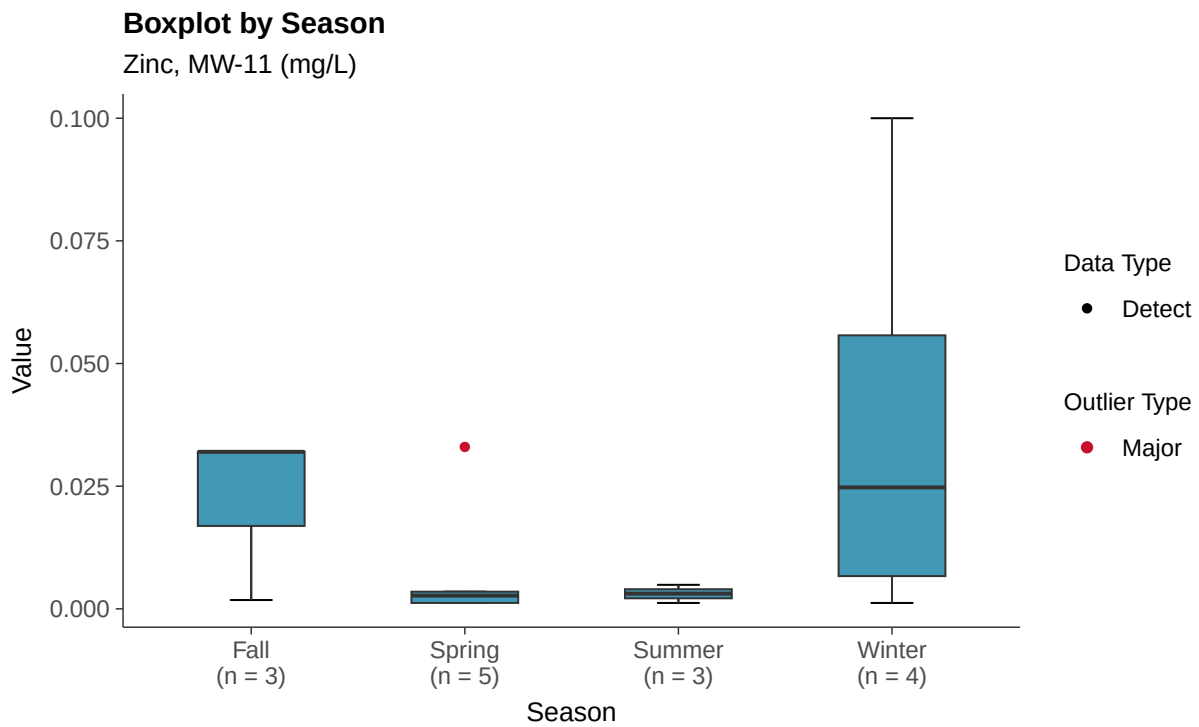
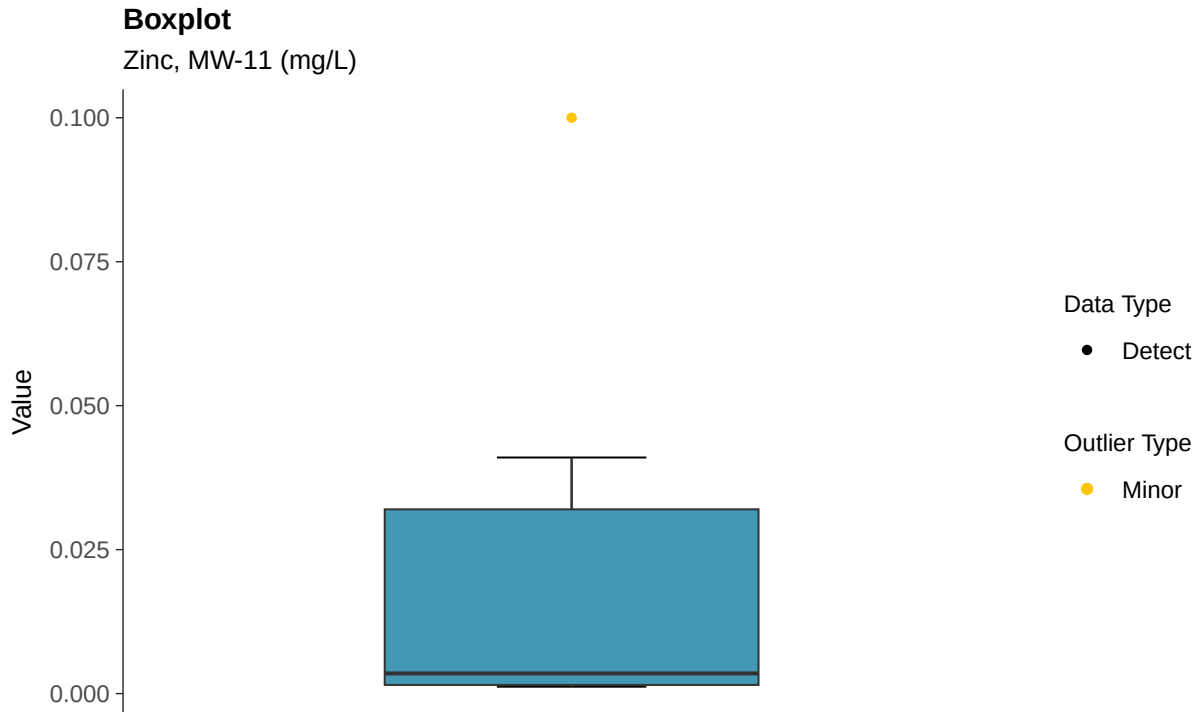
Vanadium, MW-11 (mg/L)



Part 115: Zinc, MW-11

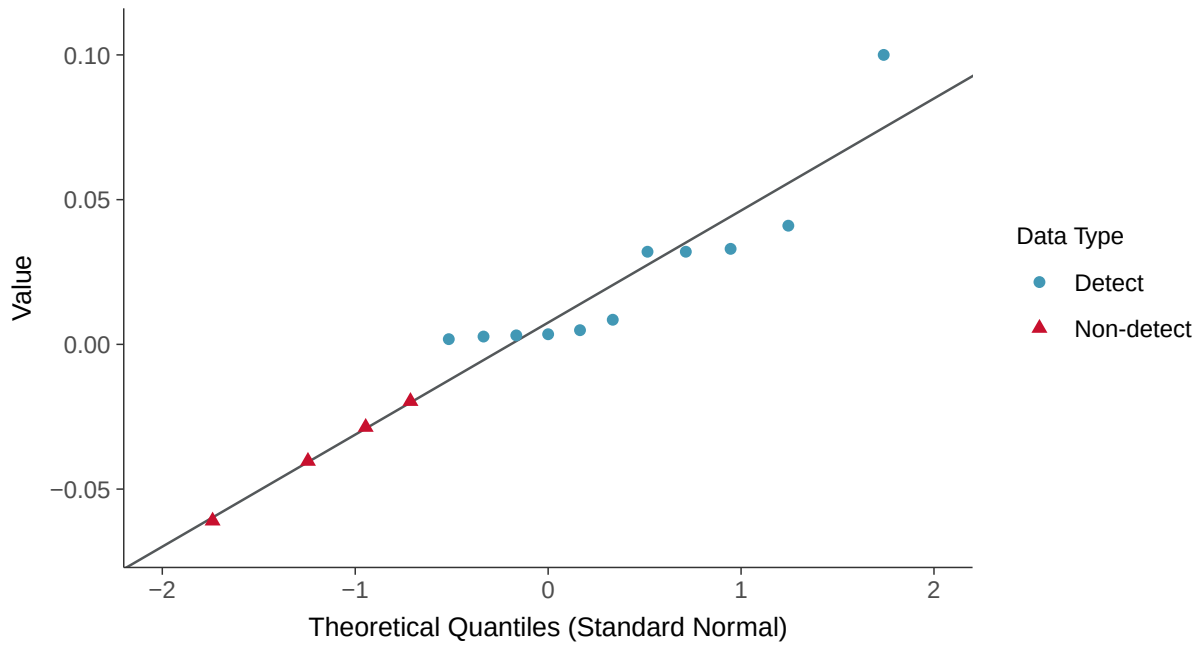
ID: 21_2_5_129





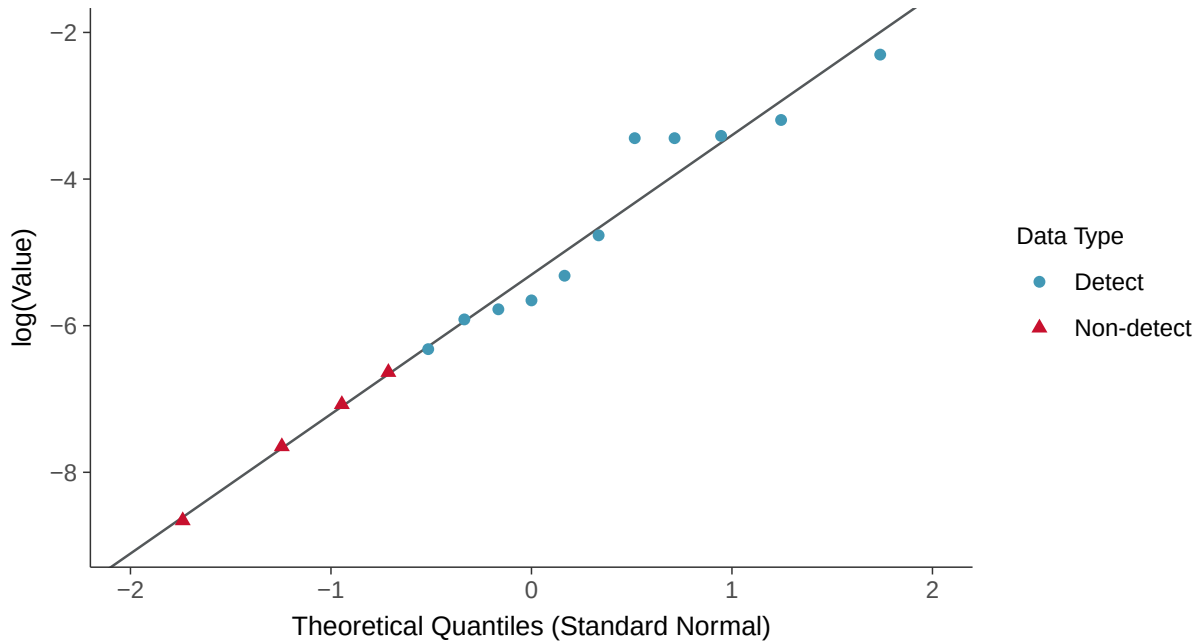
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-11 (mg/L)



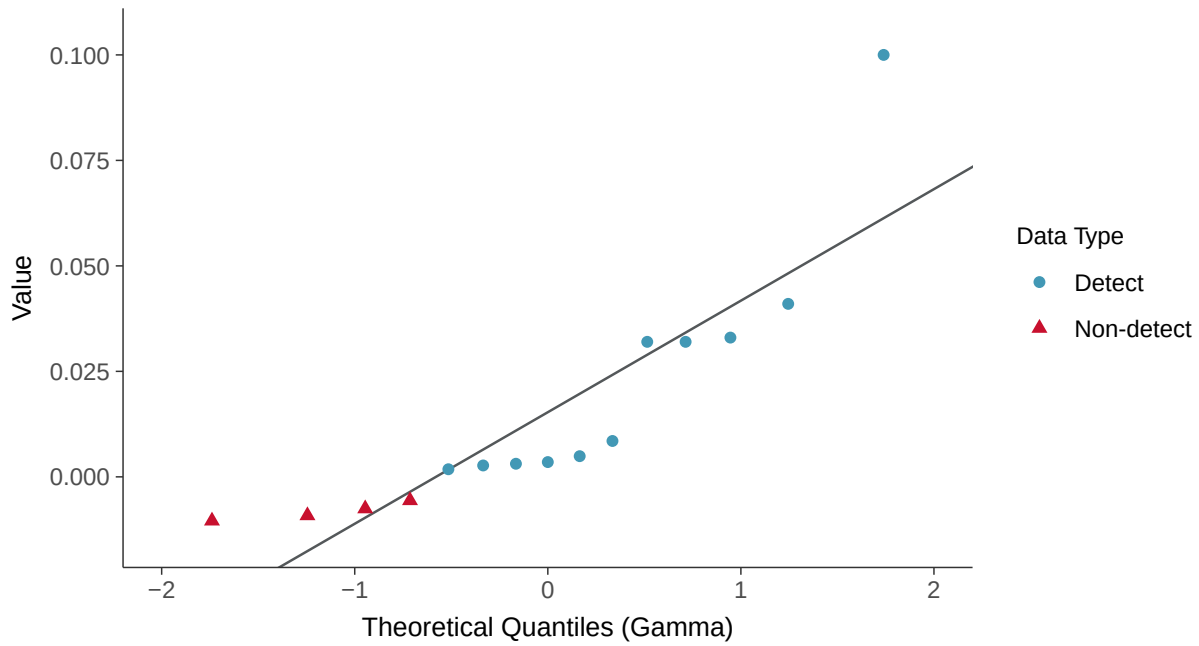
Lognormal Q-Q plot using ROS Imputed Estimates

Zinc, MW-11 (mg/L)



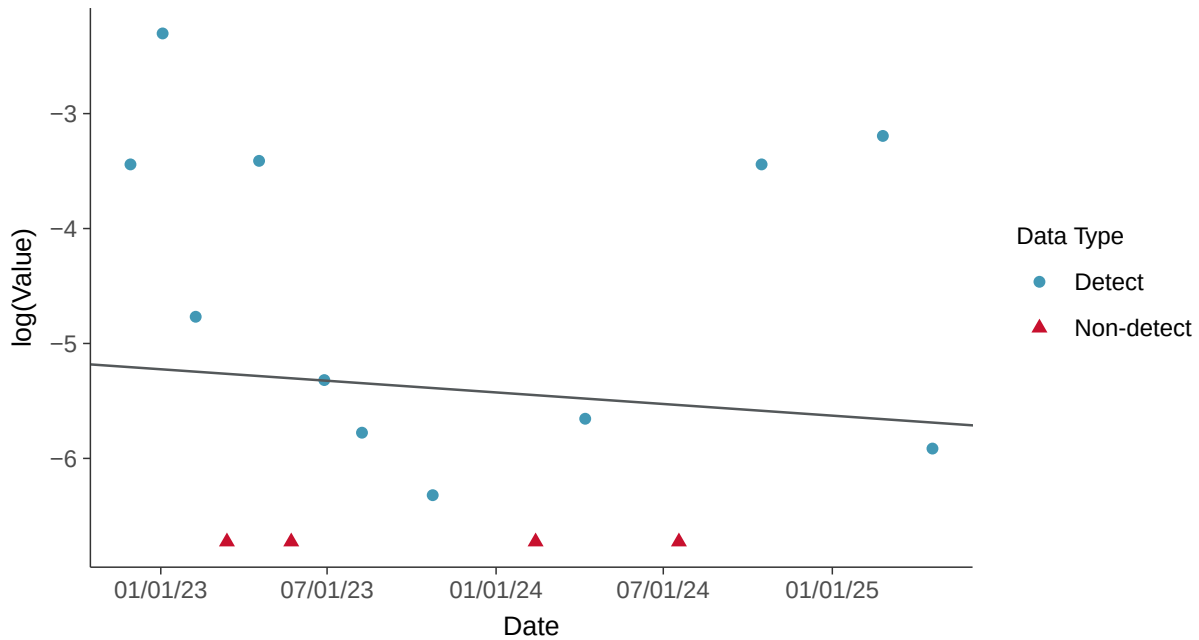
Gamma Q-Q plot using ROS Imputed Estimates

Zinc, MW-11 (mg/L)



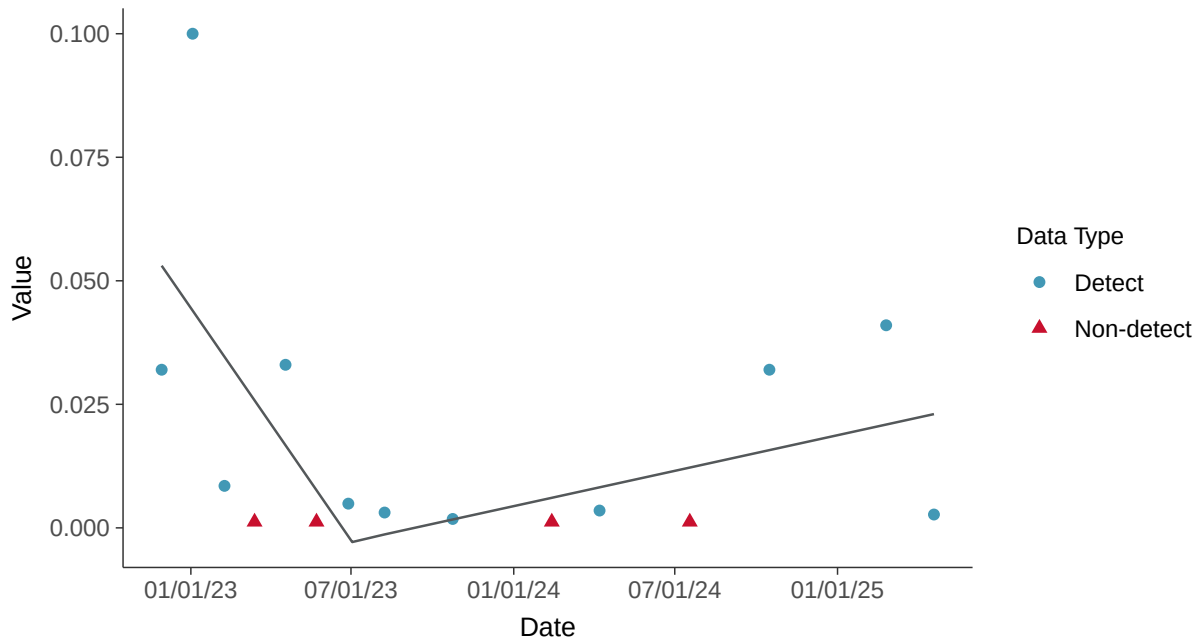
Trend Regression: Lognormal MLE

Zinc, MW-11 (mg/L)



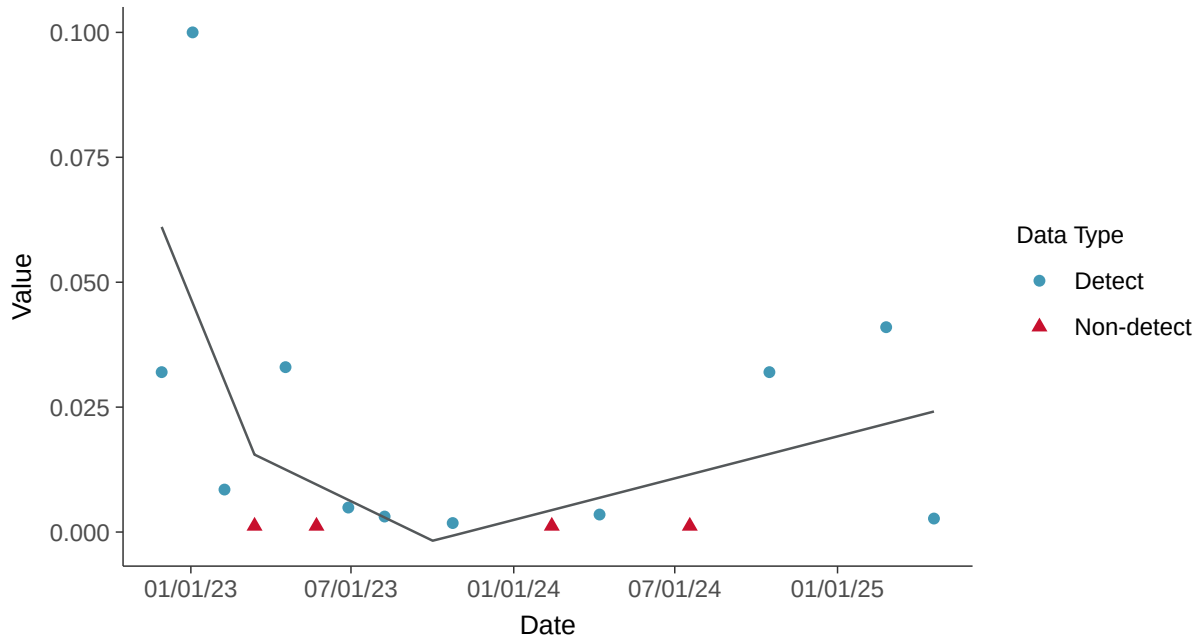
Trend Regression: Piecewise Linear-Linear

Zinc, MW-11 (mg/L)



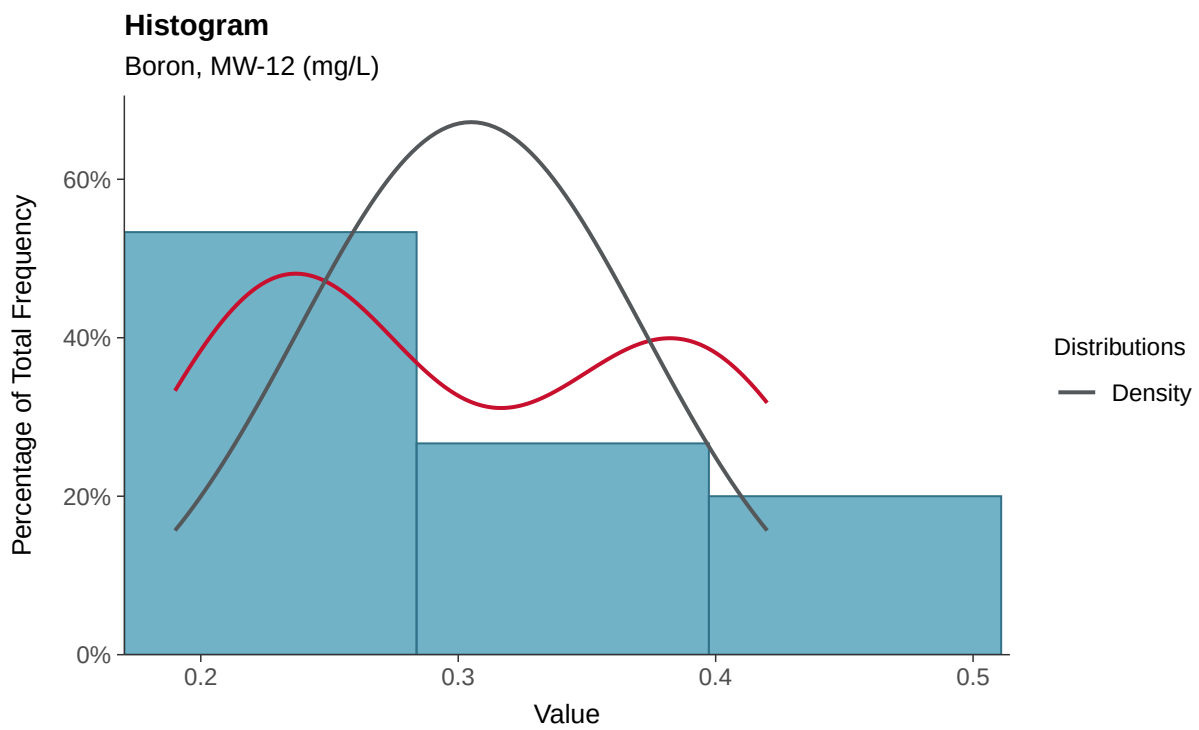
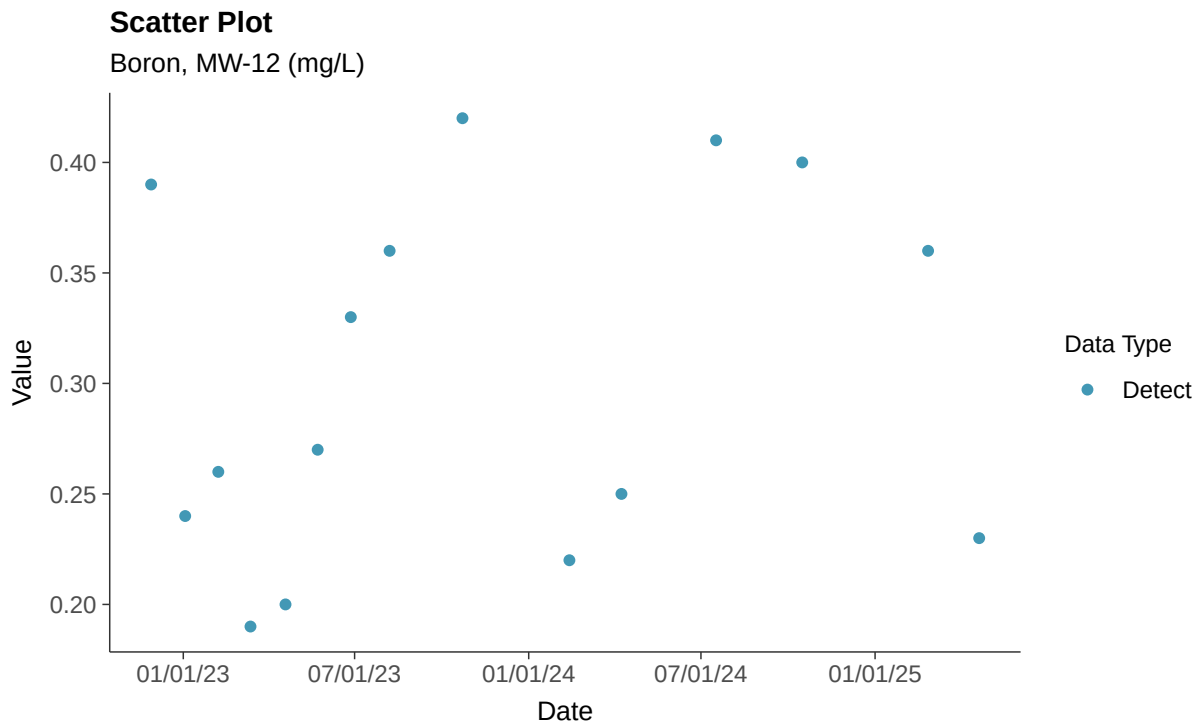
Trend Regression: Piecewise Linear-Linear-Linear

Zinc, MW-11 (mg/L)



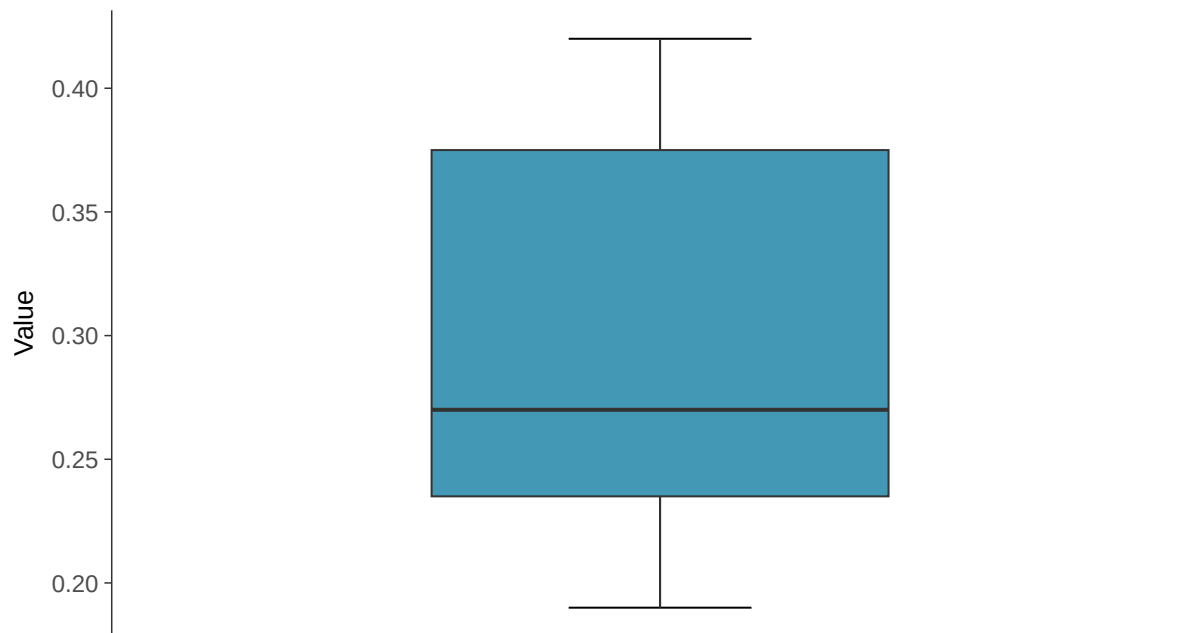
Appendix III: Boron, MW-12

ID: 22_2_3_105



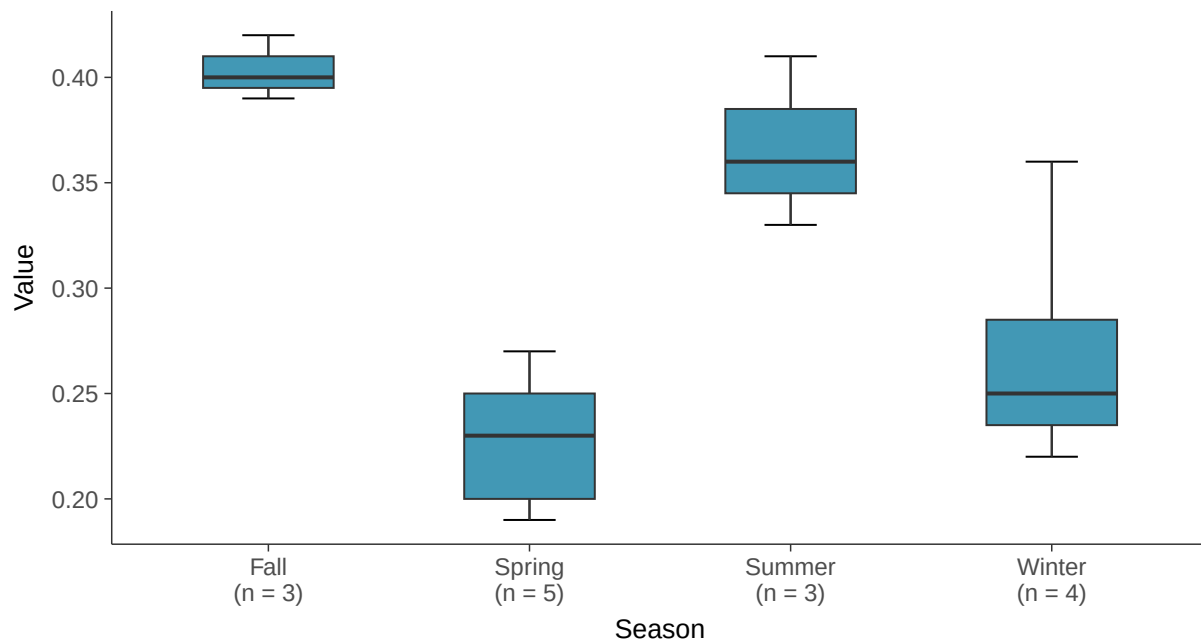
Boxplot

Boron, MW-12 (mg/L)

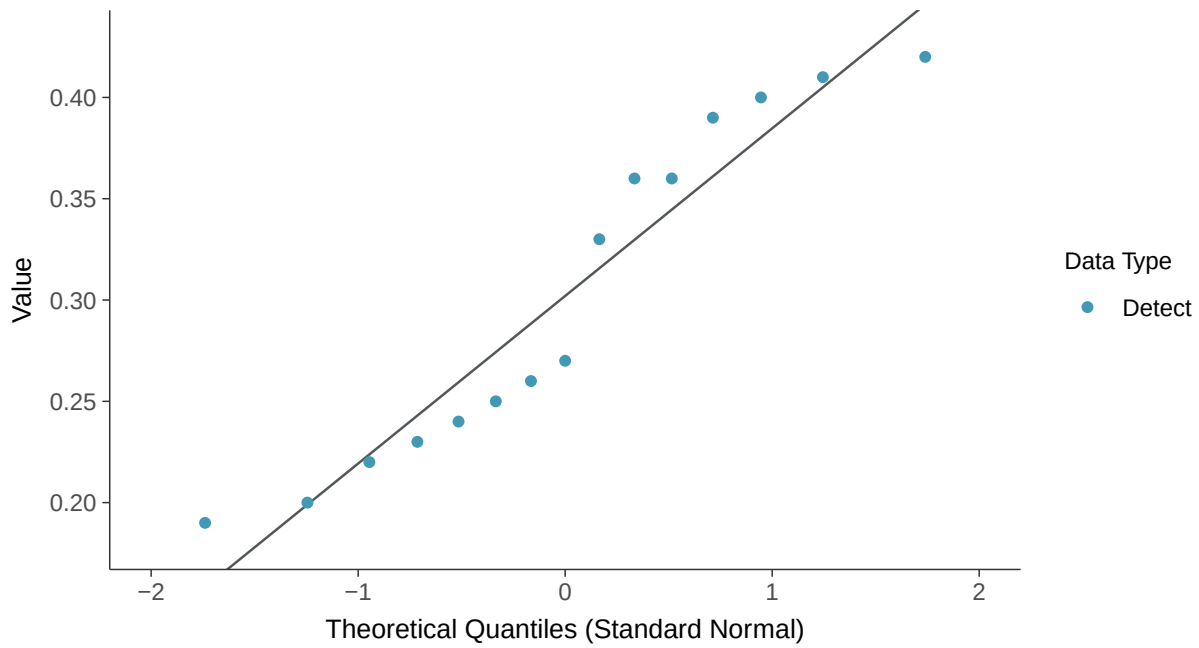


Boxplot by Season

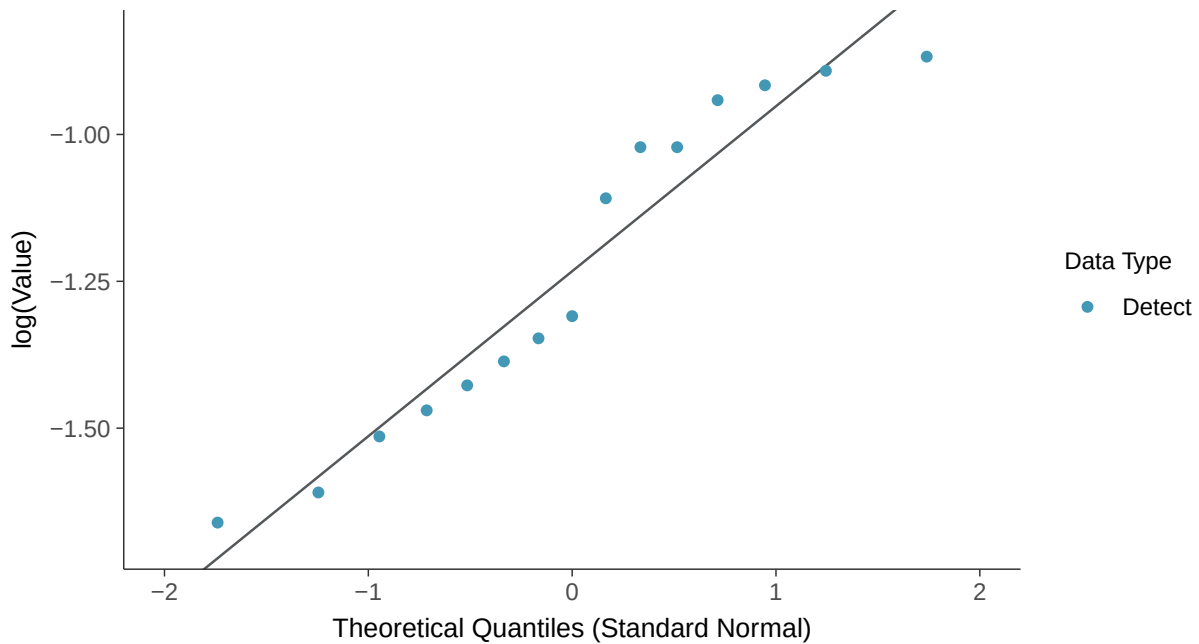
Boron, MW-12 (mg/L)



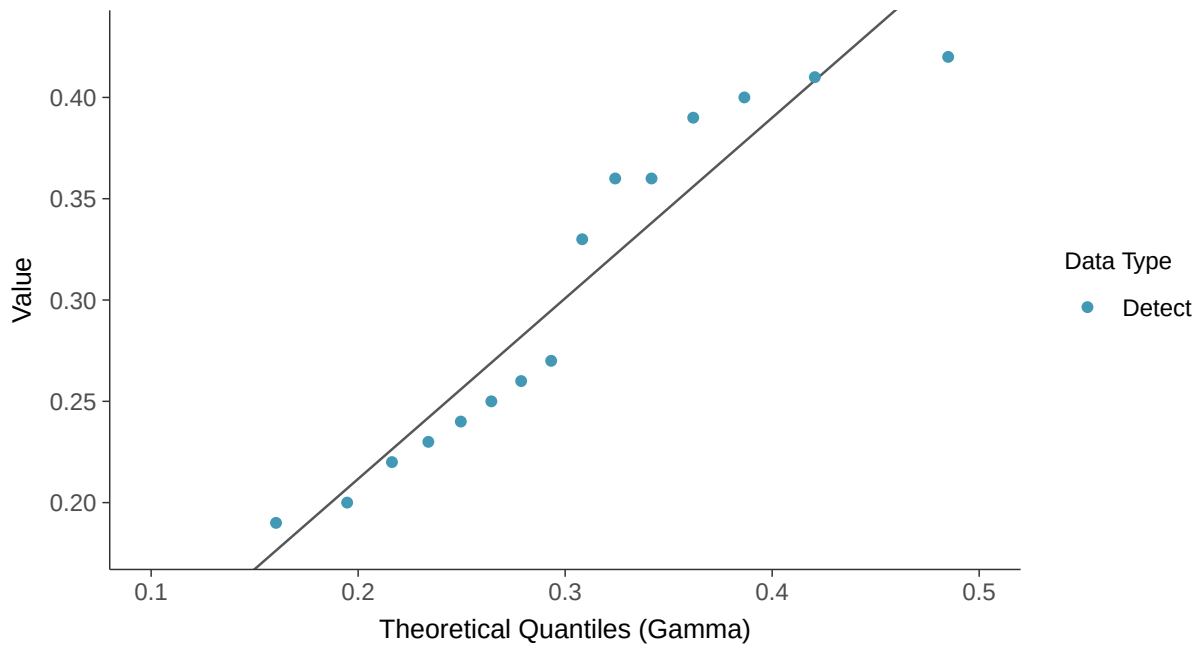
Normal Q-Q plot
Boron, MW-12 (mg/L)



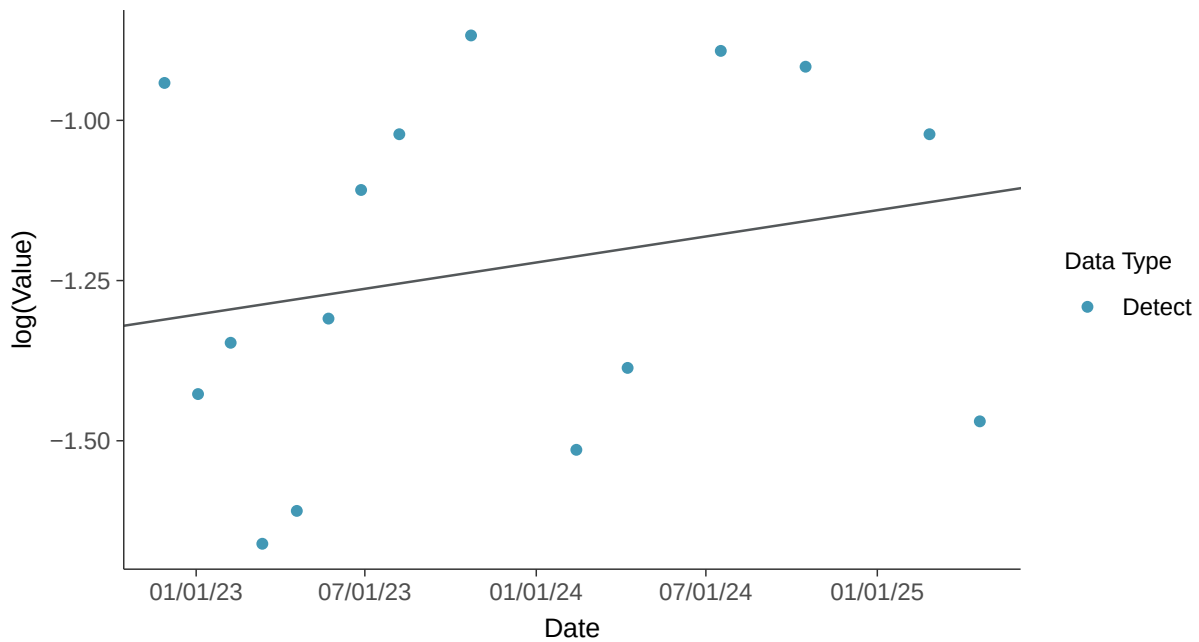
Lognormal Q-Q plot
Boron, MW-12 (mg/L)



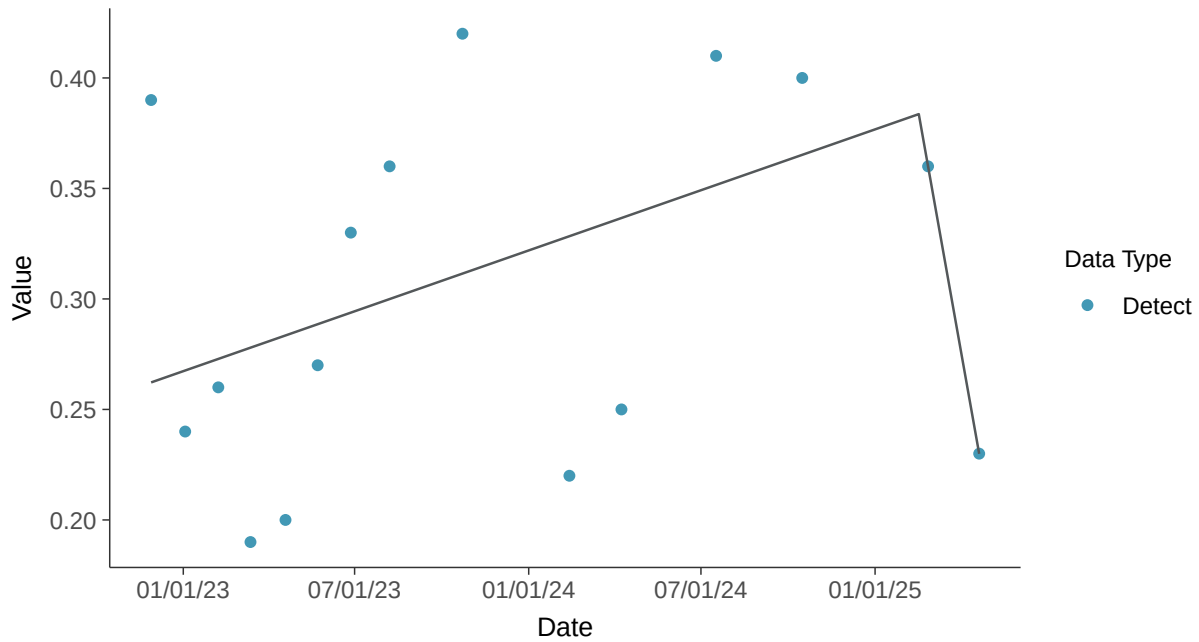
Gamma Q-Q plot
Boron, MW-12 (mg/L)



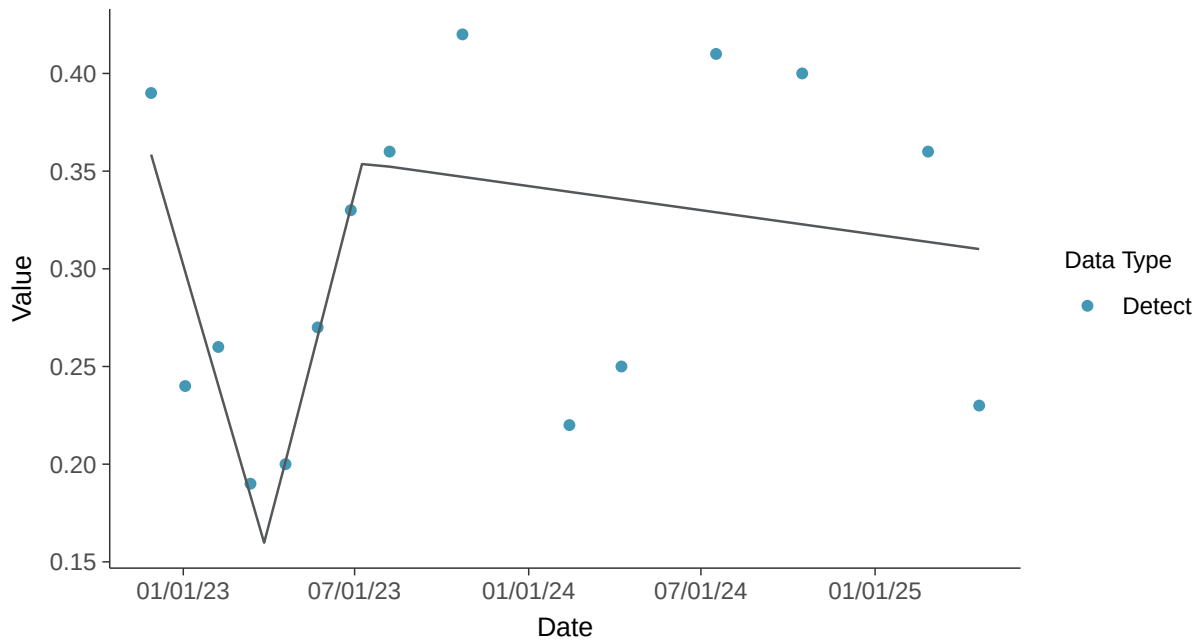
Trend Regression: Lognormal MLE
Boron, MW-12 (mg/L)



Trend Regression: Piecewise Linear-Linear
Boron, MW-12 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Boron, MW-12 (mg/L)

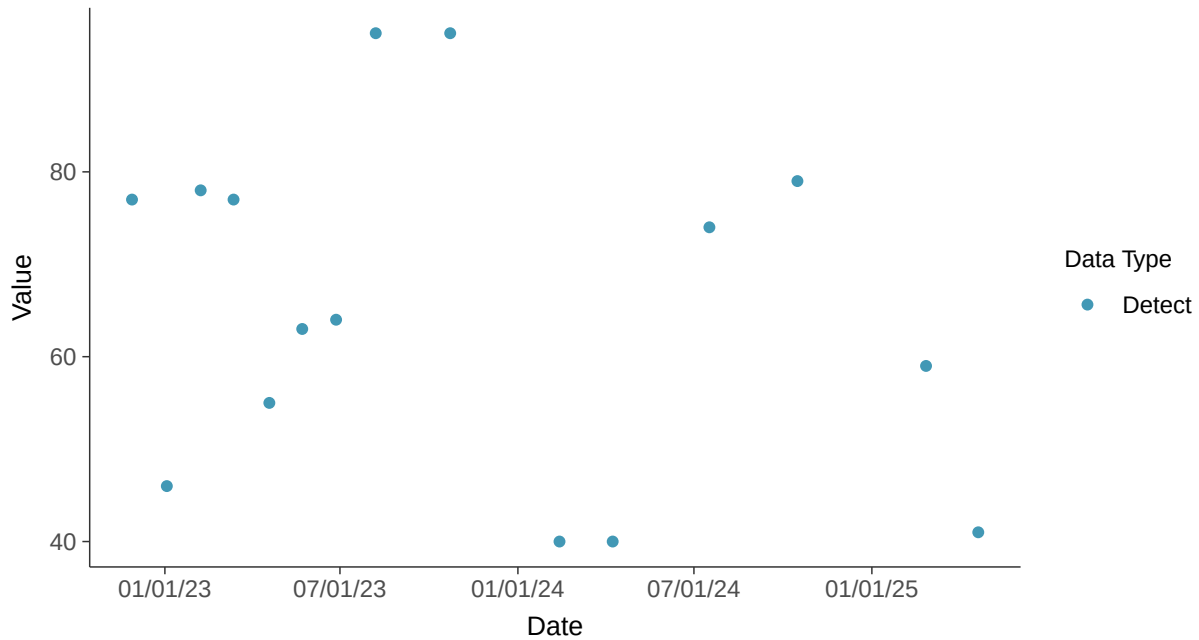


Appendix III: Calcium, MW-12

ID: 22_2_3_107

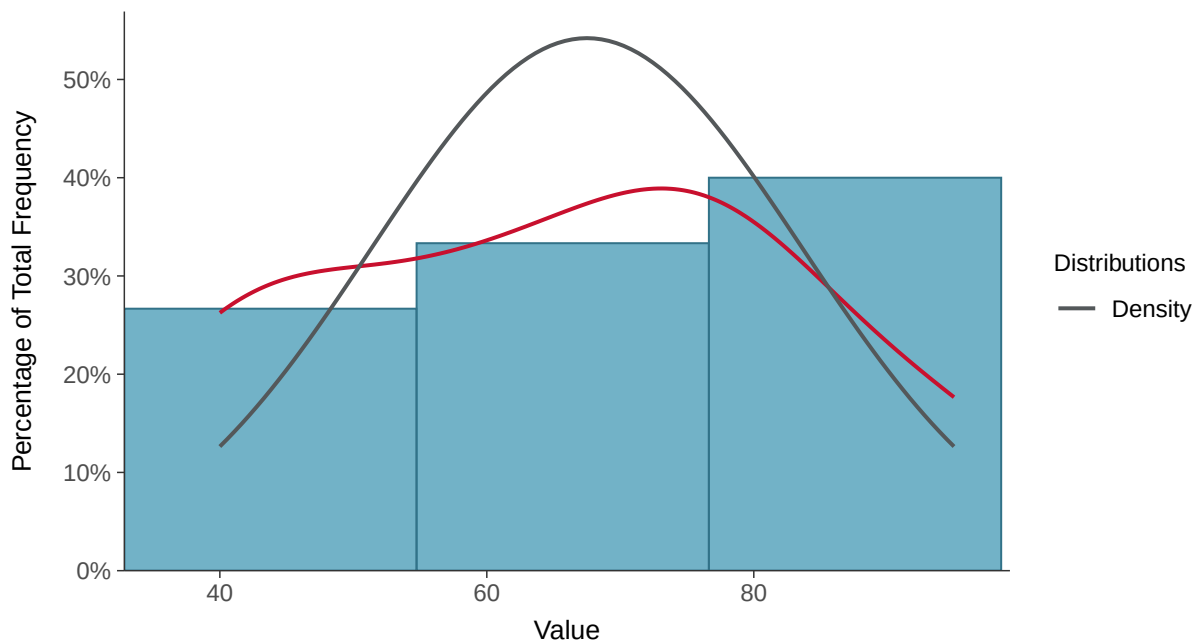
Scatter Plot

Calcium, MW-12 (mg/L)



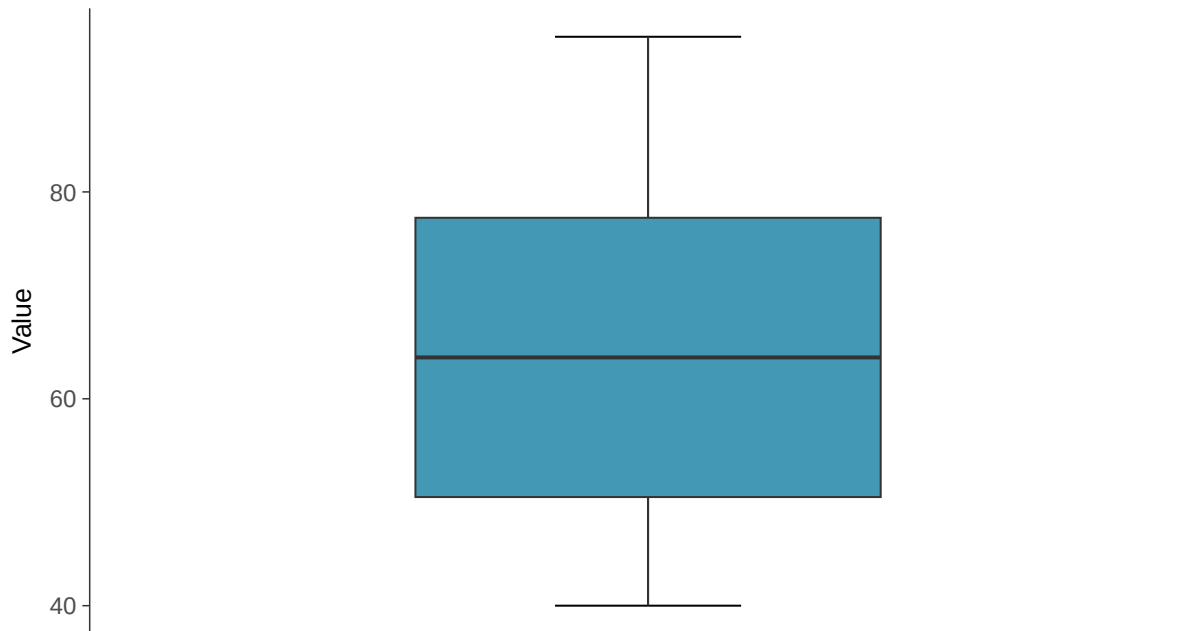
Histogram

Calcium, MW-12 (mg/L)



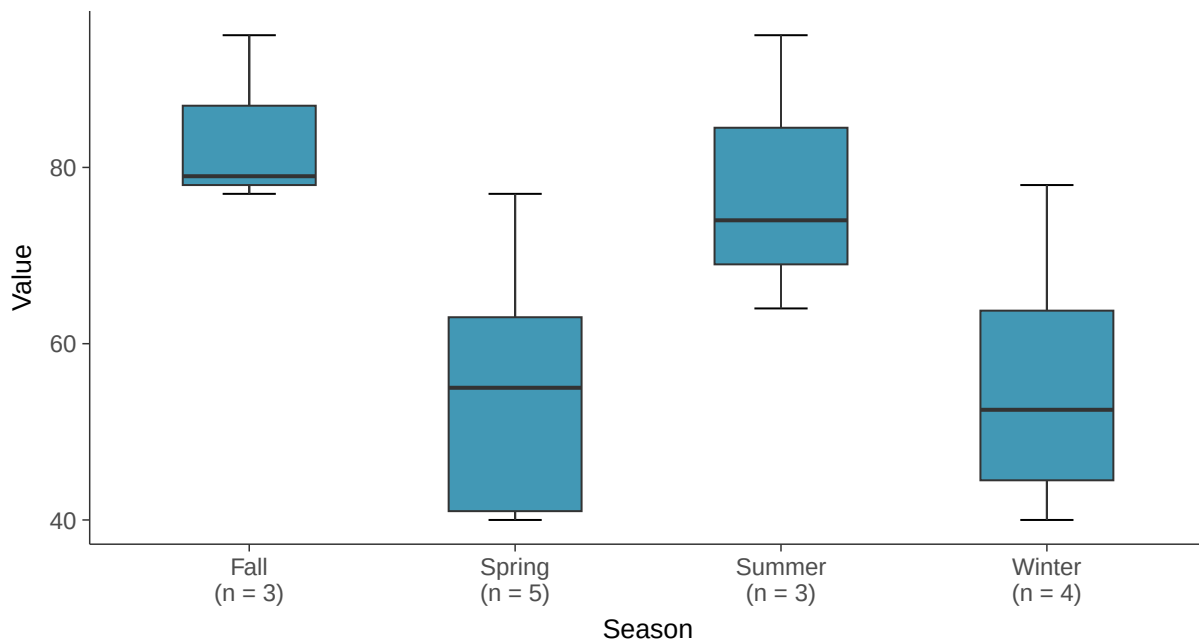
Boxplot

Calcium, MW-12 (mg/L)



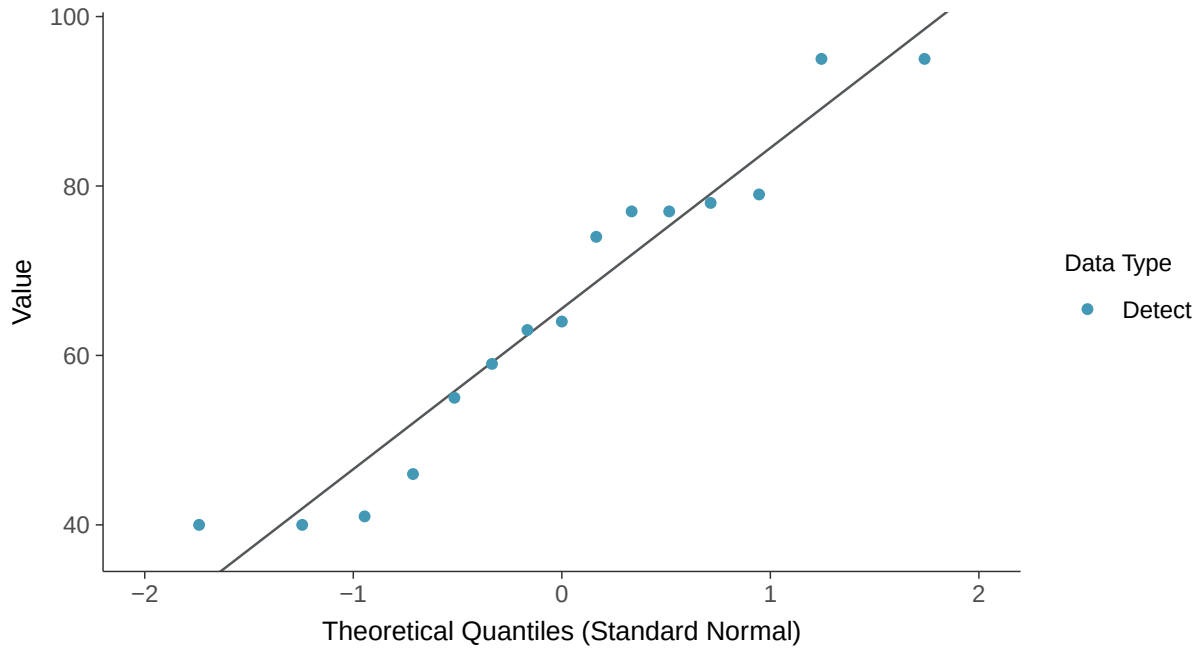
Boxplot by Season

Calcium, MW-12 (mg/L)



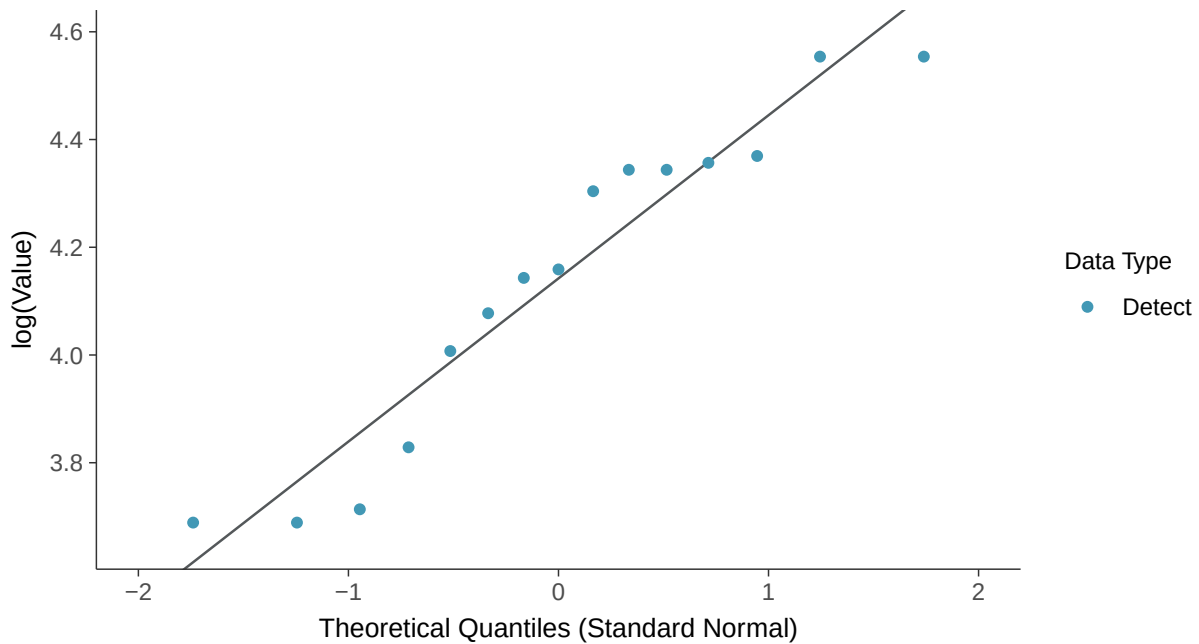
Normal Q-Q plot

Calcium, MW-12 (mg/L)



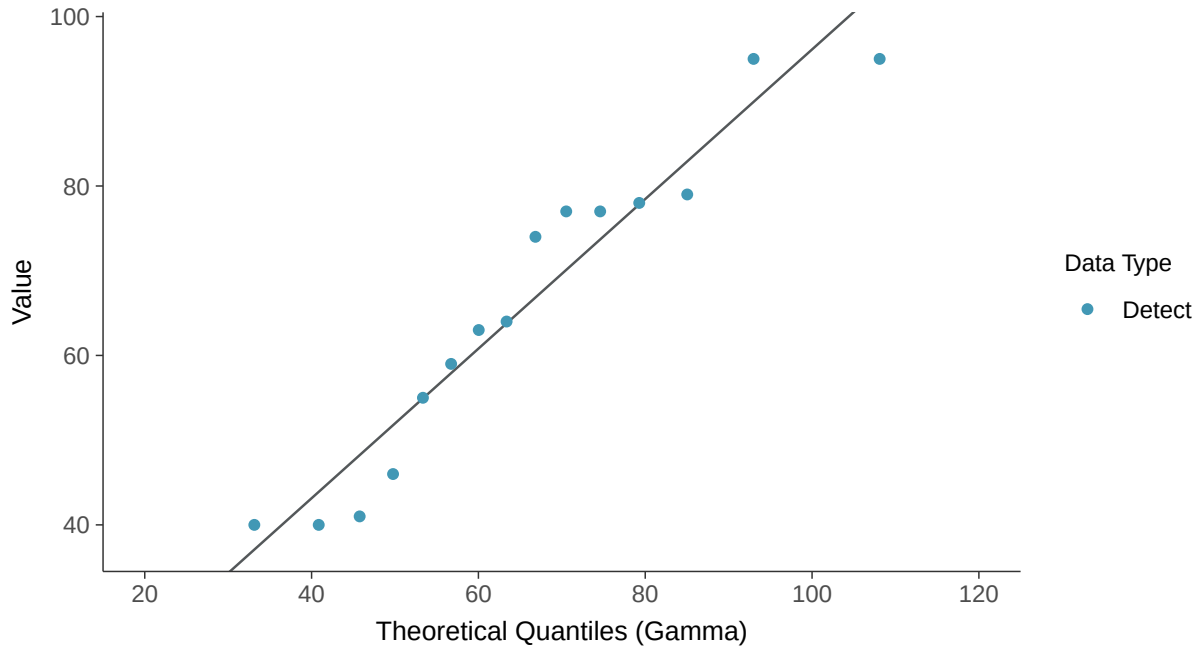
Lognormal Q-Q plot

Calcium, MW-12 (mg/L)



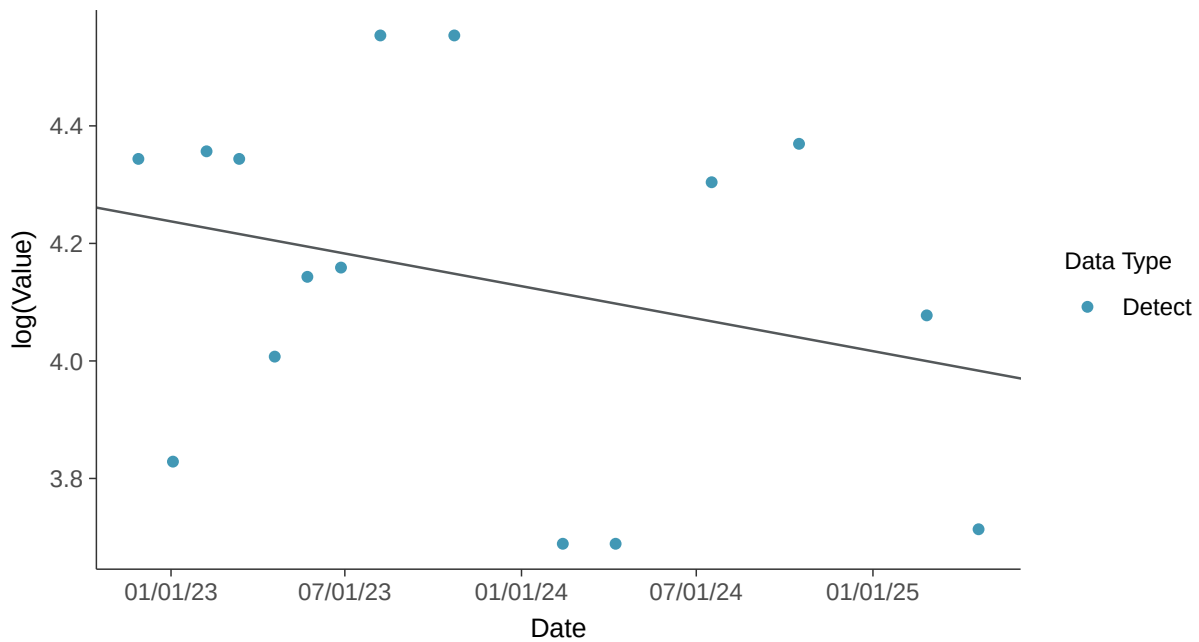
Gamma Q-Q plot

Calcium, MW-12 (mg/L)



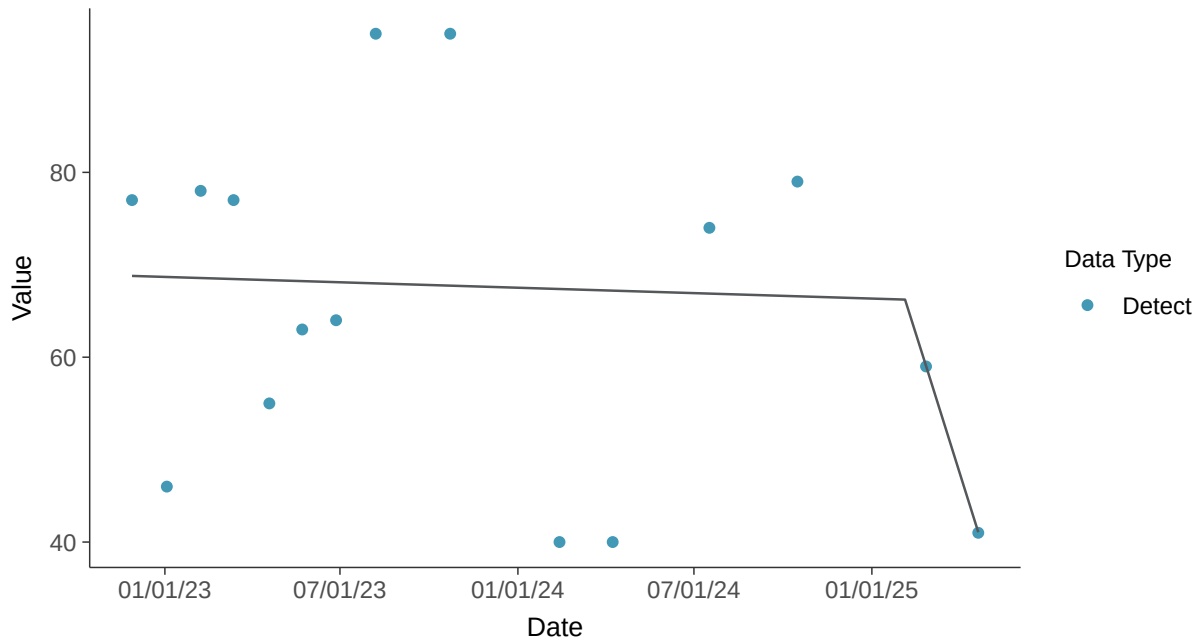
Trend Regression: Lognormal MLE

Calcium, MW-12 (mg/L)



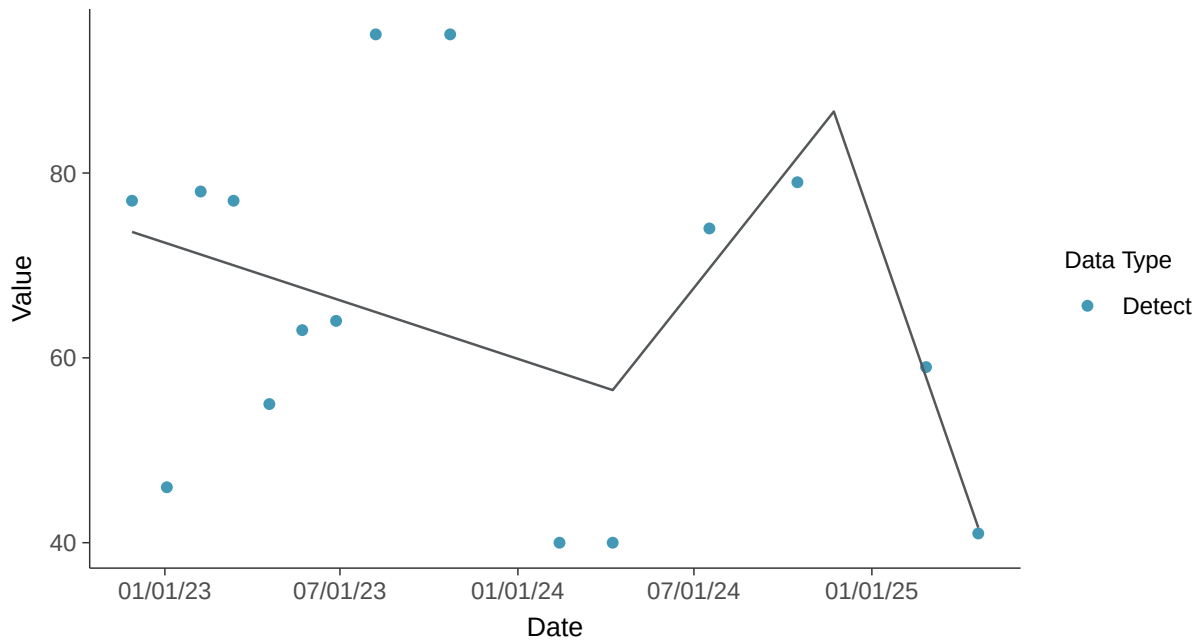
Trend Regression: Piecewise Linear-Linear

Calcium, MW-12 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Calcium, MW-12 (mg/L)

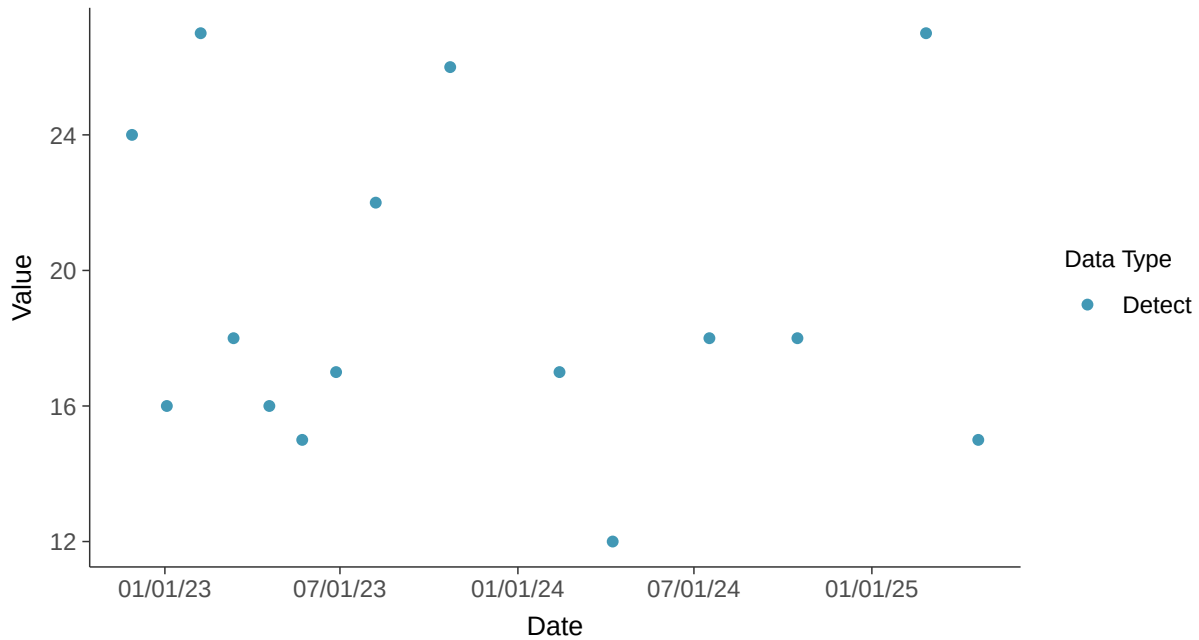


Appendix III: Chloride (as Cl), MW-12

ID: 22_2_3_108

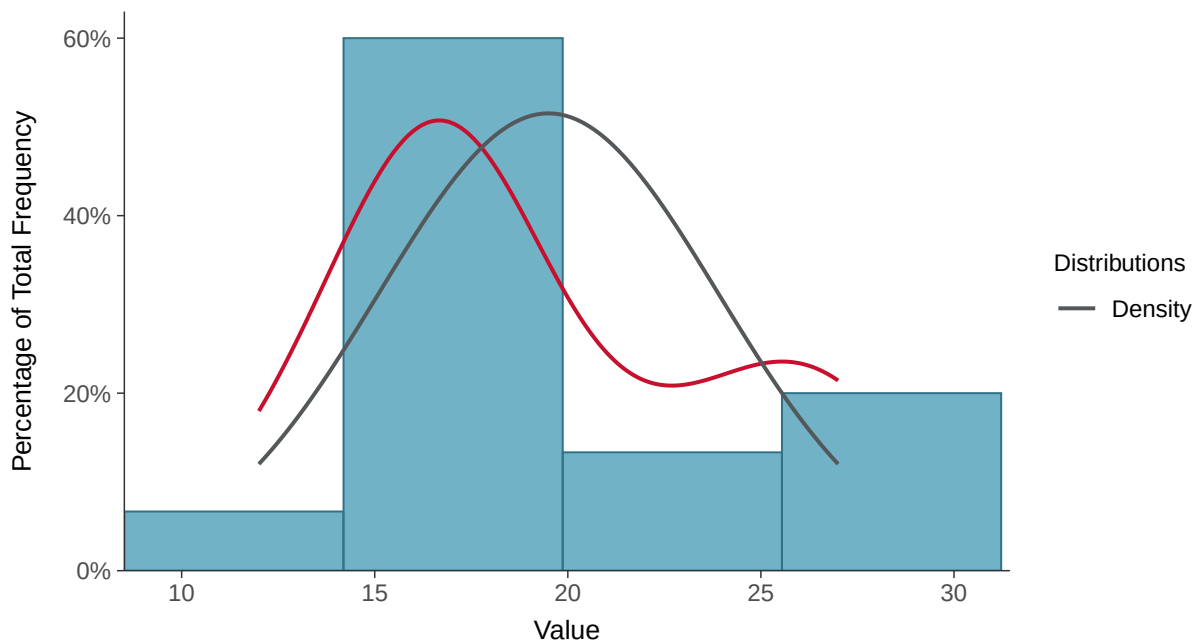
Scatter Plot

Chloride (as Cl), MW-12 (mg/L)



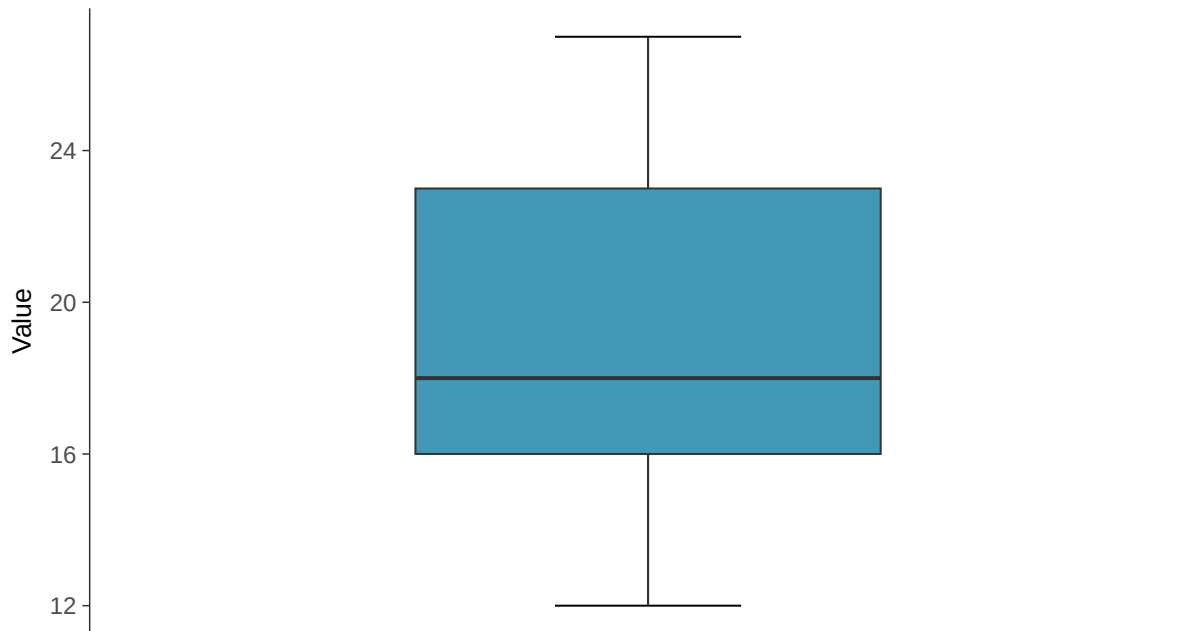
Histogram

Chloride (as Cl), MW-12 (mg/L)



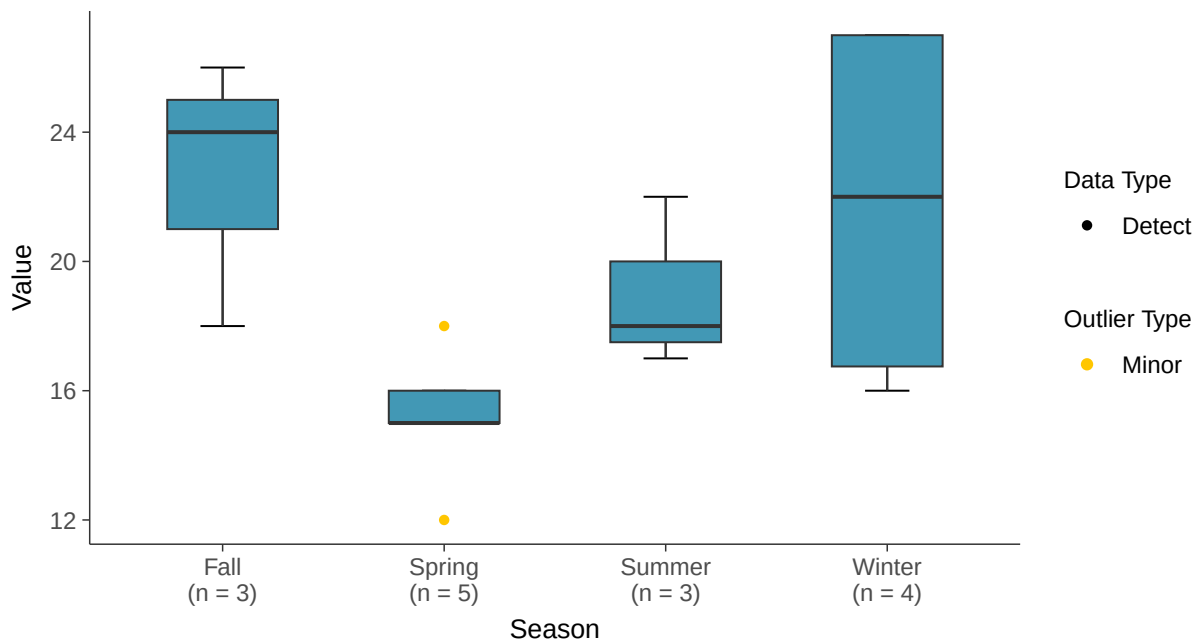
Boxplot

Chloride (as Cl), MW-12 (mg/L)



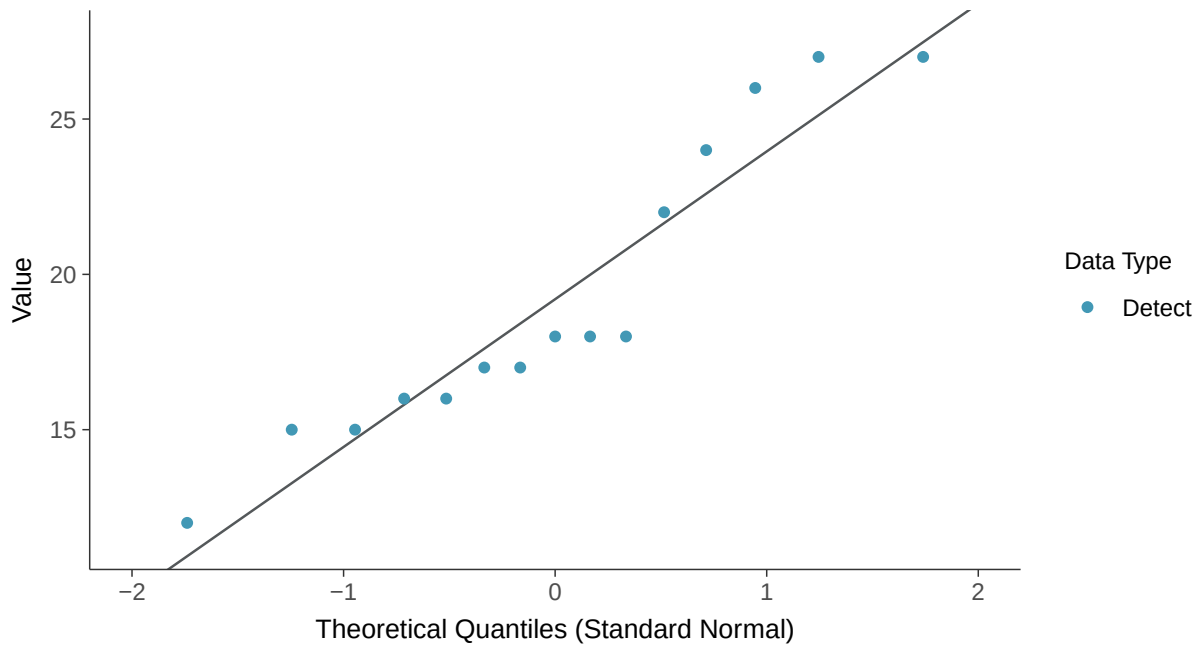
Boxplot by Season

Chloride (as Cl), MW-12 (mg/L)



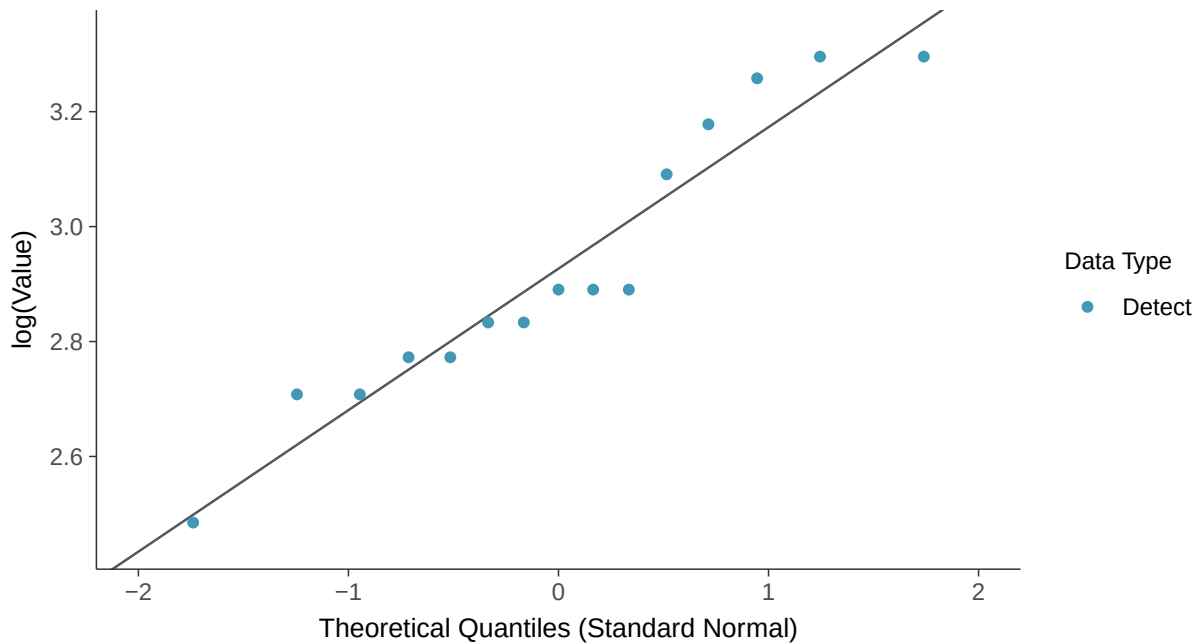
Normal Q-Q plot

Chloride (as Cl), MW-12 (mg/L)



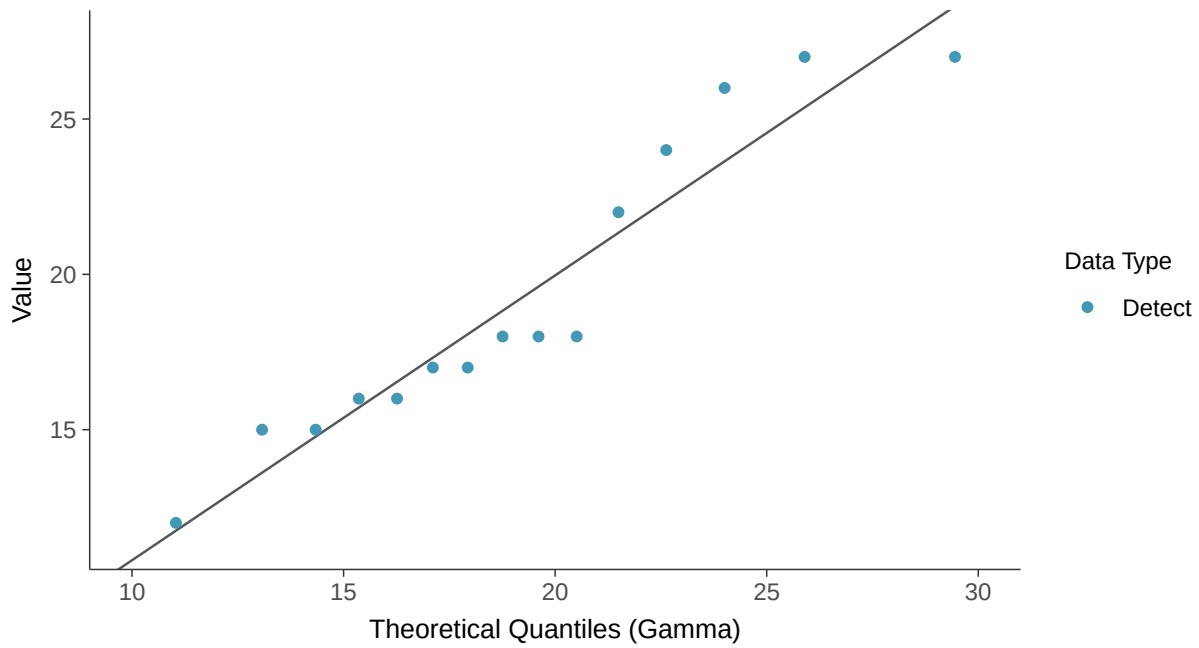
Lognormal Q-Q plot

Chloride (as Cl), MW-12 (mg/L)



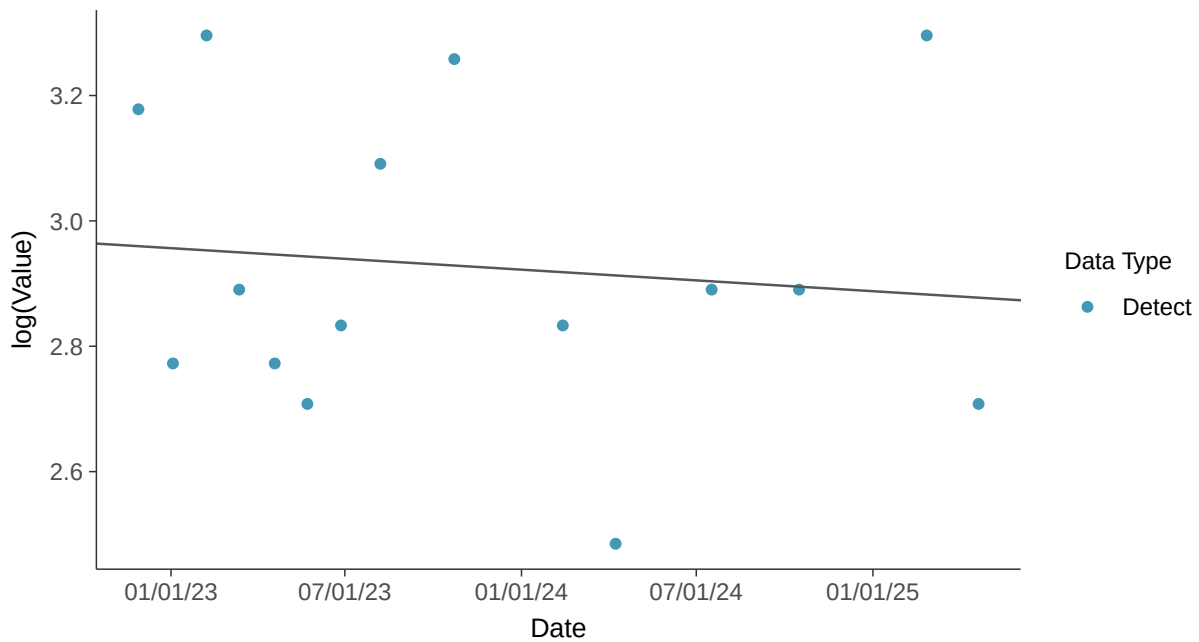
Gamma Q-Q plot

Chloride (as Cl), MW-12 (mg/L)



Trend Regression: Lognormal MLE

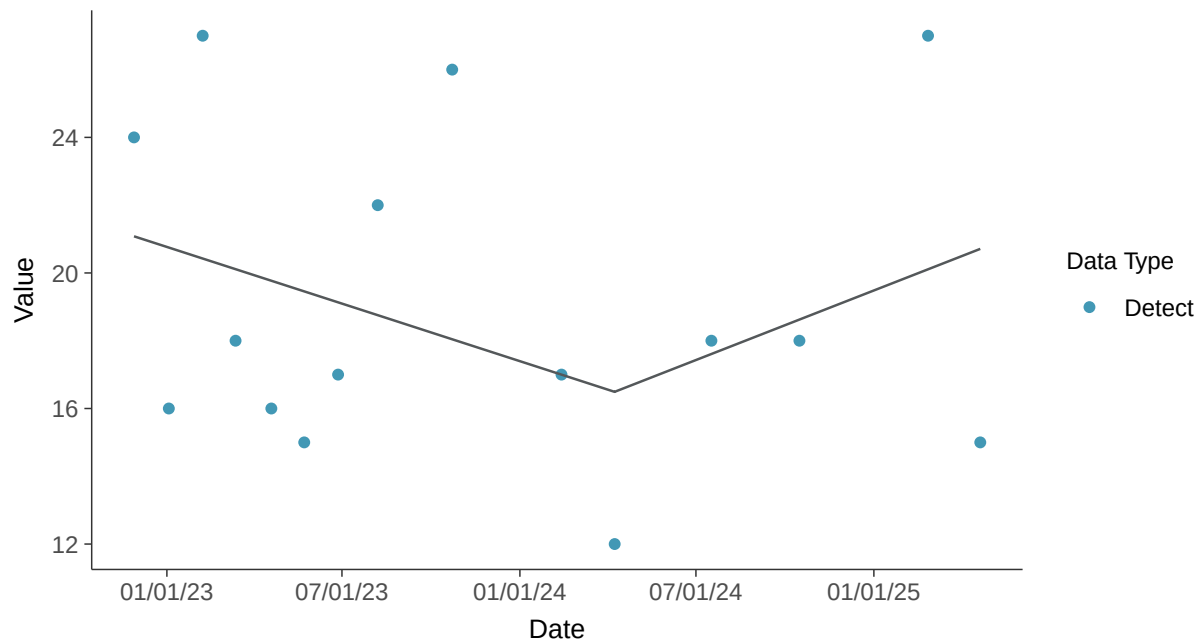
Chloride (as Cl), MW-12 (mg/L)





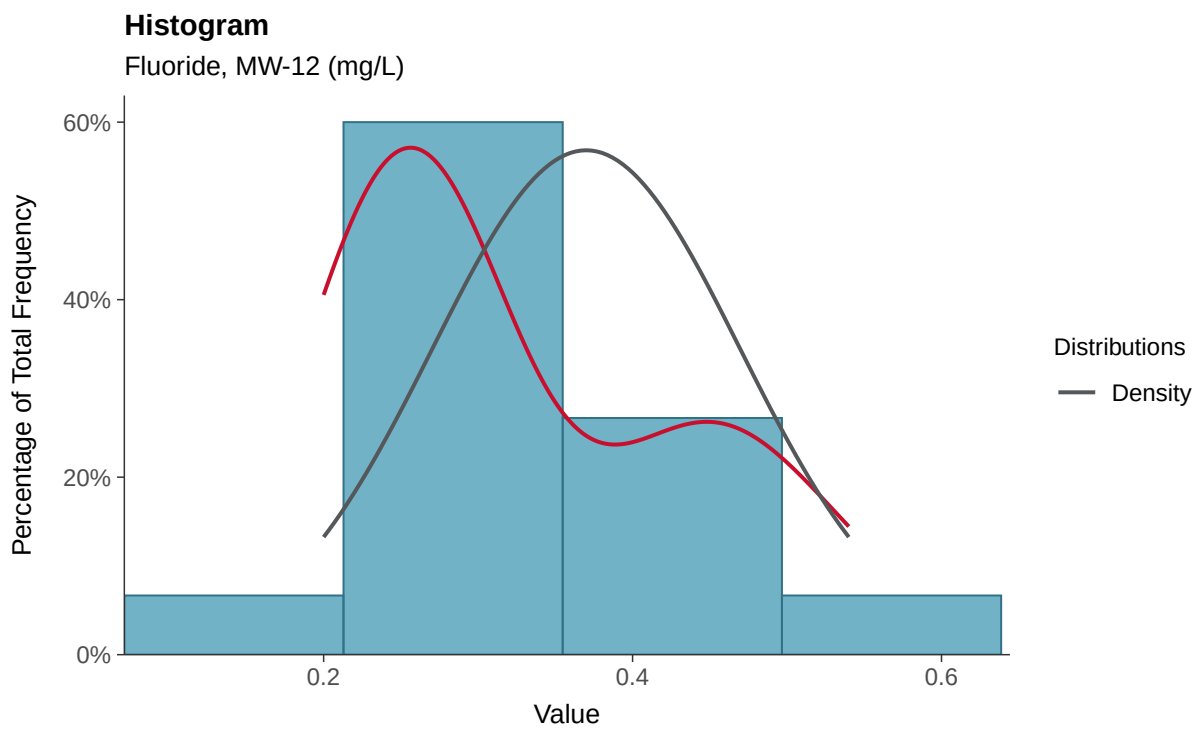
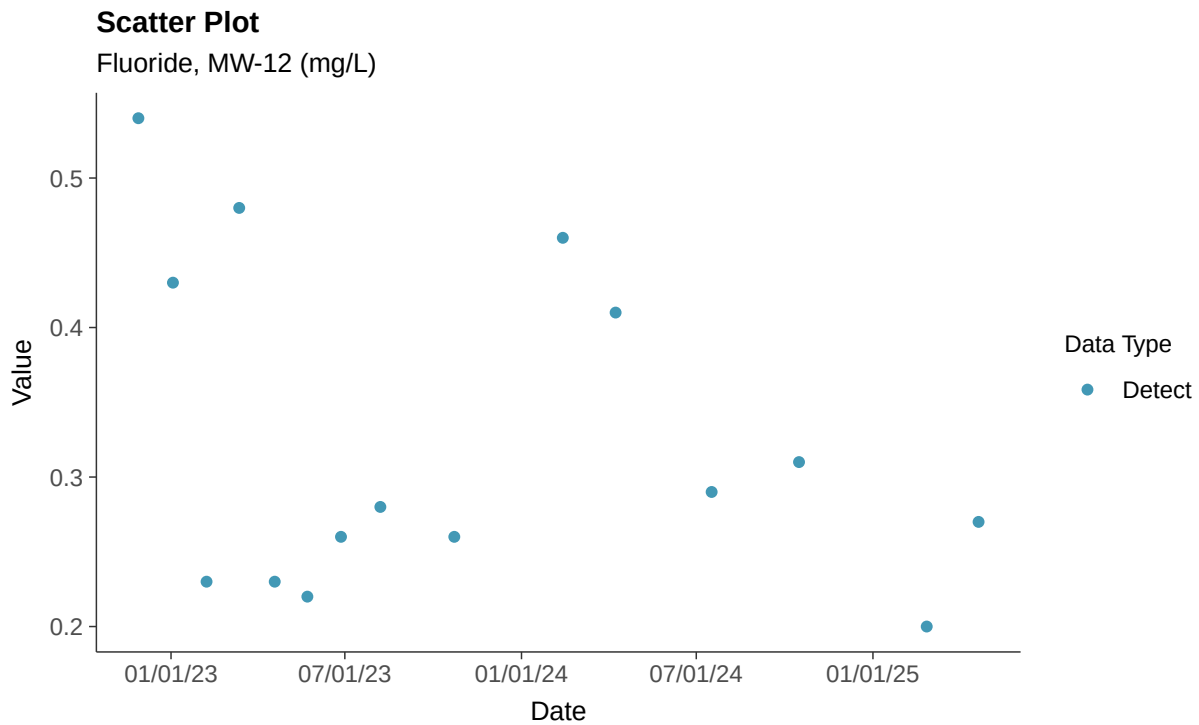
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-12 (mg/L)



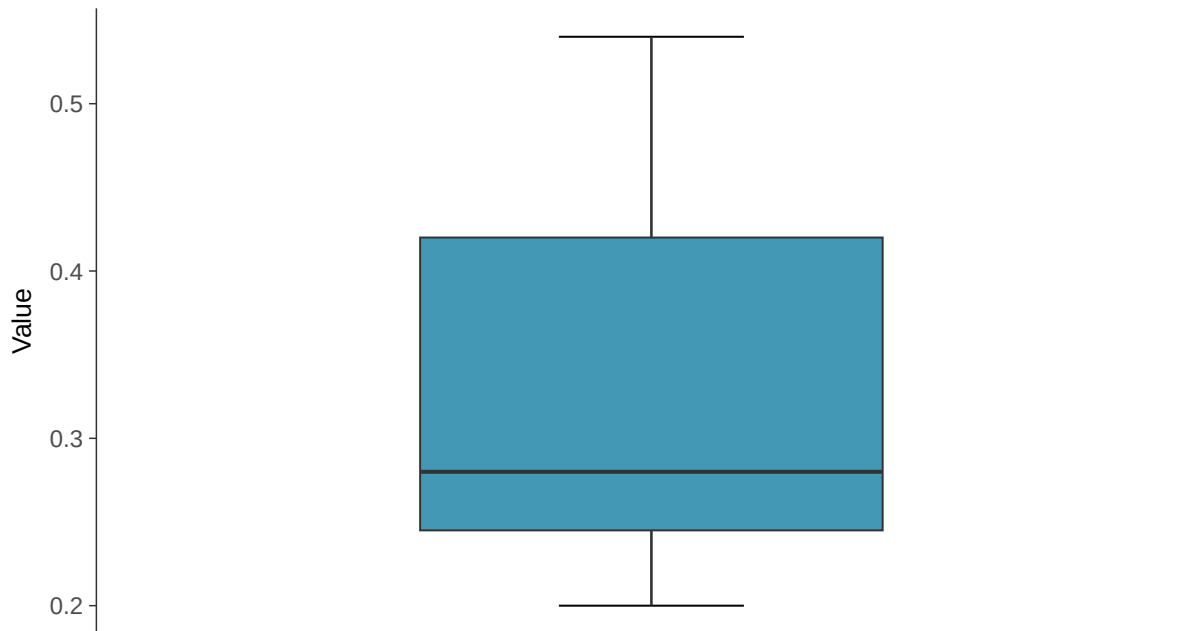
Appendix III: Fluoride, MW-12

ID: 22_2_3_112



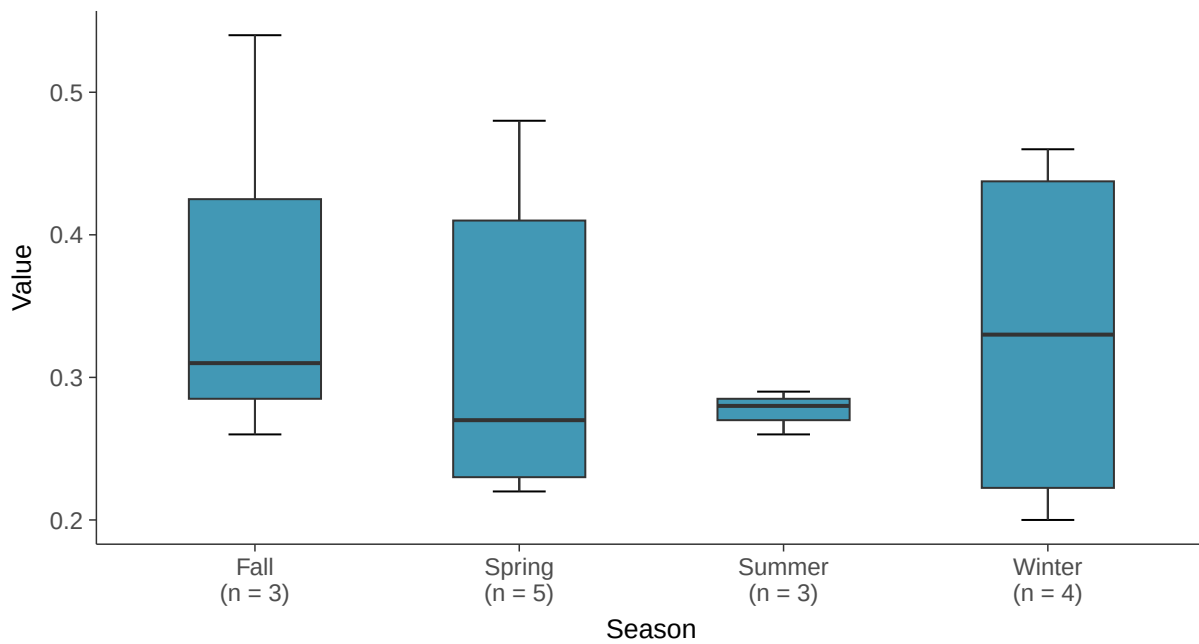
Boxplot

Fluoride, MW-12 (mg/L)

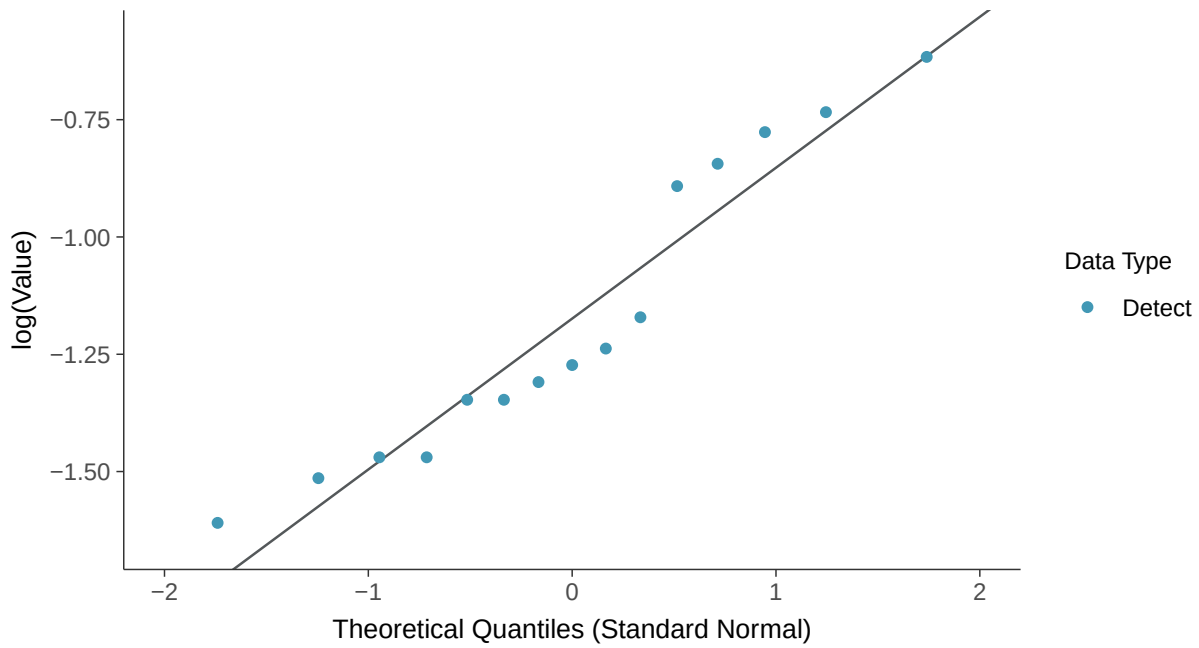


Boxplot by Season

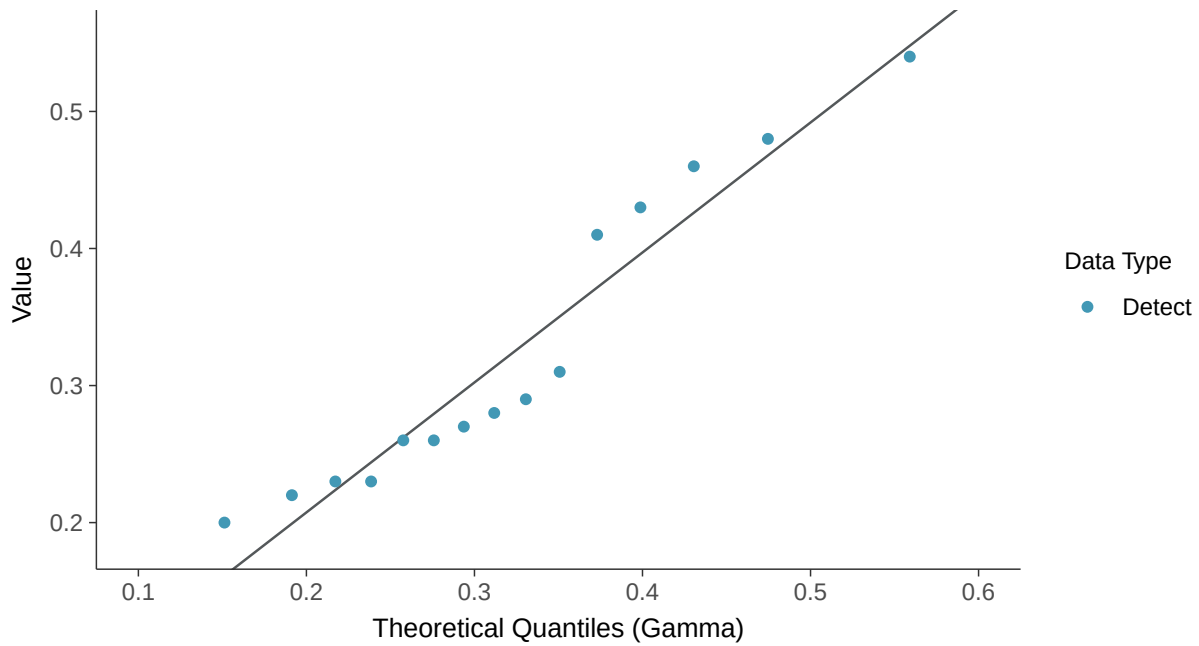
Fluoride, MW-12 (mg/L)



Lognormal Q-Q plot
Fluoride, MW-12 (mg/L)

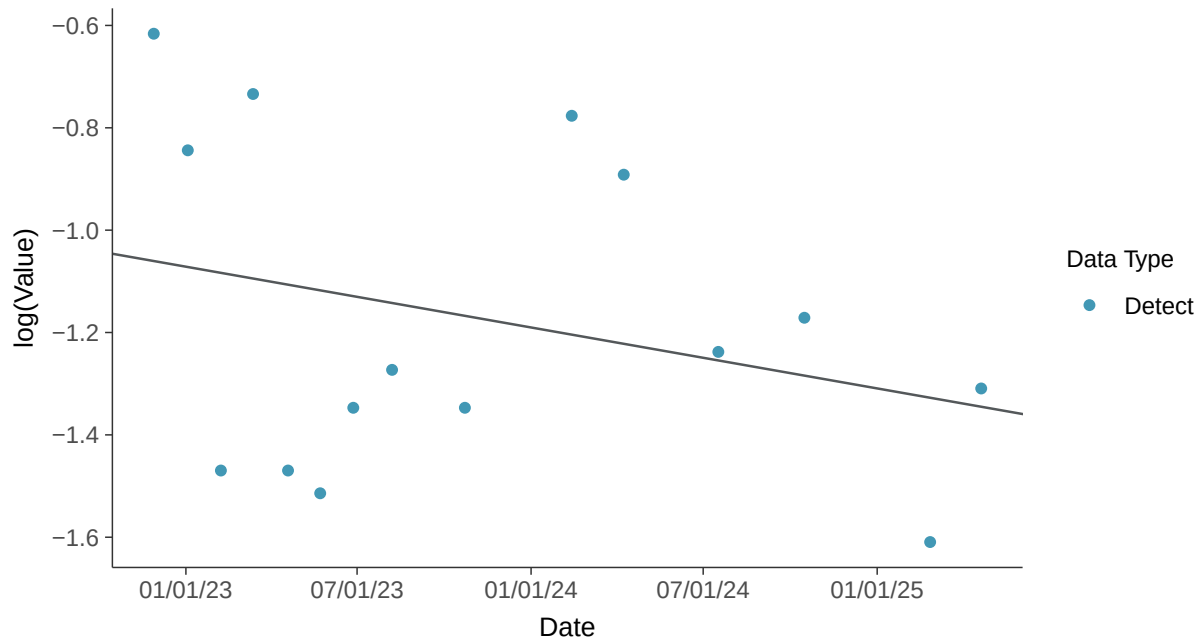


Gamma Q-Q plot
Fluoride, MW-12 (mg/L)



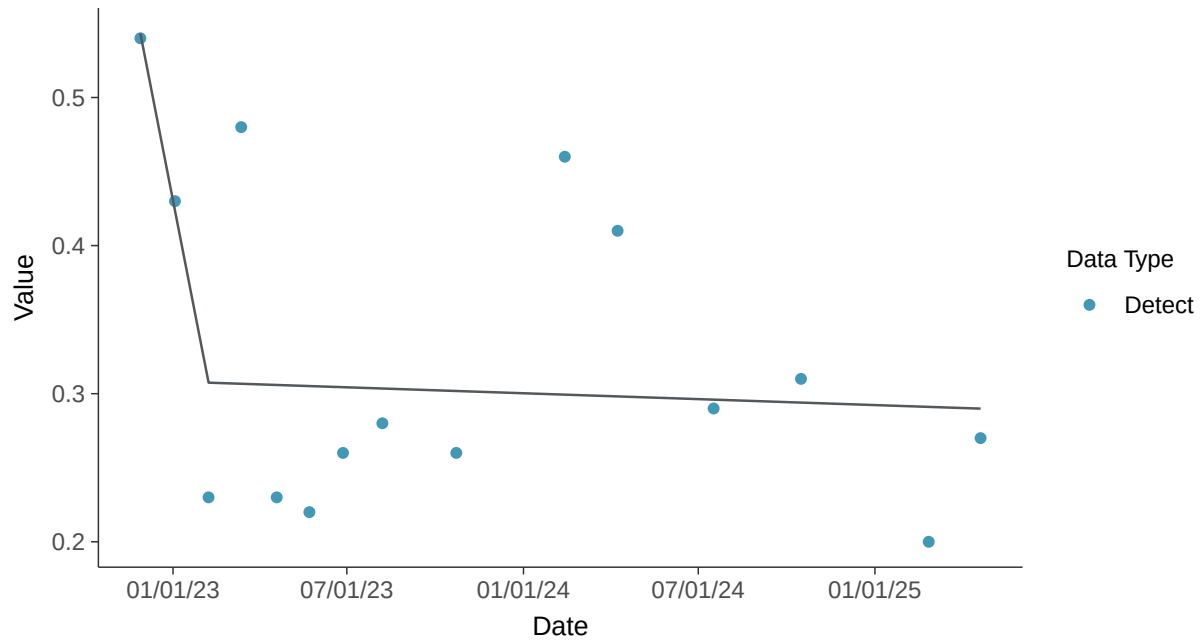
Trend Regression: Lognormal MLE

Fluoride, MW-12 (mg/L)



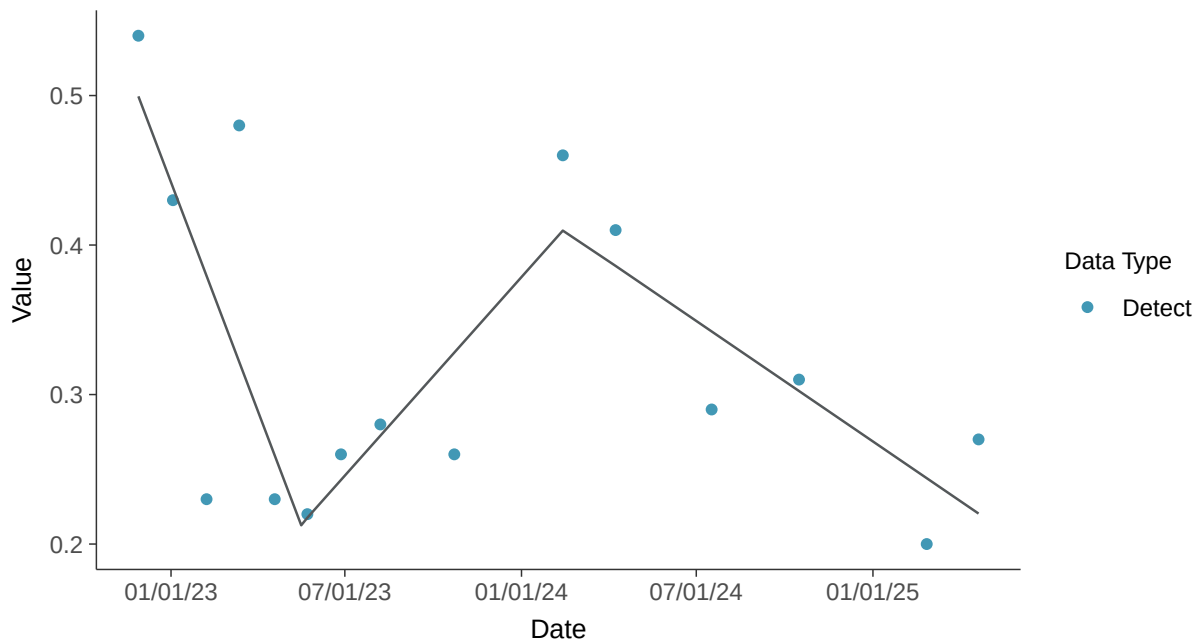
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-12 (mg/L)



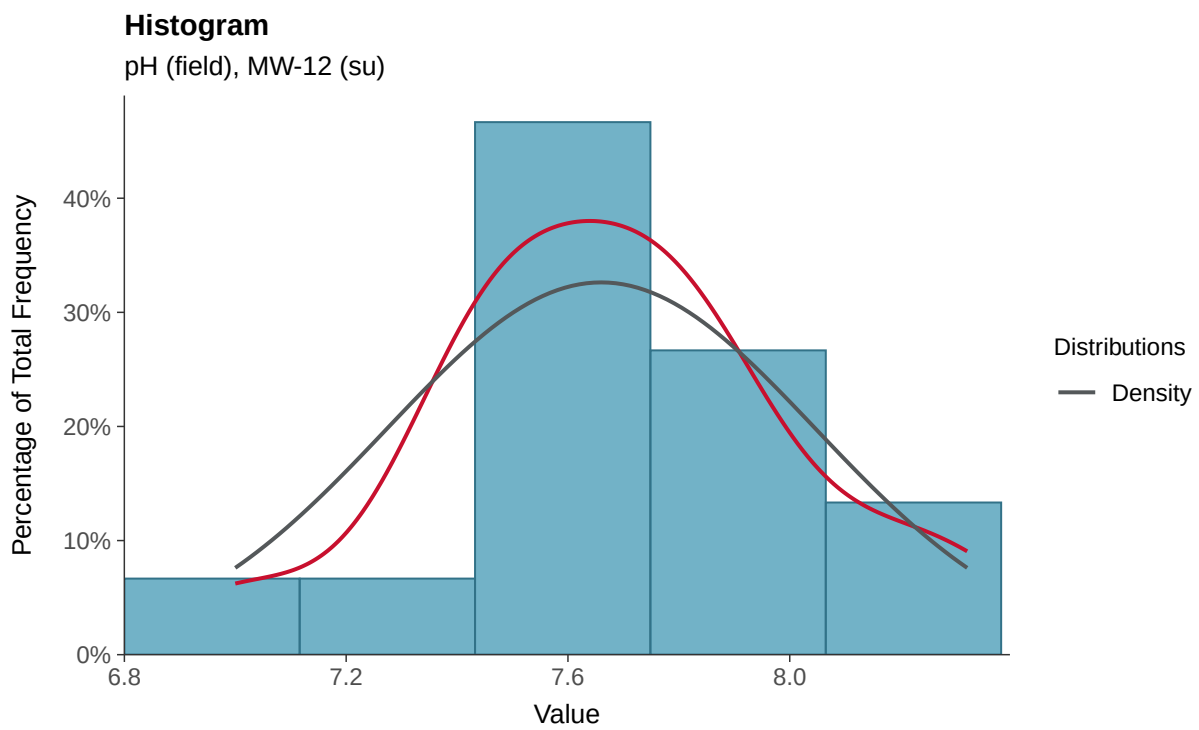
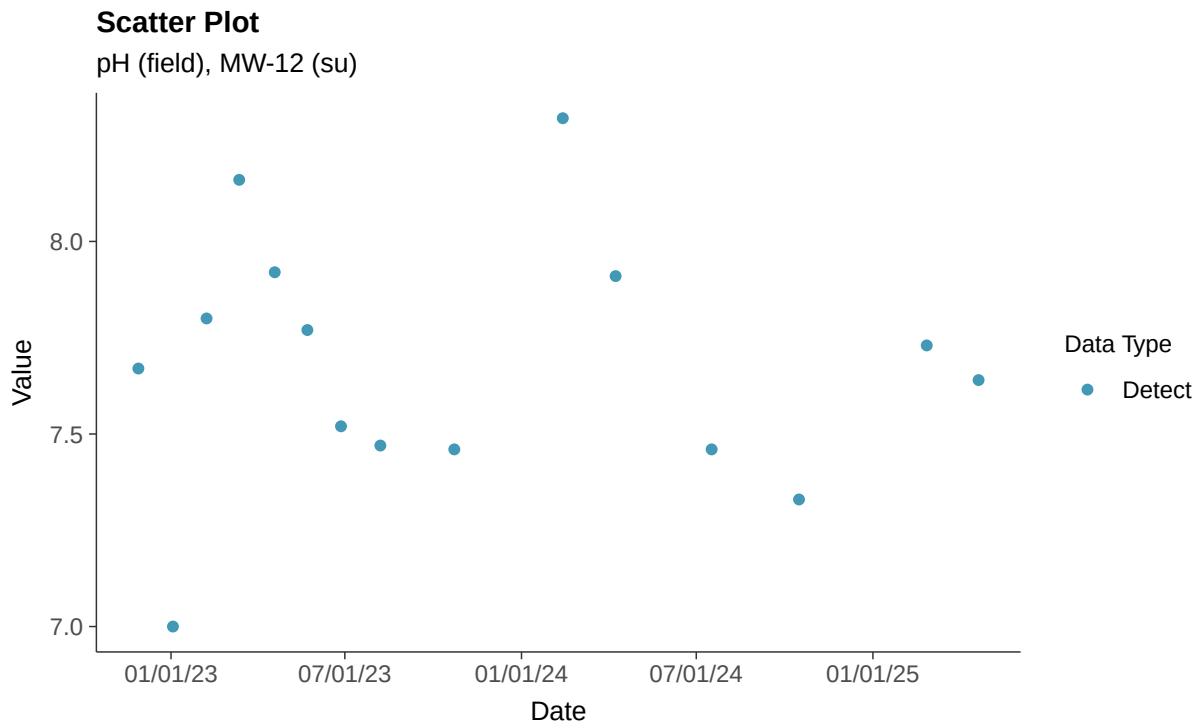
Trend Regression: Piecewise Linear-Linear-Linear

Fluoride, MW-12 (mg/L)



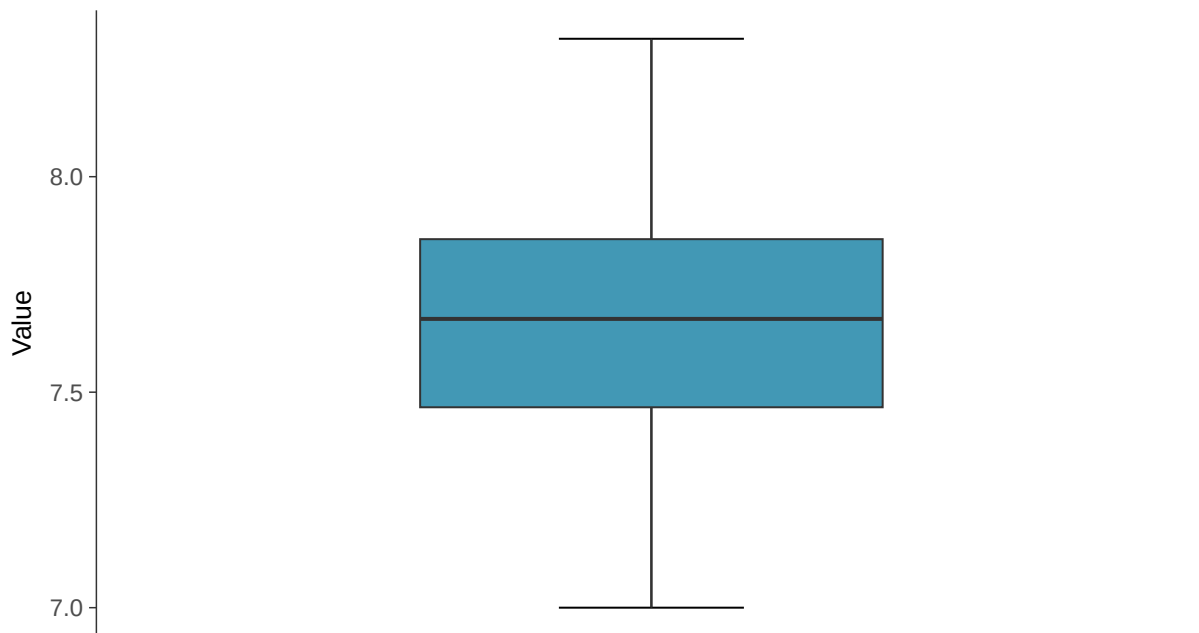
Appendix III: pH (field), MW-12

ID: 22_2_3_120



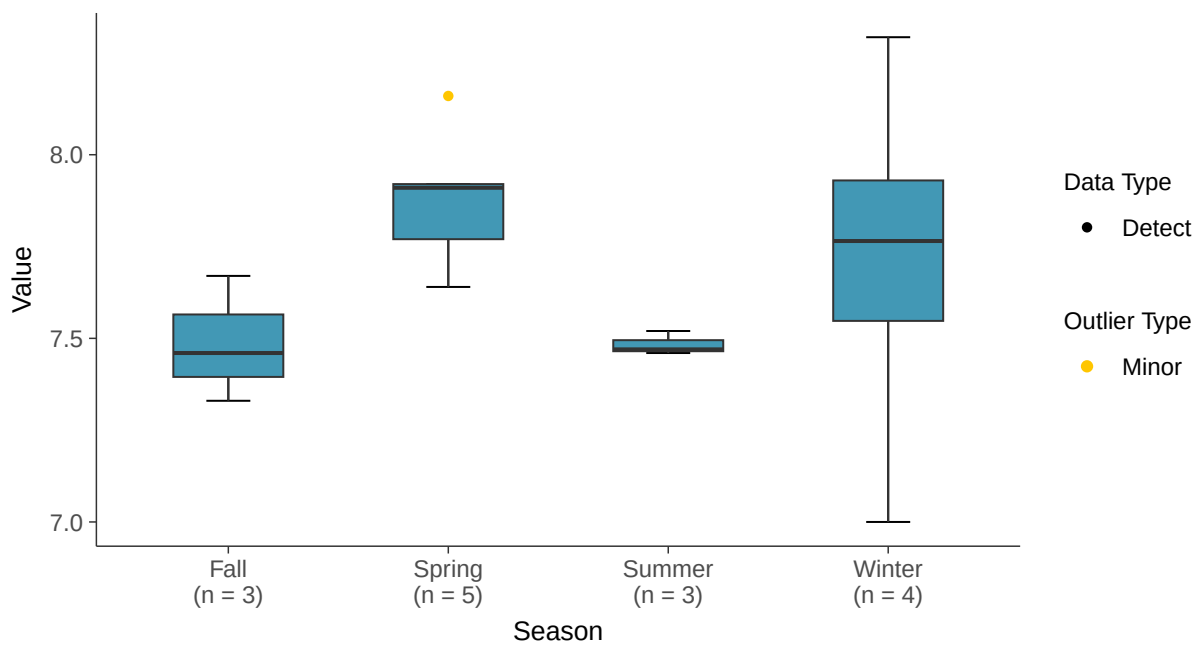
Boxplot

pH (field), MW-12 (su)

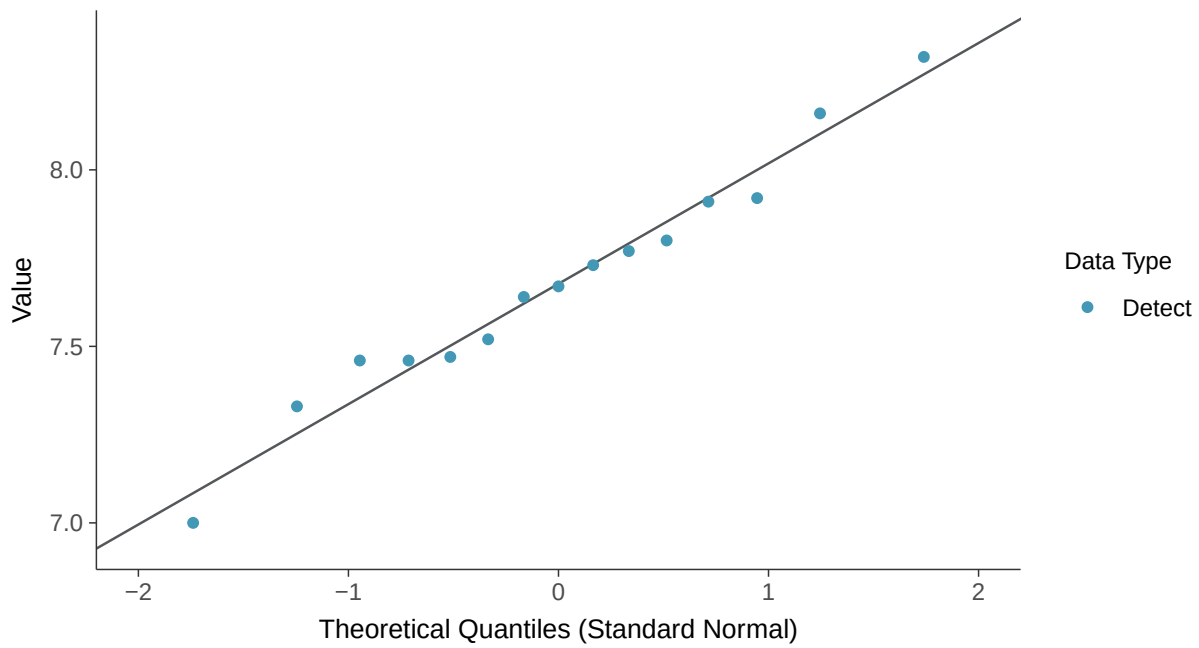


Boxplot by Season

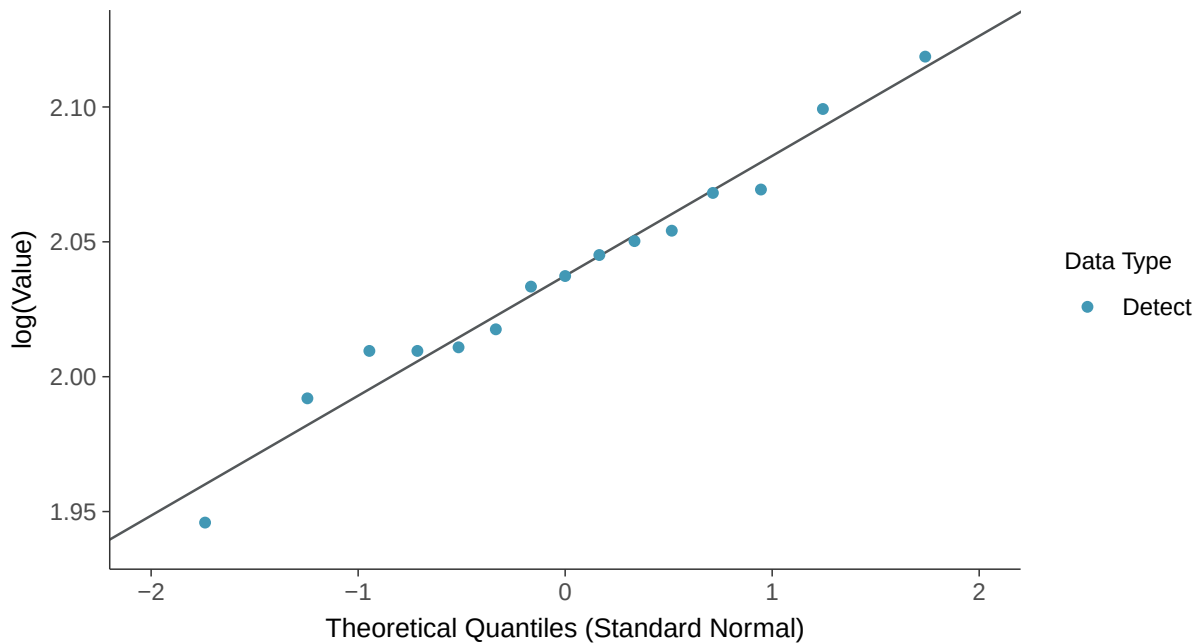
pH (field), MW-12 (su)



Normal Q-Q plot
pH (field), MW-12 (su)

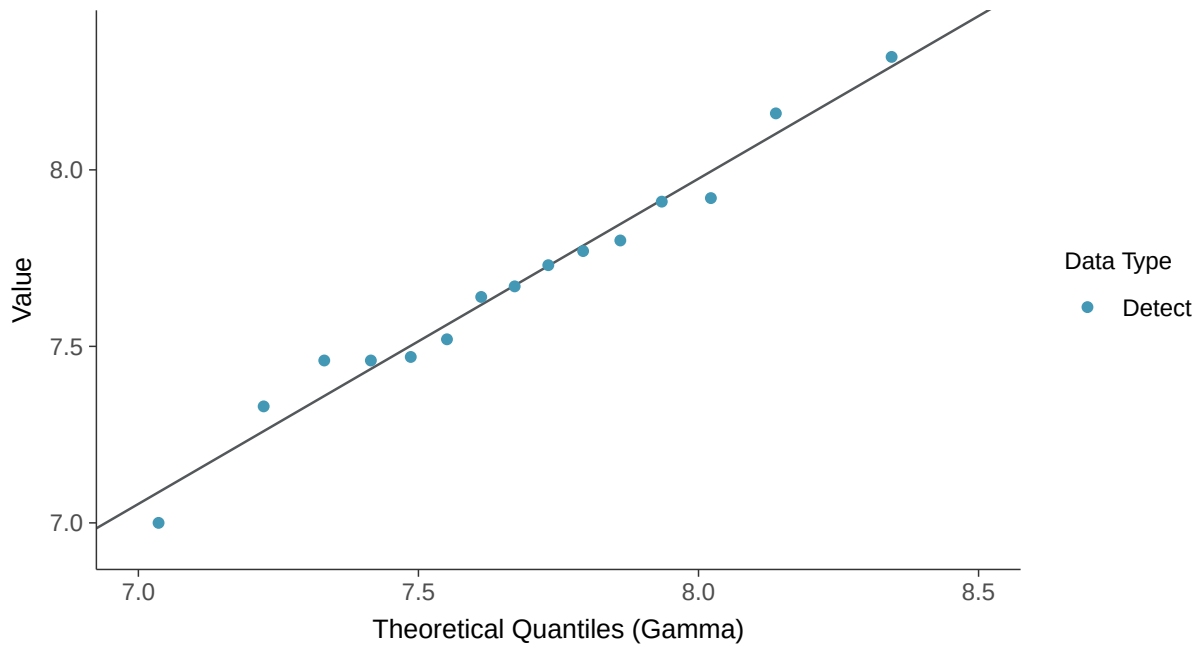


Lognormal Q-Q plot
pH (field), MW-12 (su)



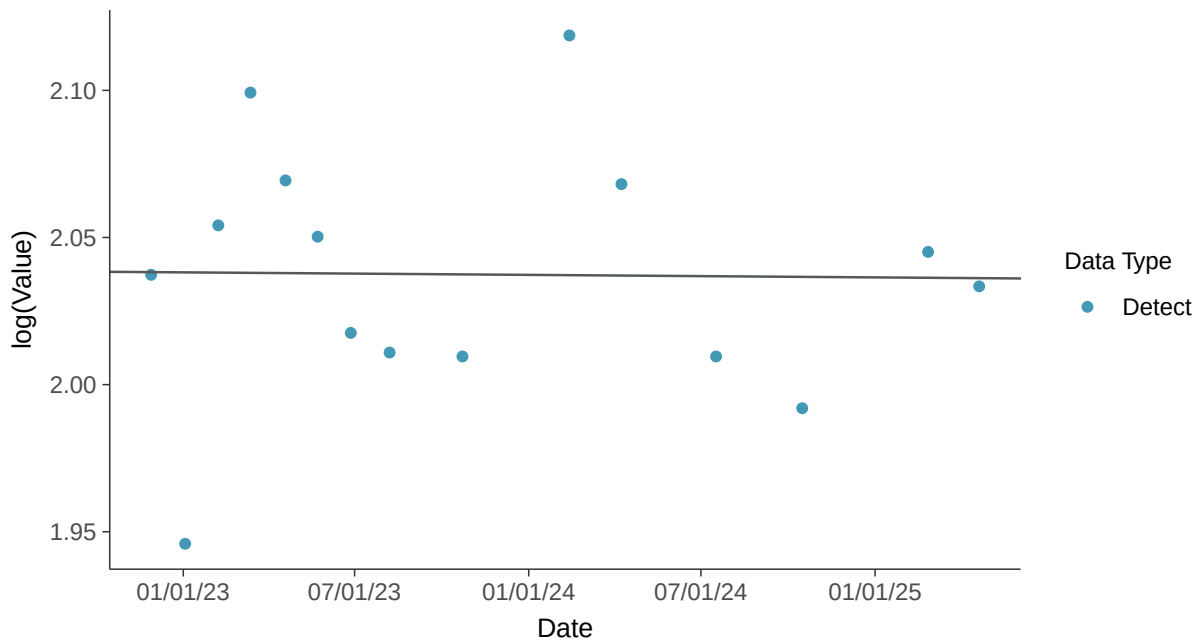
Gamma Q-Q plot

pH (field), MW-12 (su)



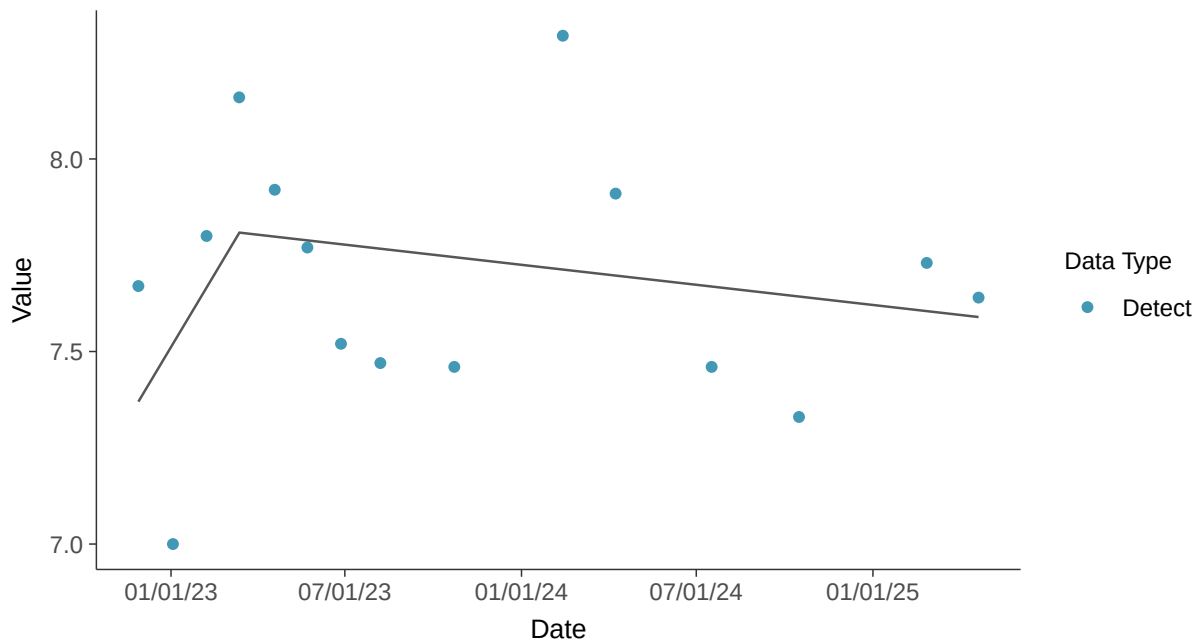
Trend Regression: Lognormal MLE

pH (field), MW-12 (su)



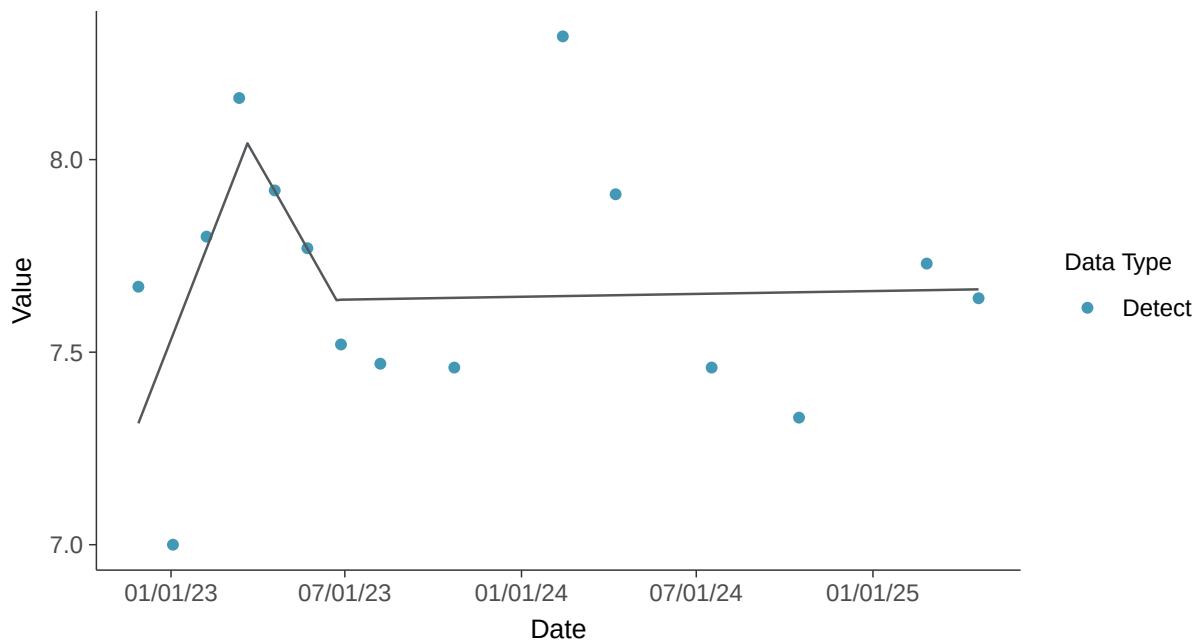
Trend Regression: Piecewise Linear-Linear

pH (field), MW-12 (su)



Trend Regression: Piecewise Linear-Linear-Linear

pH (field), MW-12 (su)

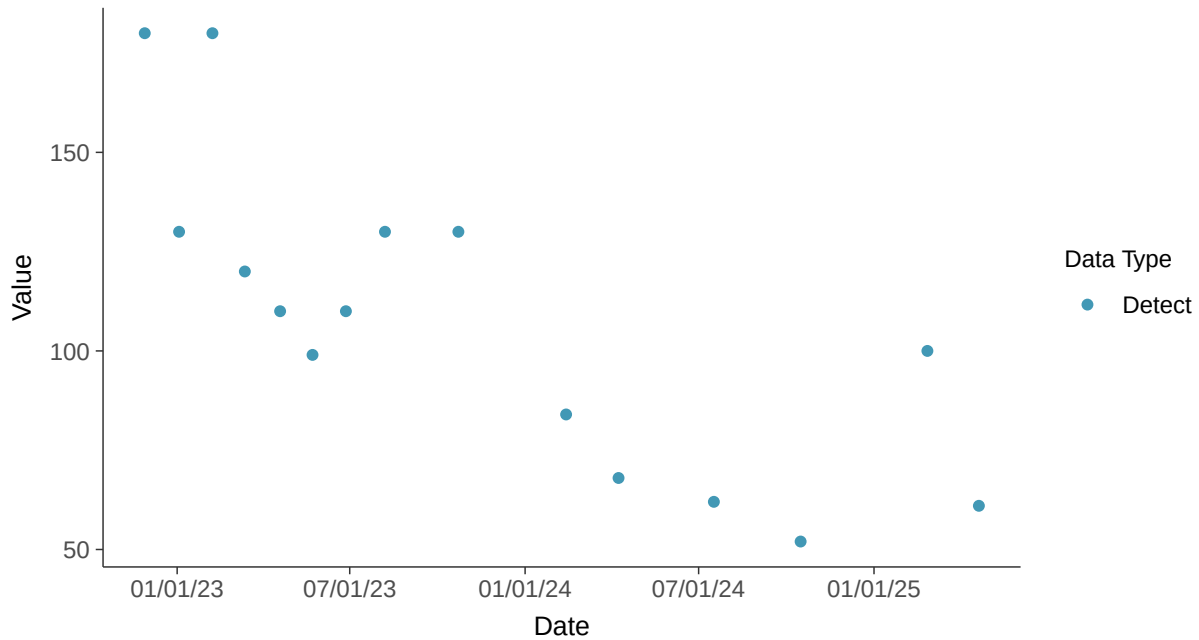


Appendix III: Sulfate (as SO₄), MW-12

ID: 22_2_3_124

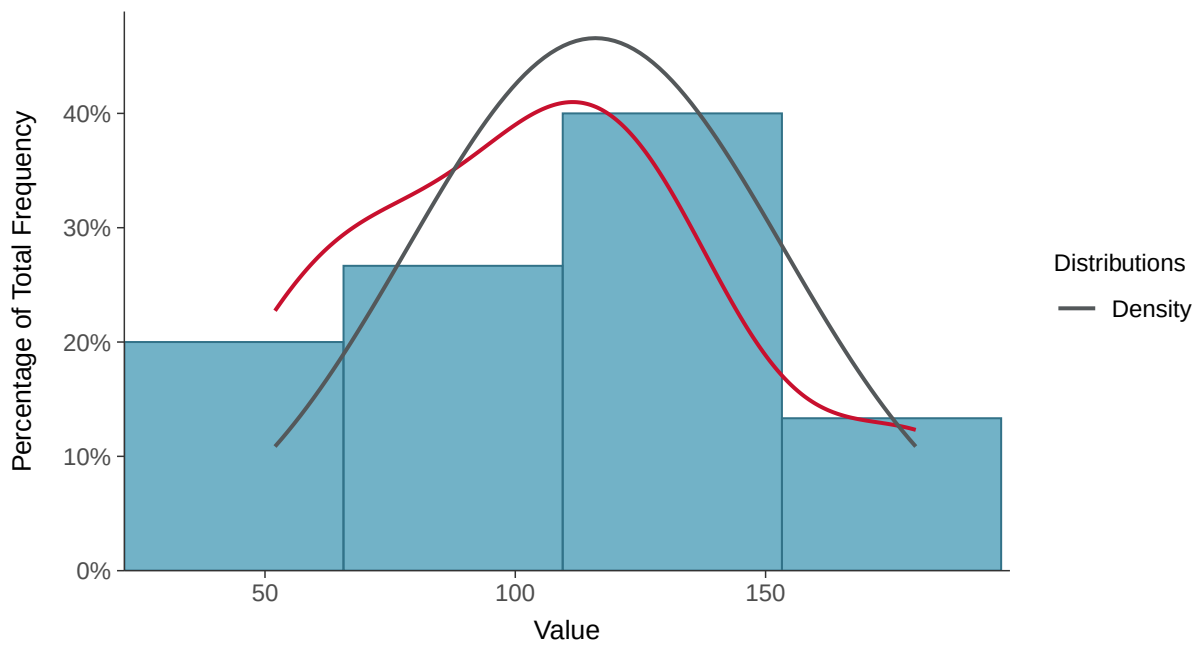
Scatter Plot

Sulfate (as SO₄), MW-12 (mg/L)



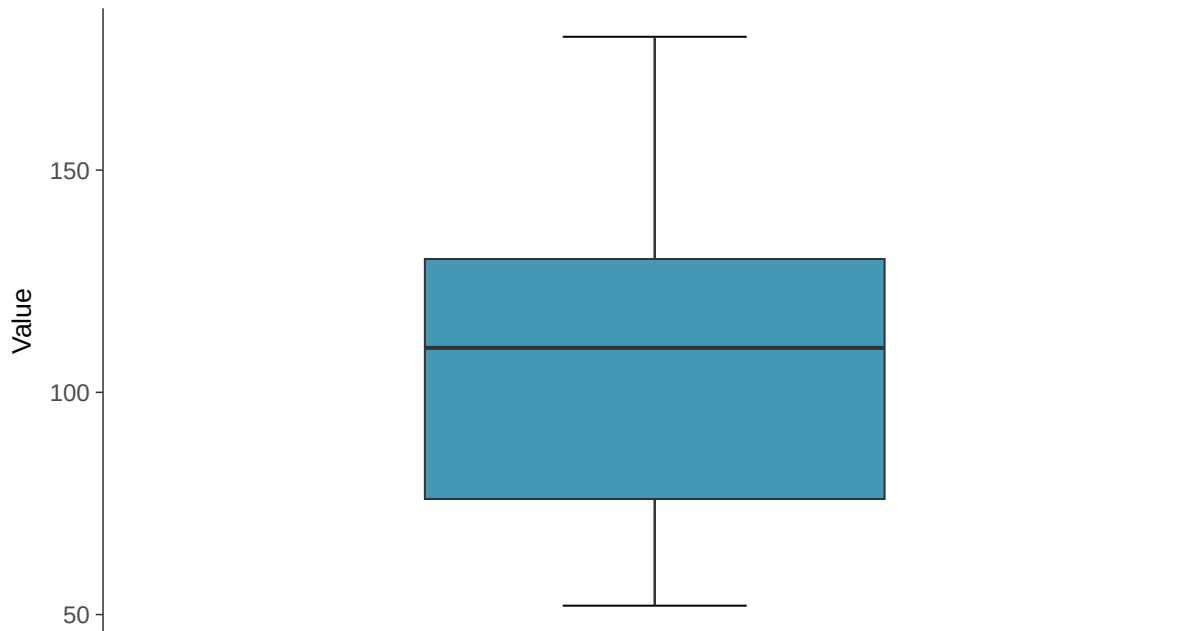
Histogram

Sulfate (as SO₄), MW-12 (mg/L)



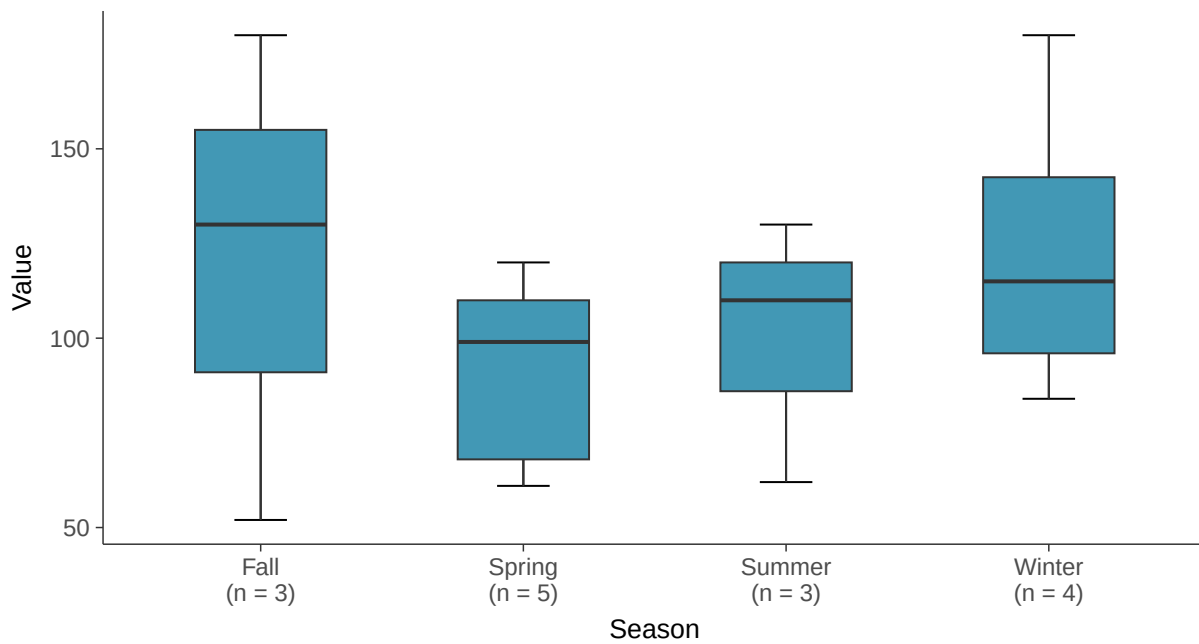
Boxplot

Sulfate (as SO₄), MW-12 (mg/L)



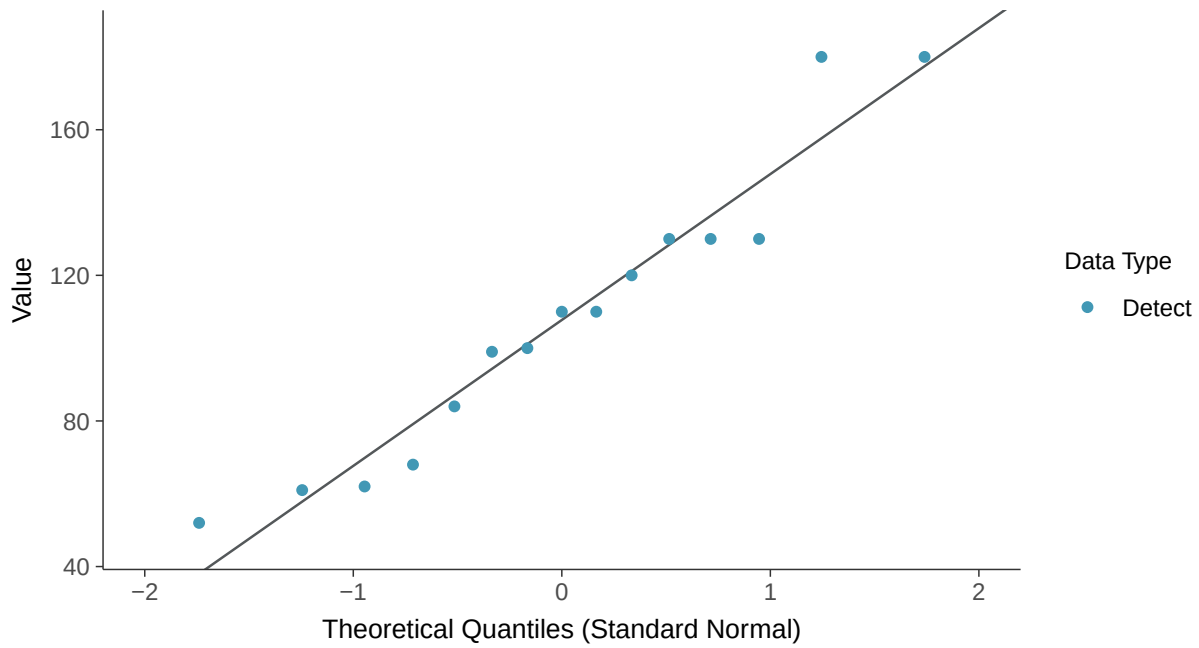
Boxplot by Season

Sulfate (as SO₄), MW-12 (mg/L)



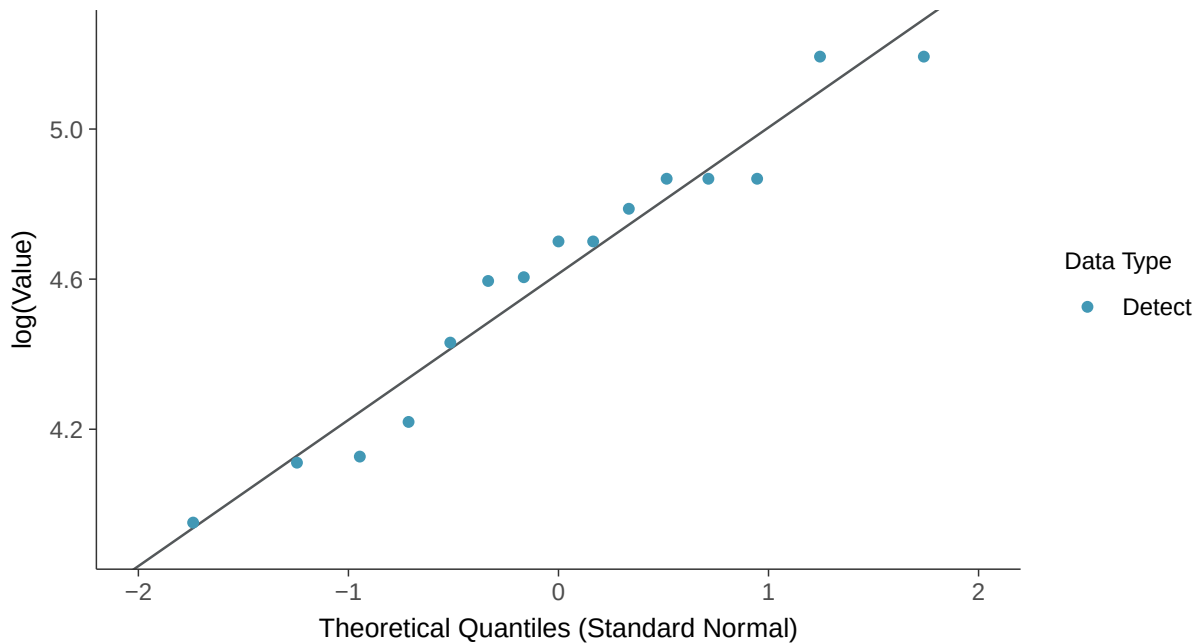
Normal Q-Q plot

Sulfate (as SO₄), MW-12 (mg/L)



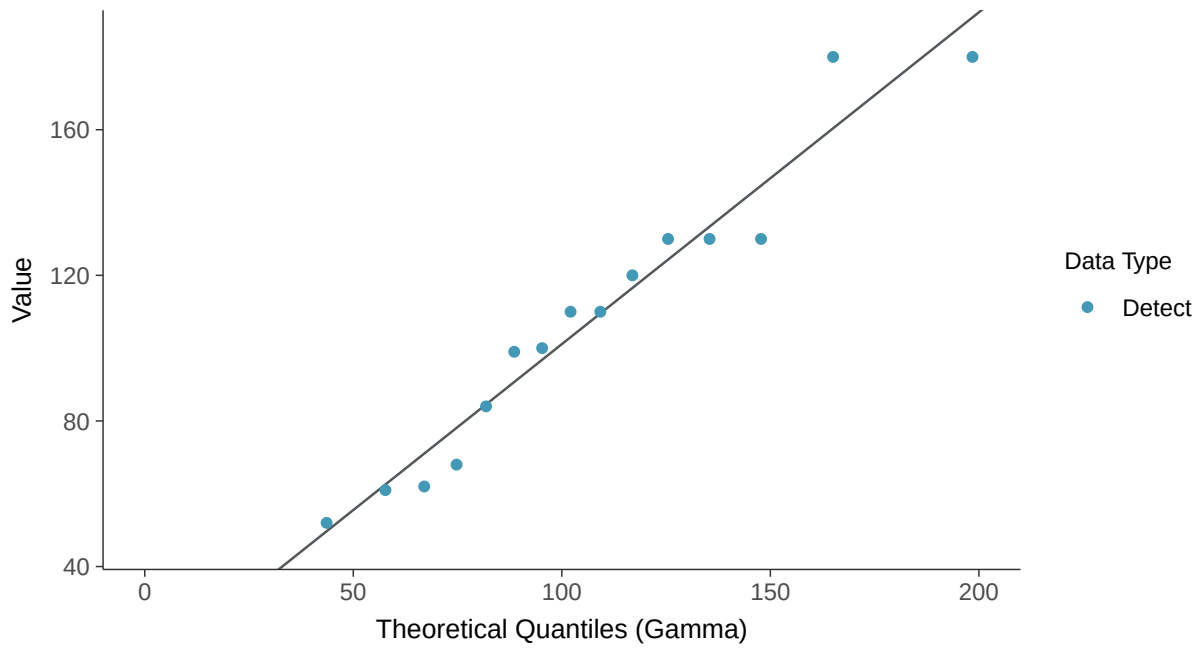
Lognormal Q-Q plot

Sulfate (as SO₄), MW-12 (mg/L)



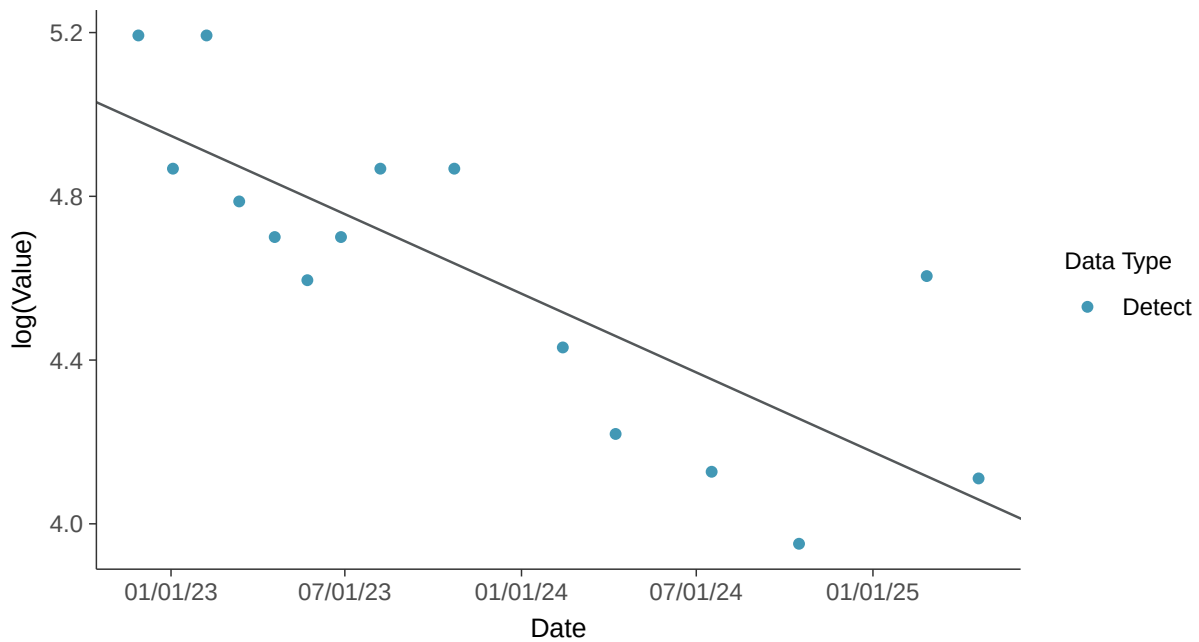
Gamma Q-Q plot

Sulfate (as SO₄), MW-12 (mg/L)



Trend Regression: Lognormal MLE

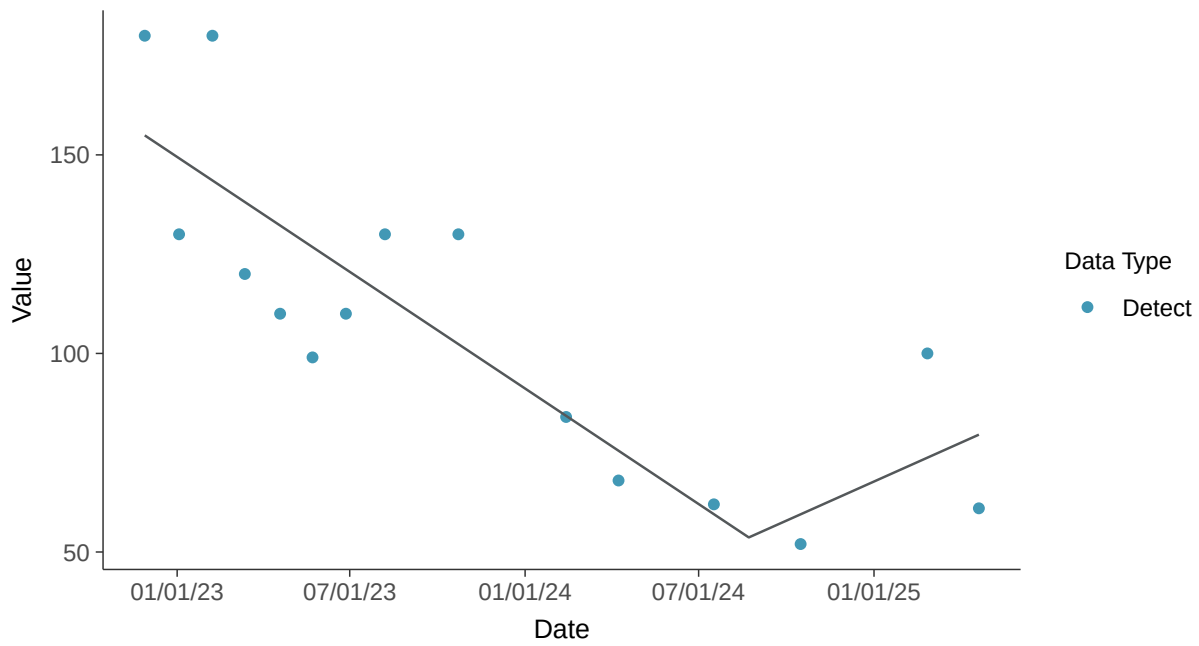
Sulfate (as SO₄), MW-12 (mg/L)





Trend Regression: Piecewise Linear-Linear

Sulfate (as SO₄), MW-12 (mg/L)

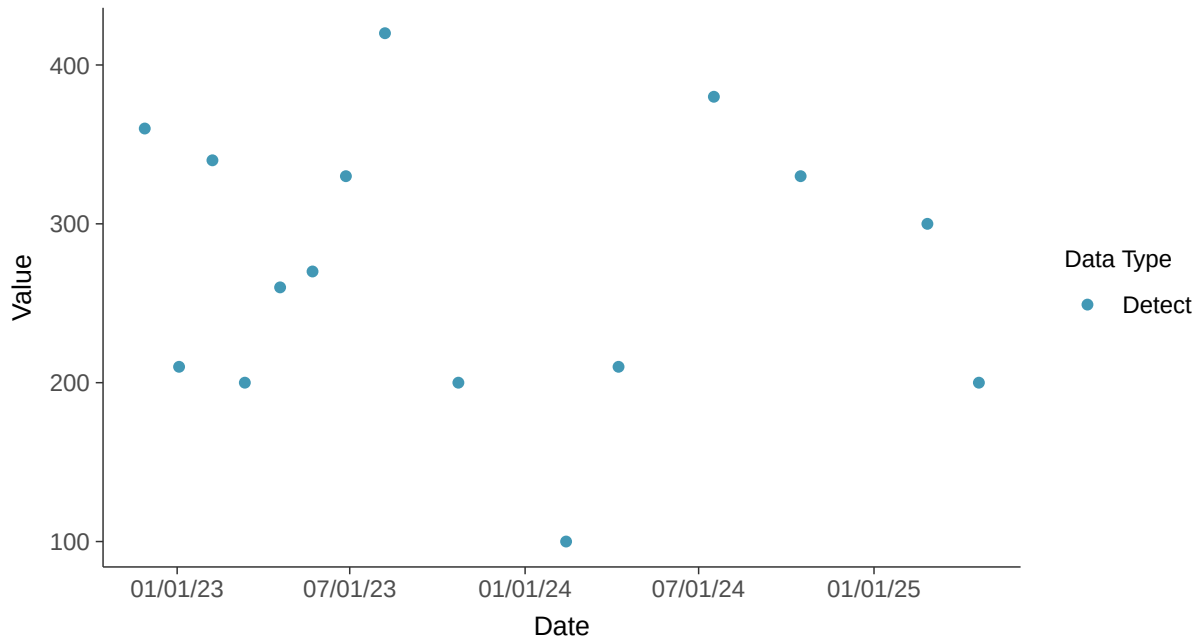


Appendix III: Total Dissolved Solids, MW-12

ID: 22_2_3_126

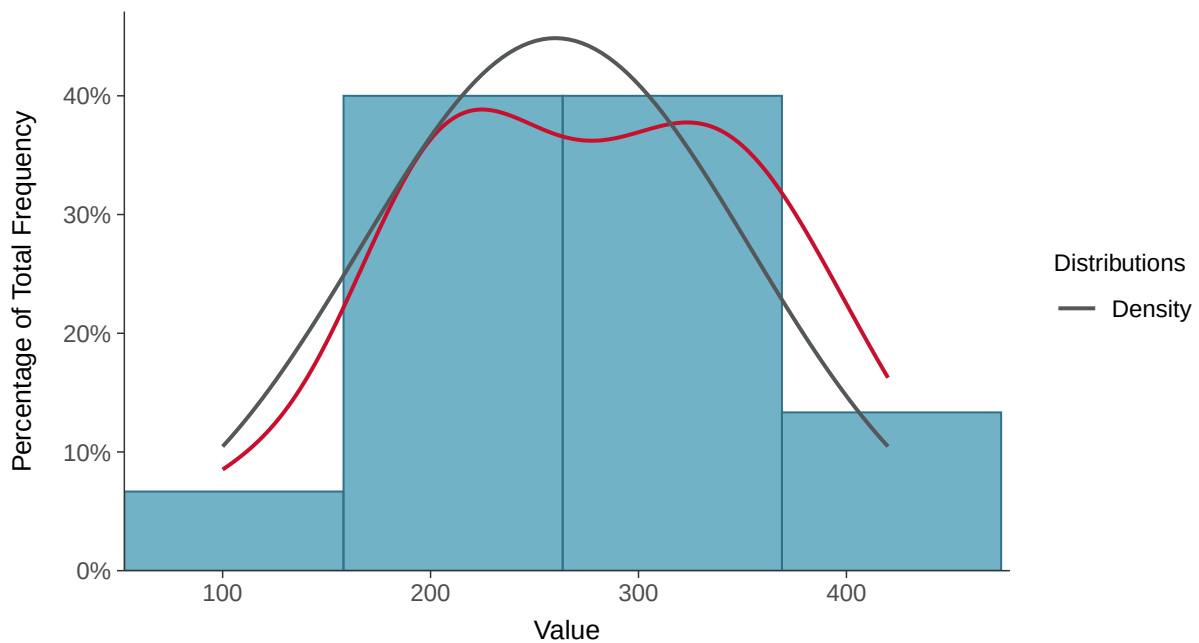
Scatter Plot

Total Dissolved Solids, MW-12 (mg/L)



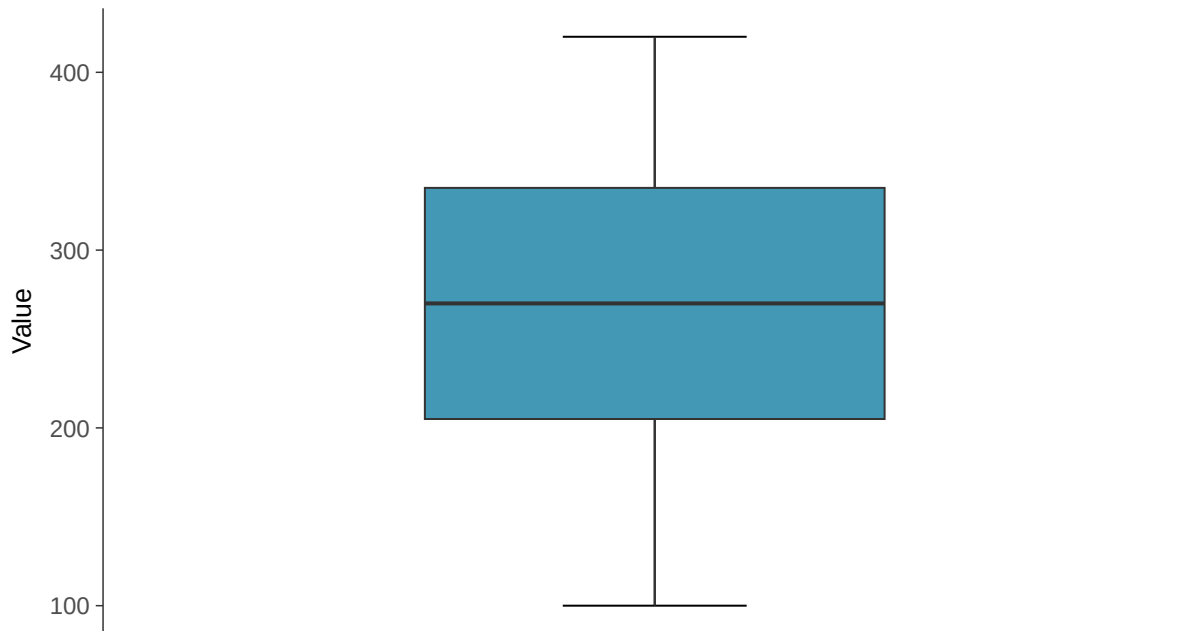
Histogram

Total Dissolved Solids, MW-12 (mg/L)



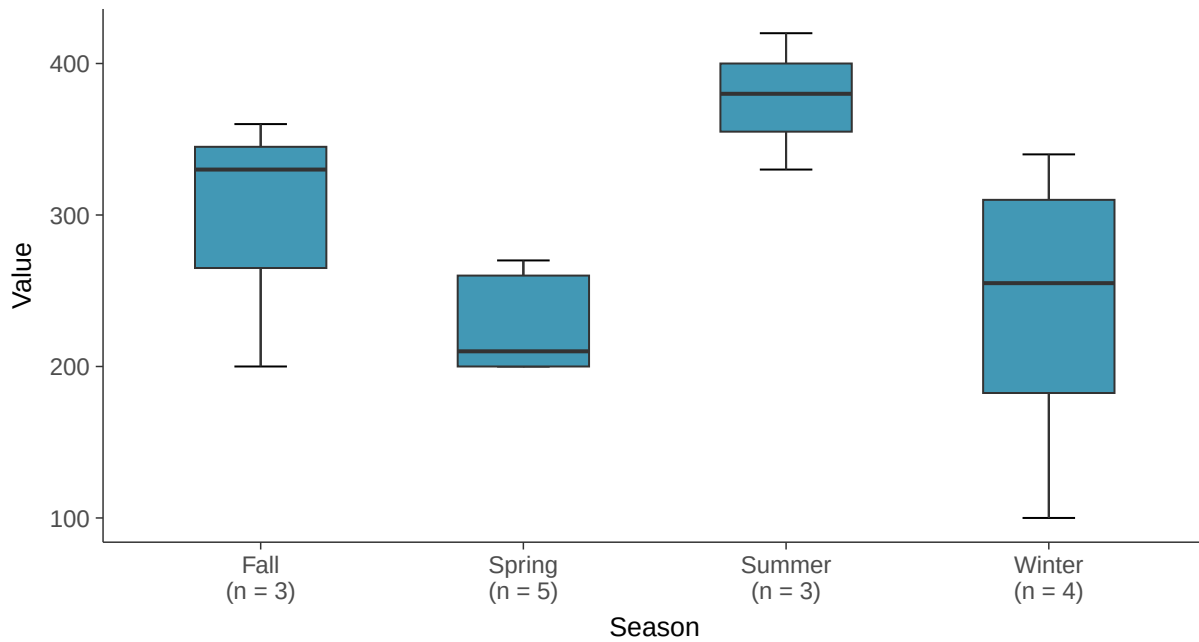
Boxplot

Total Dissolved Solids, MW-12 (mg/L)



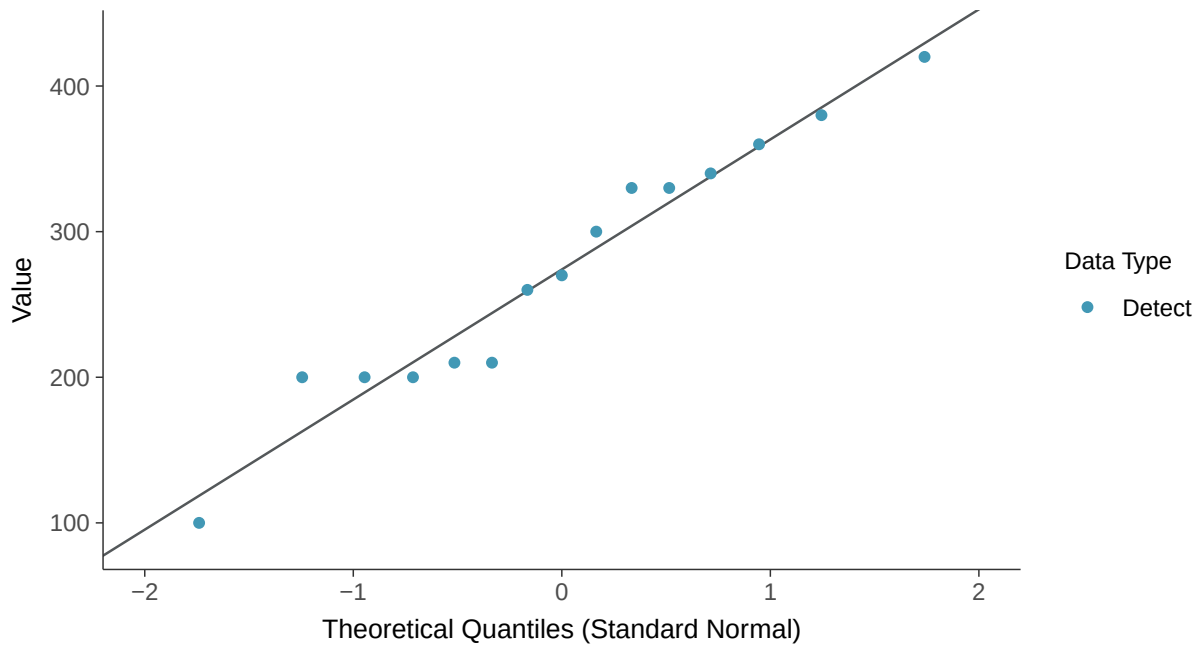
Boxplot by Season

Total Dissolved Solids, MW-12 (mg/L)



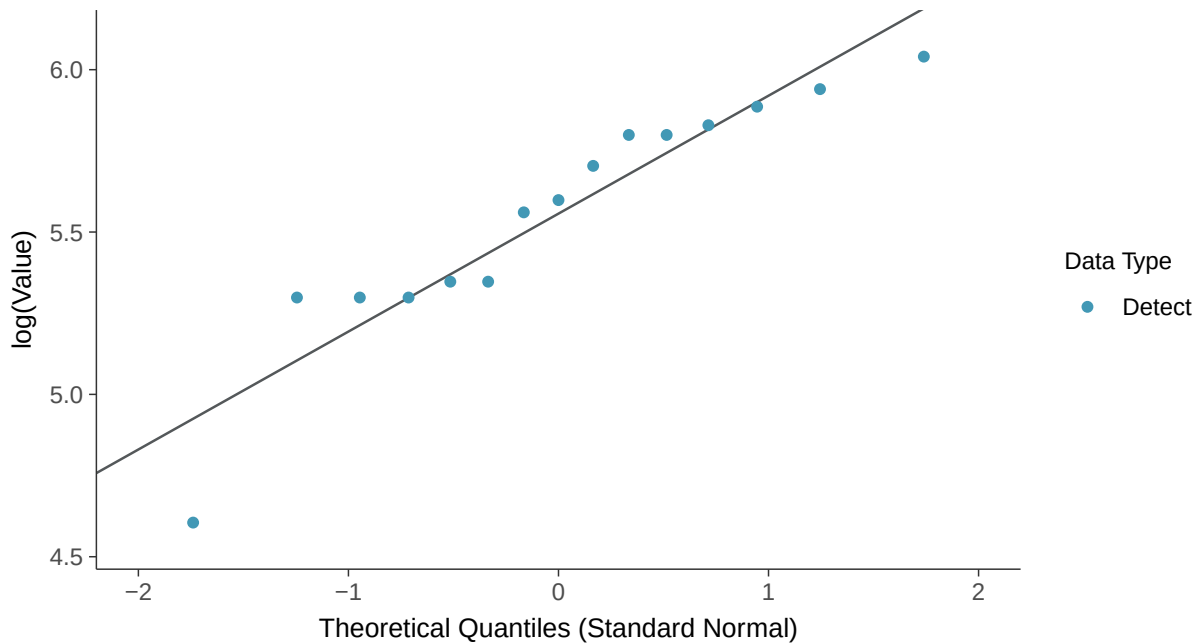
Normal Q-Q plot

Total Dissolved Solids, MW-12 (mg/L)



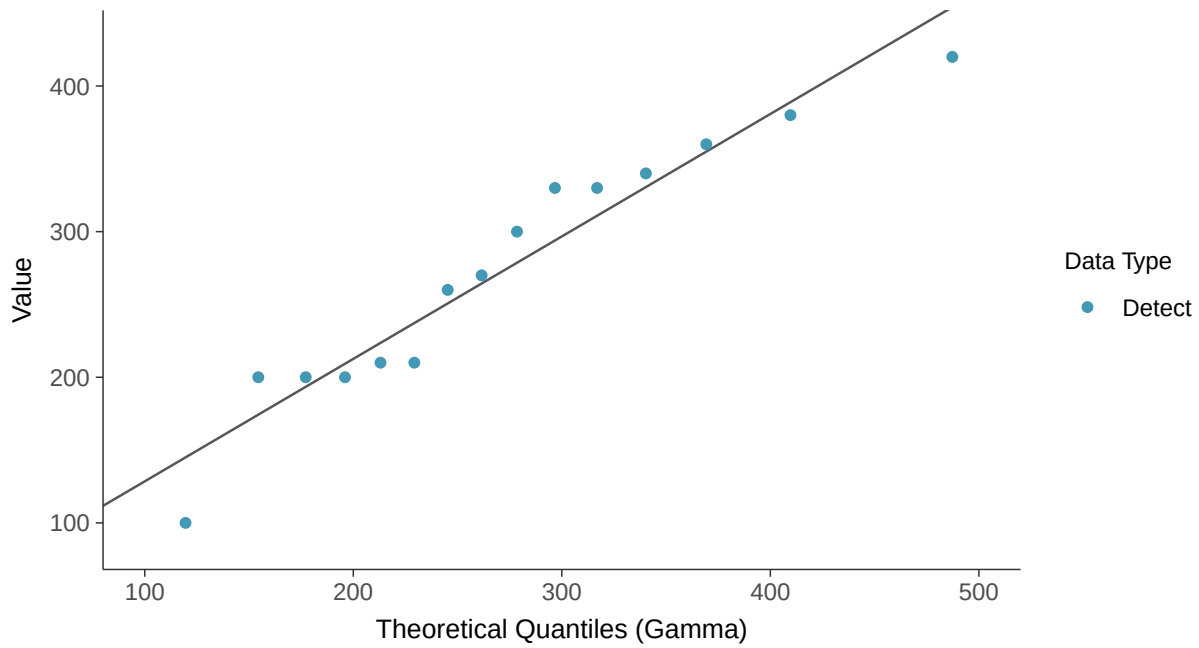
Lognormal Q-Q plot

Total Dissolved Solids, MW-12 (mg/L)



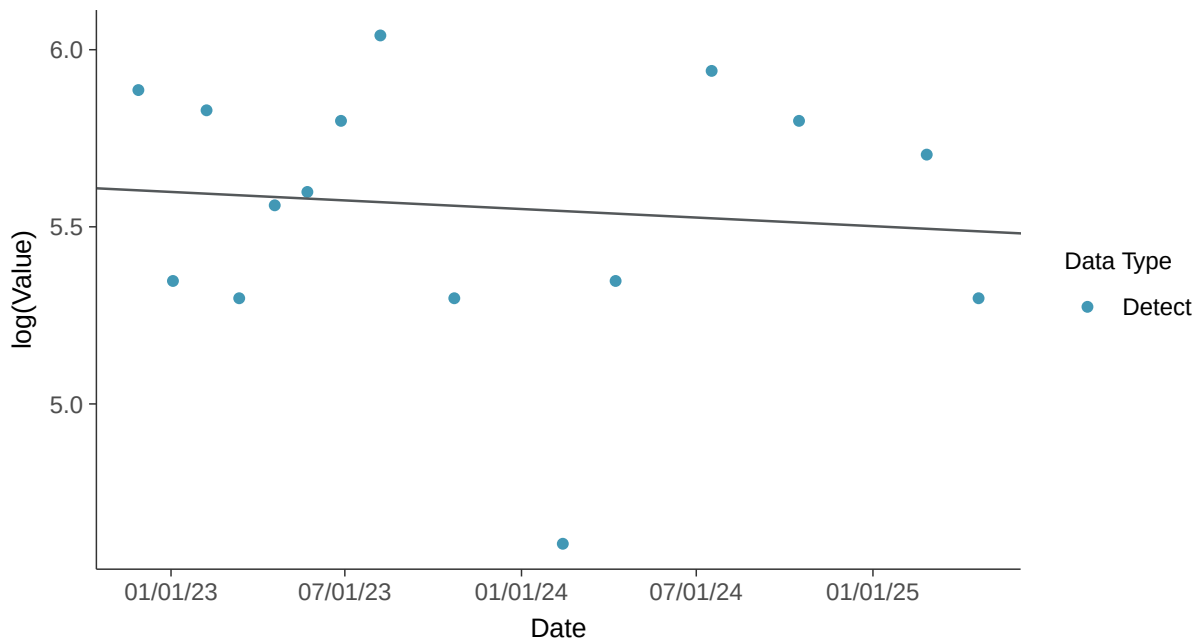
Gamma Q-Q plot

Total Dissolved Solids, MW-12 (mg/L)



Trend Regression: Lognormal MLE

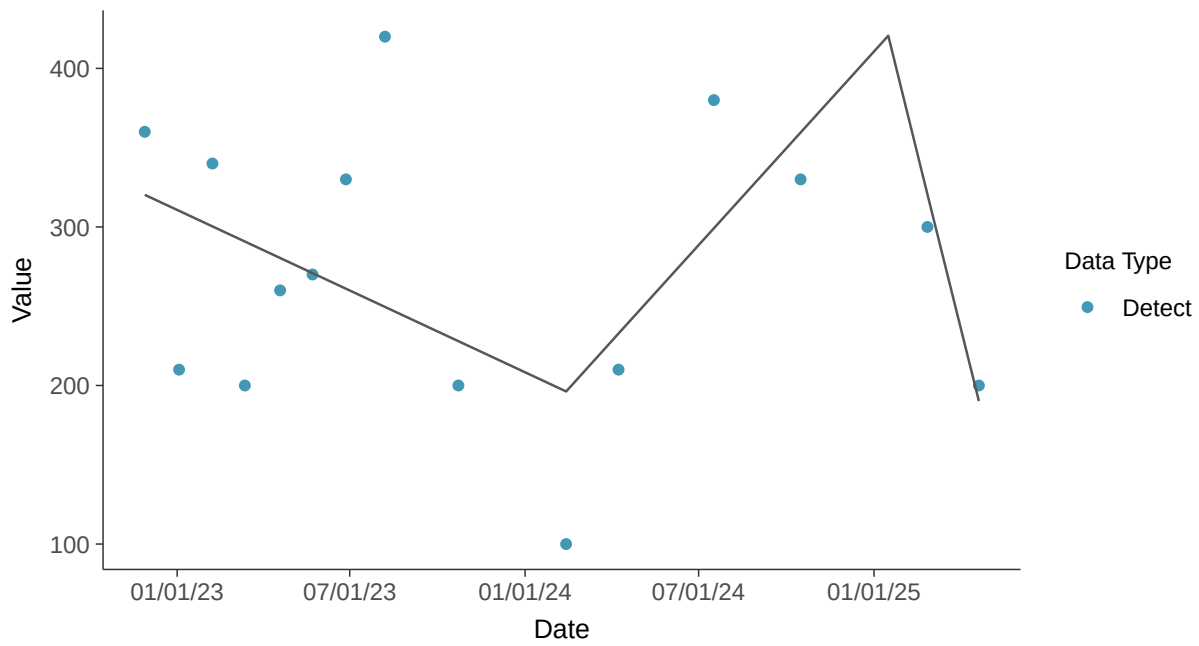
Total Dissolved Solids, MW-12 (mg/L)





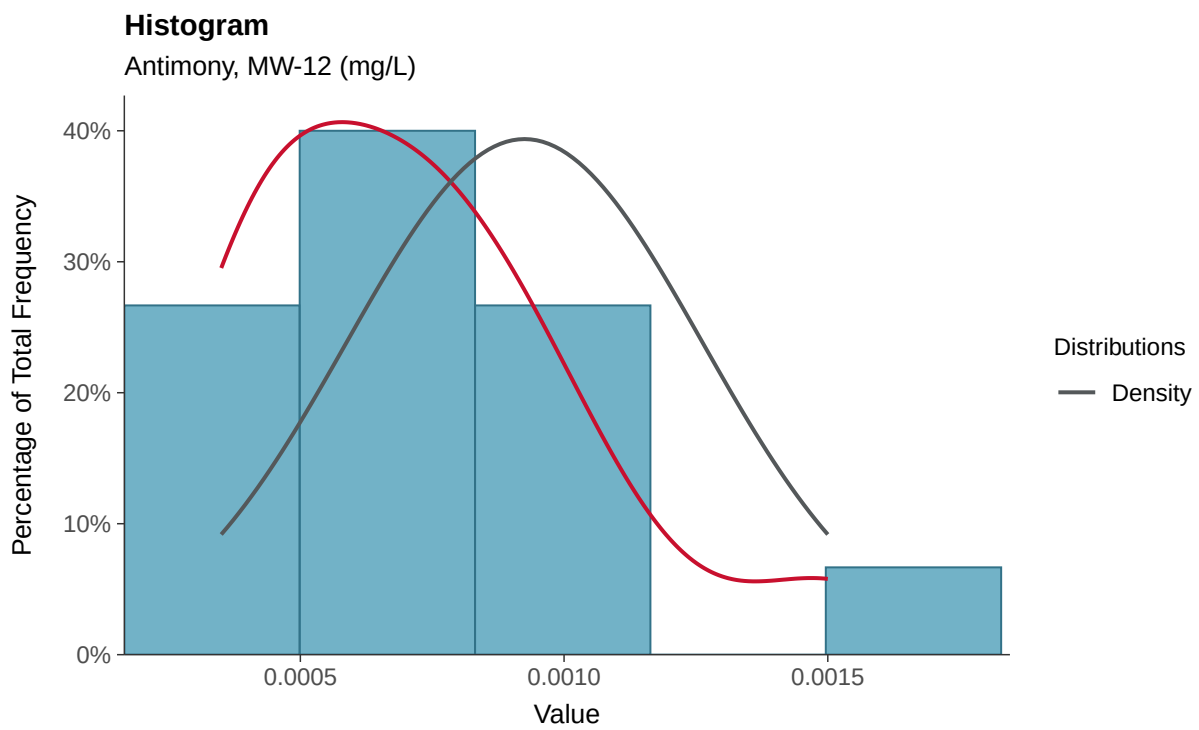
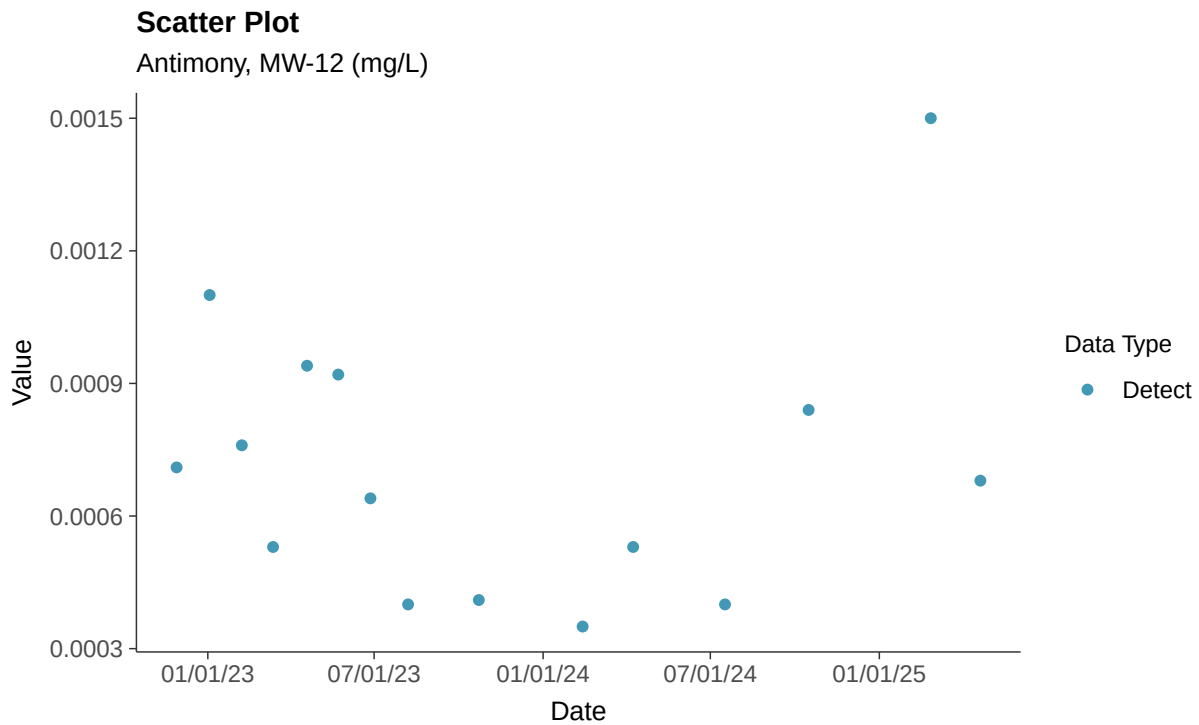
Trend Regression: Piecewise Linear-Linear-Linear

Total Dissolved Solids, MW-12 (mg/L)



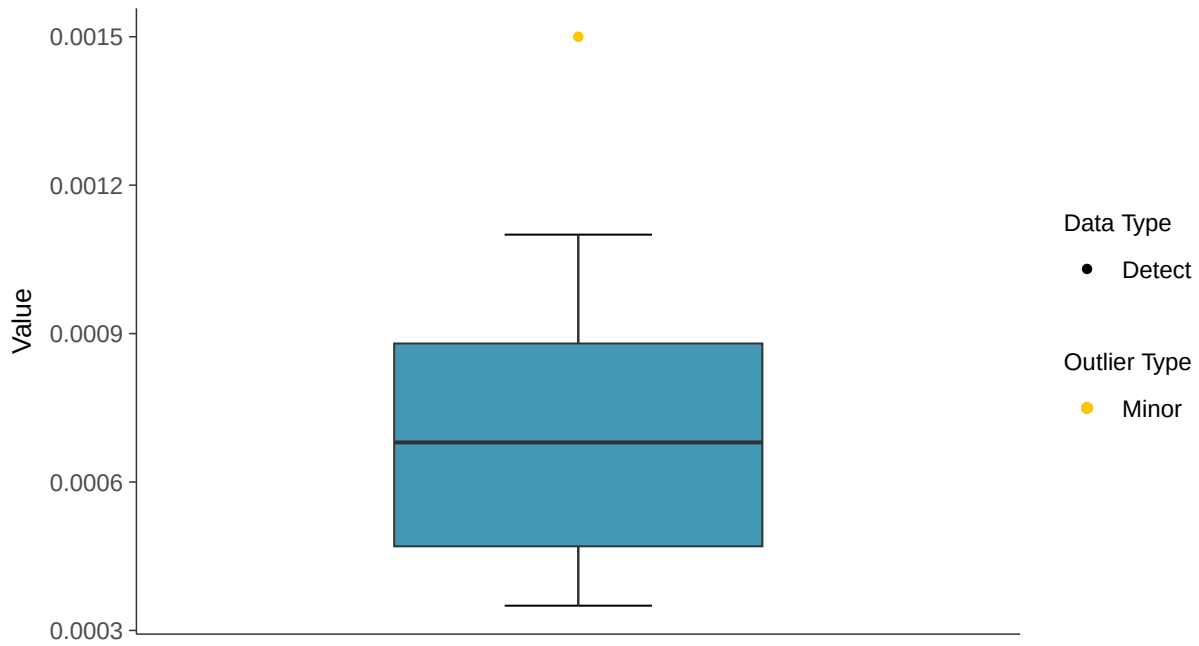
Appendix IV: Antimony, MW-12

ID: 22_2_4_101



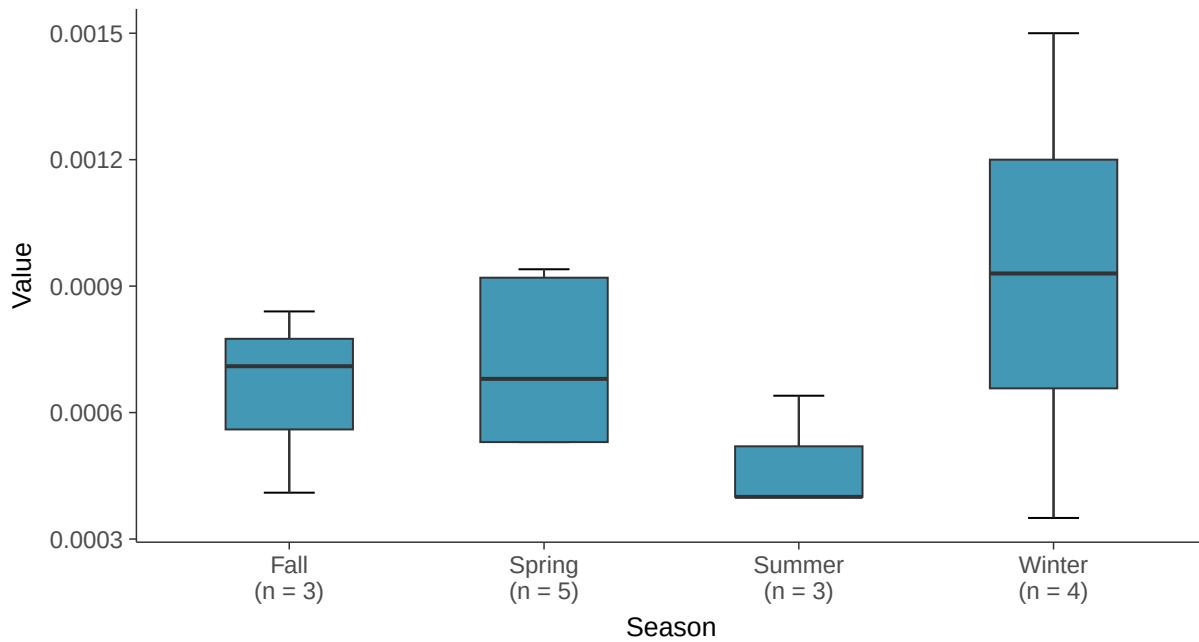
Boxplot

Antimony, MW-12 (mg/L)



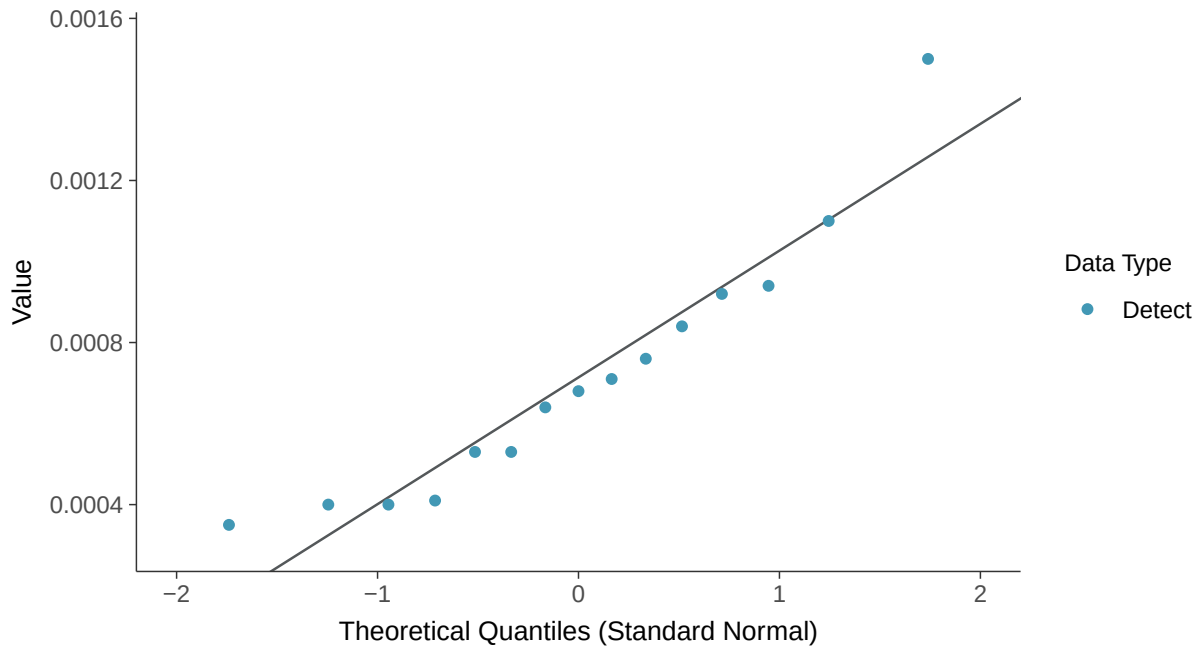
Boxplot by Season

Antimony, MW-12 (mg/L)



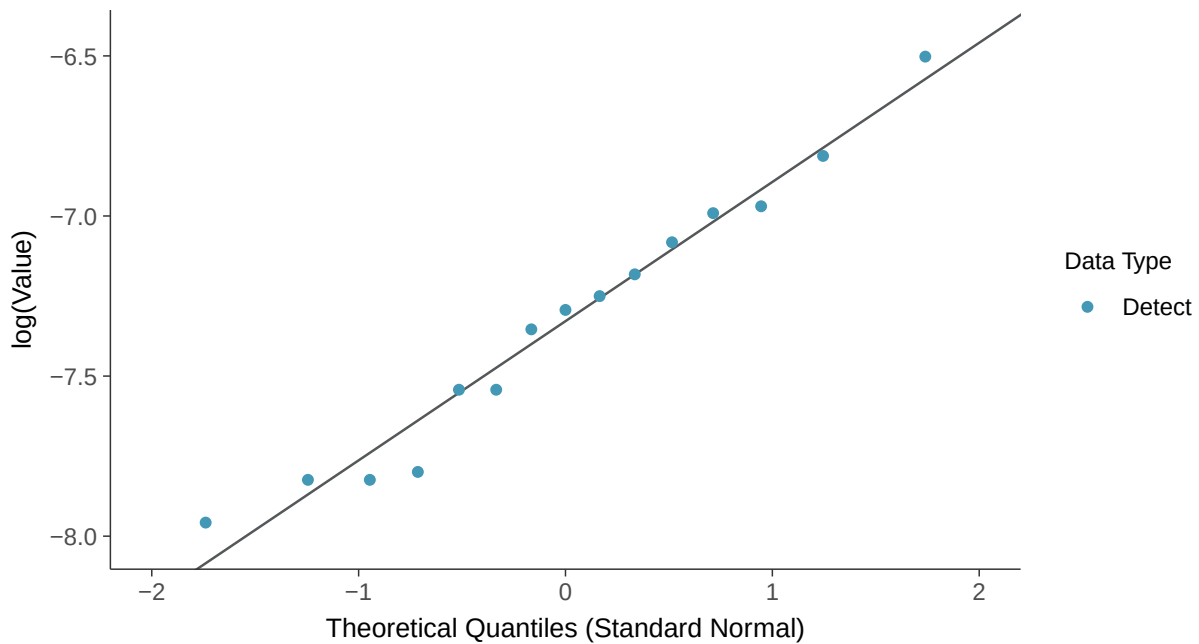
Normal Q-Q plot

Antimony, MW-12 (mg/L)



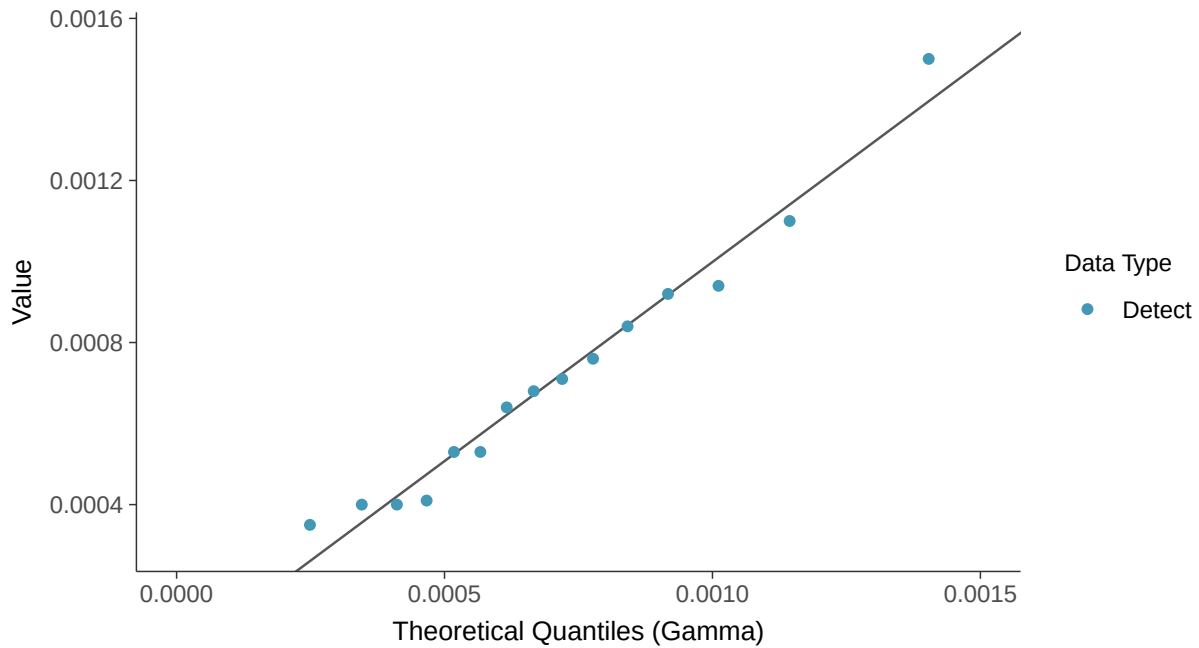
Lognormal Q-Q plot

Antimony, MW-12 (mg/L)



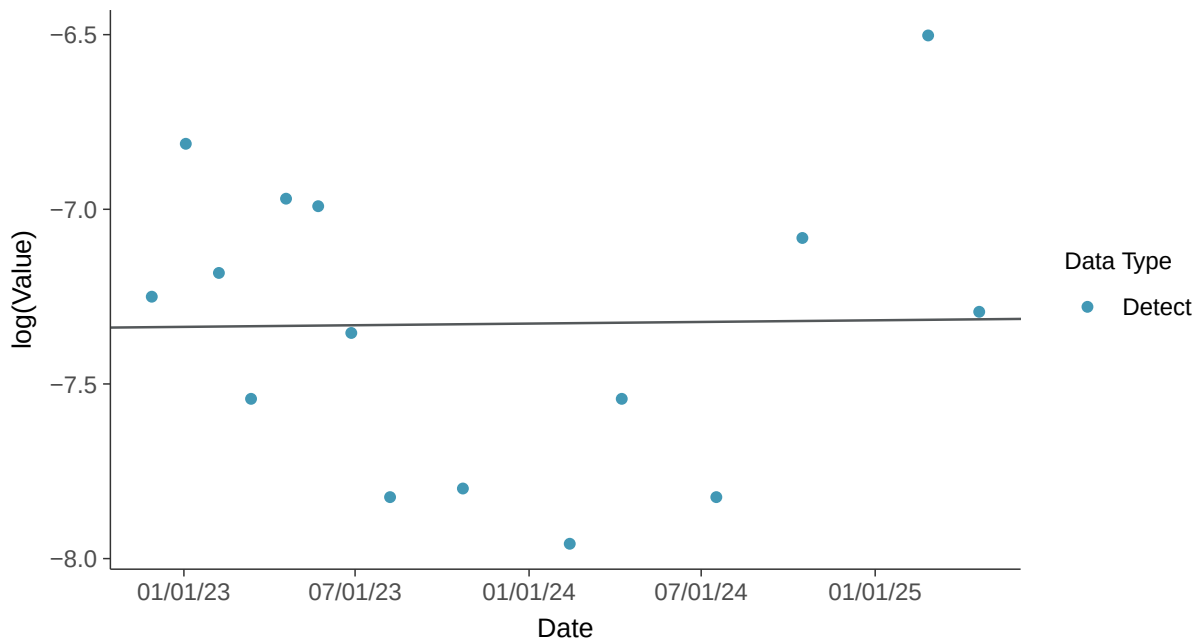
Gamma Q-Q plot

Antimony, MW-12 (mg/L)



Trend Regression: Lognormal MLE

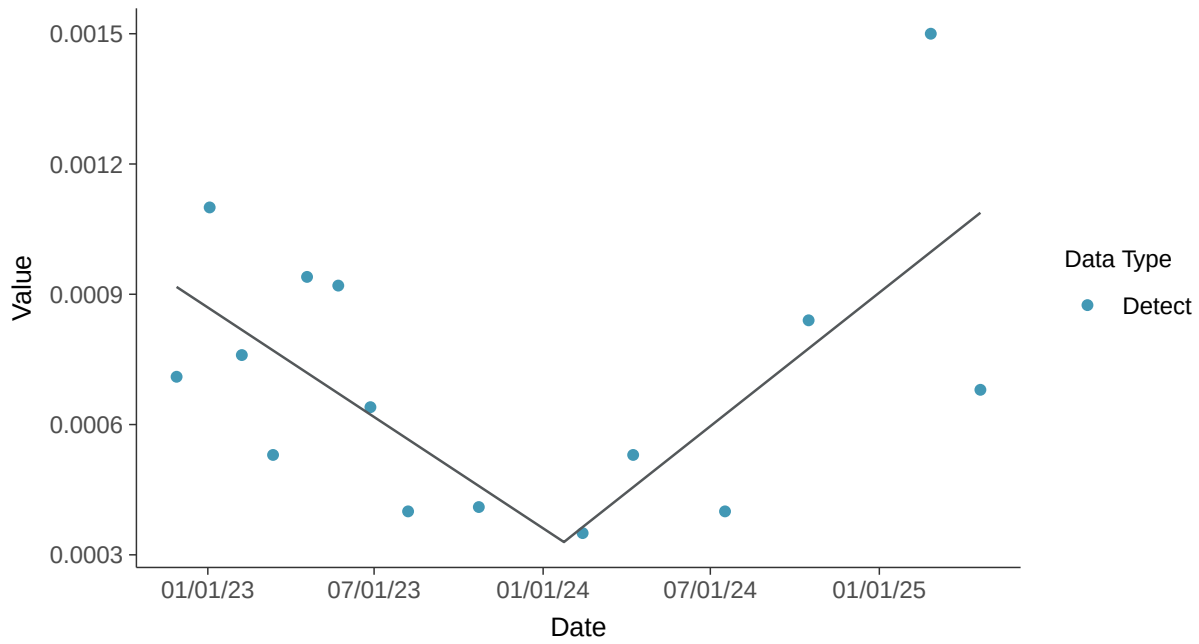
Antimony, MW-12 (mg/L)





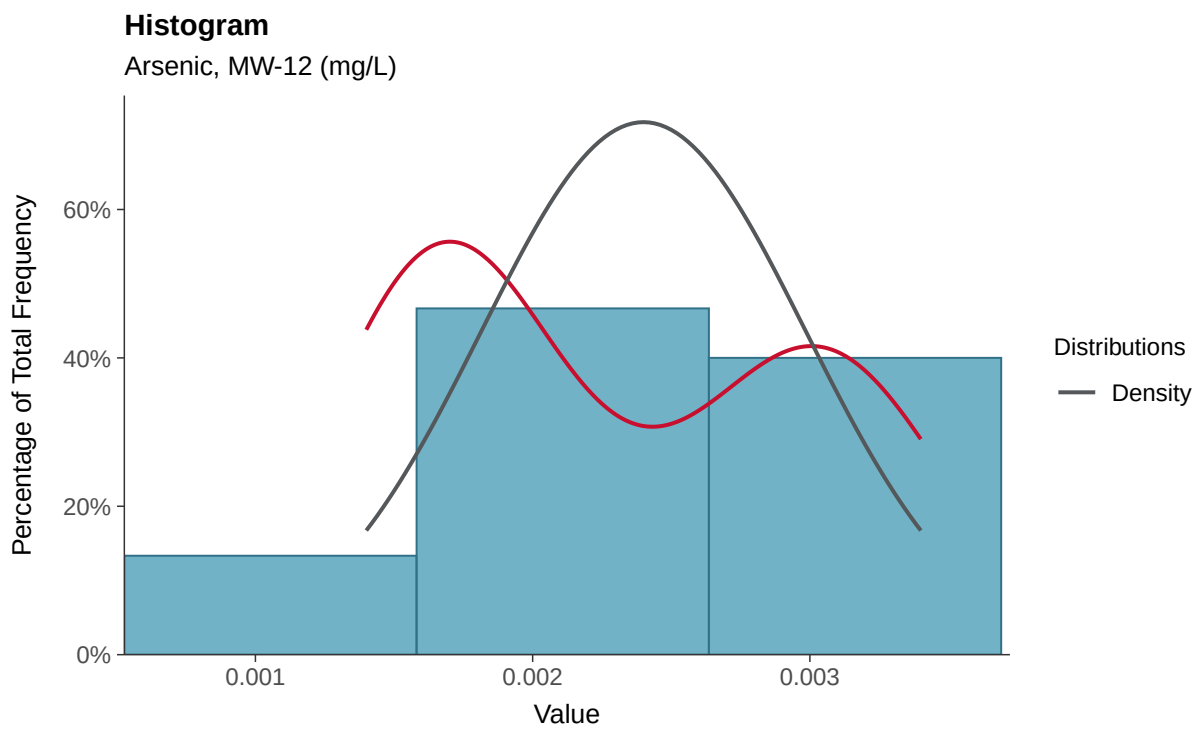
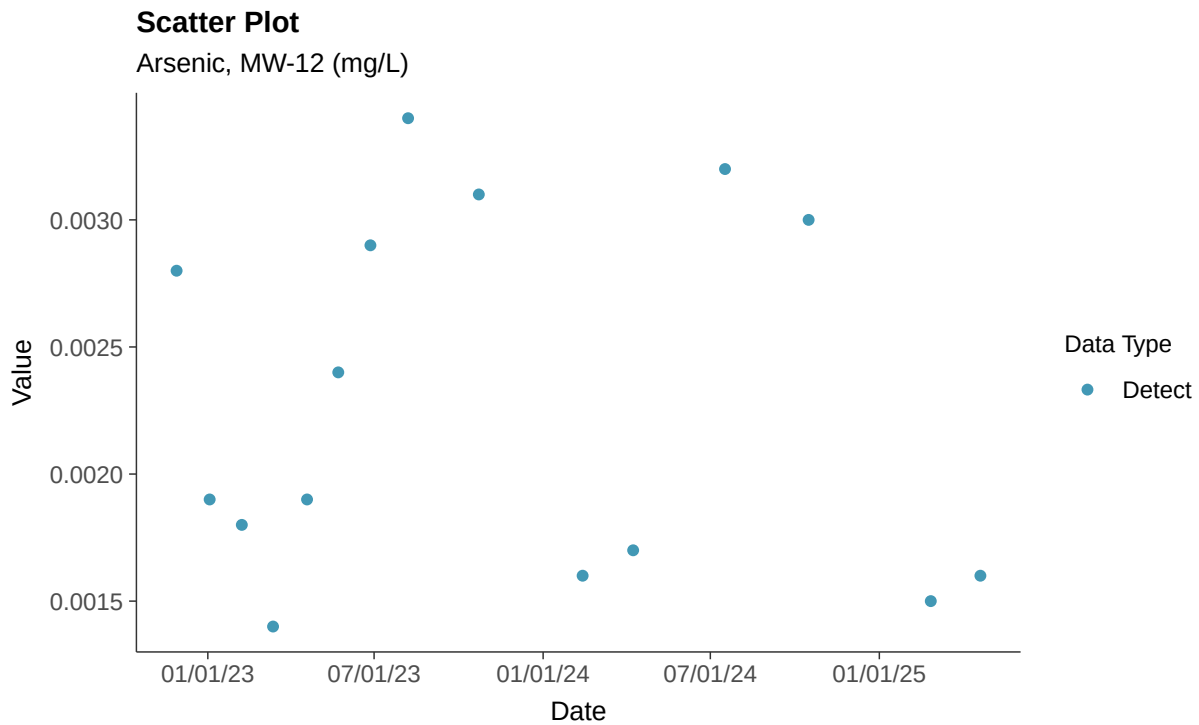
Trend Regression: Piecewise Linear-Linear

Antimony, MW-12 (mg/L)



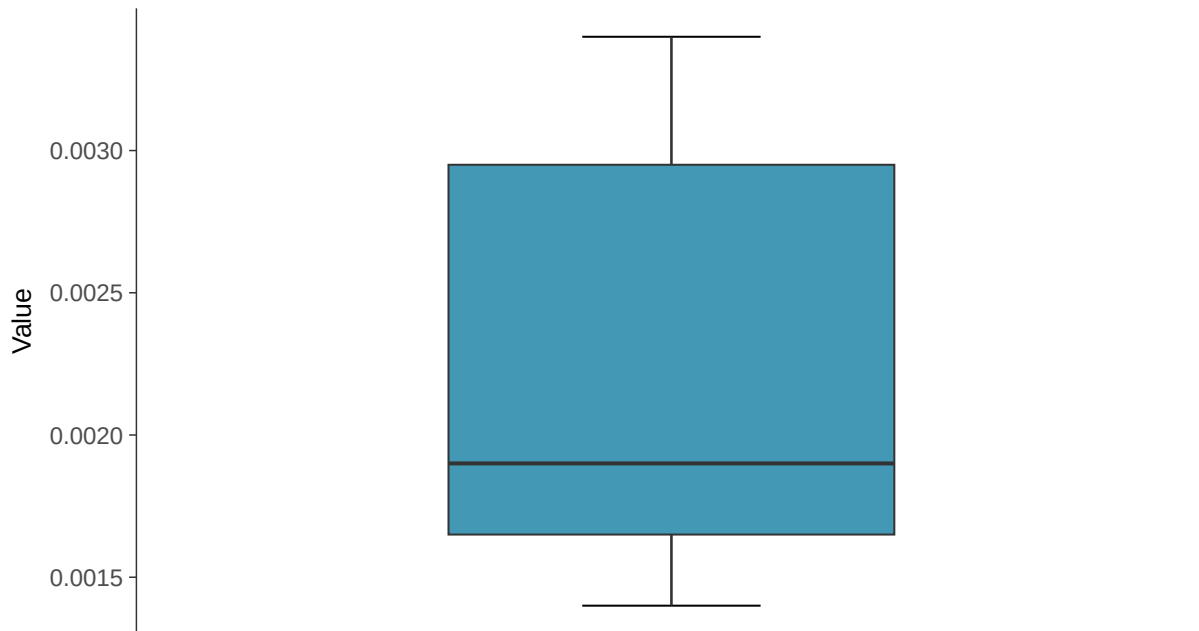
Appendix IV: Arsenic, MW-12

ID: 22_2_4_102



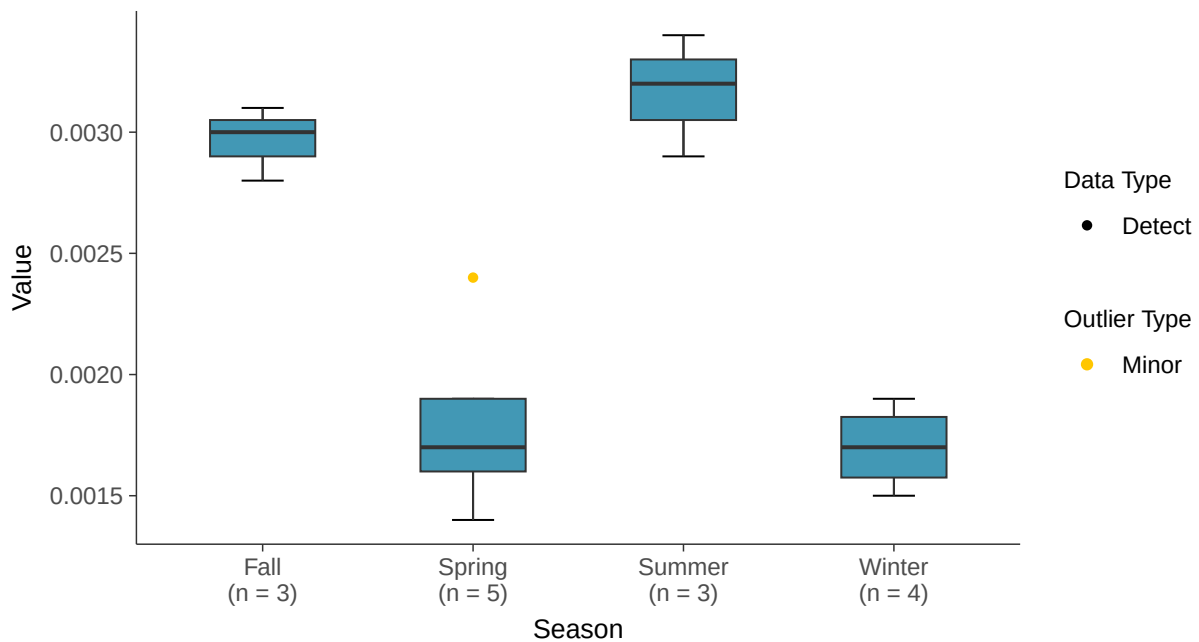
Boxplot

Arsenic, MW-12 (mg/L)



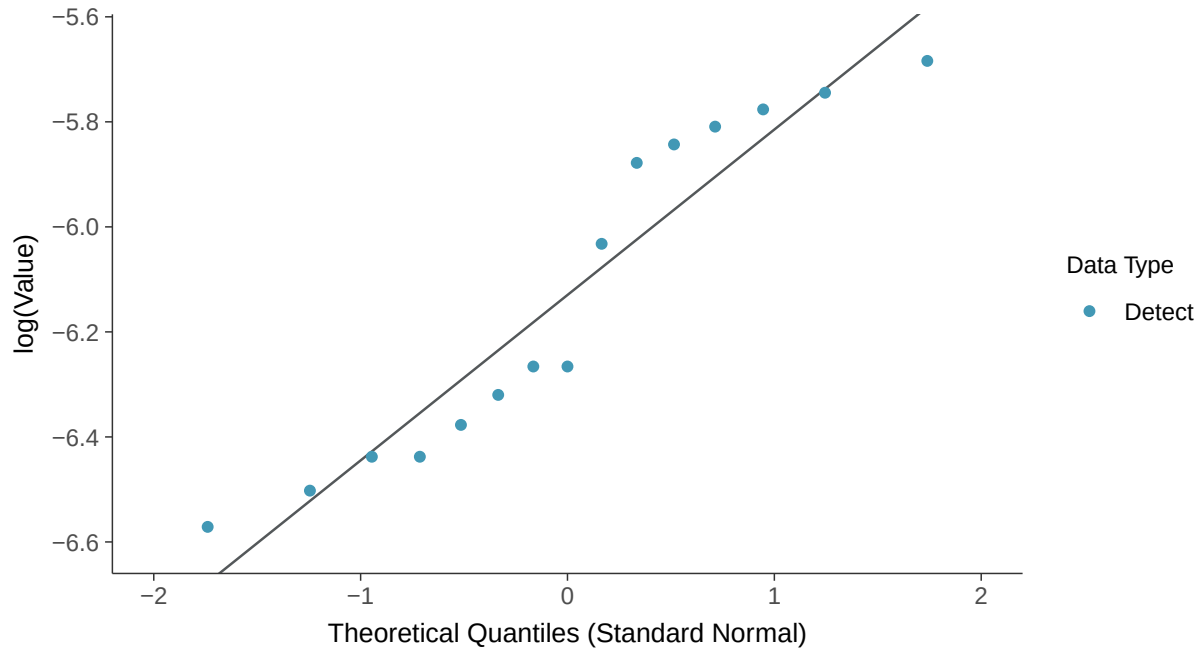
Boxplot by Season

Arsenic, MW-12 (mg/L)



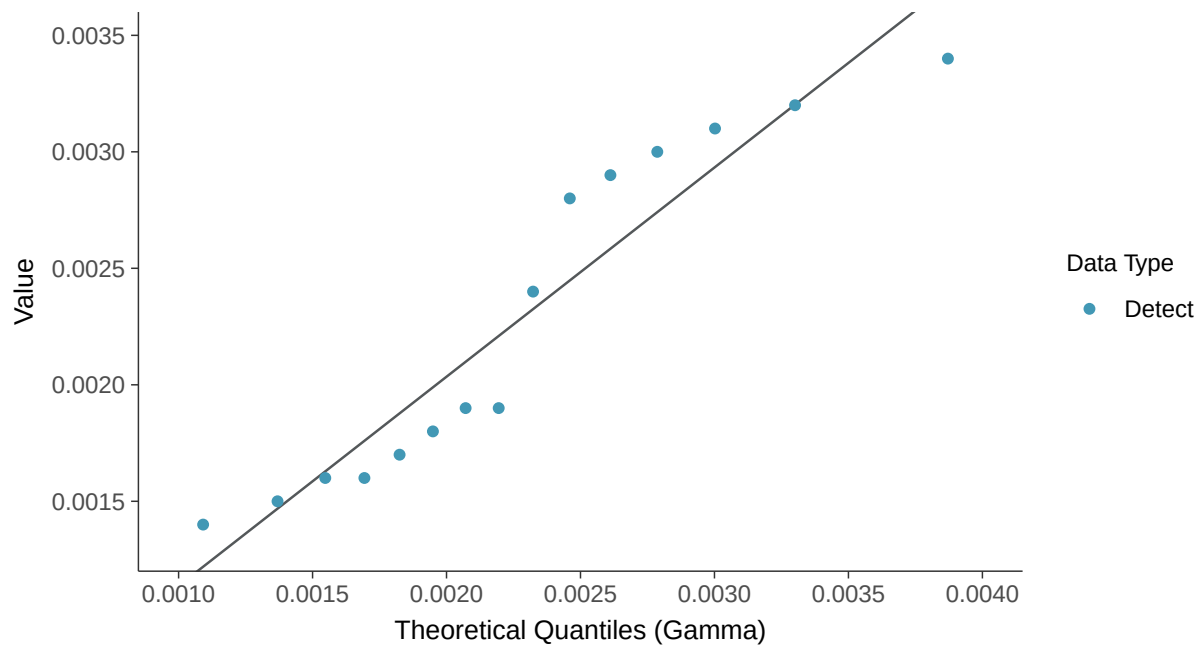
Lognormal Q-Q plot

Arsenic, MW-12 (mg/L)



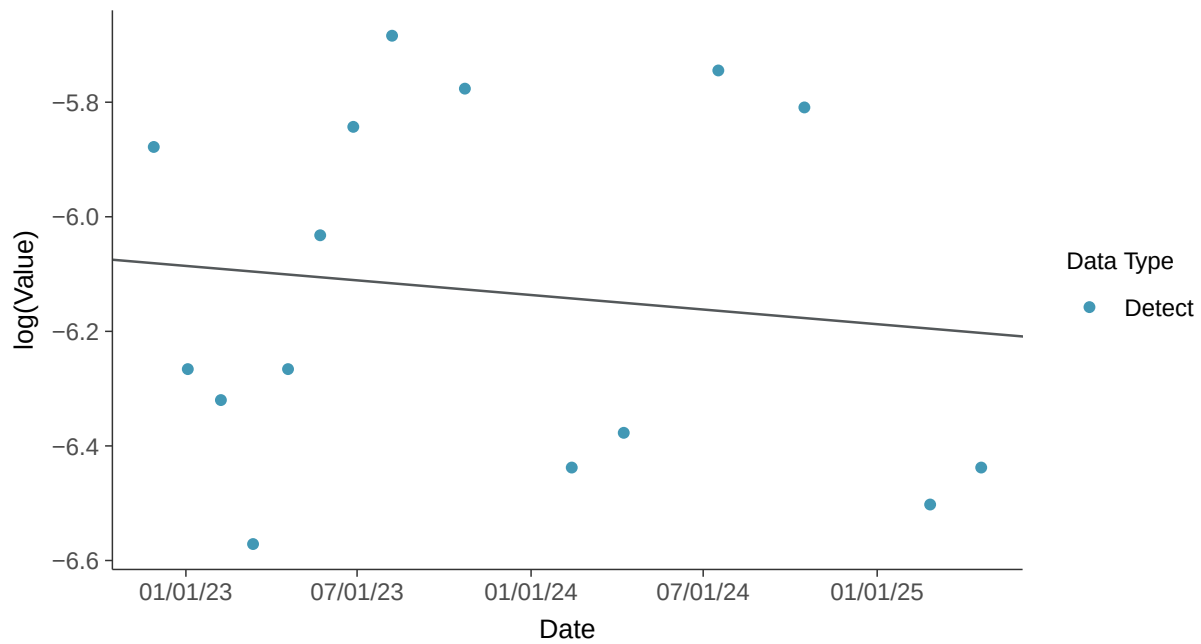
Gamma Q-Q plot

Arsenic, MW-12 (mg/L)



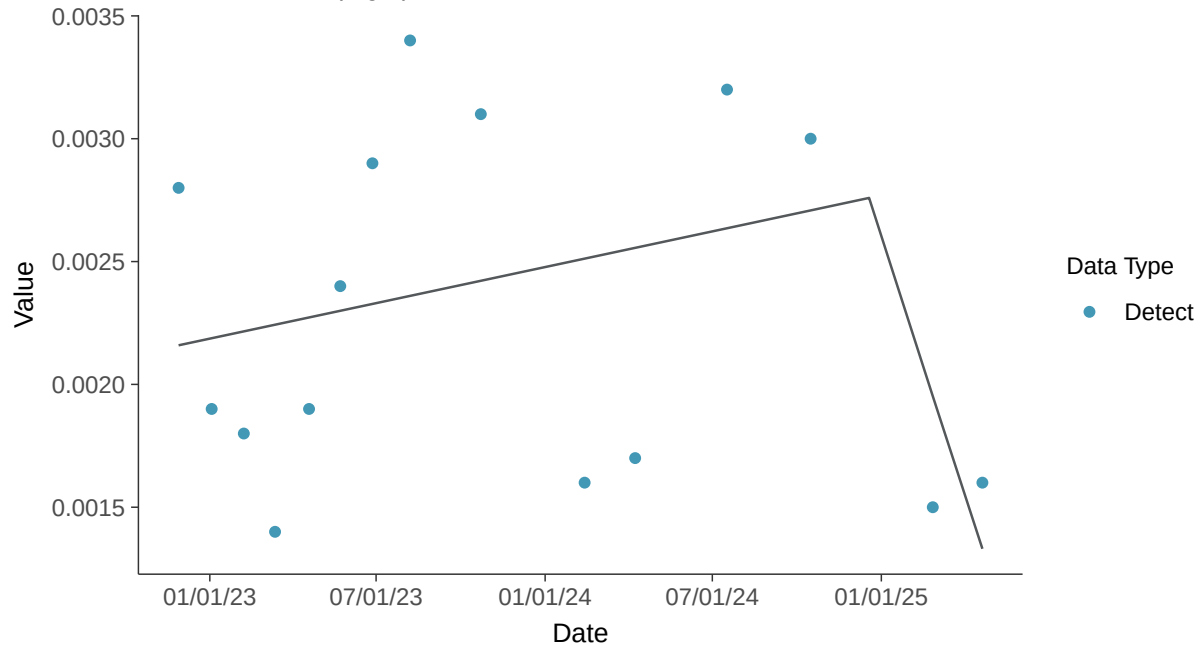
Trend Regression: Lognormal MLE

Arsenic, MW-12 (mg/L)



Trend Regression: Piecewise Linear-Linear

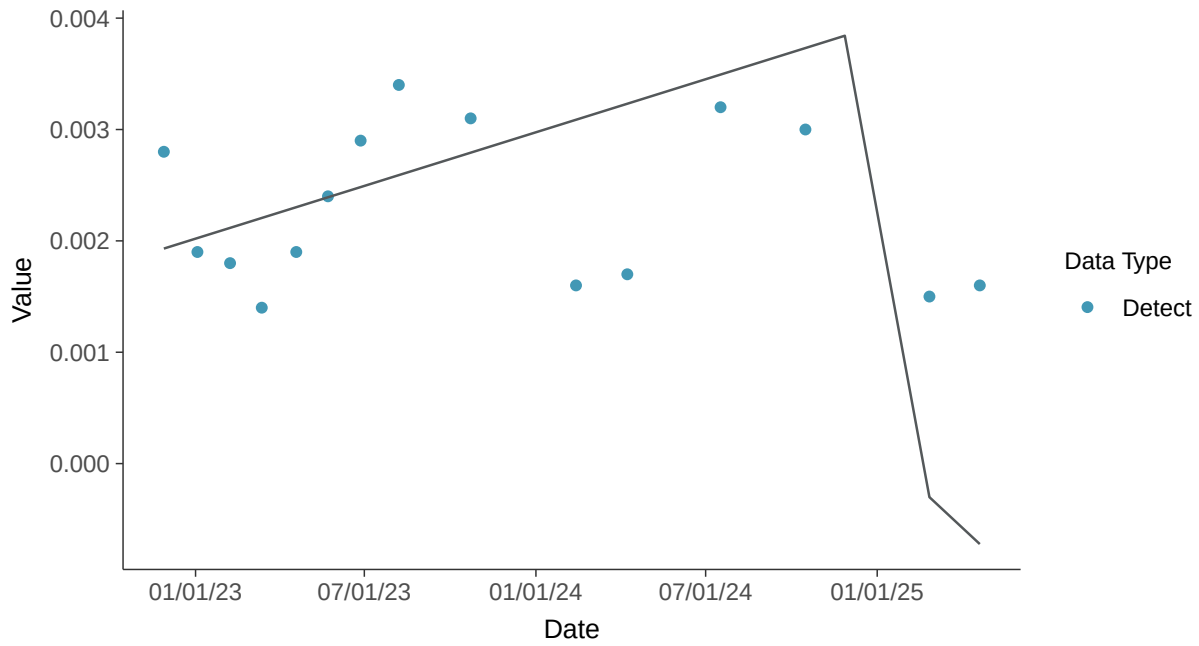
Arsenic, MW-12 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-12 (mg/L)

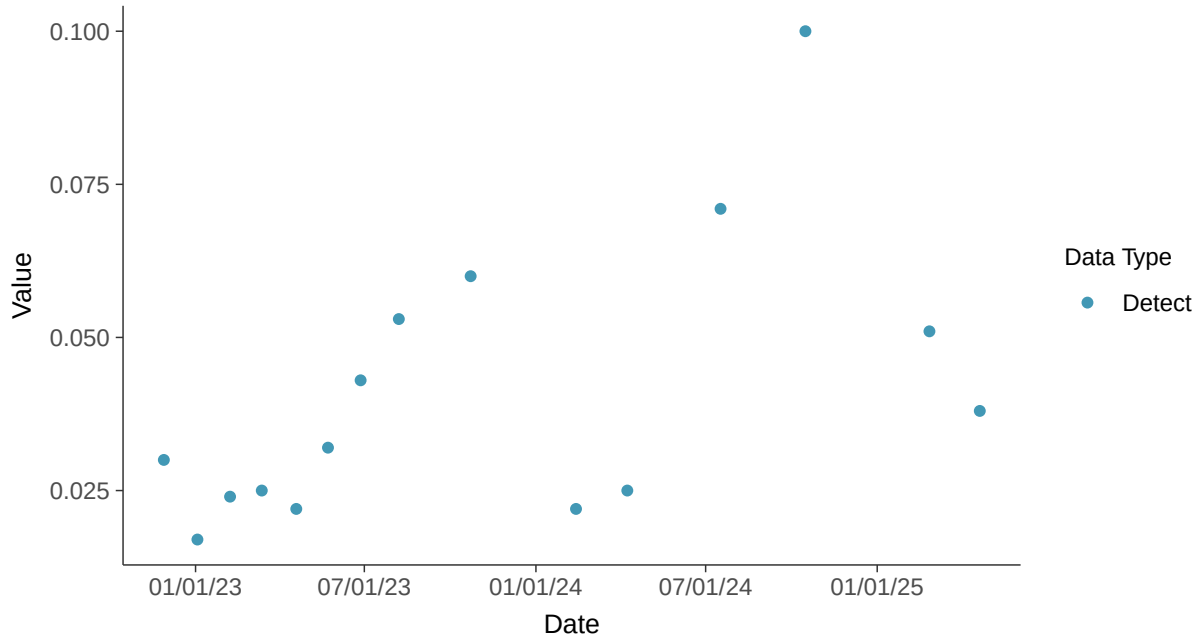


Appendix IV: Barium, MW-12

ID: 22_2_4_103

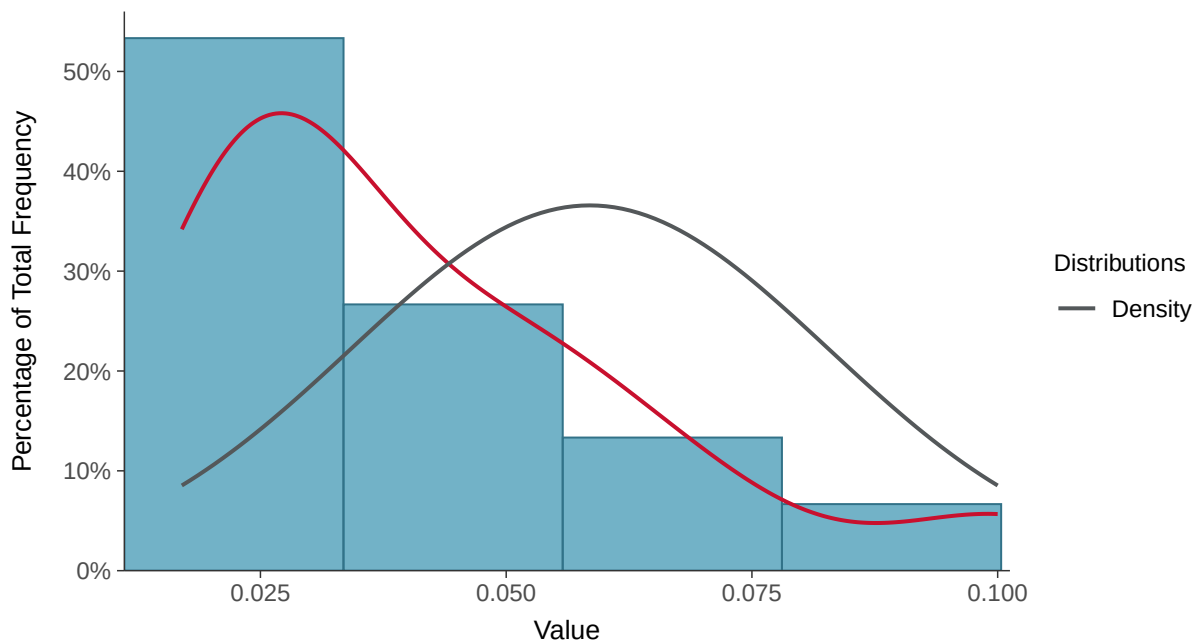
Scatter Plot

Barium, MW-12 (mg/L)



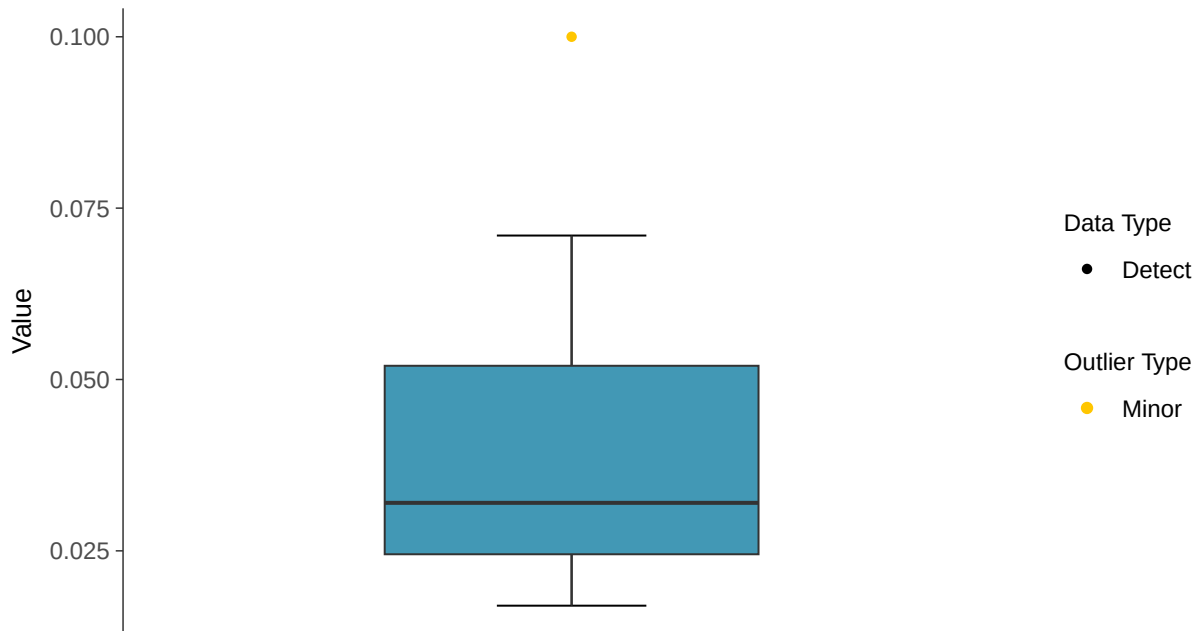
Histogram

Barium, MW-12 (mg/L)



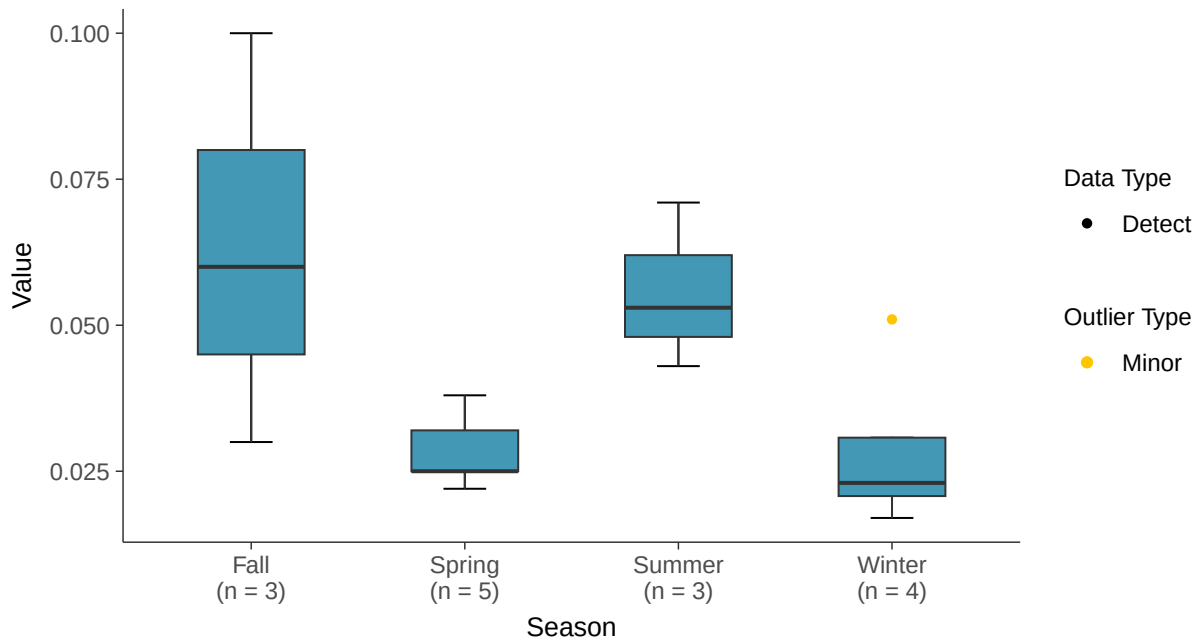
Boxplot

Barium, MW-12 (mg/L)



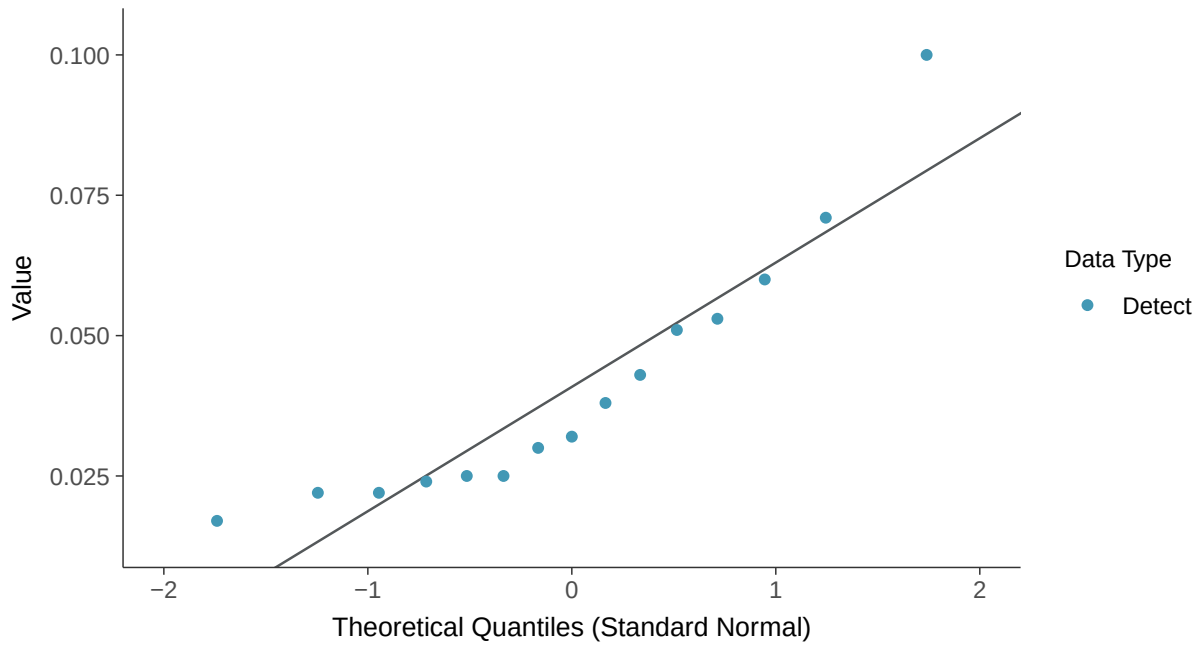
Boxplot by Season

Barium, MW-12 (mg/L)



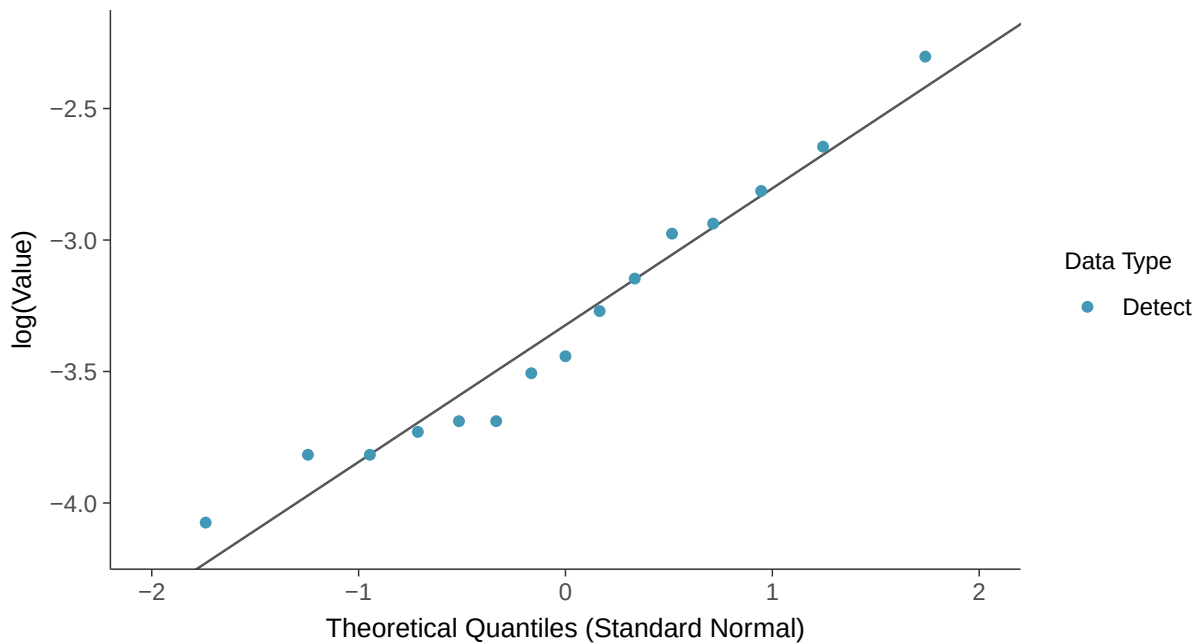
Normal Q-Q plot

Barium, MW-12 (mg/L)



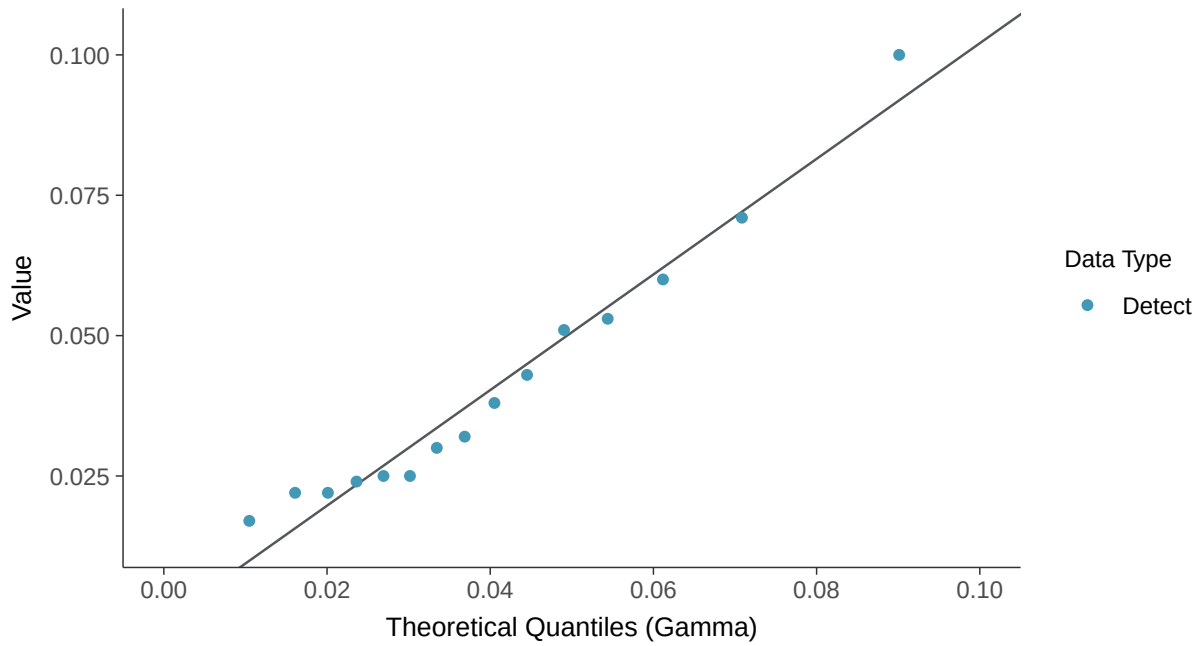
Lognormal Q-Q plot

Barium, MW-12 (mg/L)



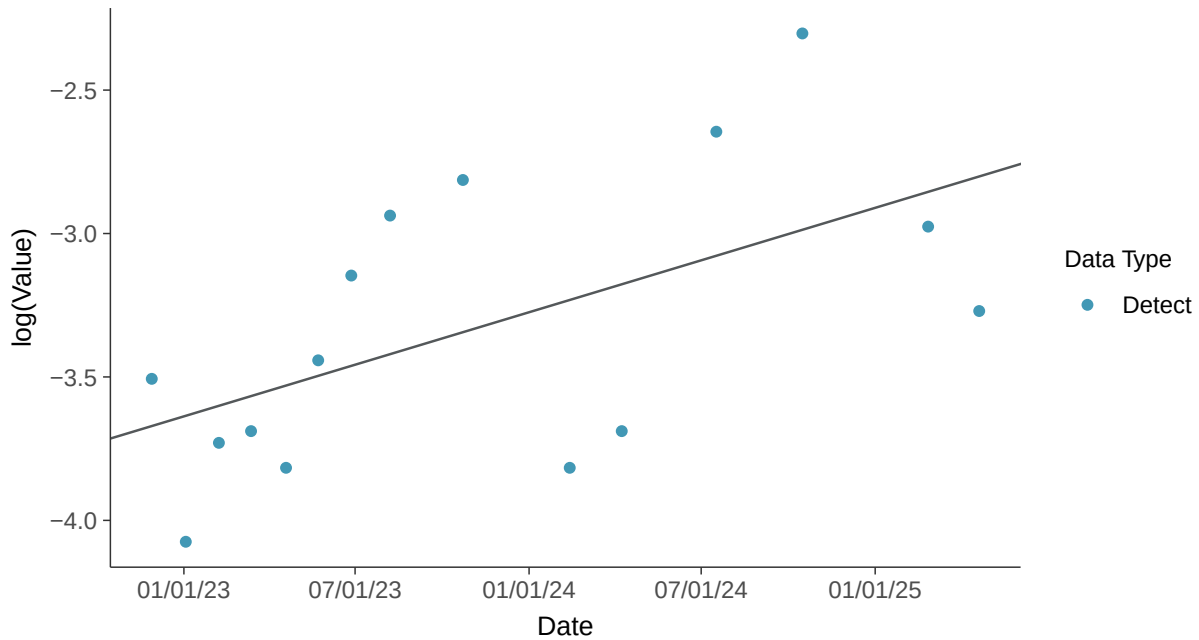
Gamma Q-Q plot

Barium, MW-12 (mg/L)



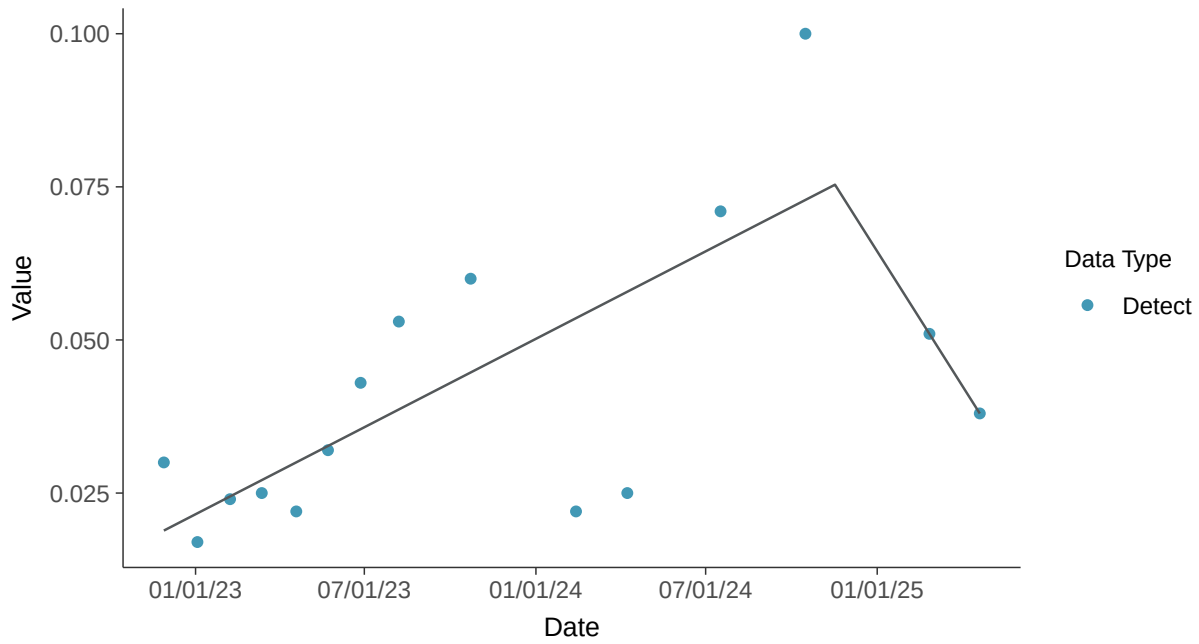
Trend Regression: Lognormal MLE

Barium, MW-12 (mg/L)



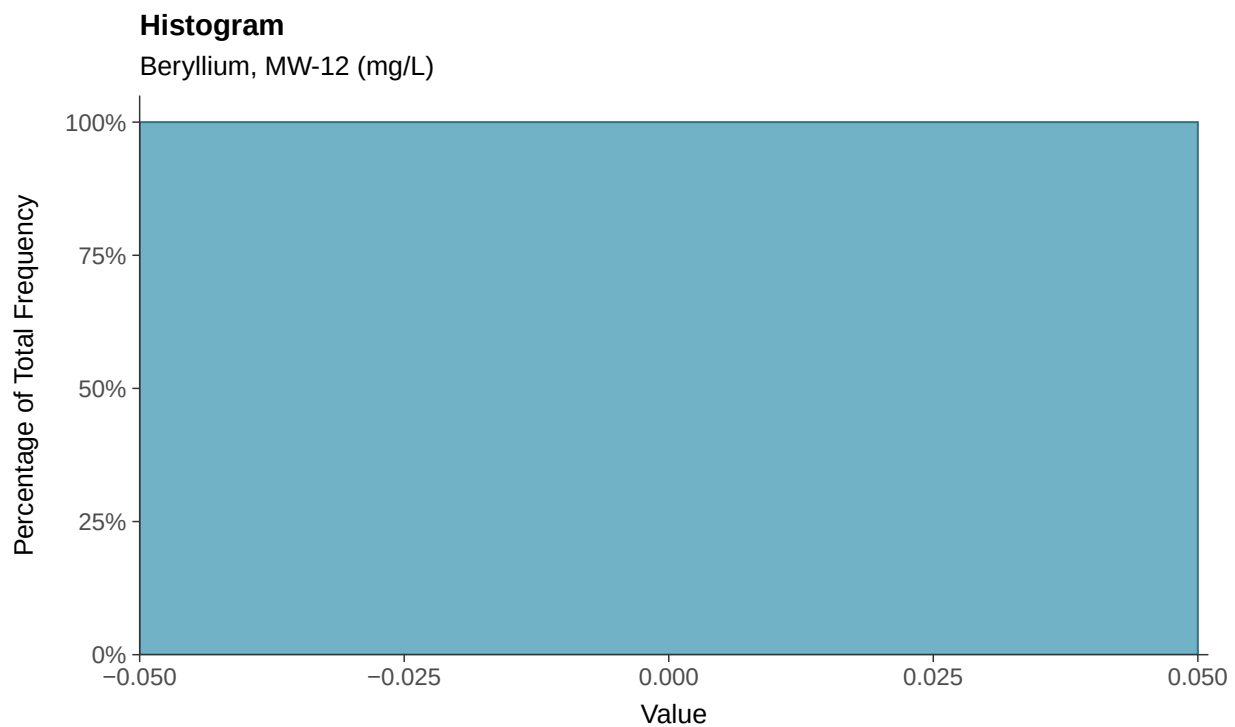
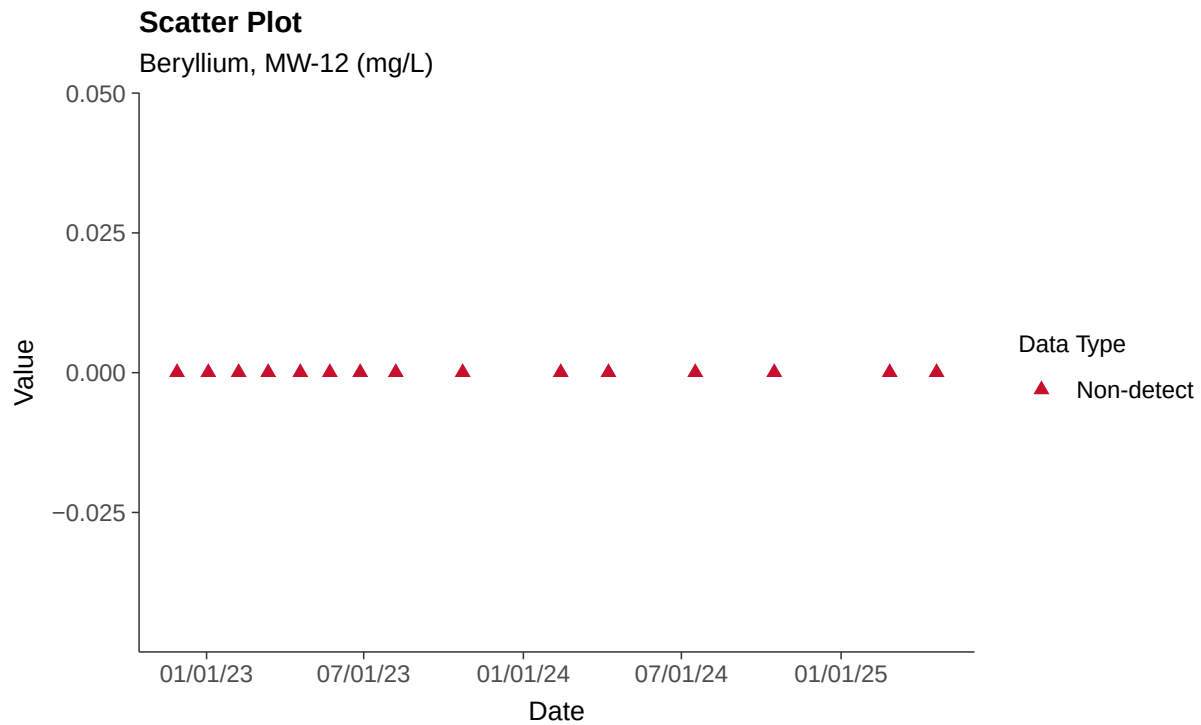
Trend Regression: Piecewise Linear-Linear

Barium, MW-12 (mg/L)



Appendix IV: Beryllium, MW-12

ID: 22_2_4_104





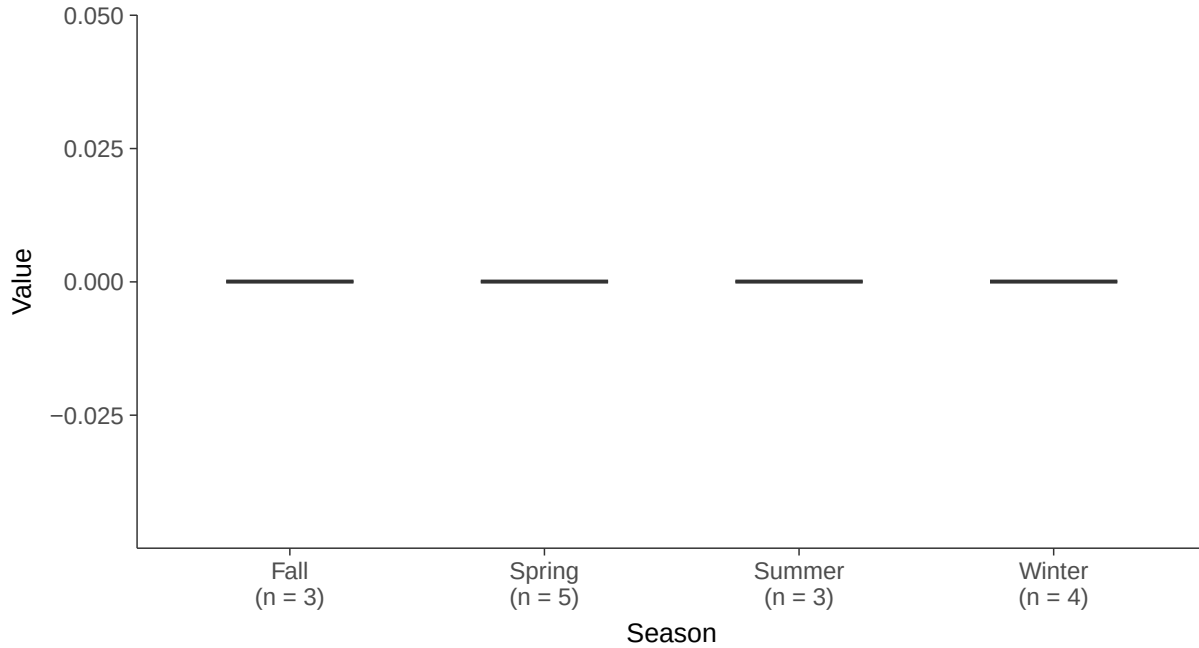
Boxplot

Beryllium, MW-12 (mg/L)



Boxplot by Season

Beryllium, MW-12 (mg/L)

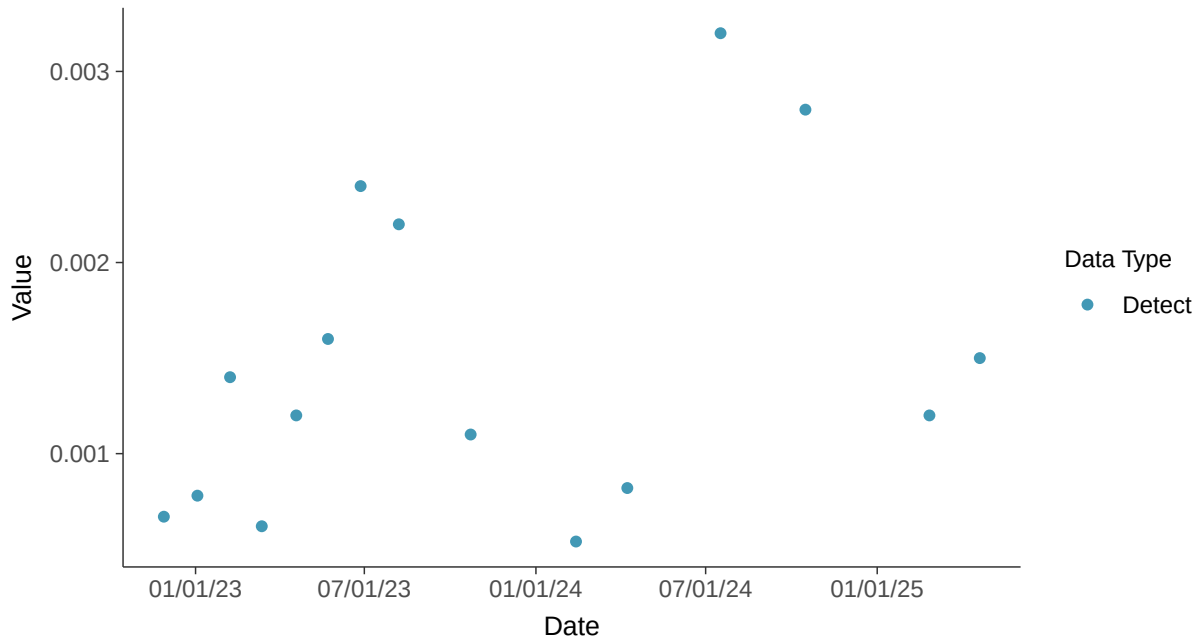


Appendix IV: Cadmium, MW-12

ID: 22_2_4_106

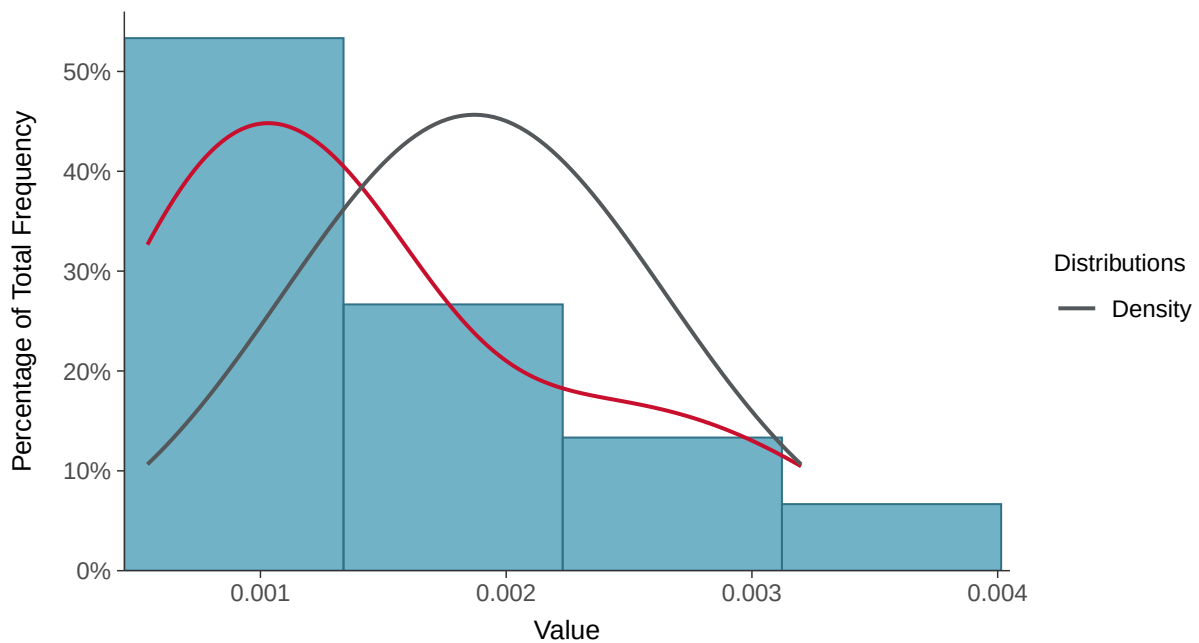
Scatter Plot

Cadmium, MW-12 (mg/L)



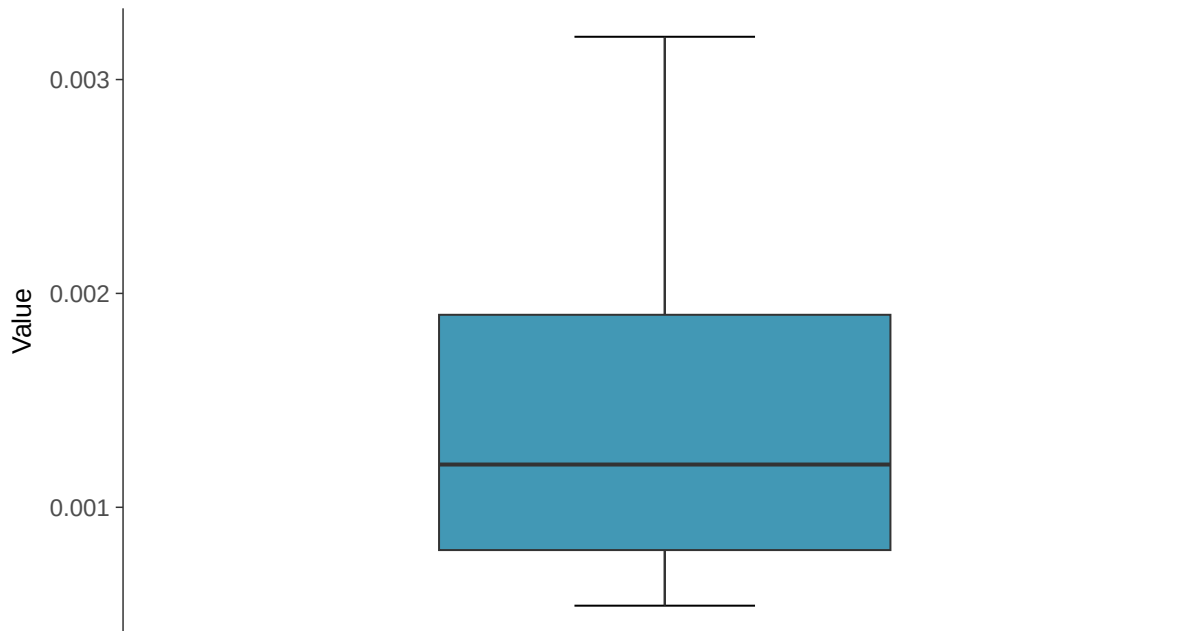
Histogram

Cadmium, MW-12 (mg/L)



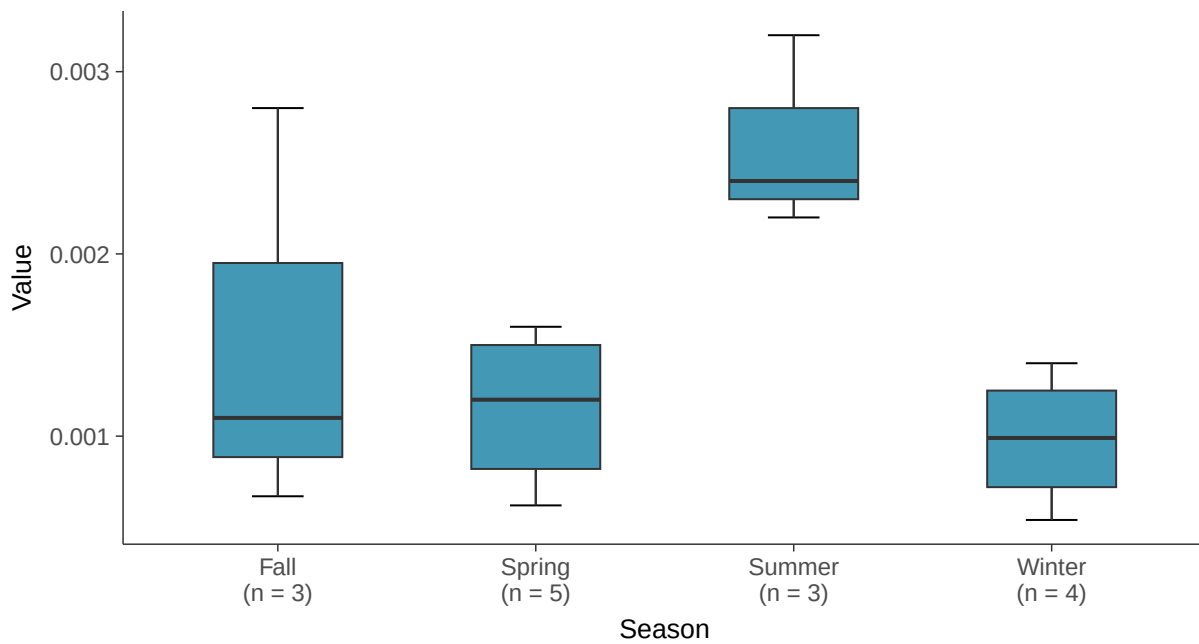
Boxplot

Cadmium, MW-12 (mg/L)



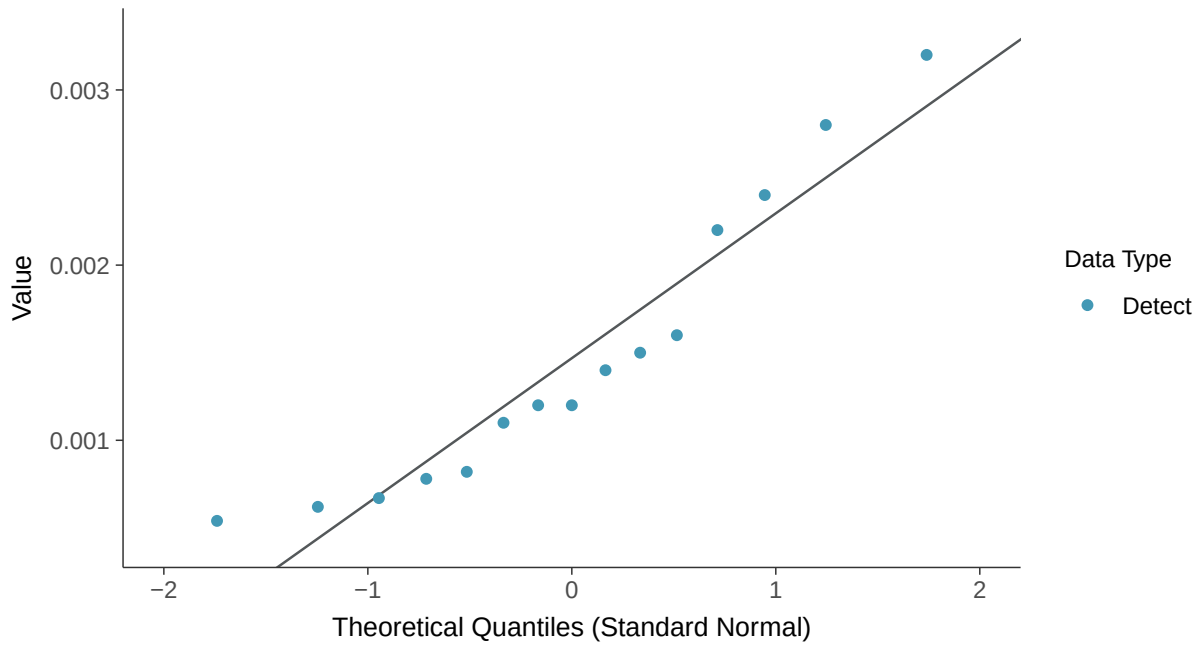
Boxplot by Season

Cadmium, MW-12 (mg/L)



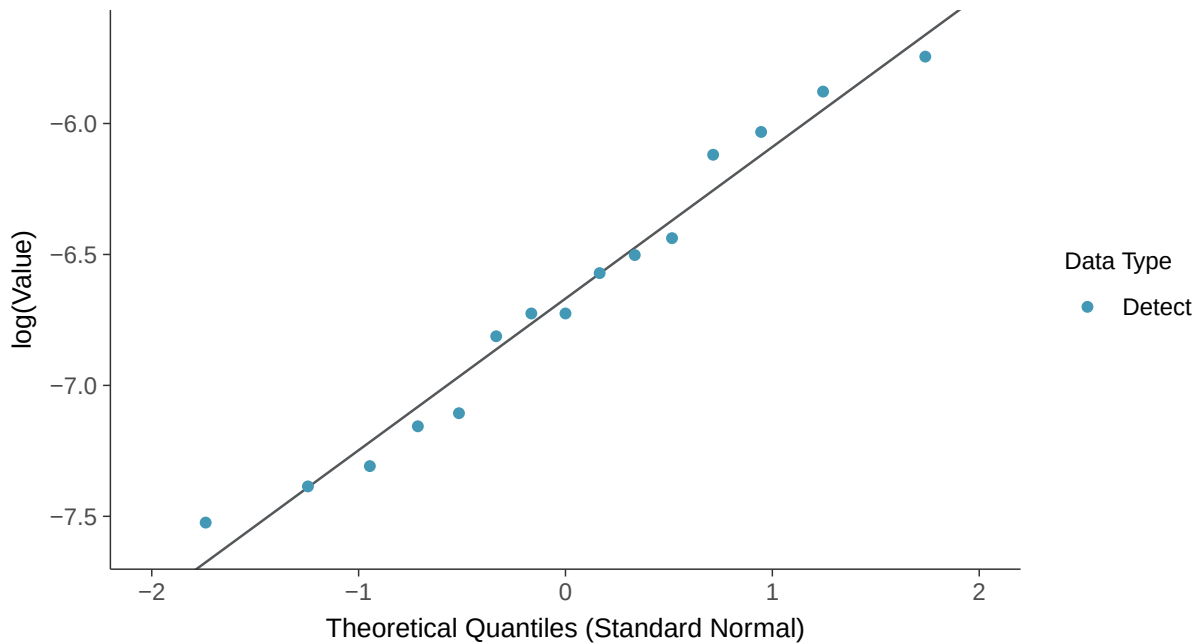
Normal Q-Q plot

Cadmium, MW-12 (mg/L)



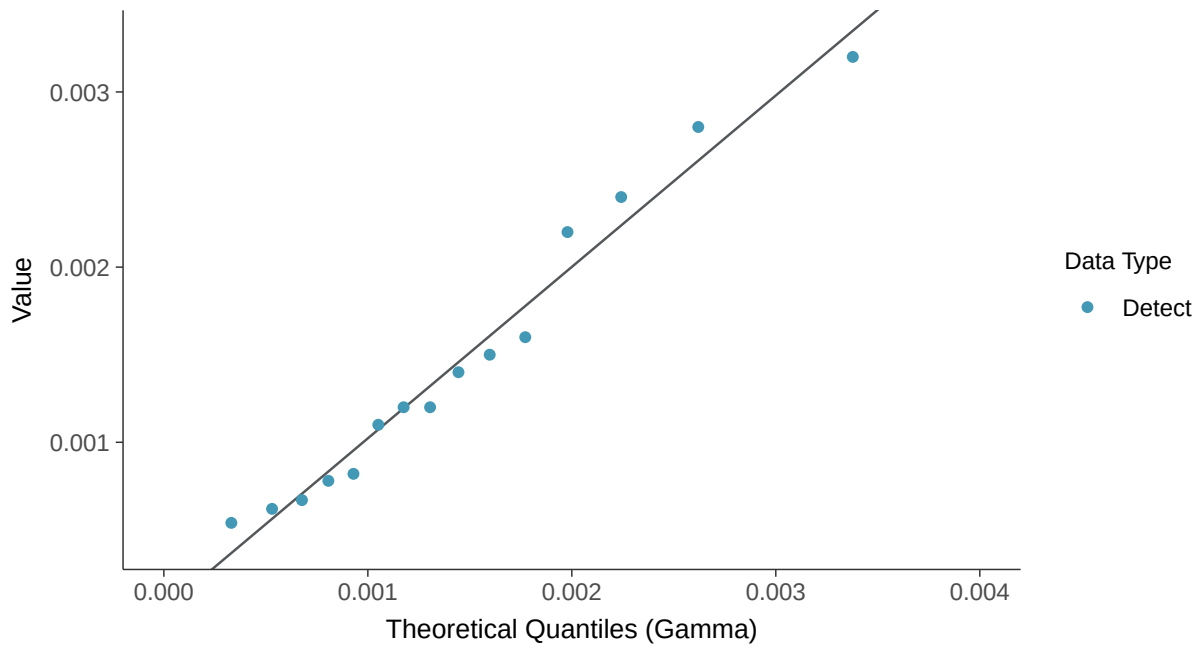
Lognormal Q-Q plot

Cadmium, MW-12 (mg/L)



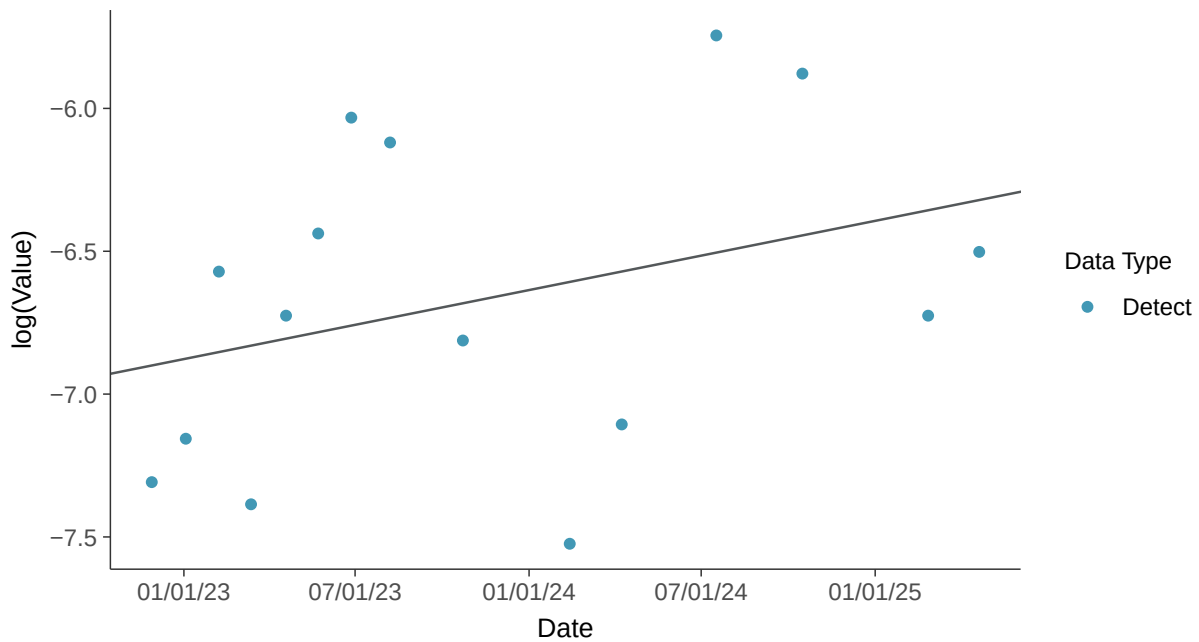
Gamma Q-Q plot

Cadmium, MW-12 (mg/L)



Trend Regression: Lognormal MLE

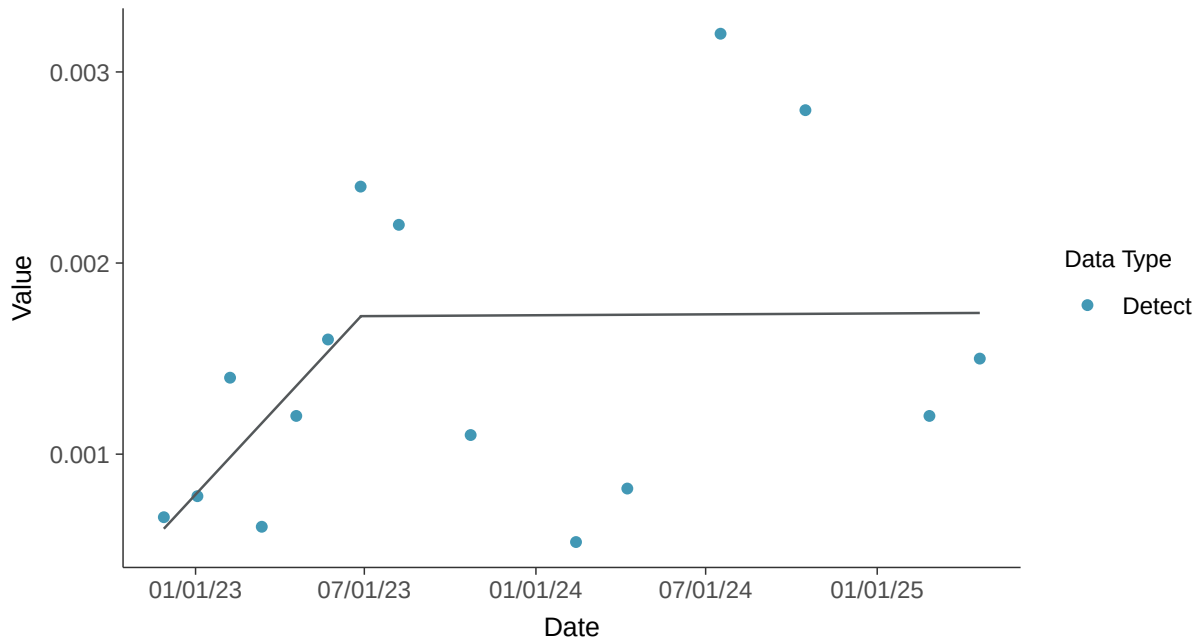
Cadmium, MW-12 (mg/L)





Trend Regression: Piecewise Linear-Linear

Cadmium, MW-12 (mg/L)

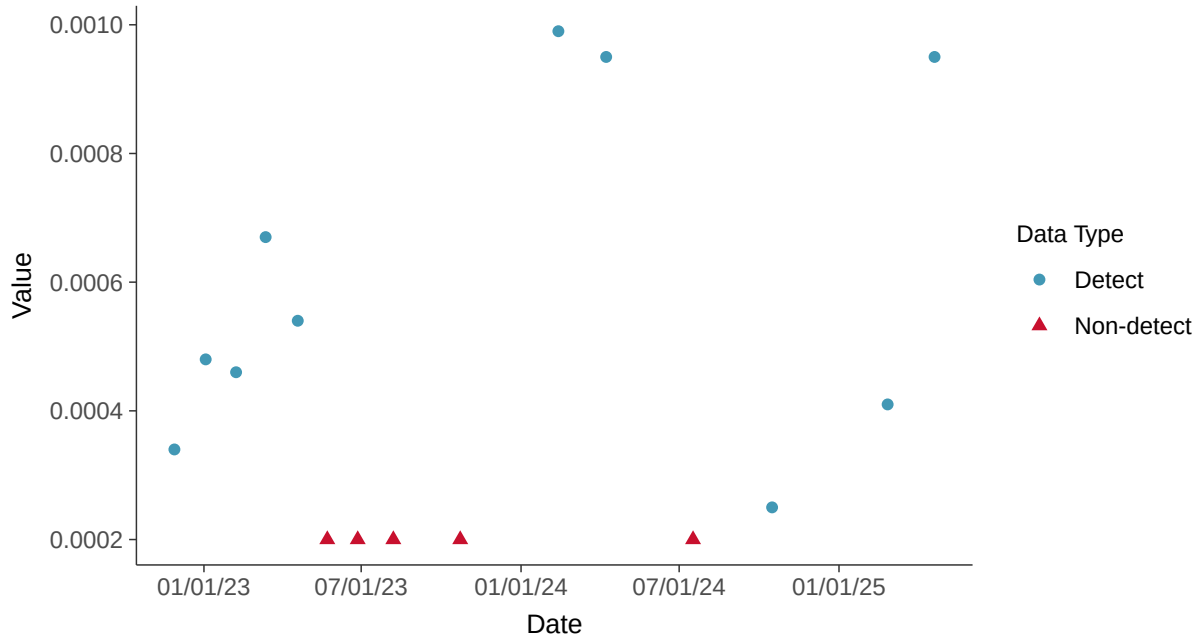


Appendix IV: Chromium, Total, MW-12

ID: 22_2_4_109

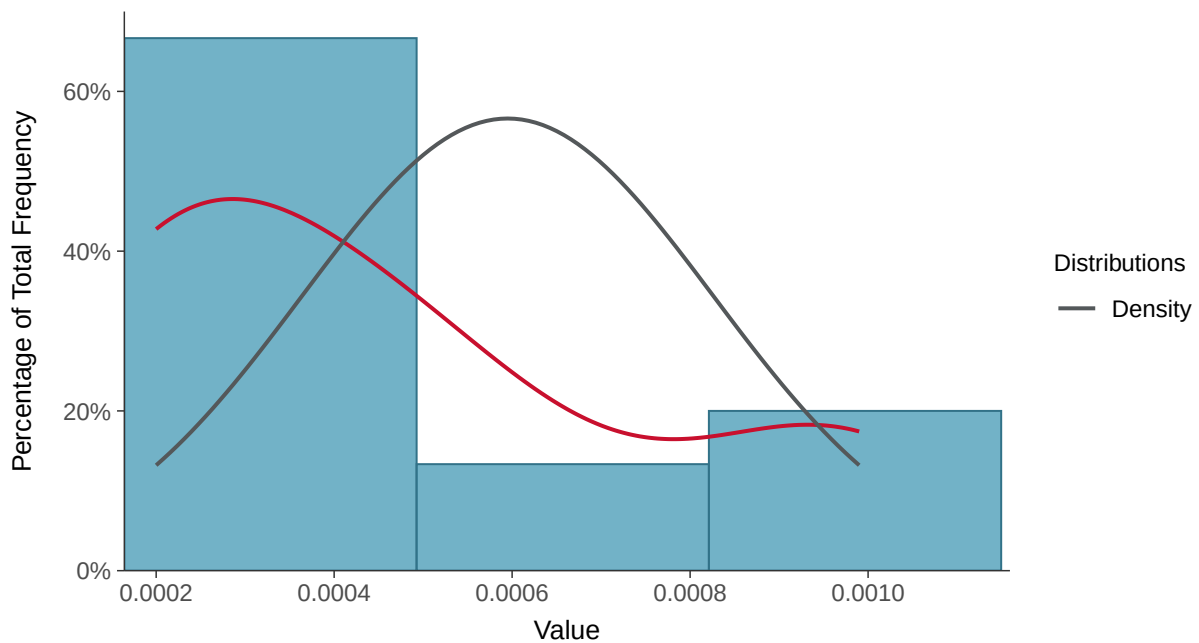
Scatter Plot

Chromium, Total, MW-12 (mg/L)



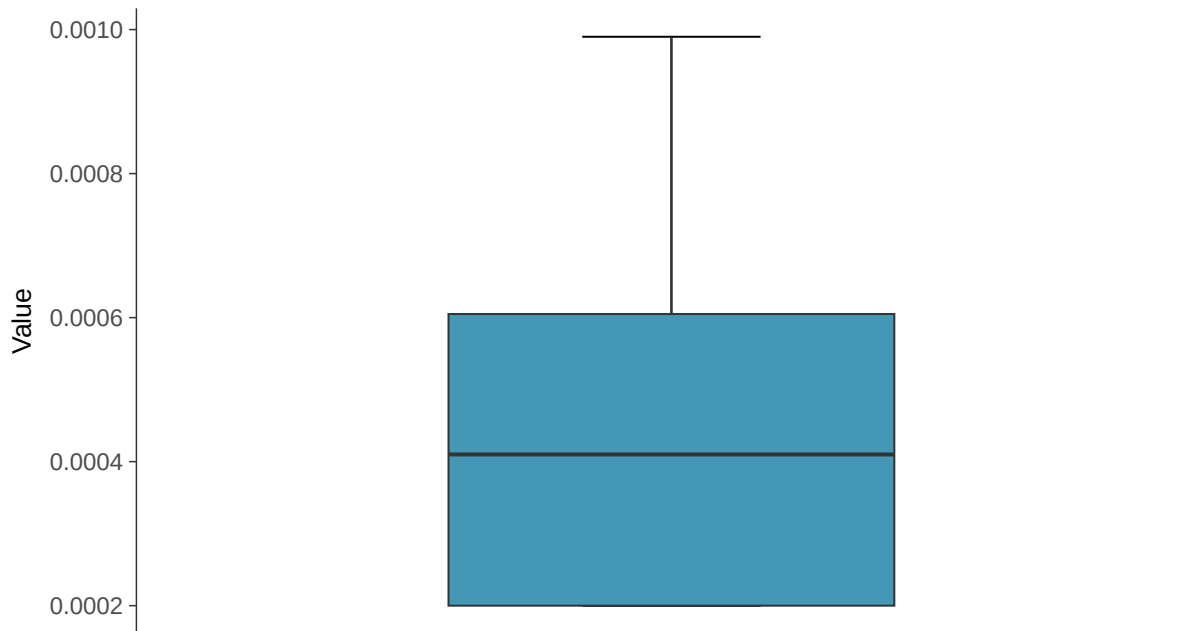
Histogram

Chromium, Total, MW-12 (mg/L)



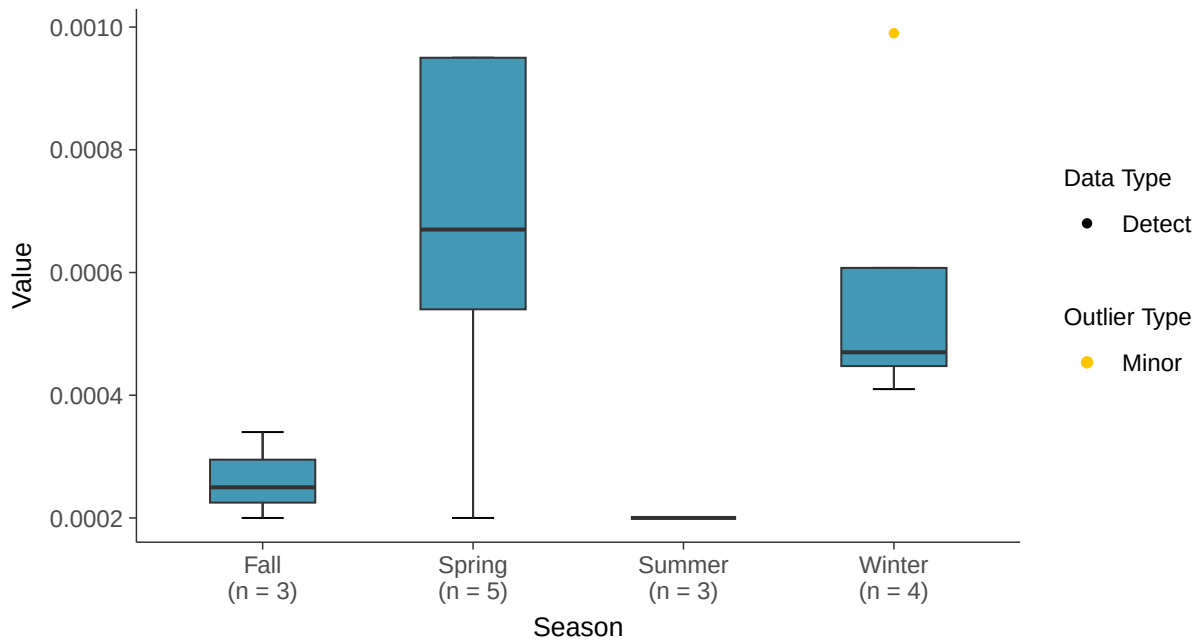
Boxplot

Chromium, Total, MW-12 (mg/L)



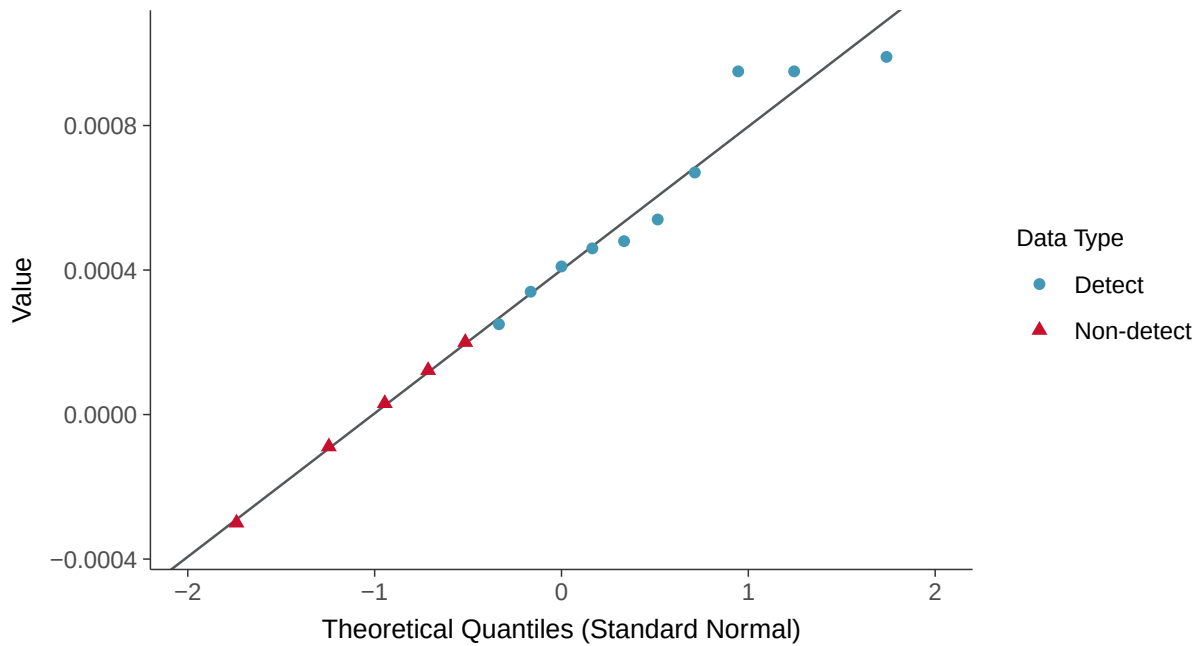
Boxplot by Season

Chromium, Total, MW-12 (mg/L)



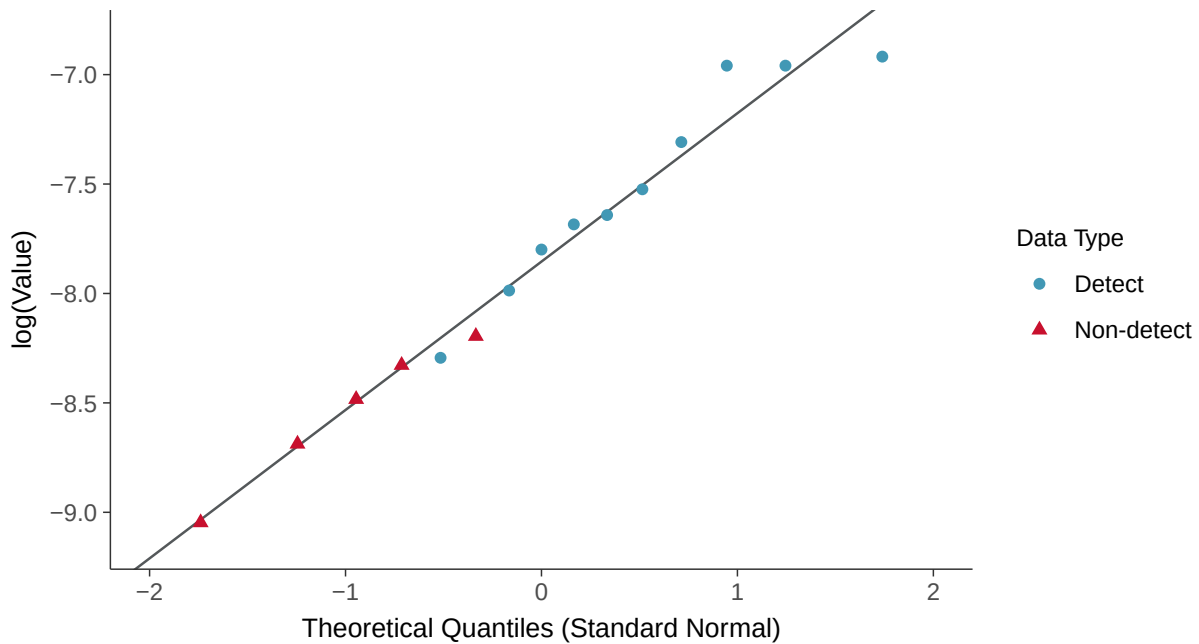
Normal Q-Q plot using ROS Imputed Estimates

Chromium, Total, MW-12 (mg/L)



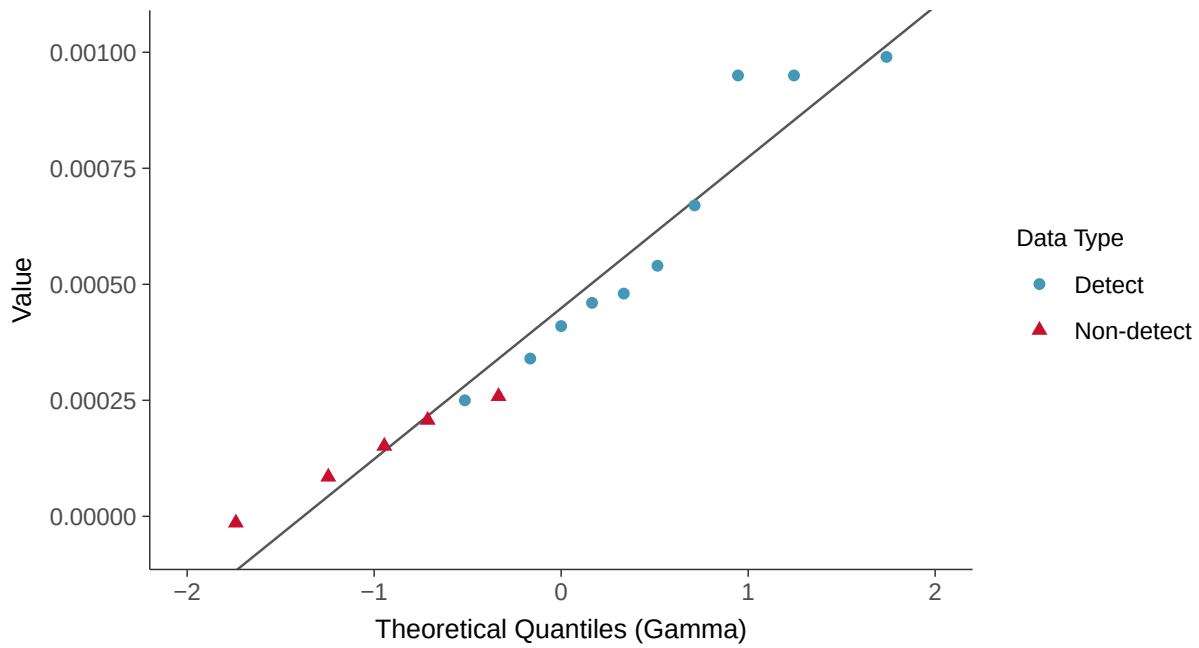
Lognormal Q-Q plot using ROS Imputed Estimates

Chromium, Total, MW-12 (mg/L)



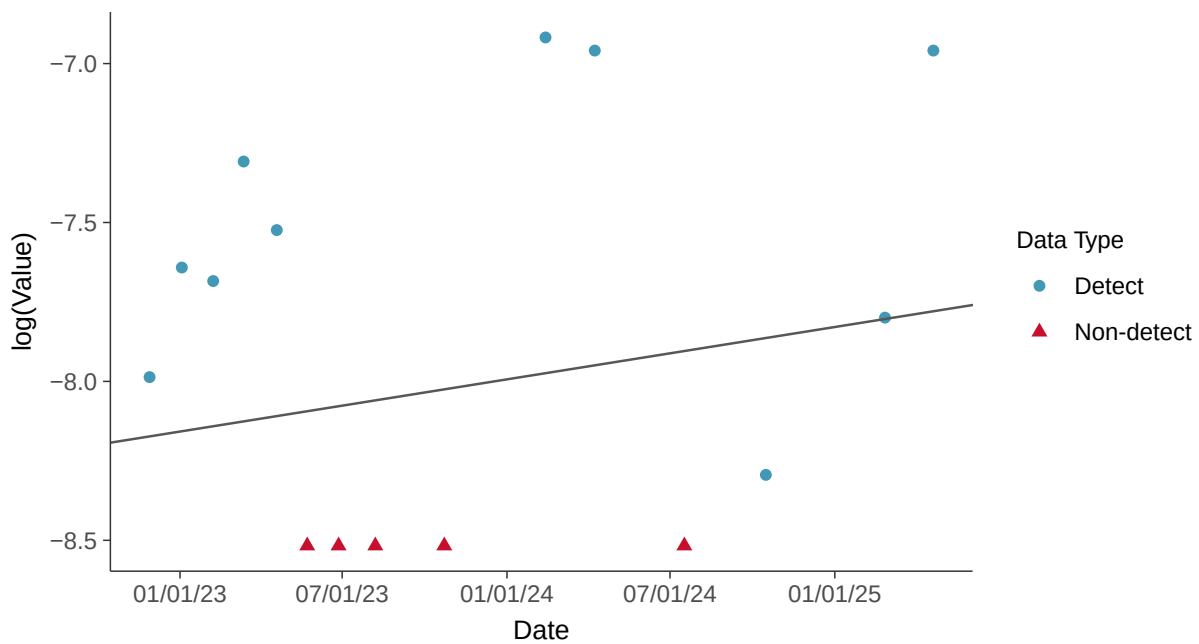
Gamma Q-Q plot using ROS Imputed Estimates

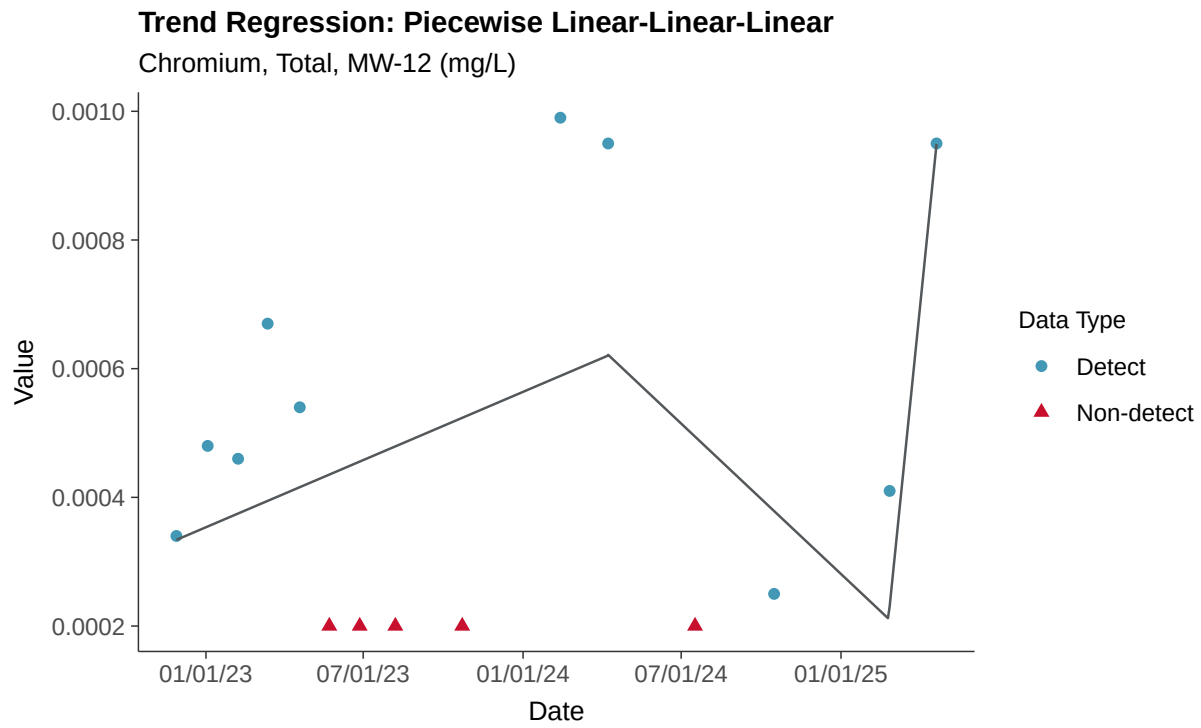
Chromium, Total, MW-12 (mg/L)



Trend Regression: Lognormal MLE

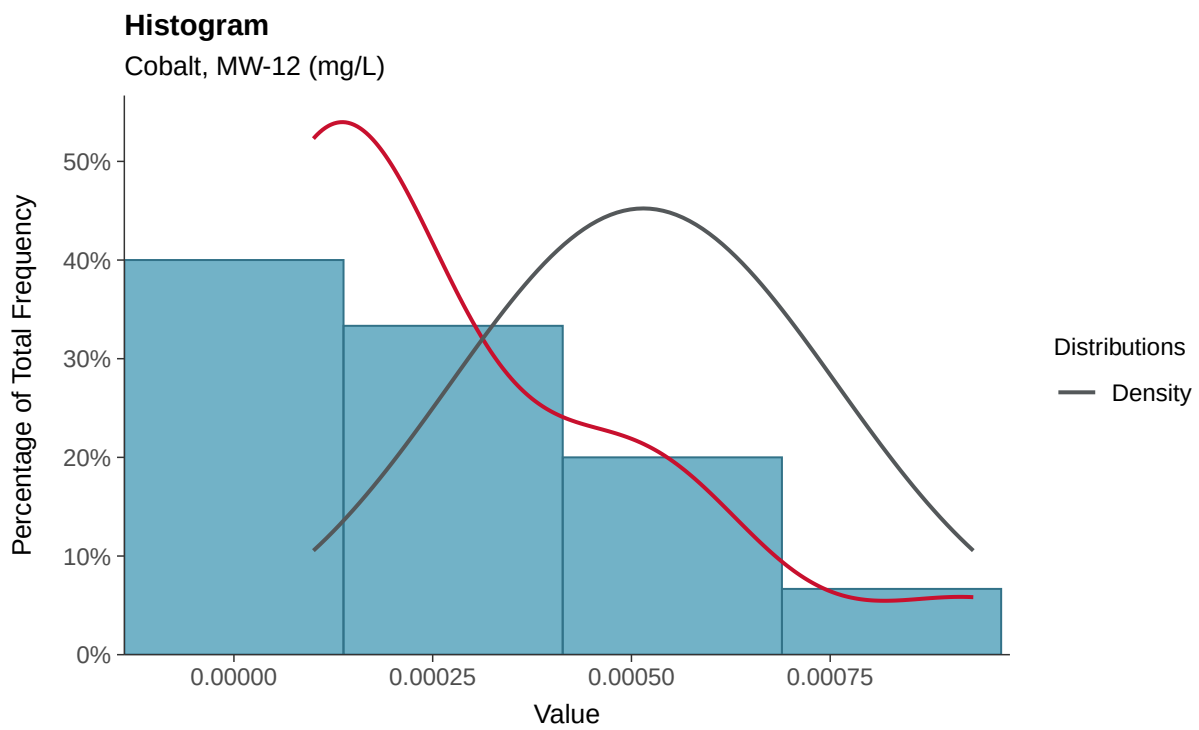
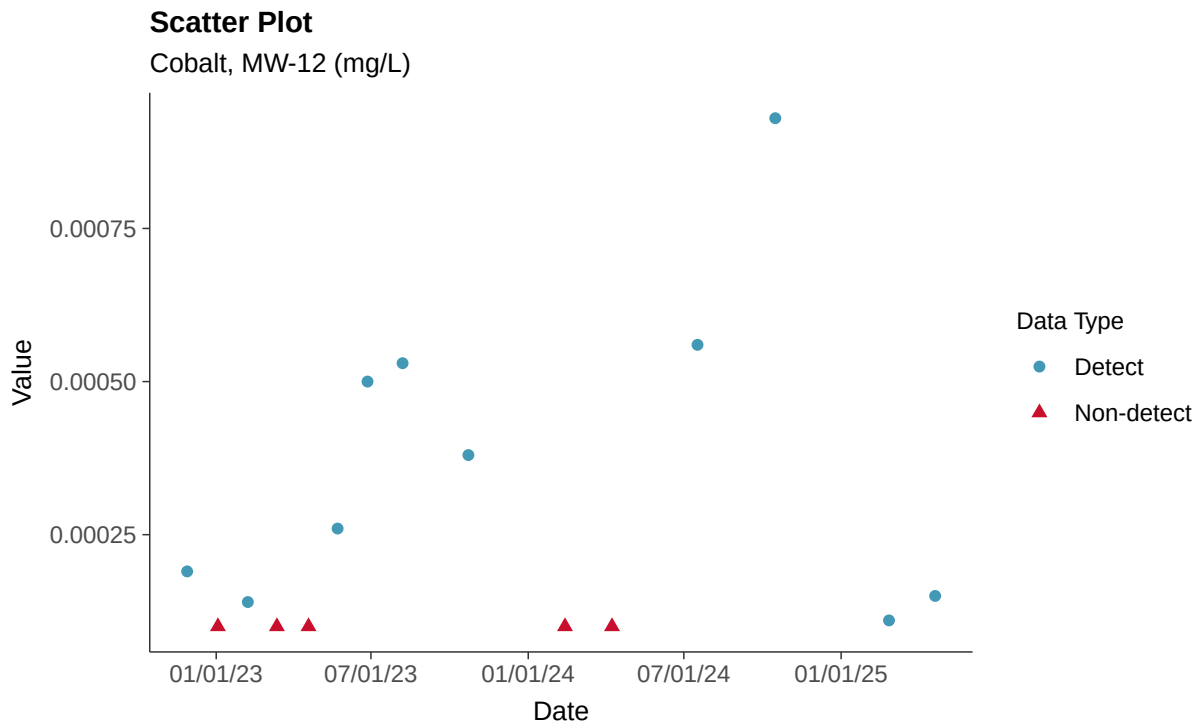
Chromium, Total, MW-12 (mg/L)





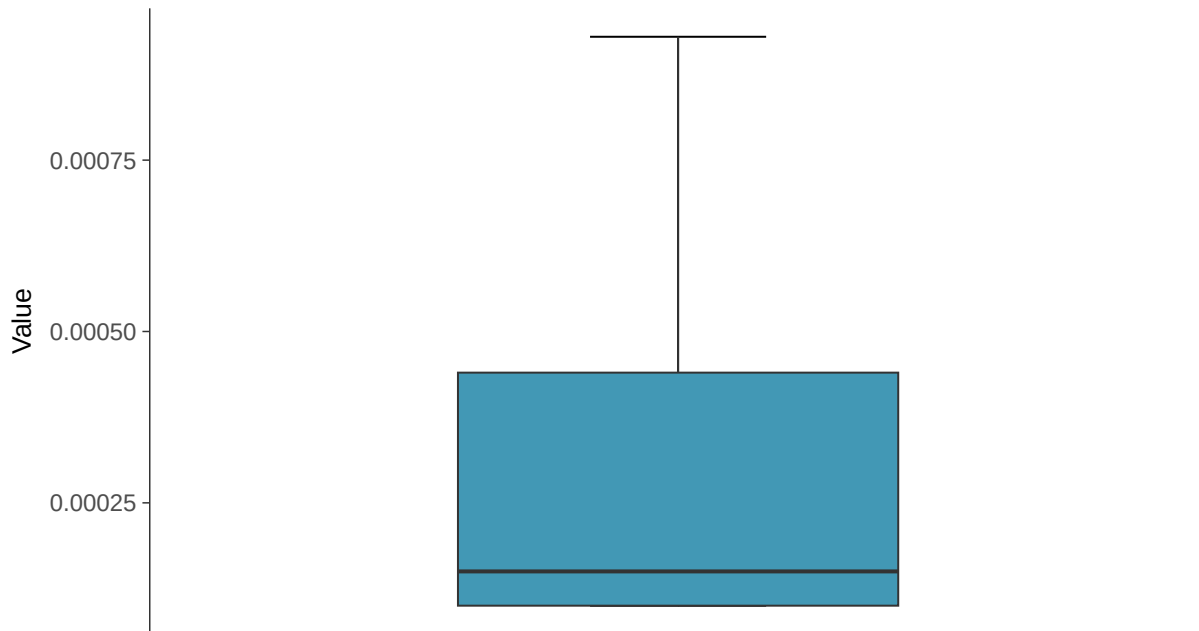
Appendix IV: Cobalt, MW-12

ID: 22_2_4_110



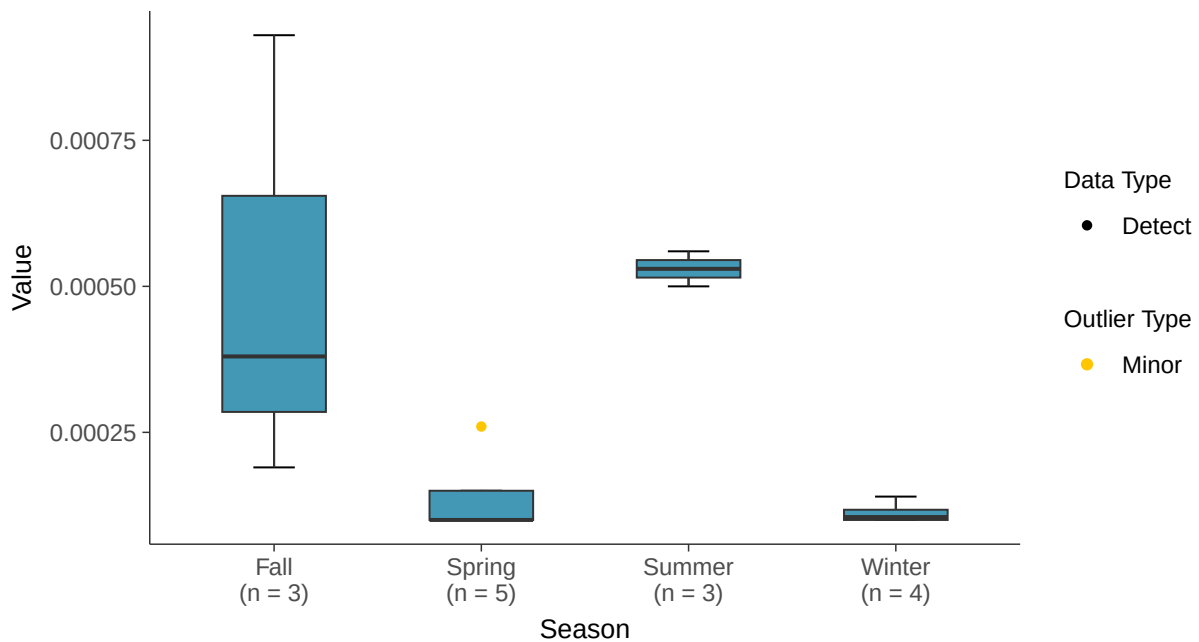
Boxplot

Cobalt, MW-12 (mg/L)



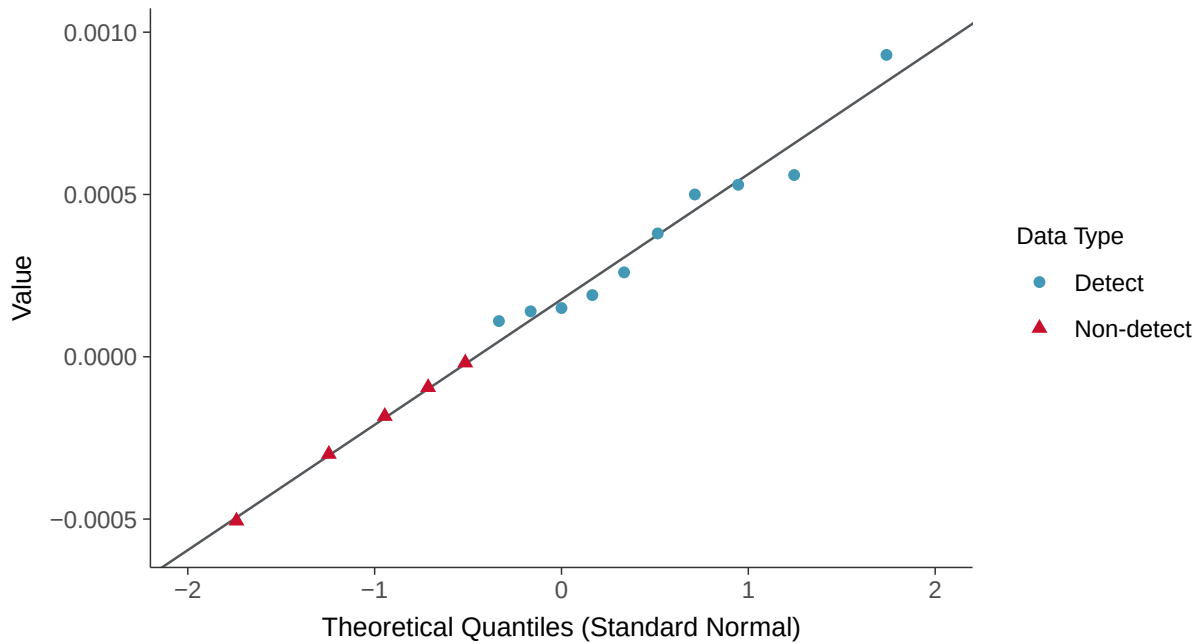
Boxplot by Season

Cobalt, MW-12 (mg/L)



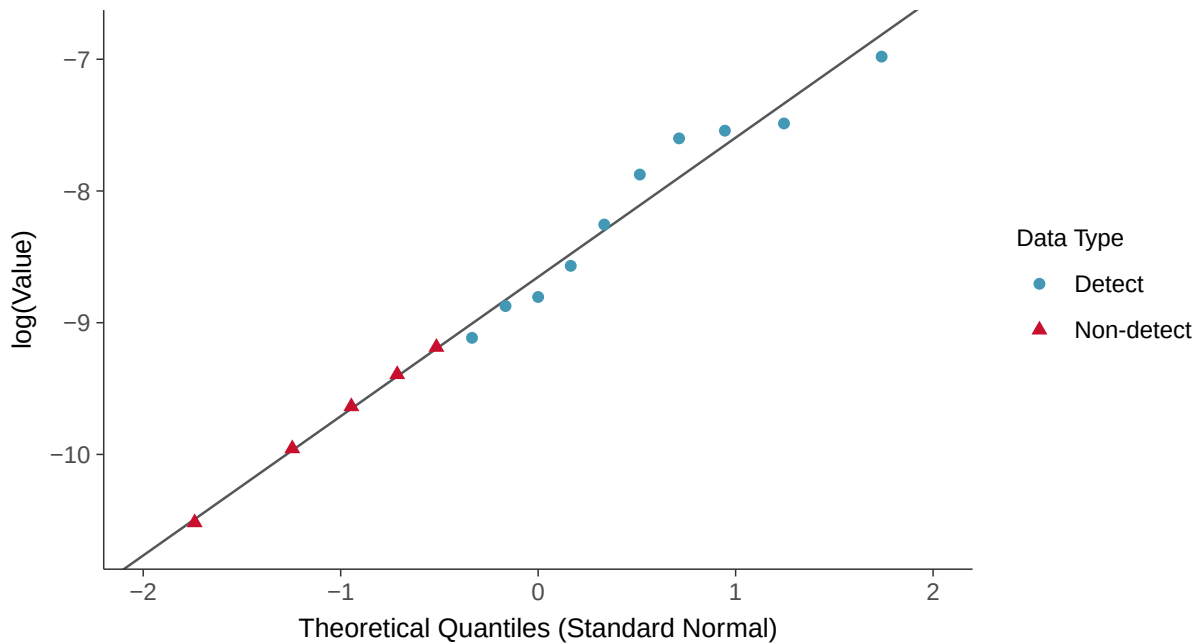
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-12 (mg/L)



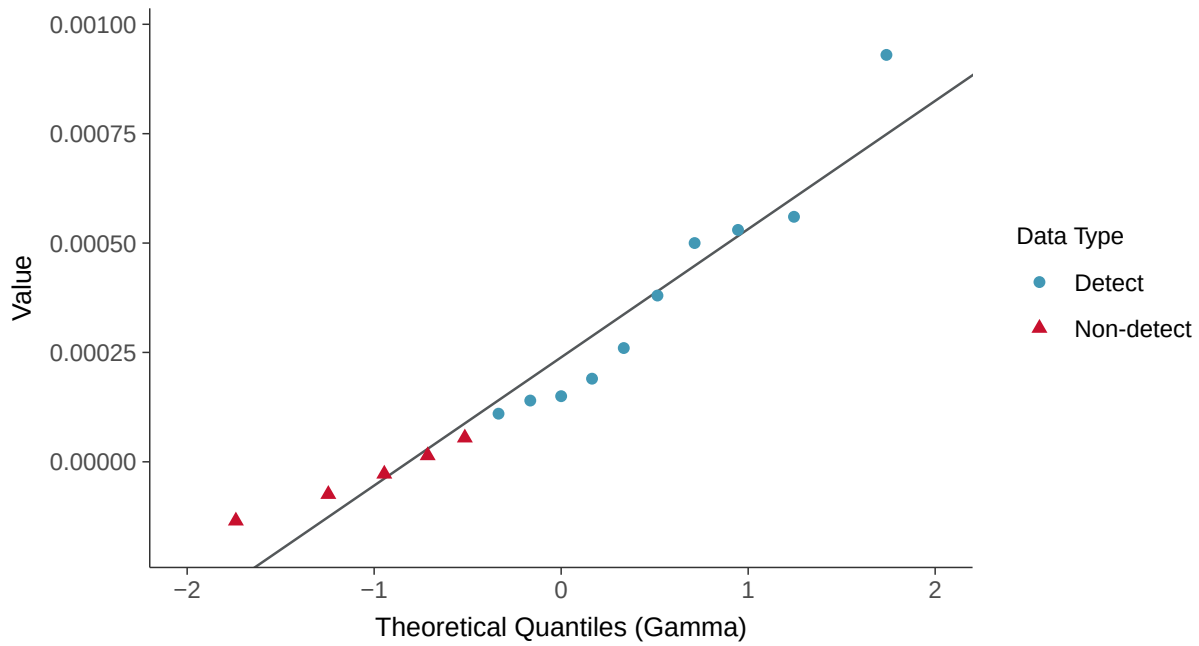
Lognormal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-12 (mg/L)



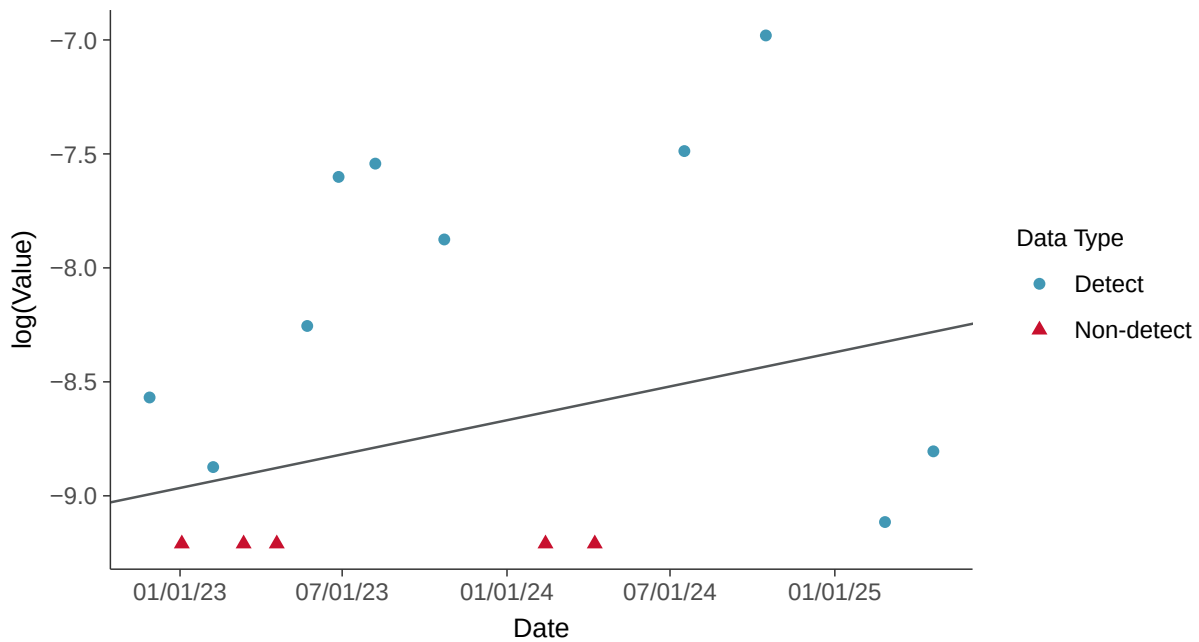
Gamma Q-Q plot using ROS Imputed Estimates

Cobalt, MW-12 (mg/L)

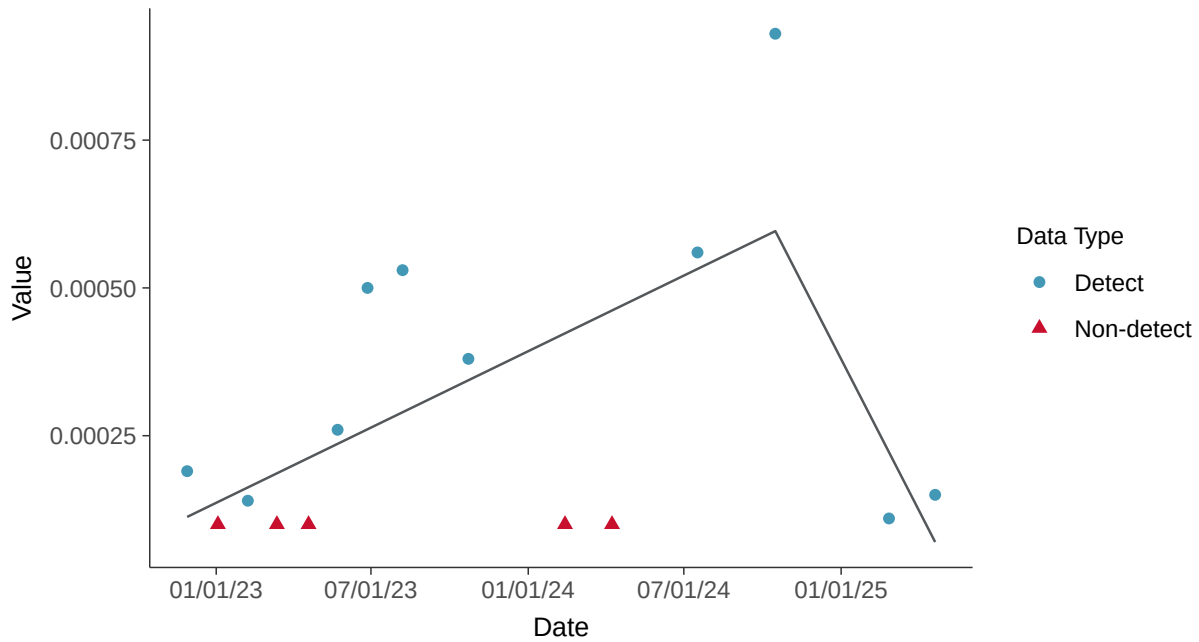


Trend Regression: Lognormal MLE

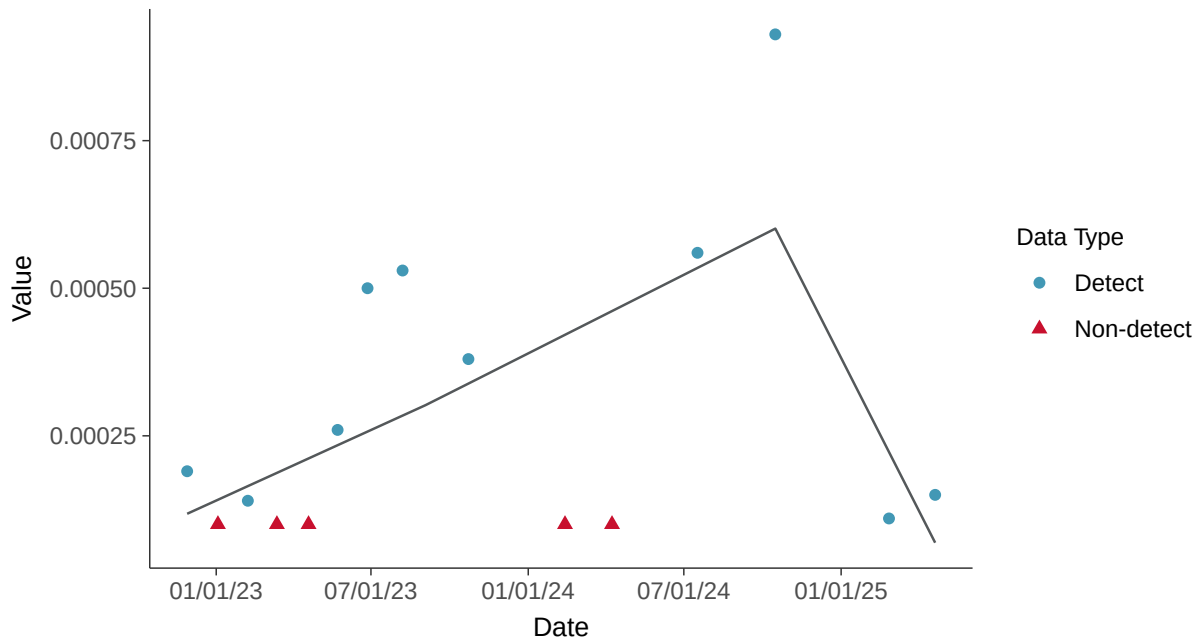
Cobalt, MW-12 (mg/L)



Trend Regression: Piecewise Linear-Linear
Cobalt, MW-12 (mg/L)

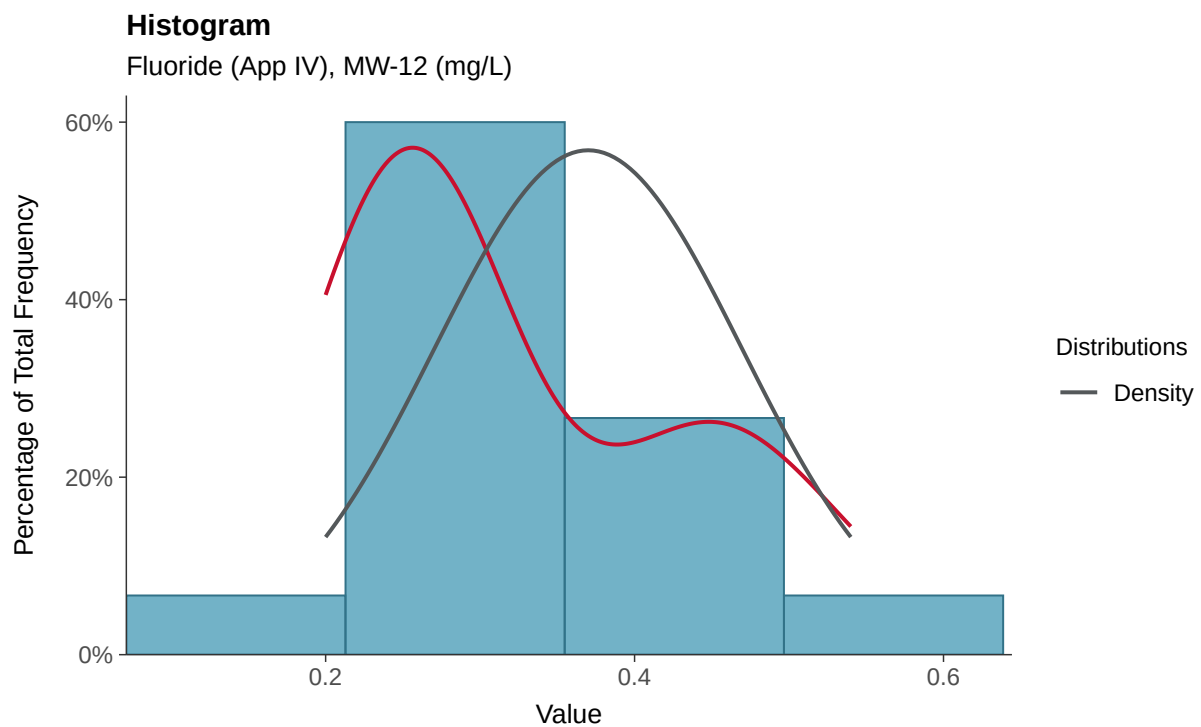
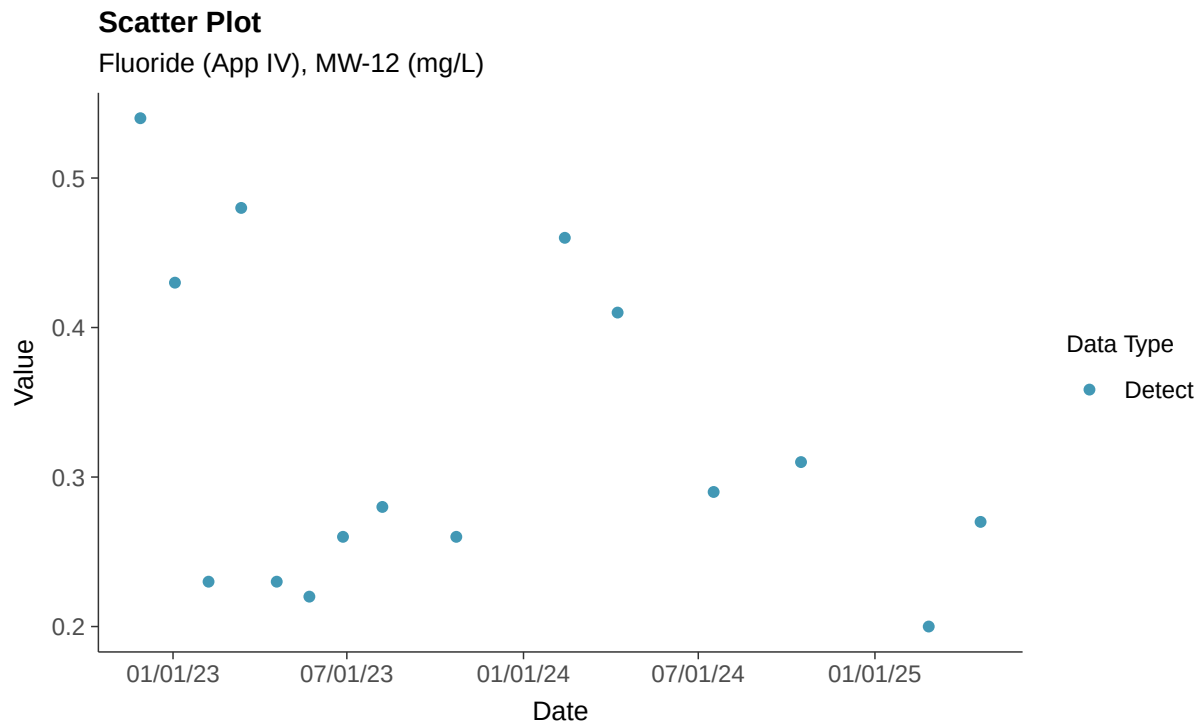


Trend Regression: Piecewise Linear-Linear-Linear
Cobalt, MW-12 (mg/L)



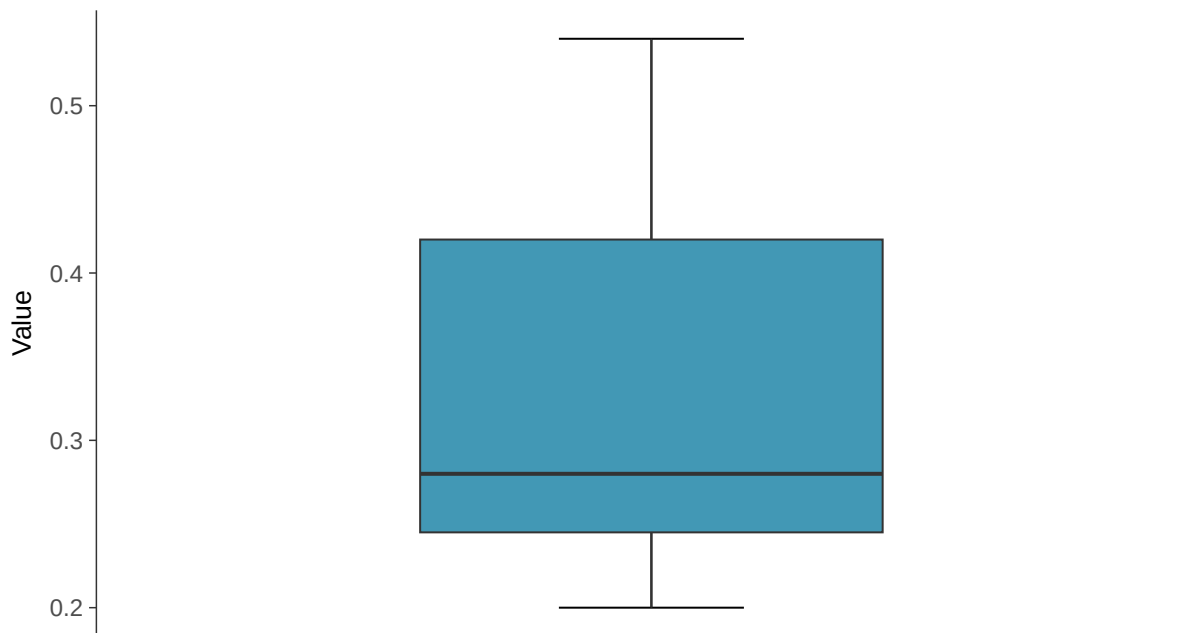
Appendix IV: Fluoride (App IV), MW-12

ID: 22_2_4_113



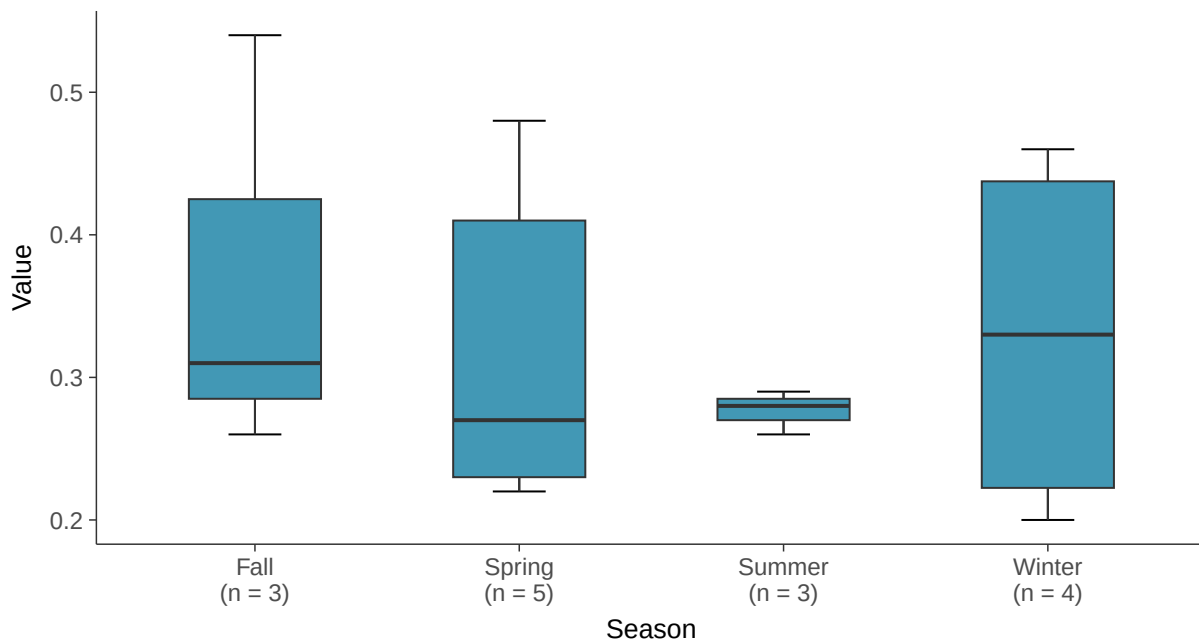
Boxplot

Fluoride (App IV), MW-12 (mg/L)



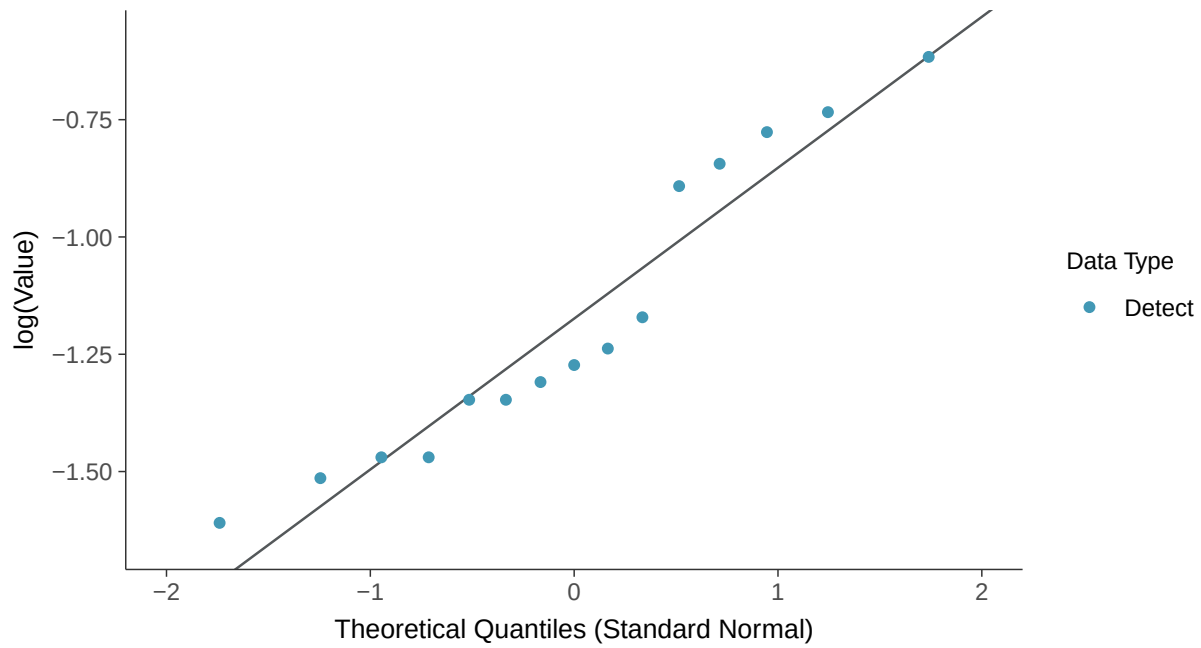
Boxplot by Season

Fluoride (App IV), MW-12 (mg/L)



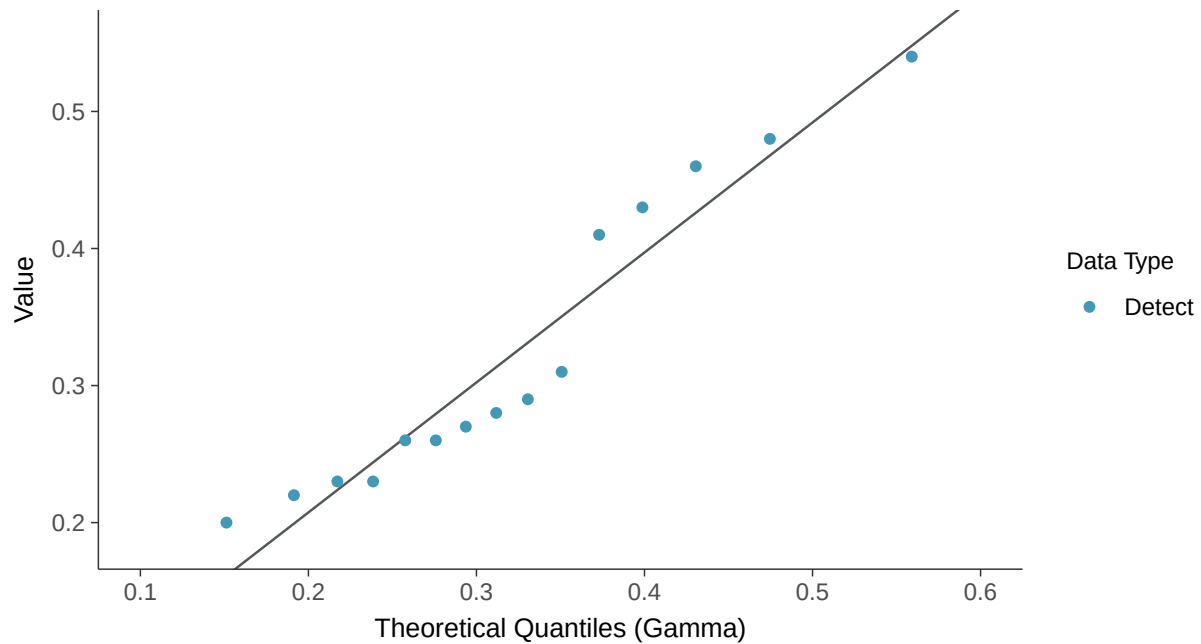
Lognormal Q-Q plot

Fluoride (App IV), MW-12 (mg/L)



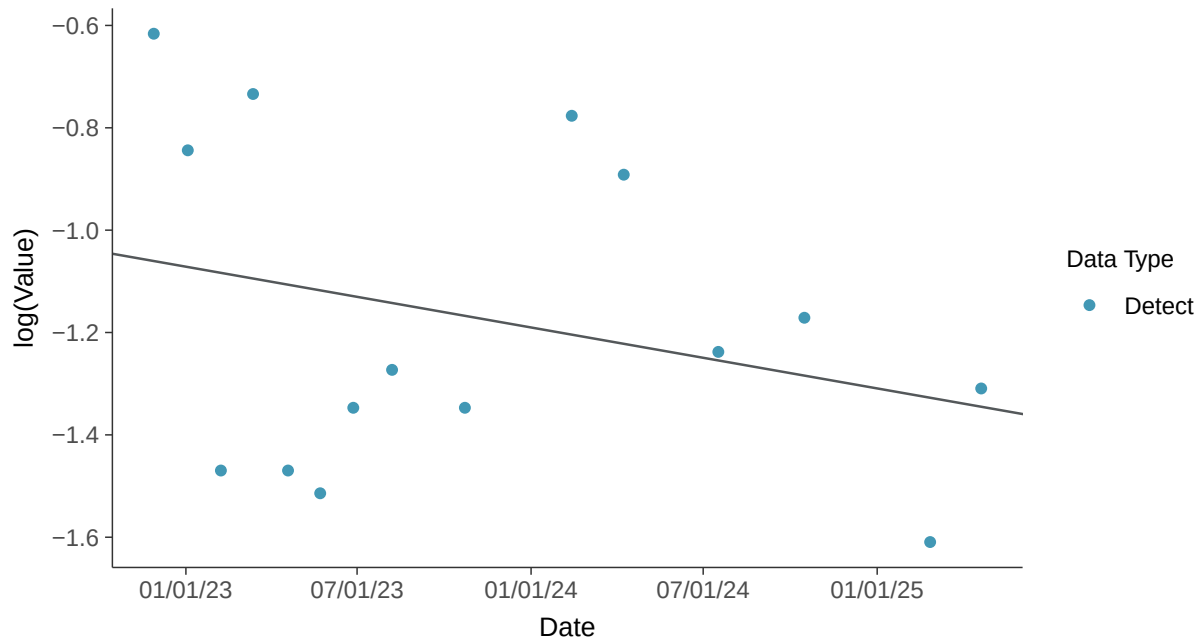
Gamma Q-Q plot

Fluoride (App IV), MW-12 (mg/L)



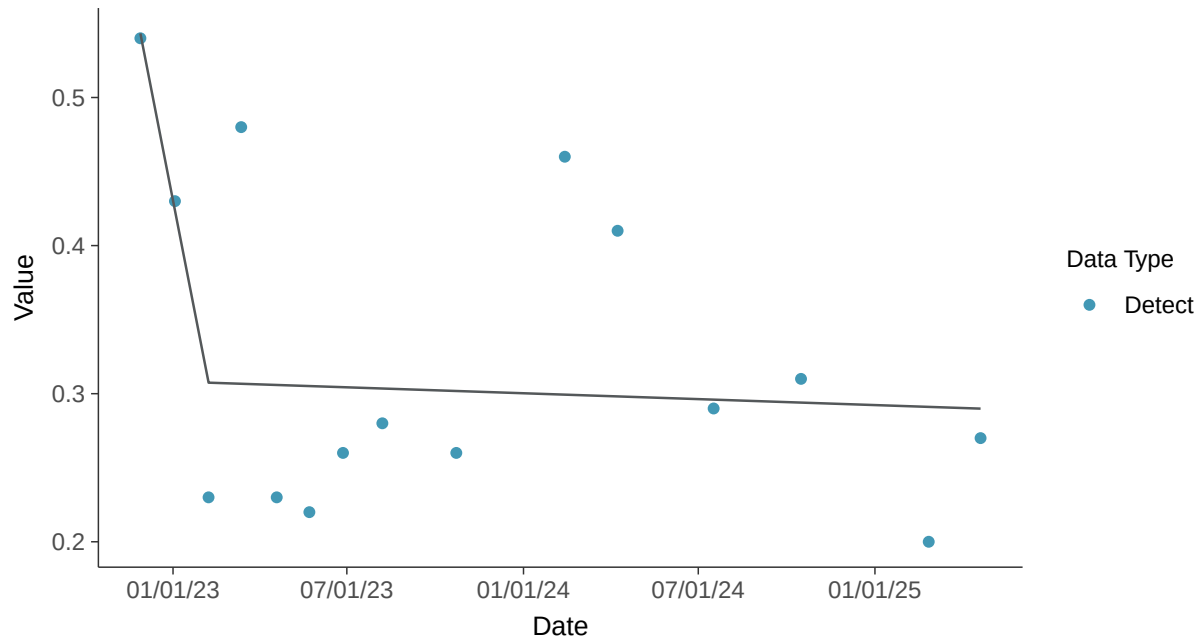
Trend Regression: Lognormal MLE

Fluoride (App IV), MW-12 (mg/L)



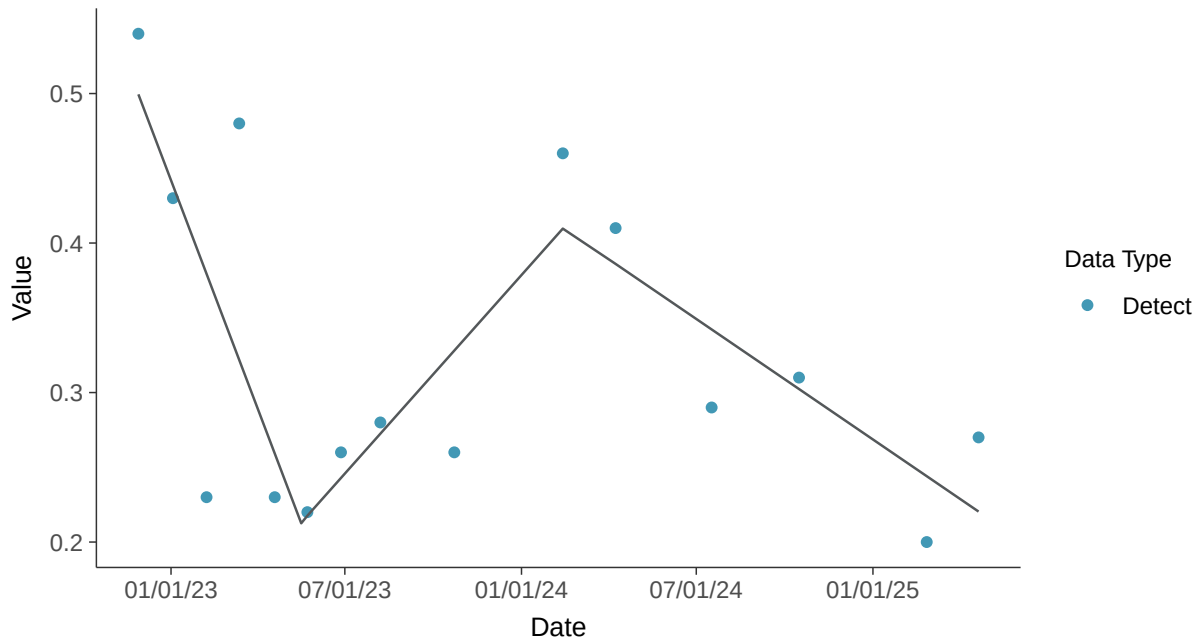
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-12 (mg/L)



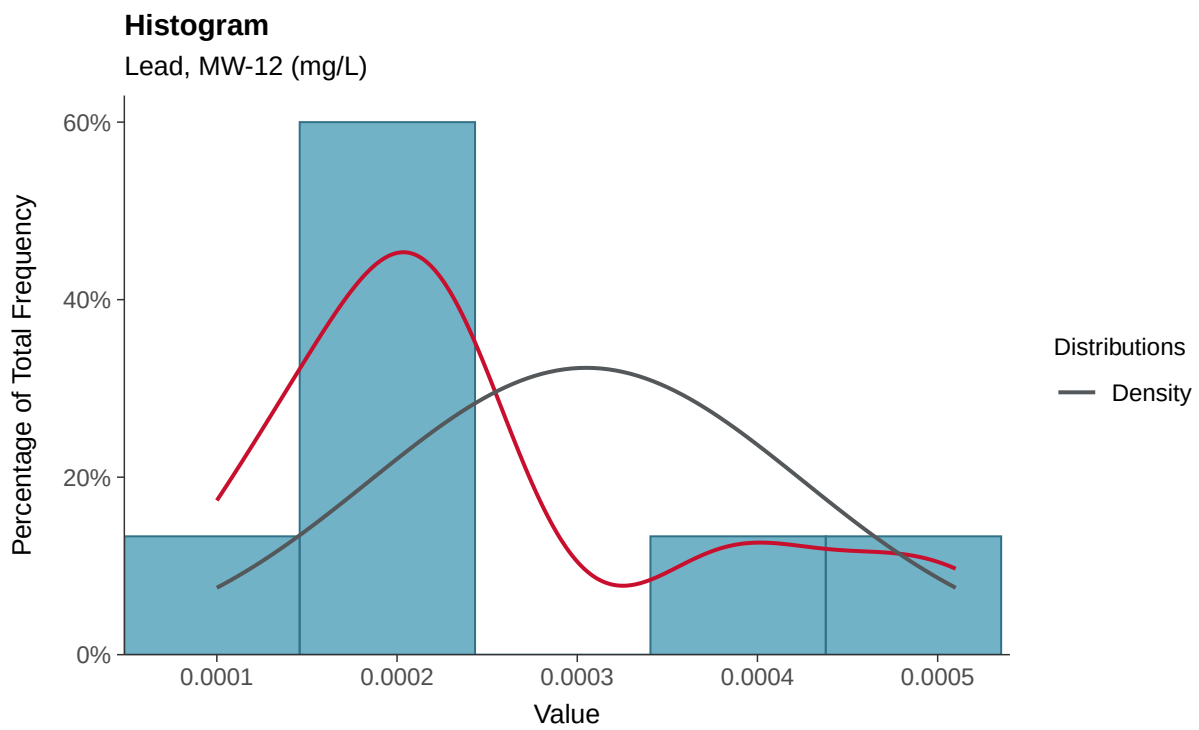
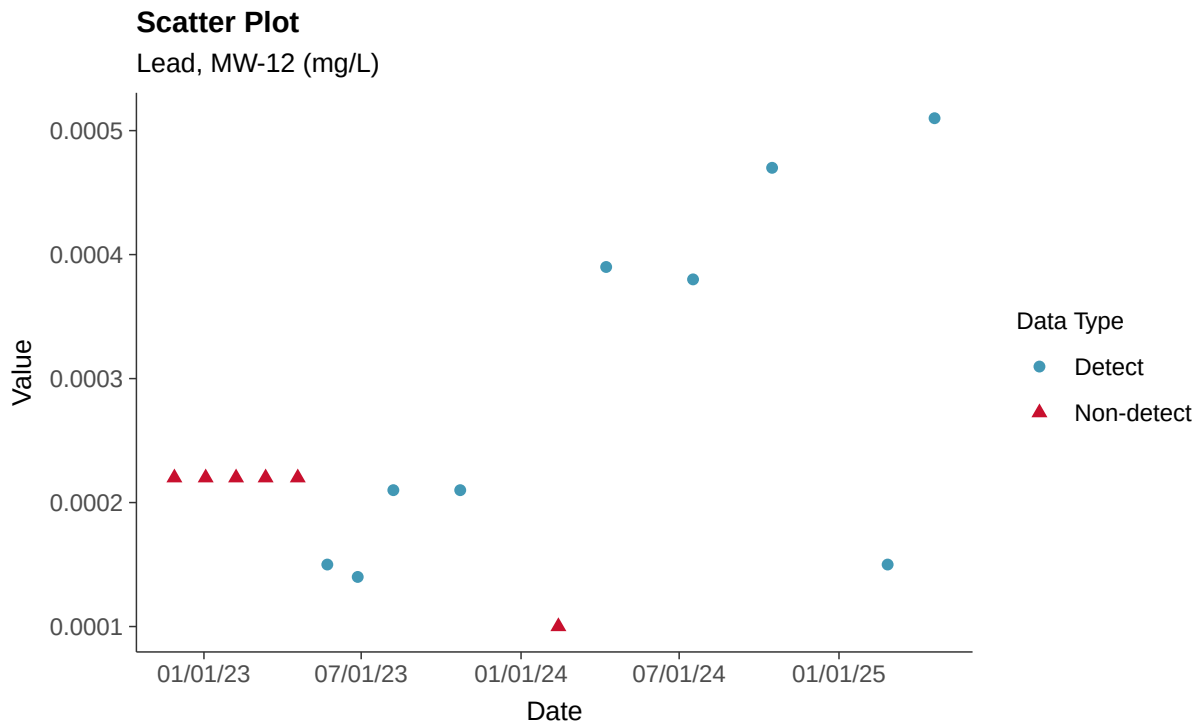
Trend Regression: Piecewise Linear-Linear-Linear

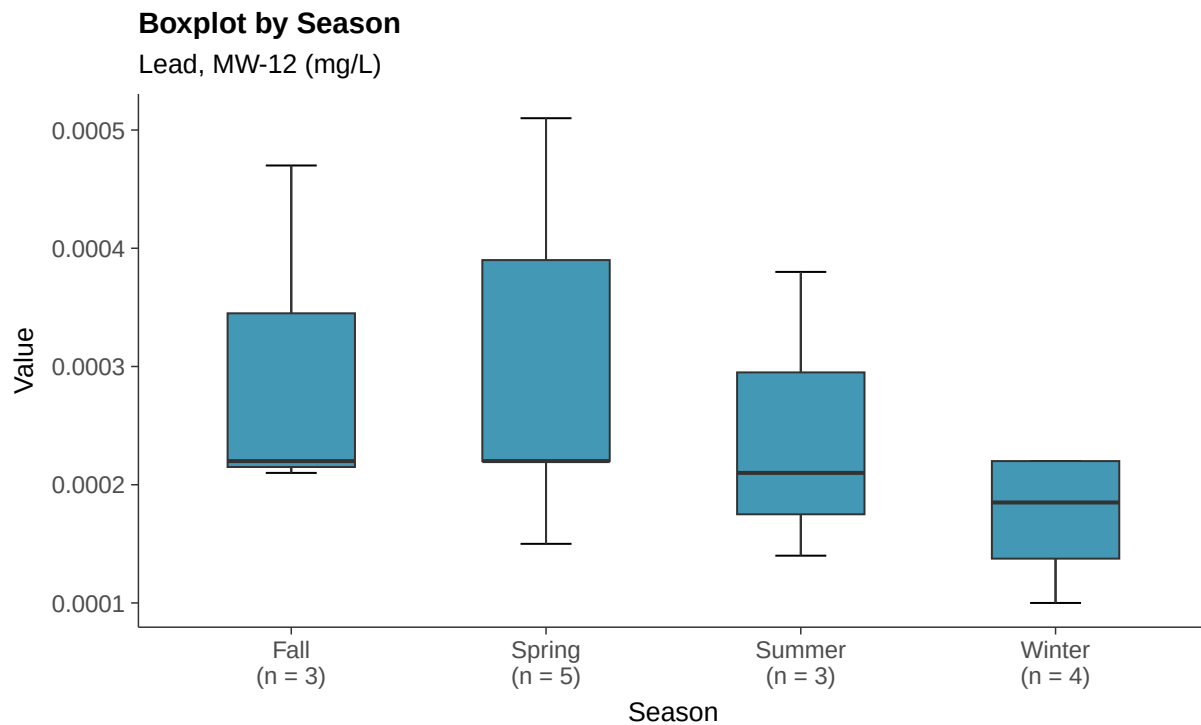
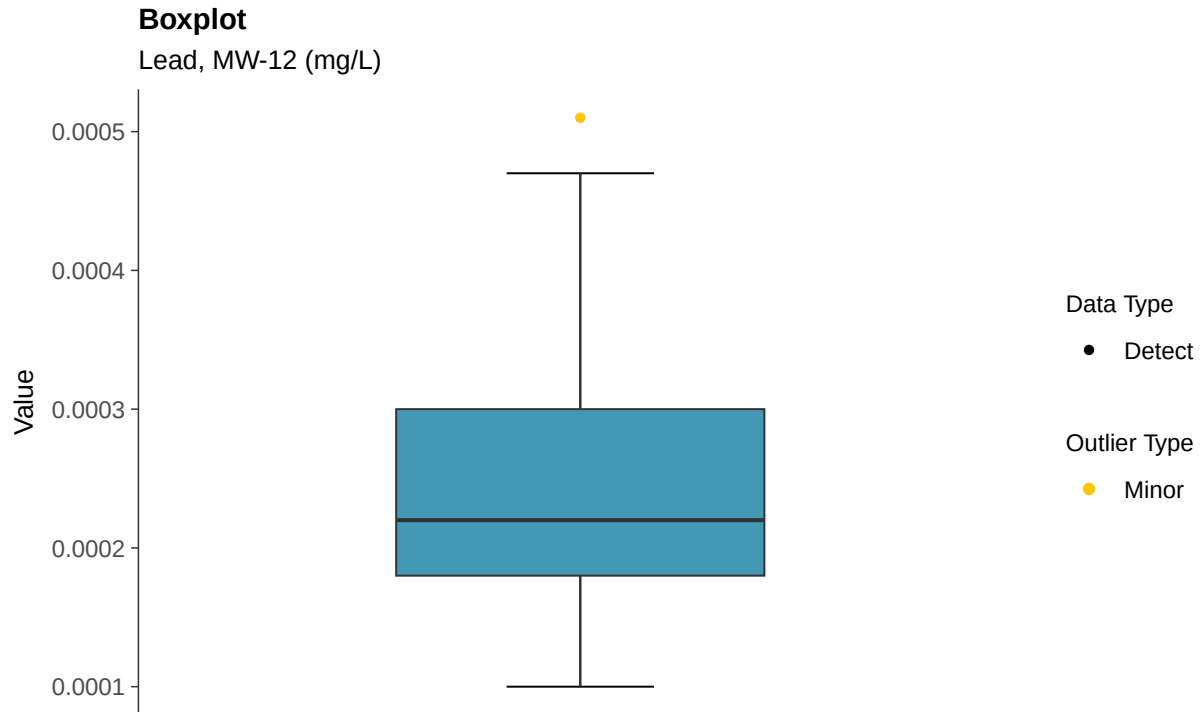
Fluoride (App IV), MW-12 (mg/L)



Appendix IV: Lead, MW-12

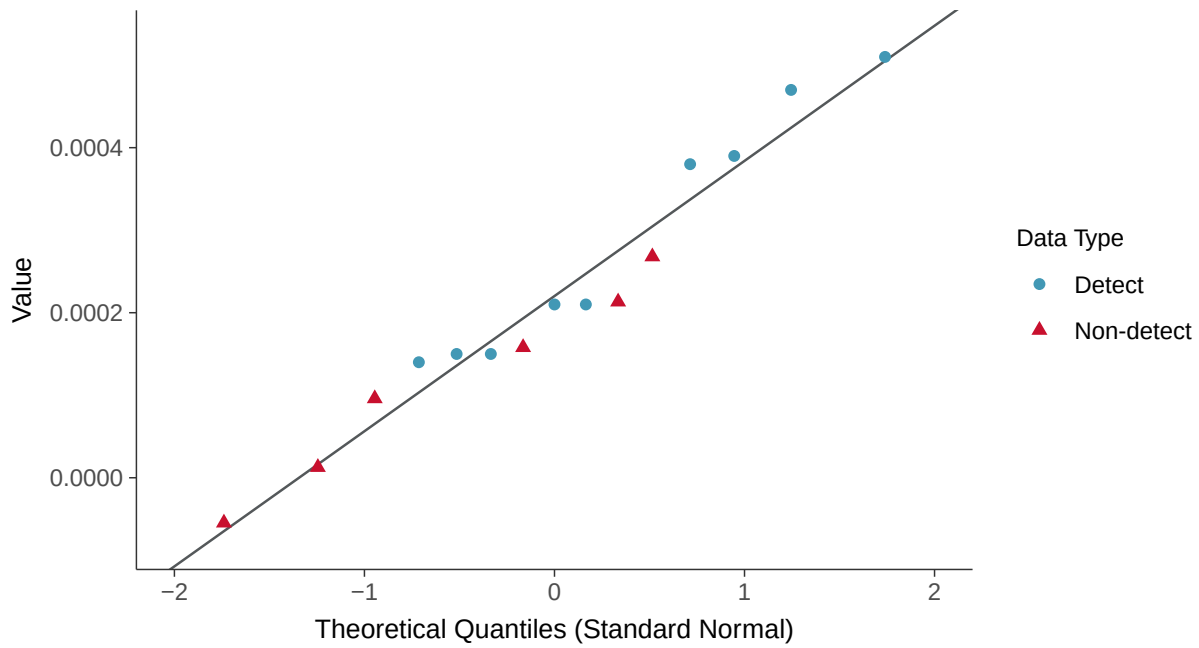
ID: 22_2_4_115





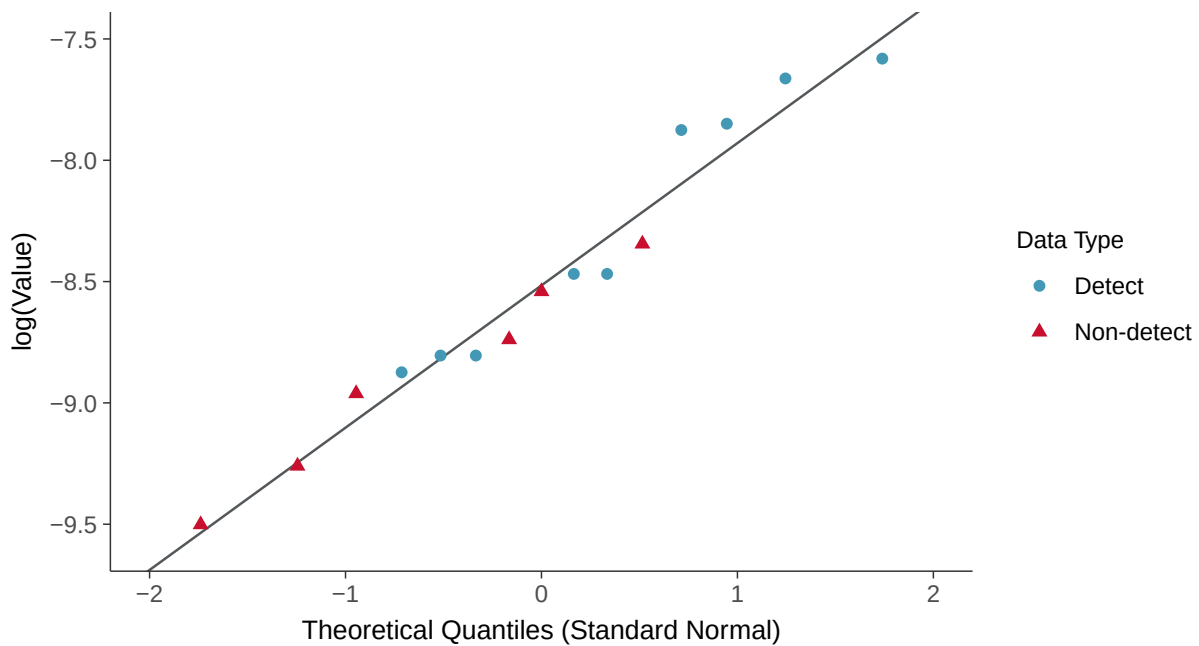
Normal Q-Q plot using ROS Imputed Estimates

Lead, MW-12 (mg/L)



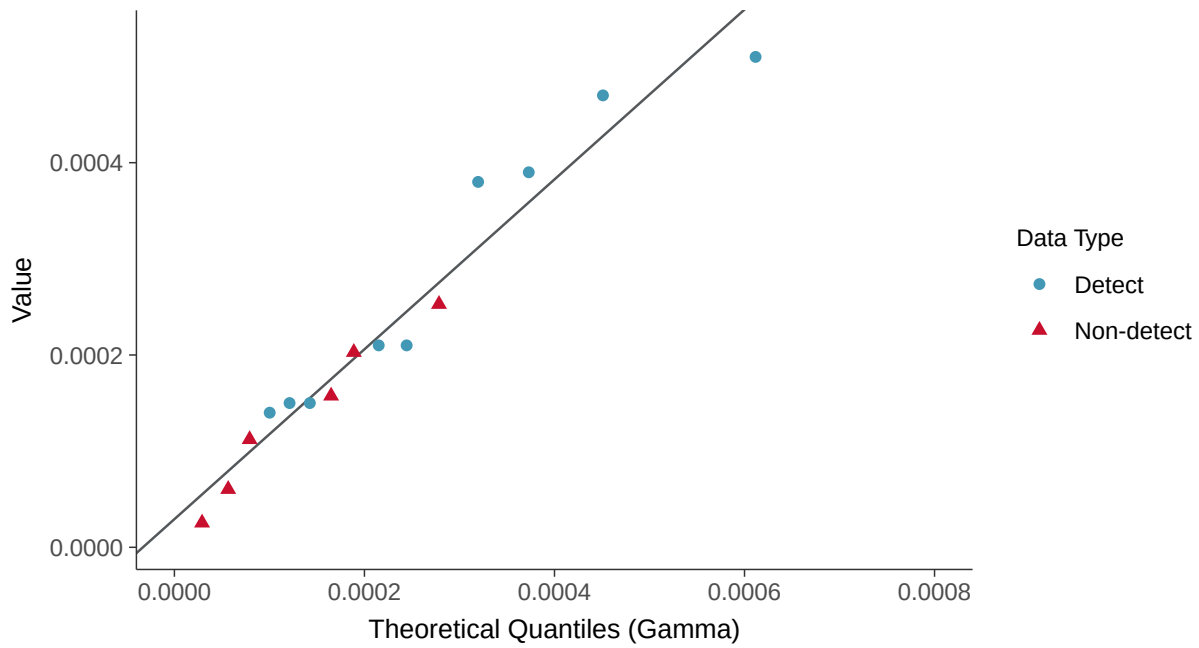
Lognormal Q-Q plot using ROS Imputed Estimates

Lead, MW-12 (mg/L)



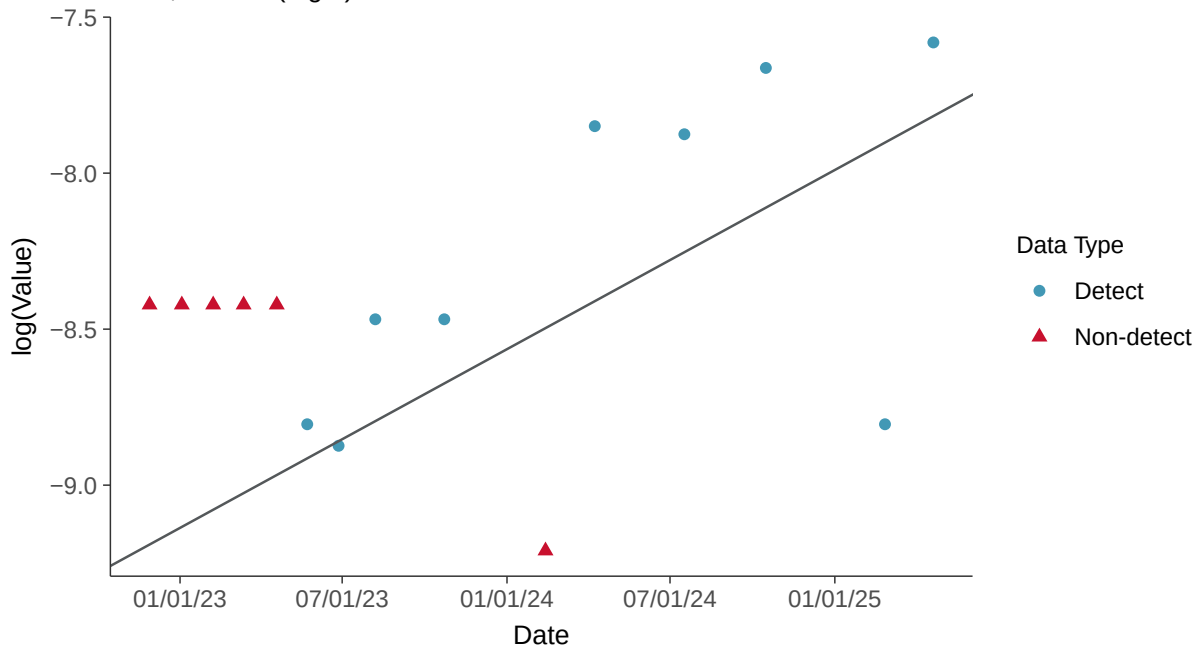
Gamma Q-Q plot using ROS Imputed Estimates

Lead, MW-12 (mg/L)



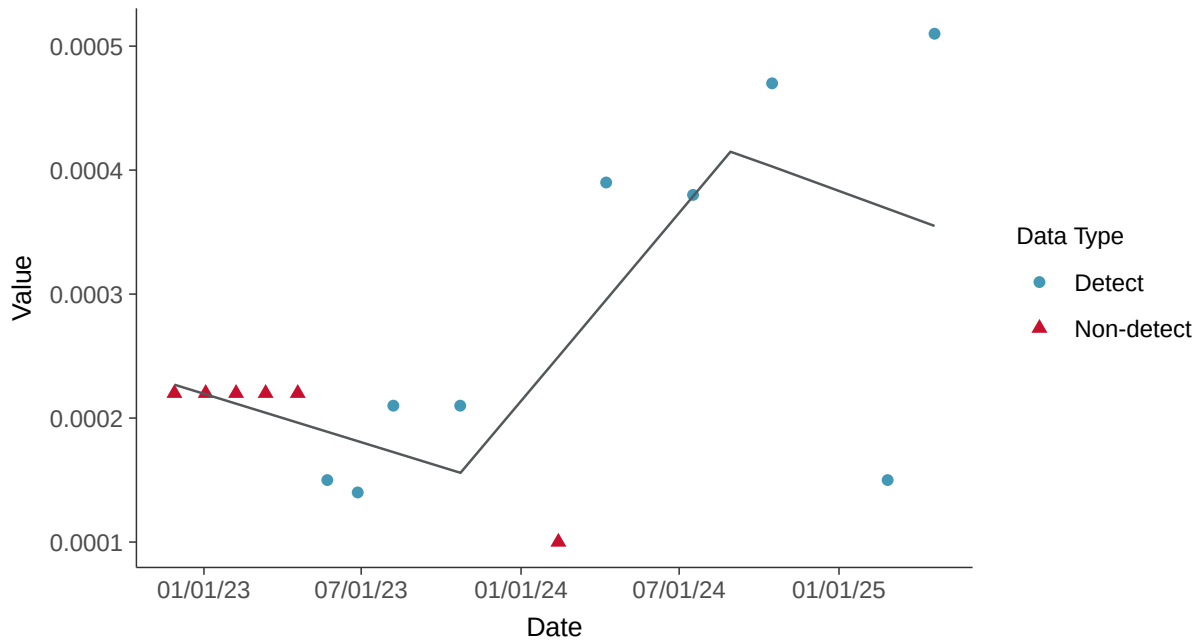
Trend Regression: Lognormal MLE

Lead, MW-12 (mg/L)



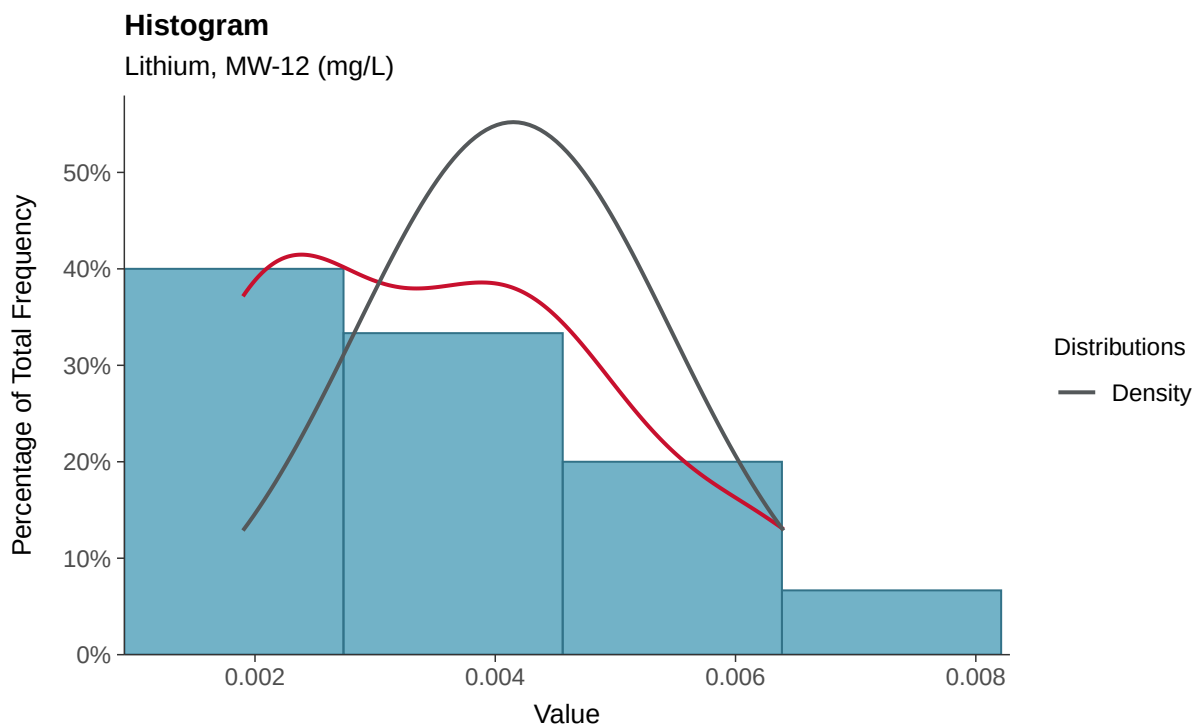
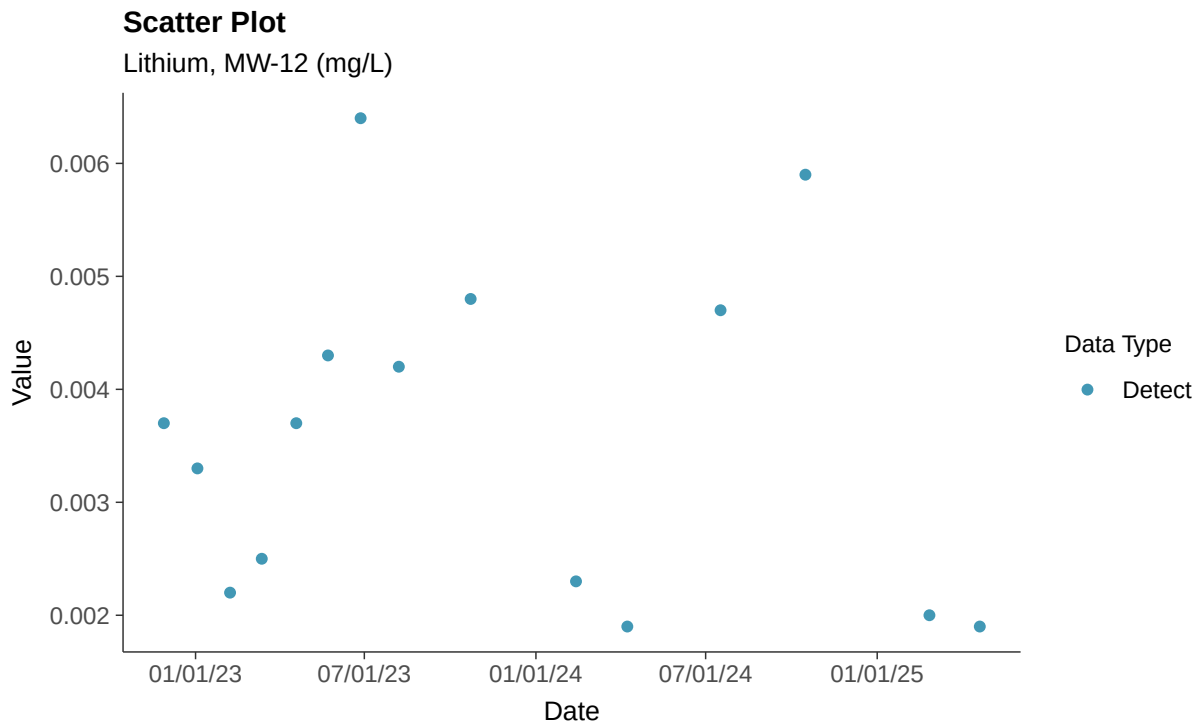
Trend Regression: Piecewise Linear-Linear-Linear

Lead, MW-12 (mg/L)



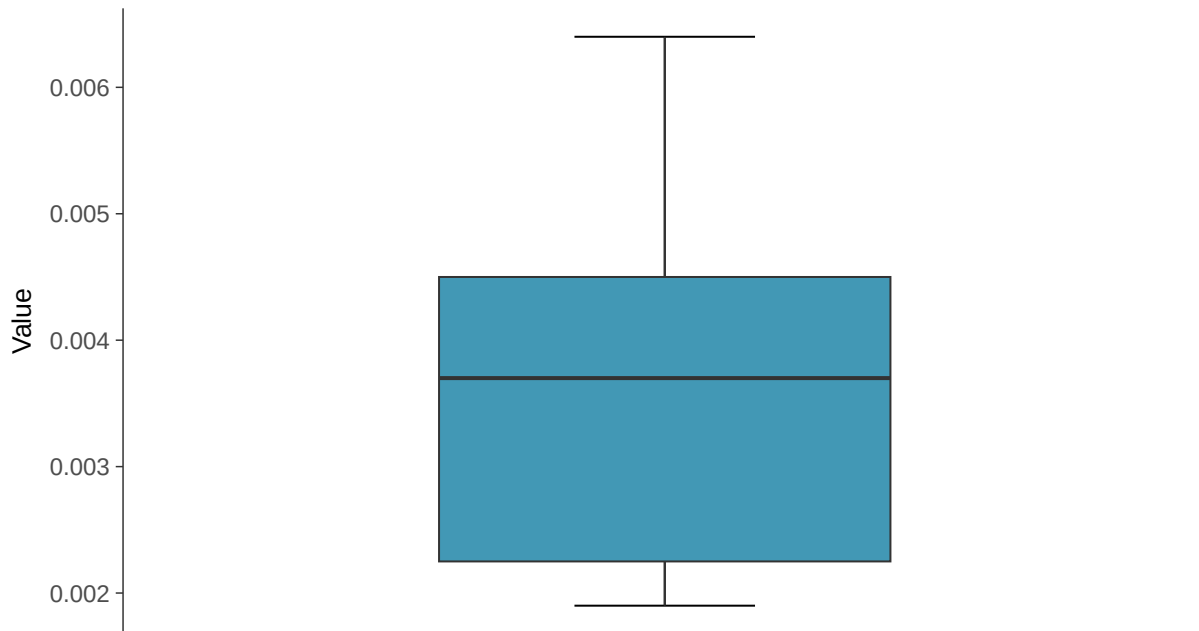
Appendix IV: Lithium, MW-12

ID: 22_2_4_116



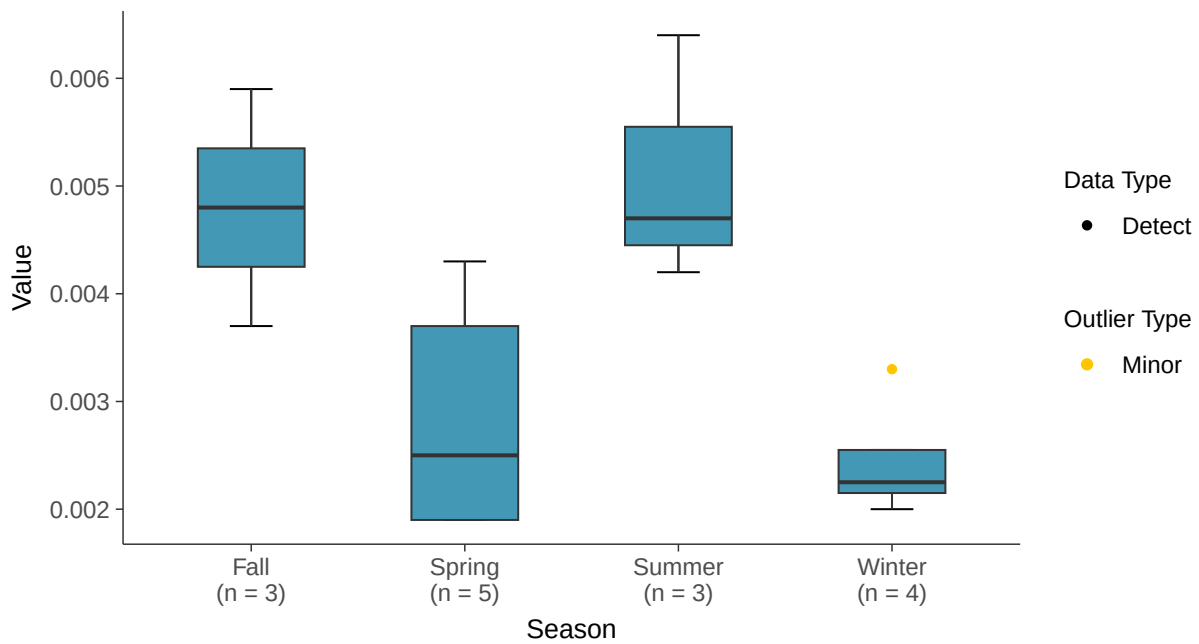
Boxplot

Lithium, MW-12 (mg/L)



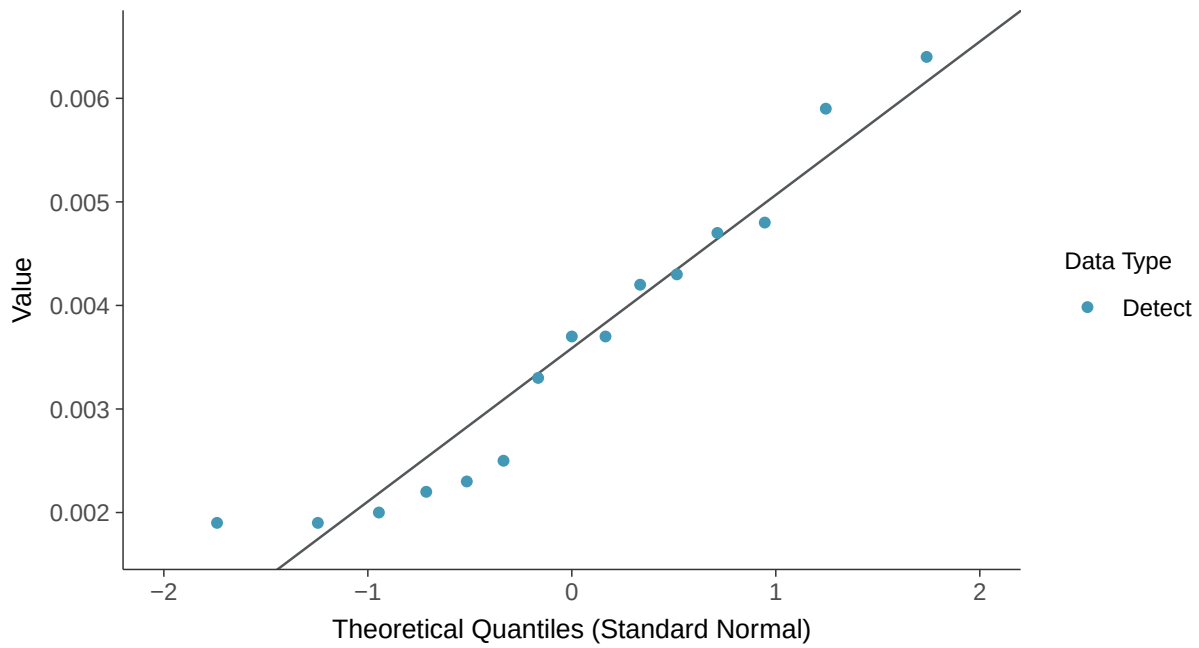
Boxplot by Season

Lithium, MW-12 (mg/L)



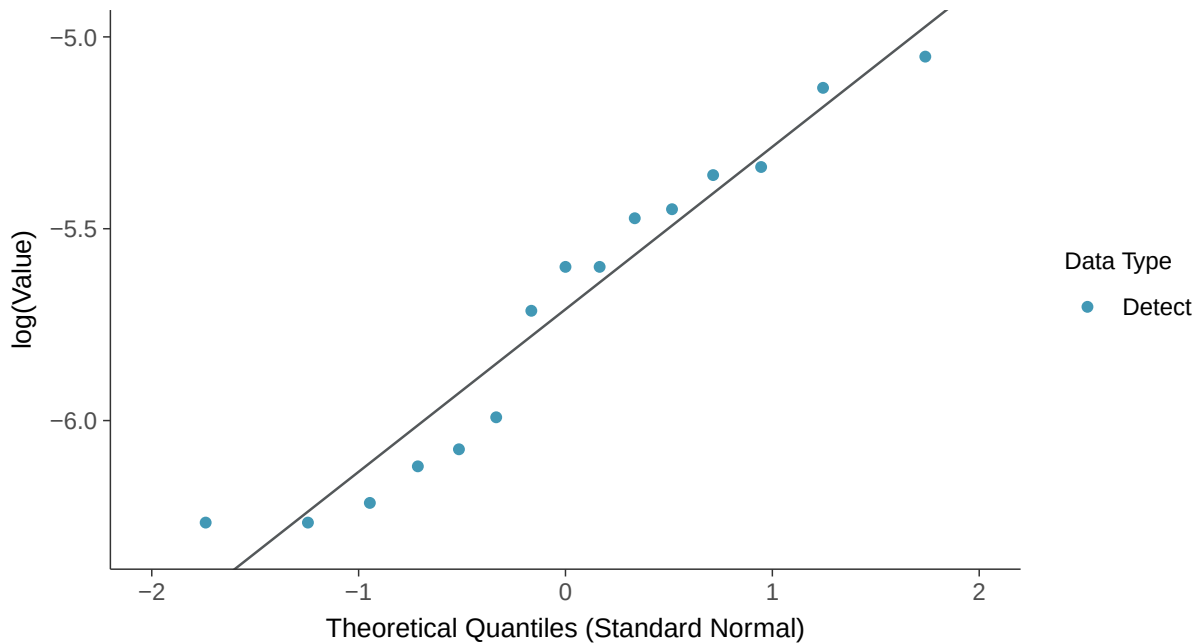
Normal Q-Q plot

Lithium, MW-12 (mg/L)



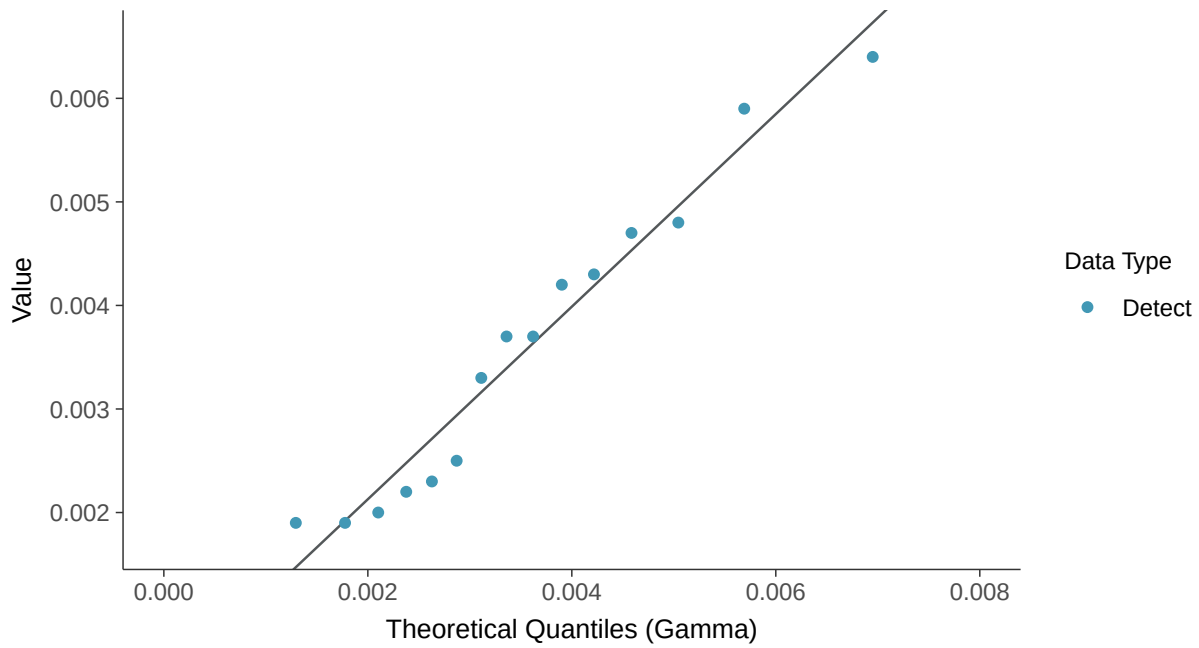
Lognormal Q-Q plot

Lithium, MW-12 (mg/L)



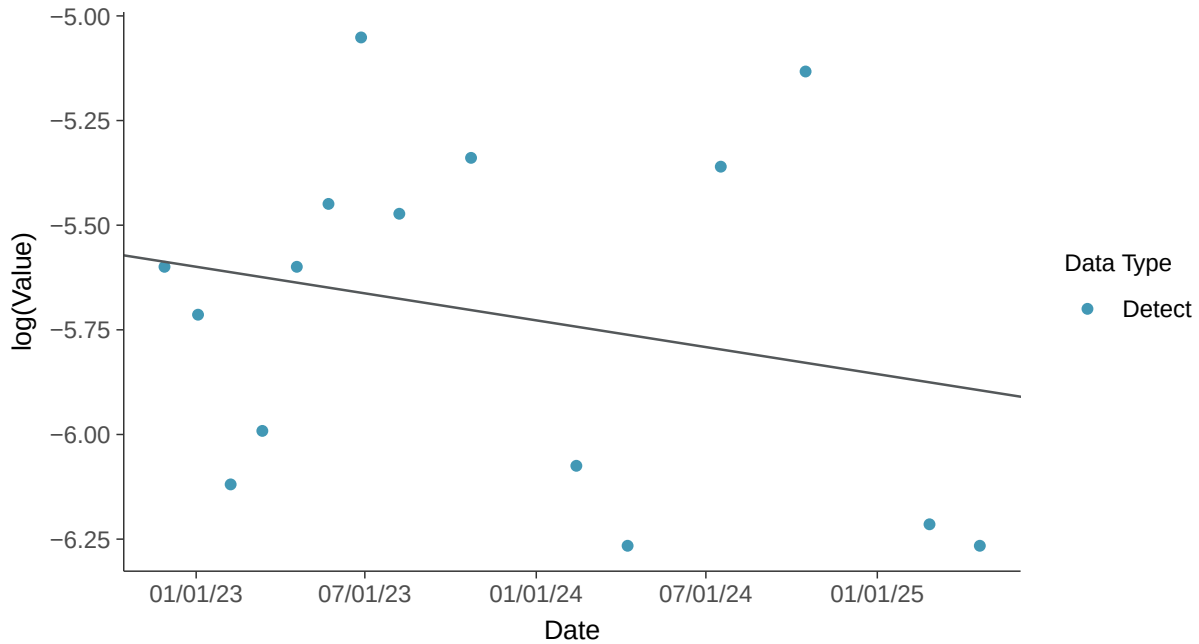
Gamma Q-Q plot

Lithium, MW-12 (mg/L)



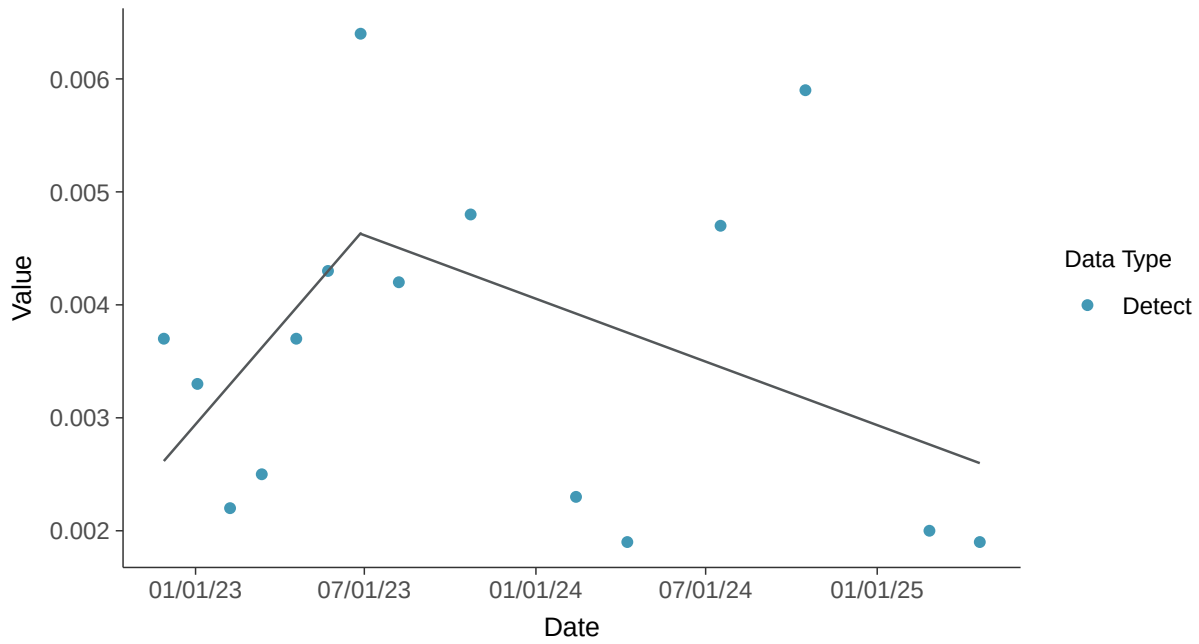
Trend Regression: Lognormal MLE

Lithium, MW-12 (mg/L)



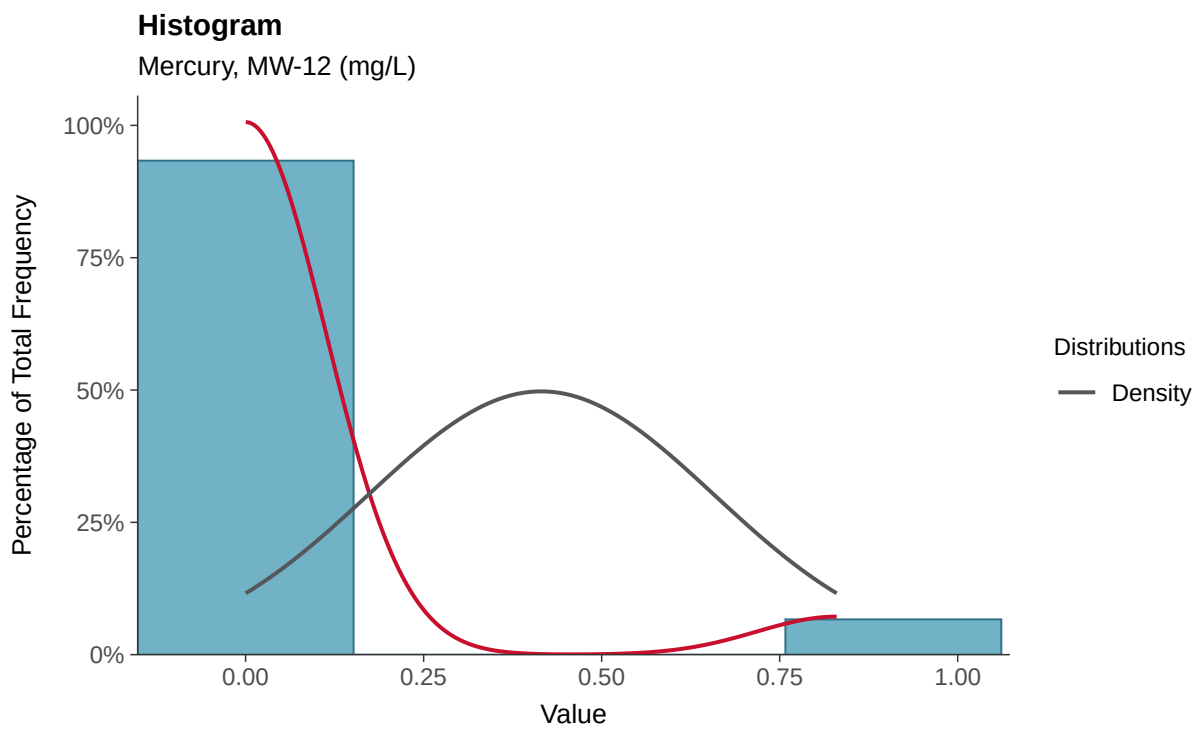
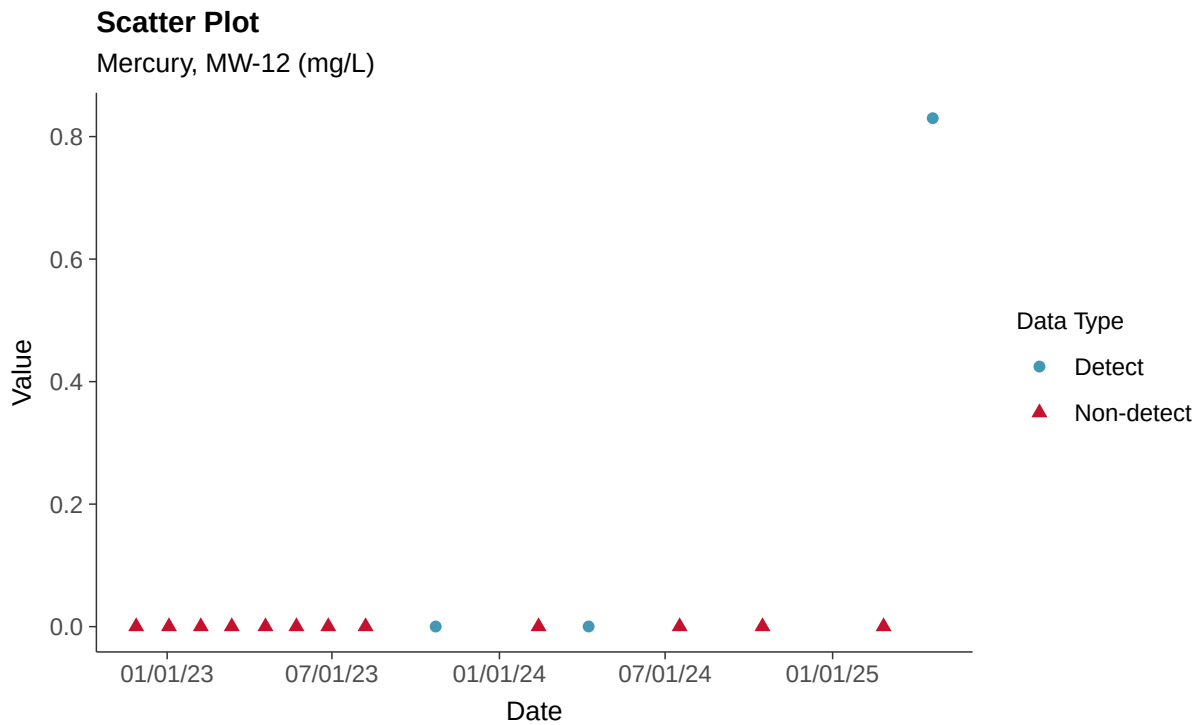
Trend Regression: Piecewise Linear-Linear

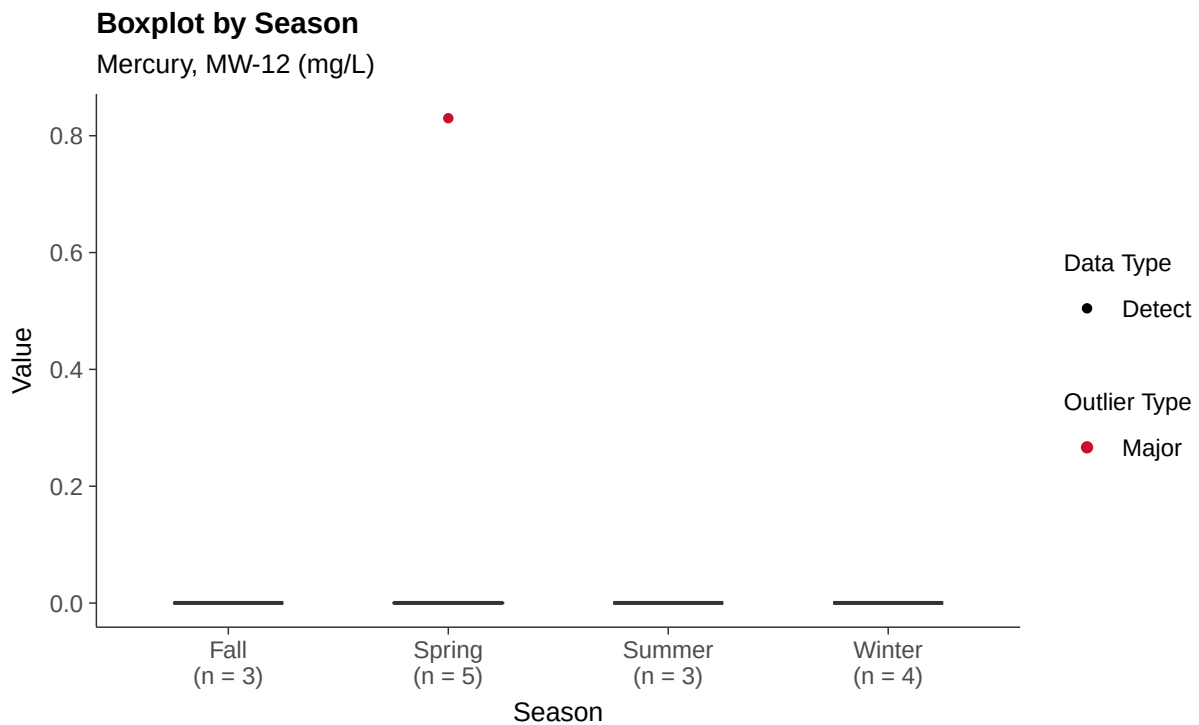
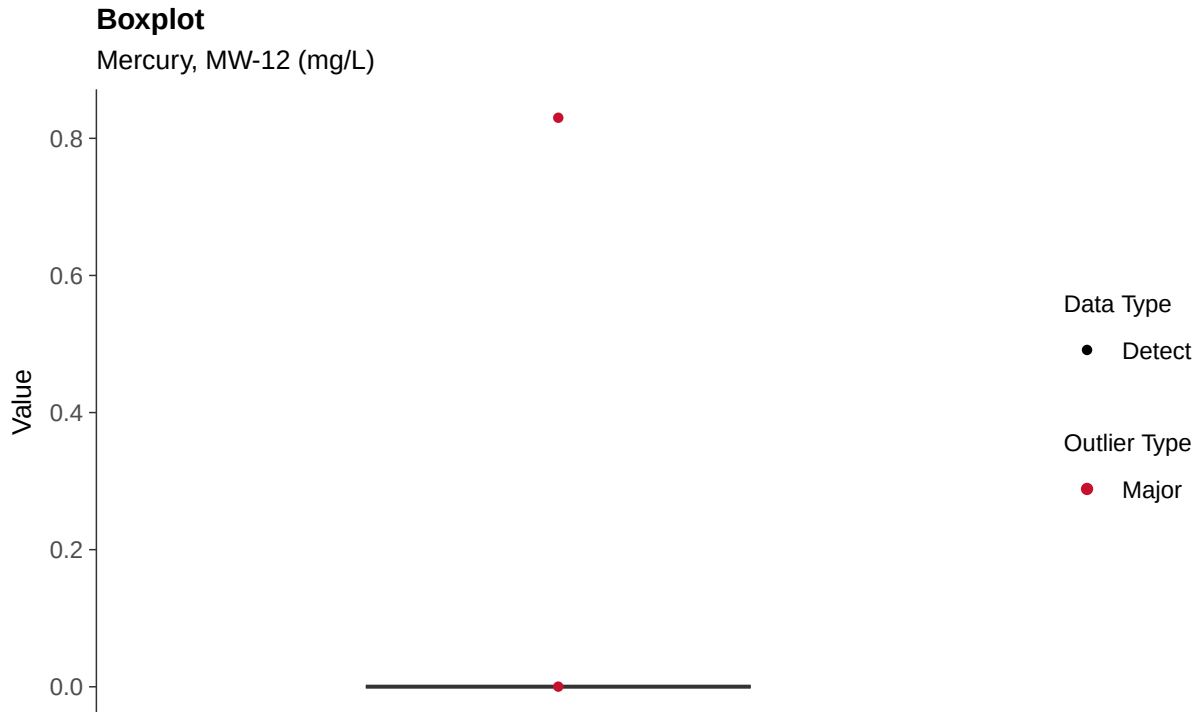
Lithium, MW-12 (mg/L)



Appendix IV: Mercury, MW-12

ID: 22_2_4_117

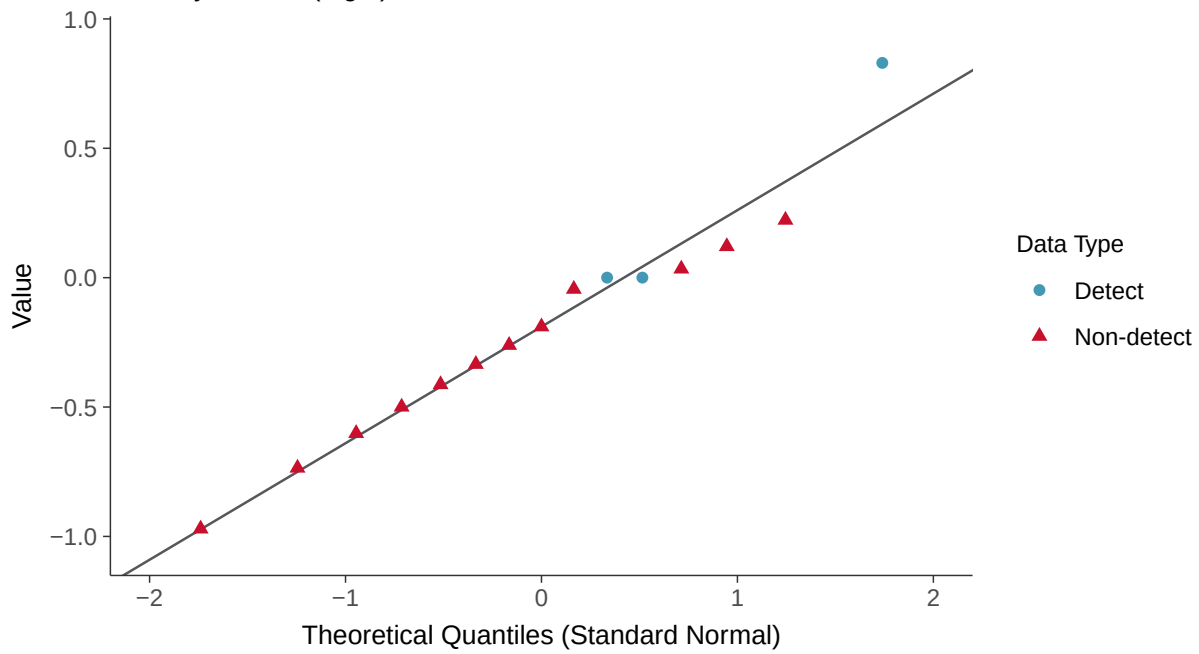






Normal Q-Q plot using ROS Imputed Estimates

Mercury, MW-12 (mg/L)

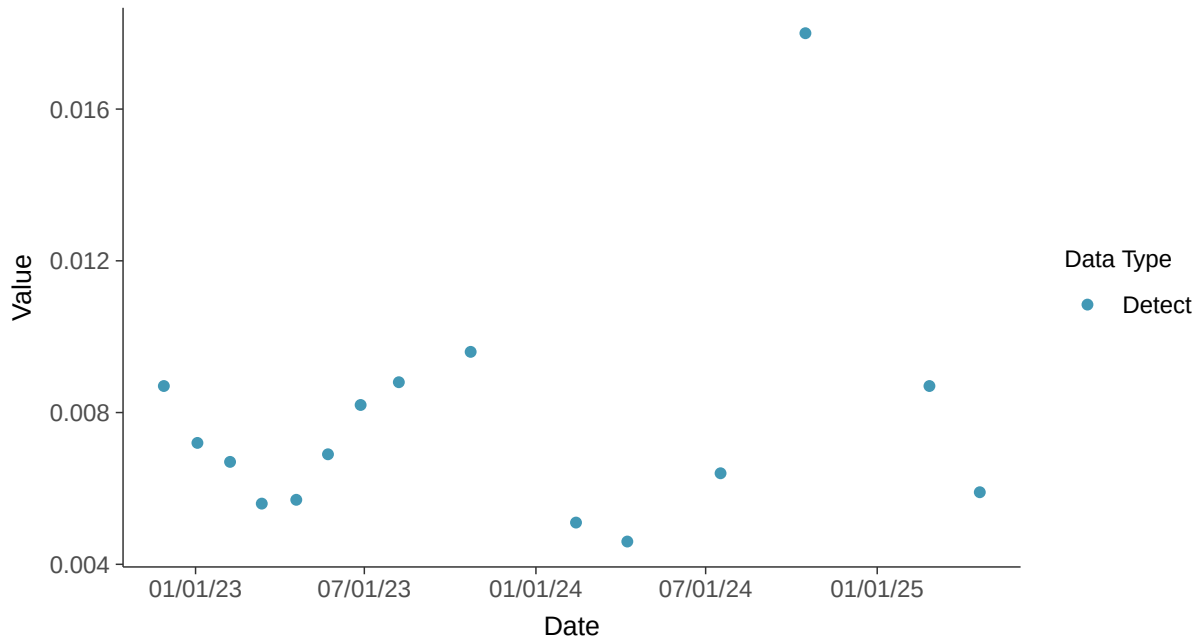


Appendix IV: Molybdenum, MW-12

ID: 22_2_4_118

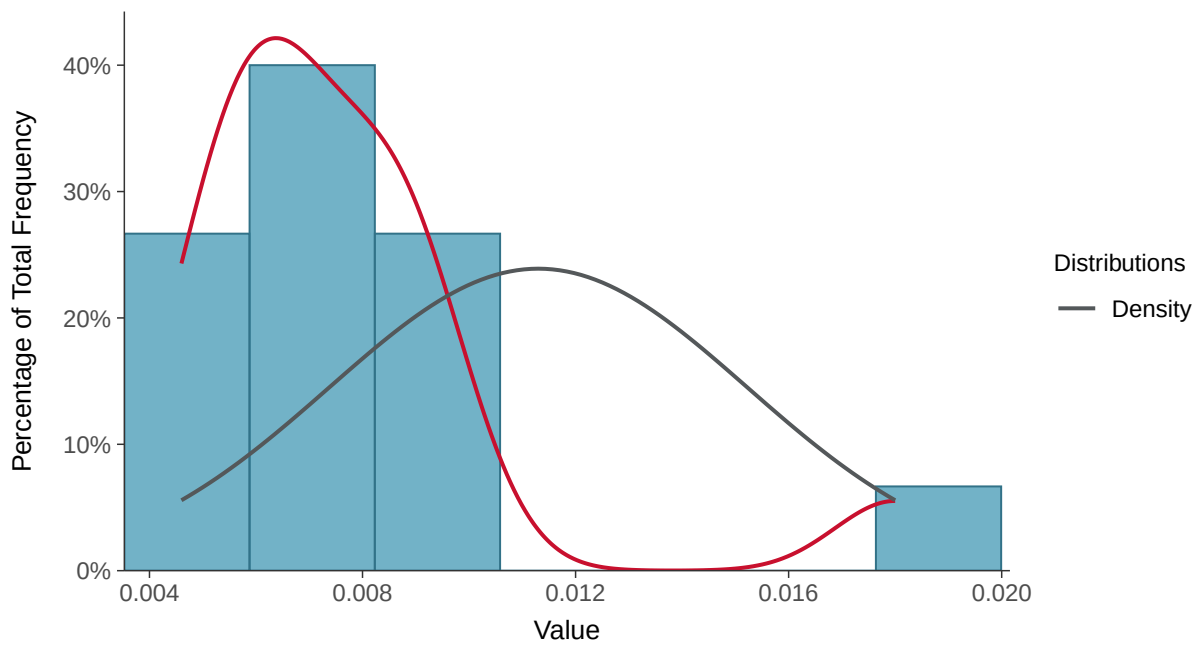
Scatter Plot

Molybdenum, MW-12 (mg/L)



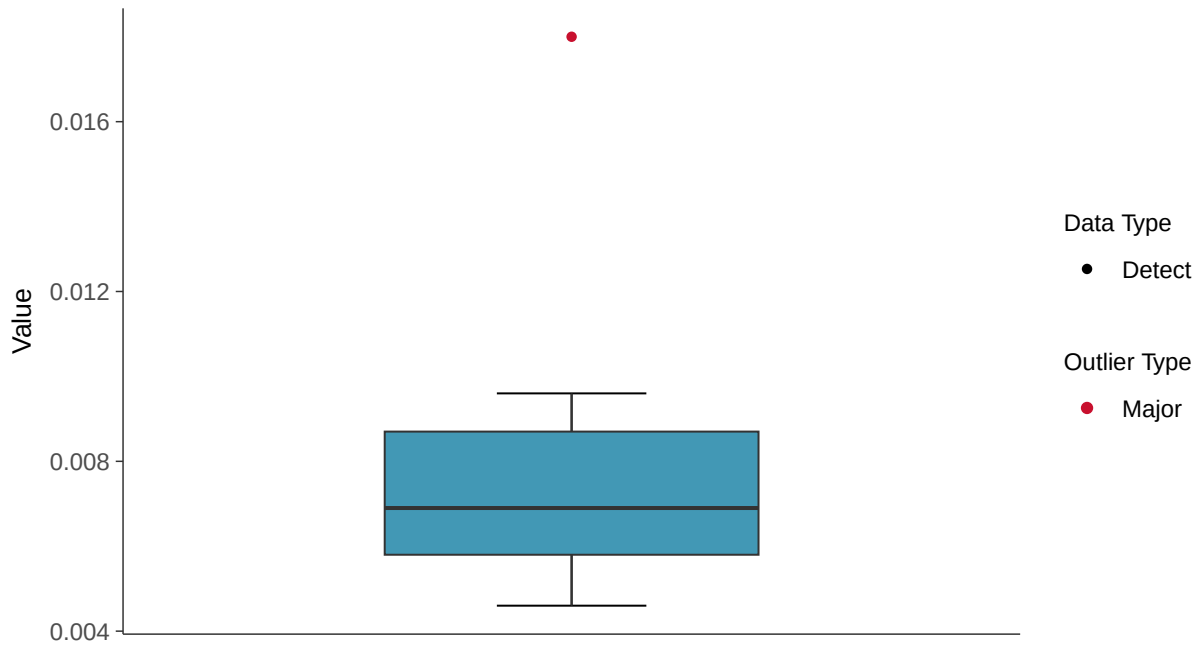
Histogram

Molybdenum, MW-12 (mg/L)



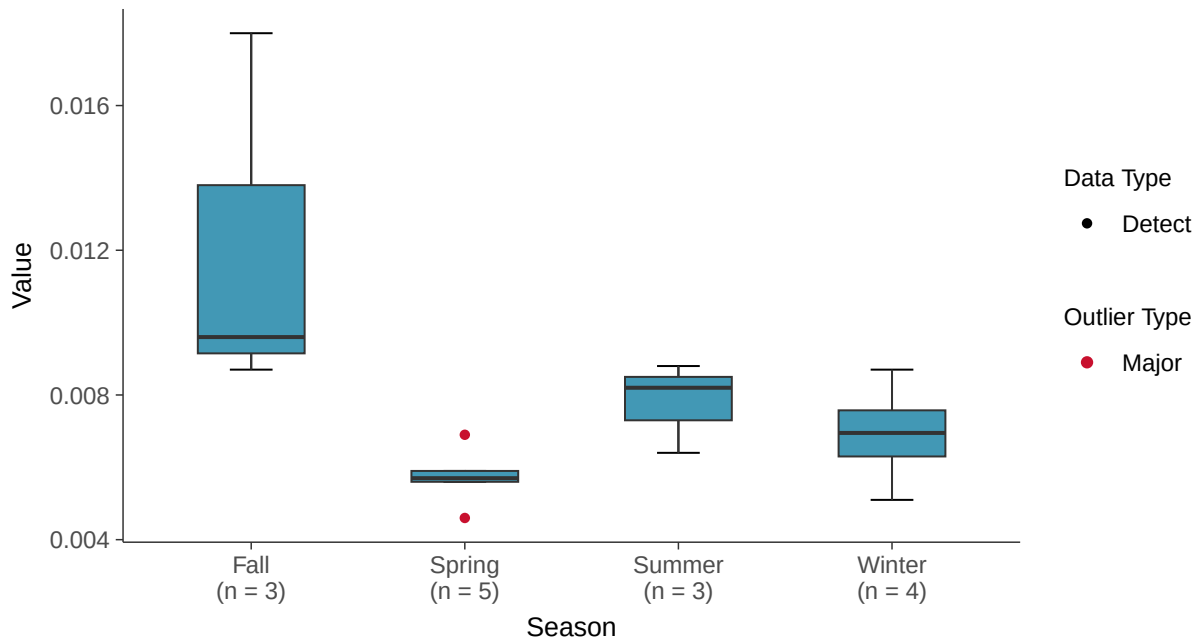
Boxplot

Molybdenum, MW-12 (mg/L)



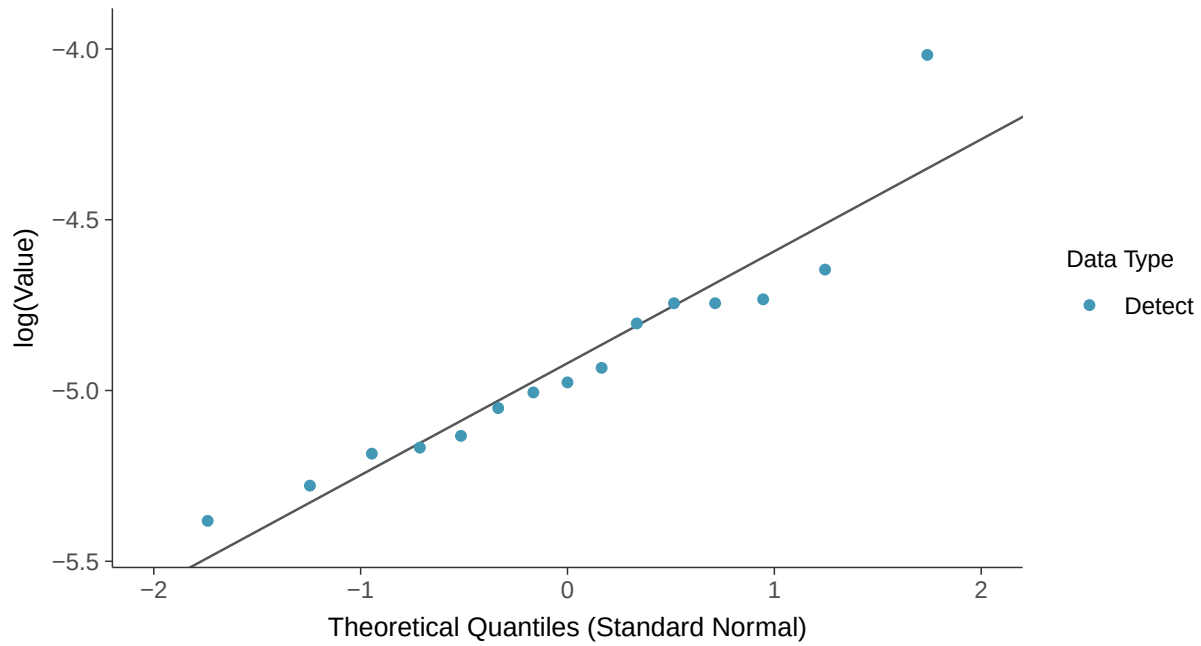
Boxplot by Season

Molybdenum, MW-12 (mg/L)



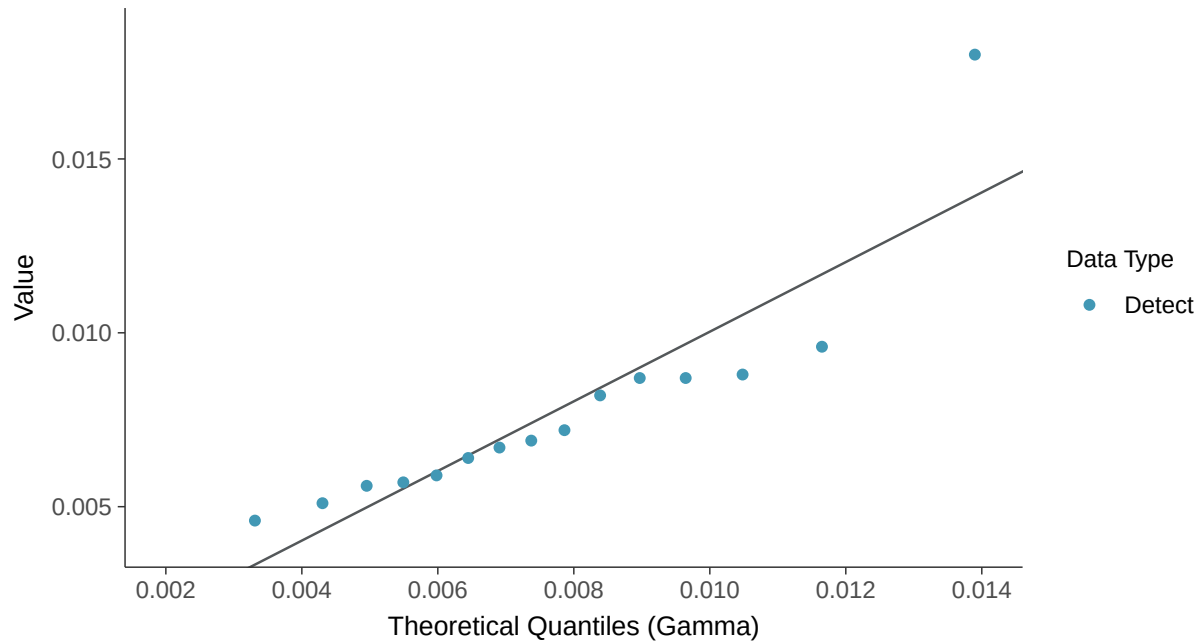
Lognormal Q-Q plot

Molybdenum, MW-12 (mg/L)



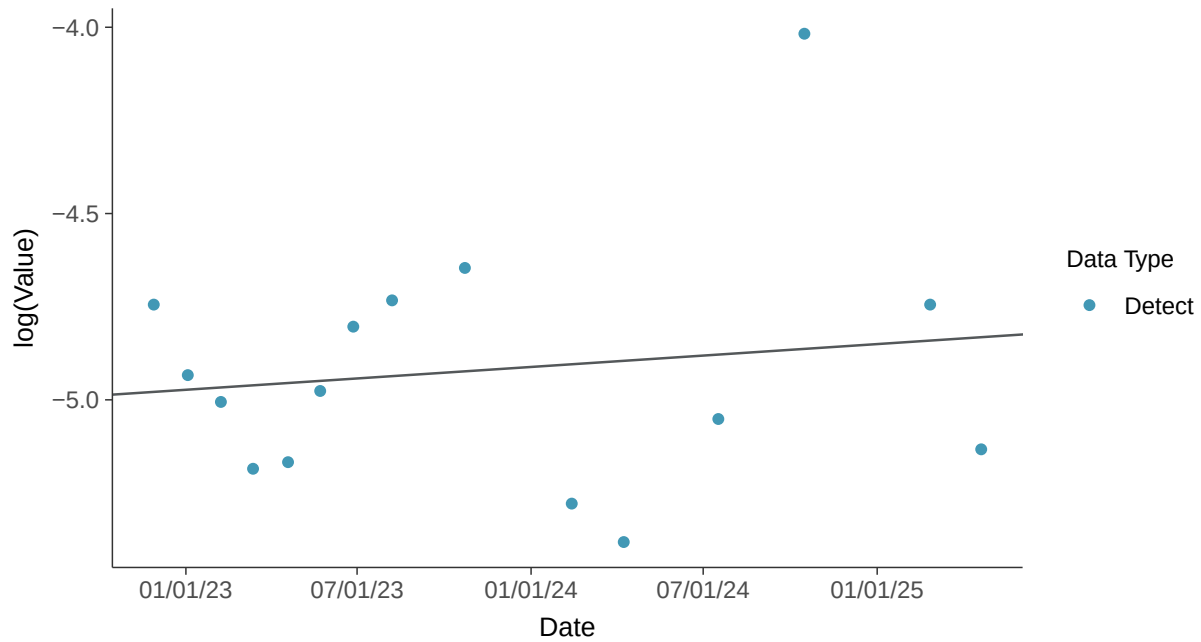
Gamma Q-Q plot

Molybdenum, MW-12 (mg/L)



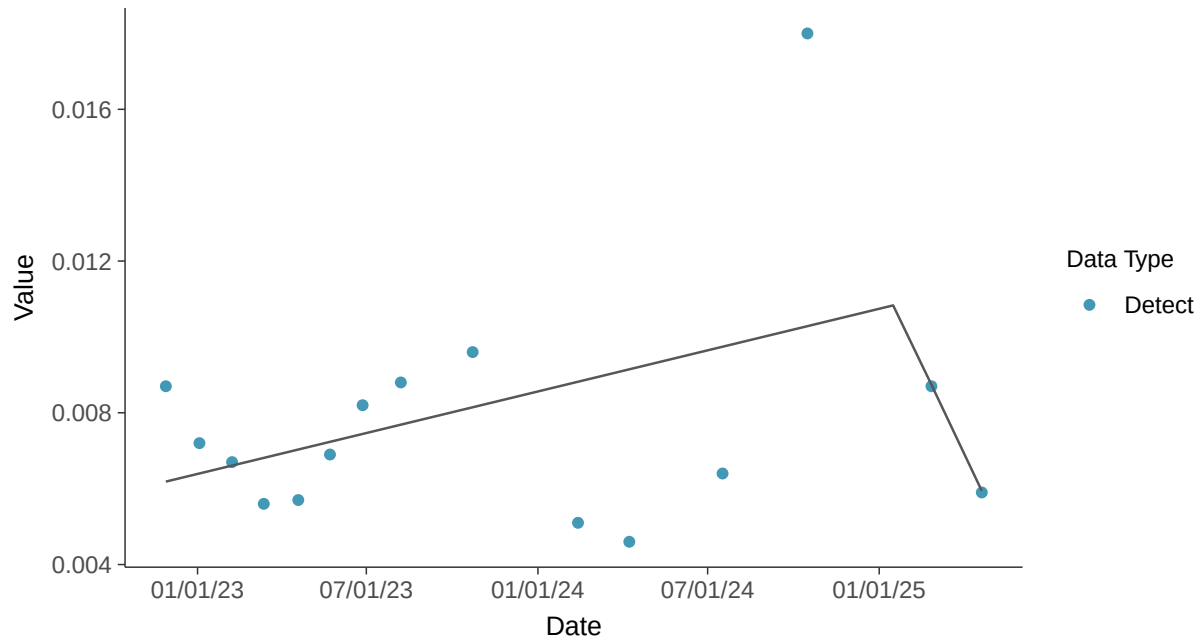
Trend Regression: Lognormal MLE

Molybdenum, MW-12 (mg/L)



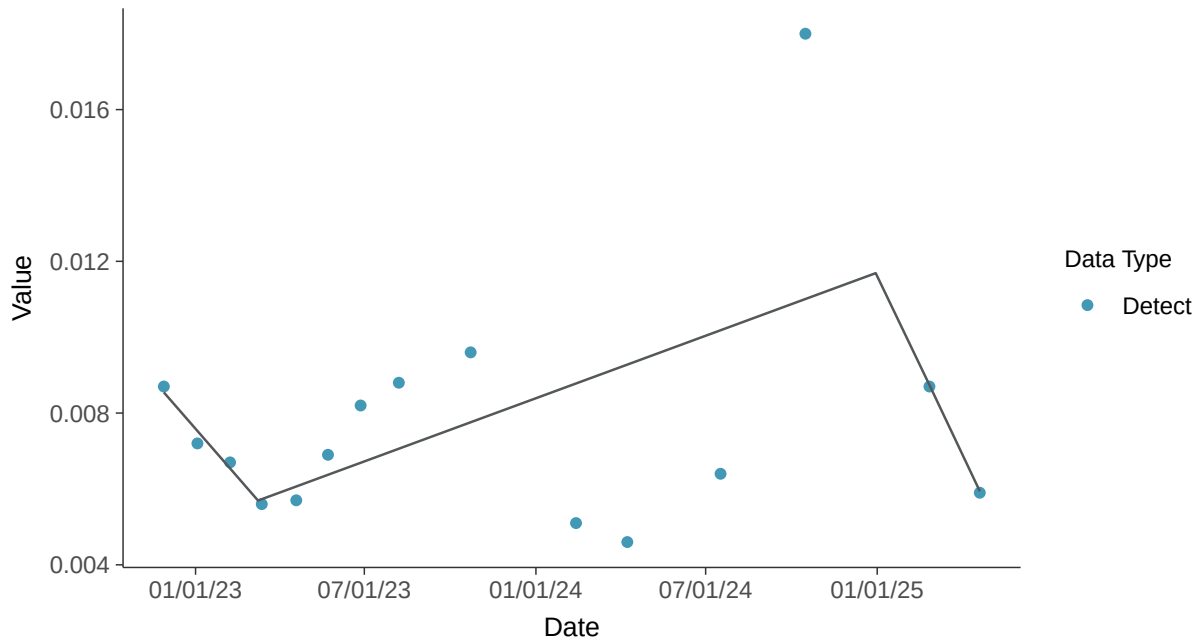
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-12 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear
Molybdenum, MW-12 (mg/L)

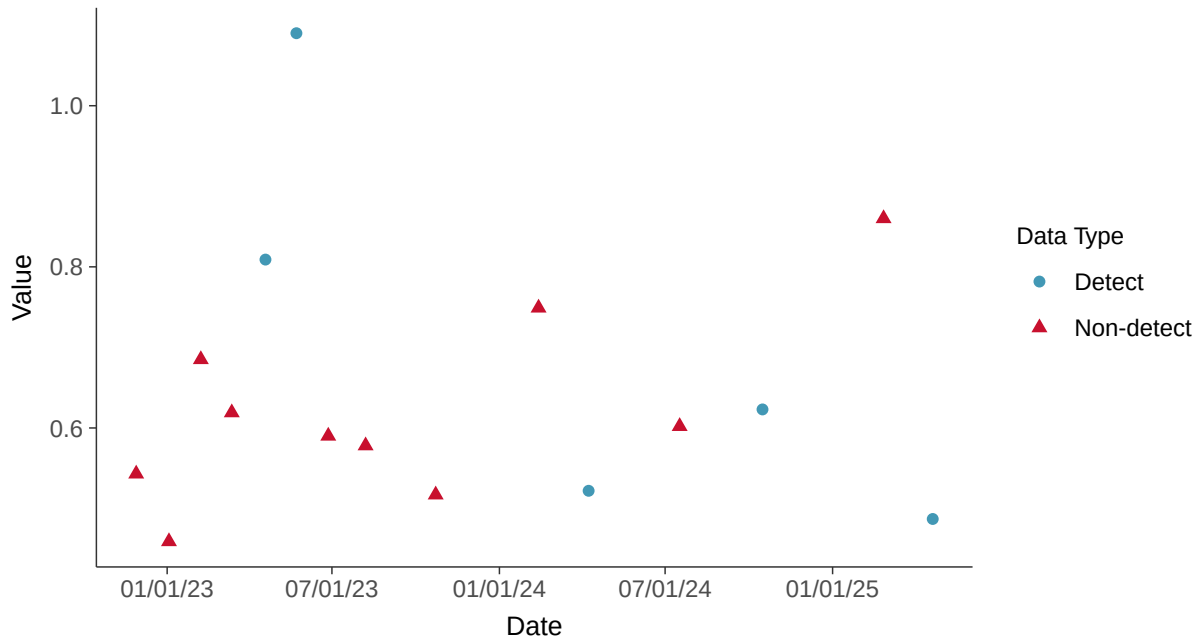


Appendix IV: Radium 226 and 228, MW-12

ID: 22_2_4_121

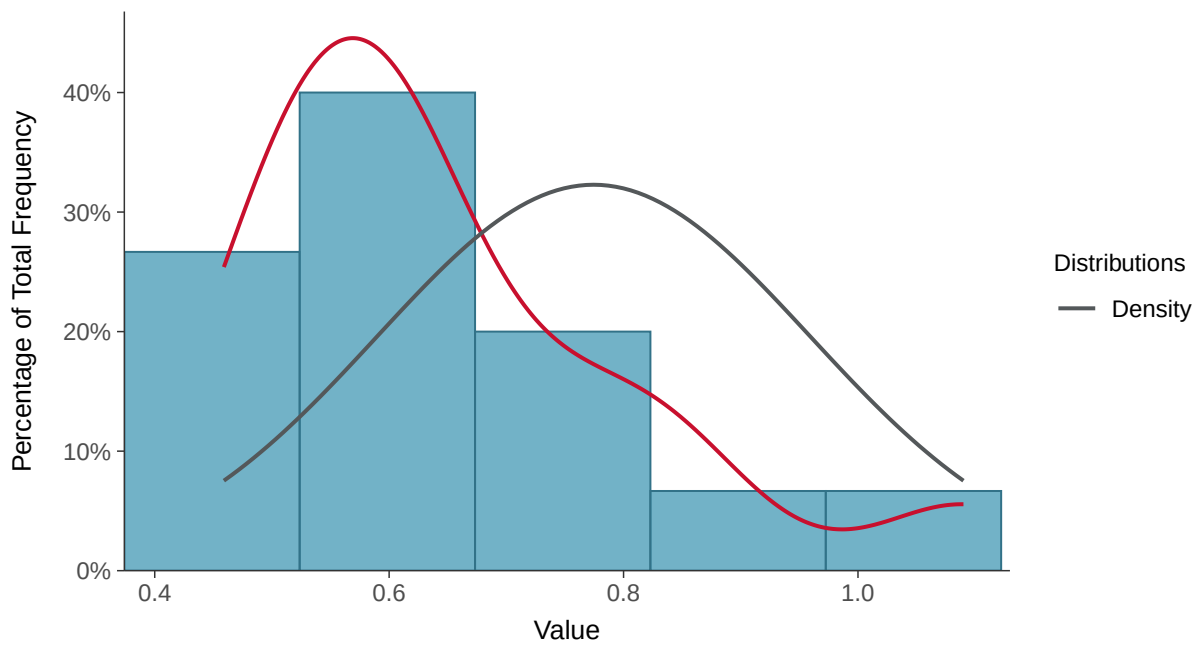
Scatter Plot

Radium 226 and 228, MW-12 (pCi/L)



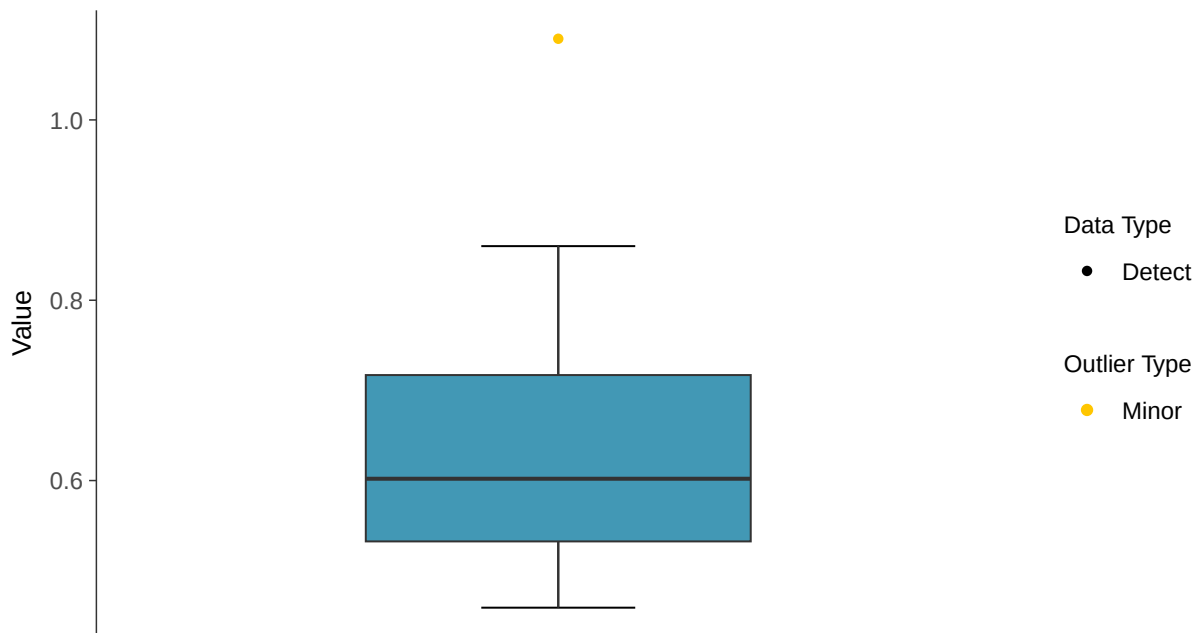
Histogram

Radium 226 and 228, MW-12 (pCi/L)



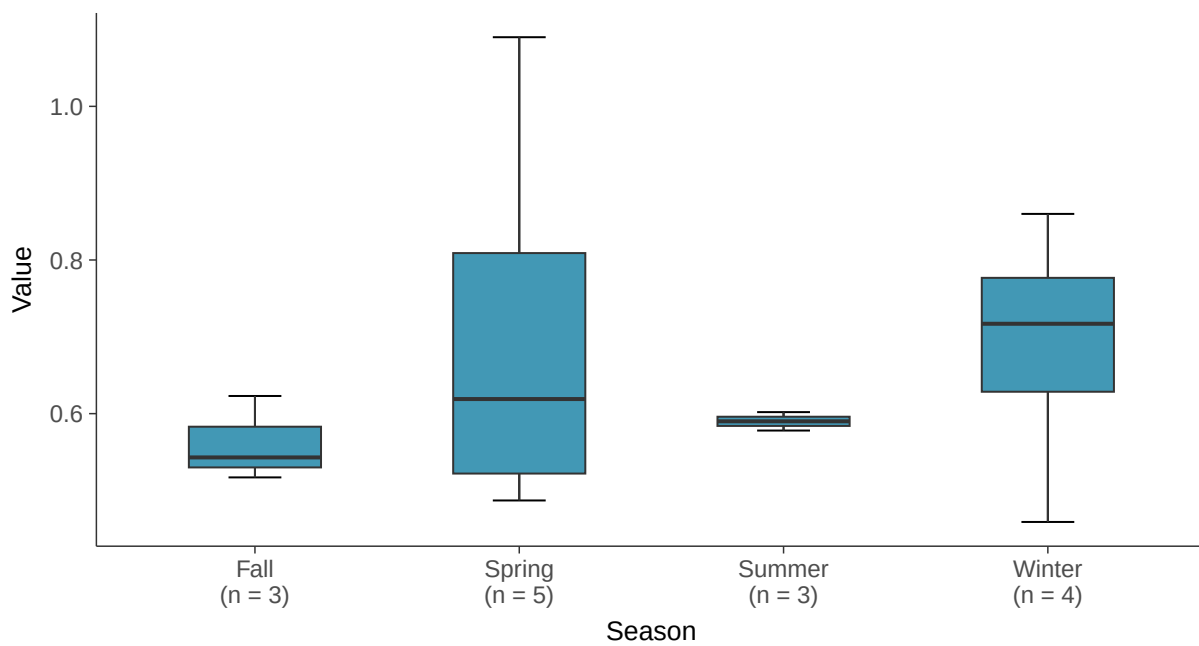
Boxplot

Radium 226 and 228, MW-12 (pCi/L)



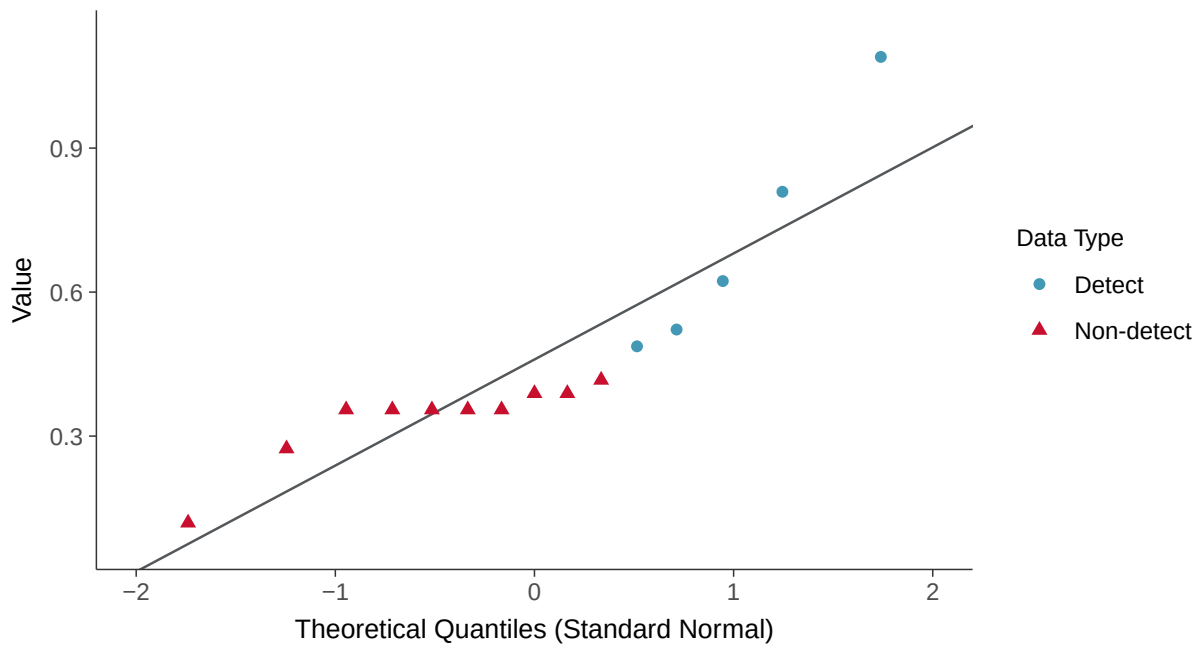
Boxplot by Season

Radium 226 and 228, MW-12 (pCi/L)



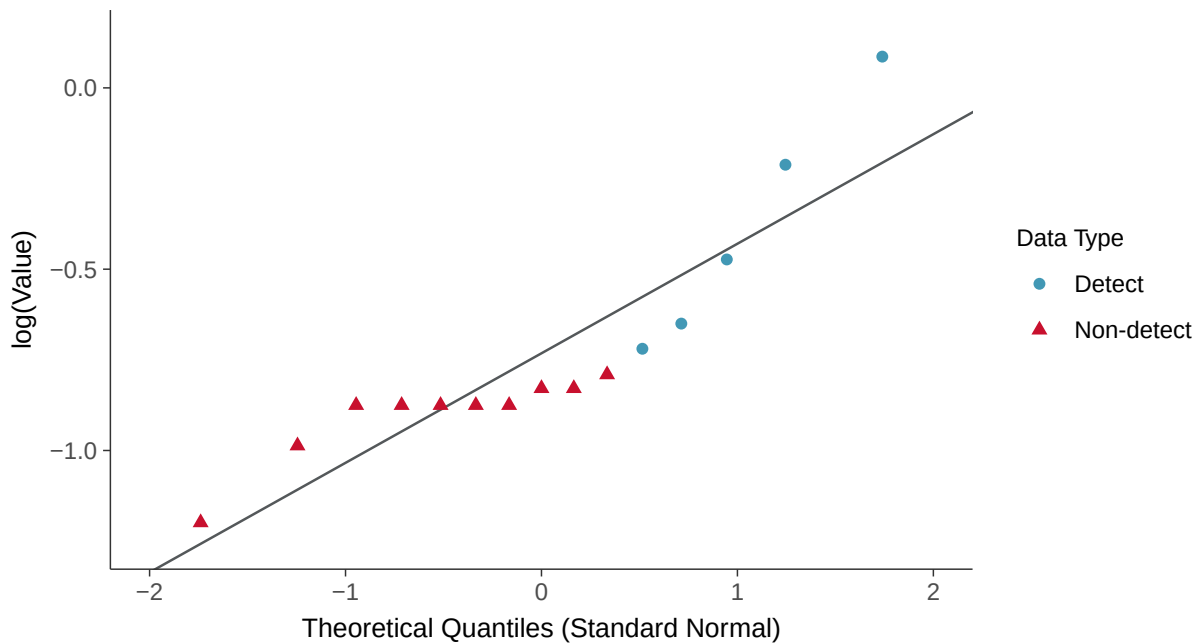
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-12 (pCi/L)



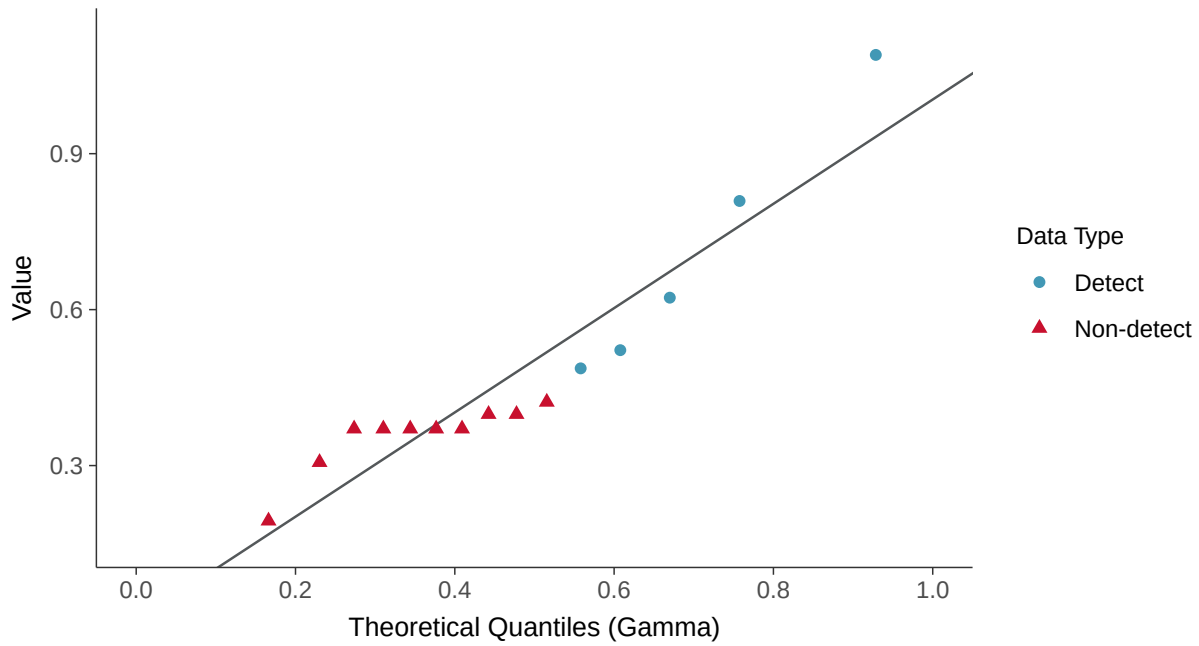
Lognormal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-12 (pCi/L)



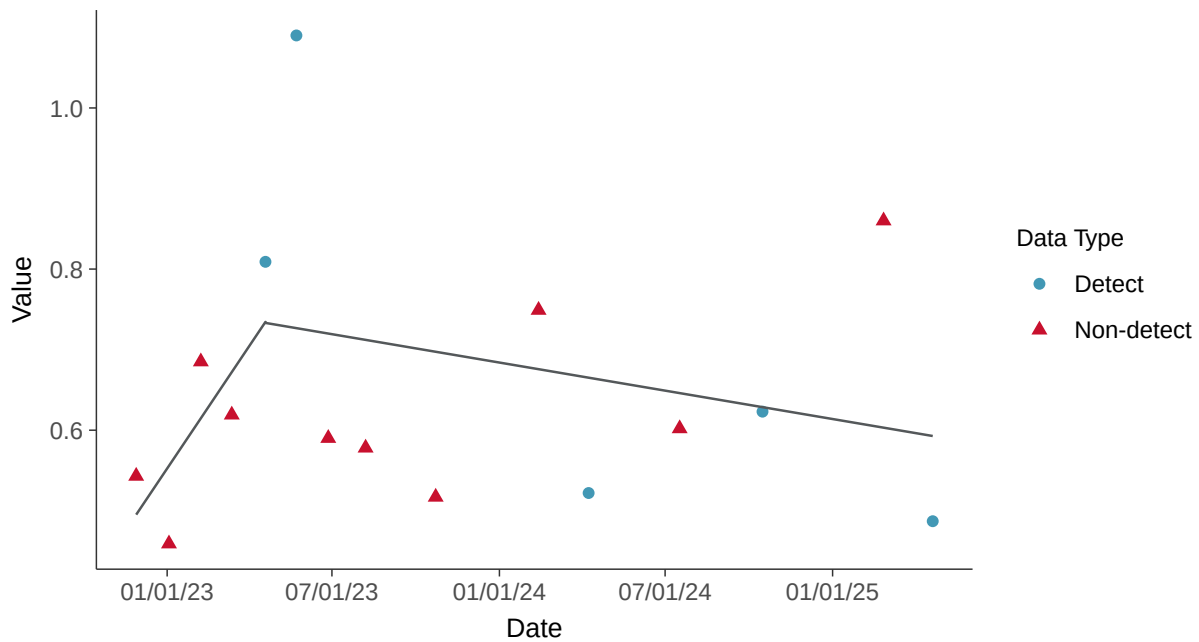
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-12 (pCi/L)



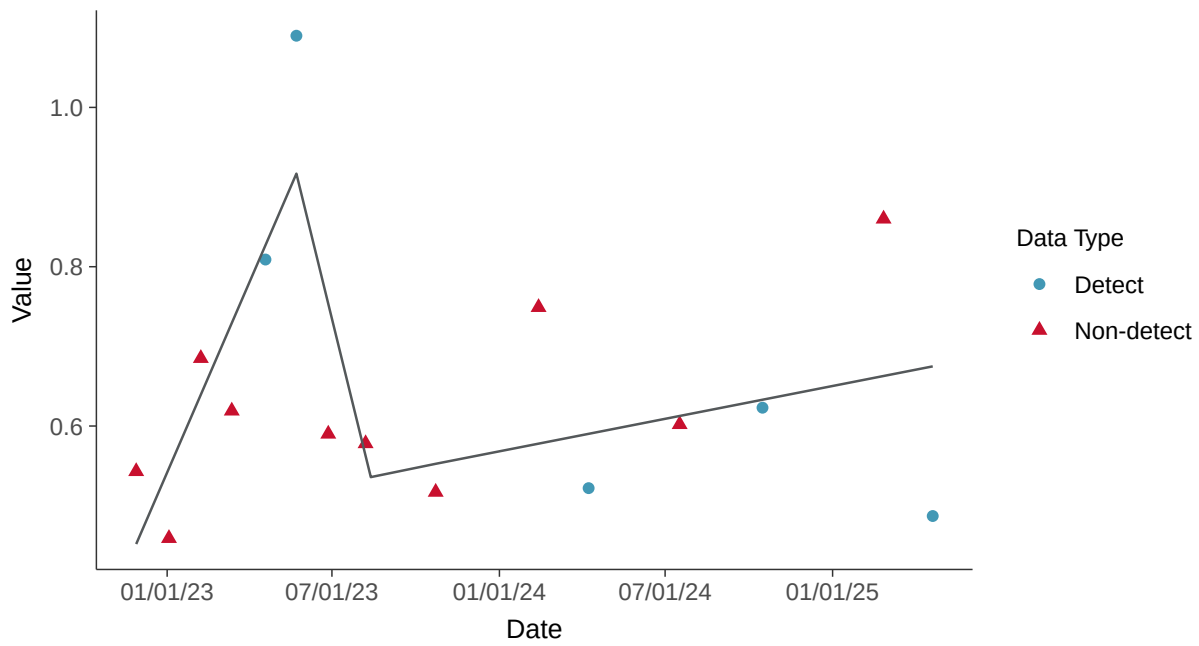
Trend Regression: Piecewise Linear-Linear

Radium 226 and 228, MW-12 (pCi/L)





Trend Regression: Piecewise Linear-Linear-Linear
Radium 226 and 228, MW-12 (pCi/L)

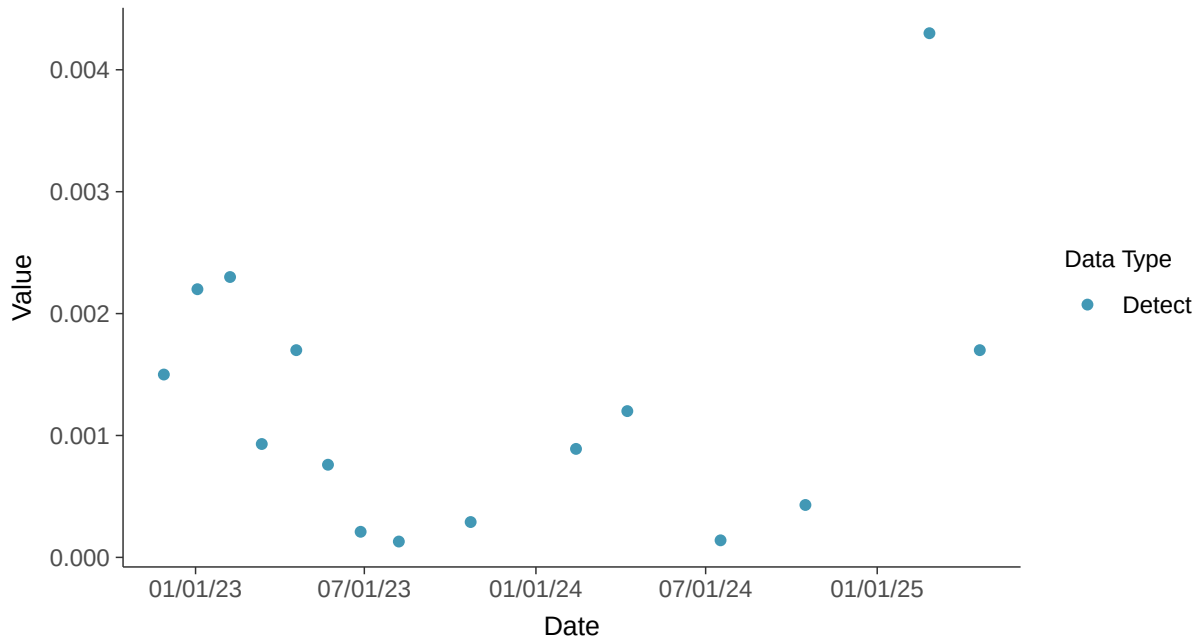


Appendix IV: Selenium, MW-12

ID: 22_2_4_122

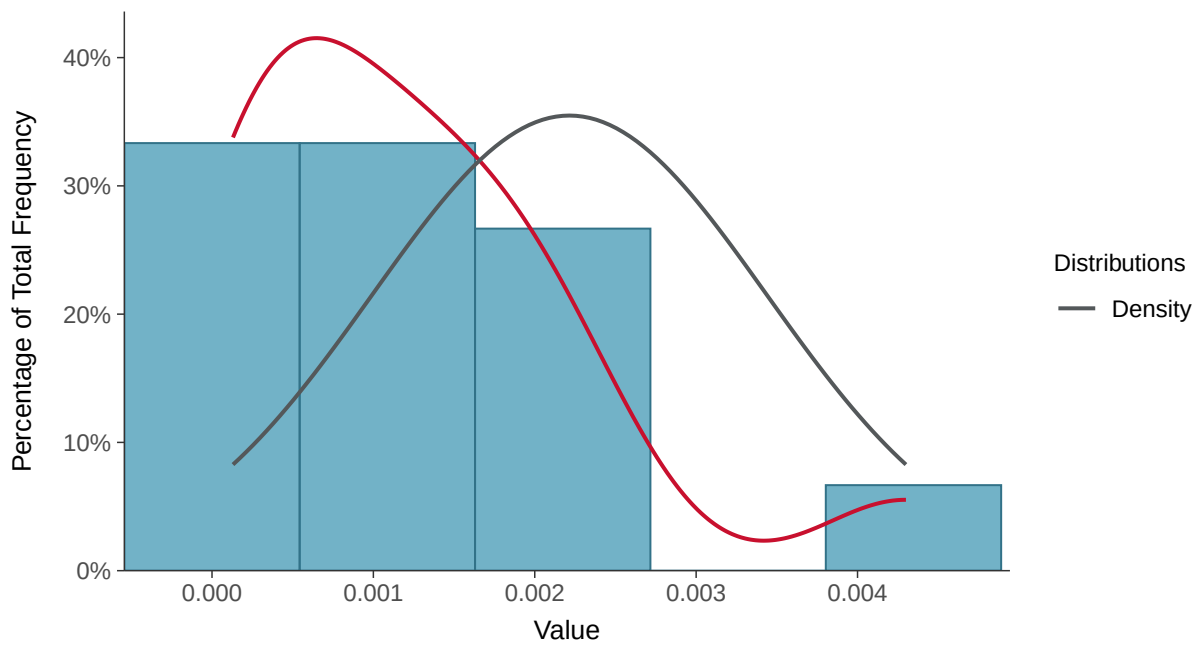
Scatter Plot

Selenium, MW-12 (mg/L)



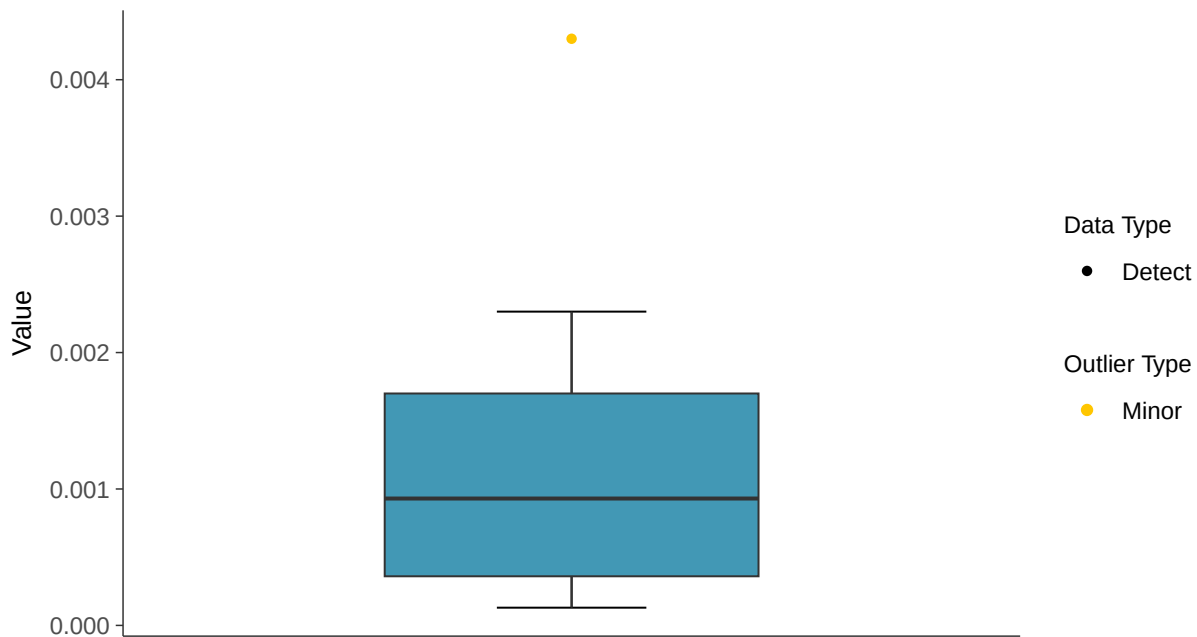
Histogram

Selenium, MW-12 (mg/L)



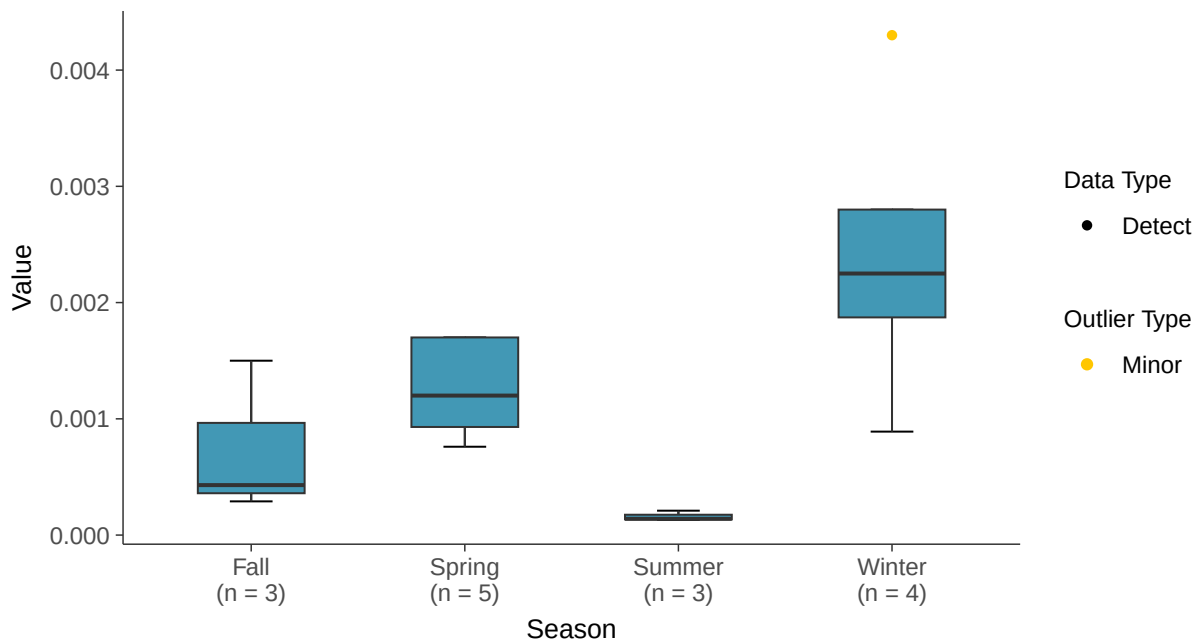
Boxplot

Selenium, MW-12 (mg/L)



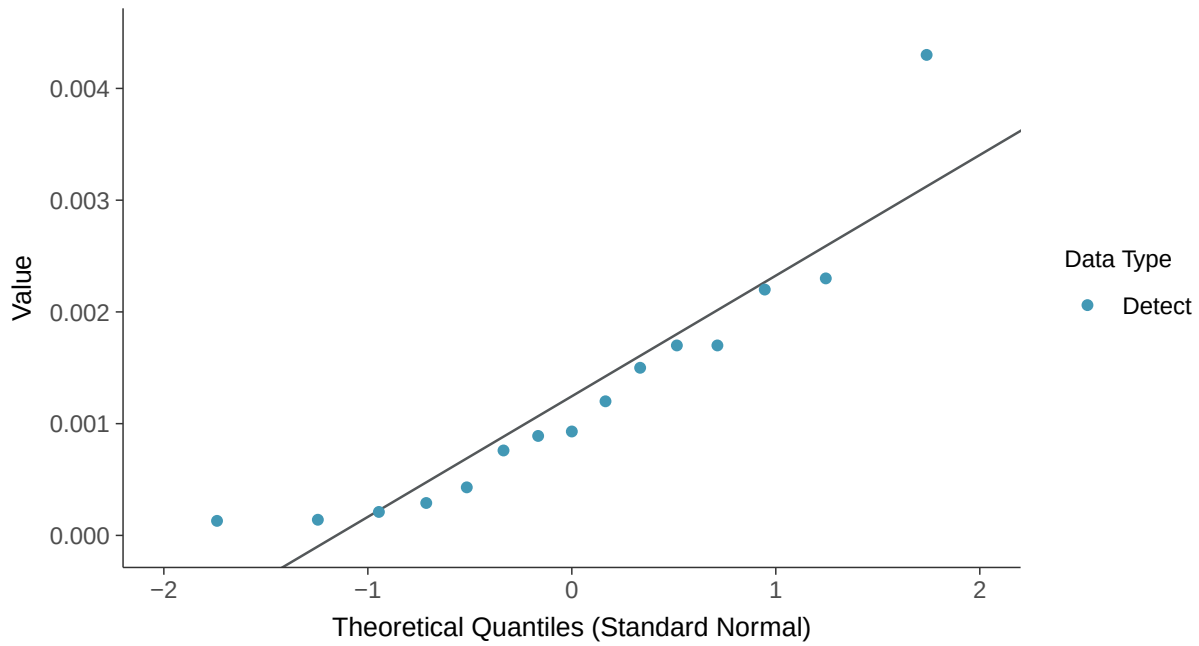
Boxplot by Season

Selenium, MW-12 (mg/L)



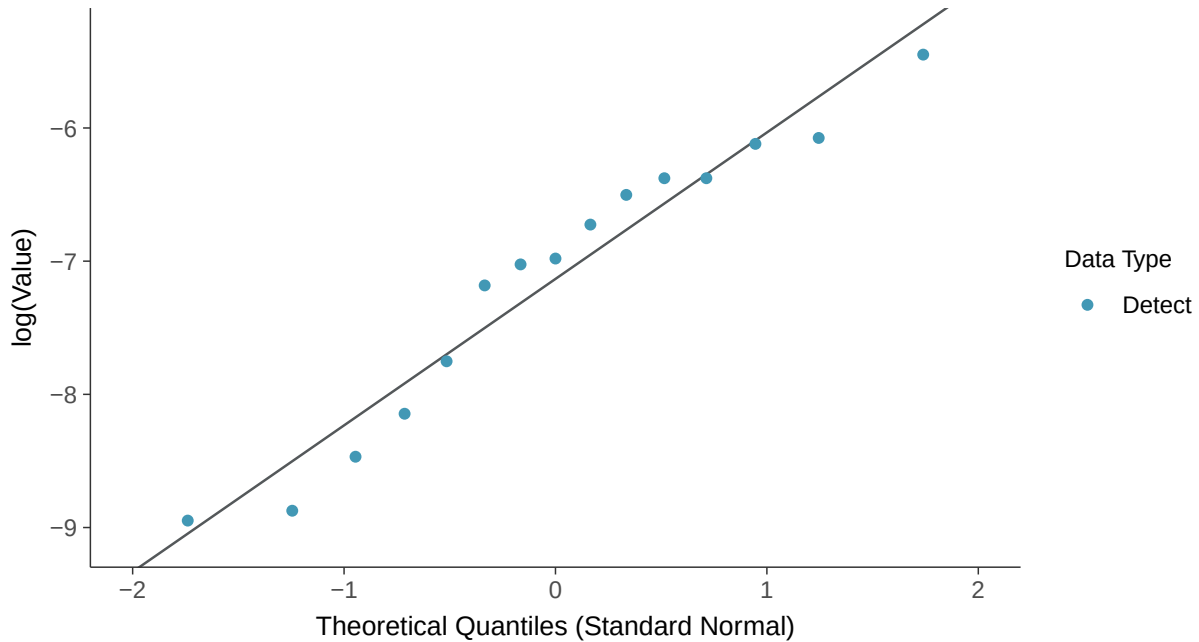
Normal Q-Q plot

Selenium, MW-12 (mg/L)



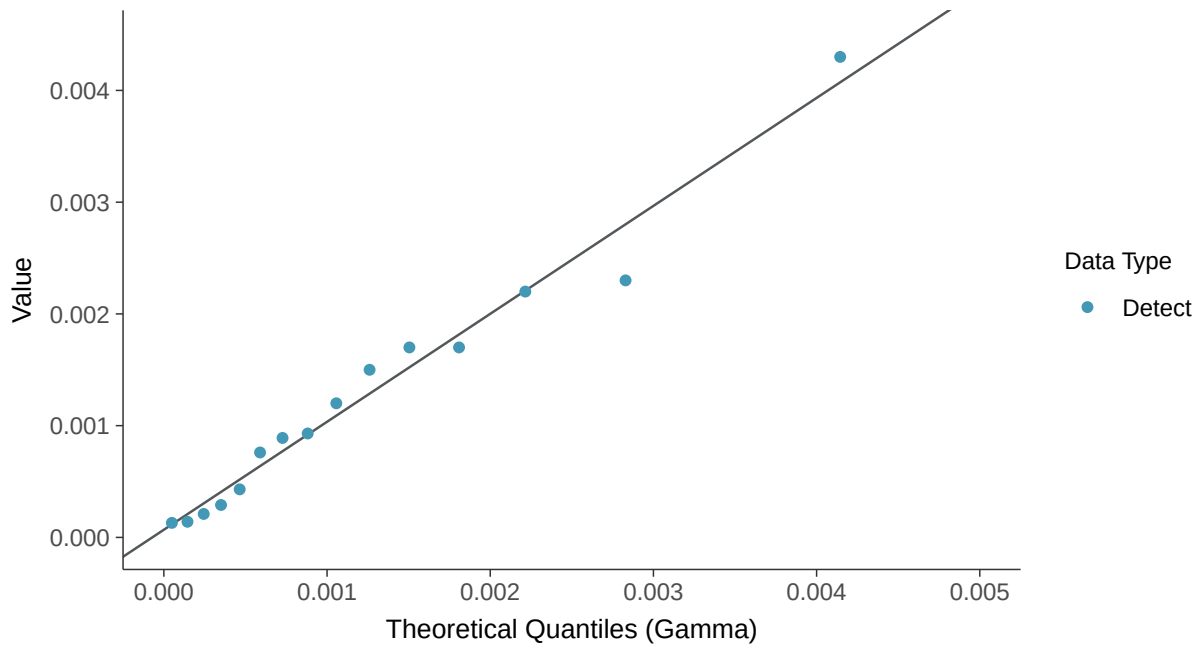
Lognormal Q-Q plot

Selenium, MW-12 (mg/L)



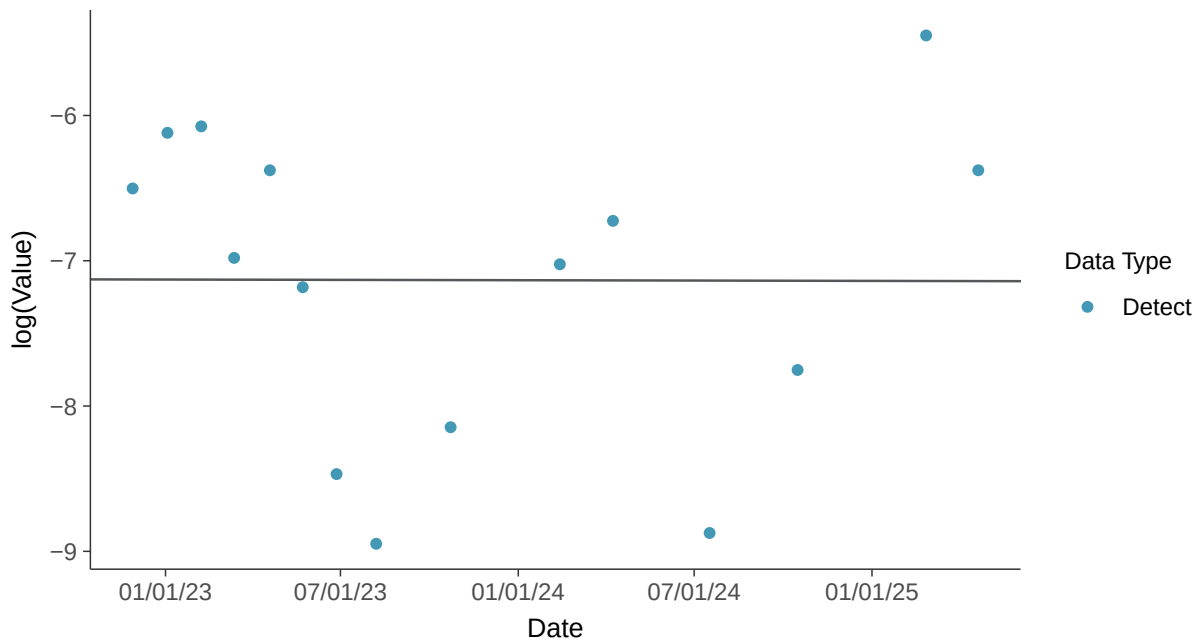
Gamma Q-Q plot

Selenium, MW-12 (mg/L)



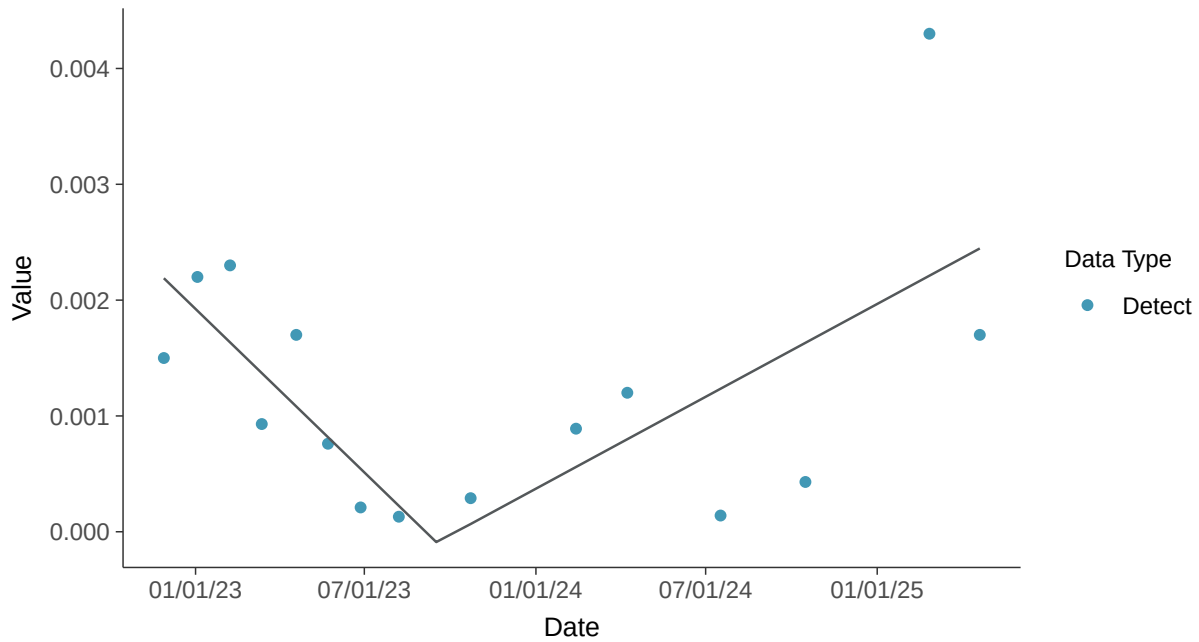
Trend Regression: Lognormal MLE

Selenium, MW-12 (mg/L)



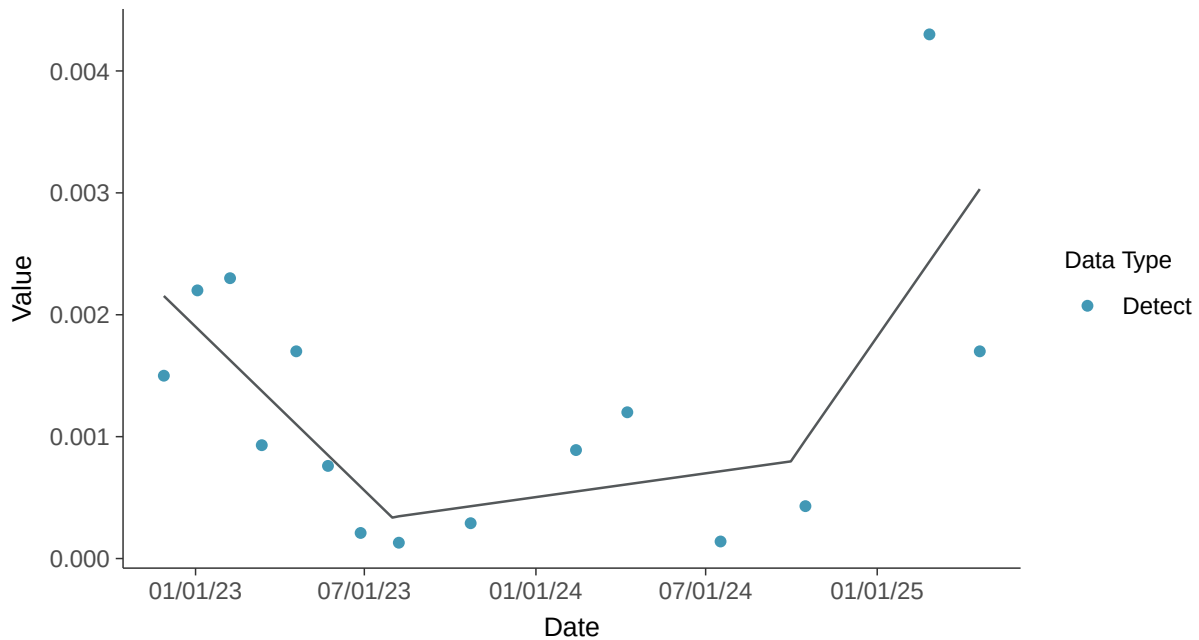
Trend Regression: Piecewise Linear-Linear

Selenium, MW-12 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

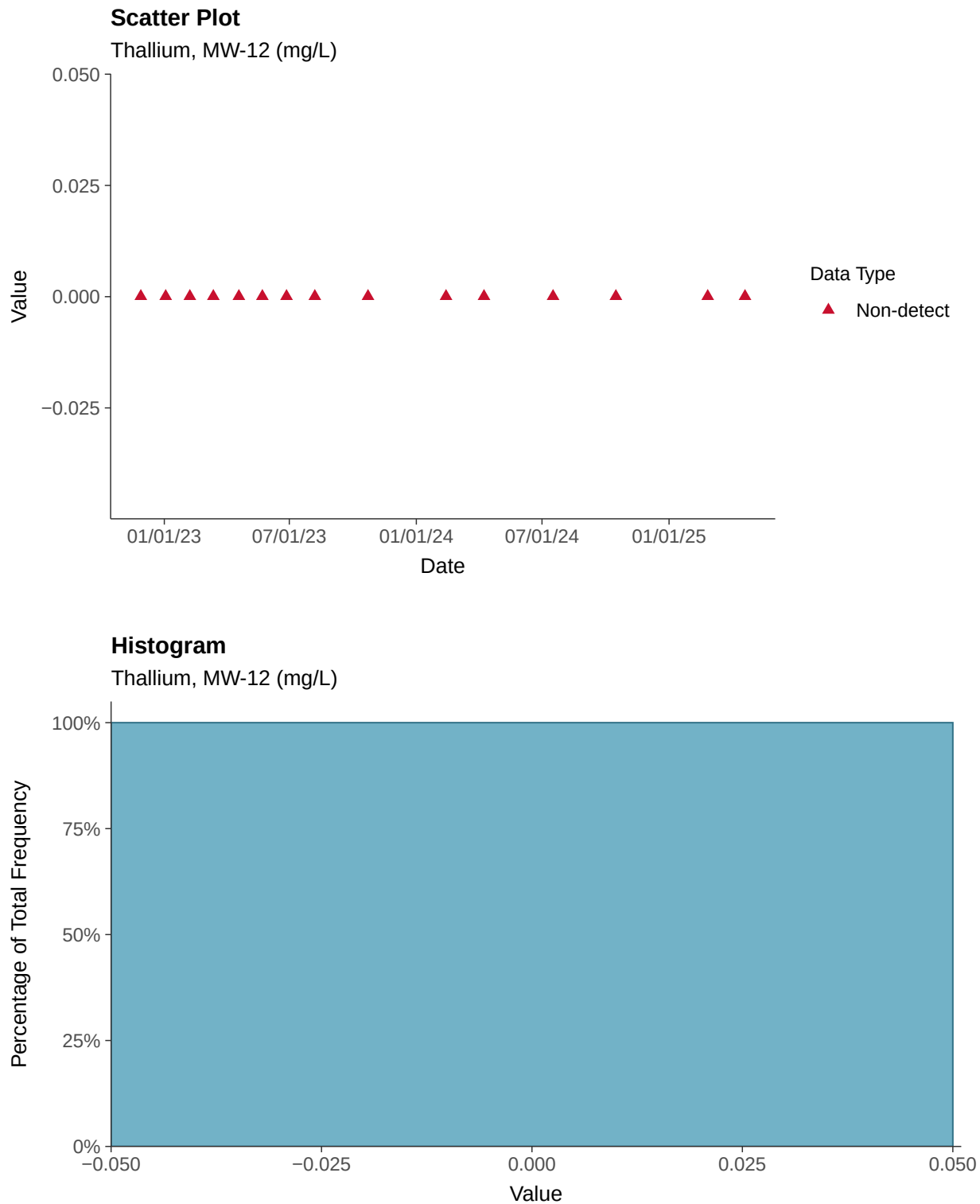
Selenium, MW-12 (mg/L)





Appendix IV: Thallium, MW-12

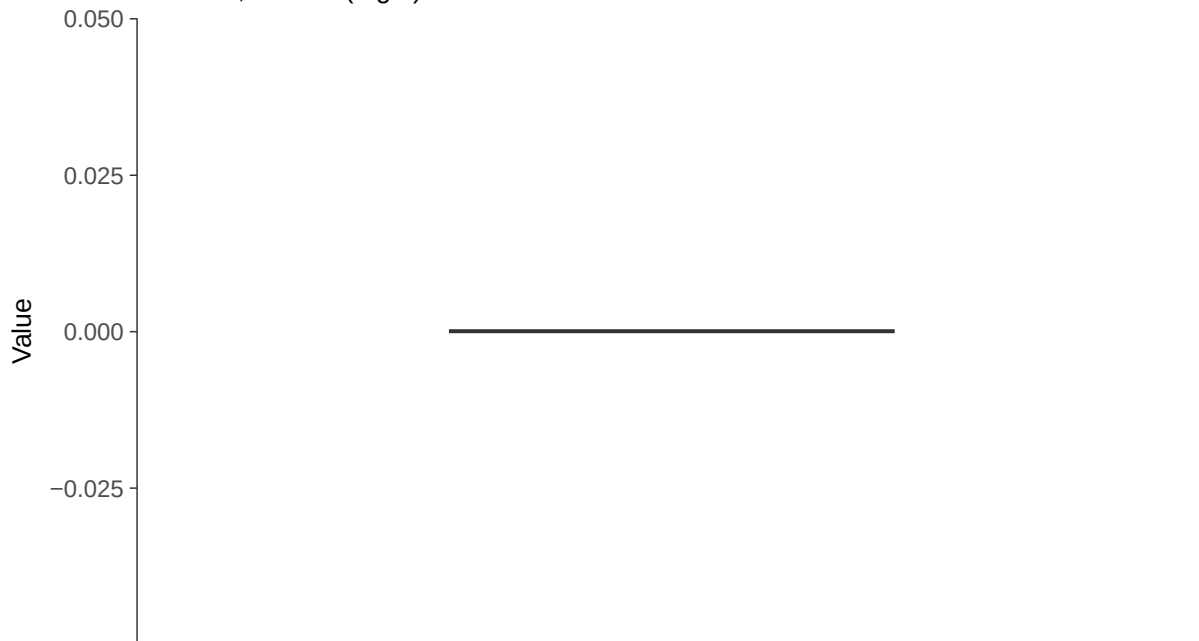
ID: 22_2_4_125





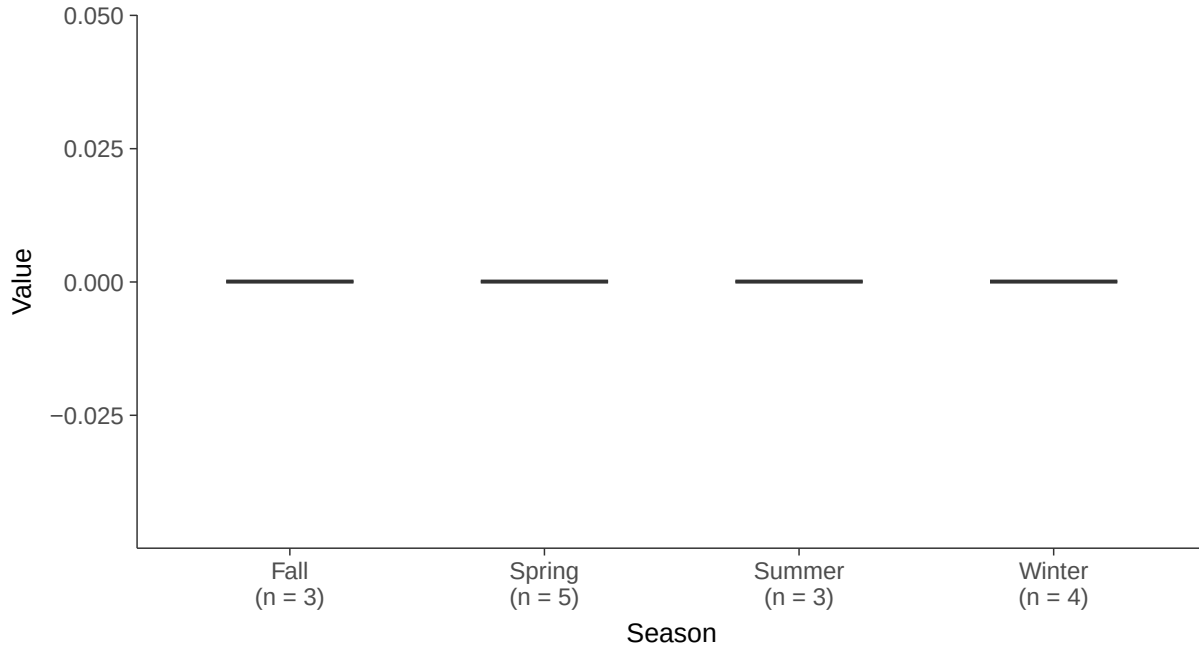
Boxplot

Thallium, MW-12 (mg/L)



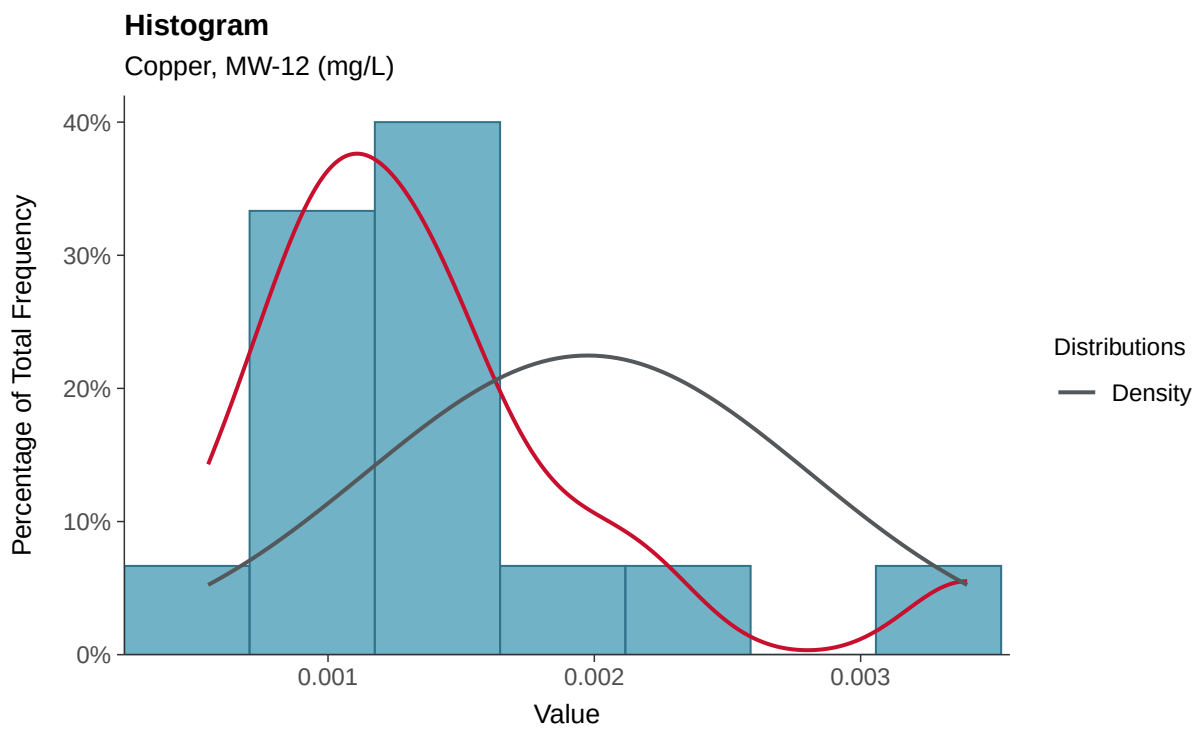
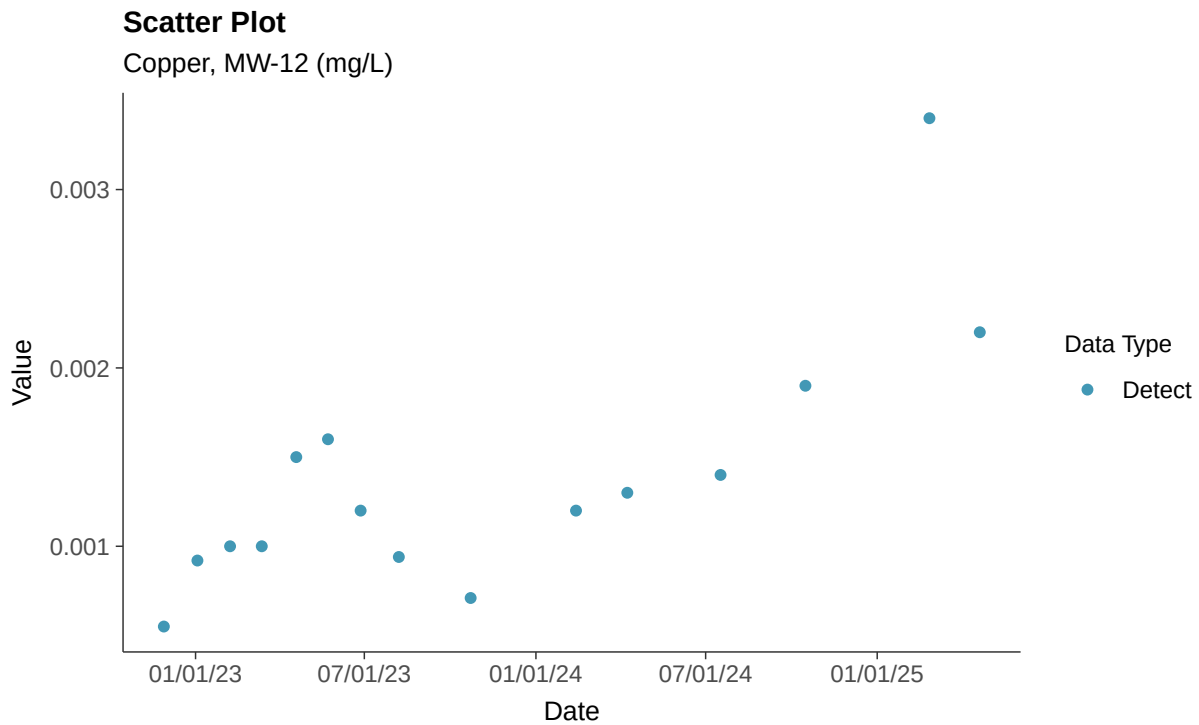
Boxplot by Season

Thallium, MW-12 (mg/L)



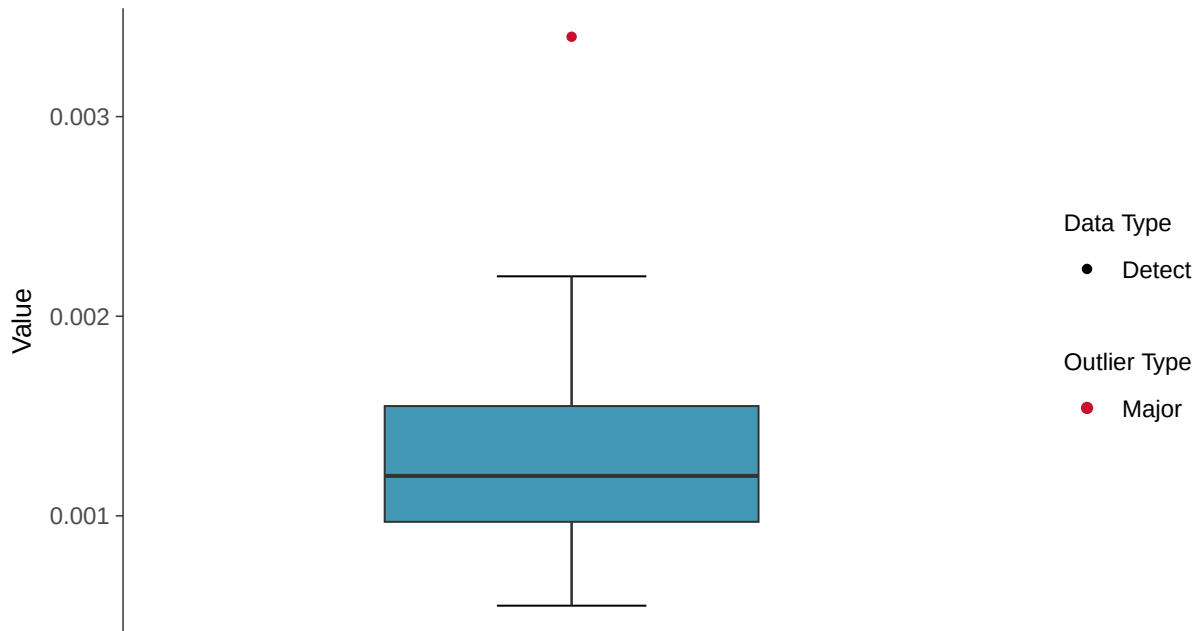
Part 115: Copper, MW-12

ID: 22_2_5_111



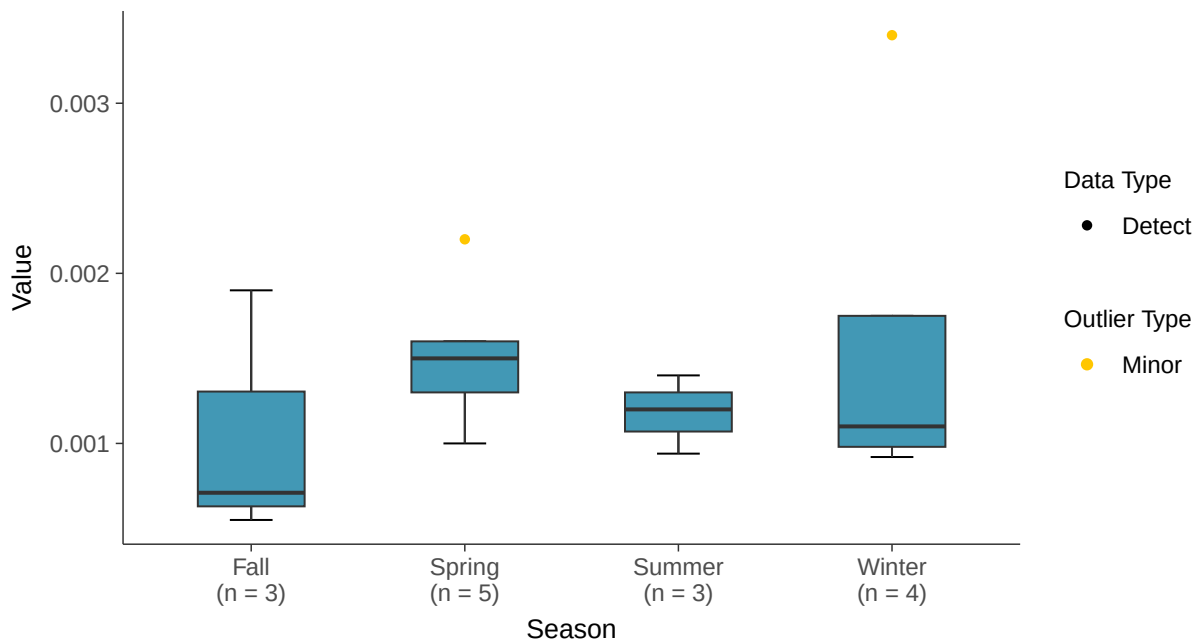
Boxplot

Copper, MW-12 (mg/L)



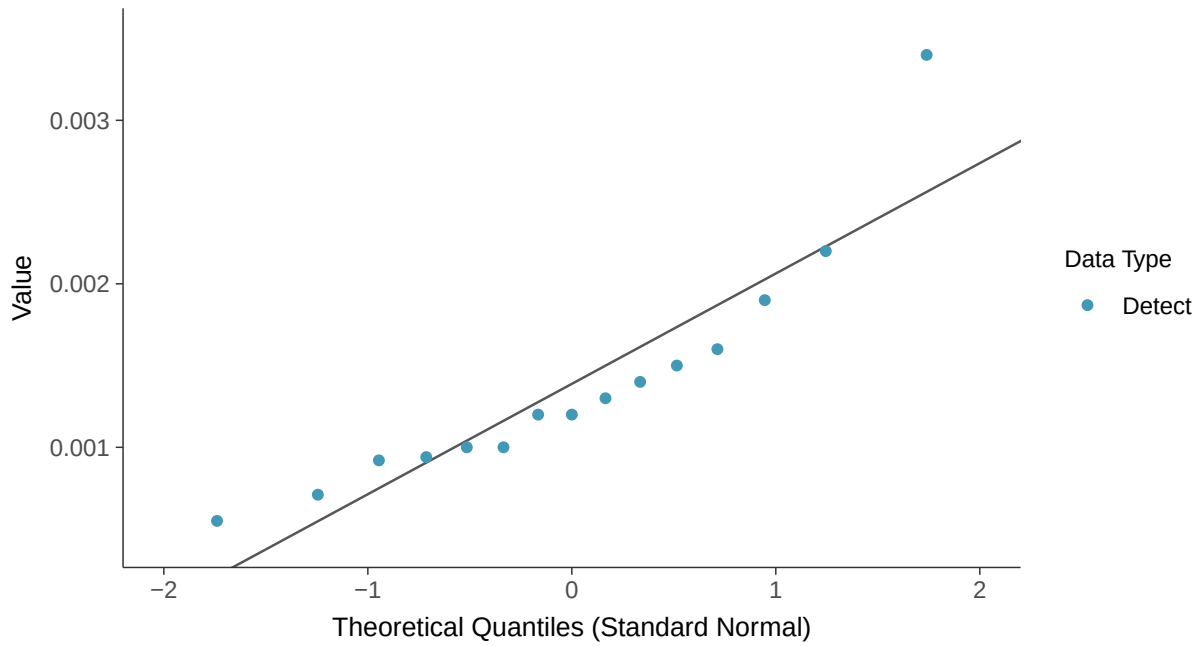
Boxplot by Season

Copper, MW-12 (mg/L)



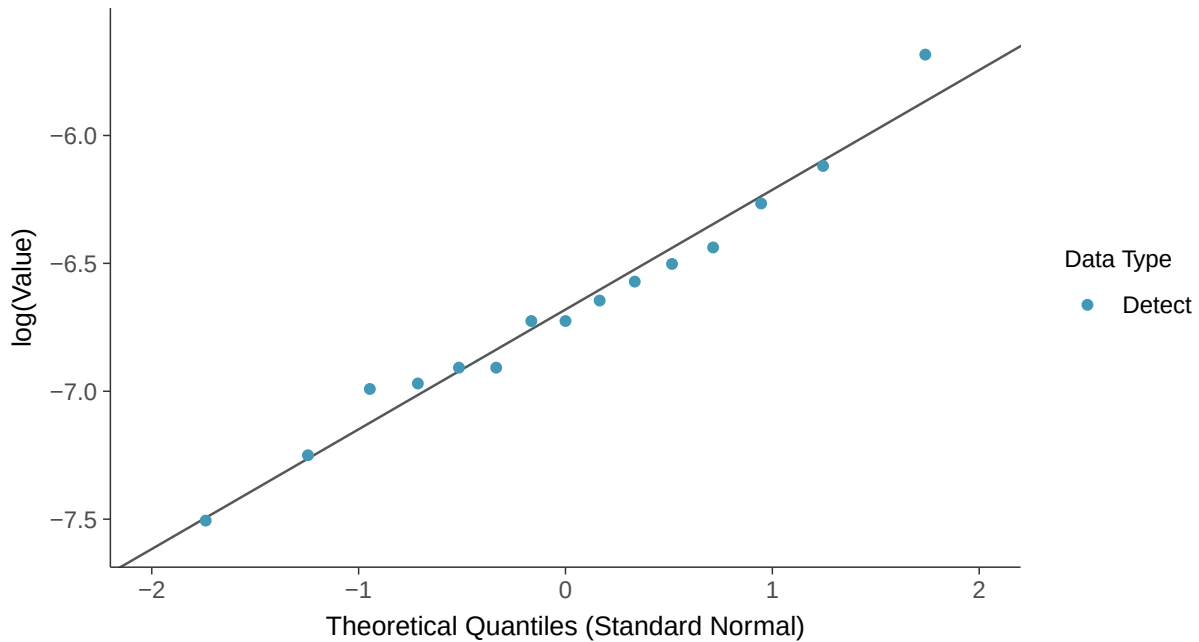
Normal Q-Q plot

Copper, MW-12 (mg/L)



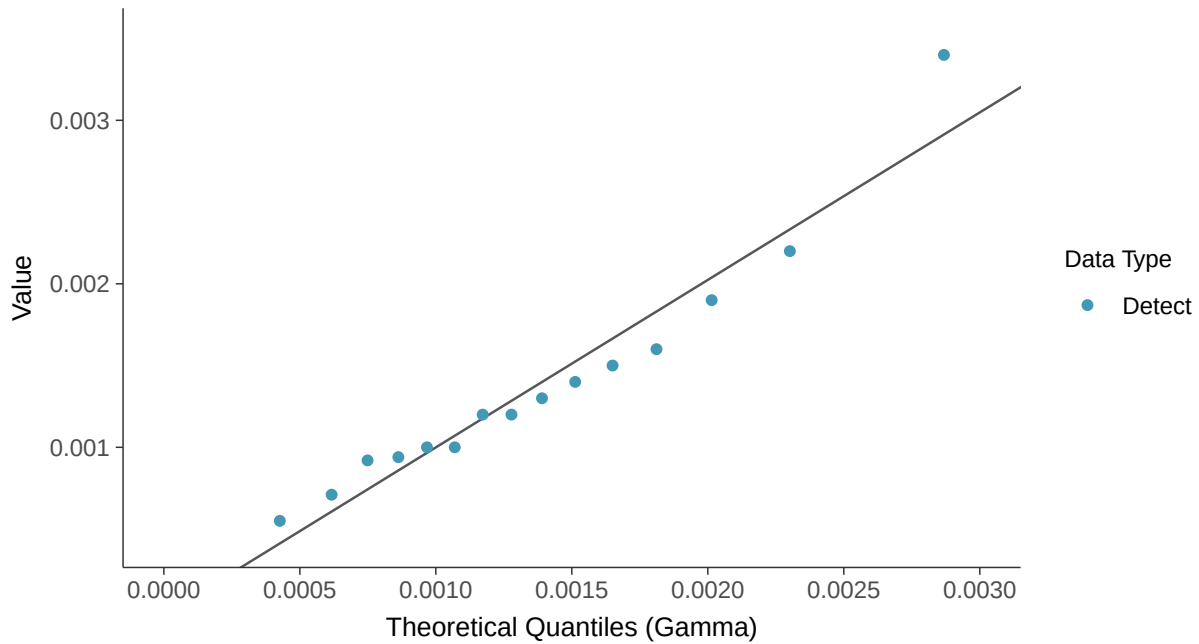
Lognormal Q-Q plot

Copper, MW-12 (mg/L)



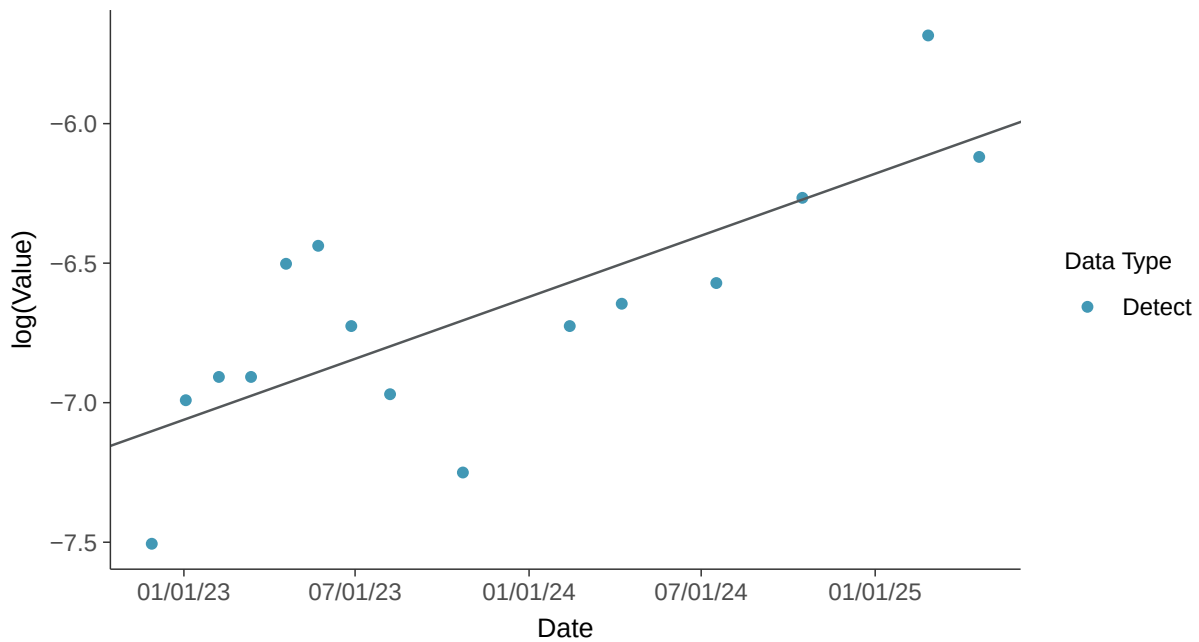
Gamma Q-Q plot

Copper, MW-12 (mg/L)



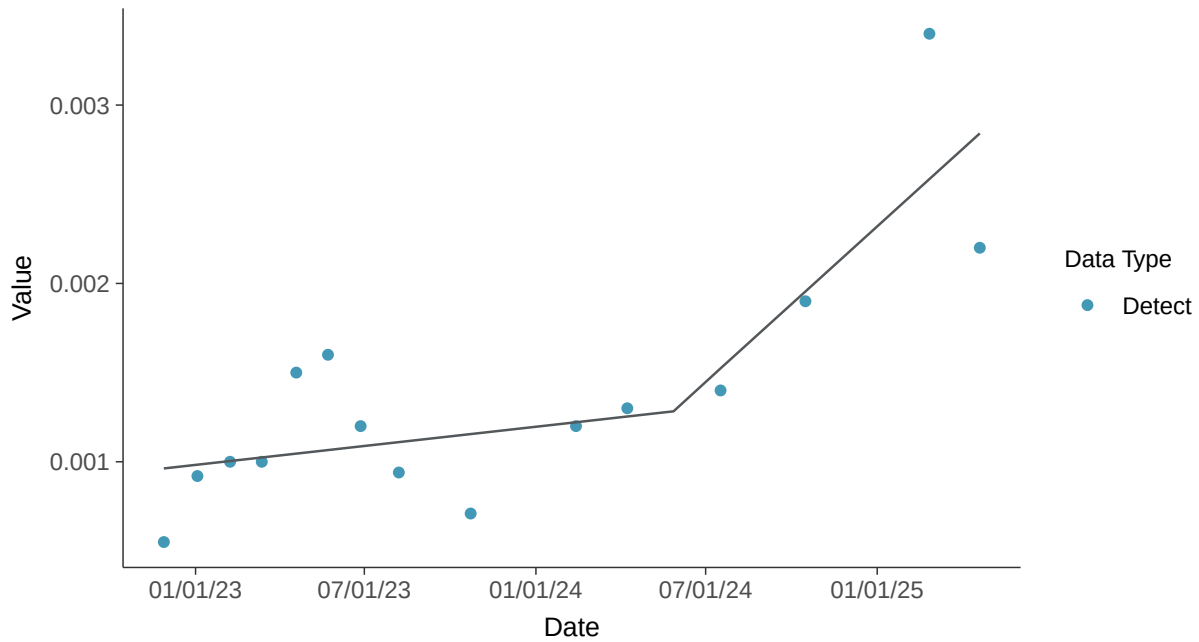
Trend Regression: Lognormal MLE

Copper, MW-12 (mg/L)



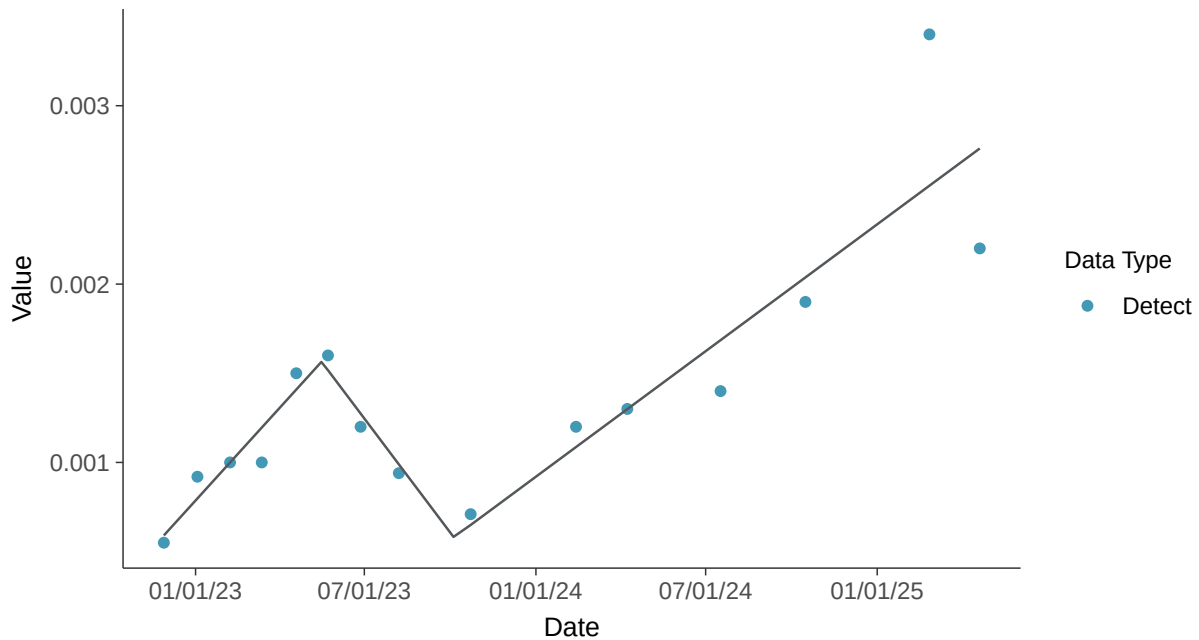
Trend Regression: Piecewise Linear-Linear

Copper, MW-12 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Copper, MW-12 (mg/L)

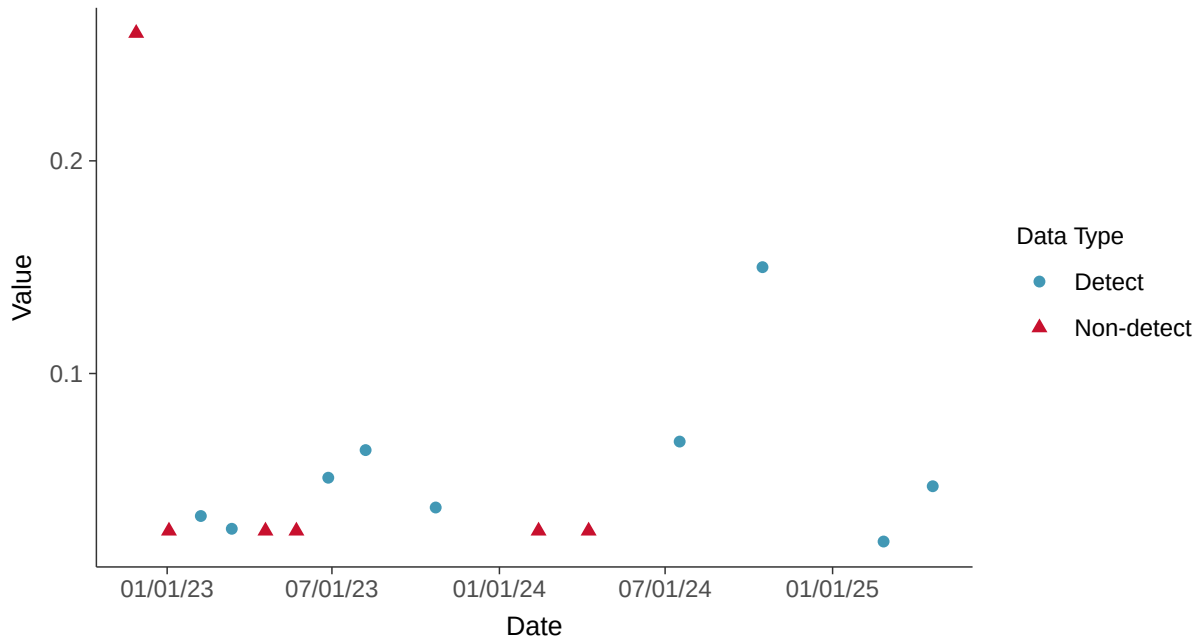


Part 115: Iron, MW-12

ID: 22_2_5_114

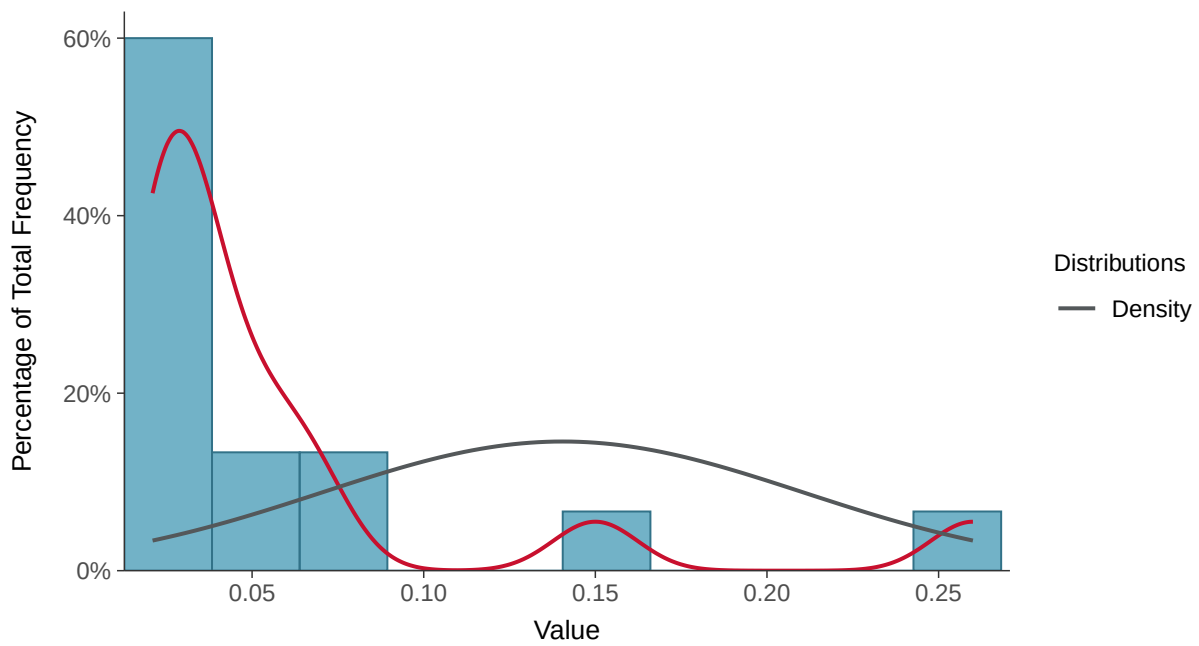
Scatter Plot

Iron, MW-12 (mg/L)



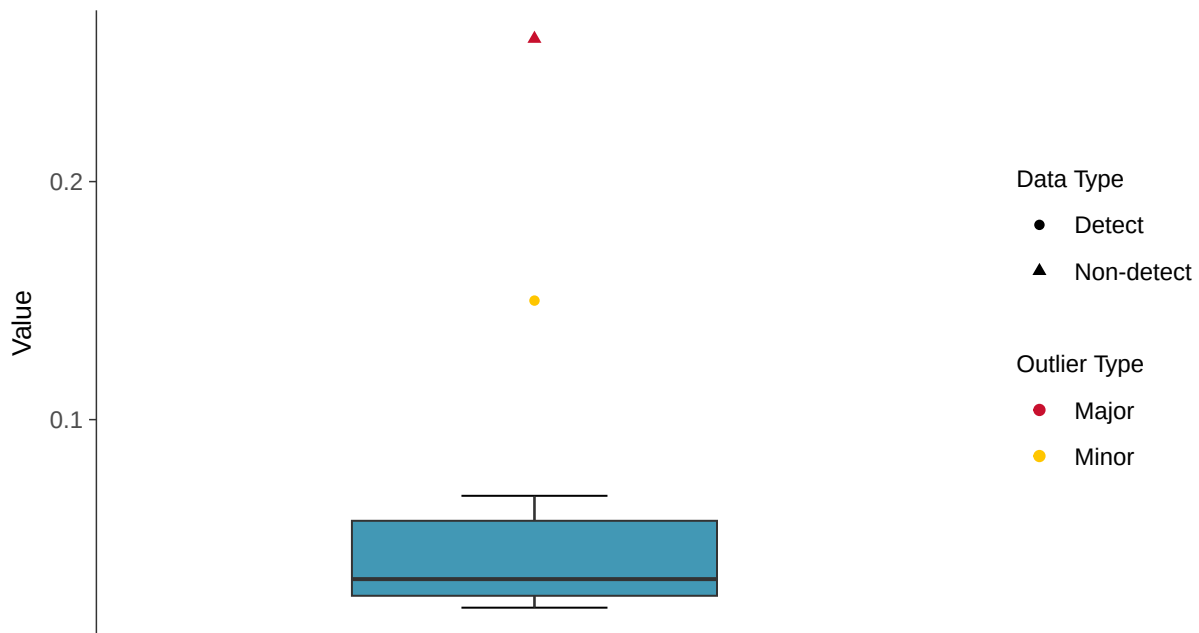
Histogram

Iron, MW-12 (mg/L)



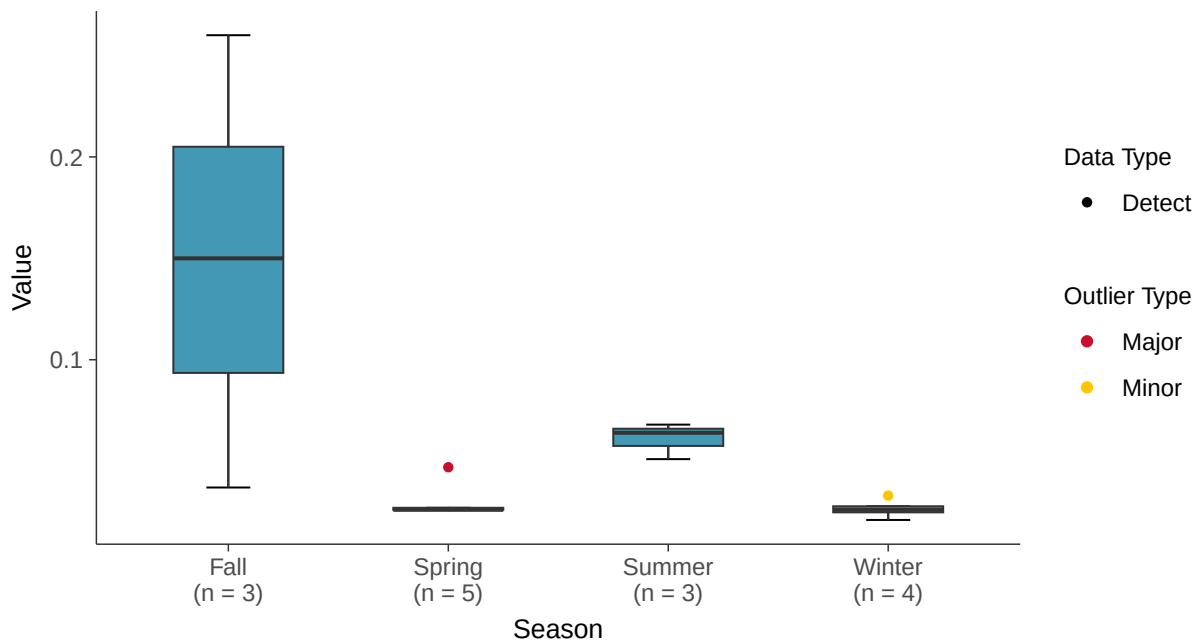
Boxplot

Iron, MW-12 (mg/L)



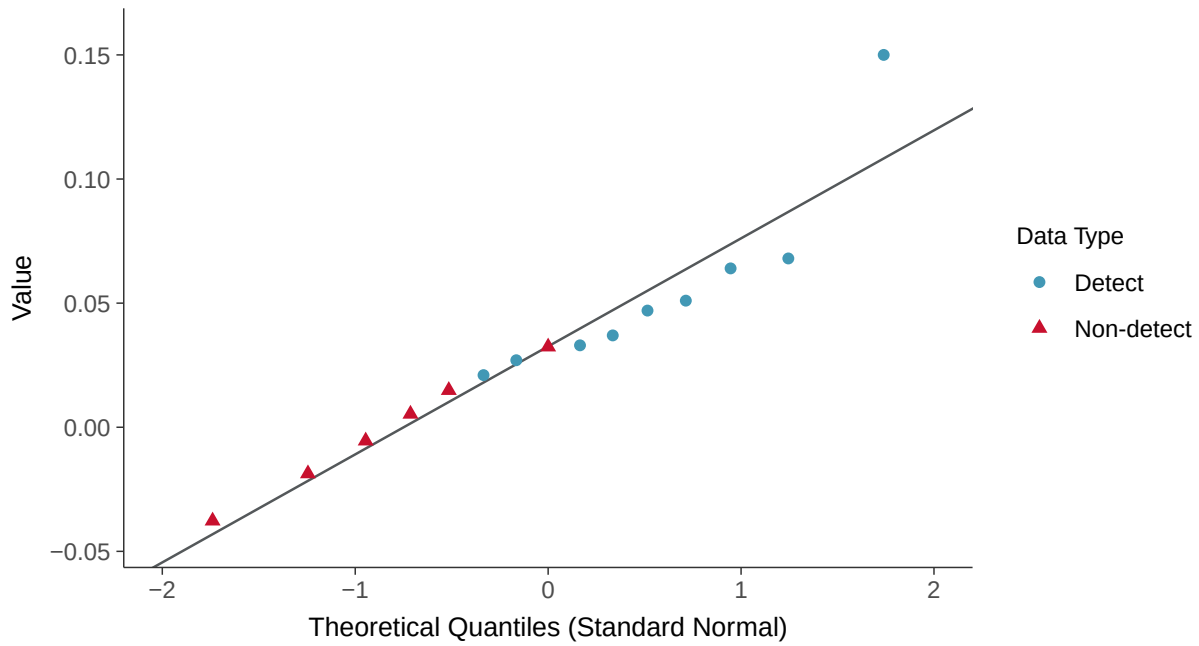
Boxplot by Season

Iron, MW-12 (mg/L)



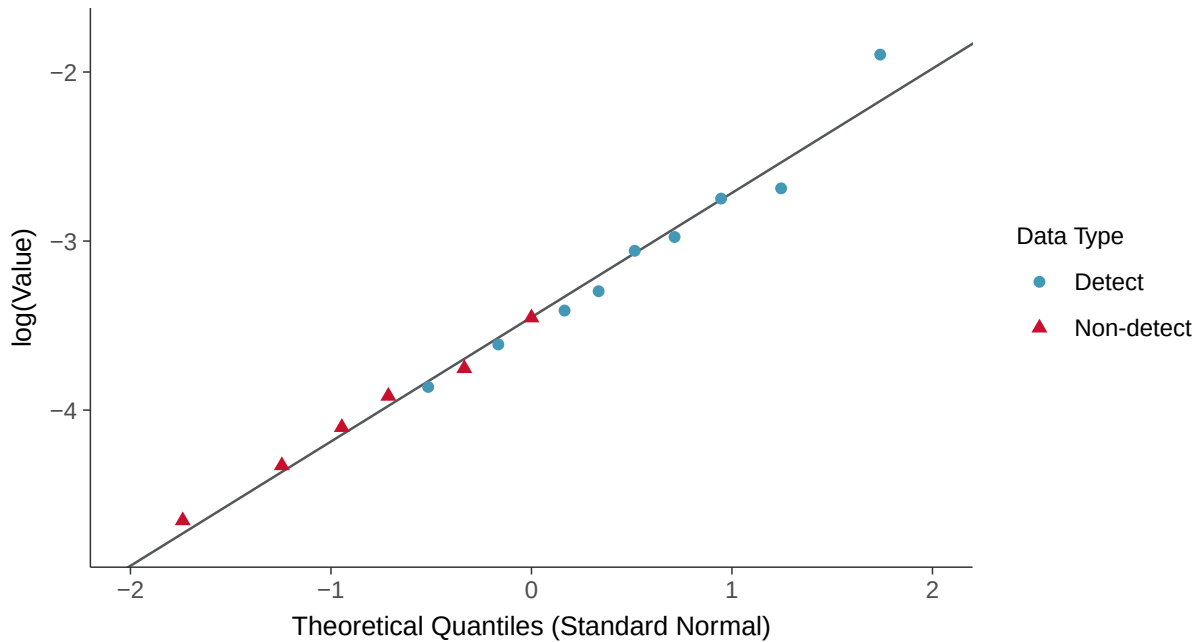
Normal Q-Q plot using ROS Imputed Estimates

Iron, MW-12 (mg/L)



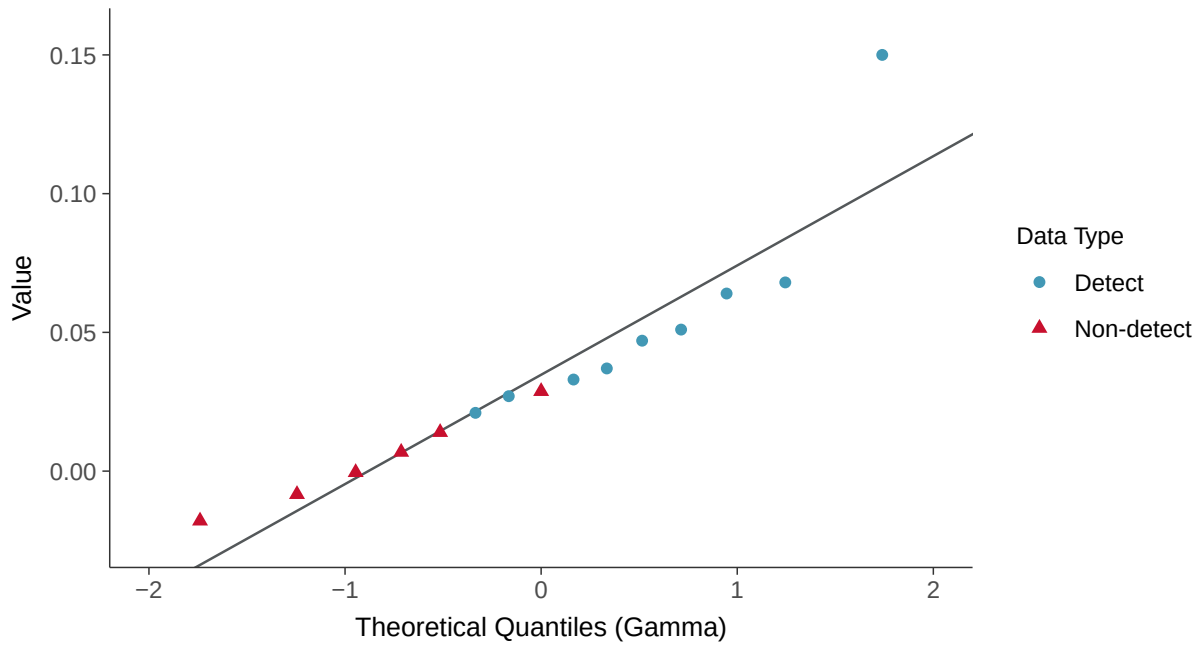
Lognormal Q-Q plot using ROS Imputed Estimates

Iron, MW-12 (mg/L)



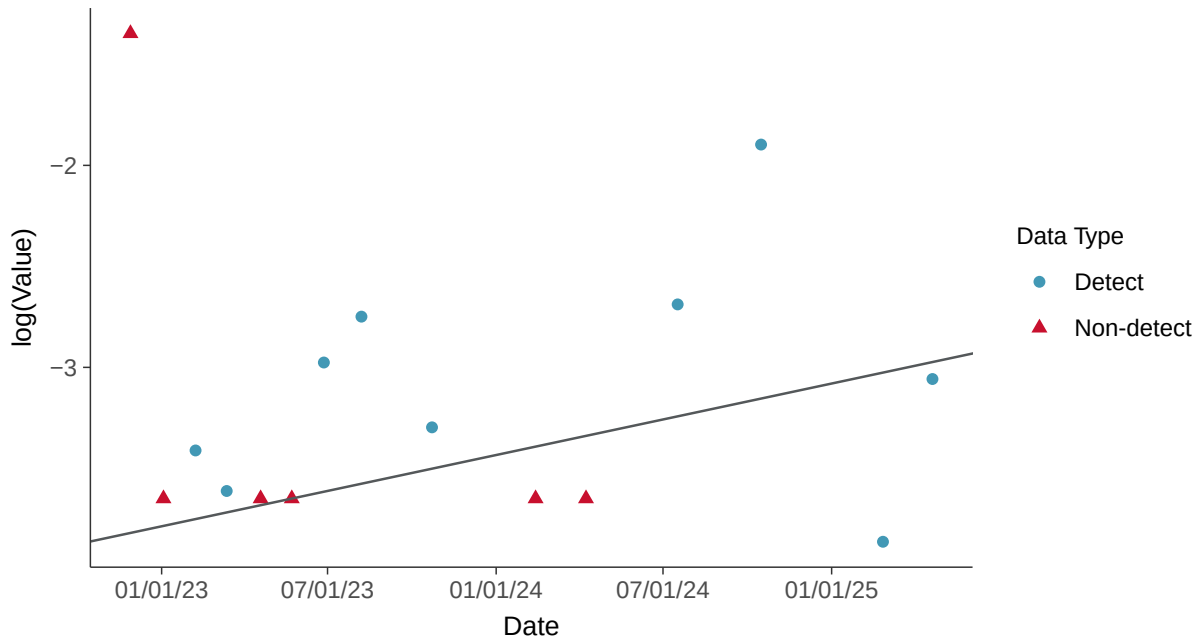
Gamma Q-Q plot using ROS Imputed Estimates

Iron, MW-12 (mg/L)



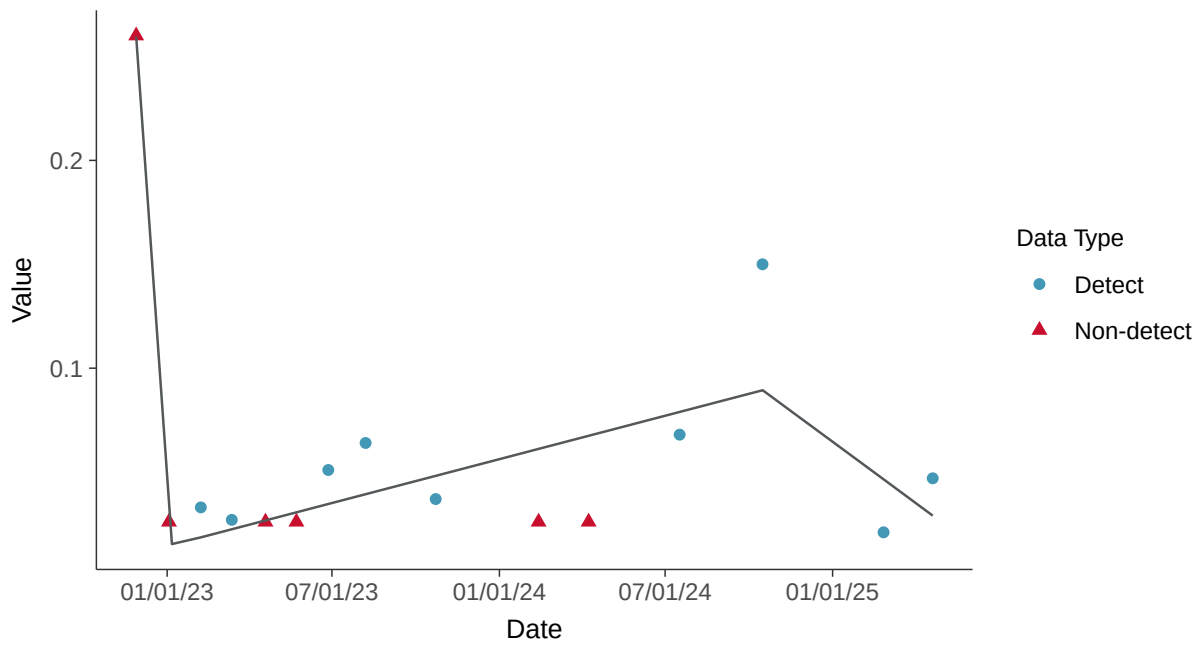
Trend Regression: Lognormal MLE

Iron, MW-12 (mg/L)



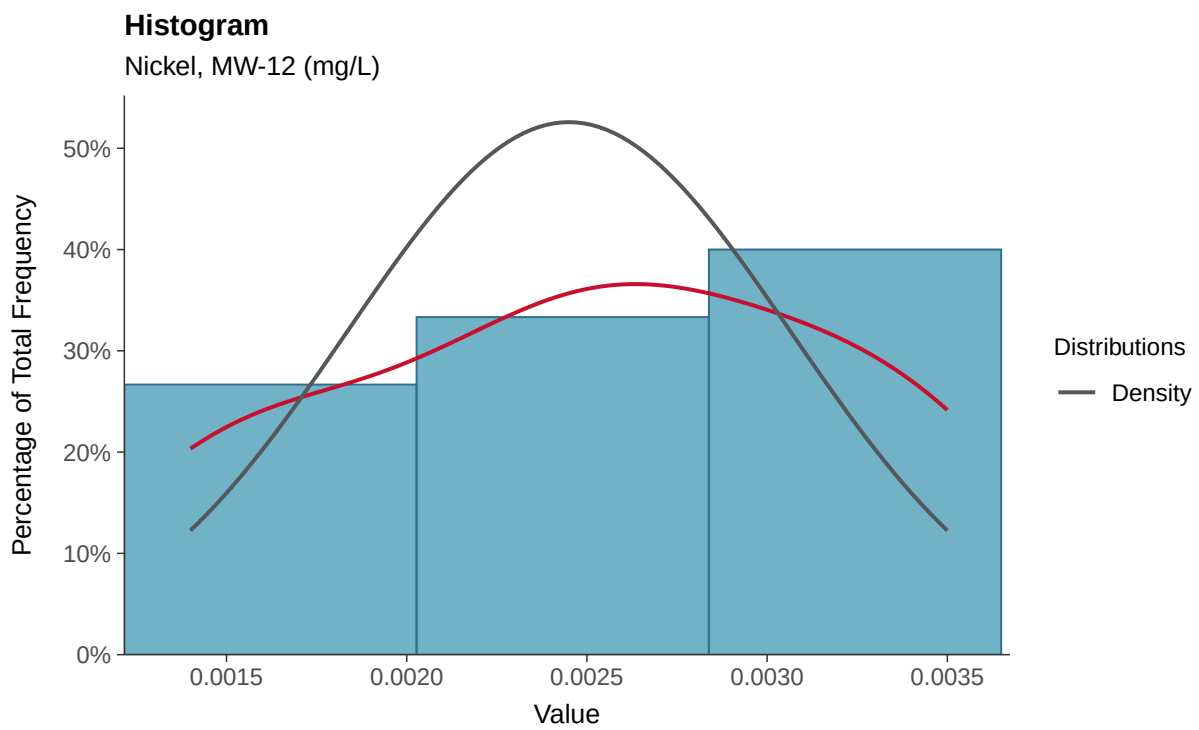
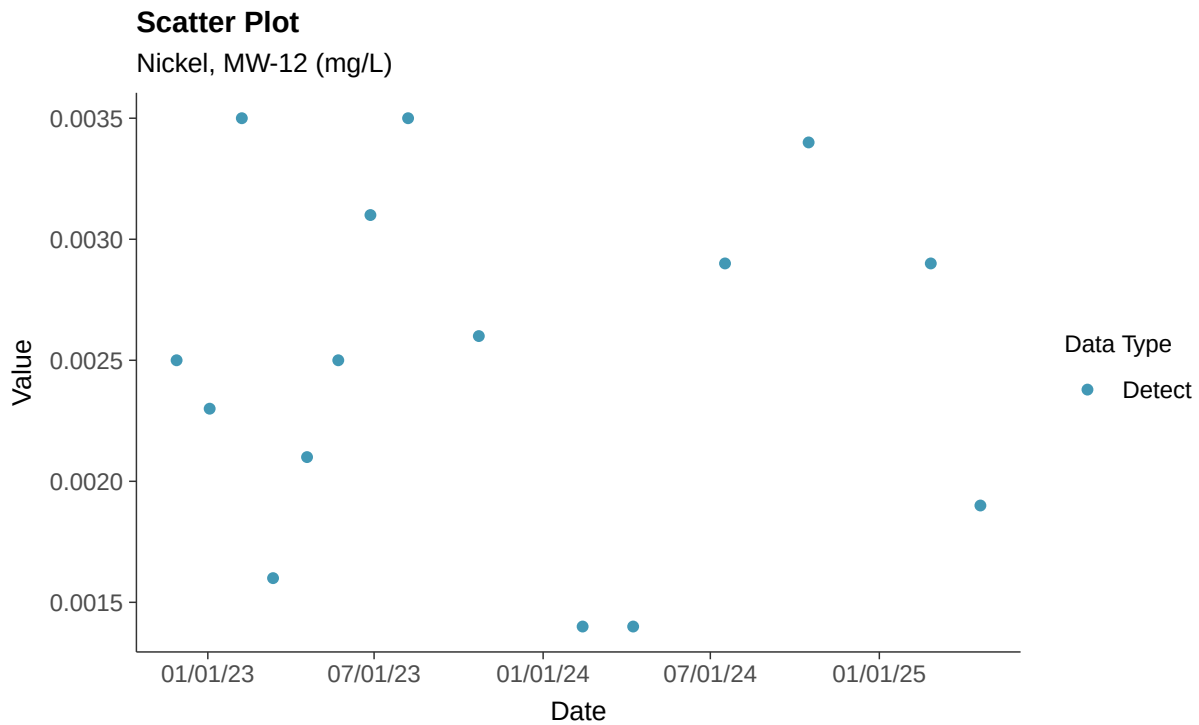
Trend Regression: Piecewise Linear-Linear-Linear

Iron, MW-12 (mg/L)



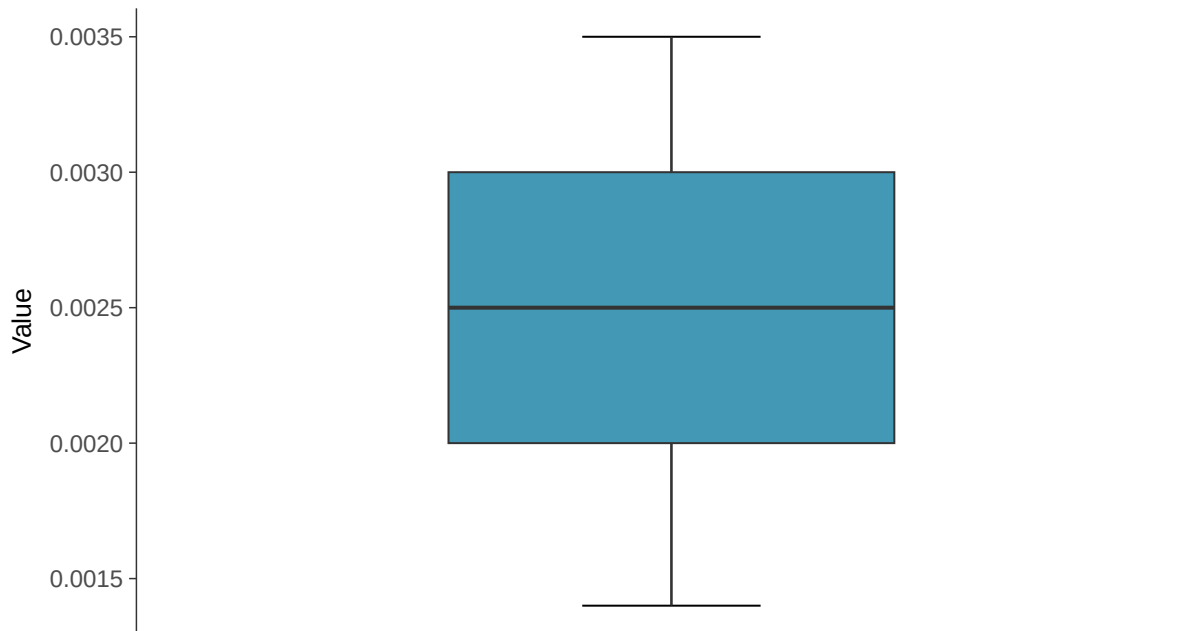
Part 115: Nickel, MW-12

ID: 22_2_5_119



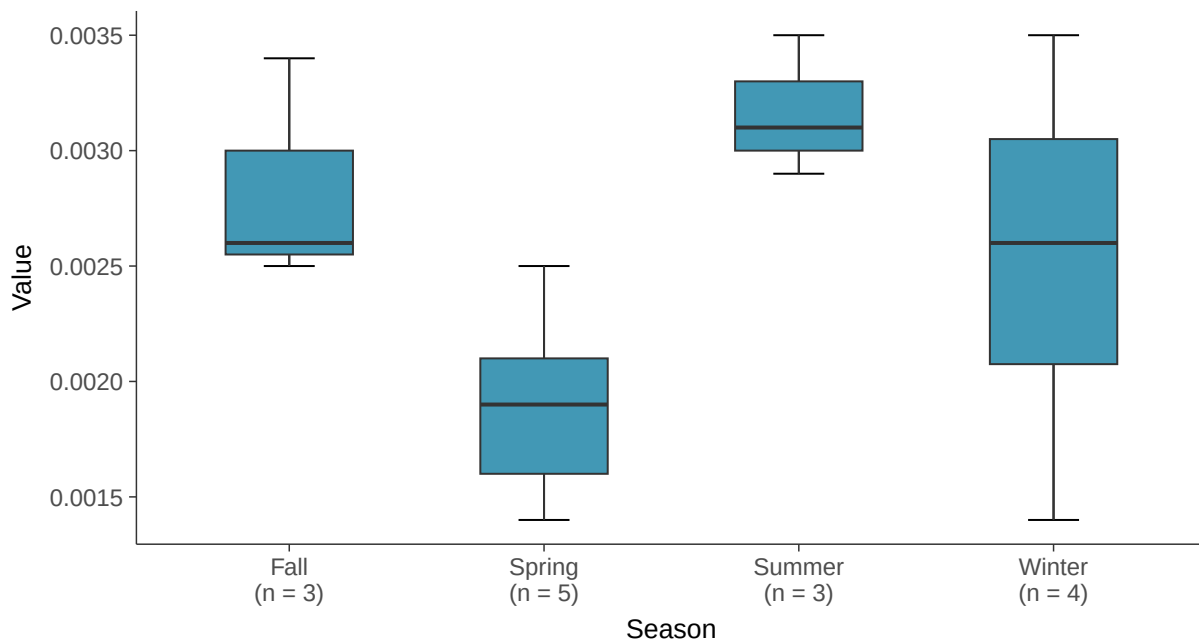
Boxplot

Nickel, MW-12 (mg/L)



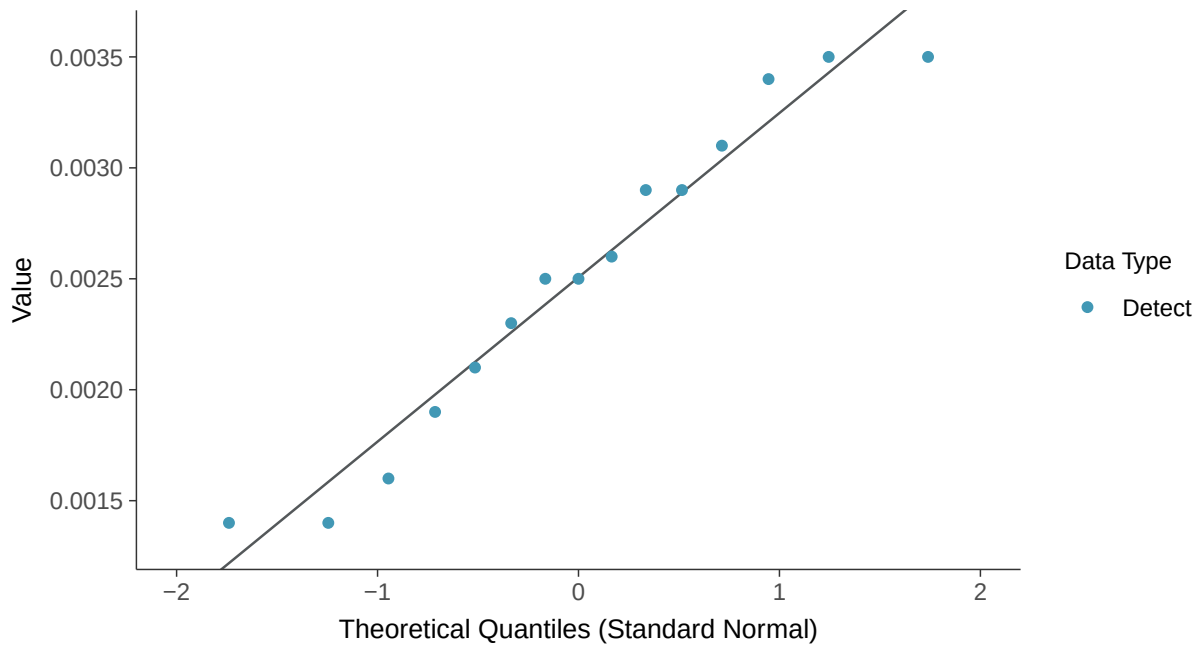
Boxplot by Season

Nickel, MW-12 (mg/L)



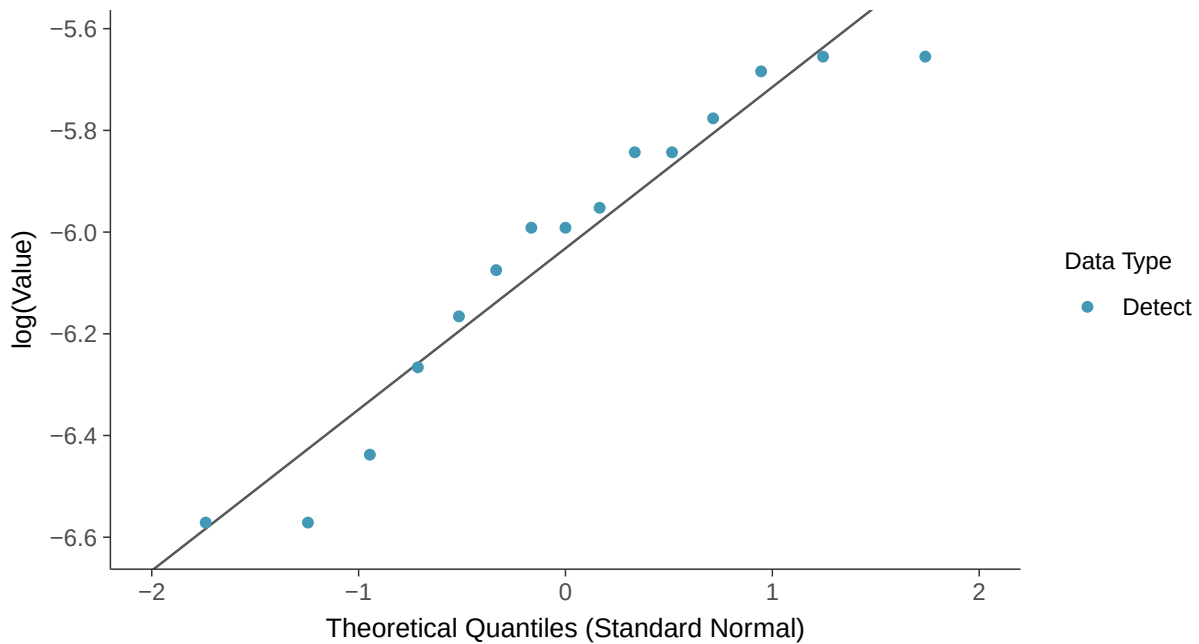
Normal Q-Q plot

Nickel, MW-12 (mg/L)



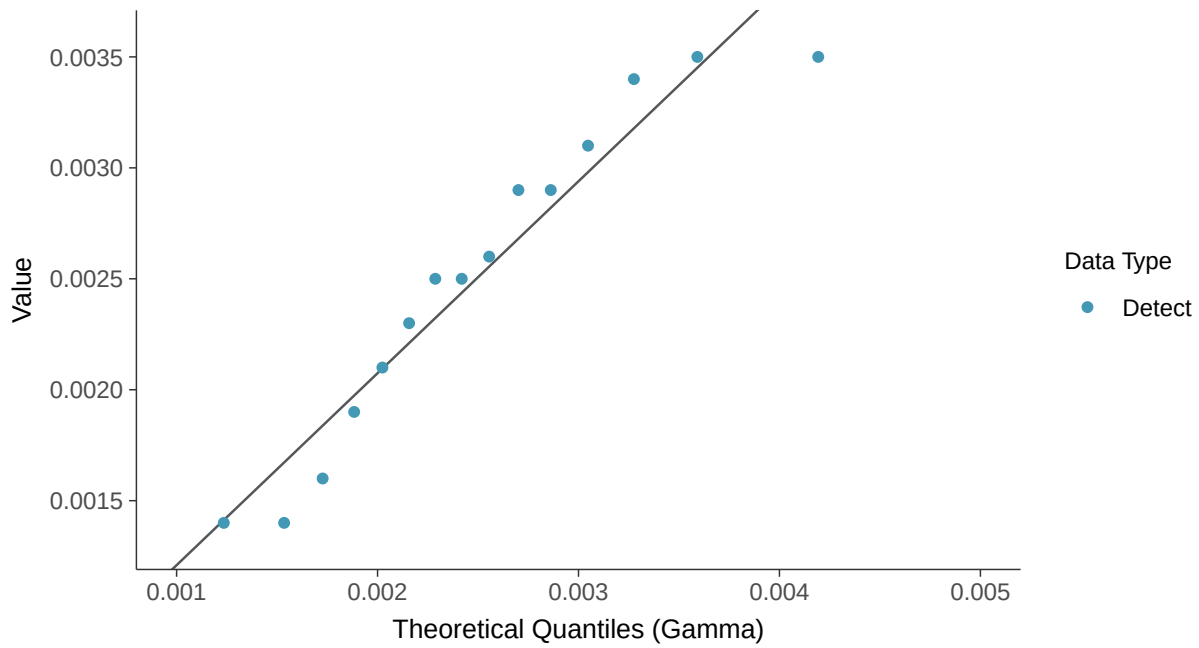
Lognormal Q-Q plot

Nickel, MW-12 (mg/L)



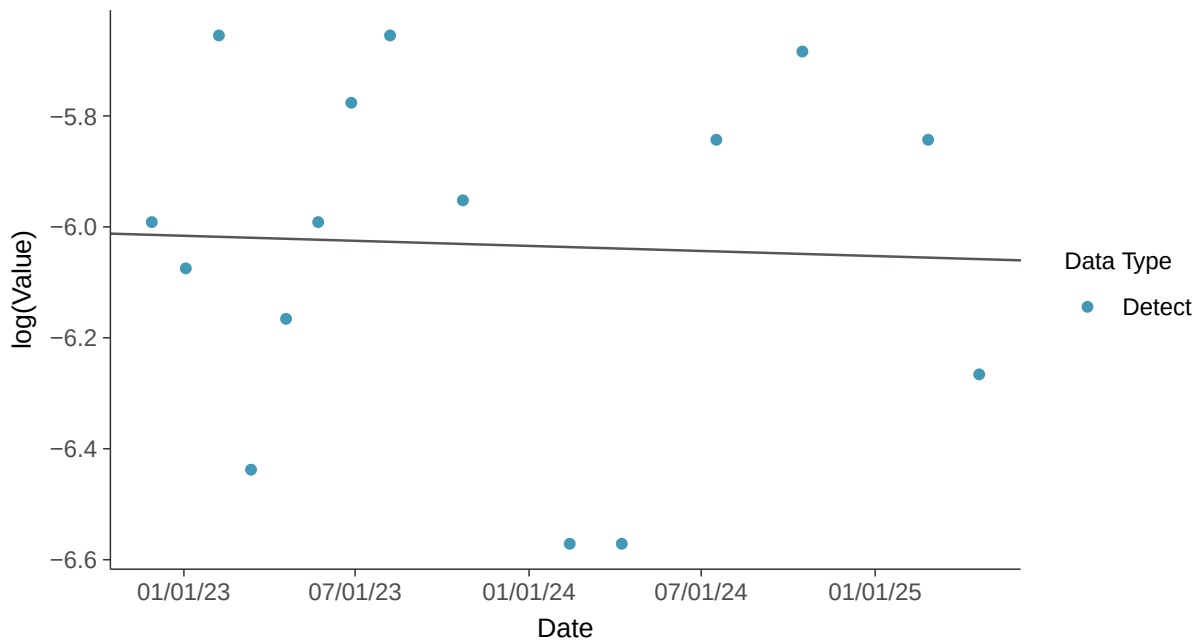
Gamma Q-Q plot

Nickel, MW-12 (mg/L)



Trend Regression: Lognormal MLE

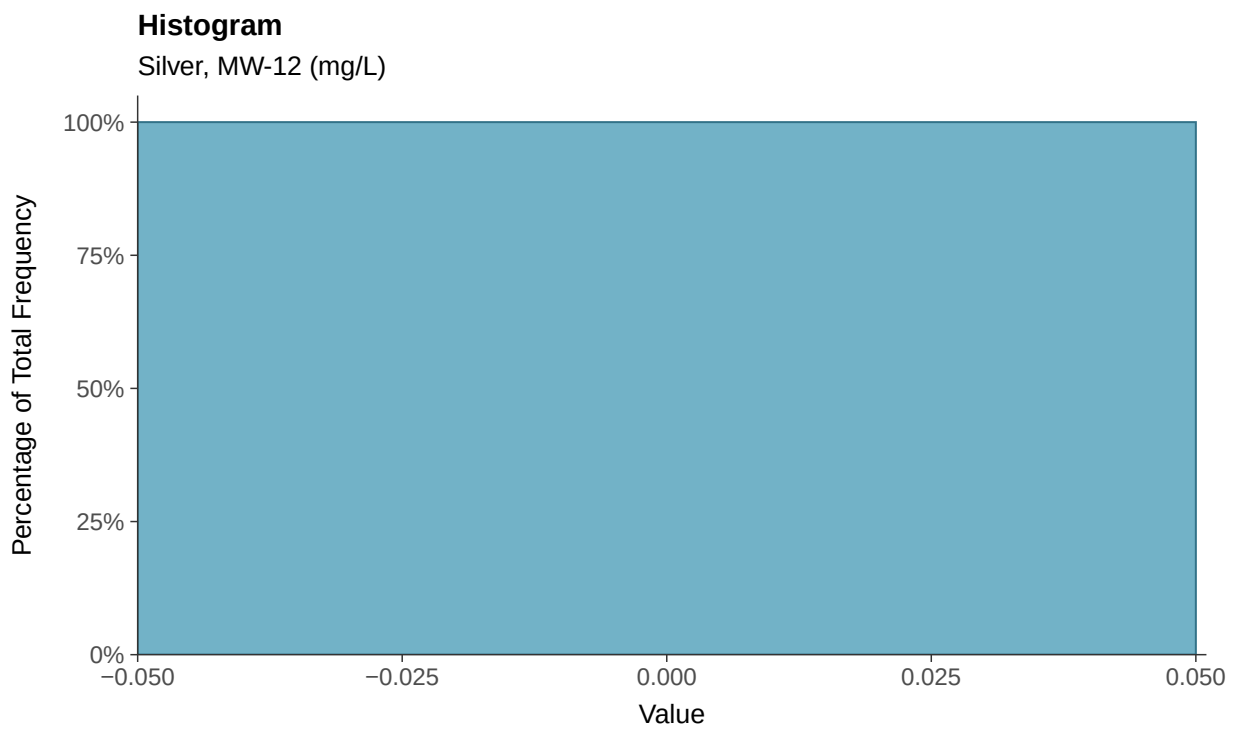
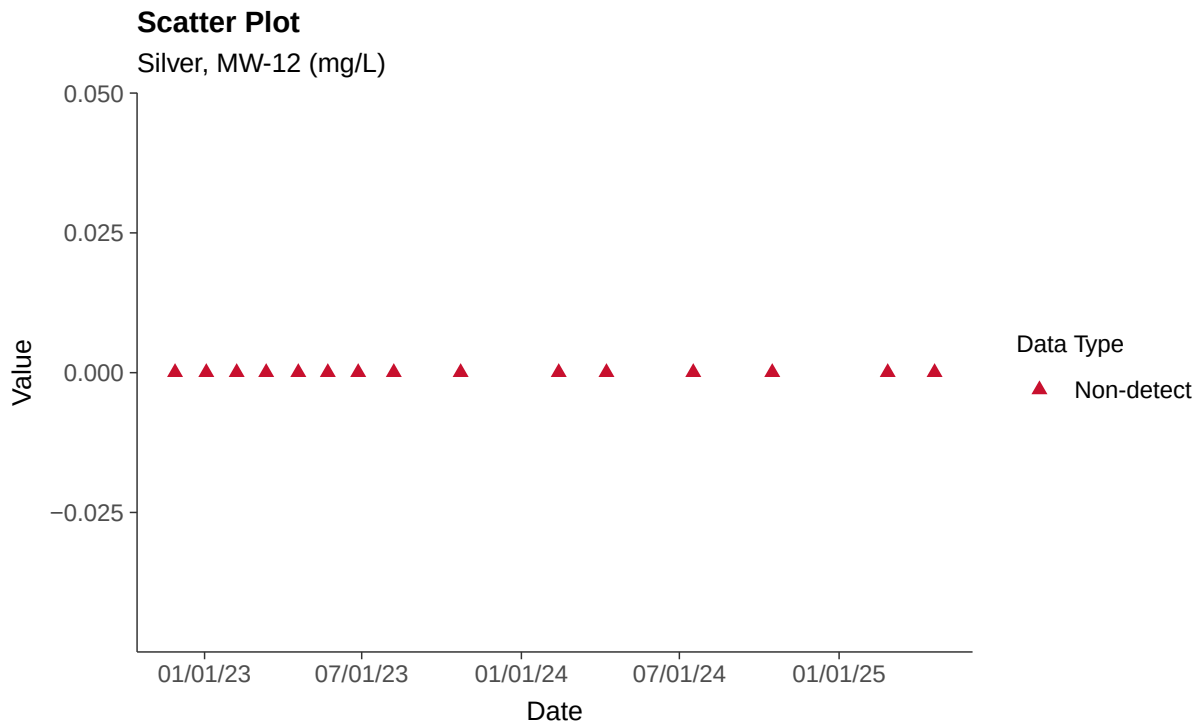
Nickel, MW-12 (mg/L)





Part 115: Silver, MW-12

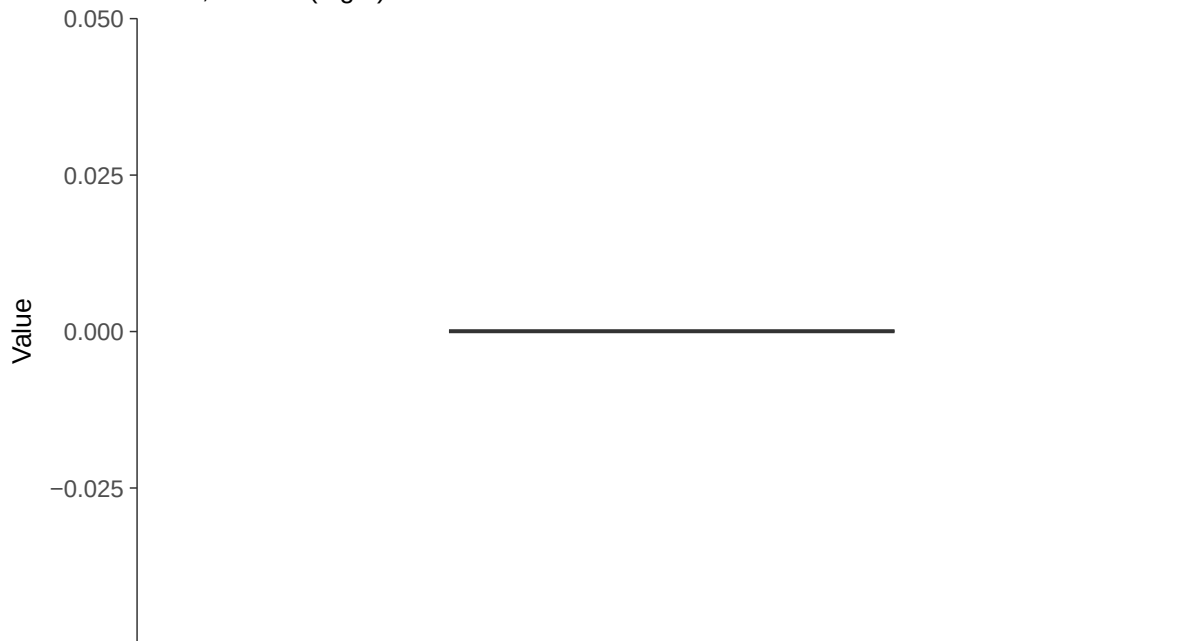
ID: 22_2_5_123





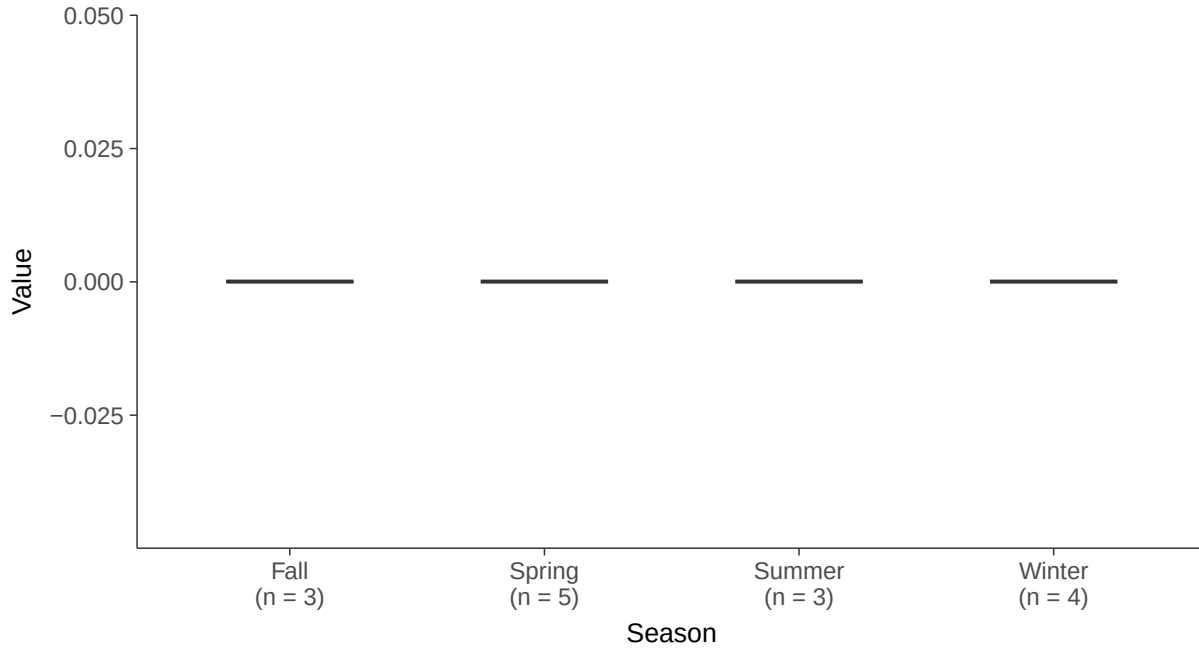
Boxplot

Silver, MW-12 (mg/L)



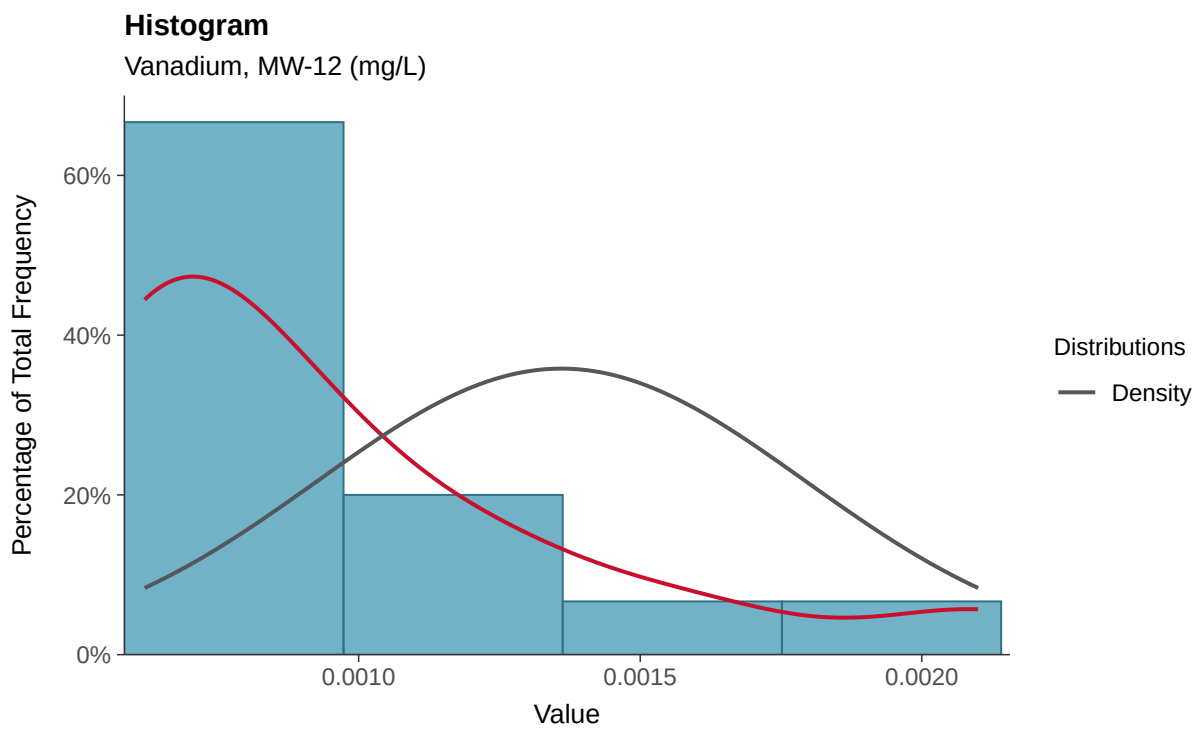
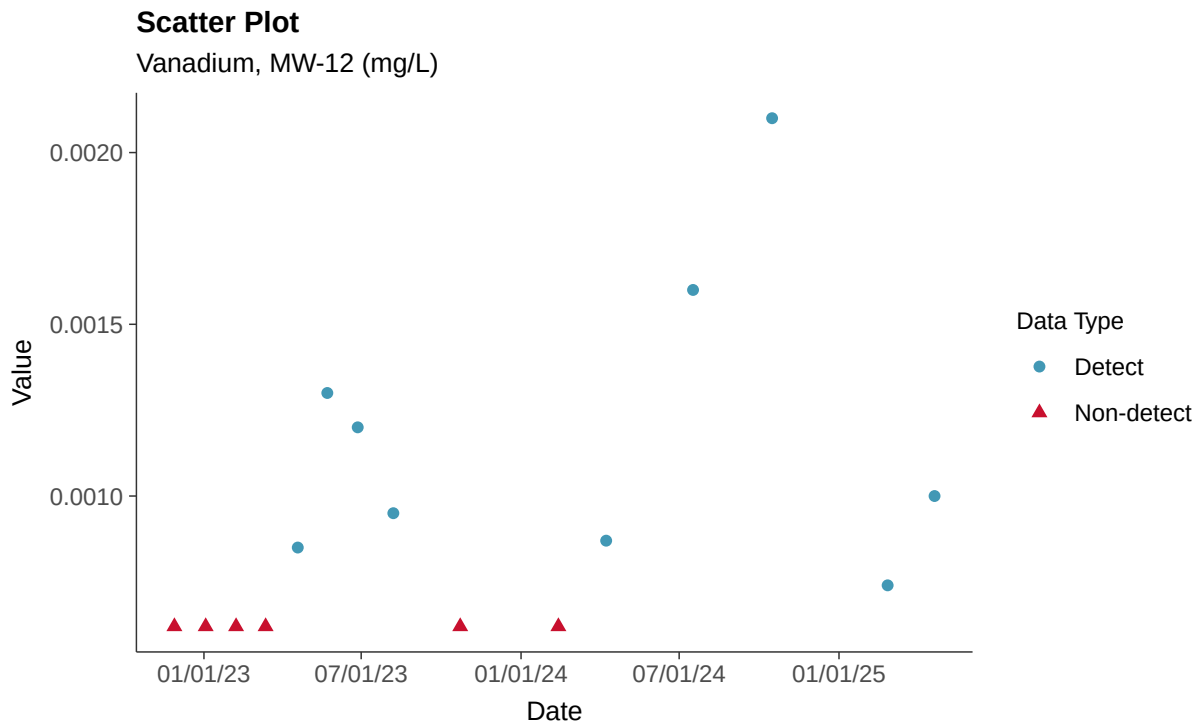
Boxplot by Season

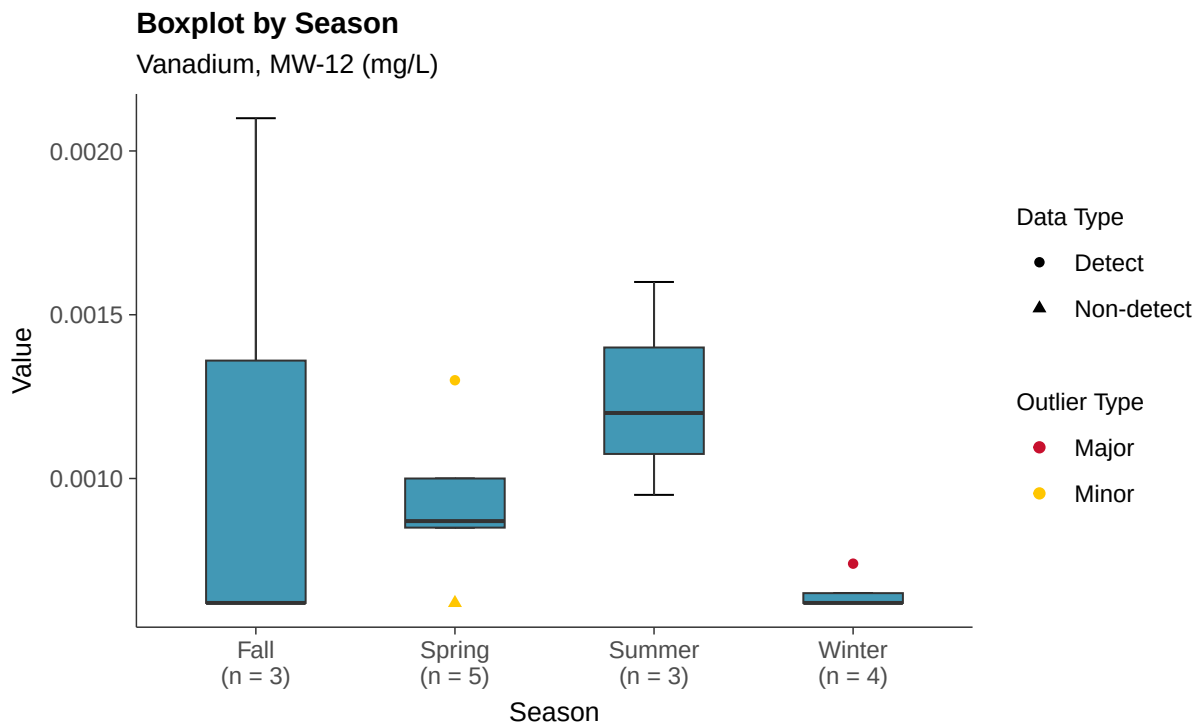
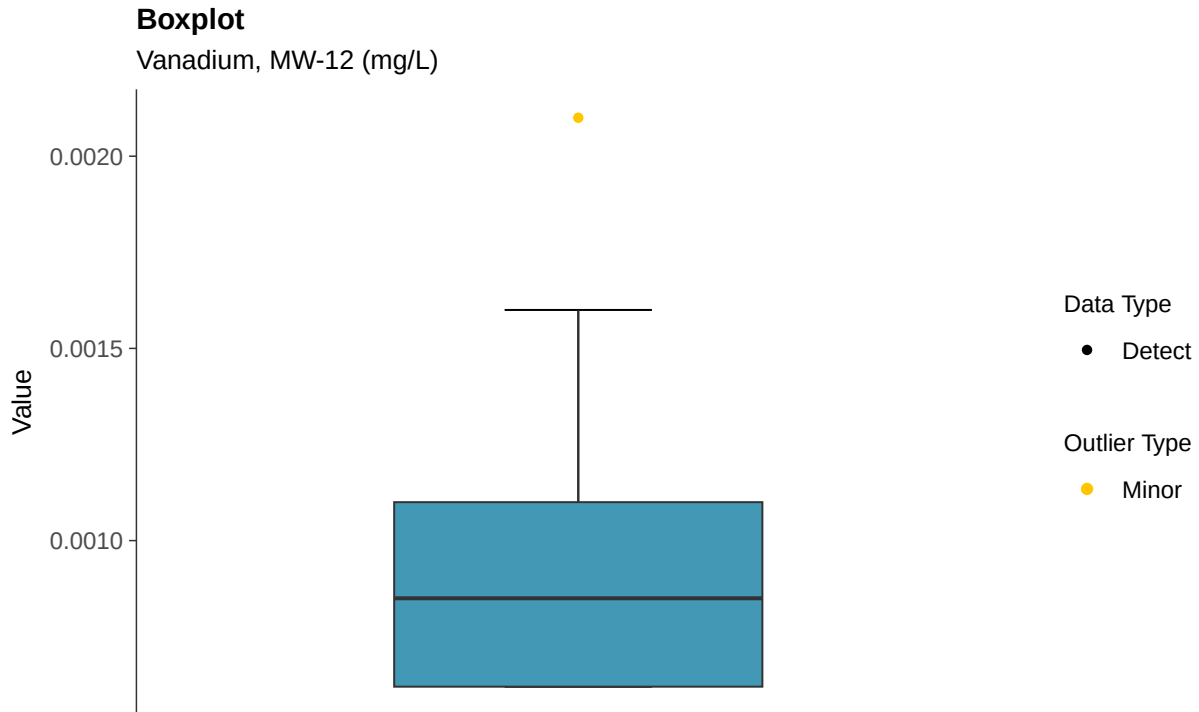
Silver, MW-12 (mg/L)



Part 115: Vanadium, MW-12

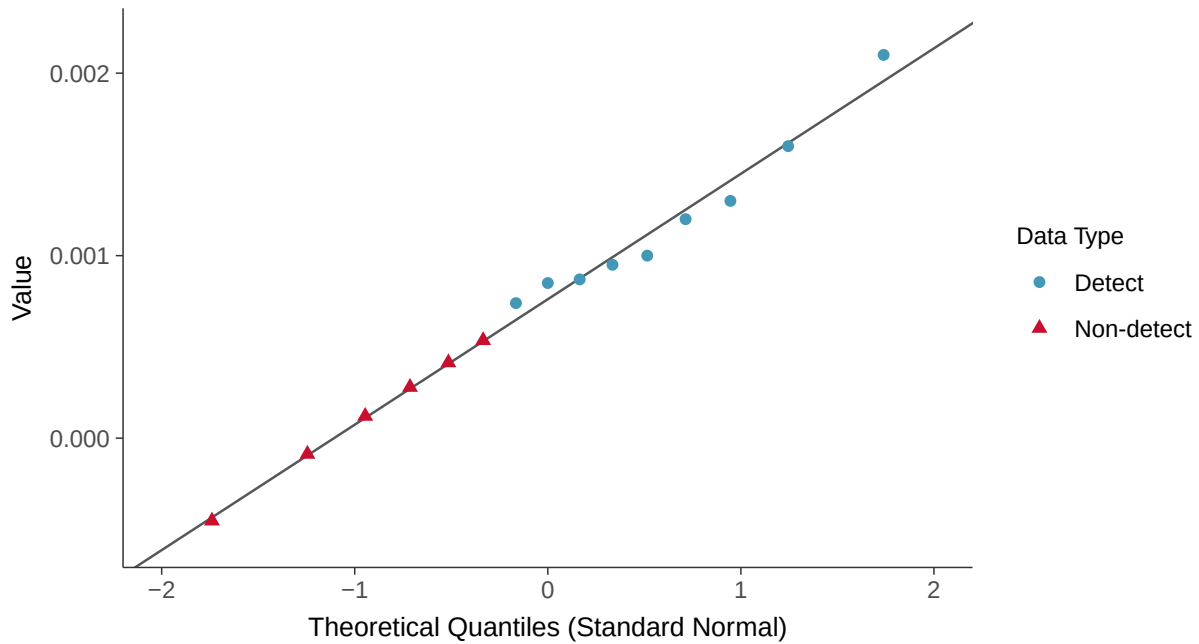
ID: 22_2_5_128





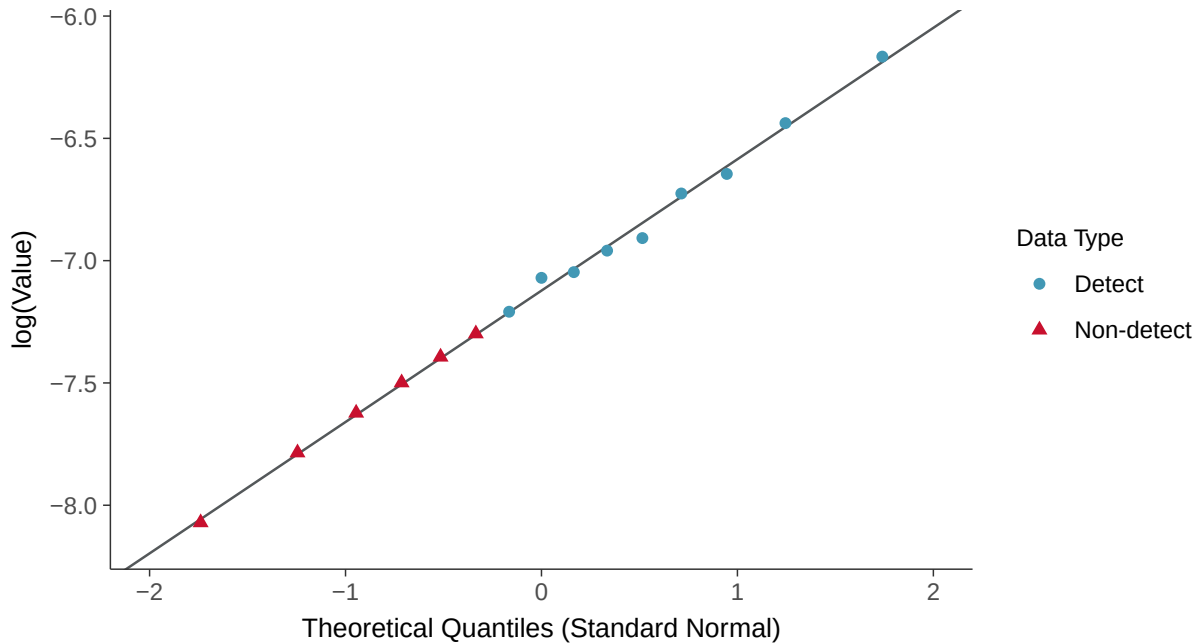
Normal Q-Q plot using ROS Imputed Estimates

Vanadium, MW-12 (mg/L)



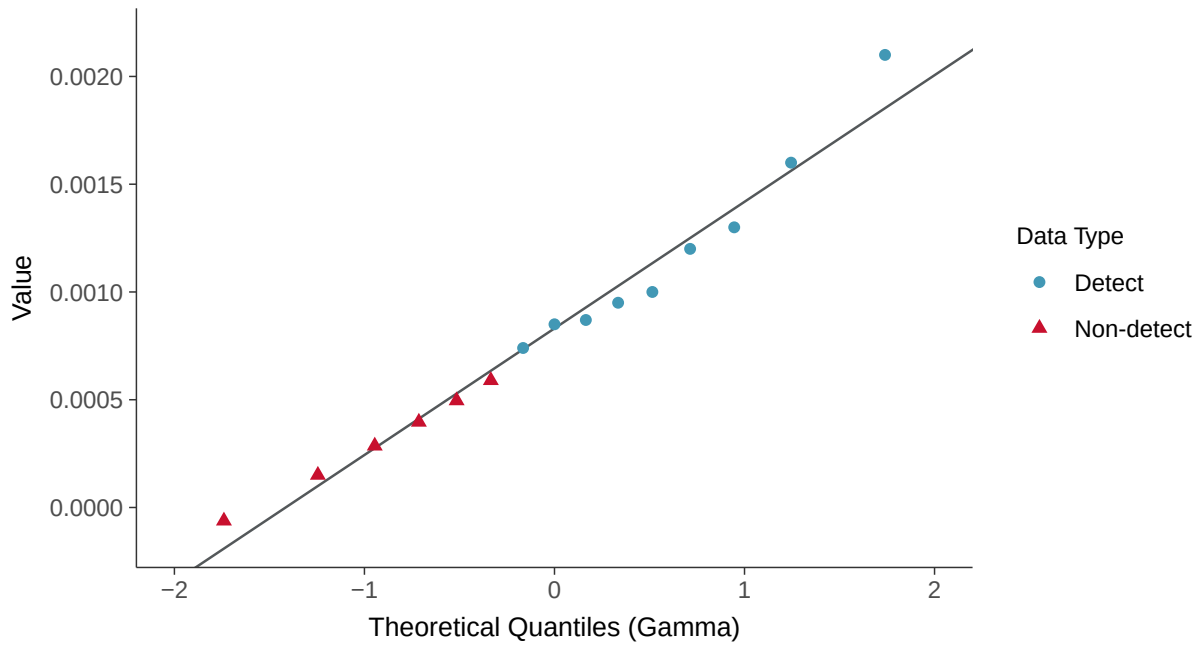
Lognormal Q-Q plot using ROS Imputed Estimates

Vanadium, MW-12 (mg/L)



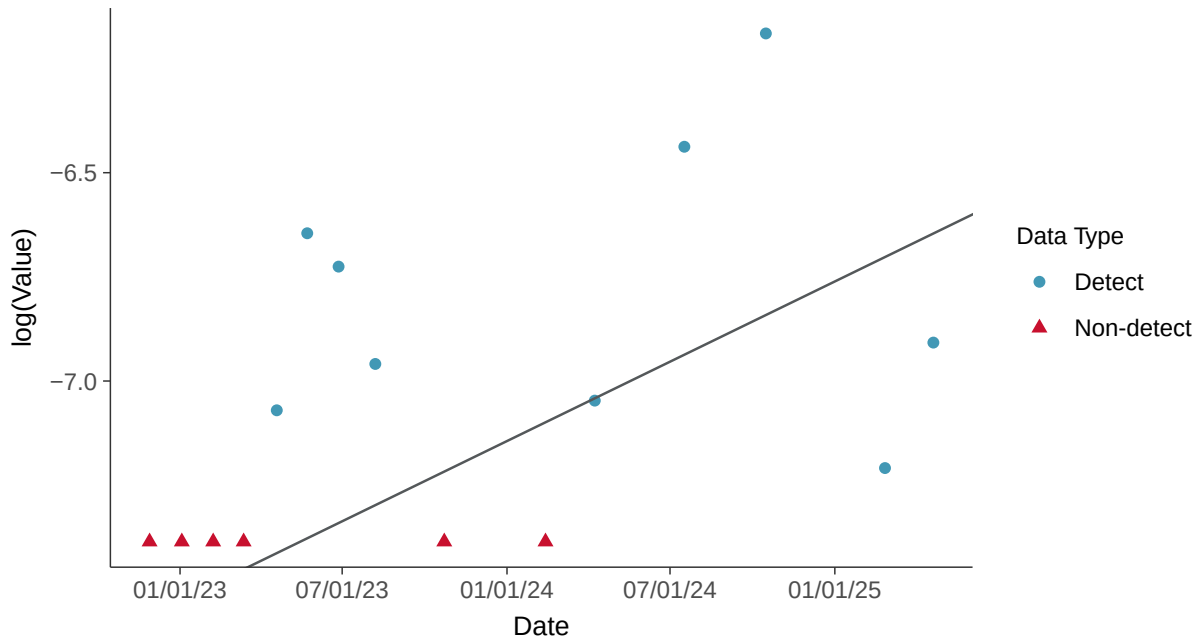
Gamma Q-Q plot using ROS Imputed Estimates

Vanadium, MW-12 (mg/L)



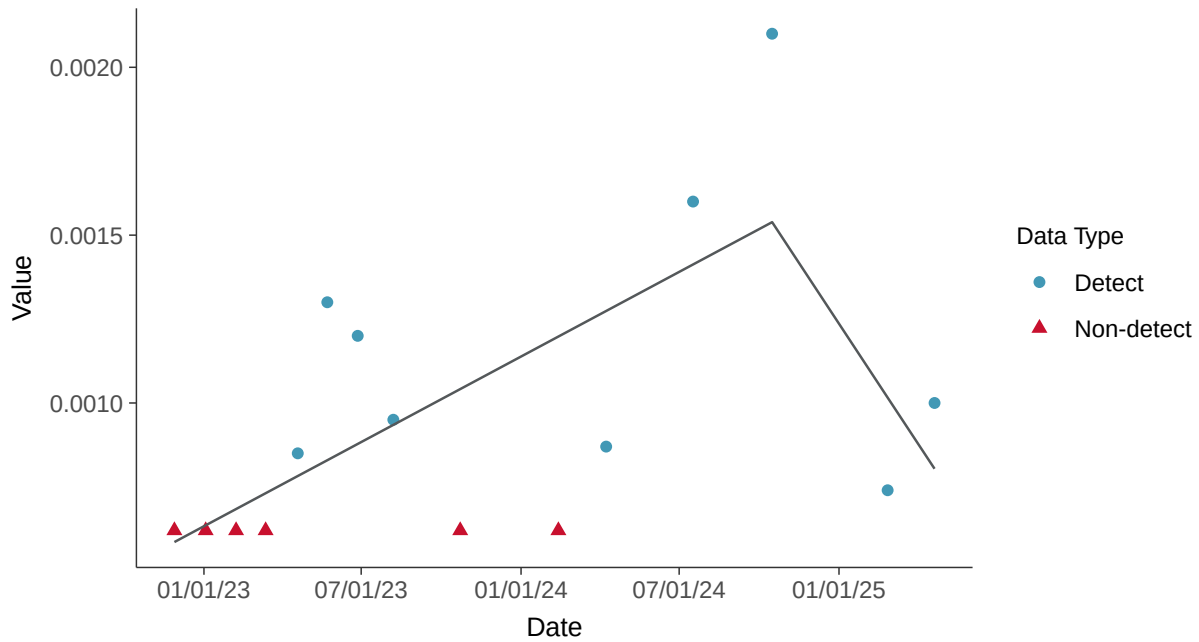
Trend Regression: Lognormal MLE

Vanadium, MW-12 (mg/L)



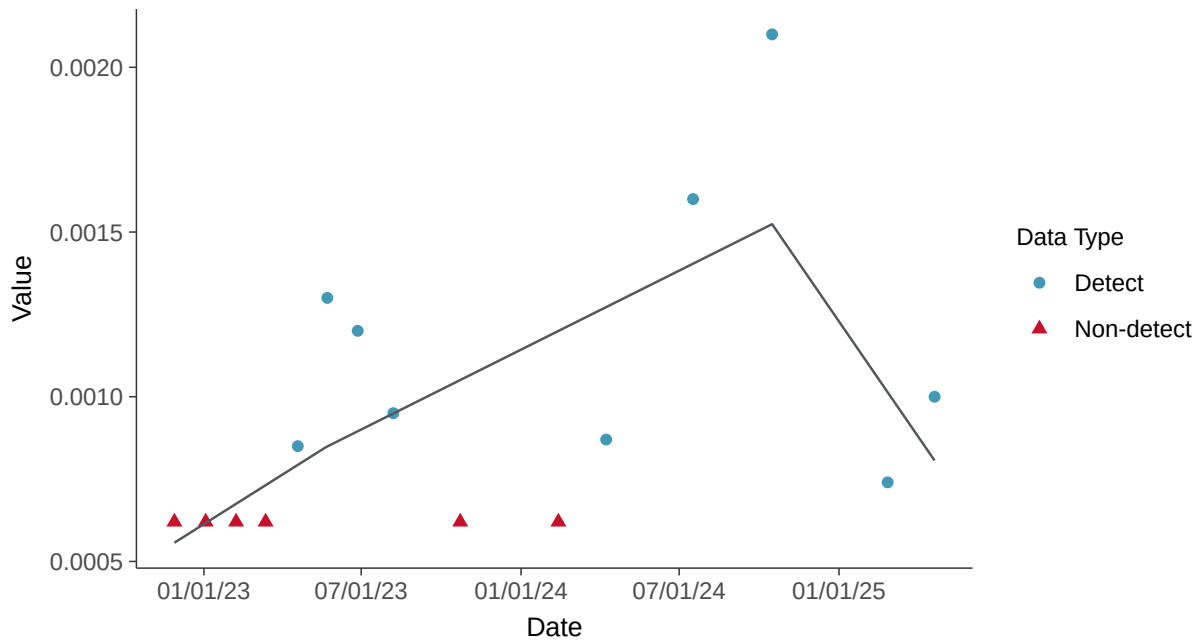
Trend Regression: Piecewise Linear-Linear

Vanadium, MW-12 (mg/L)



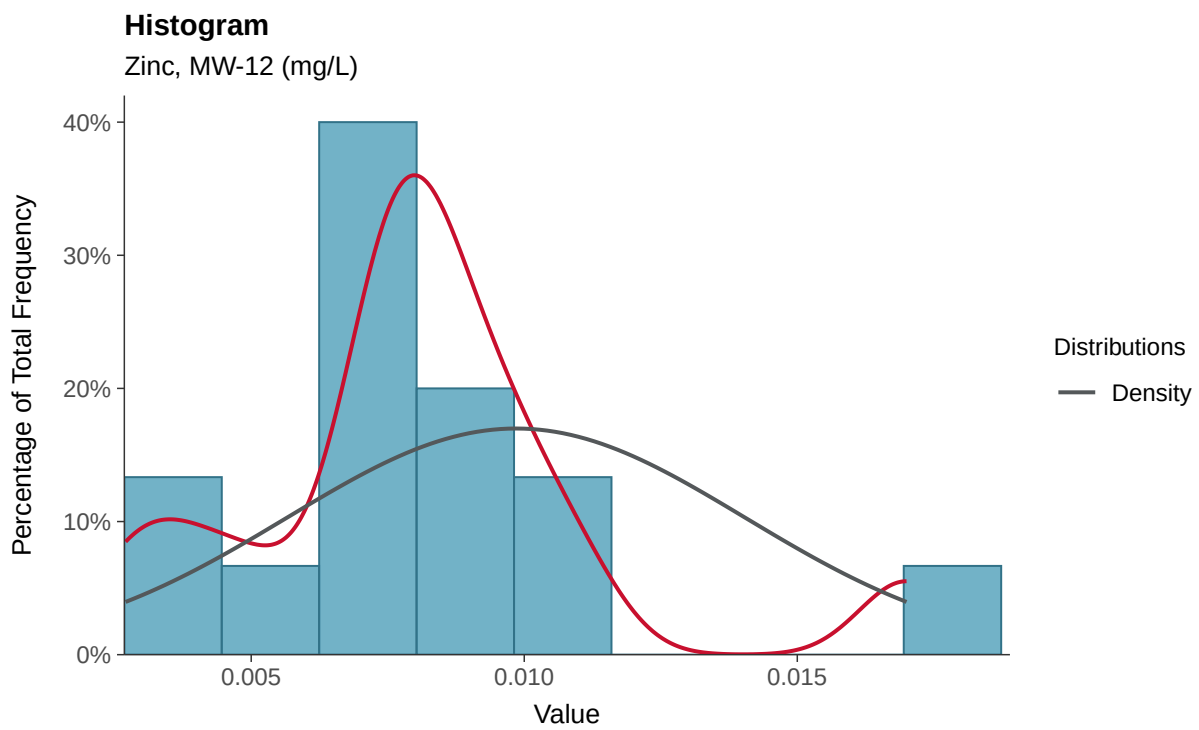
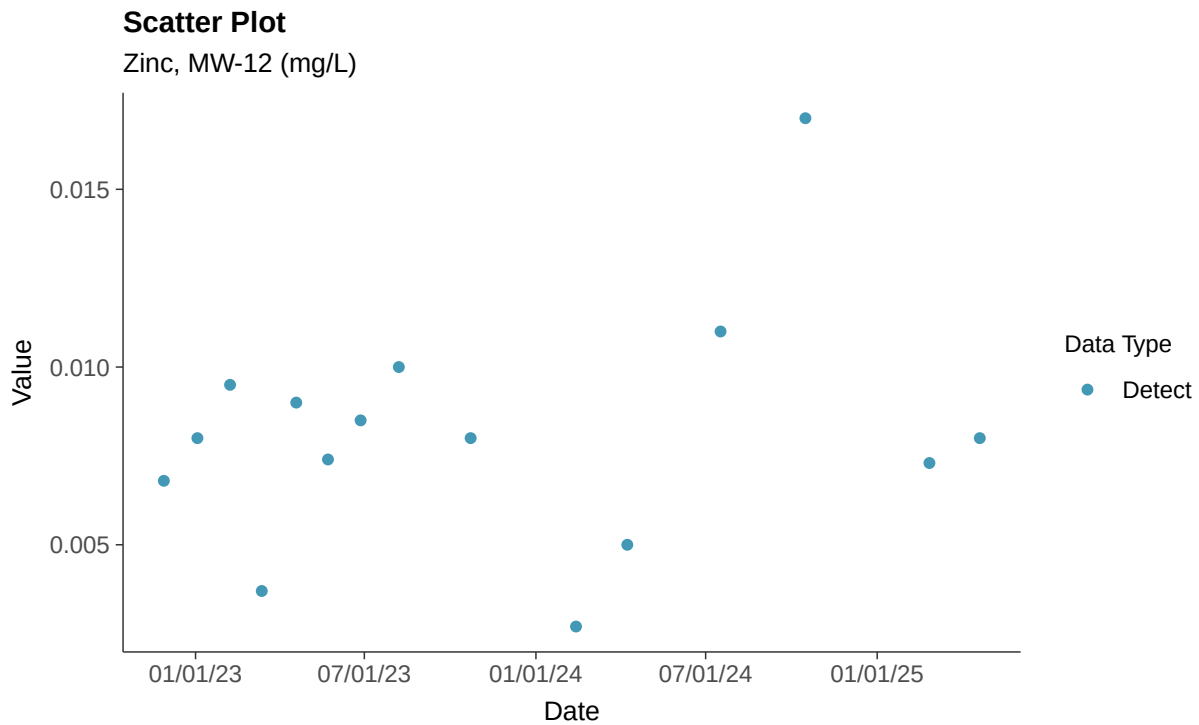
Trend Regression: Piecewise Linear-Linear-Linear

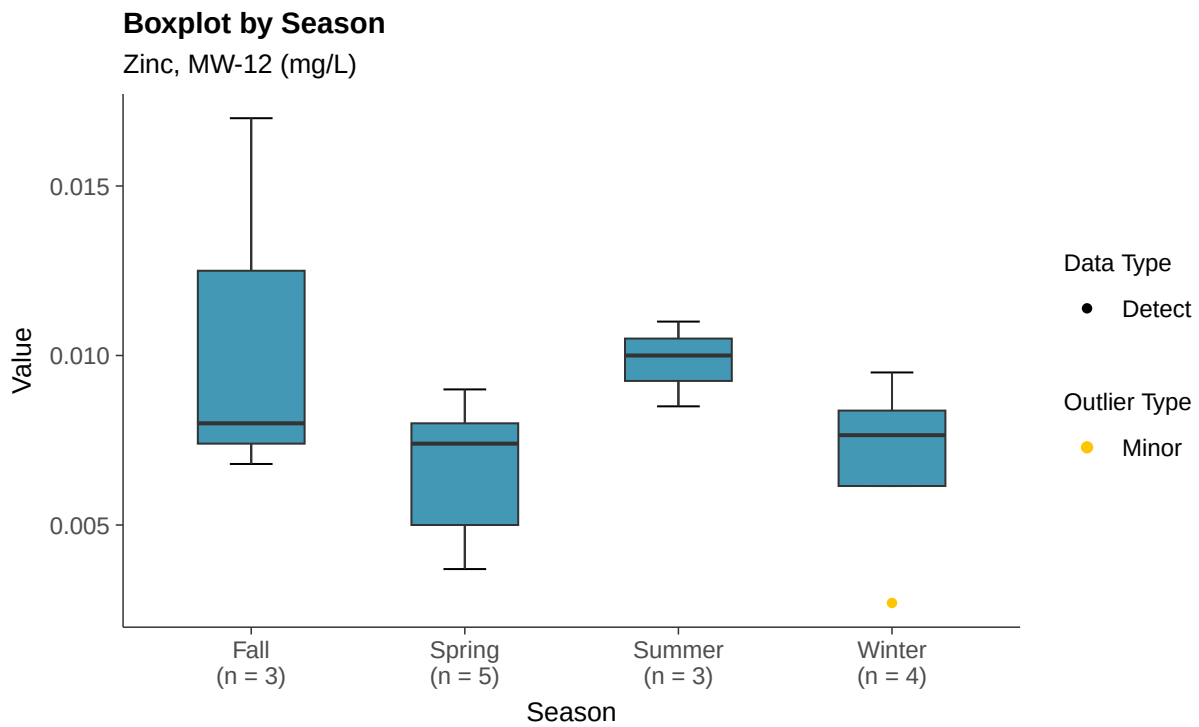
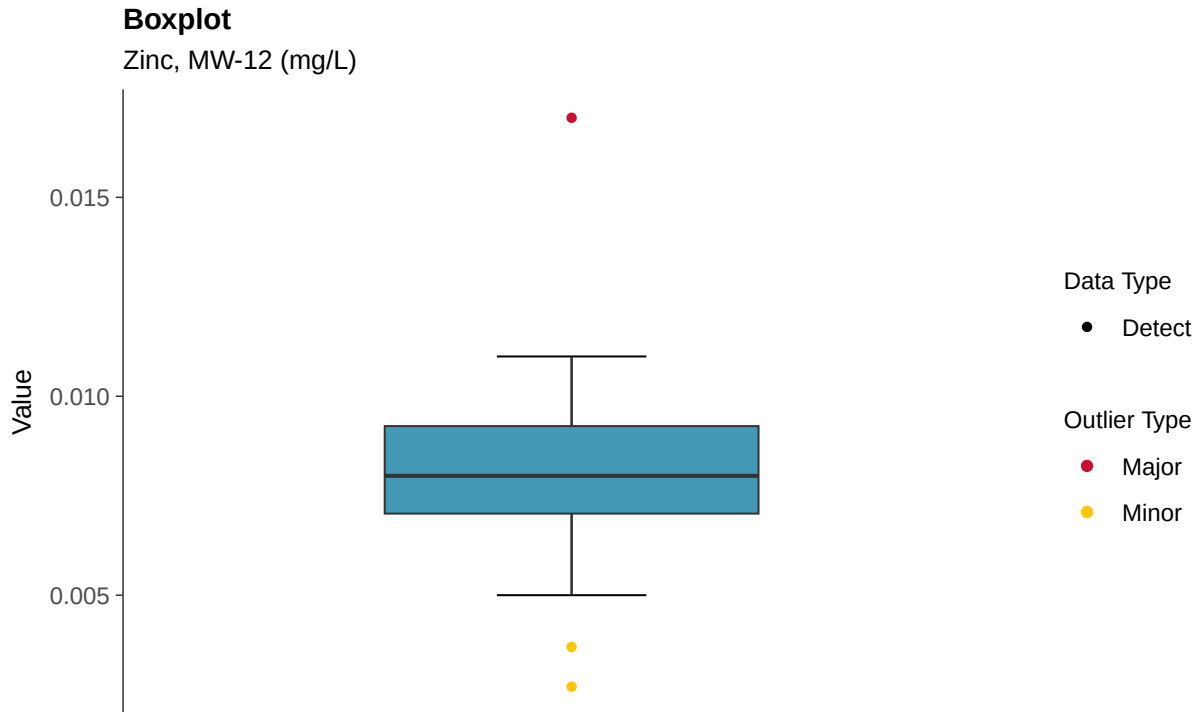
Vanadium, MW-12 (mg/L)



Part 115: Zinc, MW-12

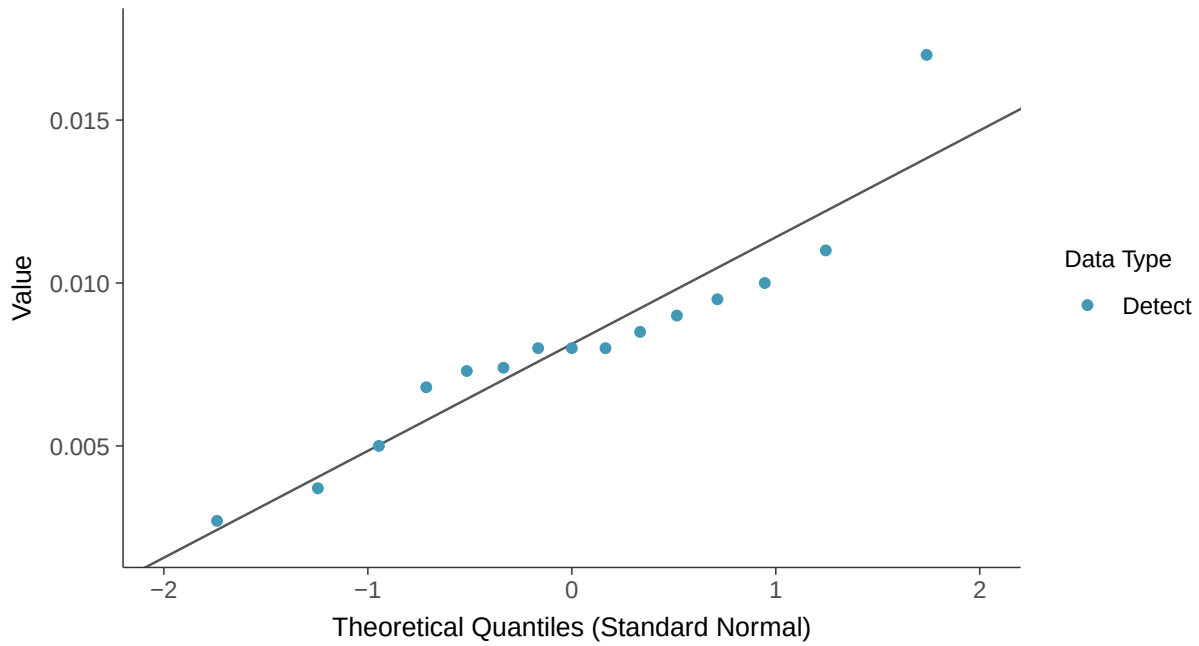
ID: 22_2_5_129





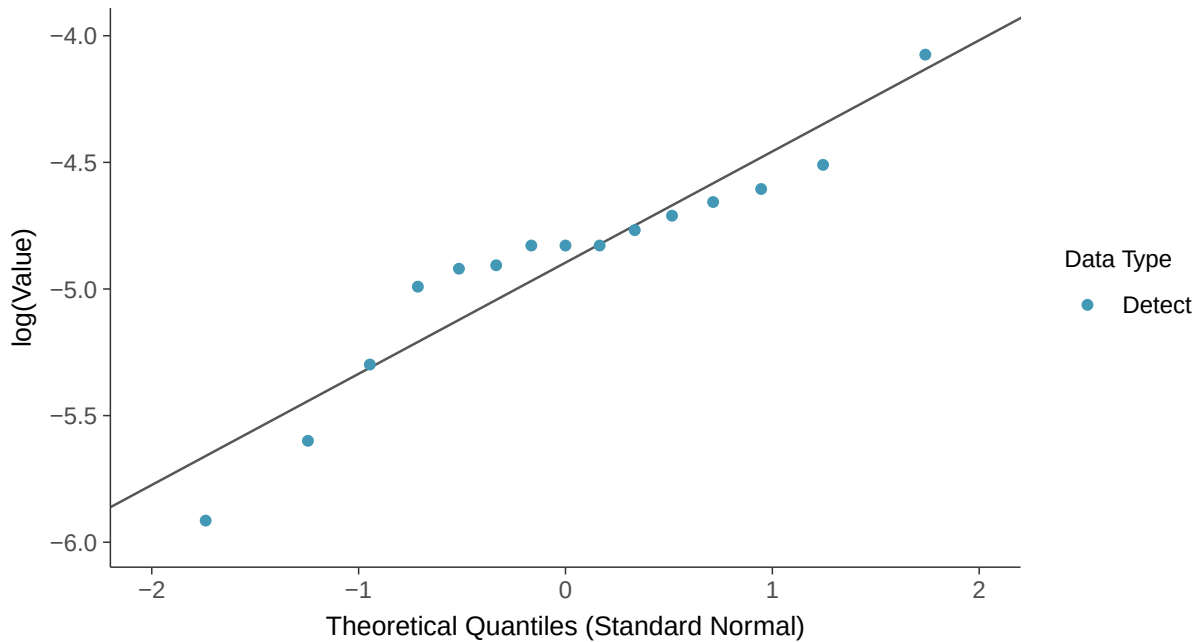
Normal Q-Q plot

Zinc, MW-12 (mg/L)



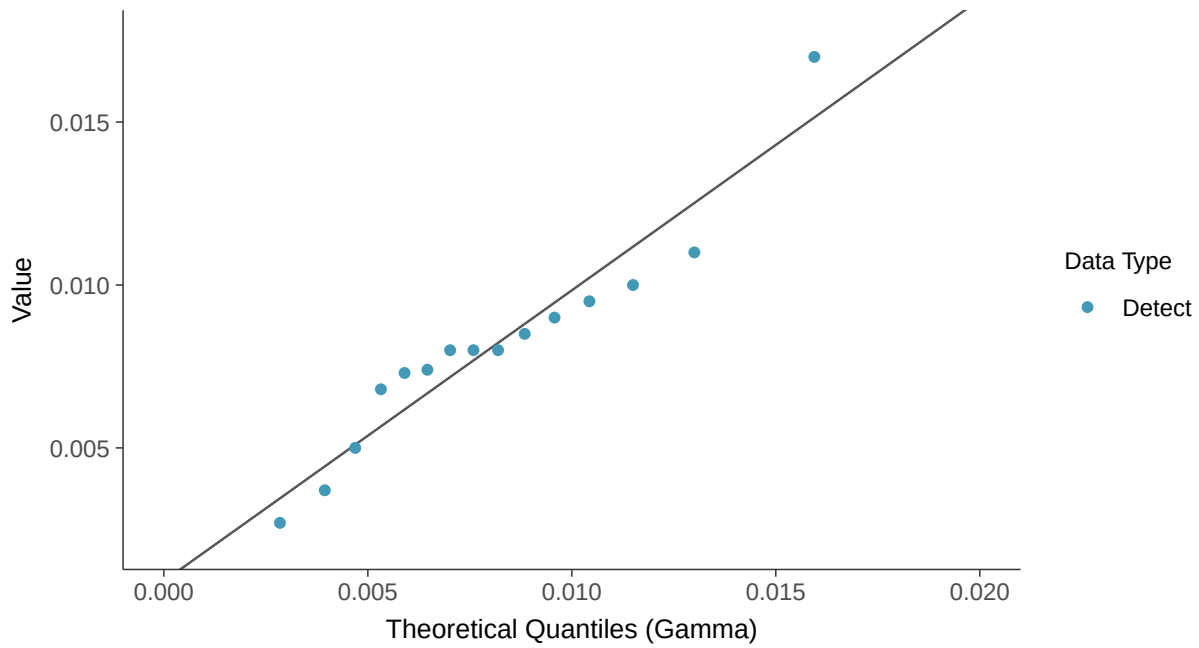
Lognormal Q-Q plot

Zinc, MW-12 (mg/L)



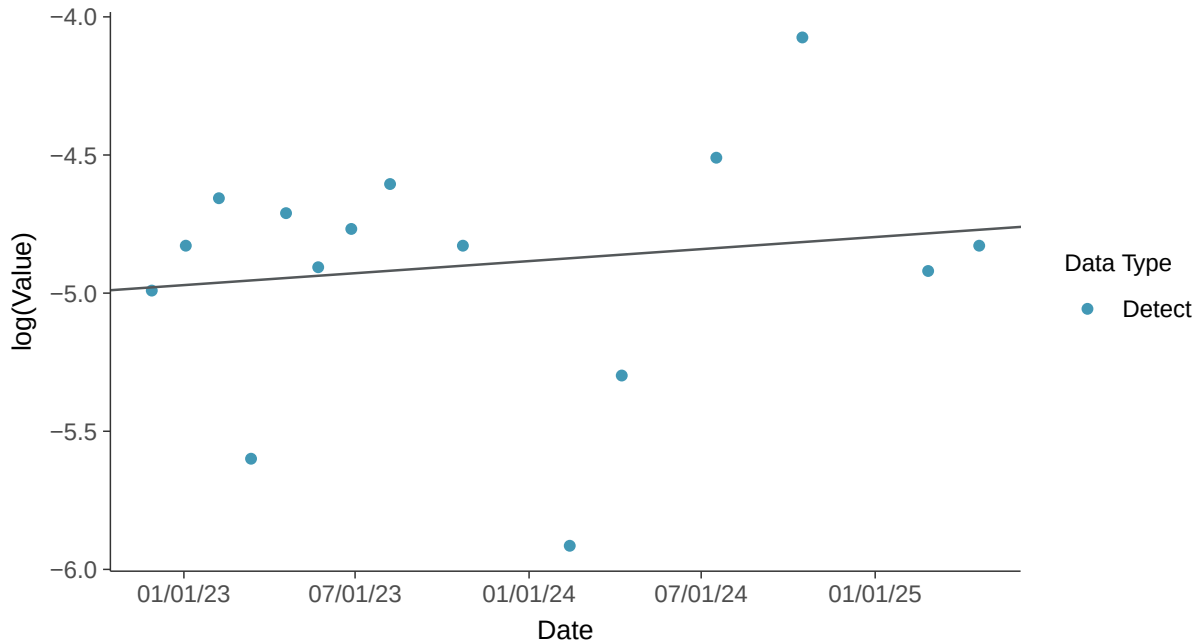
Gamma Q-Q plot

Zinc, MW-12 (mg/L)



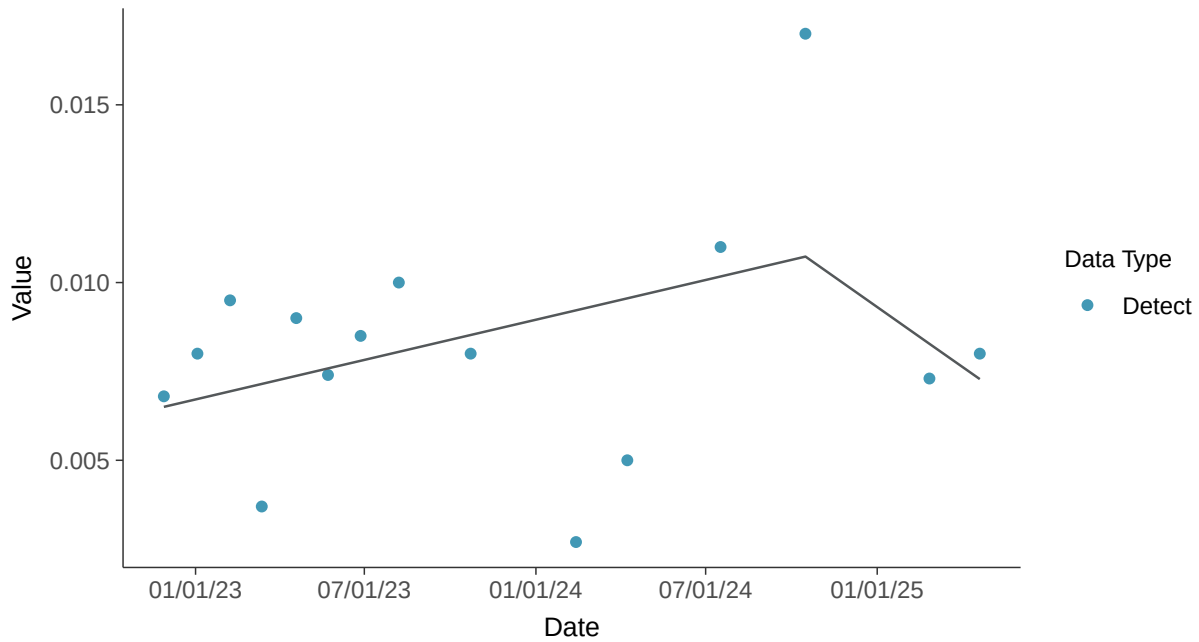
Trend Regression: Lognormal MLE

Zinc, MW-12 (mg/L)



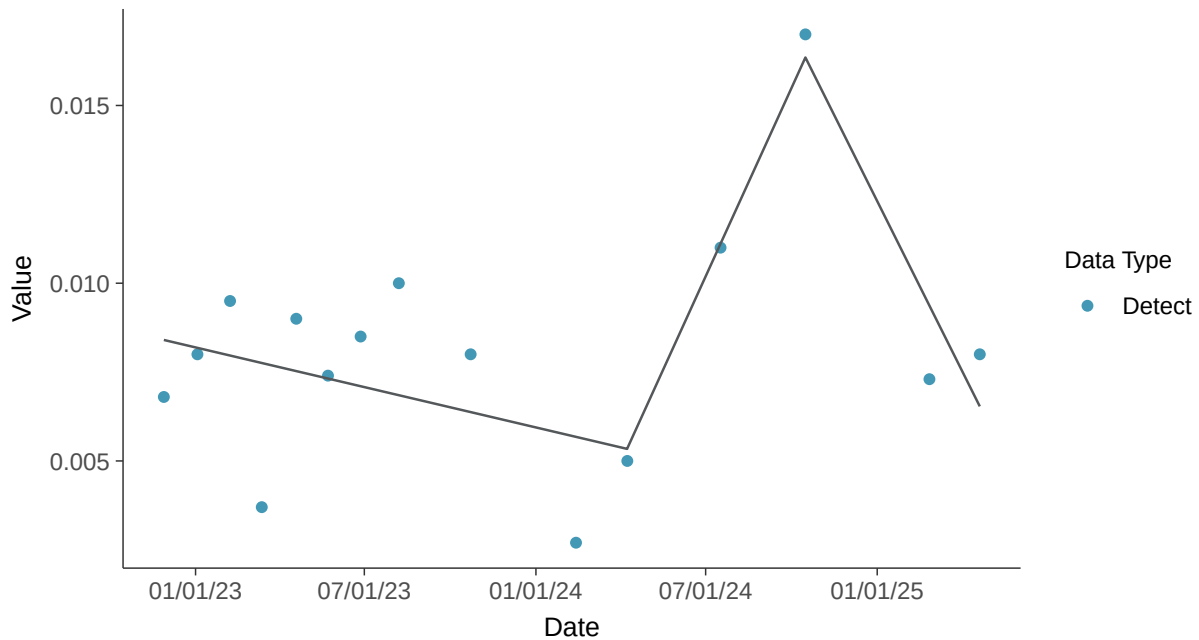
Trend Regression: Piecewise Linear-Linear

Zinc, MW-12 (mg/L)



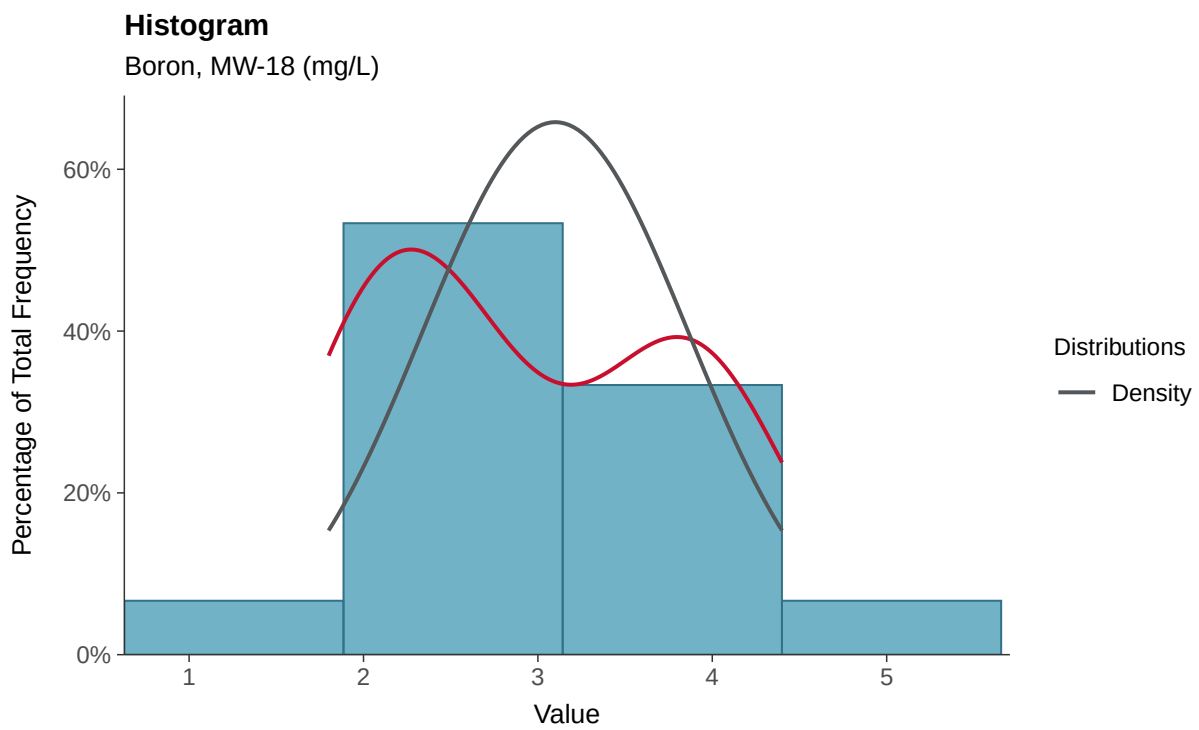
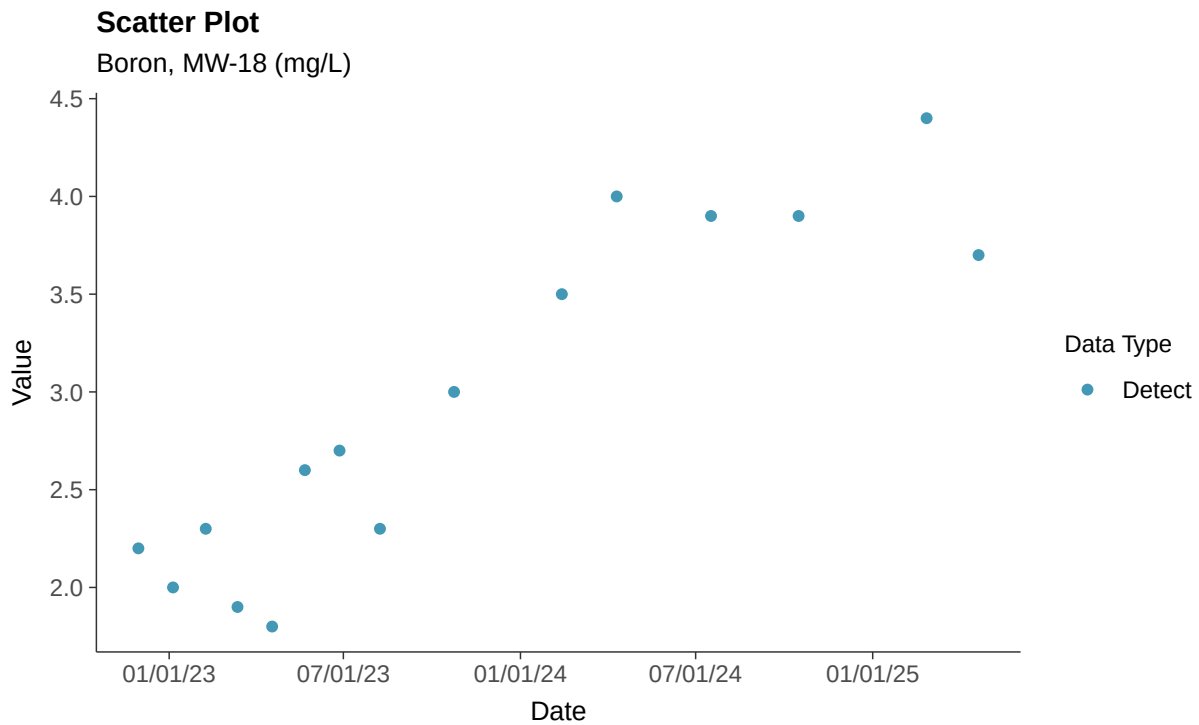
Trend Regression: Piecewise Linear-Linear-Linear

Zinc, MW-12 (mg/L)



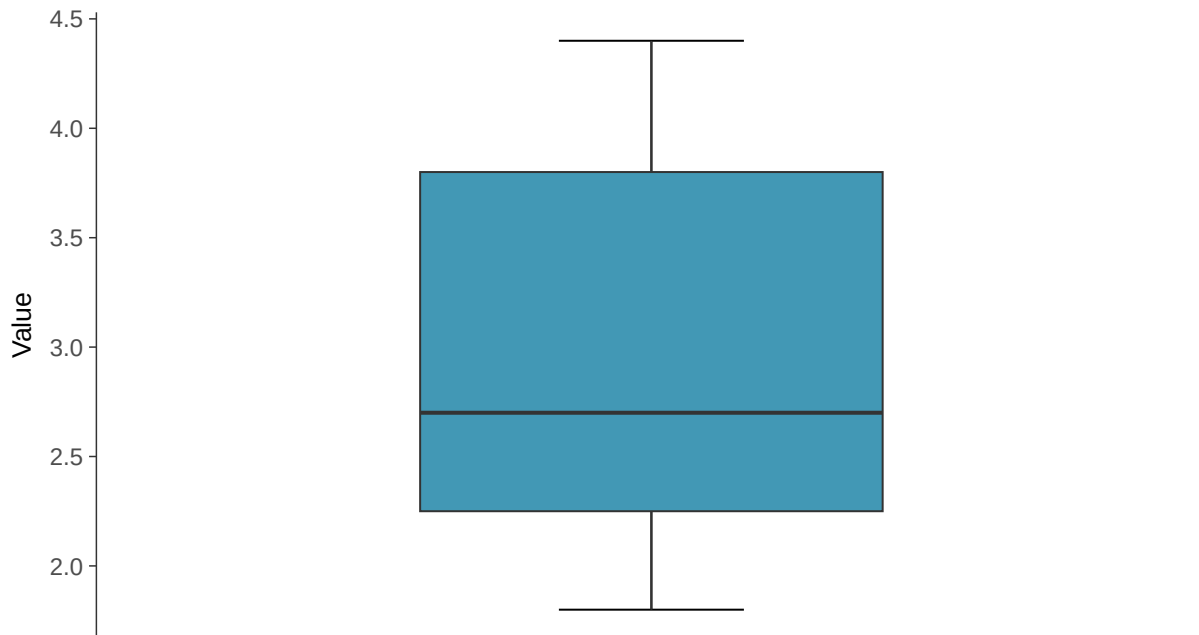
Appendix III: Boron, MW-18

ID: 28_1_3_105



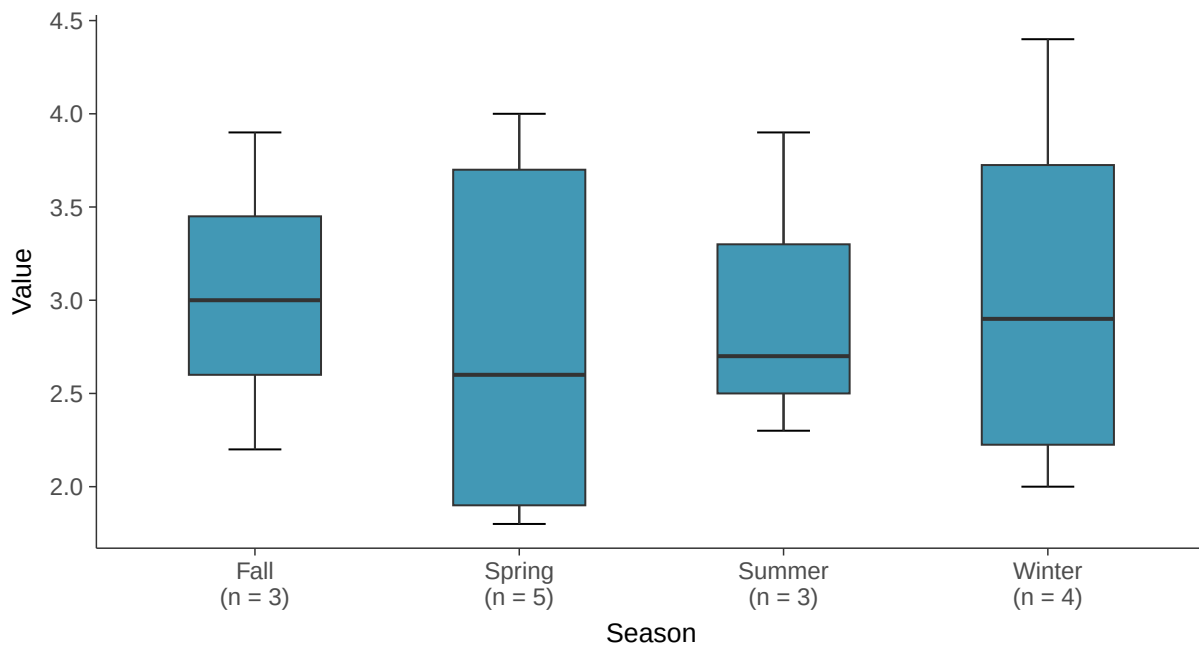
Boxplot

Boron, MW-18 (mg/L)

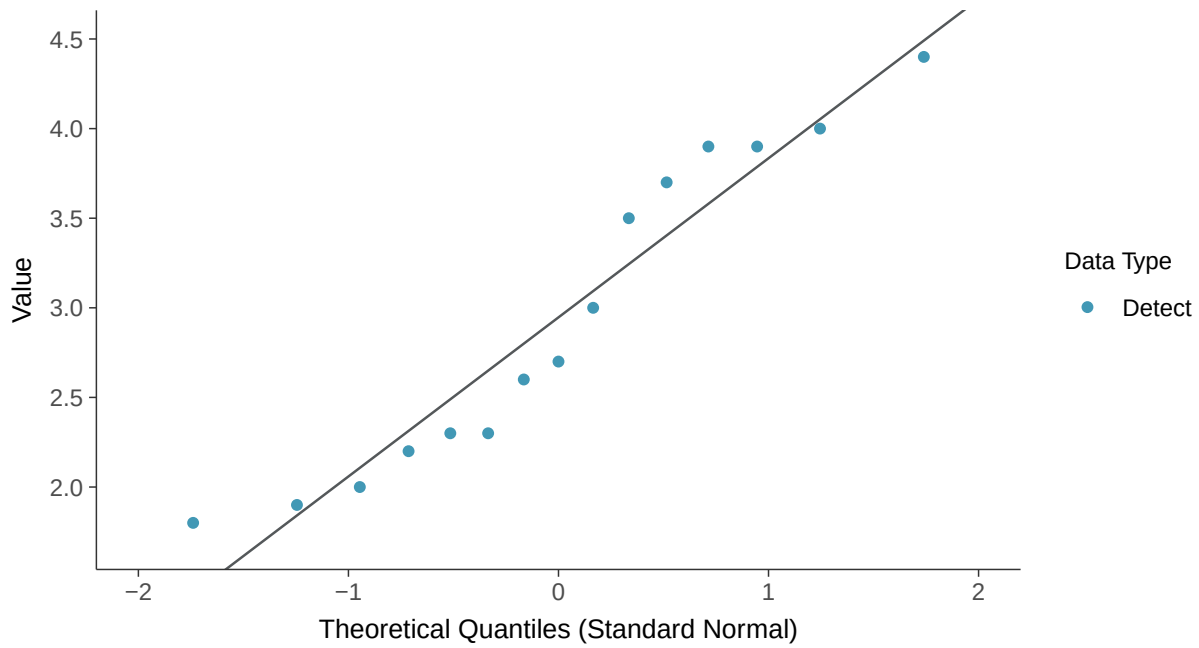


Boxplot by Season

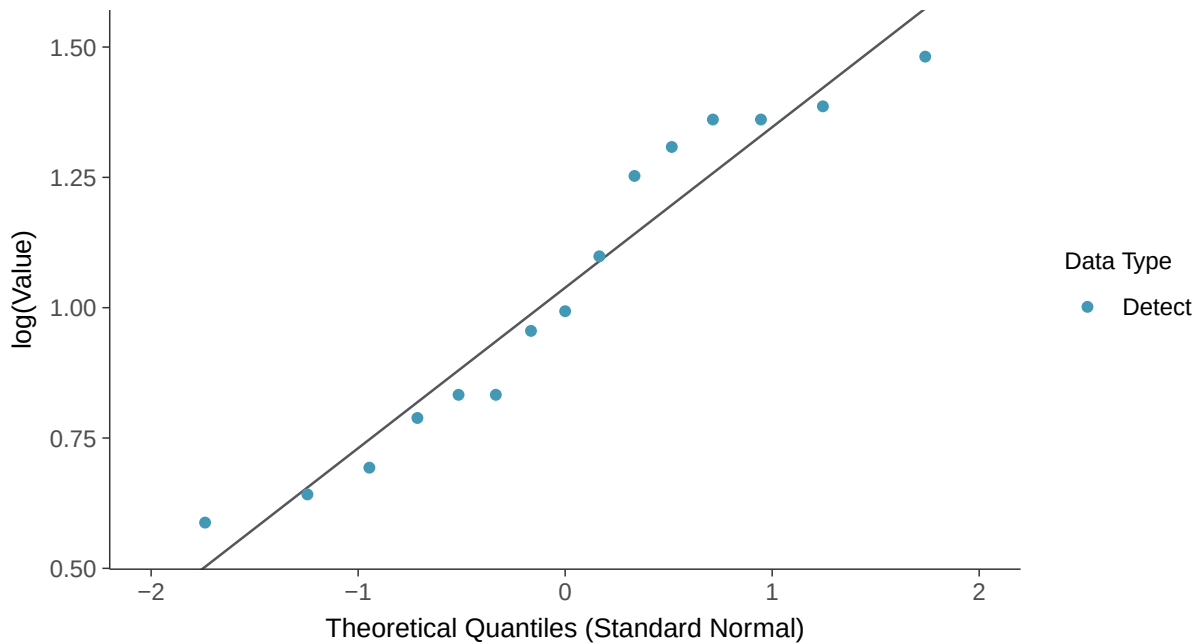
Boron, MW-18 (mg/L)



Normal Q-Q plot
Boron, MW-18 (mg/L)

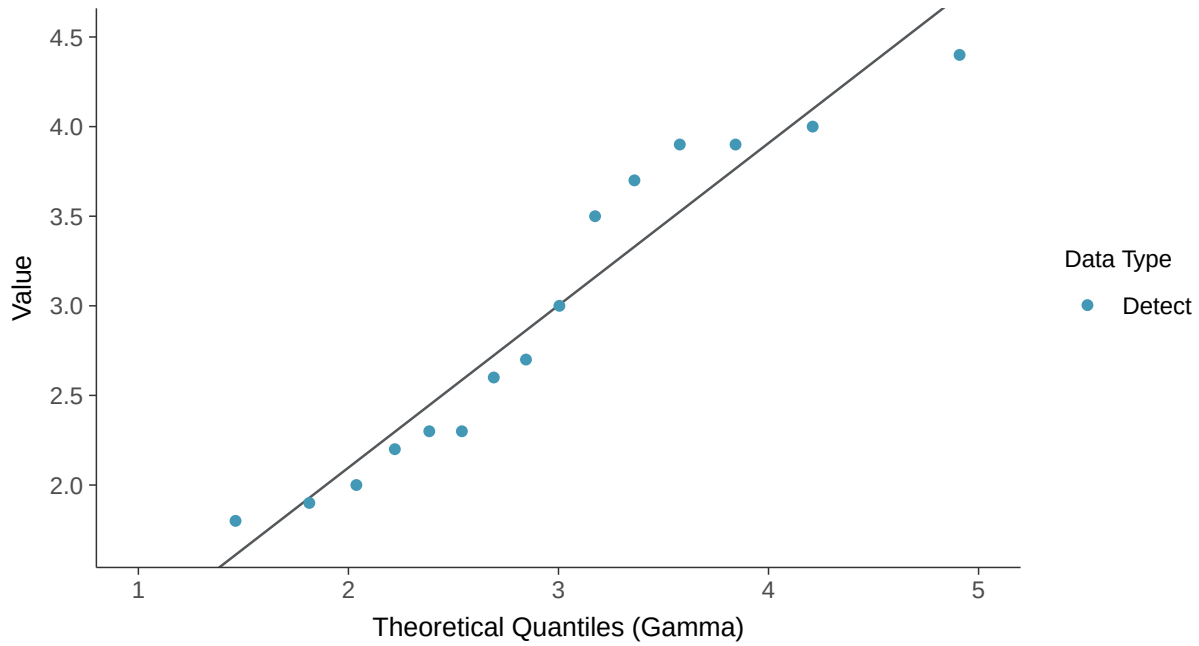


Lognormal Q-Q plot
Boron, MW-18 (mg/L)



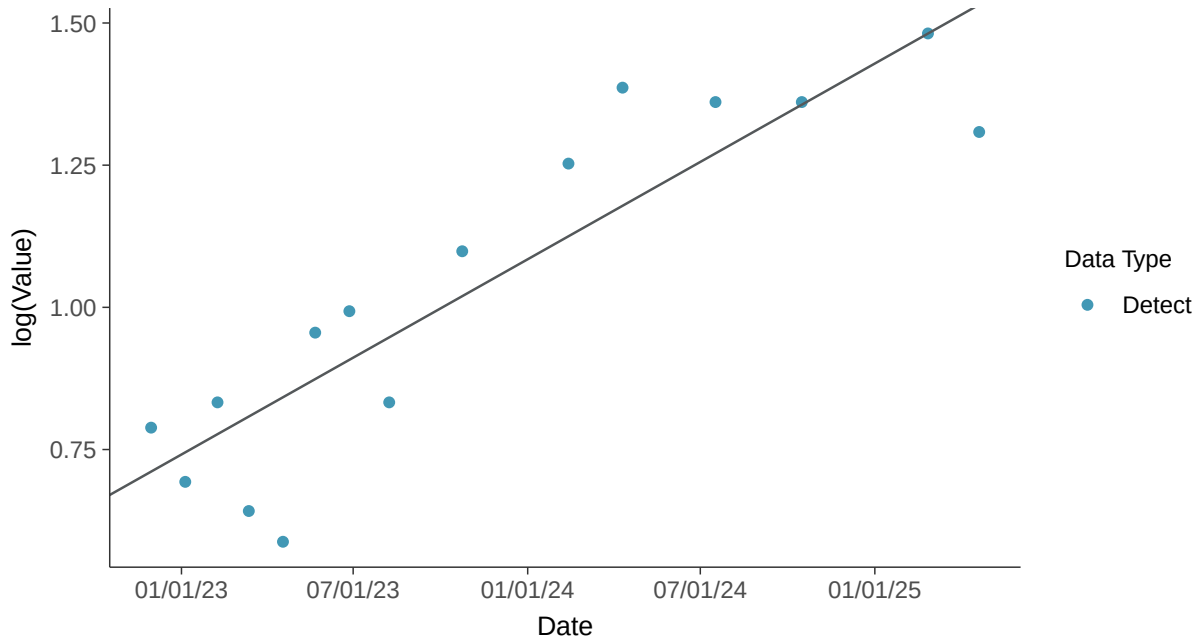
Gamma Q-Q plot

Boron, MW-18 (mg/L)



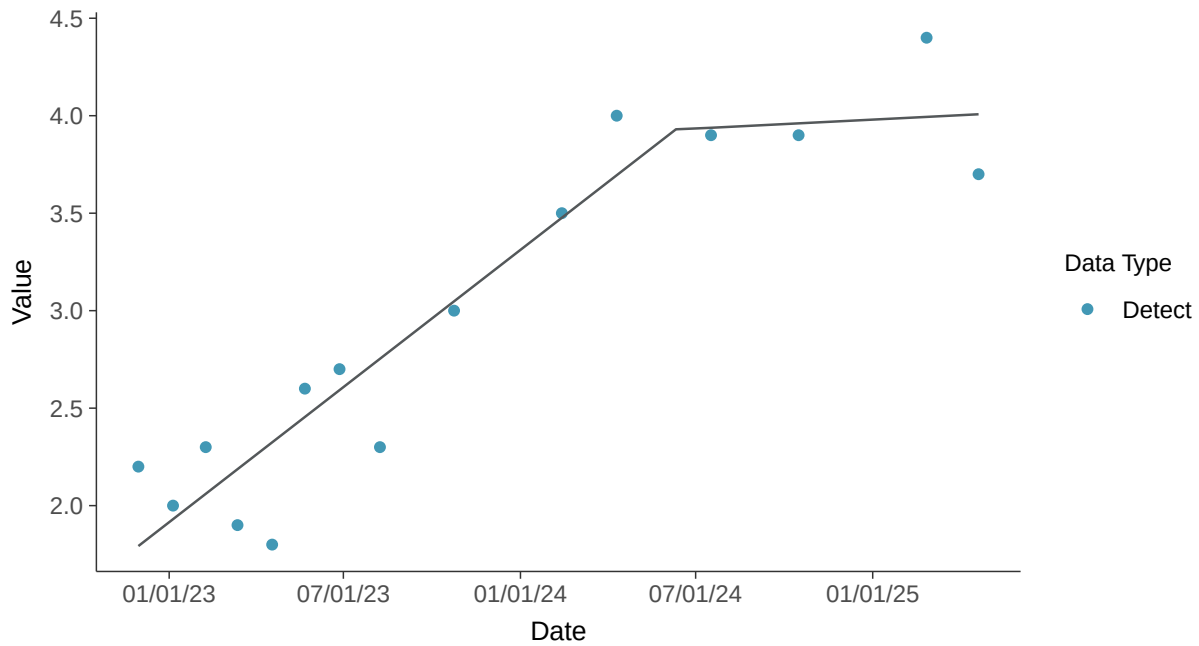
Trend Regression: Lognormal MLE

Boron, MW-18 (mg/L)



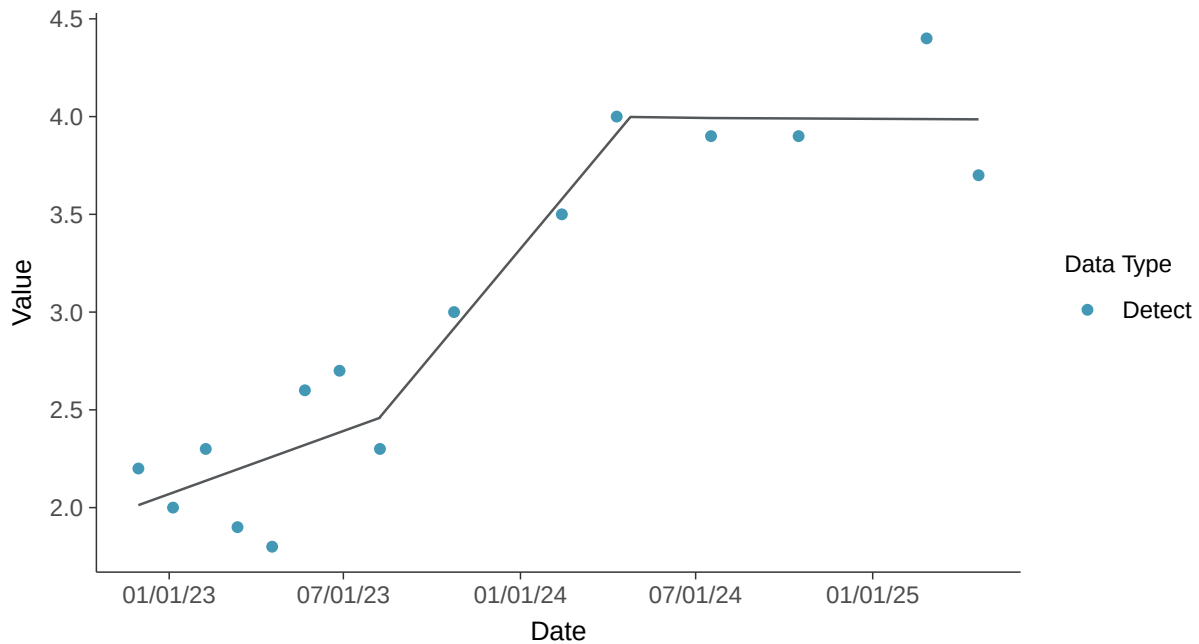
Trend Regression: Piecewise Linear-Linear

Boron, MW-18 (mg/L)



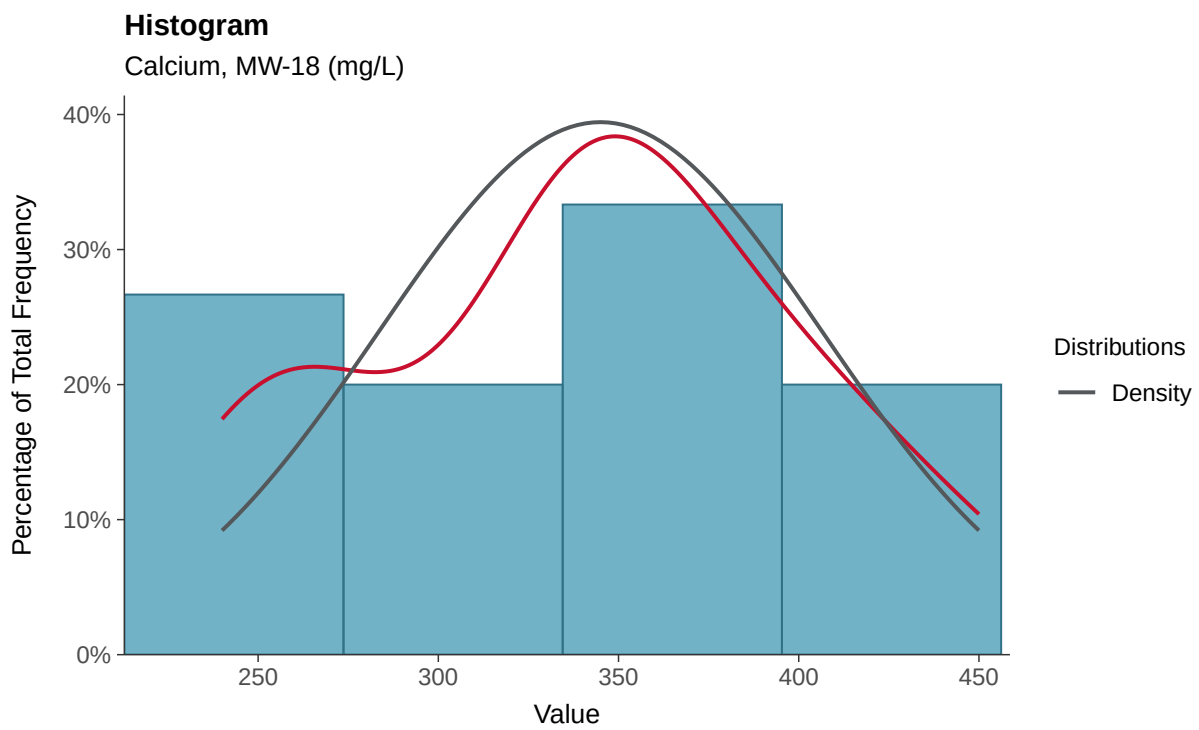
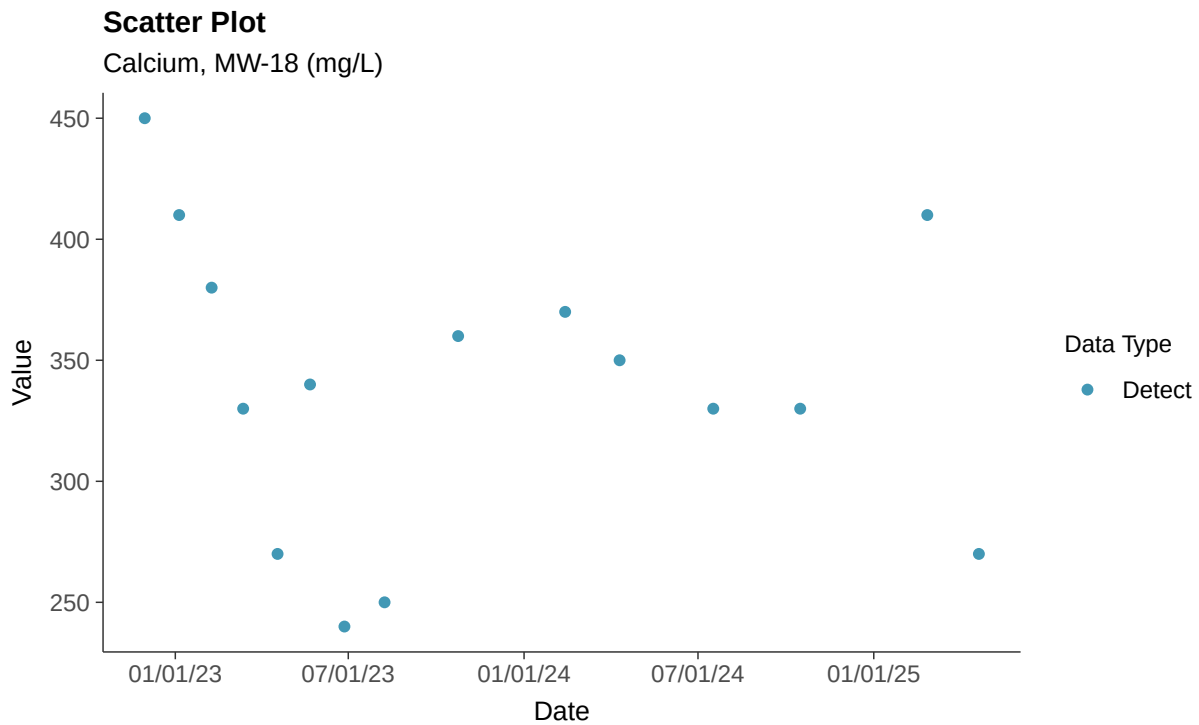
Trend Regression: Piecewise Linear-Linear-Linear

Boron, MW-18 (mg/L)



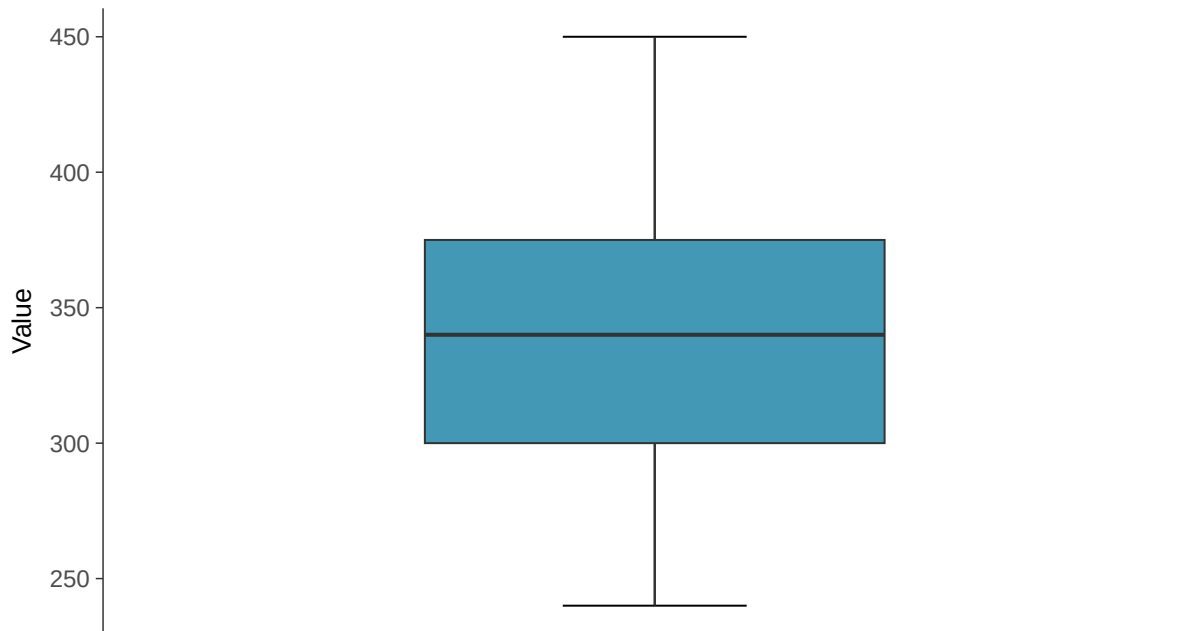
Appendix III: Calcium, MW-18

ID: 28_1_3_107



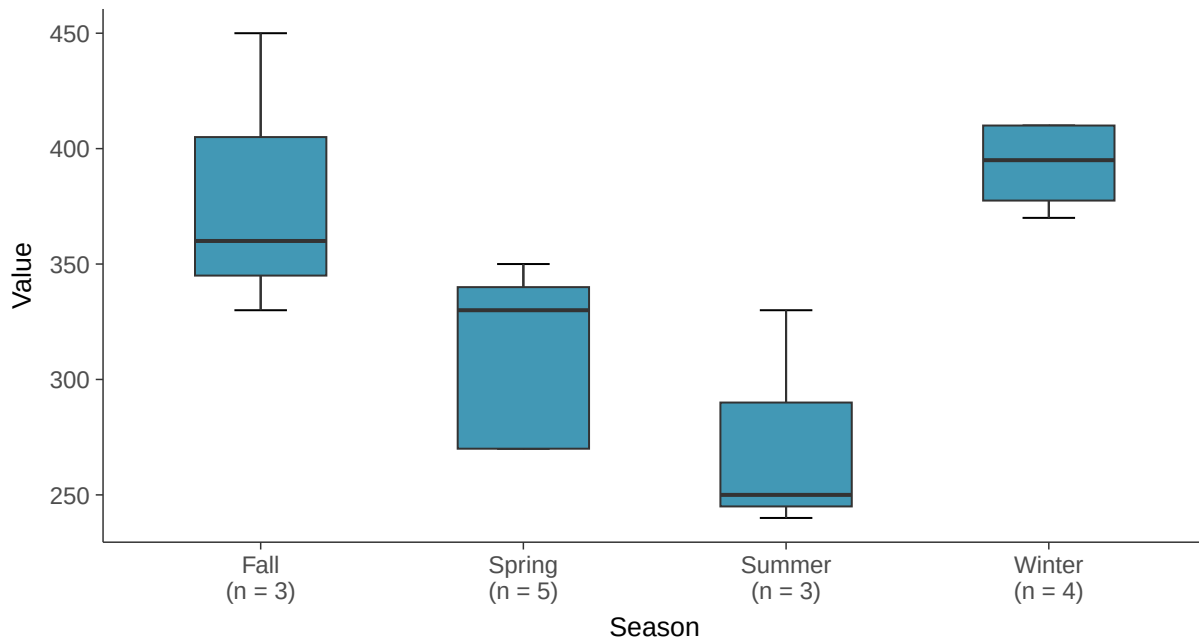
Boxplot

Calcium, MW-18 (mg/L)



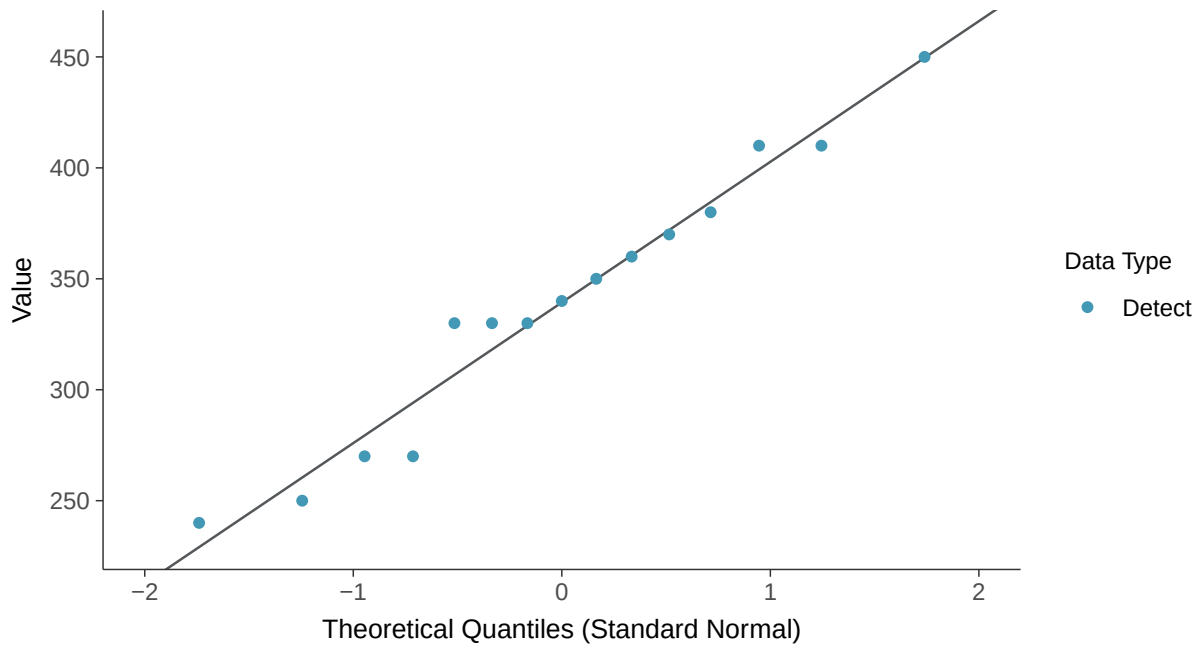
Boxplot by Season

Calcium, MW-18 (mg/L)



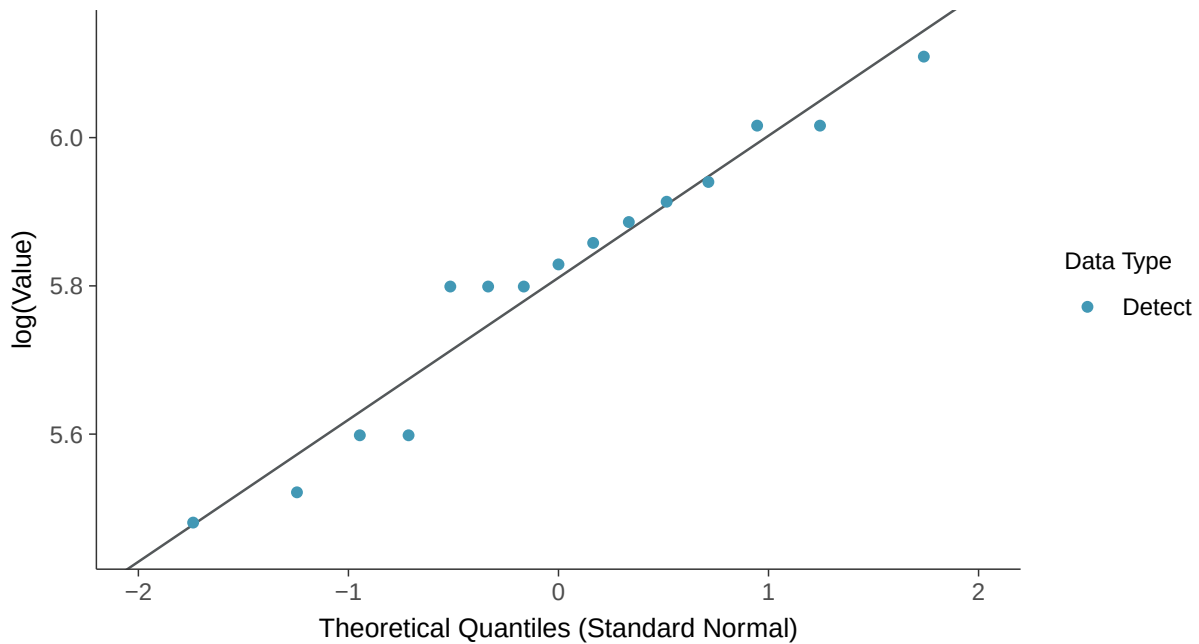
Normal Q-Q plot

Calcium, MW-18 (mg/L)



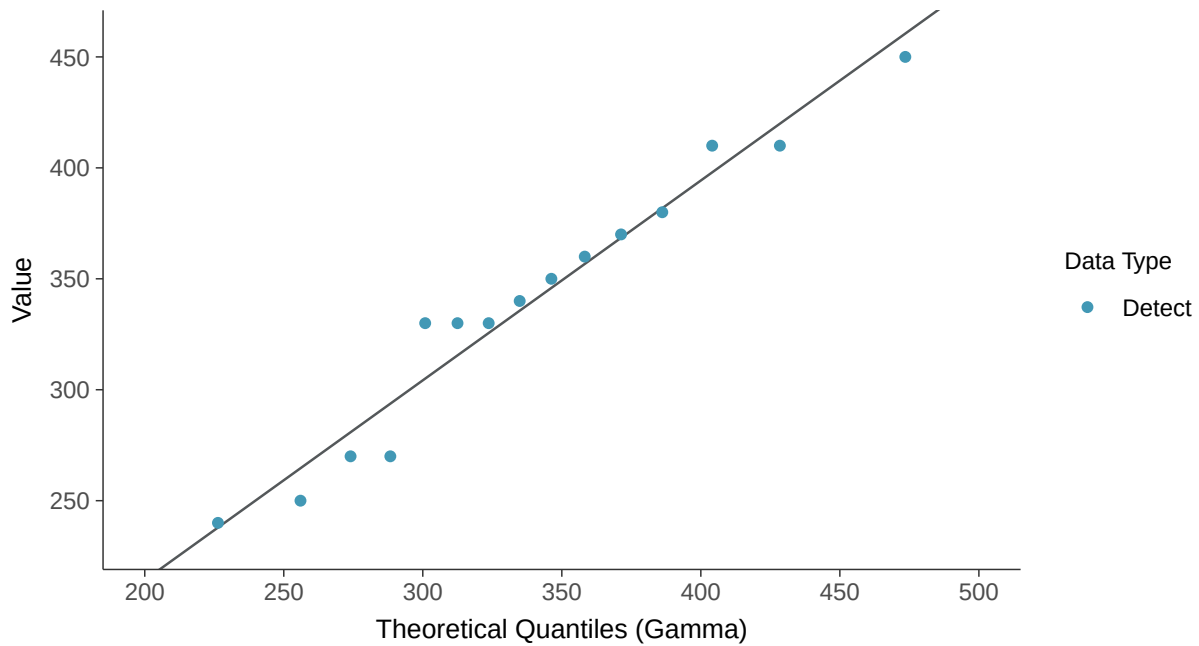
Lognormal Q-Q plot

Calcium, MW-18 (mg/L)



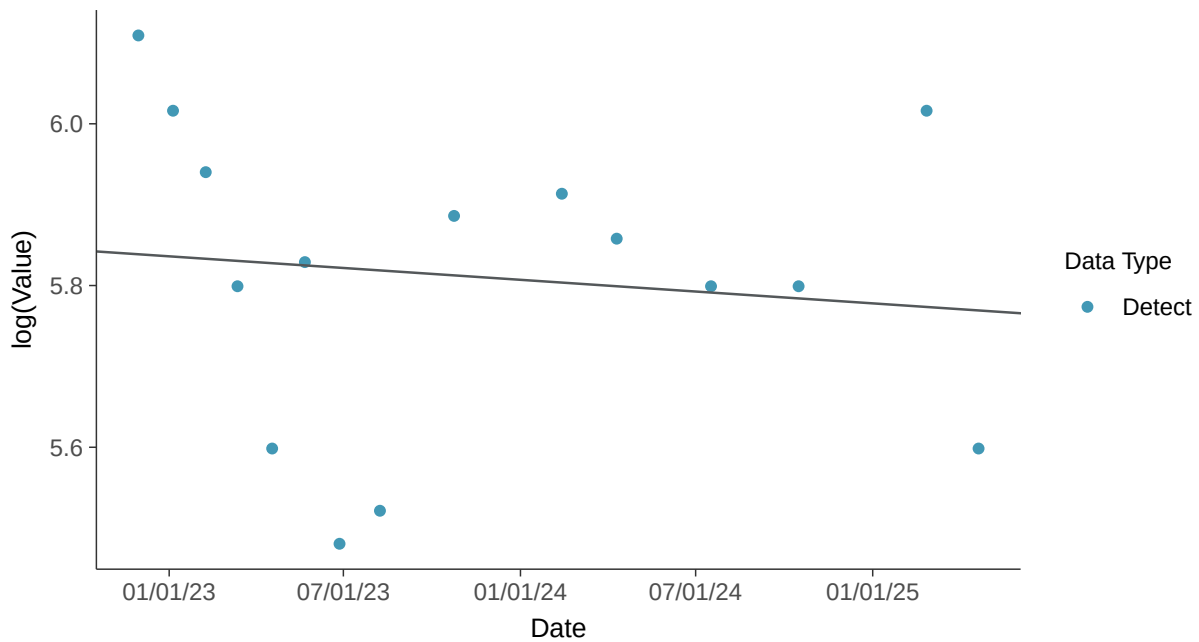
Gamma Q-Q plot

Calcium, MW-18 (mg/L)



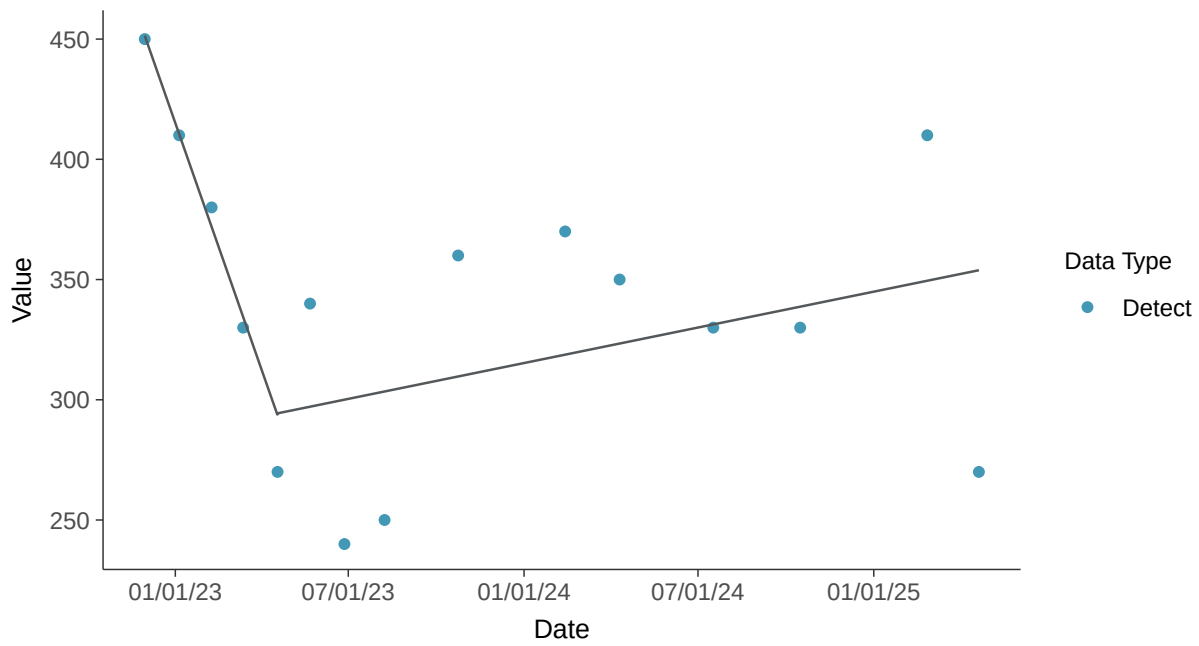
Trend Regression: Lognormal MLE

Calcium, MW-18 (mg/L)





Trend Regression: Piecewise Linear-Linear
Calcium, MW-18 (mg/L)

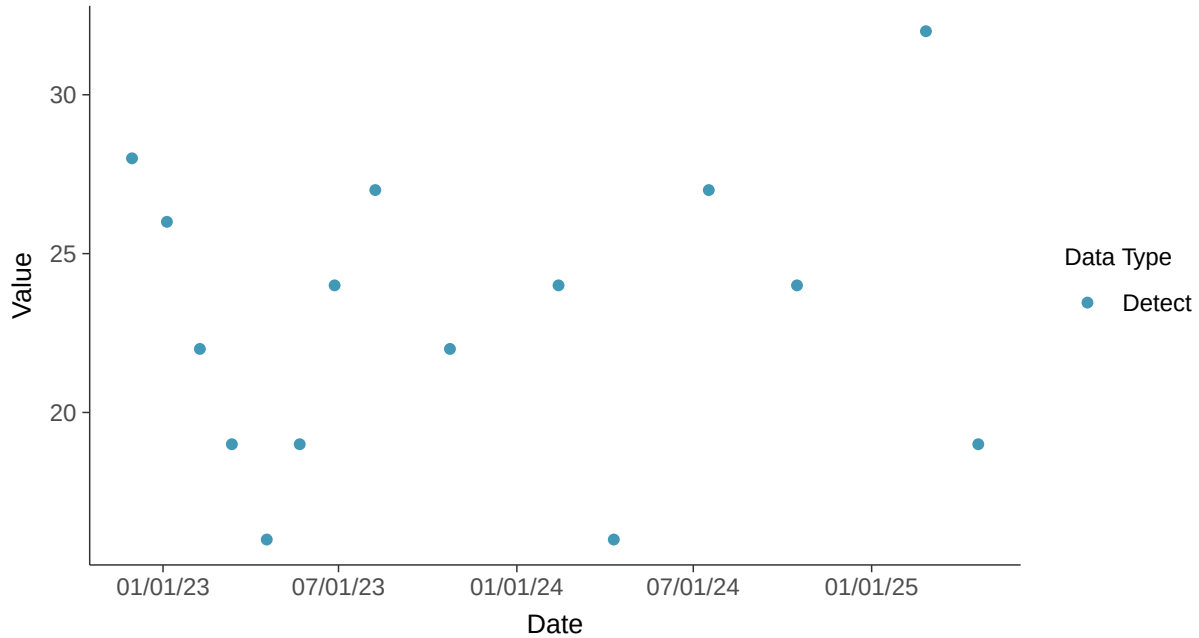


Appendix III: Chloride (as Cl), MW-18

ID: 28_1_3_108

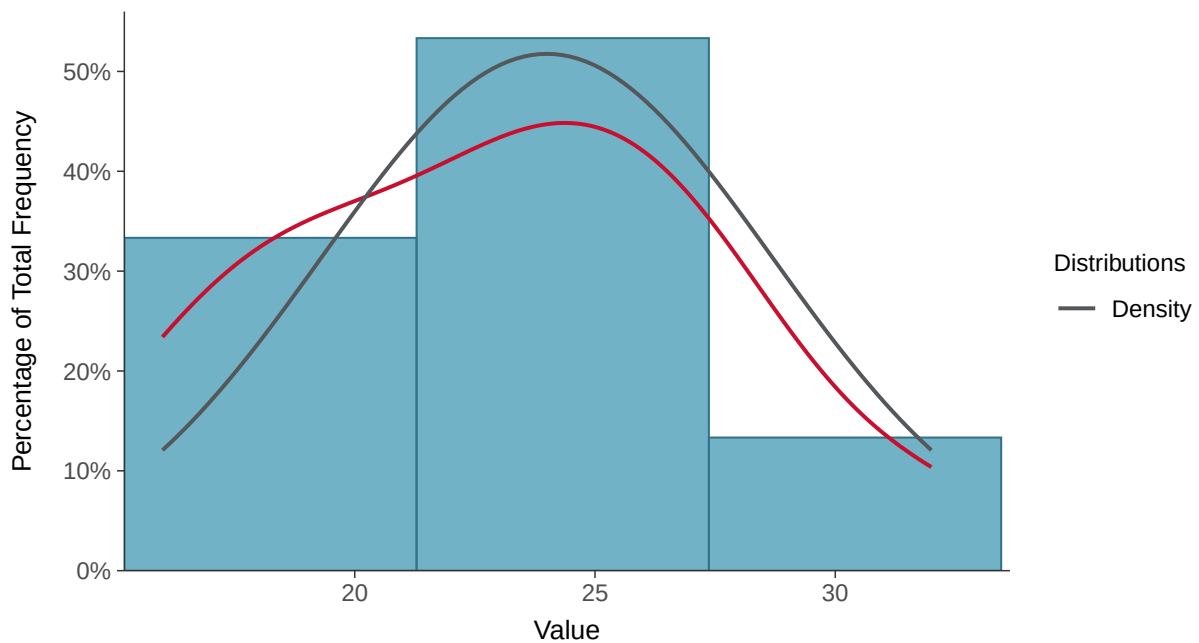
Scatter Plot

Chloride (as Cl), MW-18 (mg/L)



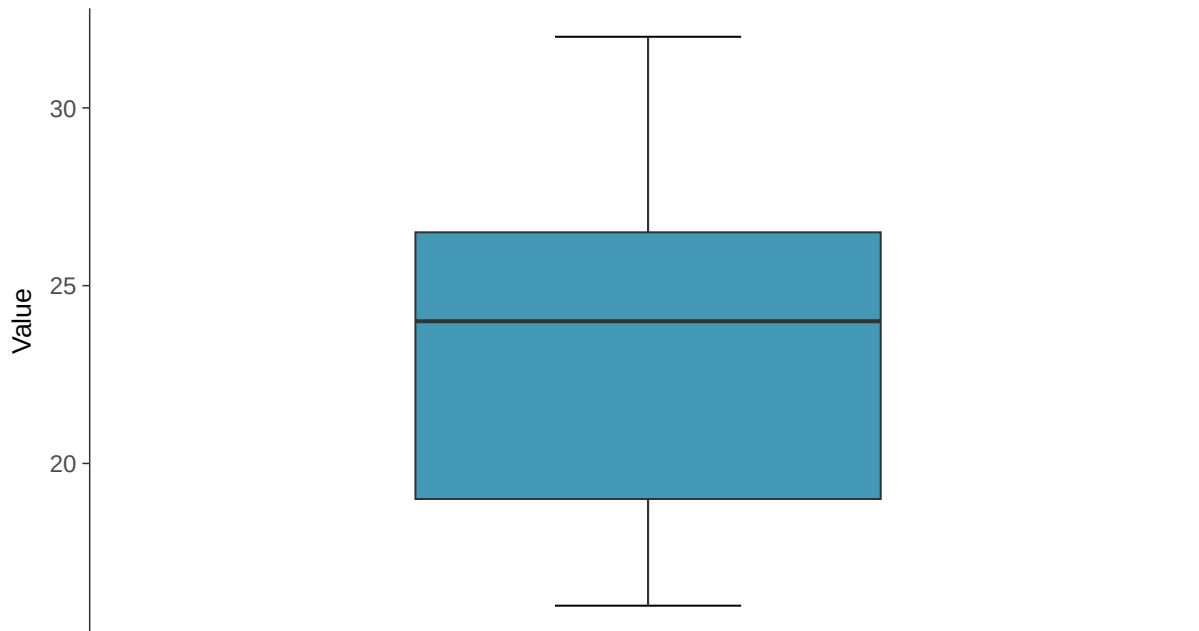
Histogram

Chloride (as Cl), MW-18 (mg/L)



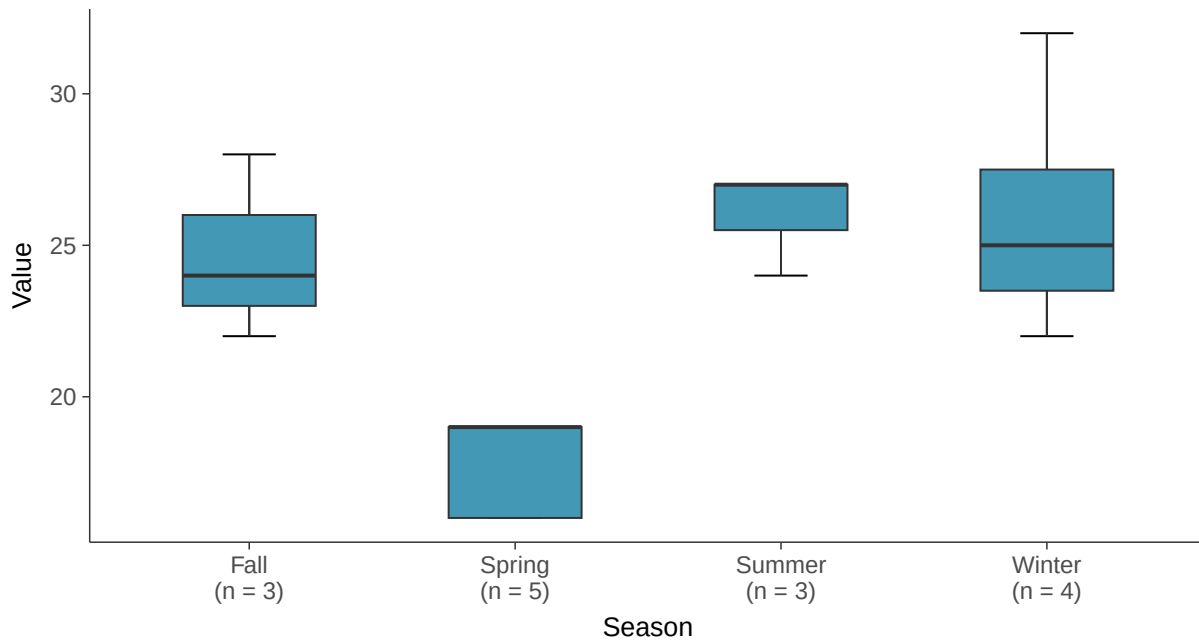
Boxplot

Chloride (as Cl), MW-18 (mg/L)



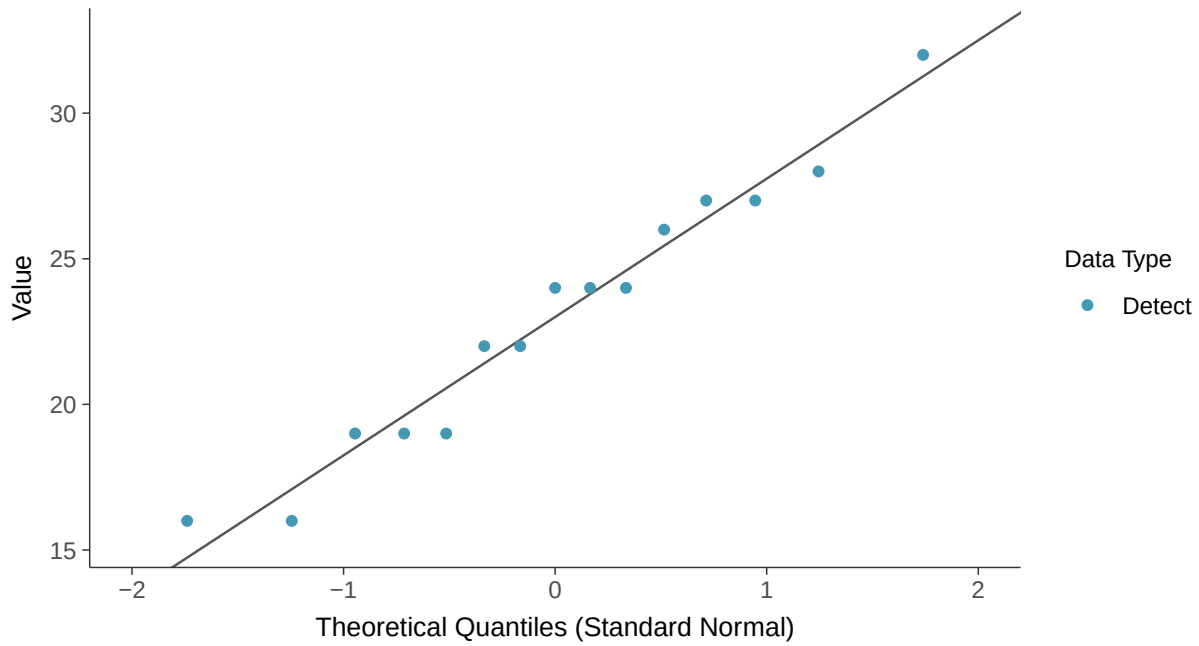
Boxplot by Season

Chloride (as Cl), MW-18 (mg/L)



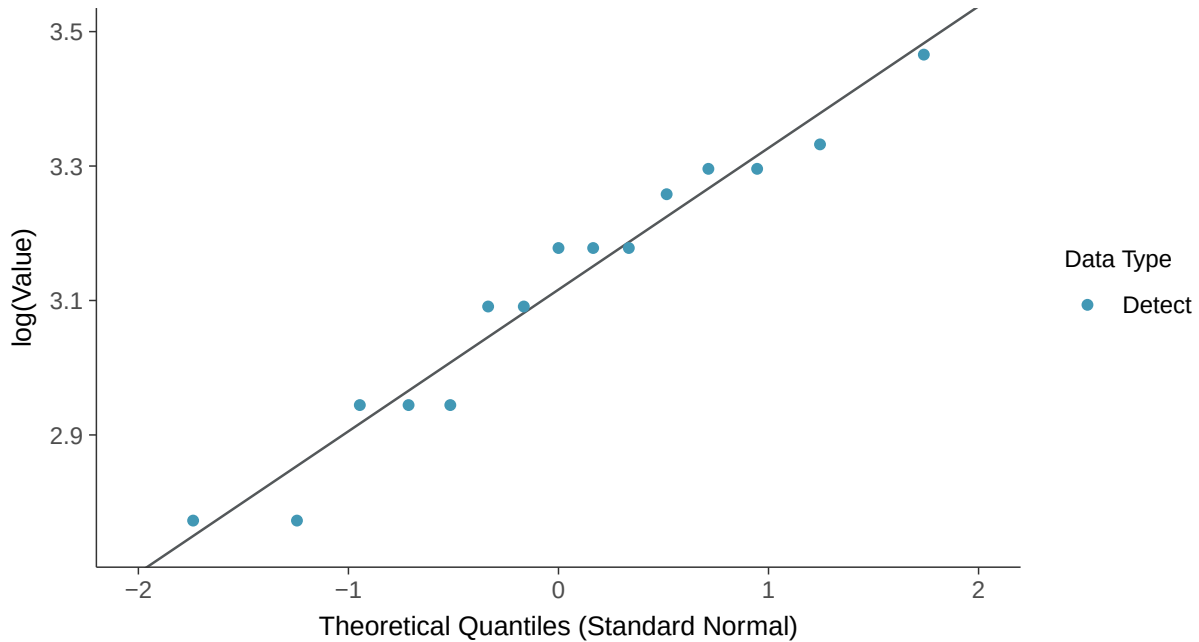
Normal Q-Q plot

Chloride (as Cl), MW-18 (mg/L)



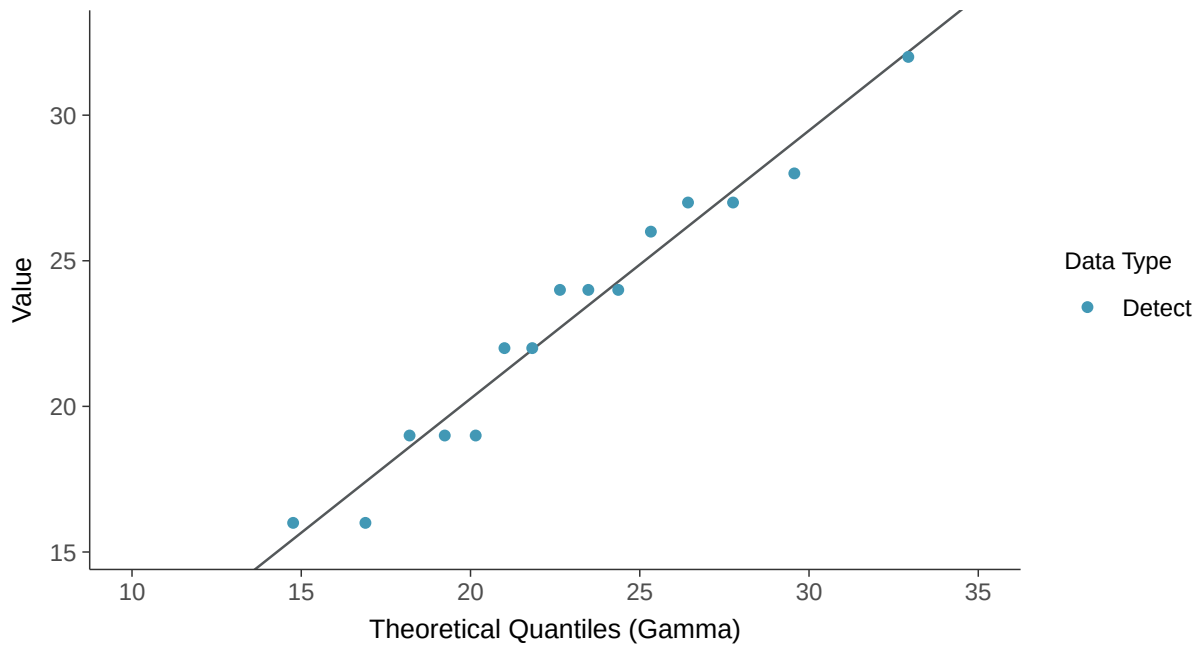
Lognormal Q-Q plot

Chloride (as Cl), MW-18 (mg/L)



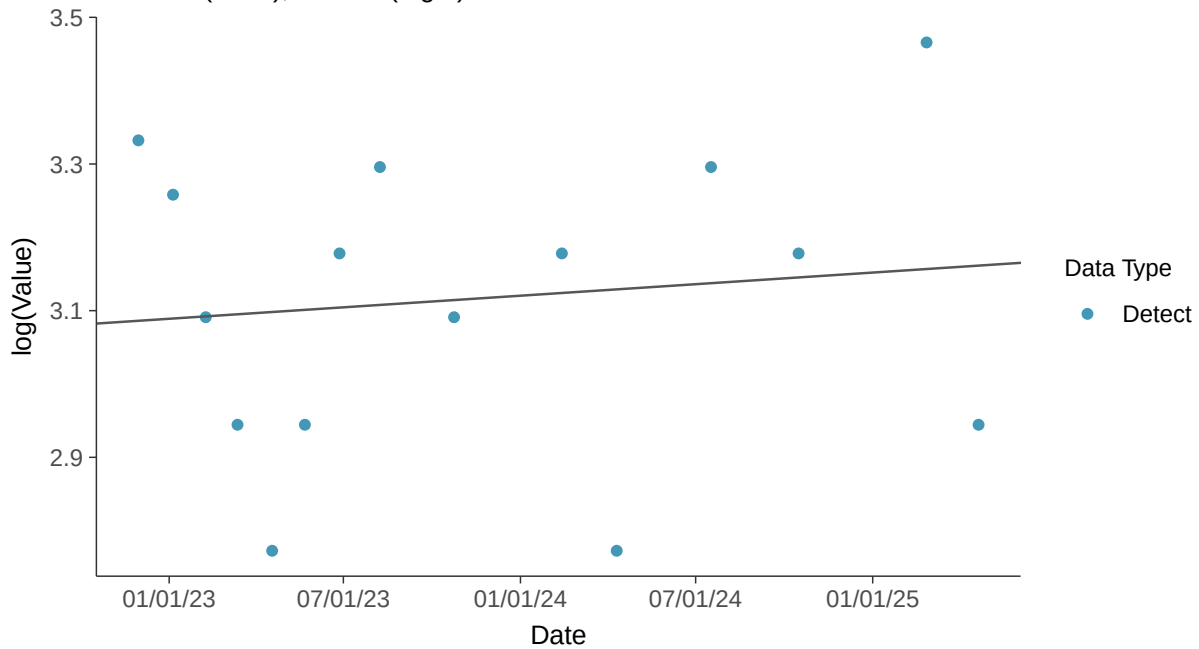
Gamma Q-Q plot

Chloride (as Cl), MW-18 (mg/L)



Trend Regression: Lognormal MLE

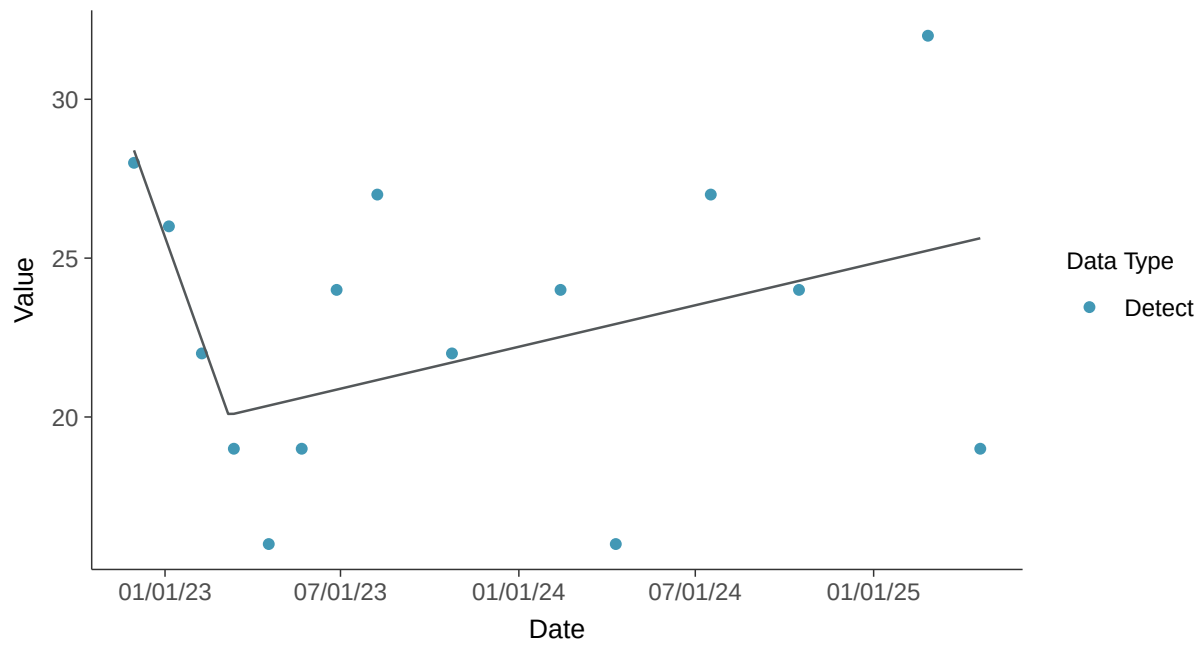
Chloride (as Cl), MW-18 (mg/L)





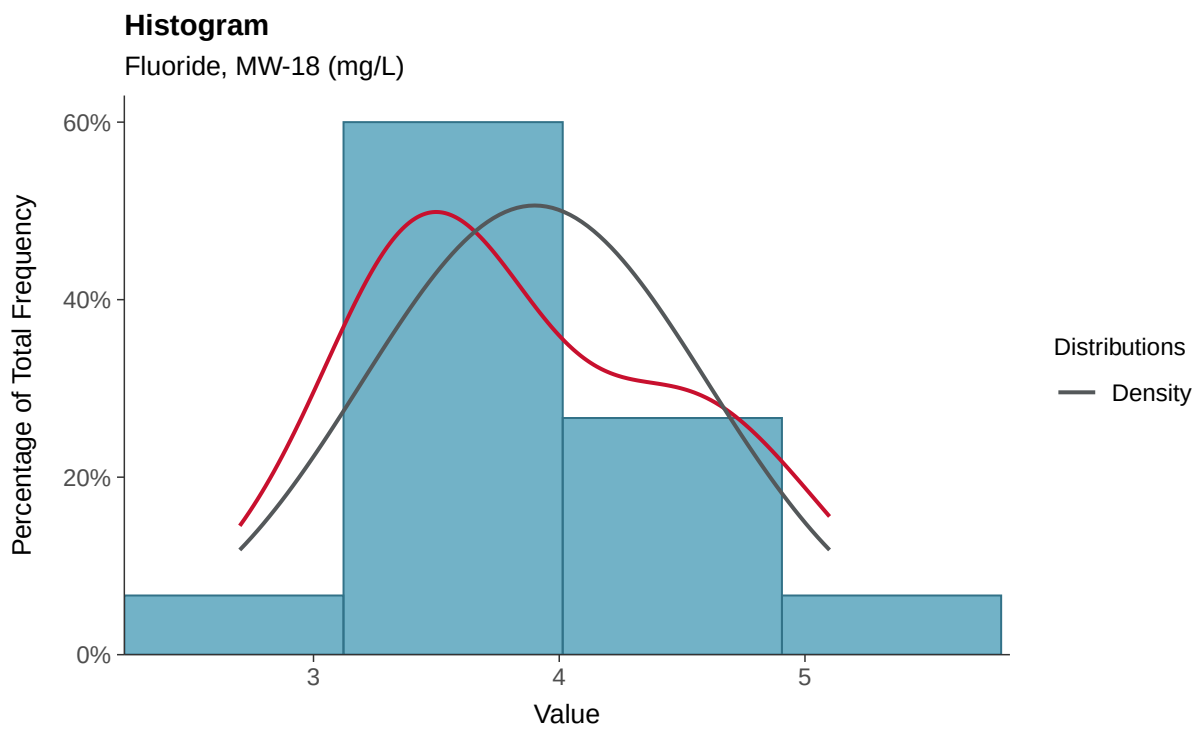
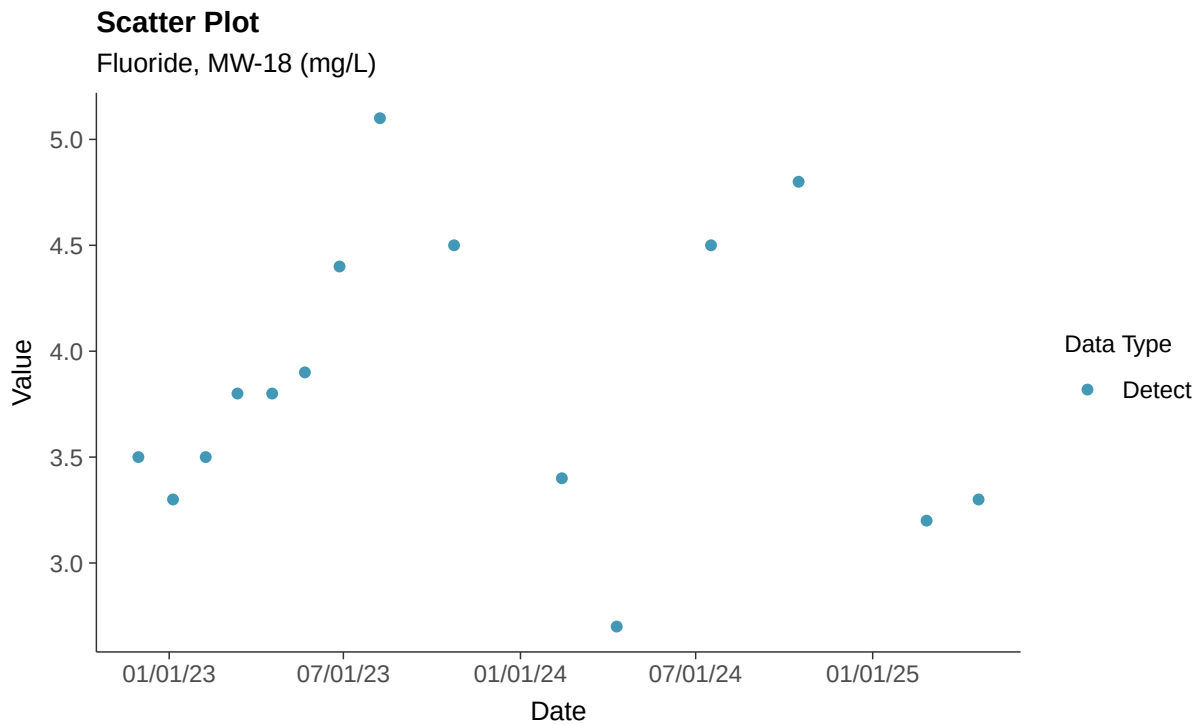
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-18 (mg/L)



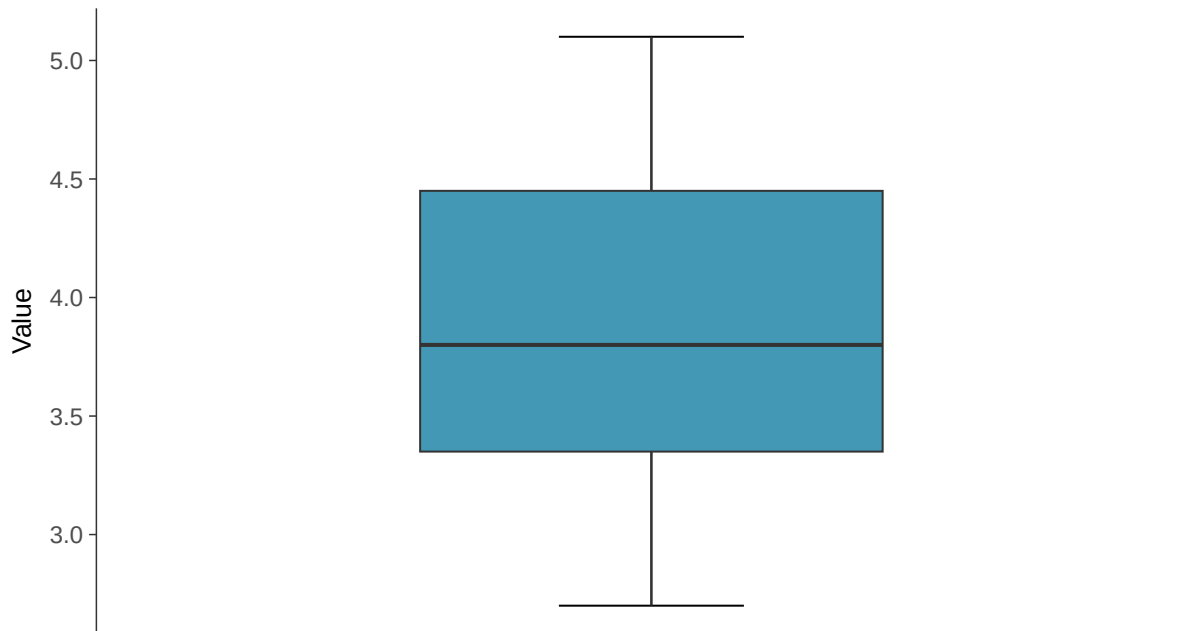
Appendix III: Fluoride, MW-18

ID: 28_1_3_112



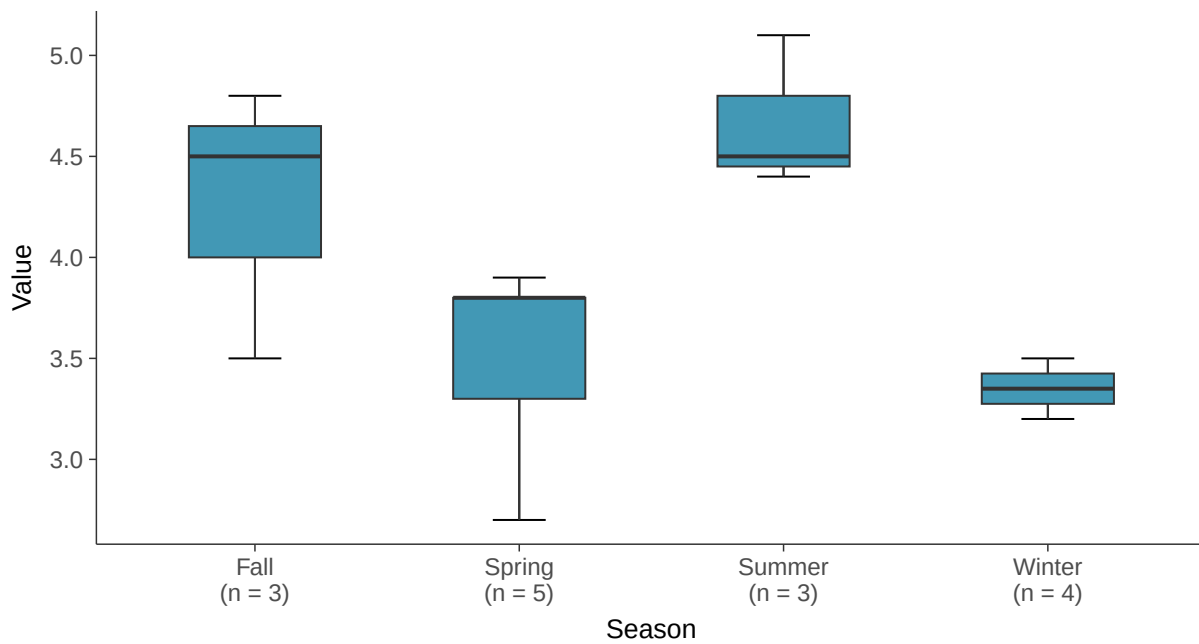
Boxplot

Fluoride, MW-18 (mg/L)

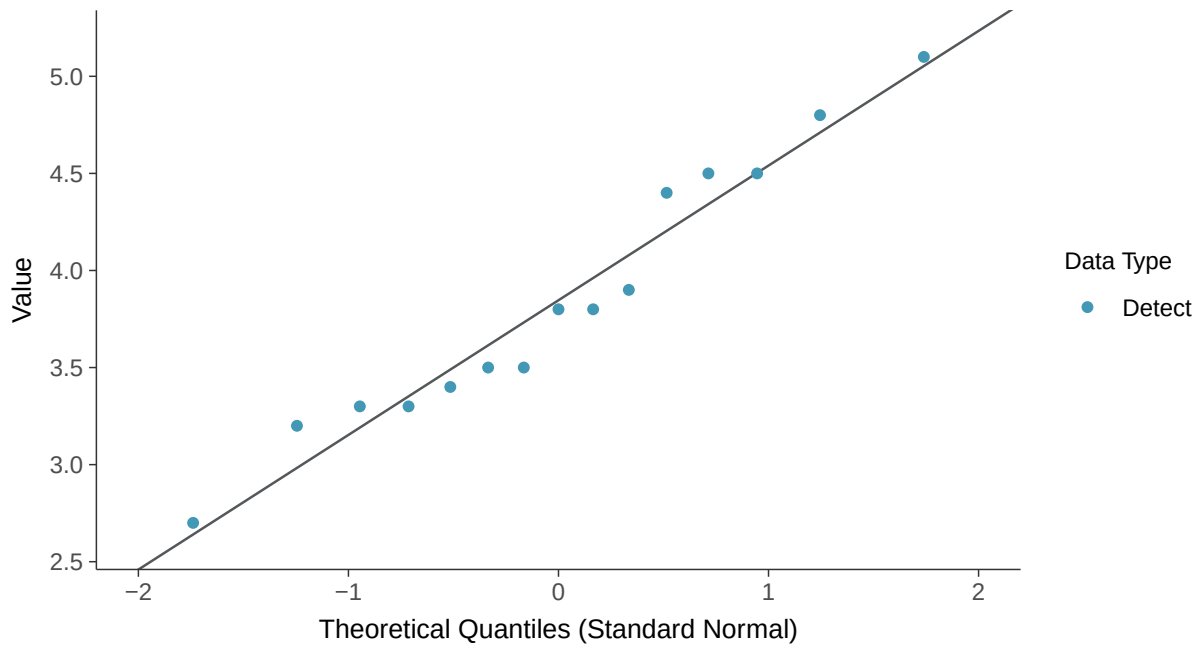


Boxplot by Season

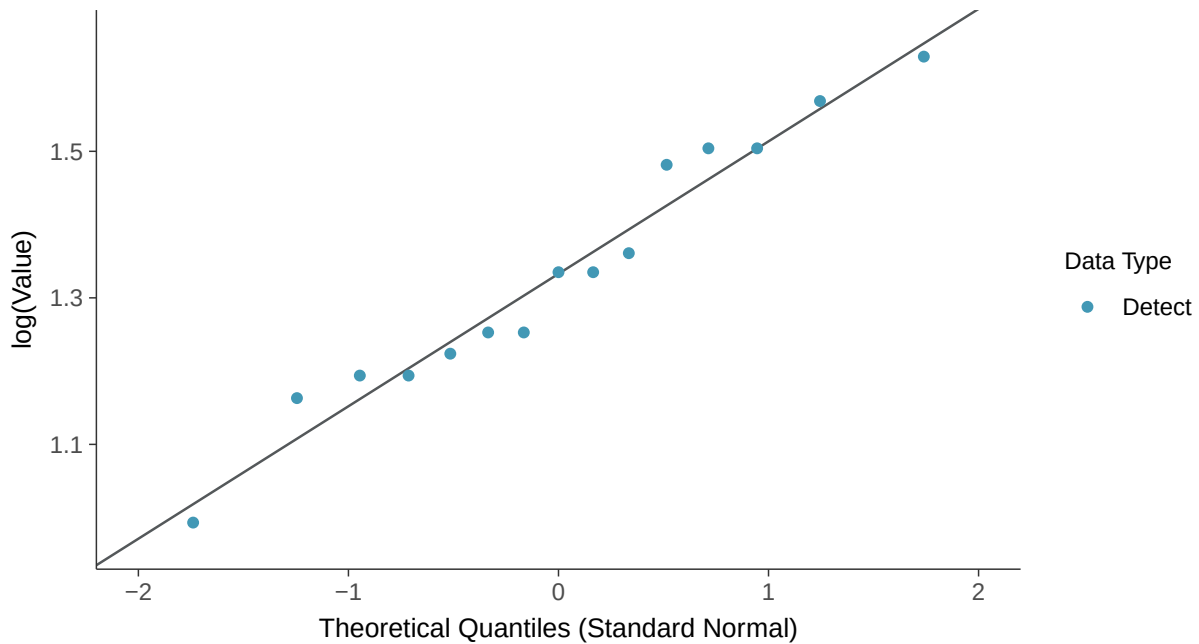
Fluoride, MW-18 (mg/L)



Normal Q-Q plot
Fluoride, MW-18 (mg/L)

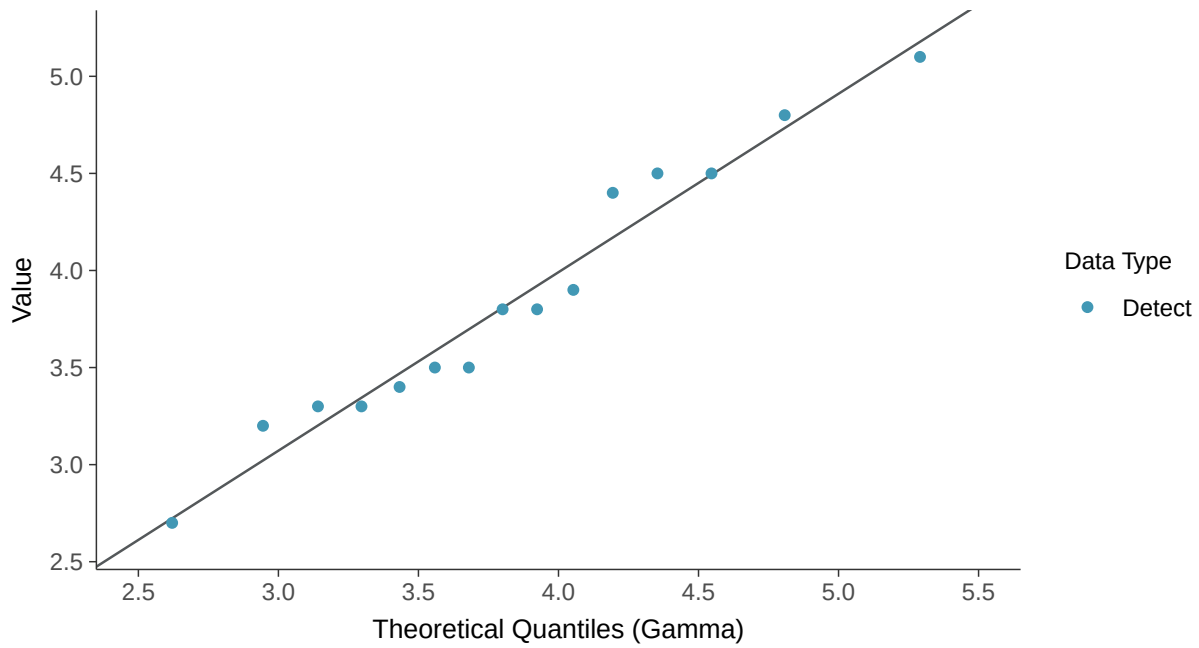


Lognormal Q-Q plot
Fluoride, MW-18 (mg/L)



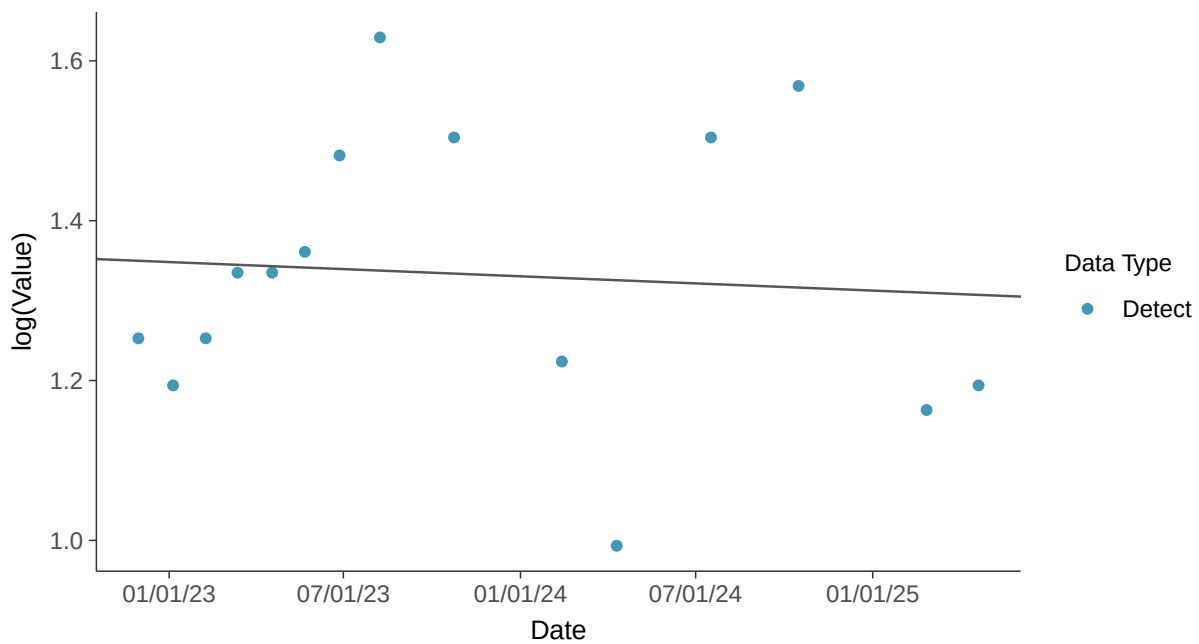
Gamma Q-Q plot

Fluoride, MW-18 (mg/L)



Trend Regression: Lognormal MLE

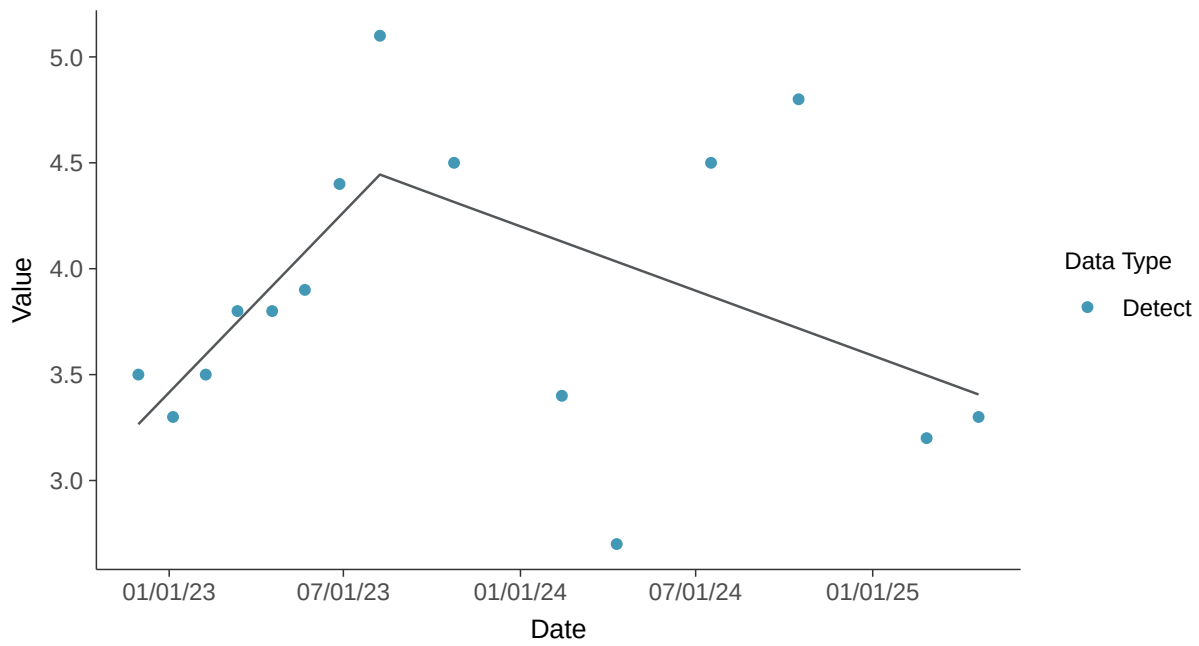
Fluoride, MW-18 (mg/L)





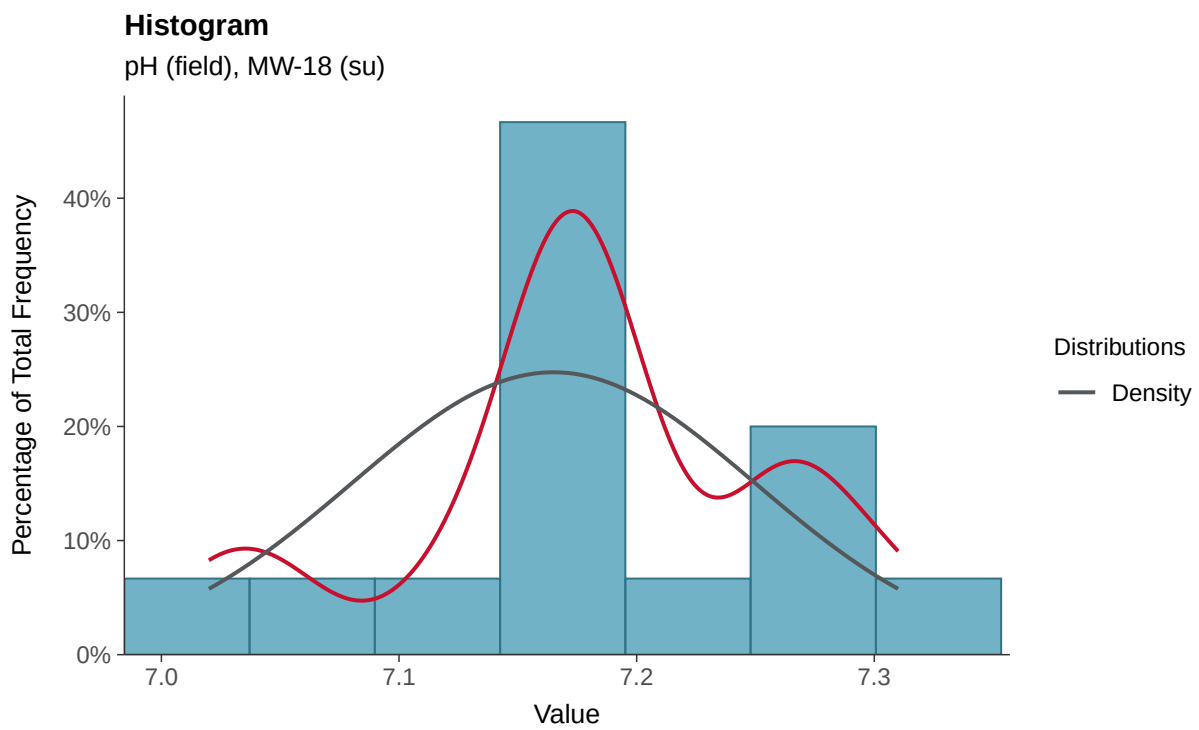
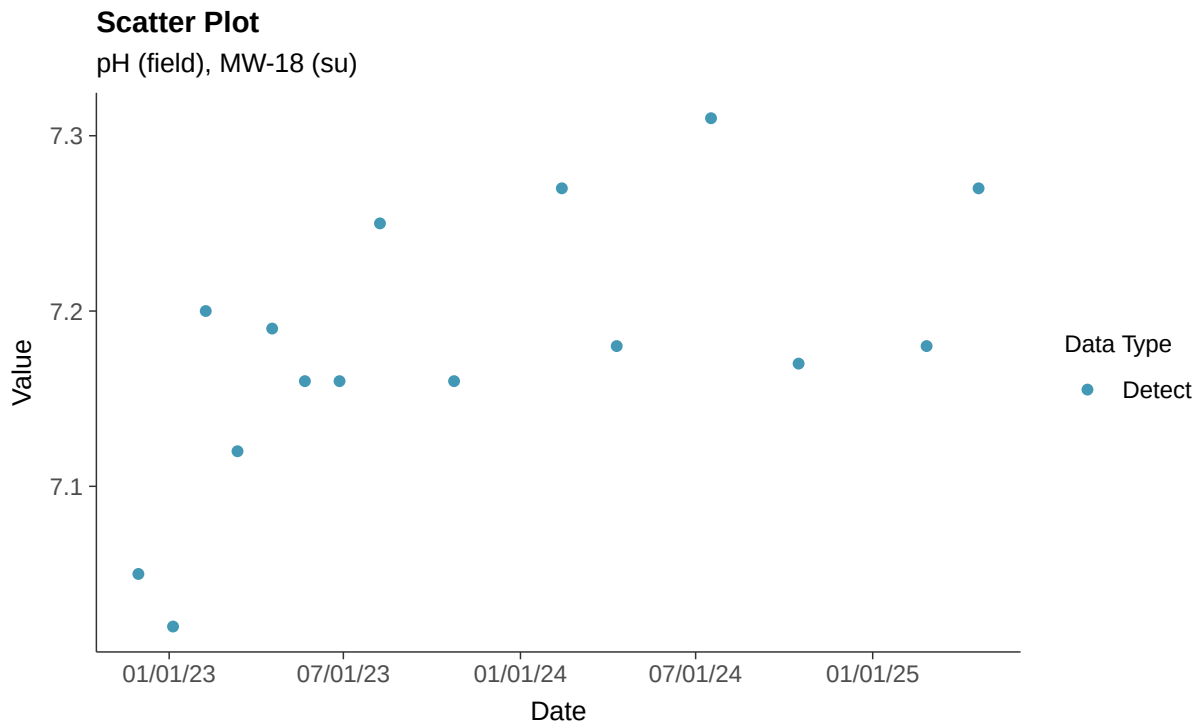
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-18 (mg/L)



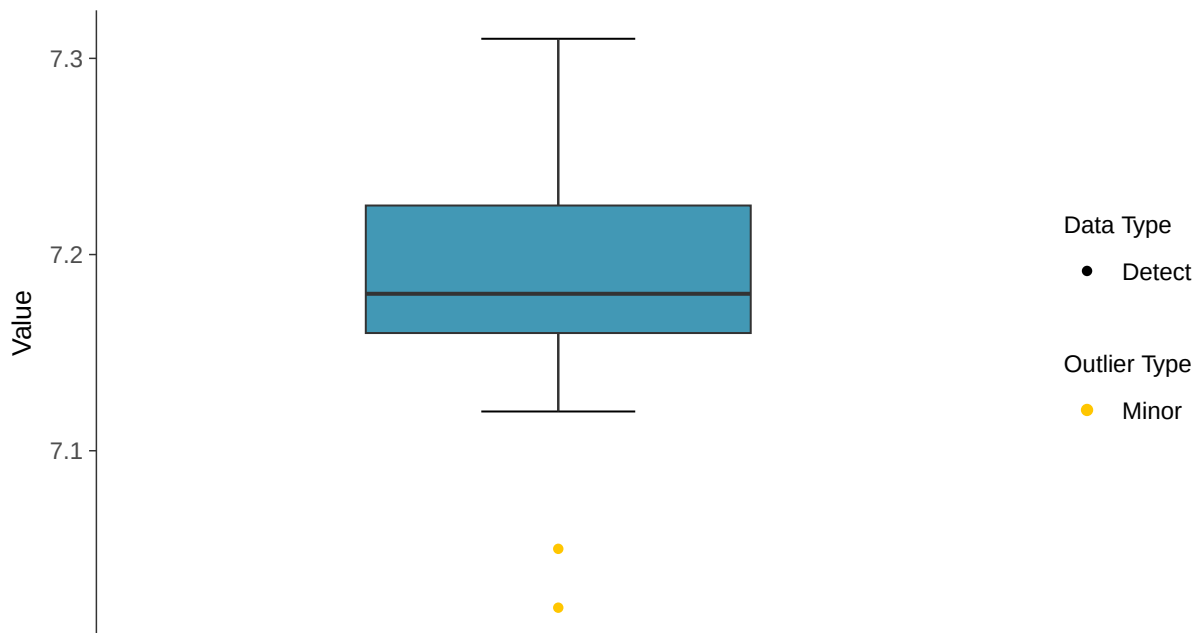
Appendix III: pH (field), MW-18

ID: 28_1_3_120



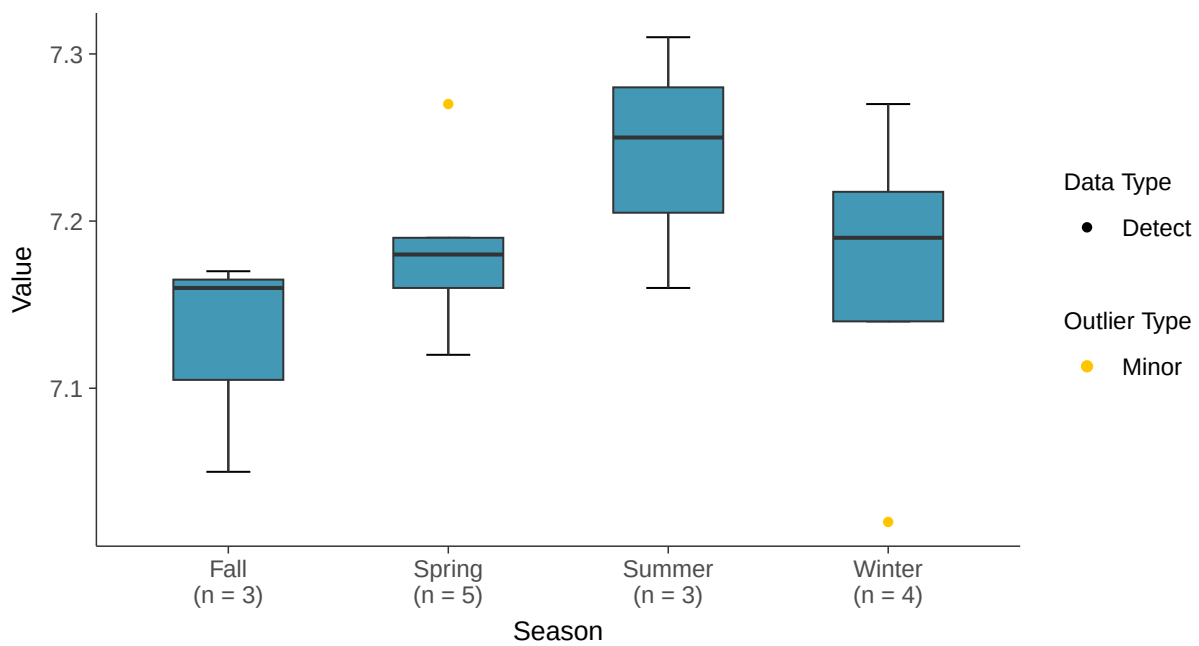
Boxplot

pH (field), MW-18 (su)

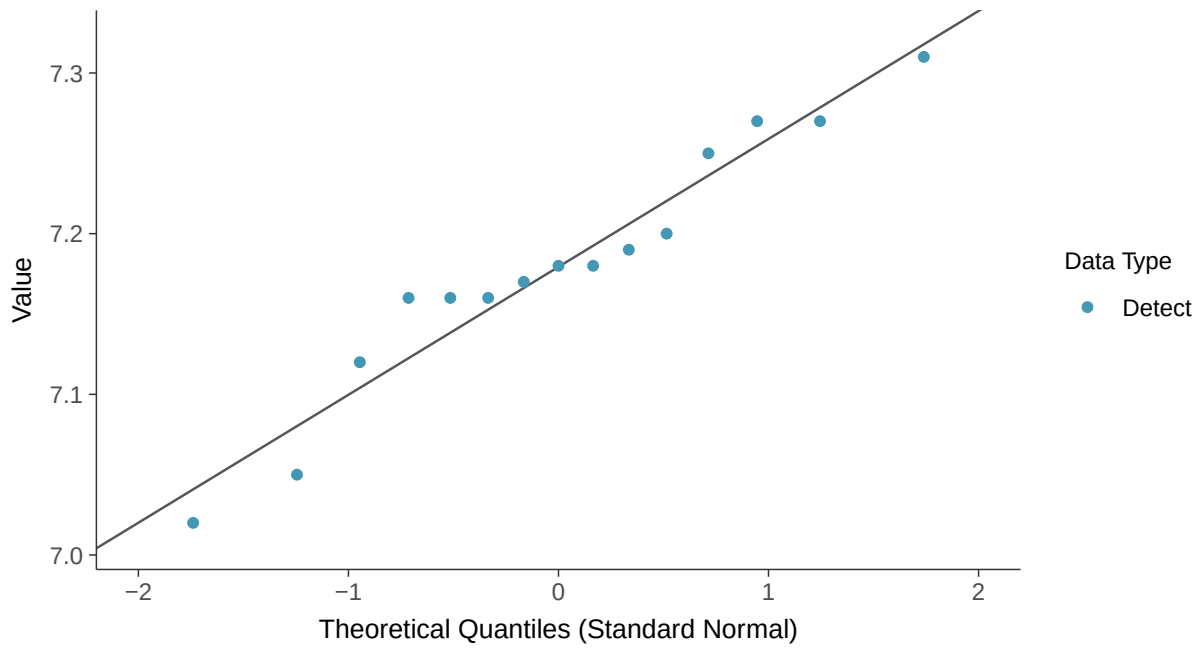


Boxplot by Season

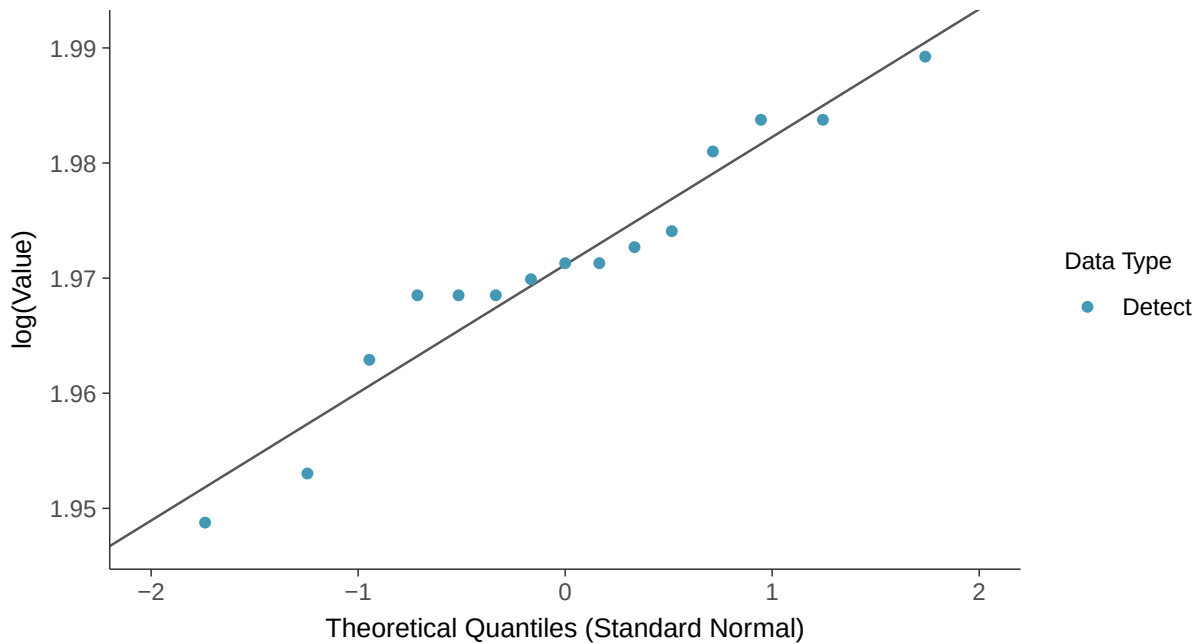
pH (field), MW-18 (su)



Normal Q-Q plot
pH (field), MW-18 (su)

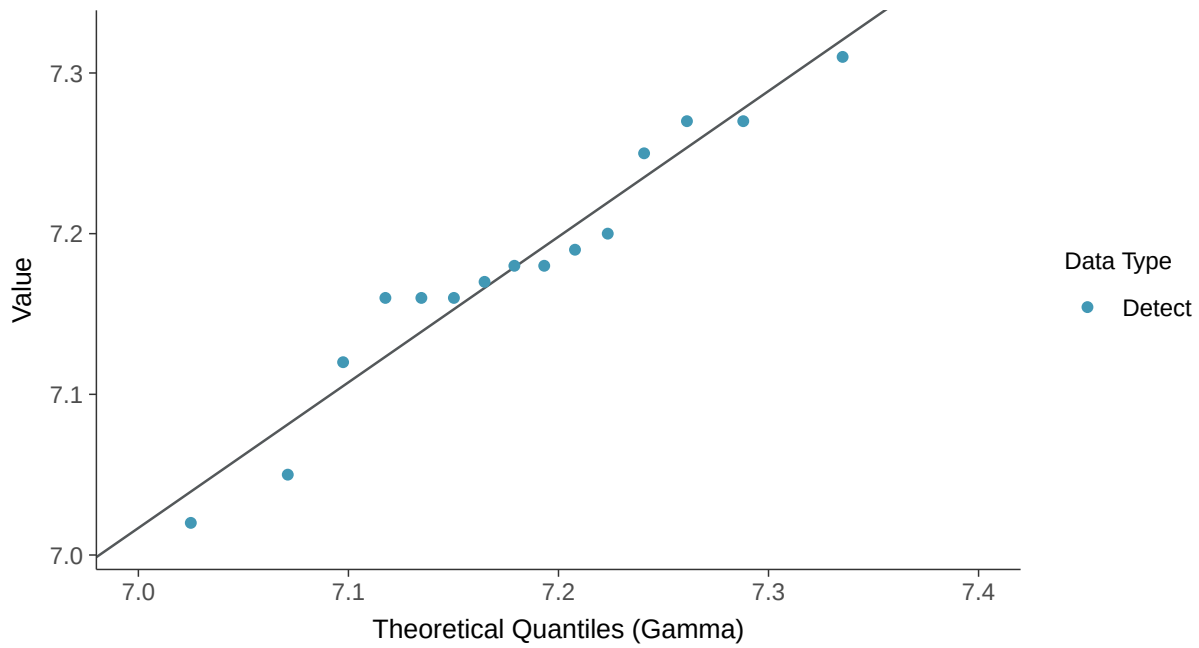


Lognormal Q-Q plot
pH (field), MW-18 (su)



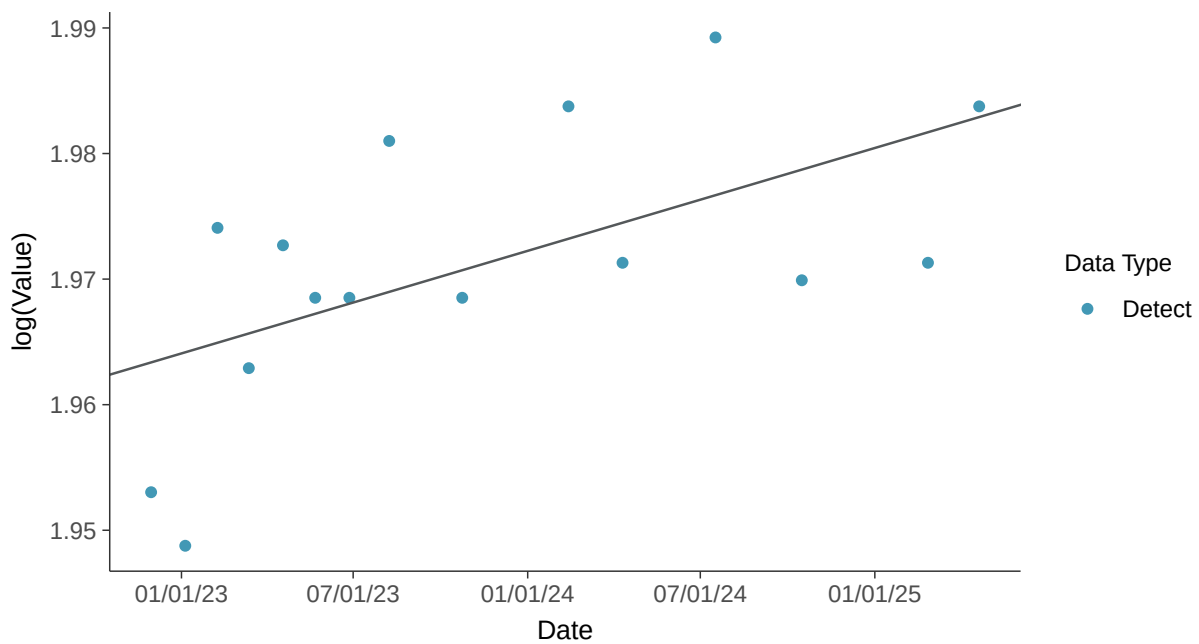
Gamma Q-Q plot

pH (field), MW-18 (su)



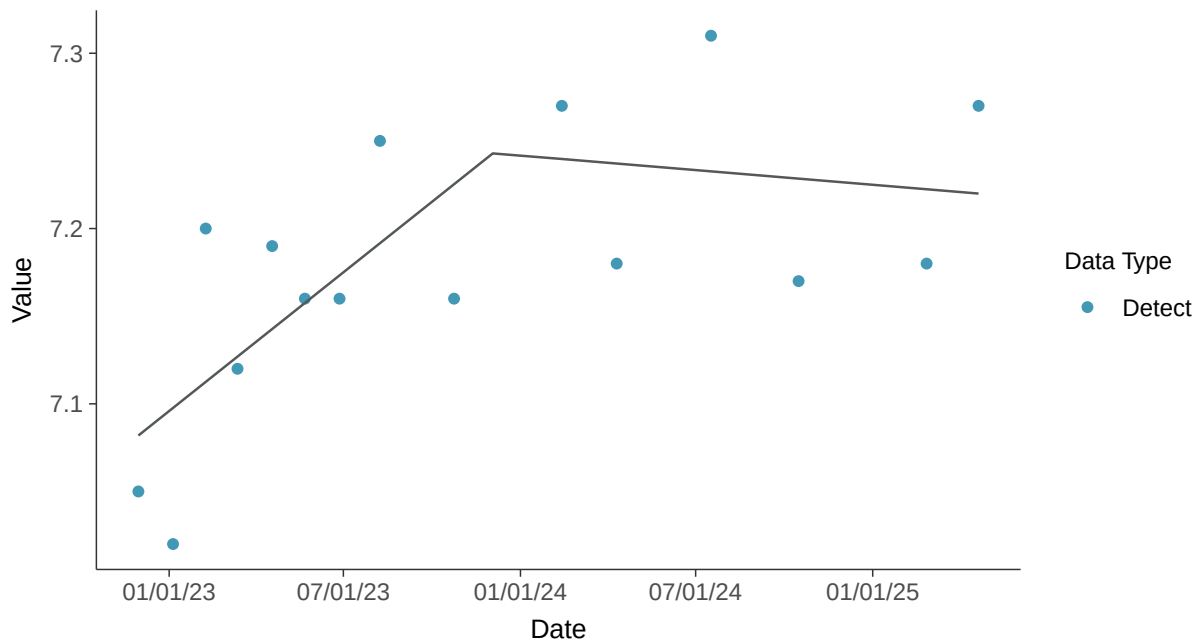
Trend Regression: Lognormal MLE

pH (field), MW-18 (su)



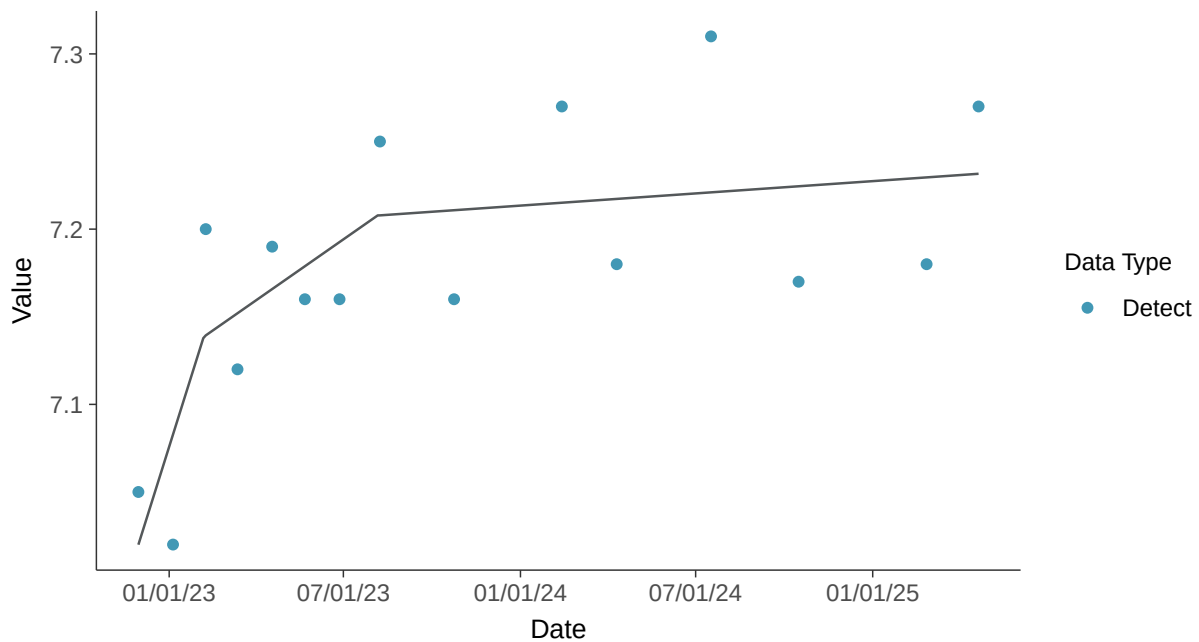
Trend Regression: Piecewise Linear-Linear

pH (field), MW-18 (su)



Trend Regression: Piecewise Linear-Linear-Linear

pH (field), MW-18 (su)

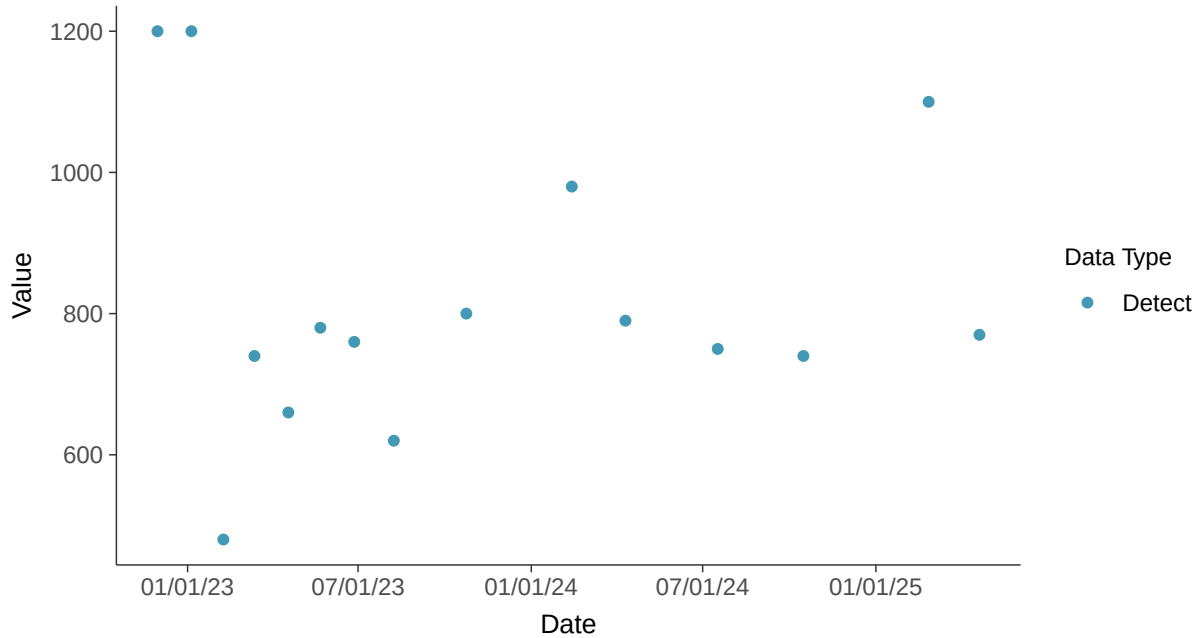


Appendix III: Sulfate (as SO₄), MW-18

ID: 28_1_3_124

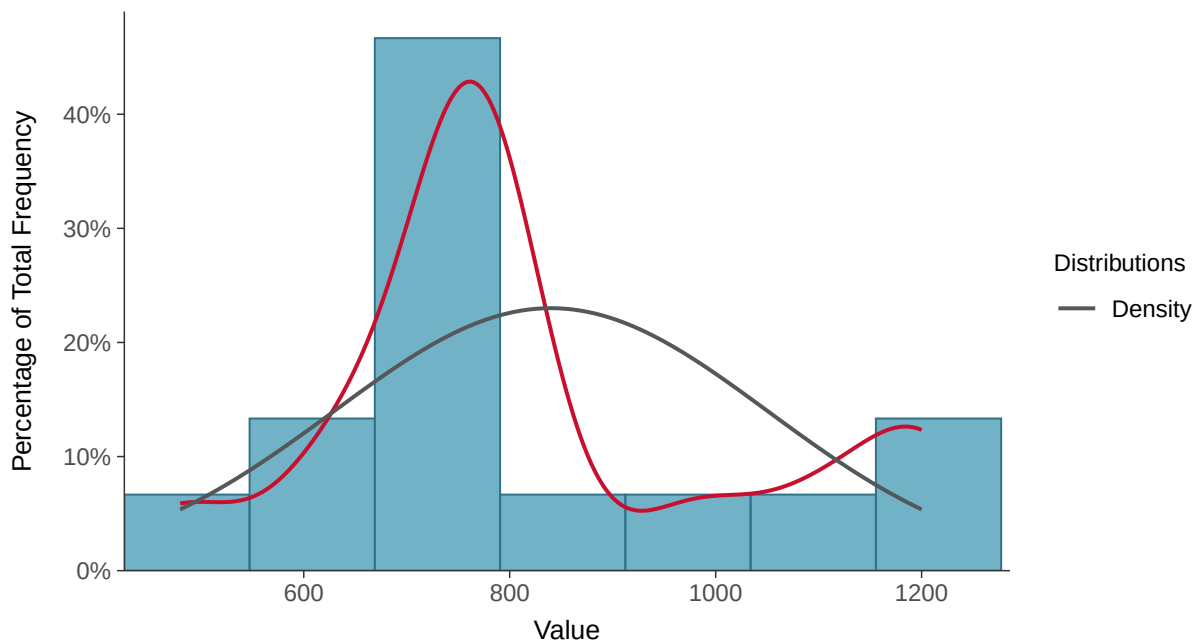
Scatter Plot

Sulfate (as SO₄), MW-18 (mg/L)



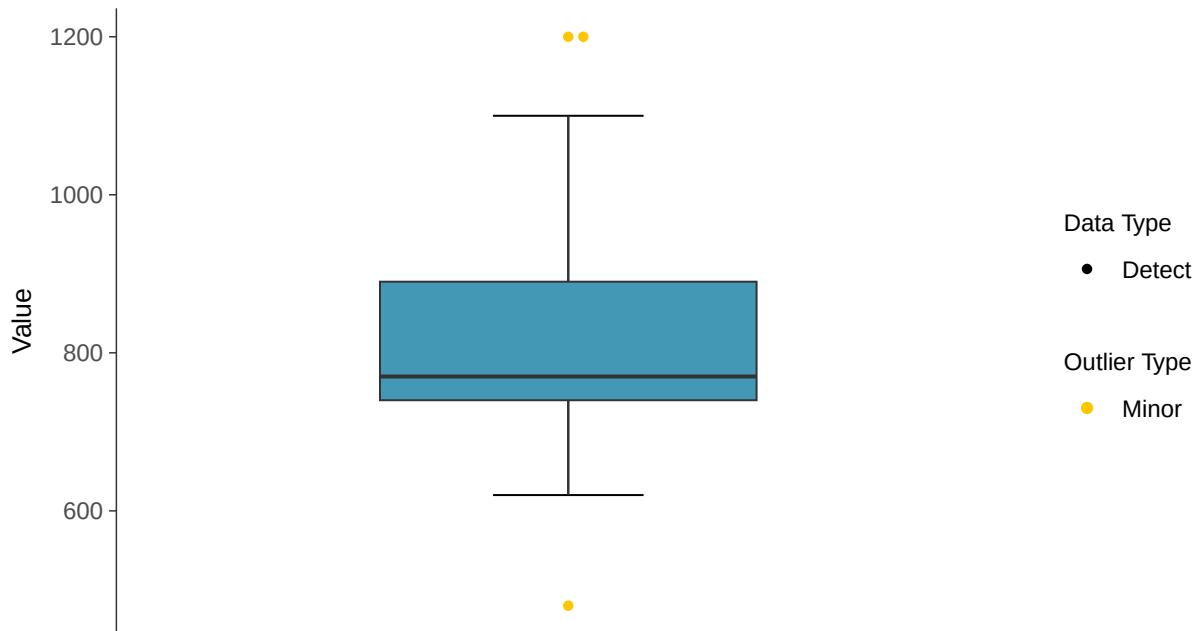
Histogram

Sulfate (as SO₄), MW-18 (mg/L)



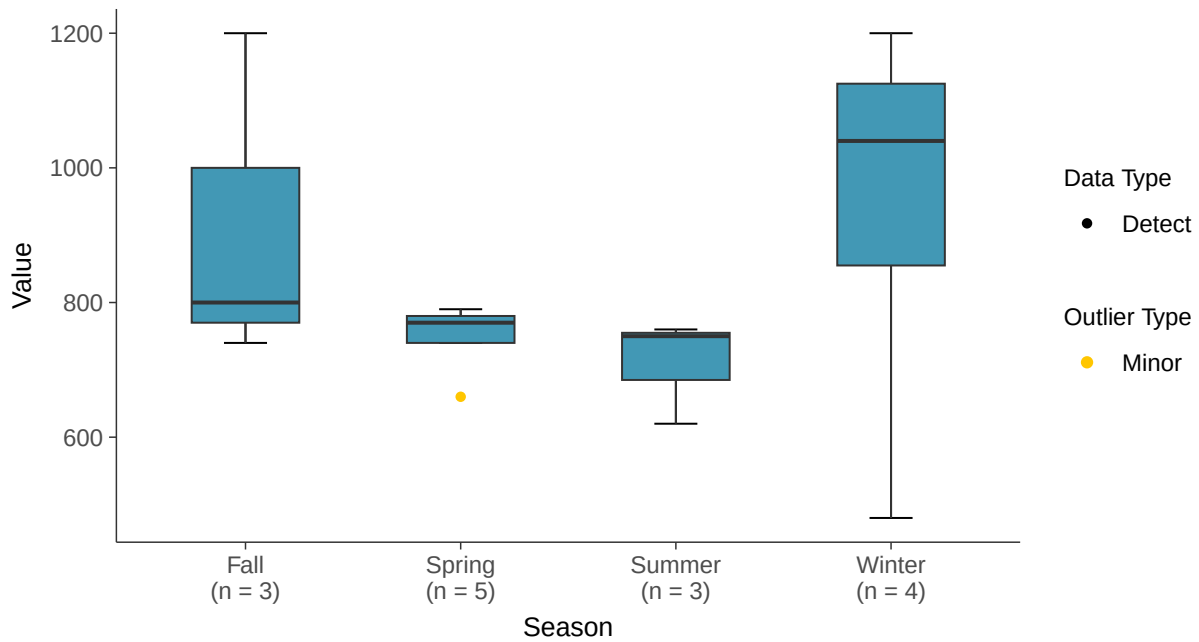
Boxplot

Sulfate (as SO₄), MW-18 (mg/L)



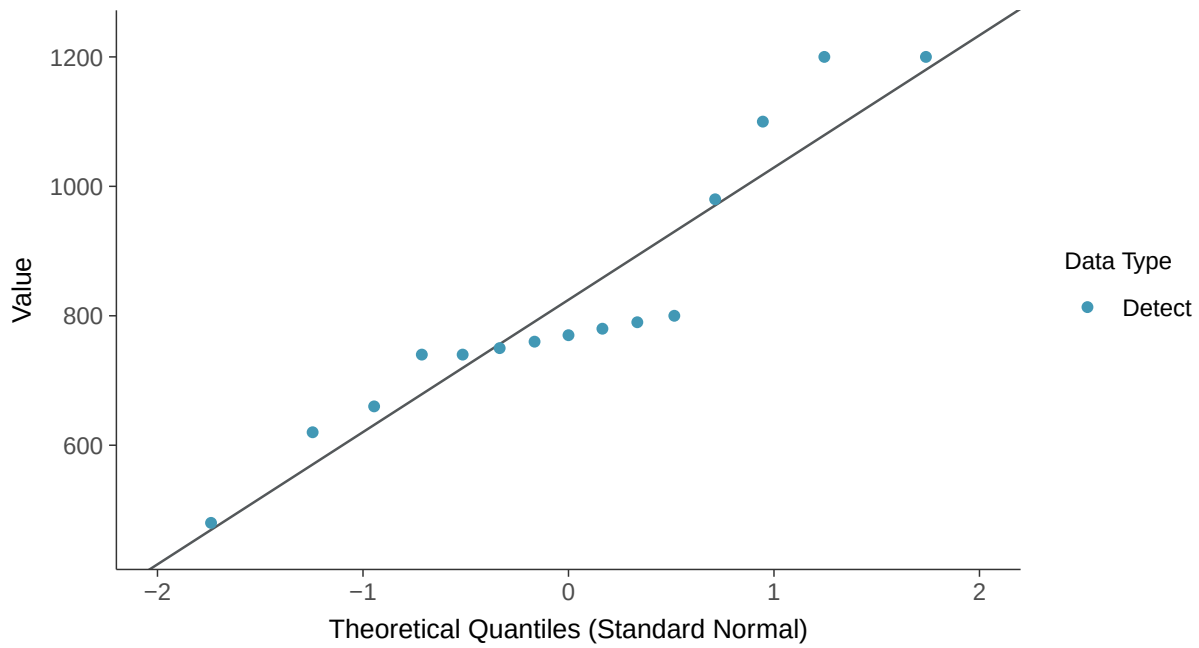
Boxplot by Season

Sulfate (as SO₄), MW-18 (mg/L)



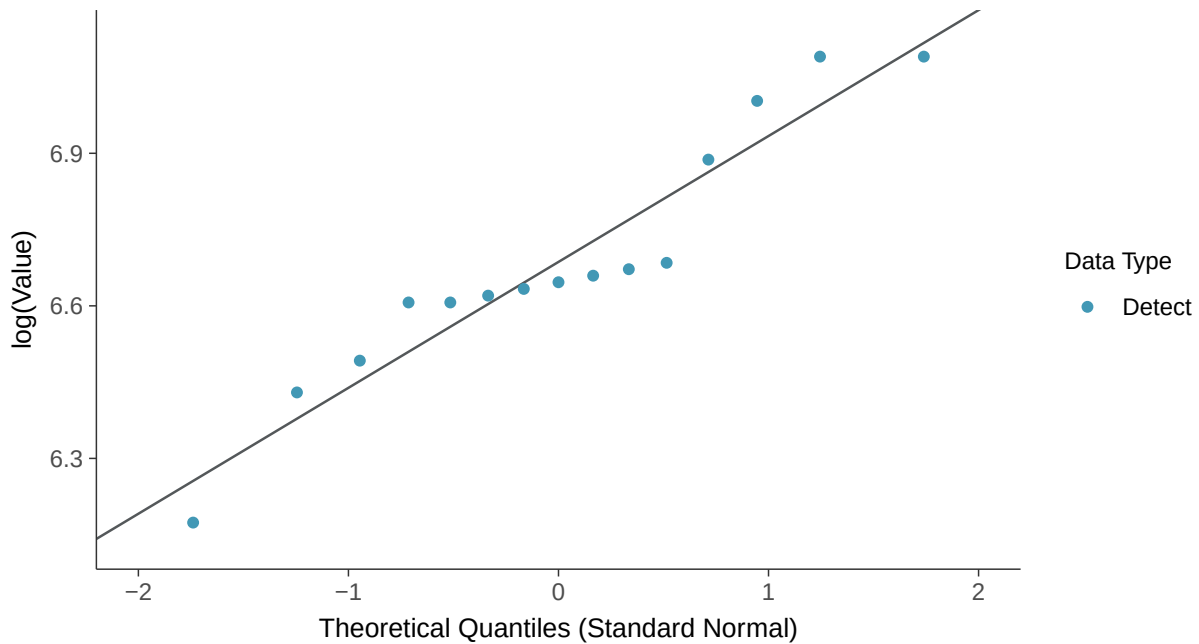
Normal Q-Q plot

Sulfate (as SO₄), MW-18 (mg/L)



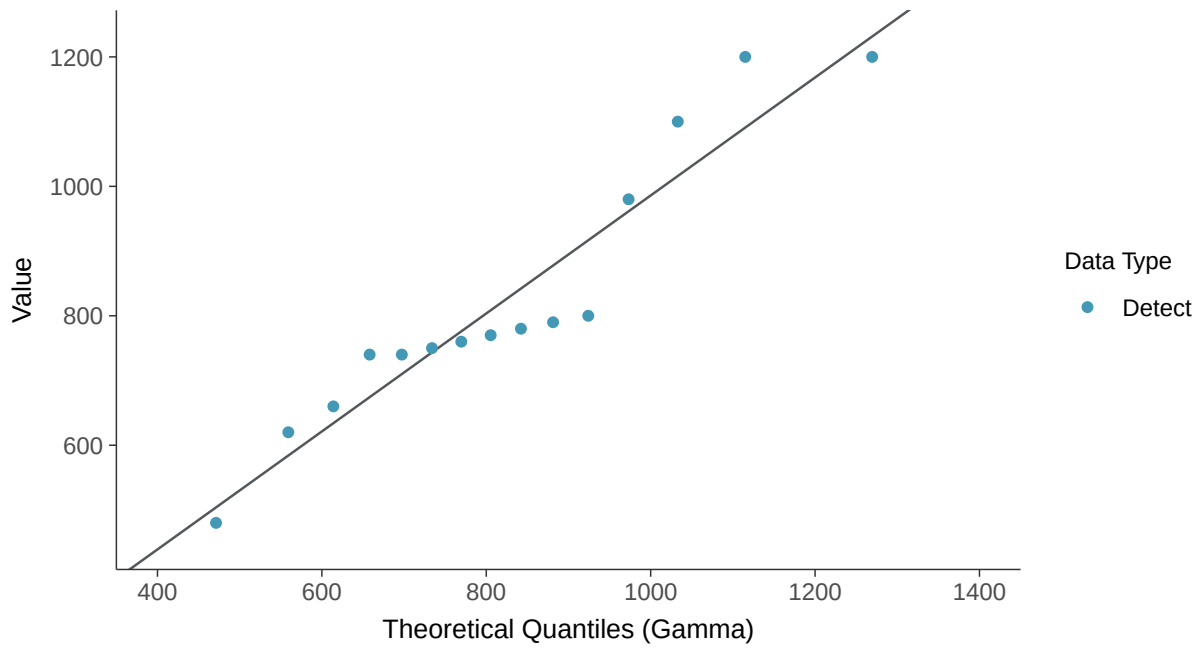
Lognormal Q-Q plot

Sulfate (as SO₄), MW-18 (mg/L)



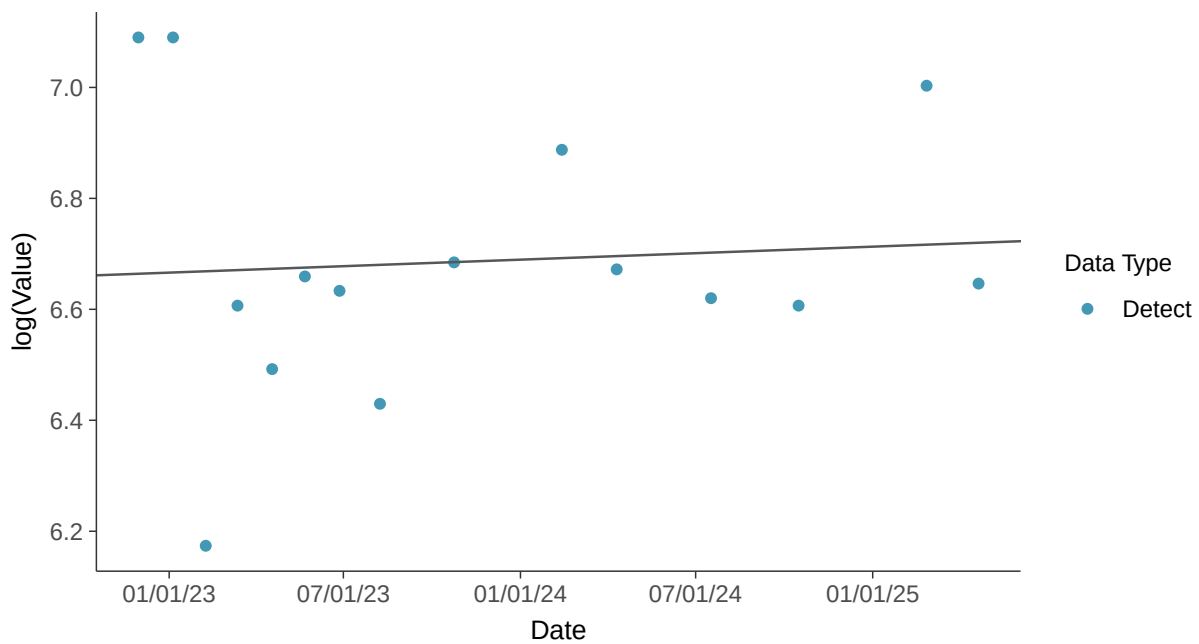
Gamma Q-Q plot

Sulfate (as SO₄), MW-18 (mg/L)



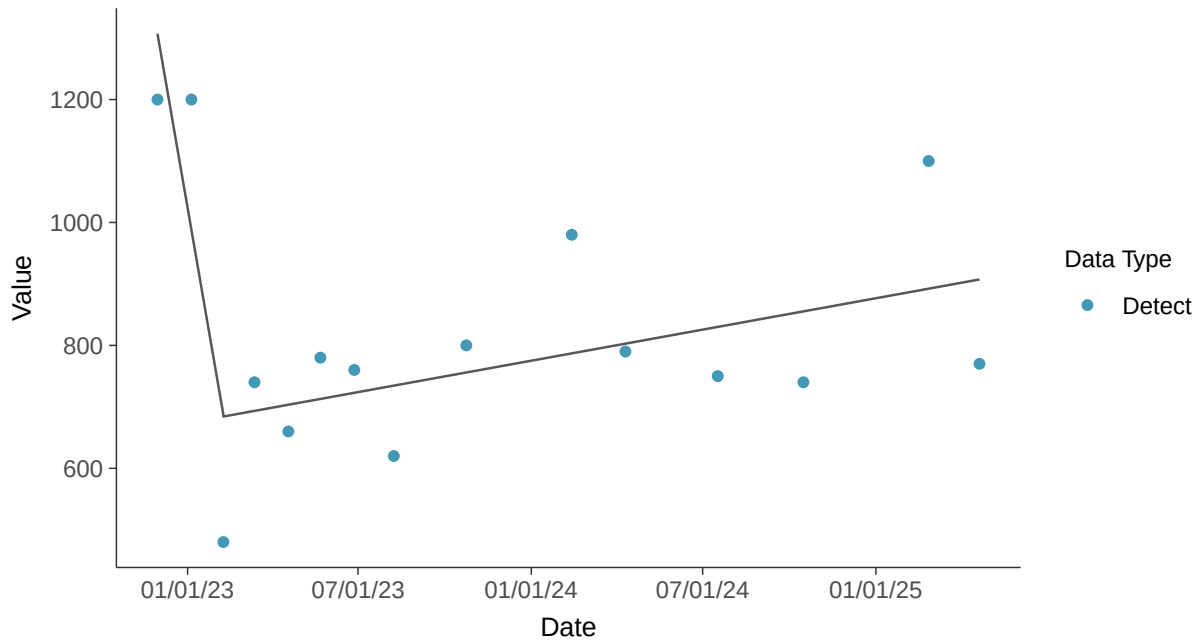
Trend Regression: Lognormal MLE

Sulfate (as SO₄), MW-18 (mg/L)



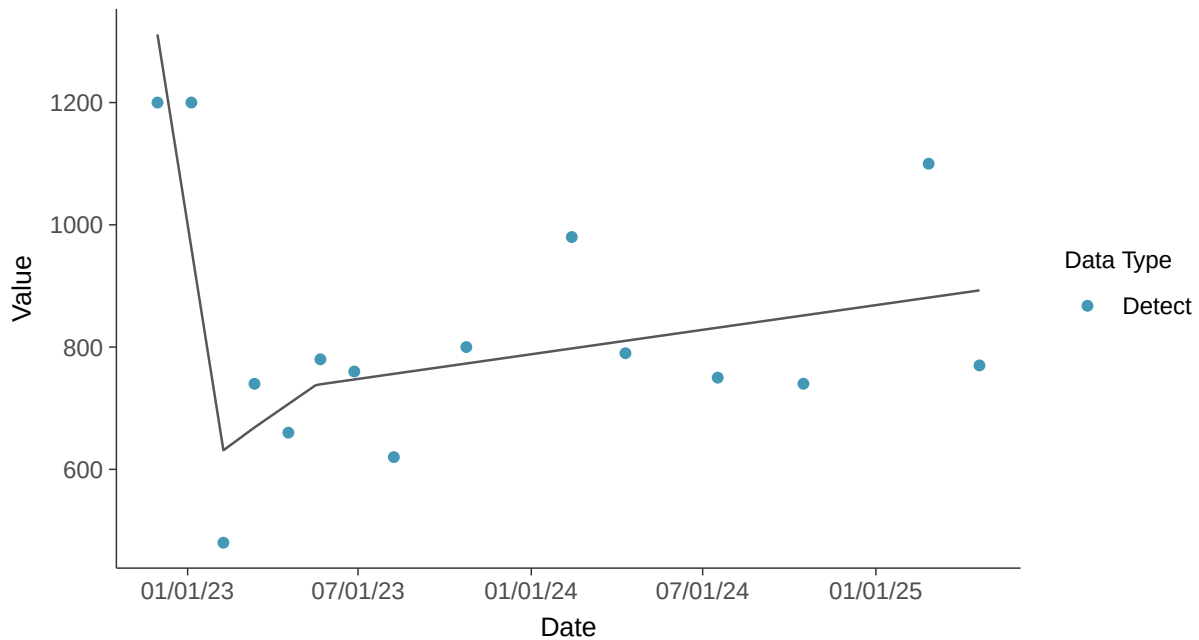
Trend Regression: Piecewise Linear-Linear

Sulfate (as SO₄), MW-18 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Sulfate (as SO₄), MW-18 (mg/L)

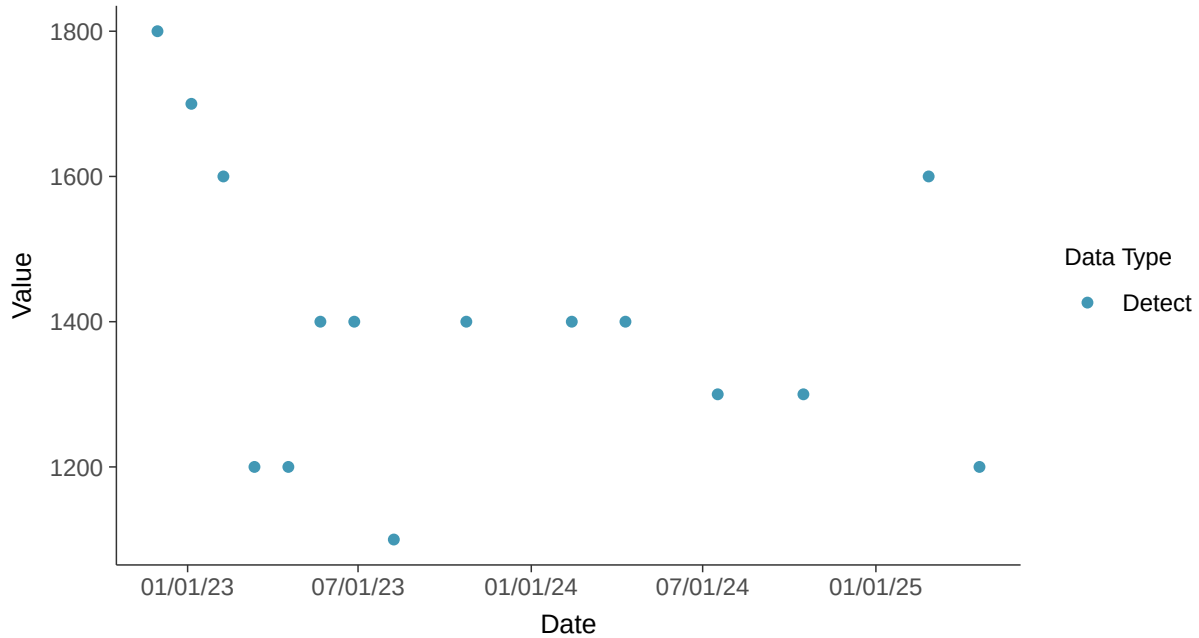


Appendix III: Total Dissolved Solids, MW-18

ID: 28_1_3_126

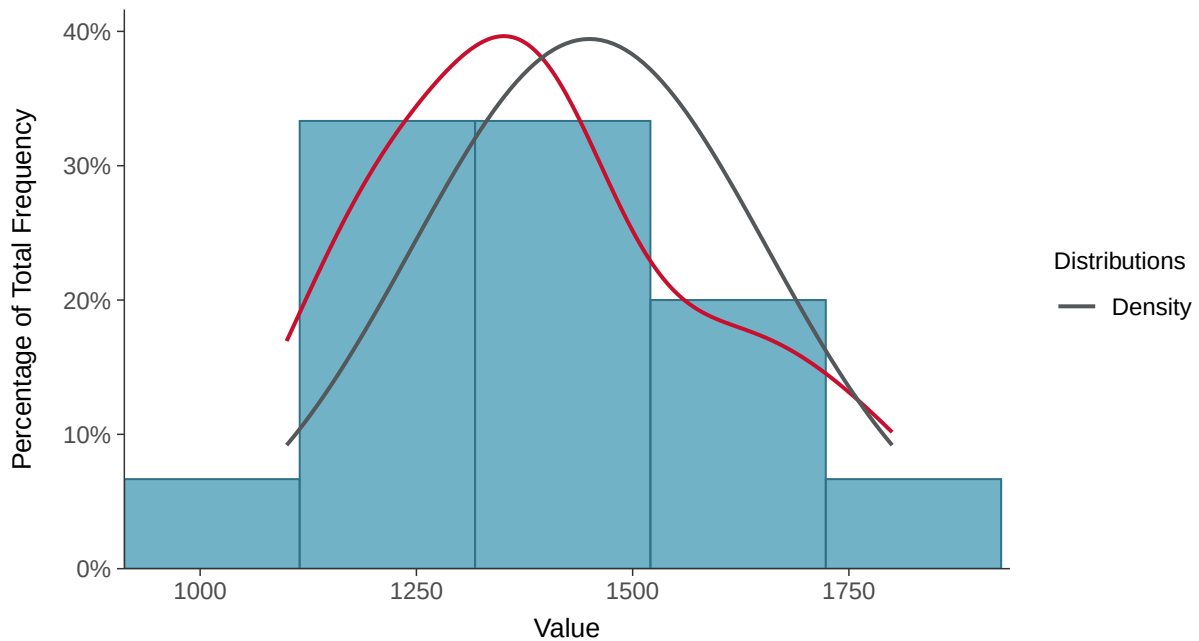
Scatter Plot

Total Dissolved Solids, MW-18 (mg/L)



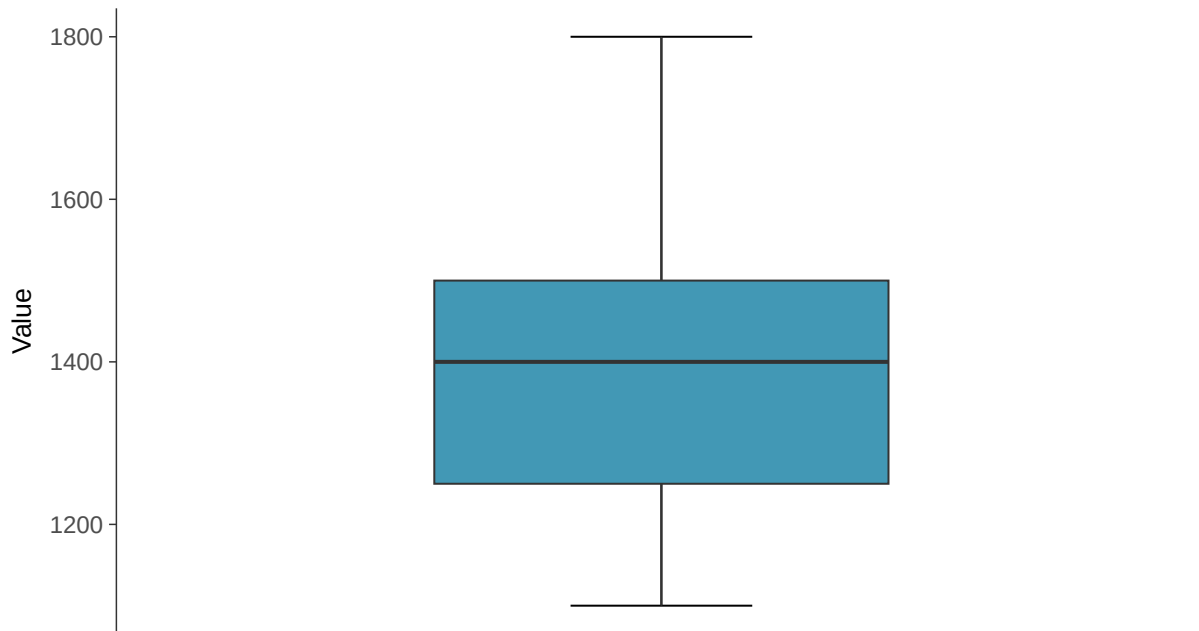
Histogram

Total Dissolved Solids, MW-18 (mg/L)



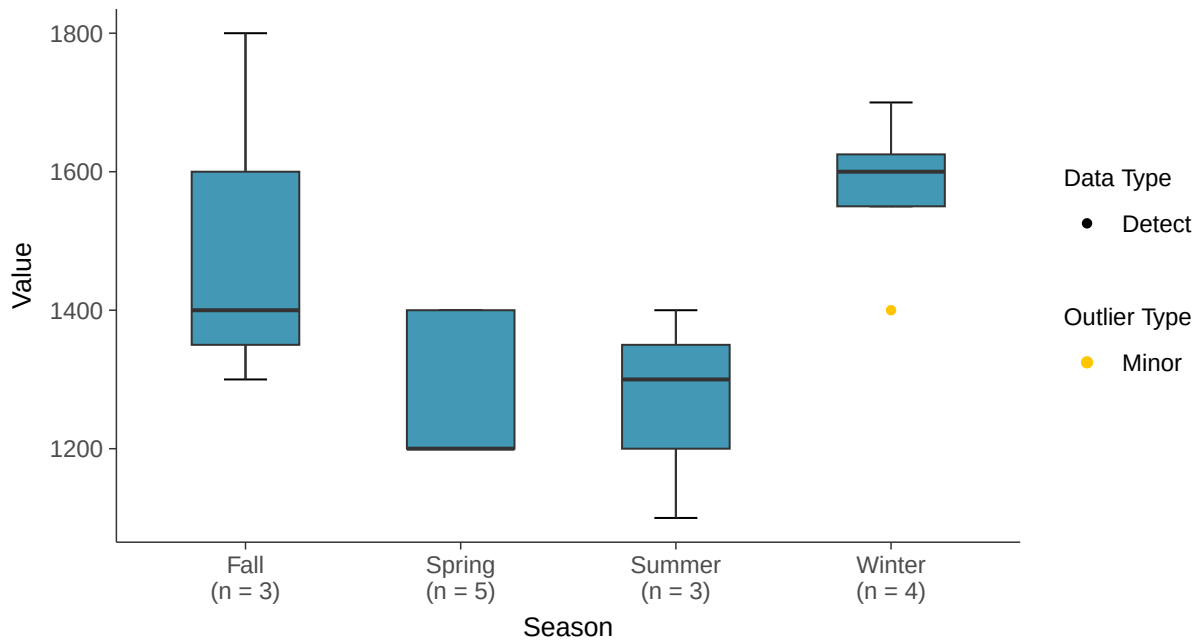
Boxplot

Total Dissolved Solids, MW-18 (mg/L)



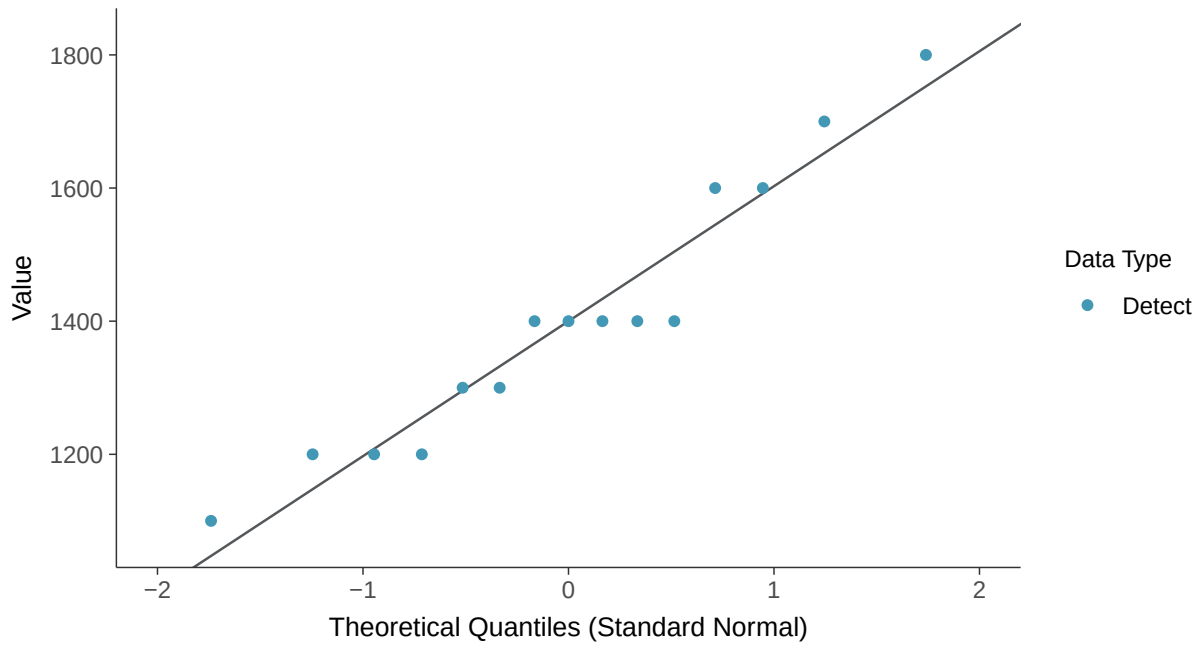
Boxplot by Season

Total Dissolved Solids, MW-18 (mg/L)



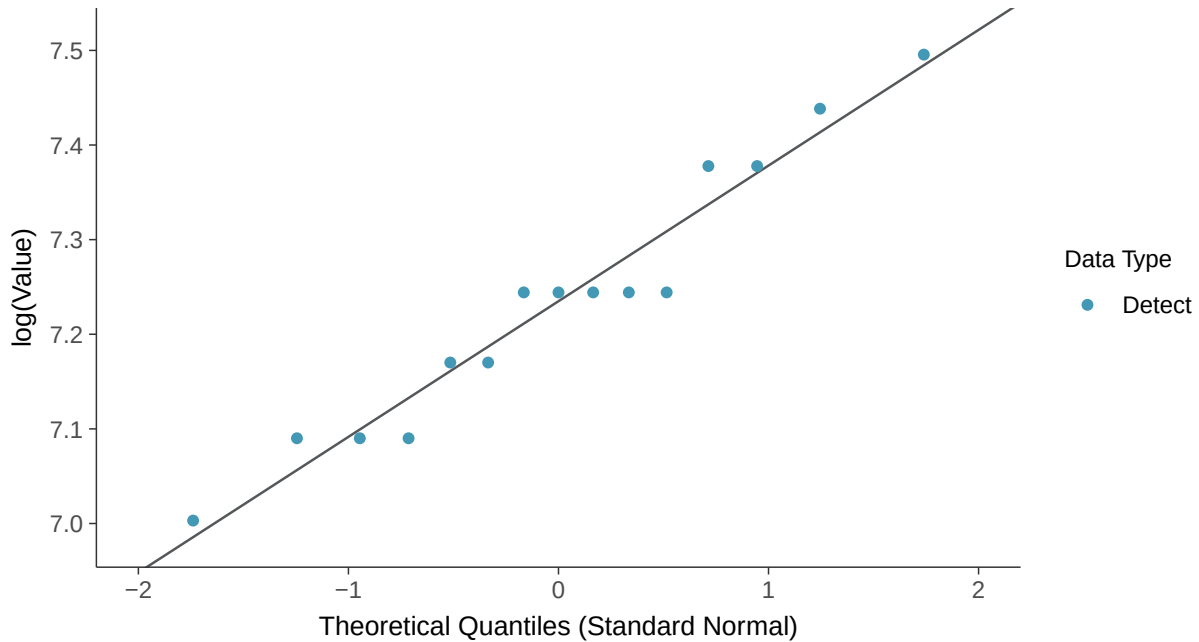
Normal Q-Q plot

Total Dissolved Solids, MW-18 (mg/L)



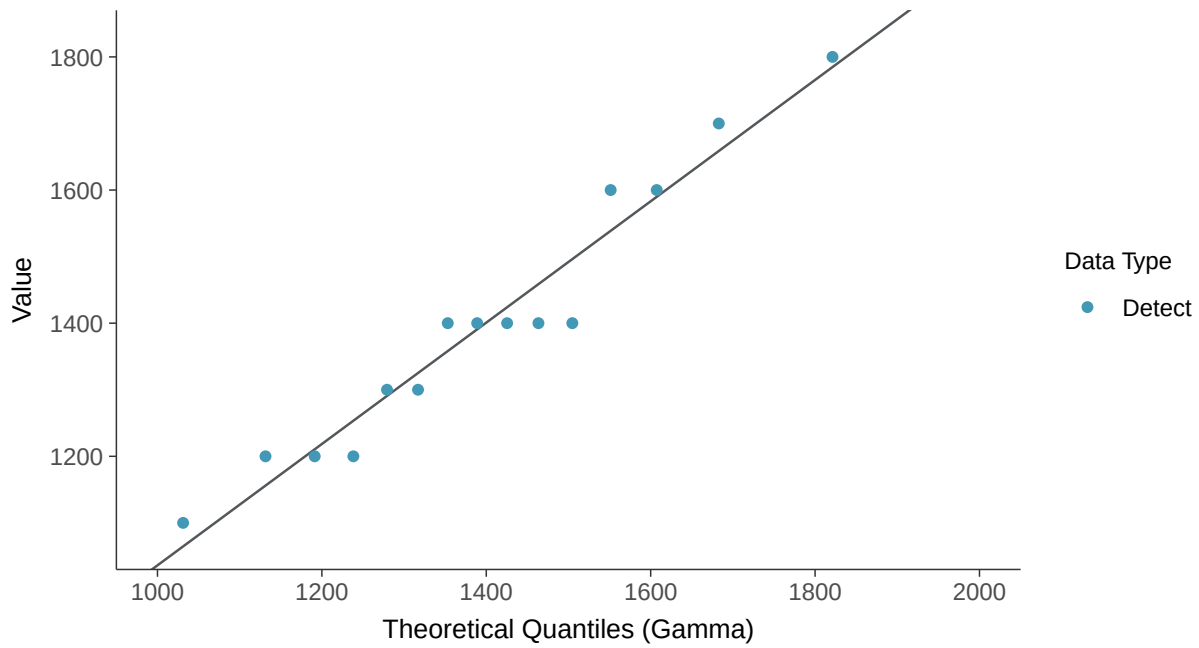
Lognormal Q-Q plot

Total Dissolved Solids, MW-18 (mg/L)



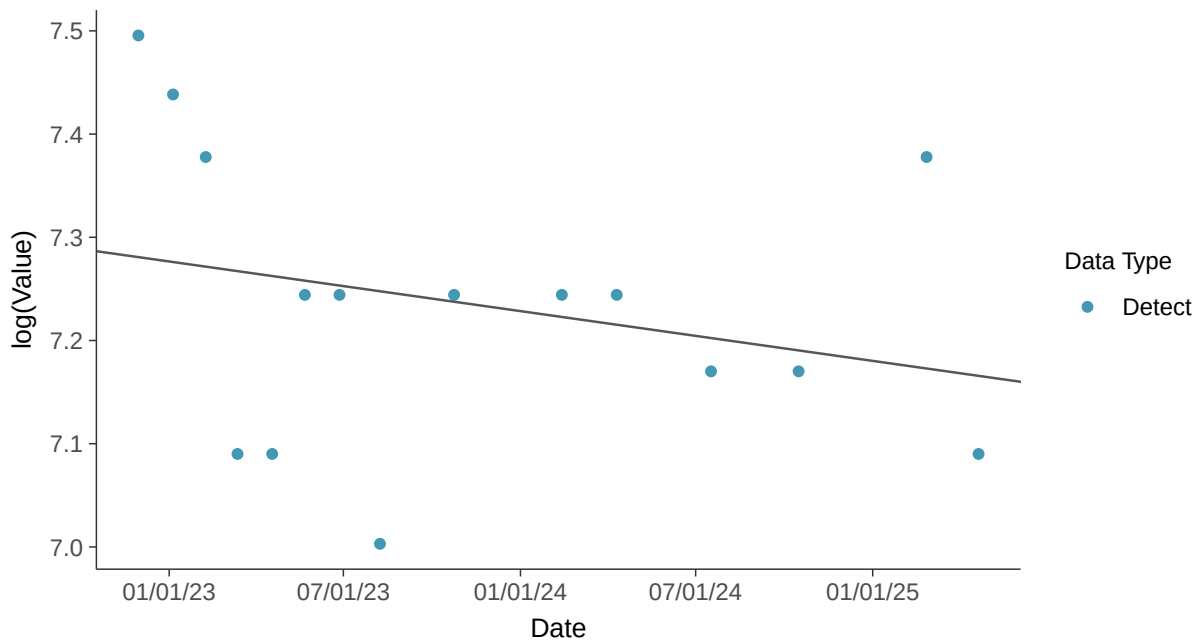
Gamma Q-Q plot

Total Dissolved Solids, MW-18 (mg/L)



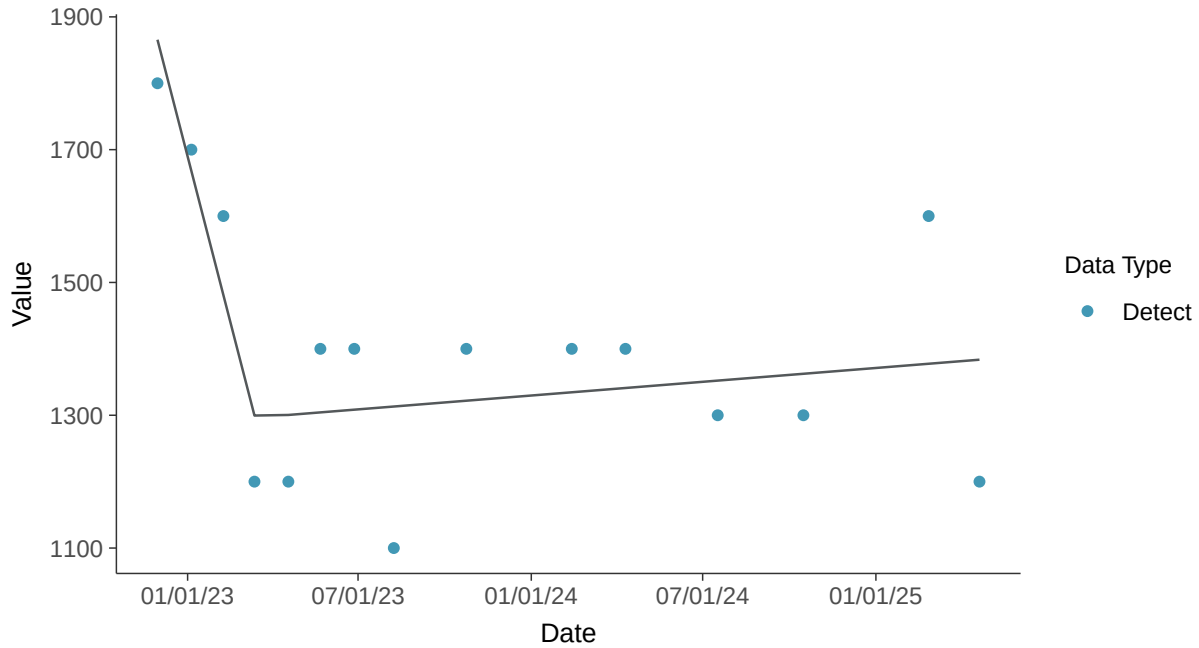
Trend Regression: Lognormal MLE

Total Dissolved Solids, MW-18 (mg/L)



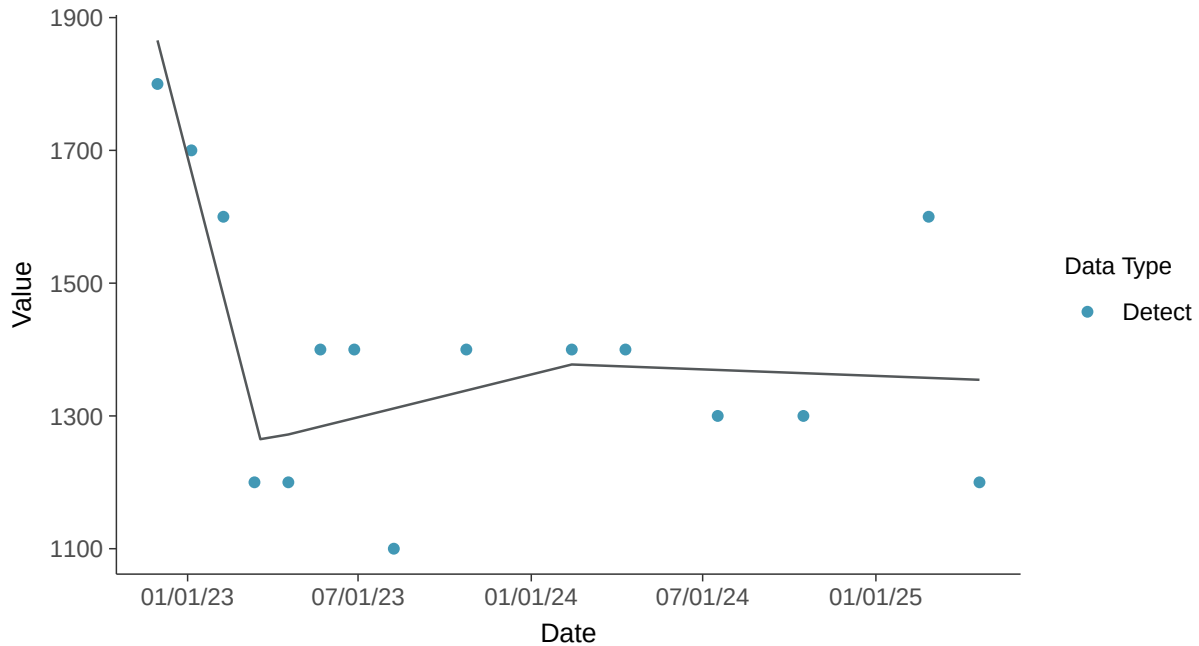
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-18 (mg/L)



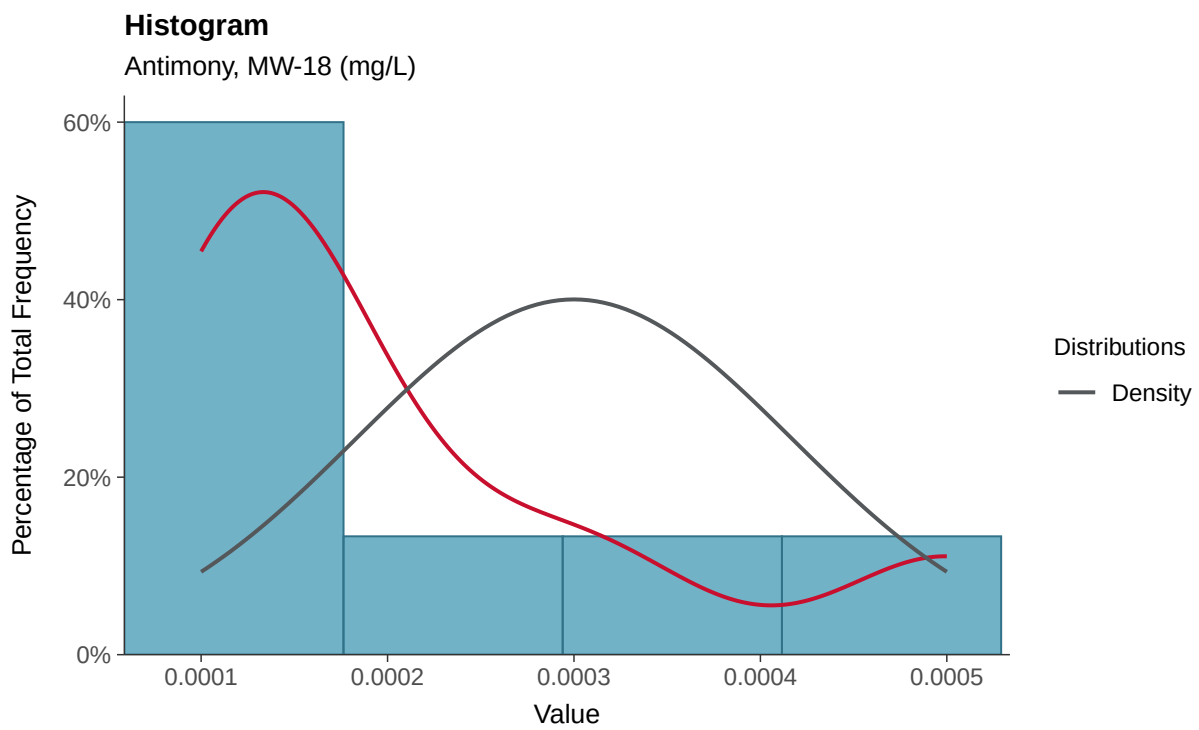
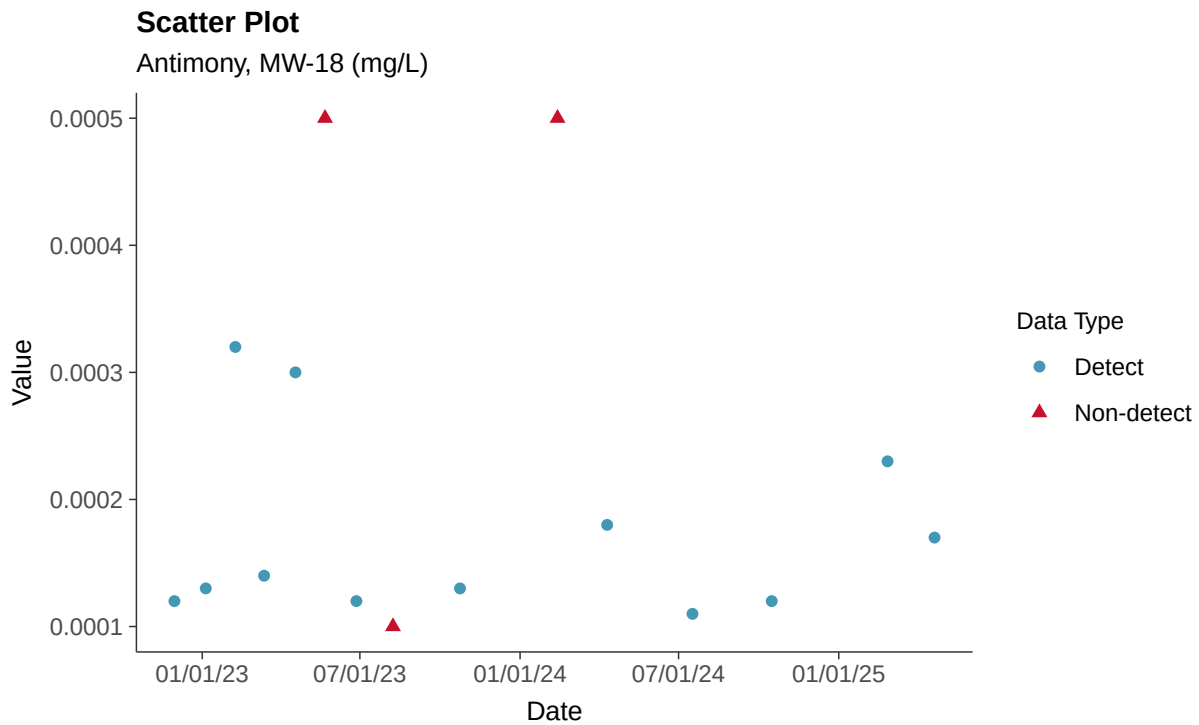
Trend Regression: Piecewise Linear-Linear-Linear

Total Dissolved Solids, MW-18 (mg/L)



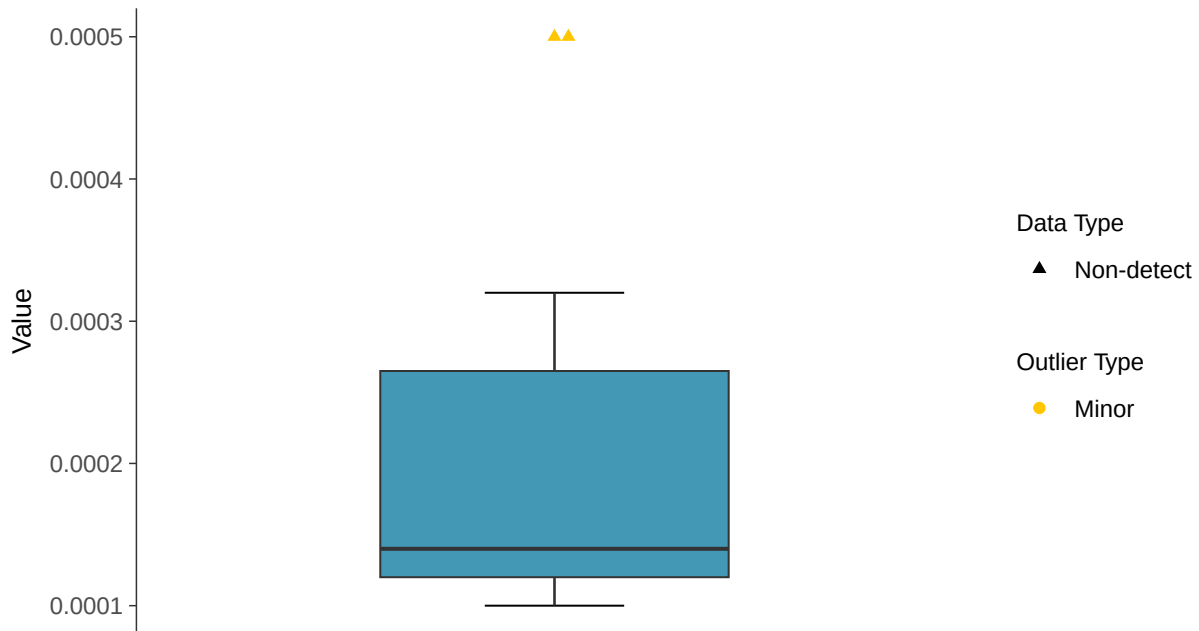
Appendix IV: Antimony, MW-18

ID: 28_1_4_101



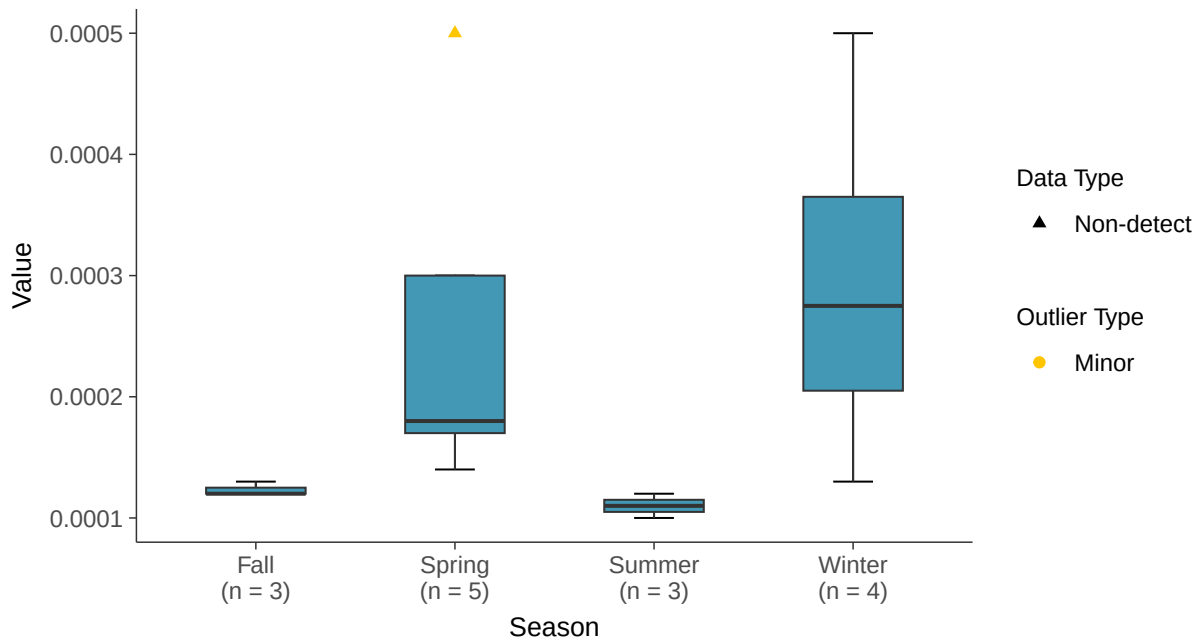
Boxplot

Antimony, MW-18 (mg/L)



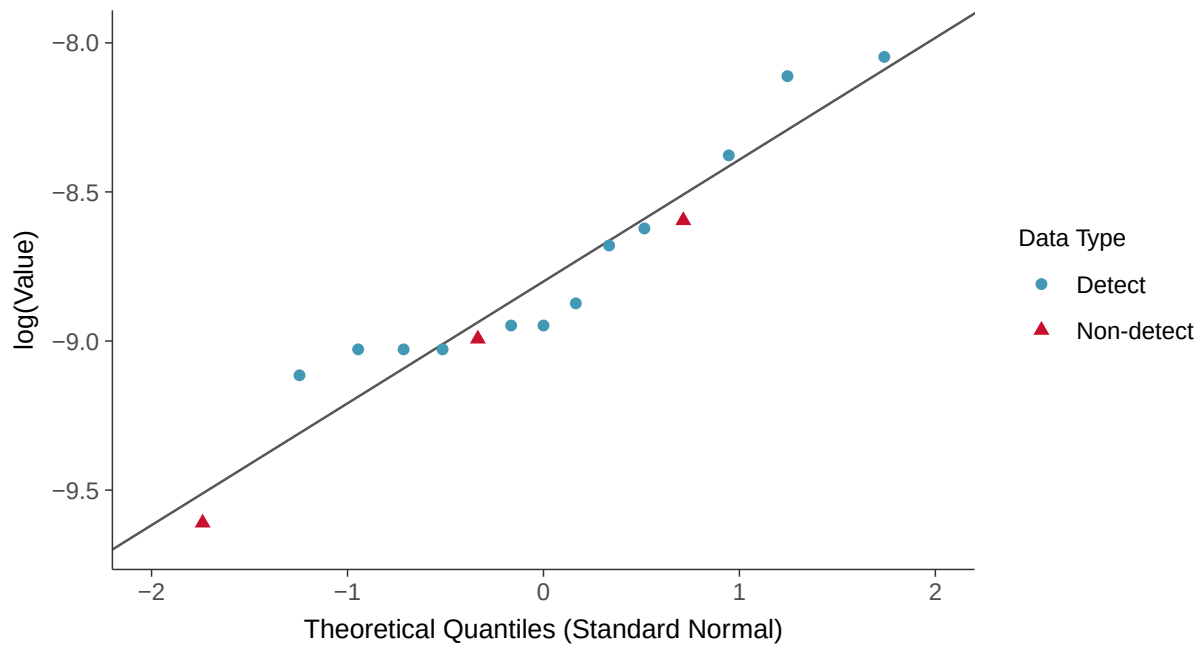
Boxplot by Season

Antimony, MW-18 (mg/L)



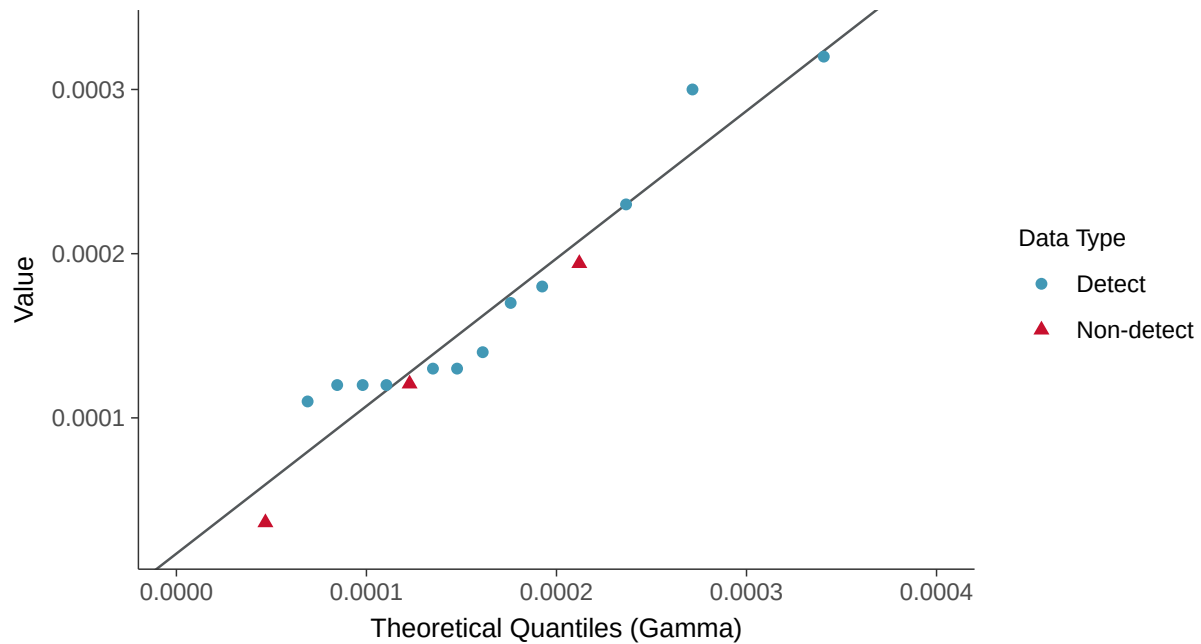
Lognormal Q-Q plot using ROS Imputed Estimates

Antimony, MW-18 (mg/L)



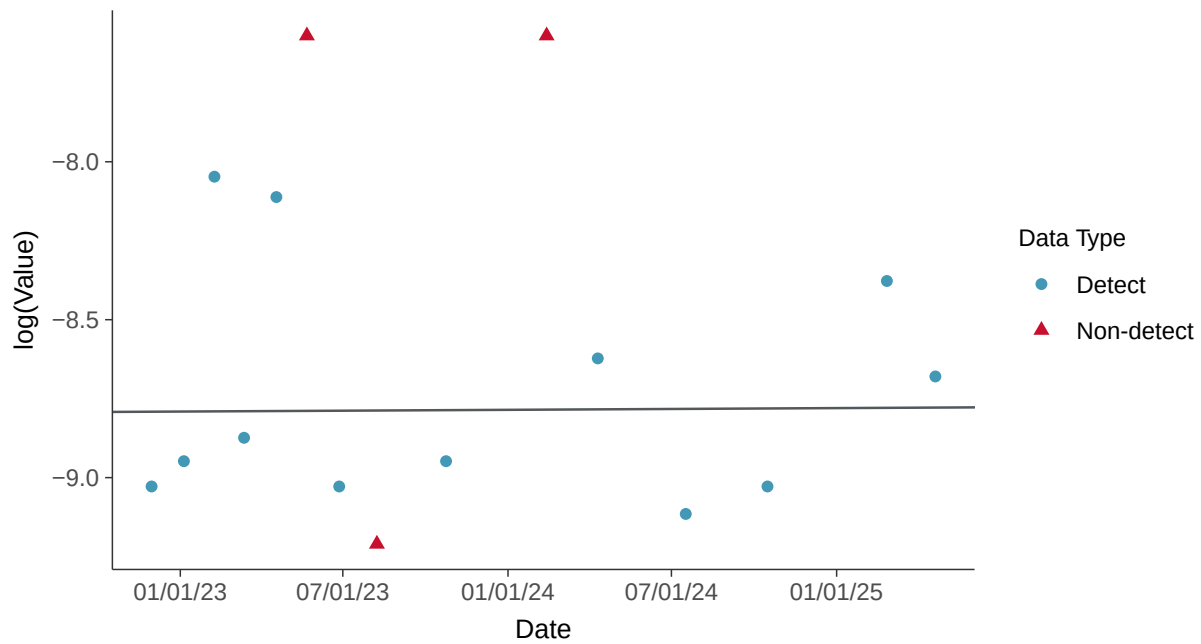
Gamma Q-Q plot using ROS Imputed Estimates

Antimony, MW-18 (mg/L)



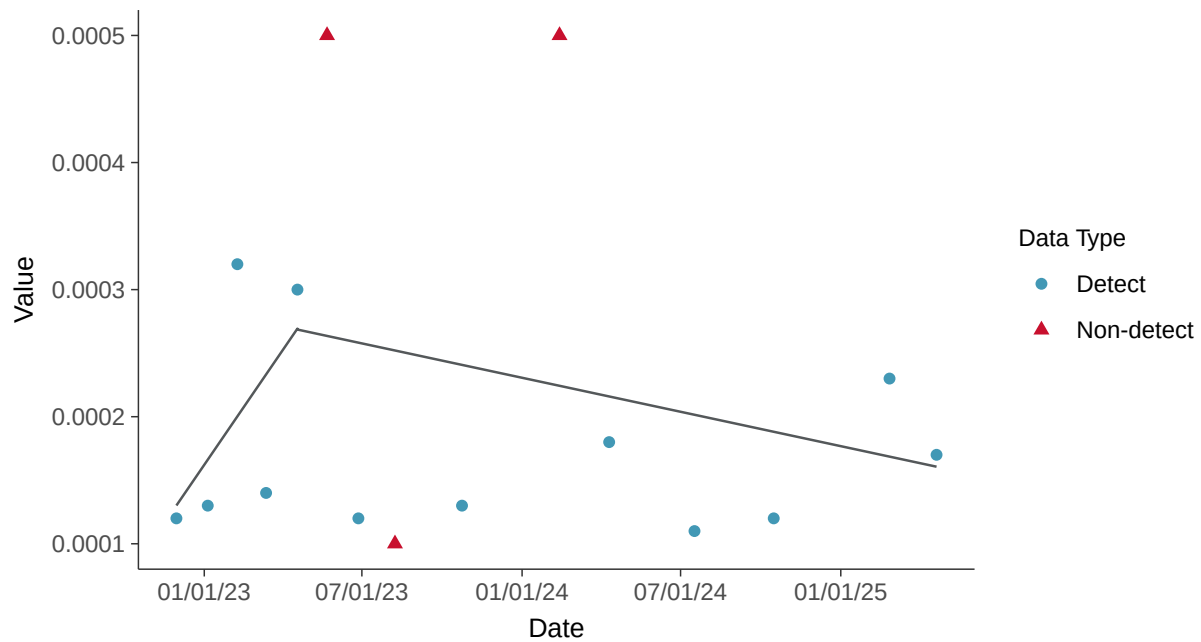
Trend Regression: Lognormal MLE

Antimony, MW-18 (mg/L)



Trend Regression: Piecewise Linear-Linear

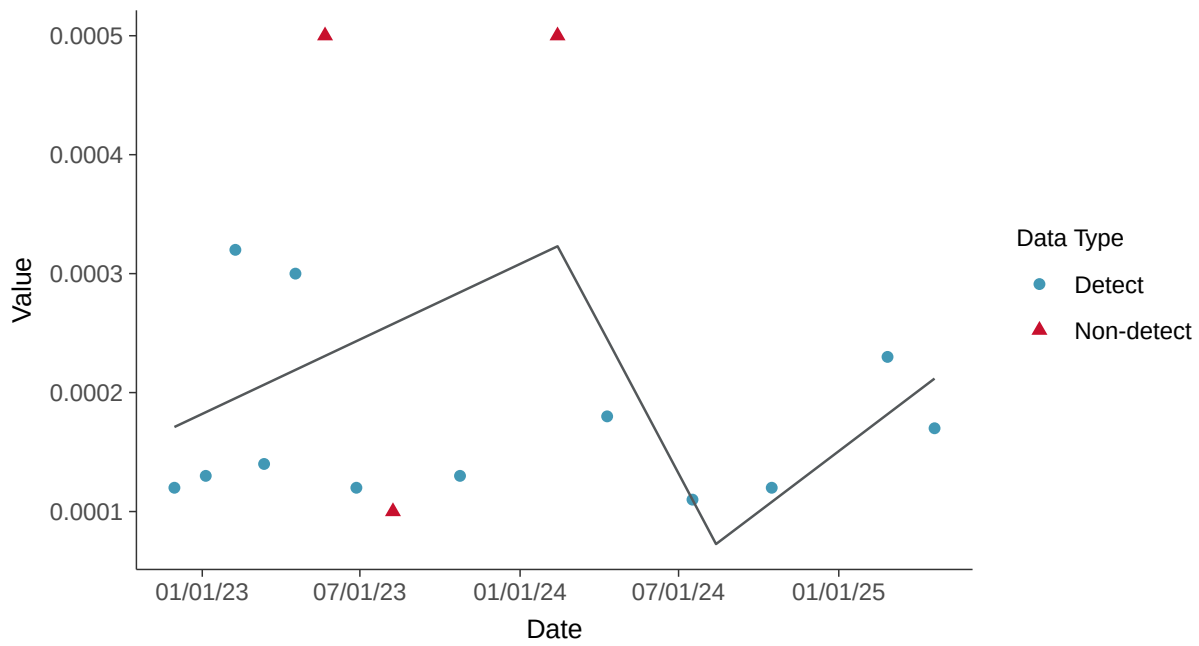
Antimony, MW-18 (mg/L)





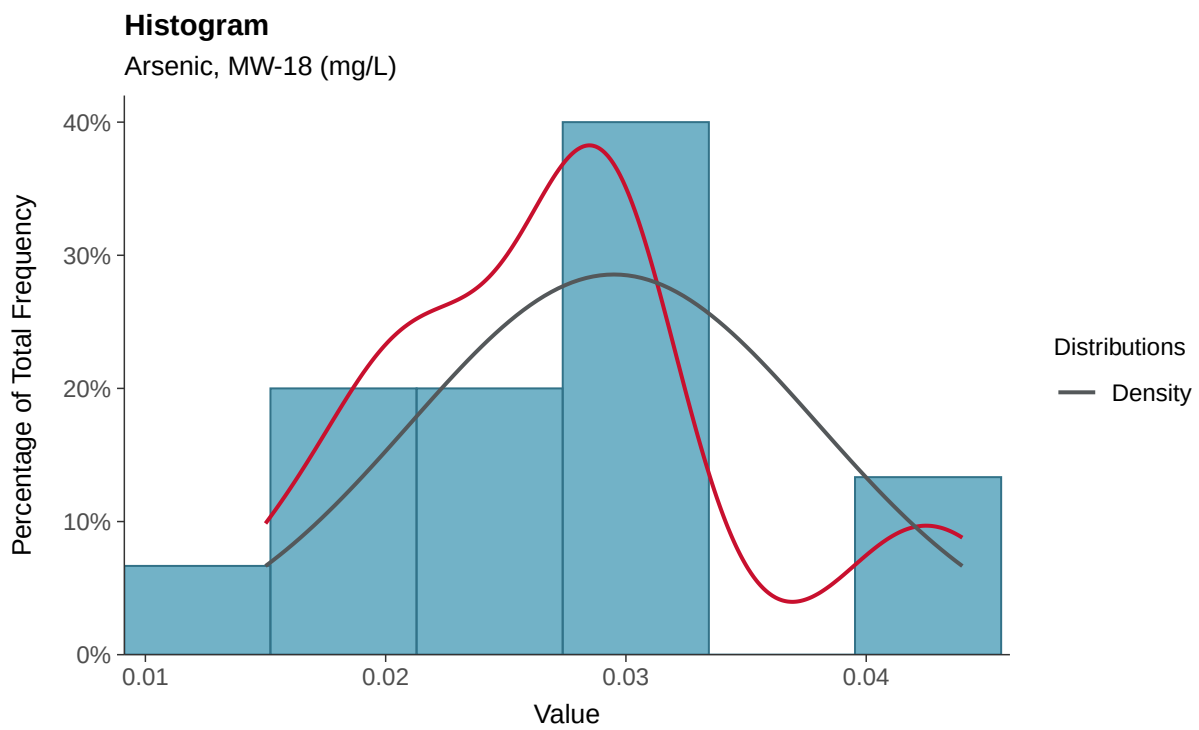
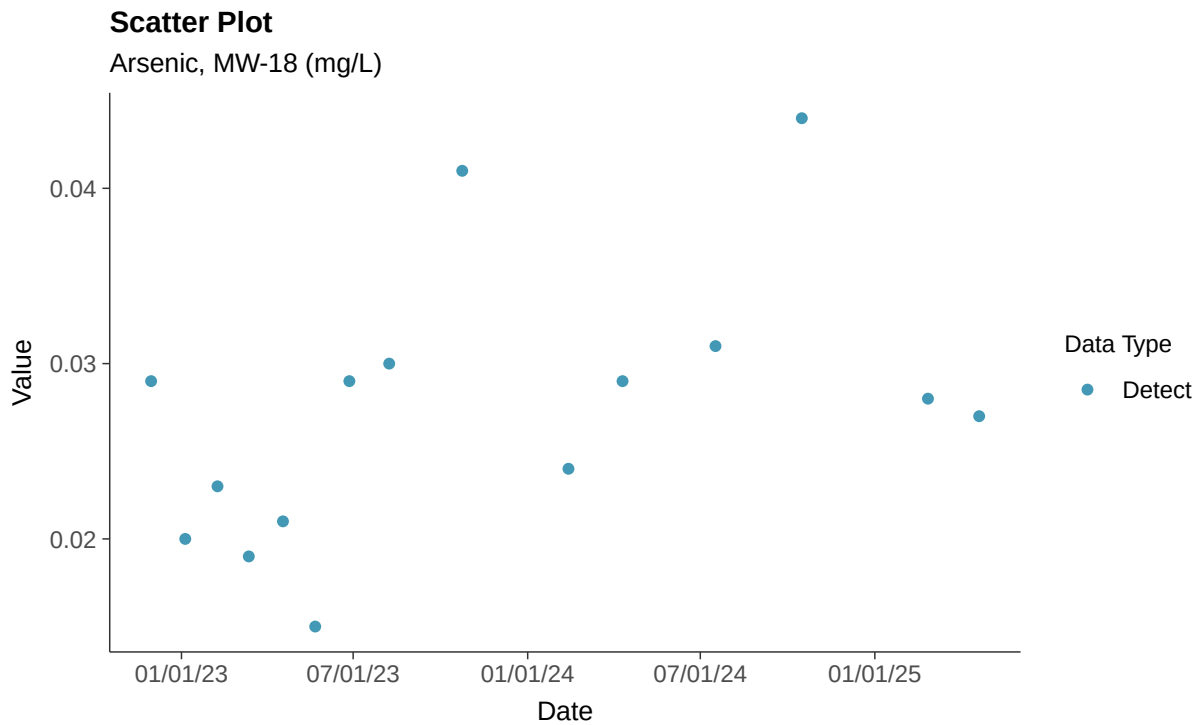
Trend Regression: Piecewise Linear-Linear-Linear

Antimony, MW-18 (mg/L)



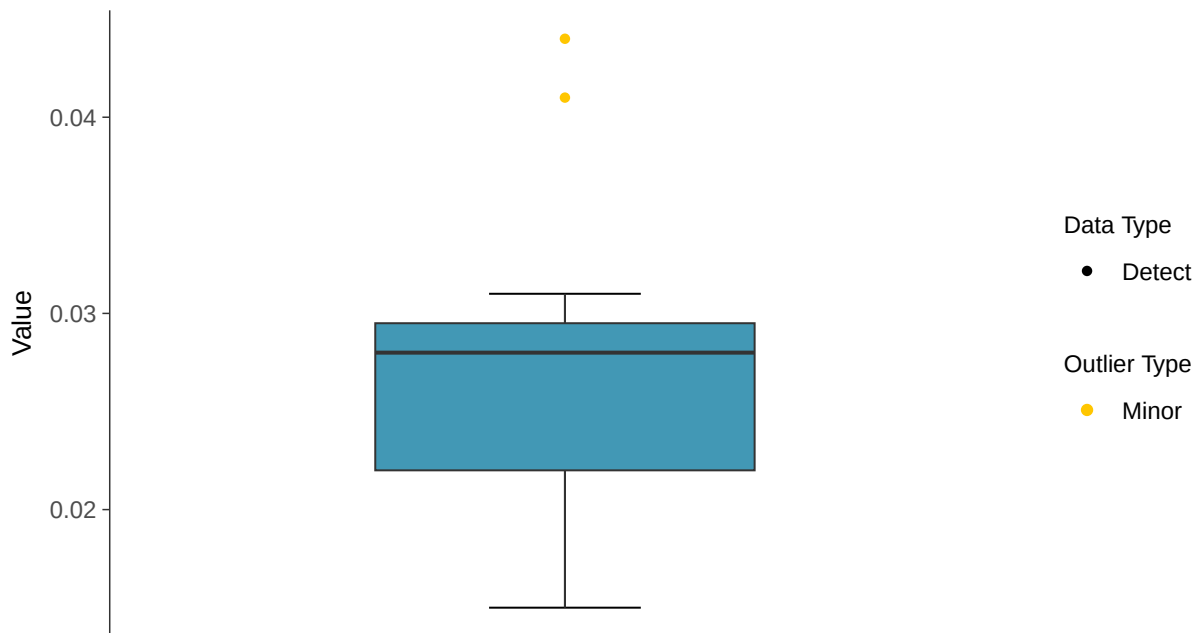
Appendix IV: Arsenic, MW-18

ID: 28_1_4_102



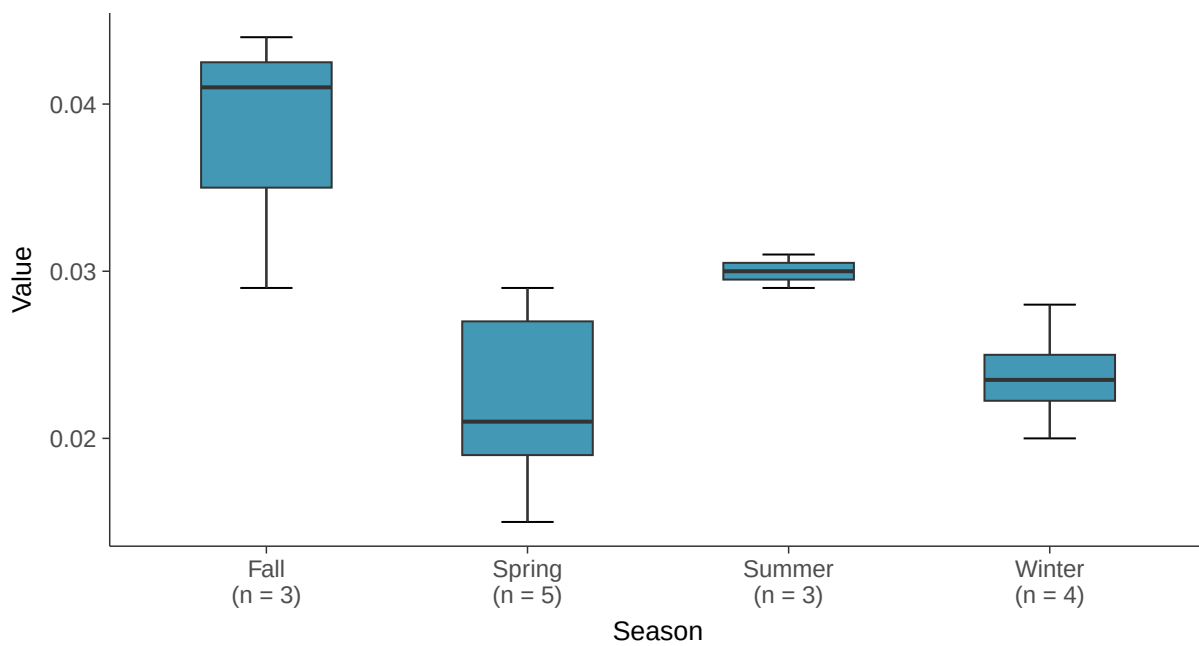
Boxplot

Arsenic, MW-18 (mg/L)



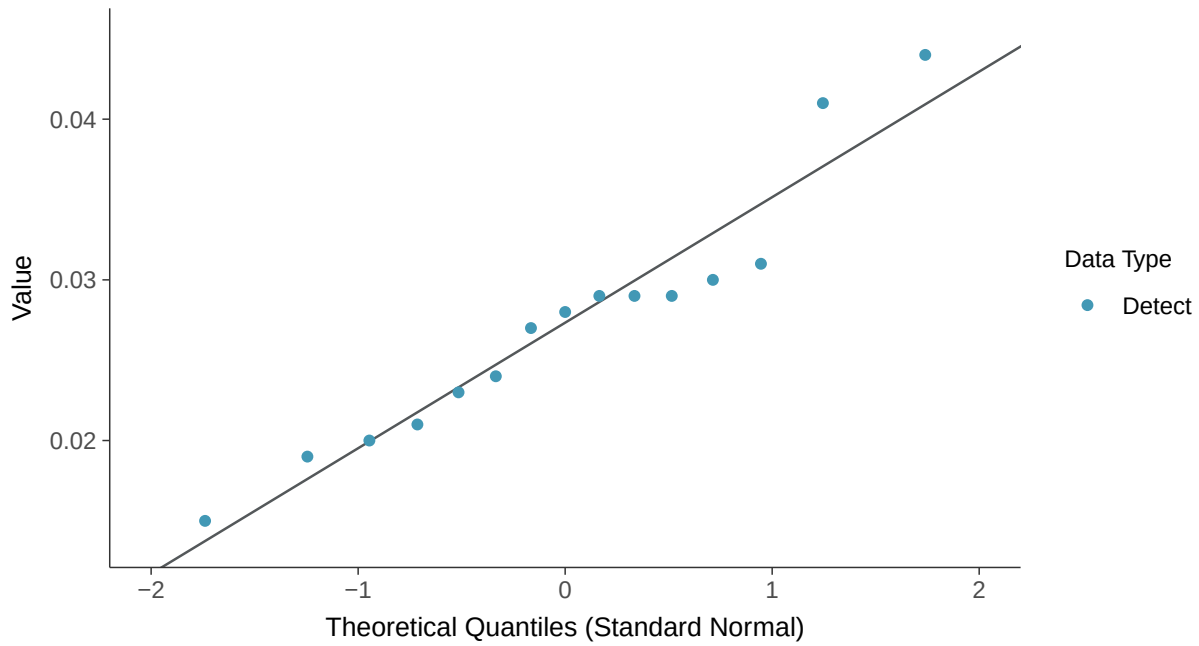
Boxplot by Season

Arsenic, MW-18 (mg/L)



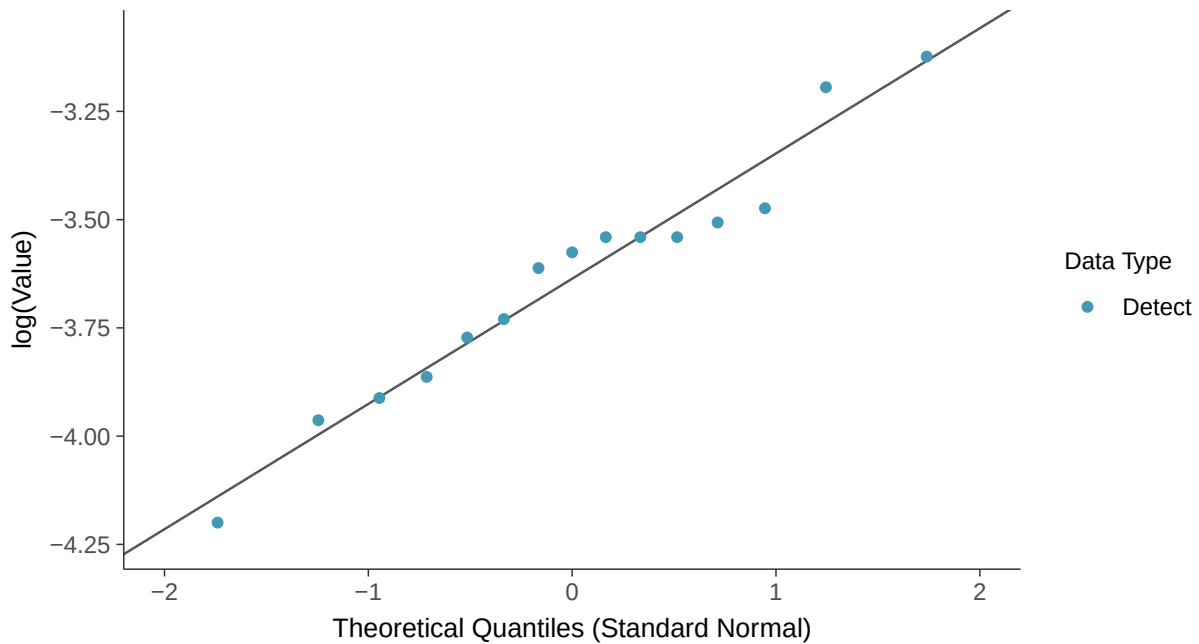
Normal Q-Q plot

Arsenic, MW-18 (mg/L)



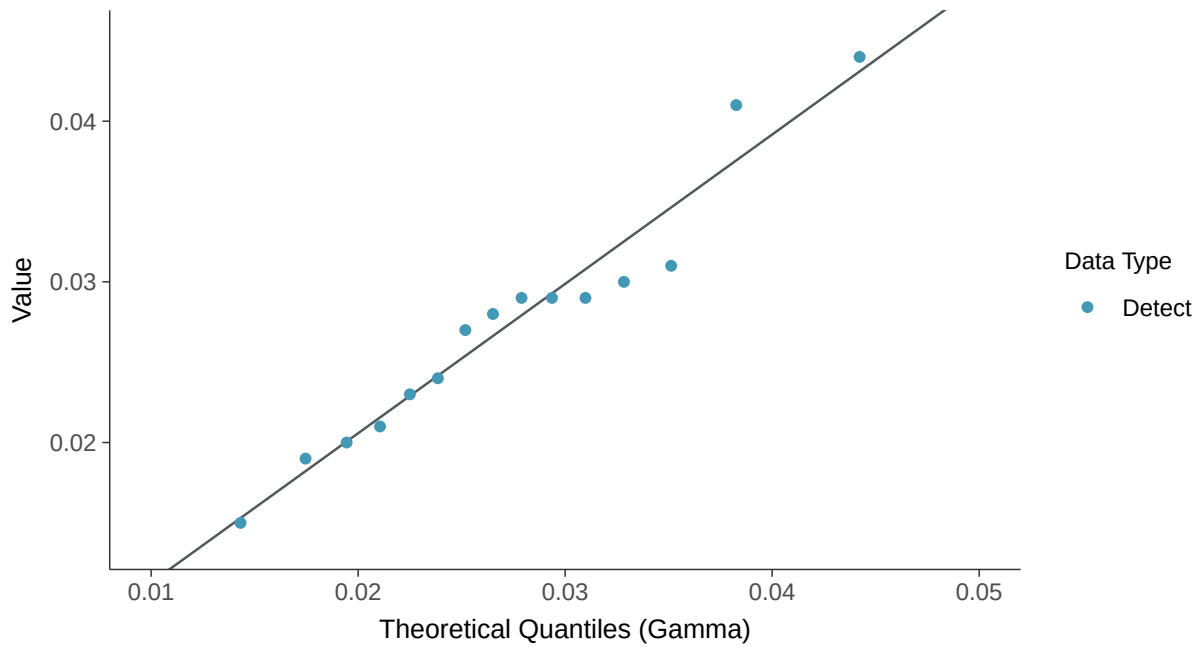
Lognormal Q-Q plot

Arsenic, MW-18 (mg/L)



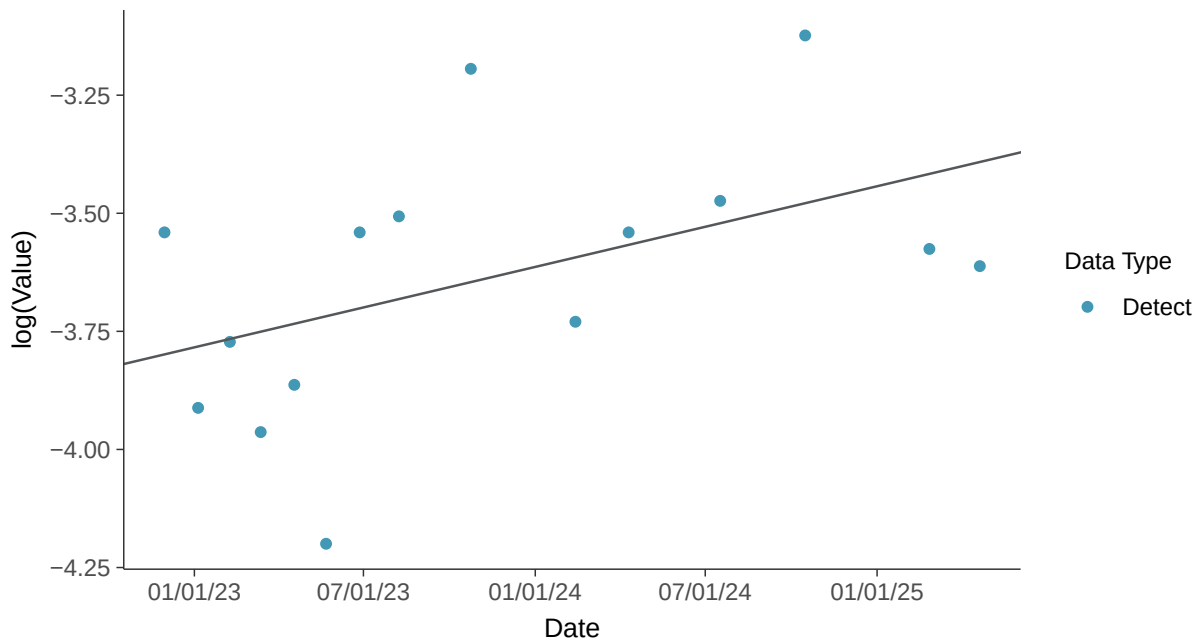
Gamma Q-Q plot

Arsenic, MW-18 (mg/L)



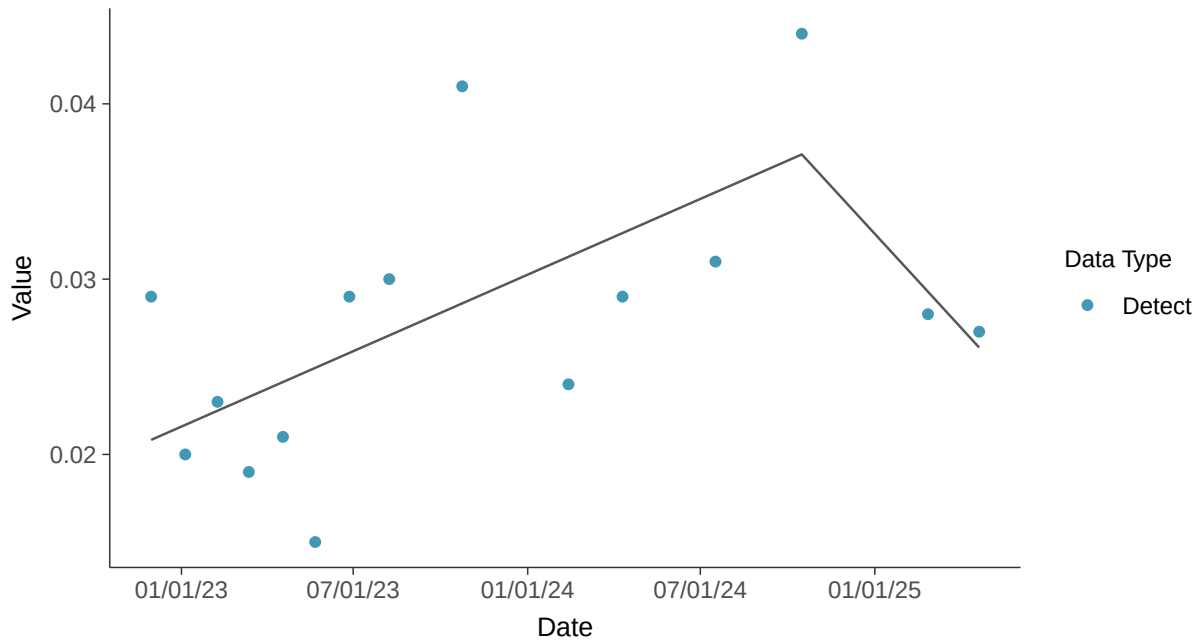
Trend Regression: Lognormal MLE

Arsenic, MW-18 (mg/L)



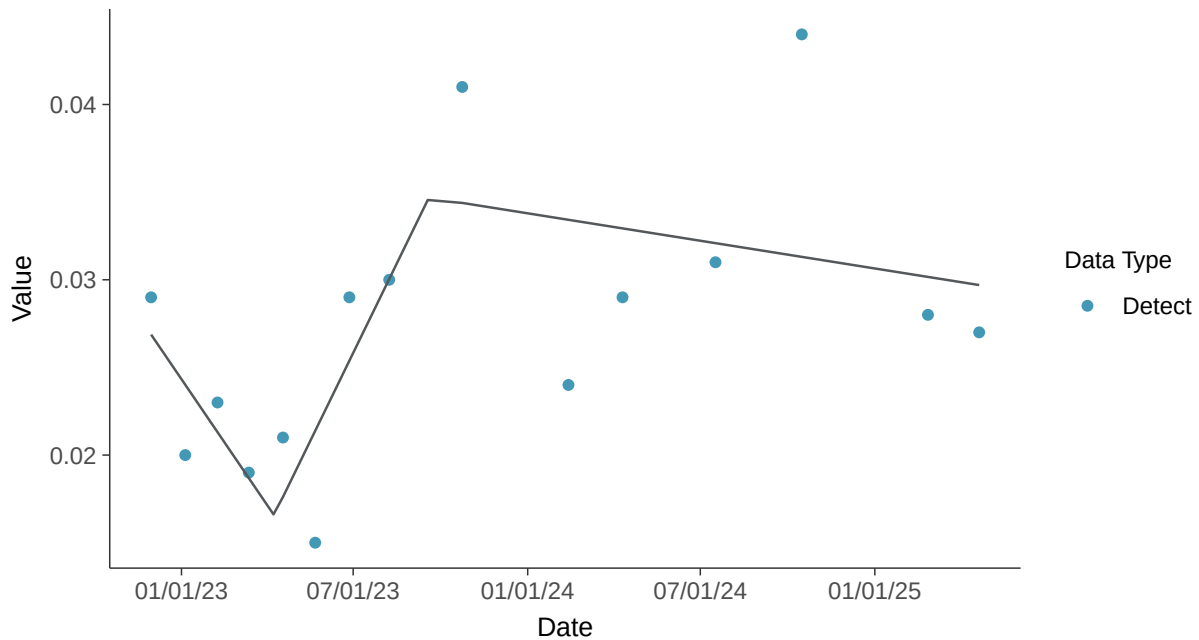
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-18 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-18 (mg/L)

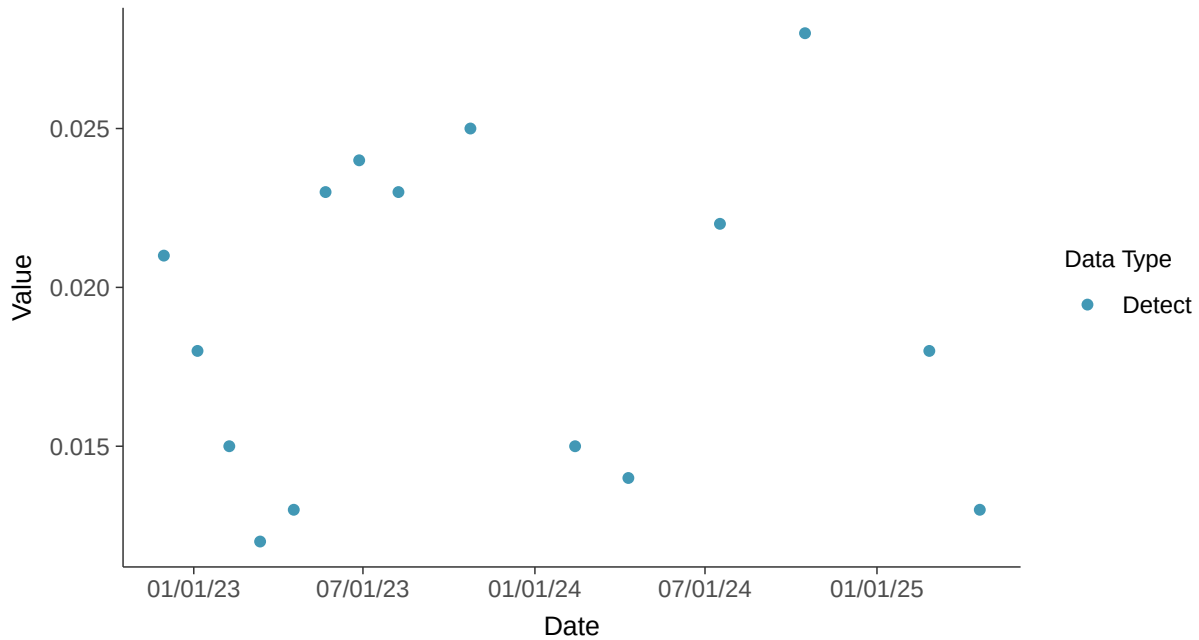


Appendix IV: Barium, MW-18

ID: 28_1_4_103

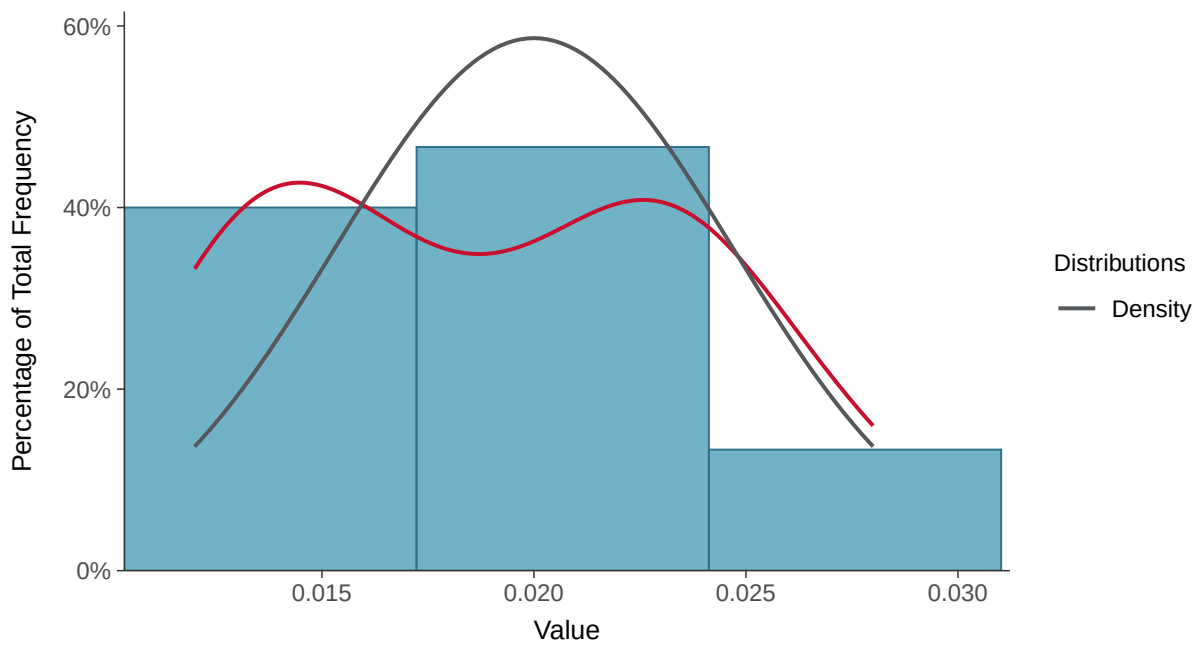
Scatter Plot

Barium, MW-18 (mg/L)



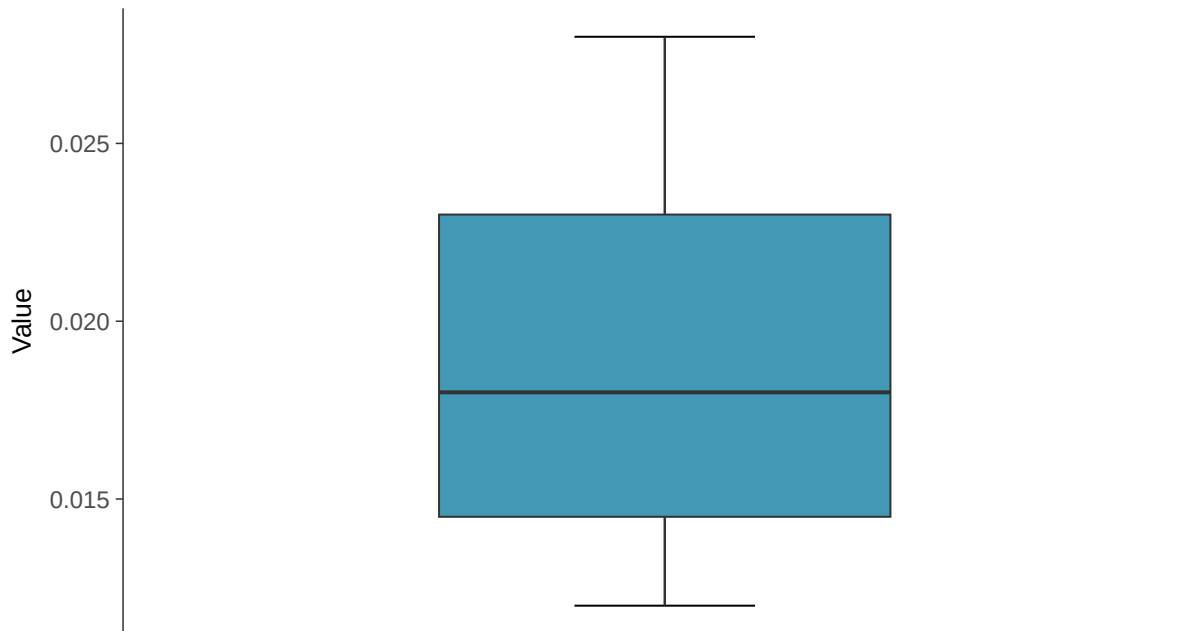
Histogram

Barium, MW-18 (mg/L)



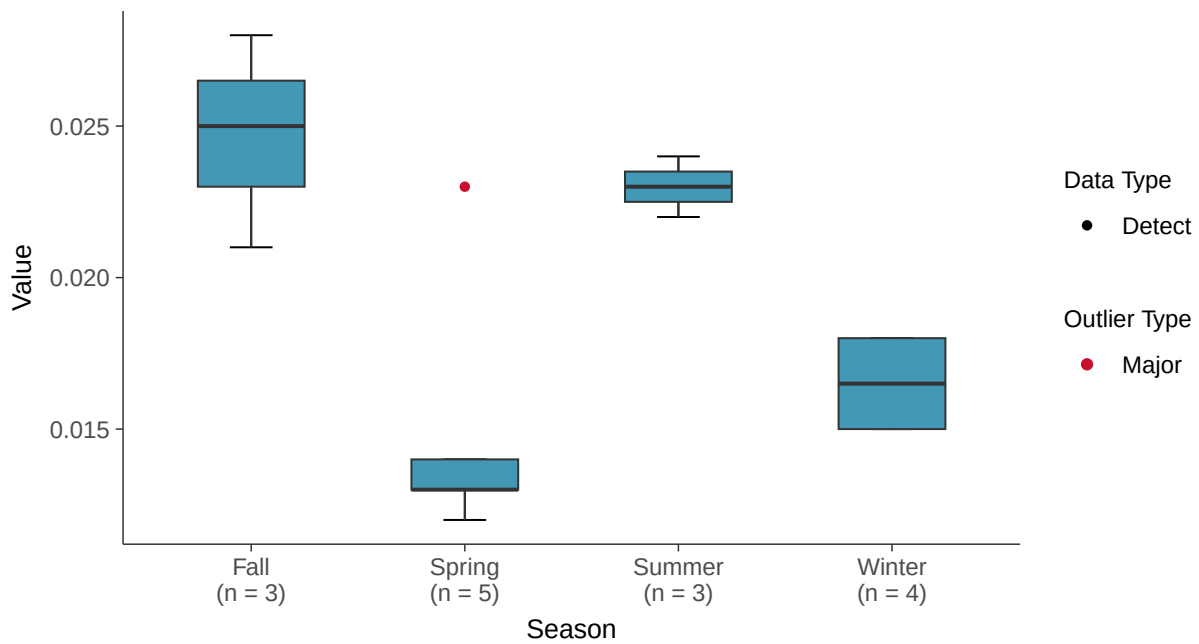
Boxplot

Barium, MW-18 (mg/L)



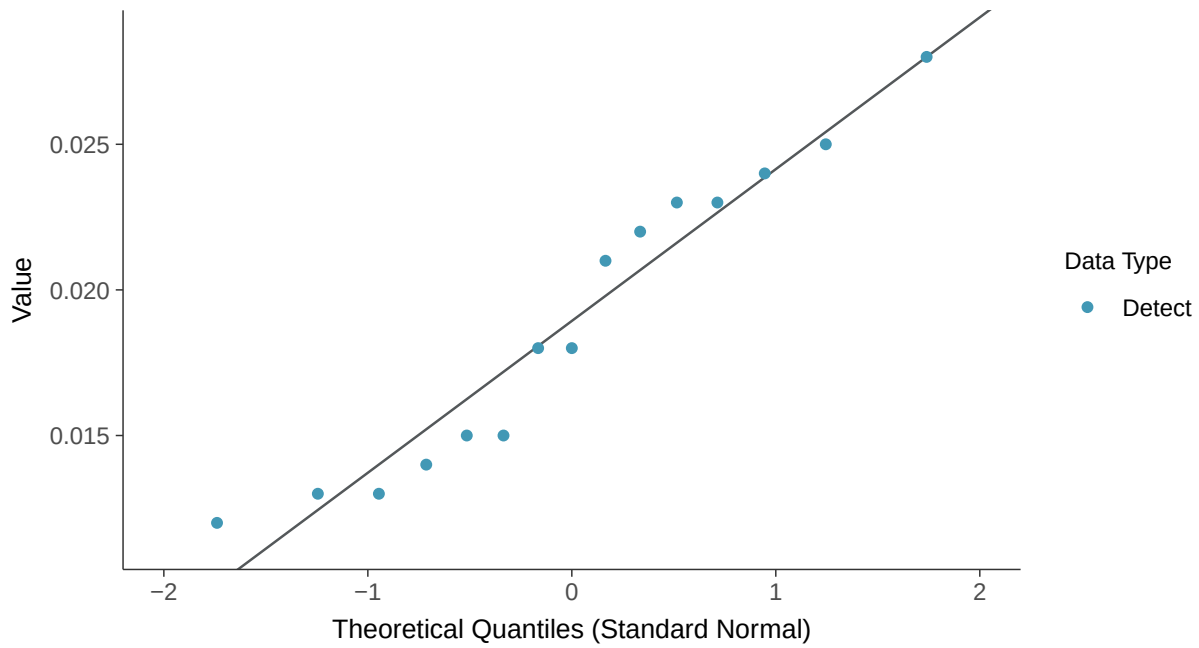
Boxplot by Season

Barium, MW-18 (mg/L)



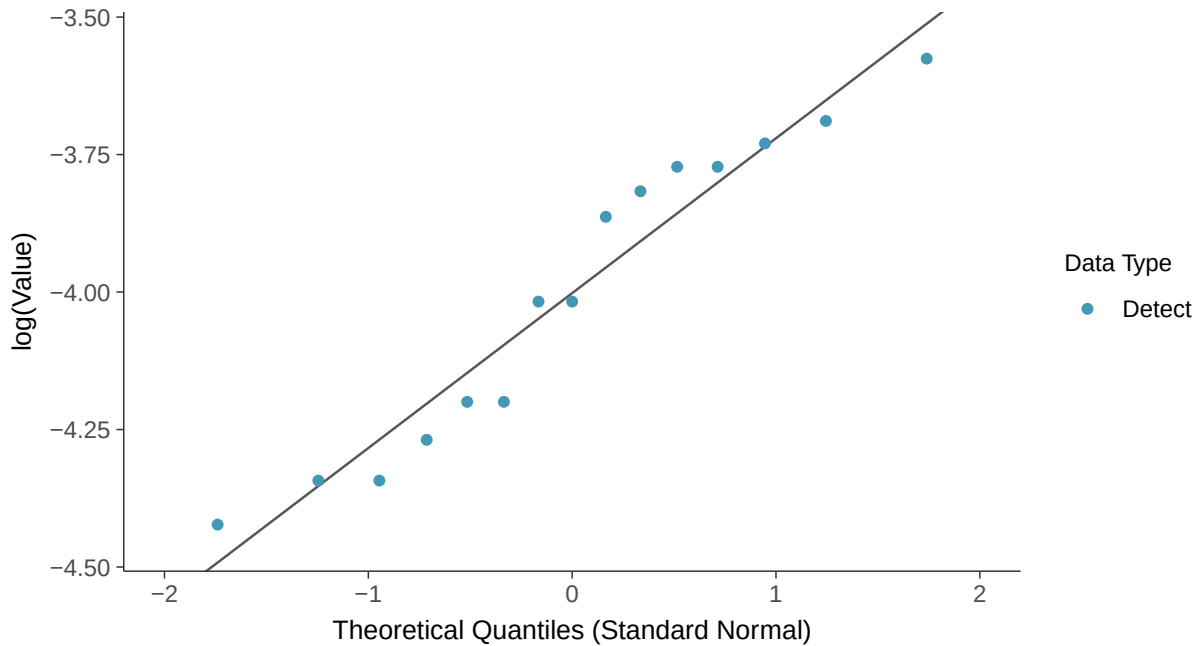
Normal Q-Q plot

Barium, MW-18 (mg/L)



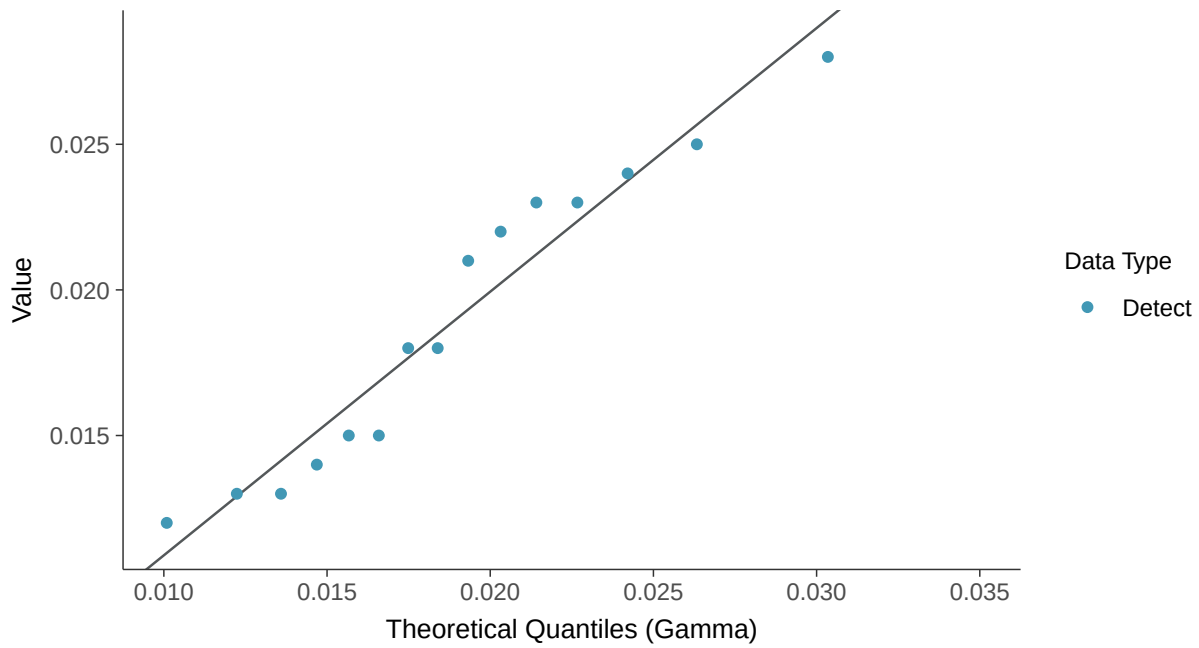
Lognormal Q-Q plot

Barium, MW-18 (mg/L)



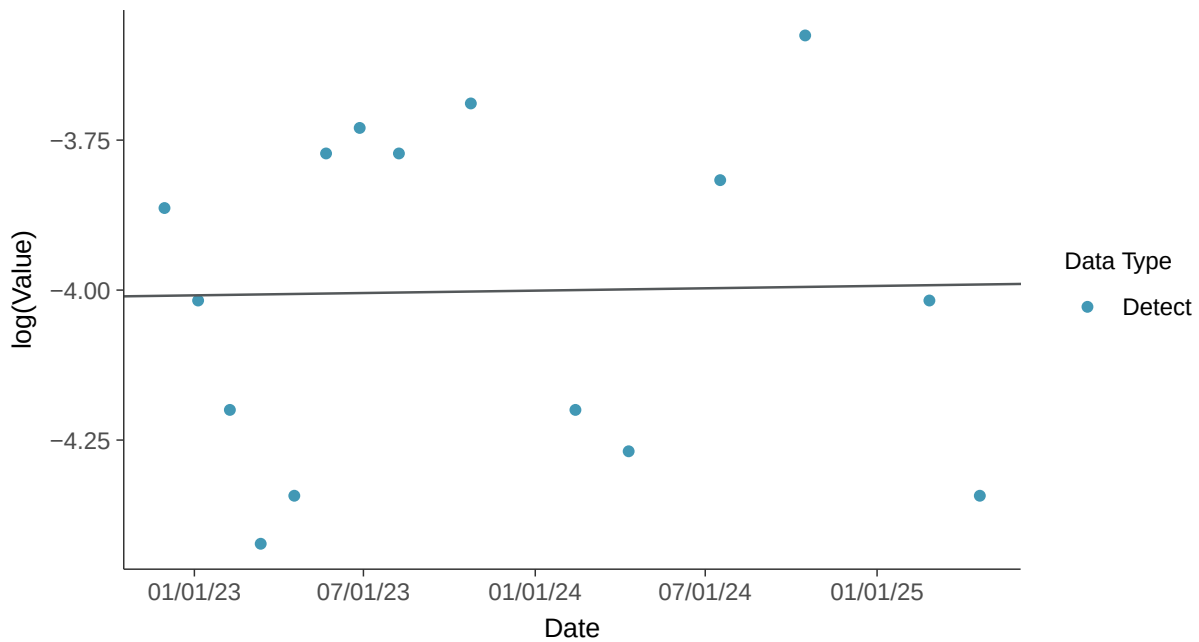
Gamma Q-Q plot

Barium, MW-18 (mg/L)



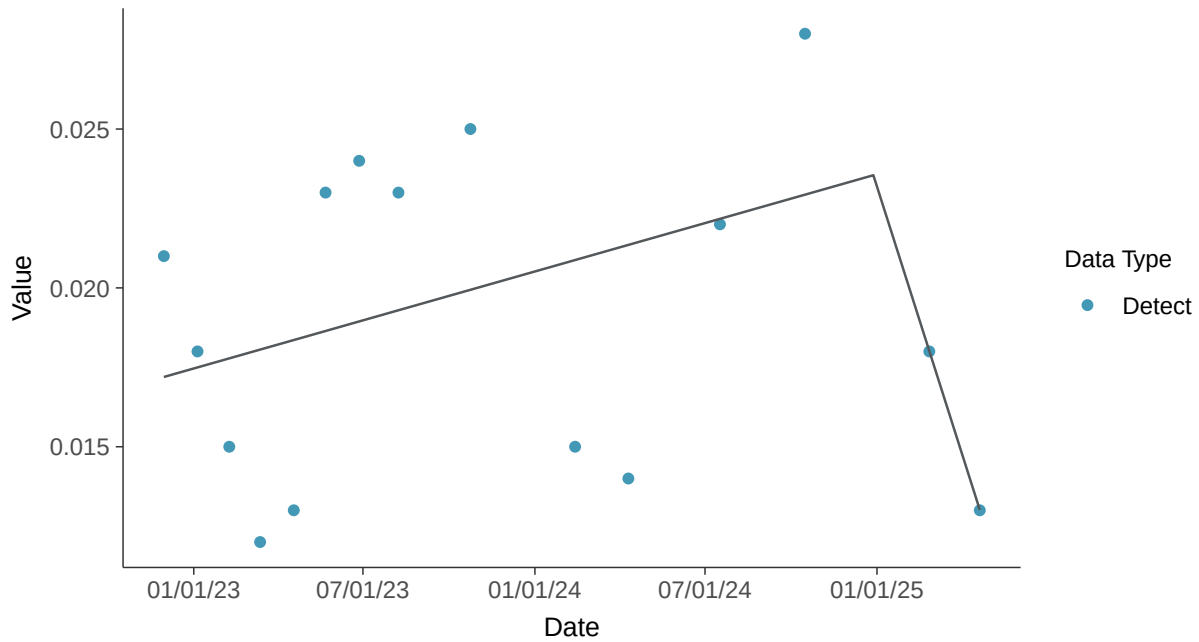
Trend Regression: Lognormal MLE

Barium, MW-18 (mg/L)



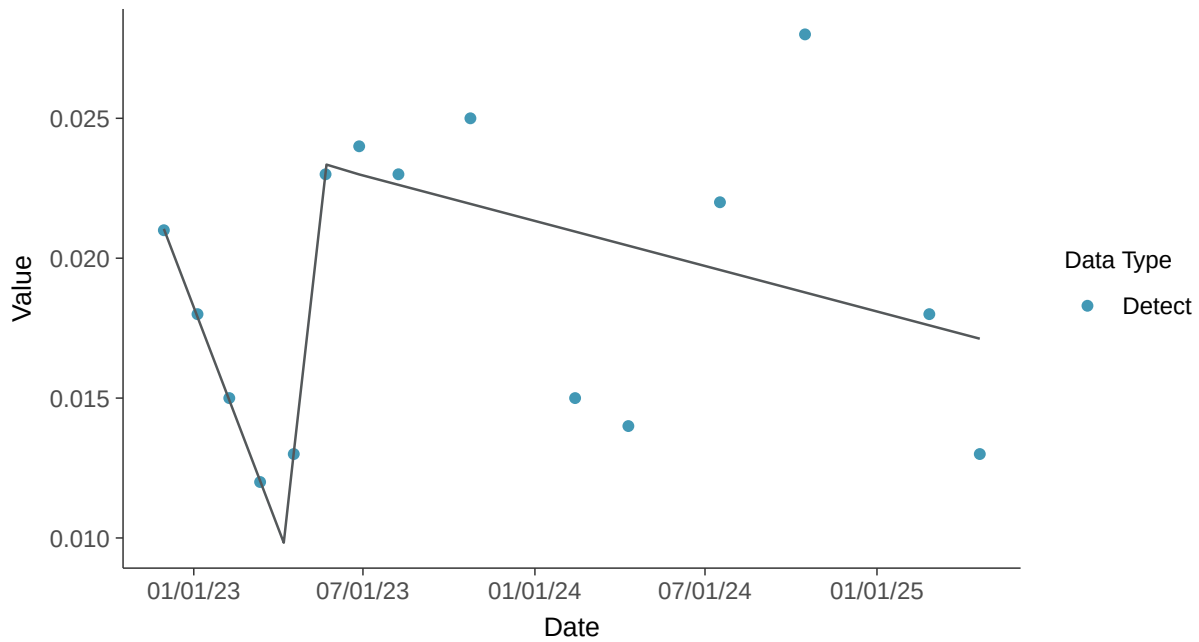
Trend Regression: Piecewise Linear-Linear

Barium, MW-18 (mg/L)



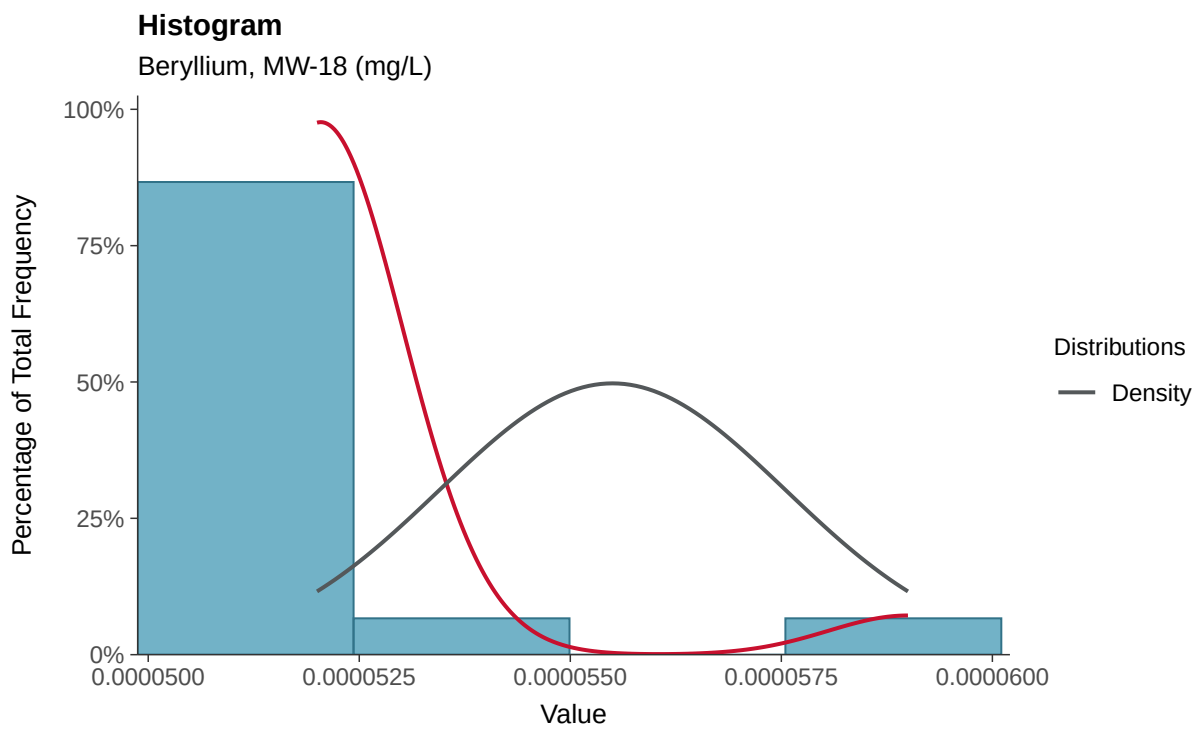
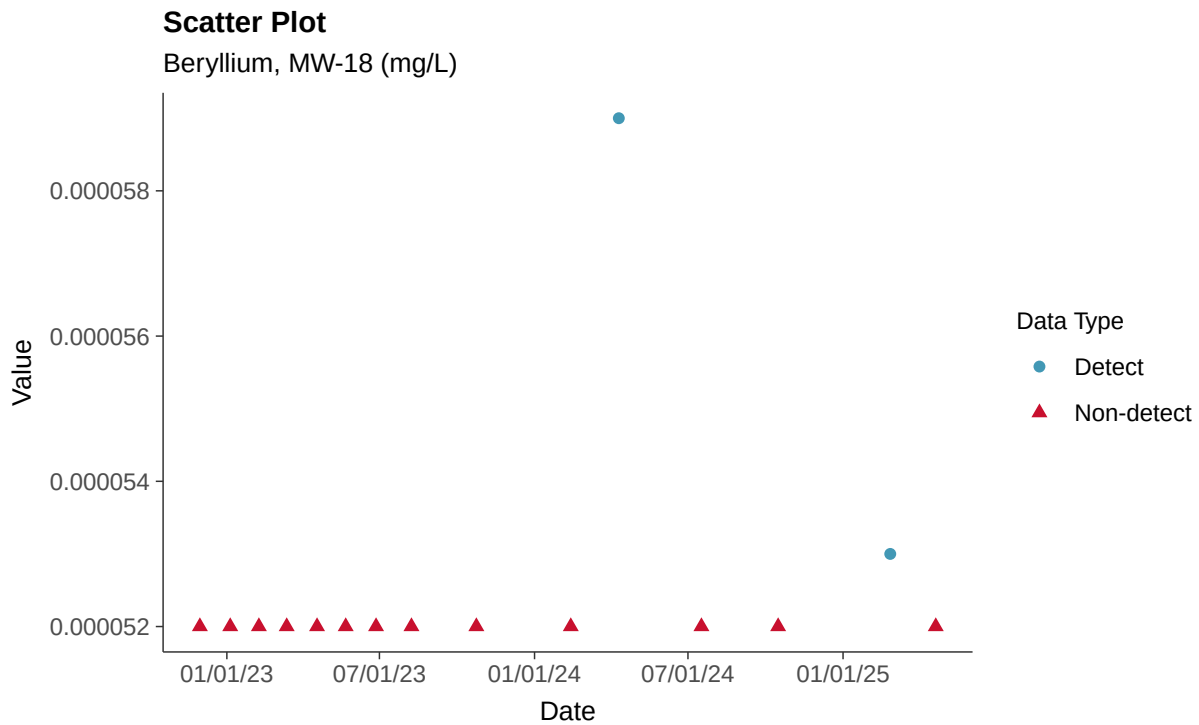
Trend Regression: Piecewise Linear-Linear-Linear

Barium, MW-18 (mg/L)



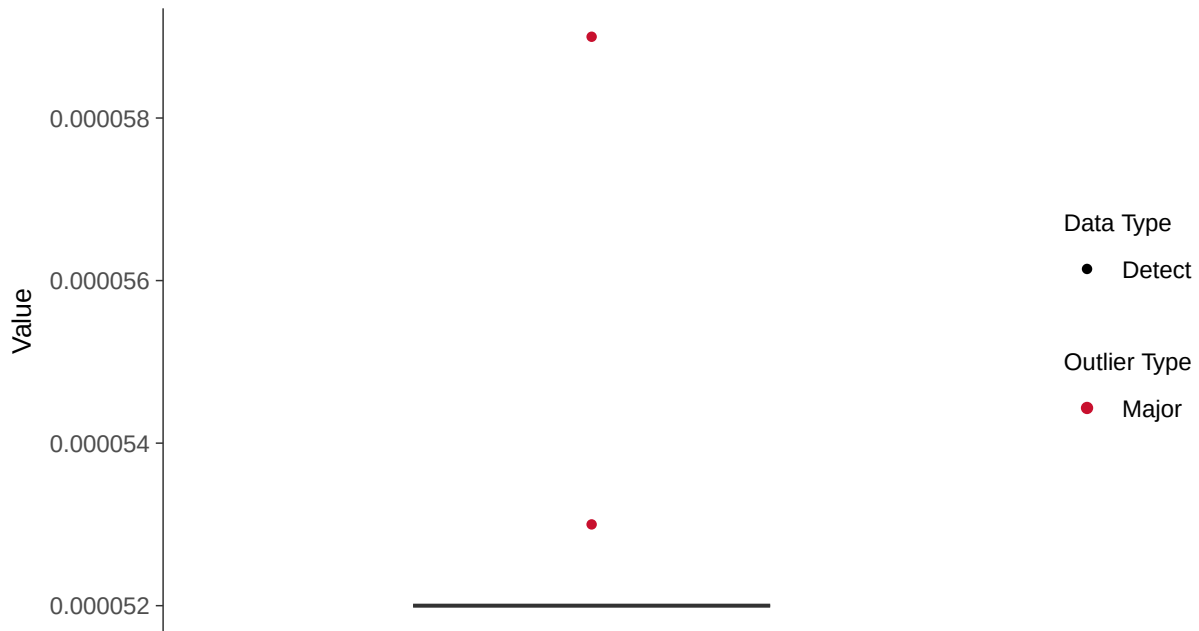
Appendix IV: Beryllium, MW-18

ID: 28_1_4_104



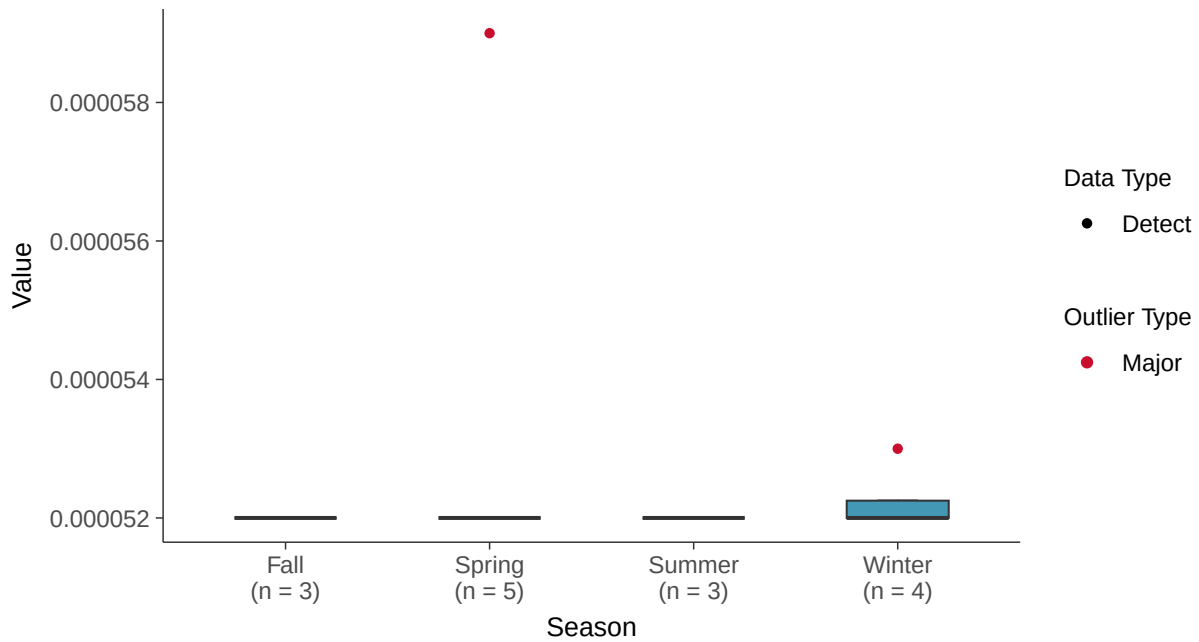
Boxplot

Beryllium, MW-18 (mg/L)



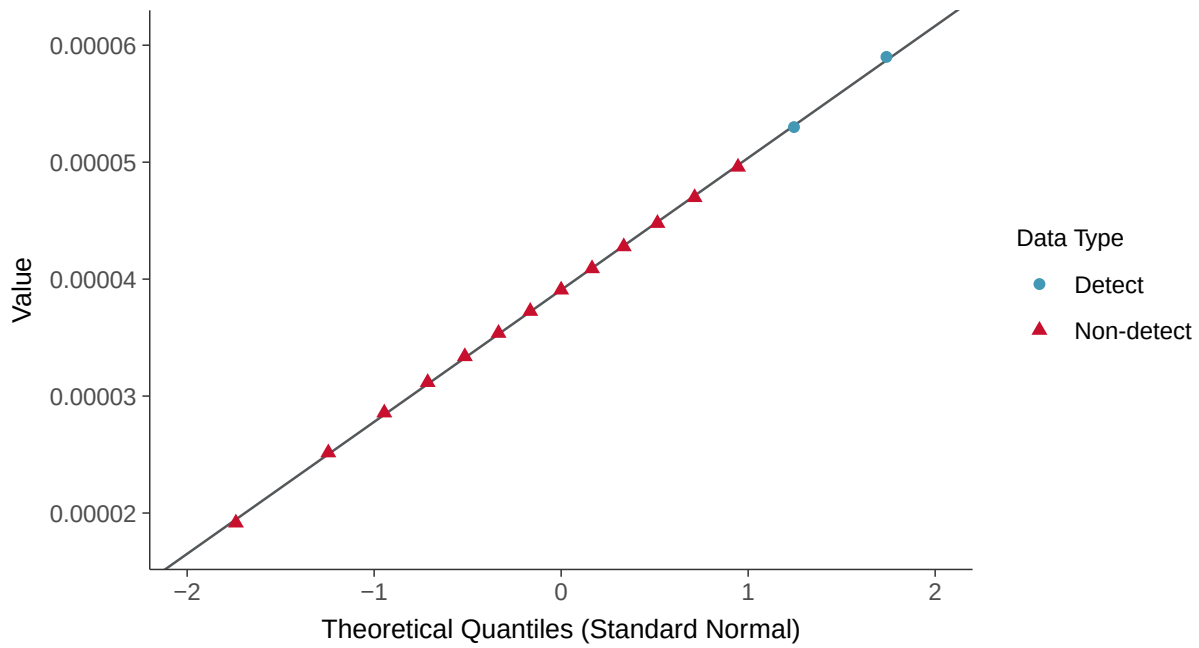
Boxplot by Season

Beryllium, MW-18 (mg/L)



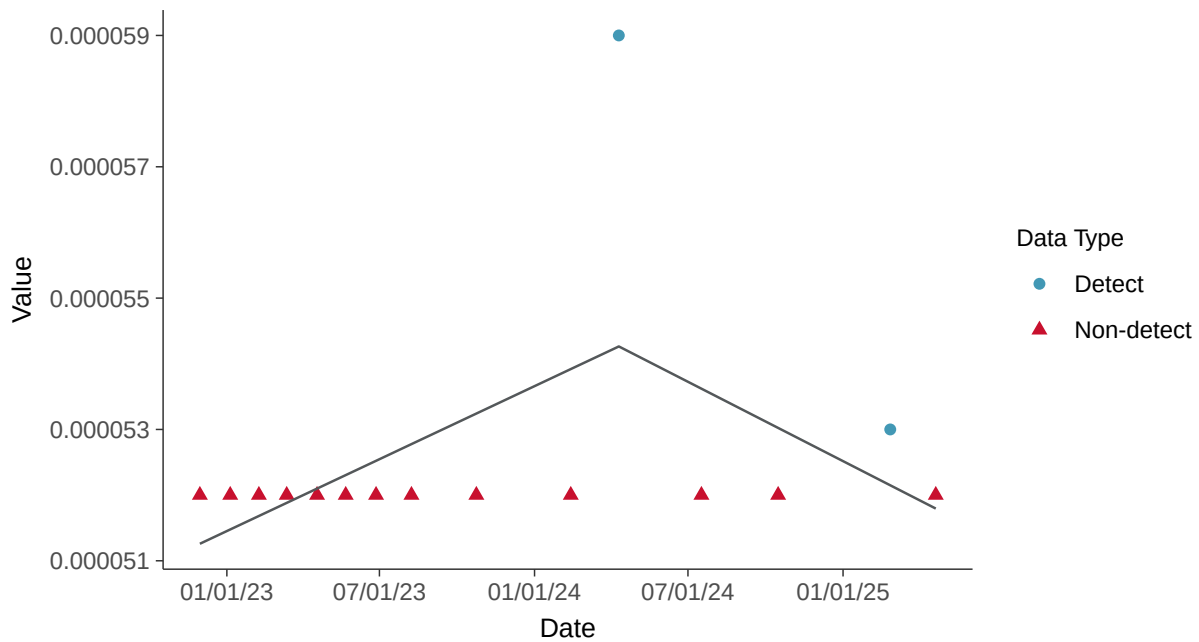
Normal Q-Q plot using ROS Imputed Estimates

Beryllium, MW-18 (mg/L)



Trend Regression: Piecewise Linear-Linear

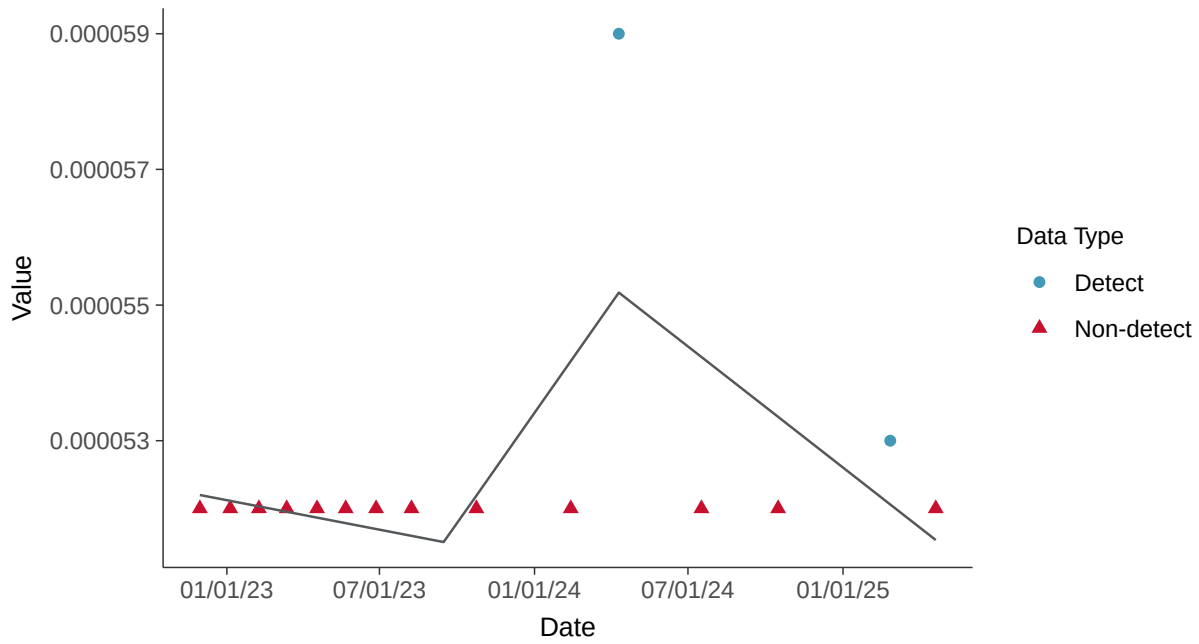
Beryllium, MW-18 (mg/L)





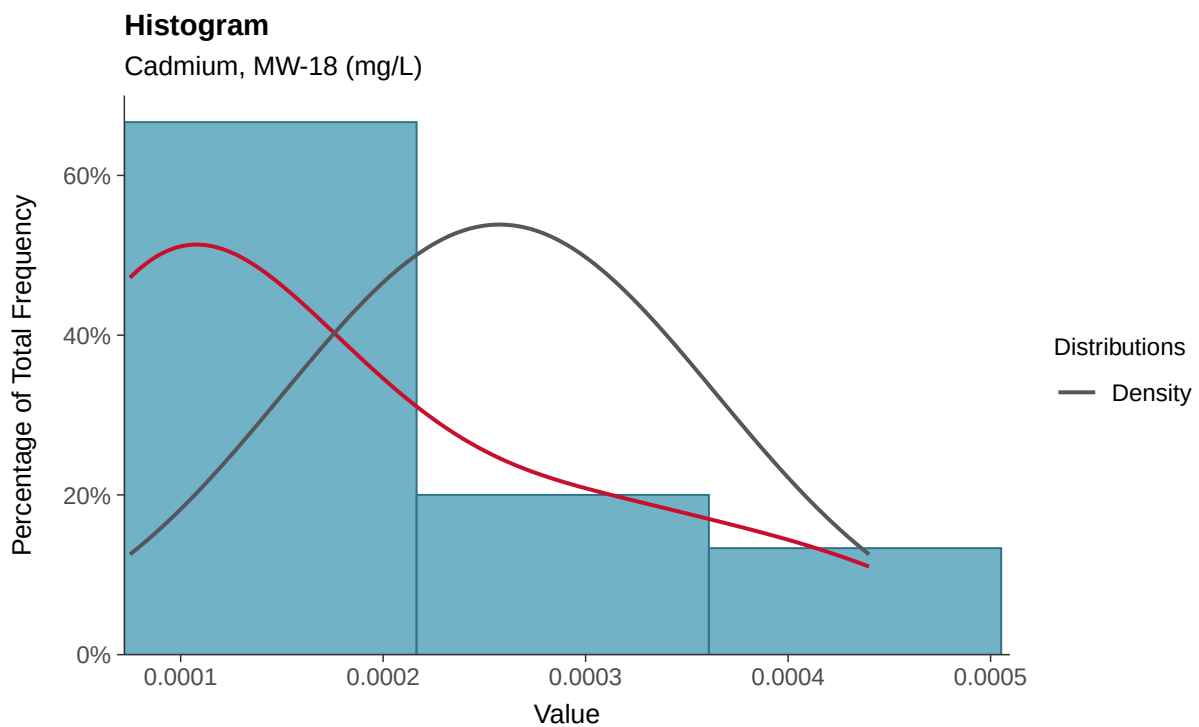
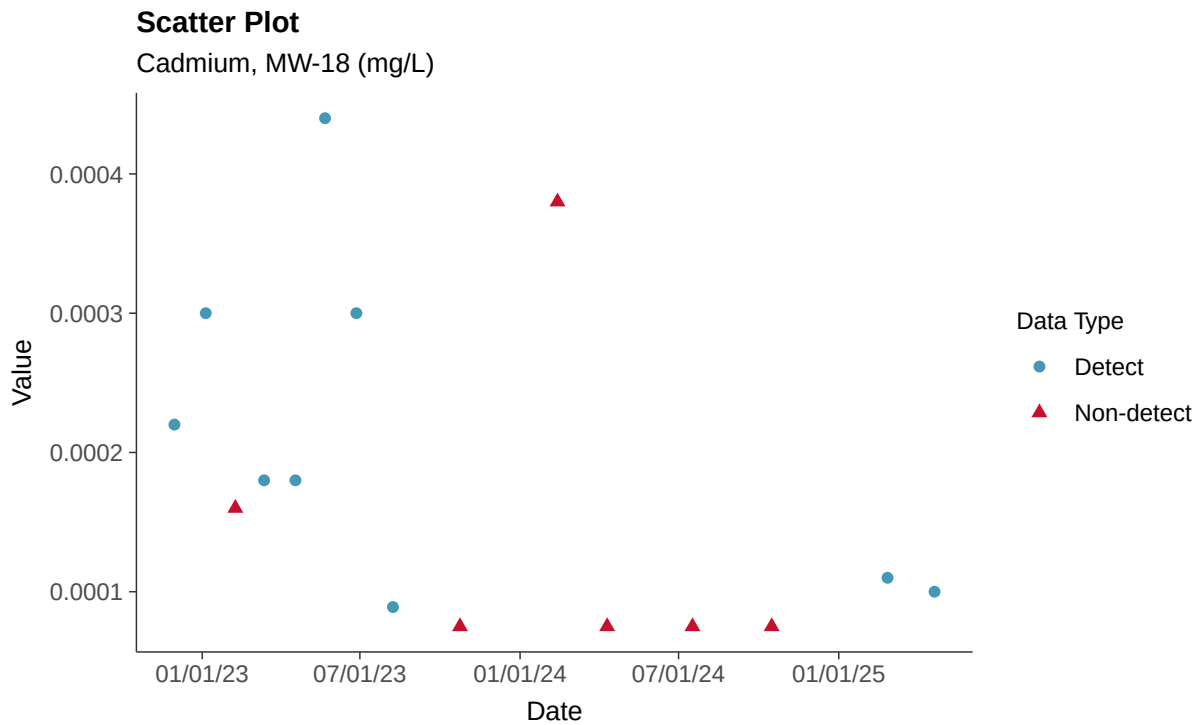
Trend Regression: Piecewise Linear-Linear-Linear

Beryllium, MW-18 (mg/L)



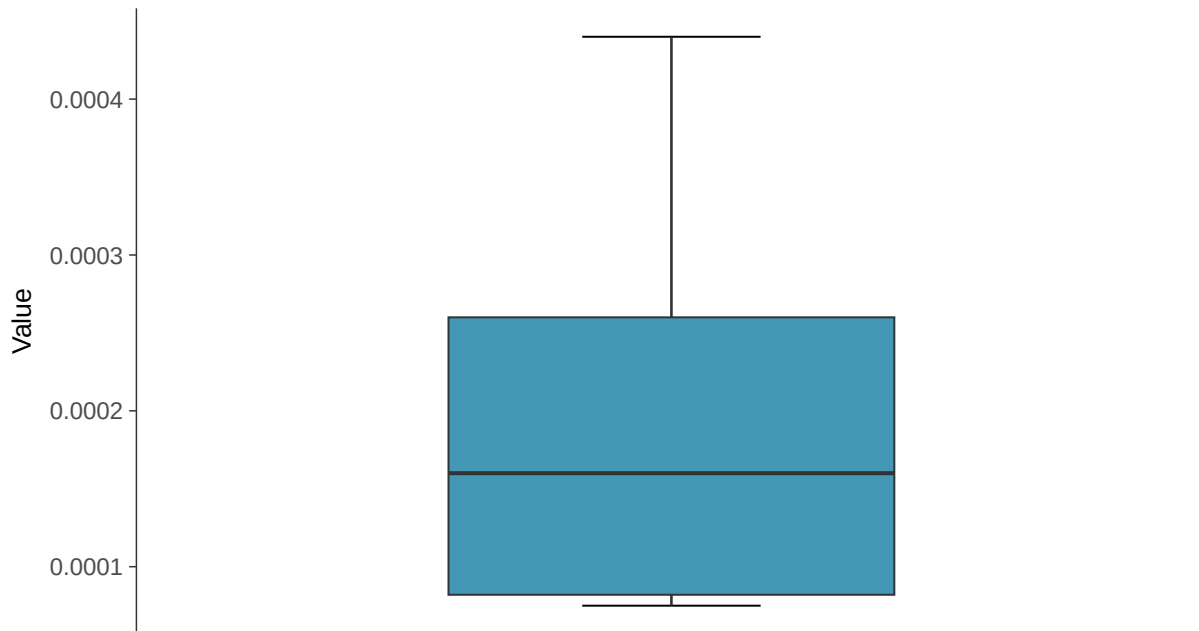
Appendix IV: Cadmium, MW-18

ID: 28_1_4_106



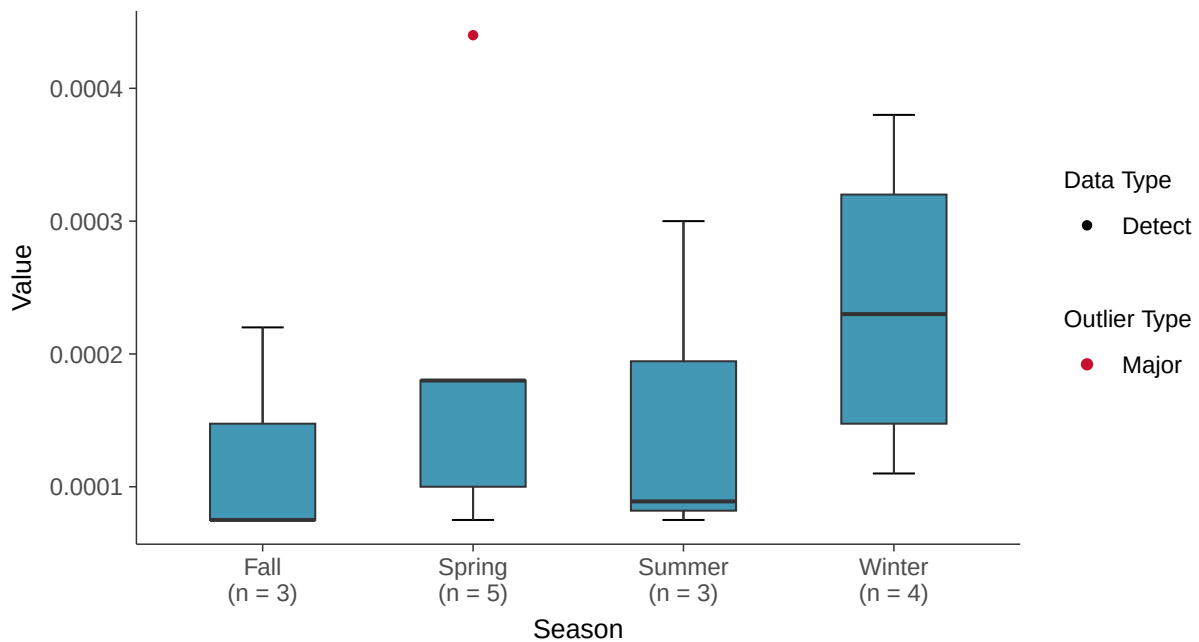
Boxplot

Cadmium, MW-18 (mg/L)



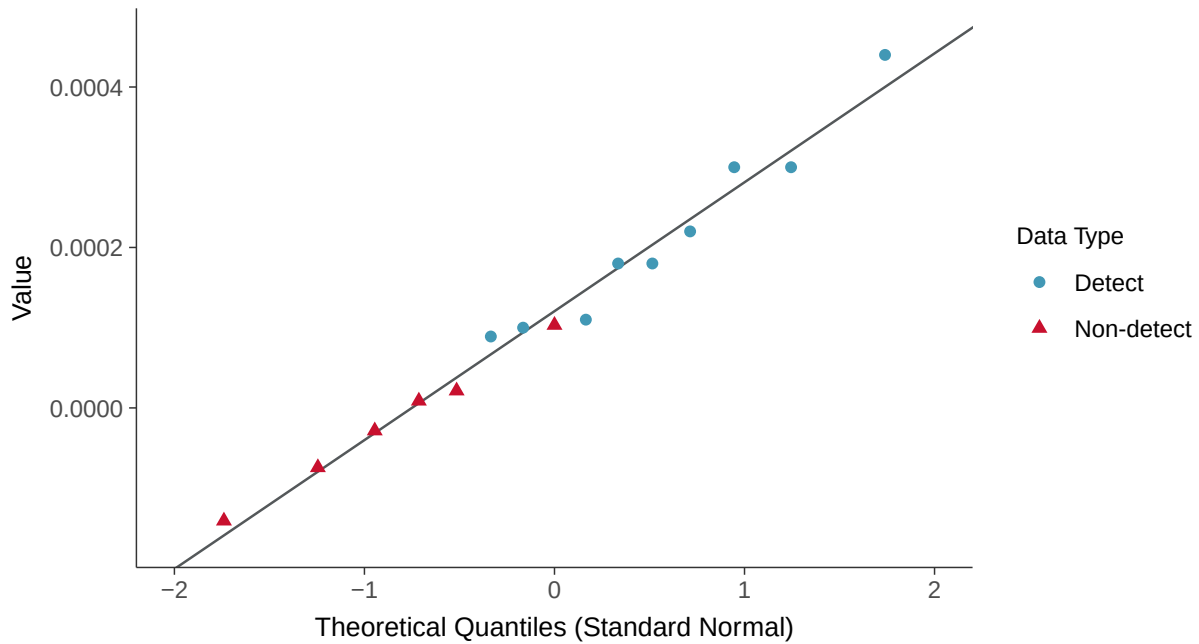
Boxplot by Season

Cadmium, MW-18 (mg/L)



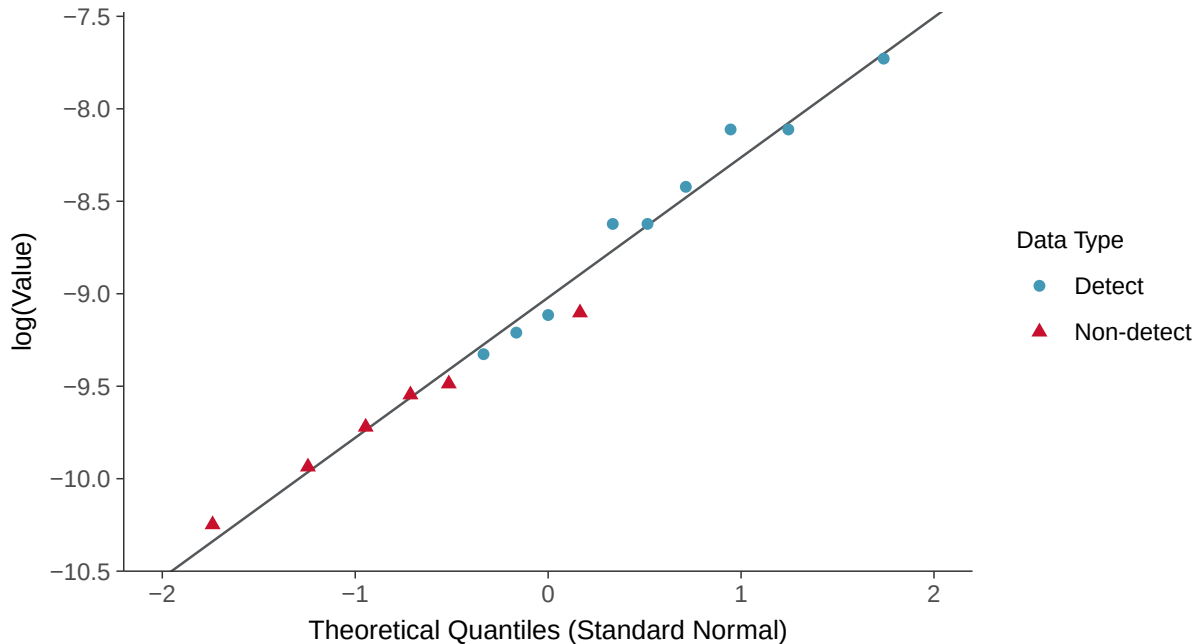
Normal Q-Q plot using ROS Imputed Estimates

Cadmium, MW-18 (mg/L)



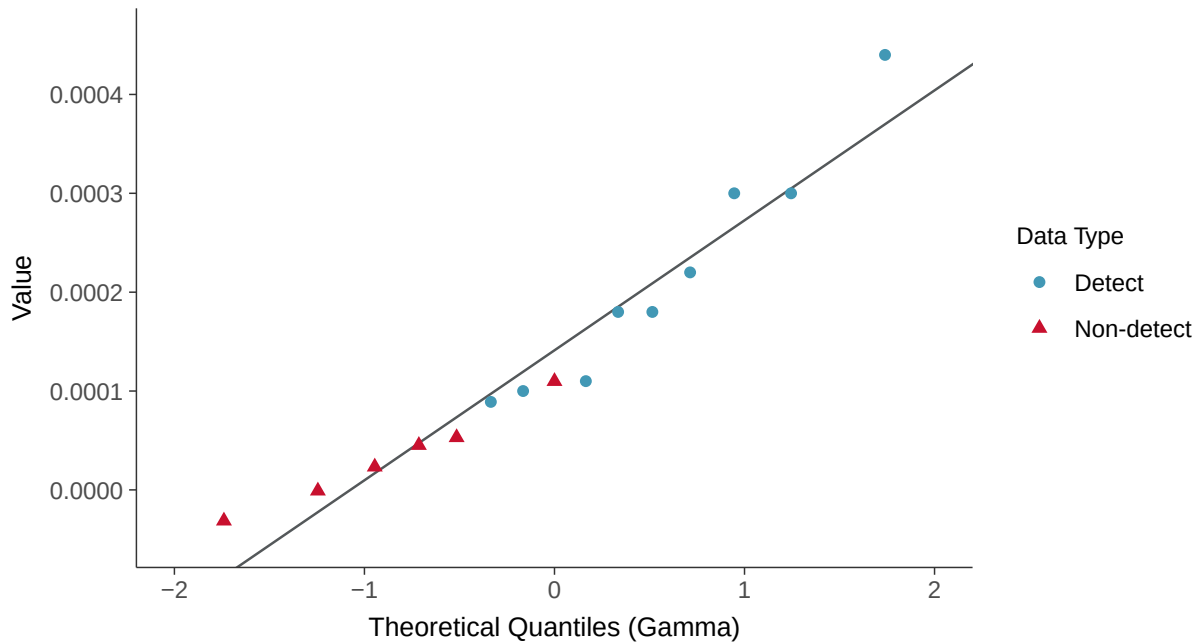
Lognormal Q-Q plot using ROS Imputed Estimates

Cadmium, MW-18 (mg/L)



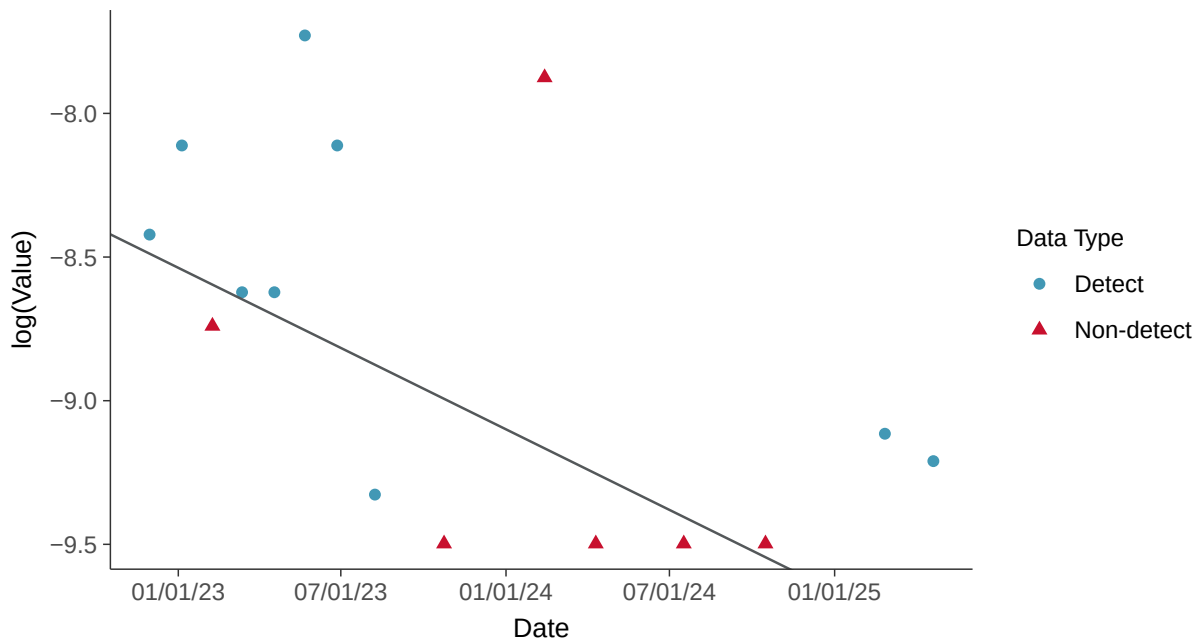
Gamma Q-Q plot using ROS Imputed Estimates

Cadmium, MW-18 (mg/L)



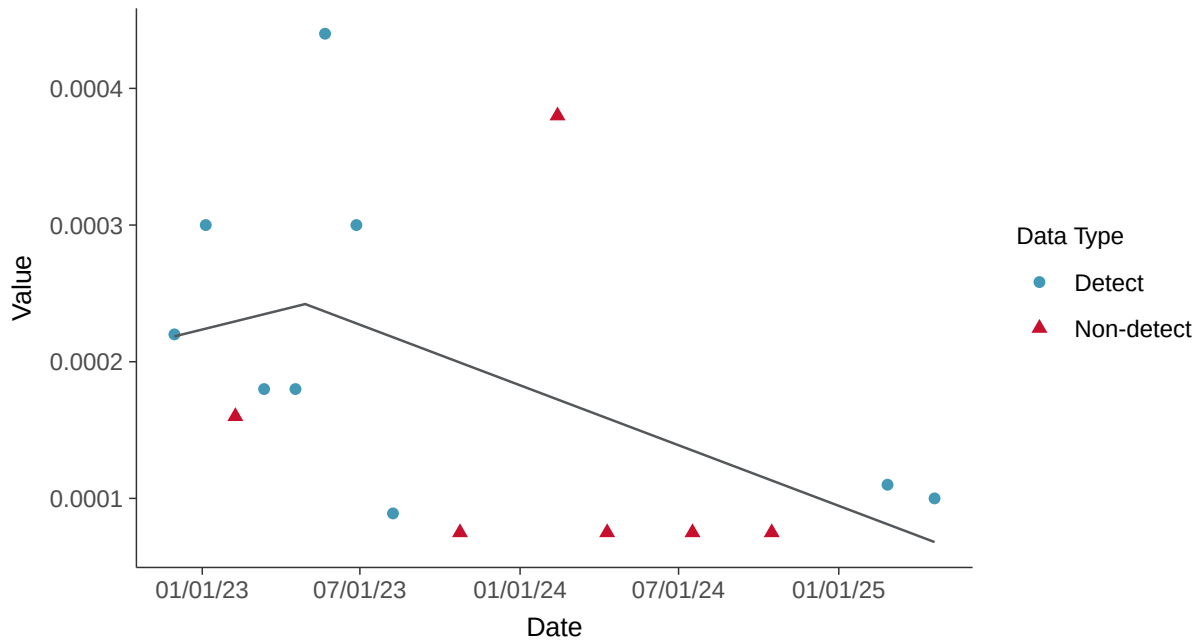
Trend Regression: Lognormal MLE

Cadmium, MW-18 (mg/L)



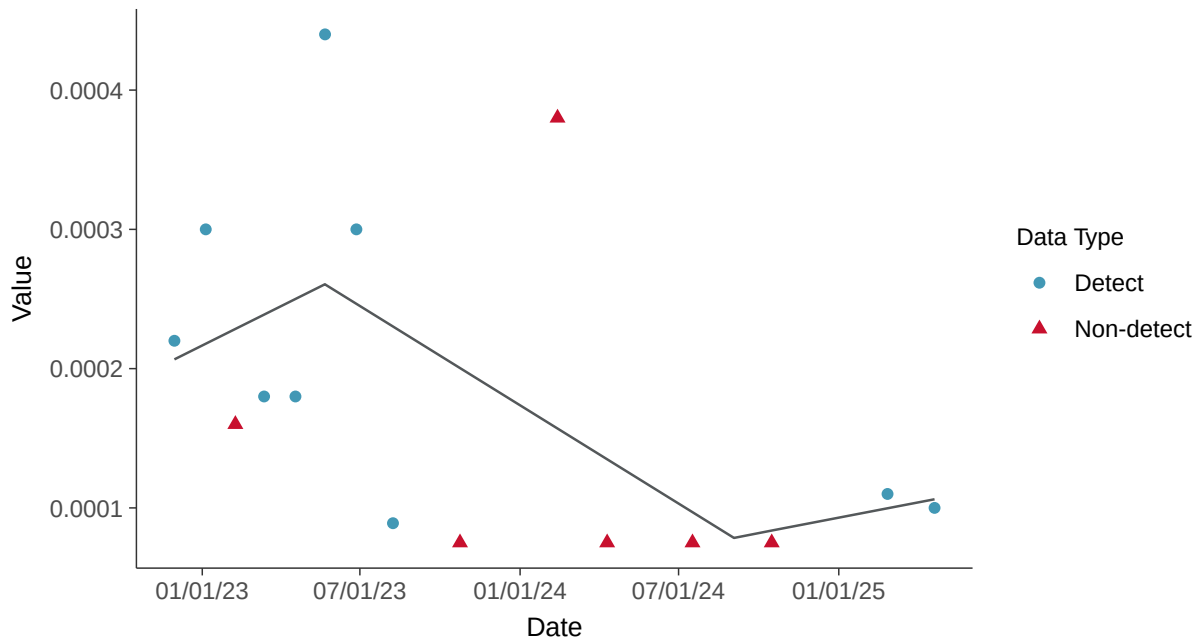
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-18 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cadmium, MW-18 (mg/L)

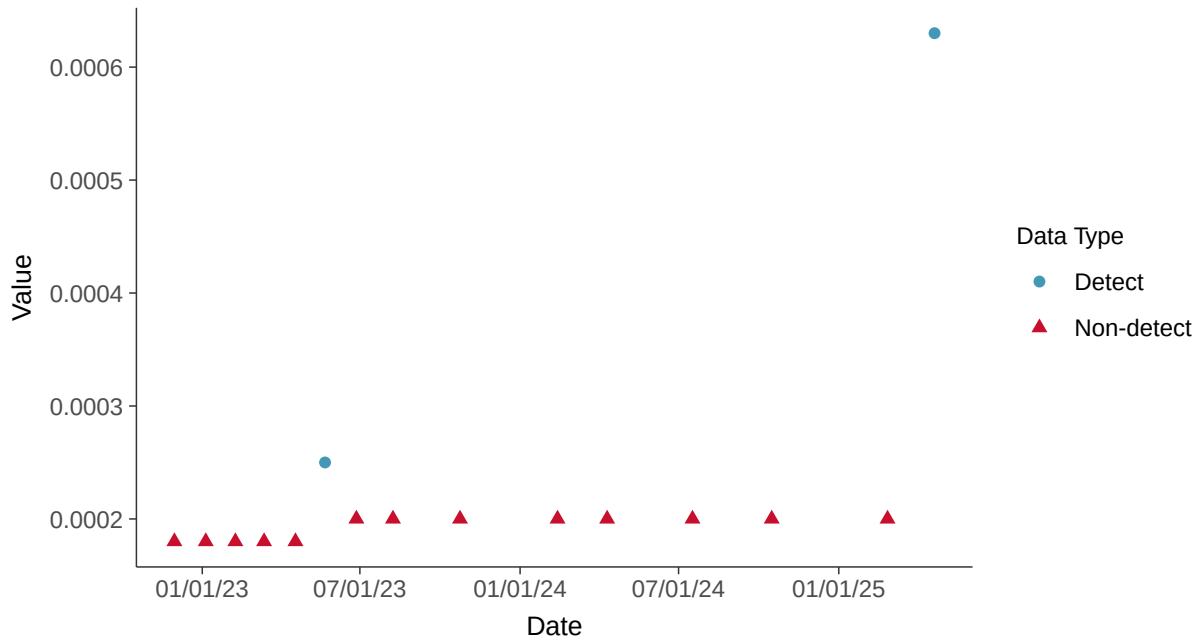


Appendix IV: Chromium, Total, MW-18

ID: 28_1_4_109

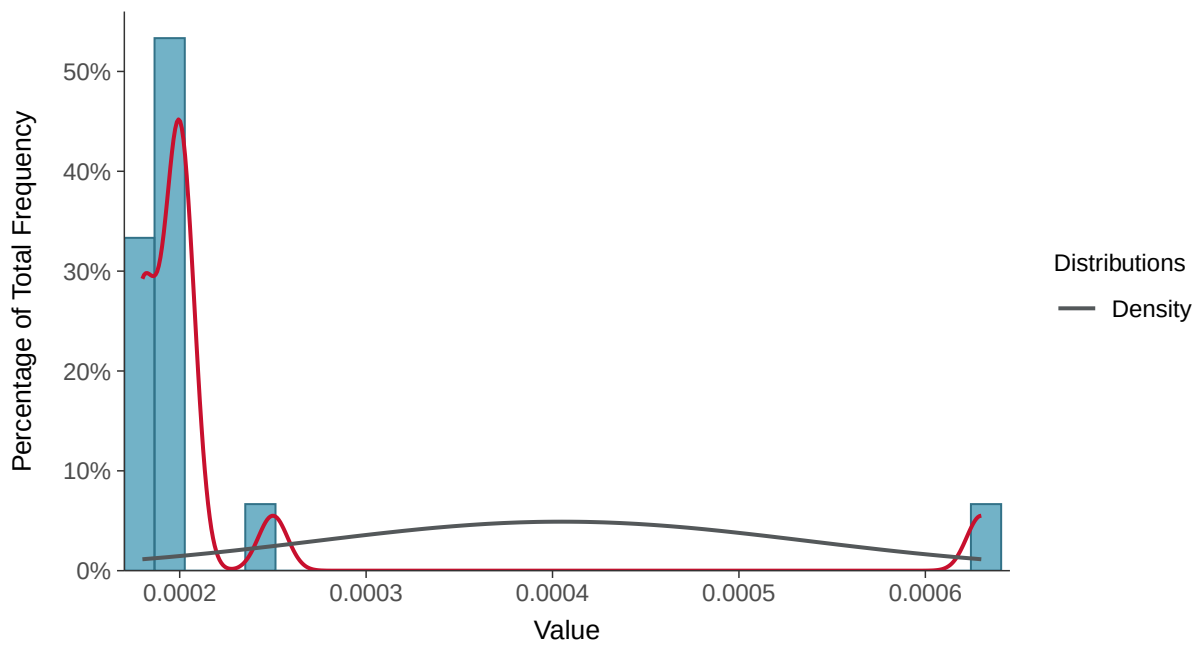
Scatter Plot

Chromium, Total, MW-18 (mg/L)



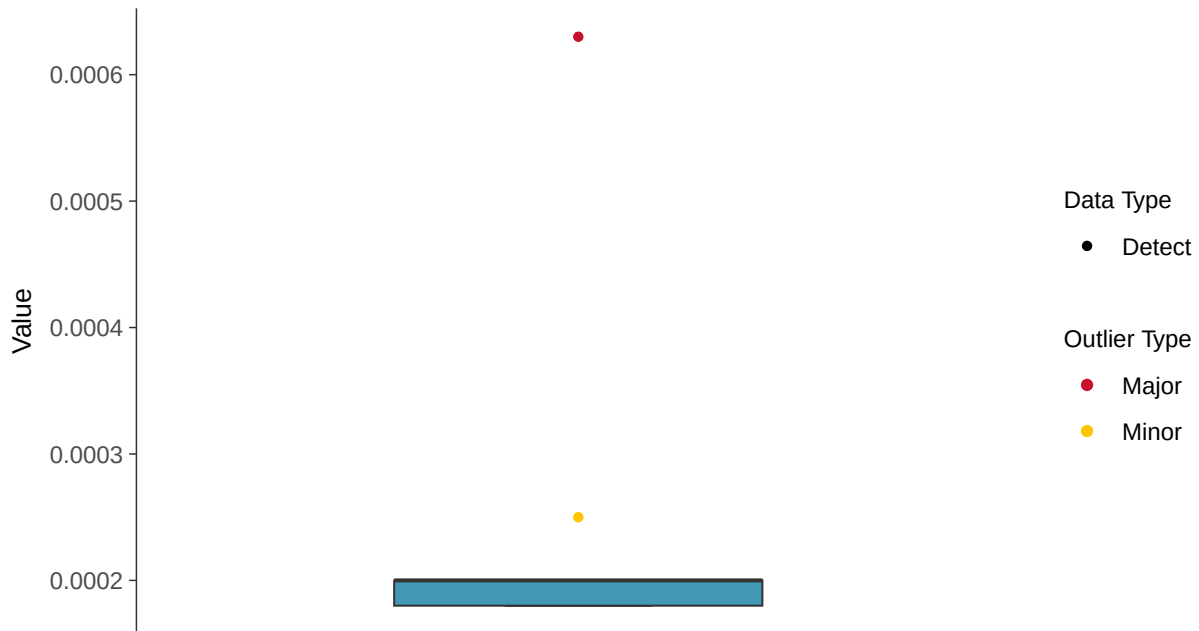
Histogram

Chromium, Total, MW-18 (mg/L)



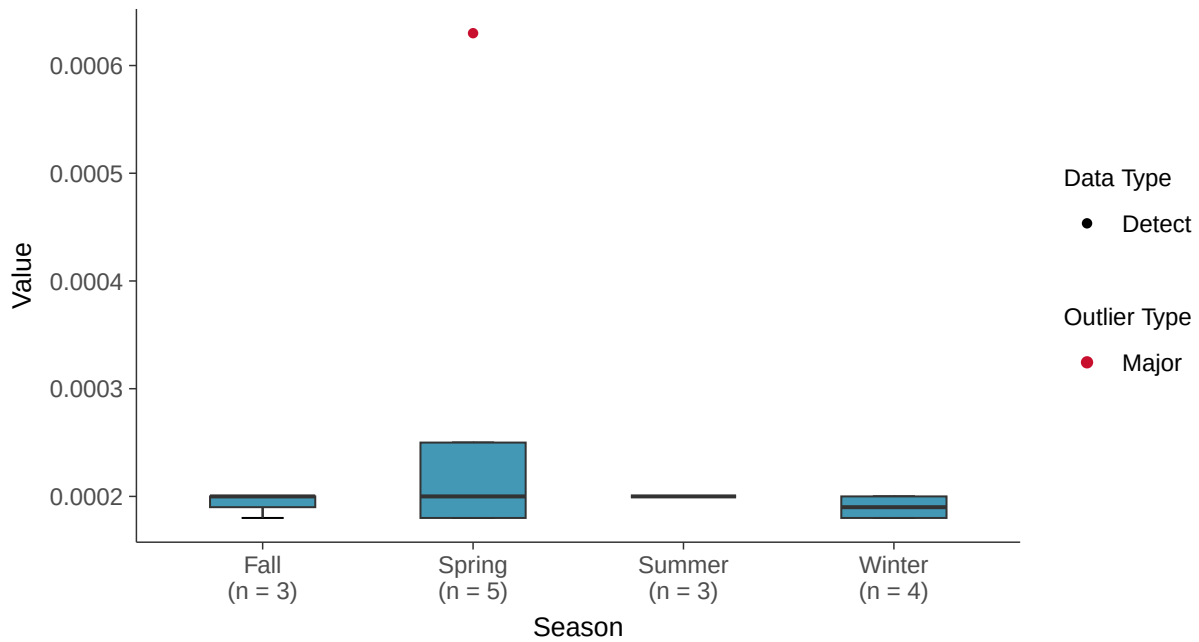
Boxplot

Chromium, Total, MW-18 (mg/L)



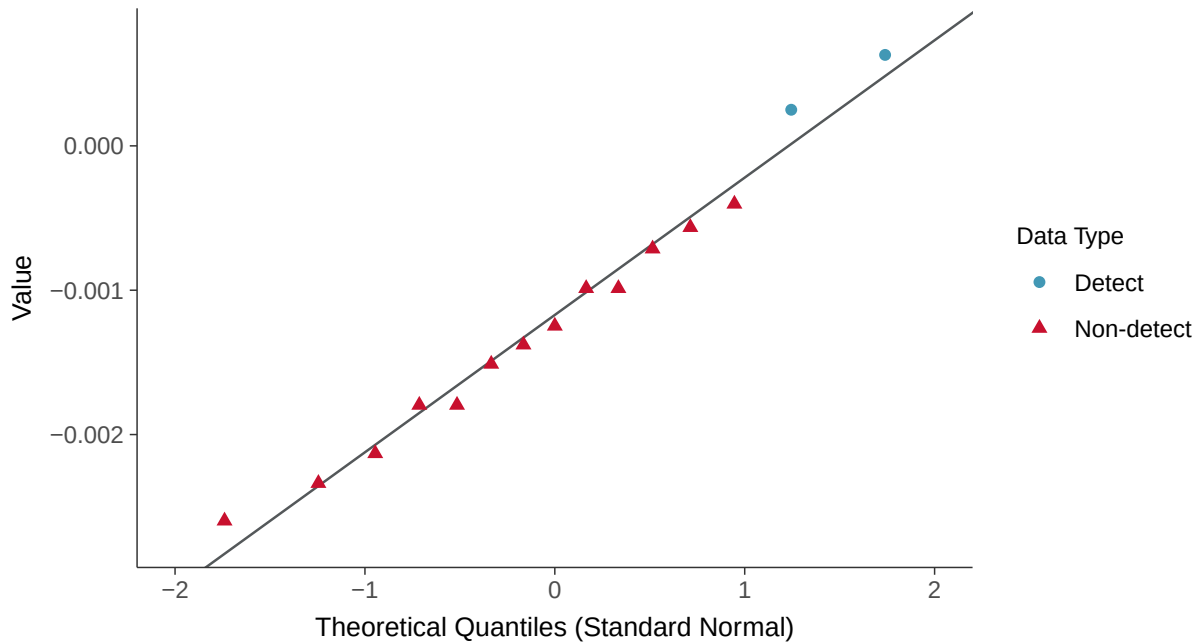
Boxplot by Season

Chromium, Total, MW-18 (mg/L)



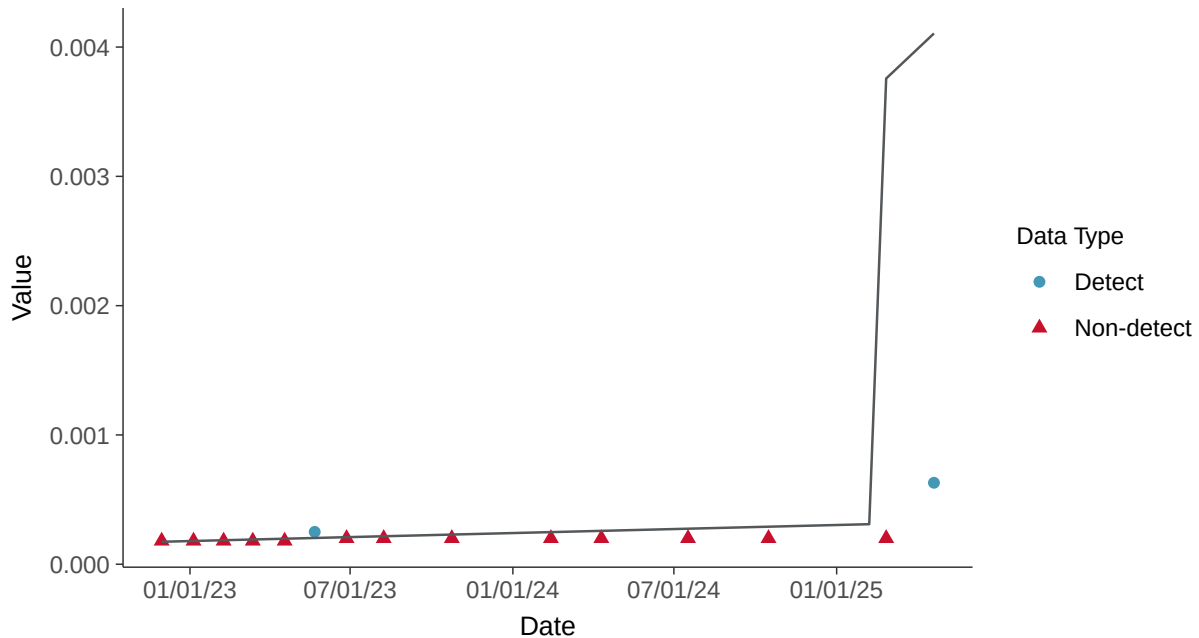
Normal Q-Q plot using ROS Imputed Estimates

Chromium, Total, MW-18 (mg/L)



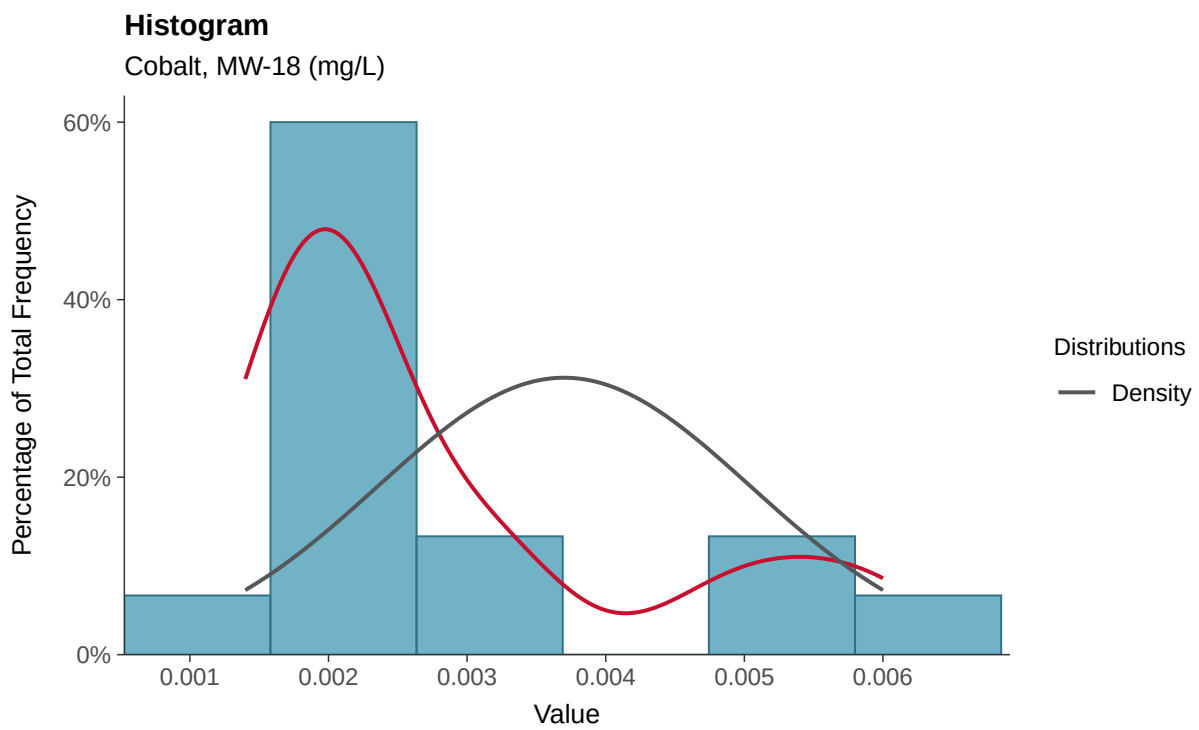
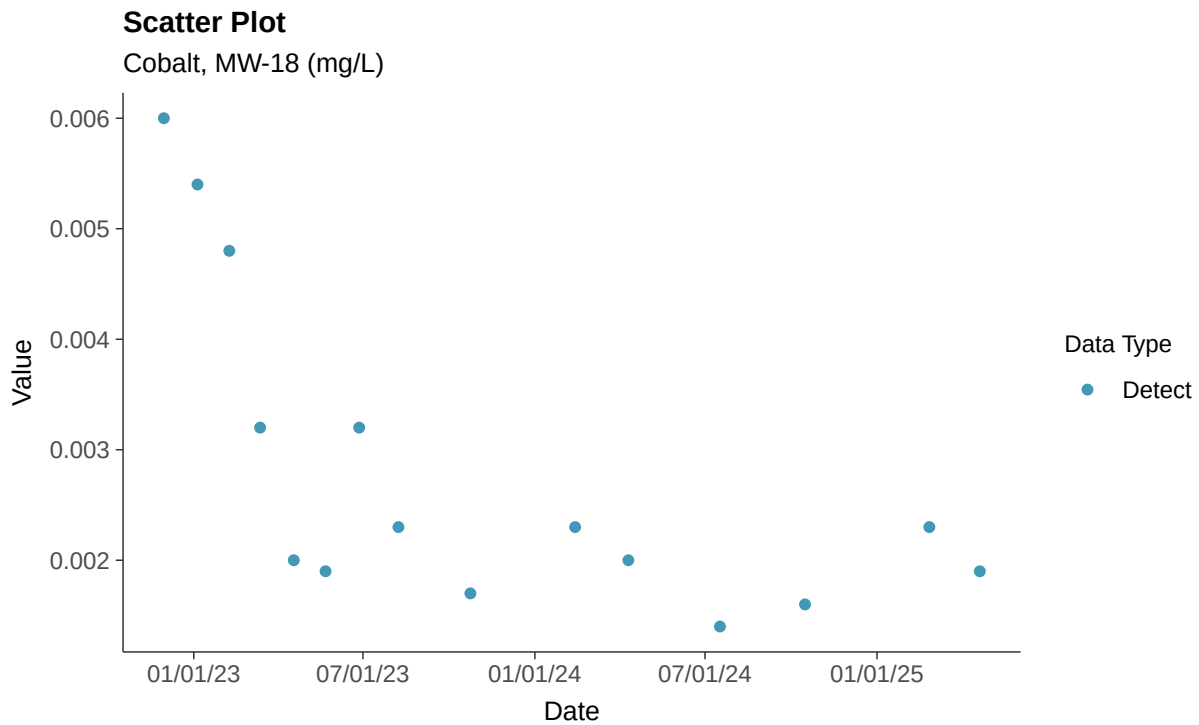
Trend Regression: Piecewise Linear-Linear-Linear

Chromium, Total, MW-18 (mg/L)



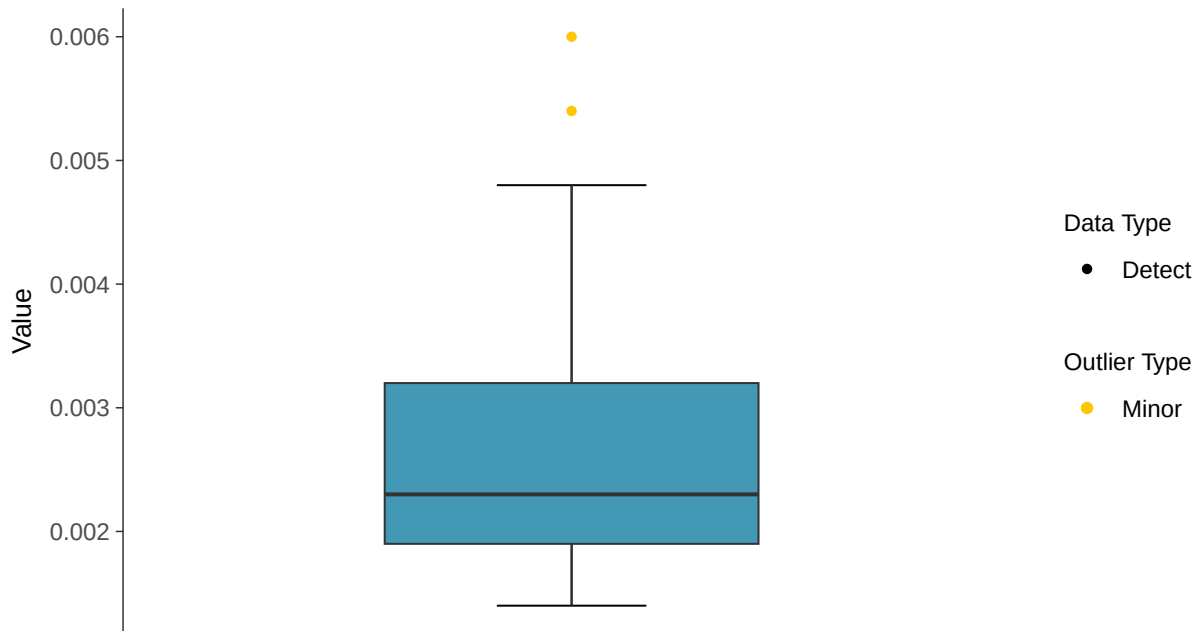
Appendix IV: Cobalt, MW-18

ID: 28_1_4_110



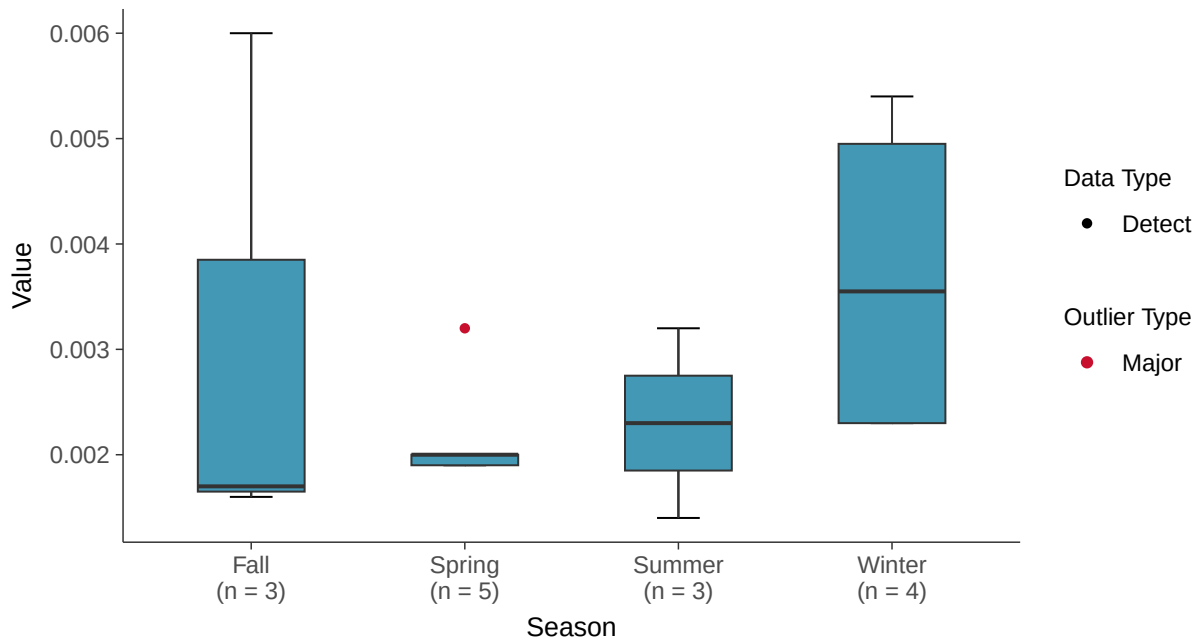
Boxplot

Cobalt, MW-18 (mg/L)

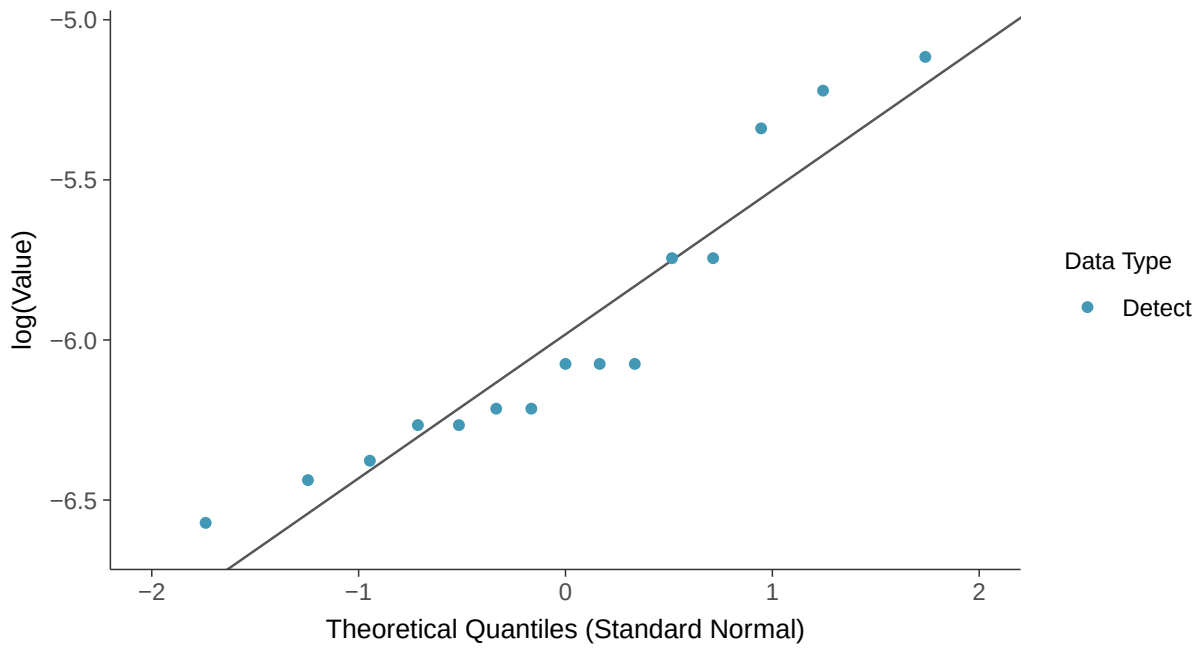


Boxplot by Season

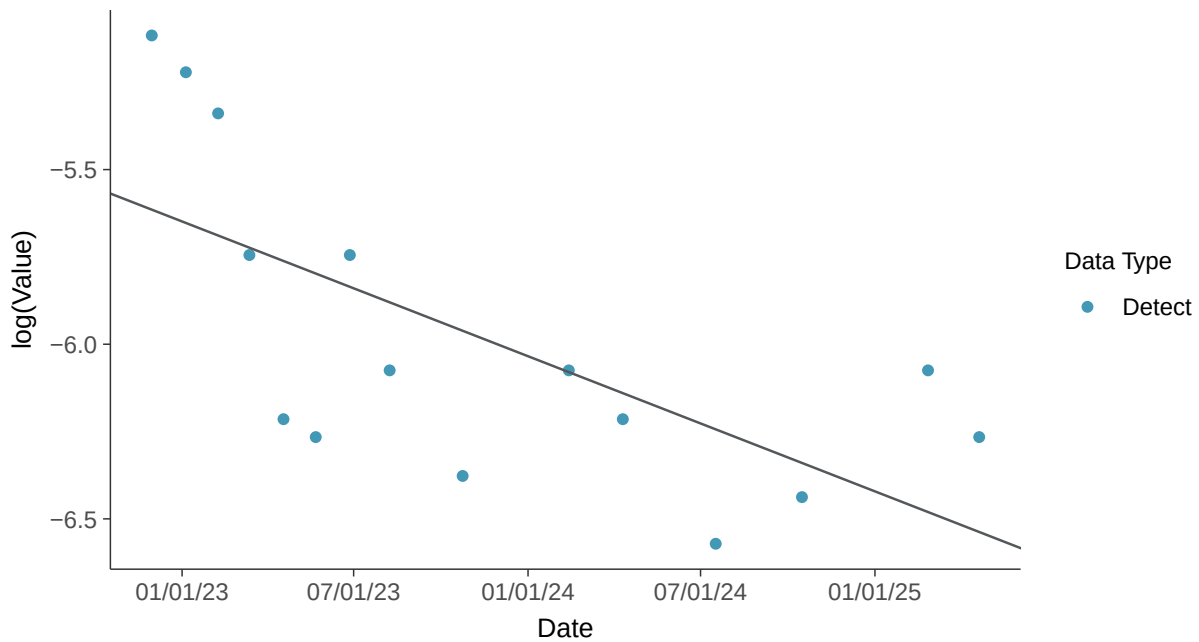
Cobalt, MW-18 (mg/L)



Lognormal Q-Q plot
Cobalt, MW-18 (mg/L)

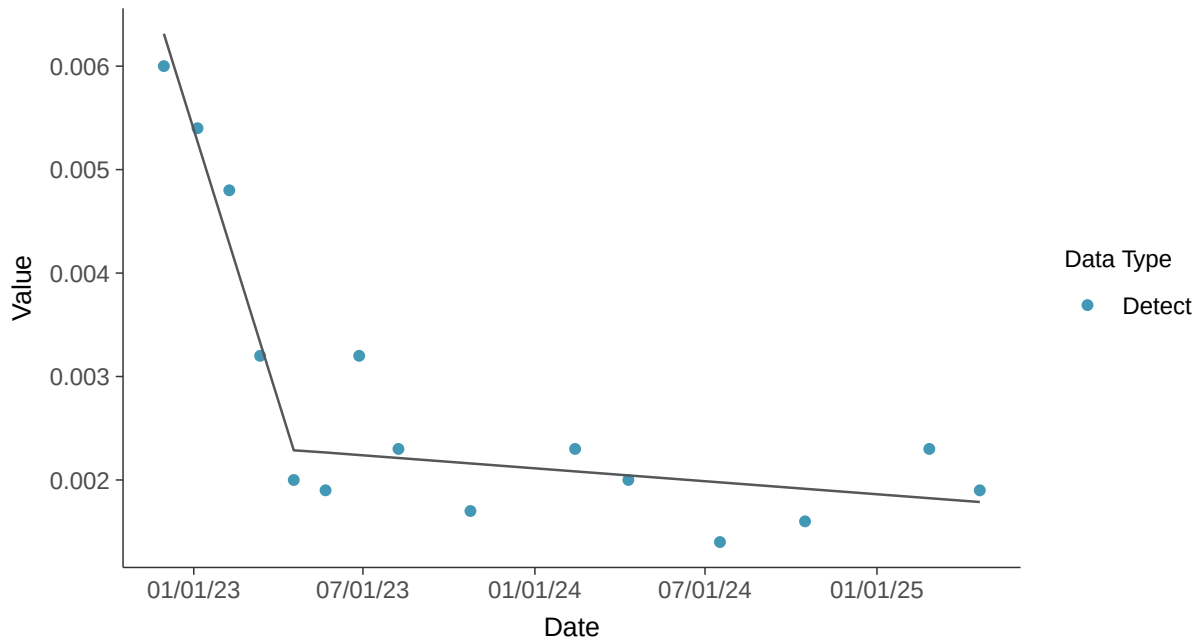


Trend Regression: Lognormal MLE
Cobalt, MW-18 (mg/L)



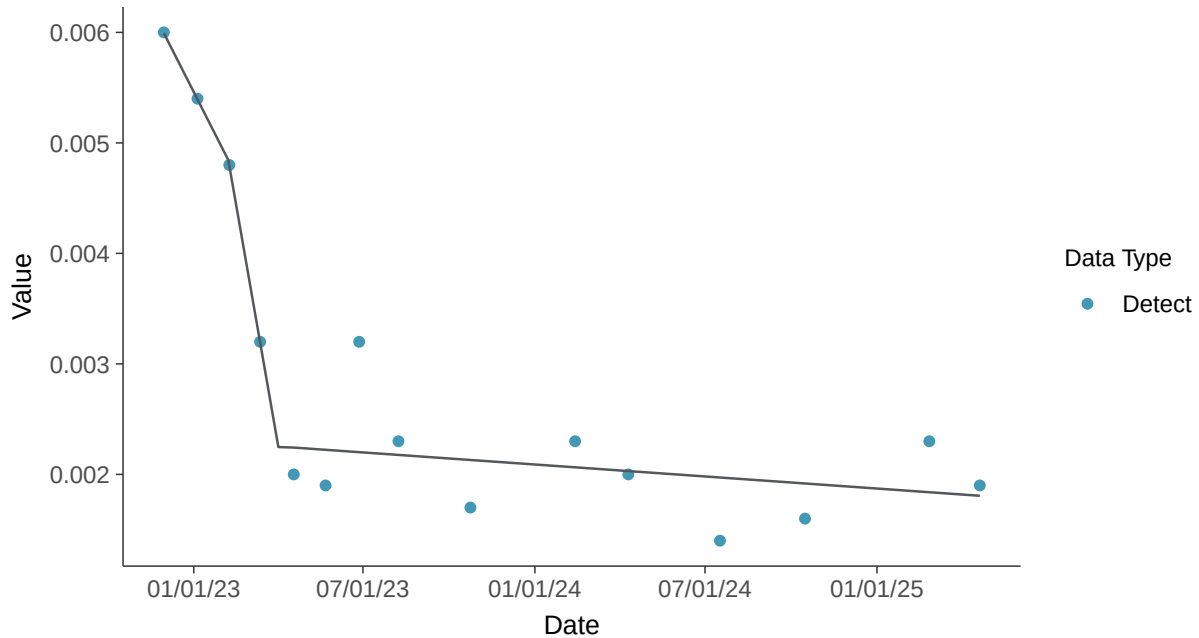
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-18 (mg/L)



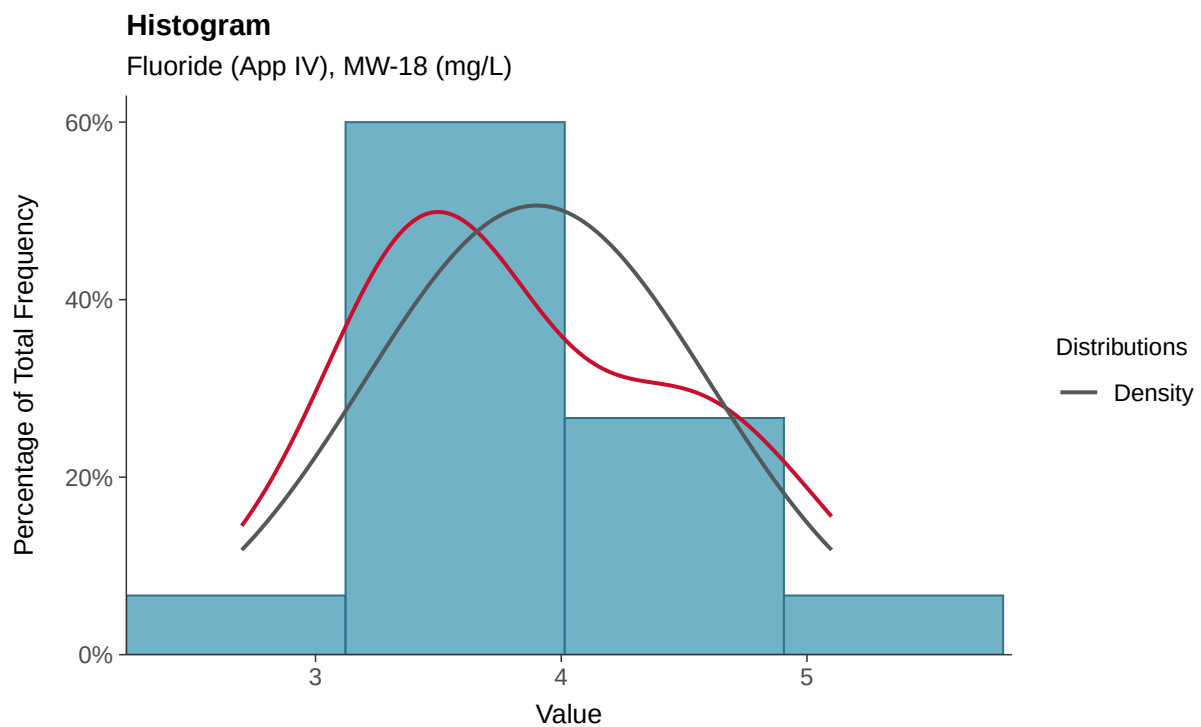
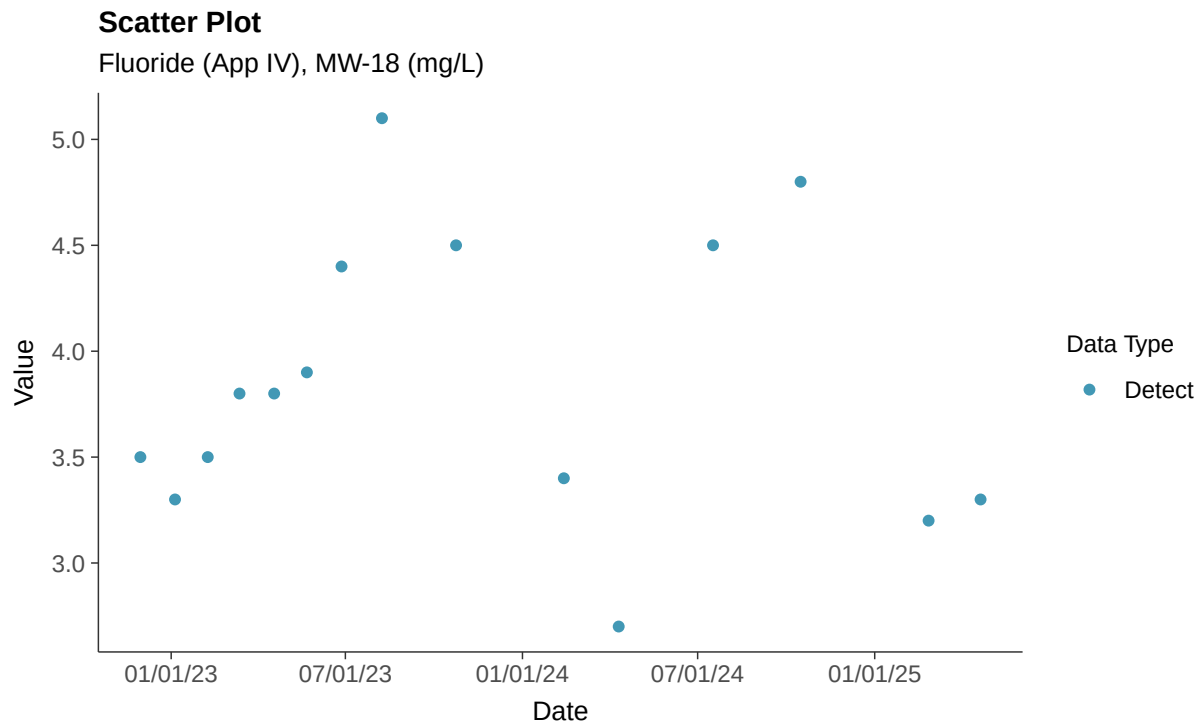
Trend Regression: Piecewise Linear-Linear-Linear

Cobalt, MW-18 (mg/L)



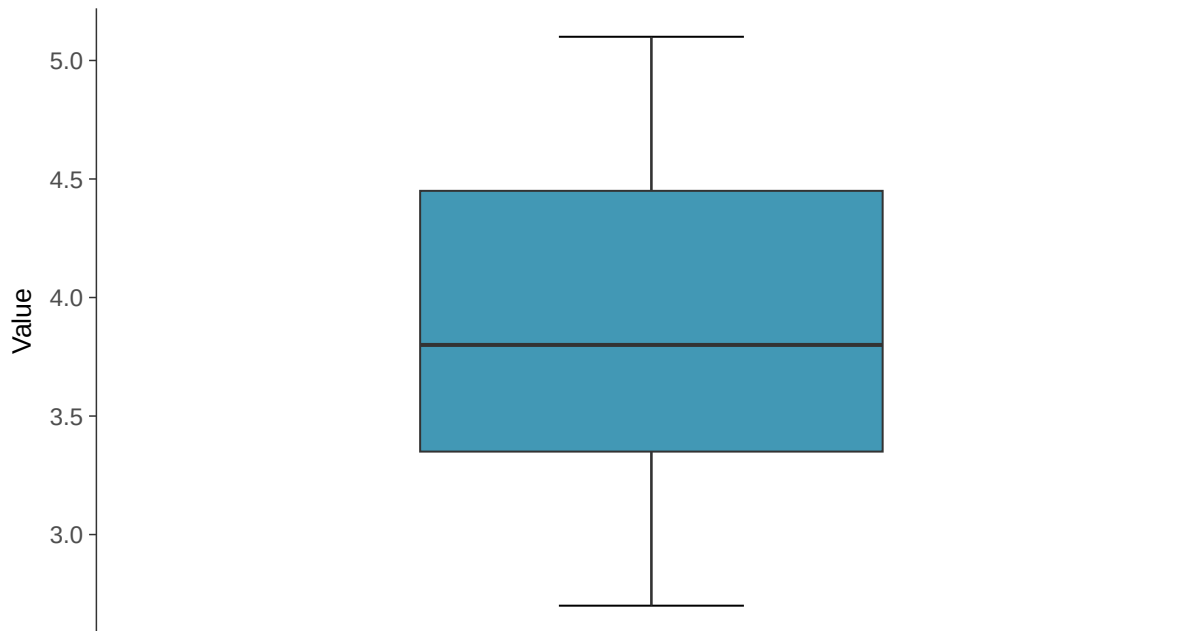
Appendix IV: Fluoride (App IV), MW-18

ID: 28_1_4_113



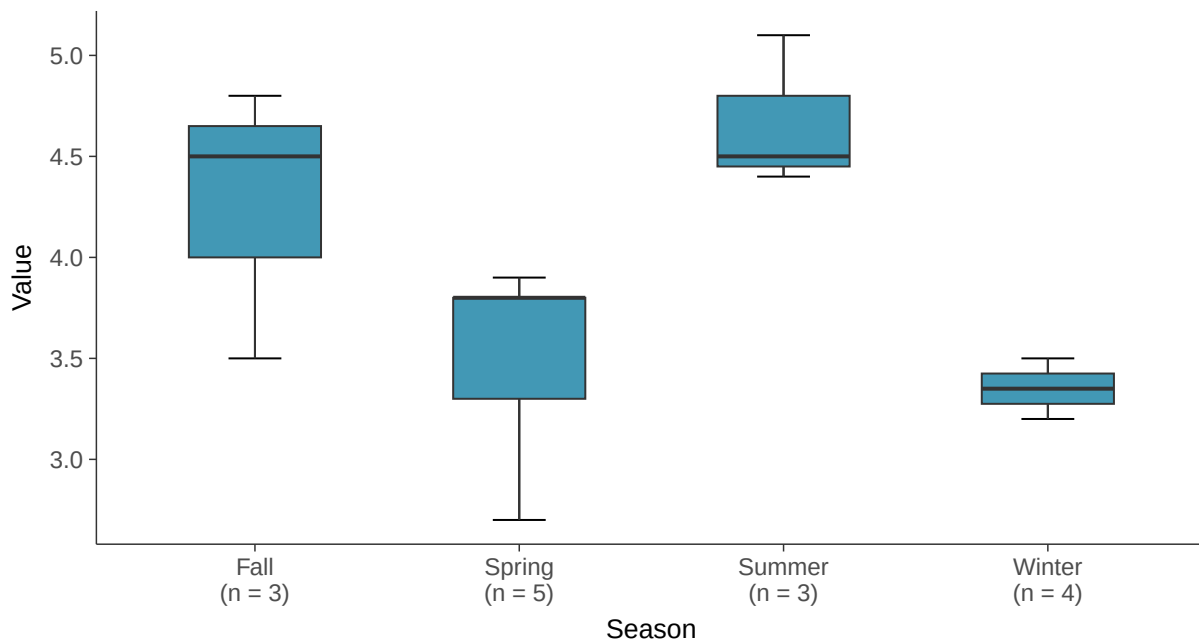
Boxplot

Fluoride (App IV), MW-18 (mg/L)



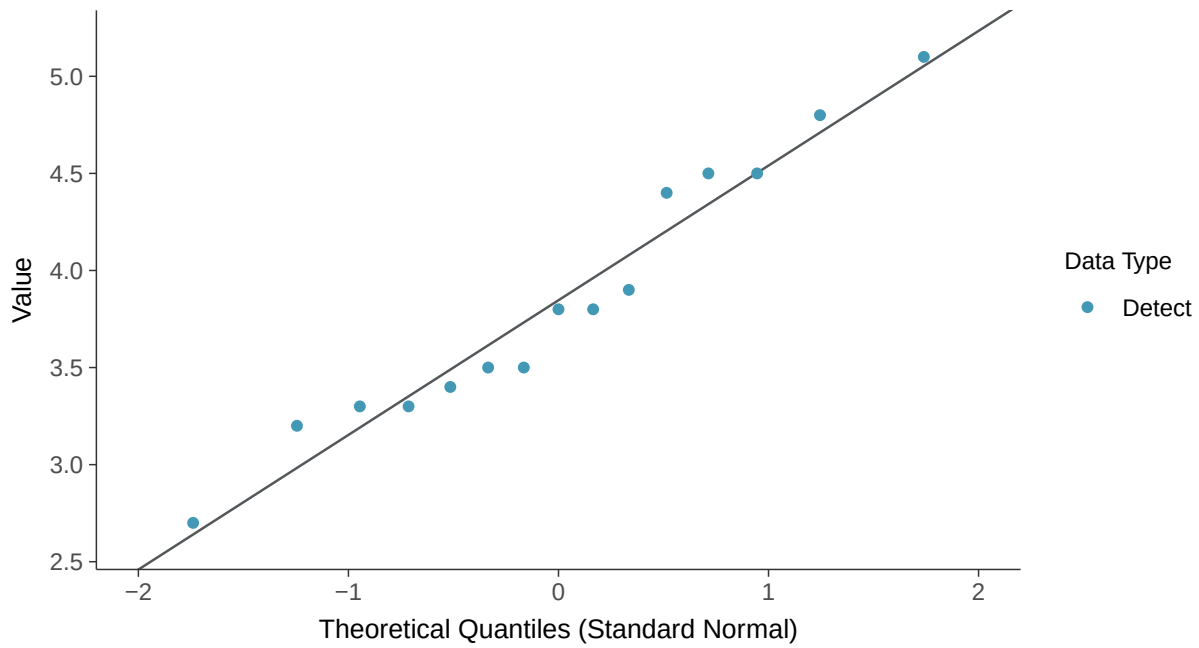
Boxplot by Season

Fluoride (App IV), MW-18 (mg/L)



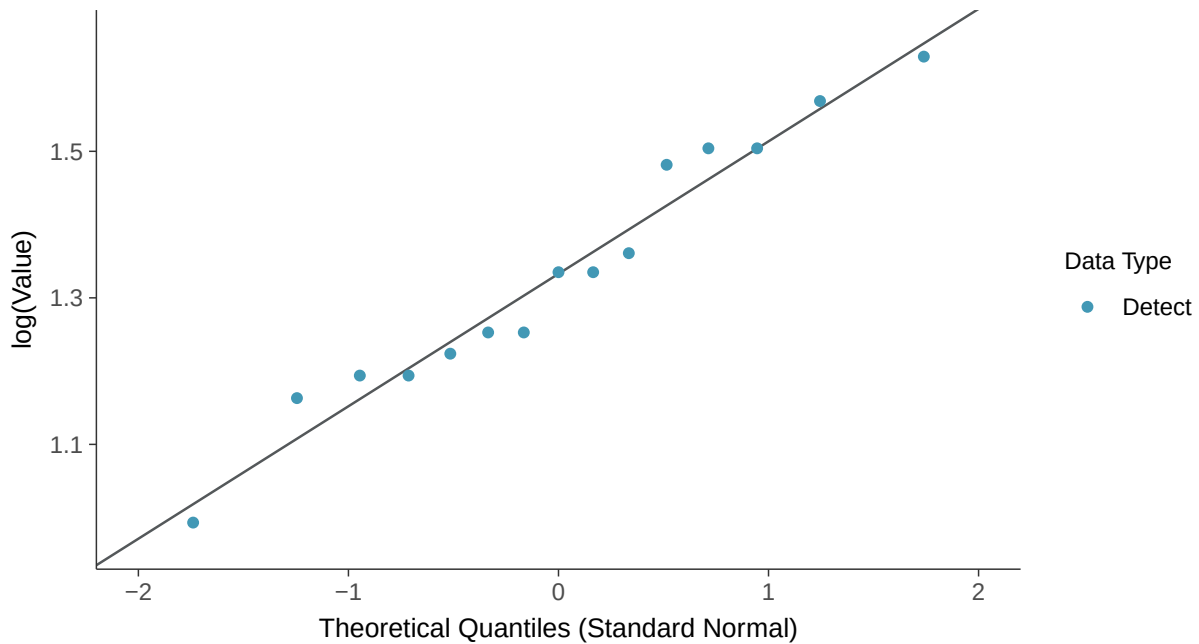
Normal Q-Q plot

Fluoride (App IV), MW-18 (mg/L)



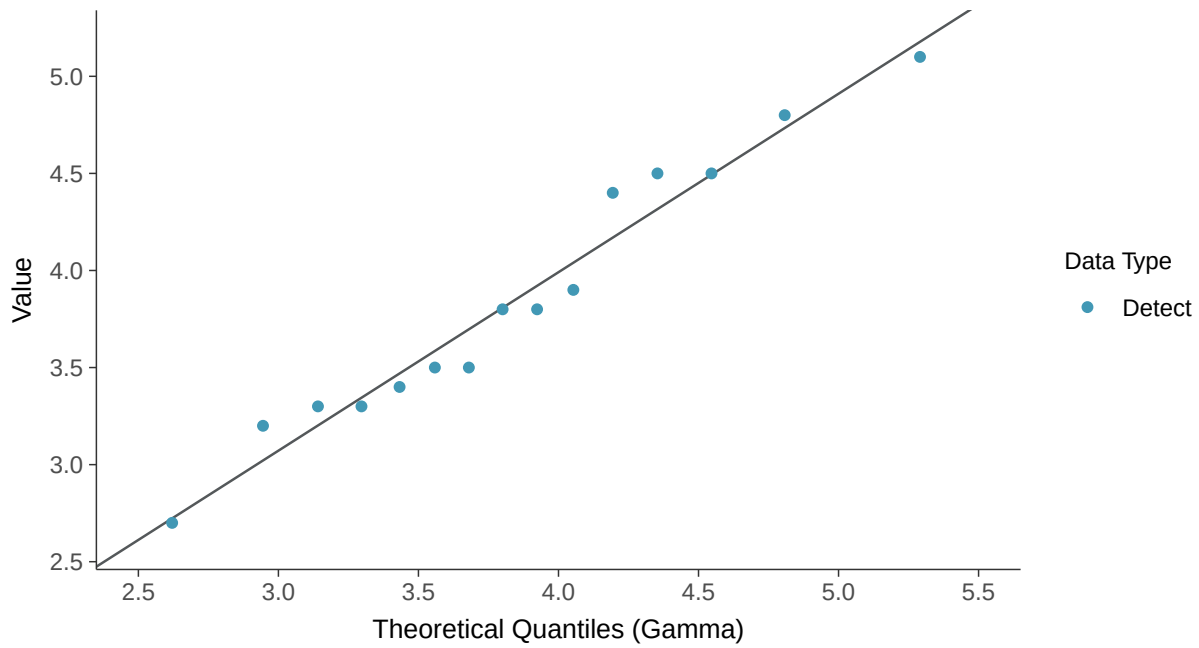
Lognormal Q-Q plot

Fluoride (App IV), MW-18 (mg/L)



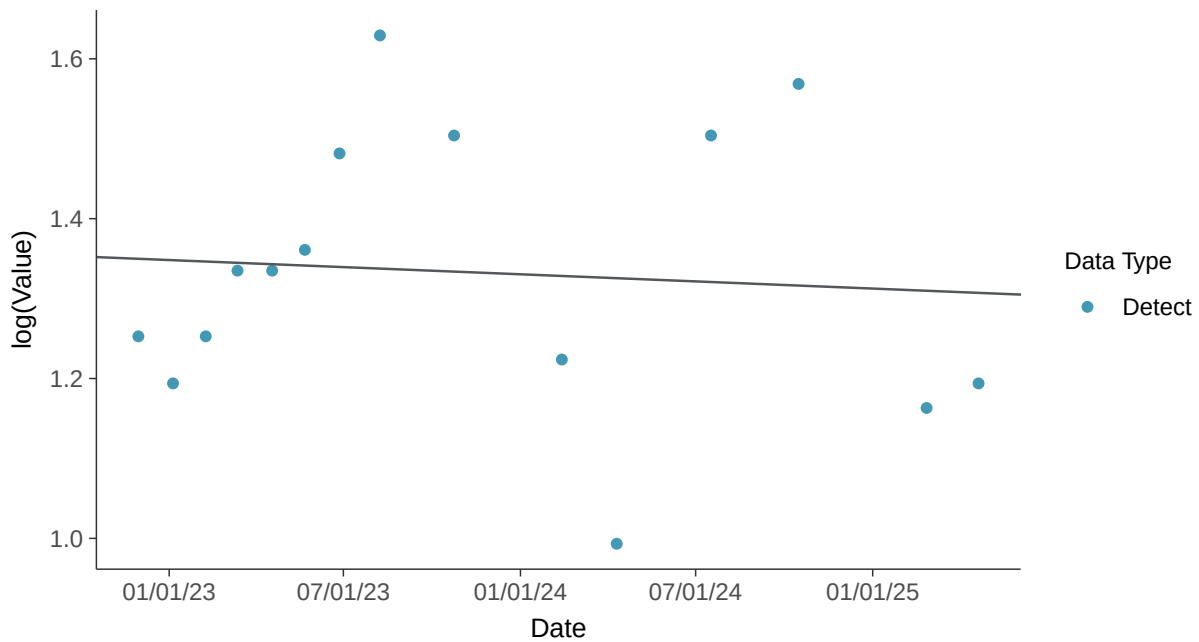
Gamma Q-Q plot

Fluoride (App IV), MW-18 (mg/L)



Trend Regression: Lognormal MLE

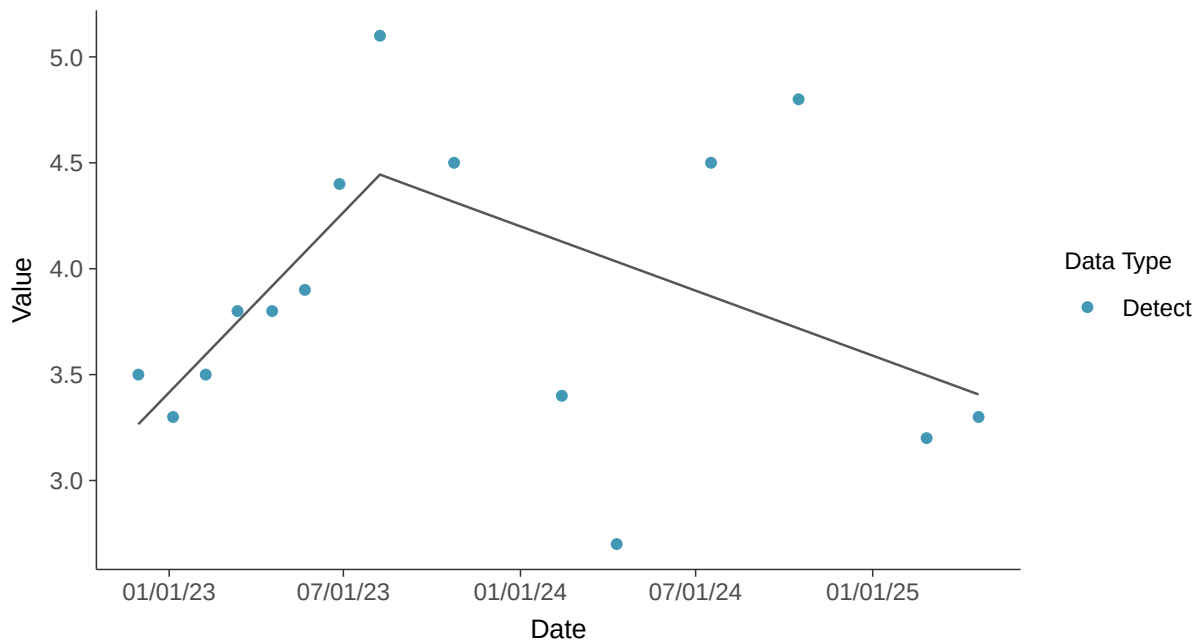
Fluoride (App IV), MW-18 (mg/L)

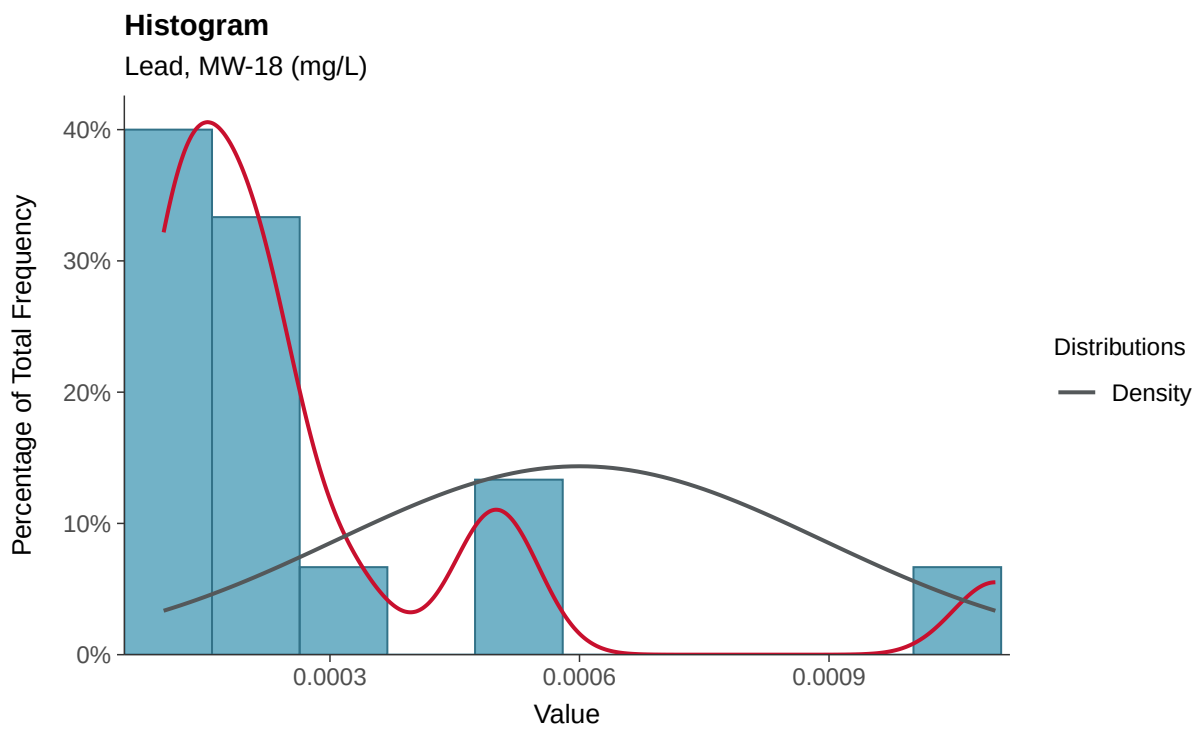




Trend Regression: Piecewise Linear-Linear

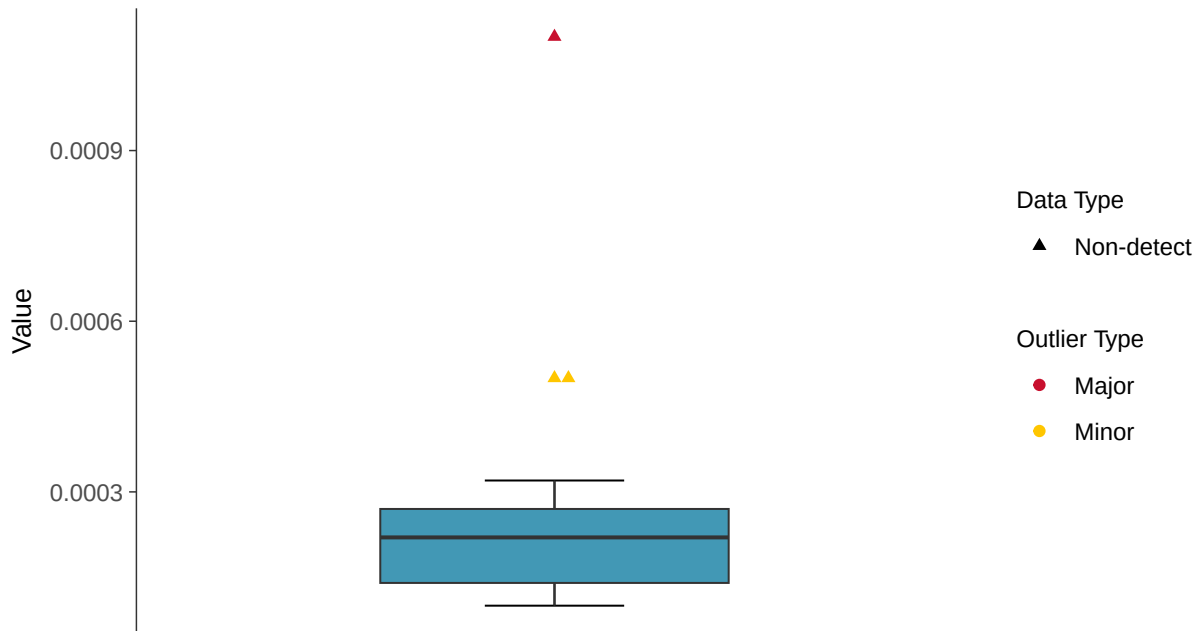
Fluoride (App IV), MW-18 (mg/L)





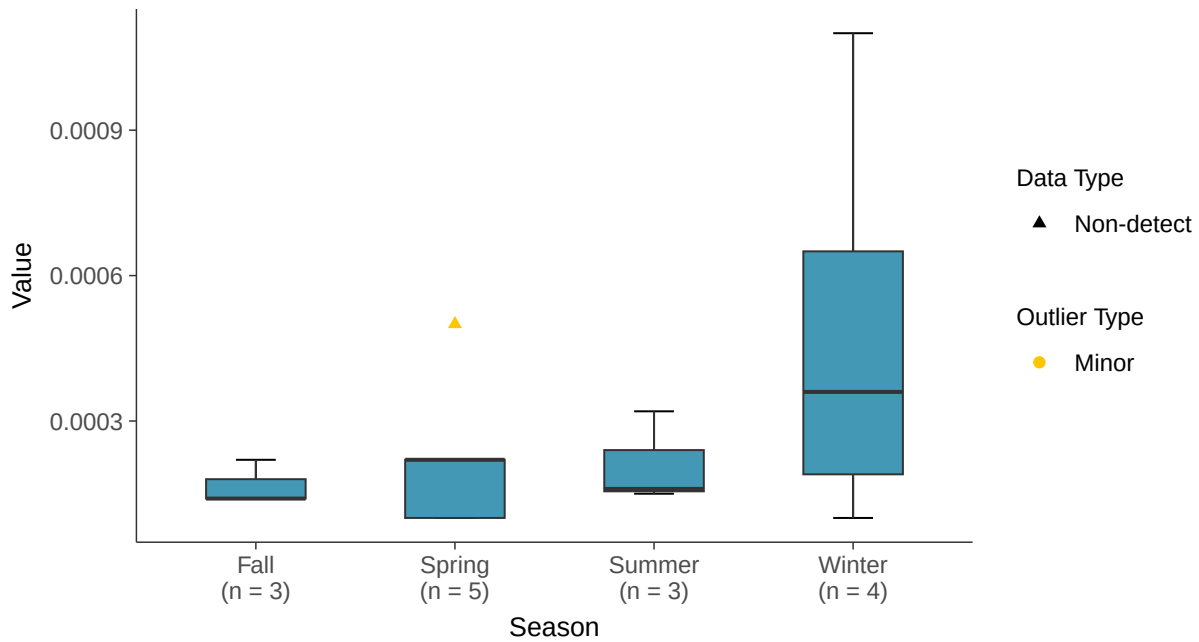
Boxplot

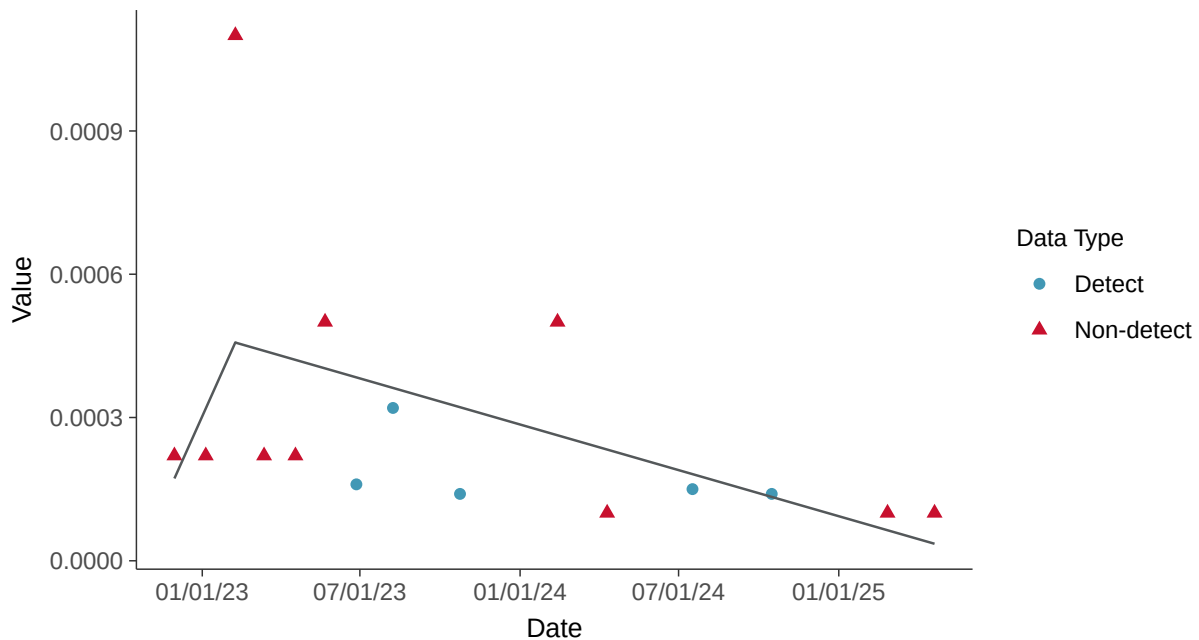
Lead, MW-18 (mg/L)



Boxplot by Season

Lead, MW-18 (mg/L)

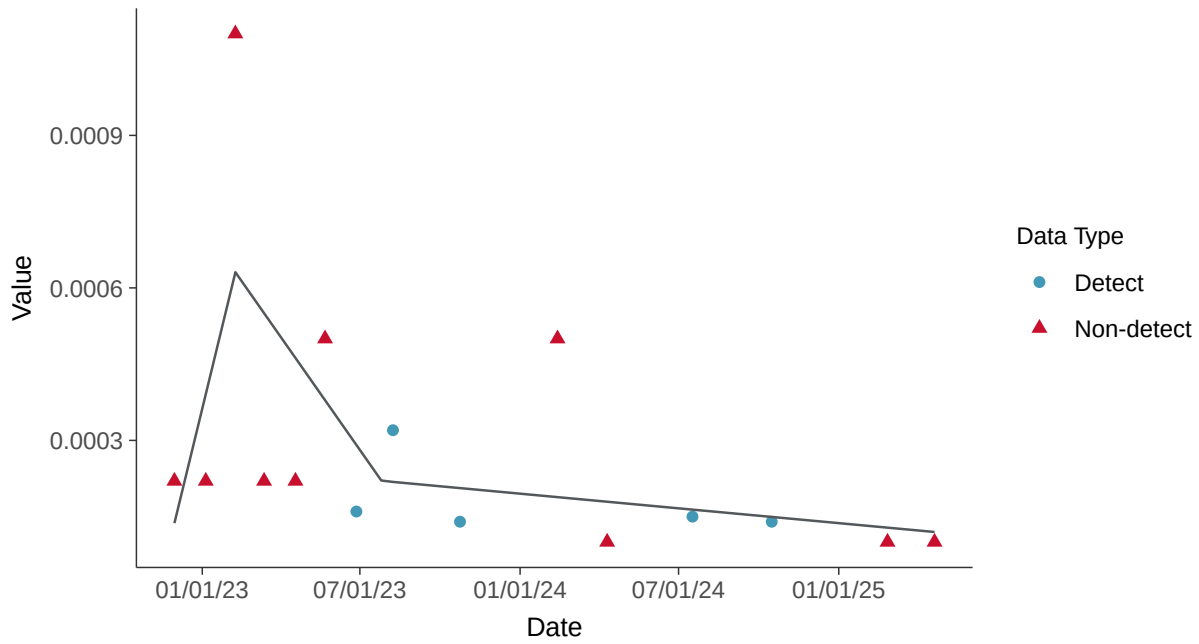






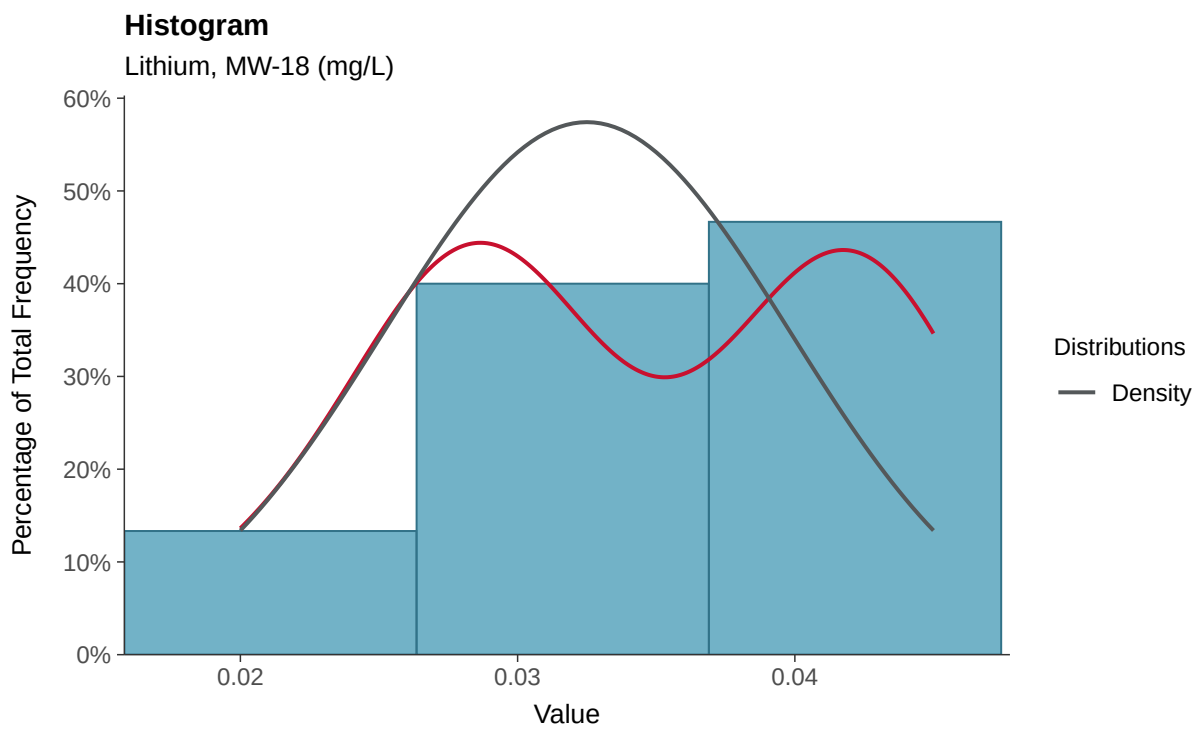
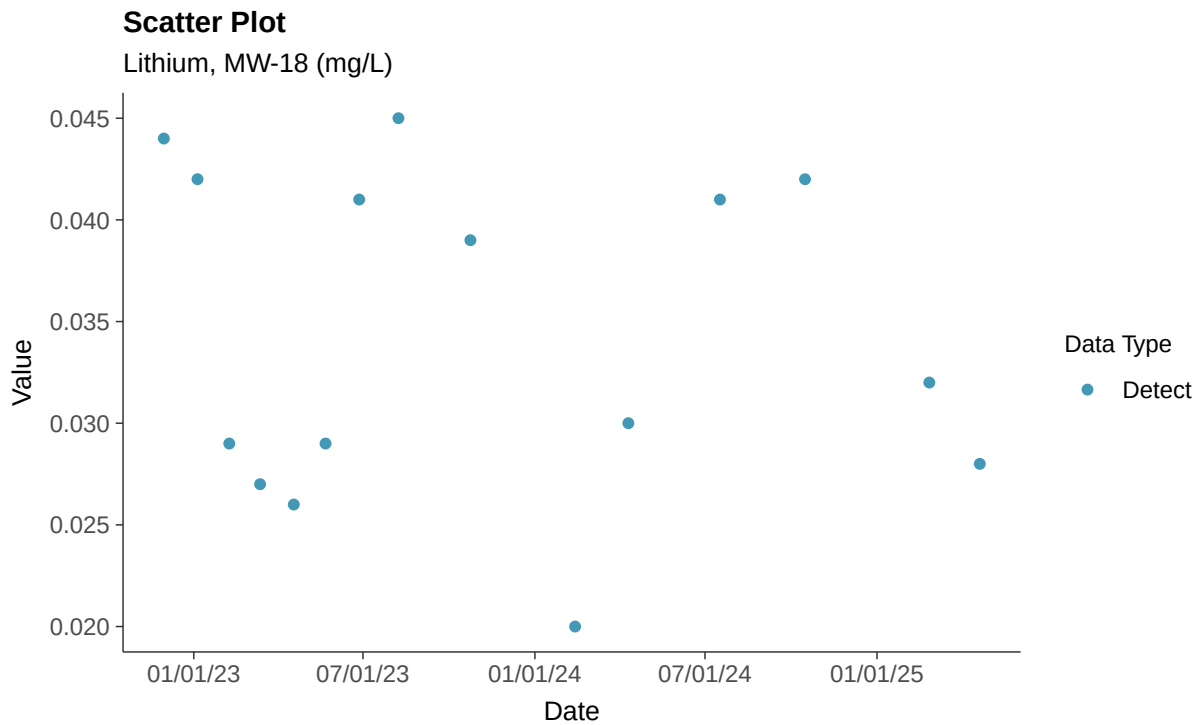
Trend Regression: Piecewise Linear-Linear-Linear

Lead, MW-18 (mg/L)



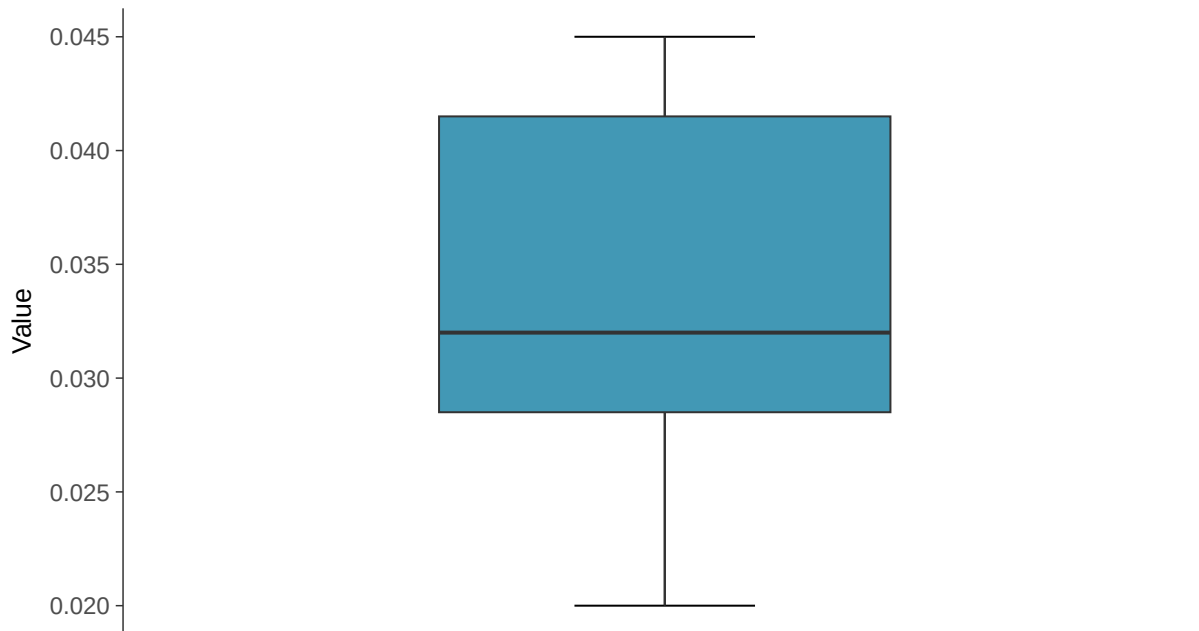
Appendix IV: Lithium, MW-18

ID: 28_1_4_116



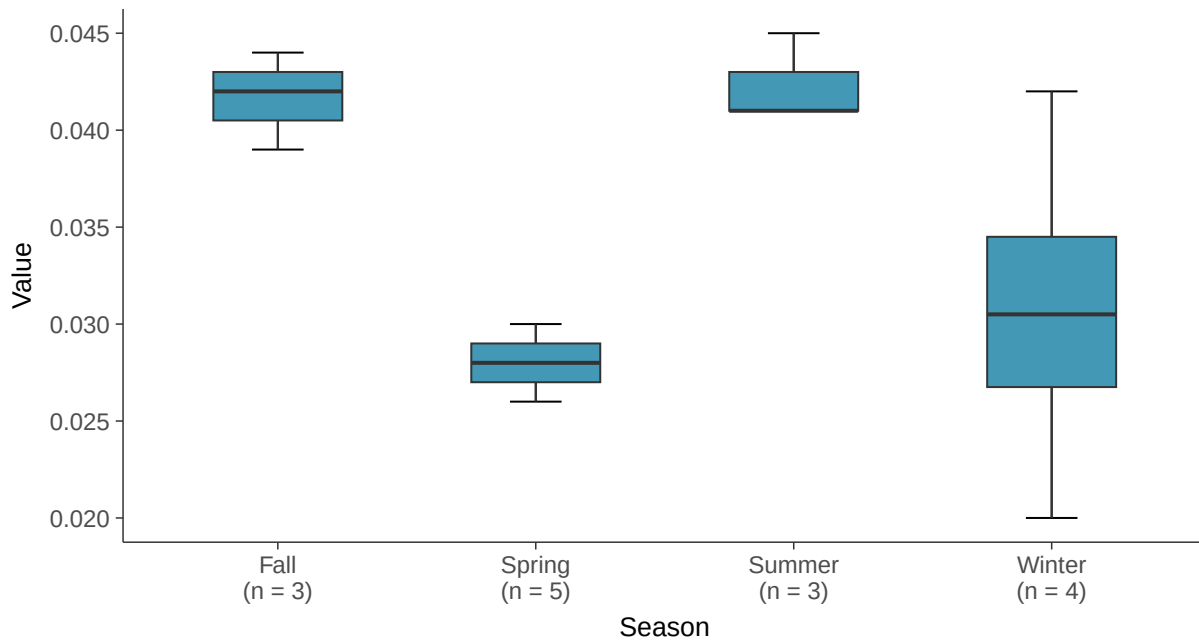
Boxplot

Lithium, MW-18 (mg/L)



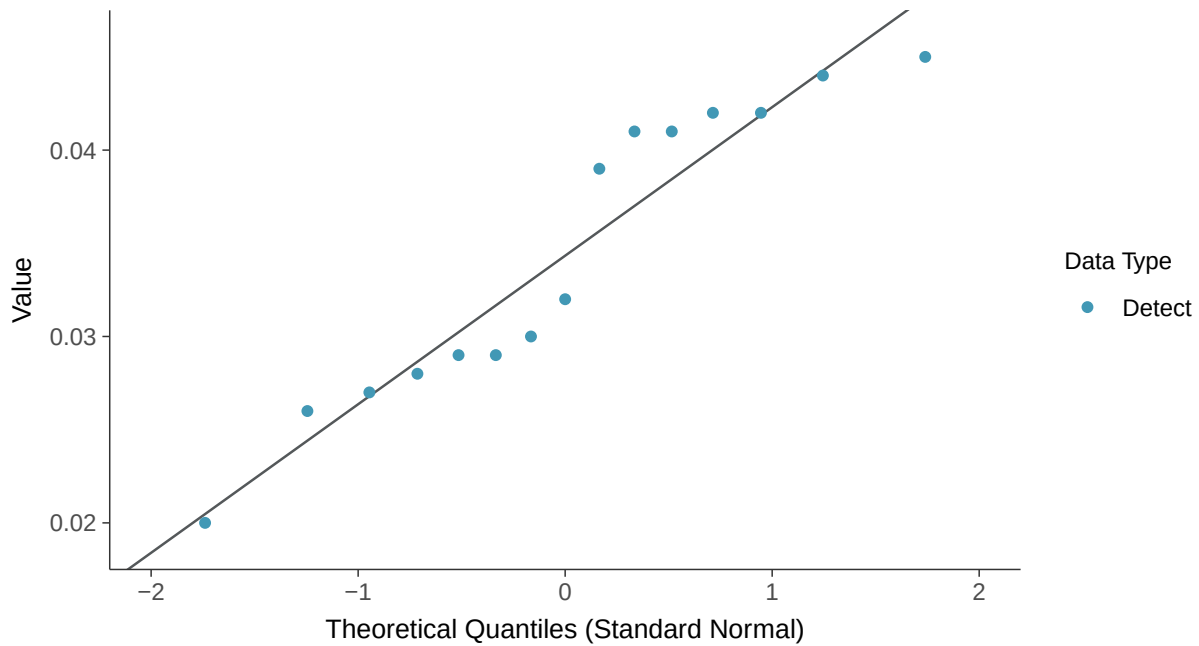
Boxplot by Season

Lithium, MW-18 (mg/L)



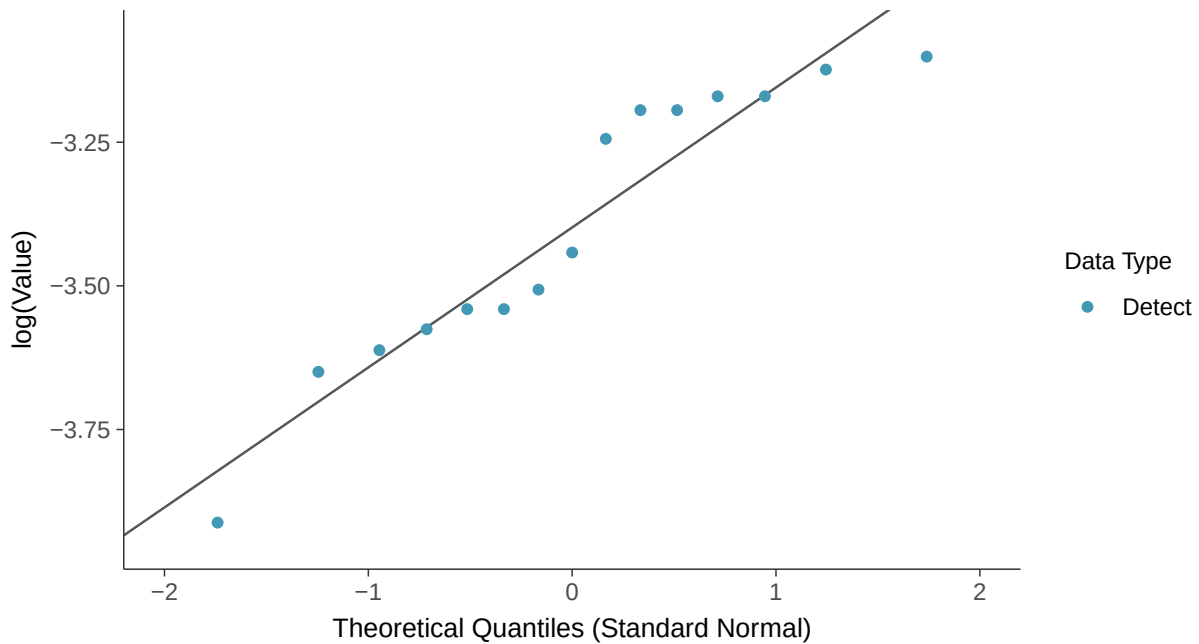
Normal Q-Q plot

Lithium, MW-18 (mg/L)



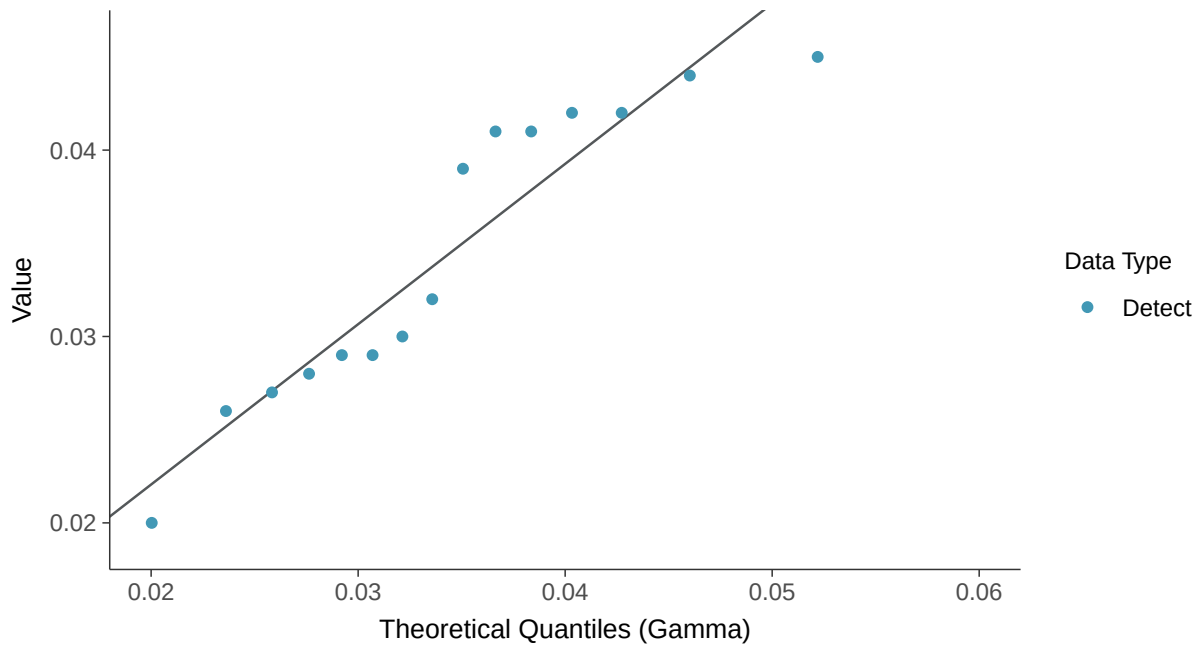
Lognormal Q-Q plot

Lithium, MW-18 (mg/L)



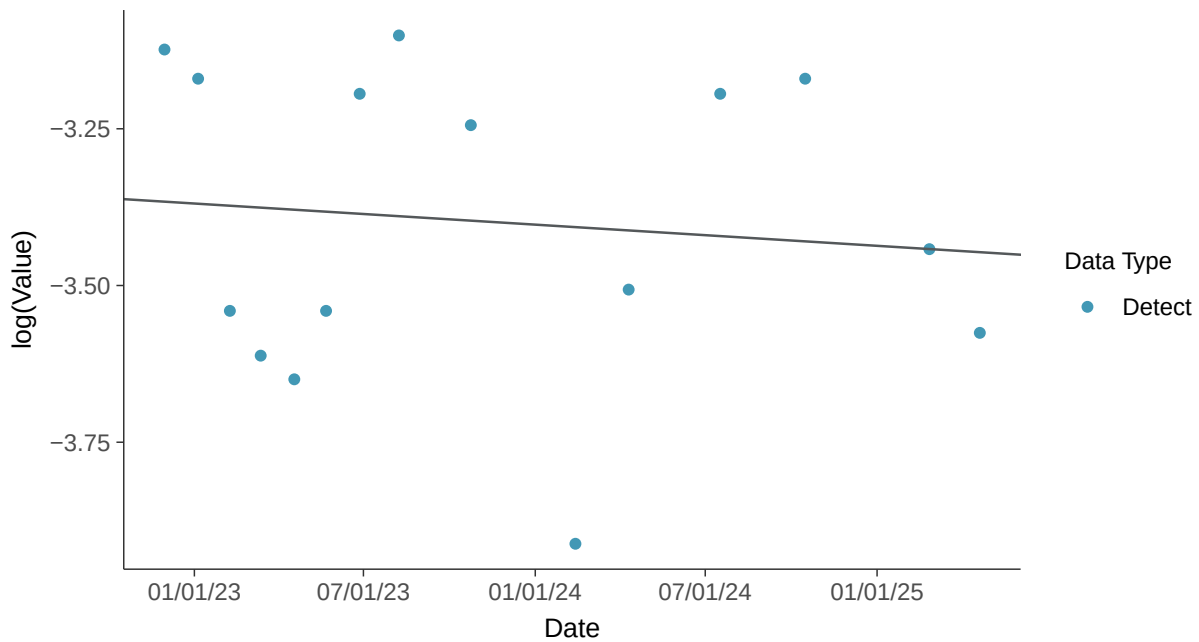
Gamma Q-Q plot

Lithium, MW-18 (mg/L)



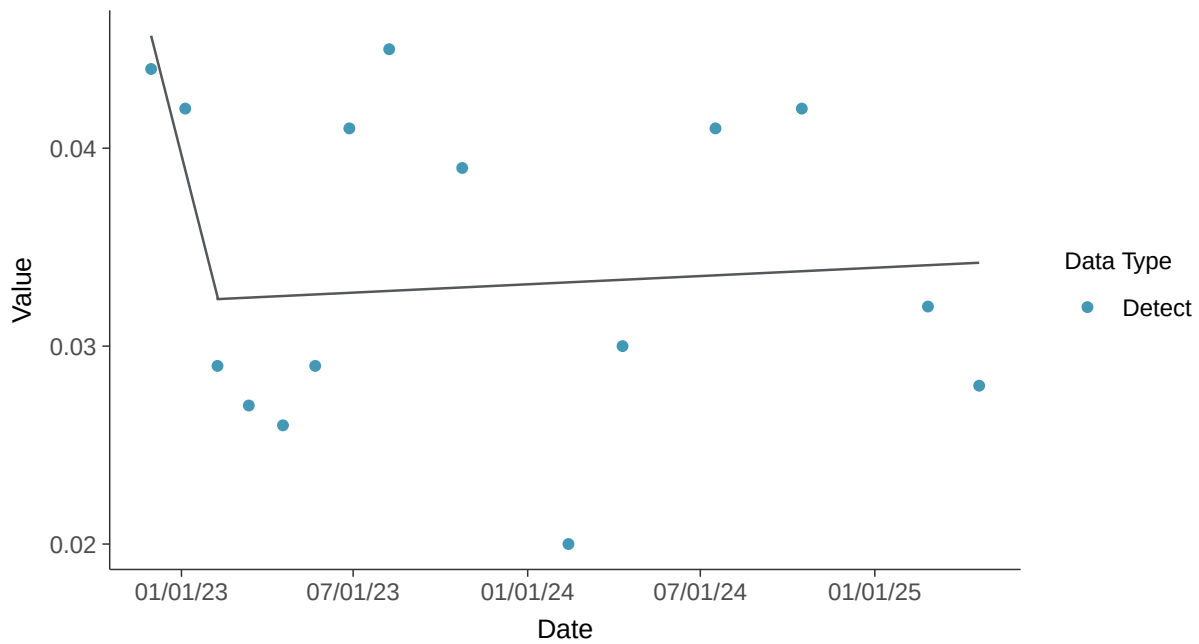
Trend Regression: Lognormal MLE

Lithium, MW-18 (mg/L)



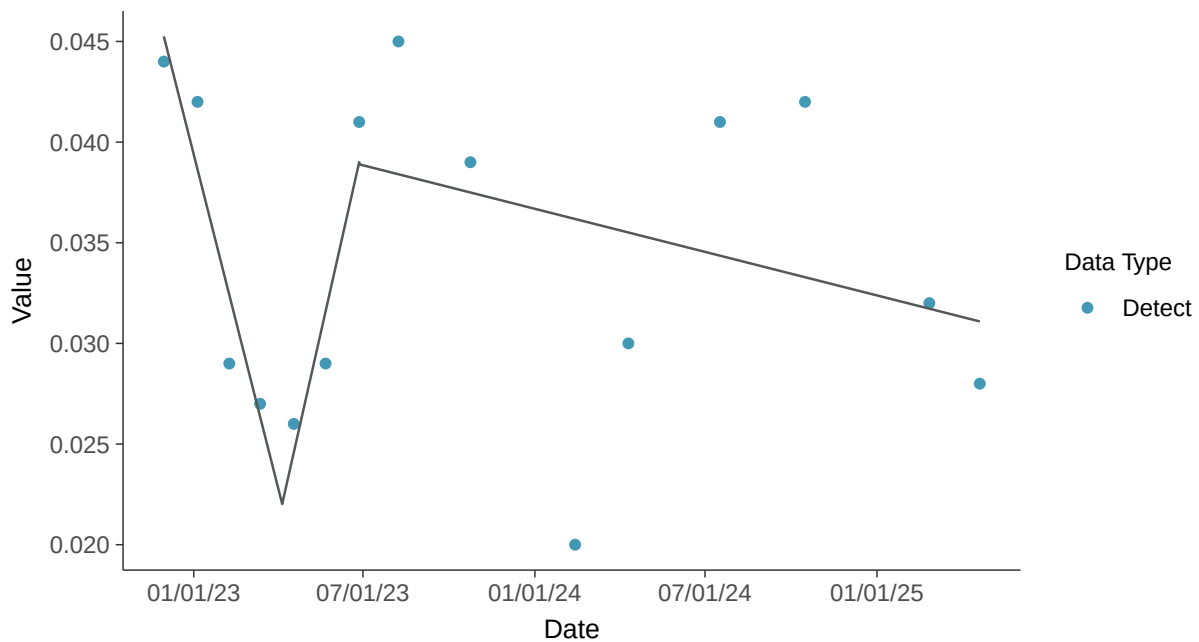
Trend Regression: Piecewise Linear-Linear

Lithium, MW-18 (mg/L)



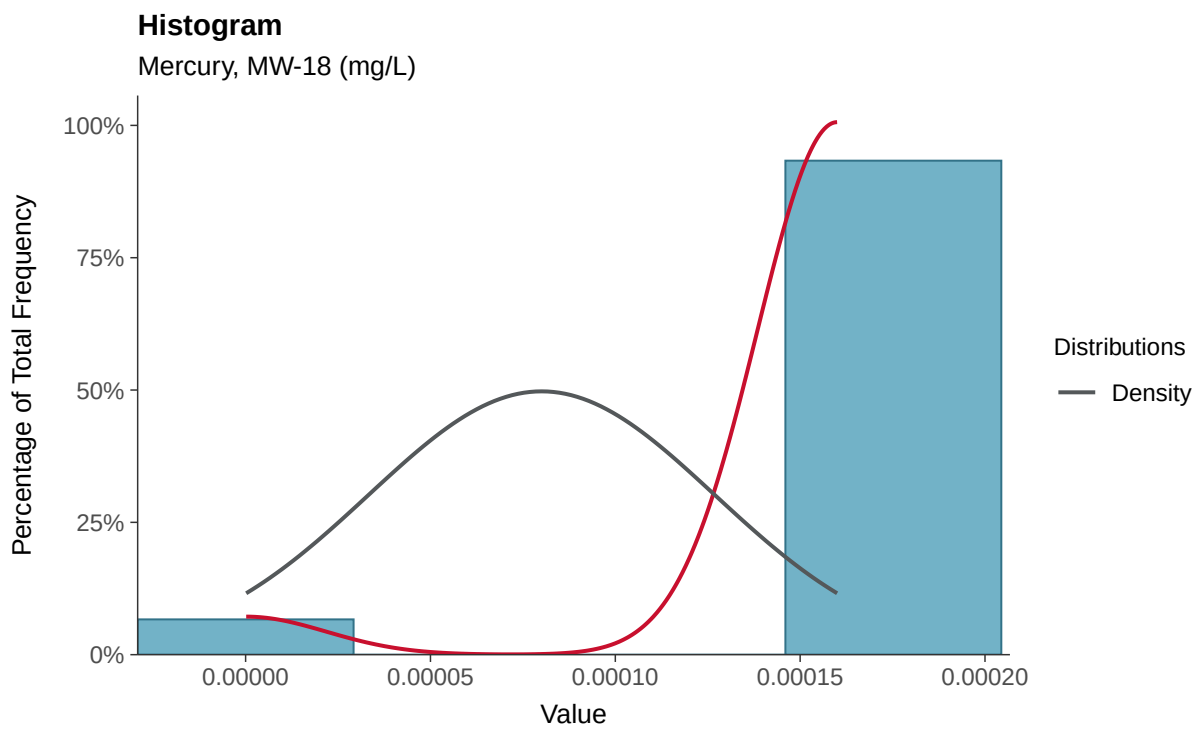
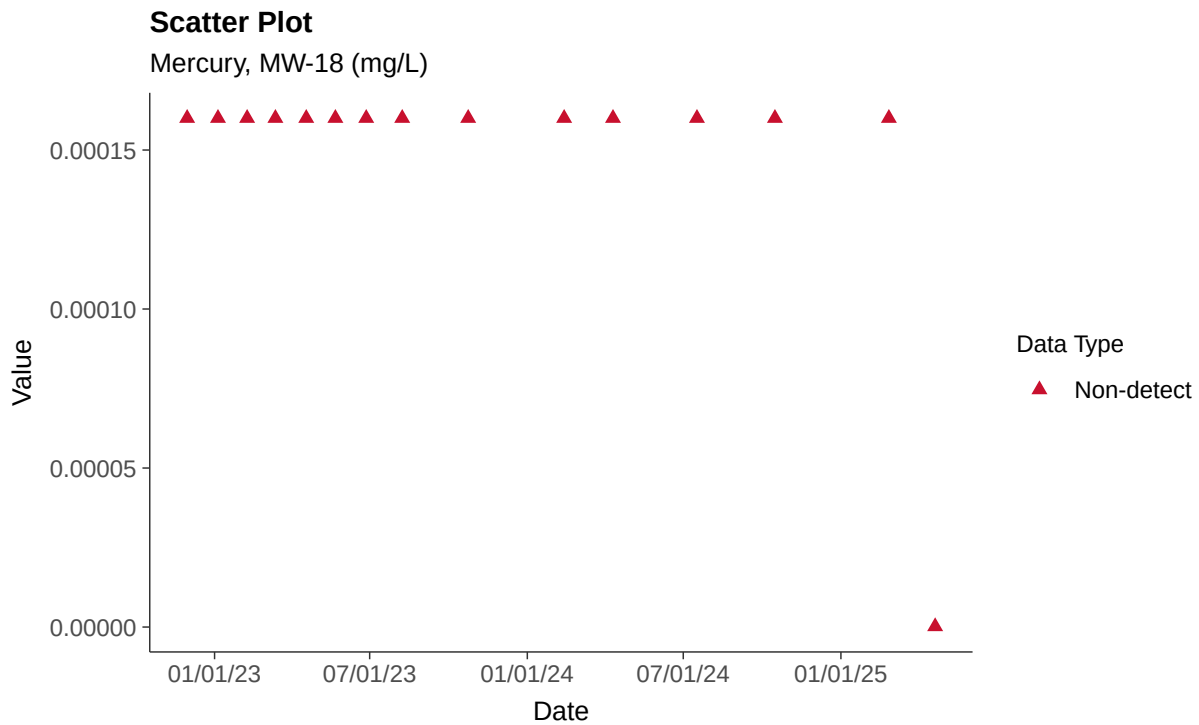
Trend Regression: Piecewise Linear-Linear-Linear

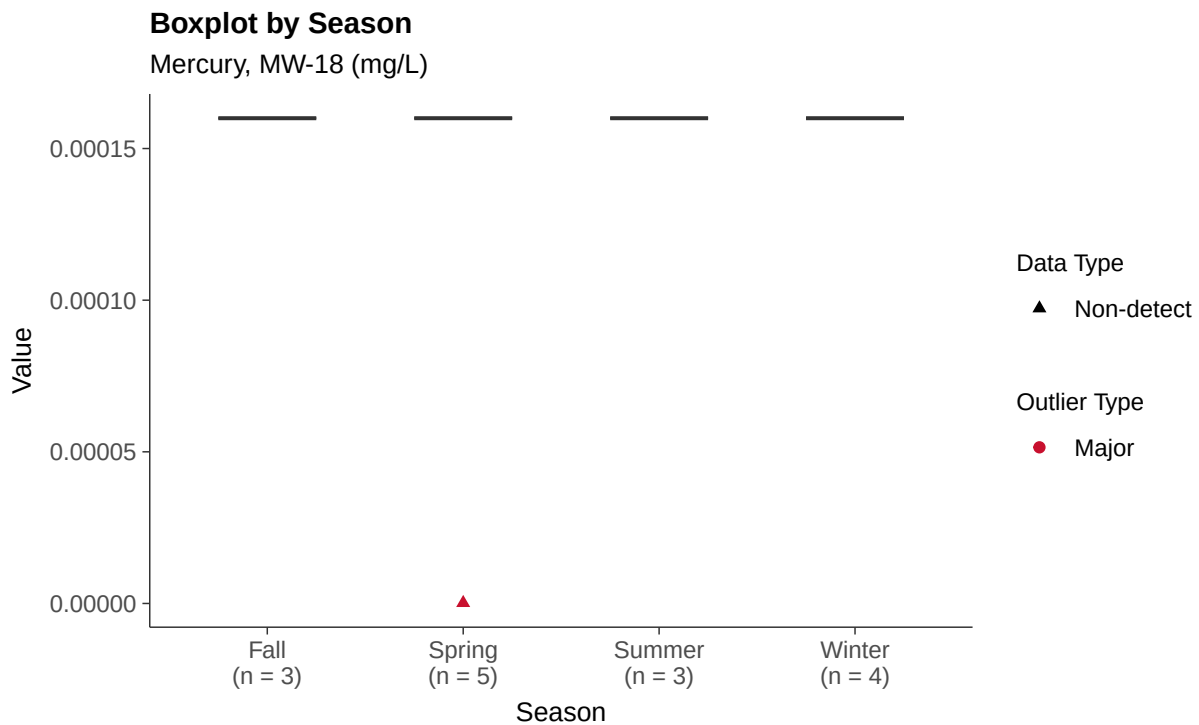
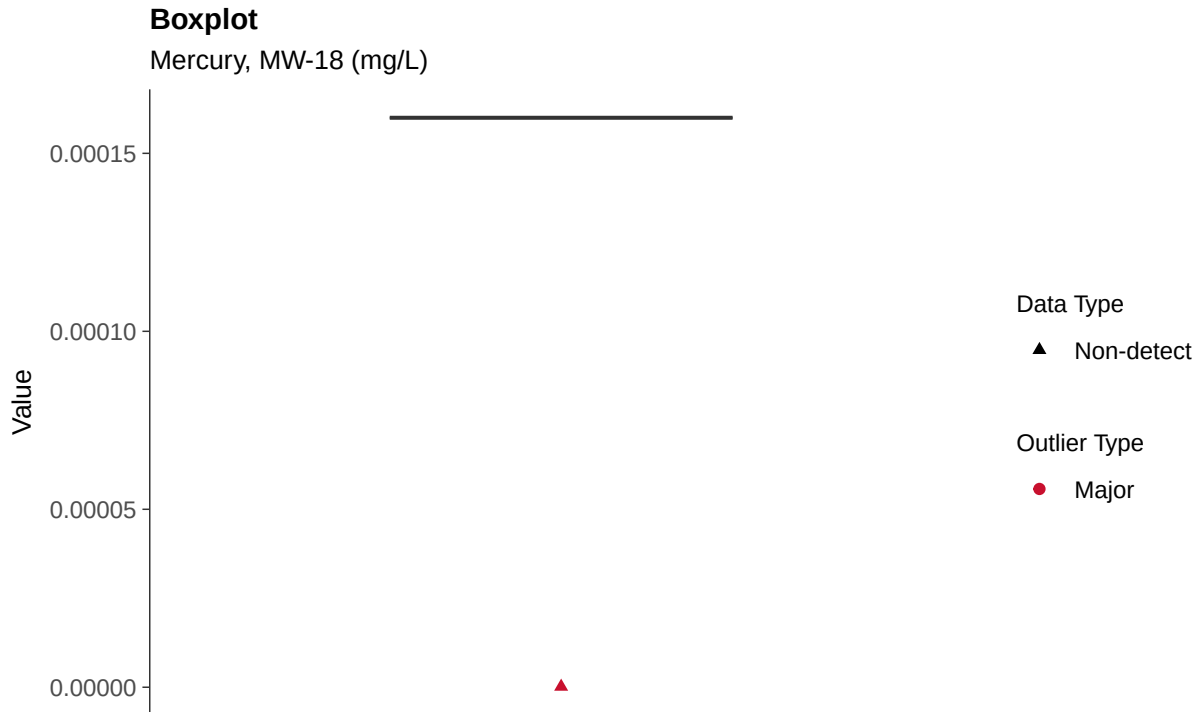
Lithium, MW-18 (mg/L)

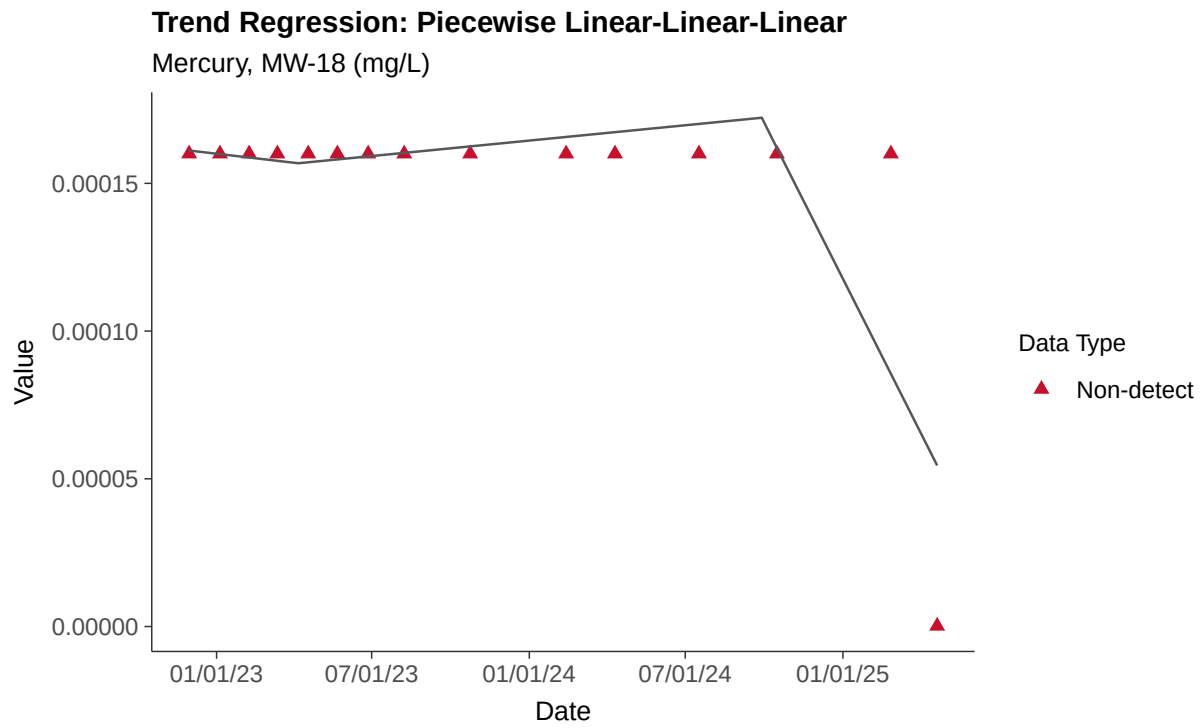


Appendix IV: Mercury, MW-18

ID: 28_1_4_117





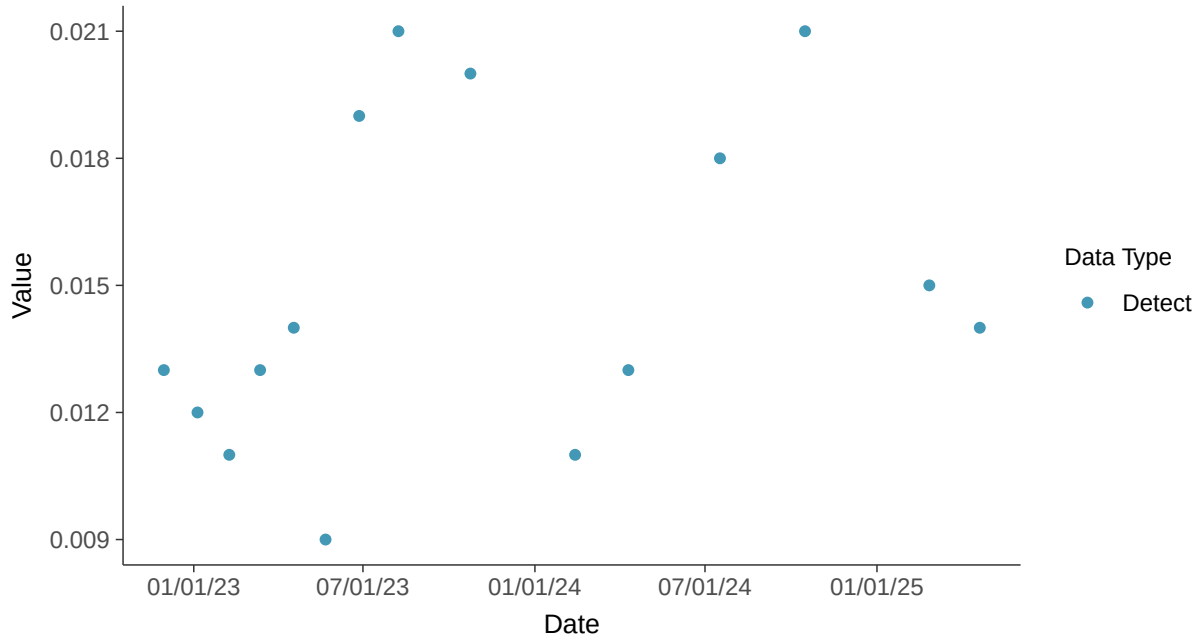


Appendix IV: Molybdenum, MW-18

ID: 28_1_4_118

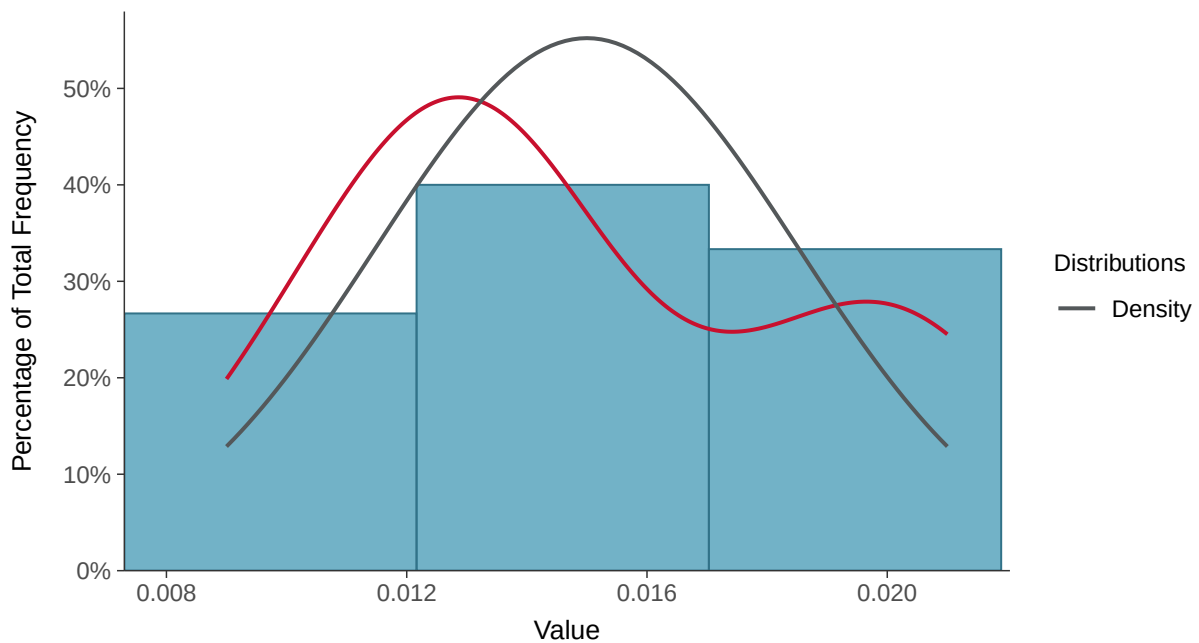
Scatter Plot

Molybdenum, MW-18 (mg/L)



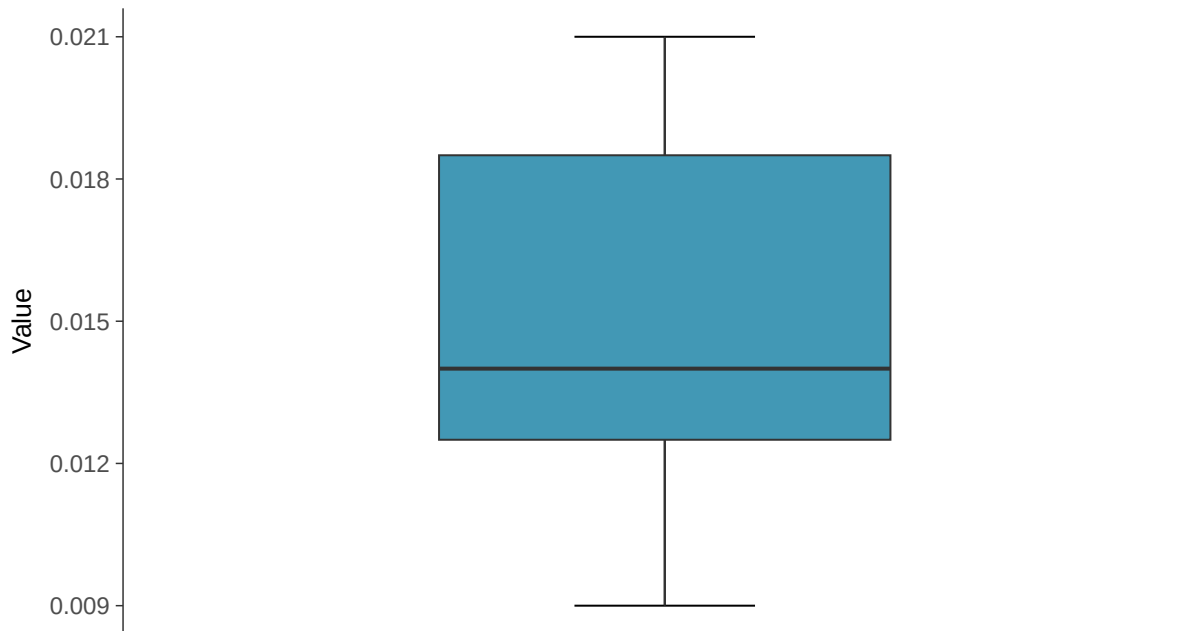
Histogram

Molybdenum, MW-18 (mg/L)



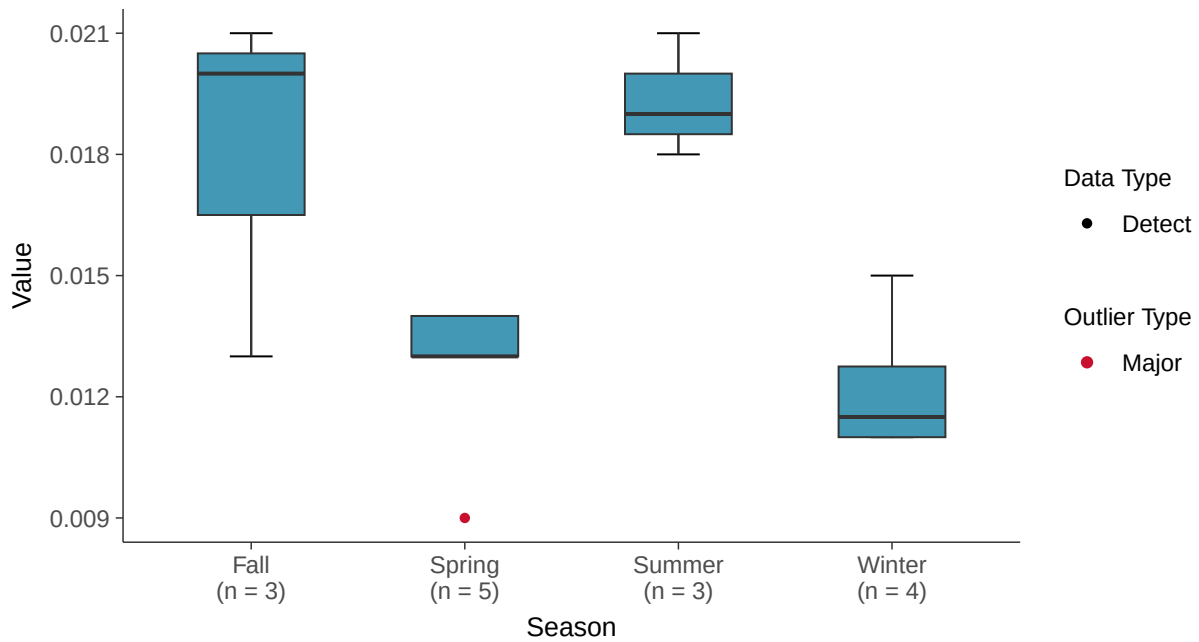
Boxplot

Molybdenum, MW-18 (mg/L)



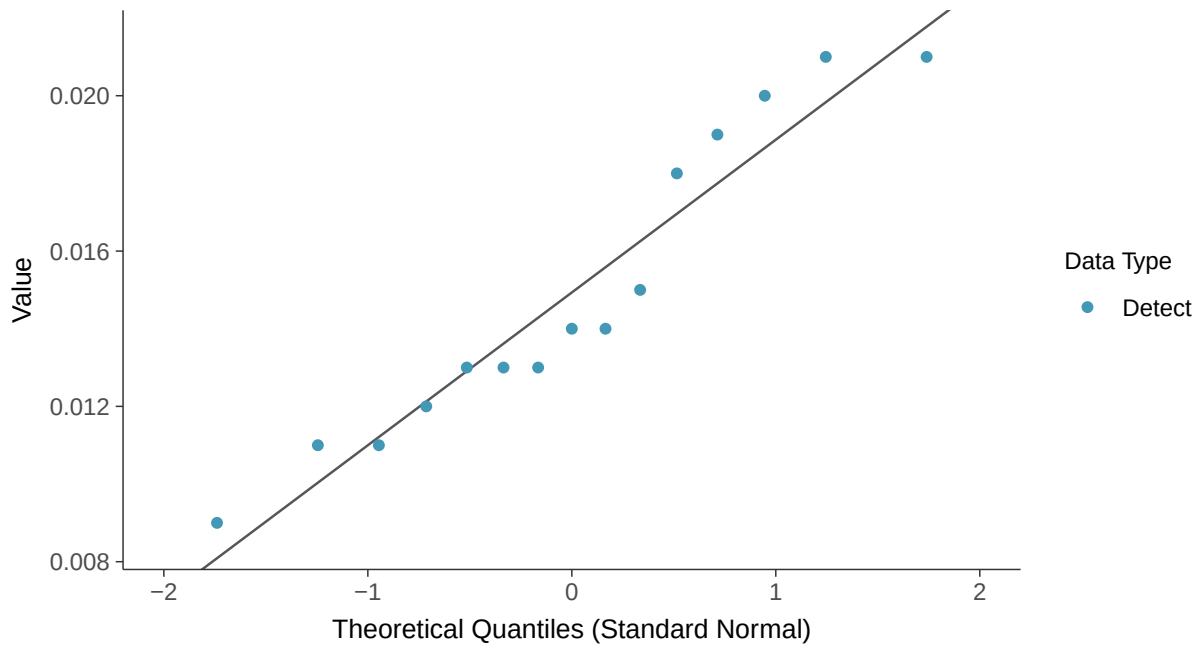
Boxplot by Season

Molybdenum, MW-18 (mg/L)



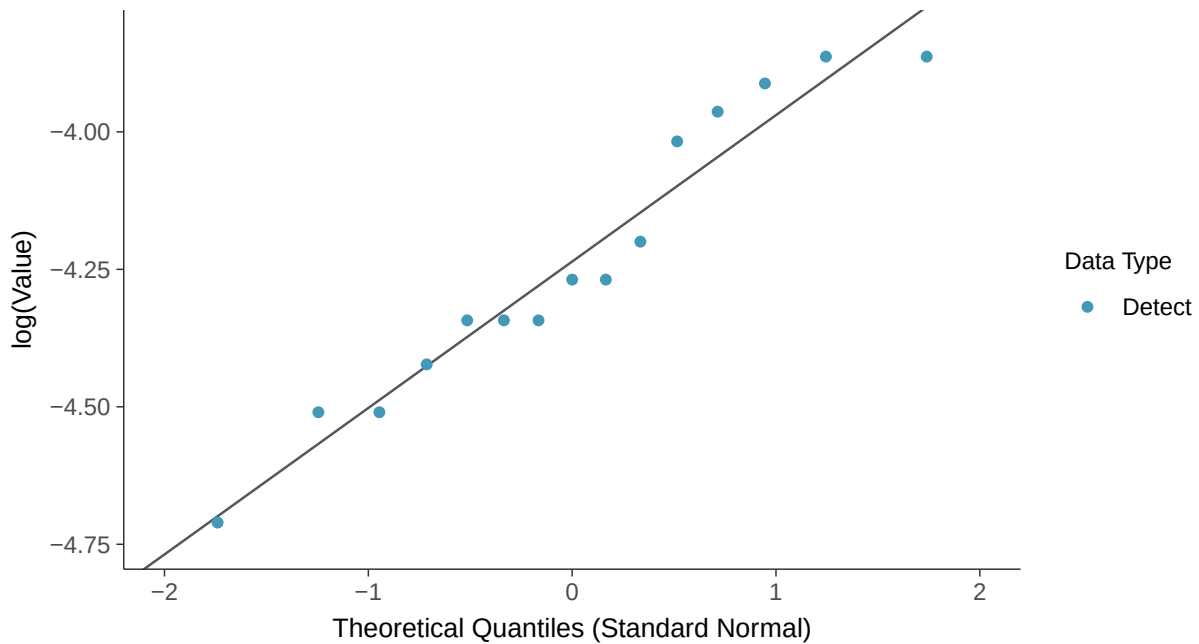
Normal Q-Q plot

Molybdenum, MW-18 (mg/L)



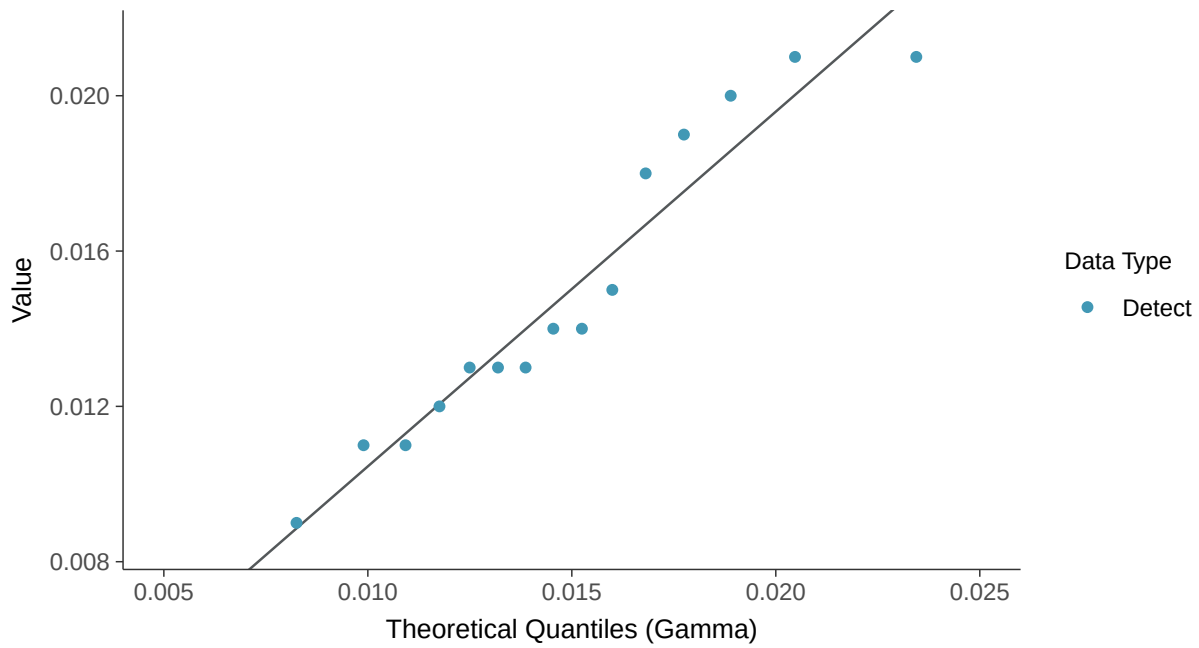
Lognormal Q-Q plot

Molybdenum, MW-18 (mg/L)



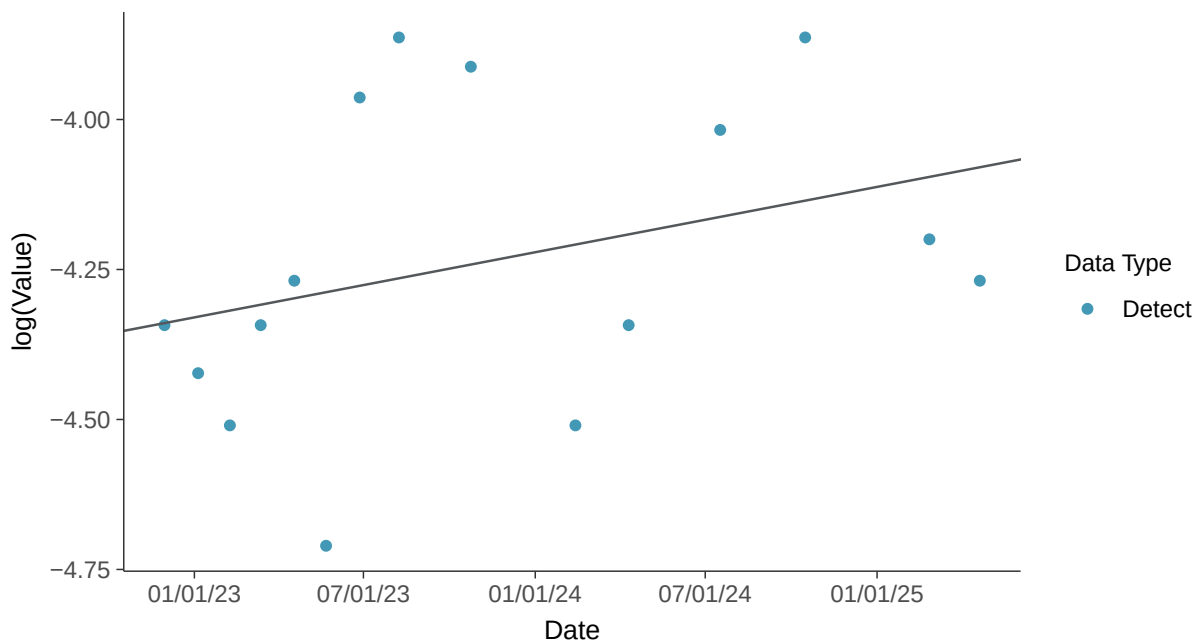
Gamma Q-Q plot

Molybdenum, MW-18 (mg/L)



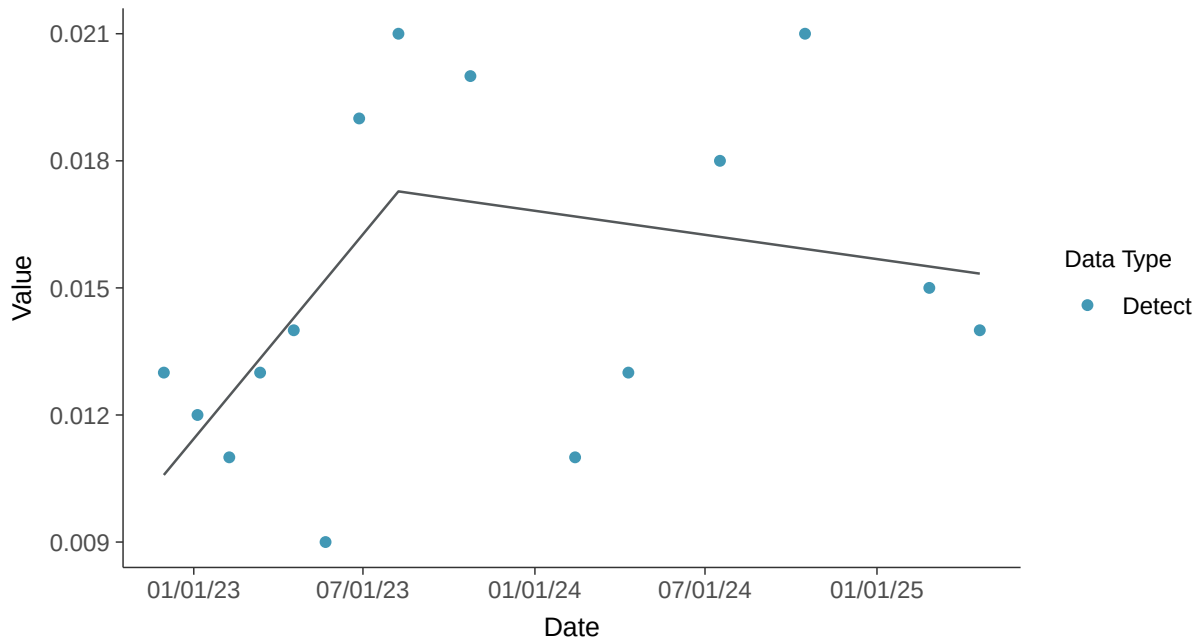
Trend Regression: Lognormal MLE

Molybdenum, MW-18 (mg/L)



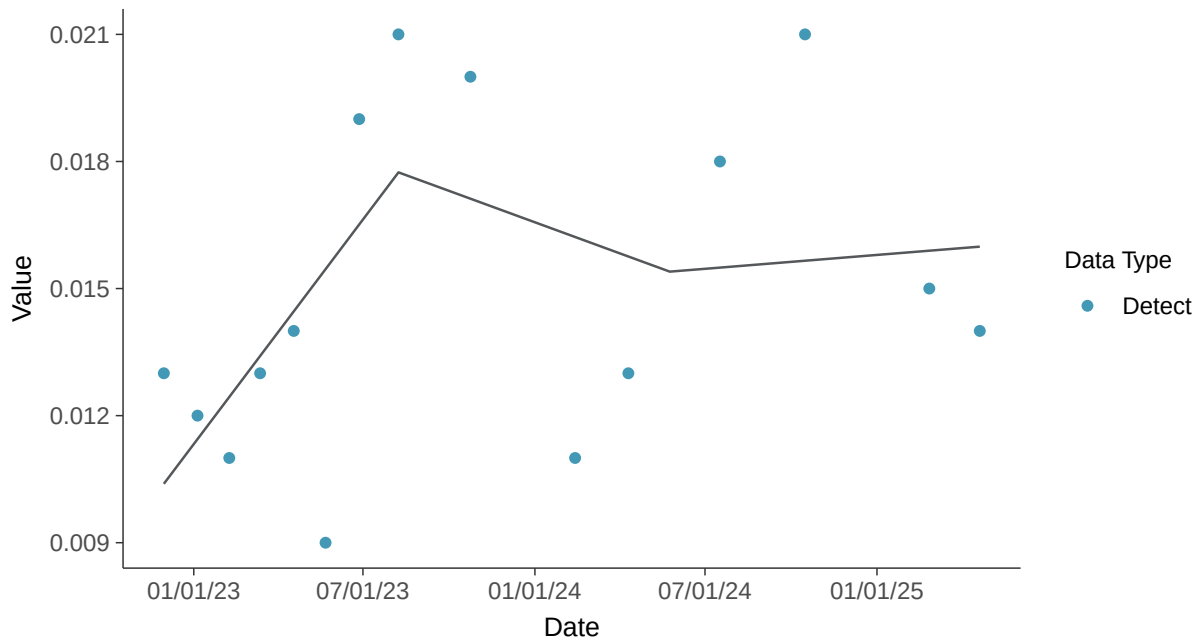
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-18 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-18 (mg/L)

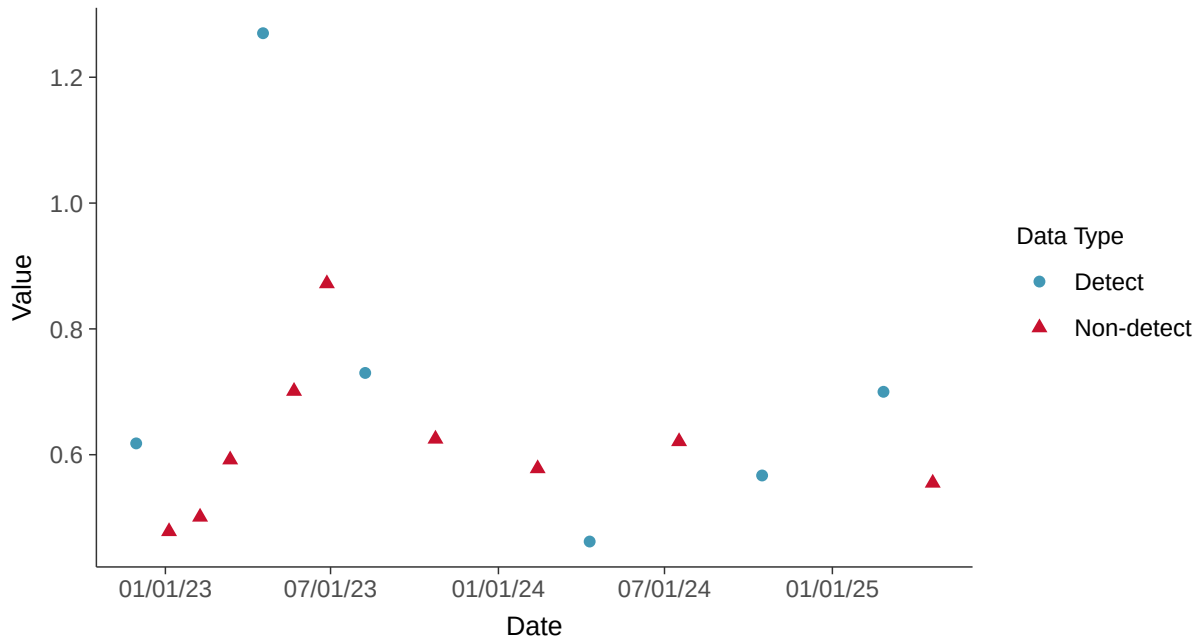


Appendix IV: Radium 226 and 228, MW-18

ID: 28_1_4_121

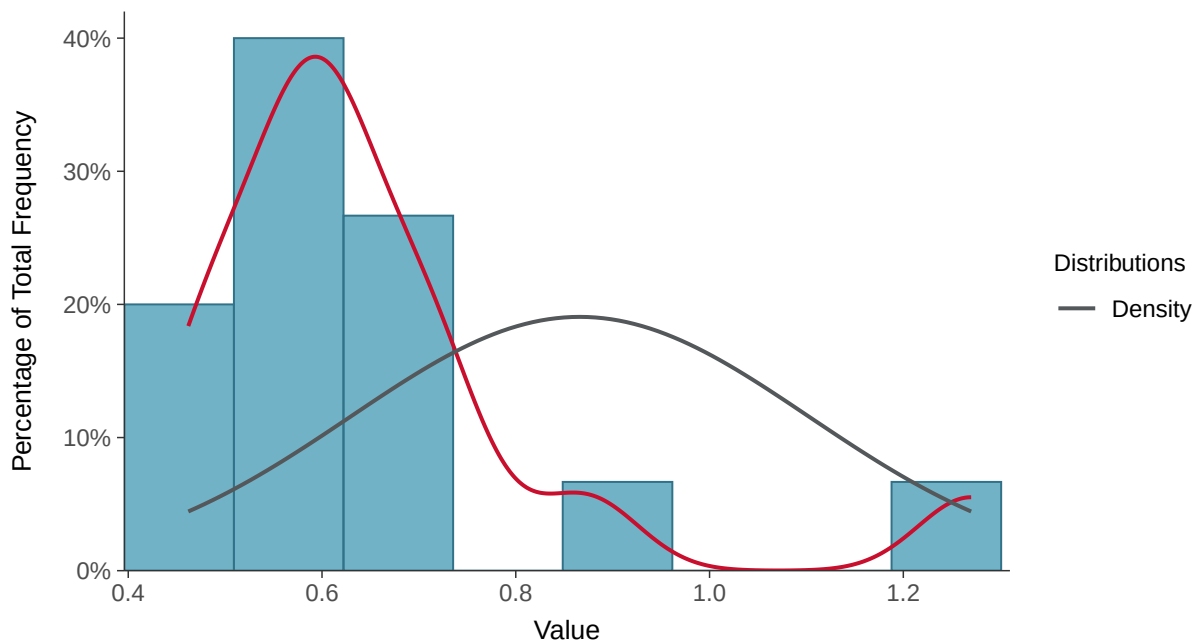
Scatter Plot

Radium 226 and 228, MW-18 (pCi/L)



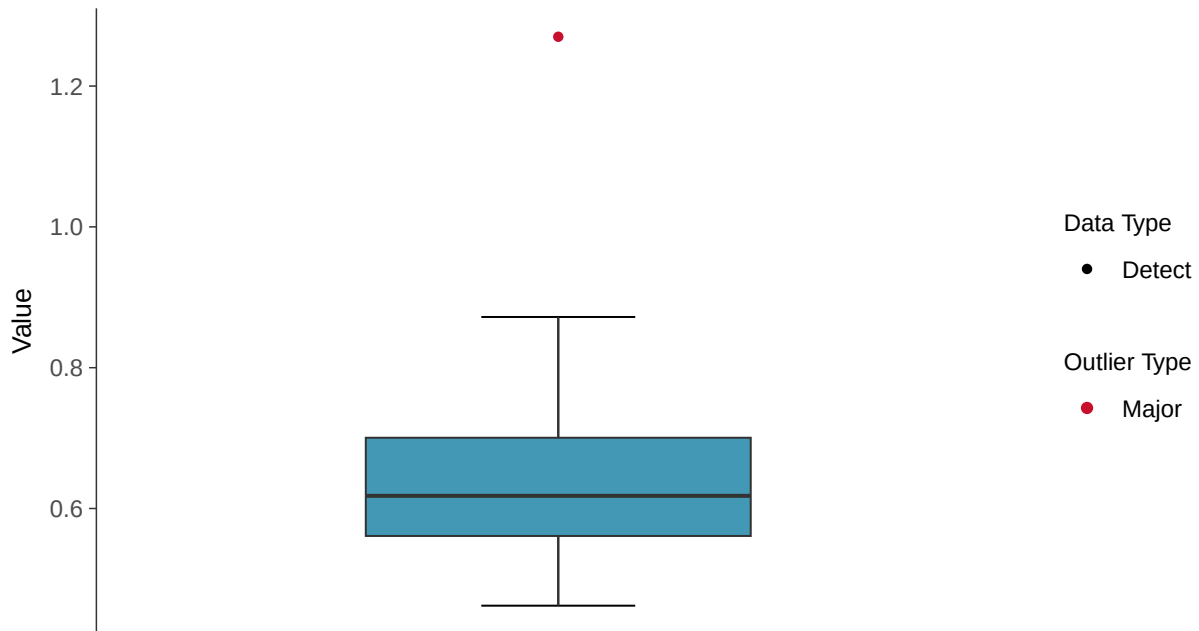
Histogram

Radium 226 and 228, MW-18 (pCi/L)



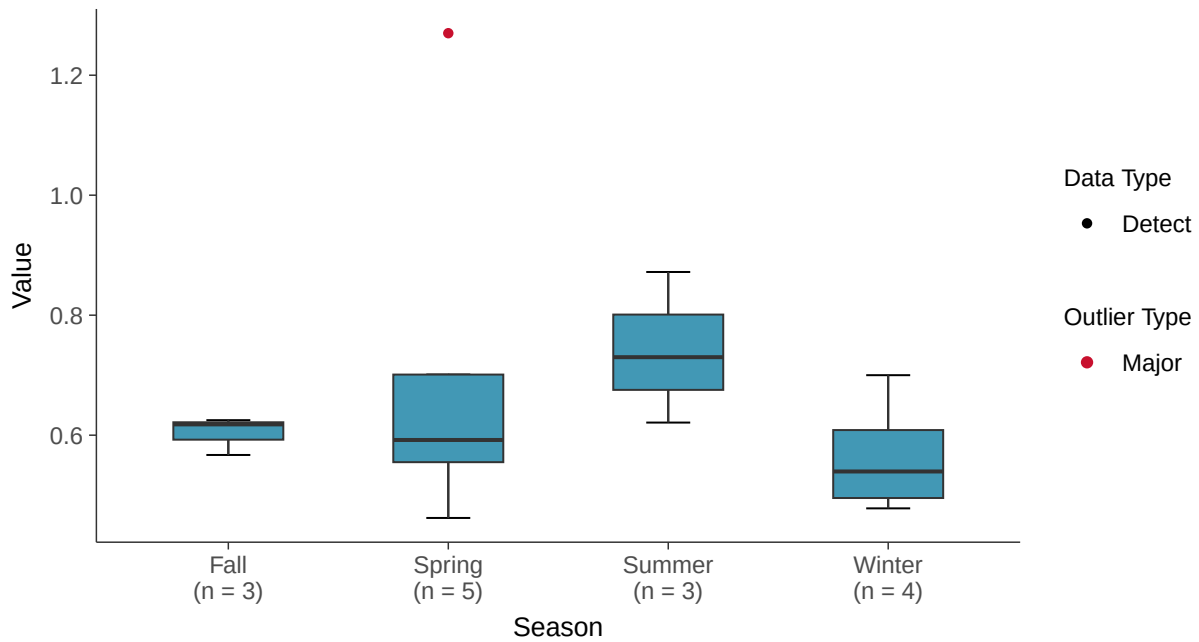
Boxplot

Radium 226 and 228, MW-18 (pCi/L)



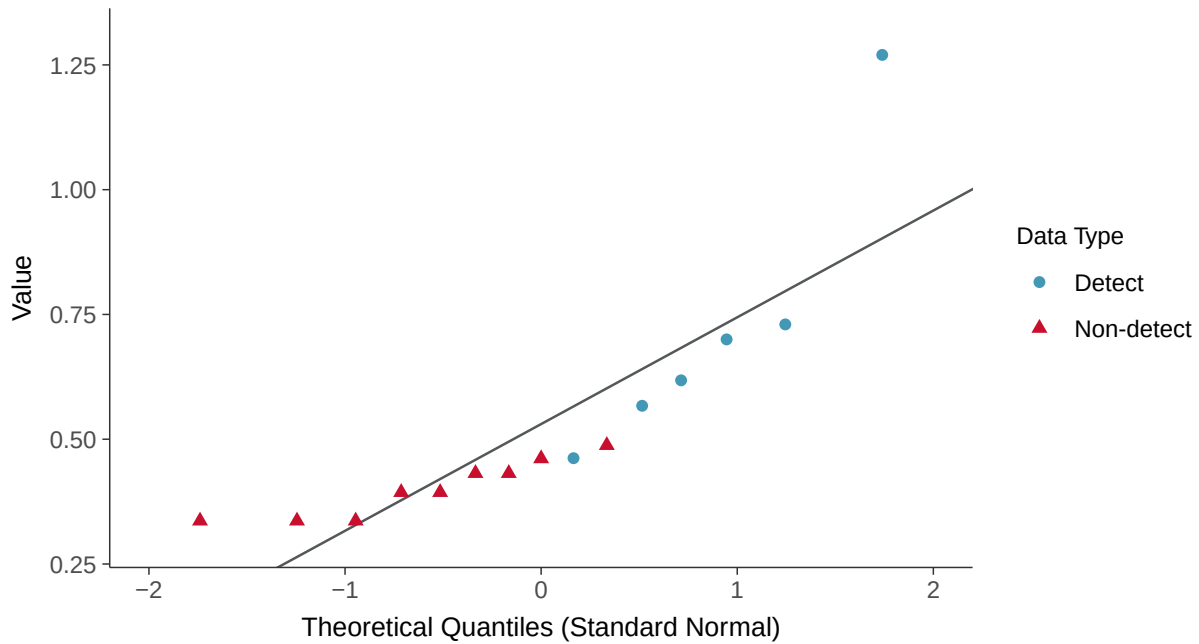
Boxplot by Season

Radium 226 and 228, MW-18 (pCi/L)



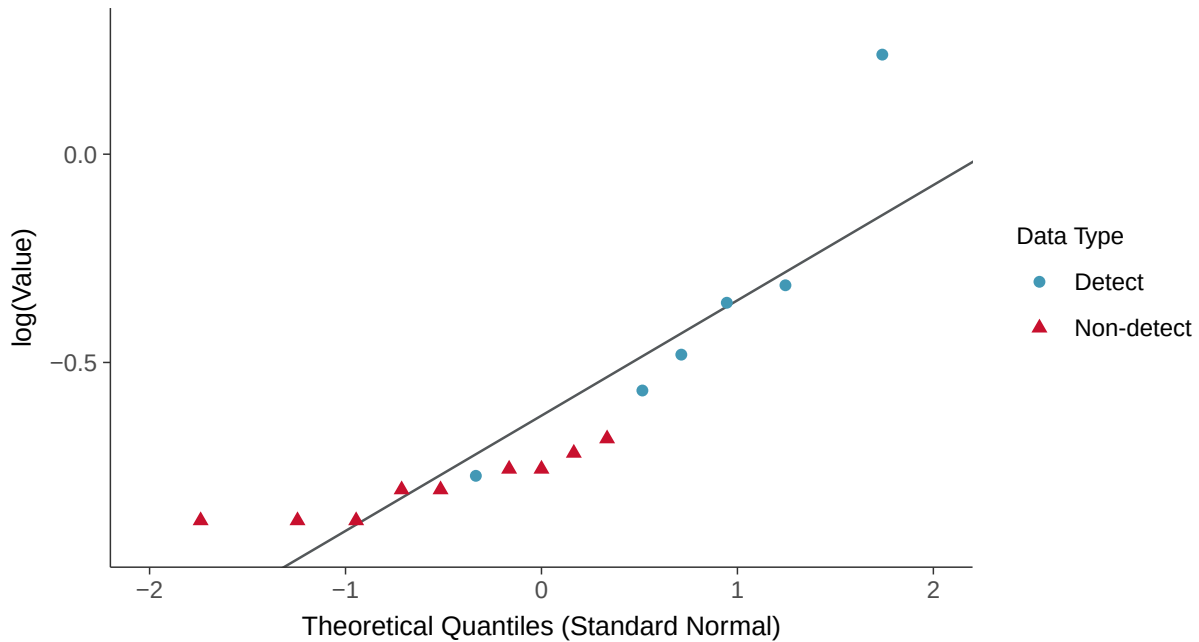
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-18 (pCi/L)



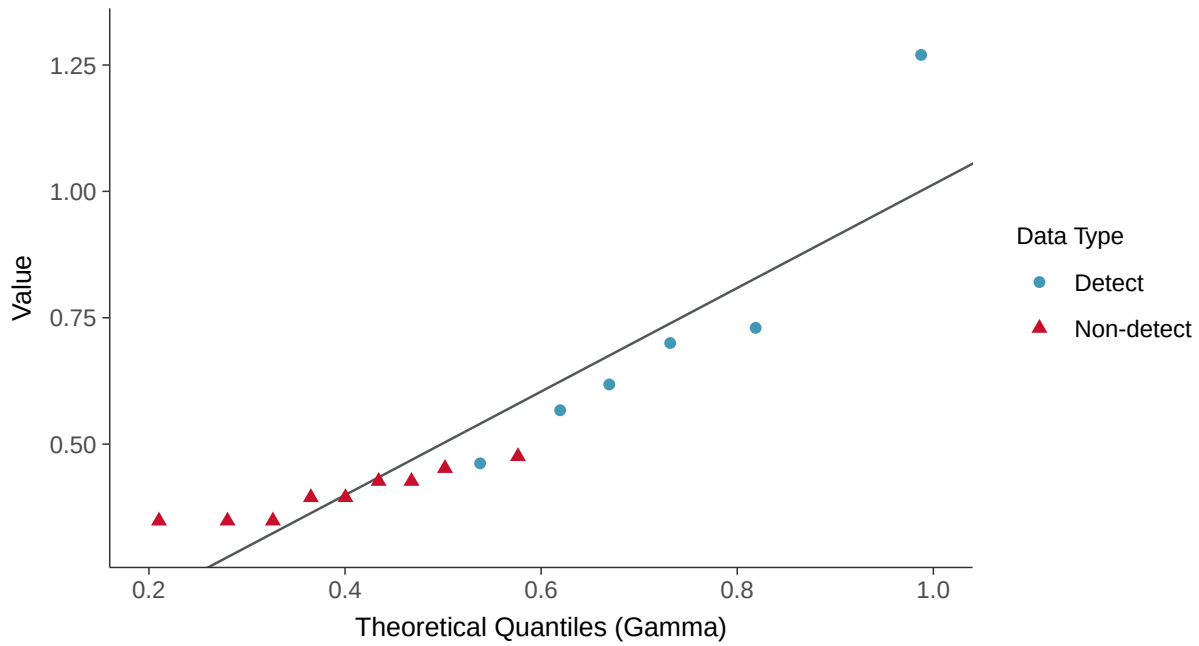
Lognormal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-18 (pCi/L)



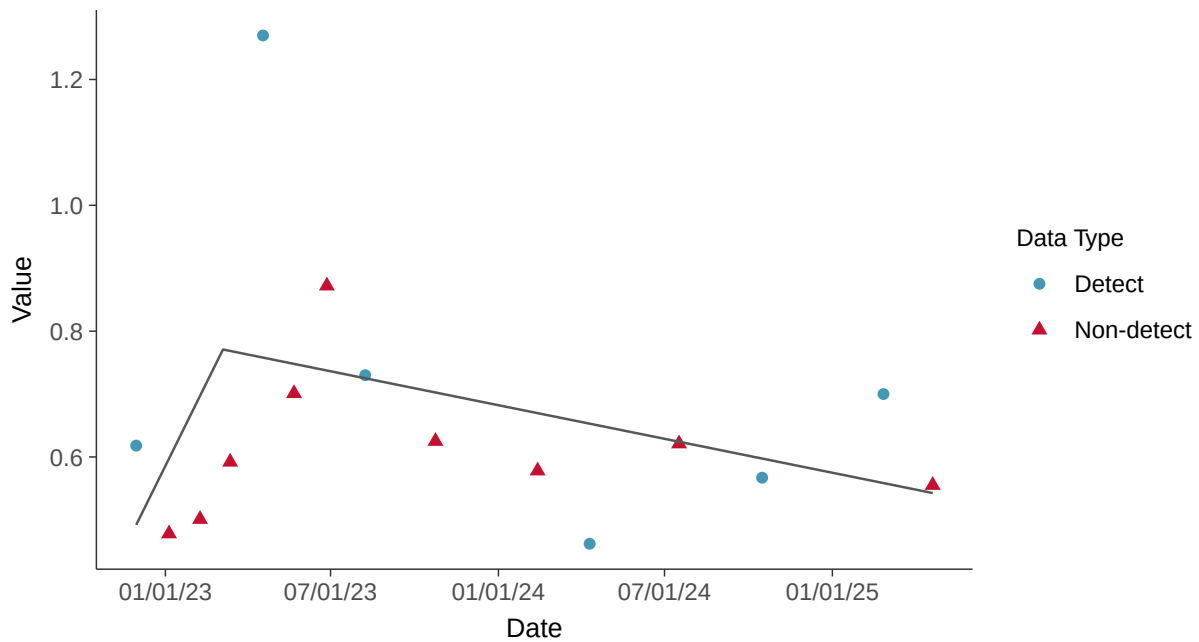
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-18 (pCi/L)



Trend Regression: Piecewise Linear-Linear

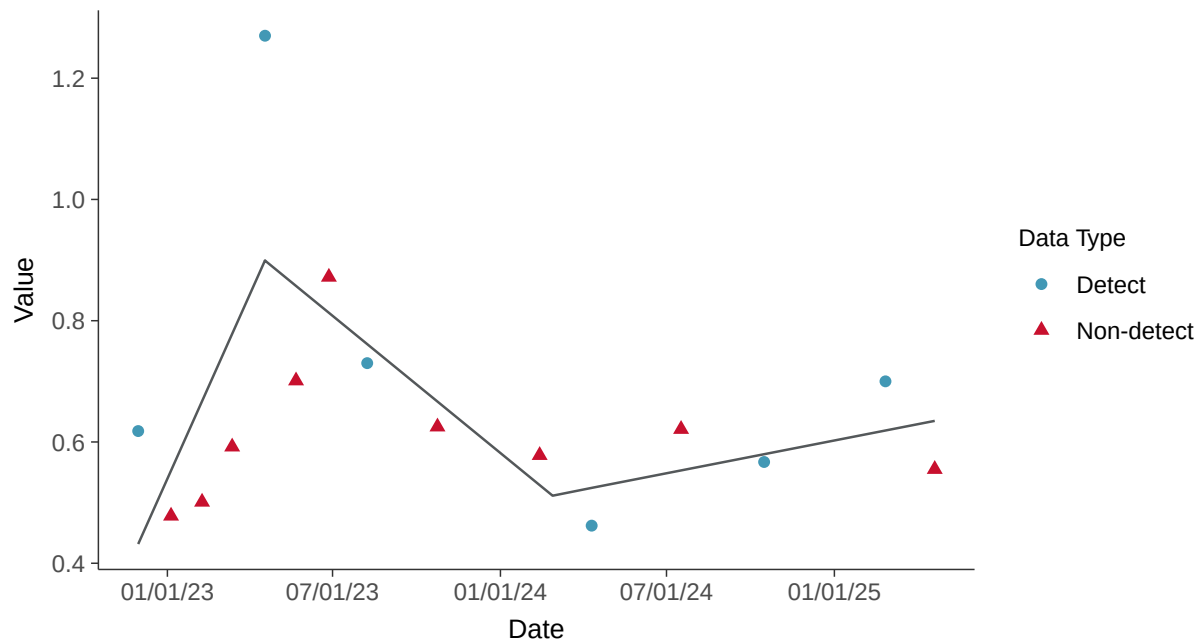
Radium 226 and 228, MW-18 (pCi/L)





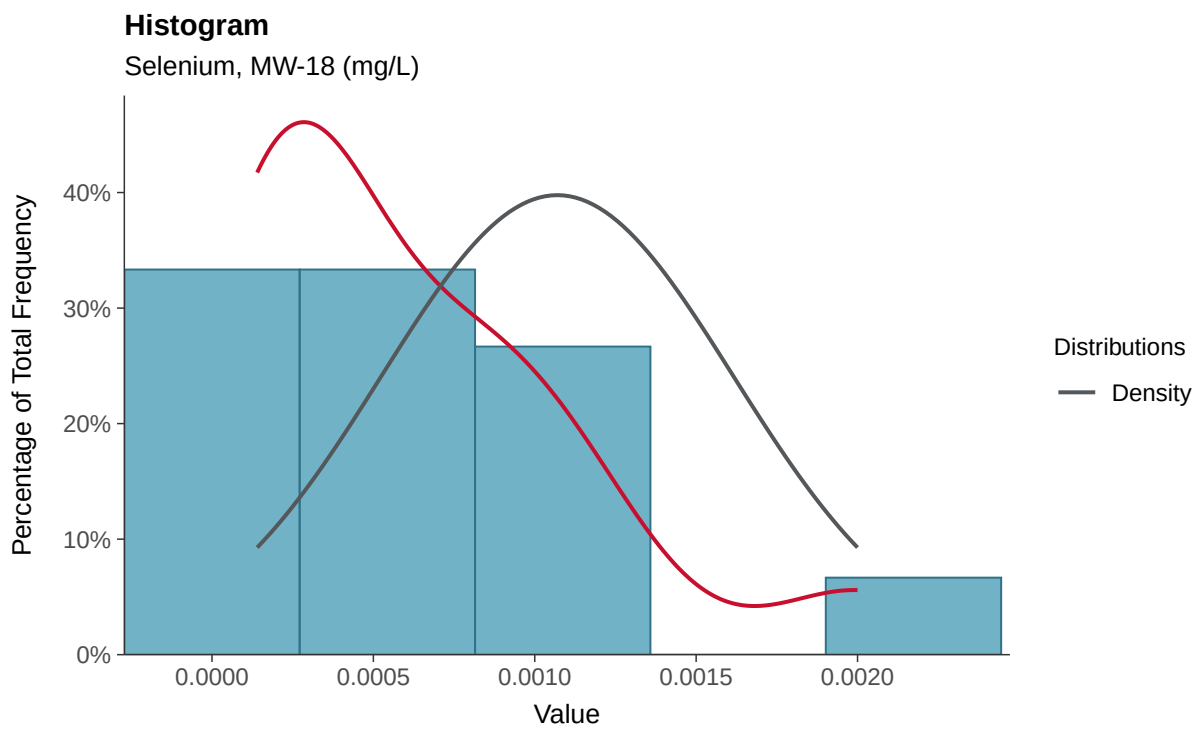
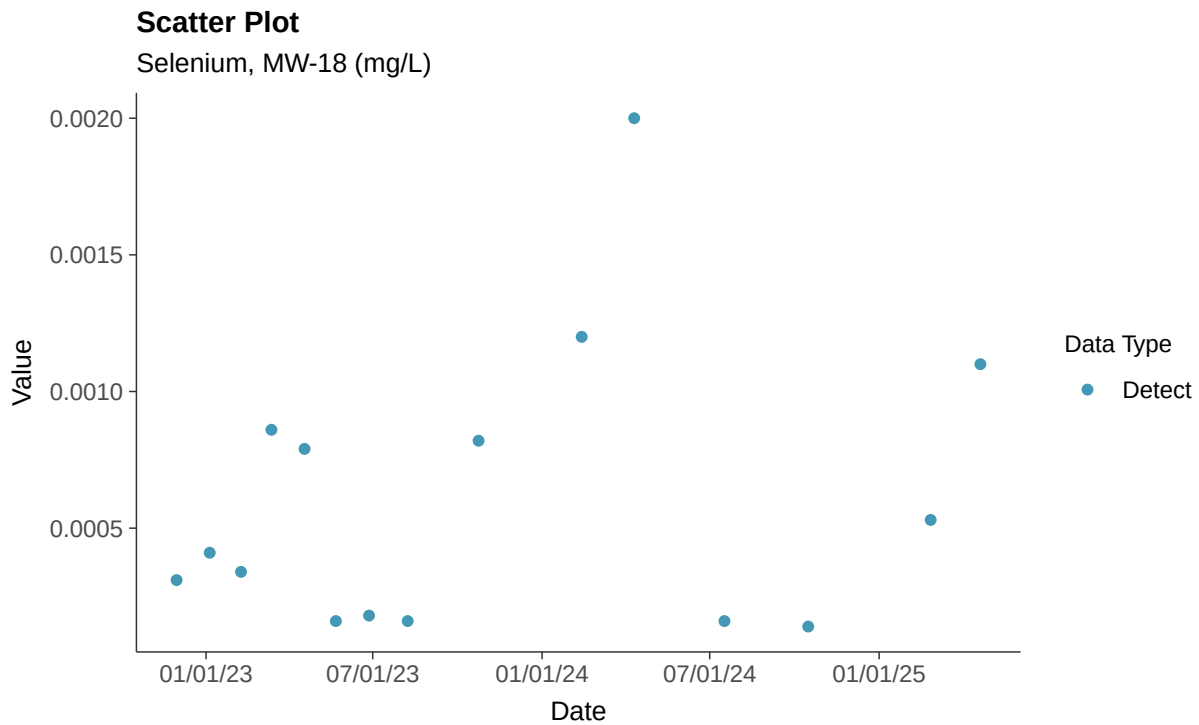
Trend Regression: Piecewise Linear-Linear-Linear

Radium 226 and 228, MW-18 (pCi/L)



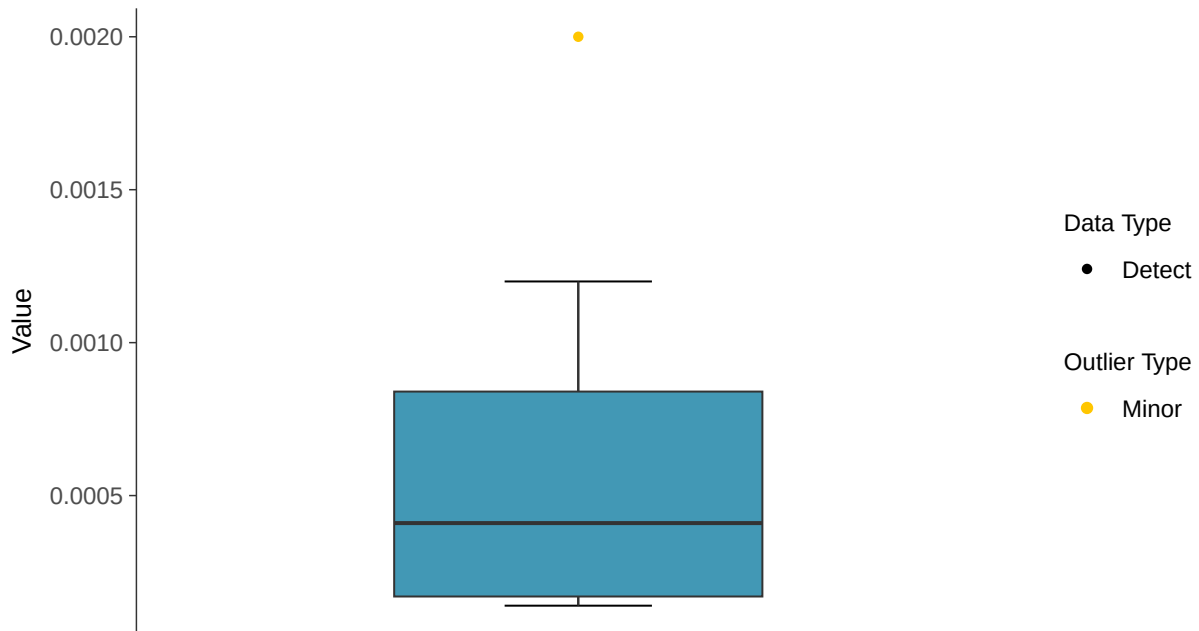
Appendix IV: Selenium, MW-18

ID: 28_1_4_122



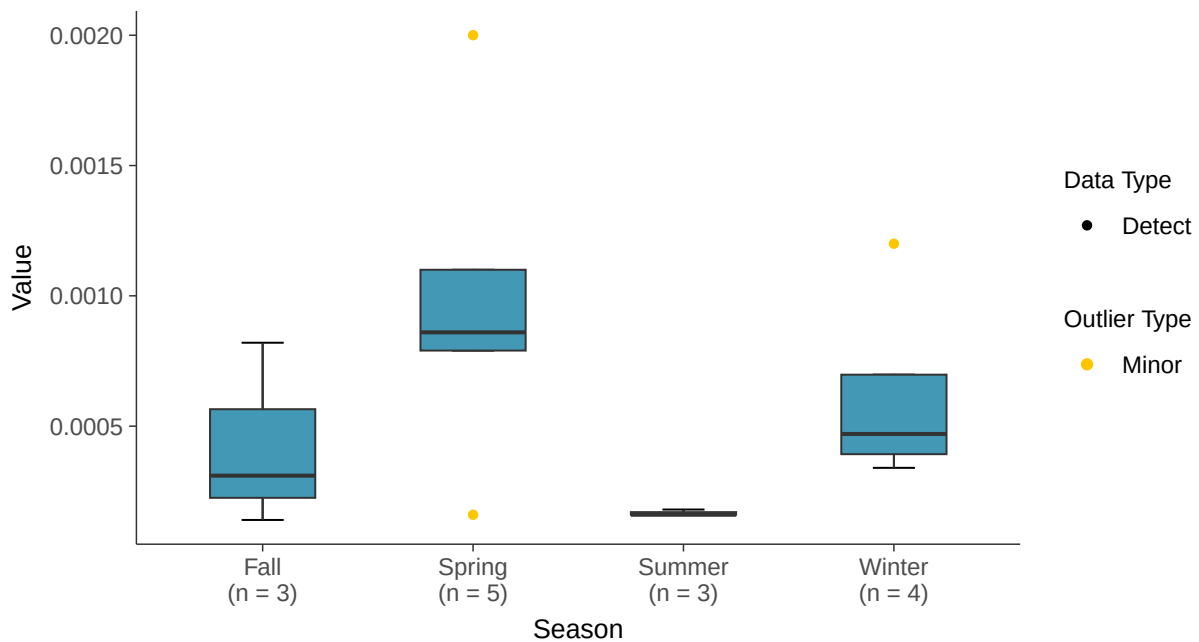
Boxplot

Selenium, MW-18 (mg/L)



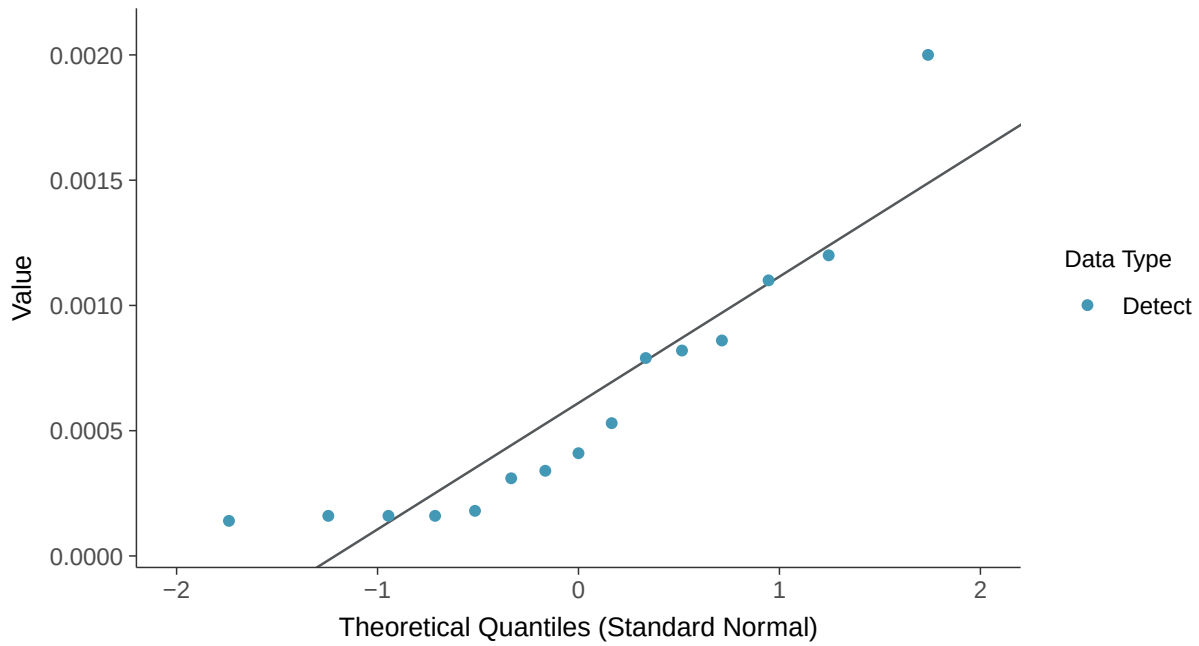
Boxplot by Season

Selenium, MW-18 (mg/L)



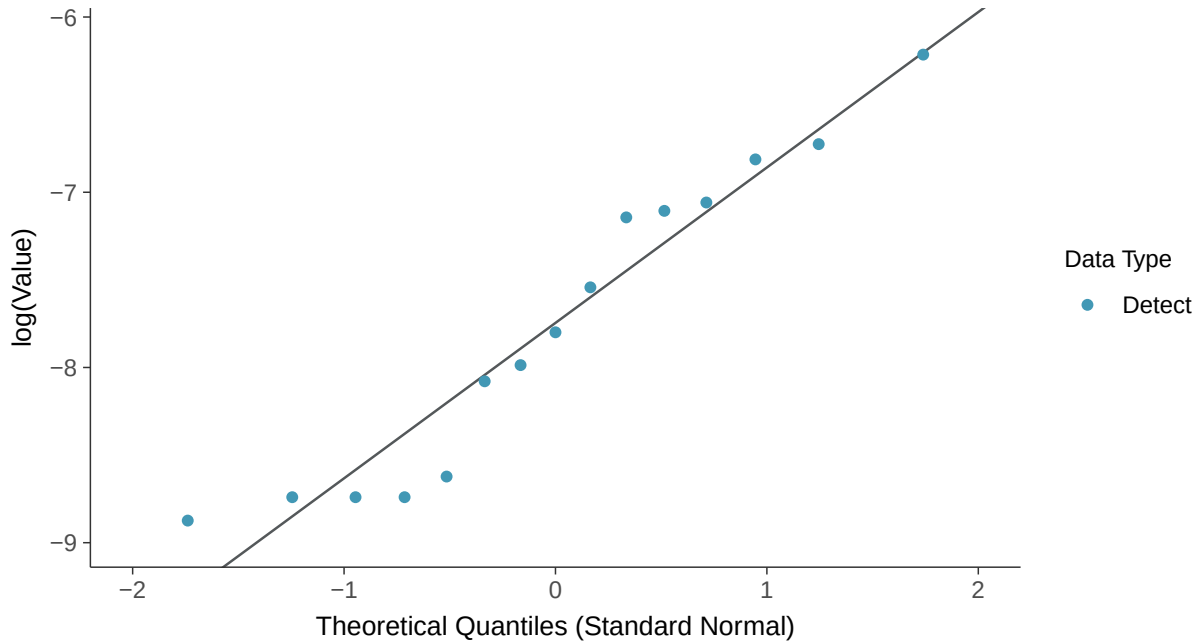
Normal Q-Q plot

Selenium, MW-18 (mg/L)



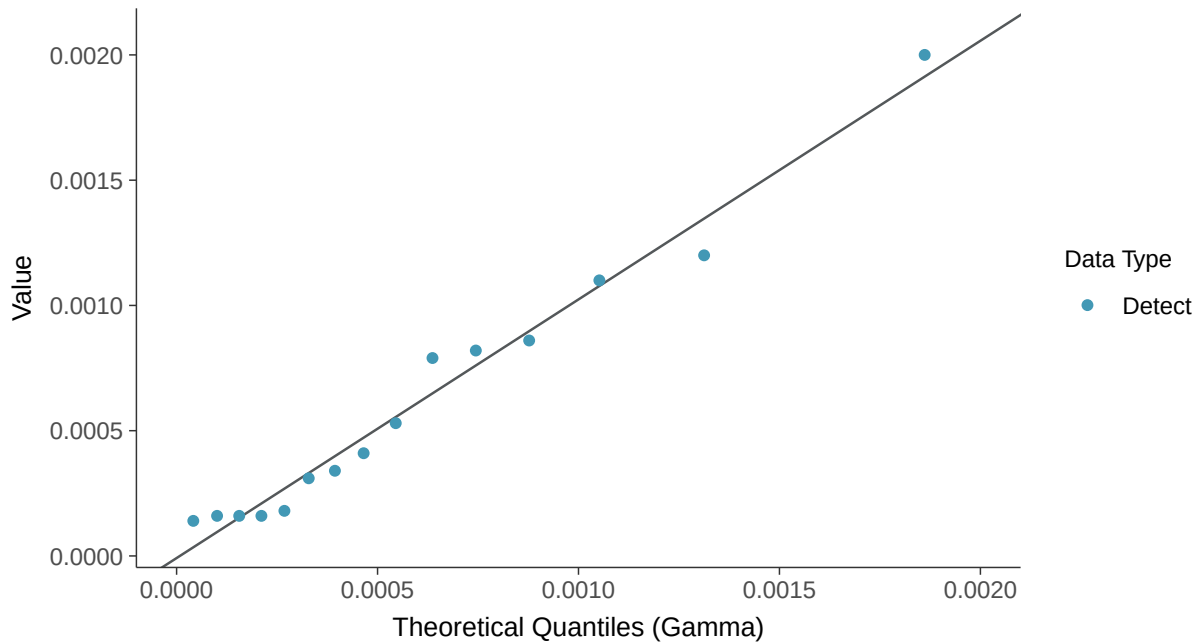
Lognormal Q-Q plot

Selenium, MW-18 (mg/L)



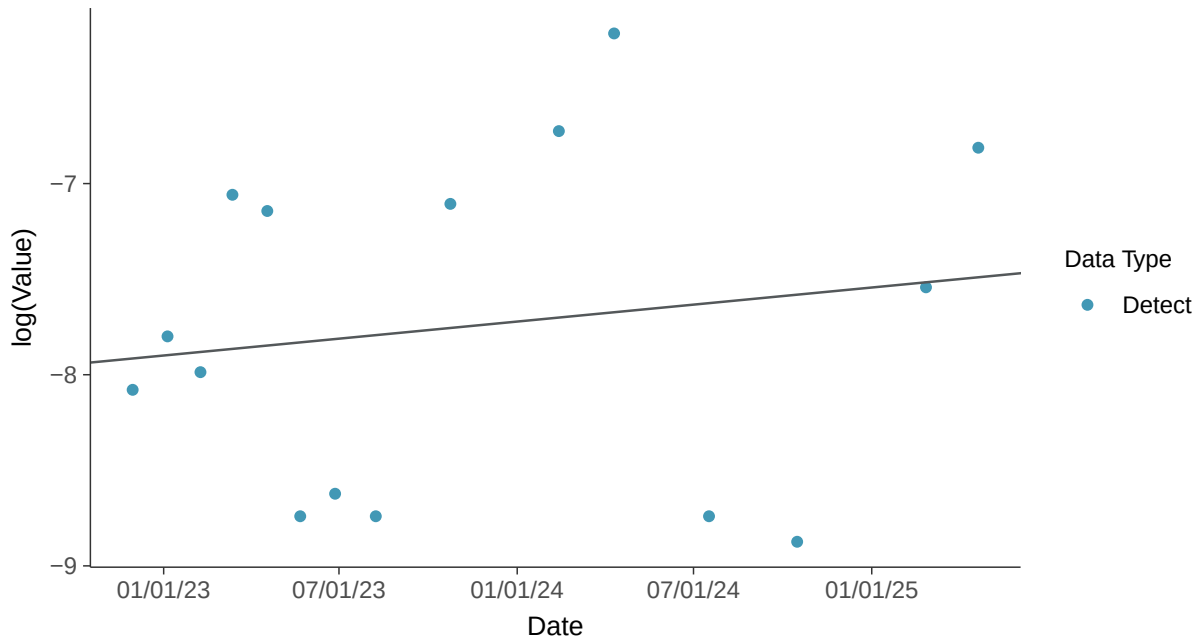
Gamma Q-Q plot

Selenium, MW-18 (mg/L)



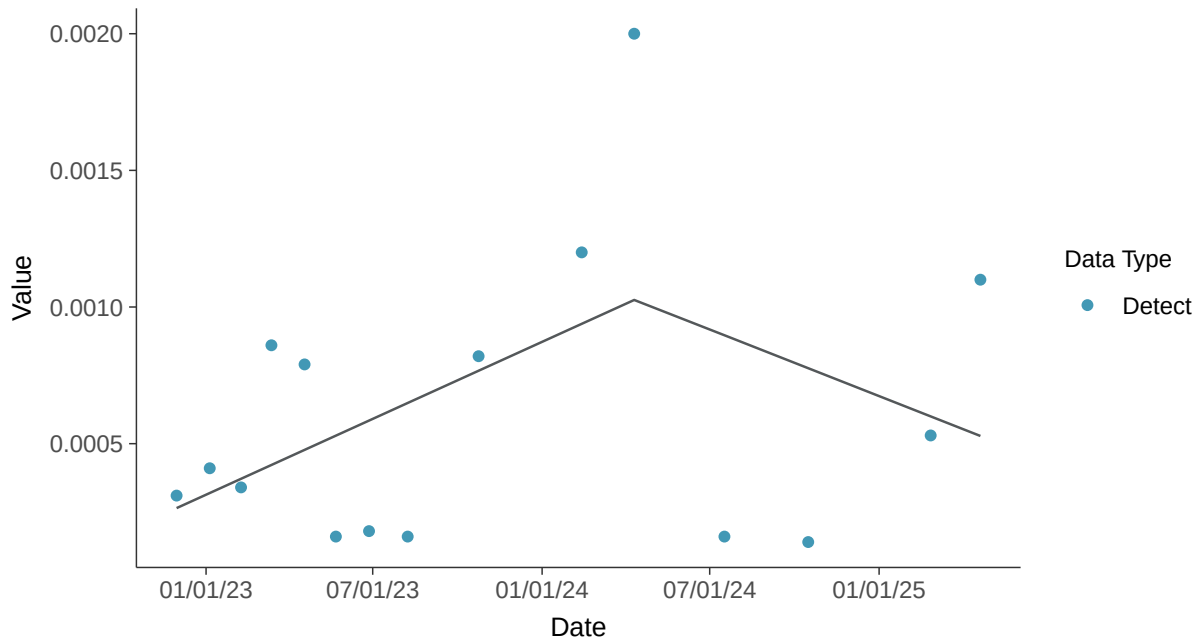
Trend Regression: Lognormal MLE

Selenium, MW-18 (mg/L)



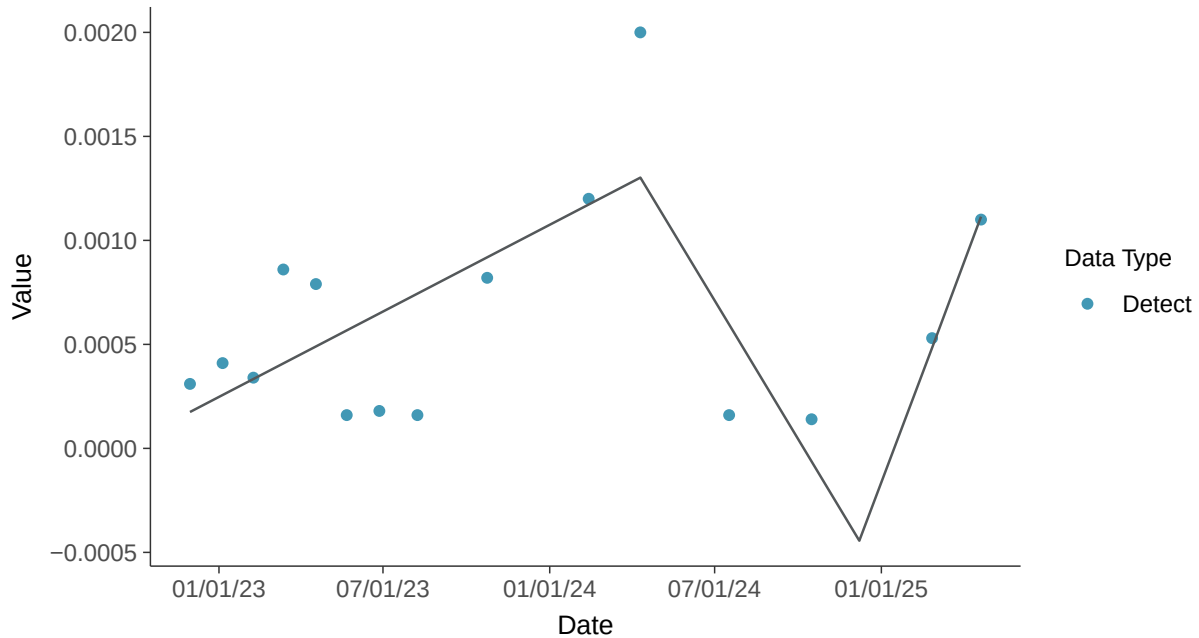
Trend Regression: Piecewise Linear-Linear

Selenium, MW-18 (mg/L)



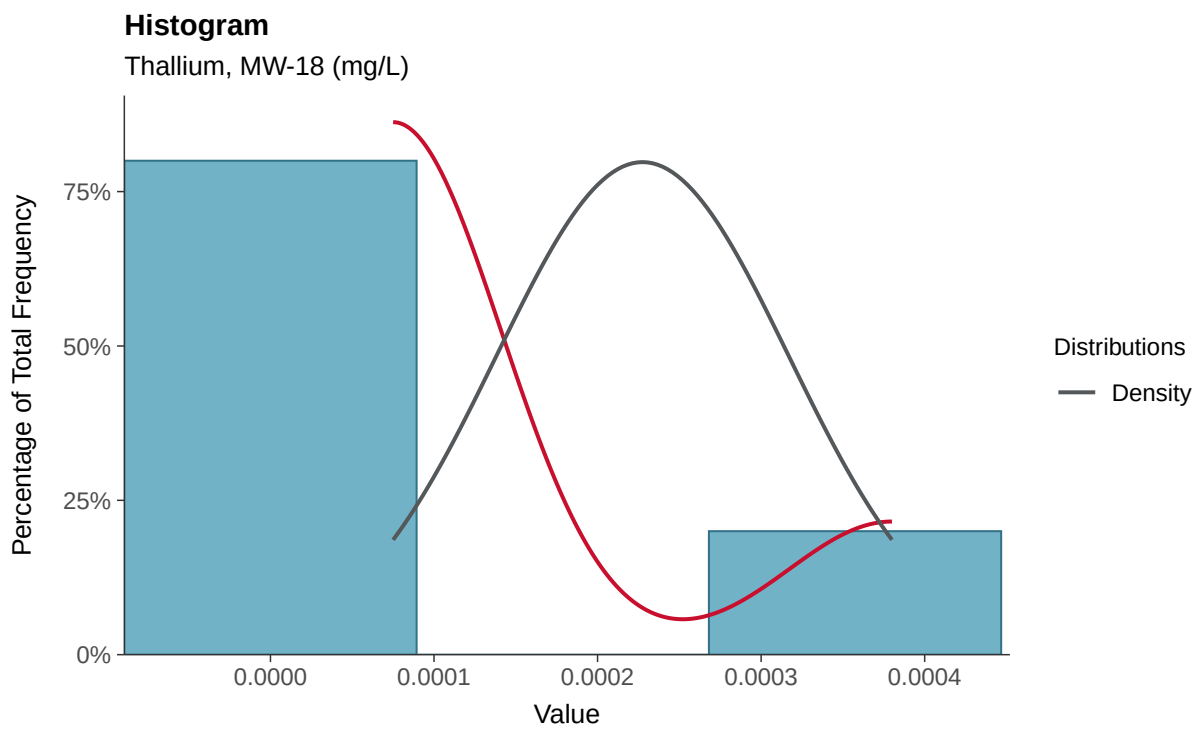
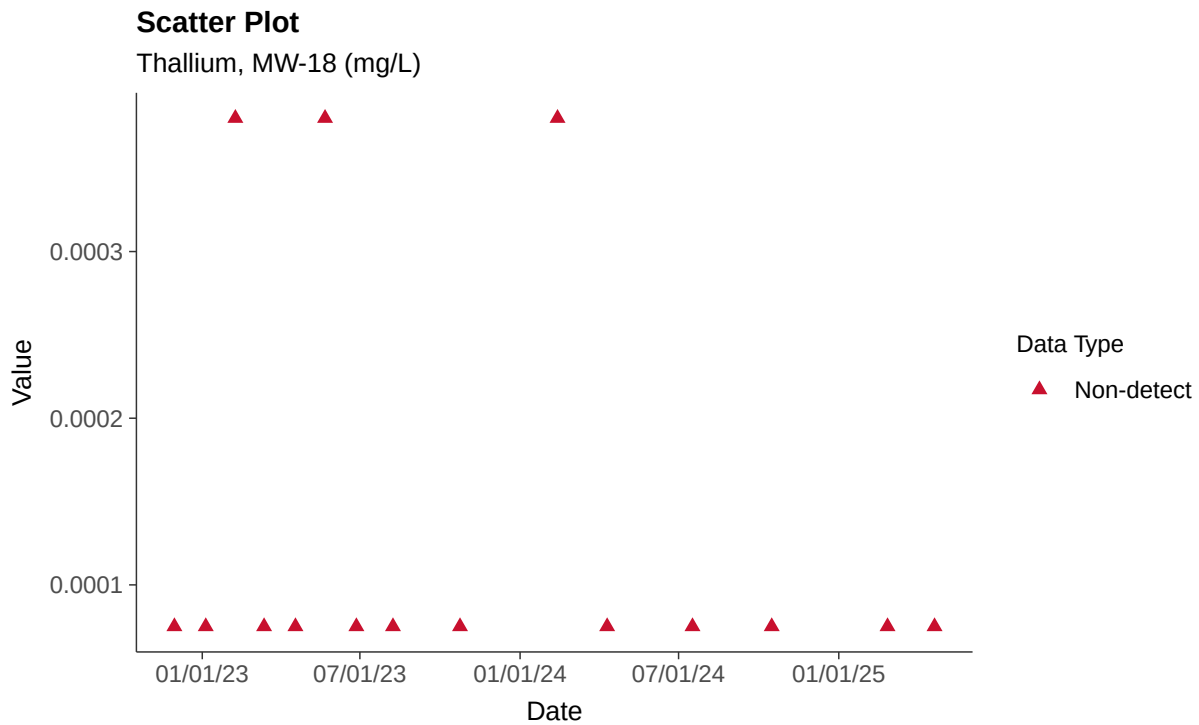
Trend Regression: Piecewise Linear-Linear-Linear

Selenium, MW-18 (mg/L)



Appendix IV: Thallium, MW-18

ID: 28_1_4_125



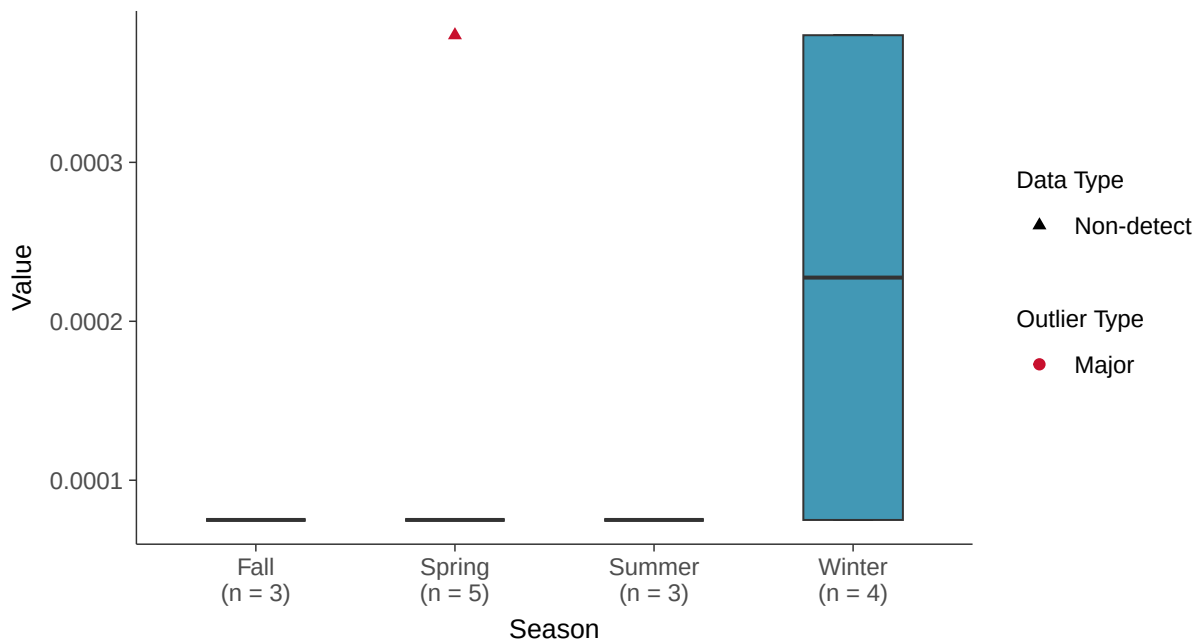
Boxplot

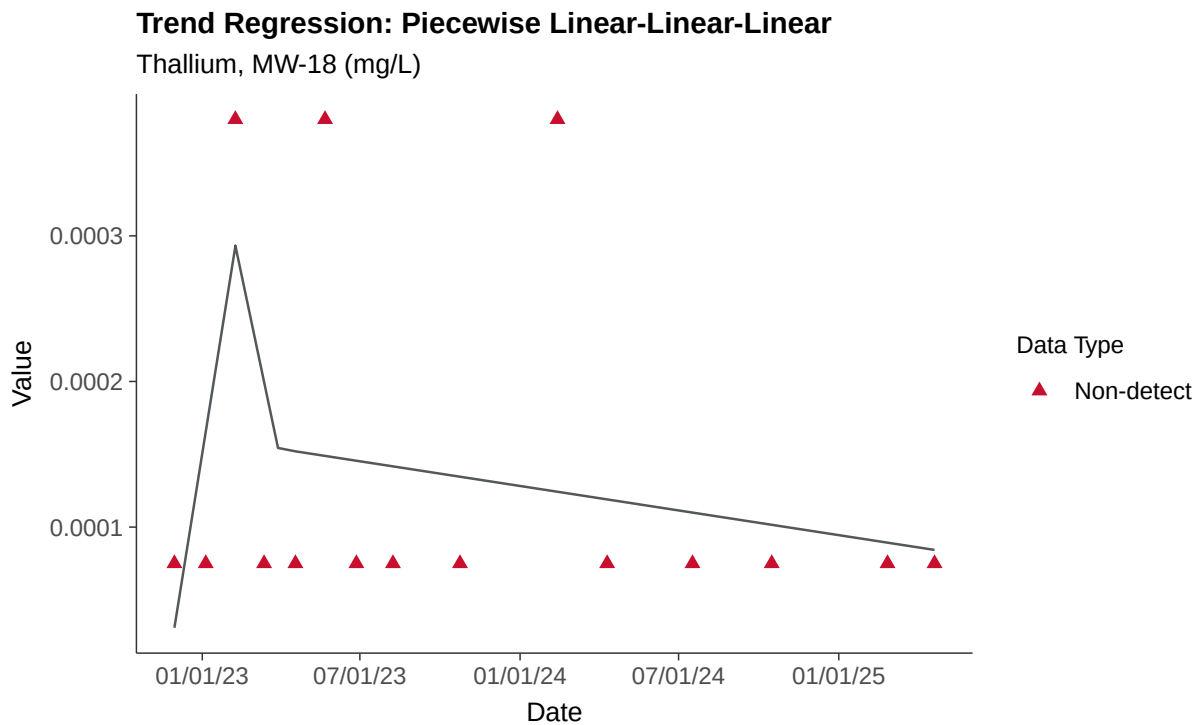
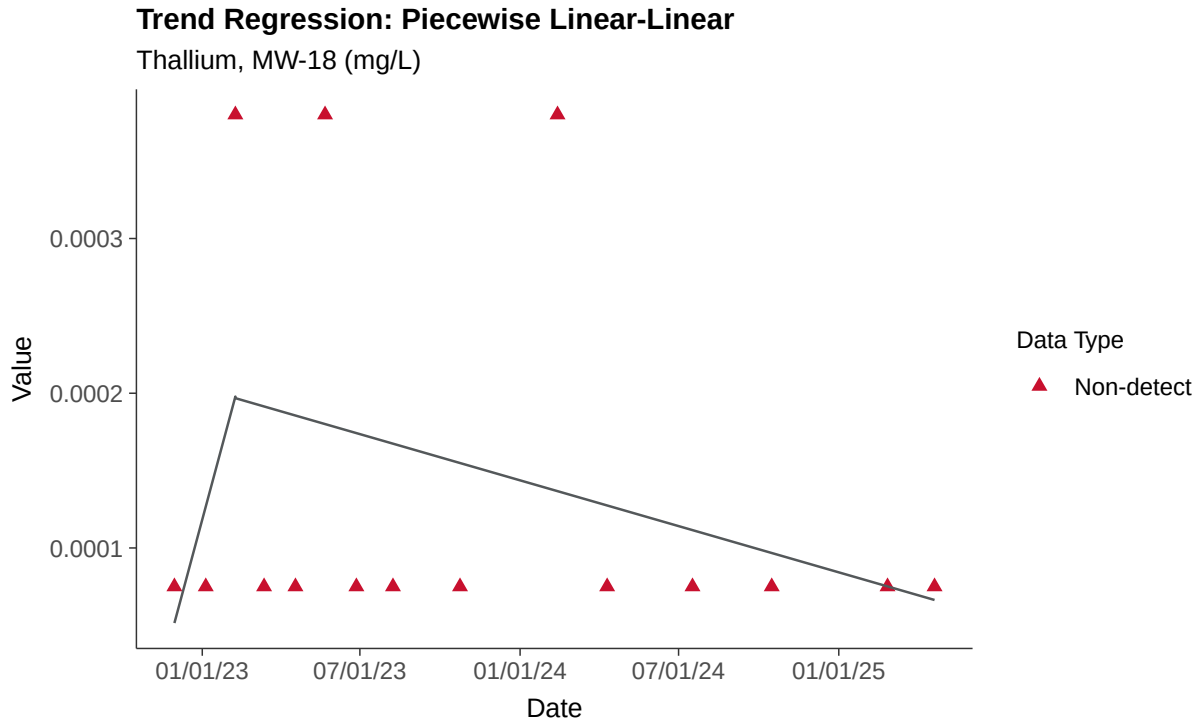
Thallium, MW-18 (mg/L)



Boxplot by Season

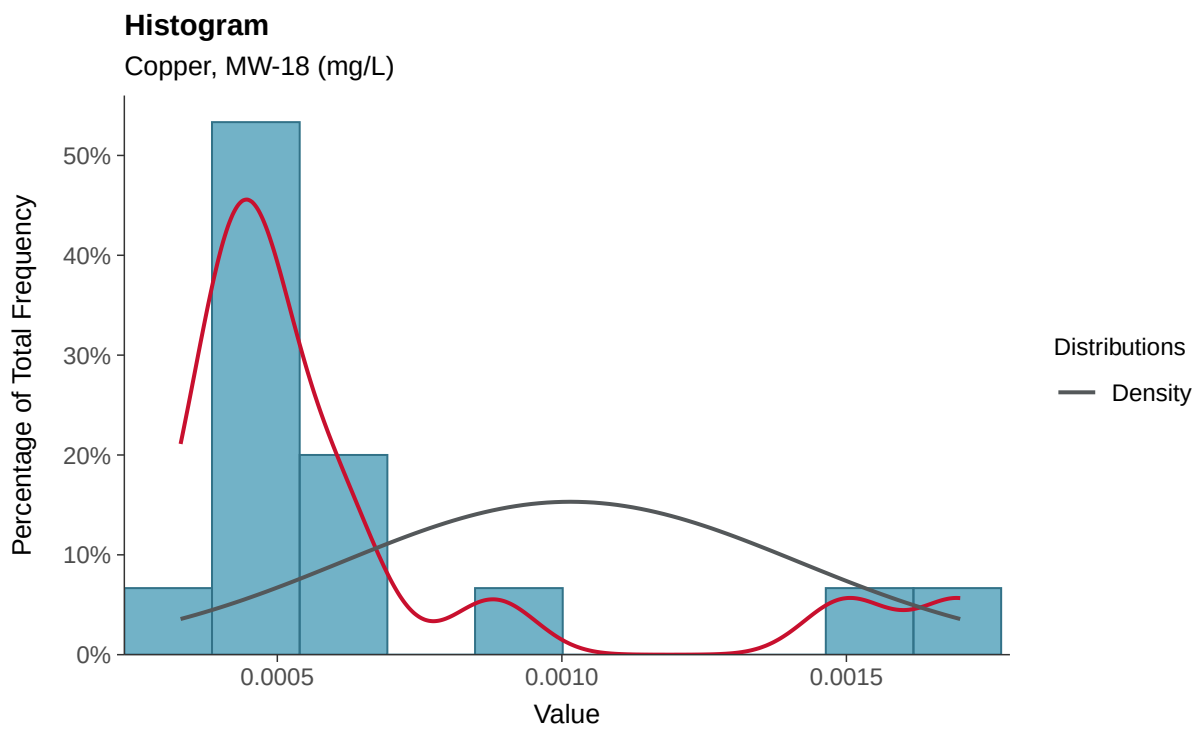
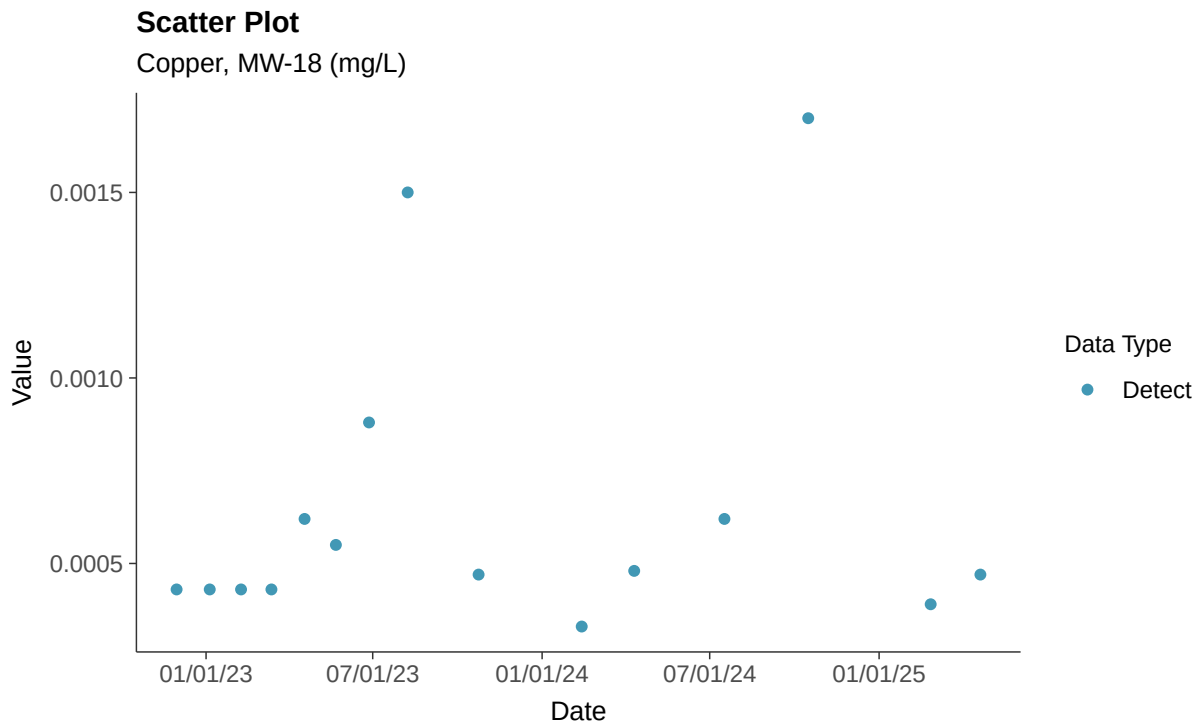
Thallium, MW-18 (mg/L)

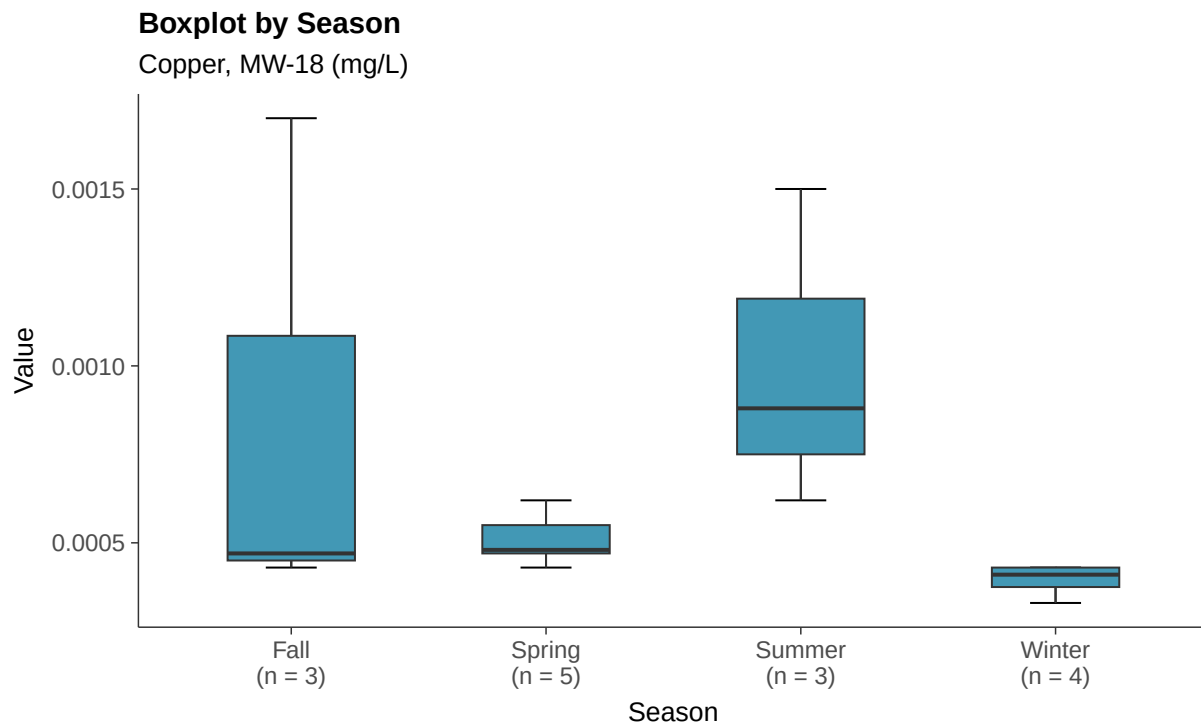
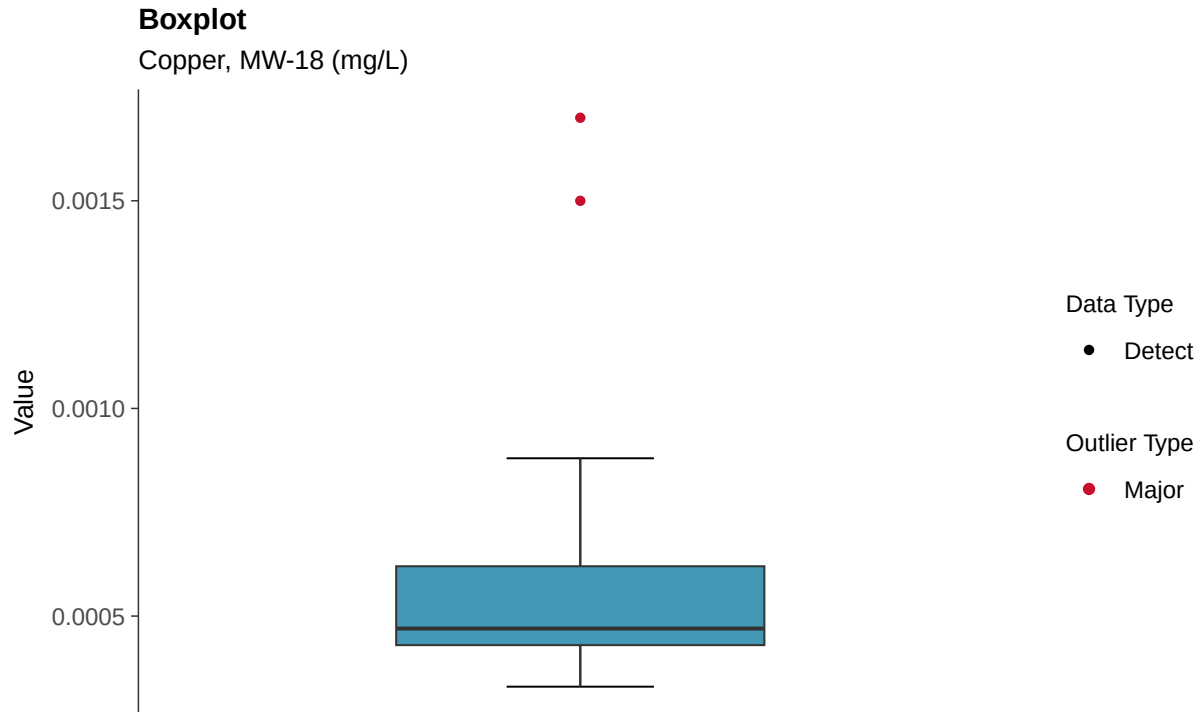




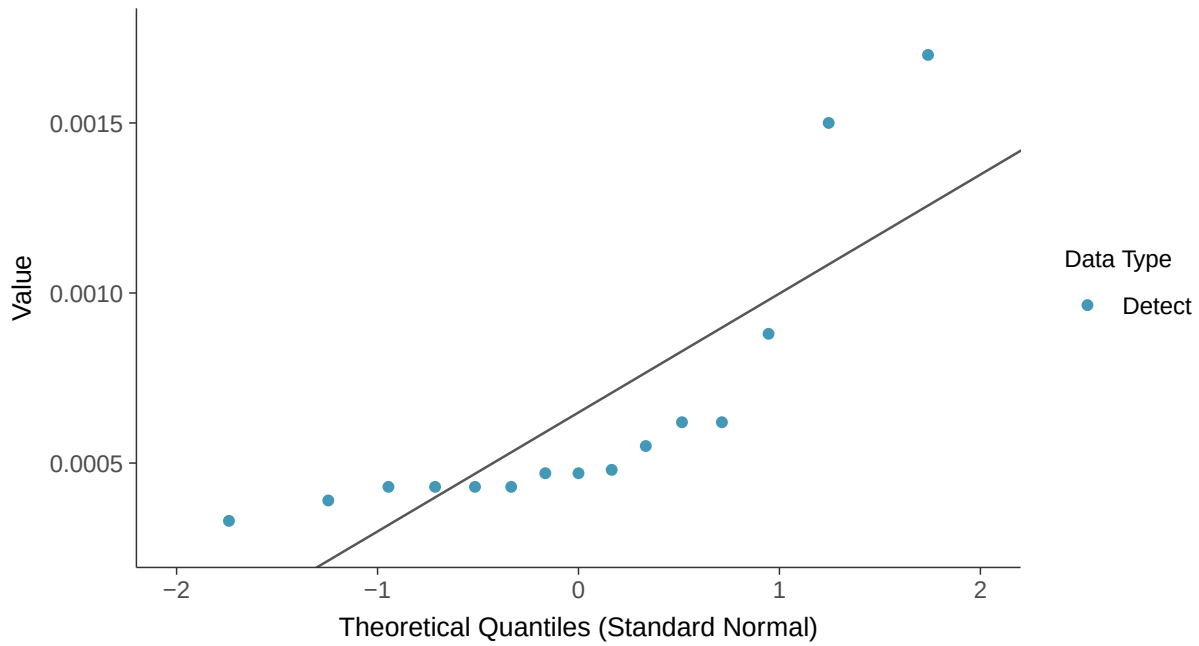
Part 115: Copper, MW-18

ID: 28_1_5_111

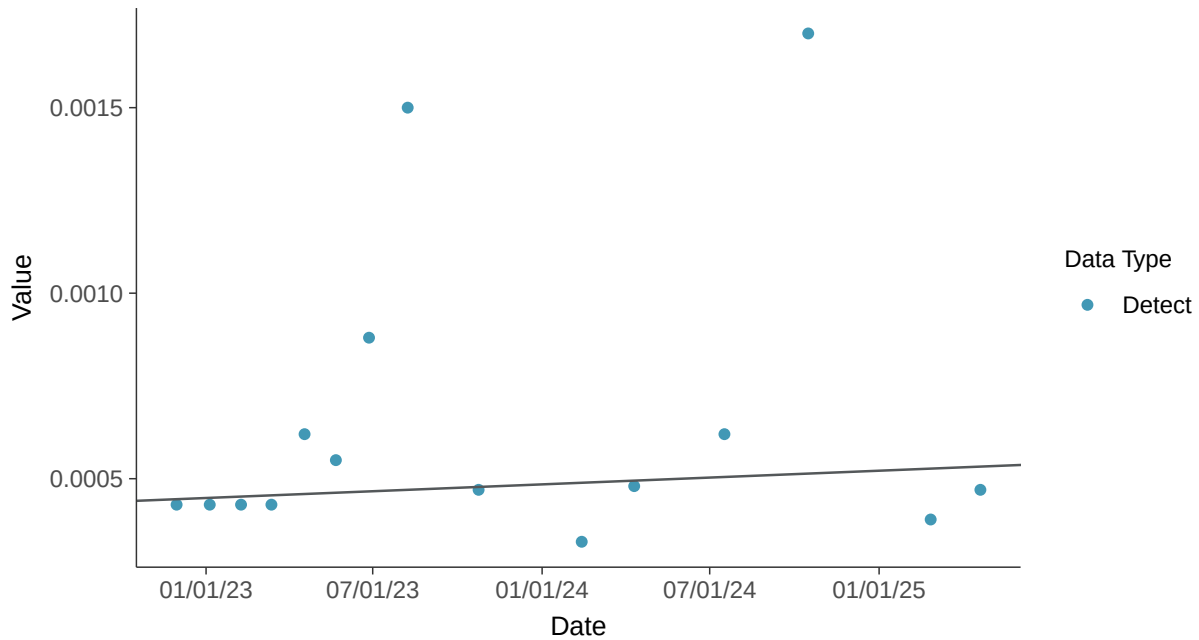




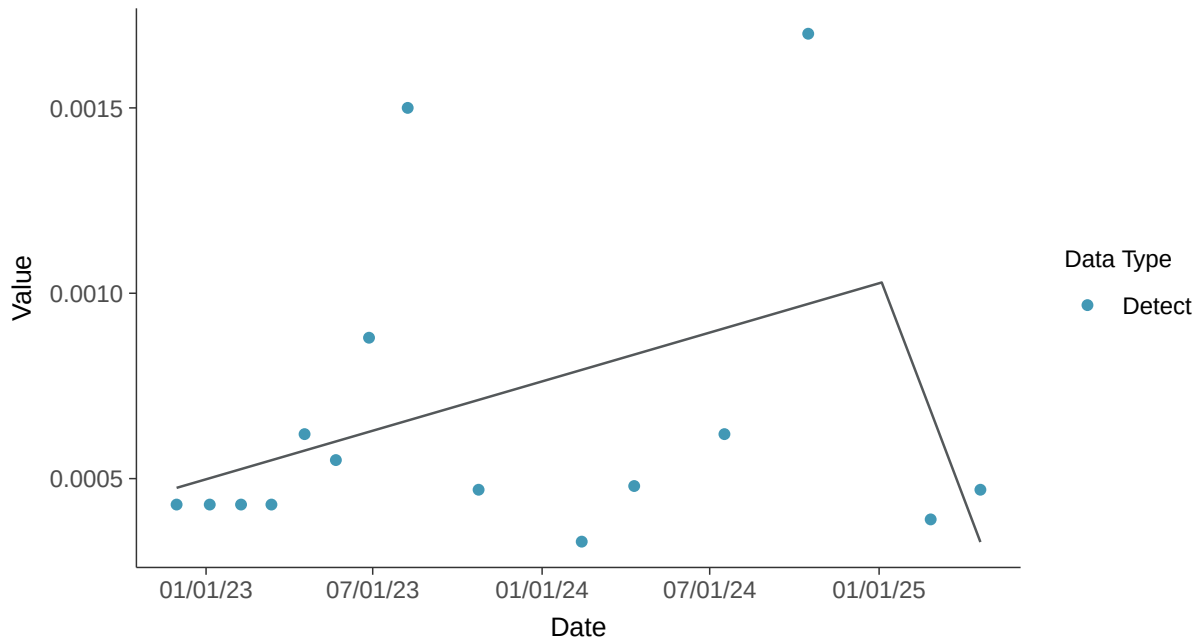
Normal Q-Q plot
Copper, MW-18 (mg/L)



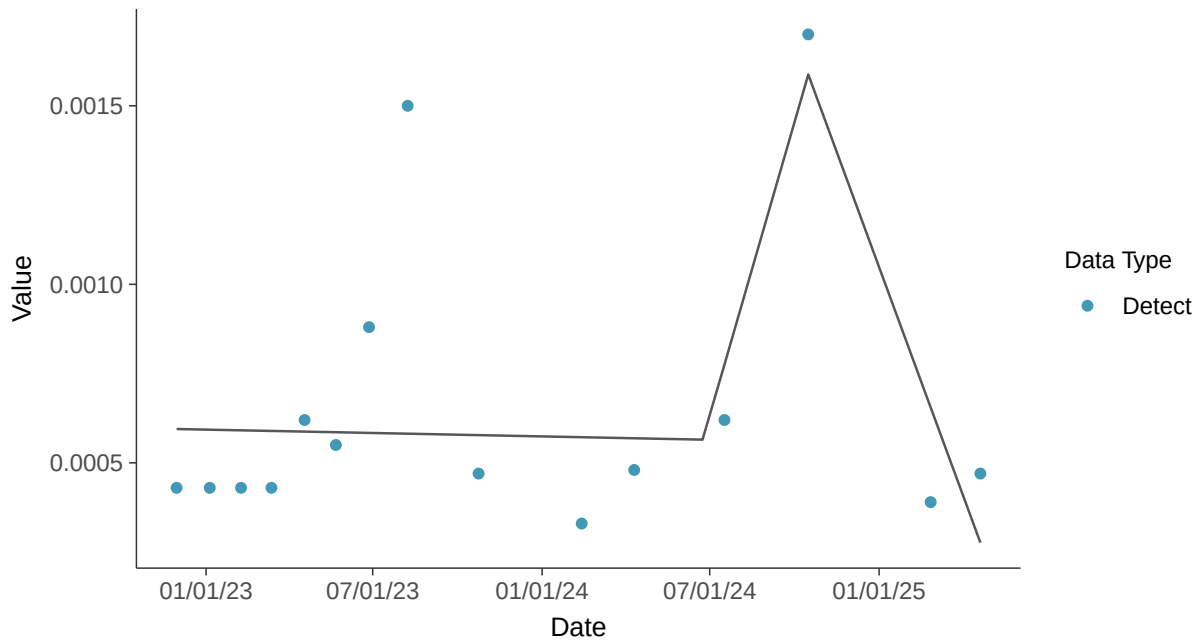
Trend Regression: Mann-Kendall/Theil-Sen Estimate
Copper, MW-18 (mg/L)



Trend Regression: Piecewise Linear-Linear
Copper, MW-18 (mg/L)

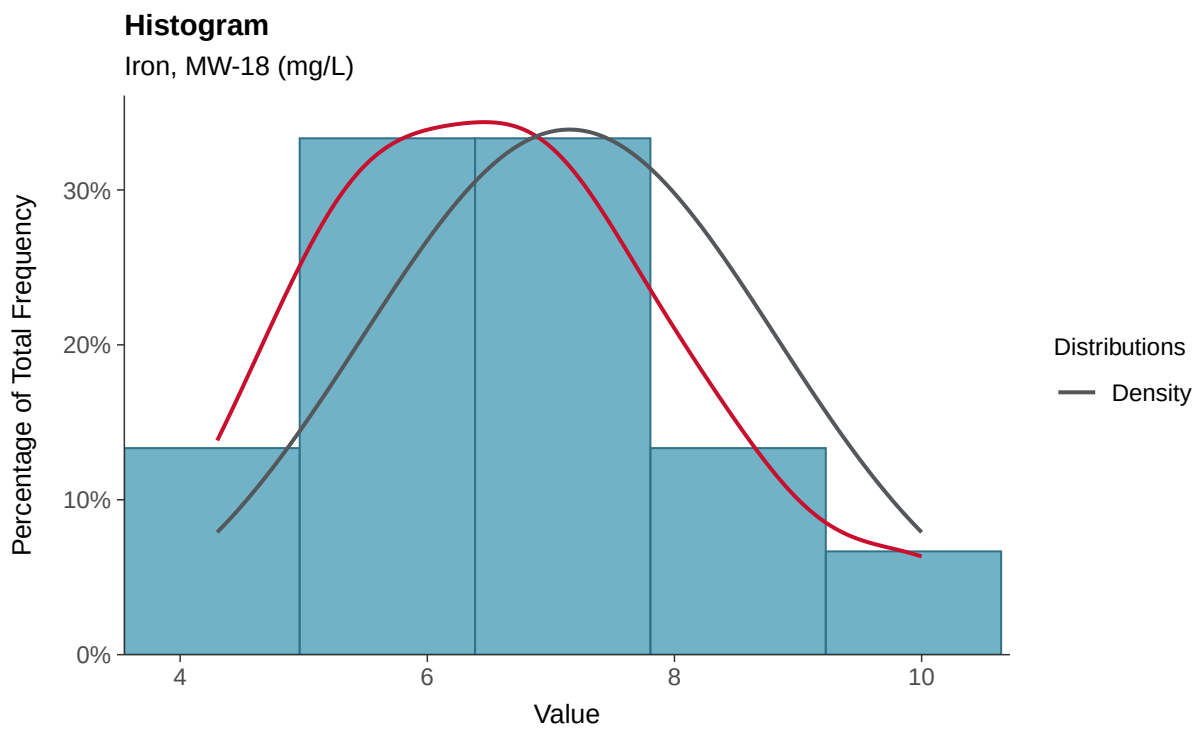
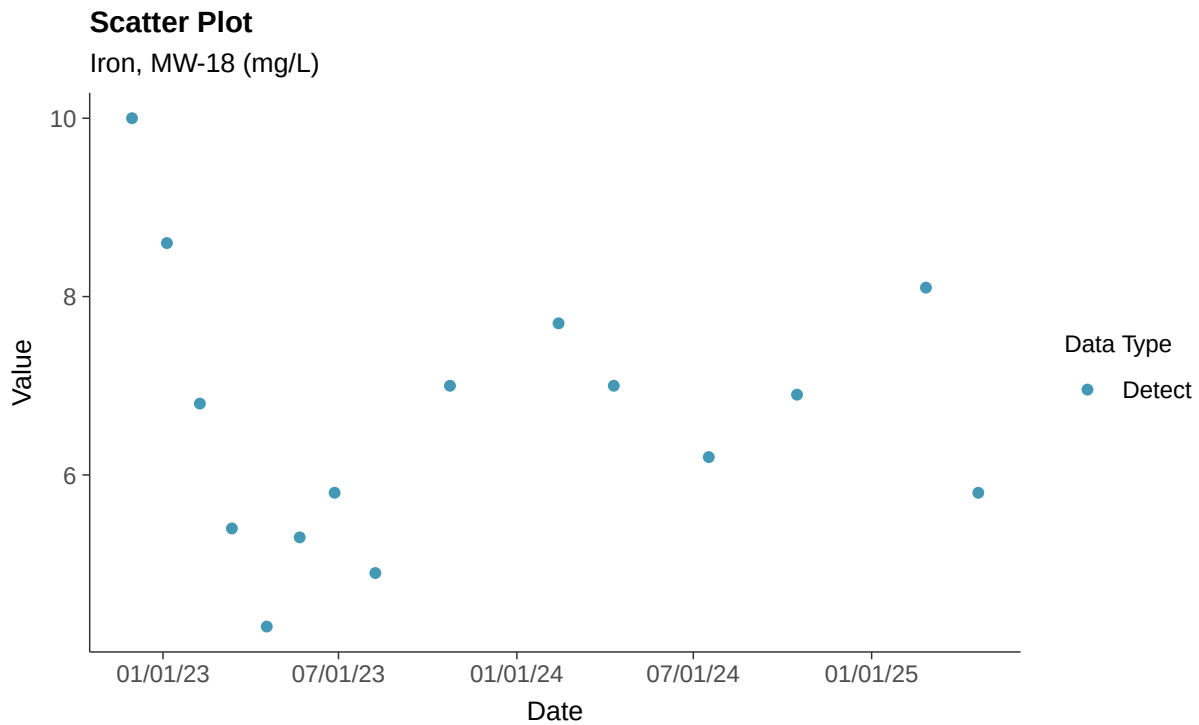


Trend Regression: Piecewise Linear-Linear-Linear
Copper, MW-18 (mg/L)



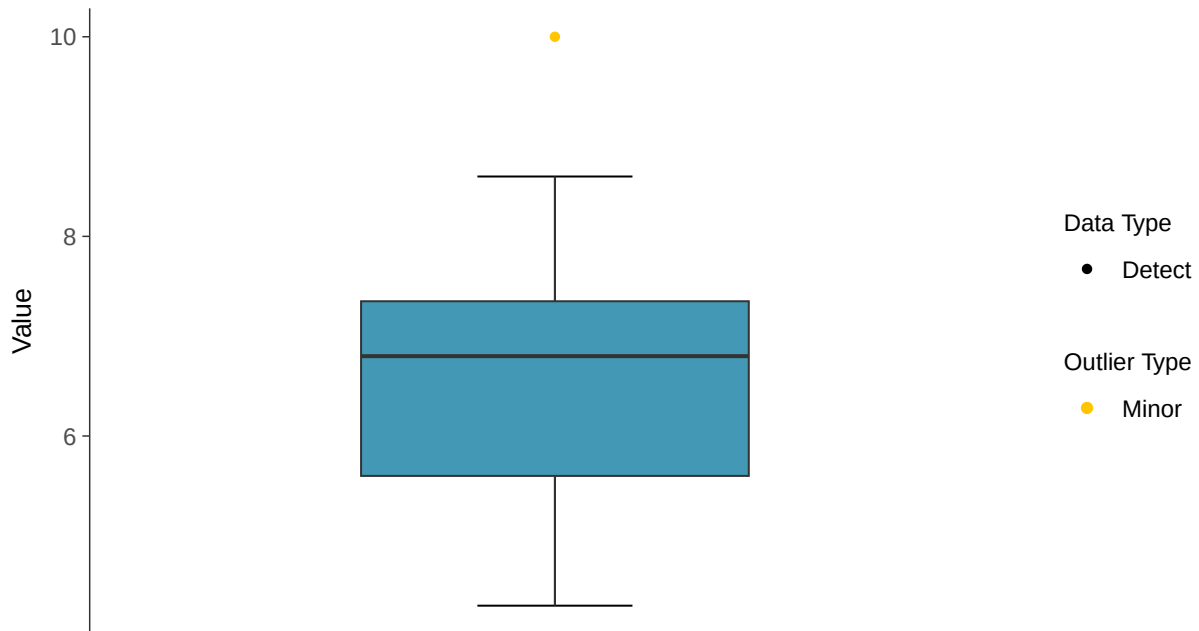
Part 115: Iron, MW-18

ID: 28_1_5_114



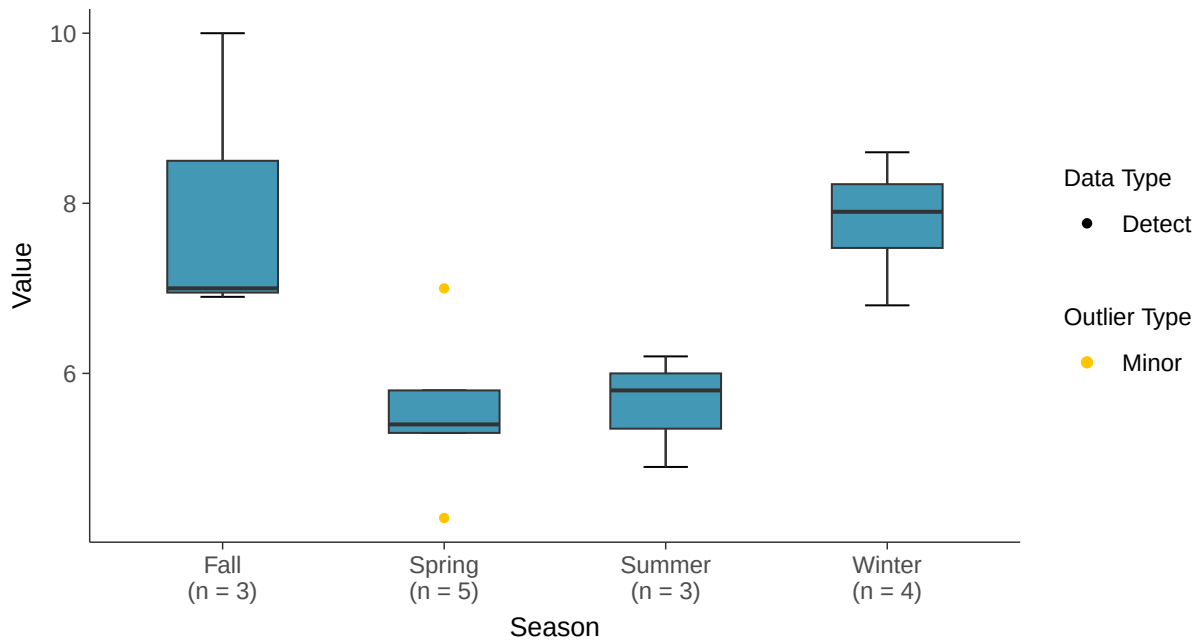
Boxplot

Iron, MW-18 (mg/L)



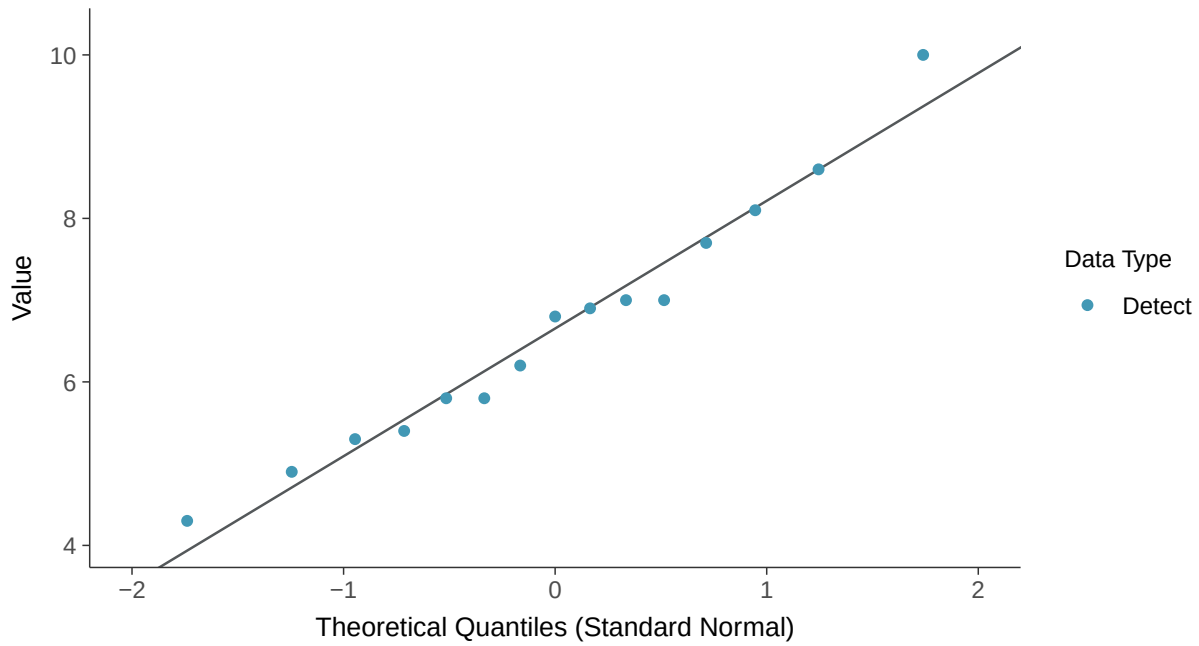
Boxplot by Season

Iron, MW-18 (mg/L)



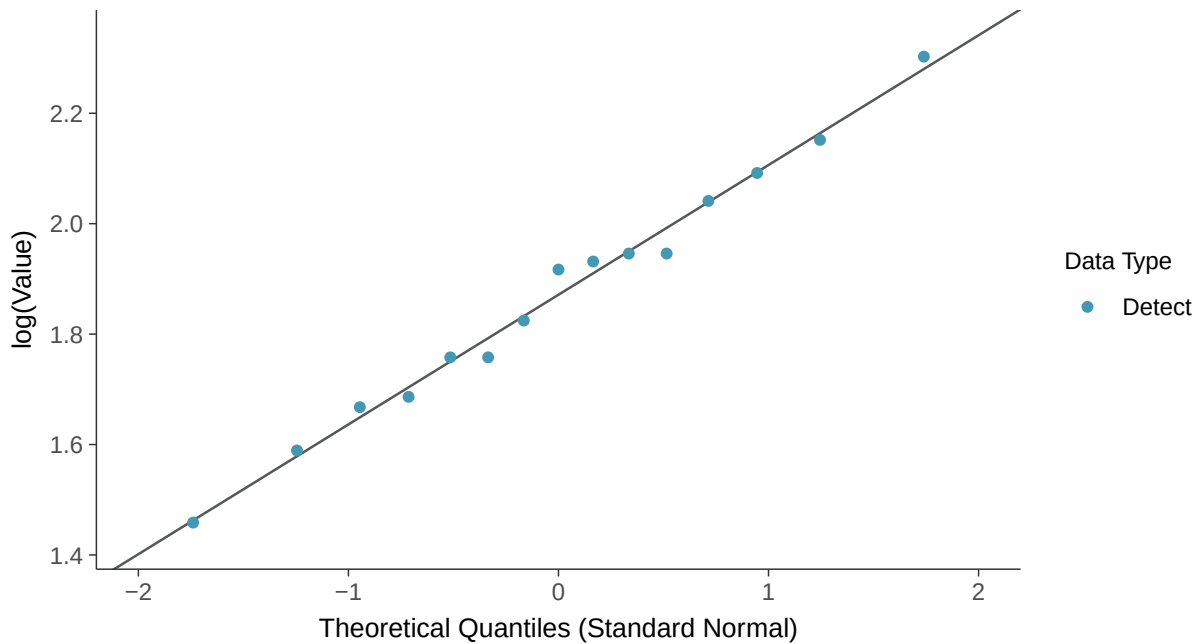
Normal Q-Q plot

Iron, MW-18 (mg/L)



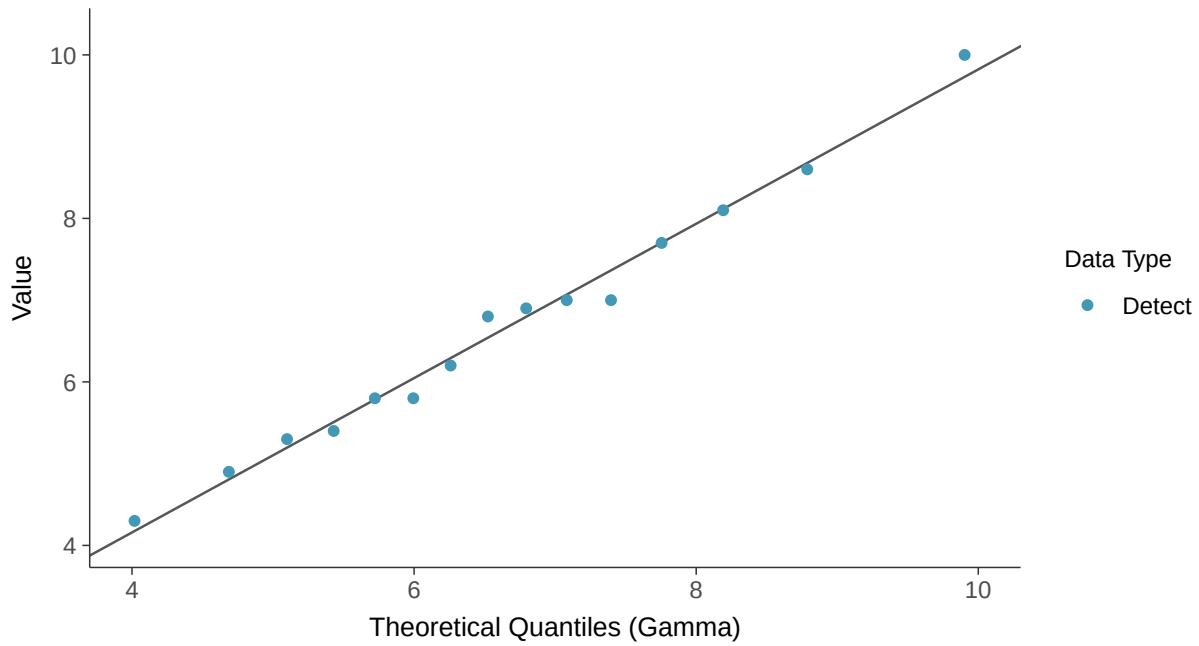
Lognormal Q-Q plot

Iron, MW-18 (mg/L)



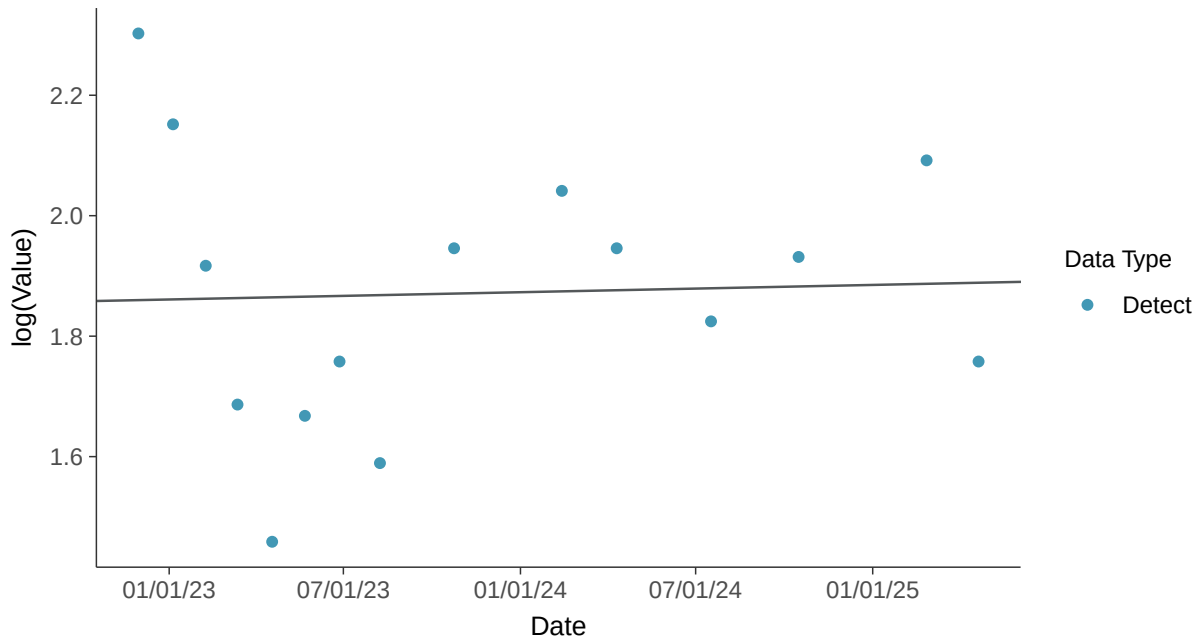
Gamma Q-Q plot

Iron, MW-18 (mg/L)



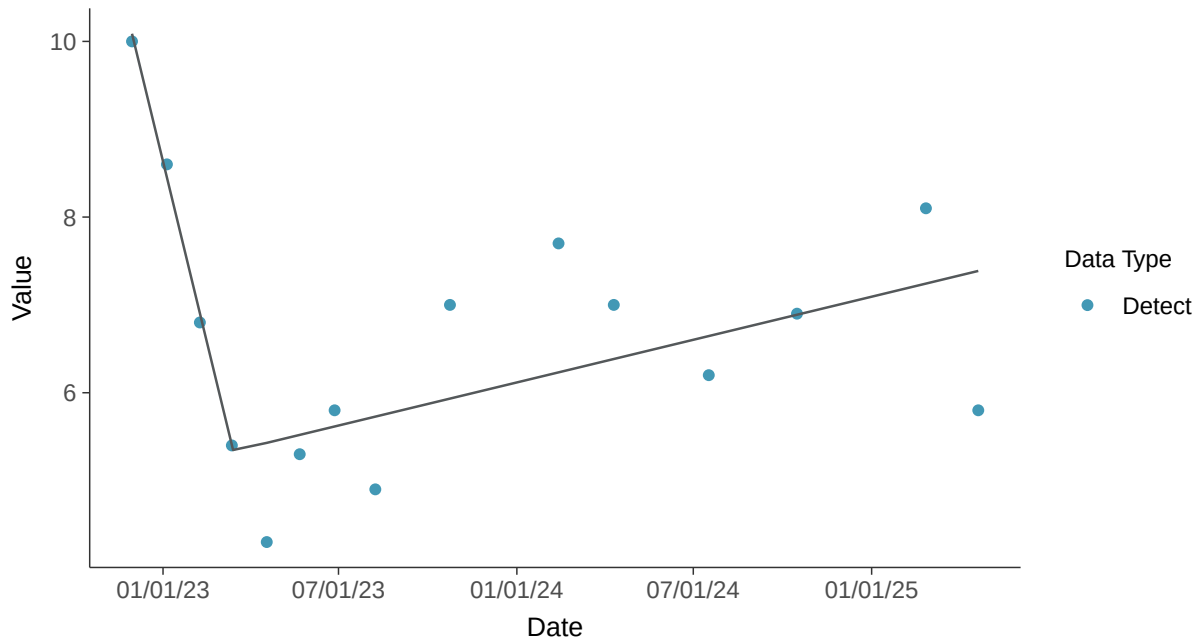
Trend Regression: Lognormal MLE

Iron, MW-18 (mg/L)



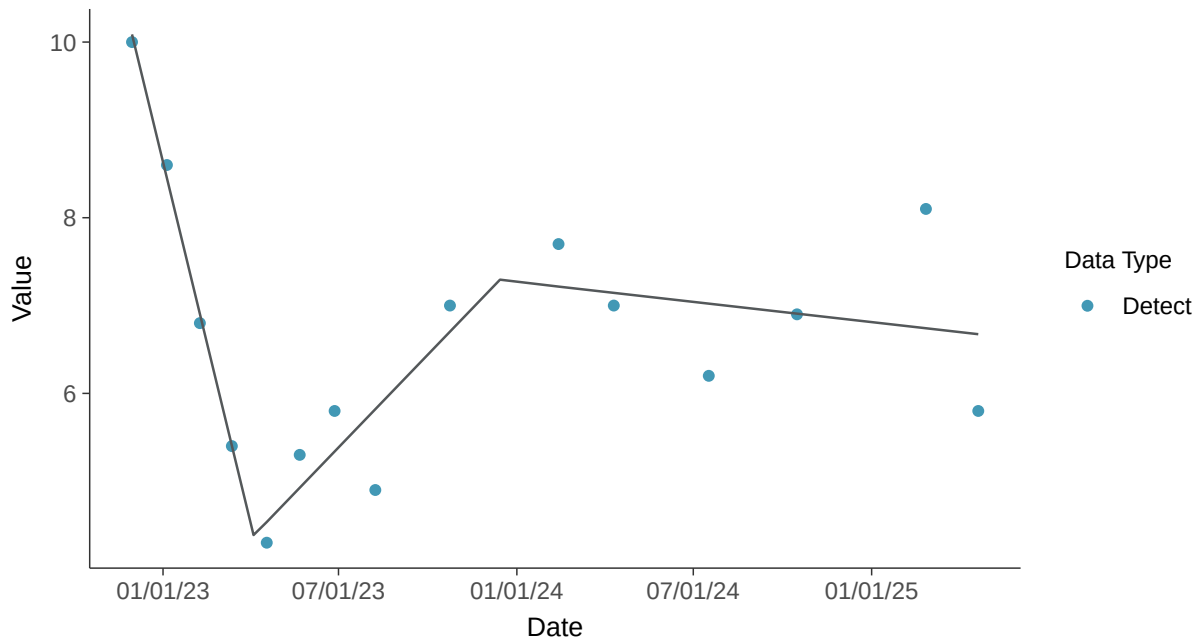
Trend Regression: Piecewise Linear-Linear

Iron, MW-18 (mg/L)



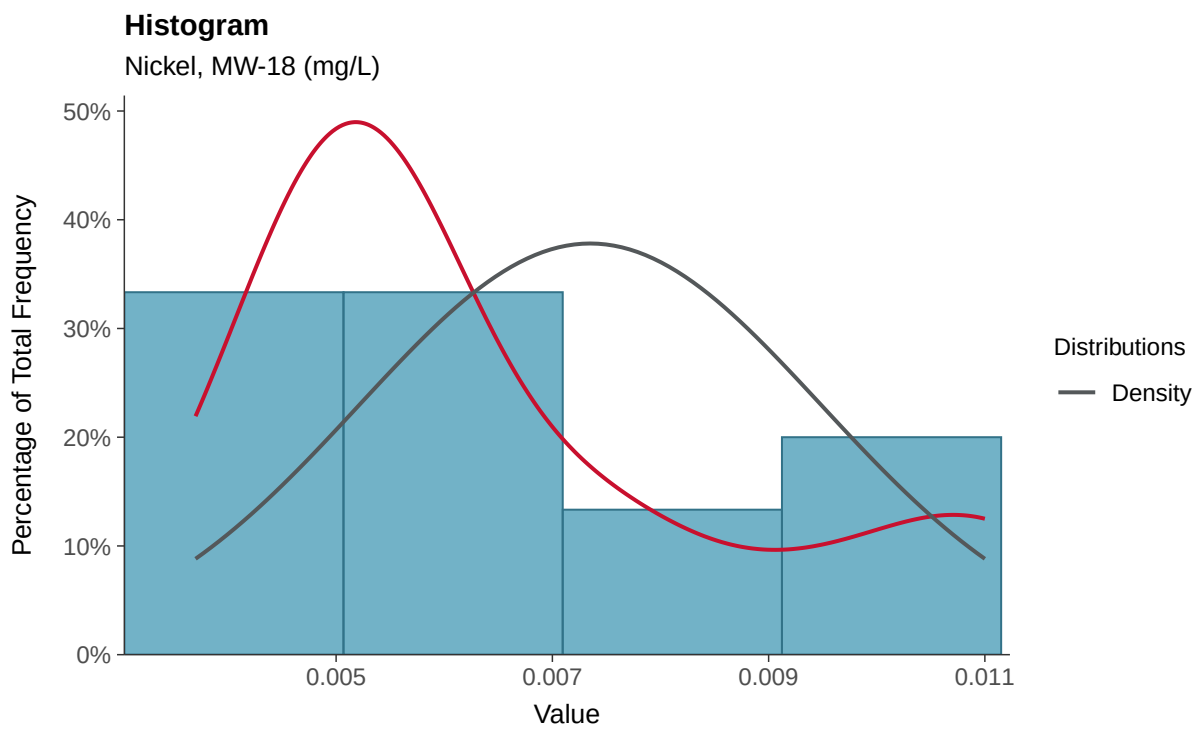
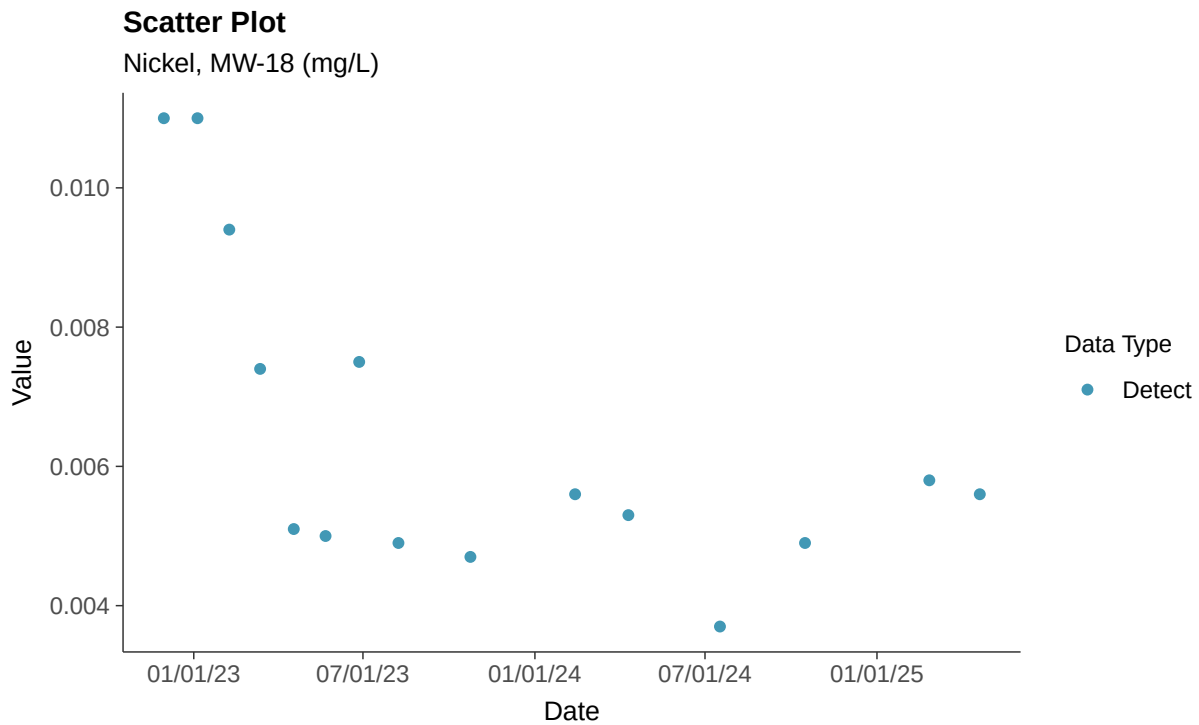
Trend Regression: Piecewise Linear-Linear-Linear

Iron, MW-18 (mg/L)



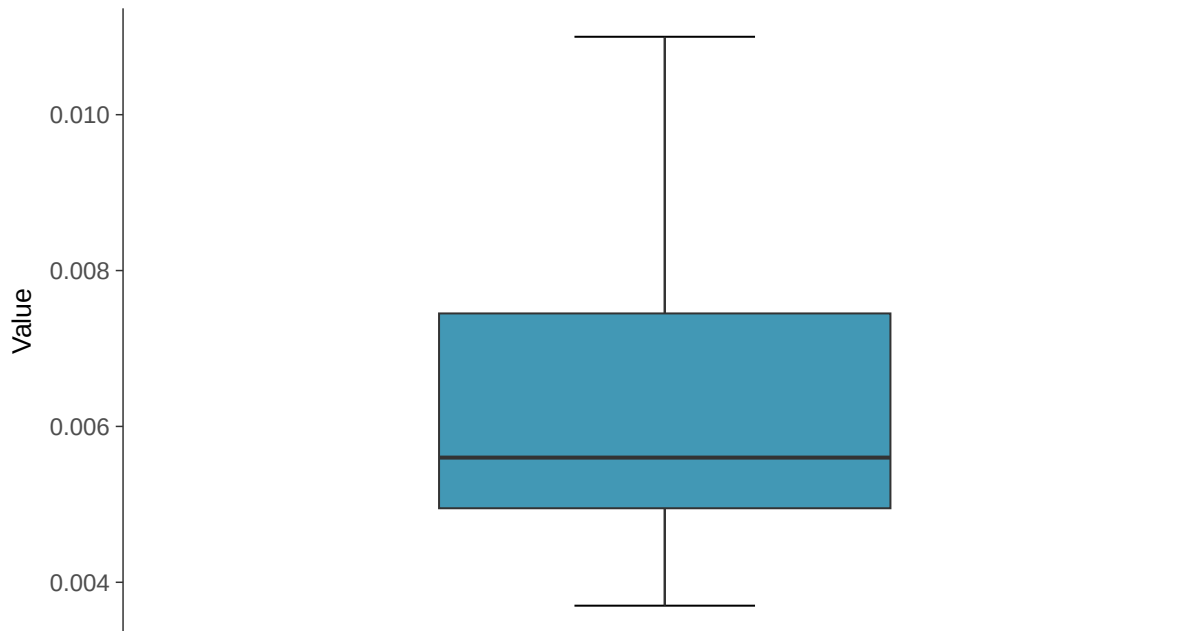
Part 115: Nickel, MW-18

ID: 28_1_5_119



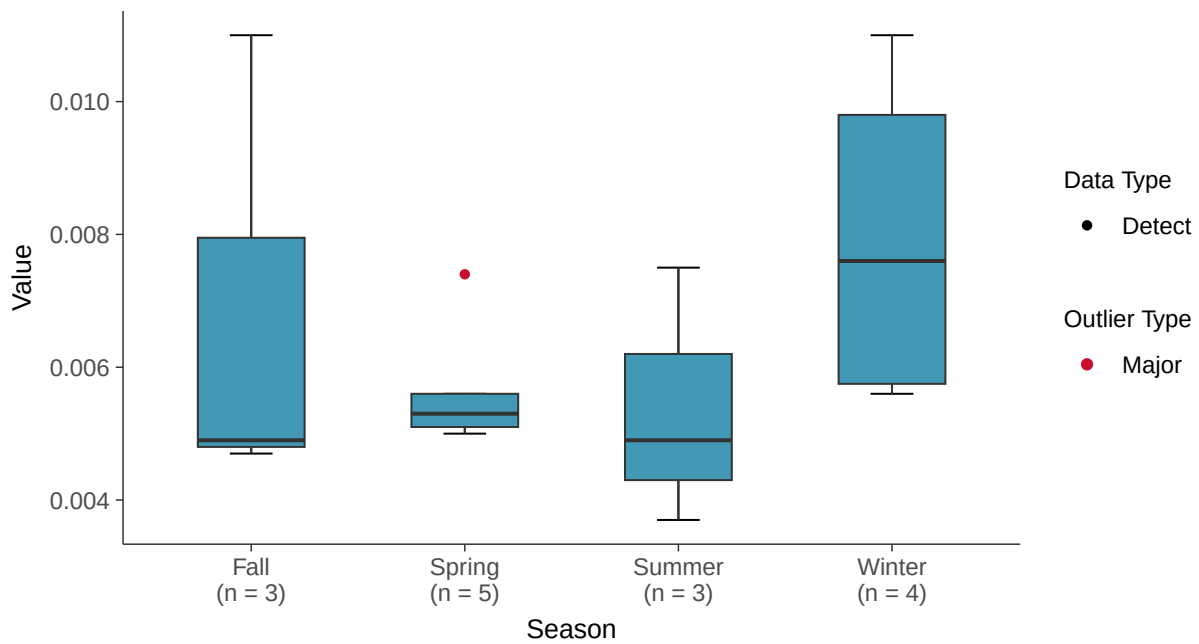
Boxplot

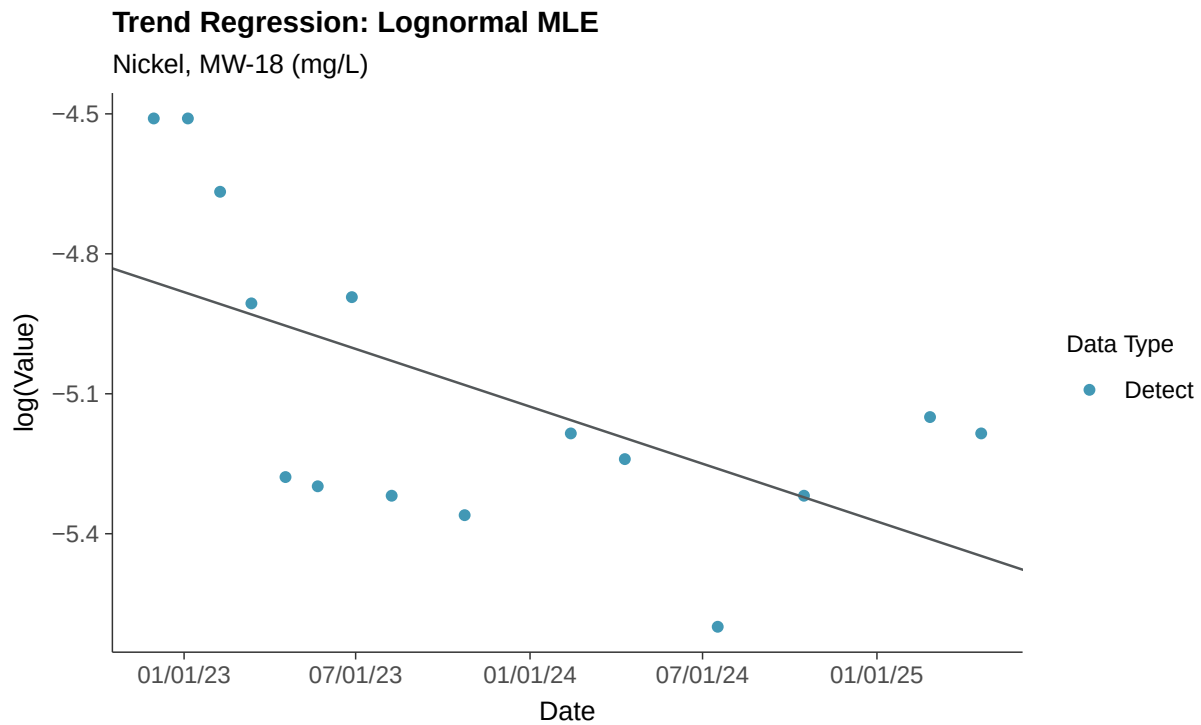
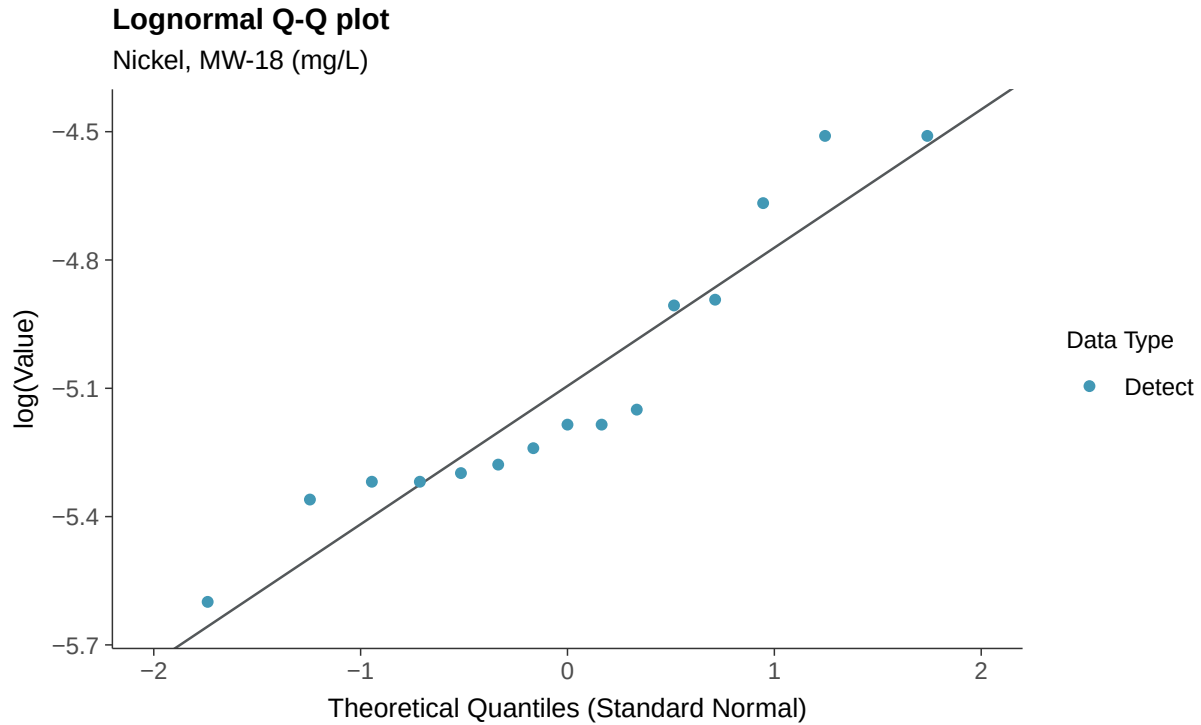
Nickel, MW-18 (mg/L)



Boxplot by Season

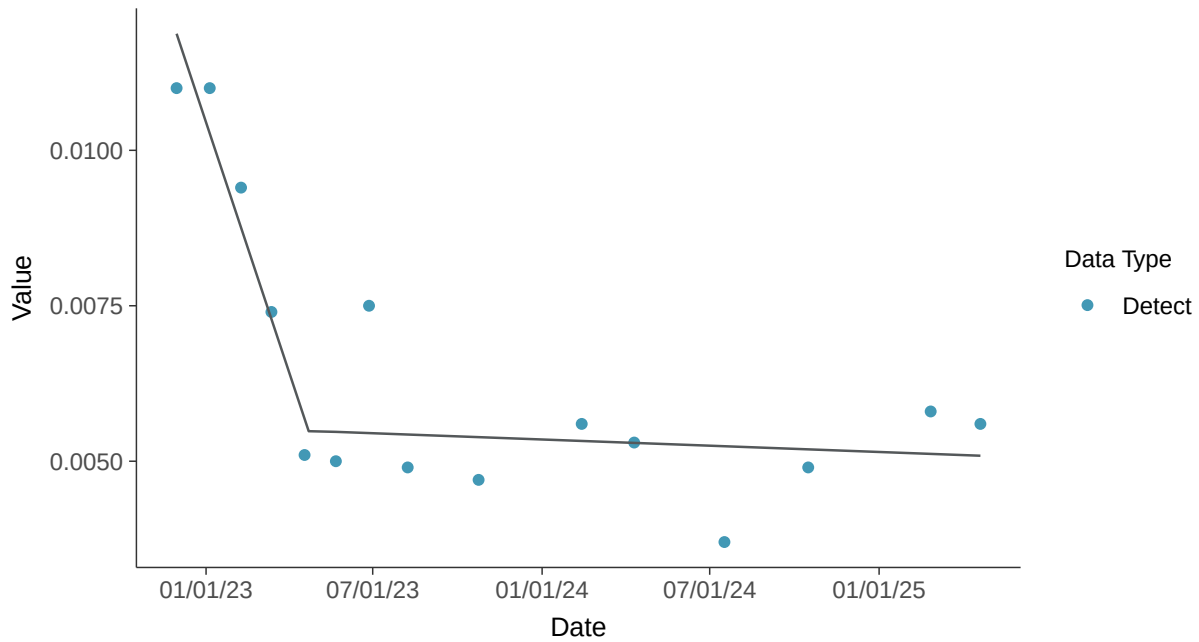
Nickel, MW-18 (mg/L)





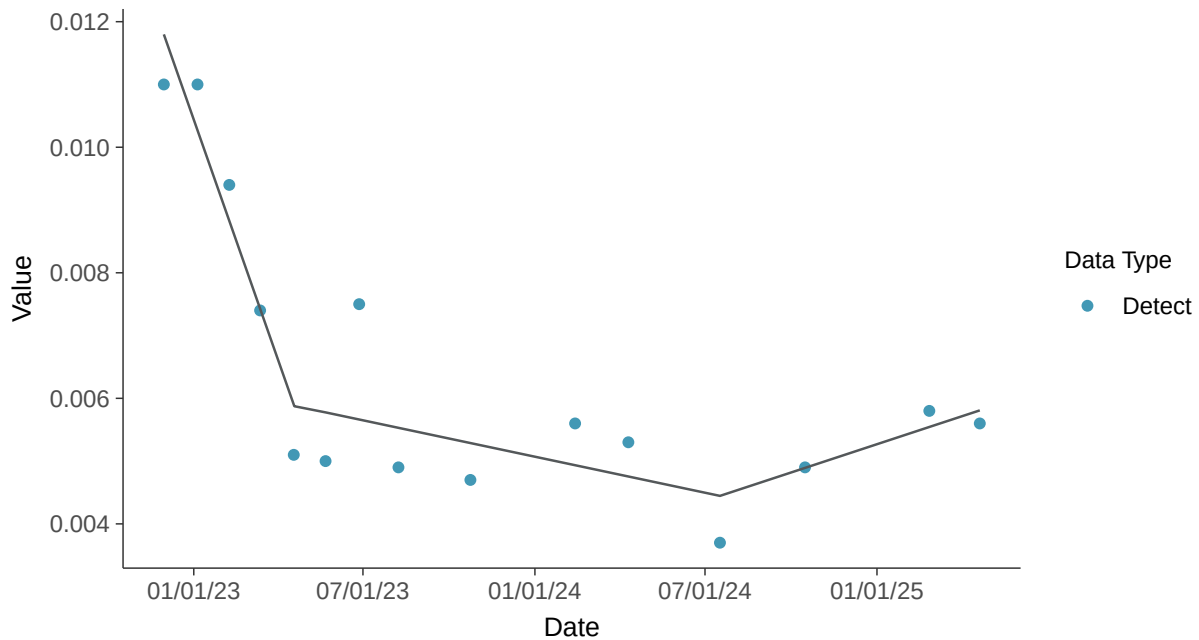
Trend Regression: Piecewise Linear-Linear

Nickel, MW-18 (mg/L)



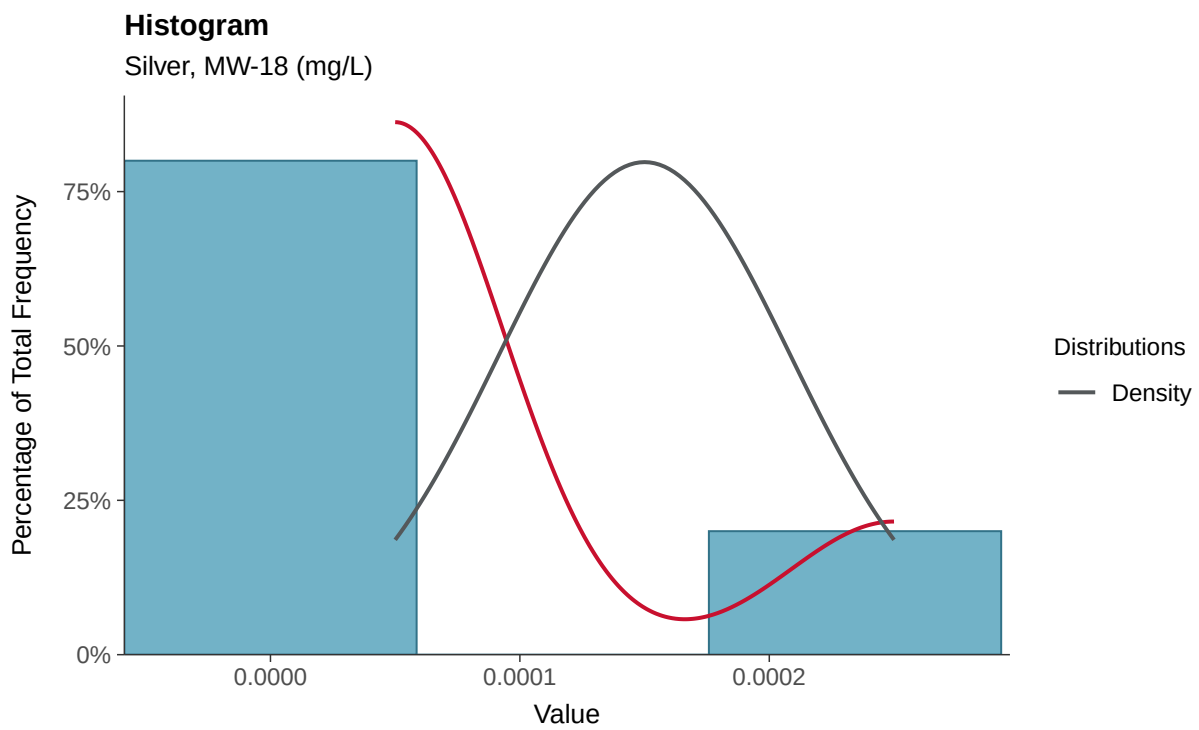
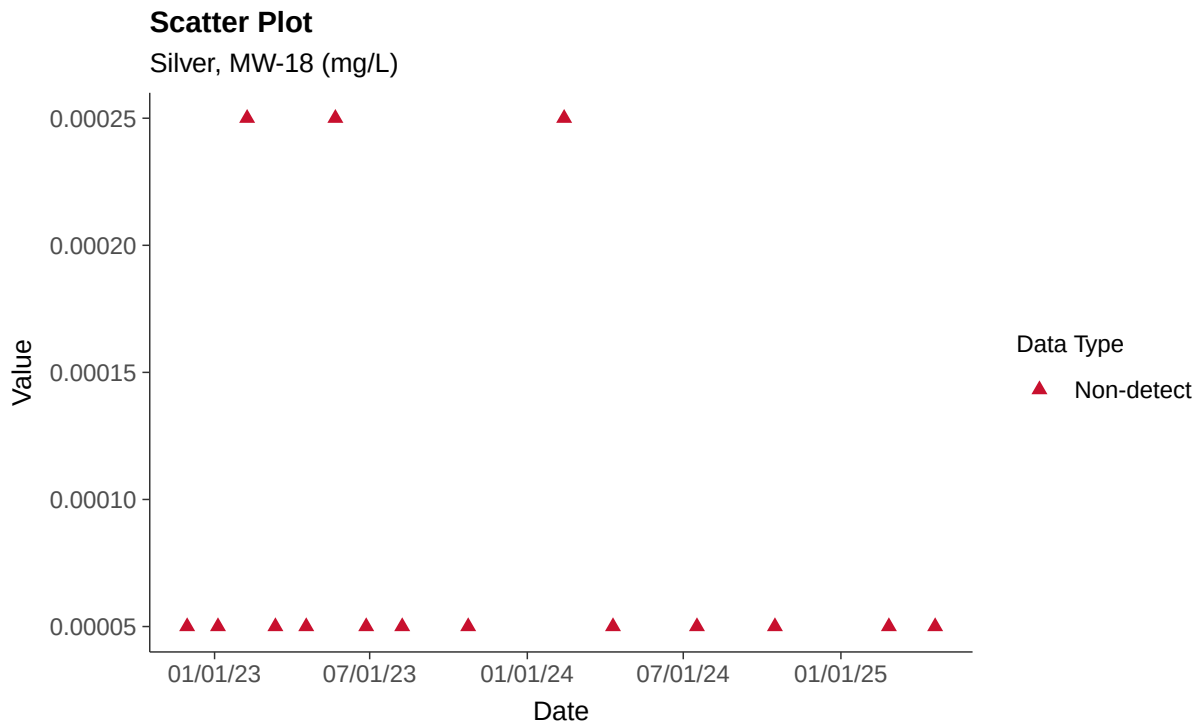
Trend Regression: Piecewise Linear-Linear-Linear

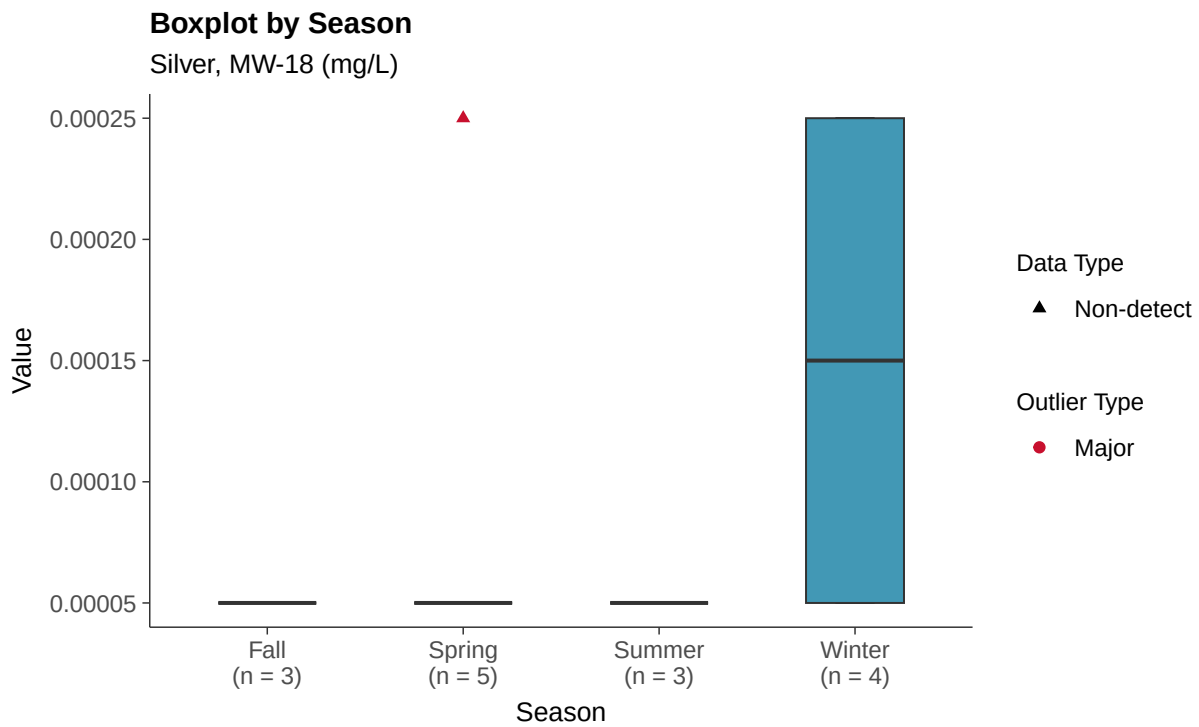
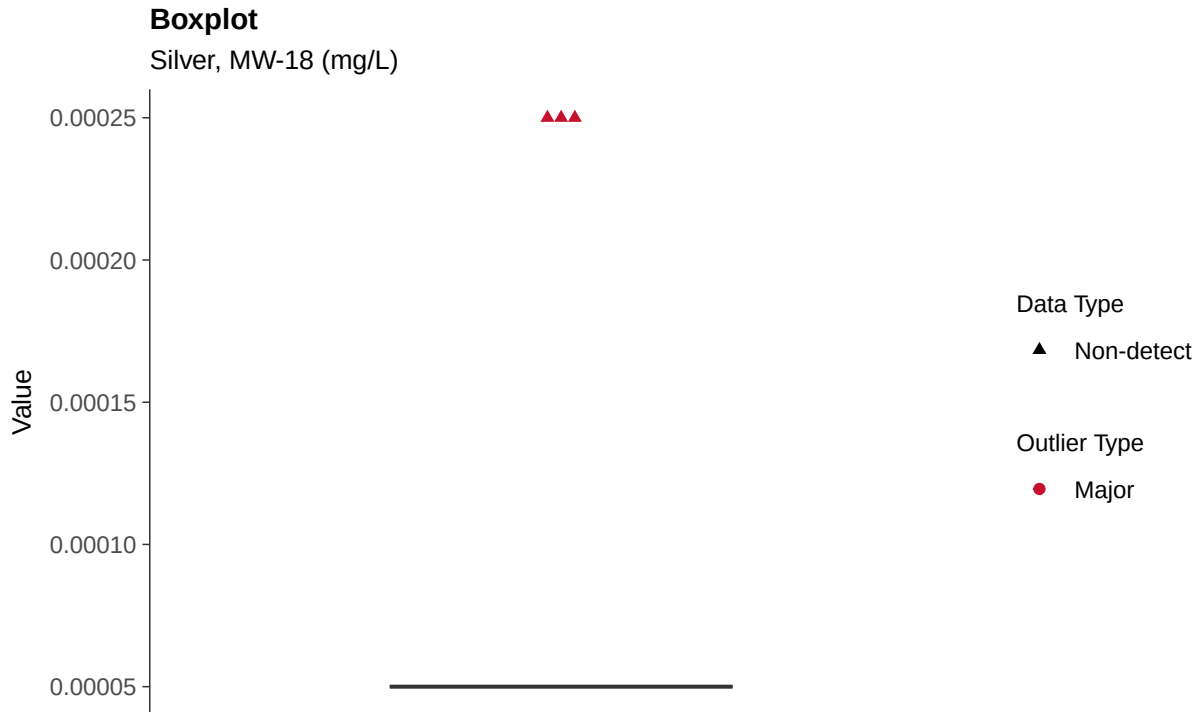
Nickel, MW-18 (mg/L)



Part 115: Silver, MW-18

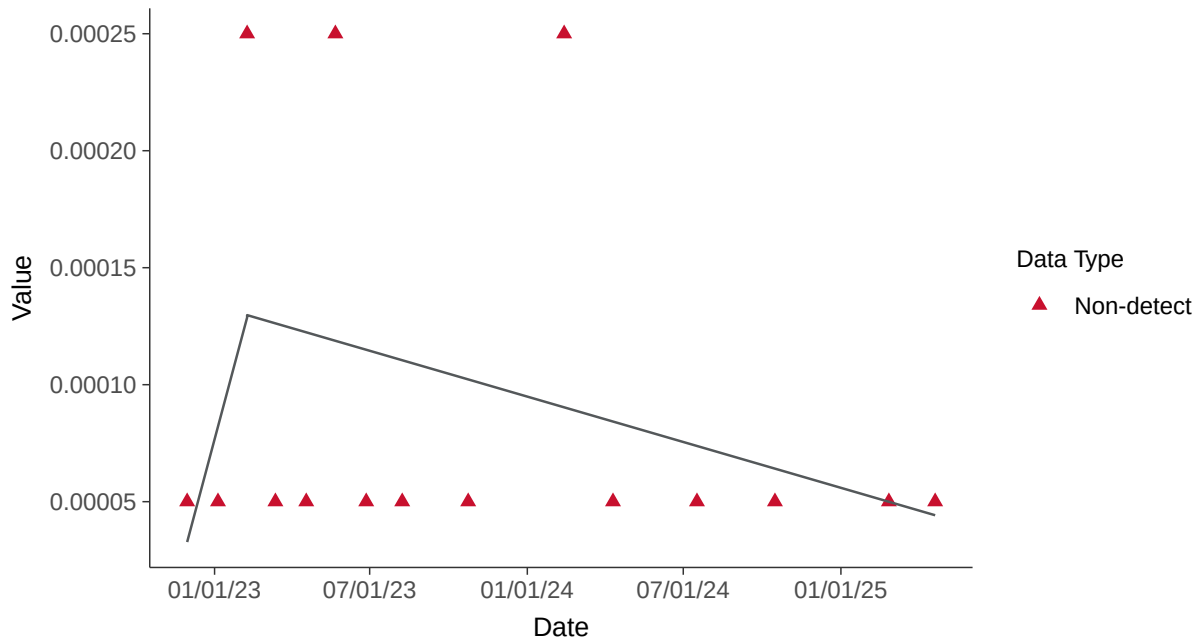
ID: 28_1_5_123





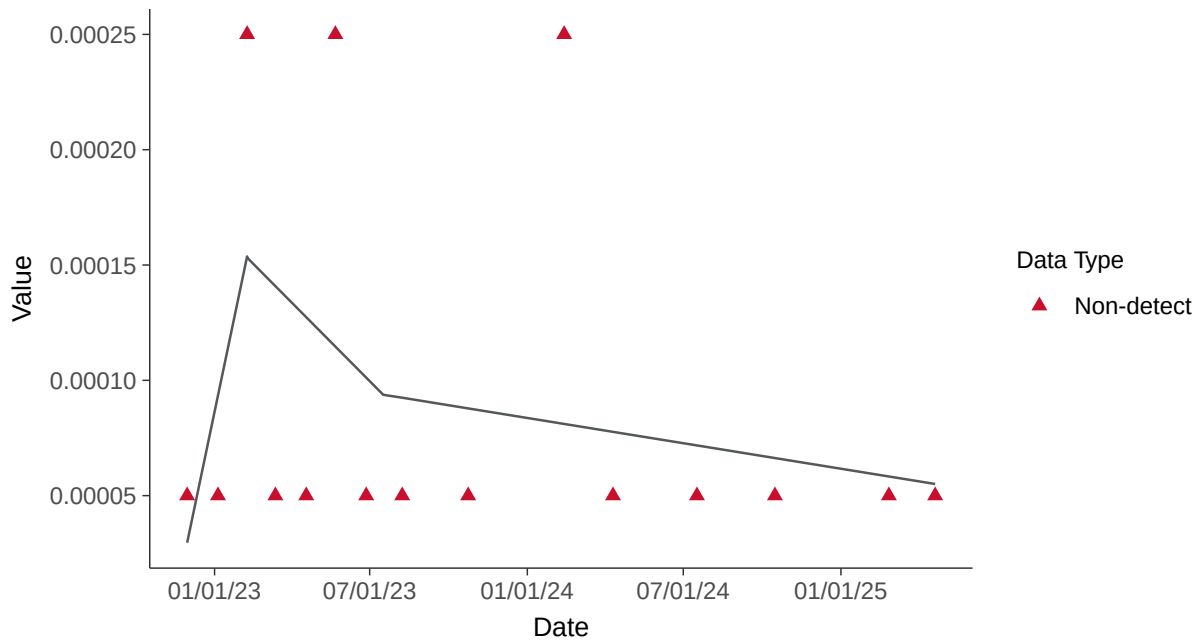
Trend Regression: Piecewise Linear-Linear

Silver, MW-18 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

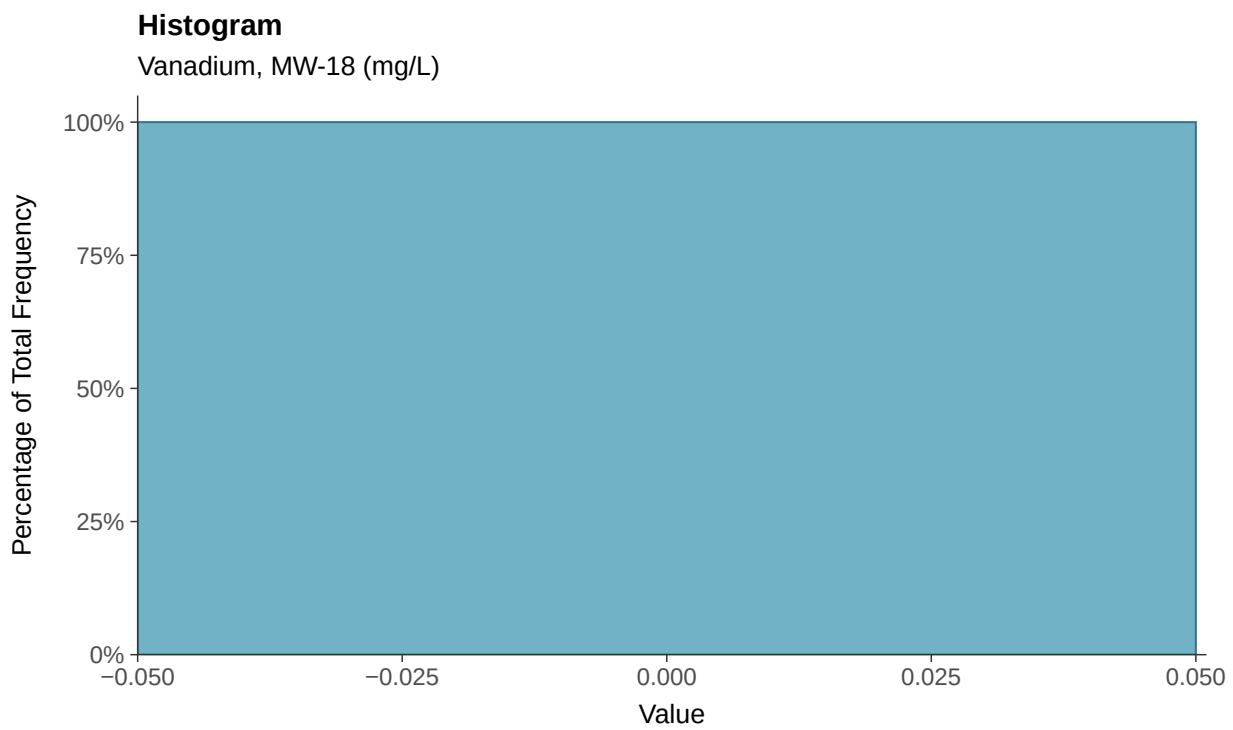
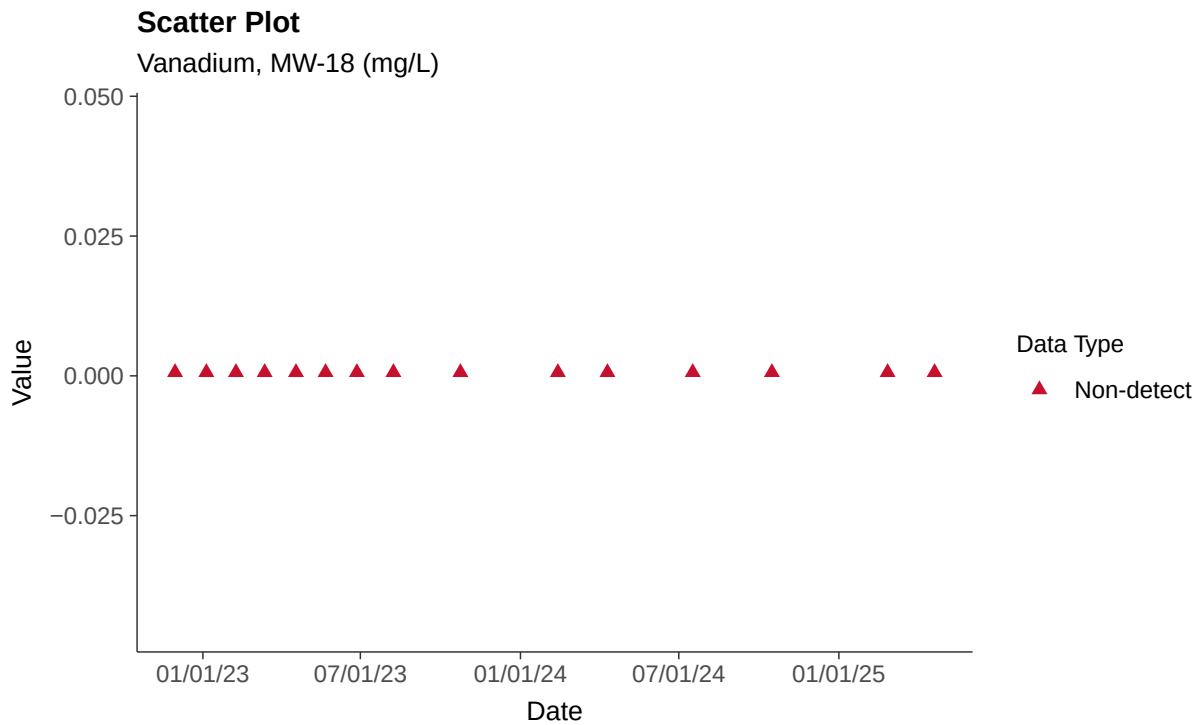
Silver, MW-18 (mg/L)





Part 115: Vanadium, MW-18

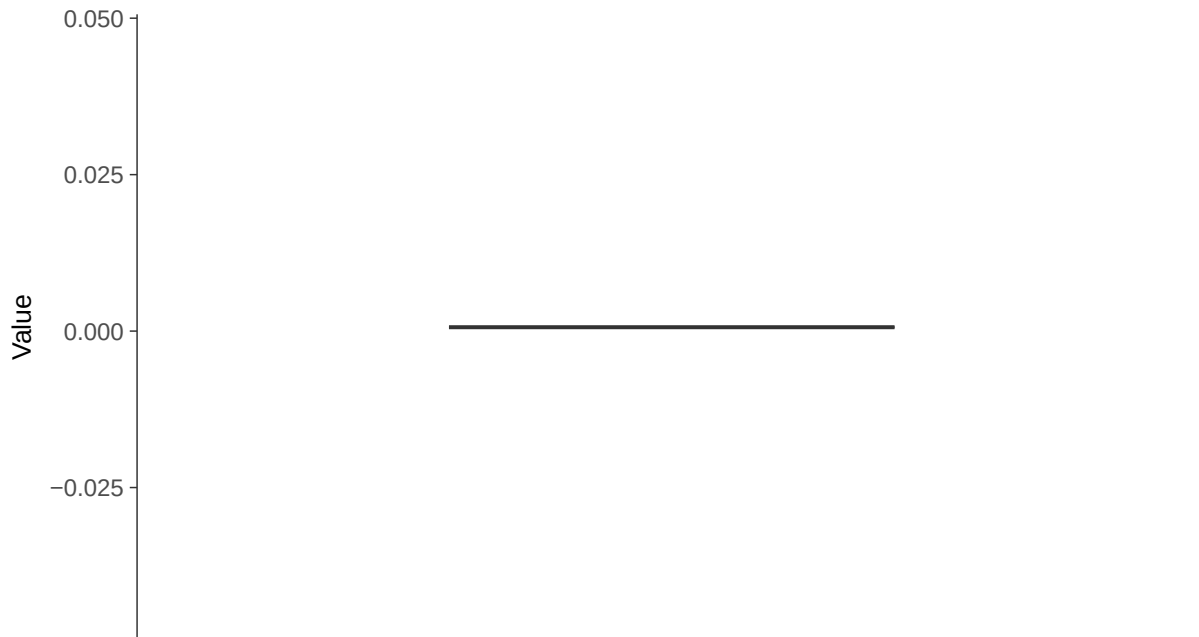
ID: 28_1_5_128





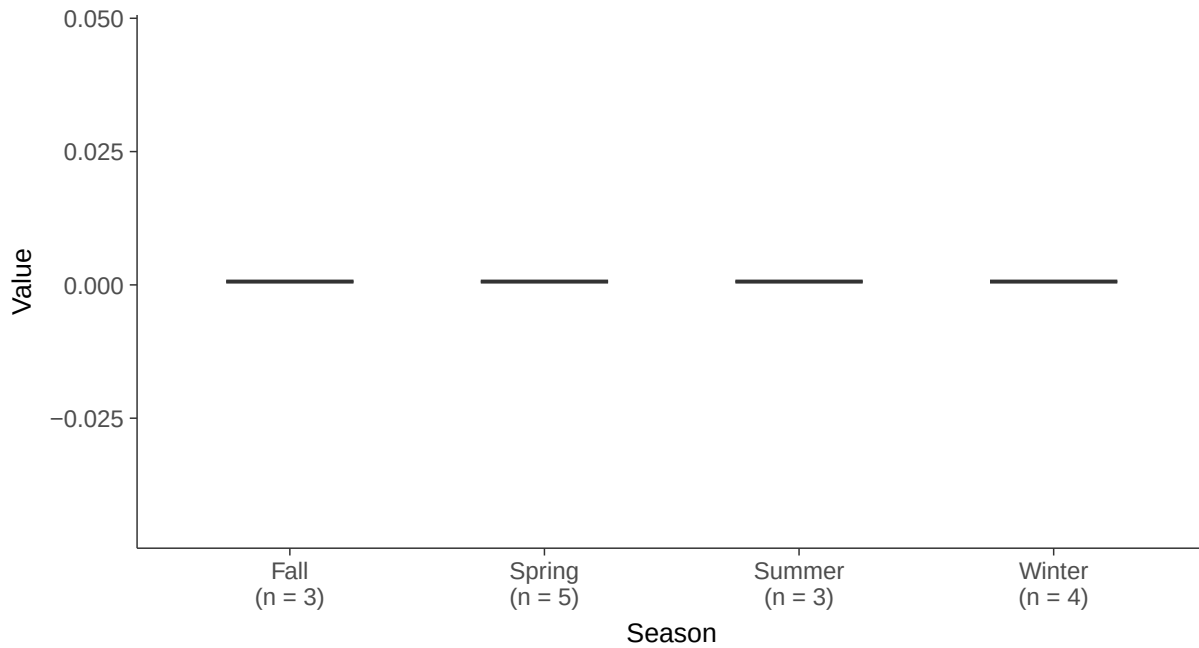
Boxplot

Vanadium, MW-18 (mg/L)



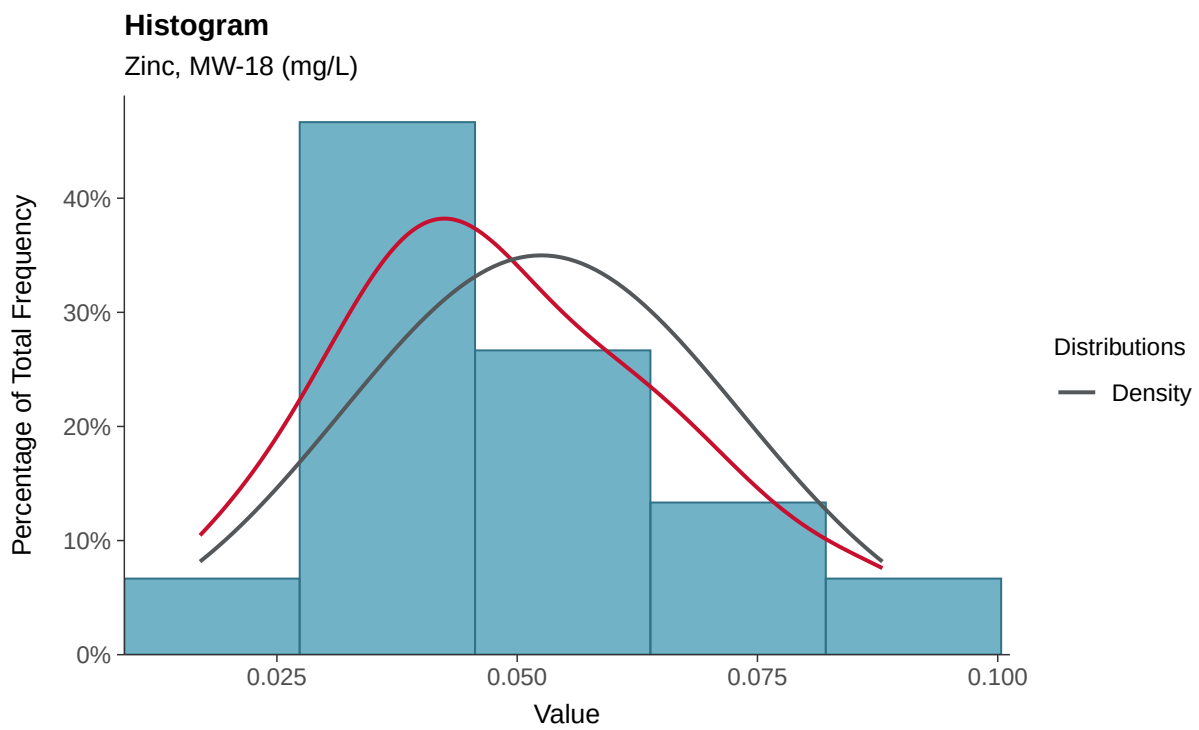
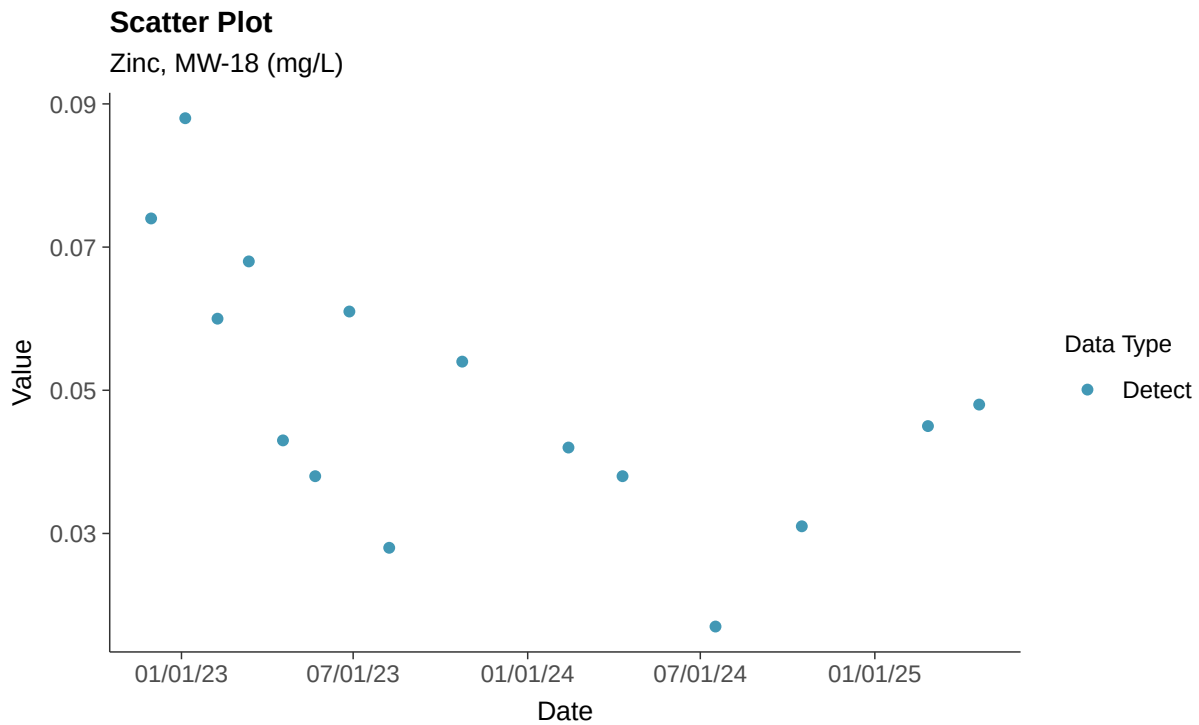
Boxplot by Season

Vanadium, MW-18 (mg/L)



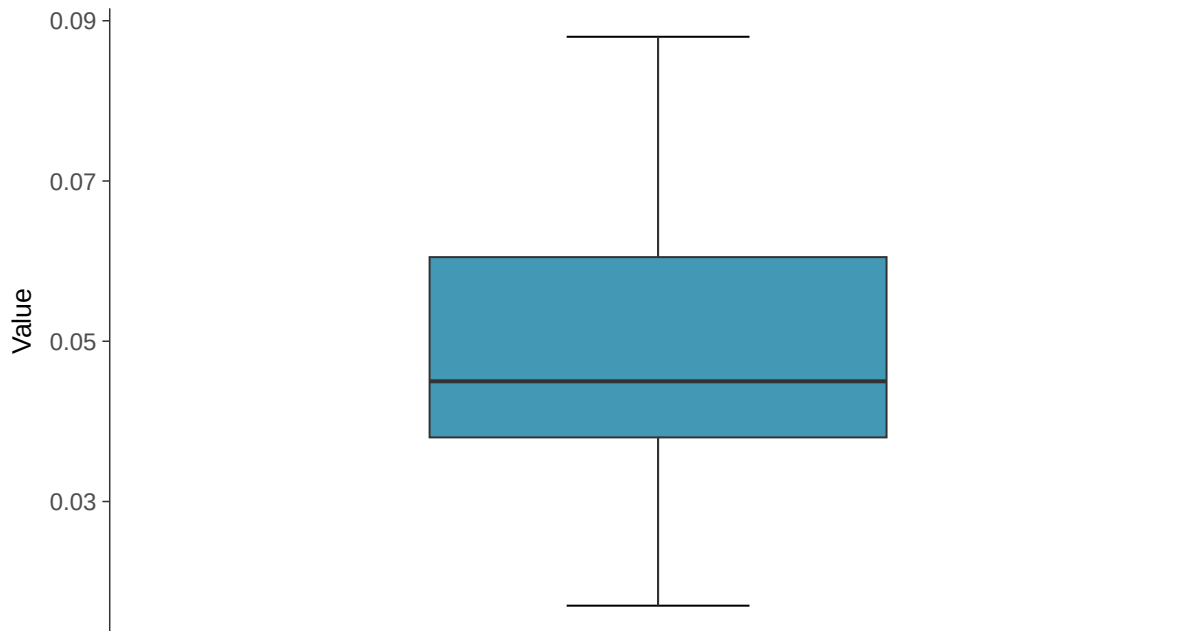
Part 115: Zinc, MW-18

ID: 28_1_5_129



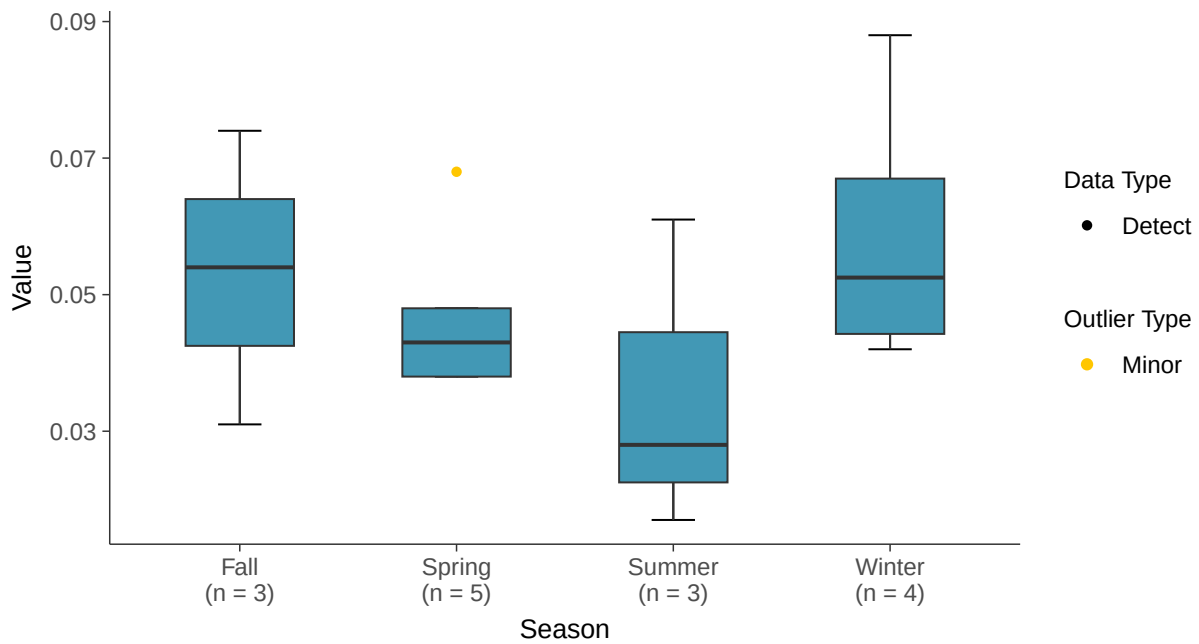
Boxplot

Zinc, MW-18 (mg/L)



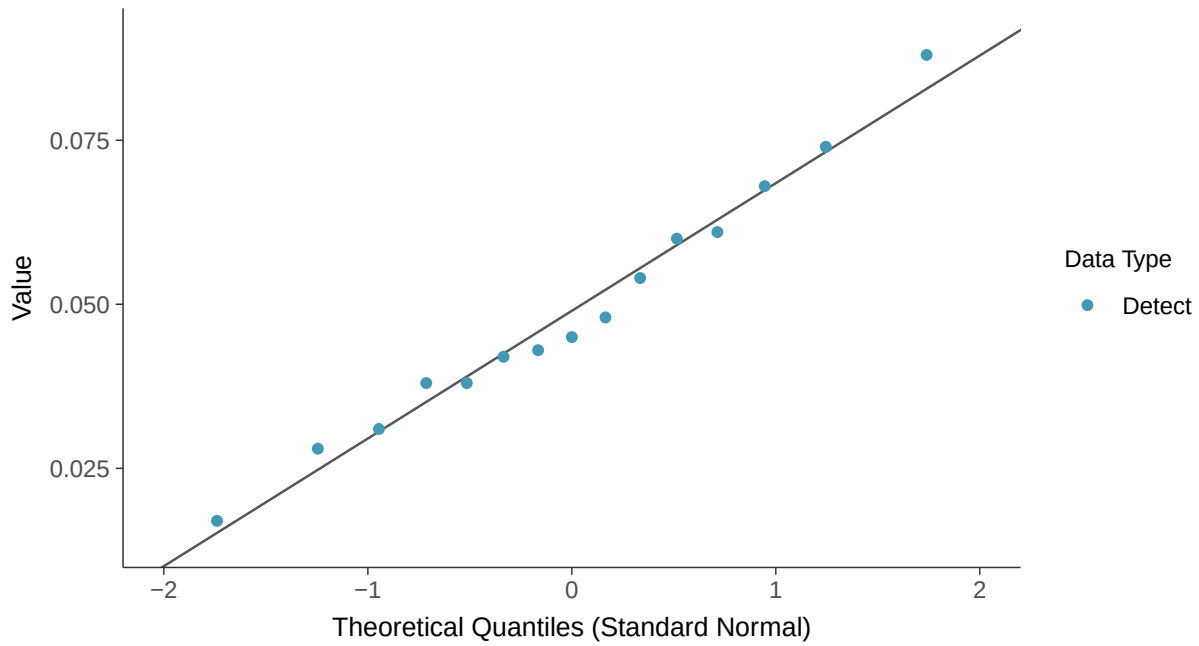
Boxplot by Season

Zinc, MW-18 (mg/L)



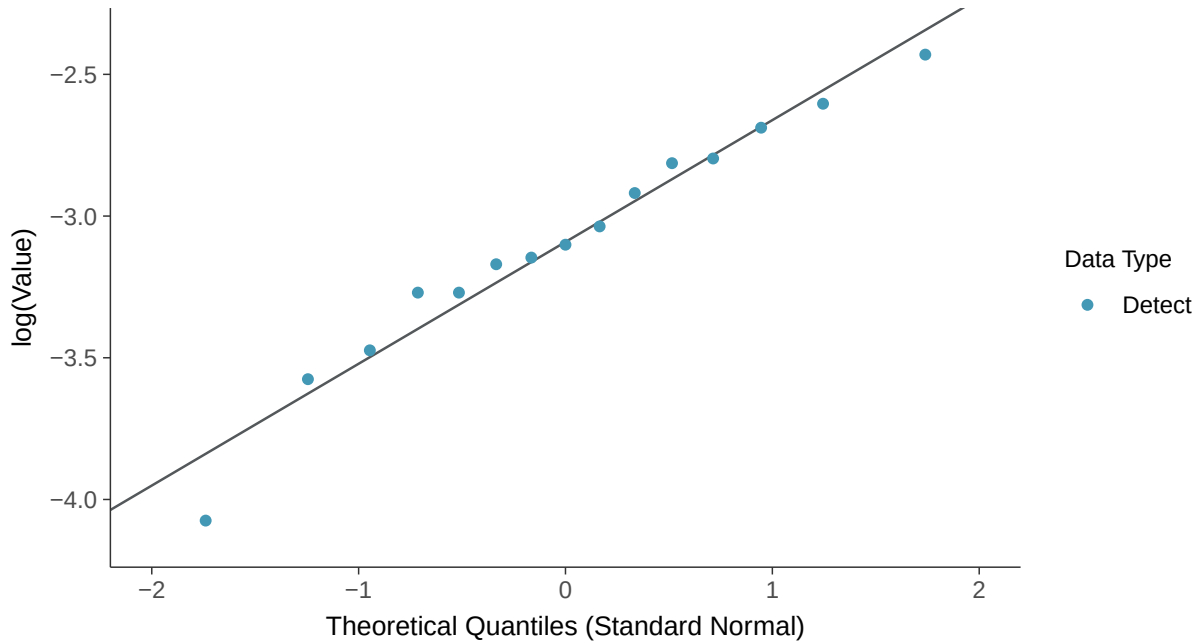
Normal Q-Q plot

Zinc, MW-18 (mg/L)



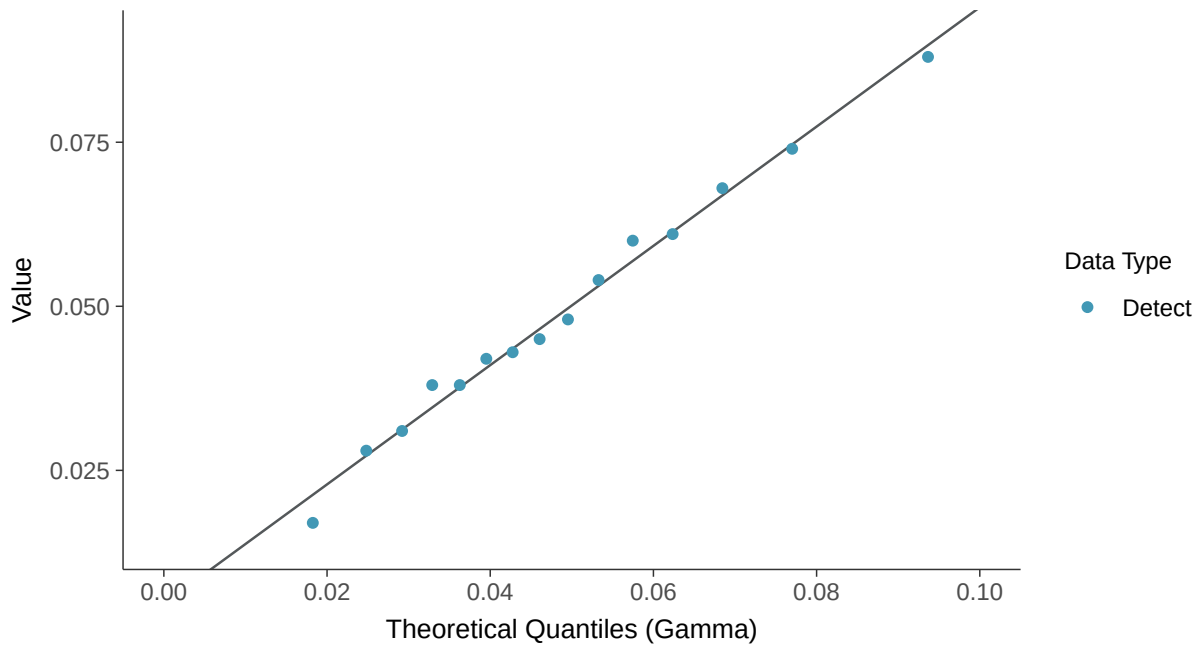
Lognormal Q-Q plot

Zinc, MW-18 (mg/L)



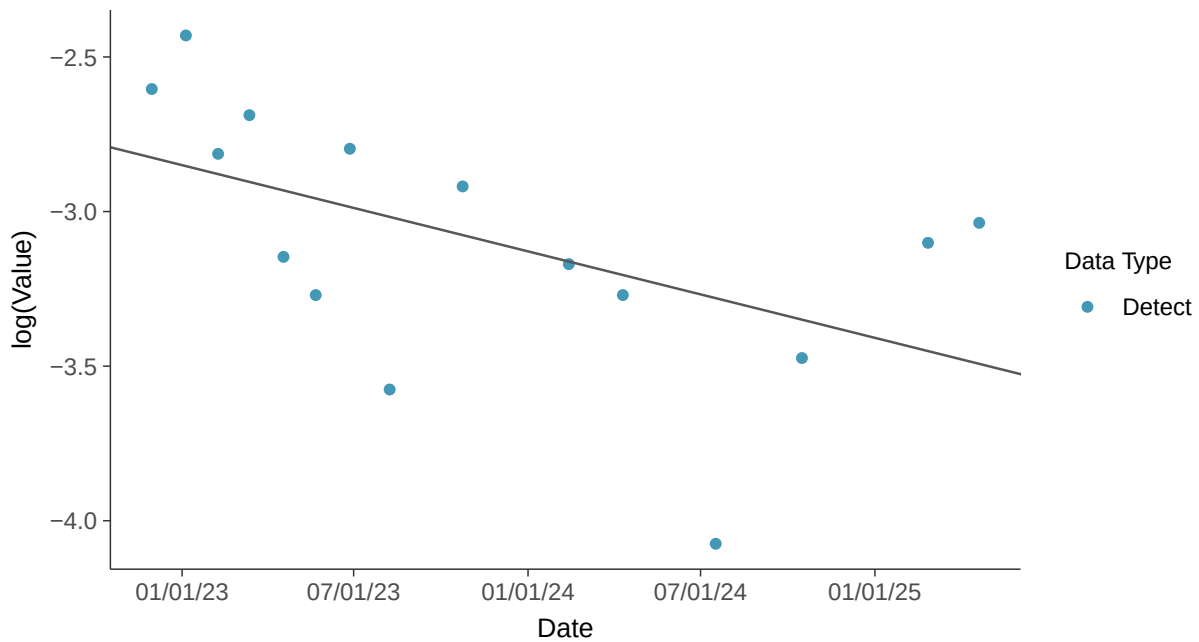
Gamma Q-Q plot

Zinc, MW-18 (mg/L)



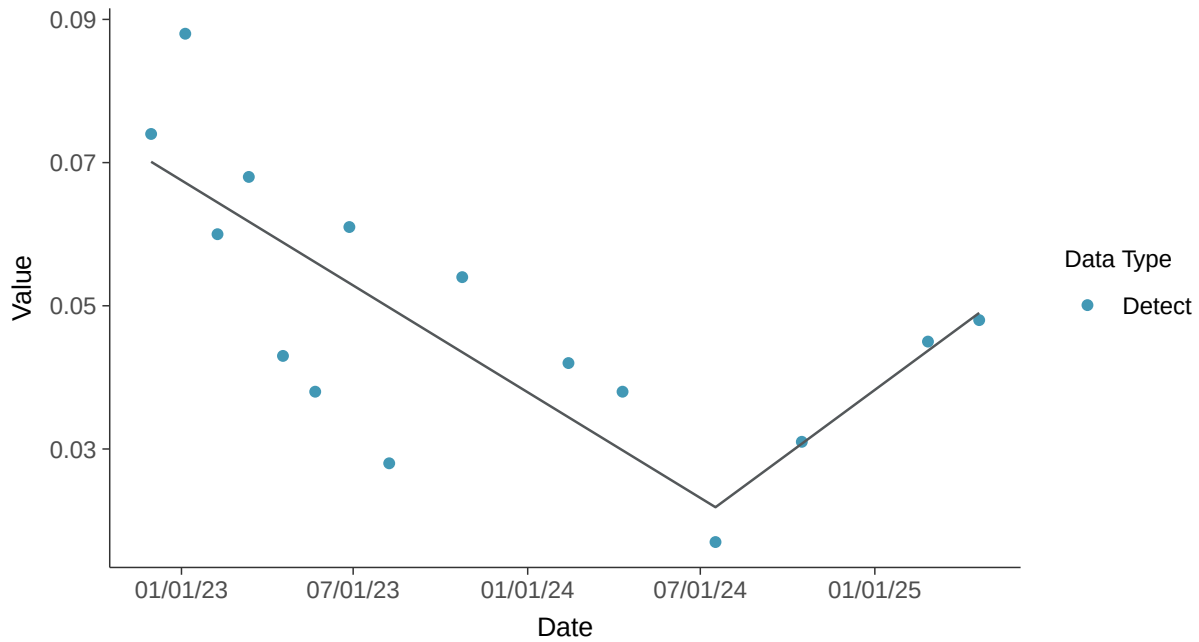
Trend Regression: Lognormal MLE

Zinc, MW-18 (mg/L)



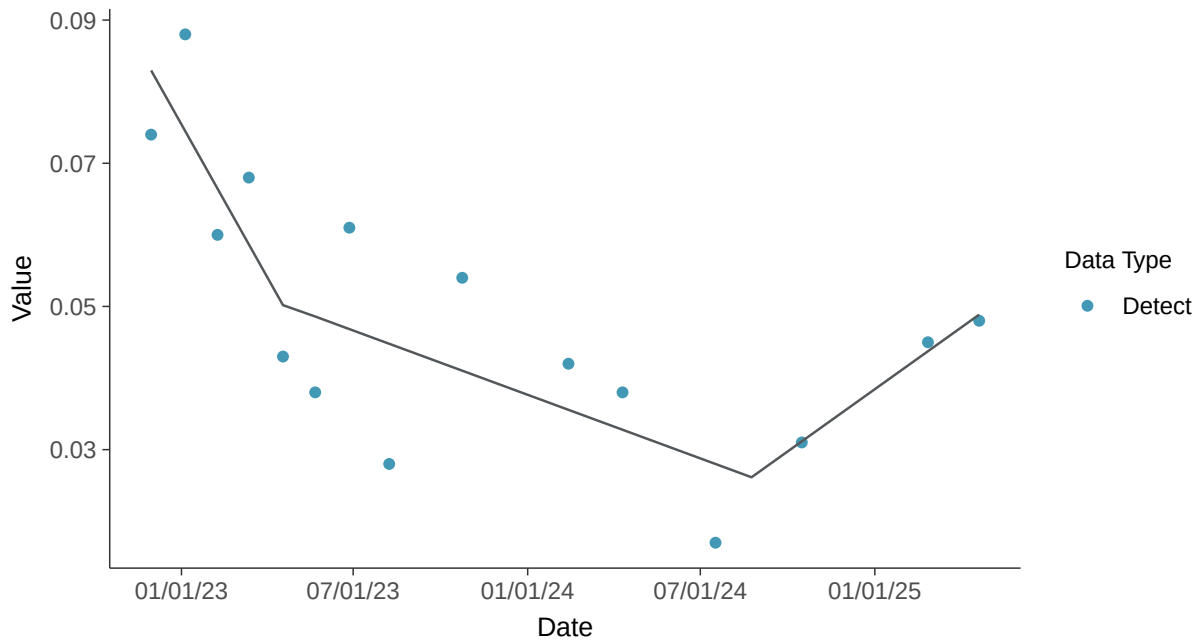
Trend Regression: Piecewise Linear-Linear

Zinc, MW-18 (mg/L)



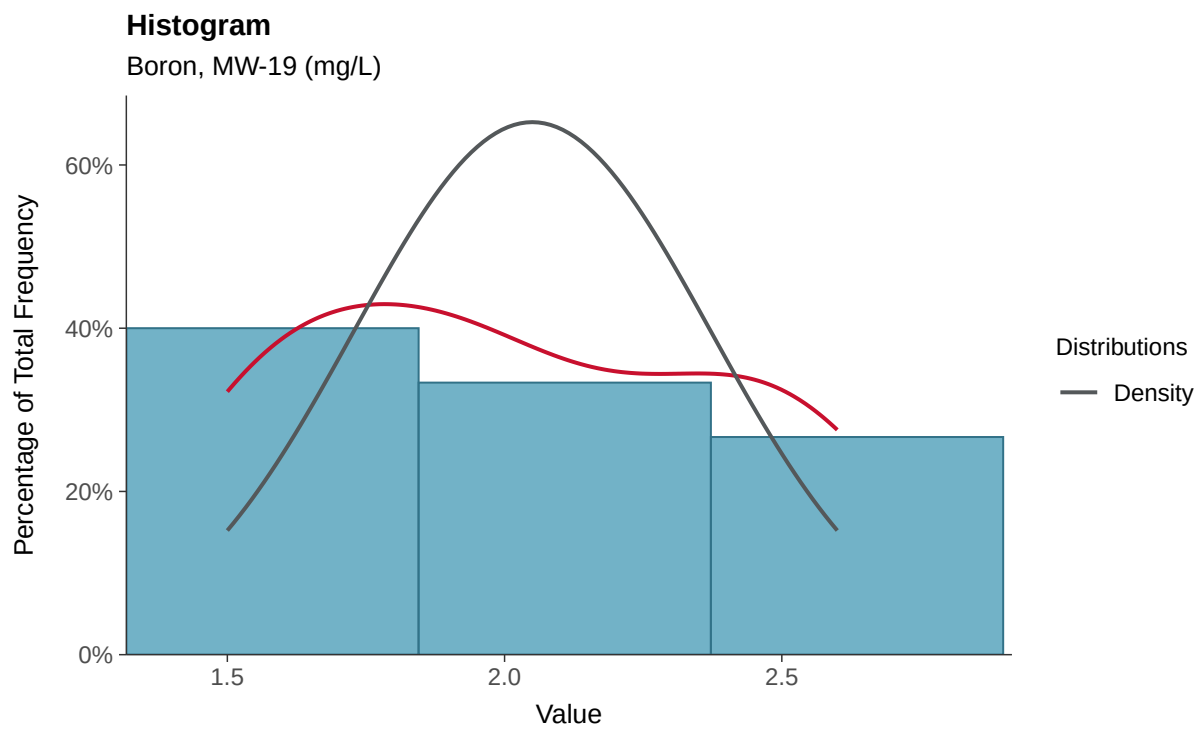
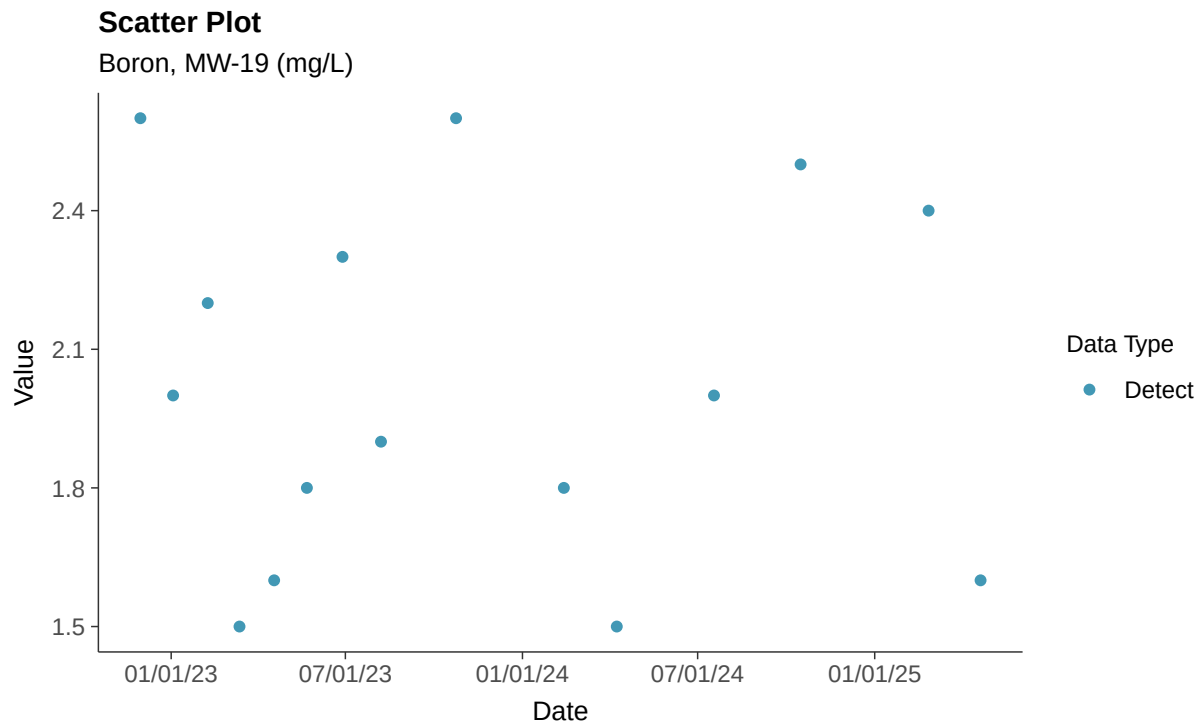
Trend Regression: Piecewise Linear-Linear-Linear

Zinc, MW-18 (mg/L)



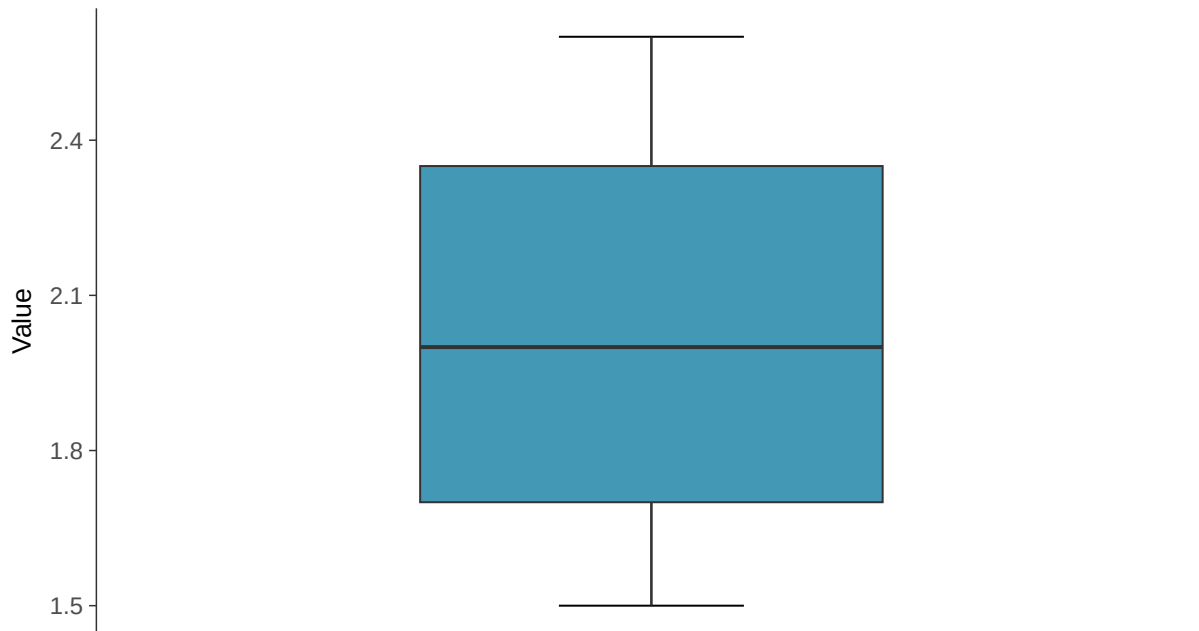
Appendix III: Boron, MW-19

ID: 29_1_3_105



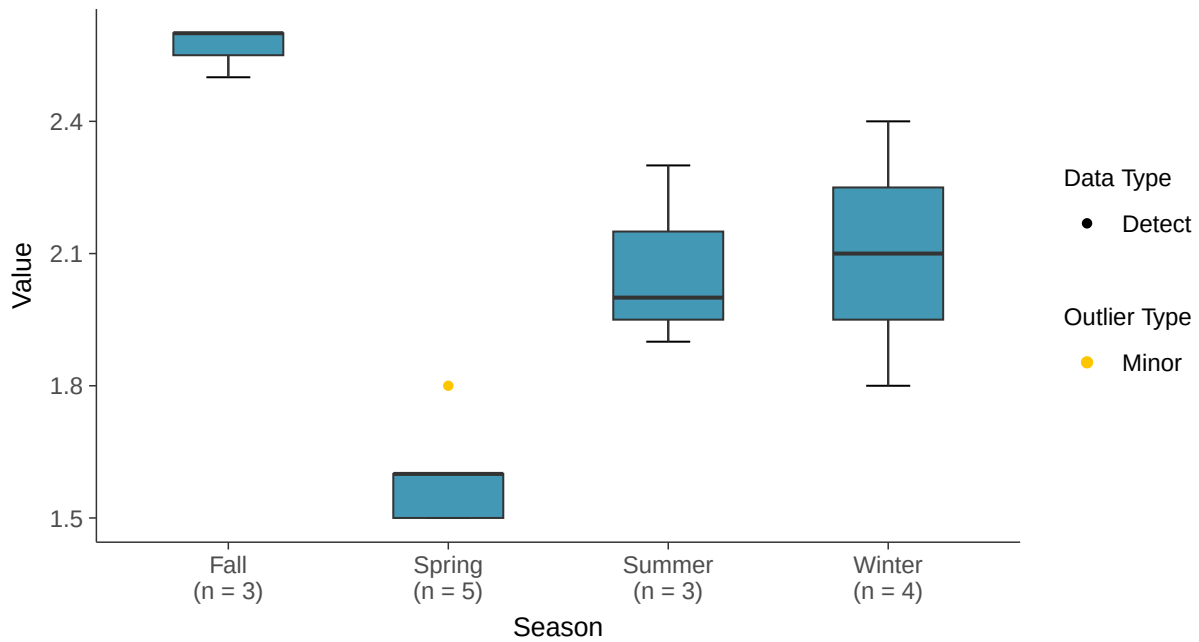
Boxplot

Boron, MW-19 (mg/L)

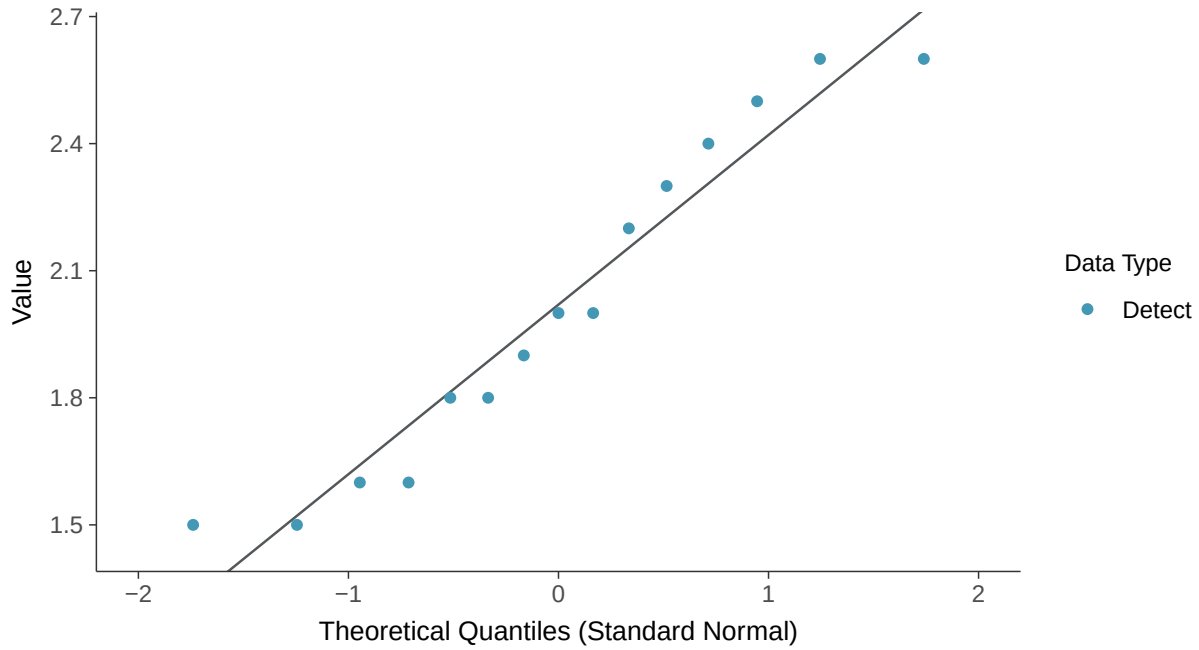


Boxplot by Season

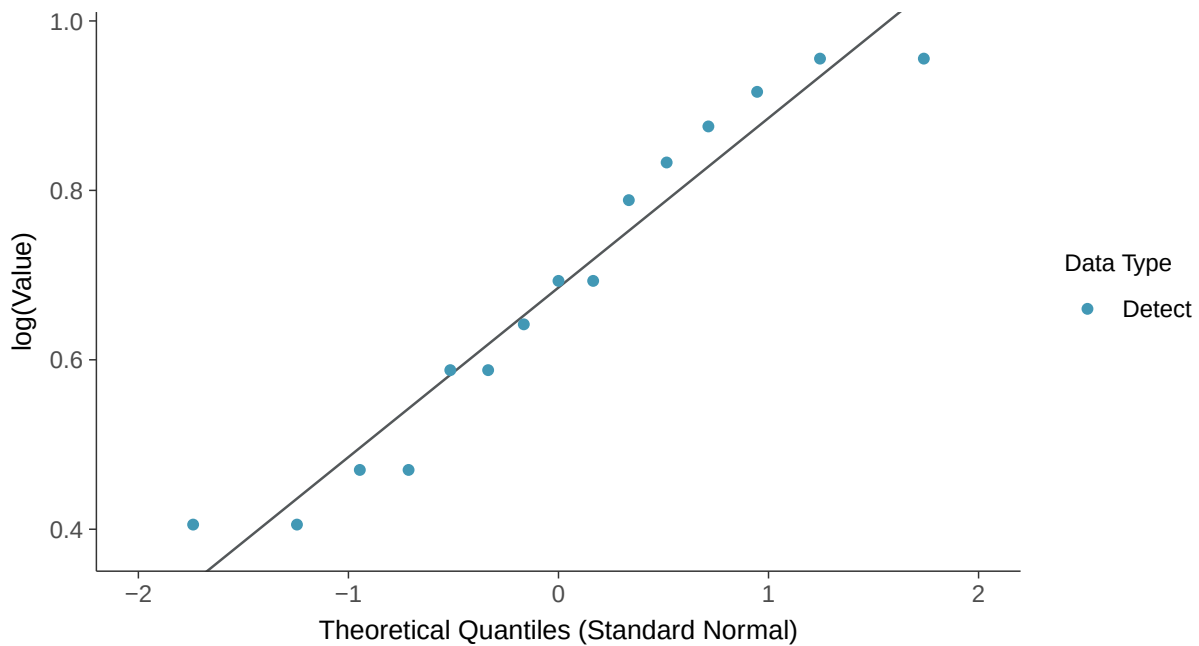
Boron, MW-19 (mg/L)



Normal Q-Q plot
Boron, MW-19 (mg/L)

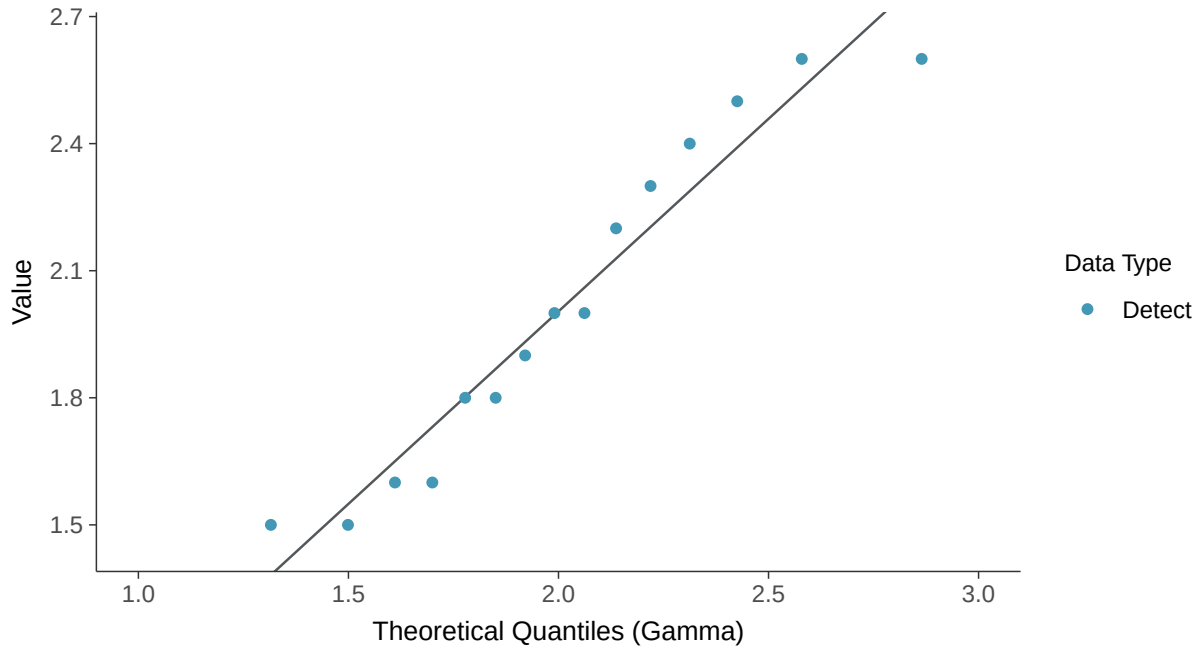


Lognormal Q-Q plot
Boron, MW-19 (mg/L)



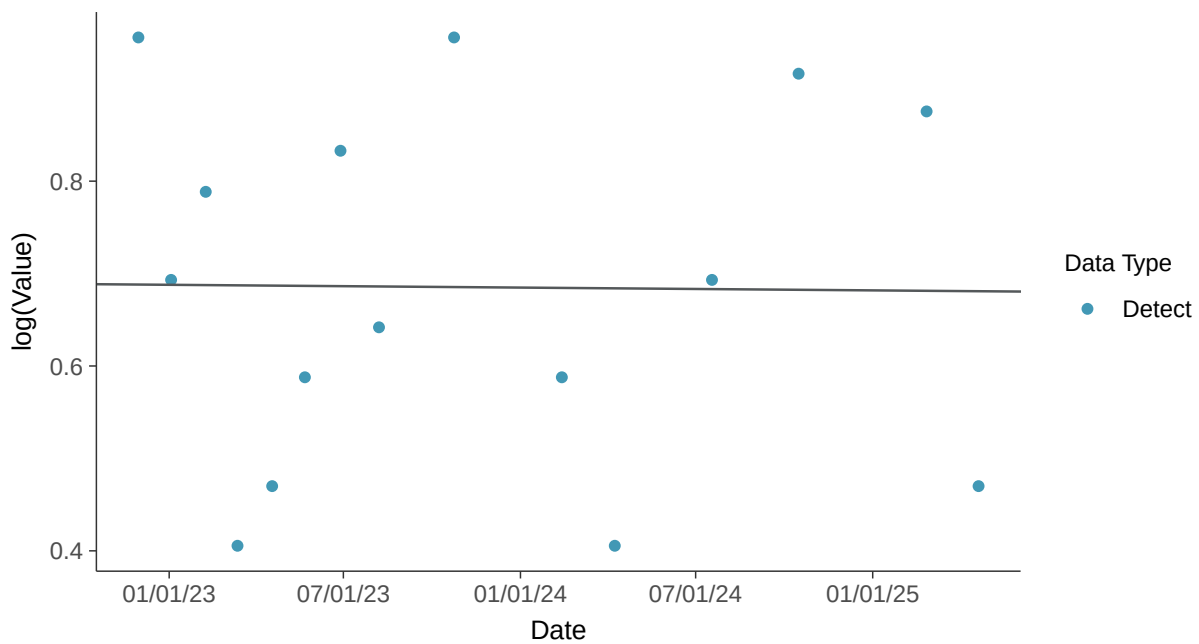
Gamma Q-Q plot

Boron, MW-19 (mg/L)



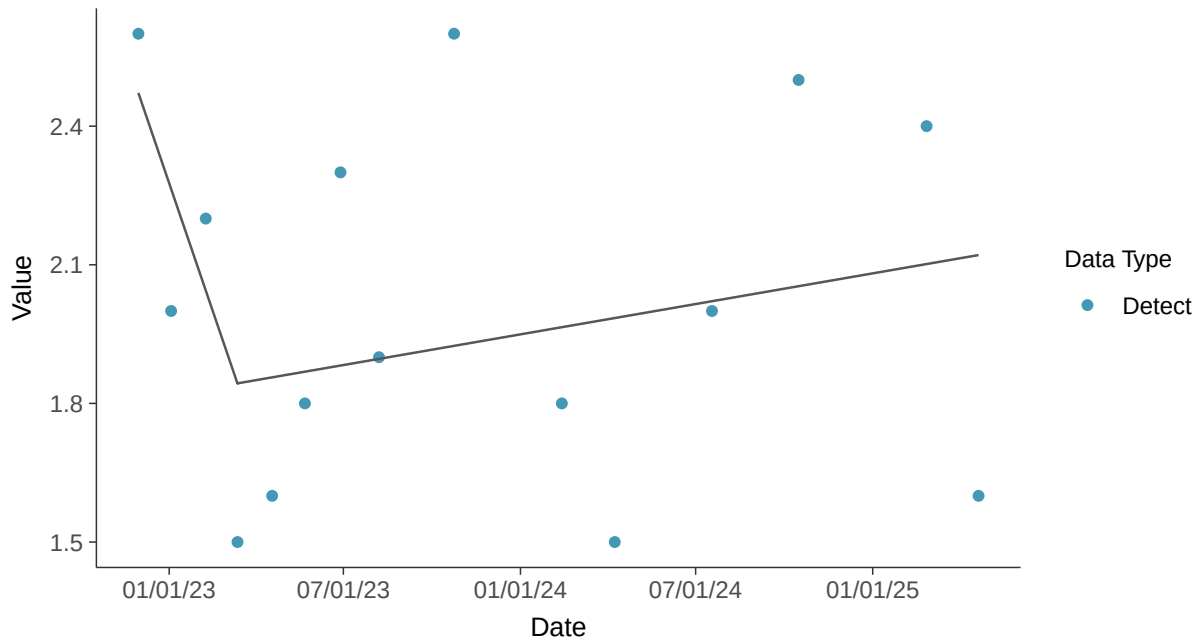
Trend Regression: Lognormal MLE

Boron, MW-19 (mg/L)



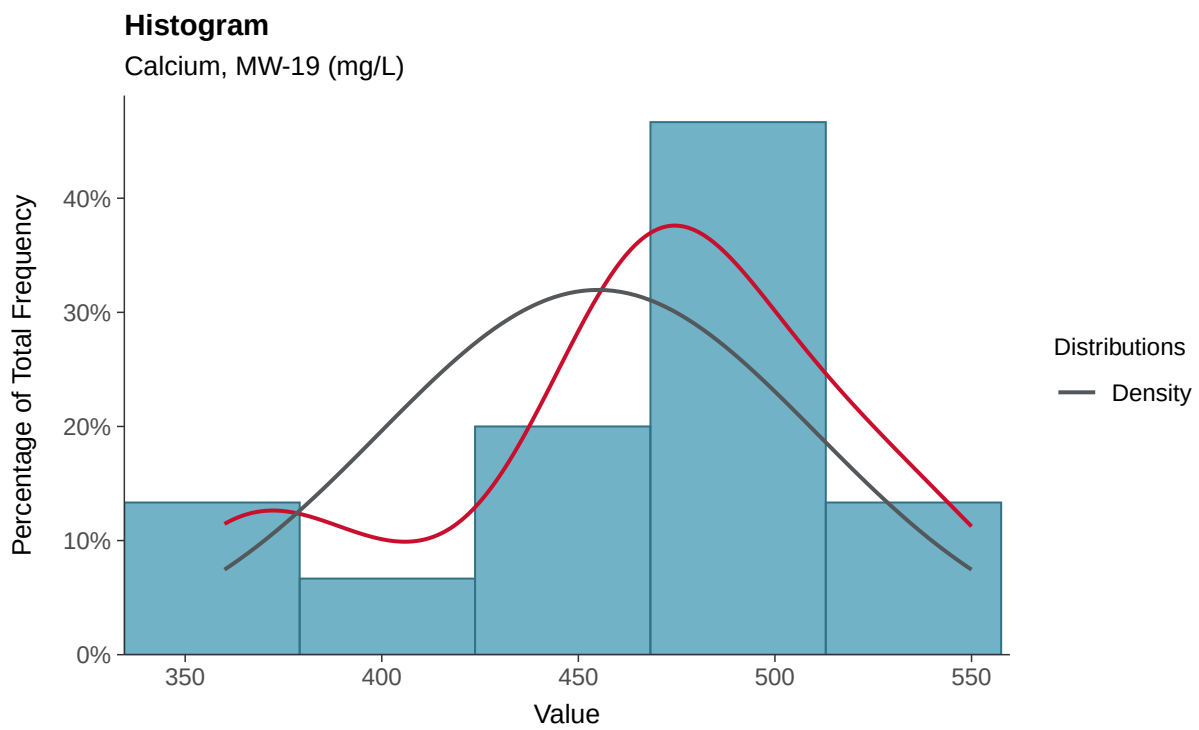
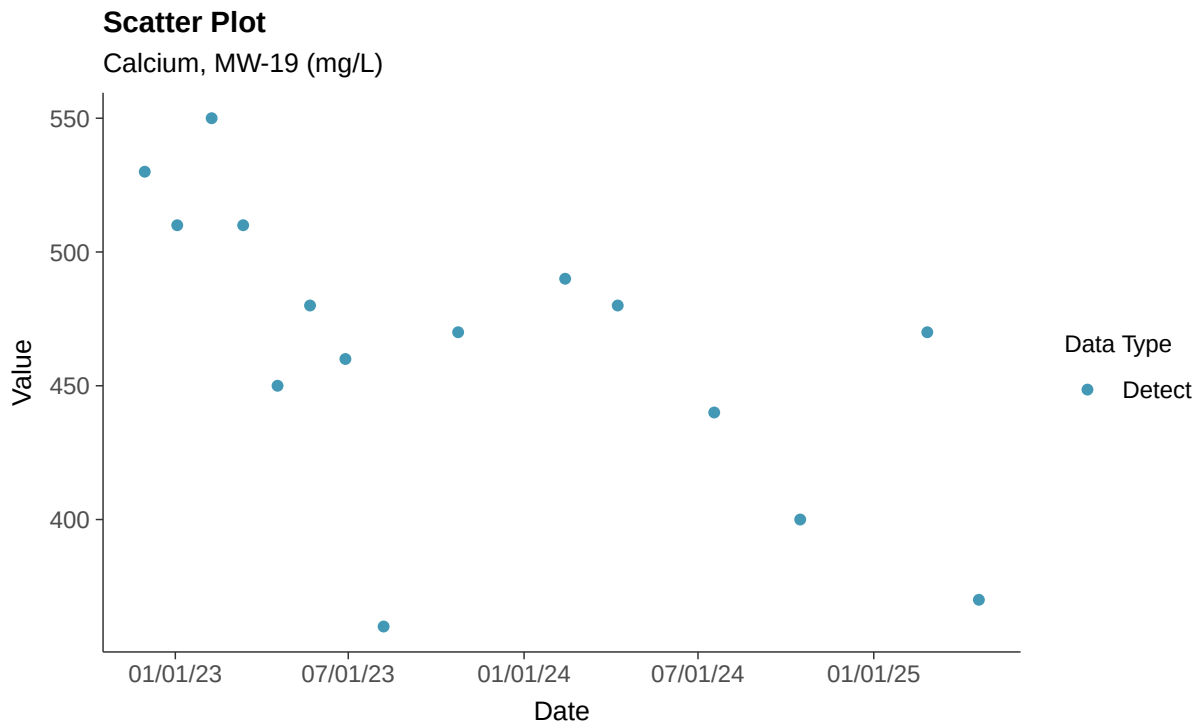


Trend Regression: Piecewise Linear-Linear
Boron, MW-19 (mg/L)



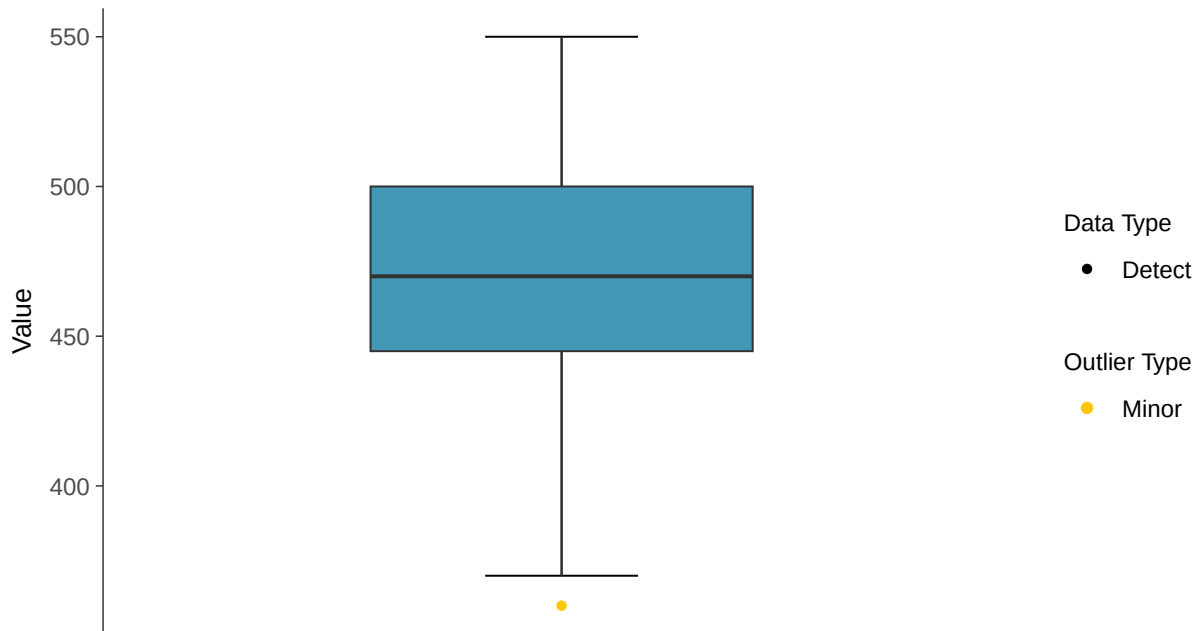
Appendix III: Calcium, MW-19

ID: 29_1_3_107



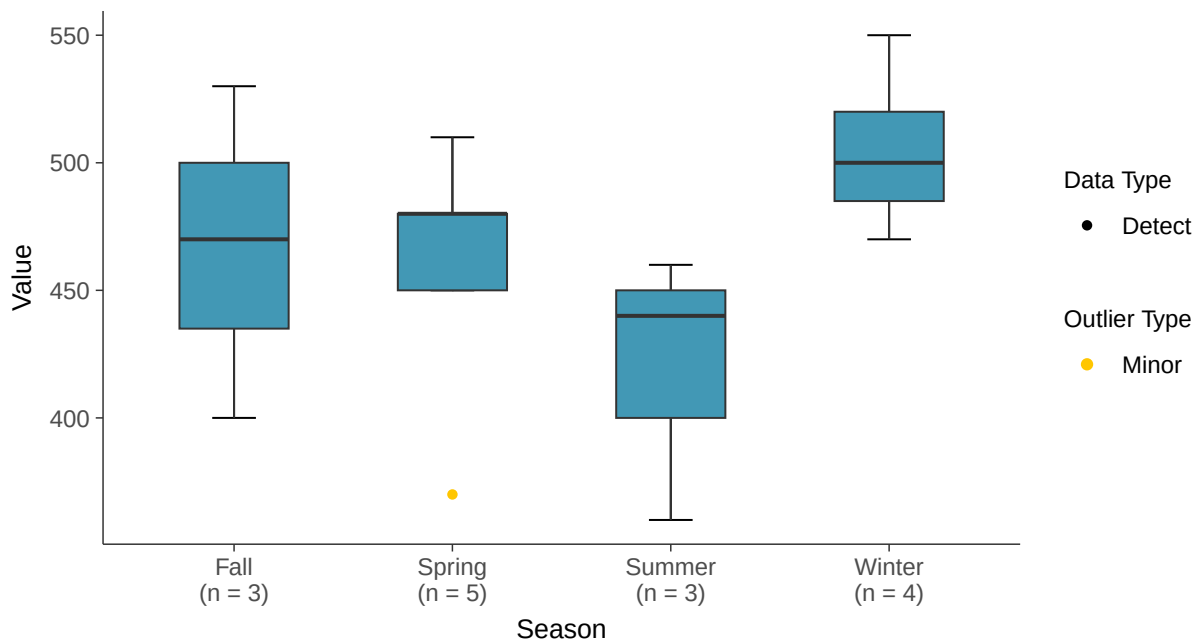
Boxplot

Calcium, MW-19 (mg/L)



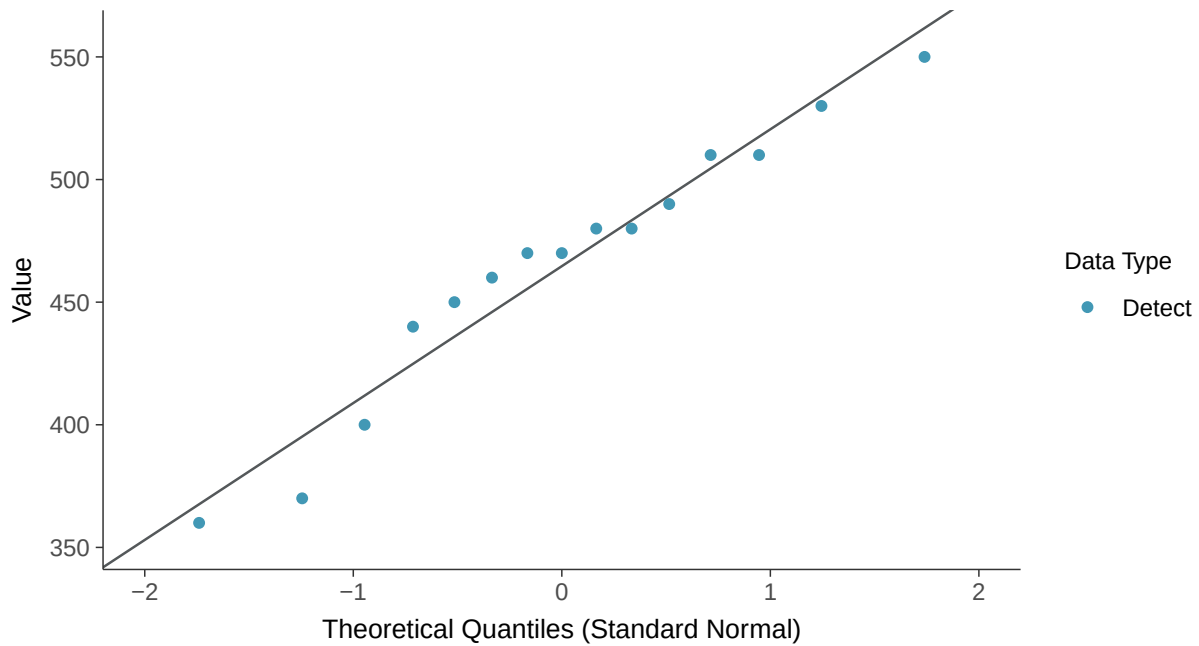
Boxplot by Season

Calcium, MW-19 (mg/L)



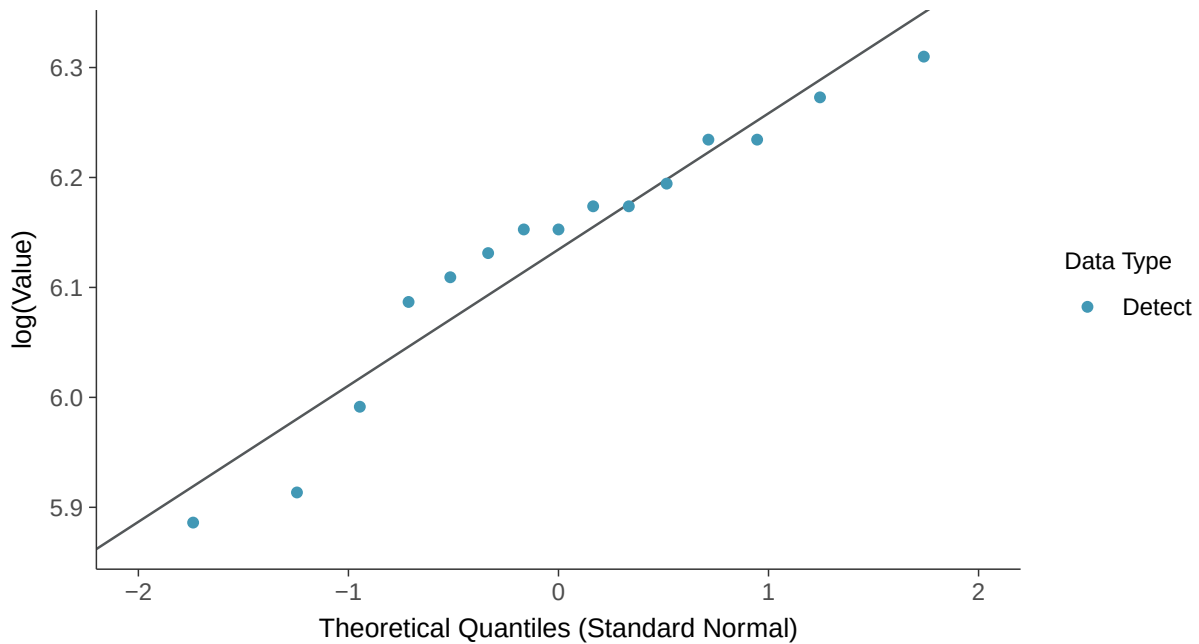
Normal Q-Q plot

Calcium, MW-19 (mg/L)



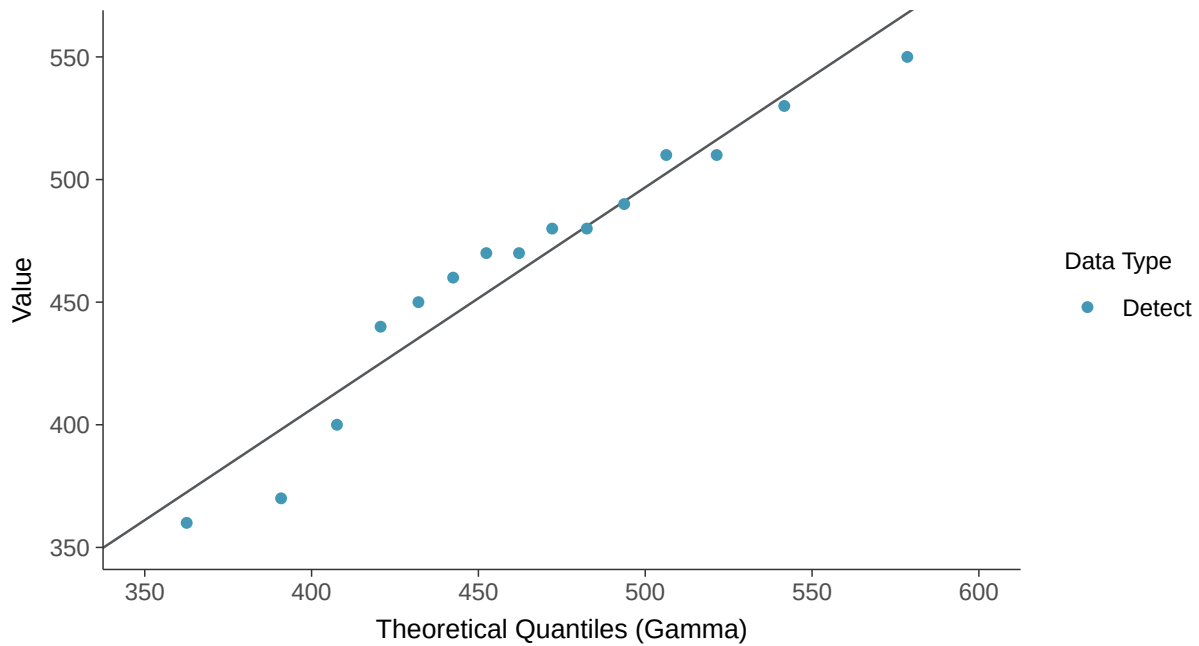
Lognormal Q-Q plot

Calcium, MW-19 (mg/L)



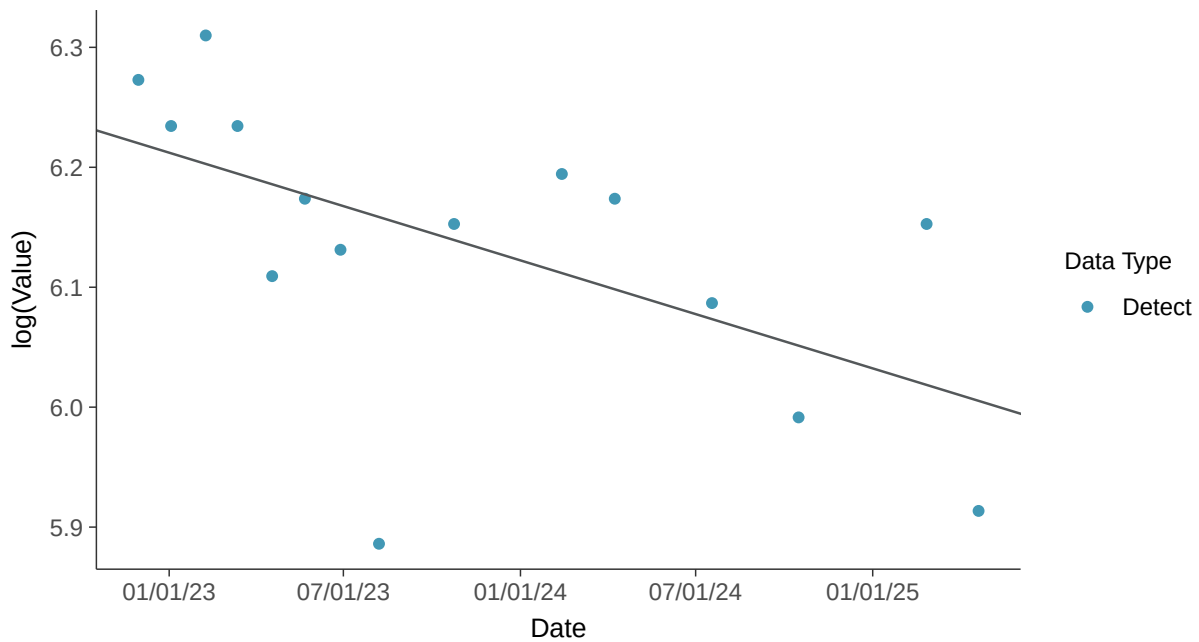
Gamma Q-Q plot

Calcium, MW-19 (mg/L)



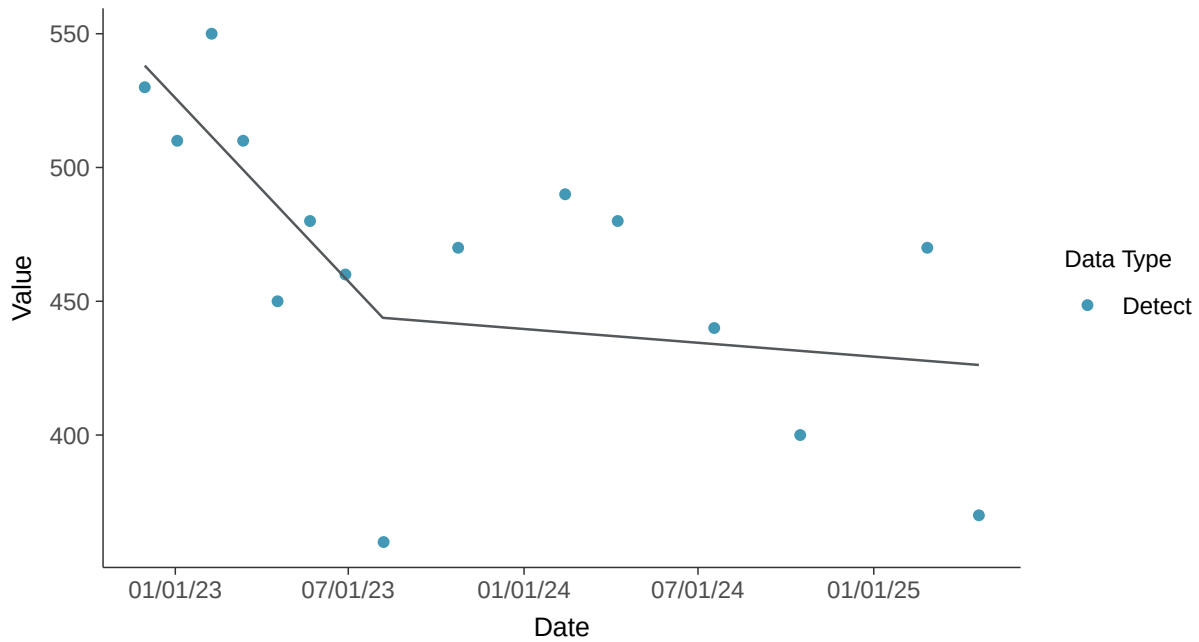
Trend Regression: Lognormal MLE

Calcium, MW-19 (mg/L)



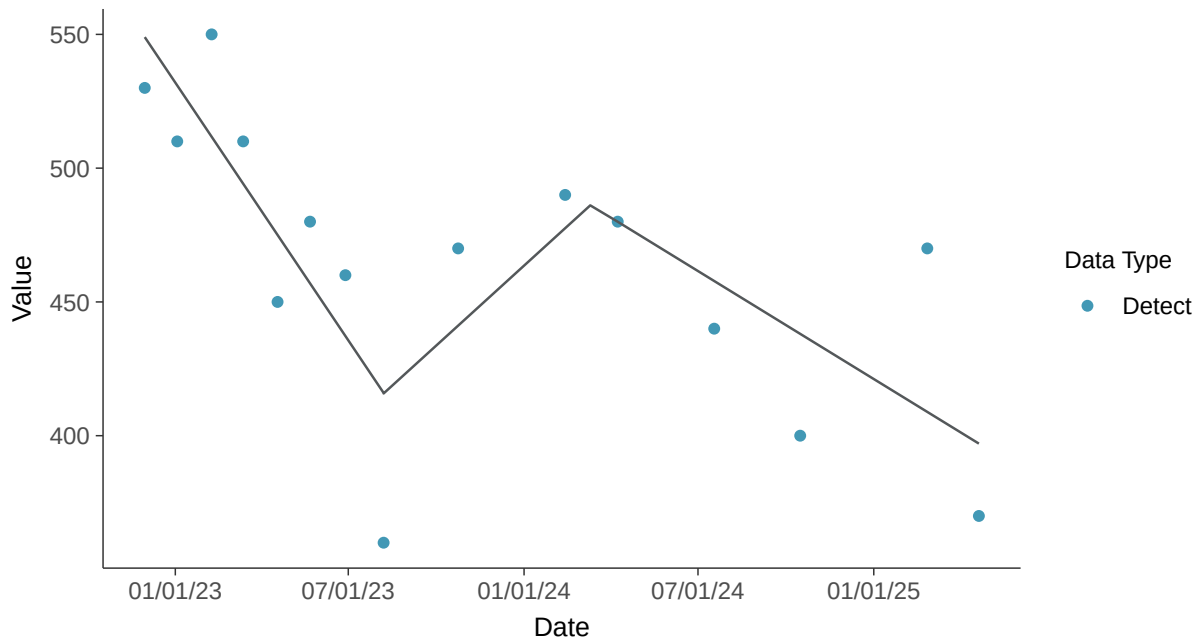
Trend Regression: Piecewise Linear-Linear

Calcium, MW-19 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Calcium, MW-19 (mg/L)

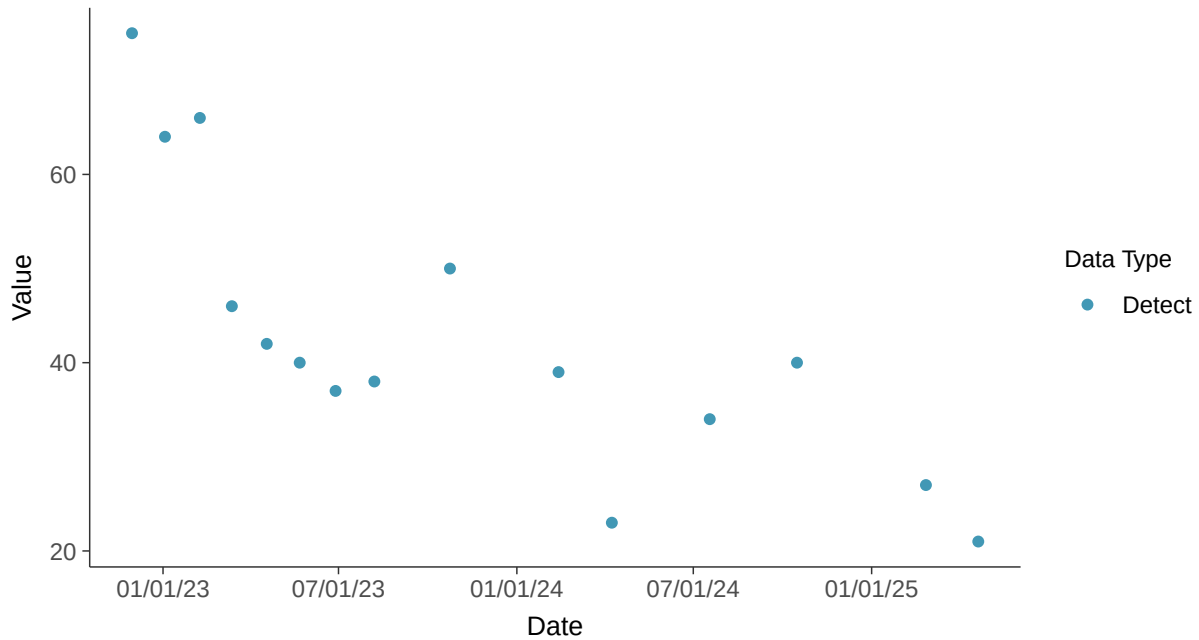


Appendix III: Chloride (as Cl), MW-19

ID: 29_1_3_108

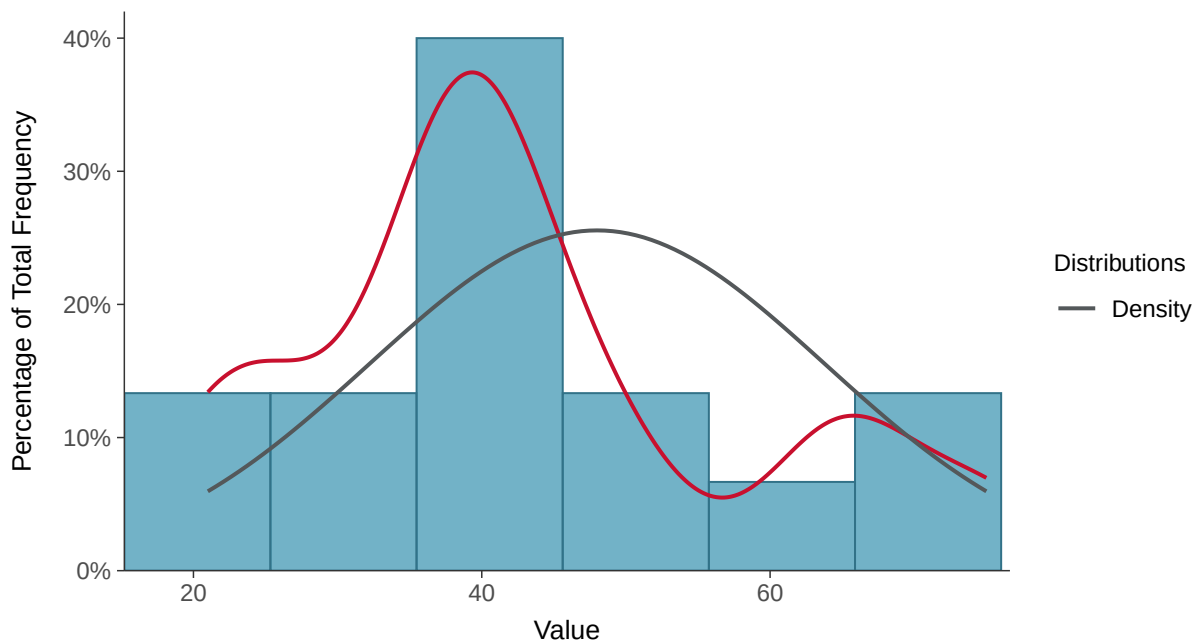
Scatter Plot

Chloride (as Cl), MW-19 (mg/L)



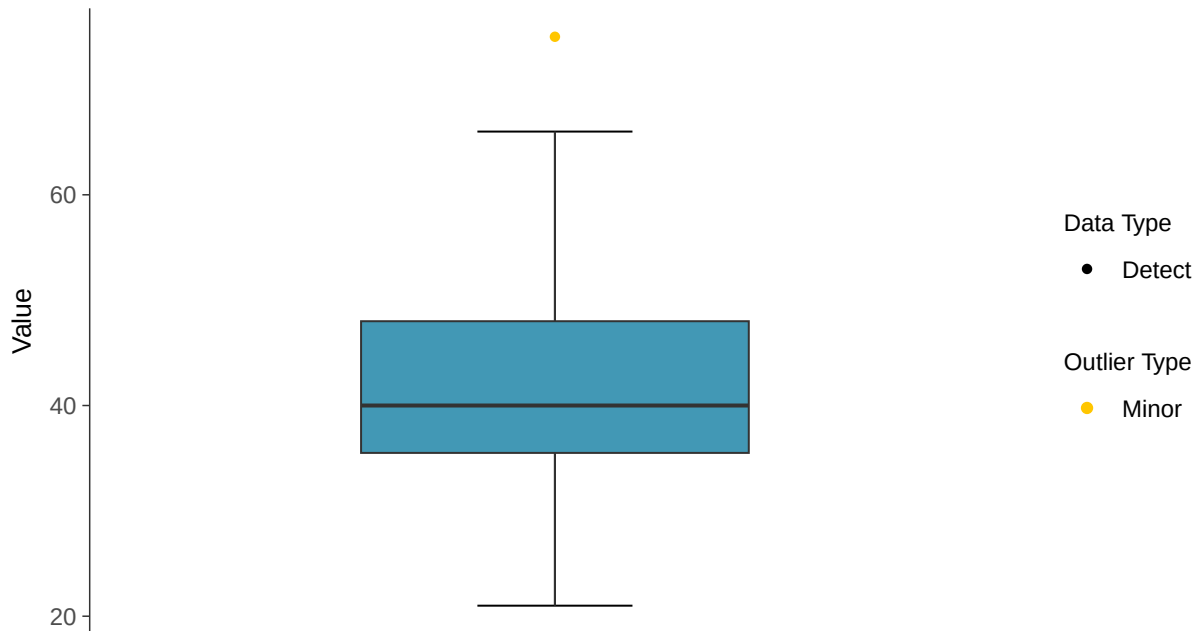
Histogram

Chloride (as Cl), MW-19 (mg/L)



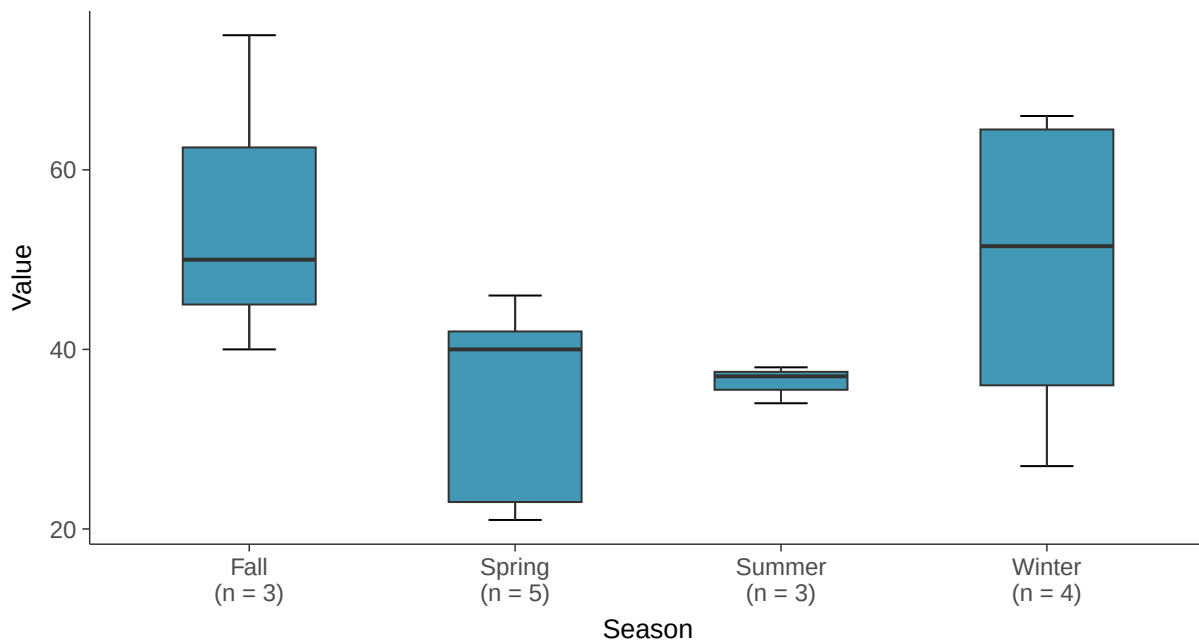
Boxplot

Chloride (as Cl), MW-19 (mg/L)



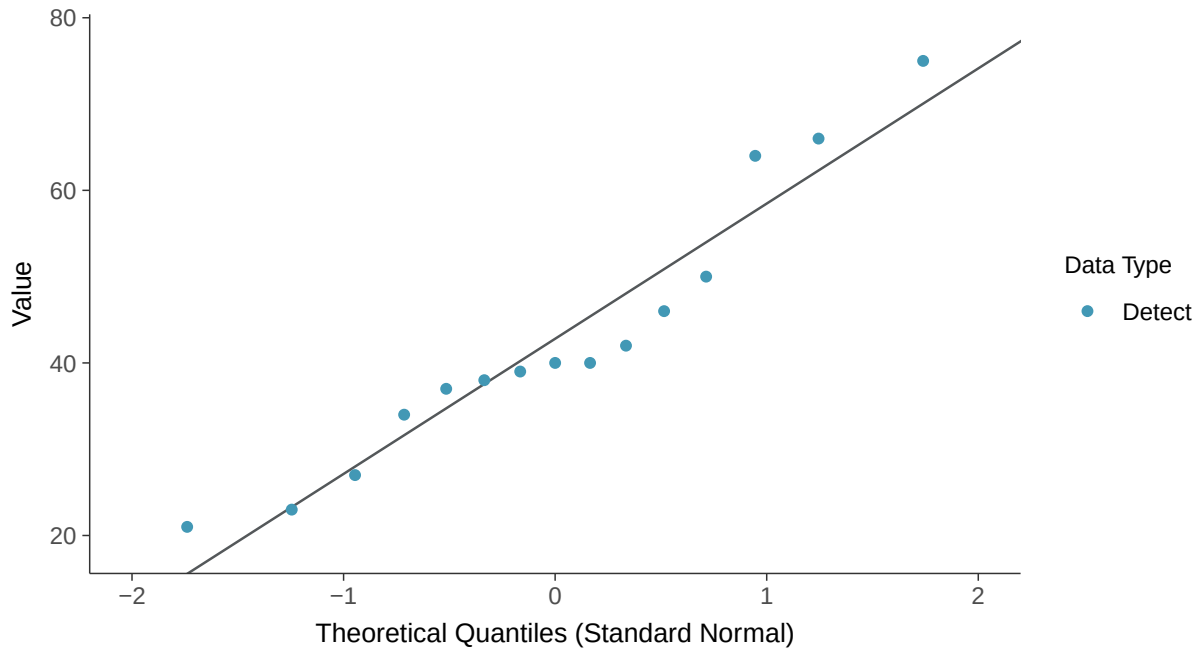
Boxplot by Season

Chloride (as Cl), MW-19 (mg/L)



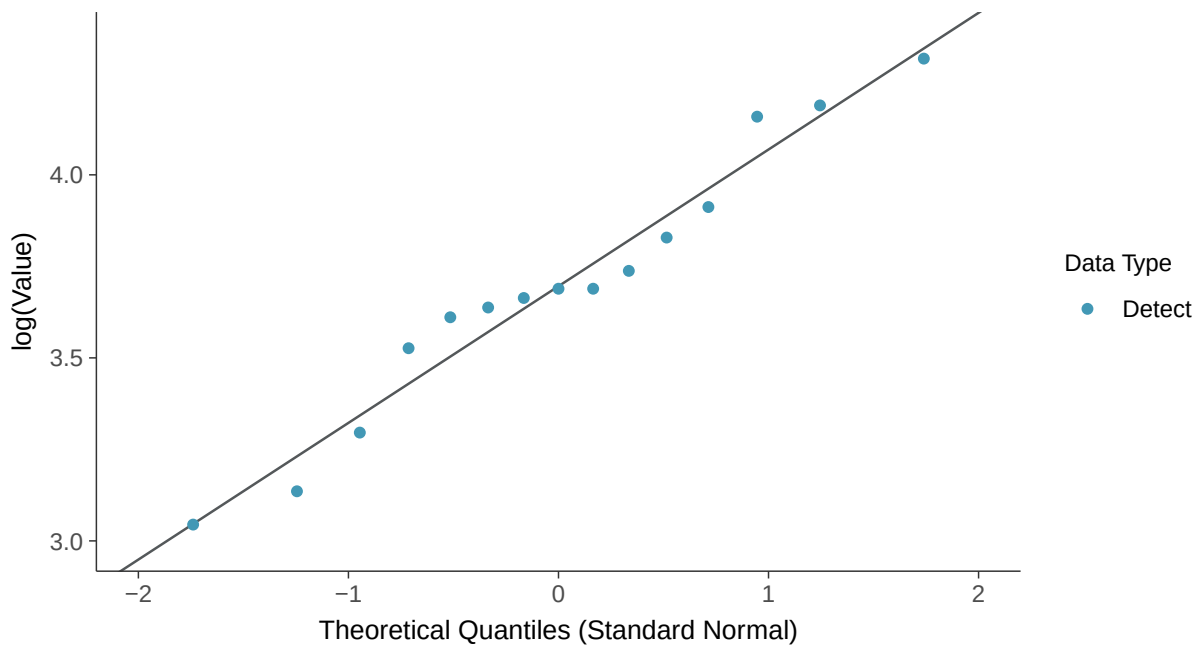
Normal Q-Q plot

Chloride (as Cl), MW-19 (mg/L)



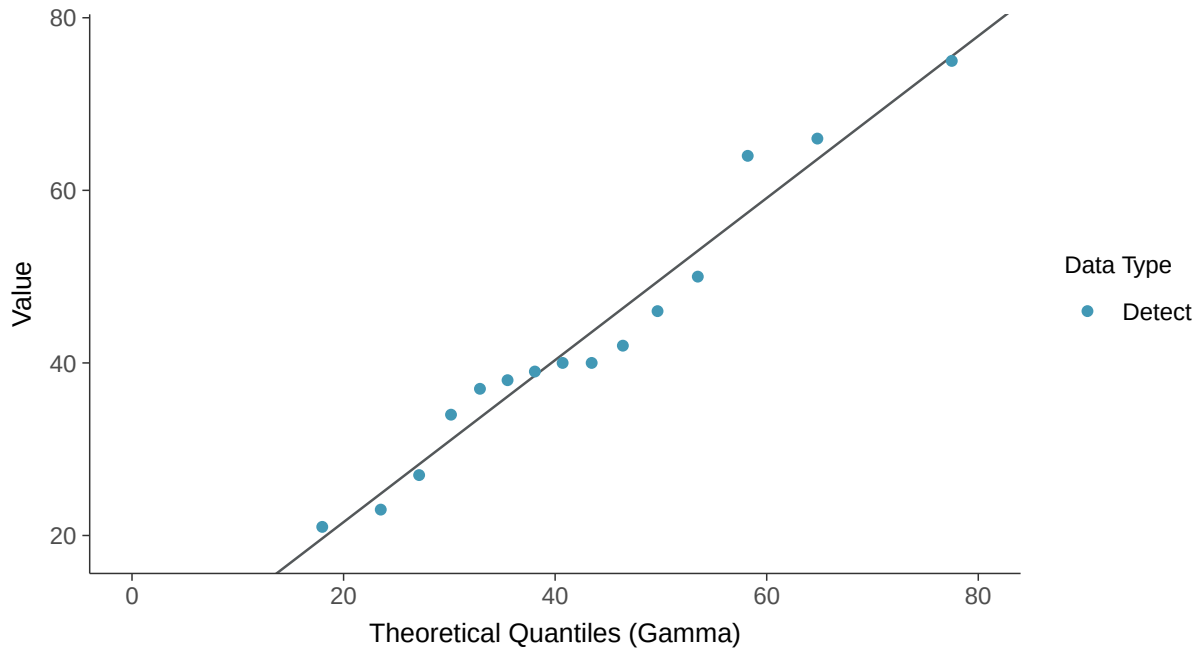
Lognormal Q-Q plot

Chloride (as Cl), MW-19 (mg/L)



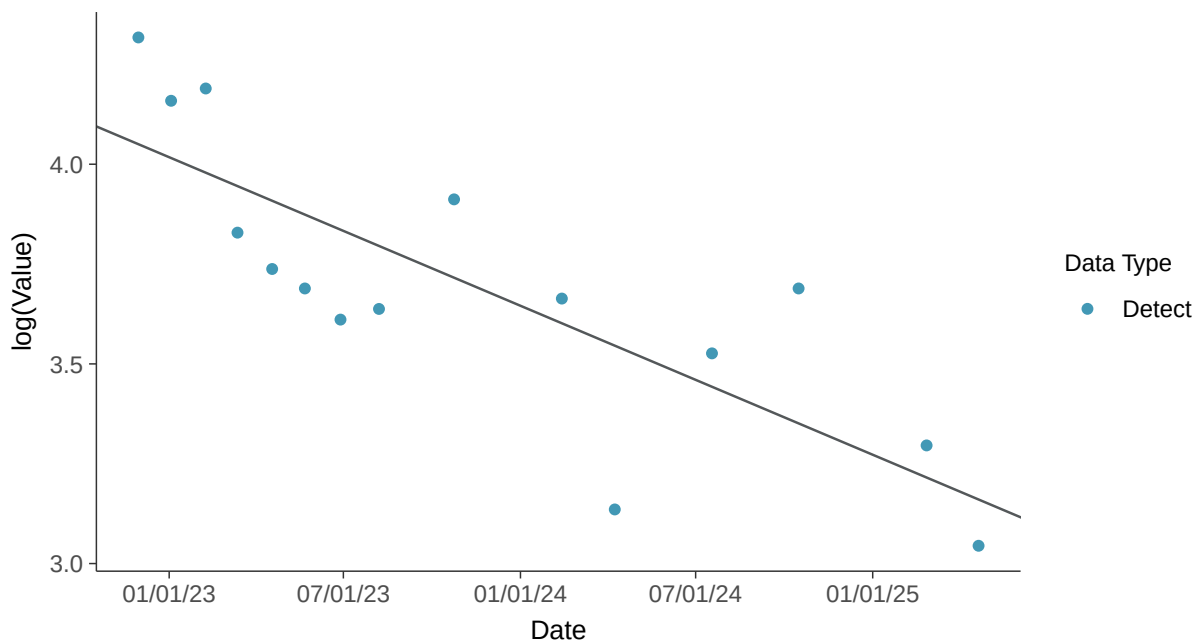
Gamma Q-Q plot

Chloride (as Cl), MW-19 (mg/L)



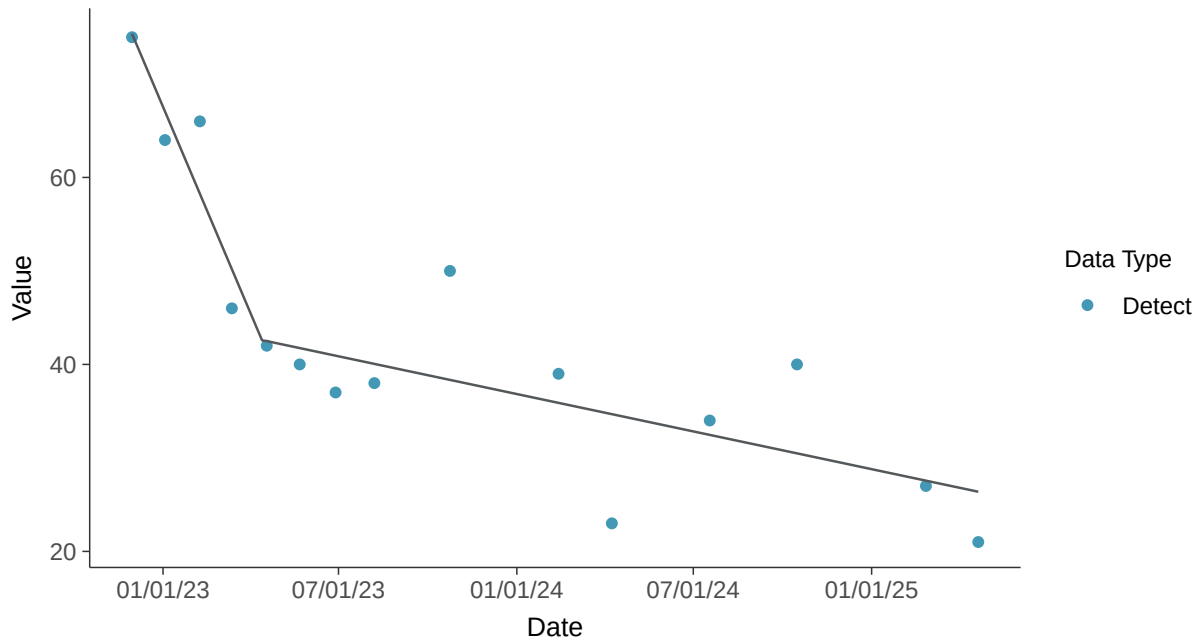
Trend Regression: Lognormal MLE

Chloride (as Cl), MW-19 (mg/L)



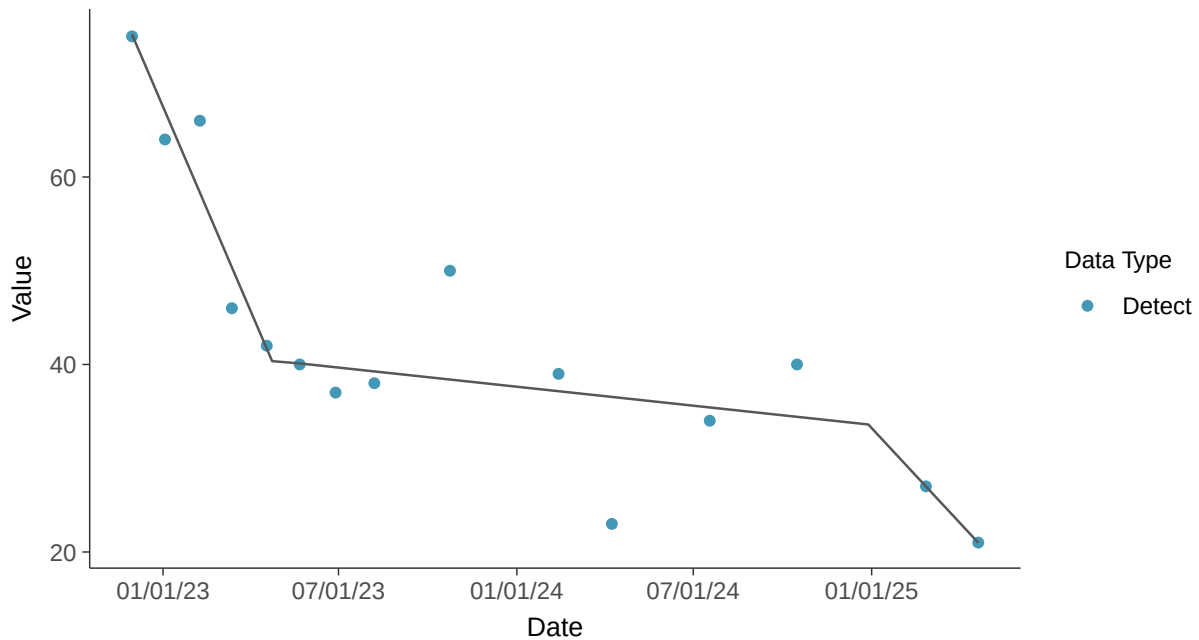
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-19 (mg/L)



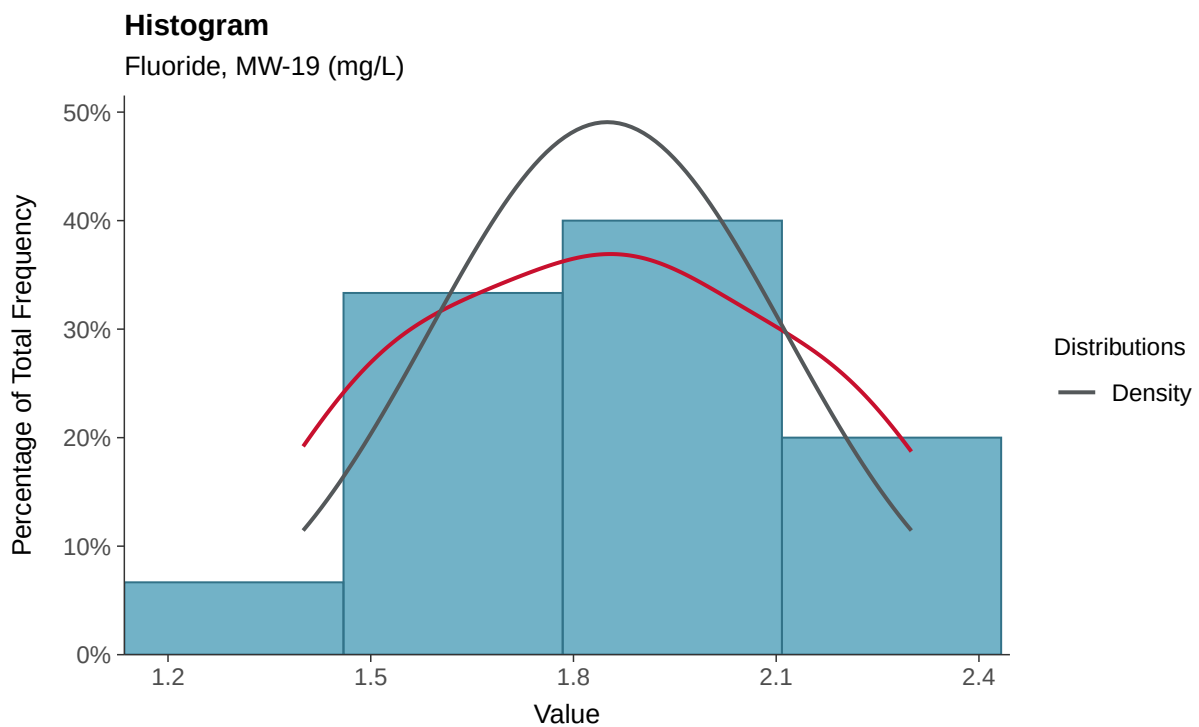
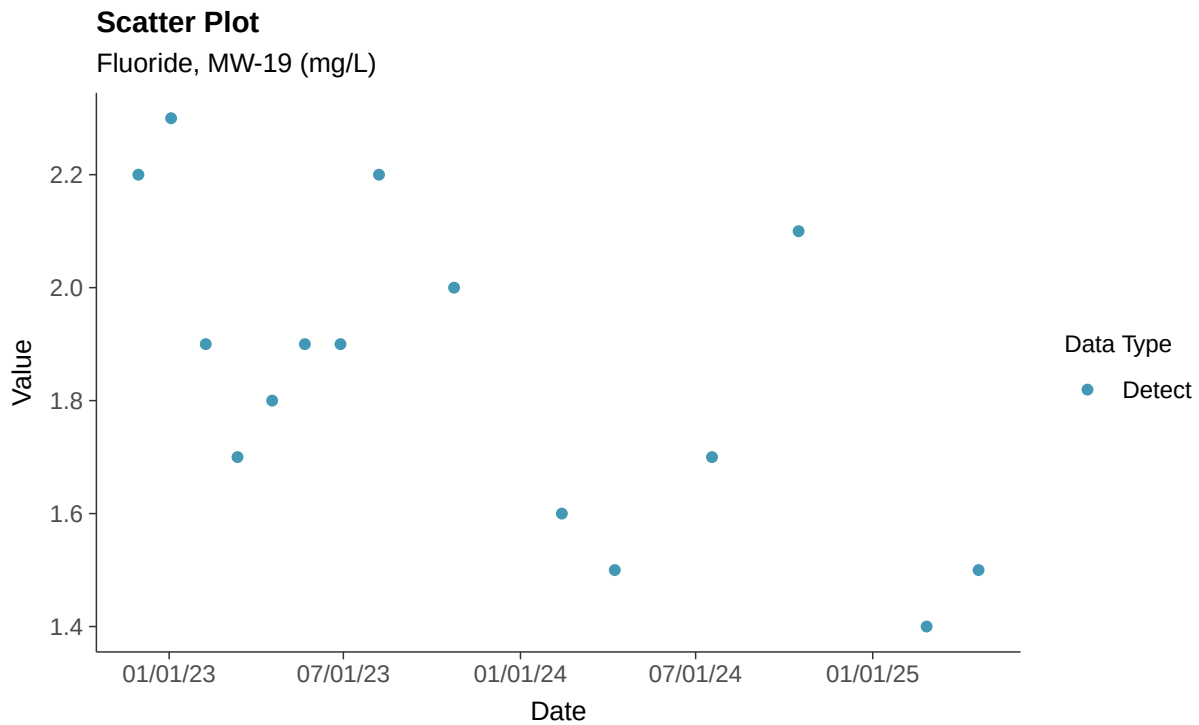
Trend Regression: Piecewise Linear-Linear-Linear

Chloride (as Cl), MW-19 (mg/L)



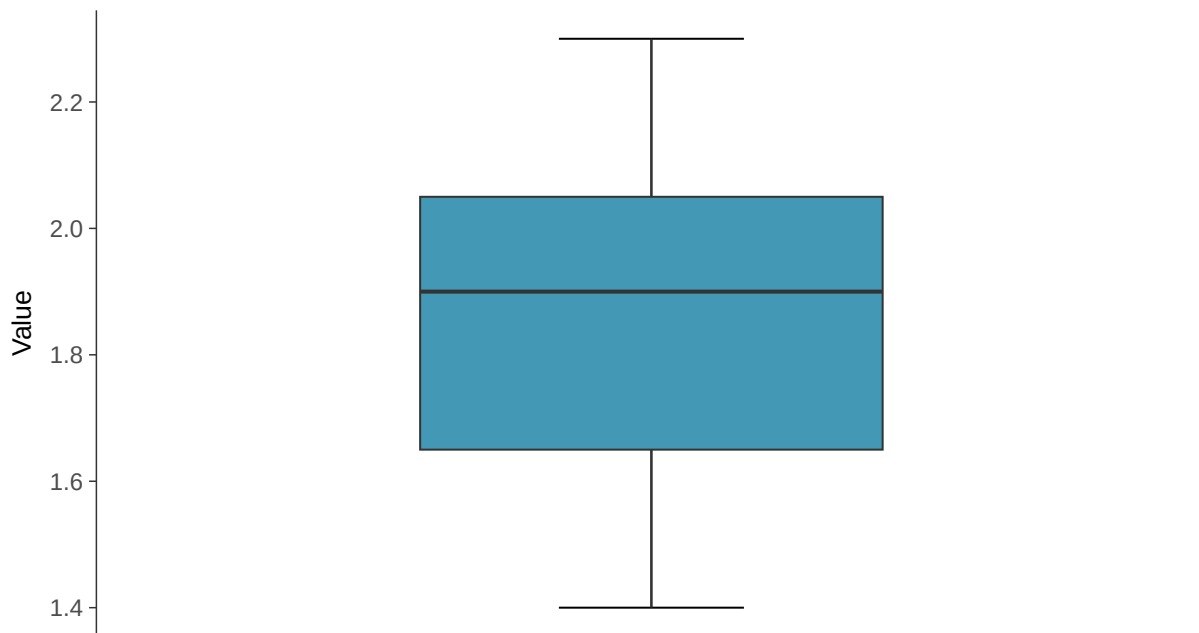
Appendix III: Fluoride, MW-19

ID: 29_1_3_112



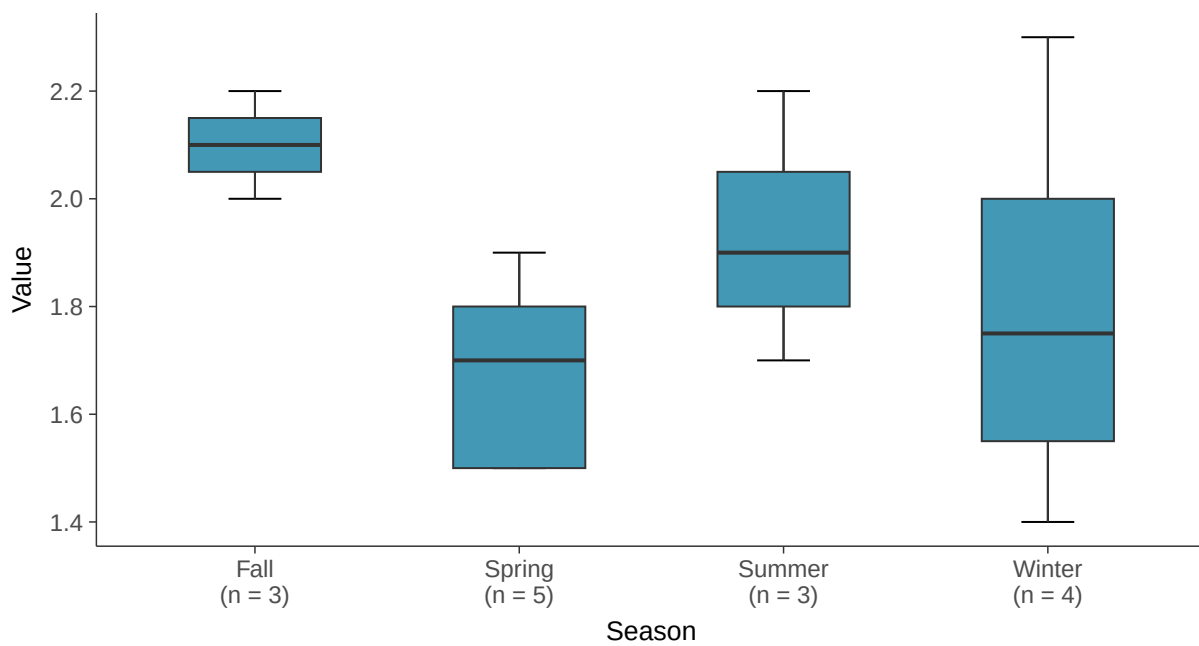
Boxplot

Fluoride, MW-19 (mg/L)

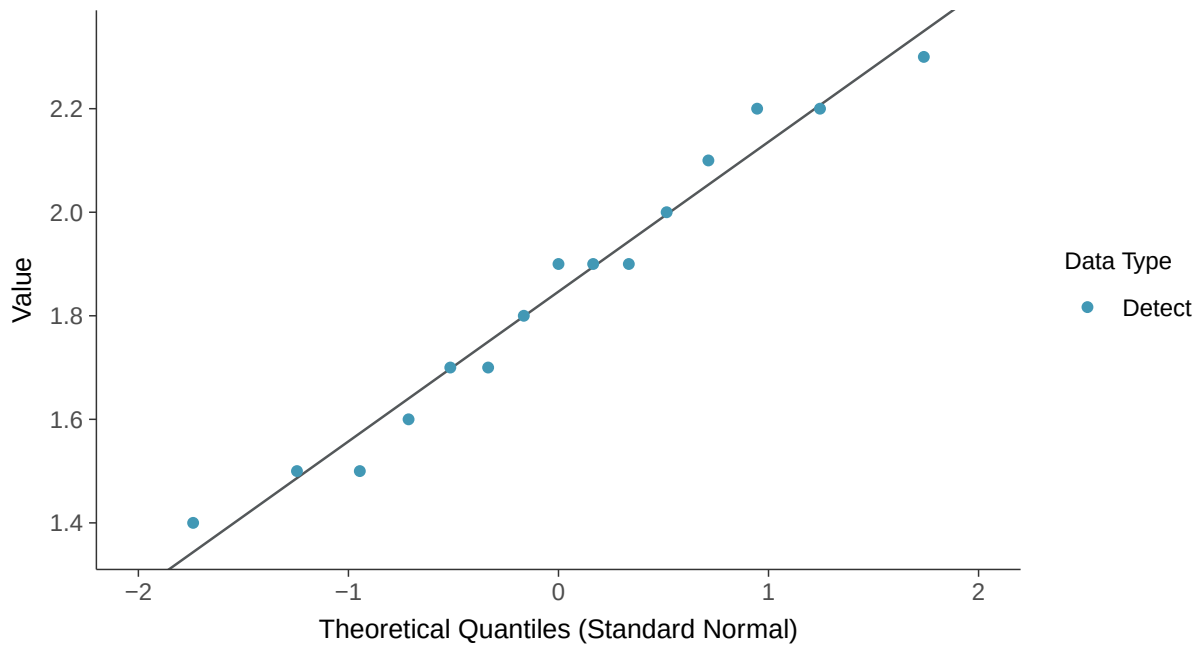


Boxplot by Season

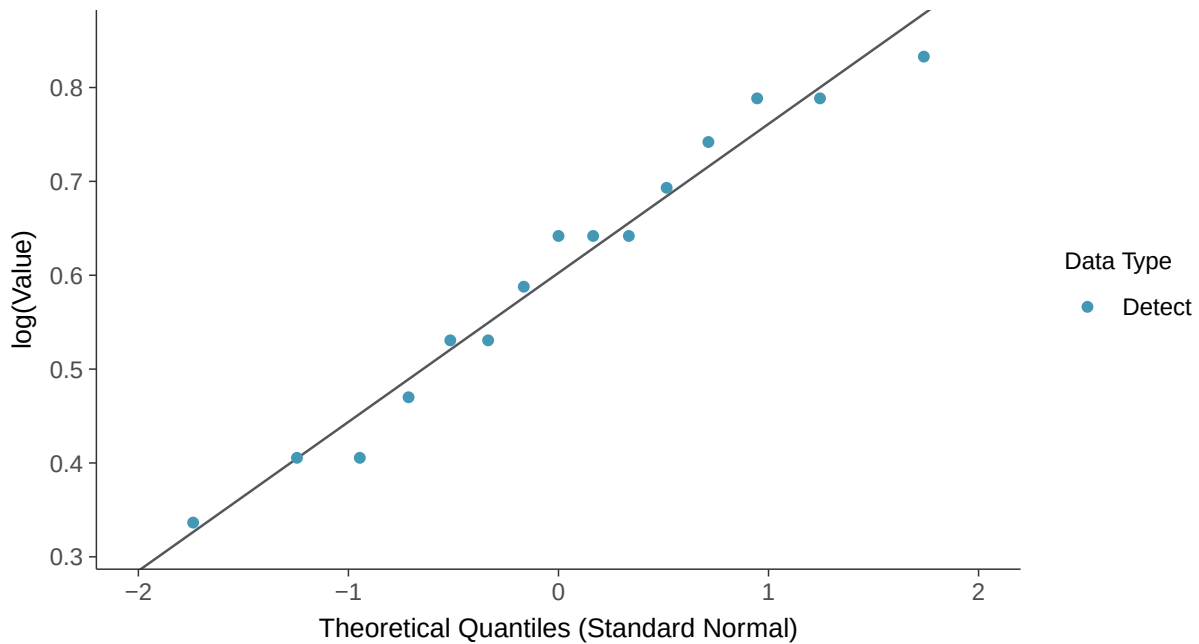
Fluoride, MW-19 (mg/L)



Normal Q-Q plot
Fluoride, MW-19 (mg/L)

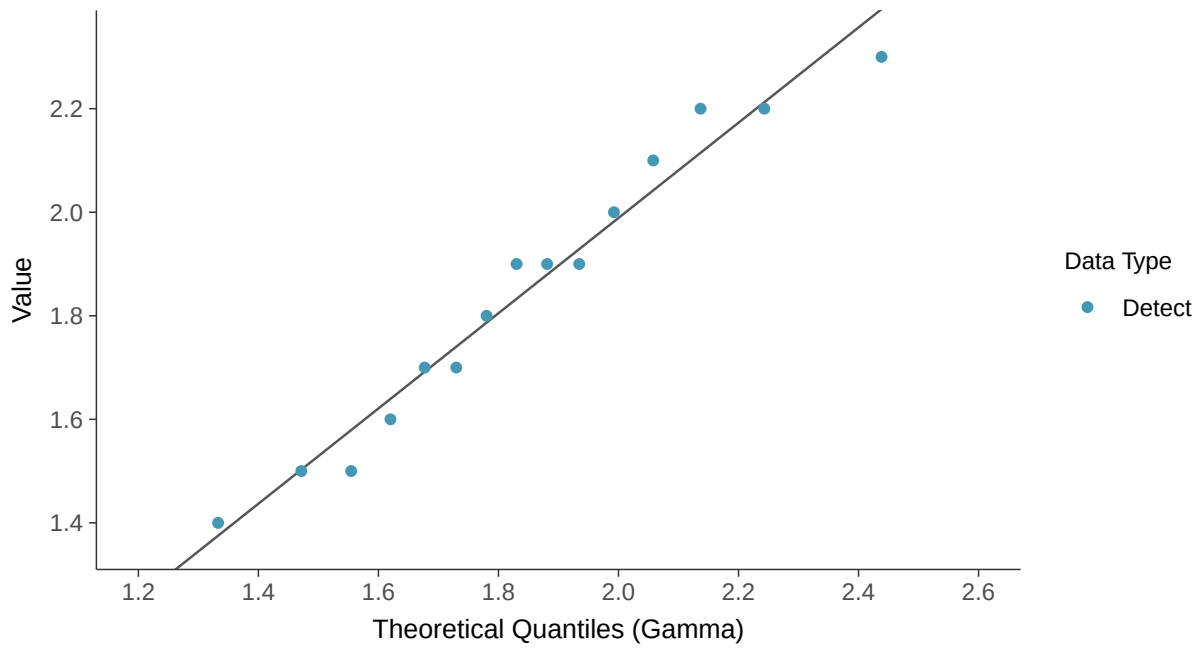


Lognormal Q-Q plot
Fluoride, MW-19 (mg/L)



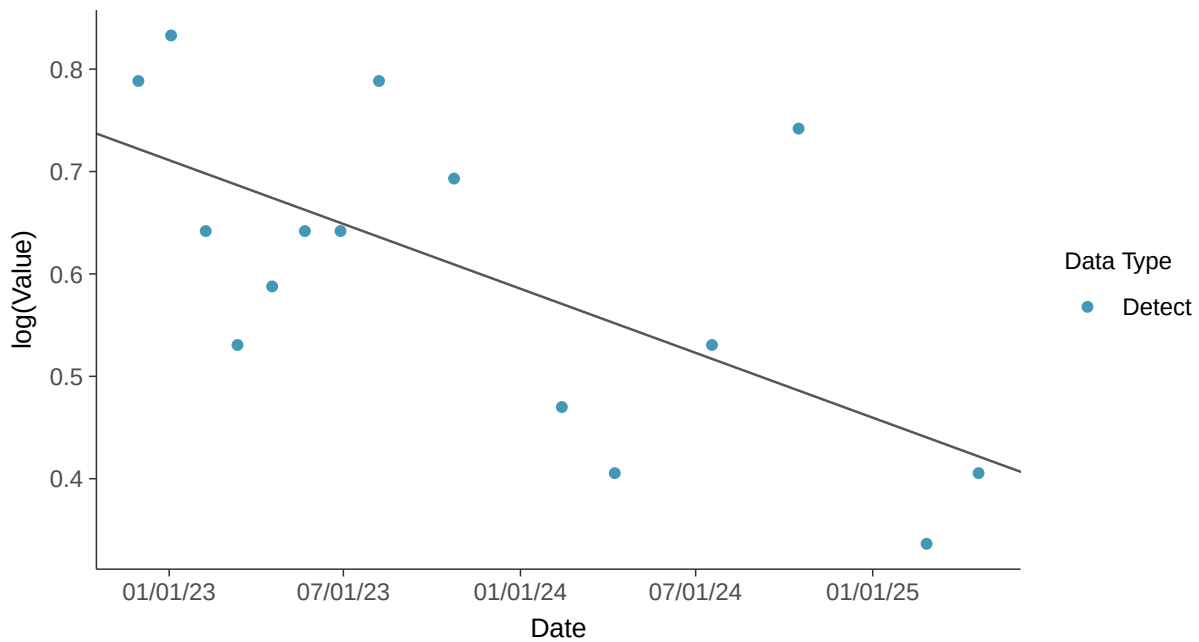
Gamma Q-Q plot

Fluoride, MW-19 (mg/L)



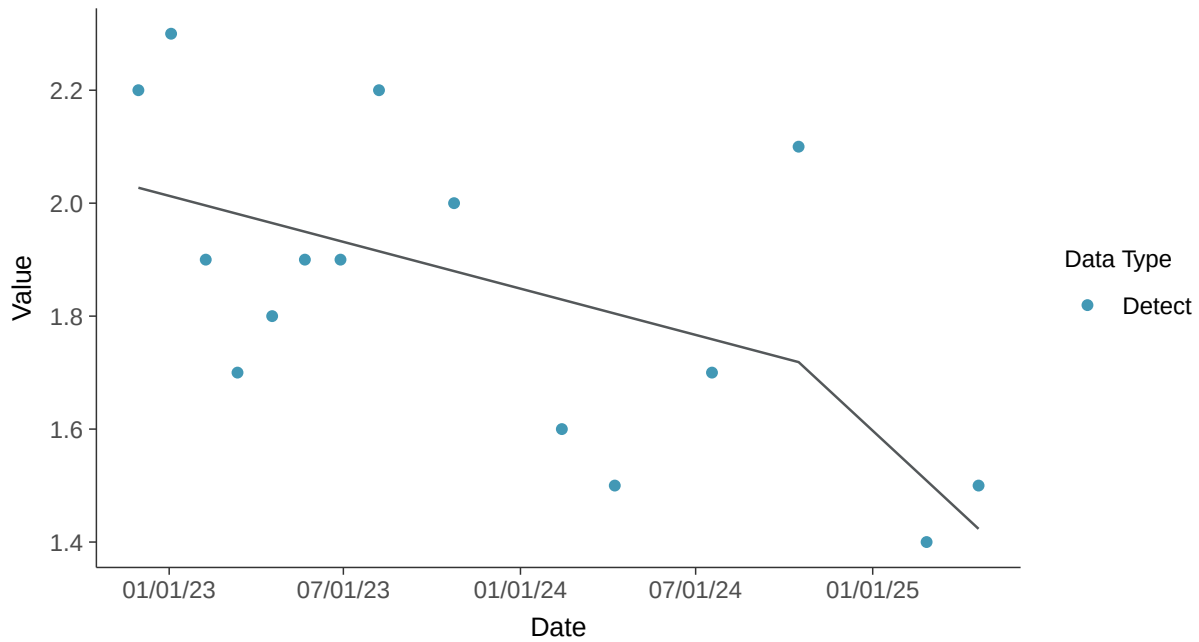
Trend Regression: Lognormal MLE

Fluoride, MW-19 (mg/L)



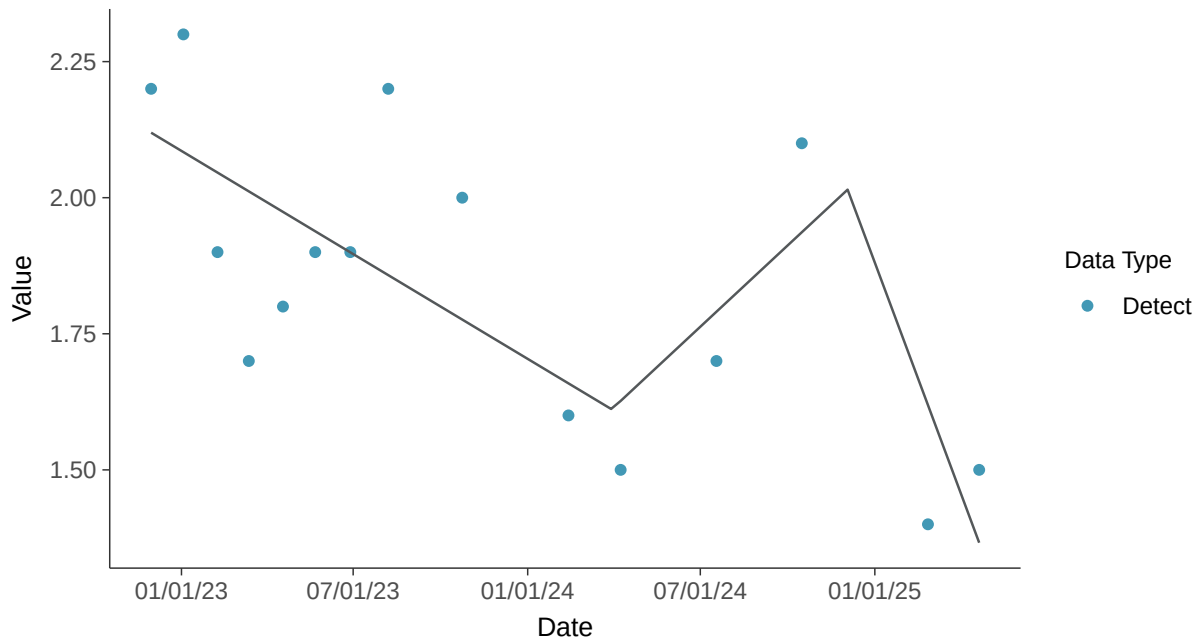
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-19 (mg/L)



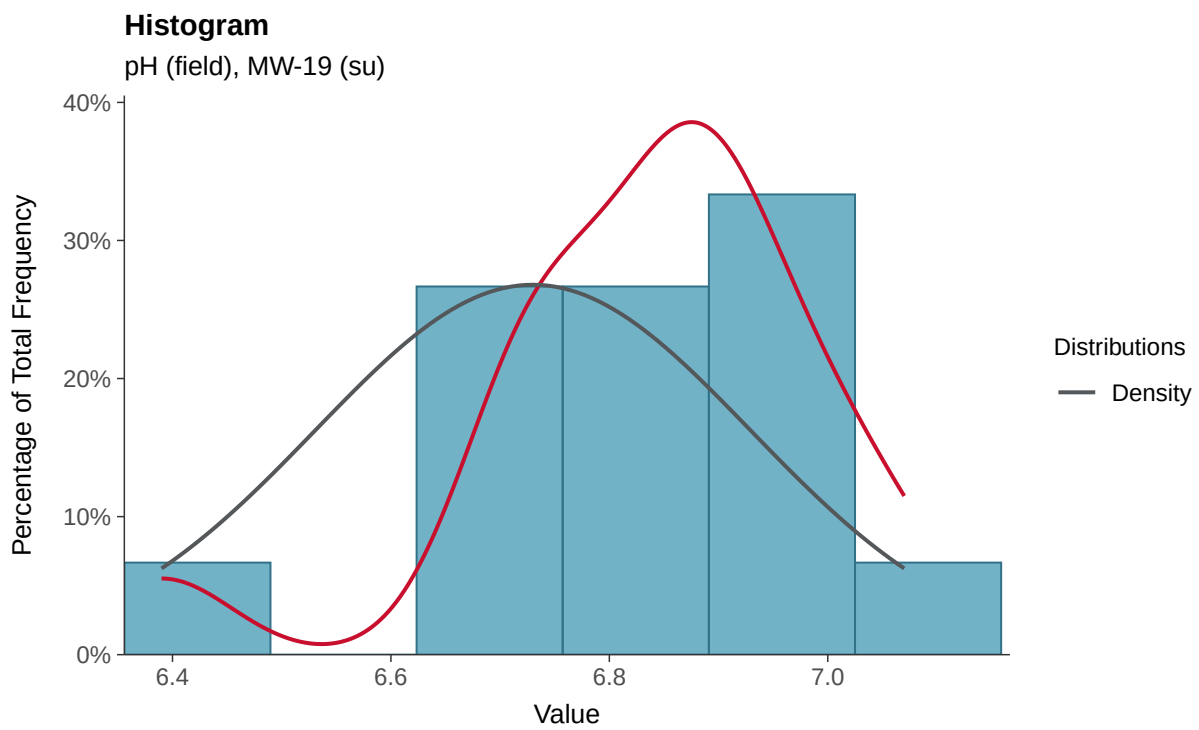
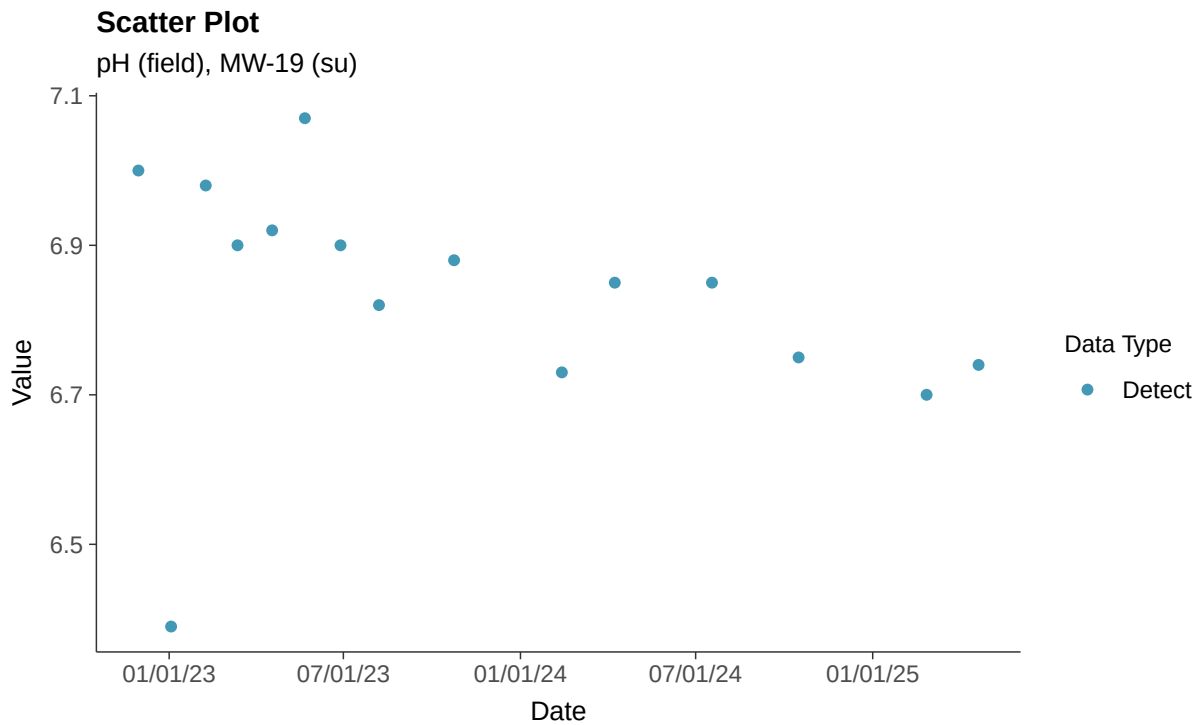
Trend Regression: Piecewise Linear-Linear-Linear

Fluoride, MW-19 (mg/L)



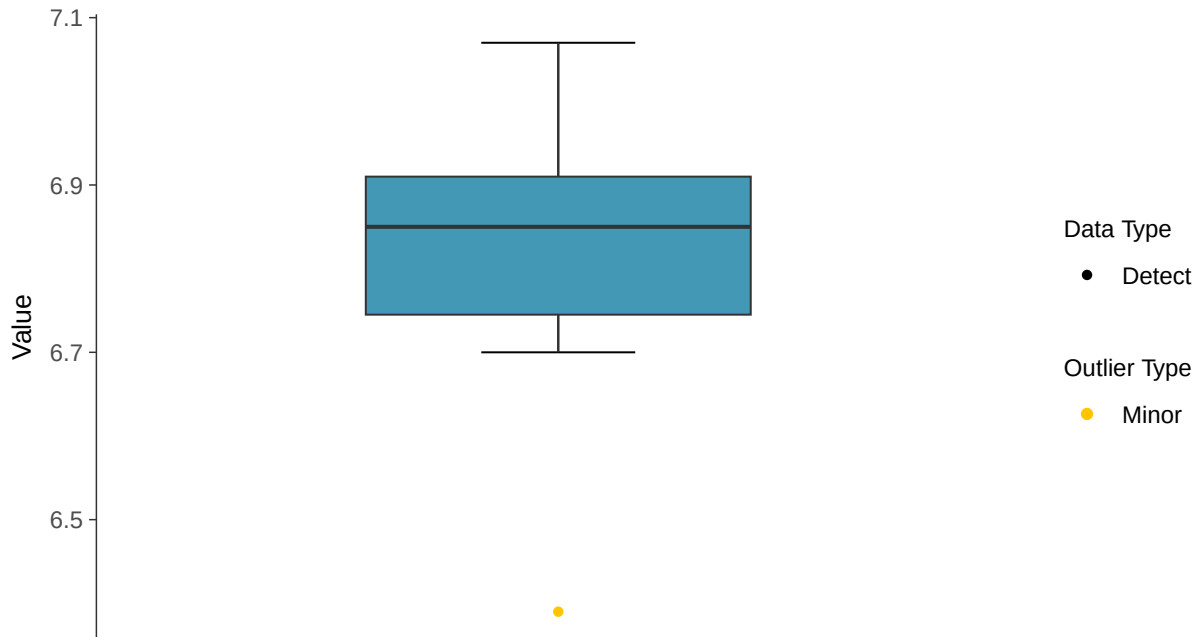
Appendix III: pH (field), MW-19

ID: 29_1_3_120



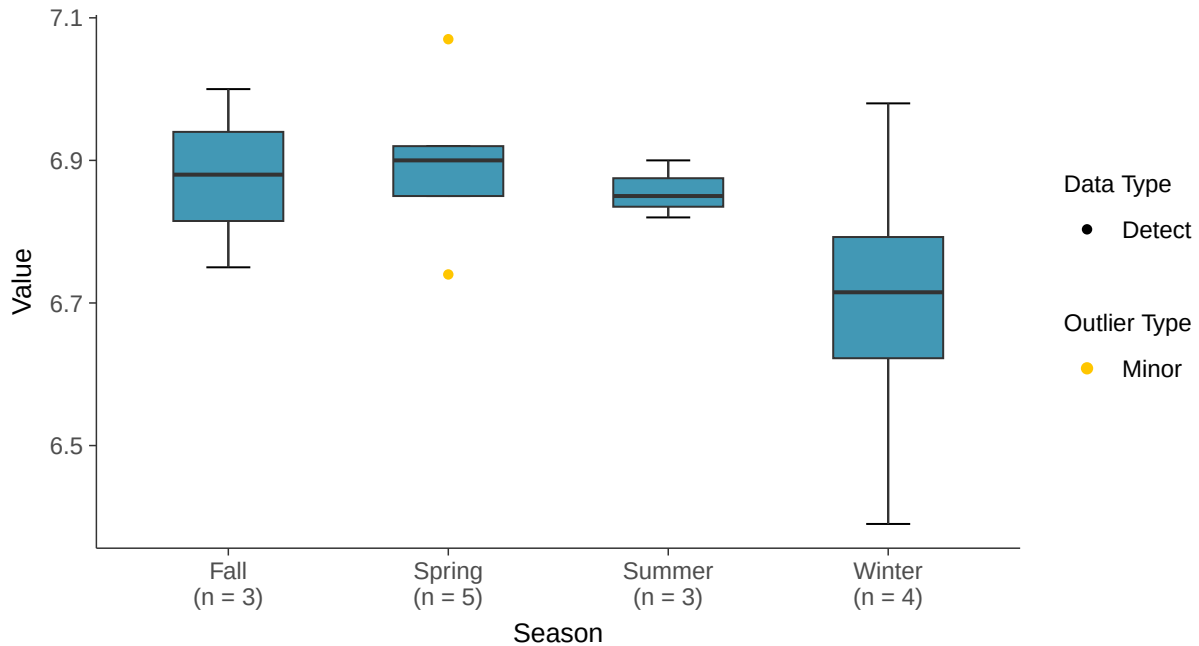
Boxplot

pH (field), MW-19 (su)



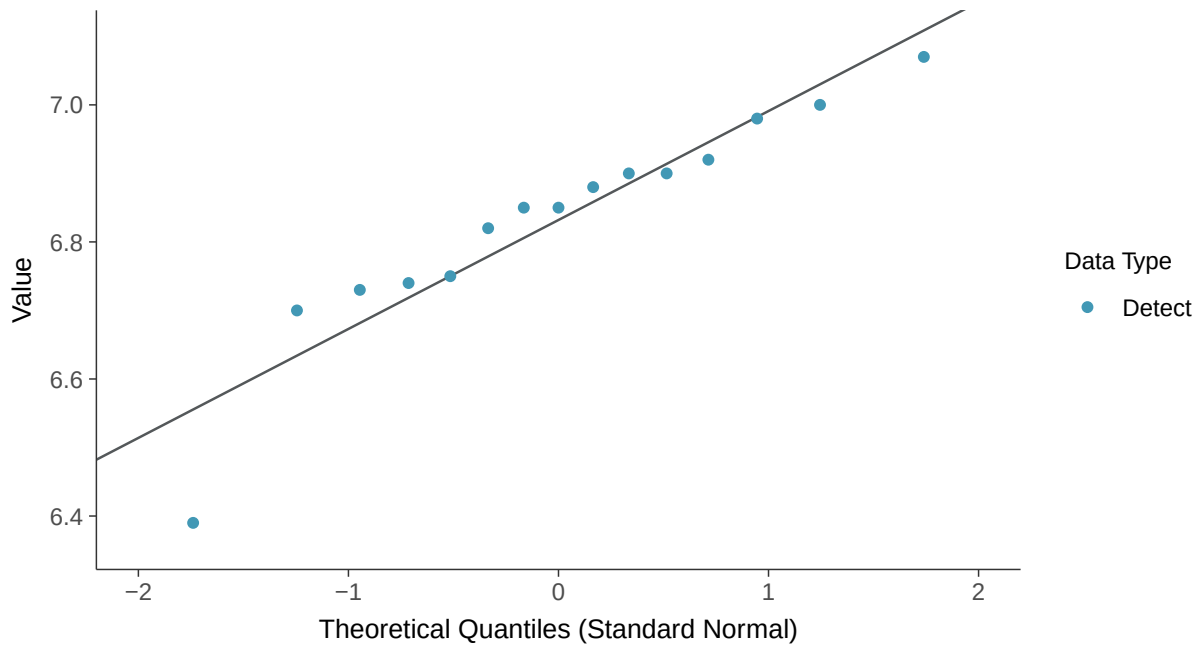
Boxplot by Season

pH (field), MW-19 (su)



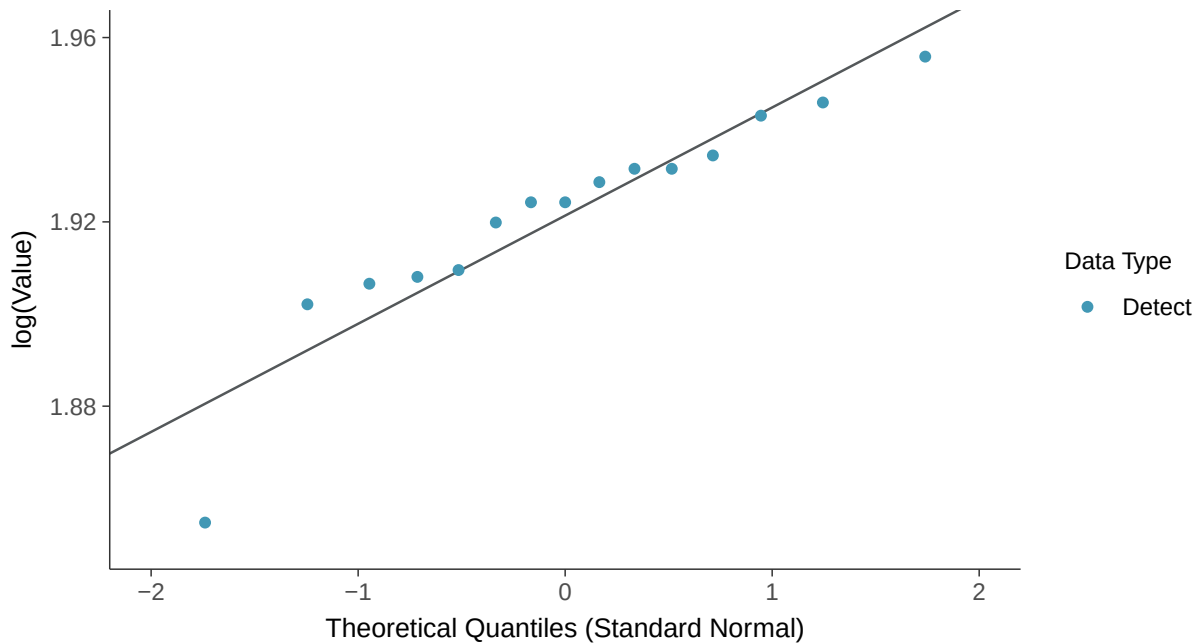
Normal Q-Q plot

pH (field), MW-19 (su)



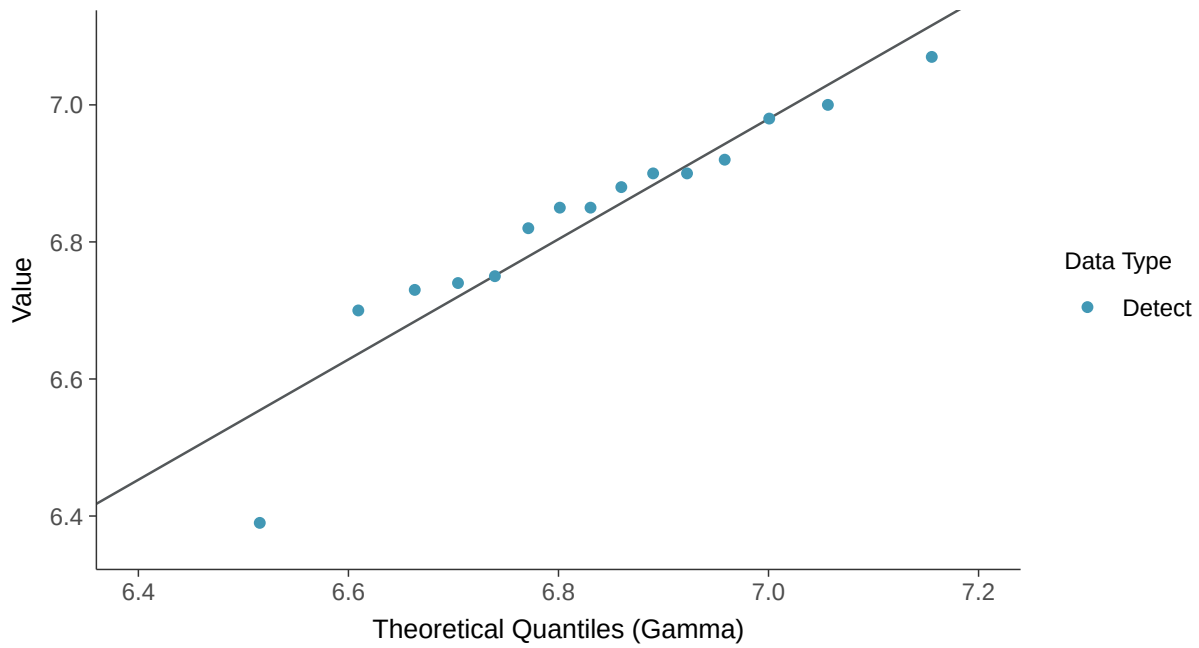
Lognormal Q-Q plot

pH (field), MW-19 (su)



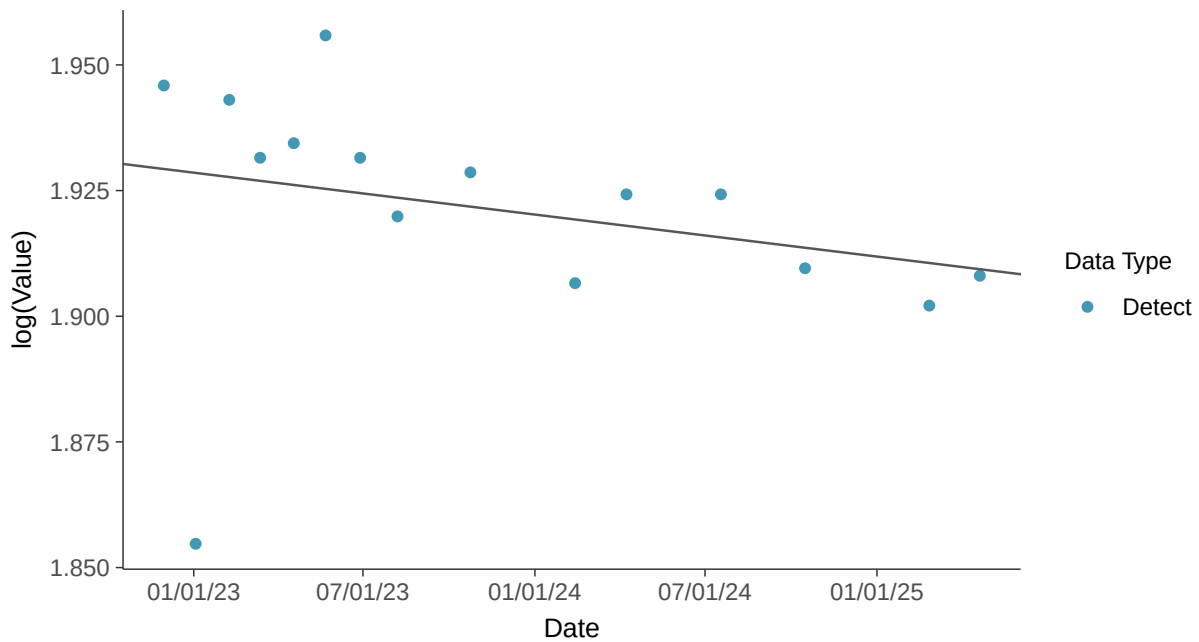
Gamma Q-Q plot

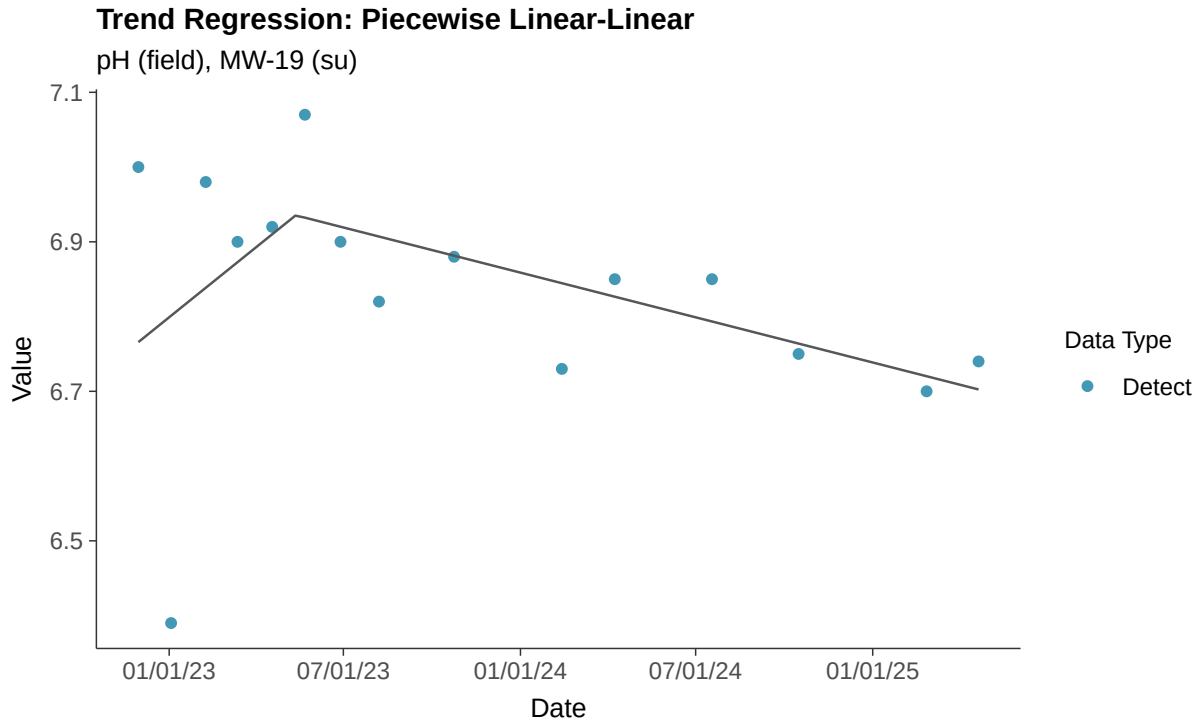
pH (field), MW-19 (su)



Trend Regression: Lognormal MLE

pH (field), MW-19 (su)



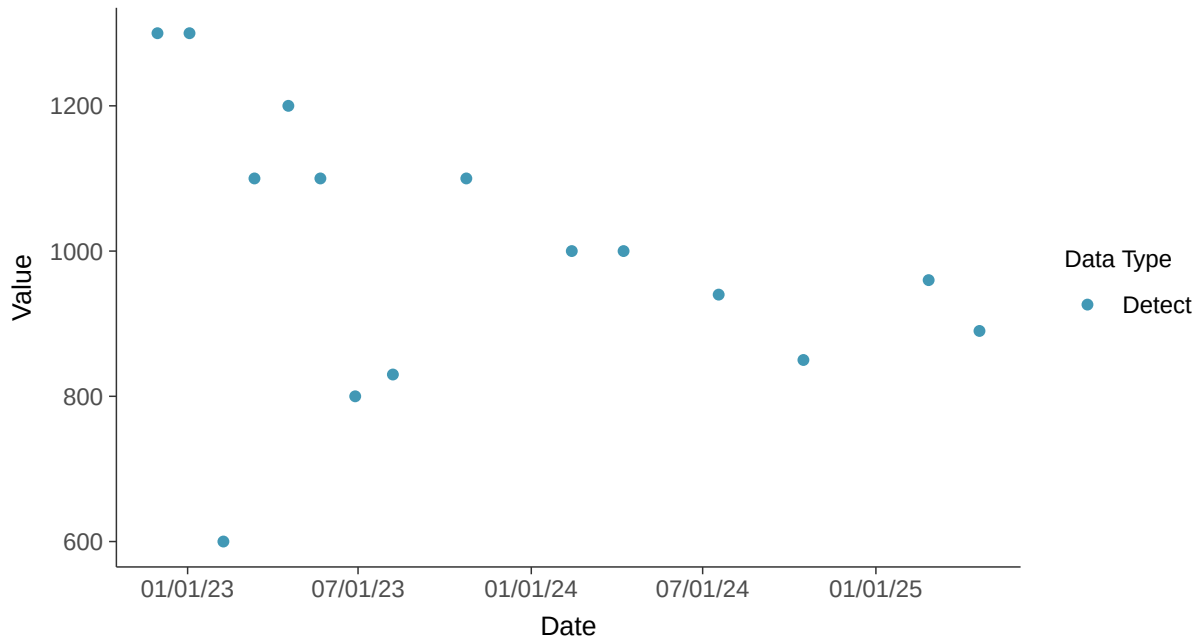


Appendix III: Sulfate (as SO₄), MW-19

ID: 29_1_3_124

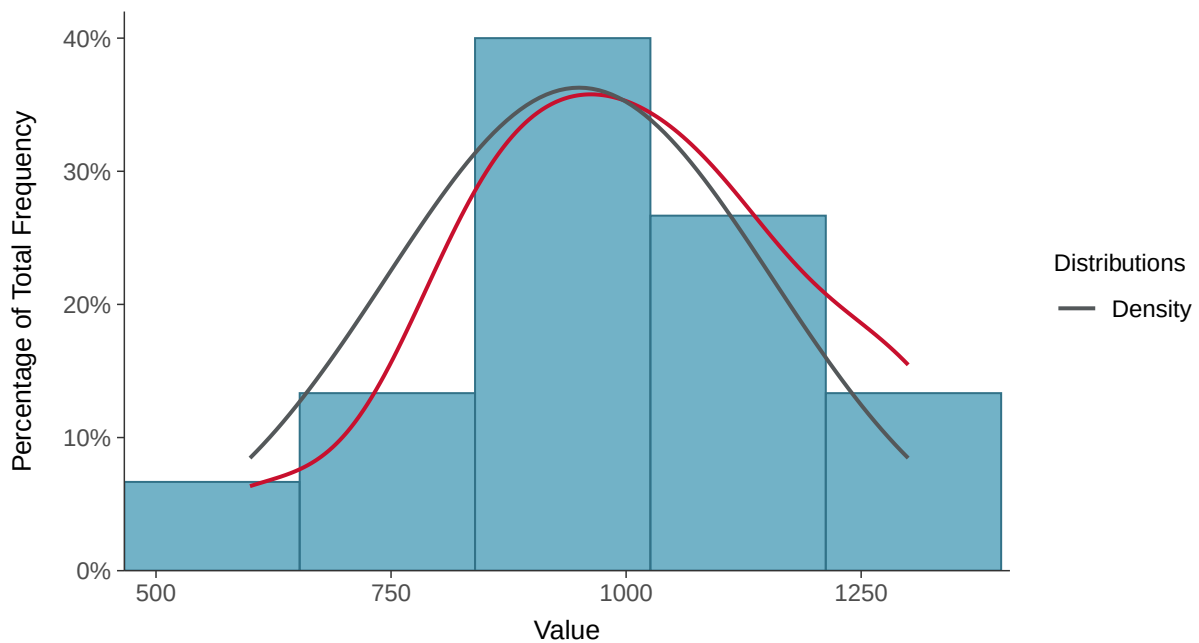
Scatter Plot

Sulfate (as SO₄), MW-19 (mg/L)



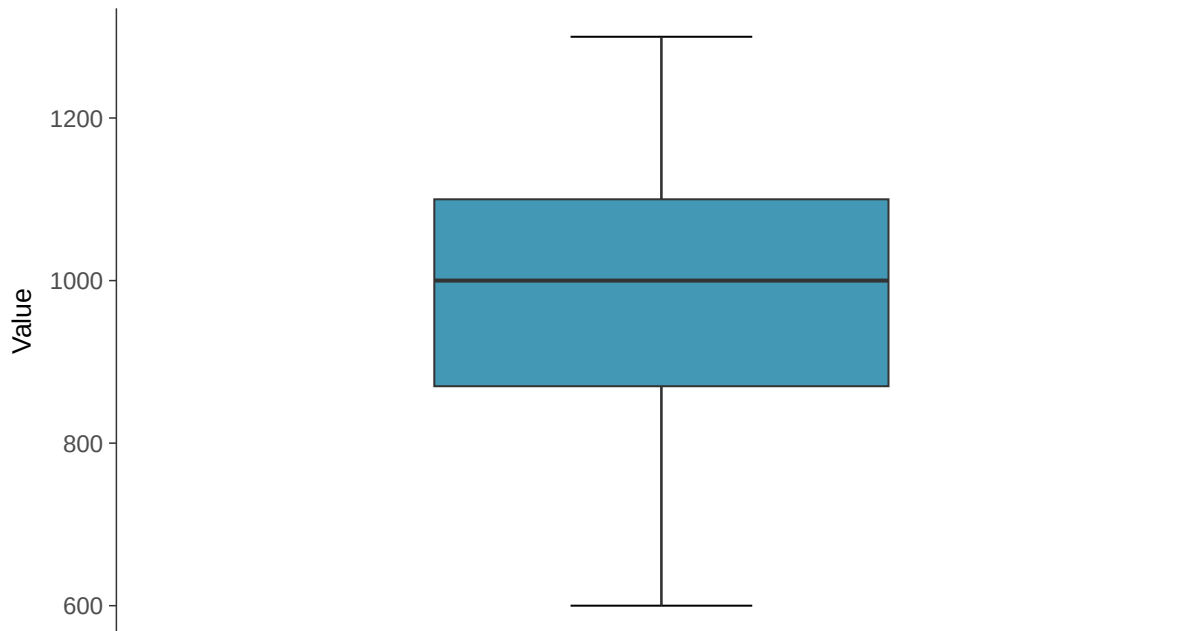
Histogram

Sulfate (as SO₄), MW-19 (mg/L)



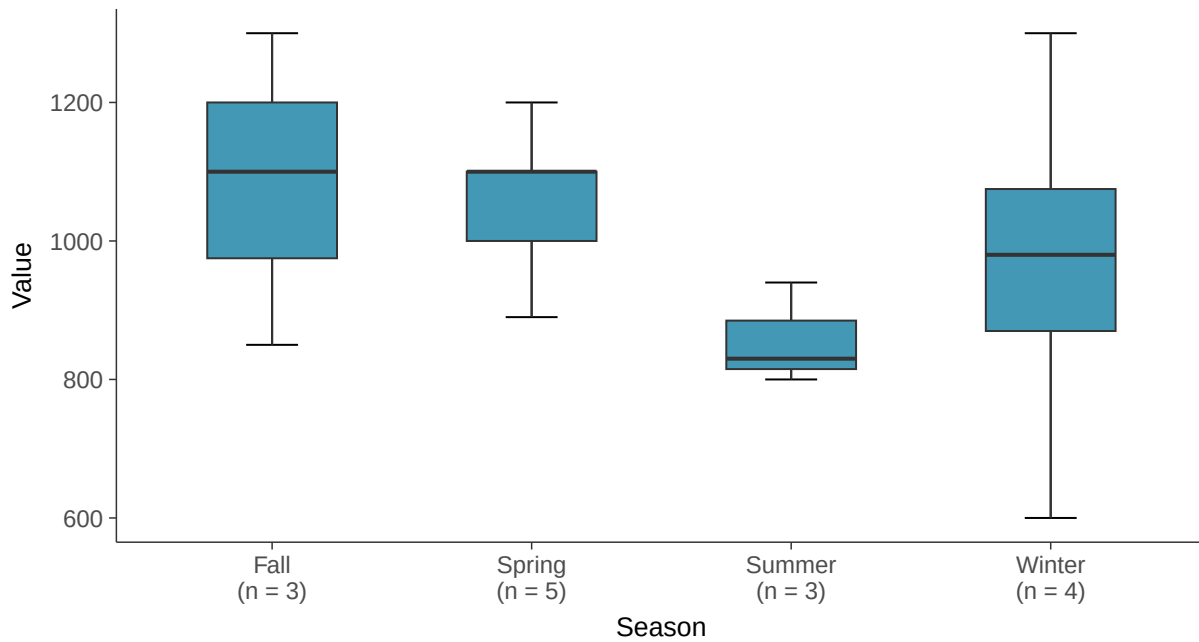
Boxplot

Sulfate (as SO₄), MW-19 (mg/L)



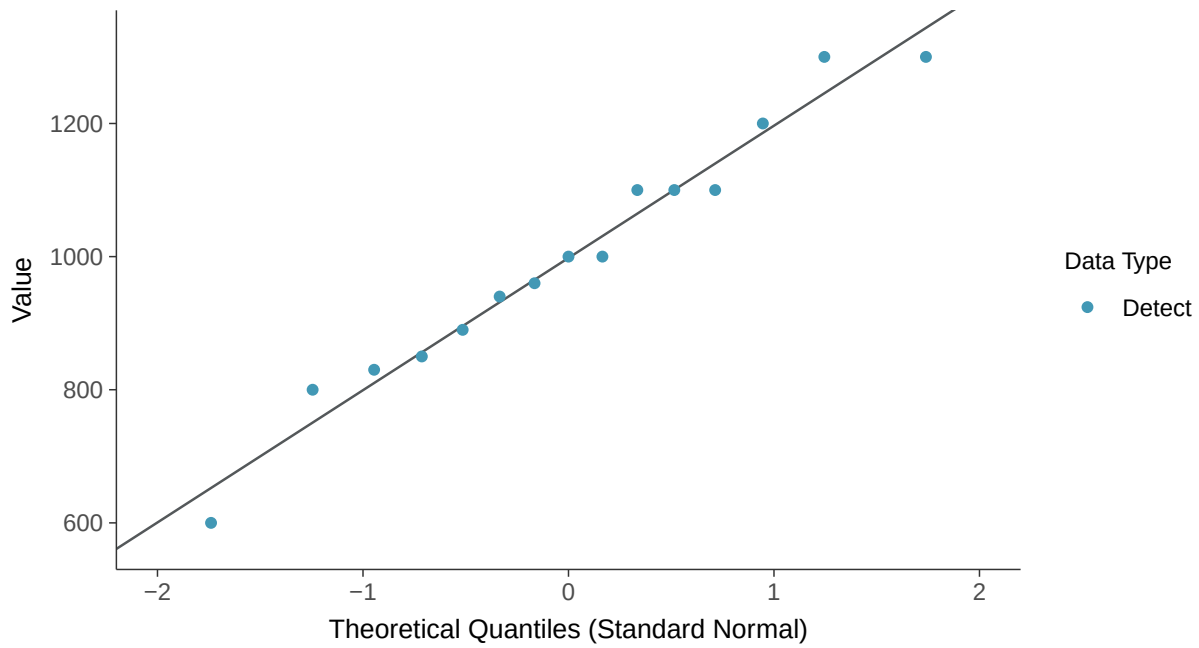
Boxplot by Season

Sulfate (as SO₄), MW-19 (mg/L)



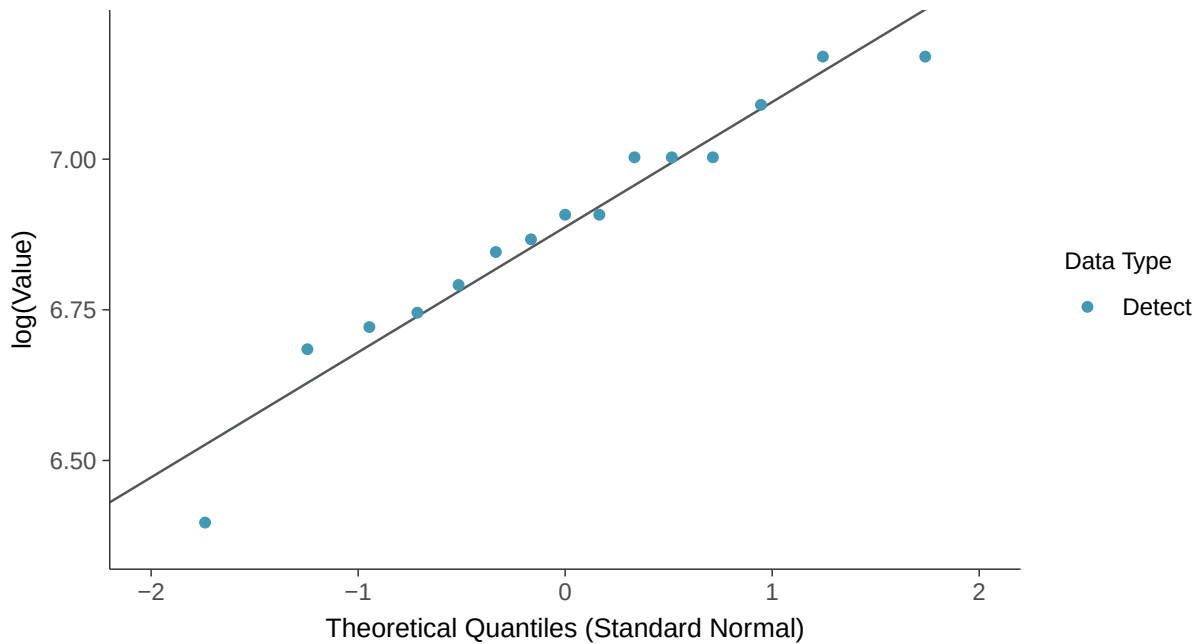
Normal Q-Q plot

Sulfate (as SO₄), MW-19 (mg/L)



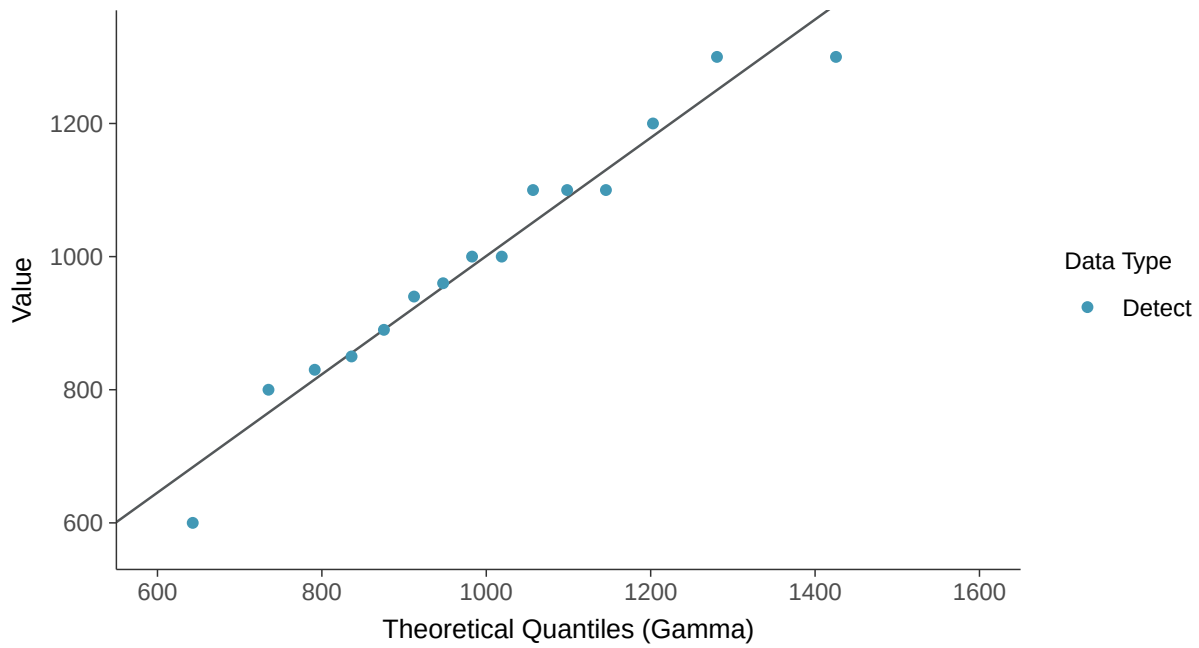
Lognormal Q-Q plot

Sulfate (as SO₄), MW-19 (mg/L)



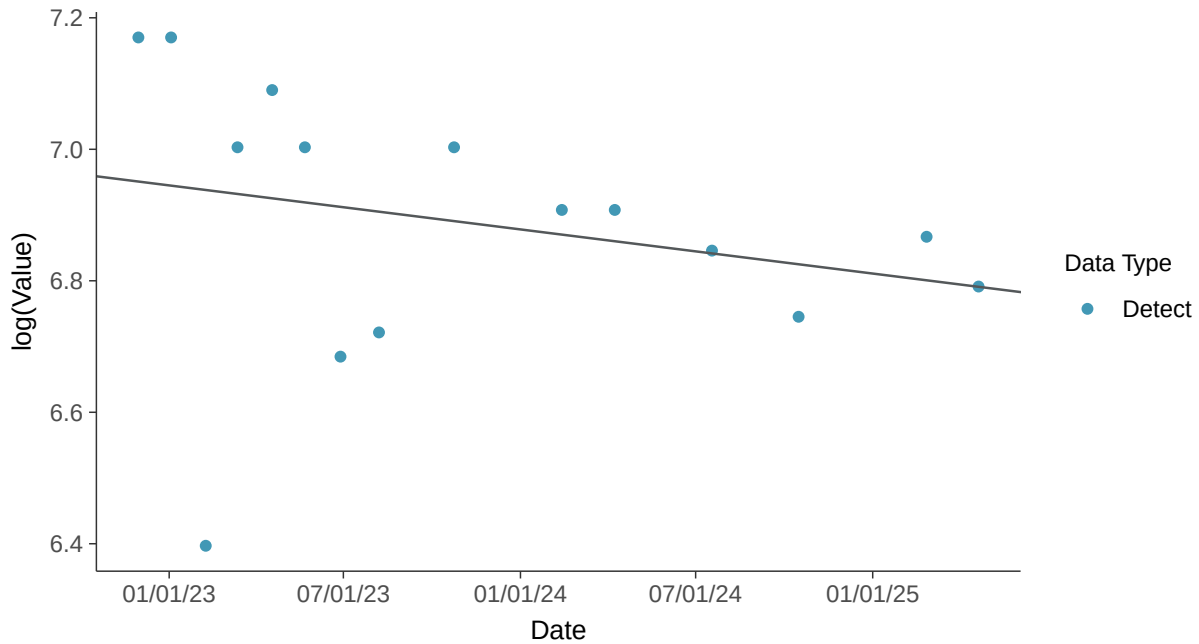
Gamma Q-Q plot

Sulfate (as SO₄), MW-19 (mg/L)



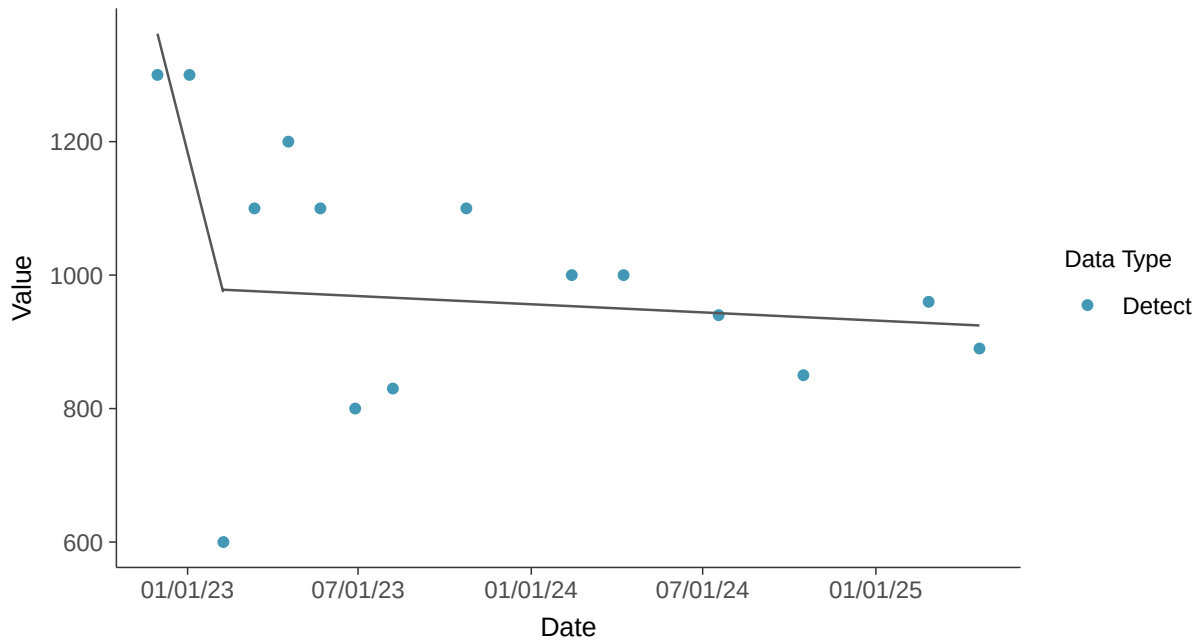
Trend Regression: Lognormal MLE

Sulfate (as SO₄), MW-19 (mg/L)



Trend Regression: Piecewise Linear-Linear

Sulfate (as SO₄), MW-19 (mg/L)

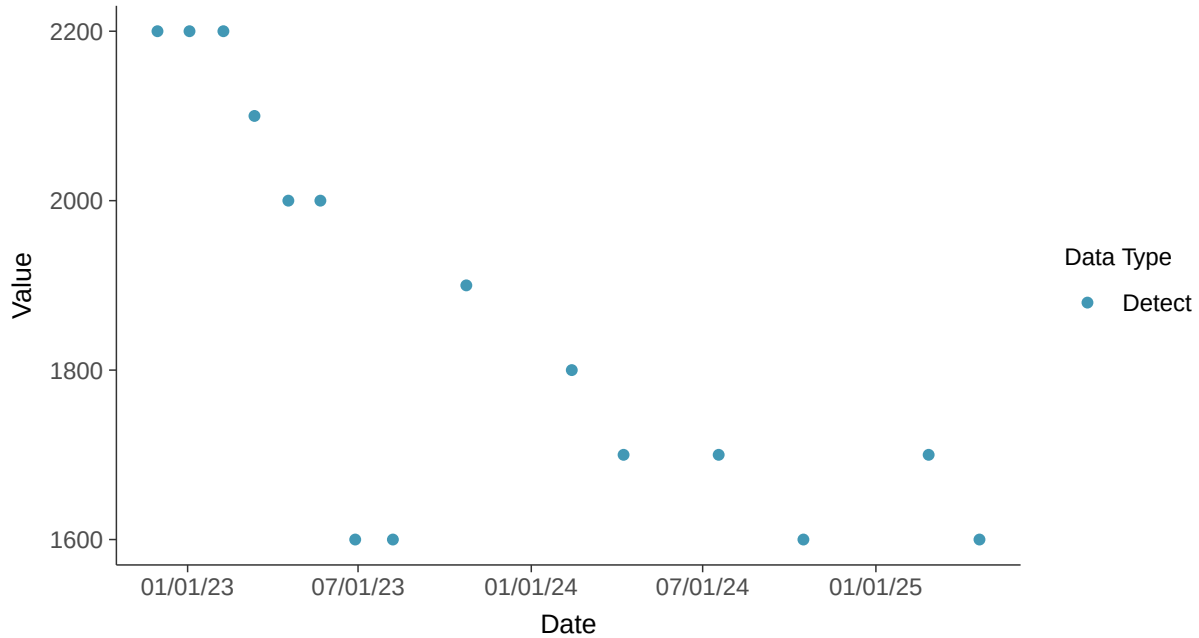


Appendix III: Total Dissolved Solids, MW-19

ID: 29_1_3_126

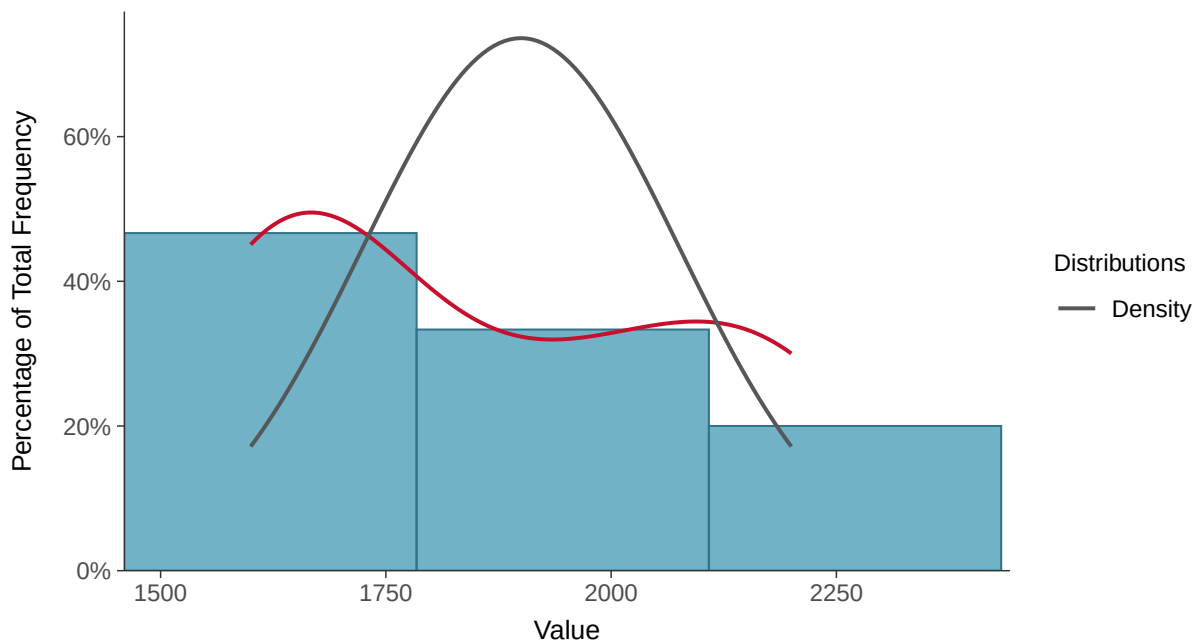
Scatter Plot

Total Dissolved Solids, MW-19 (mg/L)



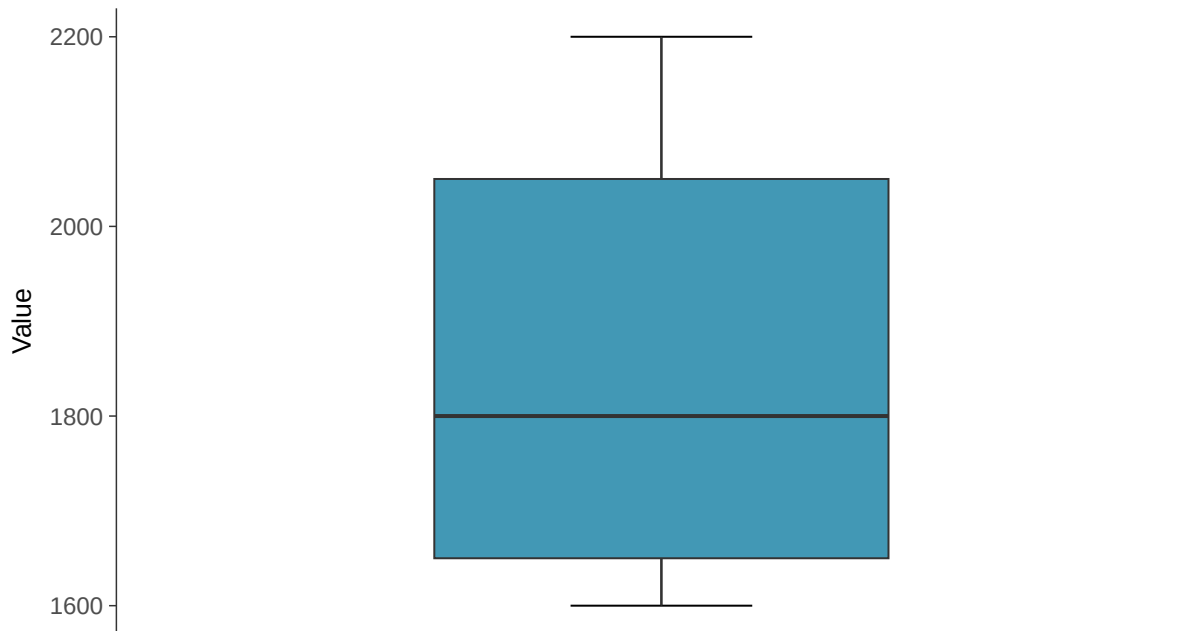
Histogram

Total Dissolved Solids, MW-19 (mg/L)



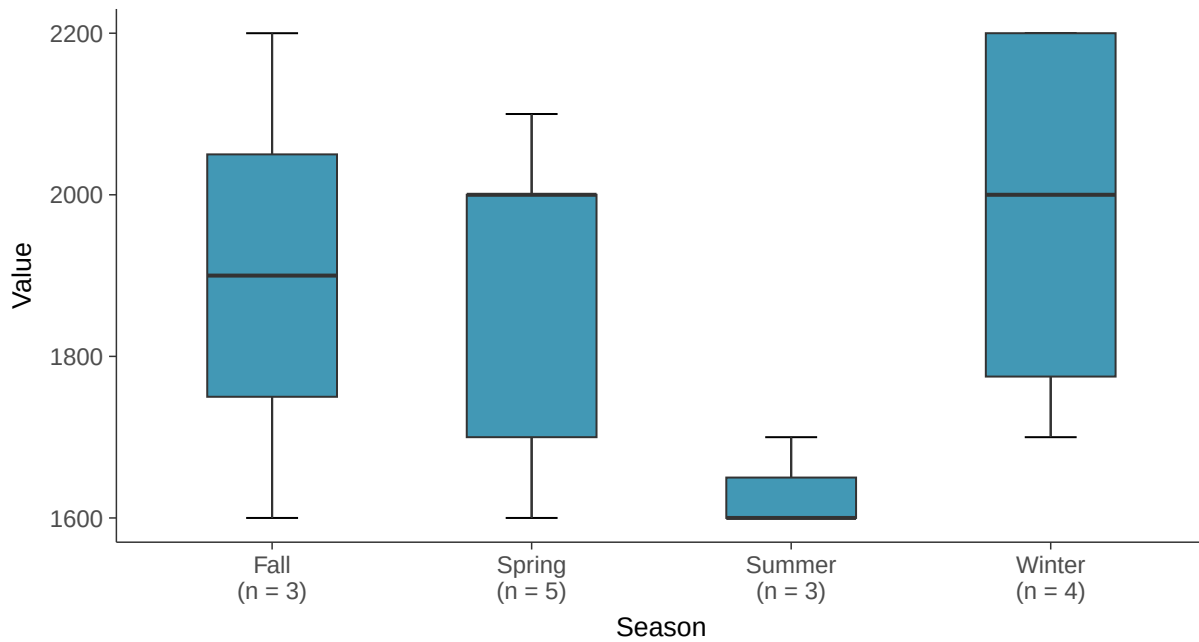
Boxplot

Total Dissolved Solids, MW-19 (mg/L)



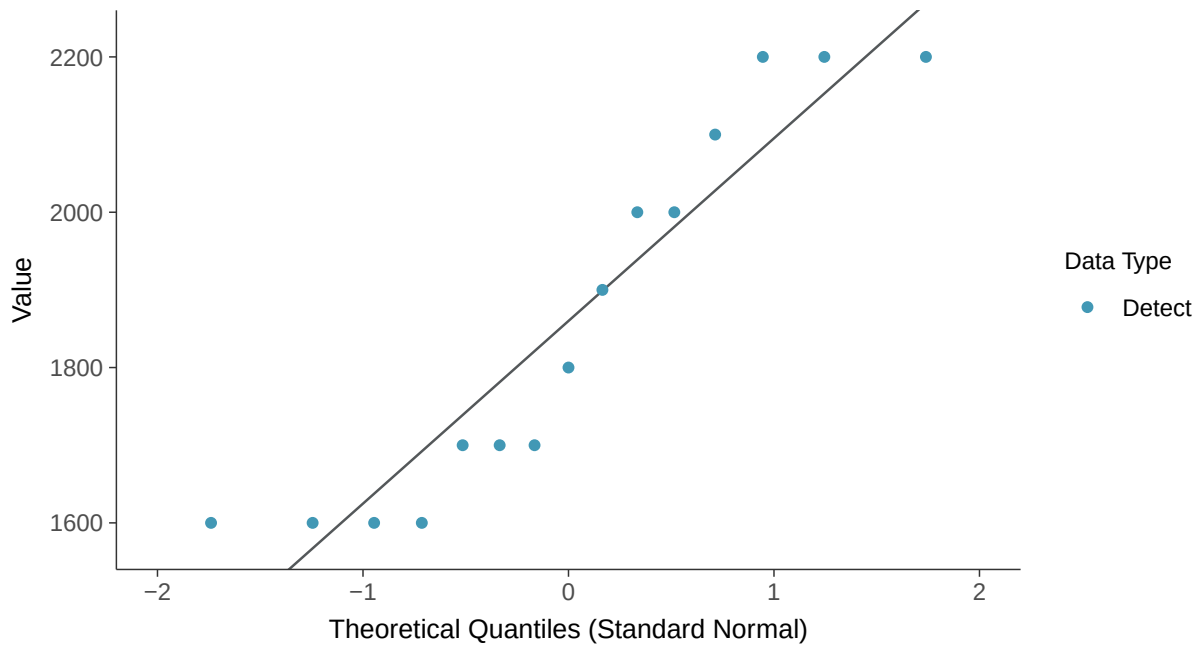
Boxplot by Season

Total Dissolved Solids, MW-19 (mg/L)



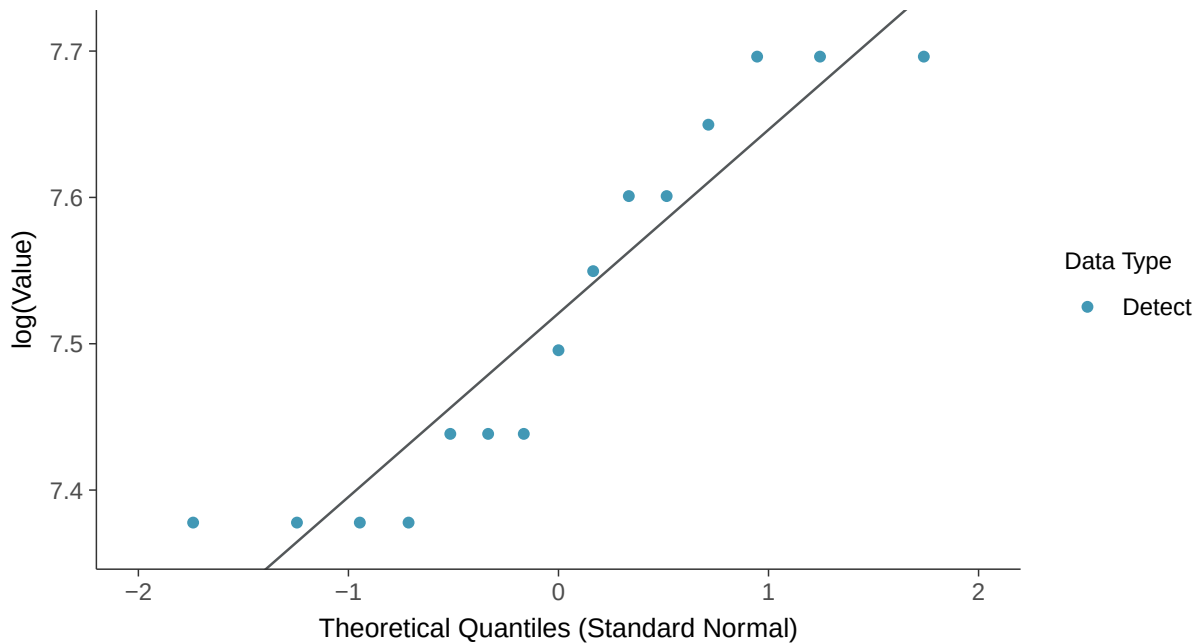
Normal Q-Q plot

Total Dissolved Solids, MW-19 (mg/L)



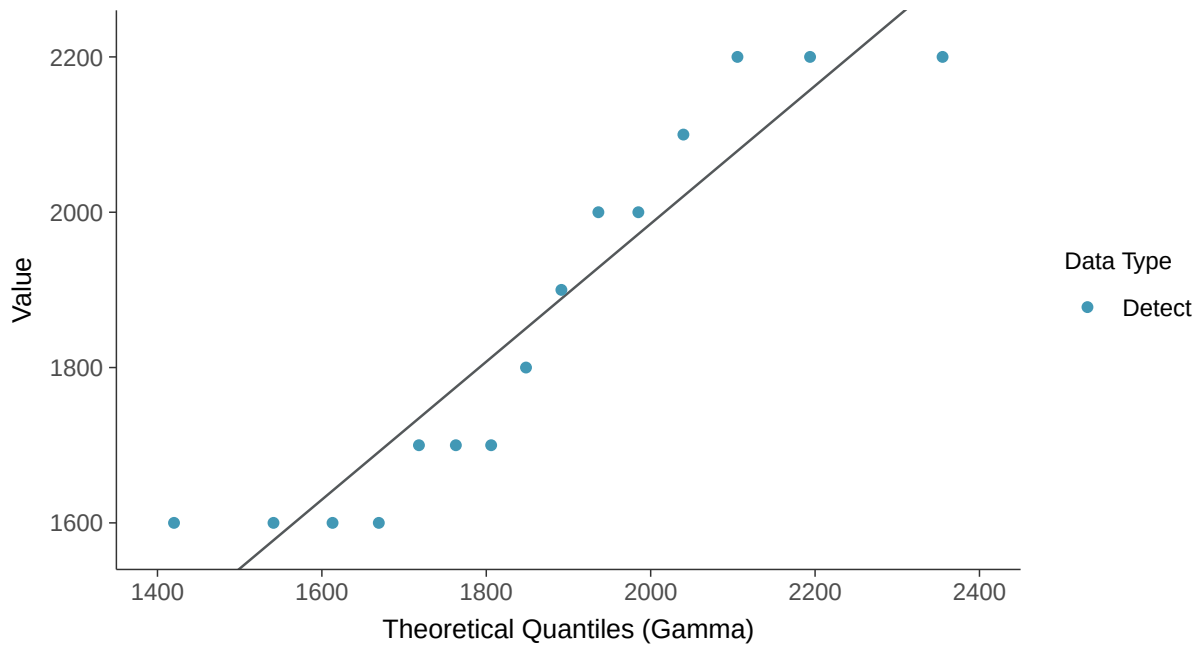
Lognormal Q-Q plot

Total Dissolved Solids, MW-19 (mg/L)



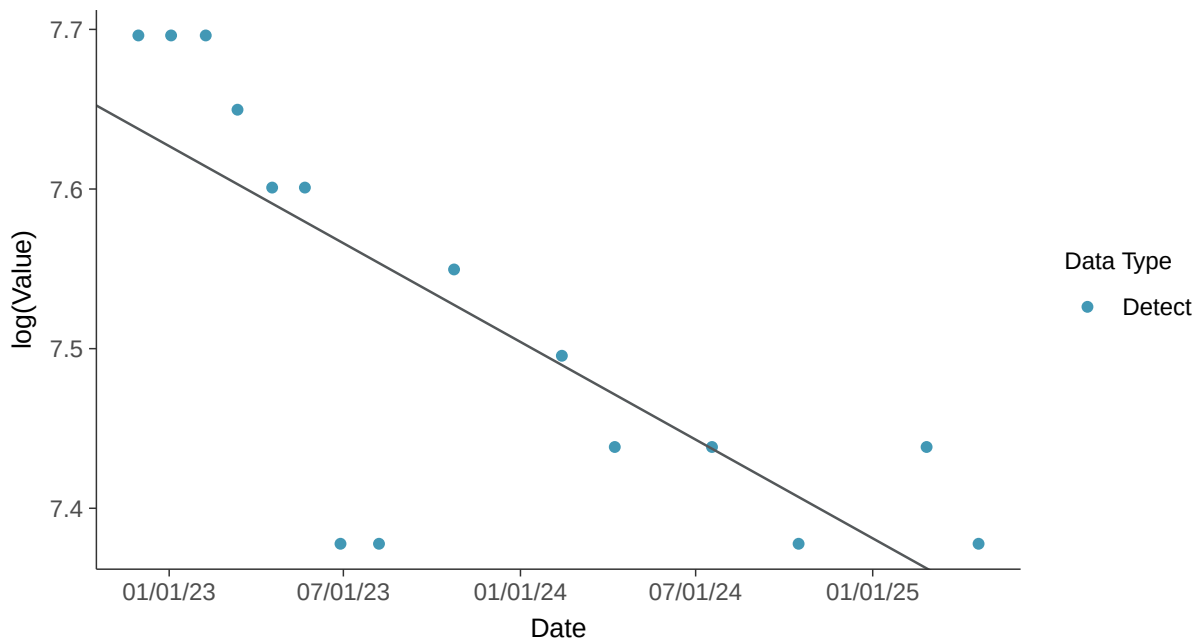
Gamma Q-Q plot

Total Dissolved Solids, MW-19 (mg/L)



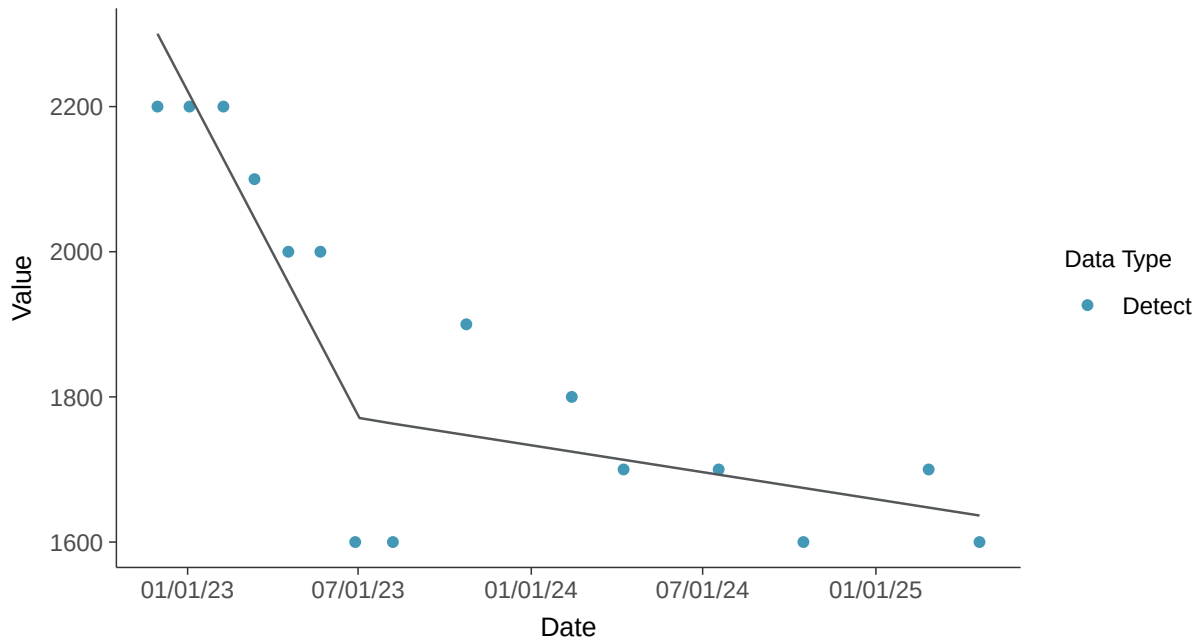
Trend Regression: Lognormal MLE

Total Dissolved Solids, MW-19 (mg/L)



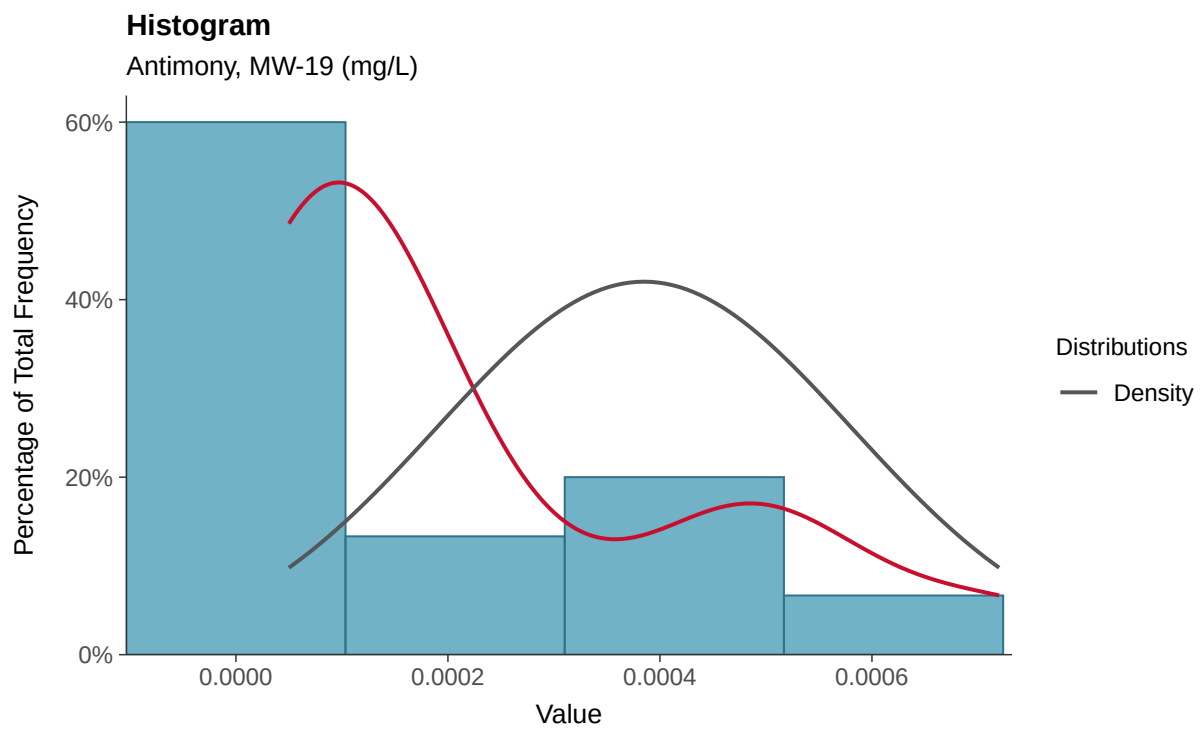
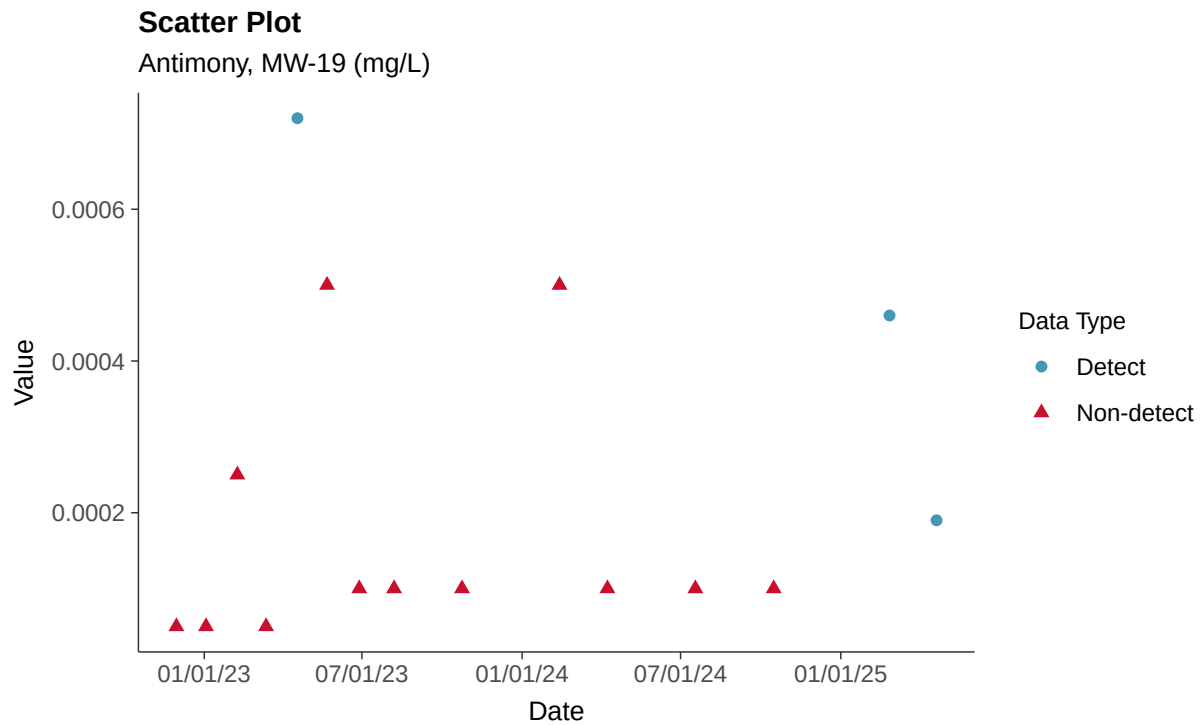
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-19 (mg/L)



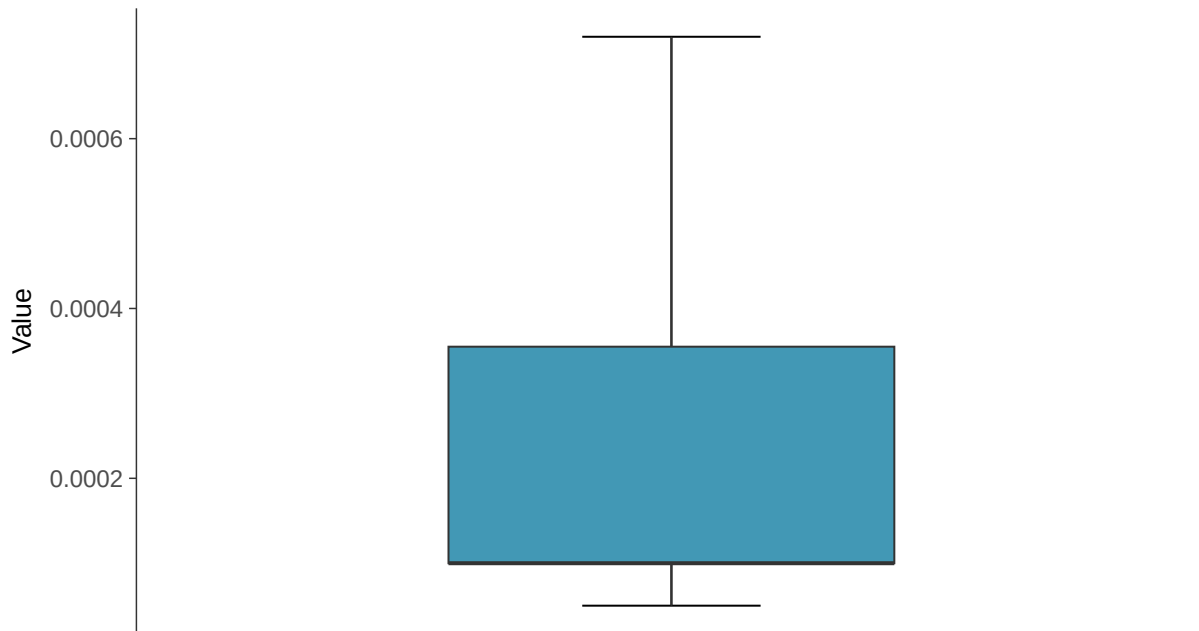
Appendix IV: Antimony, MW-19

ID: 29_1_4_101



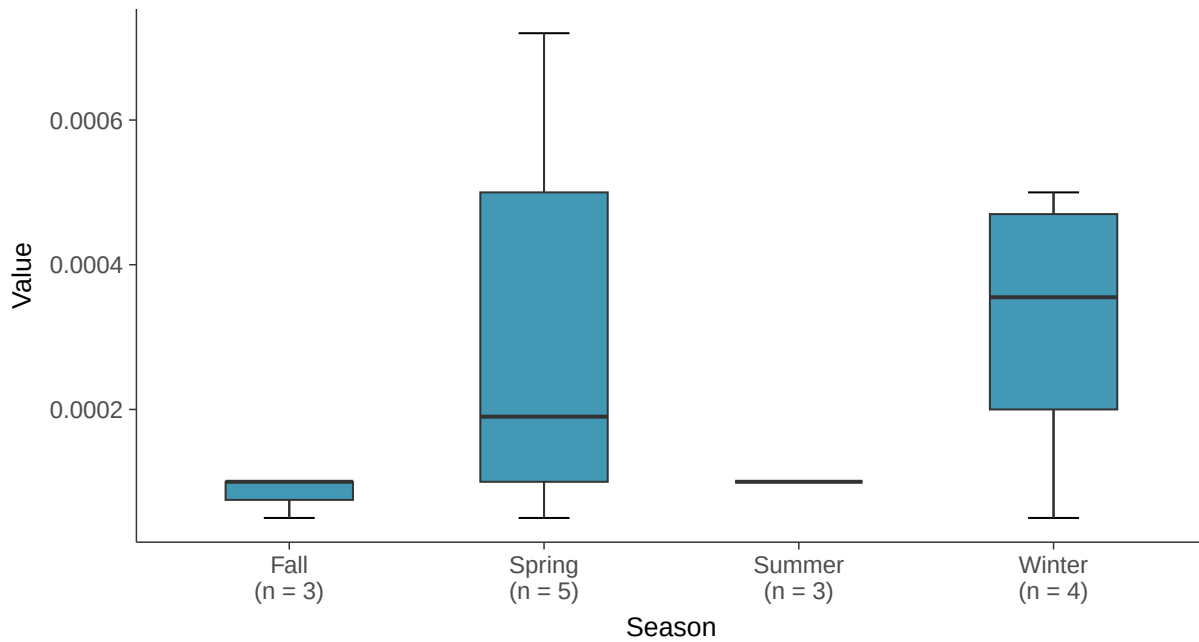
Boxplot

Antimony, MW-19 (mg/L)



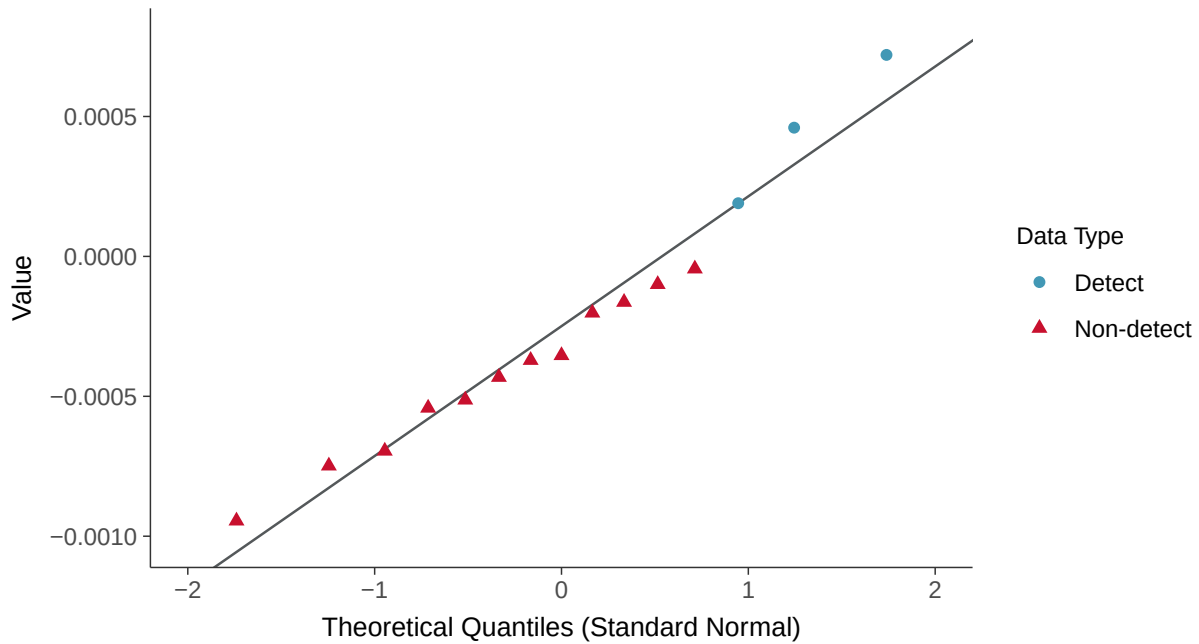
Boxplot by Season

Antimony, MW-19 (mg/L)



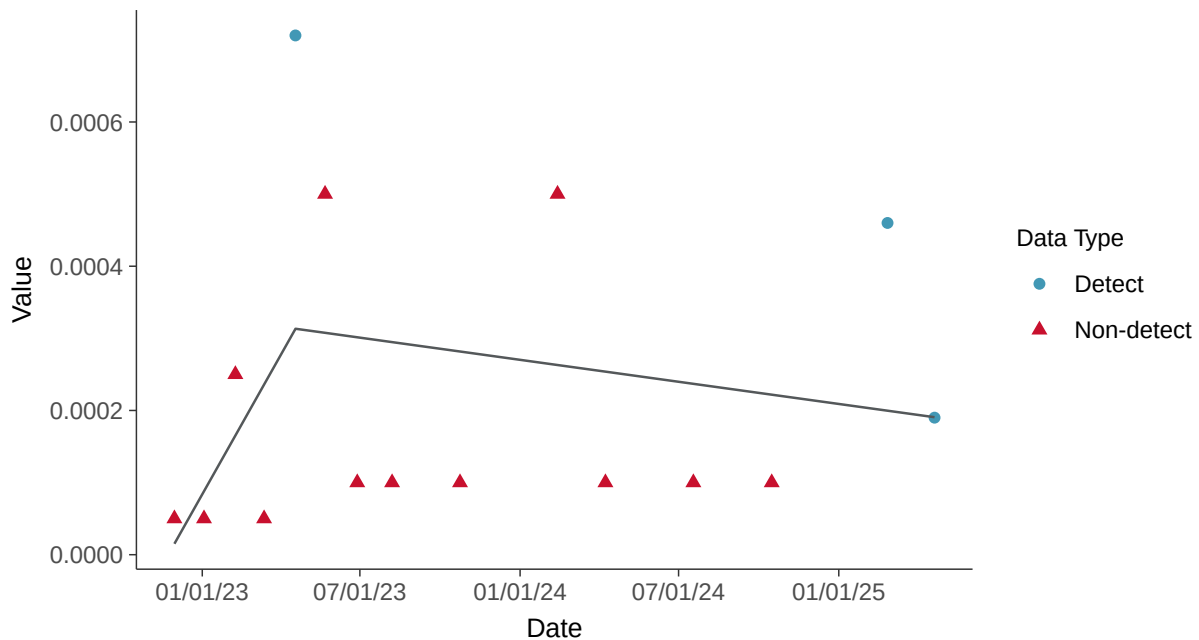
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-19 (mg/L)



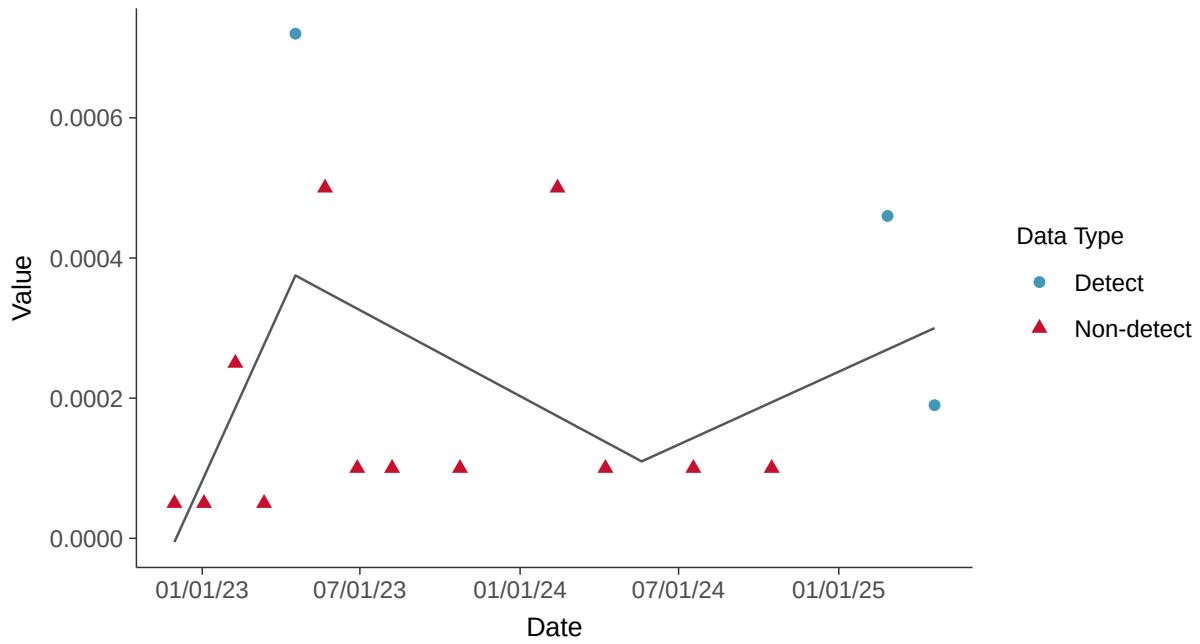
Trend Regression: Piecewise Linear-Linear

Antimony, MW-19 (mg/L)



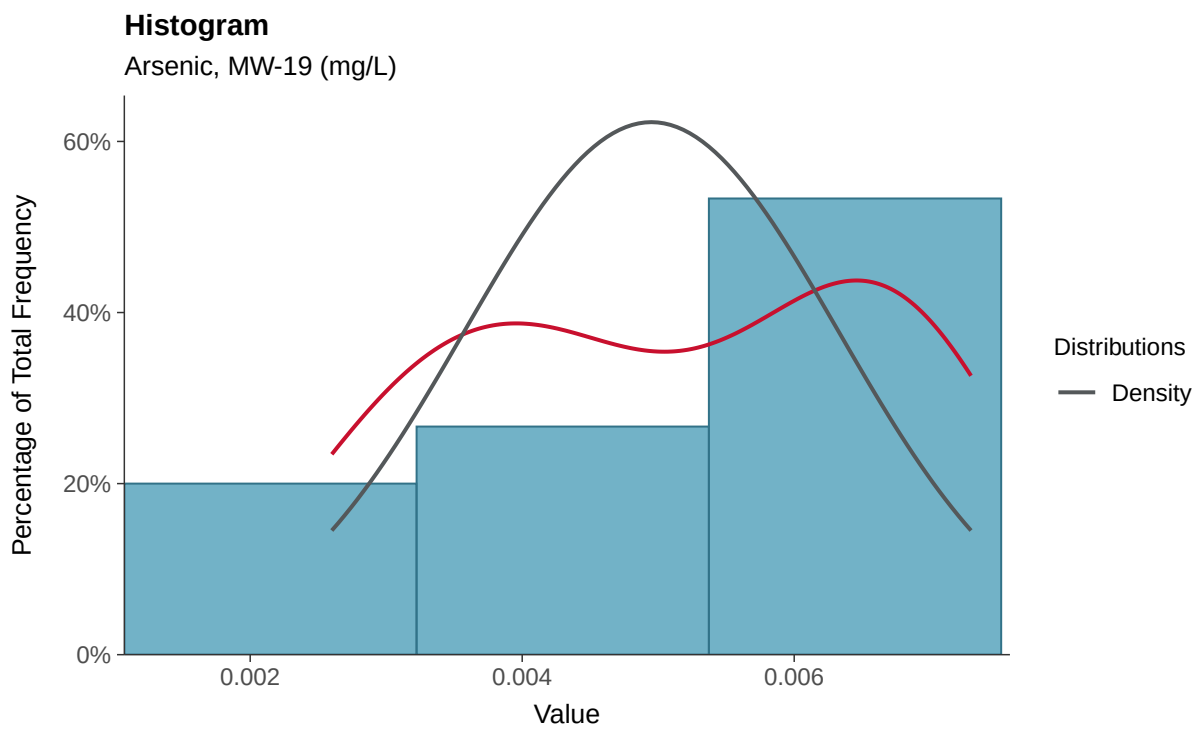
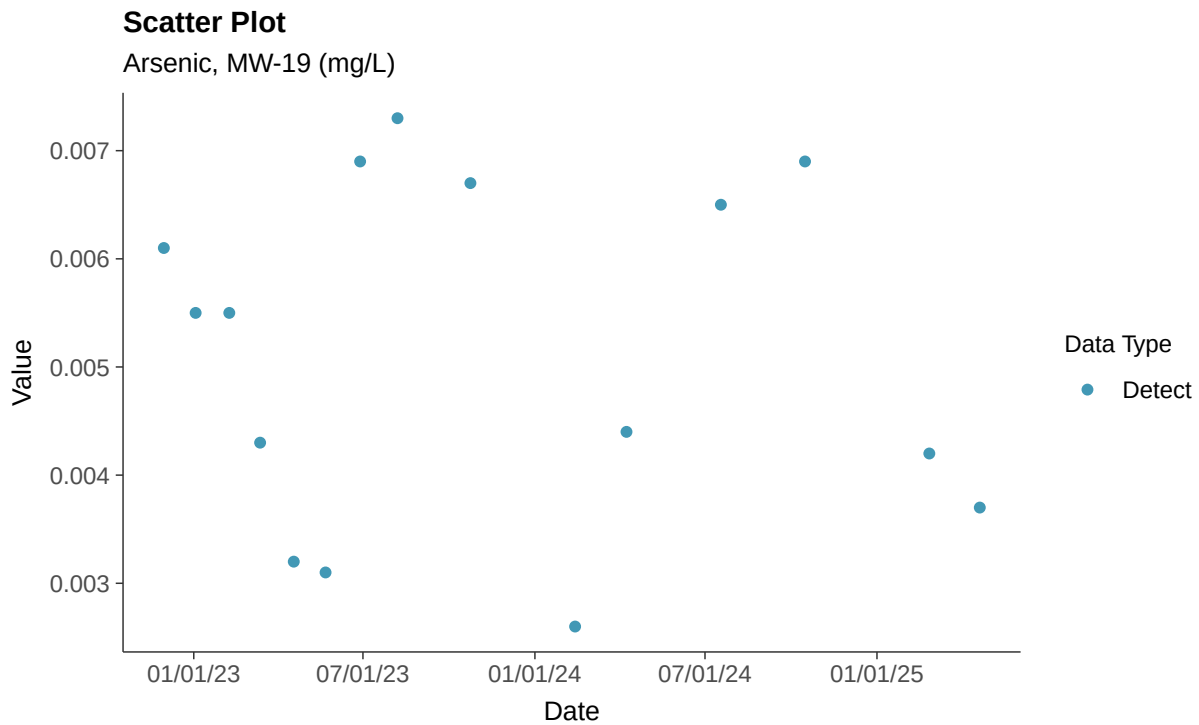


Trend Regression: Piecewise Linear-Linear-Linear
Antimony, MW-19 (mg/L)



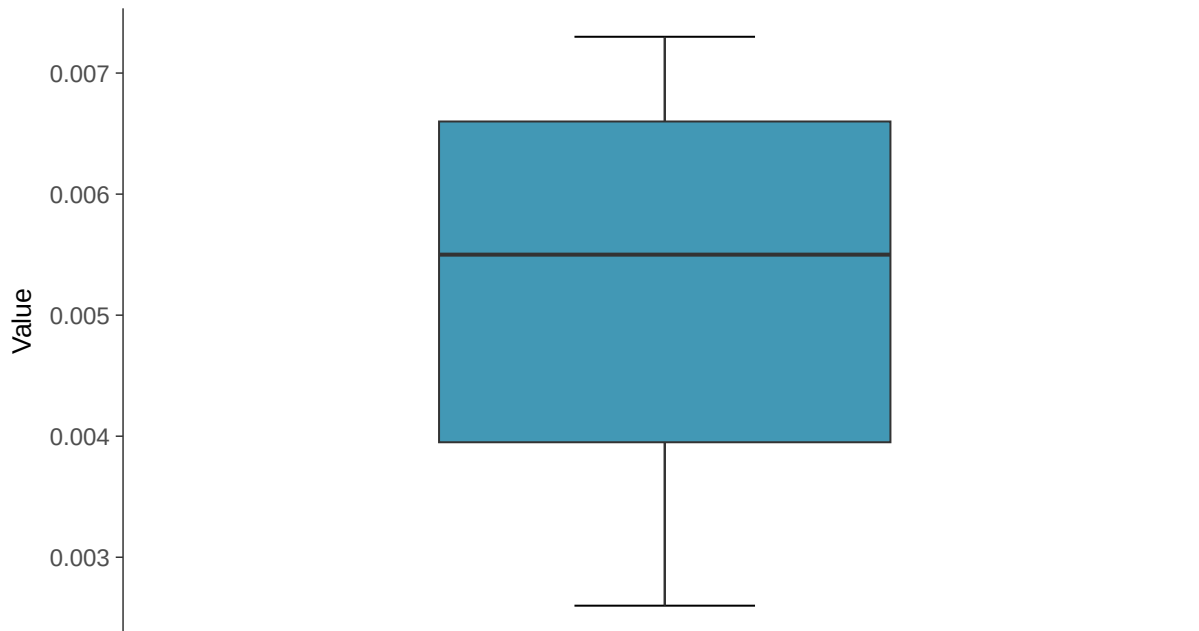
Appendix IV: Arsenic, MW-19

ID: 29_1_4_102



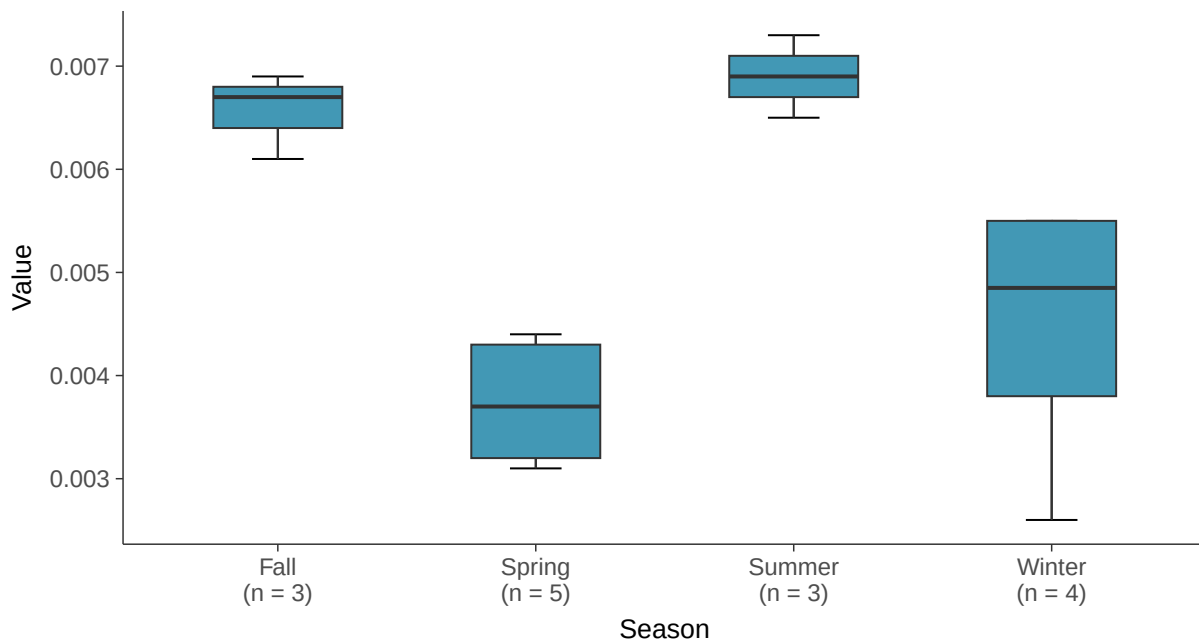
Boxplot

Arsenic, MW-19 (mg/L)



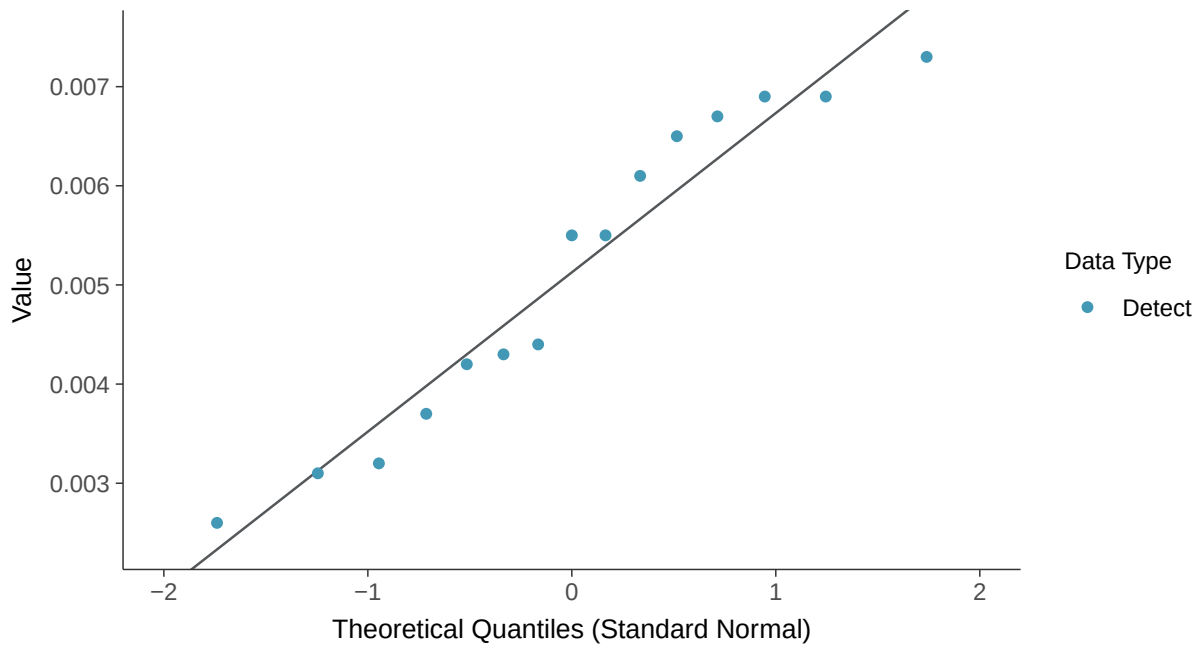
Boxplot by Season

Arsenic, MW-19 (mg/L)



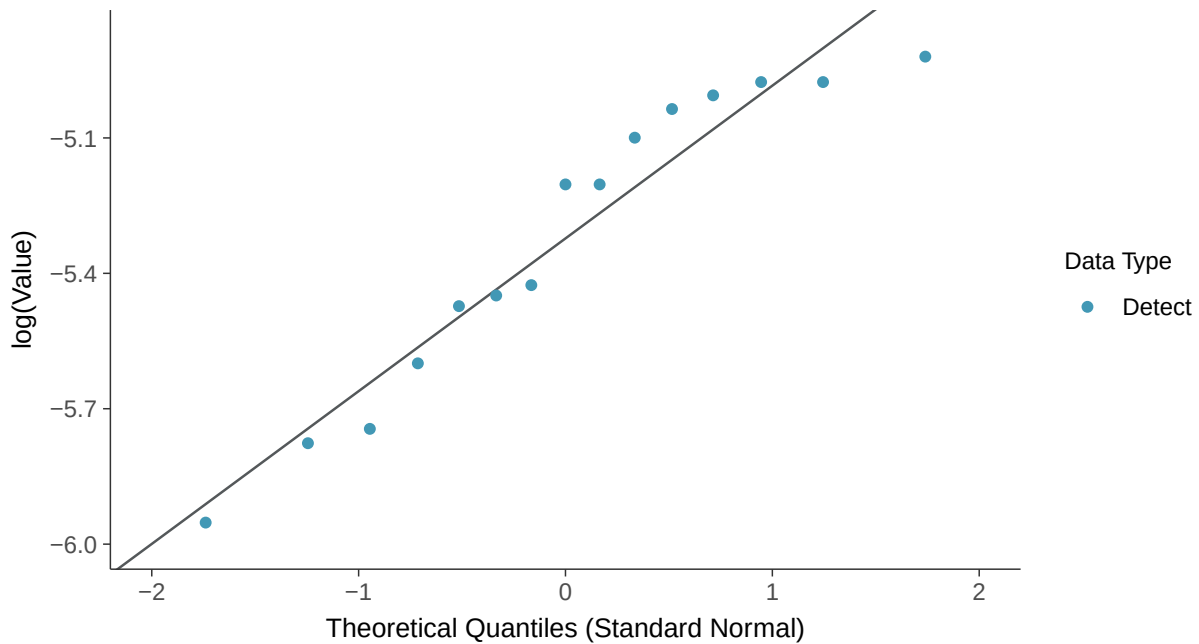
Normal Q-Q plot

Arsenic, MW-19 (mg/L)

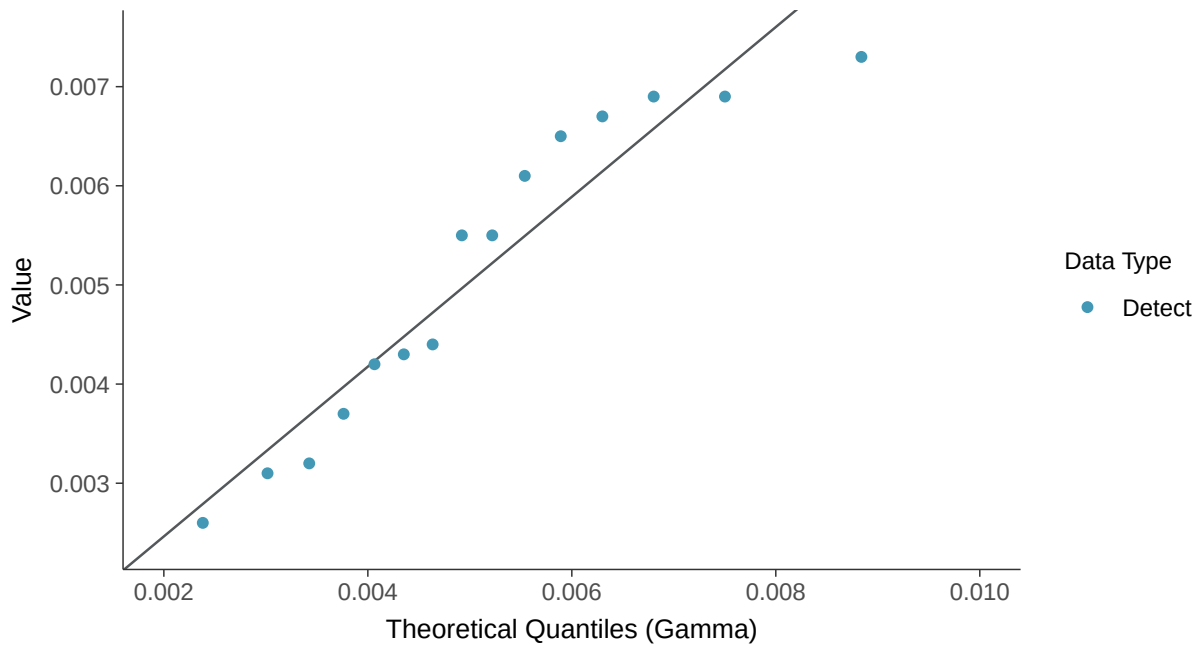


Lognormal Q-Q plot

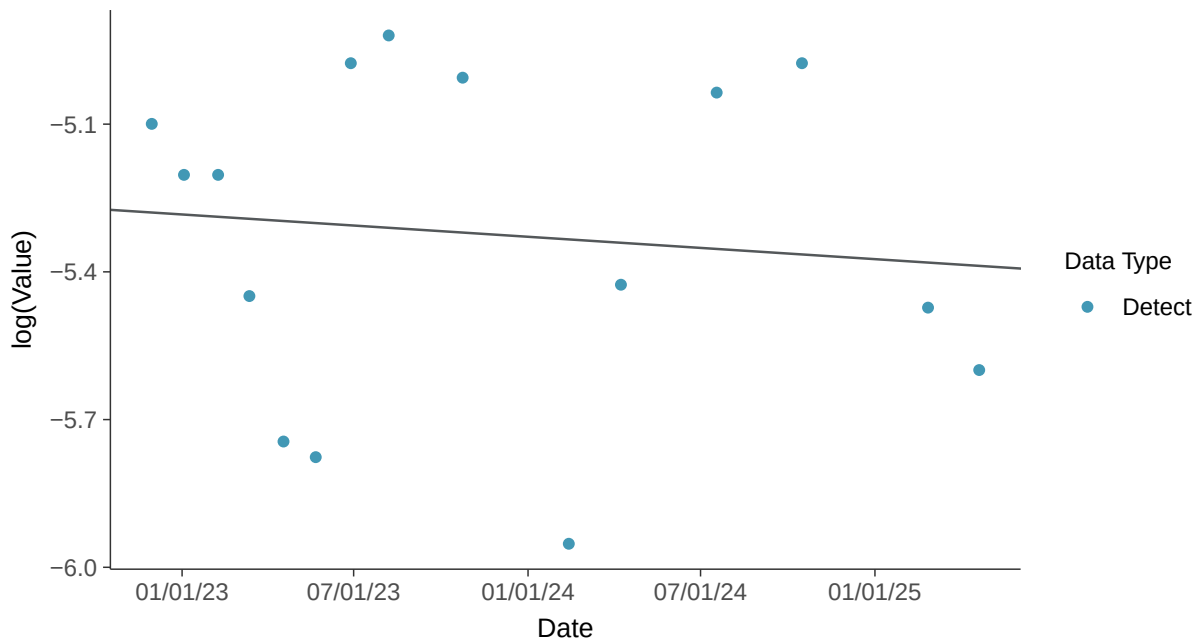
Arsenic, MW-19 (mg/L)



Gamma Q-Q plot
Arsenic, MW-19 (mg/L)

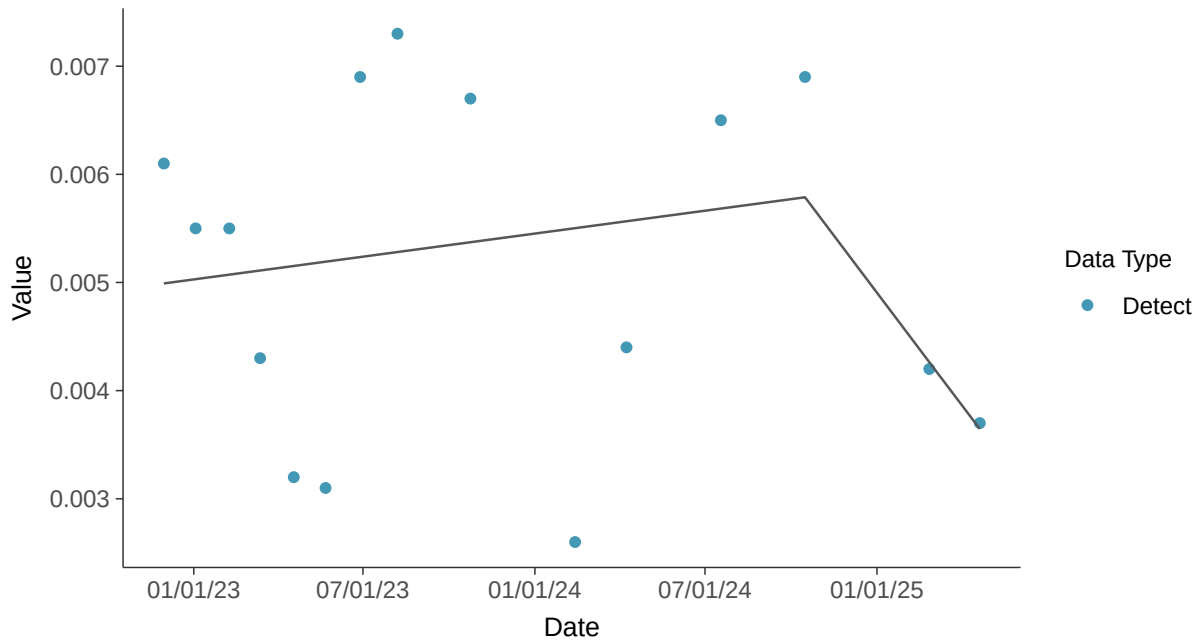


Trend Regression: Lognormal MLE
Arsenic, MW-19 (mg/L)



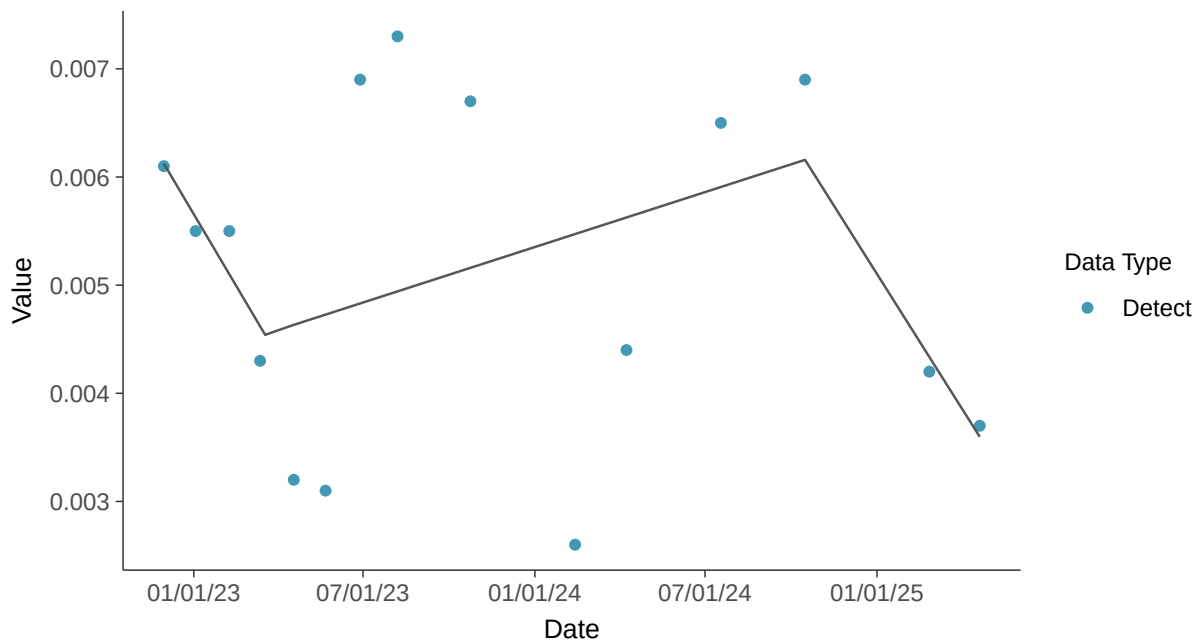
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-19 (mg/L)



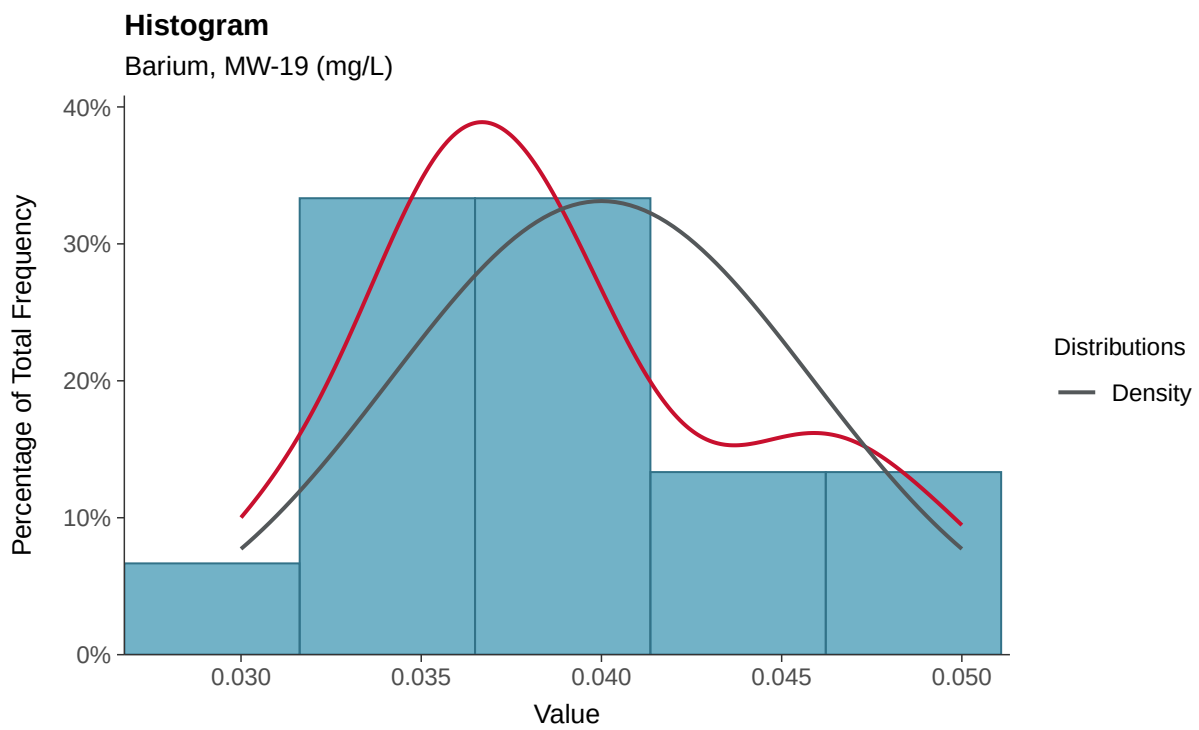
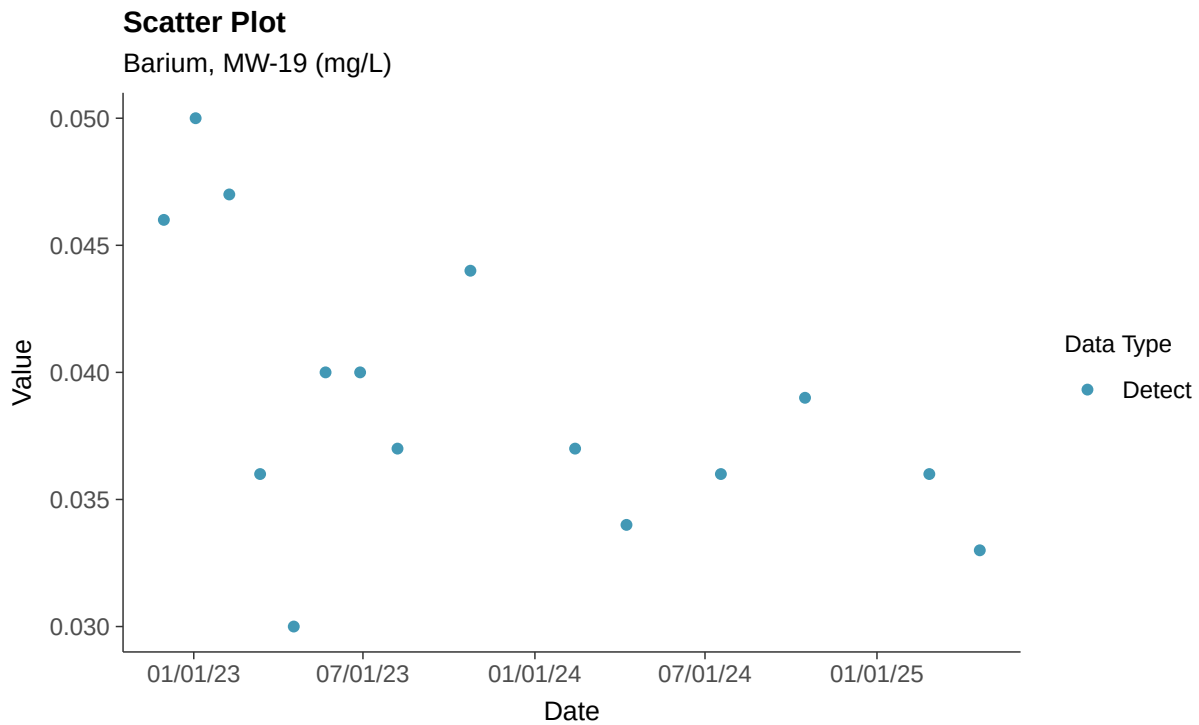
Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-19 (mg/L)



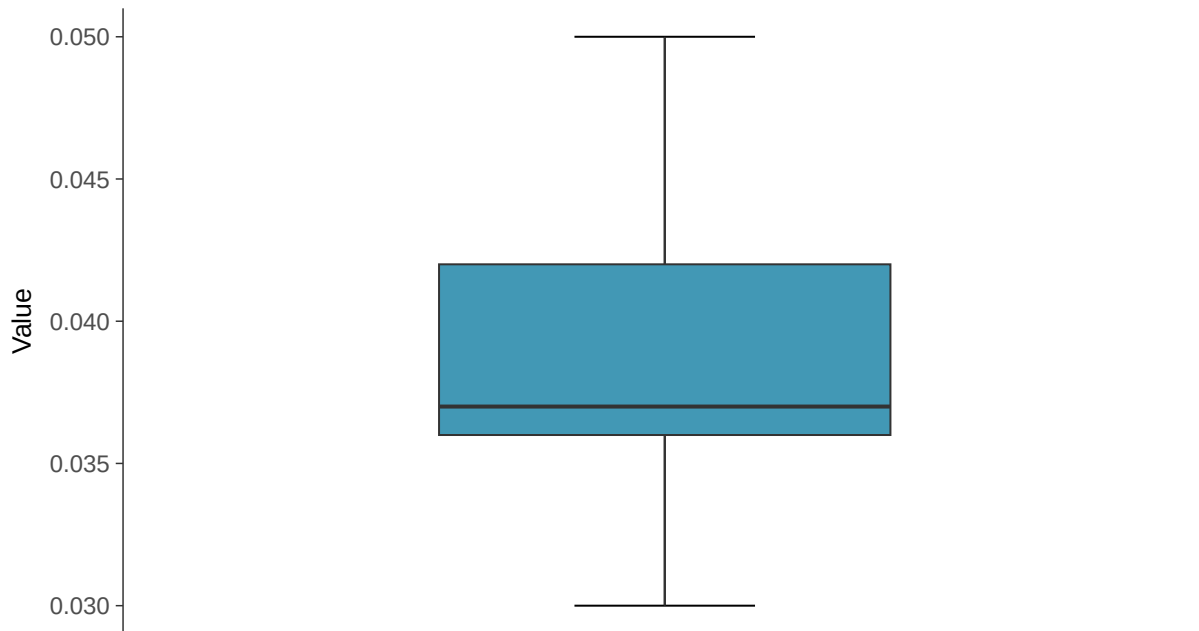
Appendix IV: Barium, MW-19

ID: 29_1_4_103



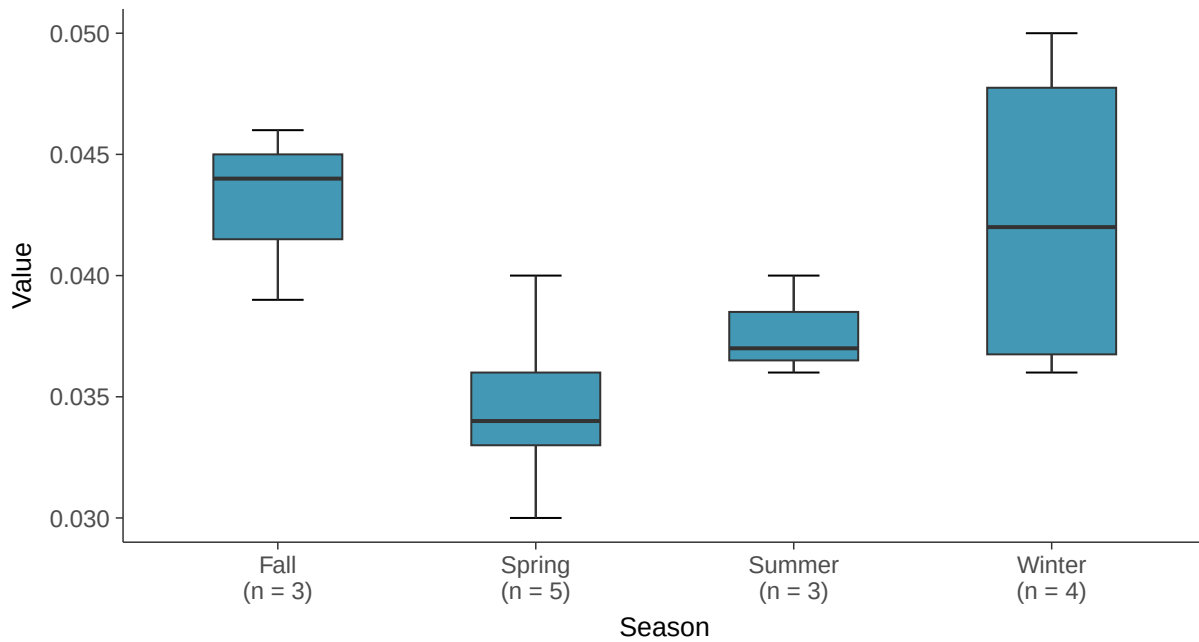
Boxplot

Barium, MW-19 (mg/L)



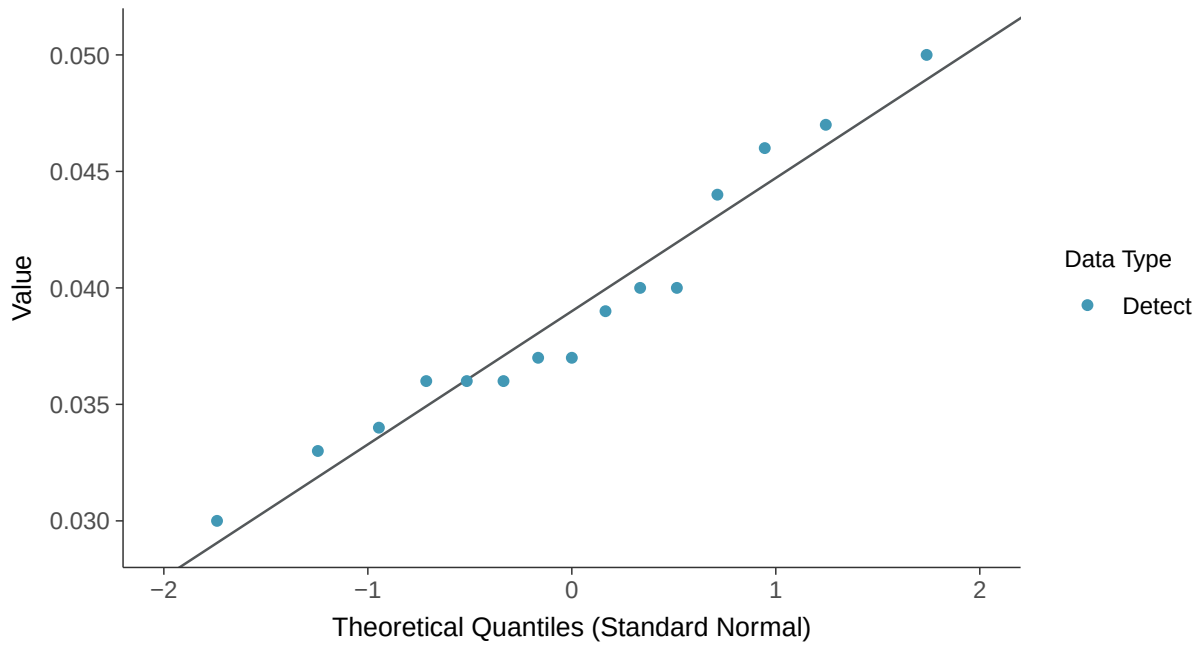
Boxplot by Season

Barium, MW-19 (mg/L)



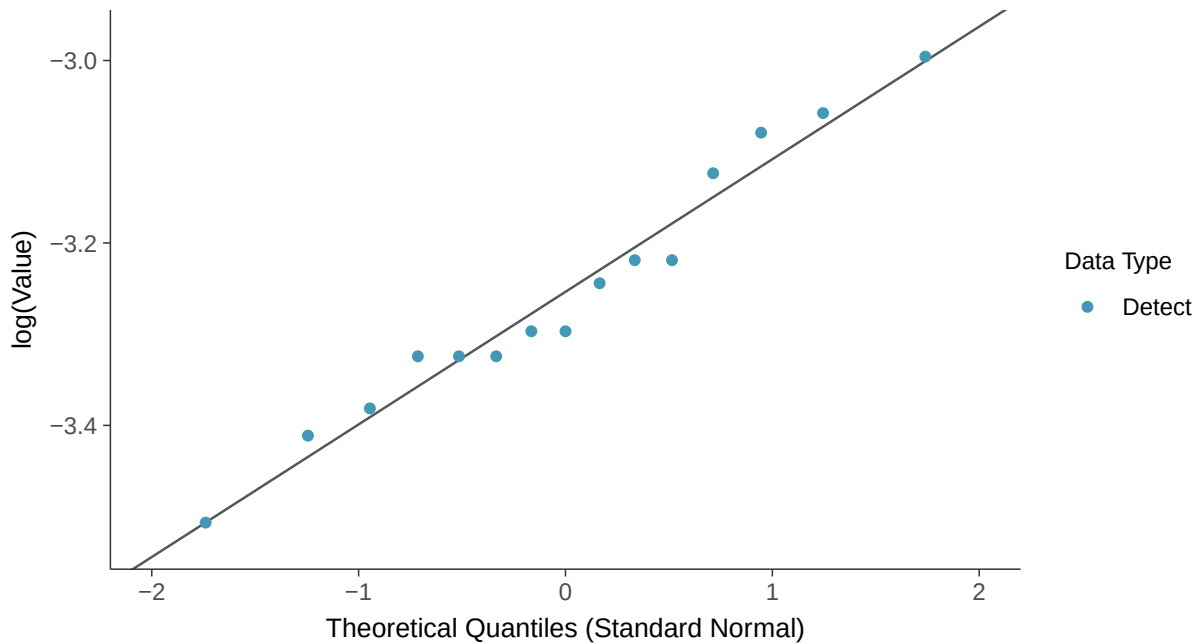
Normal Q-Q plot

Barium, MW-19 (mg/L)



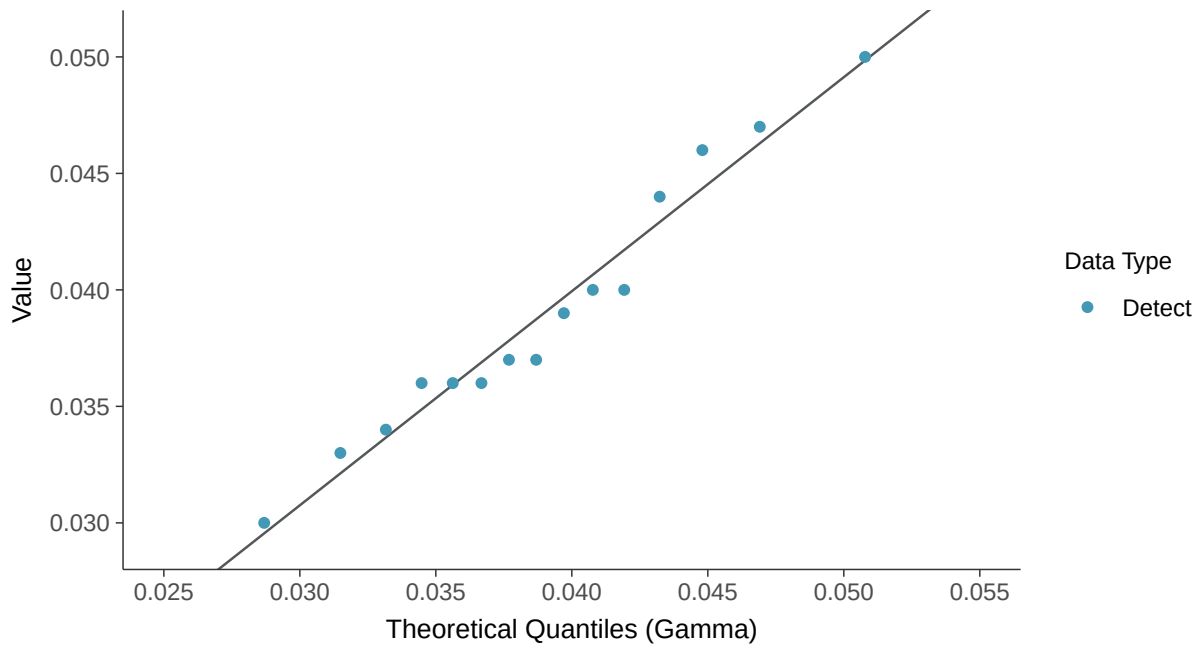
Lognormal Q-Q plot

Barium, MW-19 (mg/L)



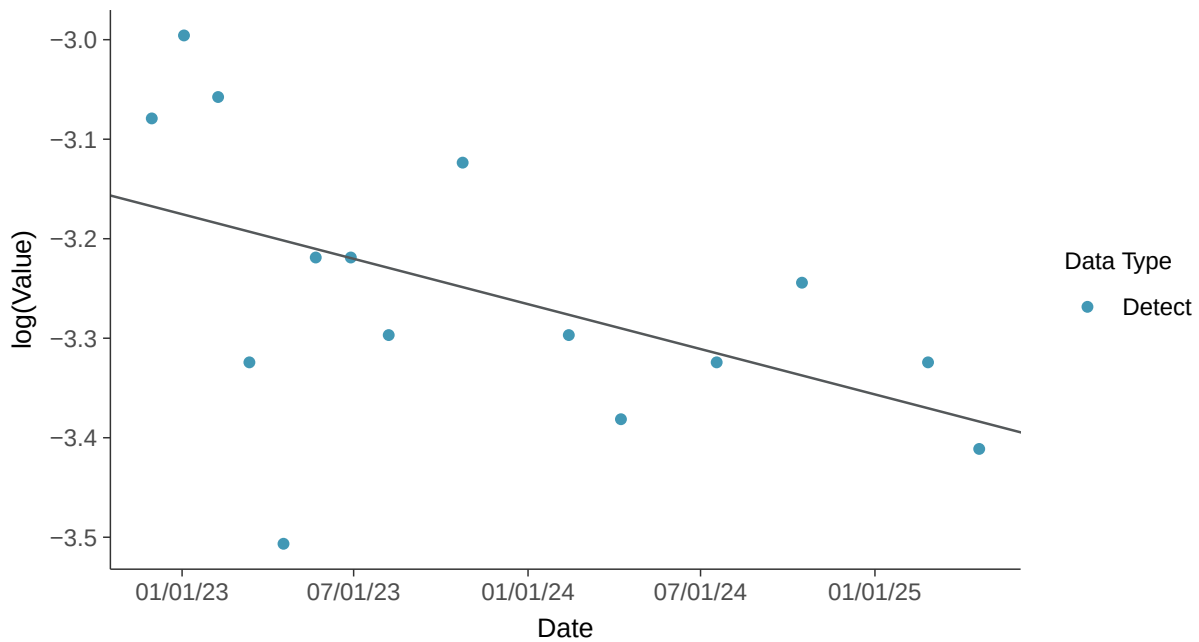
Gamma Q-Q plot

Barium, MW-19 (mg/L)



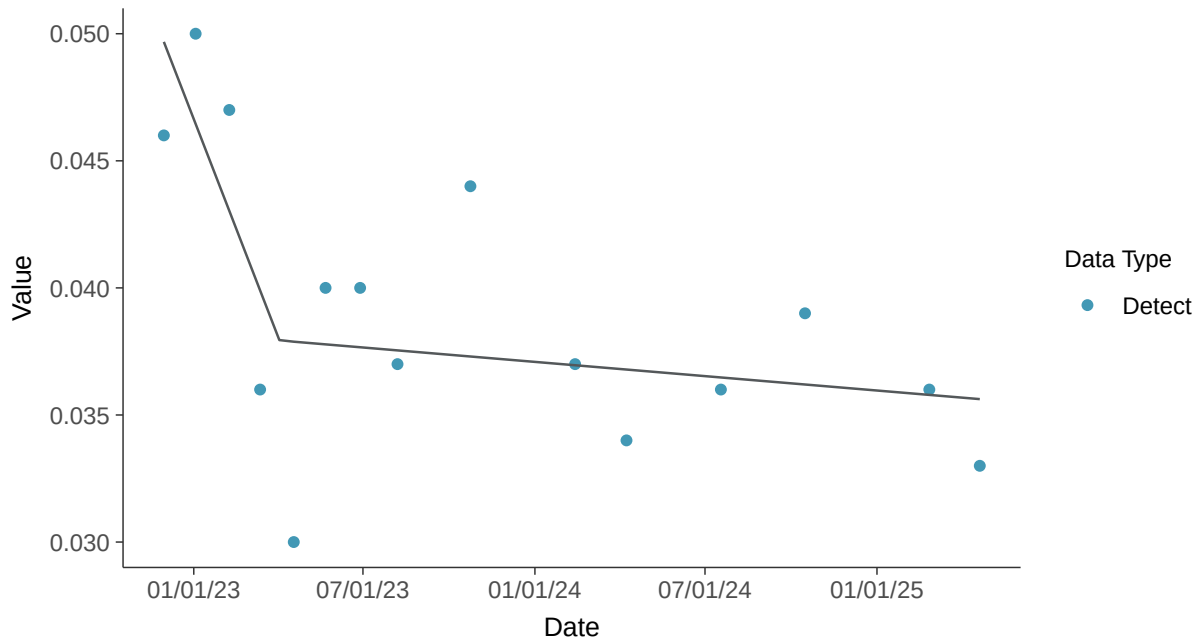
Trend Regression: Lognormal MLE

Barium, MW-19 (mg/L)



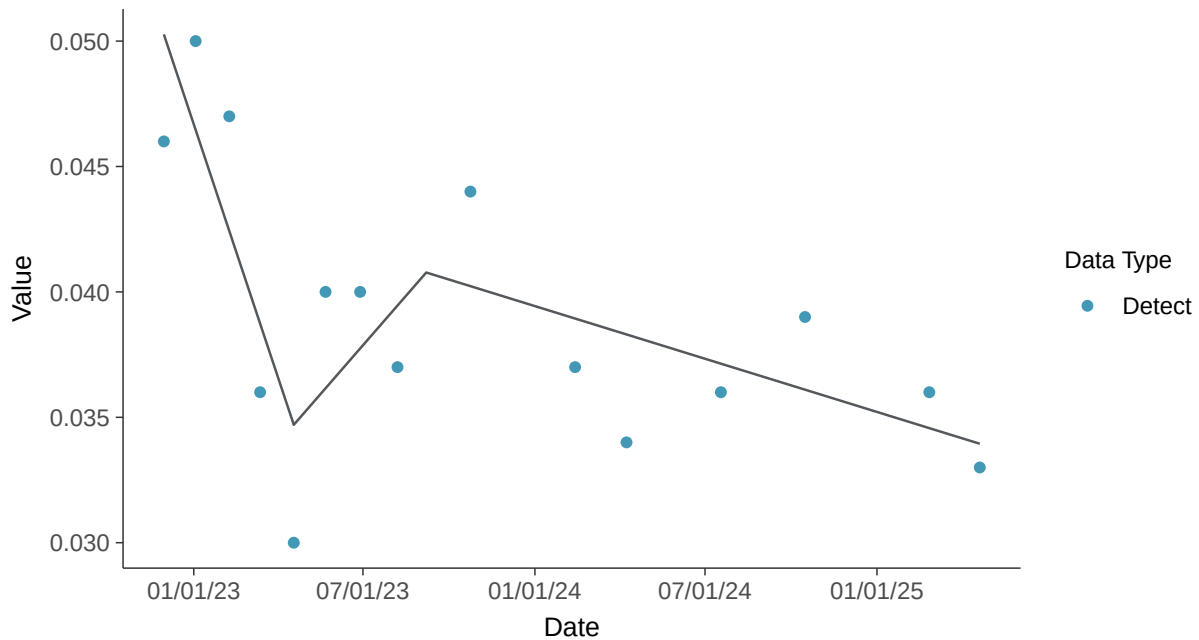
Trend Regression: Piecewise Linear-Linear

Barium, MW-19 (mg/L)



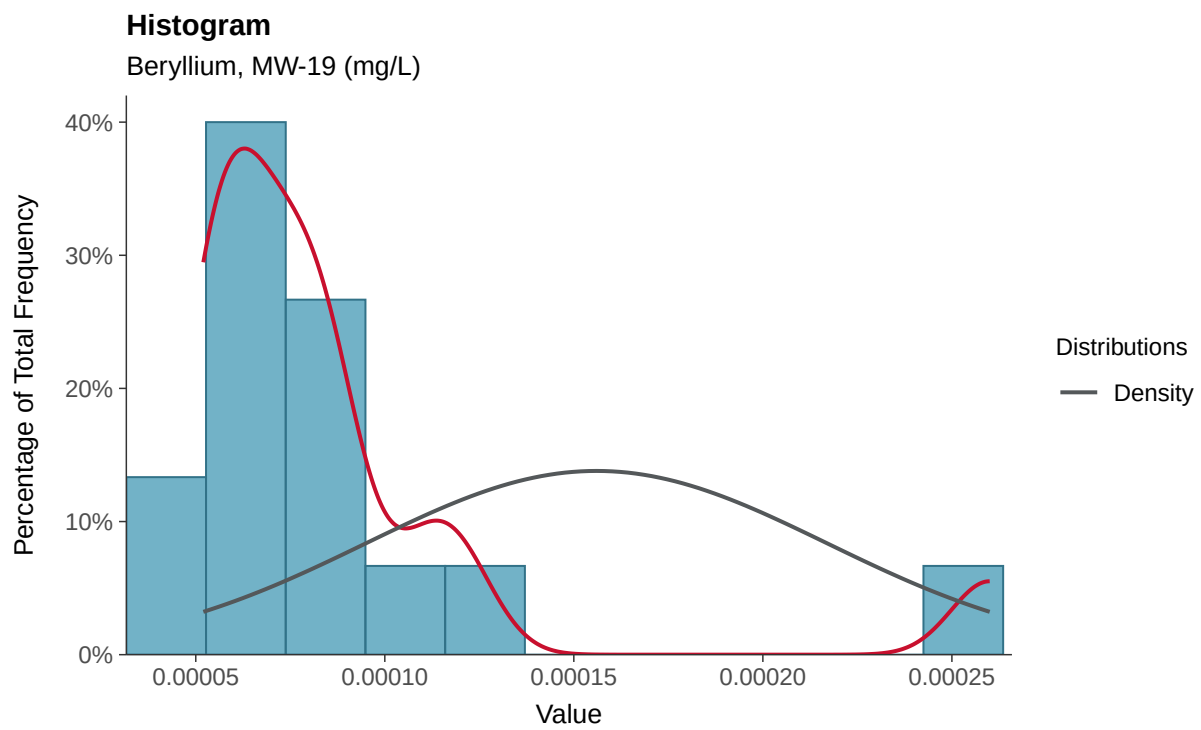
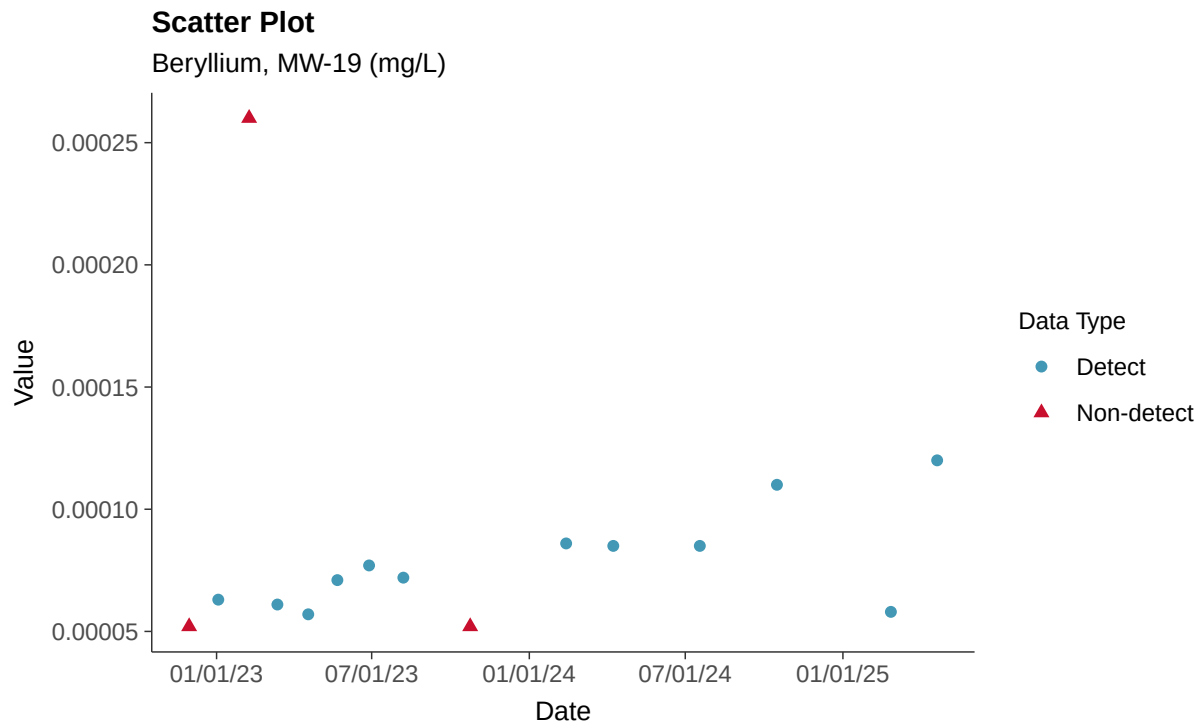
Trend Regression: Piecewise Linear-Linear-Linear

Barium, MW-19 (mg/L)



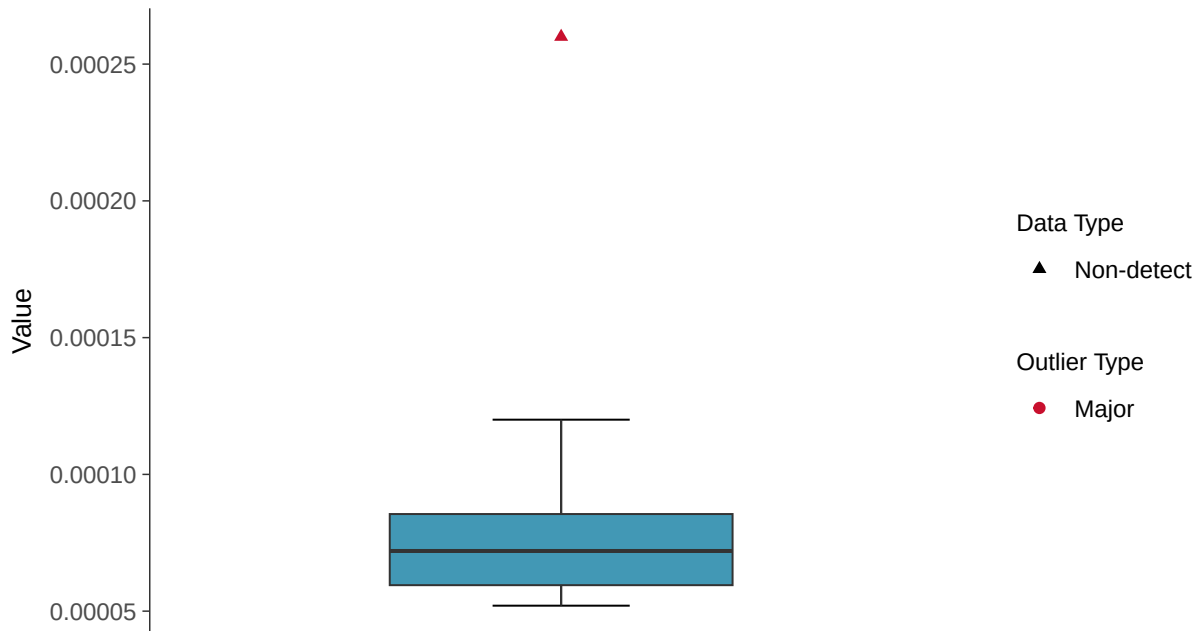
Appendix IV: Beryllium, MW-19

ID: 29_1_4_104



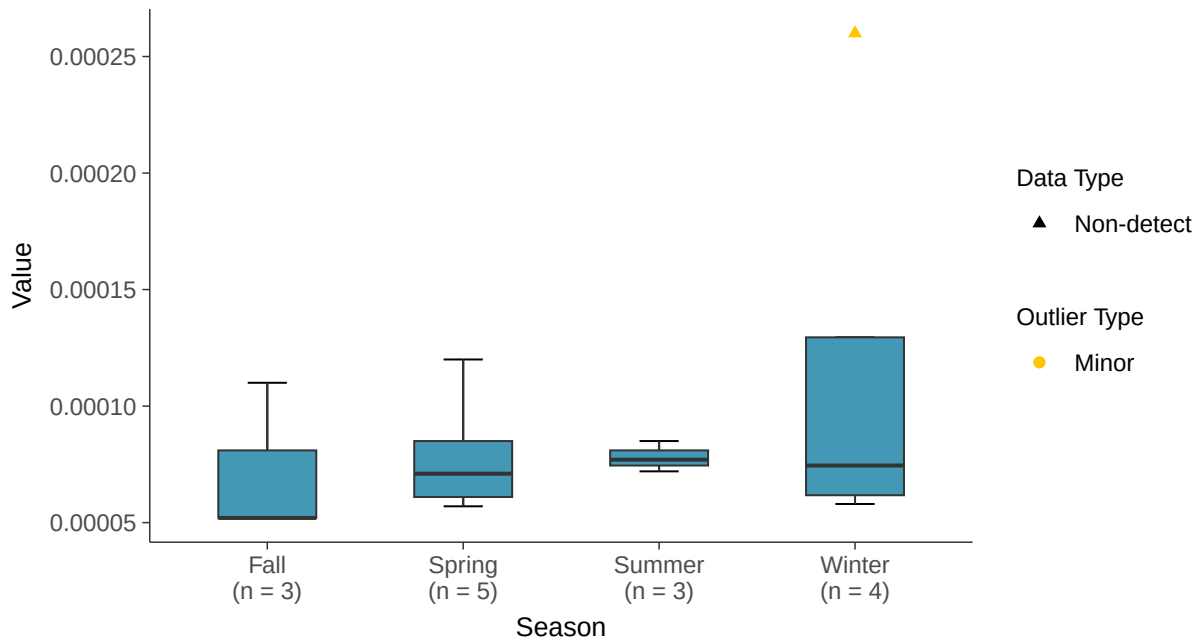
Boxplot

Beryllium, MW-19 (mg/L)



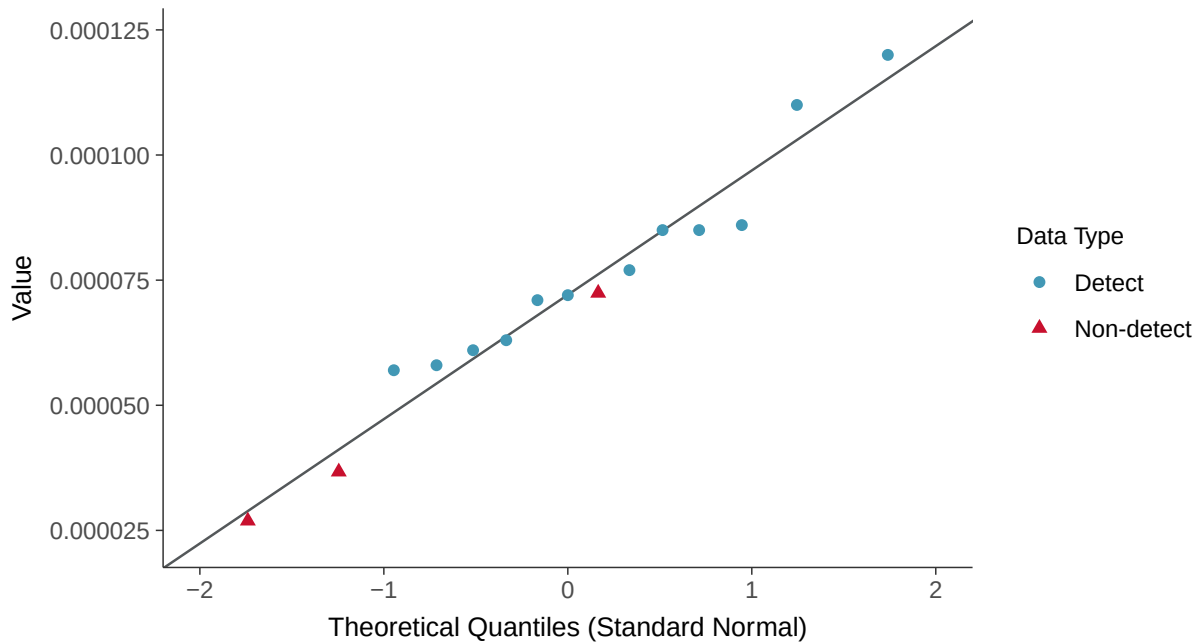
Boxplot by Season

Beryllium, MW-19 (mg/L)



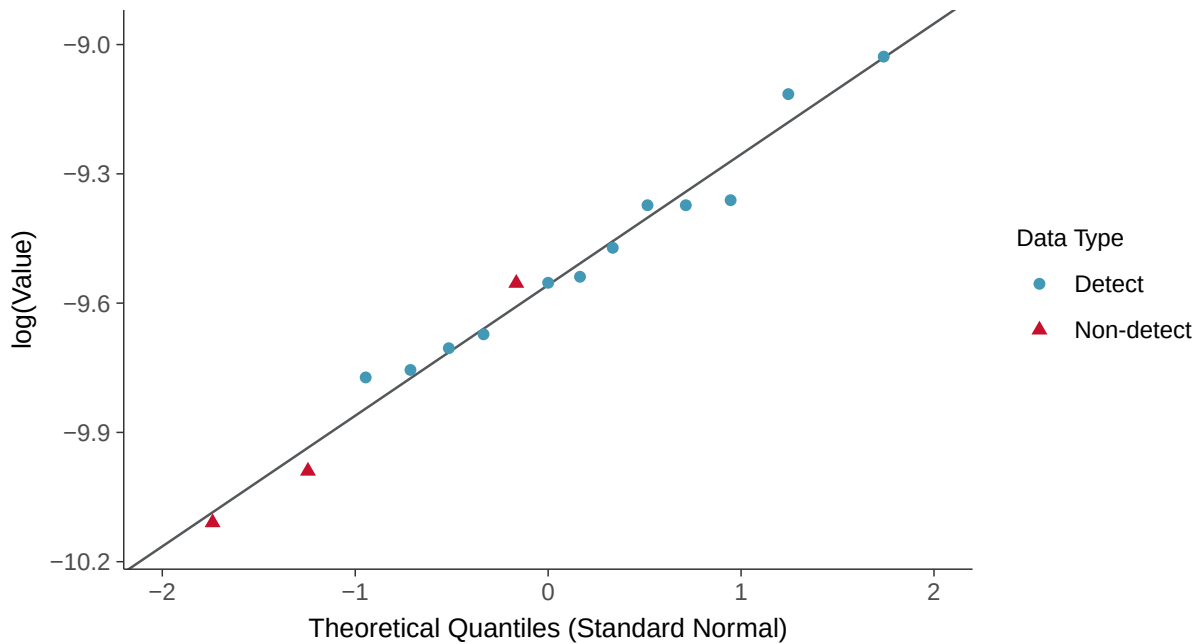
Normal Q-Q plot using ROS Imputed Estimates

Beryllium, MW-19 (mg/L)



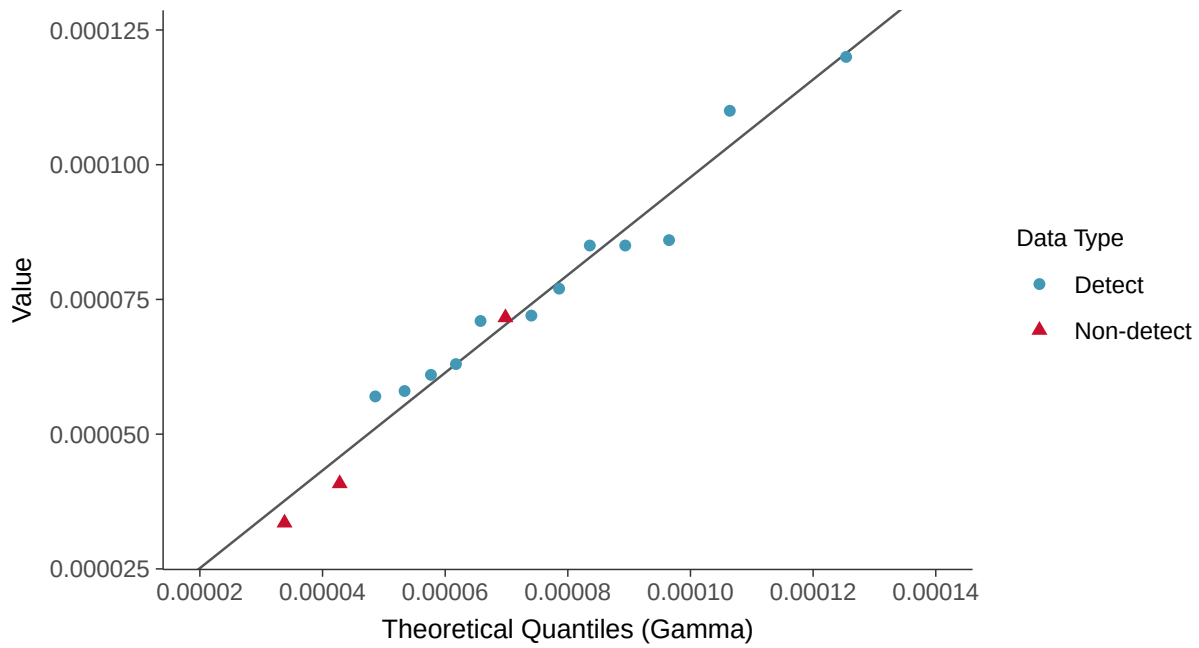
Lognormal Q-Q plot using ROS Imputed Estimates

Beryllium, MW-19 (mg/L)



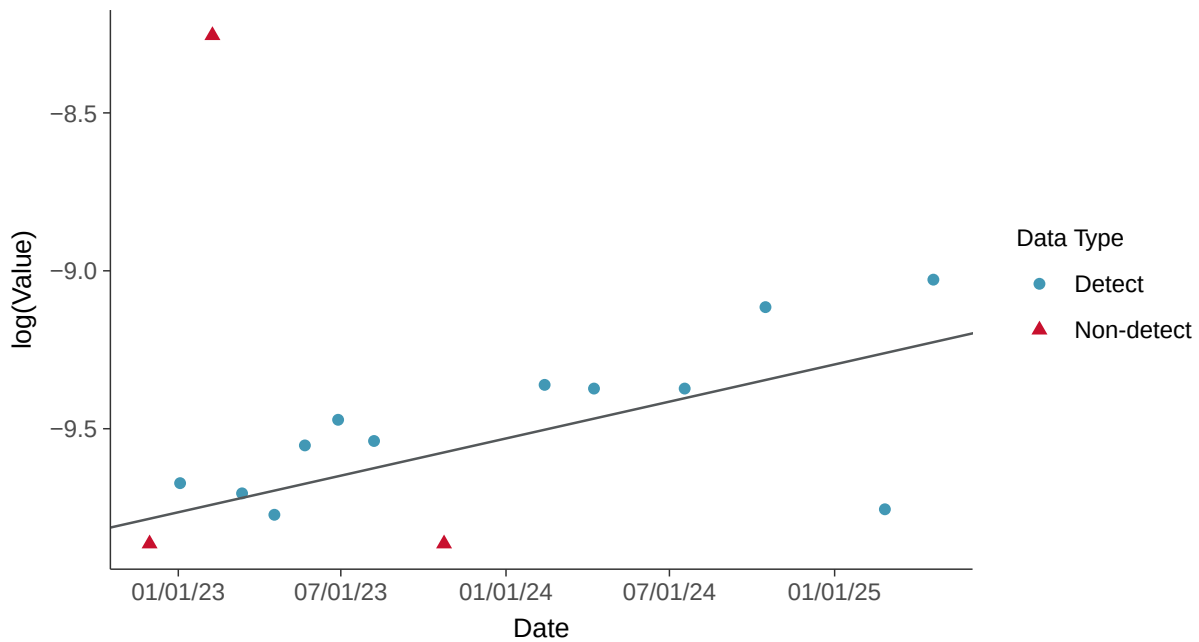
Gamma Q-Q plot using ROS Imputed Estimates

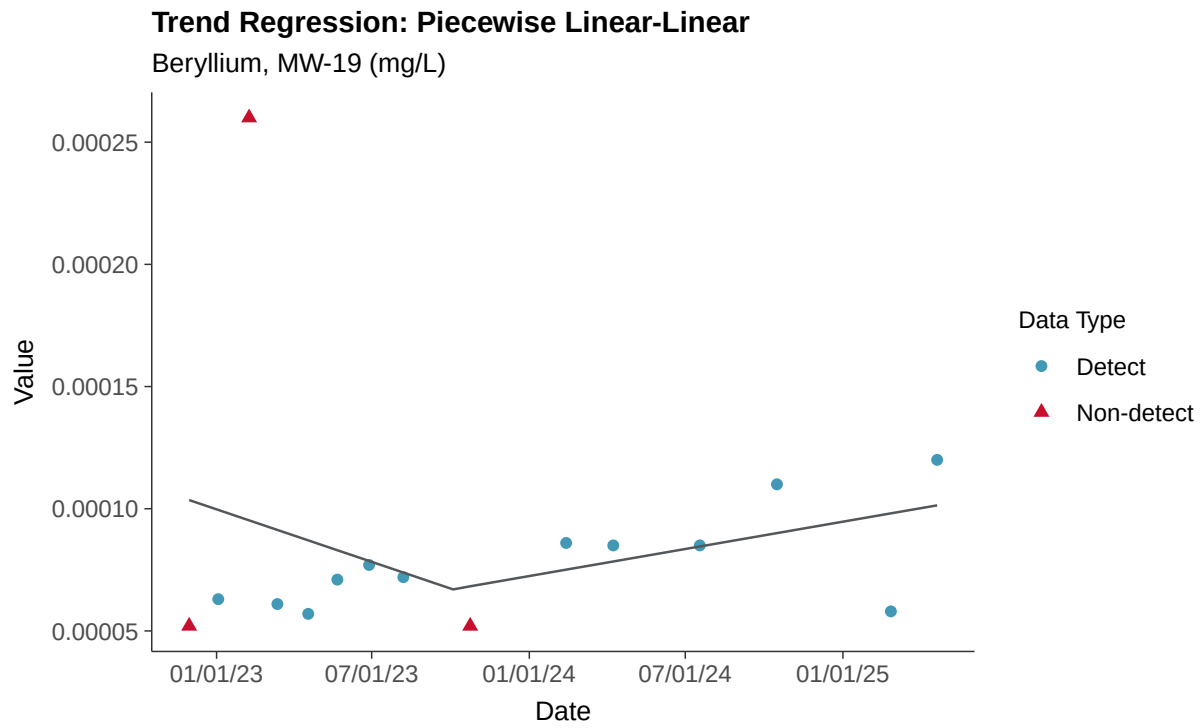
Beryllium, MW-19 (mg/L)



Trend Regression: Lognormal MLE

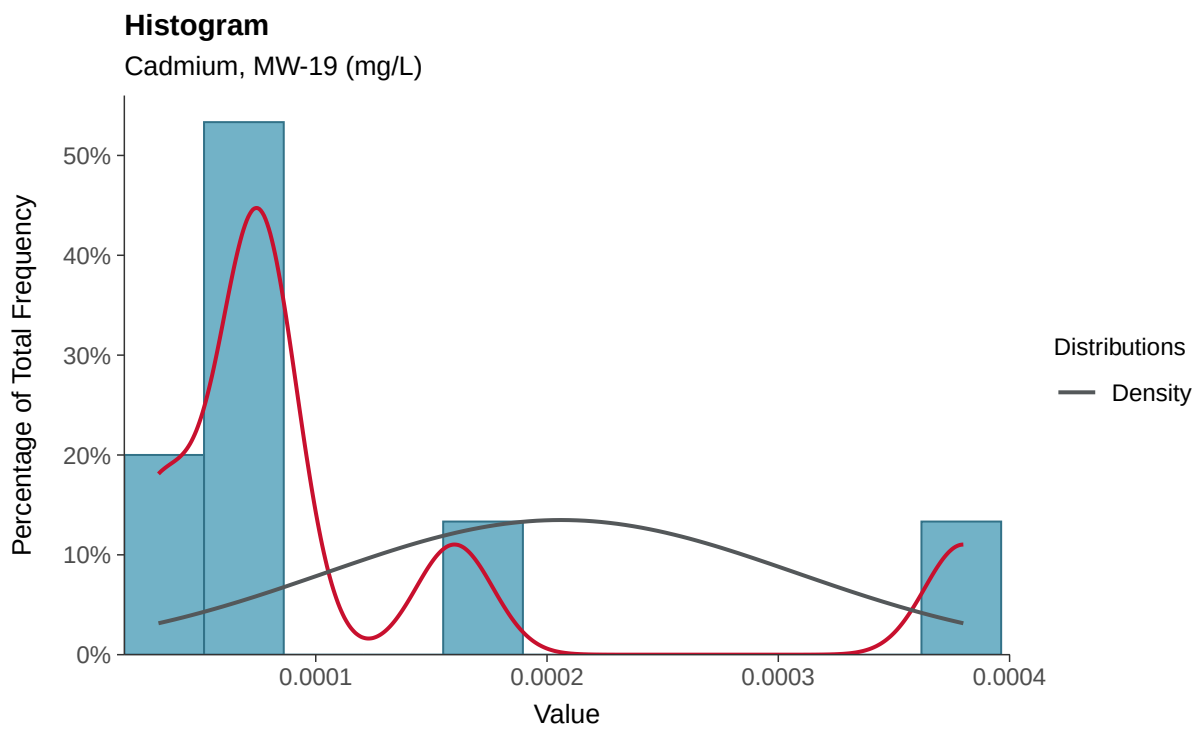
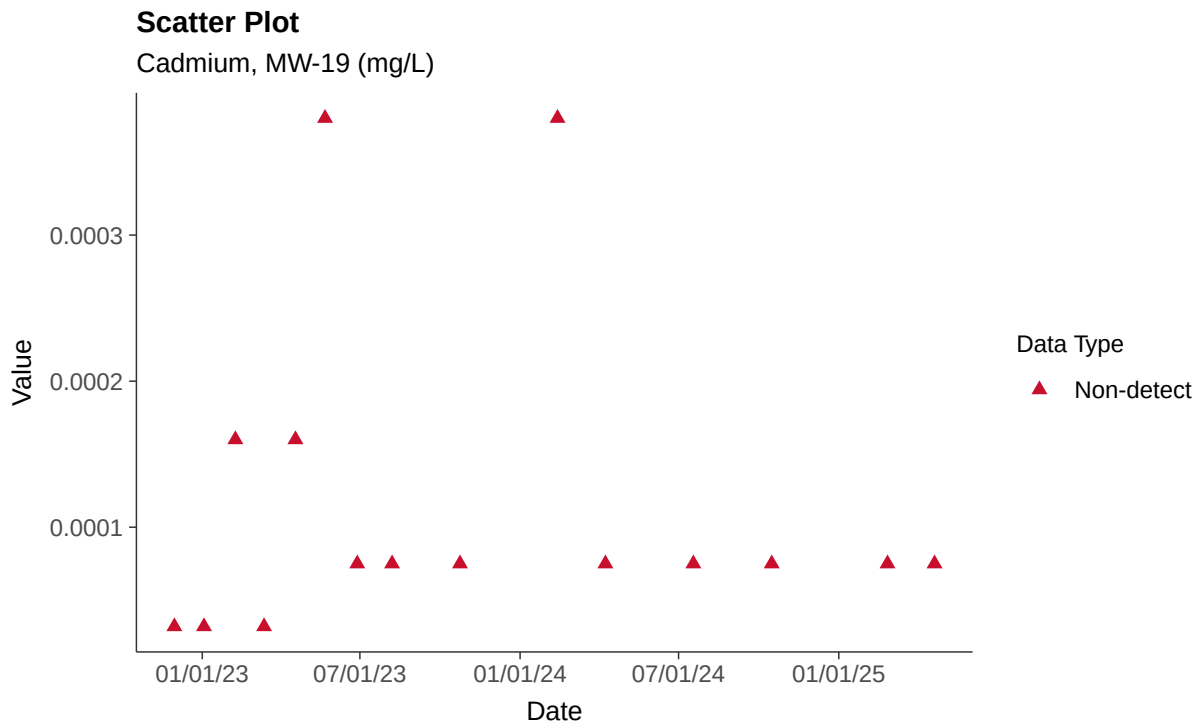
Beryllium, MW-19 (mg/L)





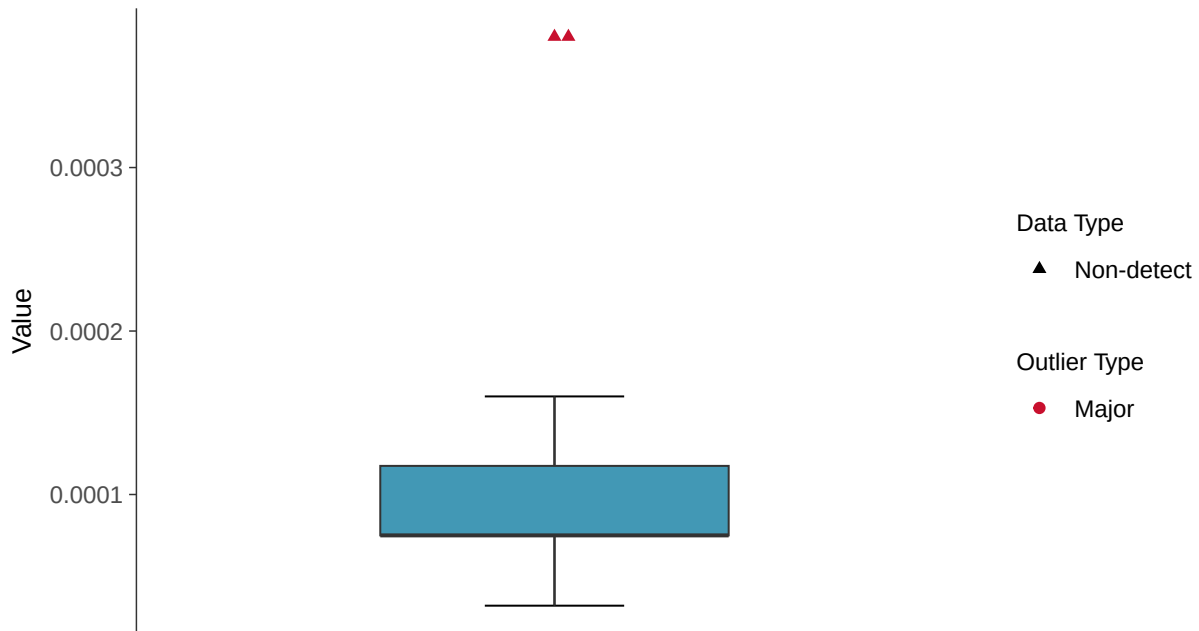
Appendix IV: Cadmium, MW-19

ID: 29_1_4_106



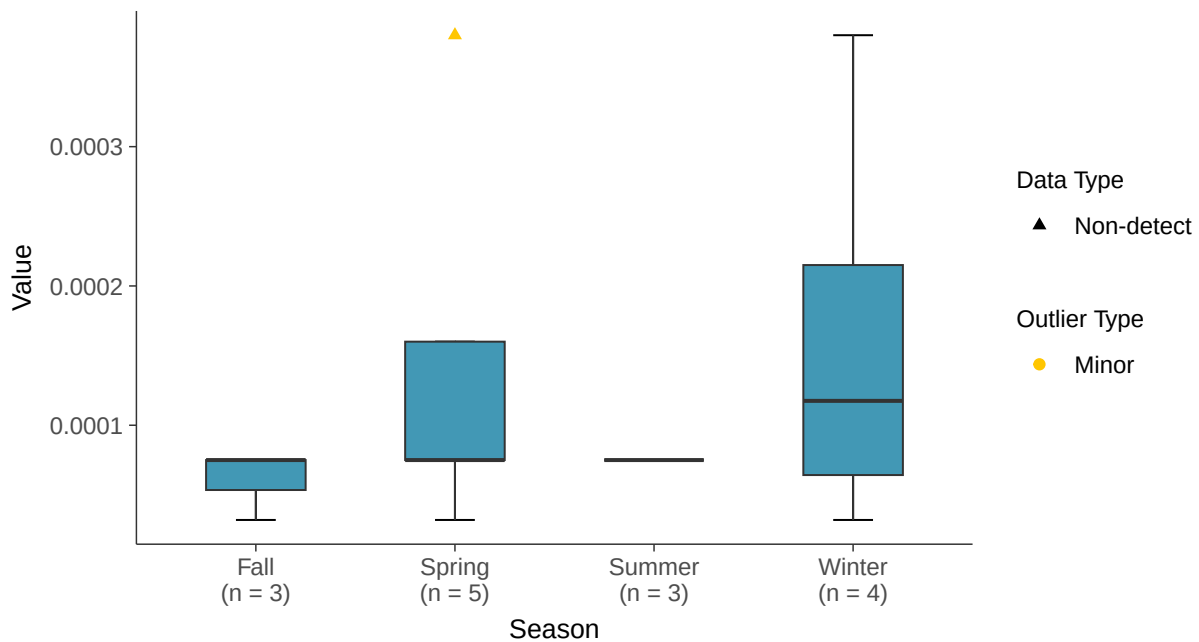
Boxplot

Cadmium, MW-19 (mg/L)



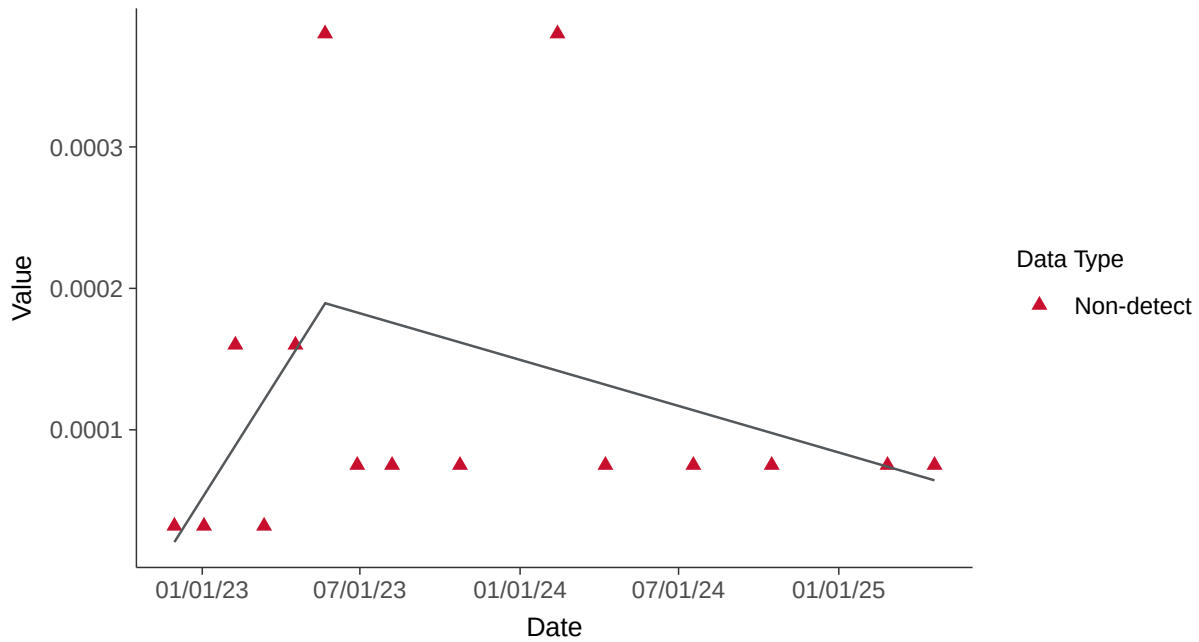
Boxplot by Season

Cadmium, MW-19 (mg/L)



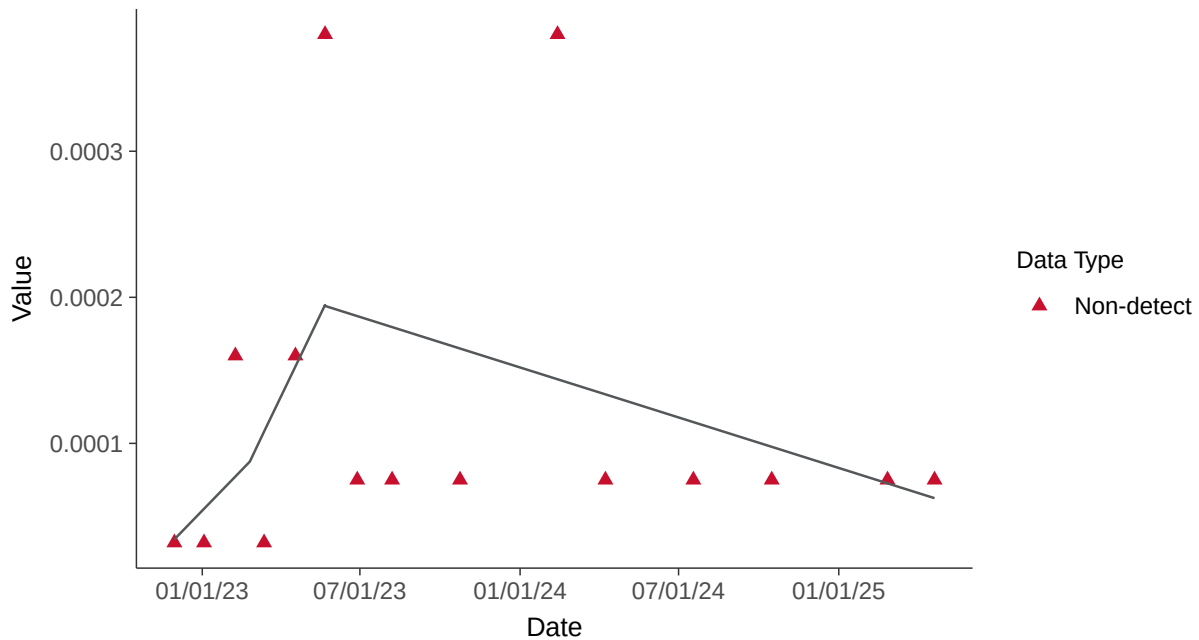
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-19 (mg/L)



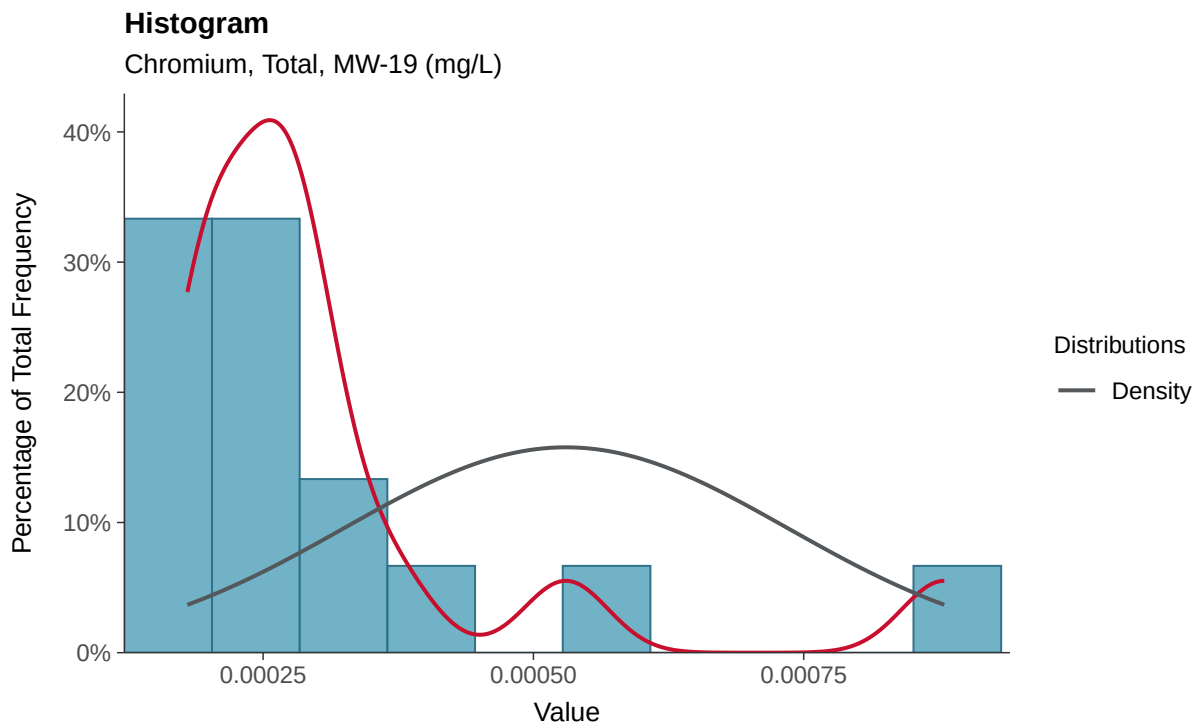
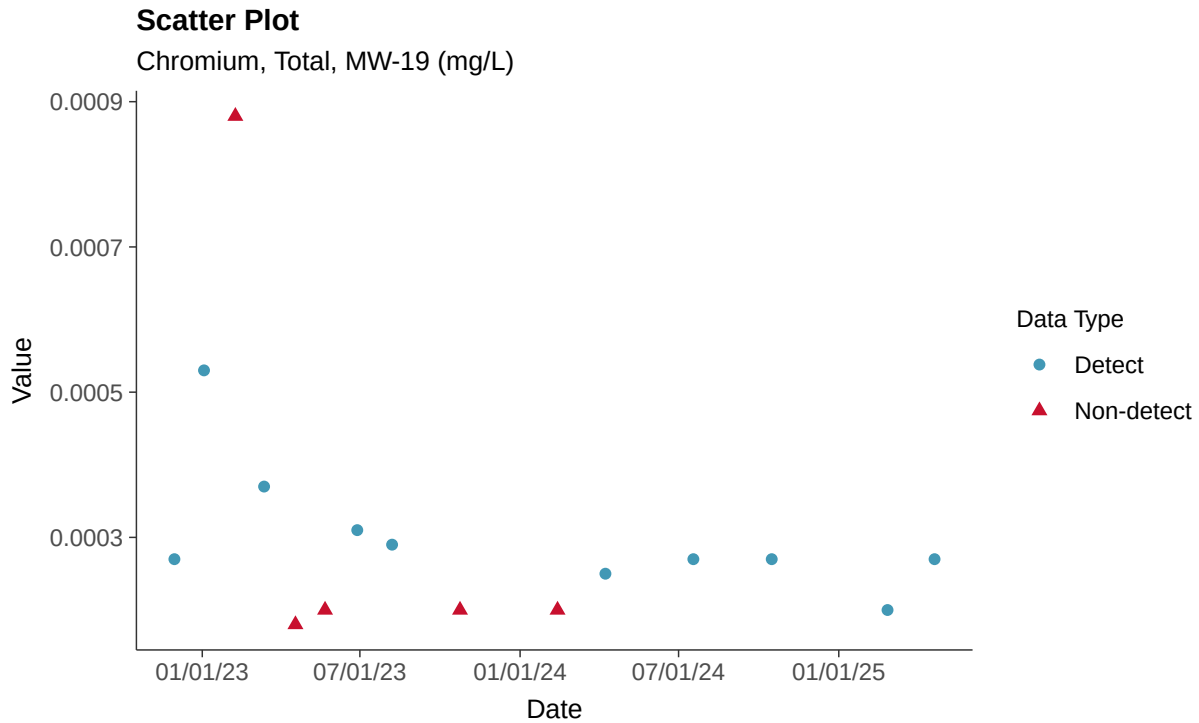
Trend Regression: Piecewise Linear-Linear-Linear

Cadmium, MW-19 (mg/L)



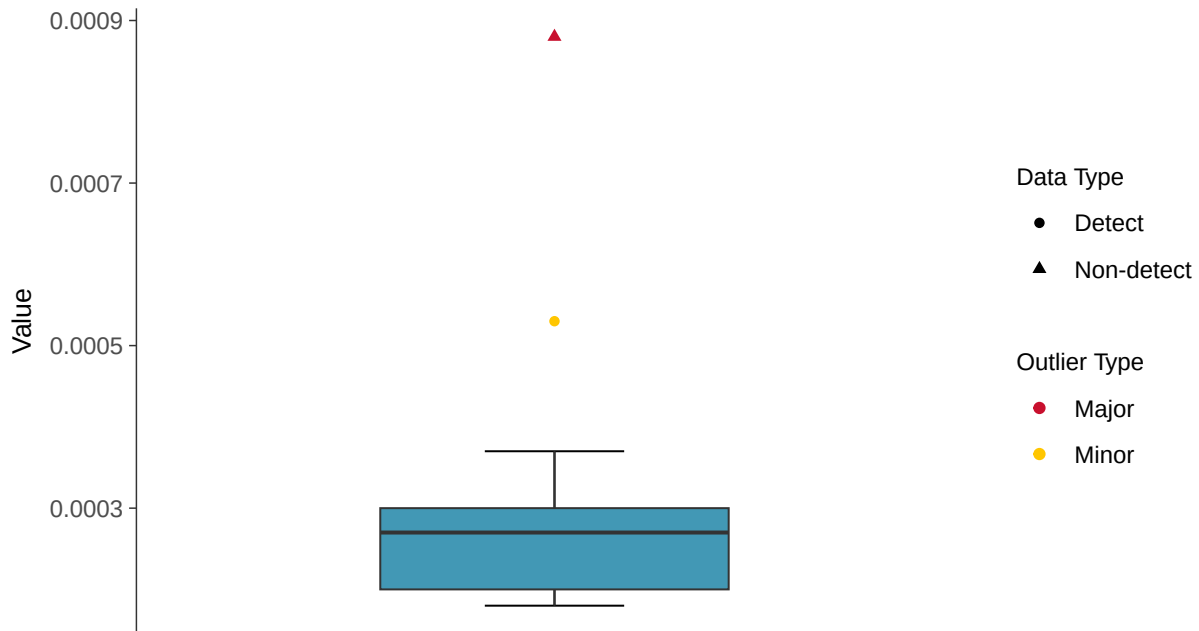
Appendix IV: Chromium, Total, MW-19

ID: 29_1_4_109



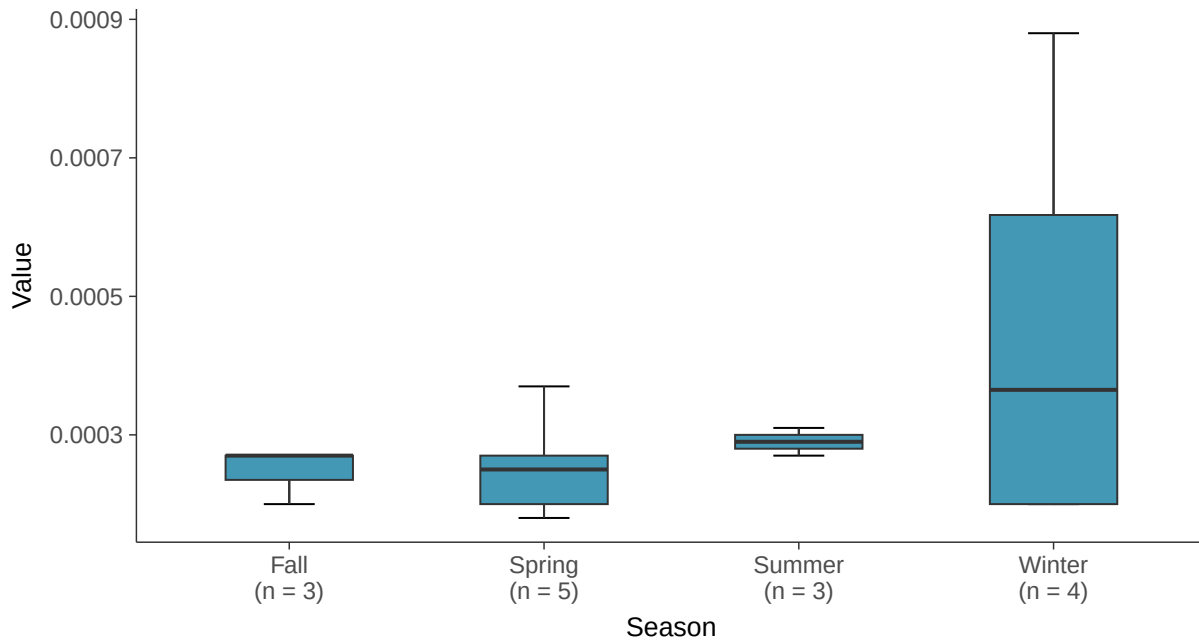
Boxplot

Chromium, Total, MW-19 (mg/L)



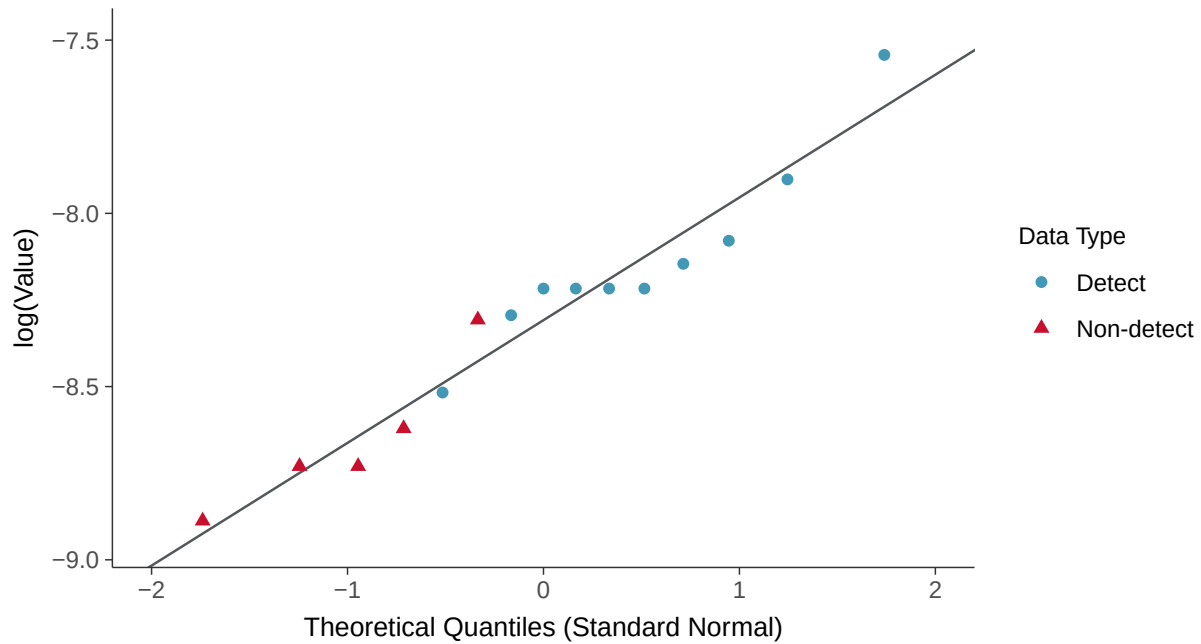
Boxplot by Season

Chromium, Total, MW-19 (mg/L)



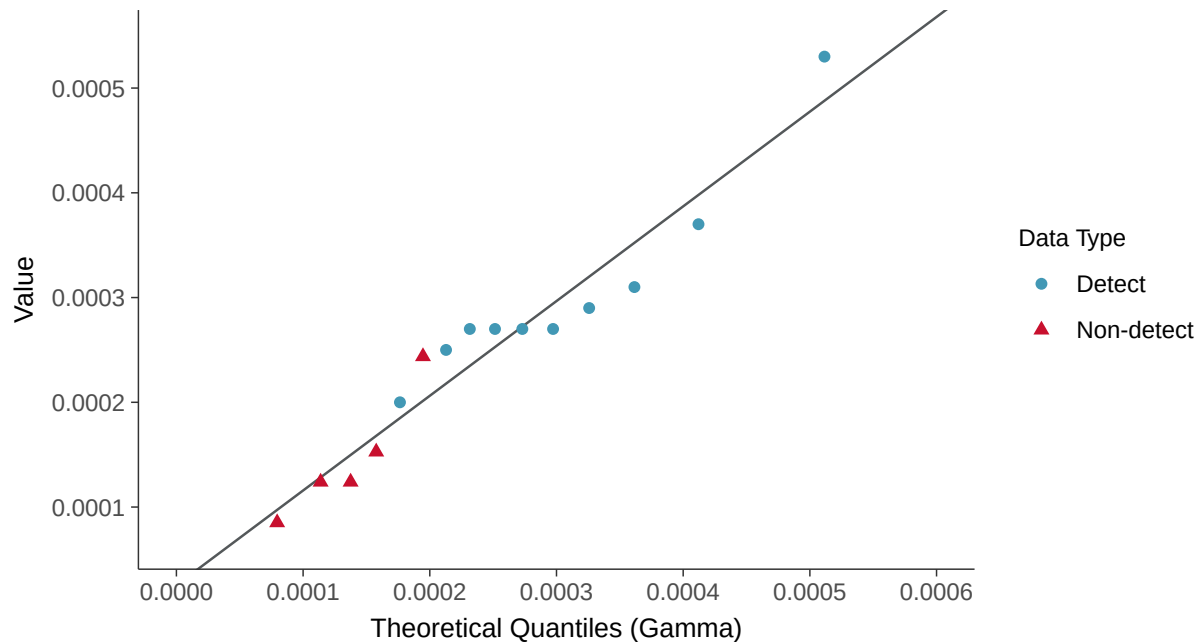
Lognormal Q-Q plot using ROS Imputed Estimates

Chromium, Total, MW-19 (mg/L)



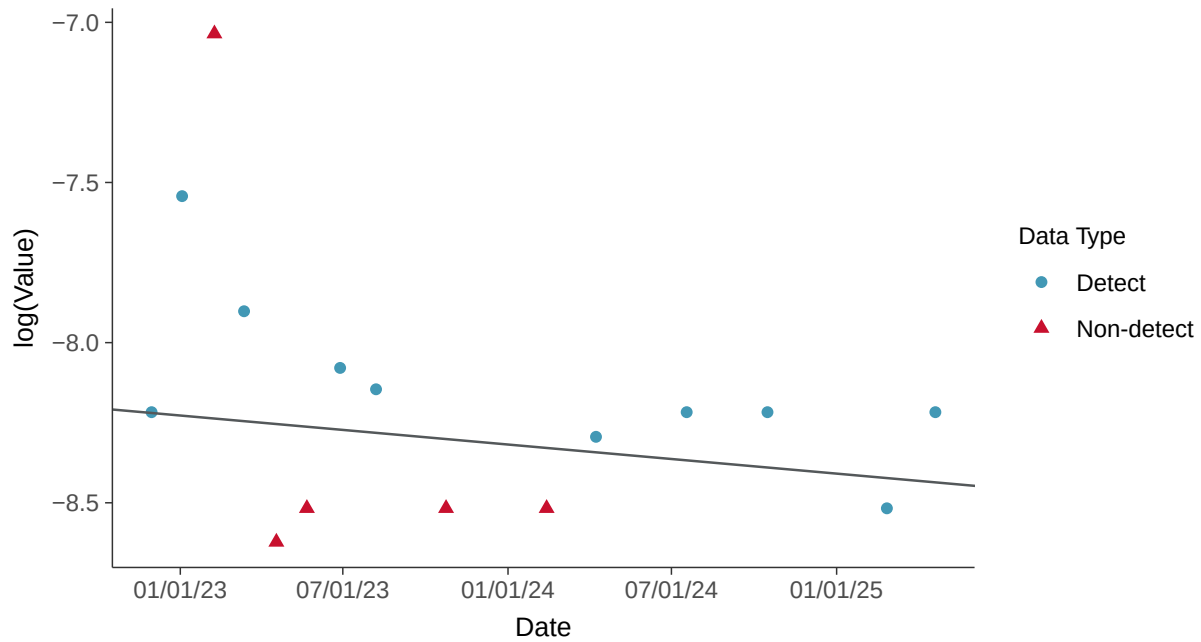
Gamma Q-Q plot using ROS Imputed Estimates

Chromium, Total, MW-19 (mg/L)



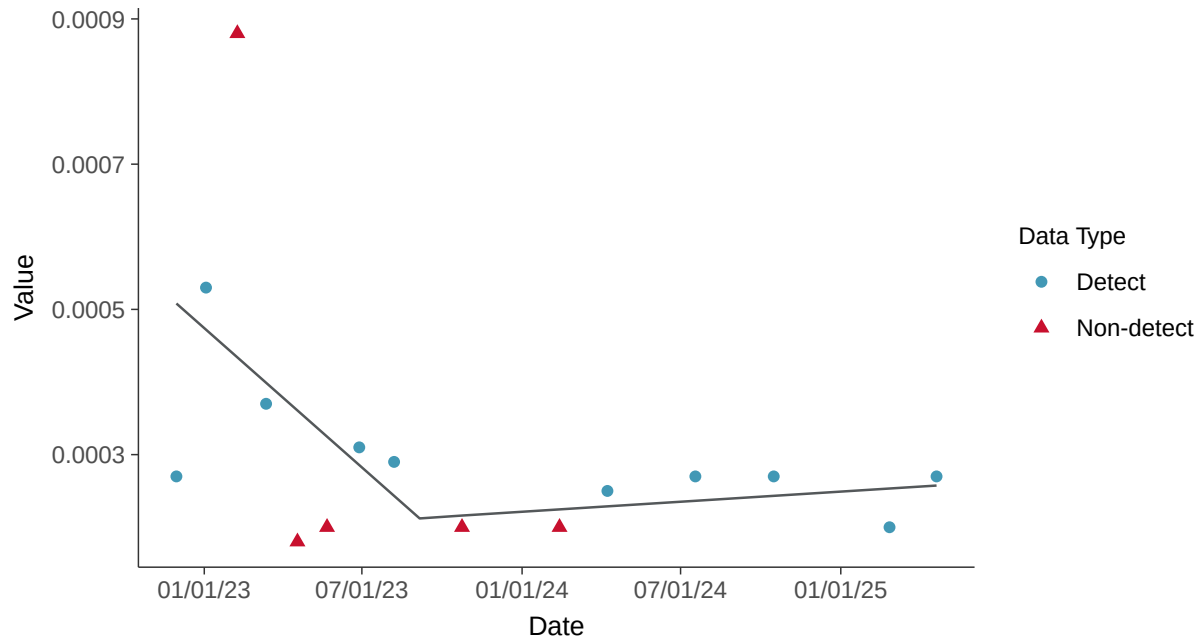
Trend Regression: Lognormal MLE

Chromium, Total, MW-19 (mg/L)

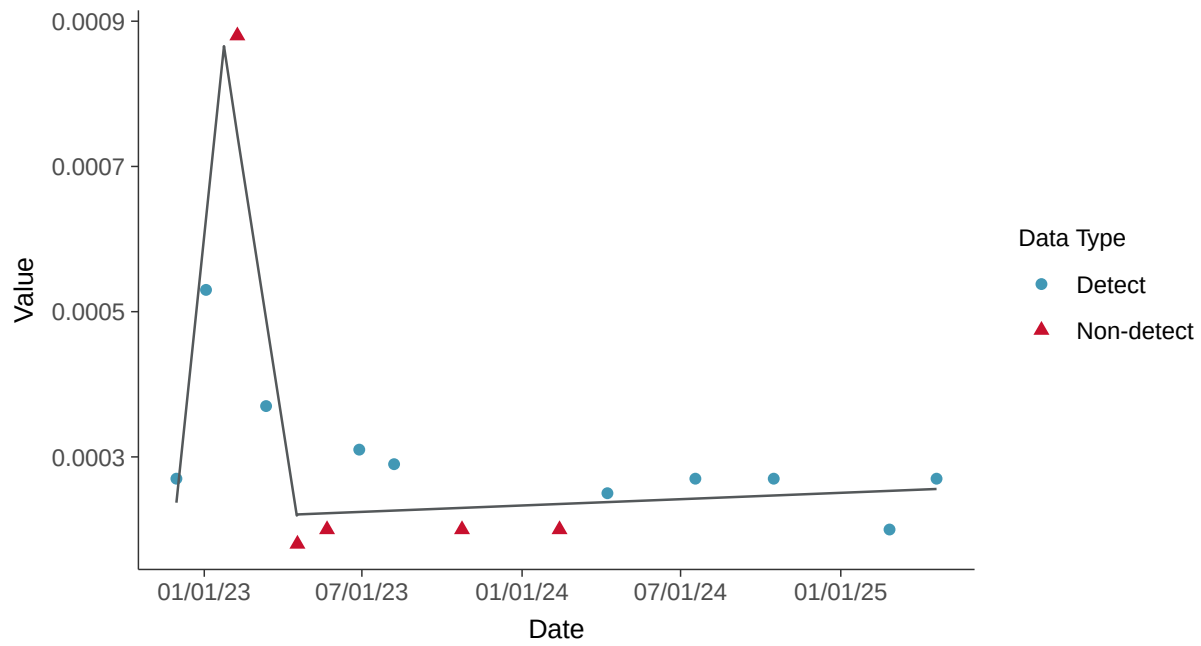


Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-19 (mg/L)

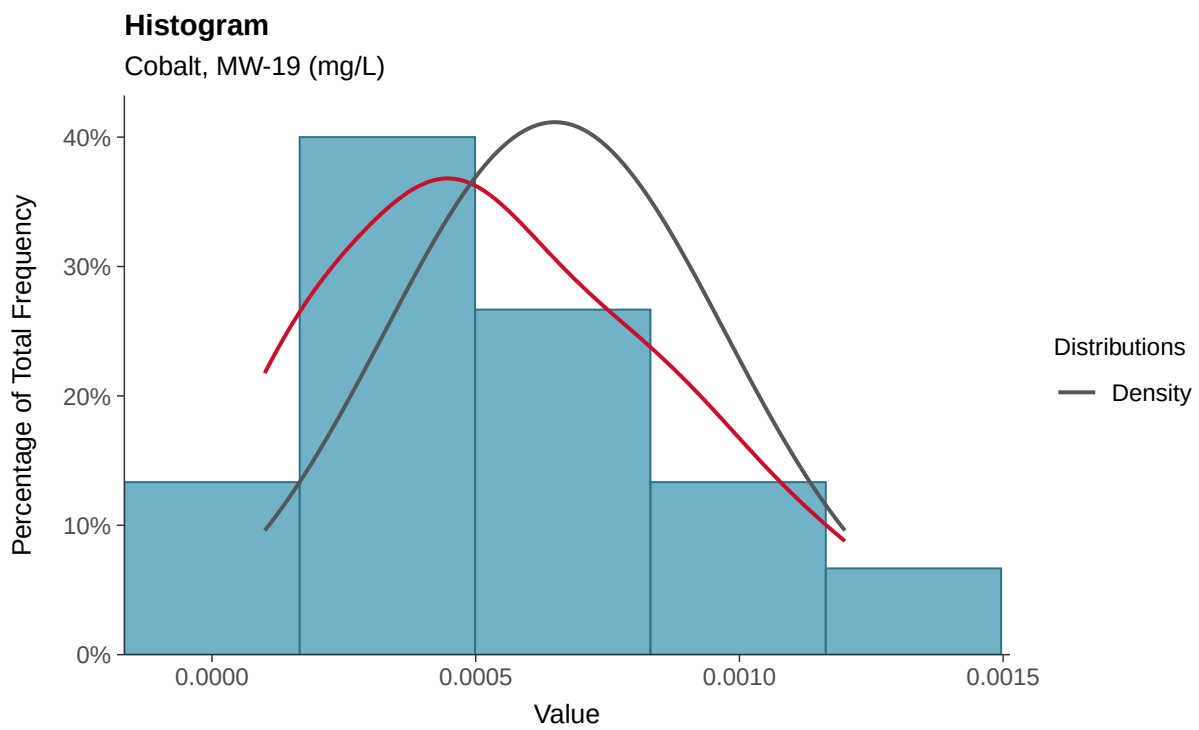
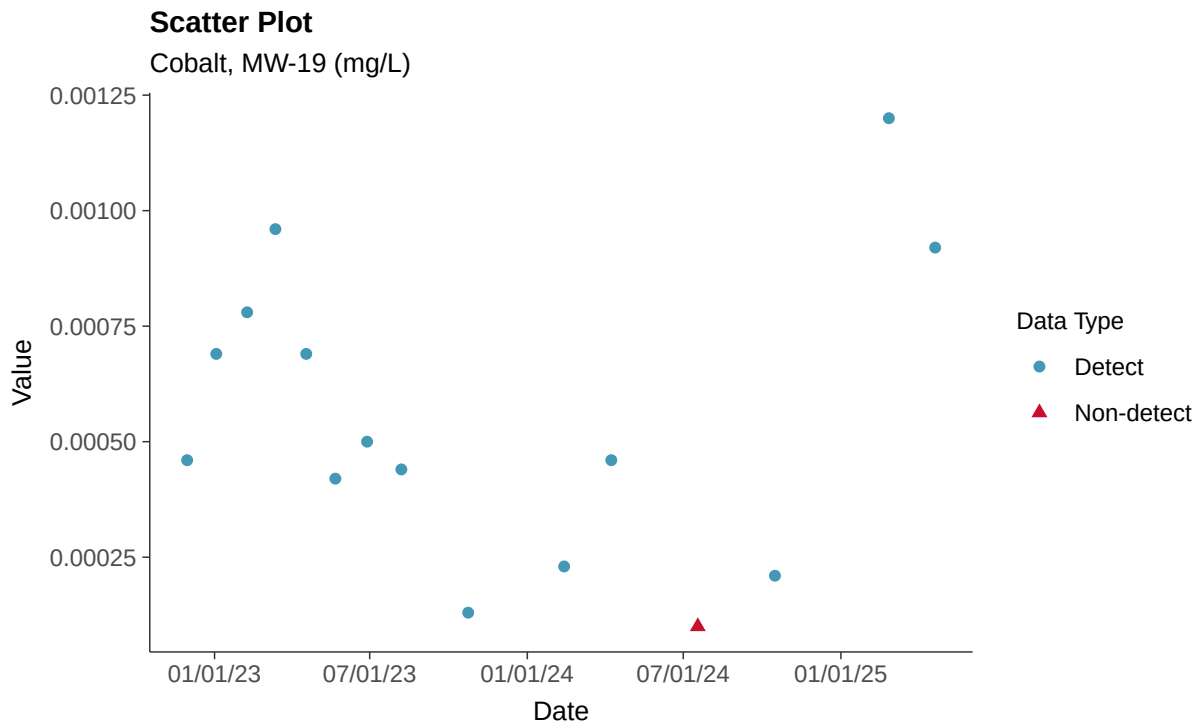


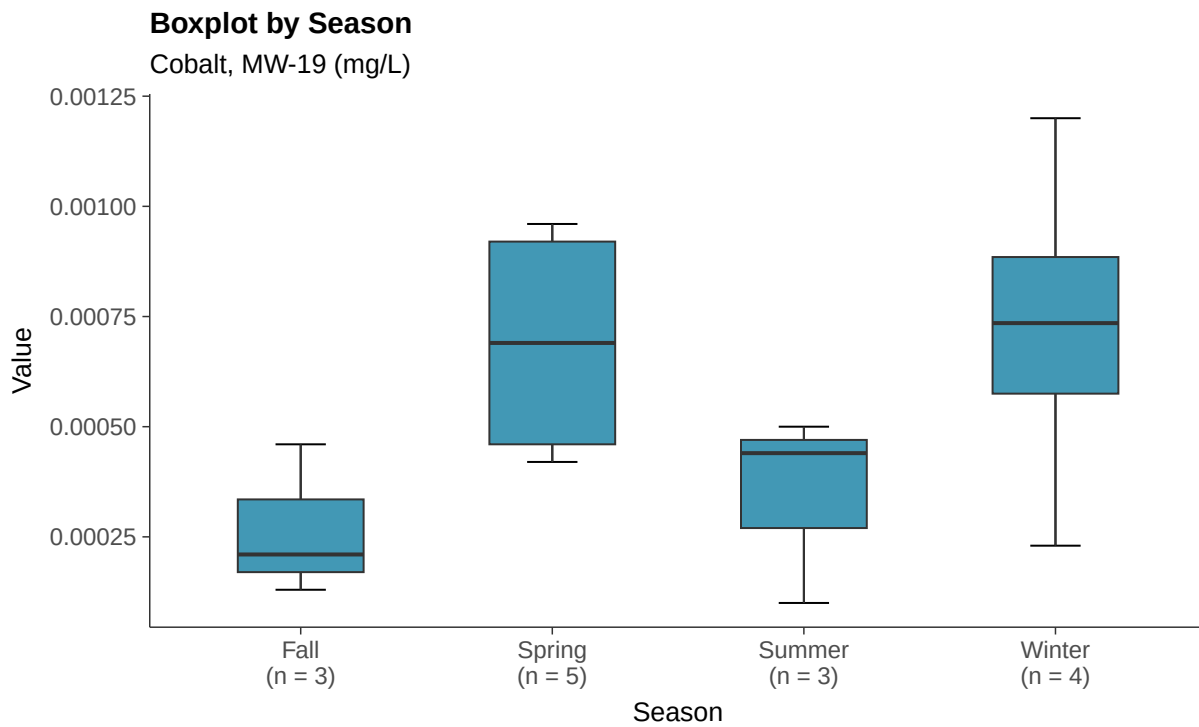
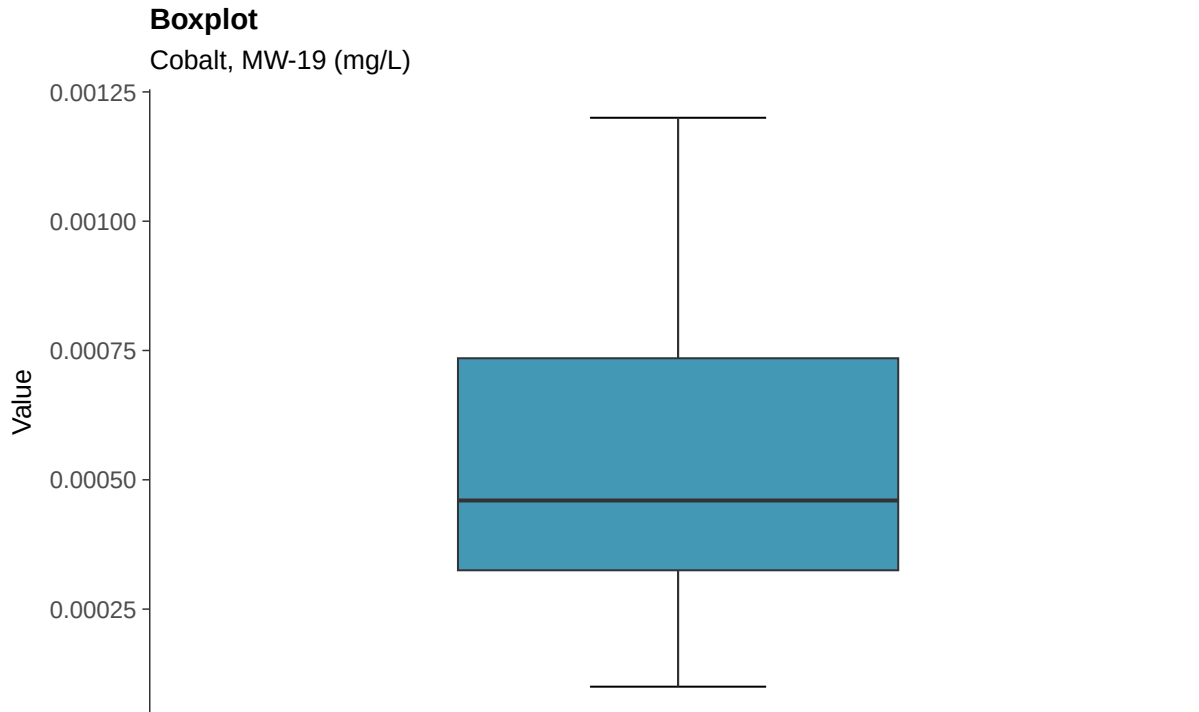
Trend Regression: Piecewise Linear-Linear-Linear
Chromium, Total, MW-19 (mg/L)



Appendix IV: Cobalt, MW-19

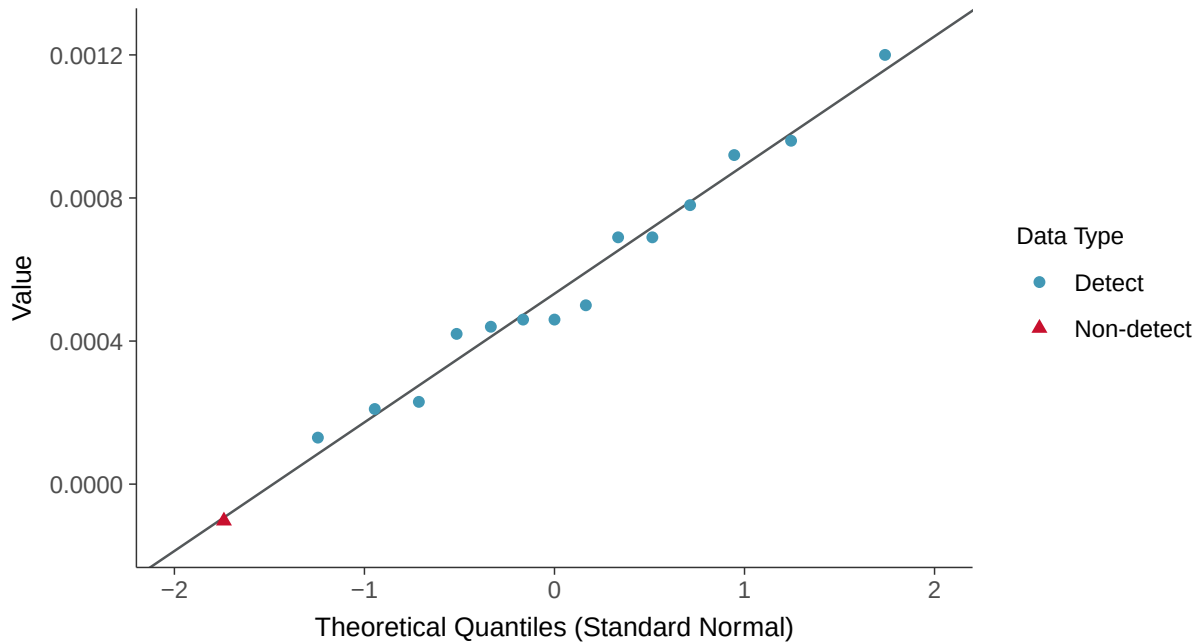
ID: 29_1_4_110





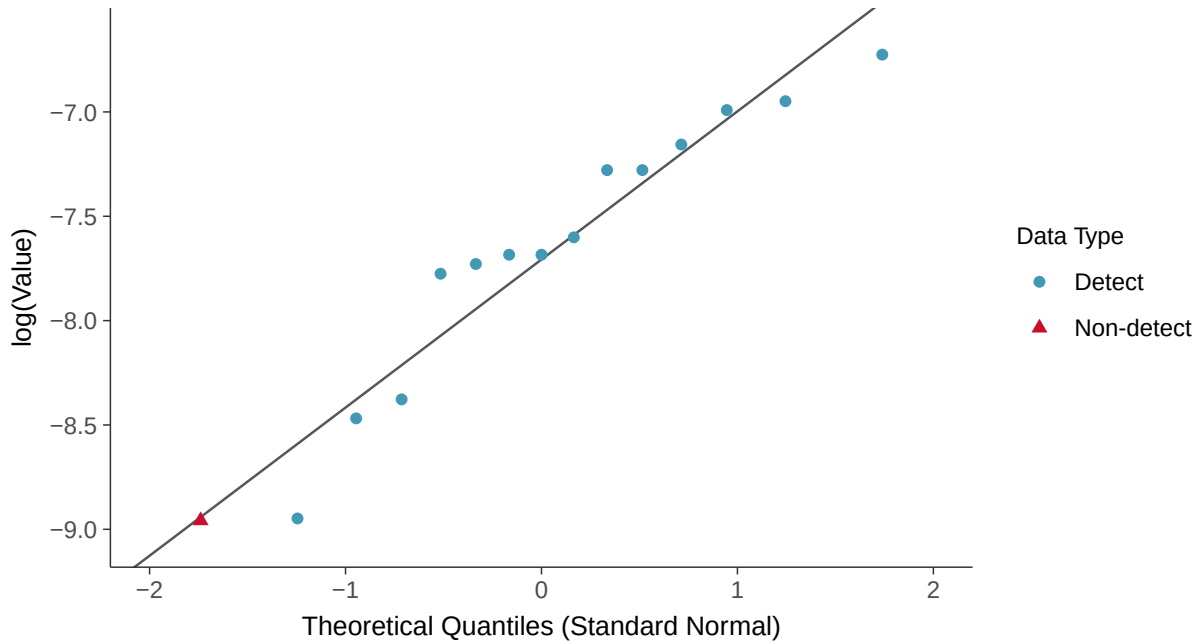
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-19 (mg/L)



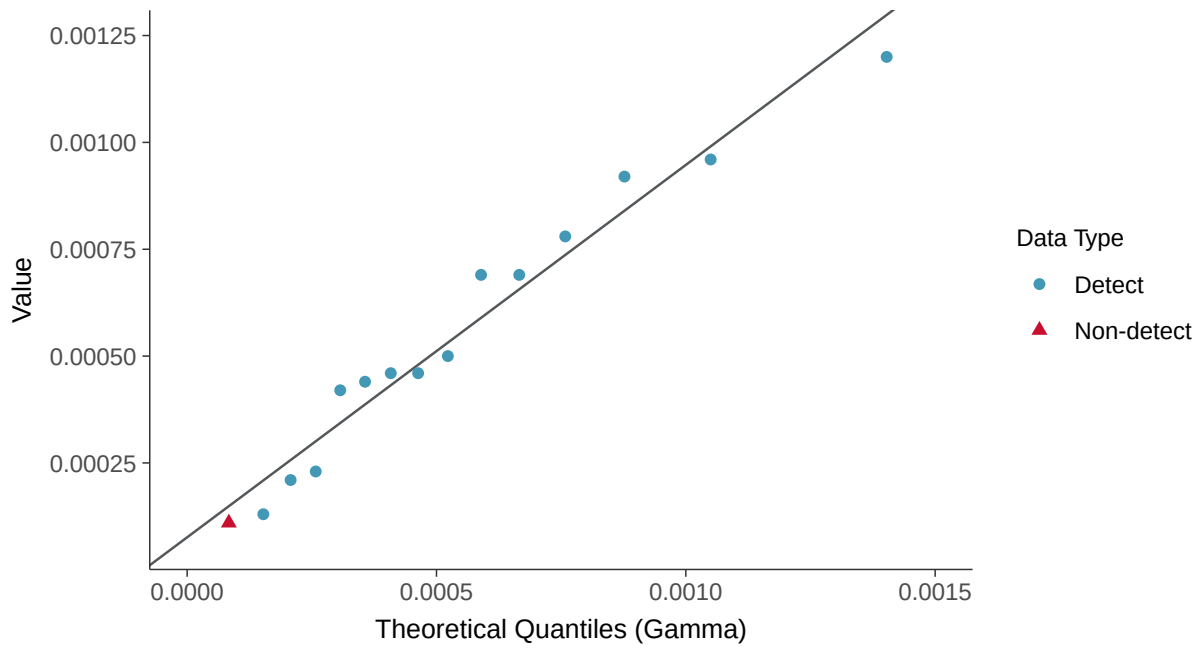
Lognormal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-19 (mg/L)



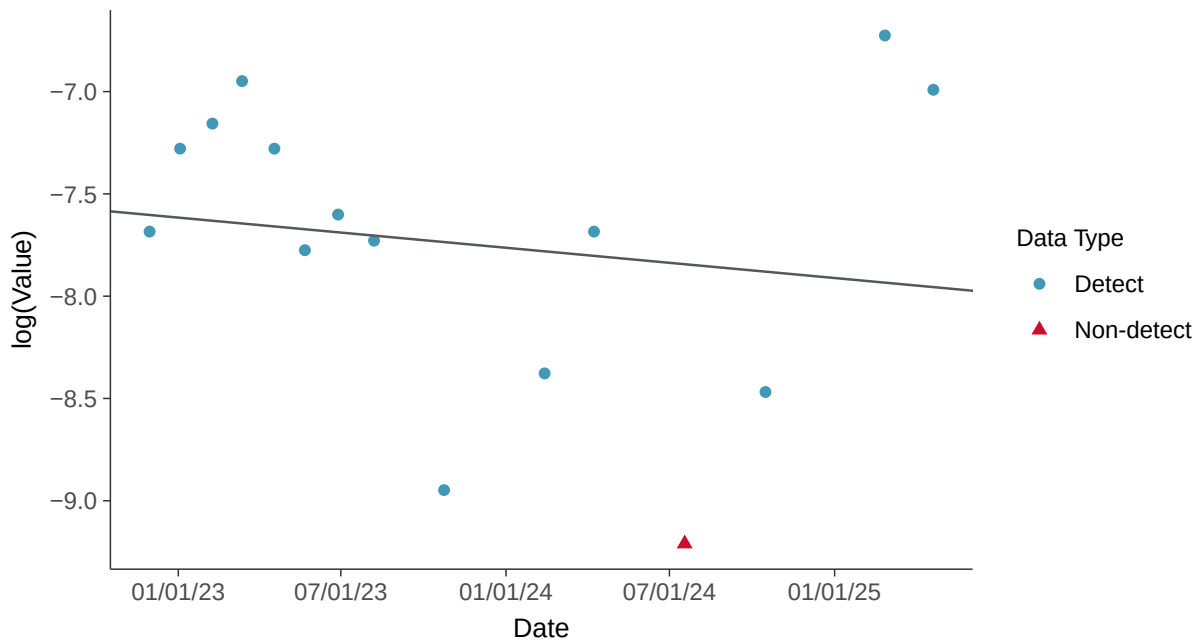
Gamma Q-Q plot using ROS Imputed Estimates

Cobalt, MW-19 (mg/L)



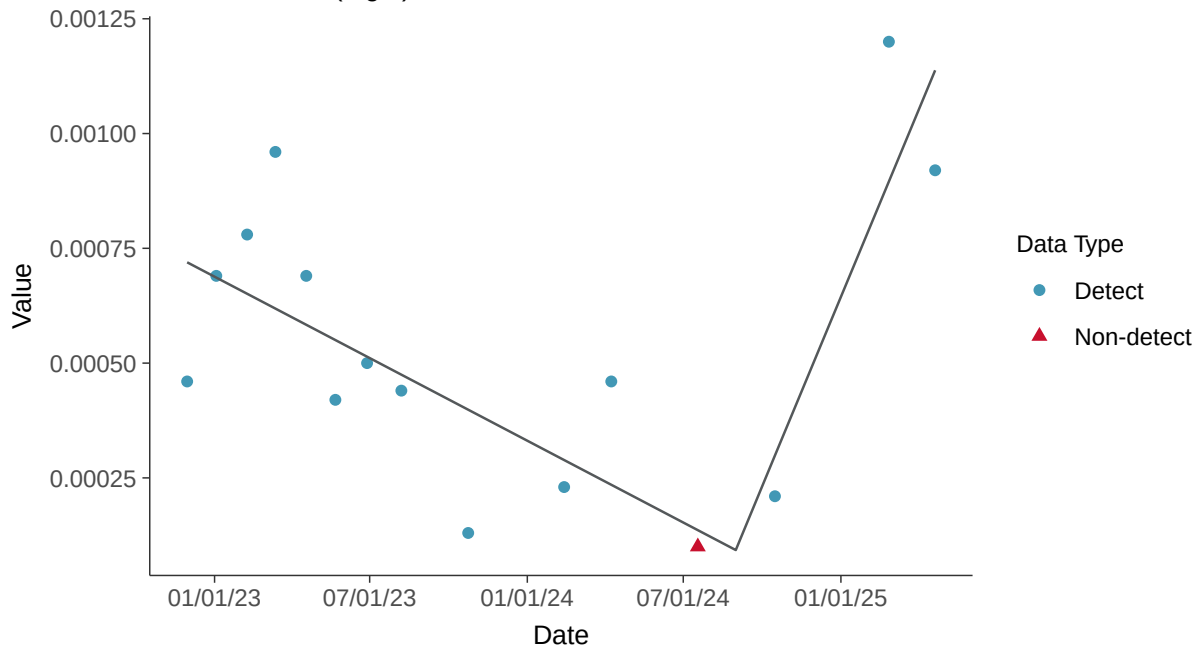
Trend Regression: Lognormal MLE

Cobalt, MW-19 (mg/L)



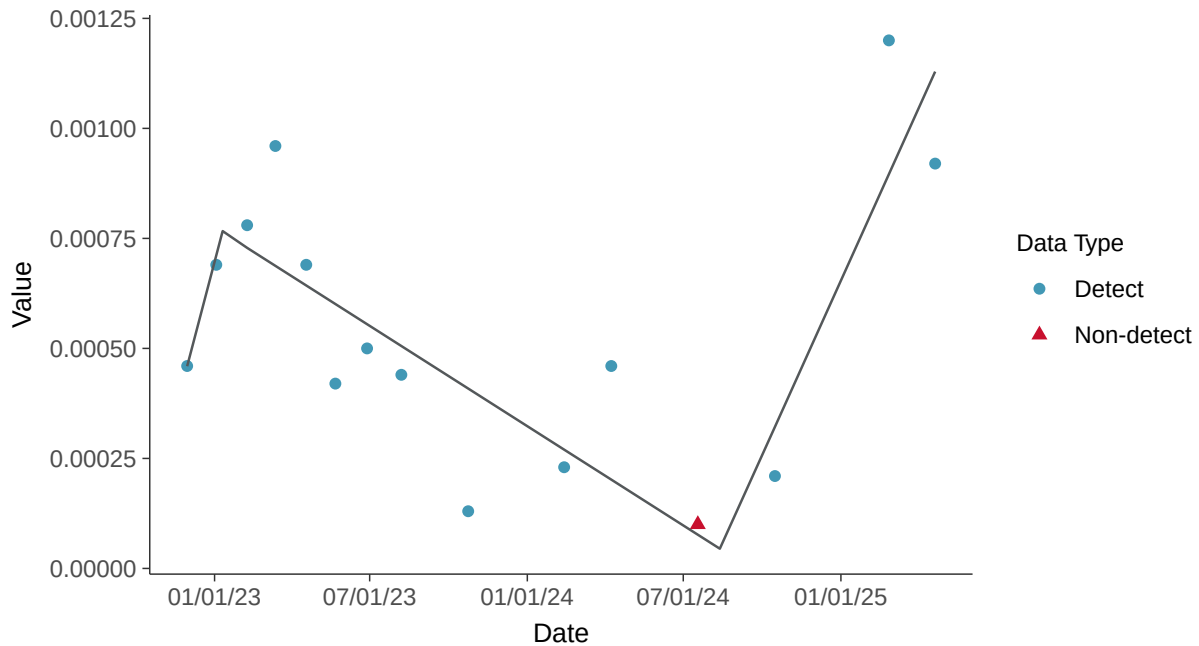
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-19 (mg/L)



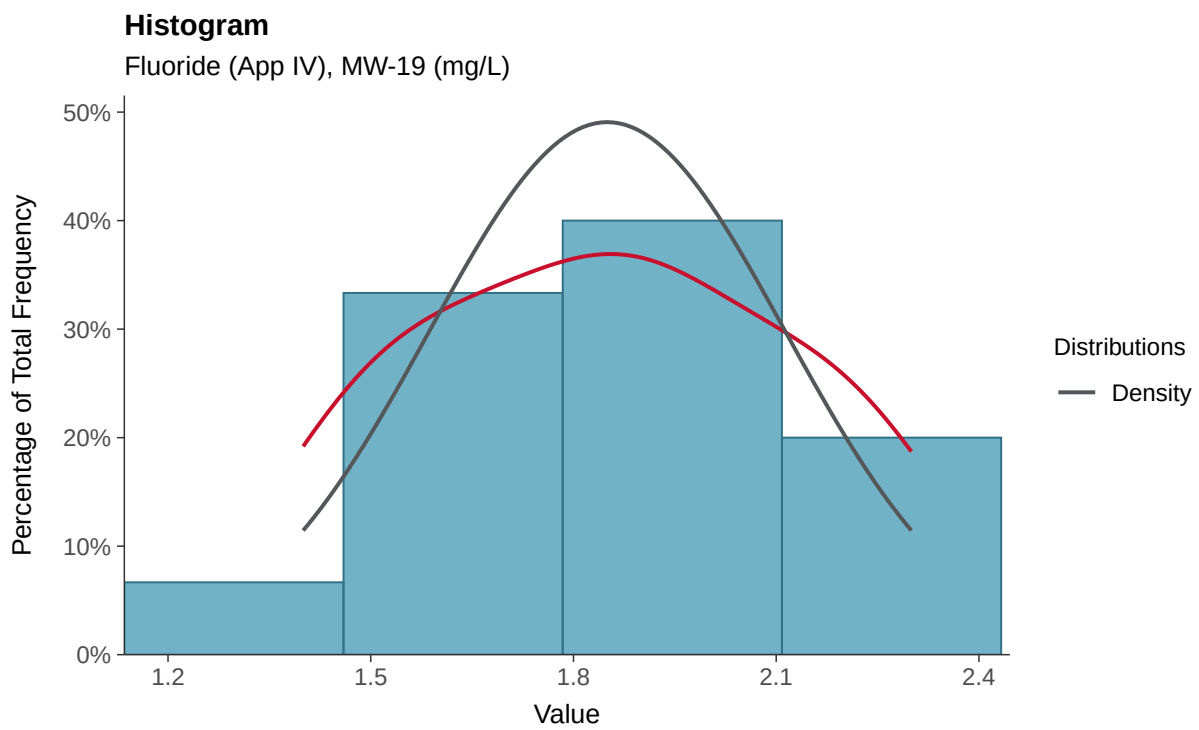
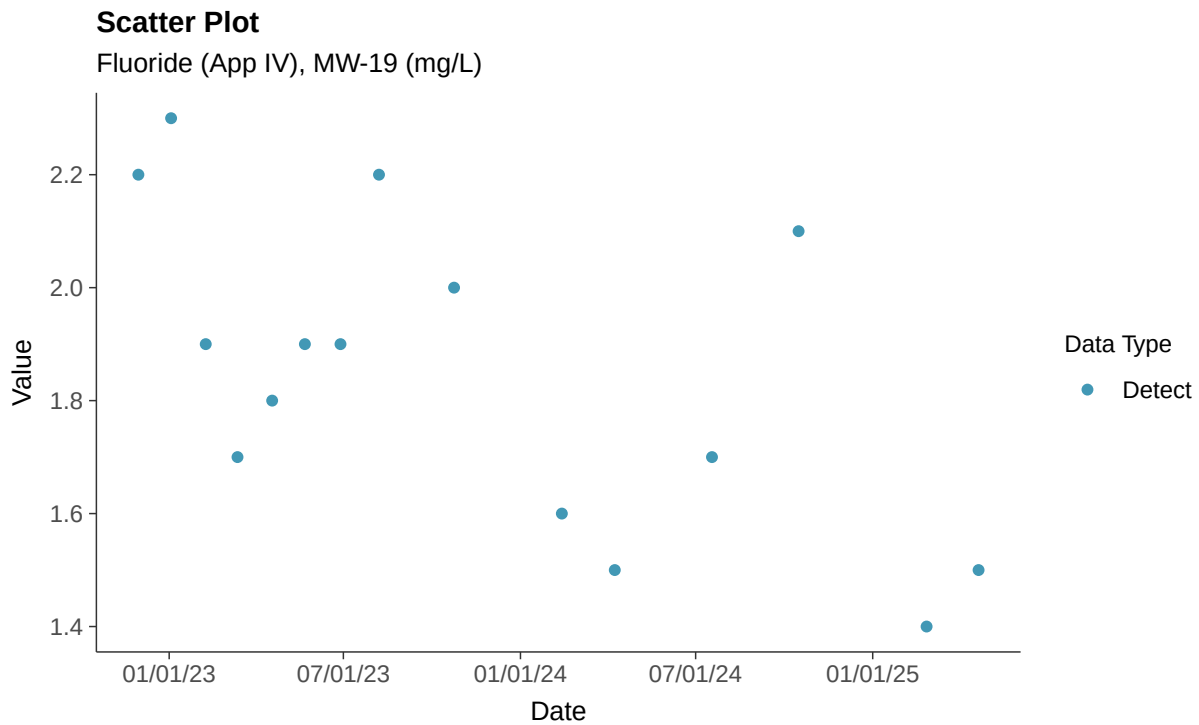
Trend Regression: Piecewise Linear-Linear-Linear

Cobalt, MW-19 (mg/L)



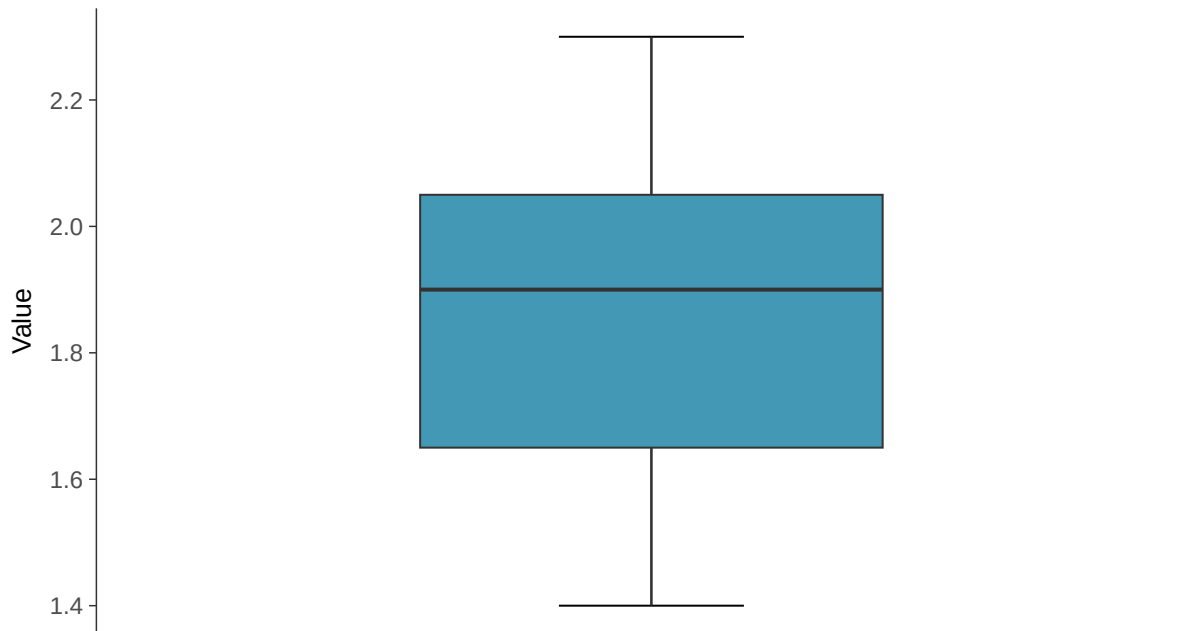
Appendix IV: Fluoride (App IV), MW-19

ID: 29_1_4_113



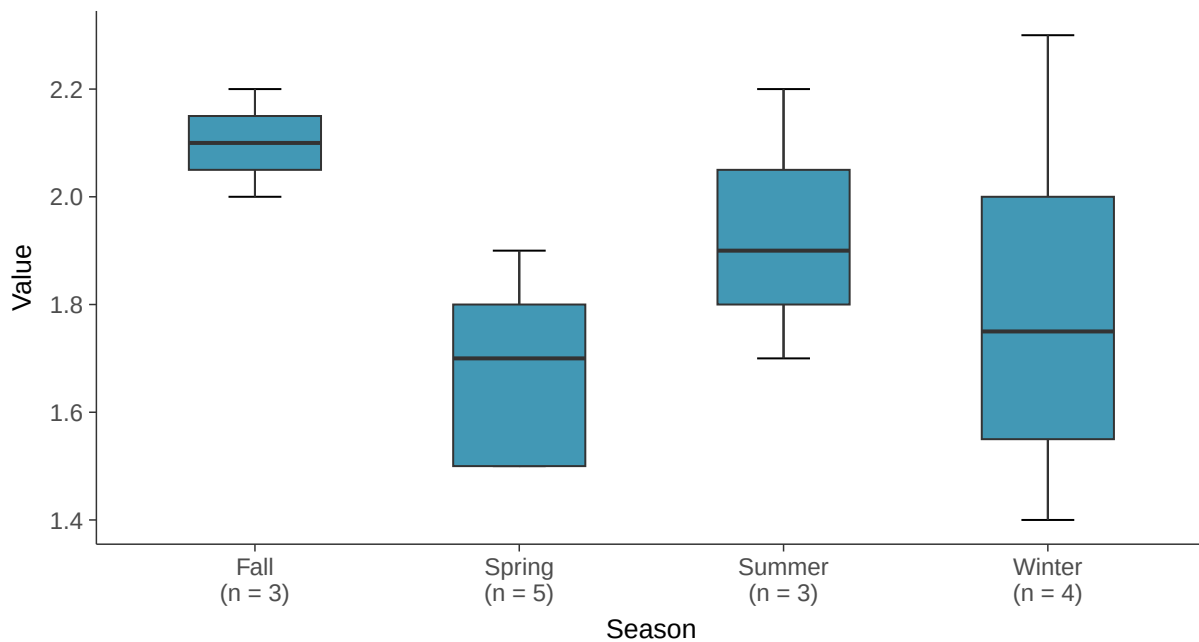
Boxplot

Fluoride (App IV), MW-19 (mg/L)



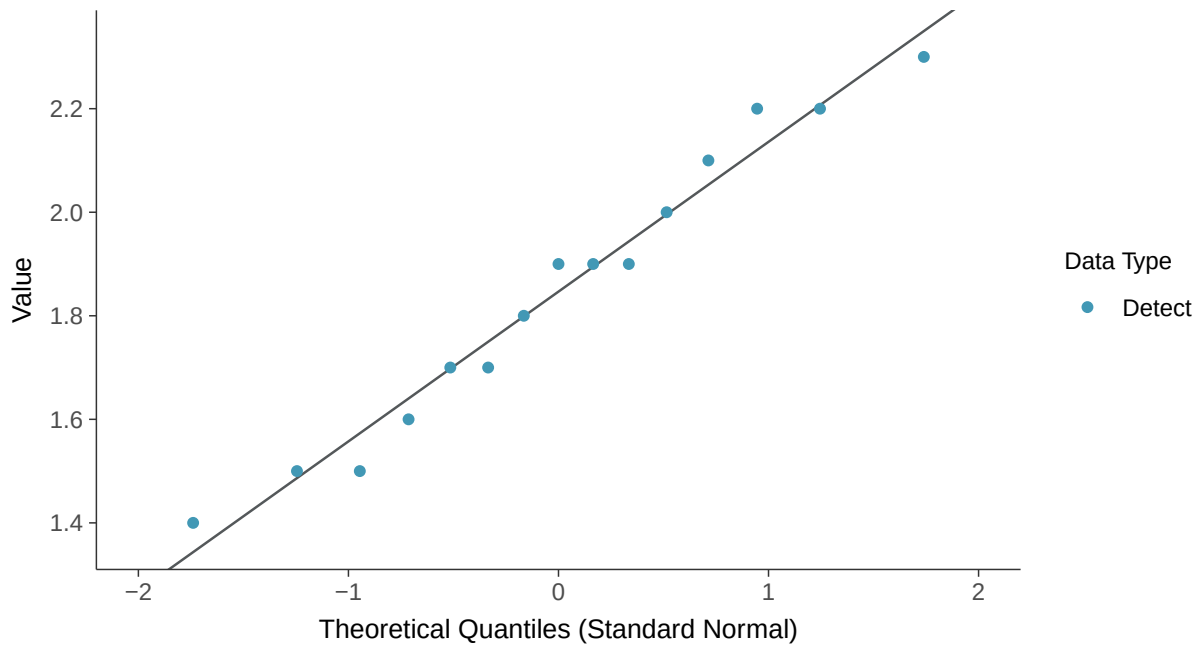
Boxplot by Season

Fluoride (App IV), MW-19 (mg/L)



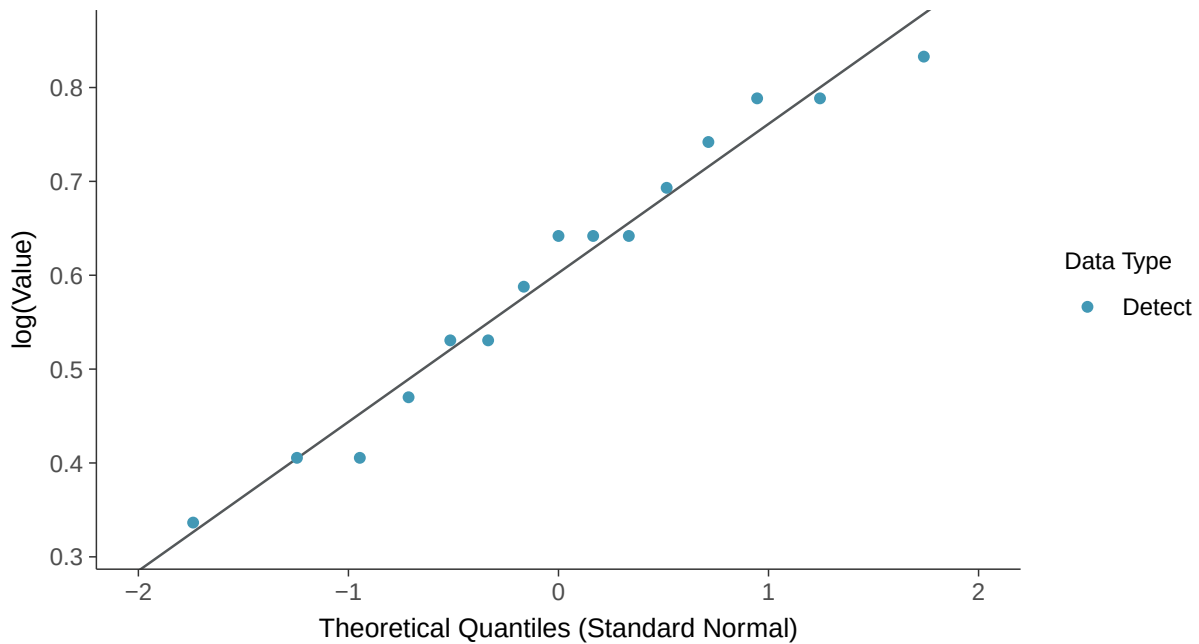
Normal Q-Q plot

Fluoride (App IV), MW-19 (mg/L)



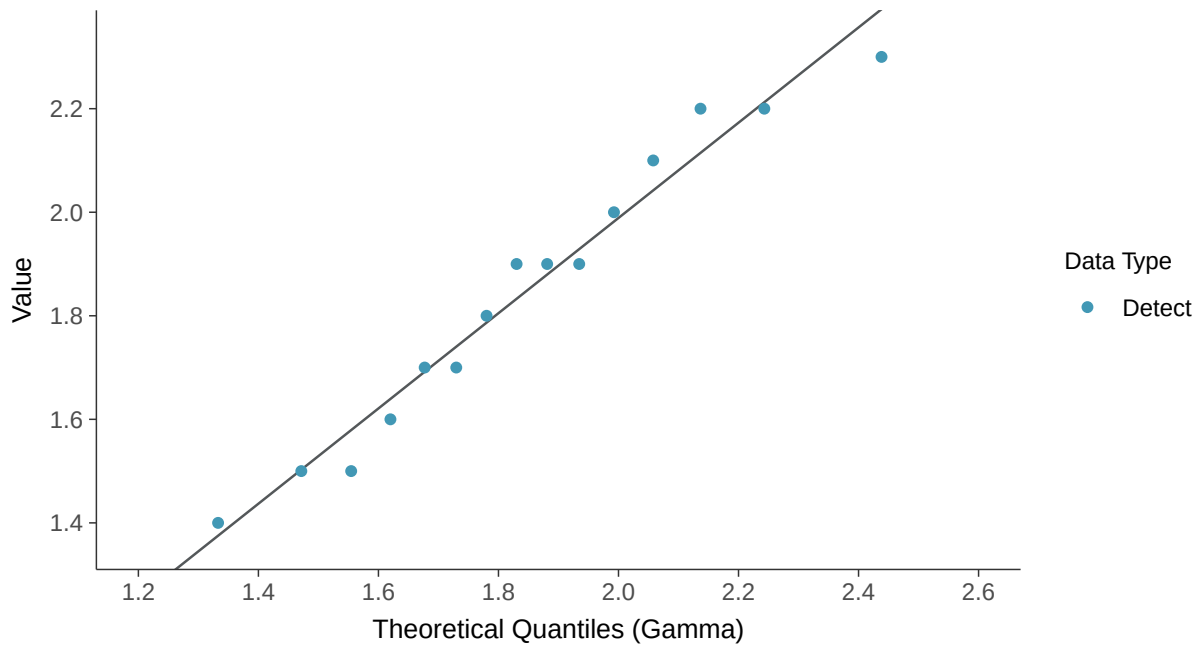
Lognormal Q-Q plot

Fluoride (App IV), MW-19 (mg/L)



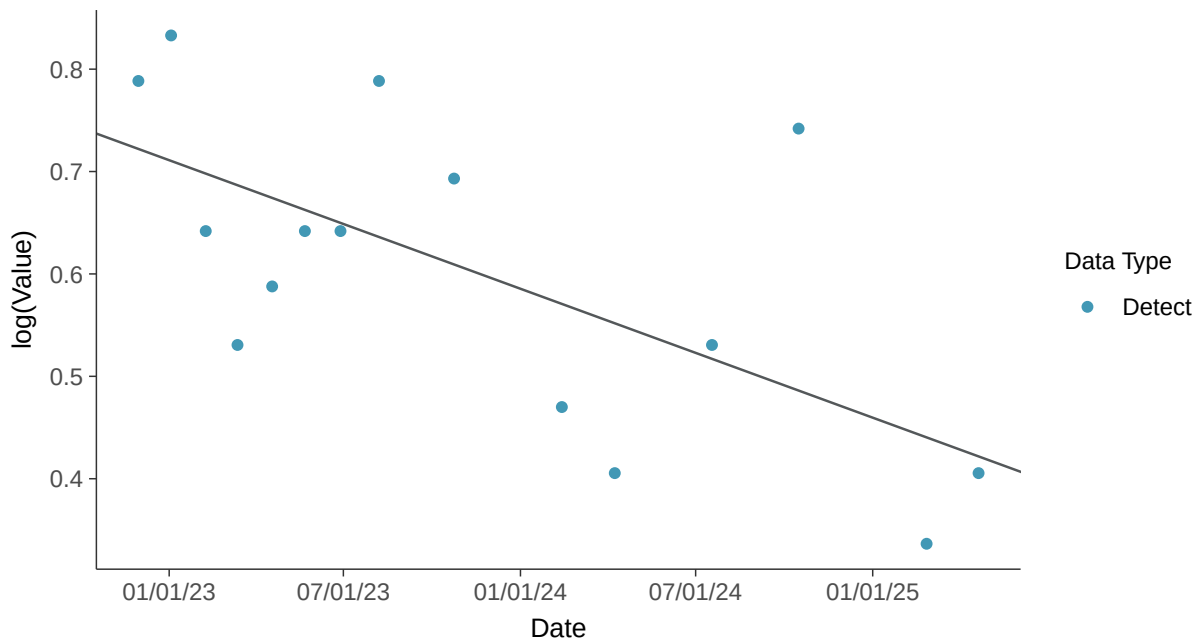
Gamma Q-Q plot

Fluoride (App IV), MW-19 (mg/L)



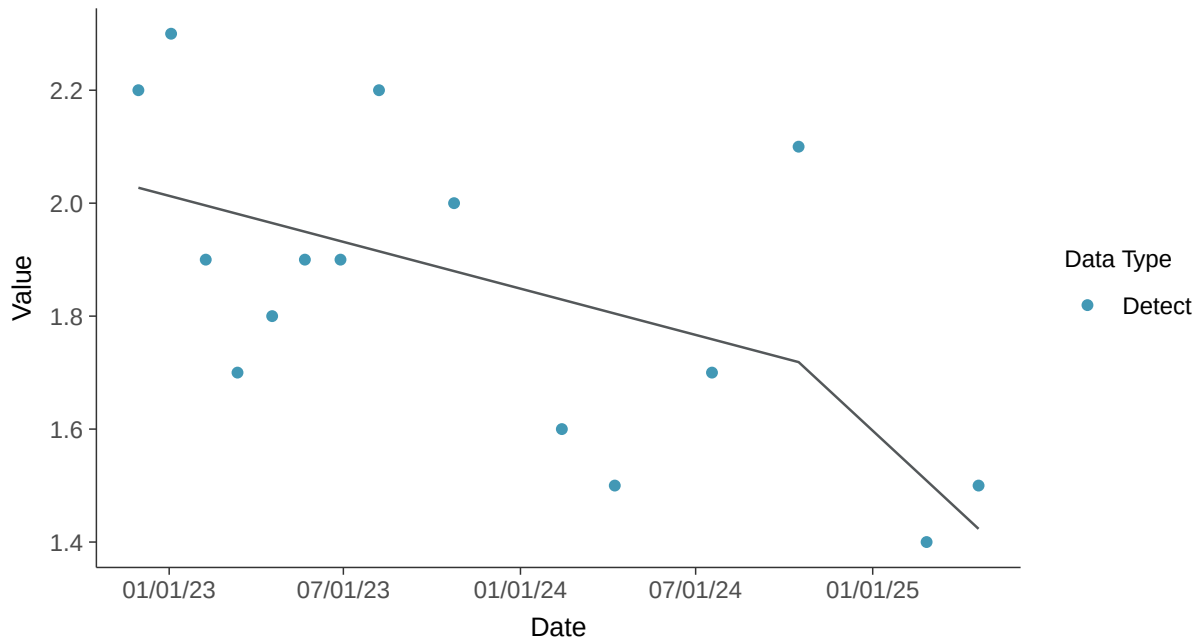
Trend Regression: Lognormal MLE

Fluoride (App IV), MW-19 (mg/L)



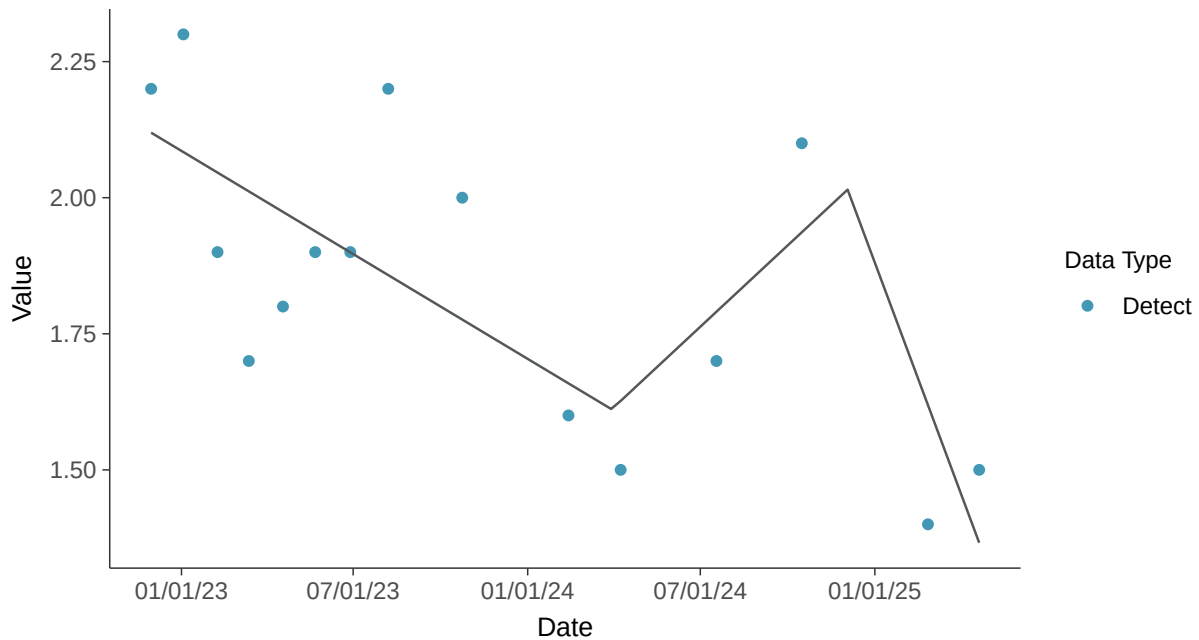
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-19 (mg/L)



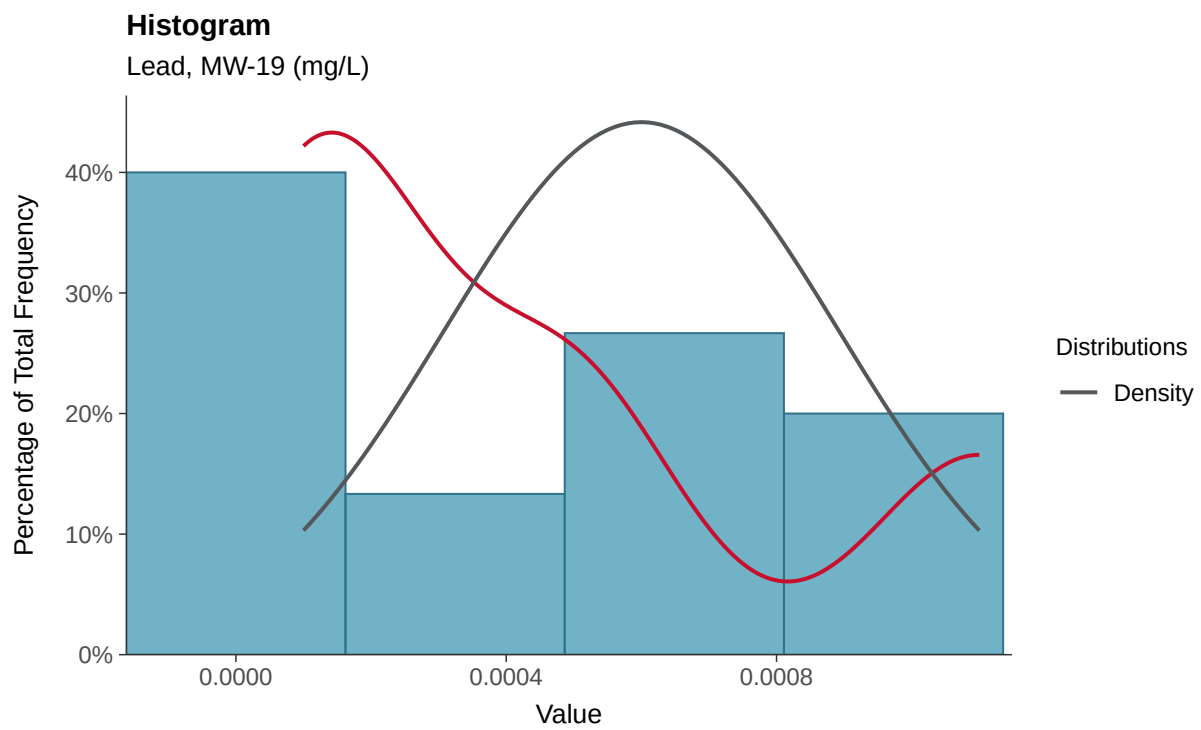
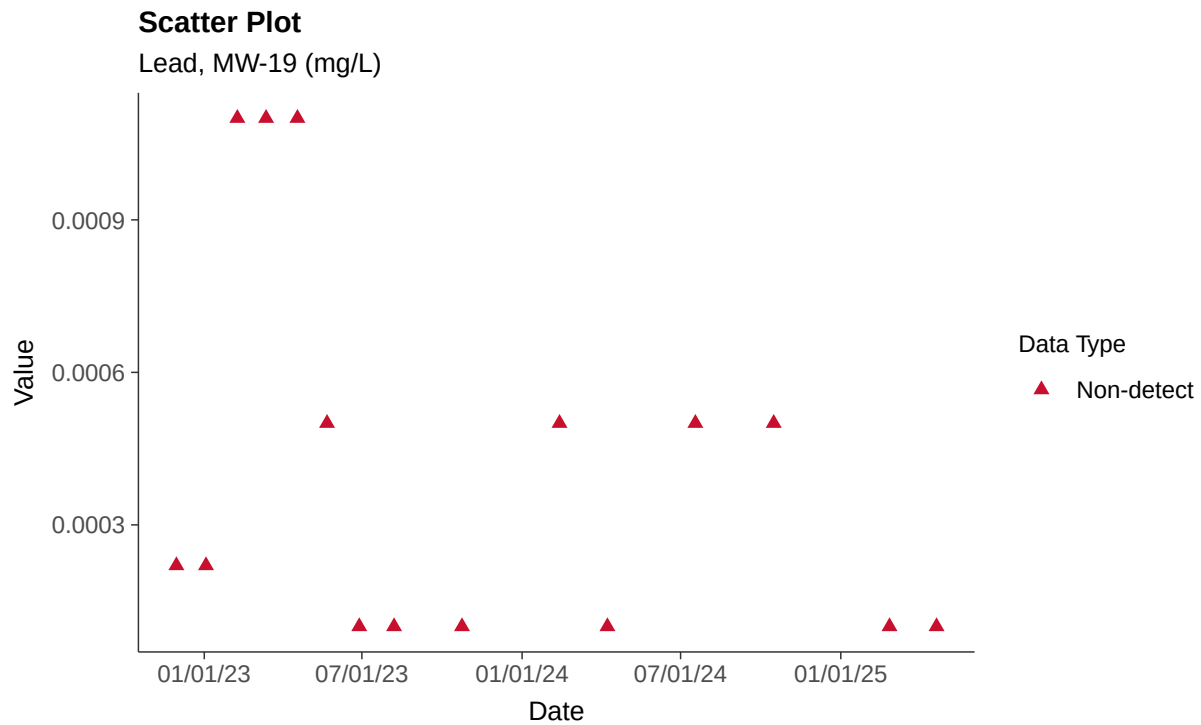
Trend Regression: Piecewise Linear-Linear-Linear

Fluoride (App IV), MW-19 (mg/L)



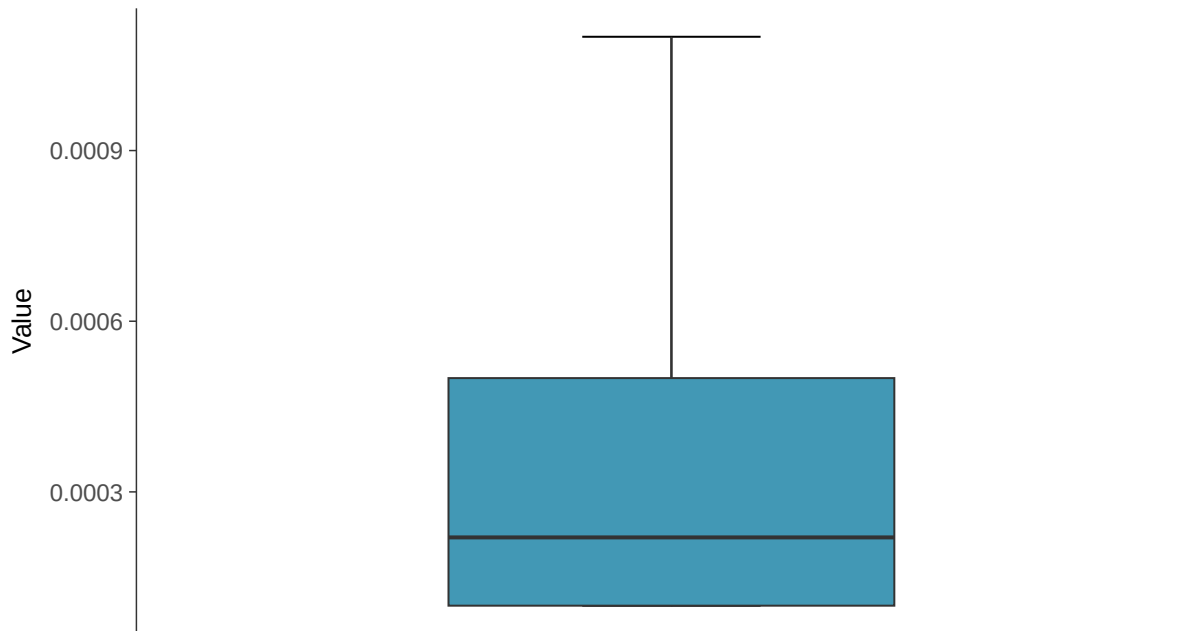
Appendix IV: Lead, MW-19

ID: 29_1_4_115



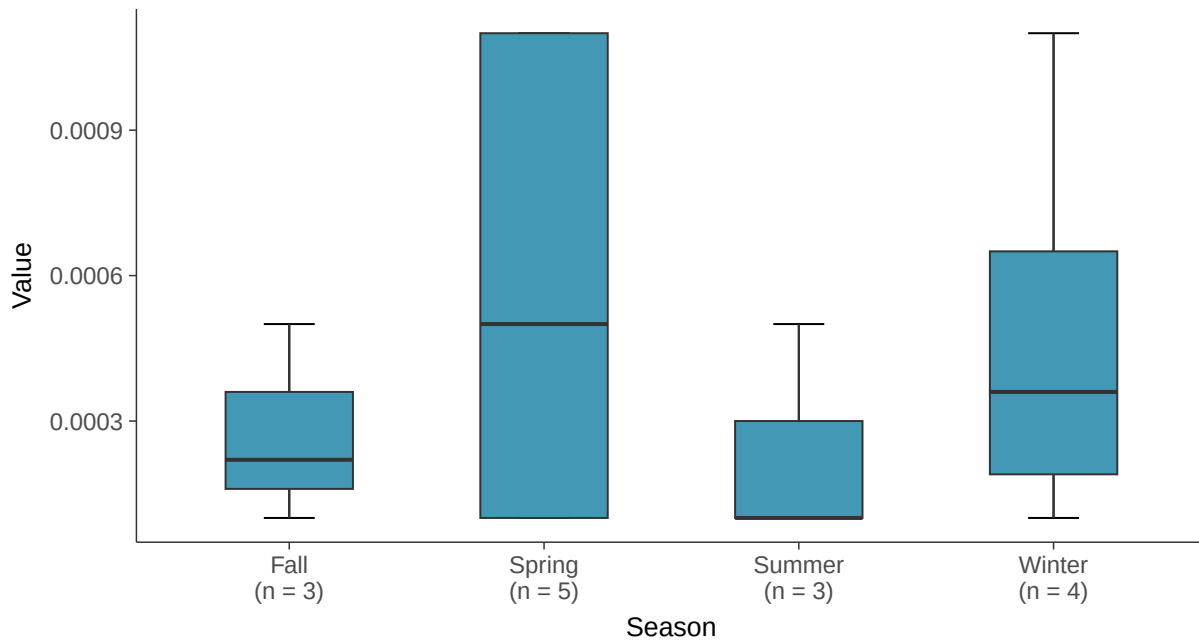
Boxplot

Lead, MW-19 (mg/L)



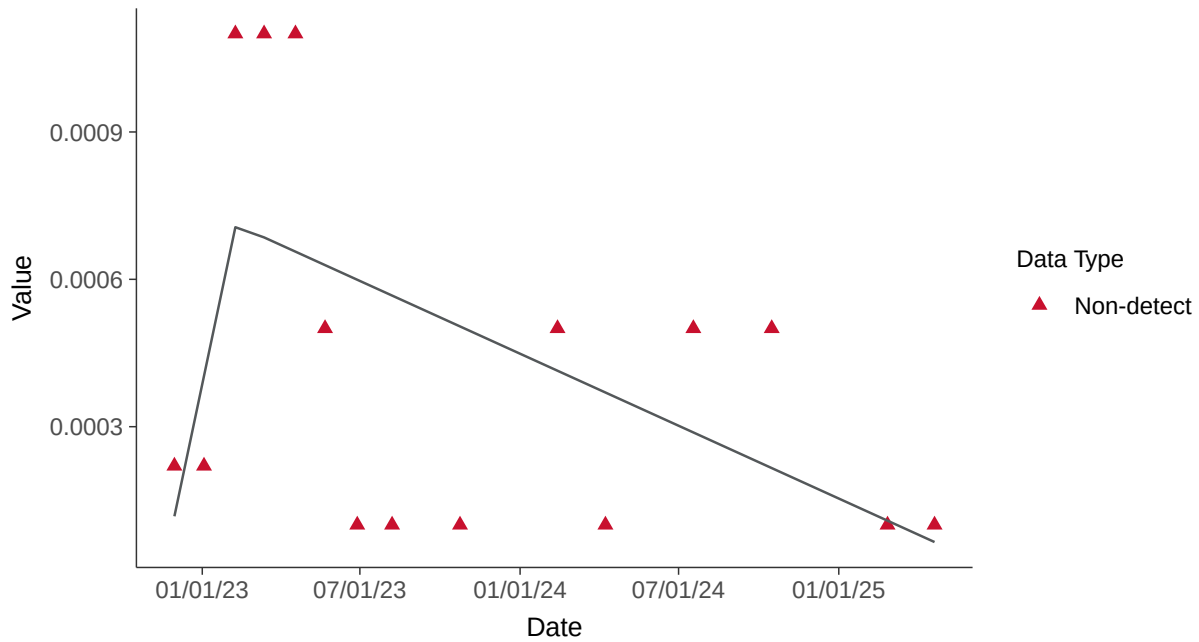
Boxplot by Season

Lead, MW-19 (mg/L)



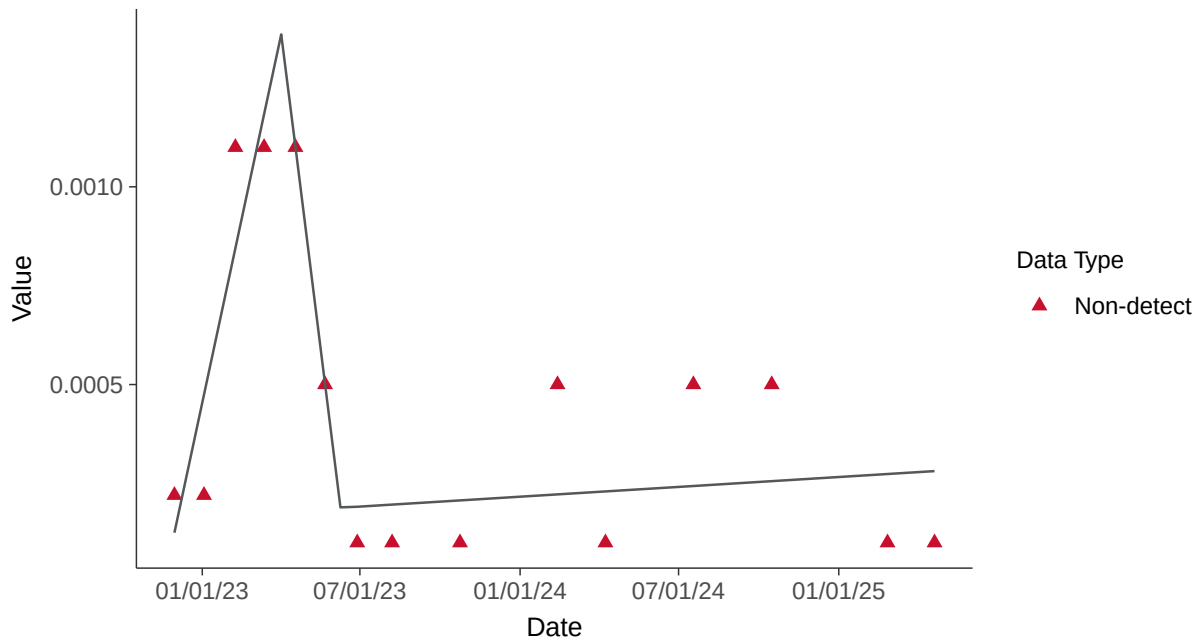
Trend Regression: Piecewise Linear-Linear

Lead, MW-19 (mg/L)



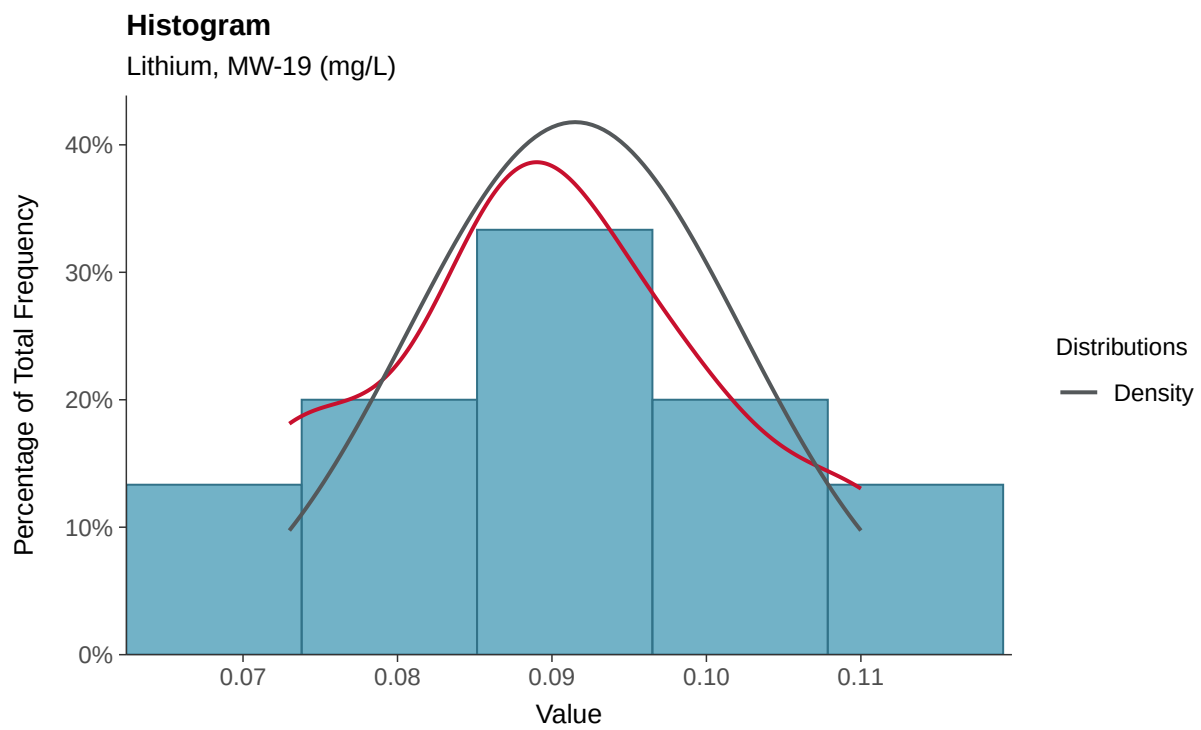
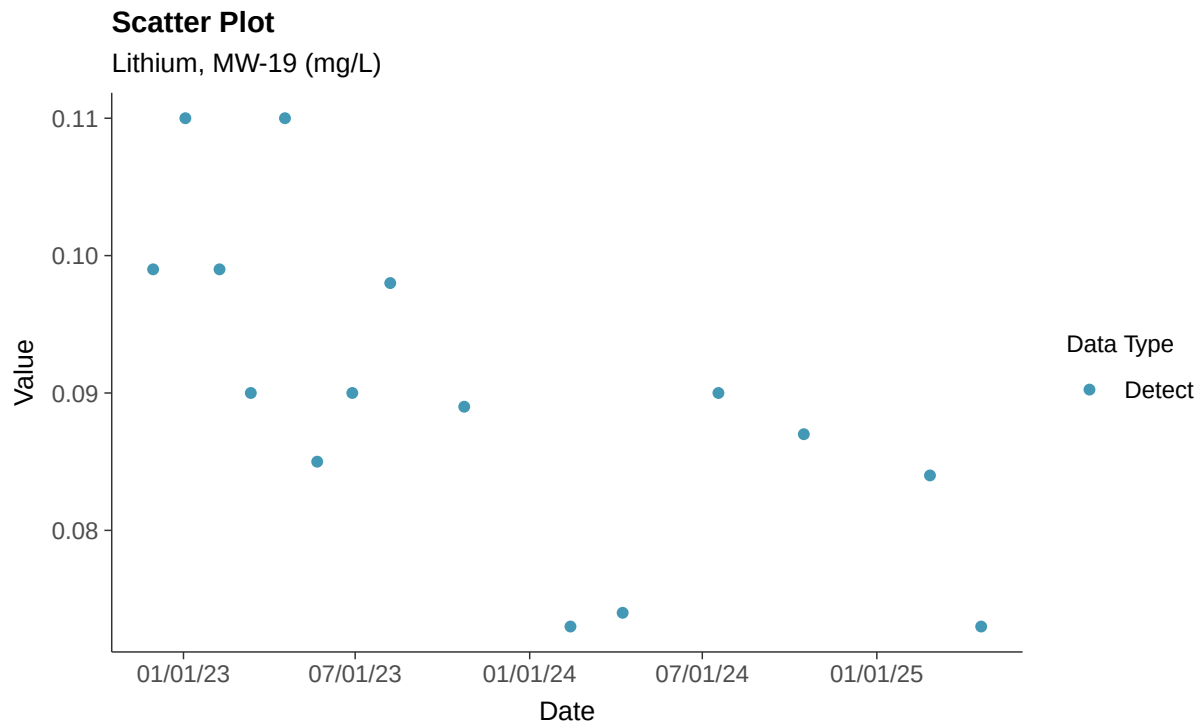
Trend Regression: Piecewise Linear-Linear-Linear

Lead, MW-19 (mg/L)



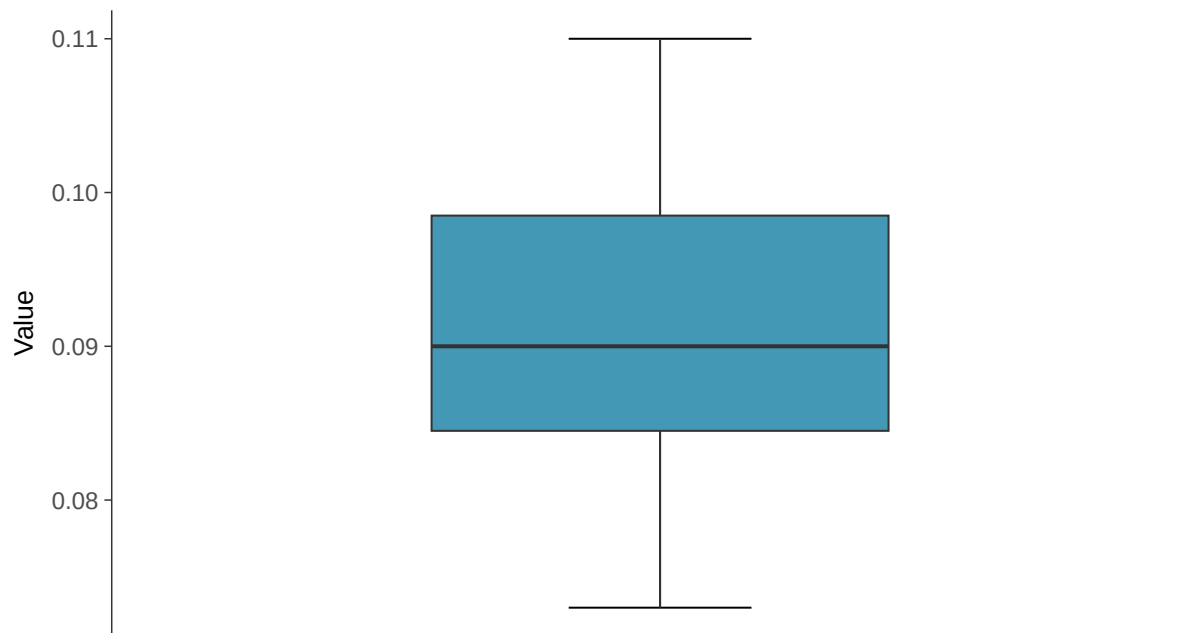
Appendix IV: Lithium, MW-19

ID: 29_1_4_116



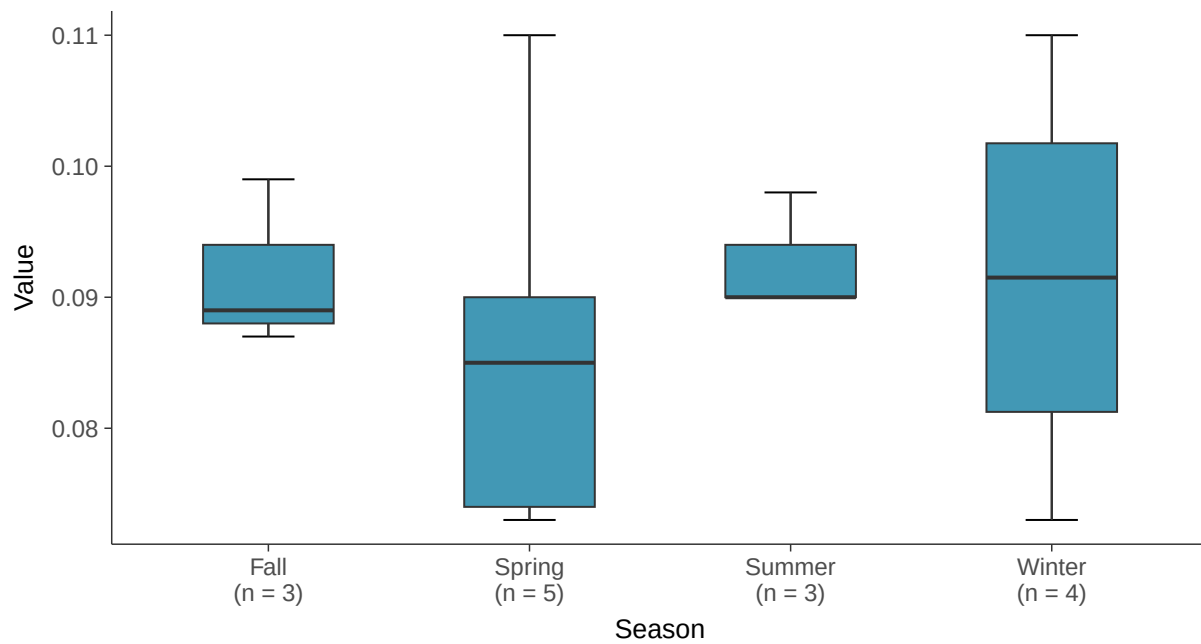
Boxplot

Lithium, MW-19 (mg/L)



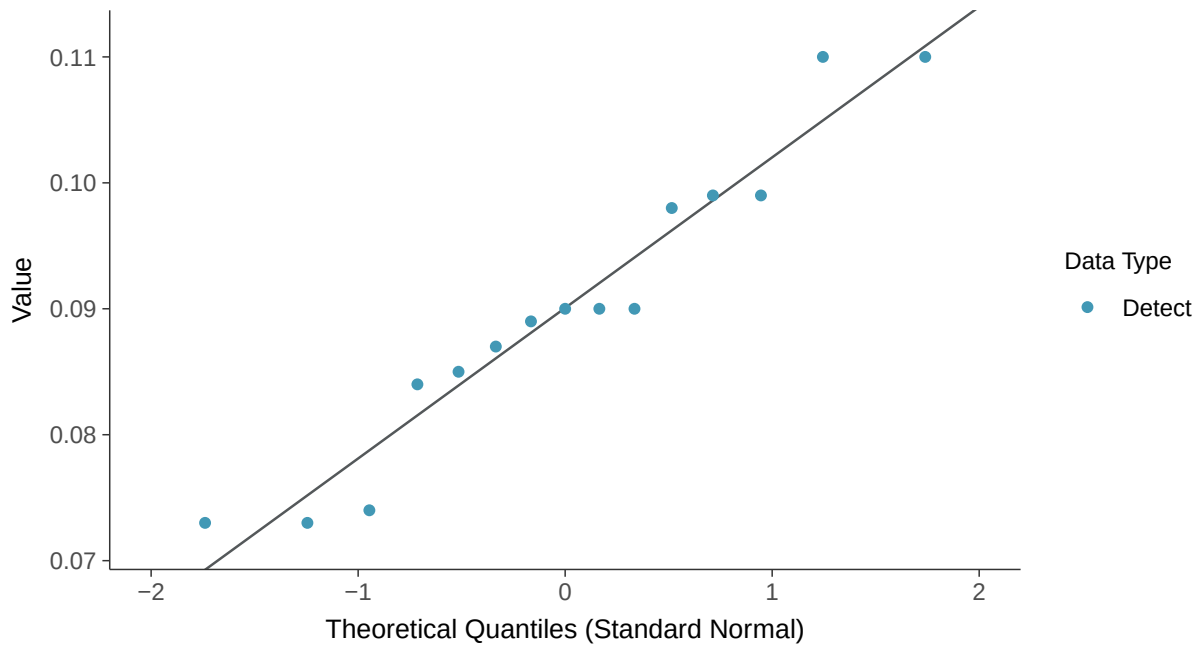
Boxplot by Season

Lithium, MW-19 (mg/L)



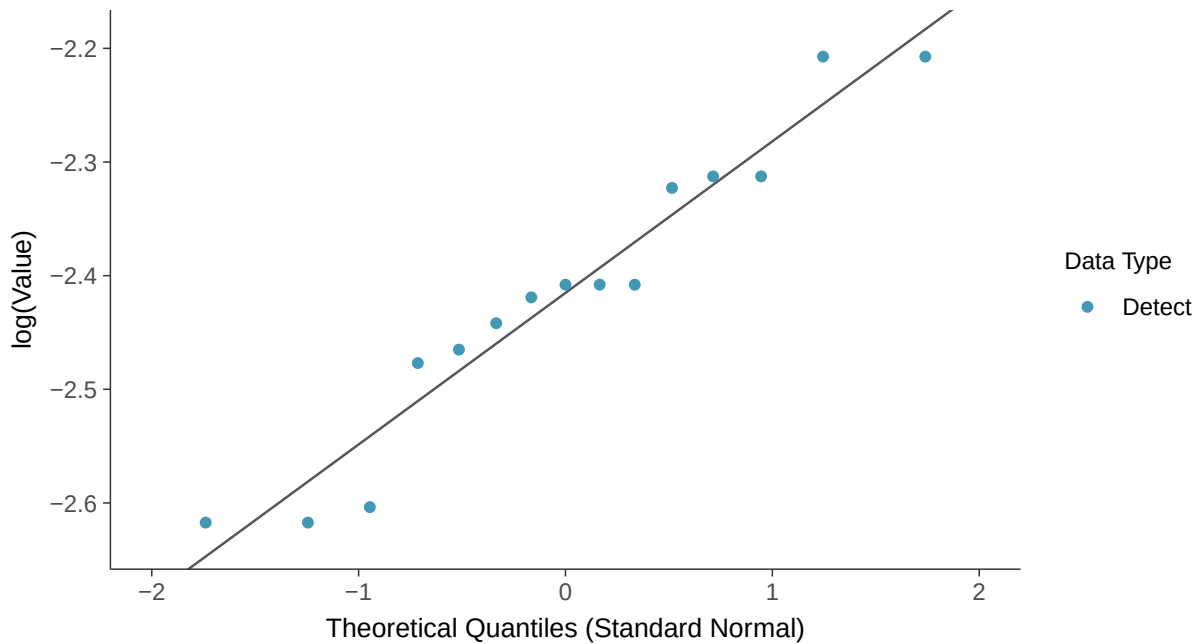
Normal Q-Q plot

Lithium, MW-19 (mg/L)



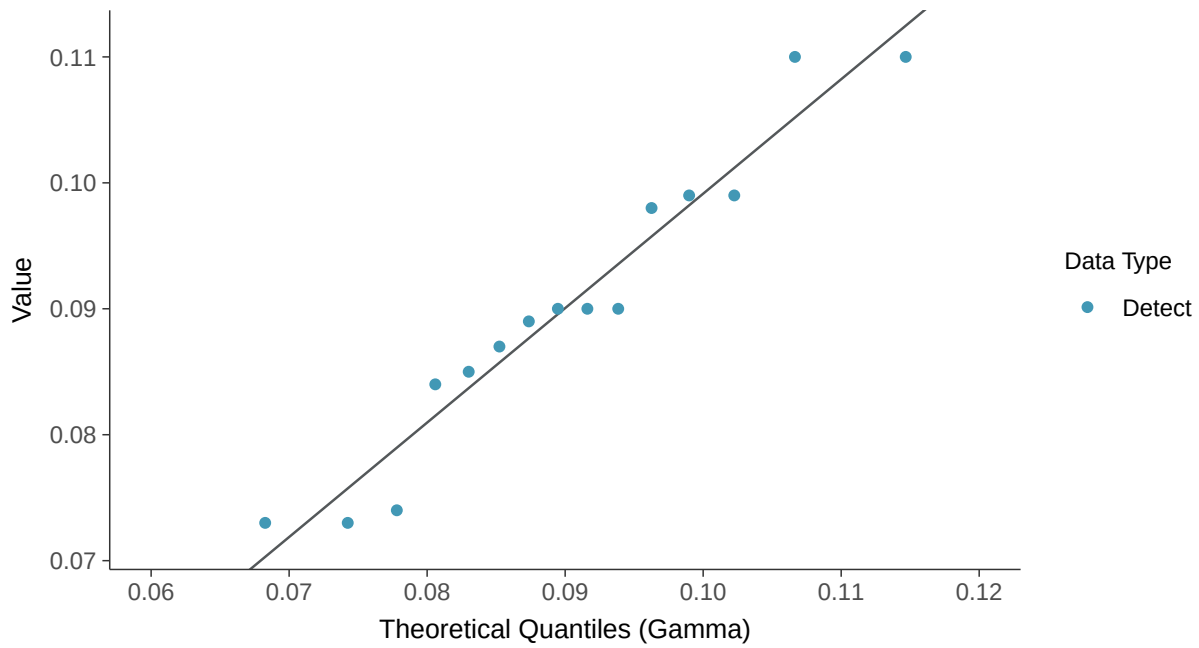
Lognormal Q-Q plot

Lithium, MW-19 (mg/L)



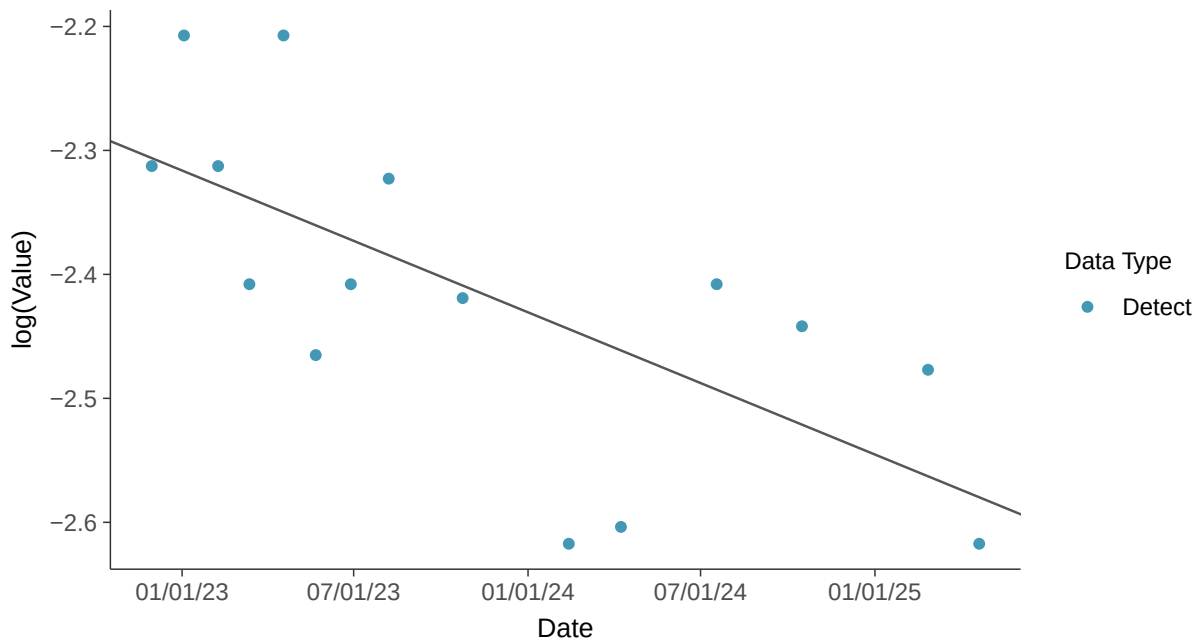
Gamma Q-Q plot

Lithium, MW-19 (mg/L)



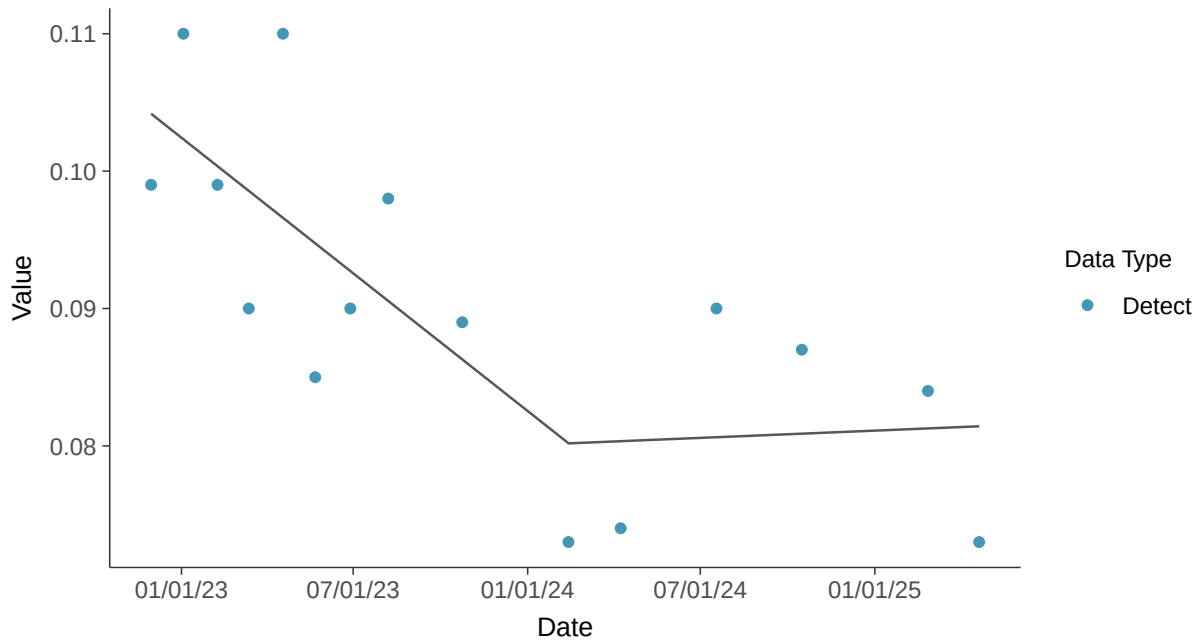
Trend Regression: Lognormal MLE

Lithium, MW-19 (mg/L)



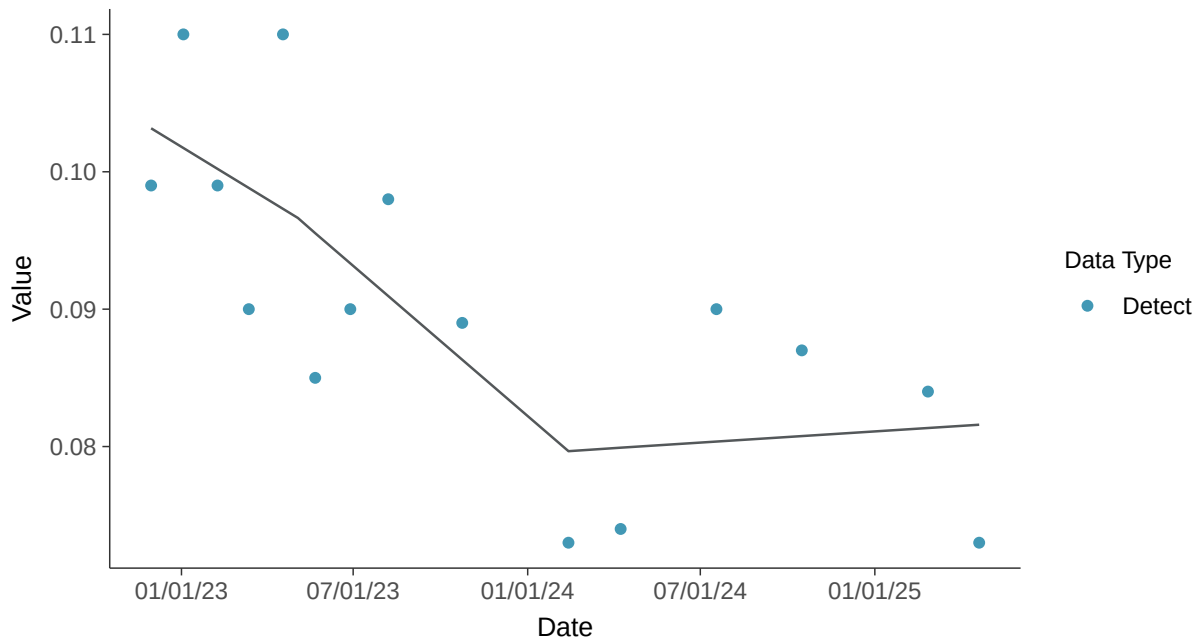
Trend Regression: Piecewise Linear-Linear

Lithium, MW-19 (mg/L)



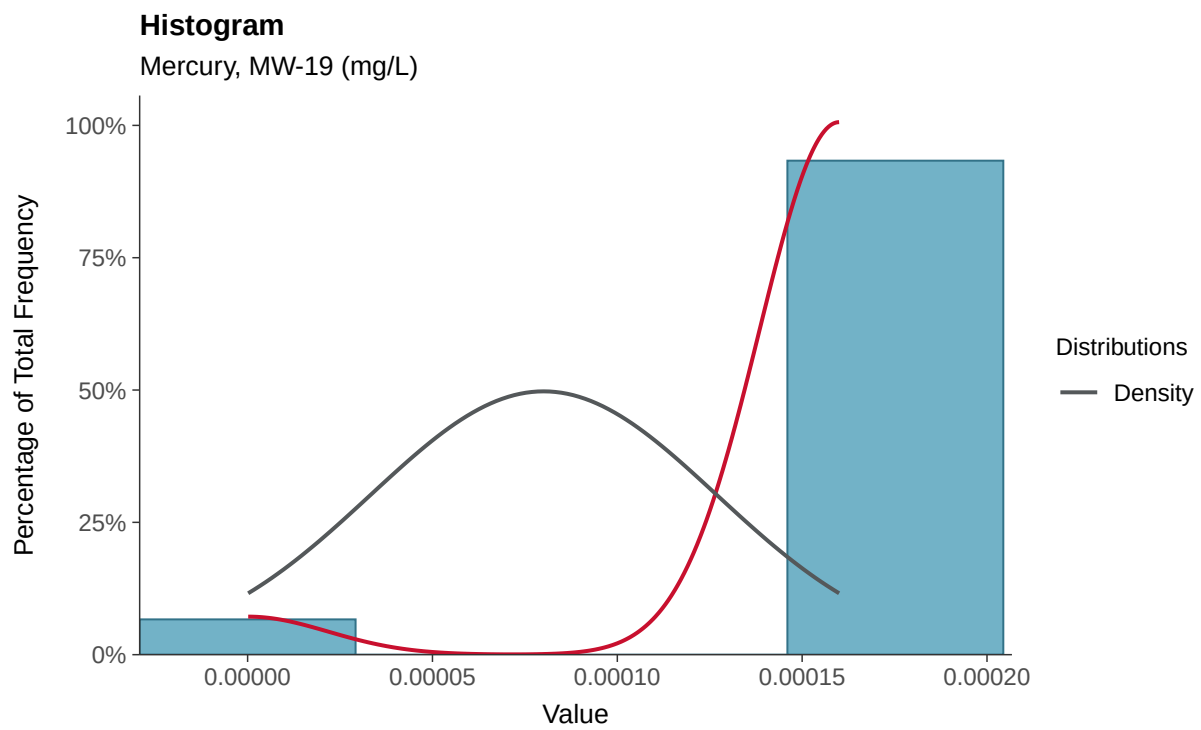
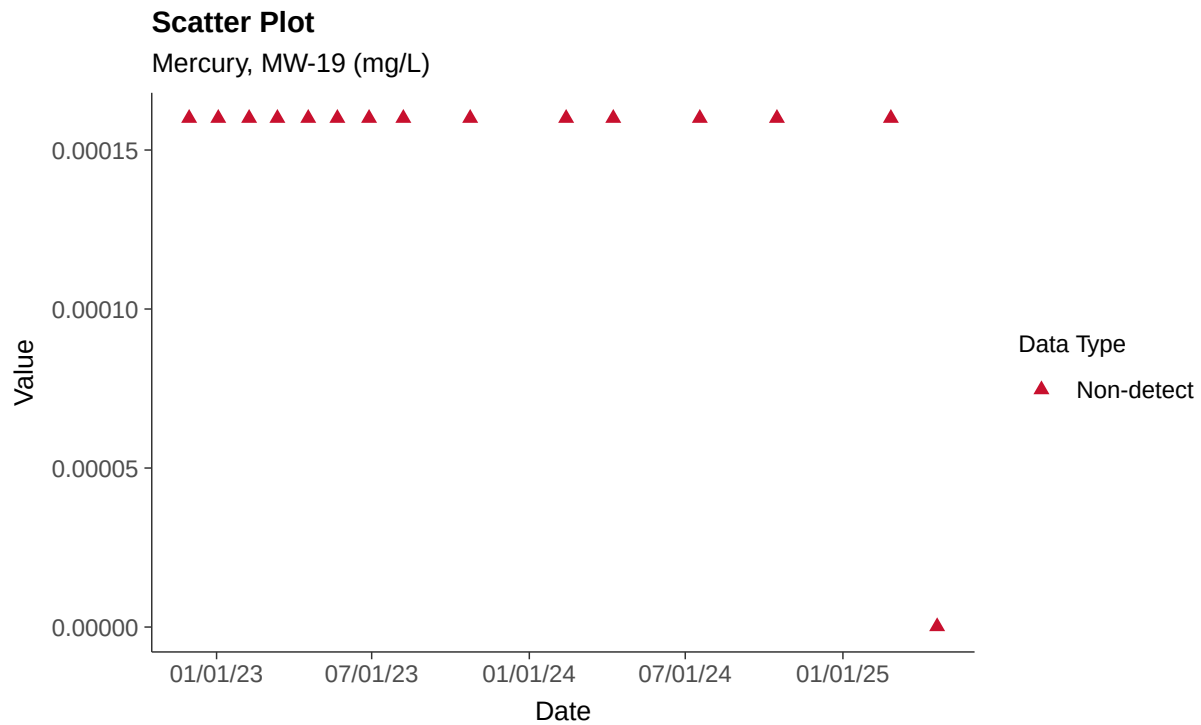
Trend Regression: Piecewise Linear-Linear-Linear

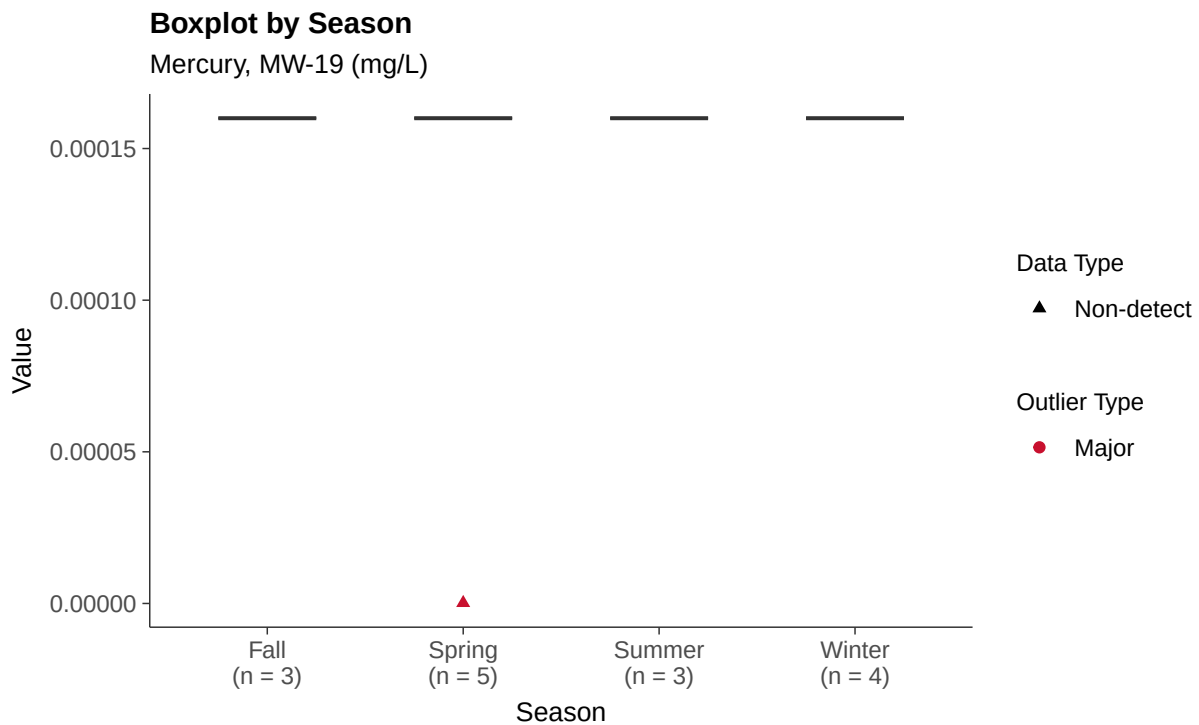
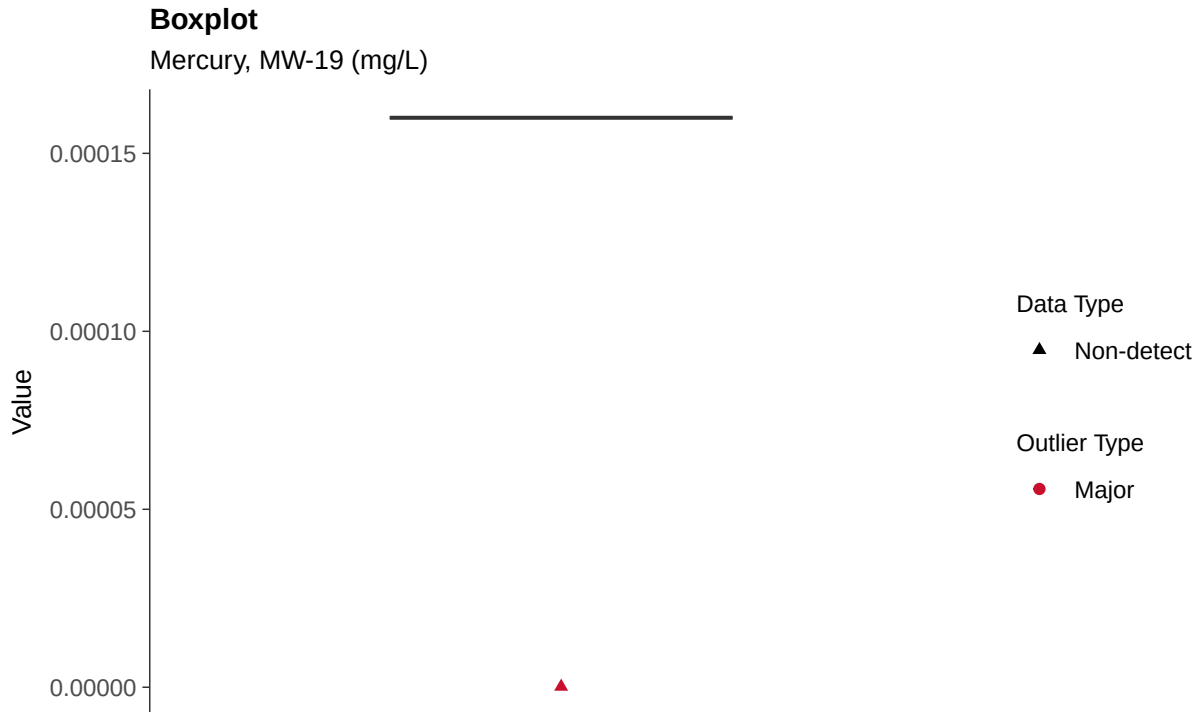
Lithium, MW-19 (mg/L)

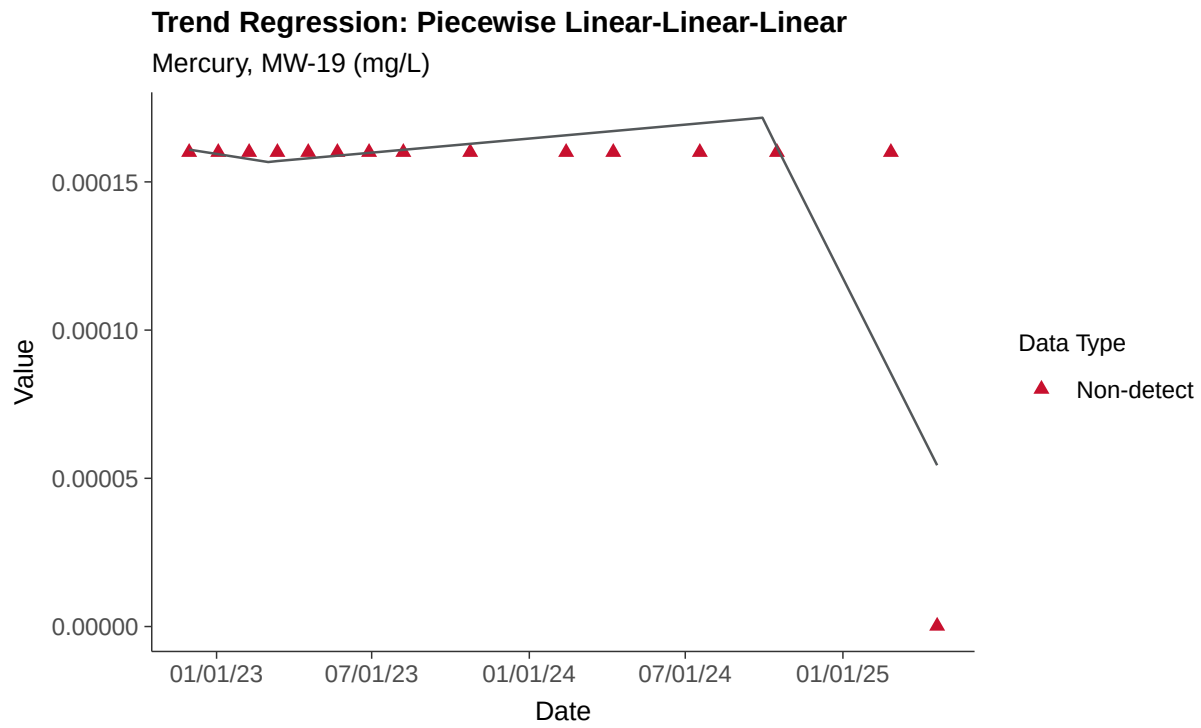


Appendix IV: Mercury, MW-19

ID: 29_1_4_117





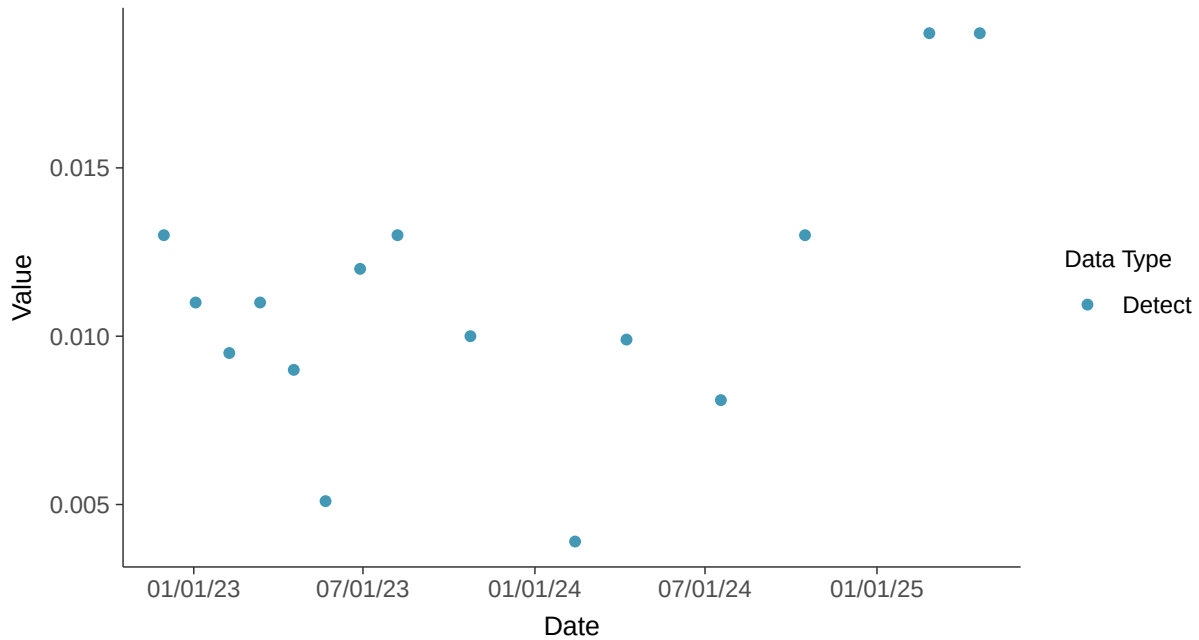


Appendix IV: Molybdenum, MW-19

ID: 29_1_4_118

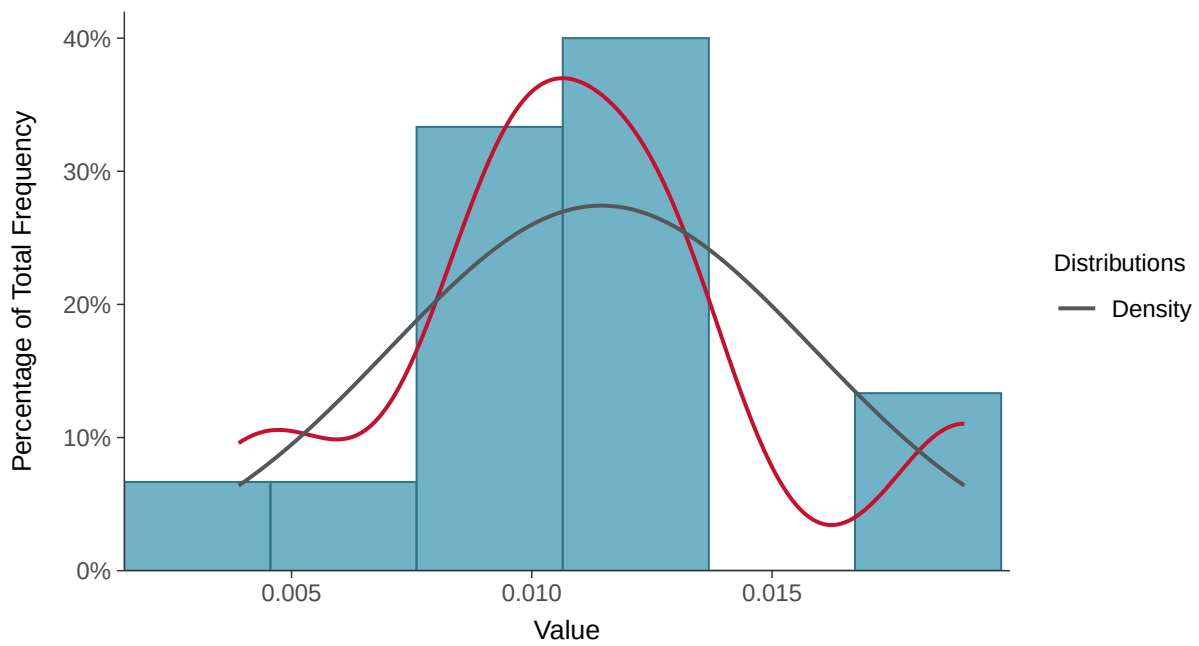
Scatter Plot

Molybdenum, MW-19 (mg/L)



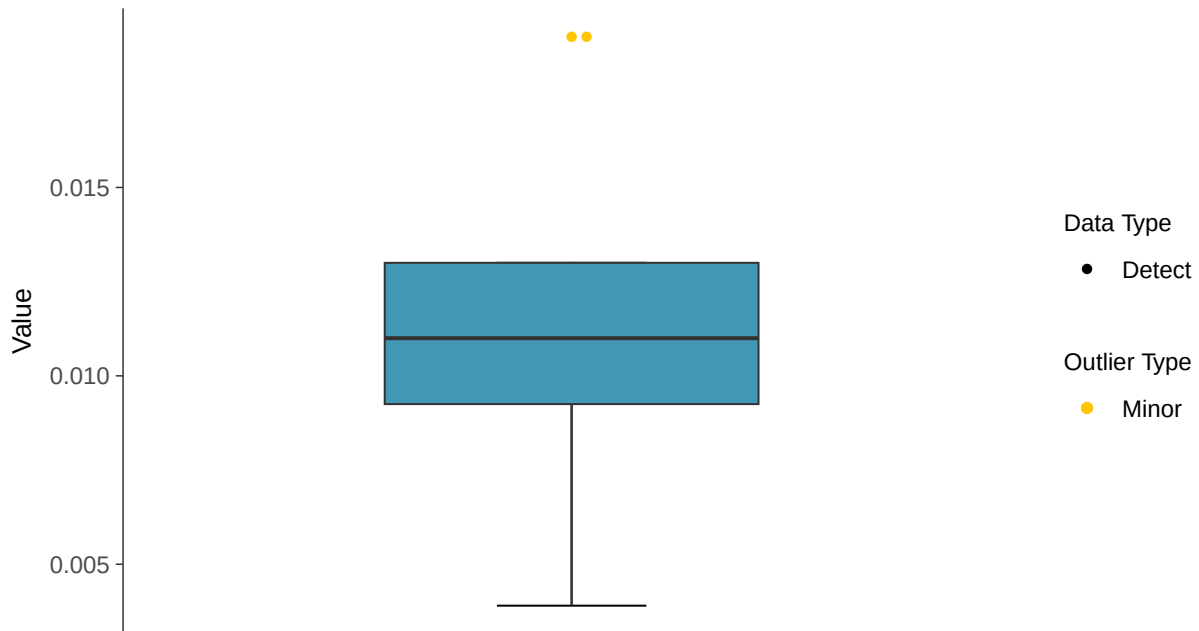
Histogram

Molybdenum, MW-19 (mg/L)



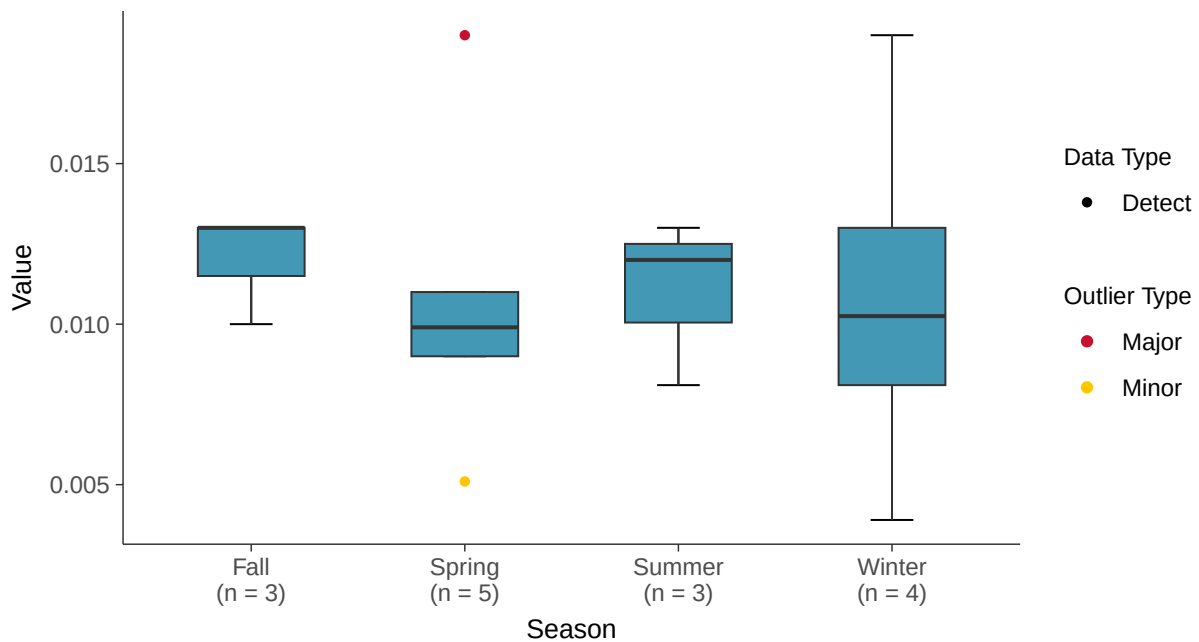
Boxplot

Molybdenum, MW-19 (mg/L)



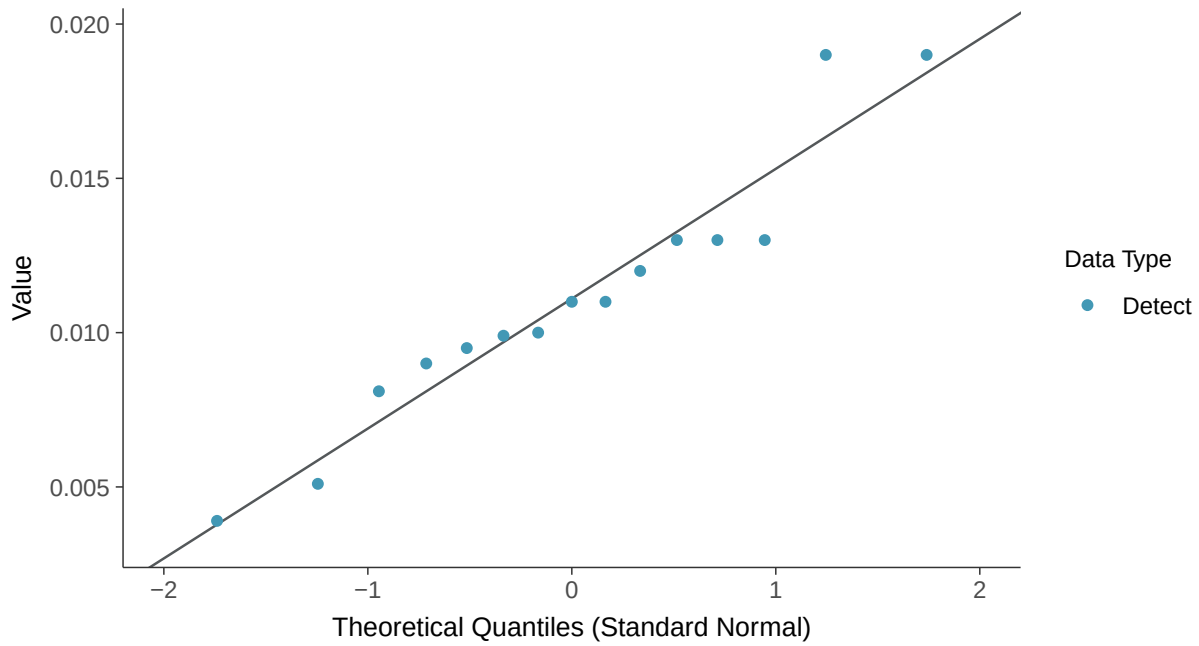
Boxplot by Season

Molybdenum, MW-19 (mg/L)



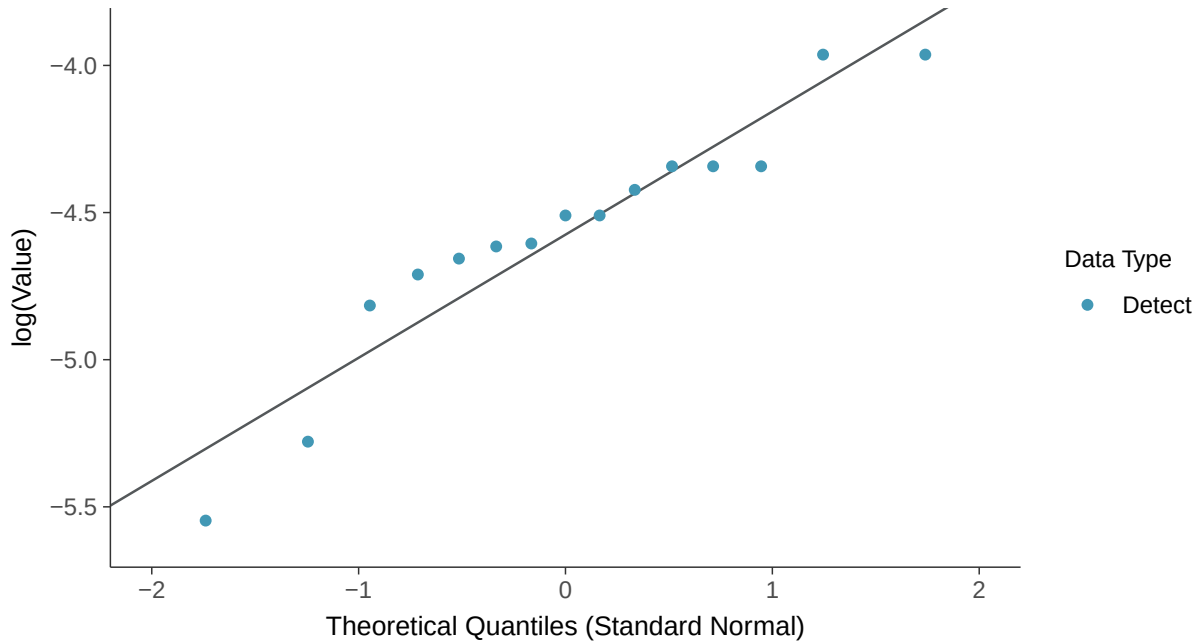
Normal Q-Q plot

Molybdenum, MW-19 (mg/L)



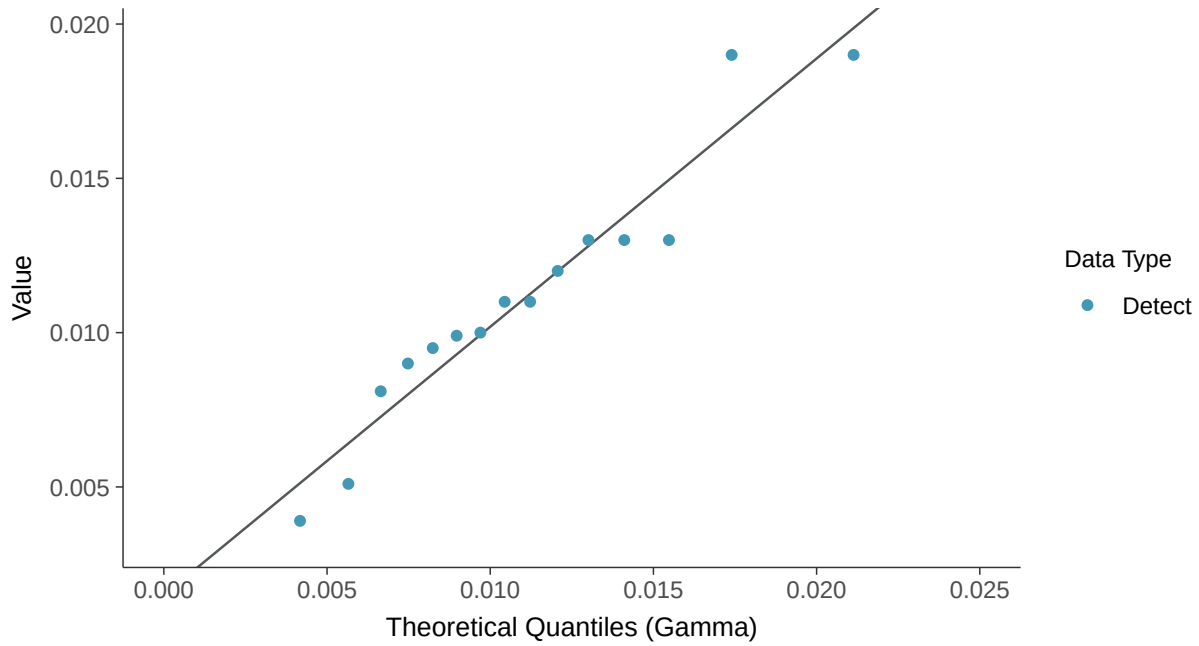
Lognormal Q-Q plot

Molybdenum, MW-19 (mg/L)



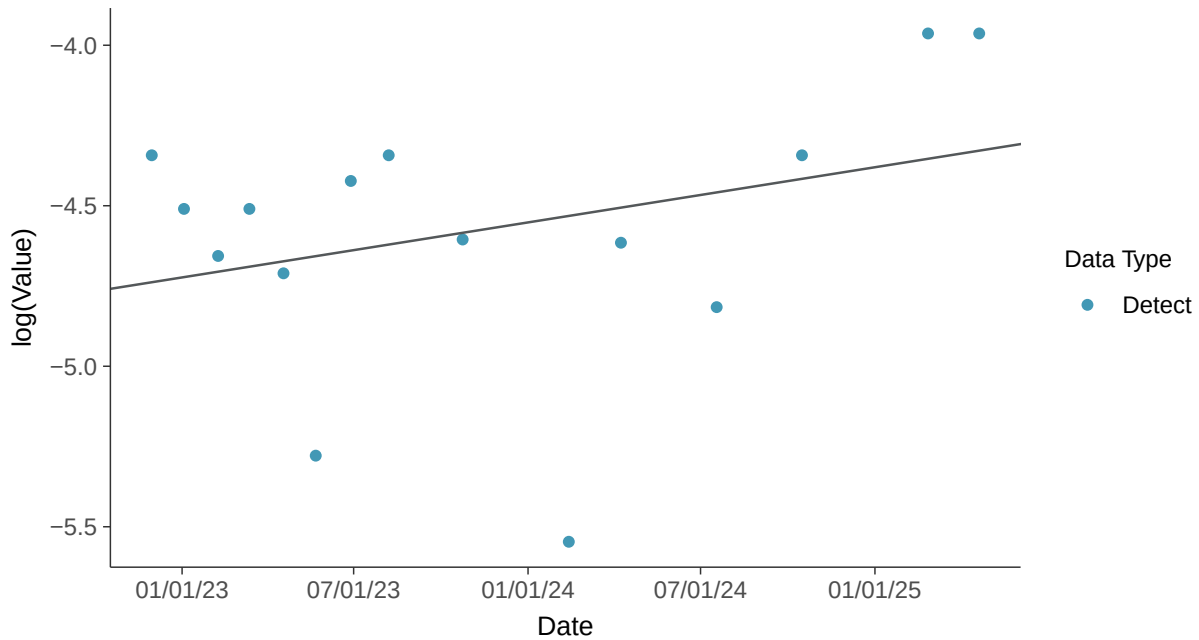
Gamma Q-Q plot

Molybdenum, MW-19 (mg/L)



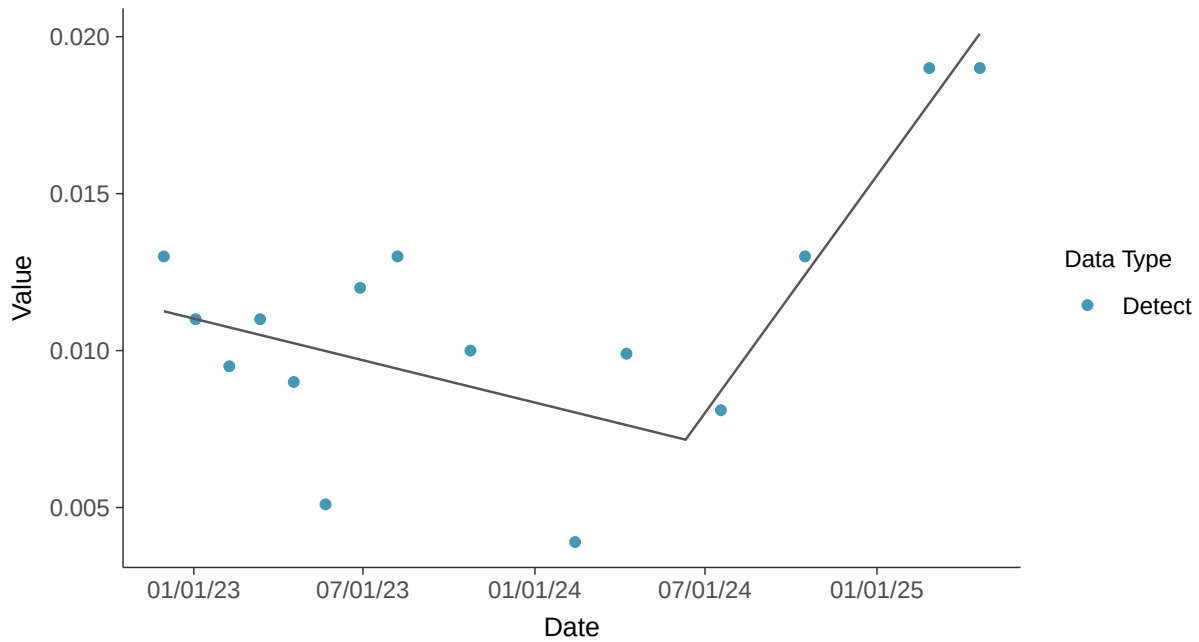
Trend Regression: Lognormal MLE

Molybdenum, MW-19 (mg/L)



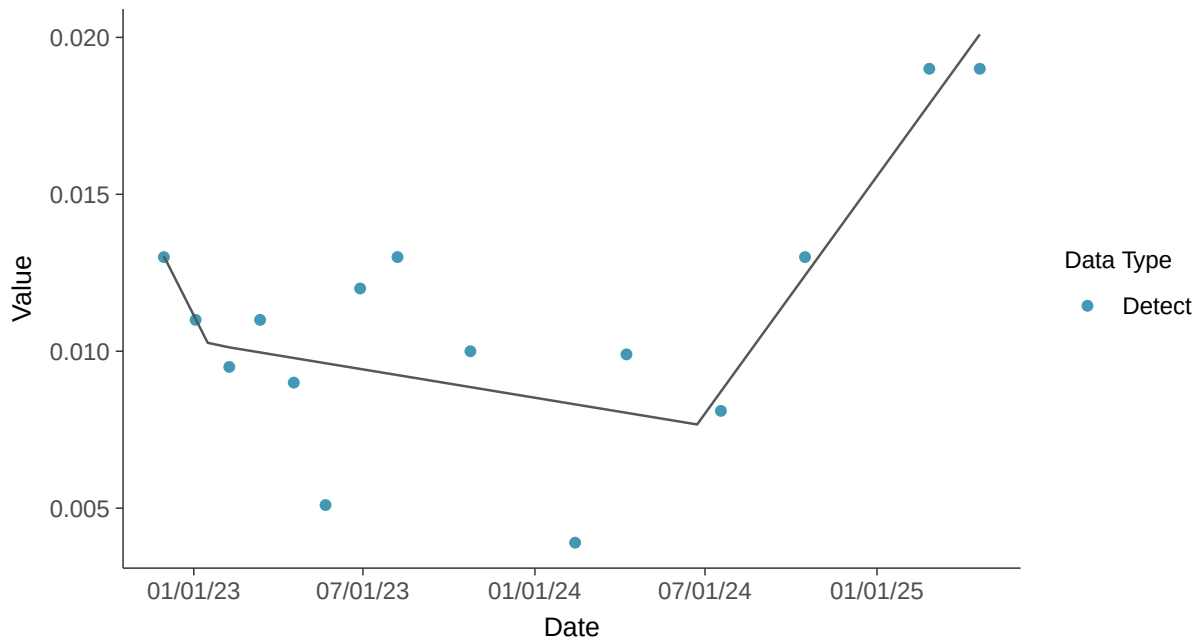
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-19 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-19 (mg/L)

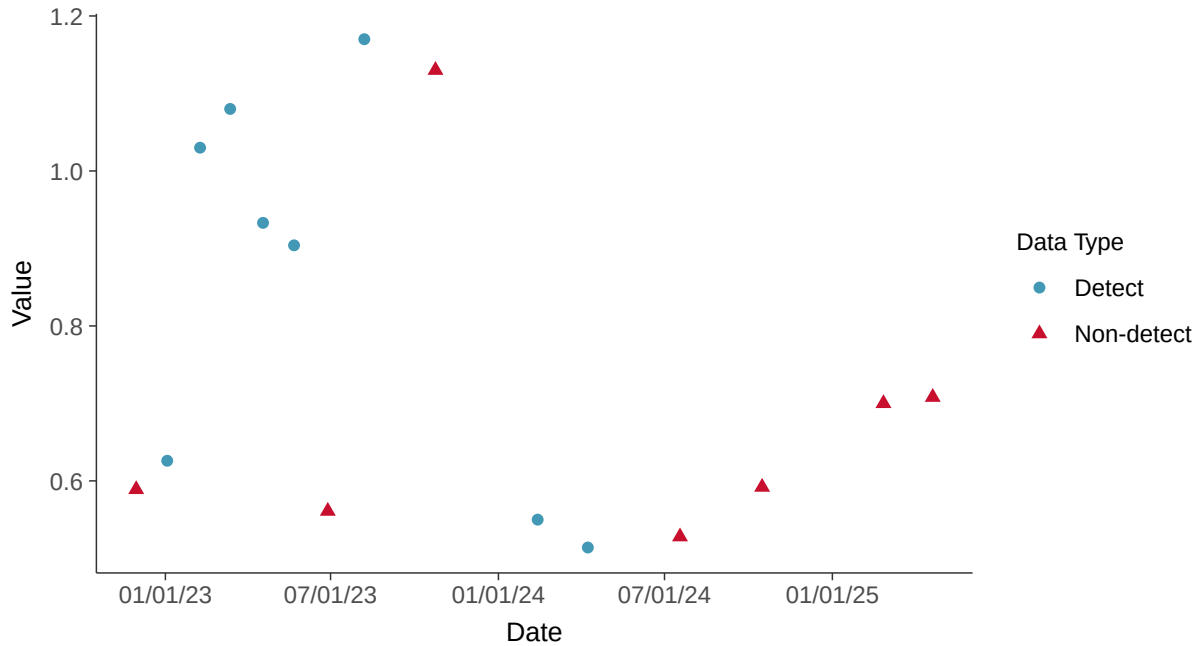


Appendix IV: Radium 226 and 228, MW-19

ID: 29_1_4_121

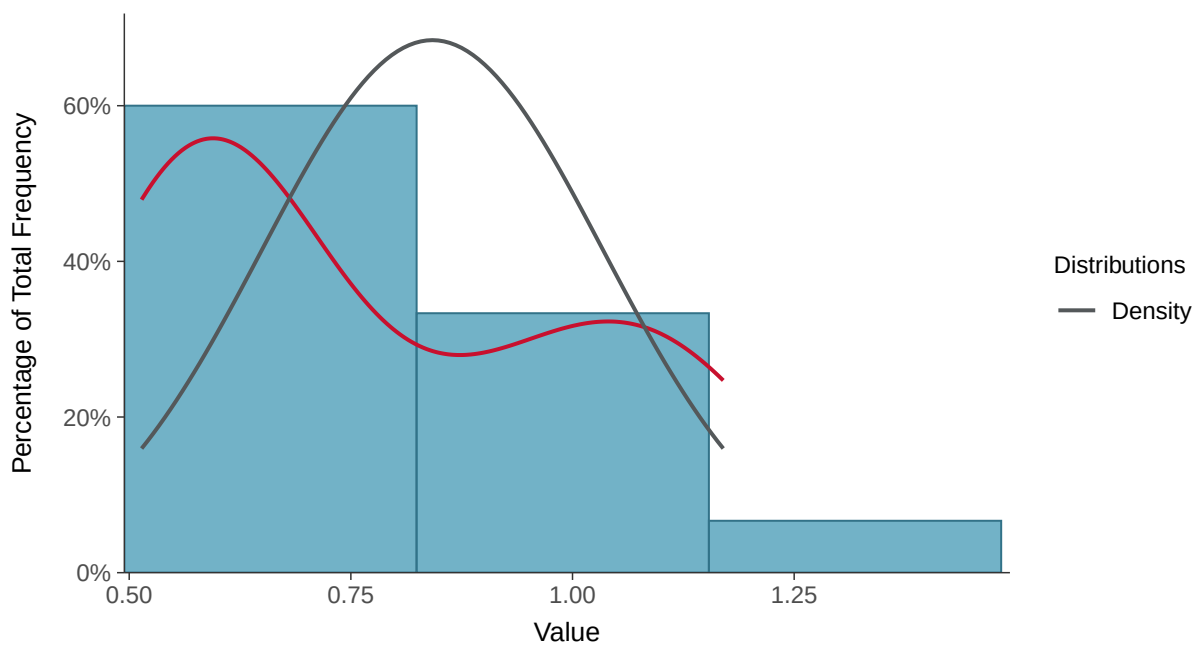
Scatter Plot

Radium 226 and 228, MW-19 (pCi/L)



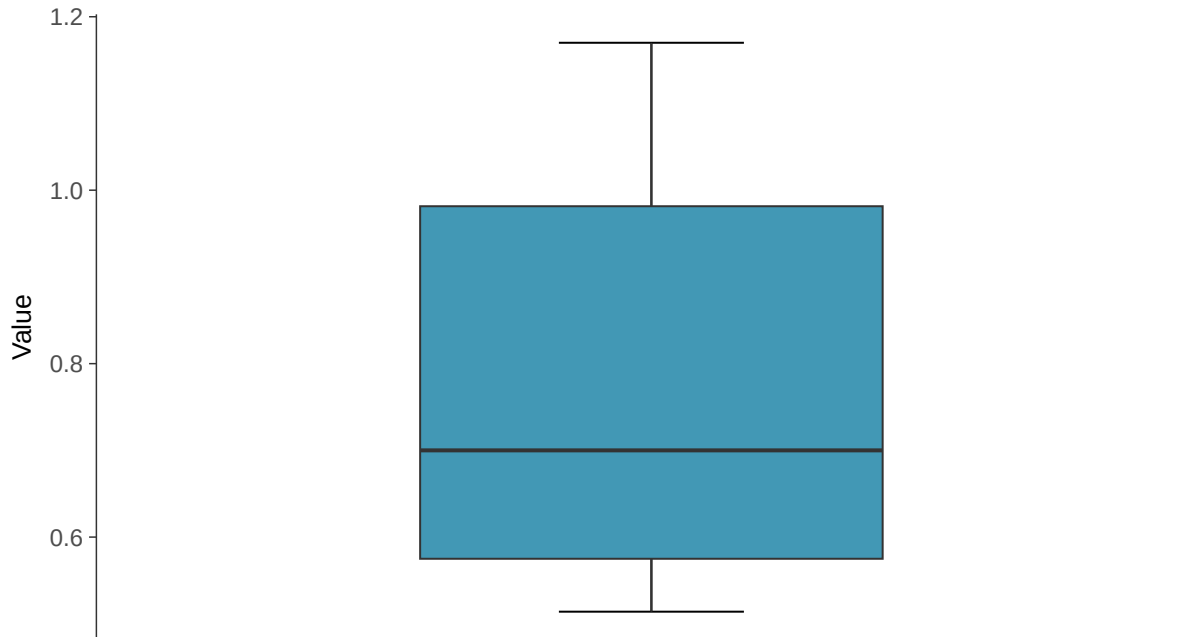
Histogram

Radium 226 and 228, MW-19 (pCi/L)



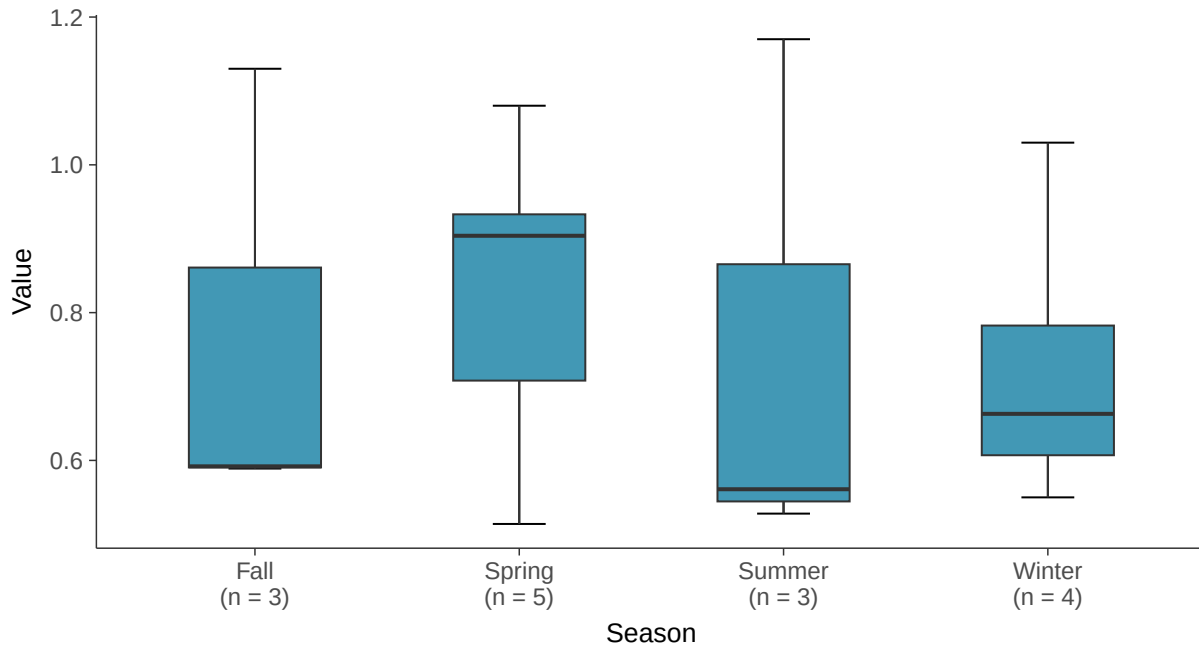
Boxplot

Radium 226 and 228, MW-19 (pCi/L)



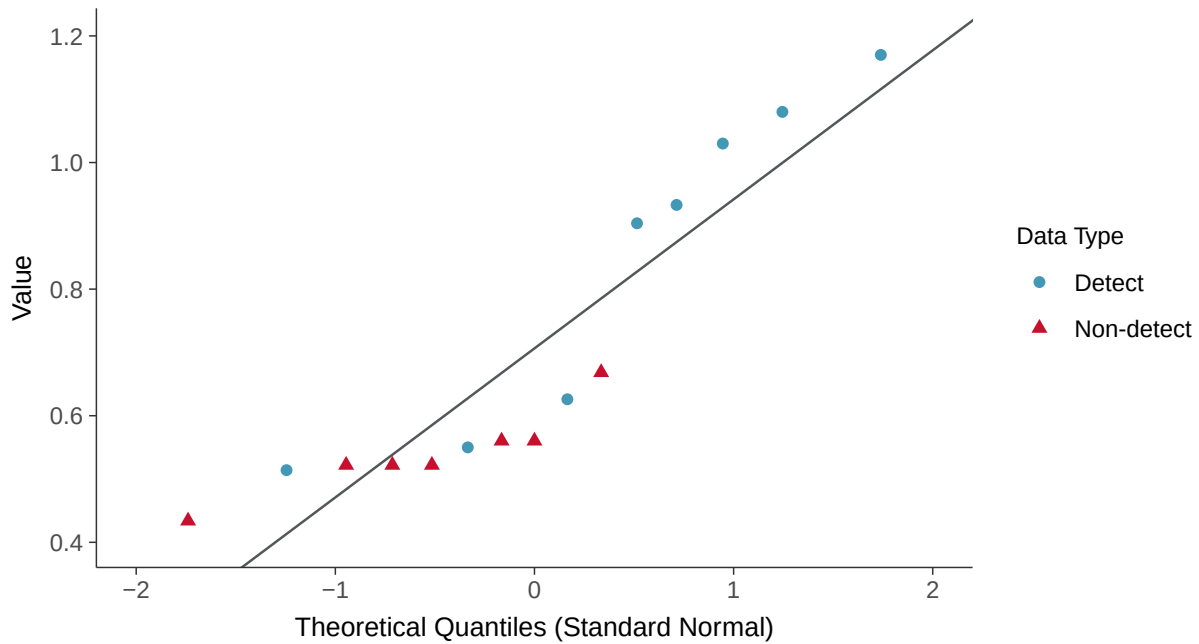
Boxplot by Season

Radium 226 and 228, MW-19 (pCi/L)



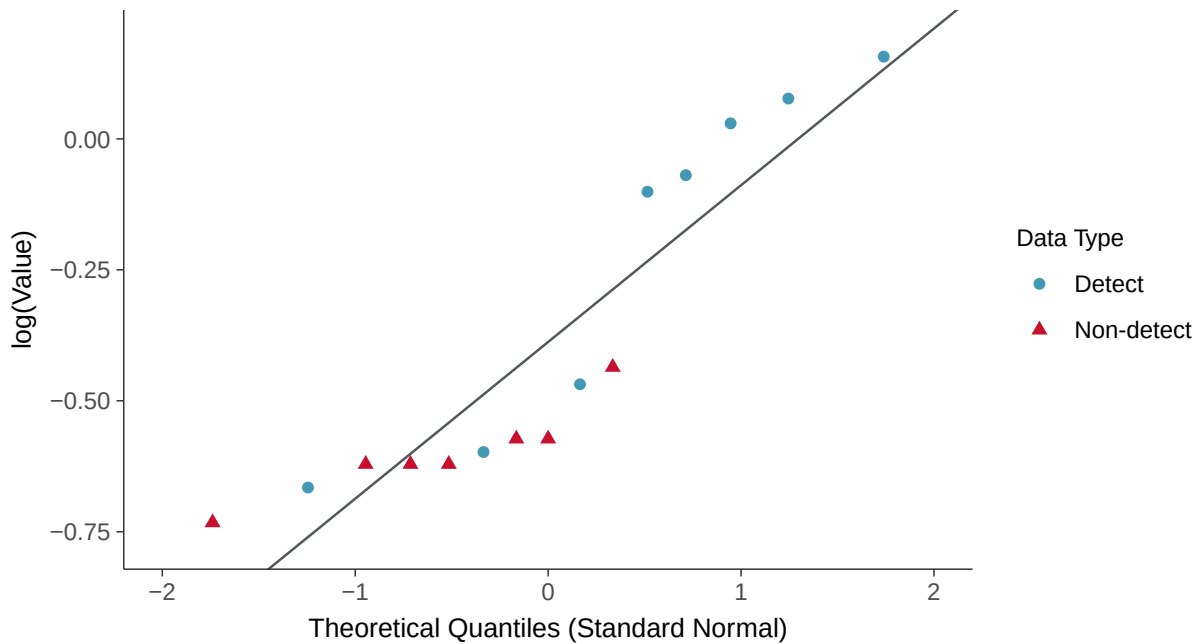
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-19 (pCi/L)



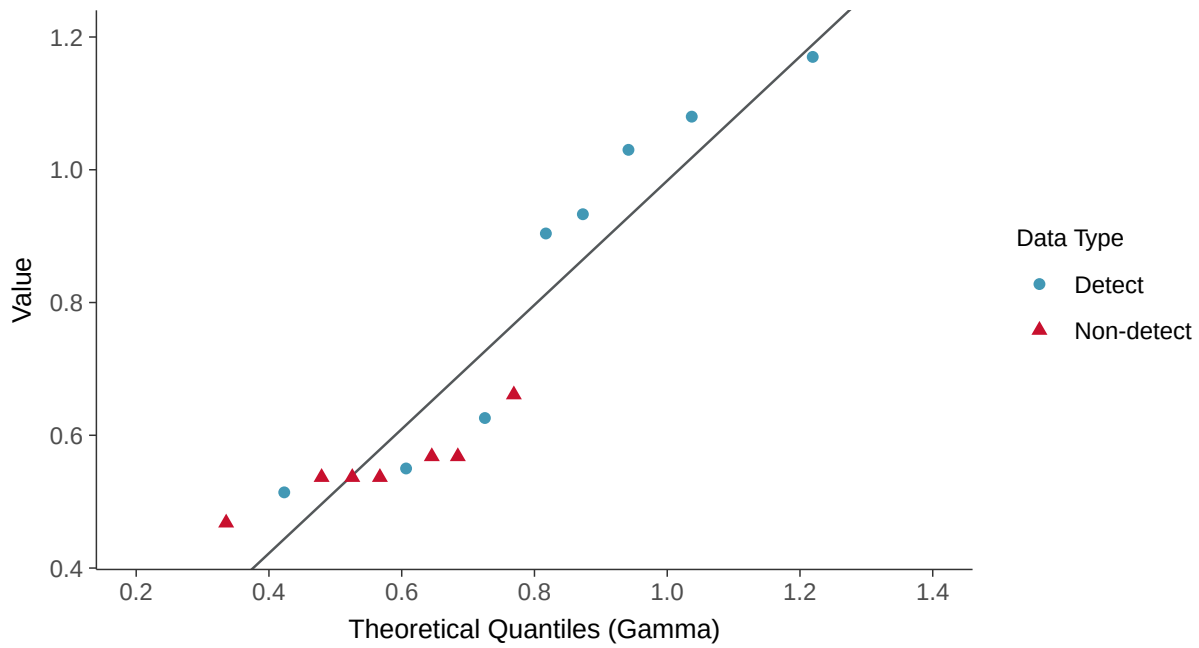
Lognormal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-19 (pCi/L)



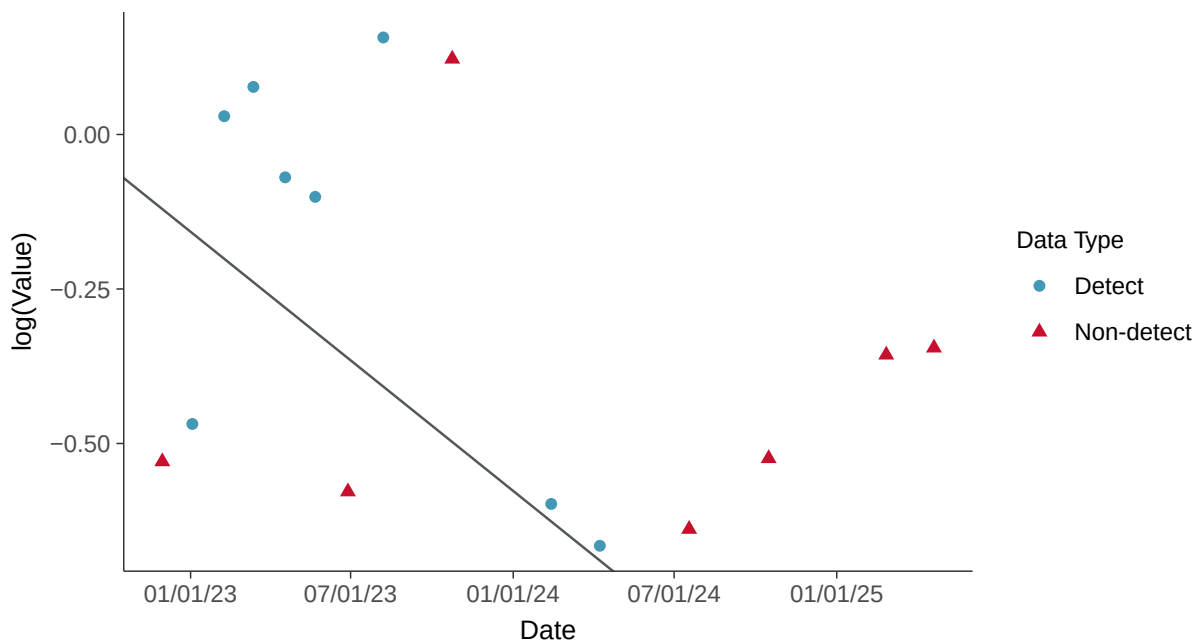
Gamma Q-Q plot using ROS Imputed Estimates

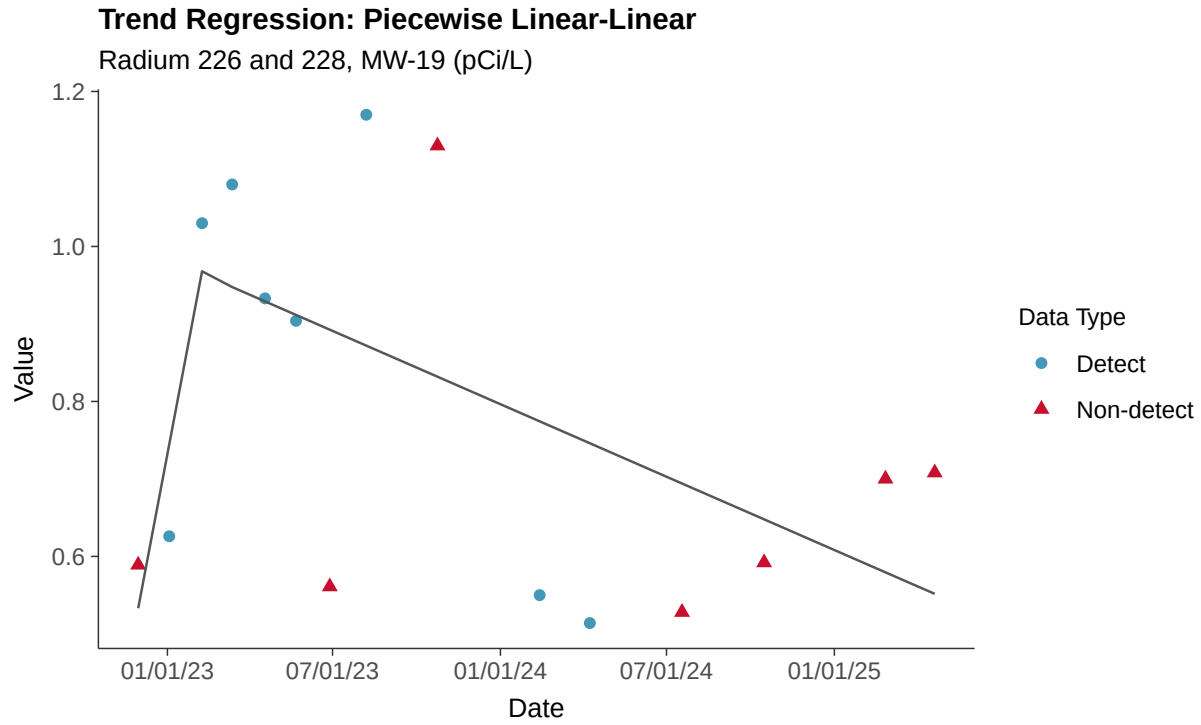
Radium 226 and 228, MW-19 (pCi/L)



Trend Regression: Lognormal MLE

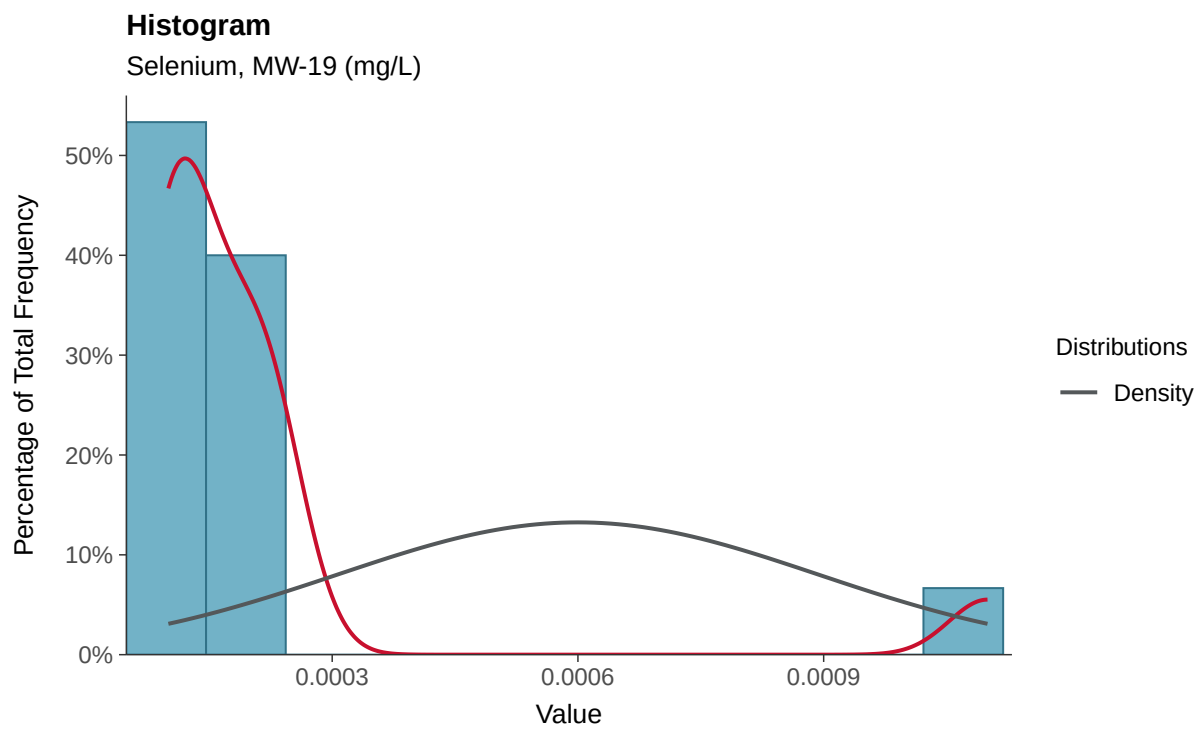
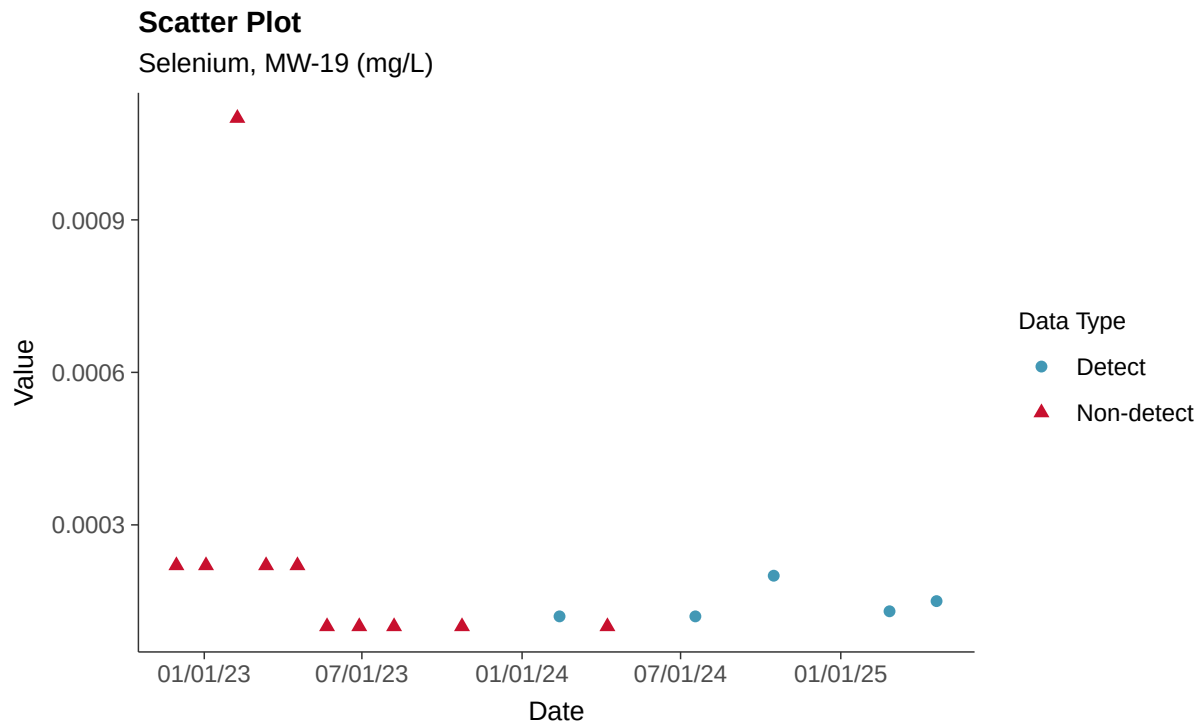
Radium 226 and 228, MW-19 (pCi/L)





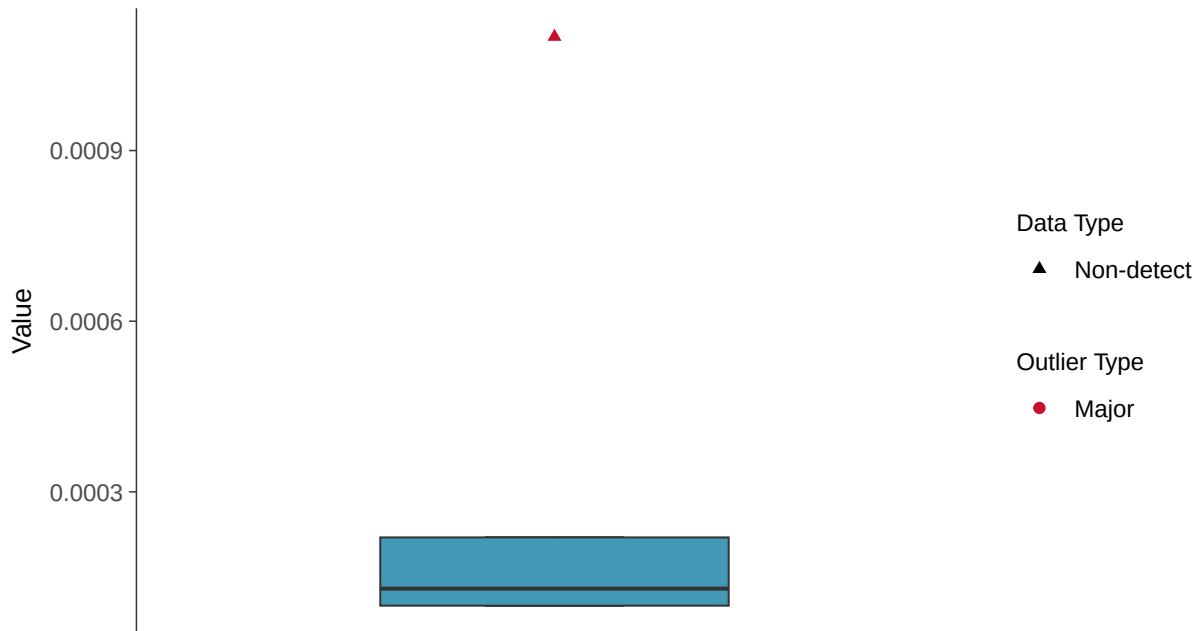
Appendix IV: Selenium, MW-19

ID: 29_1_4_122



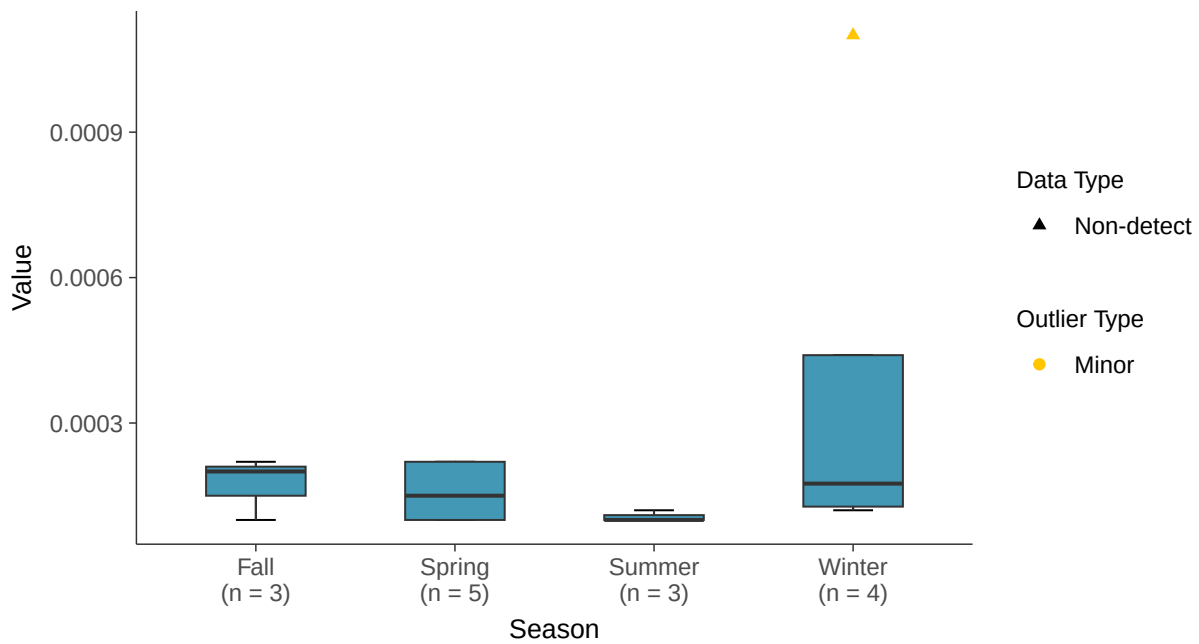
Boxplot

Selenium, MW-19 (mg/L)



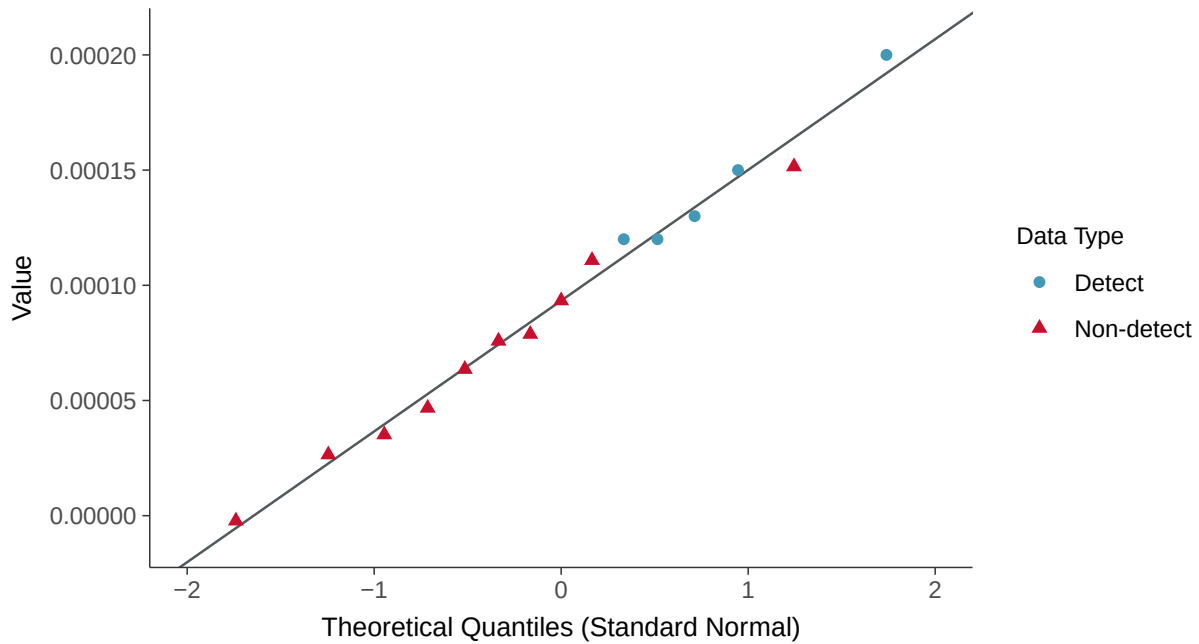
Boxplot by Season

Selenium, MW-19 (mg/L)



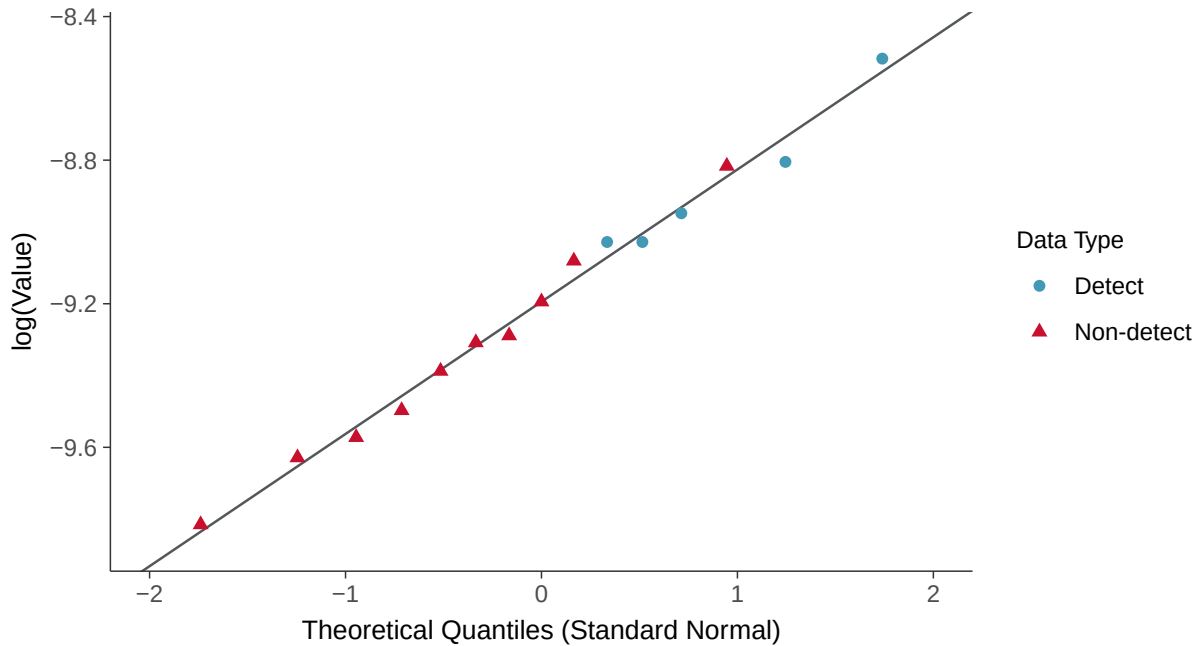
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-19 (mg/L)



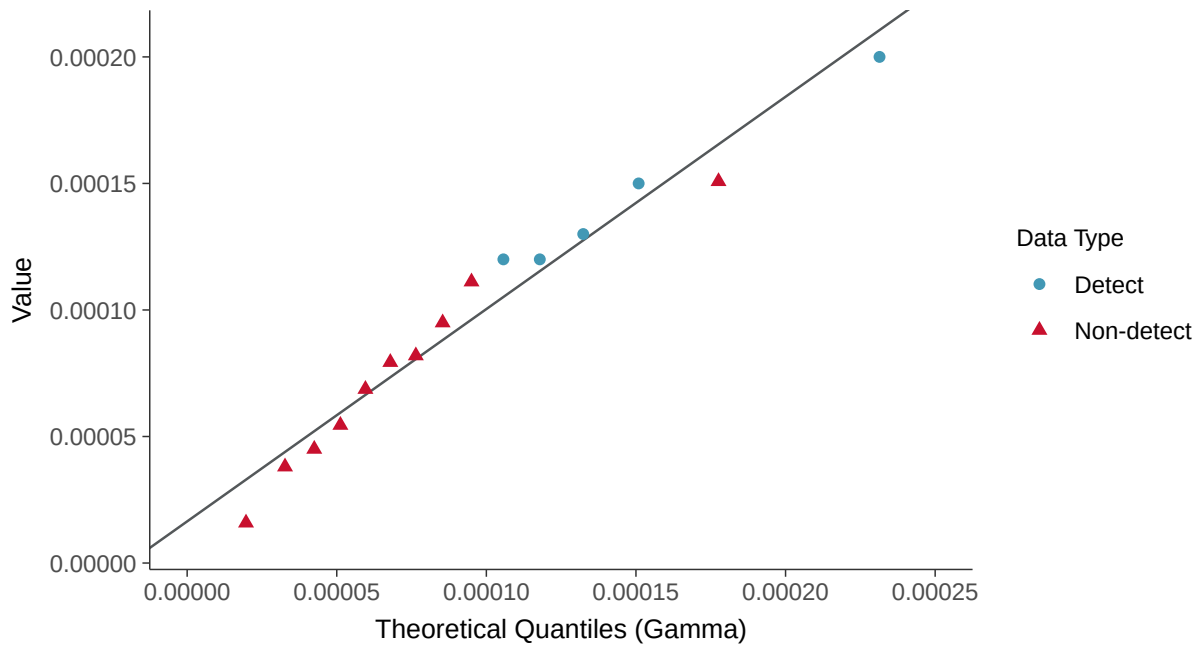
Lognormal Q-Q plot using ROS Imputed Estimates

Selenium, MW-19 (mg/L)



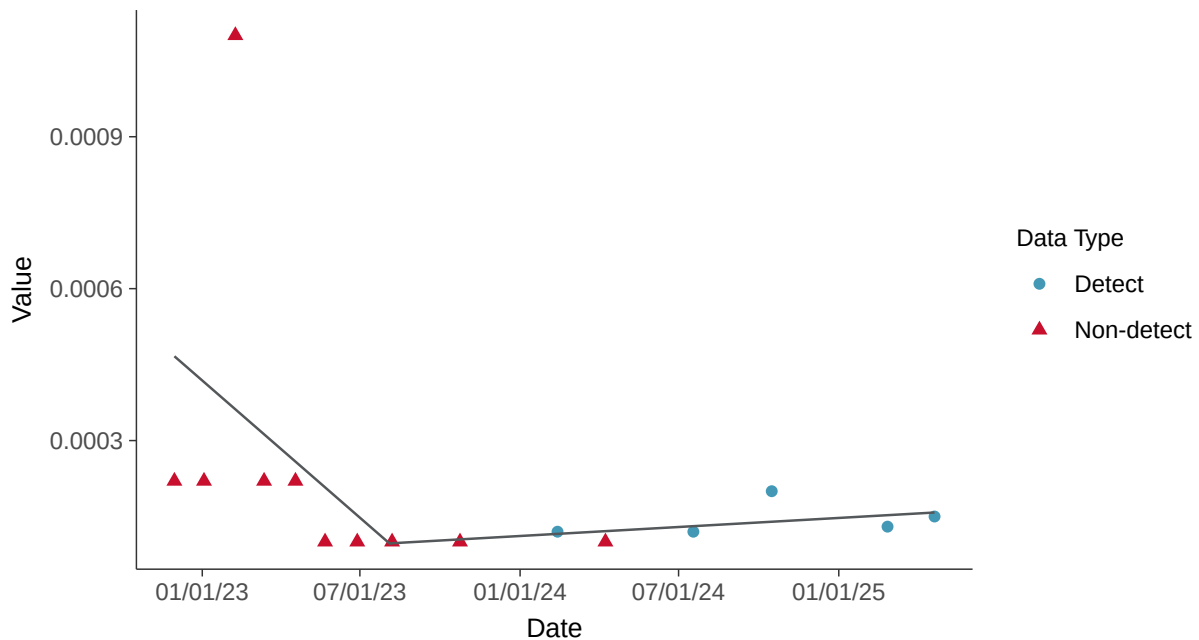
Gamma Q-Q plot using ROS Imputed Estimates

Selenium, MW-19 (mg/L)



Trend Regression: Piecewise Linear-Linear

Selenium, MW-19 (mg/L)

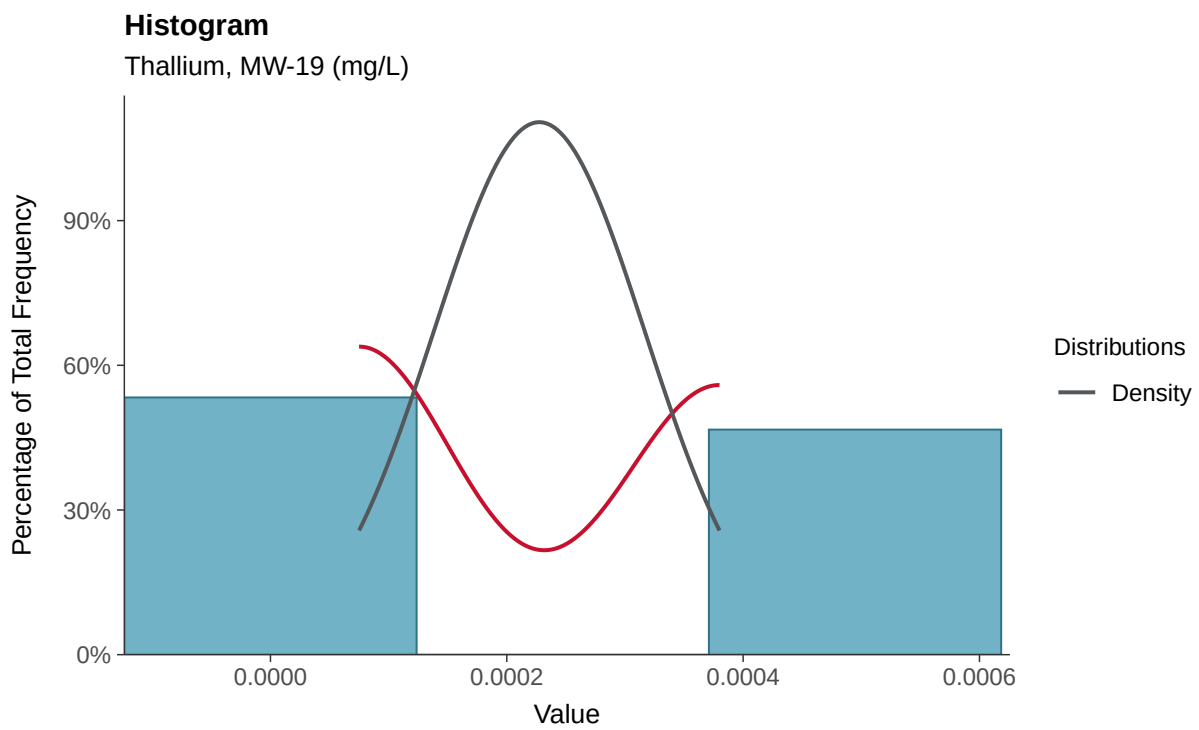
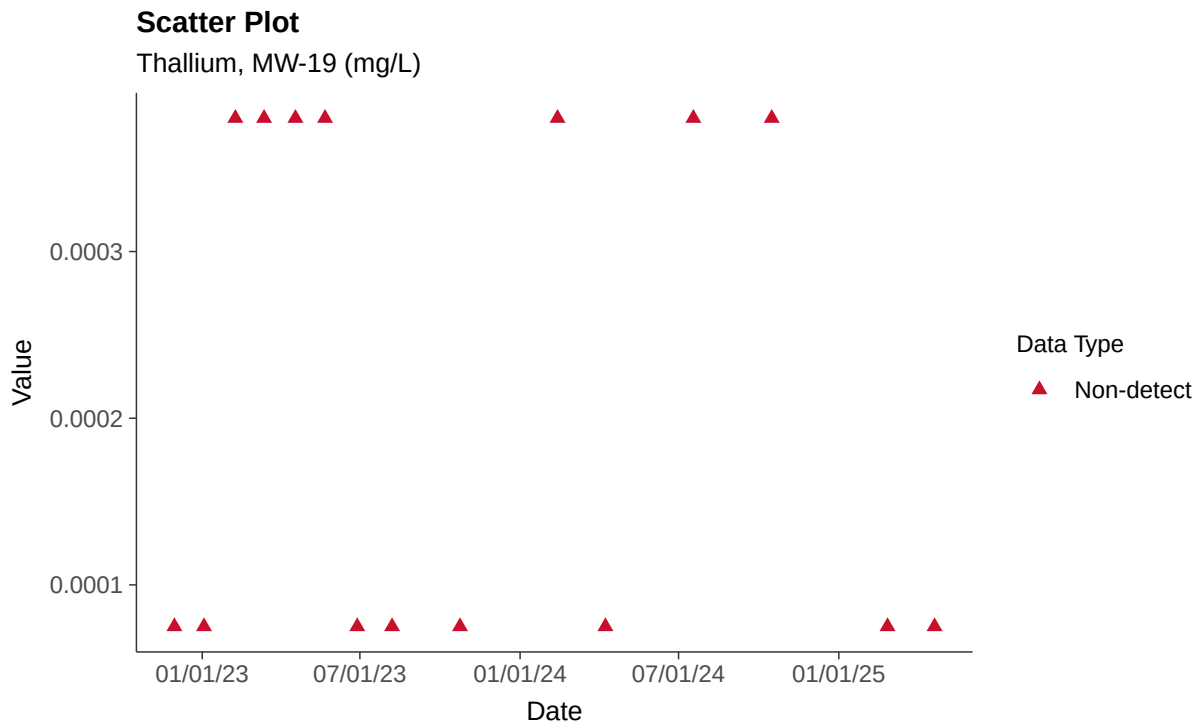


The graph displays the trend of the number of cases per 100,000 people. The y-axis, labeled 'Value', ranges from 0.0003 to 0.0009. The x-axis, labeled 'Date', shows dates from 01/01/23 to 01/01/25. A line represents the trend, starting at approximately 0.0005 in early 2023, decreasing to a minimum of about 0.0001 in mid-2023, and then gradually increasing to about 0.0002 by early 2025. Data points are categorized as 'Detect' (blue circles) and 'Non-detect' (red triangles). Non-detect points are clustered in early 2023, with one notable peak at approximately 0.0011. Detect points are scattered throughout the period, generally following the trend line.

Date	Value	Data Type
01/01/23	0.0002	Non-detect
02/01/23	0.0002	Non-detect
03/01/23	0.0011	Non-detect
04/01/23	0.0002	Non-detect
05/01/23	0.0002	Non-detect
06/01/23	0.0001	Non-detect
07/01/23	0.0001	Non-detect
08/01/23	0.0001	Non-detect
09/01/23	0.0001	Non-detect
10/01/23	0.0001	Non-detect
11/01/23	0.0001	Non-detect
12/01/23	0.0001	Non-detect
01/01/24	0.0001	Non-detect
02/01/24	0.0001	Non-detect
03/01/24	0.0001	Non-detect
04/01/24	0.0001	Non-detect
05/01/24	0.0001	Non-detect
06/01/24	0.0001	Non-detect
07/01/24	0.0001	Non-detect
08/01/24	0.0001	Non-detect
09/01/24	0.0001	Non-detect
10/01/24	0.0001	Non-detect
11/01/24	0.0001	Non-detect
12/01/24	0.0001	Non-detect
01/01/25	0.0001	Non-detect
02/01/25	0.0001	Non-detect
03/01/25	0.0001	Non-detect
04/01/25	0.0001	Non-detect
05/01/25	0.0001	Non-detect
06/01/25	0.0001	Non-detect
07/01/25	0.0001	Non-detect
08/01/25	0.0001	Non-detect
09/01/25	0.0001	Non-detect
10/01/25	0.0001	Non-detect
11/01/25	0.0001	Non-detect
12/01/25	0.0001	Non-detect
01/01/26	0.0001	Non-detect
02/01/26	0.0001	Non-detect
03/01/26	0.0001	Non-detect
04/01/26	0.0001	Non-detect
05/01/26	0.0001	Non-detect
06/01/26	0.0001	Non-detect
07/01/26	0.0001	Non-detect
08/01/26	0.0001	Non-detect
09/01/26	0.0001	Non-detect
10/01/26	0.0001	Non-detect
11/01/26	0.0001	Non-detect
12/01/26	0.0001	Non-detect
01/01/27	0.0001	Non-detect
02/01/27	0.0001	Non-detect
03/01/27	0.0001	Non-detect
04/01/27	0.0001	Non-detect
05/01/27	0.0001	Non-detect
06/01/27	0.0001	Non-detect
07/01/27	0.0001	Non-detect
08/01/27	0.0001	Non-detect
09/01/27	0.0001	Non-detect
10/01/27	0.0001	Non-detect
11/01/27	0.0001	Non-detect
12/01/27	0.0001	Non-detect
01/01/28	0.0001	Non-detect
02/01/28	0.0001	Non-detect
03/01/28	0.0001	Non-detect
04/01/28	0.0001	Non-detect
05/01/28	0.0001	Non-detect
06/01/28	0.0001	Non-detect
07/01/28	0.0001	Non-detect
08/01/28	0.0001	Non-detect
09/01/28	0.0001	Non-detect
10/01/28	0.0001	Non-detect
11/01/28	0.0001	Non-detect
12/01/28	0.0001	Non-detect
01/01/29	0.0001	Non-detect
02/01/29	0.0001	Non-detect
03/01/29	0.0001	Non-detect
04/01/29	0.0001	Non-detect
05/01/29	0.0001	Non-detect
06/01/29	0.0001	Non-detect
07/01/29	0.0001	Non-detect
08/01/29	0.0001	Non-detect
09/01/29	0.0001	Non-detect
10/01/29	0.0001	Non-detect
11/01/29	0.0001	Non-detect
12/01/29	0.0001	Non-detect
01/01/30	0.0001	Non-detect
02/01/30	0.0001	Non-detect
03/01/30	0.0001	Non-detect
04/01/30	0.0001	Non-detect
05/01/30	0.0001	Non-detect
06/01/30	0.0001	Non-detect
07/01/30	0.0001	Non-detect
08/01/30	0.0001	Non-detect
09/01/30	0.0001	Non-detect
10/01/30	0.0001	Non-detect
11/01/30	0.0001	Non-detect
12/01/30	0.0001	Non-detect
01/01/31	0.0001	Non-detect
02/01/31	0.0001	Non-detect
03/01/31	0.0001	Non-detect
04/01/31	0.0001	Non-detect
05/01/31	0.0001	Non-detect
06/01/31	0.0001	Non-detect
07/01/31	0.0001	Non-detect
08/01/31	0.	

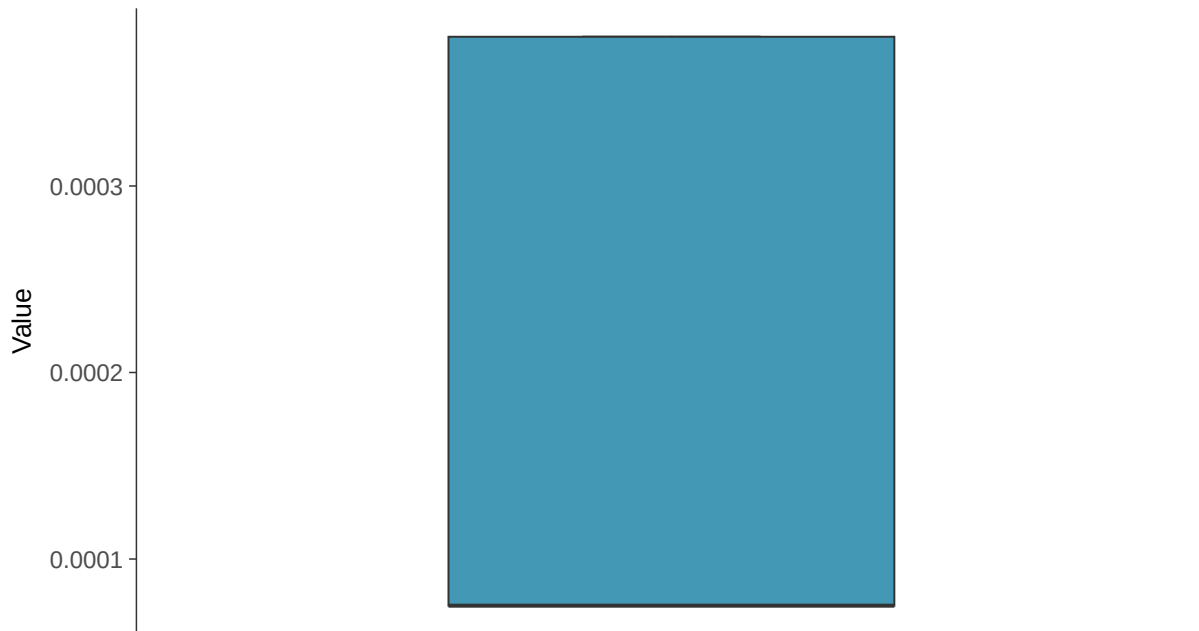
Appendix IV: Thallium, MW-19

ID: 29_1_4_125



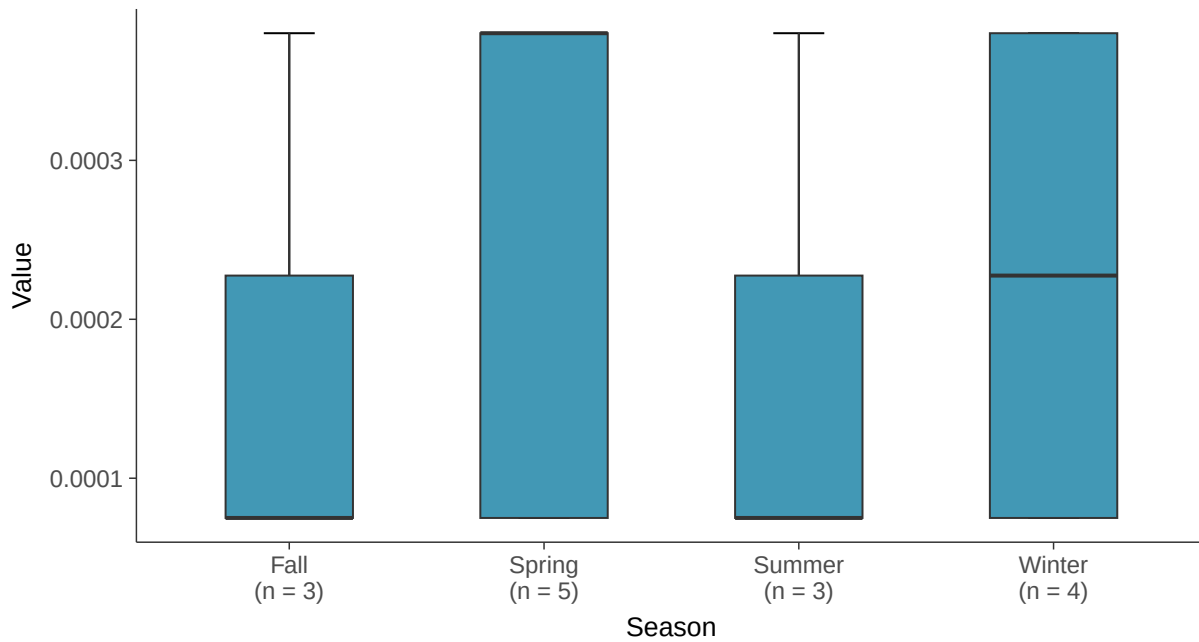
Boxplot

Thallium, MW-19 (mg/L)



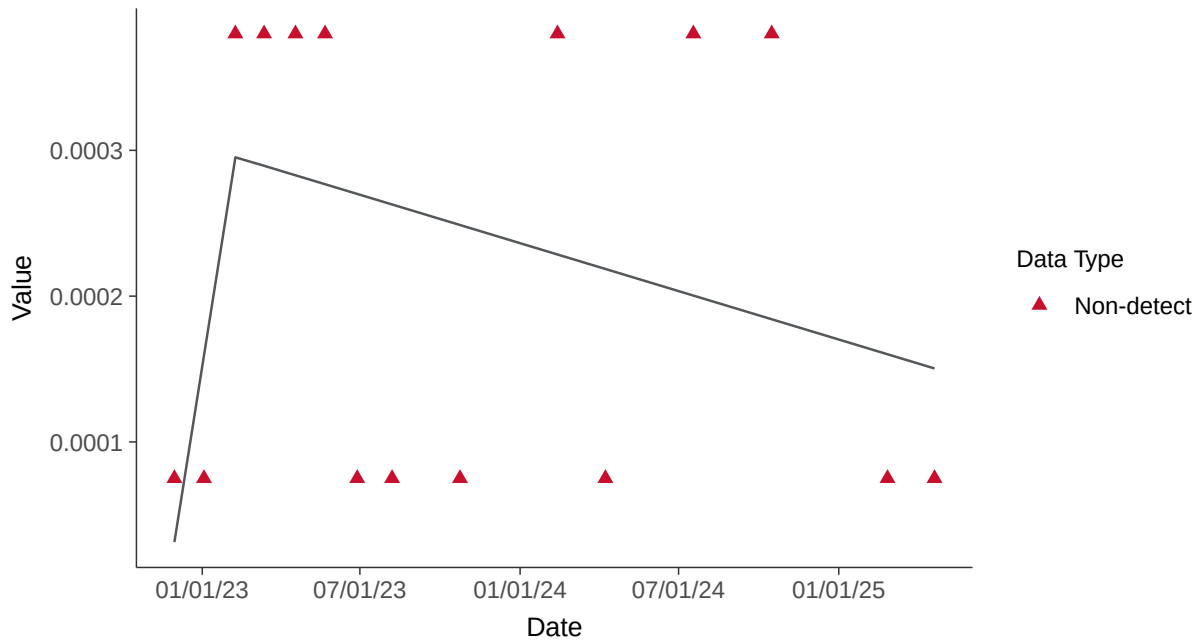
Boxplot by Season

Thallium, MW-19 (mg/L)



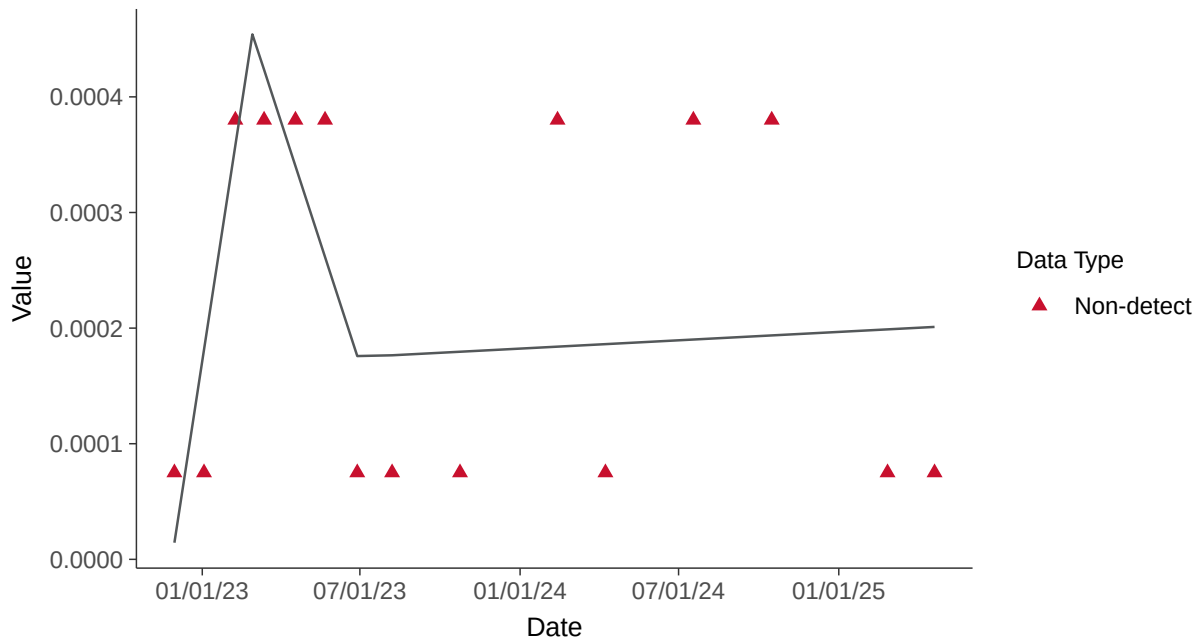
Trend Regression: Piecewise Linear-Linear

Thallium, MW-19 (mg/L)



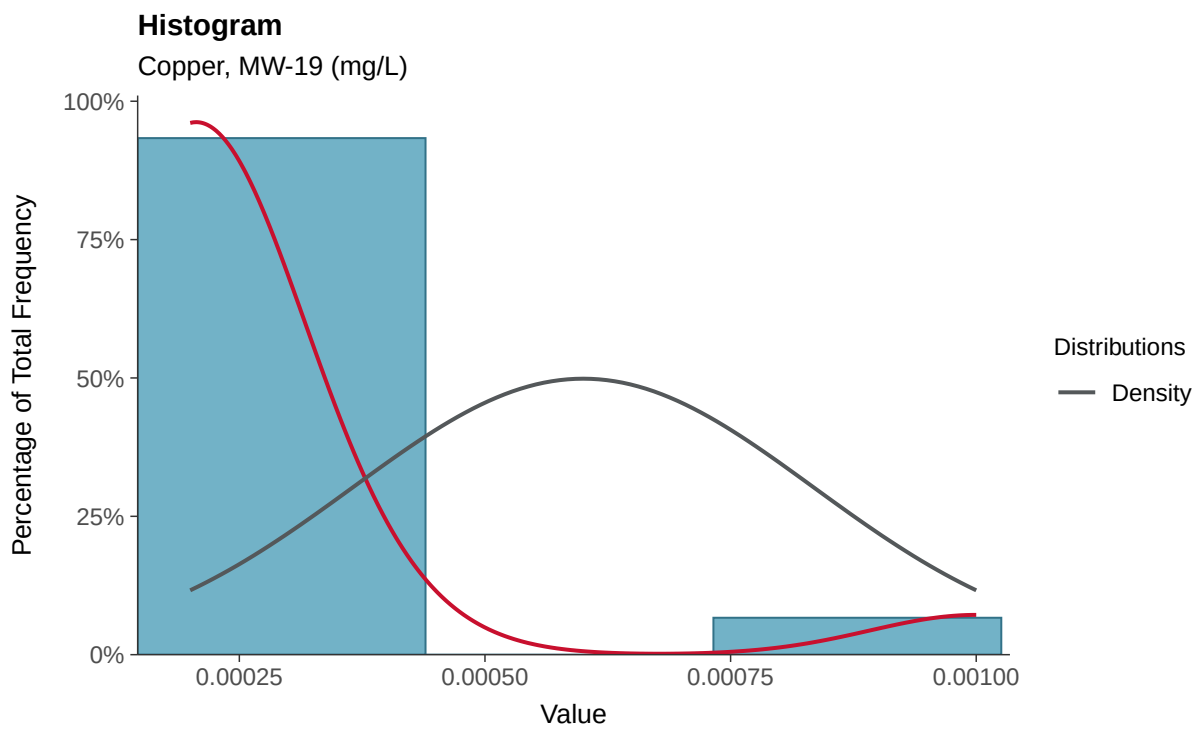
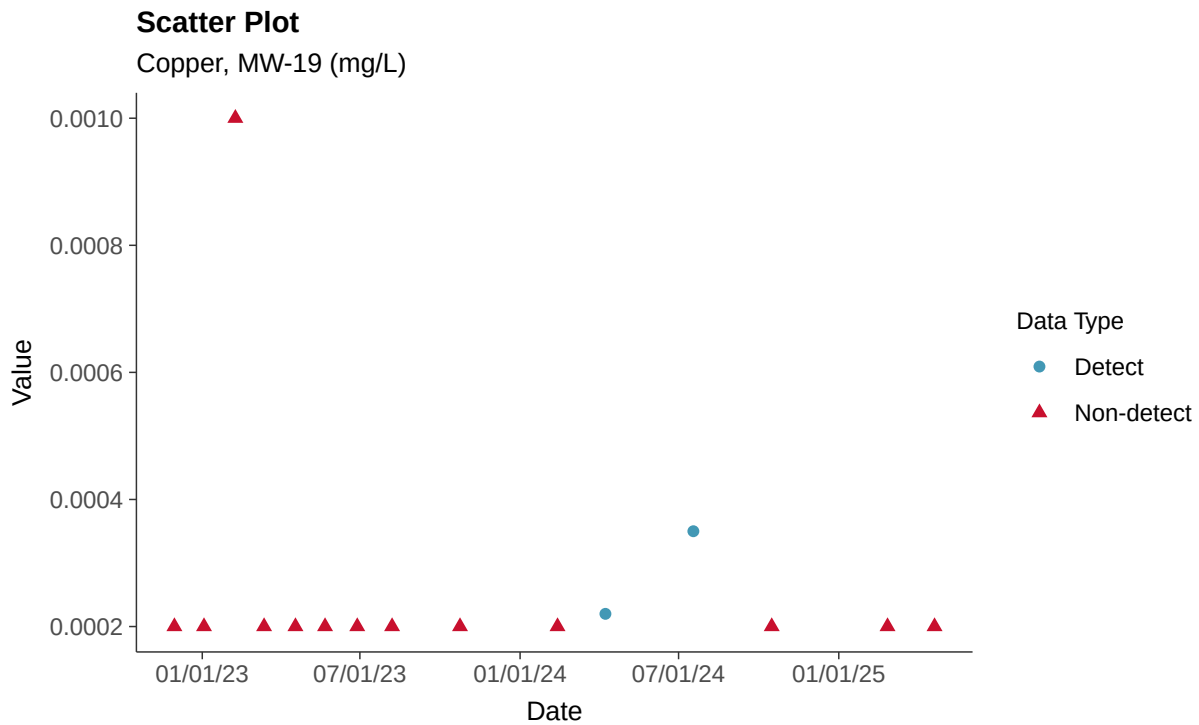
Trend Regression: Piecewise Linear-Linear-Linear

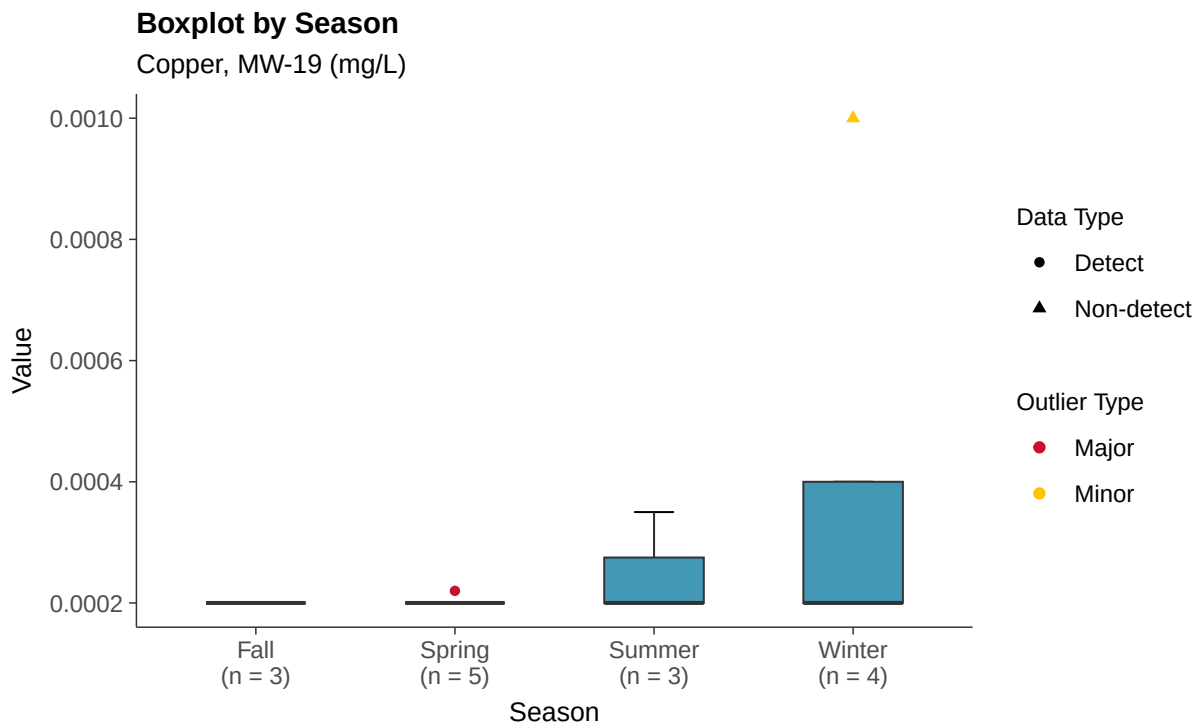
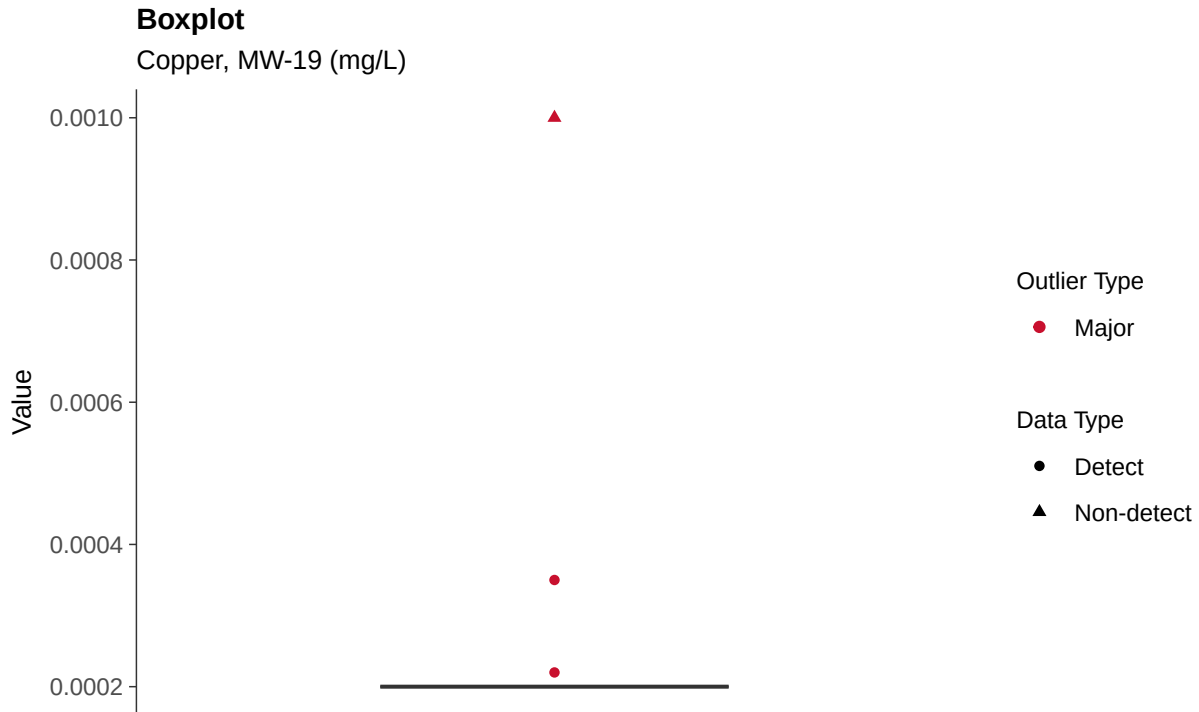
Thallium, MW-19 (mg/L)



Part 115: Copper, MW-19

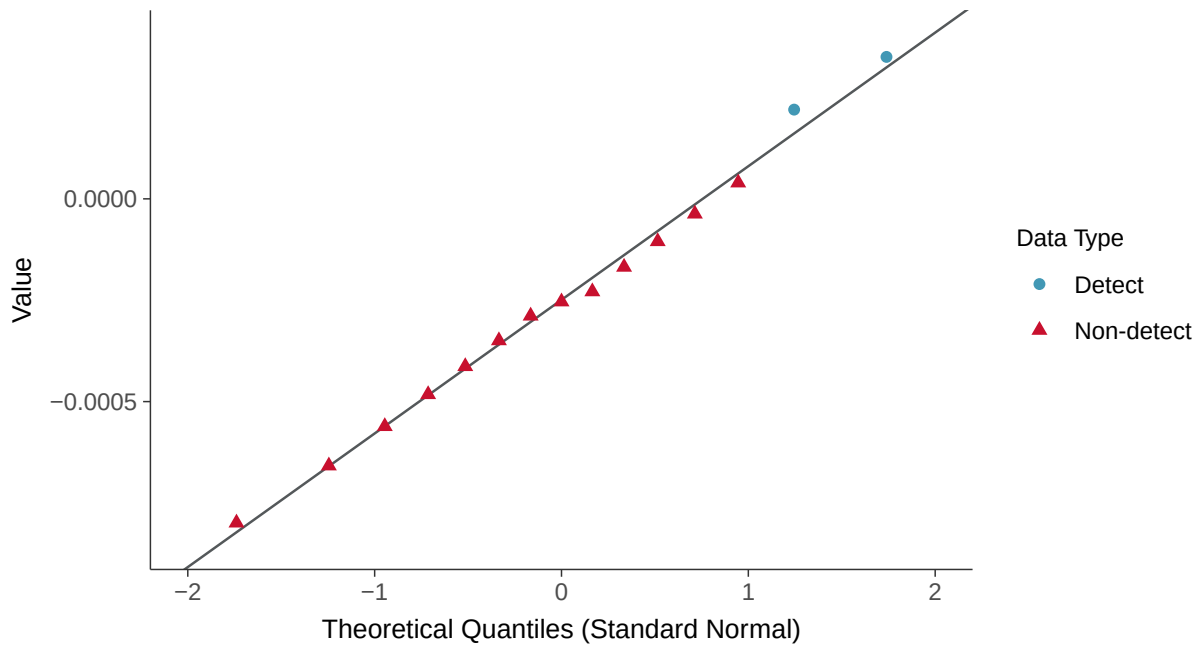
ID: 29_1_5_111





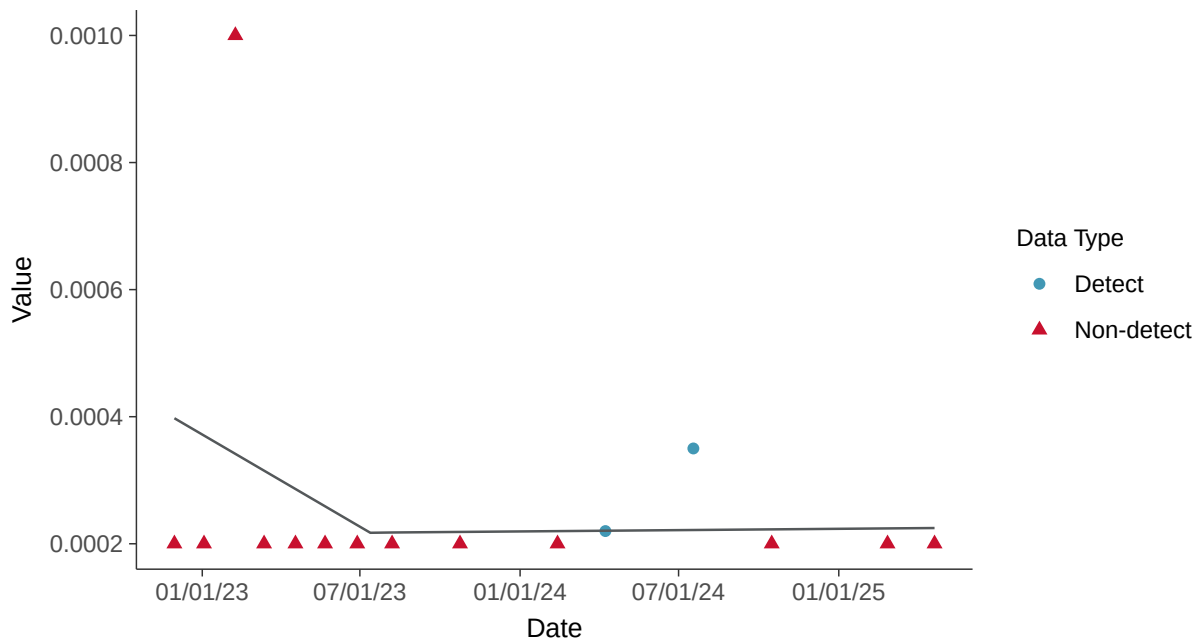
Normal Q-Q plot using ROS Imputed Estimates

Copper, MW-19 (mg/L)

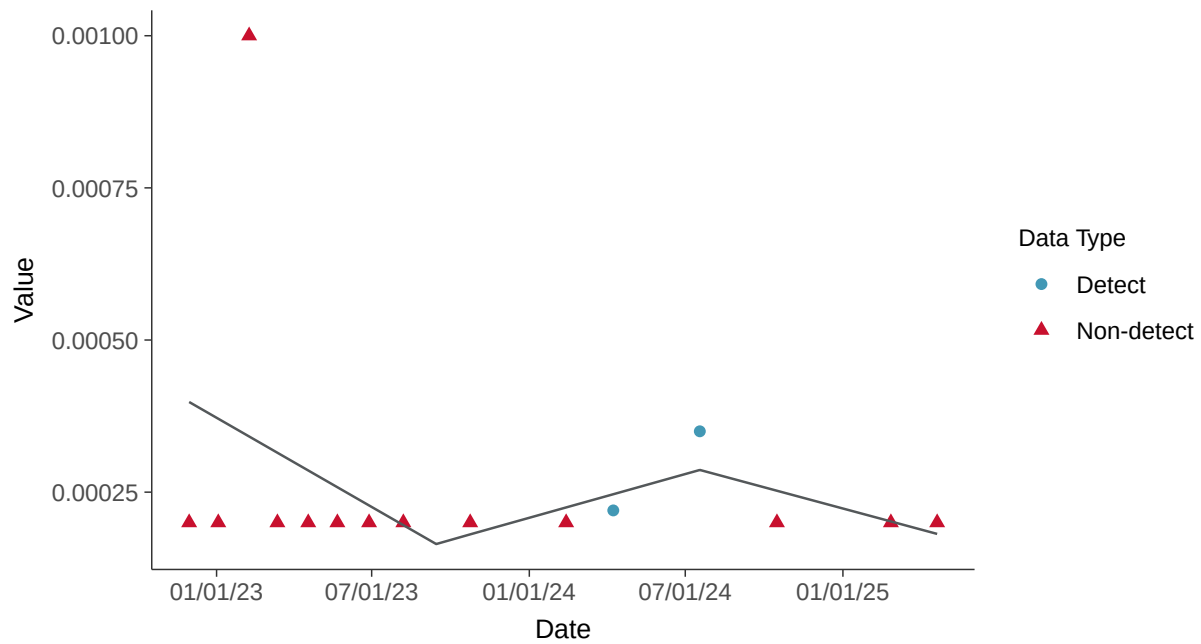


Trend Regression: Piecewise Linear-Linear

Copper, MW-19 (mg/L)

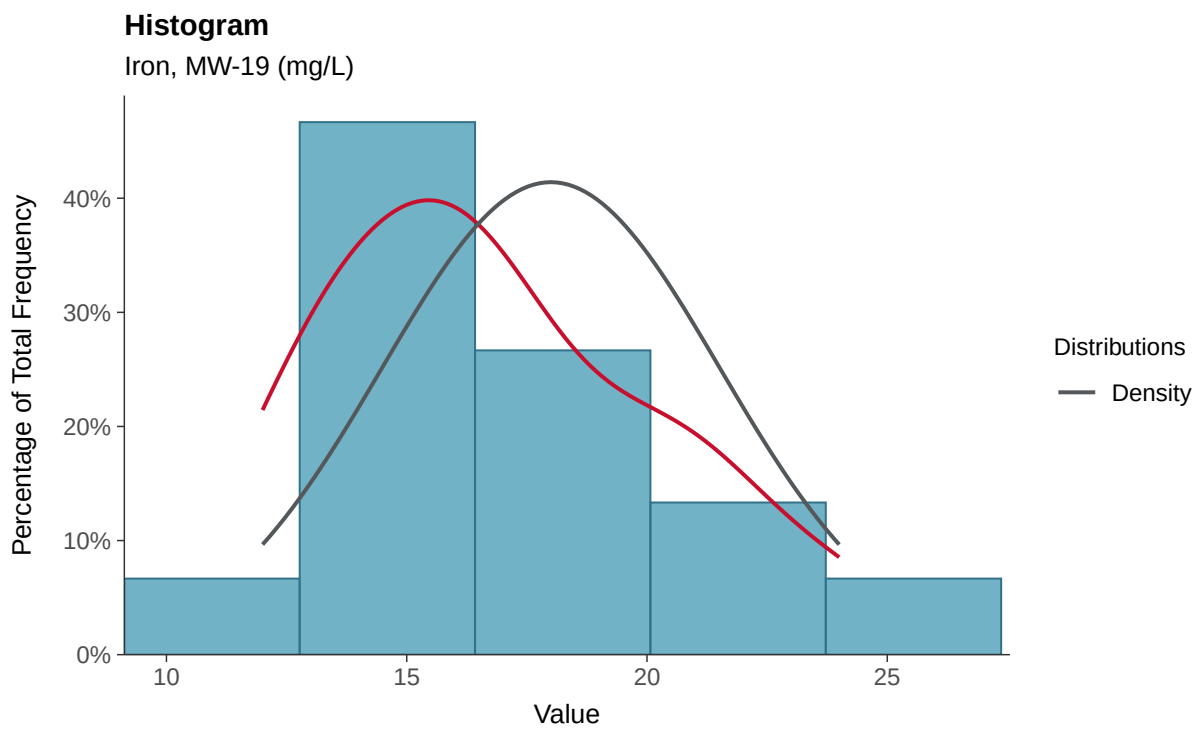
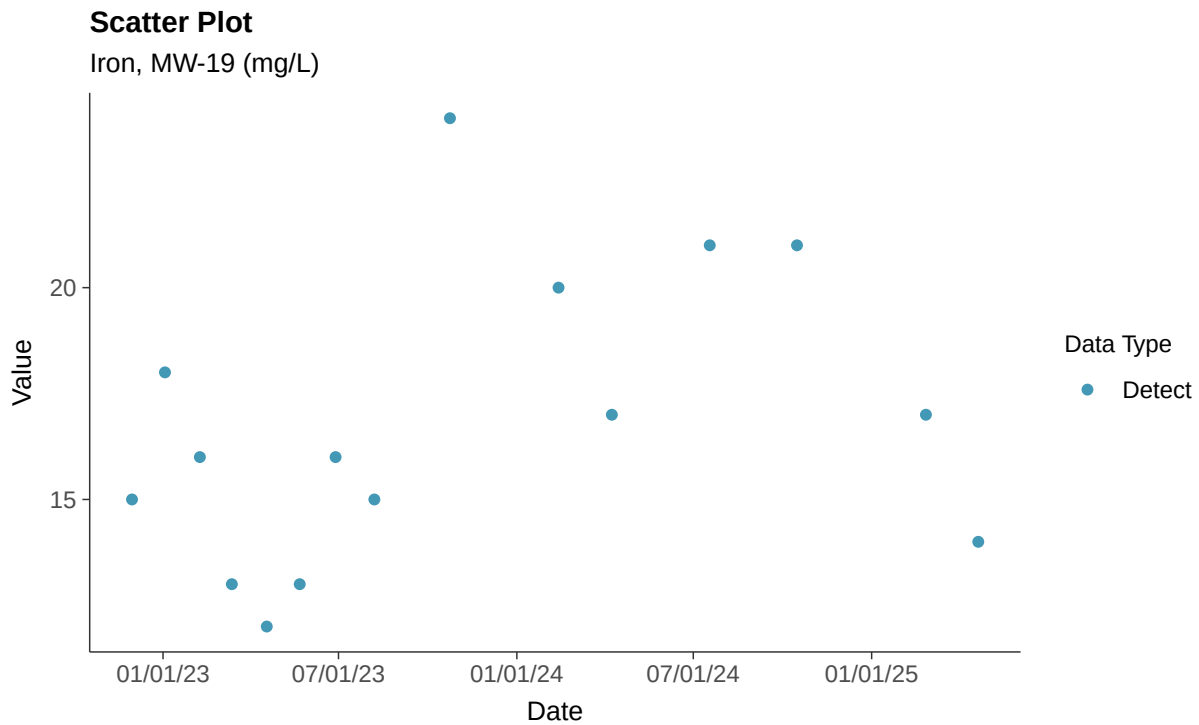


Copper, MW-19 (mg/L)



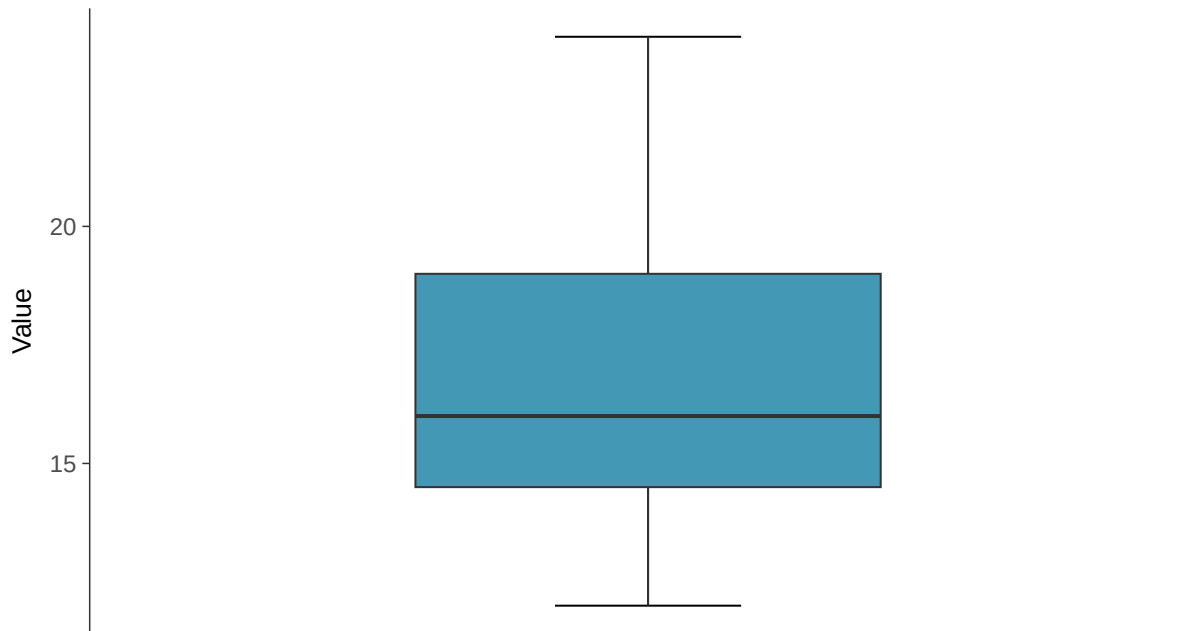
Part 115: Iron, MW-19

ID: 29_1_5_114



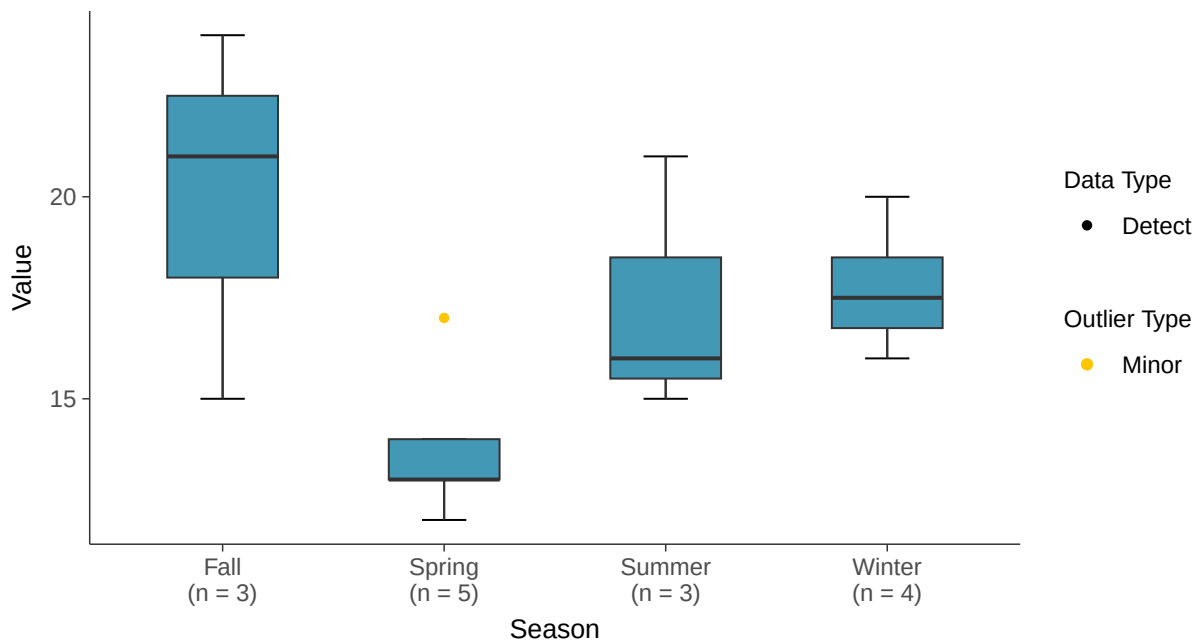
Boxplot

Iron, MW-19 (mg/L)



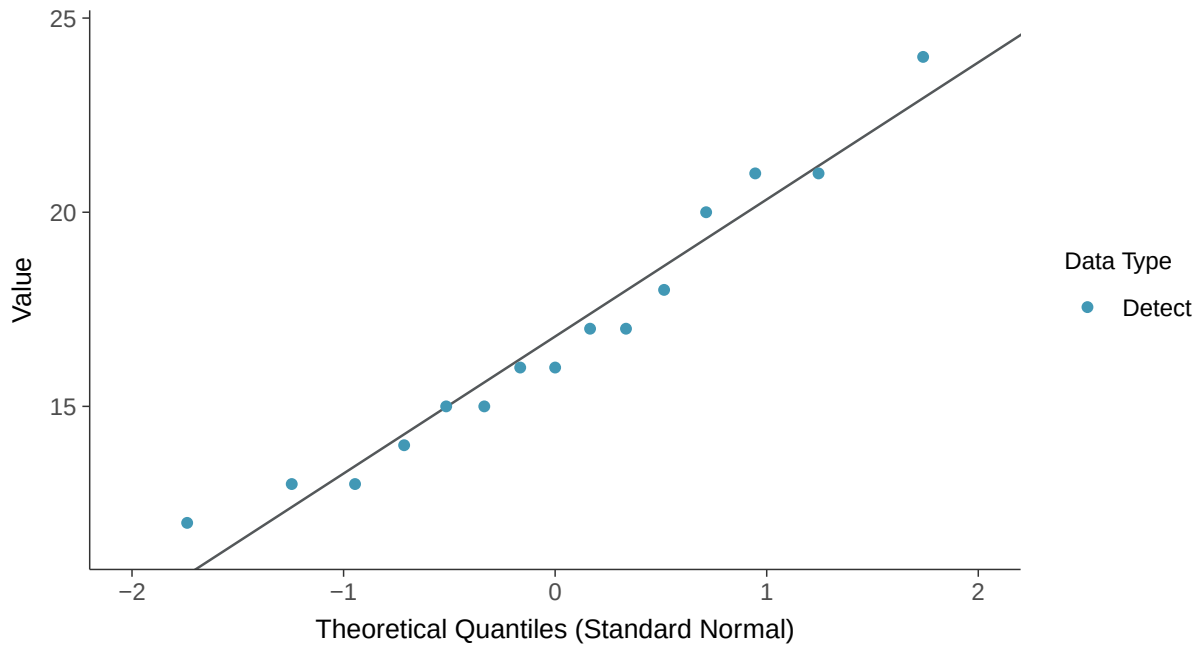
Boxplot by Season

Iron, MW-19 (mg/L)



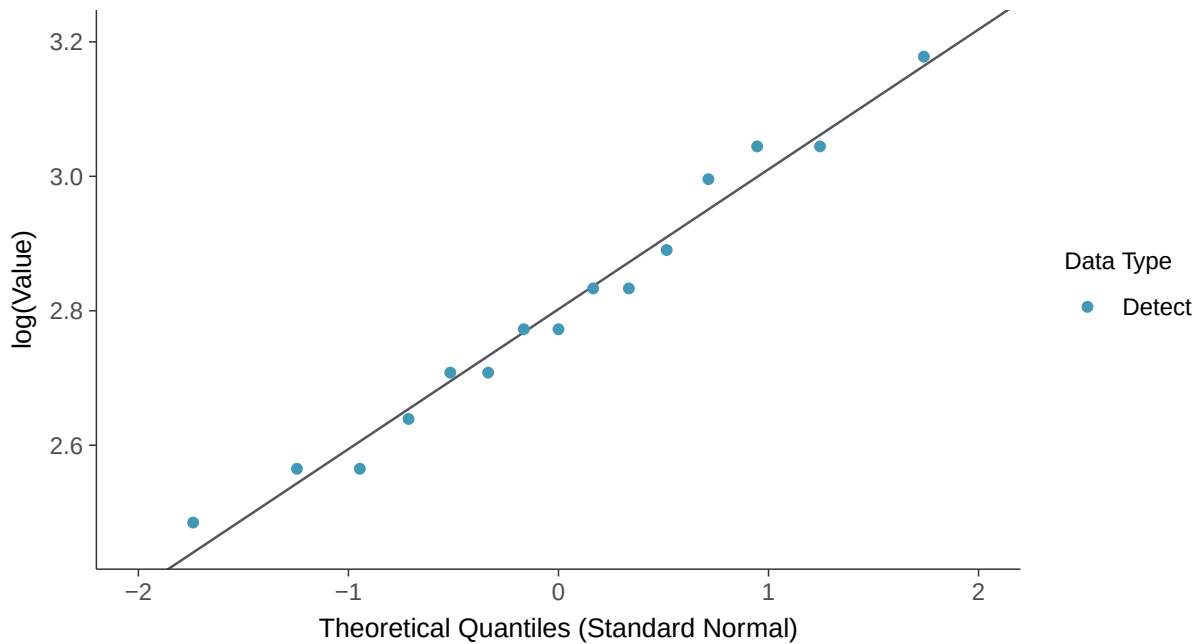
Normal Q-Q plot

Iron, MW-19 (mg/L)



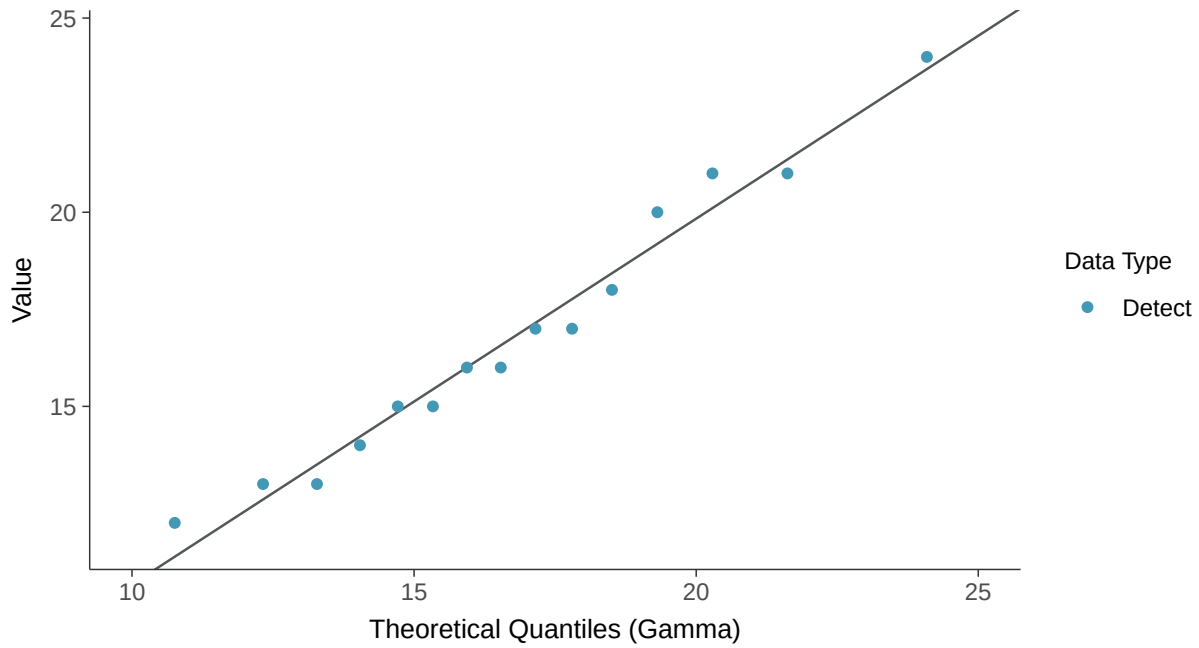
Lognormal Q-Q plot

Iron, MW-19 (mg/L)



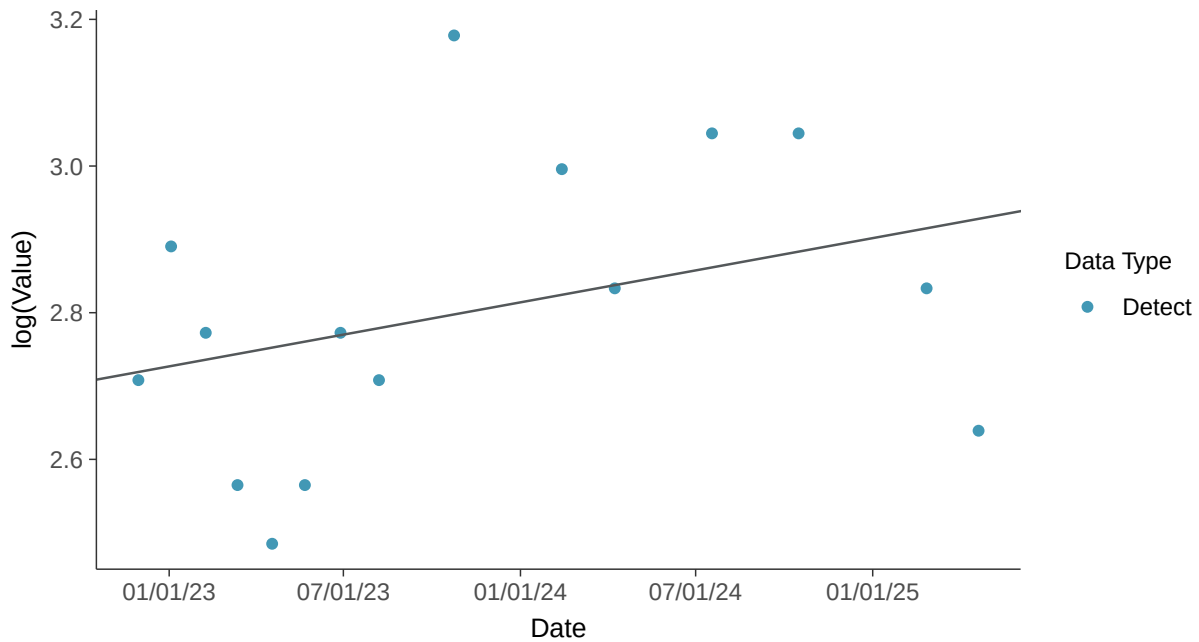
Gamma Q-Q plot

Iron, MW-19 (mg/L)



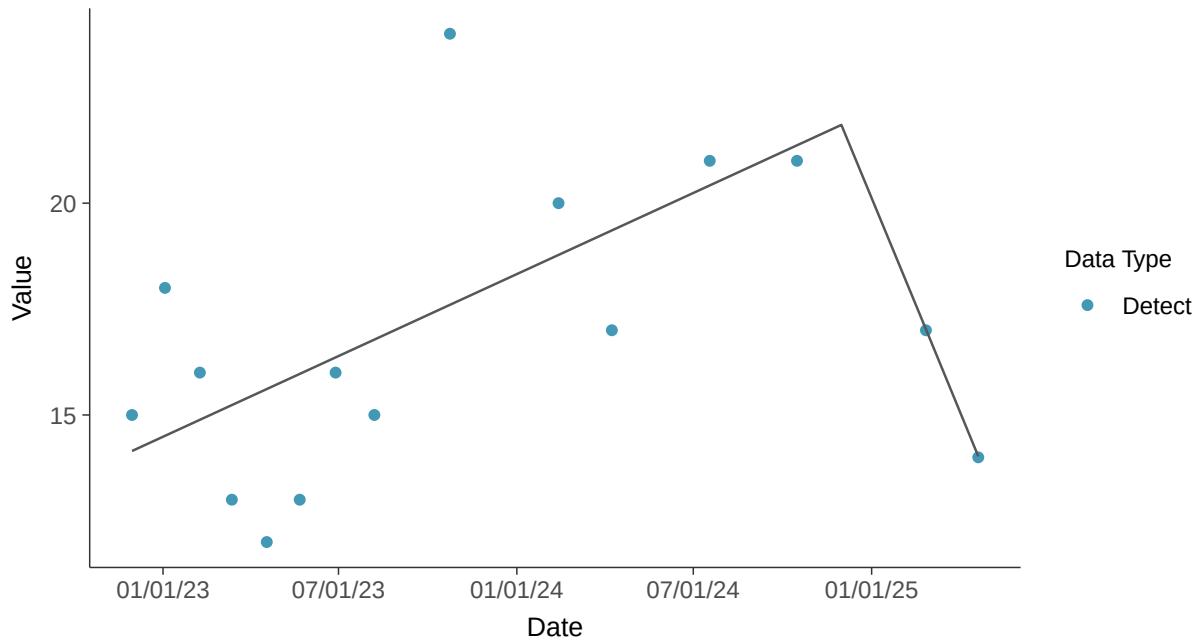
Trend Regression: Lognormal MLE

Iron, MW-19 (mg/L)



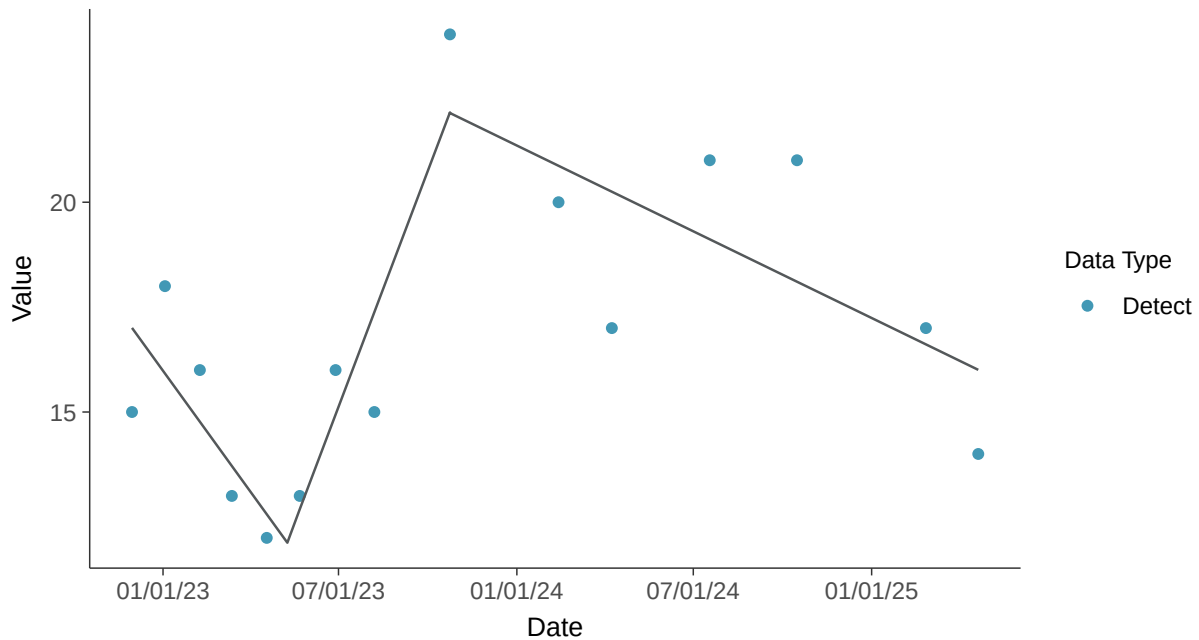
Trend Regression: Piecewise Linear-Linear

Iron, MW-19 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Iron, MW-19 (mg/L)

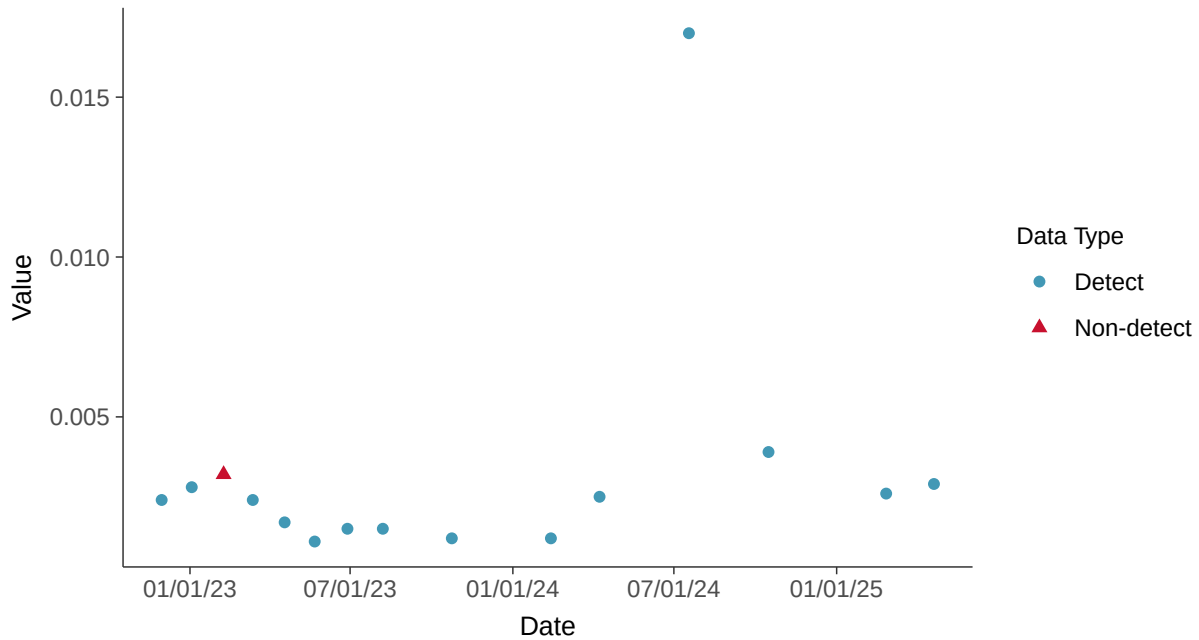


Part 115: Nickel, MW-19

ID: 29_1_5_119

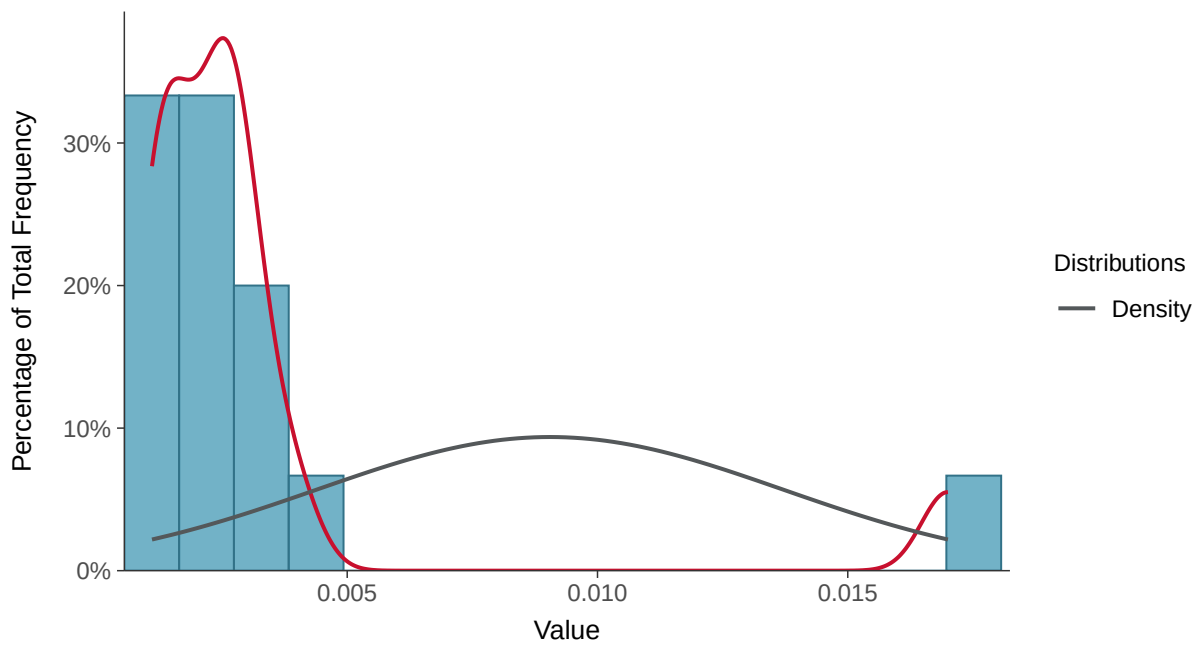
Scatter Plot

Nickel, MW-19 (mg/L)



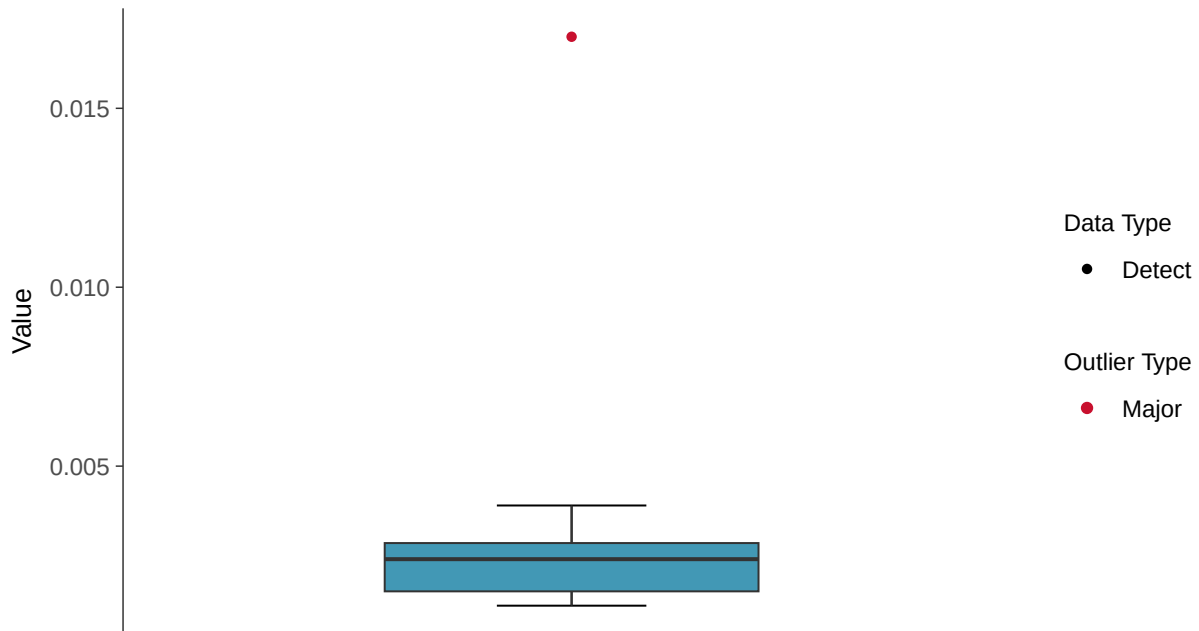
Histogram

Nickel, MW-19 (mg/L)



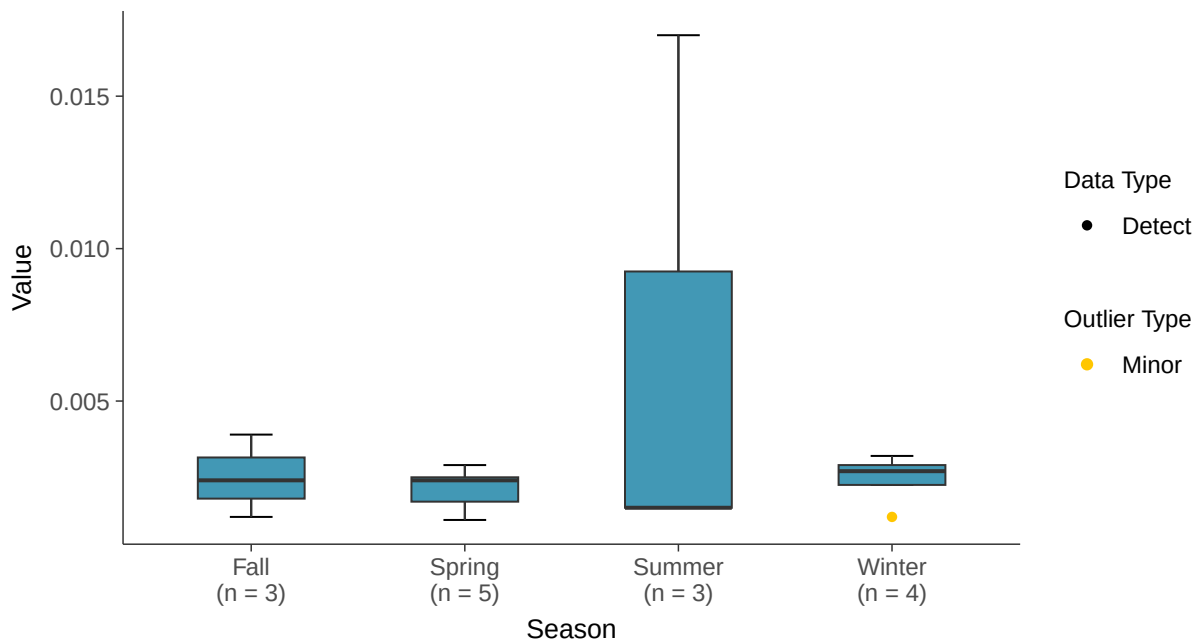
Boxplot

Nickel, MW-19 (mg/L)



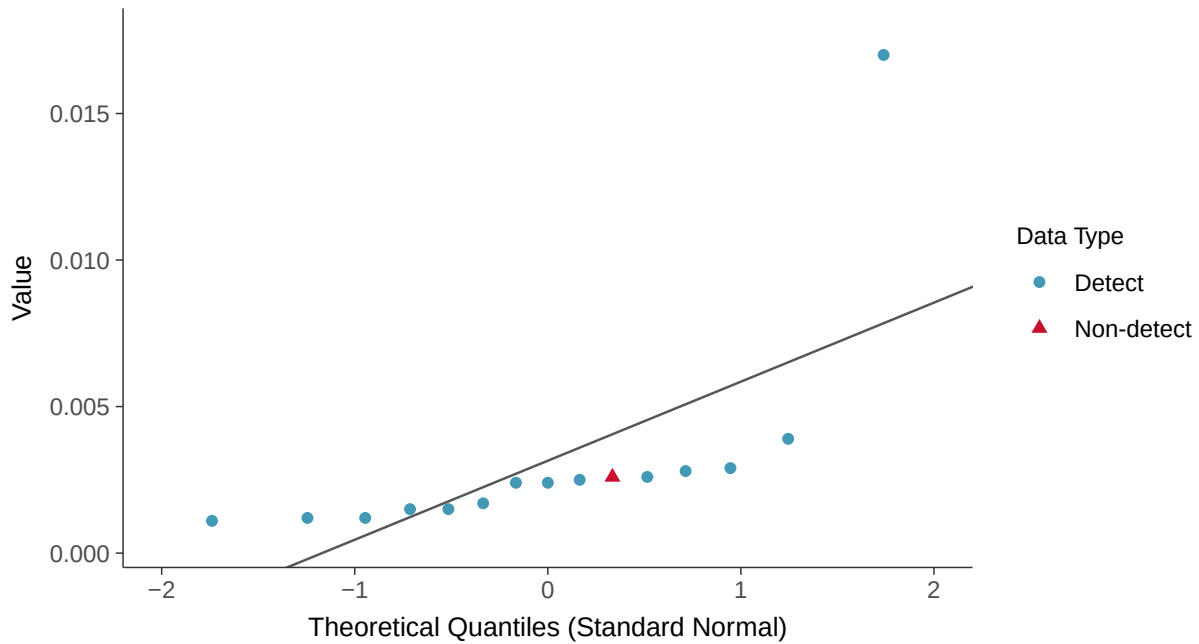
Boxplot by Season

Nickel, MW-19 (mg/L)



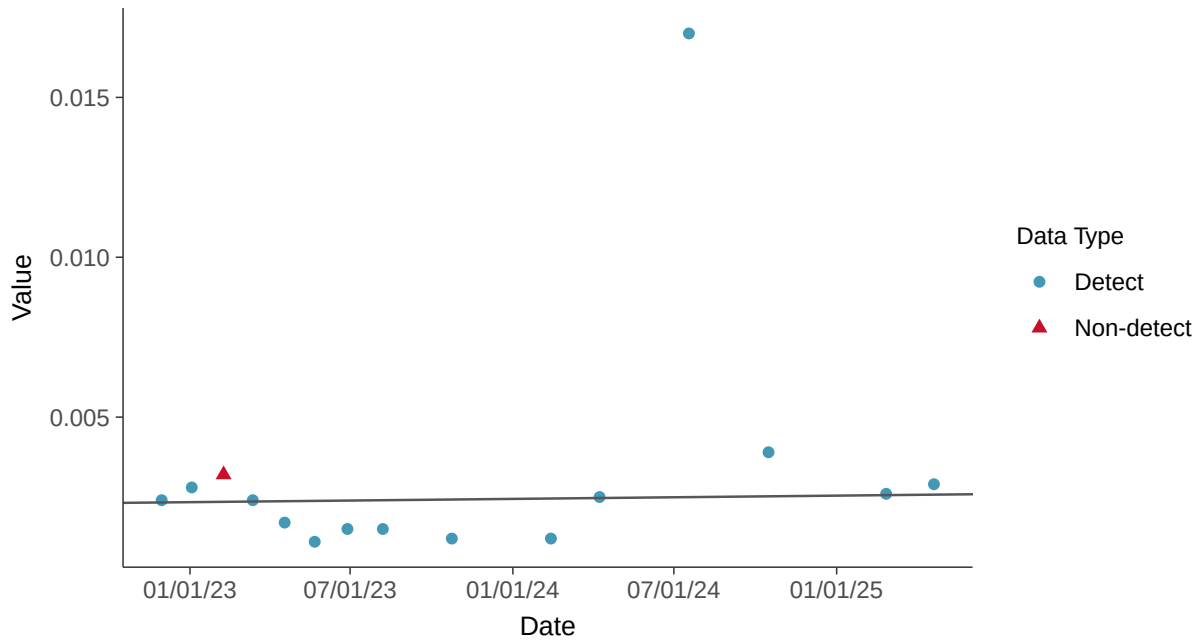
Normal Q-Q plot using ROS Imputed Estimates

Nickel, MW-19 (mg/L)



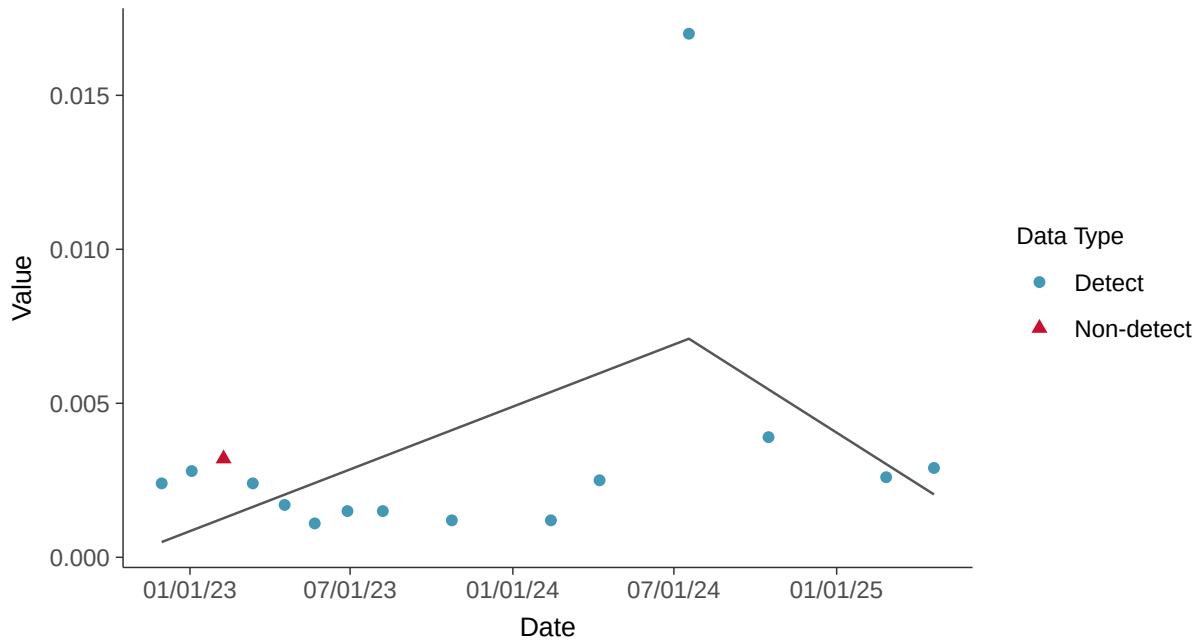
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Nickel, MW-19 (mg/L)



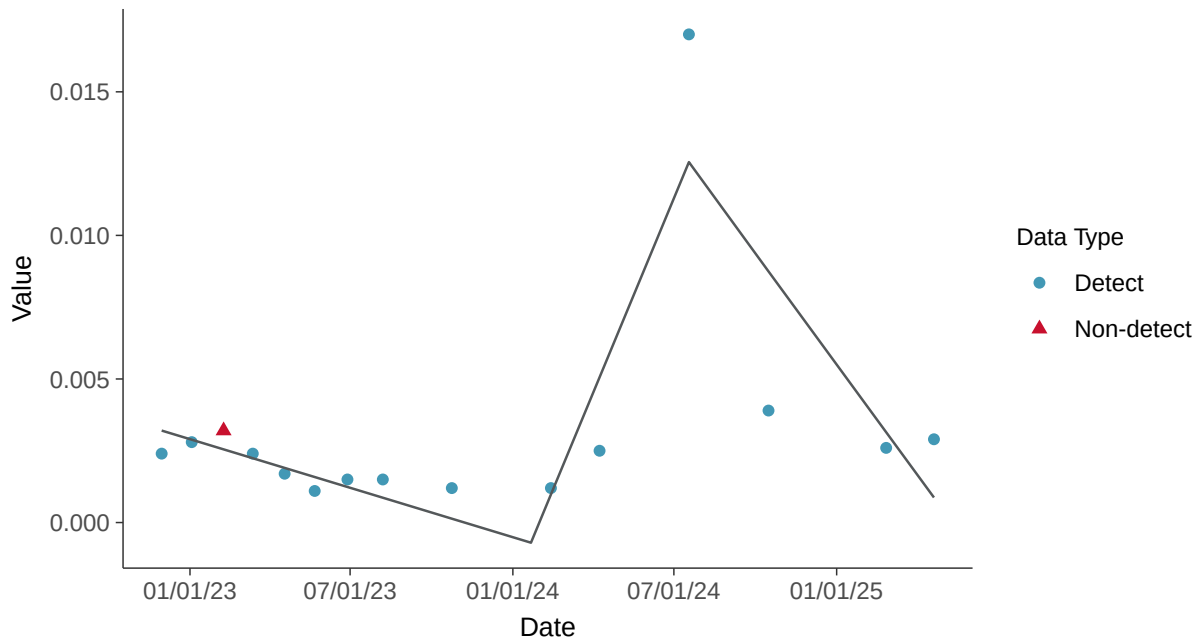
Trend Regression: Piecewise Linear-Linear

Nickel, MW-19 (mg/L)



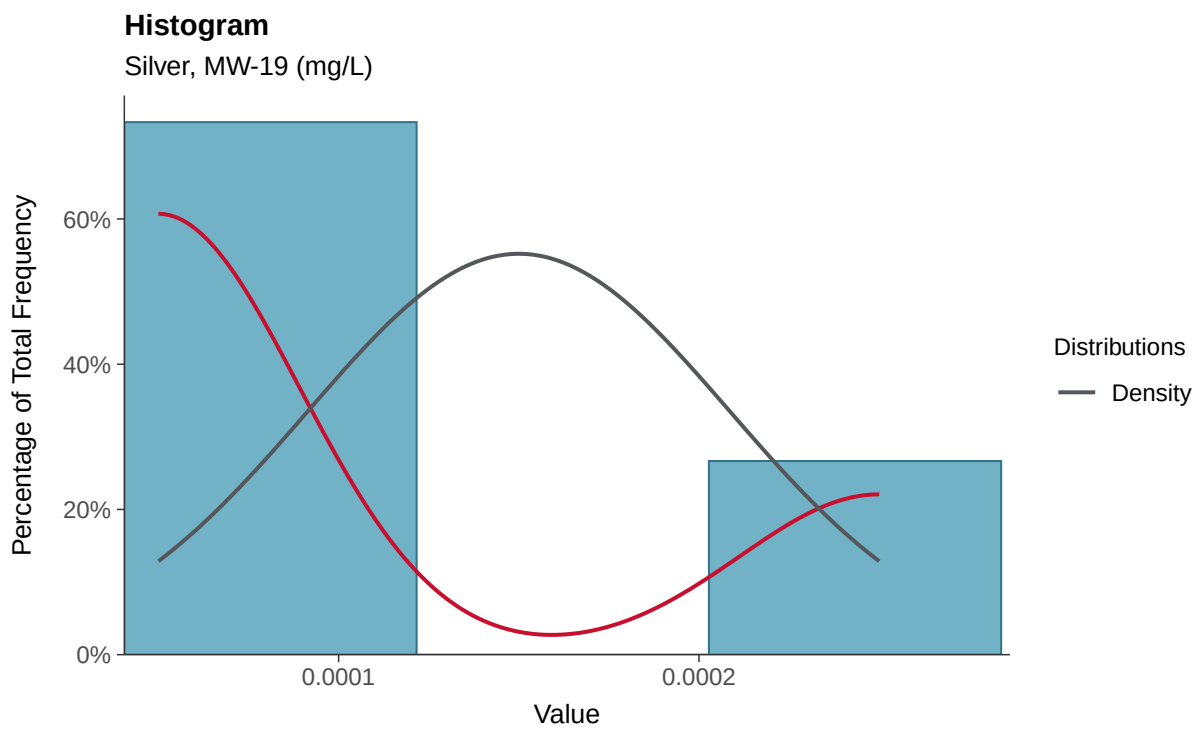
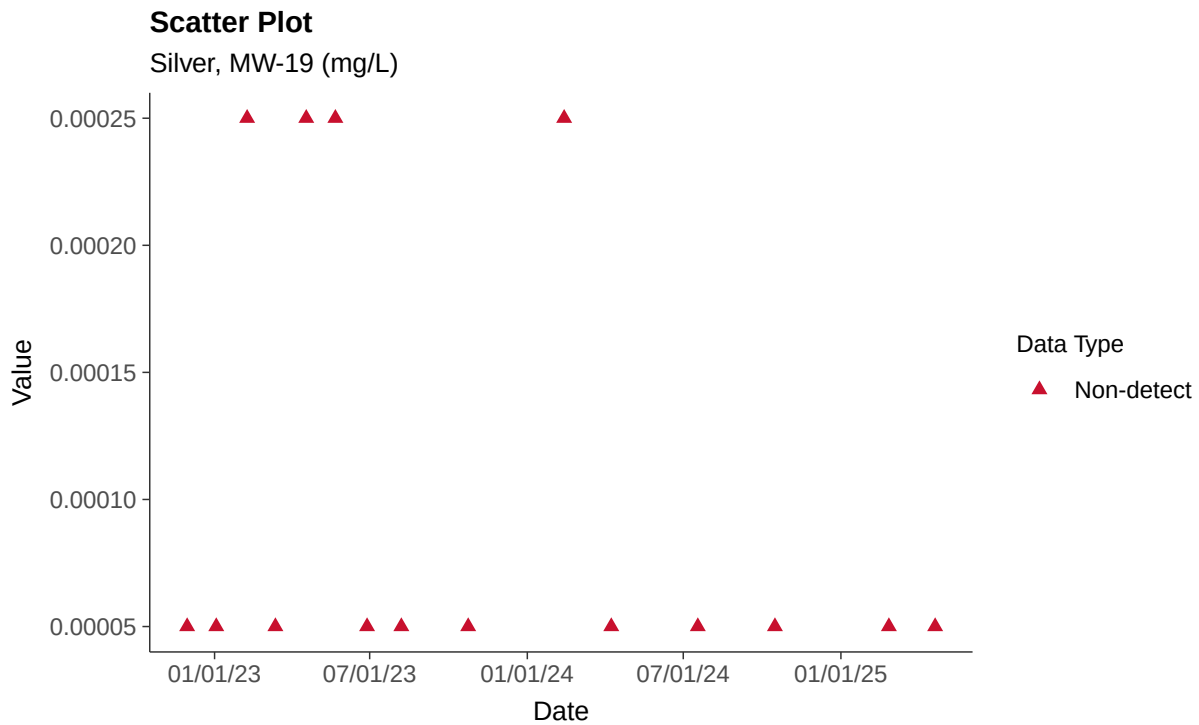
Trend Regression: Piecewise Linear-Linear-Linear

Nickel, MW-19 (mg/L)



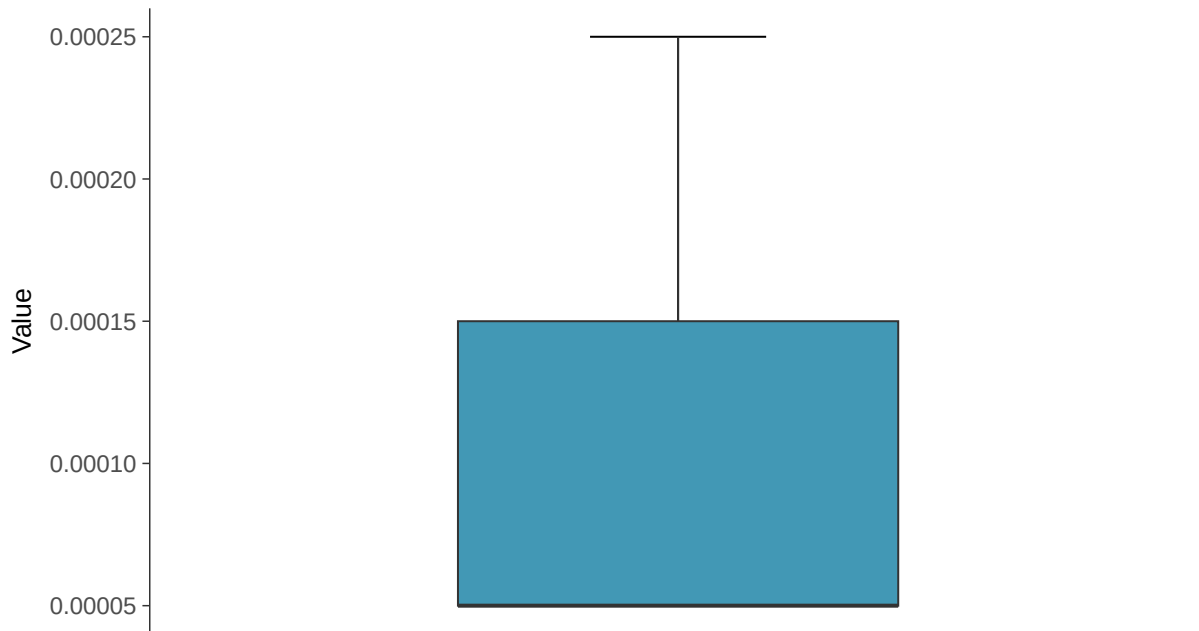
Part 115: Silver, MW-19

ID: 29_1_5_123



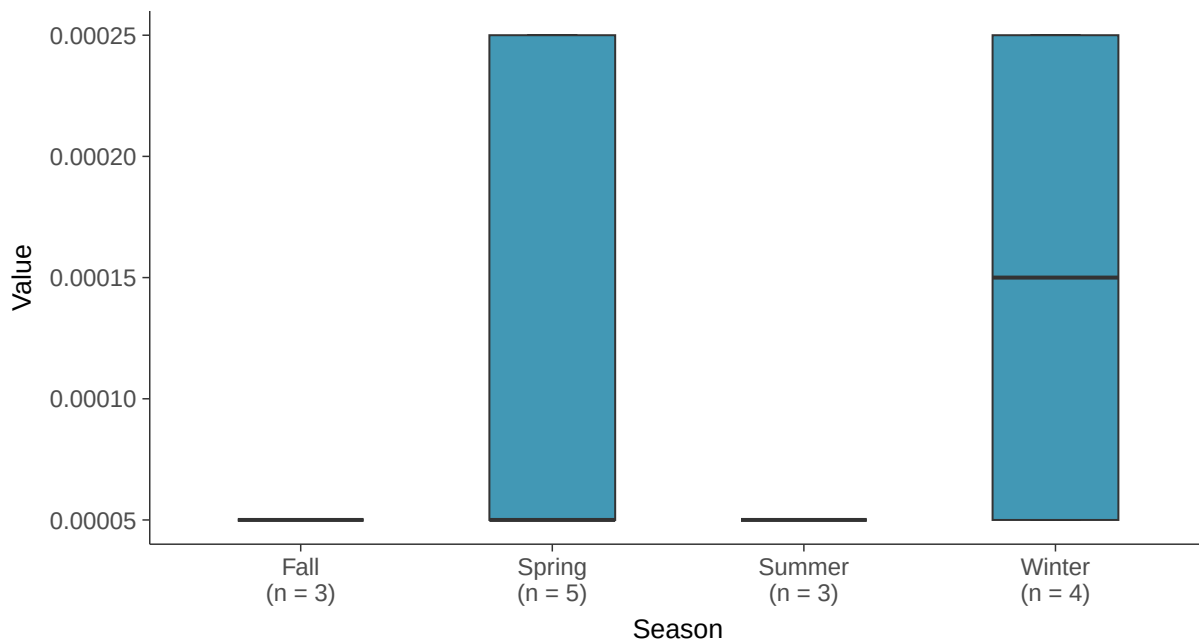
Boxplot

Silver, MW-19 (mg/L)



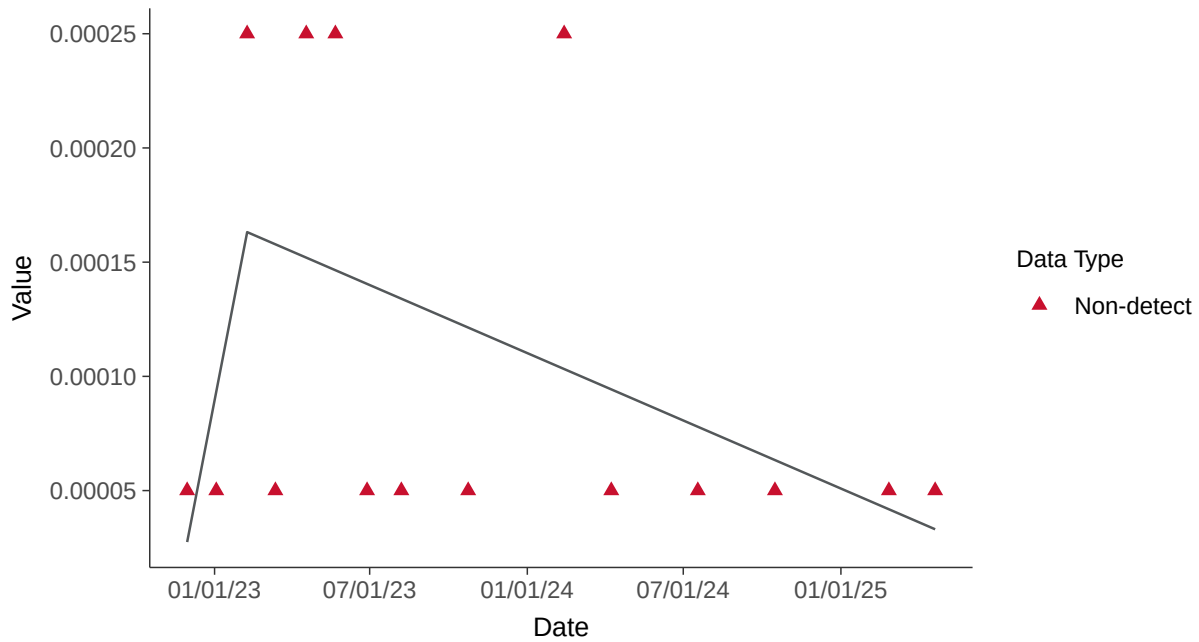
Boxplot by Season

Silver, MW-19 (mg/L)



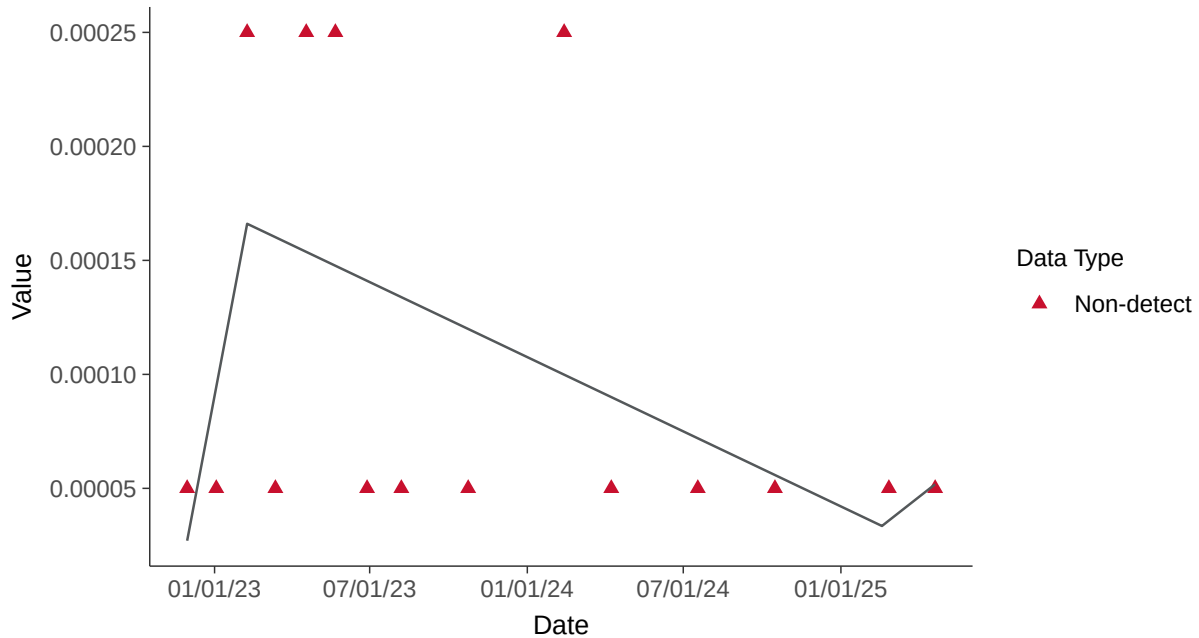
Trend Regression: Piecewise Linear-Linear

Silver, MW-19 (mg/L)



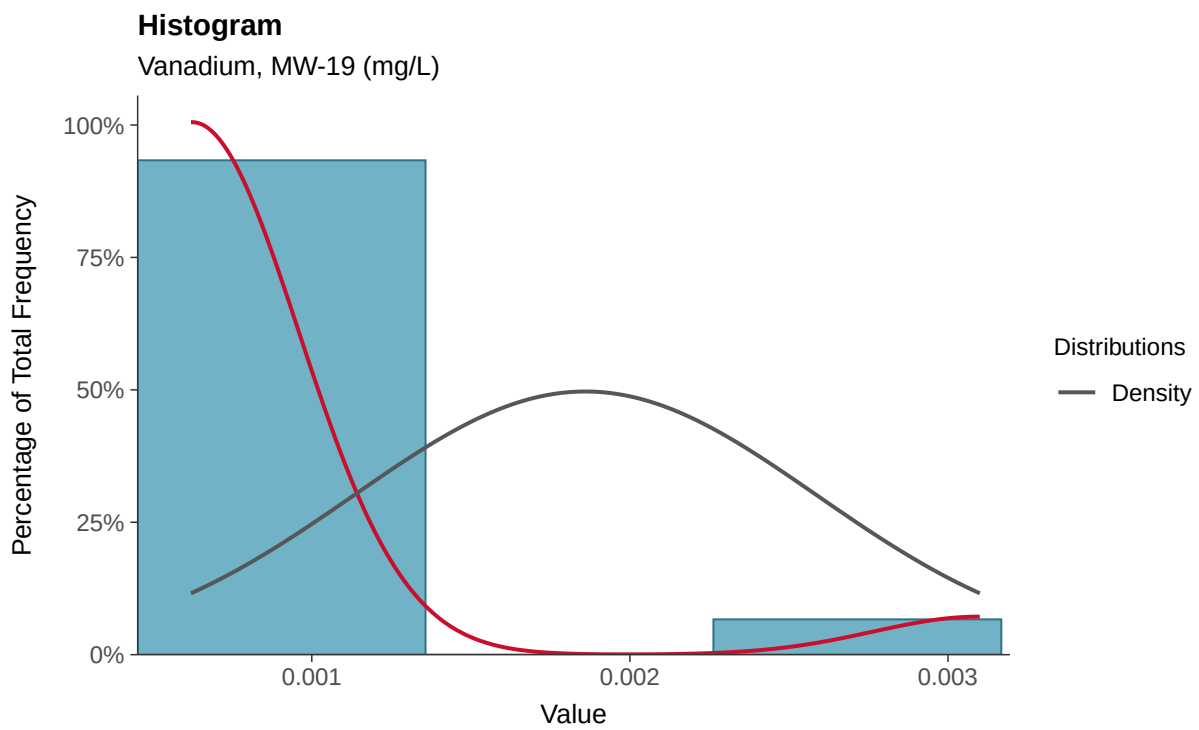
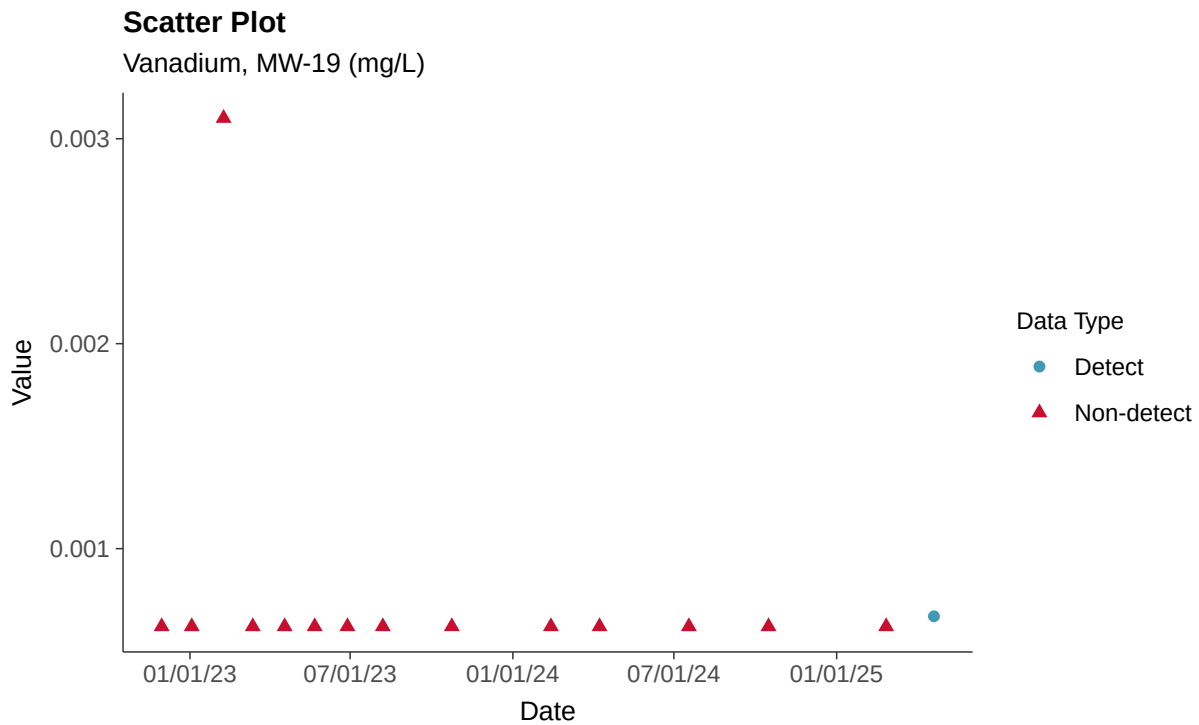
Trend Regression: Piecewise Linear-Linear-Linear

Silver, MW-19 (mg/L)



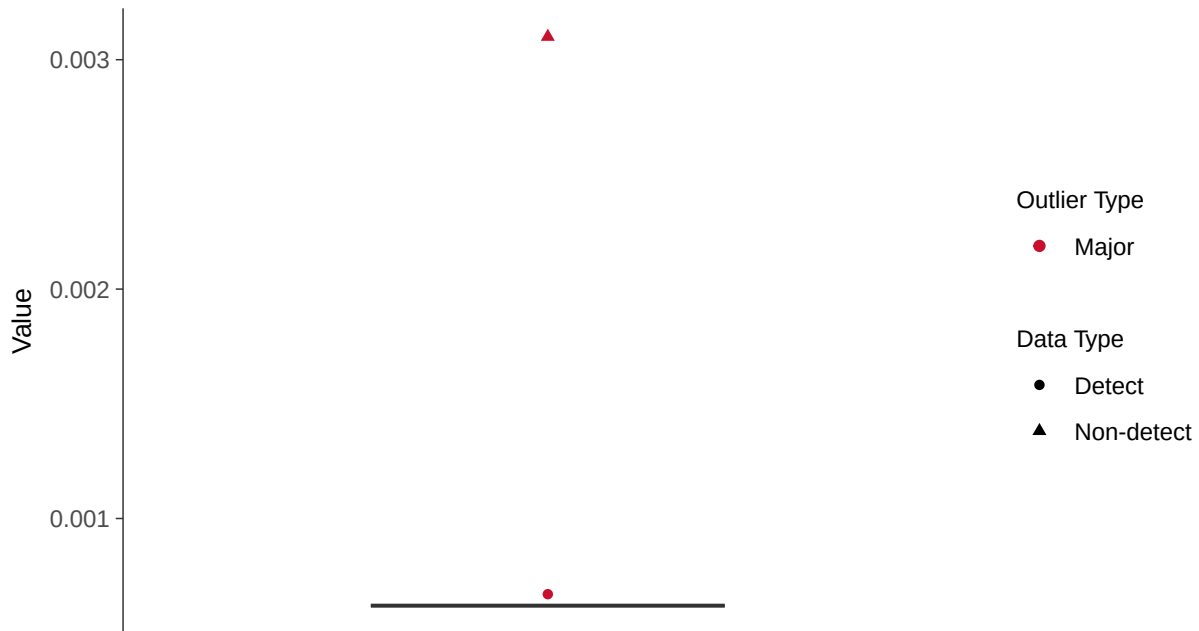
Part 115: Vanadium, MW-19

ID: 29_1_5_128



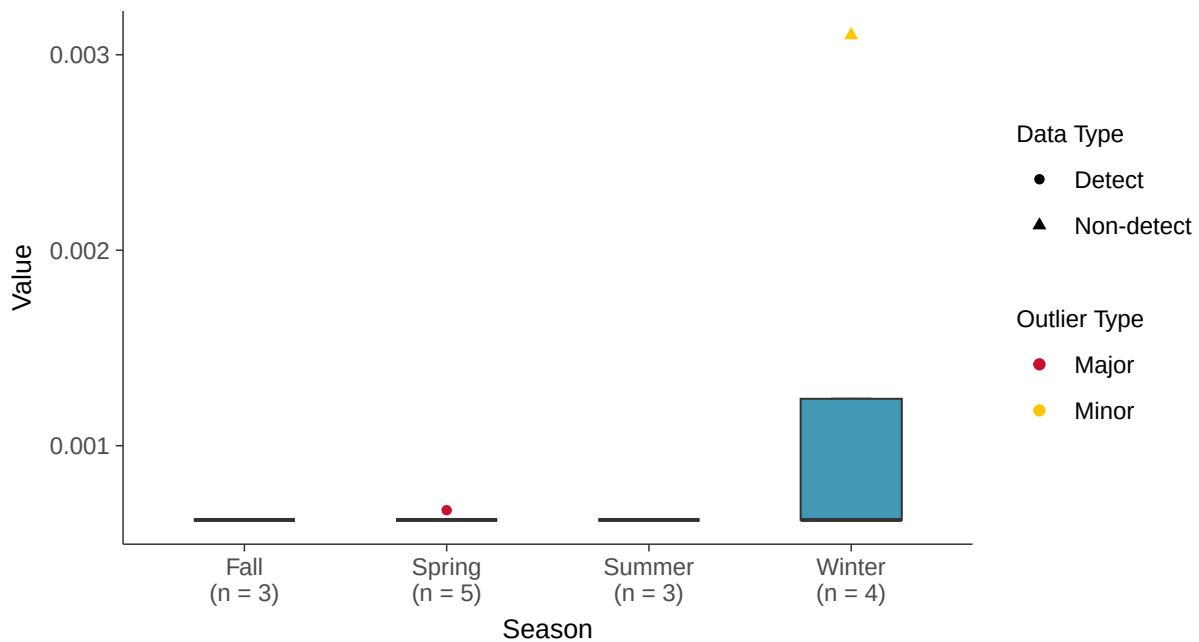
Boxplot

Vanadium, MW-19 (mg/L)



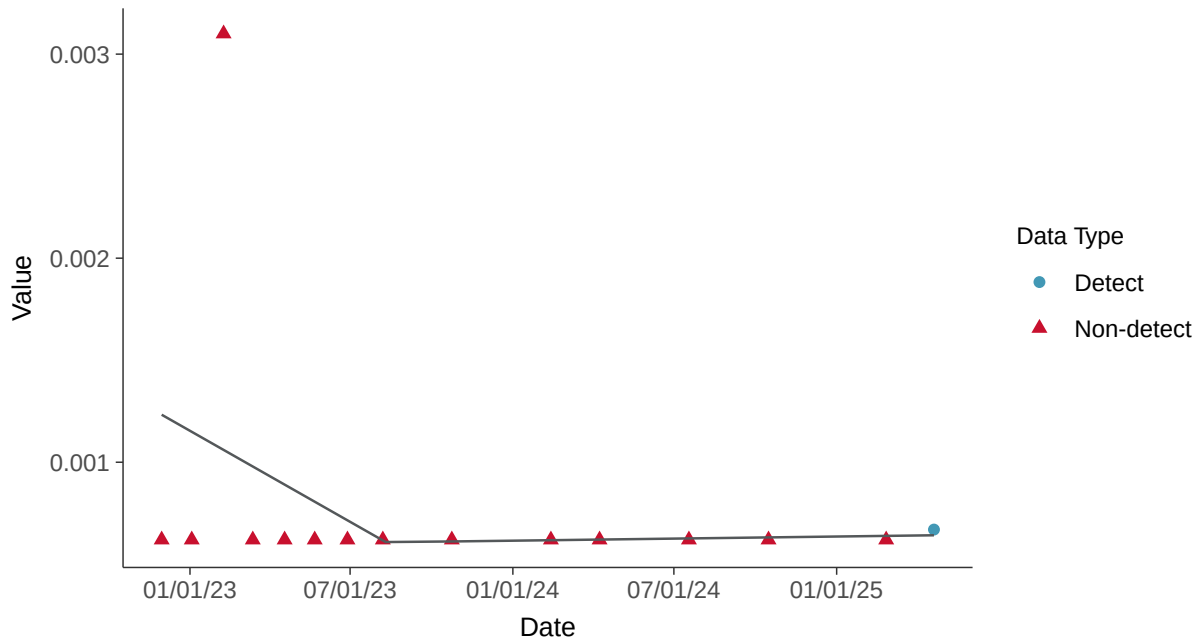
Boxplot by Season

Vanadium, MW-19 (mg/L)



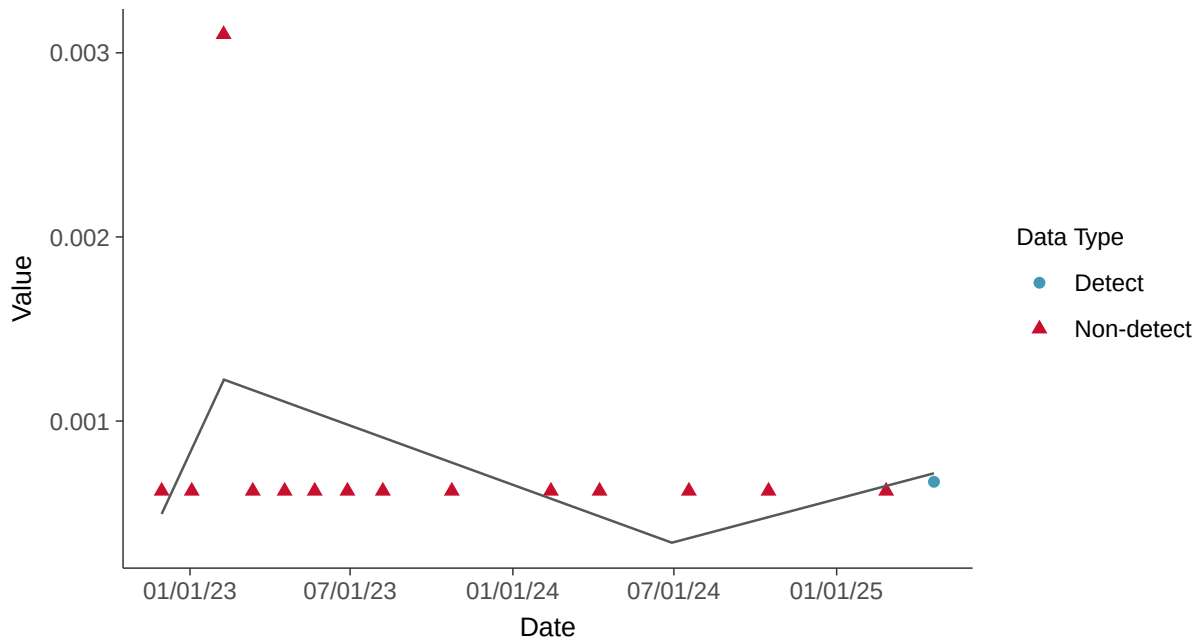
Trend Regression: Piecewise Linear-Linear

Vanadium, MW-19 (mg/L)



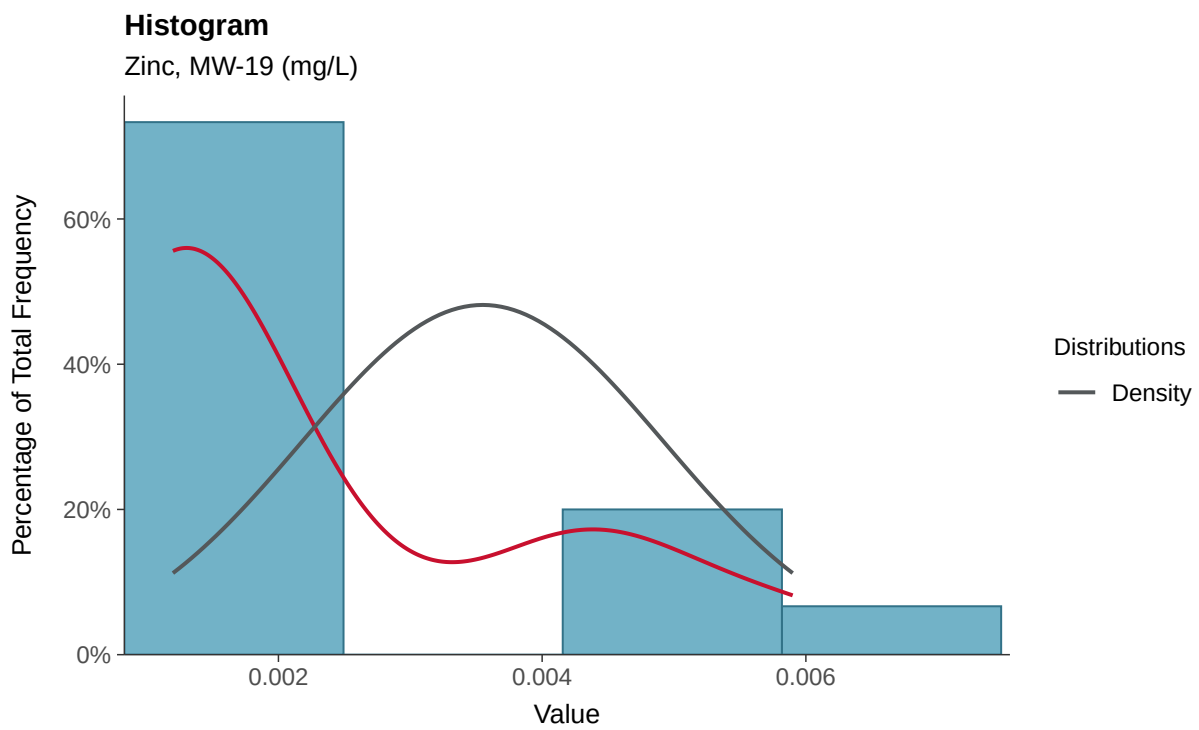
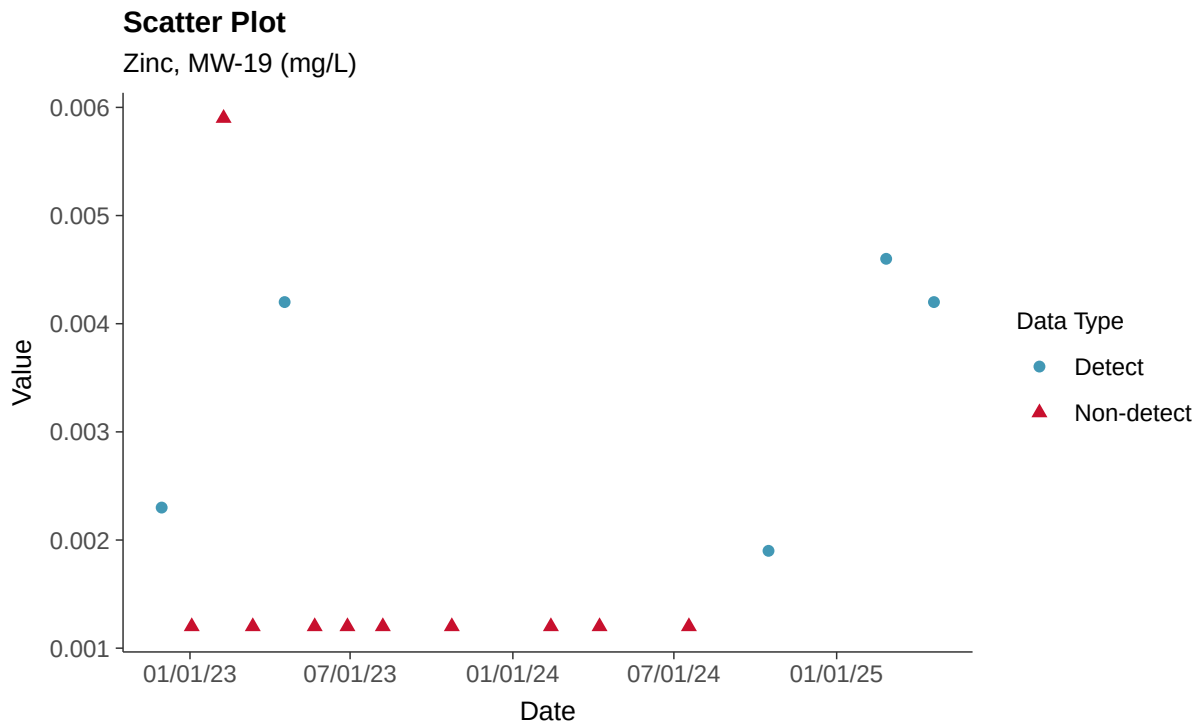
Trend Regression: Piecewise Linear-Linear-Linear

Vanadium, MW-19 (mg/L)



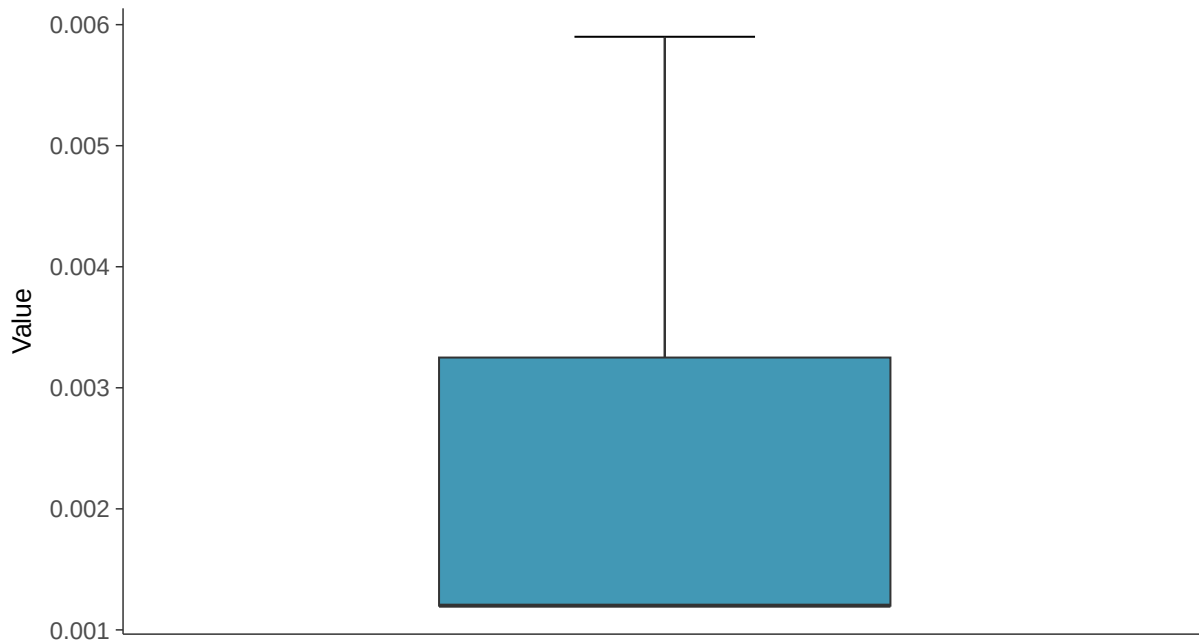
Part 115: Zinc, MW-19

ID: 29_1_5_129



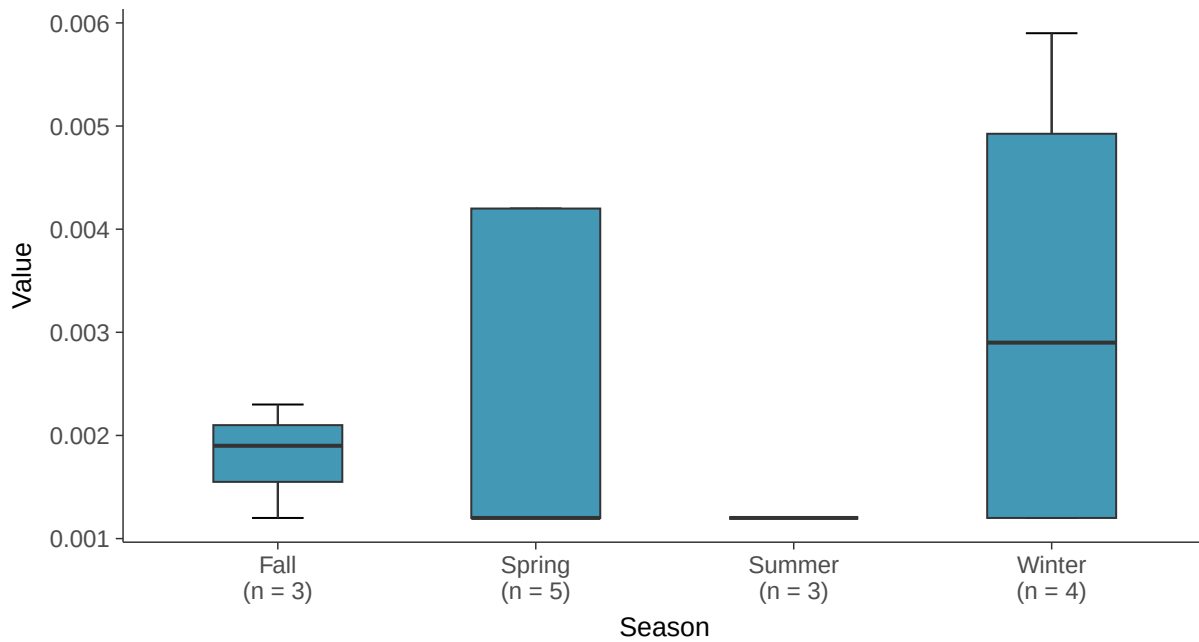
Boxplot

Zinc, MW-19 (mg/L)



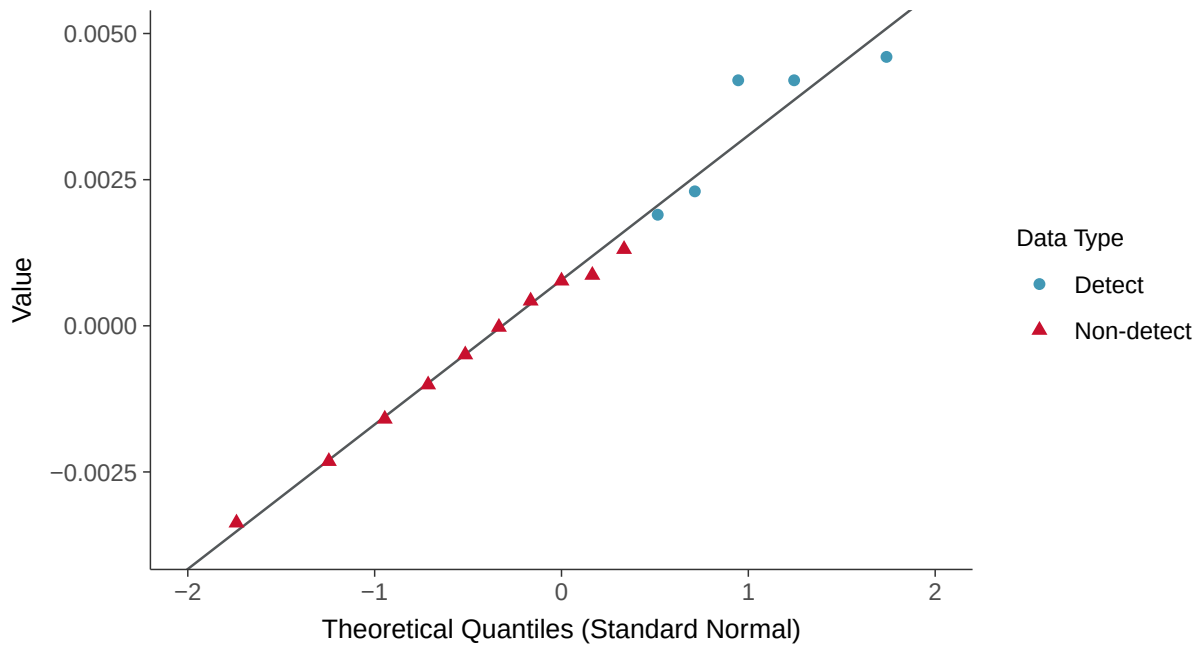
Boxplot by Season

Zinc, MW-19 (mg/L)



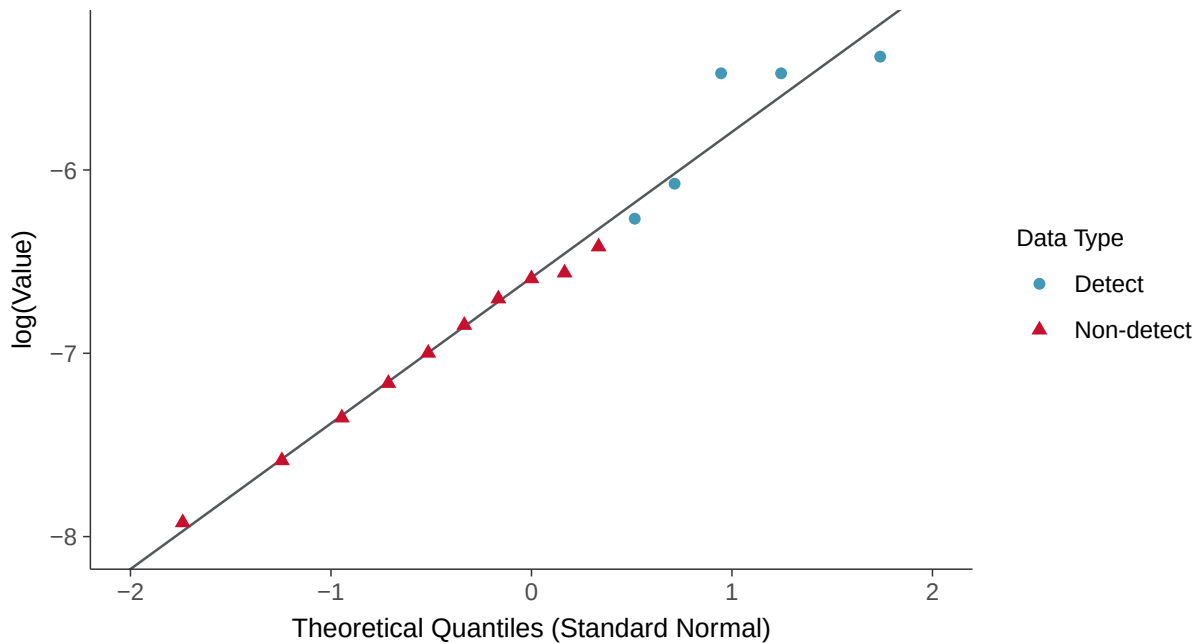
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-19 (mg/L)



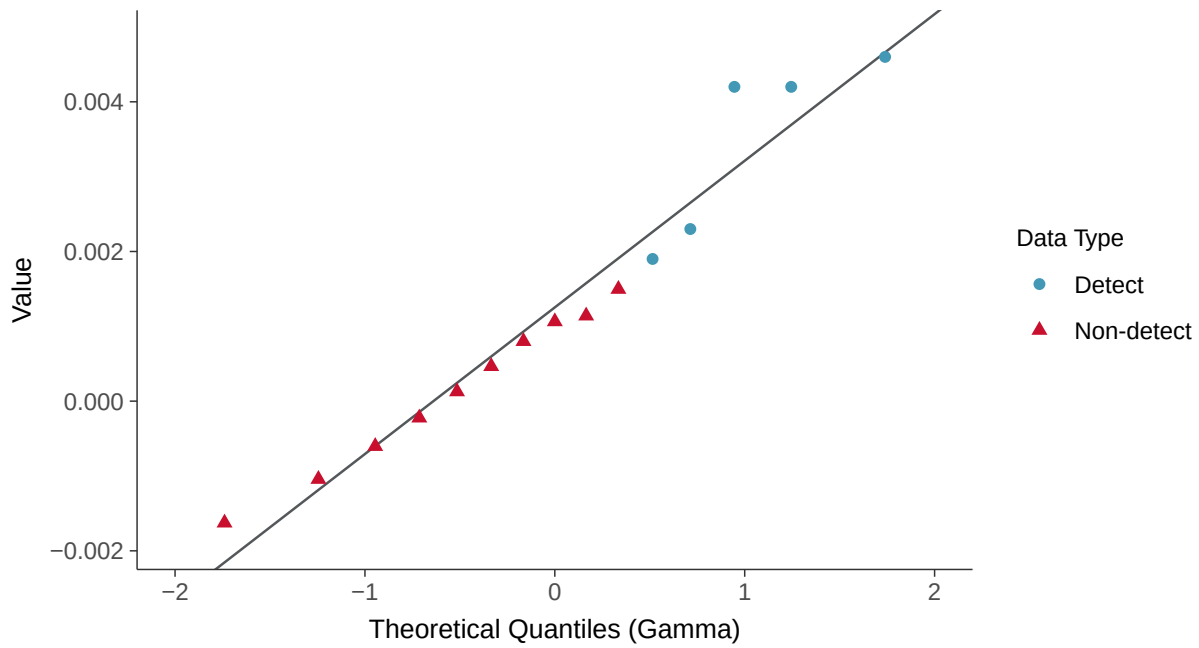
Lognormal Q-Q plot using ROS Imputed Estimates

Zinc, MW-19 (mg/L)



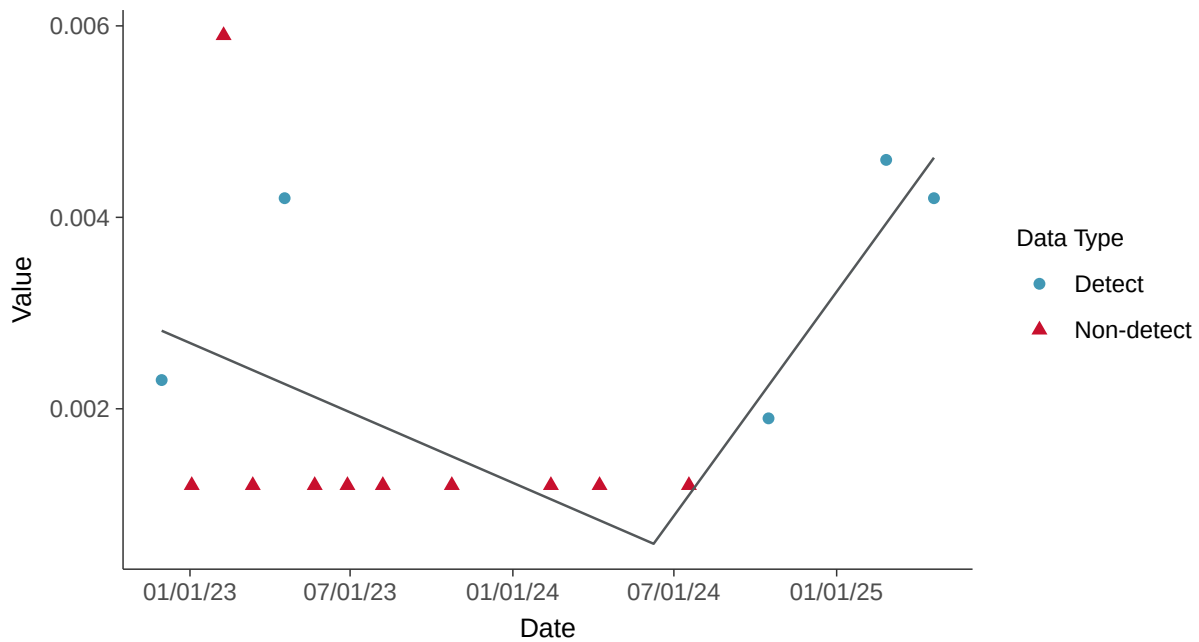
Gamma Q-Q plot using ROS Imputed Estimates

Zinc, MW-19 (mg/L)



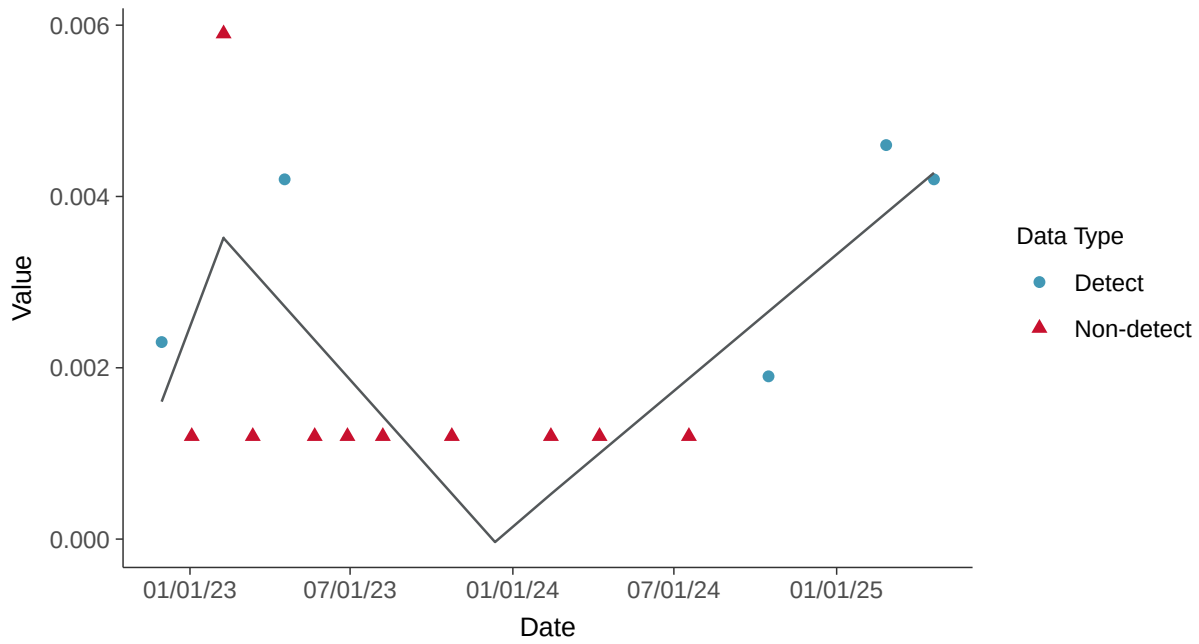
Trend Regression: Piecewise Linear-Linear

Zinc, MW-19 (mg/L)



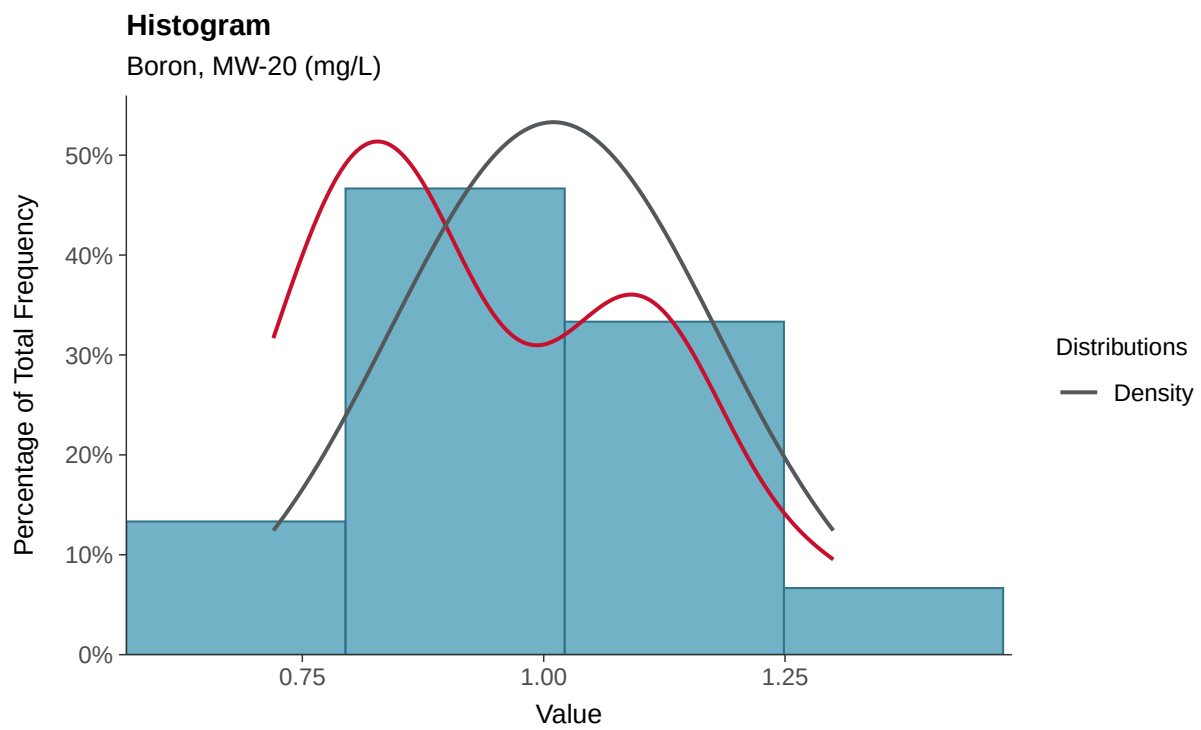
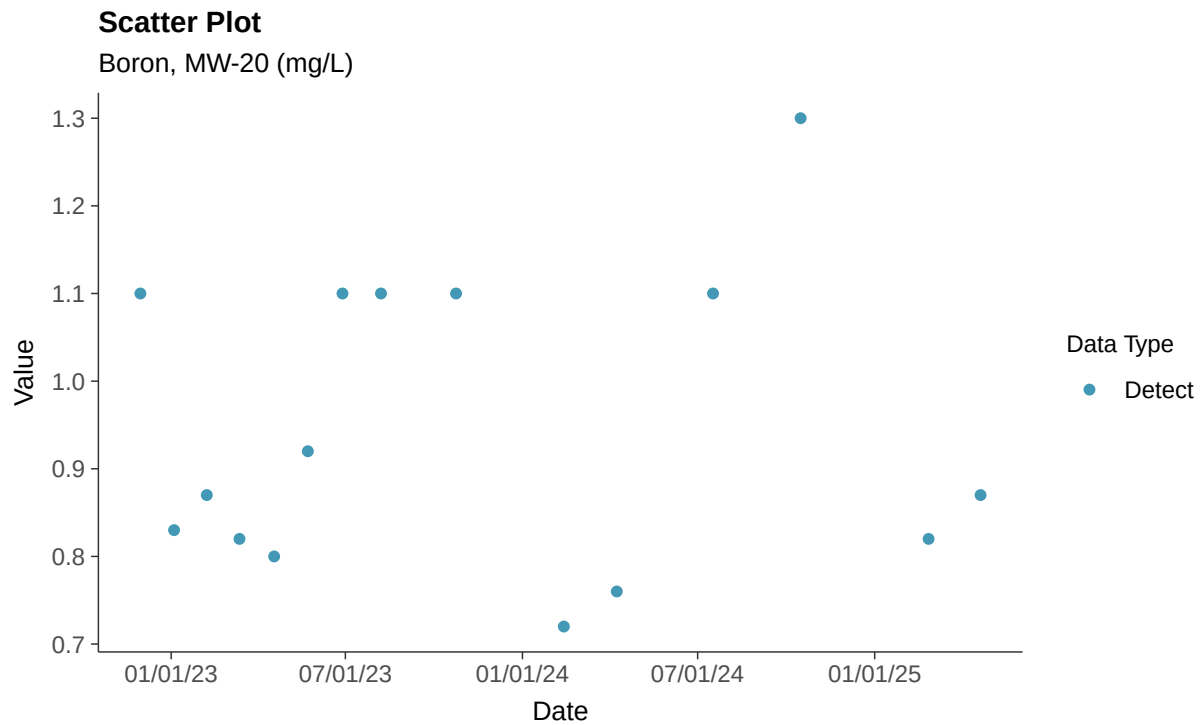


Trend Regression: Piecewise Linear-Linear-Linear
Zinc, MW-19 (mg/L)



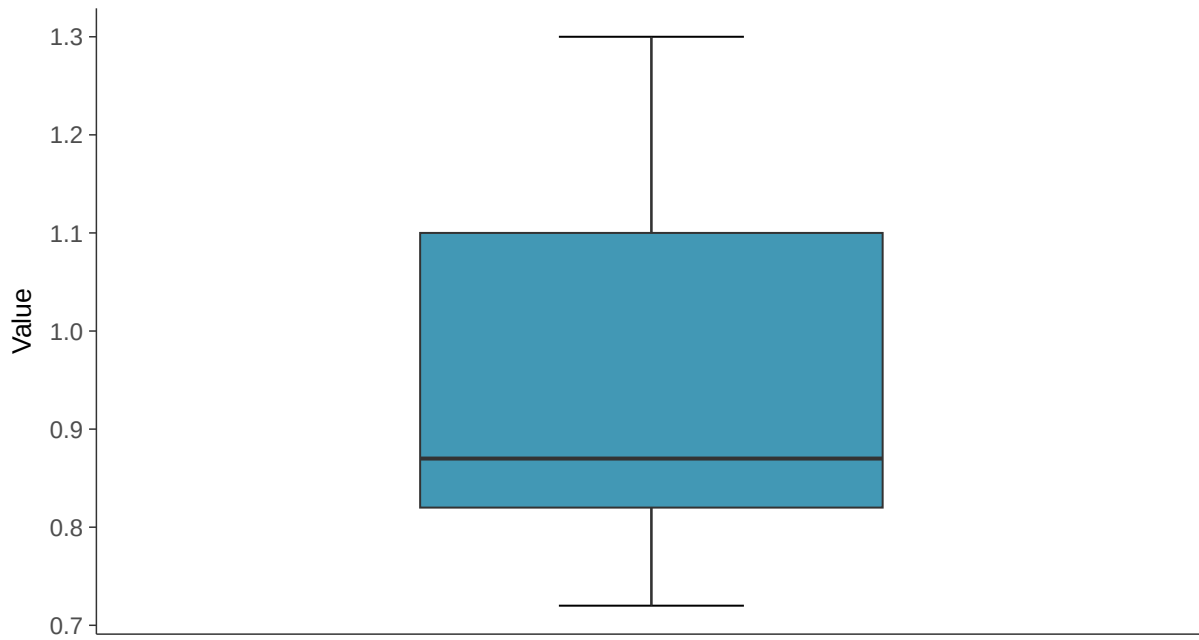
Appendix III: Boron, MW-20

ID: 30_1_3_105



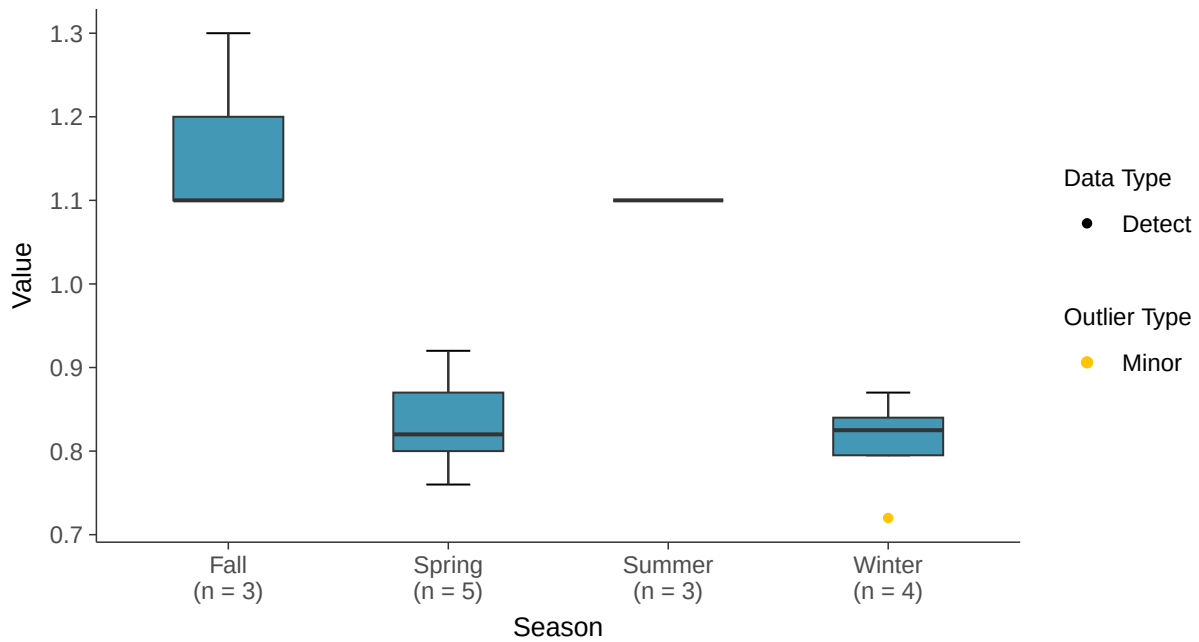
Boxplot

Boron, MW-20 (mg/L)

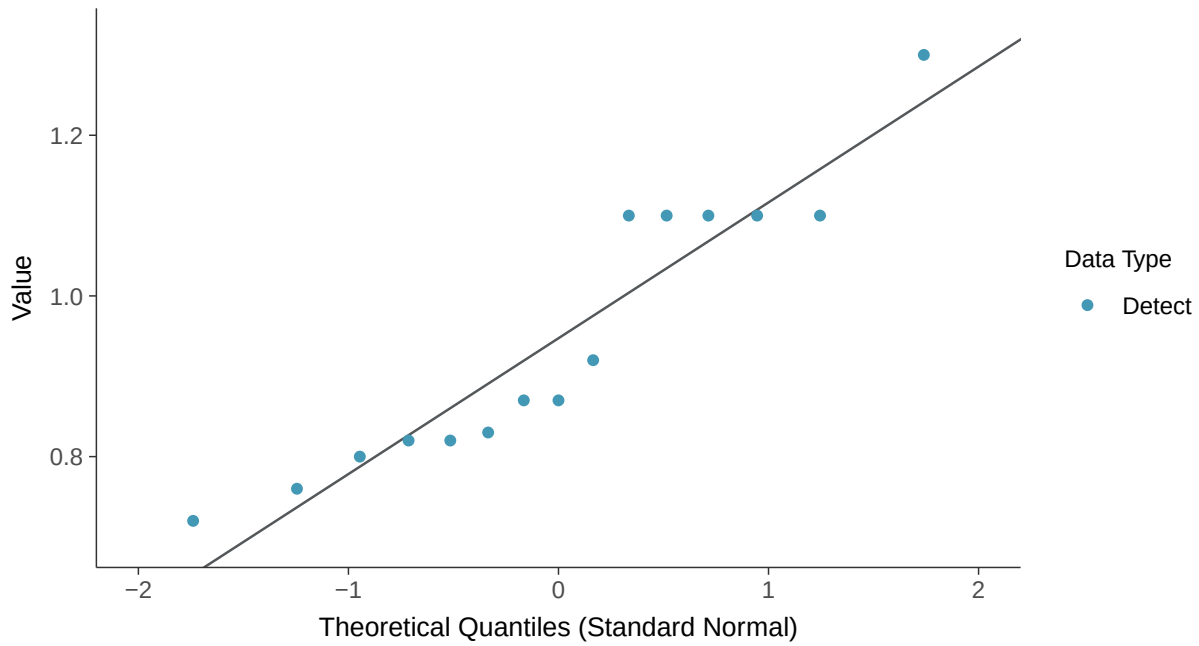


Boxplot by Season

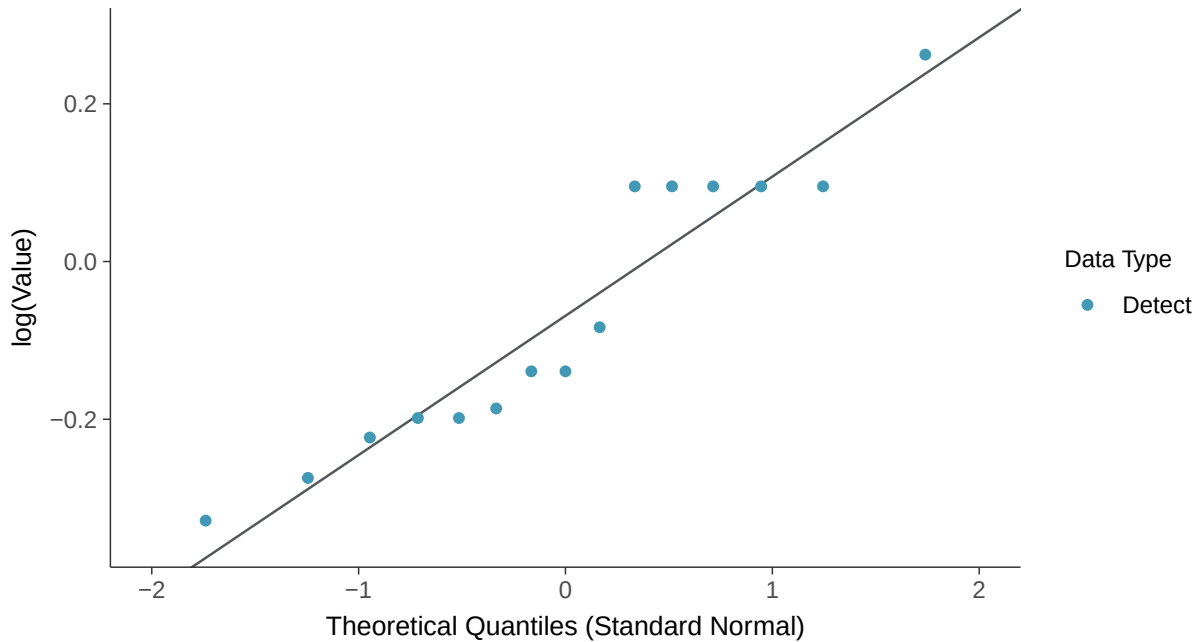
Boron, MW-20 (mg/L)



Normal Q-Q plot
Boron, MW-20 (mg/L)

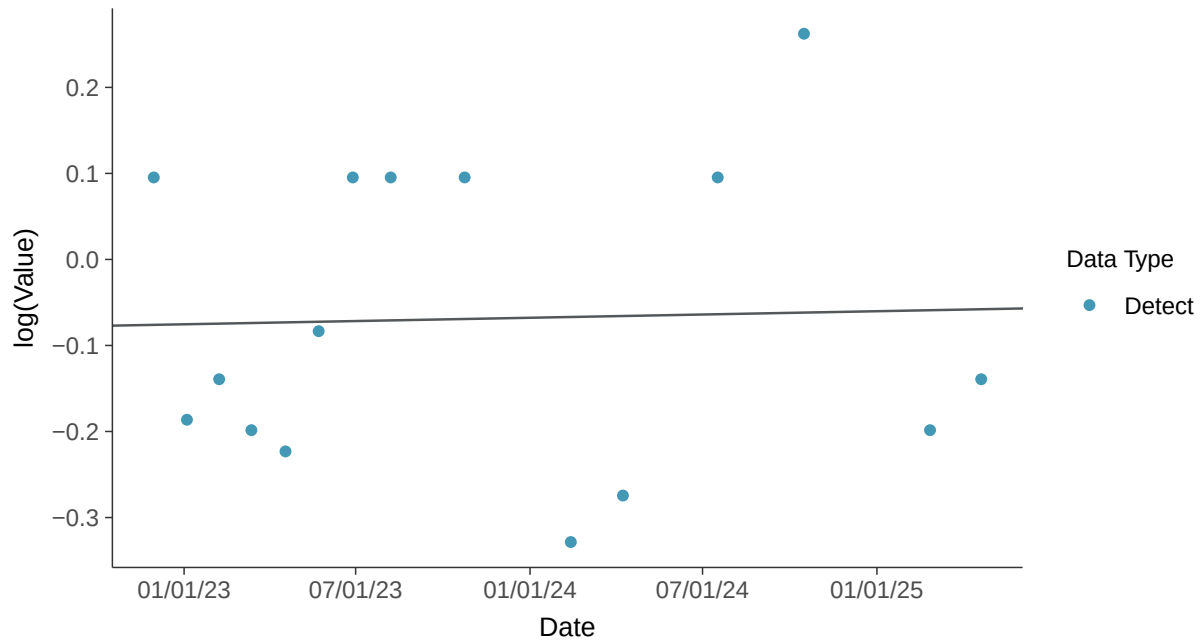


Lognormal Q-Q plot
Boron, MW-20 (mg/L)



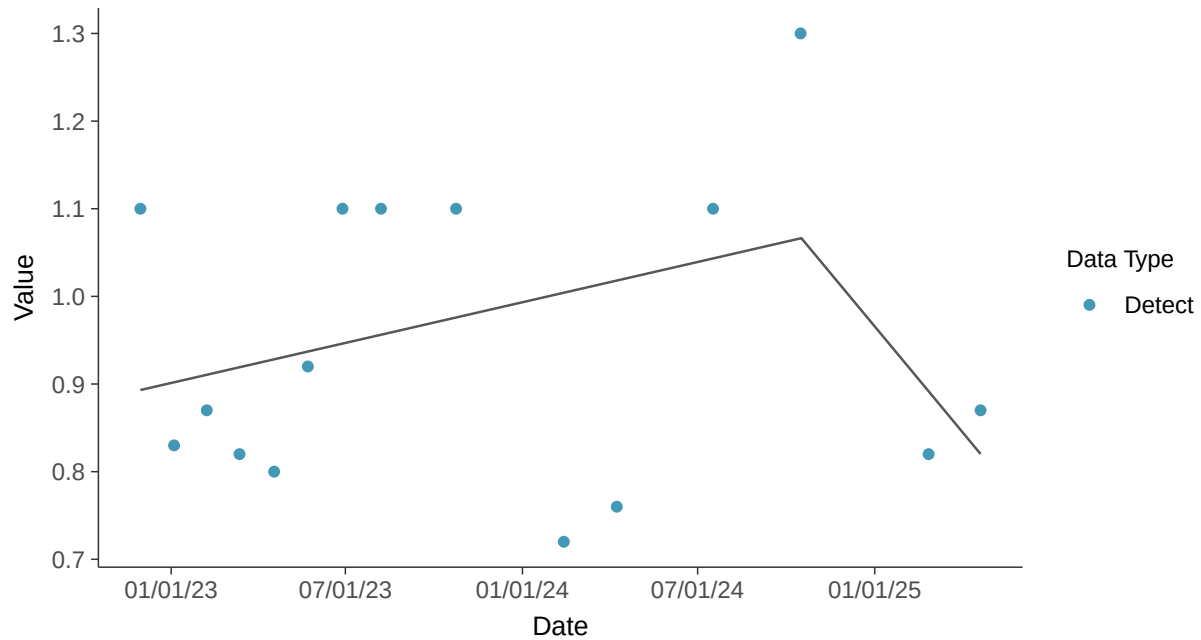
Trend Regression: Lognormal MLE

Boron, MW-20 (mg/L)



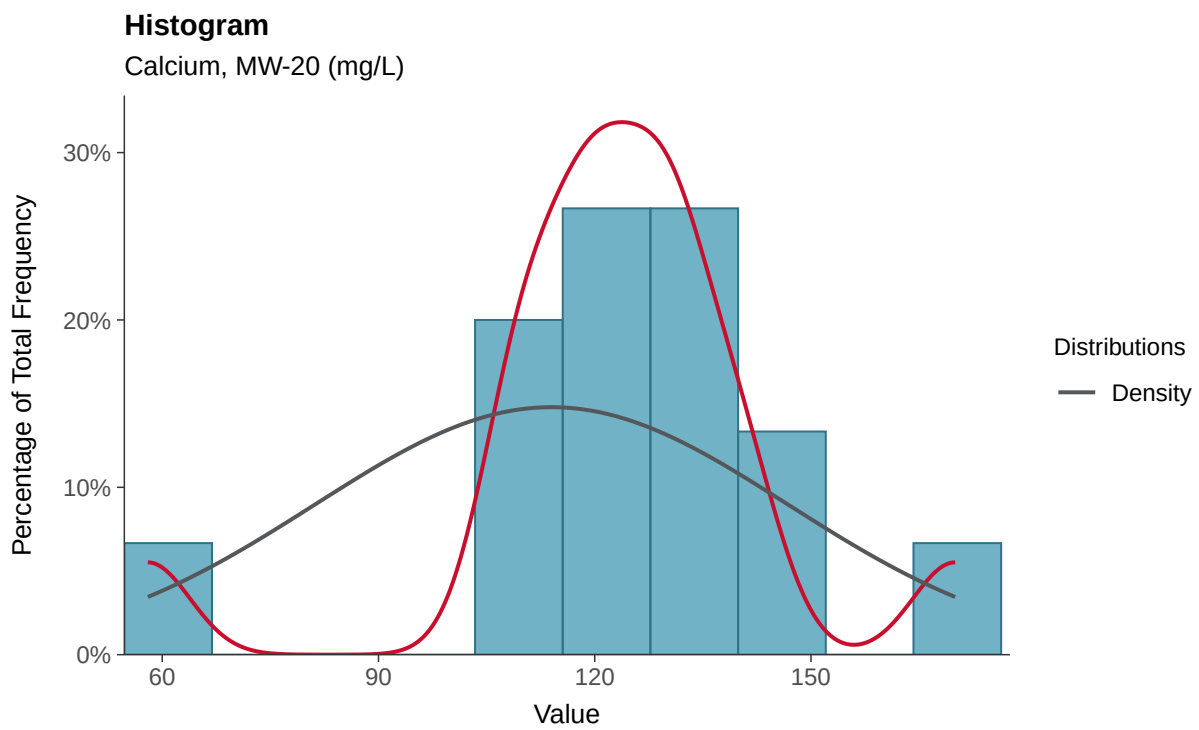
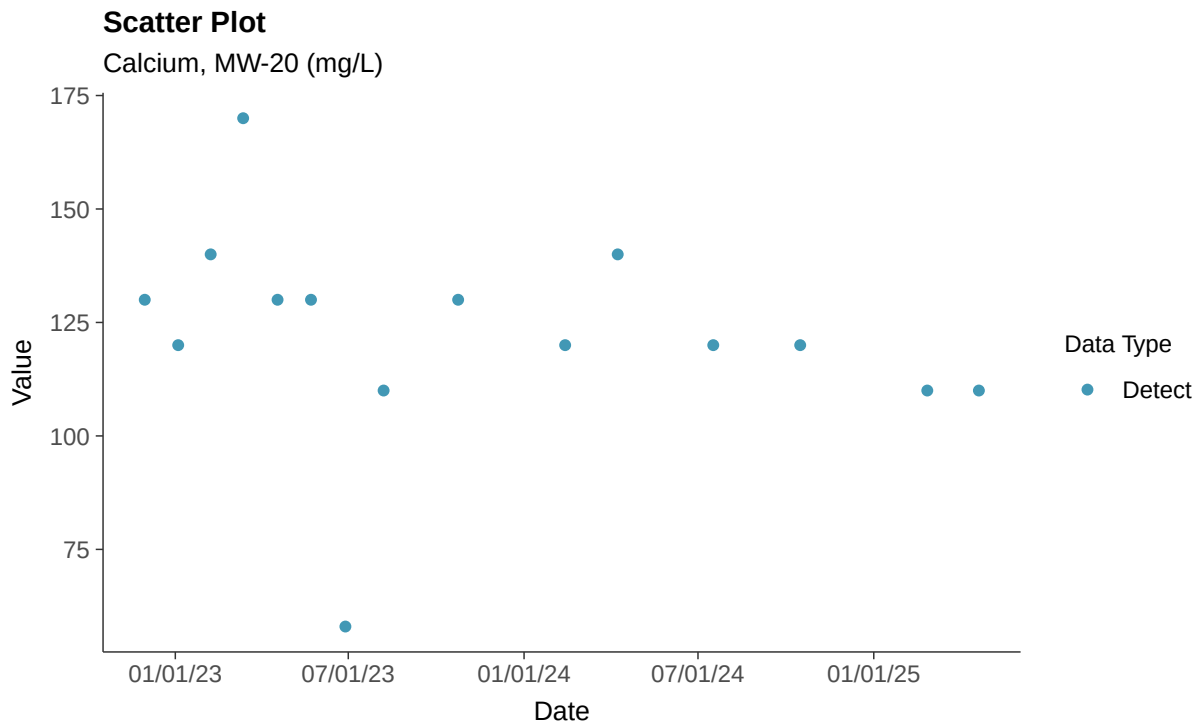
Trend Regression: Piecewise Linear-Linear

Boron, MW-20 (mg/L)



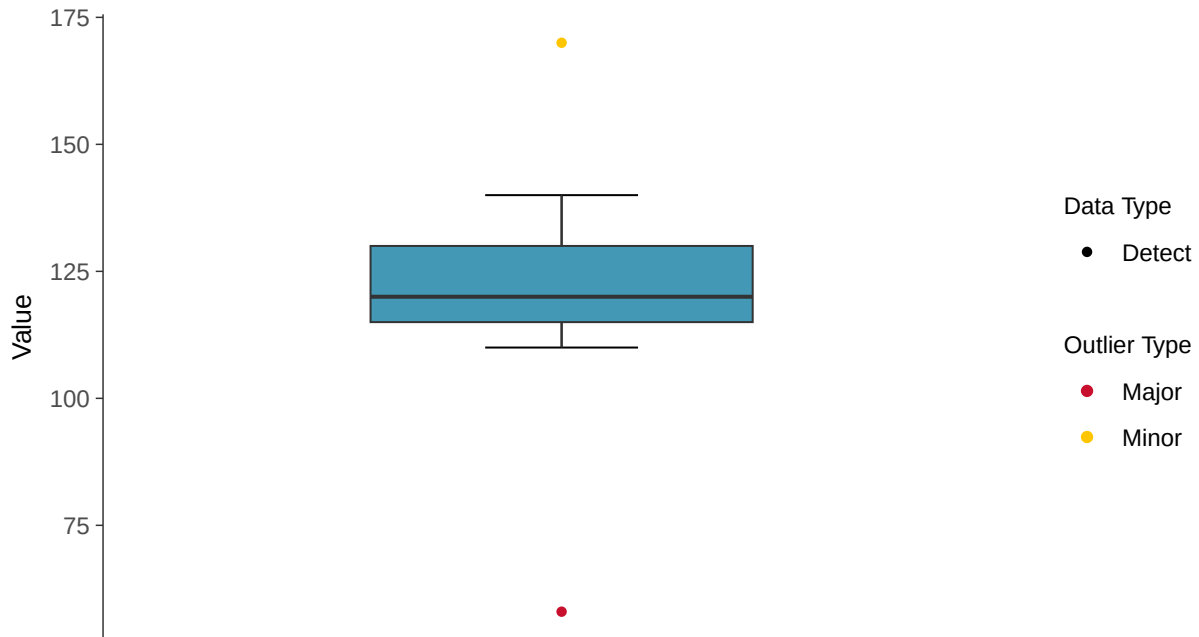
Appendix III: Calcium, MW-20

ID: 30_1_3_107



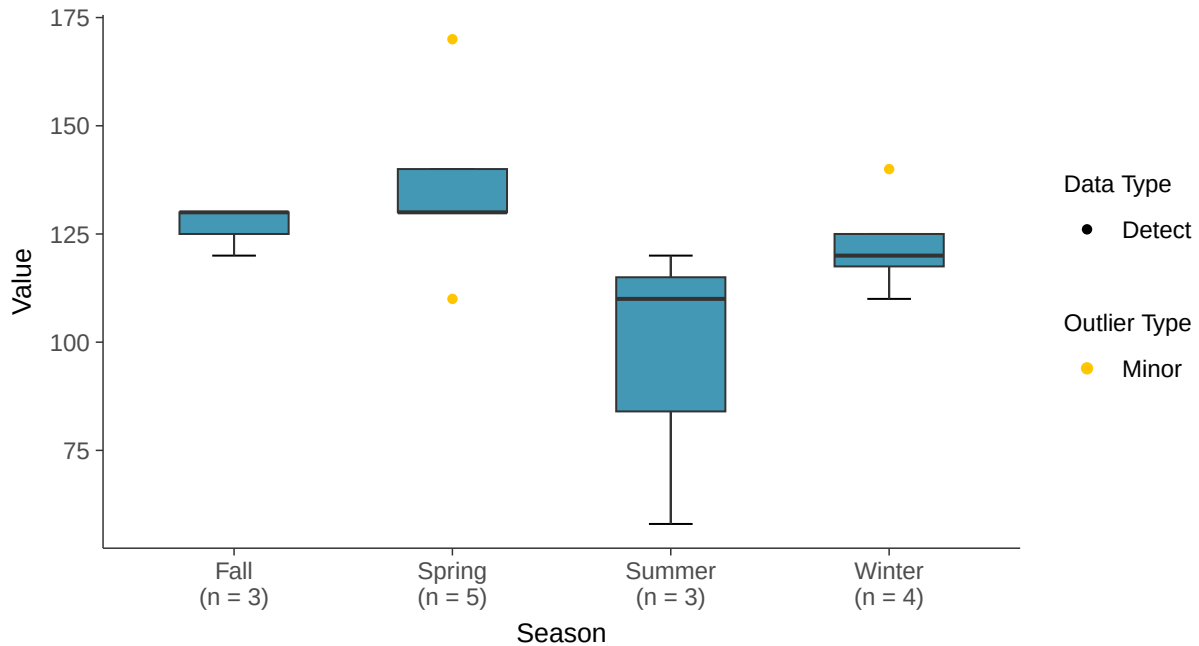
Boxplot

Calcium, MW-20 (mg/L)



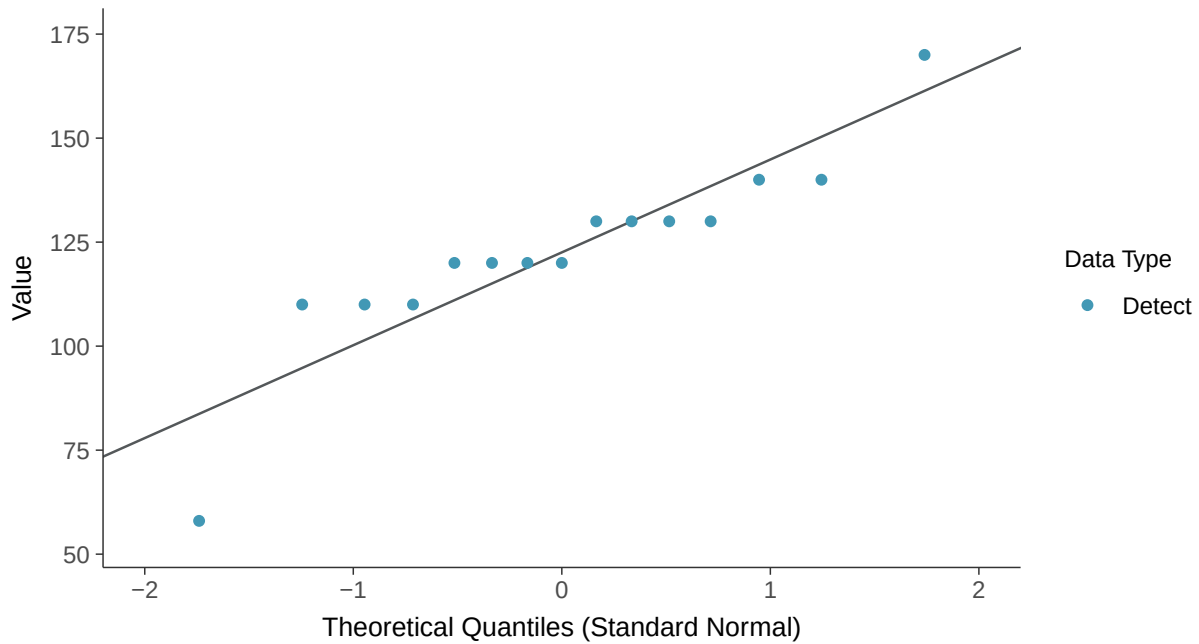
Boxplot by Season

Calcium, MW-20 (mg/L)



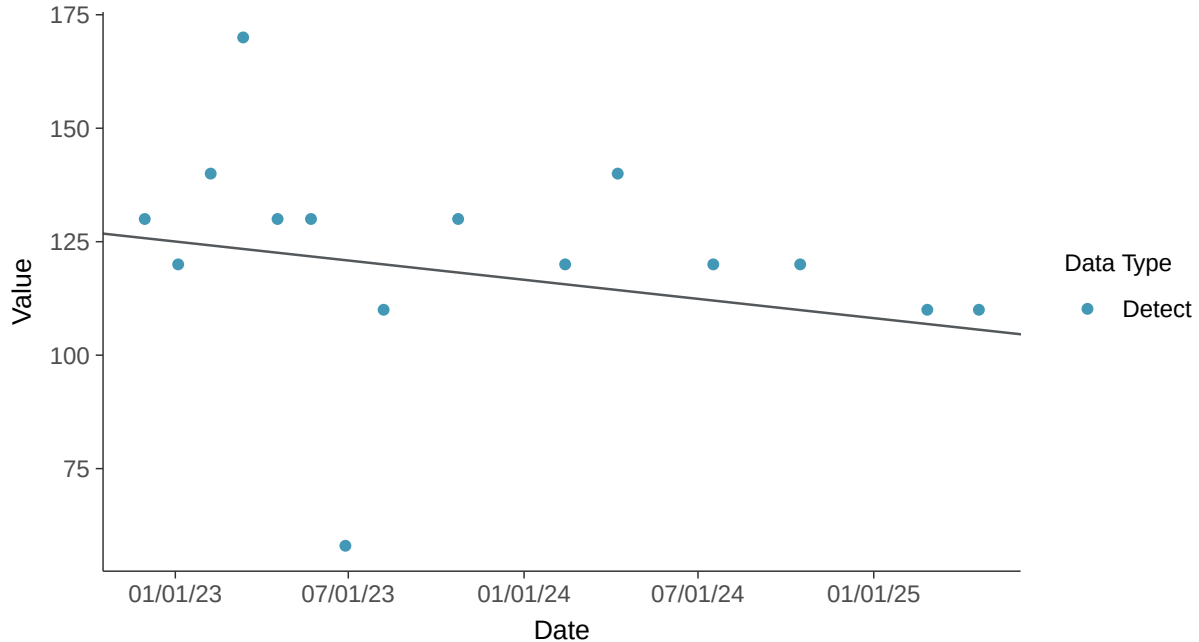
Normal Q-Q plot

Calcium, MW-20 (mg/L)



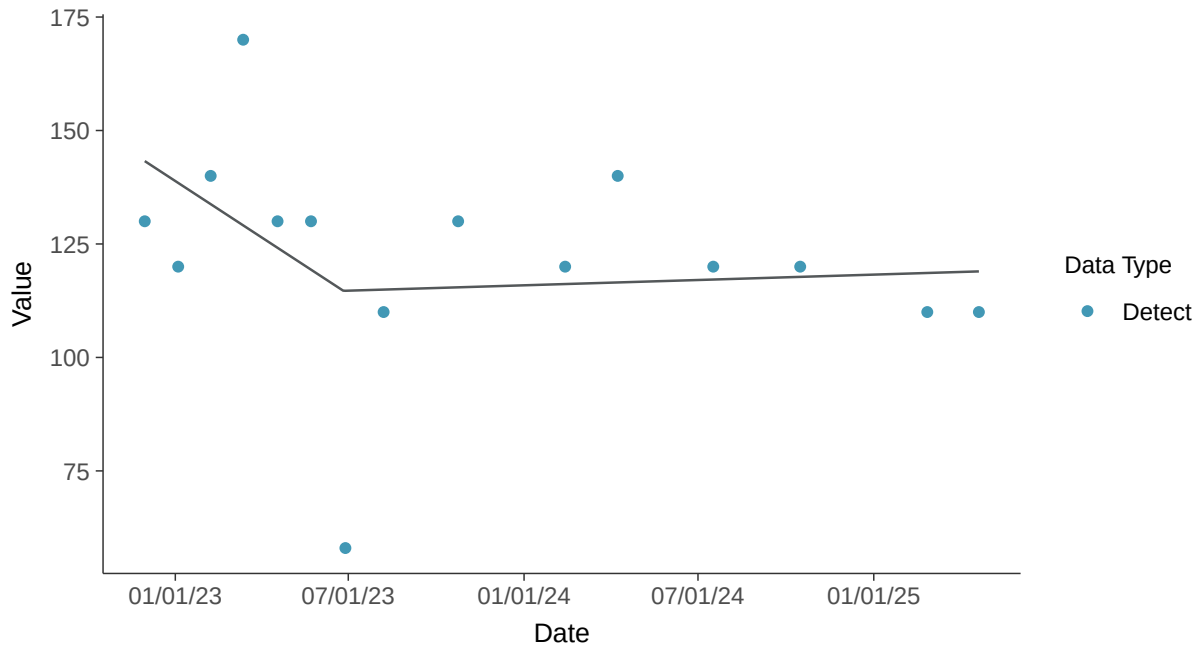
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Calcium, MW-20 (mg/L)



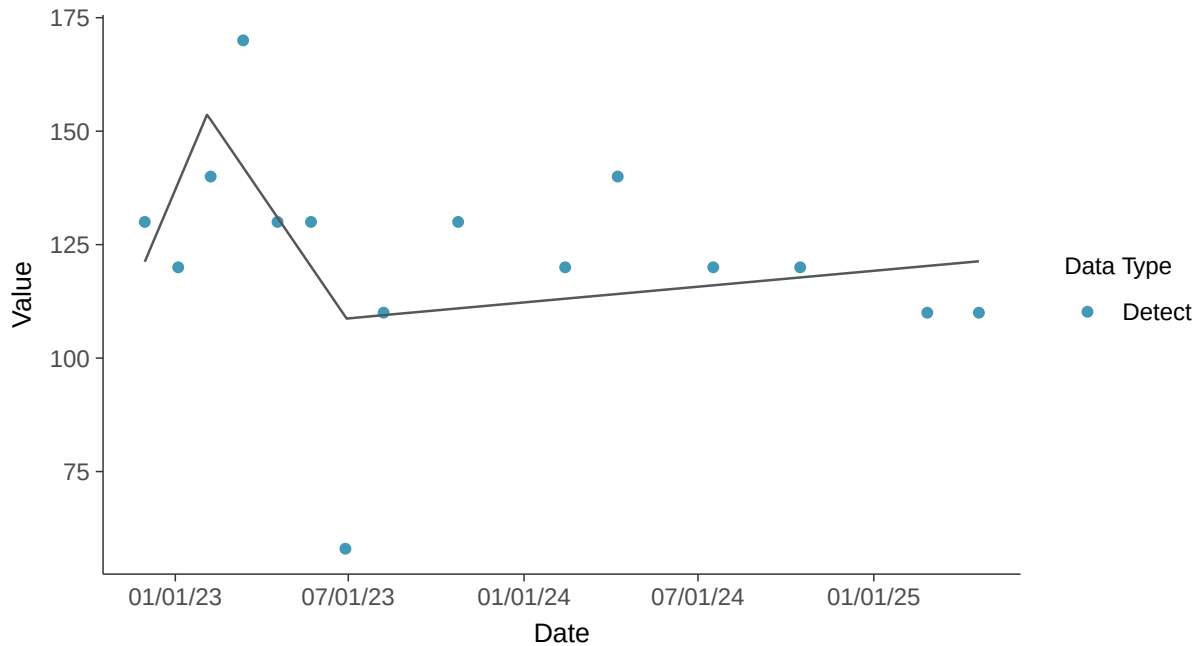
Trend Regression: Piecewise Linear-Linear

Calcium, MW-20 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Calcium, MW-20 (mg/L)

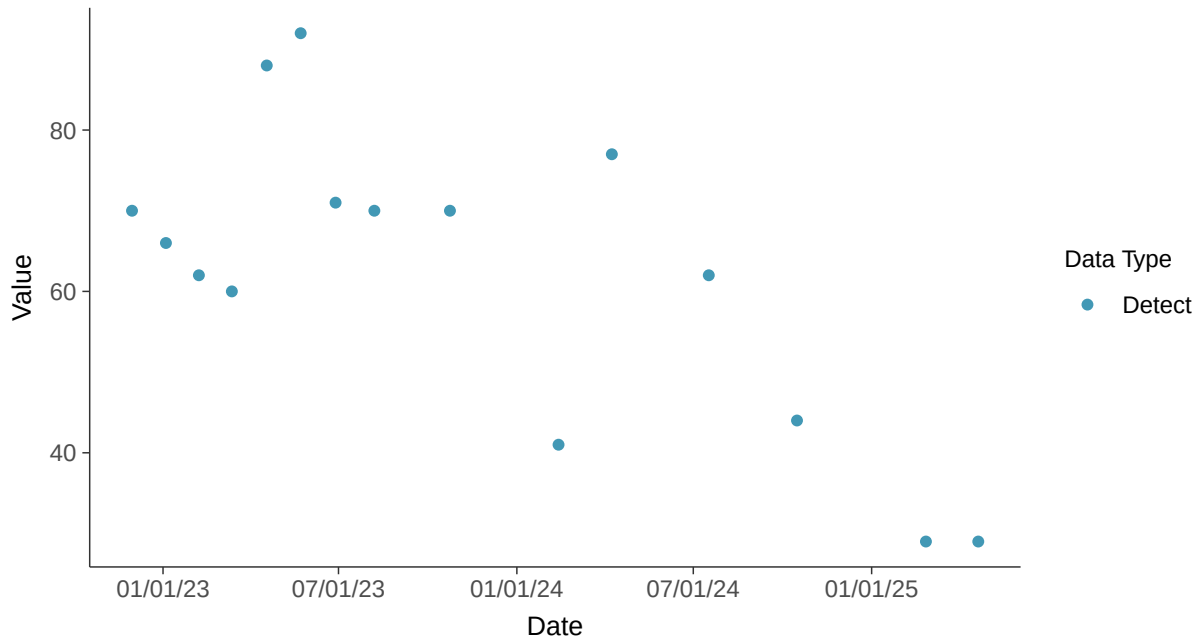


Appendix III: Chloride (as Cl), MW-20

ID: 30_1_3_108

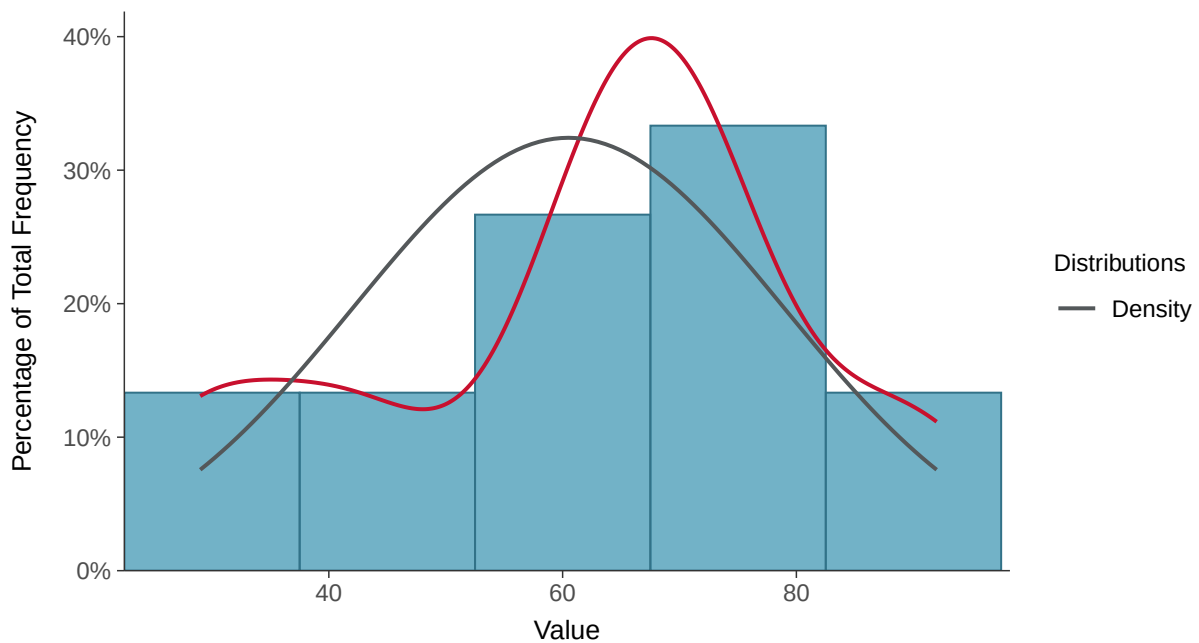
Scatter Plot

Chloride (as Cl), MW-20 (mg/L)



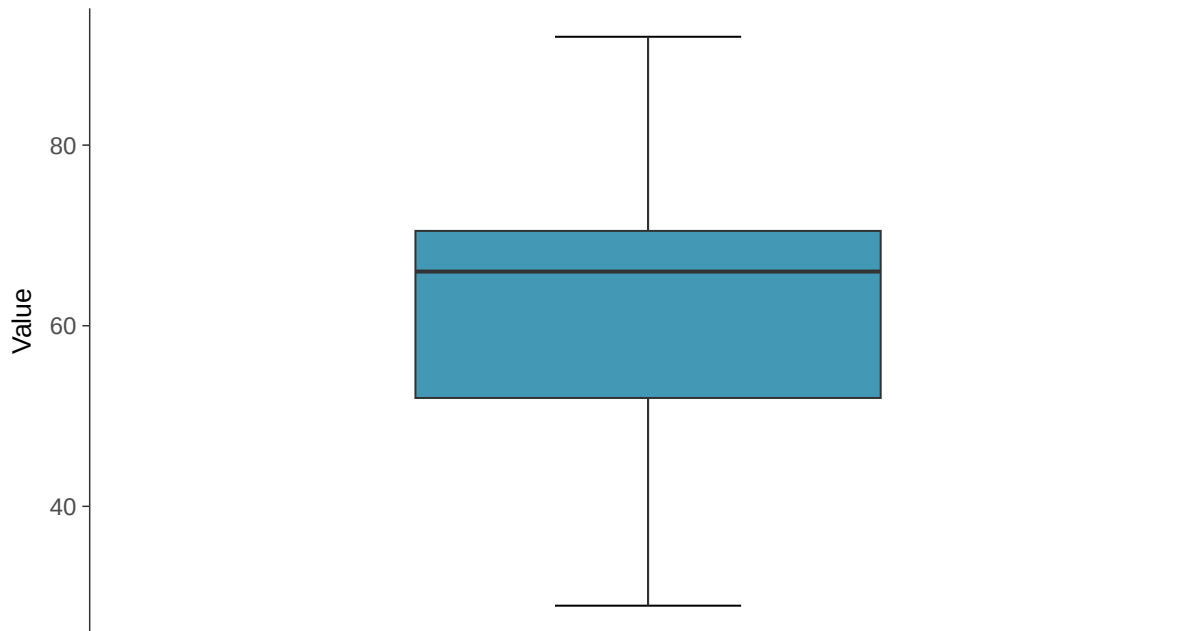
Histogram

Chloride (as Cl), MW-20 (mg/L)



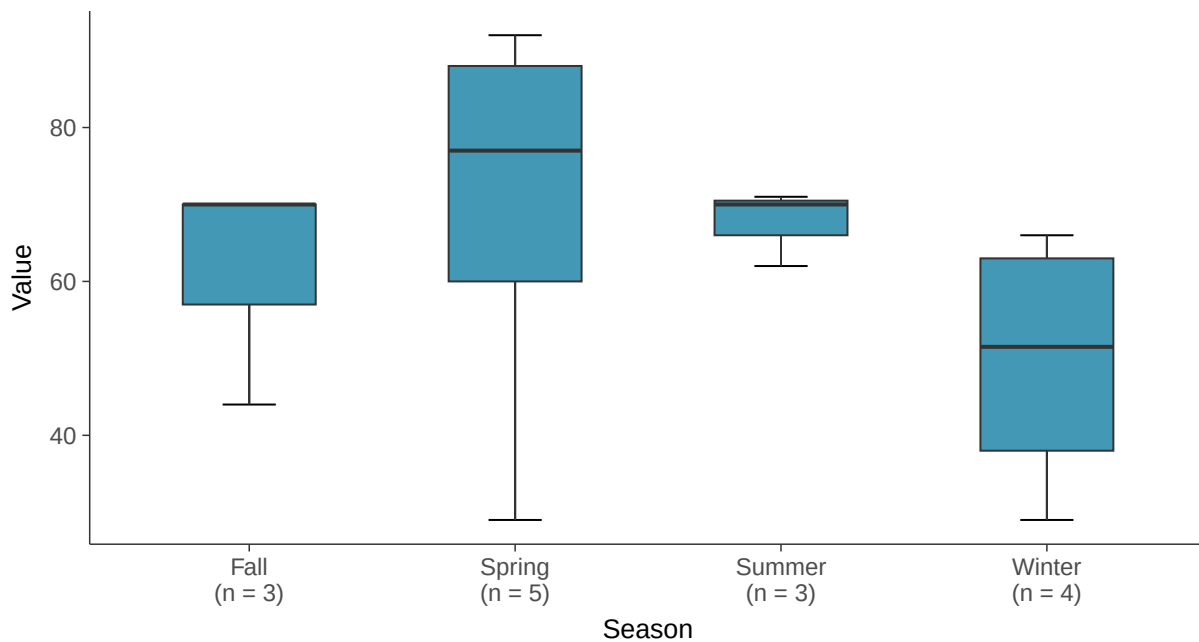
Boxplot

Chloride (as Cl), MW-20 (mg/L)



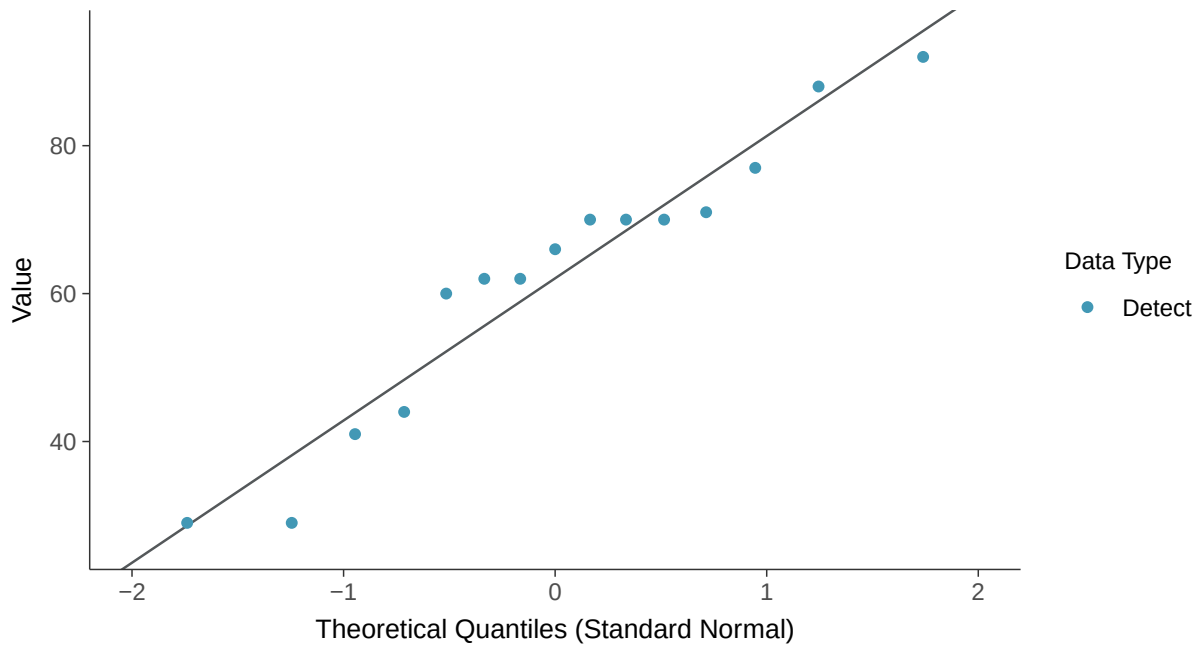
Boxplot by Season

Chloride (as Cl), MW-20 (mg/L)



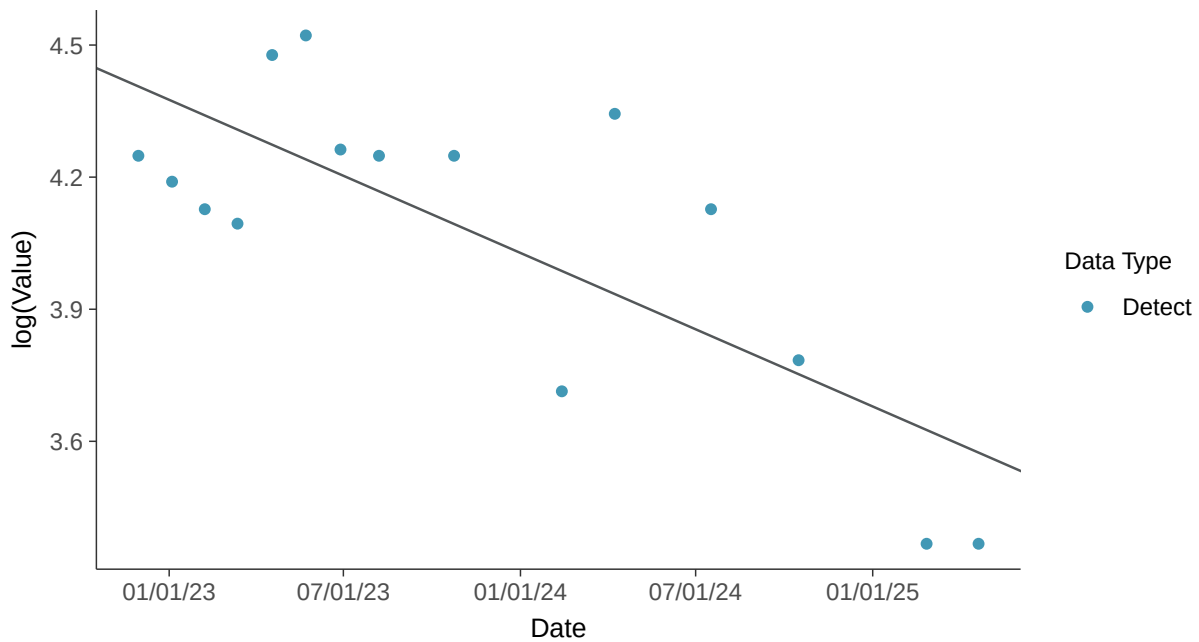
Normal Q-Q plot

Chloride (as Cl), MW-20 (mg/L)



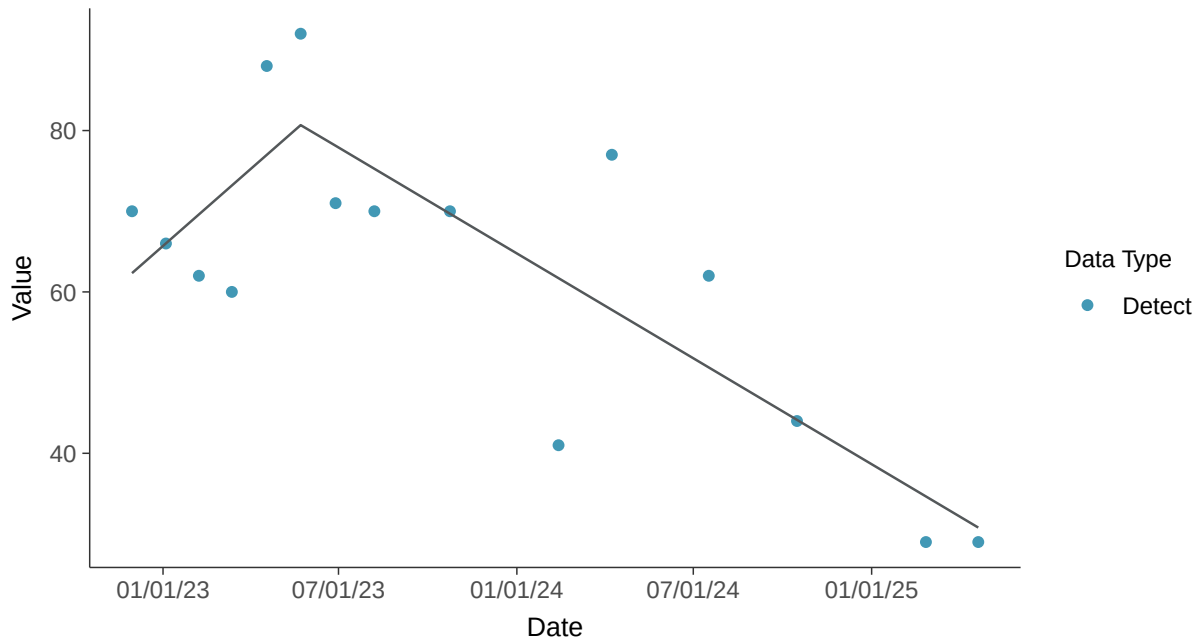
Trend Regression: Lognormal MLE

Chloride (as Cl), MW-20 (mg/L)



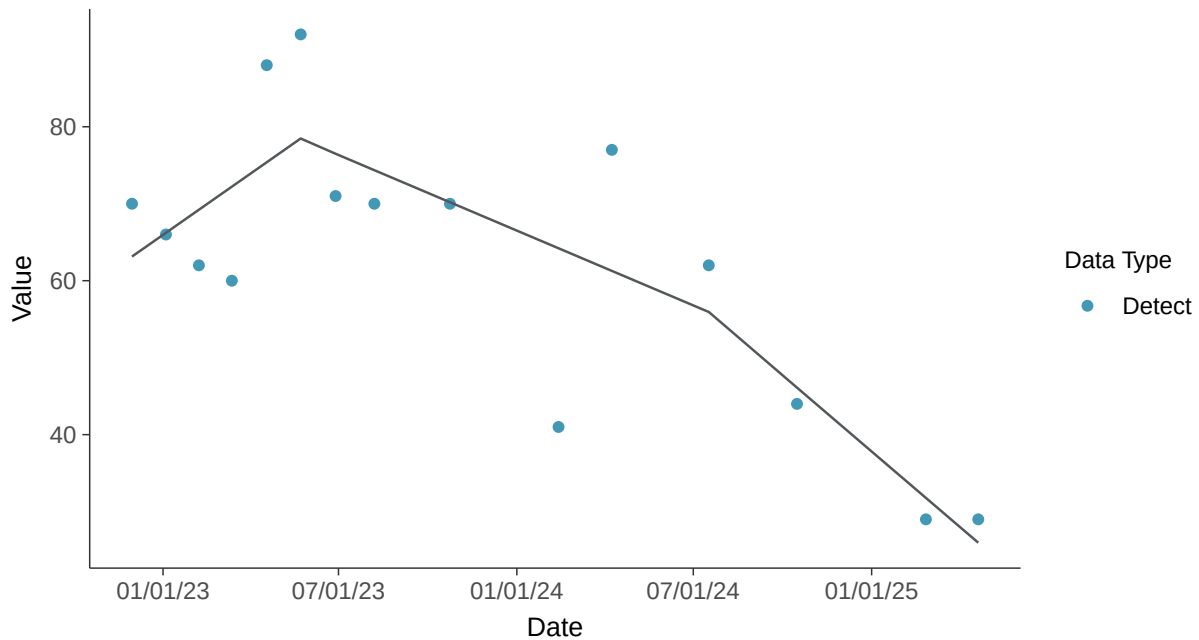
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-20 (mg/L)



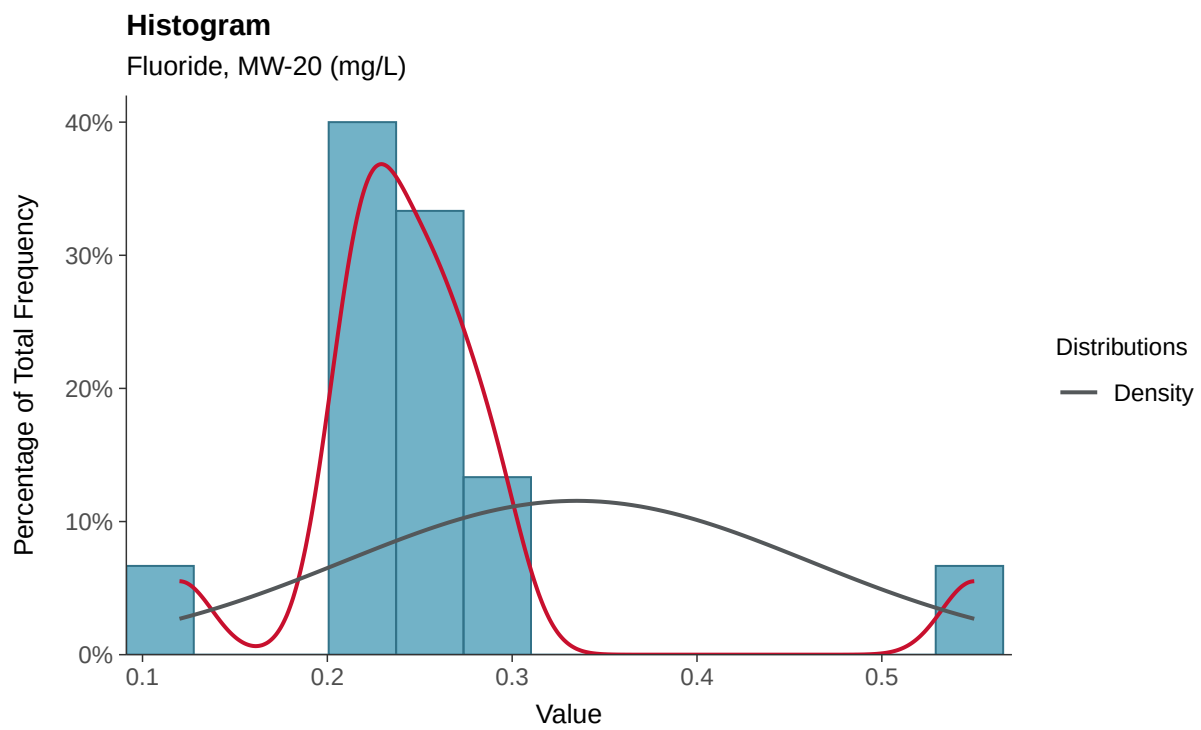
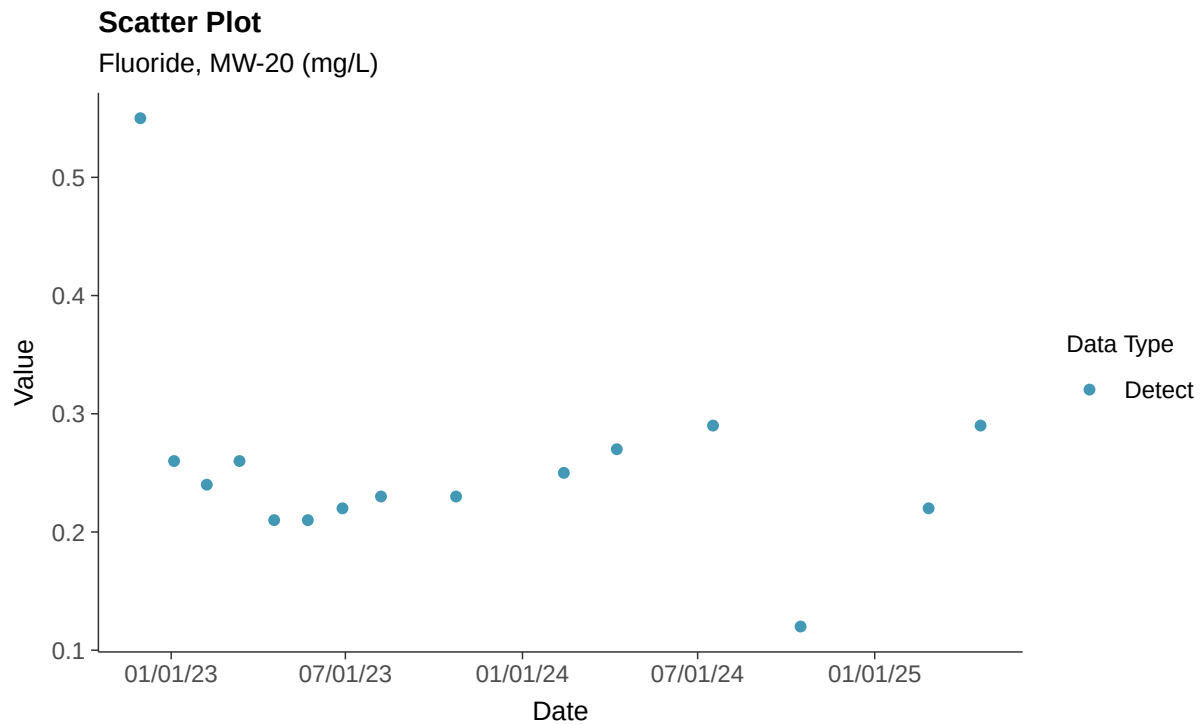
Trend Regression: Piecewise Linear-Linear-Linear

Chloride (as Cl), MW-20 (mg/L)



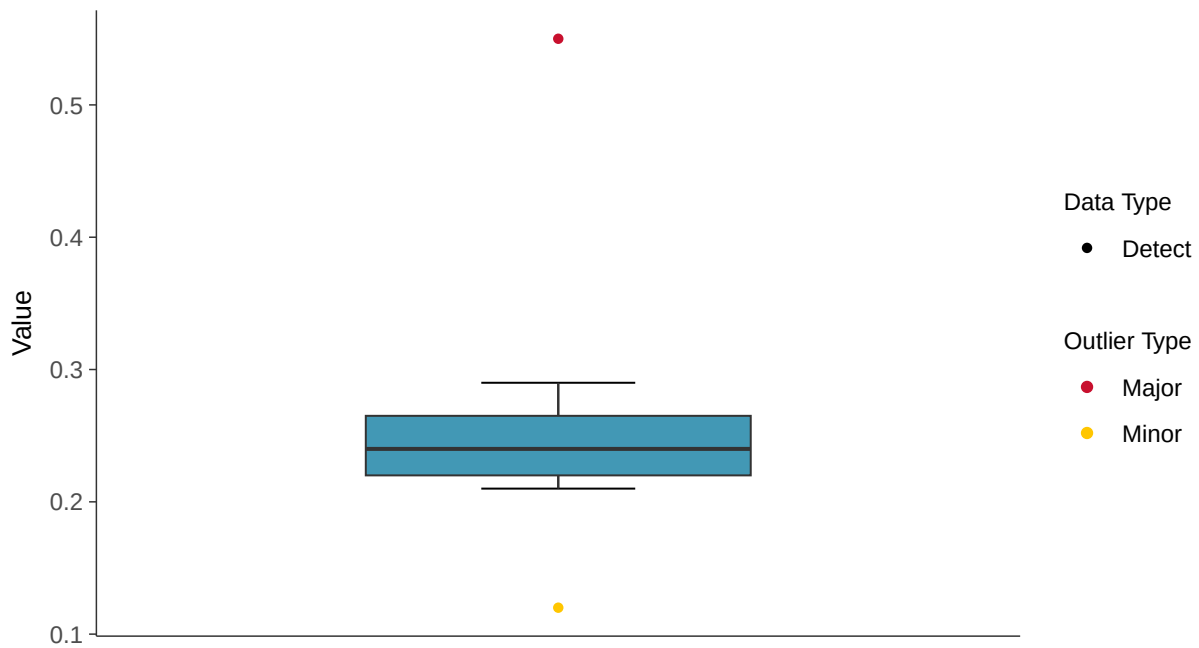
Appendix III: Fluoride, MW-20

ID: 30_1_3_112



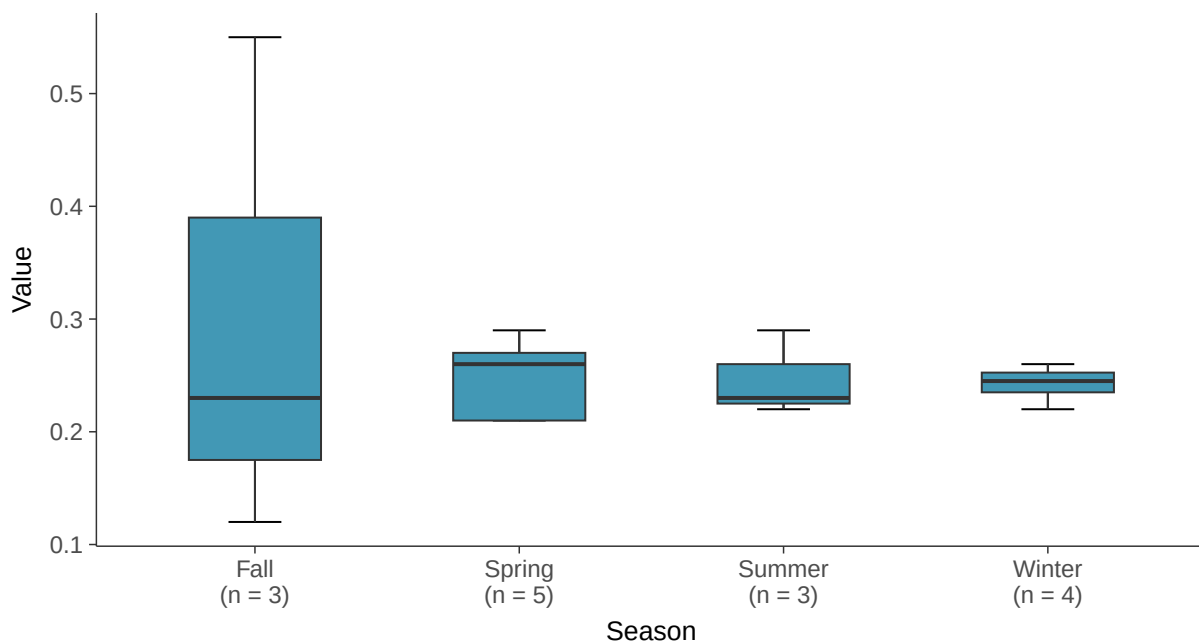
Boxplot

Fluoride, MW-20 (mg/L)



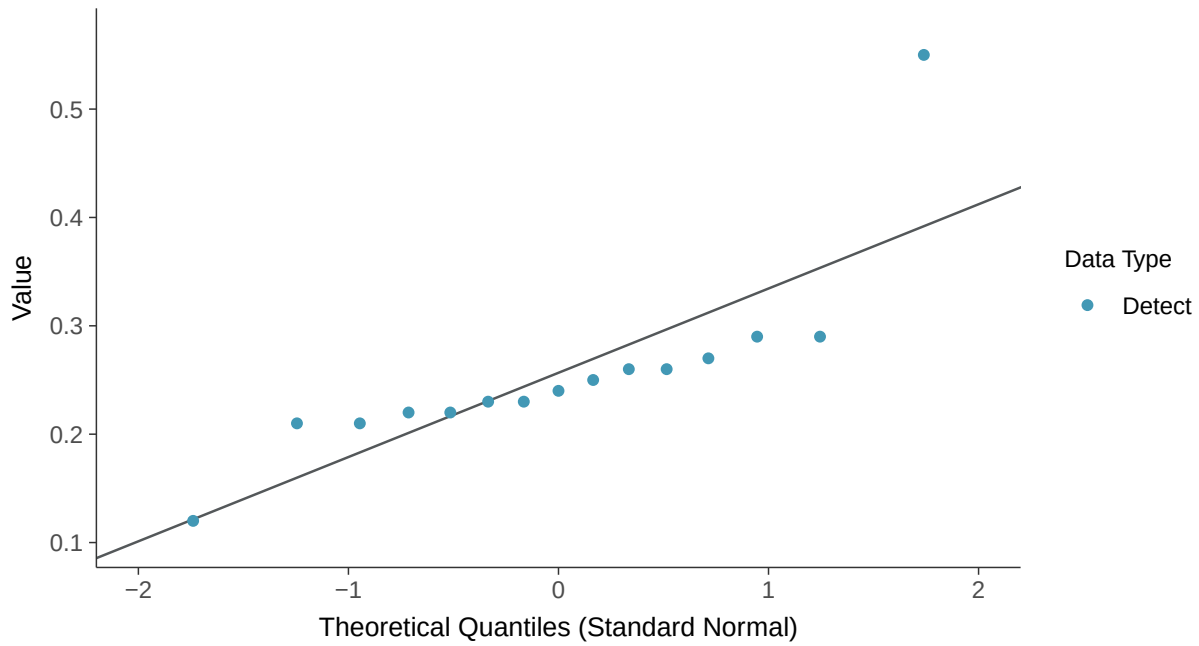
Boxplot by Season

Fluoride, MW-20 (mg/L)



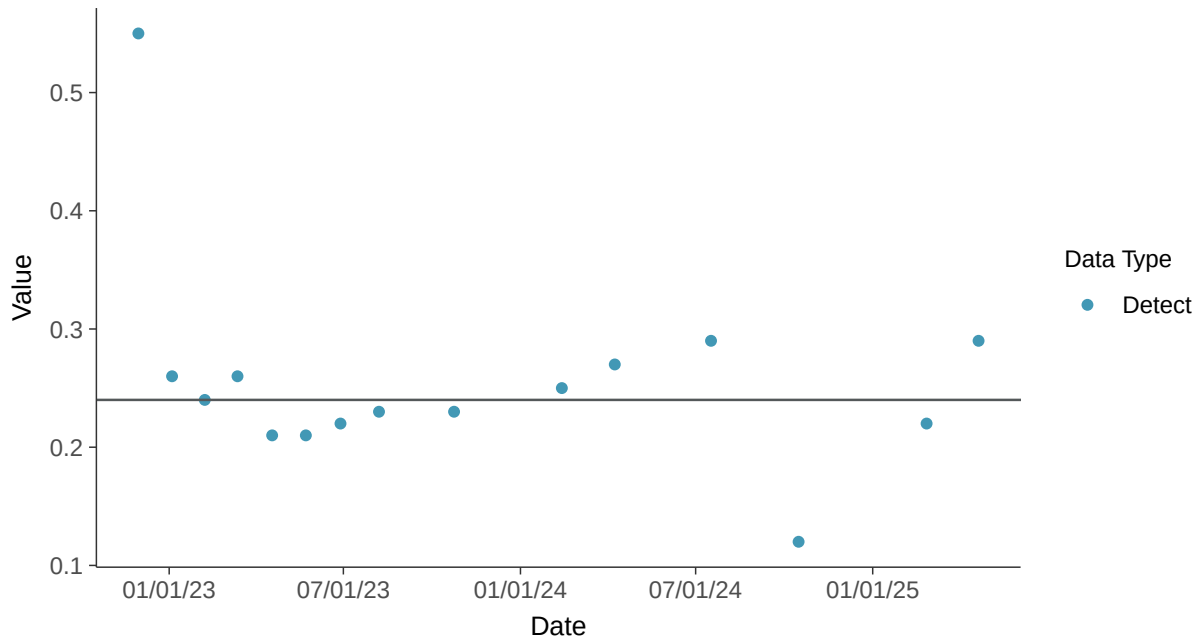
Normal Q-Q plot

Fluoride, MW-20 (mg/L)



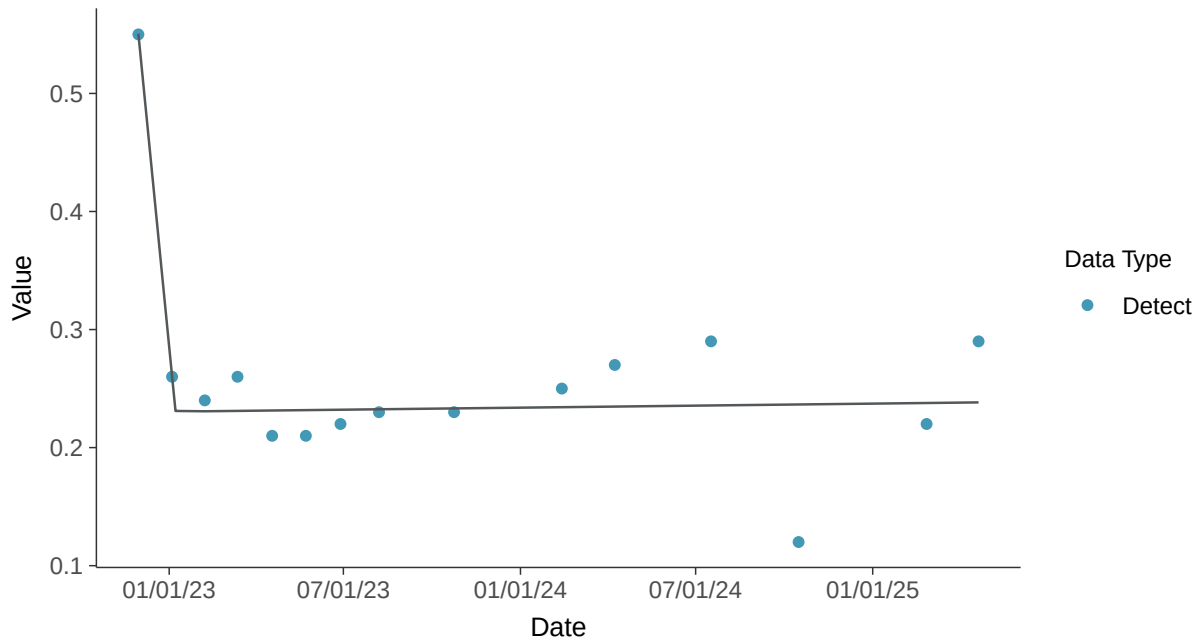
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Fluoride, MW-20 (mg/L)



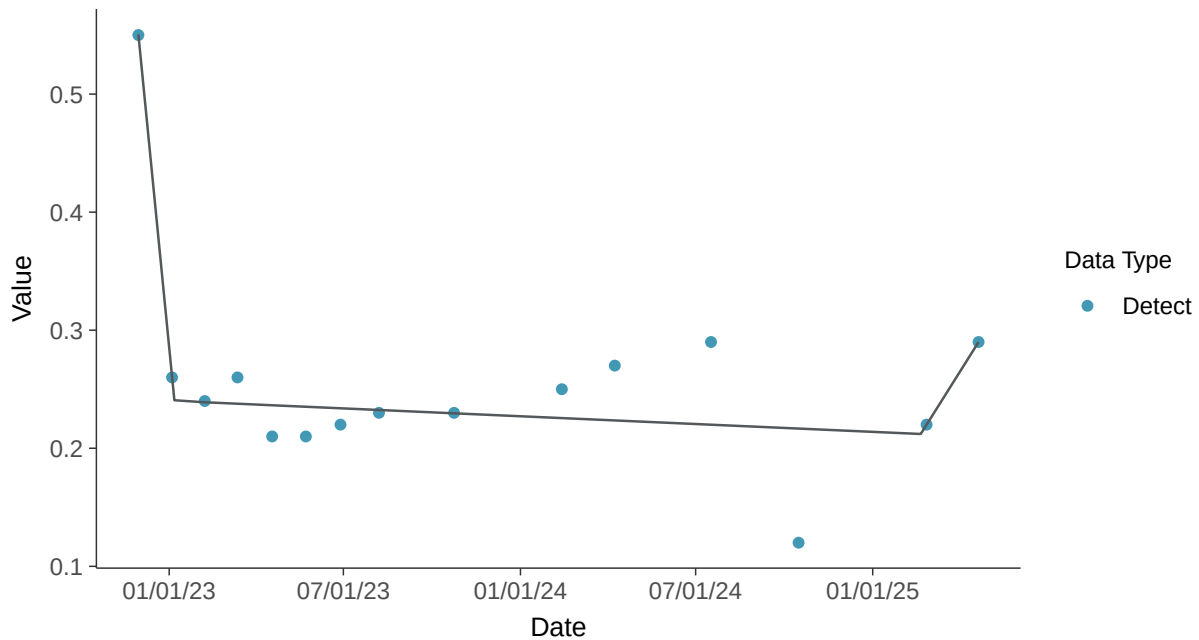
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-20 (mg/L)



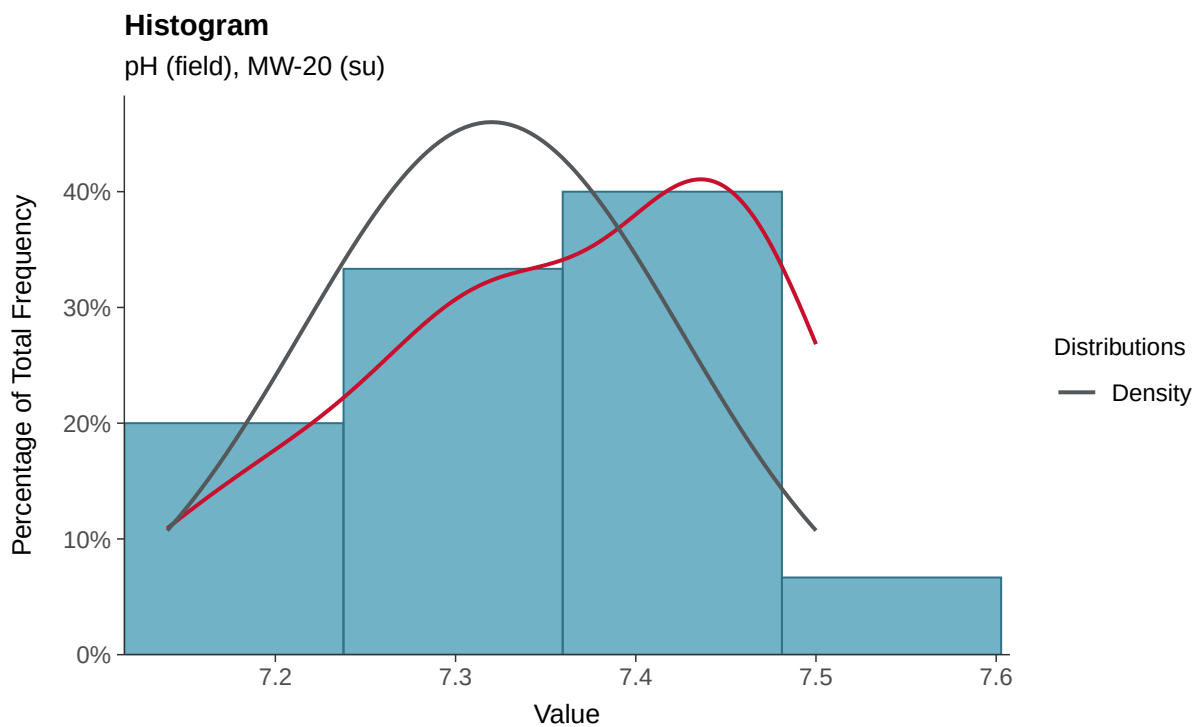
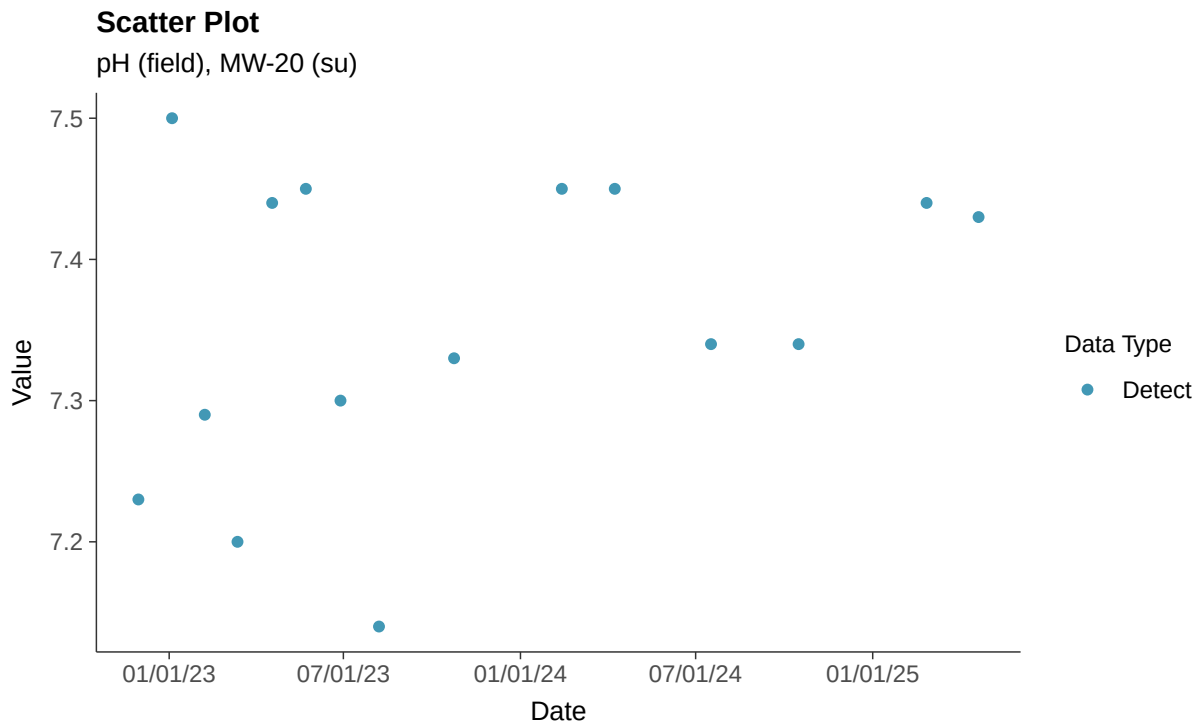
Trend Regression: Piecewise Linear-Linear-Linear

Fluoride, MW-20 (mg/L)



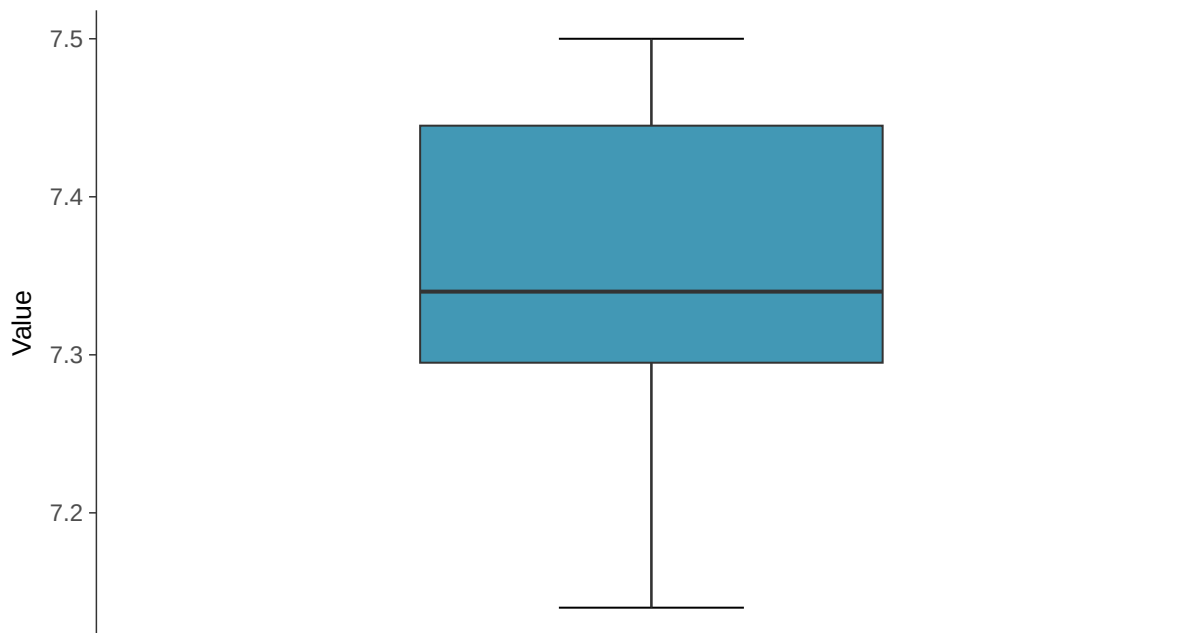
Appendix III: pH (field), MW-20

ID: 30_1_3_120



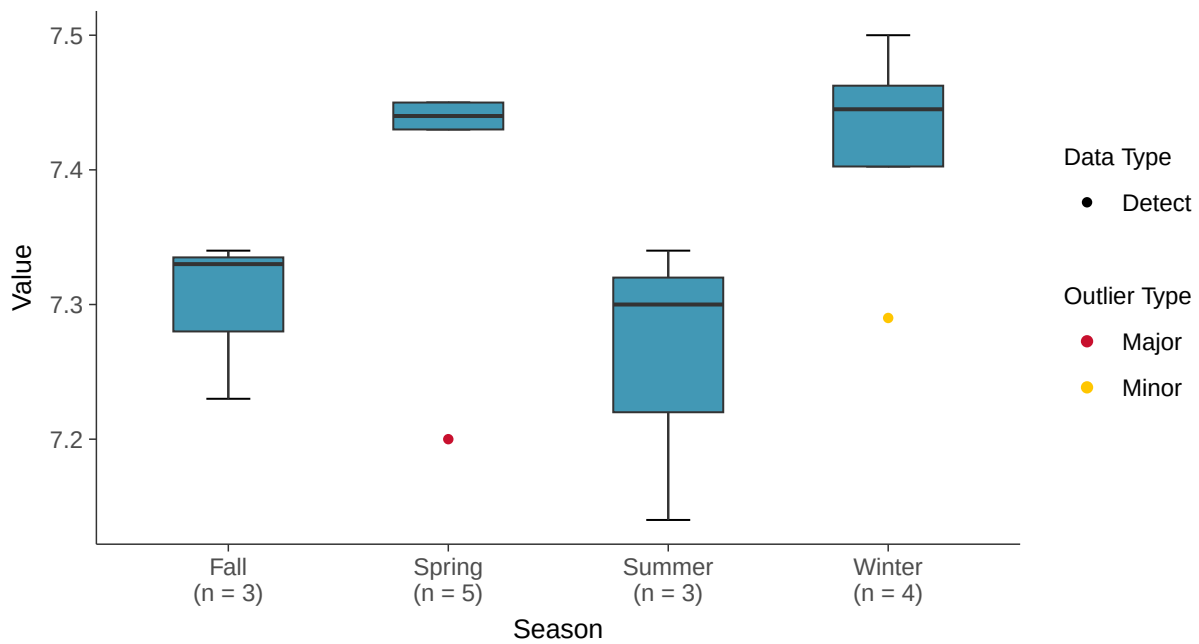
Boxplot

pH (field), MW-20 (su)

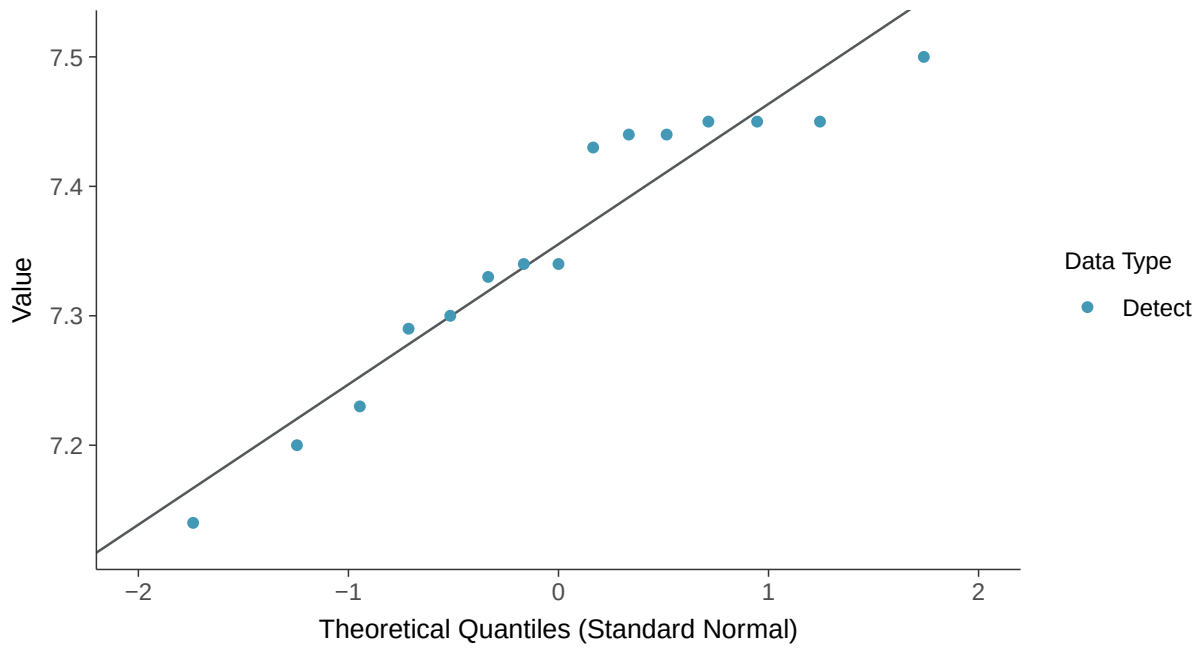


Boxplot by Season

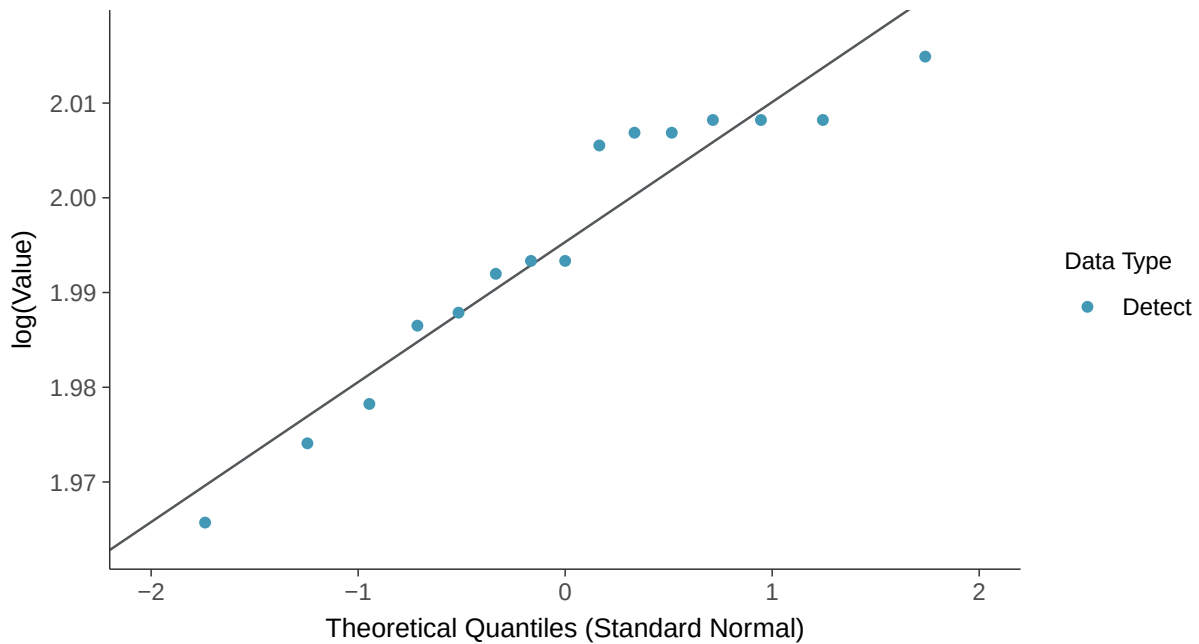
pH (field), MW-20 (su)



Normal Q-Q plot
pH (field), MW-20 (su)

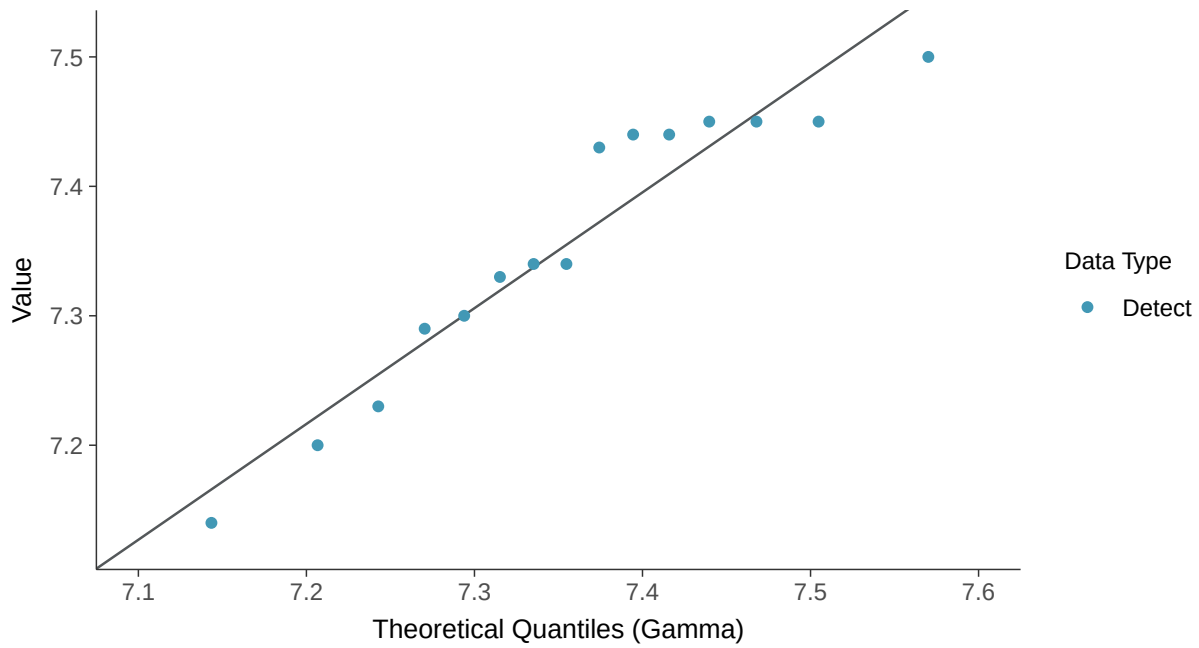


Lognormal Q-Q plot
pH (field), MW-20 (su)



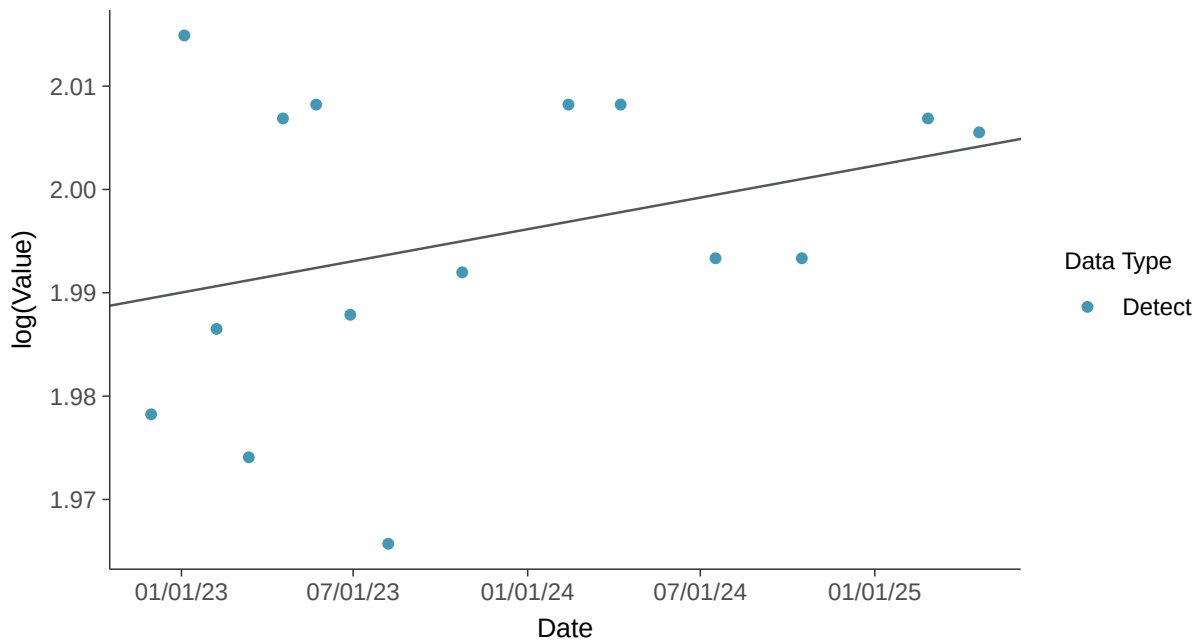
Gamma Q-Q plot

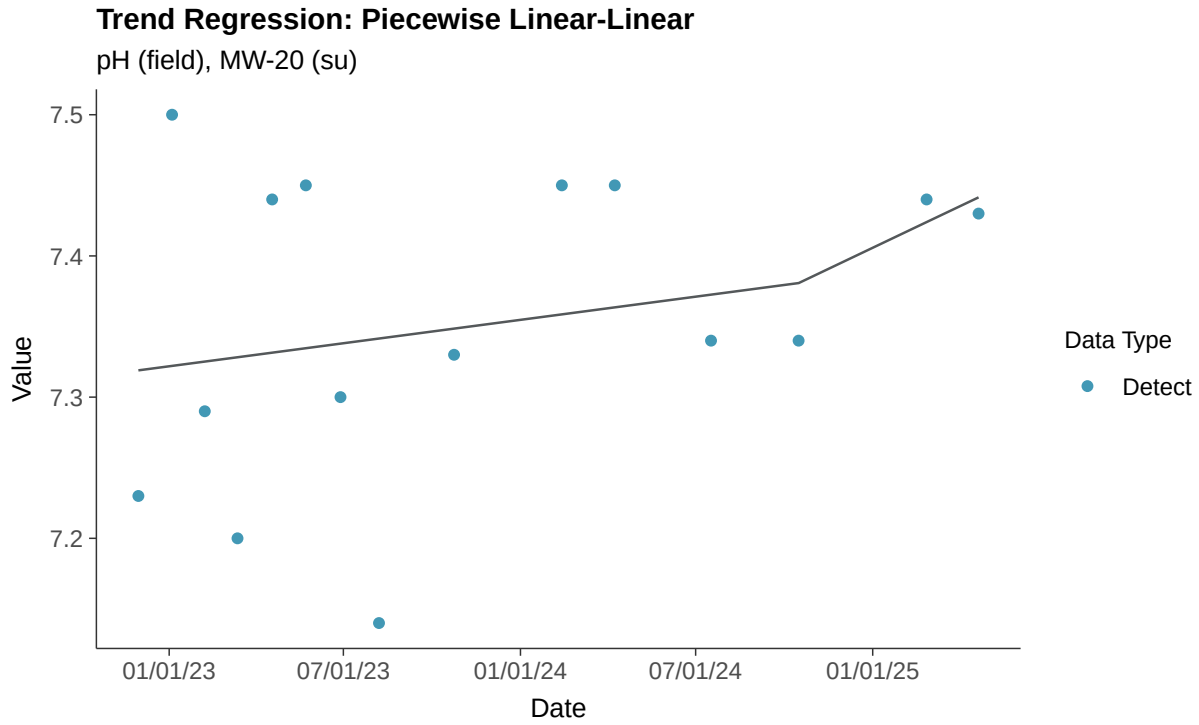
pH (field), MW-20 (su)



Trend Regression: Lognormal MLE

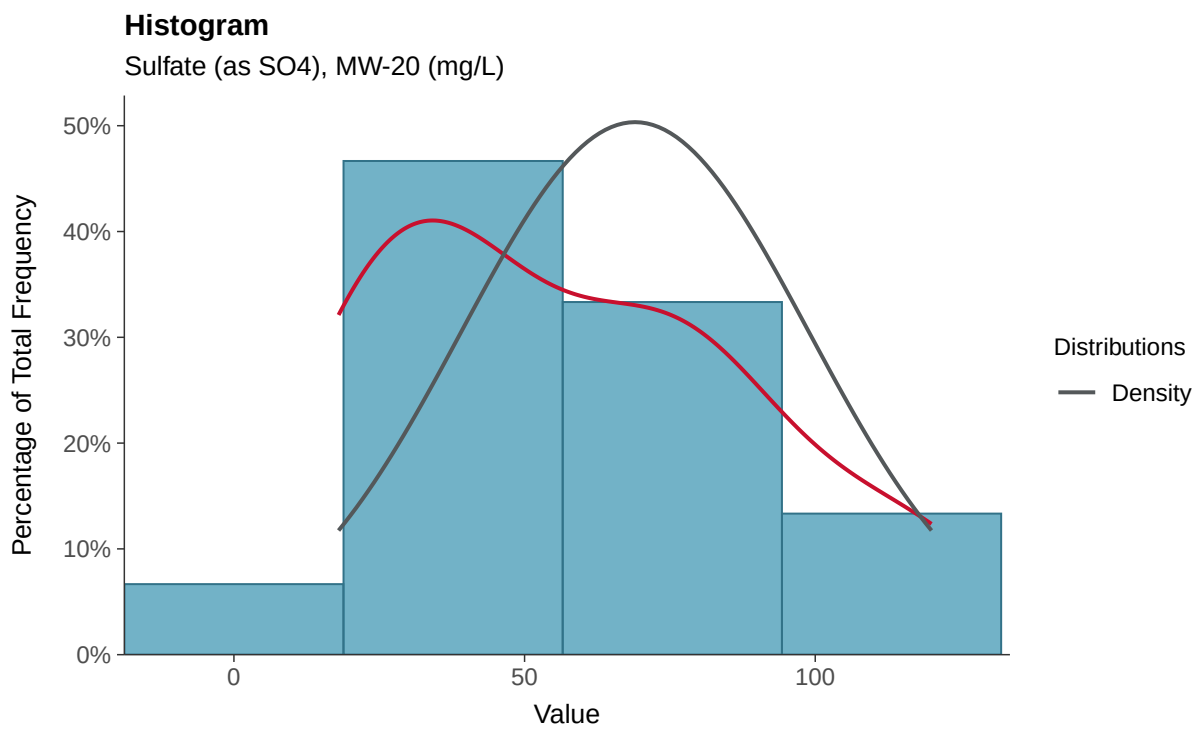
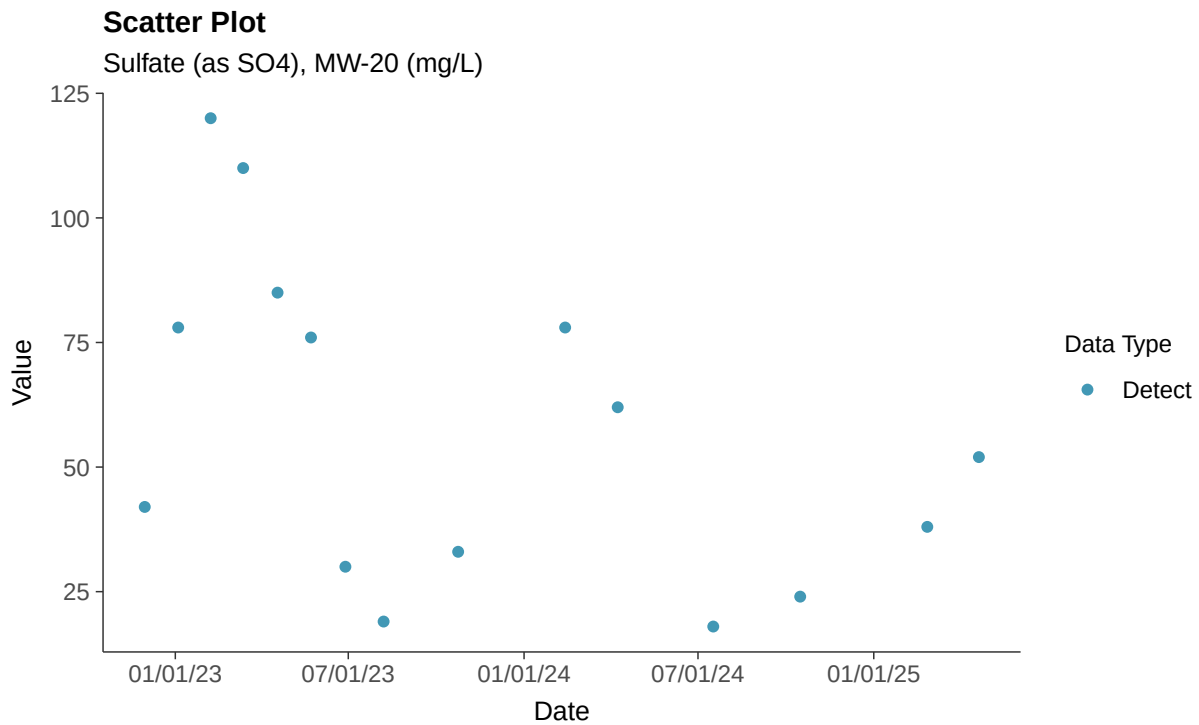
pH (field), MW-20 (su)





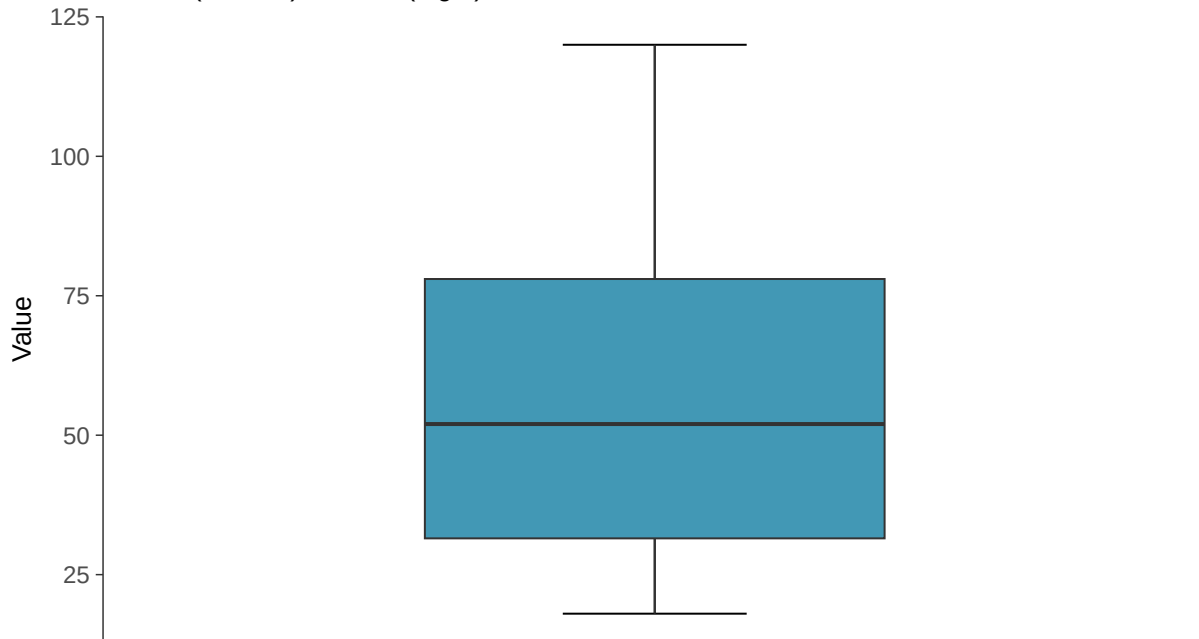
Appendix III: Sulfate (as SO₄), MW-20

ID: 30_1_3_124



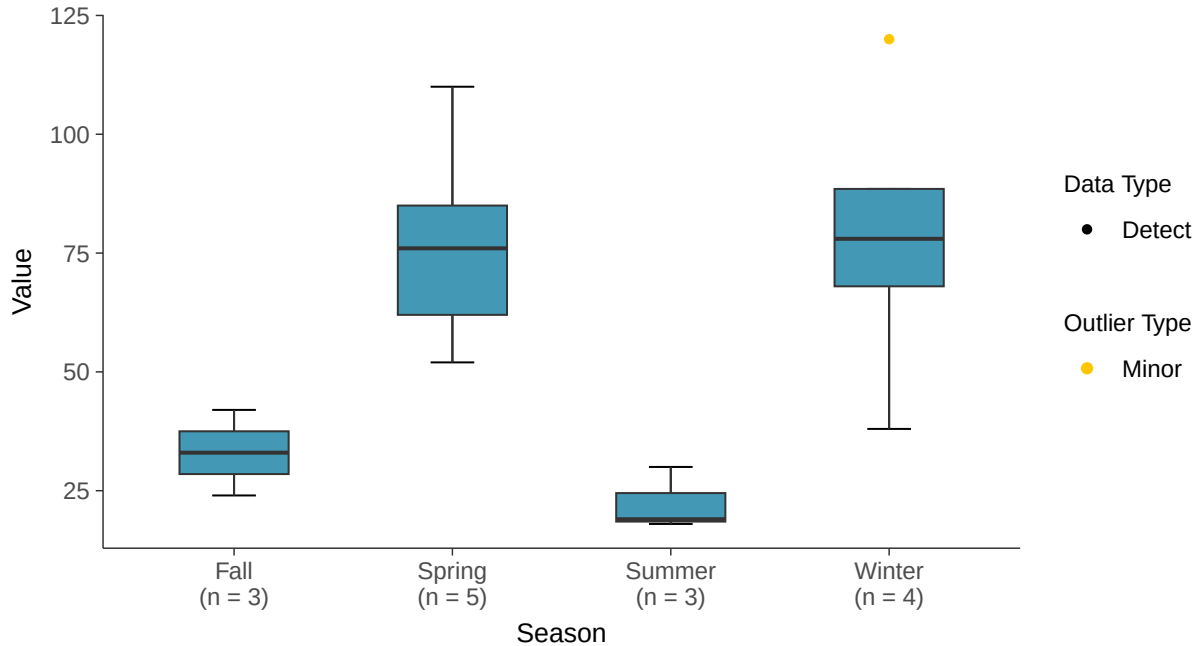
Boxplot

Sulfate (as SO₄), MW-20 (mg/L)



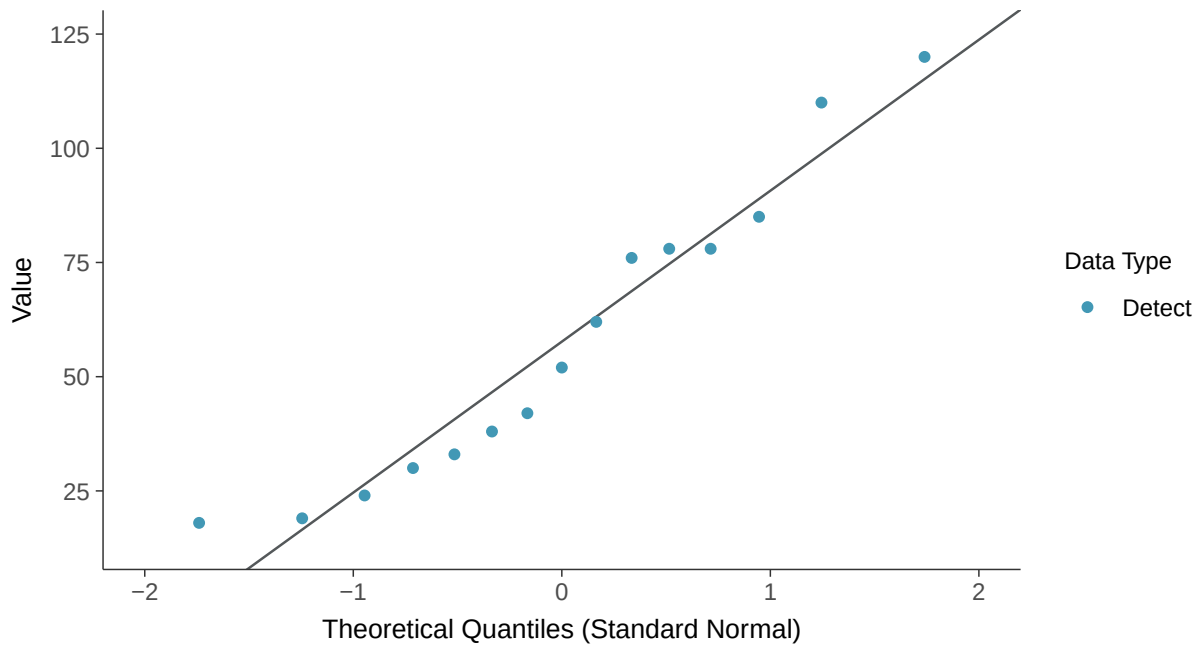
Boxplot by Season

Sulfate (as SO₄), MW-20 (mg/L)



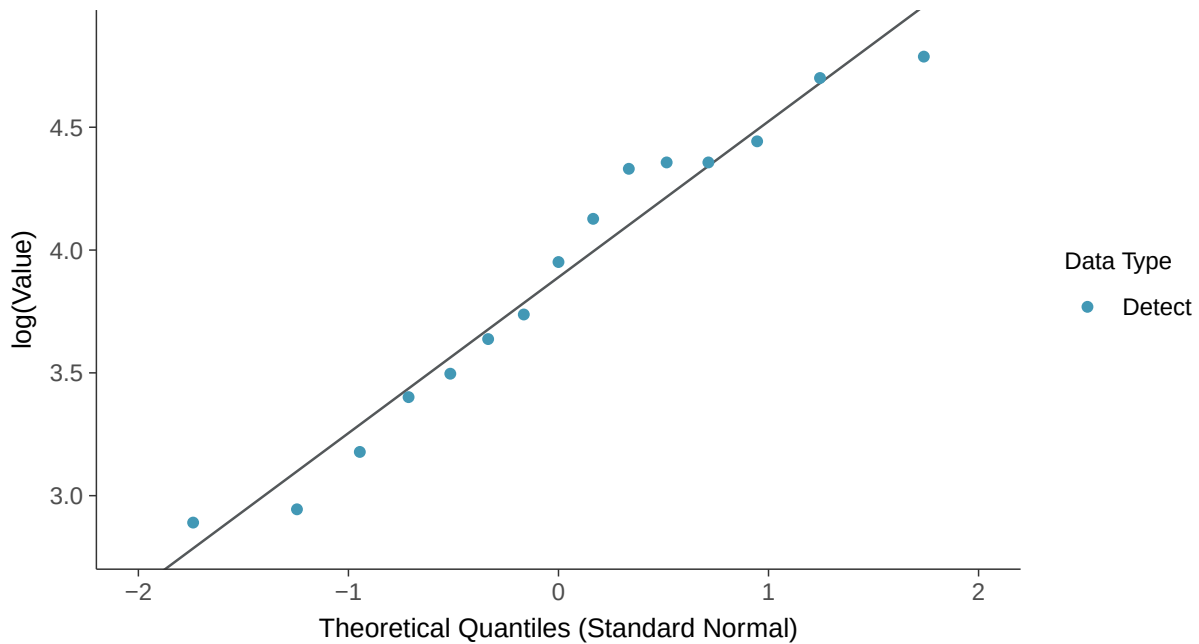
Normal Q-Q plot

Sulfate (as SO₄), MW-20 (mg/L)



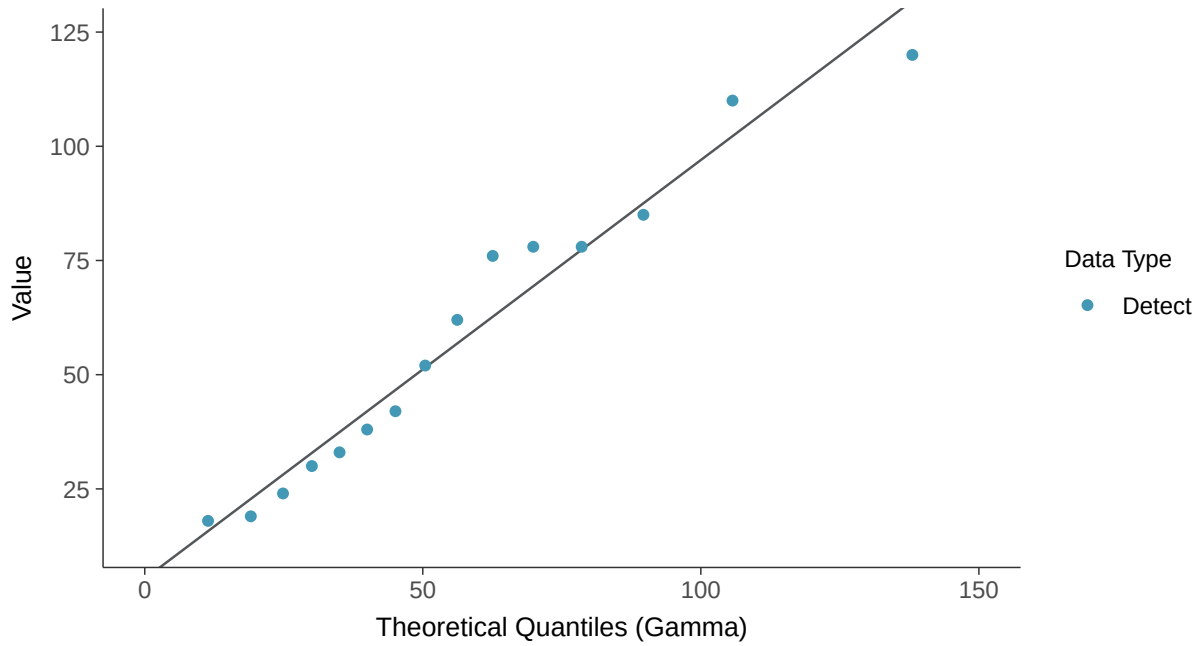
Lognormal Q-Q plot

Sulfate (as SO₄), MW-20 (mg/L)



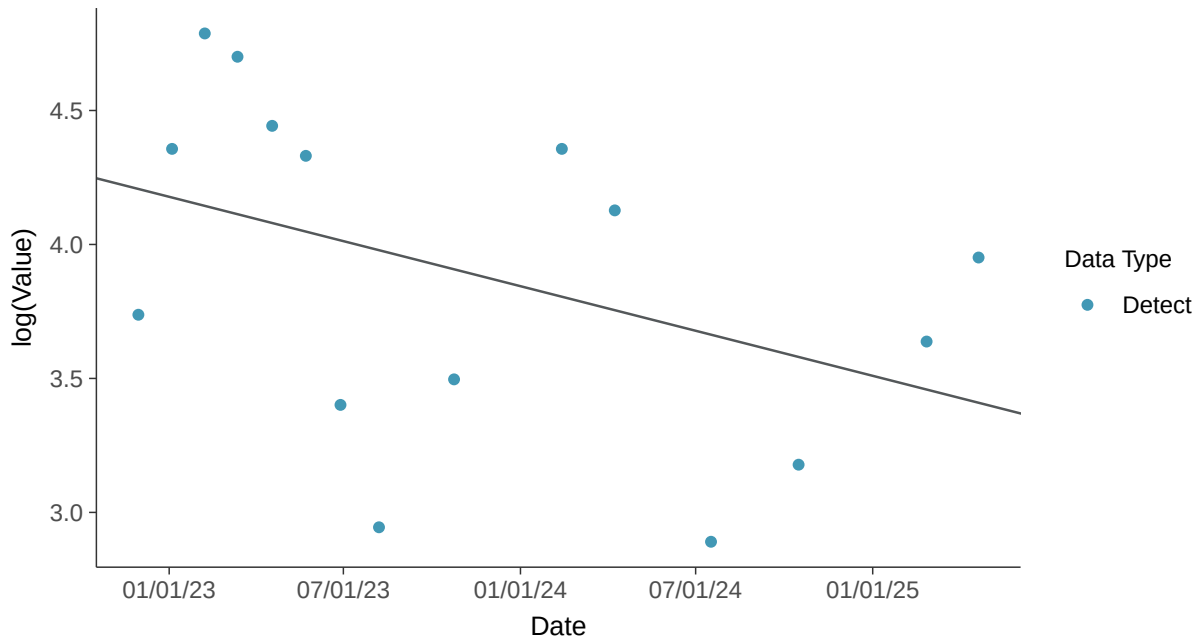
Gamma Q-Q plot

Sulfate (as SO₄), MW-20 (mg/L)



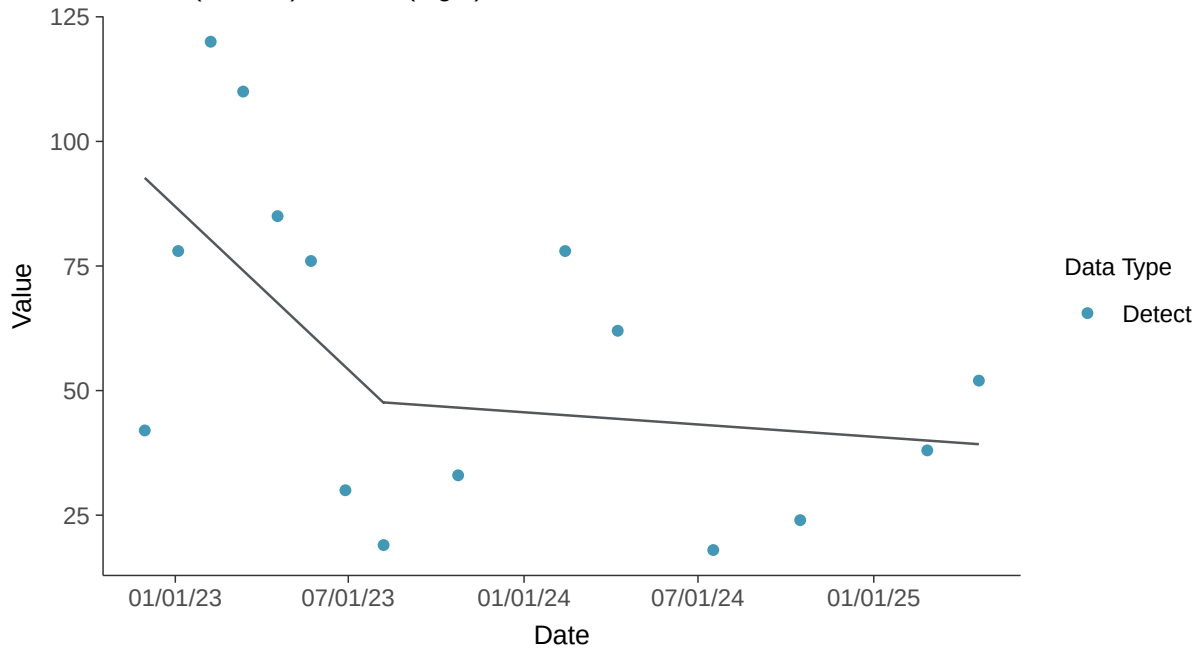
Trend Regression: Lognormal MLE

Sulfate (as SO₄), MW-20 (mg/L)



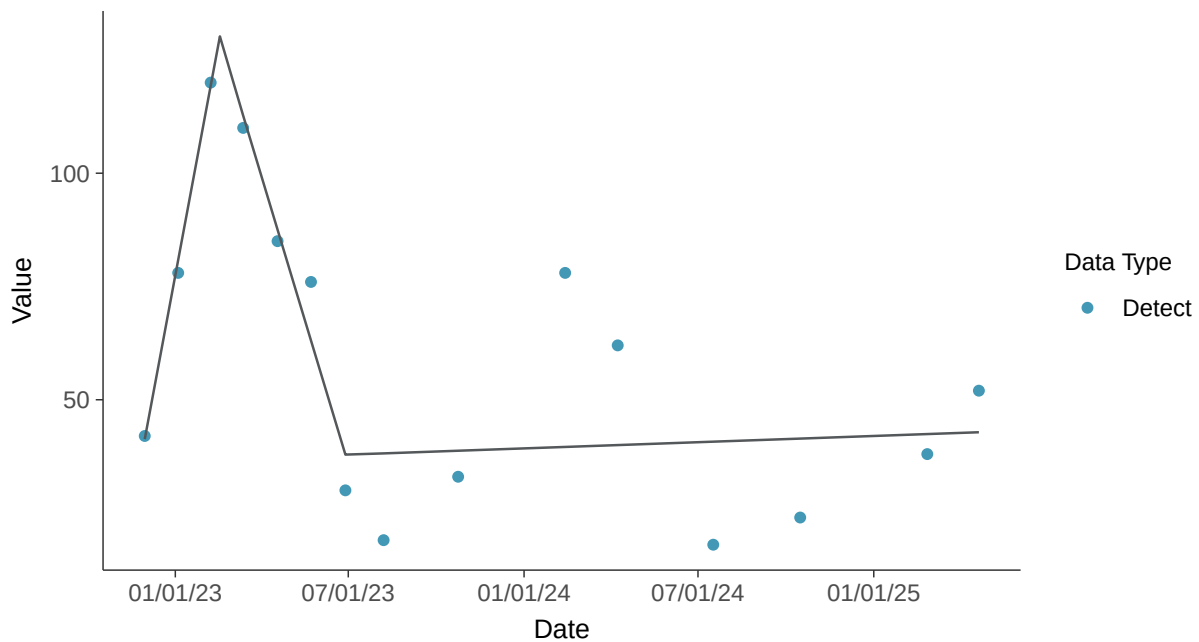
Trend Regression: Piecewise Linear-Linear

Sulfate (as SO₄), MW-20 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Sulfate (as SO₄), MW-20 (mg/L)

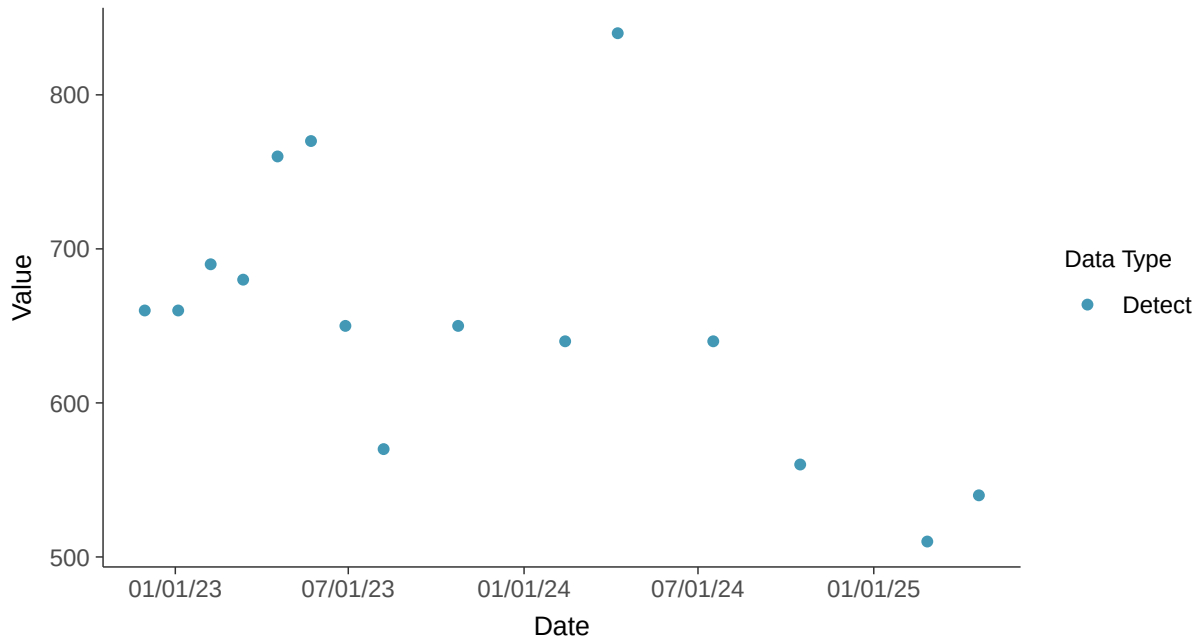


Appendix III: Total Dissolved Solids, MW-20

ID: 30_1_3_126

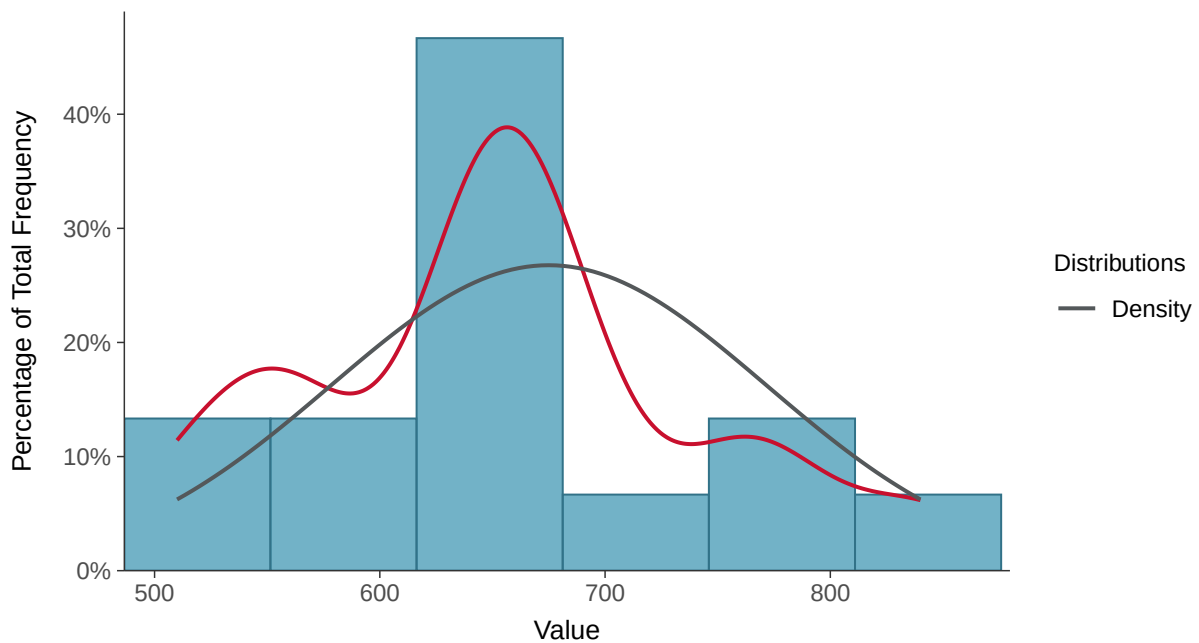
Scatter Plot

Total Dissolved Solids, MW-20 (mg/L)



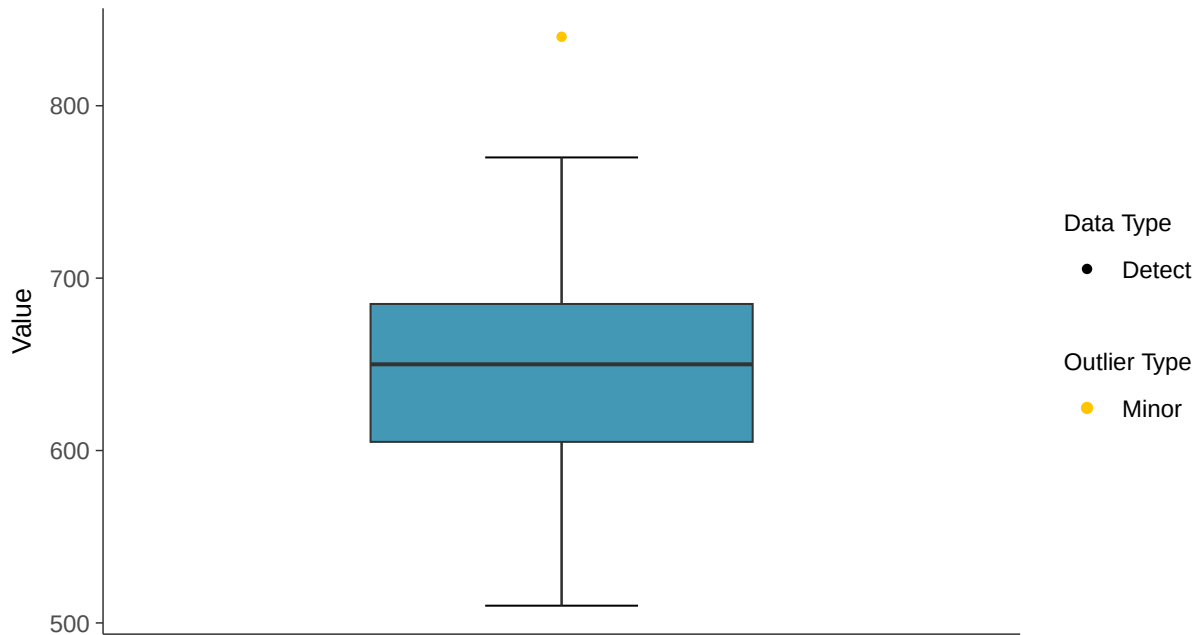
Histogram

Total Dissolved Solids, MW-20 (mg/L)



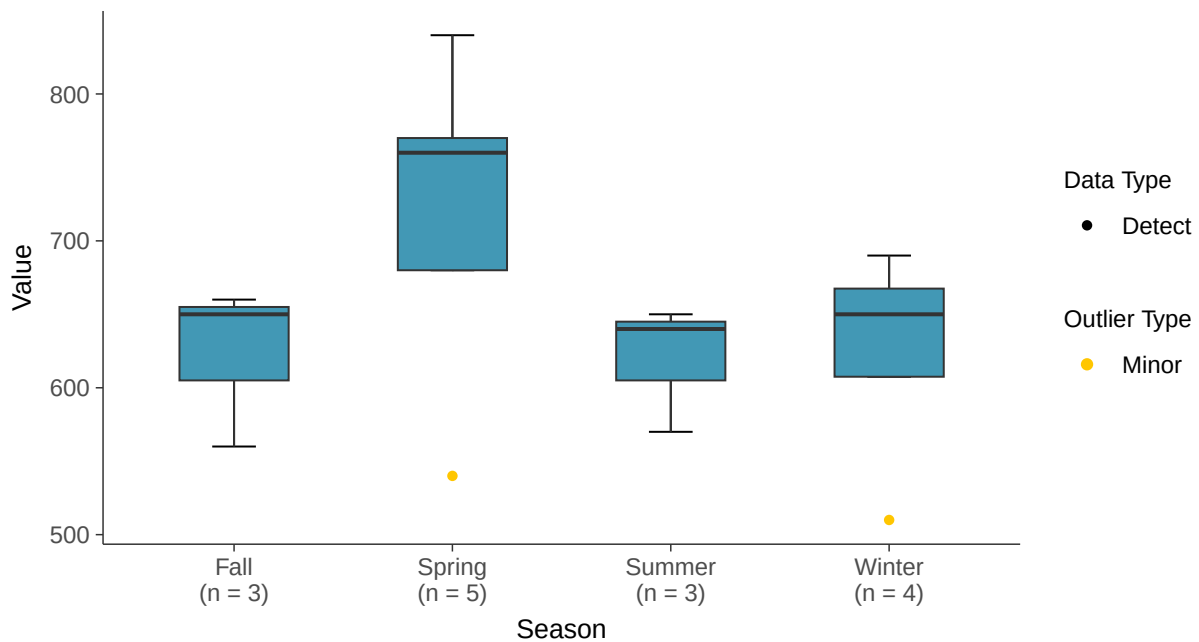
Boxplot

Total Dissolved Solids, MW-20 (mg/L)



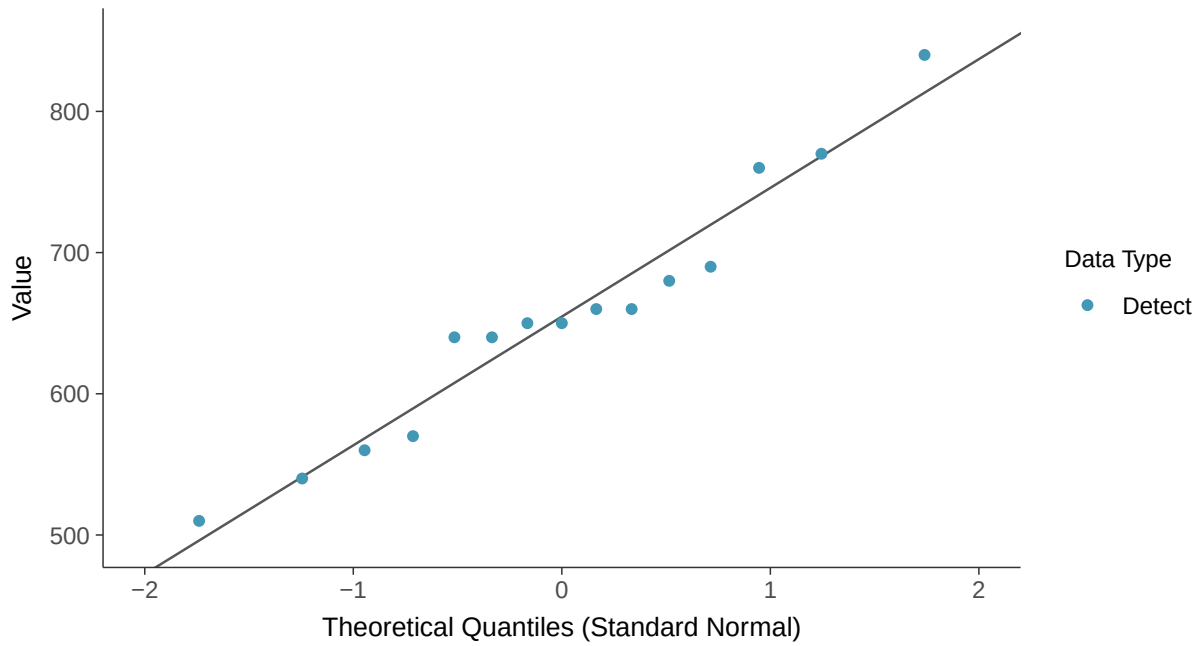
Boxplot by Season

Total Dissolved Solids, MW-20 (mg/L)



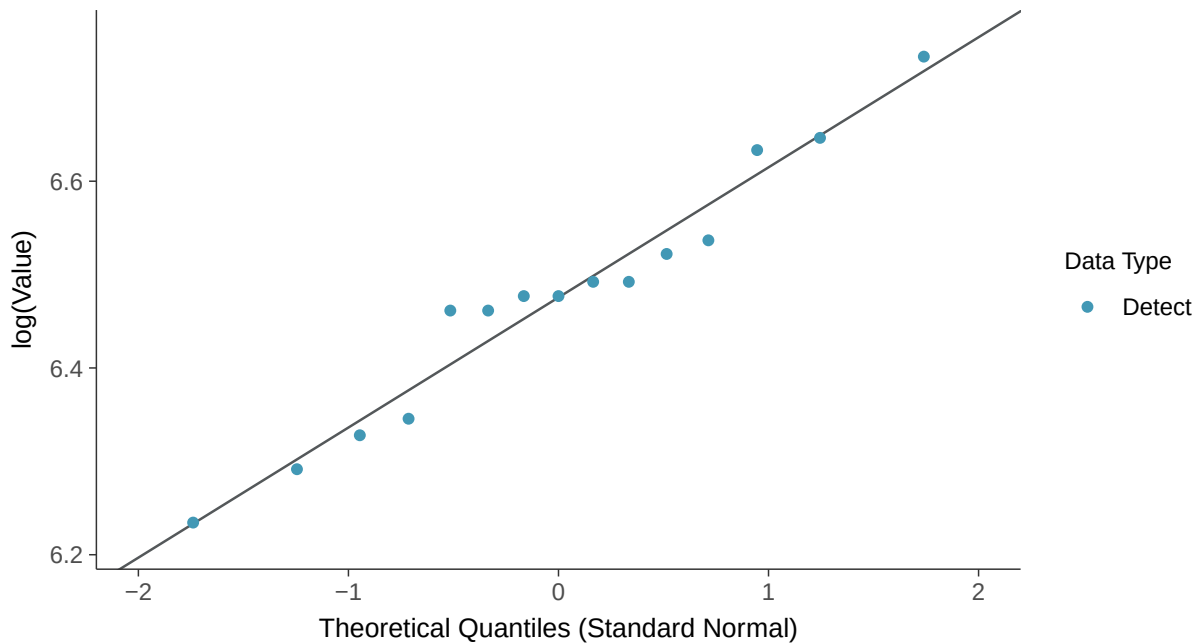
Normal Q-Q plot

Total Dissolved Solids, MW-20 (mg/L)



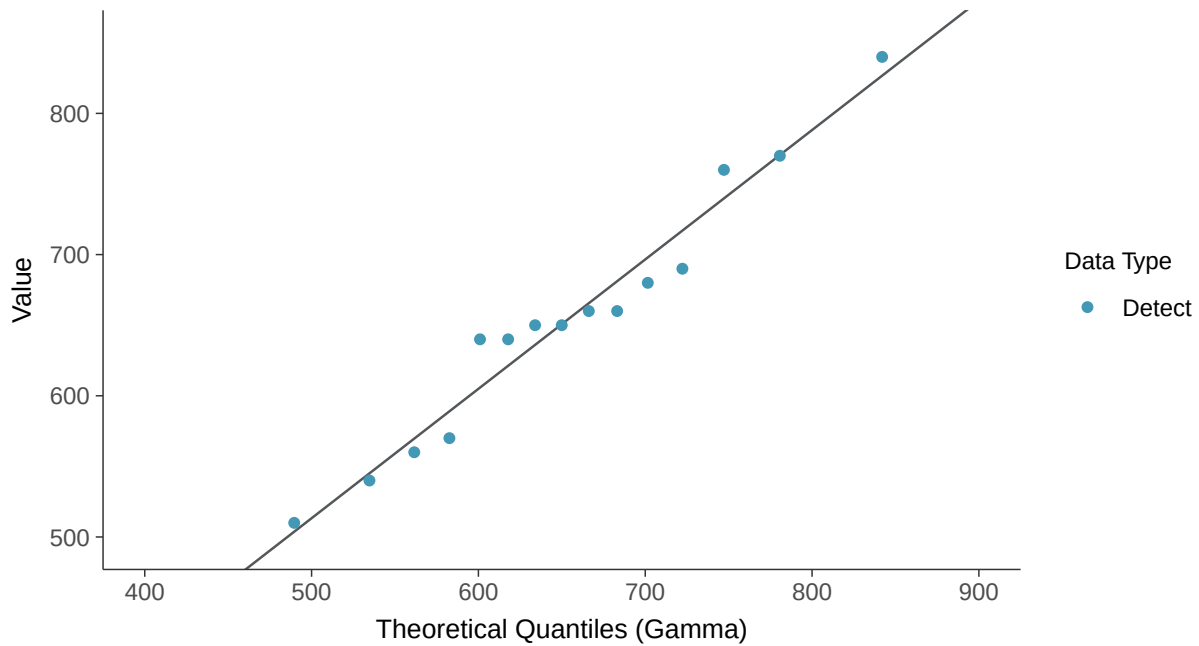
Lognormal Q-Q plot

Total Dissolved Solids, MW-20 (mg/L)



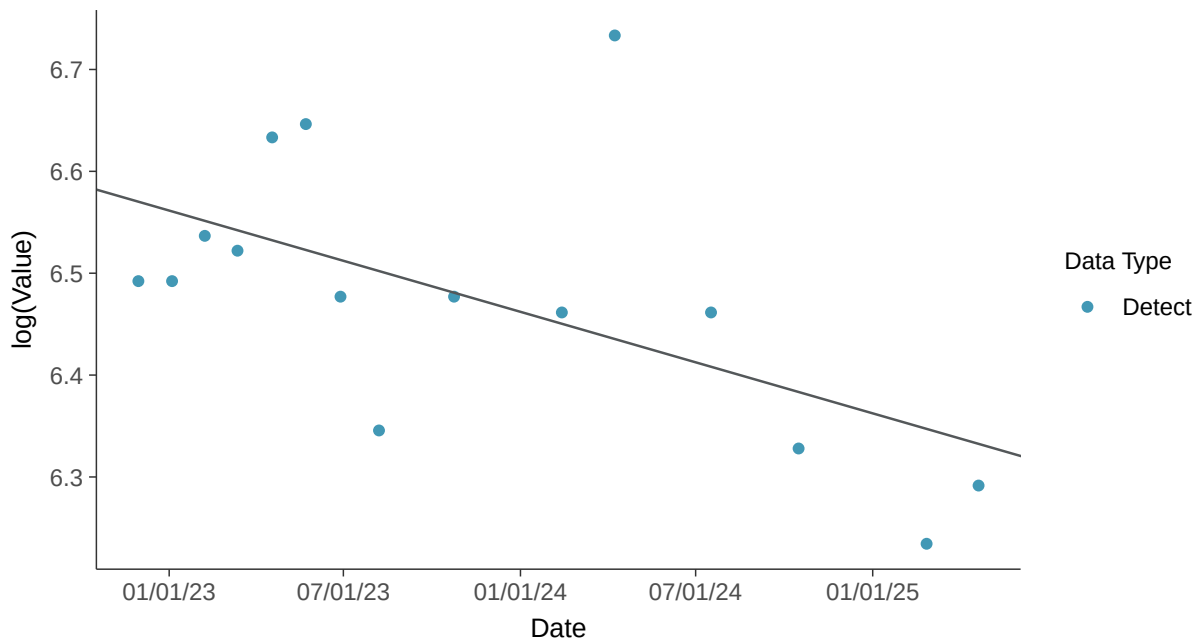
Gamma Q-Q plot

Total Dissolved Solids, MW-20 (mg/L)



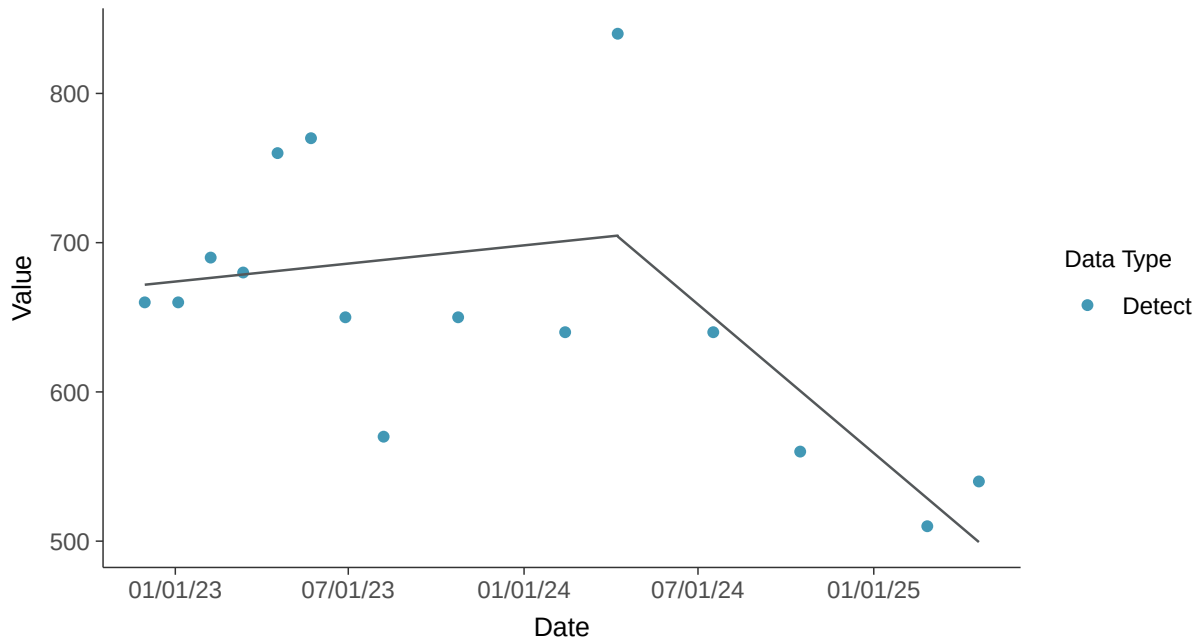
Trend Regression: Lognormal MLE

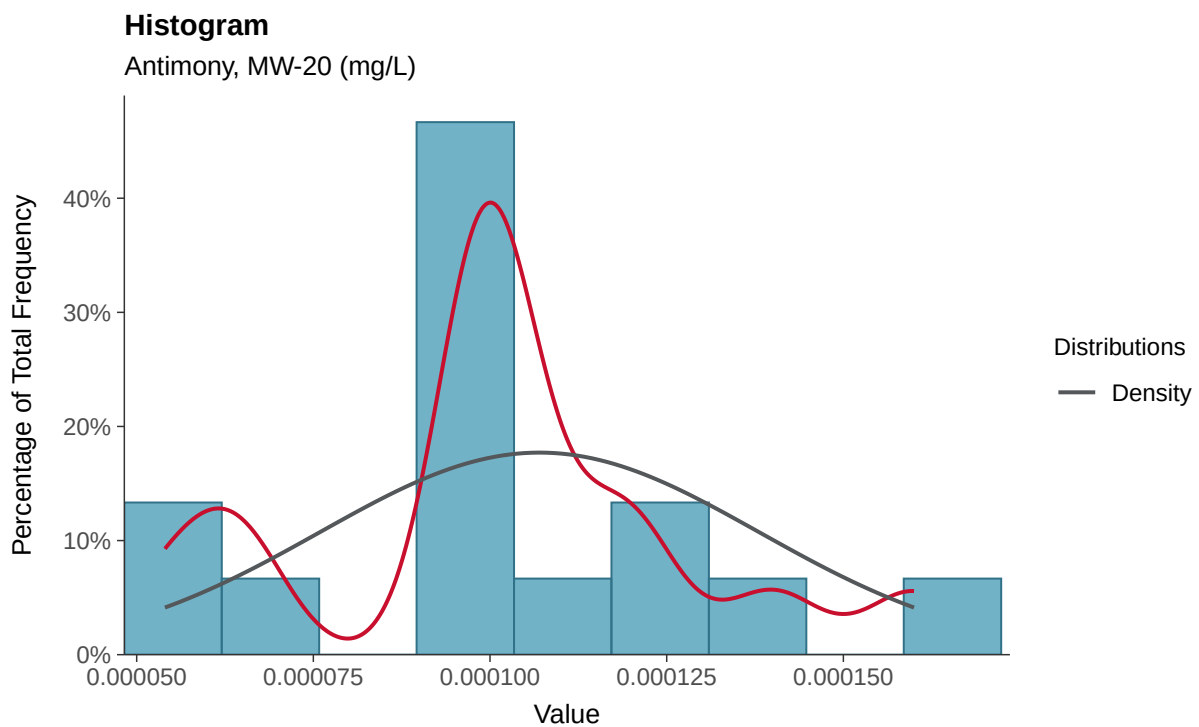
Total Dissolved Solids, MW-20 (mg/L)

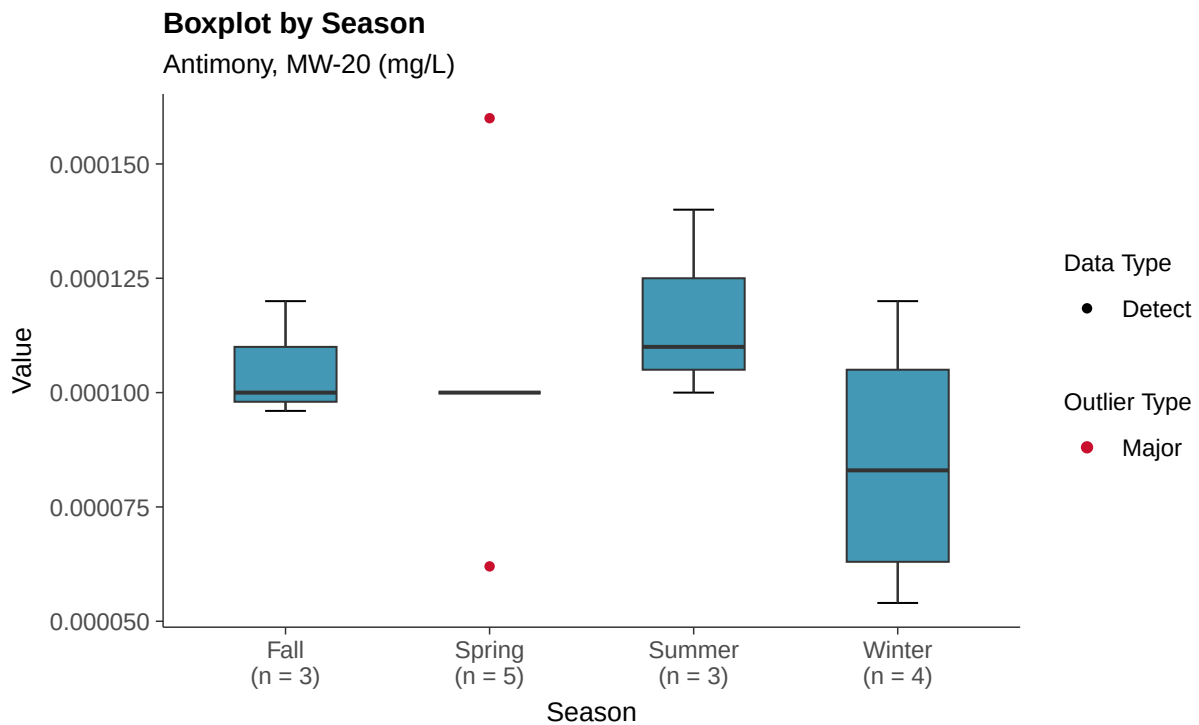
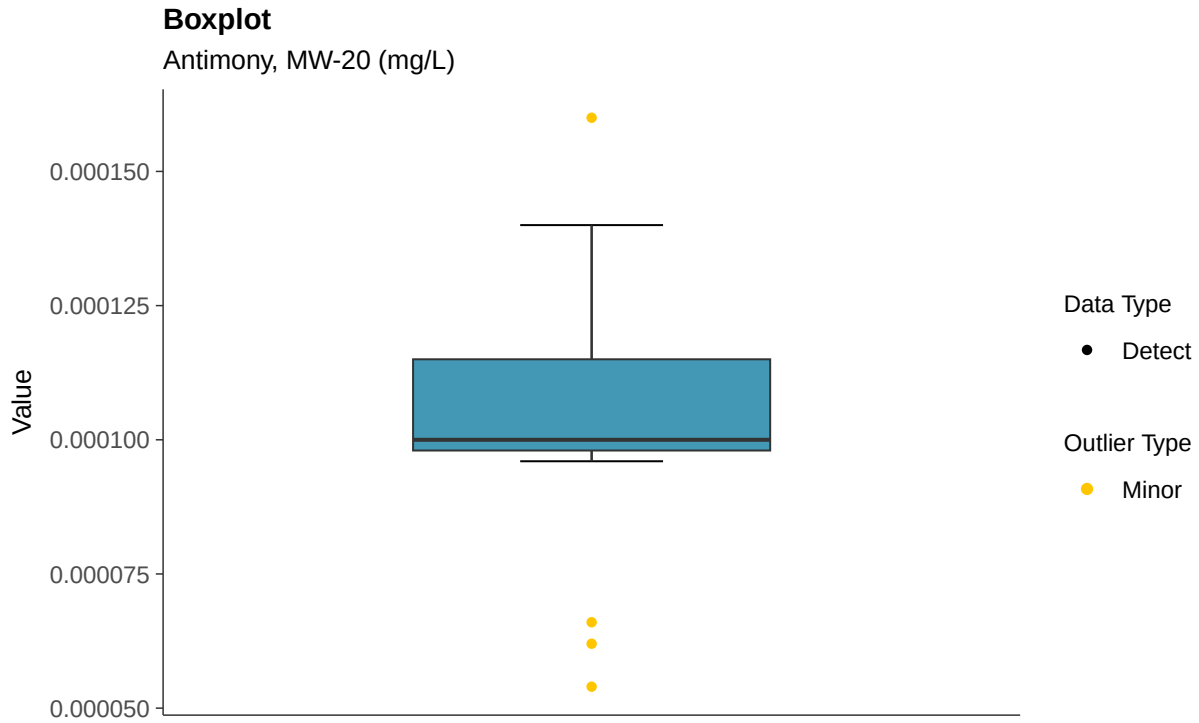


Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-20 (mg/L)

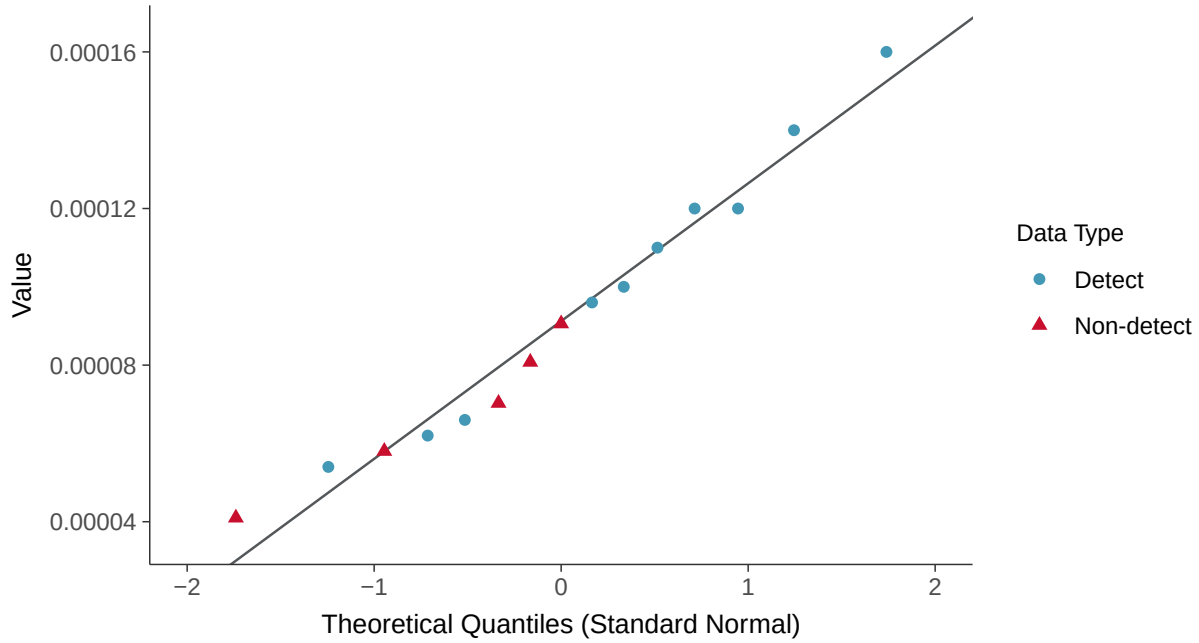






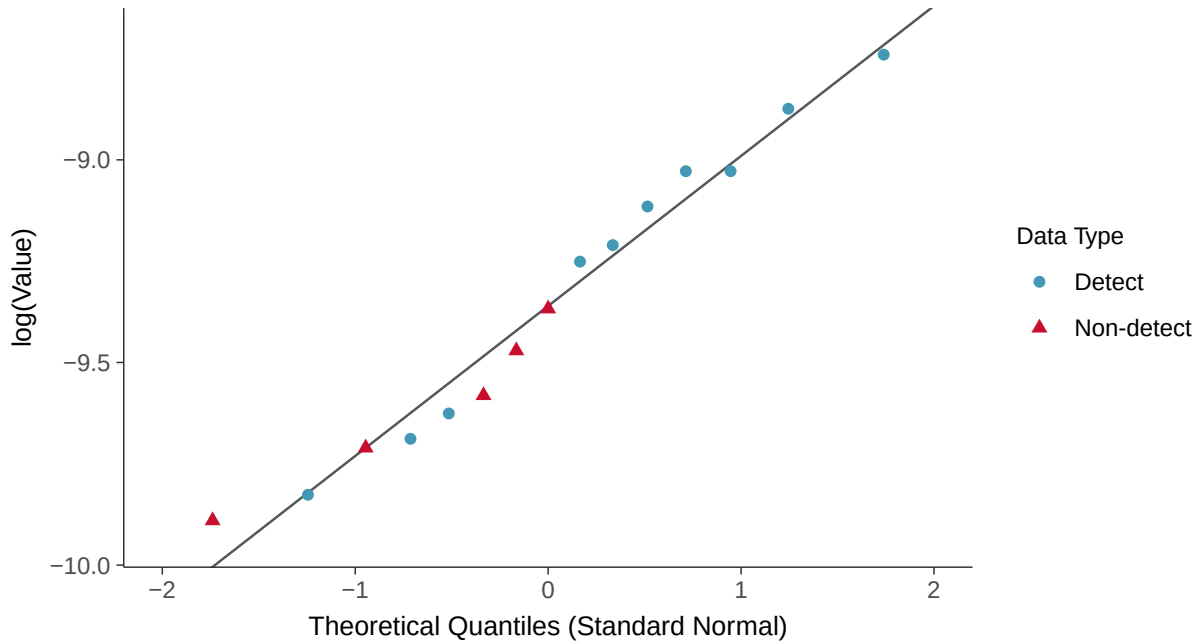
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-20 (mg/L)



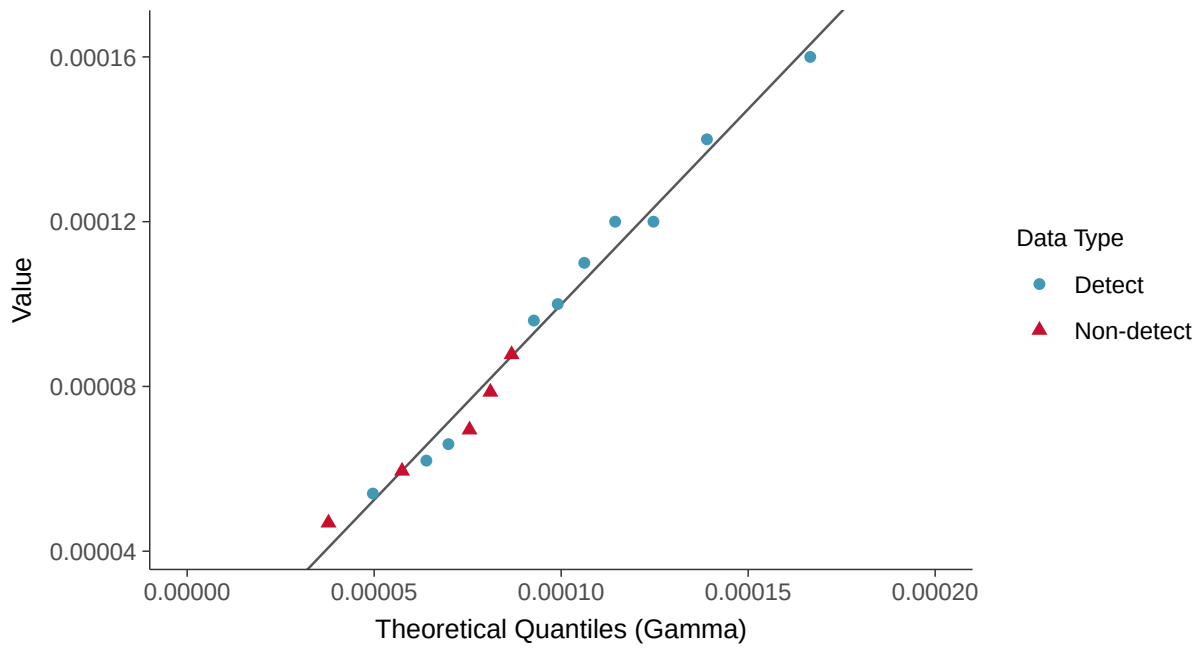
Lognormal Q-Q plot using ROS Imputed Estimates

Antimony, MW-20 (mg/L)



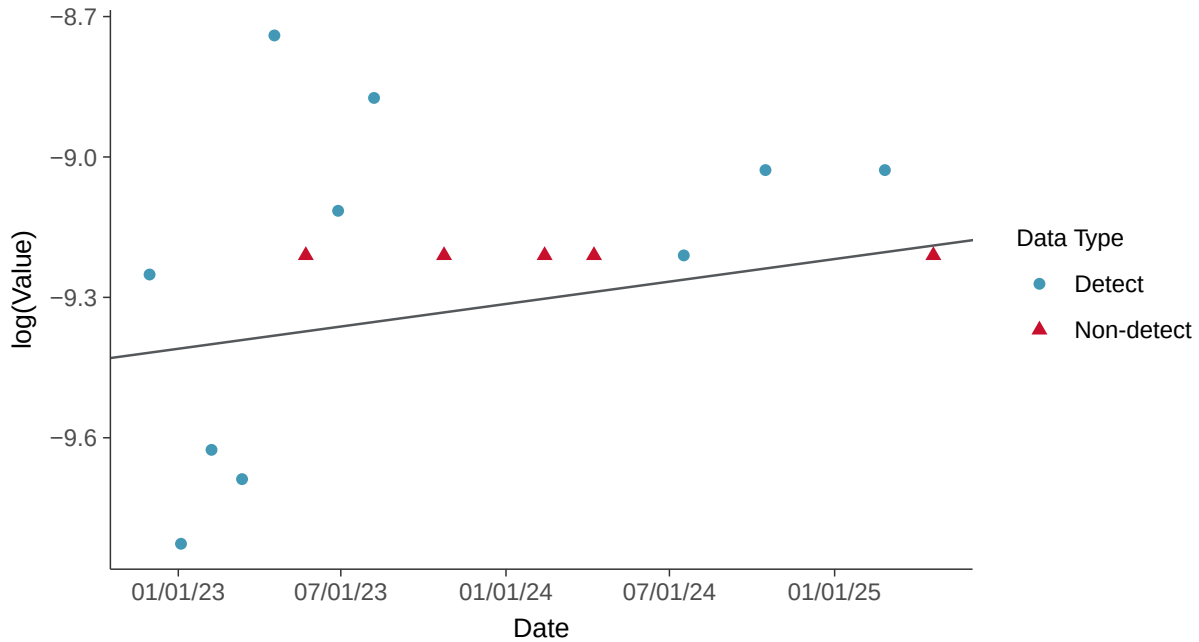
Gamma Q-Q plot using ROS Imputed Estimates

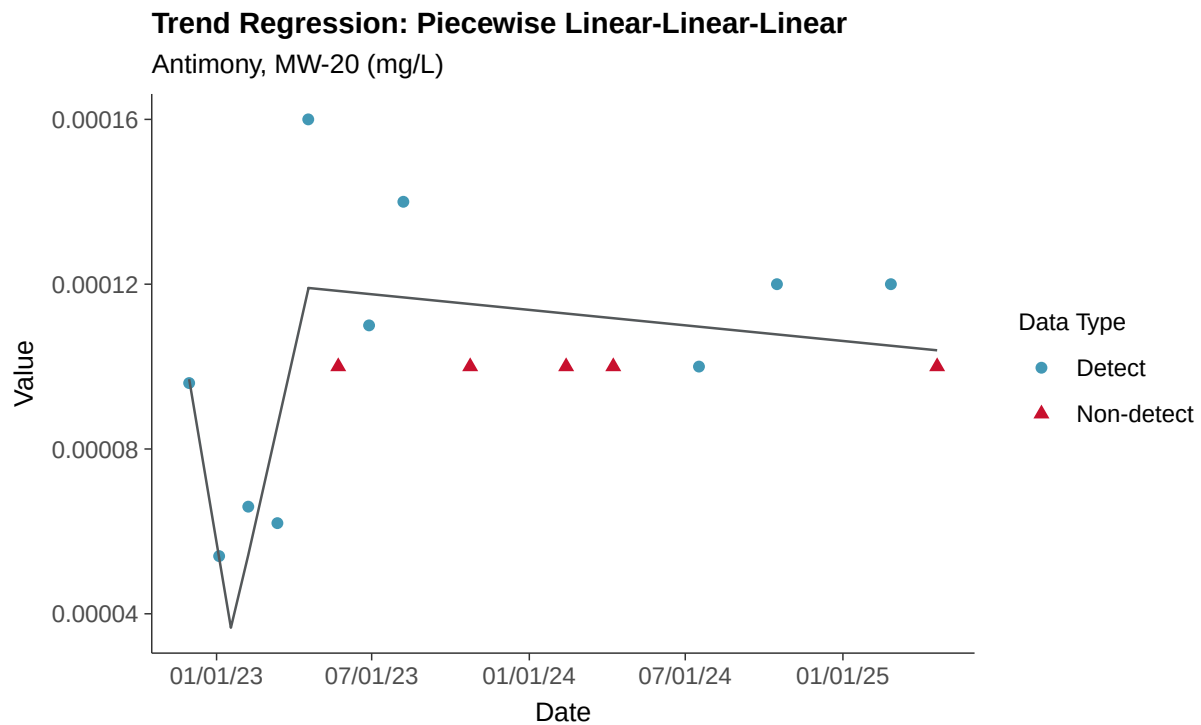
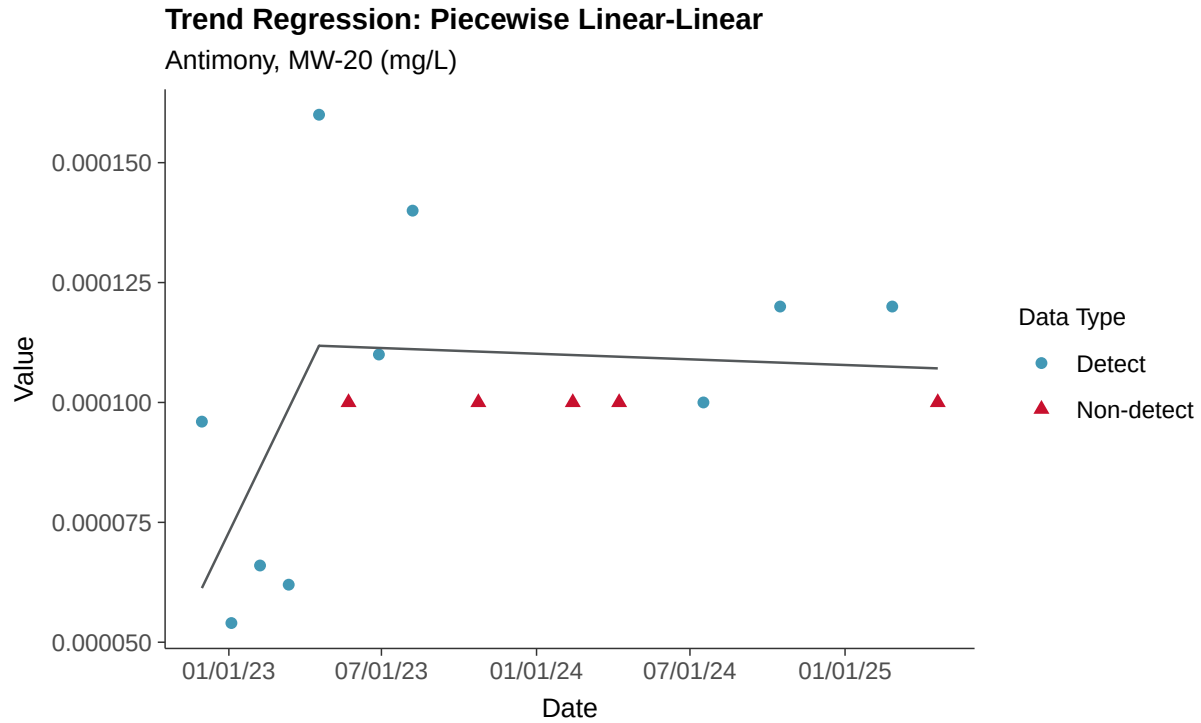
Antimony, MW-20 (mg/L)



Trend Regression: Lognormal MLE

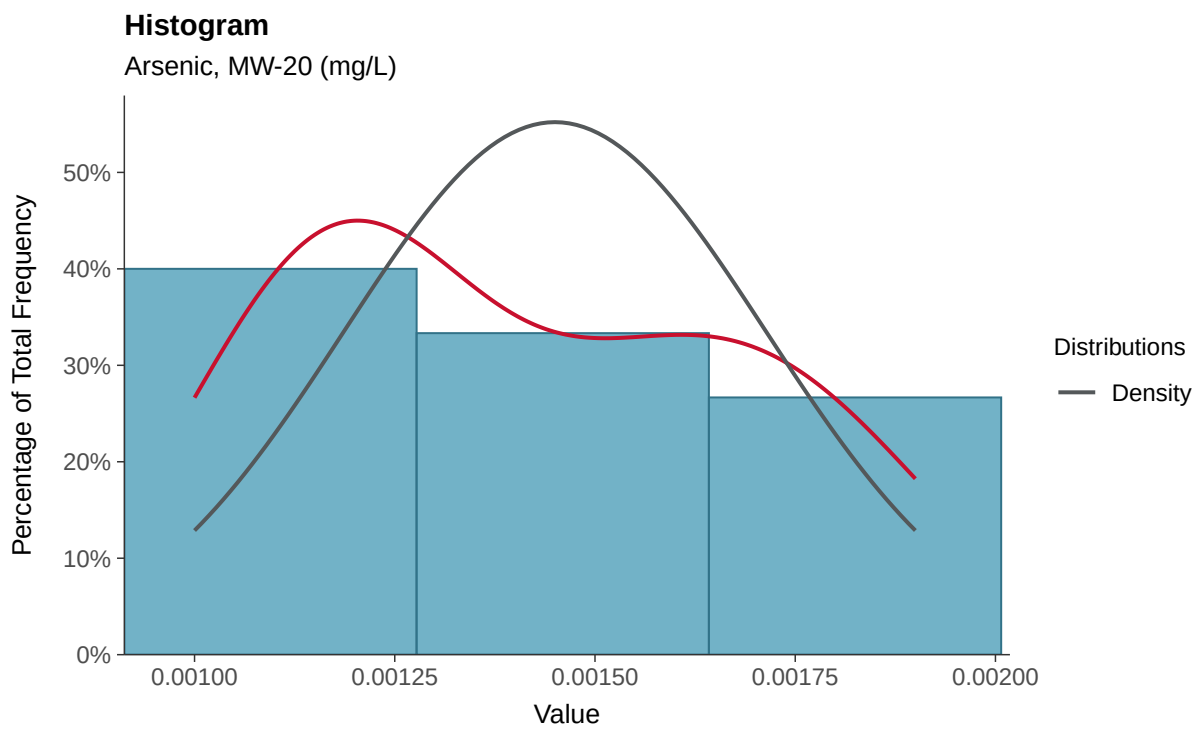
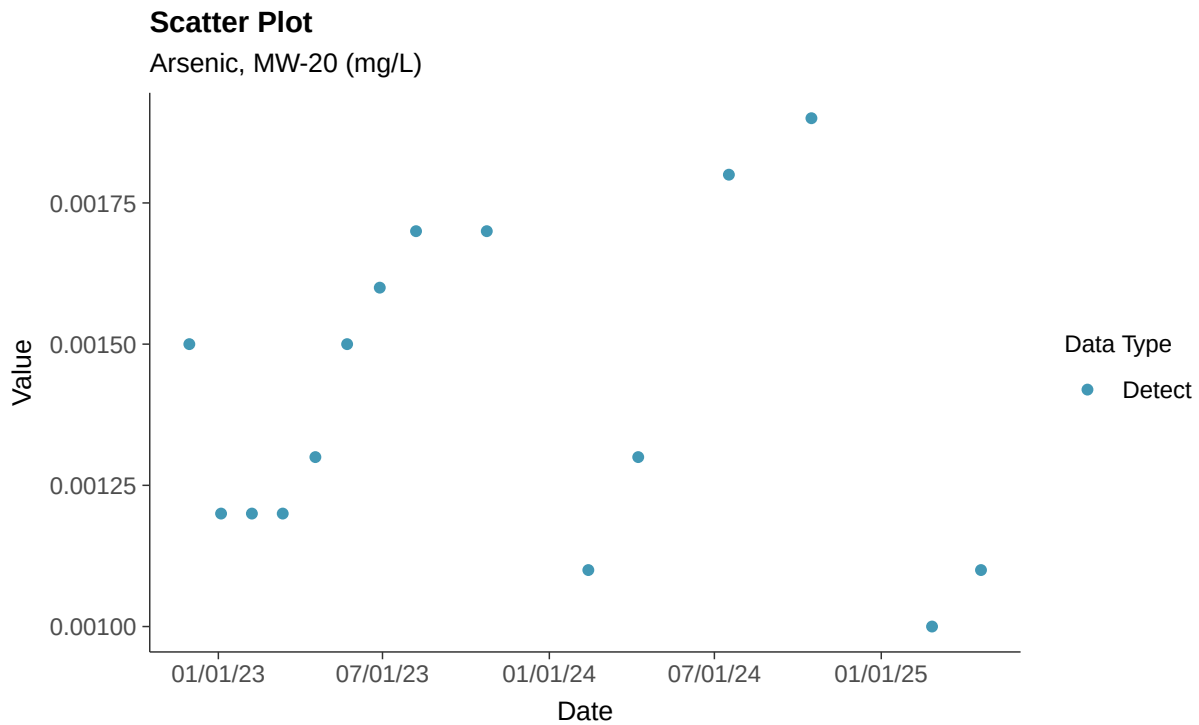
Antimony, MW-20 (mg/L)





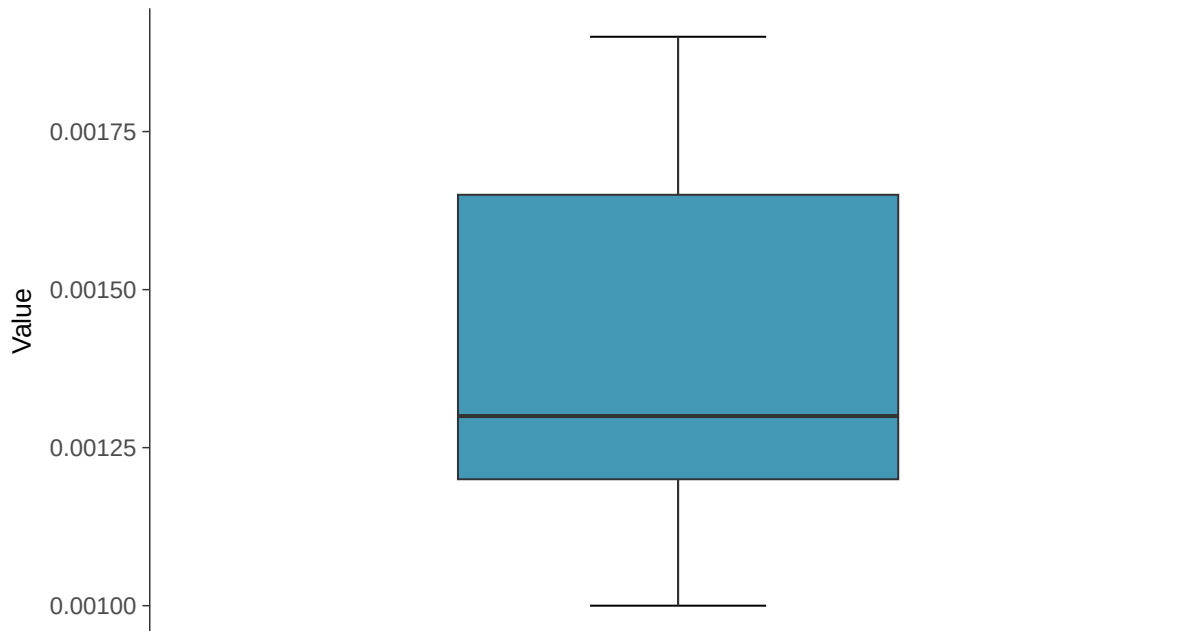
Appendix IV: Arsenic, MW-20

ID: 30_1_4_102



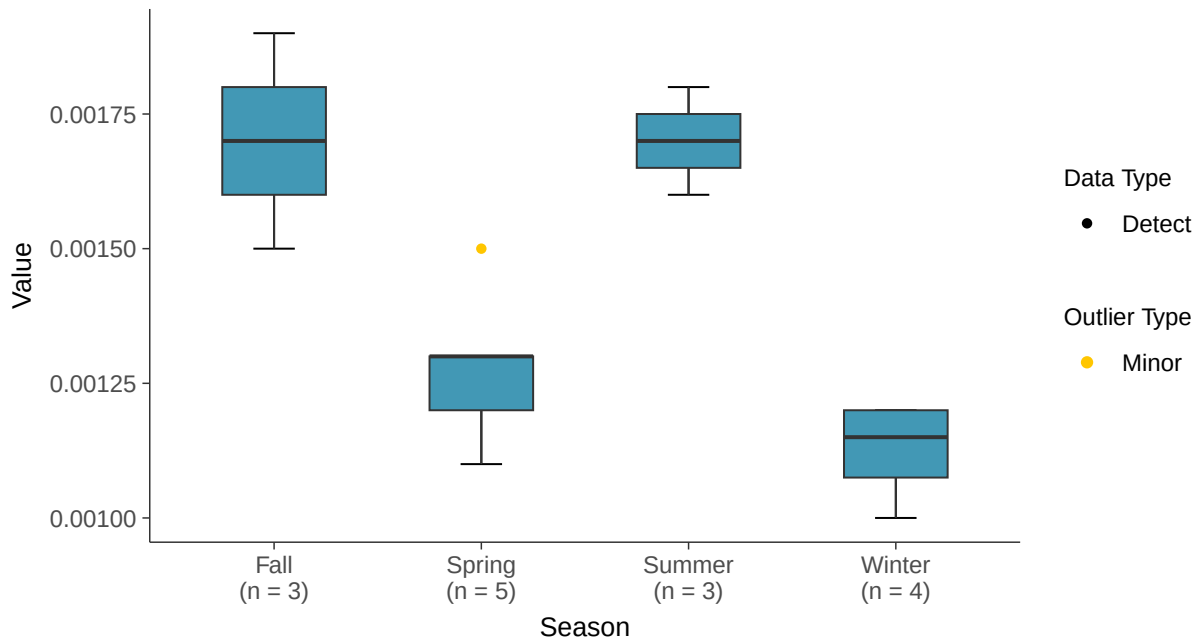
Boxplot

Arsenic, MW-20 (mg/L)



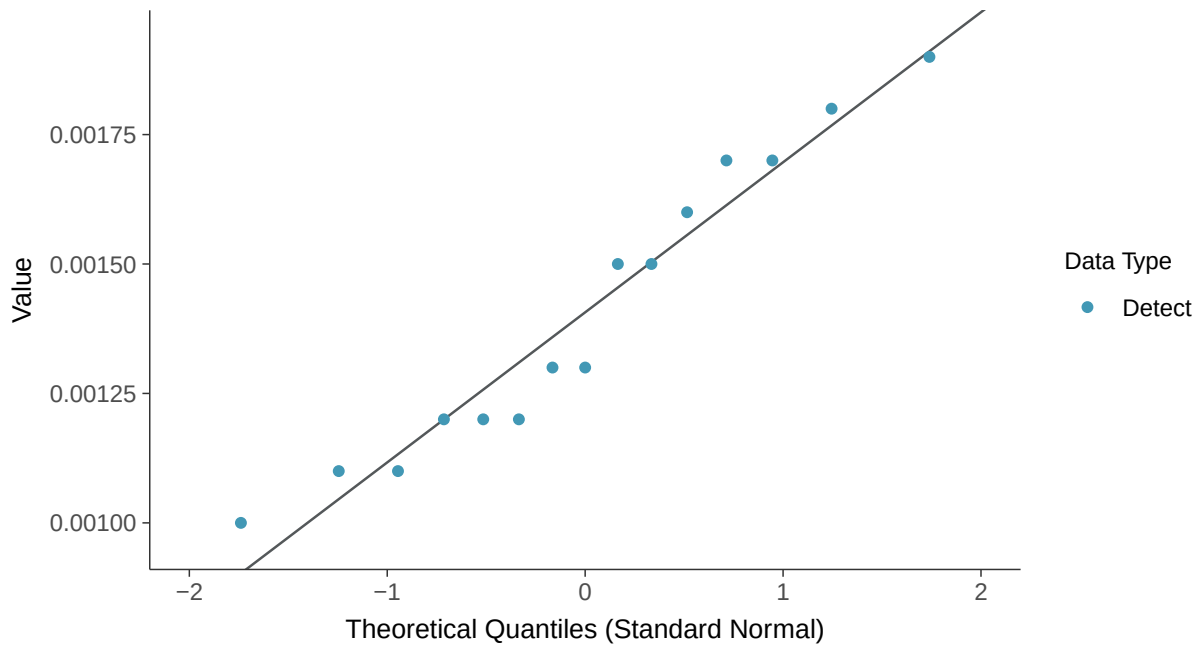
Boxplot by Season

Arsenic, MW-20 (mg/L)



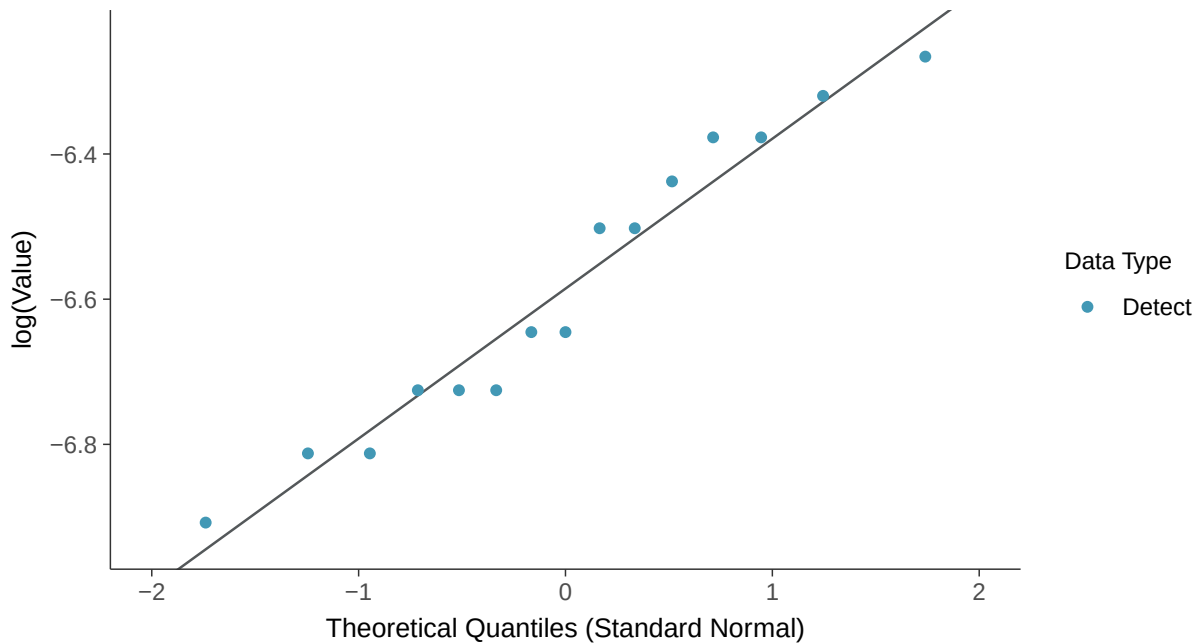
Normal Q-Q plot

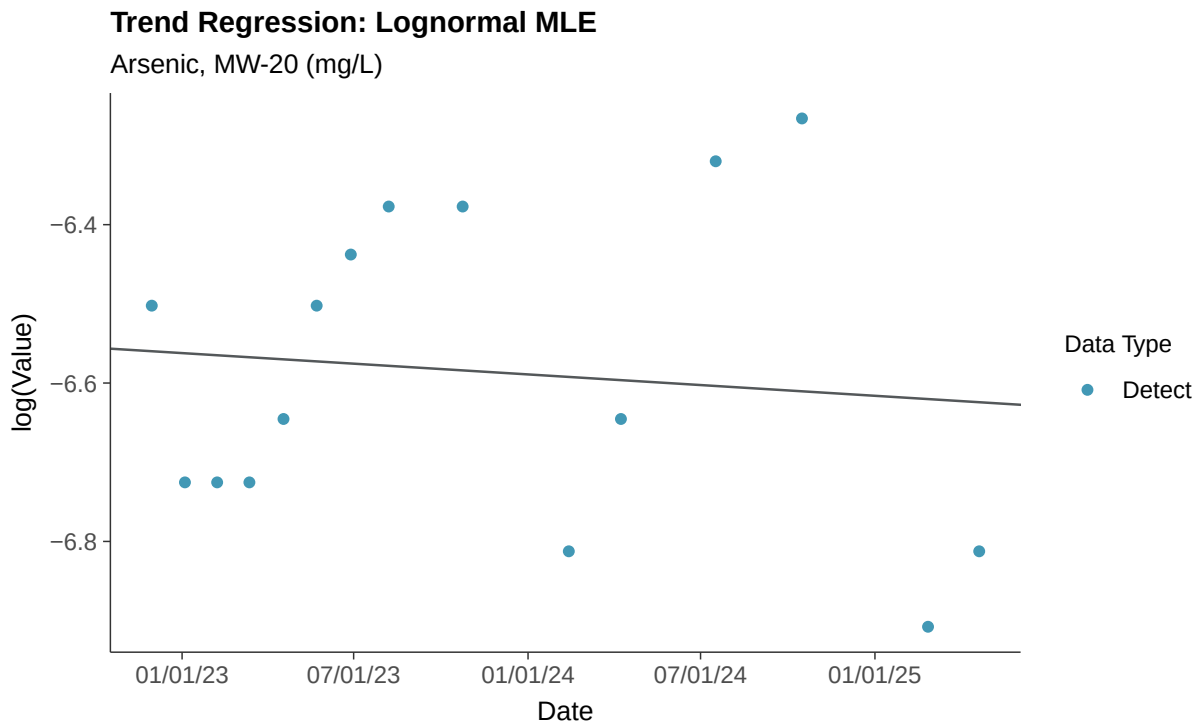
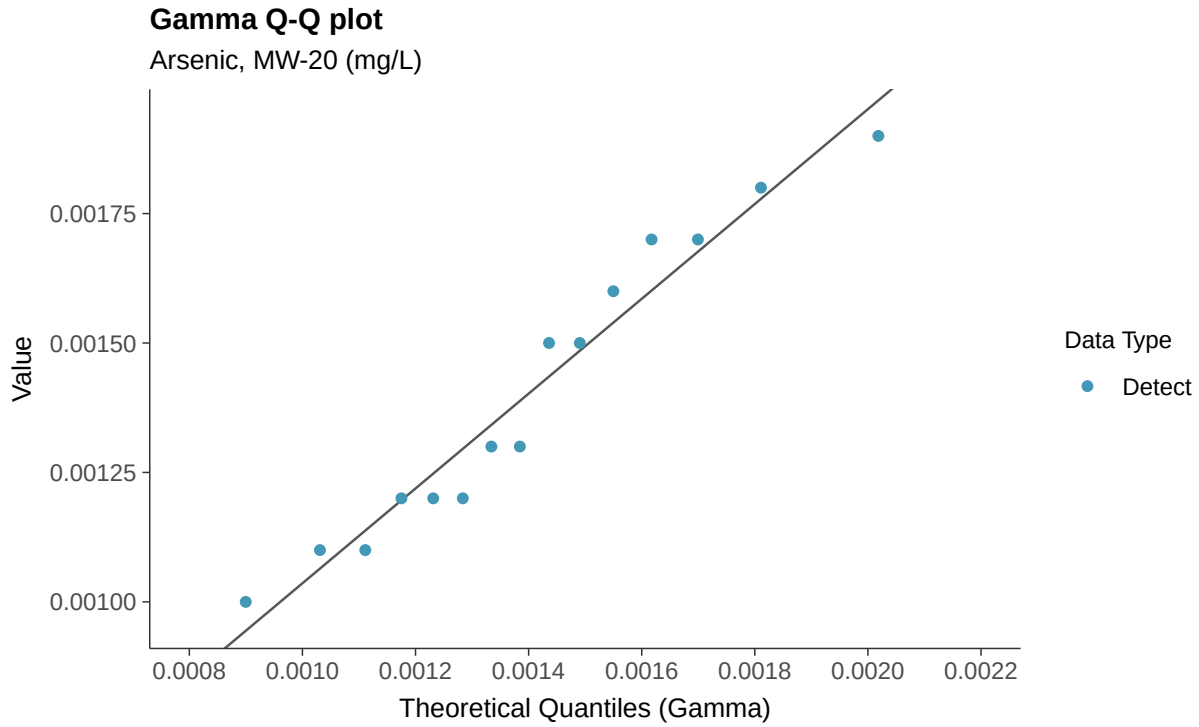
Arsenic, MW-20 (mg/L)



Lognormal Q-Q plot

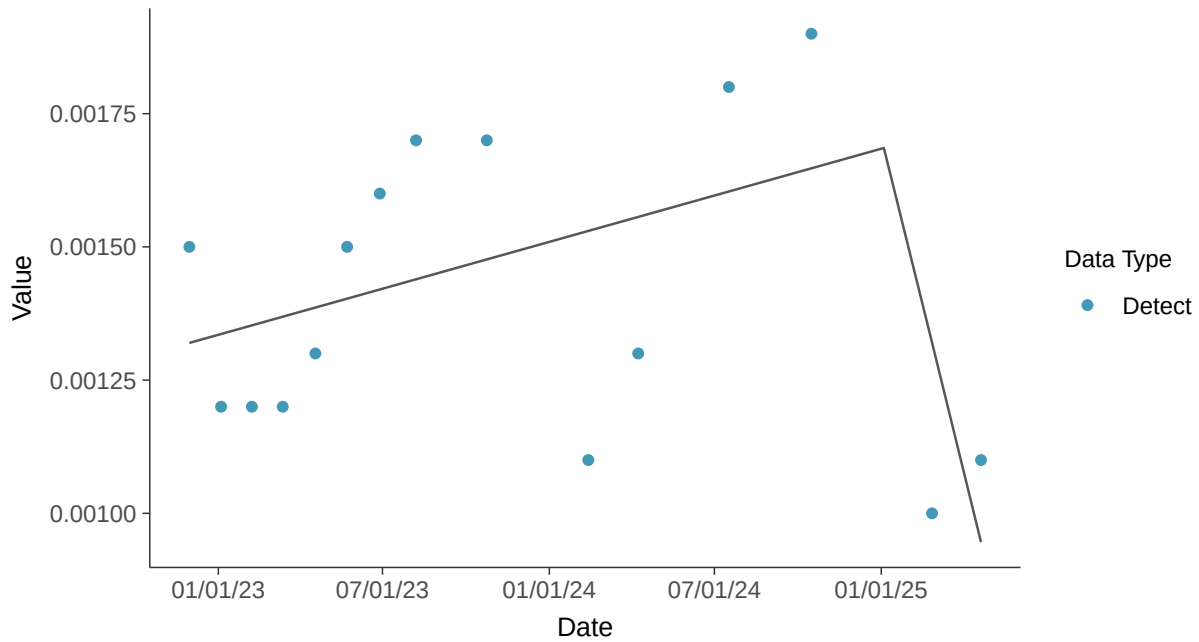
Arsenic, MW-20 (mg/L)





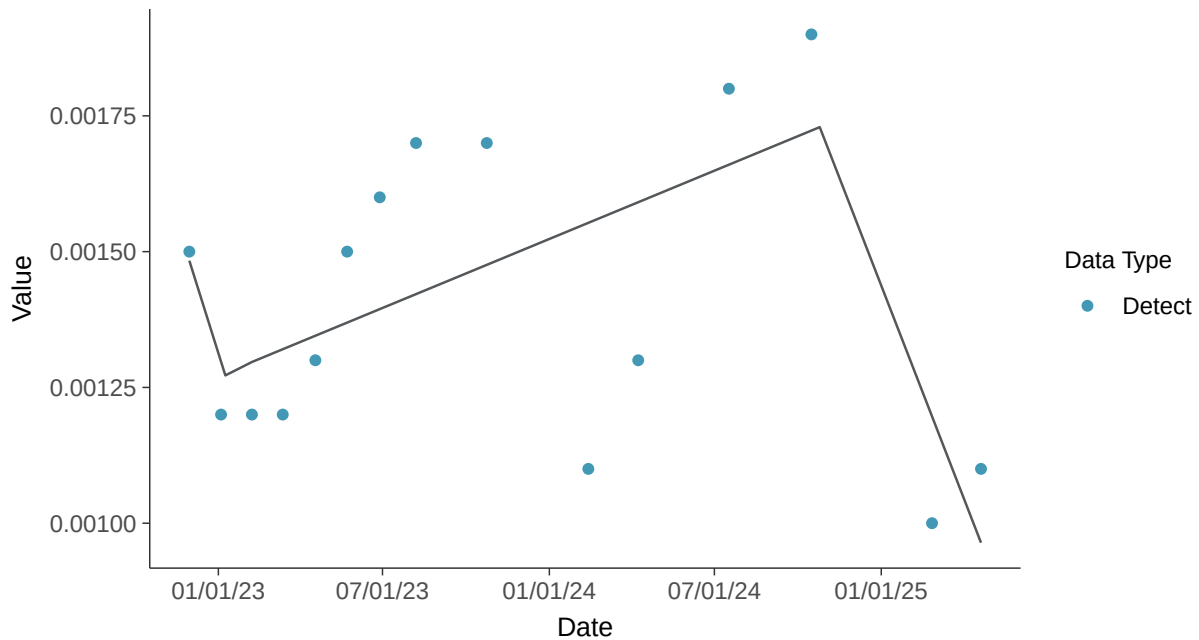
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-20 (mg/L)



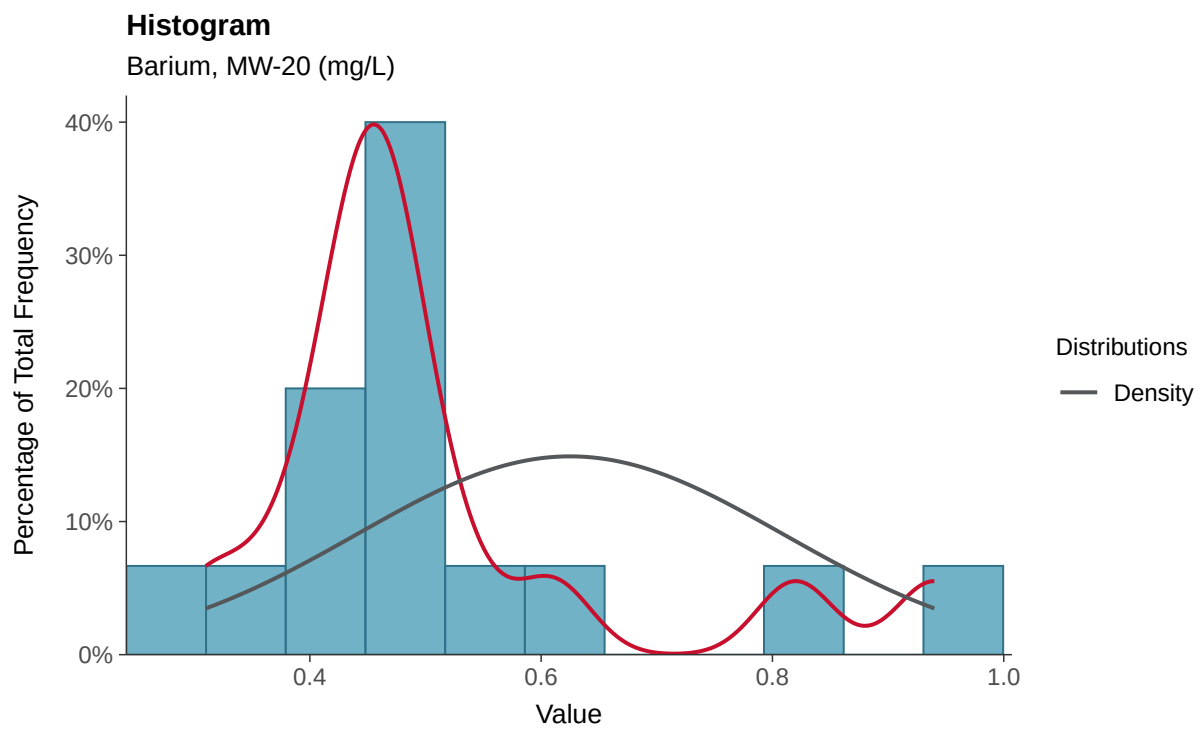
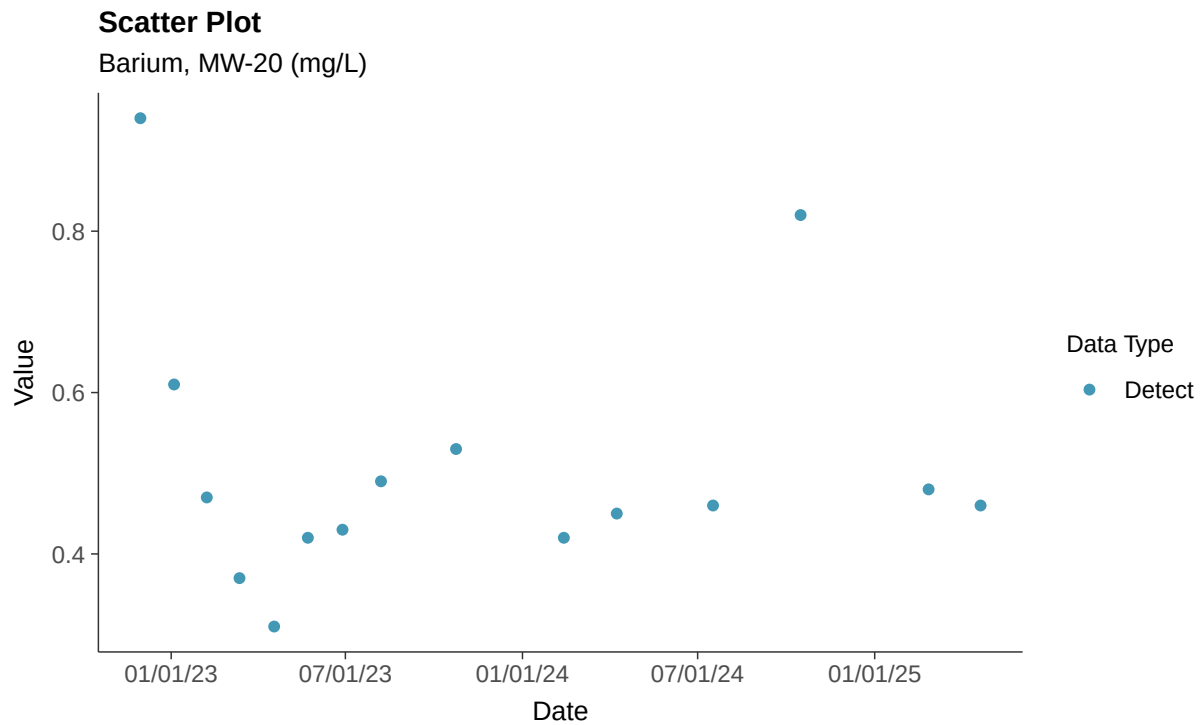
Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-20 (mg/L)



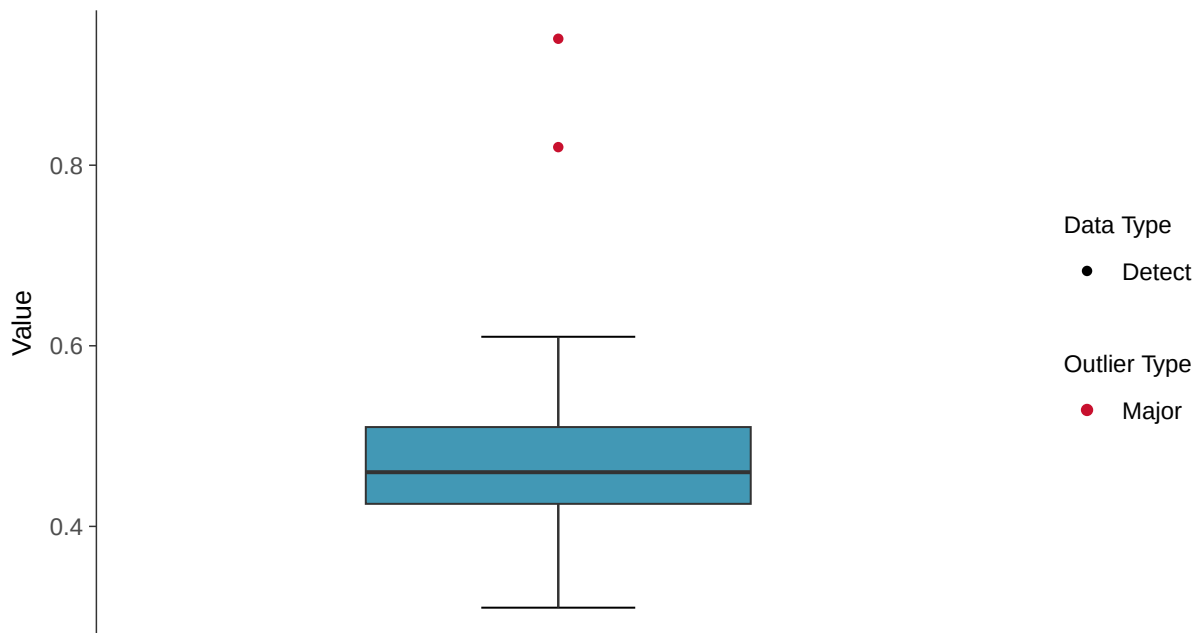
Appendix IV: Barium, MW-20

ID: 30_1_4_103



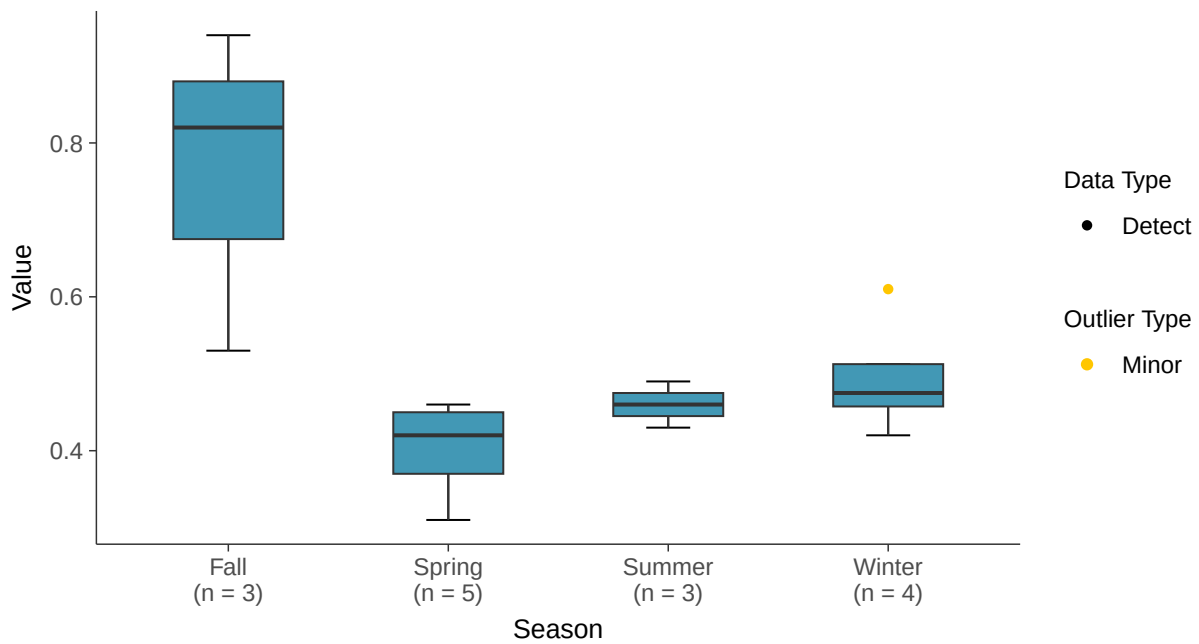
Boxplot

Barium, MW-20 (mg/L)



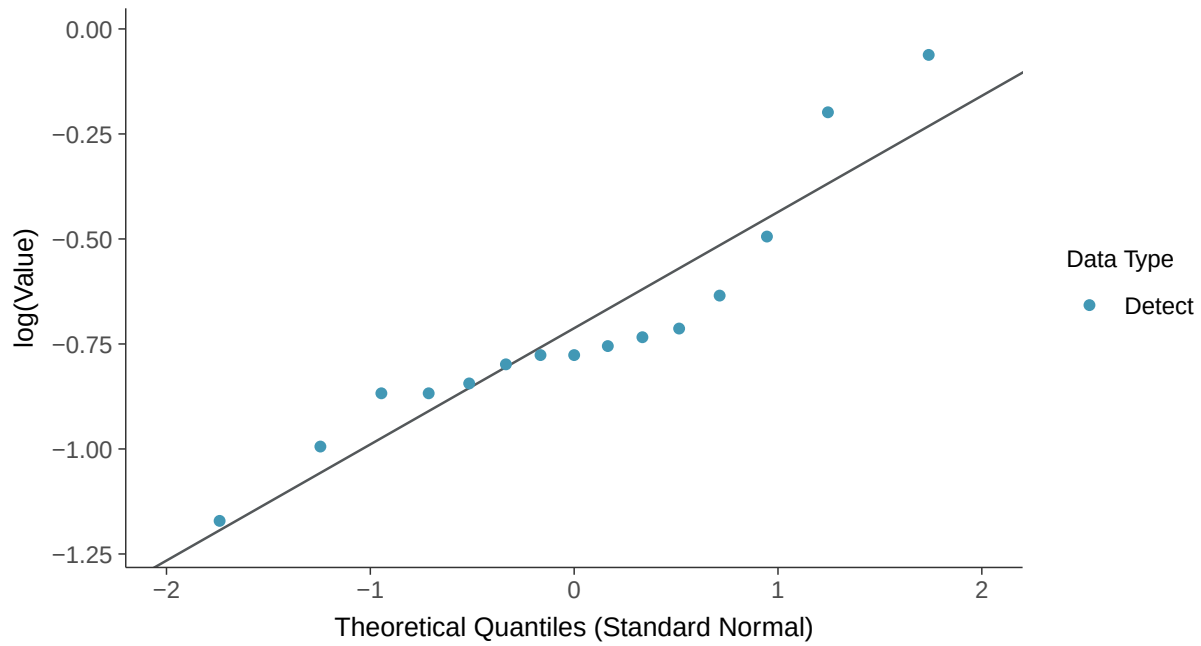
Boxplot by Season

Barium, MW-20 (mg/L)



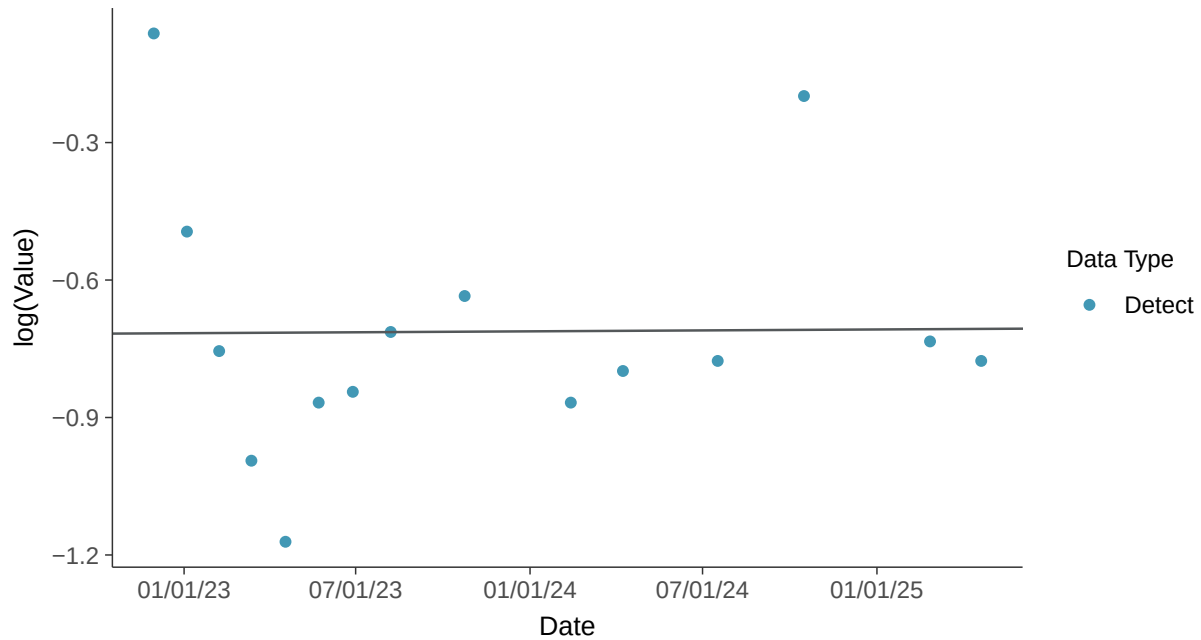
Lognormal Q-Q plot

Barium, MW-20 (mg/L)



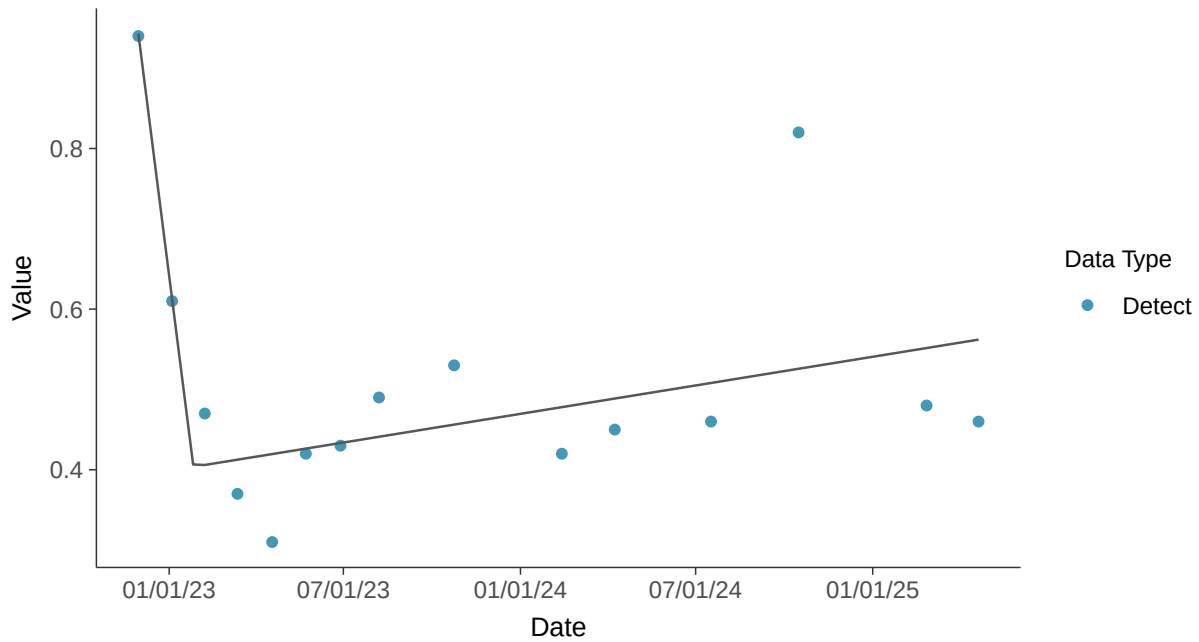
Trend Regression: Lognormal MLE

Barium, MW-20 (mg/L)



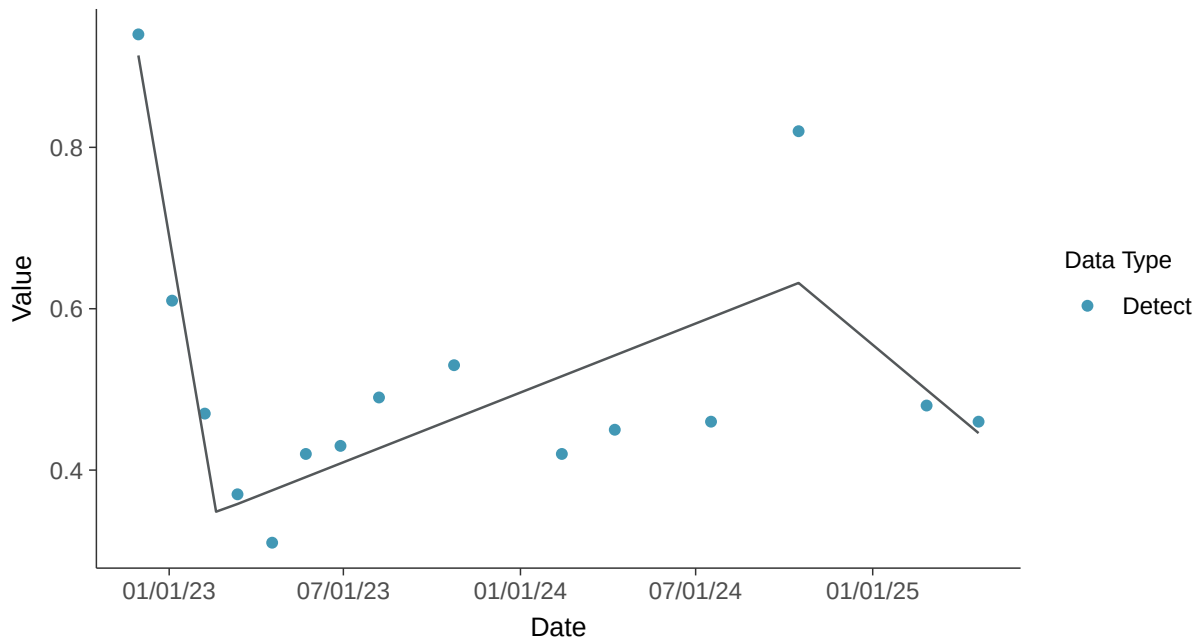
Trend Regression: Piecewise Linear-Linear

Barium, MW-20 (mg/L)



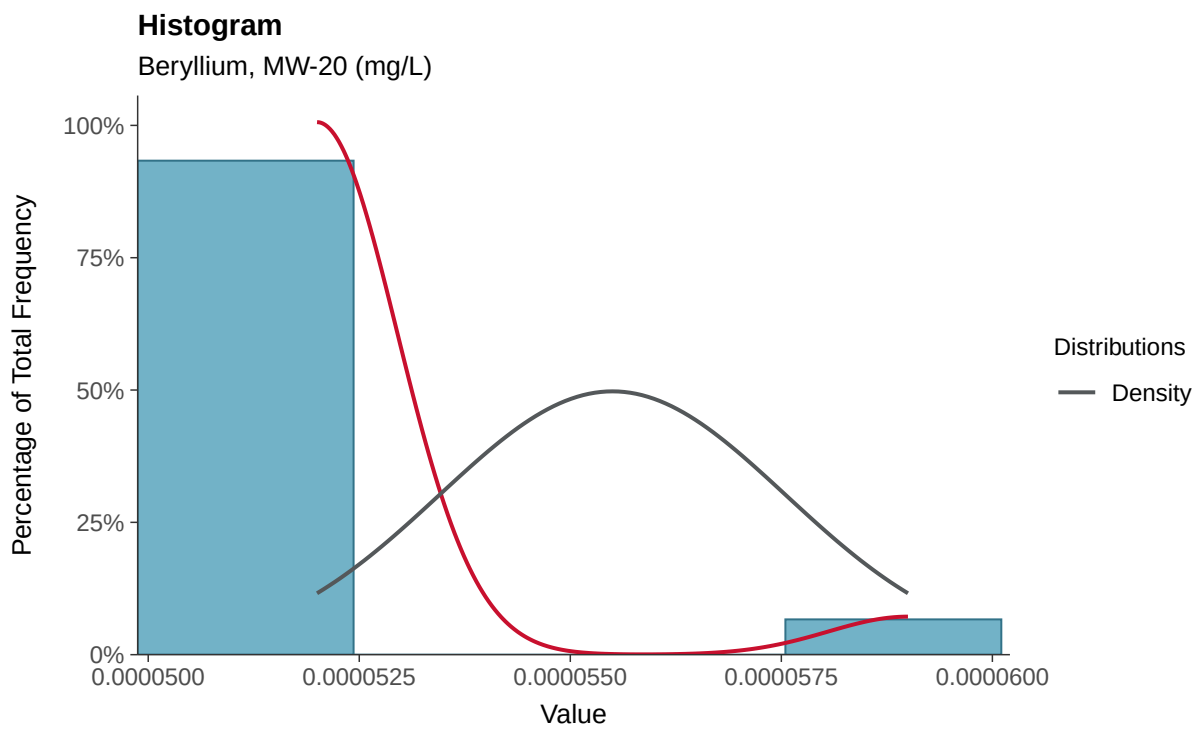
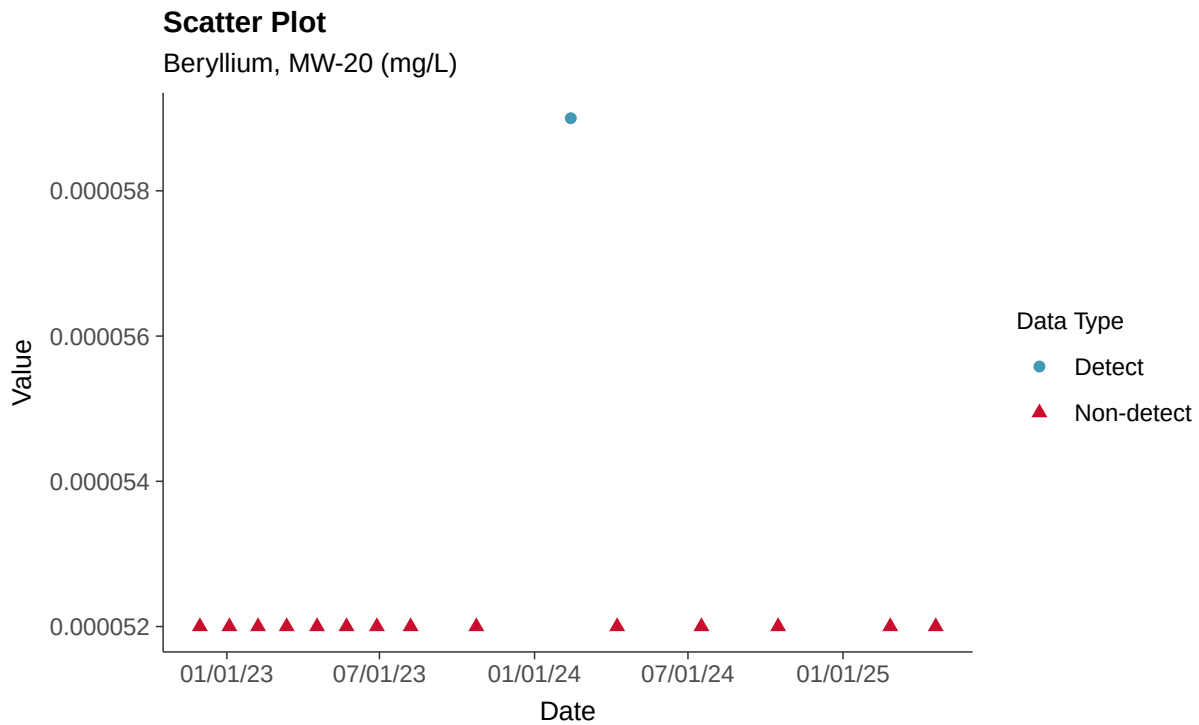
Trend Regression: Piecewise Linear-Linear-Linear

Barium, MW-20 (mg/L)



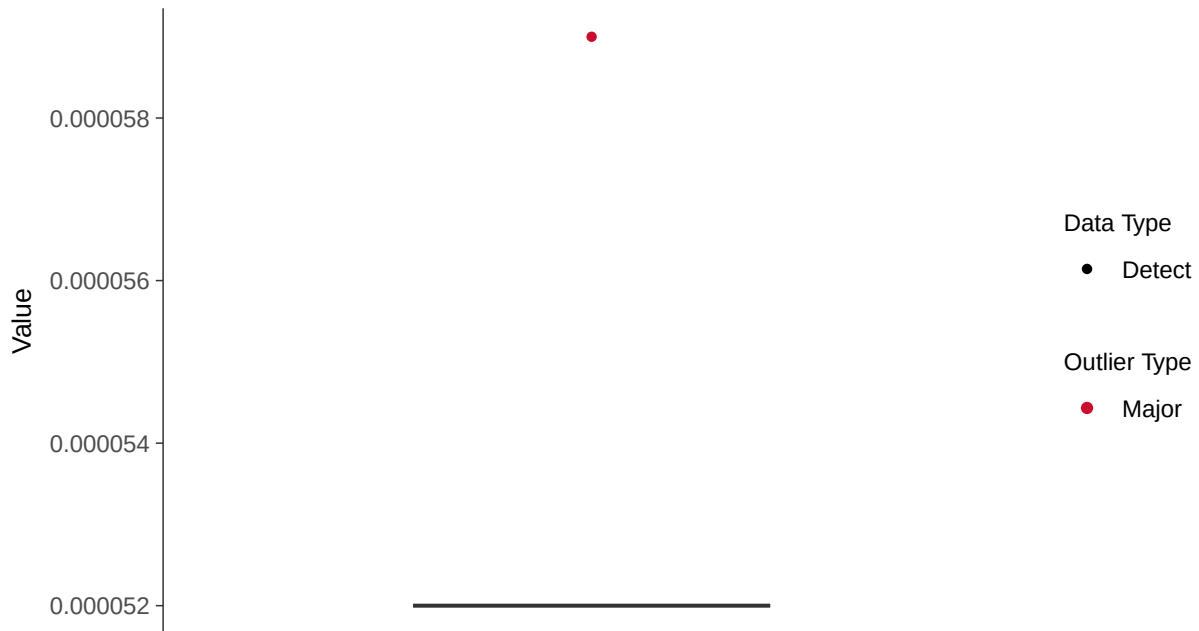
Appendix IV: Beryllium, MW-20

ID: 30_1_4_104



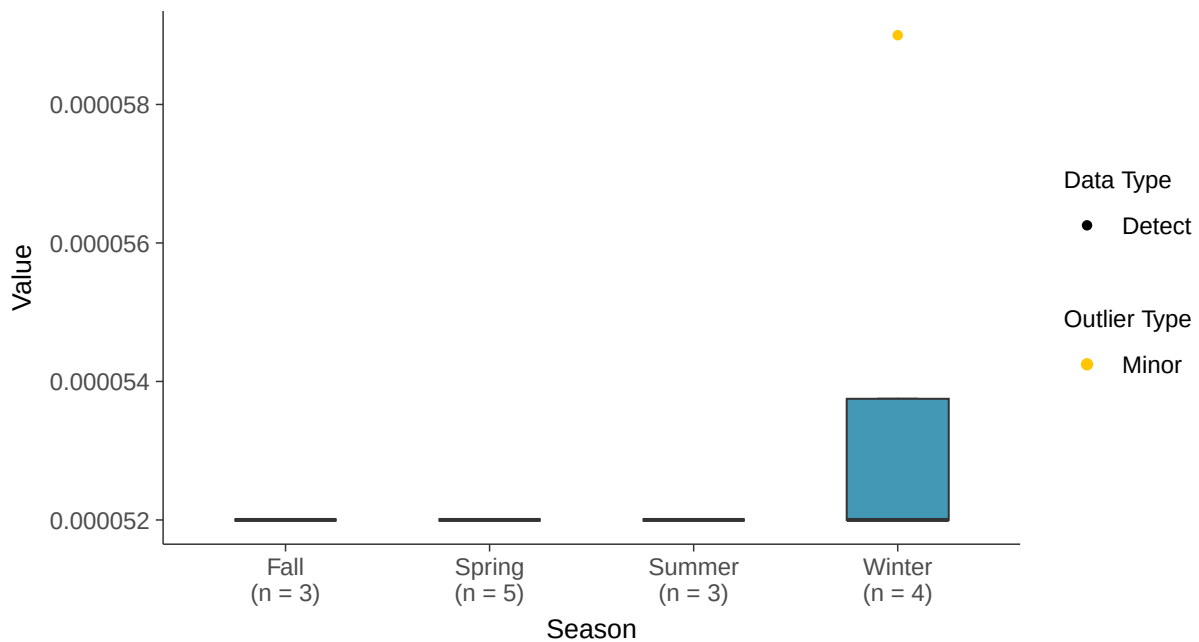
Boxplot

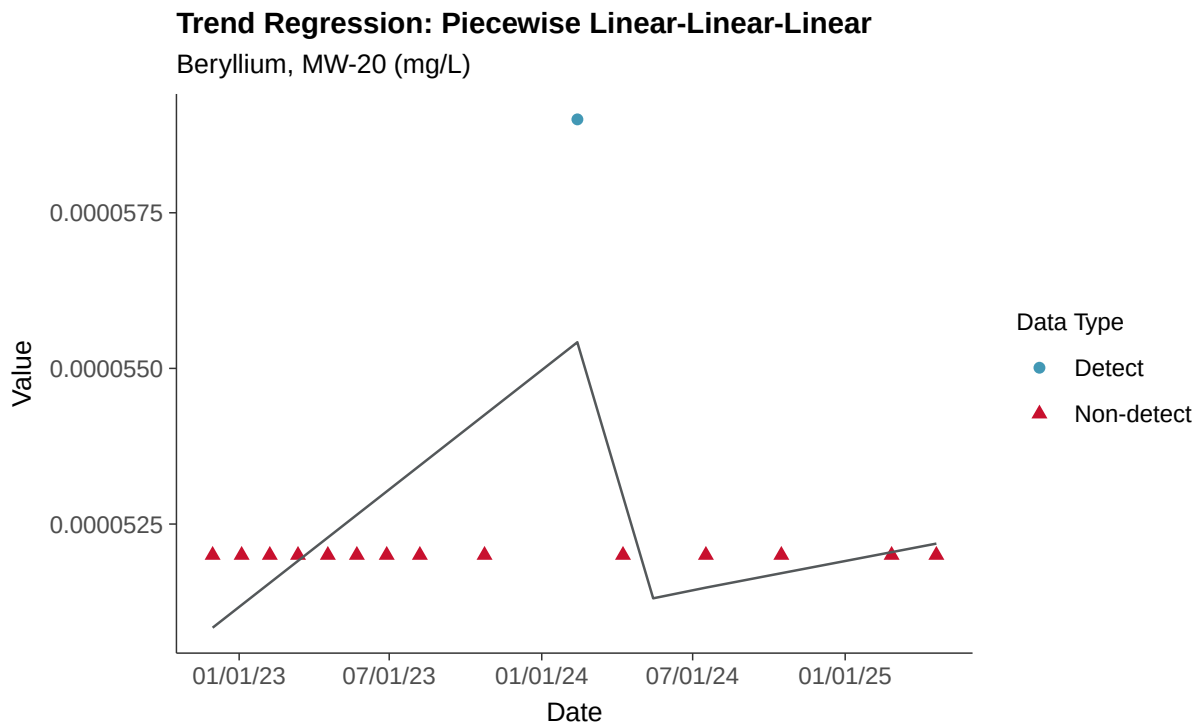
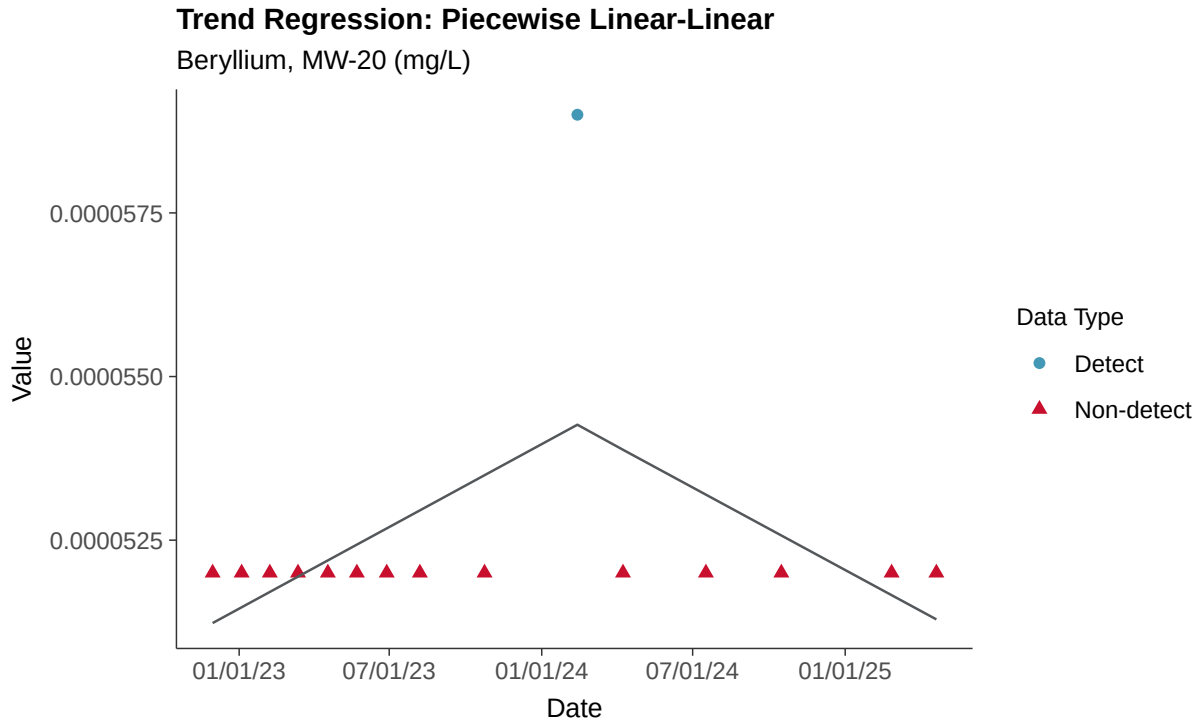
Beryllium, MW-20 (mg/L)



Boxplot by Season

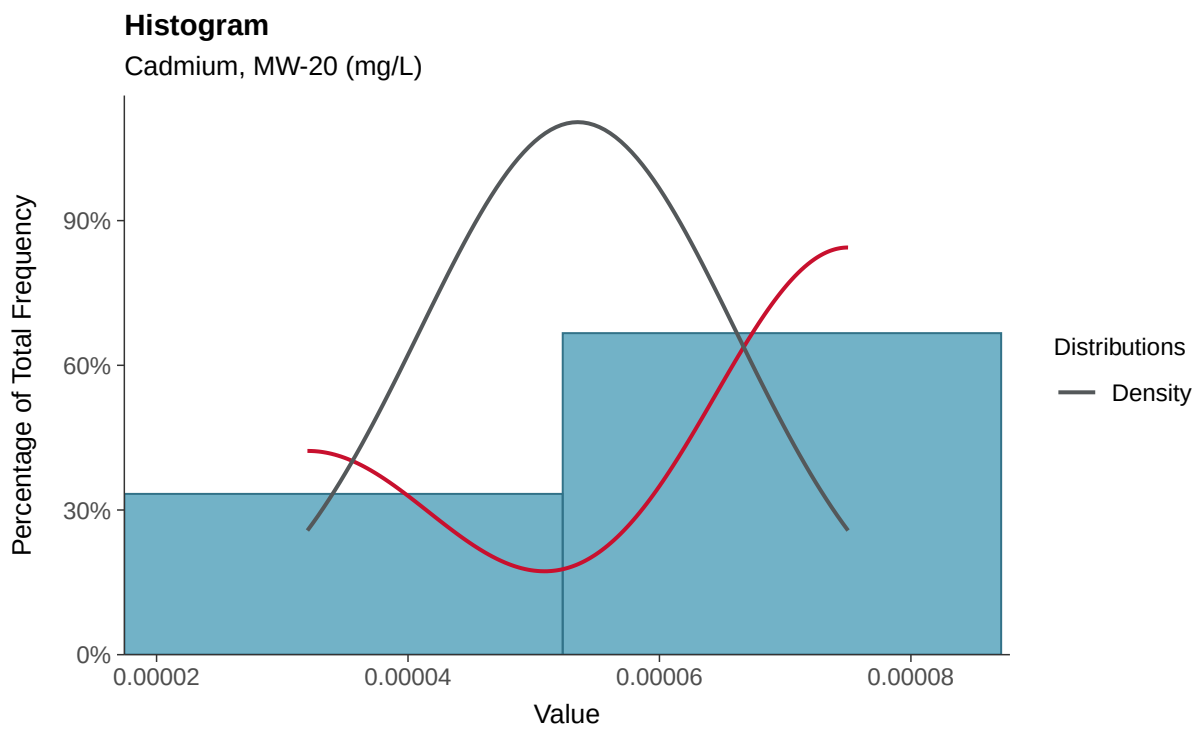
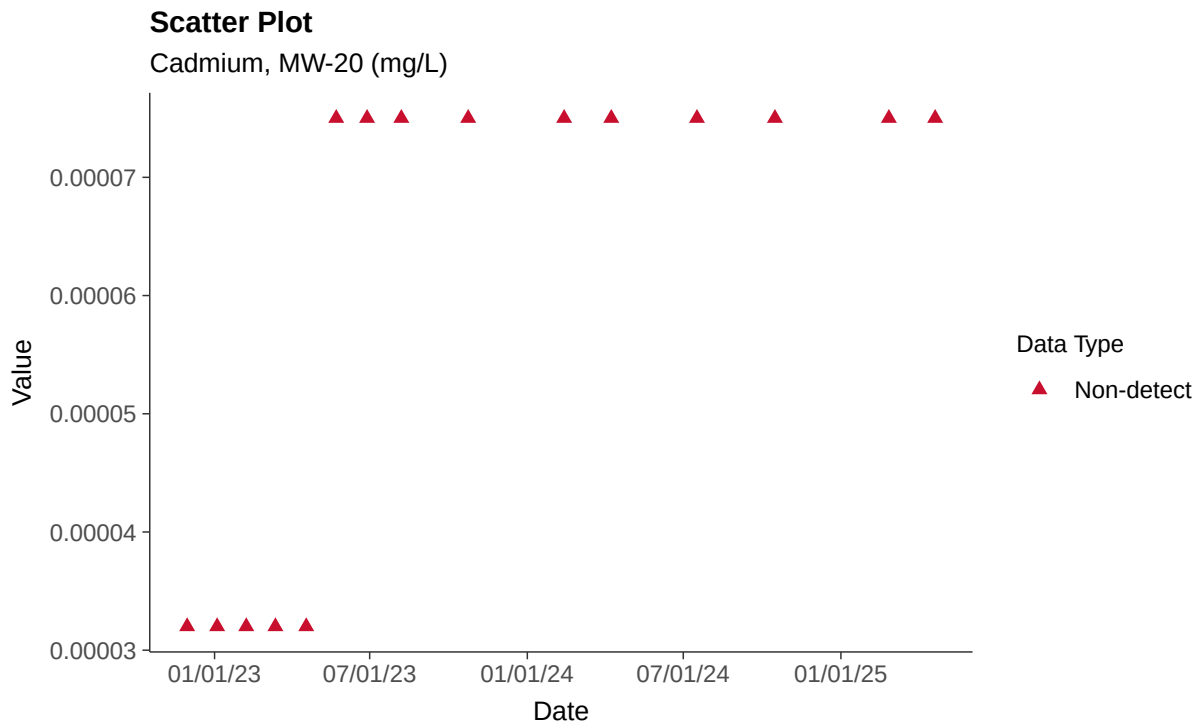
Beryllium, MW-20 (mg/L)





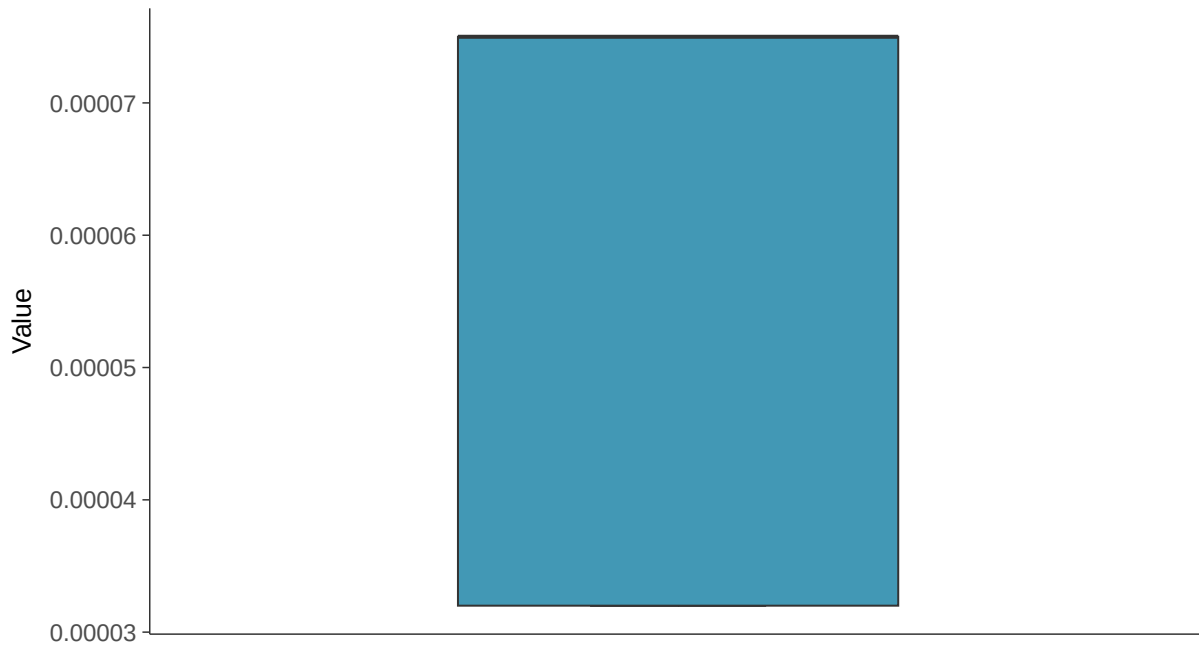
Appendix IV: Cadmium, MW-20

ID: 30_1_4_106



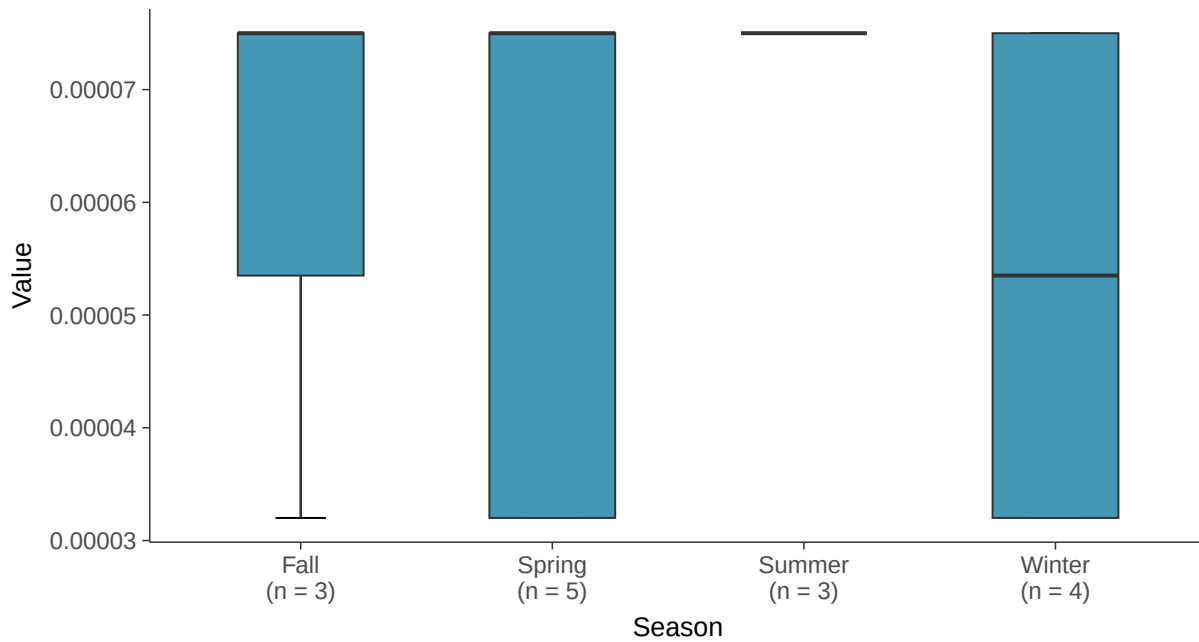
Boxplot

Cadmium, MW-20 (mg/L)



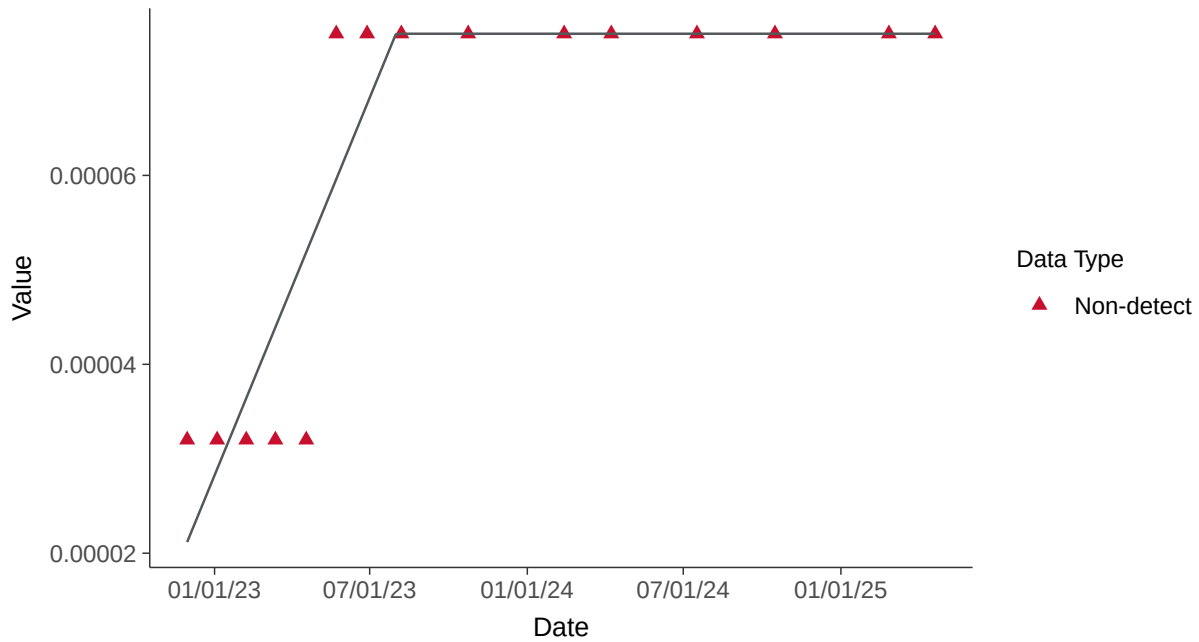
Boxplot by Season

Cadmium, MW-20 (mg/L)



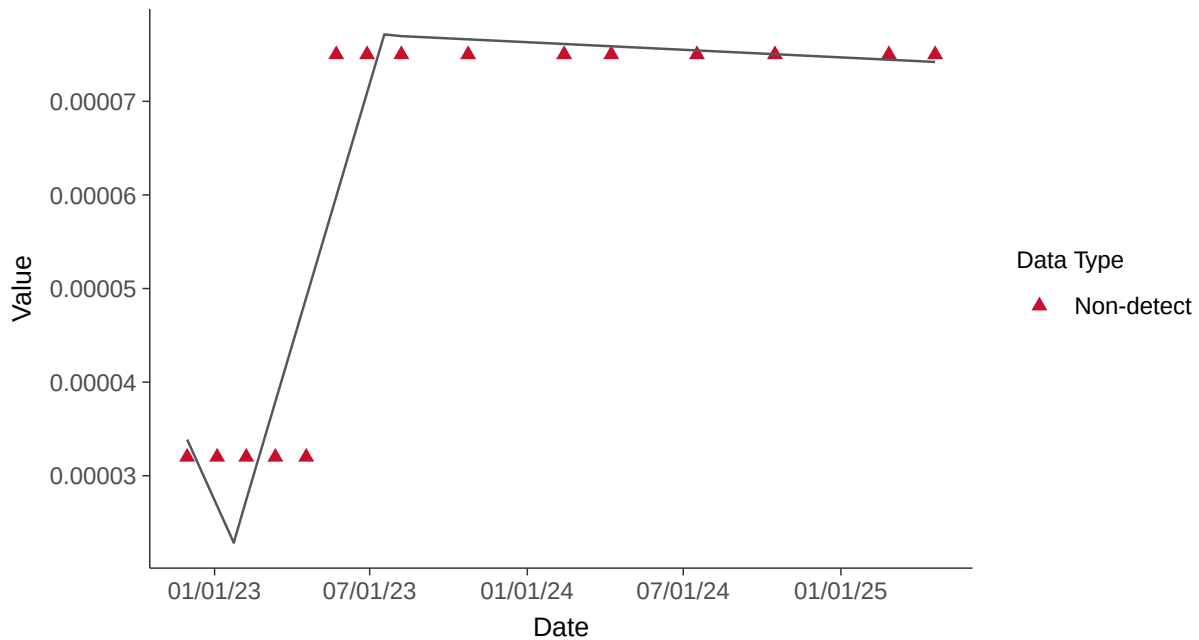
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-20 (mg/L)



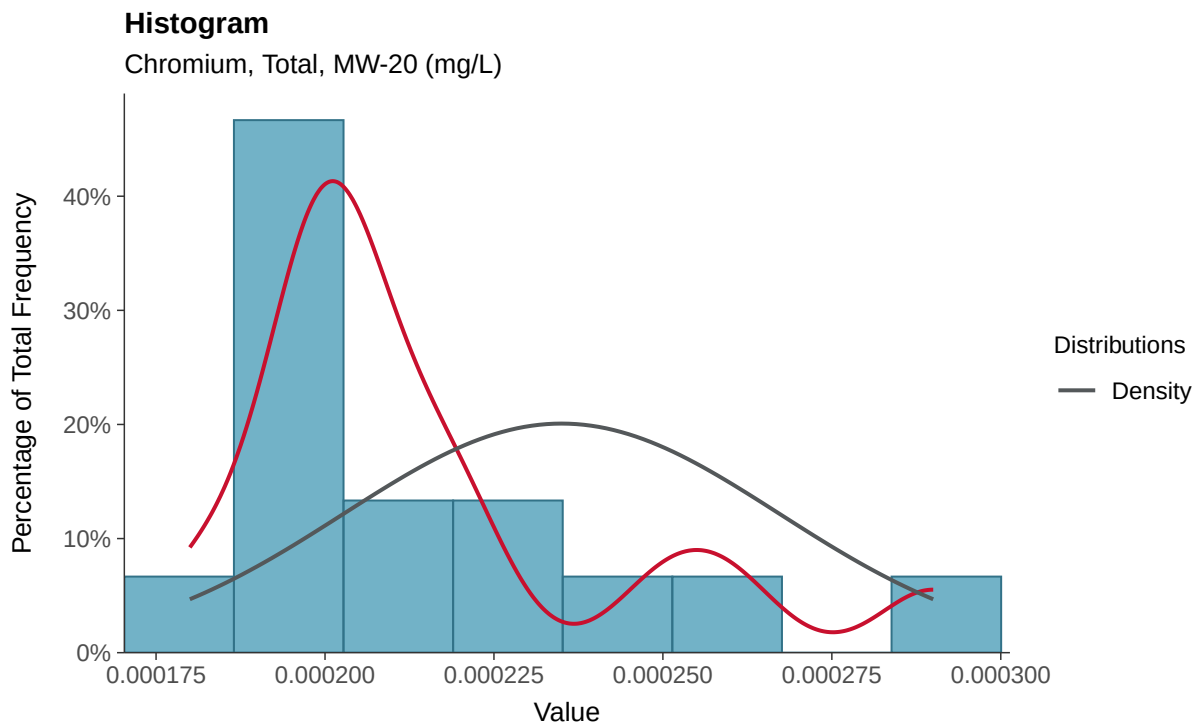
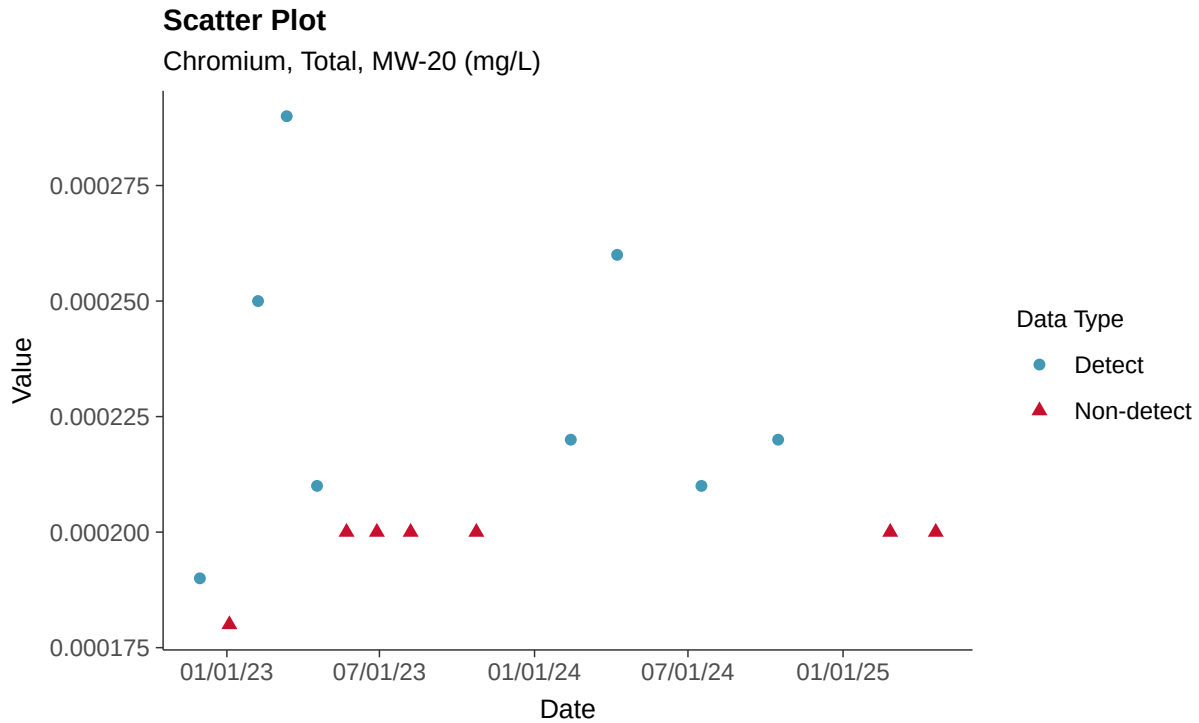
Trend Regression: Piecewise Linear-Linear-Linear

Cadmium, MW-20 (mg/L)



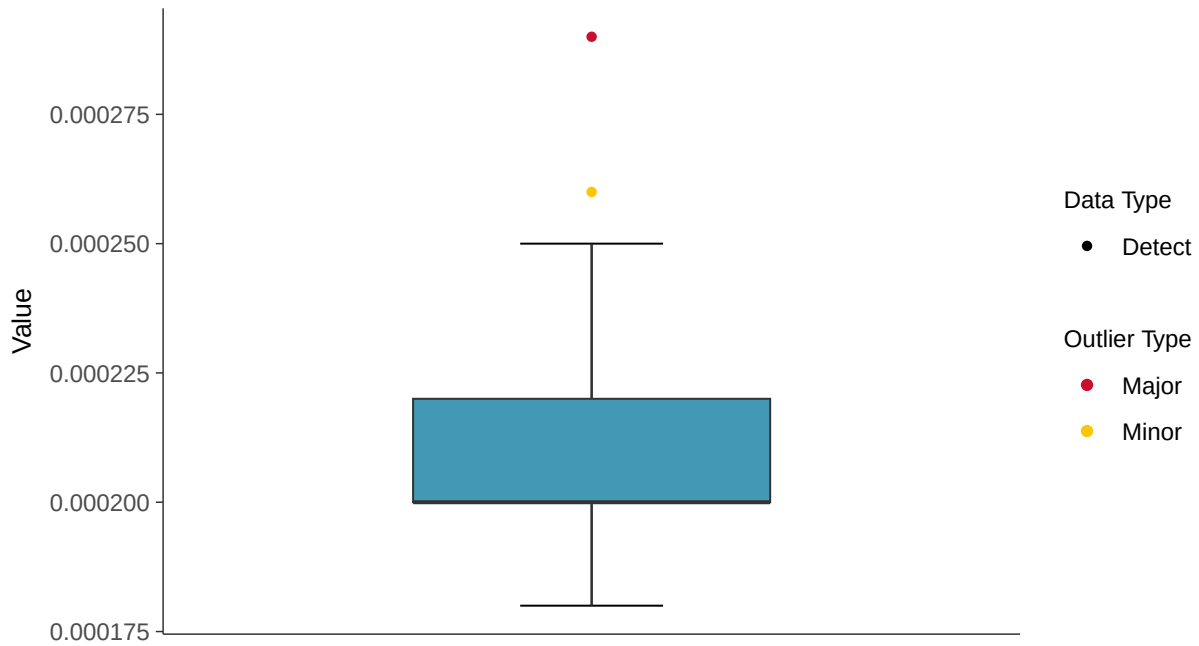
Appendix IV: Chromium, Total, MW-20

ID: 30_1_4_109



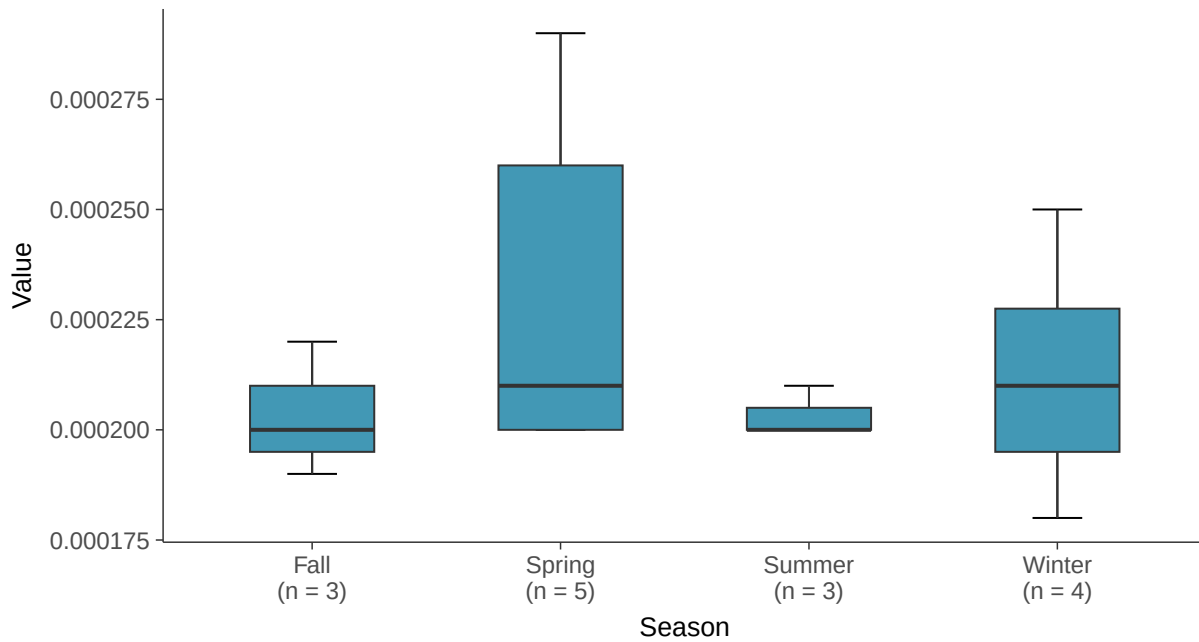
Boxplot

Chromium, Total, MW-20 (mg/L)



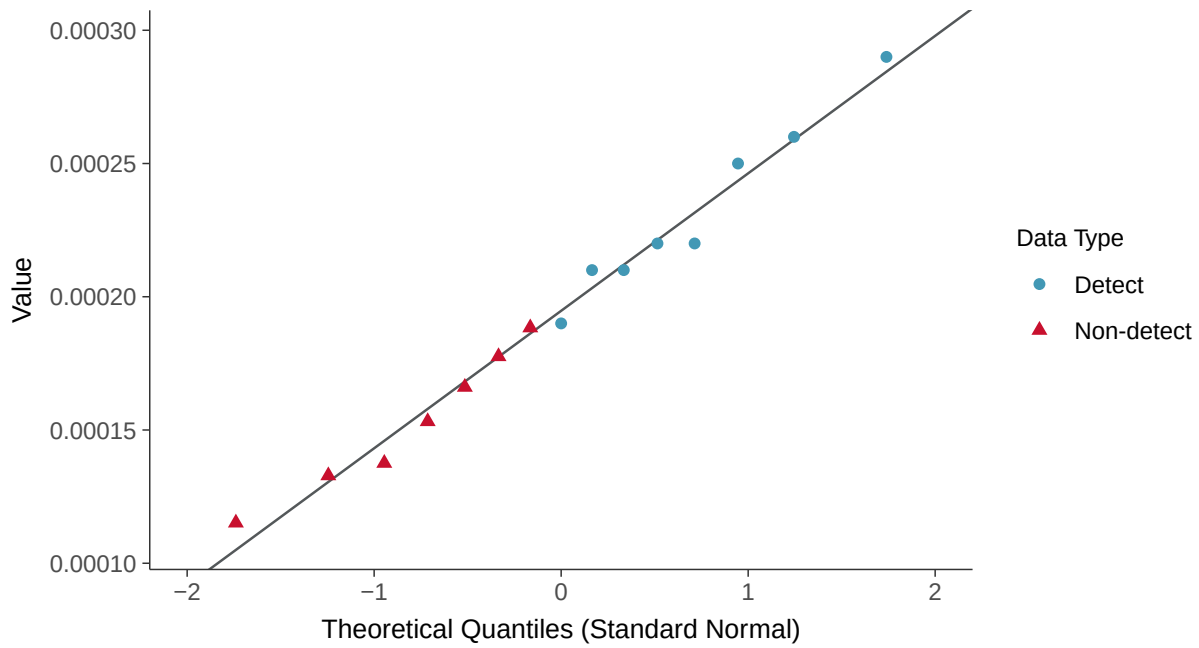
Boxplot by Season

Chromium, Total, MW-20 (mg/L)



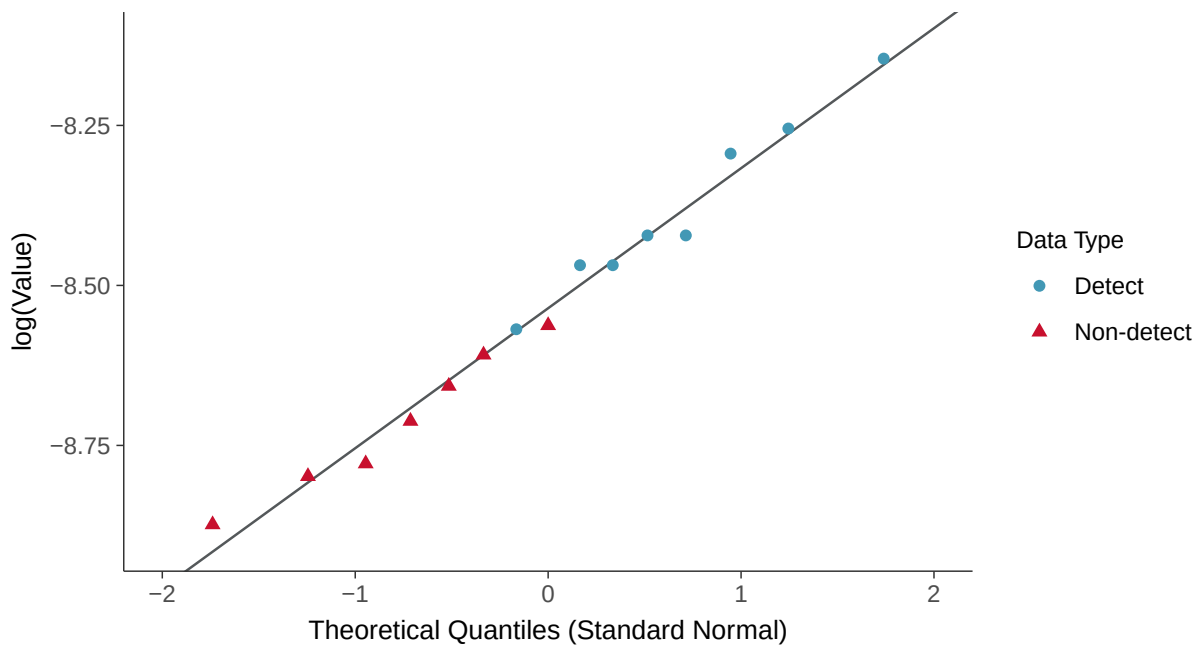
Normal Q-Q plot using ROS Imputed Estimates

Chromium, Total, MW-20 (mg/L)



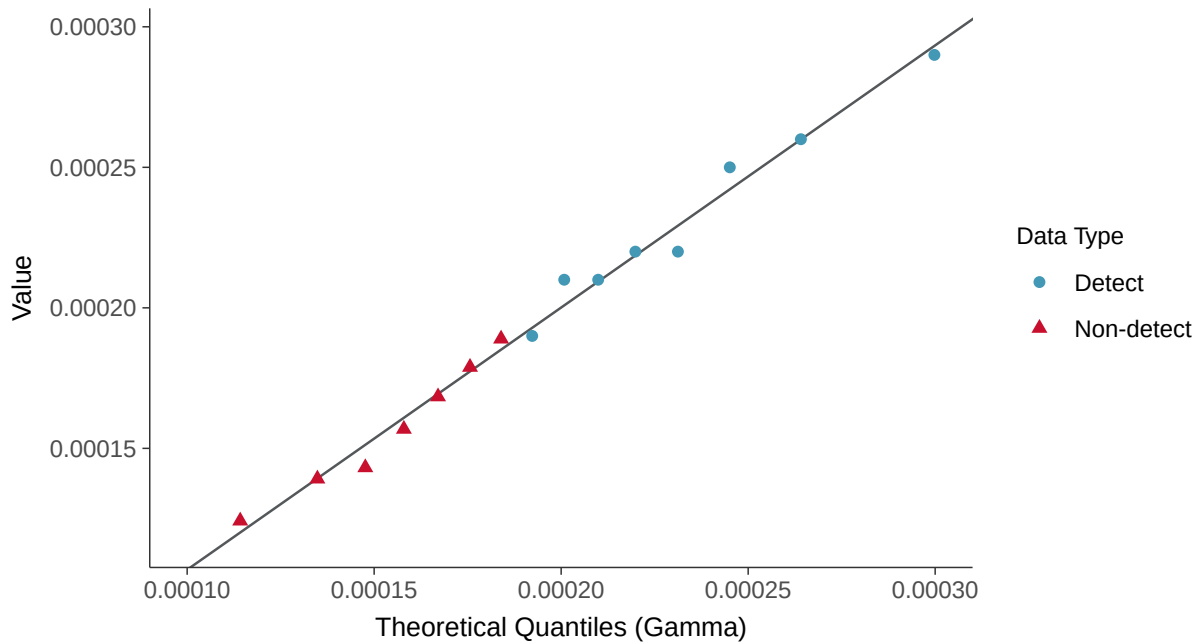
Lognormal Q-Q plot using ROS Imputed Estimates

Chromium, Total, MW-20 (mg/L)



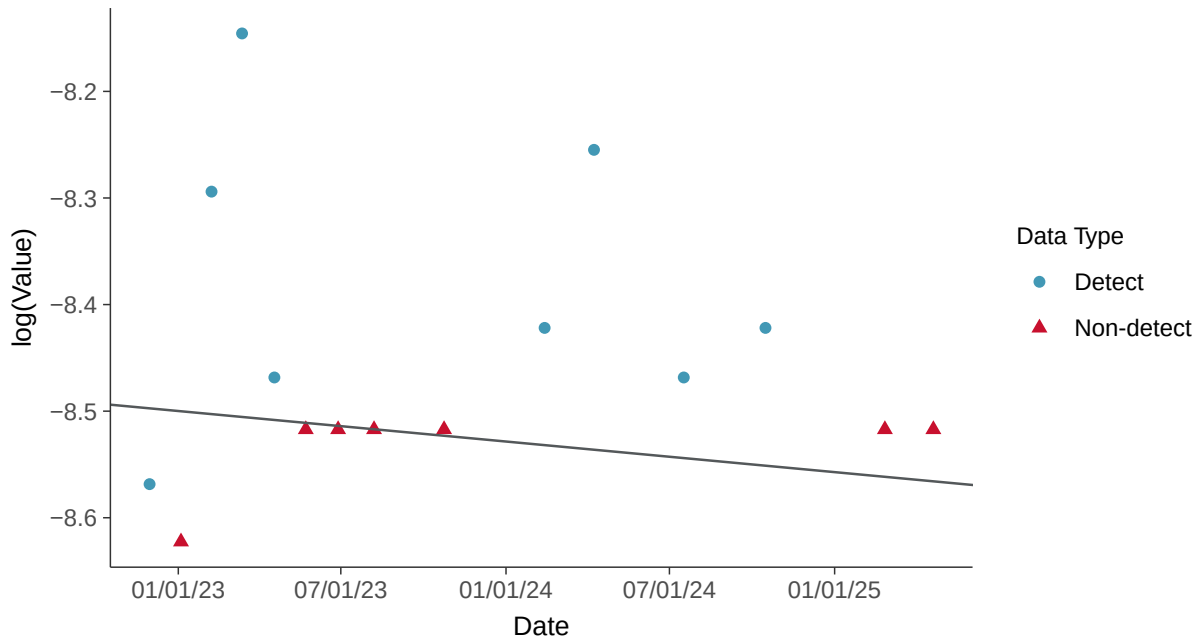
Gamma Q-Q plot using ROS Imputed Estimates

Chromium, Total, MW-20 (mg/L)



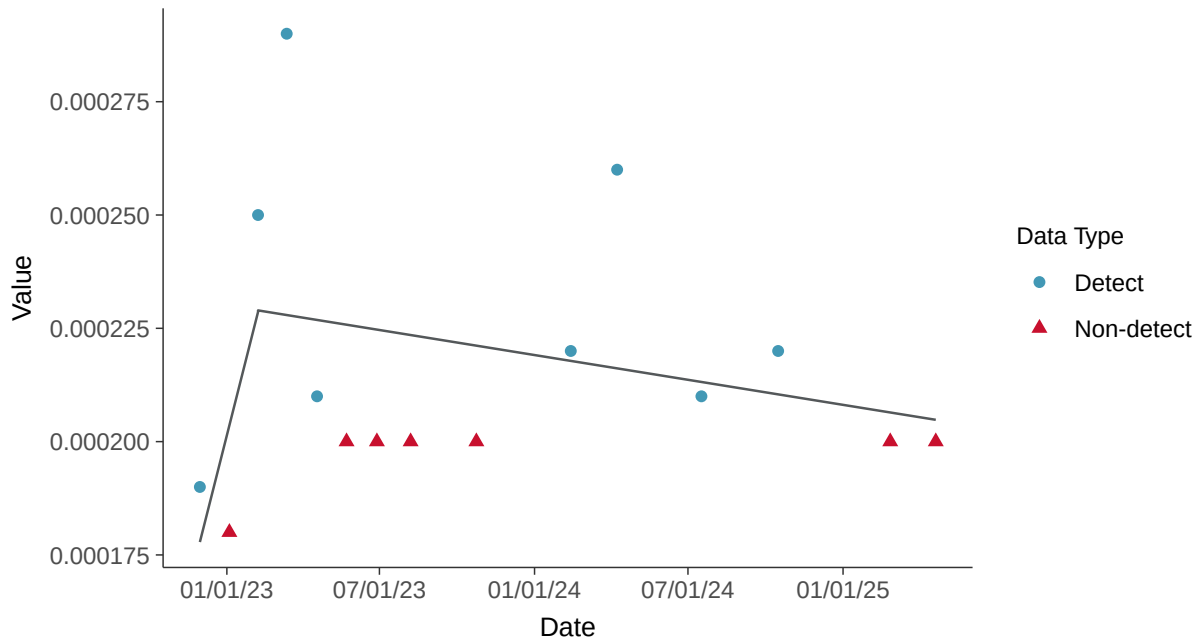
Trend Regression: Lognormal MLE

Chromium, Total, MW-20 (mg/L)



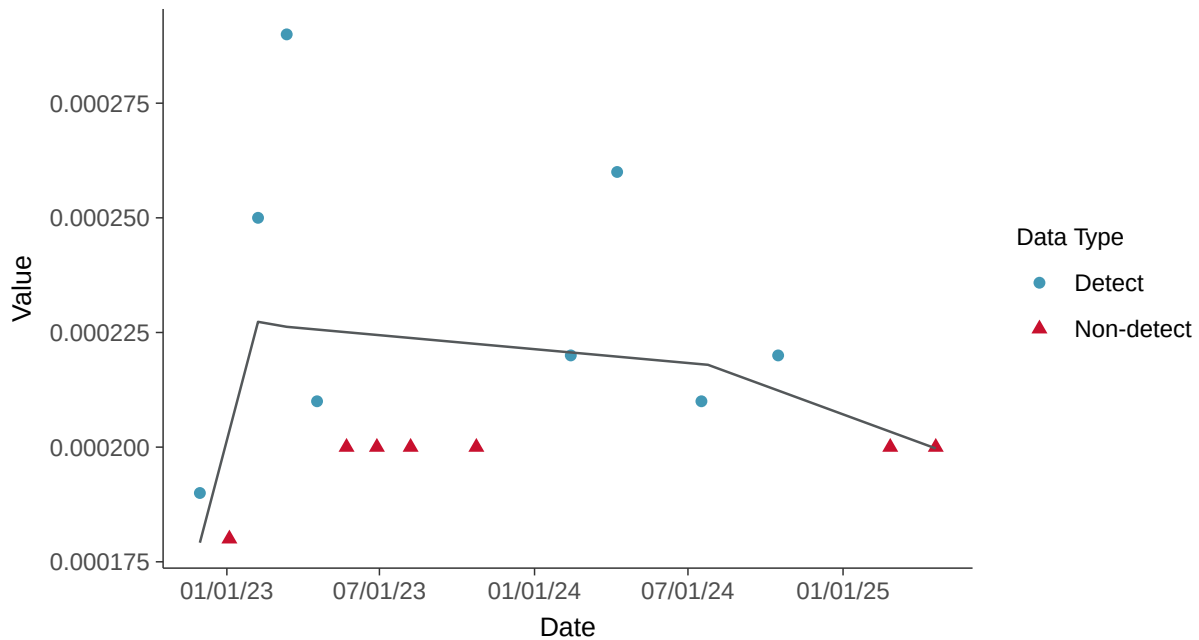
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-20 (mg/L)



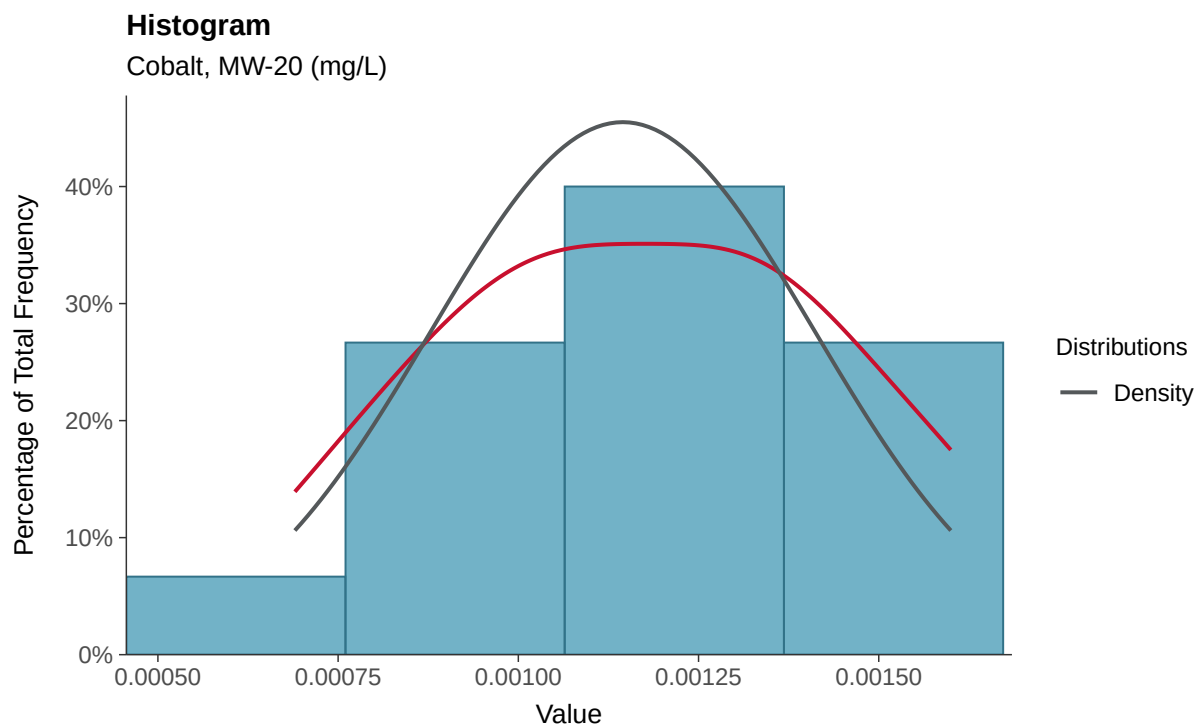
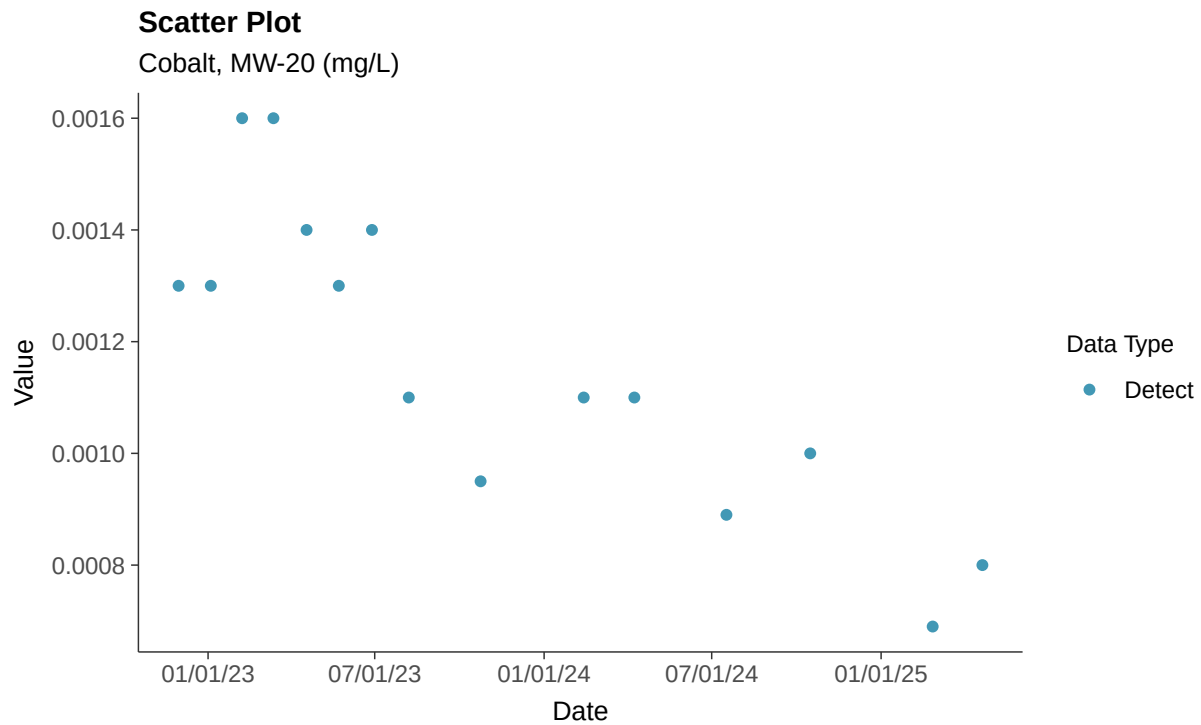
Trend Regression: Piecewise Linear-Linear-Linear

Chromium, Total, MW-20 (mg/L)



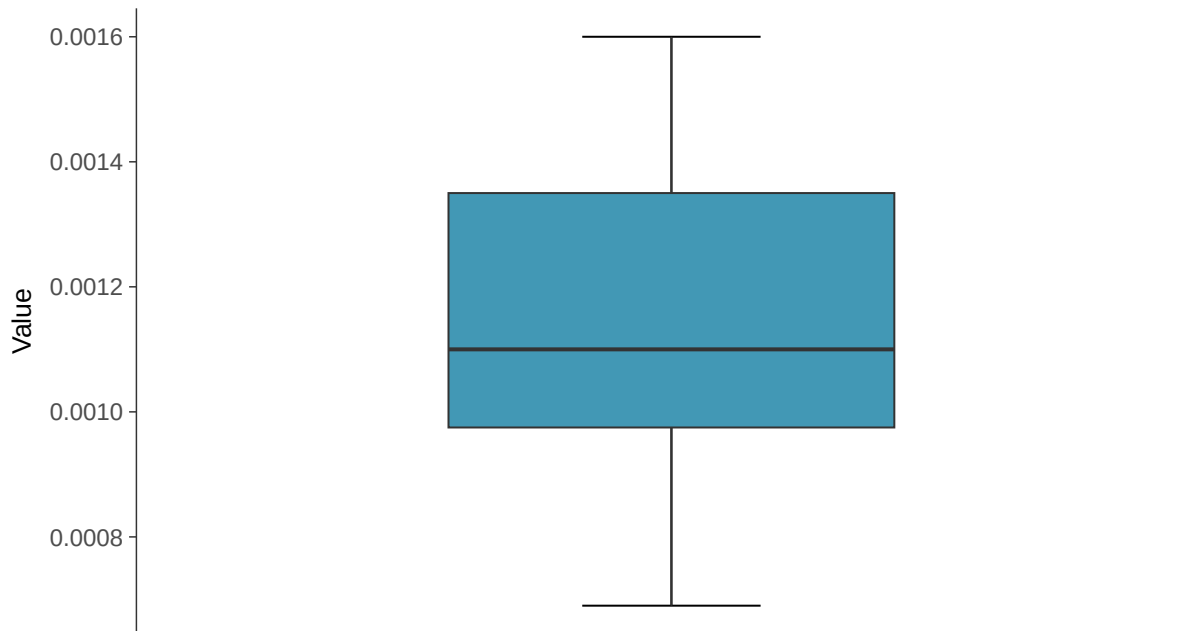
Appendix IV: Cobalt, MW-20

ID: 30_1_4_110



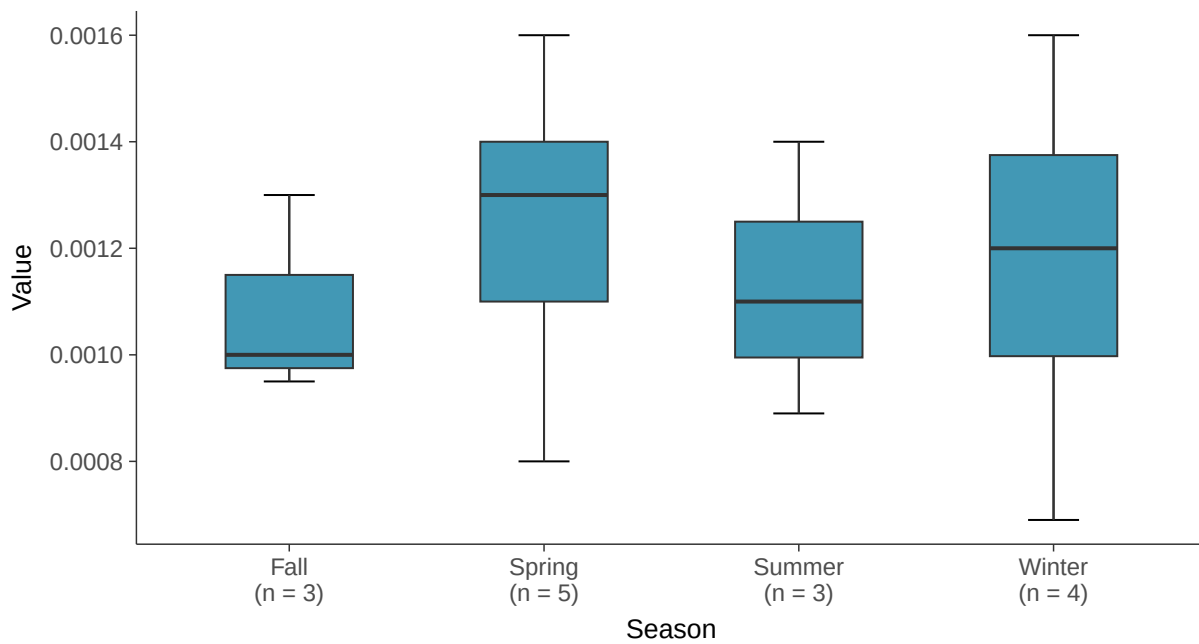
Boxplot

Cobalt, MW-20 (mg/L)

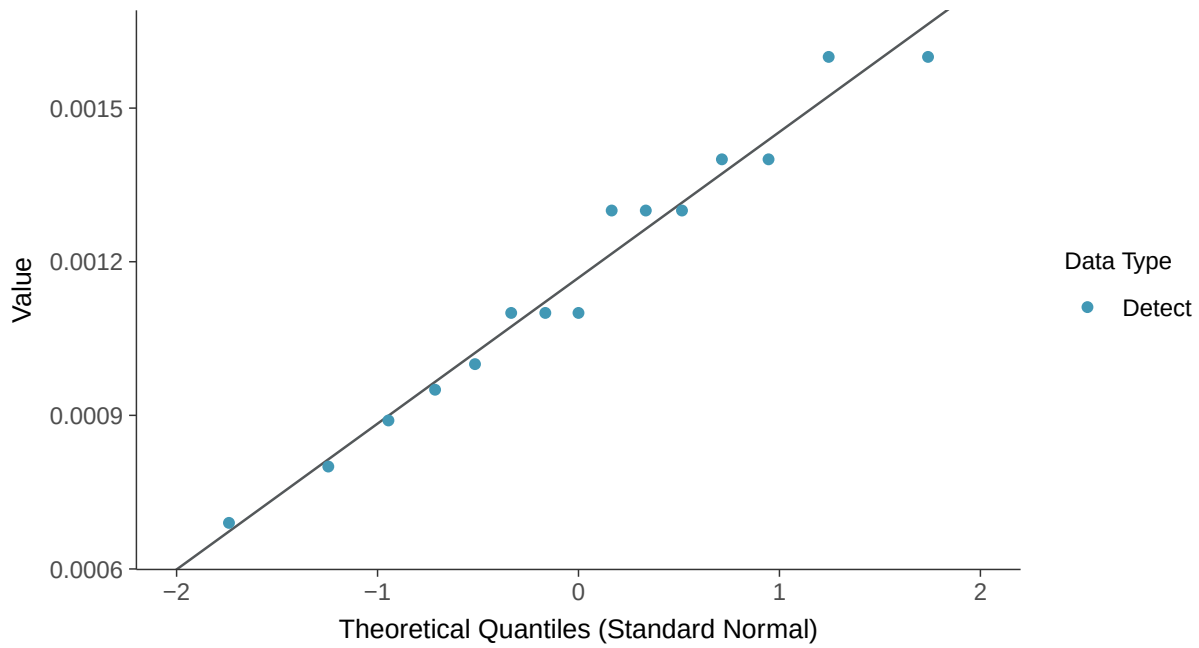


Boxplot by Season

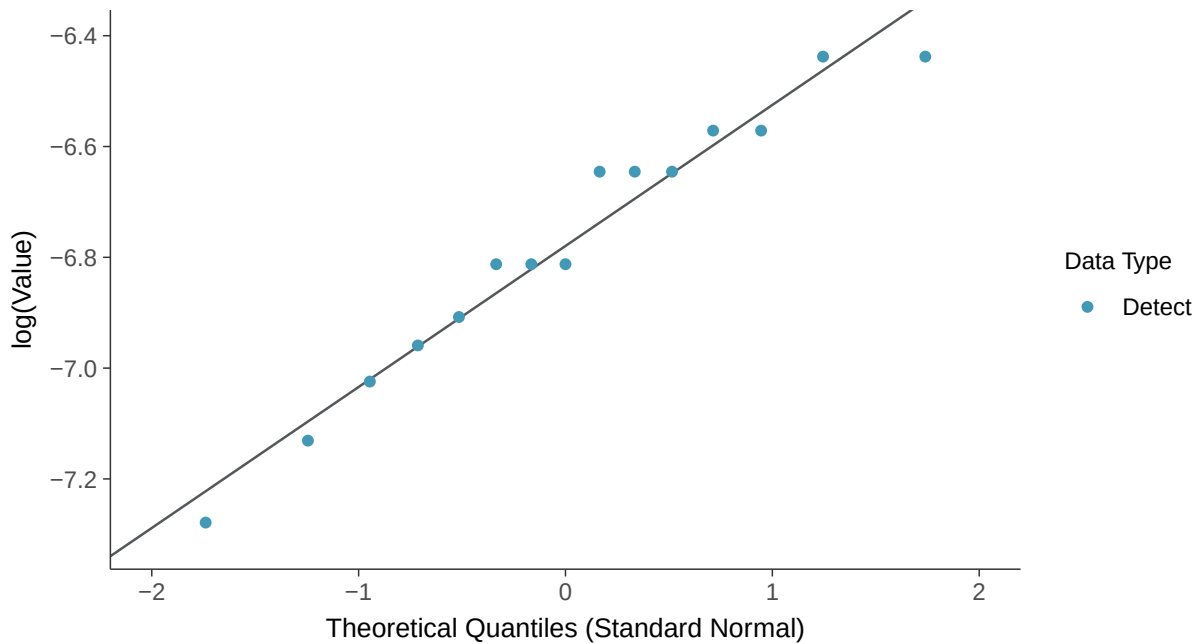
Cobalt, MW-20 (mg/L)



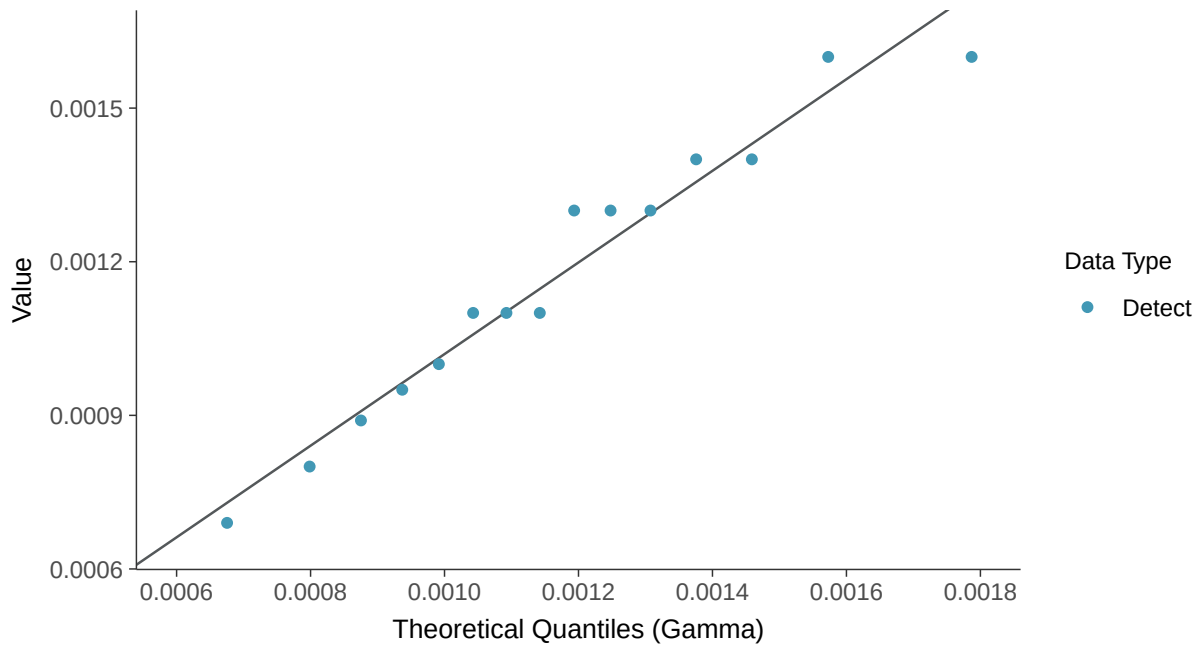
Normal Q-Q plot
Cobalt, MW-20 (mg/L)



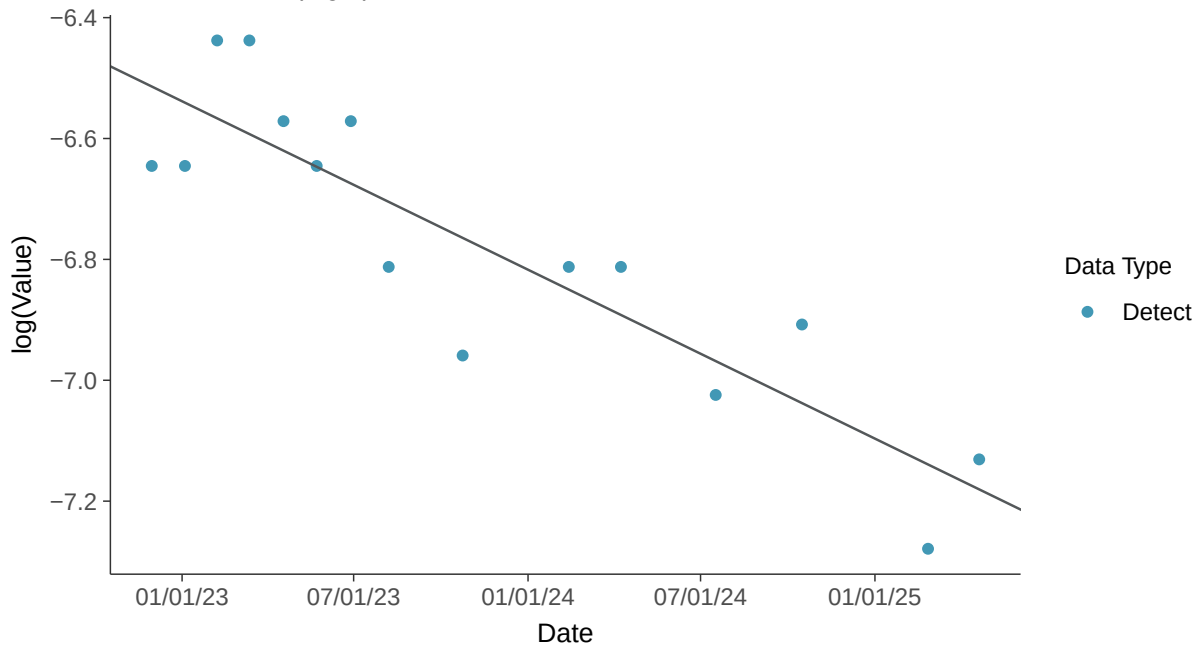
Lognormal Q-Q plot
Cobalt, MW-20 (mg/L)



Gamma Q-Q plot
Cobalt, MW-20 (mg/L)

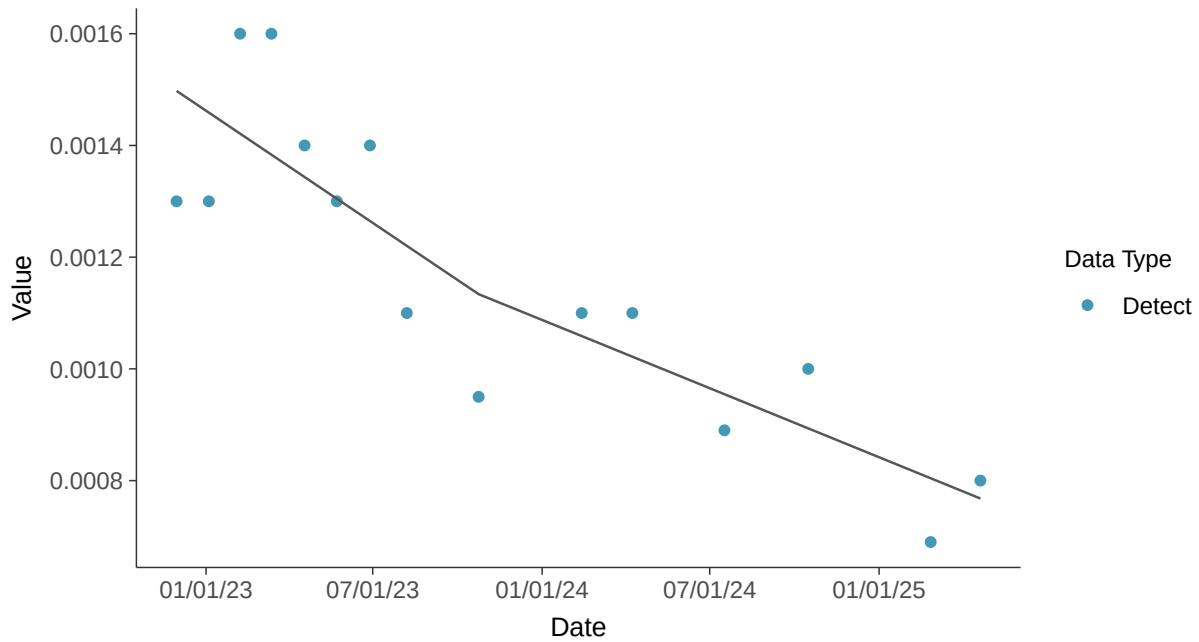


Trend Regression: Lognormal MLE
Cobalt, MW-20 (mg/L)



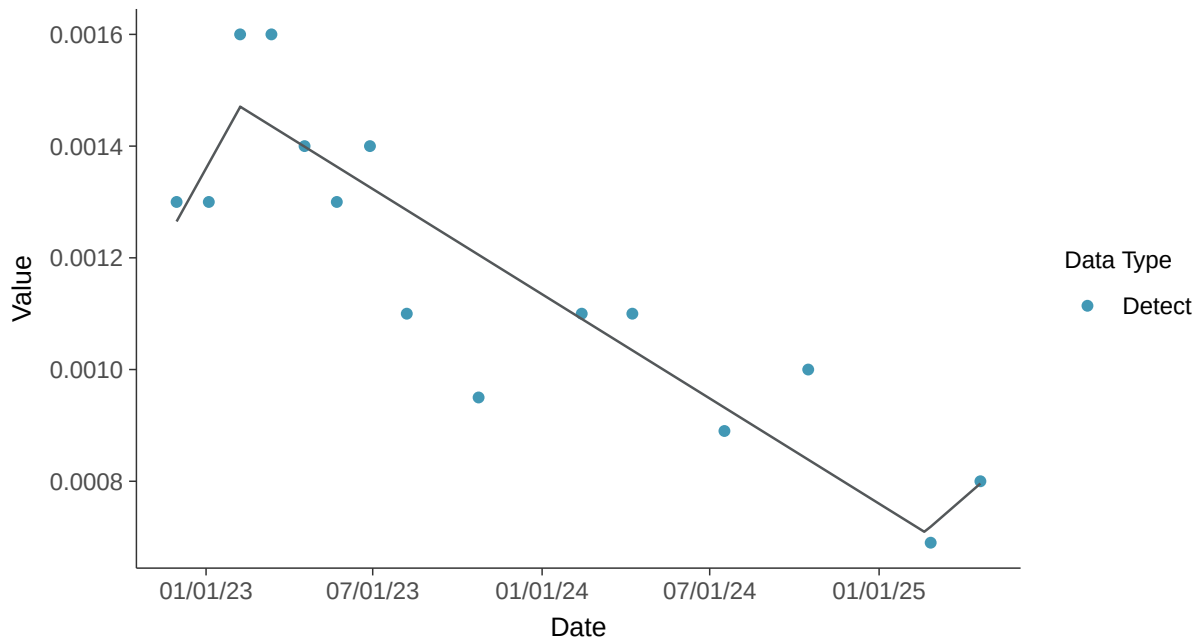
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-20 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cobalt, MW-20 (mg/L)

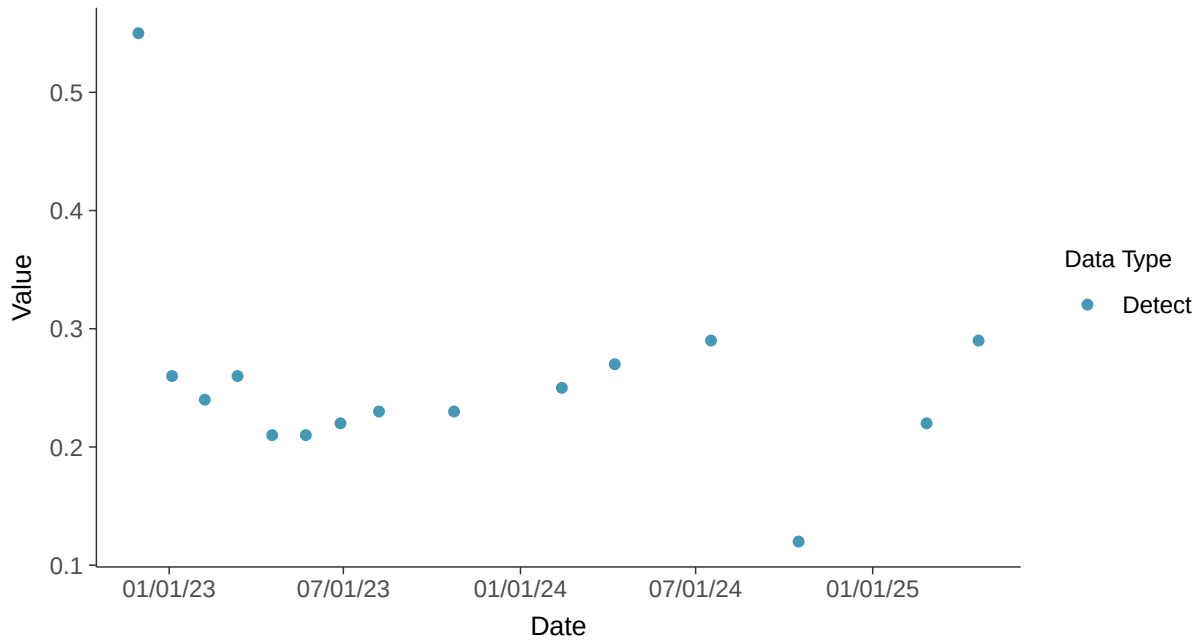


Appendix IV: Fluoride (App IV), MW-20

ID: 30_1_4_113

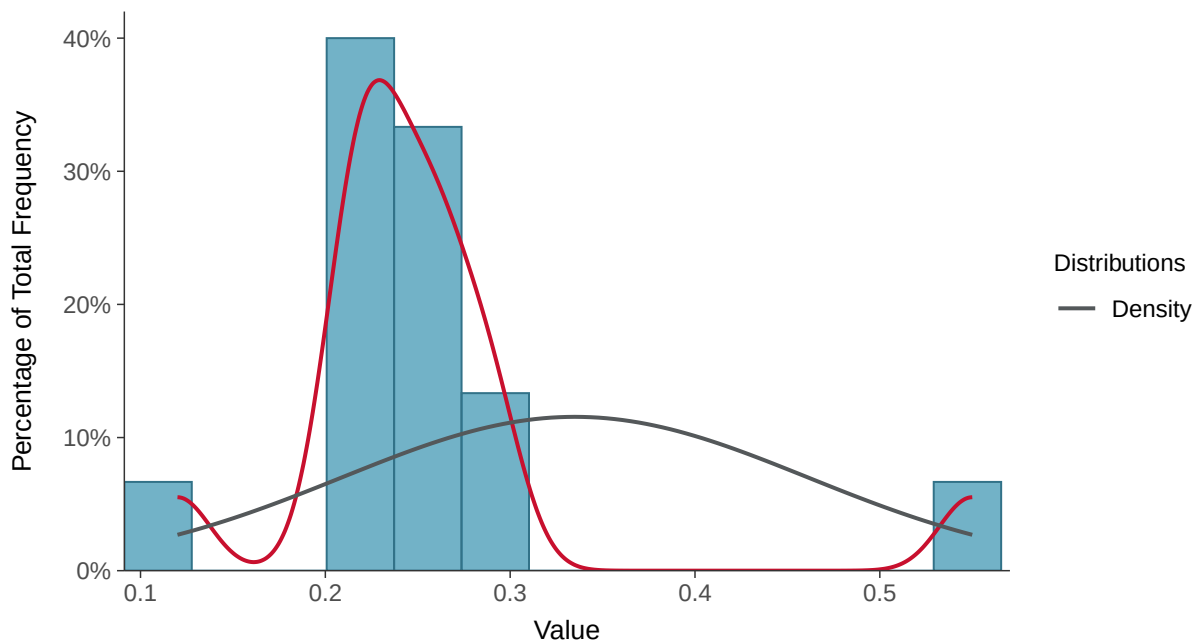
Scatter Plot

Fluoride (App IV), MW-20 (mg/L)



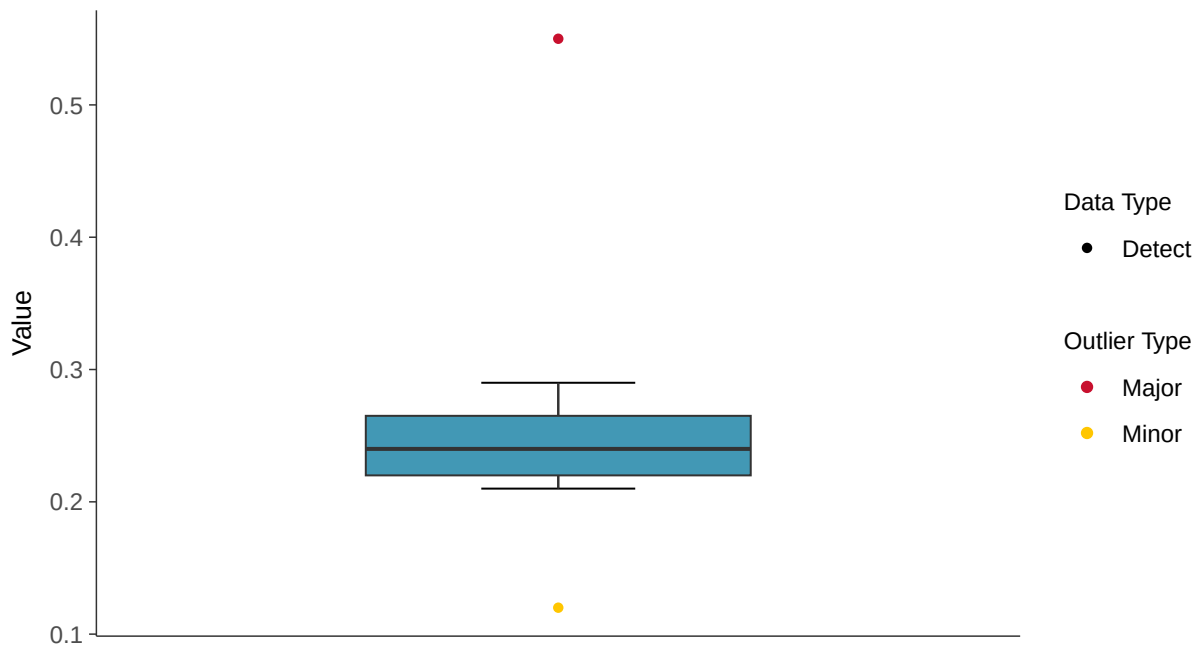
Histogram

Fluoride (App IV), MW-20 (mg/L)



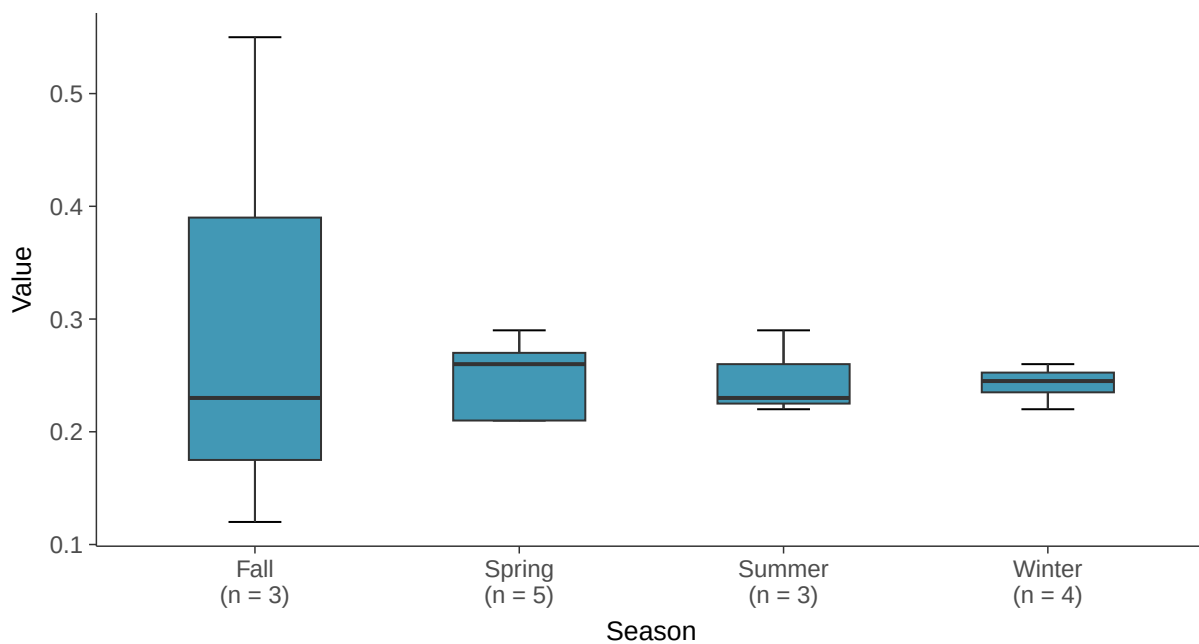
Boxplot

Fluoride (App IV), MW-20 (mg/L)



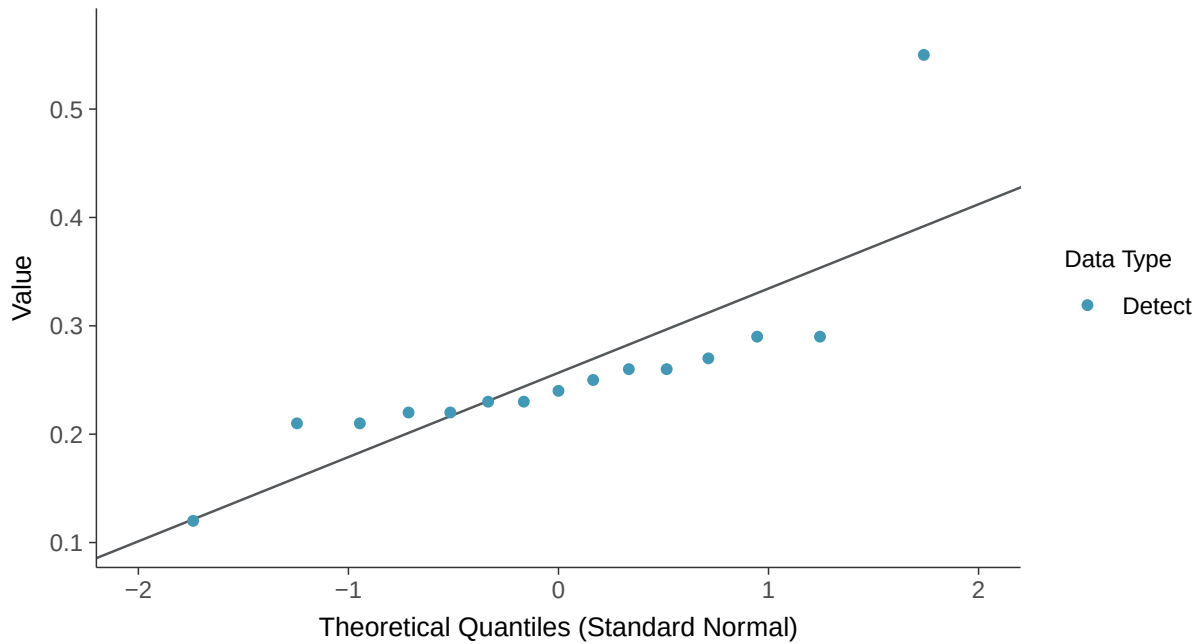
Boxplot by Season

Fluoride (App IV), MW-20 (mg/L)



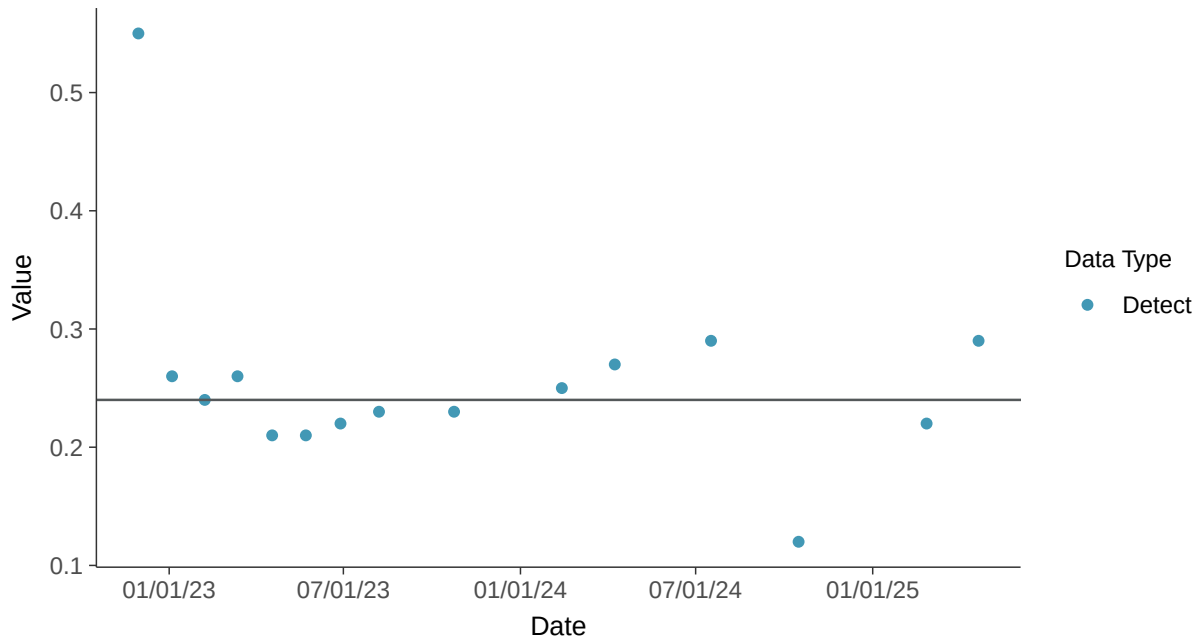
Normal Q-Q plot

Fluoride (App IV), MW-20 (mg/L)



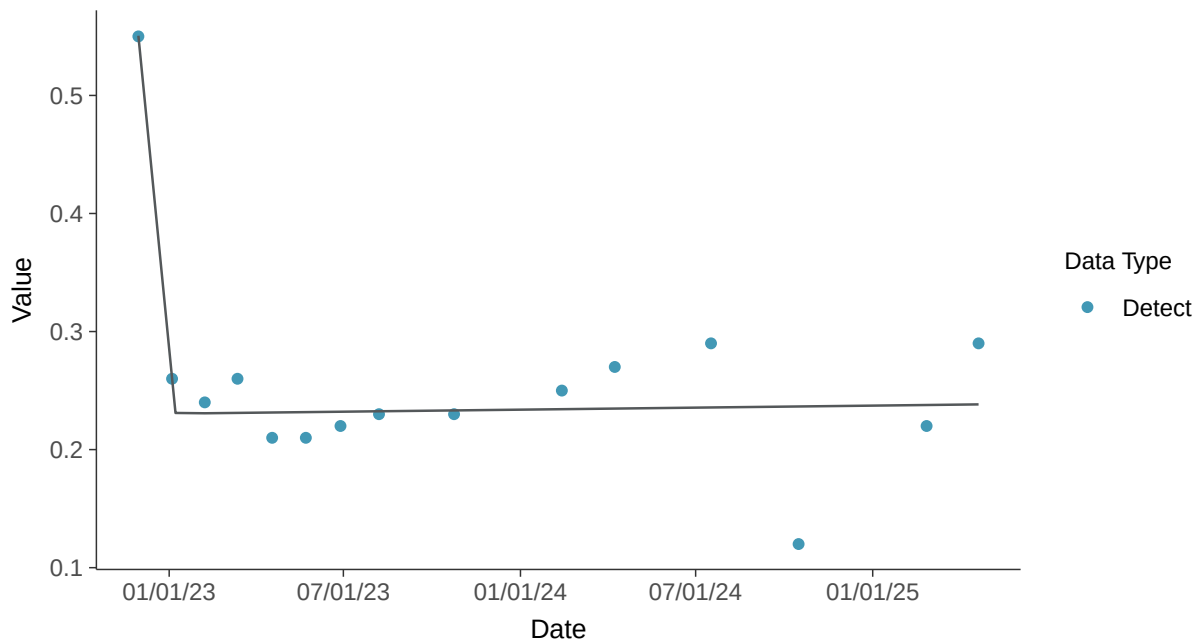
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Fluoride (App IV), MW-20 (mg/L)



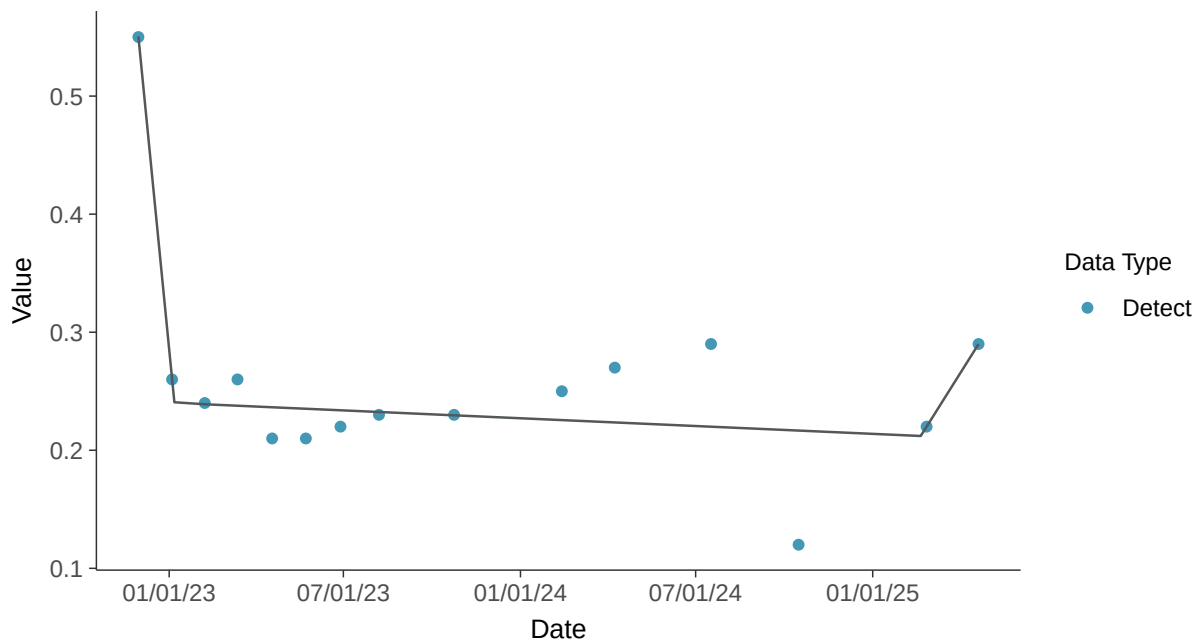
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-20 (mg/L)



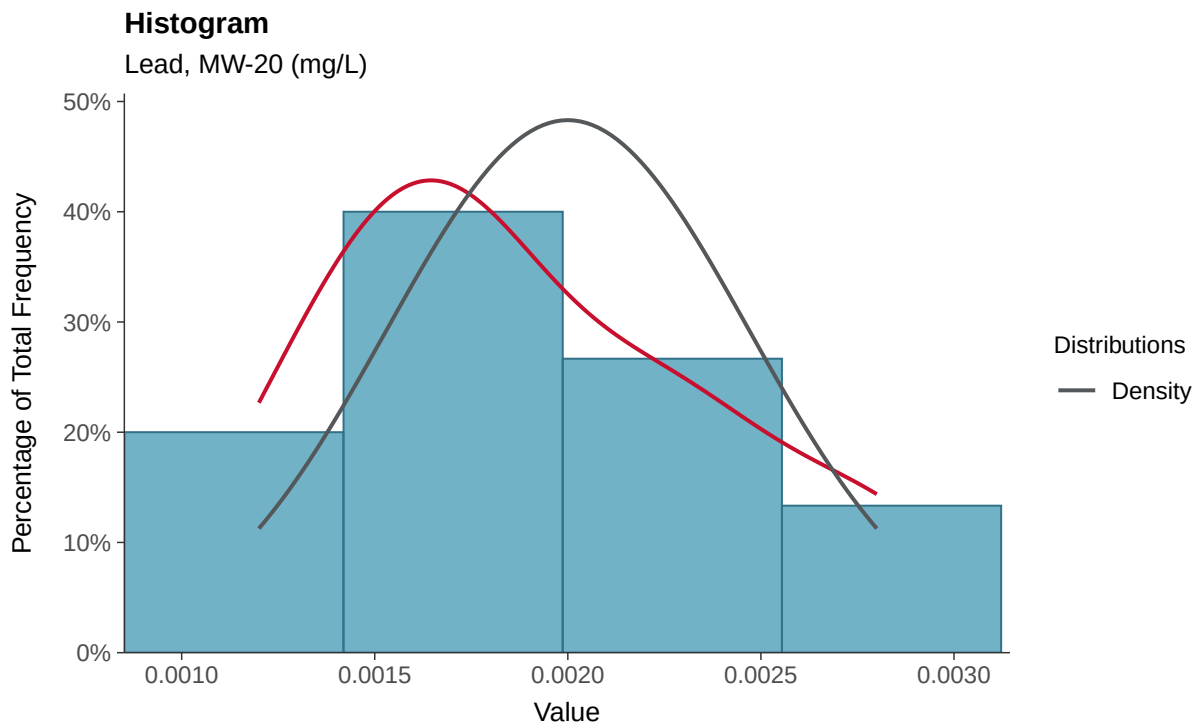
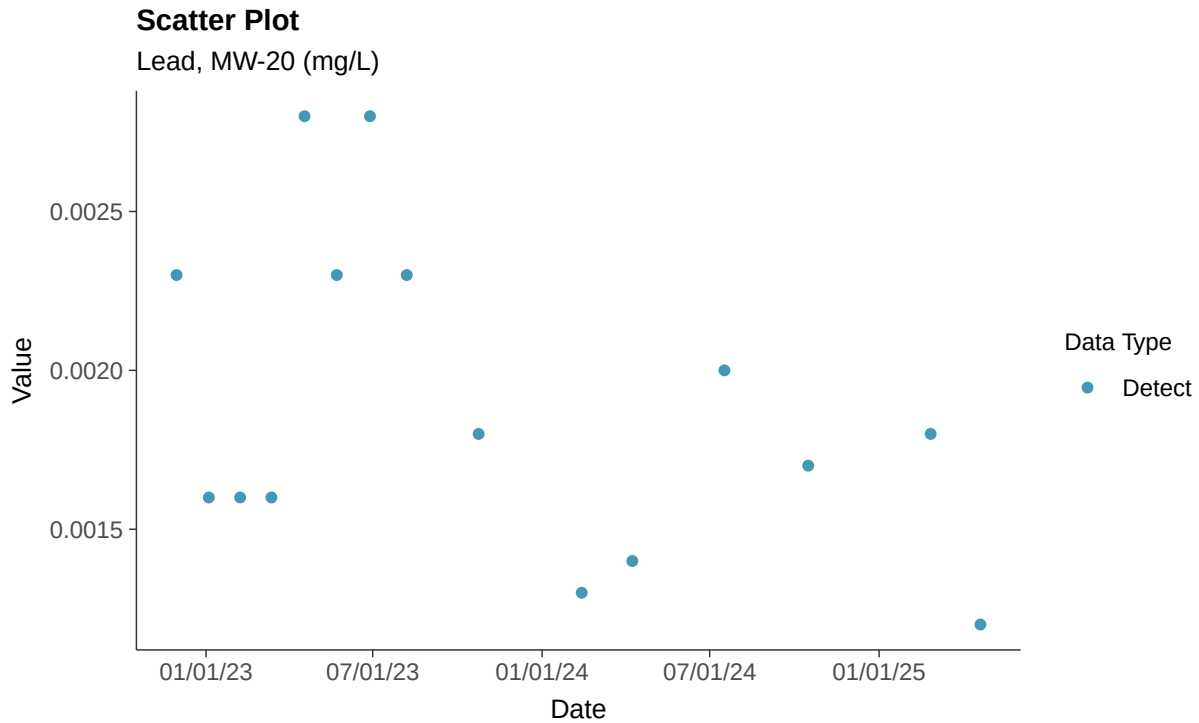
Trend Regression: Piecewise Linear-Linear-Linear

Fluoride (App IV), MW-20 (mg/L)



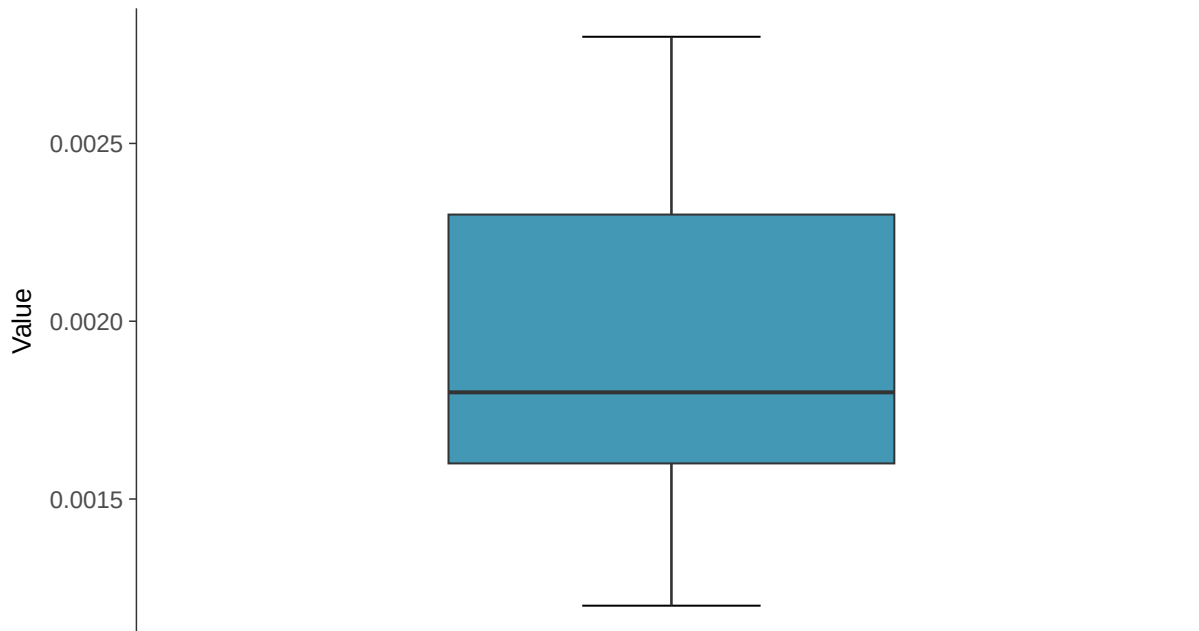
Appendix IV: Lead, MW-20

ID: 30_1_4_115



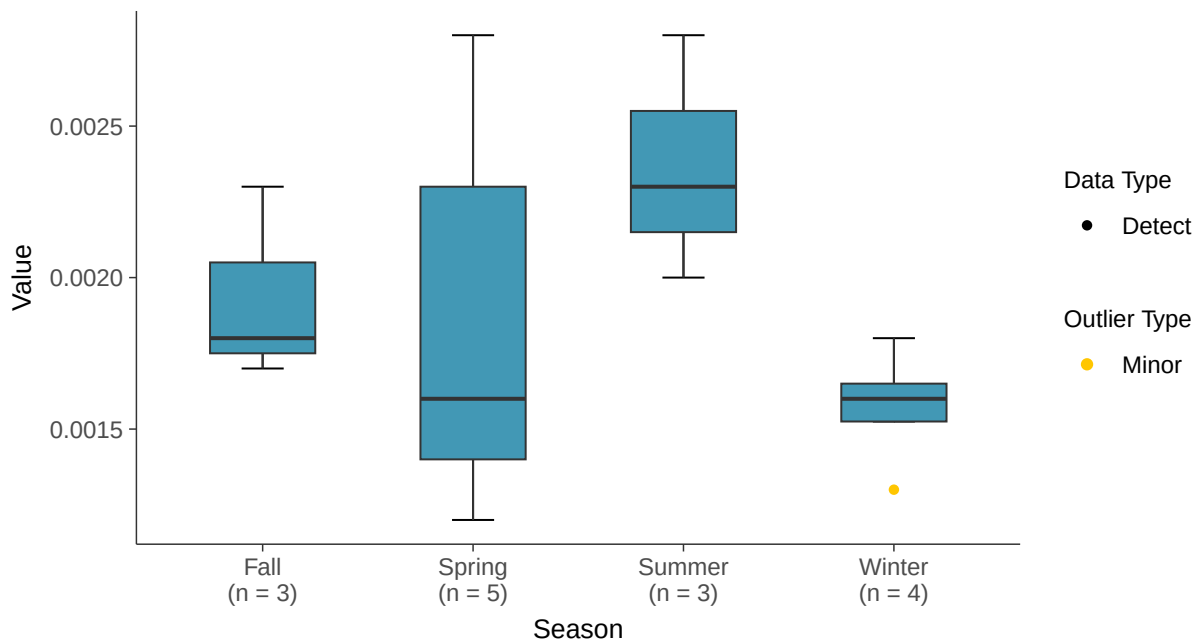
Boxplot

Lead, MW-20 (mg/L)

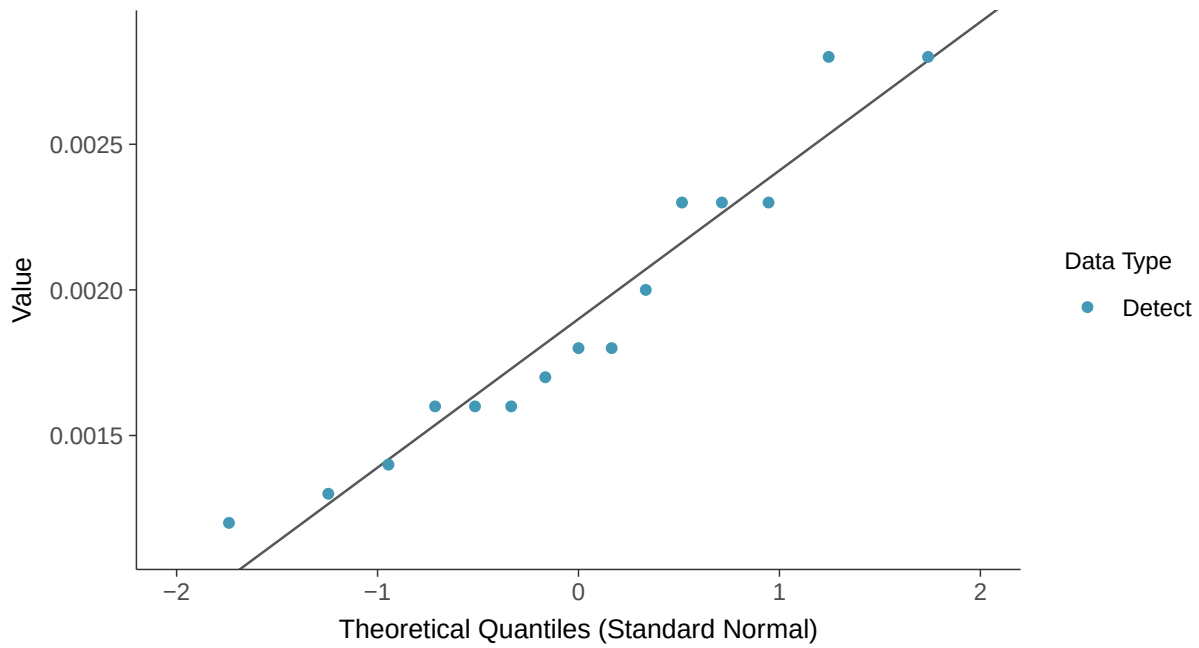


Boxplot by Season

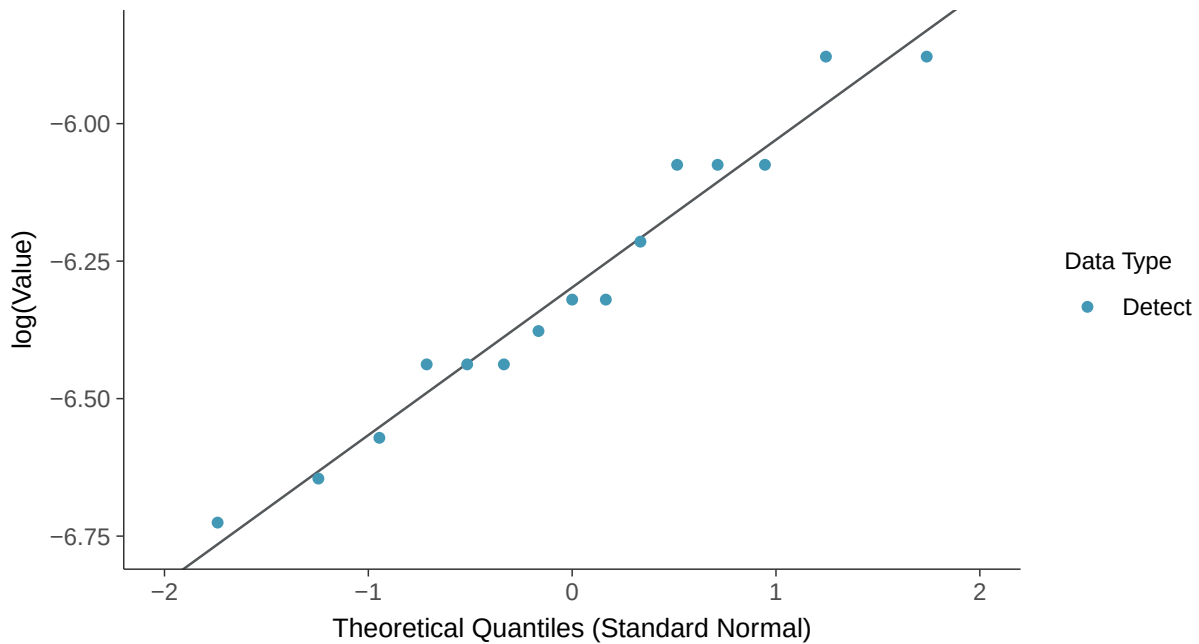
Lead, MW-20 (mg/L)



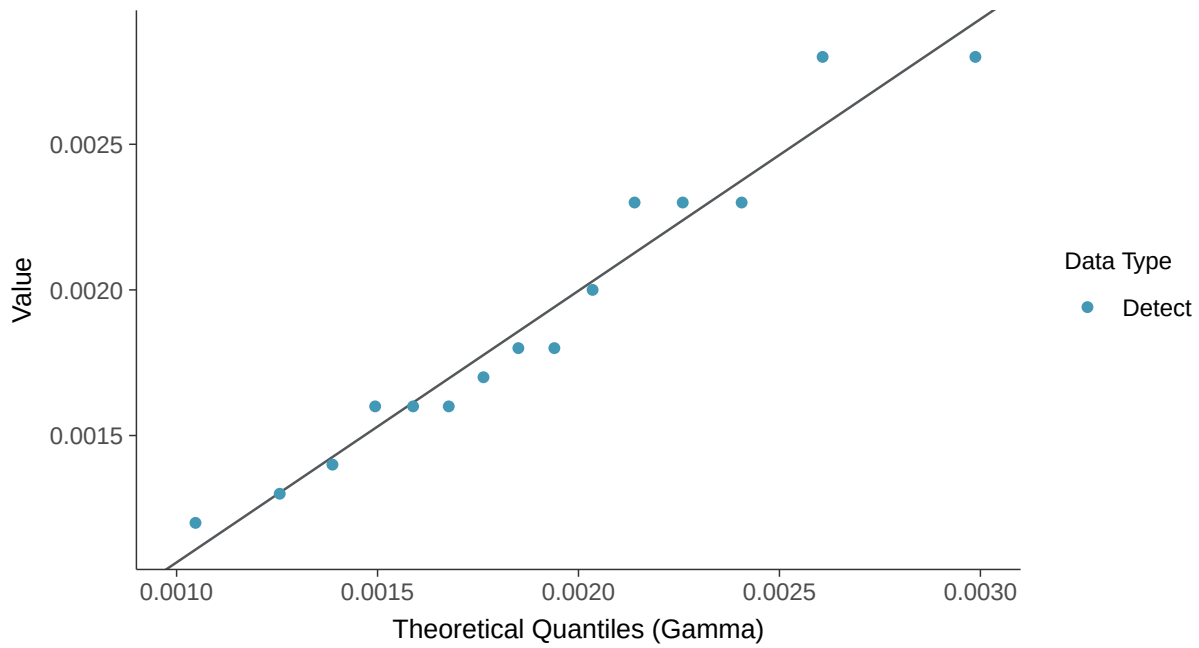
Normal Q-Q plot
Lead, MW-20 (mg/L)



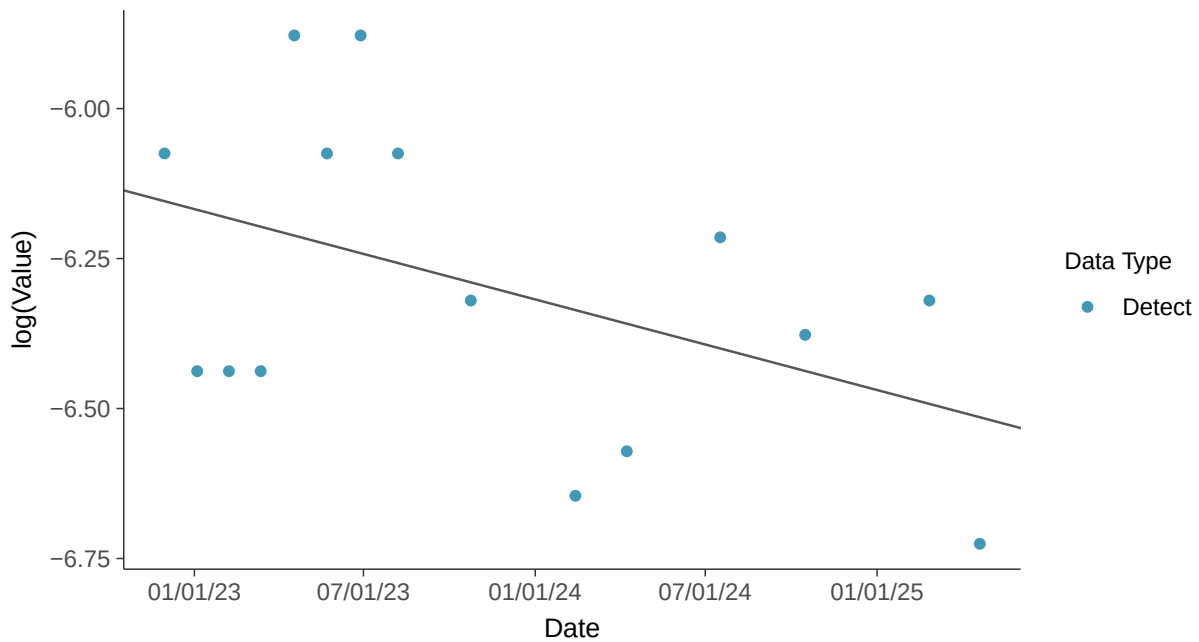
Lognormal Q-Q plot
Lead, MW-20 (mg/L)



Gamma Q-Q plot
Lead, MW-20 (mg/L)

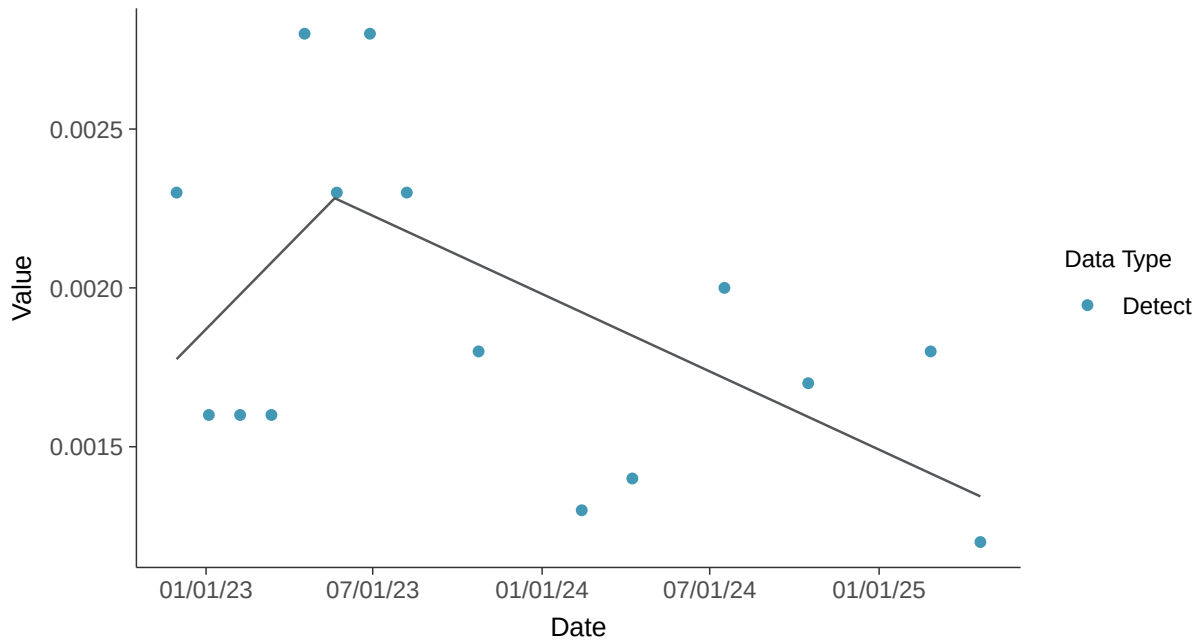


Trend Regression: Lognormal MLE
Lead, MW-20 (mg/L)



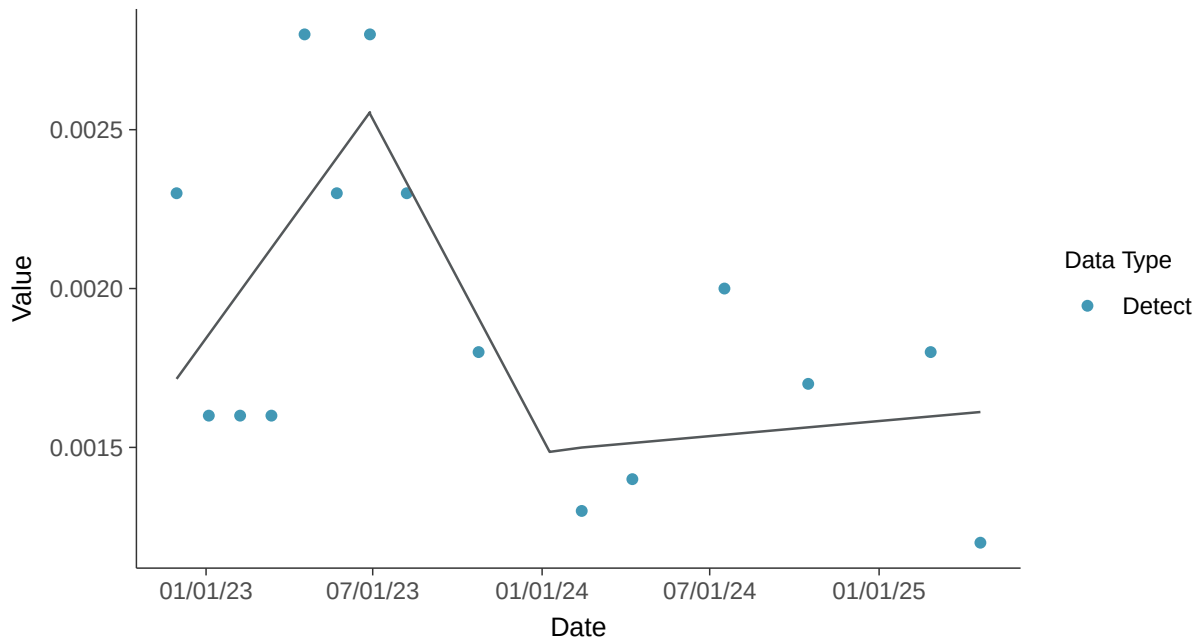
Trend Regression: Piecewise Linear-Linear

Lead, MW-20 (mg/L)



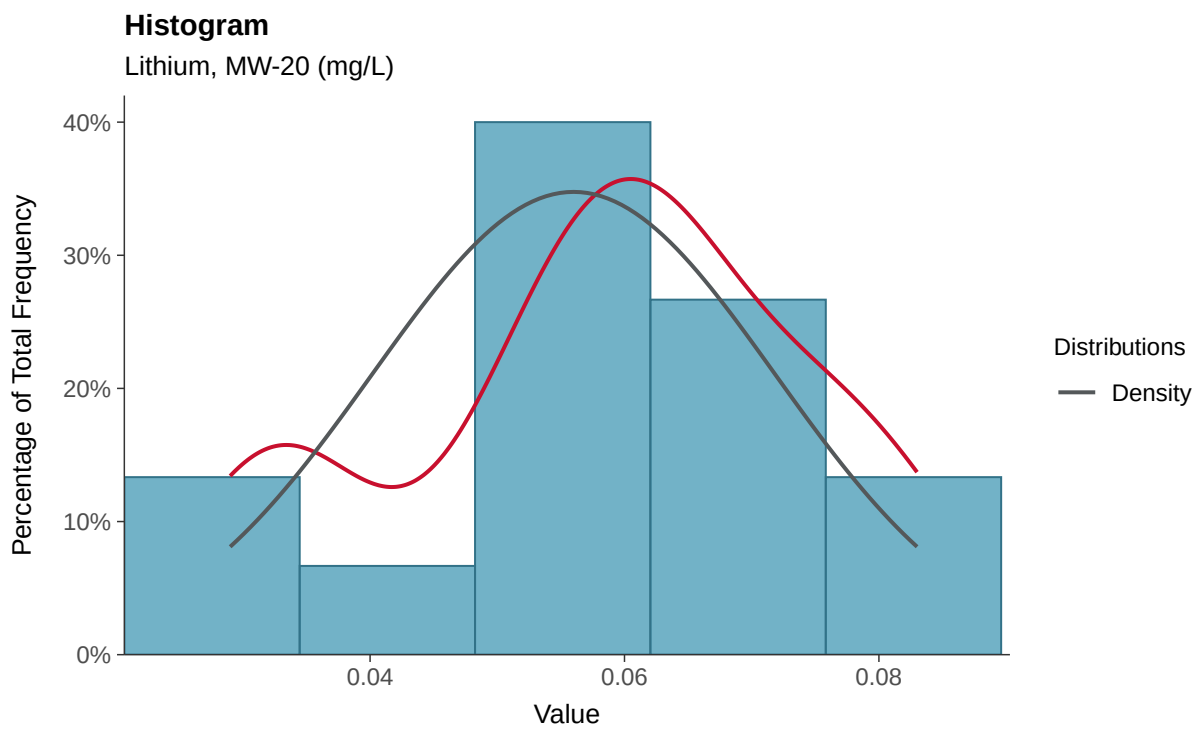
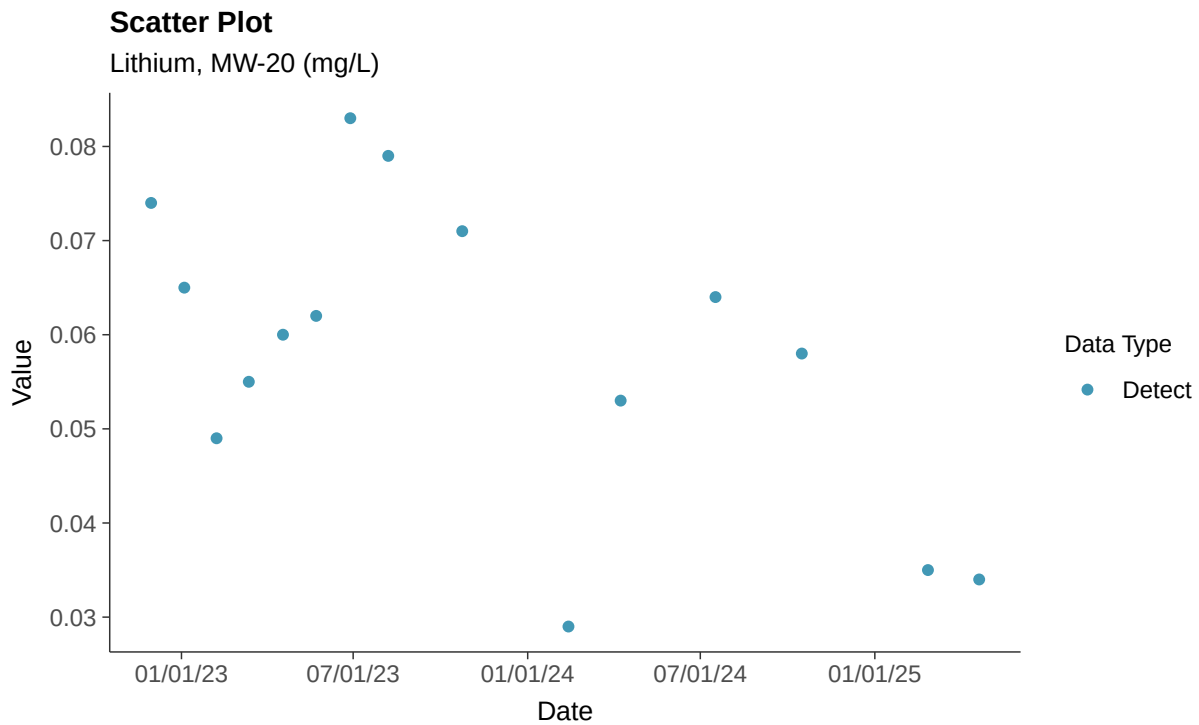
Trend Regression: Piecewise Linear-Linear-Linear

Lead, MW-20 (mg/L)



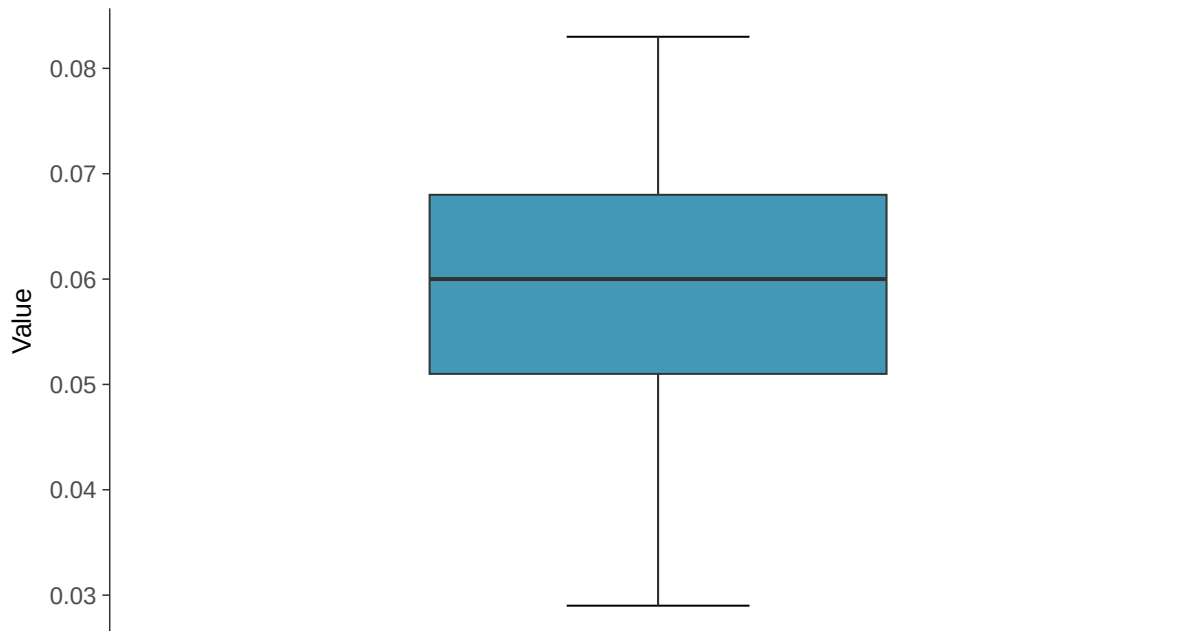
Appendix IV: Lithium, MW-20

ID: 30_1_4_116



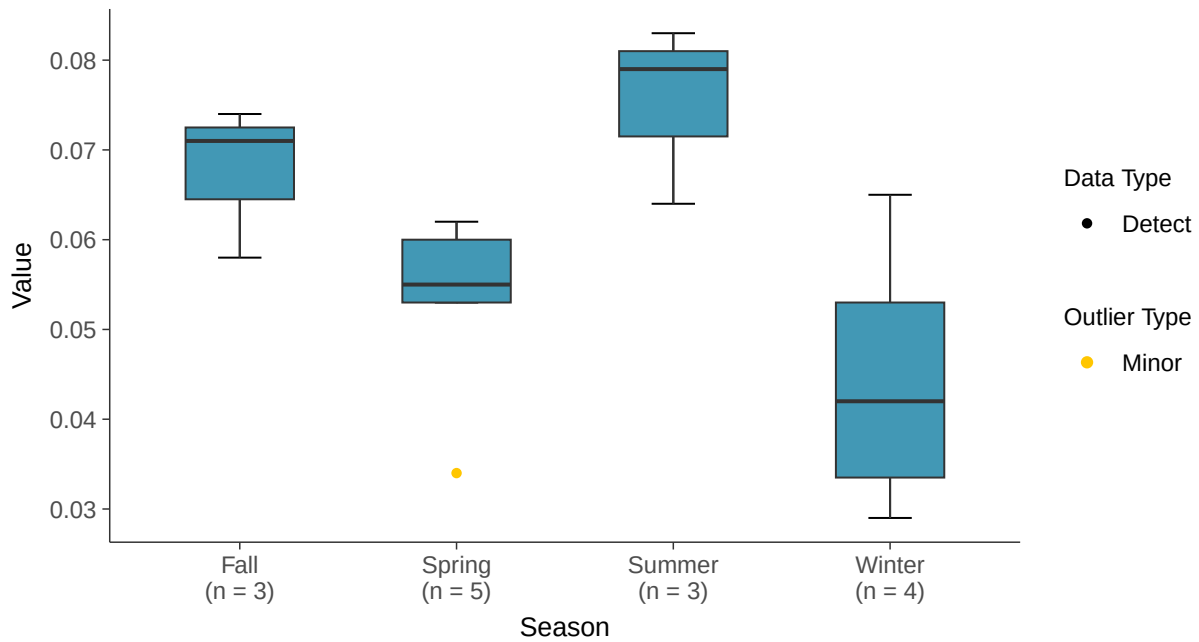
Boxplot

Lithium, MW-20 (mg/L)



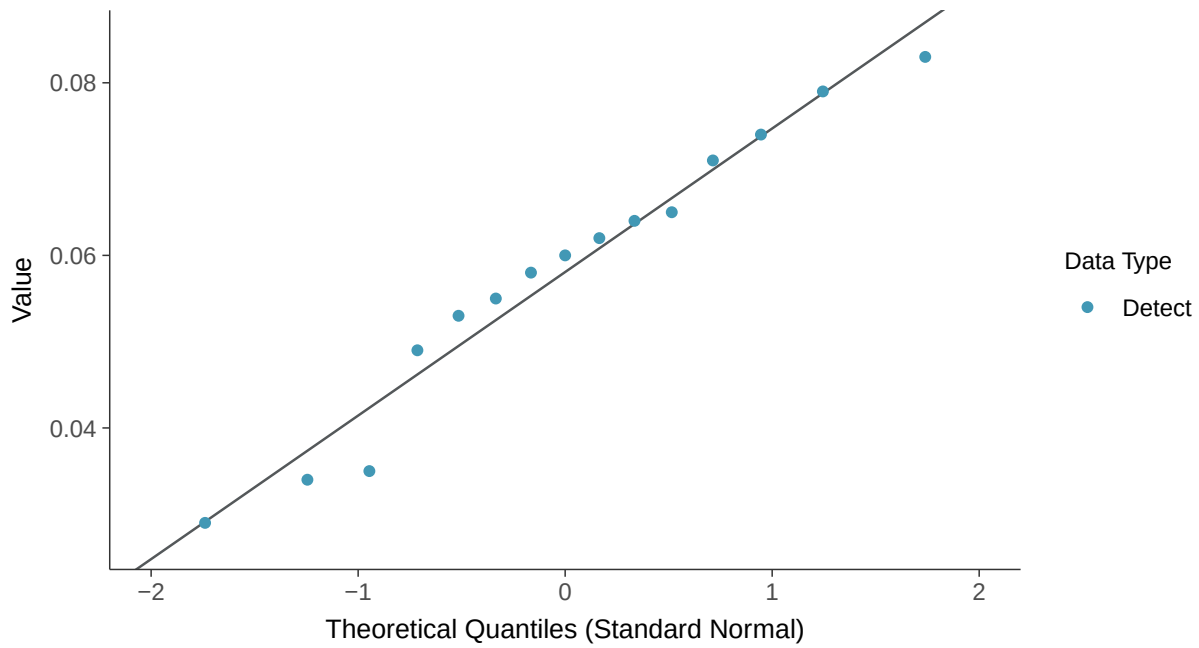
Boxplot by Season

Lithium, MW-20 (mg/L)



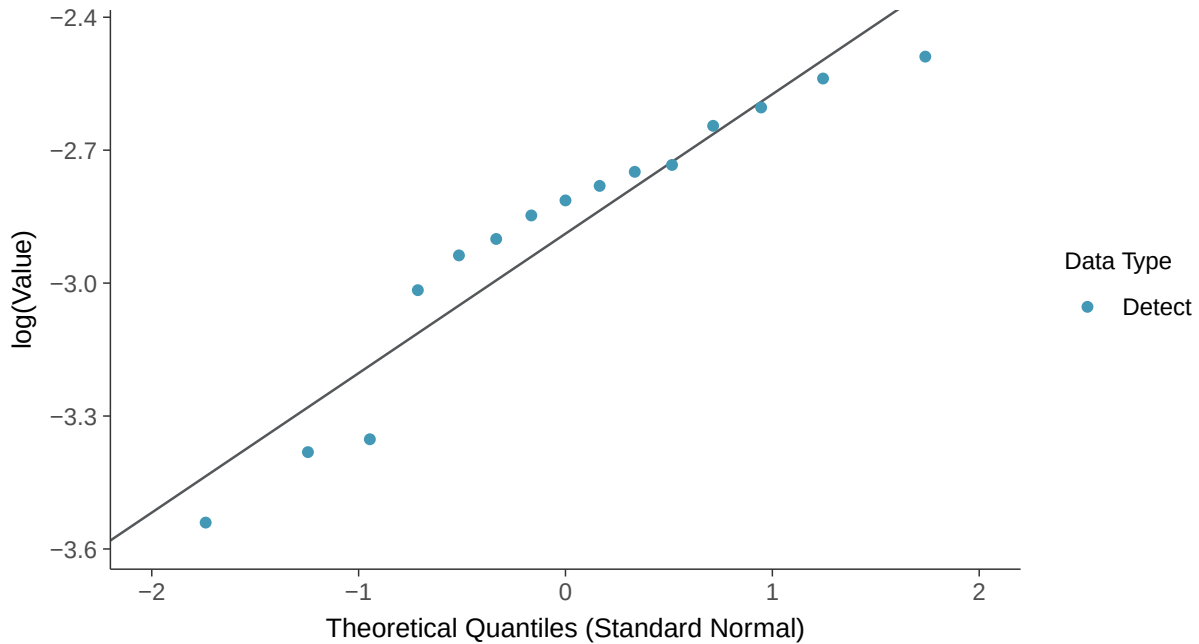
Normal Q-Q plot

Lithium, MW-20 (mg/L)



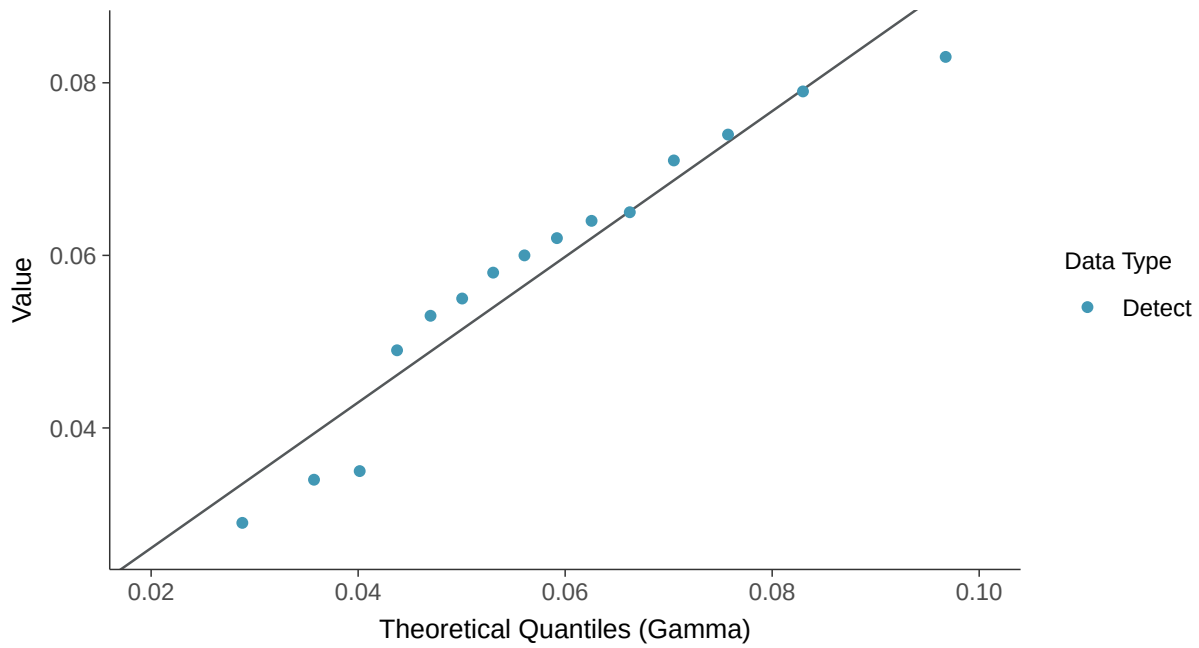
Lognormal Q-Q plot

Lithium, MW-20 (mg/L)



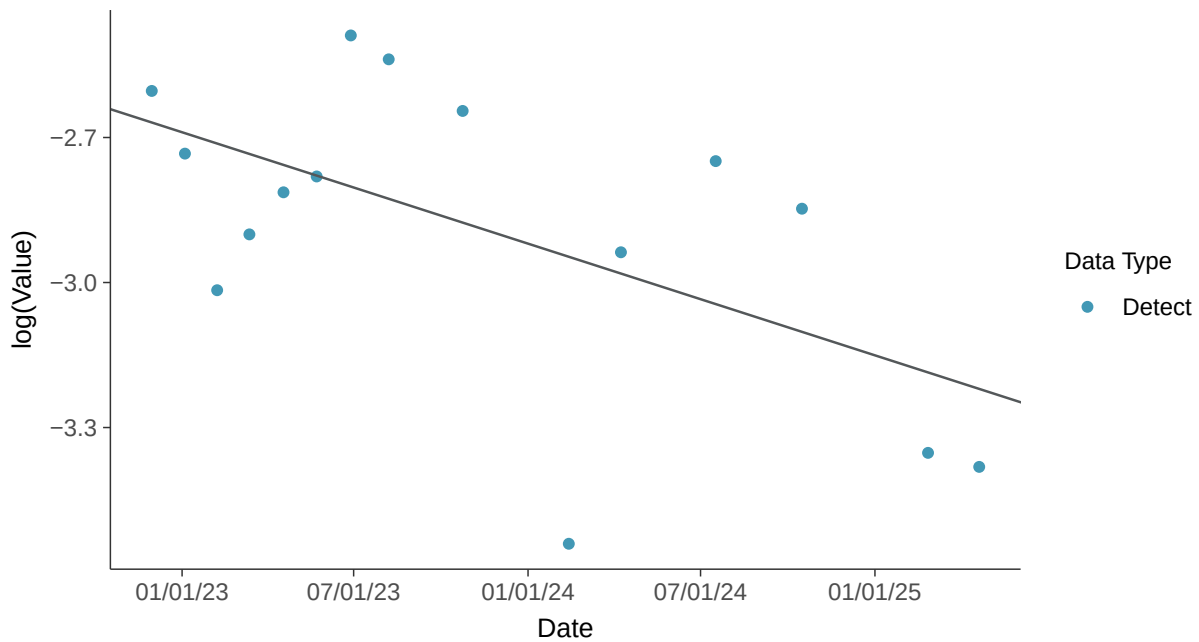
Gamma Q-Q plot

Lithium, MW-20 (mg/L)



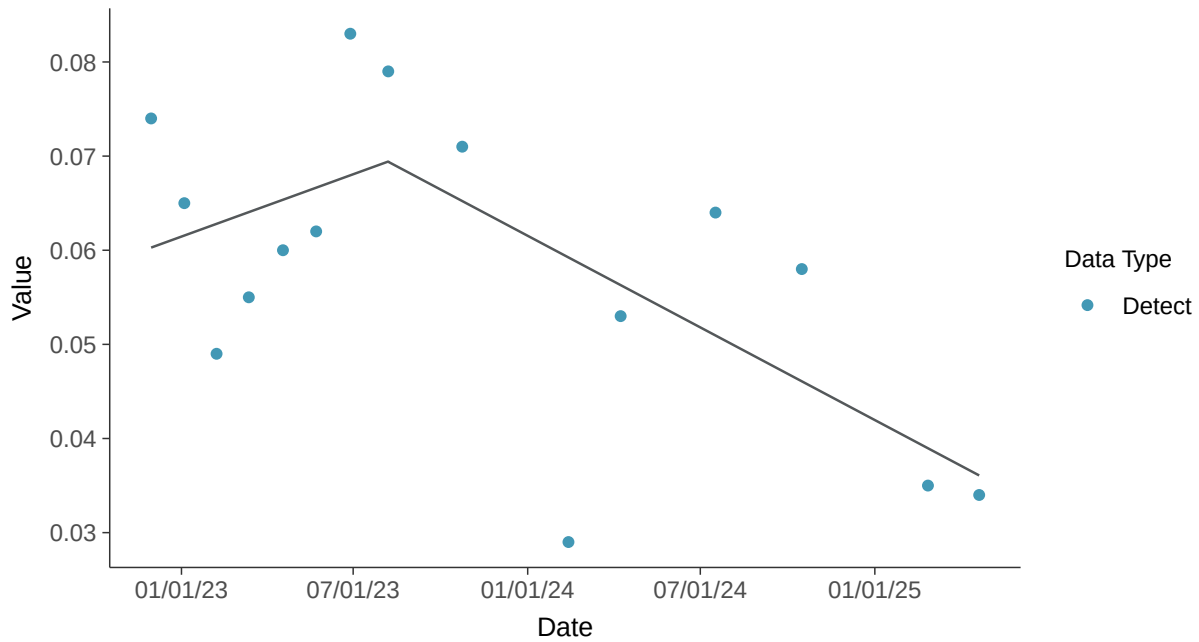
Trend Regression: Lognormal MLE

Lithium, MW-20 (mg/L)



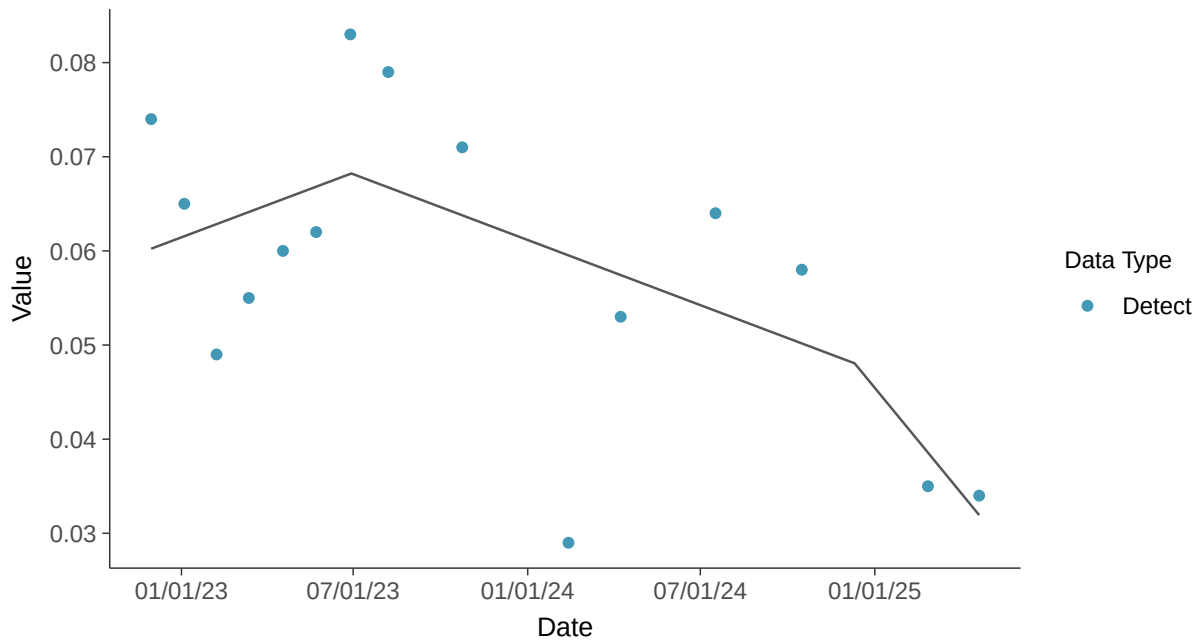
Trend Regression: Piecewise Linear-Linear

Lithium, MW-20 (mg/L)



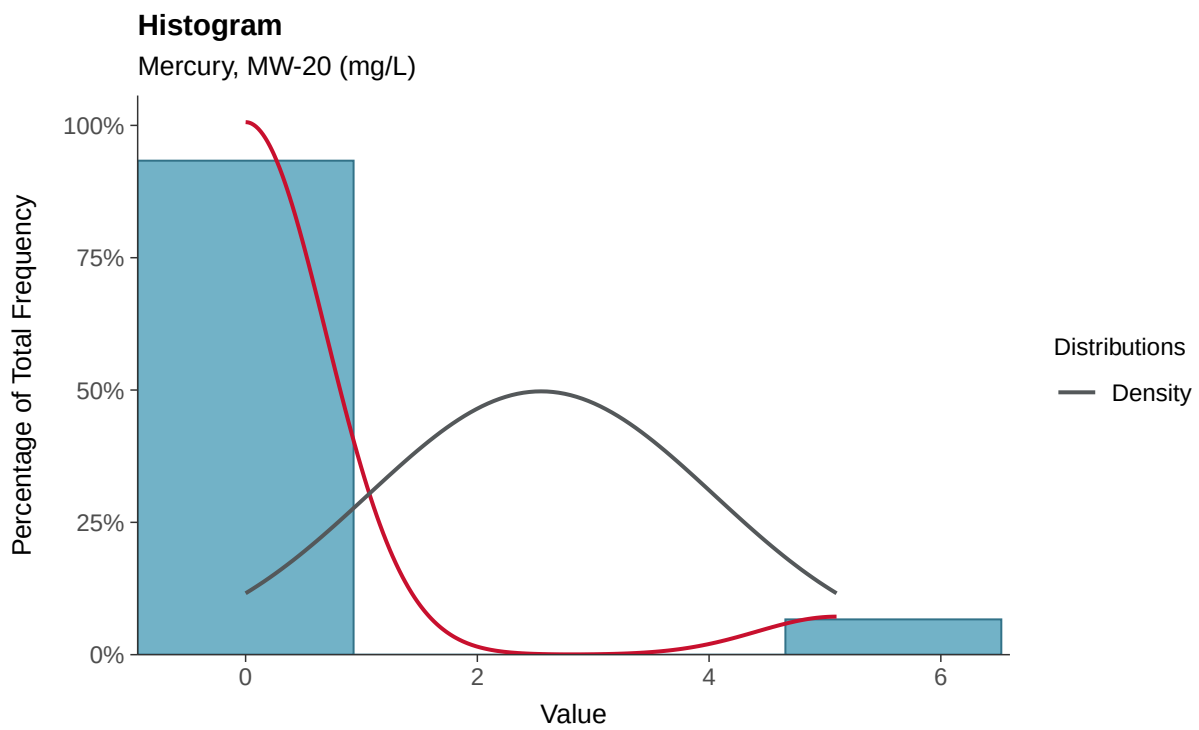
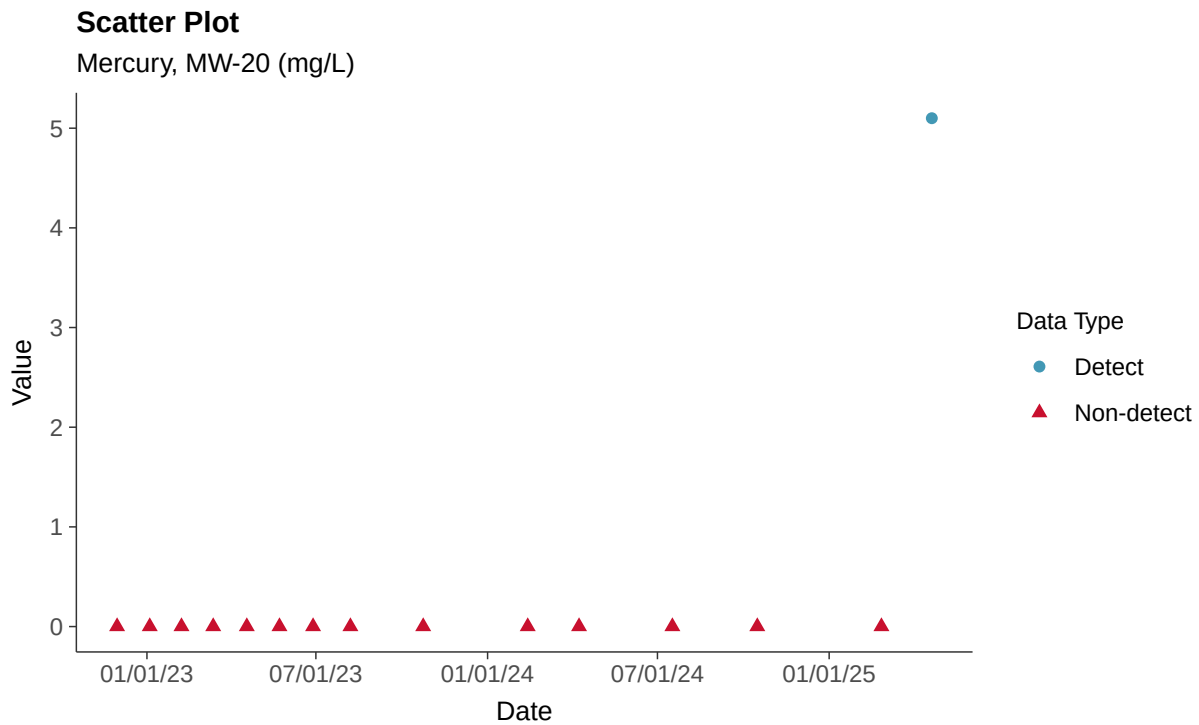
Trend Regression: Piecewise Linear-Linear-Linear

Lithium, MW-20 (mg/L)



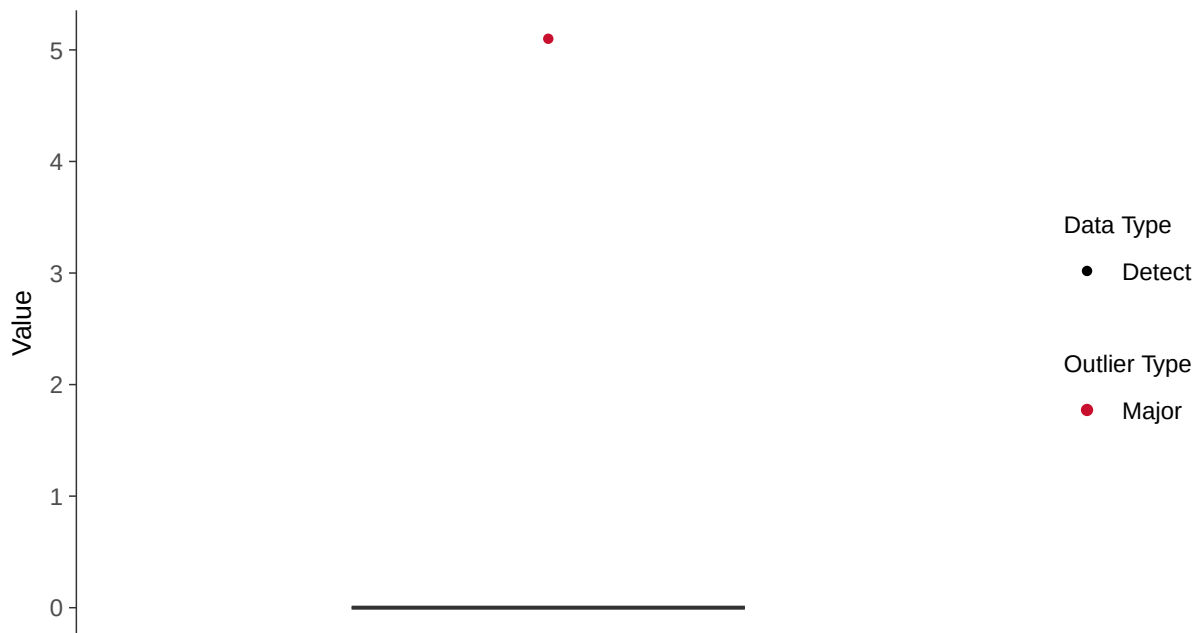
Appendix IV: Mercury, MW-20

ID: 30_1_4_117



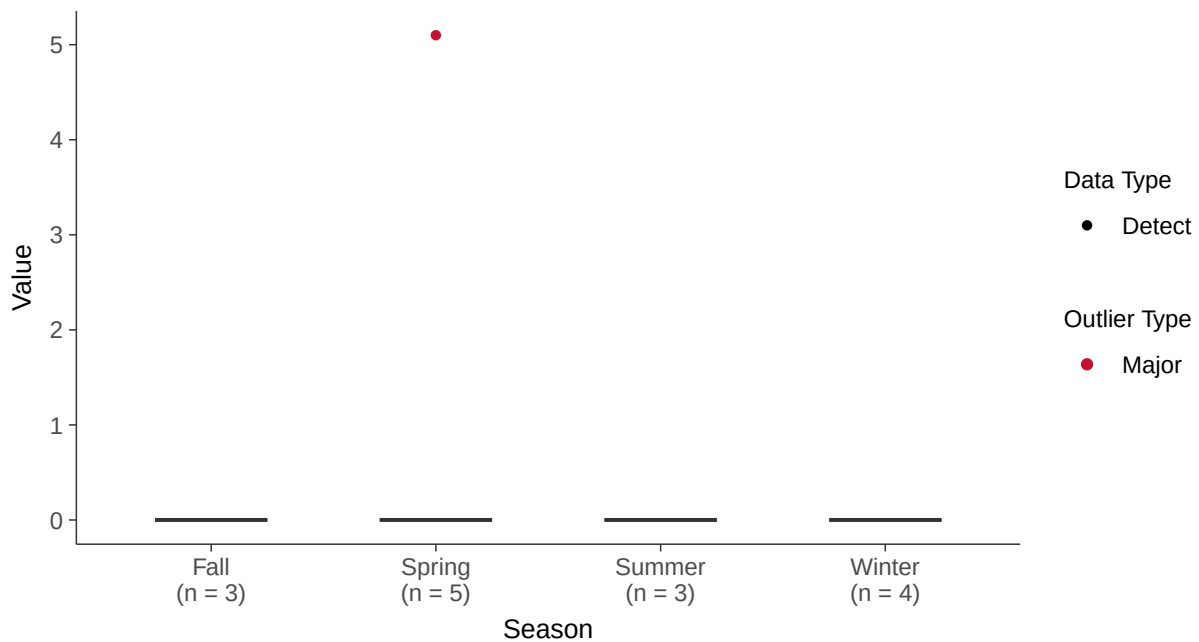
Boxplot

Mercury, MW-20 (mg/L)



Boxplot by Season

Mercury, MW-20 (mg/L)

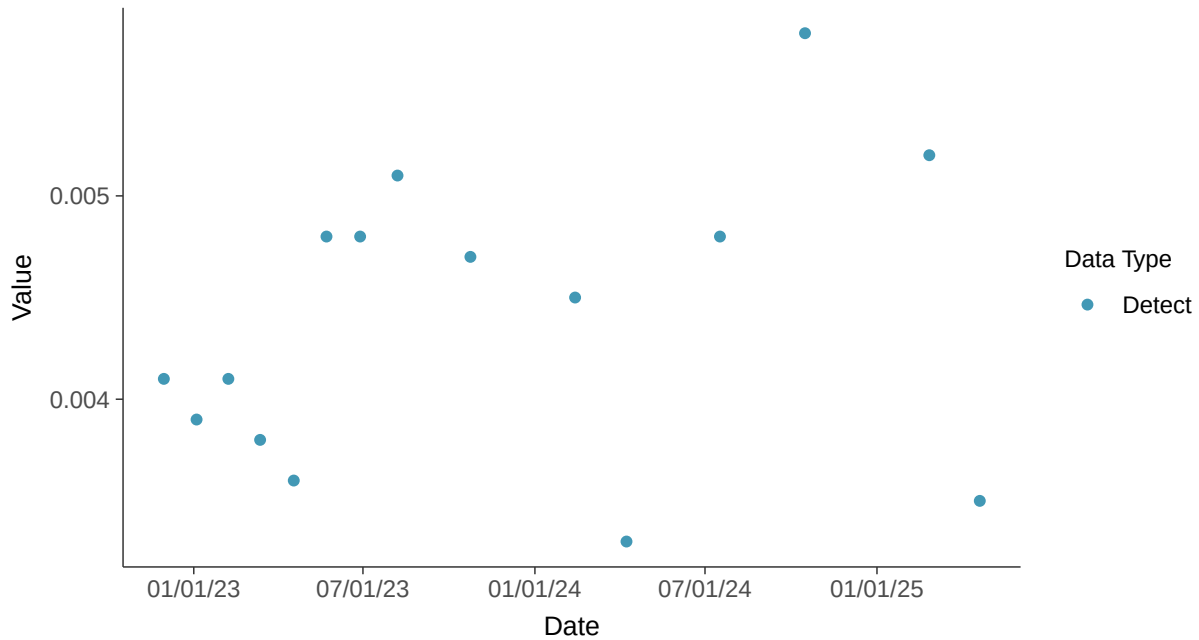


Appendix IV: Molybdenum, MW-20

ID: 30_1_4_118

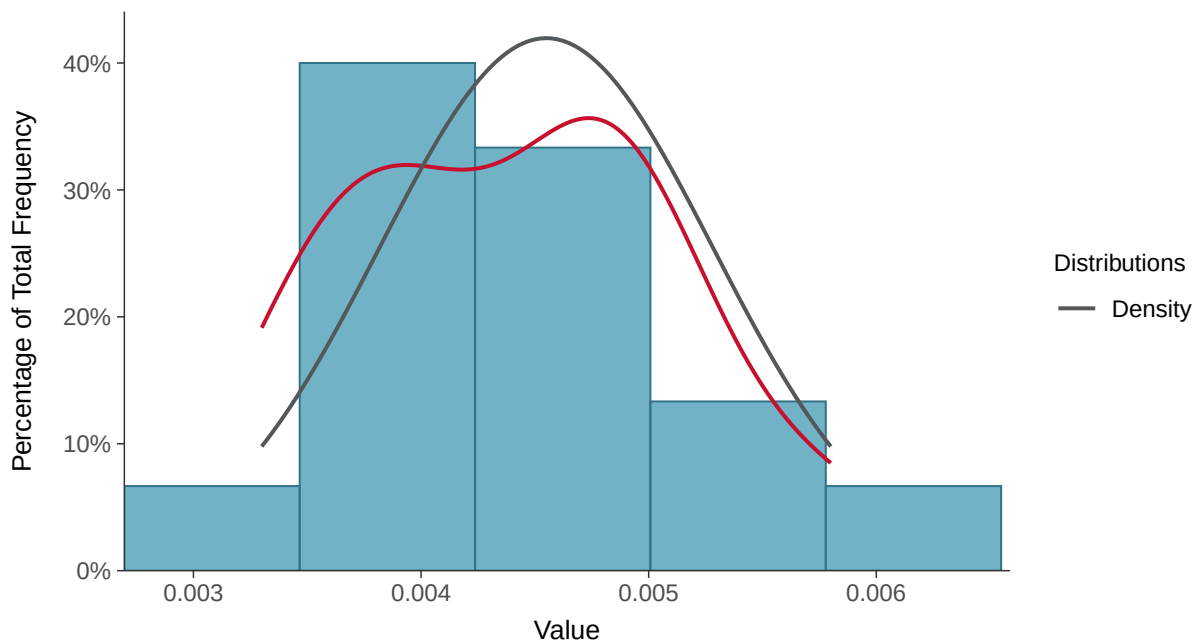
Scatter Plot

Molybdenum, MW-20 (mg/L)



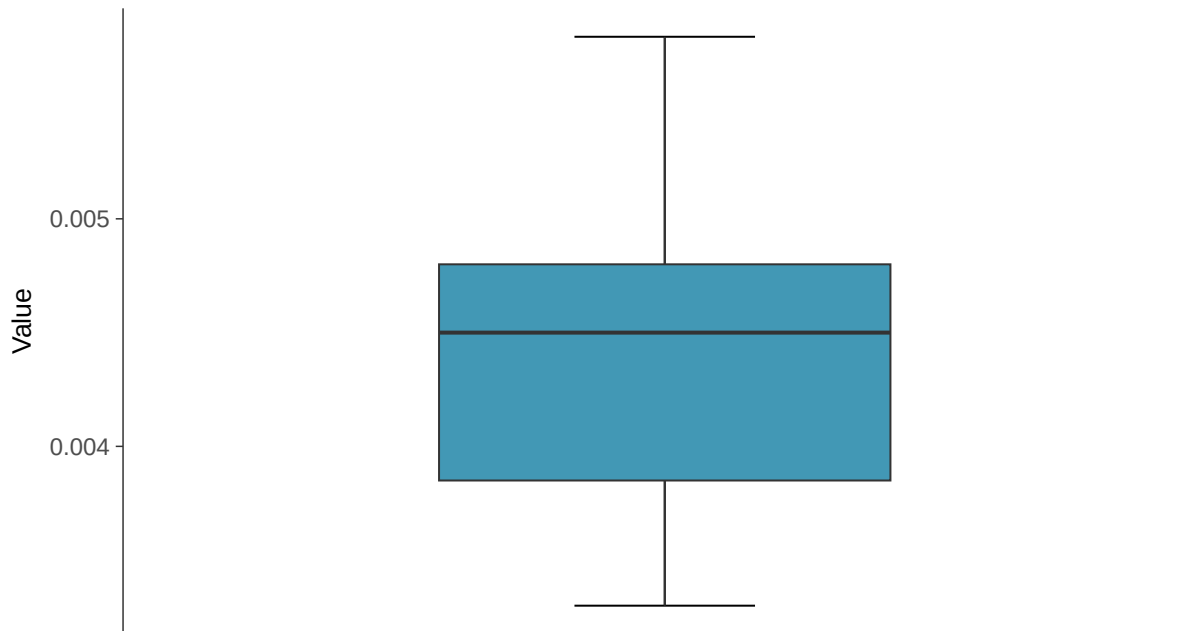
Histogram

Molybdenum, MW-20 (mg/L)



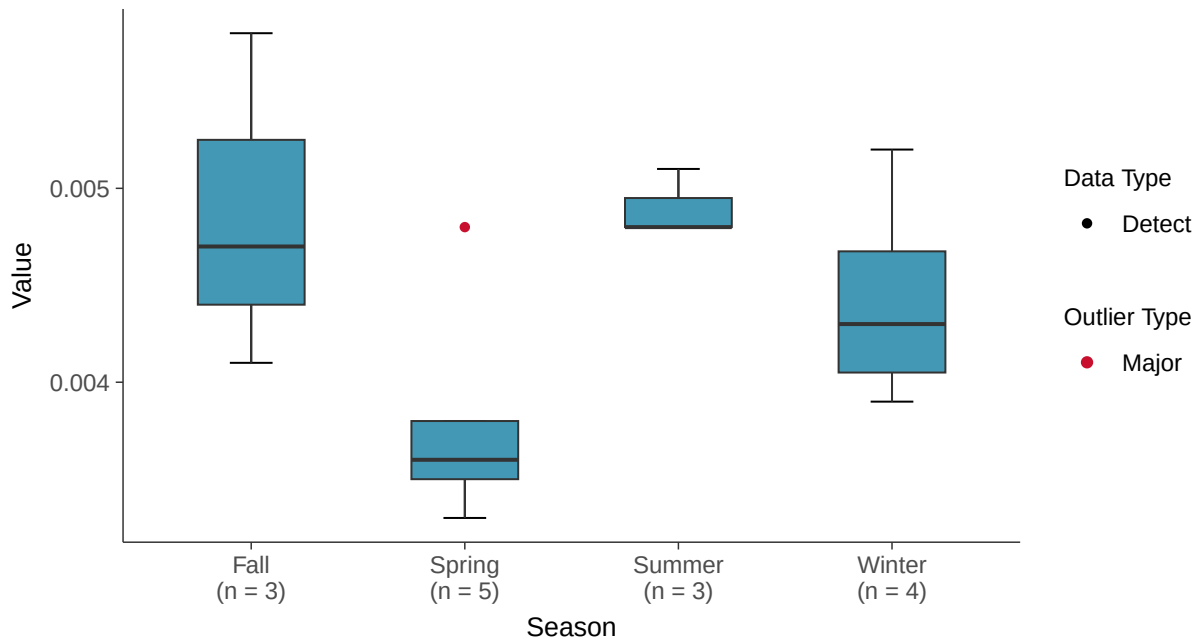
Boxplot

Molybdenum, MW-20 (mg/L)



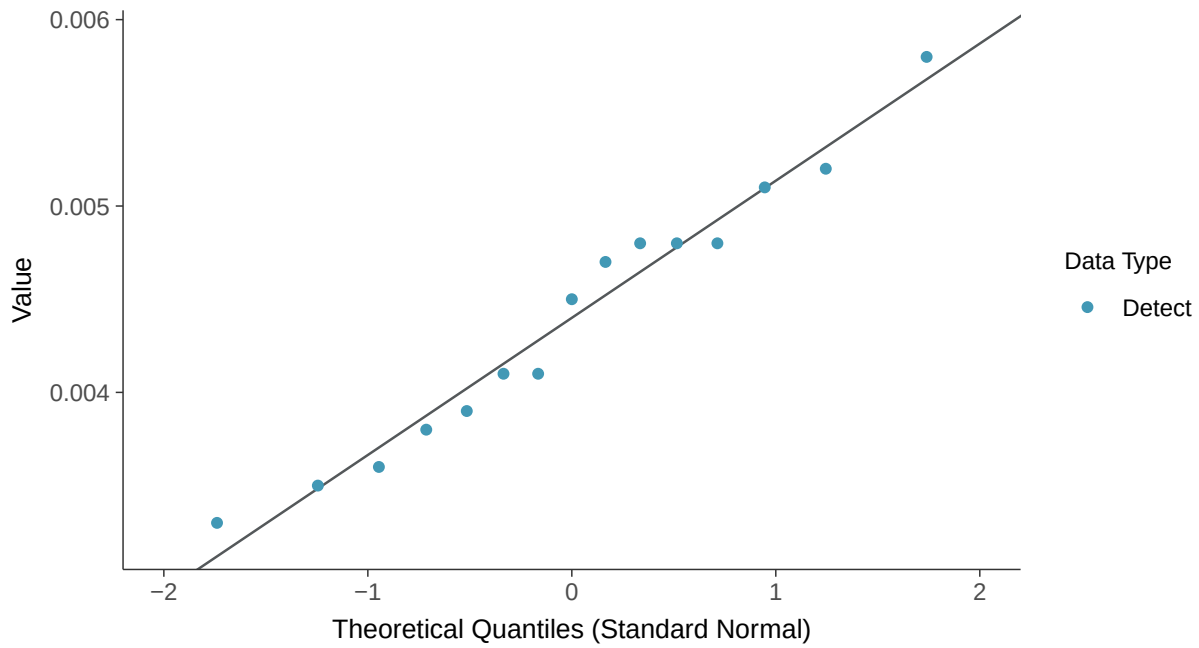
Boxplot by Season

Molybdenum, MW-20 (mg/L)



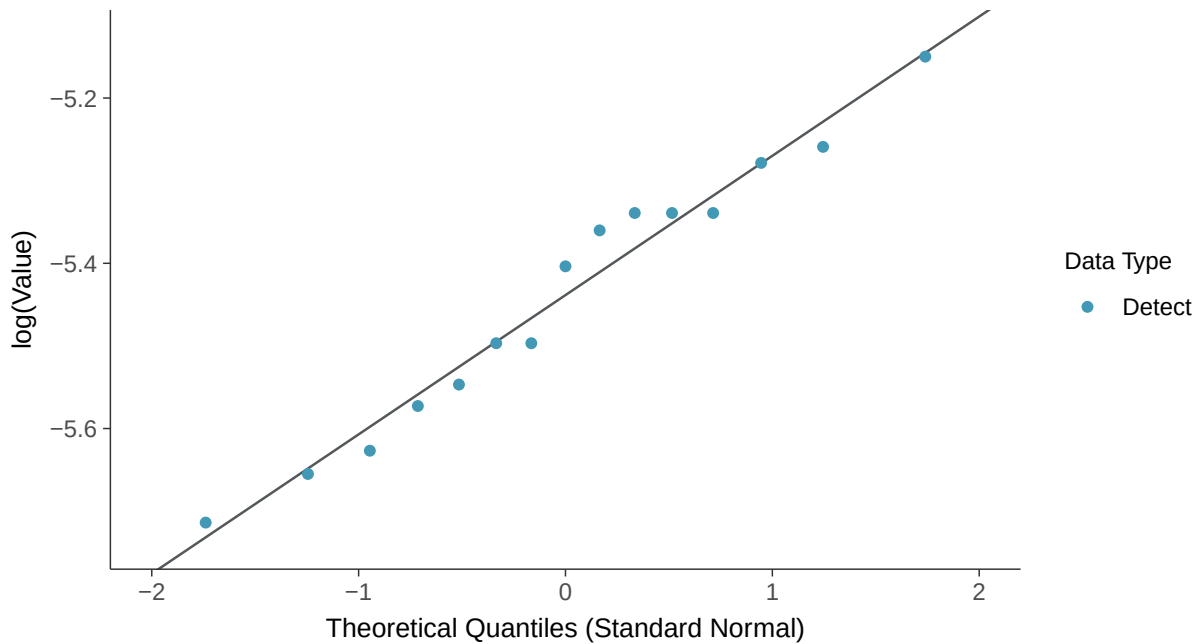
Normal Q-Q plot

Molybdenum, MW-20 (mg/L)



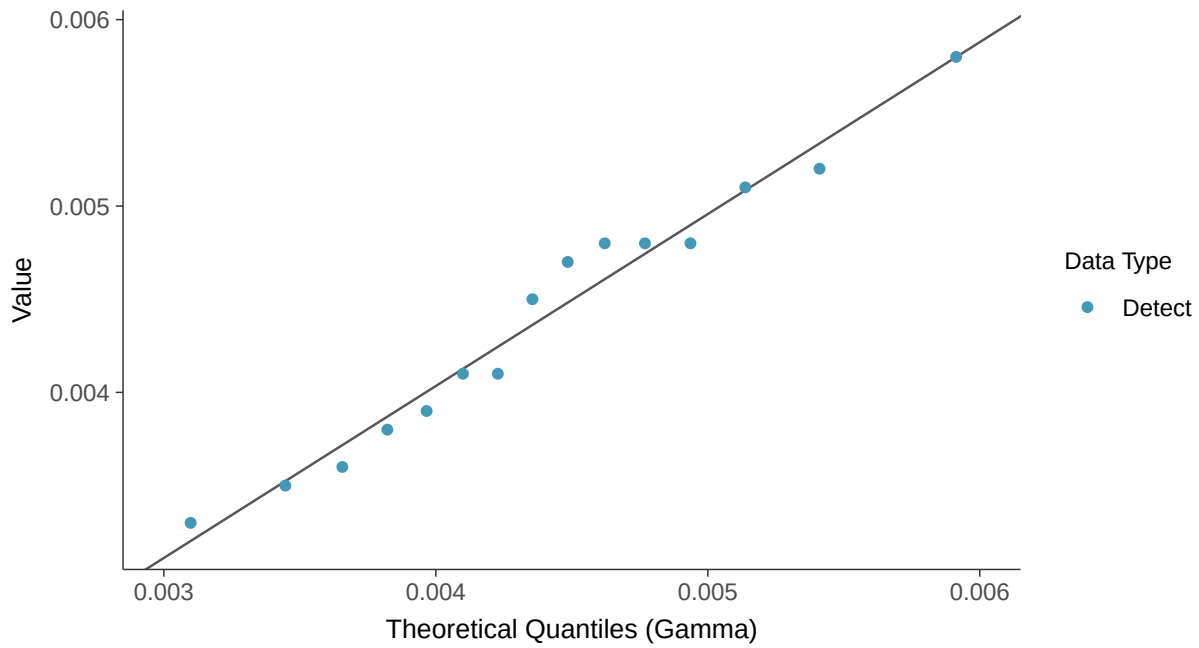
Lognormal Q-Q plot

Molybdenum, MW-20 (mg/L)



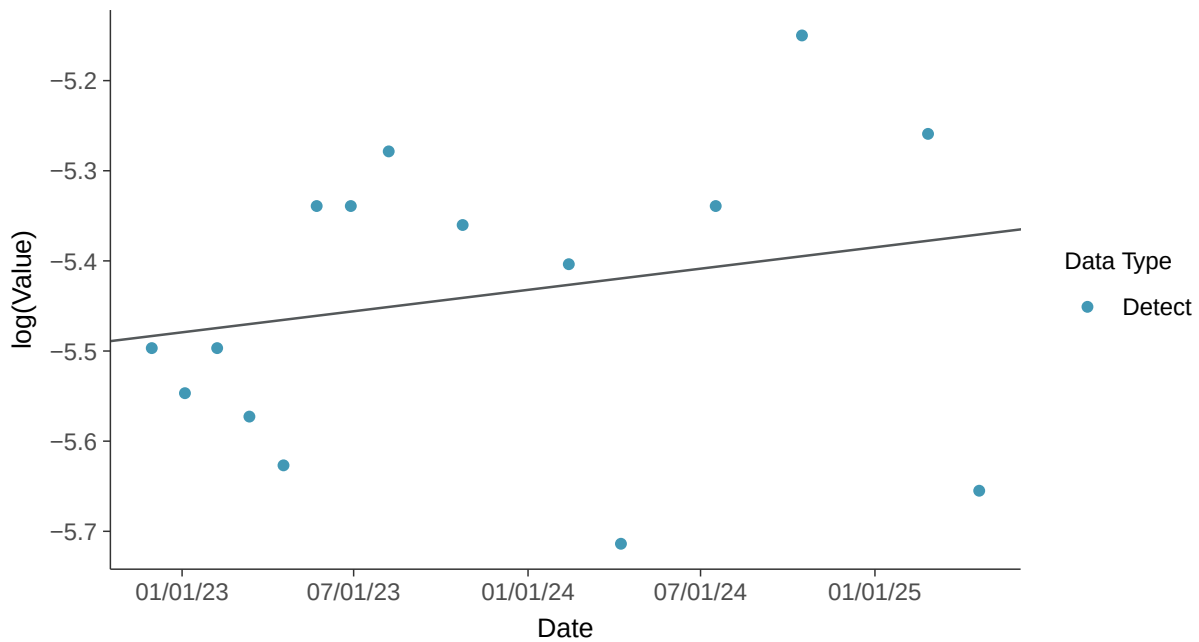
Gamma Q-Q plot

Molybdenum, MW-20 (mg/L)



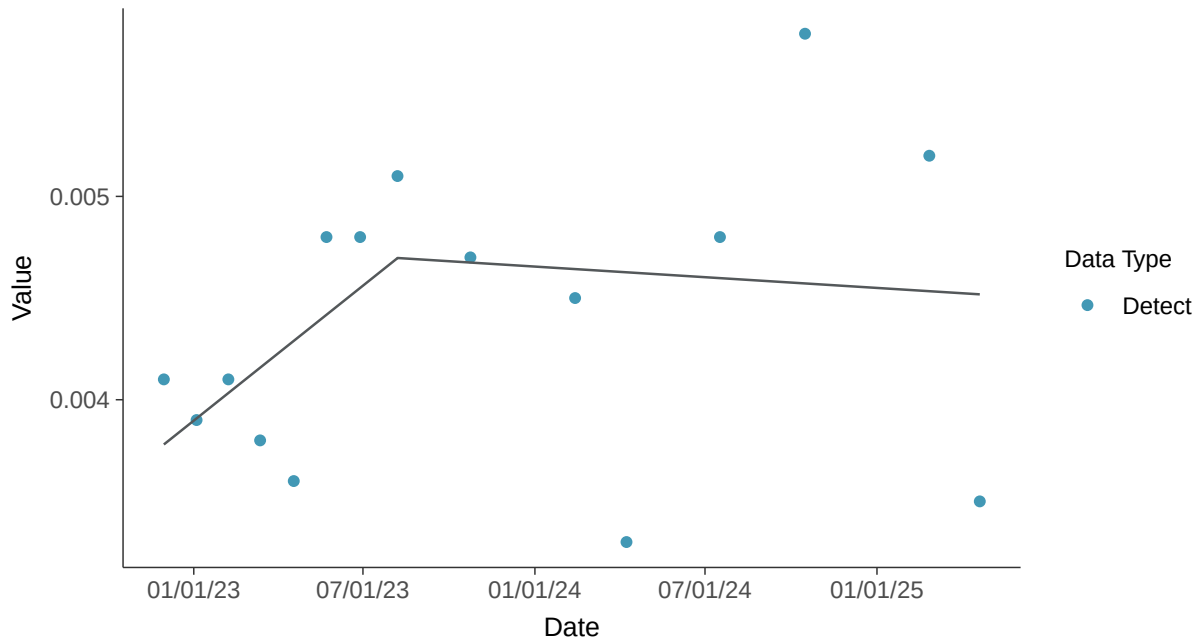
Trend Regression: Lognormal MLE

Molybdenum, MW-20 (mg/L)



Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-20 (mg/L)

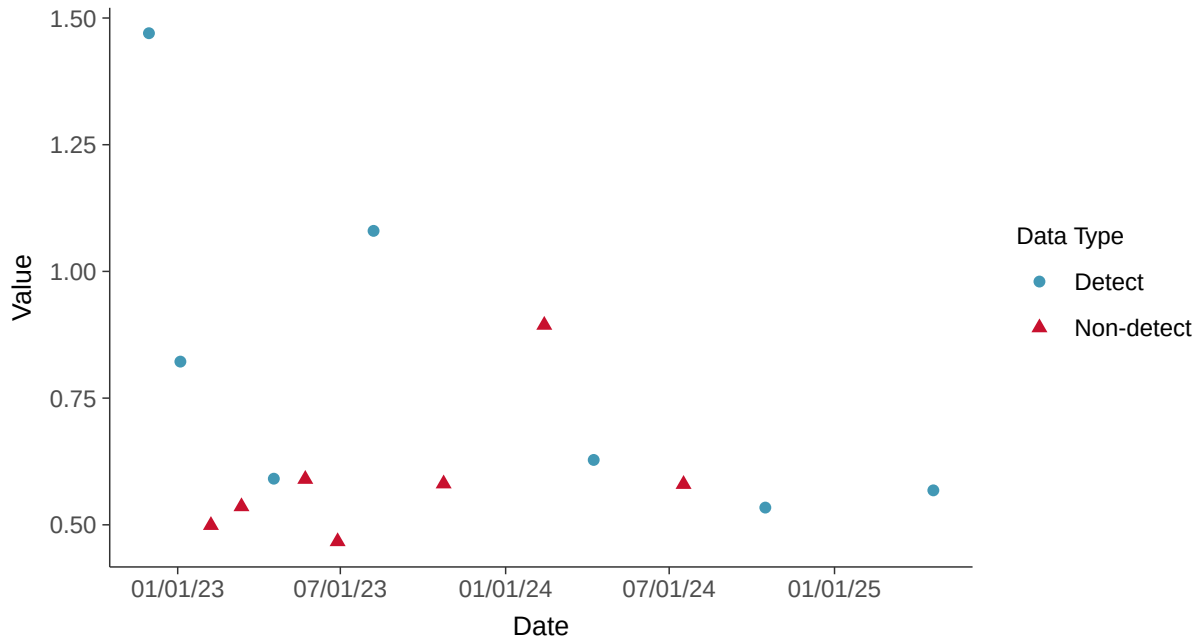


Appendix IV: Radium 226 and 228, MW-20

ID: 30_1_4_121

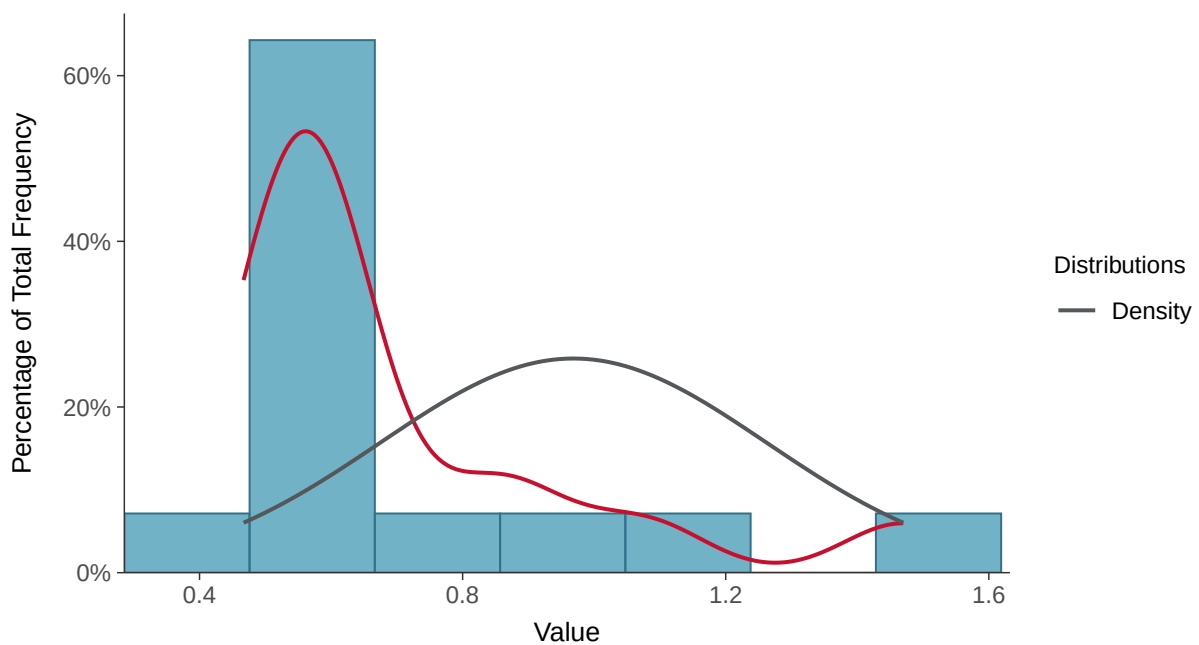
Scatter Plot

Radium 226 and 228, MW-20 (pCi/L)



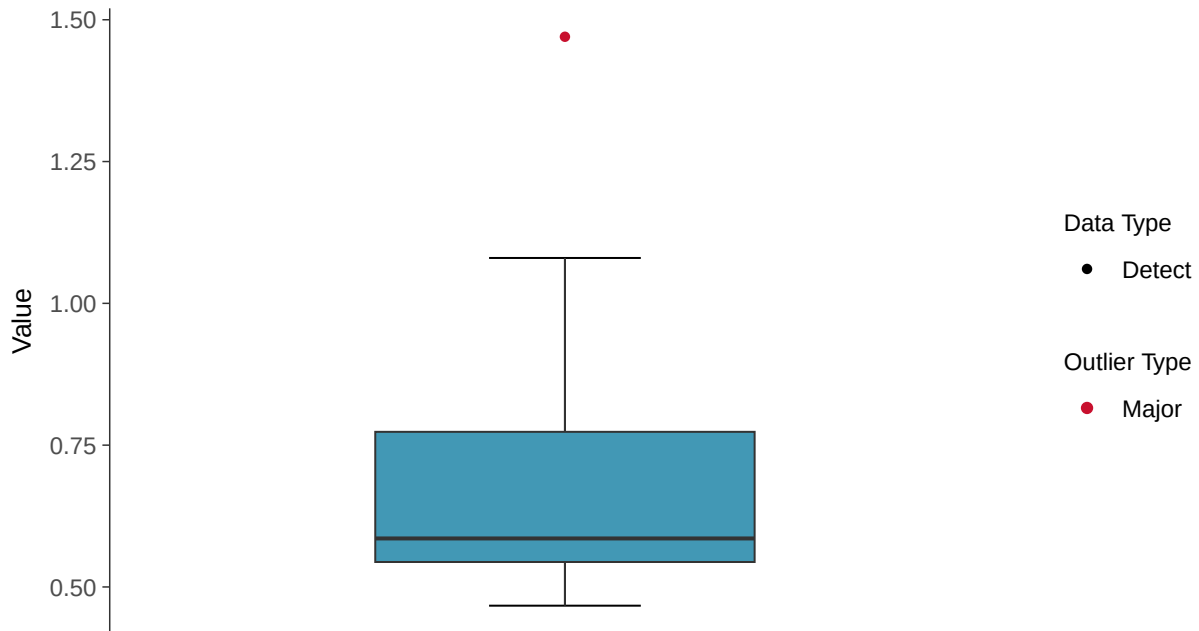
Histogram

Radium 226 and 228, MW-20 (pCi/L)



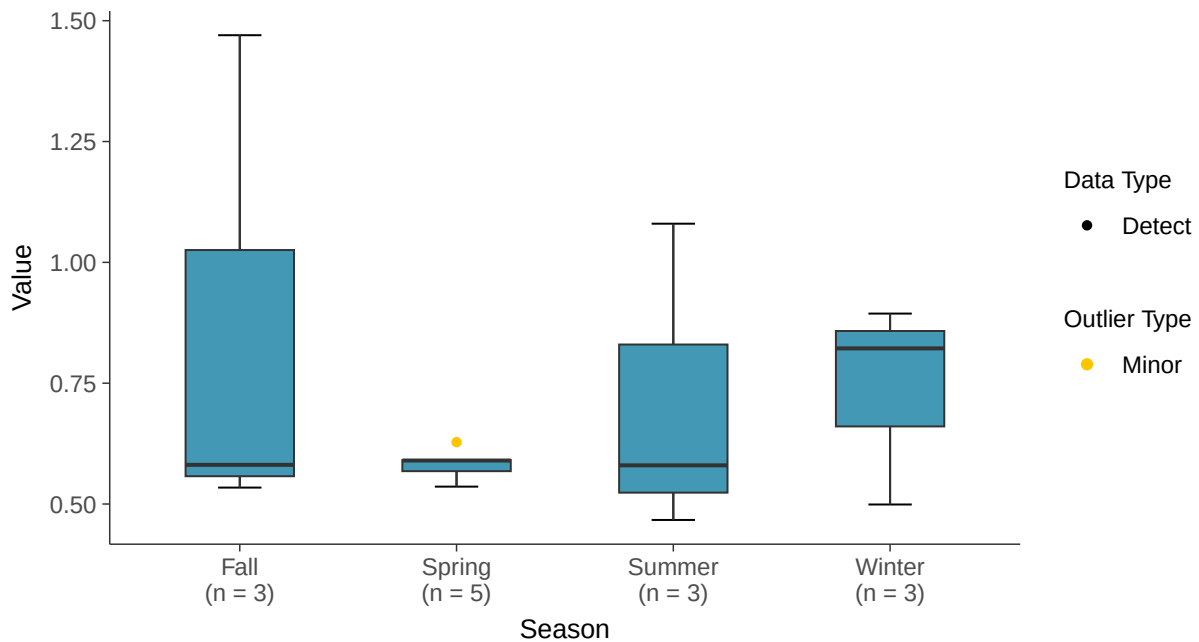
Boxplot

Radium 226 and 228, MW-20 (pCi/L)



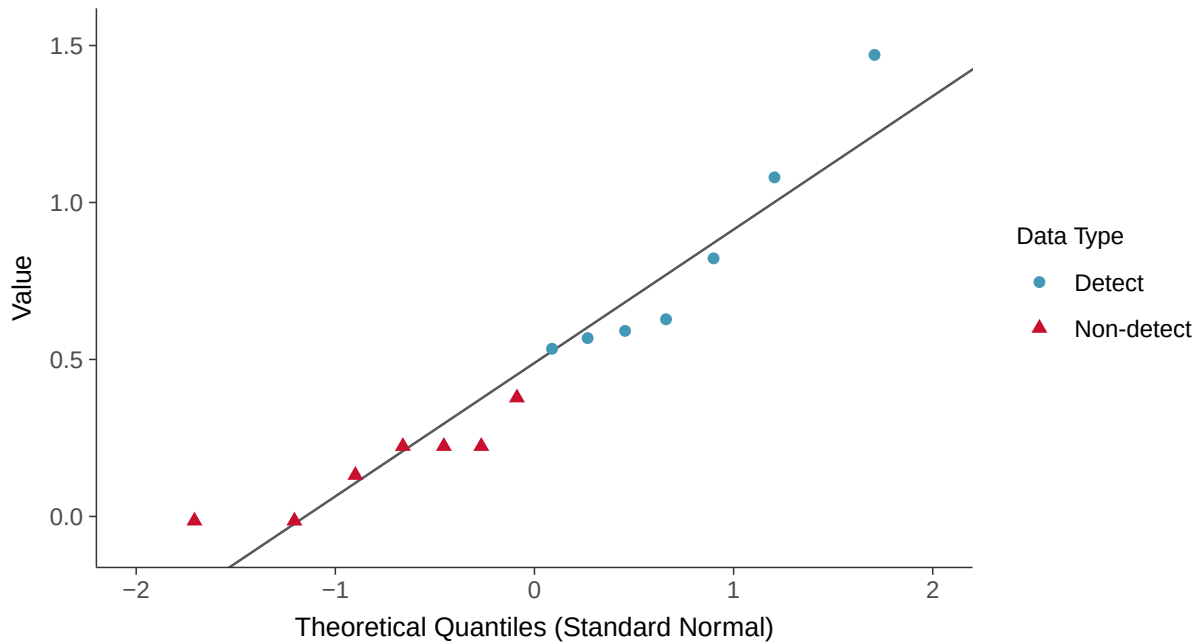
Boxplot by Season

Radium 226 and 228, MW-20 (pCi/L)



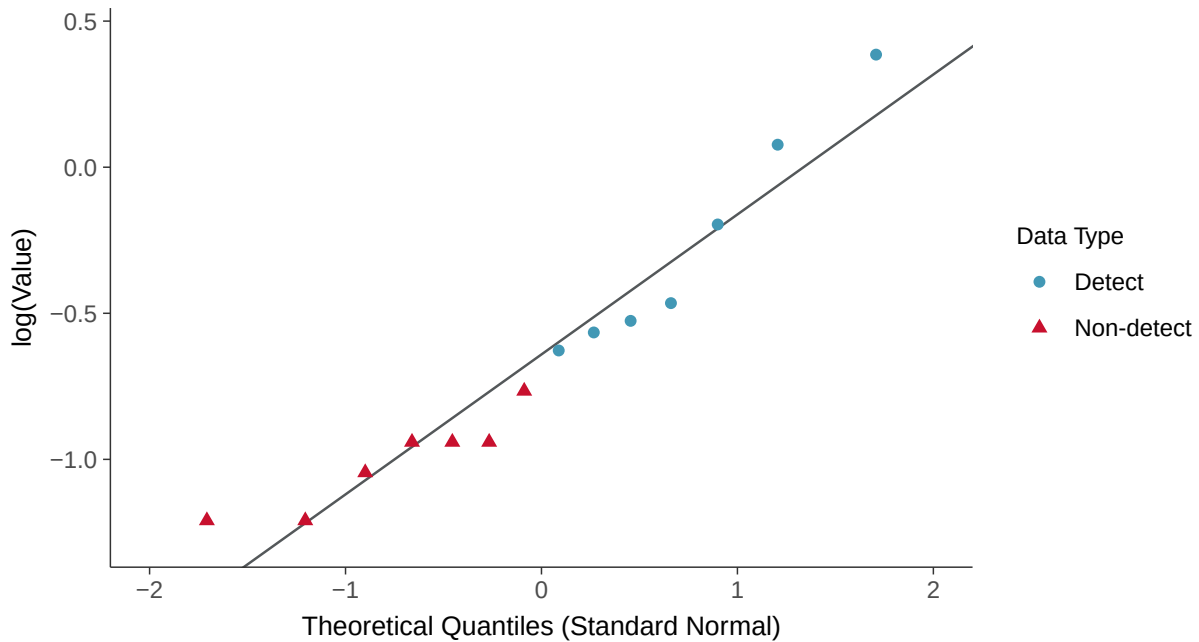
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-20 (pCi/L)



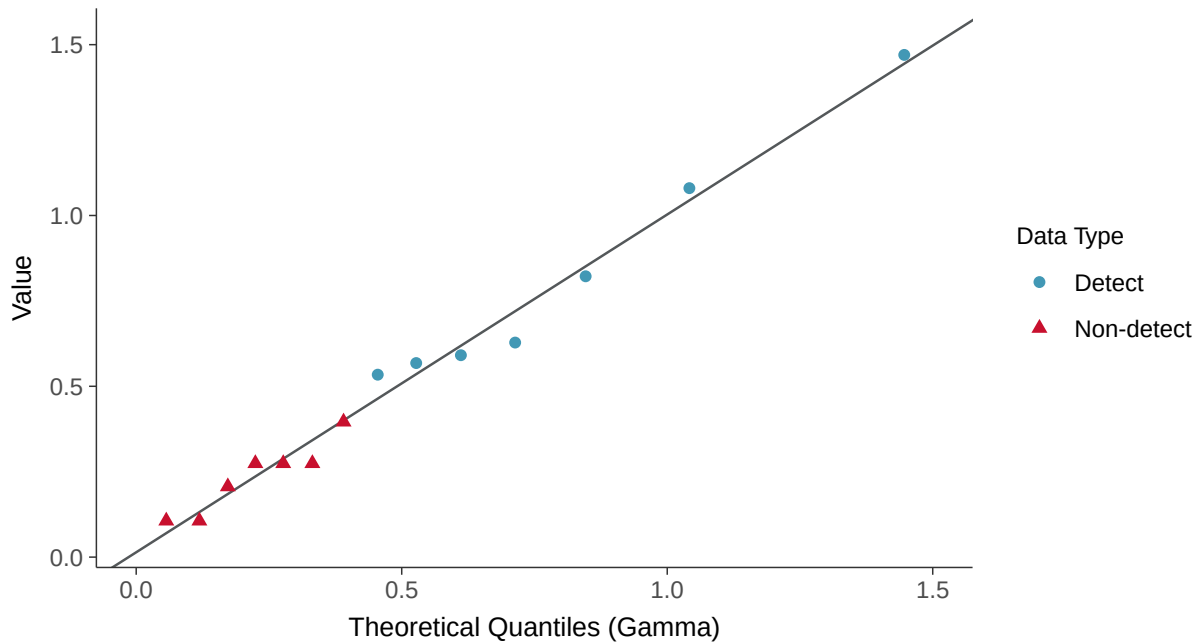
Lognormal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-20 (pCi/L)



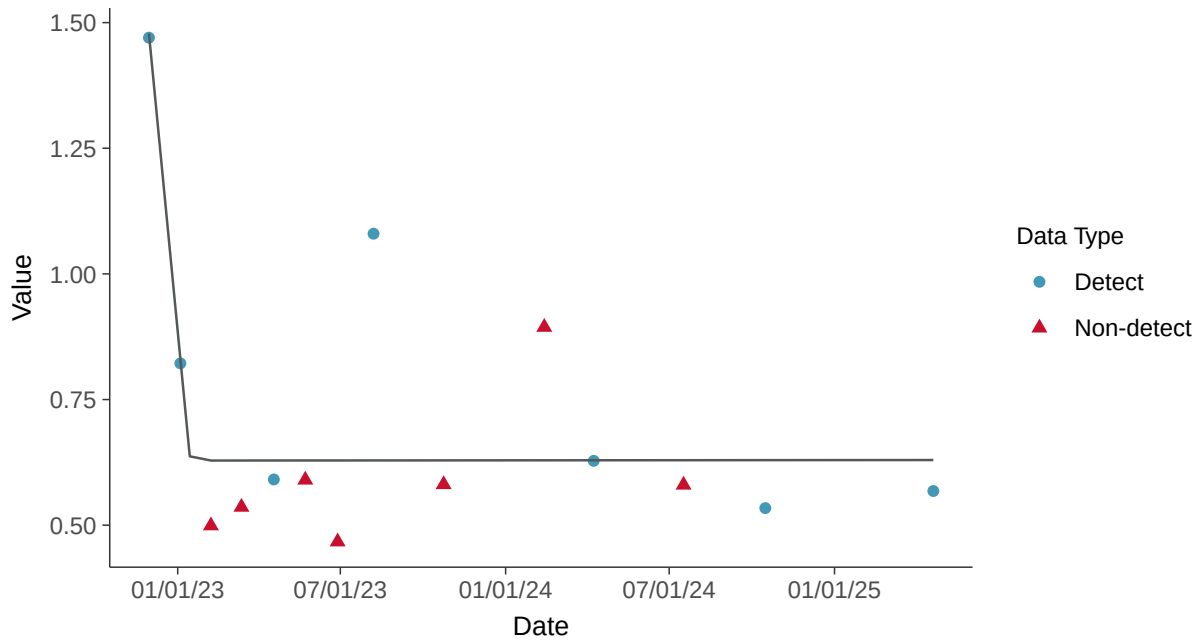
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-20 (pCi/L)

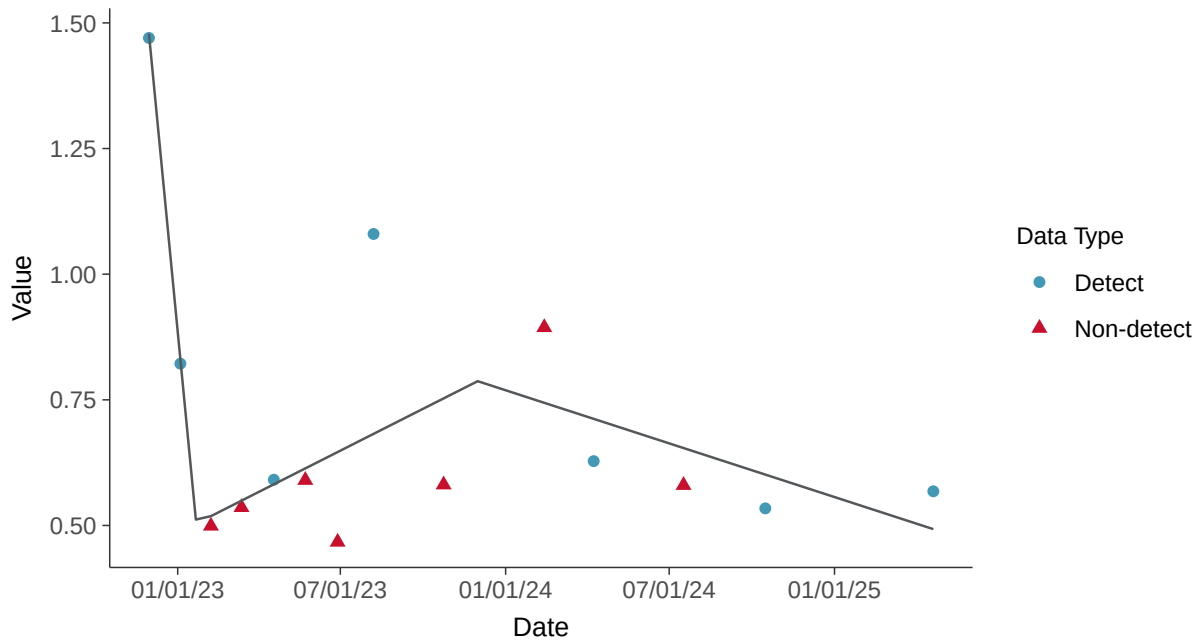


Trend Regression: Piecewise Linear-Linear

Radium 226 and 228, MW-20 (pCi/L)

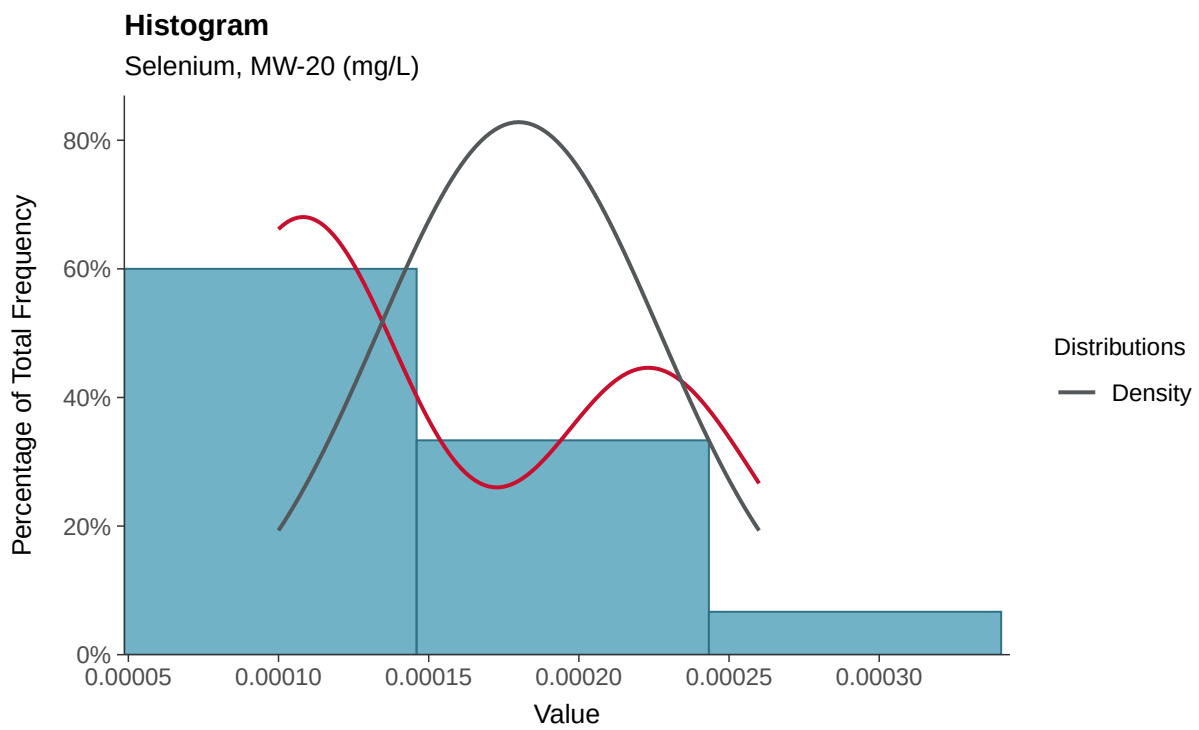
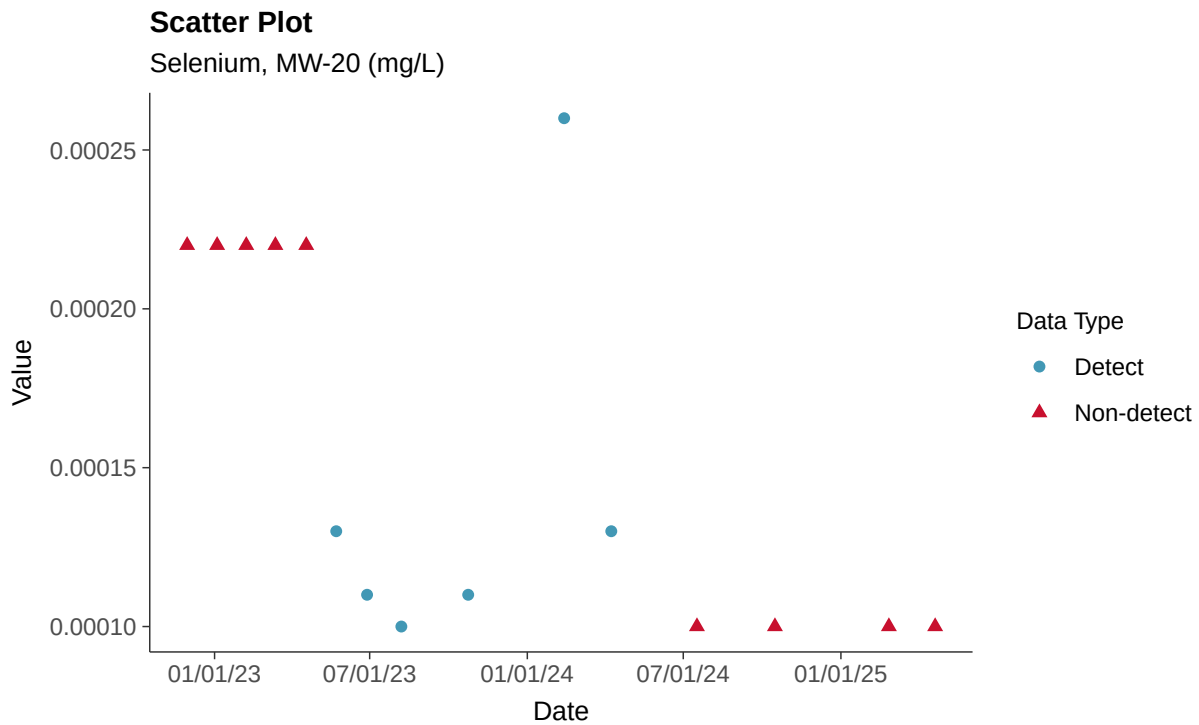


Trend Regression: Piecewise Linear-Linear-Linear
Radium 226 and 228, MW-20 (pCi/L)



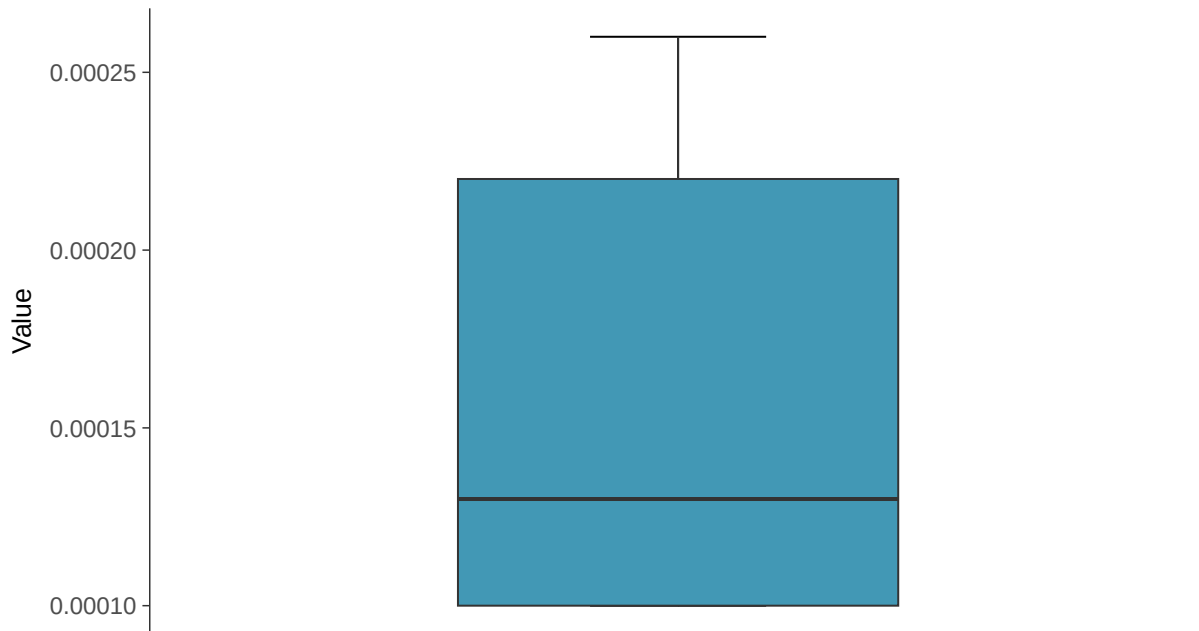
Appendix IV: Selenium, MW-20

ID: 30_1_4_122



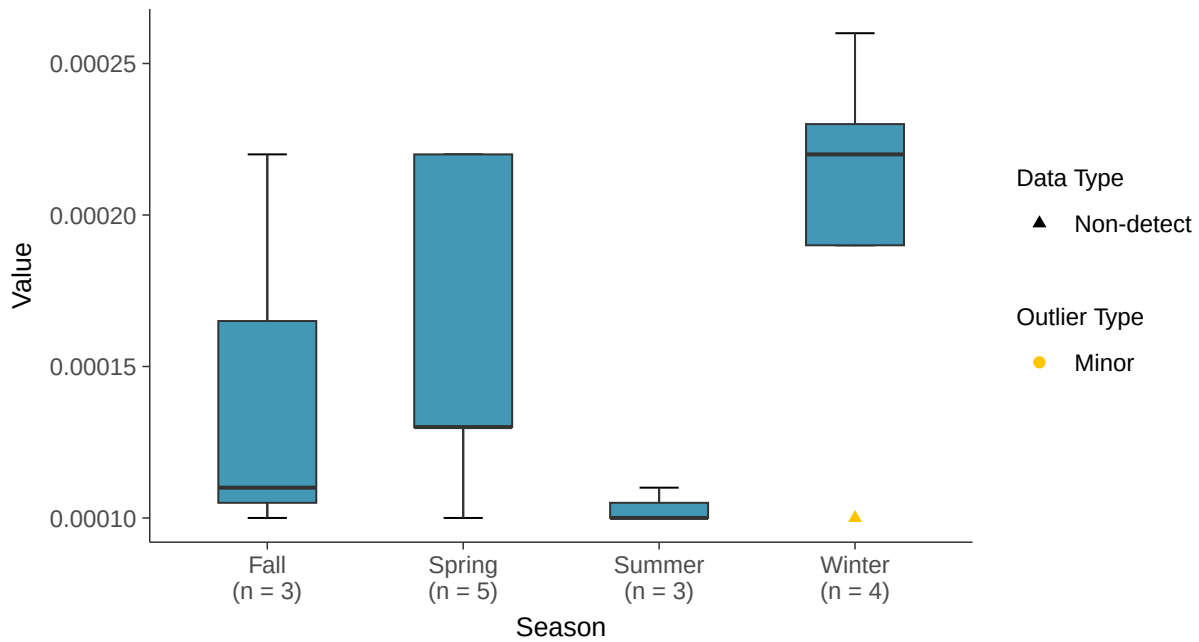
Boxplot

Selenium, MW-20 (mg/L)



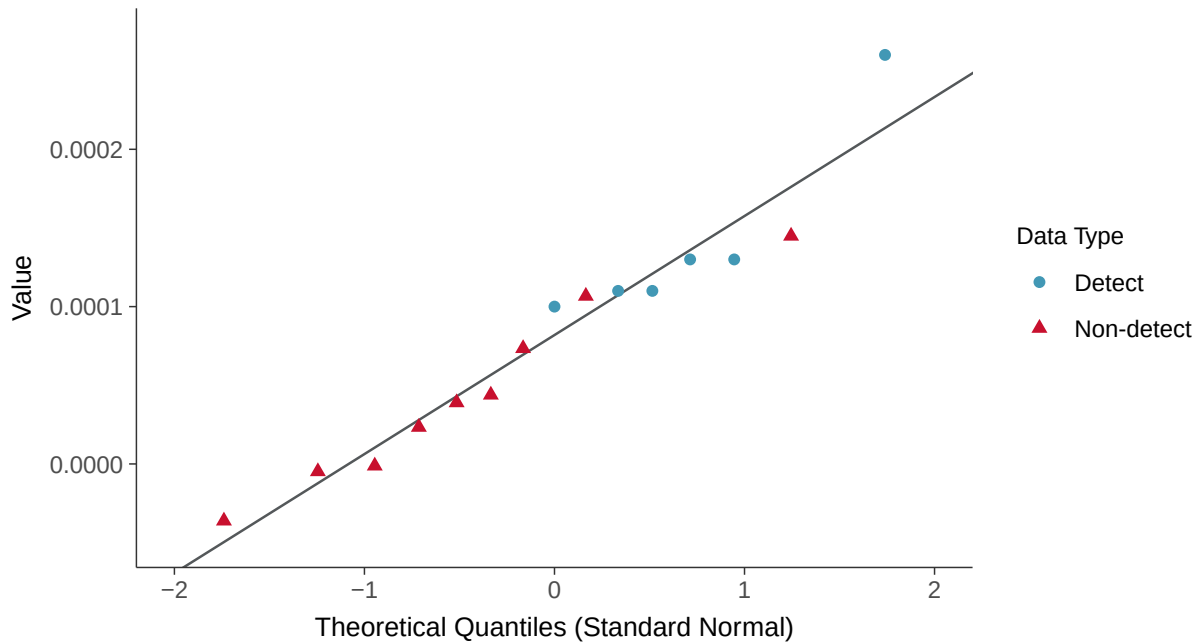
Boxplot by Season

Selenium, MW-20 (mg/L)



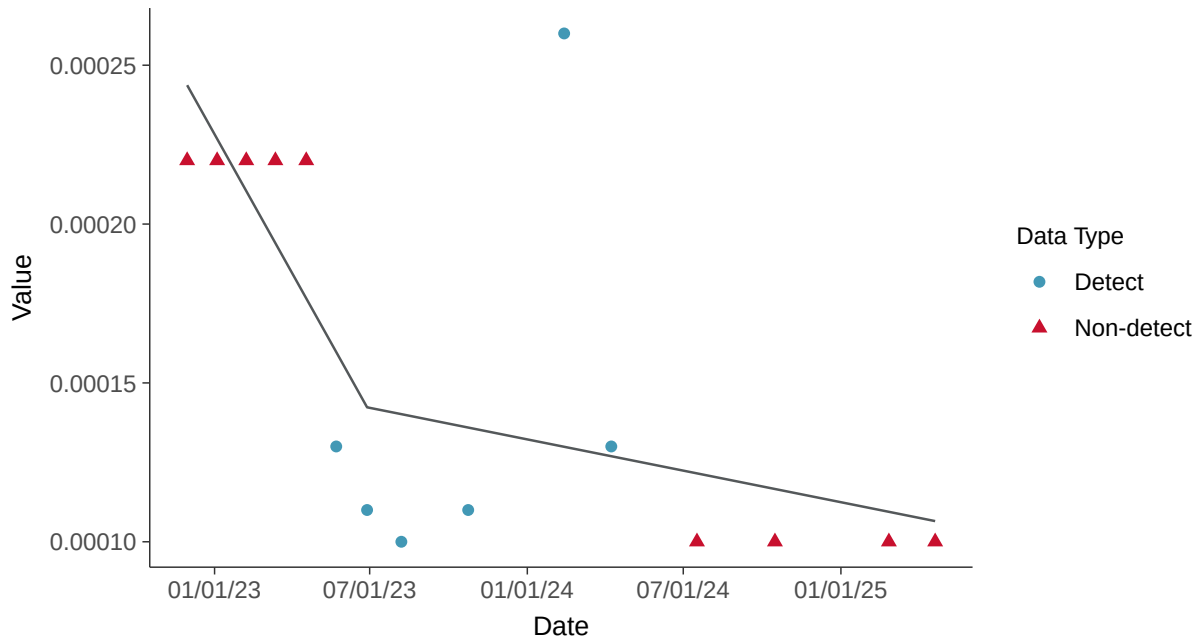
Normal Q-Q plot using ROS Imputed Estimates

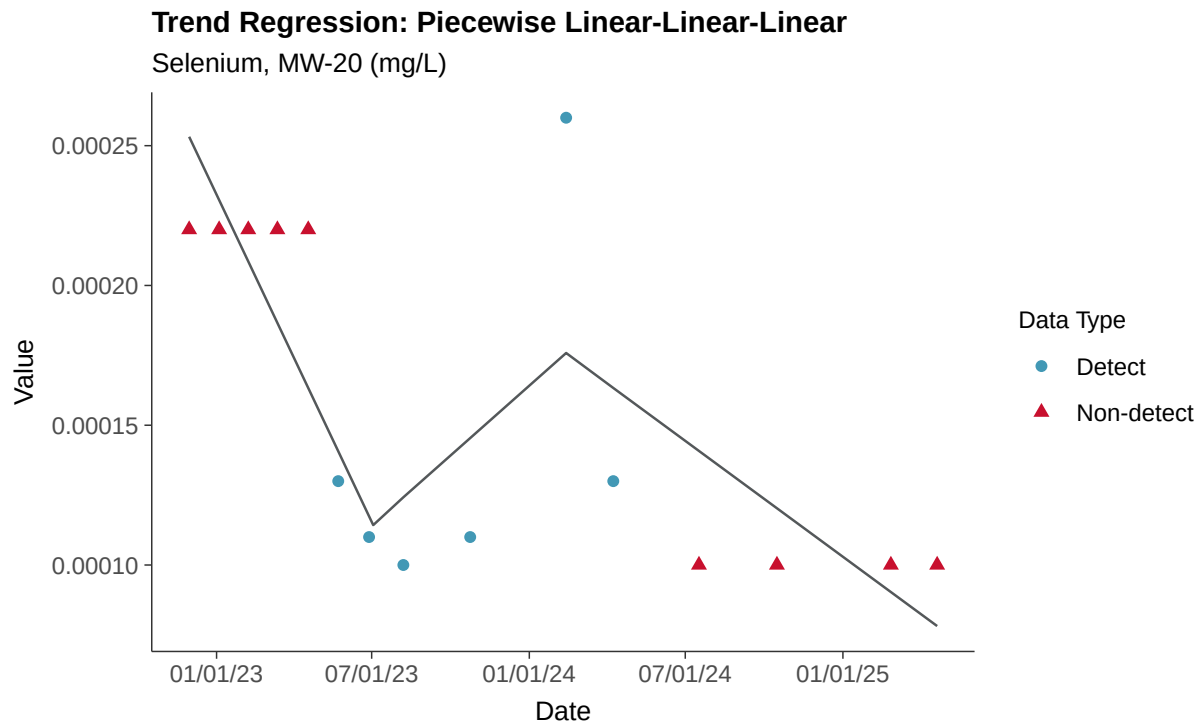
Selenium, MW-20 (mg/L)



Trend Regression: Piecewise Linear-Linear

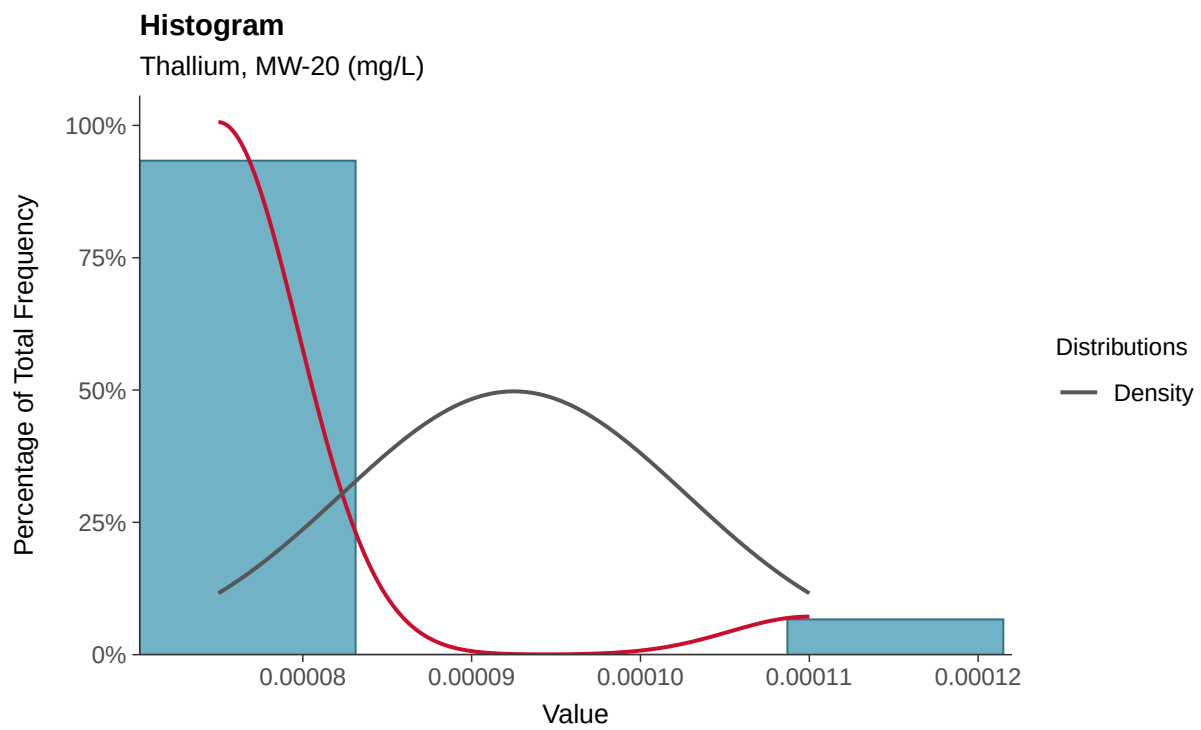
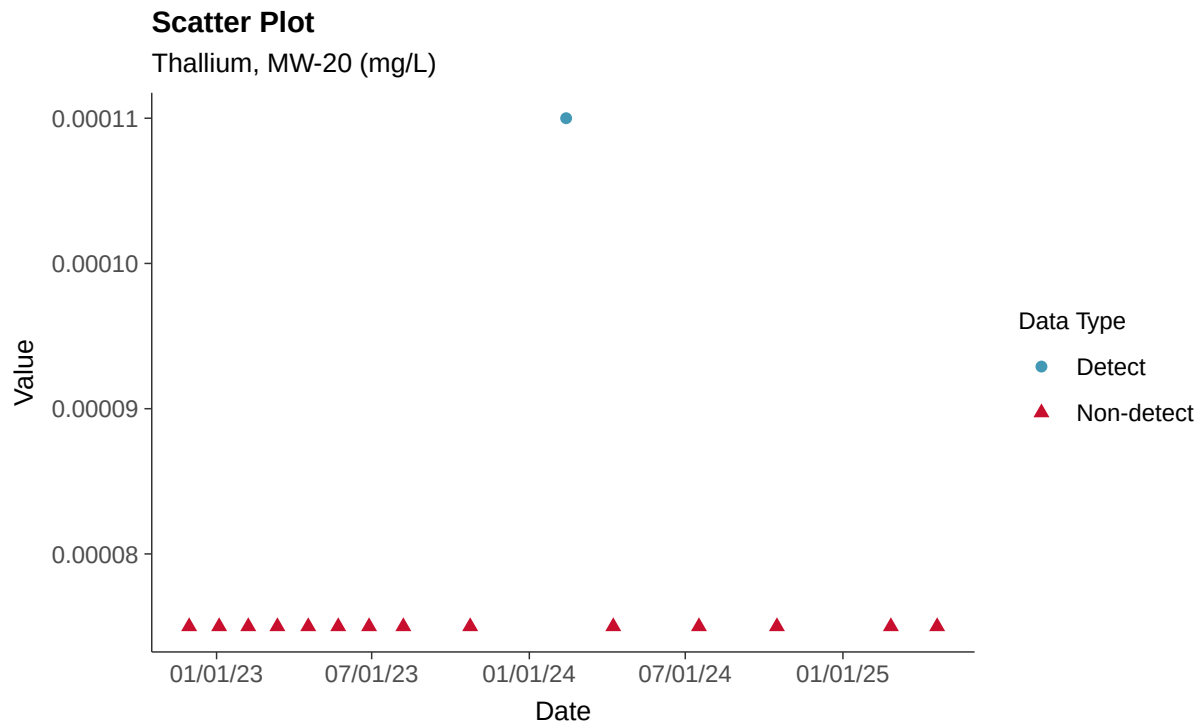
Selenium, MW-20 (mg/L)





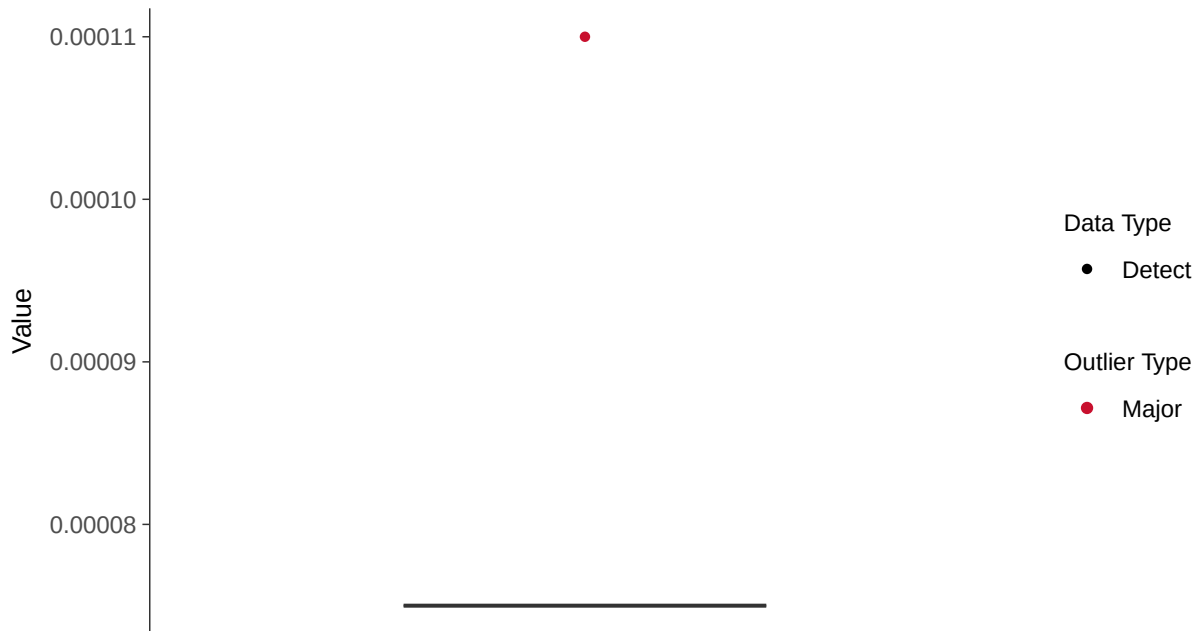
Appendix IV: Thallium, MW-20

ID: 30_1_4_125



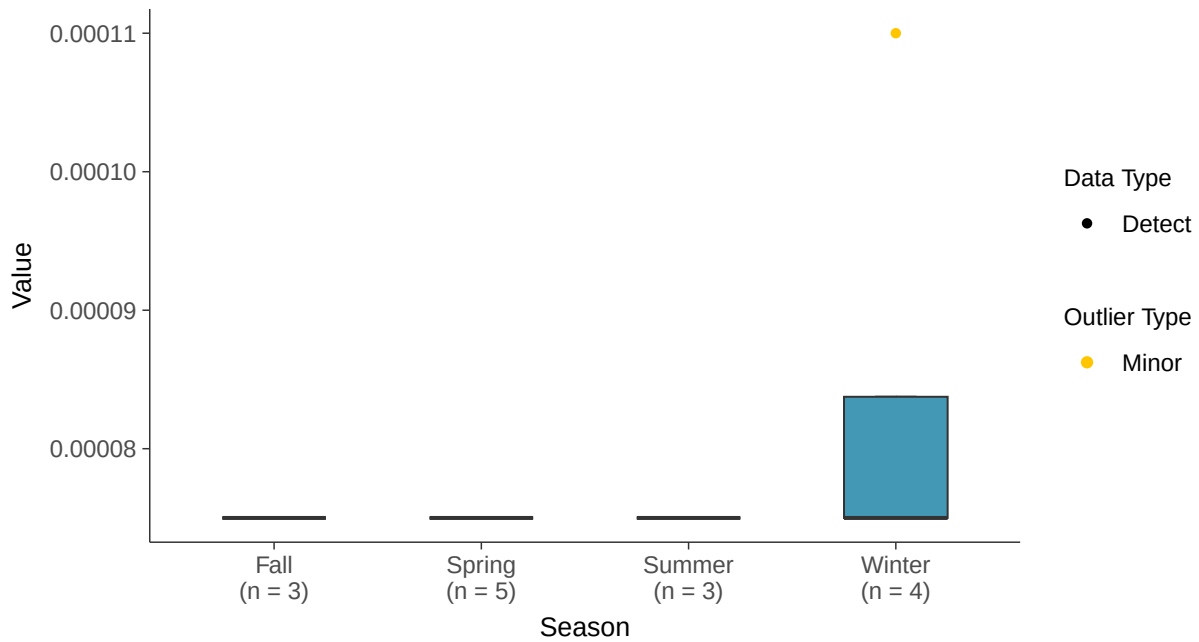
Boxplot

Thallium, MW-20 (mg/L)



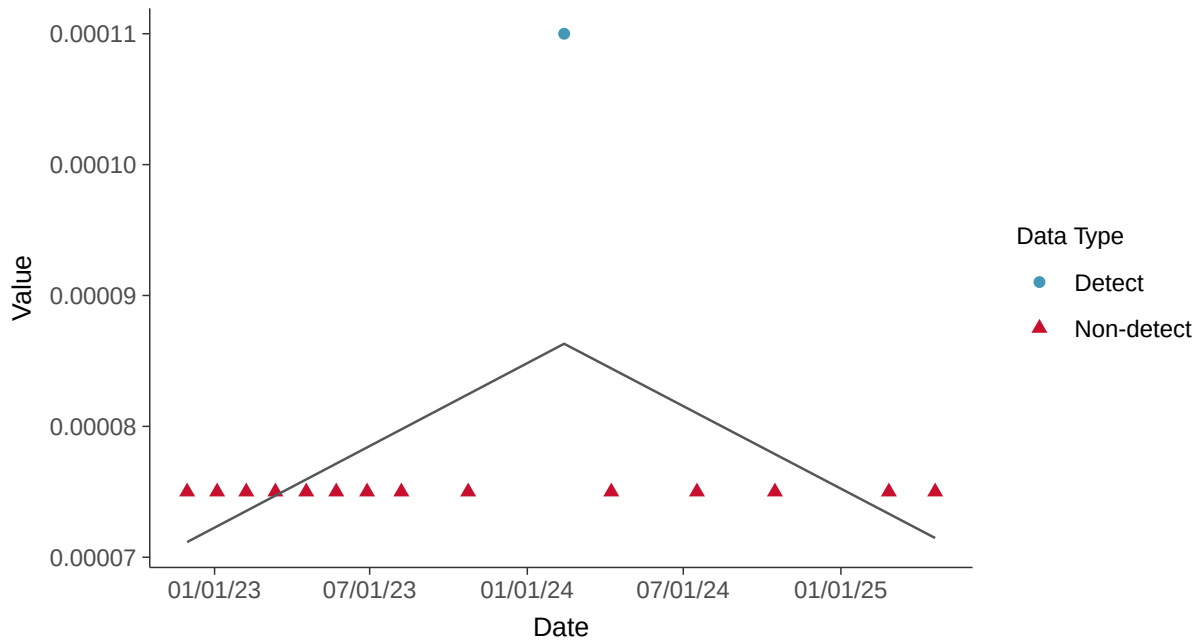
Boxplot by Season

Thallium, MW-20 (mg/L)



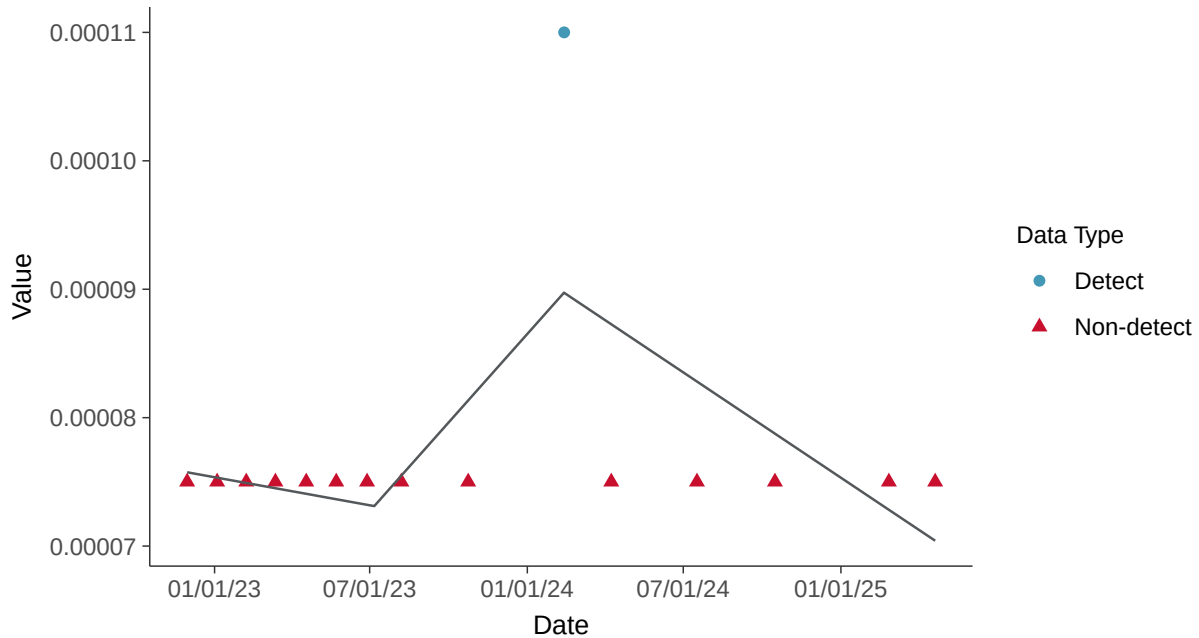
Trend Regression: Piecewise Linear-Linear

Thallium, MW-20 (mg/L)



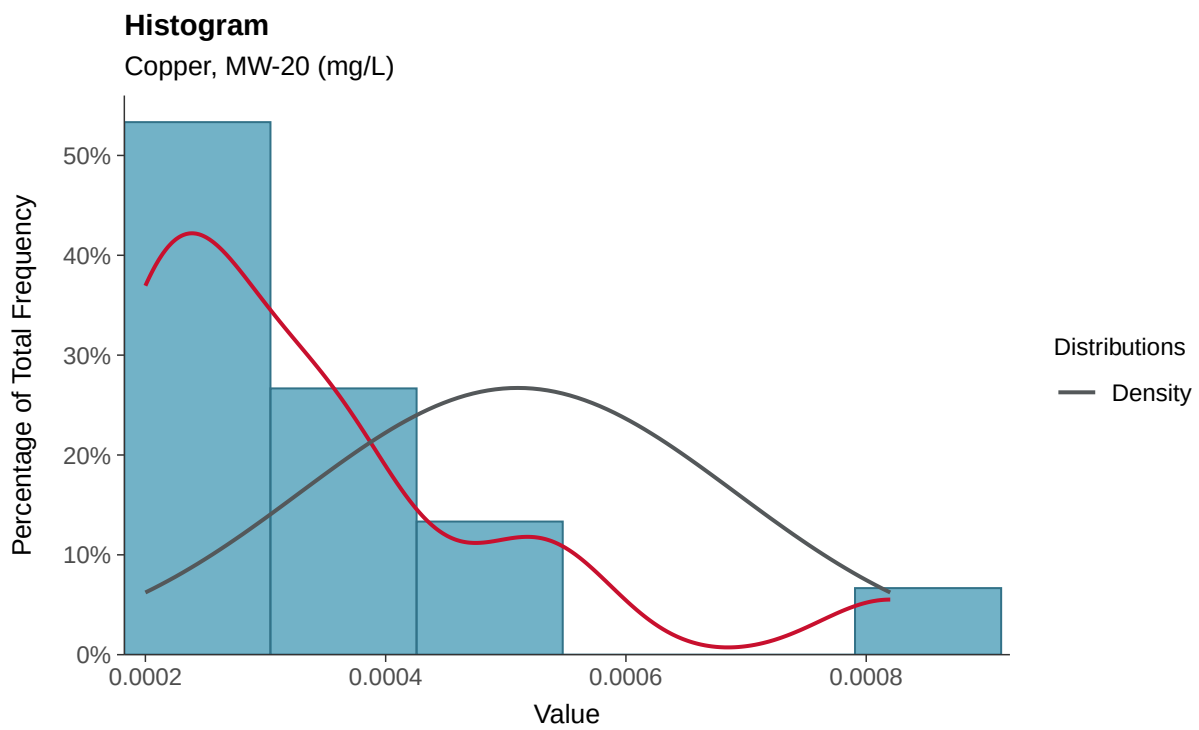
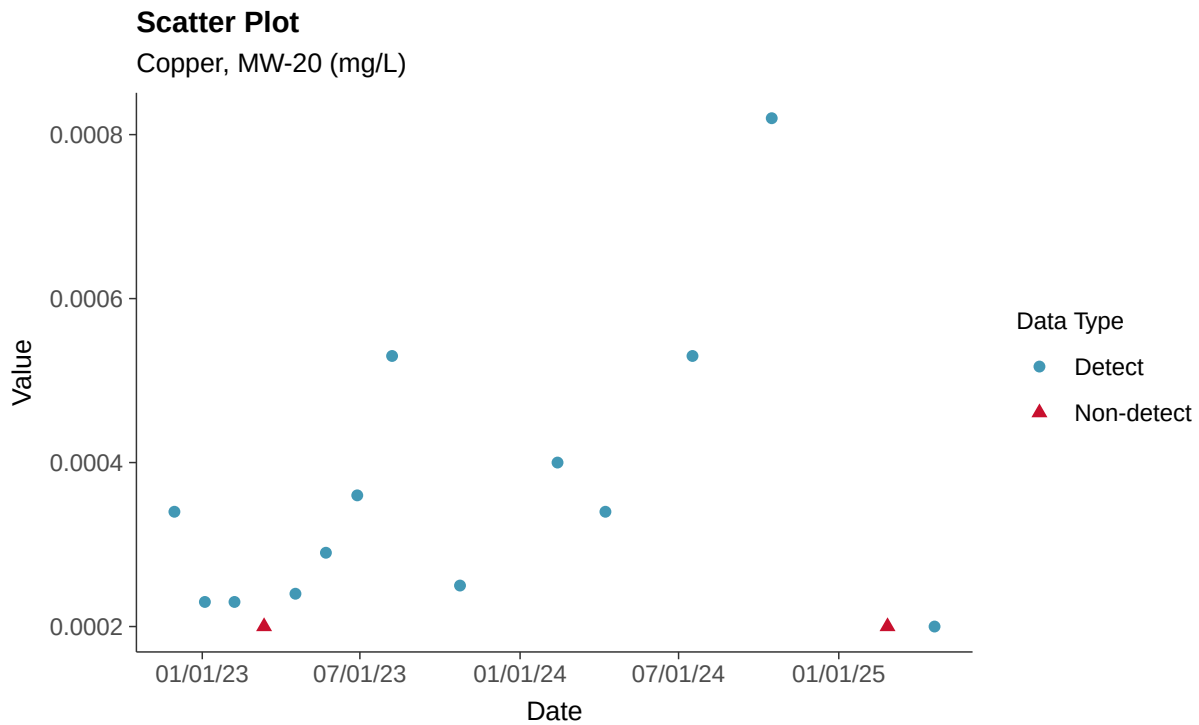
Trend Regression: Piecewise Linear-Linear-Linear

Thallium, MW-20 (mg/L)



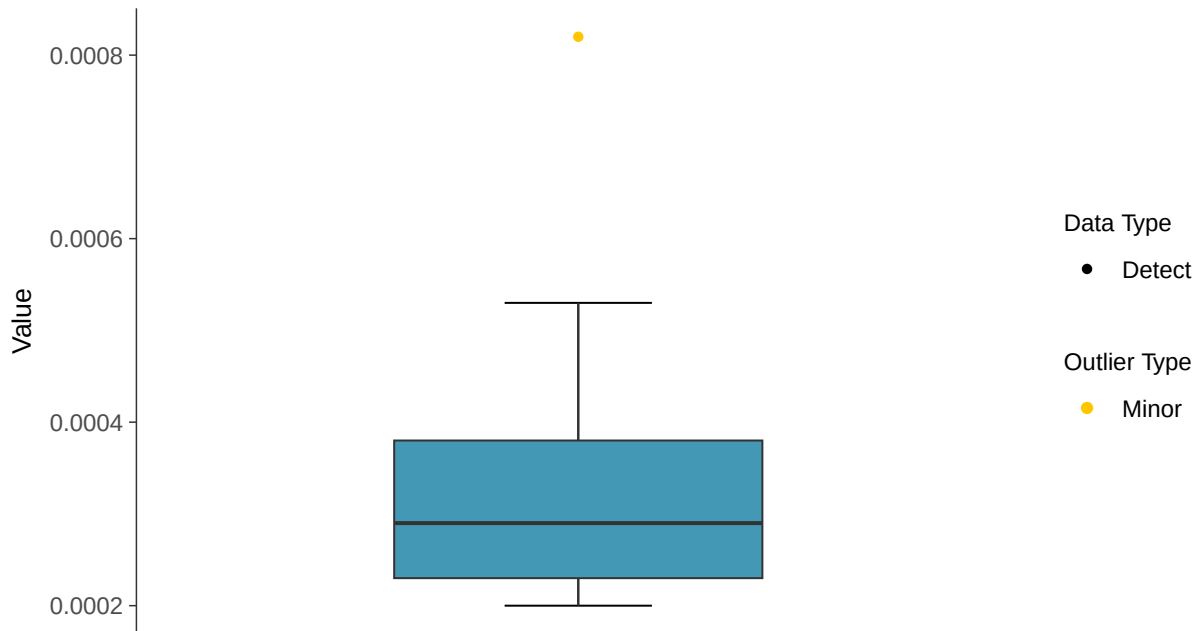
Part 115: Copper, MW-20

ID: 30_1_5_111



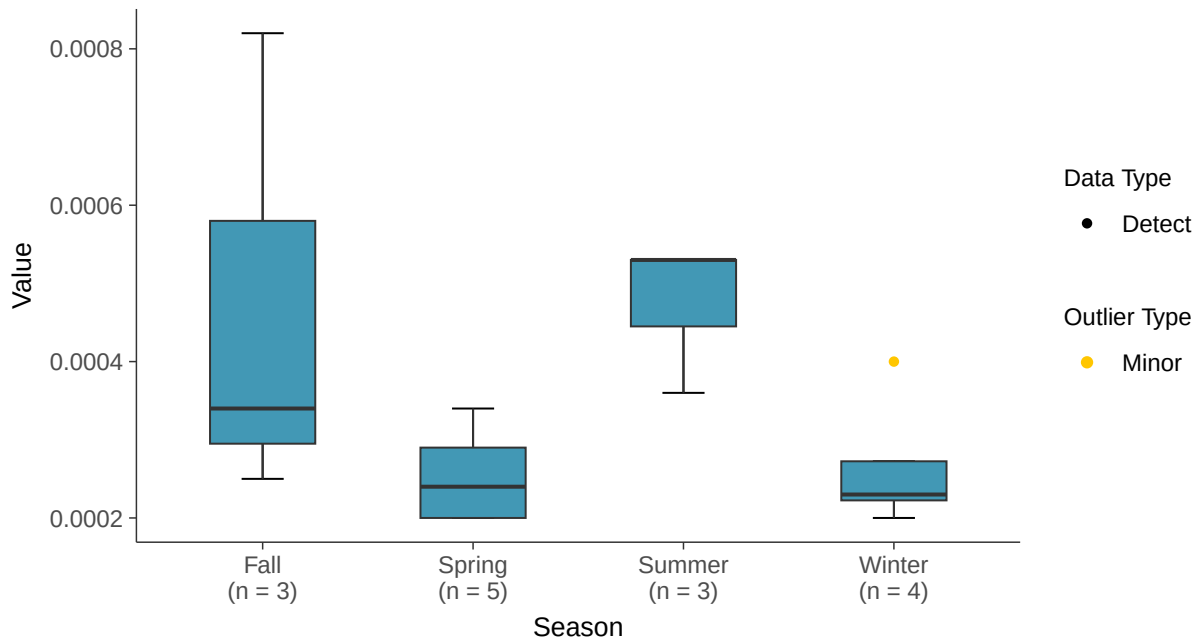
Boxplot

Copper, MW-20 (mg/L)



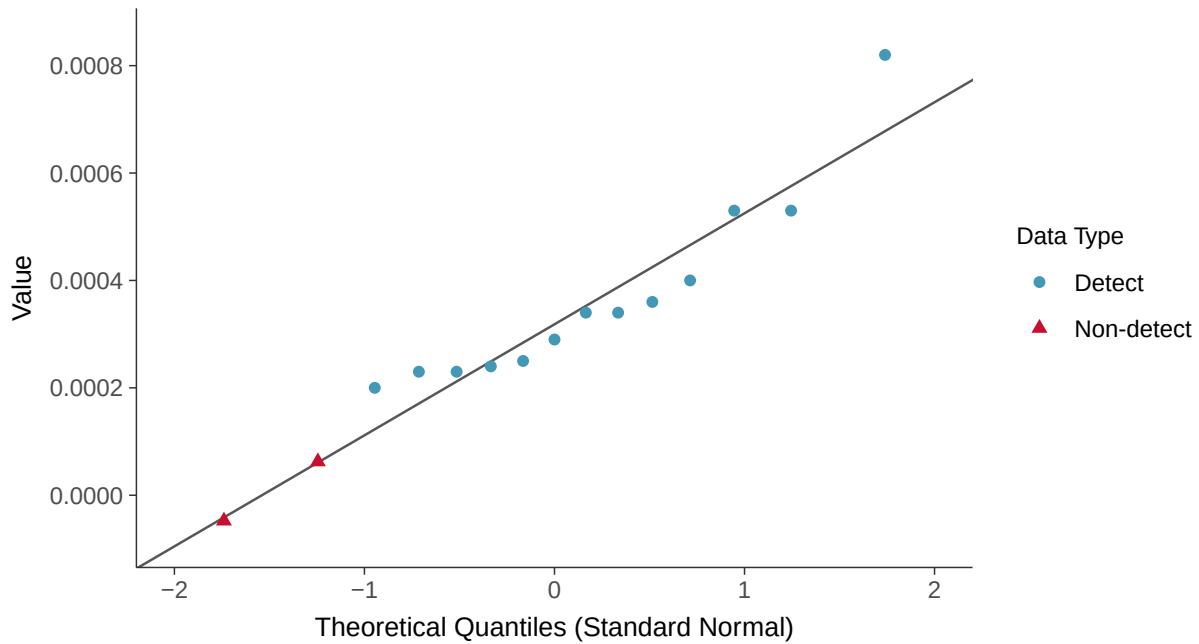
Boxplot by Season

Copper, MW-20 (mg/L)



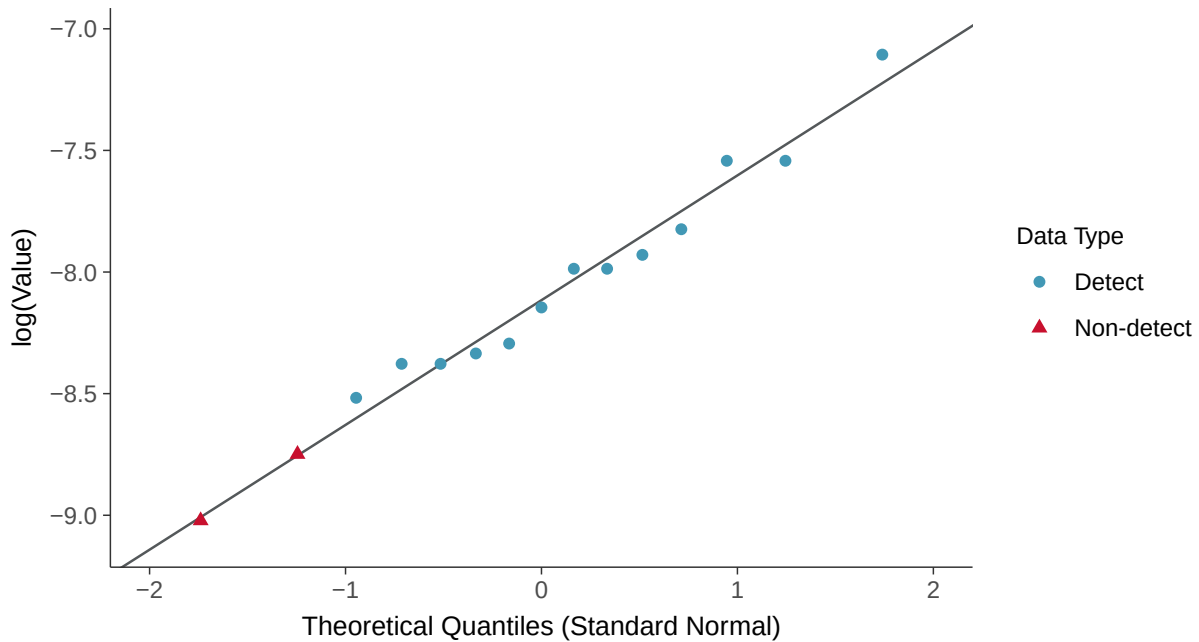
Normal Q-Q plot using ROS Imputed Estimates

Copper, MW-20 (mg/L)



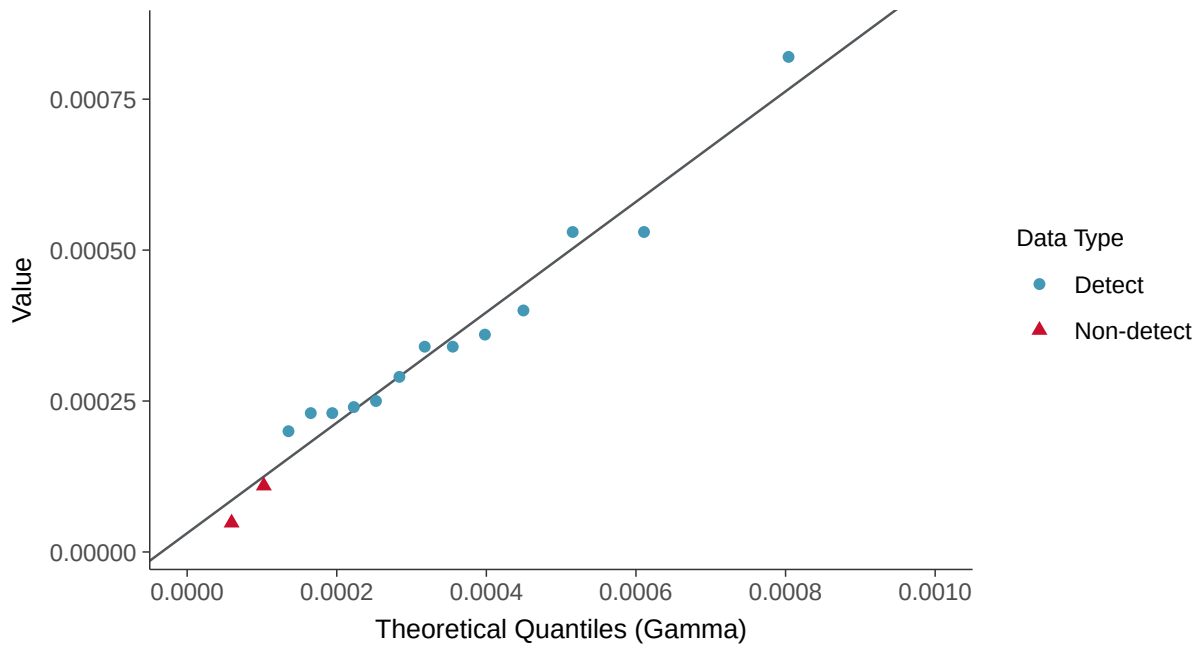
Lognormal Q-Q plot using ROS Imputed Estimates

Copper, MW-20 (mg/L)



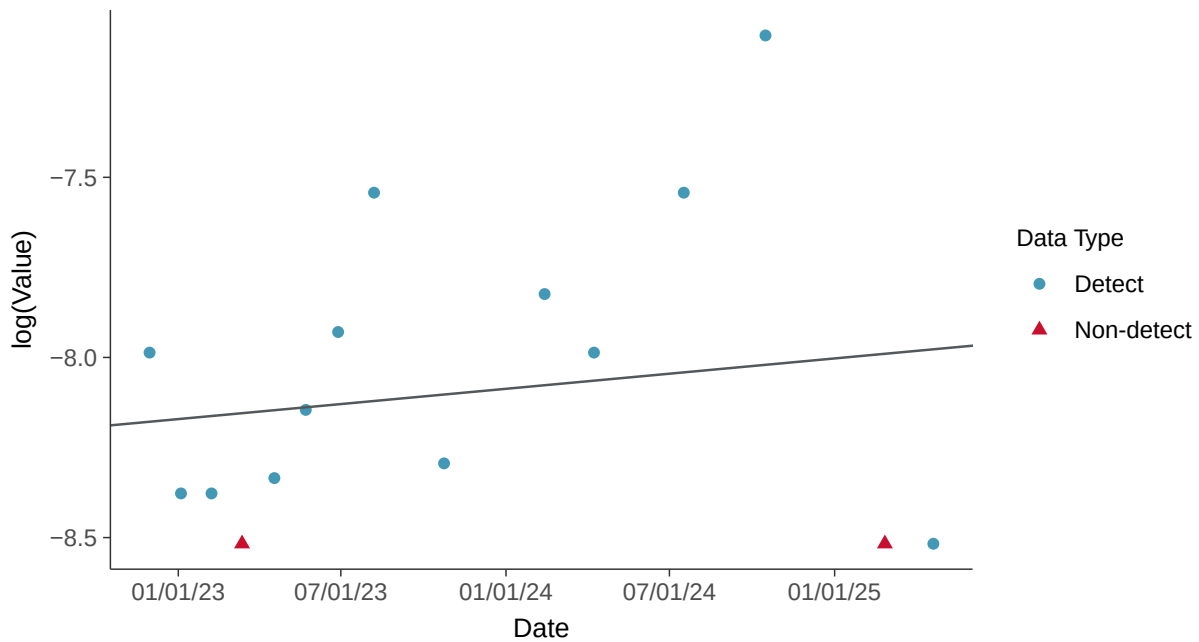
Gamma Q-Q plot using ROS Imputed Estimates

Copper, MW-20 (mg/L)

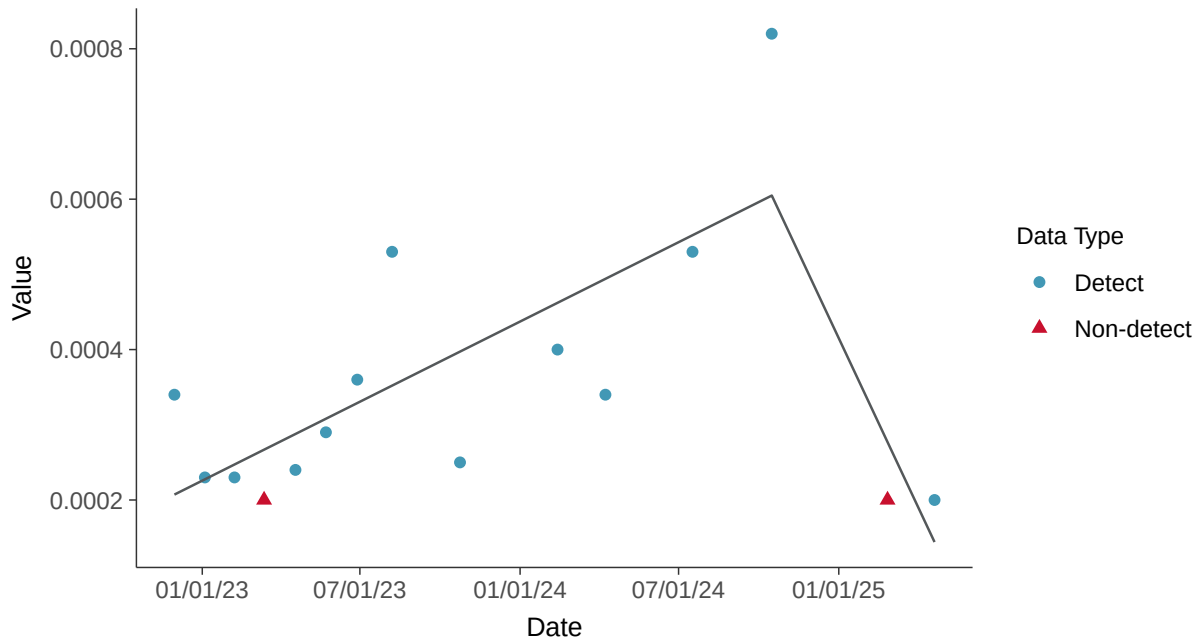


Trend Regression: Lognormal MLE

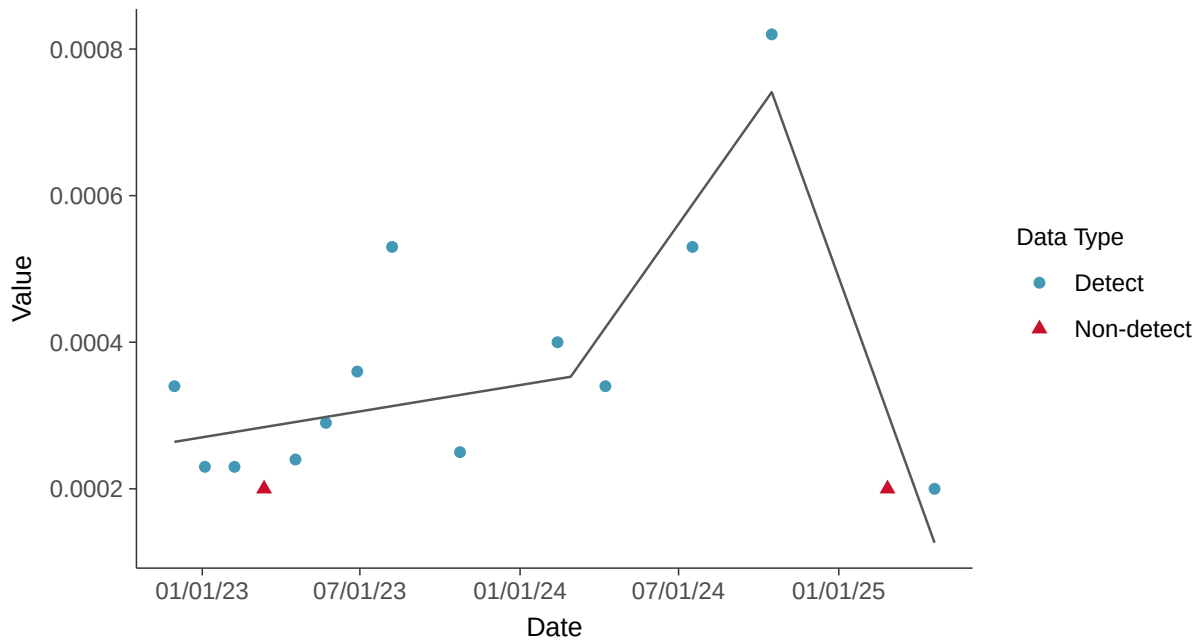
Copper, MW-20 (mg/L)



Trend Regression: Piecewise Linear-Linear
Copper, MW-20 (mg/L)

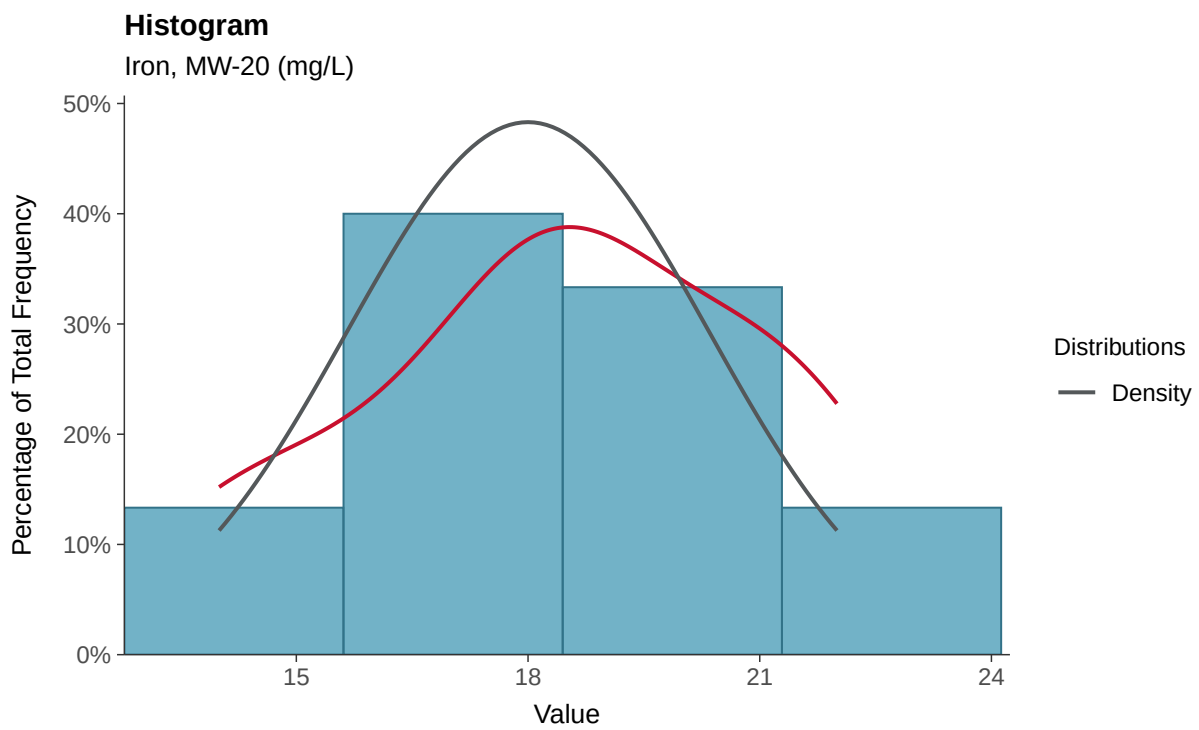
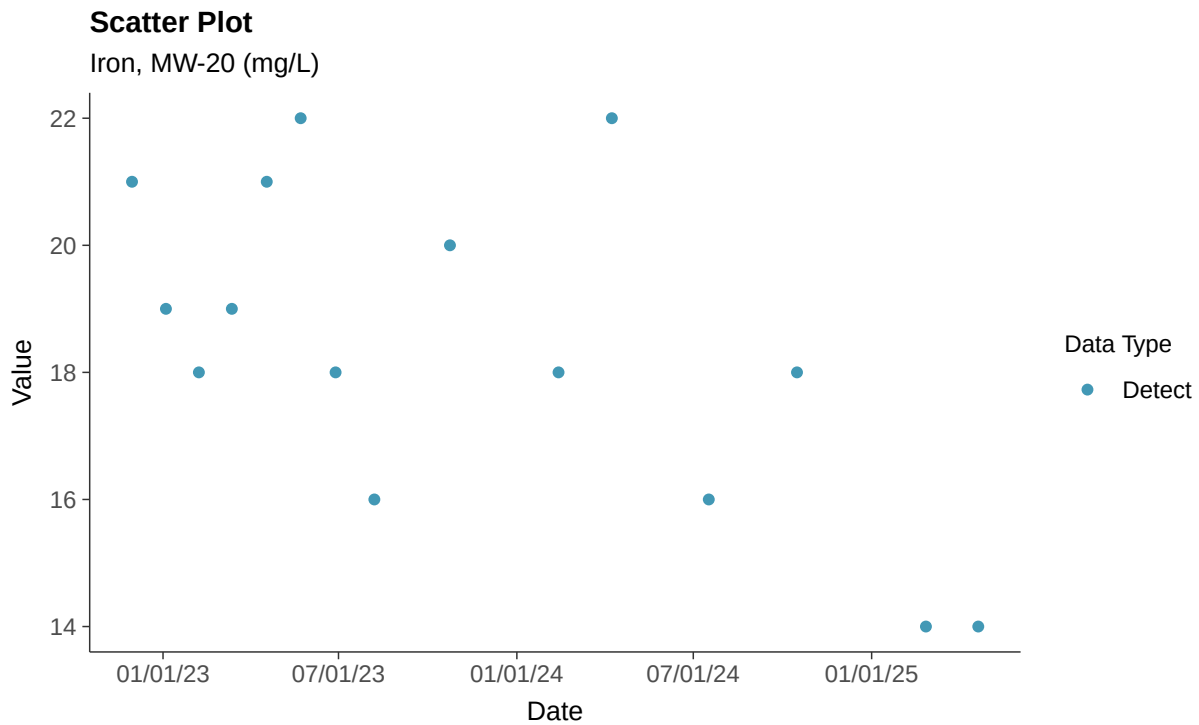


Trend Regression: Piecewise Linear-Linear-Linear
Copper, MW-20 (mg/L)



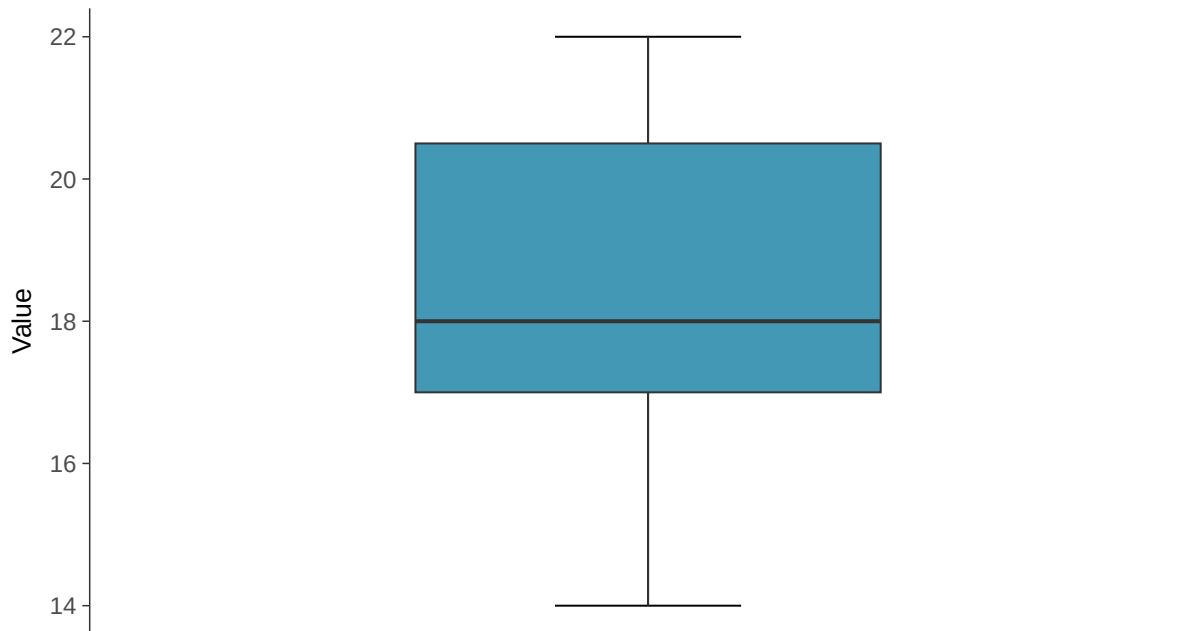
Part 115: Iron, MW-20

ID: 30_1_5_114



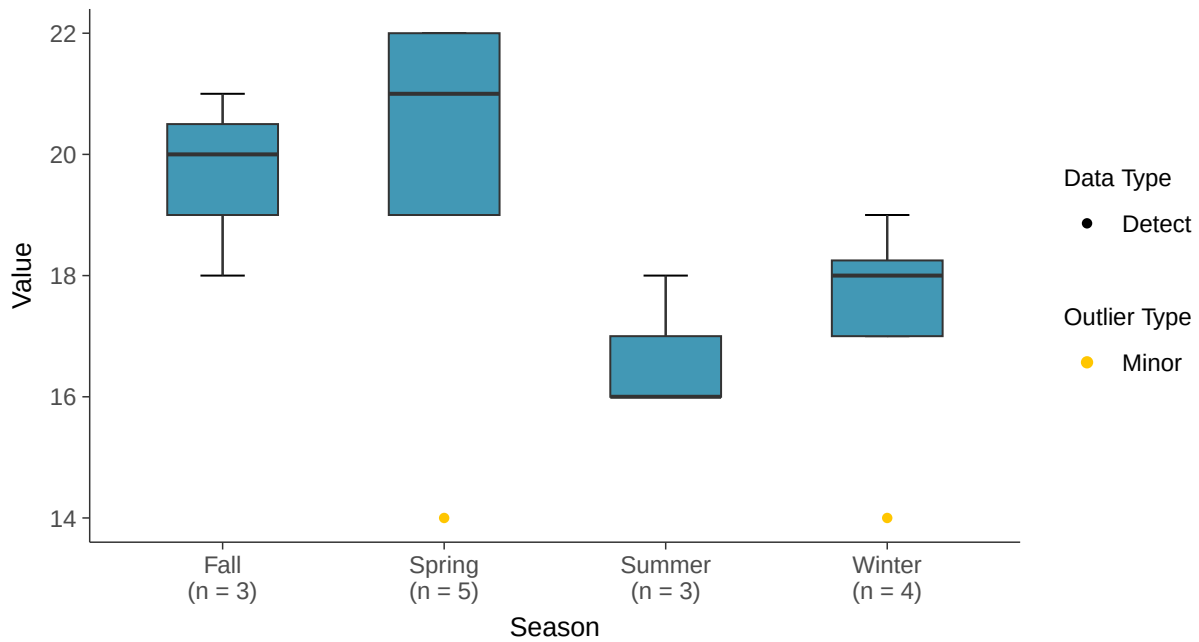
Boxplot

Iron, MW-20 (mg/L)

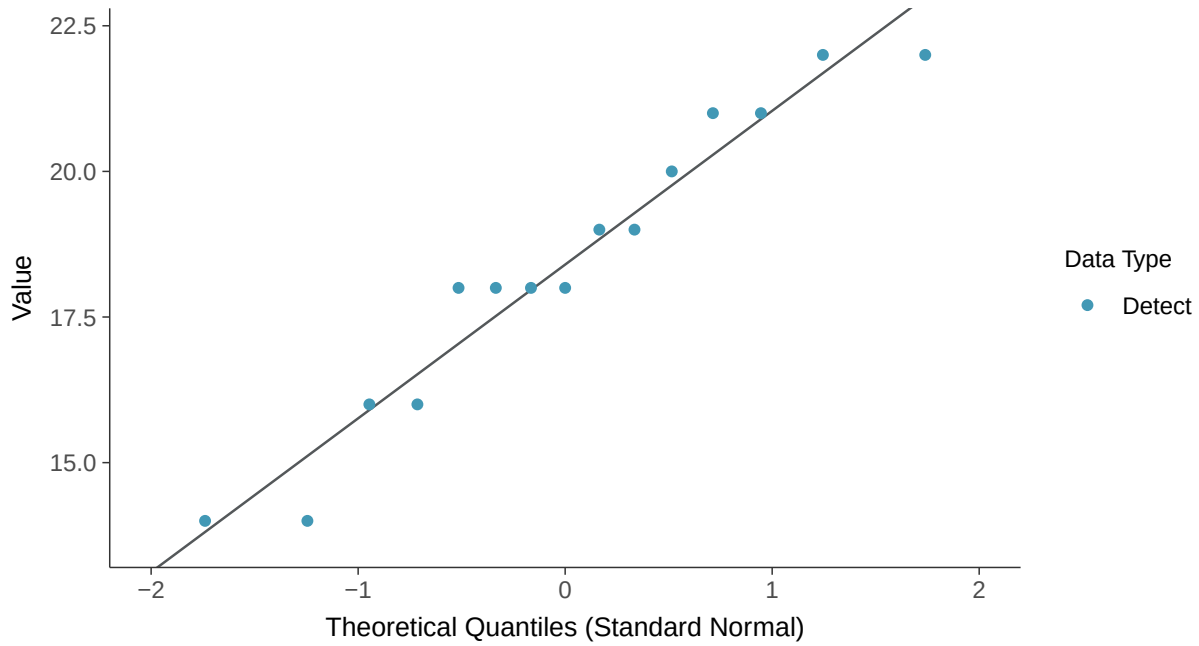


Boxplot by Season

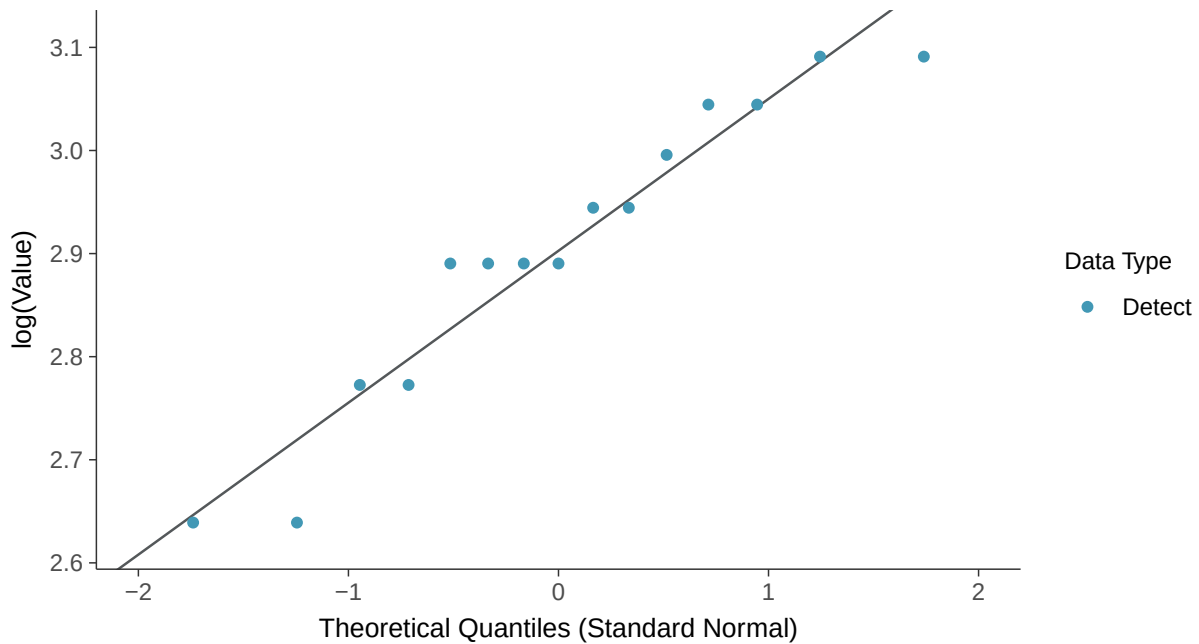
Iron, MW-20 (mg/L)

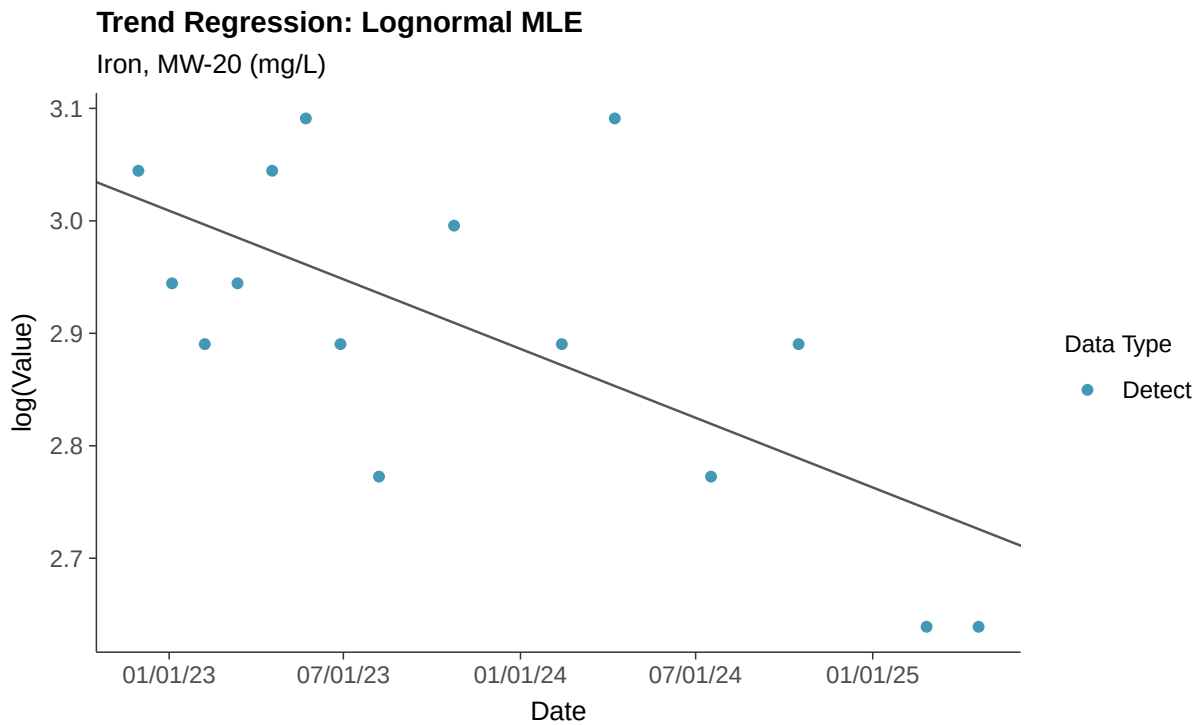
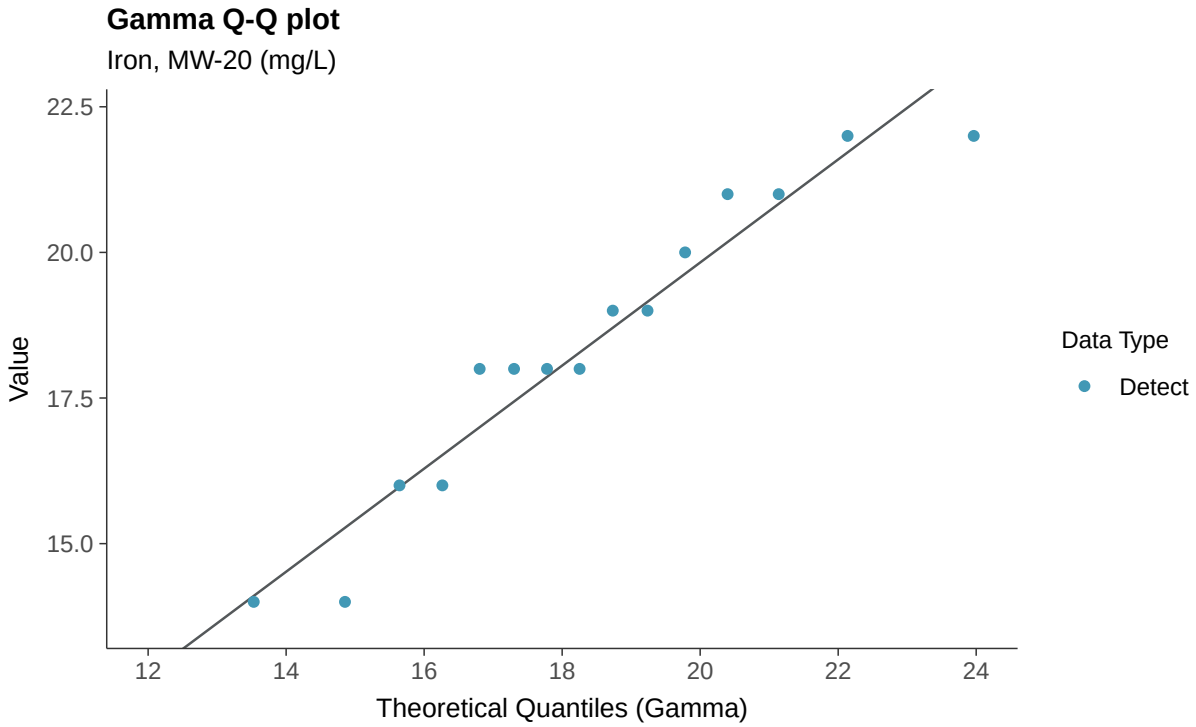


Normal Q-Q plot
Iron, MW-20 (mg/L)



Lognormal Q-Q plot
Iron, MW-20 (mg/L)

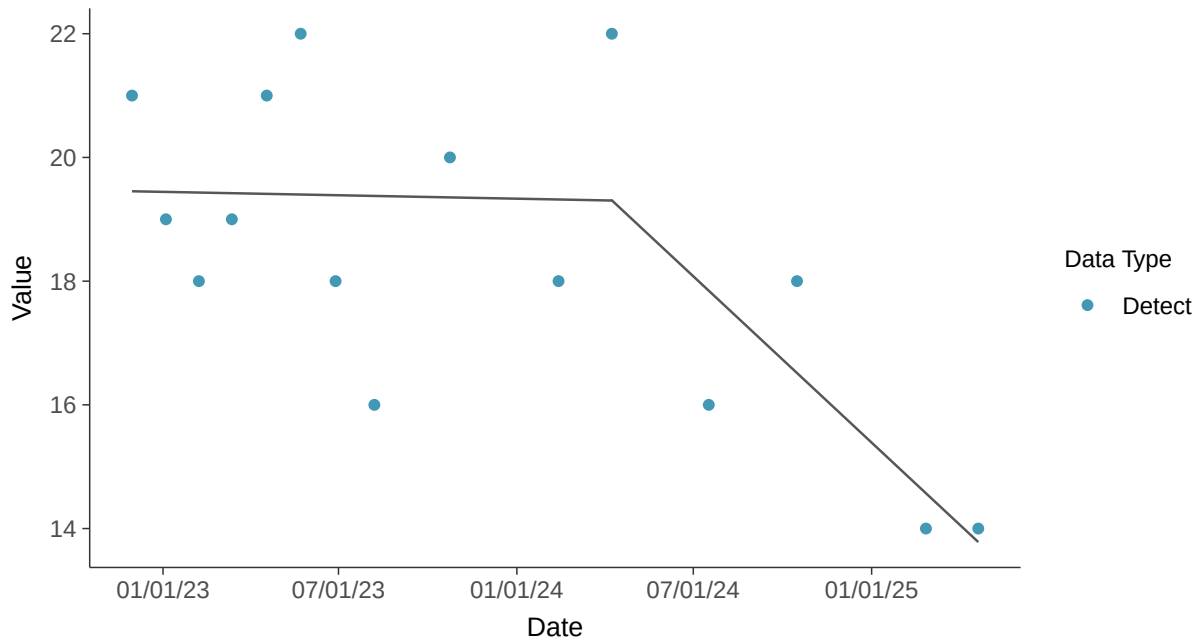






Trend Regression: Piecewise Linear-Linear

Iron, MW-20 (mg/L)

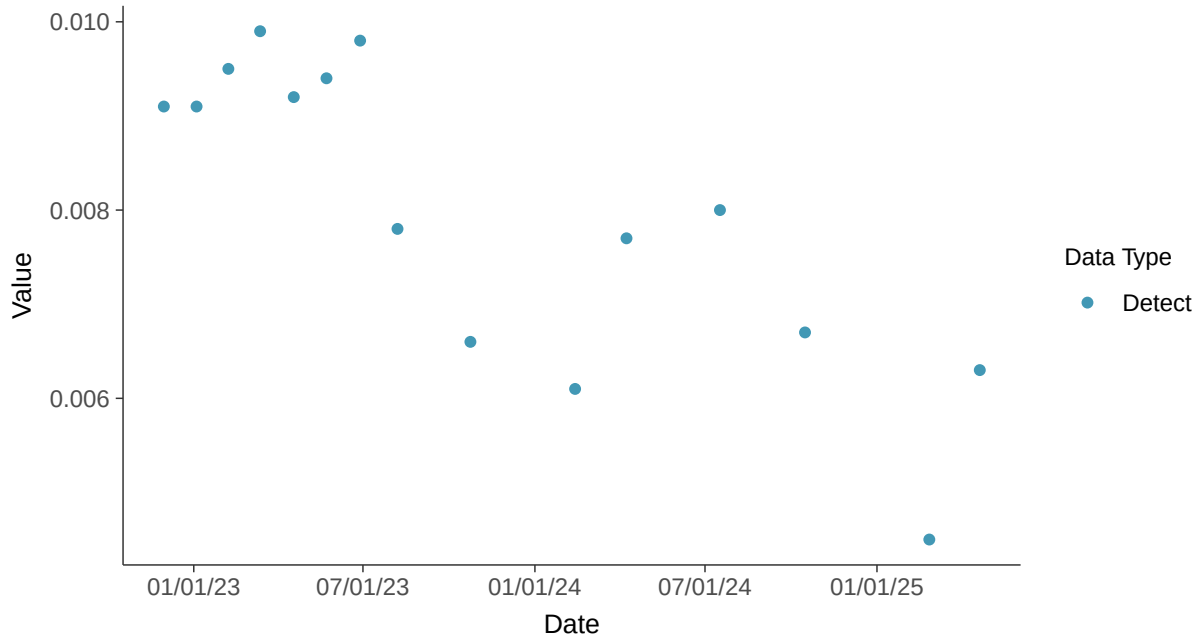


Part 115: Nickel, MW-20

ID: 30_1_5_119

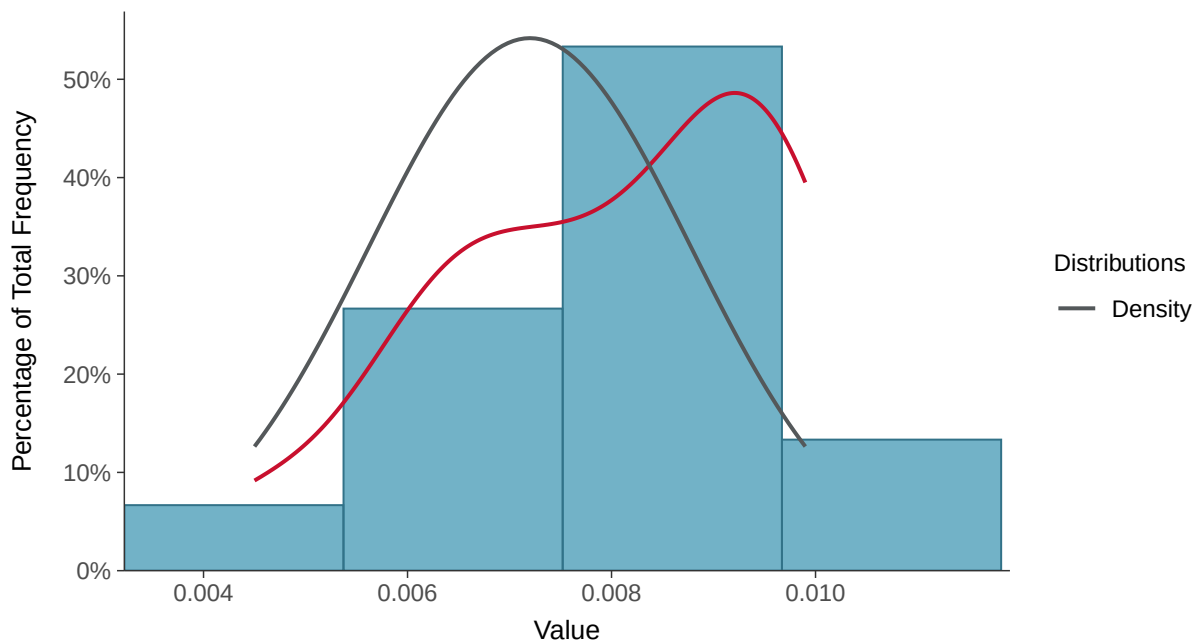
Scatter Plot

Nickel, MW-20 (mg/L)



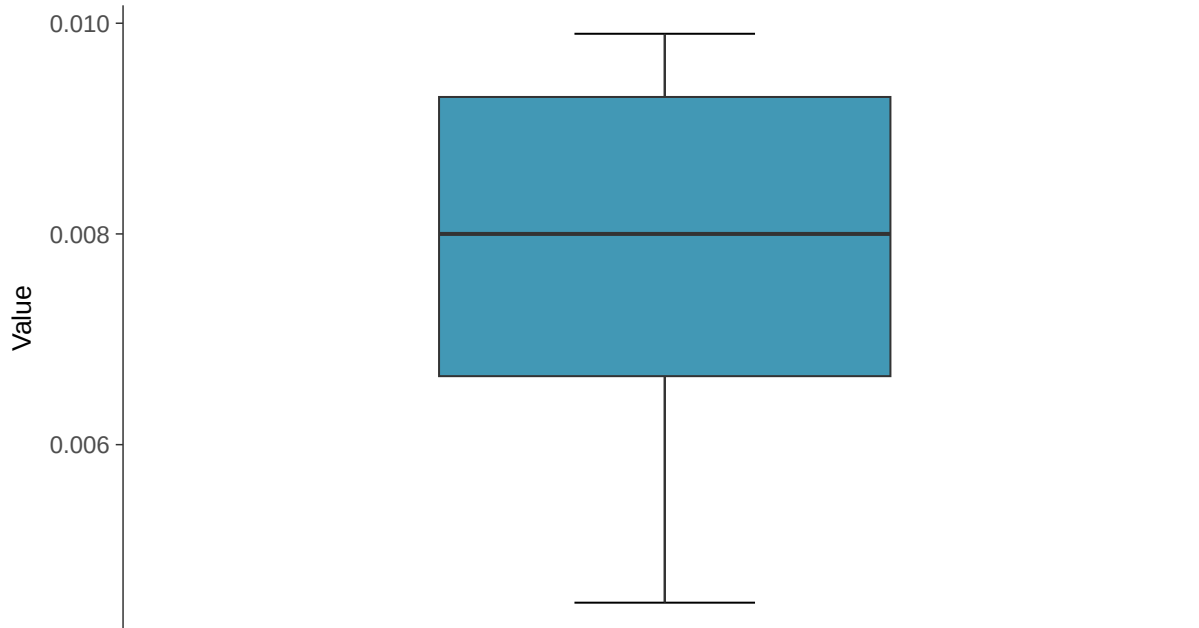
Histogram

Nickel, MW-20 (mg/L)



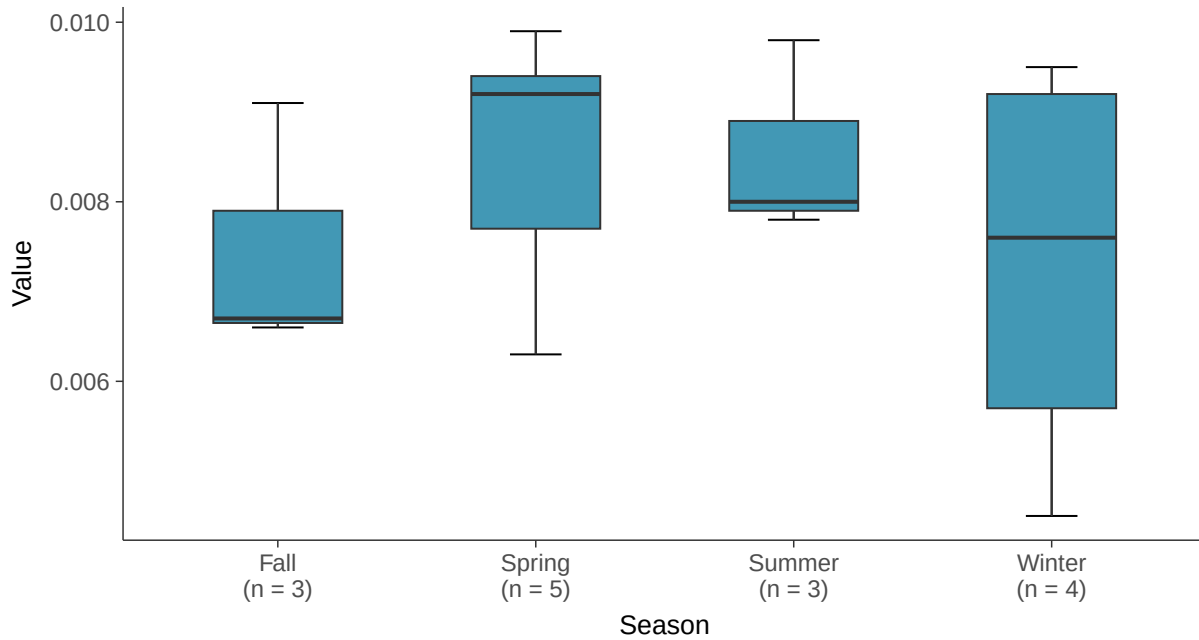
Boxplot

Nickel, MW-20 (mg/L)



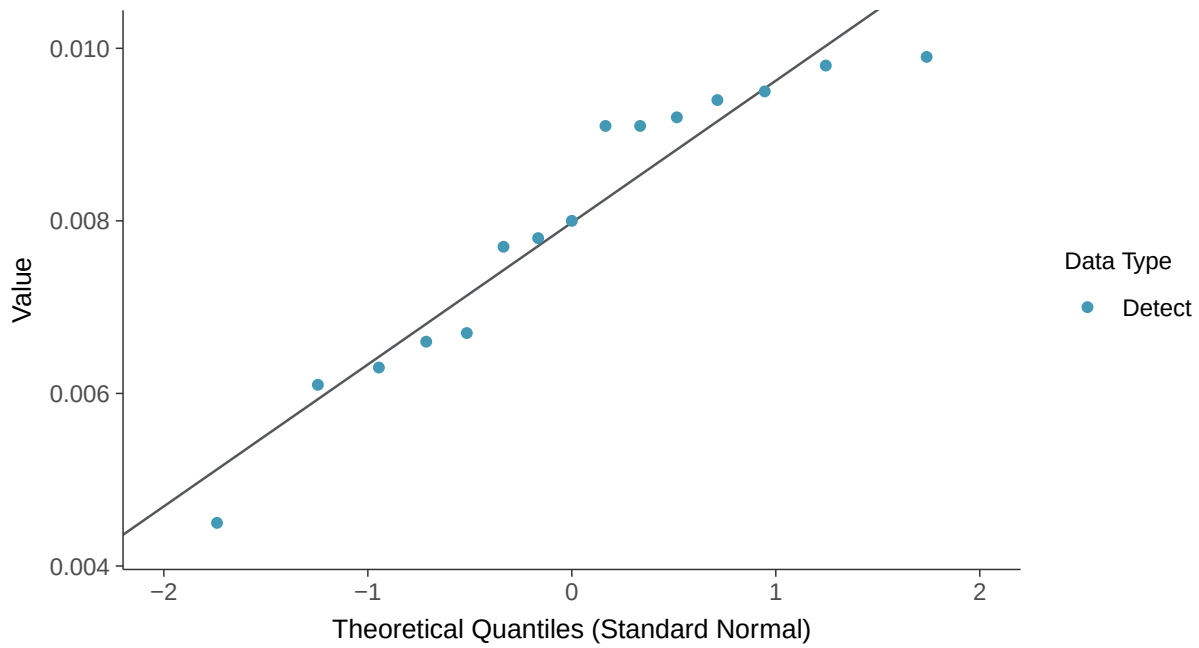
Boxplot by Season

Nickel, MW-20 (mg/L)



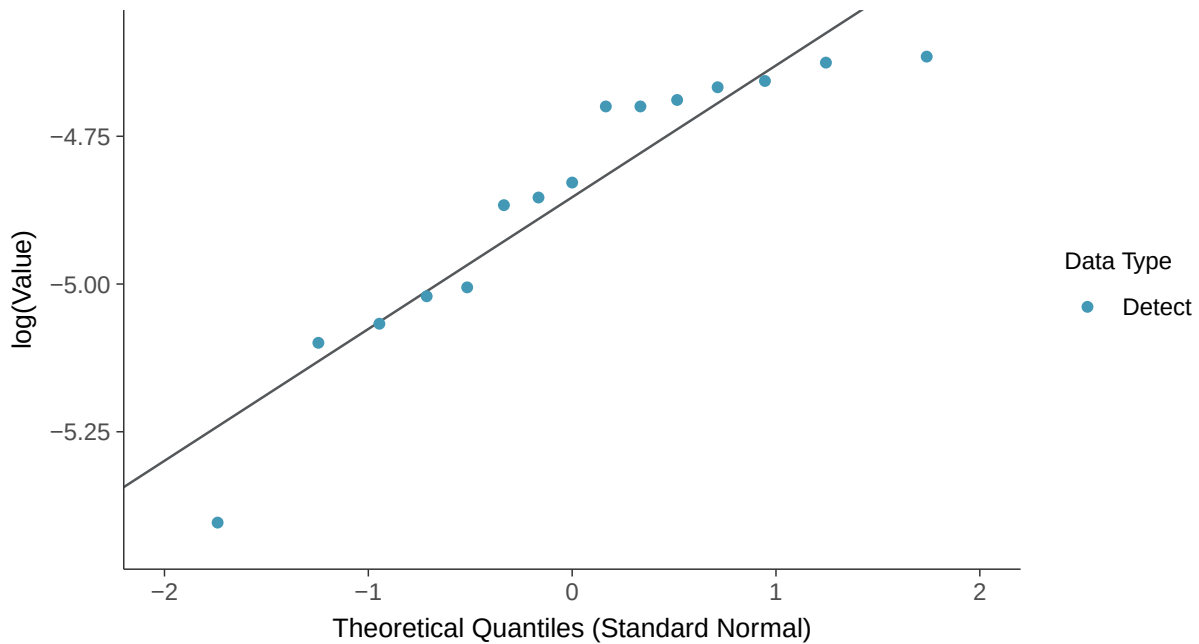
Normal Q-Q plot

Nickel, MW-20 (mg/L)

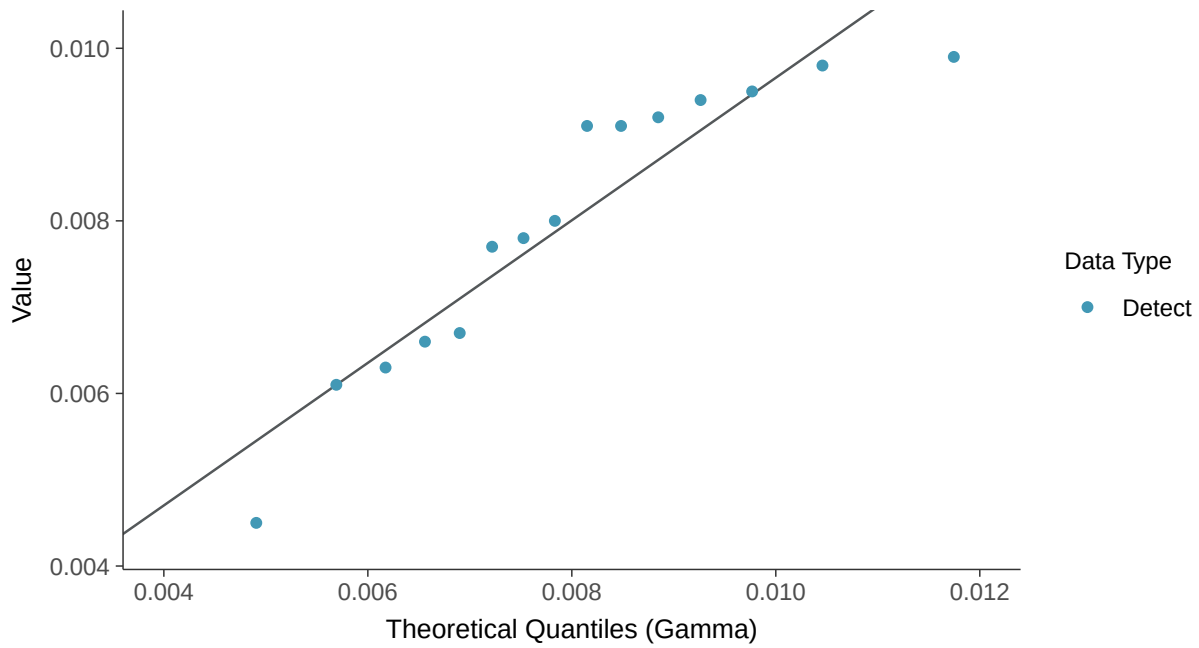


Lognormal Q-Q plot

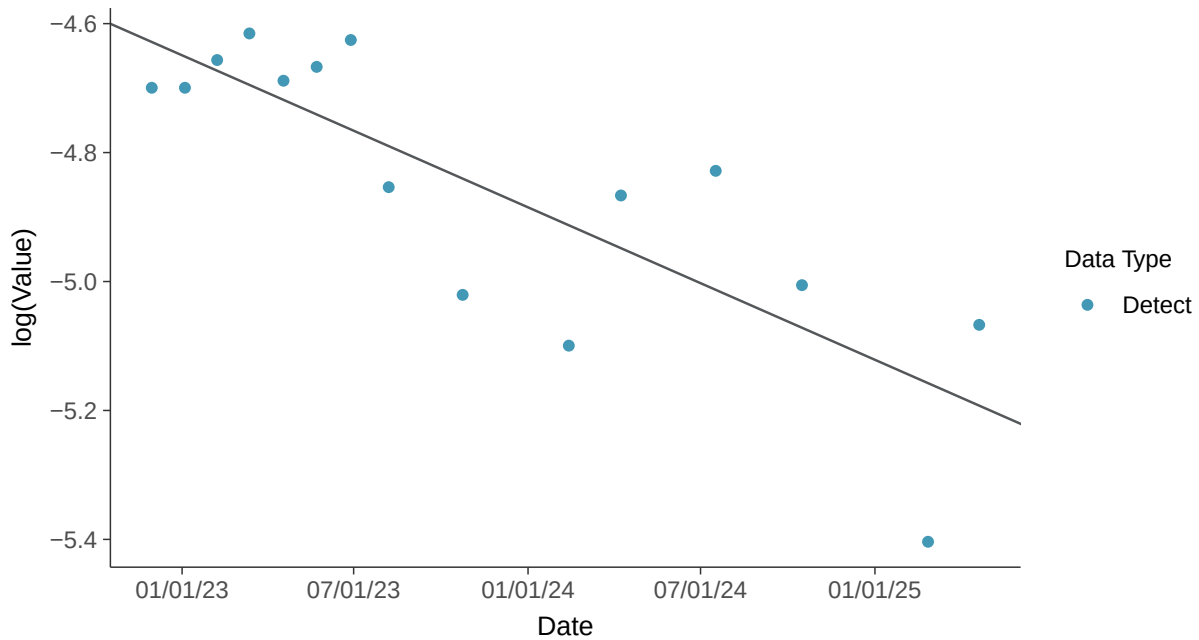
Nickel, MW-20 (mg/L)



Gamma Q-Q plot
Nickel, MW-20 (mg/L)



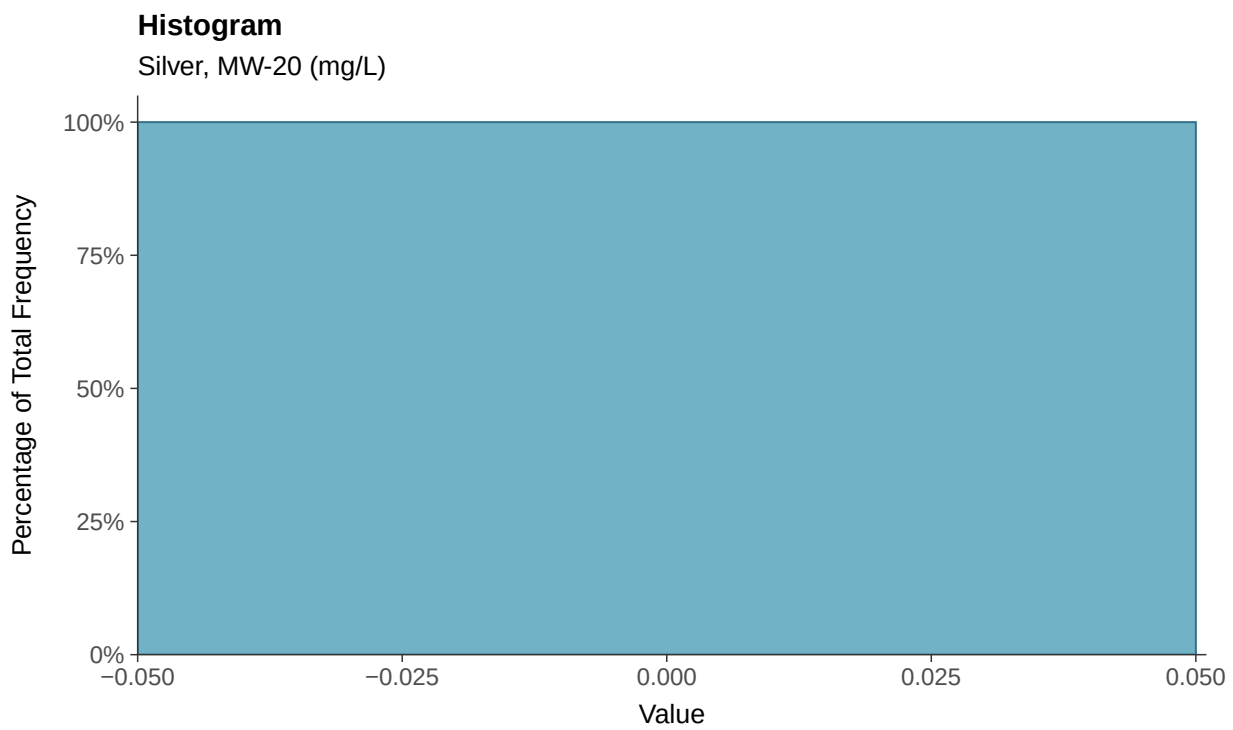
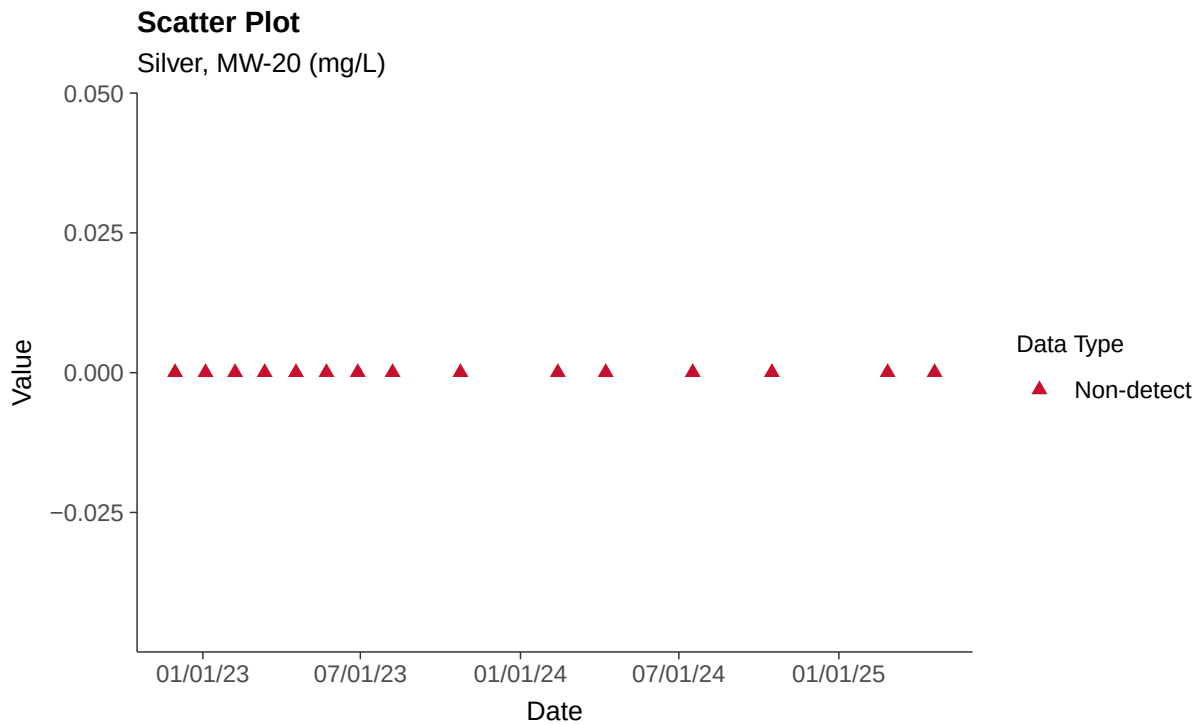
Trend Regression: Lognormal MLE
Nickel, MW-20 (mg/L)





Part 115: Silver, MW-20

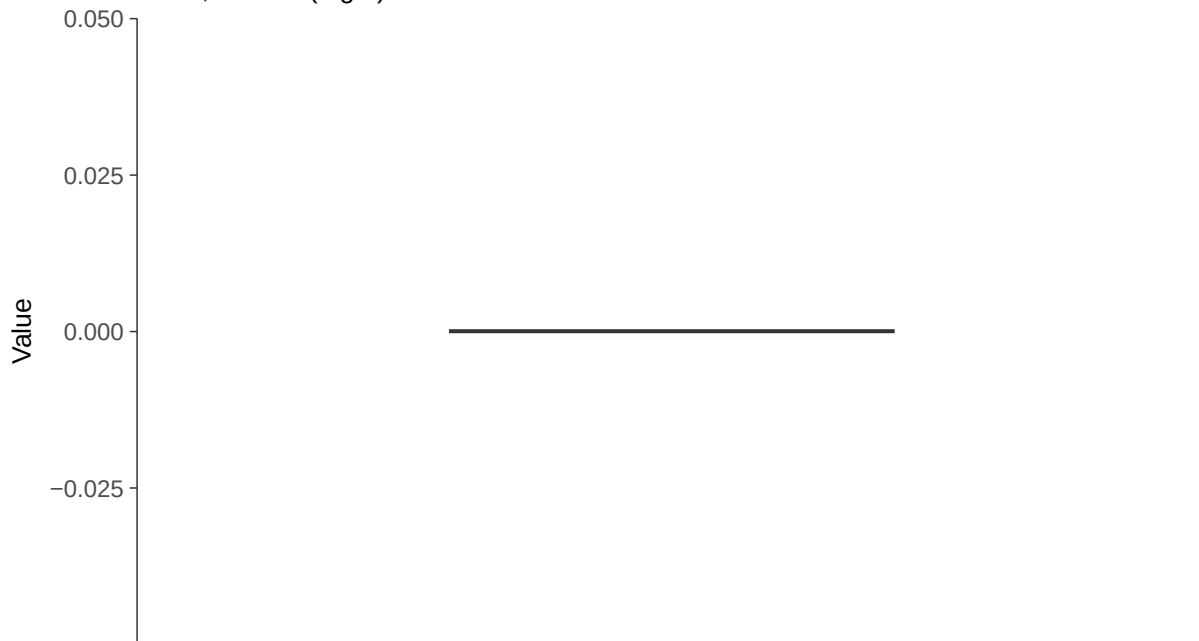
ID: 30_1_5_123





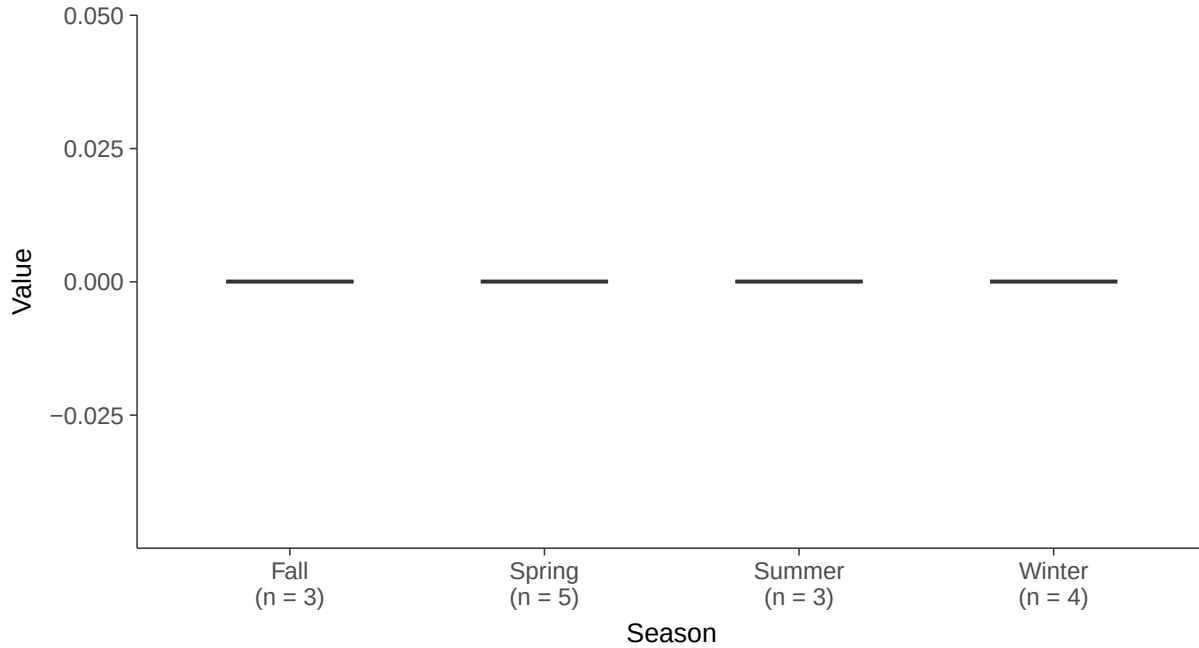
Boxplot

Silver, MW-20 (mg/L)



Boxplot by Season

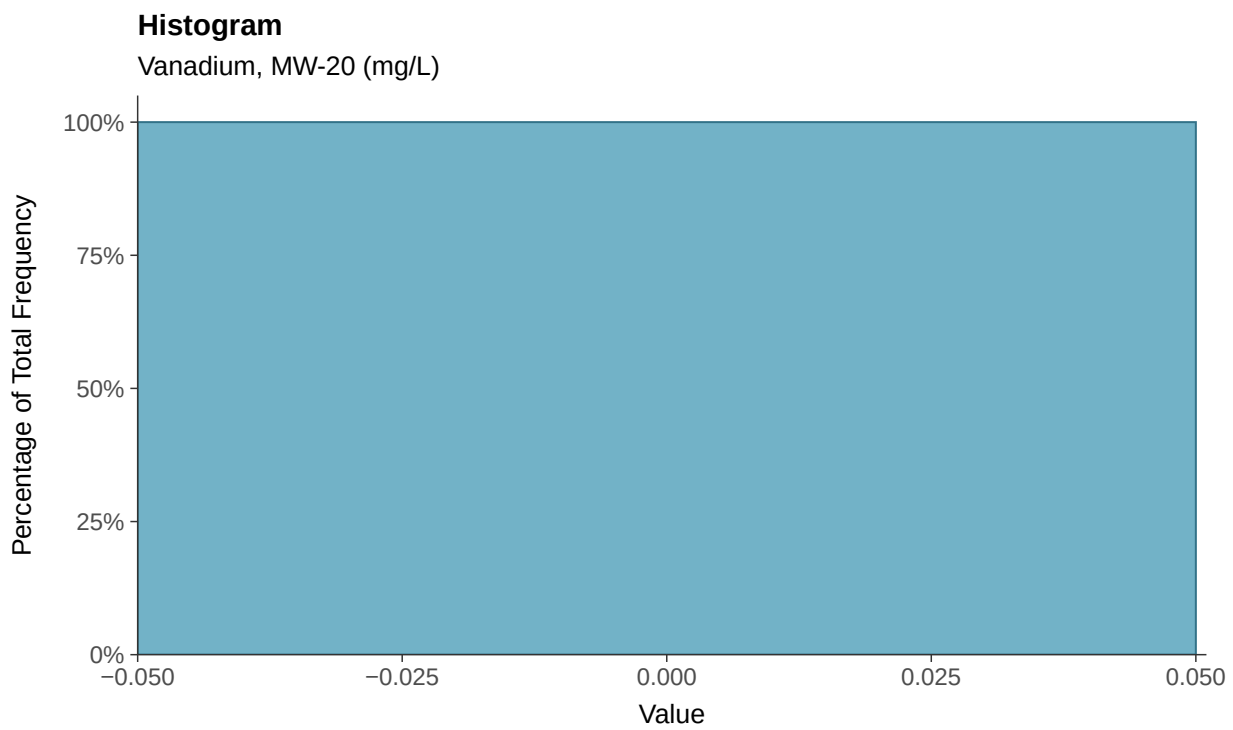
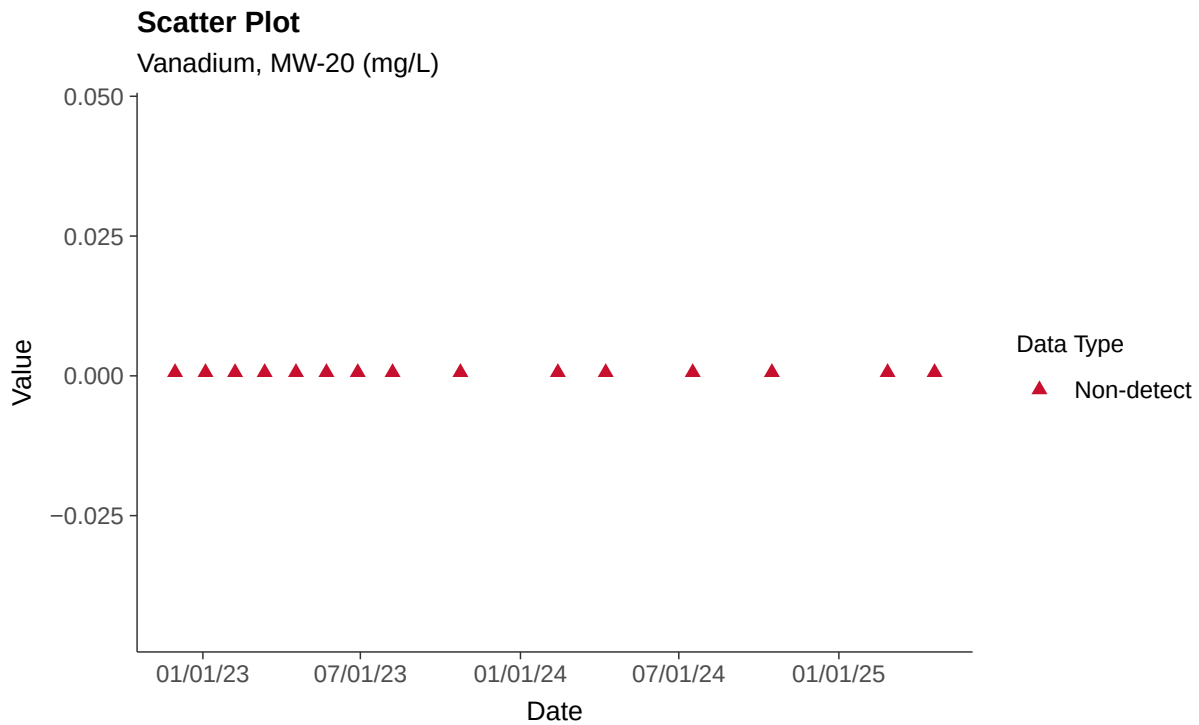
Silver, MW-20 (mg/L)





Part 115: Vanadium, MW-20

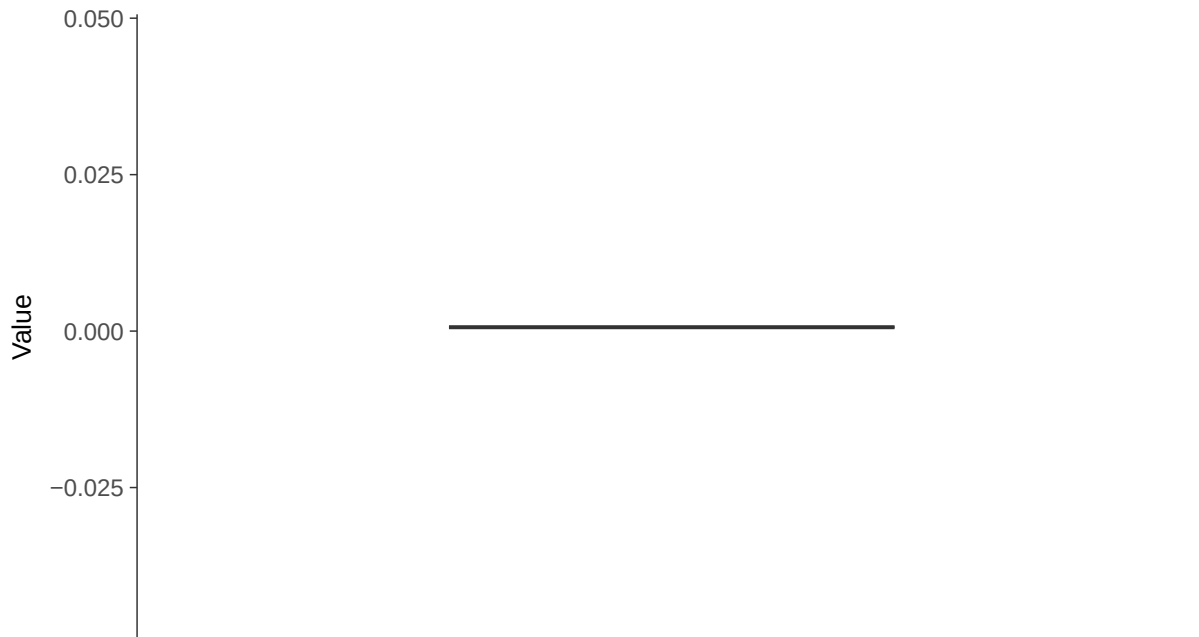
ID: 30_1_5_128





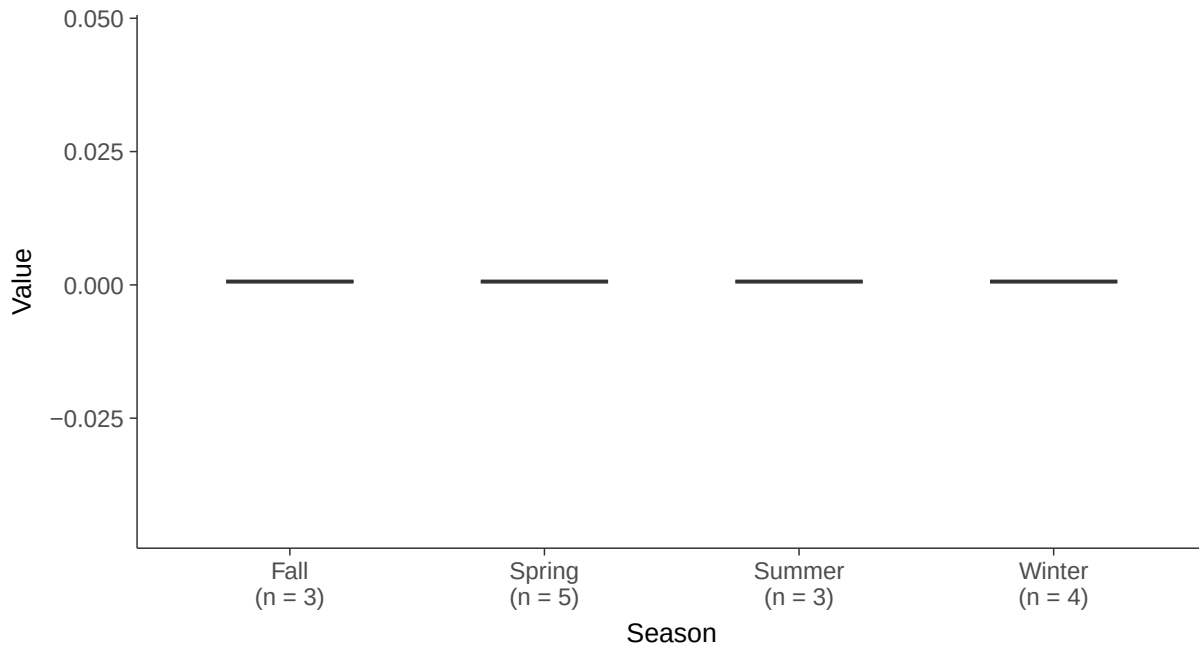
Boxplot

Vanadium, MW-20 (mg/L)



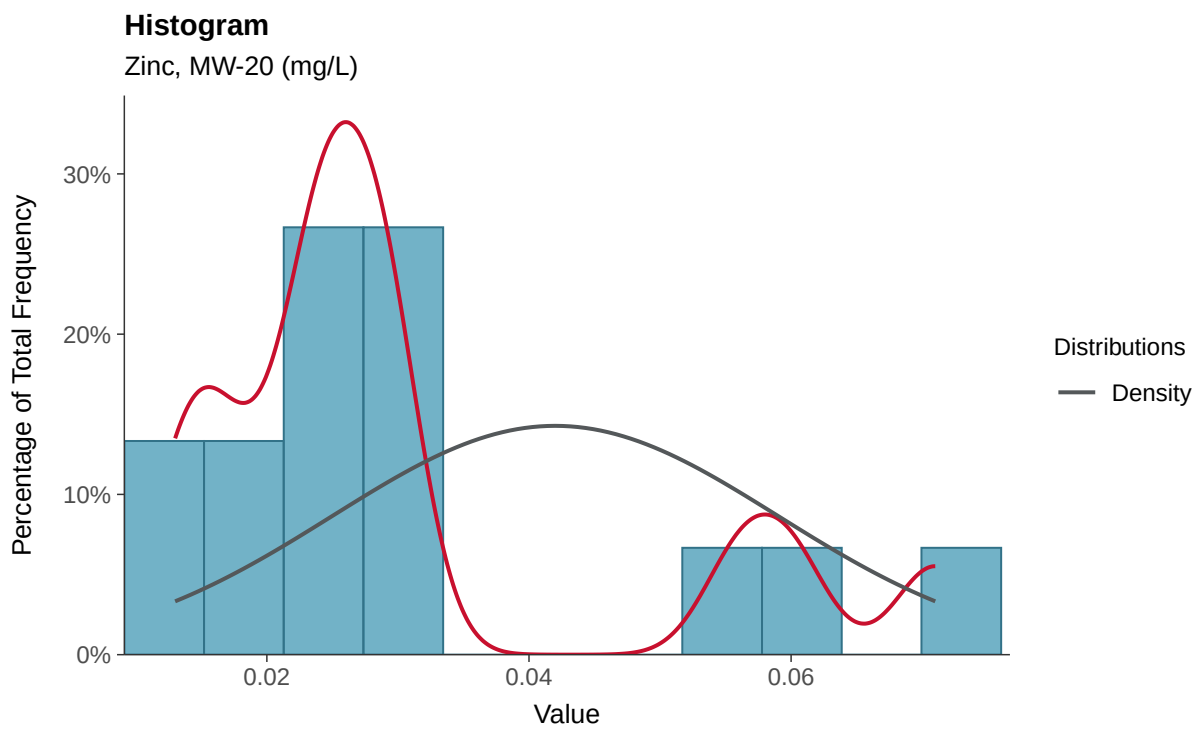
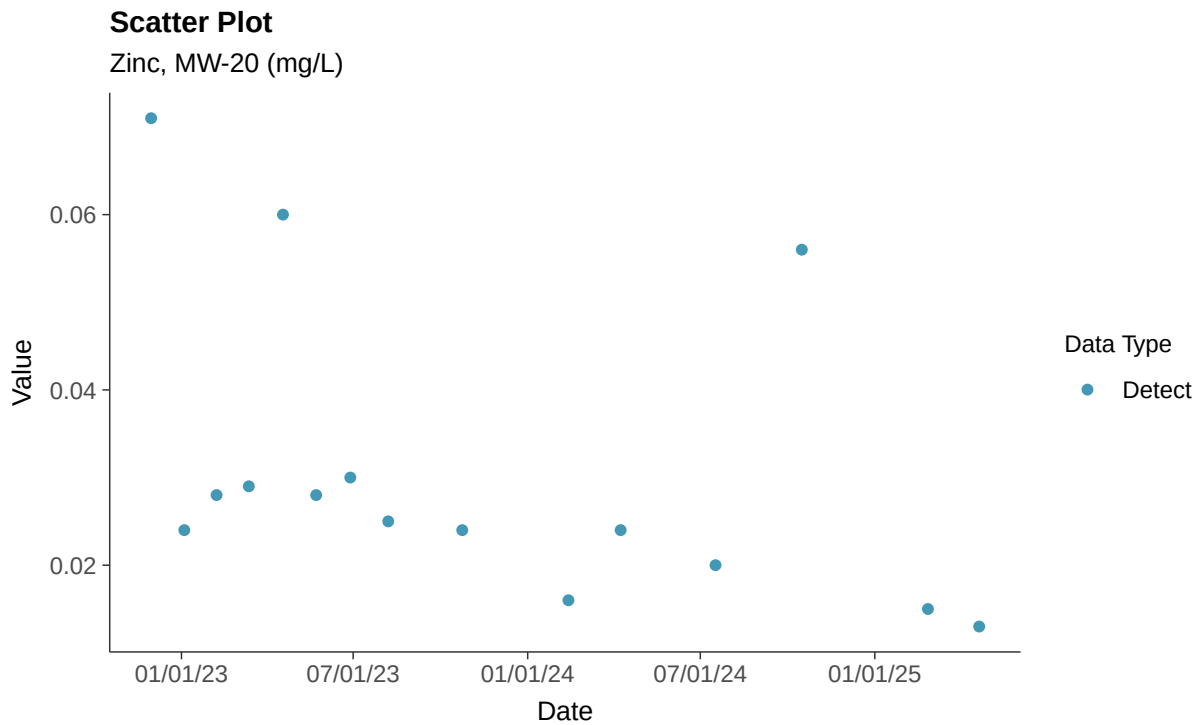
Boxplot by Season

Vanadium, MW-20 (mg/L)



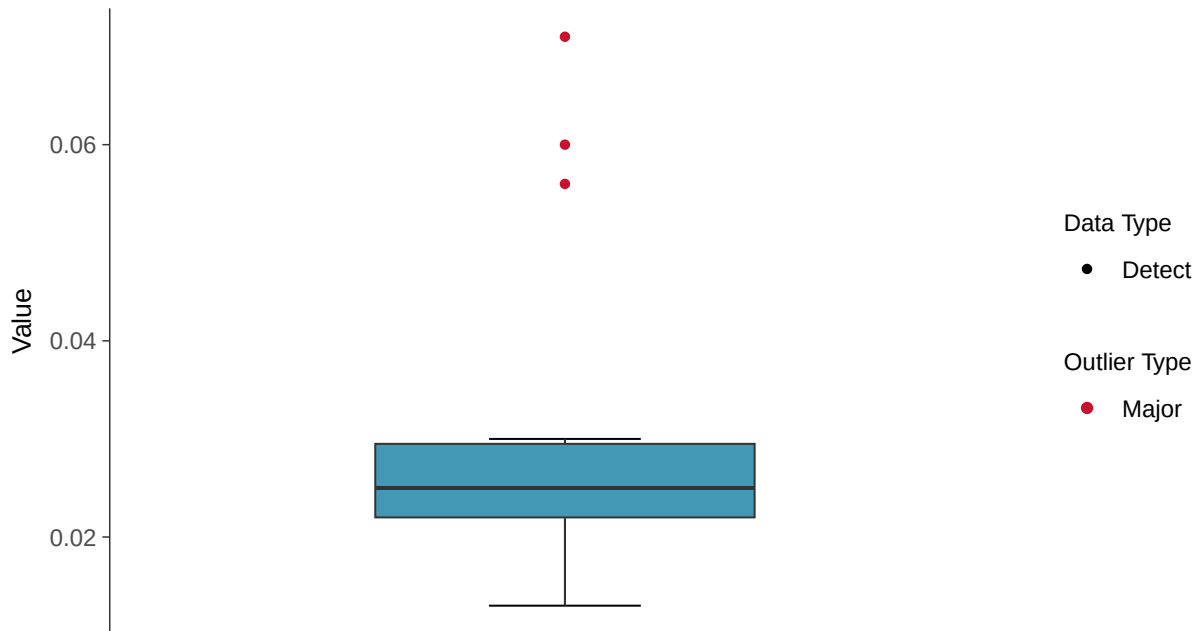
Part 115: Zinc, MW-20

ID: 30_1_5_129



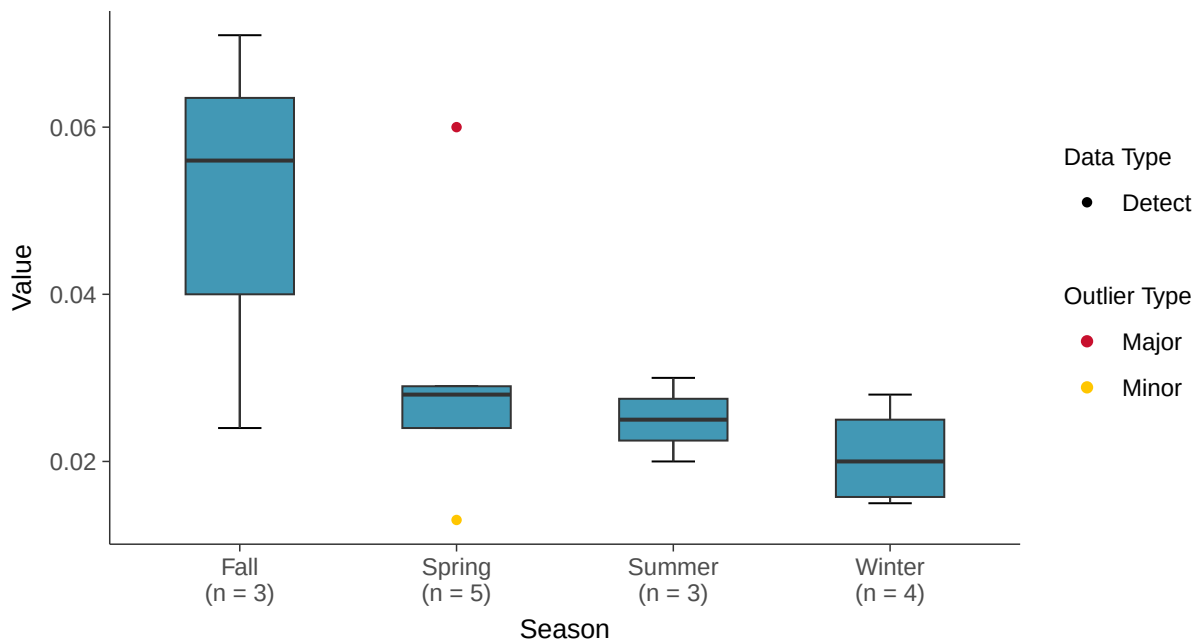
Boxplot

Zinc, MW-20 (mg/L)



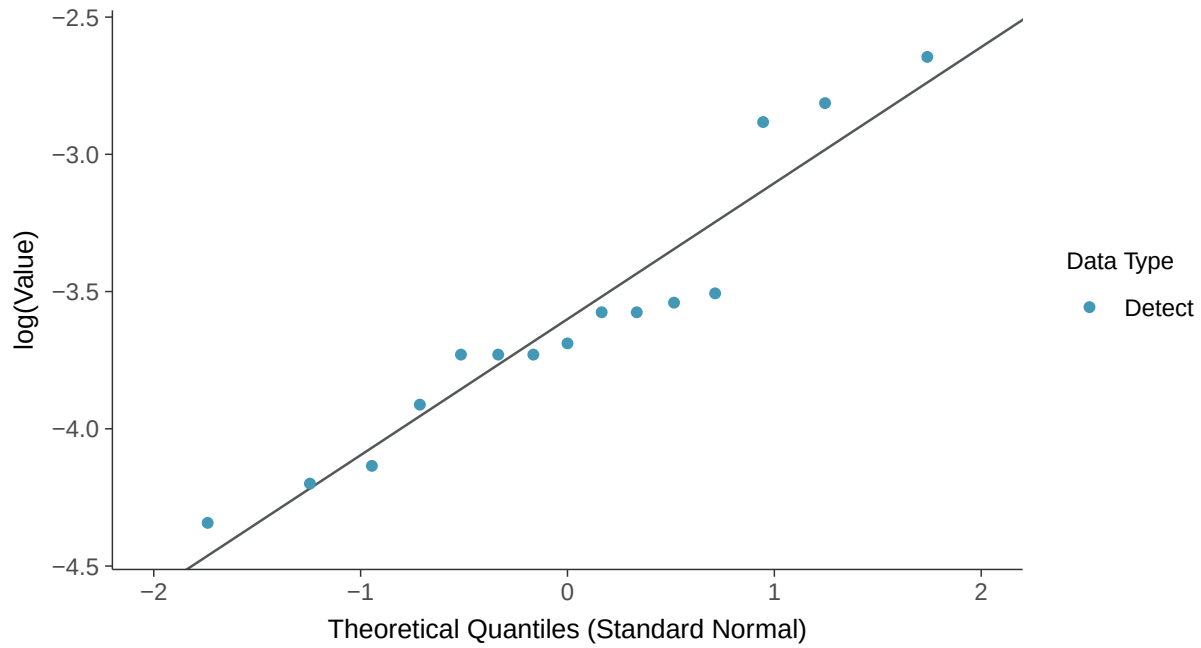
Boxplot by Season

Zinc, MW-20 (mg/L)



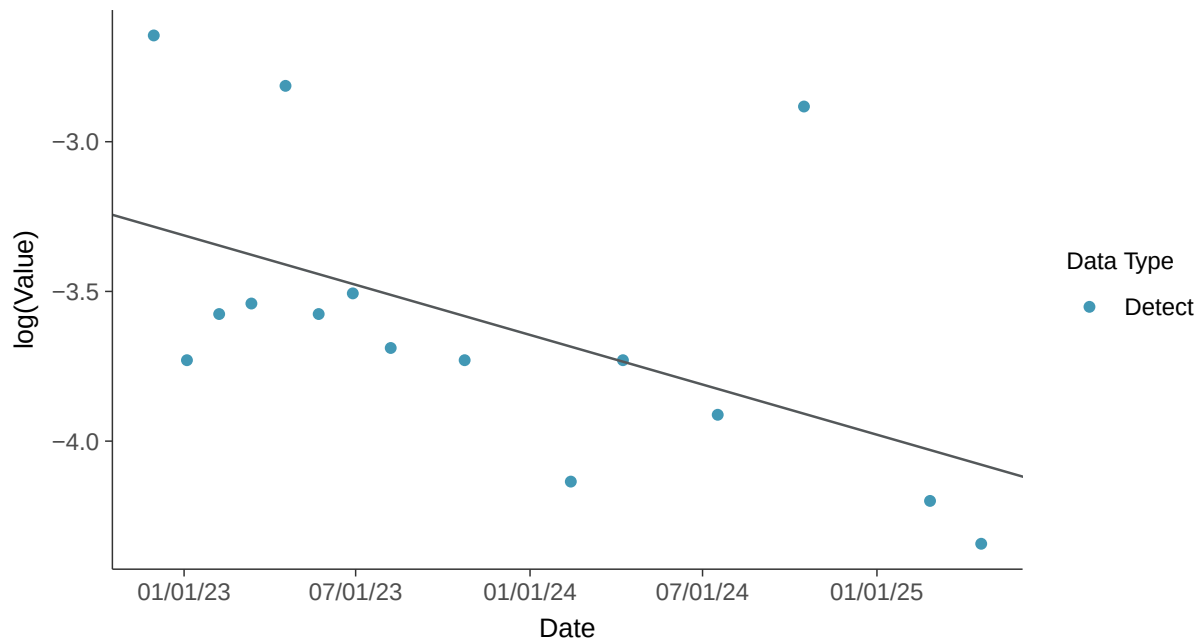
Lognormal Q-Q plot

Zinc, MW-20 (mg/L)



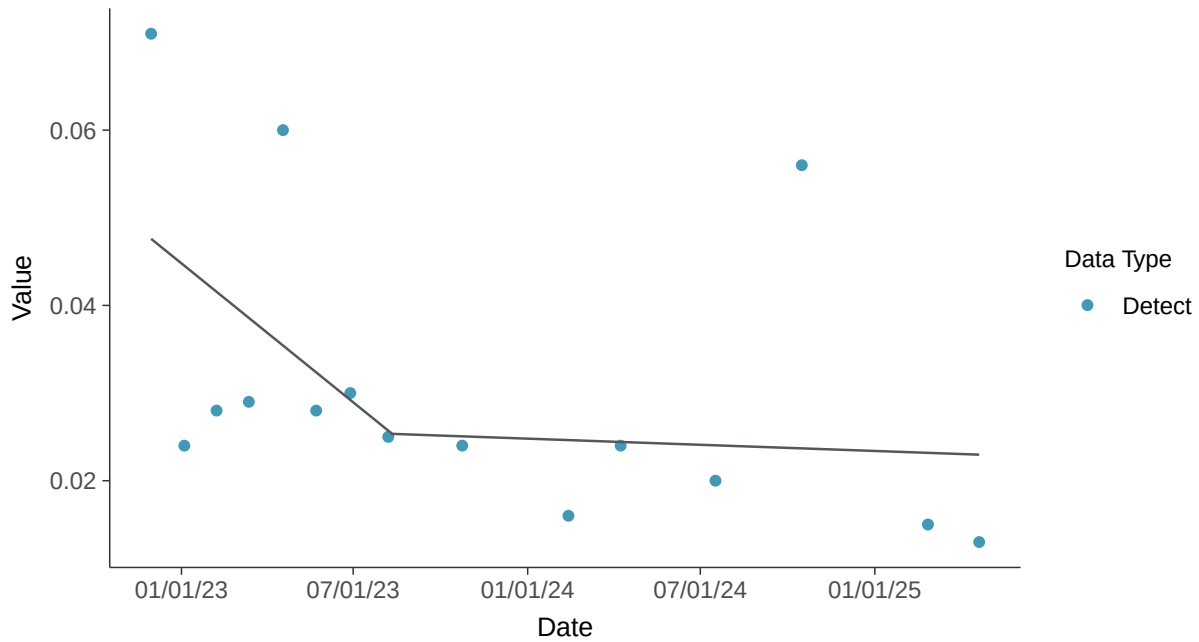
Trend Regression: Lognormal MLE

Zinc, MW-20 (mg/L)



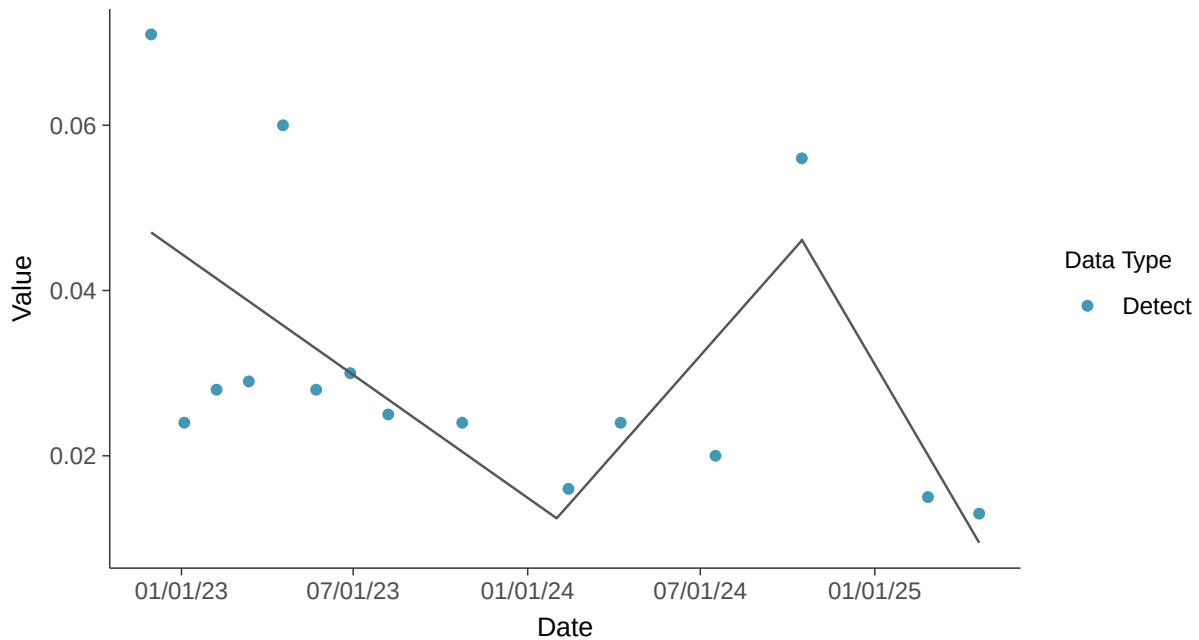
Trend Regression: Piecewise Linear-Linear

Zinc, MW-20 (mg/L)



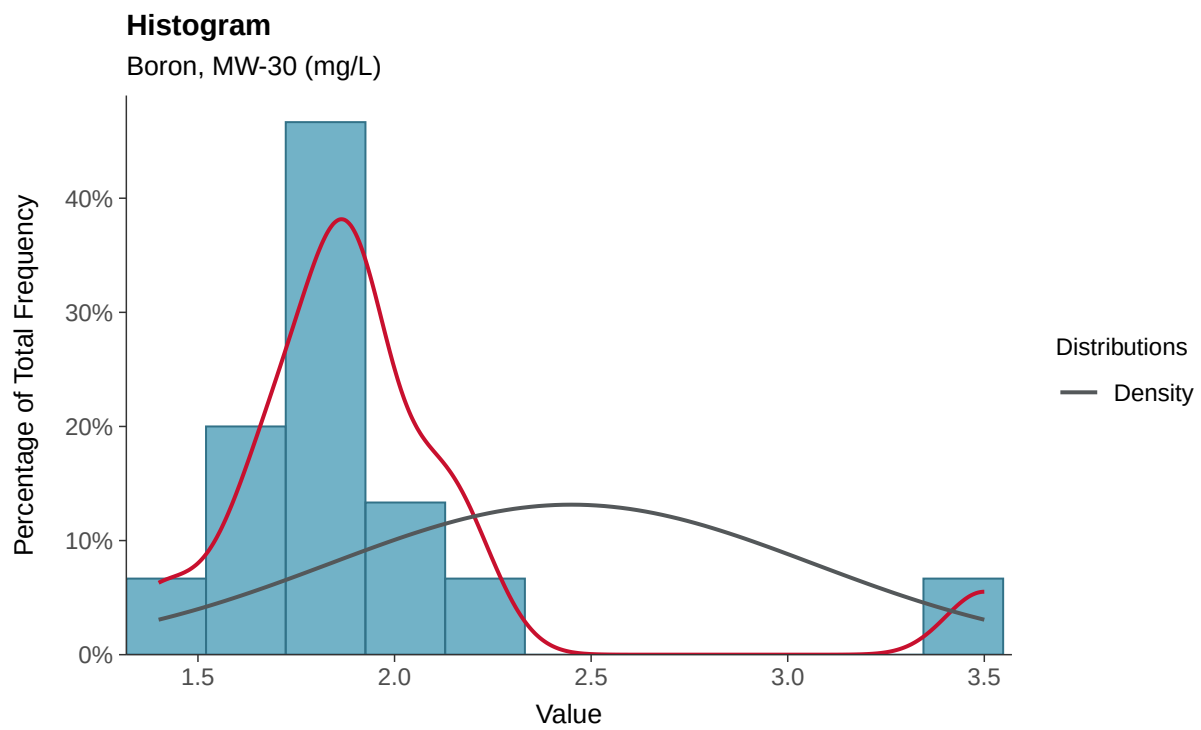
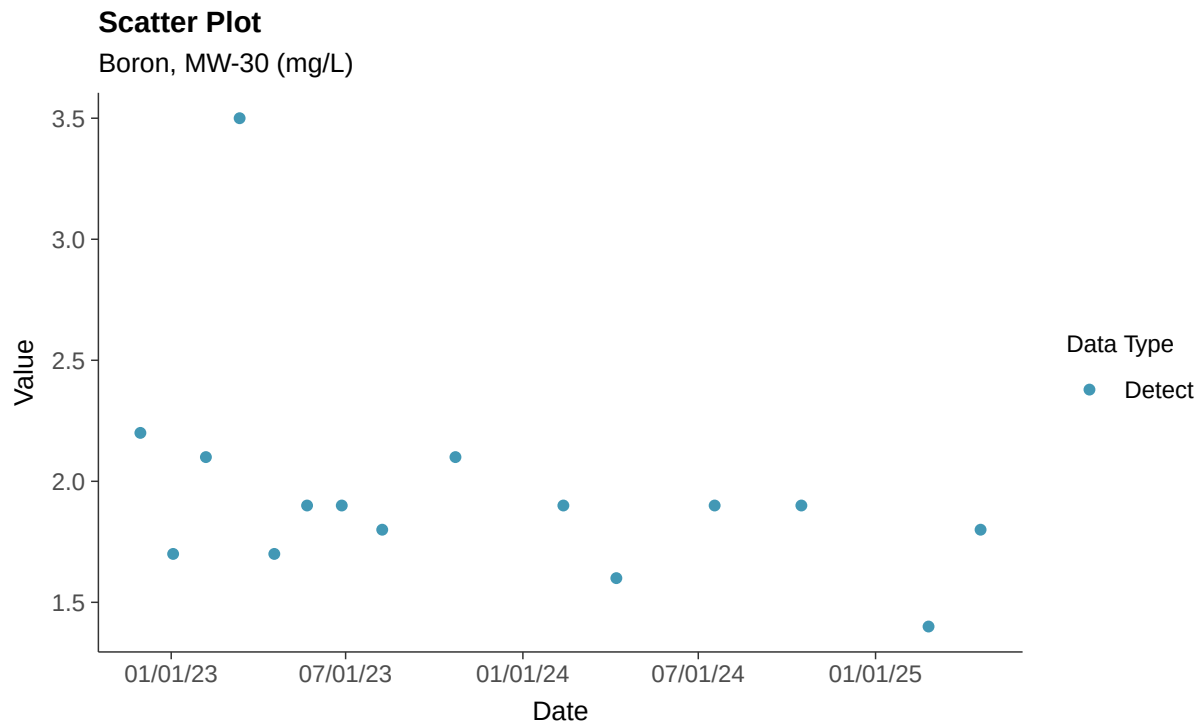
Trend Regression: Piecewise Linear-Linear-Linear

Zinc, MW-20 (mg/L)



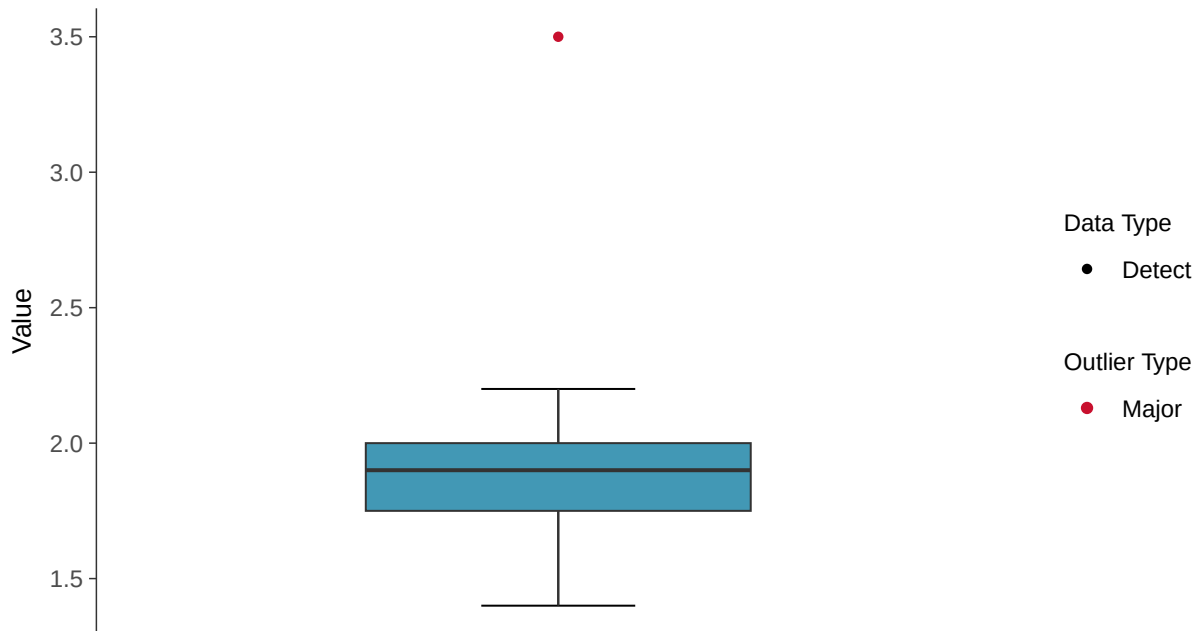
Appendix III: Boron, MW-30

ID: 40_1_3_105



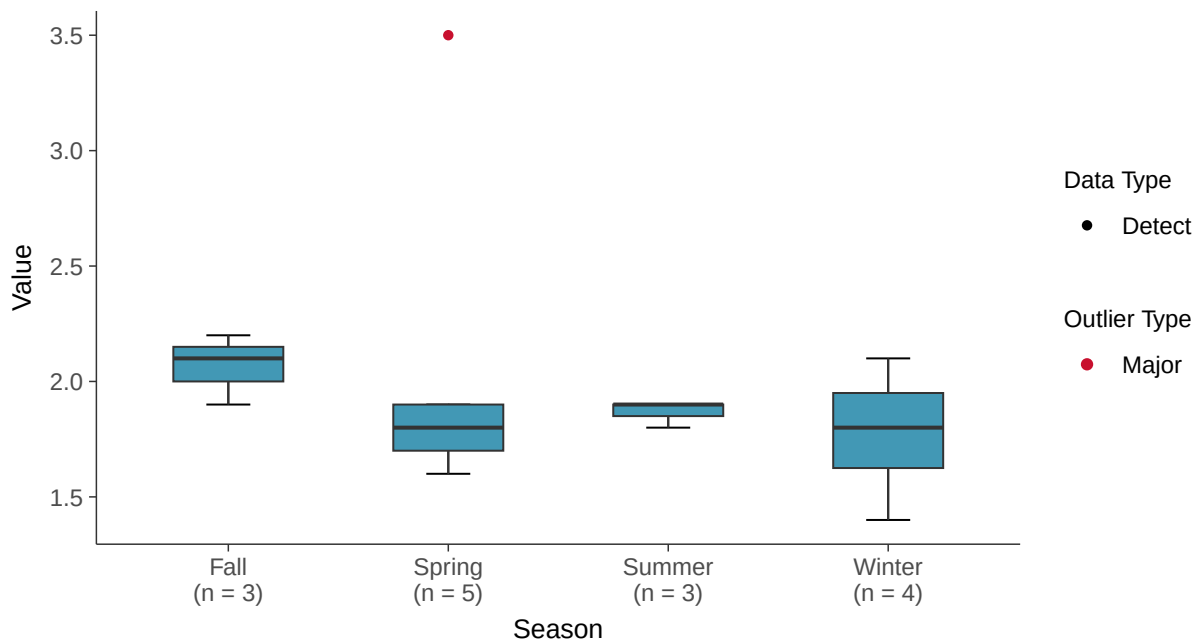
Boxplot

Boron, MW-30 (mg/L)



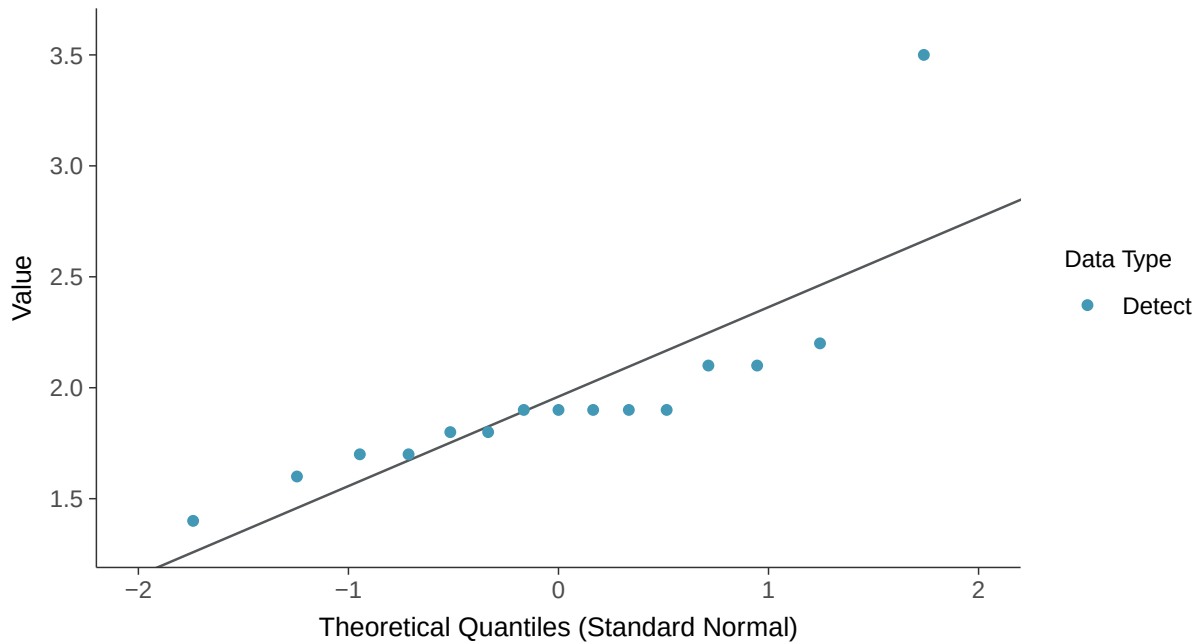
Boxplot by Season

Boron, MW-30 (mg/L)



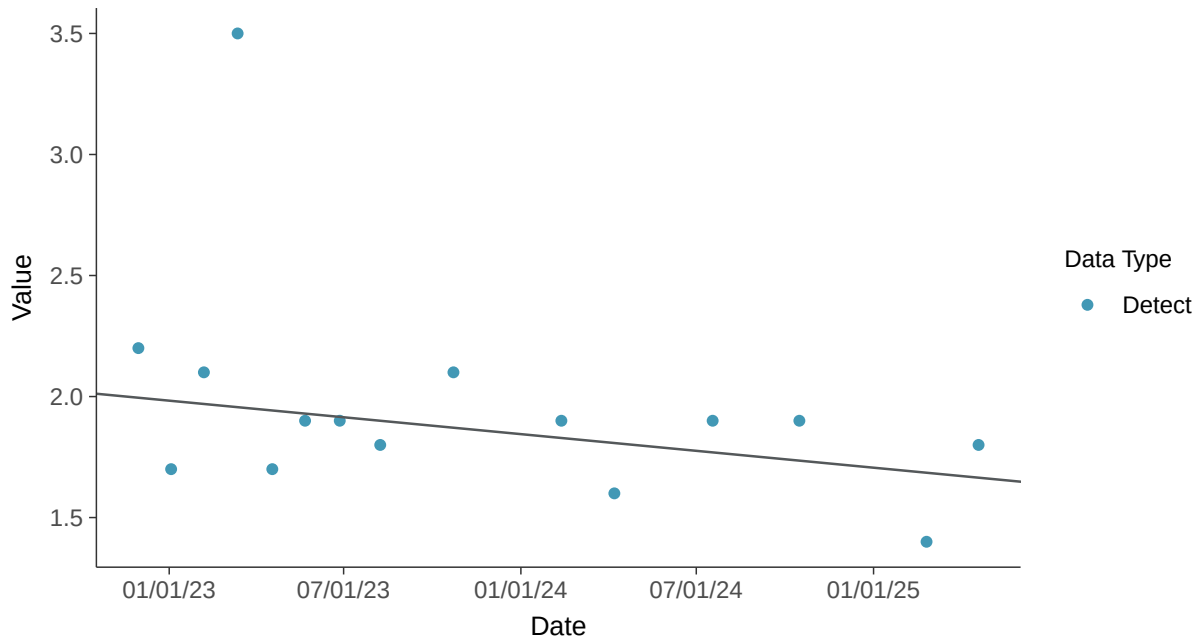
Normal Q-Q plot

Boron, MW-30 (mg/L)



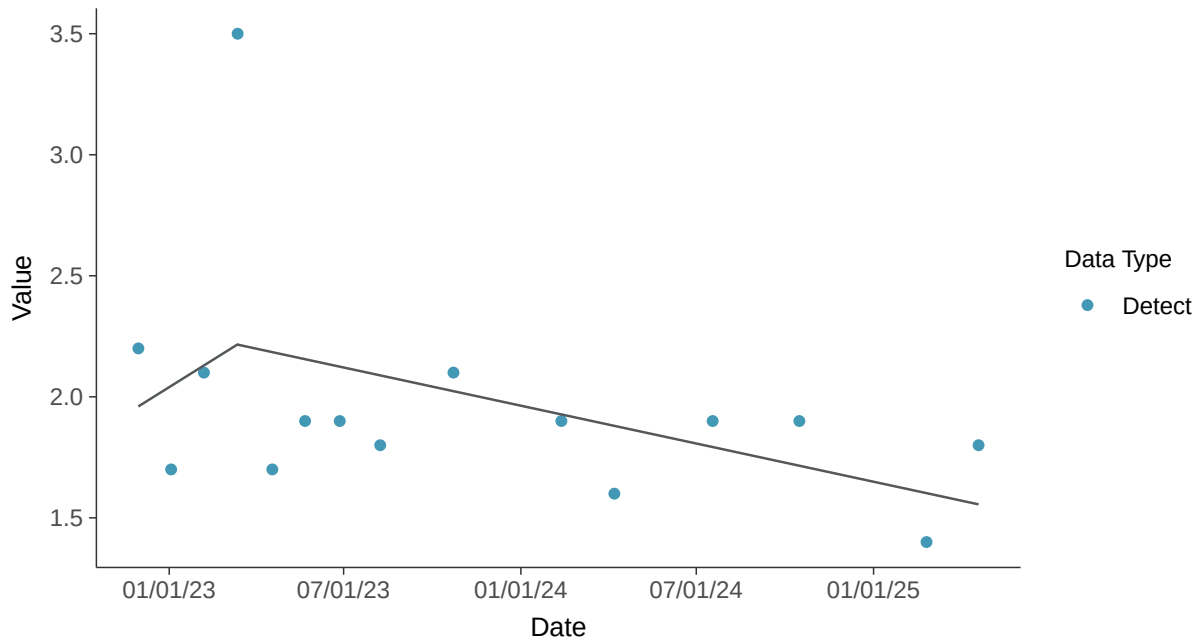
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Boron, MW-30 (mg/L)



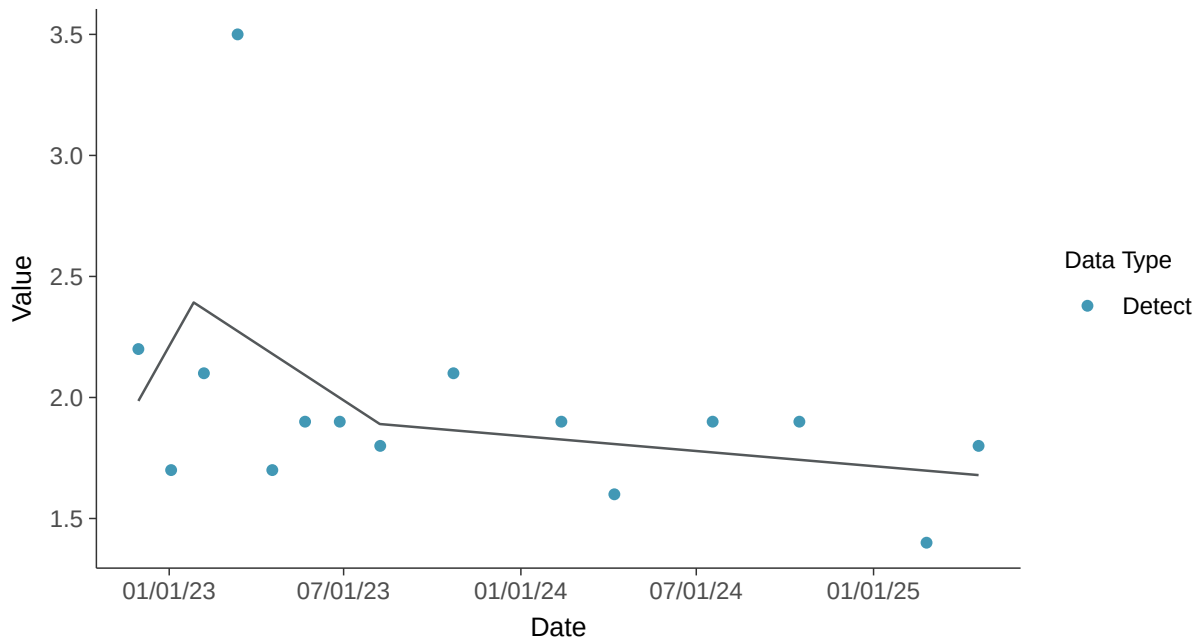
Trend Regression: Piecewise Linear-Linear

Boron, MW-30 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Boron, MW-30 (mg/L)

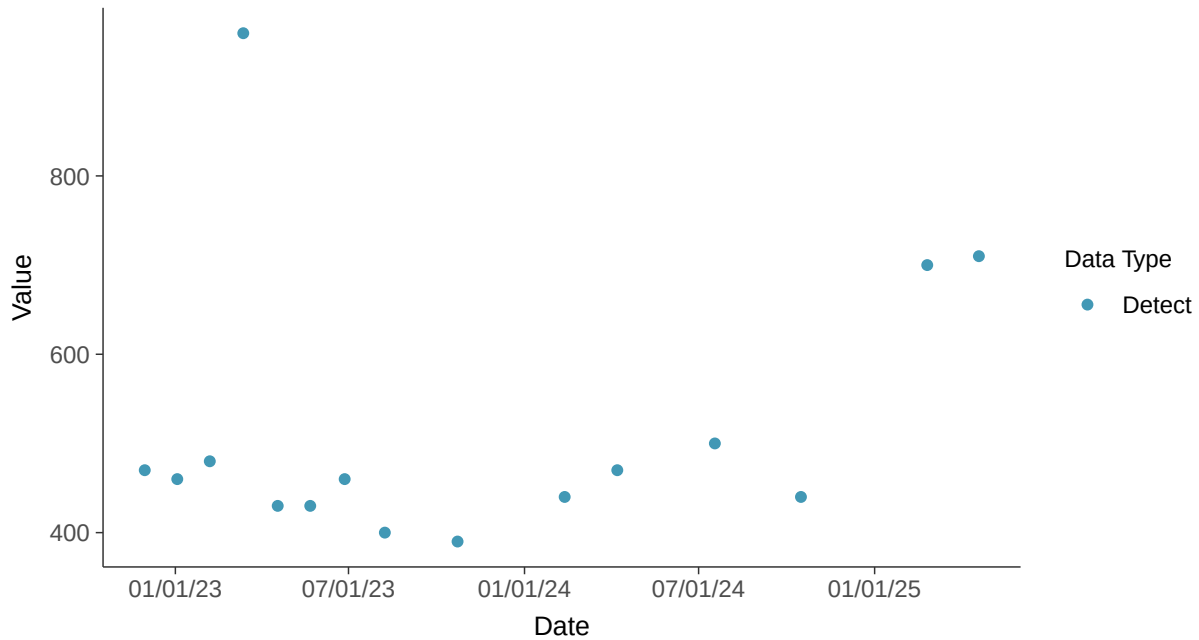


Appendix III: Calcium, MW-30

ID: 40_1_3_107

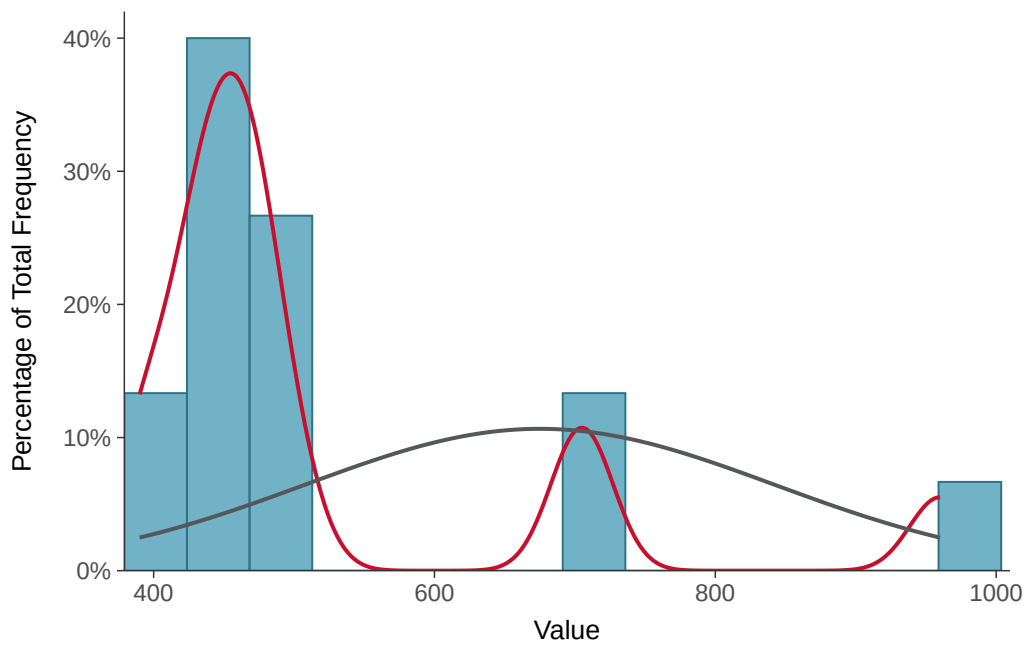
Scatter Plot

Calcium, MW-30 (mg/L)



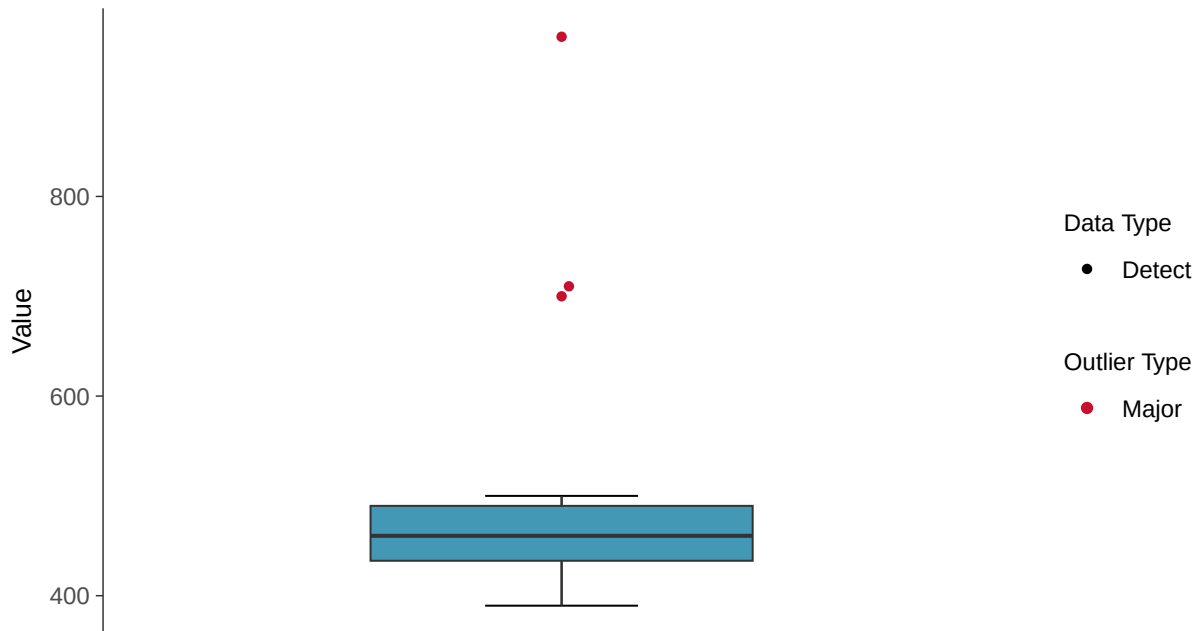
Histogram

Calcium, MW-30 (mg/L)



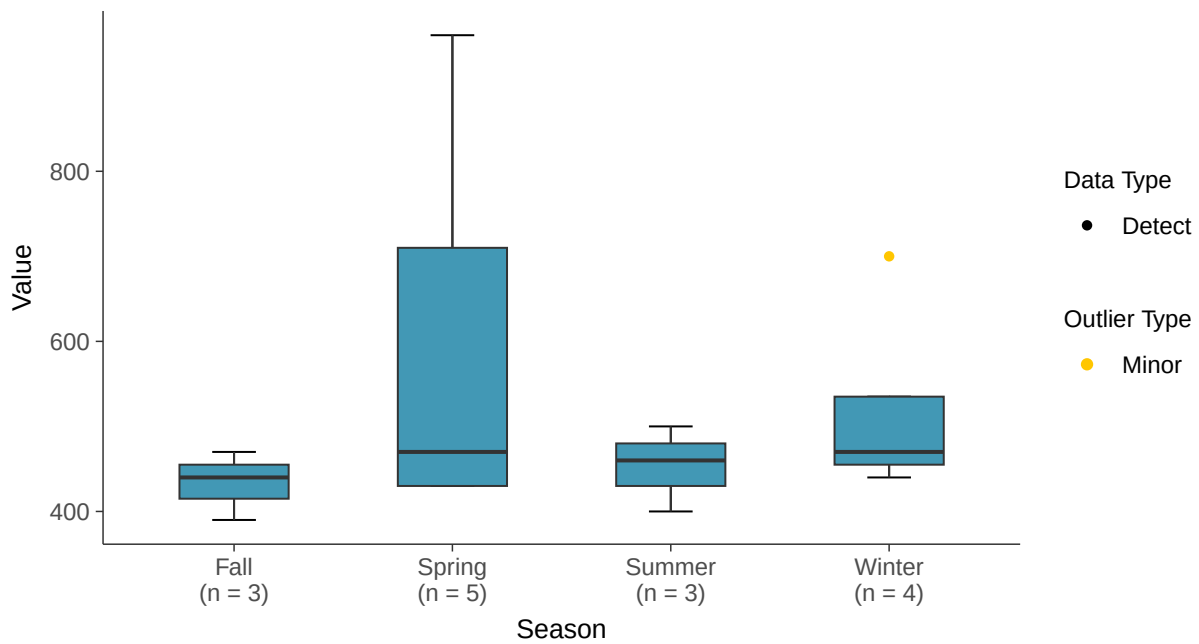
Boxplot

Calcium, MW-30 (mg/L)



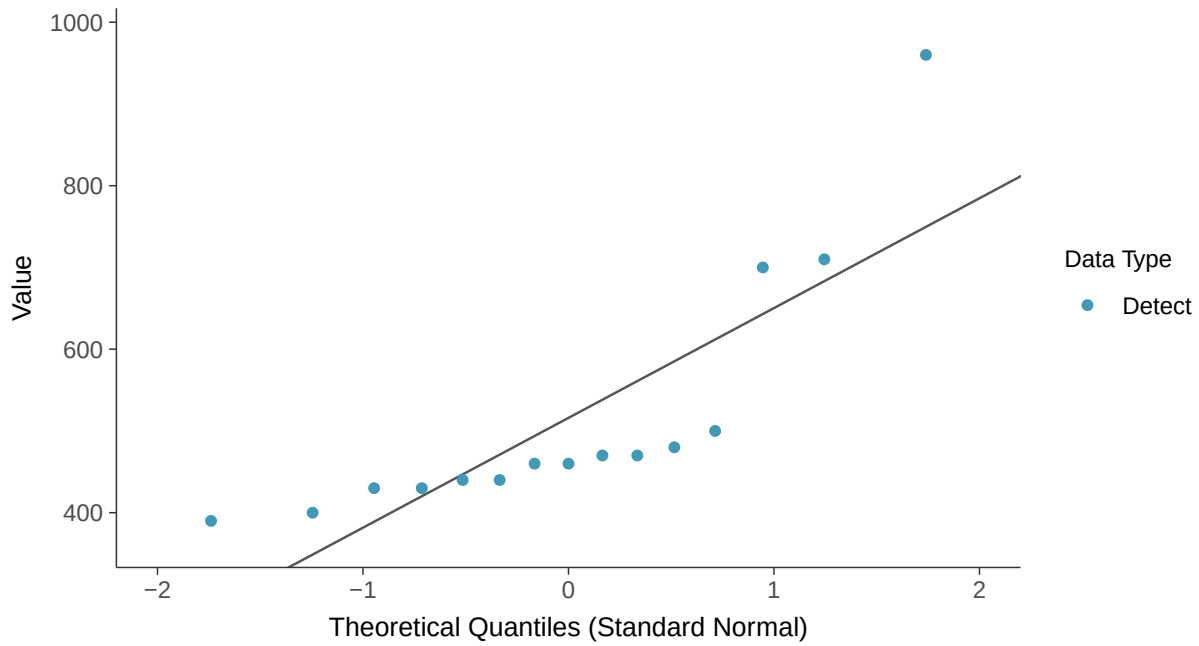
Boxplot by Season

Calcium, MW-30 (mg/L)



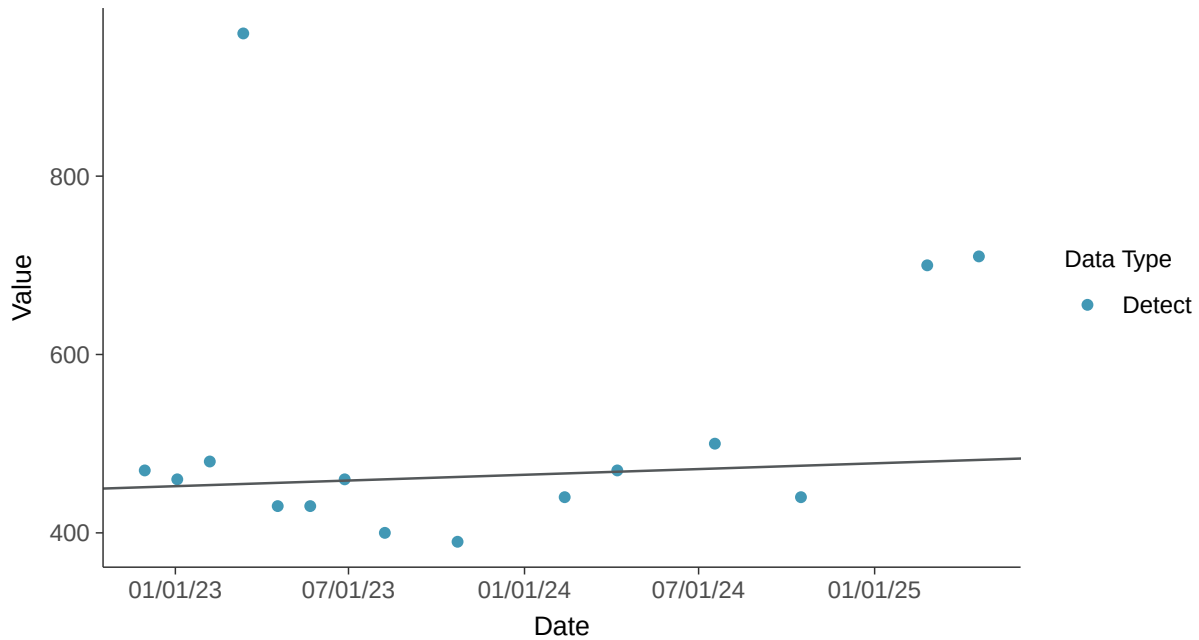
Normal Q-Q plot

Calcium, MW-30 (mg/L)



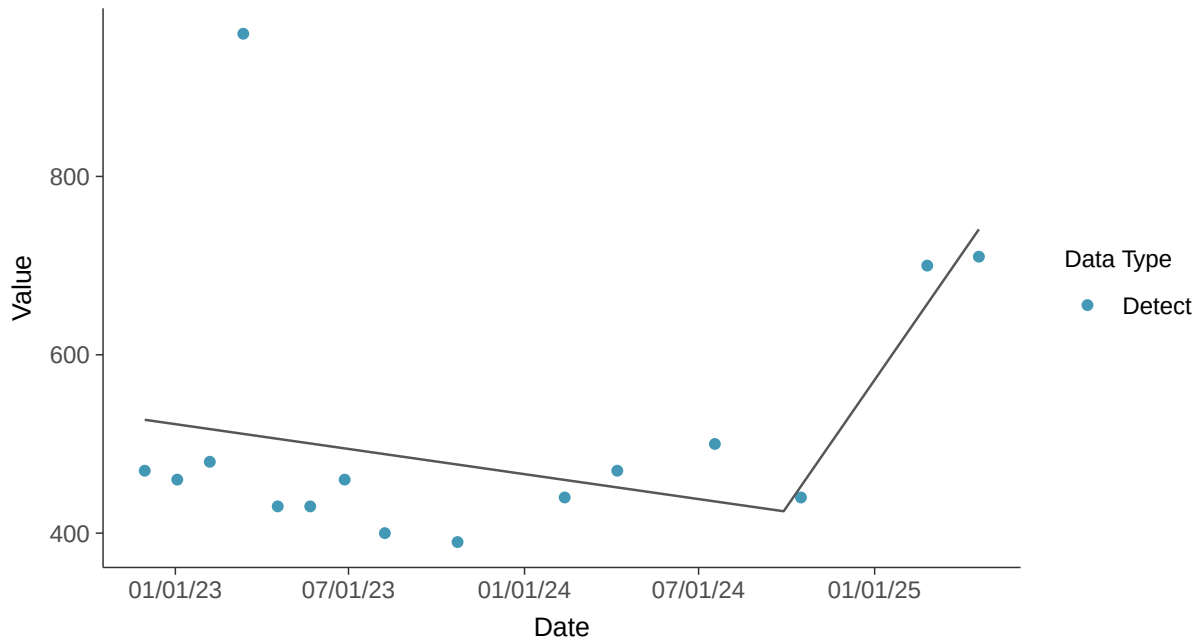
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Calcium, MW-30 (mg/L)



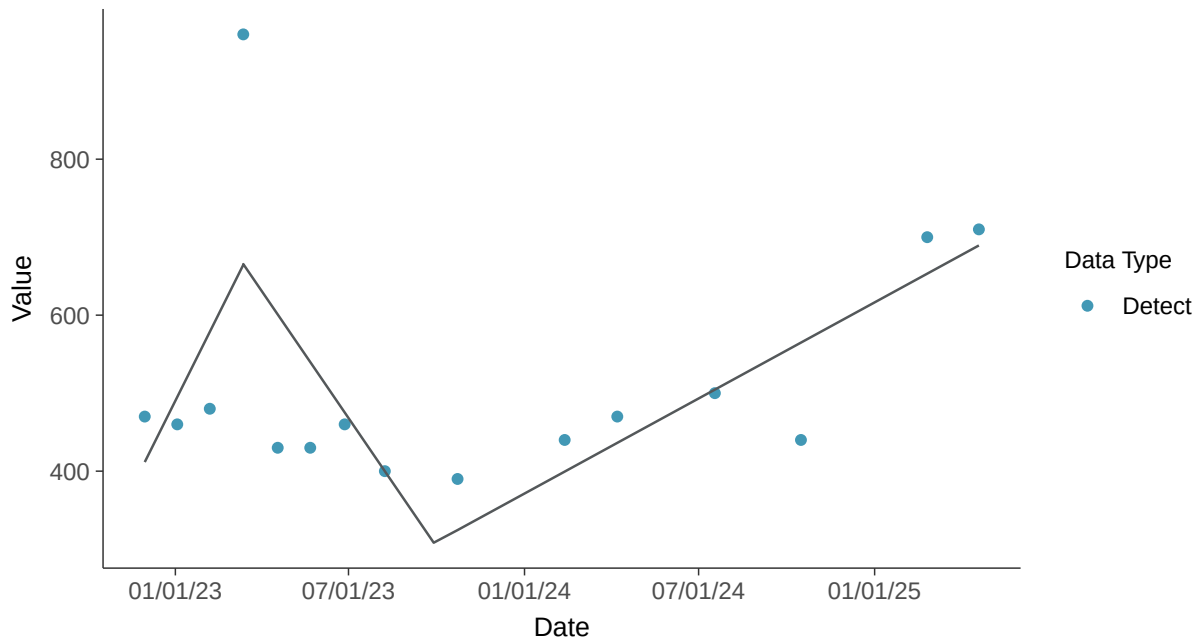
Trend Regression: Piecewise Linear-Linear

Calcium, MW-30 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Calcium, MW-30 (mg/L)

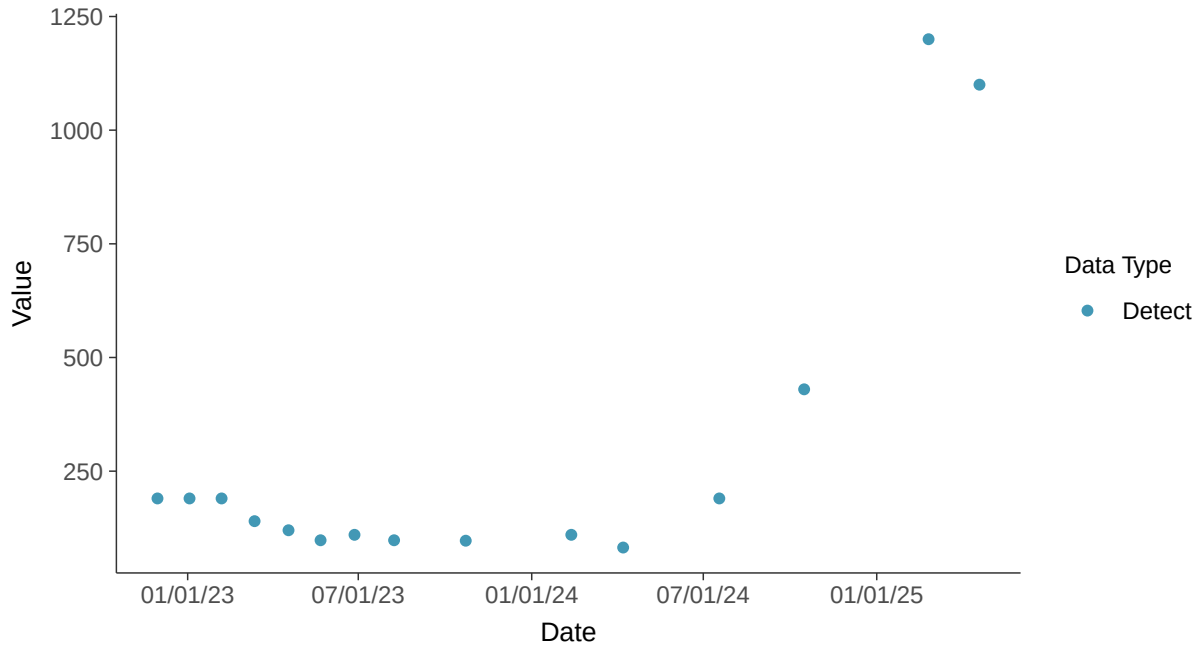


Appendix III: Chloride (as Cl), MW-30

ID: 40_1_3_108

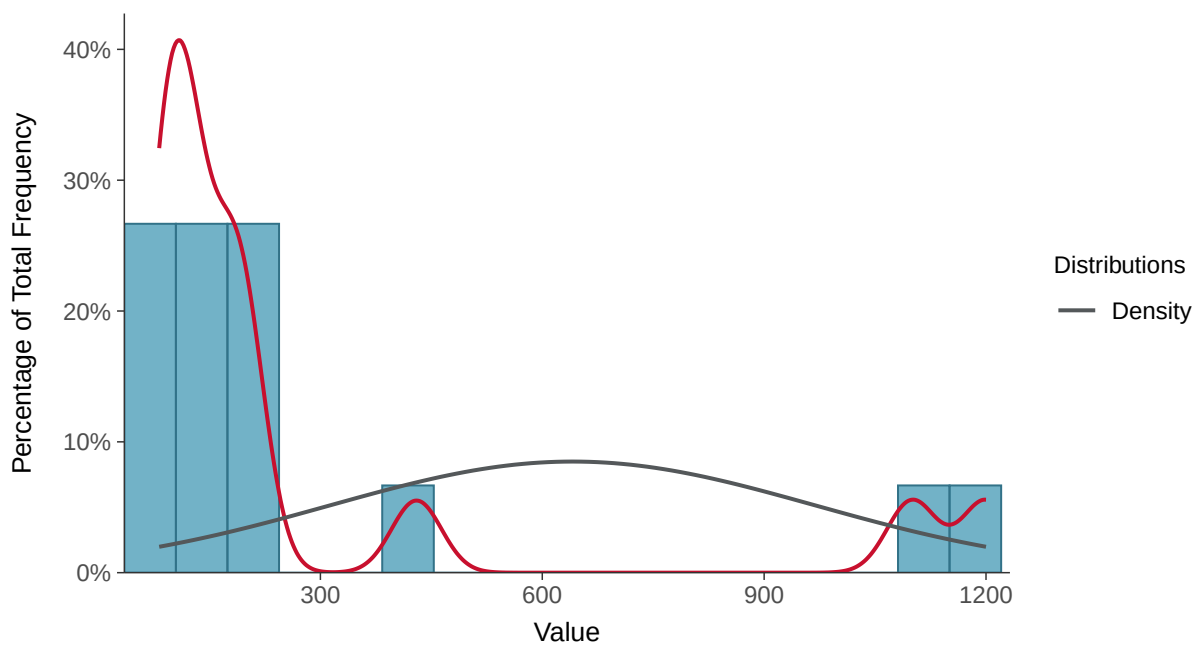
Scatter Plot

Chloride (as Cl), MW-30 (mg/L)



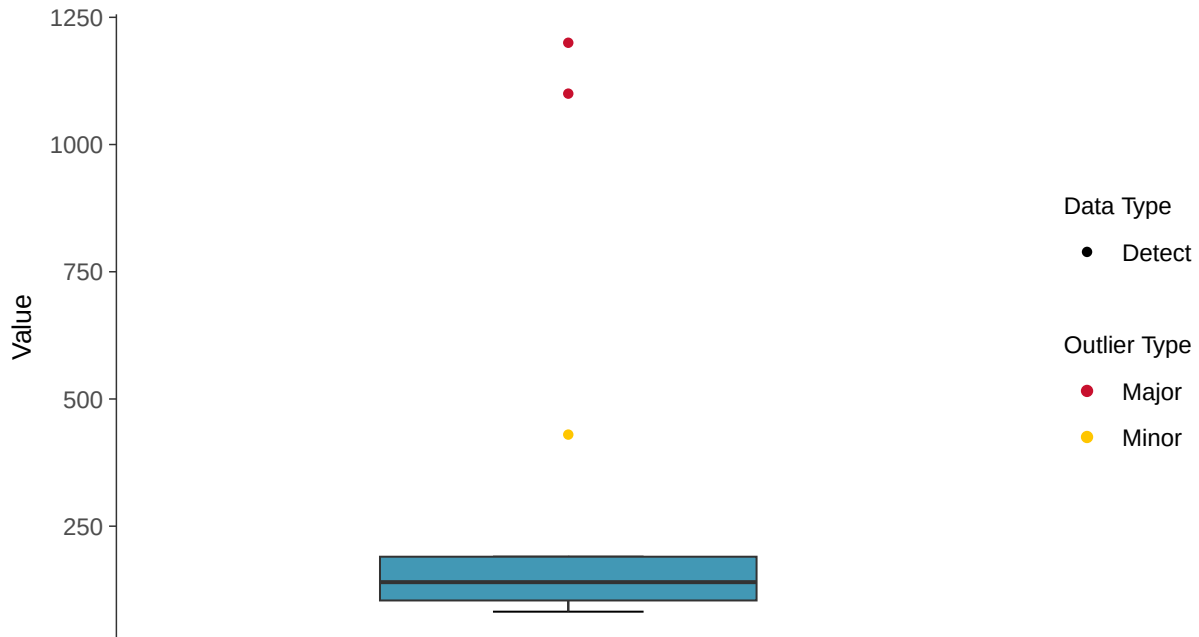
Histogram

Chloride (as Cl), MW-30 (mg/L)



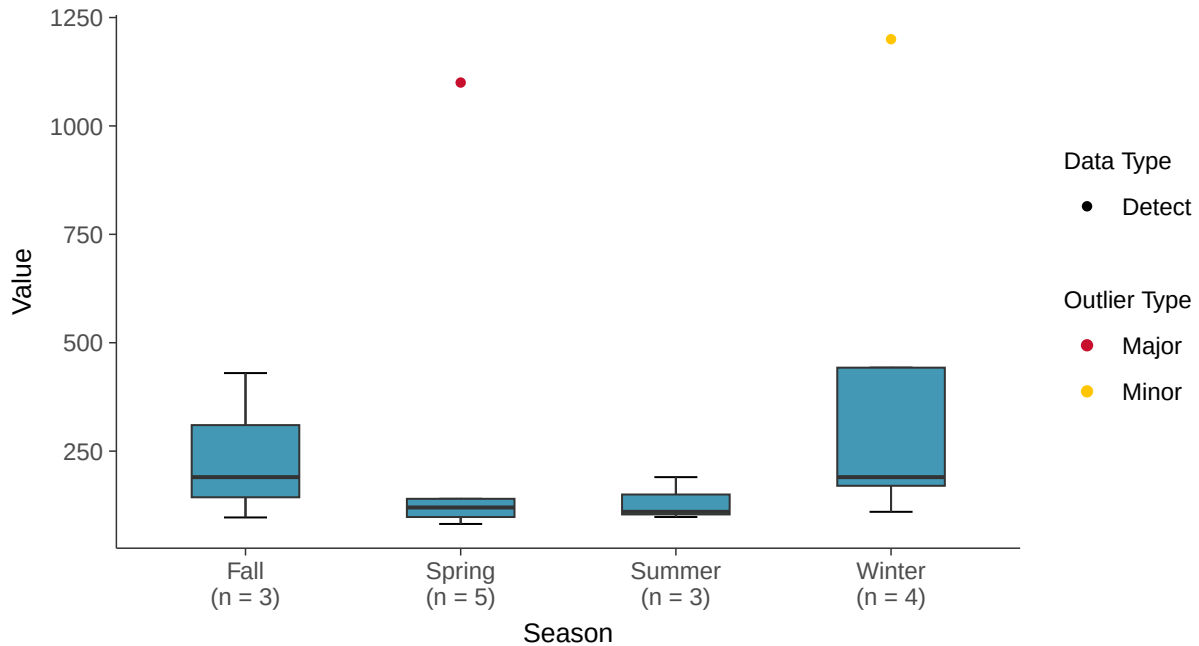
Boxplot

Chloride (as Cl), MW-30 (mg/L)



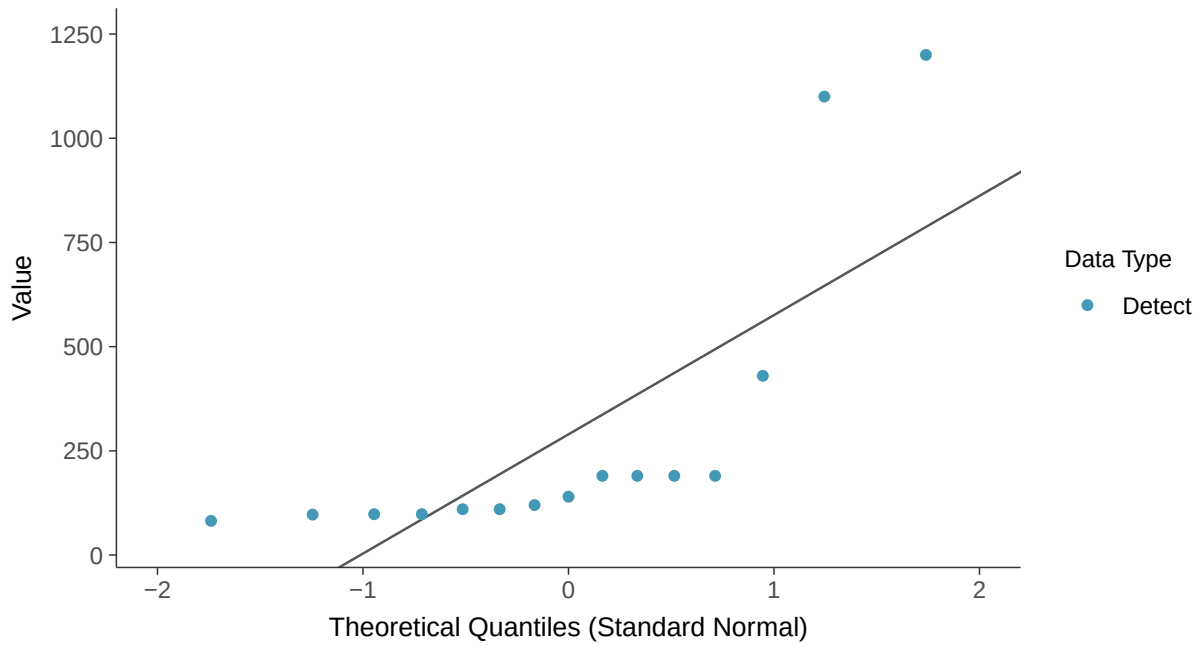
Boxplot by Season

Chloride (as Cl), MW-30 (mg/L)



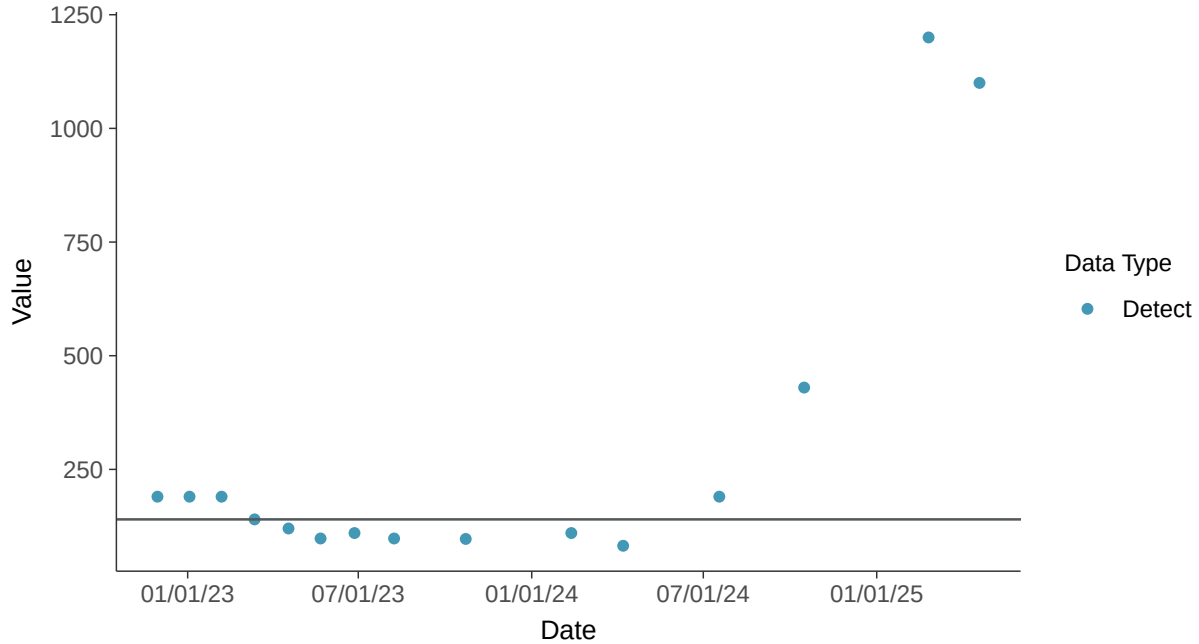
Normal Q-Q plot

Chloride (as Cl), MW-30 (mg/L)



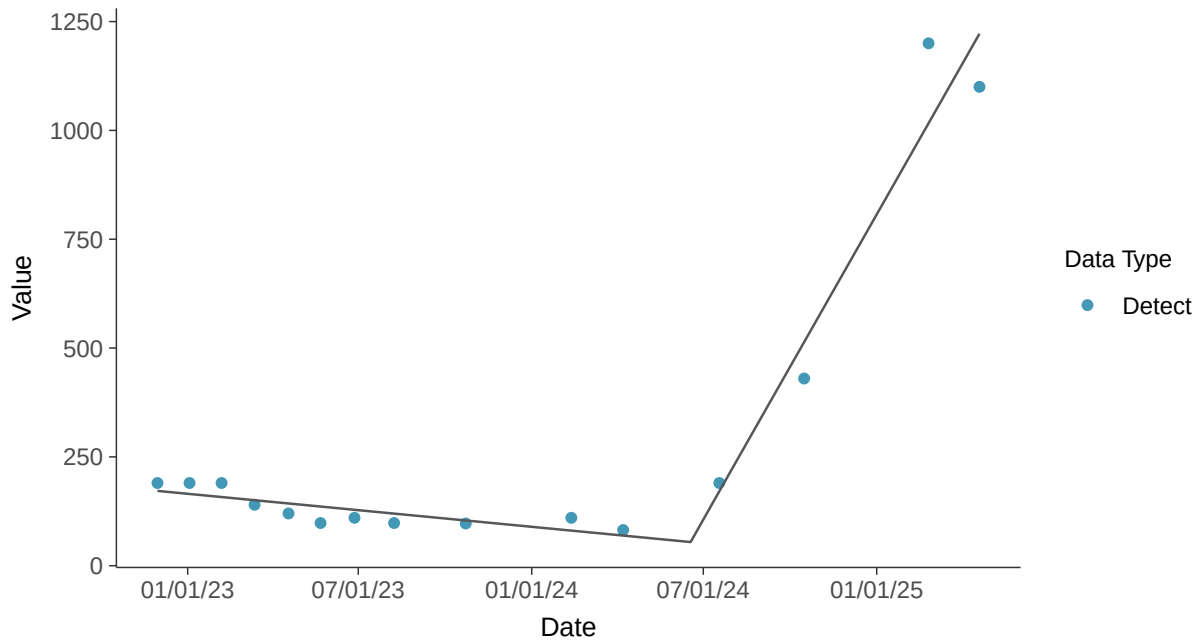
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Chloride (as Cl), MW-30 (mg/L)



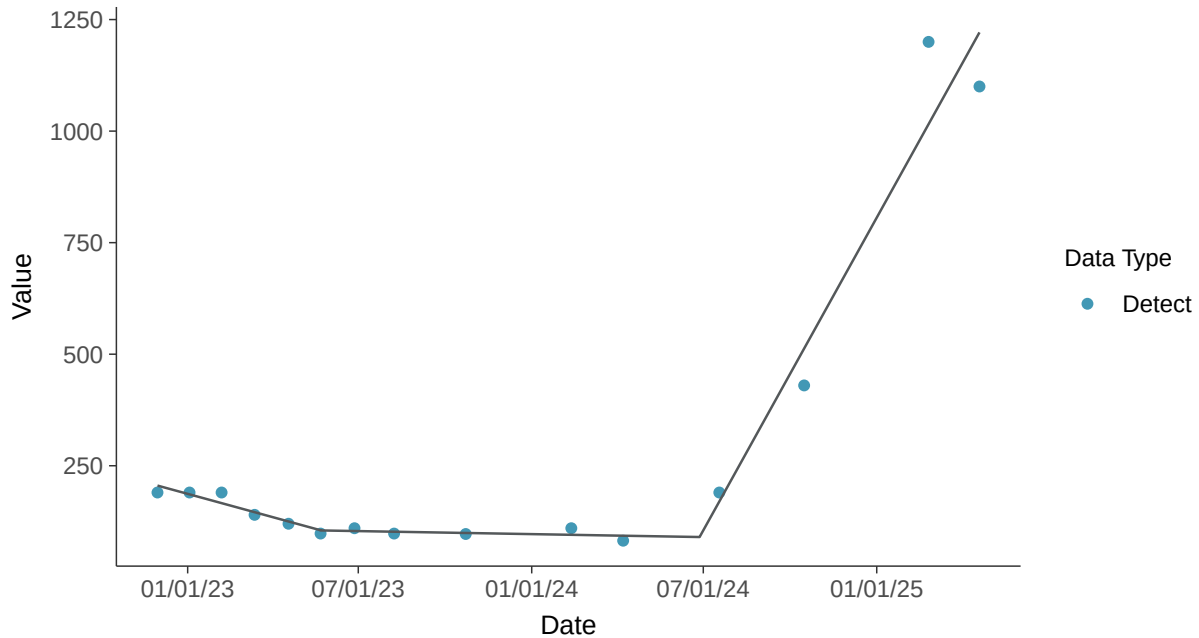
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-30 (mg/L)



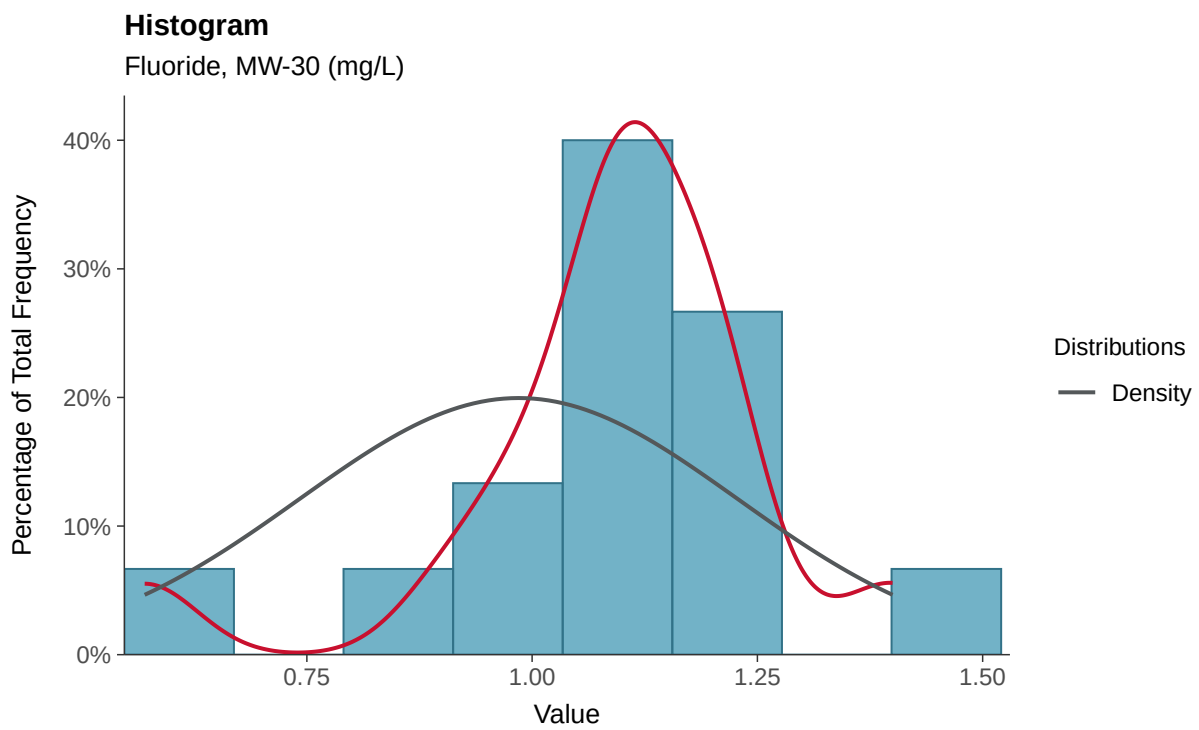
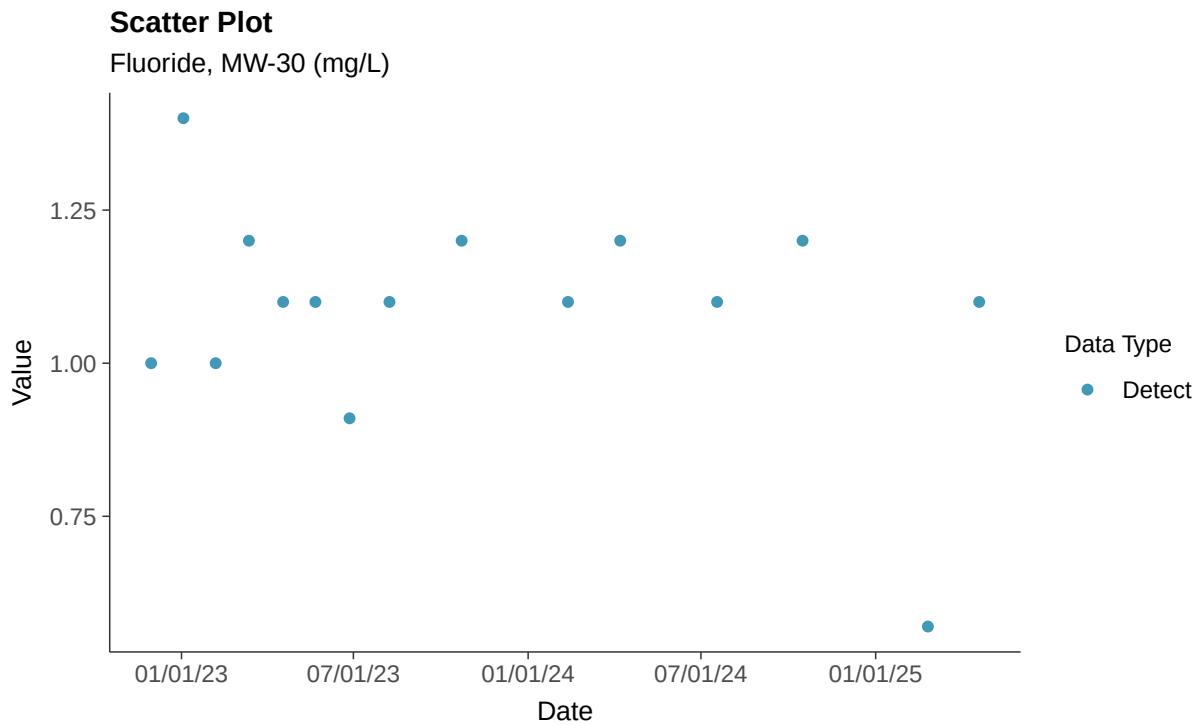
Trend Regression: Piecewise Linear-Linear-Linear

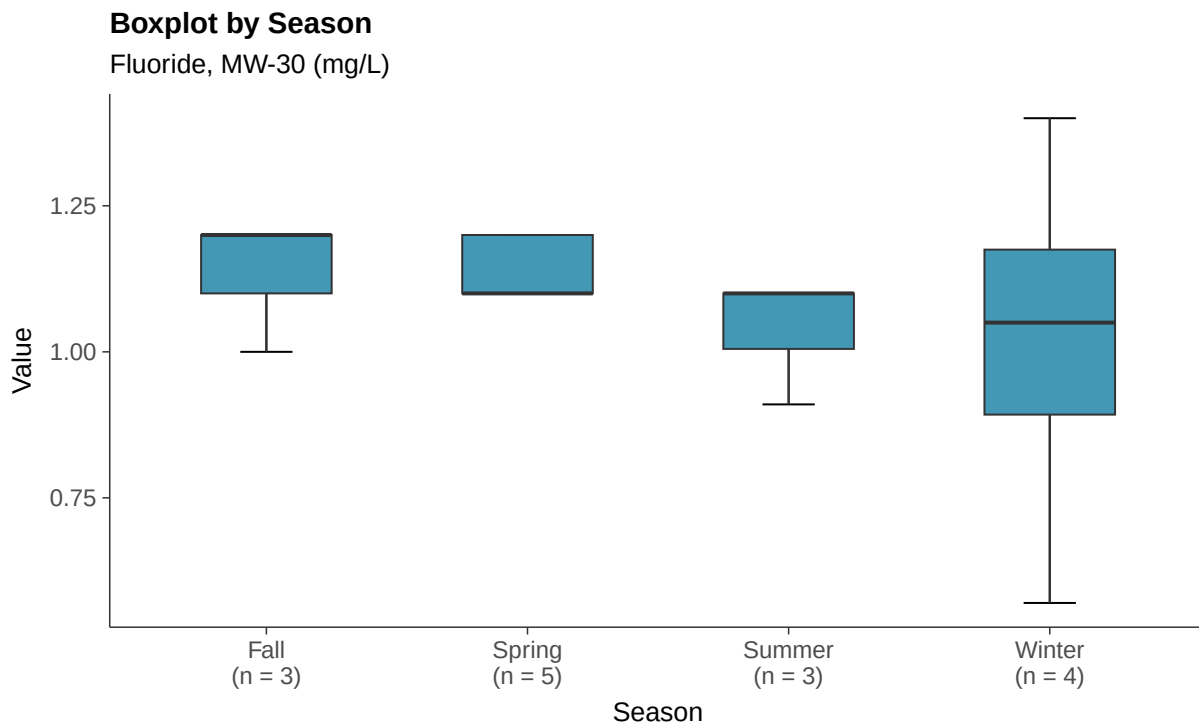
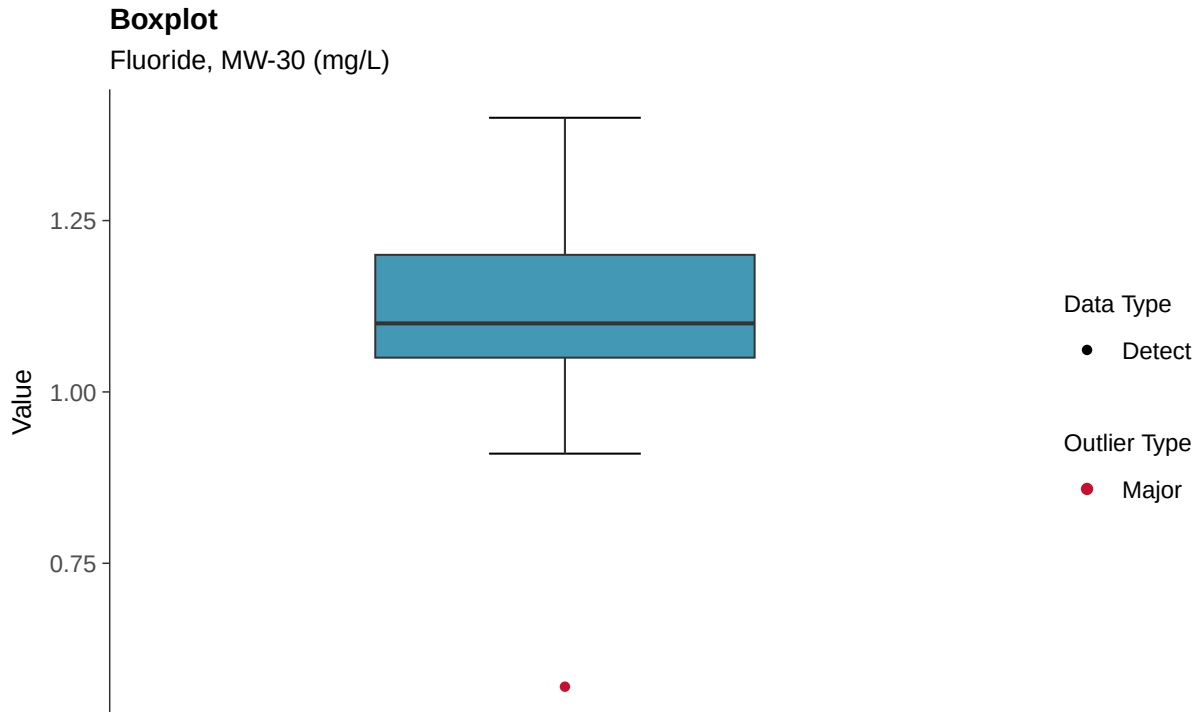
Chloride (as Cl), MW-30 (mg/L)



Appendix III: Fluoride, MW-30

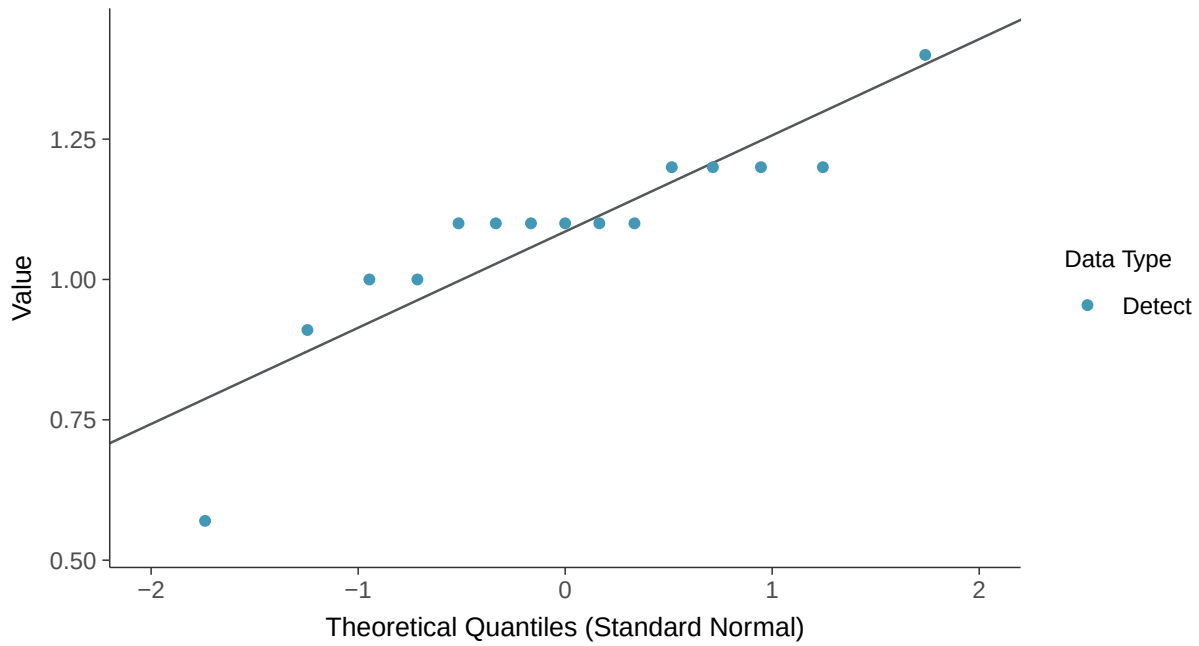
ID: 40_1_3_112





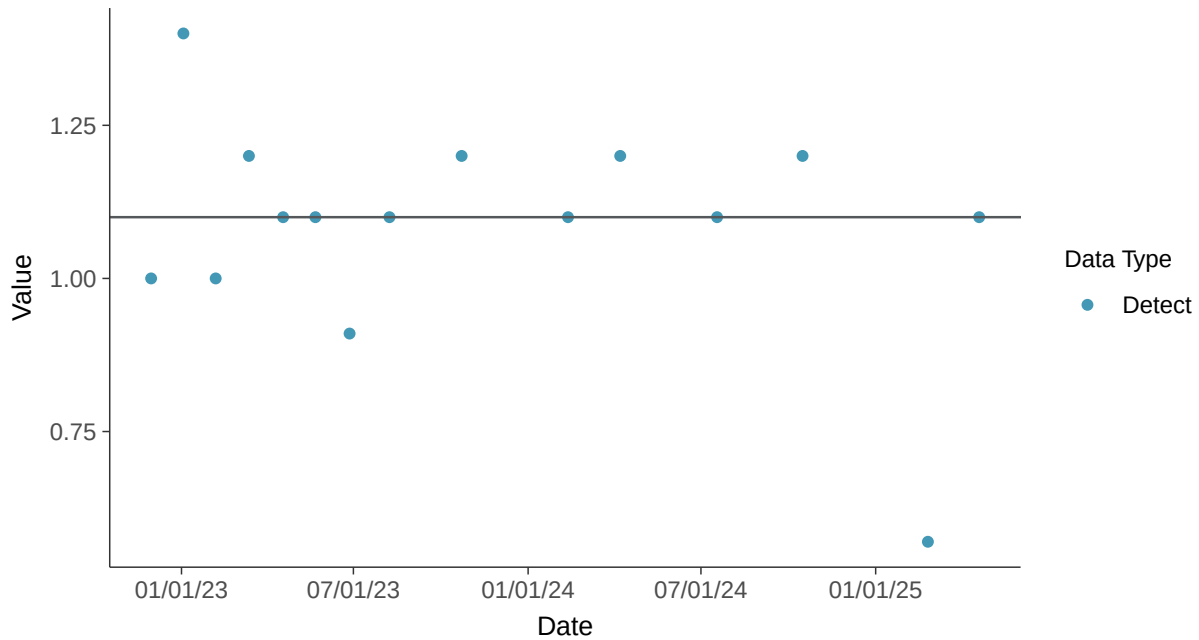
Normal Q-Q plot

Fluoride, MW-30 (mg/L)



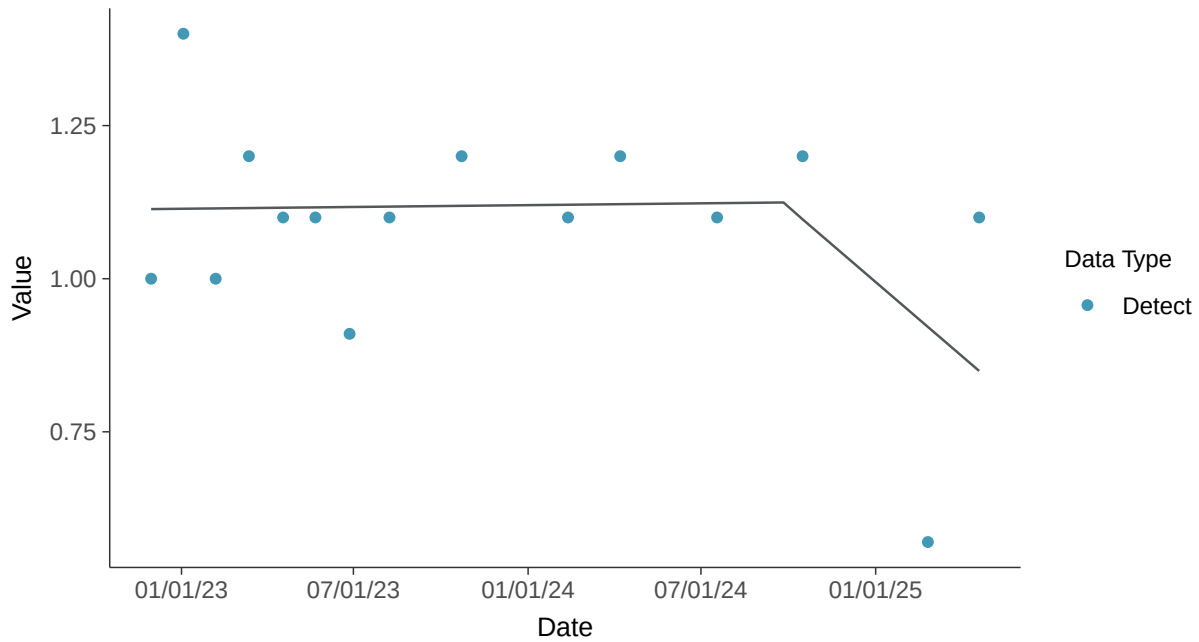
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Fluoride, MW-30 (mg/L)



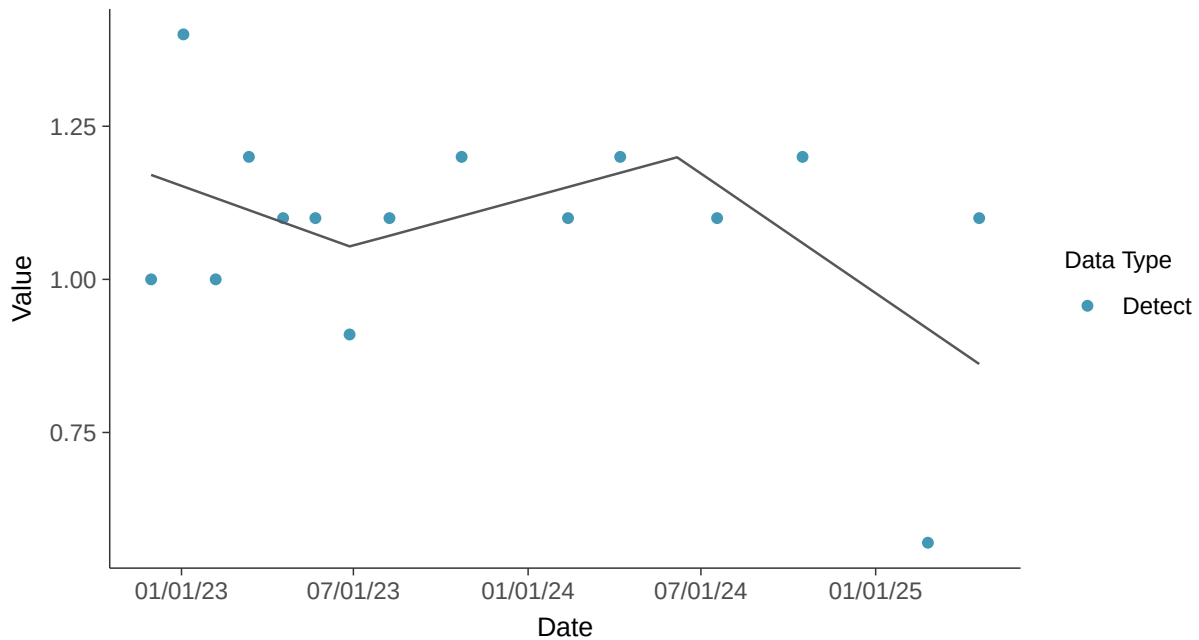
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-30 (mg/L)



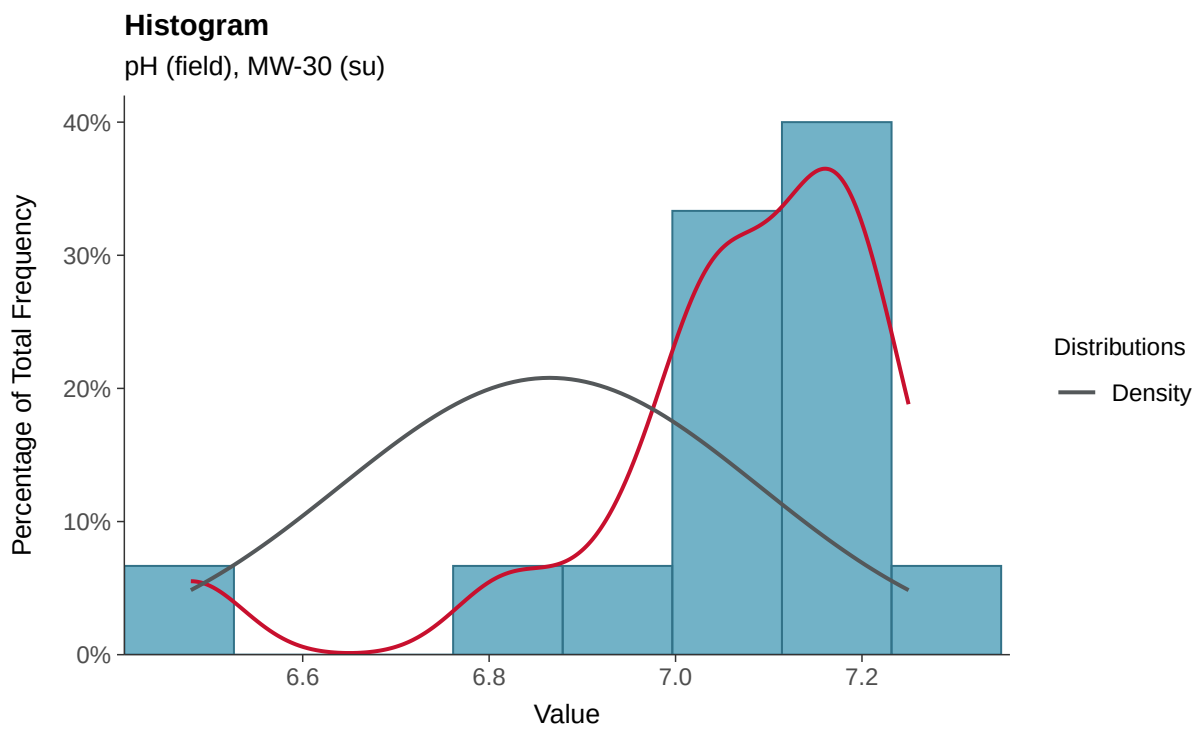
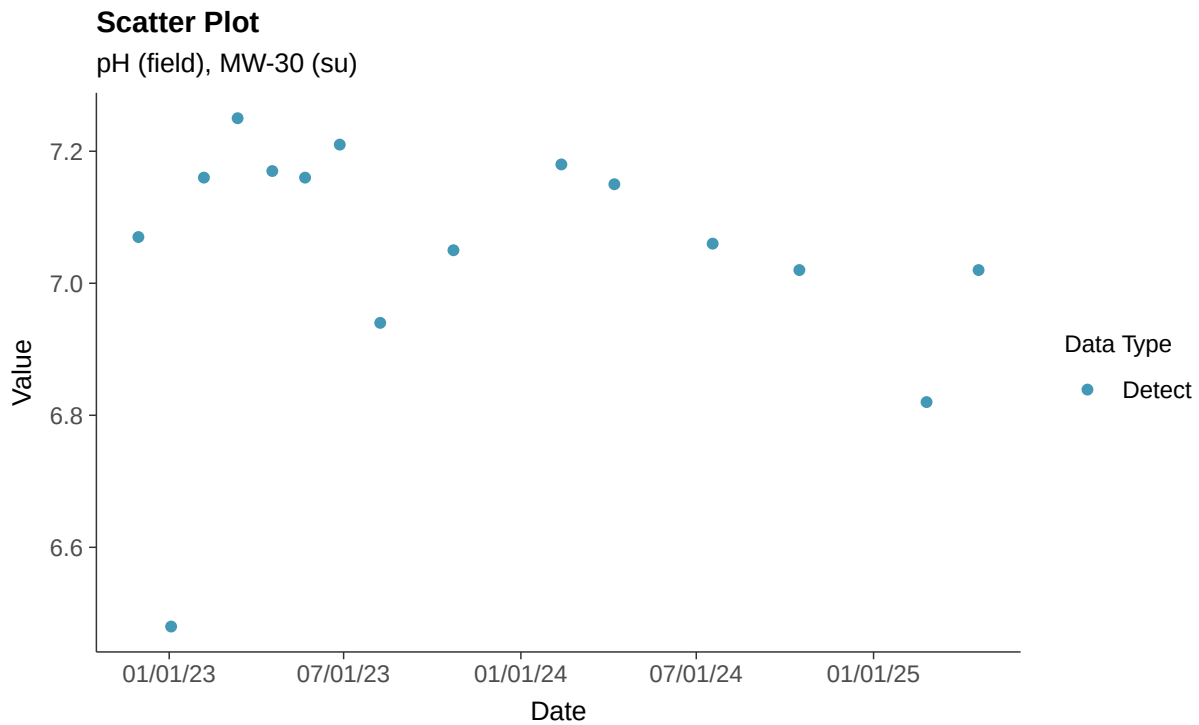
Trend Regression: Piecewise Linear-Linear-Linear

Fluoride, MW-30 (mg/L)



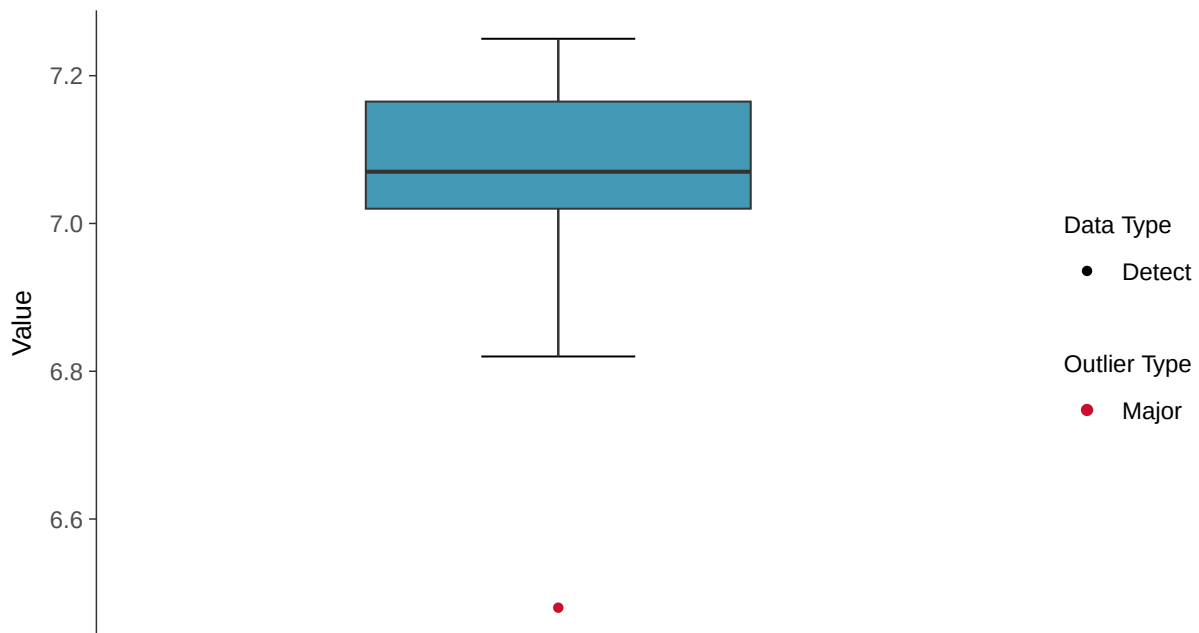
Appendix III: pH (field), MW-30

ID: 40_1_3_120



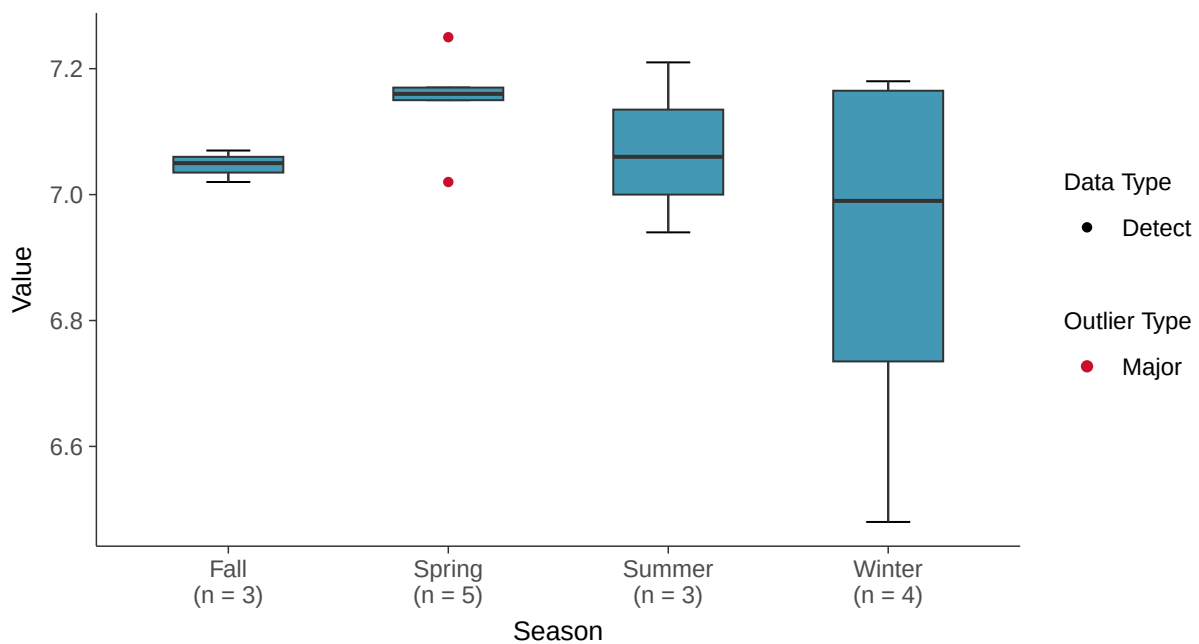
Boxplot

pH (field), MW-30 (su)

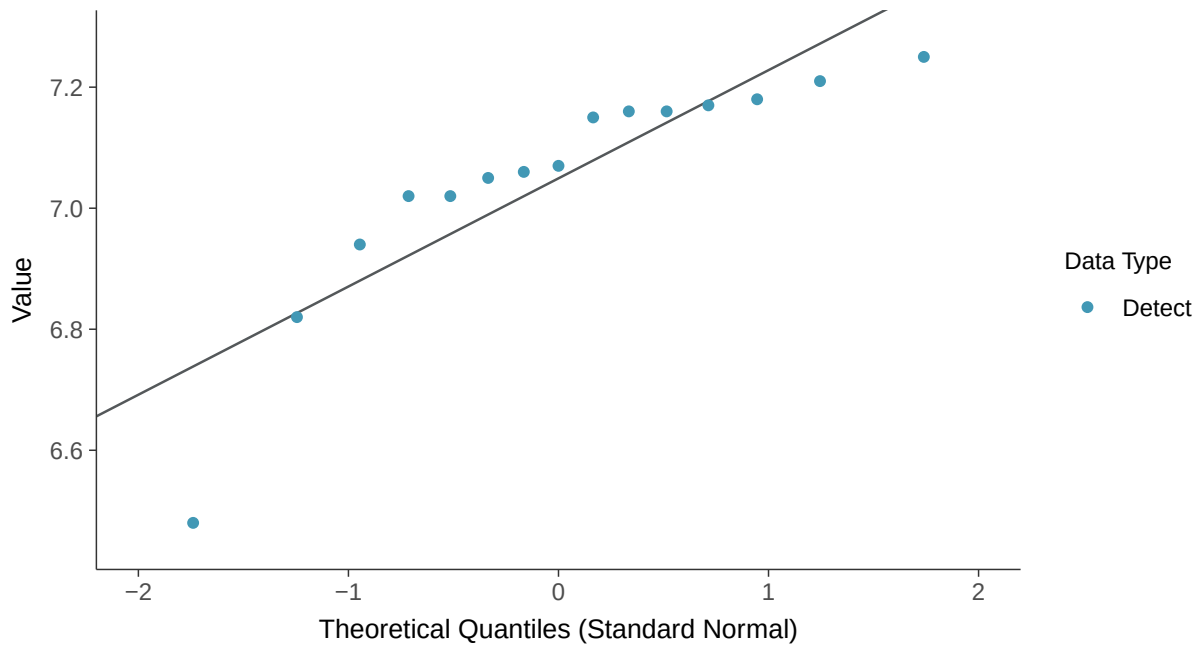


Boxplot by Season

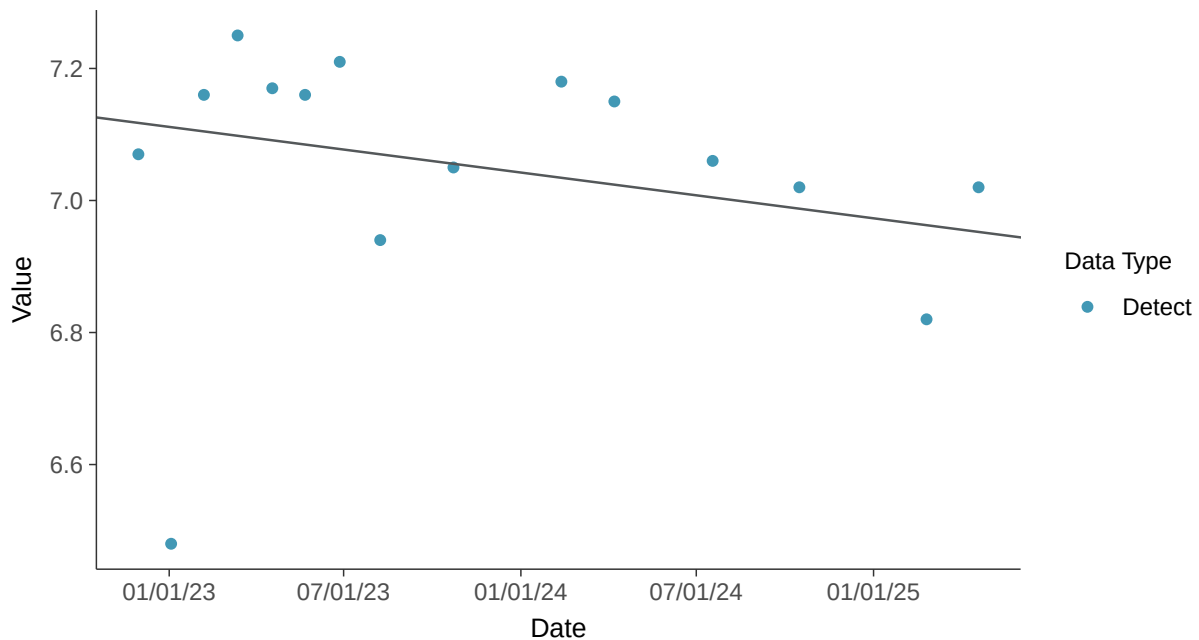
pH (field), MW-30 (su)

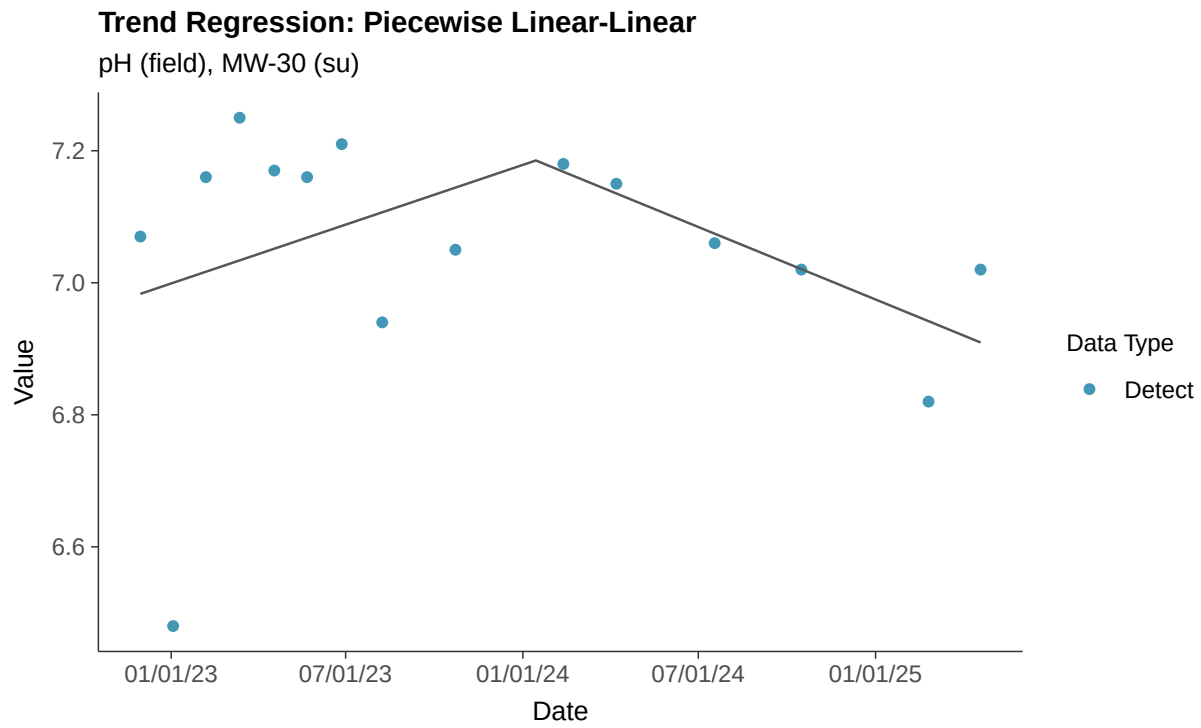


Normal Q-Q plot
pH (field), MW-30 (su)



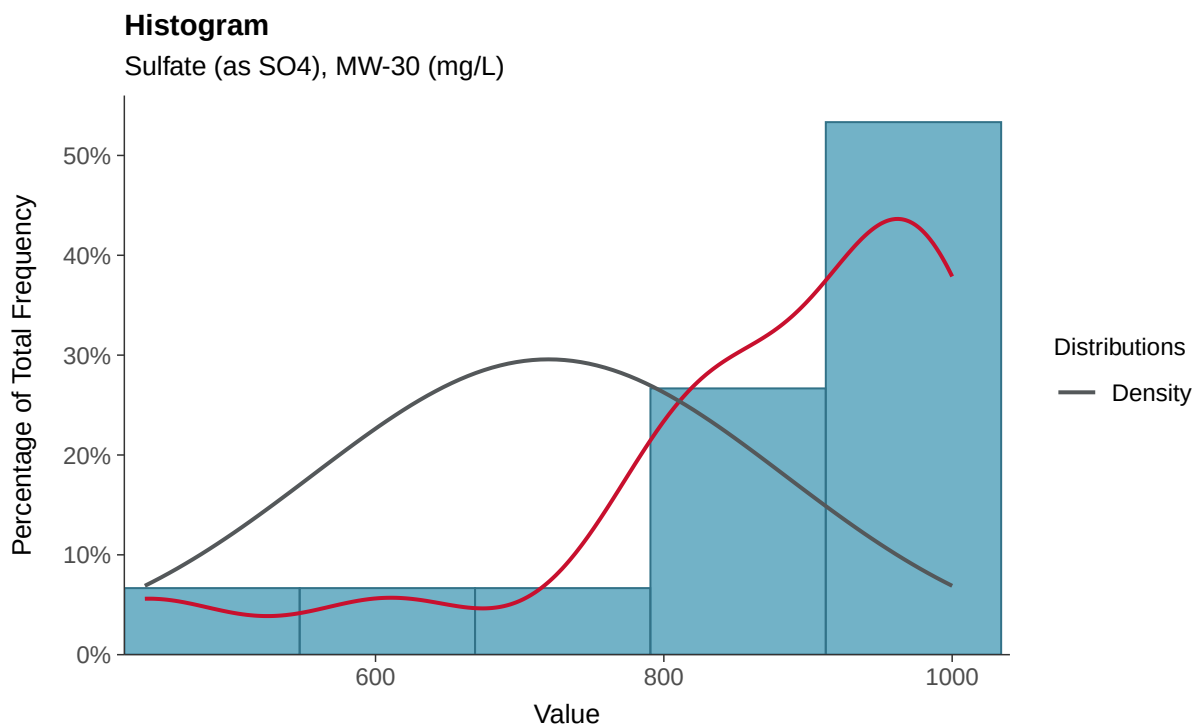
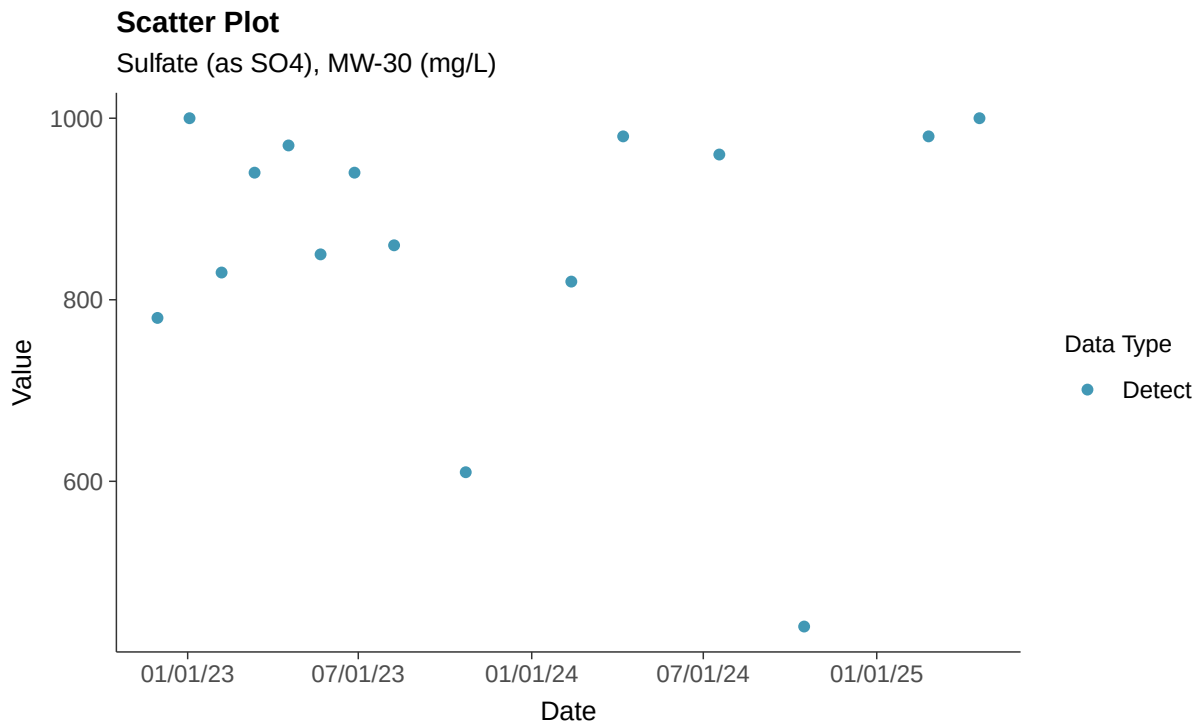
Trend Regression: Mann-Kendall/Theil-Sen Estimate
pH (field), MW-30 (su)





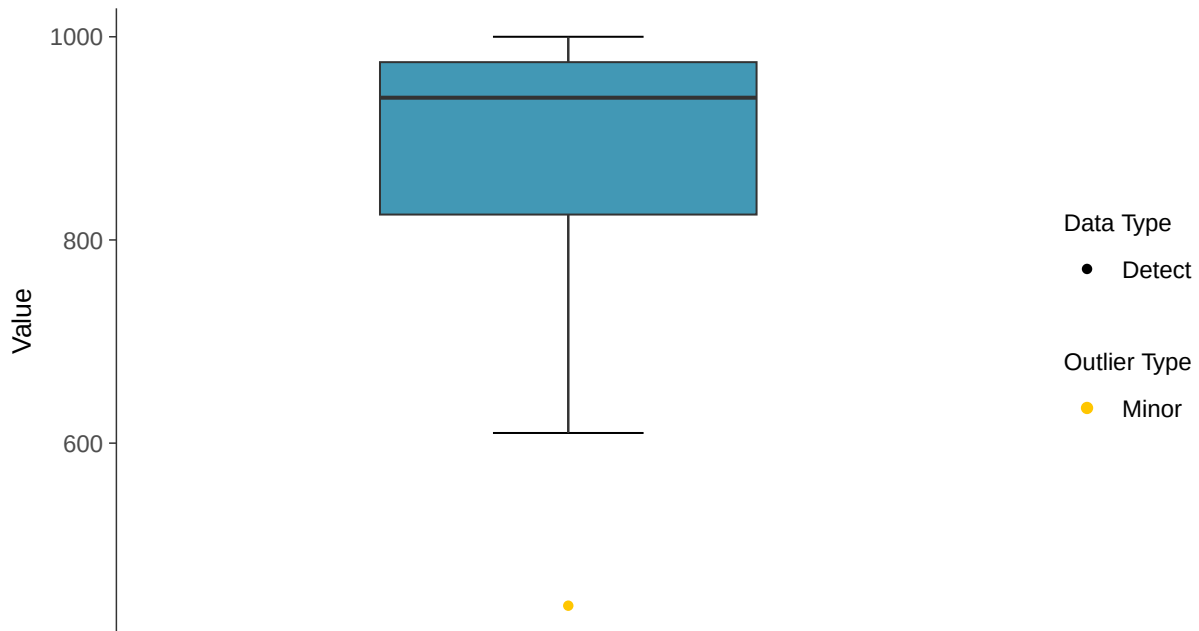
Appendix III: Sulfate (as SO₄), MW-30

ID: 40_1_3_124



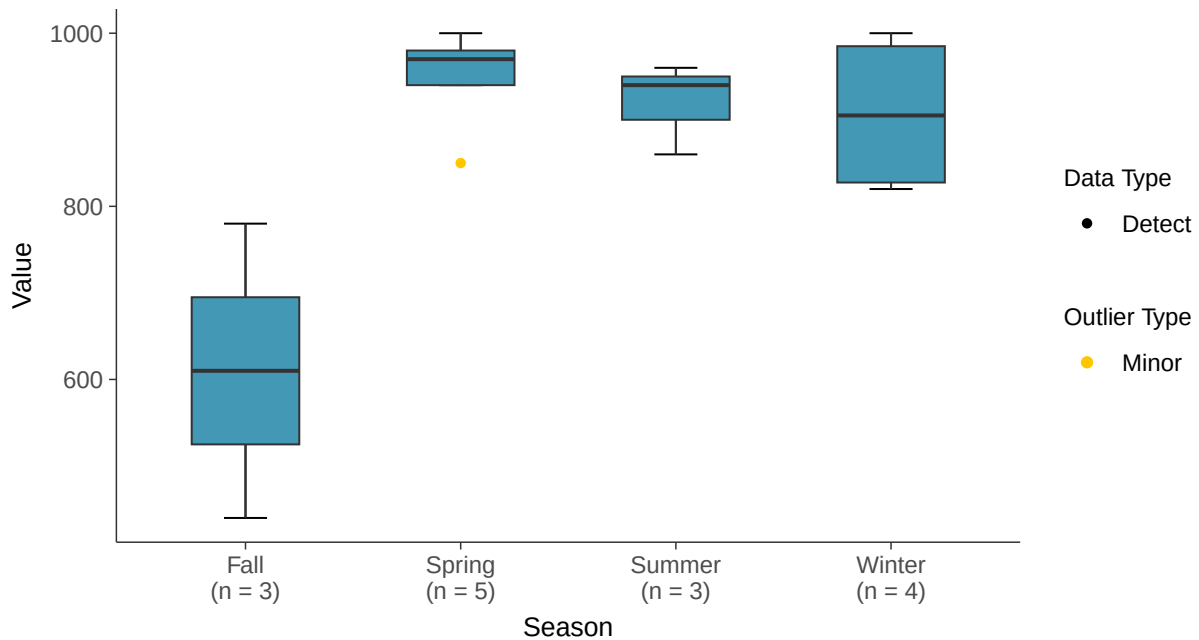
Boxplot

Sulfate (as SO₄), MW-30 (mg/L)



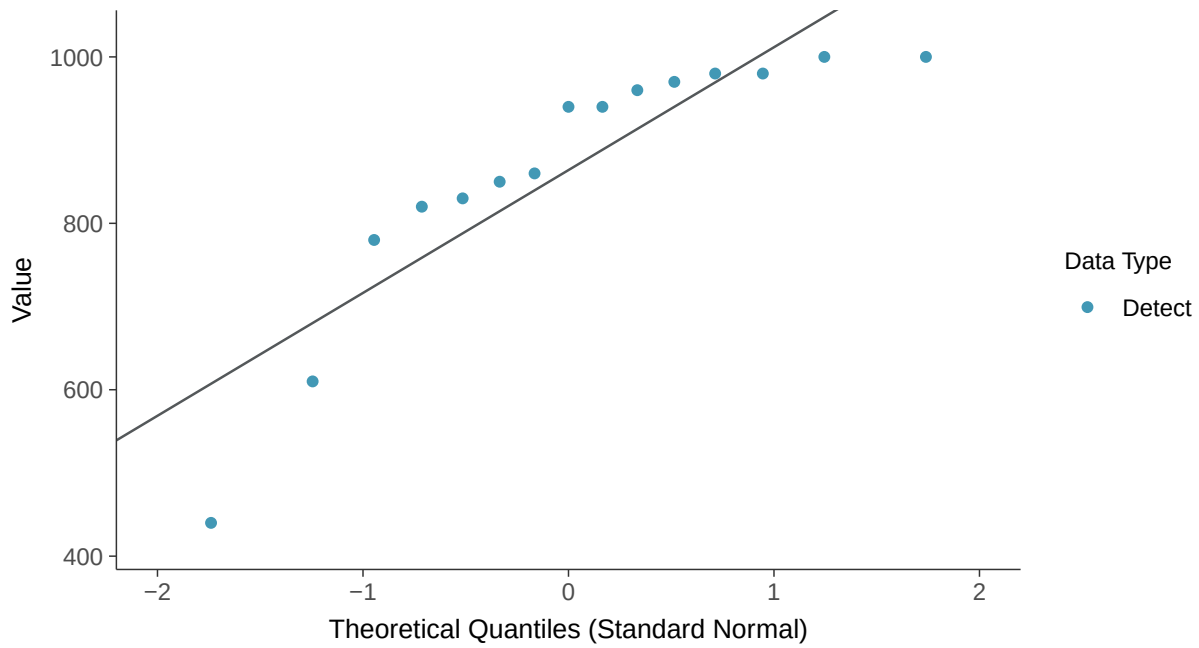
Boxplot by Season

Sulfate (as SO₄), MW-30 (mg/L)



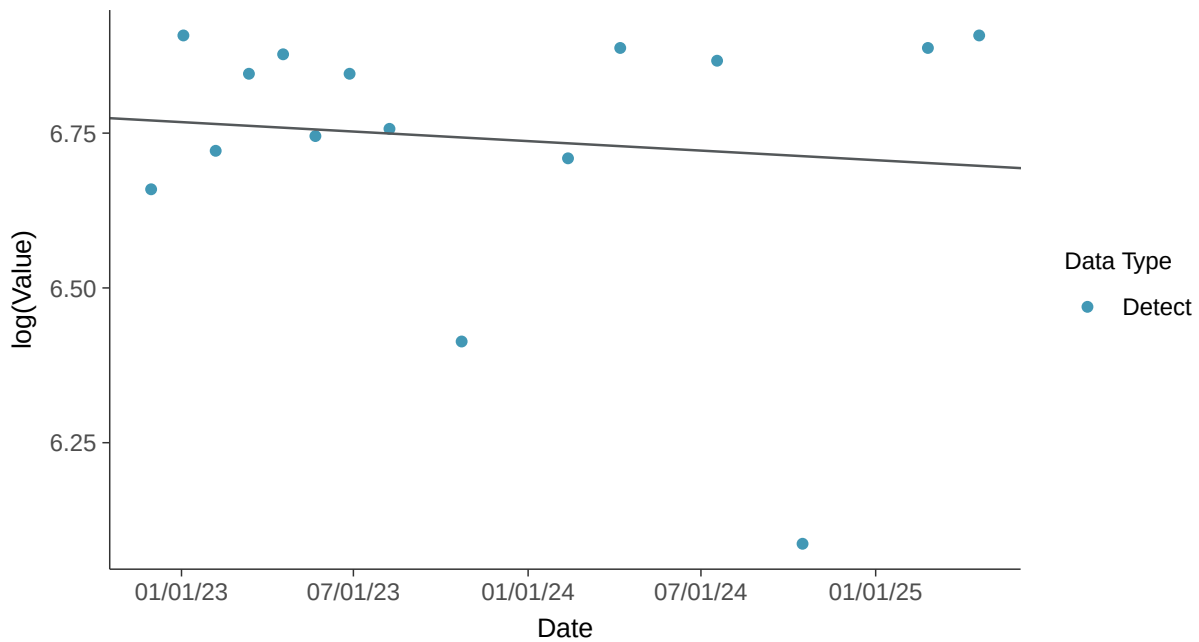
Normal Q-Q plot

Sulfate (as SO₄), MW-30 (mg/L)



Trend Regression: Lognormal MLE

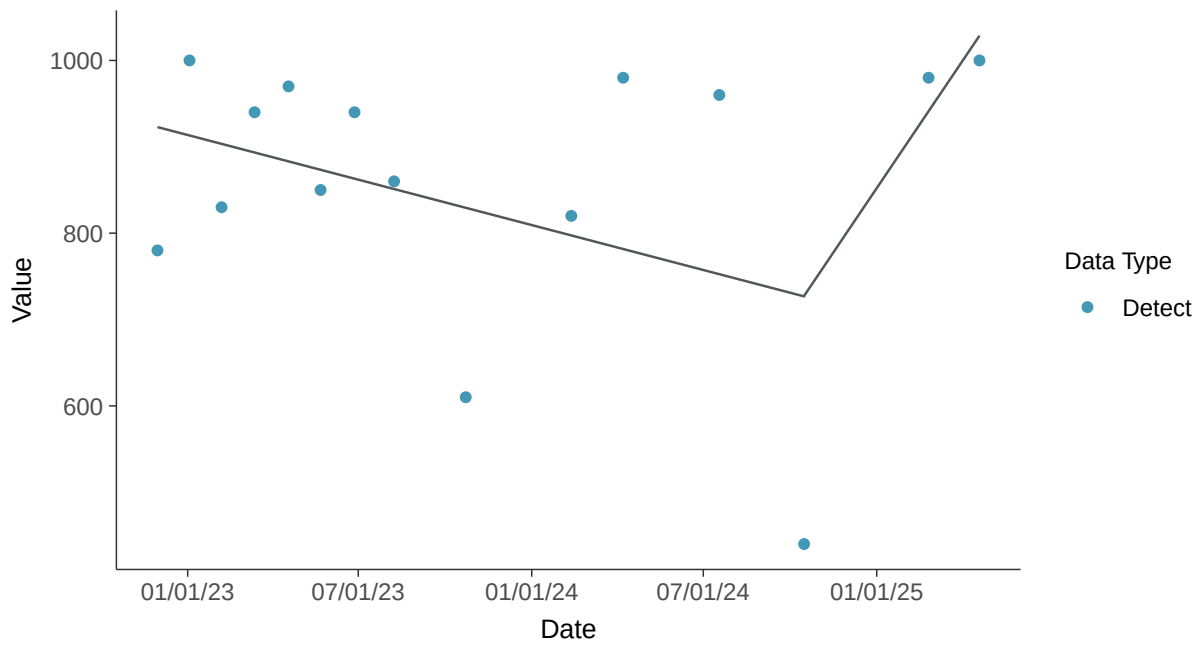
Sulfate (as SO₄), MW-30 (mg/L)





Trend Regression: Piecewise Linear-Linear

Sulfate (as SO₄), MW-30 (mg/L)

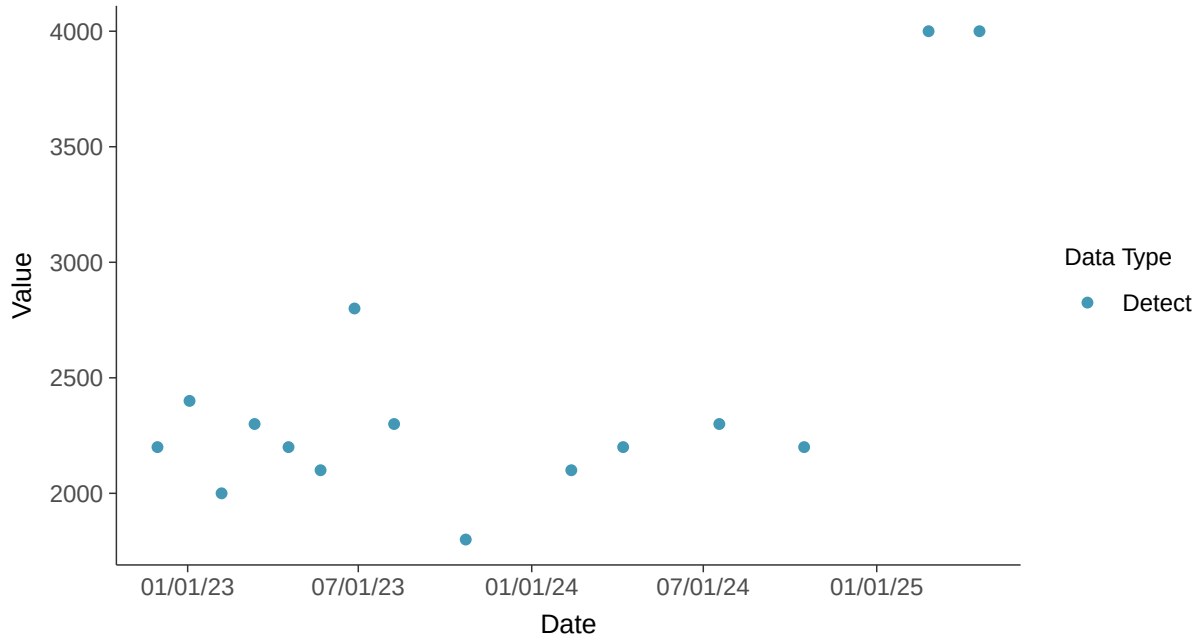


Appendix III: Total Dissolved Solids, MW-30

ID: 40_1_3_126

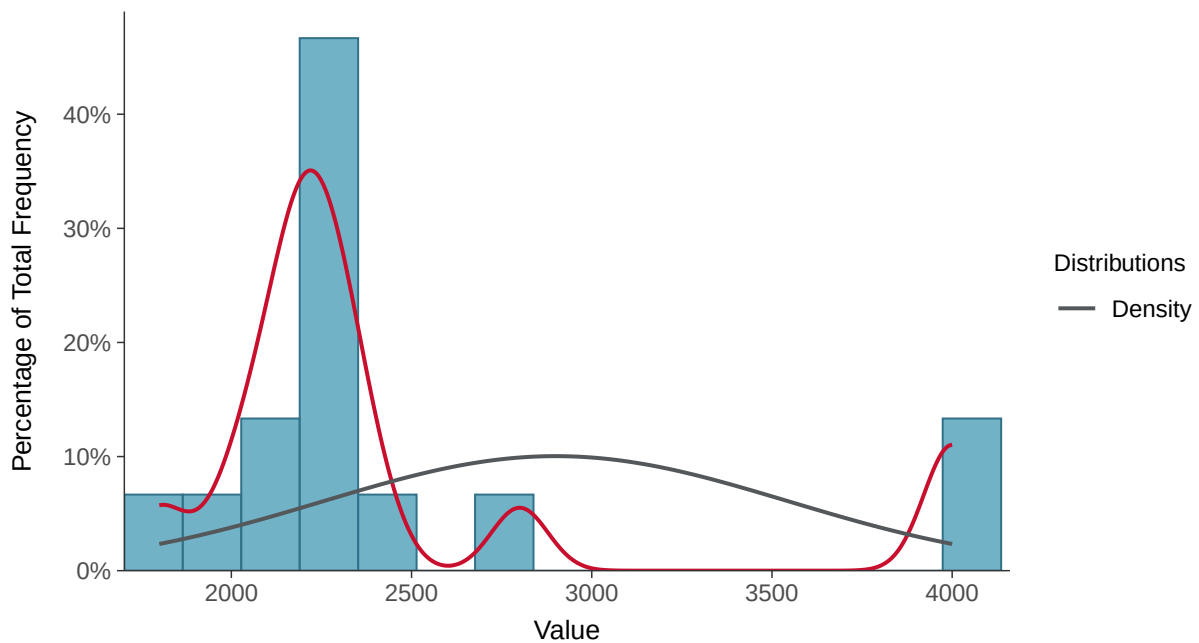
Scatter Plot

Total Dissolved Solids, MW-30 (mg/L)



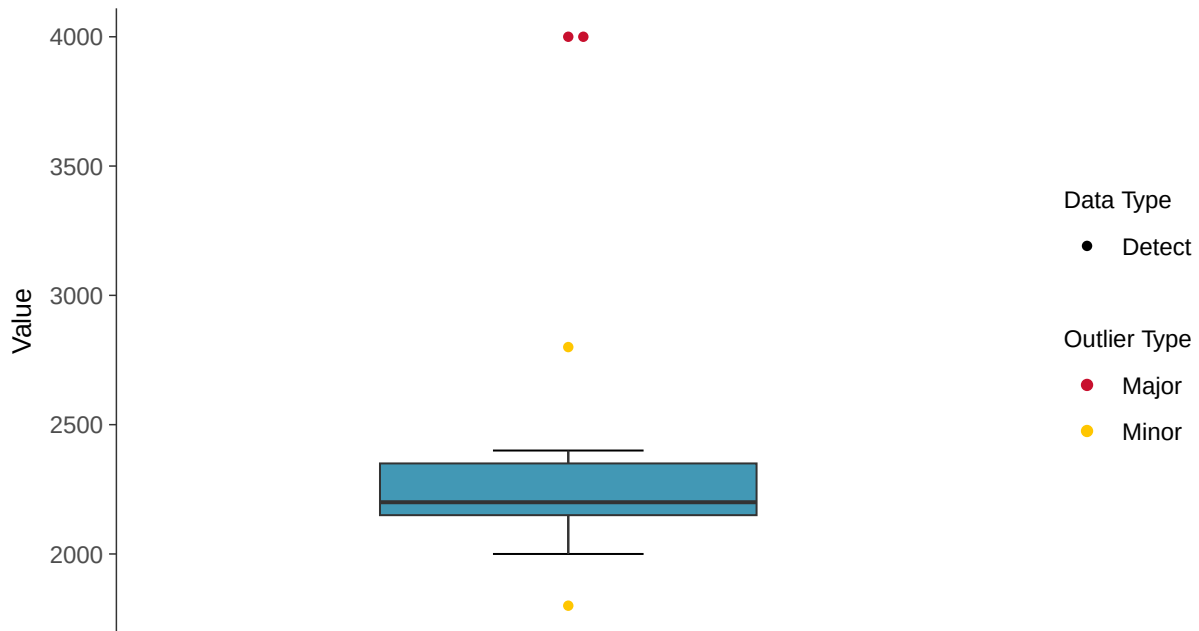
Histogram

Total Dissolved Solids, MW-30 (mg/L)



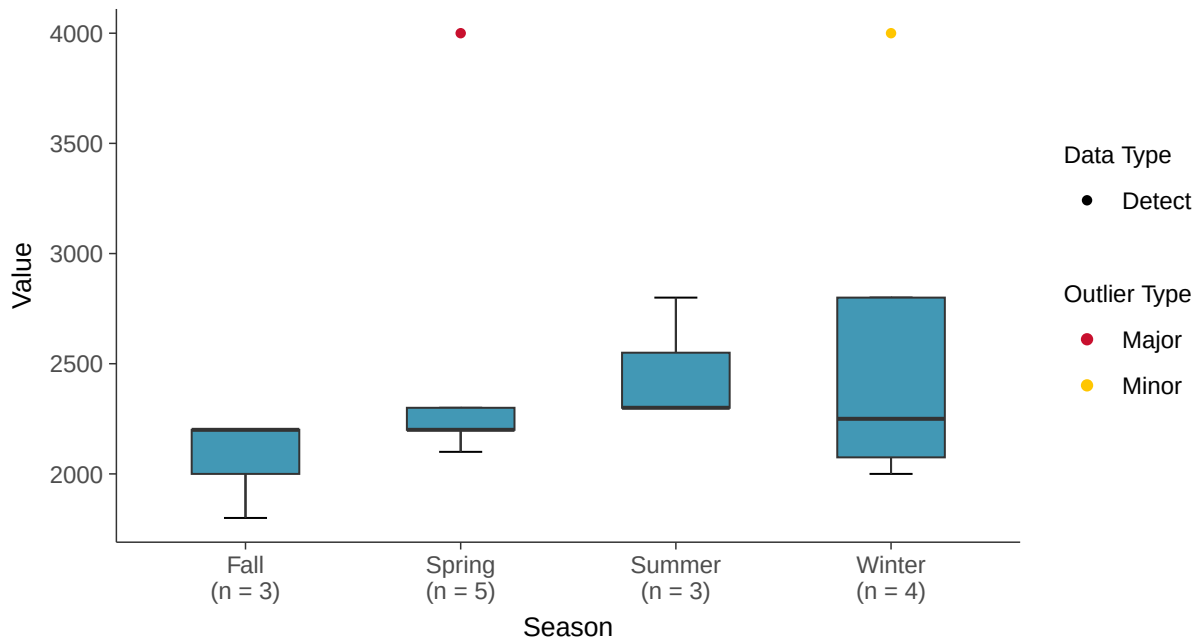
Boxplot

Total Dissolved Solids, MW-30 (mg/L)



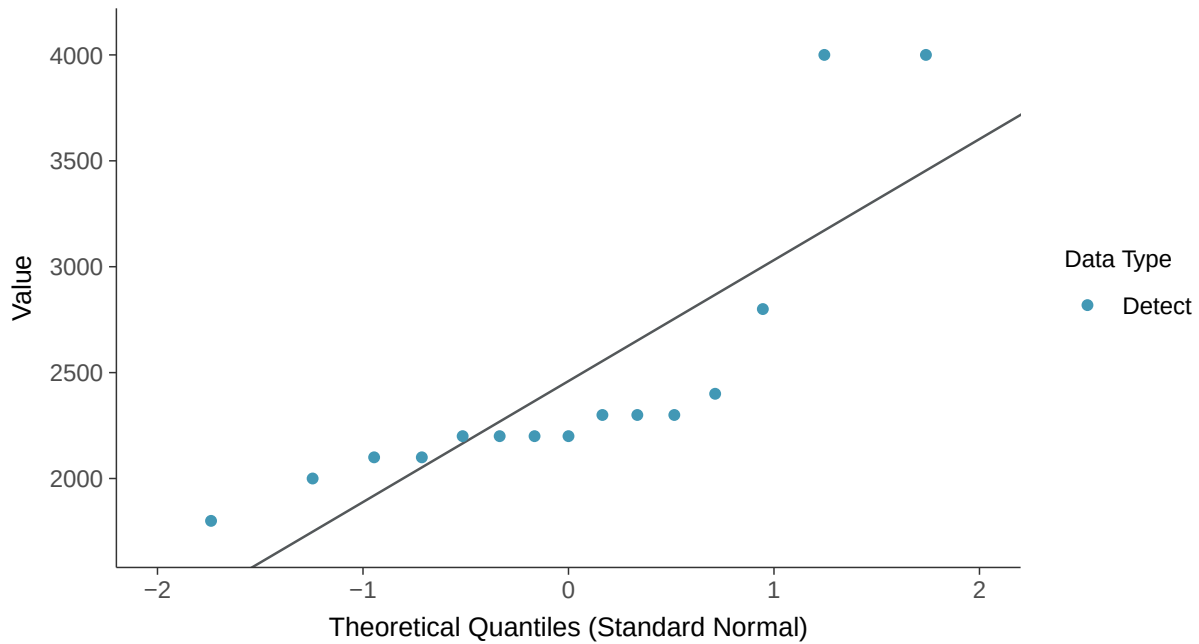
Boxplot by Season

Total Dissolved Solids, MW-30 (mg/L)



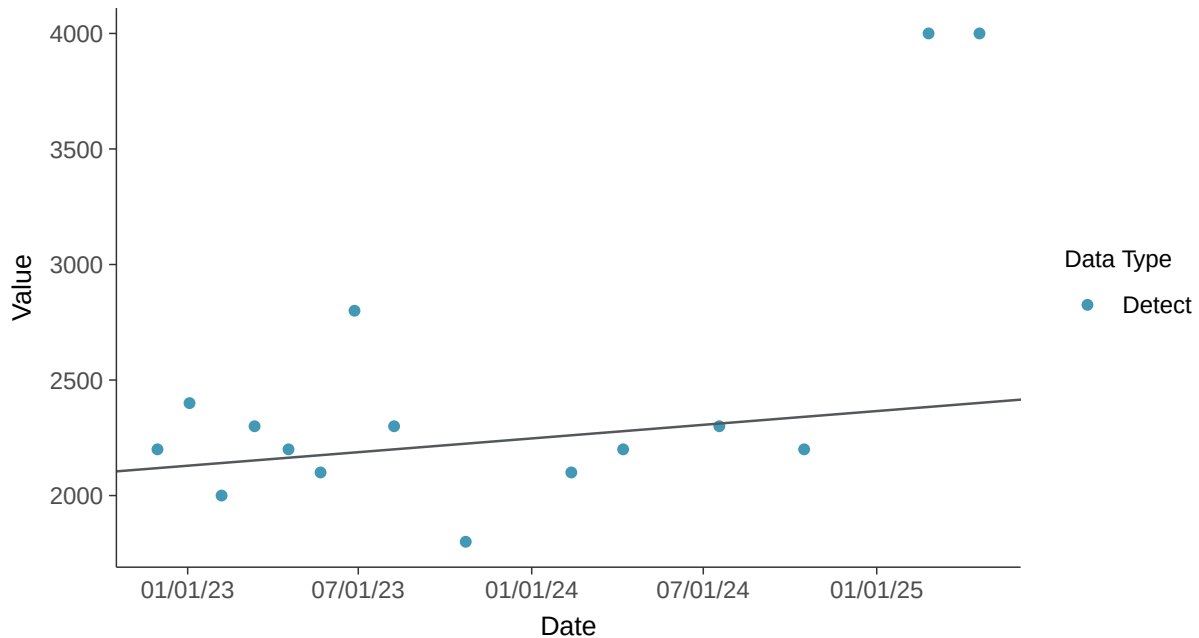
Normal Q-Q plot

Total Dissolved Solids, MW-30 (mg/L)



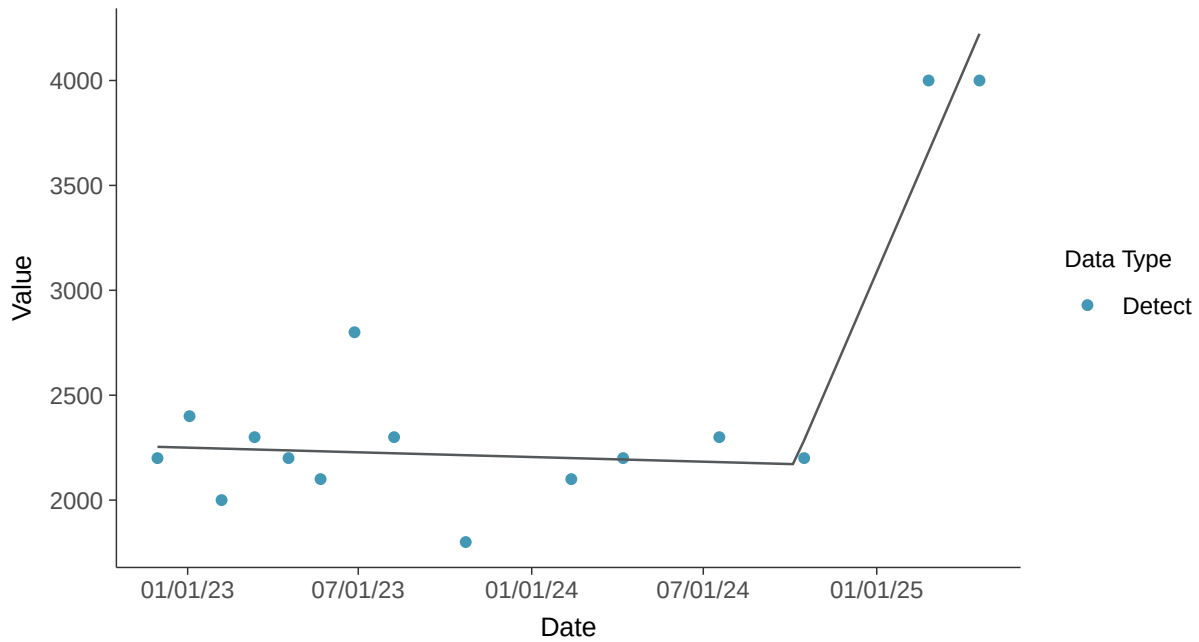
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Total Dissolved Solids, MW-30 (mg/L)



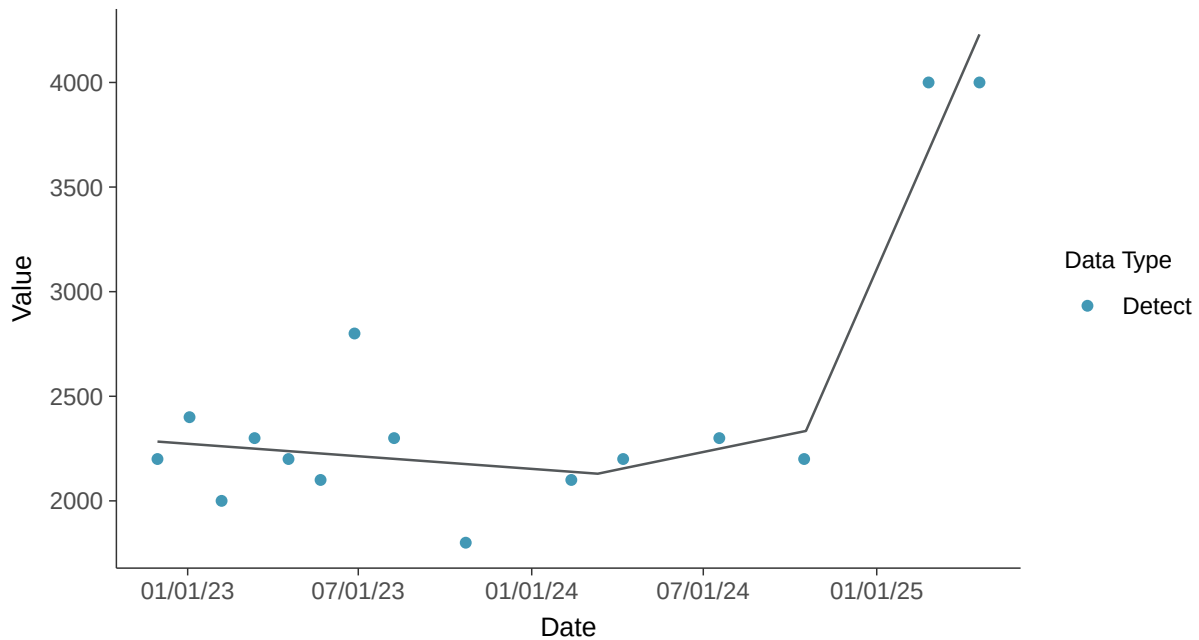
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-30 (mg/L)



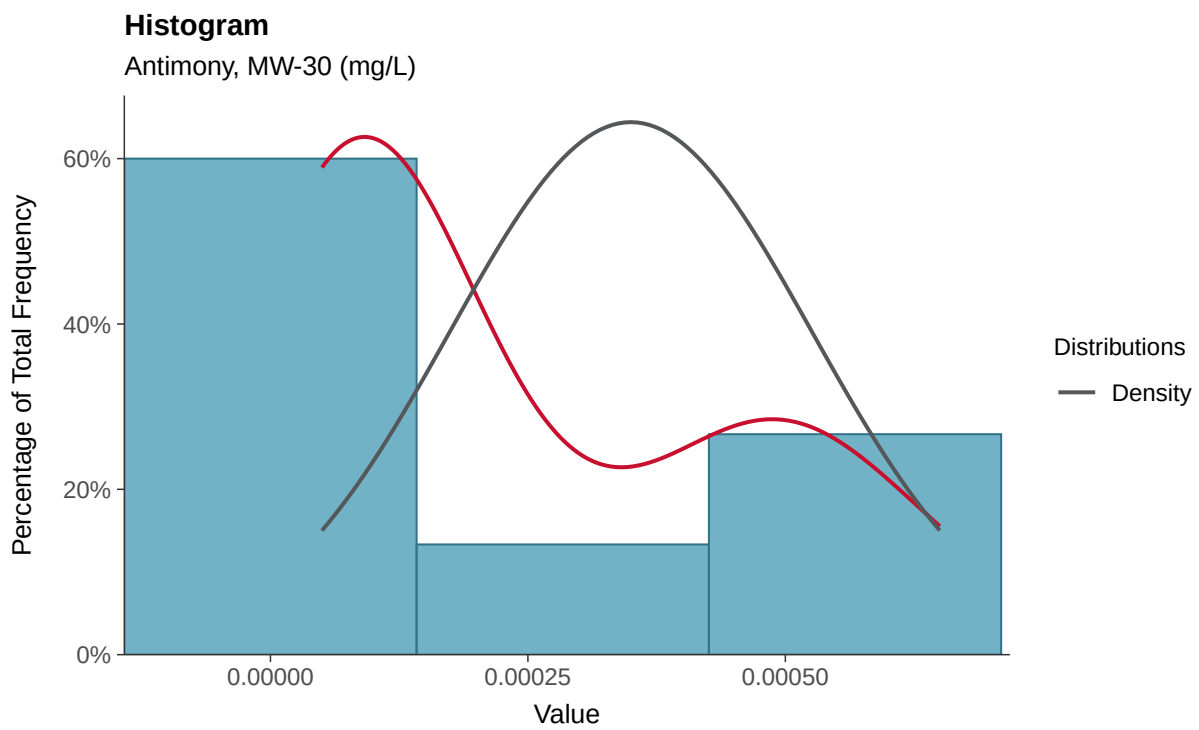
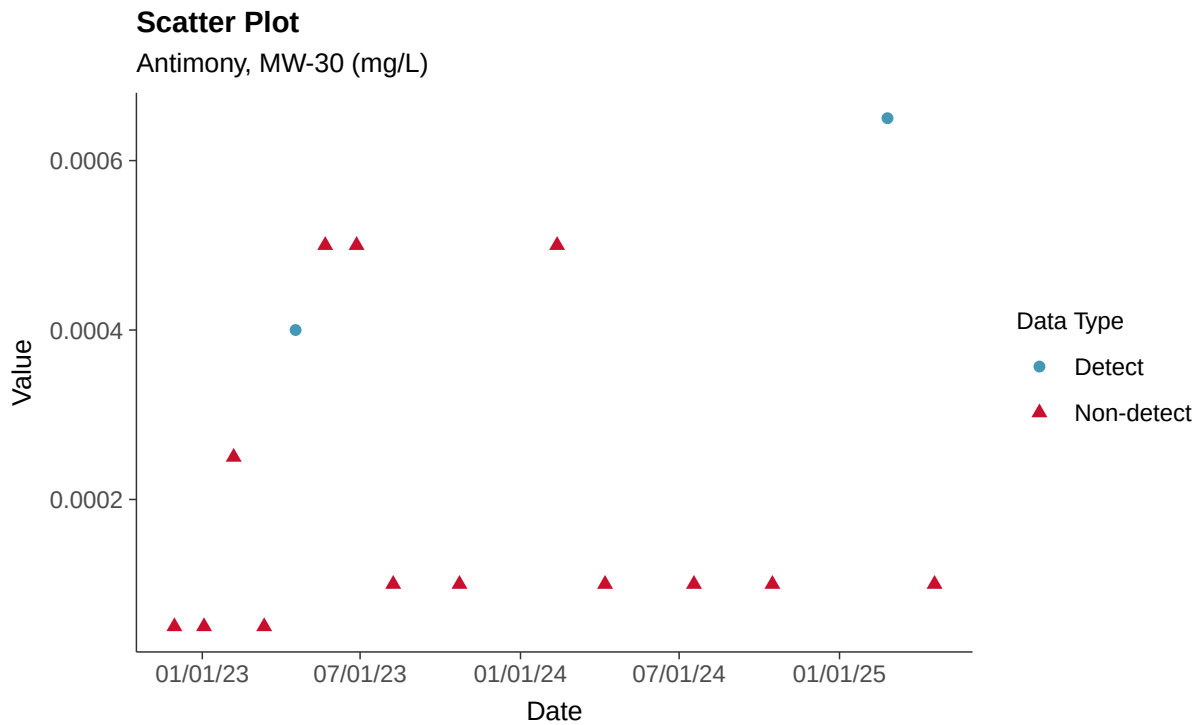
Trend Regression: Piecewise Linear-Linear-Linear

Total Dissolved Solids, MW-30 (mg/L)



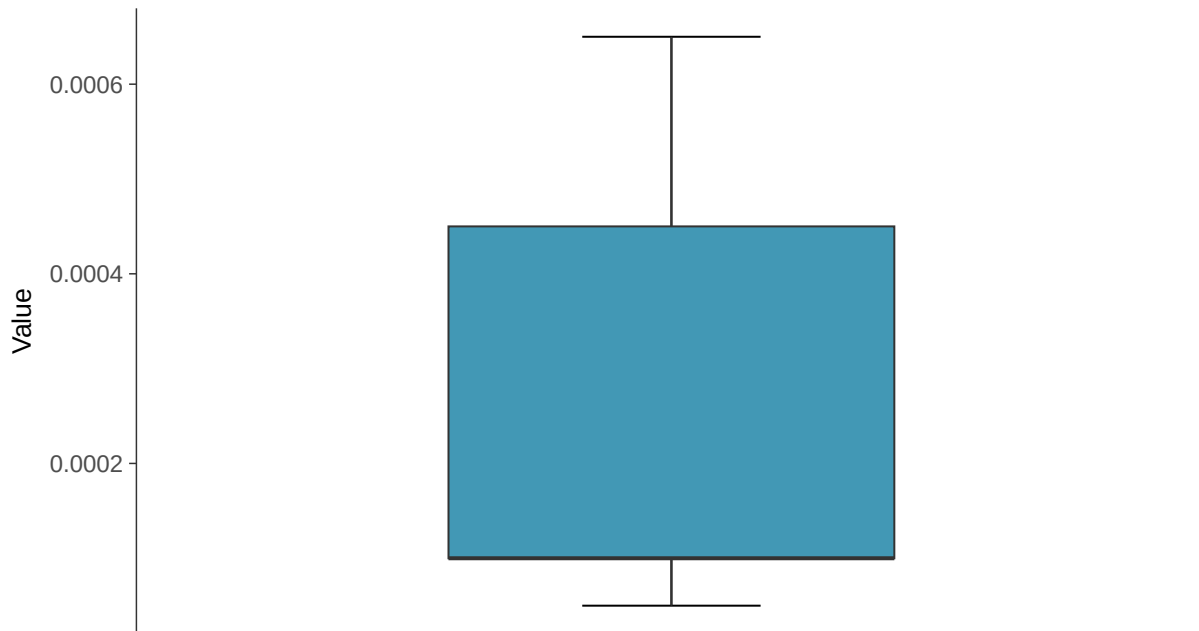
Appendix IV: Antimony, MW-30

ID: 40_1_4_101



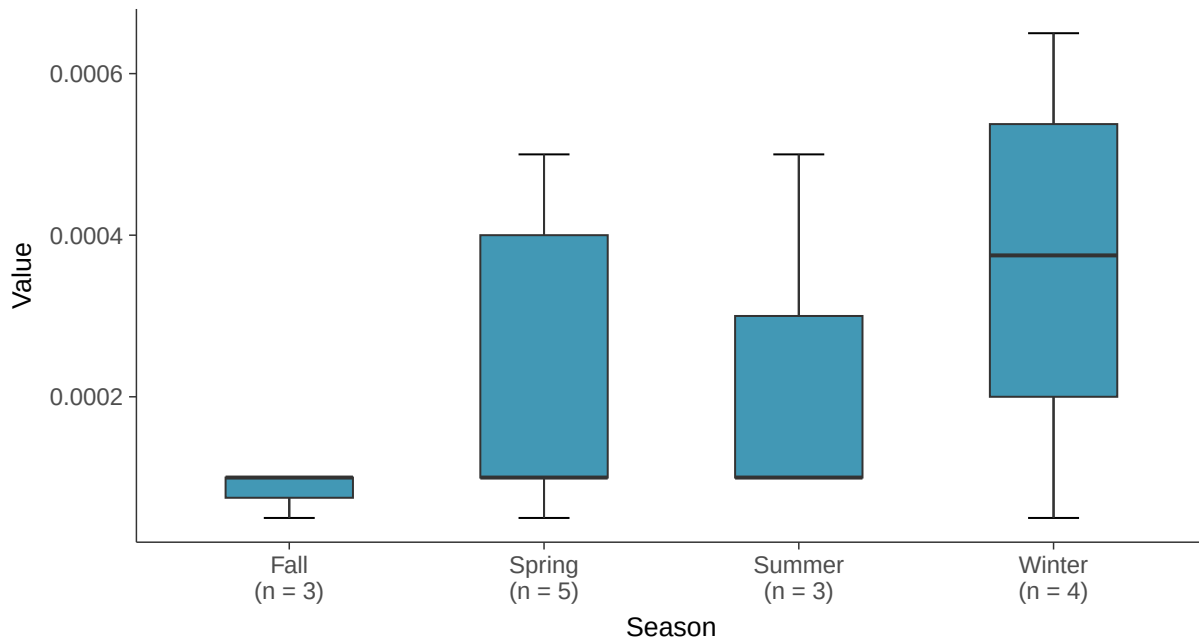
Boxplot

Antimony, MW-30 (mg/L)



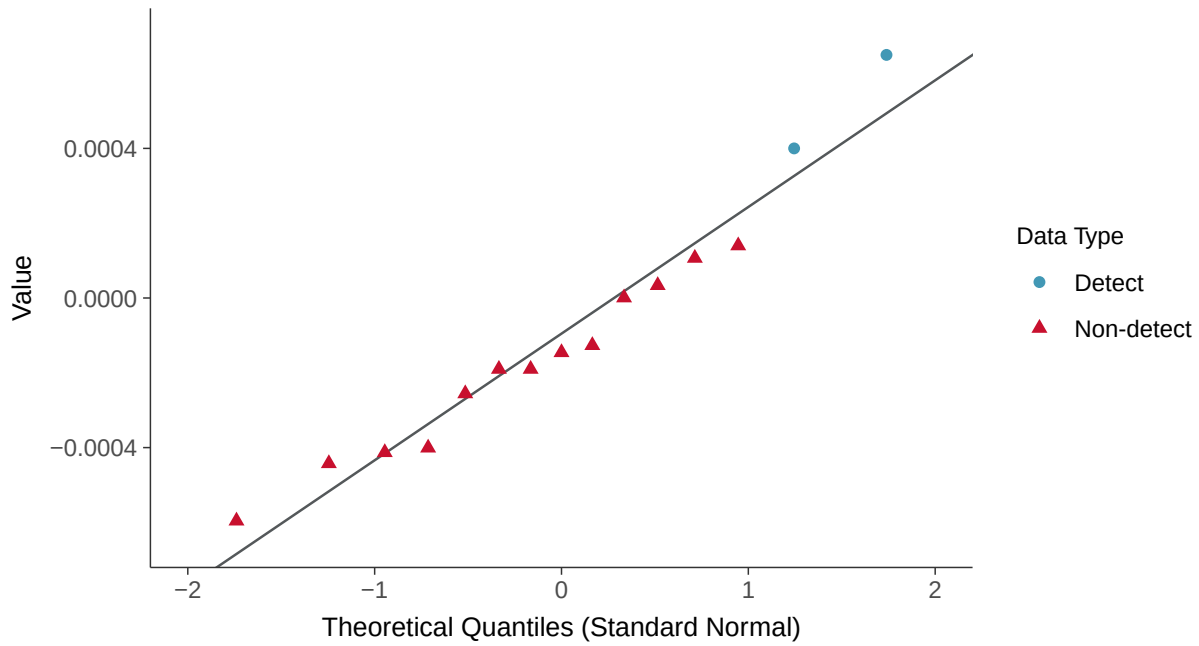
Boxplot by Season

Antimony, MW-30 (mg/L)



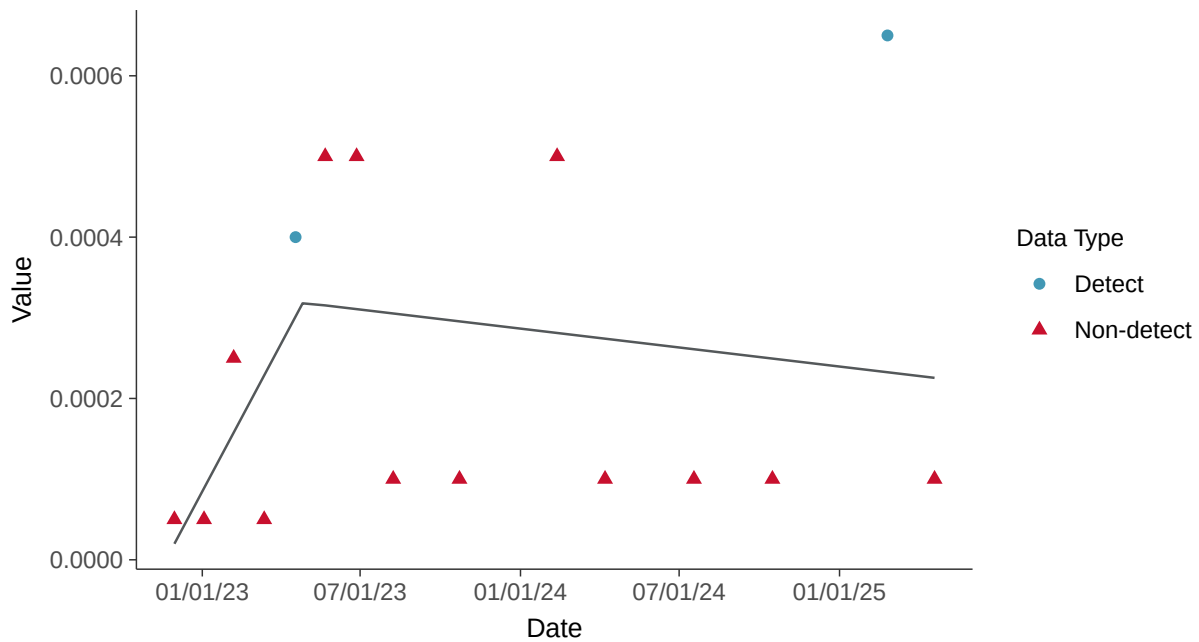
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-30 (mg/L)



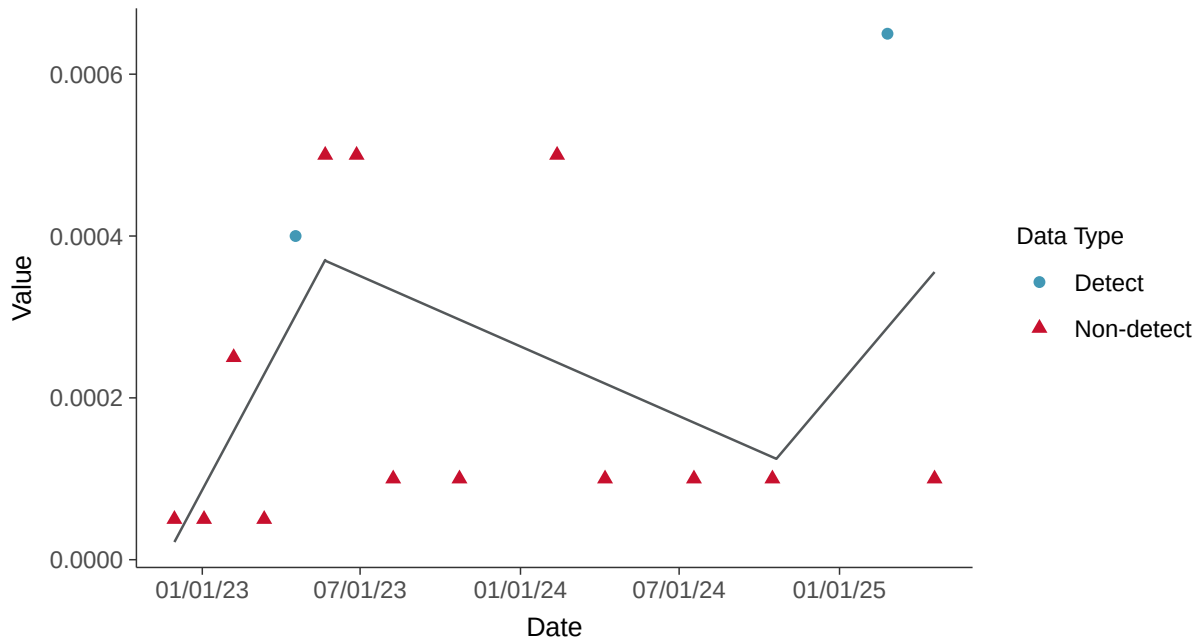
Trend Regression: Piecewise Linear-Linear

Antimony, MW-30 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear
Antimony, MW-30 (mg/L)

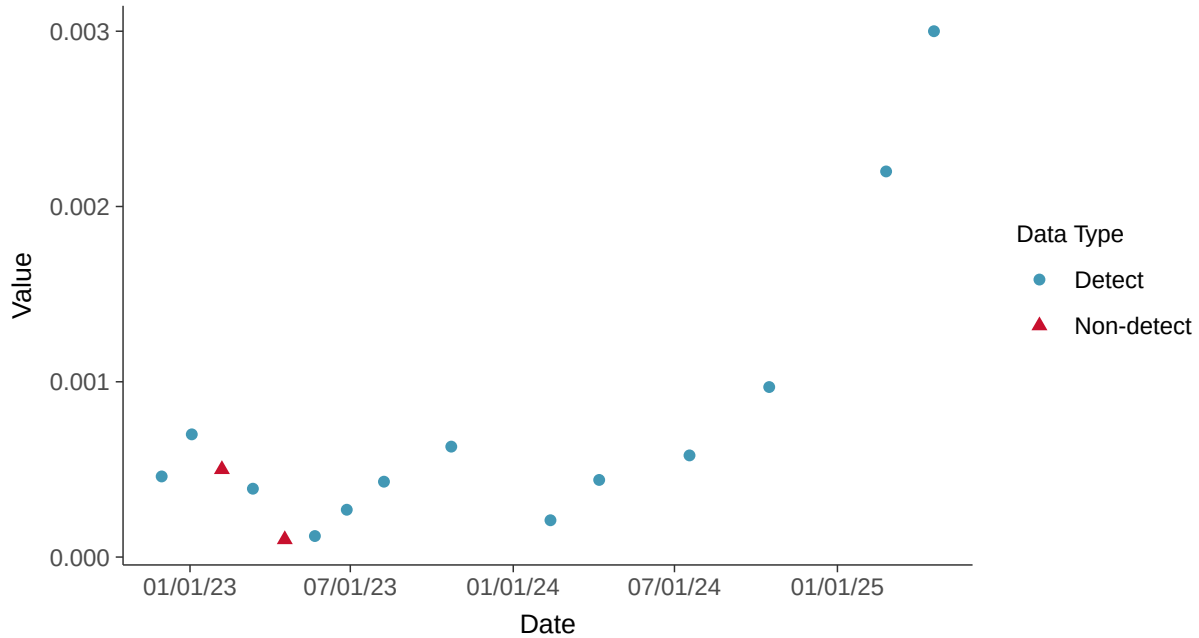


Appendix IV: Arsenic, MW-30

ID: 40_1_4_102

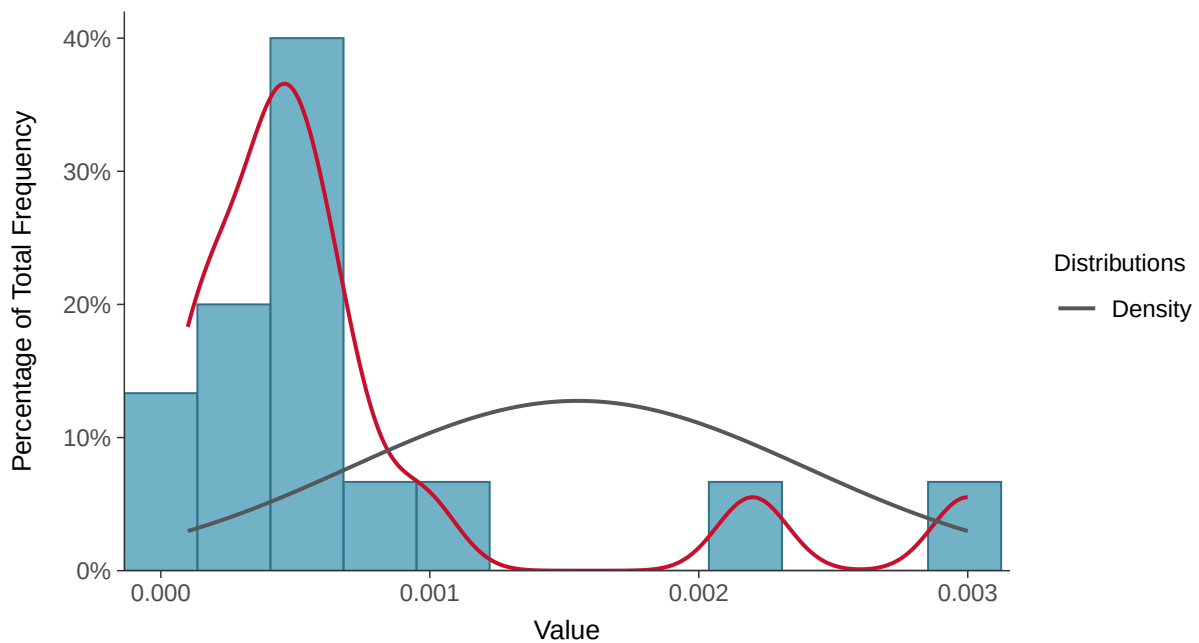
Scatter Plot

Arsenic, MW-30 (mg/L)



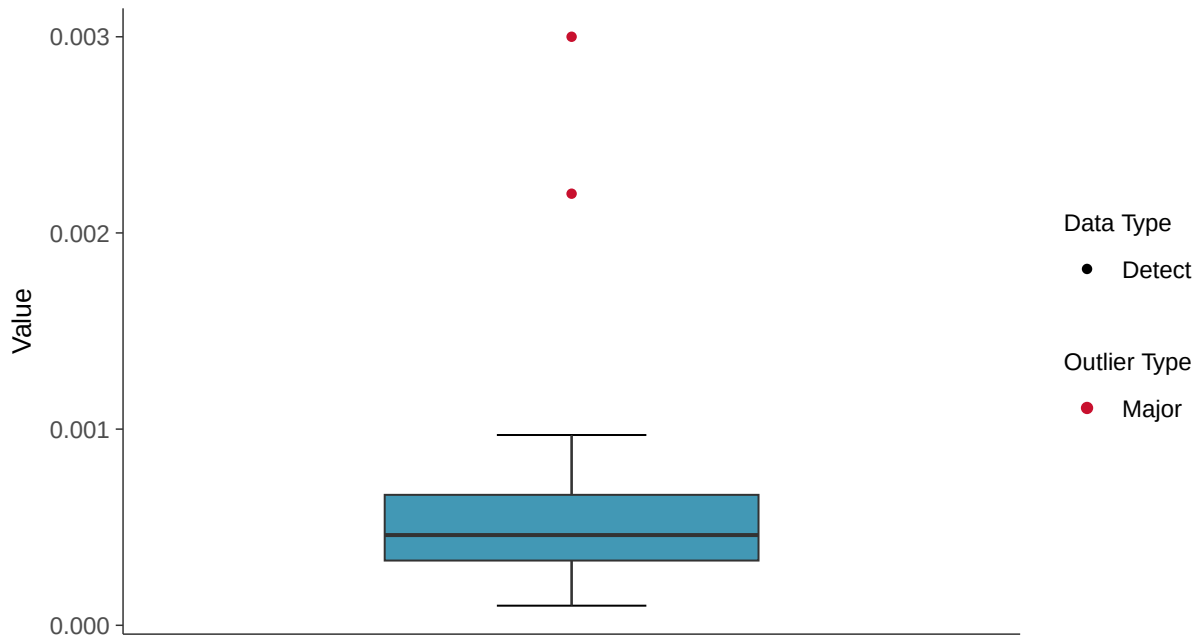
Histogram

Arsenic, MW-30 (mg/L)



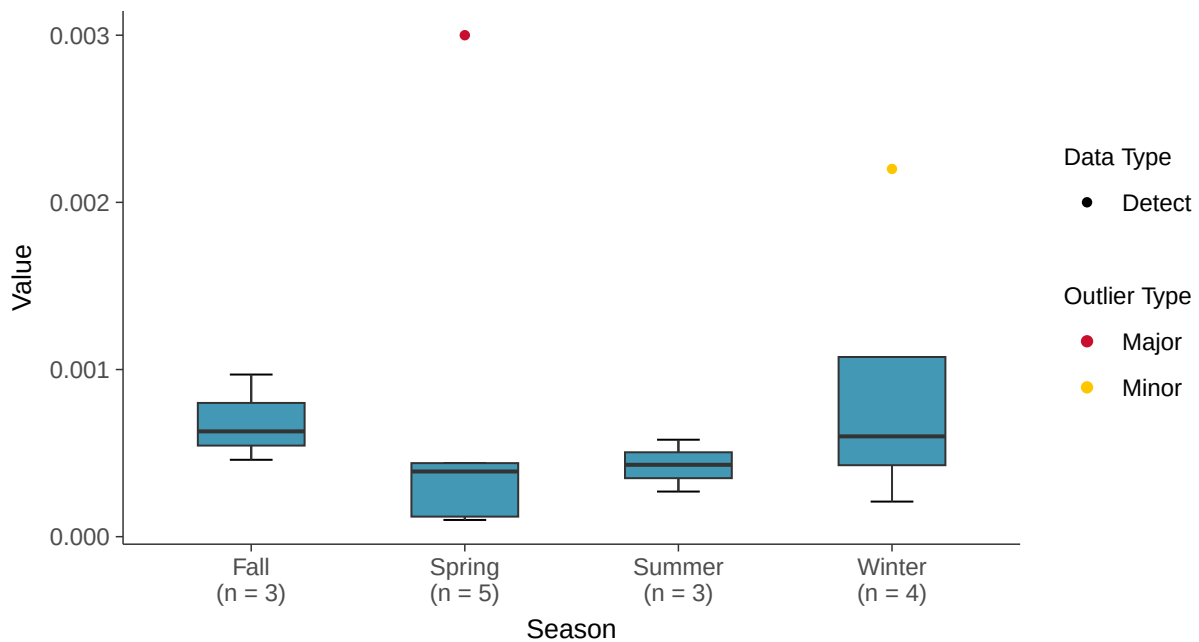
Boxplot

Arsenic, MW-30 (mg/L)



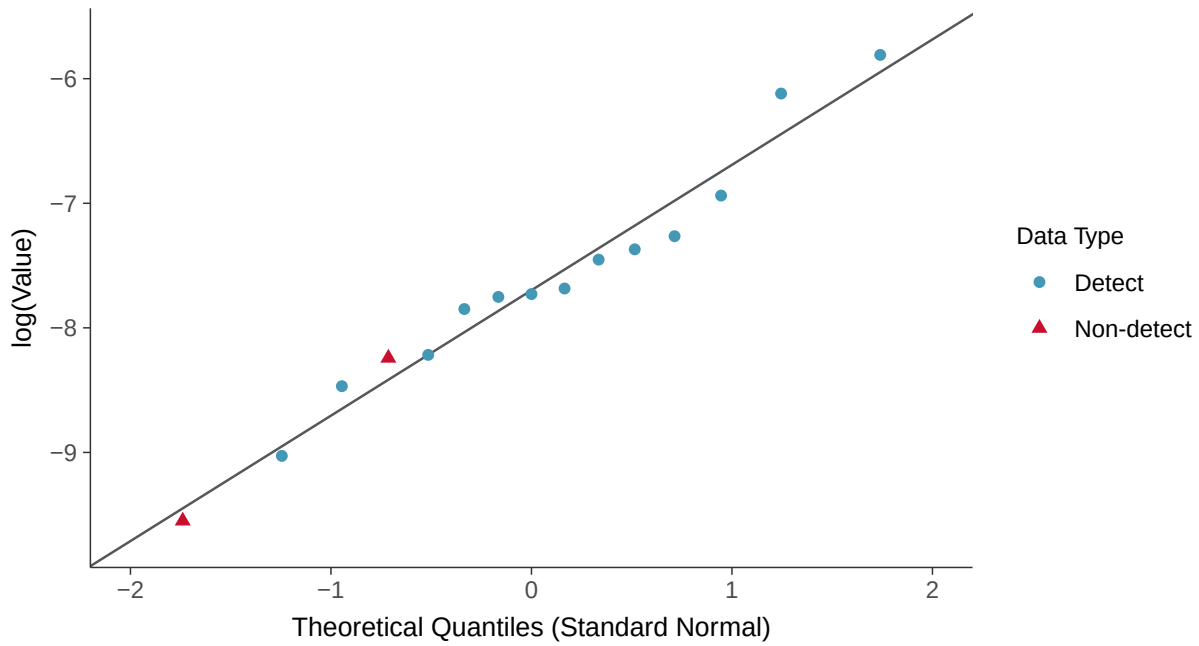
Boxplot by Season

Arsenic, MW-30 (mg/L)



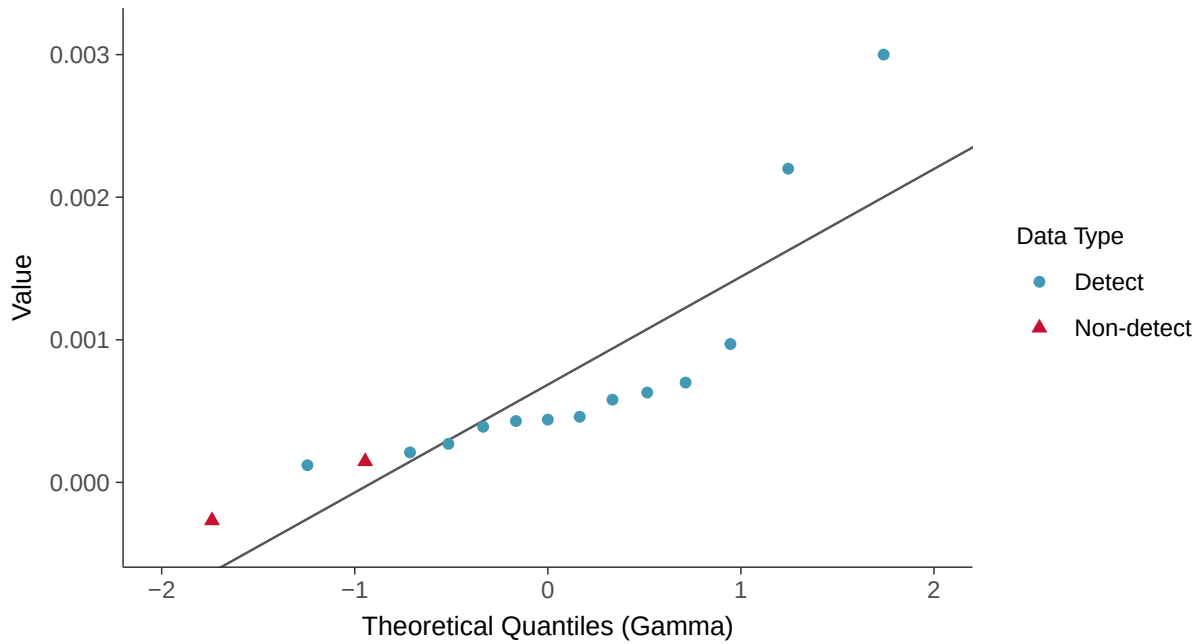
Lognormal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-30 (mg/L)



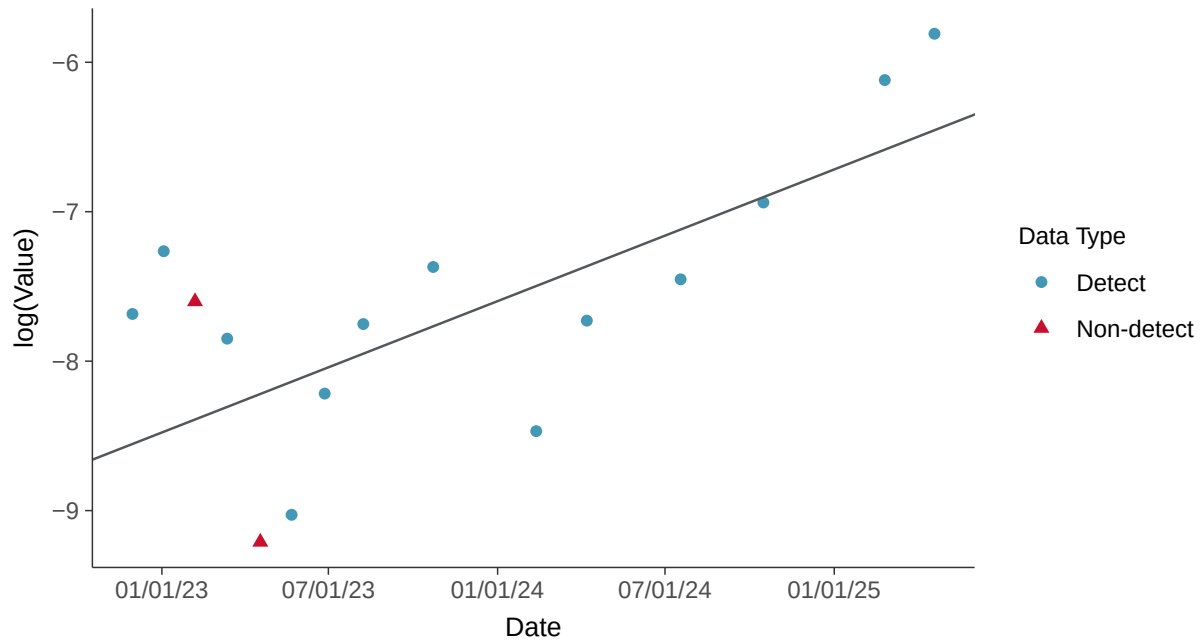
Gamma Q-Q plot using ROS Imputed Estimates

Arsenic, MW-30 (mg/L)



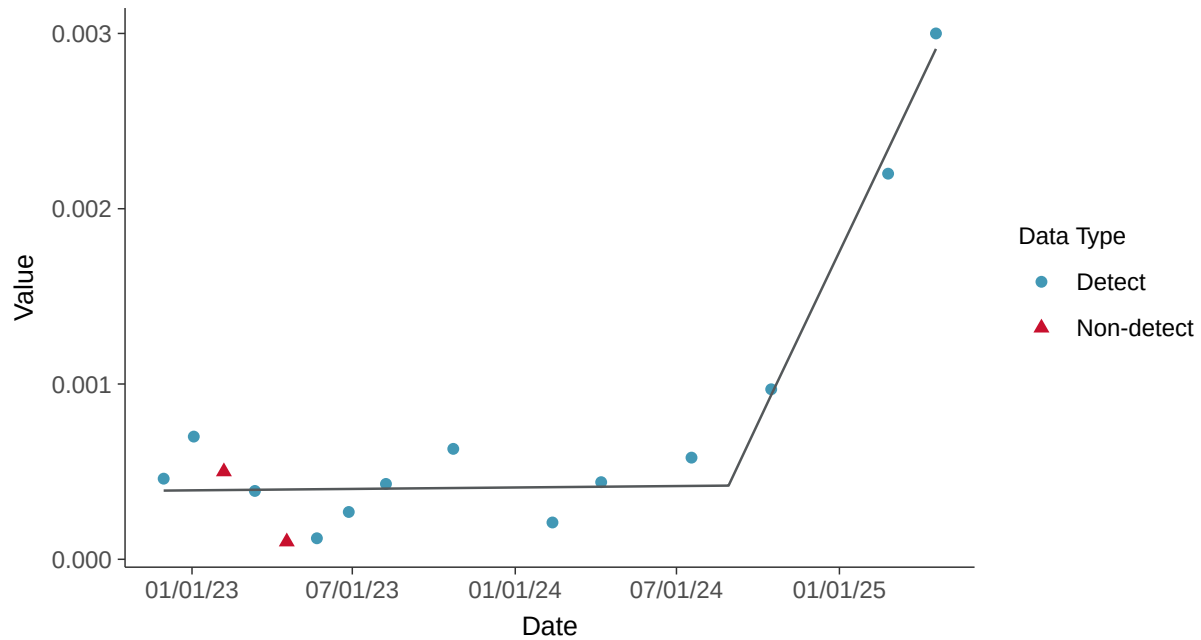
Trend Regression: Lognormal MLE

Arsenic, MW-30 (mg/L)



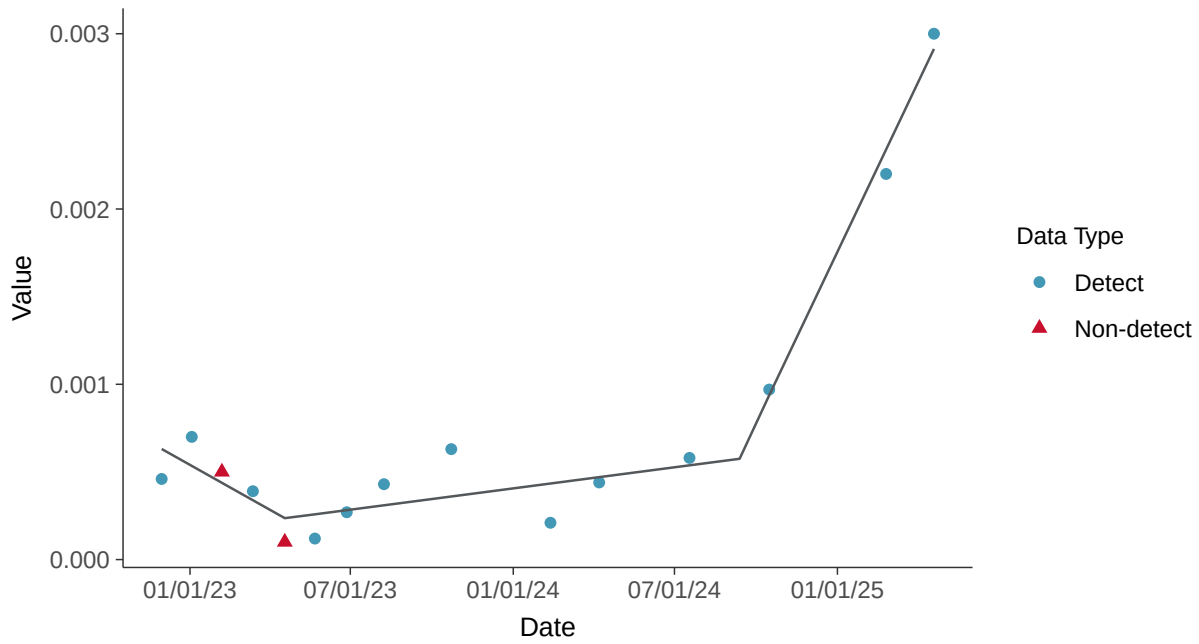
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-30 (mg/L)



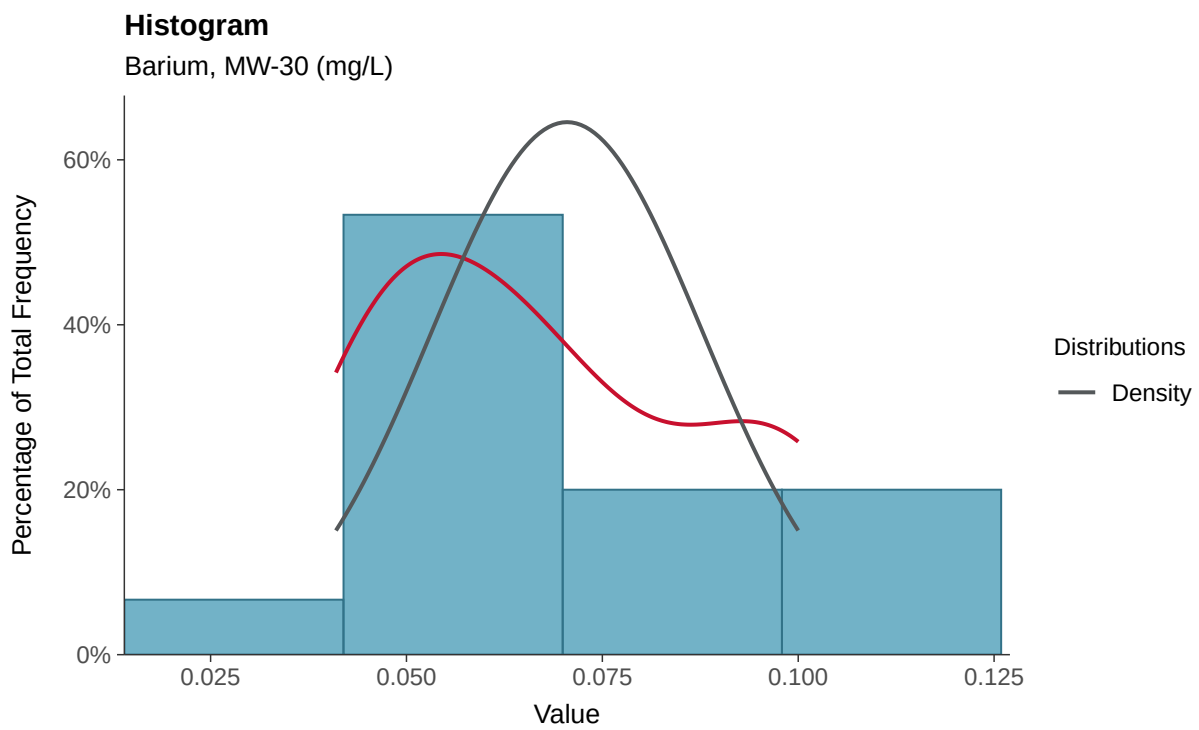
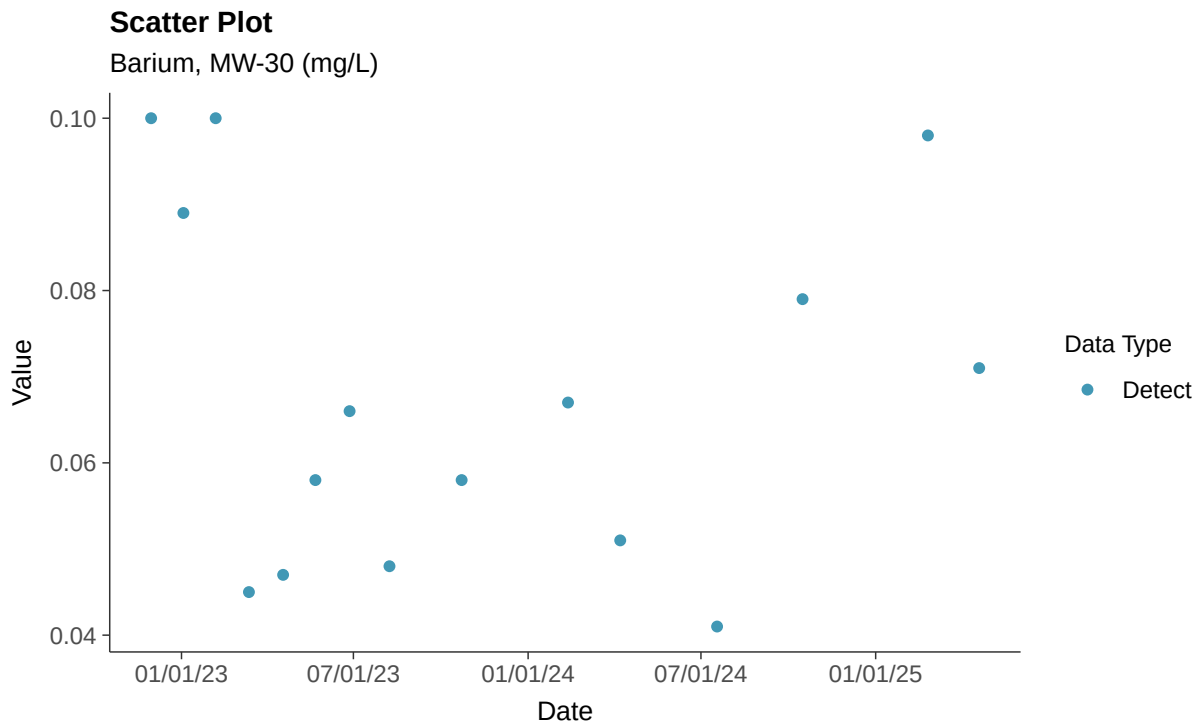


Trend Regression: Piecewise Linear-Linear-Linear
Arsenic, MW-30 (mg/L)



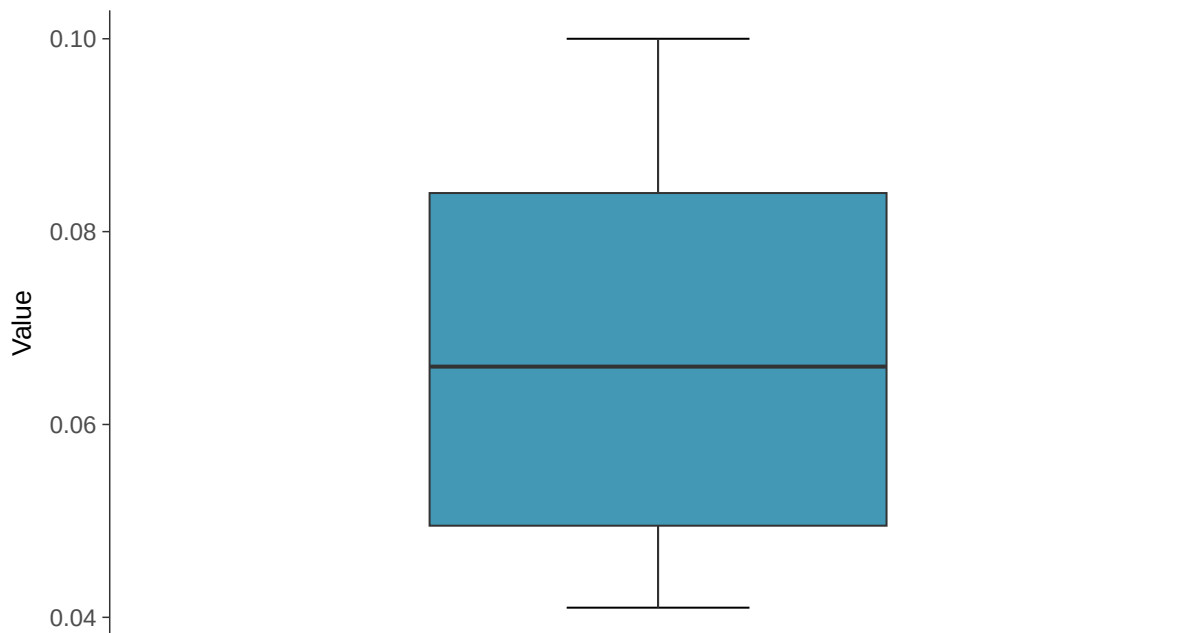
Appendix IV: Barium, MW-30

ID: 40_1_4_103



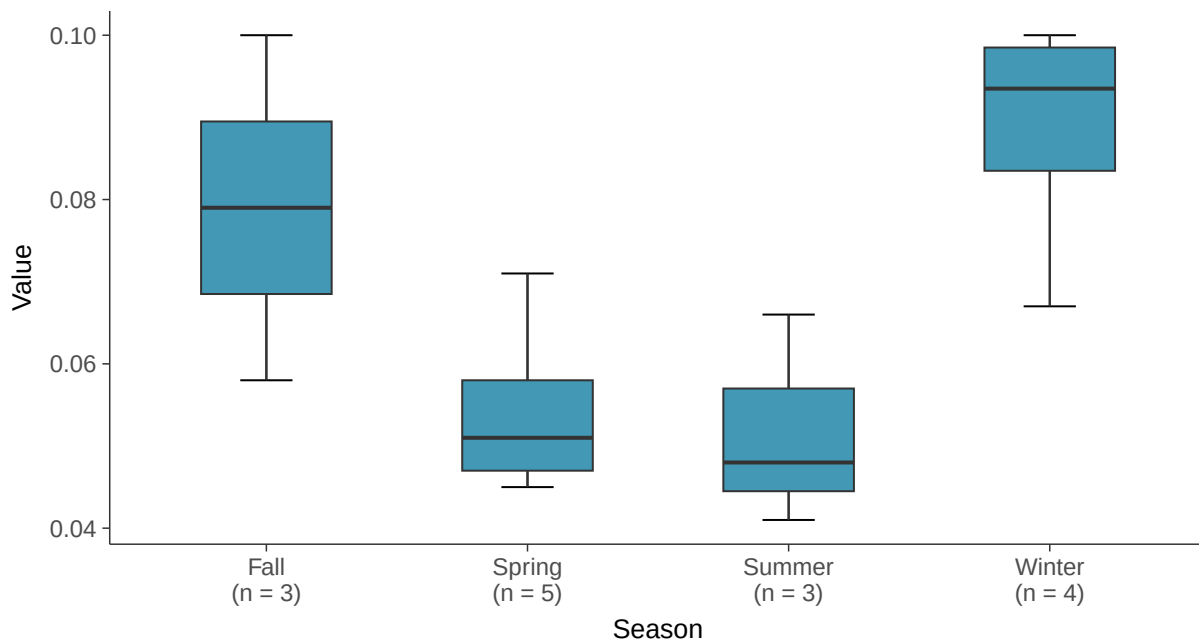
Boxplot

Barium, MW-30 (mg/L)



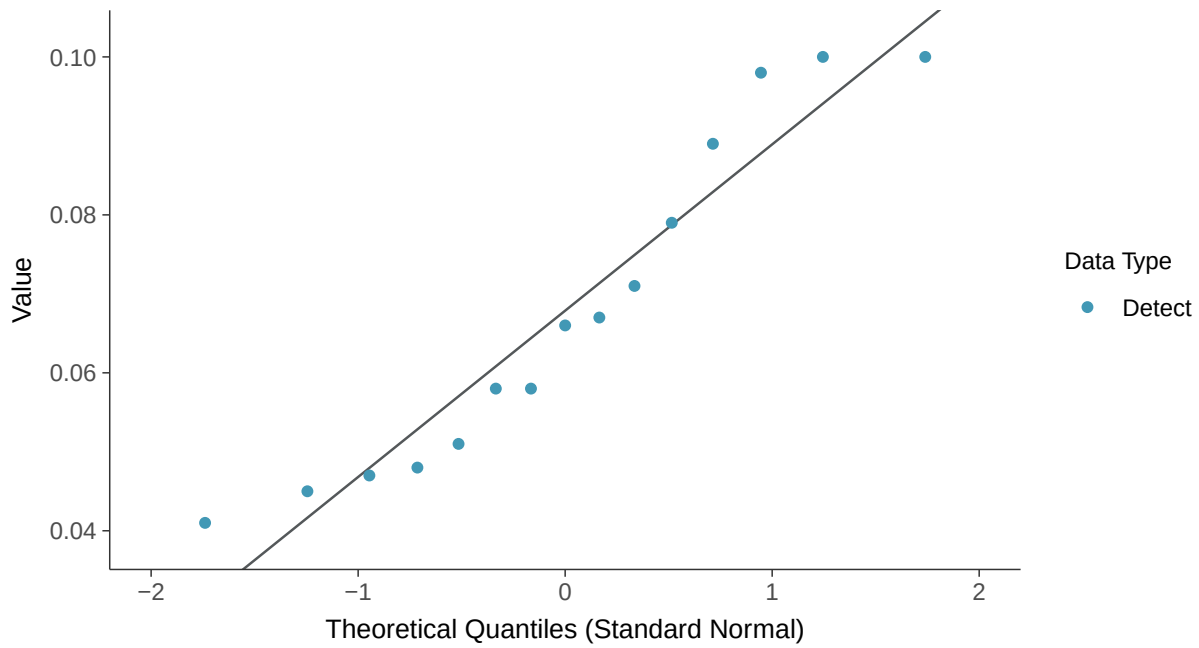
Boxplot by Season

Barium, MW-30 (mg/L)



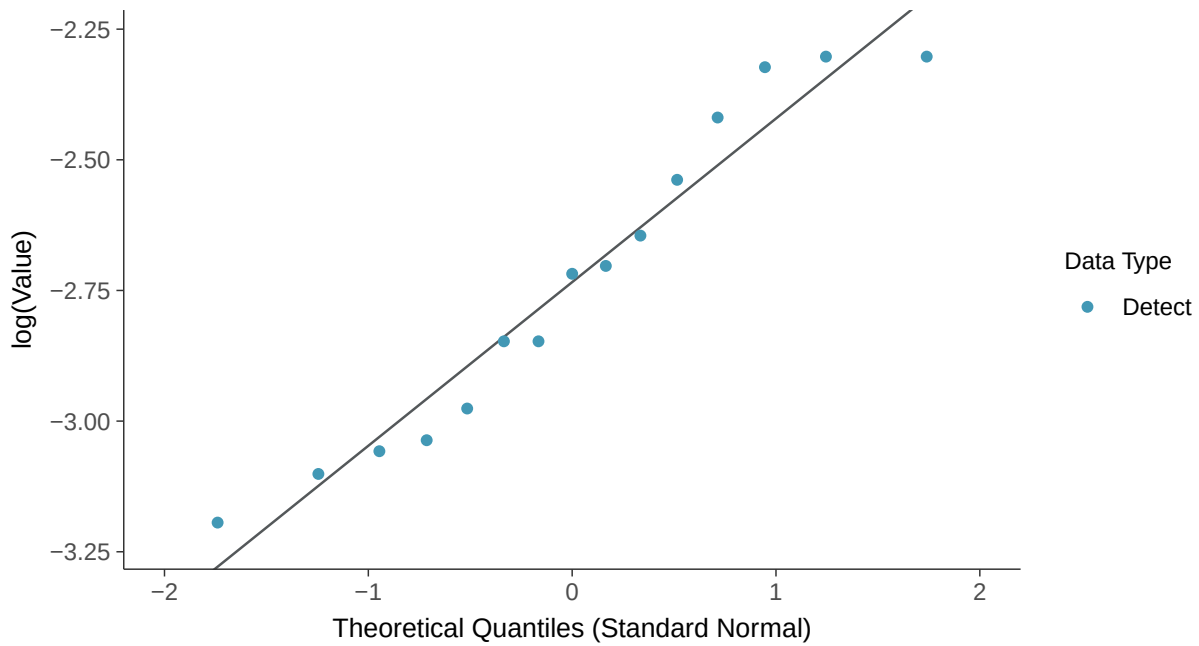
Normal Q-Q plot

Barium, MW-30 (mg/L)



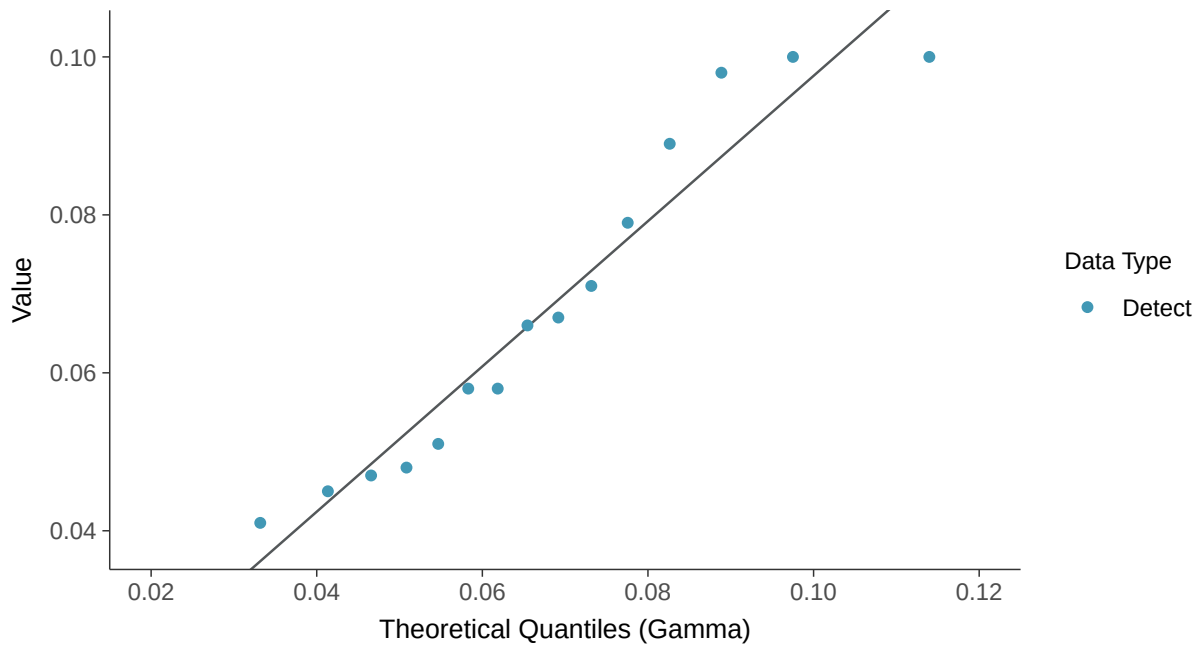
Lognormal Q-Q plot

Barium, MW-30 (mg/L)



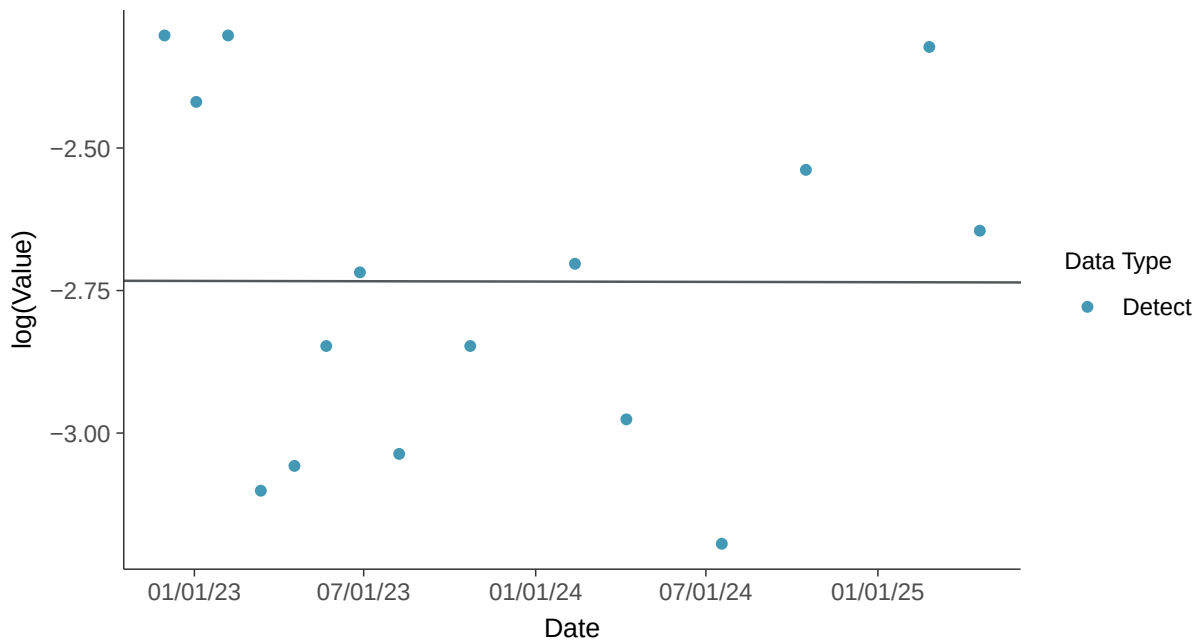
Gamma Q-Q plot

Barium, MW-30 (mg/L)



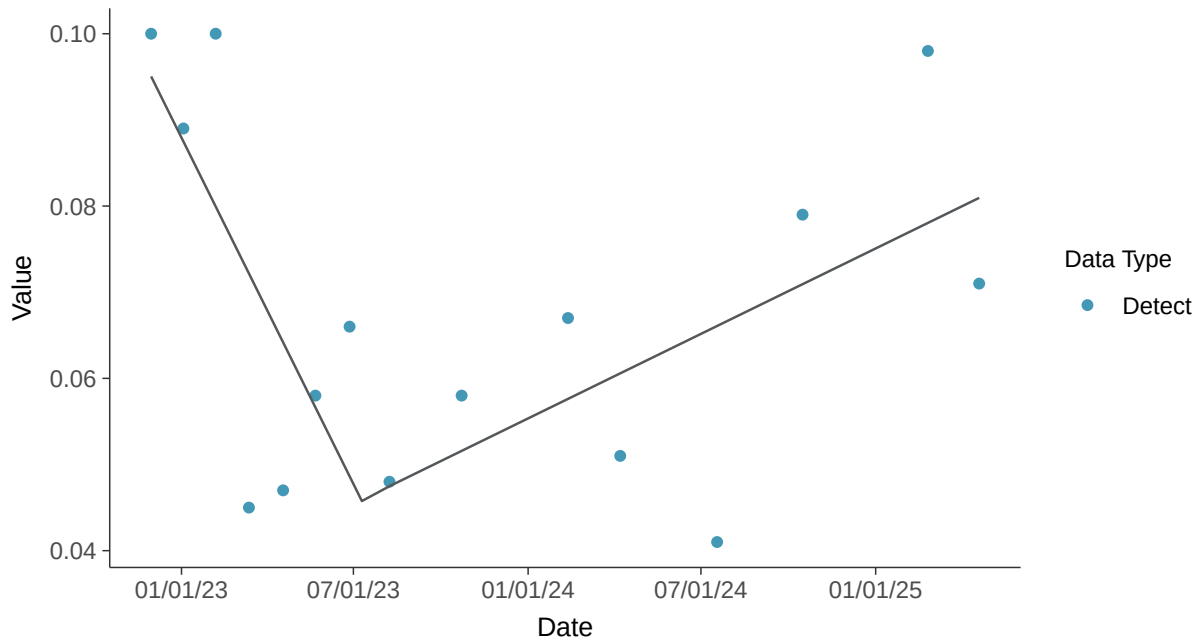
Trend Regression: Lognormal MLE

Barium, MW-30 (mg/L)



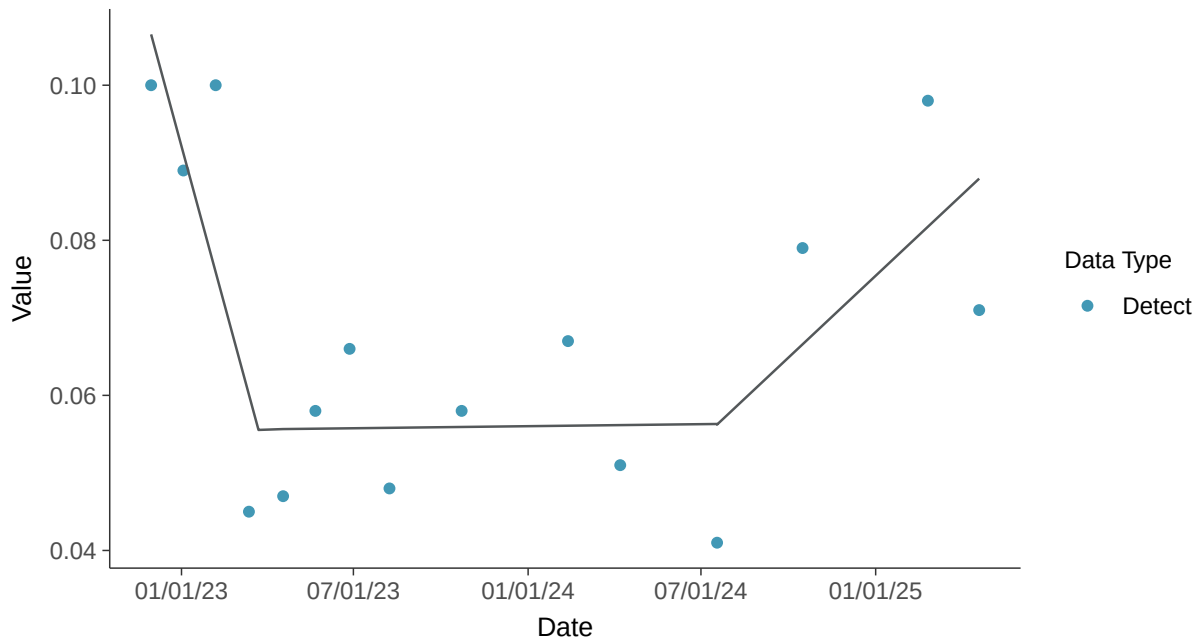
Trend Regression: Piecewise Linear-Linear

Barium, MW-30 (mg/L)



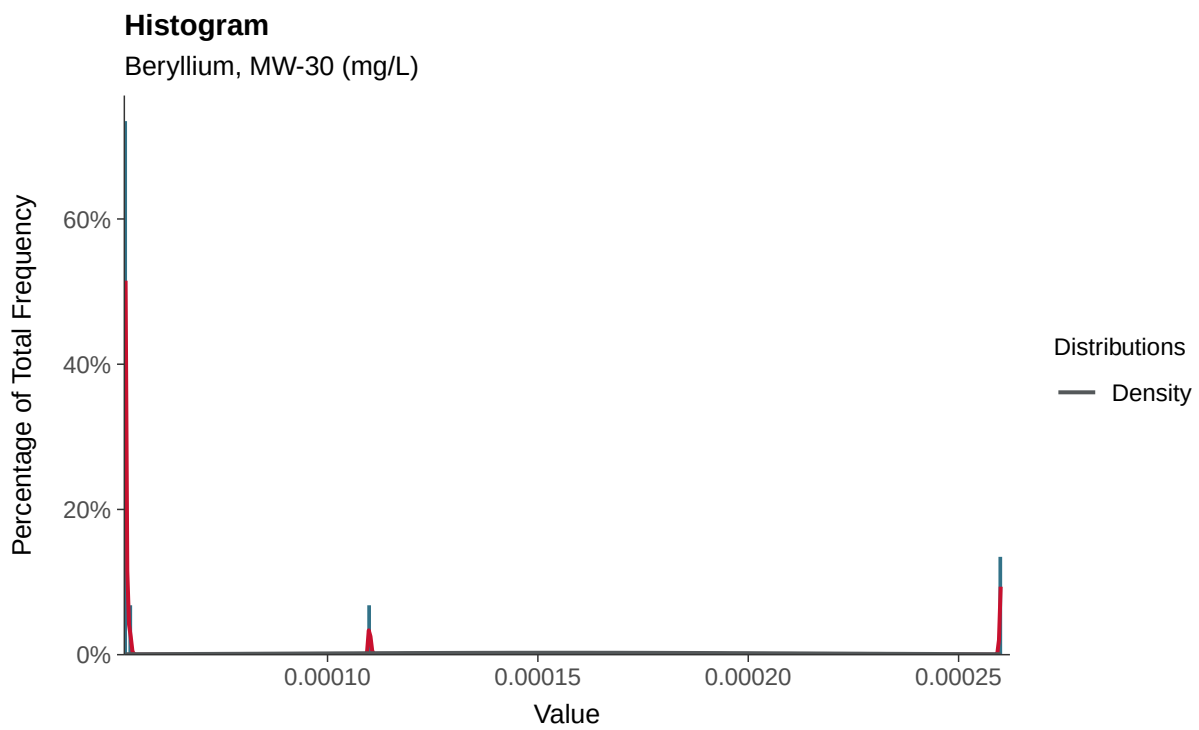
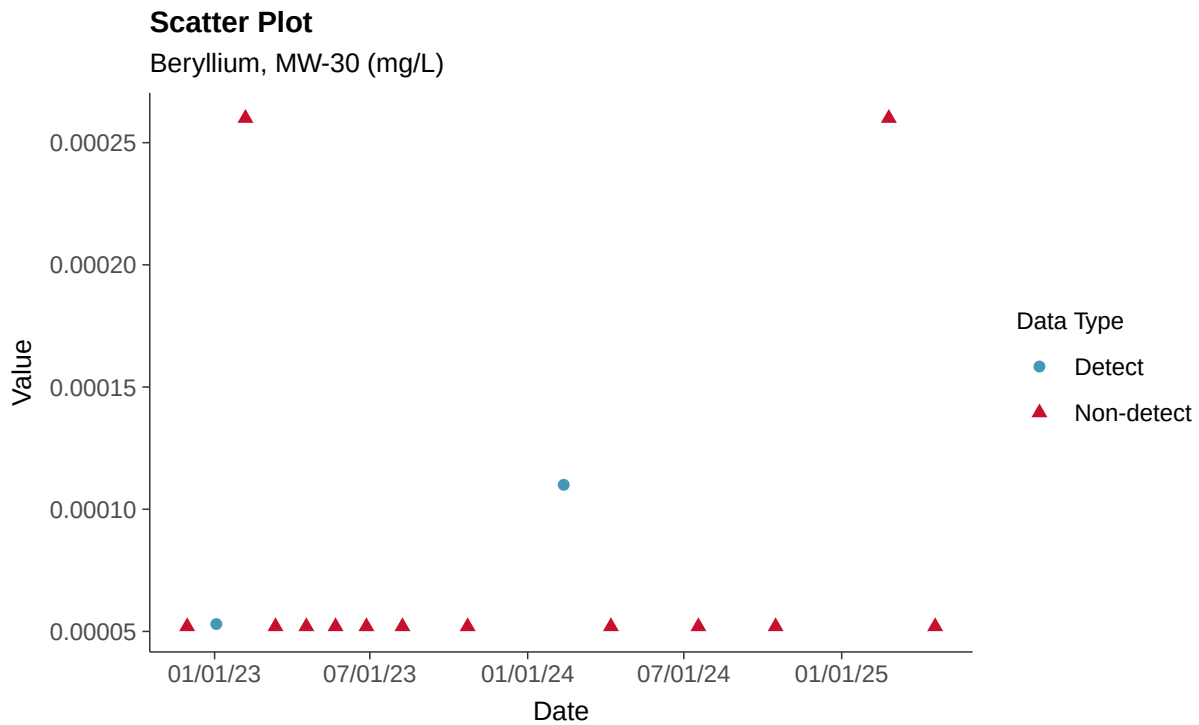
Trend Regression: Piecewise Linear-Linear-Linear

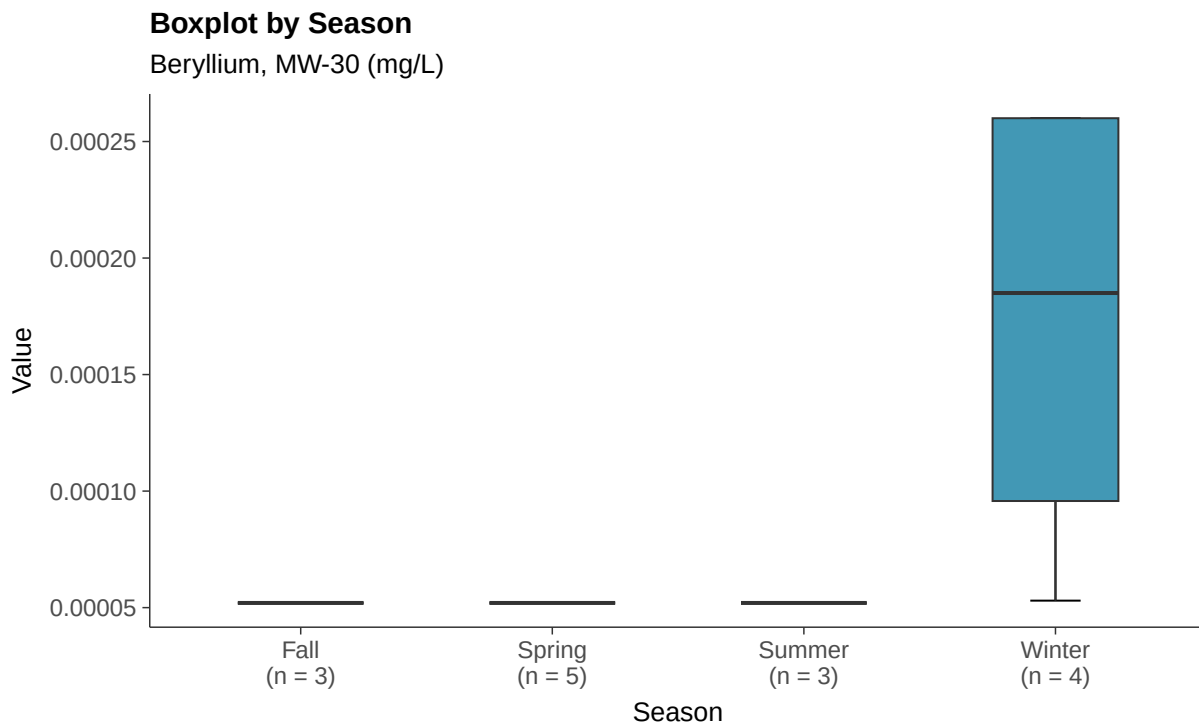
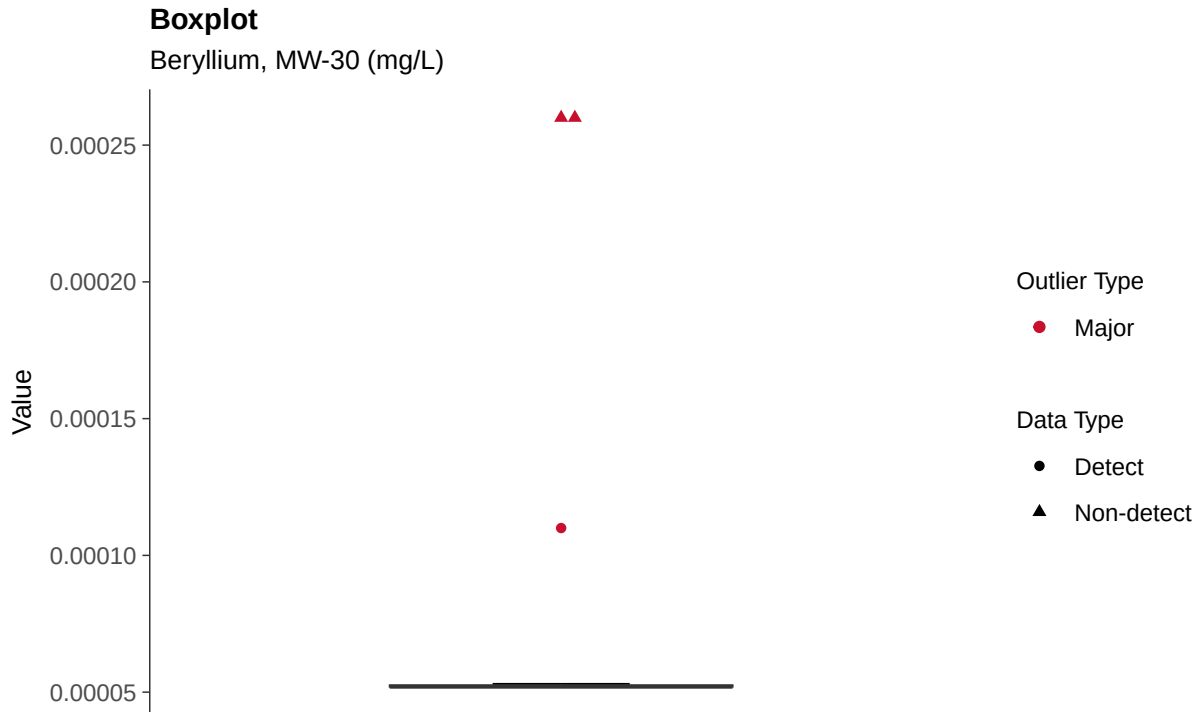
Barium, MW-30 (mg/L)



Appendix IV: Beryllium, MW-30

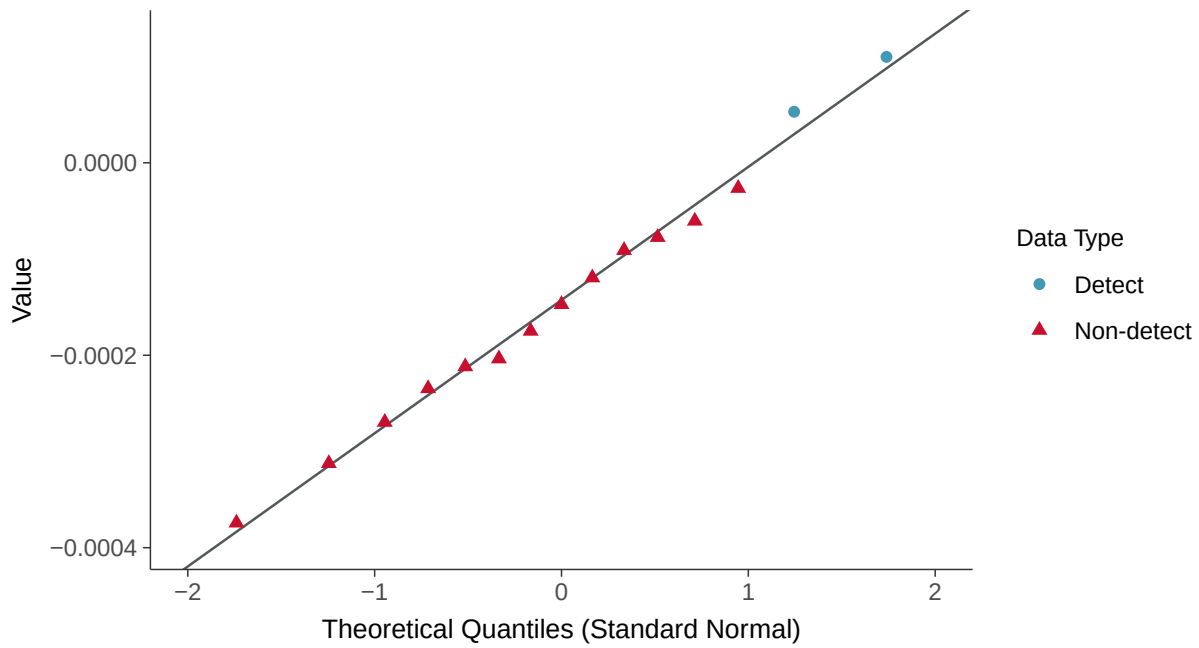
ID: 40_1_4_104





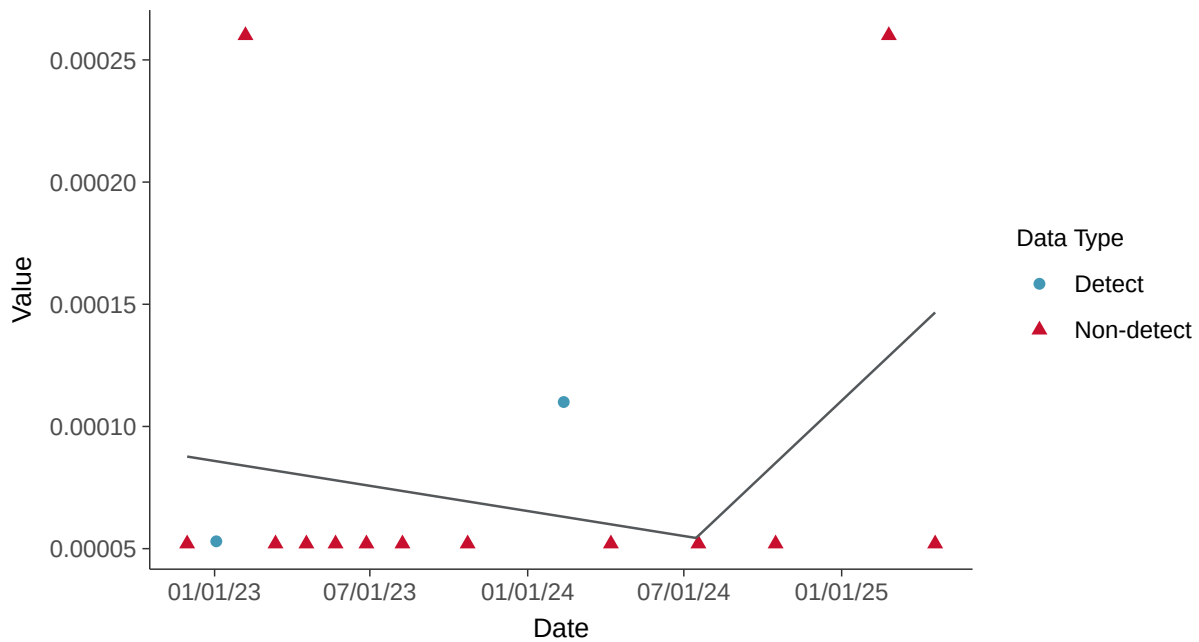
Normal Q-Q plot using ROS Imputed Estimates

Beryllium, MW-30 (mg/L)



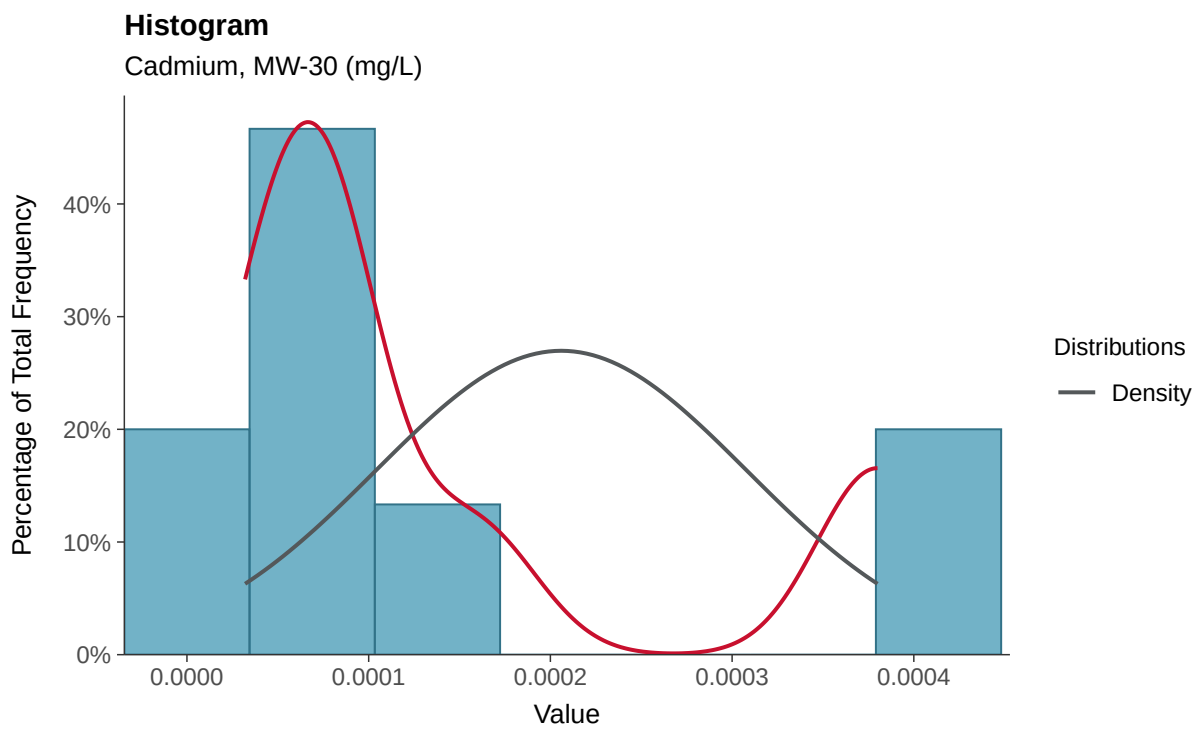
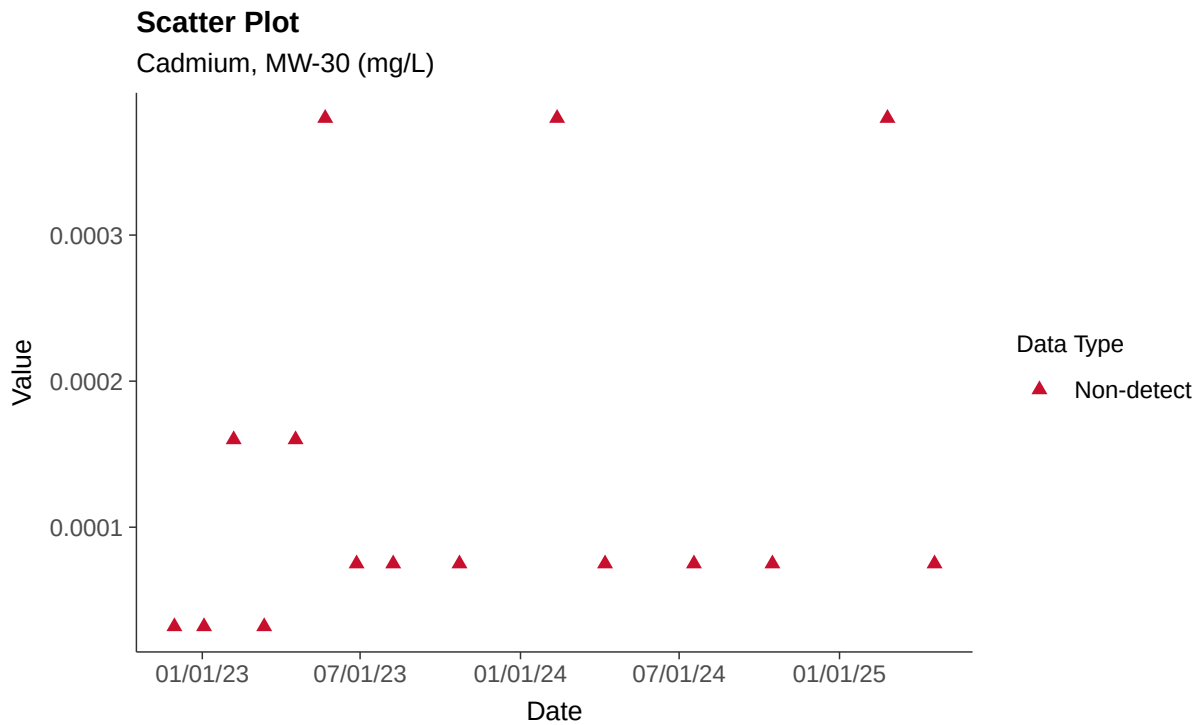
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-30 (mg/L)



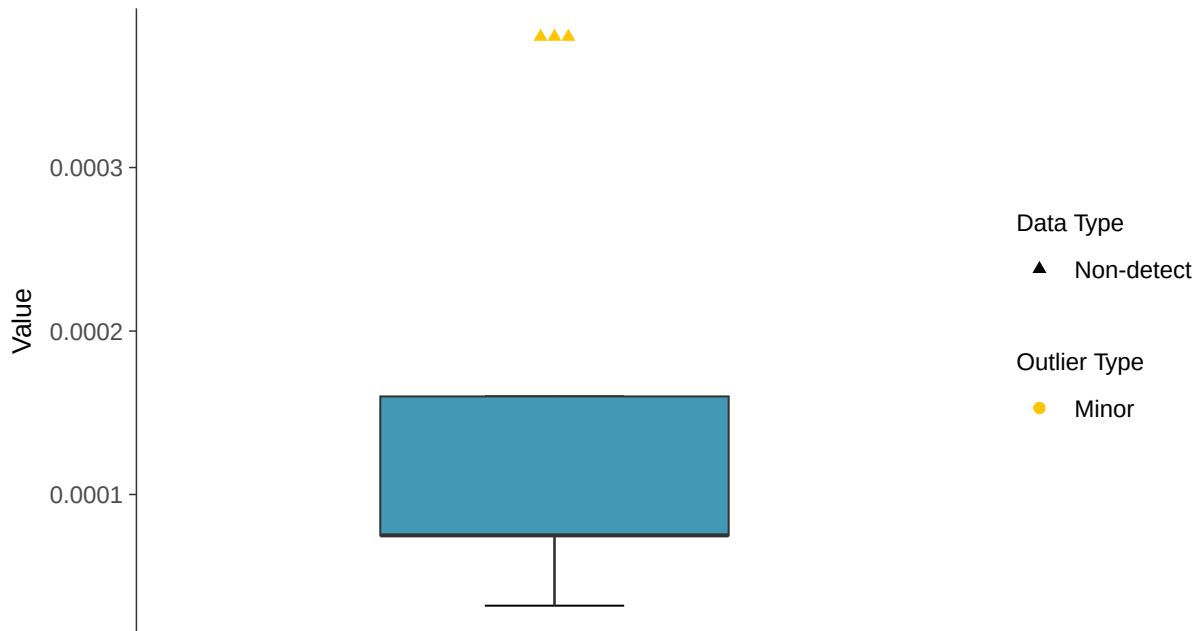
Appendix IV: Cadmium, MW-30

ID: 40_1_4_106



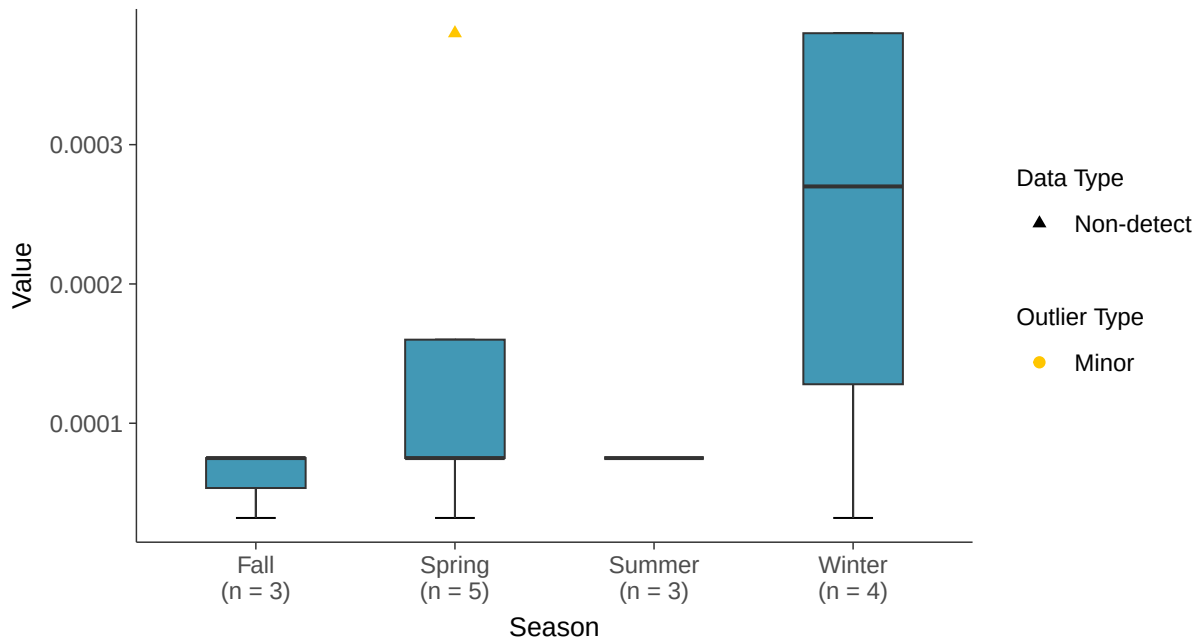
Boxplot

Cadmium, MW-30 (mg/L)



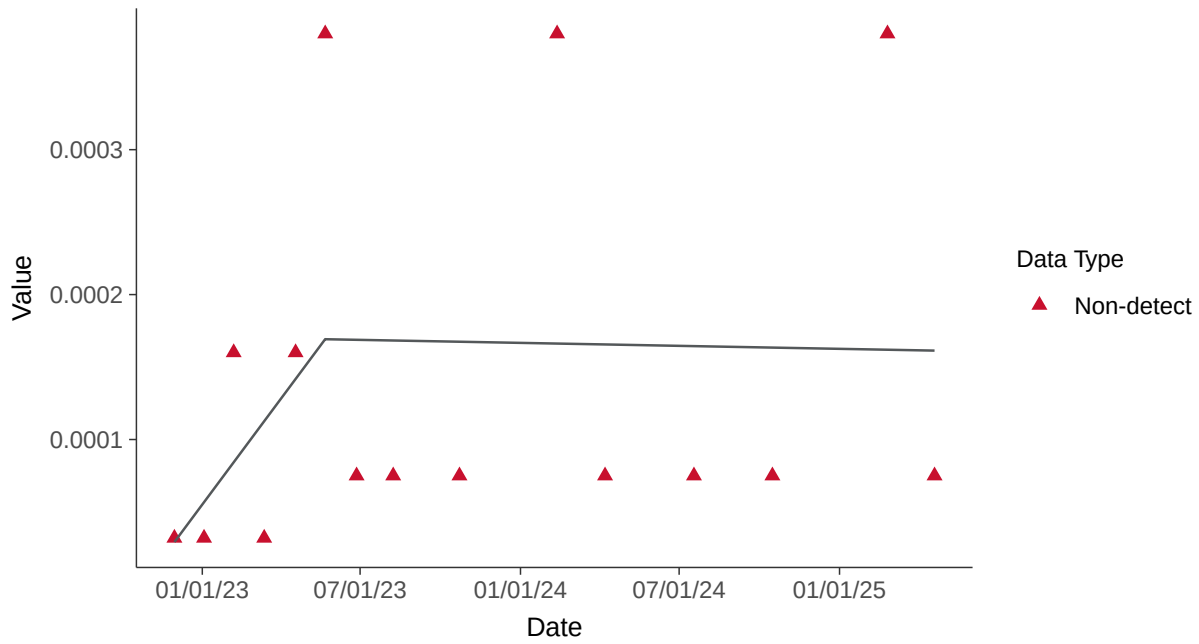
Boxplot by Season

Cadmium, MW-30 (mg/L)



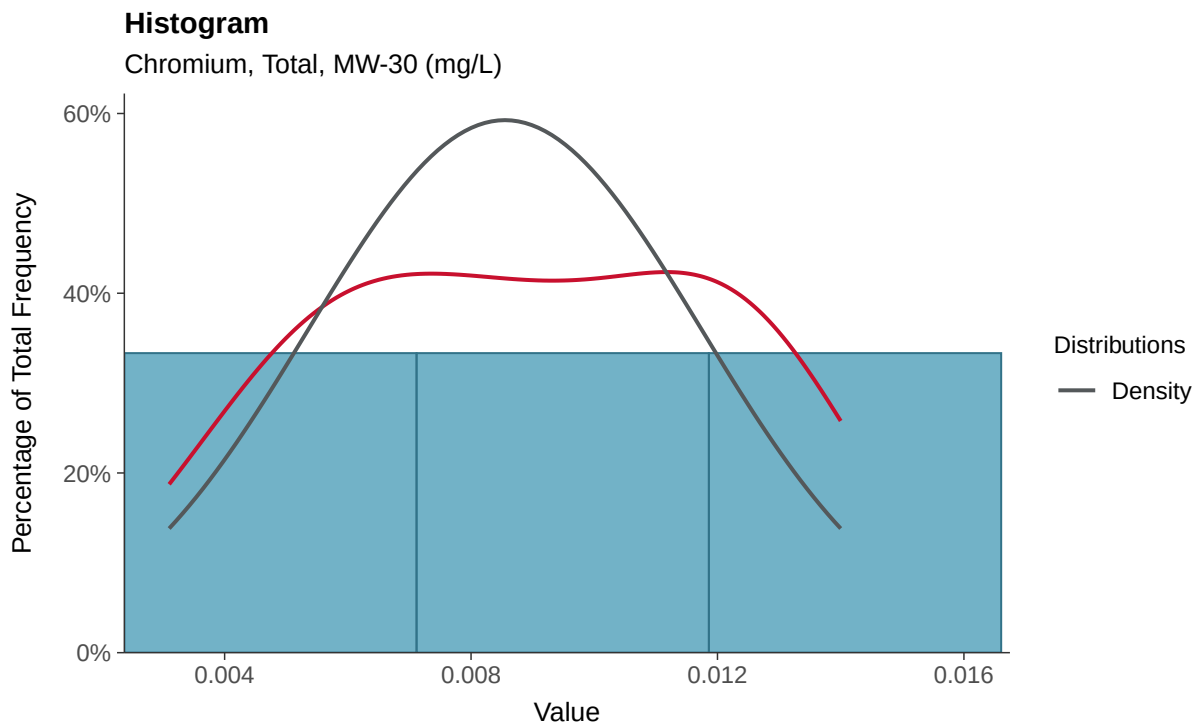
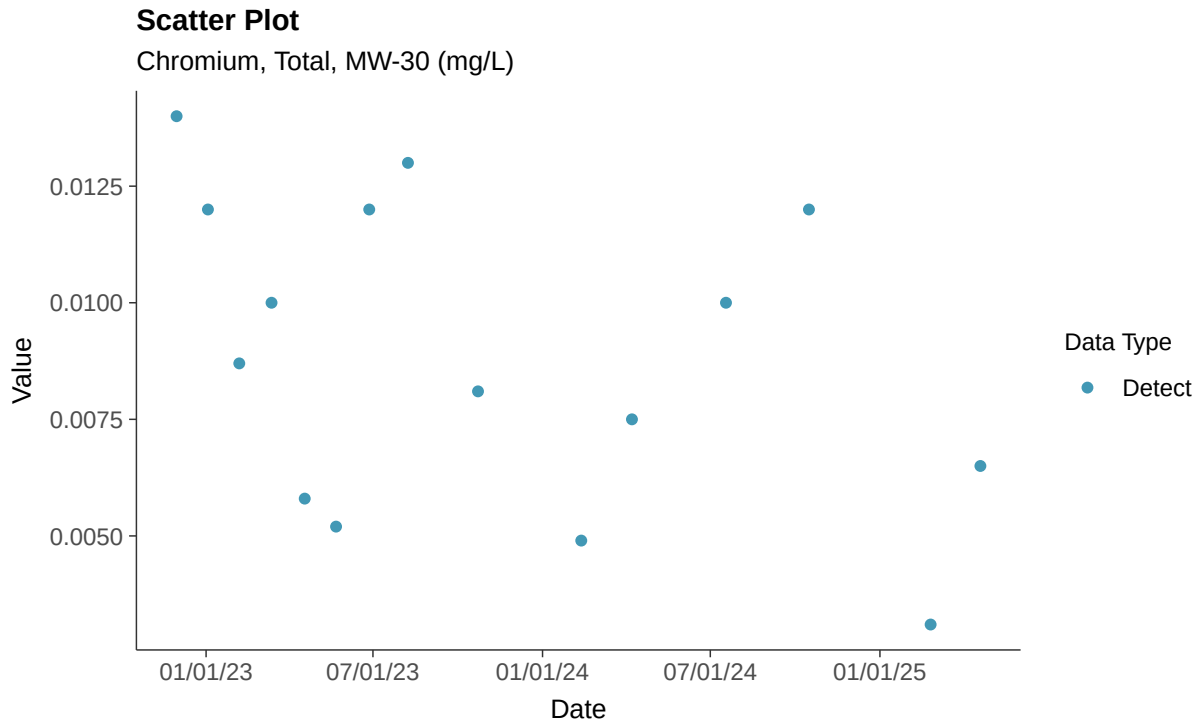


Trend Regression: Piecewise Linear-Linear
Cadmium, MW-30 (mg/L)



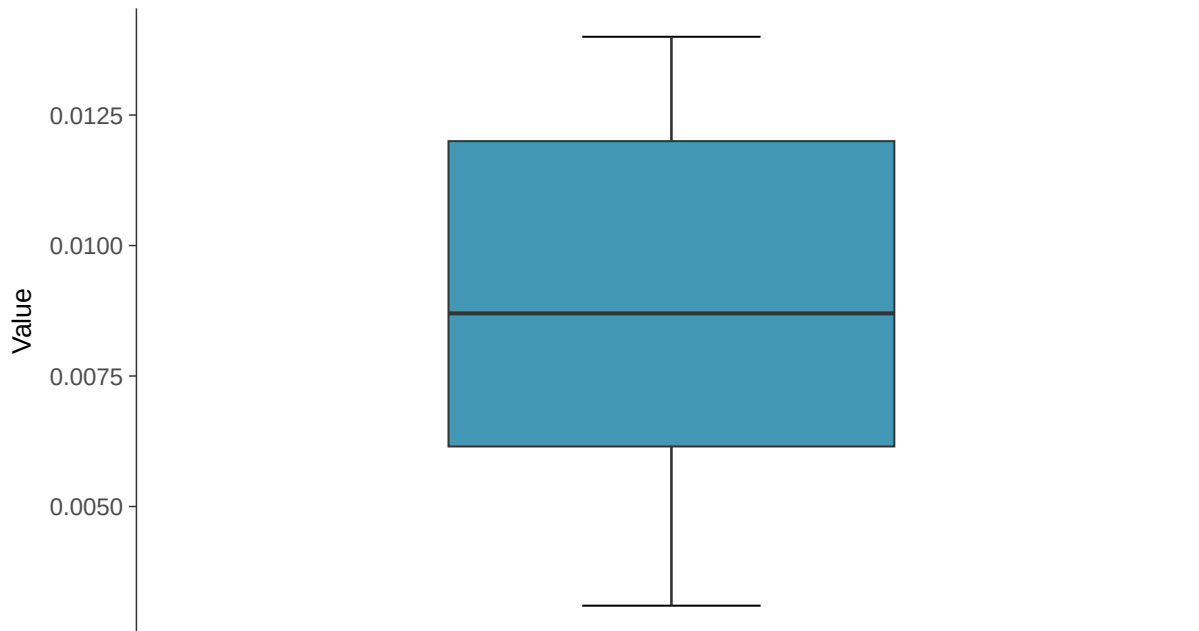
Appendix IV: Chromium, Total, MW-30

ID: 40_1_4_109



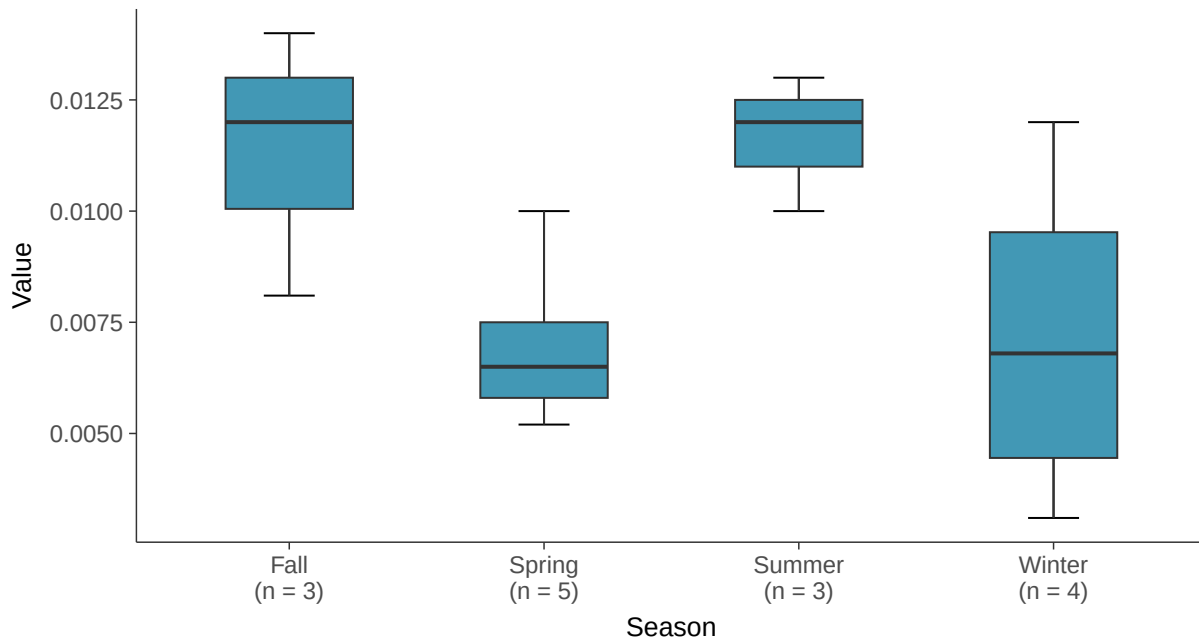
Boxplot

Chromium, Total, MW-30 (mg/L)



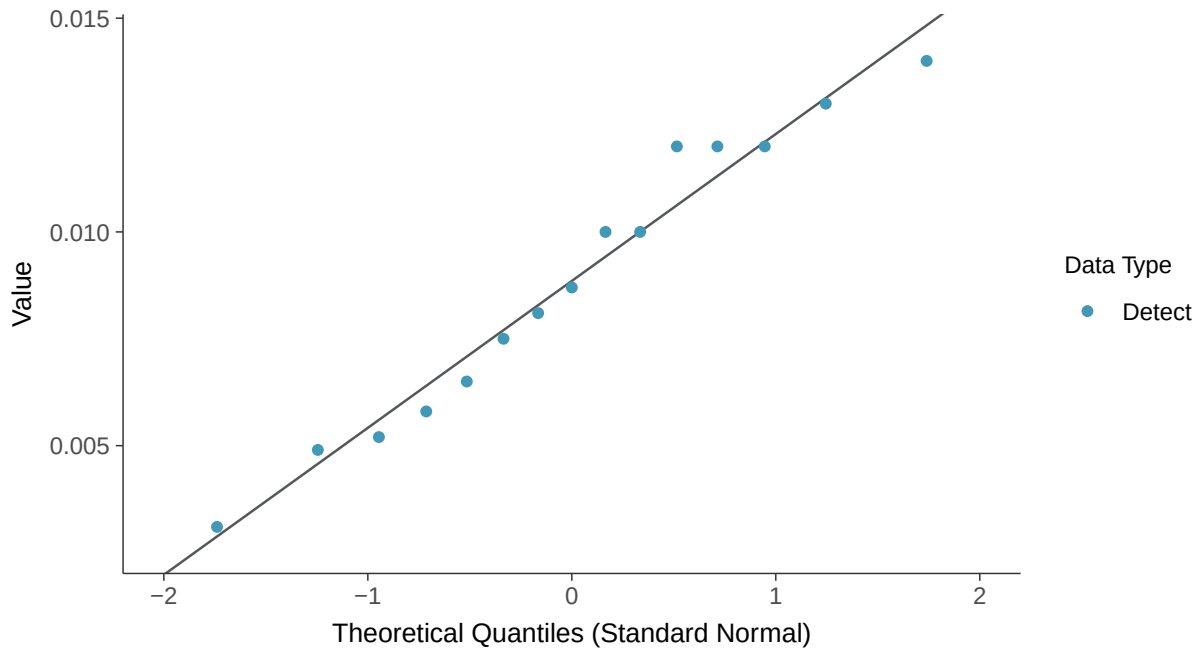
Boxplot by Season

Chromium, Total, MW-30 (mg/L)



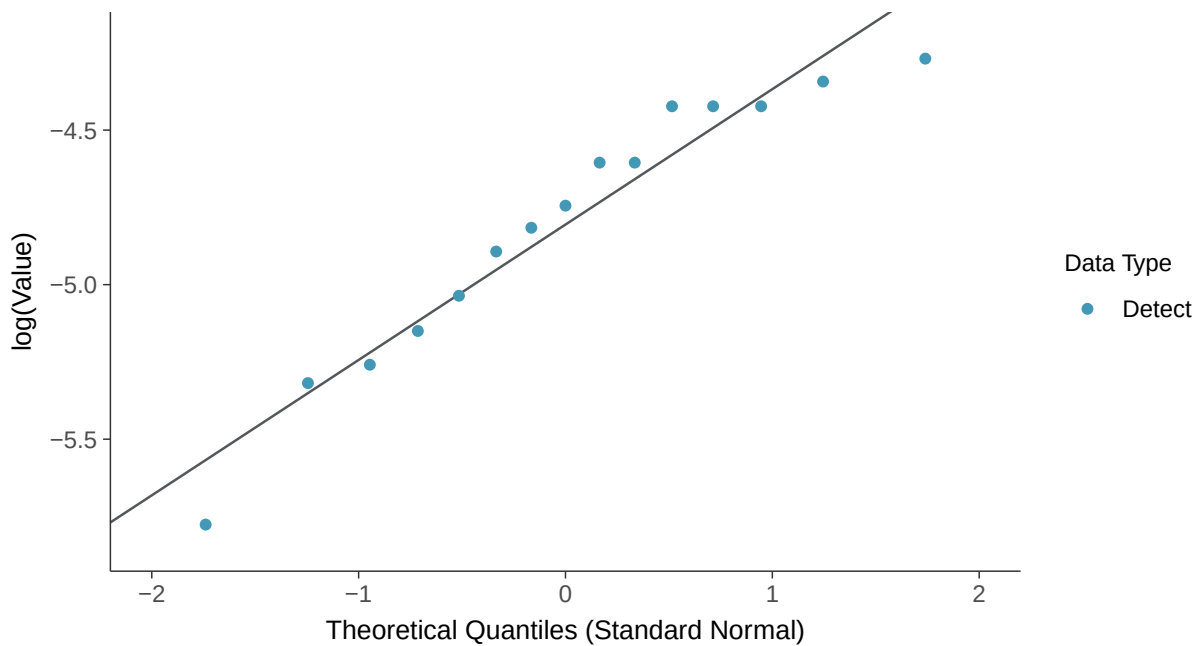
Normal Q-Q plot

Chromium, Total, MW-30 (mg/L)



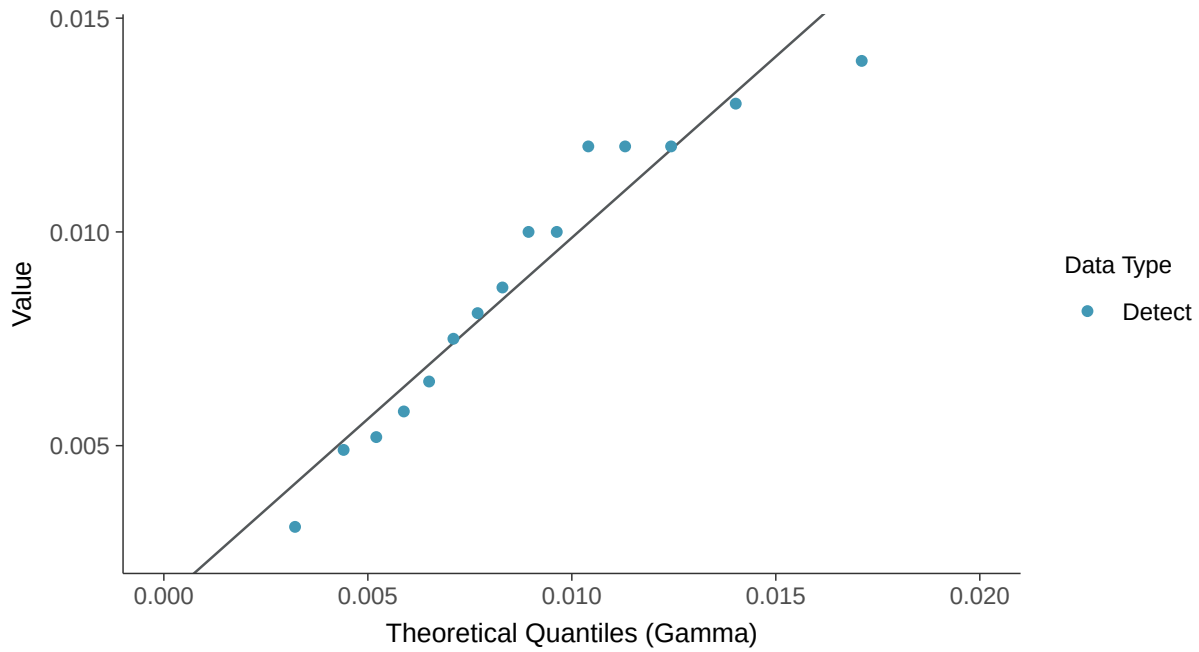
Lognormal Q-Q plot

Chromium, Total, MW-30 (mg/L)



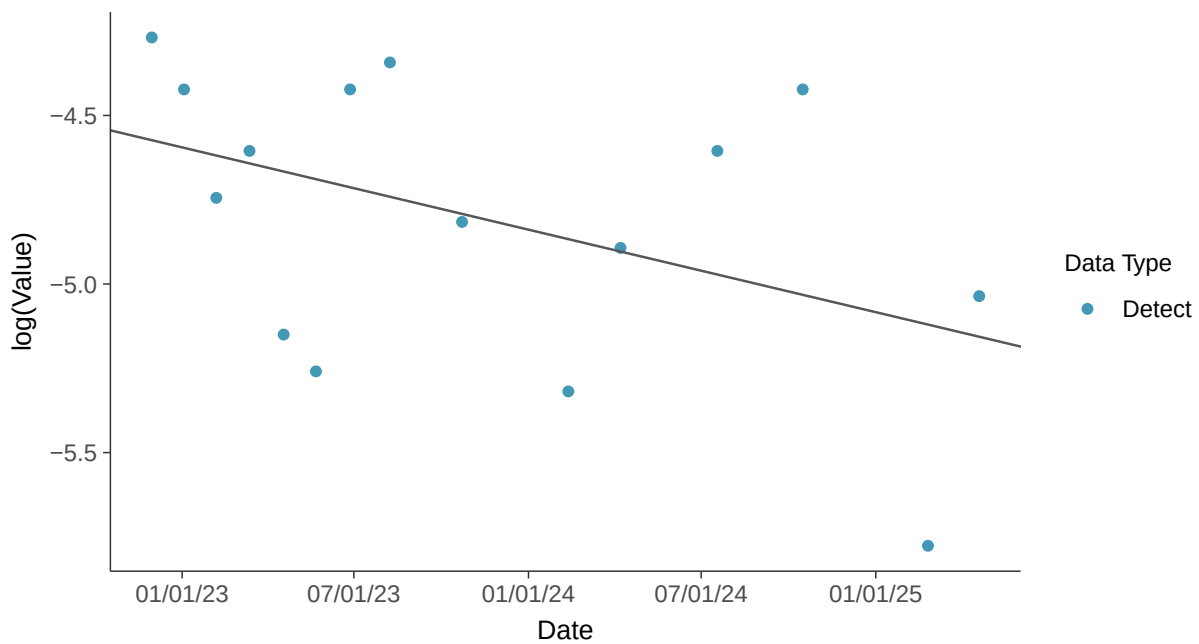
Gamma Q-Q plot

Chromium, Total, MW-30 (mg/L)



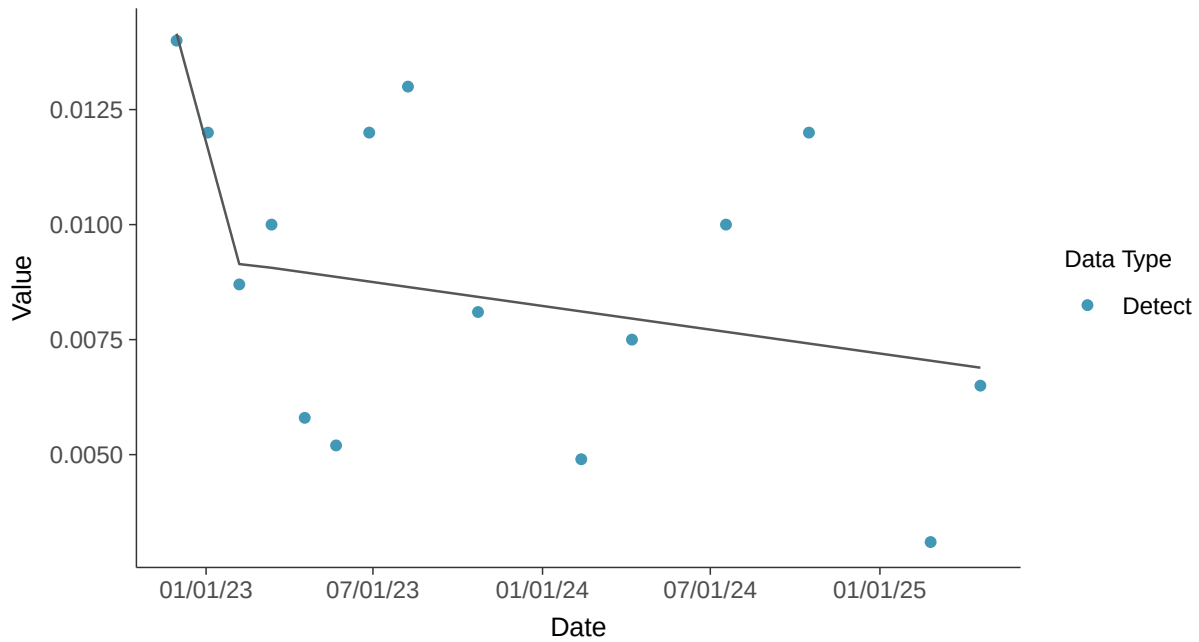
Trend Regression: Lognormal MLE

Chromium, Total, MW-30 (mg/L)



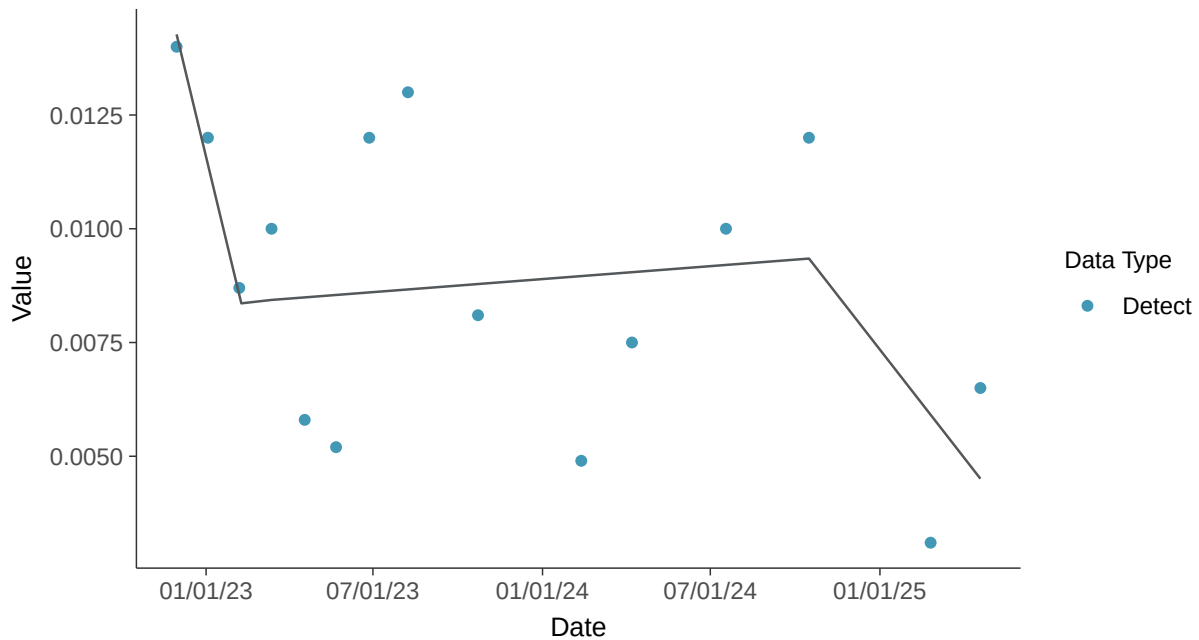
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-30 (mg/L)



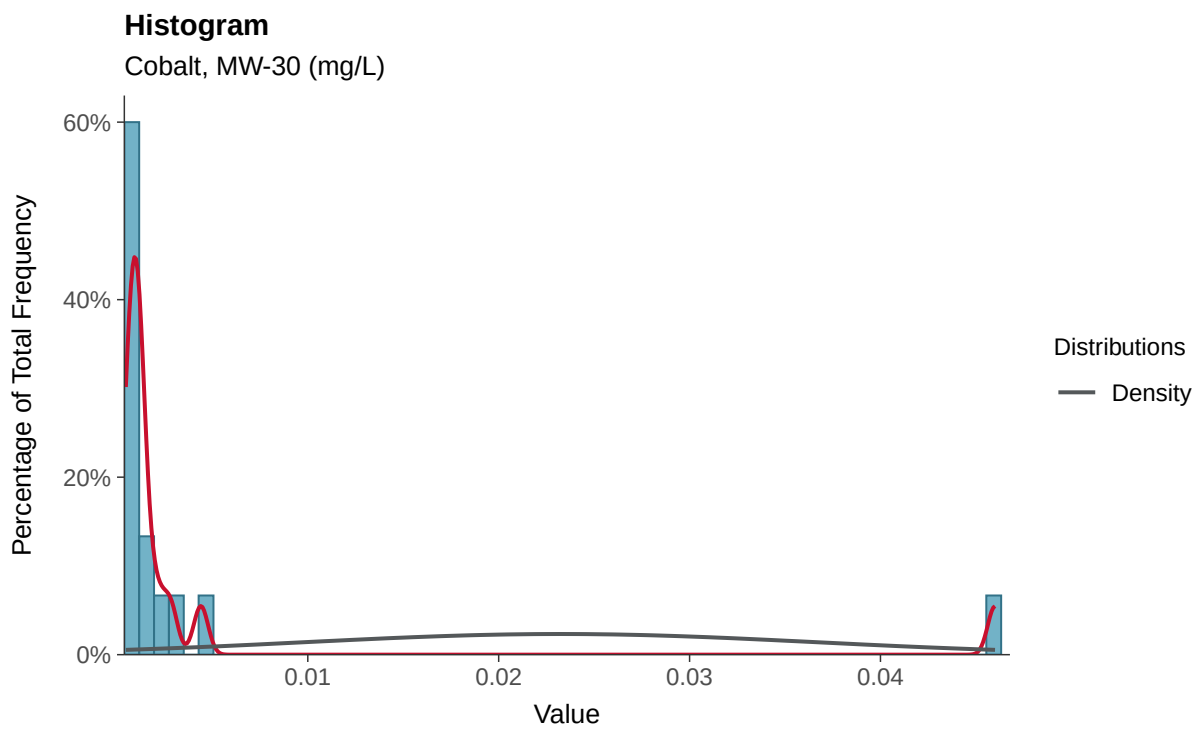
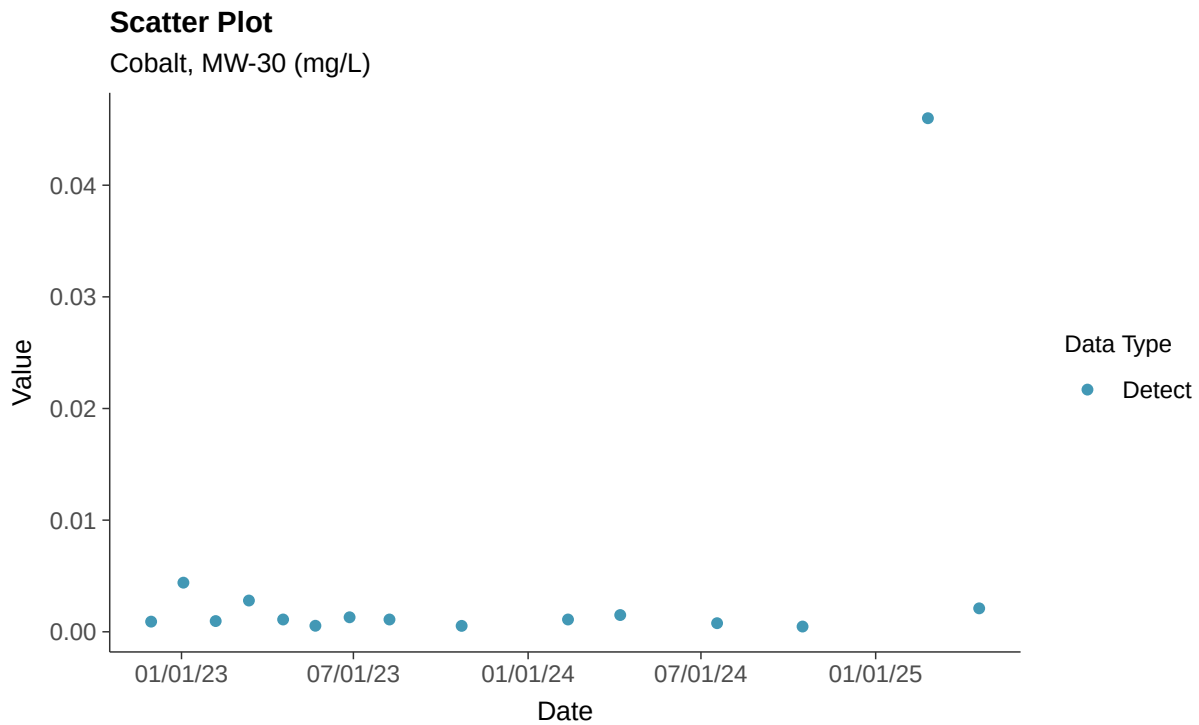
Trend Regression: Piecewise Linear-Linear-Linear

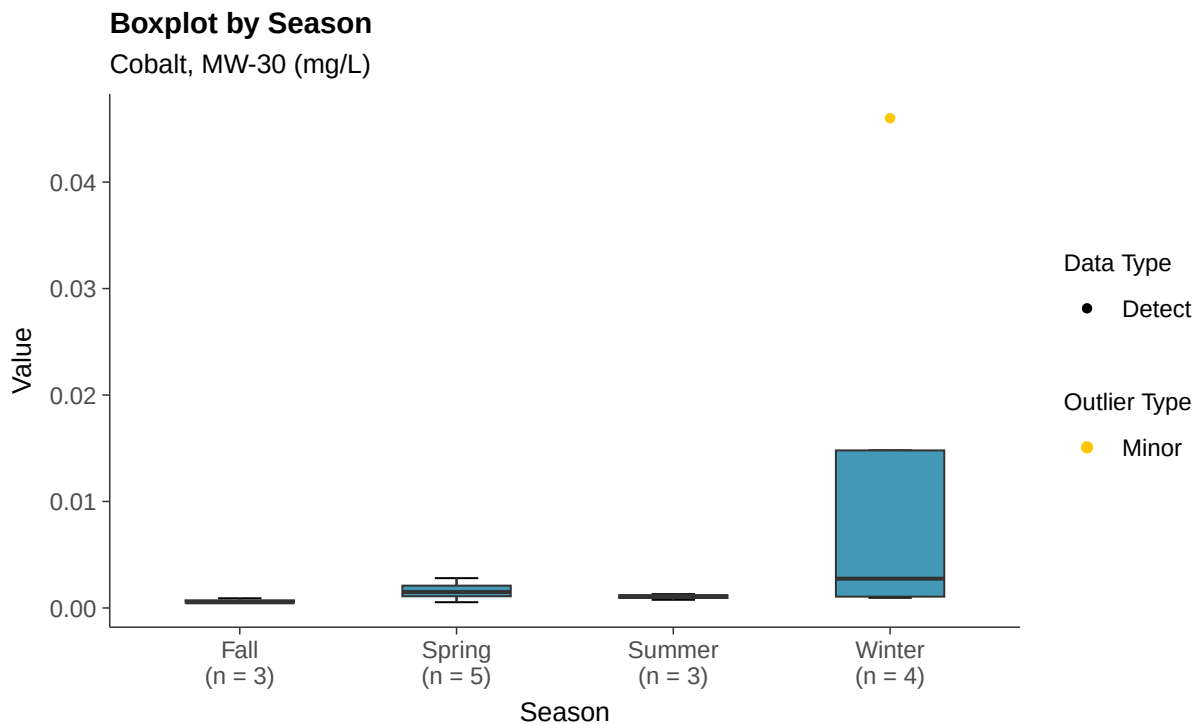
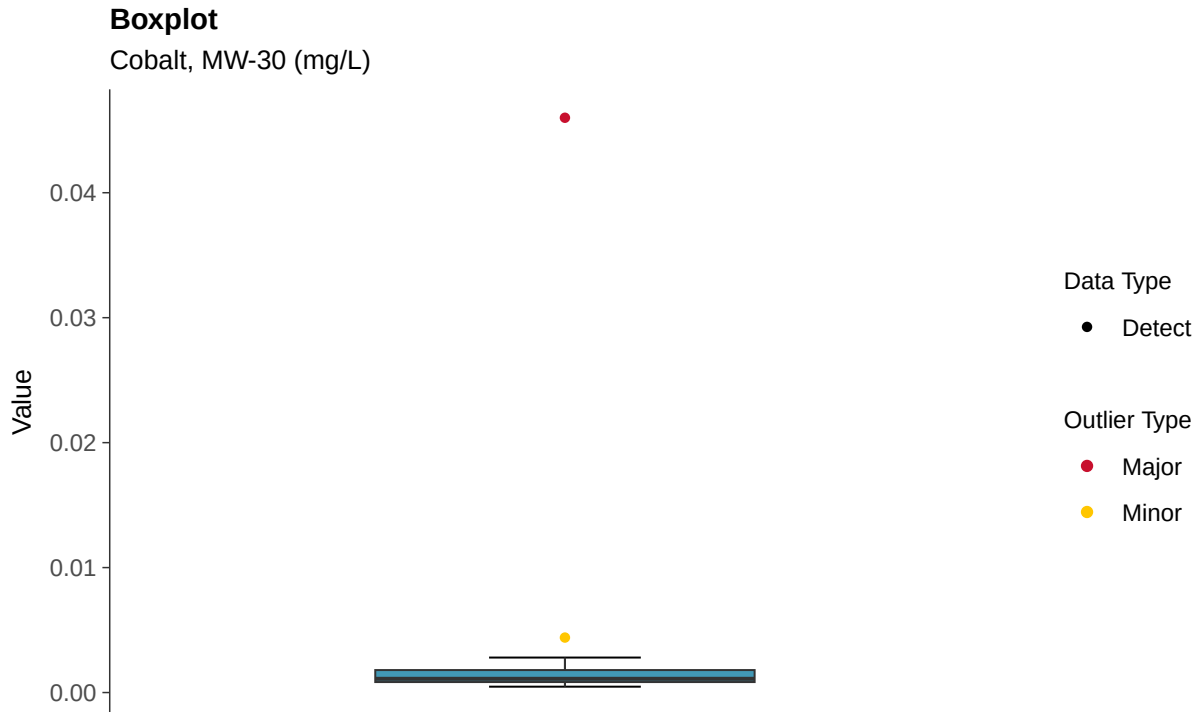
Chromium, Total, MW-30 (mg/L)



Appendix IV: Cobalt, MW-30

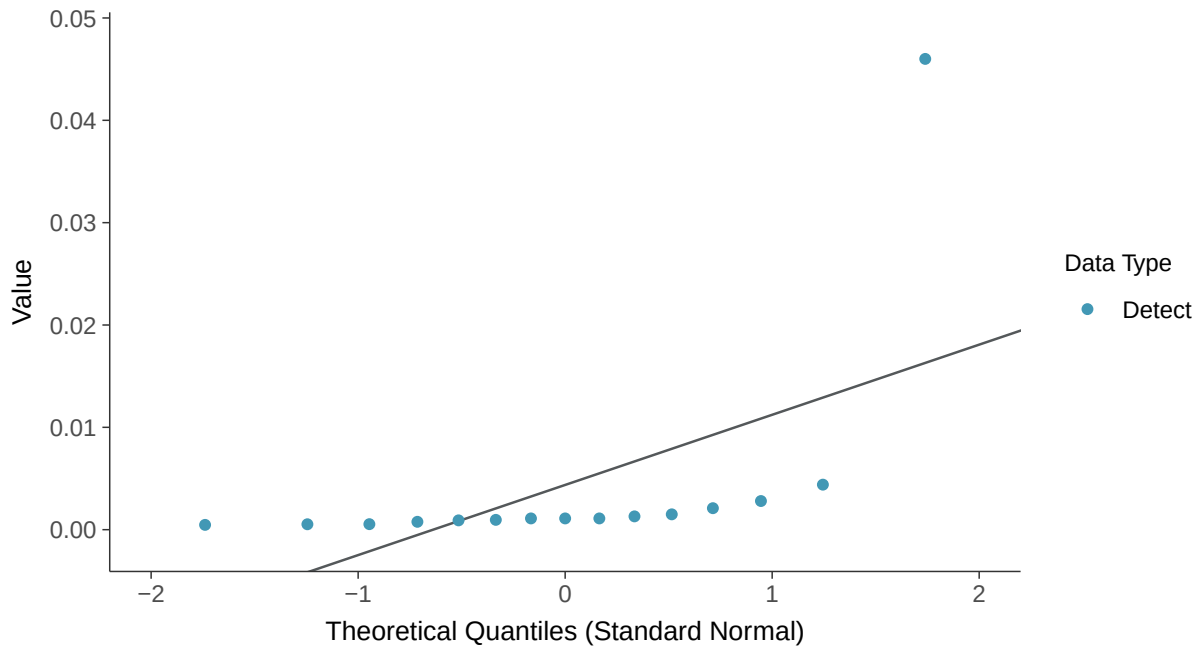
ID: 40_1_4_110





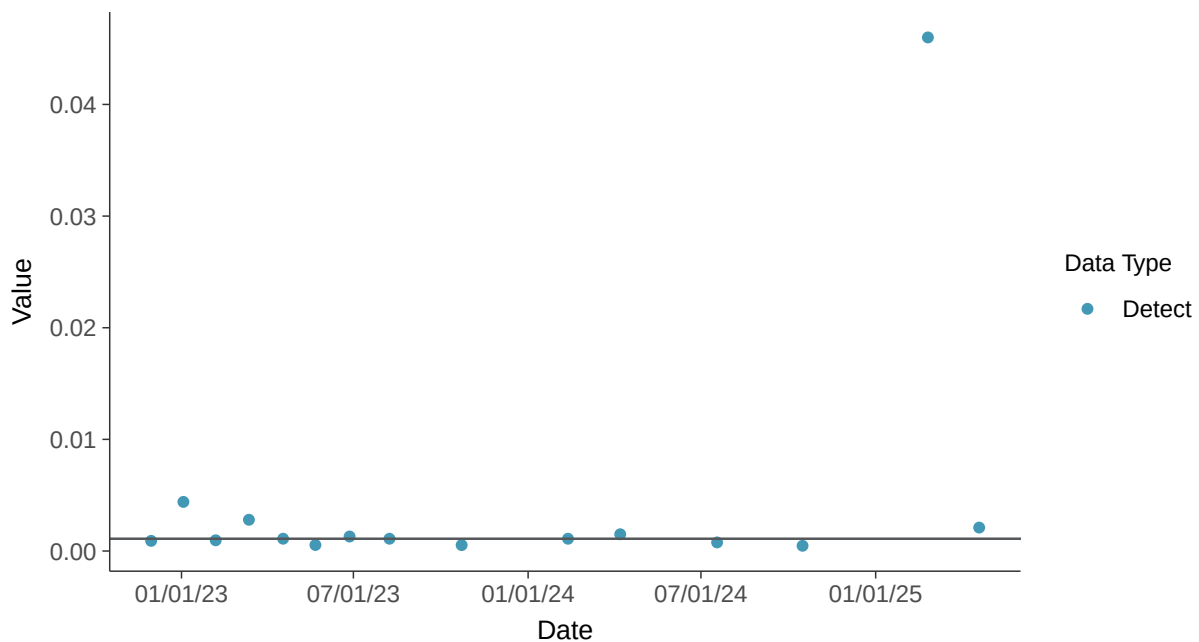
Normal Q-Q plot

Cobalt, MW-30 (mg/L)

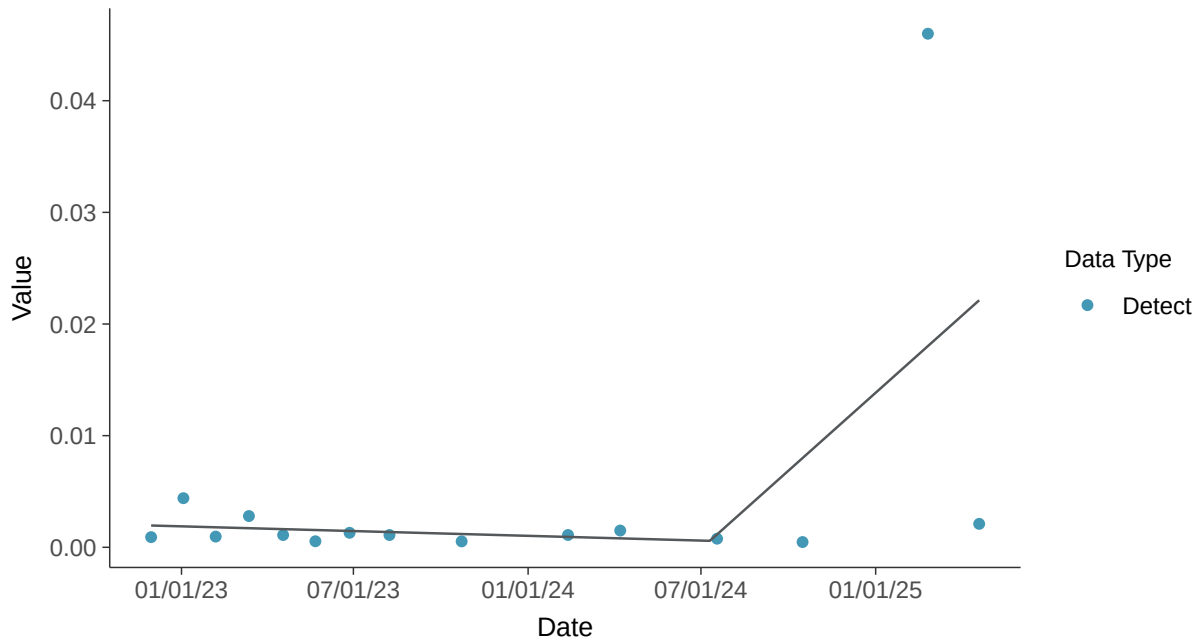


Trend Regression: Mann-Kendall/Theil-Sen Estimate

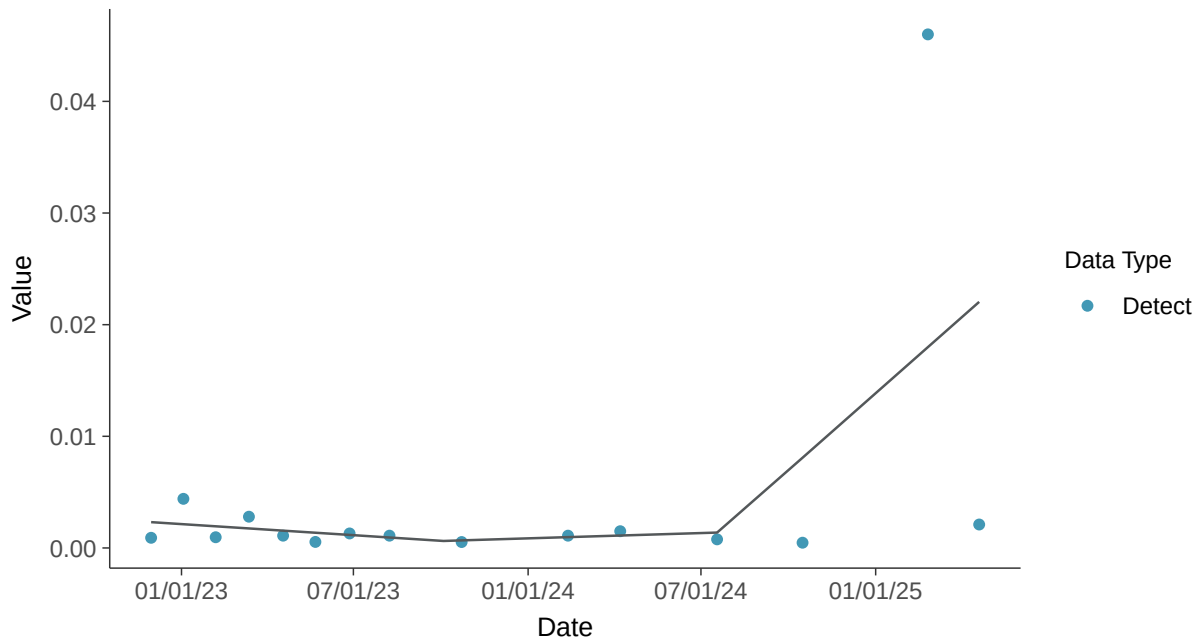
Cobalt, MW-30 (mg/L)



Trend Regression: Piecewise Linear-Linear
Cobalt, MW-30 (mg/L)

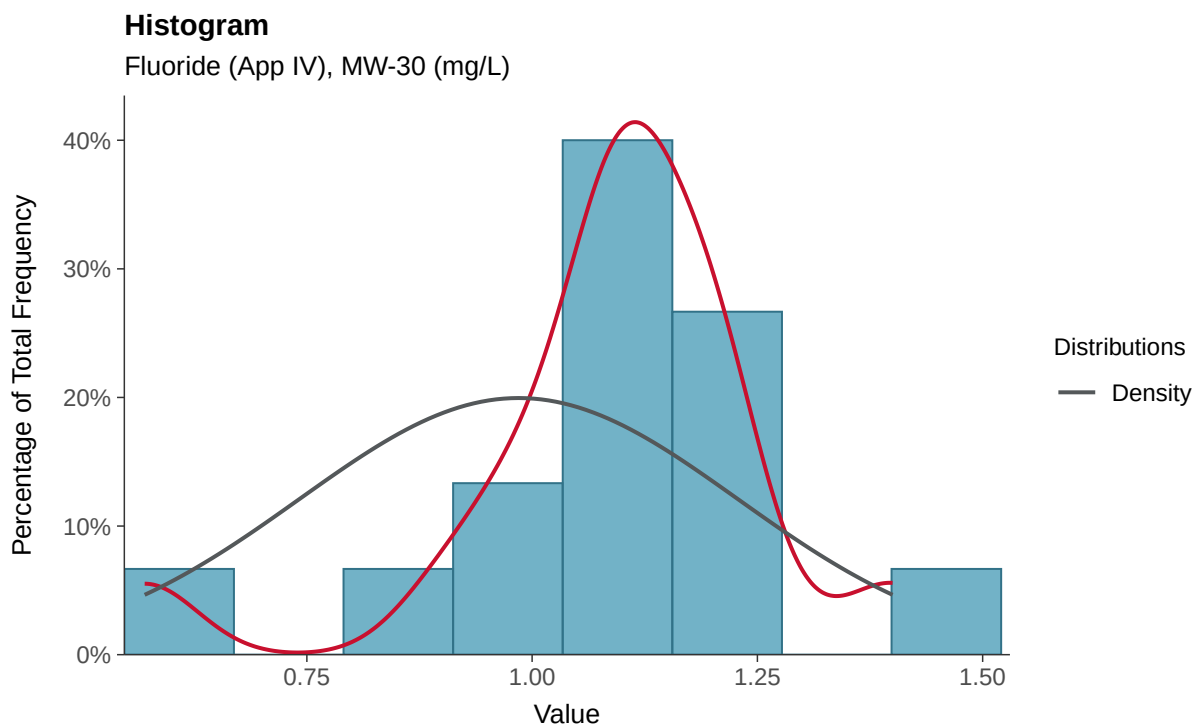
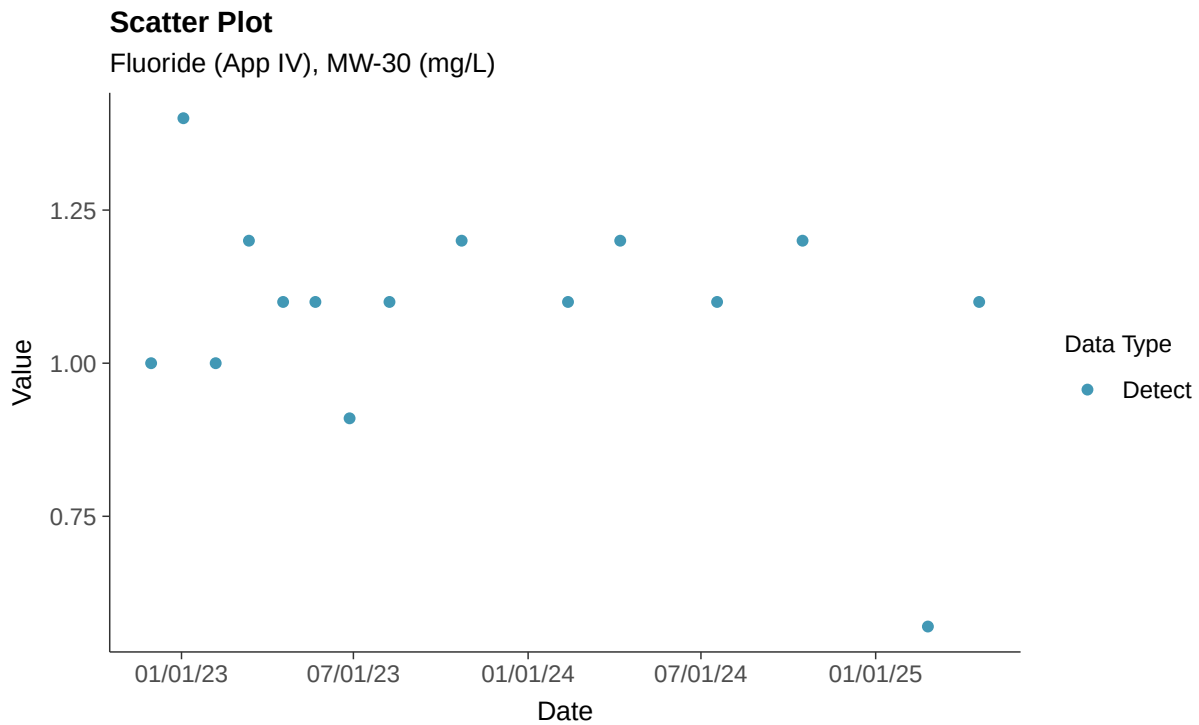


Trend Regression: Piecewise Linear-Linear-Linear
Cobalt, MW-30 (mg/L)



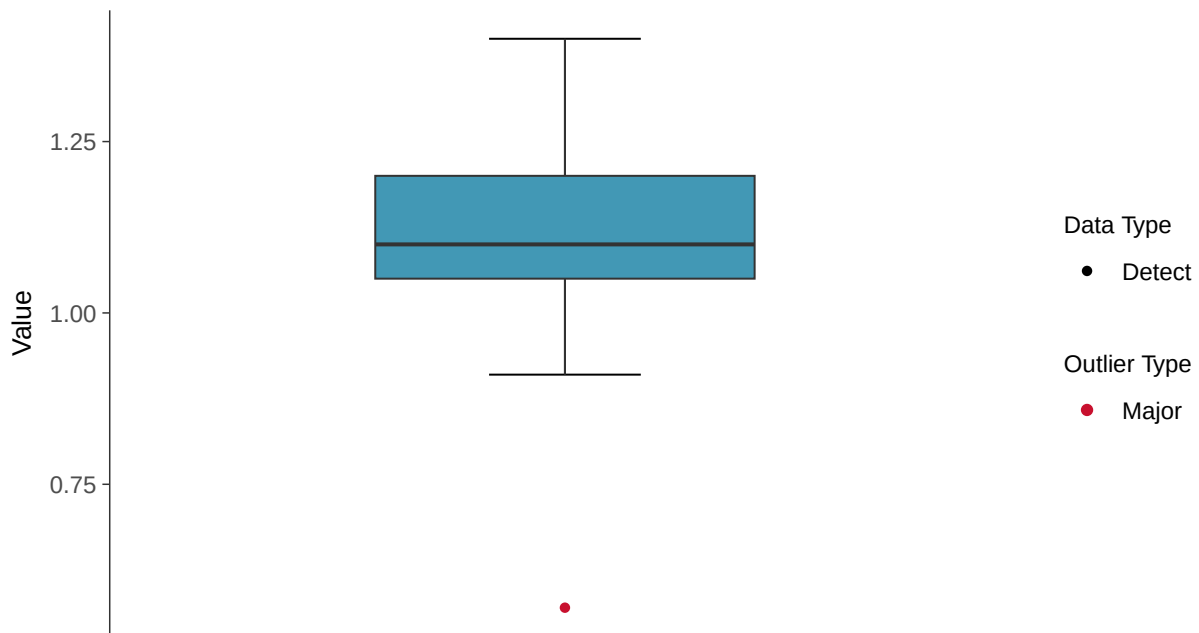
Appendix IV: Fluoride (App IV), MW-30

ID: 40_1_4_113



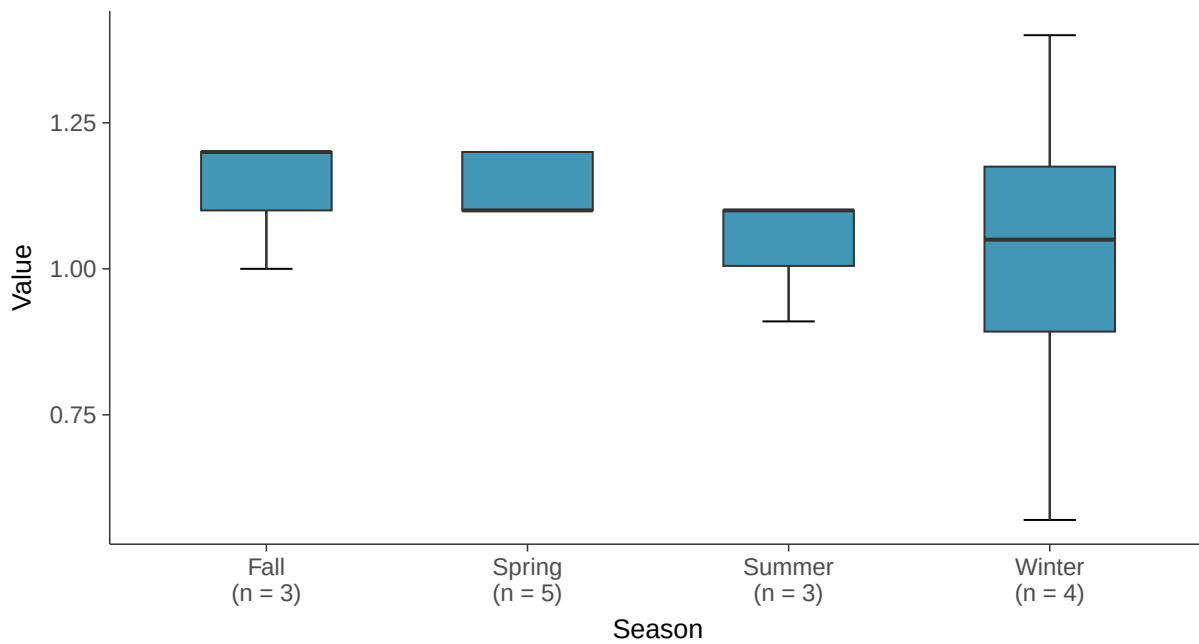
Boxplot

Fluoride (App IV), MW-30 (mg/L)



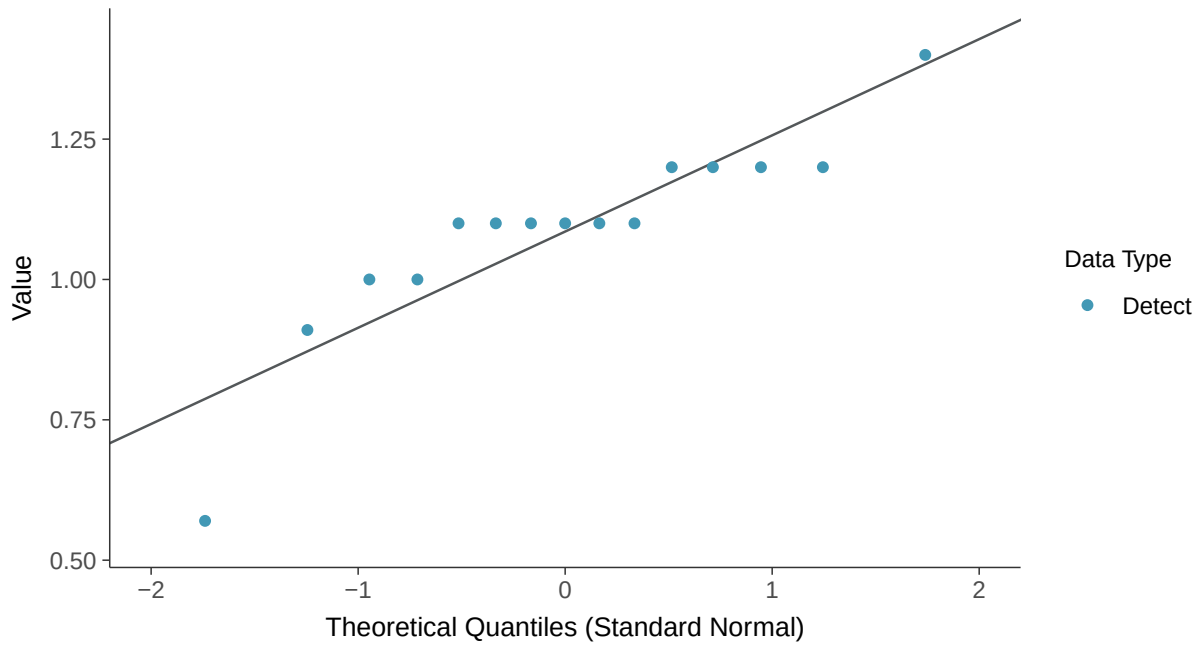
Boxplot by Season

Fluoride (App IV), MW-30 (mg/L)



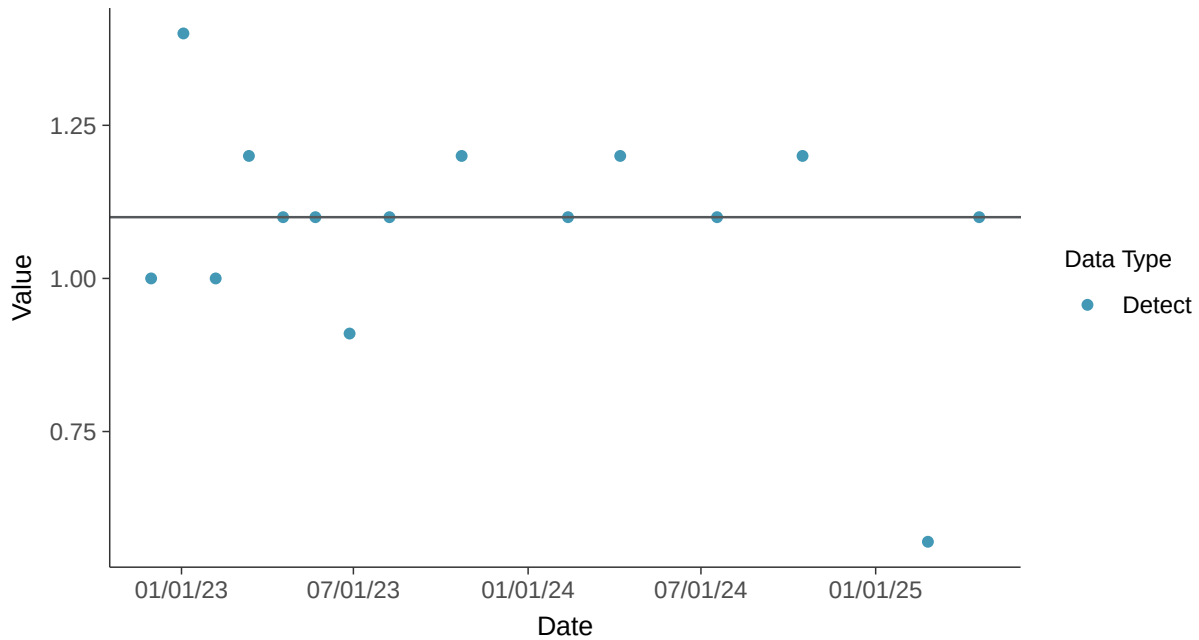
Normal Q-Q plot

Fluoride (App IV), MW-30 (mg/L)



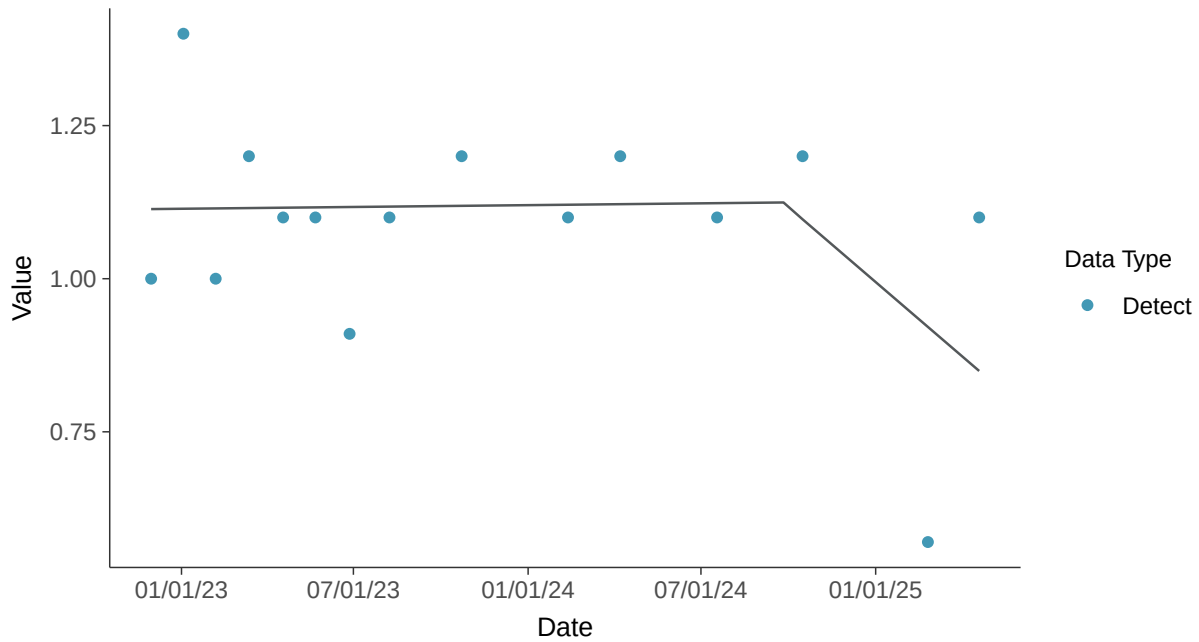
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Fluoride (App IV), MW-30 (mg/L)



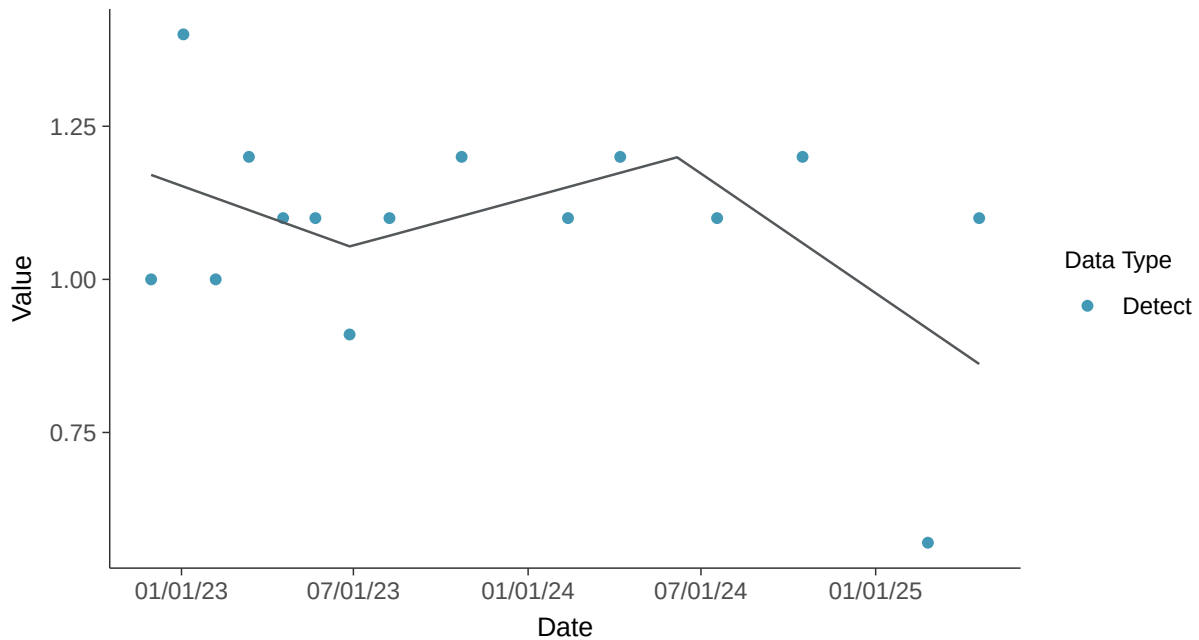
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-30 (mg/L)



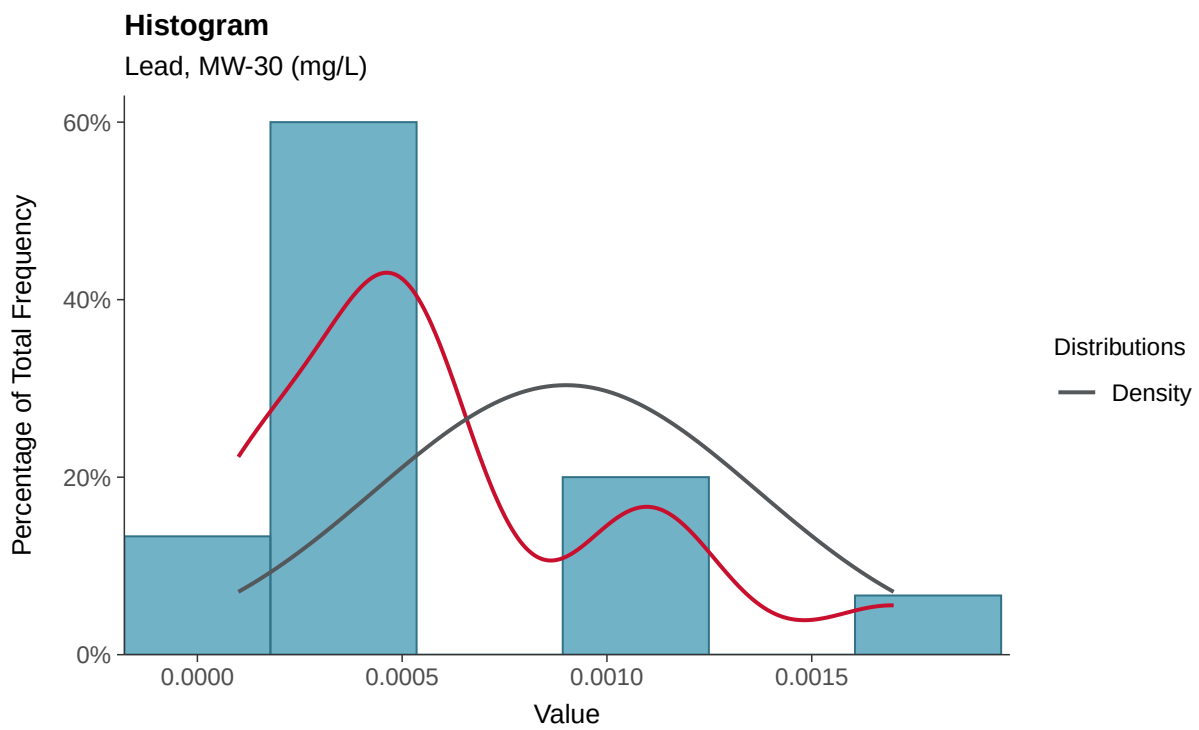
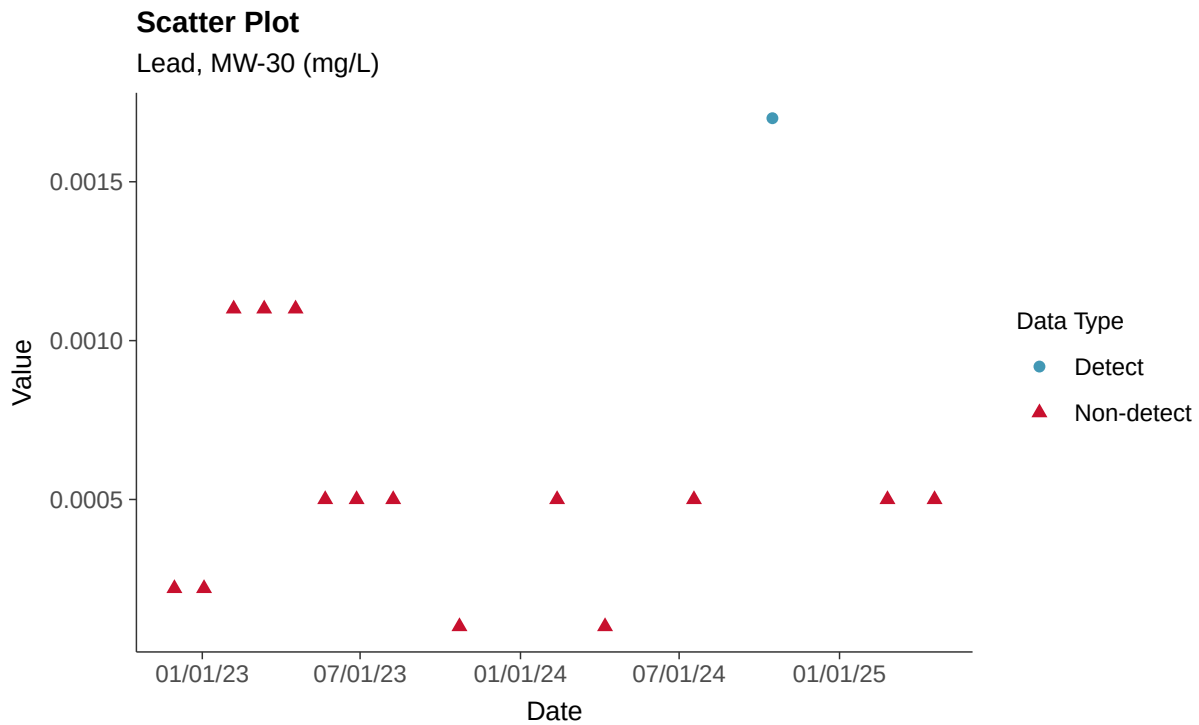
Trend Regression: Piecewise Linear-Linear-Linear

Fluoride (App IV), MW-30 (mg/L)



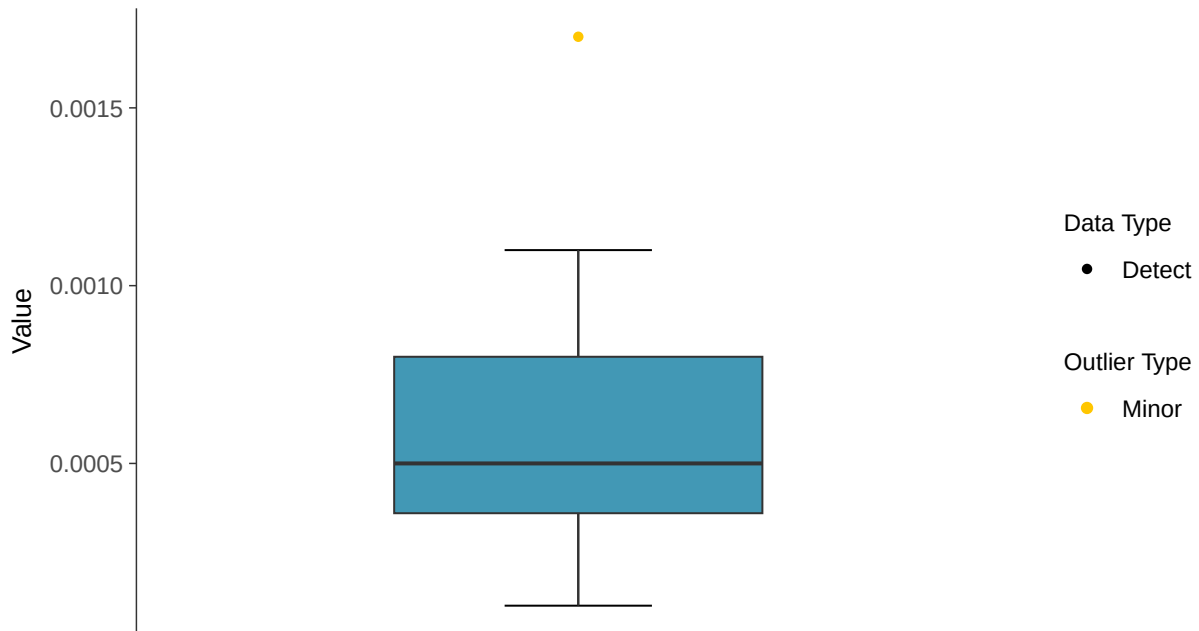
Appendix IV: Lead, MW-30

ID: 40_1_4_115



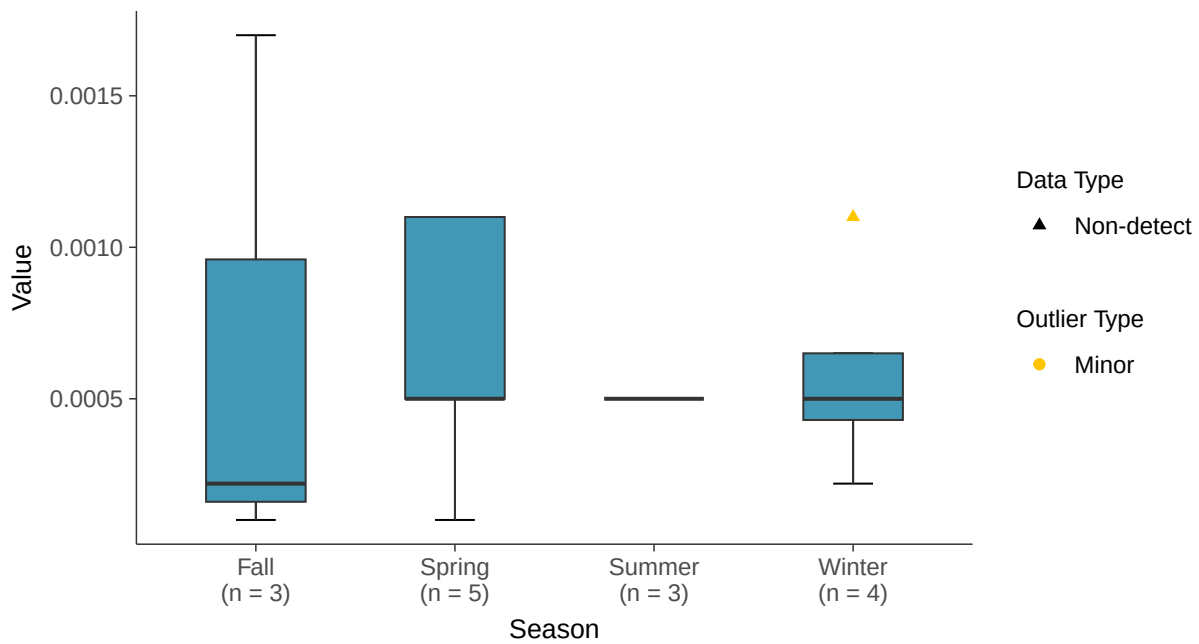
Boxplot

Lead, MW-30 (mg/L)



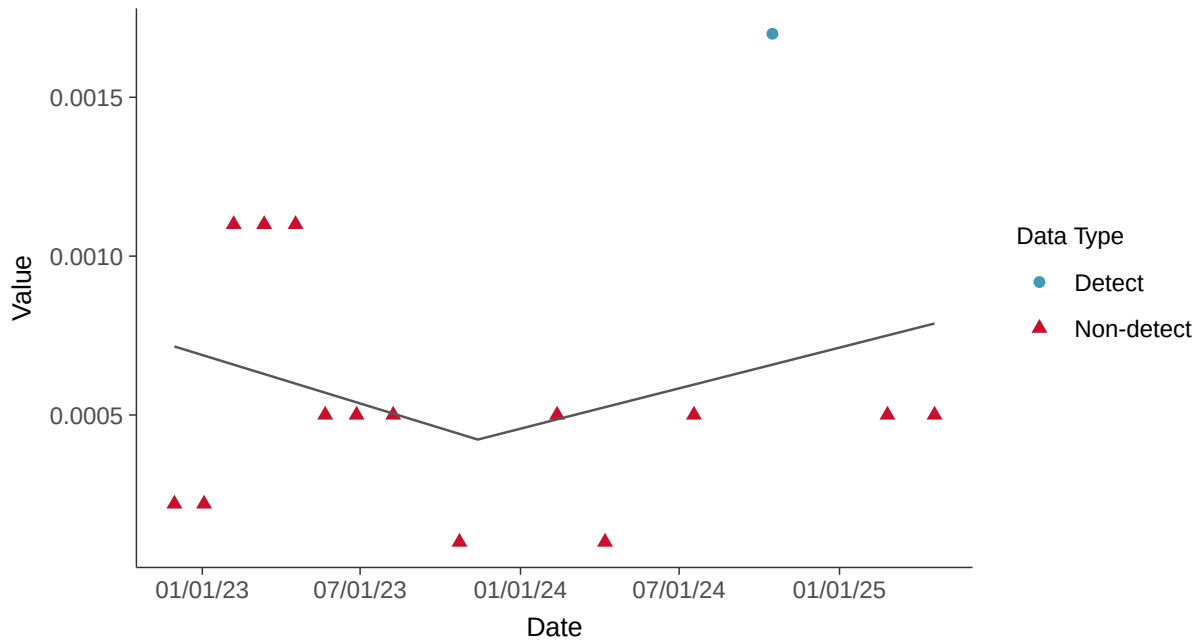
Boxplot by Season

Lead, MW-30 (mg/L)



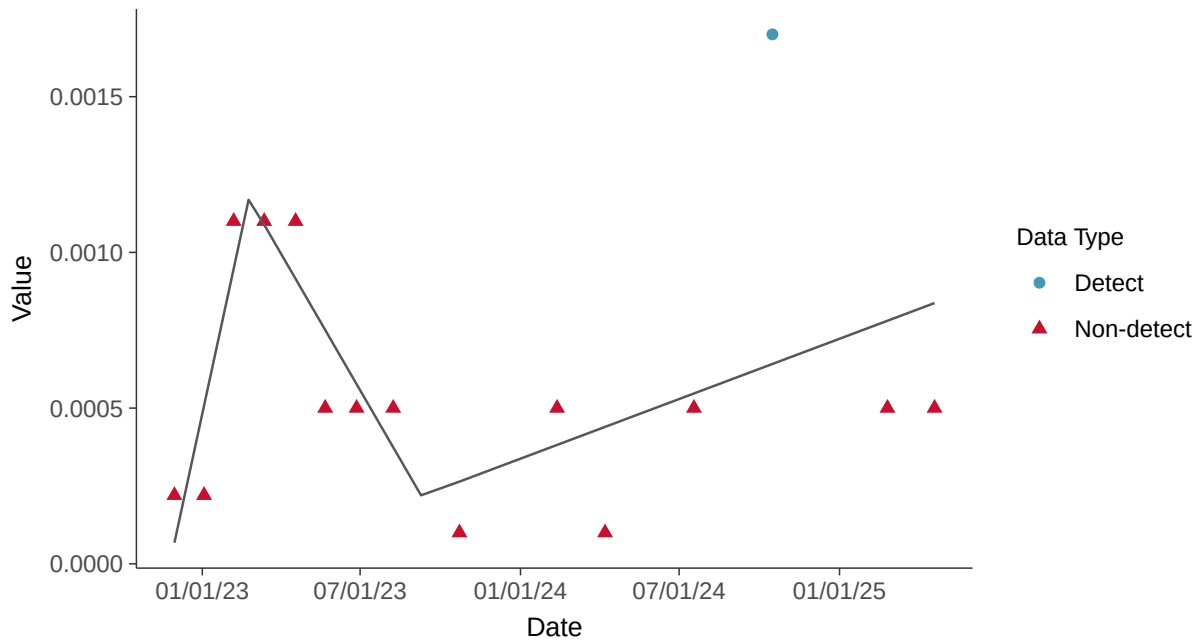
Trend Regression: Piecewise Linear-Linear

Lead, MW-30 (mg/L)



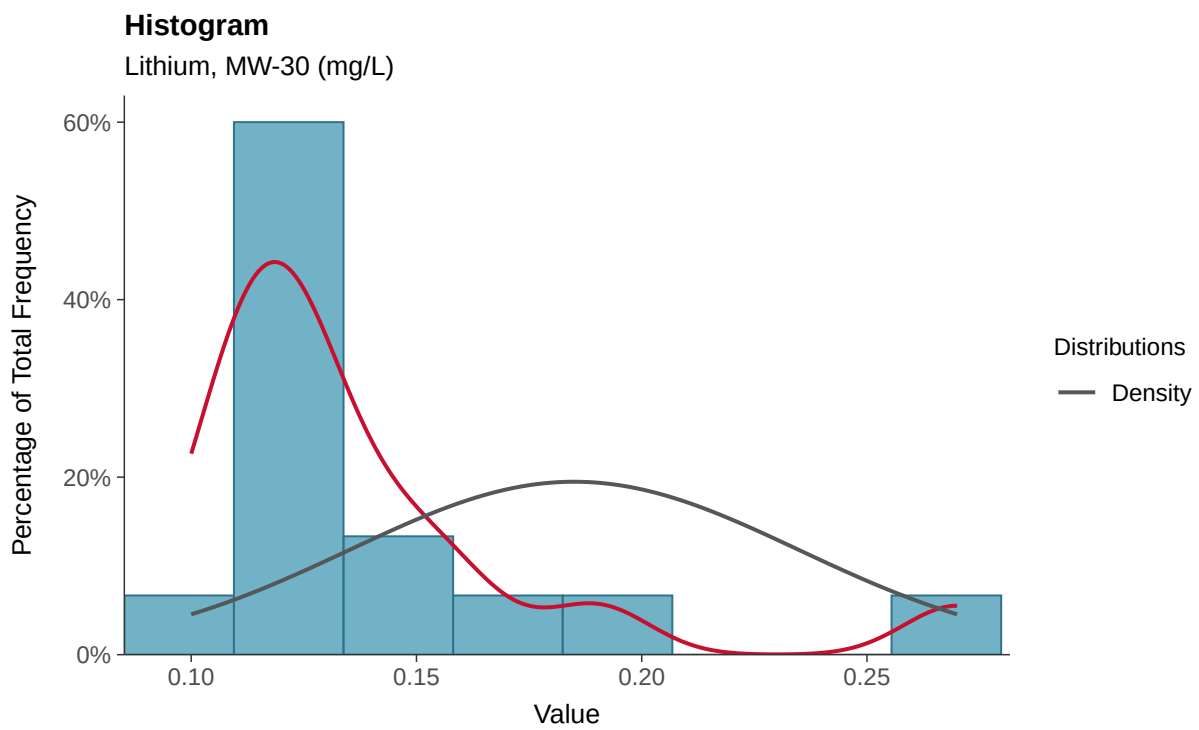
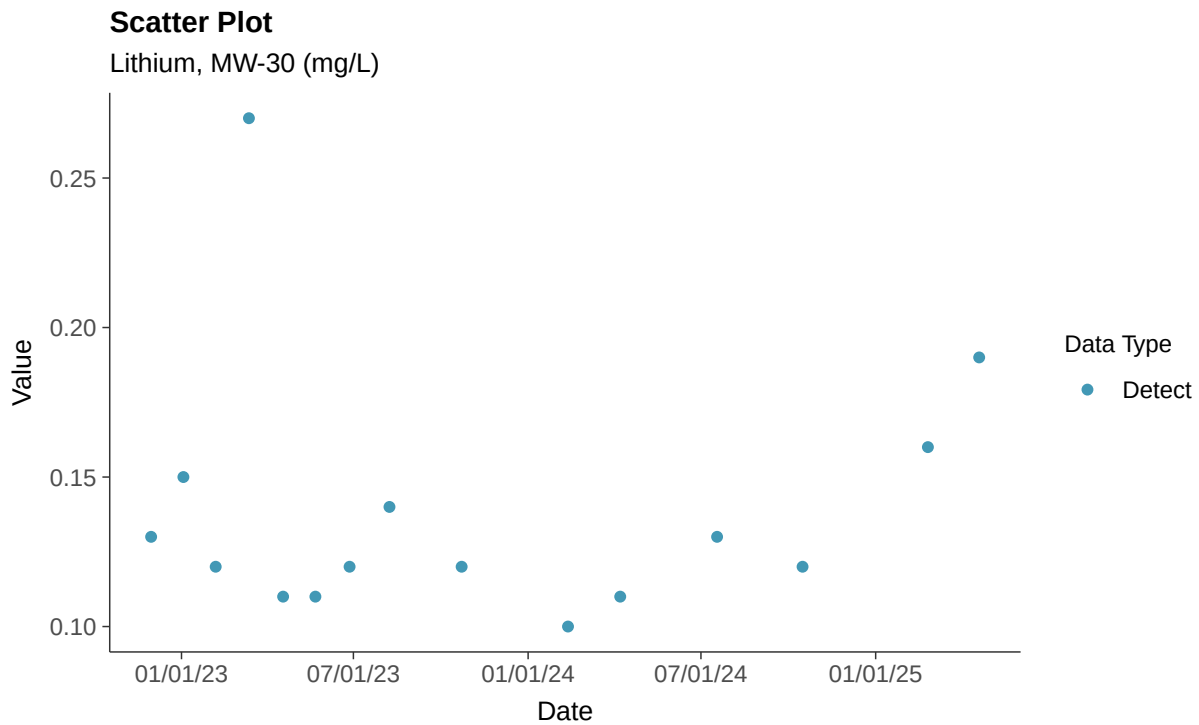
Trend Regression: Piecewise Linear-Linear-Linear

Lead, MW-30 (mg/L)



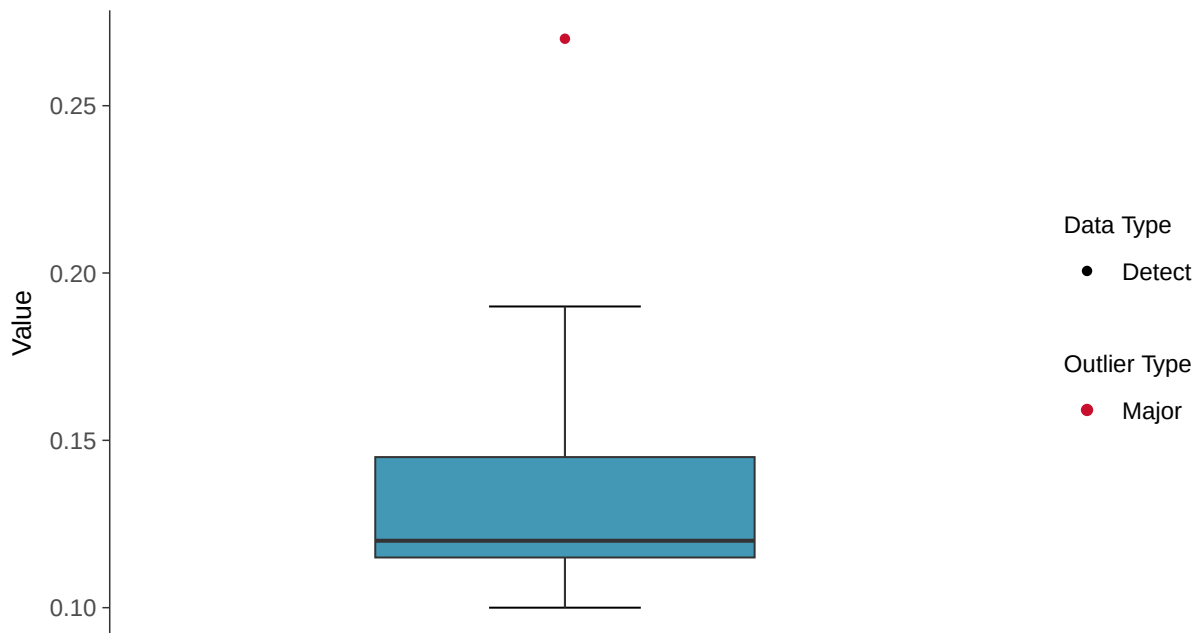
Appendix IV: Lithium, MW-30

ID: 40_1_4_116



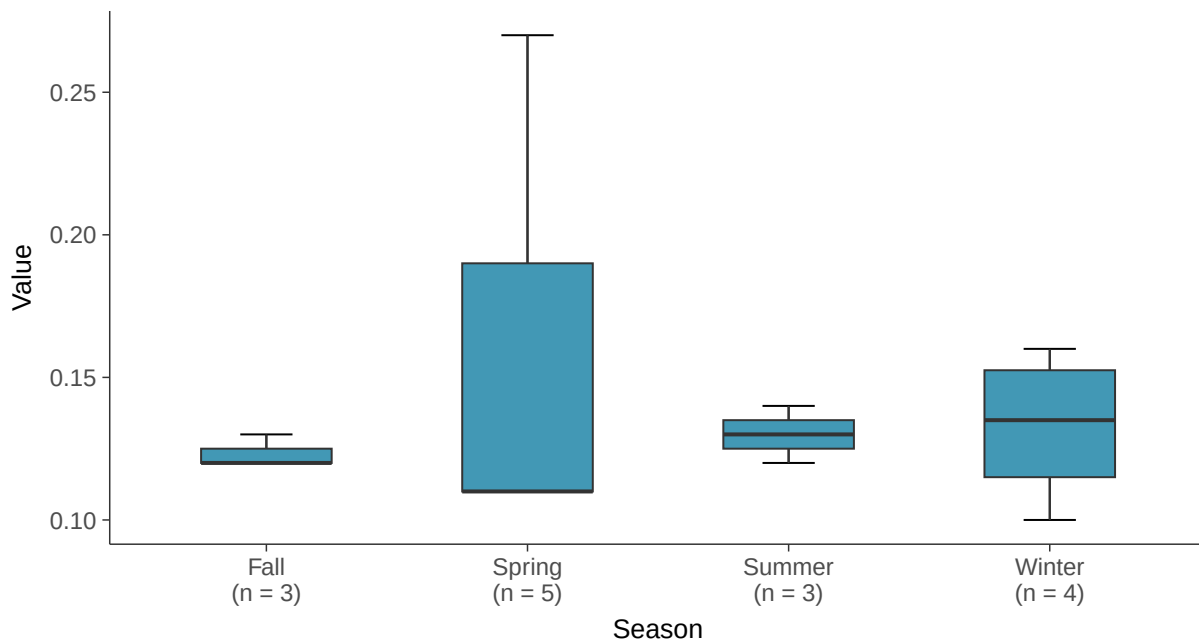
Boxplot

Lithium, MW-30 (mg/L)

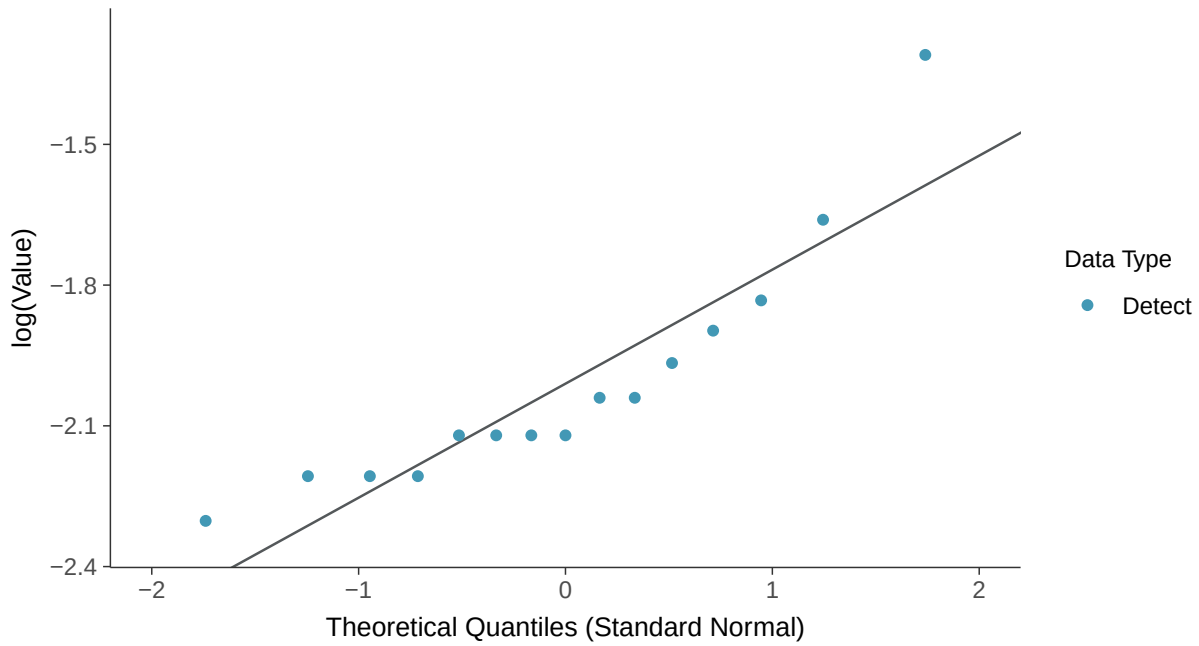


Boxplot by Season

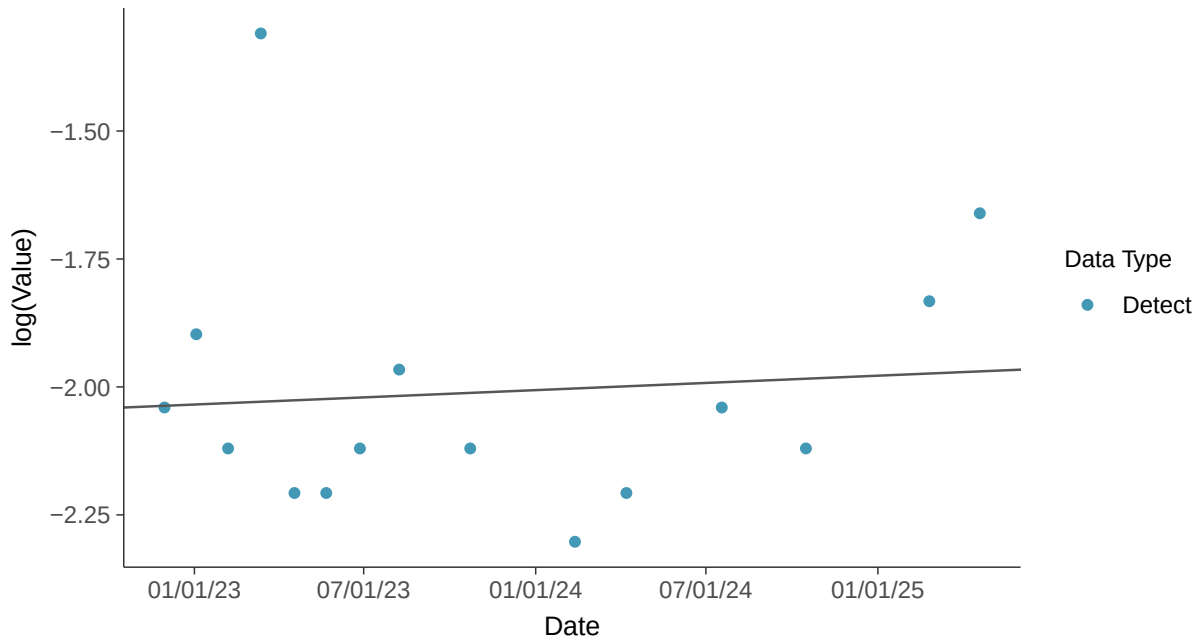
Lithium, MW-30 (mg/L)



Lognormal Q-Q plot
Lithium, MW-30 (mg/L)

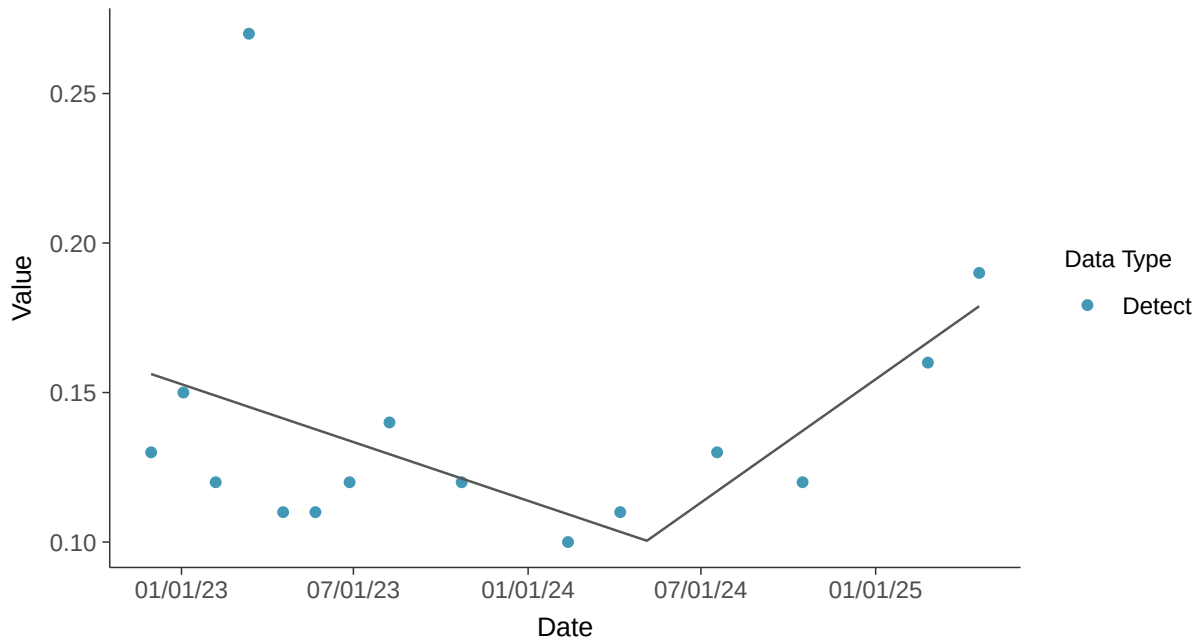


Trend Regression: Lognormal MLE
Lithium, MW-30 (mg/L)



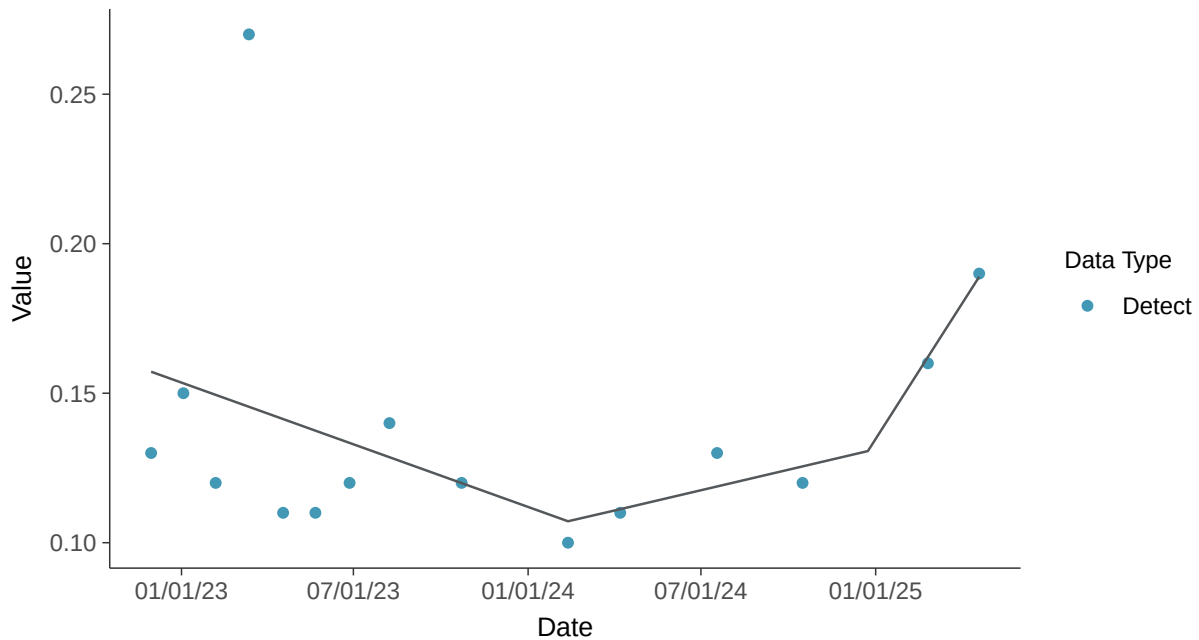
Trend Regression: Piecewise Linear-Linear

Lithium, MW-30 (mg/L)



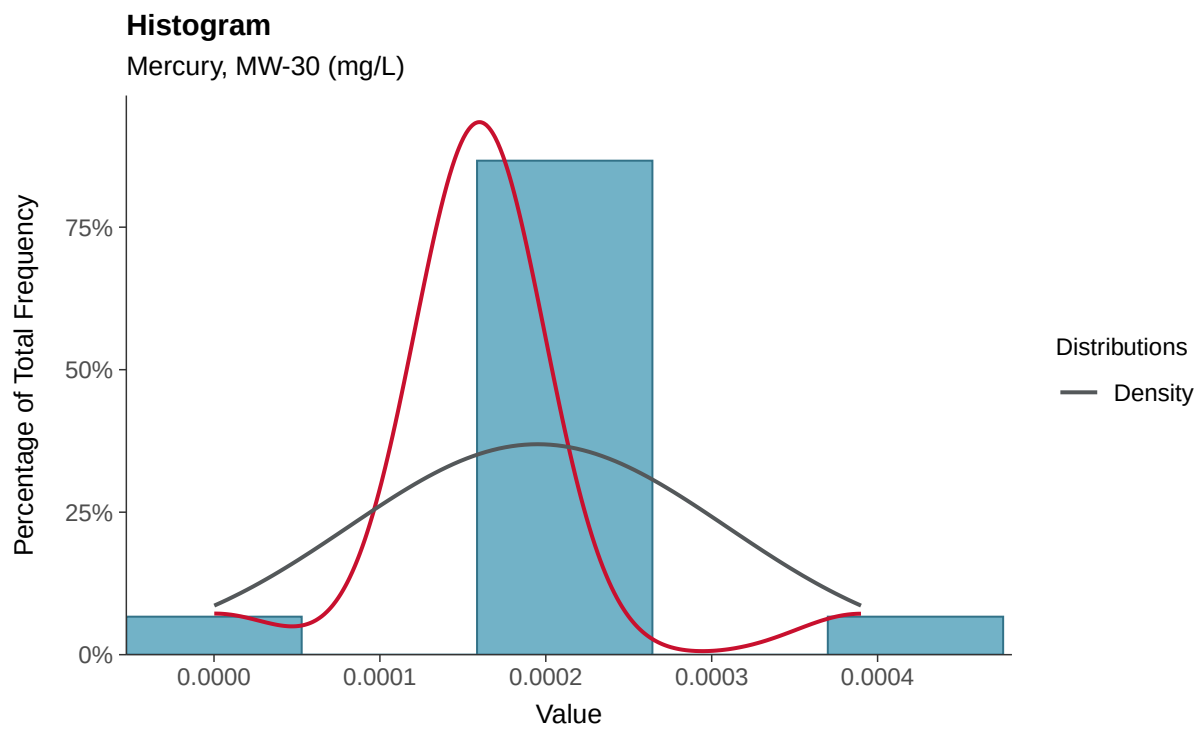
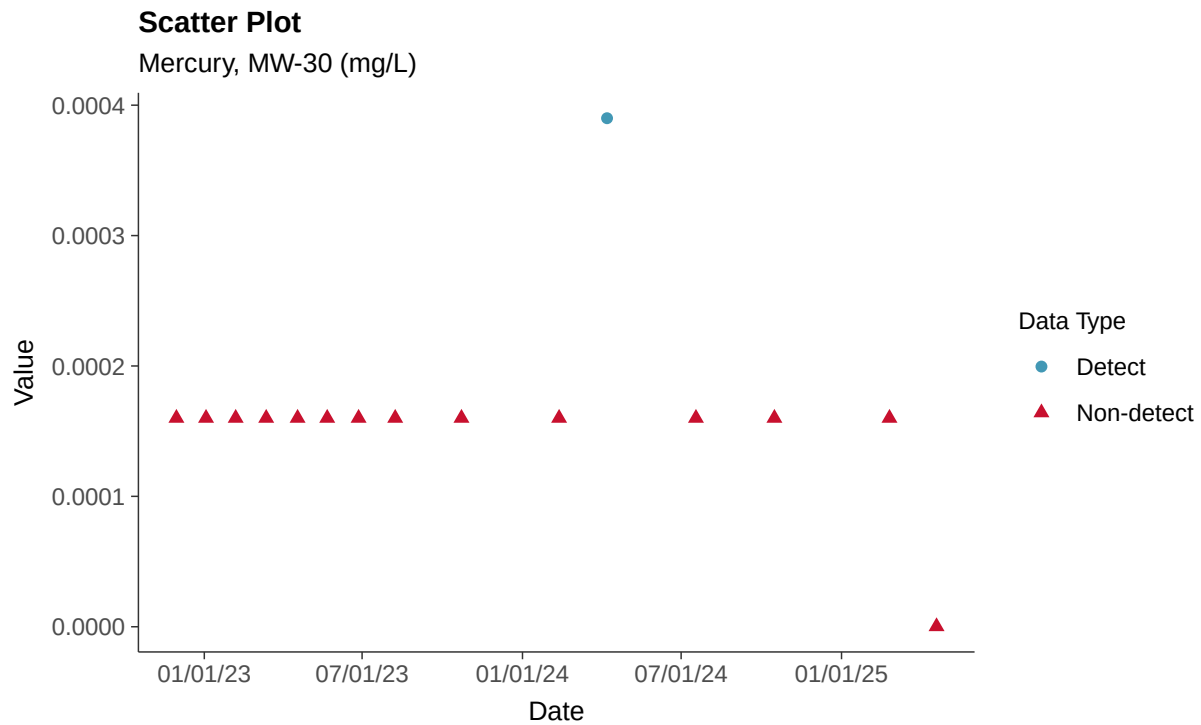
Trend Regression: Piecewise Linear-Linear-Linear

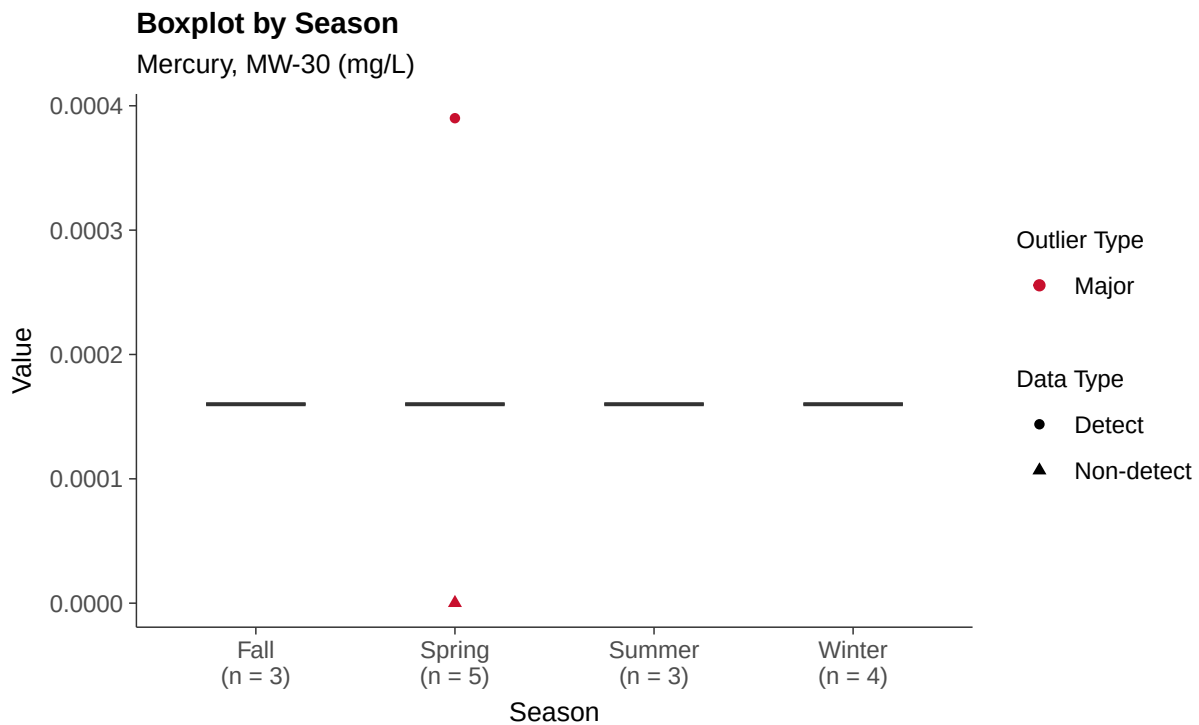
Lithium, MW-30 (mg/L)



Appendix IV: Mercury, MW-30

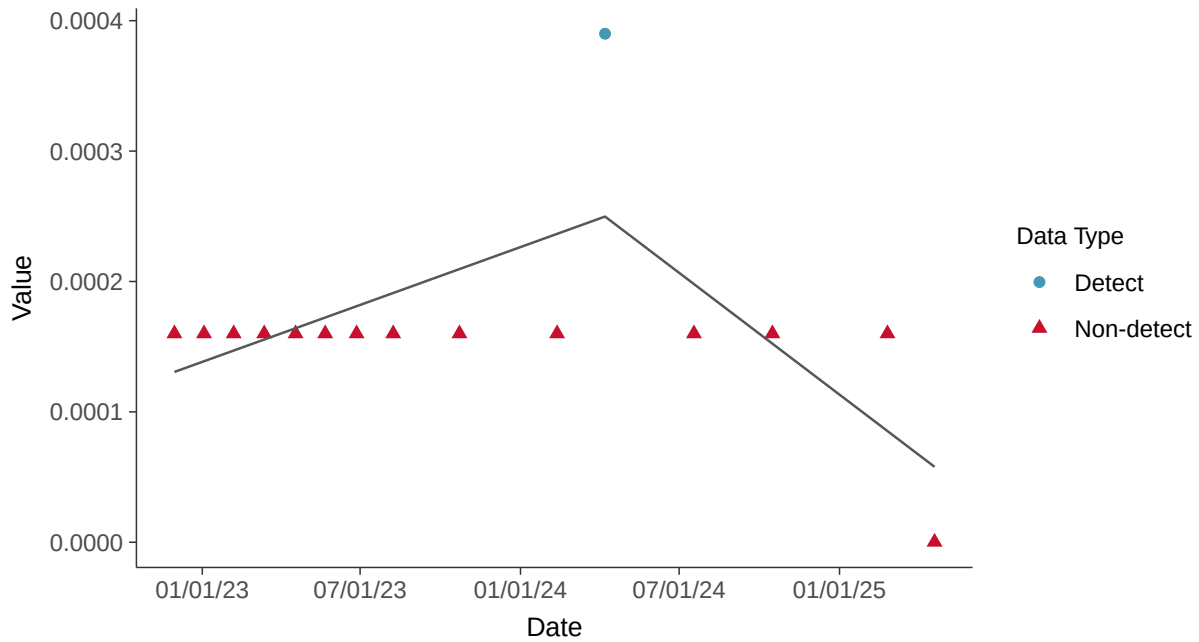
ID: 40_1_4_117





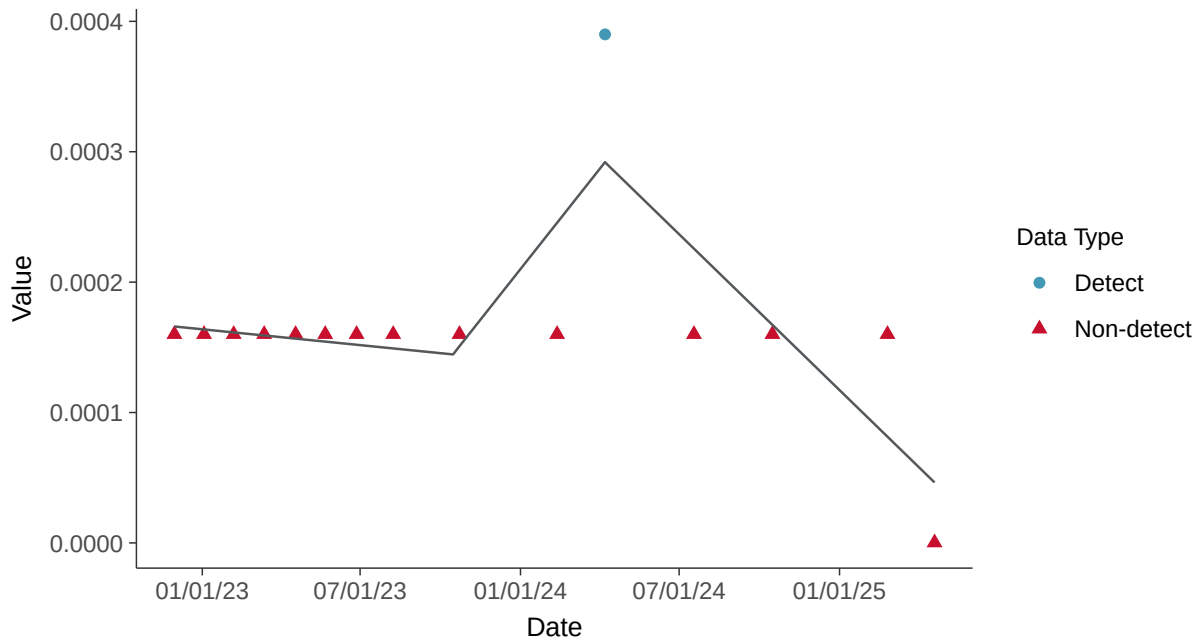
Trend Regression: Piecewise Linear-Linear

Mercury, MW-30 (mg/L)



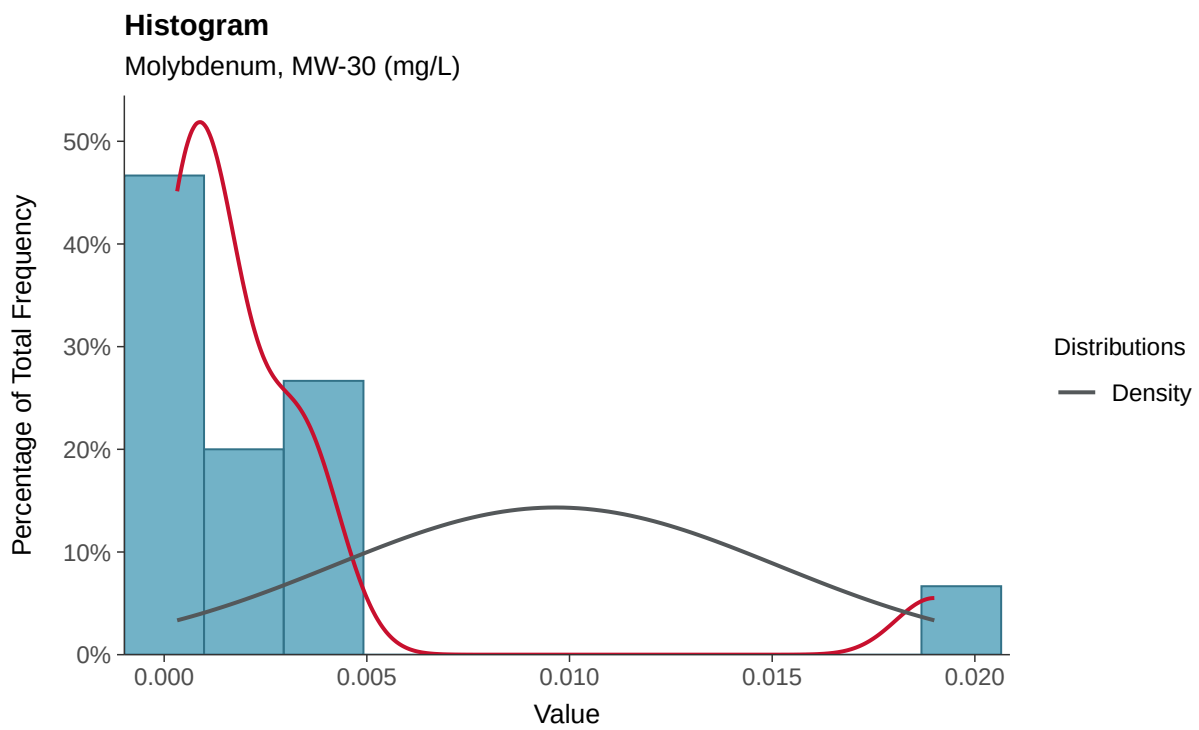
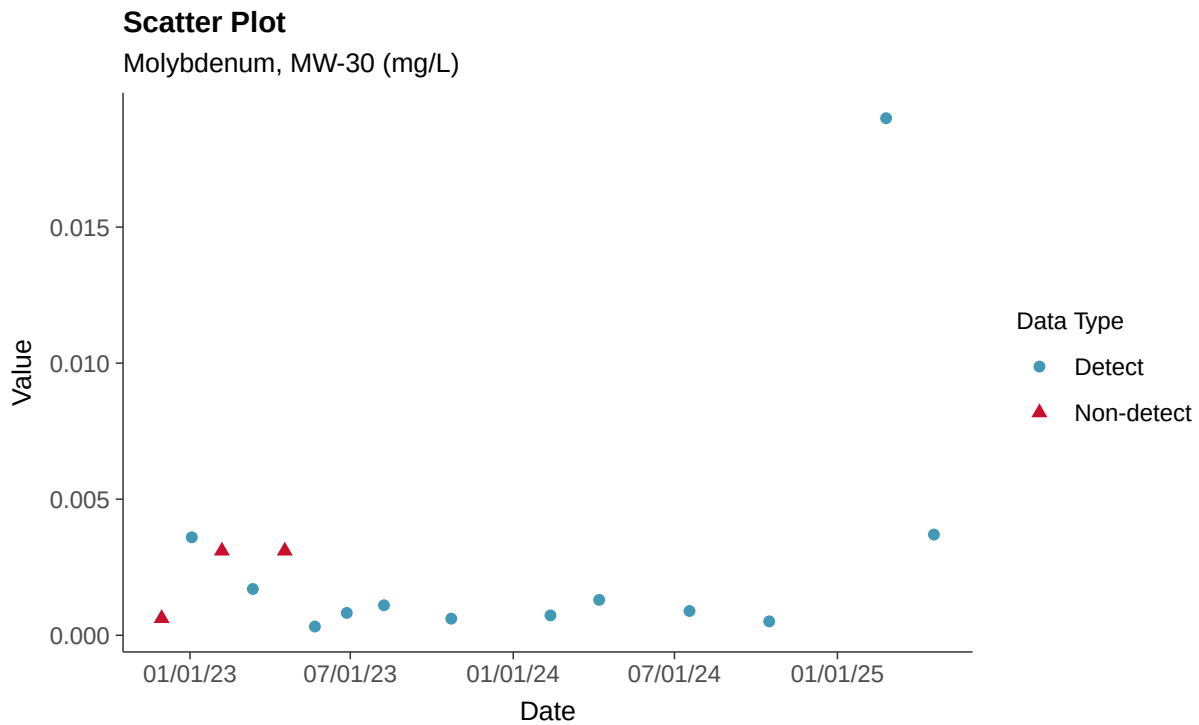
Trend Regression: Piecewise Linear-Linear-Linear

Mercury, MW-30 (mg/L)



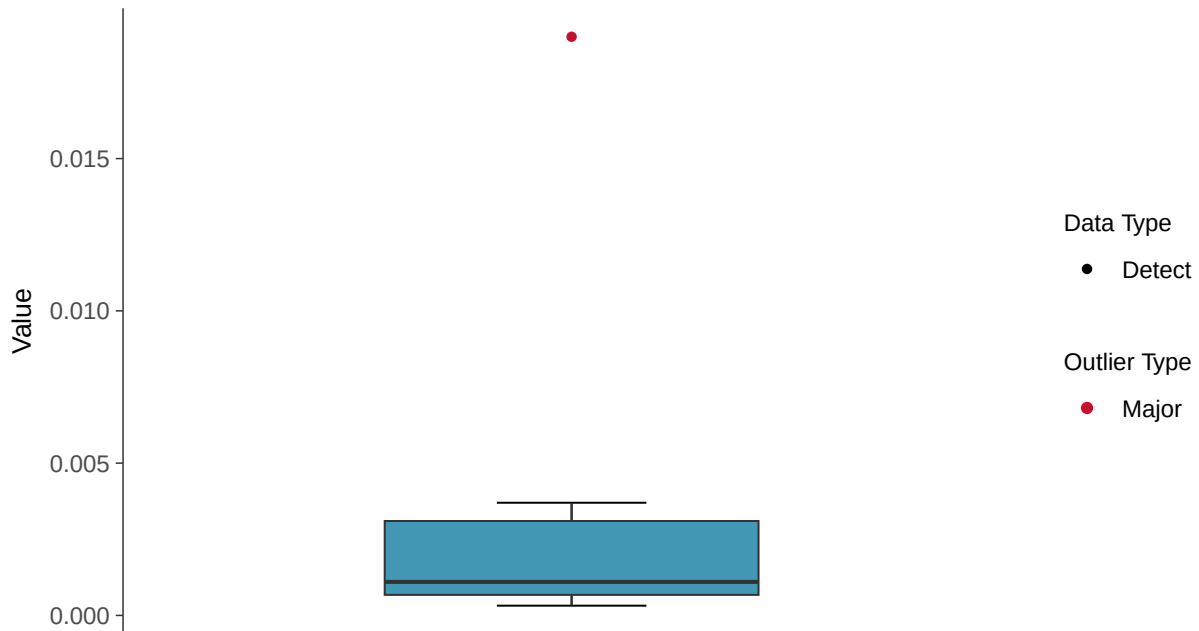
Appendix IV: Molybdenum, MW-30

ID: 40_1_4_118



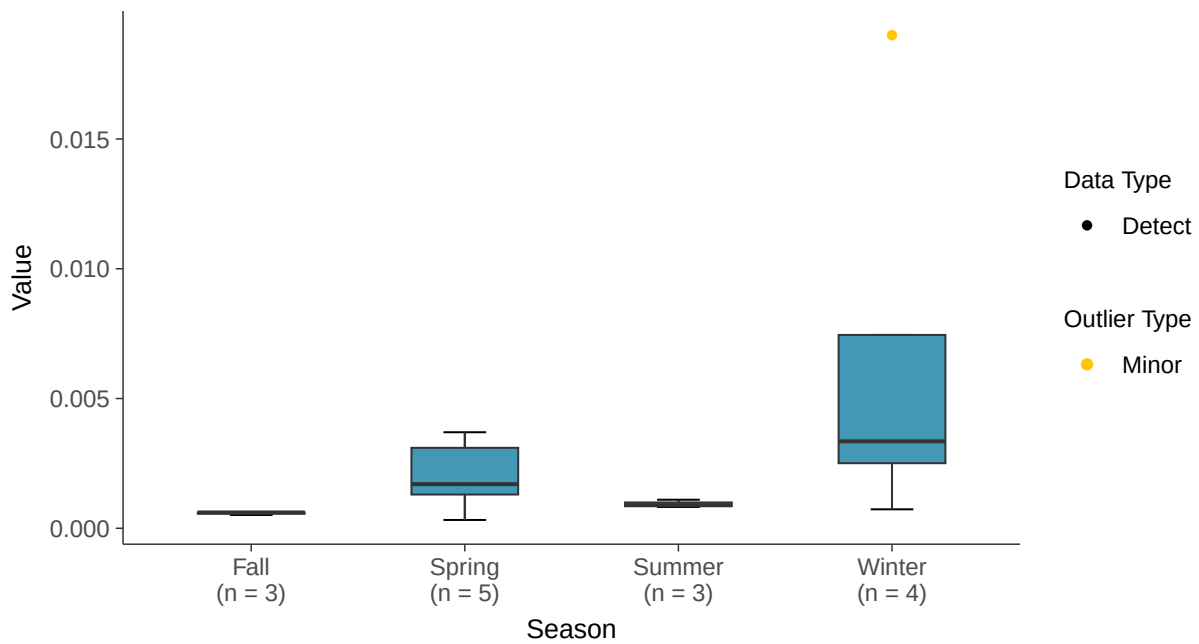
Boxplot

Molybdenum, MW-30 (mg/L)



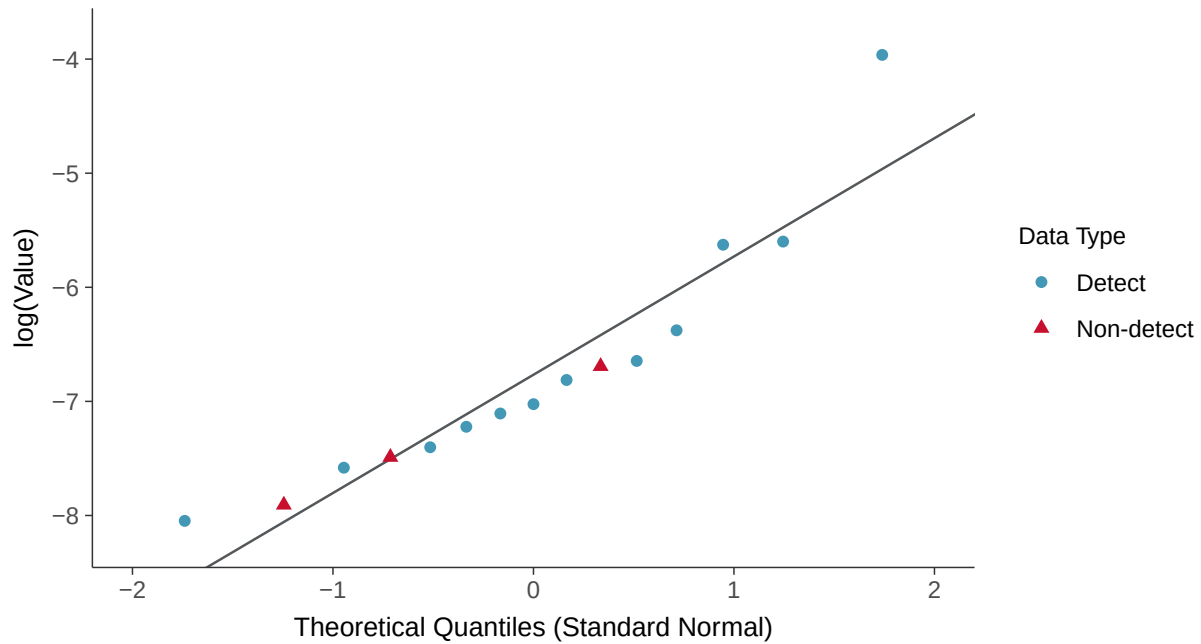
Boxplot by Season

Molybdenum, MW-30 (mg/L)



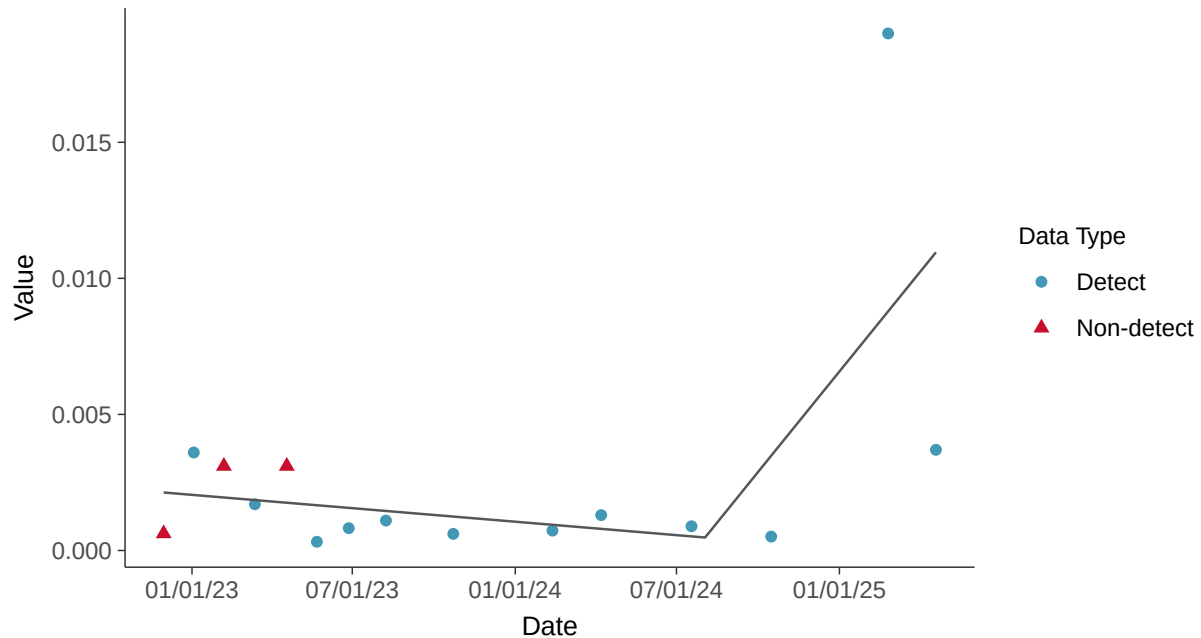
Lognormal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-30 (mg/L)



Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-30 (mg/L)

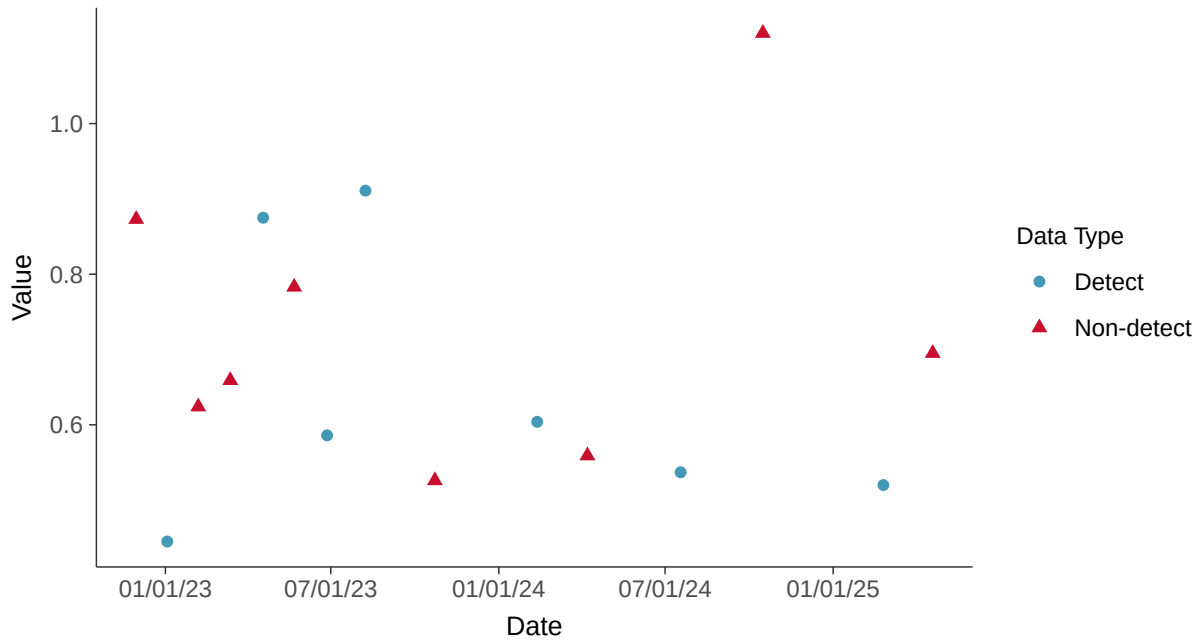


Appendix IV: Radium 226 and 228, MW-30

ID: 40_1_4_121

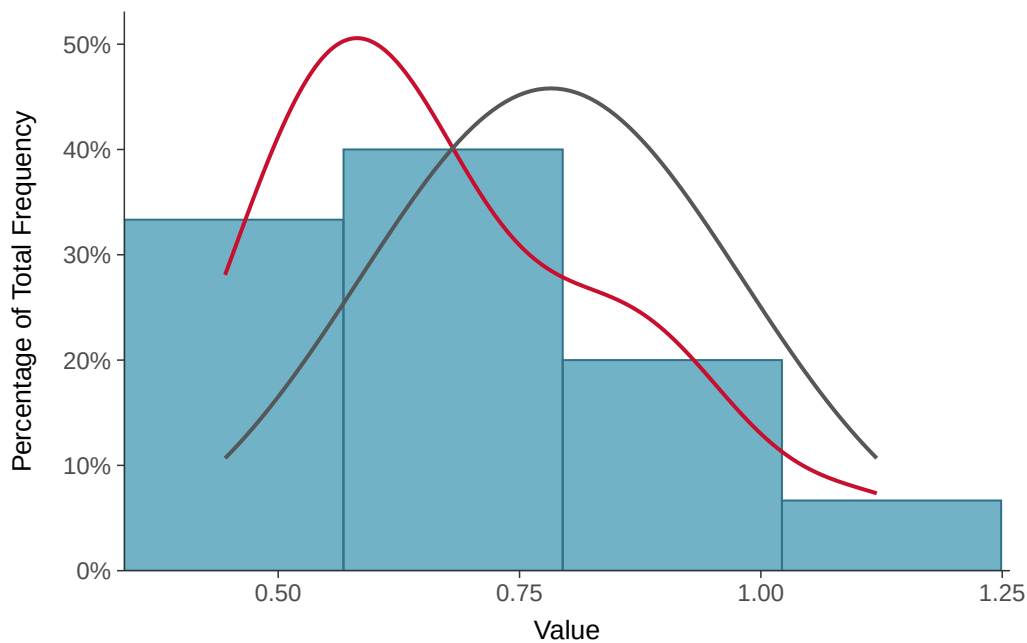
Scatter Plot

Radium 226 and 228, MW-30 (pCi/L)



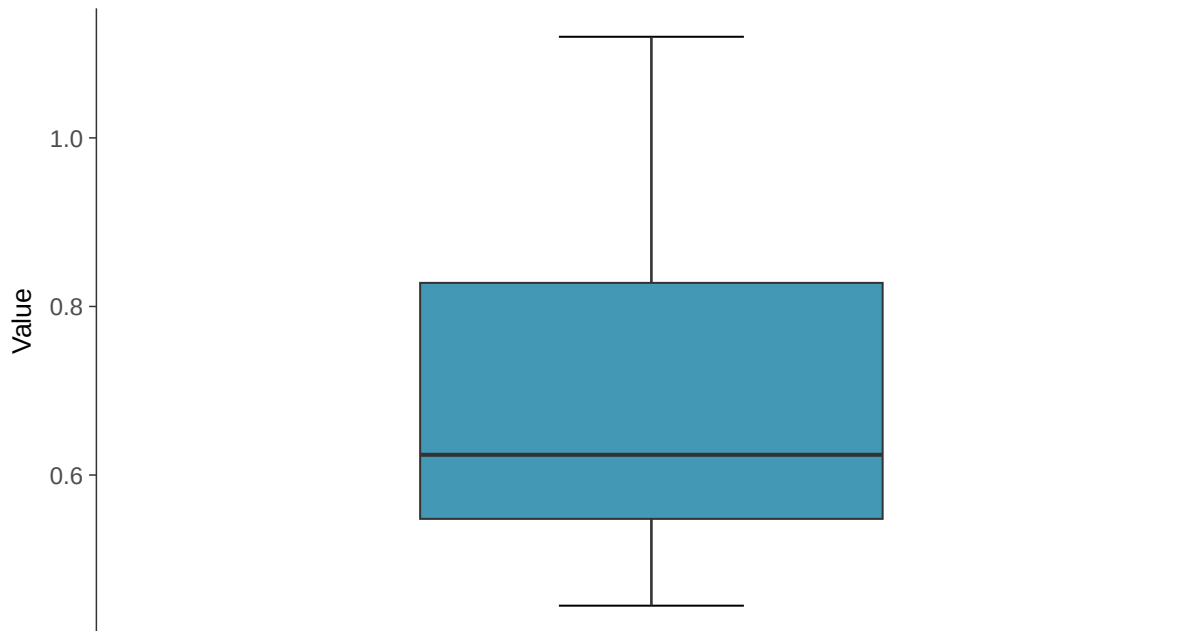
Histogram

Radium 226 and 228, MW-30 (pCi/L)



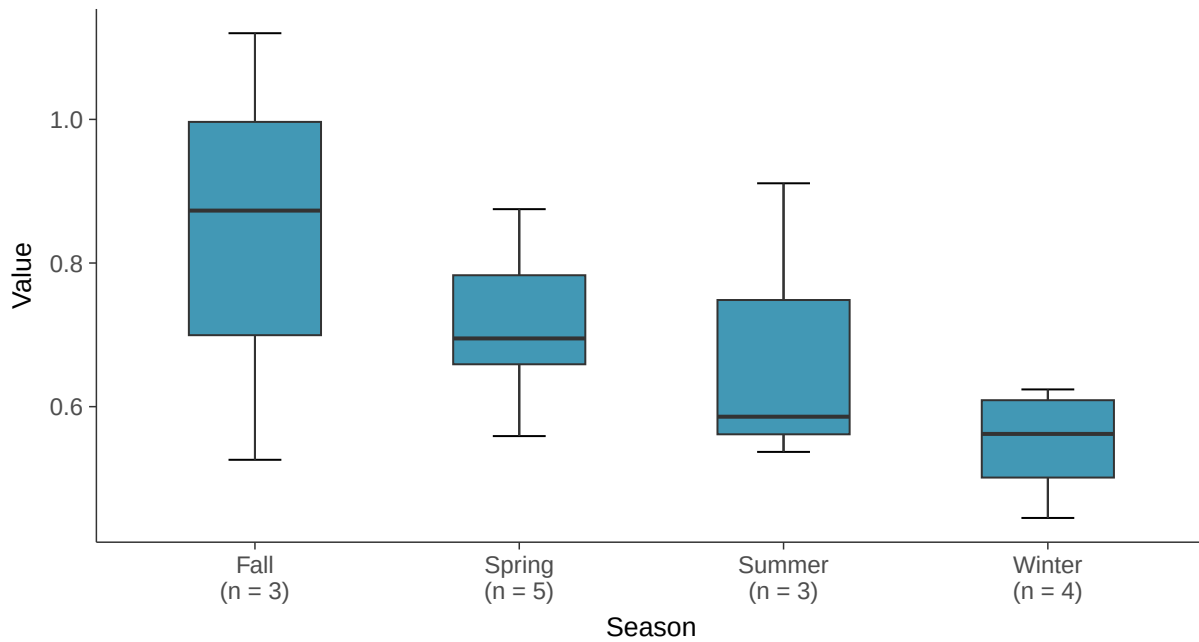
Boxplot

Radium 226 and 228, MW-30 (pCi/L)



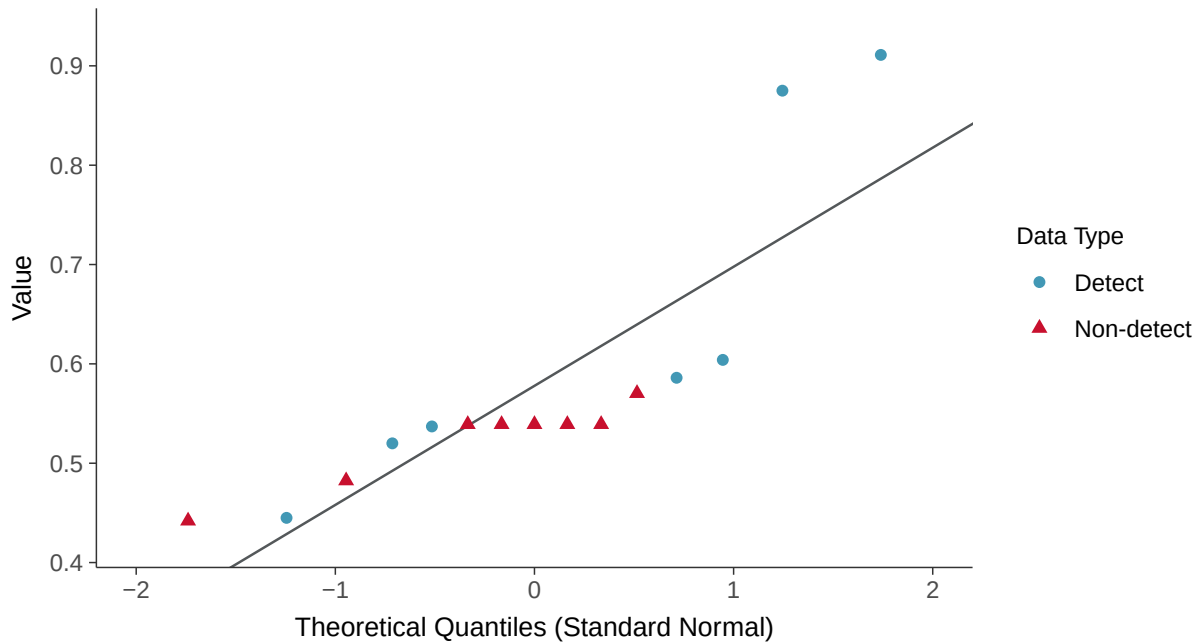
Boxplot by Season

Radium 226 and 228, MW-30 (pCi/L)



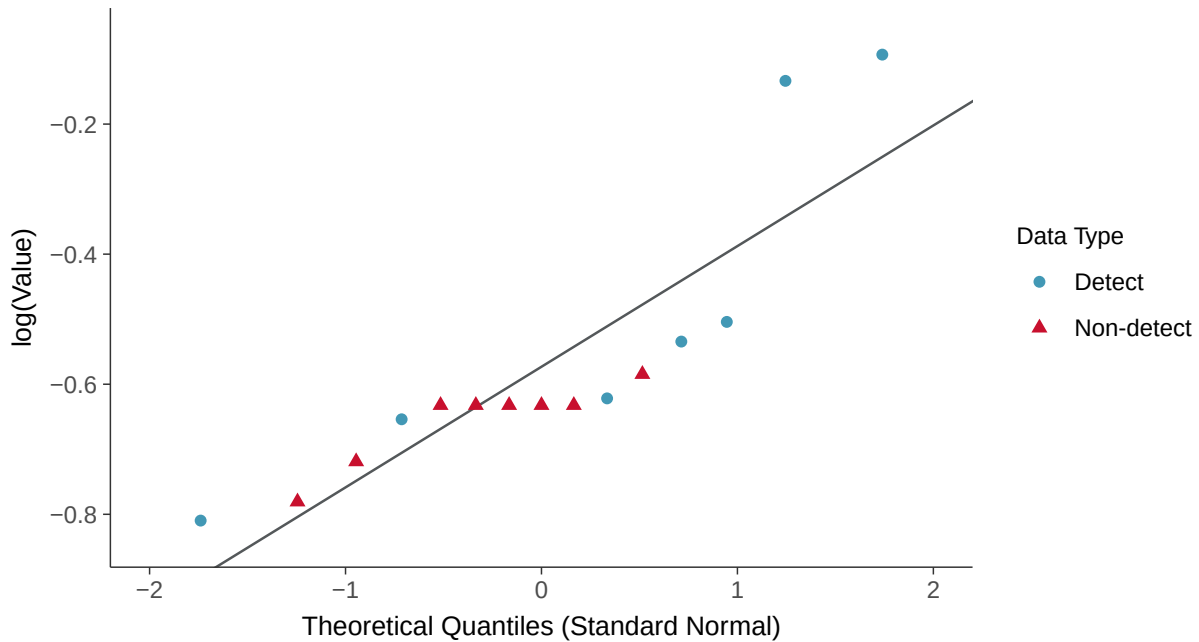
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-30 (pCi/L)



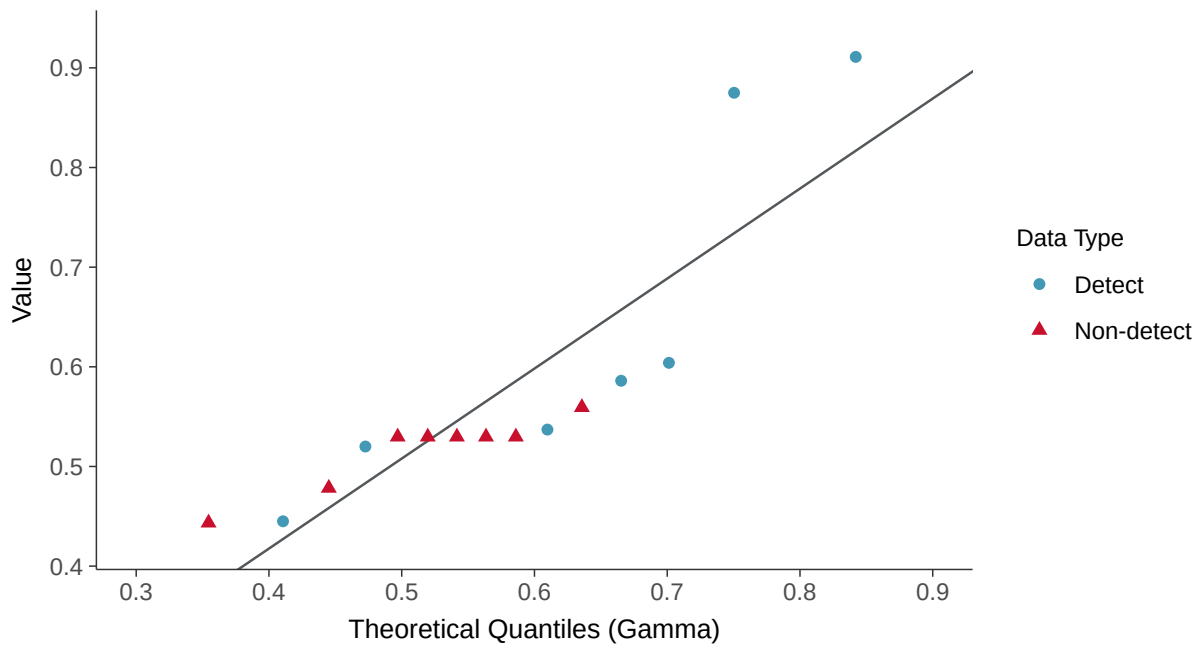
Lognormal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-30 (pCi/L)



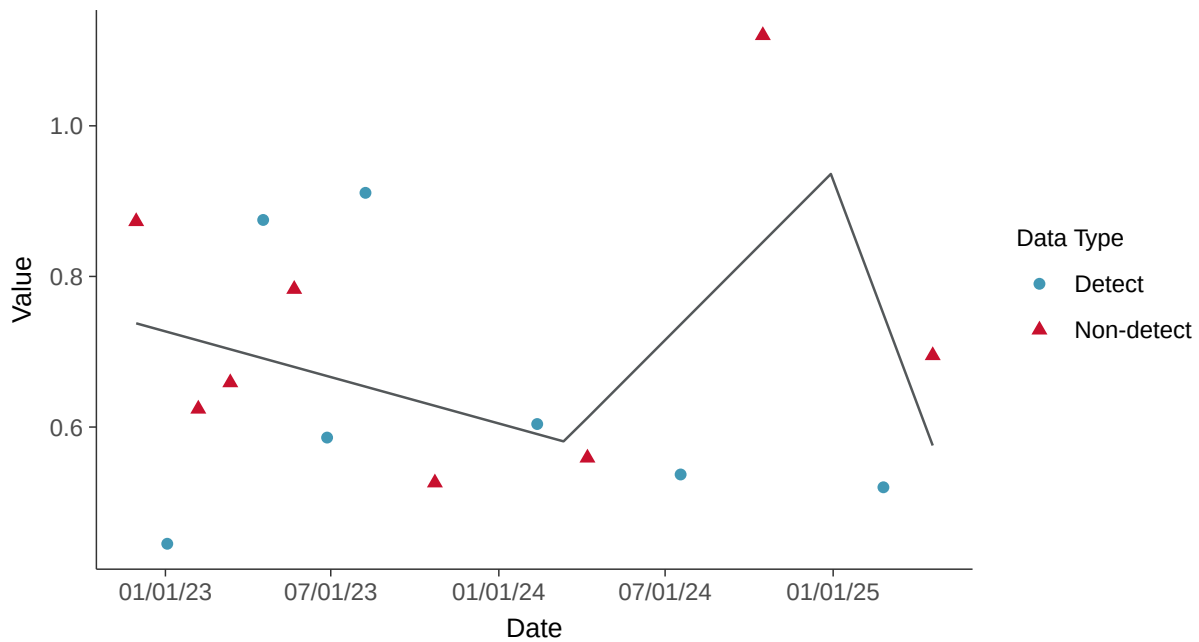
Gamma Q-Q plot using ROS Imputed Estimates

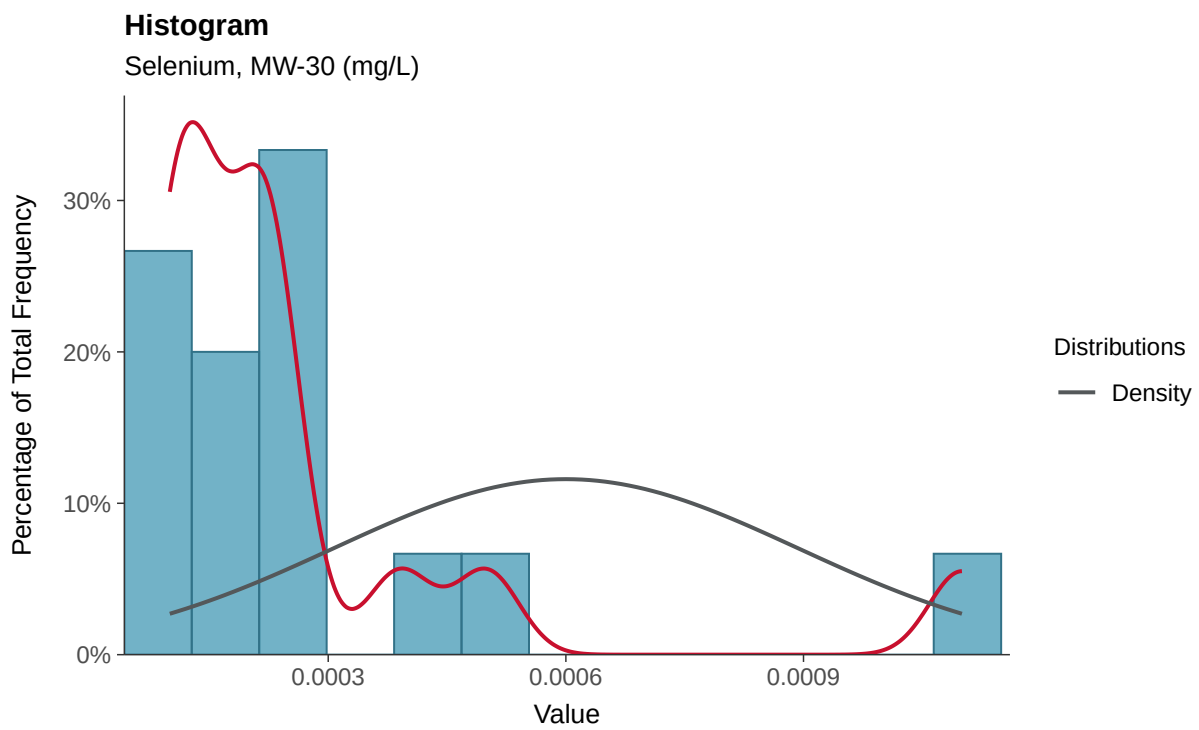
Radium 226 and 228, MW-30 (pCi/L)



Trend Regression: Piecewise Linear-Linear-Linear

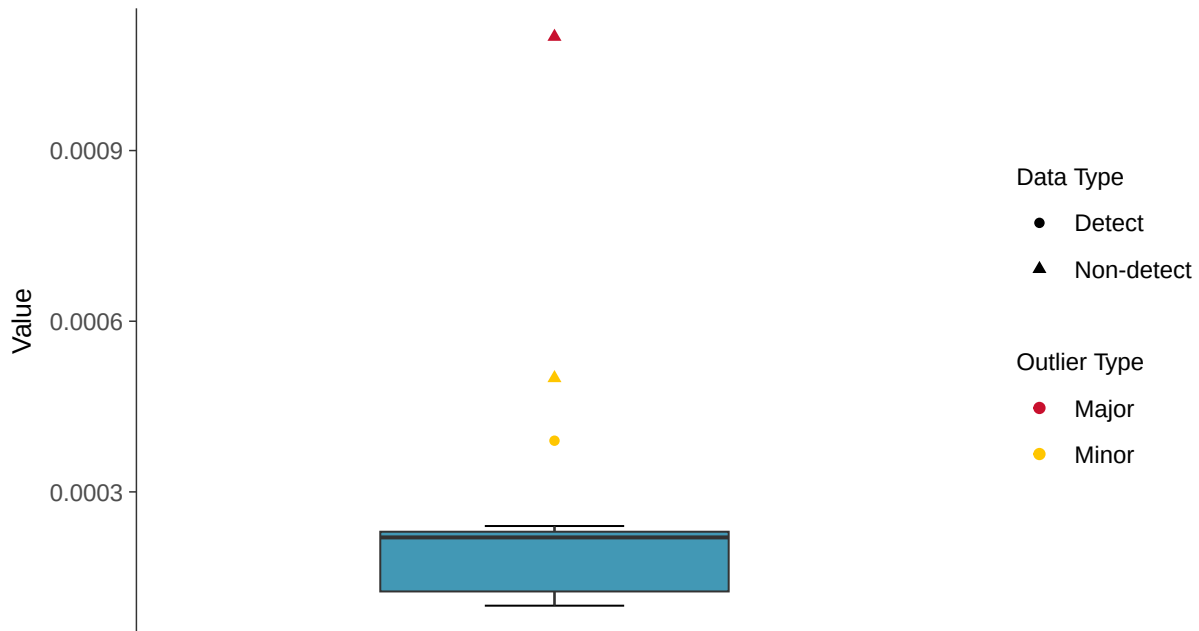
Radium 226 and 228, MW-30 (pCi/L)





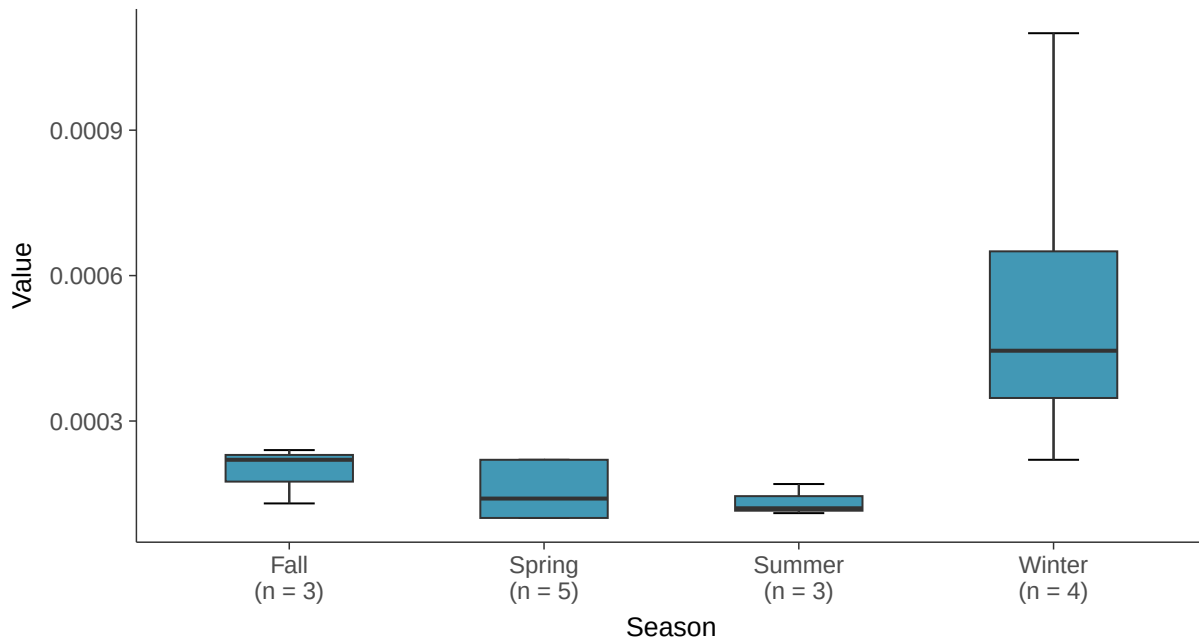
Boxplot

Selenium, MW-30 (mg/L)



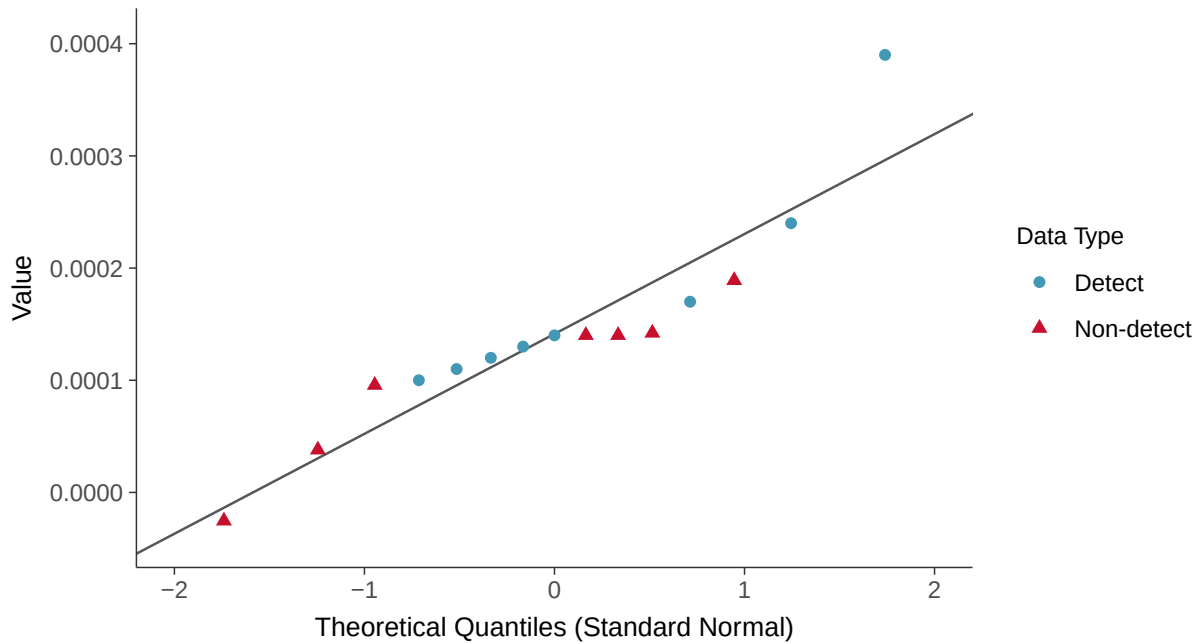
Boxplot by Season

Selenium, MW-30 (mg/L)



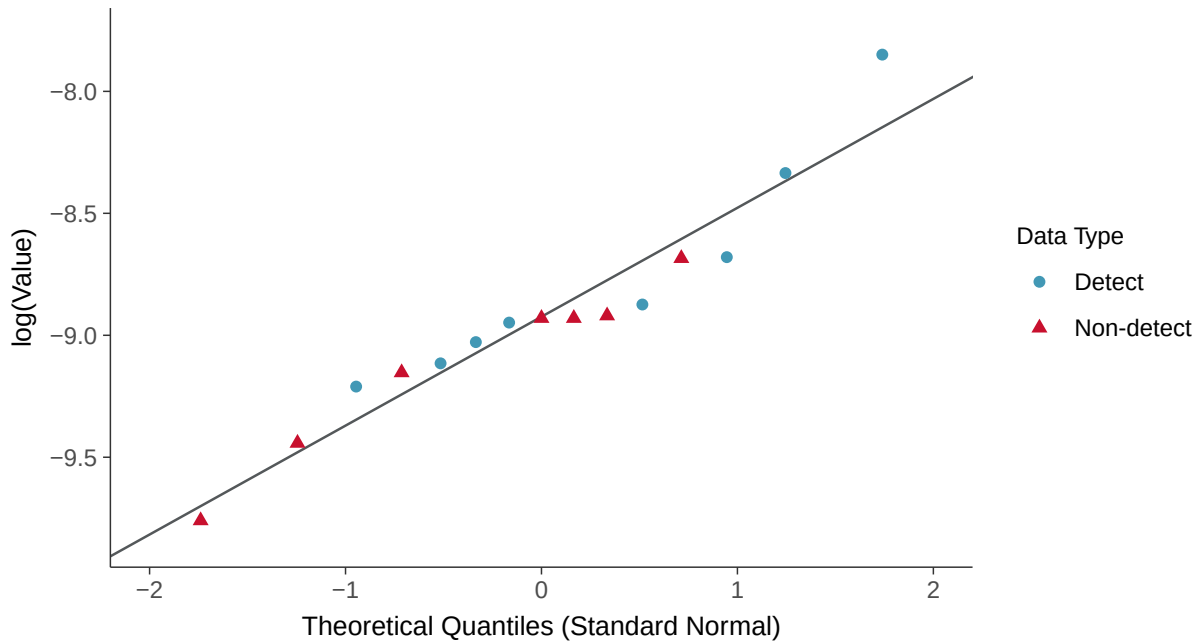
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-30 (mg/L)



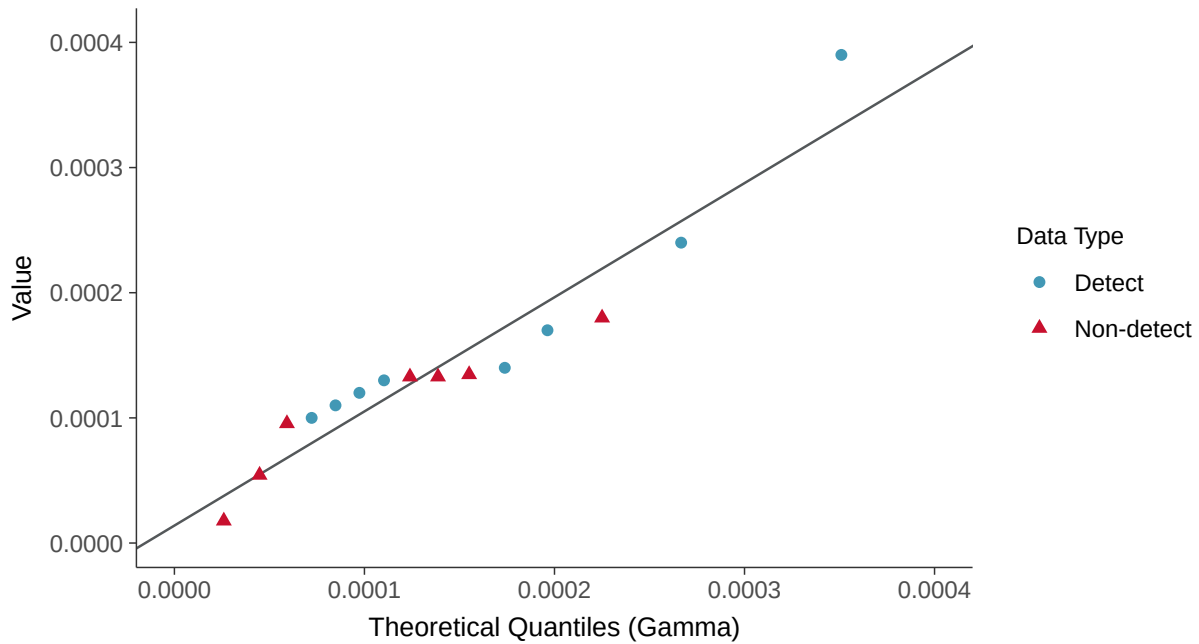
Lognormal Q-Q plot using ROS Imputed Estimates

Selenium, MW-30 (mg/L)



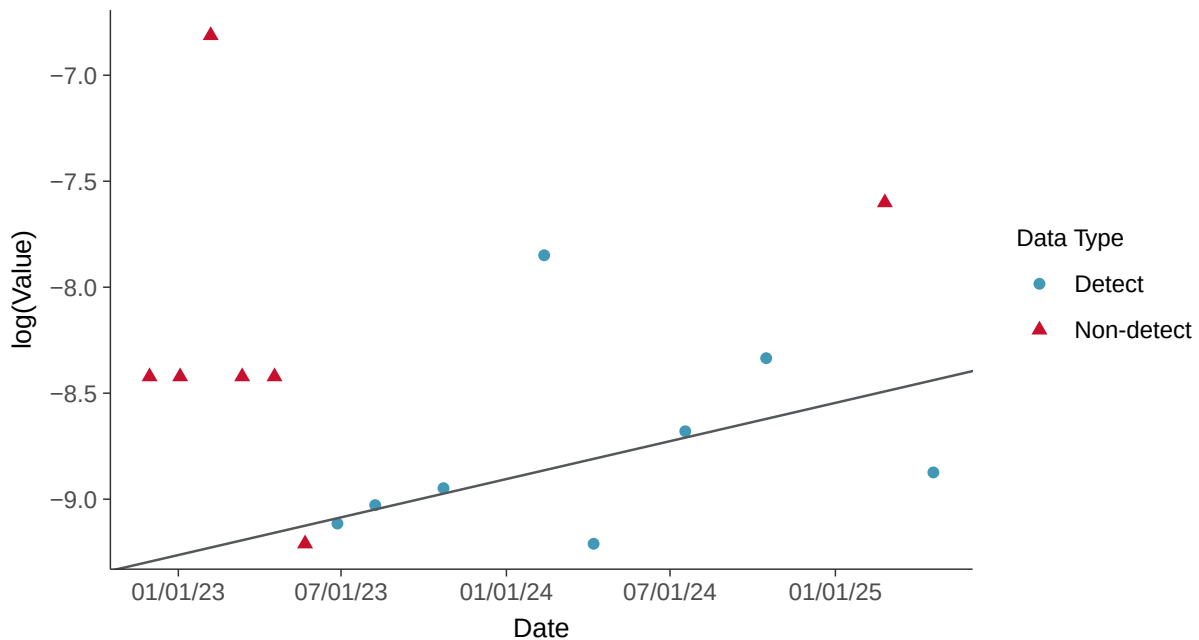
Gamma Q-Q plot using ROS Imputed Estimates

Selenium, MW-30 (mg/L)

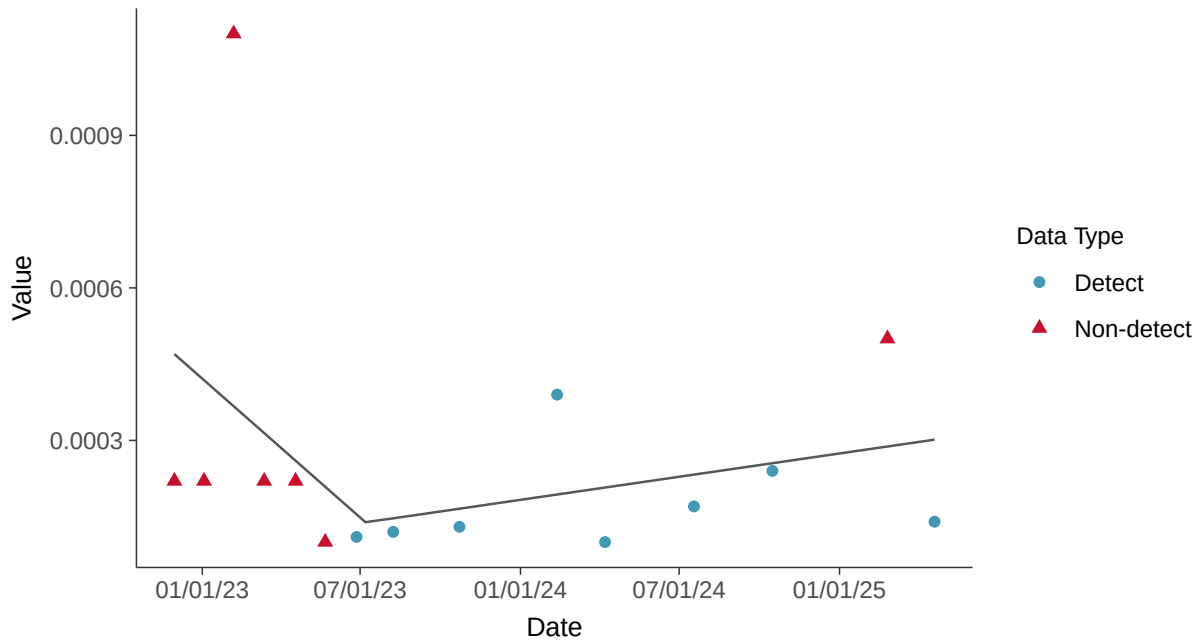


Trend Regression: Lognormal MLE

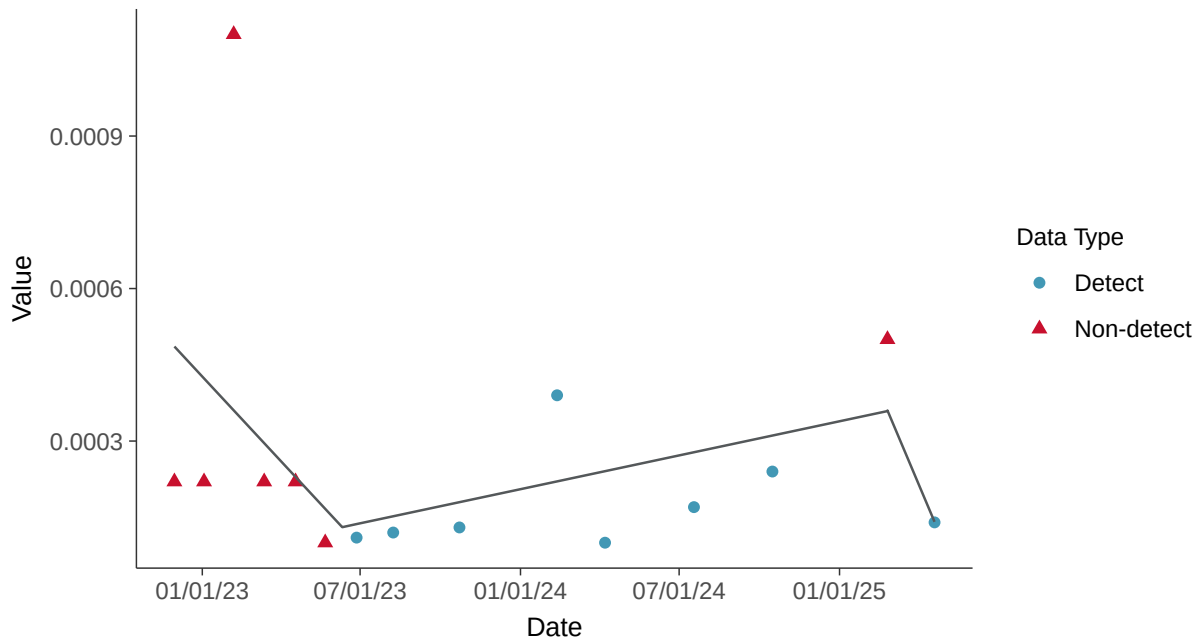
Selenium, MW-30 (mg/L)



Trend Regression: Piecewise Linear-Linear
Selenium, MW-30 (mg/L)

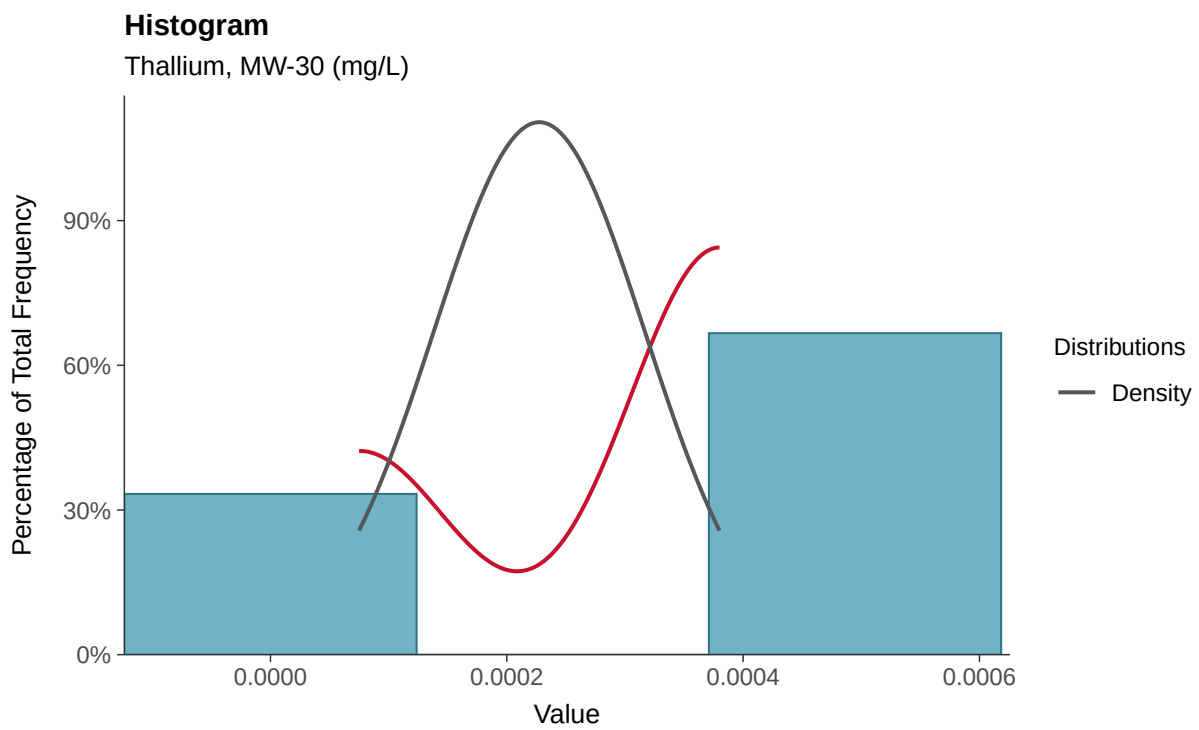
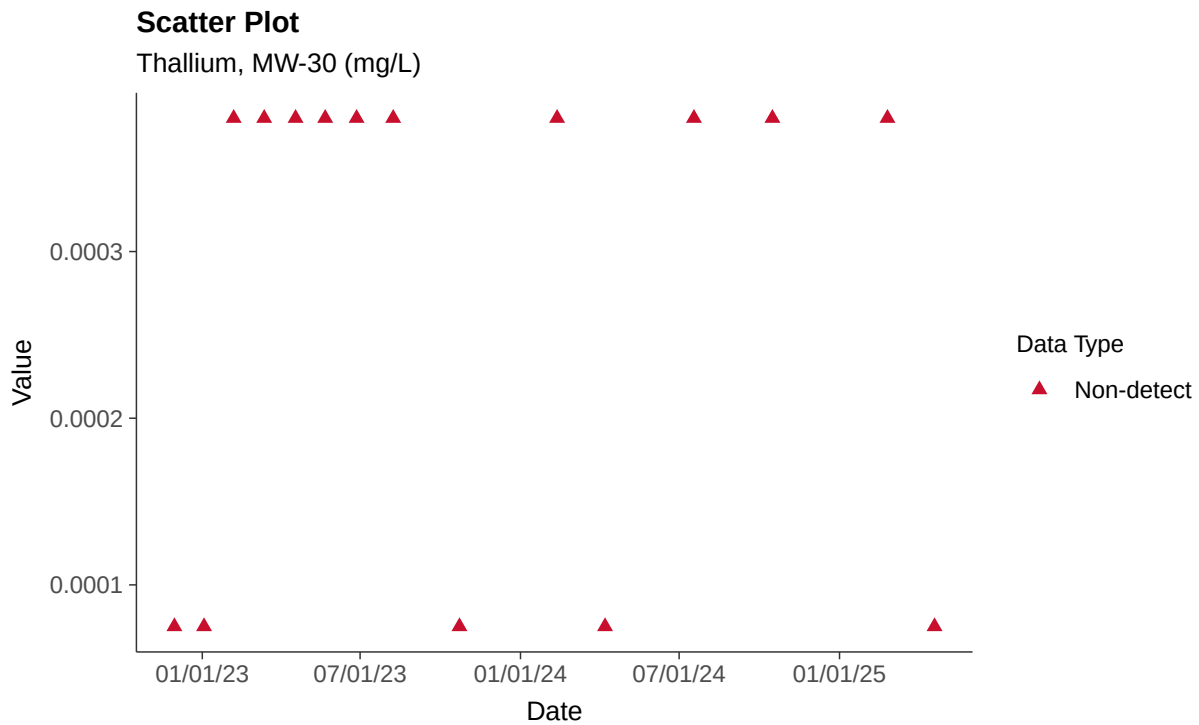


Trend Regression: Piecewise Linear-Linear-Linear
Selenium, MW-30 (mg/L)



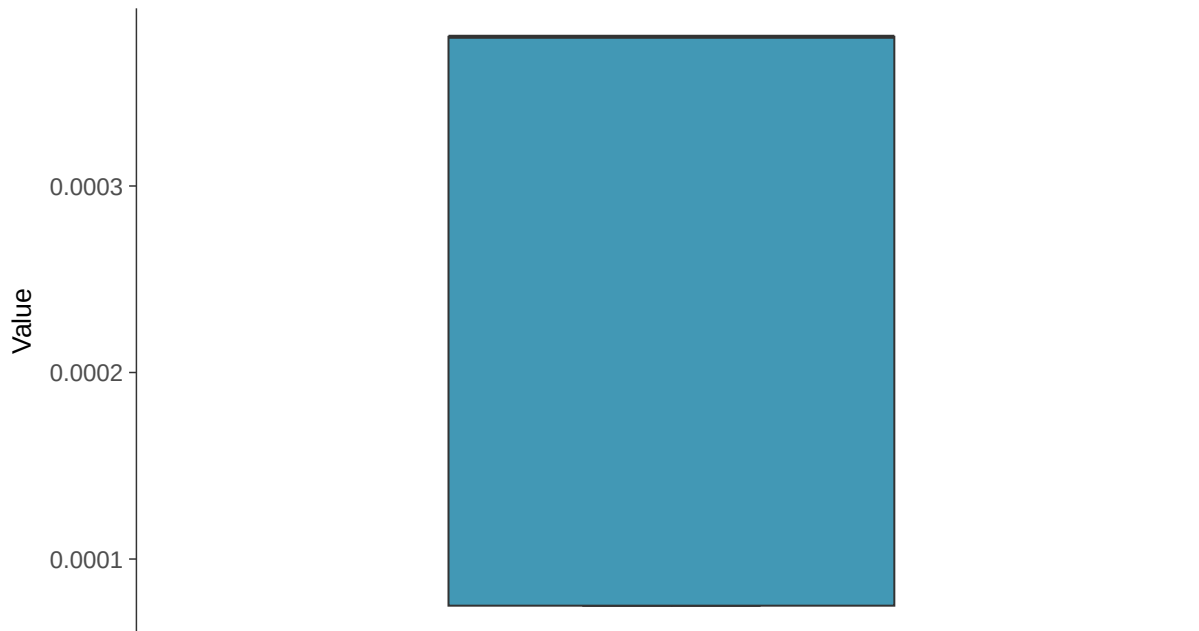
Appendix IV: Thallium, MW-30

ID: 40_1_4_125



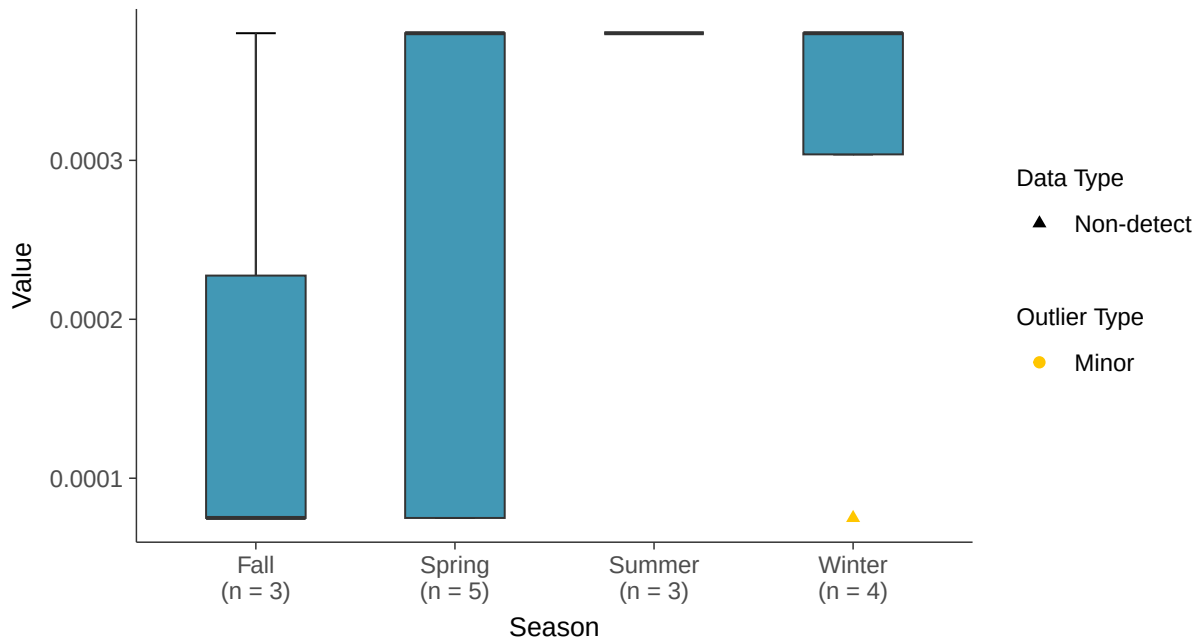
Boxplot

Thallium, MW-30 (mg/L)



Boxplot by Season

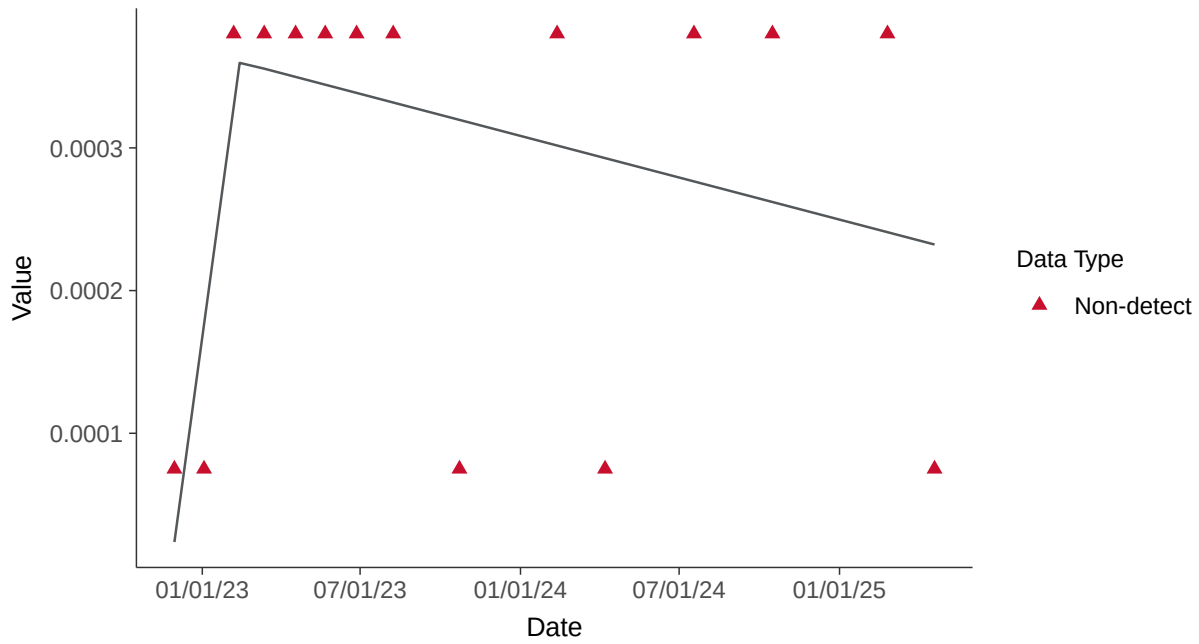
Thallium, MW-30 (mg/L)





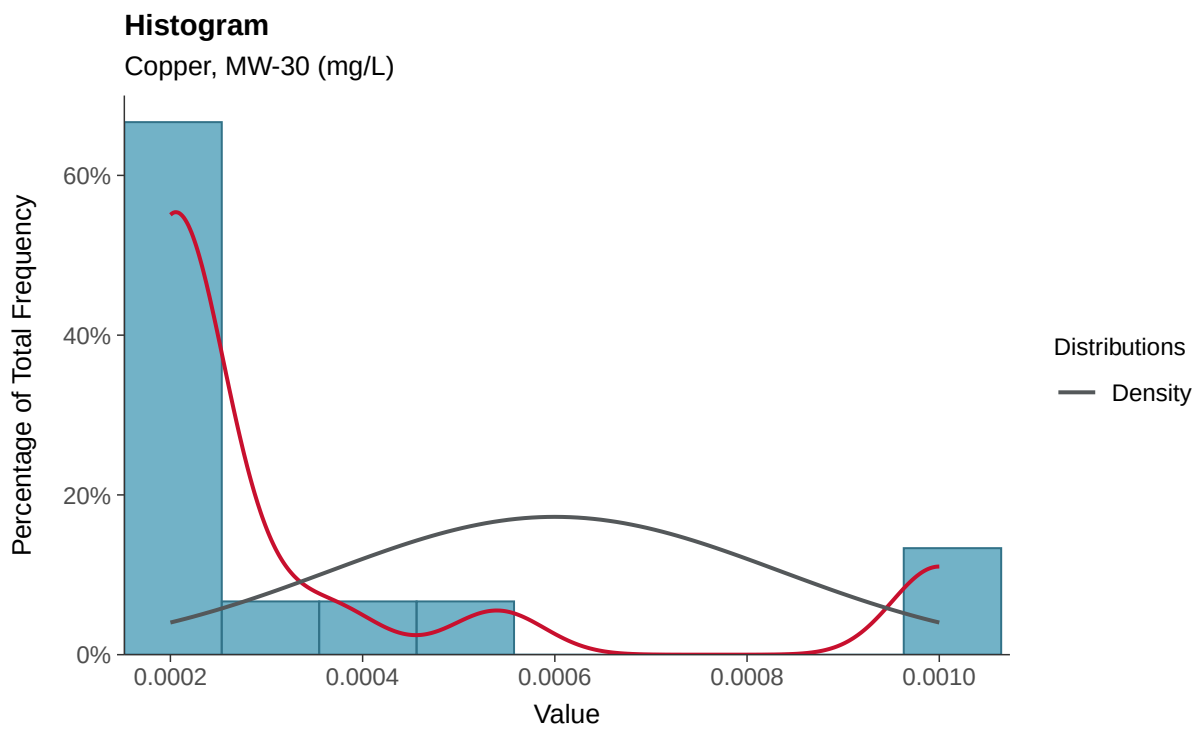
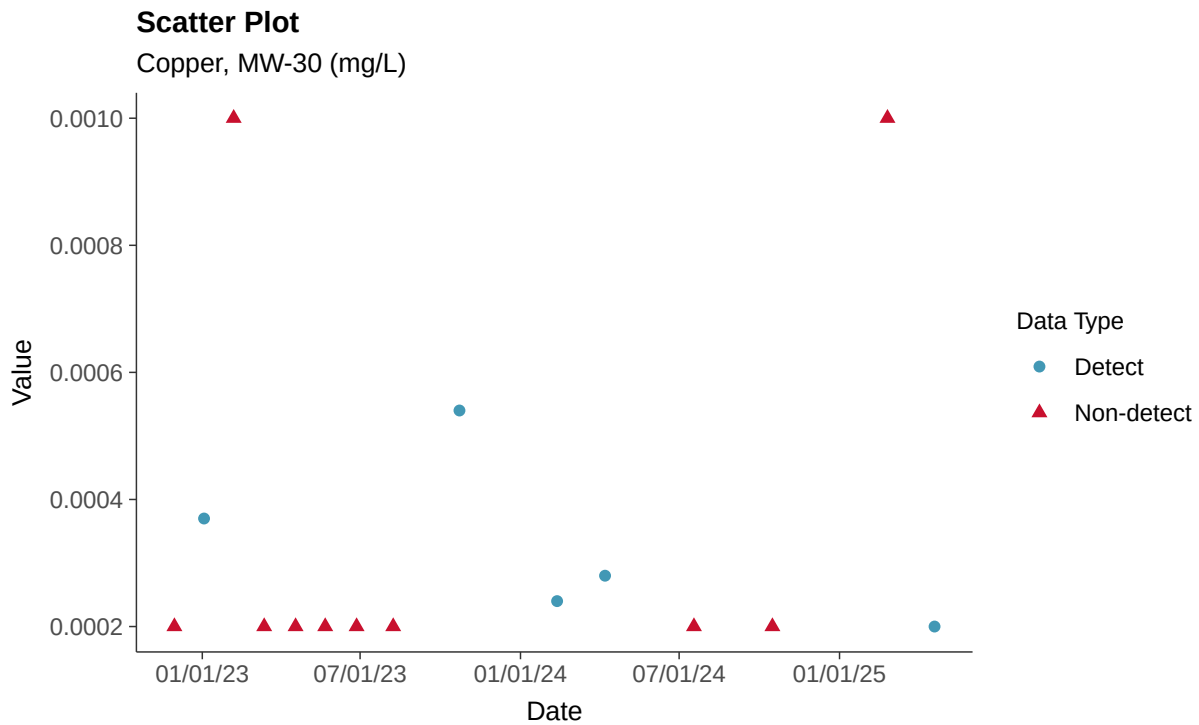
Trend Regression: Piecewise Linear-Linear

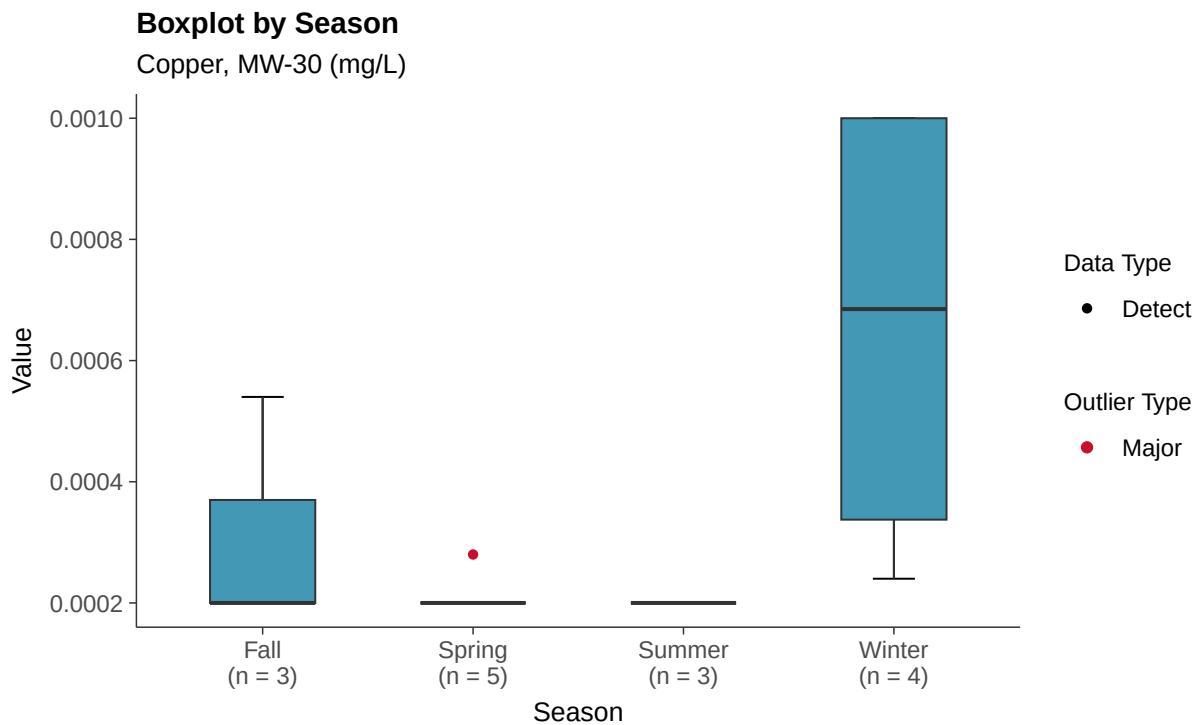
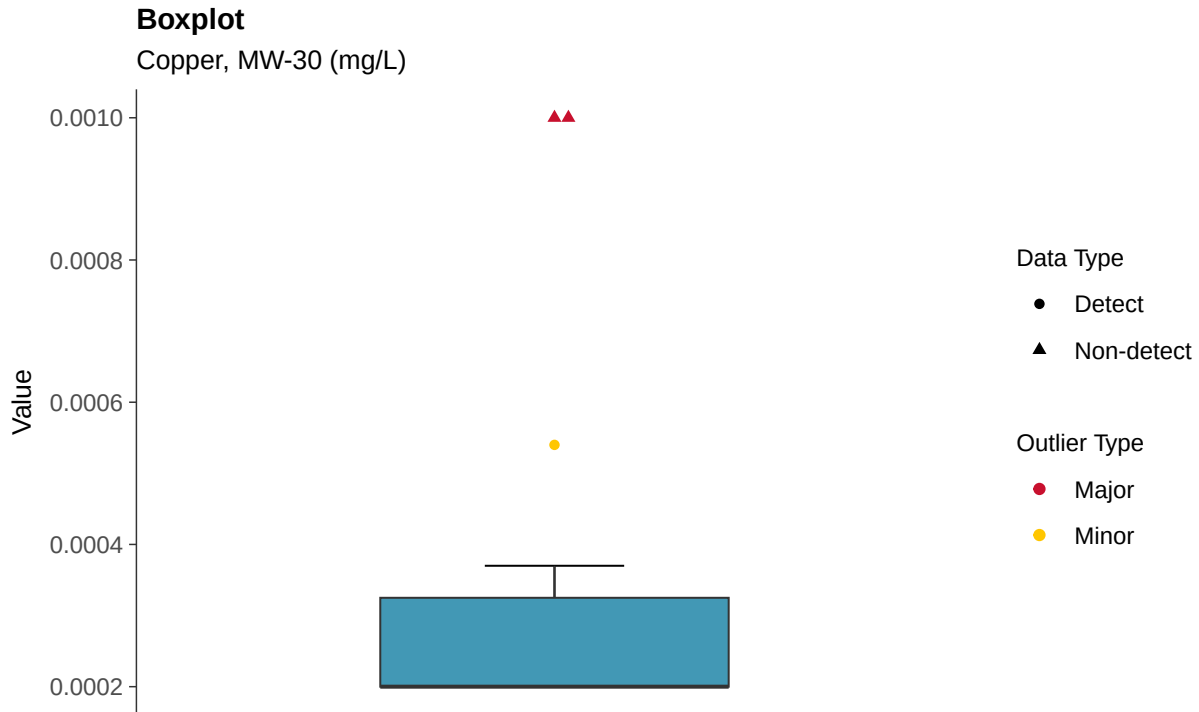
Thallium, MW-30 (mg/L)



Part 115: Copper, MW-30

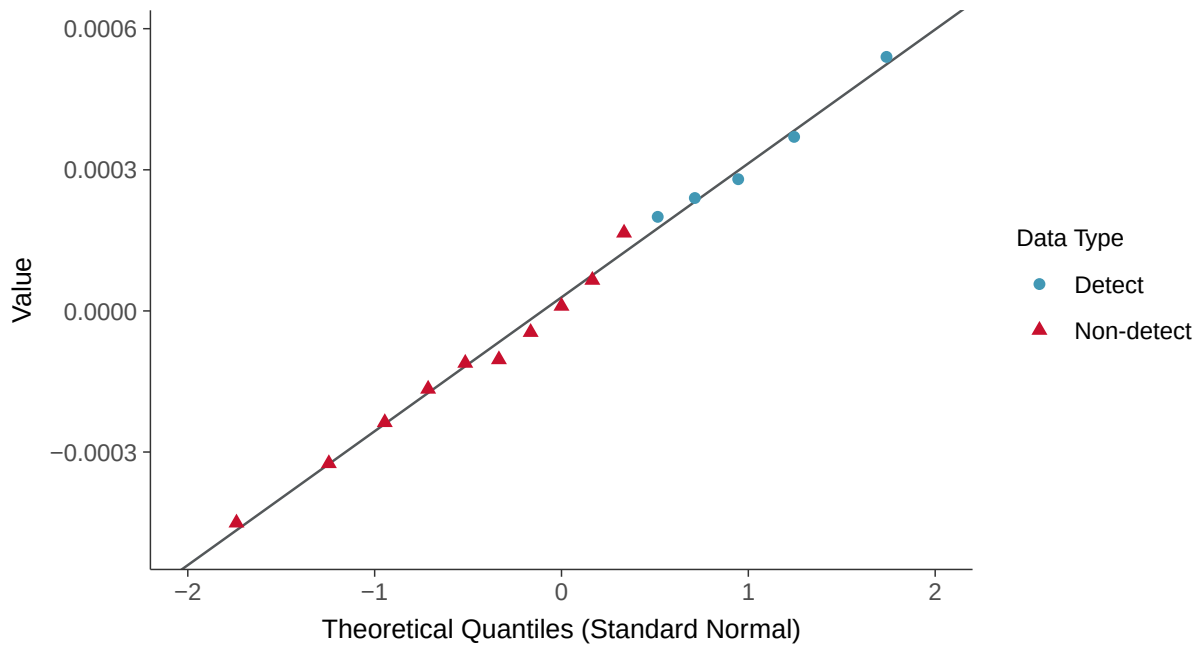
ID: 40_1_5_111





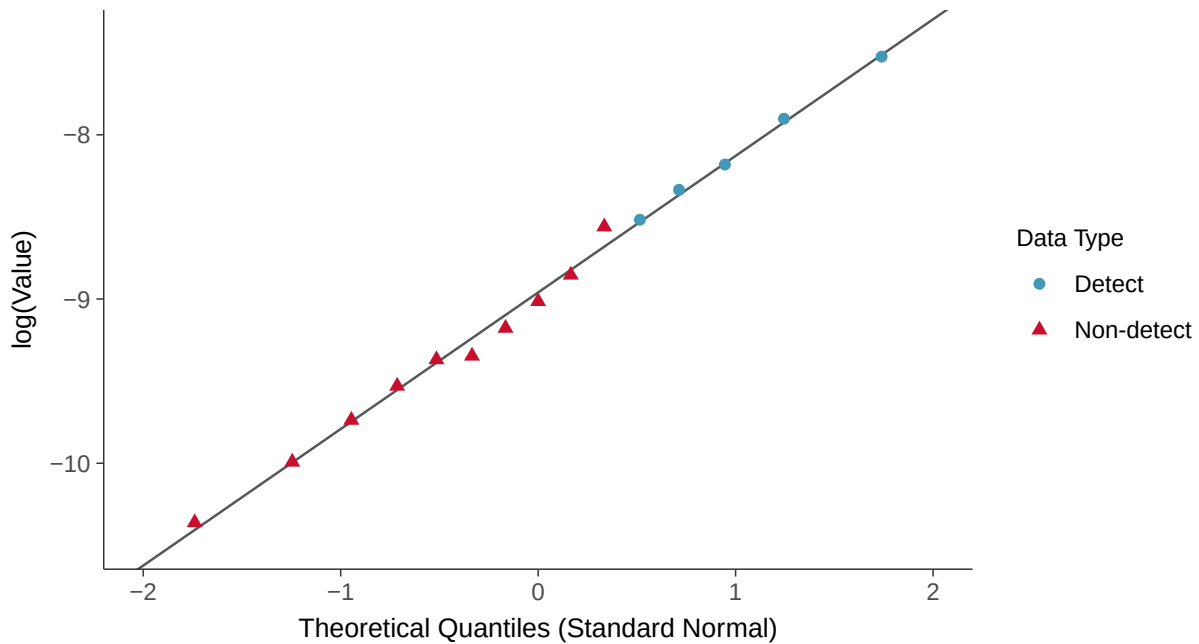
Normal Q-Q plot using ROS Imputed Estimates

Copper, MW-30 (mg/L)



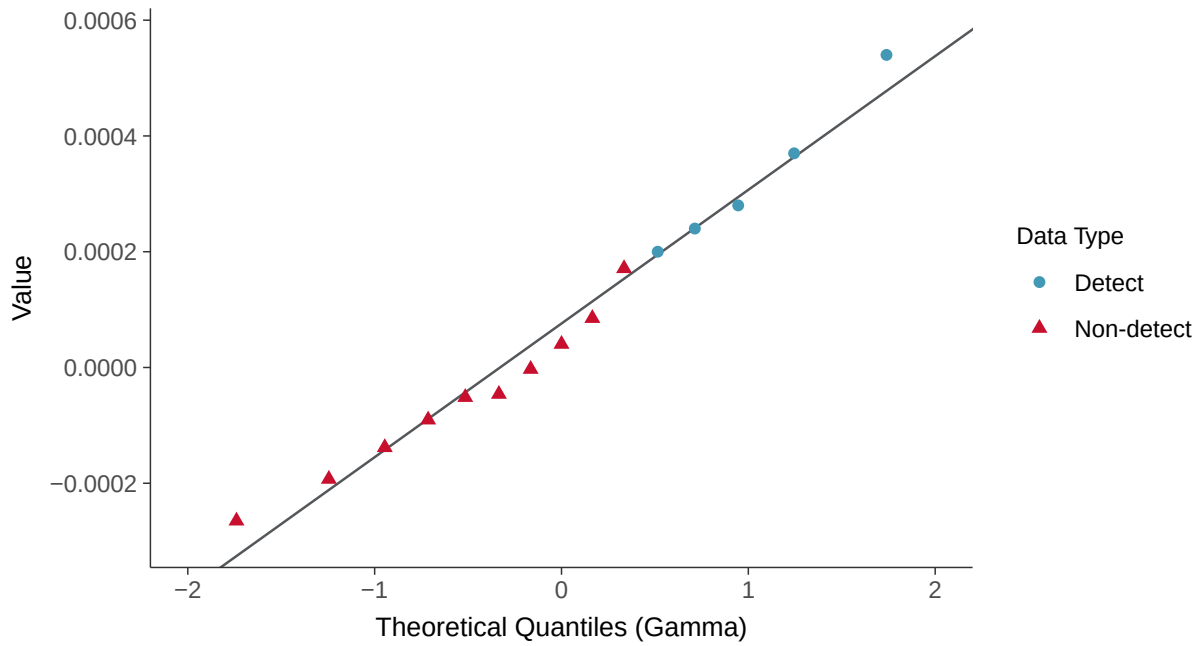
Lognormal Q-Q plot using ROS Imputed Estimates

Copper, MW-30 (mg/L)



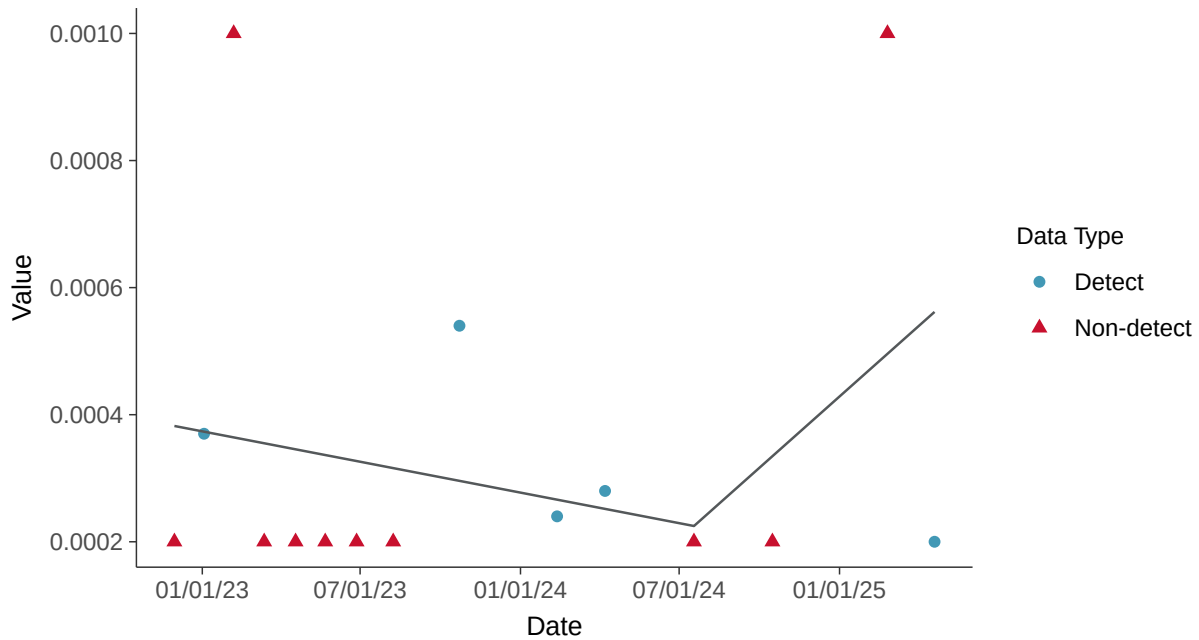
Gamma Q-Q plot using ROS Imputed Estimates

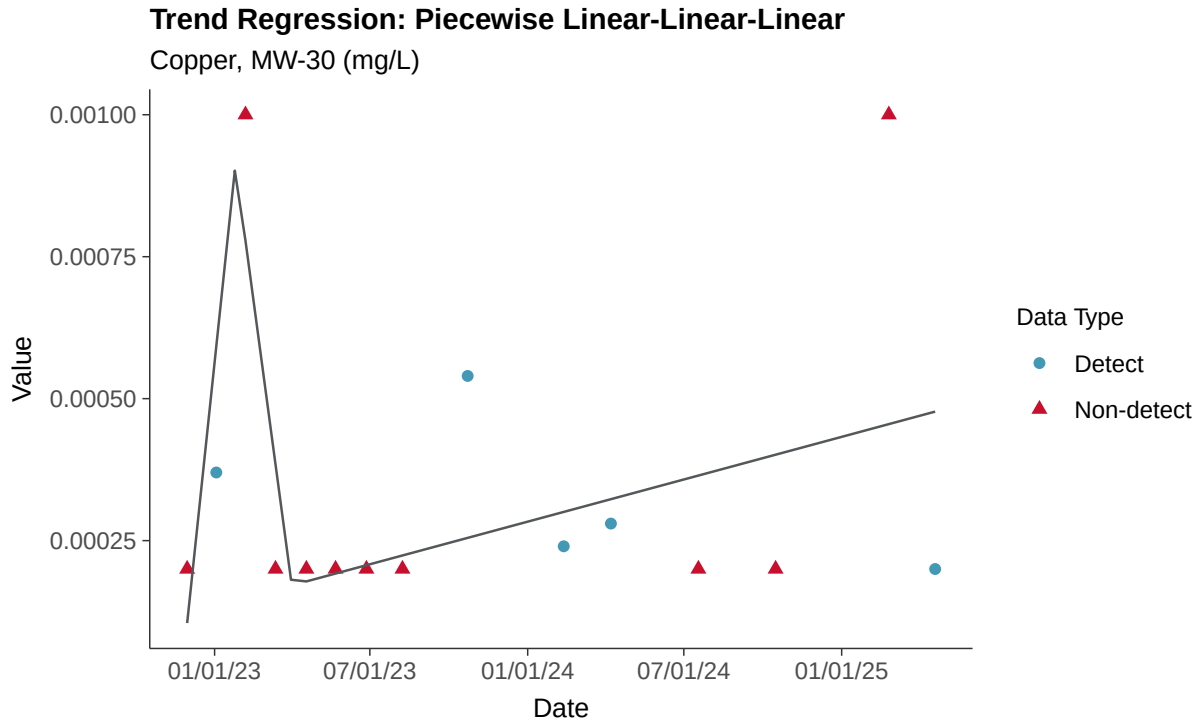
Copper, MW-30 (mg/L)



Trend Regression: Piecewise Linear-Linear

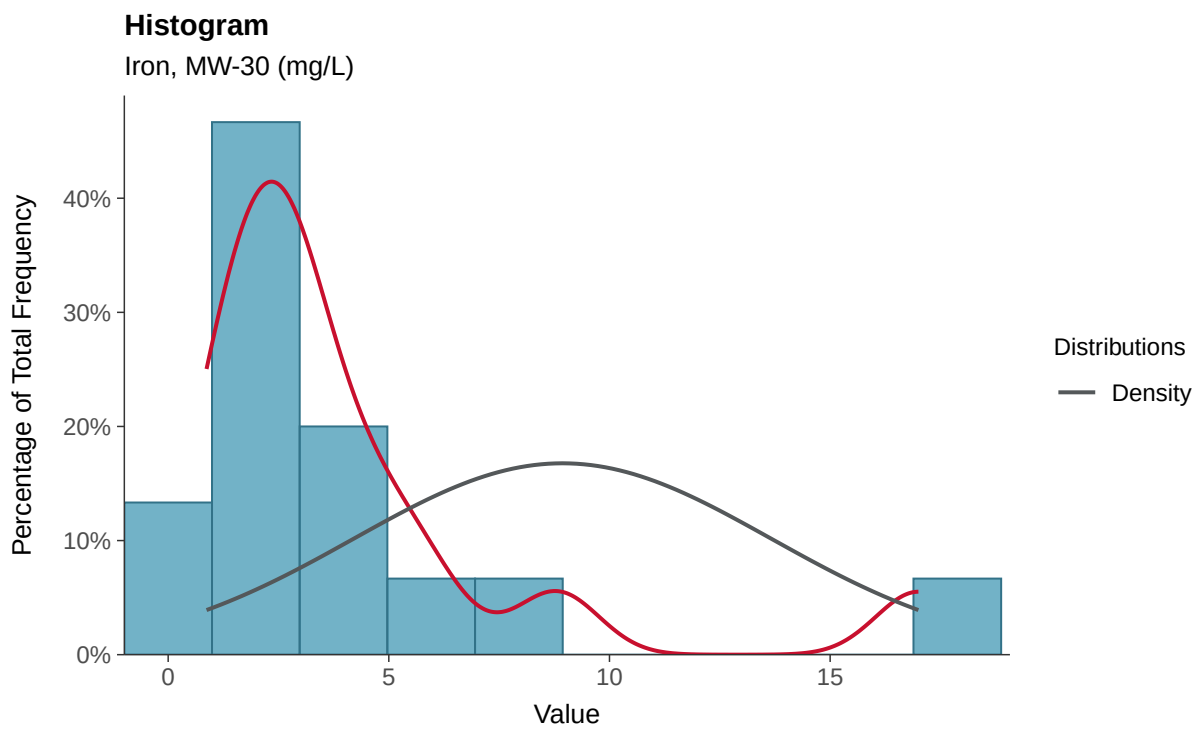
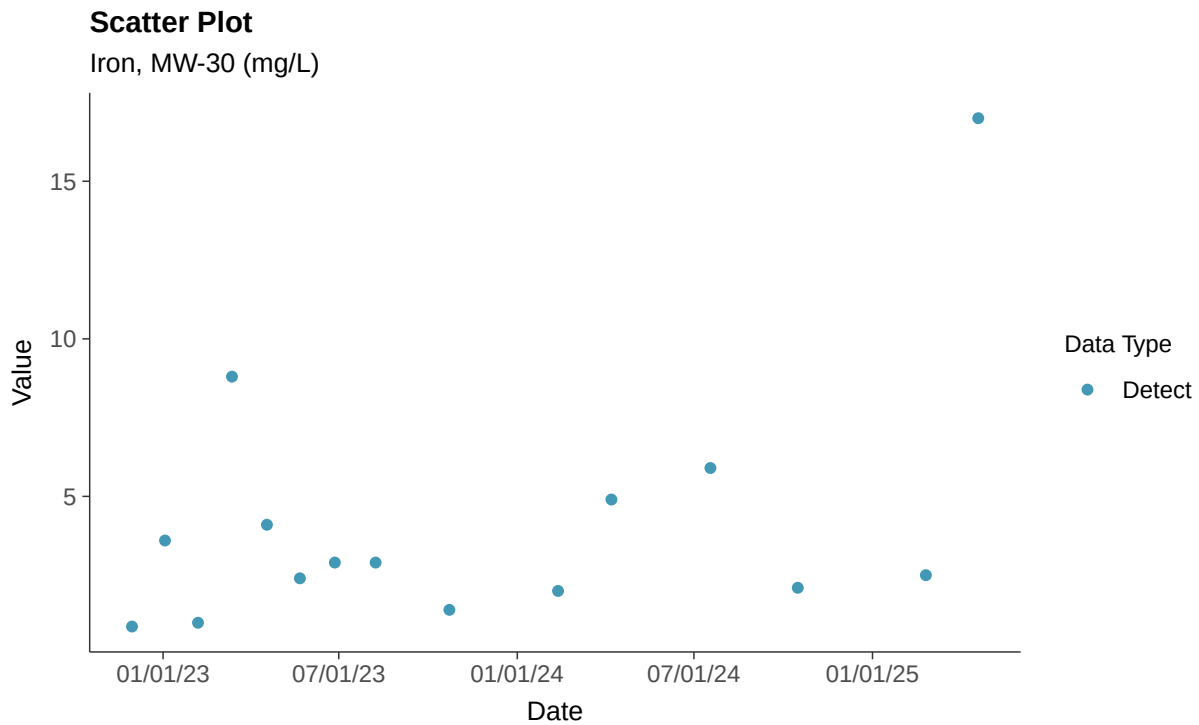
Copper, MW-30 (mg/L)

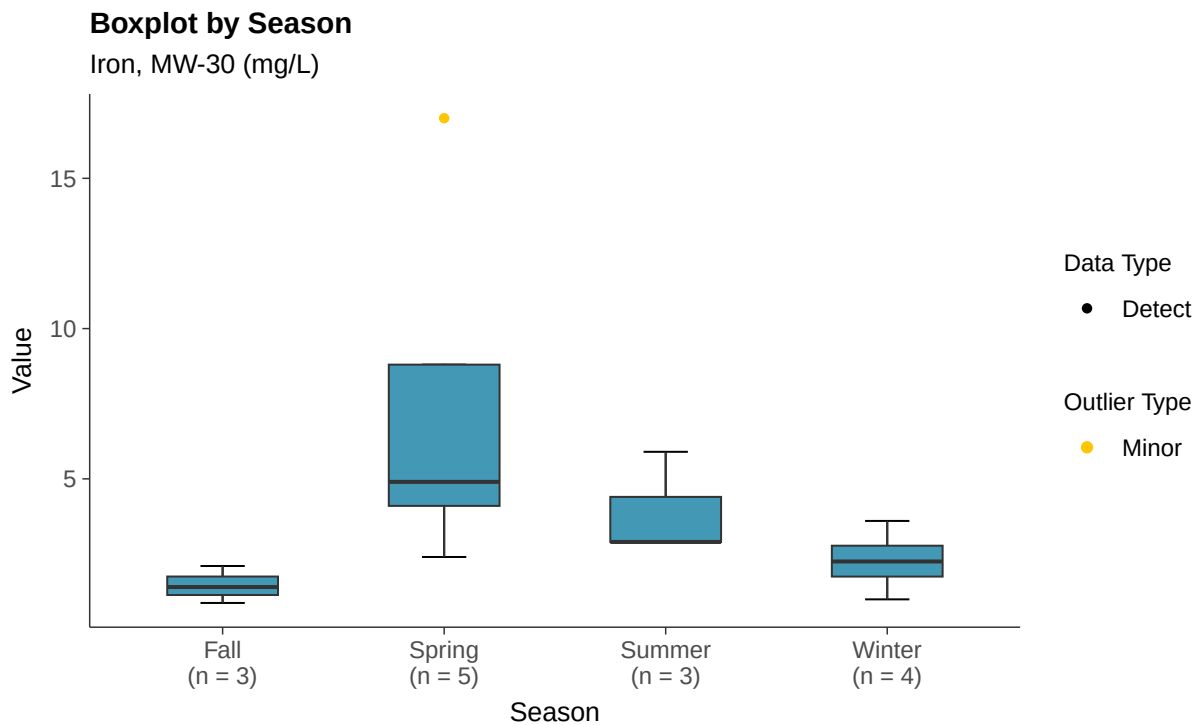
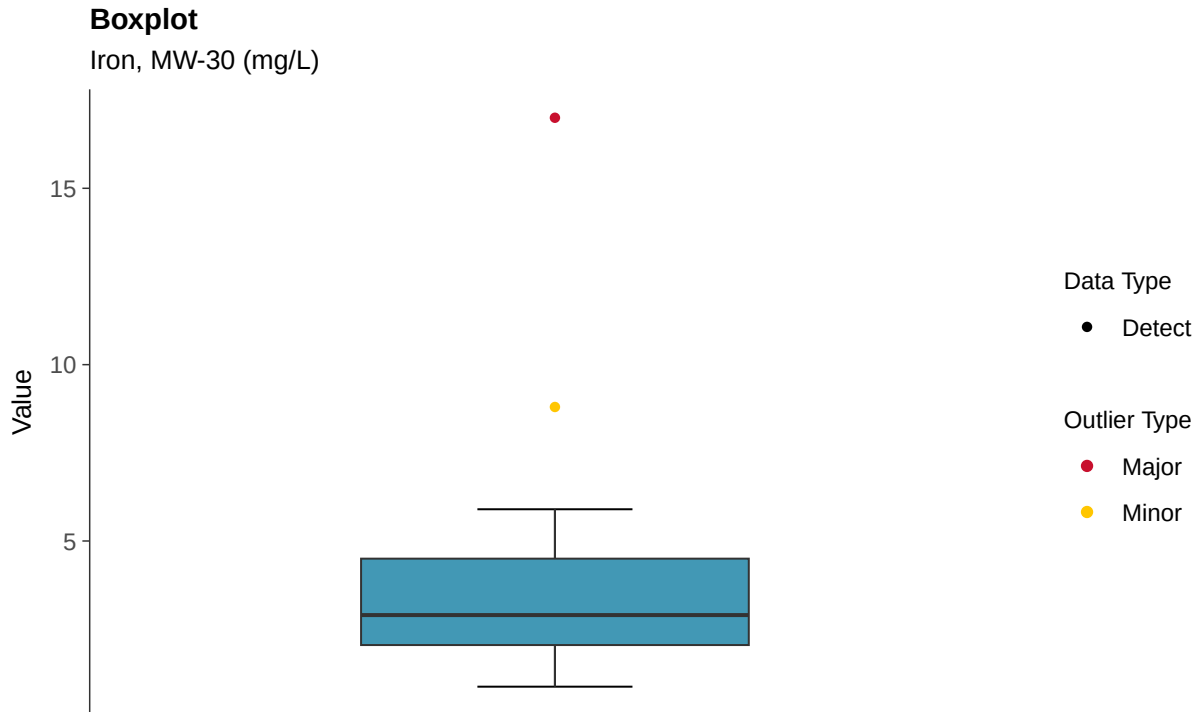




Part 115: Iron, MW-30

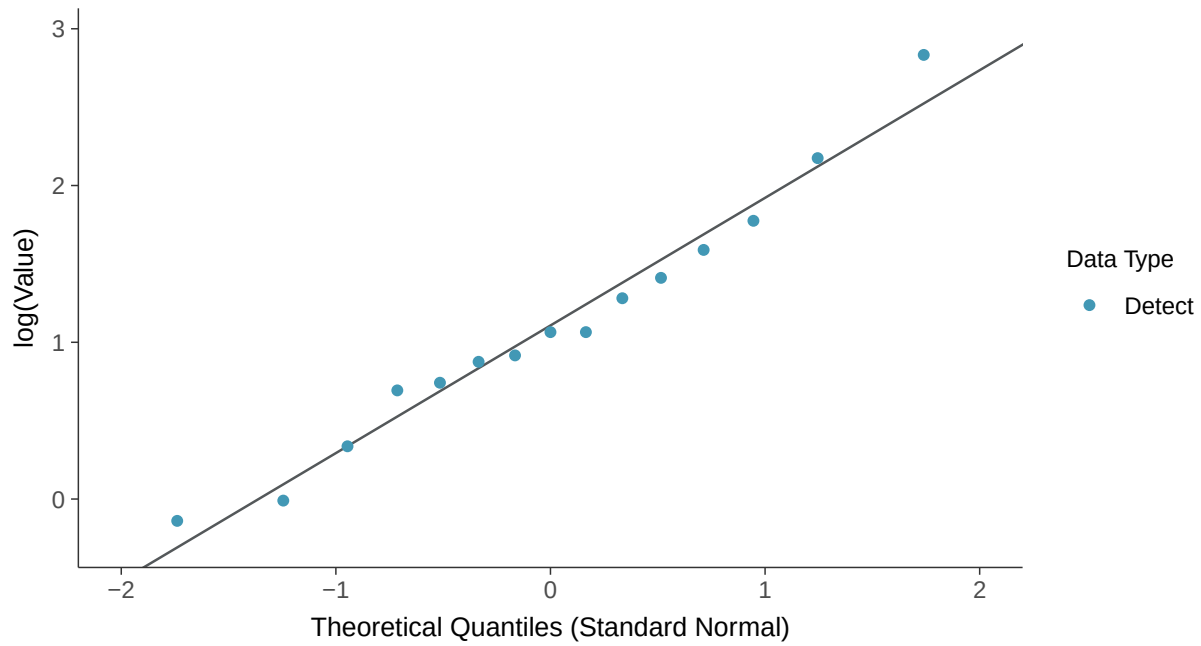
ID: 40_1_5_114





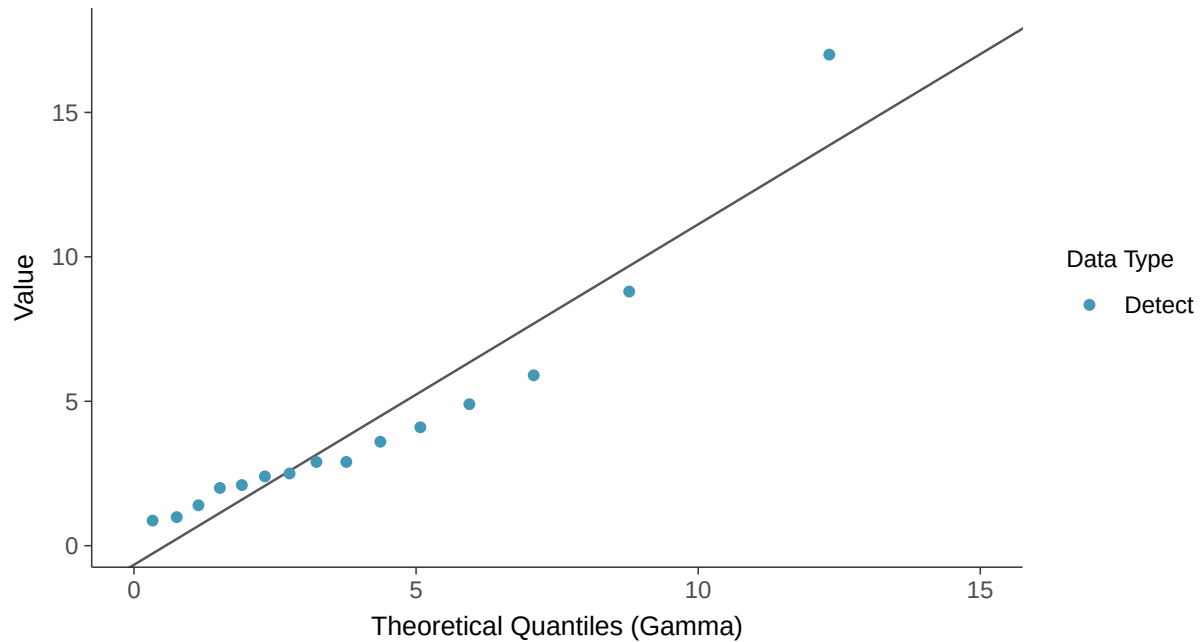
Lognormal Q-Q plot

Iron, MW-30 (mg/L)



Gamma Q-Q plot

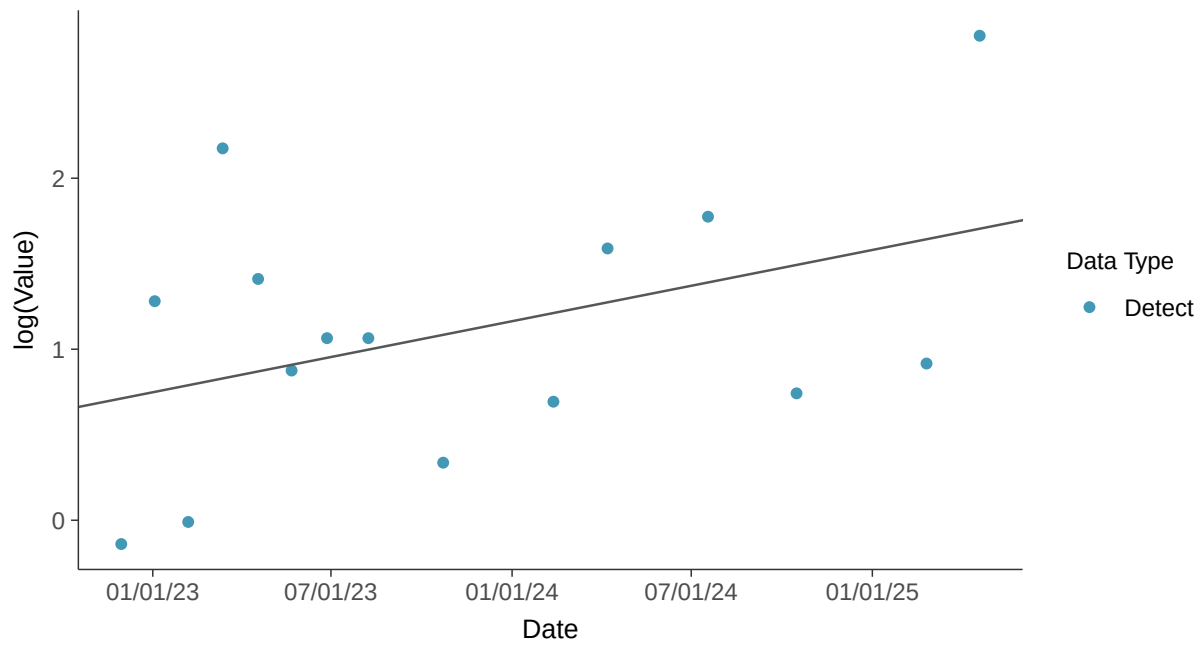
Iron, MW-30 (mg/L)





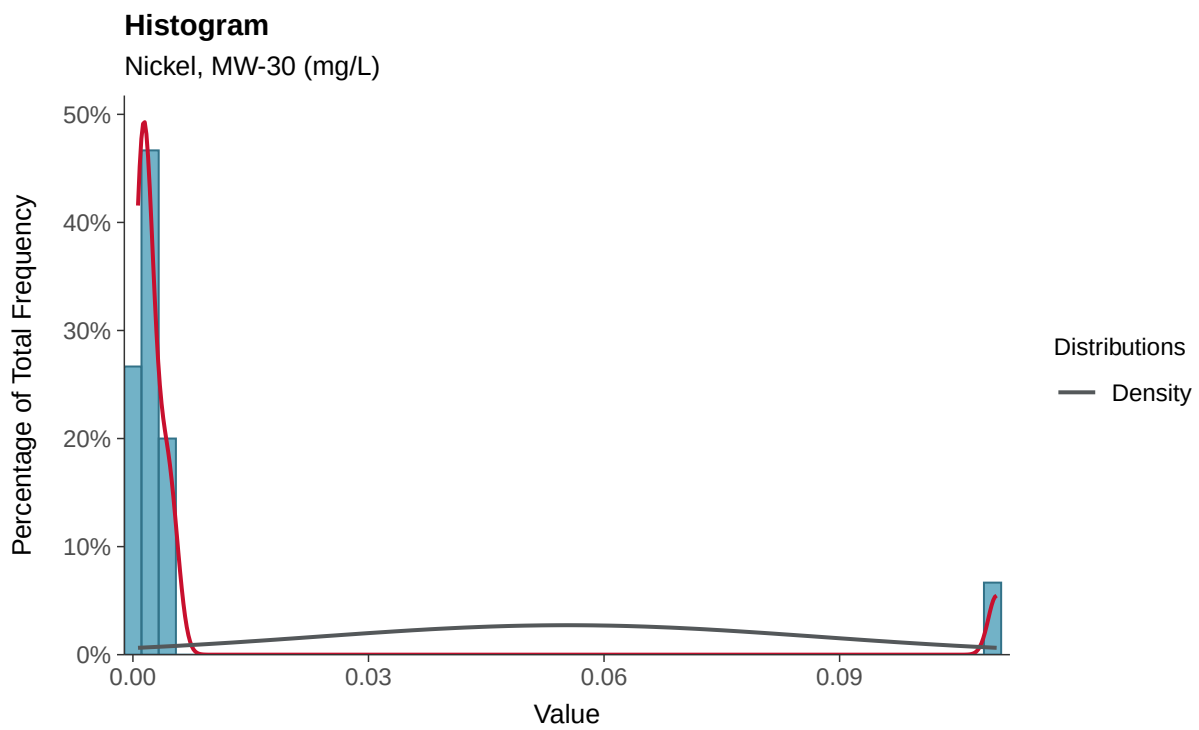
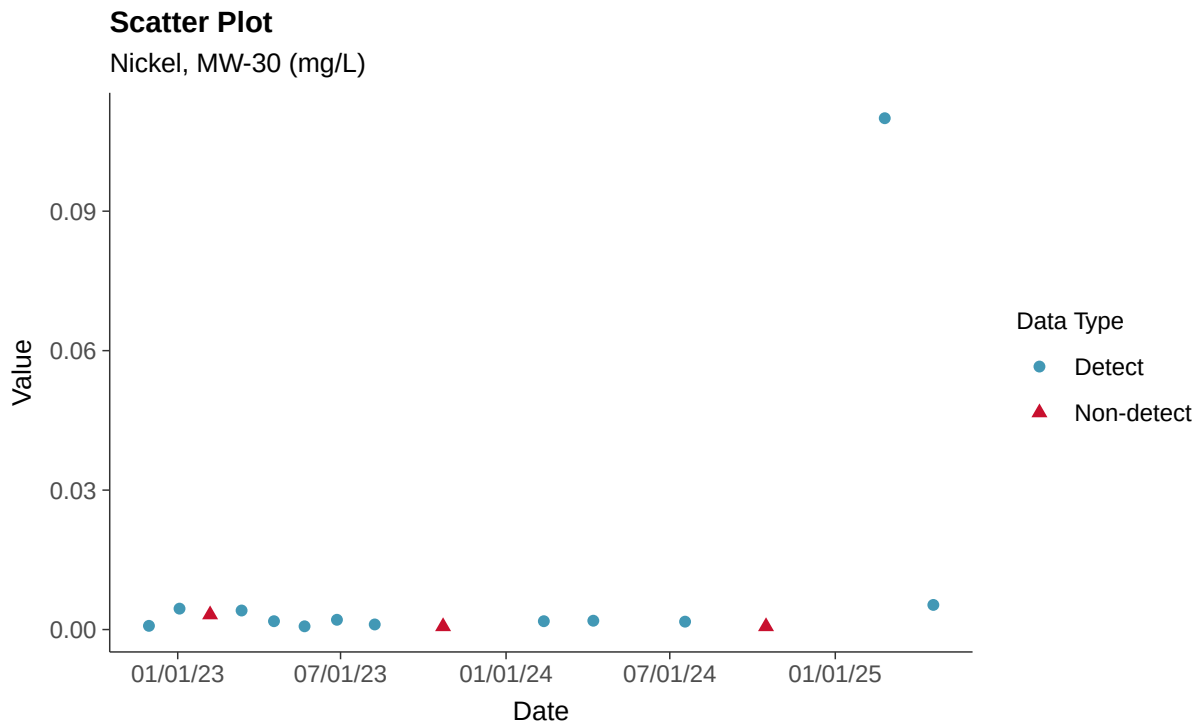
Trend Regression: Lognormal MLE

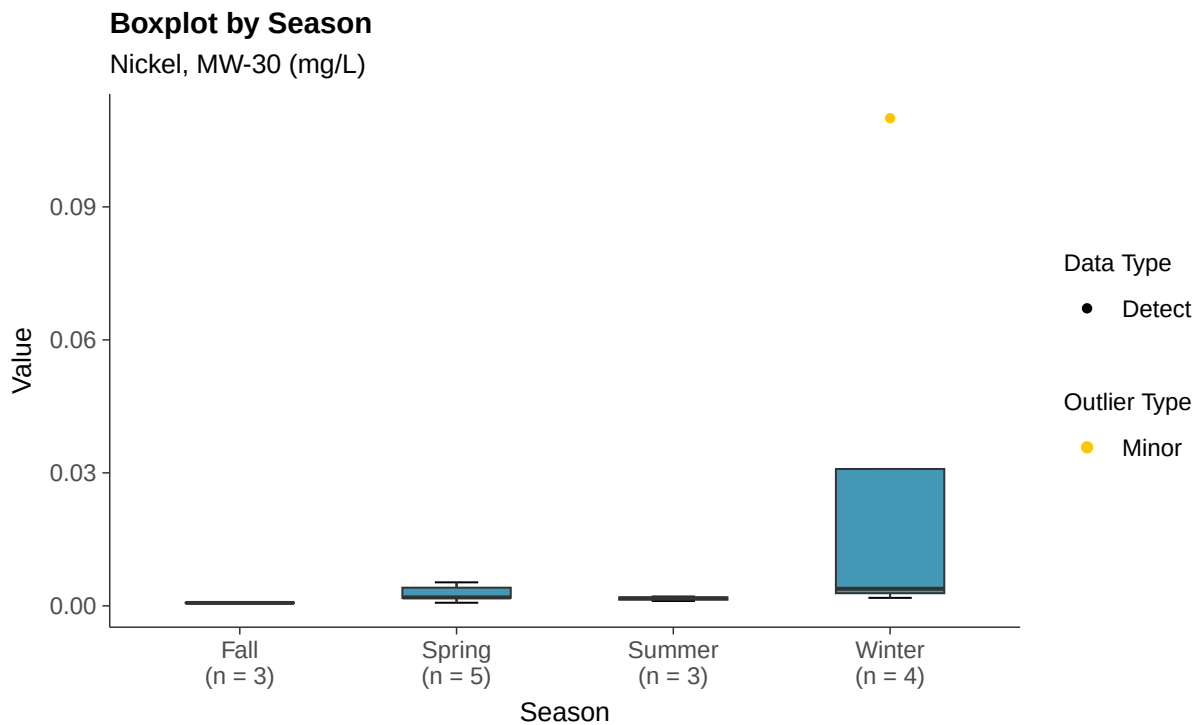
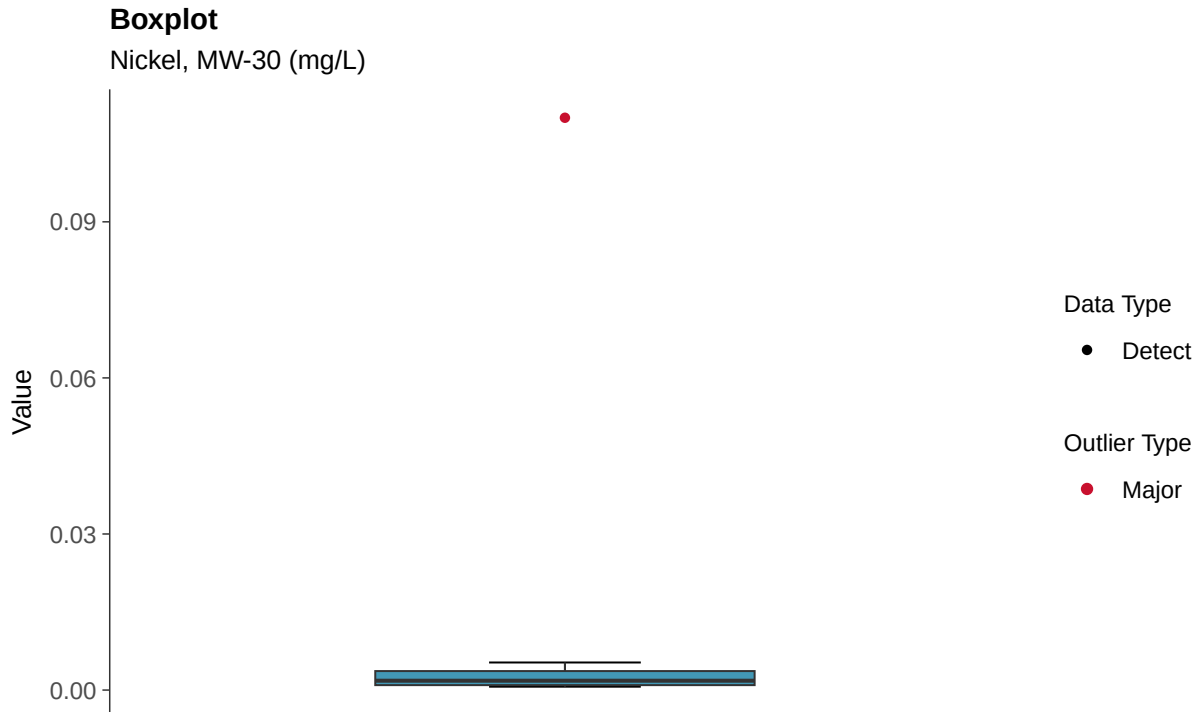
Iron, MW-30 (mg/L)



Part 115: Nickel, MW-30

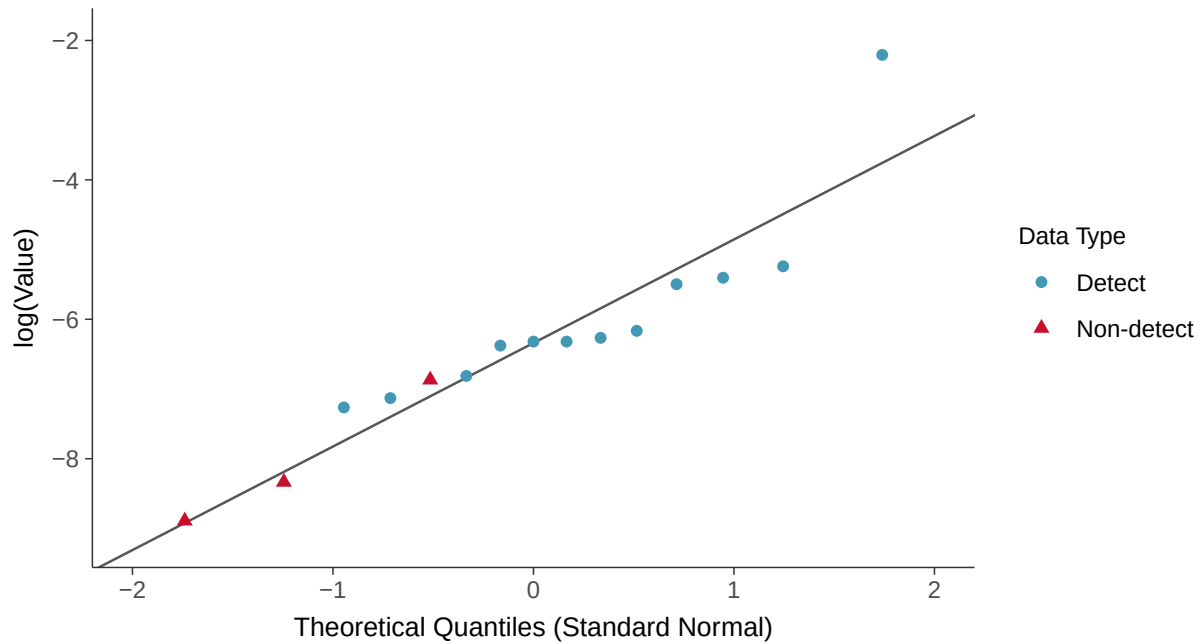
ID: 40_1_5_119





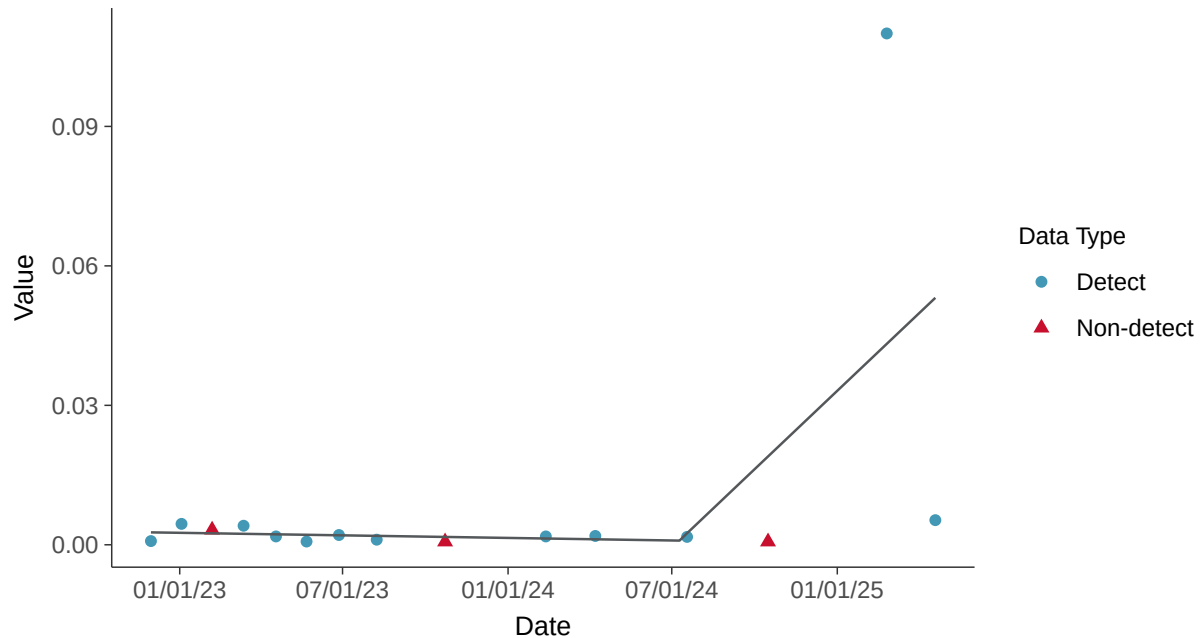
Lognormal Q-Q plot using ROS Imputed Estimates

Nickel, MW-30 (mg/L)



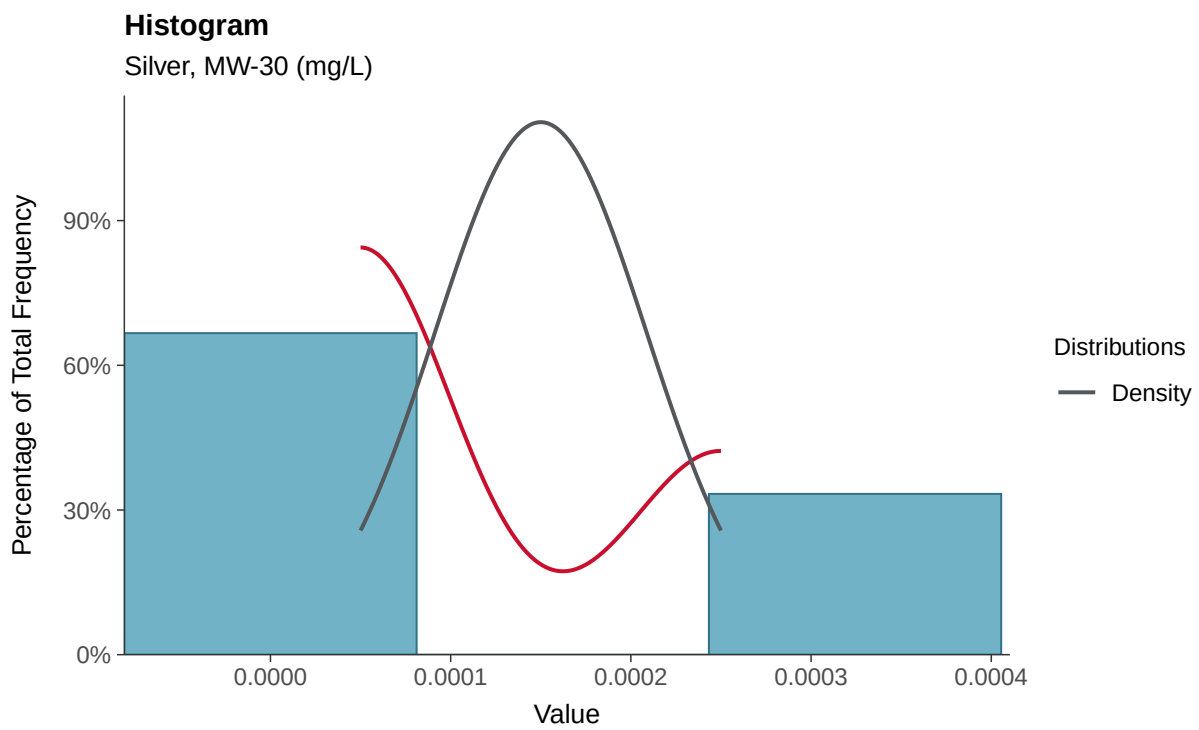
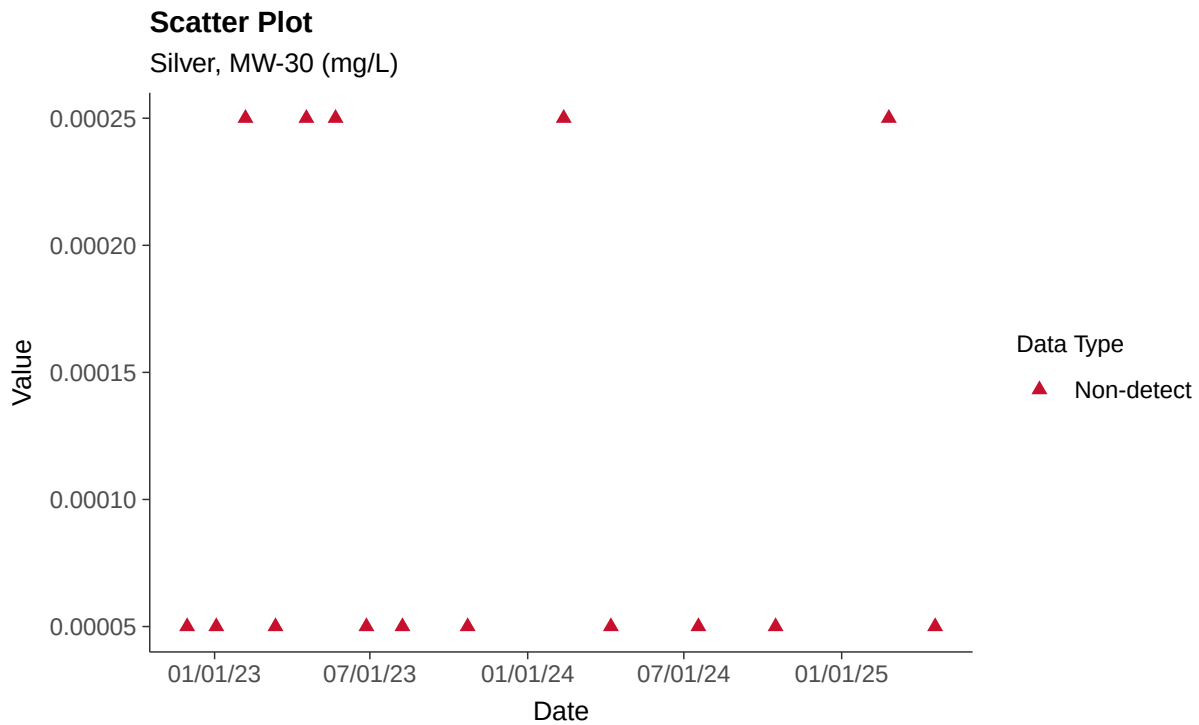
Trend Regression: Piecewise Linear-Linear

Nickel, MW-30 (mg/L)



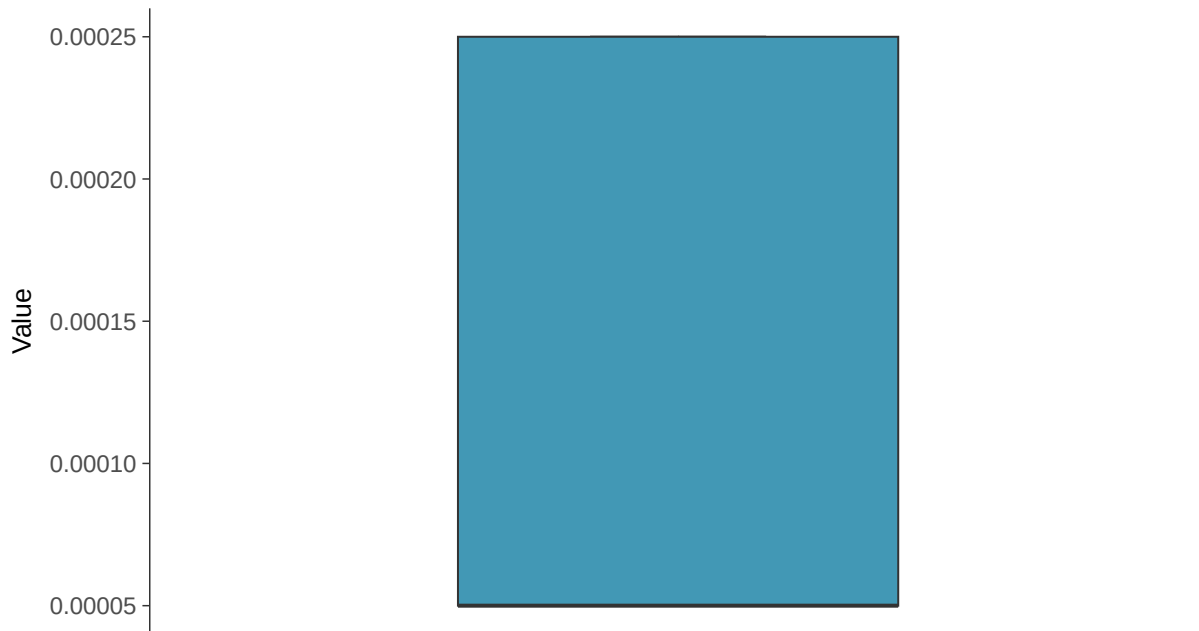
Part 115: Silver, MW-30

ID: 40_1_5_123



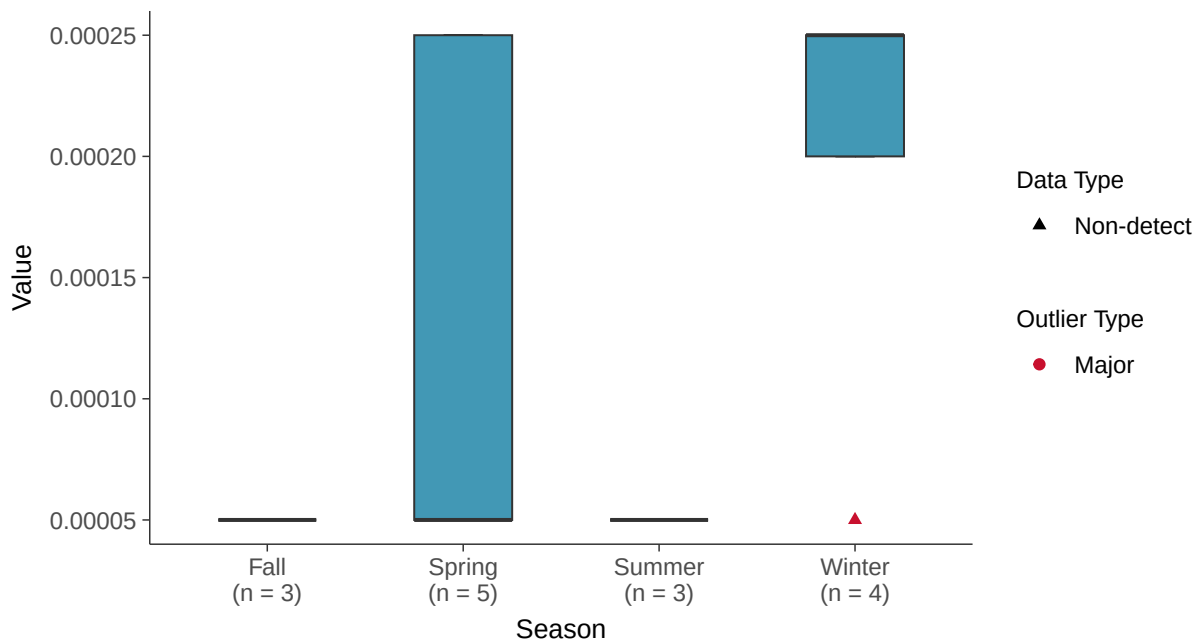
Boxplot

Silver, MW-30 (mg/L)



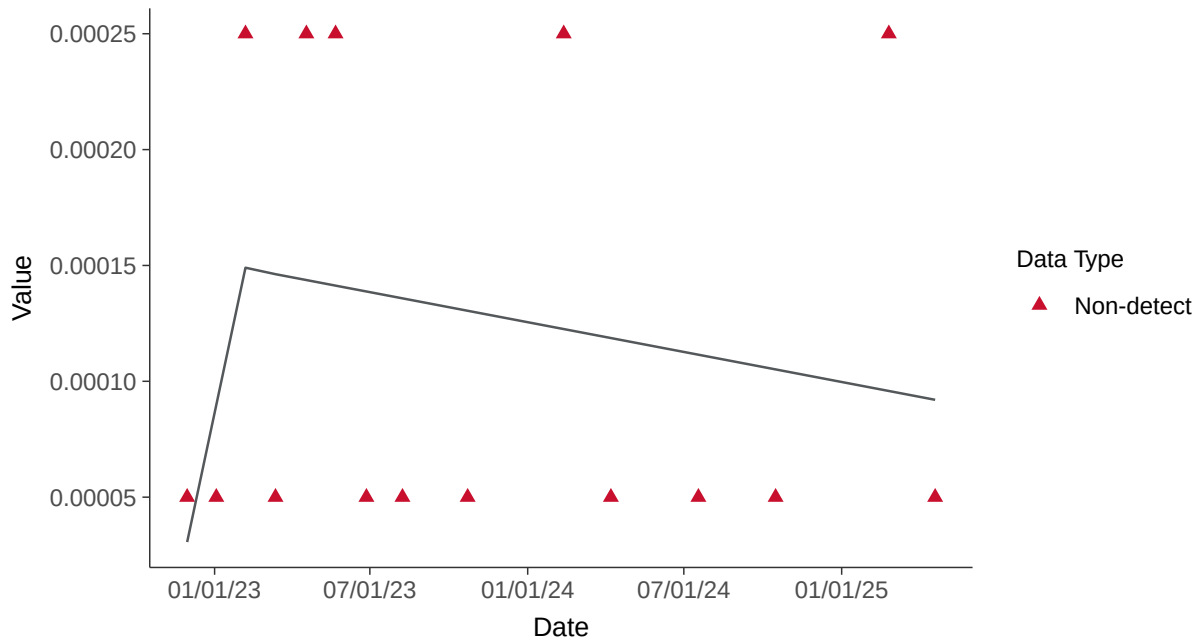
Boxplot by Season

Silver, MW-30 (mg/L)



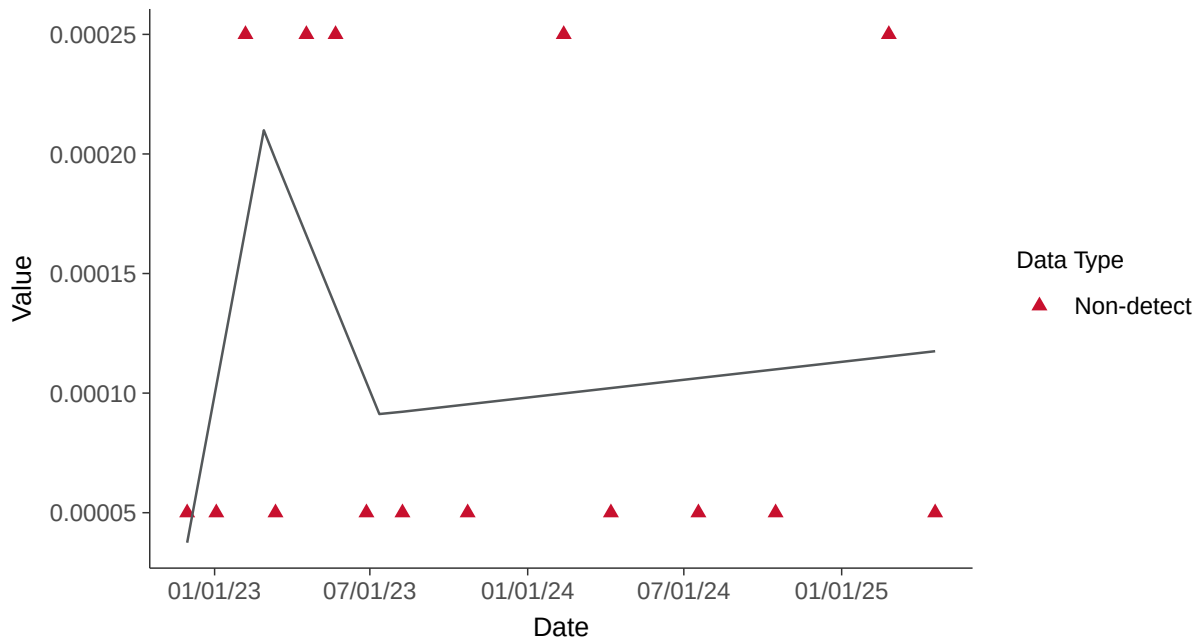
Trend Regression: Piecewise Linear-Linear

Silver, MW-30 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Silver, MW-30 (mg/L)

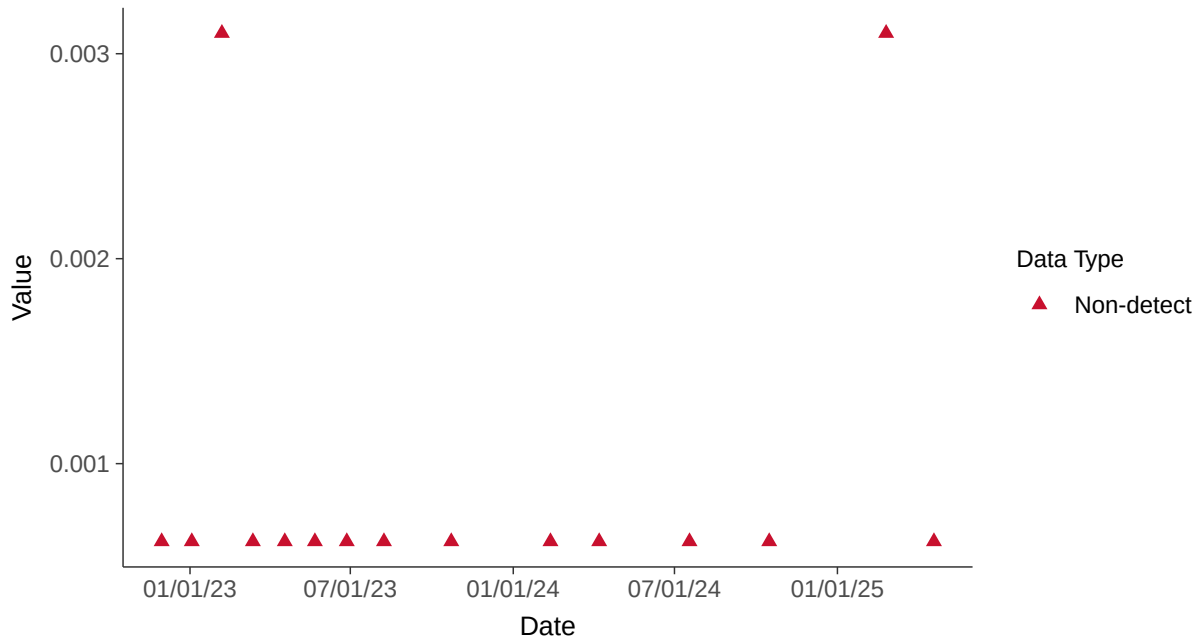


Part 115: Vanadium, MW-30

ID: 40_1_5_128

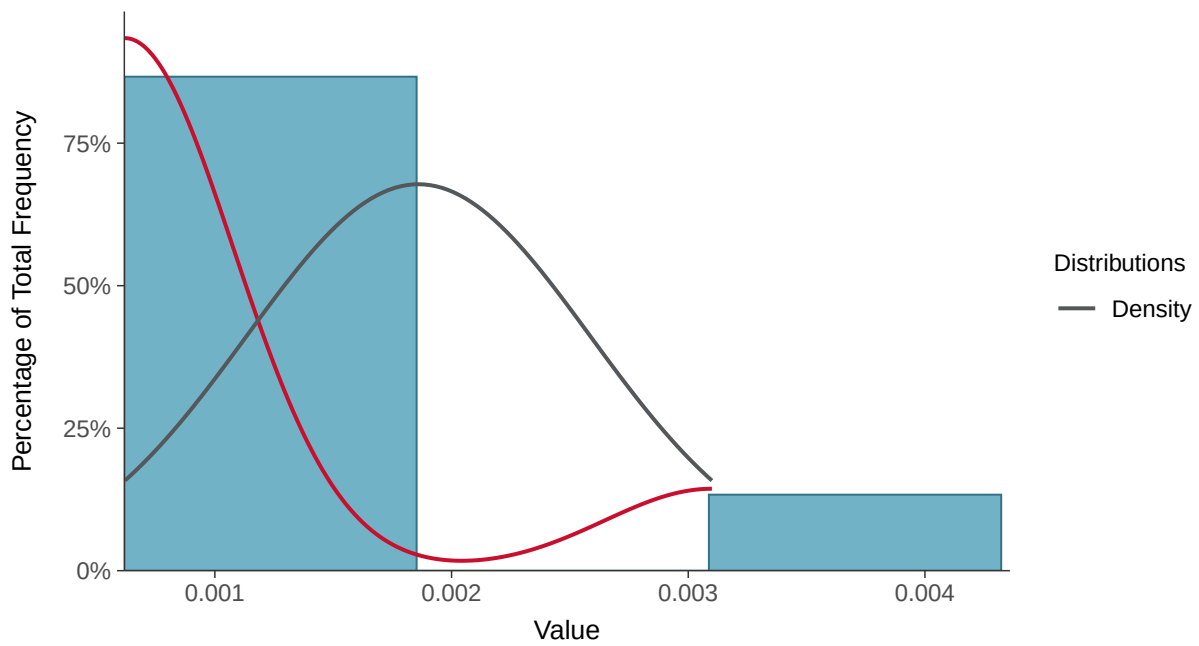
Scatter Plot

Vanadium, MW-30 (mg/L)



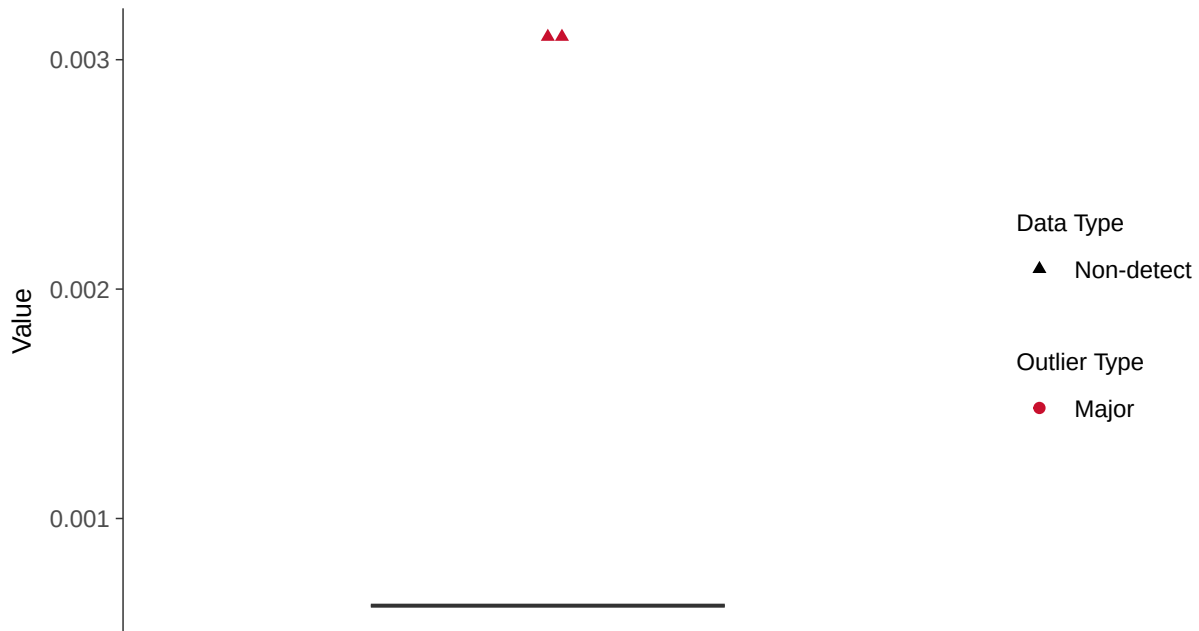
Histogram

Vanadium, MW-30 (mg/L)



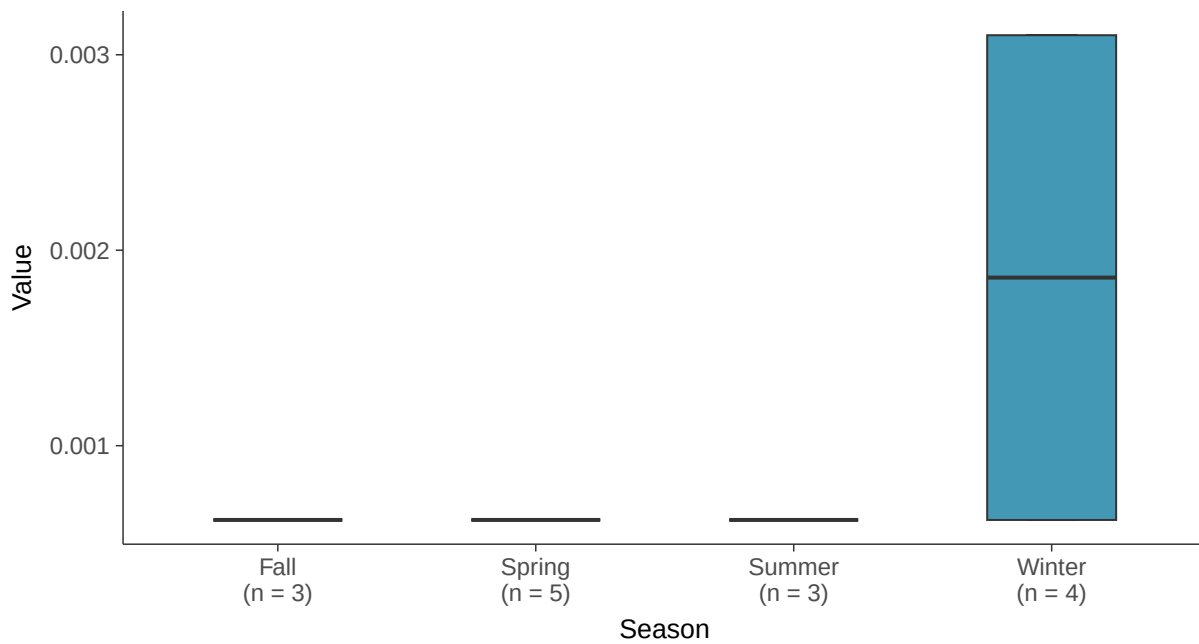
Boxplot

Vanadium, MW-30 (mg/L)



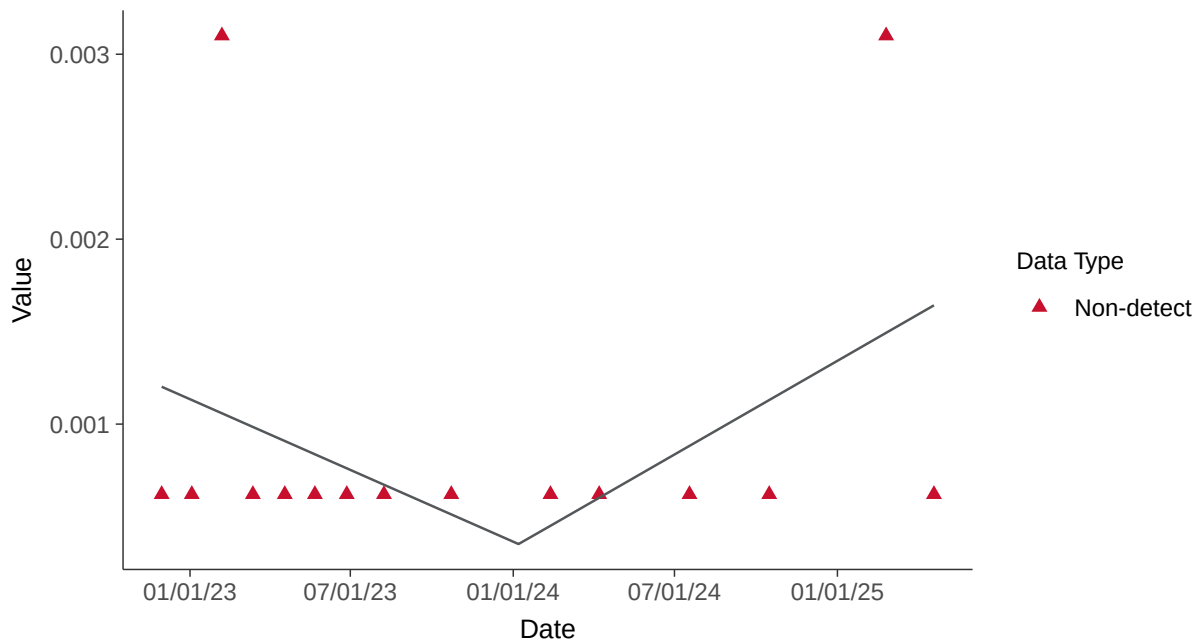
Boxplot by Season

Vanadium, MW-30 (mg/L)



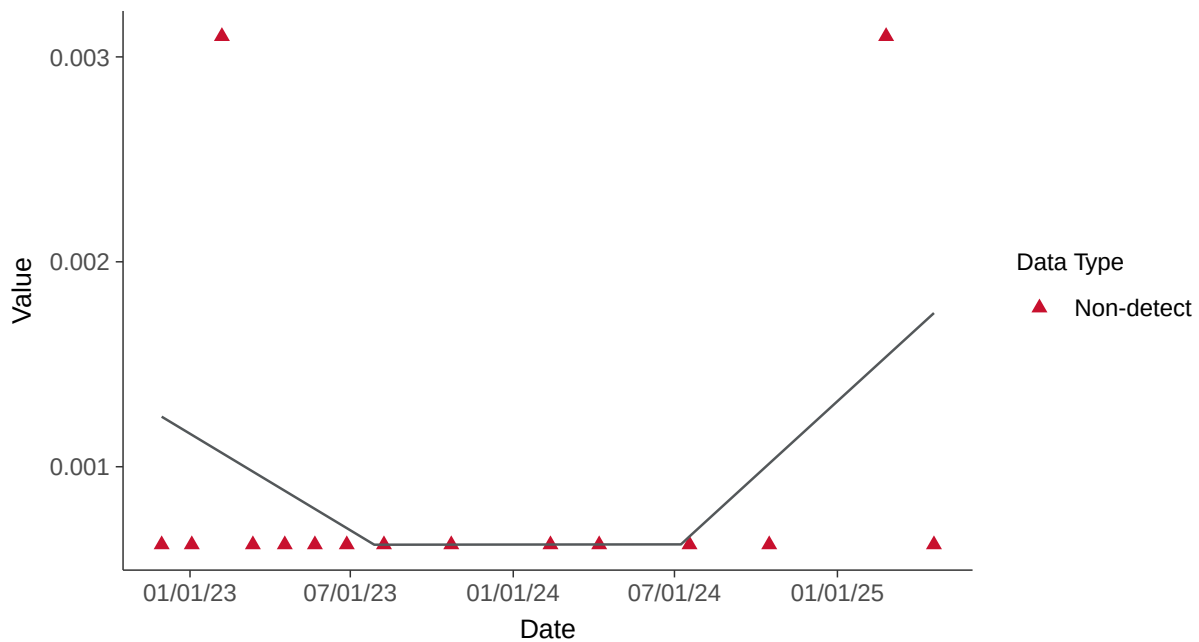
Trend Regression: Piecewise Linear-Linear

Vanadium, MW-30 (mg/L)



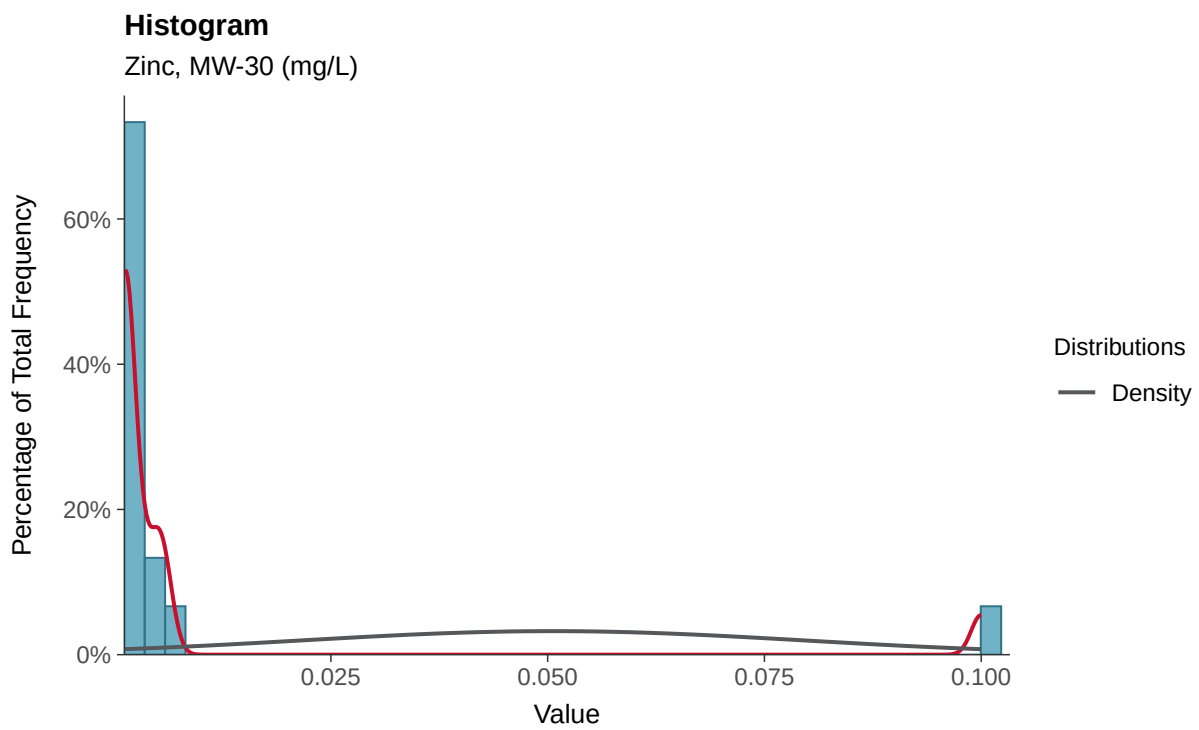
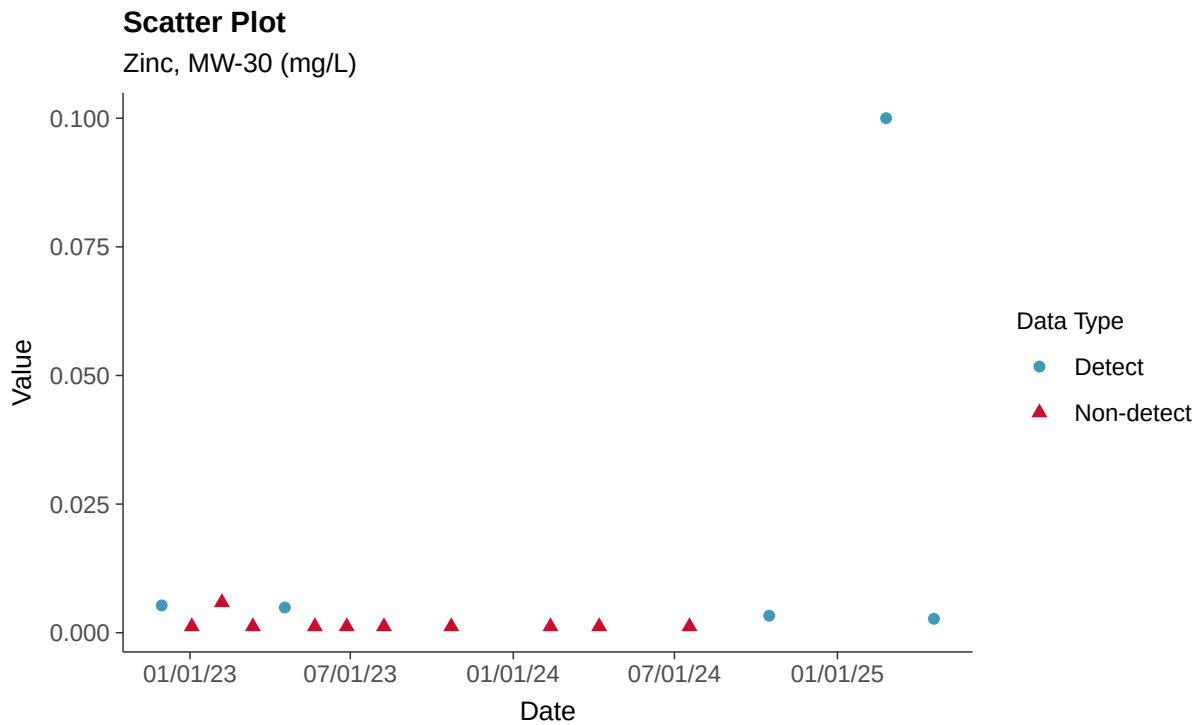
Trend Regression: Piecewise Linear-Linear-Linear

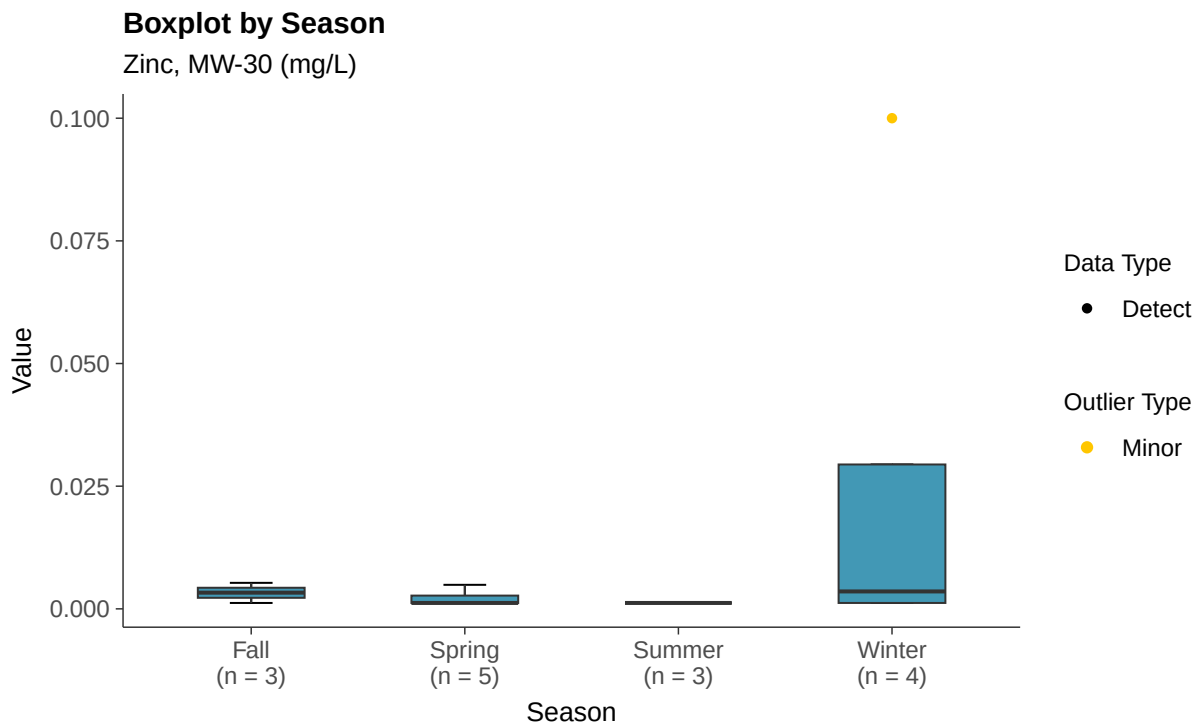
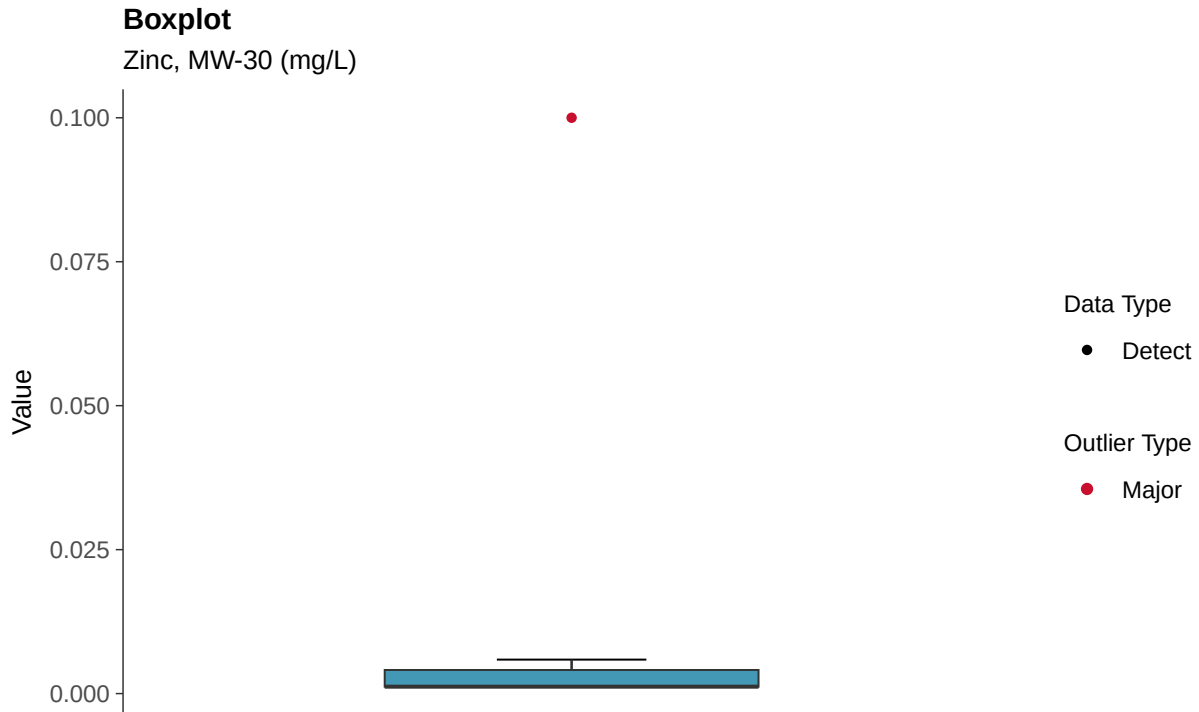
Vanadium, MW-30 (mg/L)



Part 115: Zinc, MW-30

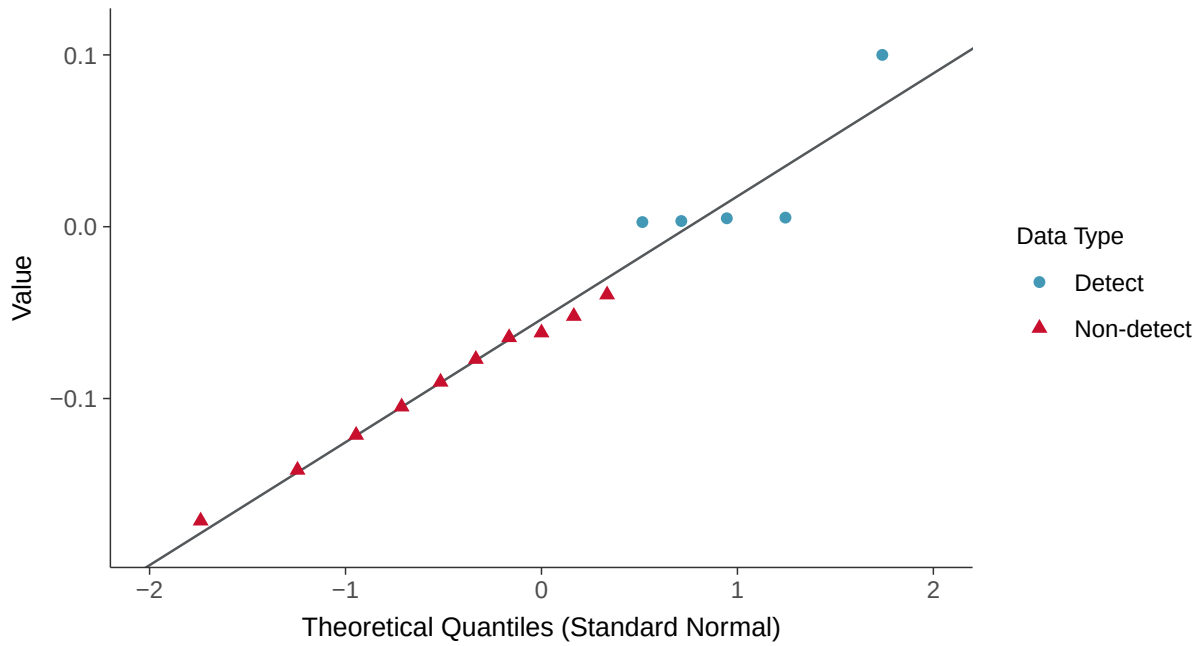
ID: 40_1_5_129





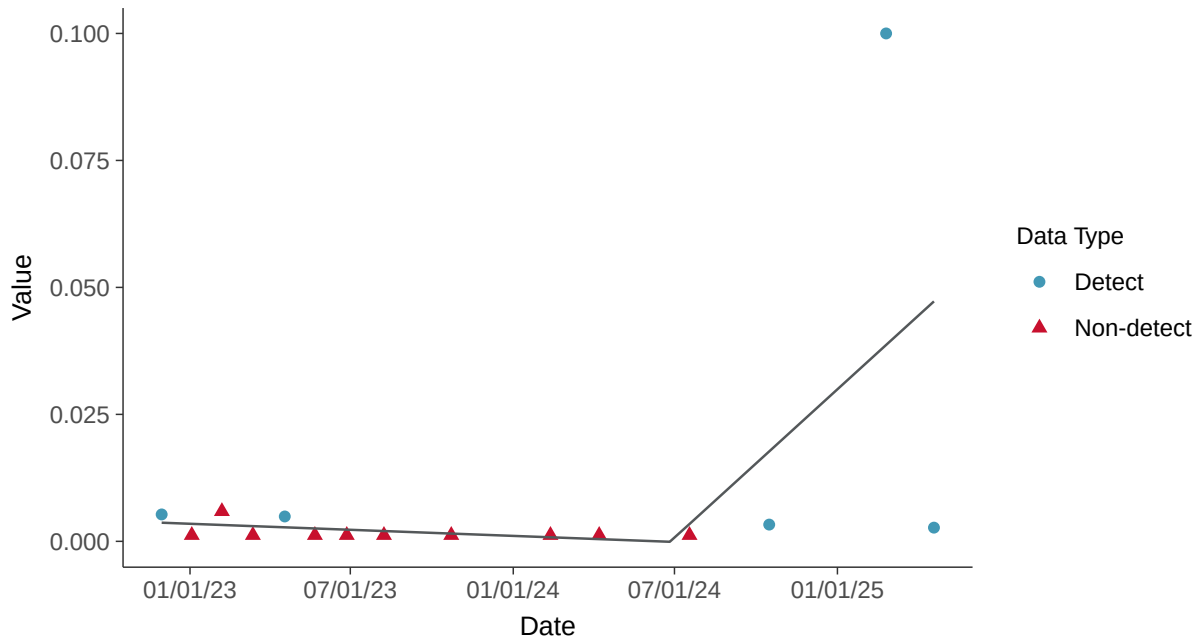
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-30 (mg/L)



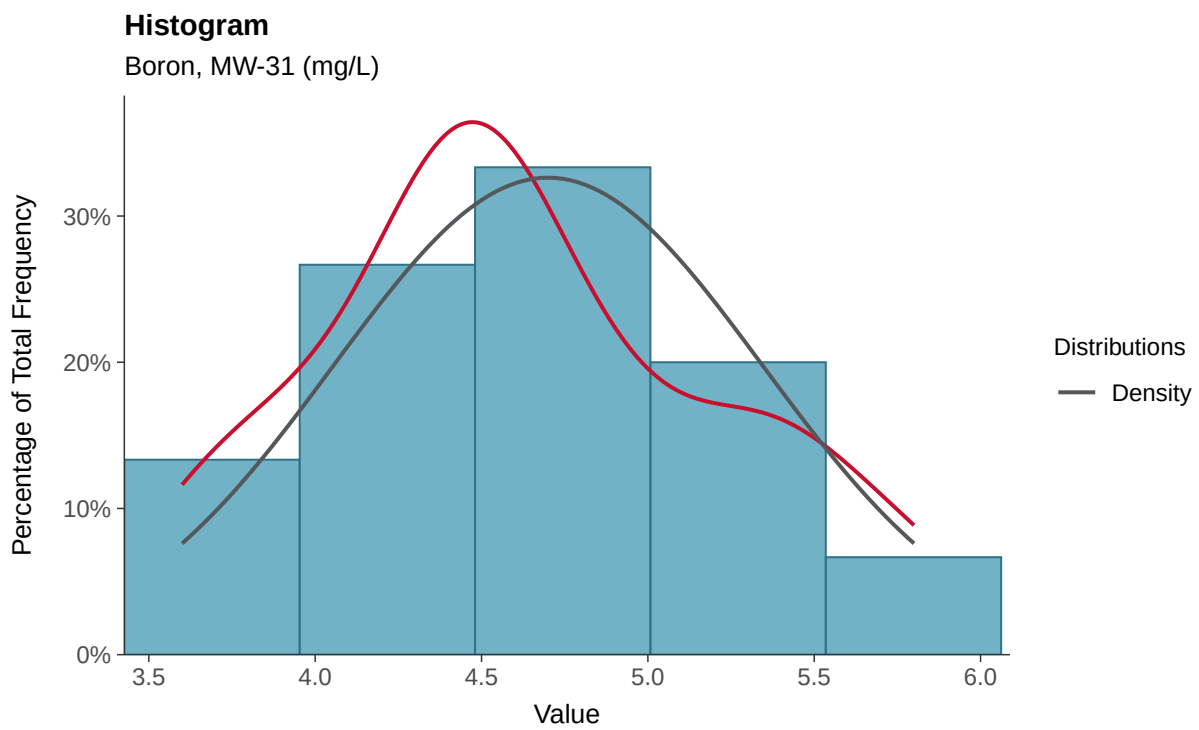
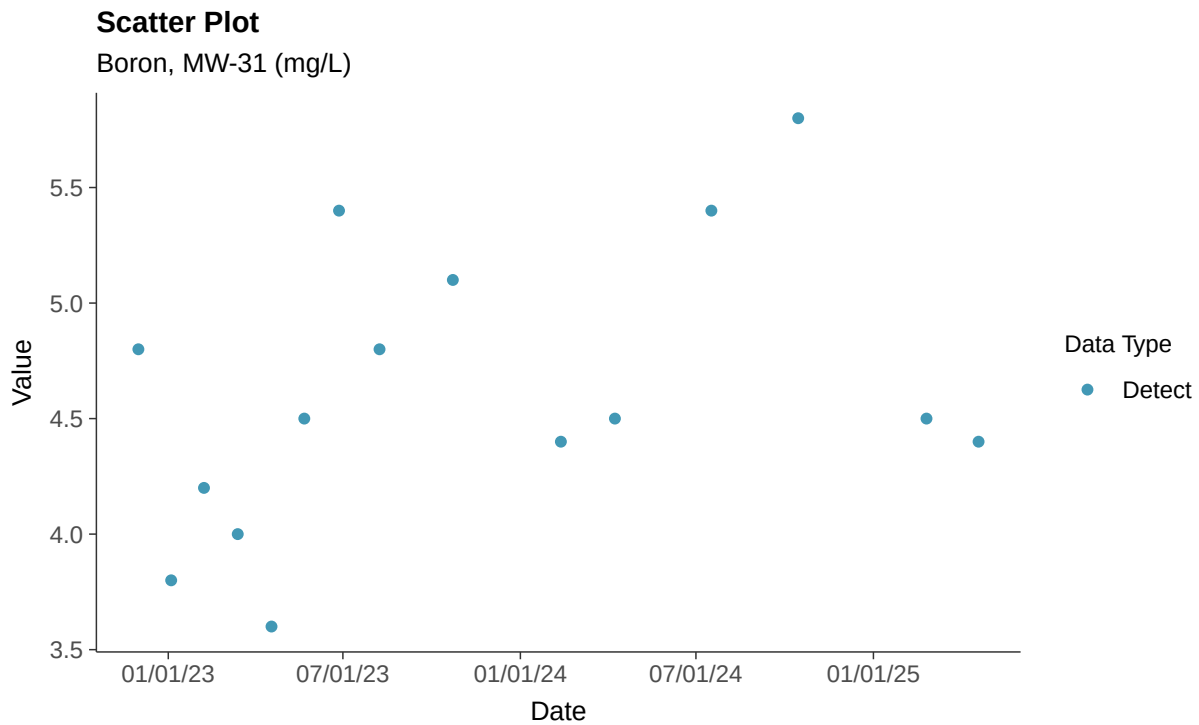
Trend Regression: Piecewise Linear-Linear

Zinc, MW-30 (mg/L)



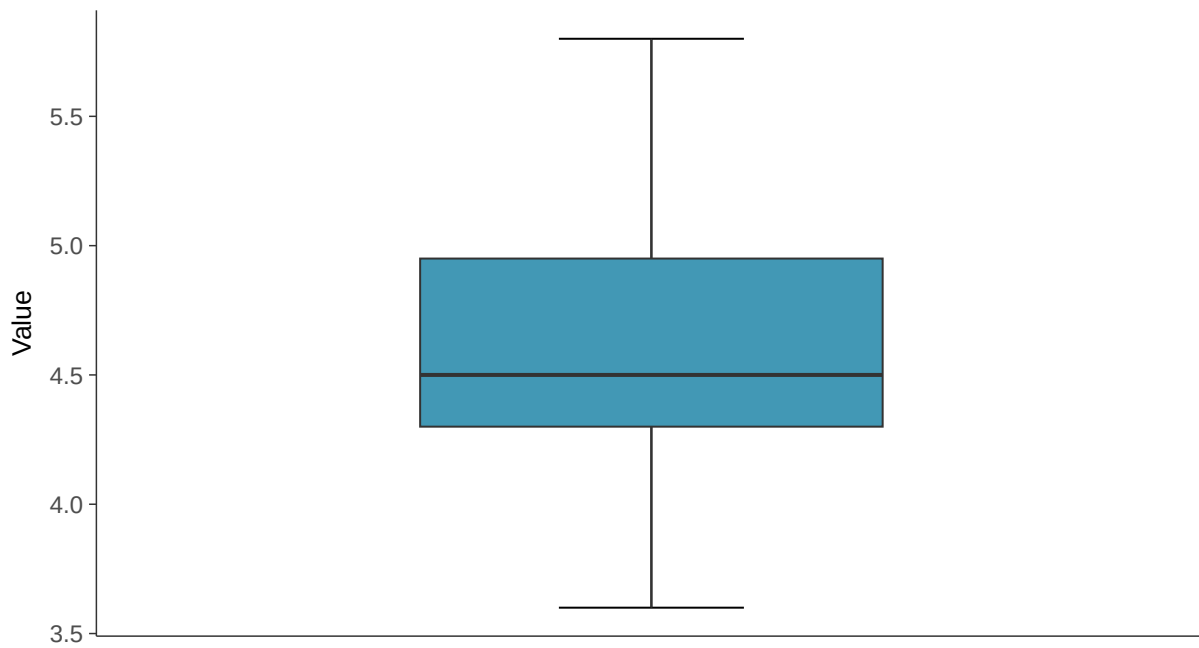
Appendix III: Boron, MW-31

ID: 41_1_3_105



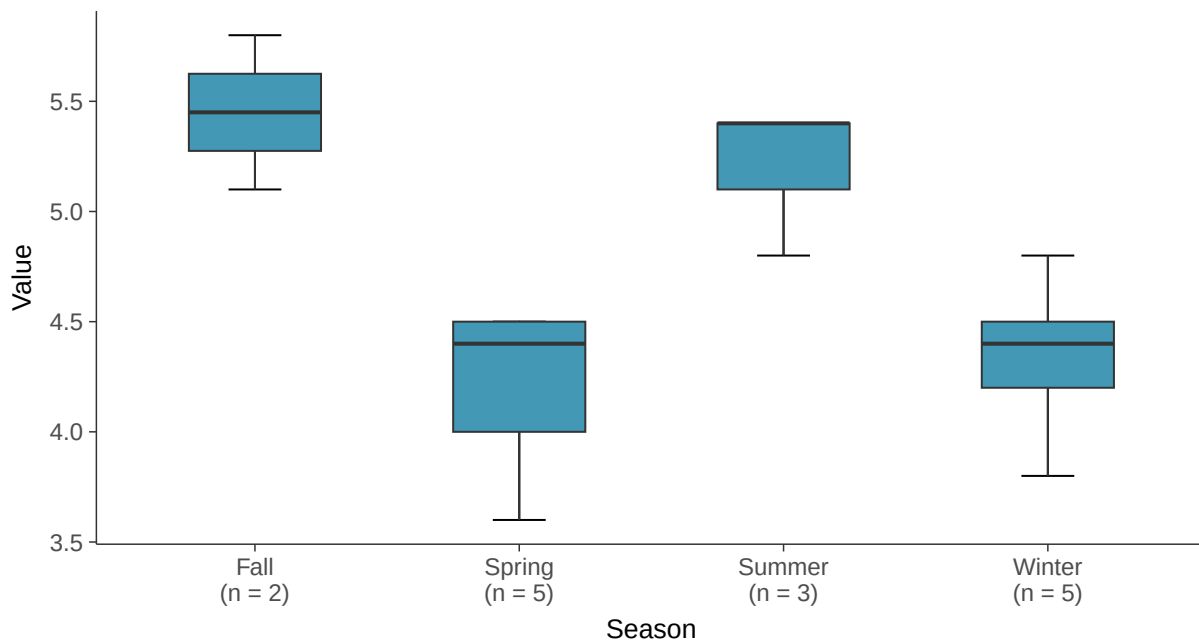
Boxplot

Boron, MW-31 (mg/L)



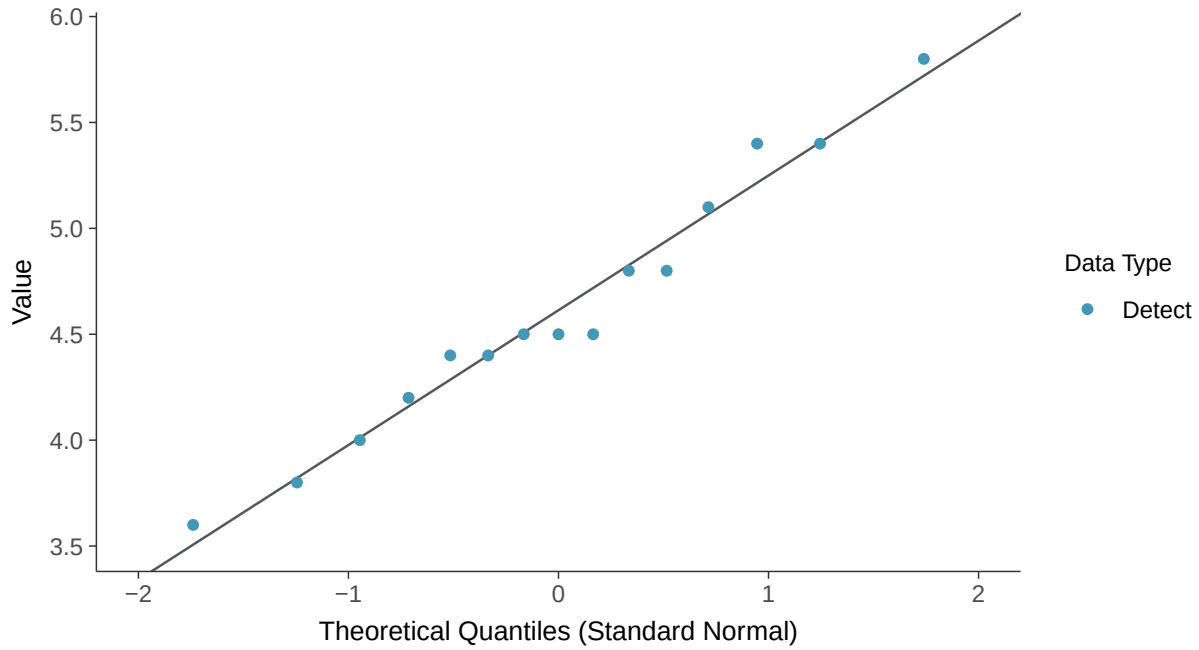
Boxplot by Season

Boron, MW-31 (mg/L)



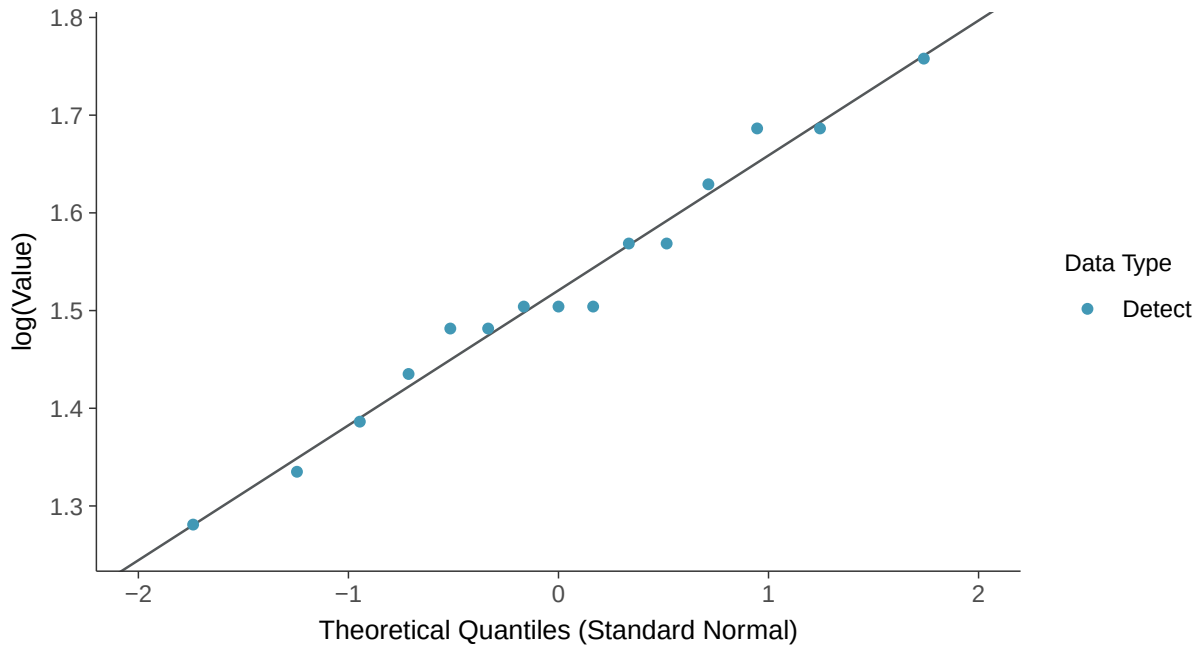
Normal Q-Q plot

Boron, MW-31 (mg/L)



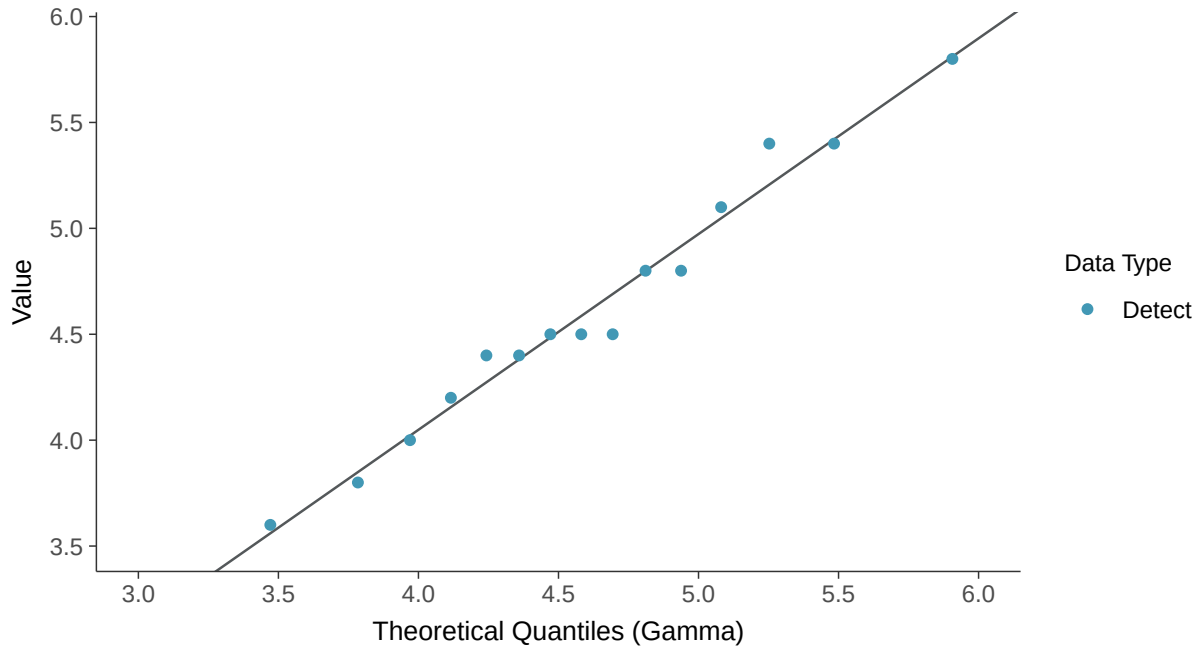
Lognormal Q-Q plot

Boron, MW-31 (mg/L)



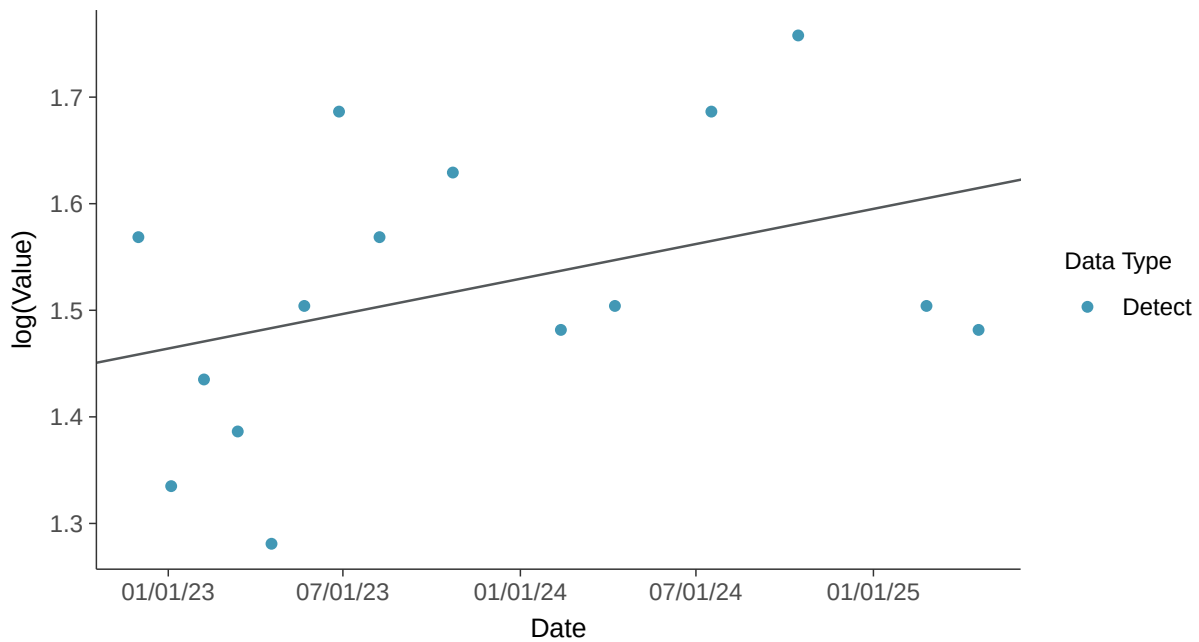
Gamma Q-Q plot

Boron, MW-31 (mg/L)



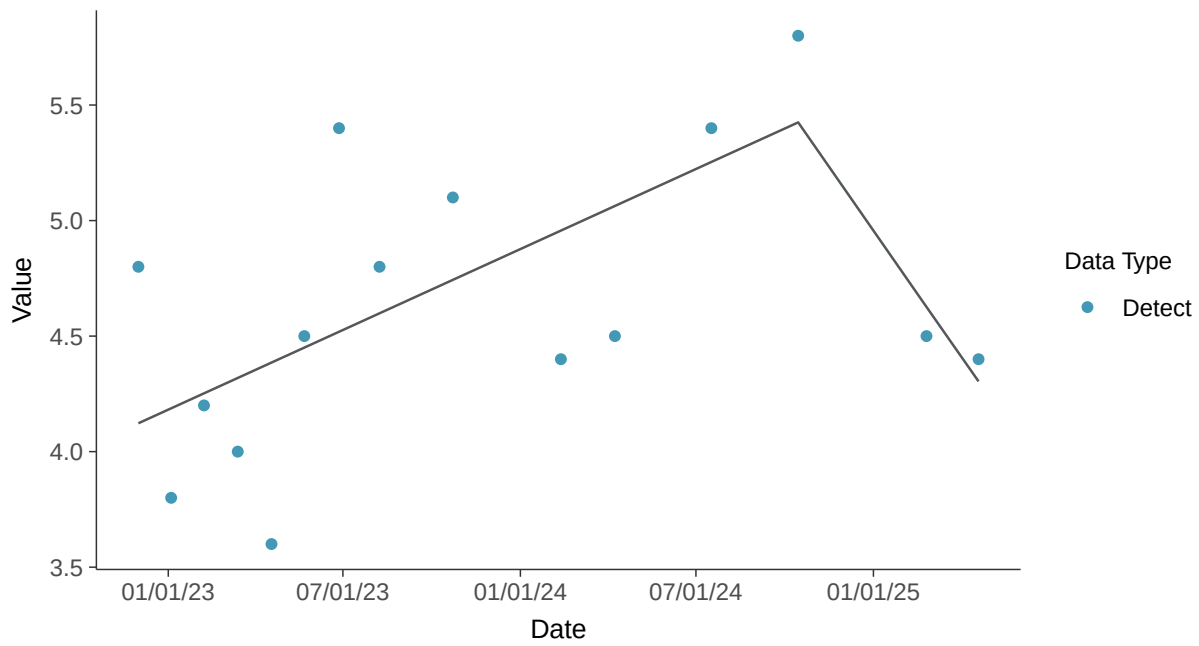
Trend Regression: Lognormal MLE

Boron, MW-31 (mg/L)



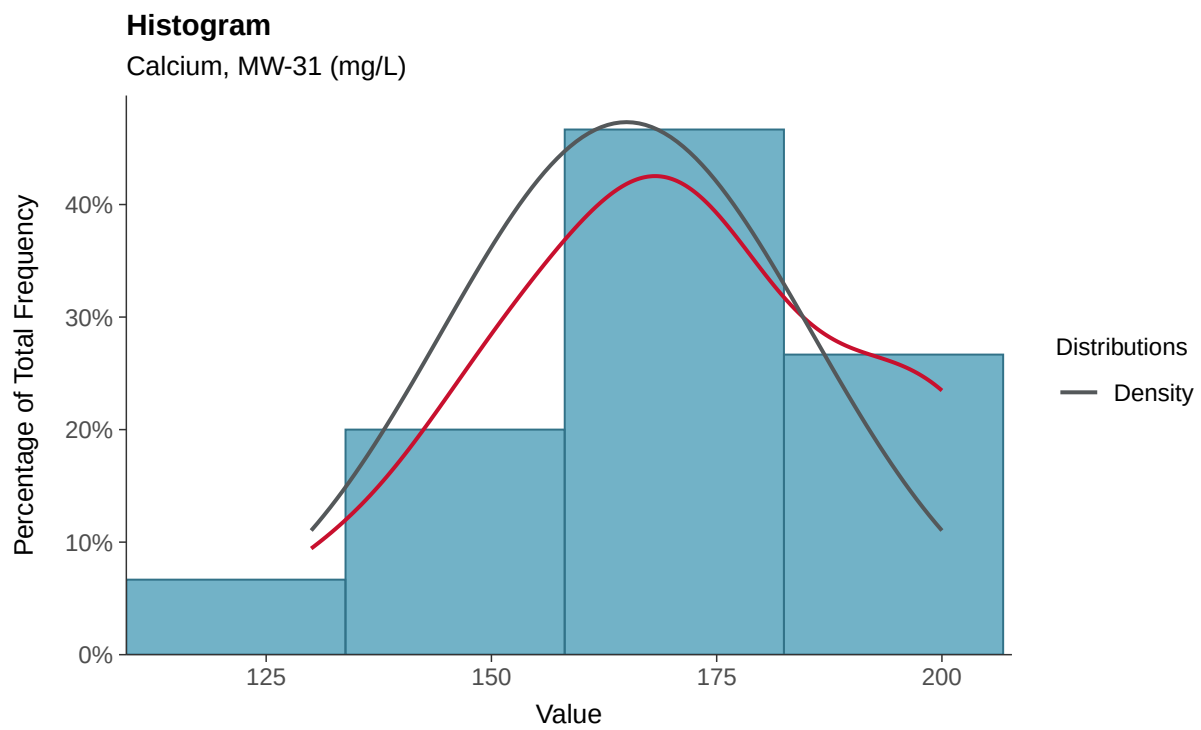
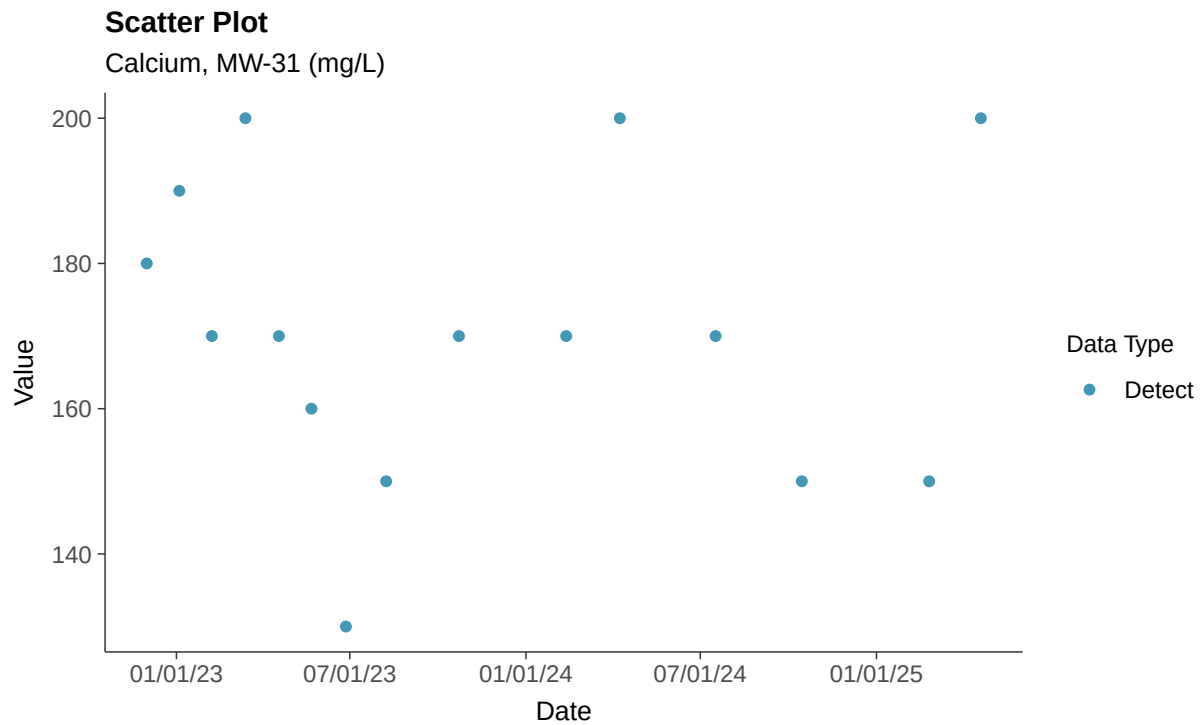


Trend Regression: Piecewise Linear-Linear
Boron, MW-31 (mg/L)



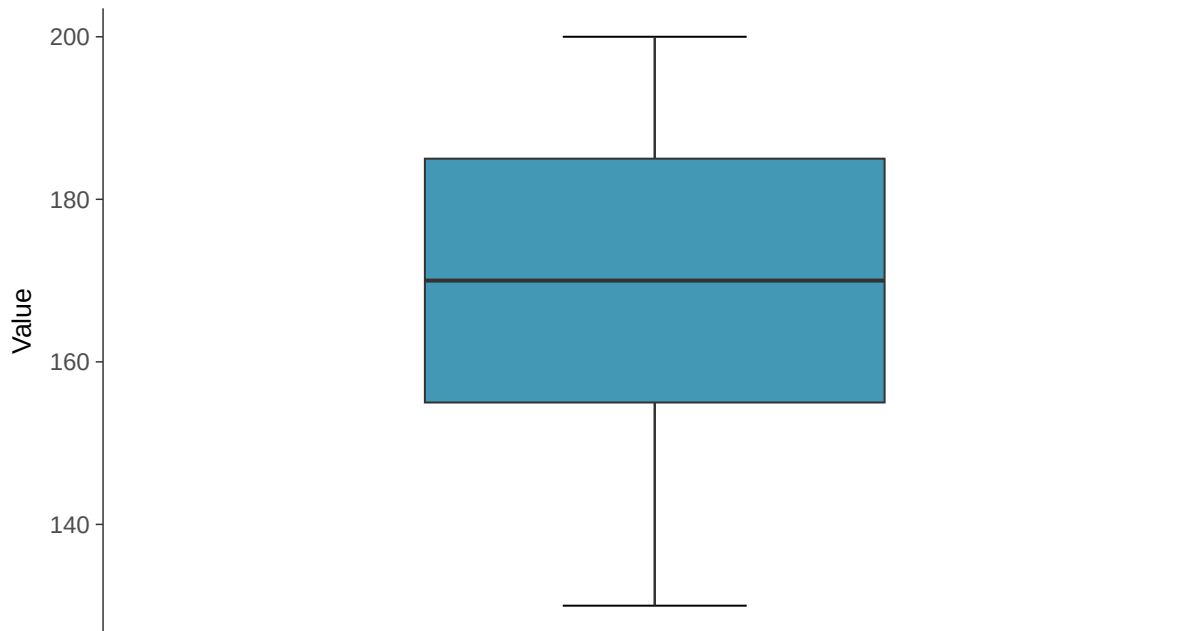
Appendix III: Calcium, MW-31

ID: 41_1_3_107



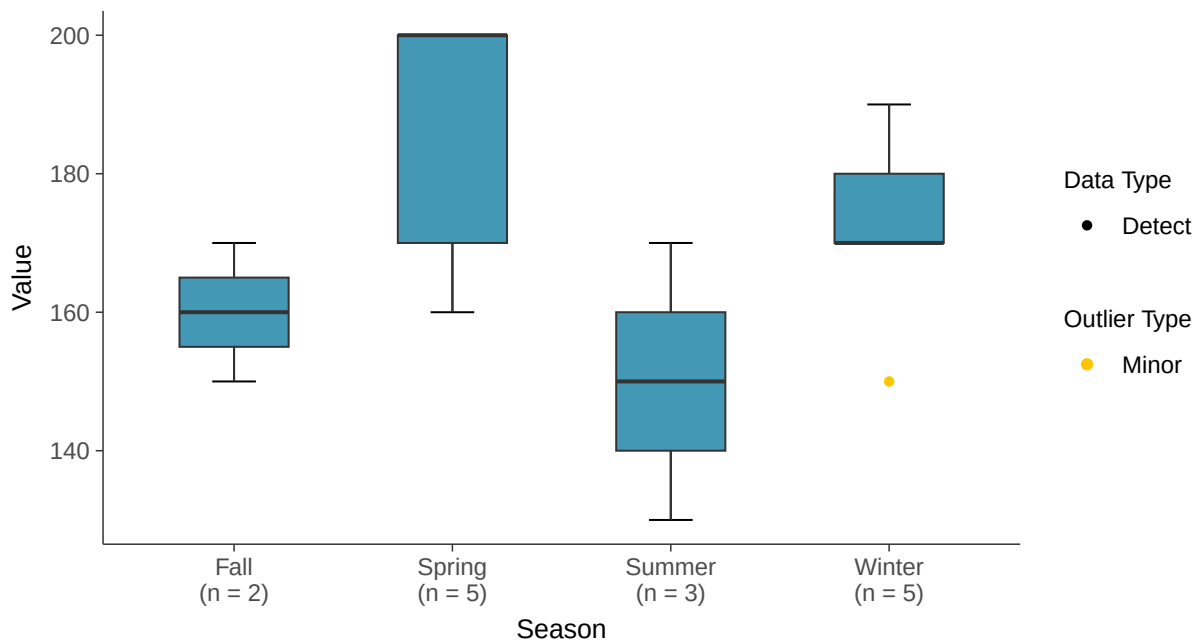
Boxplot

Calcium, MW-31 (mg/L)



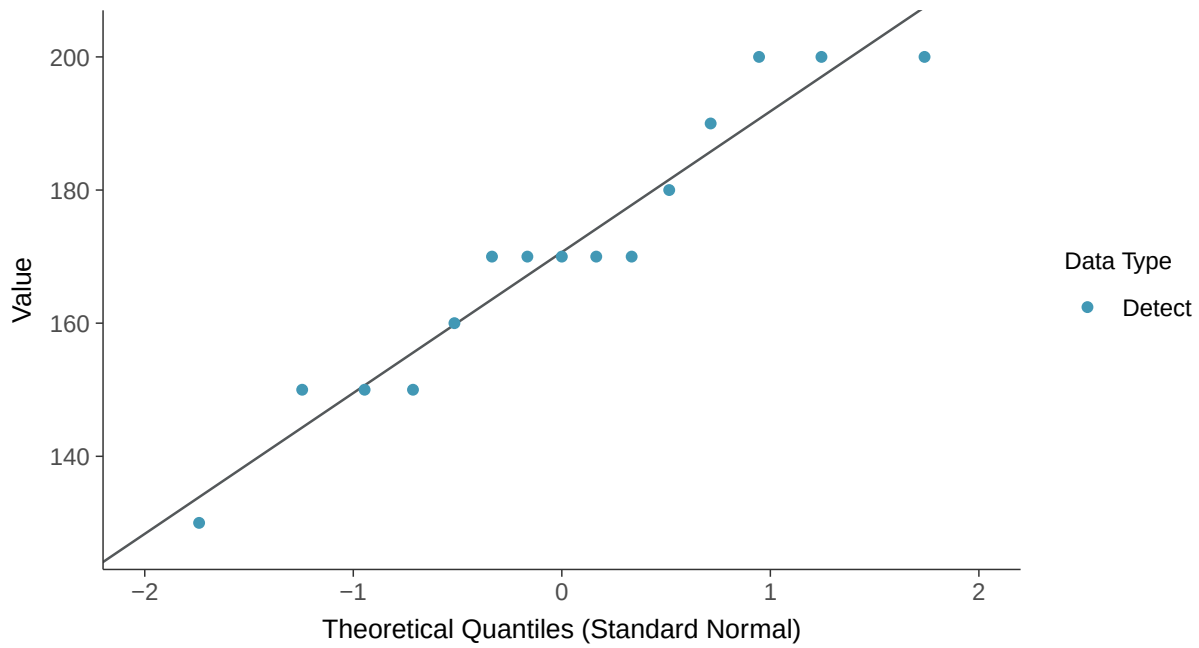
Boxplot by Season

Calcium, MW-31 (mg/L)



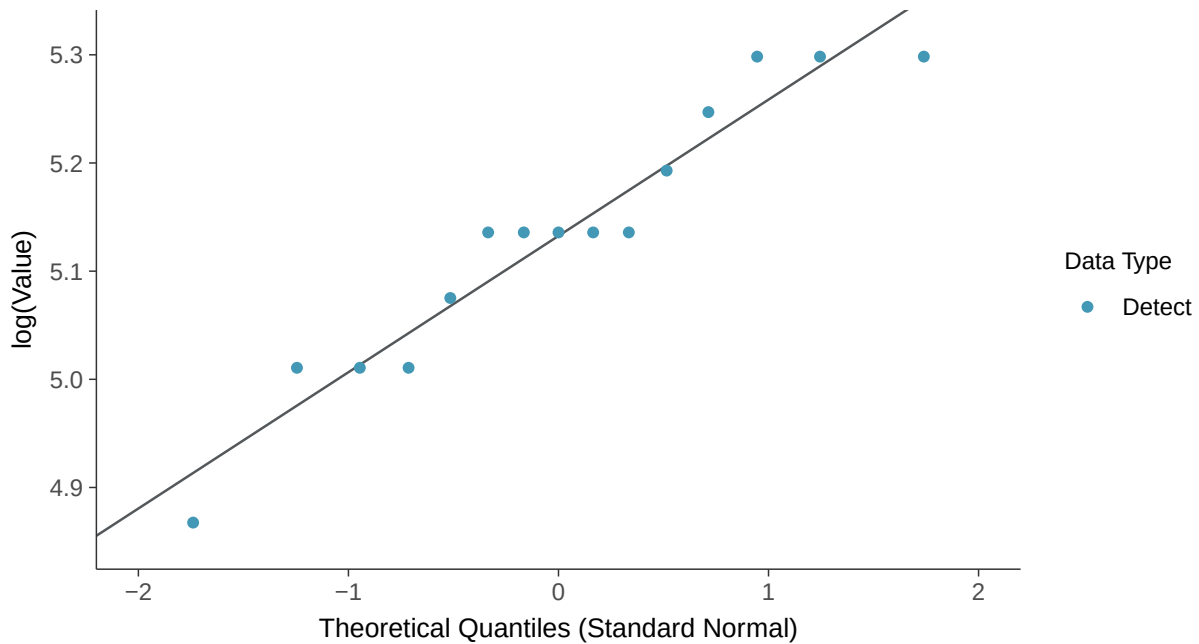
Normal Q-Q plot

Calcium, MW-31 (mg/L)



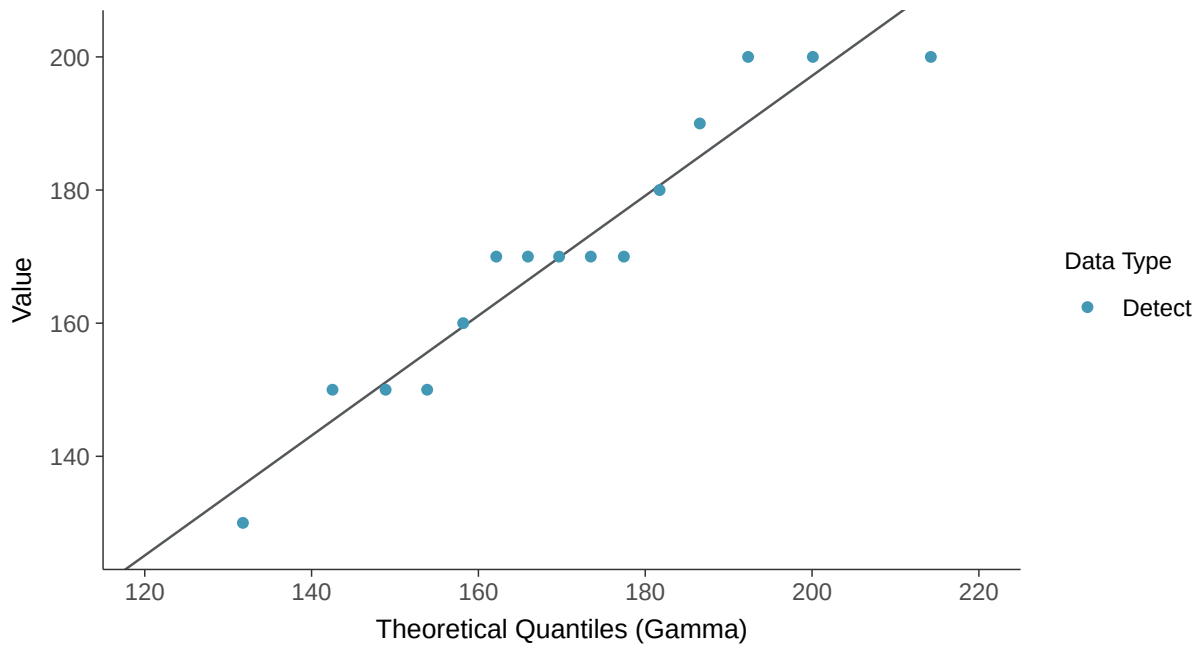
Lognormal Q-Q plot

Calcium, MW-31 (mg/L)



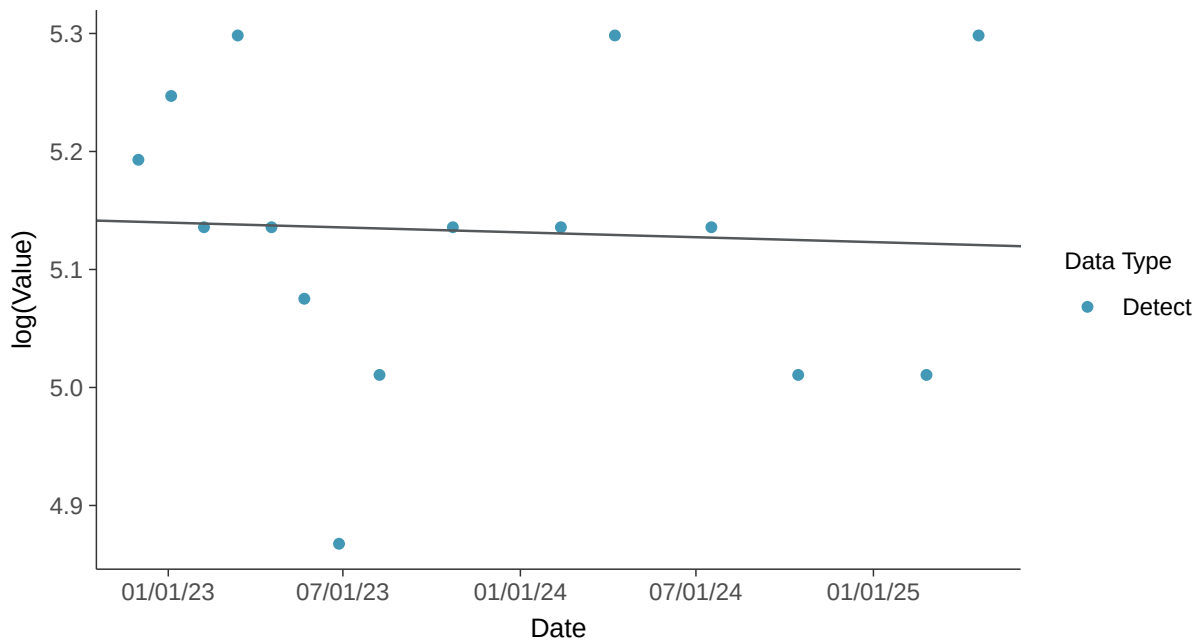
Gamma Q-Q plot

Calcium, MW-31 (mg/L)



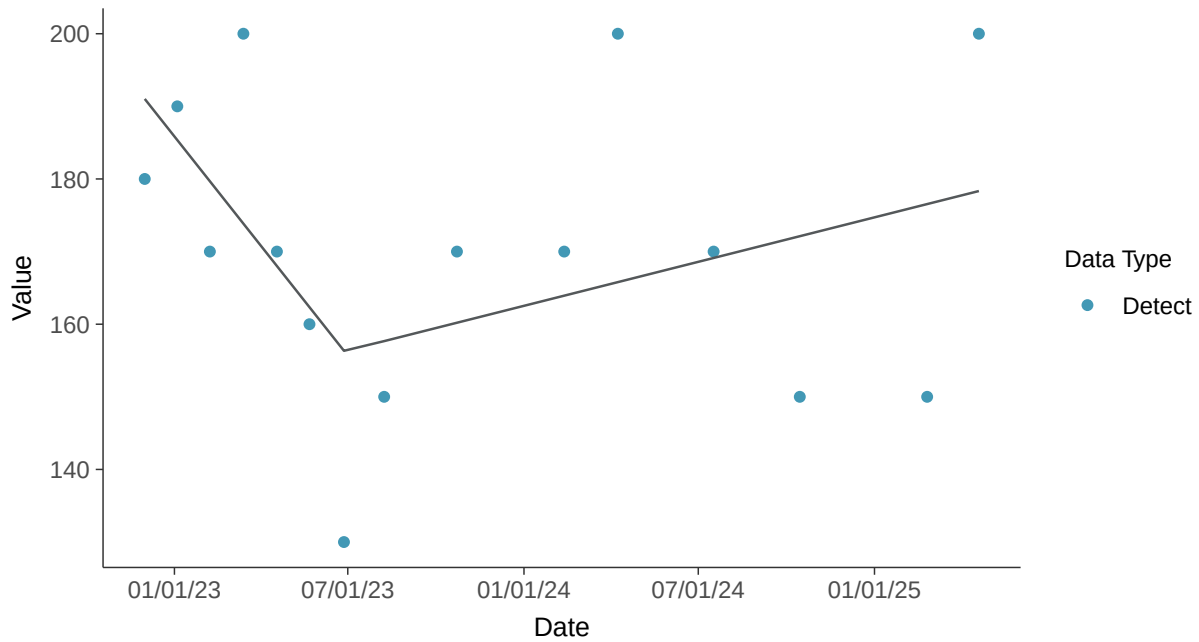
Trend Regression: Lognormal MLE

Calcium, MW-31 (mg/L)



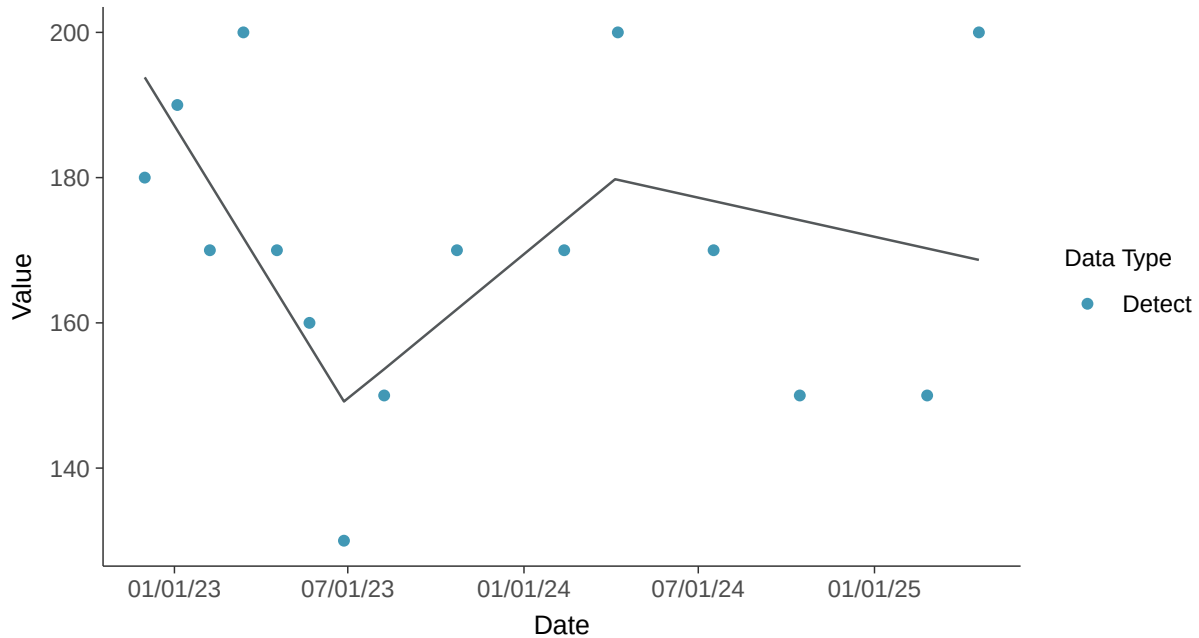
Trend Regression: Piecewise Linear-Linear

Calcium, MW-31 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Calcium, MW-31 (mg/L)

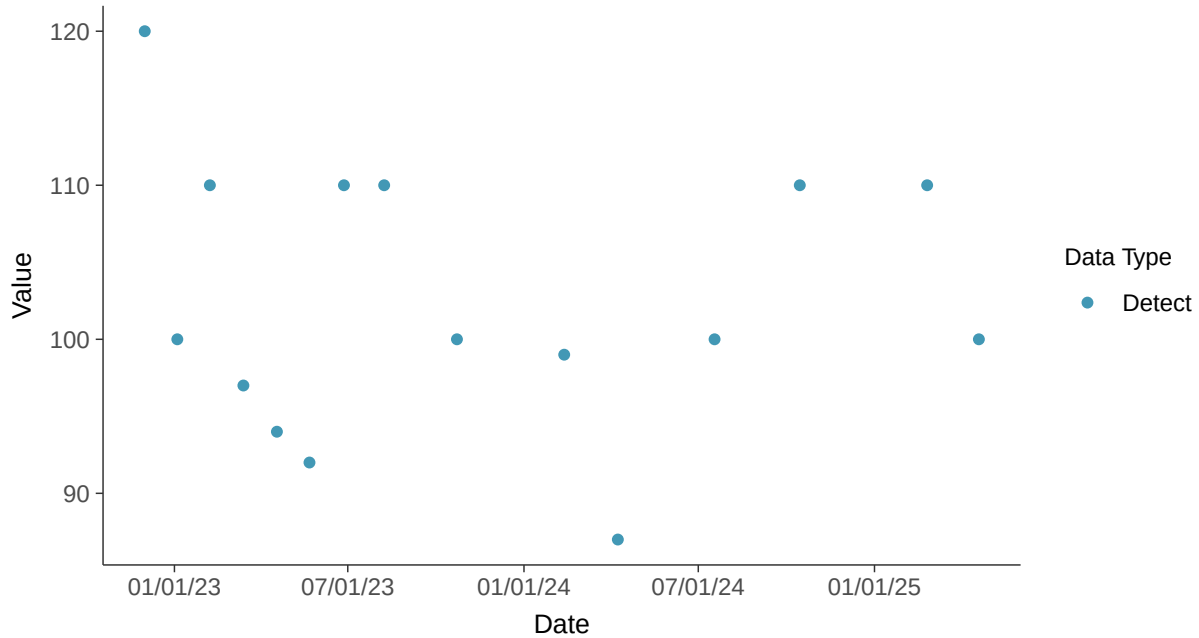


Appendix III: Chloride (as Cl), MW-31

ID: 41_1_3_108

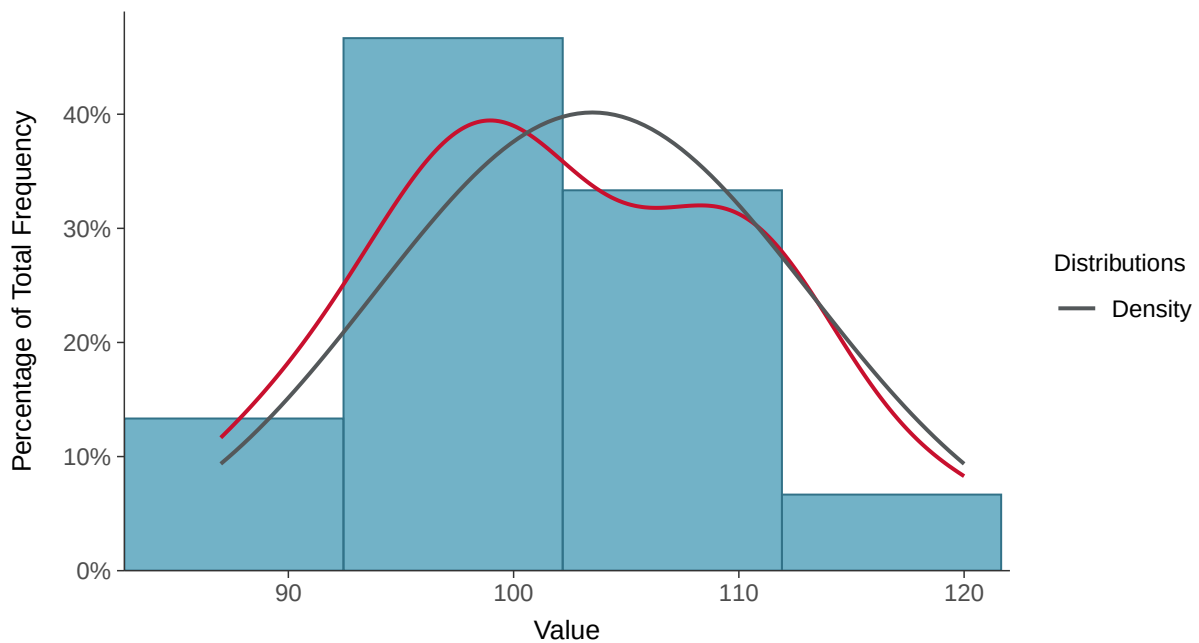
Scatter Plot

Chloride (as Cl), MW-31 (mg/L)



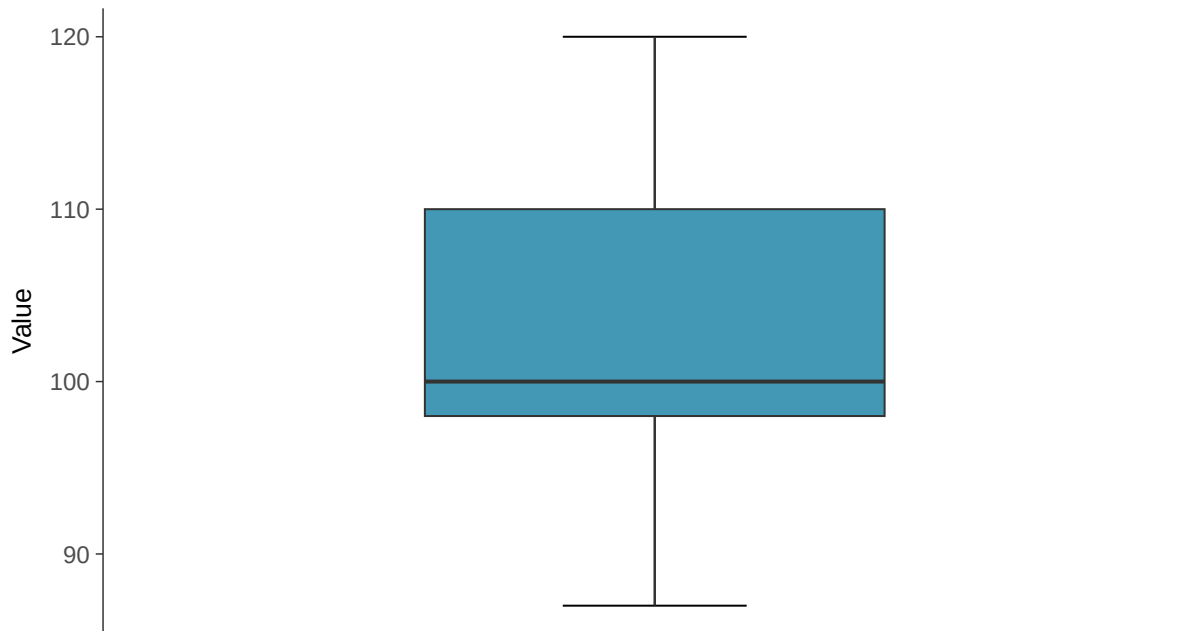
Histogram

Chloride (as Cl), MW-31 (mg/L)



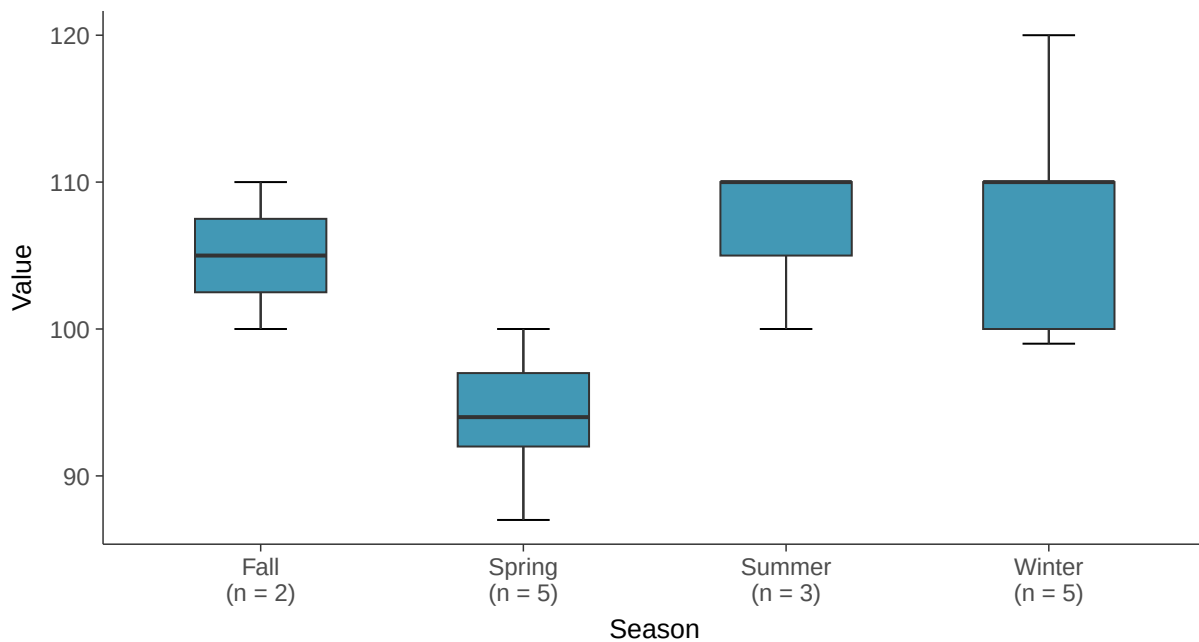
Boxplot

Chloride (as Cl), MW-31 (mg/L)



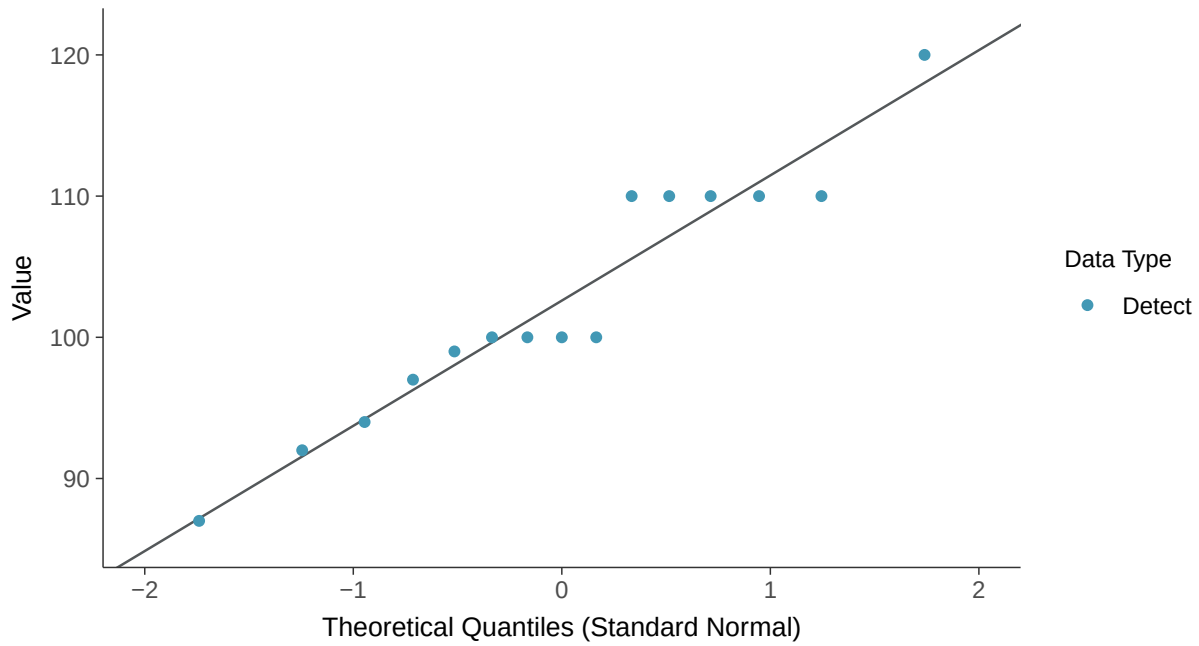
Boxplot by Season

Chloride (as Cl), MW-31 (mg/L)



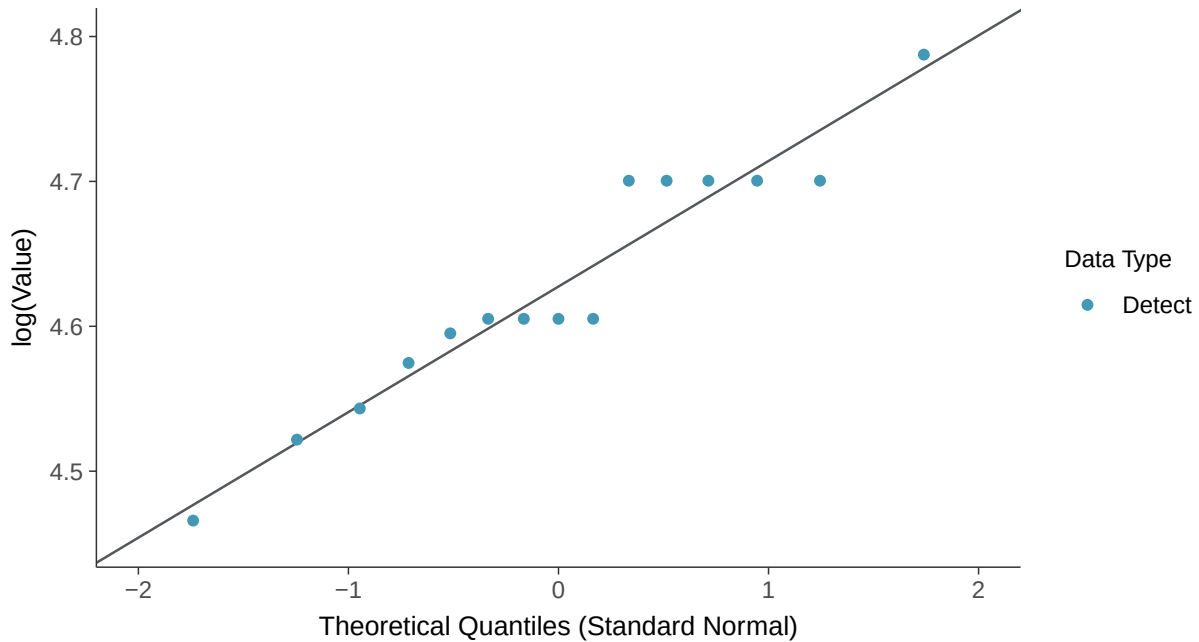
Normal Q-Q plot

Chloride (as Cl), MW-31 (mg/L)



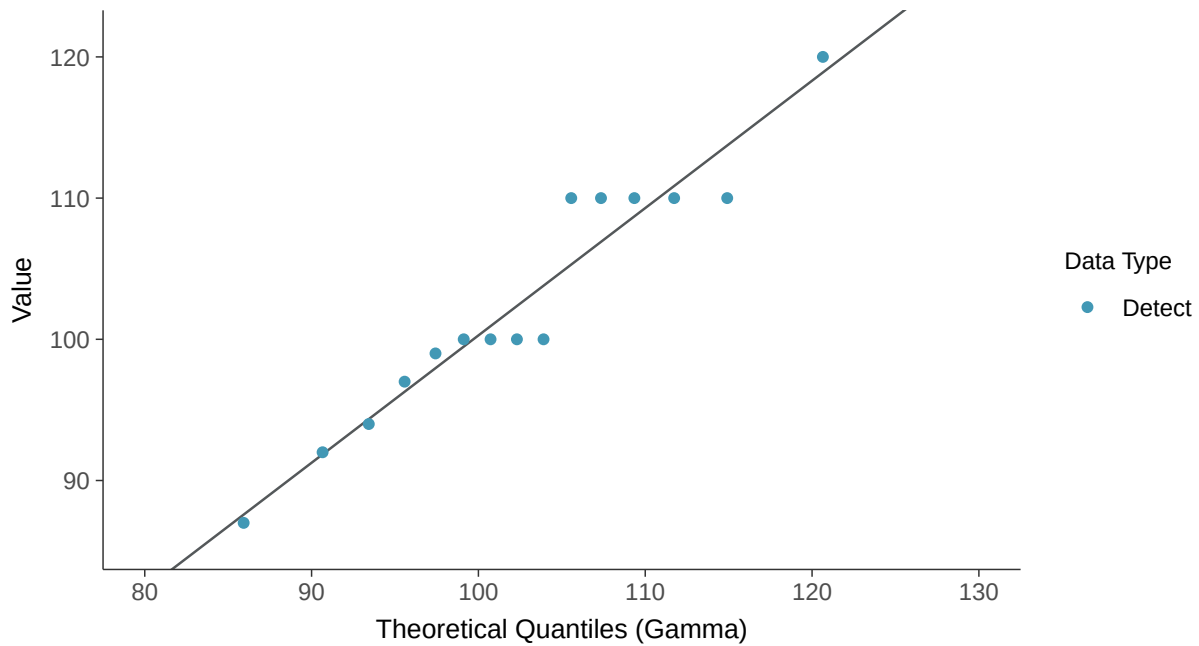
Lognormal Q-Q plot

Chloride (as Cl), MW-31 (mg/L)



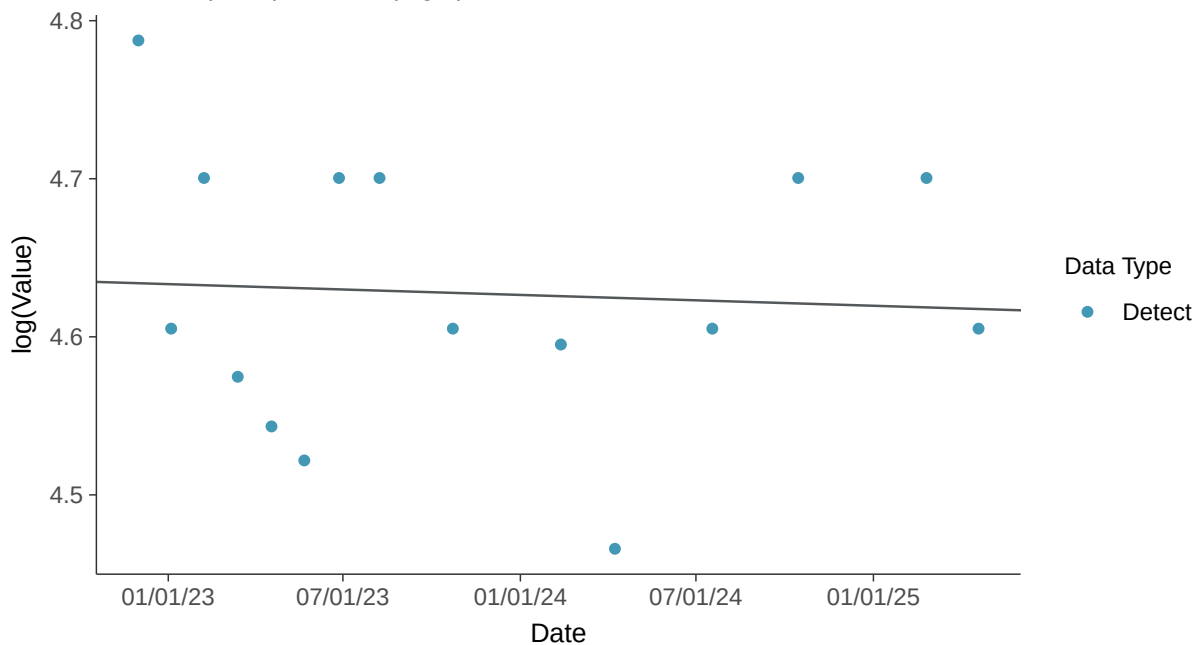
Gamma Q-Q plot

Chloride (as Cl), MW-31 (mg/L)



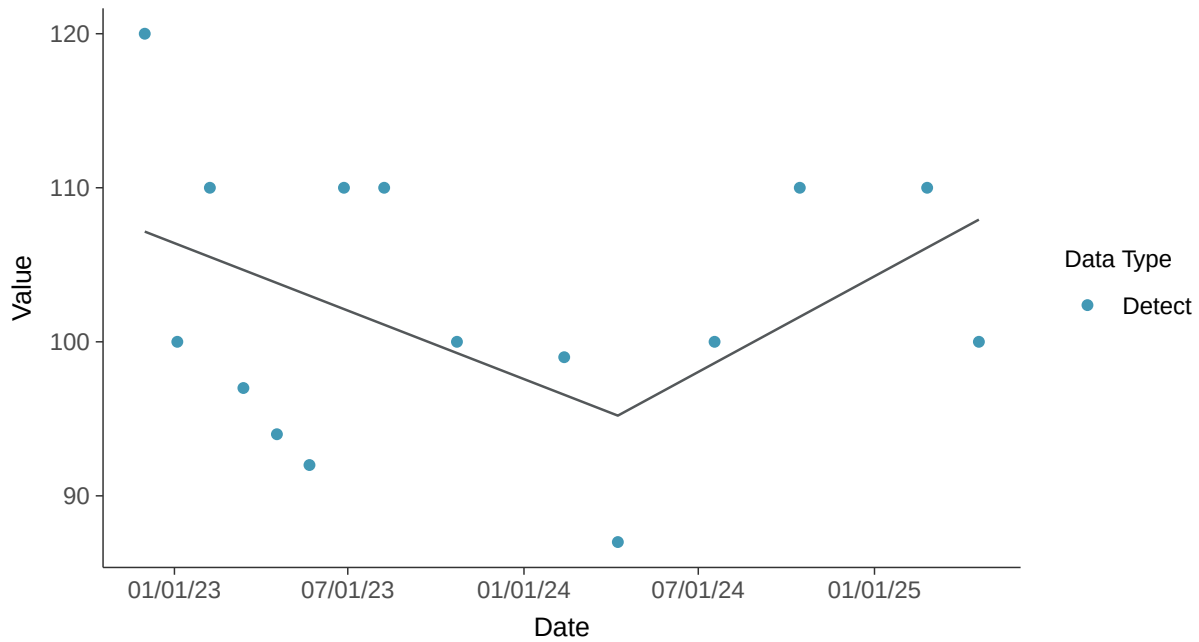
Trend Regression: Lognormal MLE

Chloride (as Cl), MW-31 (mg/L)



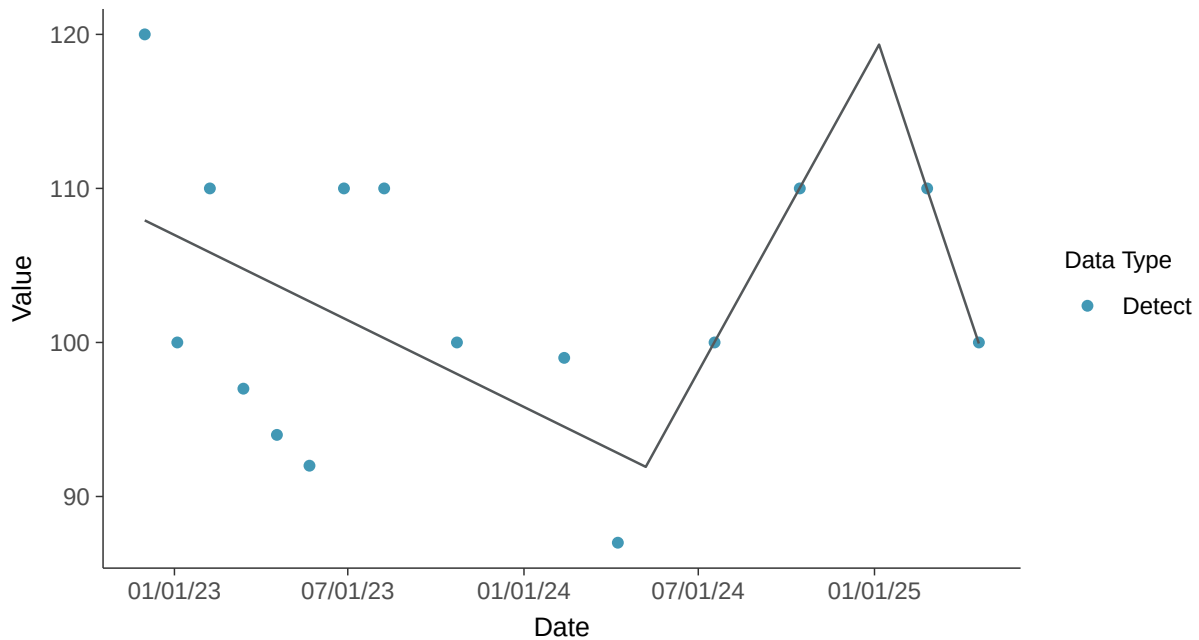
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-31 (mg/L)



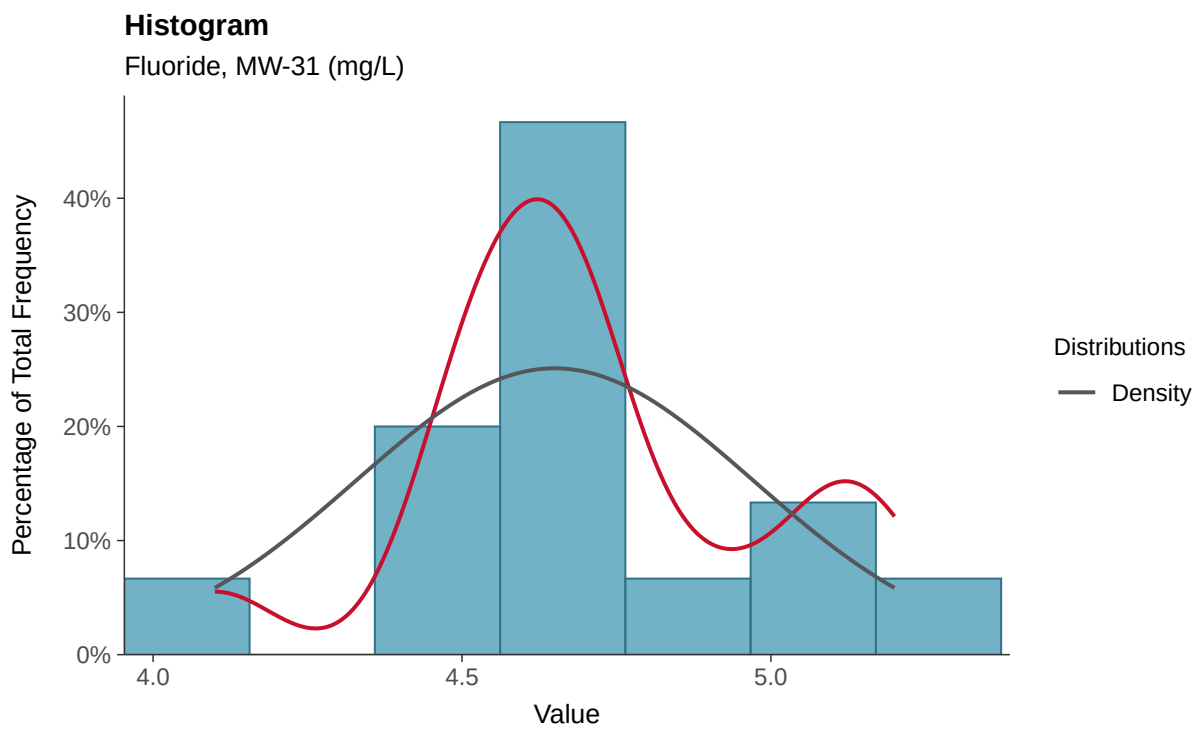
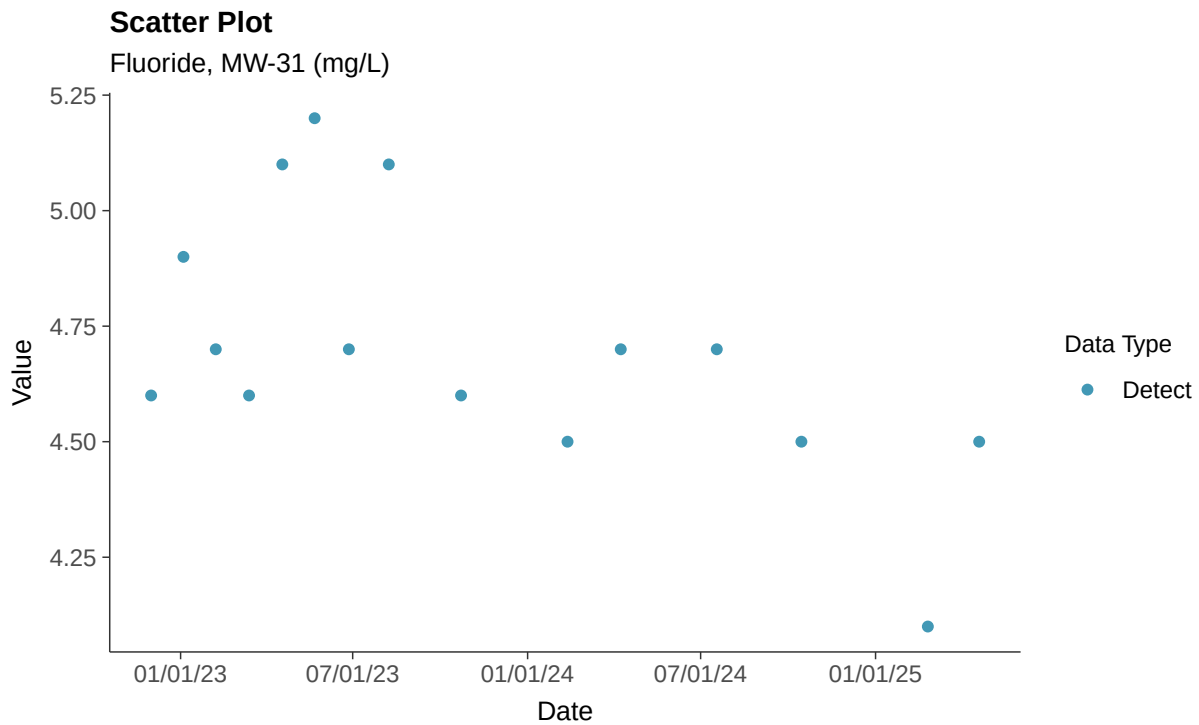
Trend Regression: Piecewise Linear-Linear-Linear

Chloride (as Cl), MW-31 (mg/L)



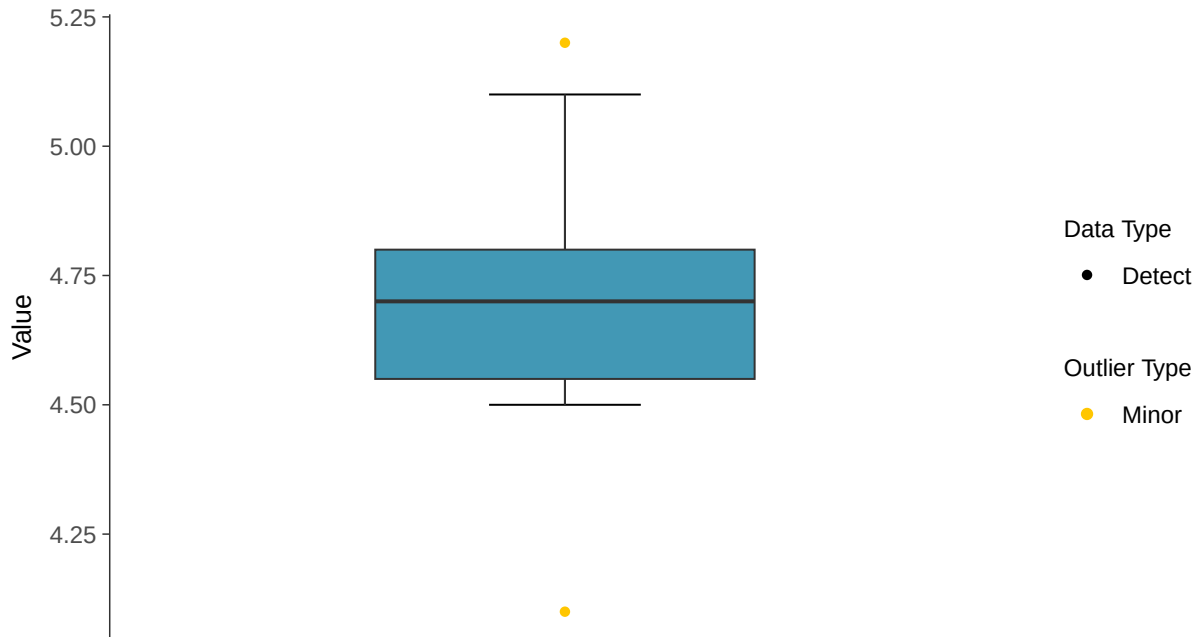
Appendix III: Fluoride, MW-31

ID: 41_1_3_112



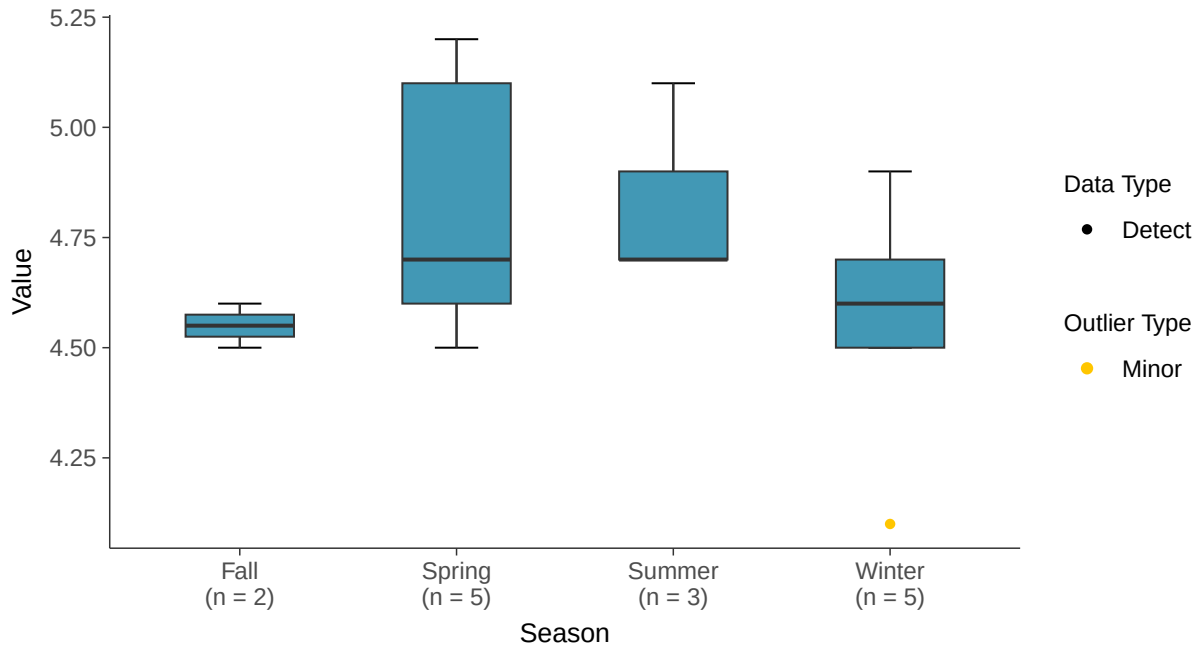
Boxplot

Fluoride, MW-31 (mg/L)



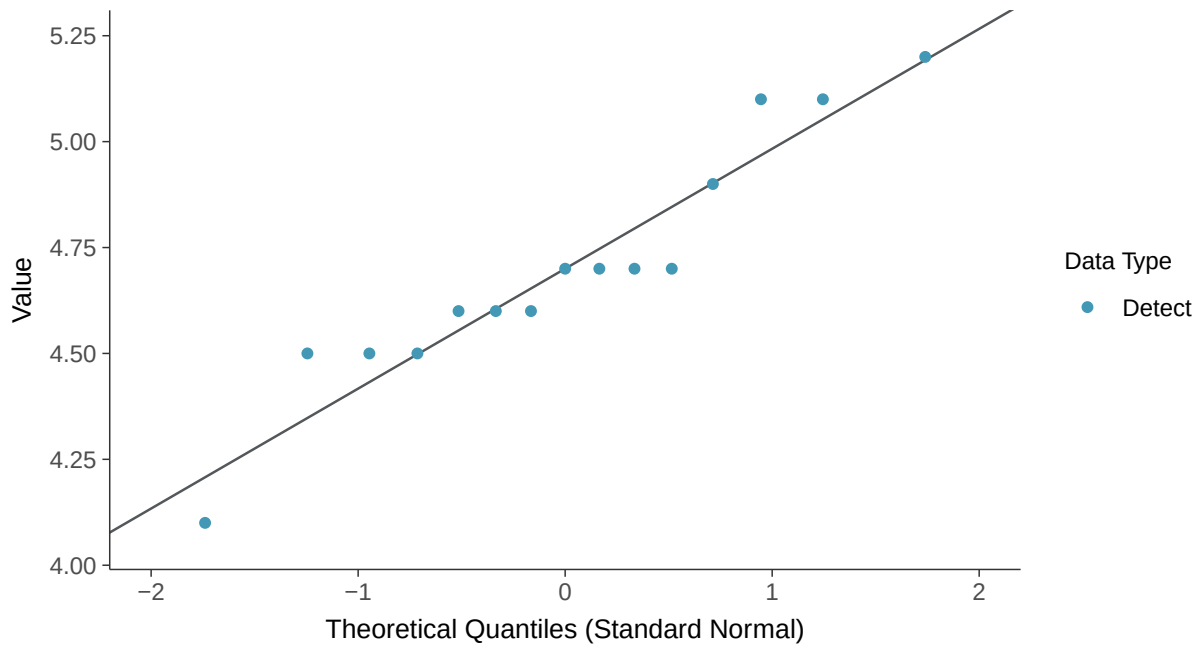
Boxplot by Season

Fluoride, MW-31 (mg/L)



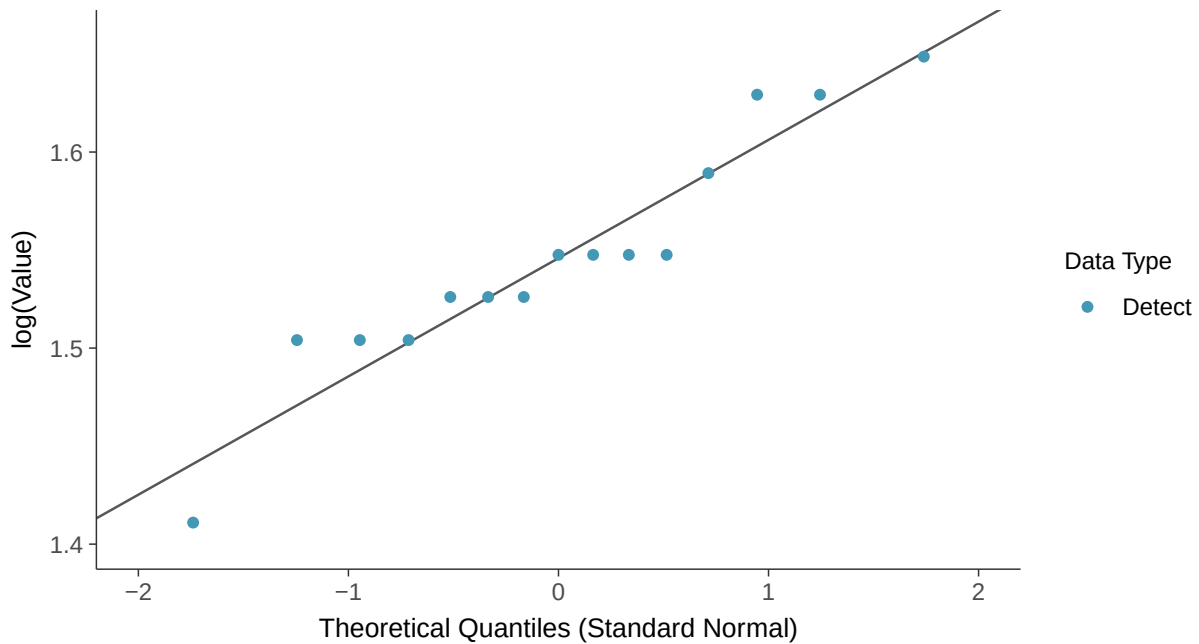
Normal Q-Q plot

Fluoride, MW-31 (mg/L)



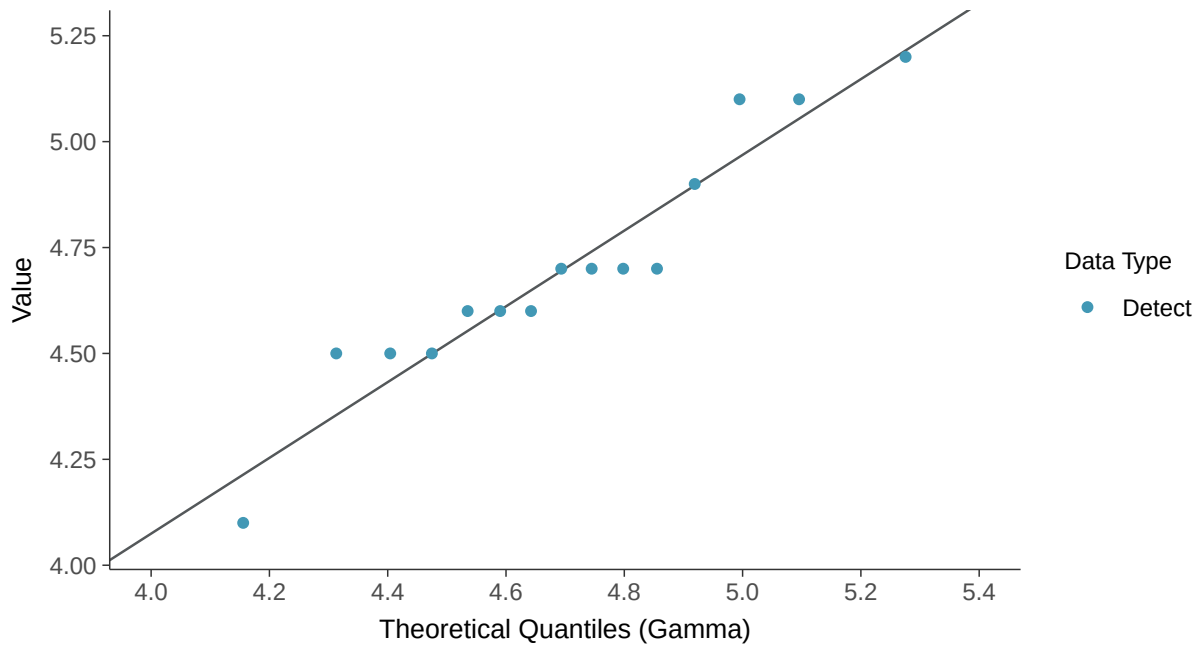
Lognormal Q-Q plot

Fluoride, MW-31 (mg/L)



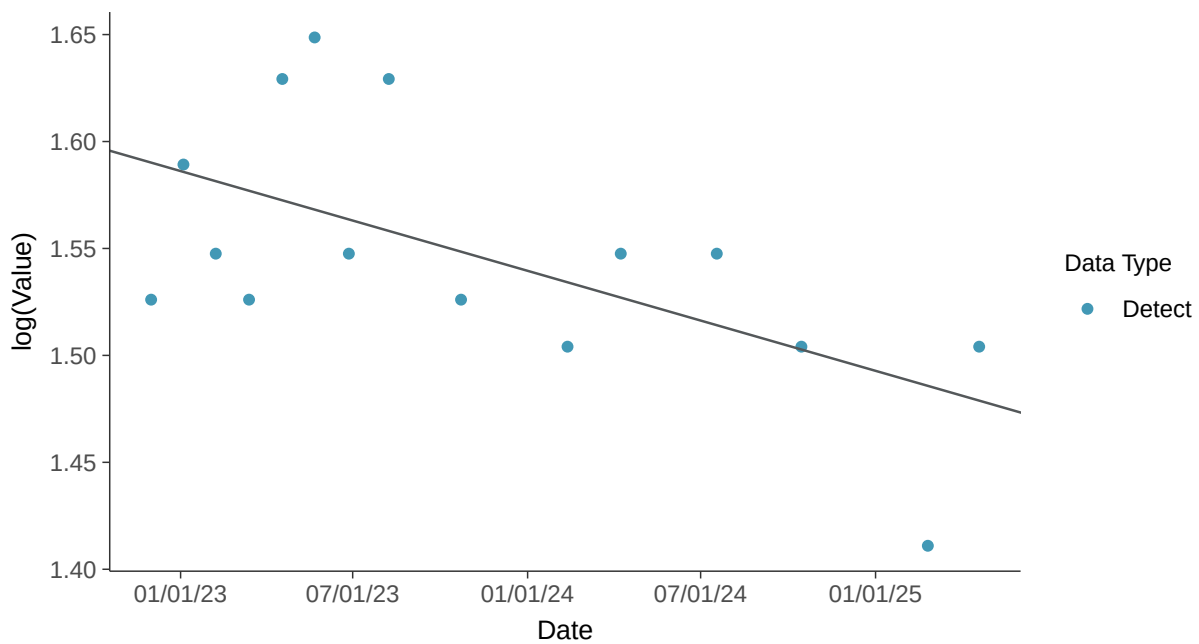
Gamma Q-Q plot

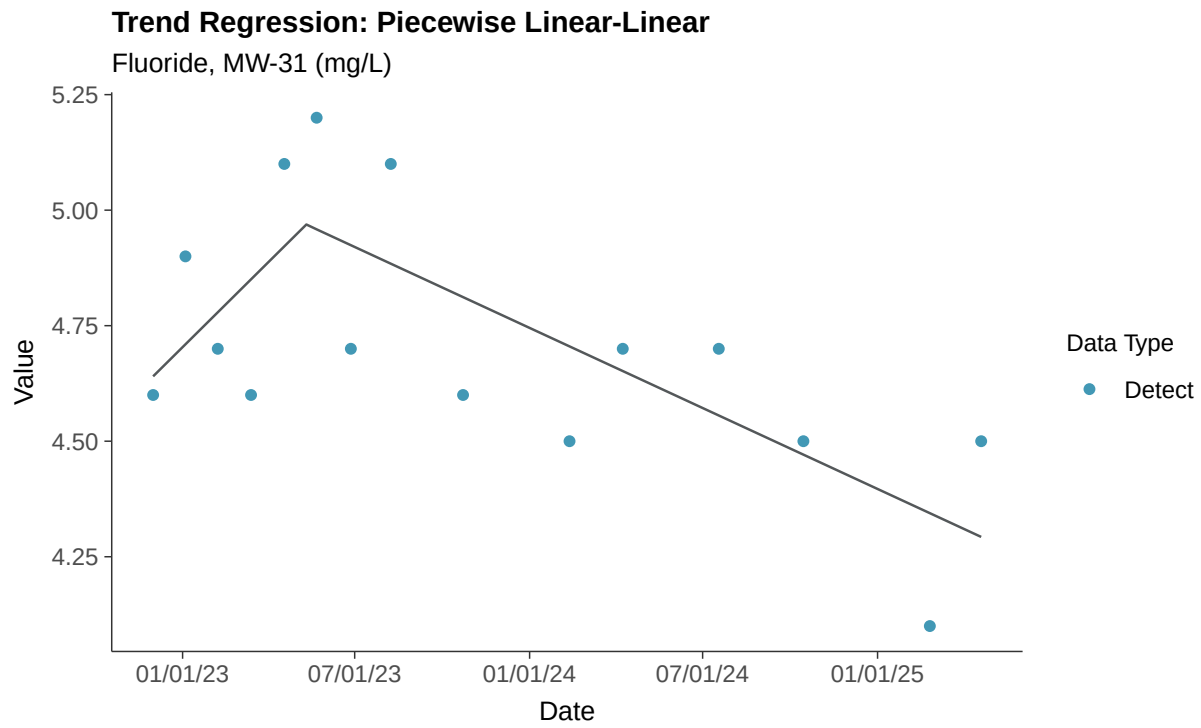
Fluoride, MW-31 (mg/L)



Trend Regression: Lognormal MLE

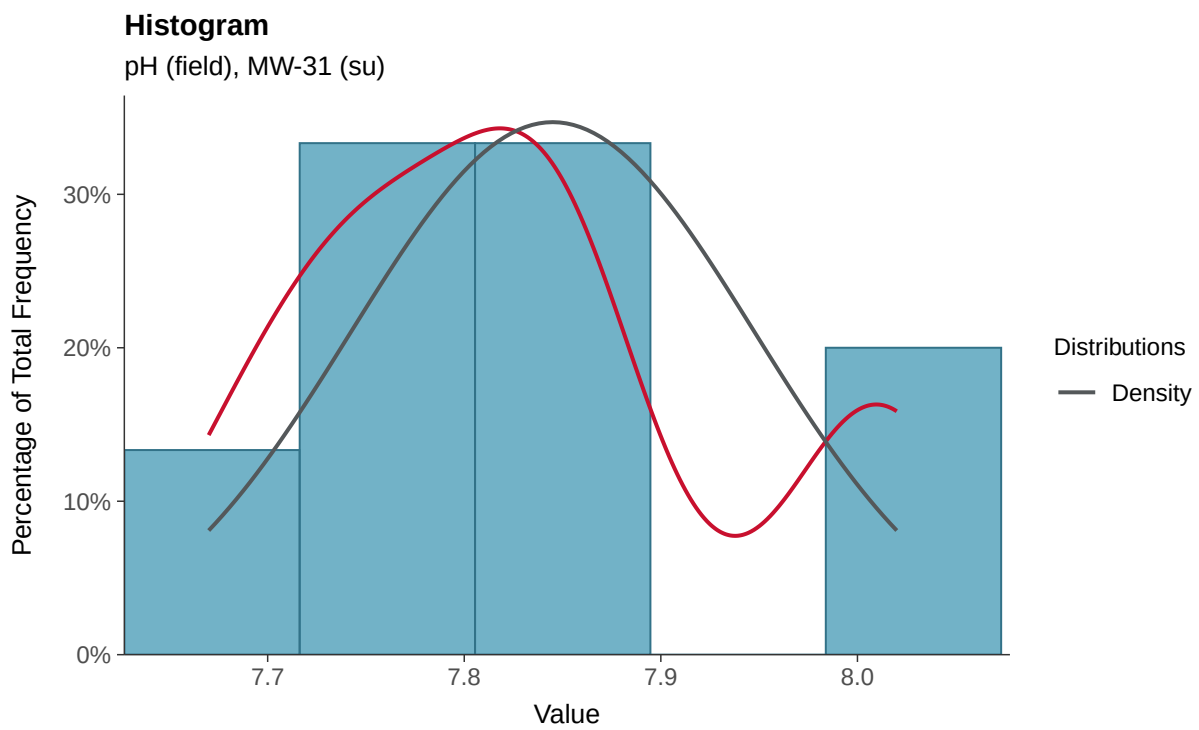
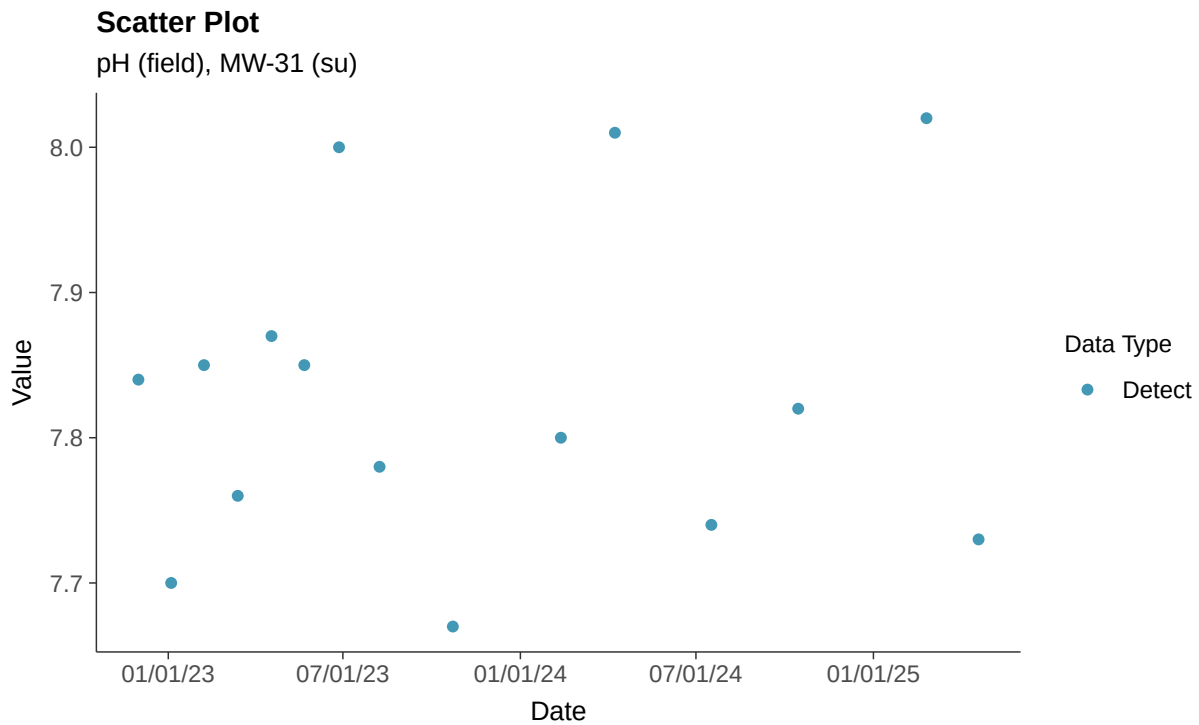
Fluoride, MW-31 (mg/L)





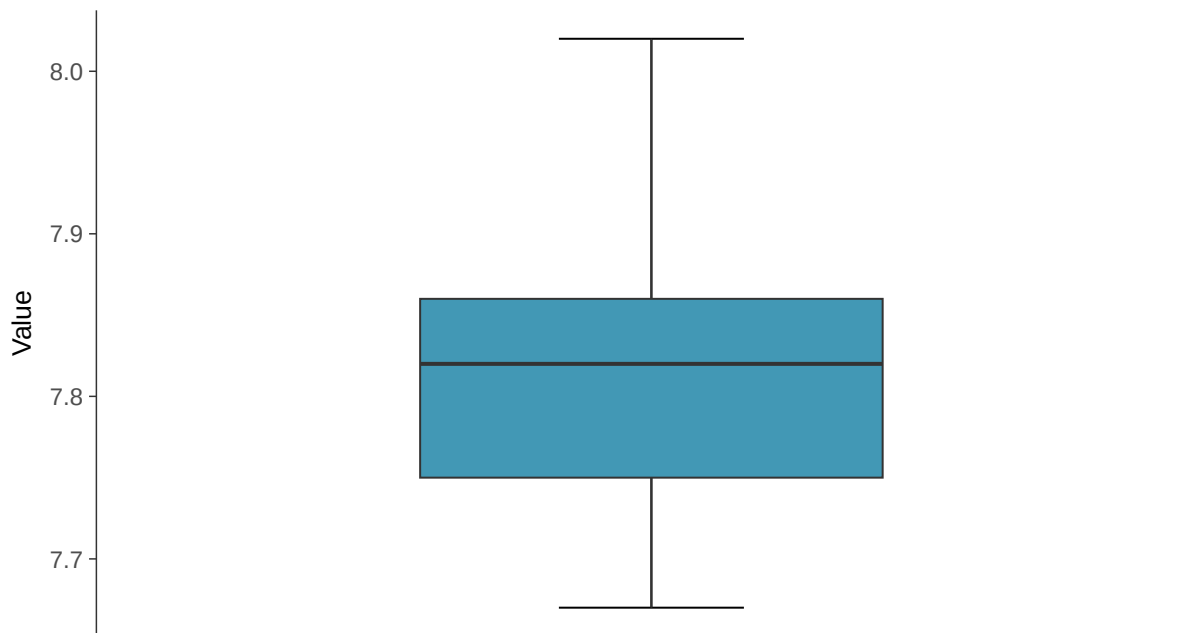
Appendix III: pH (field), MW-31

ID: 41_1_3_120



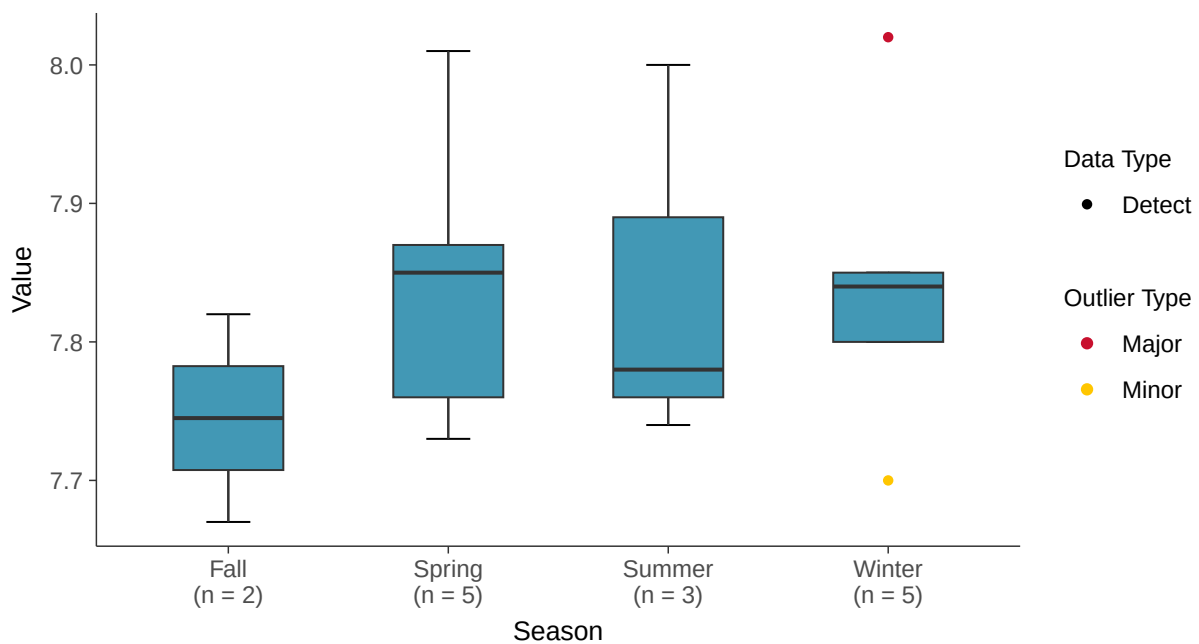
Boxplot

pH (field), MW-31 (su)

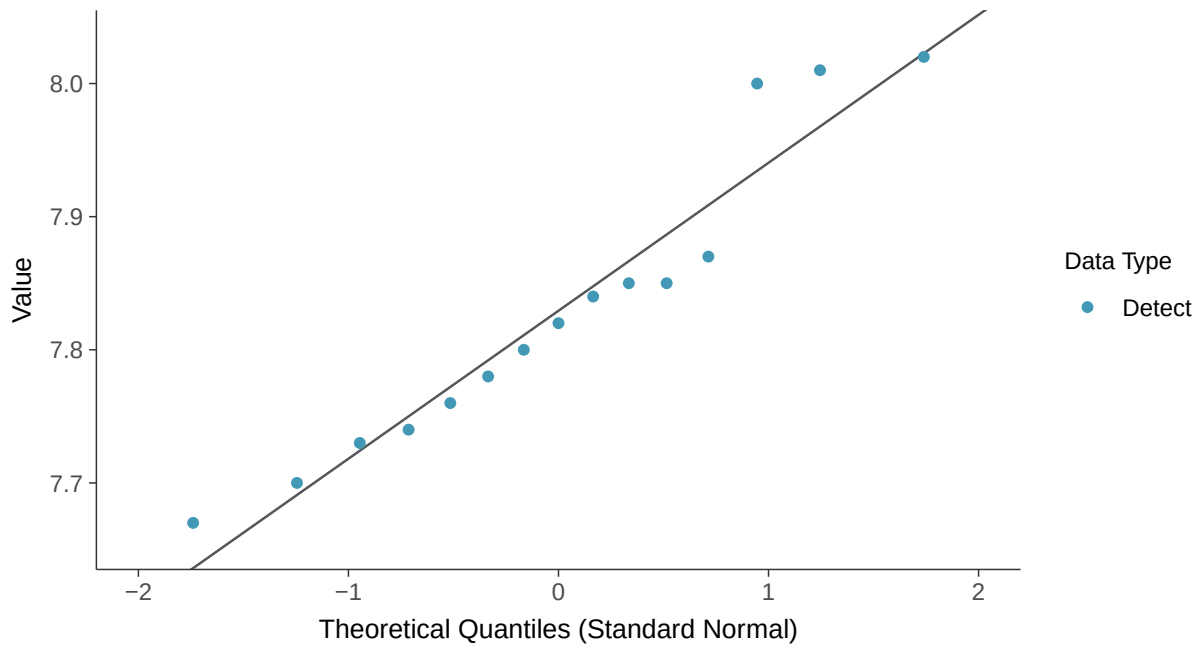


Boxplot by Season

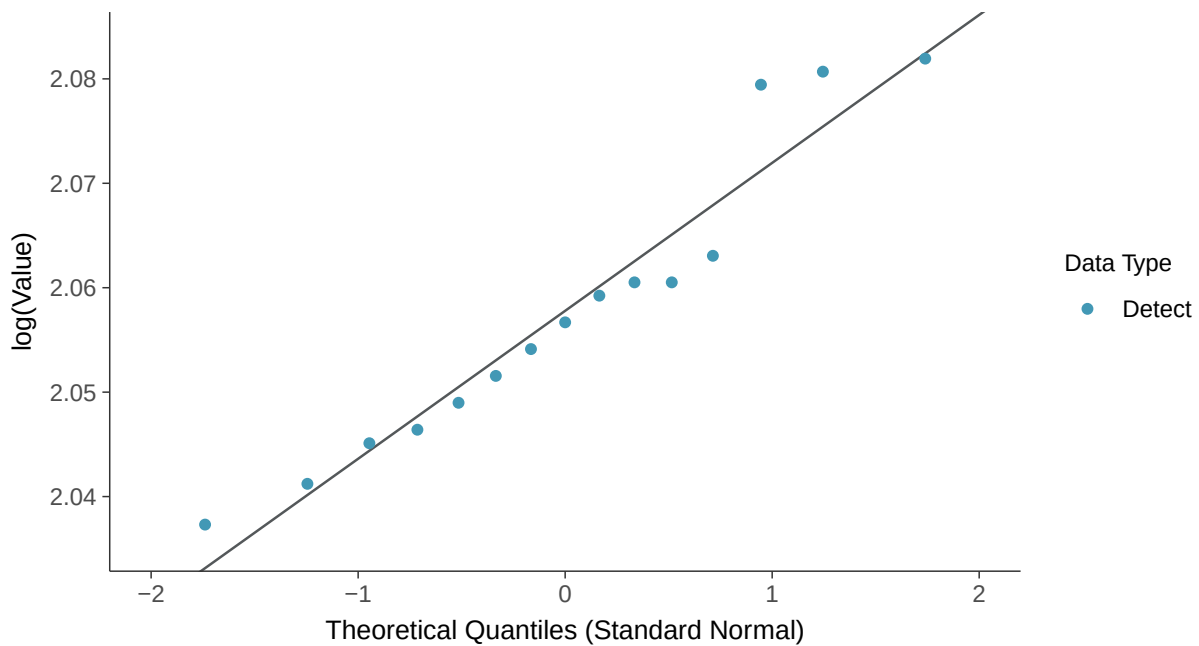
pH (field), MW-31 (su)



Normal Q-Q plot
pH (field), MW-31 (su)

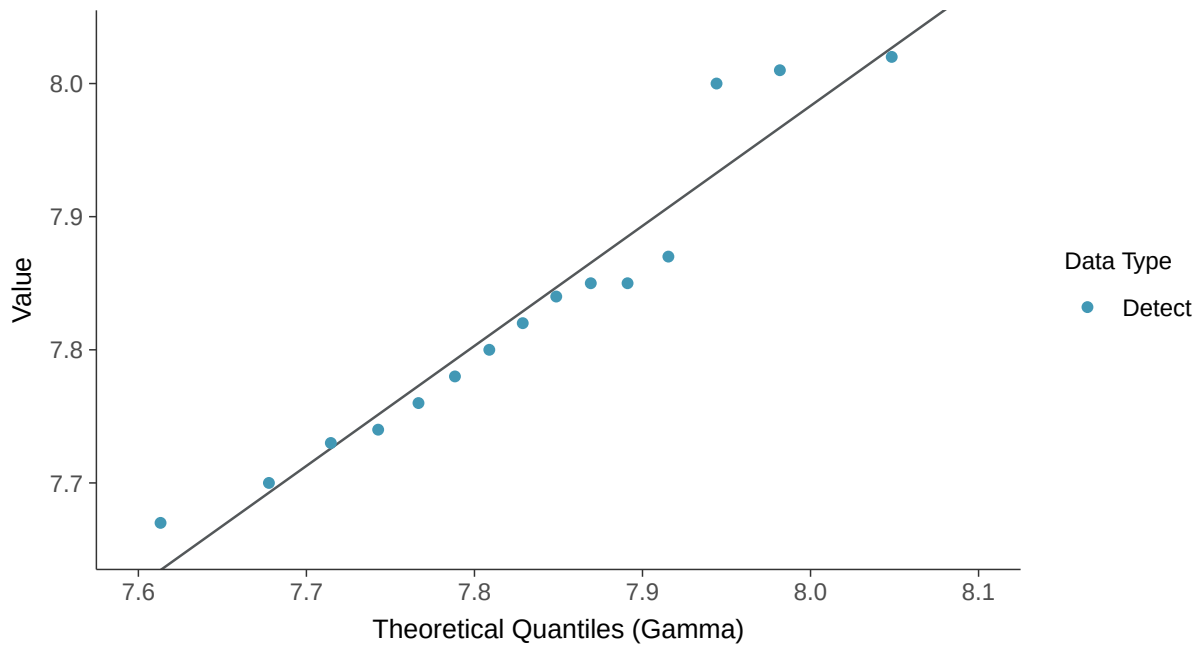


Lognormal Q-Q plot
pH (field), MW-31 (su)



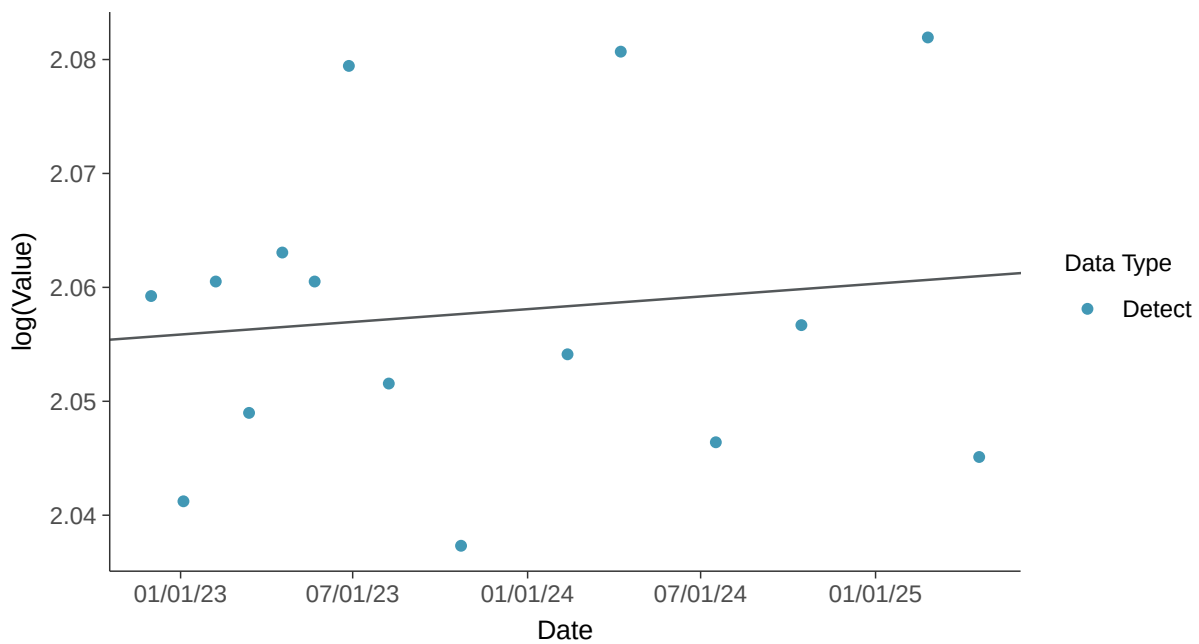
Gamma Q-Q plot

pH (field), MW-31 (su)



Trend Regression: Lognormal MLE

pH (field), MW-31 (su)

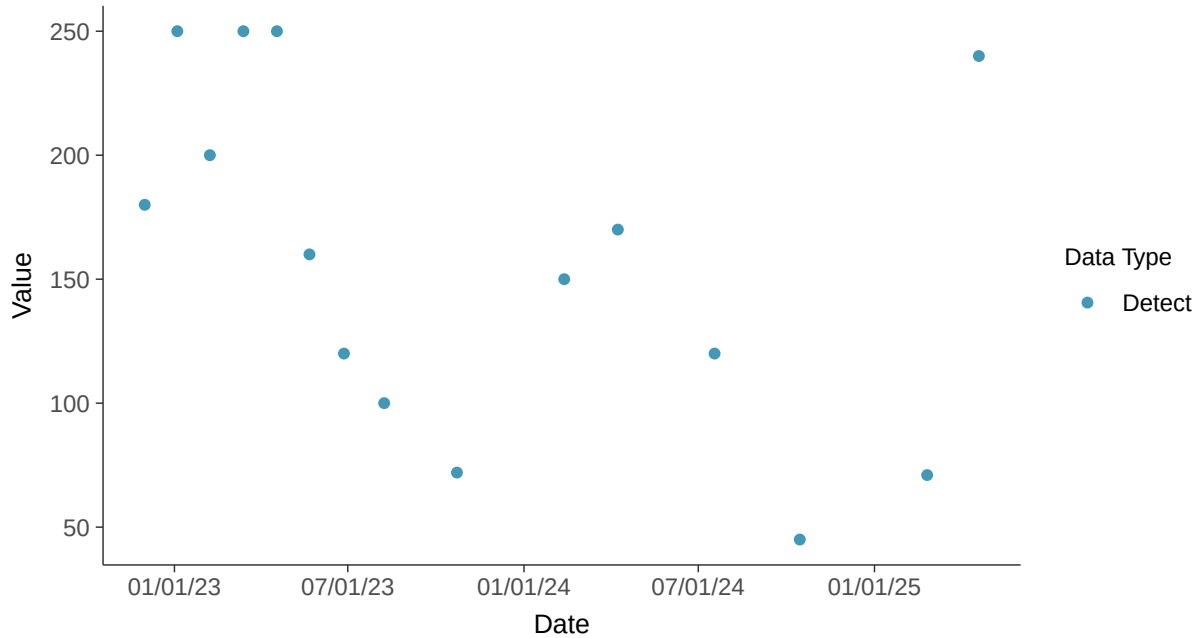


Appendix III: Sulfate (as SO₄), MW-31

ID: 41_1_3_124

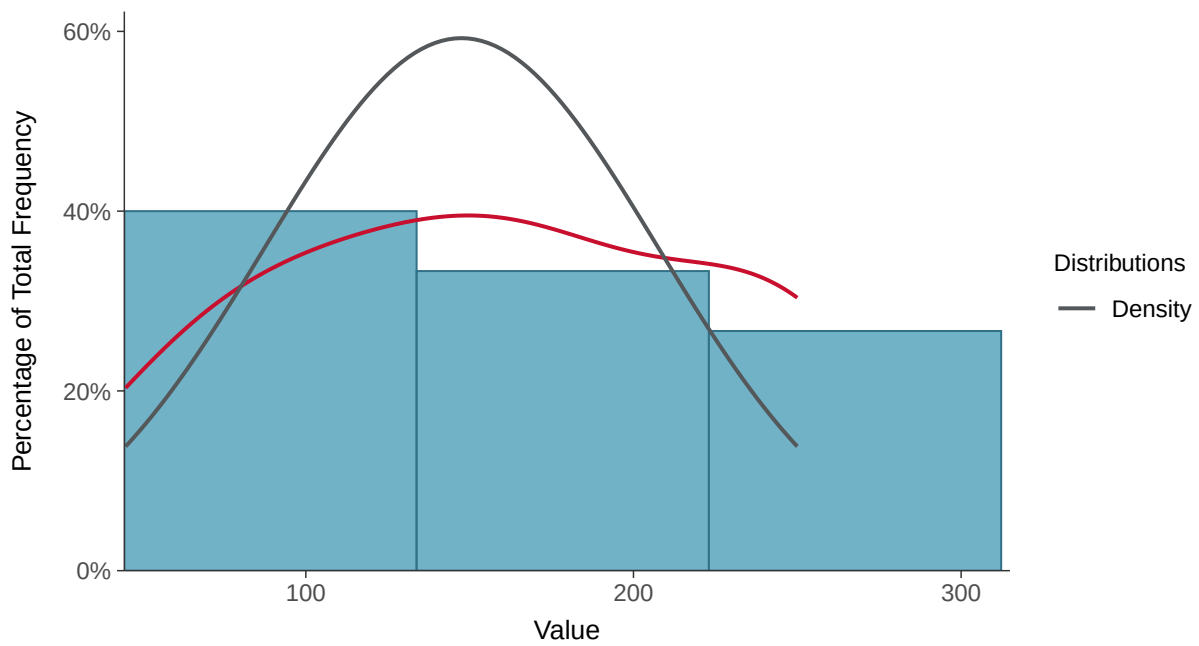
Scatter Plot

Sulfate (as SO₄), MW-31 (mg/L)



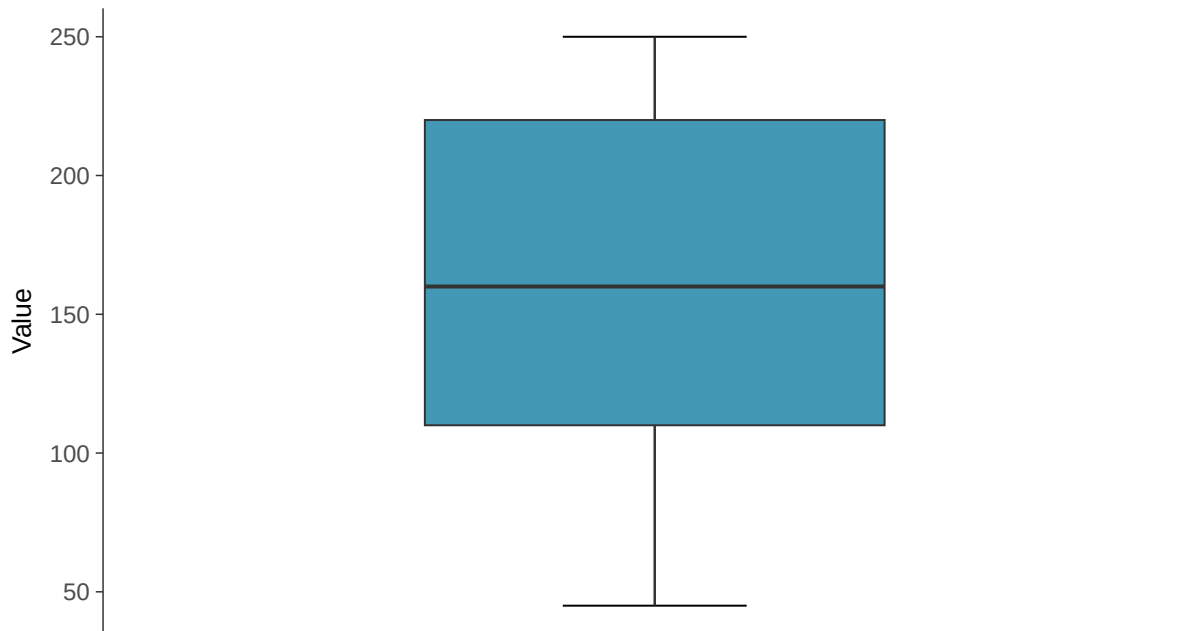
Histogram

Sulfate (as SO₄), MW-31 (mg/L)



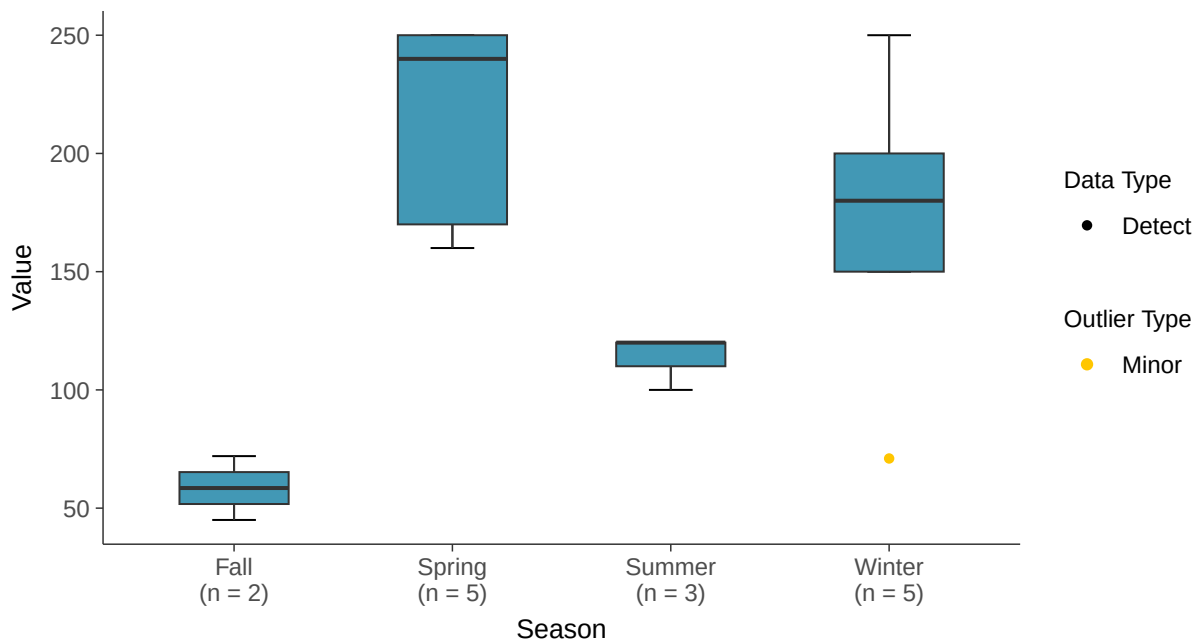
Boxplot

Sulfate (as SO₄), MW-31 (mg/L)



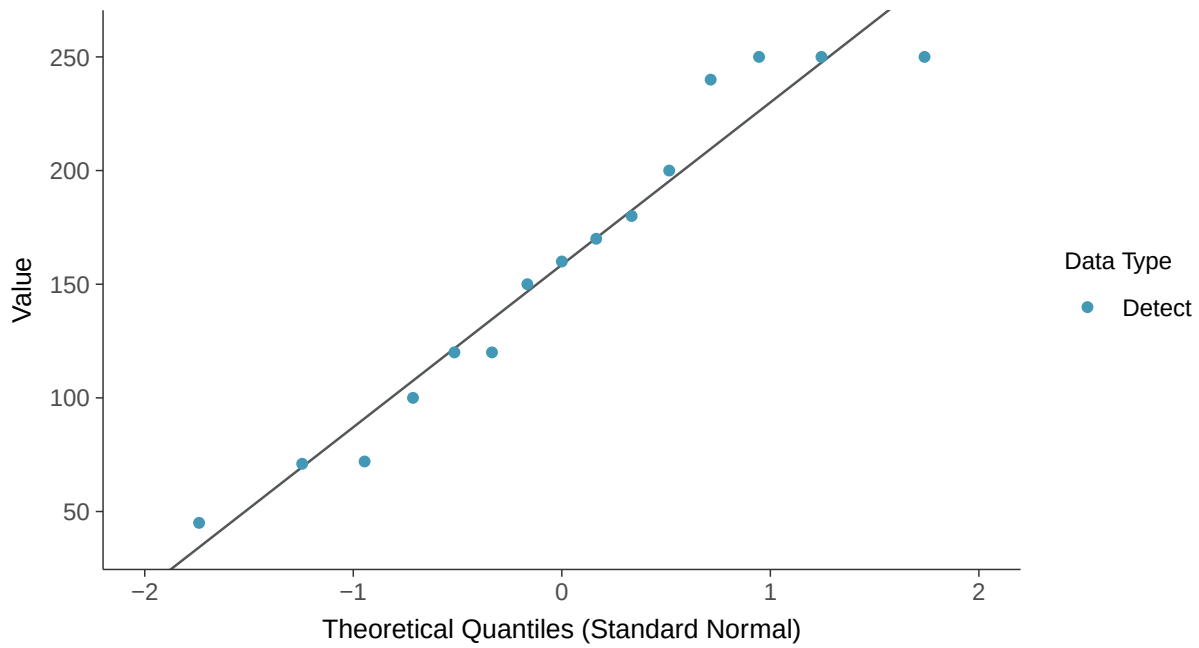
Boxplot by Season

Sulfate (as SO₄), MW-31 (mg/L)



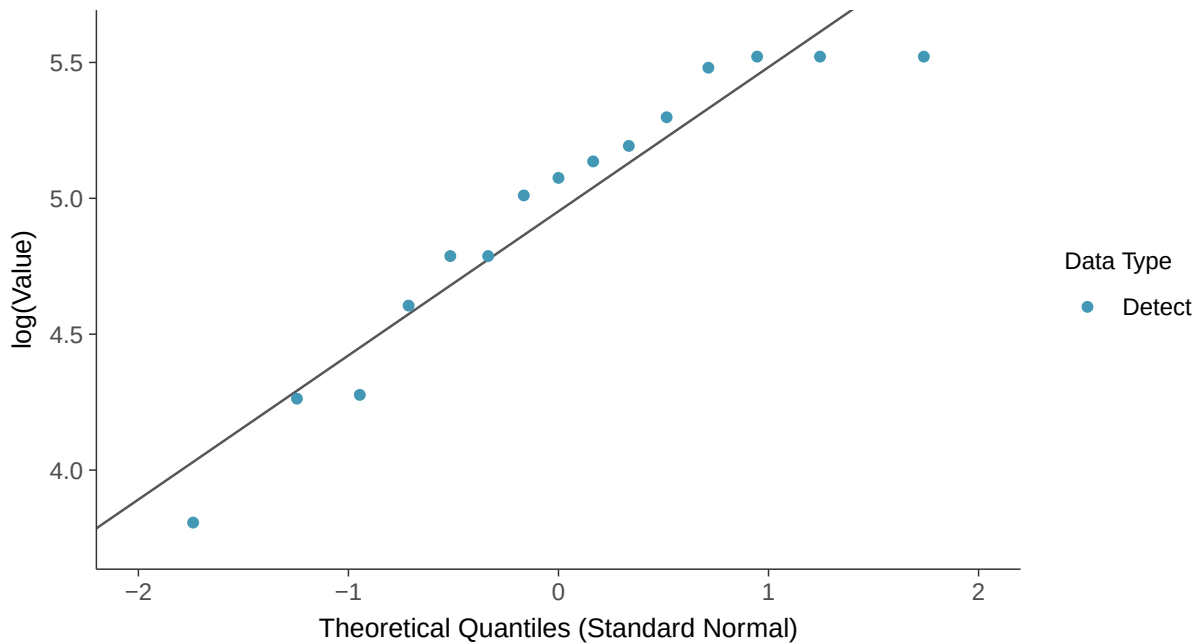
Normal Q-Q plot

Sulfate (as SO₄), MW-31 (mg/L)



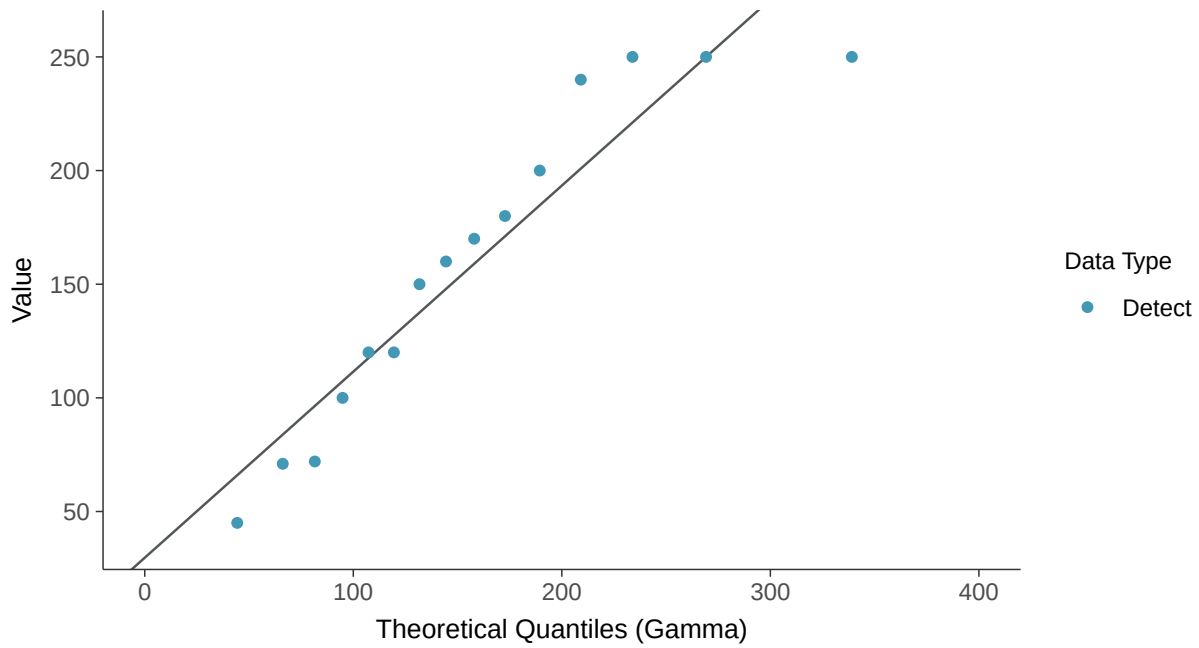
Lognormal Q-Q plot

Sulfate (as SO₄), MW-31 (mg/L)



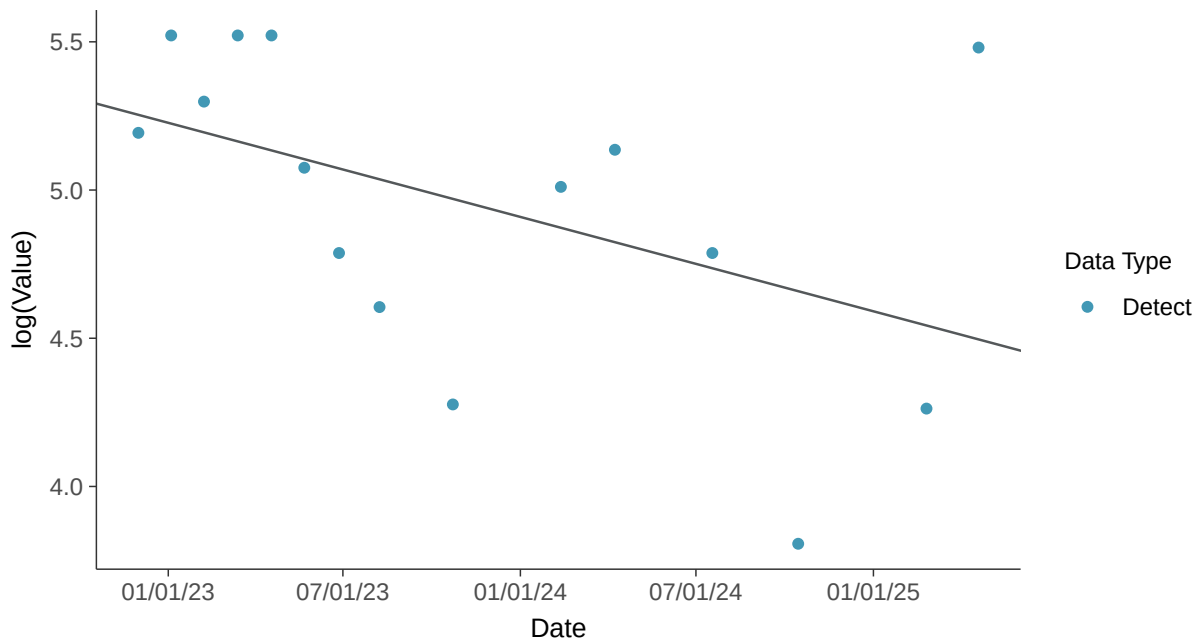
Gamma Q-Q plot

Sulfate (as SO₄), MW-31 (mg/L)



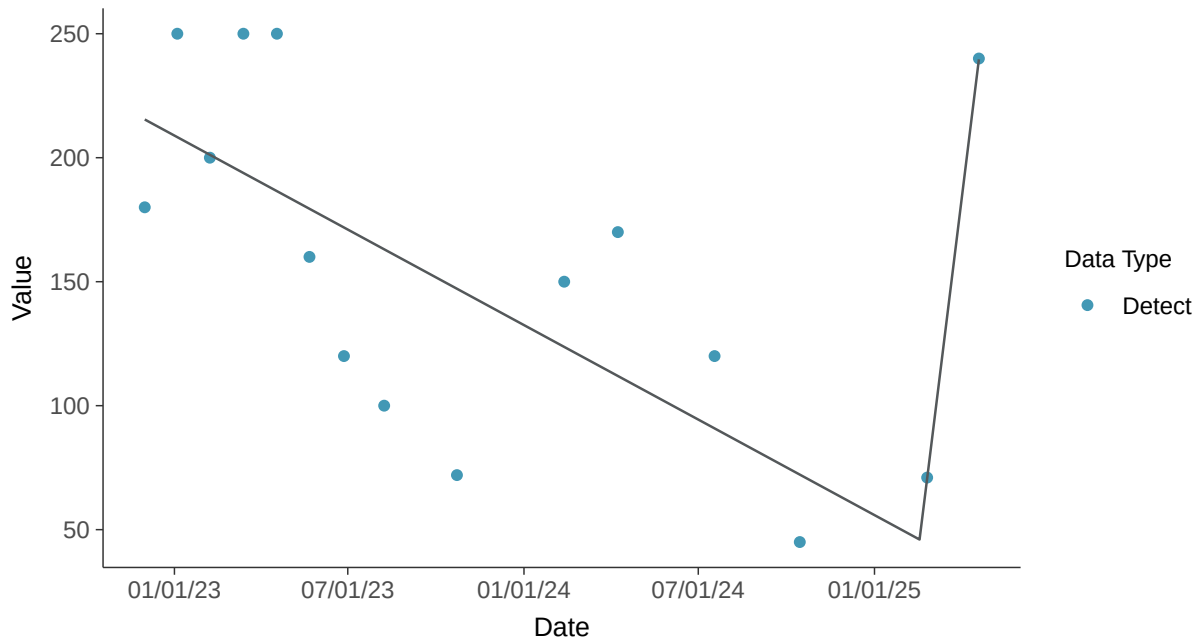
Trend Regression: Lognormal MLE

Sulfate (as SO₄), MW-31 (mg/L)



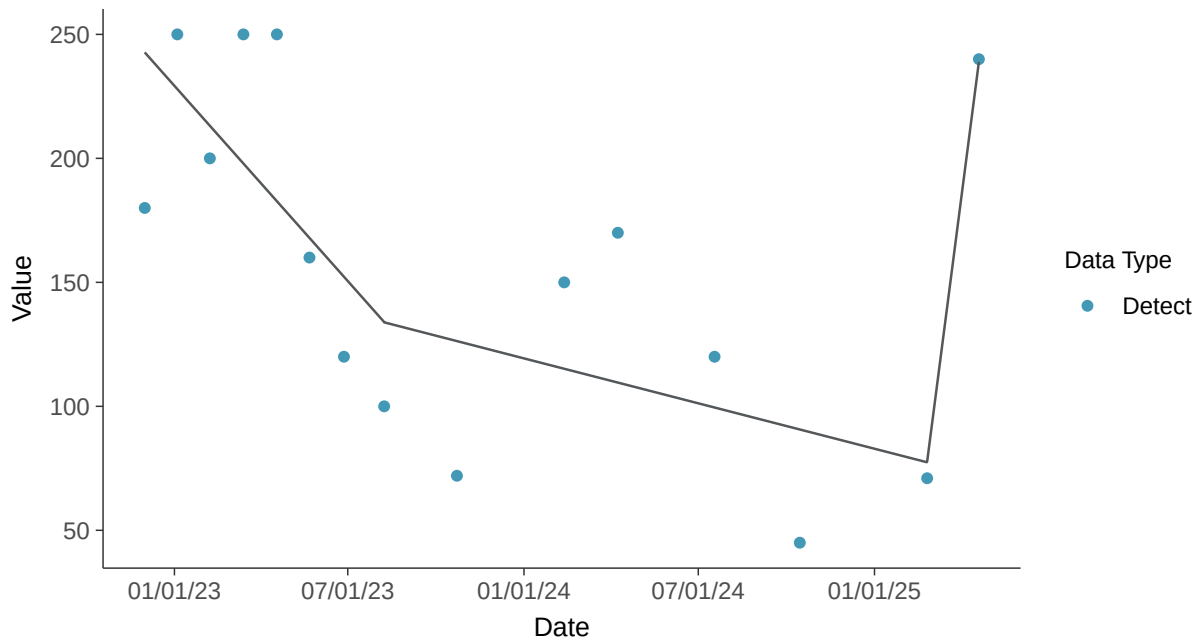
Trend Regression: Piecewise Linear-Linear

Sulfate (as SO₄), MW-31 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Sulfate (as SO₄), MW-31 (mg/L)

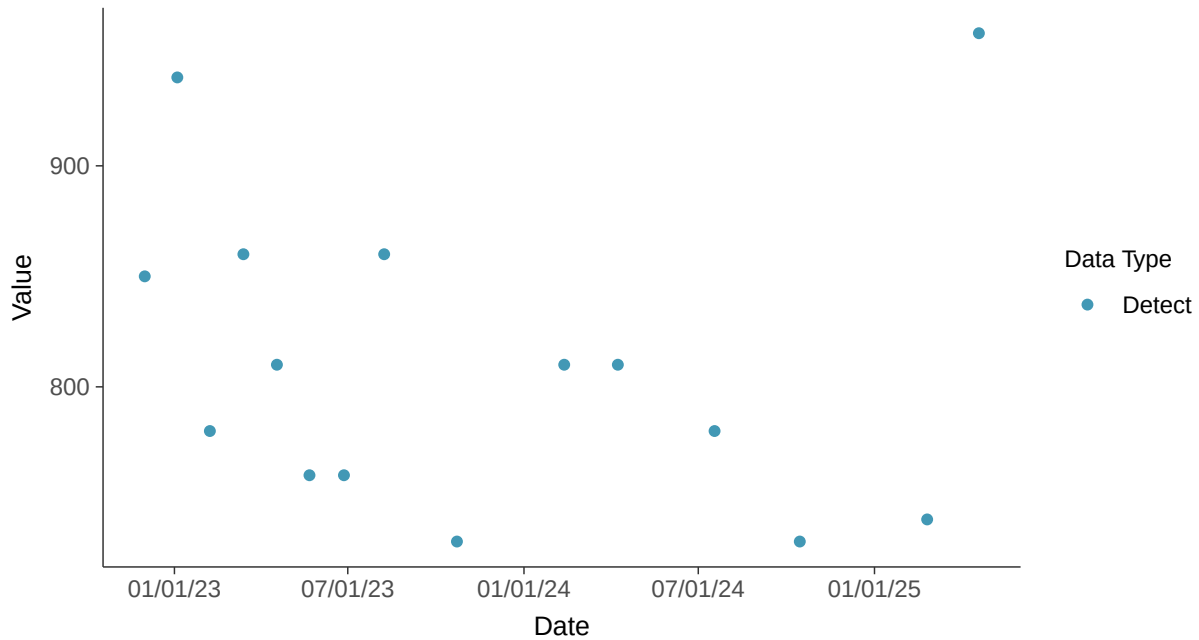


Appendix III: Total Dissolved Solids, MW-31

ID: 41_1_3_126

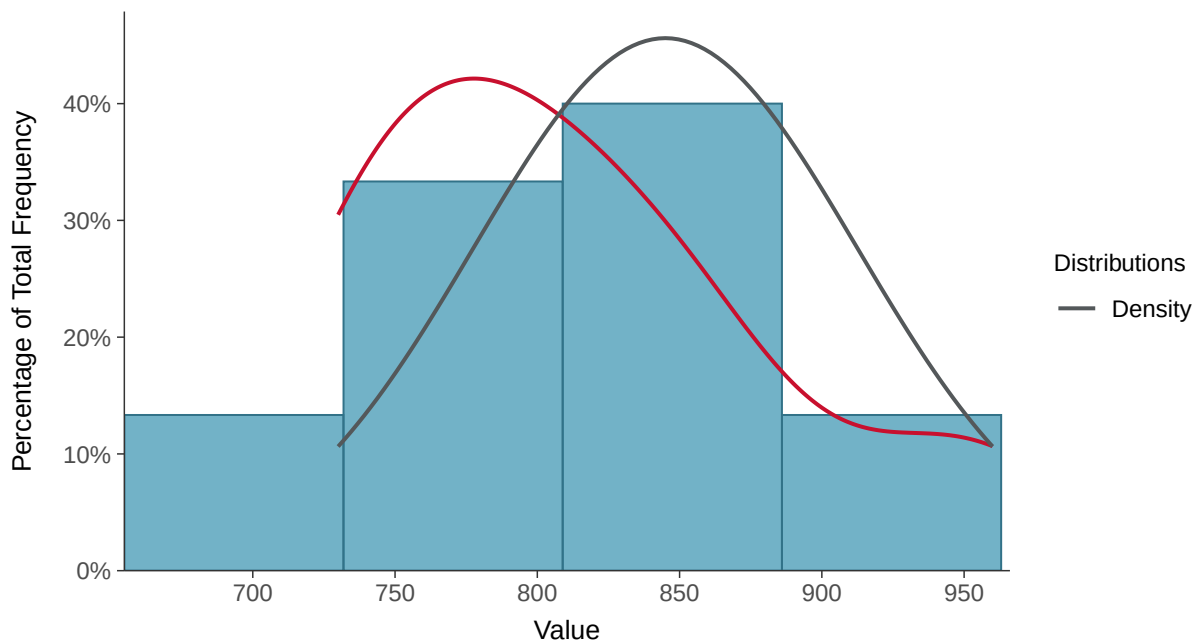
Scatter Plot

Total Dissolved Solids, MW-31 (mg/L)



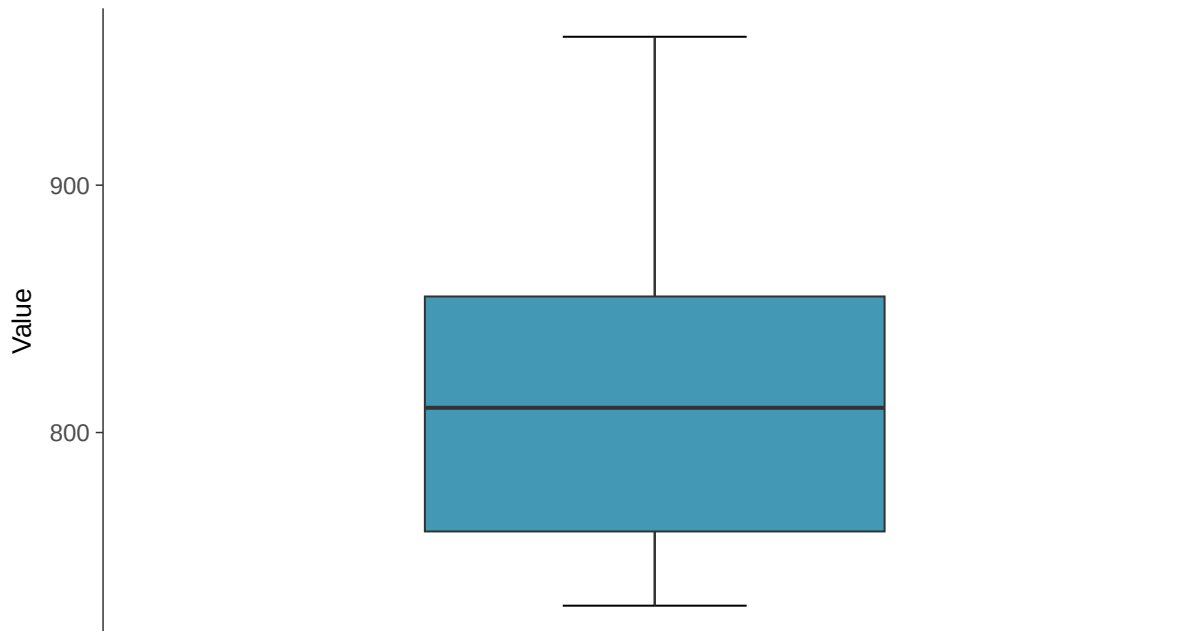
Histogram

Total Dissolved Solids, MW-31 (mg/L)



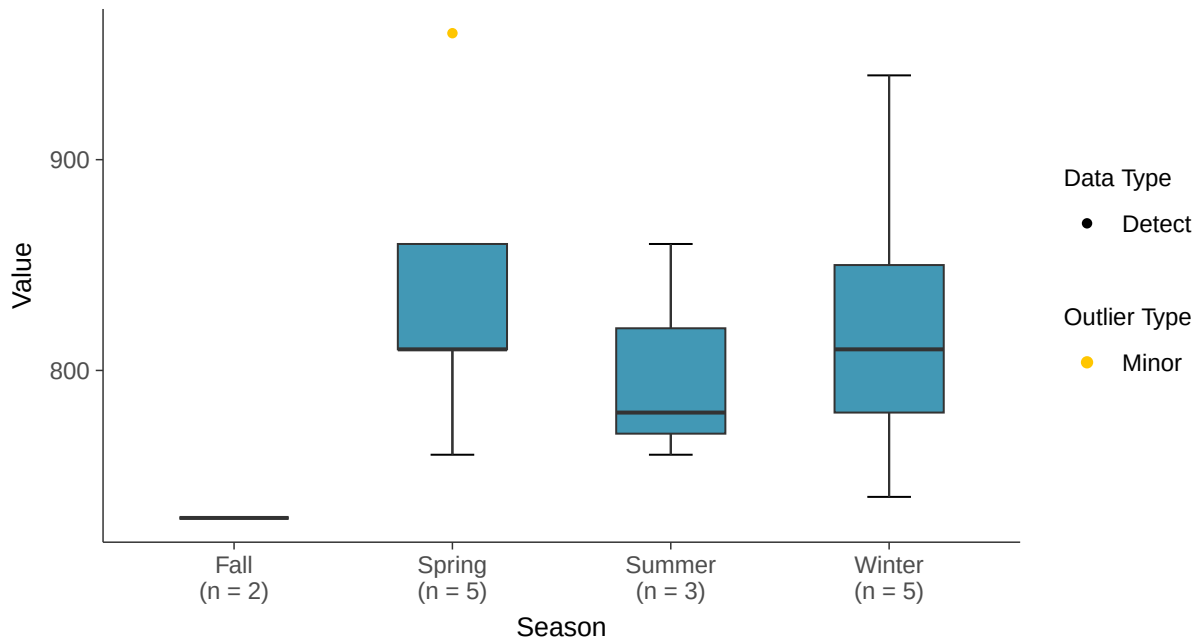
Boxplot

Total Dissolved Solids, MW-31 (mg/L)



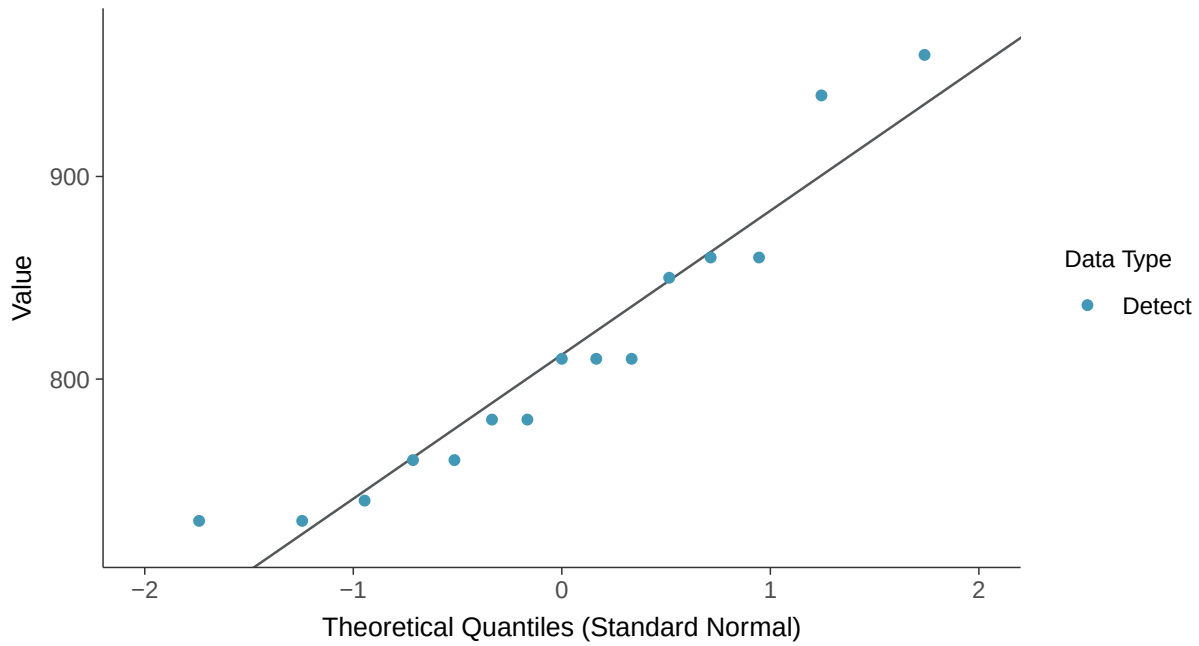
Boxplot by Season

Total Dissolved Solids, MW-31 (mg/L)



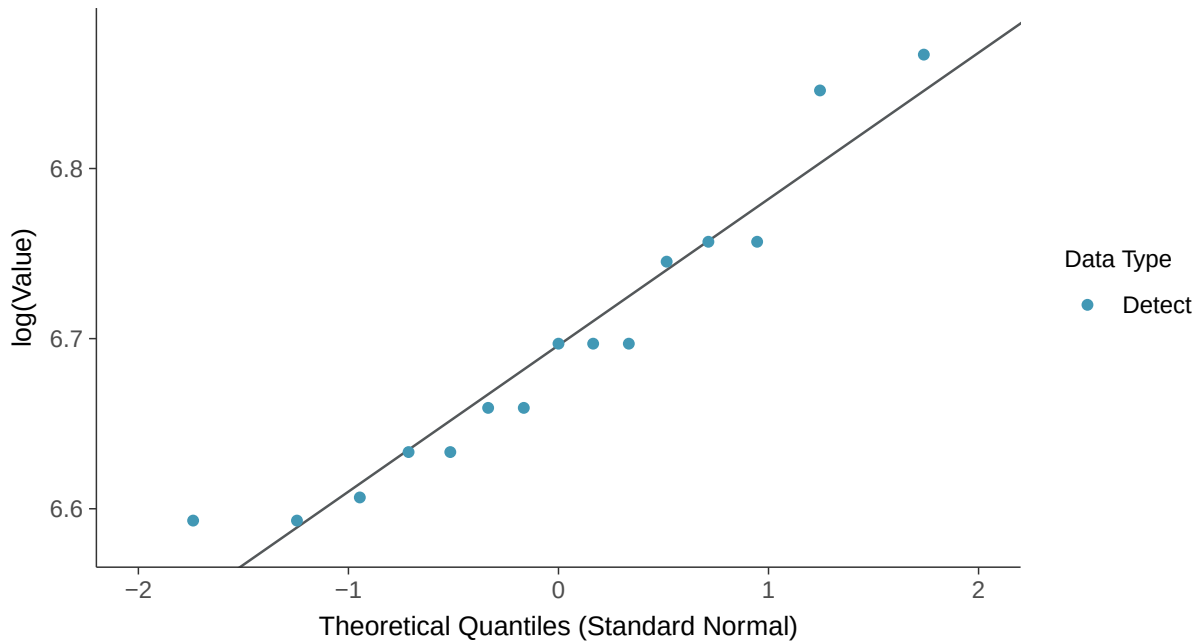
Normal Q-Q plot

Total Dissolved Solids, MW-31 (mg/L)



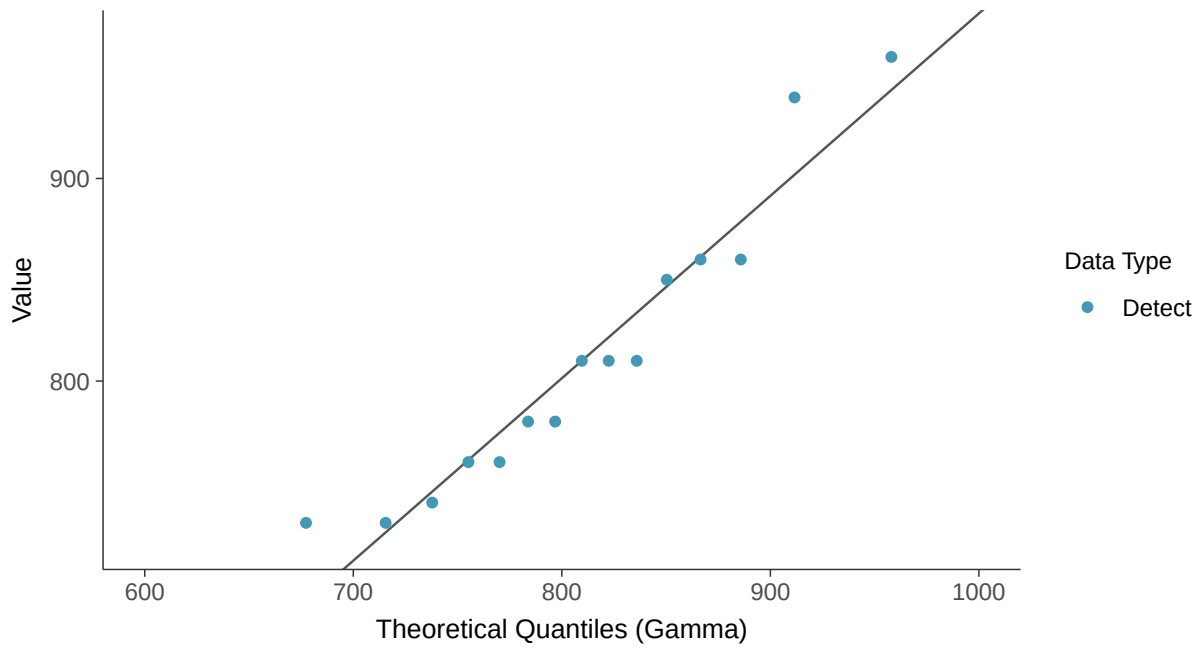
Lognormal Q-Q plot

Total Dissolved Solids, MW-31 (mg/L)



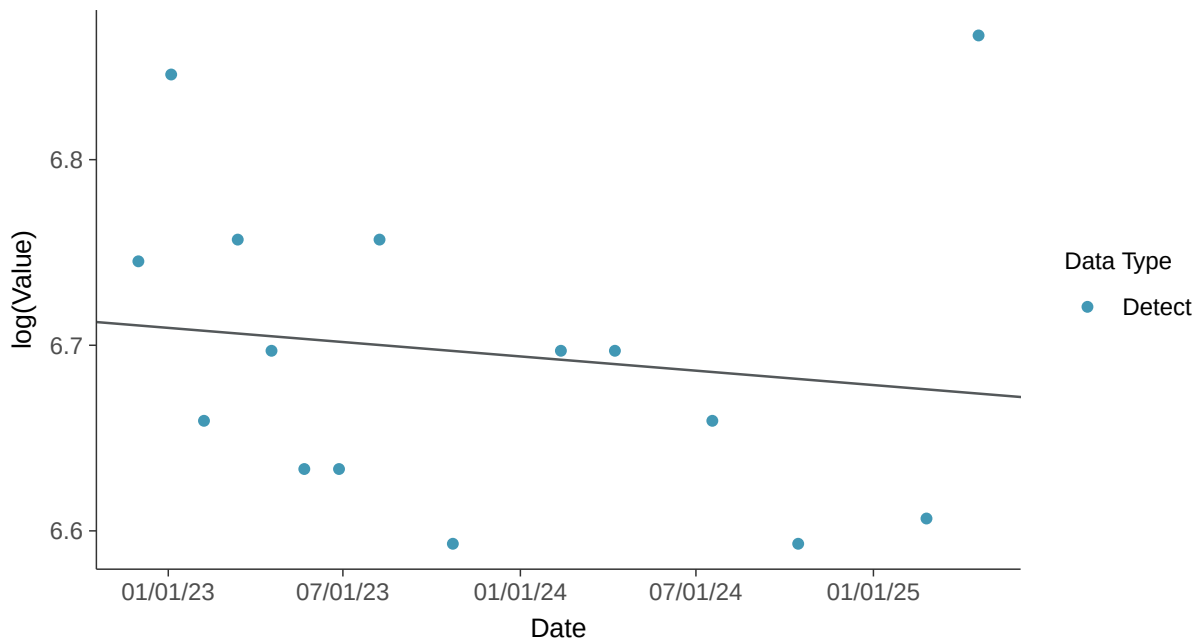
Gamma Q-Q plot

Total Dissolved Solids, MW-31 (mg/L)



Trend Regression: Lognormal MLE

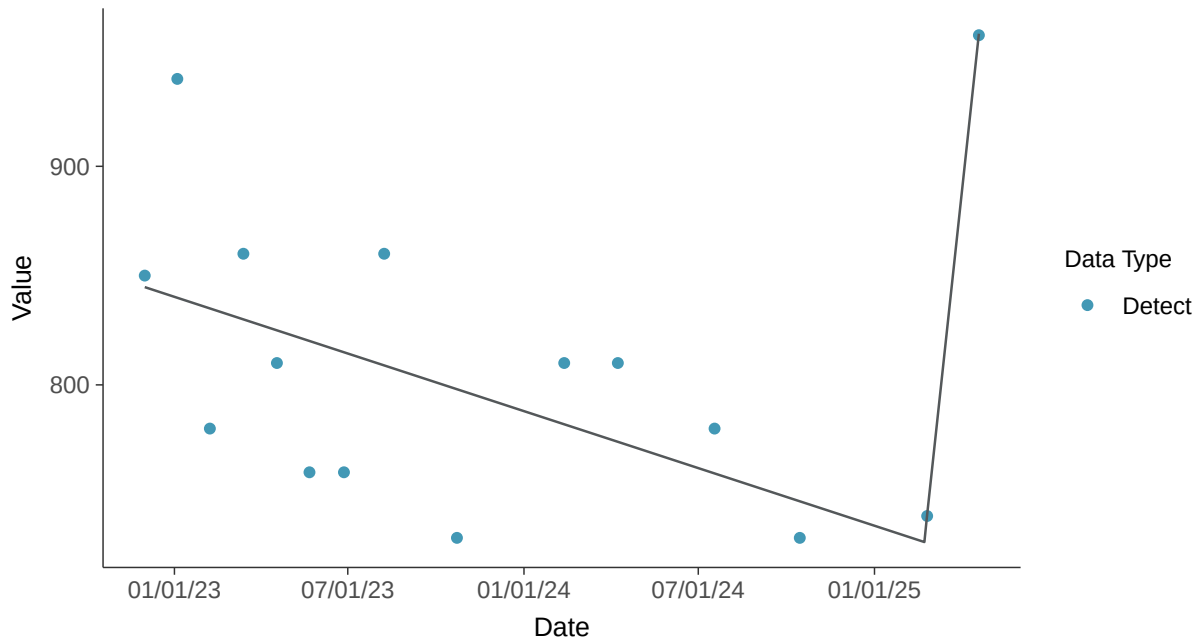
Total Dissolved Solids, MW-31 (mg/L)





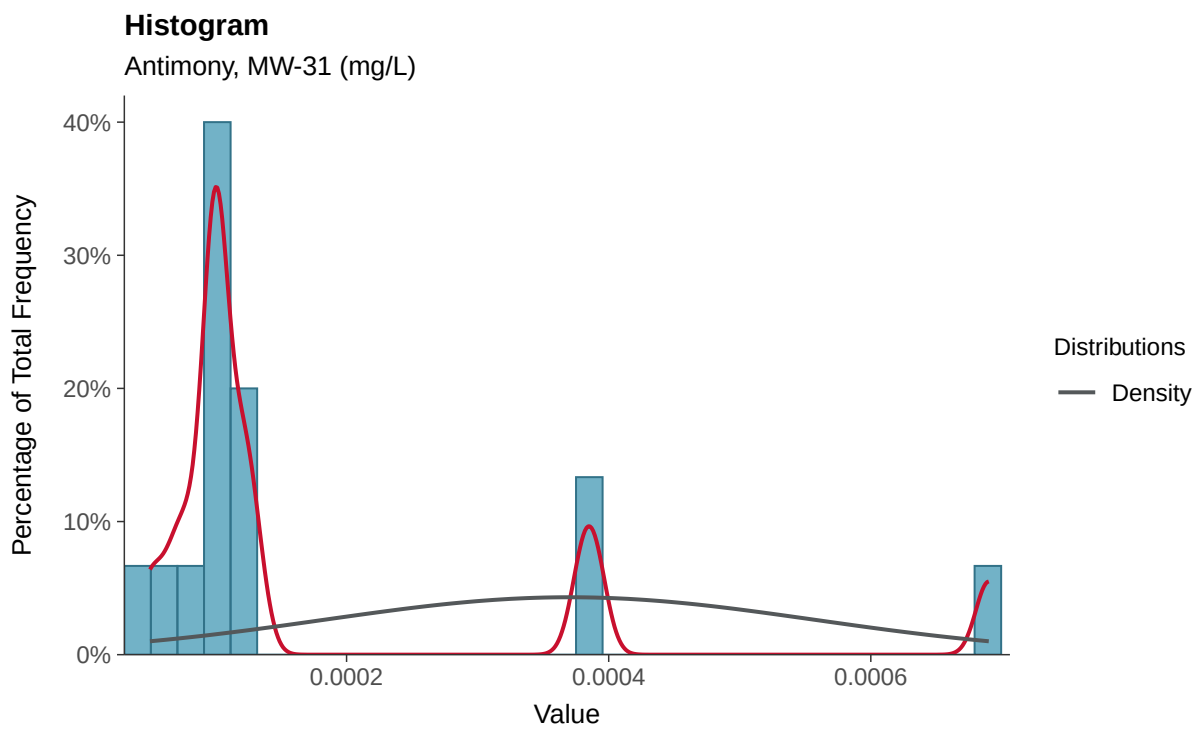
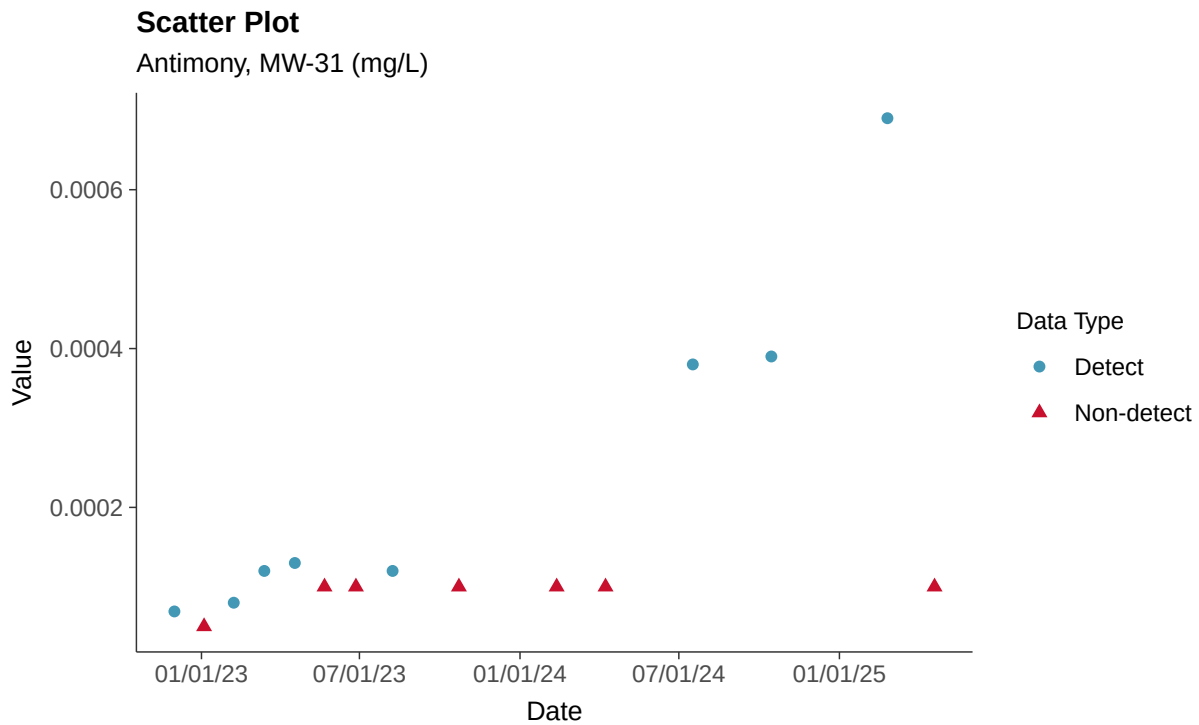
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-31 (mg/L)



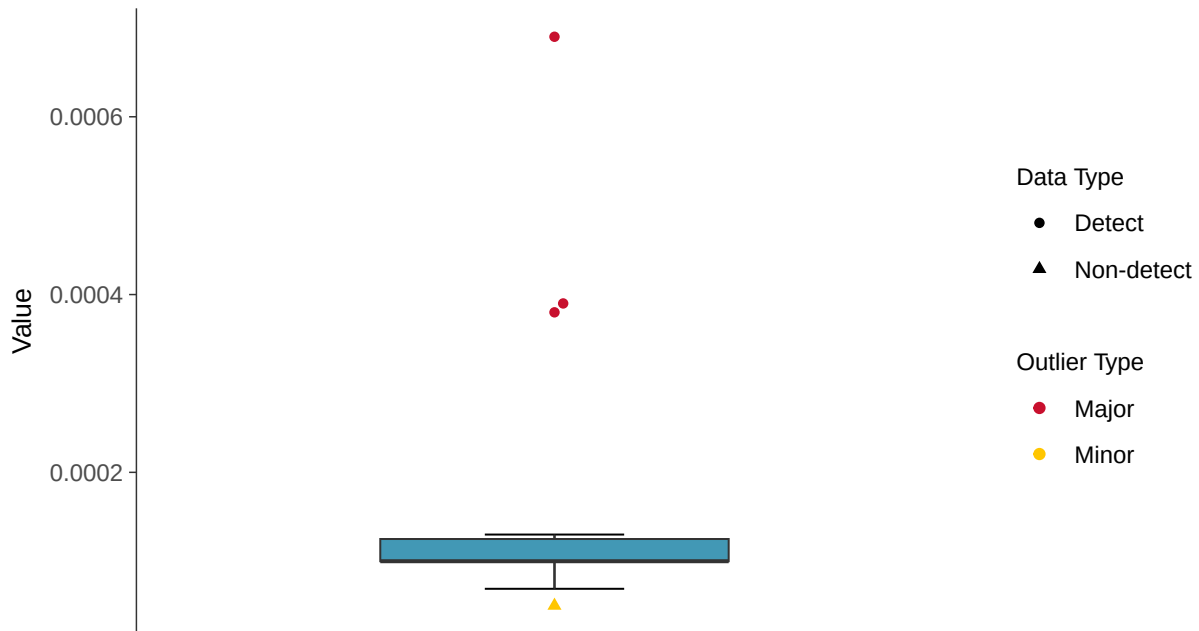
Appendix IV: Antimony, MW-31

ID: 41_1_4_101



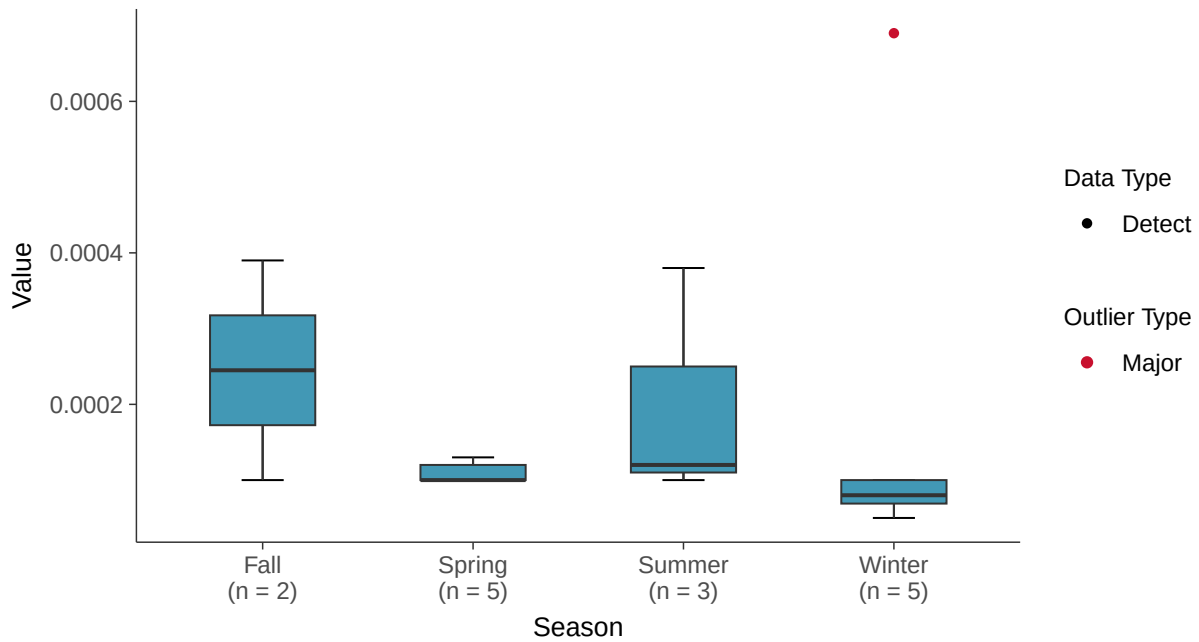
Boxplot

Antimony, MW-31 (mg/L)



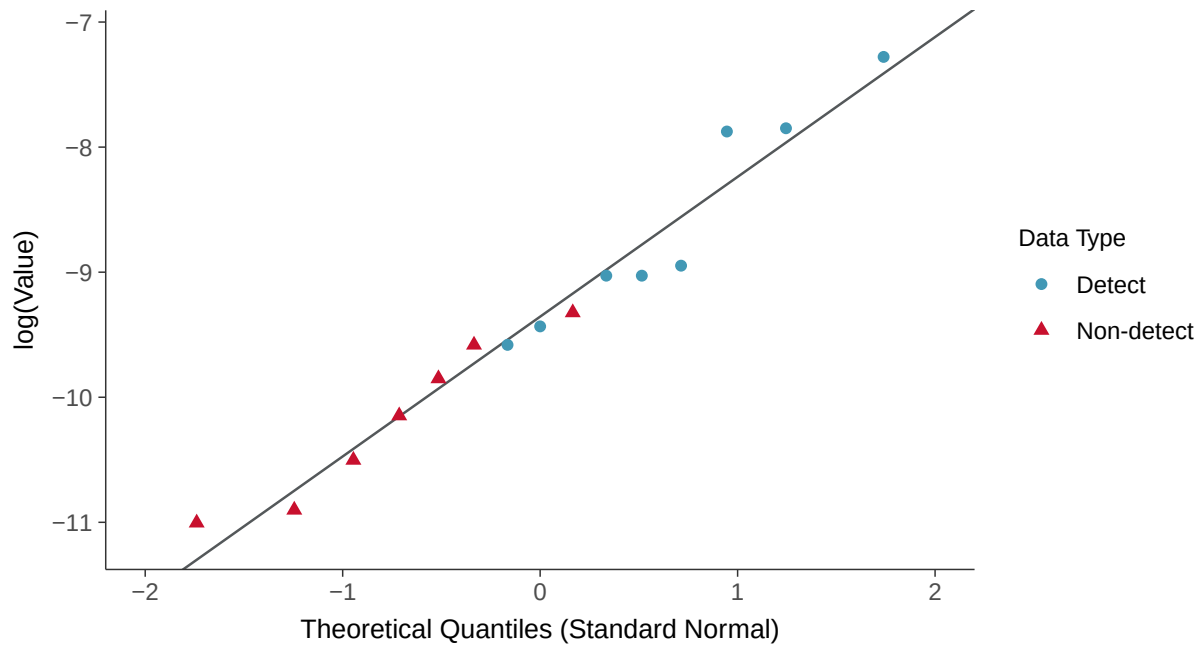
Boxplot by Season

Antimony, MW-31 (mg/L)



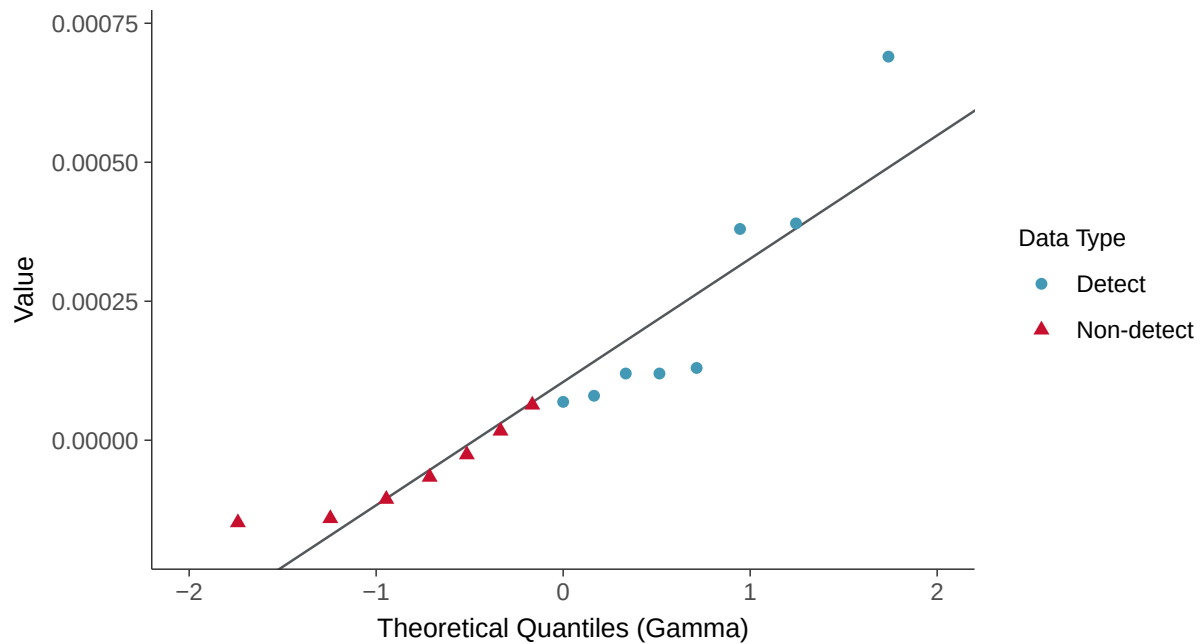
Lognormal Q-Q plot using ROS Imputed Estimates

Antimony, MW-31 (mg/L)



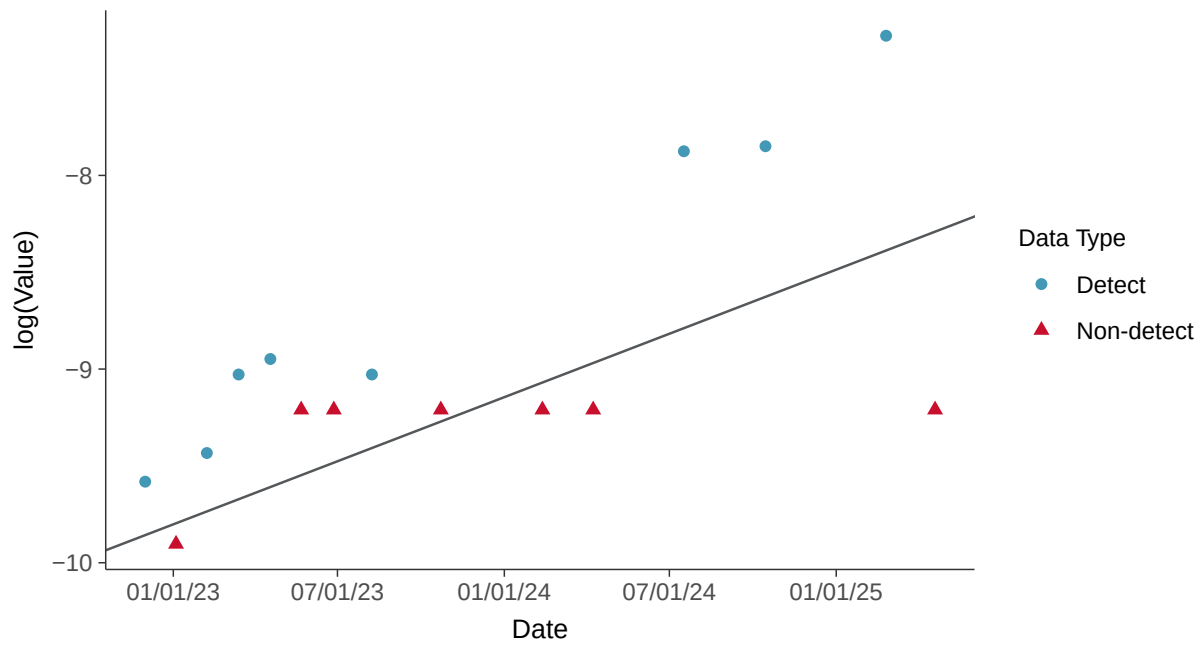
Gamma Q-Q plot using ROS Imputed Estimates

Antimony, MW-31 (mg/L)



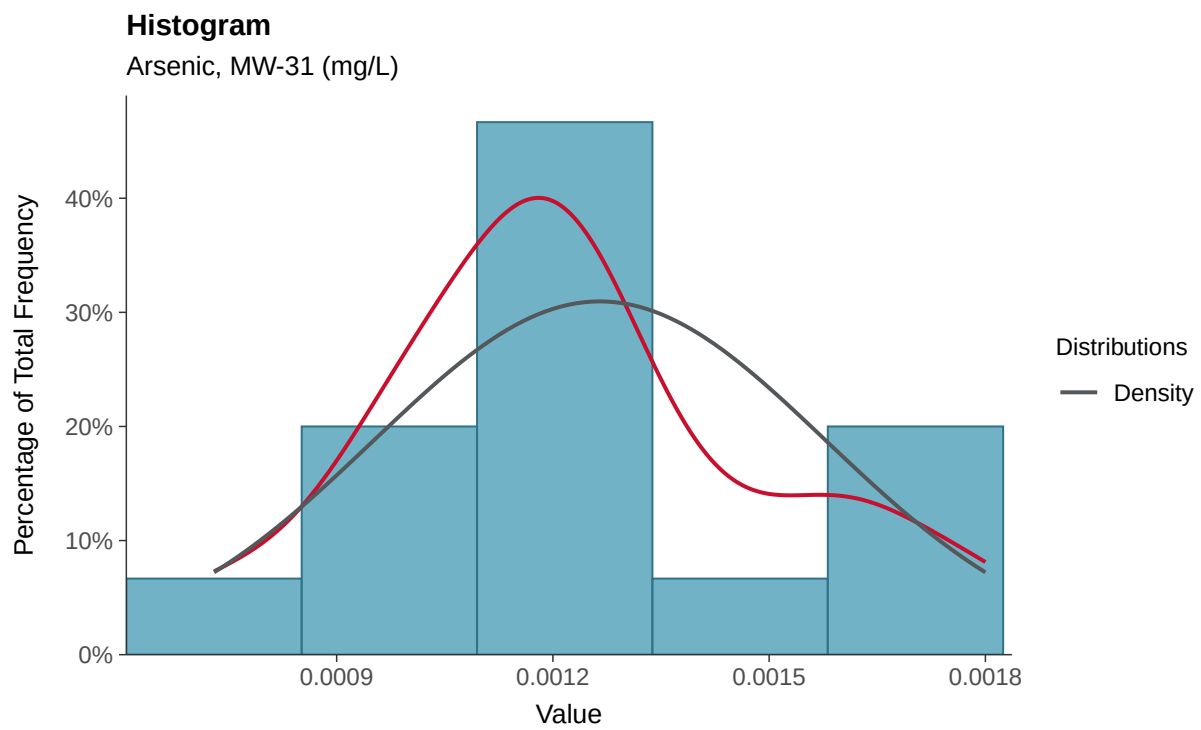
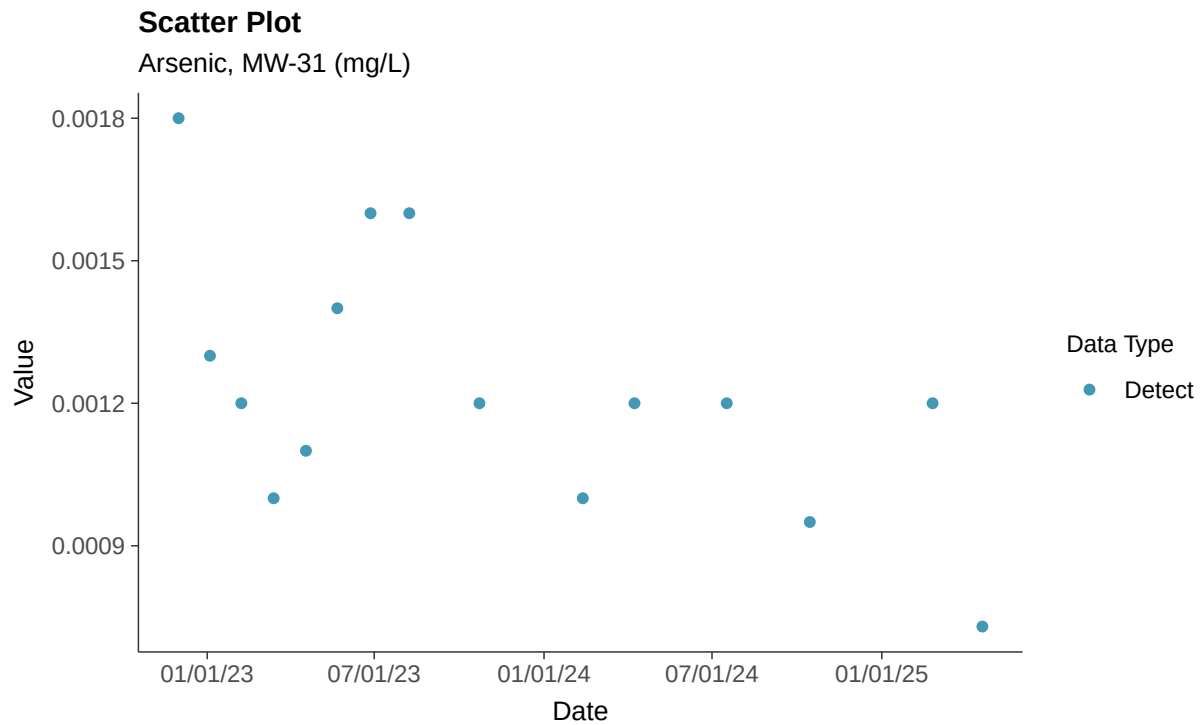
Trend Regression: Lognormal MLE

Antimony, MW-31 (mg/L)



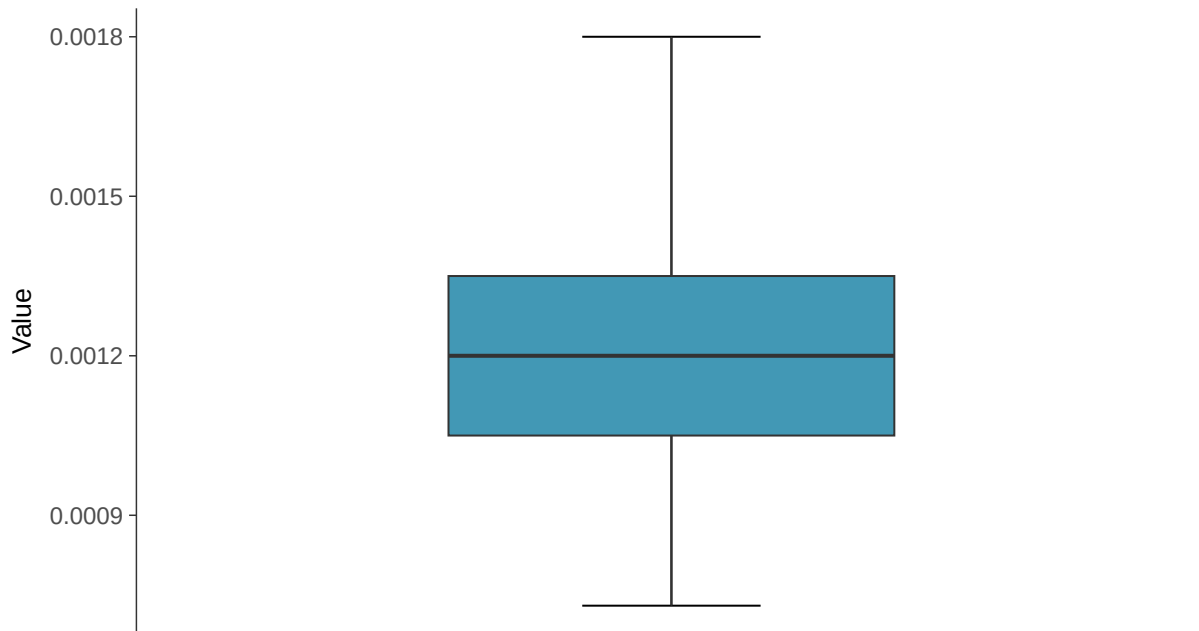
Appendix IV: Arsenic, MW-31

ID: 41_1_4_102



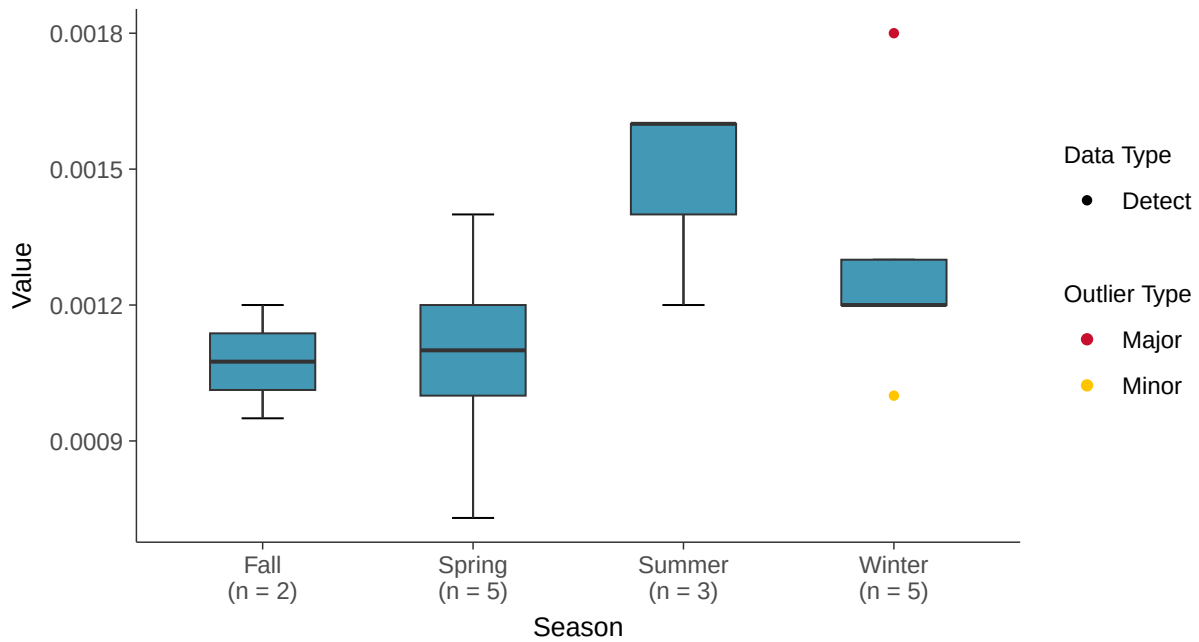
Boxplot

Arsenic, MW-31 (mg/L)



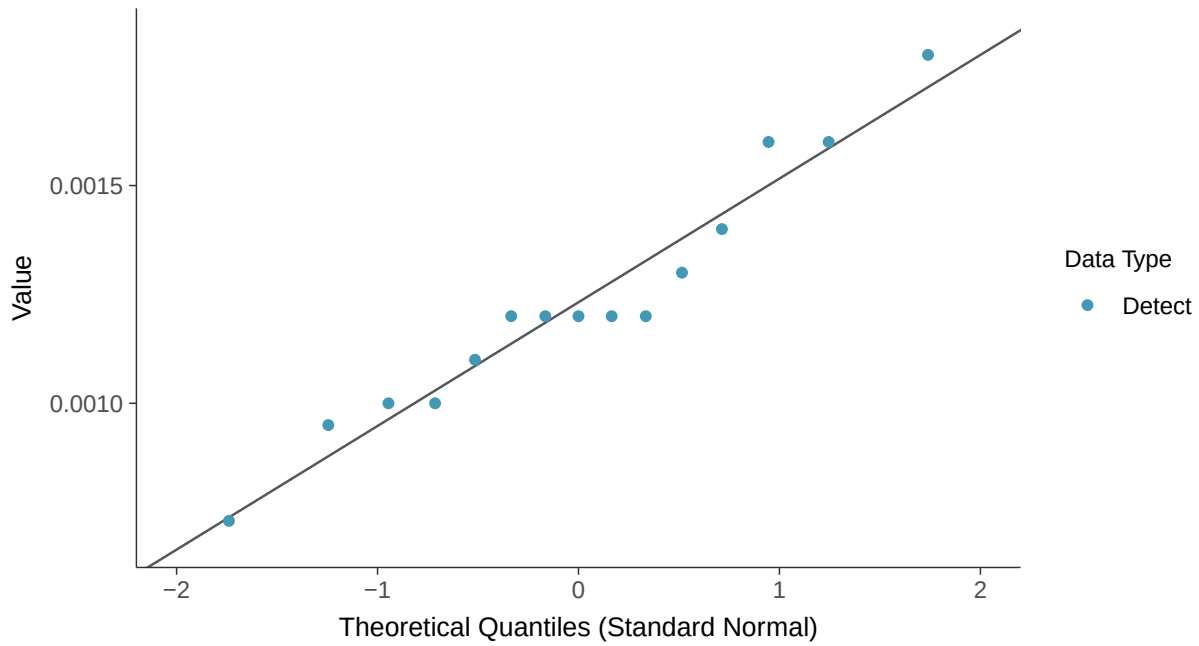
Boxplot by Season

Arsenic, MW-31 (mg/L)



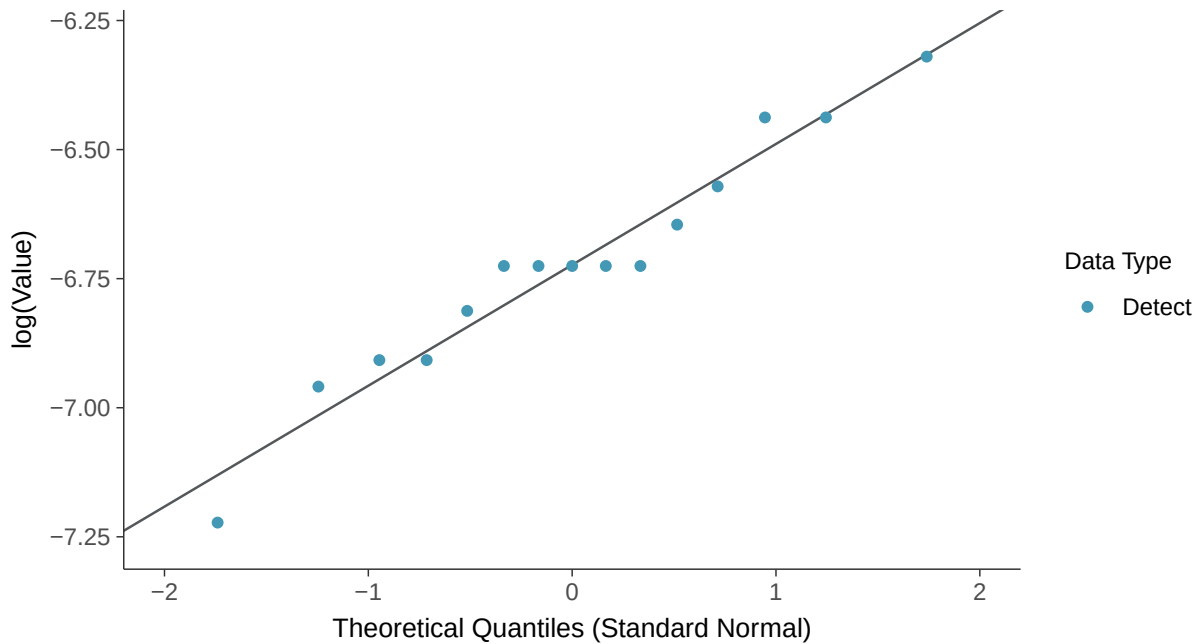
Normal Q-Q plot

Arsenic, MW-31 (mg/L)



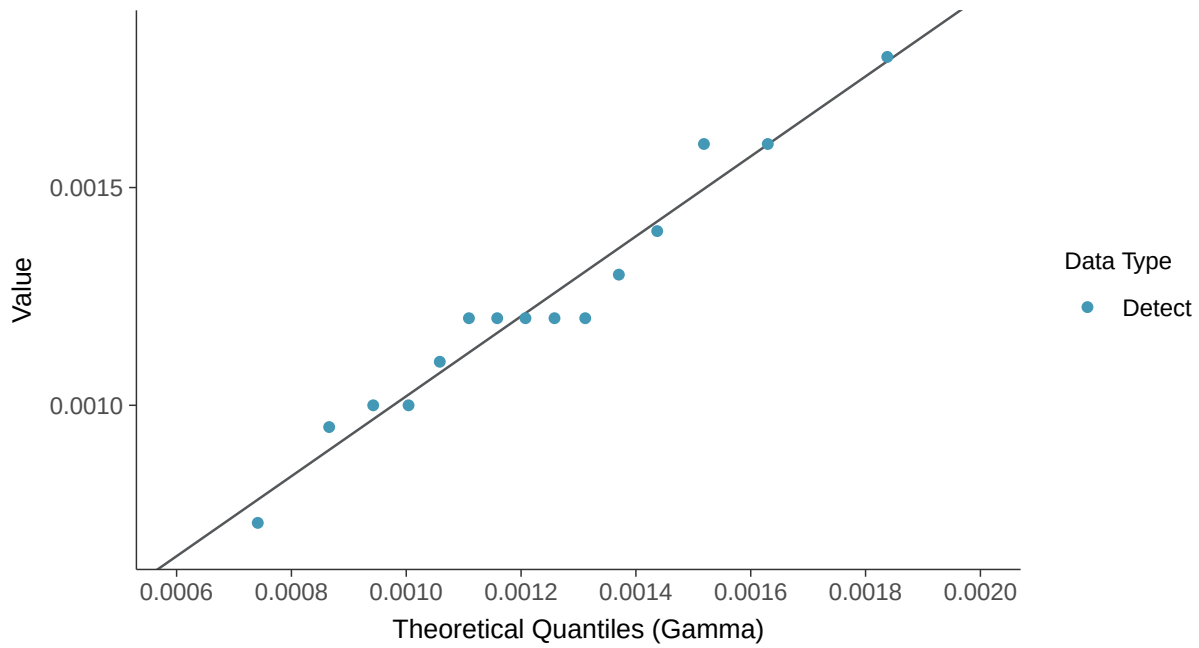
Lognormal Q-Q plot

Arsenic, MW-31 (mg/L)



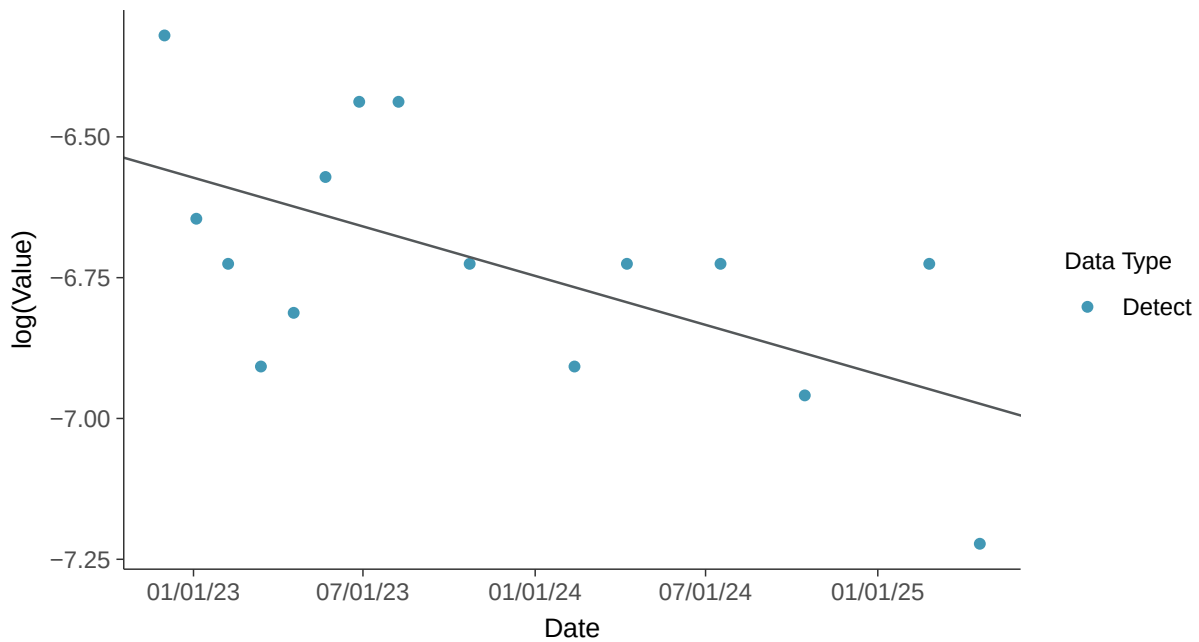
Gamma Q-Q plot

Arsenic, MW-31 (mg/L)



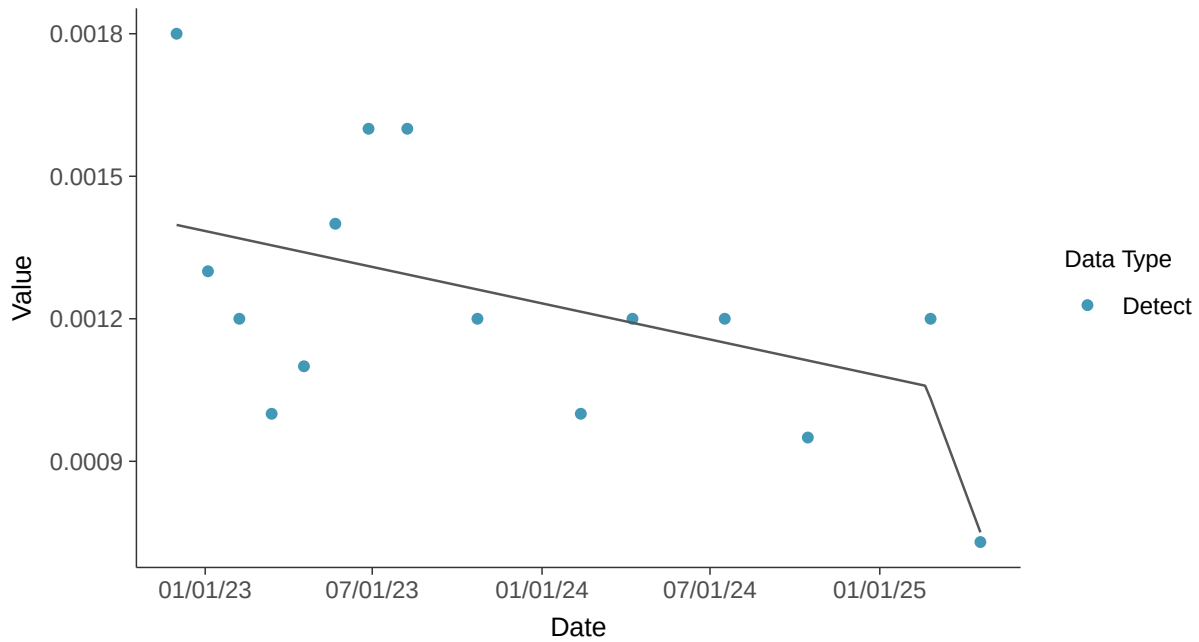
Trend Regression: Lognormal MLE

Arsenic, MW-31 (mg/L)



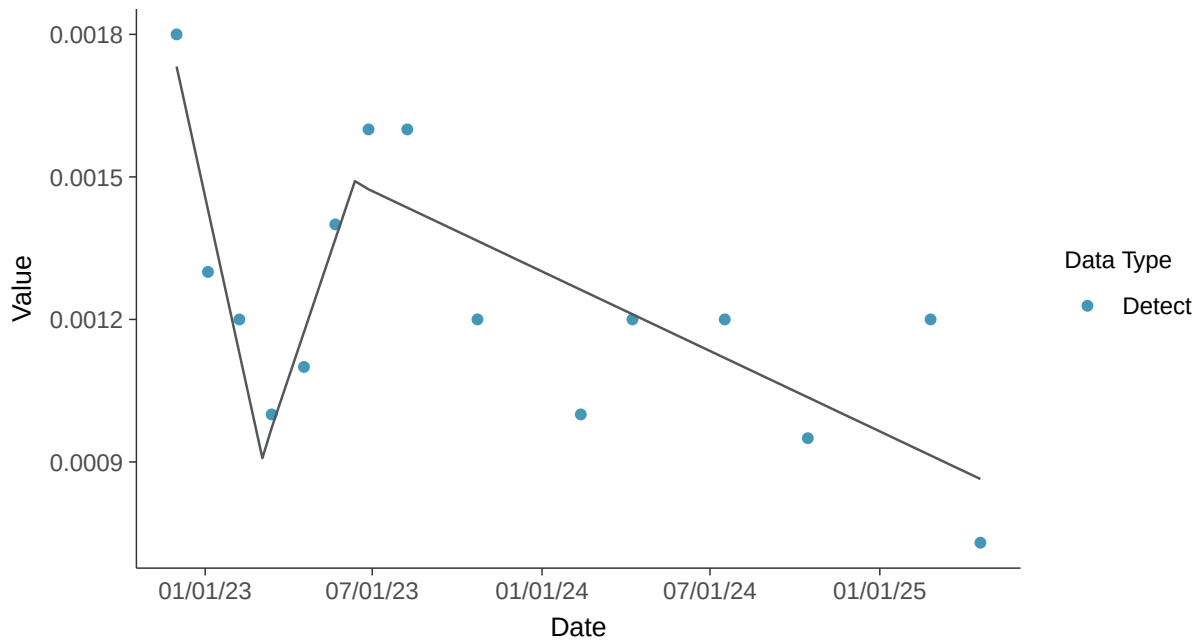
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-31 (mg/L)



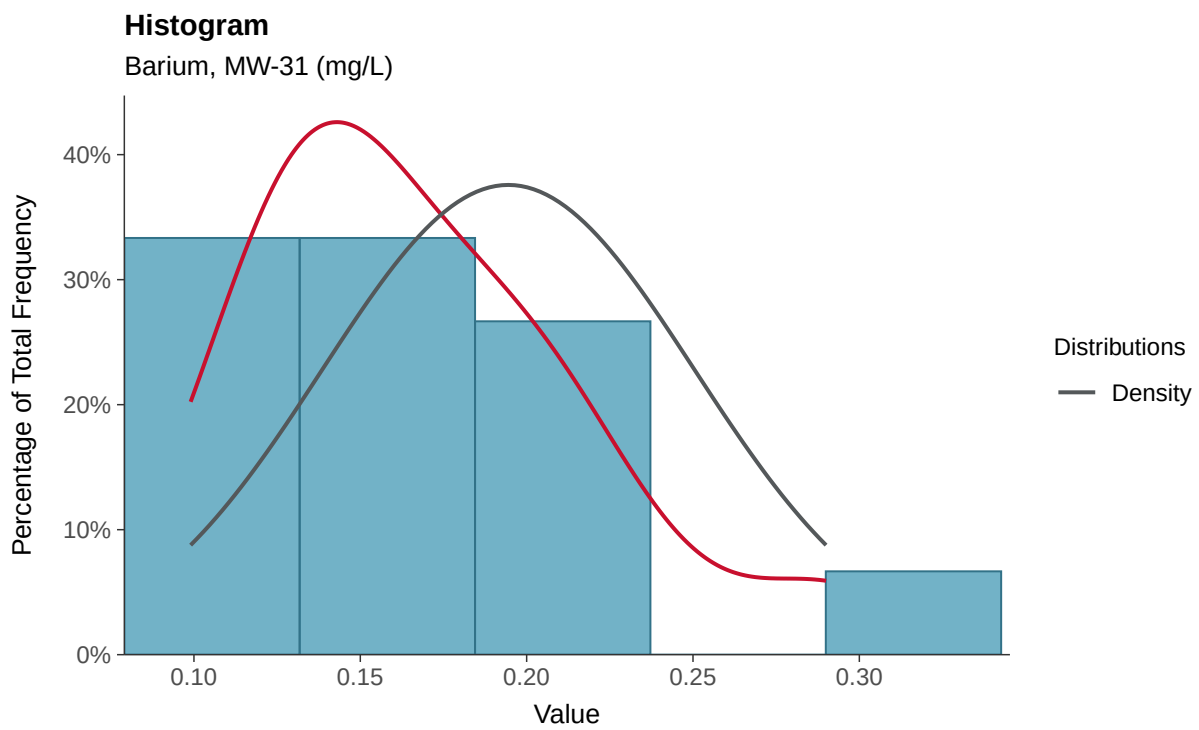
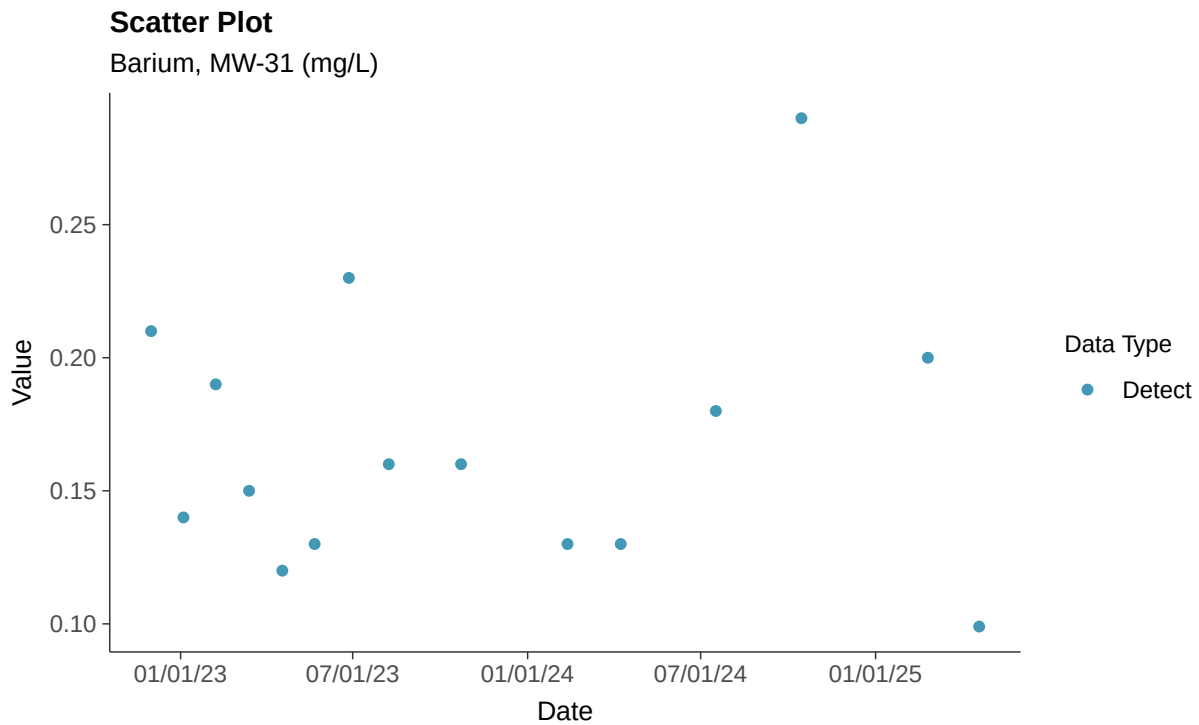
Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-31 (mg/L)



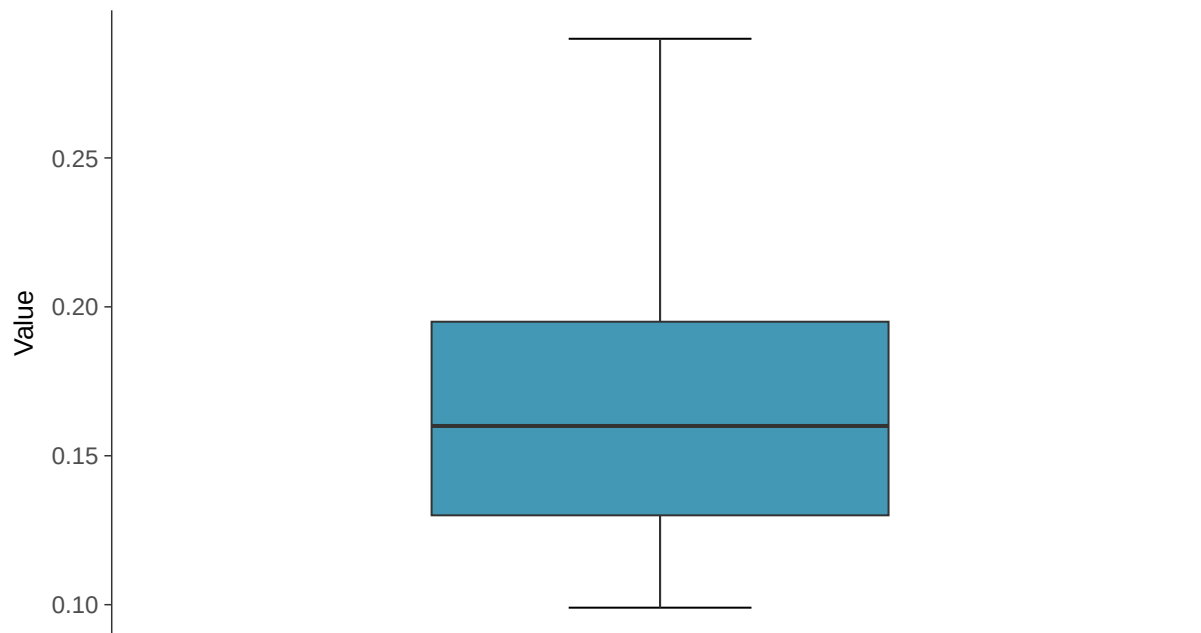
Appendix IV: Barium, MW-31

ID: 41_1_4_103



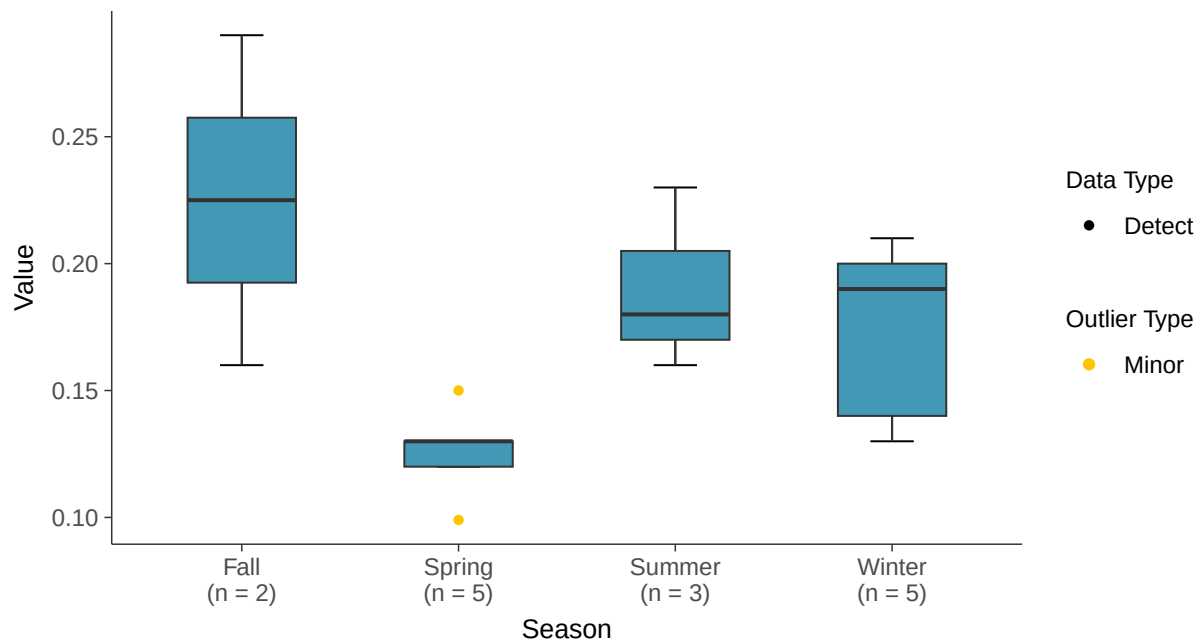
Boxplot

Barium, MW-31 (mg/L)



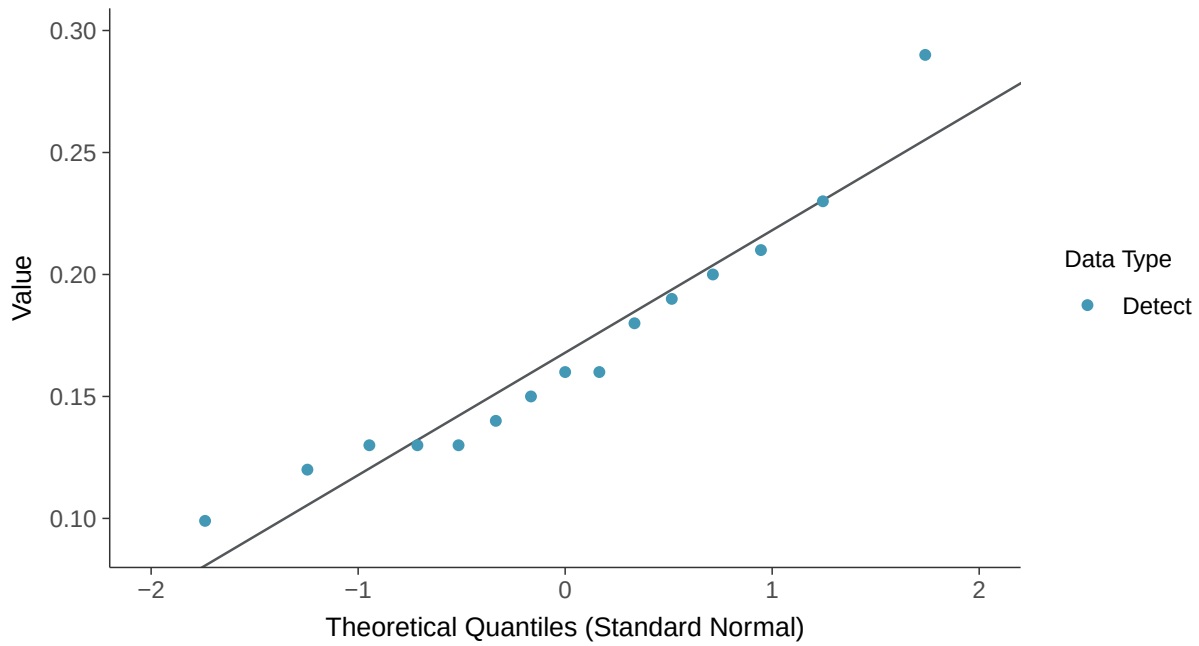
Boxplot by Season

Barium, MW-31 (mg/L)



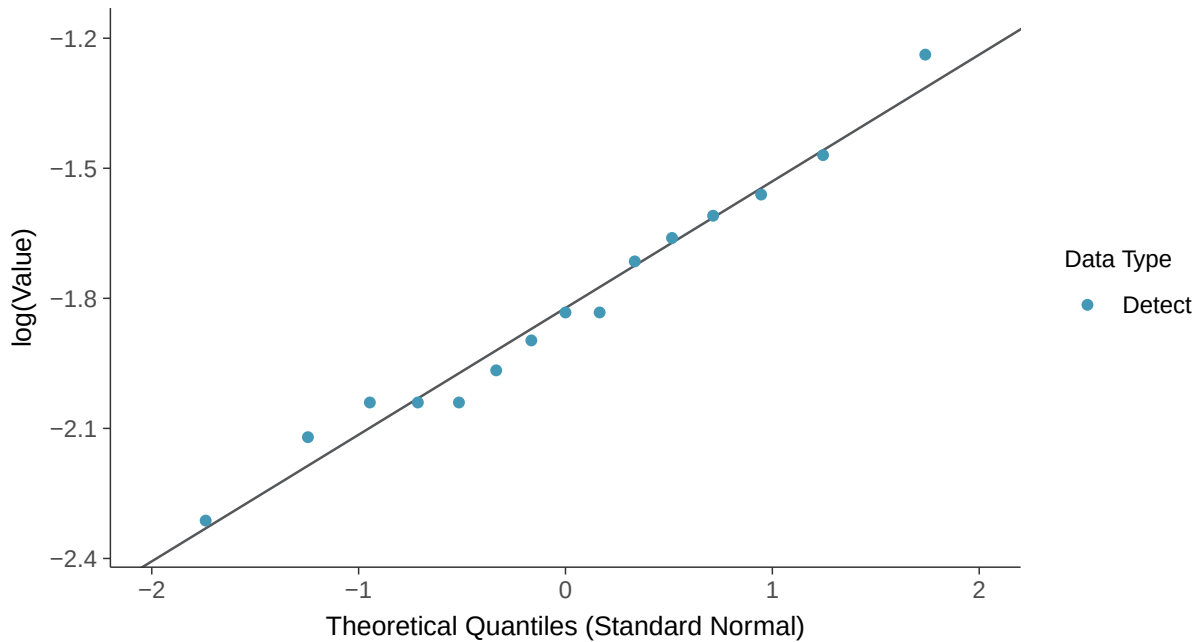
Normal Q-Q plot

Barium, MW-31 (mg/L)



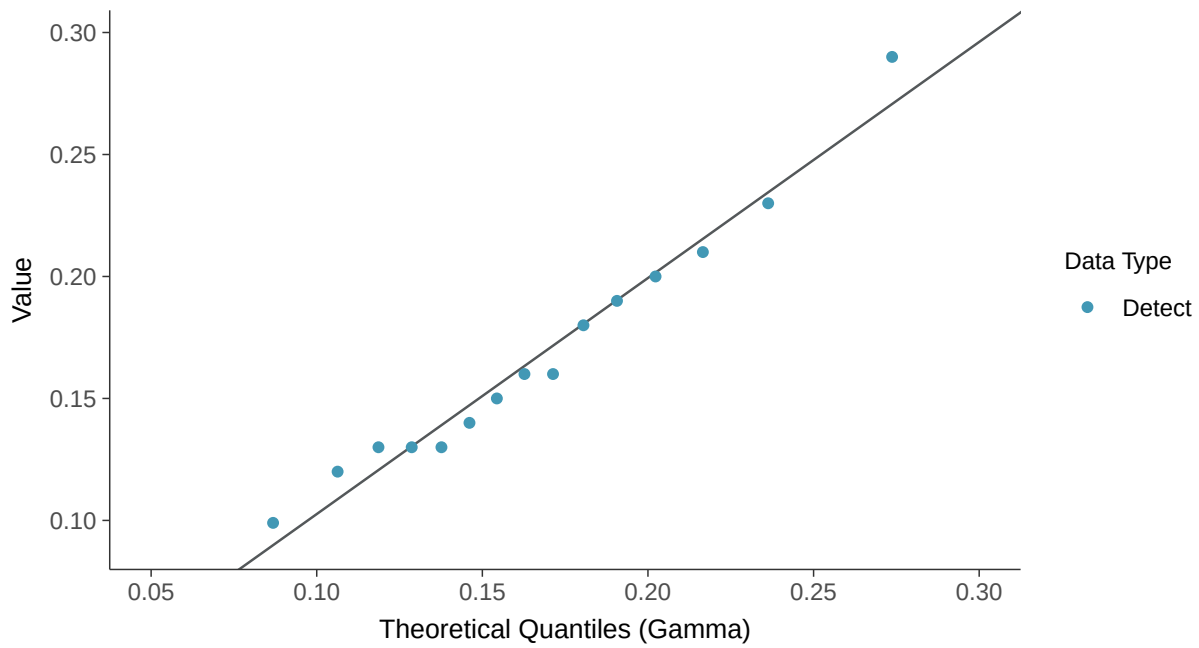
Lognormal Q-Q plot

Barium, MW-31 (mg/L)



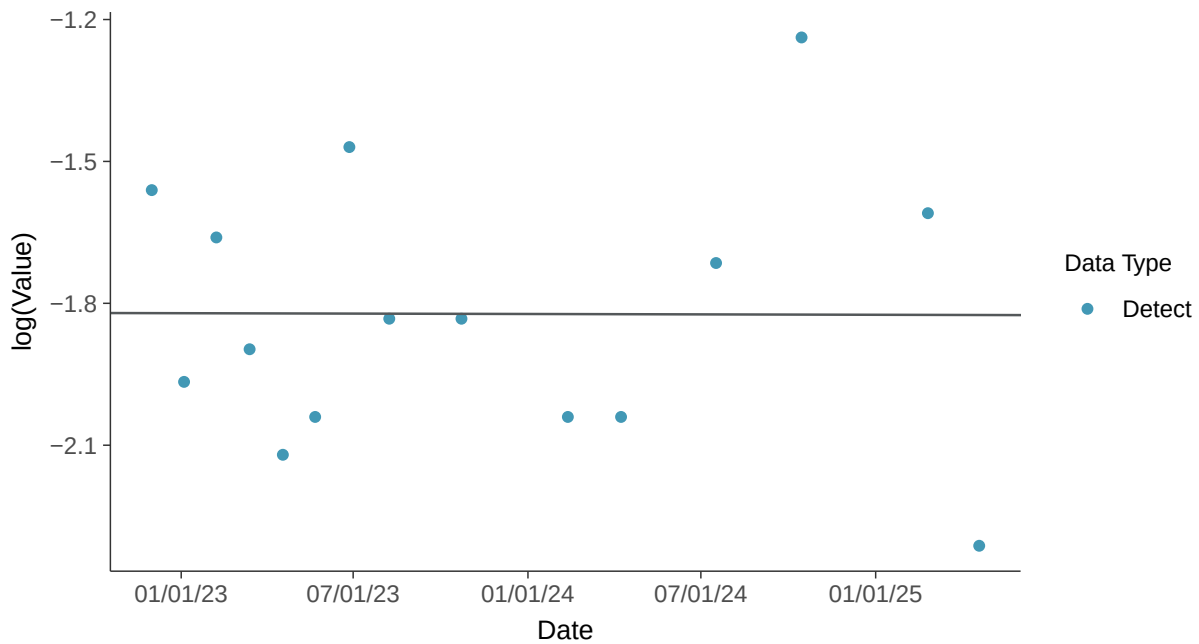
Gamma Q-Q plot

Barium, MW-31 (mg/L)



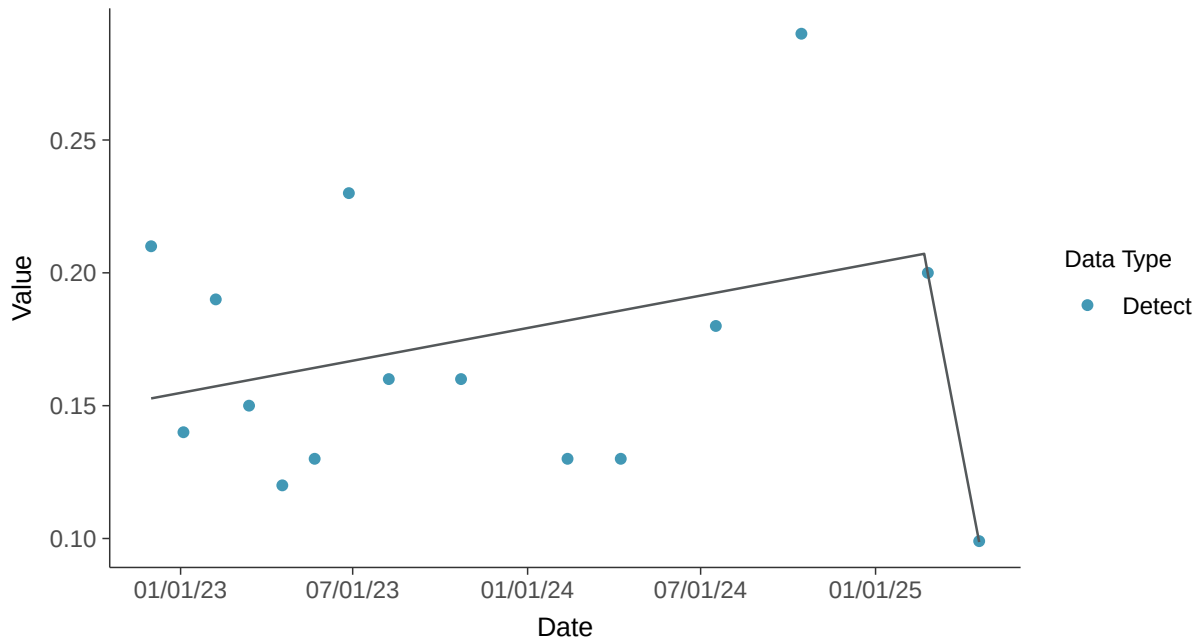
Trend Regression: Lognormal MLE

Barium, MW-31 (mg/L)



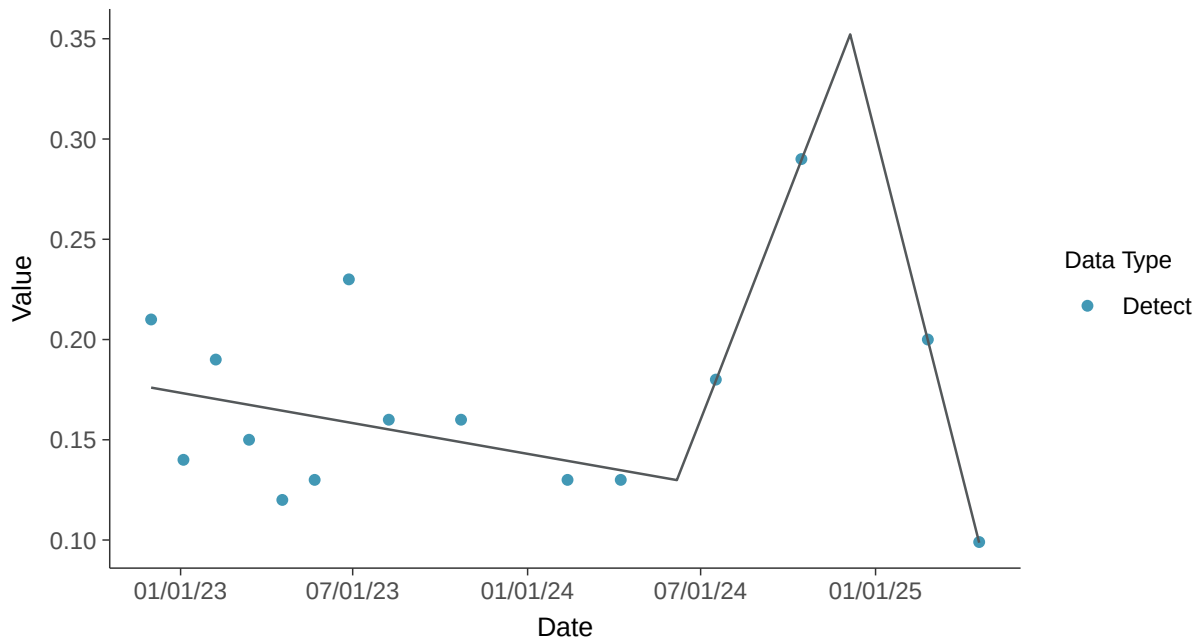
Trend Regression: Piecewise Linear-Linear

Barium, MW-31 (mg/L)



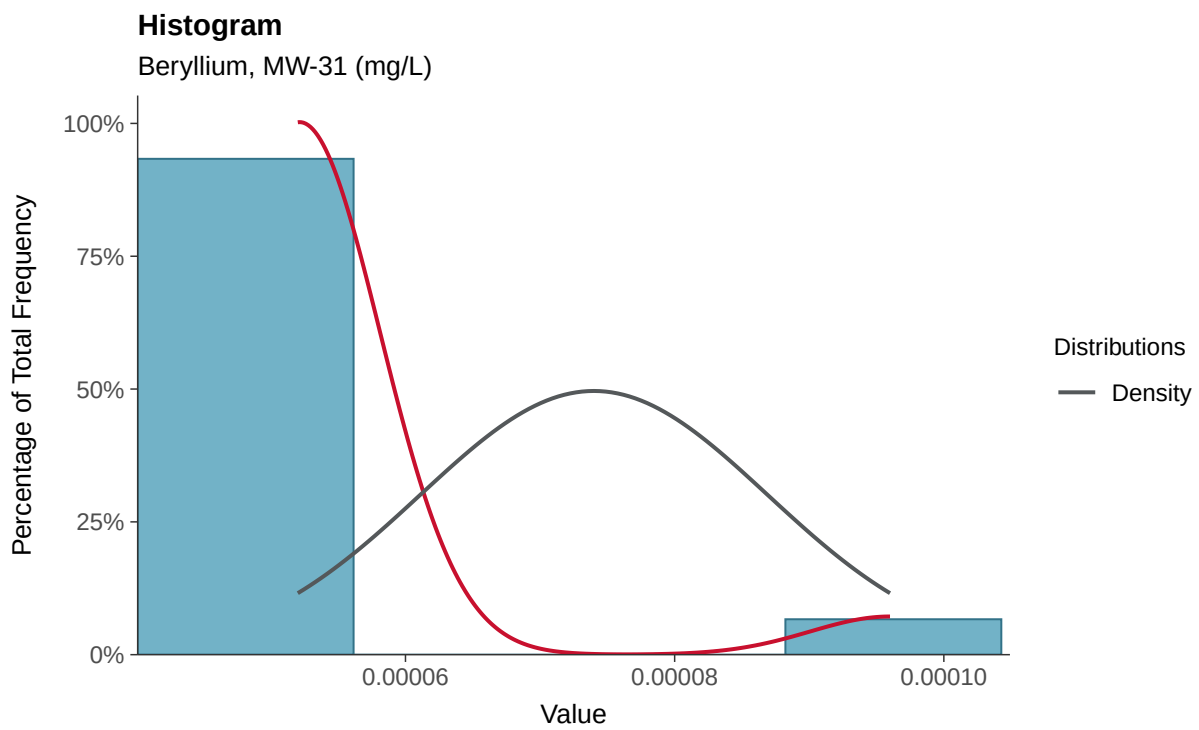
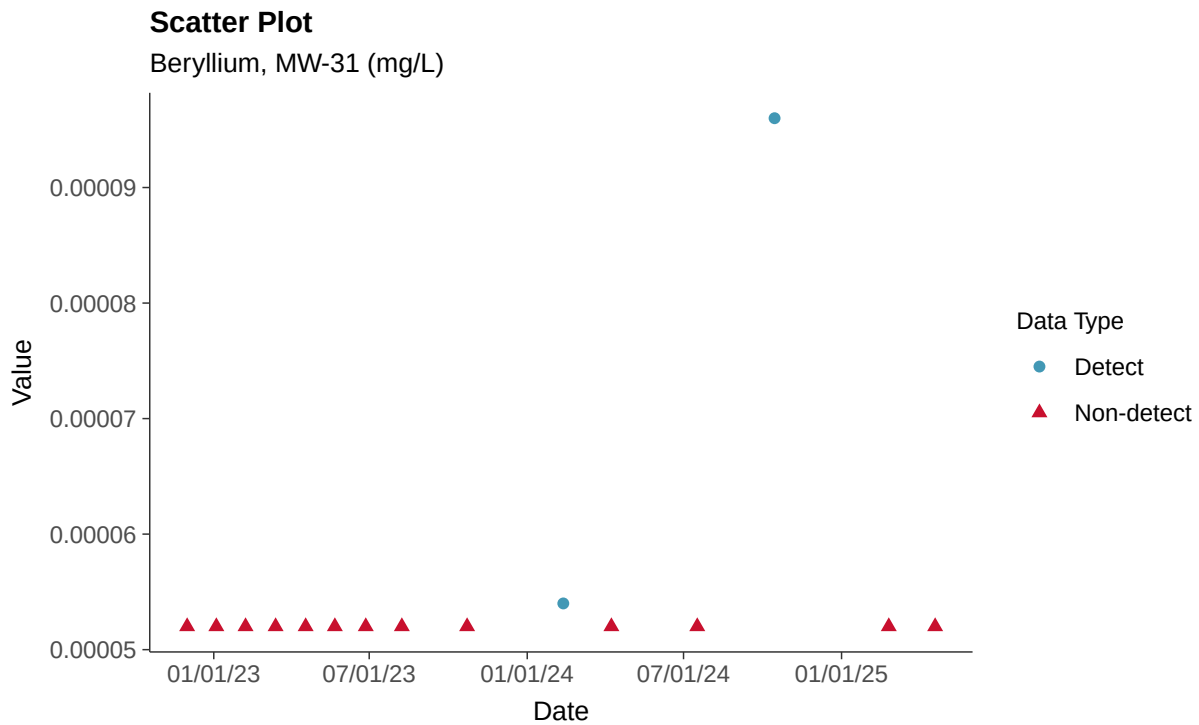
Trend Regression: Piecewise Linear-Linear-Linear

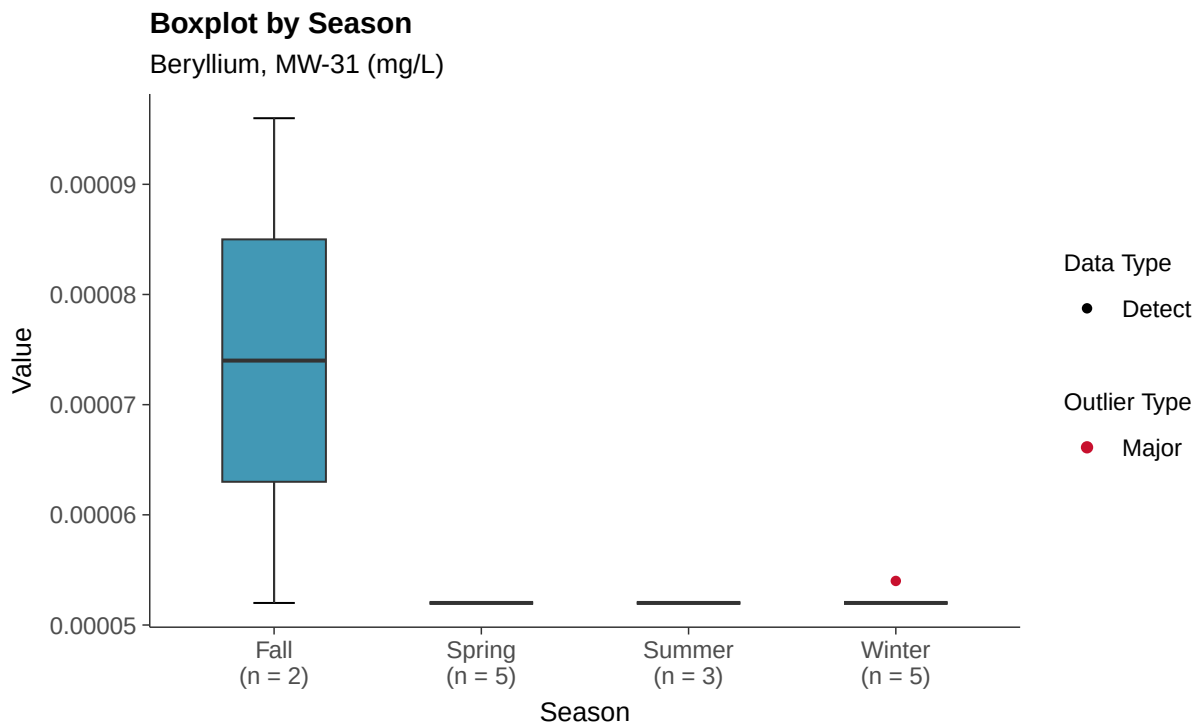
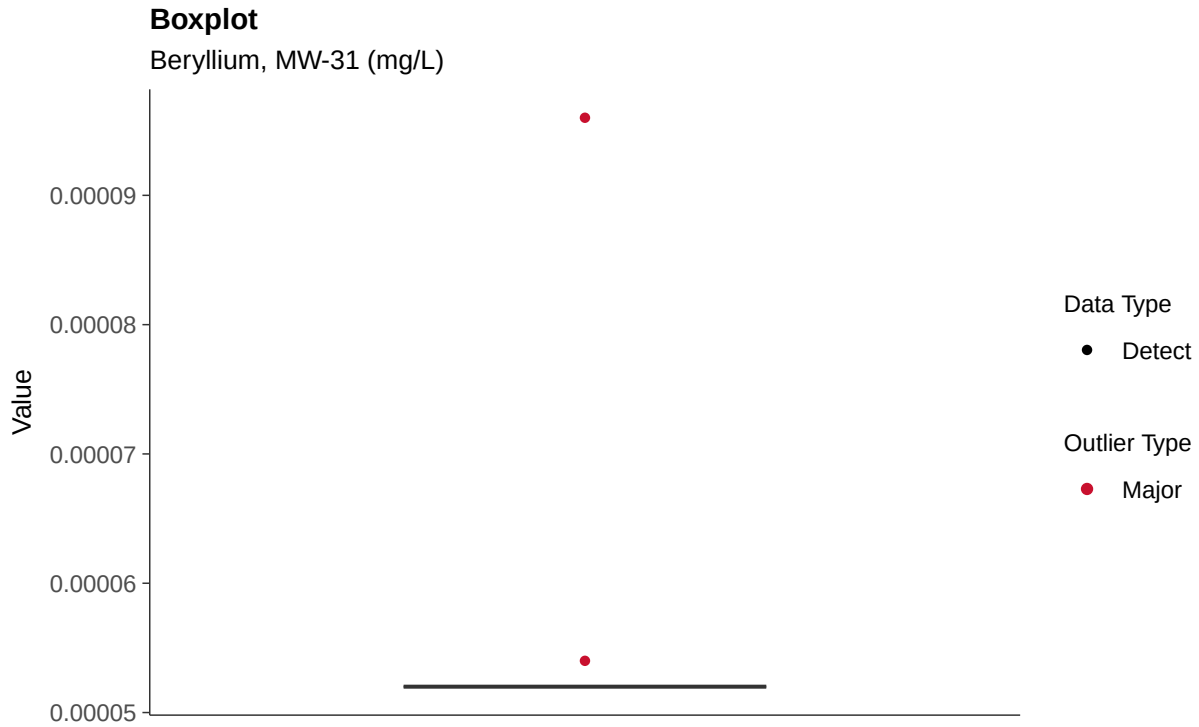
Barium, MW-31 (mg/L)

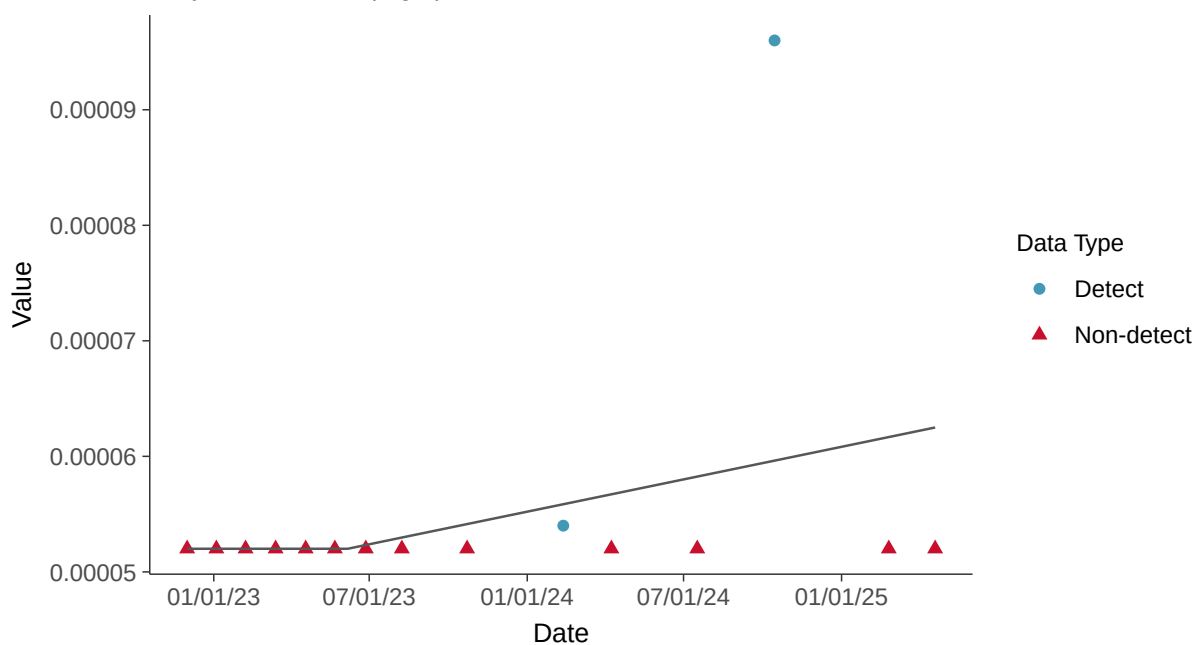


Appendix IV: Beryllium, MW-31

ID: 41_1_4_104

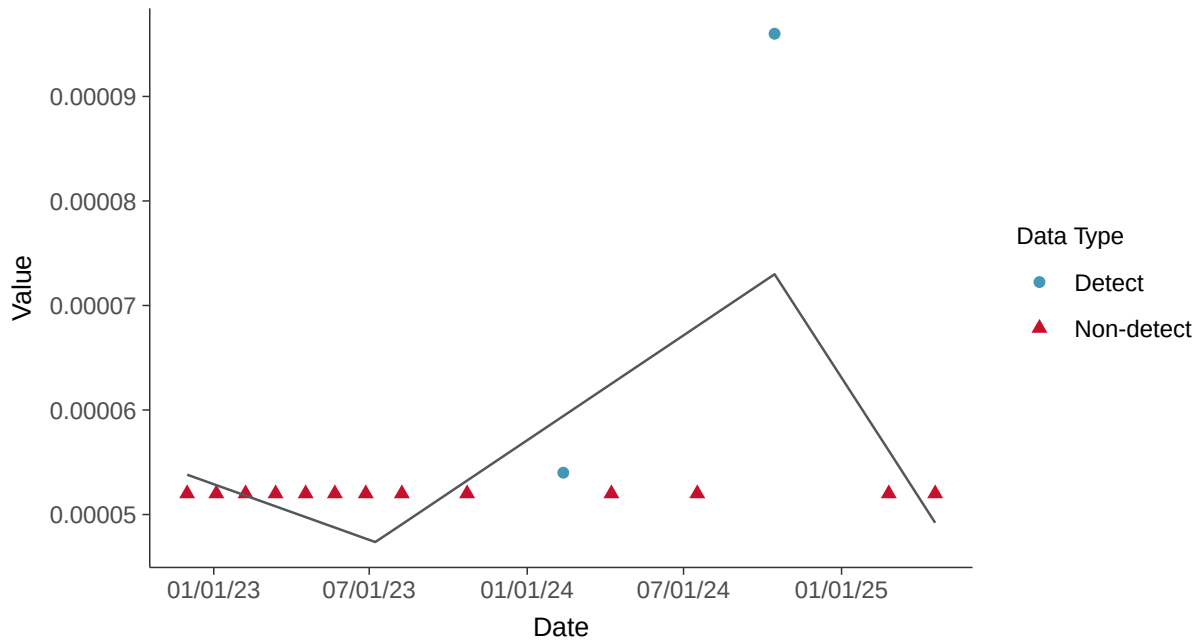






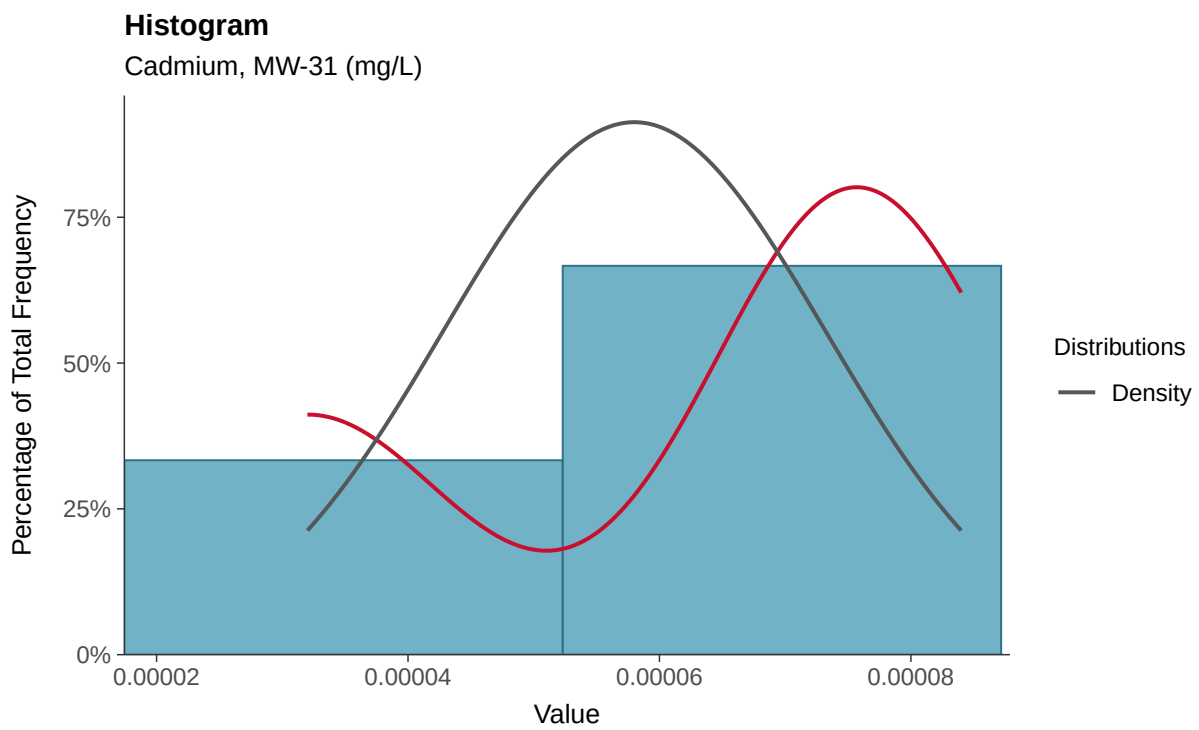
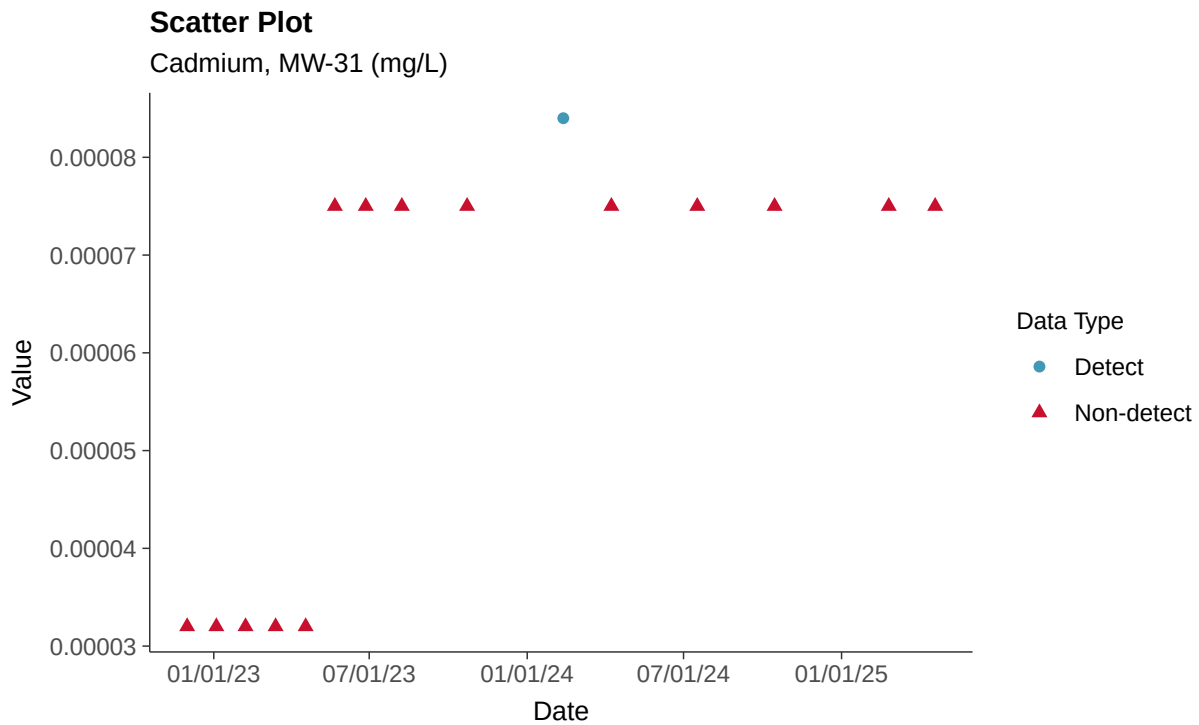


Trend Regression: Piecewise Linear-Linear-Linear
Beryllium, MW-31 (mg/L)



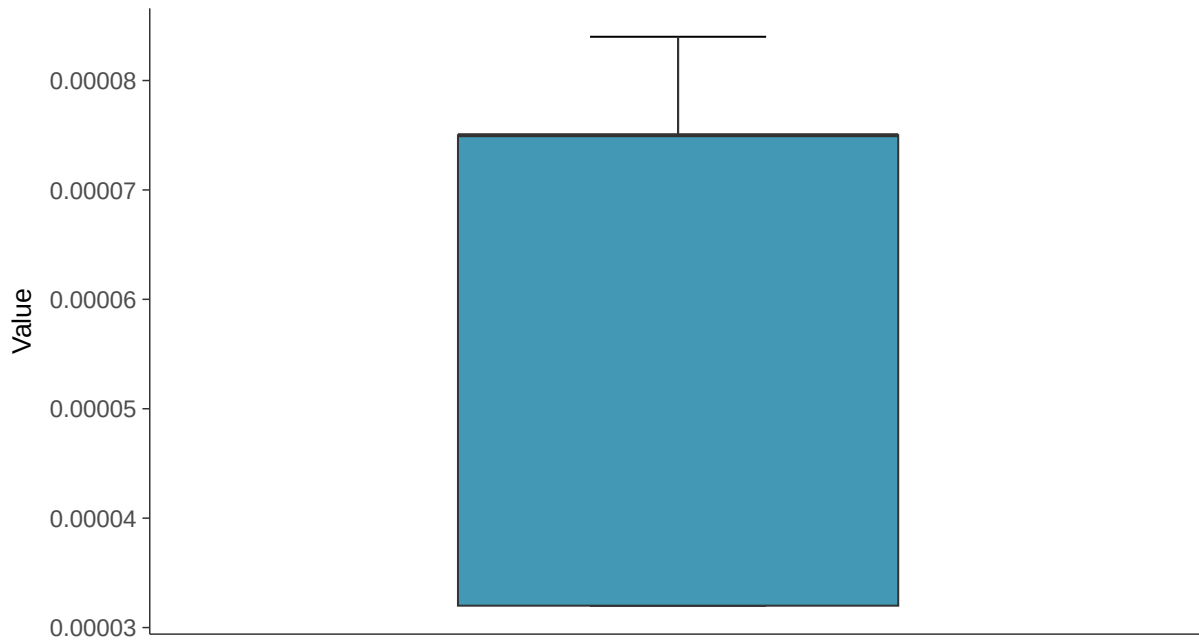
Appendix IV: Cadmium, MW-31

ID: 41_1_4_106



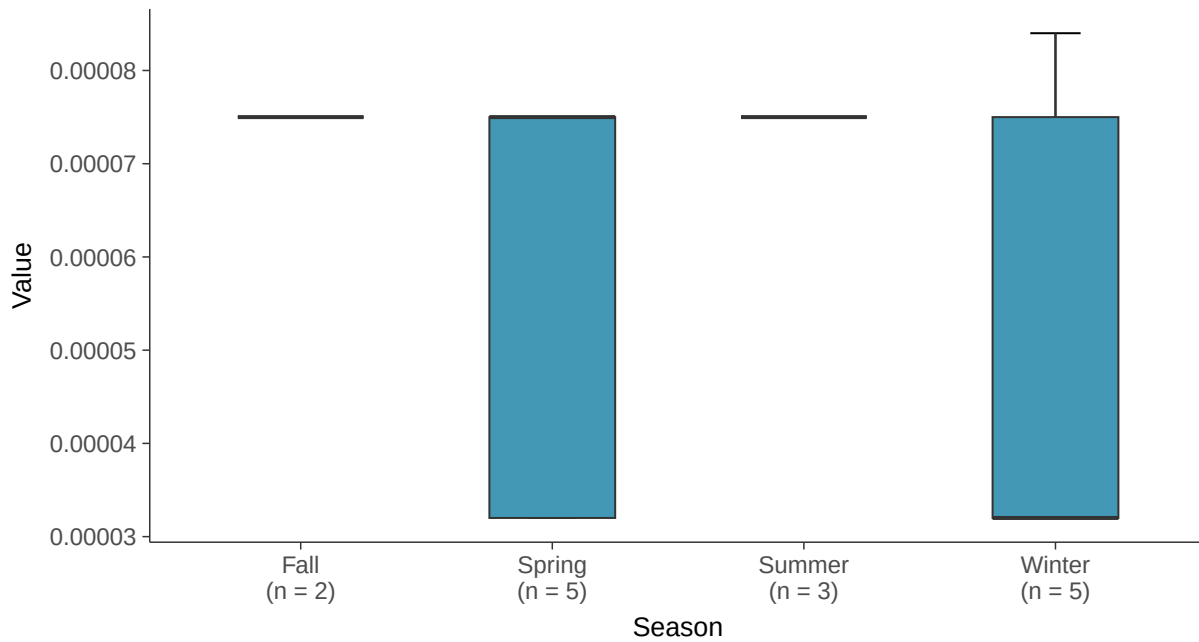
Boxplot

Cadmium, MW-31 (mg/L)



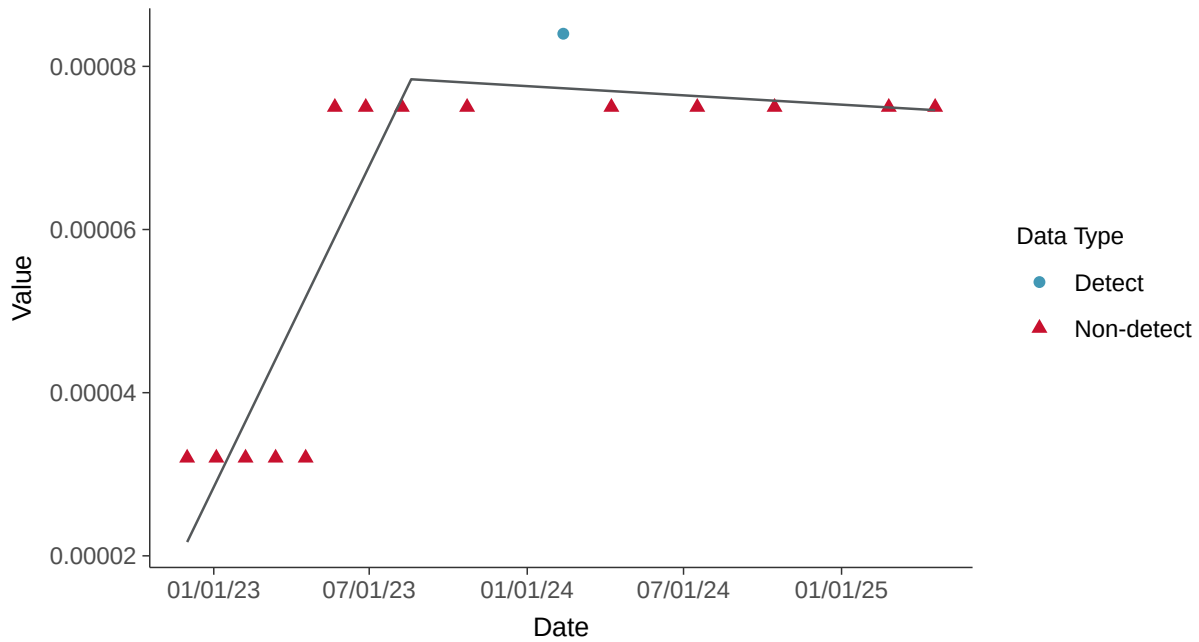
Boxplot by Season

Cadmium, MW-31 (mg/L)



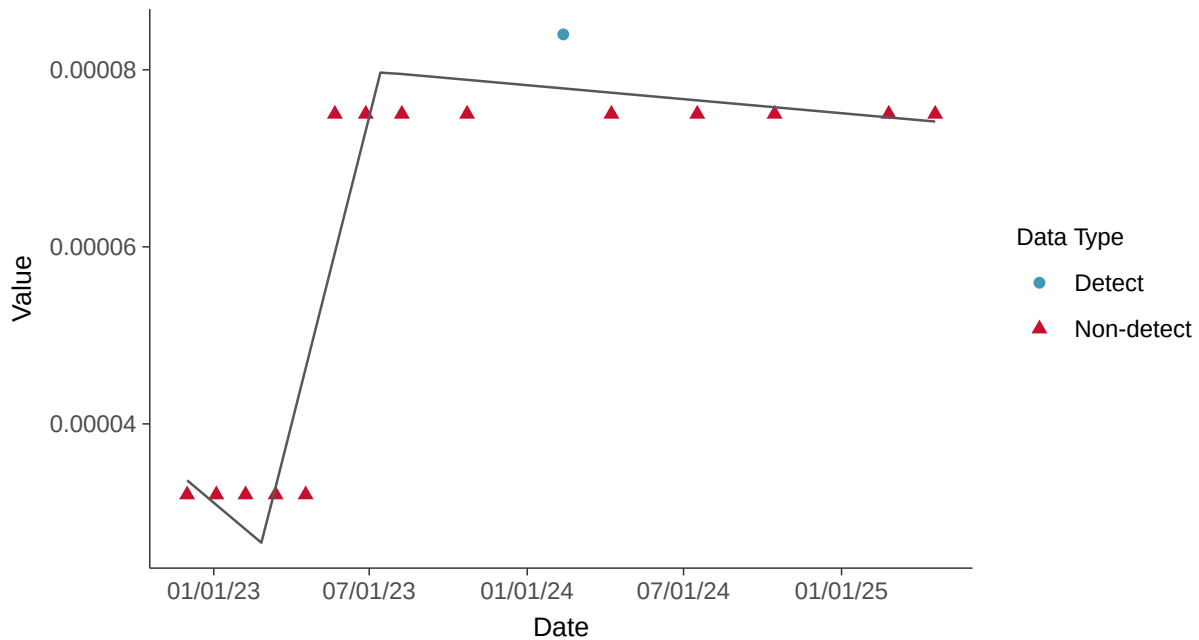
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-31 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cadmium, MW-31 (mg/L)

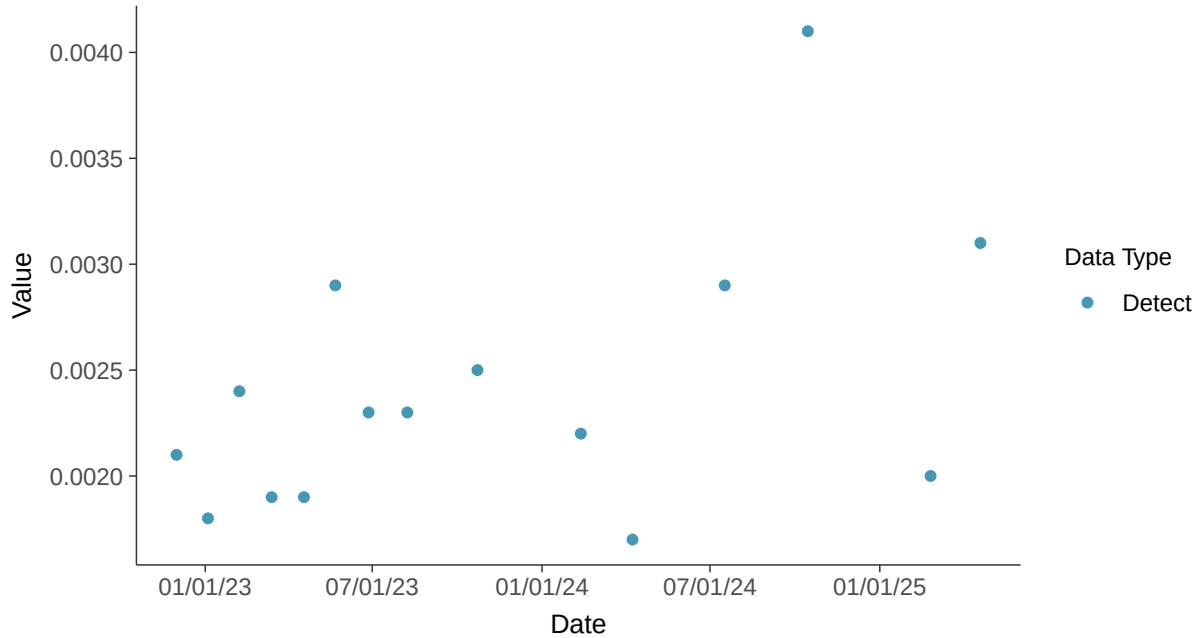


Appendix IV: Chromium, Total, MW-31

ID: 41_1_4_109

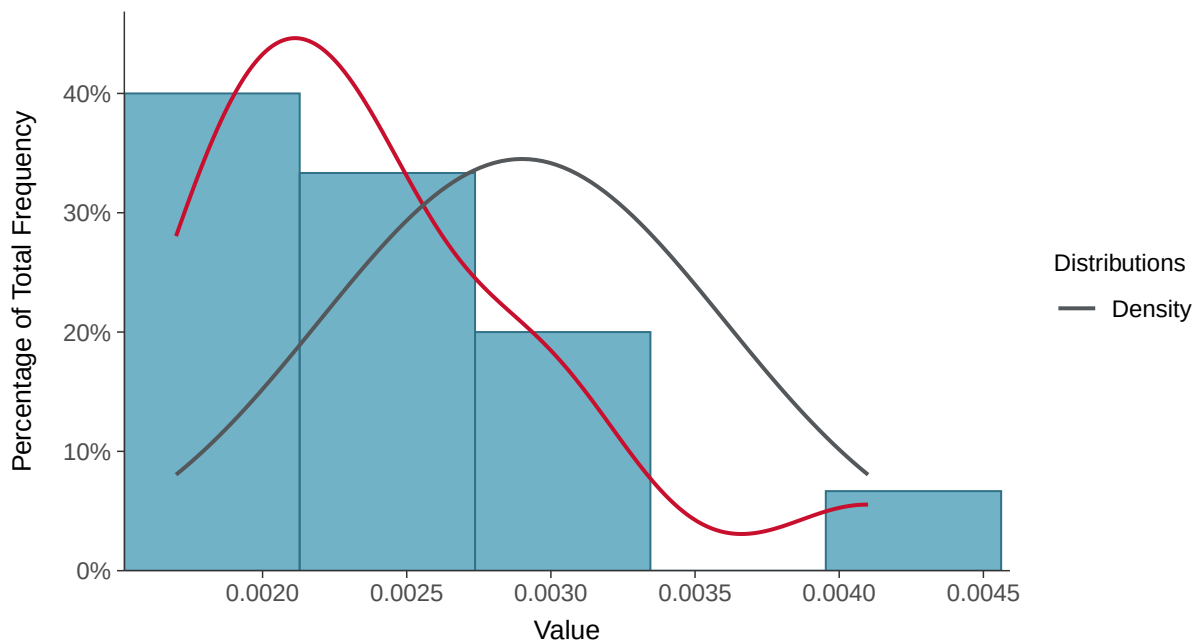
Scatter Plot

Chromium, Total, MW-31 (mg/L)



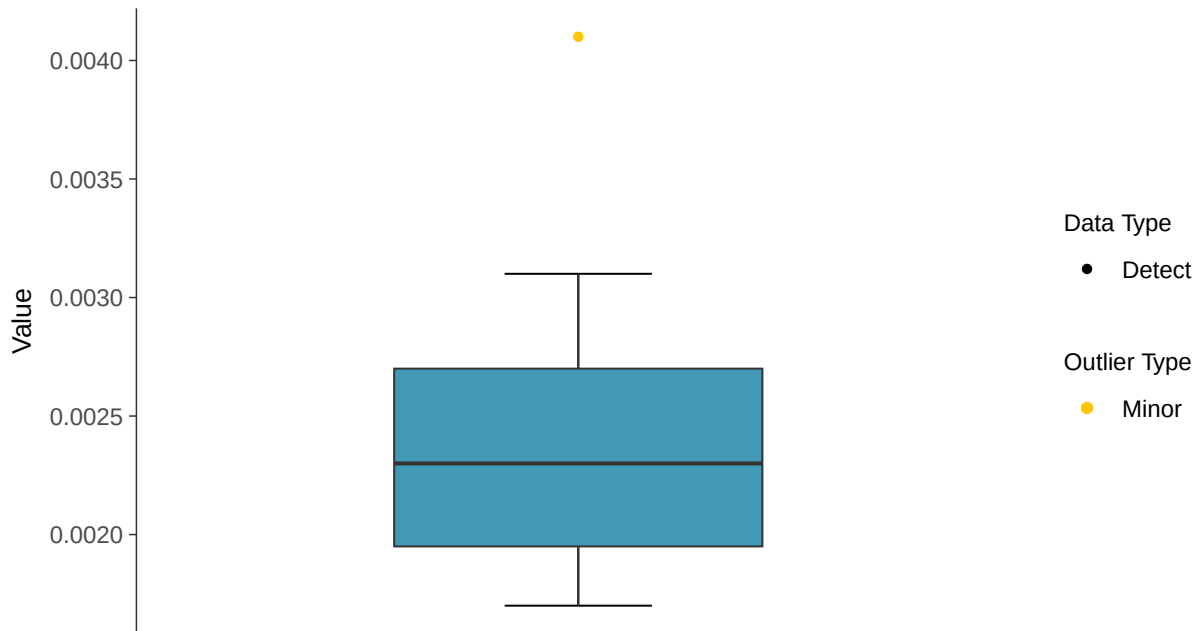
Histogram

Chromium, Total, MW-31 (mg/L)



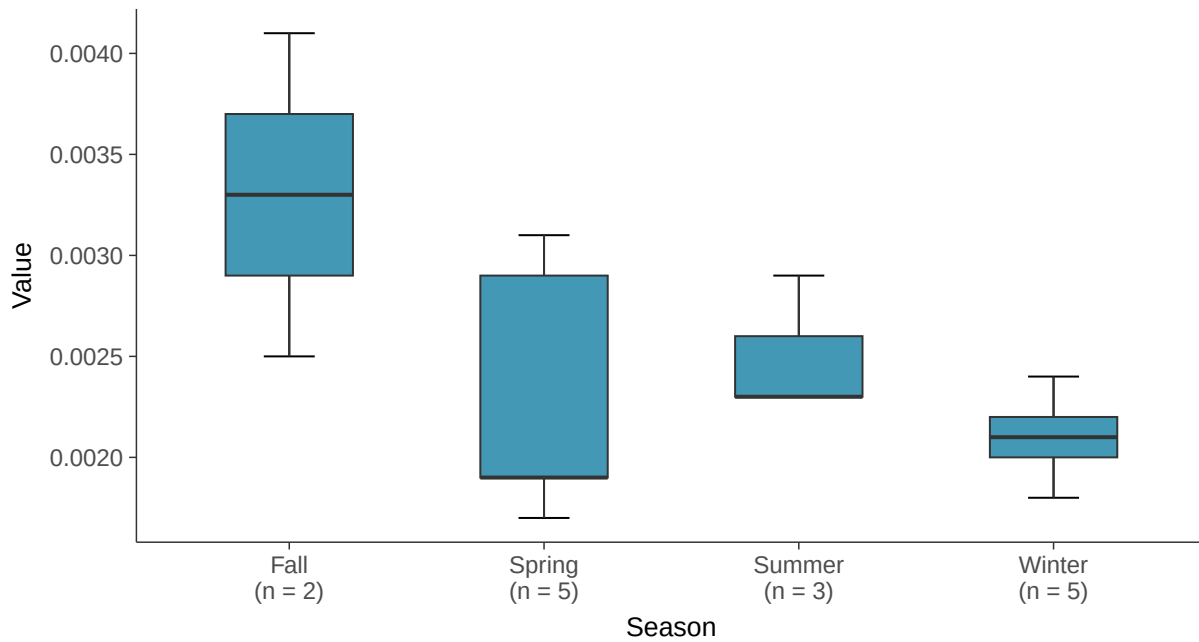
Boxplot

Chromium, Total, MW-31 (mg/L)



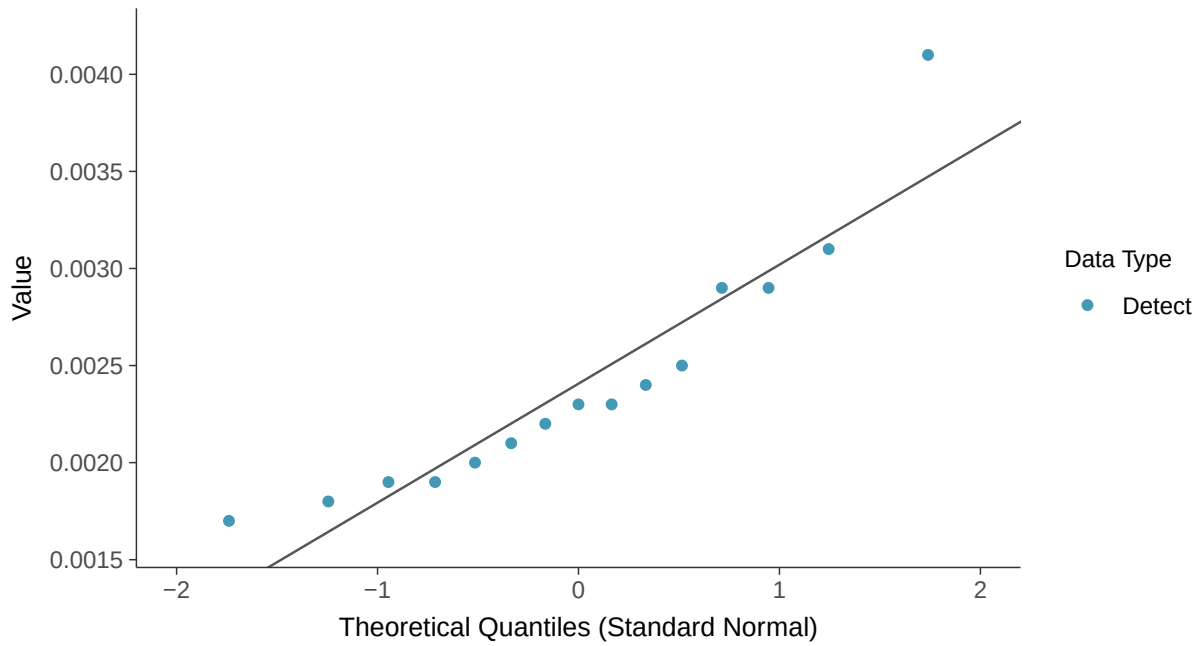
Boxplot by Season

Chromium, Total, MW-31 (mg/L)



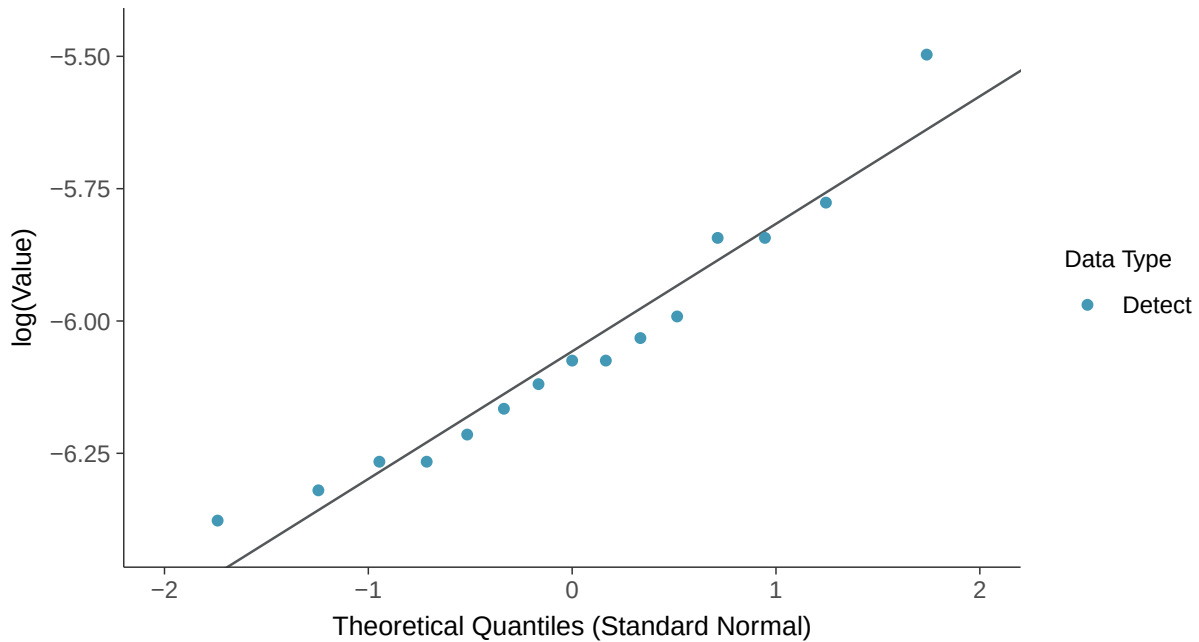
Normal Q-Q plot

Chromium, Total, MW-31 (mg/L)



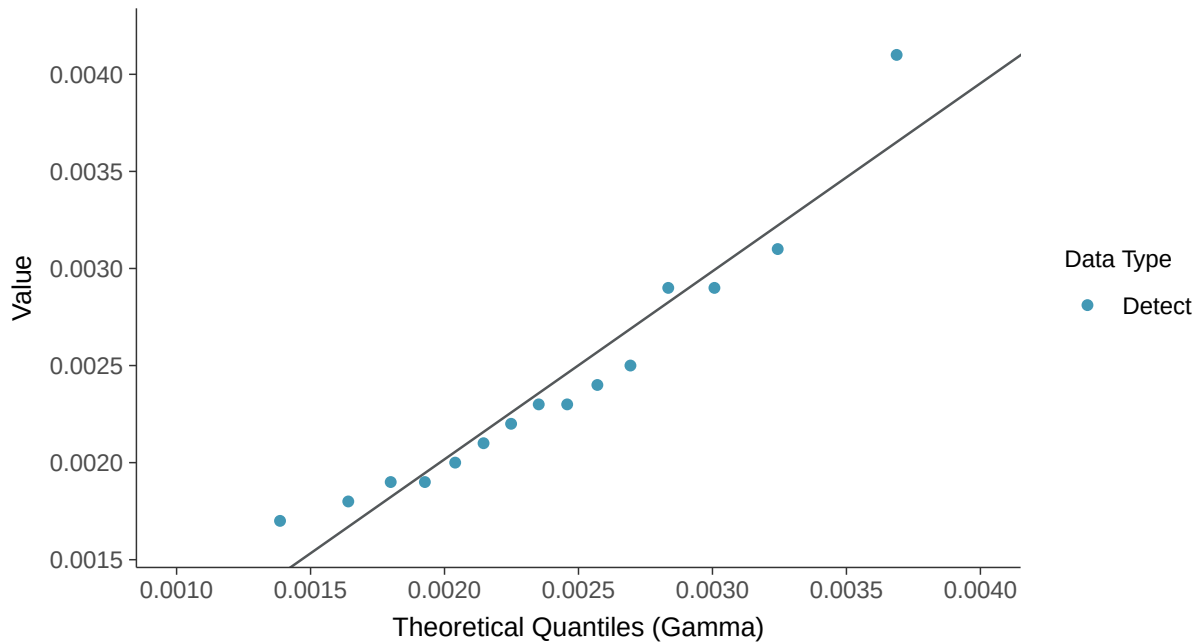
Lognormal Q-Q plot

Chromium, Total, MW-31 (mg/L)



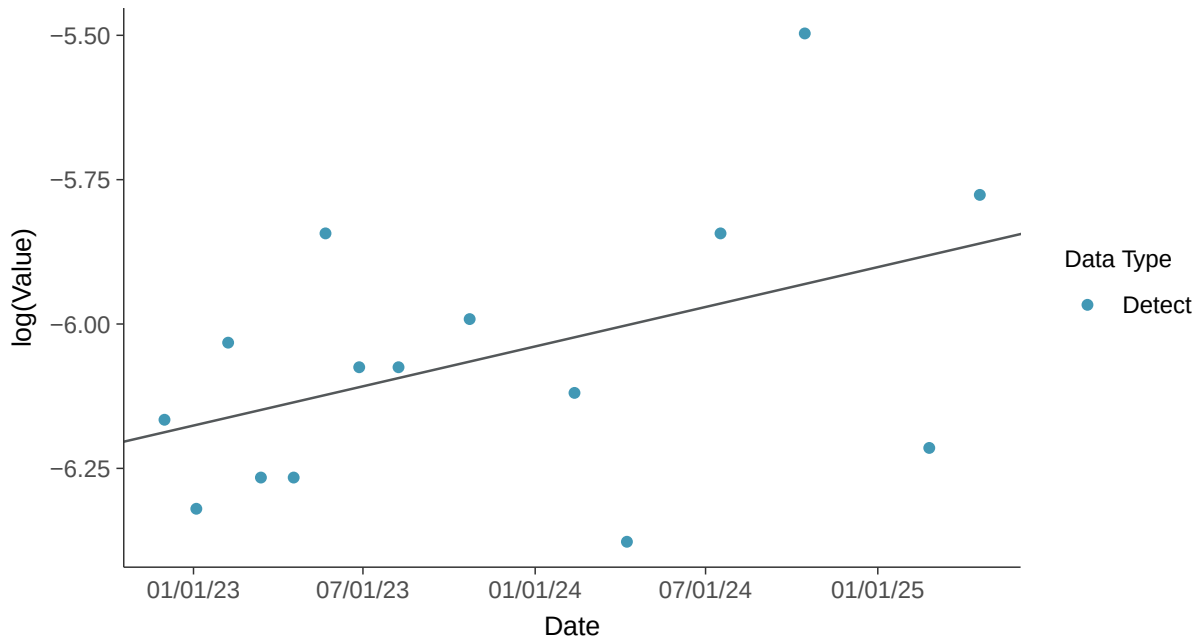
Gamma Q-Q plot

Chromium, Total, MW-31 (mg/L)



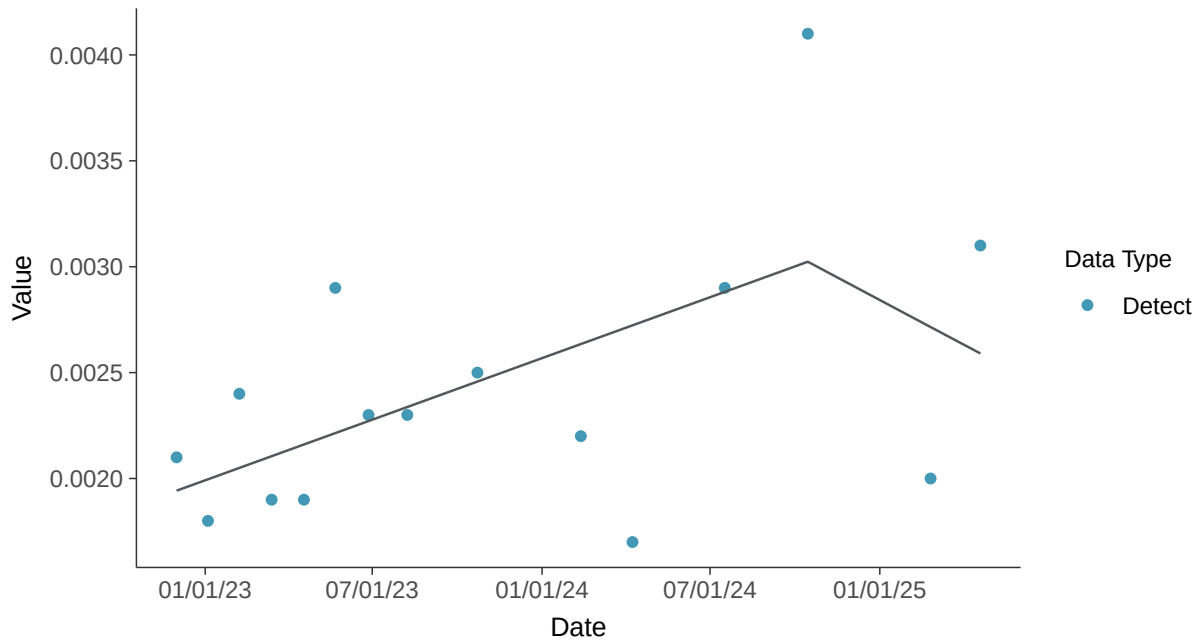
Trend Regression: Lognormal MLE

Chromium, Total, MW-31 (mg/L)



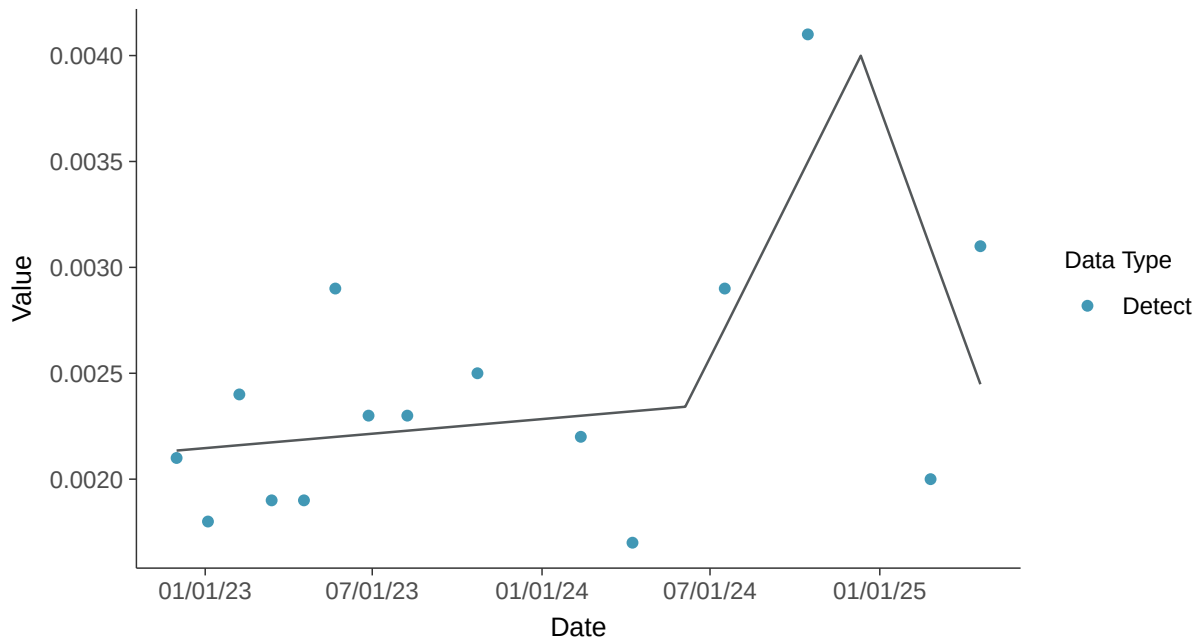
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-31 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Chromium, Total, MW-31 (mg/L)

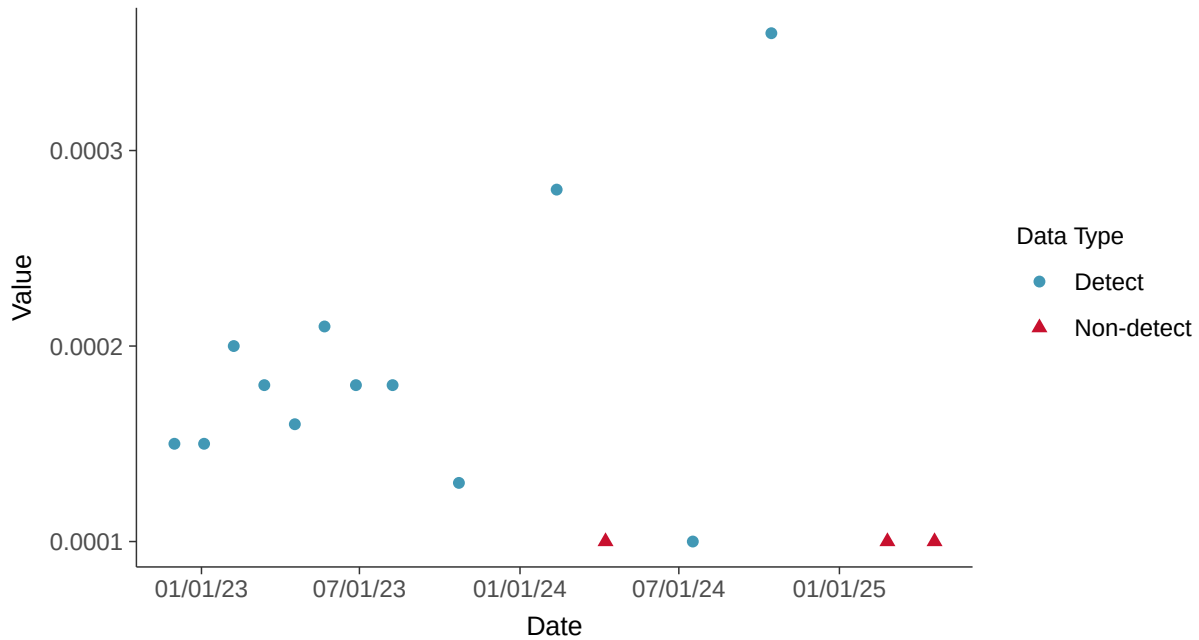


Appendix IV: Cobalt, MW-31

ID: 41_1_4_110

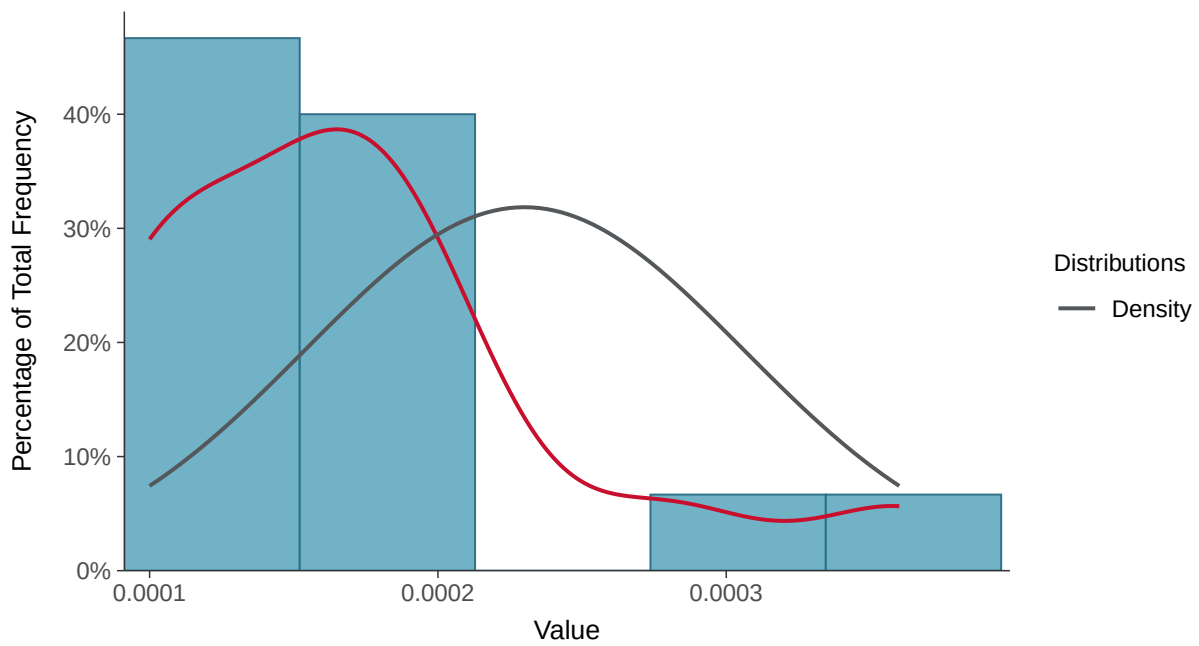
Scatter Plot

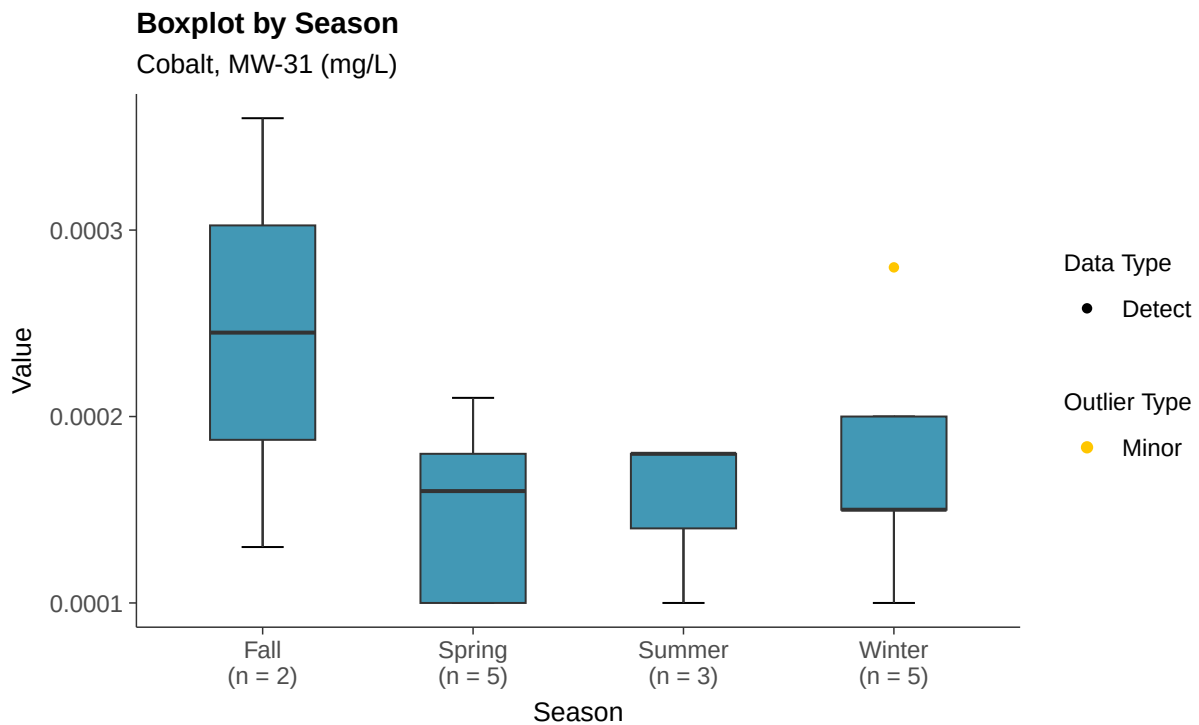
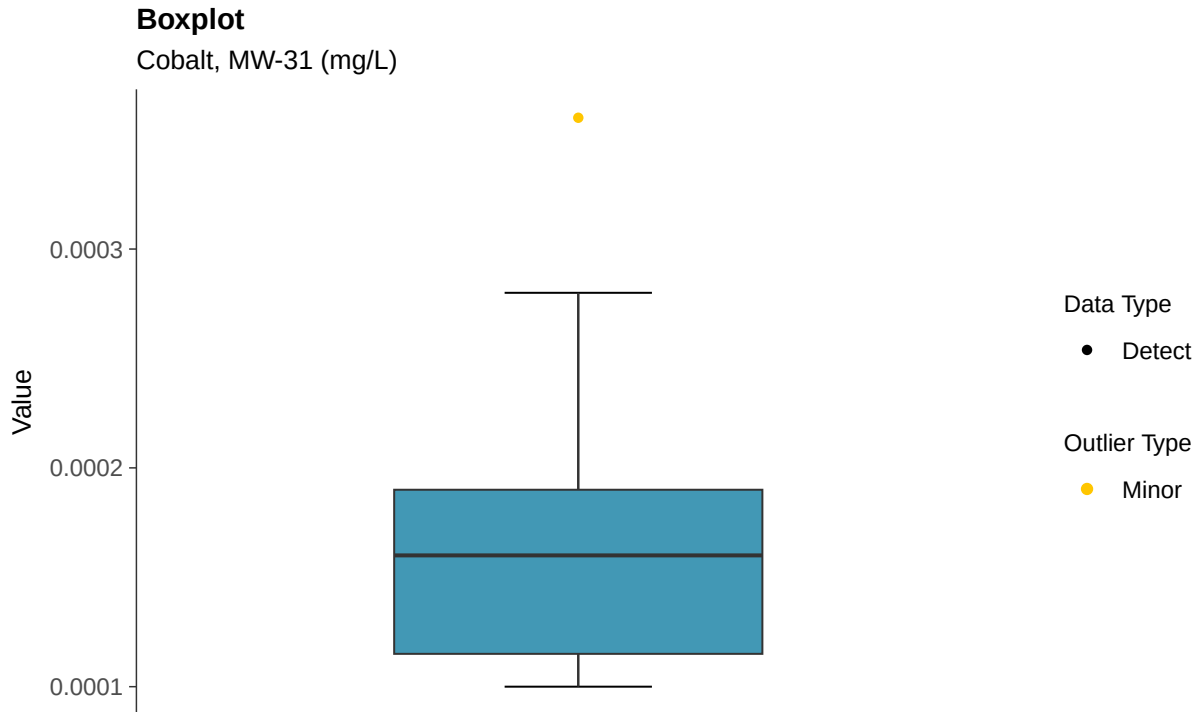
Cobalt, MW-31 (mg/L)



Histogram

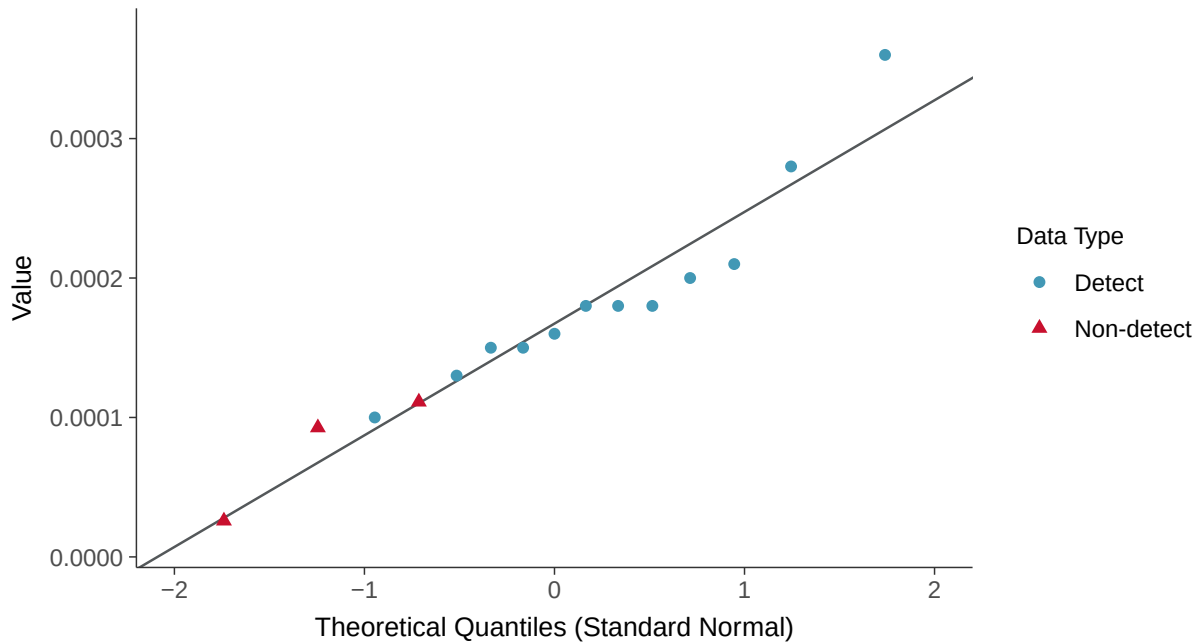
Cobalt, MW-31 (mg/L)





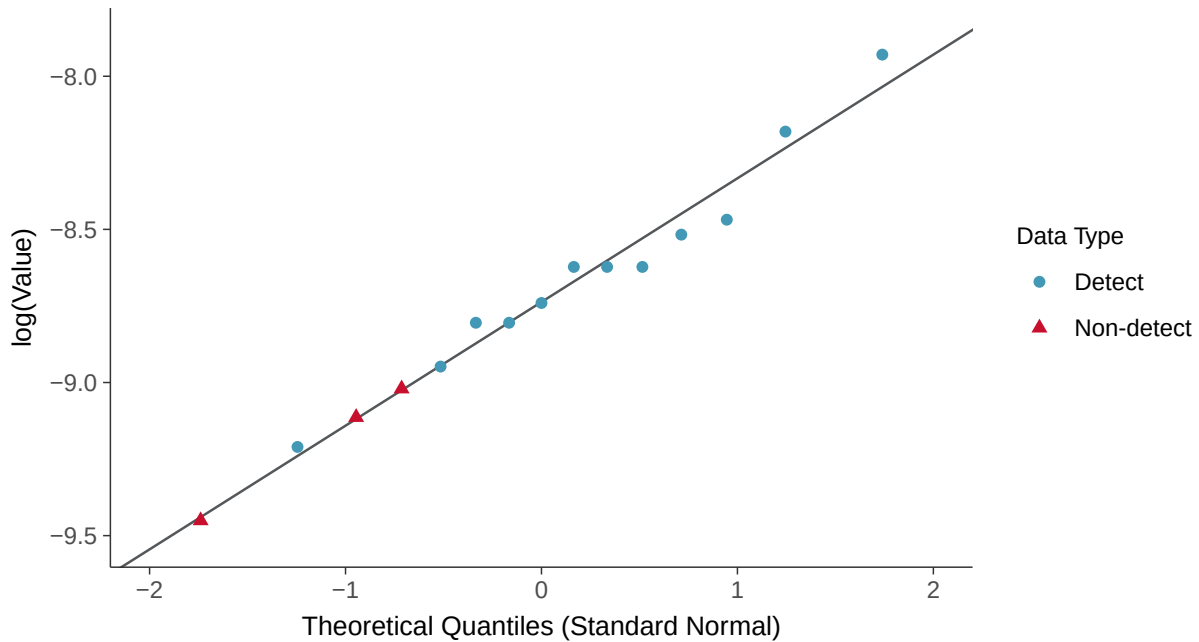
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-31 (mg/L)



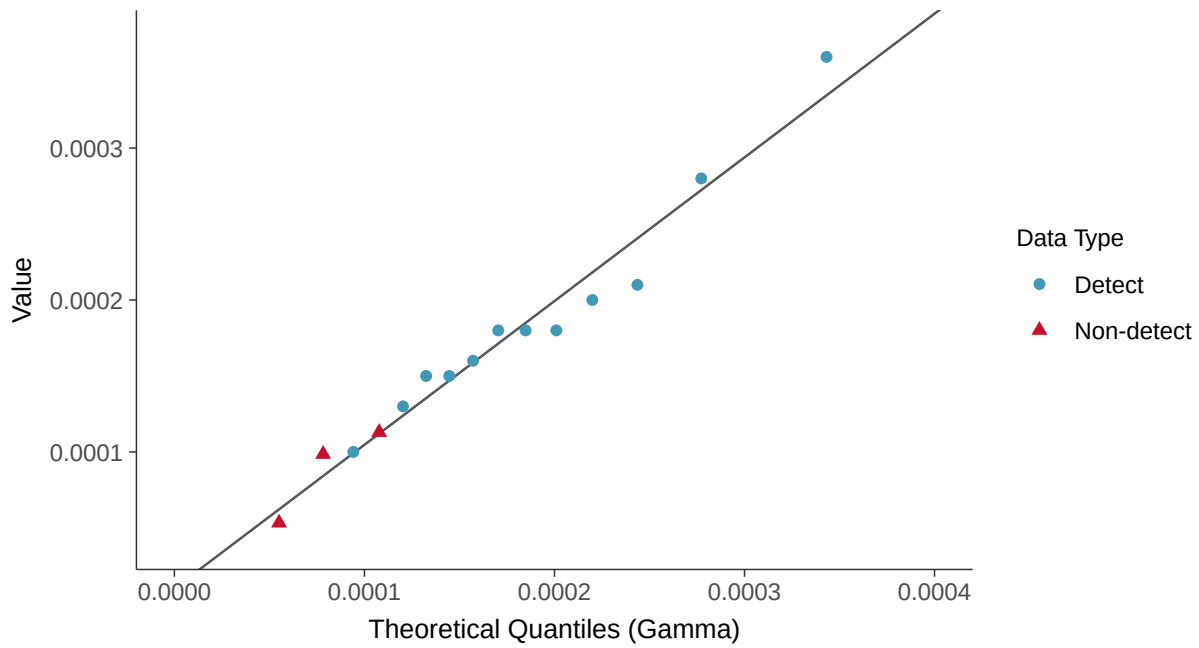
Lognormal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-31 (mg/L)



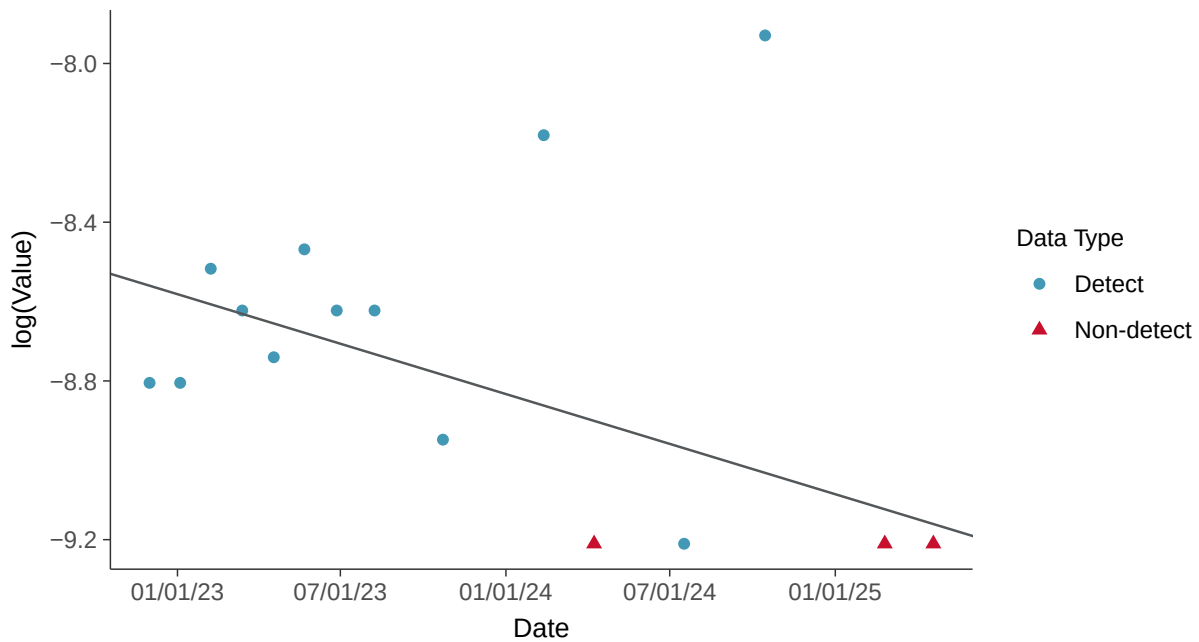
Gamma Q-Q plot using ROS Imputed Estimates

Cobalt, MW-31 (mg/L)

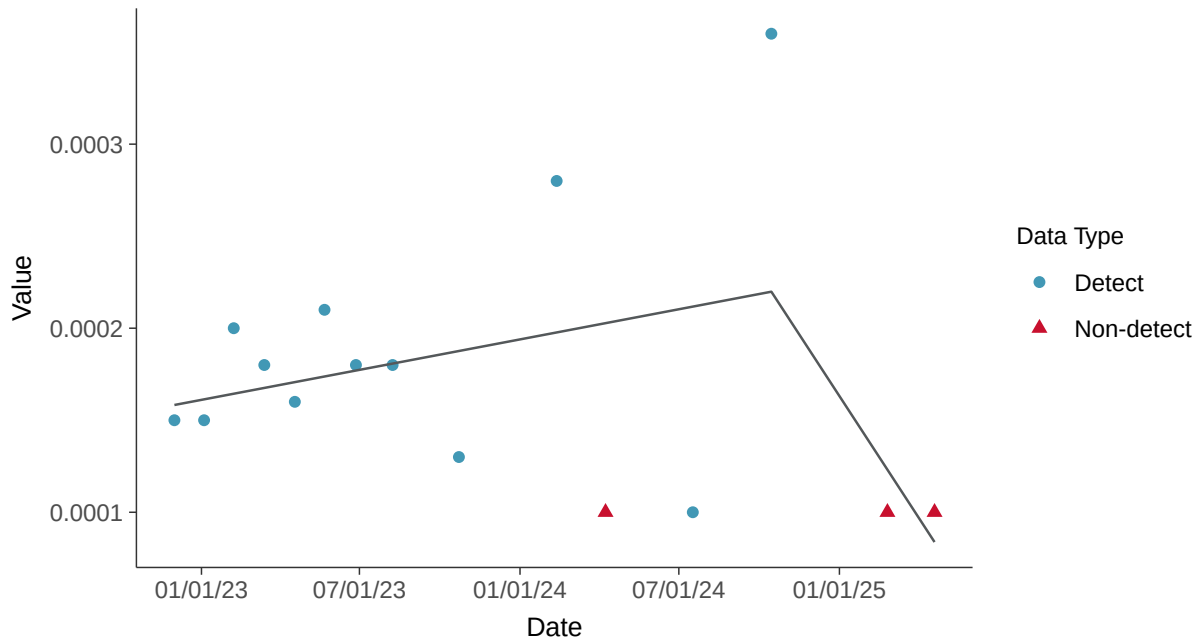


Trend Regression: Lognormal MLE

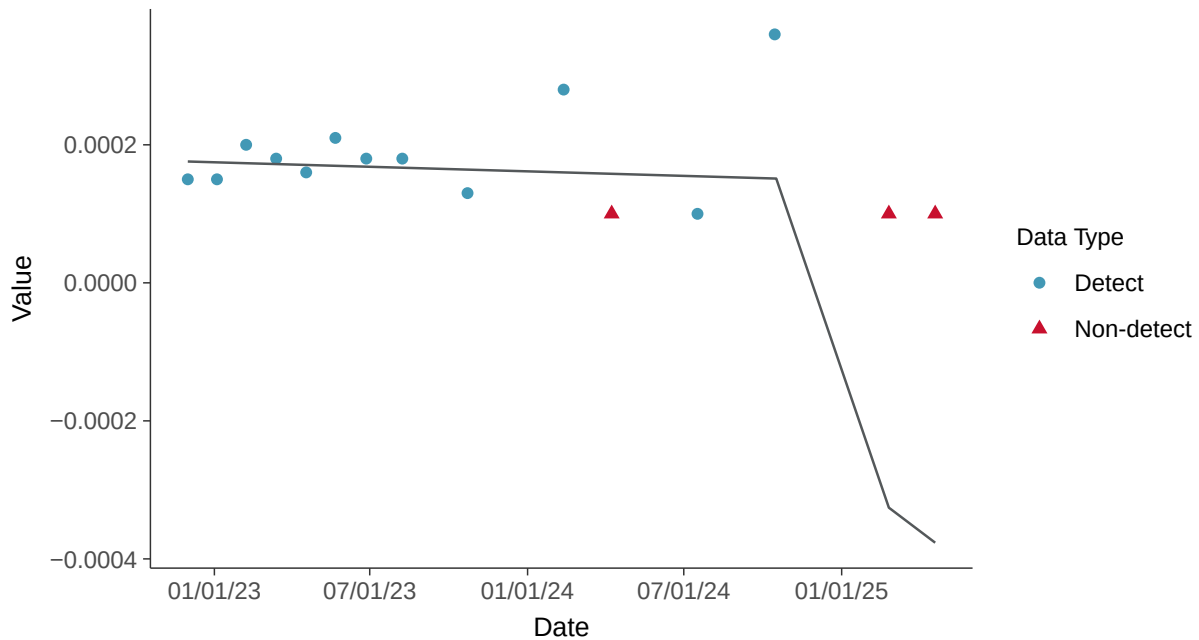
Cobalt, MW-31 (mg/L)



Trend Regression: Piecewise Linear-Linear
Cobalt, MW-31 (mg/L)

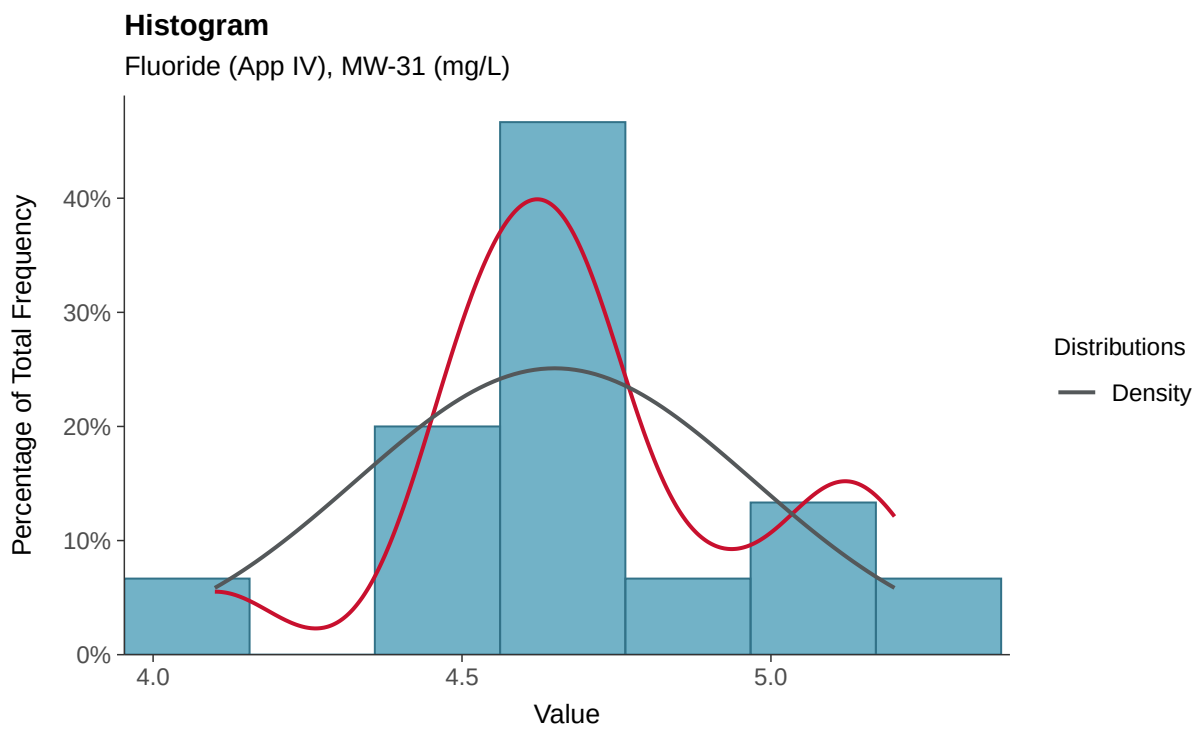
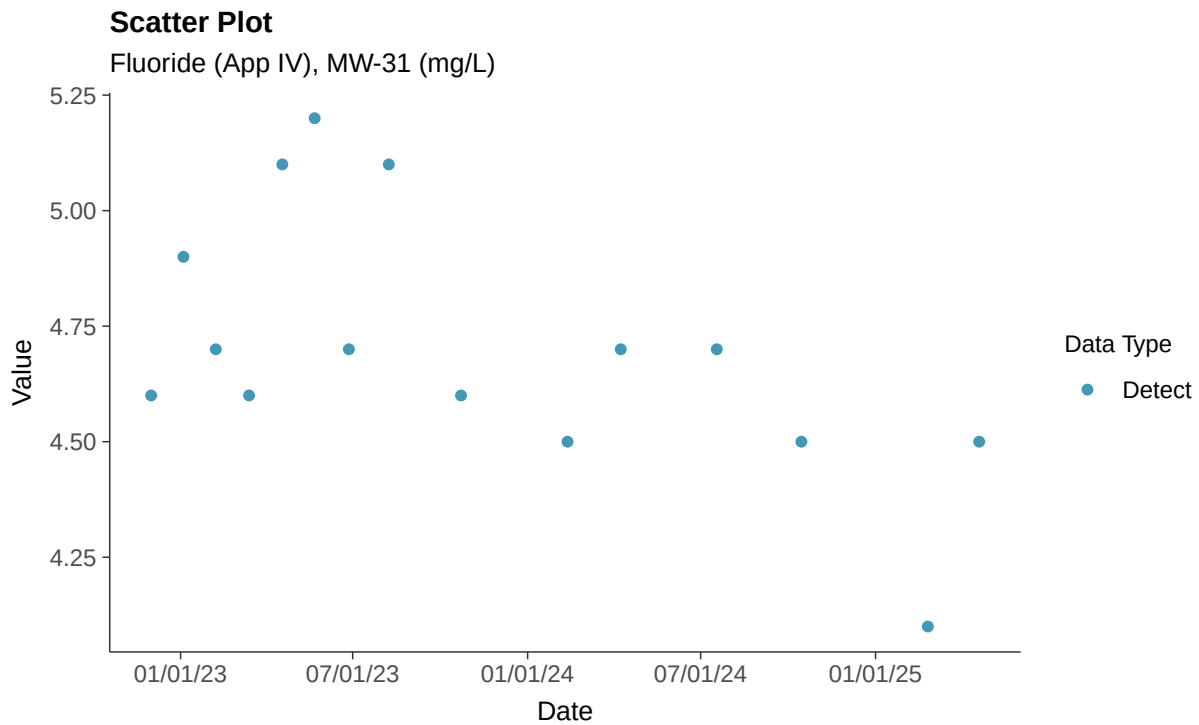


Trend Regression: Piecewise Linear-Linear-Linear
Cobalt, MW-31 (mg/L)



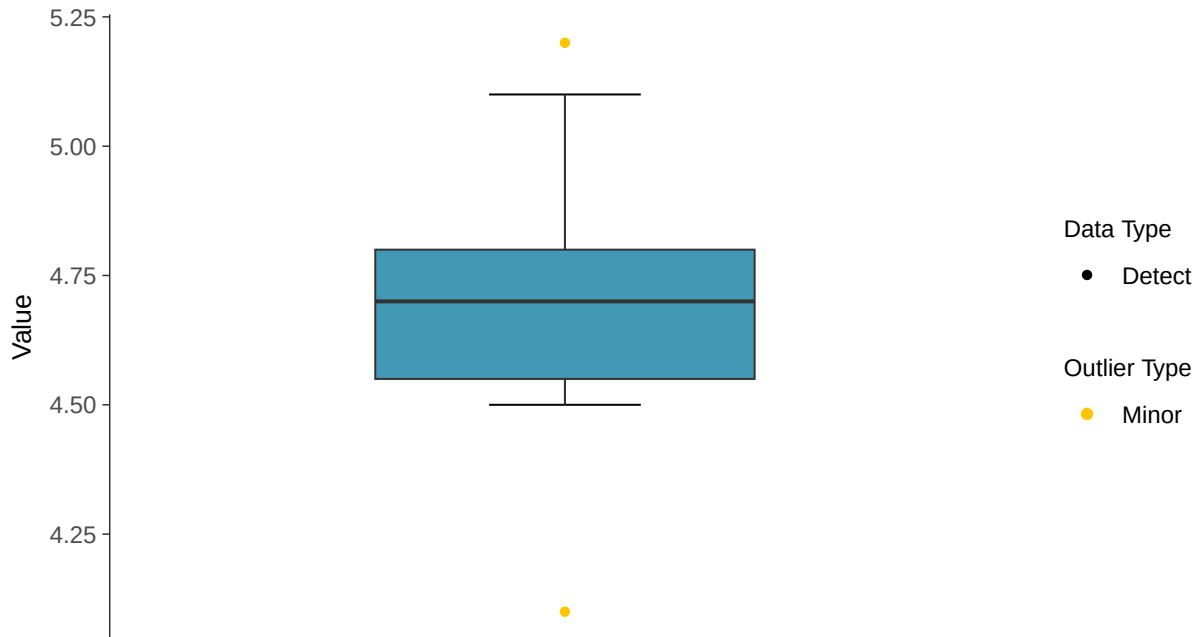
Appendix IV: Fluoride (App IV), MW-31

ID: 41_1_4_113



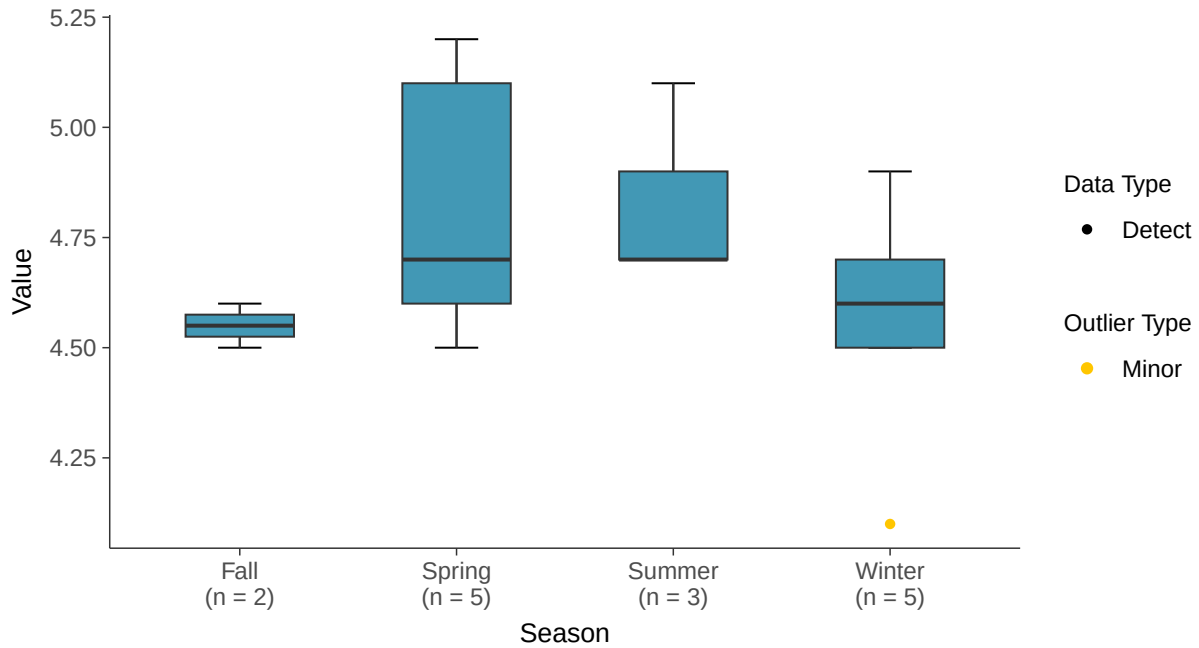
Boxplot

Fluoride (App IV), MW-31 (mg/L)



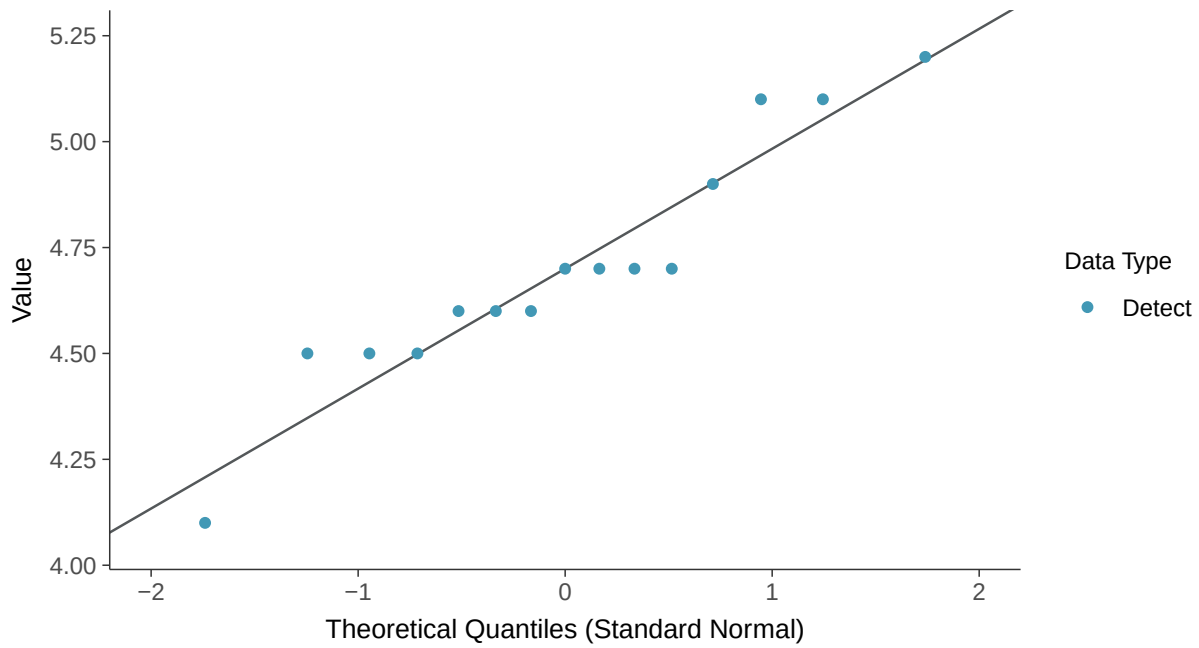
Boxplot by Season

Fluoride (App IV), MW-31 (mg/L)



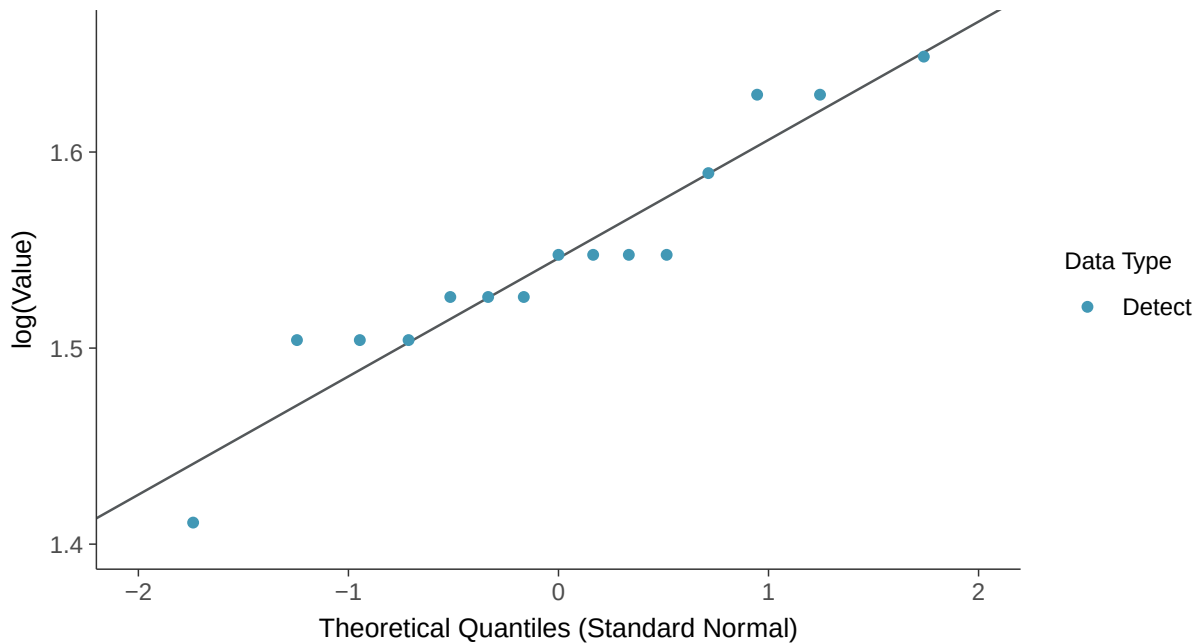
Normal Q-Q plot

Fluoride (App IV), MW-31 (mg/L)



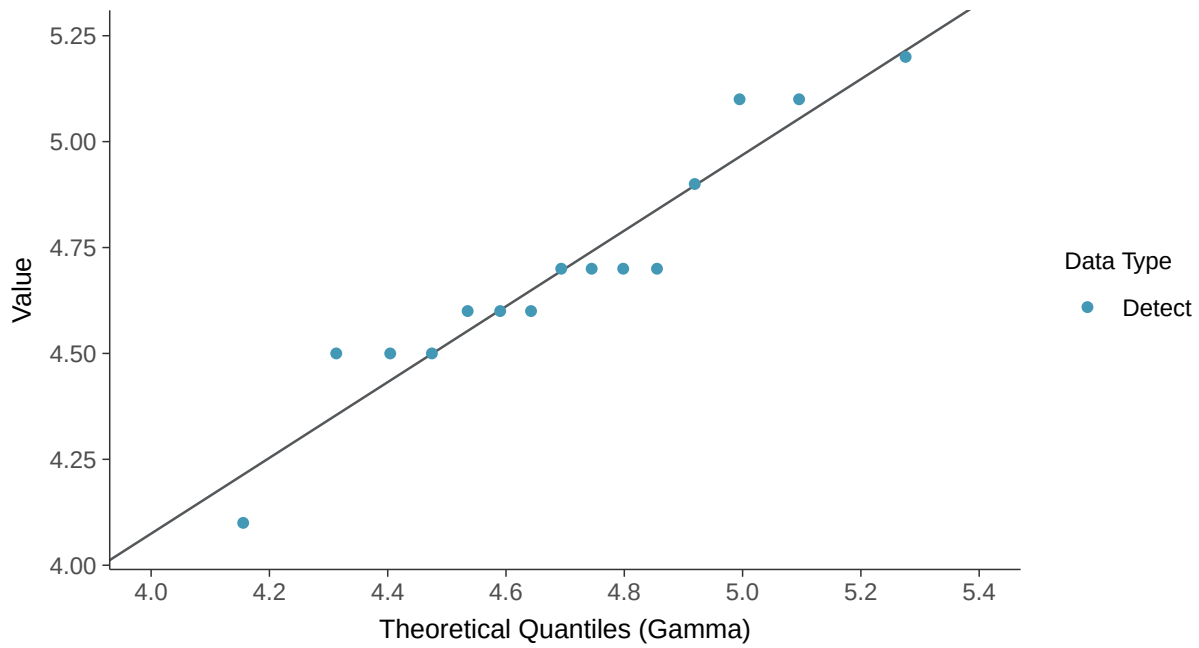
Lognormal Q-Q plot

Fluoride (App IV), MW-31 (mg/L)



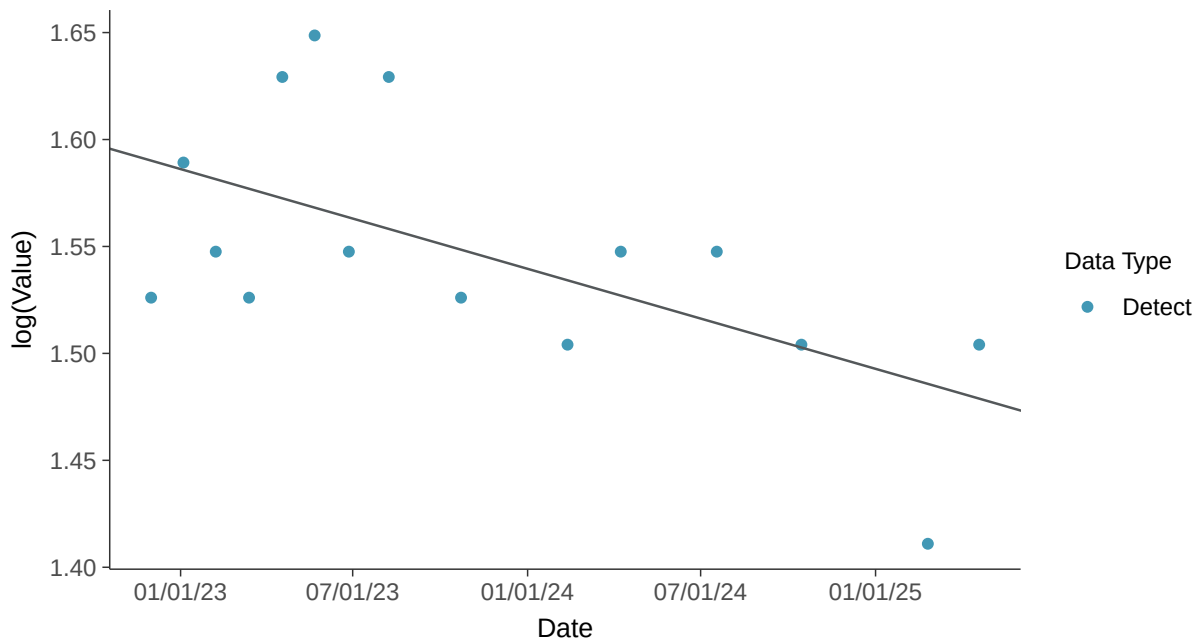
Gamma Q-Q plot

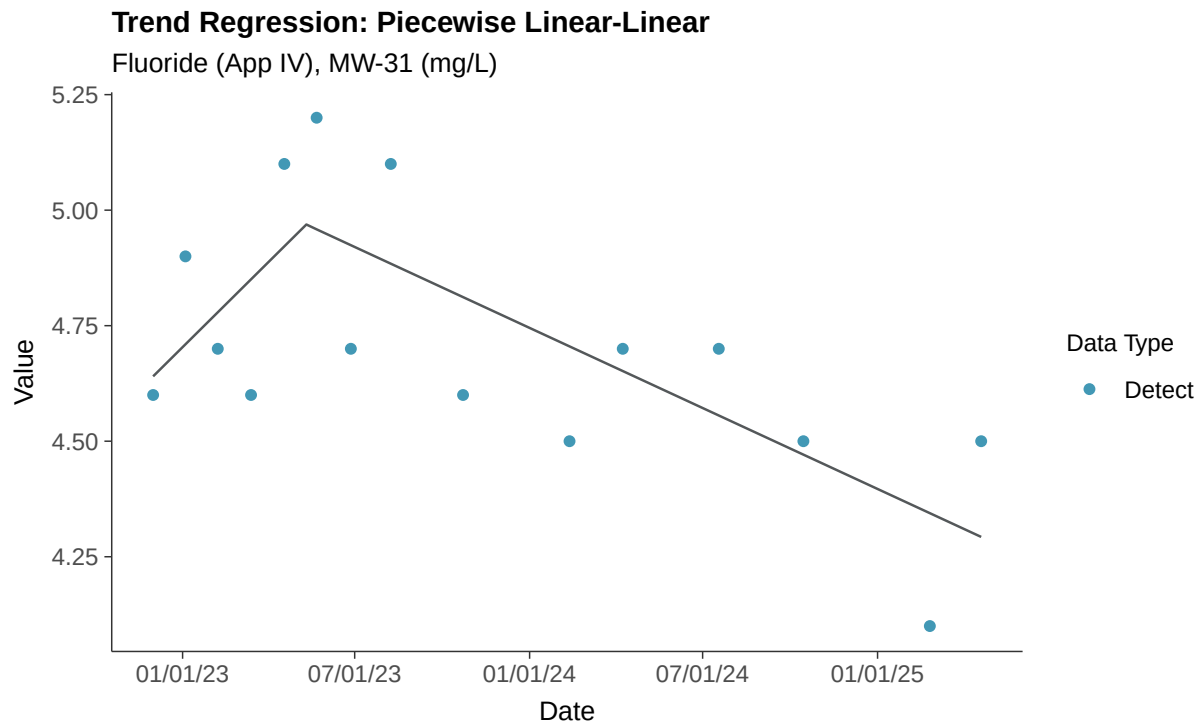
Fluoride (App IV), MW-31 (mg/L)



Trend Regression: Lognormal MLE

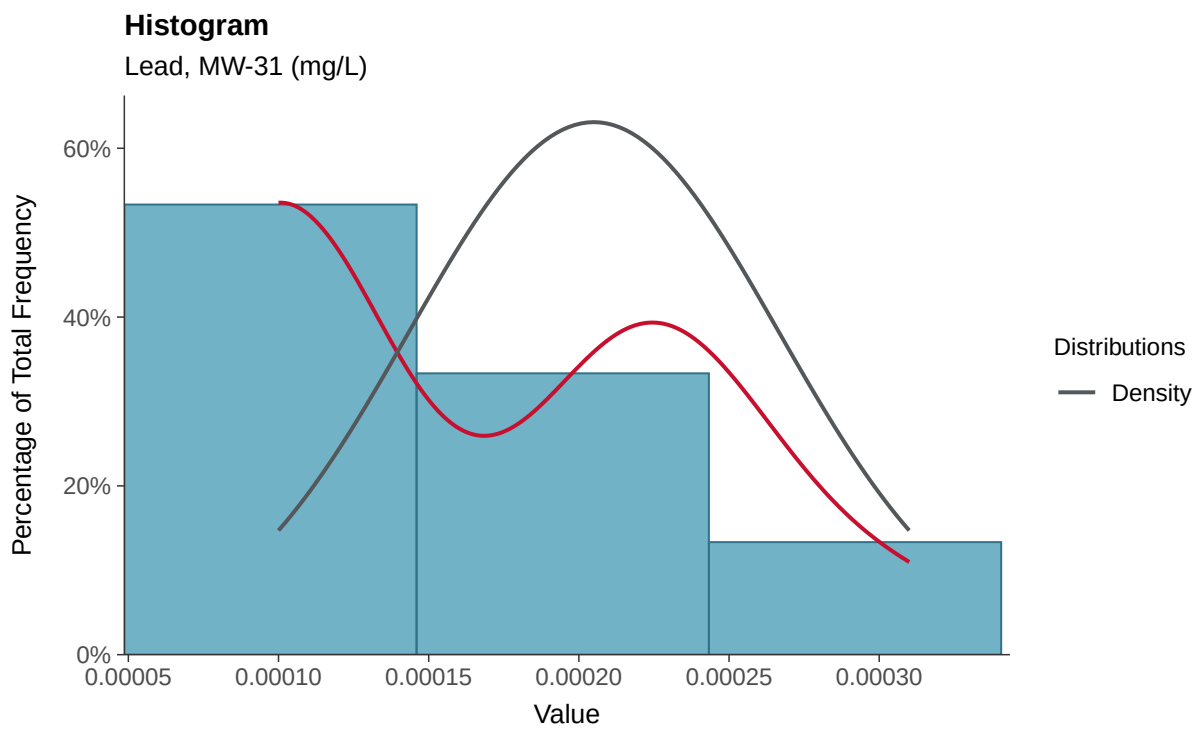
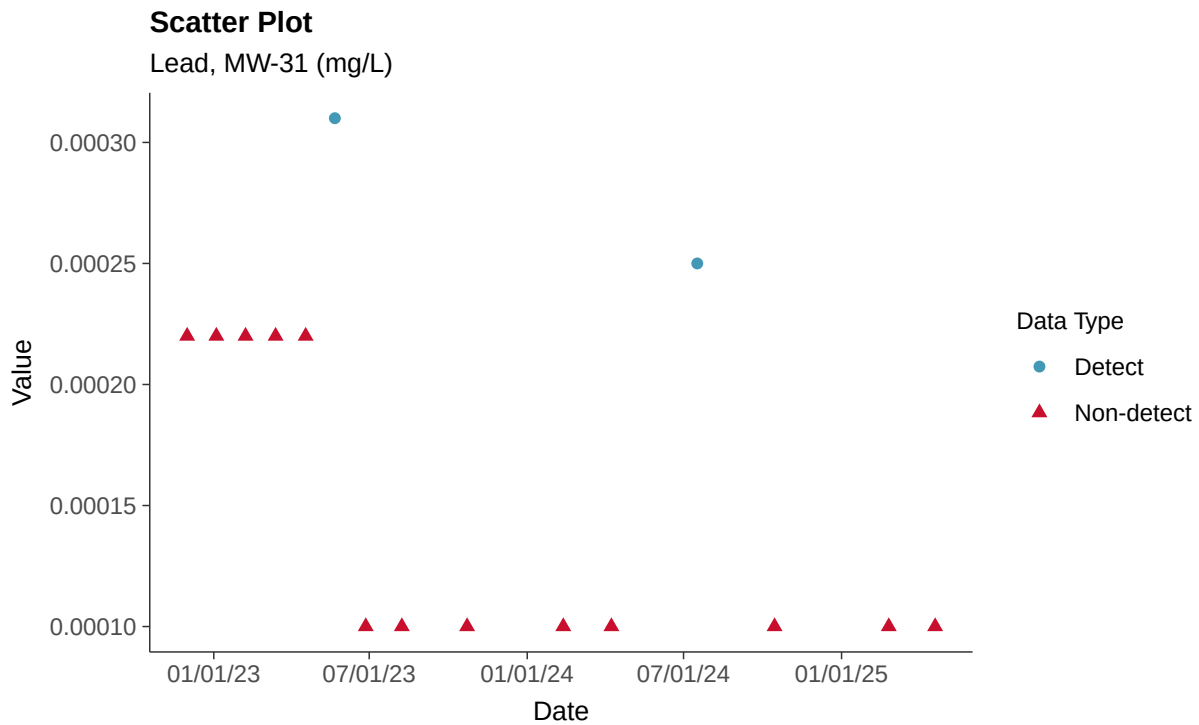
Fluoride (App IV), MW-31 (mg/L)





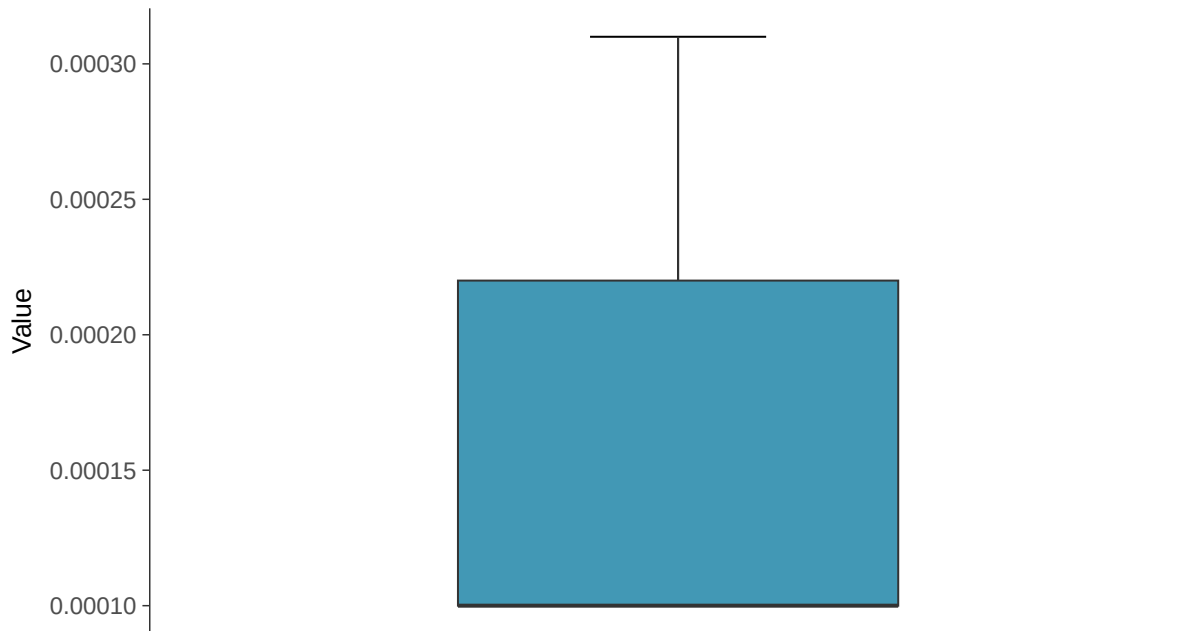
Appendix IV: Lead, MW-31

ID: 41_1_4_115



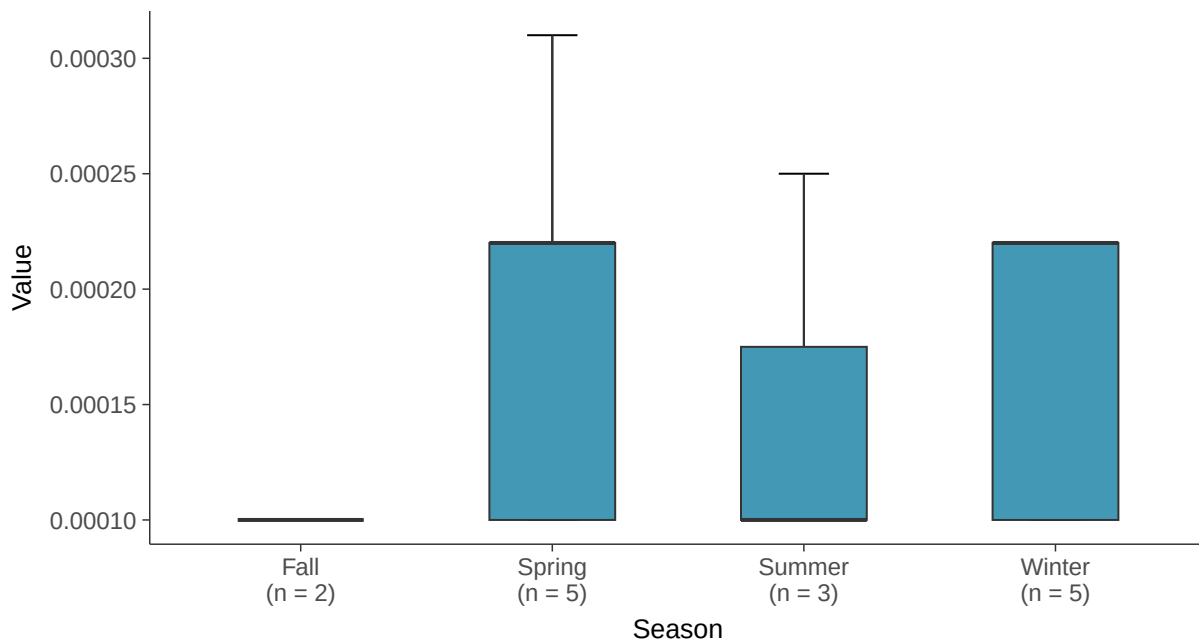
Boxplot

Lead, MW-31 (mg/L)



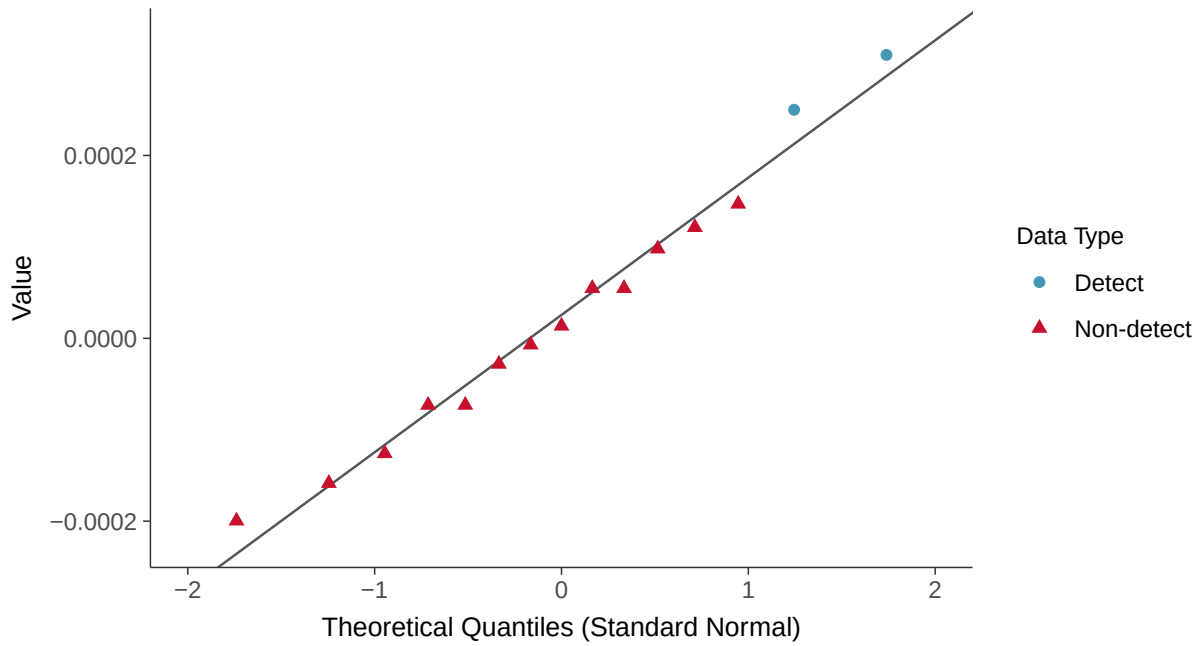
Boxplot by Season

Lead, MW-31 (mg/L)



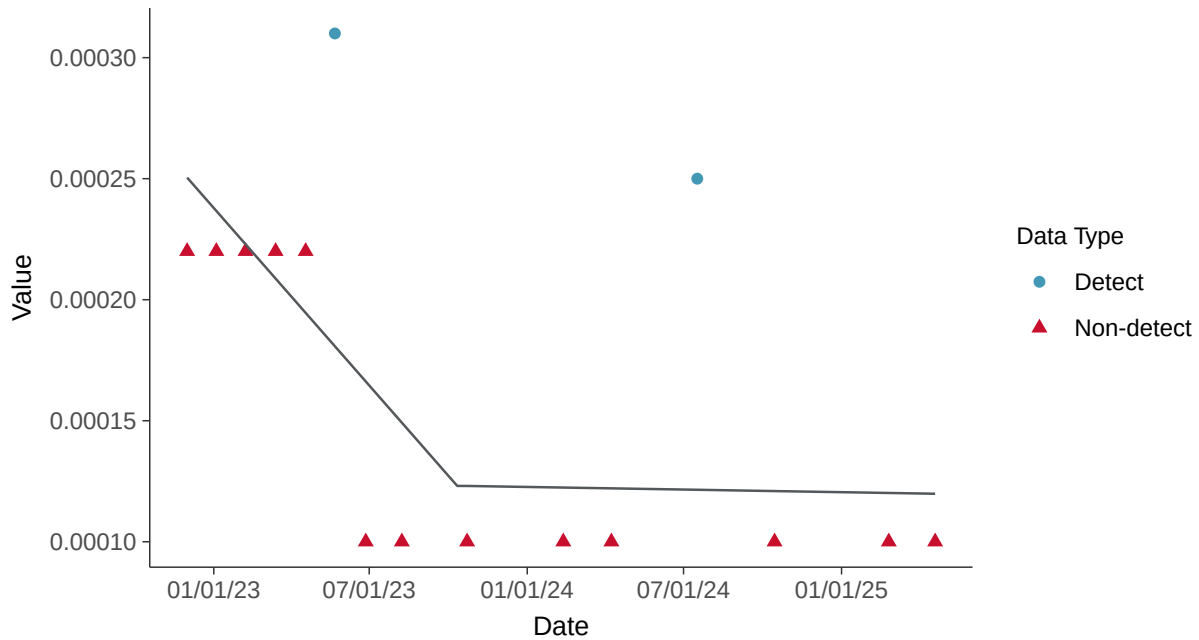
Normal Q-Q plot using ROS Imputed Estimates

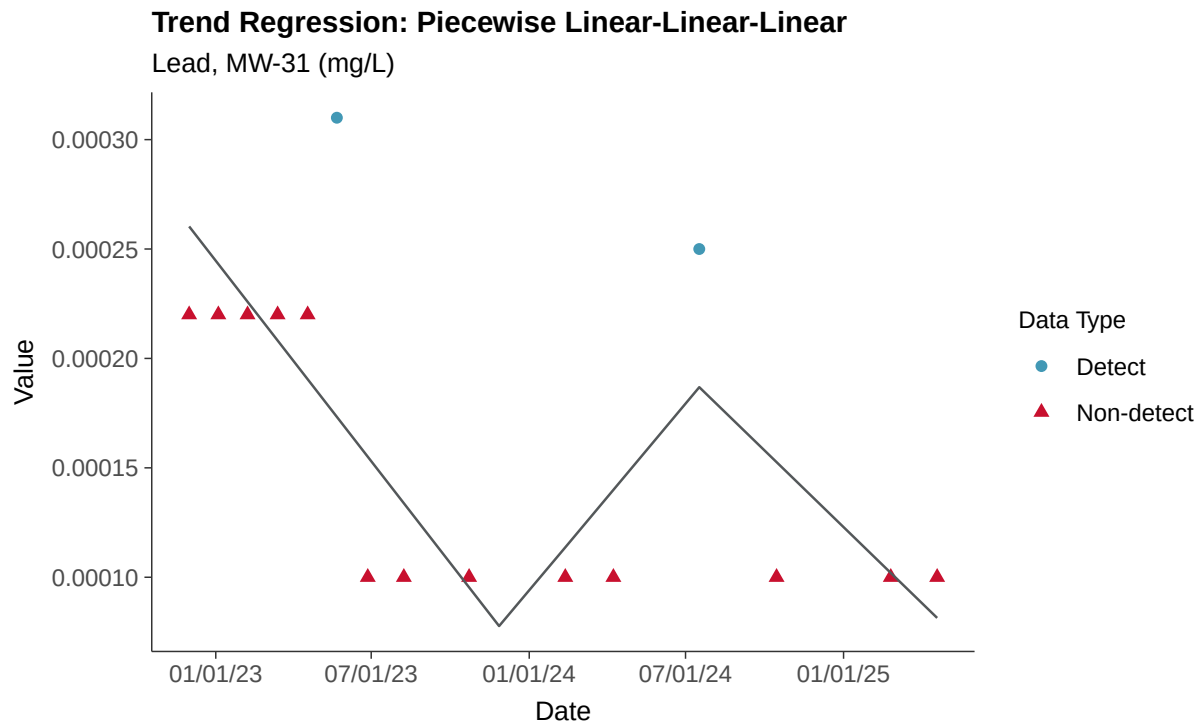
Lead, MW-31 (mg/L)



Trend Regression: Piecewise Linear-Linear

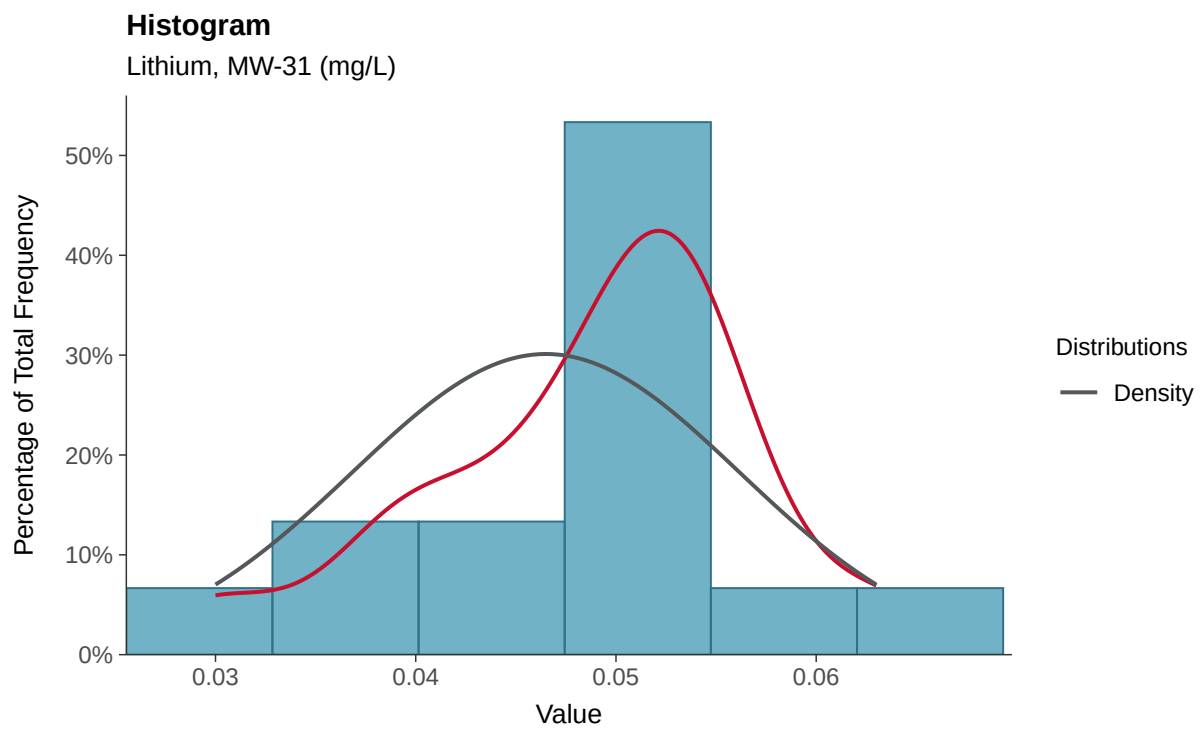
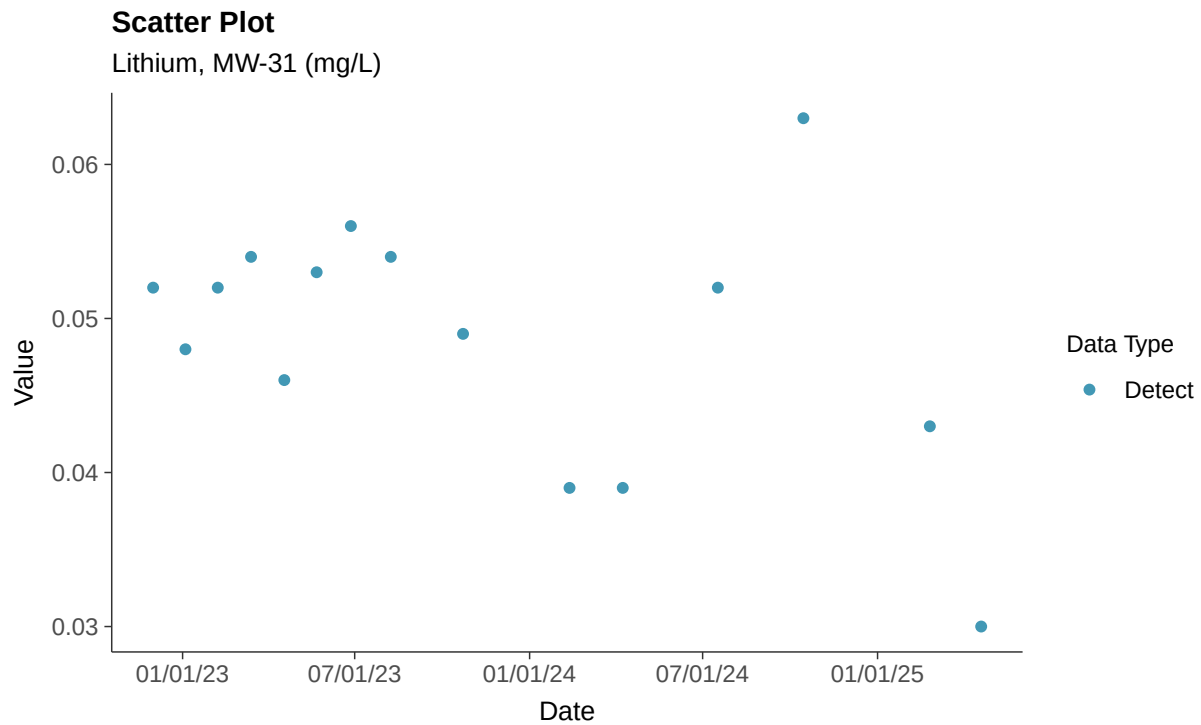
Lead, MW-31 (mg/L)





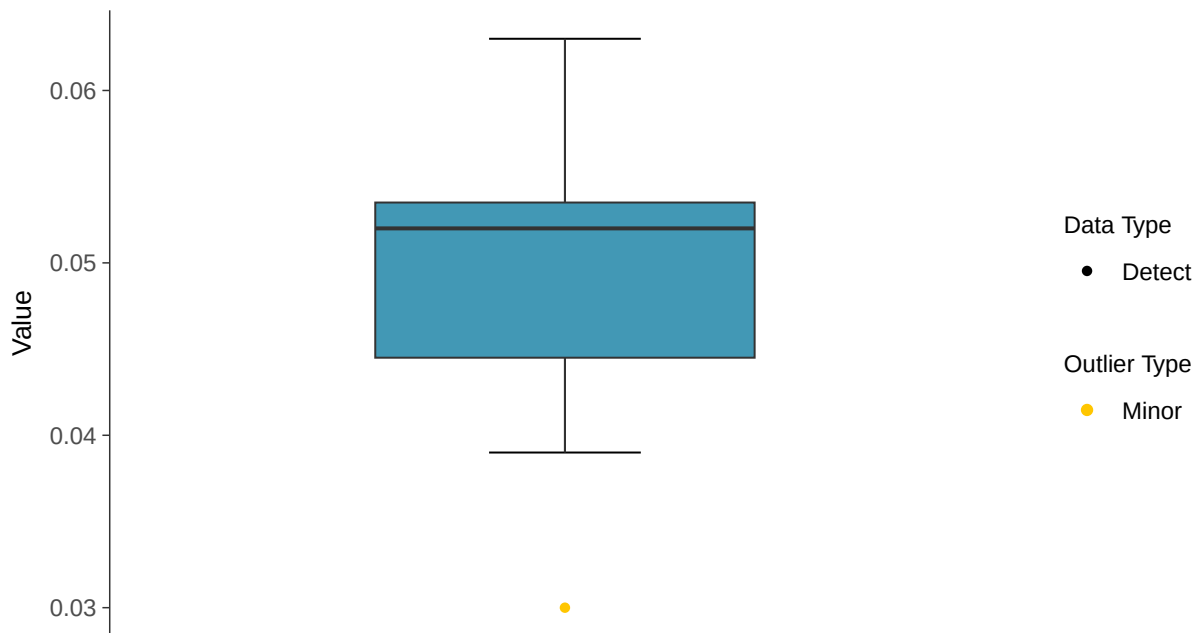
Appendix IV: Lithium, MW-31

ID: 41_1_4_116



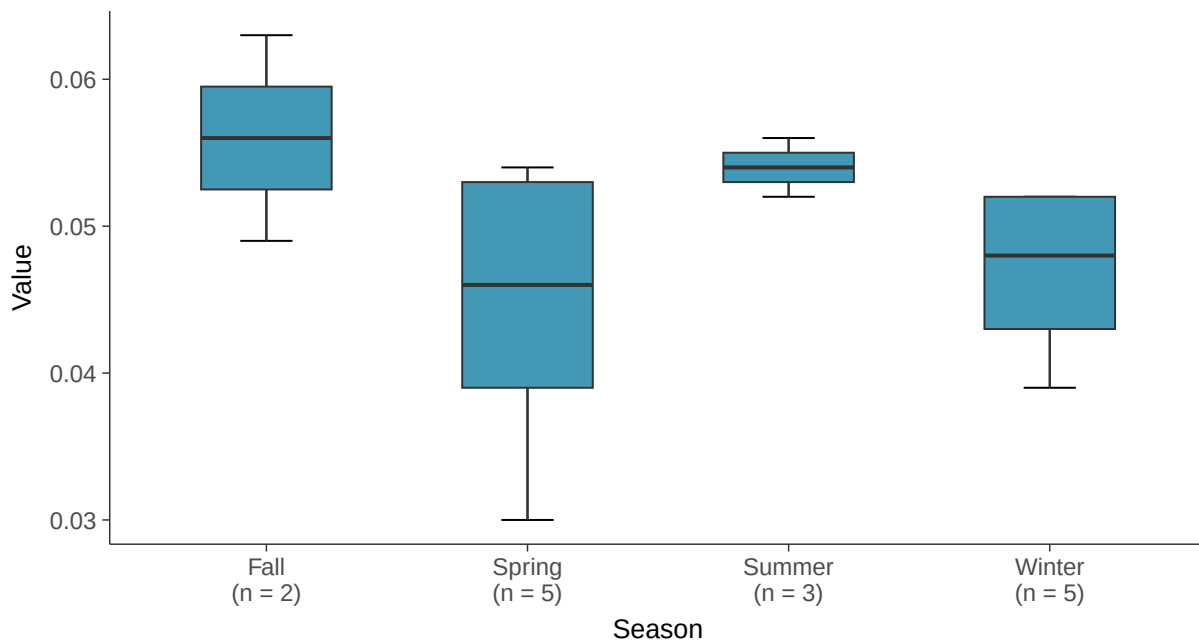
Boxplot

Lithium, MW-31 (mg/L)



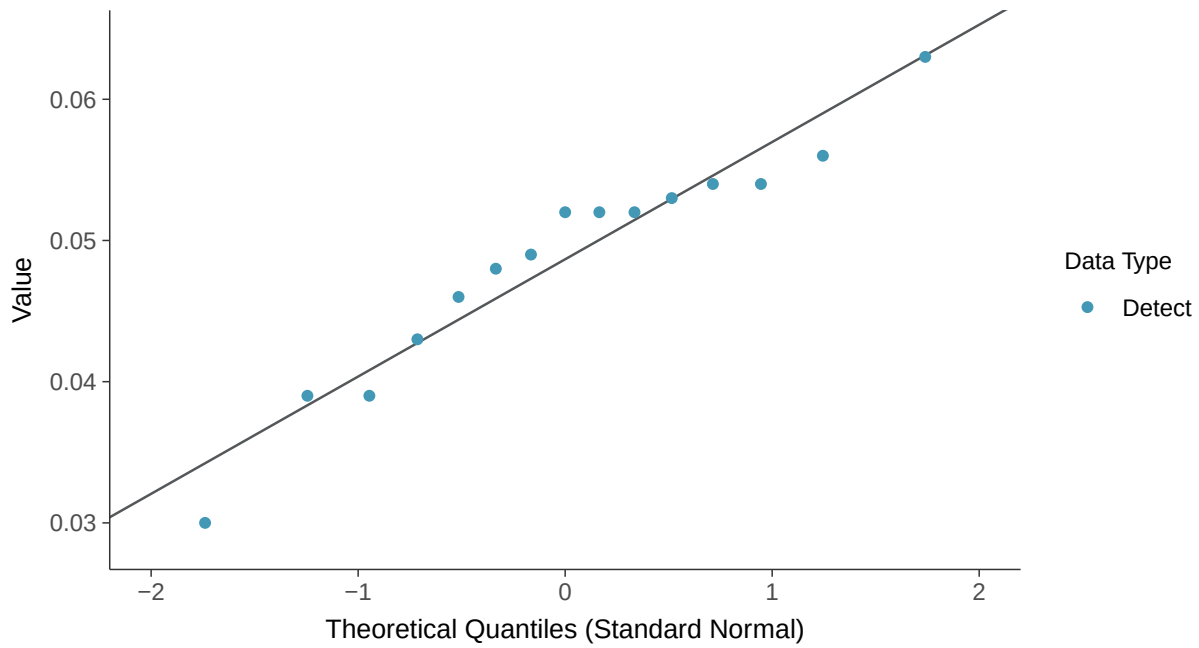
Boxplot by Season

Lithium, MW-31 (mg/L)



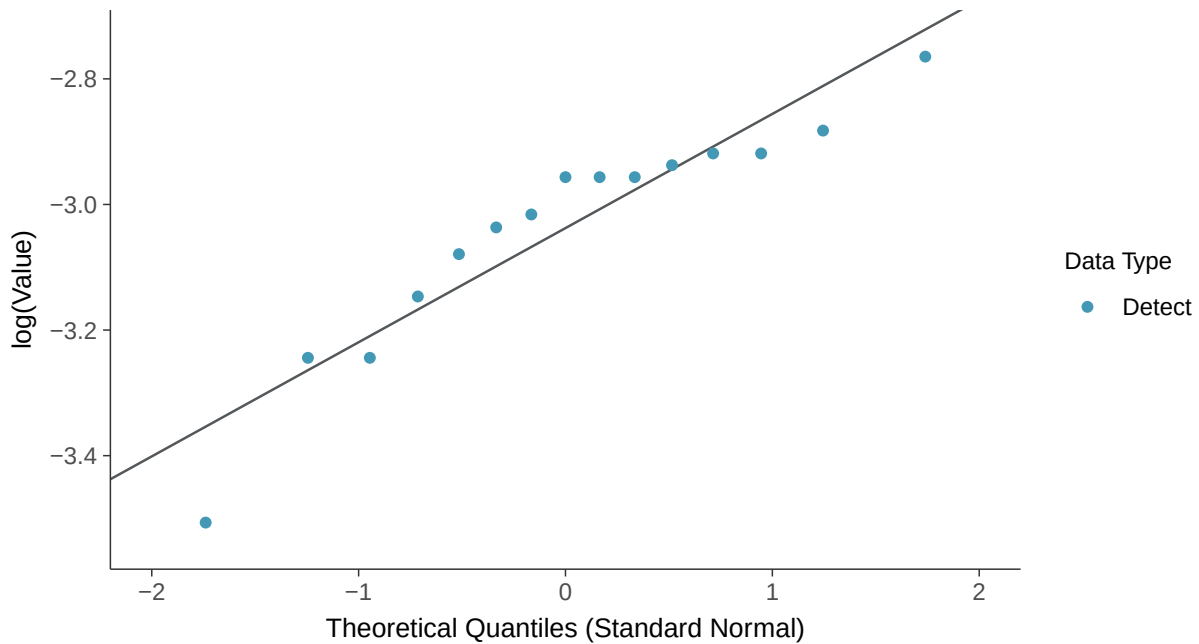
Normal Q-Q plot

Lithium, MW-31 (mg/L)



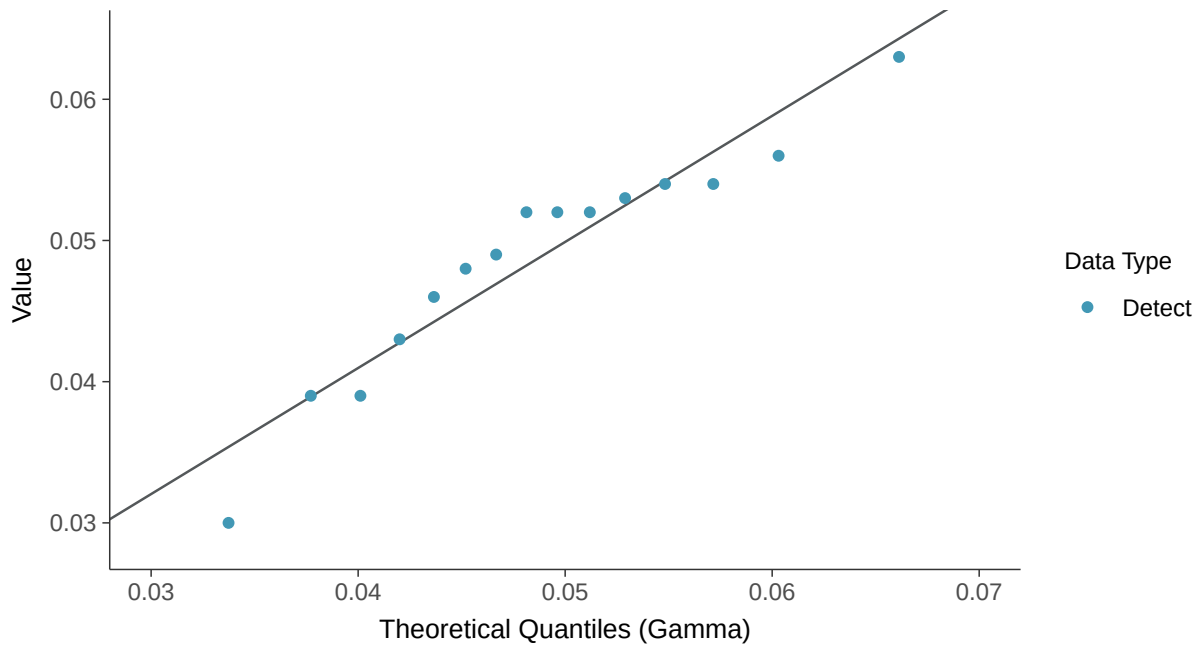
Lognormal Q-Q plot

Lithium, MW-31 (mg/L)



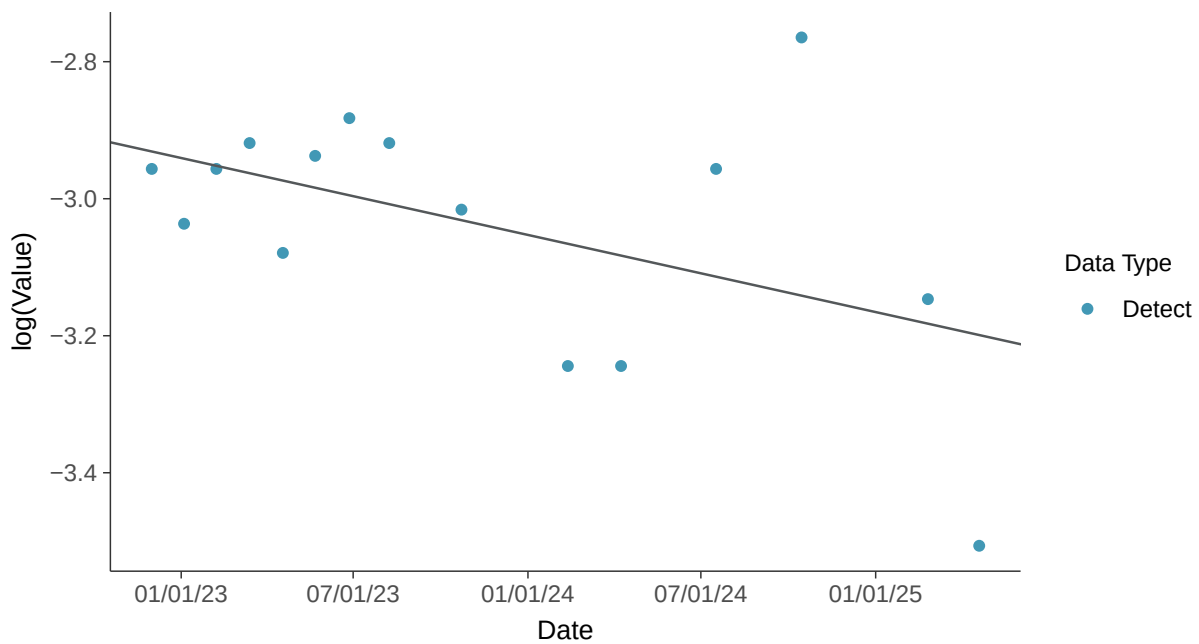
Gamma Q-Q plot

Lithium, MW-31 (mg/L)



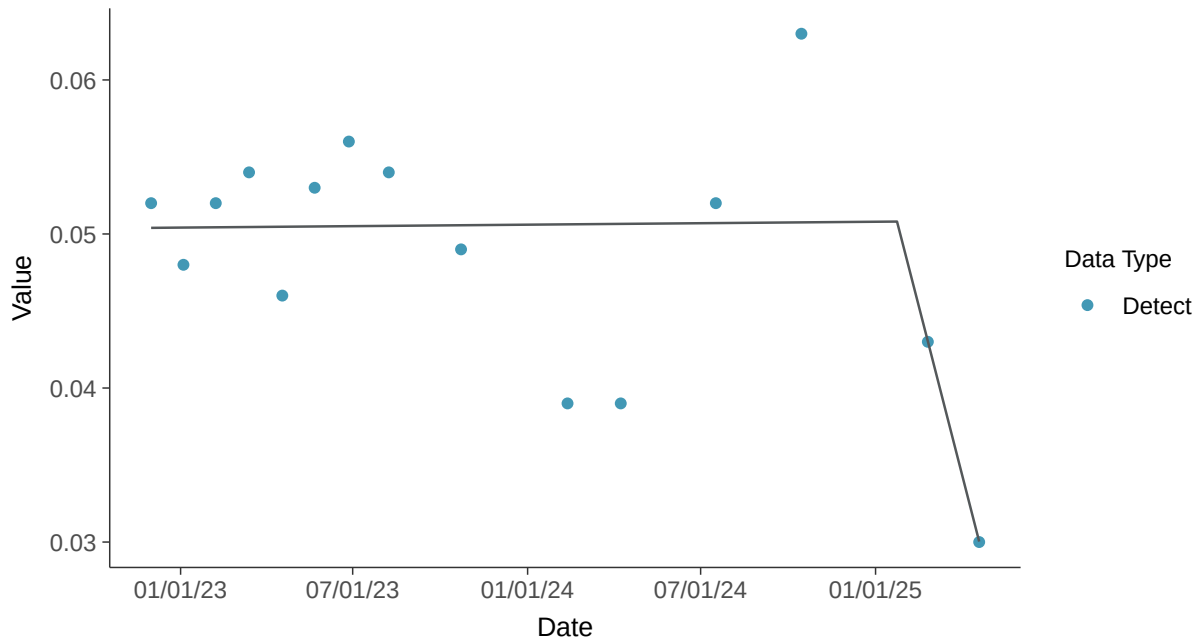
Trend Regression: Lognormal MLE

Lithium, MW-31 (mg/L)



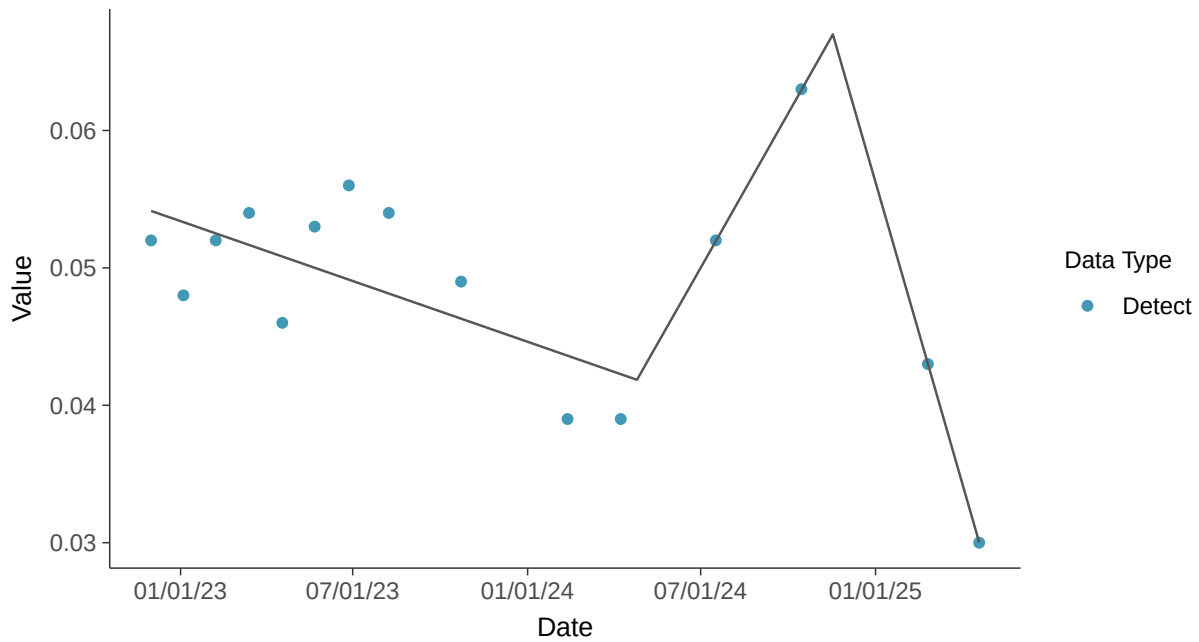
Trend Regression: Piecewise Linear-Linear

Lithium, MW-31 (mg/L)



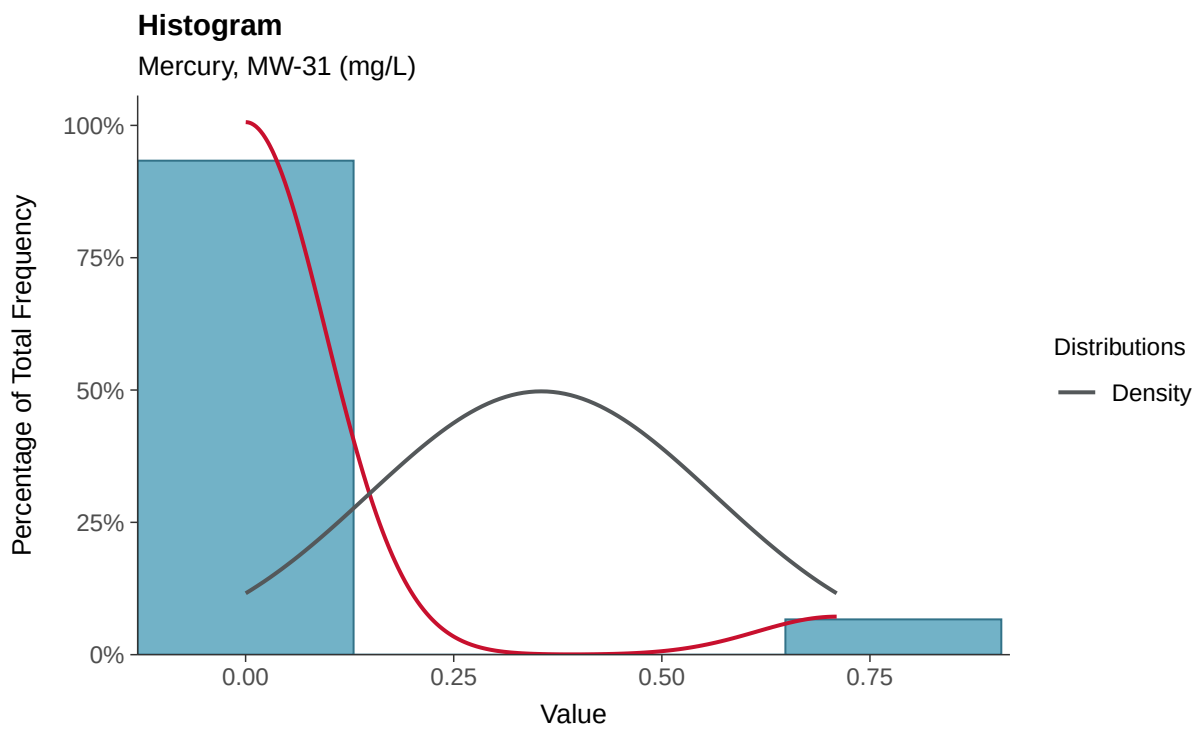
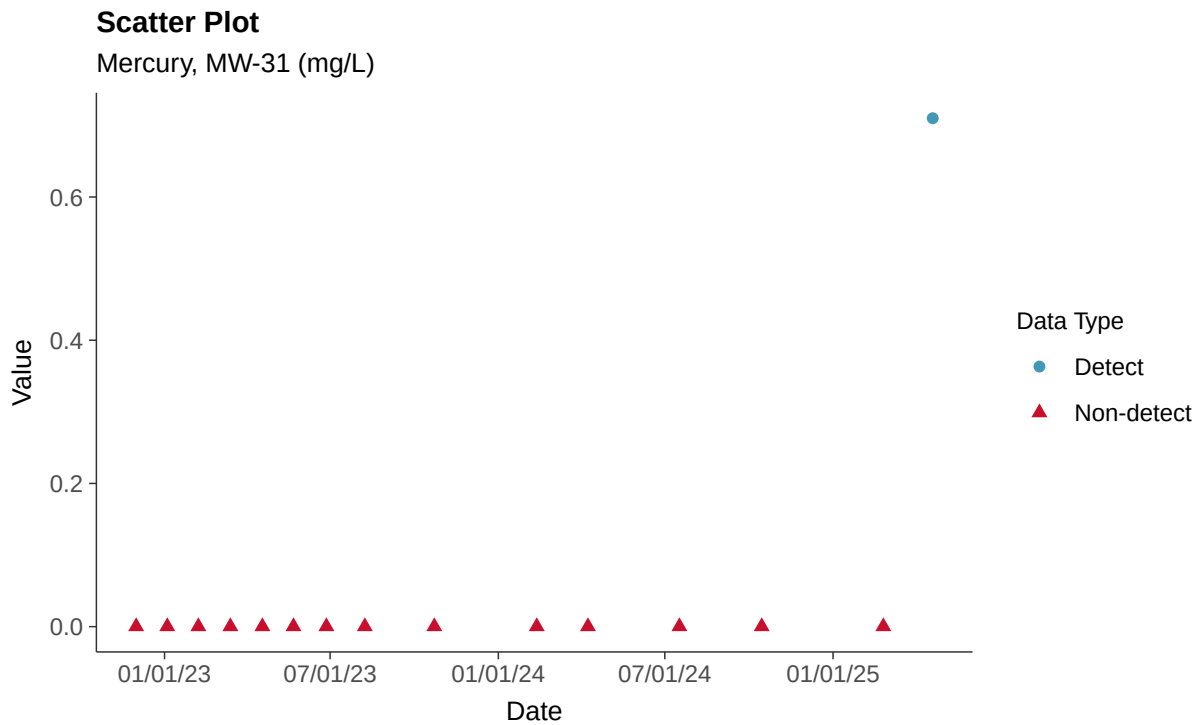
Trend Regression: Piecewise Linear-Linear-Linear

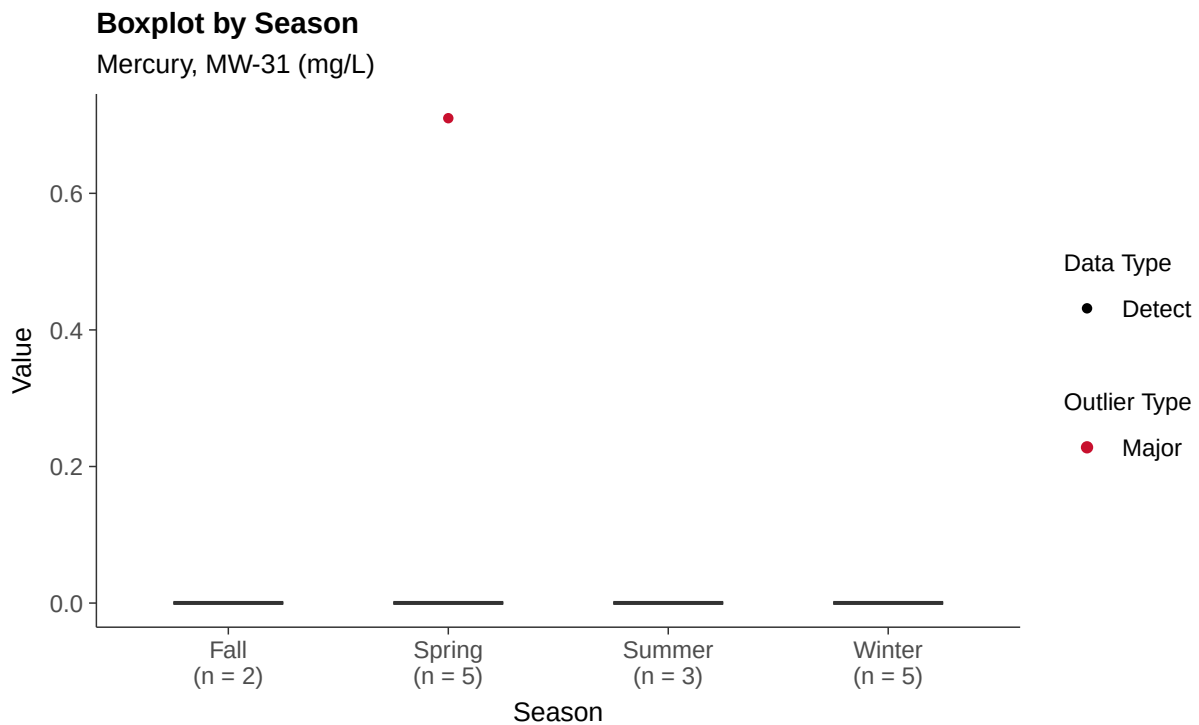
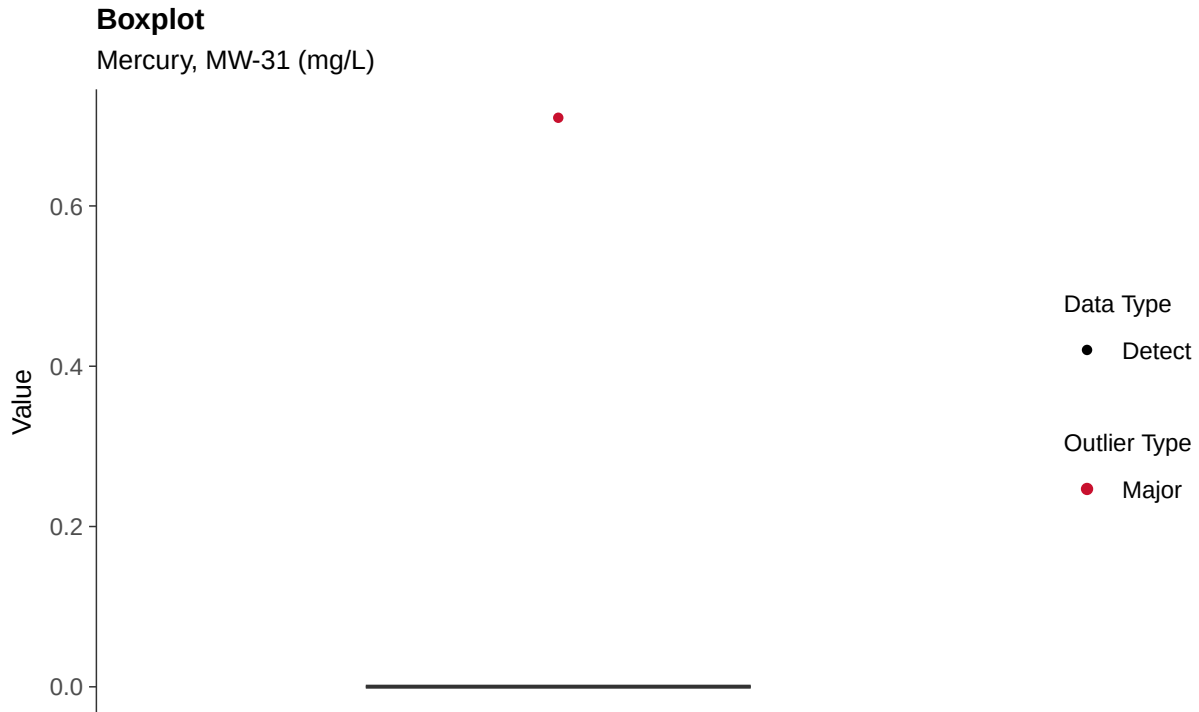
Lithium, MW-31 (mg/L)



Appendix IV: Mercury, MW-31

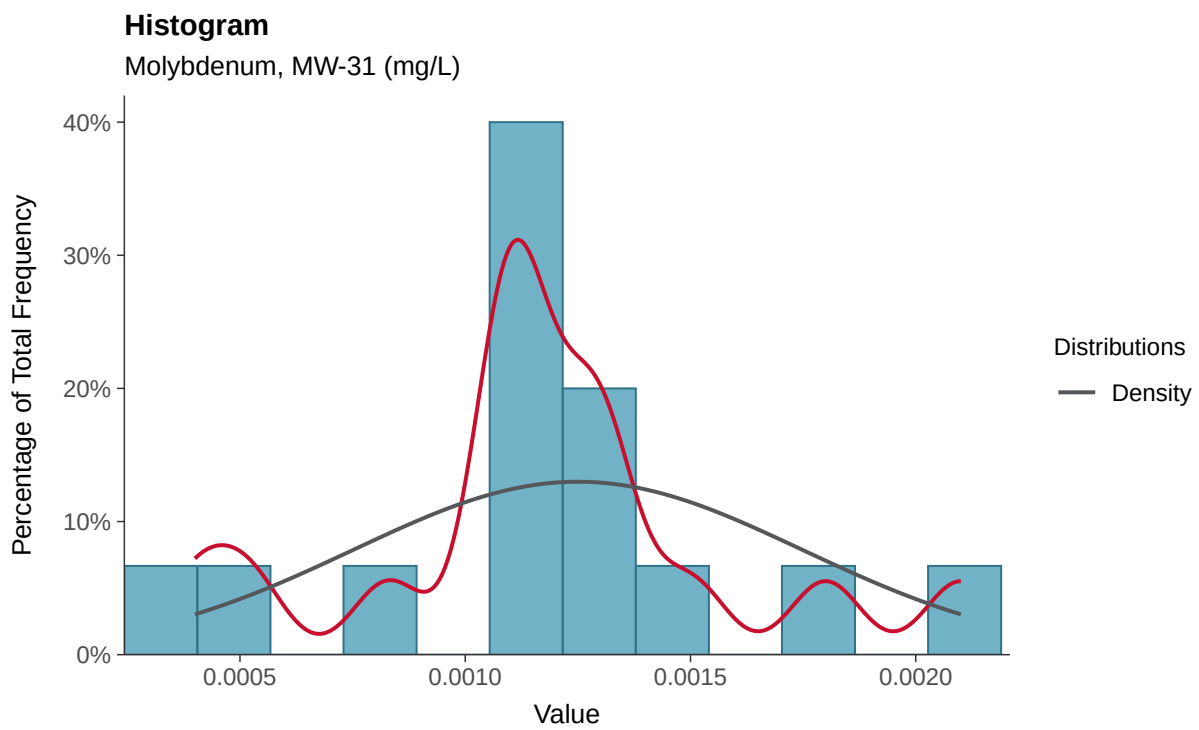
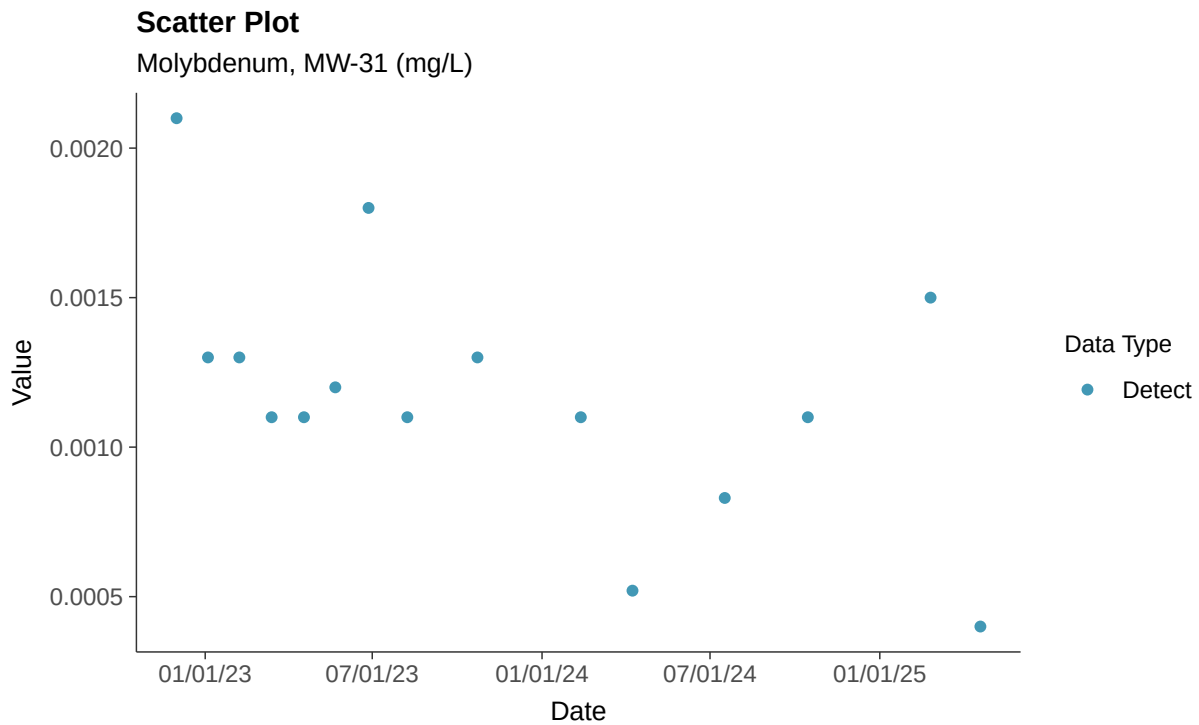
ID: 41_1_4_117





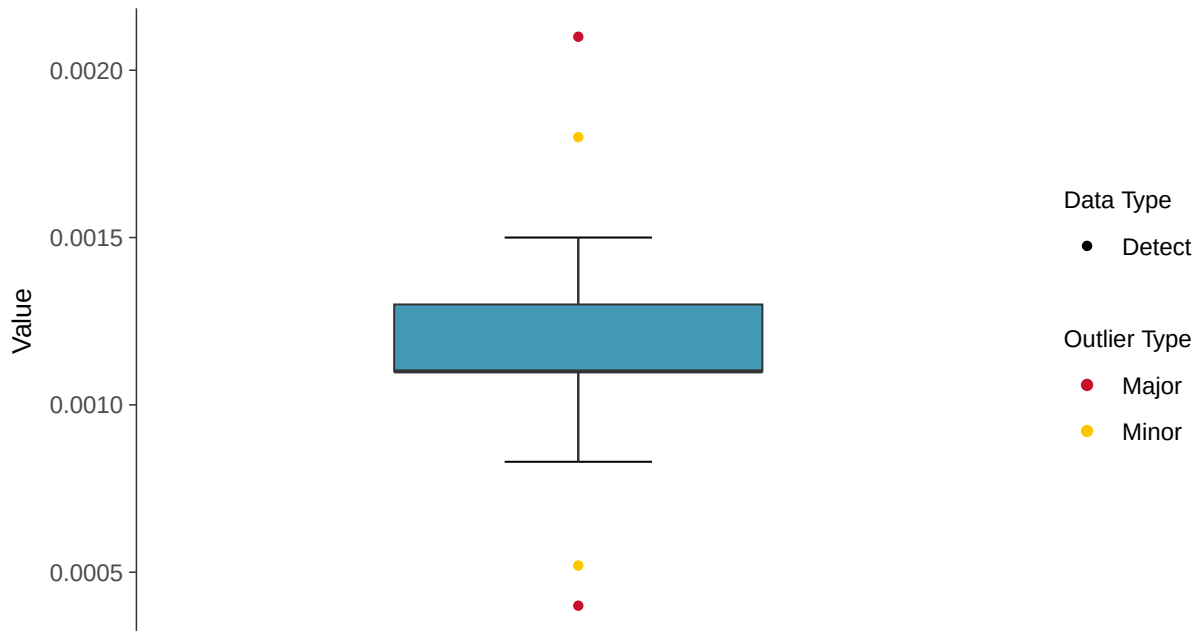
Appendix IV: Molybdenum, MW-31

ID: 41_1_4_118



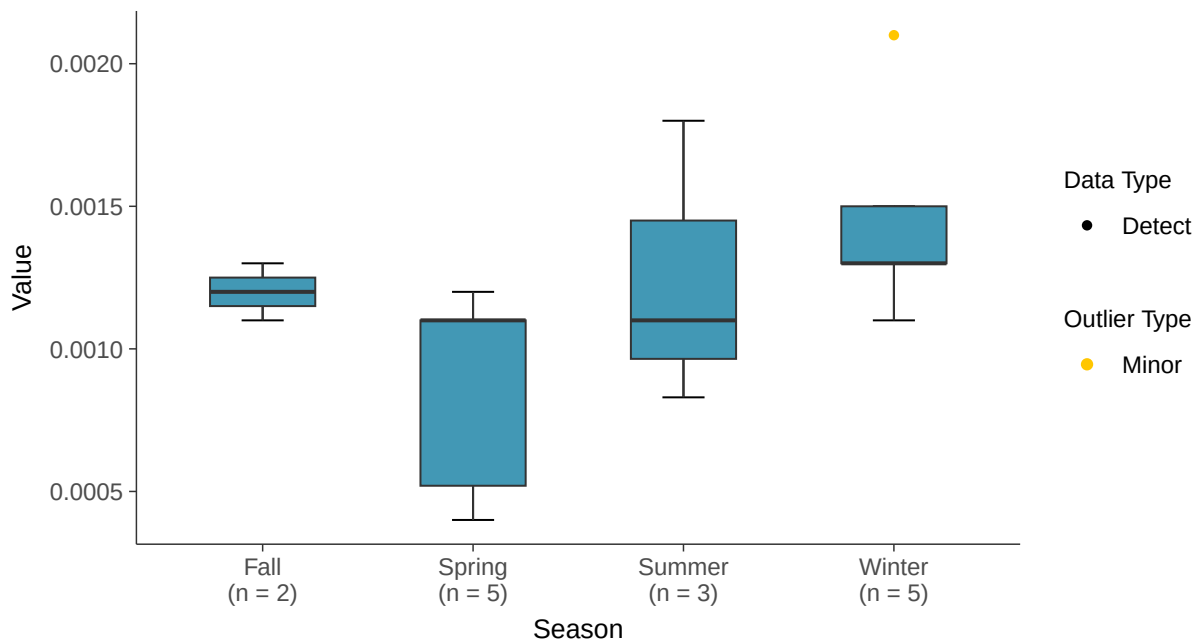
Boxplot

Molybdenum, MW-31 (mg/L)



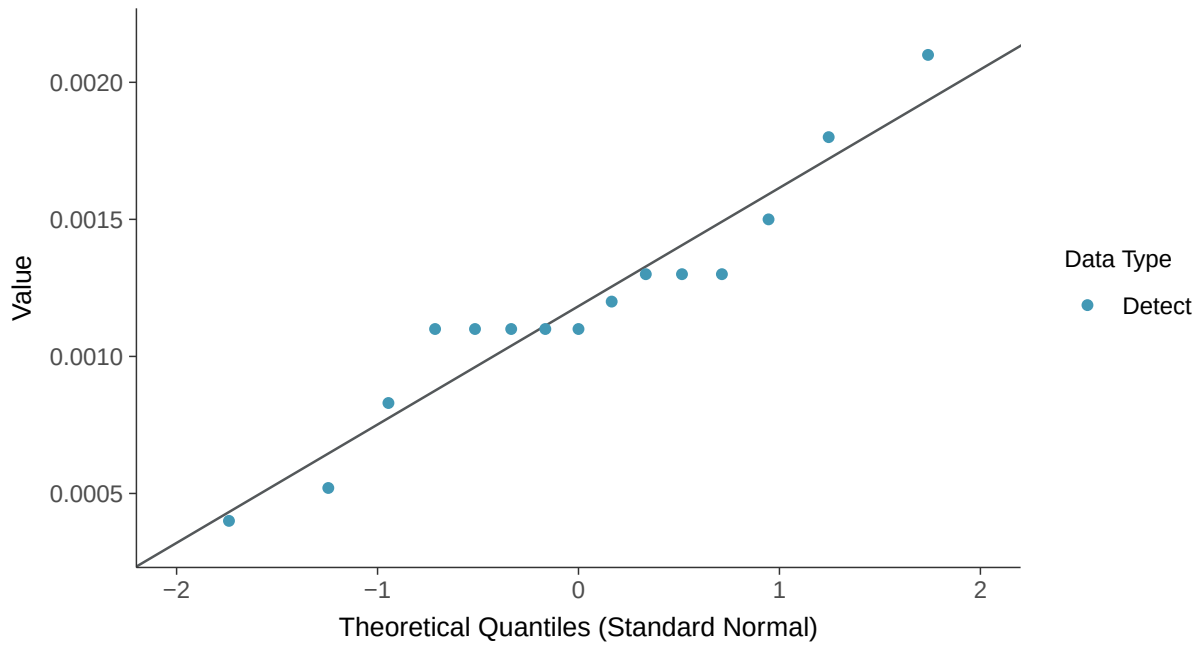
Boxplot by Season

Molybdenum, MW-31 (mg/L)



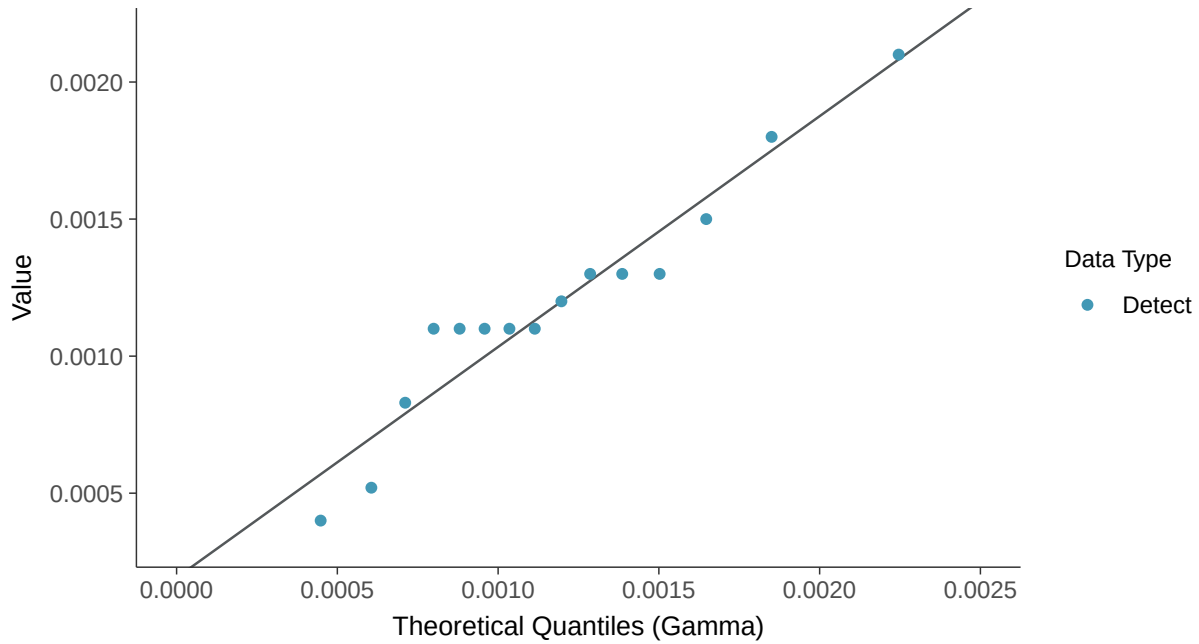
Normal Q-Q plot

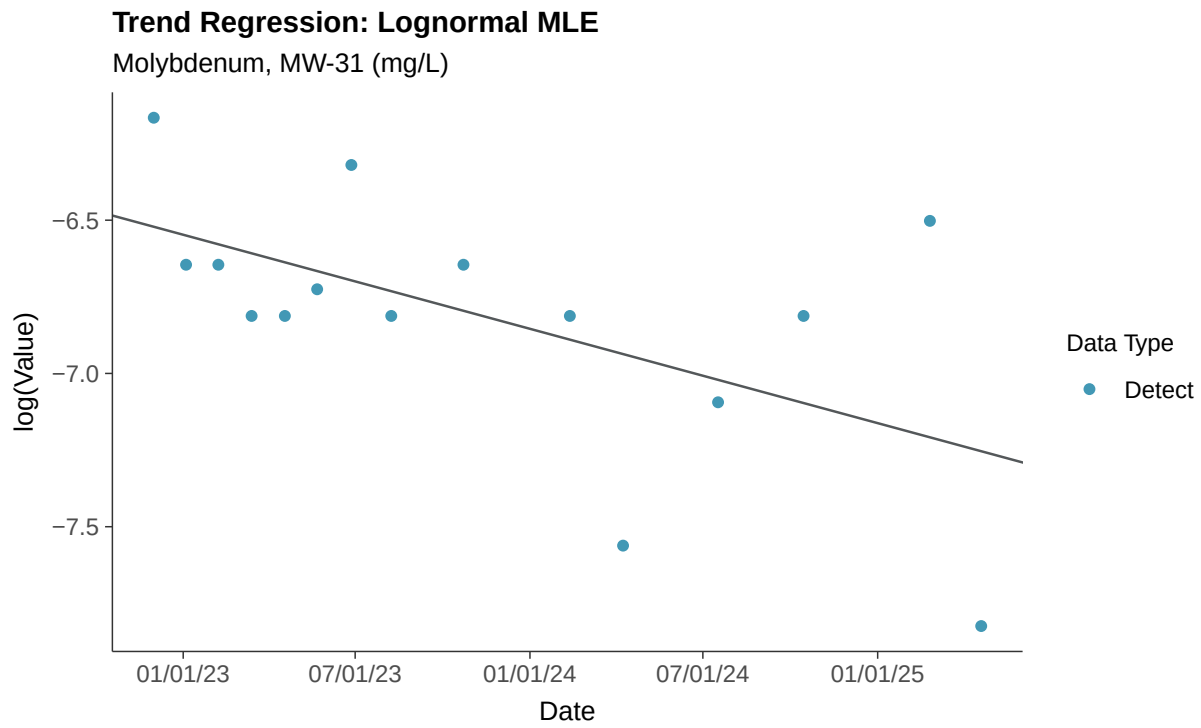
Molybdenum, MW-31 (mg/L)



Gamma Q-Q plot

Molybdenum, MW-31 (mg/L)



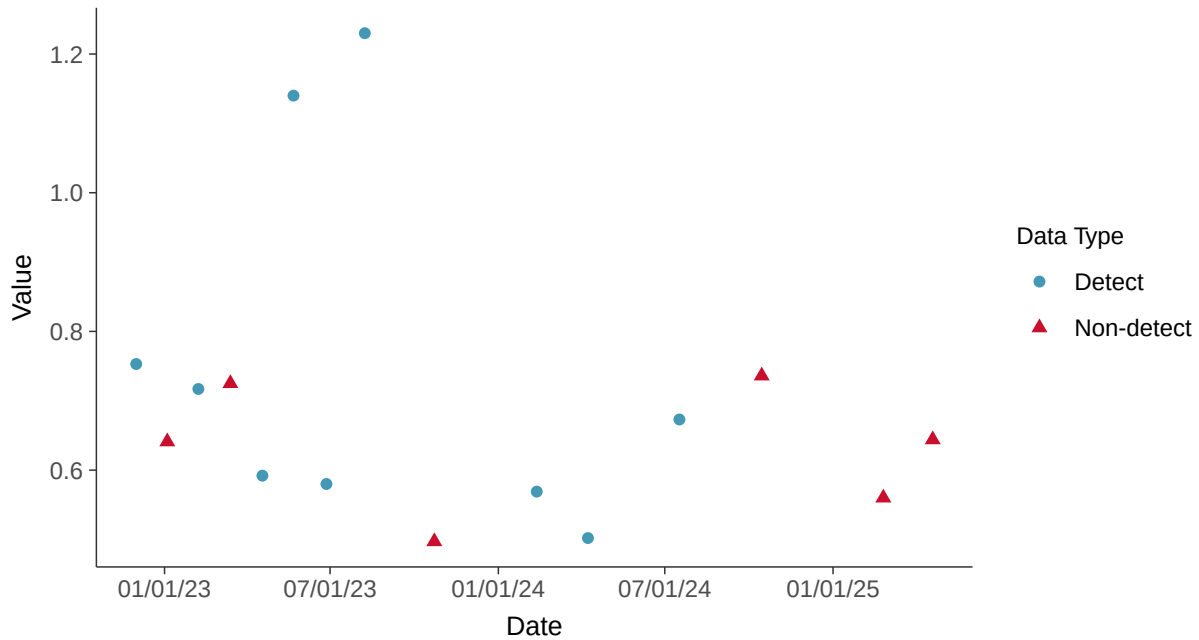


Appendix IV: Radium 226 and 228, MW-31

ID: 41_1_4_121

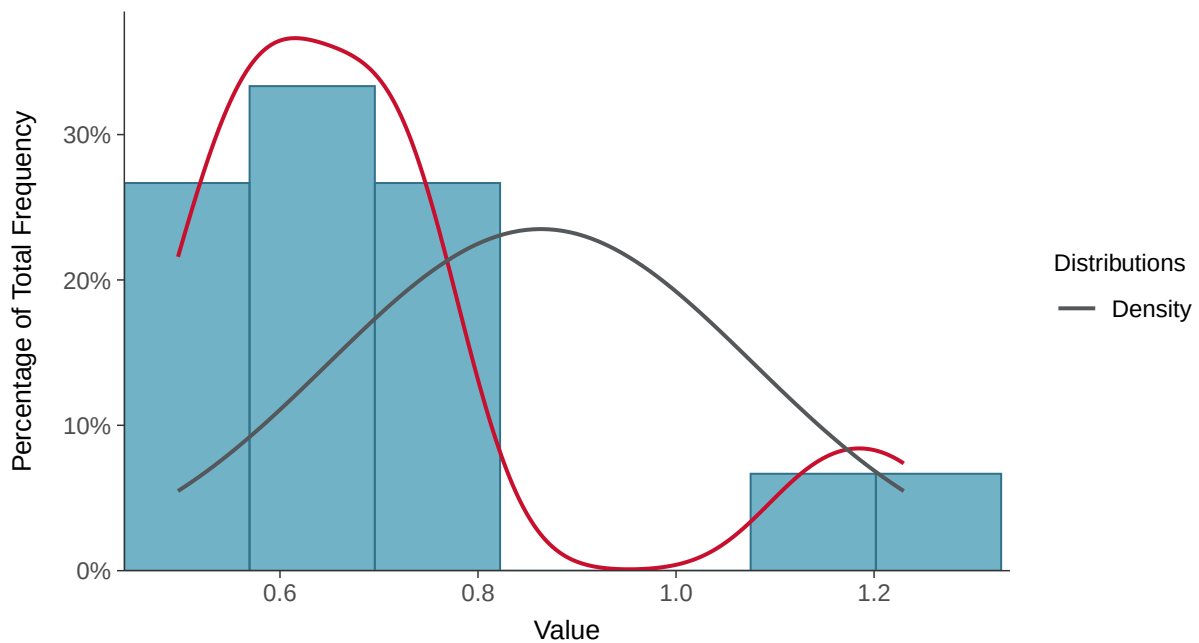
Scatter Plot

Radium 226 and 228, MW-31 (pCi/L)



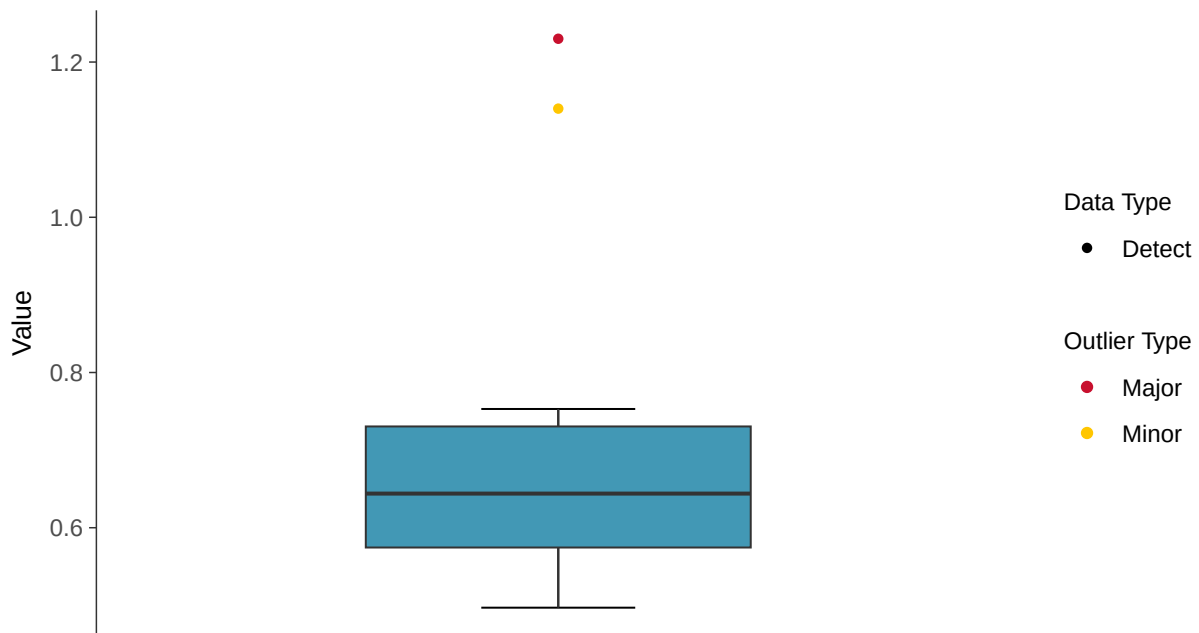
Histogram

Radium 226 and 228, MW-31 (pCi/L)



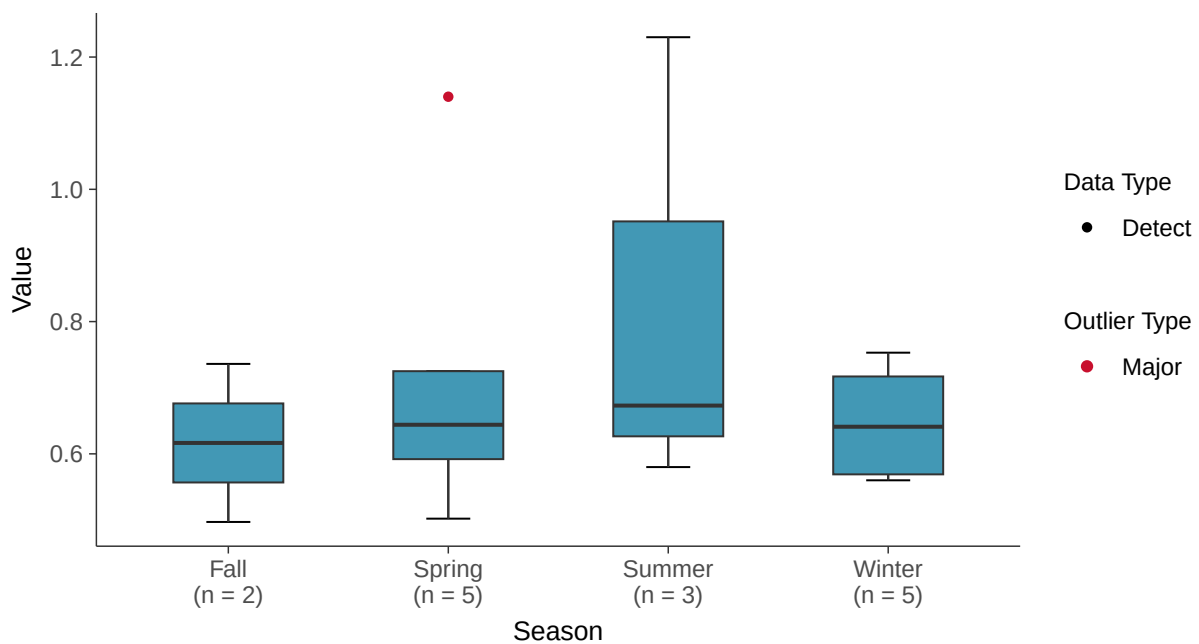
Boxplot

Radium 226 and 228, MW-31 (pCi/L)



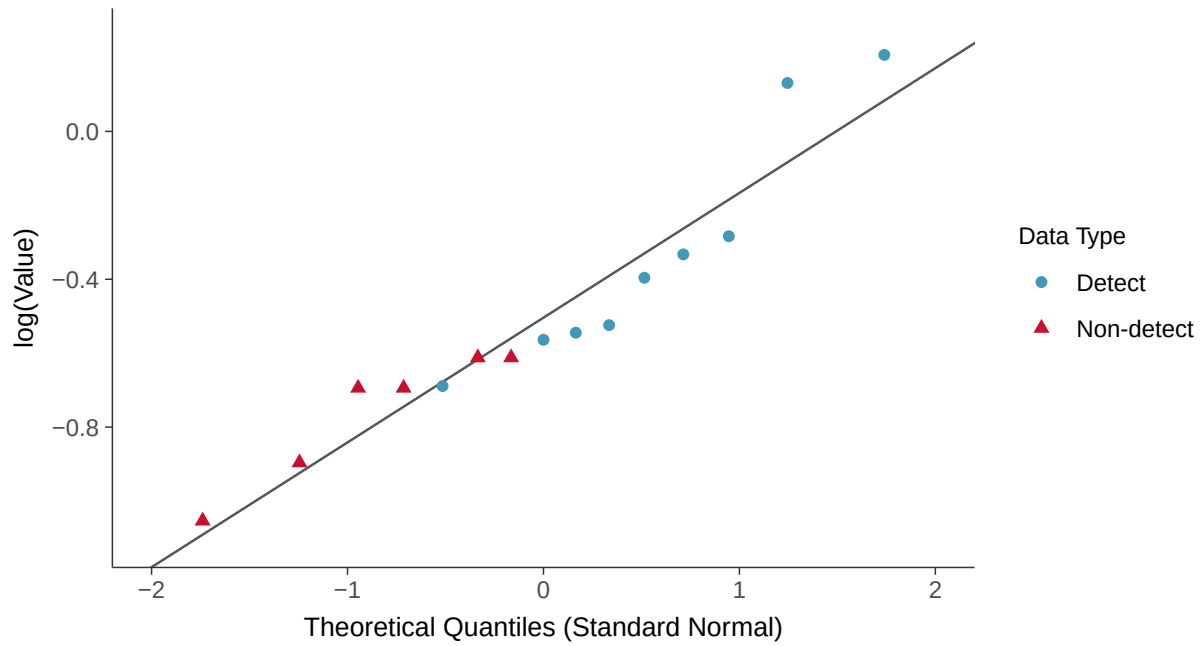
Boxplot by Season

Radium 226 and 228, MW-31 (pCi/L)



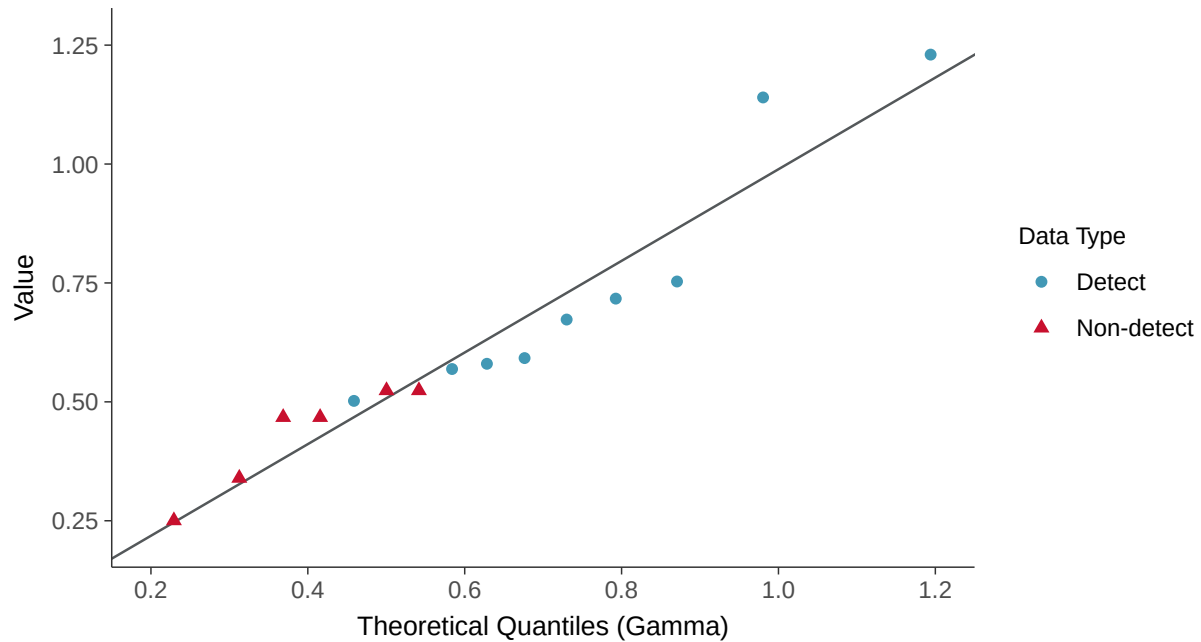
Lognormal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-31 (pCi/L)



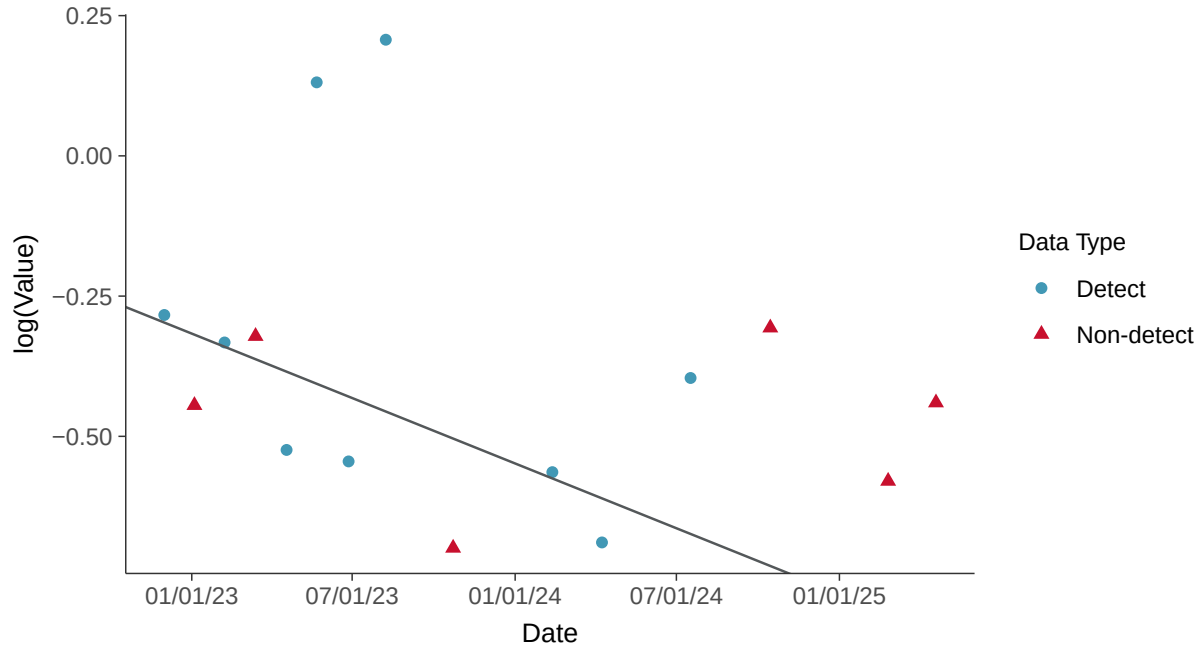
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-31 (pCi/L)



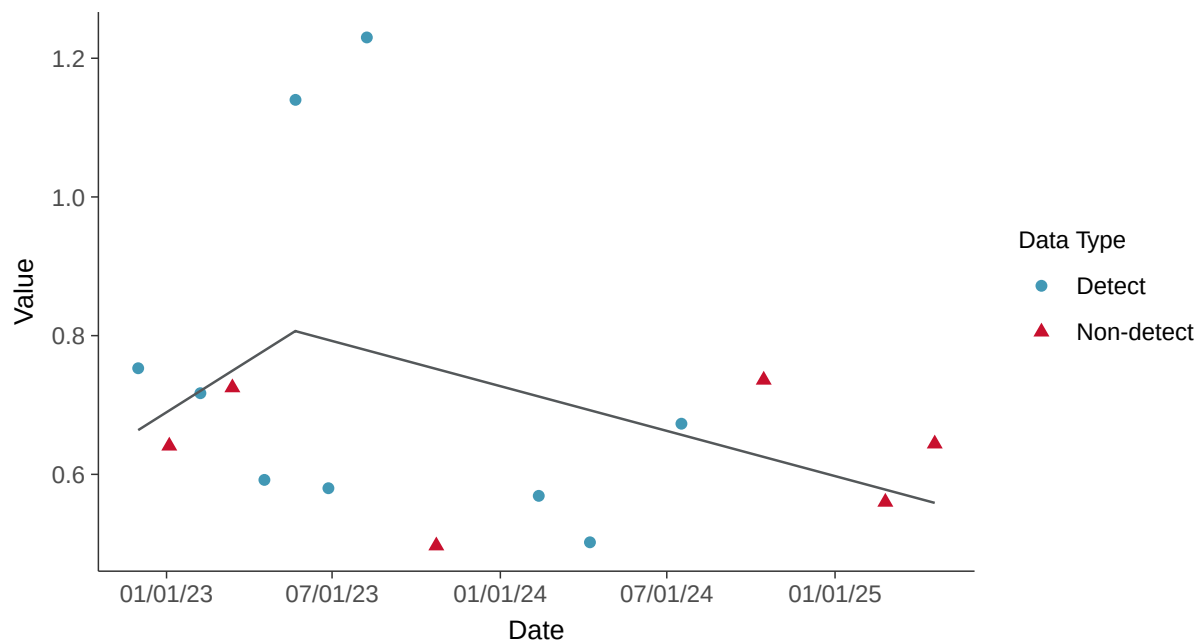
Trend Regression: Lognormal MLE

Radium 226 and 228, MW-31 (pCi/L)



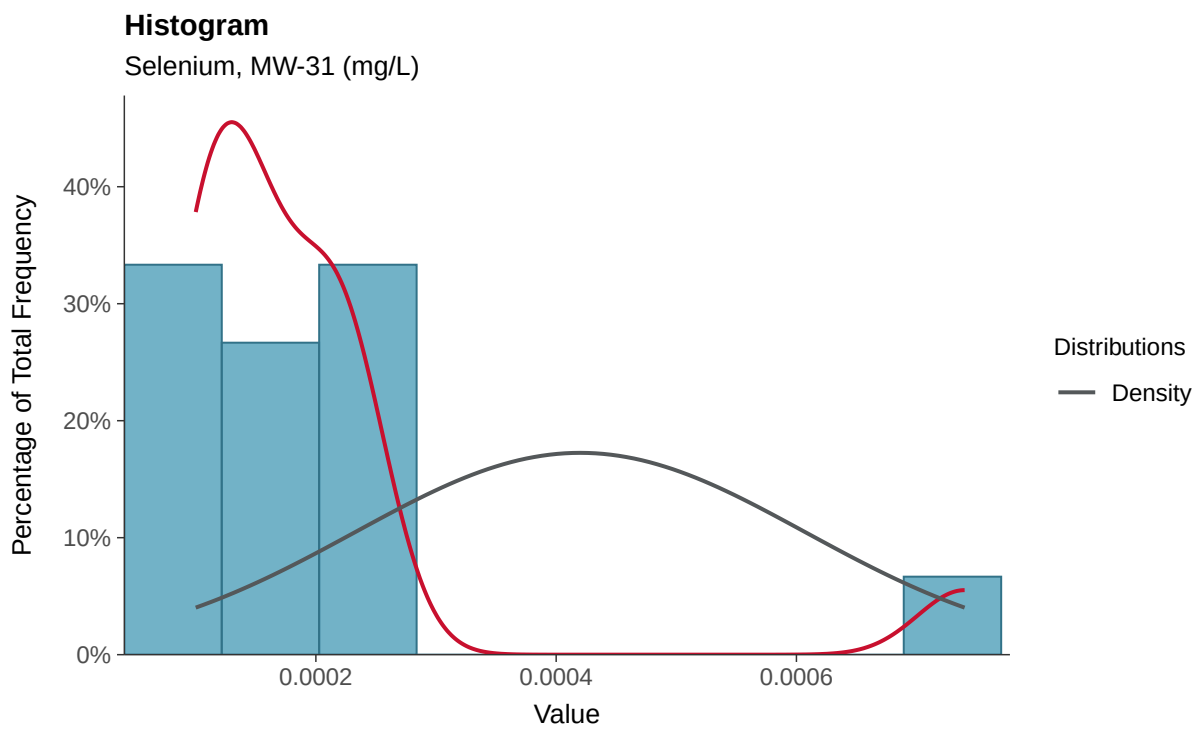
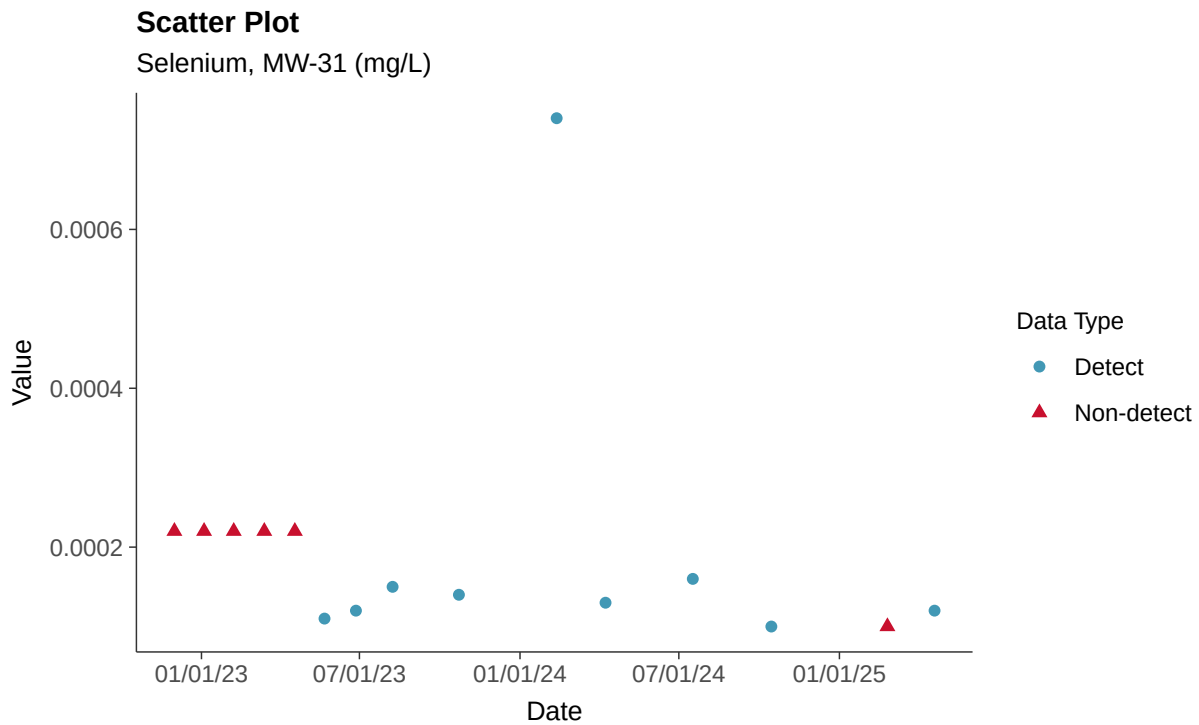
Trend Regression: Piecewise Linear-Linear

Radium 226 and 228, MW-31 (pCi/L)



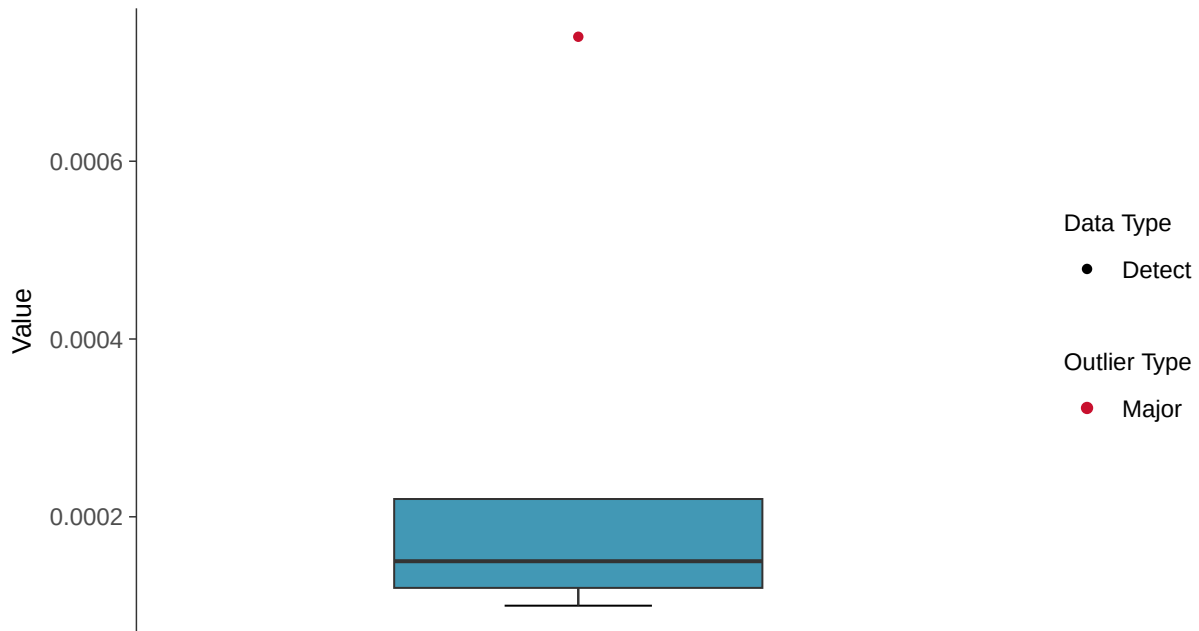
Appendix IV: Selenium, MW-31

ID: 41_1_4_122



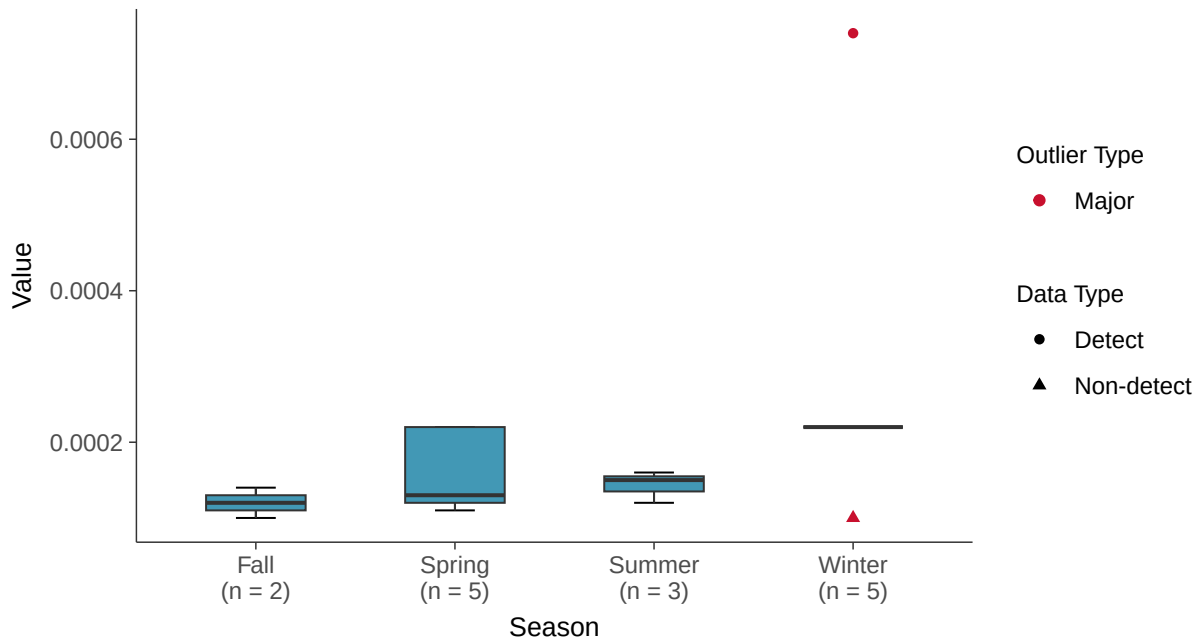
Boxplot

Selenium, MW-31 (mg/L)



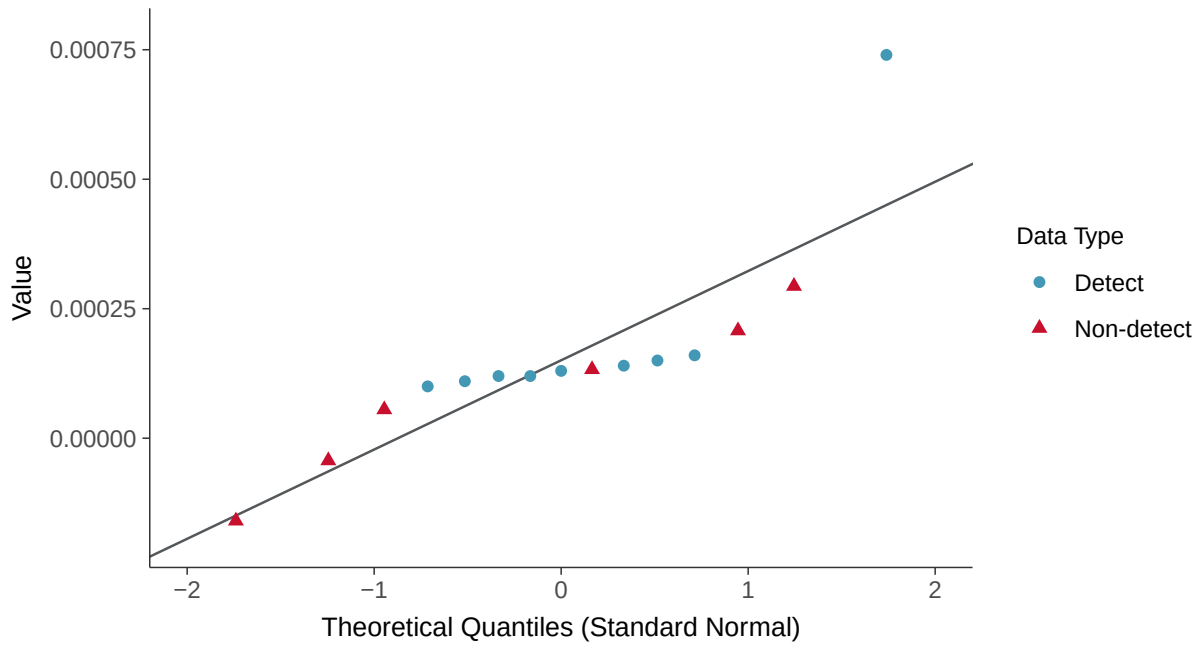
Boxplot by Season

Selenium, MW-31 (mg/L)



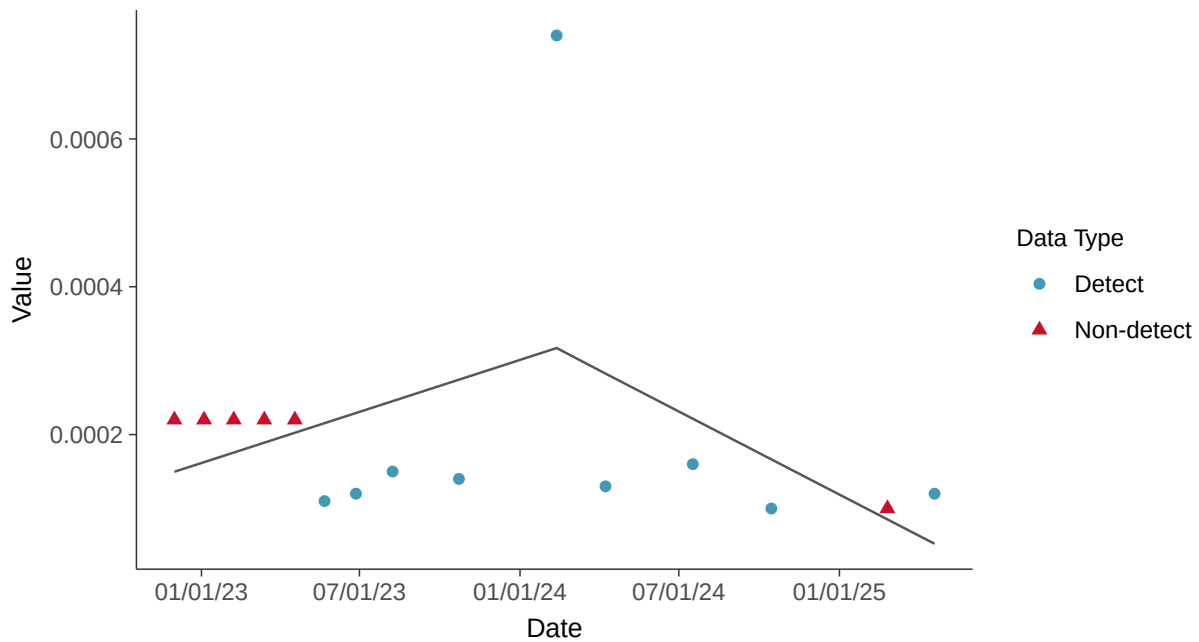
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-31 (mg/L)

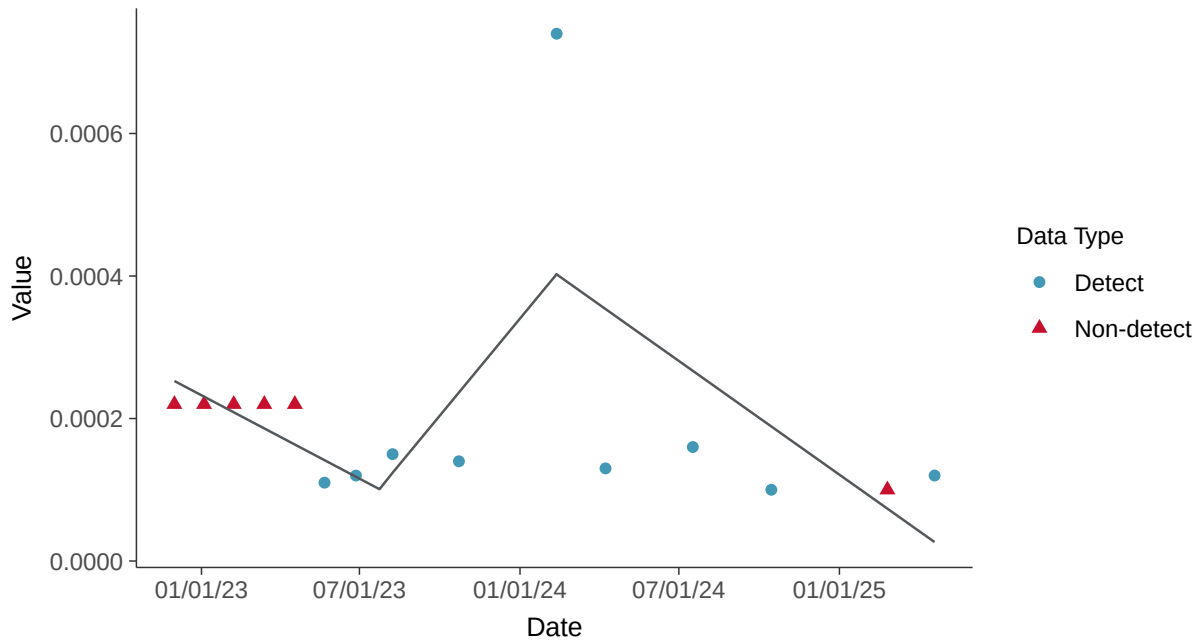


Trend Regression: Piecewise Linear-Linear

Selenium, MW-31 (mg/L)

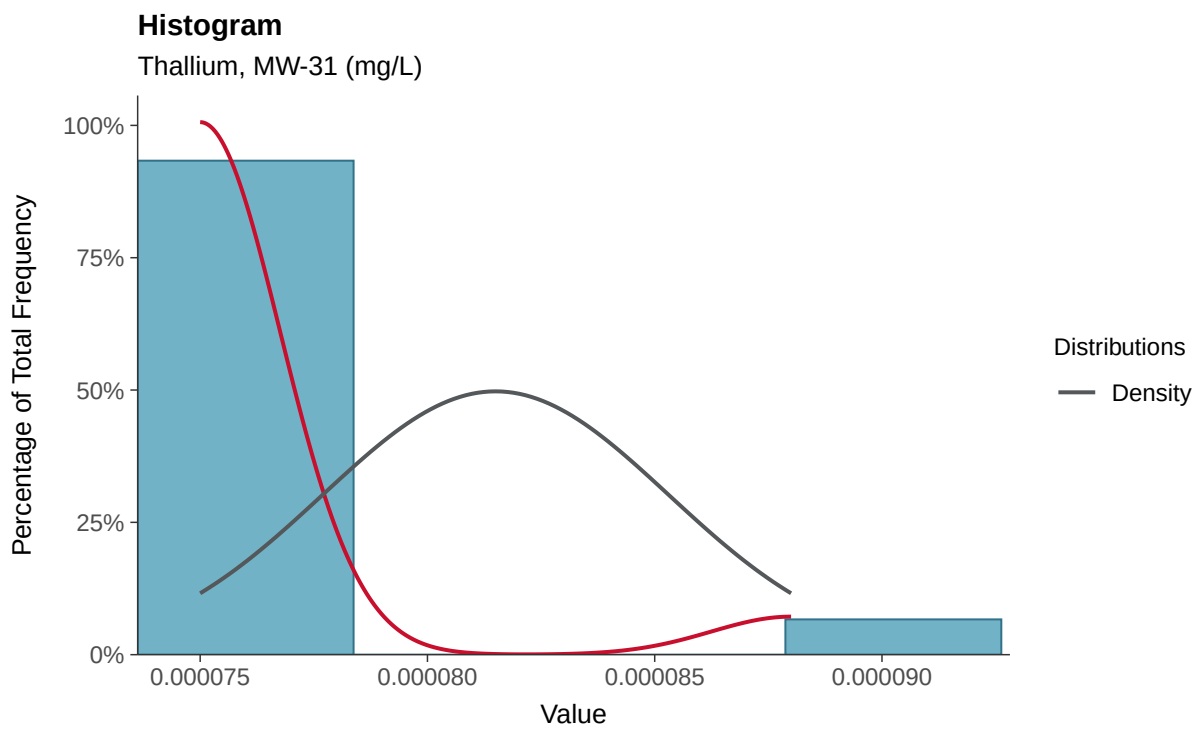
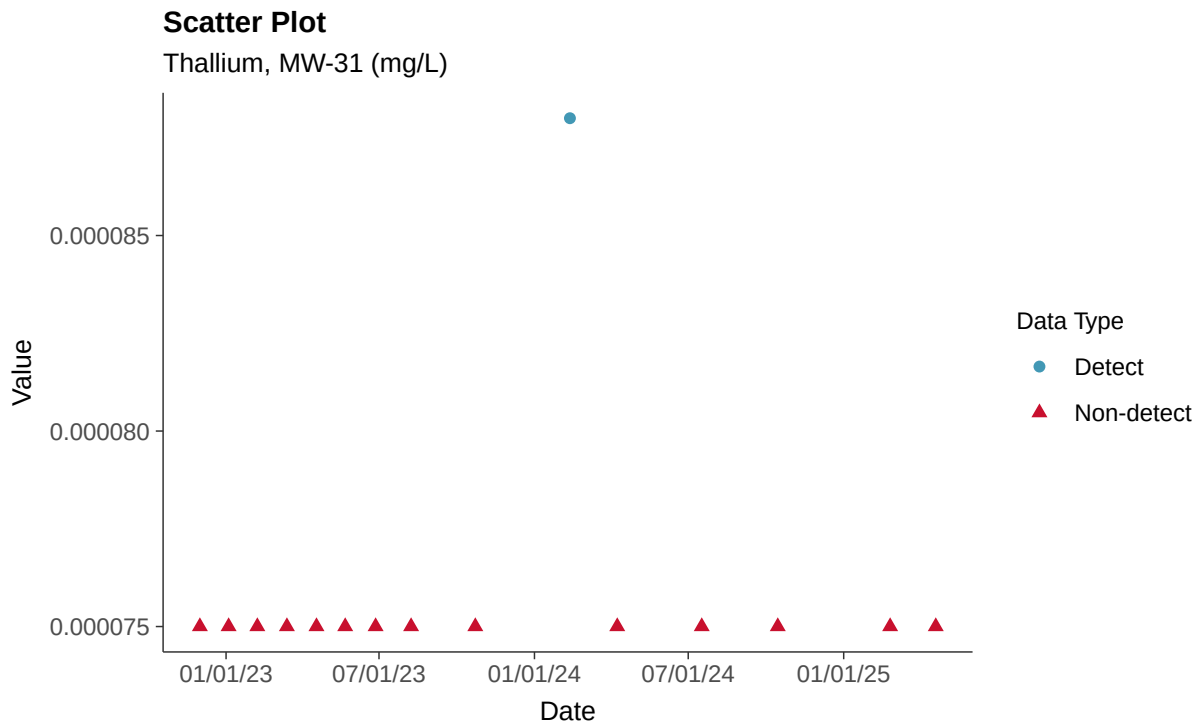


Trend Regression: Piecewise Linear-Linear-Linear
Selenium, MW-31 (mg/L)



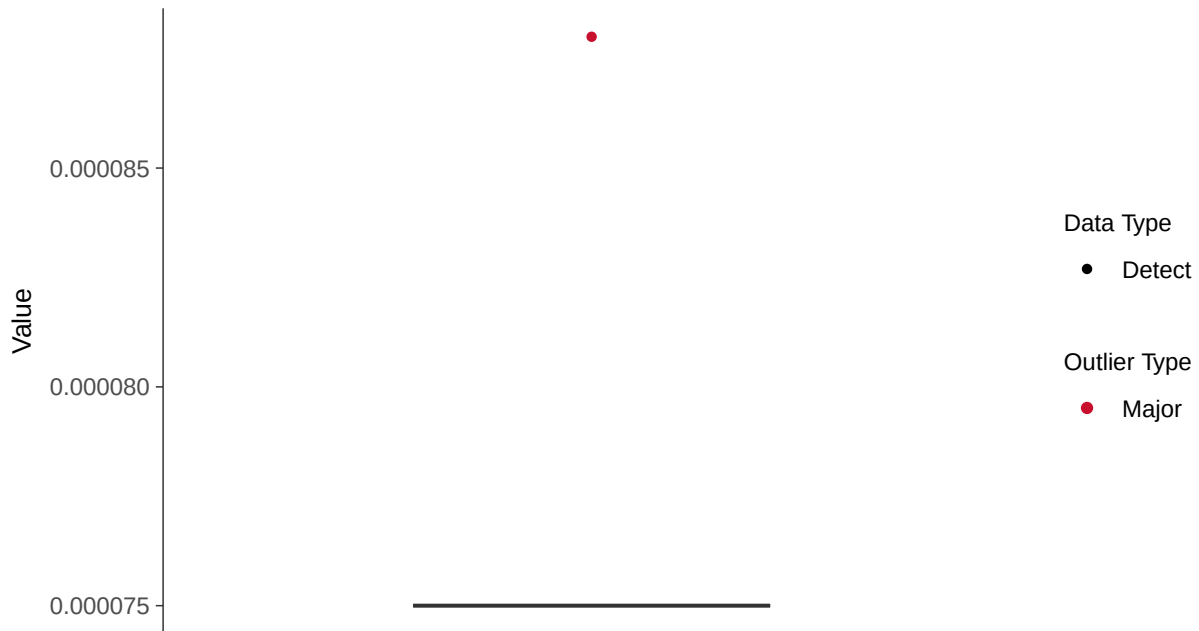
Appendix IV: Thallium, MW-31

ID: 41_1_4_125



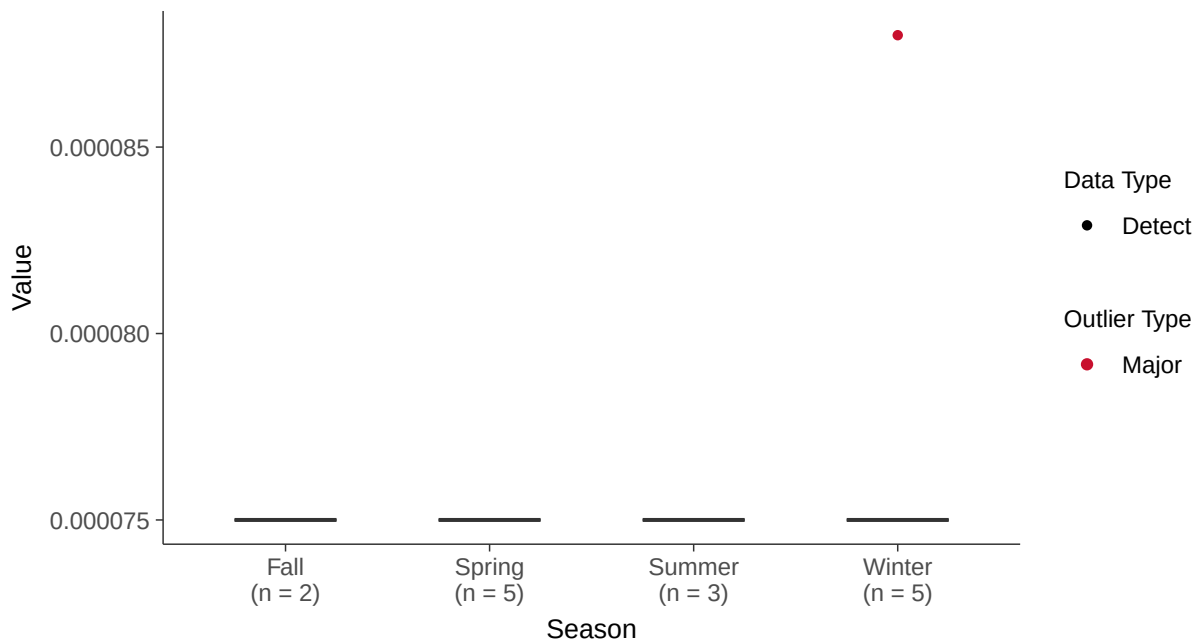
Boxplot

Thallium, MW-31 (mg/L)



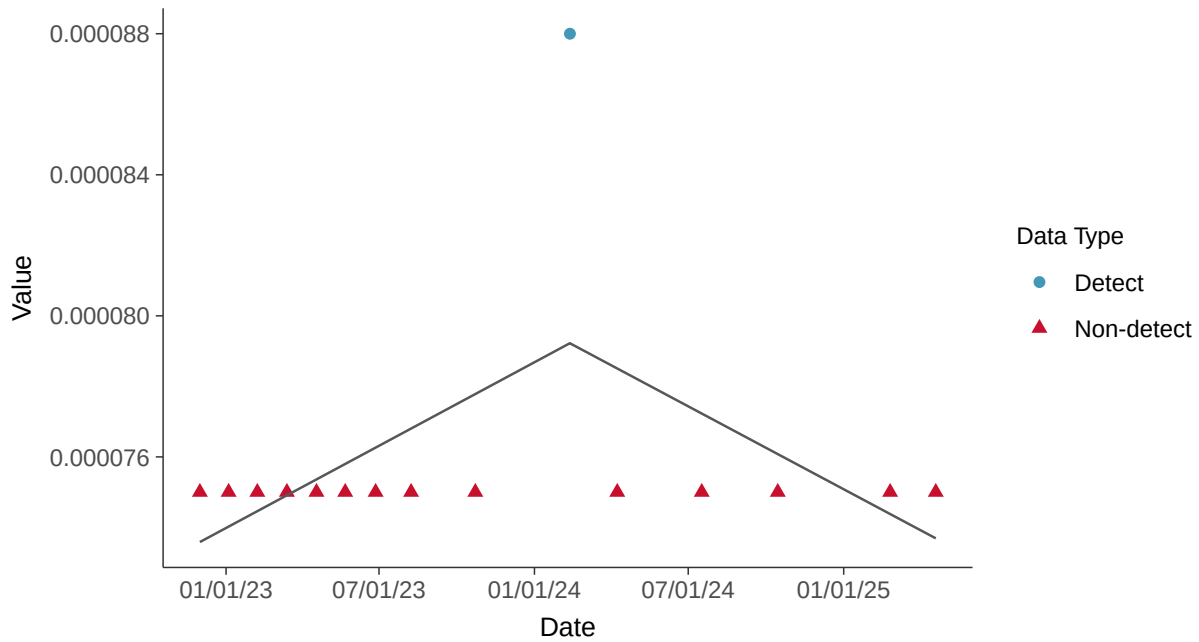
Boxplot by Season

Thallium, MW-31 (mg/L)



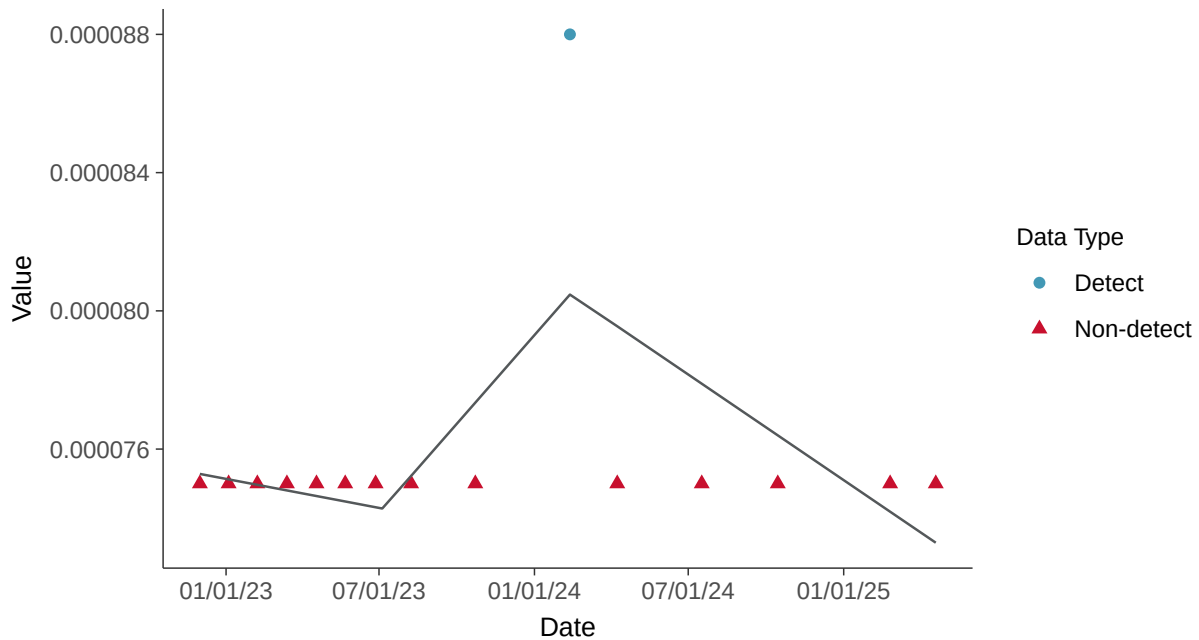
Trend Regression: Piecewise Linear-Linear

Thallium, MW-31 (mg/L)



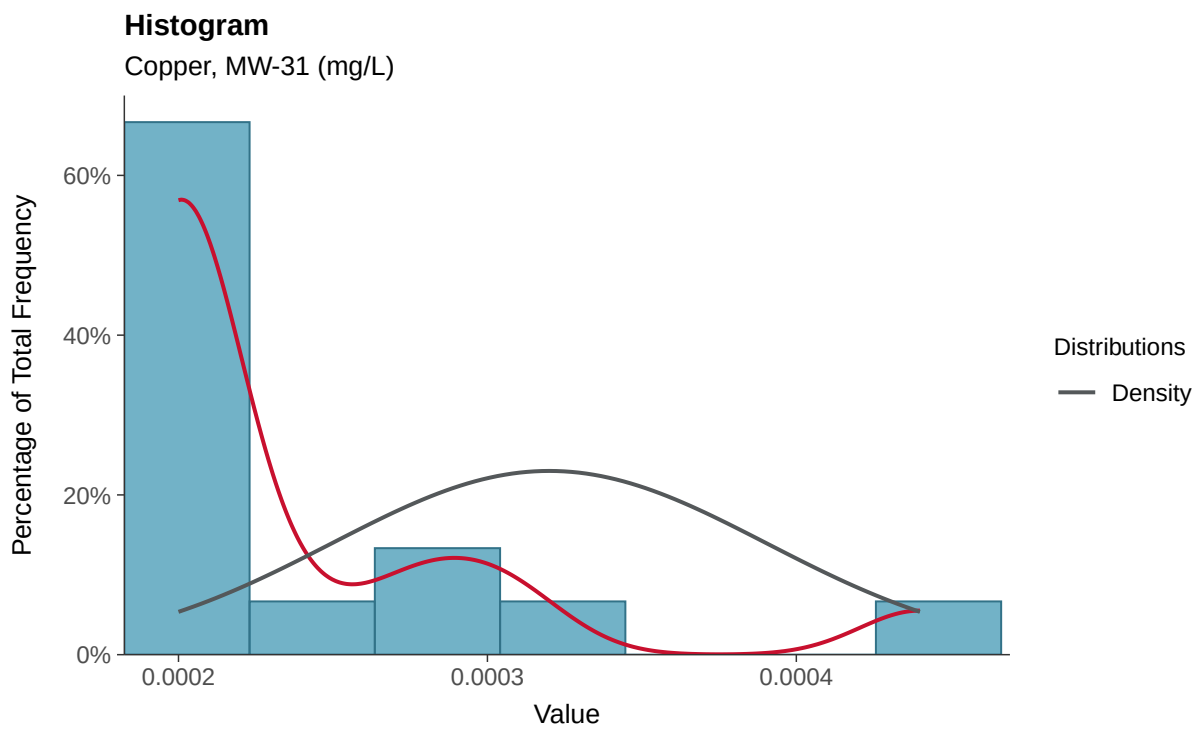
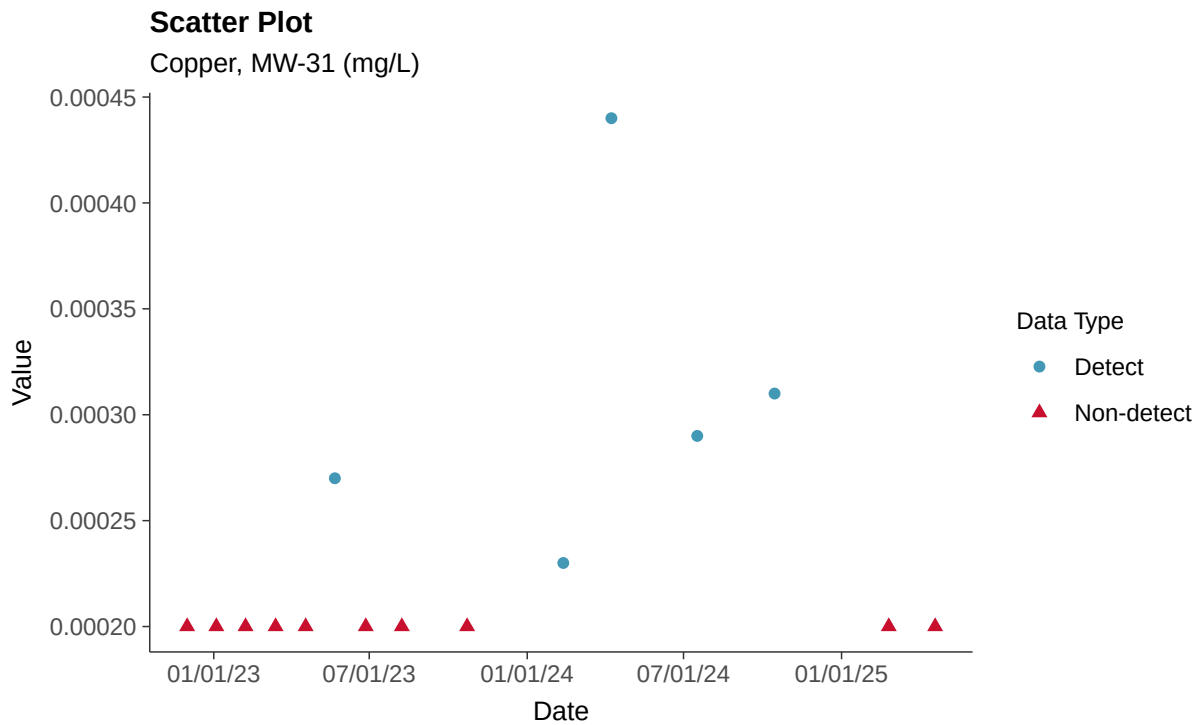
Trend Regression: Piecewise Linear-Linear-Linear

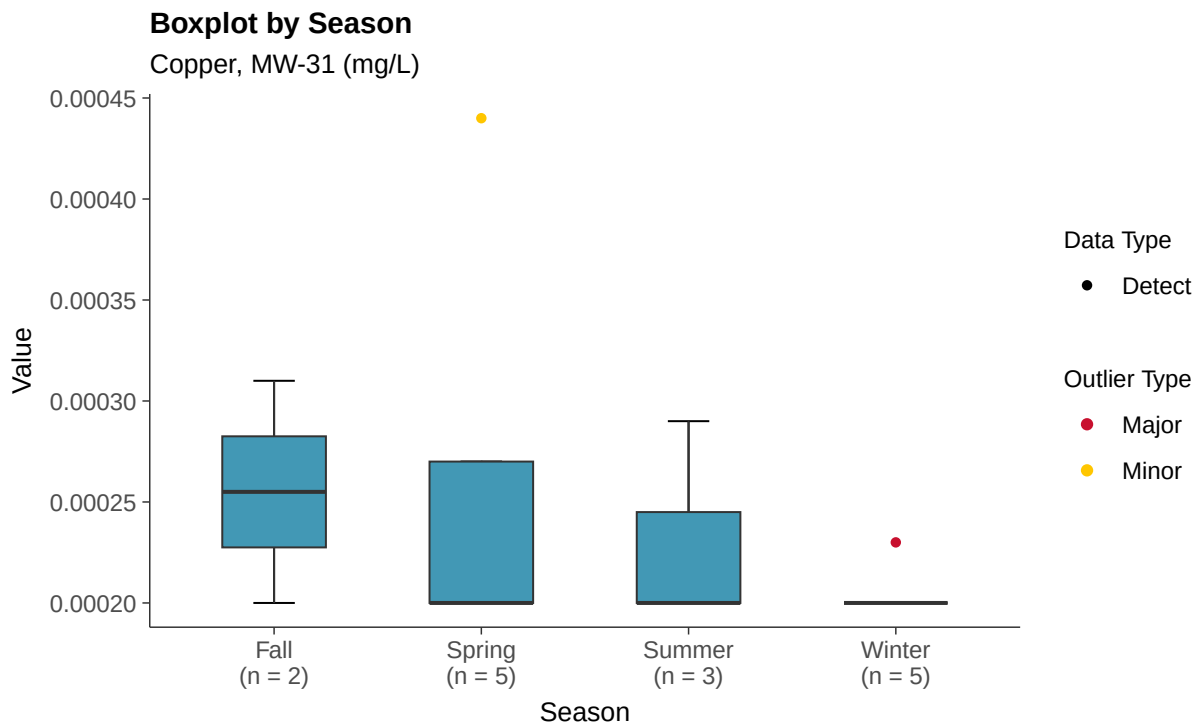
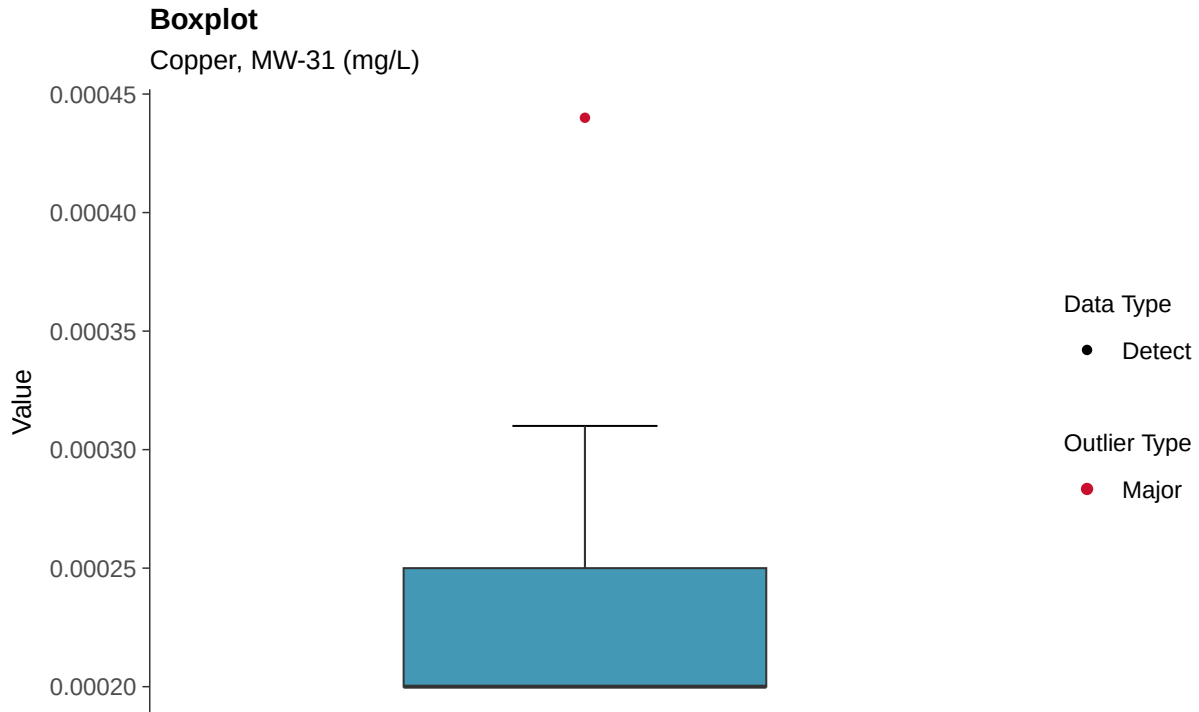
Thallium, MW-31 (mg/L)



Part 115: Copper, MW-31

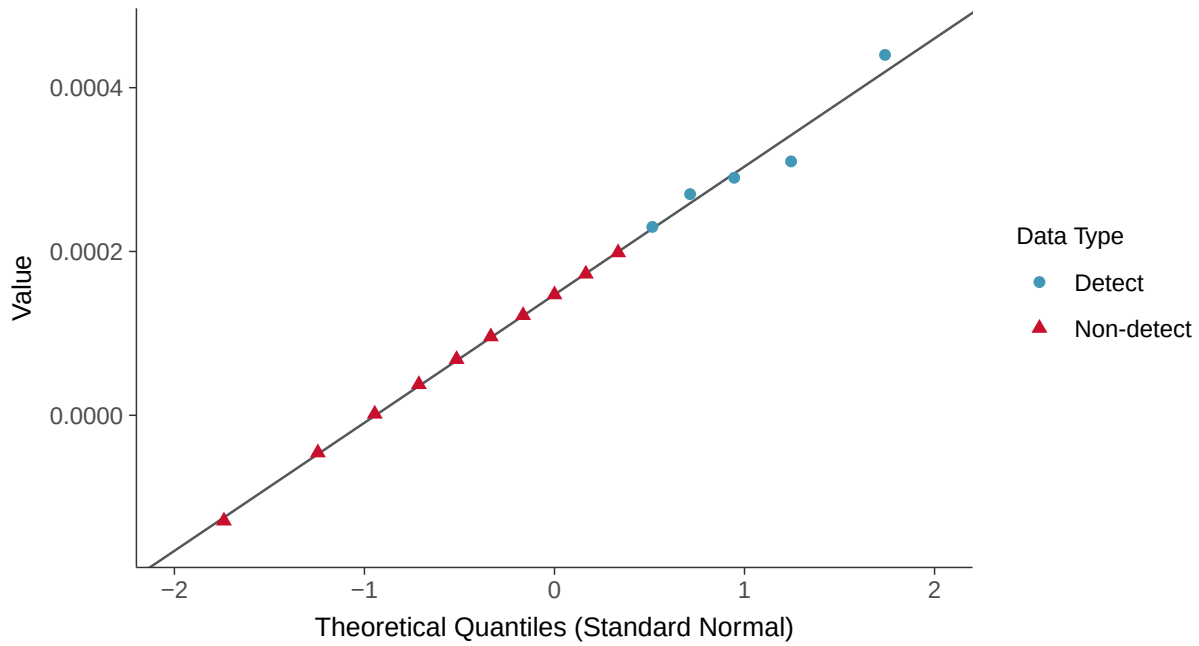
ID: 41_1_5_111





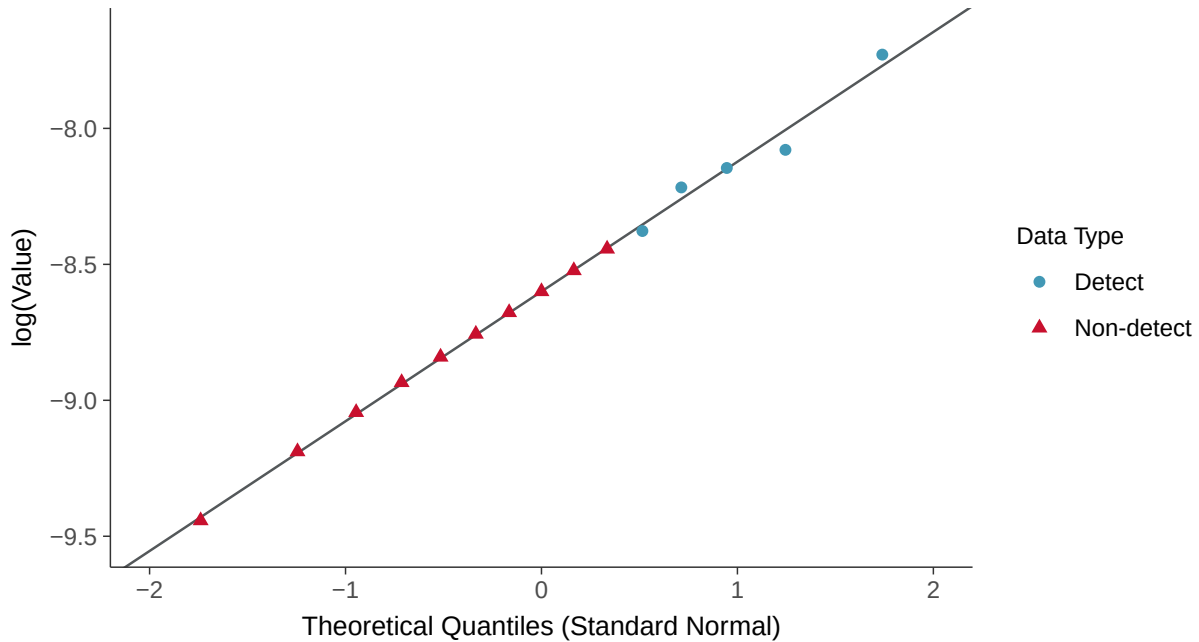
Normal Q-Q plot using ROS Imputed Estimates

Copper, MW-31 (mg/L)



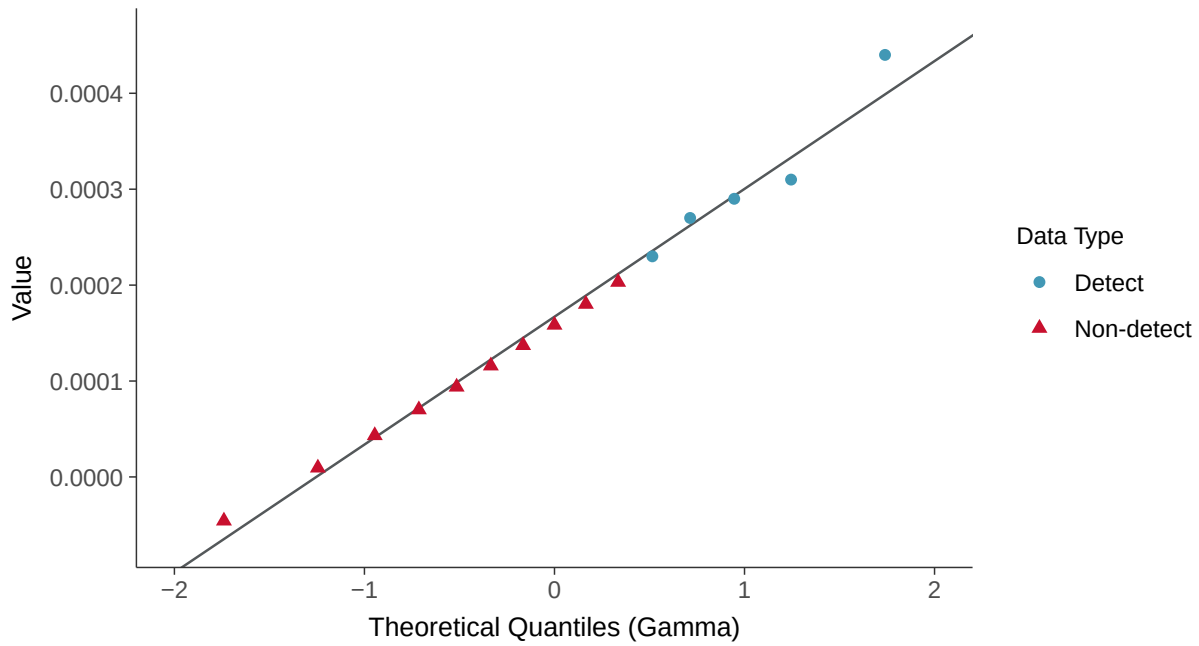
Lognormal Q-Q plot using ROS Imputed Estimates

Copper, MW-31 (mg/L)



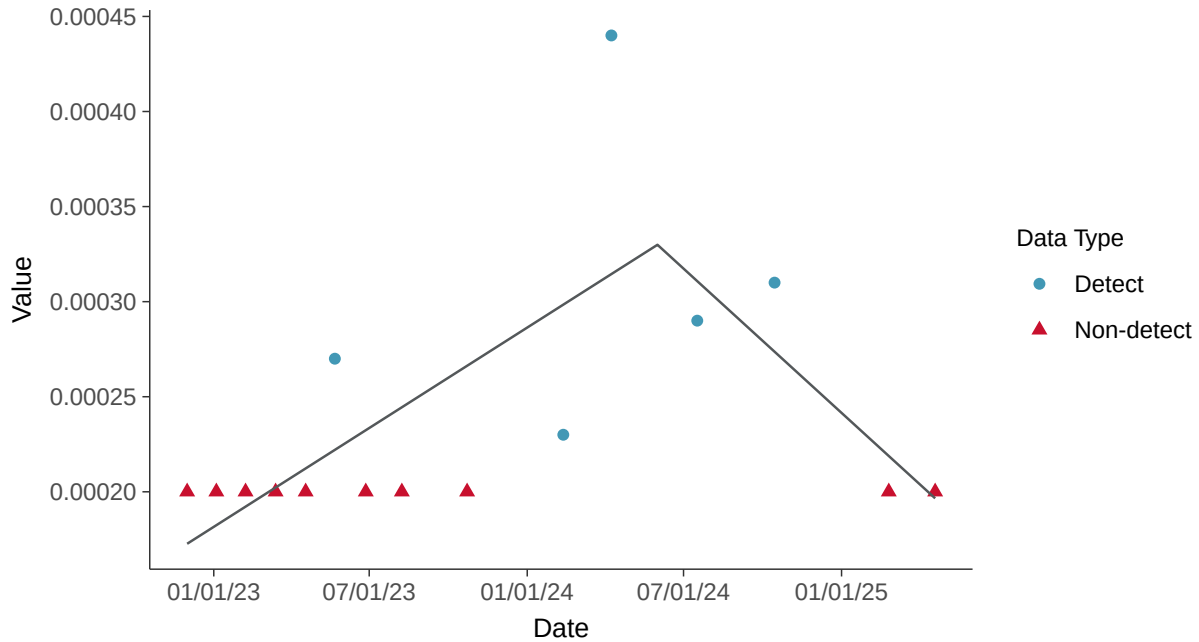
Gamma Q-Q plot using ROS Imputed Estimates

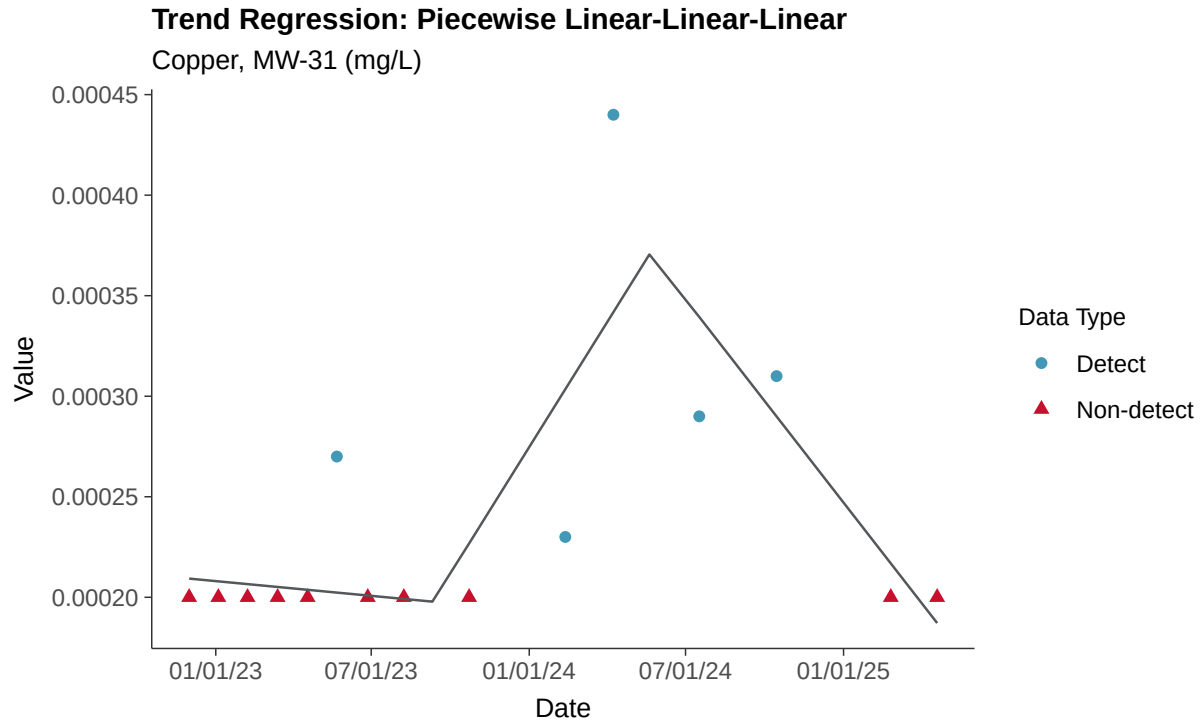
Copper, MW-31 (mg/L)



Trend Regression: Piecewise Linear-Linear

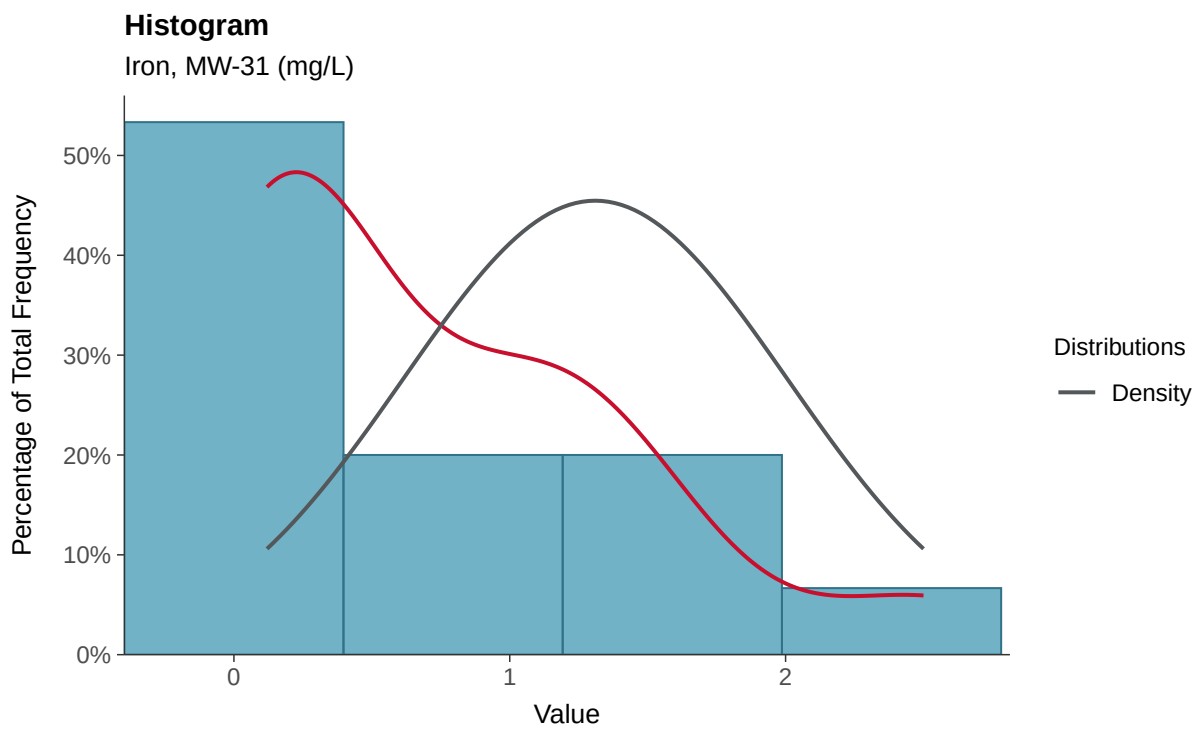
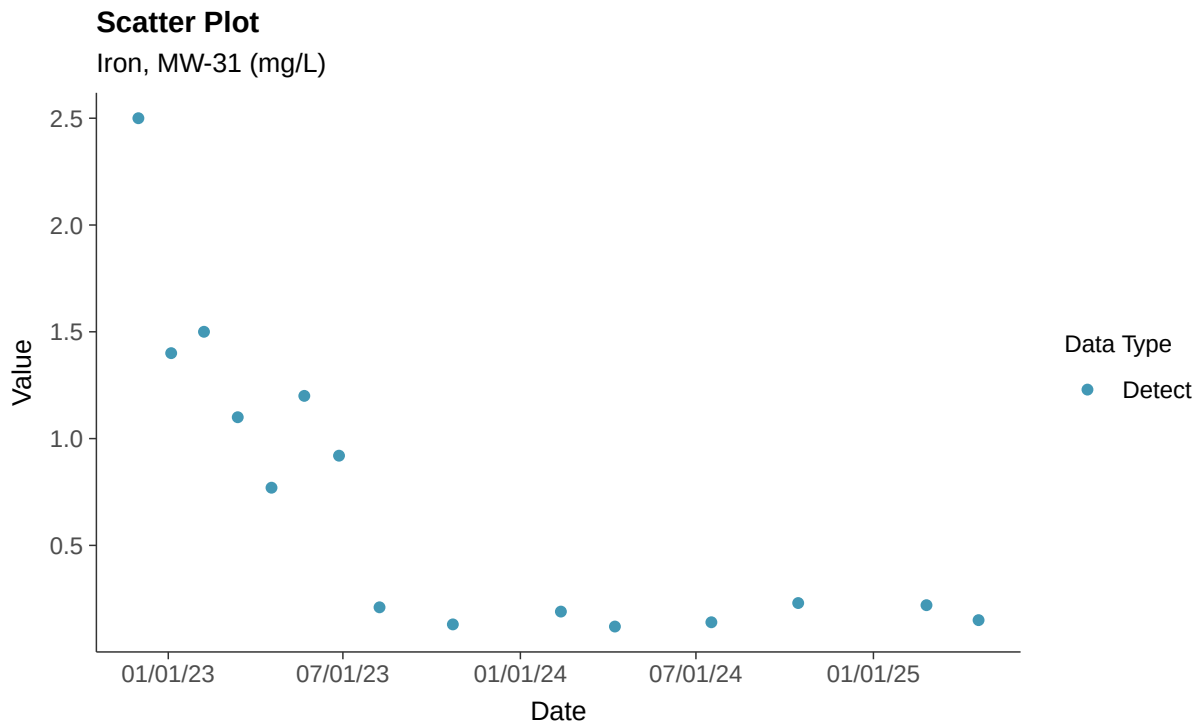
Copper, MW-31 (mg/L)





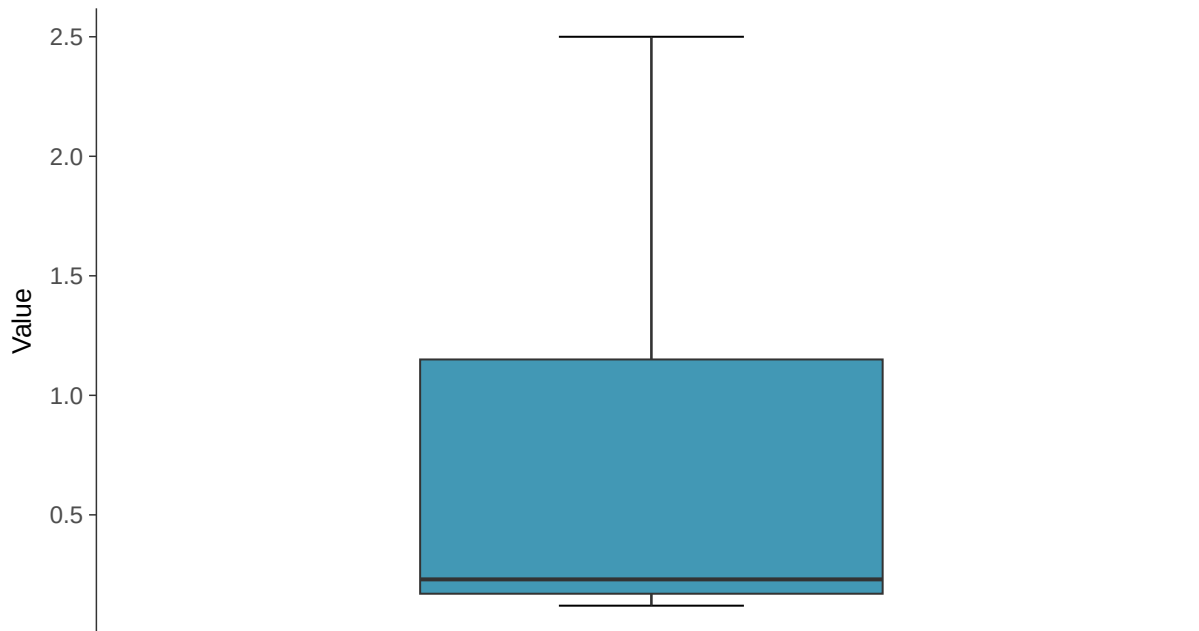
Part 115: Iron, MW-31

ID: 41_1_5_114



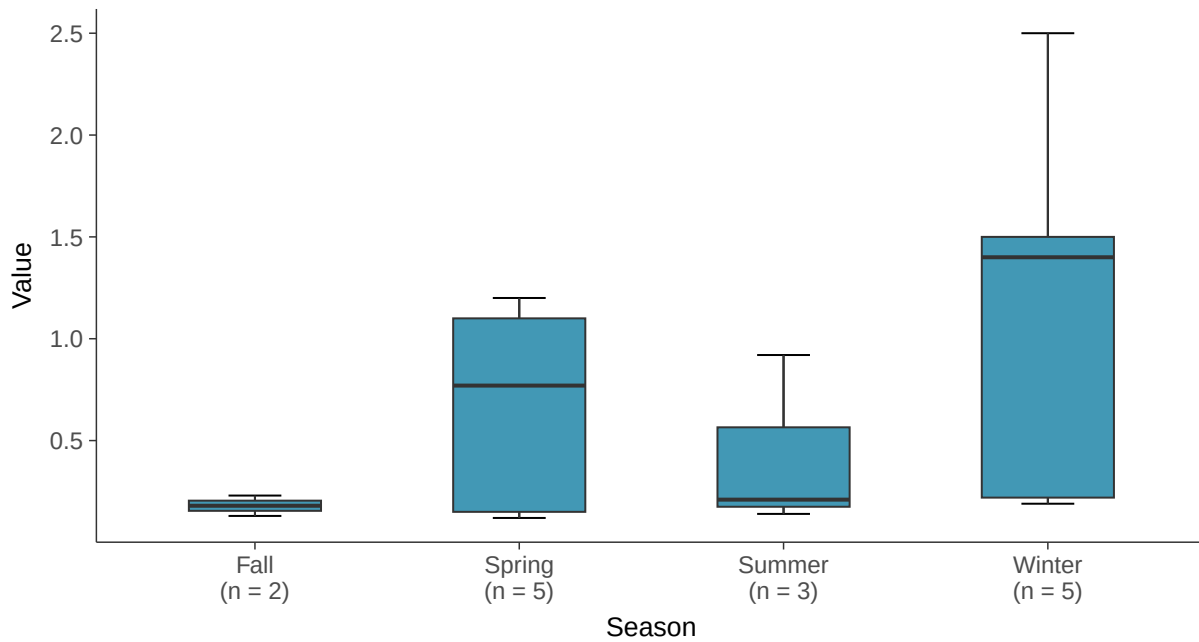
Boxplot

Iron, MW-31 (mg/L)

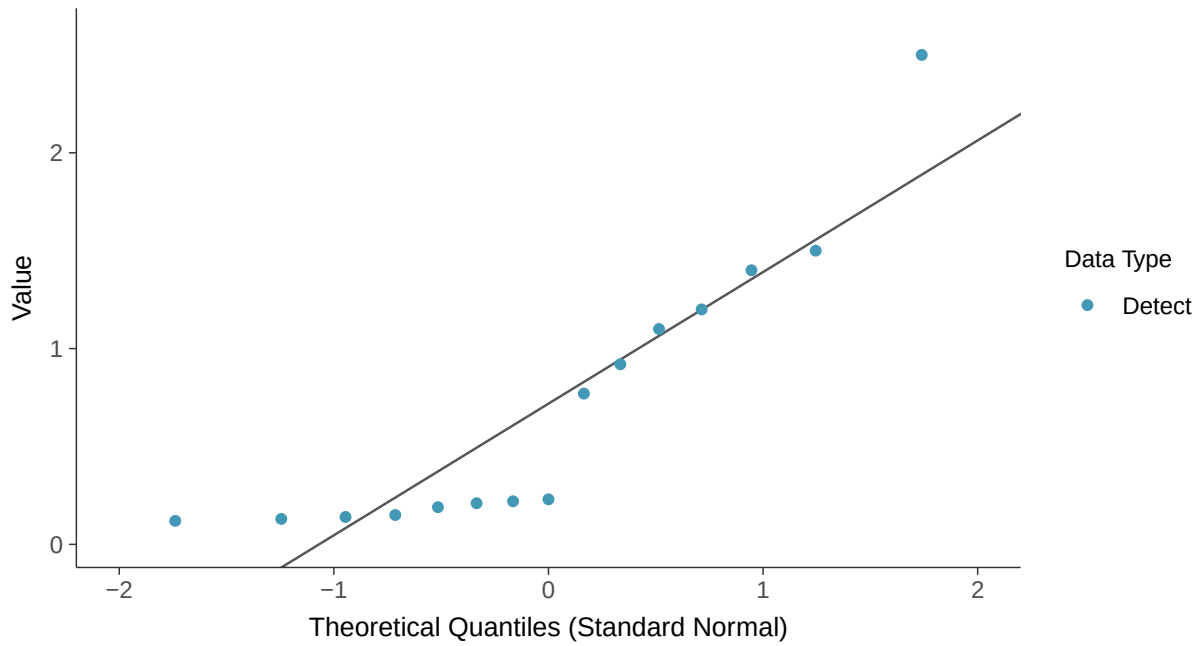


Boxplot by Season

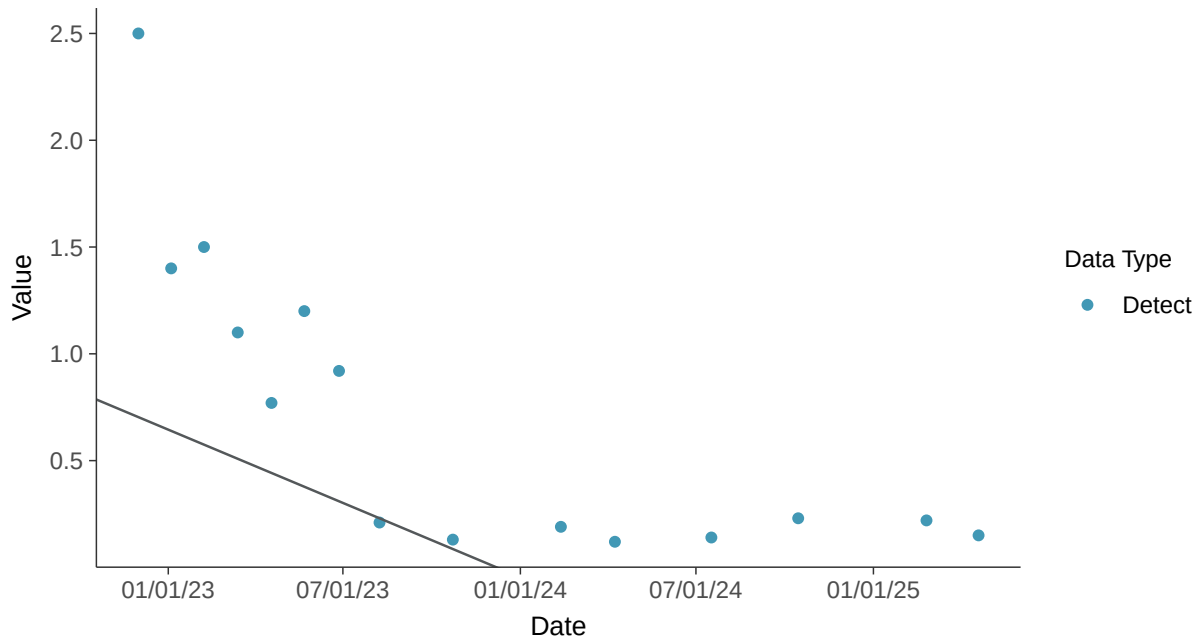
Iron, MW-31 (mg/L)

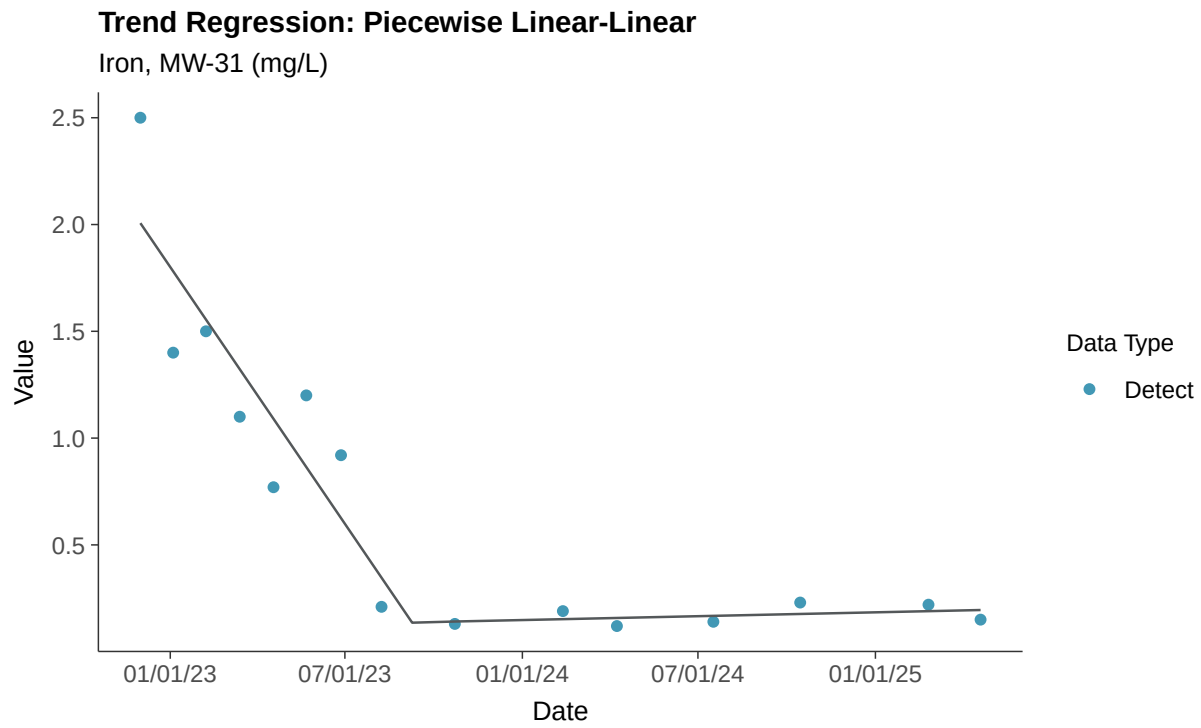


Normal Q-Q plot
Iron, MW-31 (mg/L)



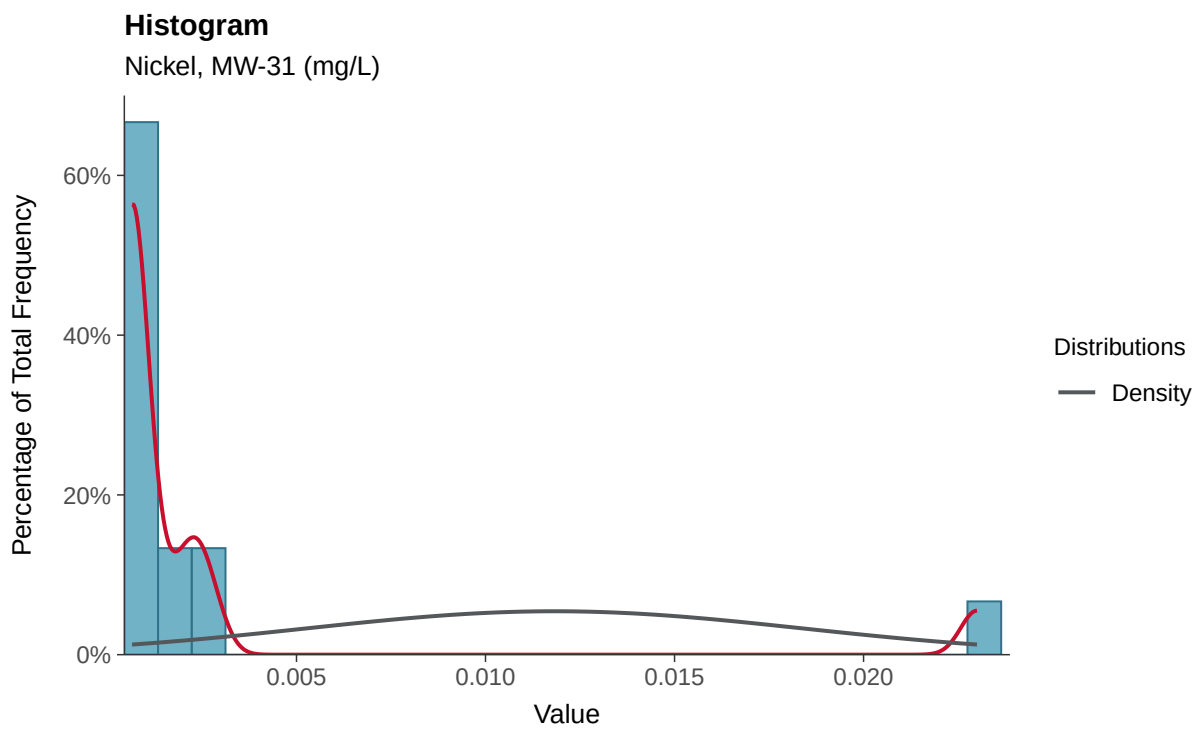
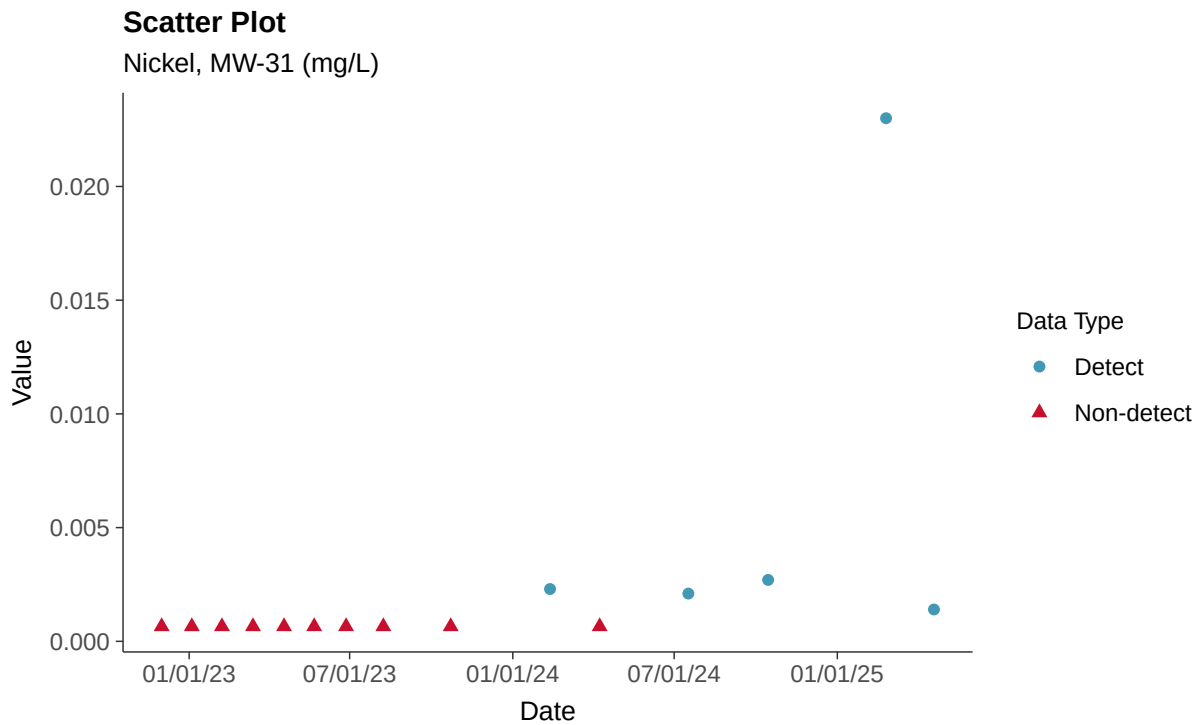
Trend Regression: Mann-Kendall/Theil-Sen Estimate
Iron, MW-31 (mg/L)





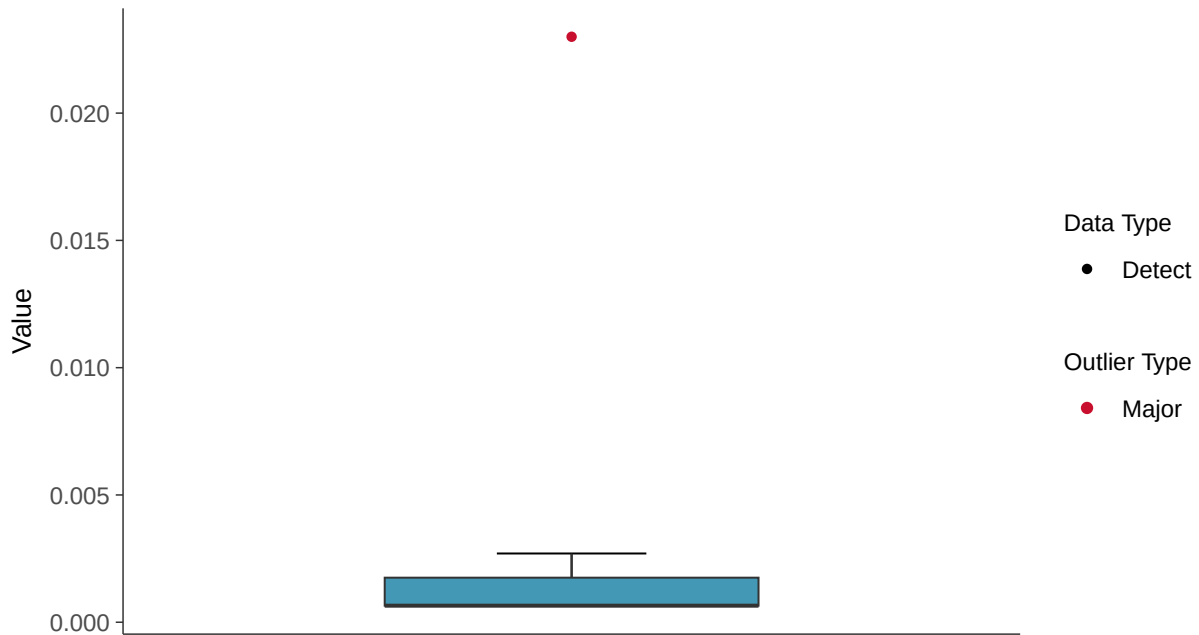
Part 115: Nickel, MW-31

ID: 41_1_5_119



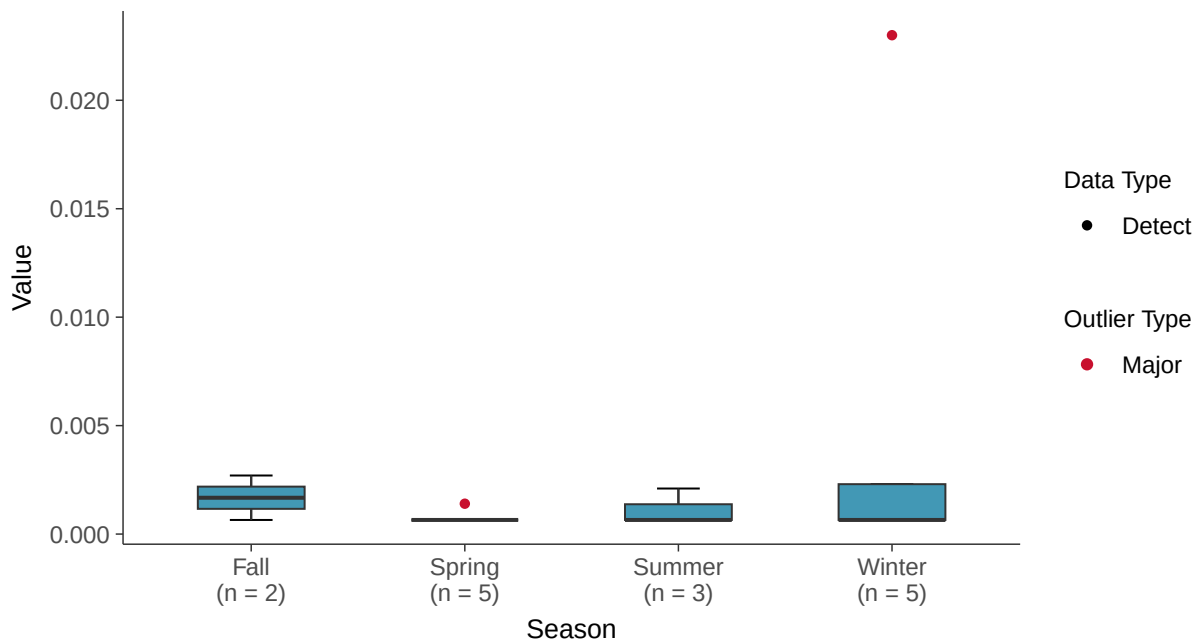
Boxplot

Nickel, MW-31 (mg/L)



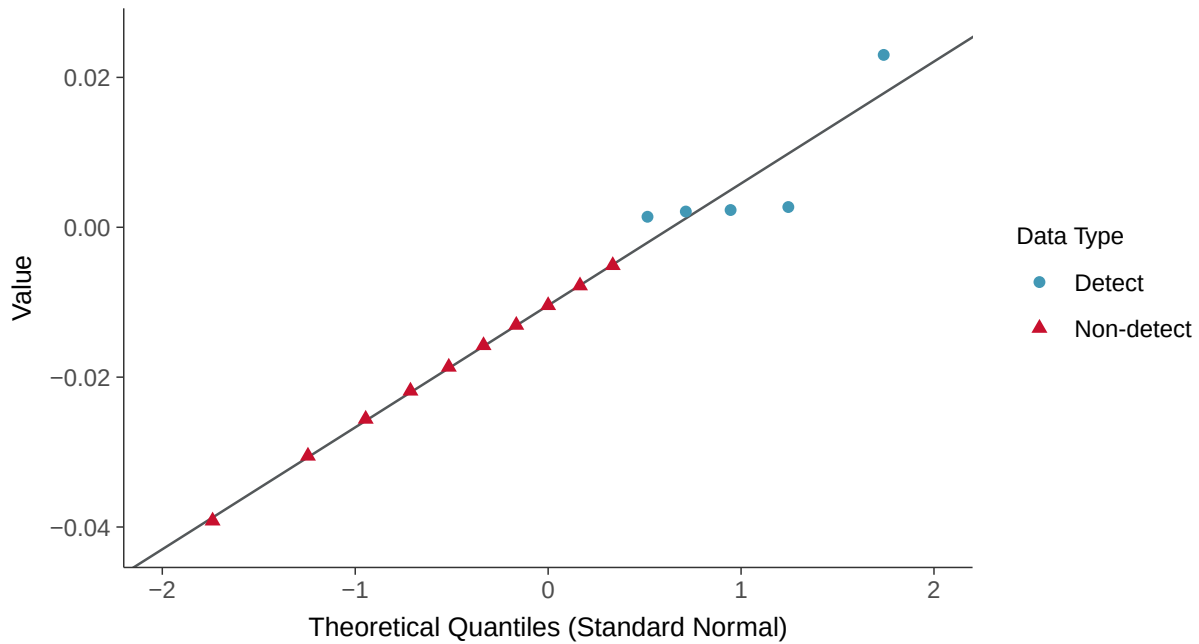
Boxplot by Season

Nickel, MW-31 (mg/L)



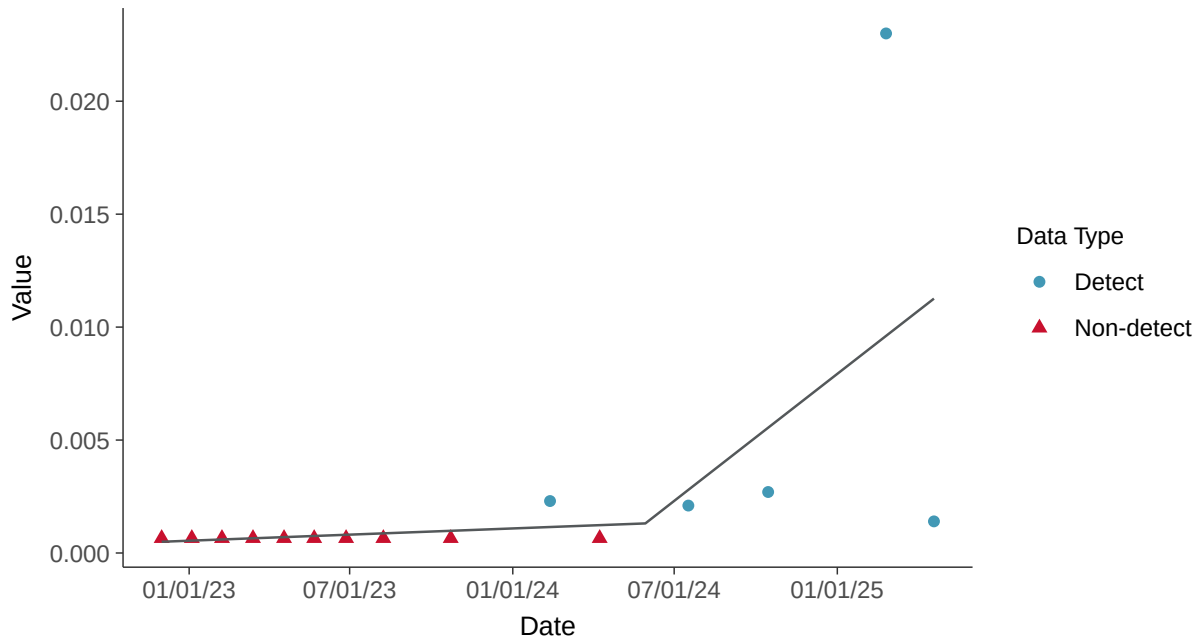
Normal Q-Q plot using ROS Imputed Estimates

Nickel, MW-31 (mg/L)



Trend Regression: Piecewise Linear-Linear

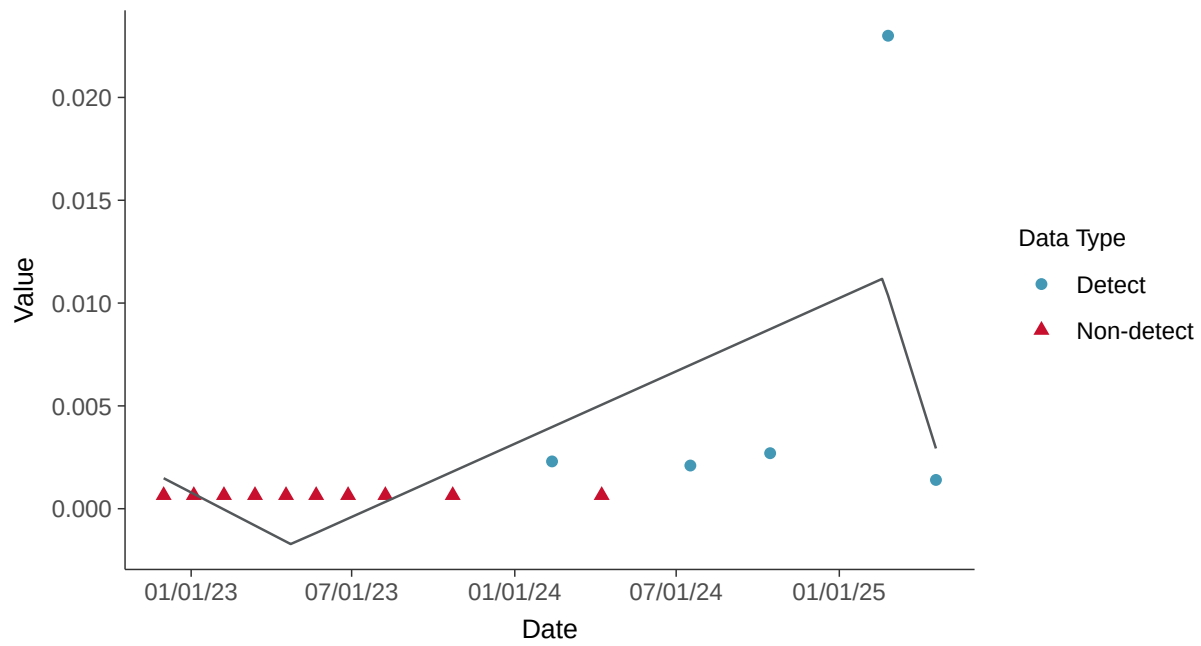
Nickel, MW-31 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

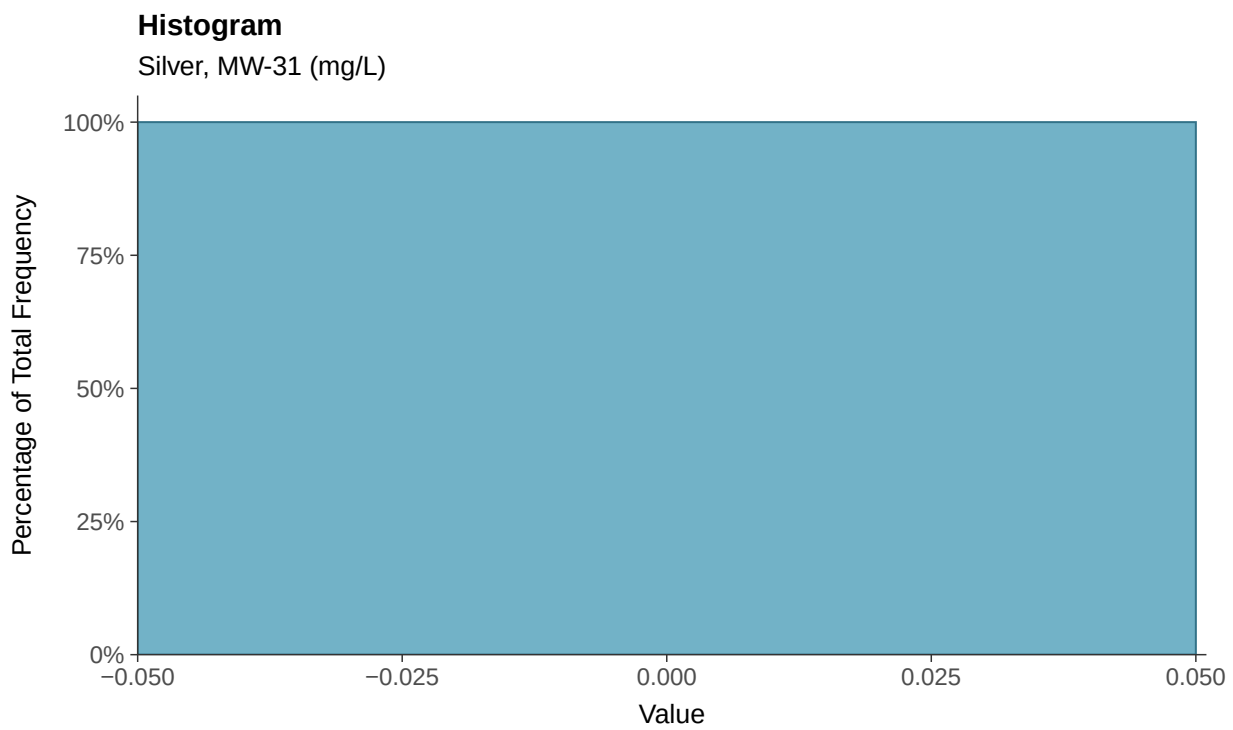
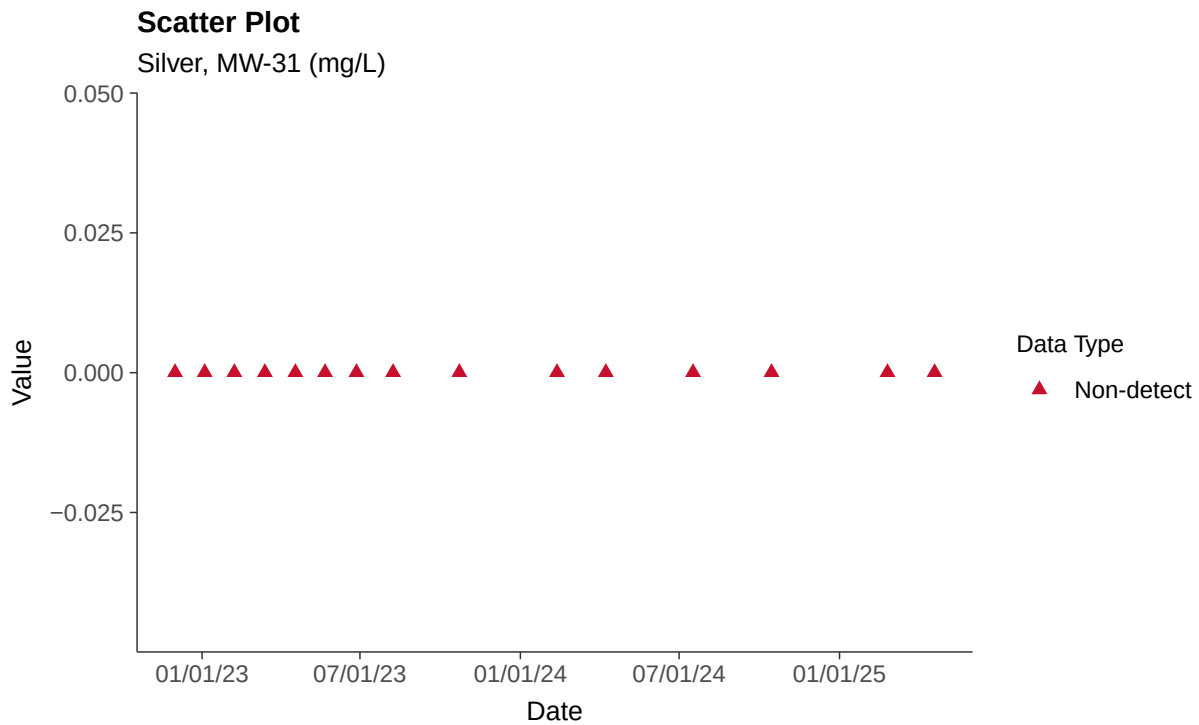
Nickel, MW-31 (mg/L)





Part 115: Silver, MW-31

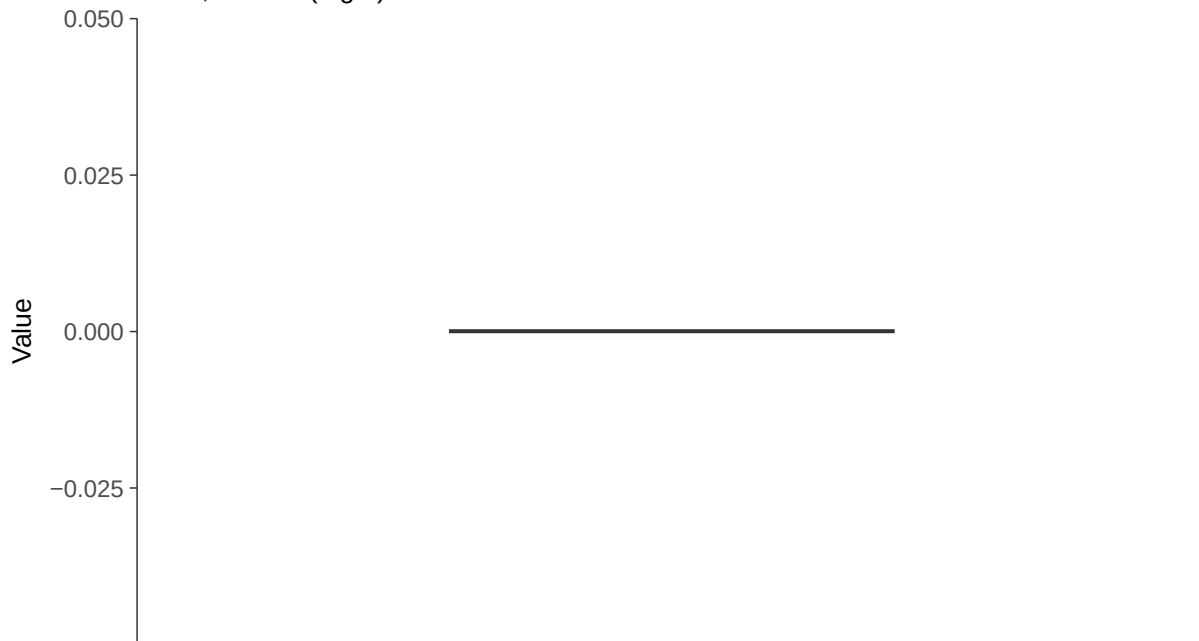
ID: 41_1_5_123





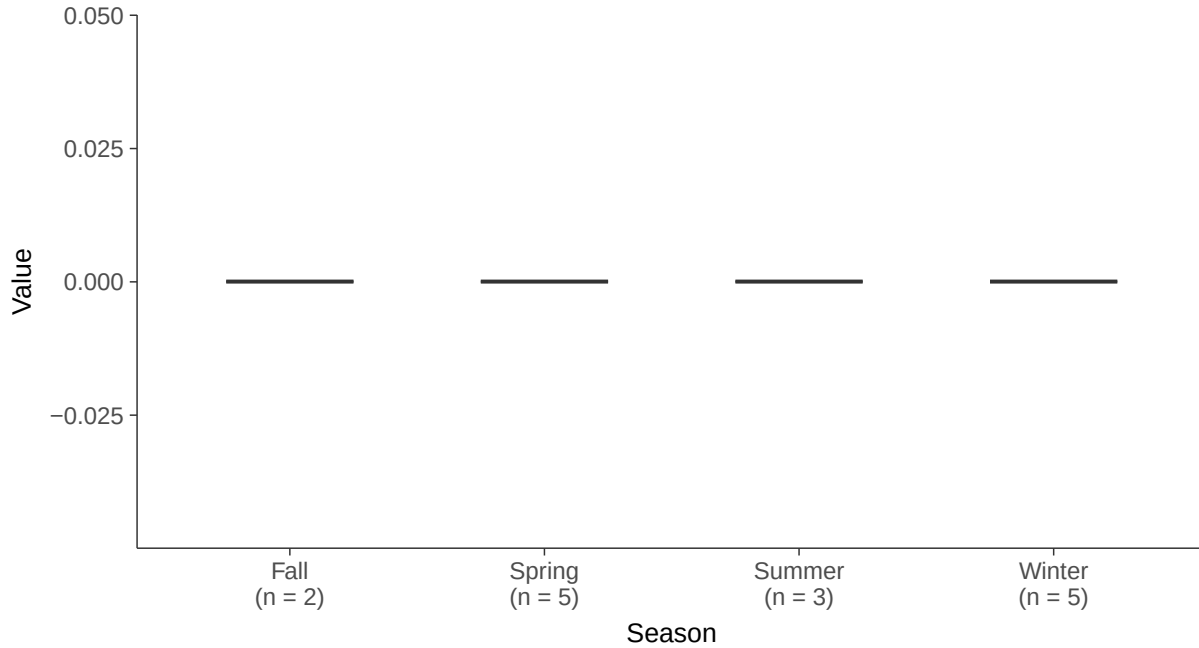
Boxplot

Silver, MW-31 (mg/L)



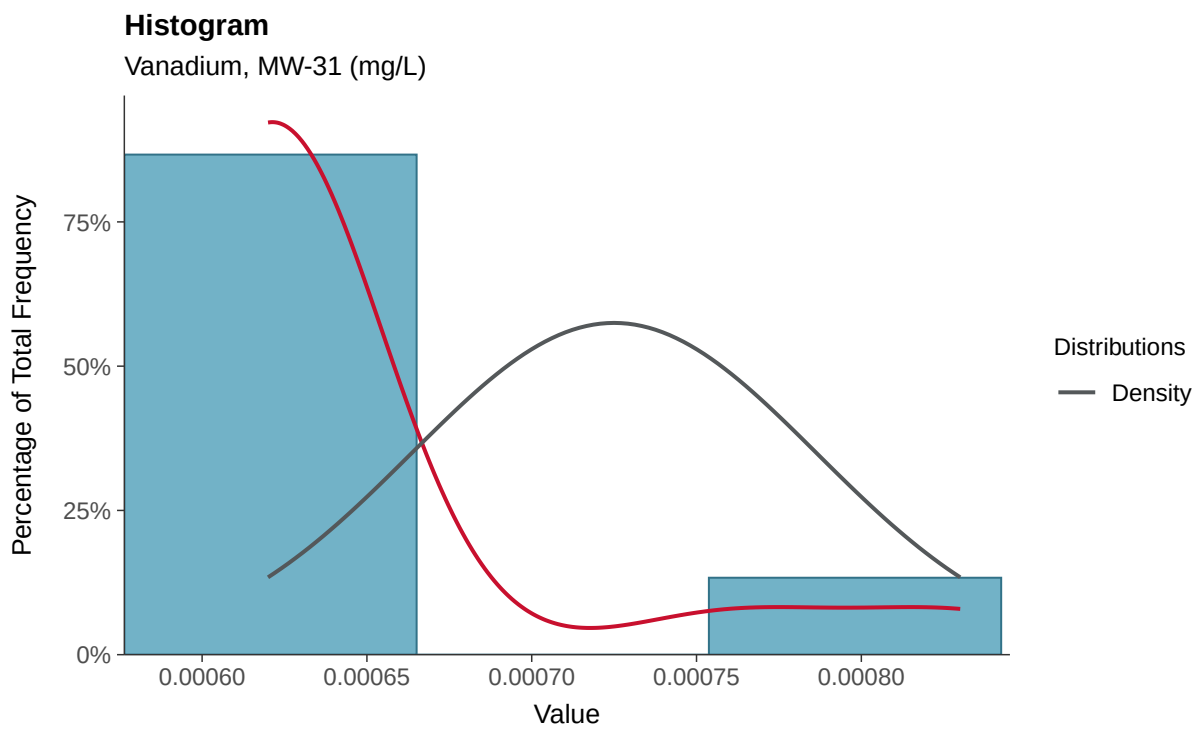
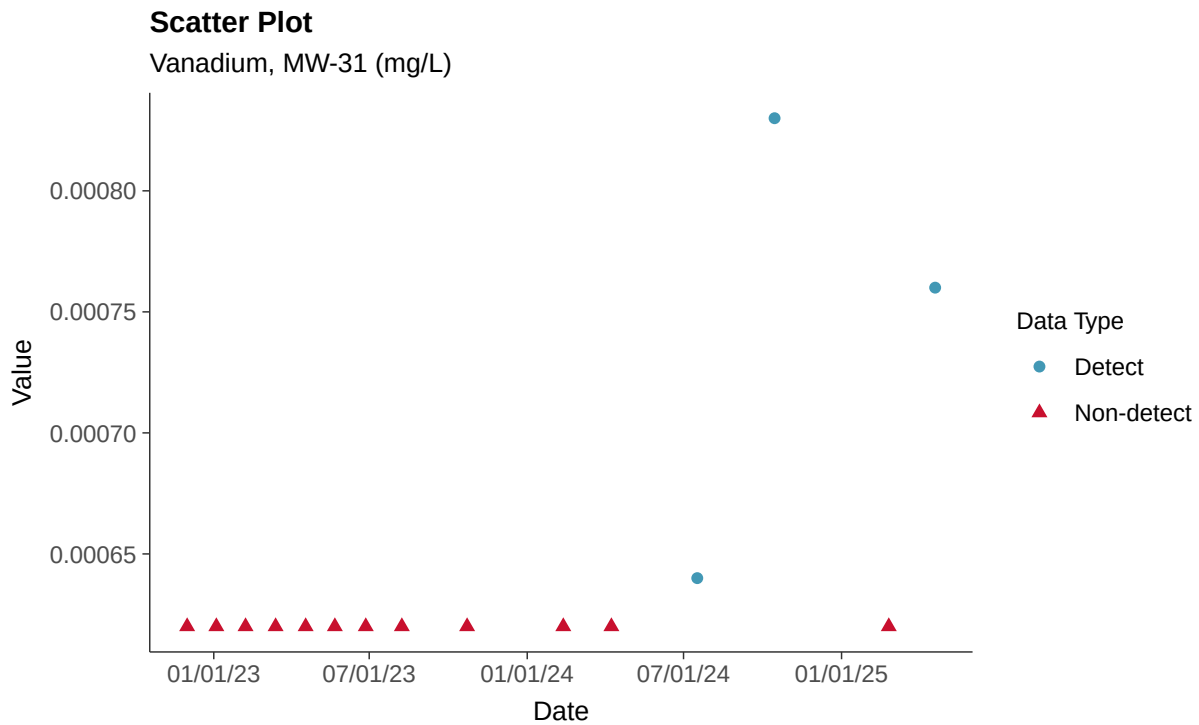
Boxplot by Season

Silver, MW-31 (mg/L)



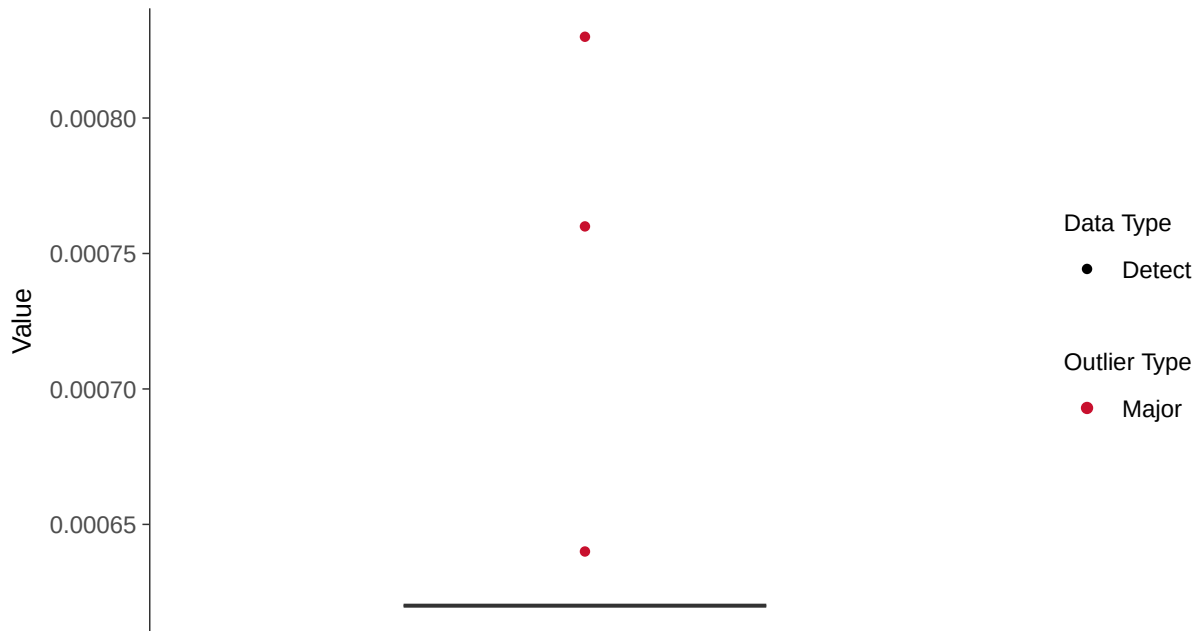
Part 115: Vanadium, MW-31

ID: 41_1_5_128



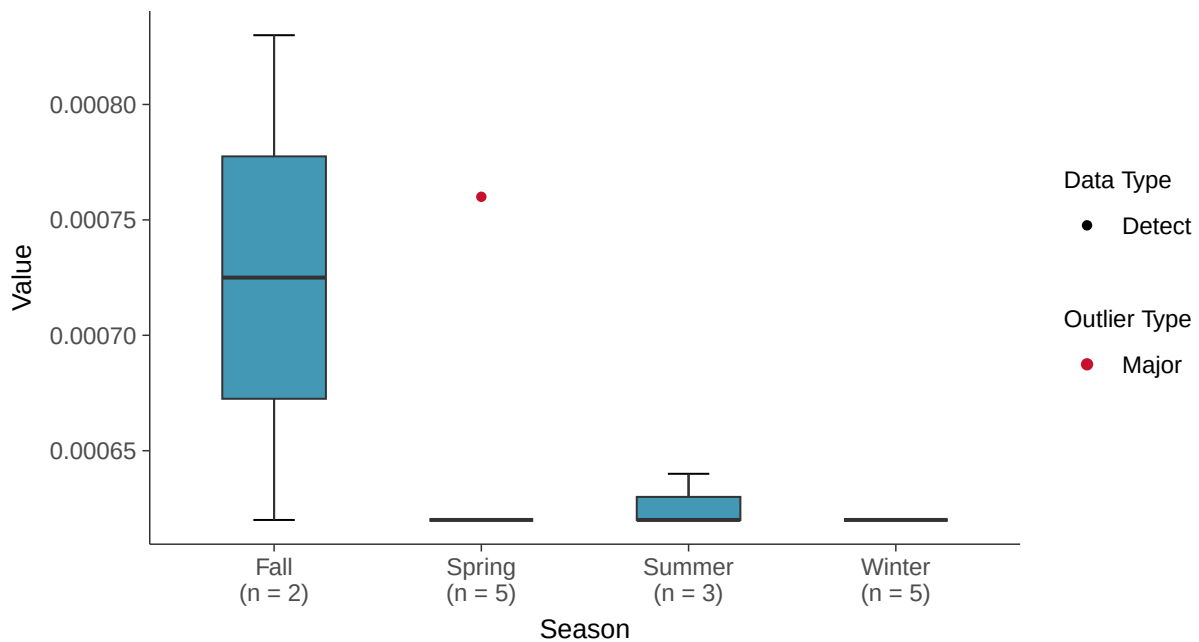
Boxplot

Vanadium, MW-31 (mg/L)



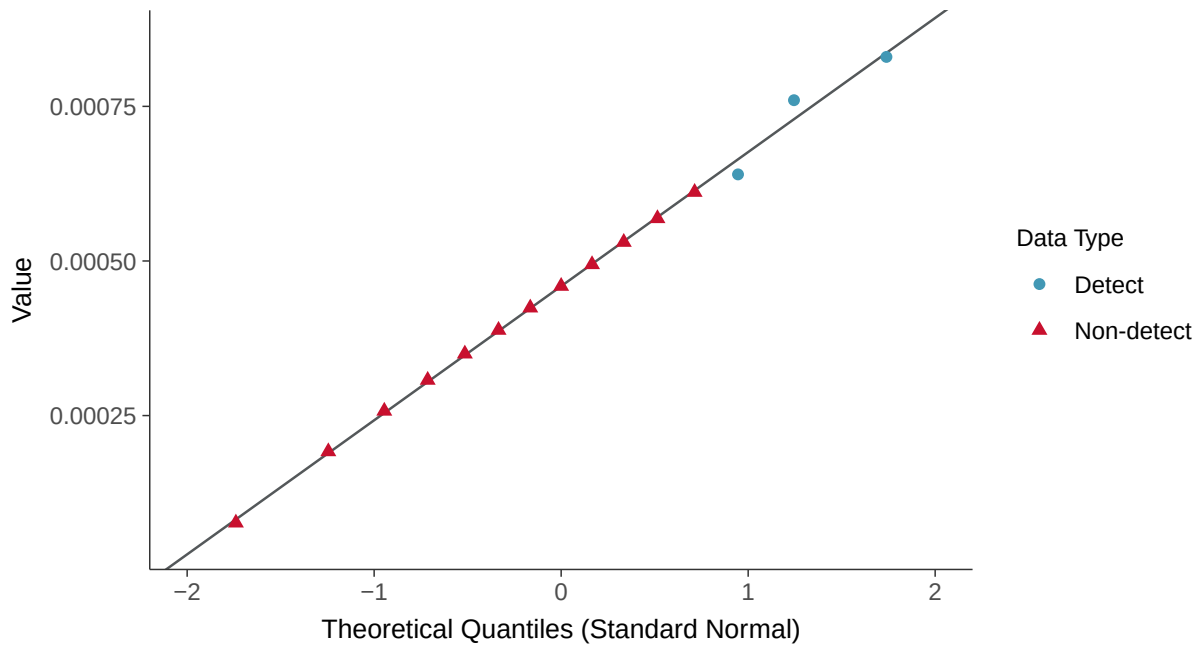
Boxplot by Season

Vanadium, MW-31 (mg/L)



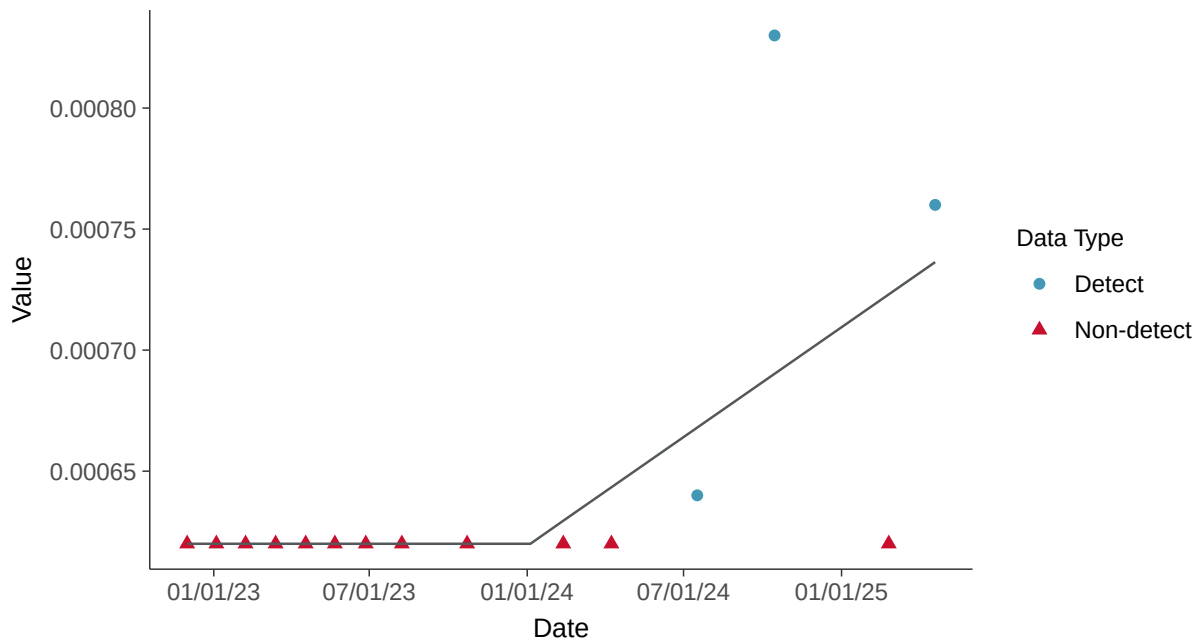
Normal Q-Q plot using ROS Imputed Estimates

Vanadium, MW-31 (mg/L)



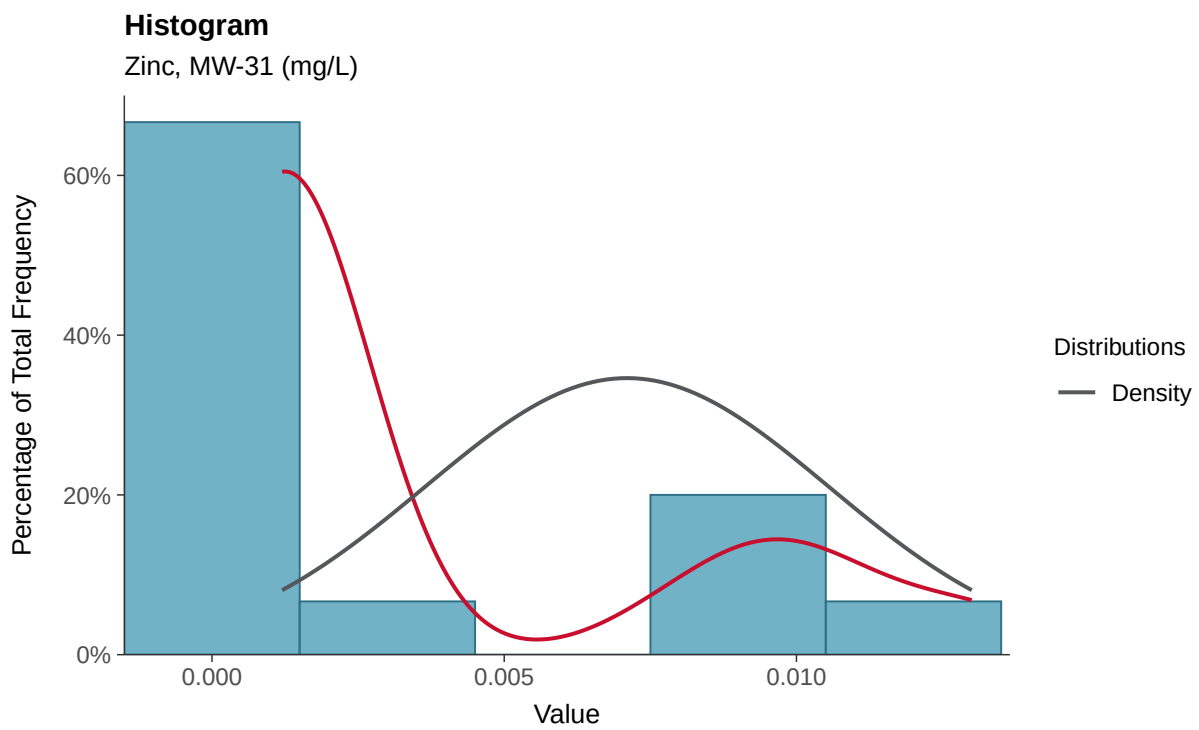
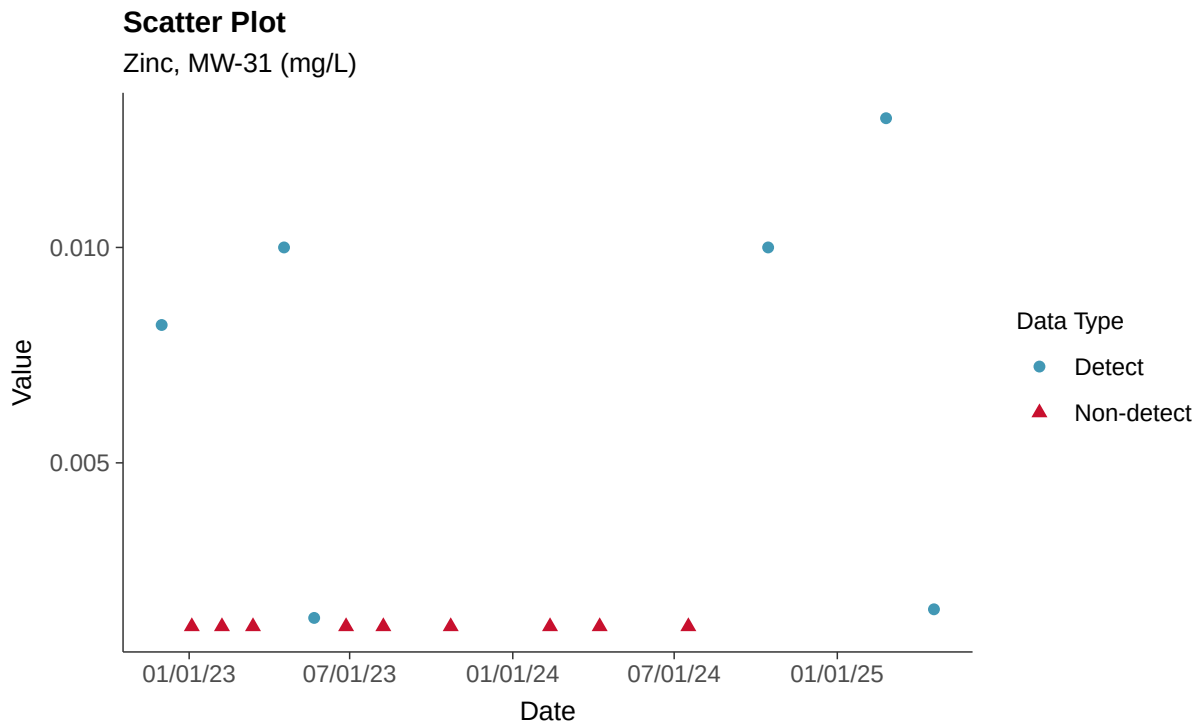
Trend Regression: Piecewise Linear-Linear

Vanadium, MW-31 (mg/L)



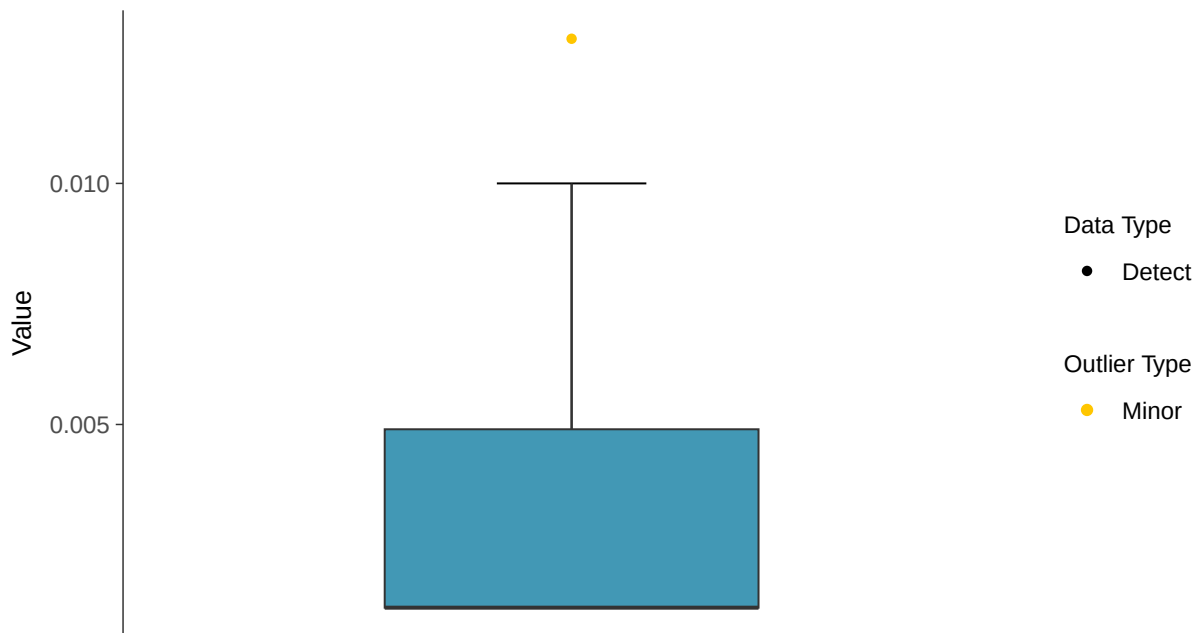
Part 115: Zinc, MW-31

ID: 41_1_5_129



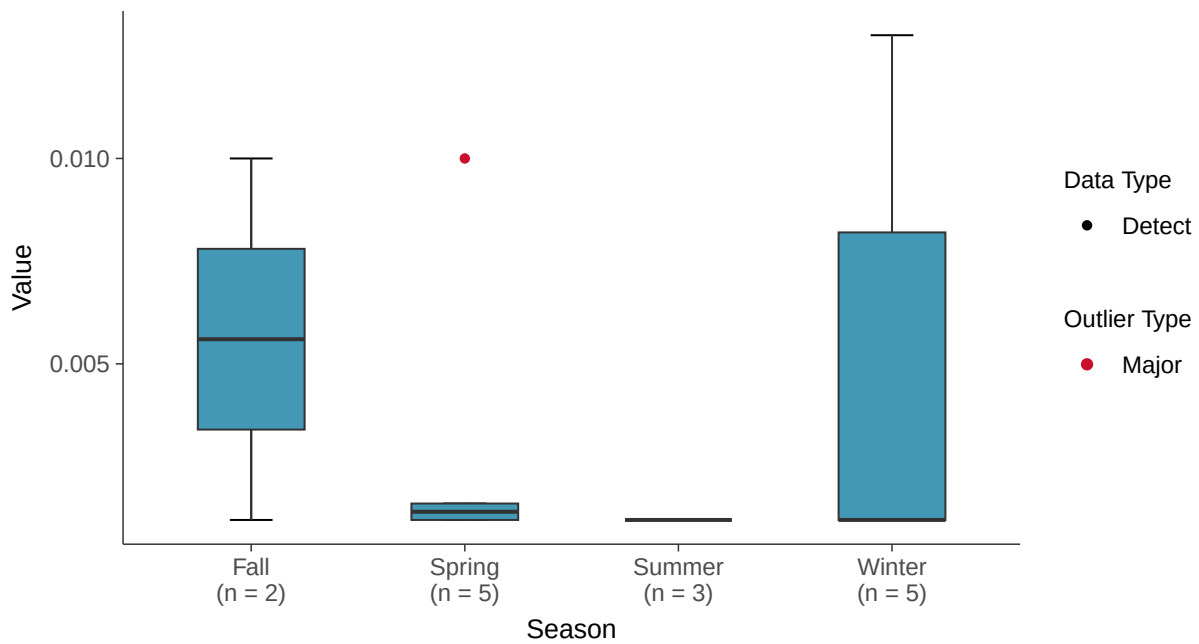
Boxplot

Zinc, MW-31 (mg/L)



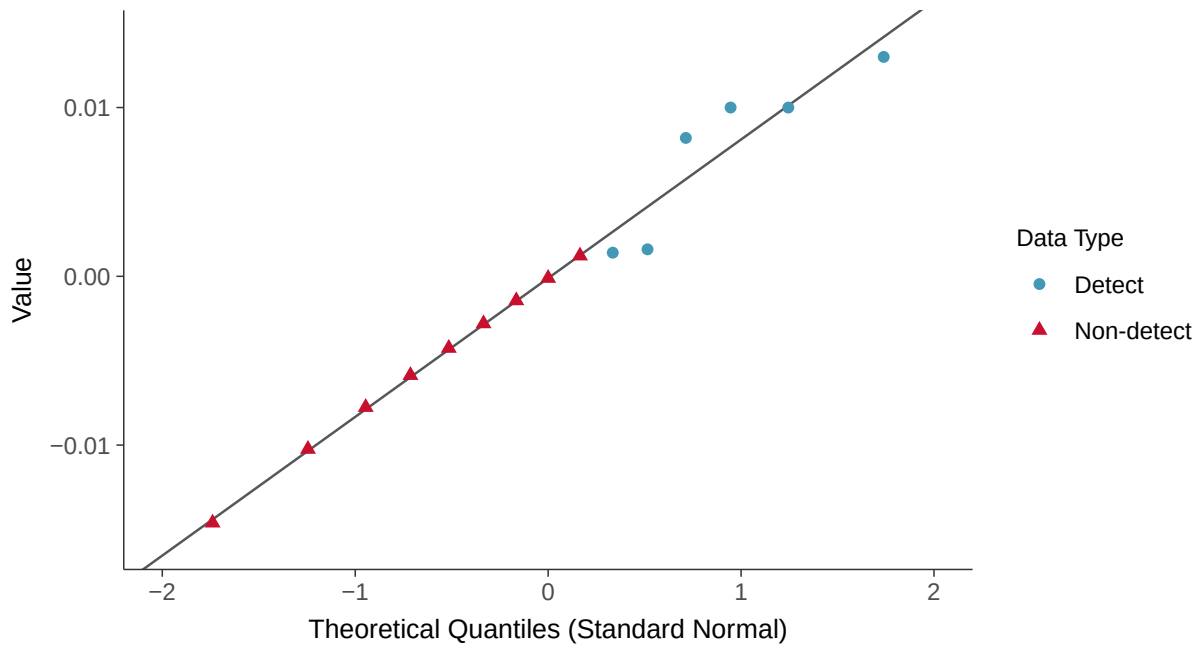
Boxplot by Season

Zinc, MW-31 (mg/L)



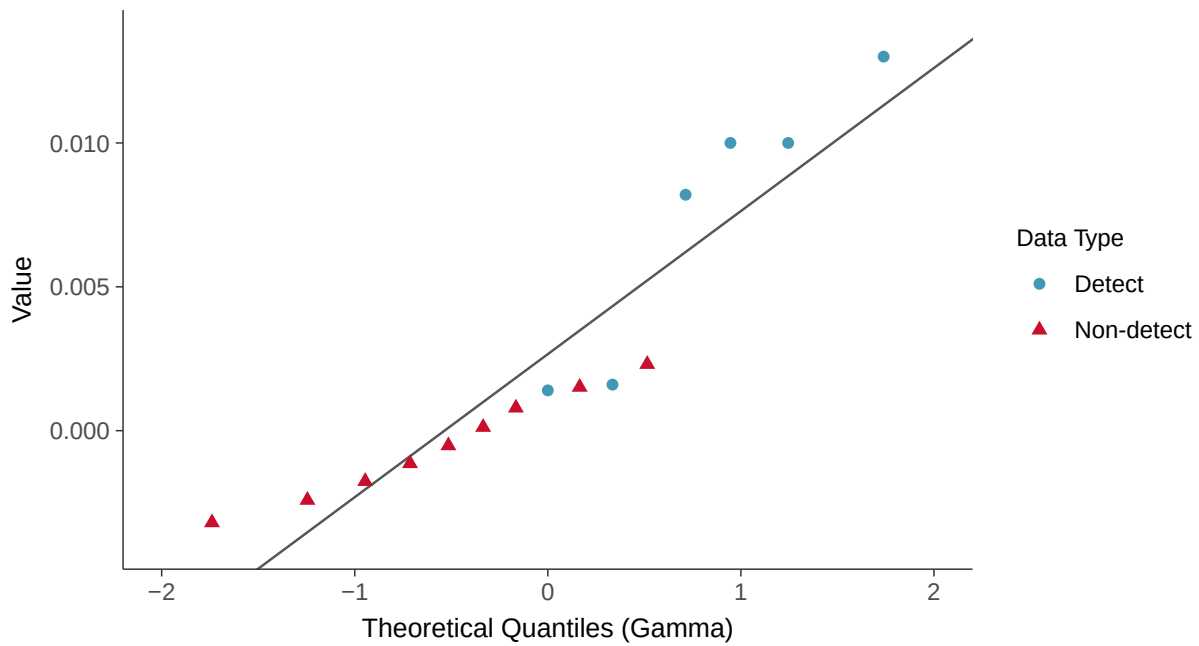
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-31 (mg/L)

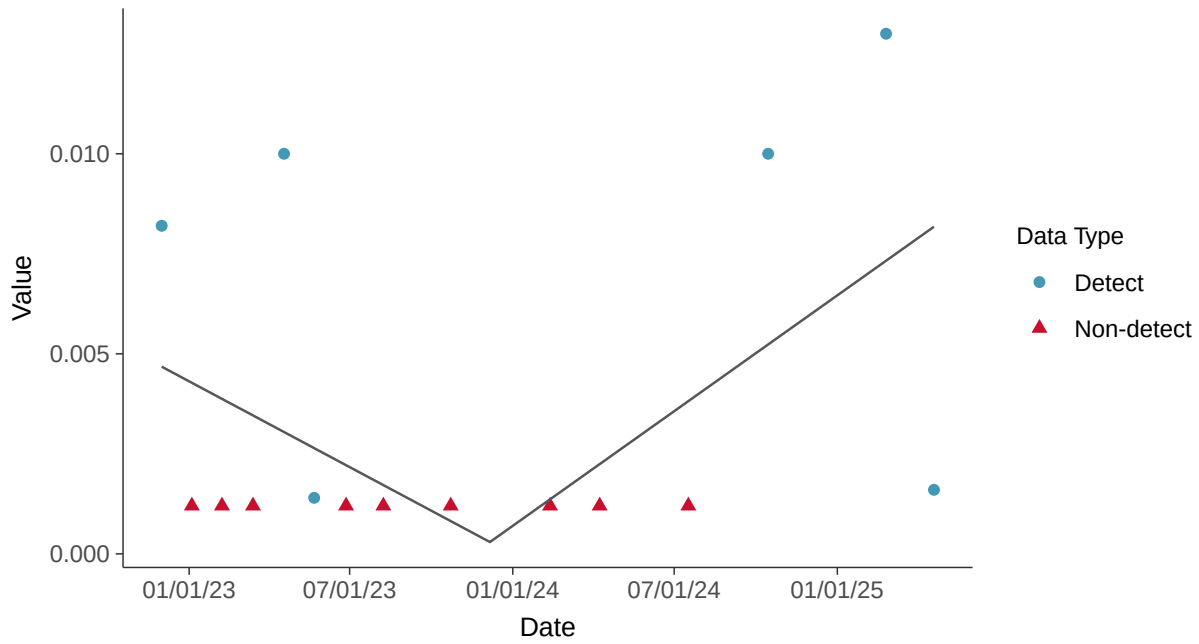


Gamma Q-Q plot using ROS Imputed Estimates

Zinc, MW-31 (mg/L)



Trend Regression: Piecewise Linear-Linear
Zinc, MW-31 (mg/L)

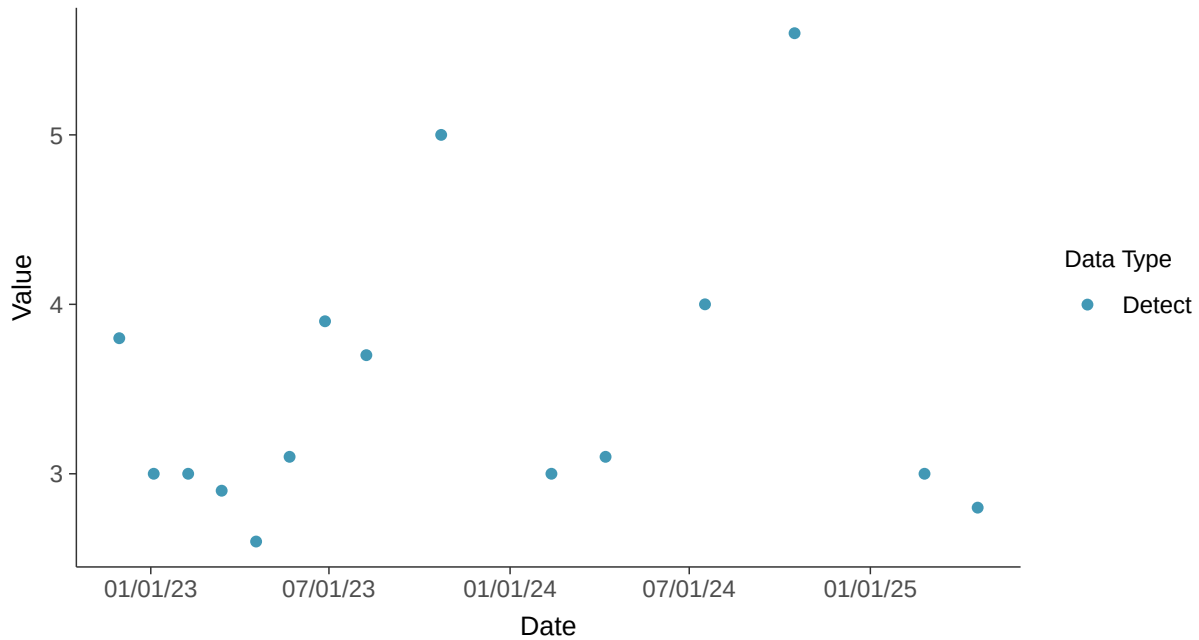


Appendix III: Boron, MW-32

ID: 42_1_3_105

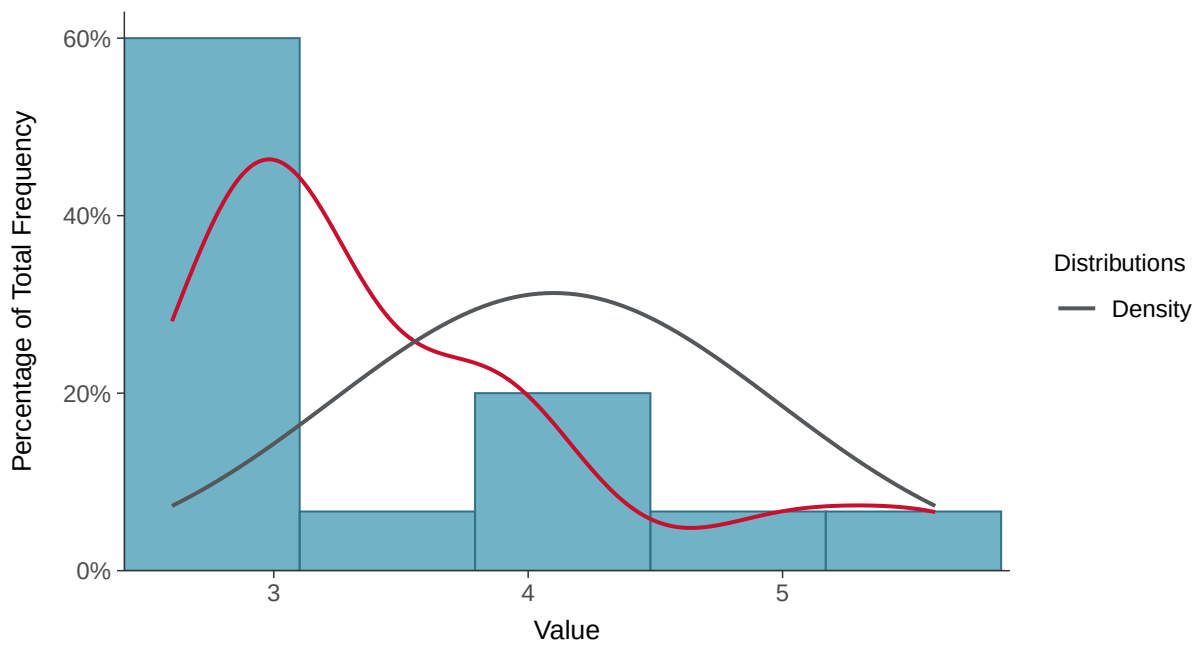
Scatter Plot

Boron, MW-32 (mg/L)



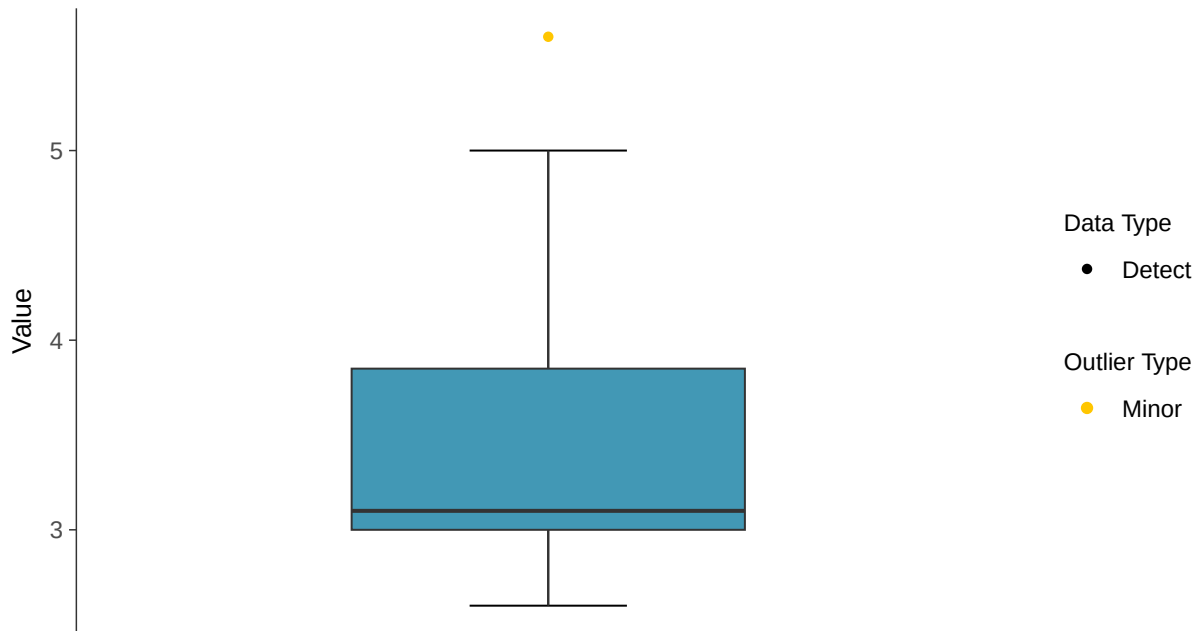
Histogram

Boron, MW-32 (mg/L)



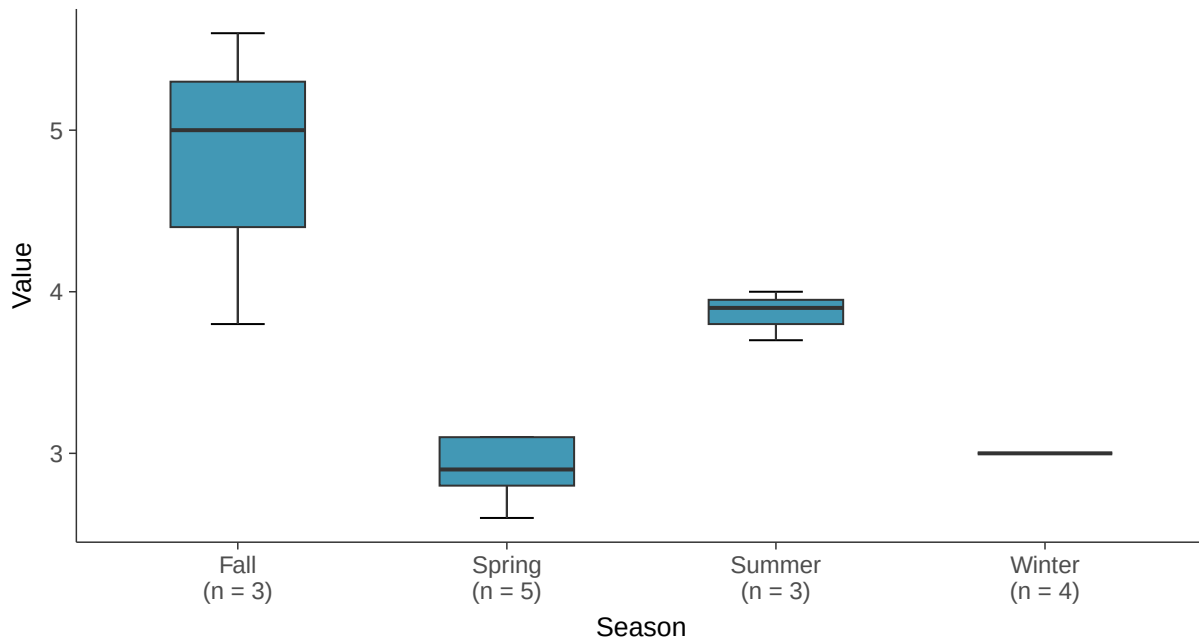
Boxplot

Boron, MW-32 (mg/L)



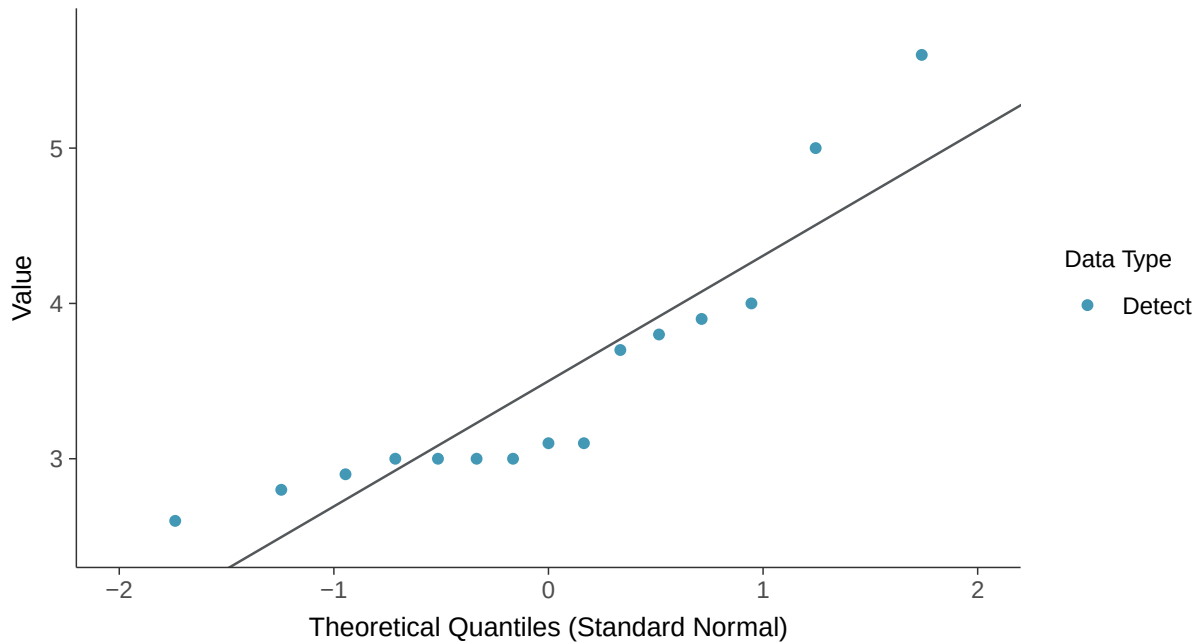
Boxplot by Season

Boron, MW-32 (mg/L)



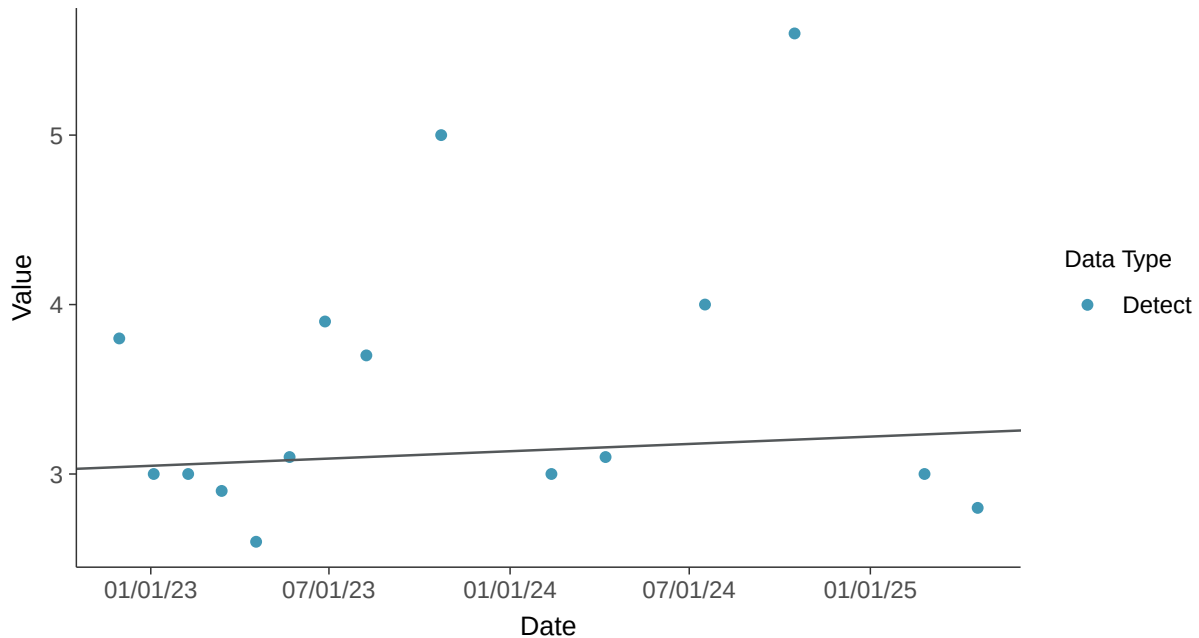
Normal Q-Q plot

Boron, MW-32 (mg/L)



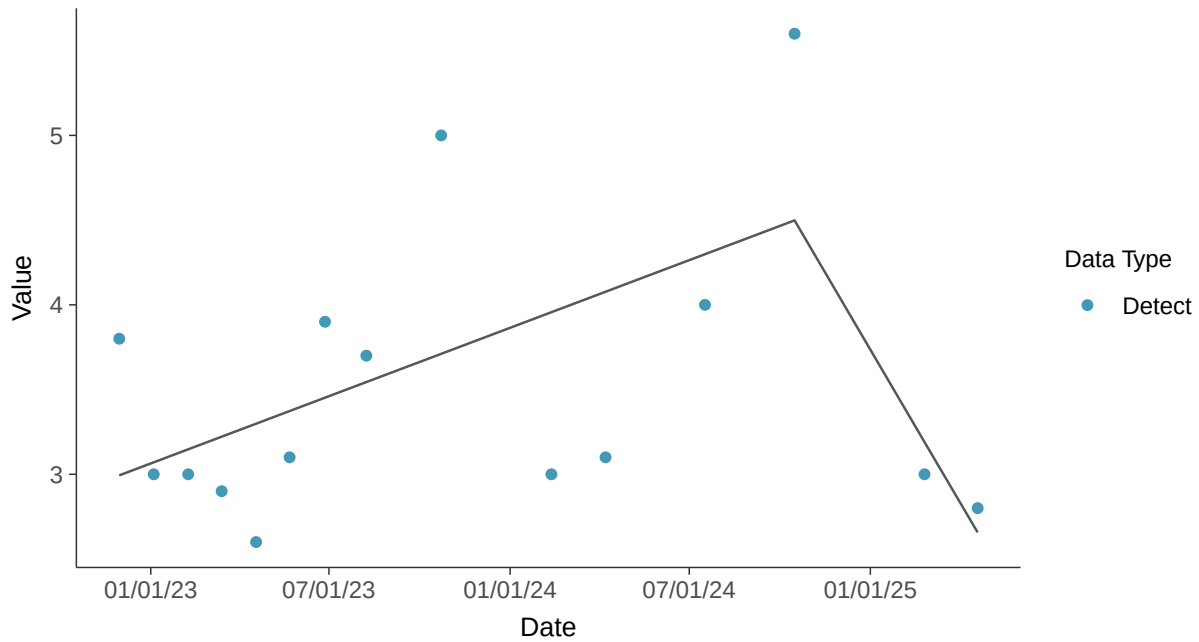
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Boron, MW-32 (mg/L)



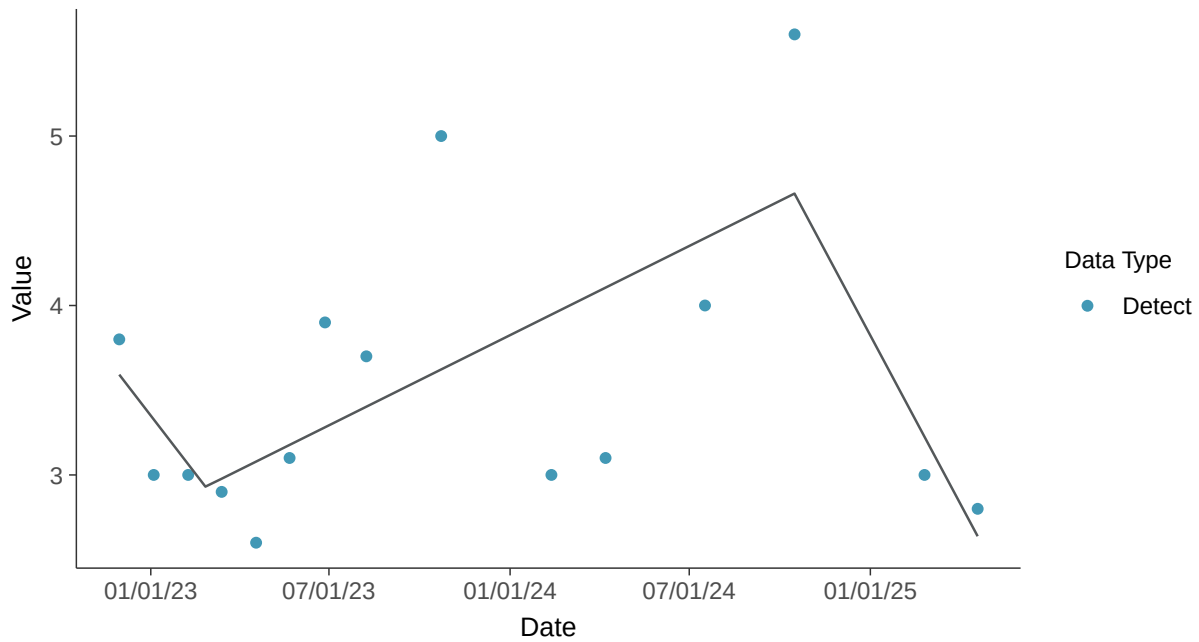
Trend Regression: Piecewise Linear-Linear

Boron, MW-32 (mg/L)



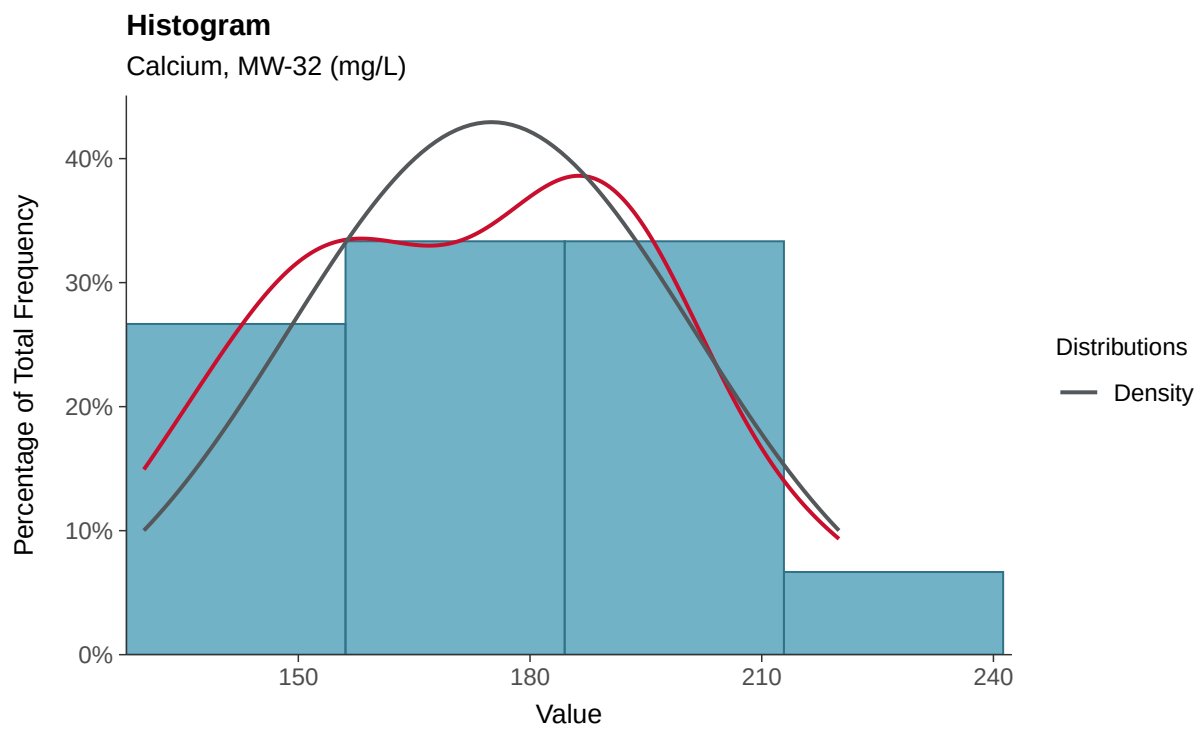
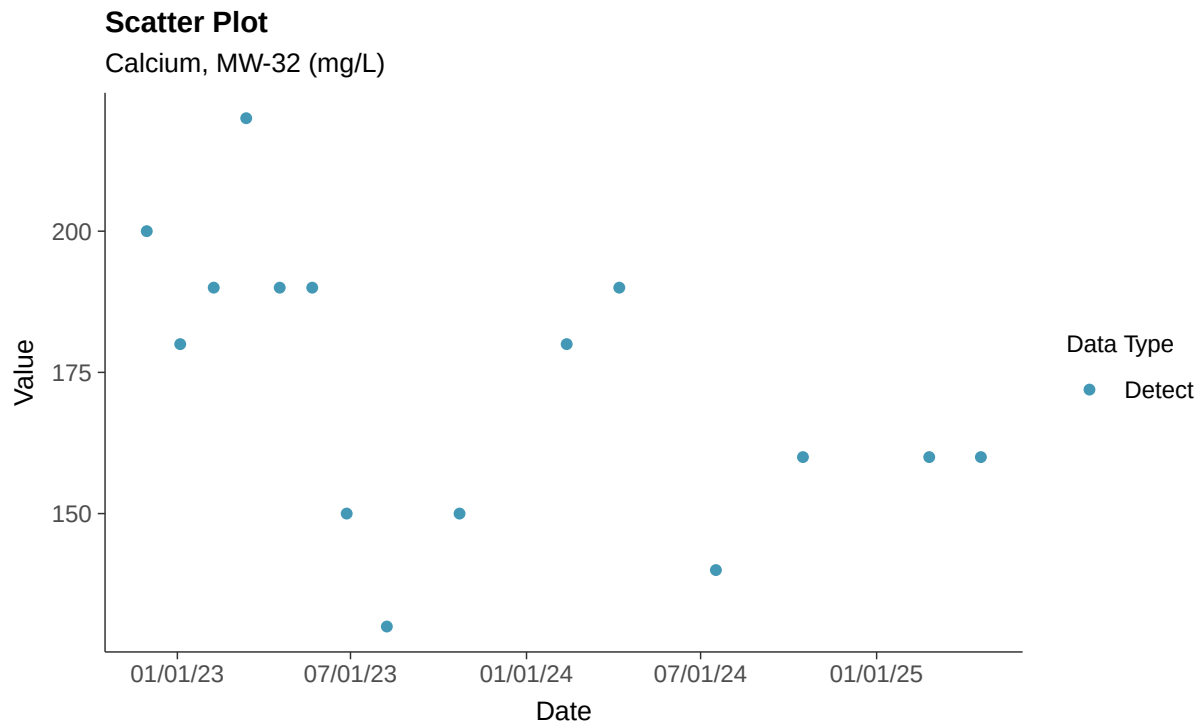
Trend Regression: Piecewise Linear-Linear-Linear

Boron, MW-32 (mg/L)



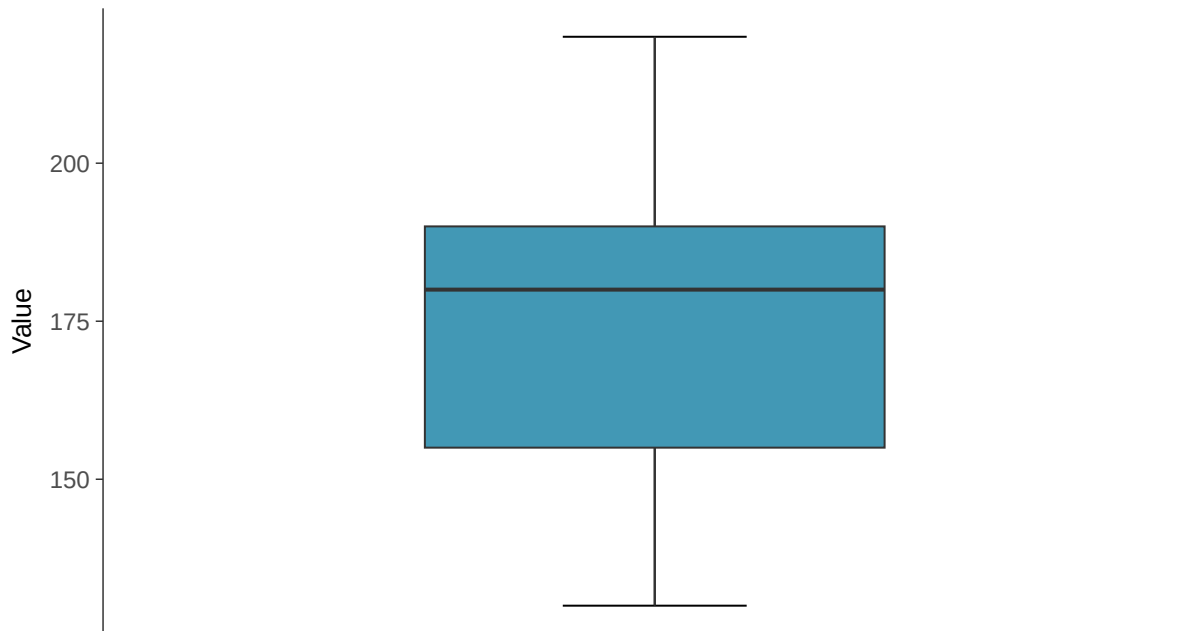
Appendix III: Calcium, MW-32

ID: 42_1_3_107



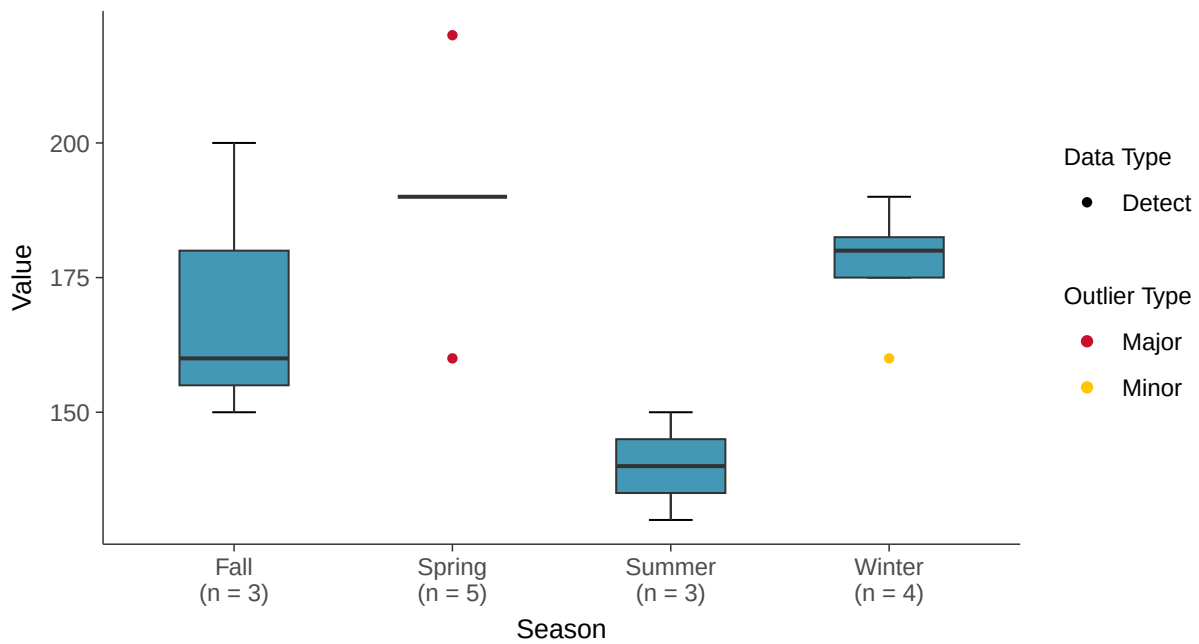
Boxplot

Calcium, MW-32 (mg/L)



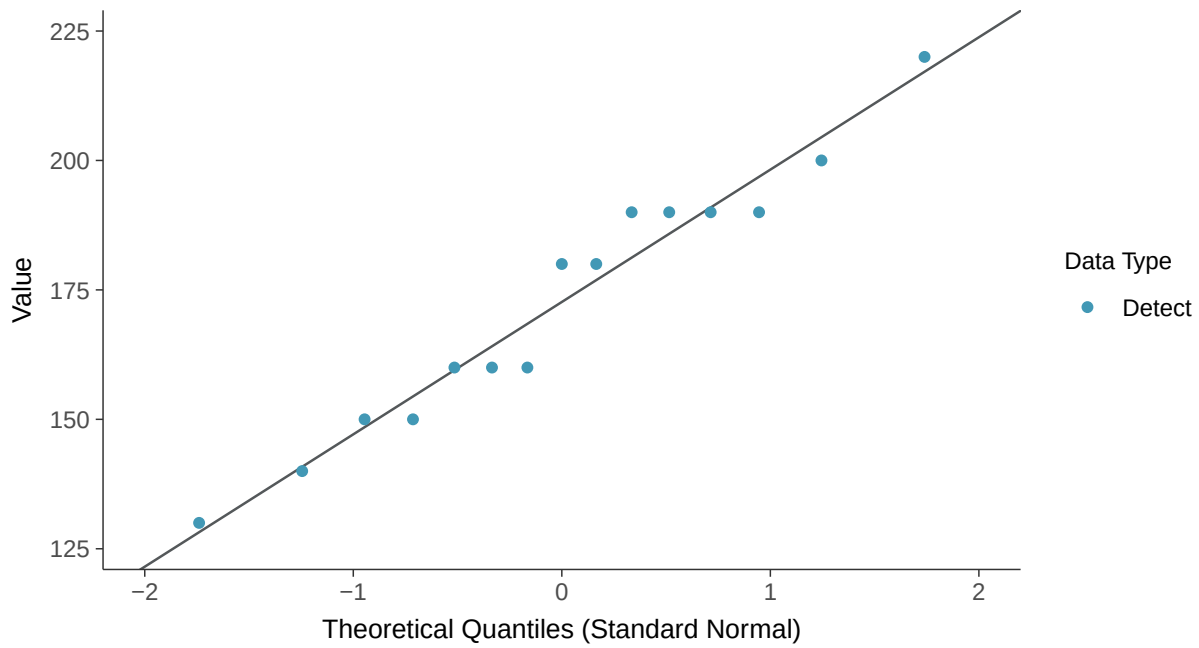
Boxplot by Season

Calcium, MW-32 (mg/L)



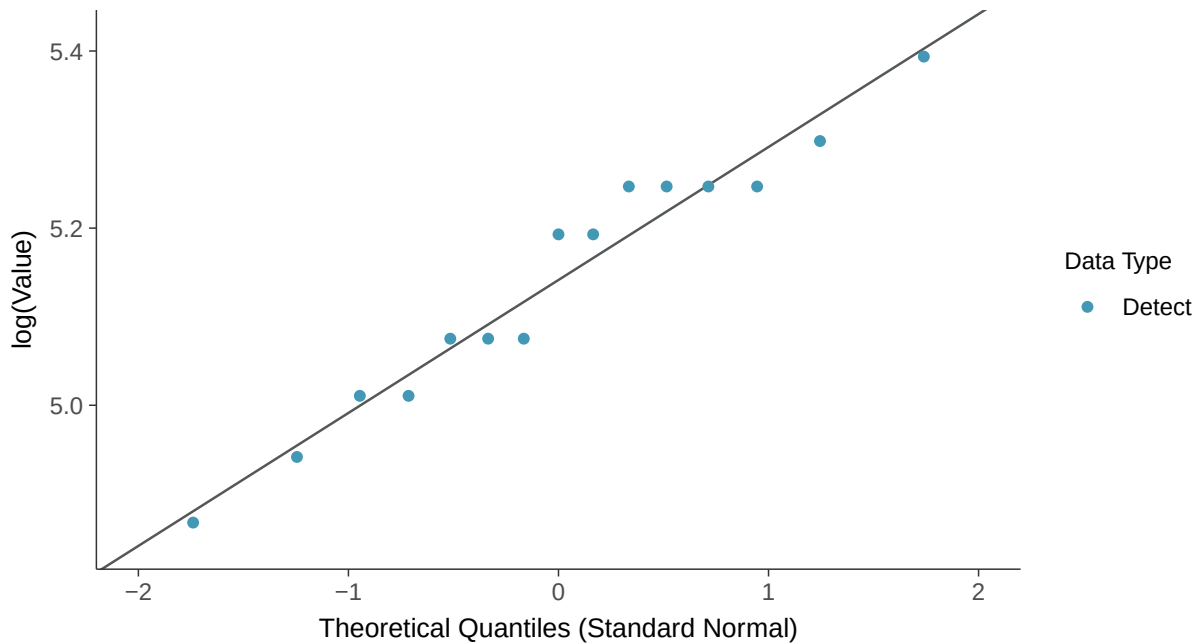
Normal Q-Q plot

Calcium, MW-32 (mg/L)



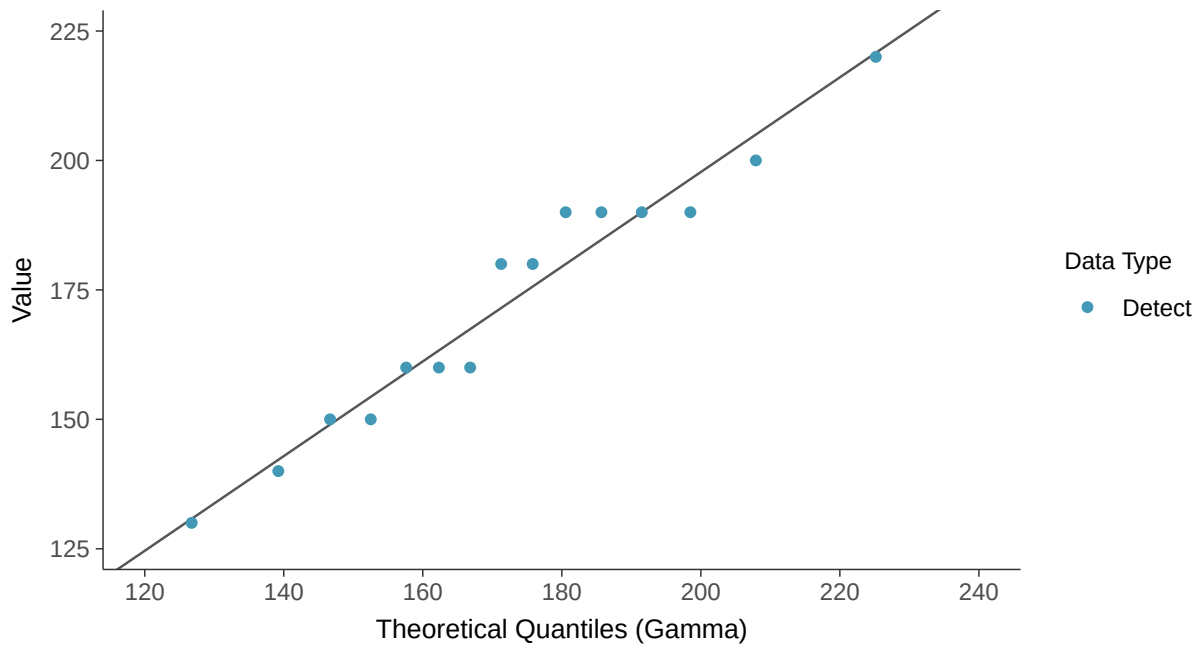
Lognormal Q-Q plot

Calcium, MW-32 (mg/L)



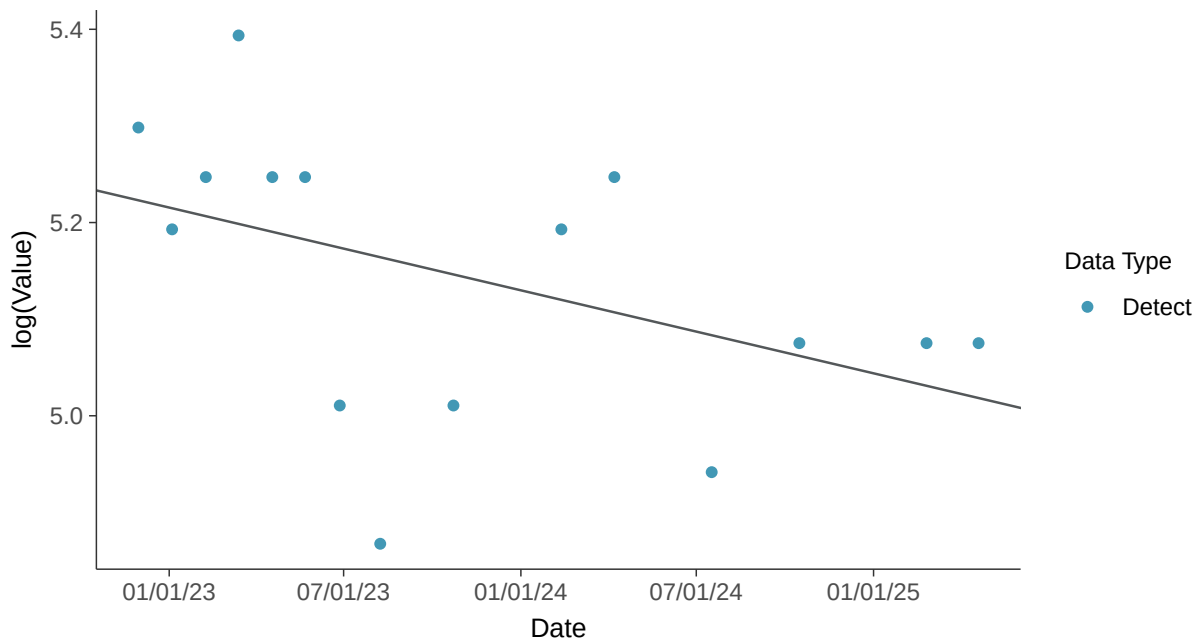
Gamma Q-Q plot

Calcium, MW-32 (mg/L)



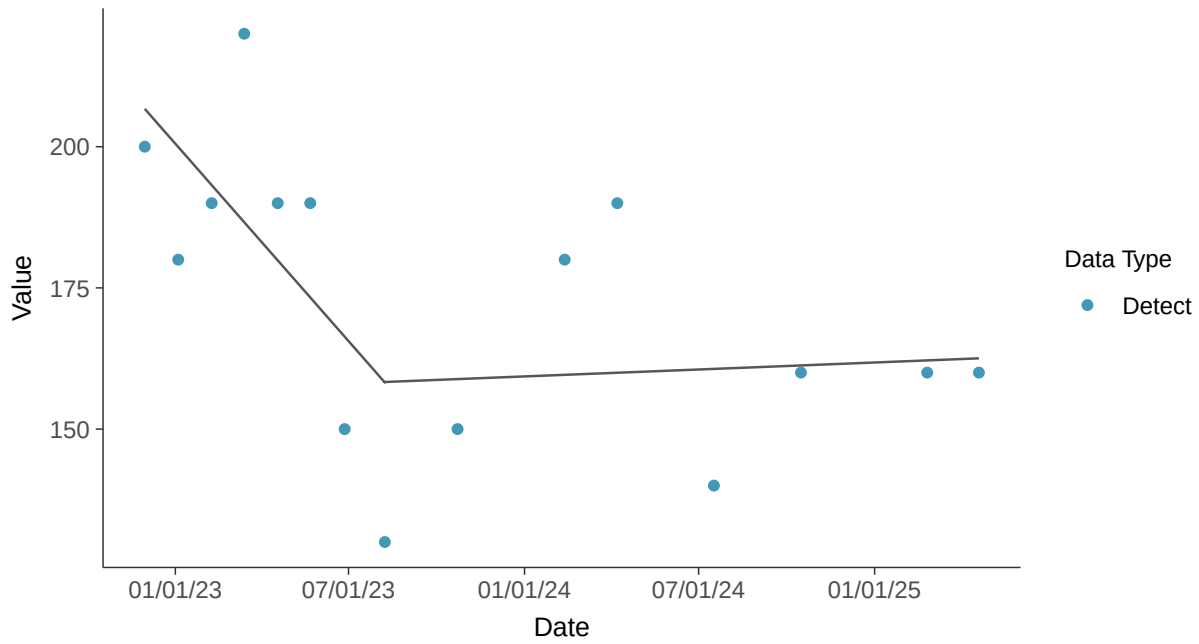
Trend Regression: Lognormal MLE

Calcium, MW-32 (mg/L)



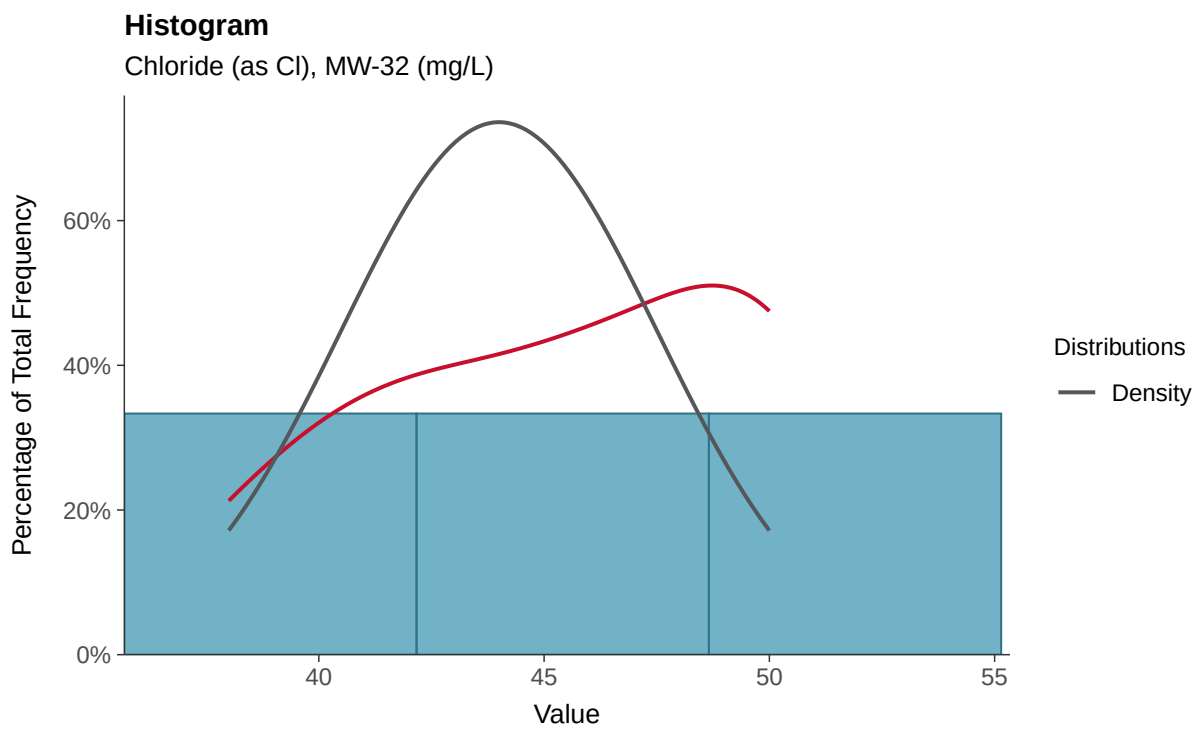
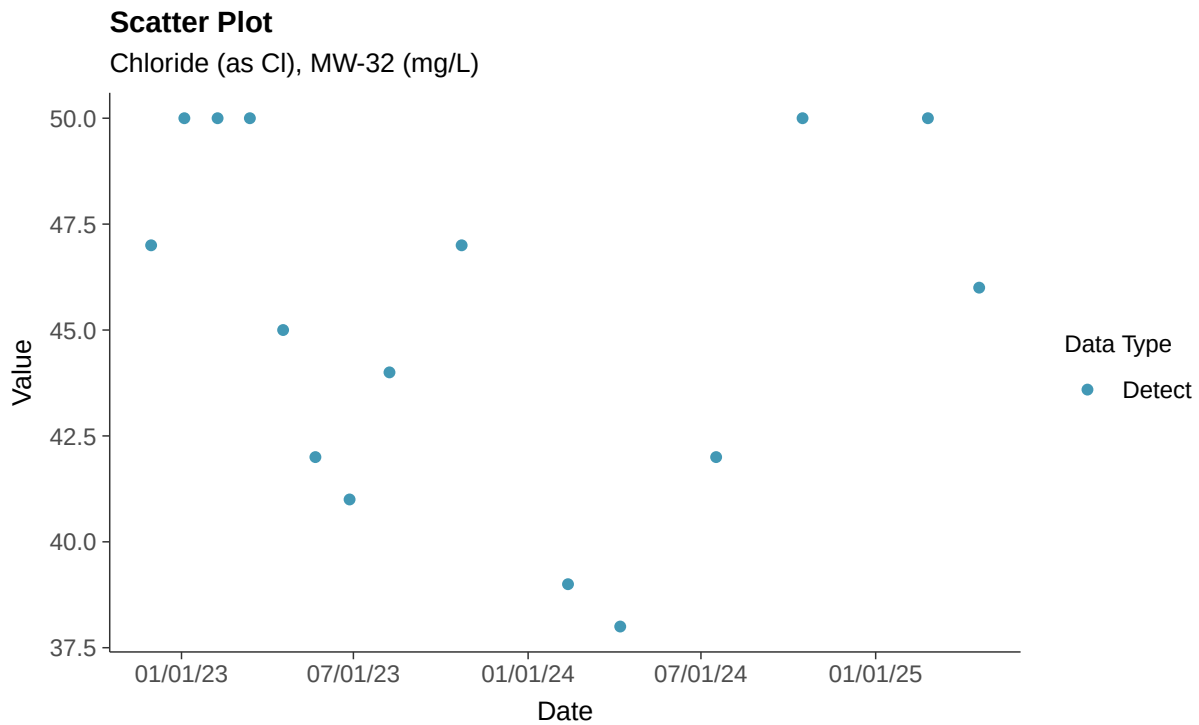


Trend Regression: Piecewise Linear-Linear
Calcium, MW-32 (mg/L)



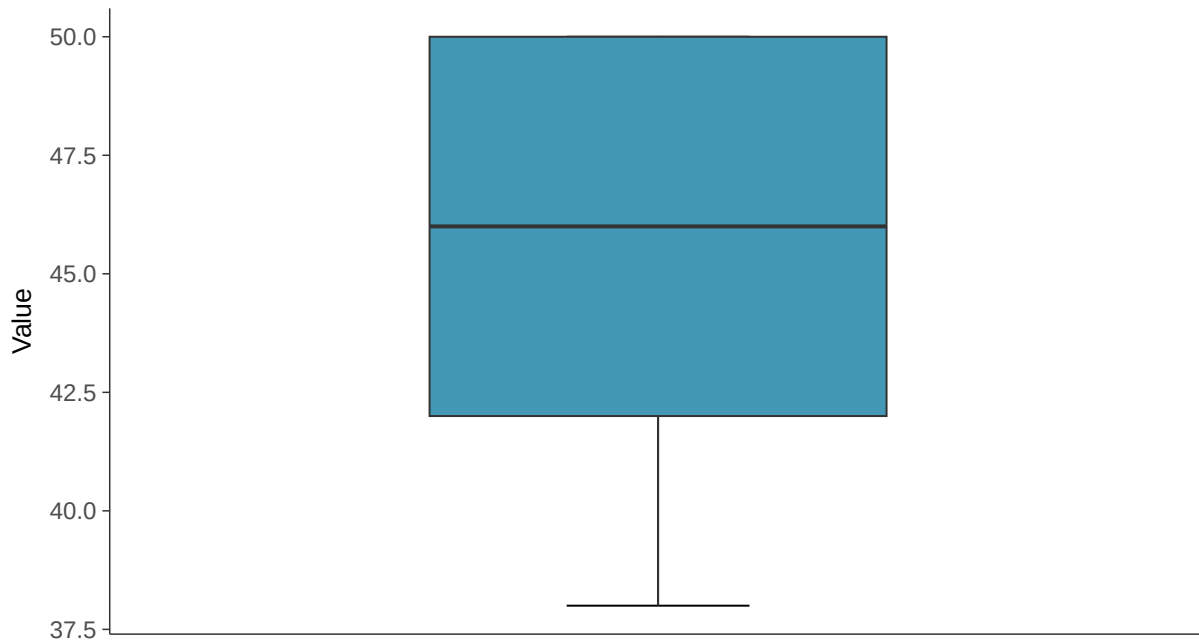
Appendix III: Chloride (as Cl), MW-32

ID: 42_1_3_108



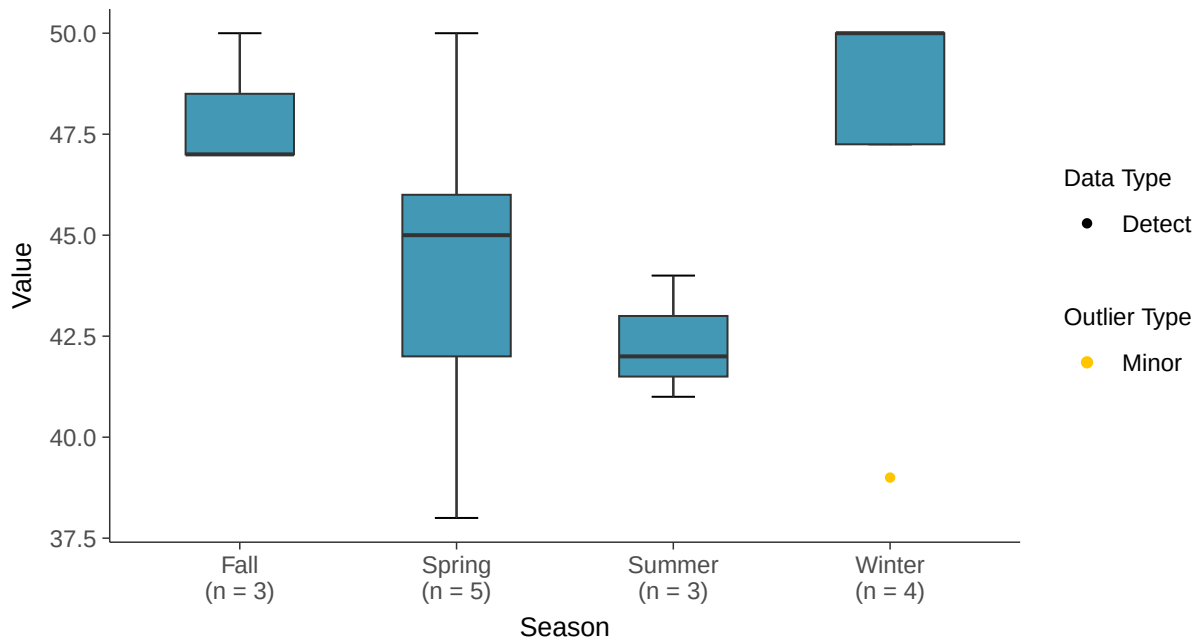
Boxplot

Chloride (as Cl), MW-32 (mg/L)



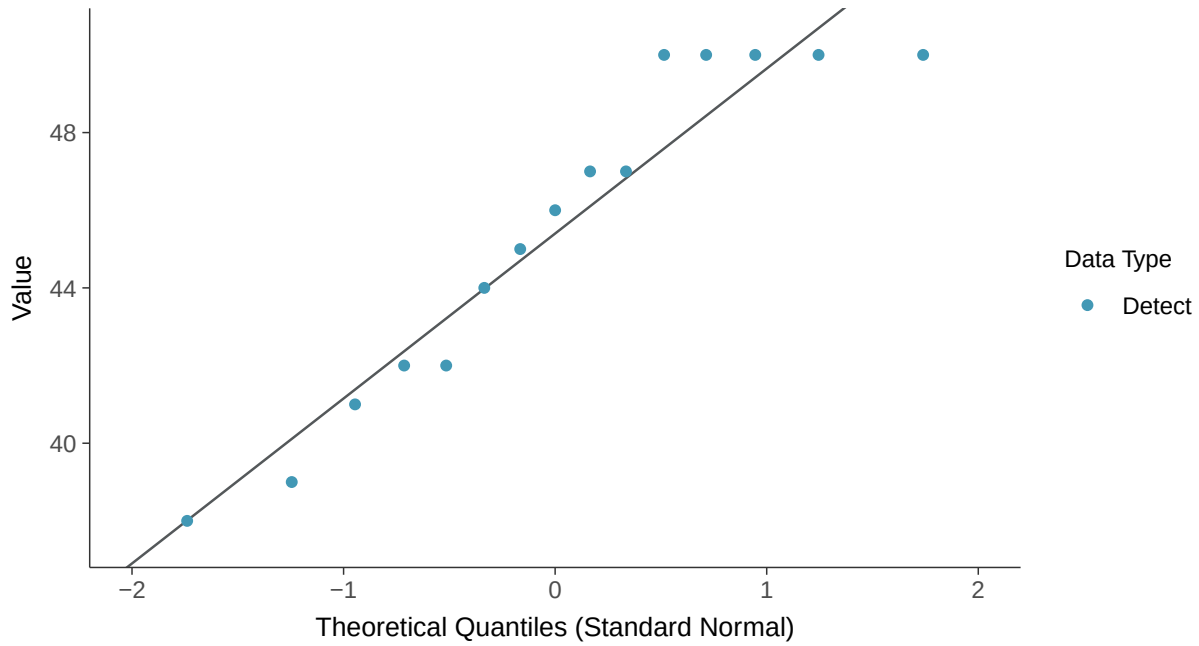
Boxplot by Season

Chloride (as Cl), MW-32 (mg/L)



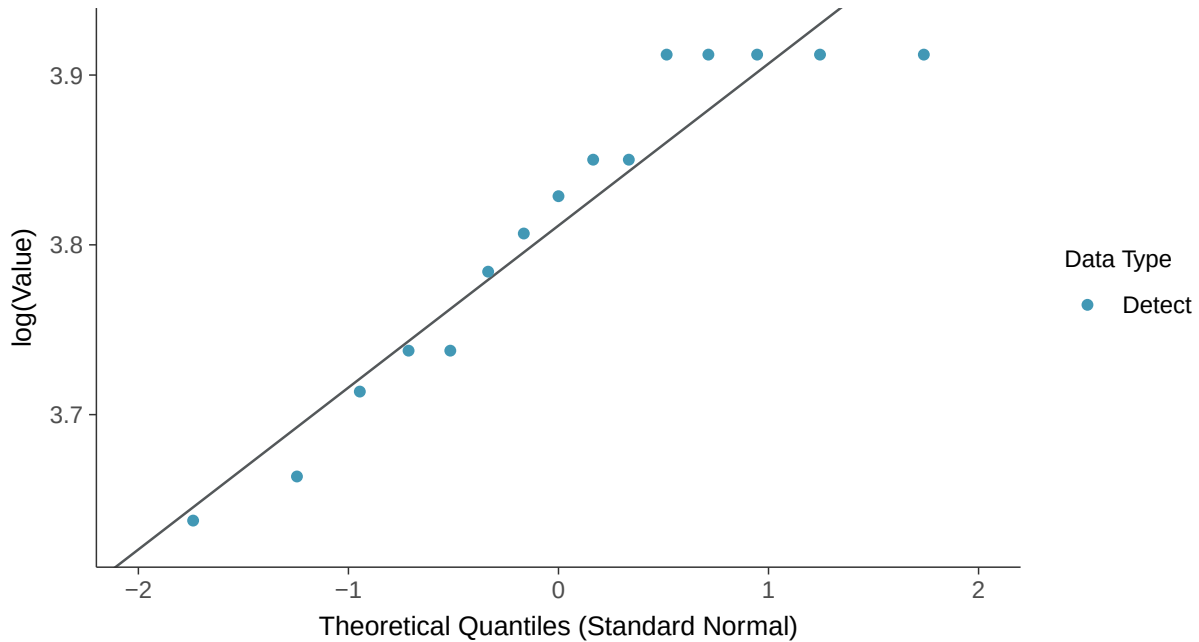
Normal Q-Q plot

Chloride (as Cl), MW-32 (mg/L)



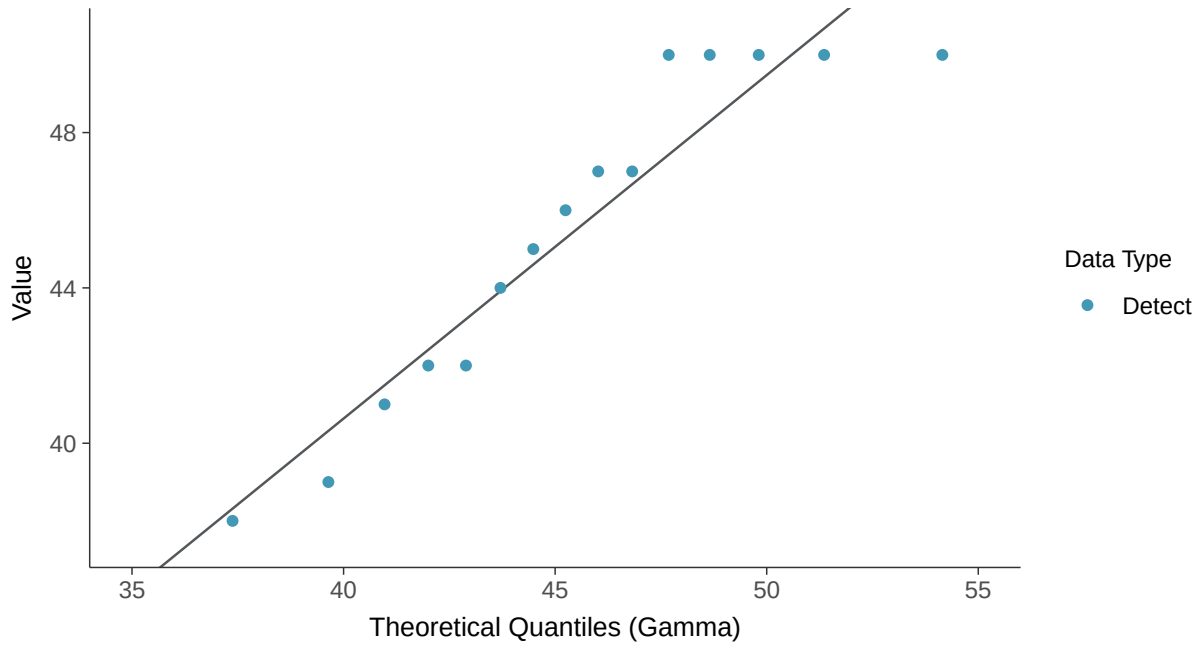
Lognormal Q-Q plot

Chloride (as Cl), MW-32 (mg/L)



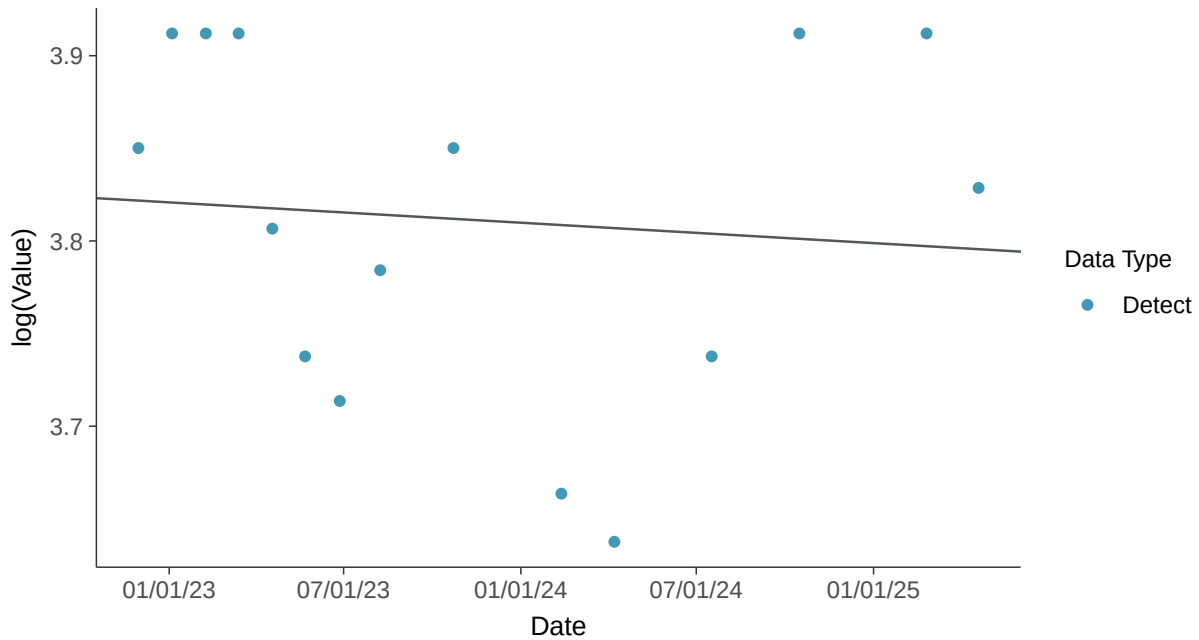
Gamma Q-Q plot

Chloride (as Cl), MW-32 (mg/L)



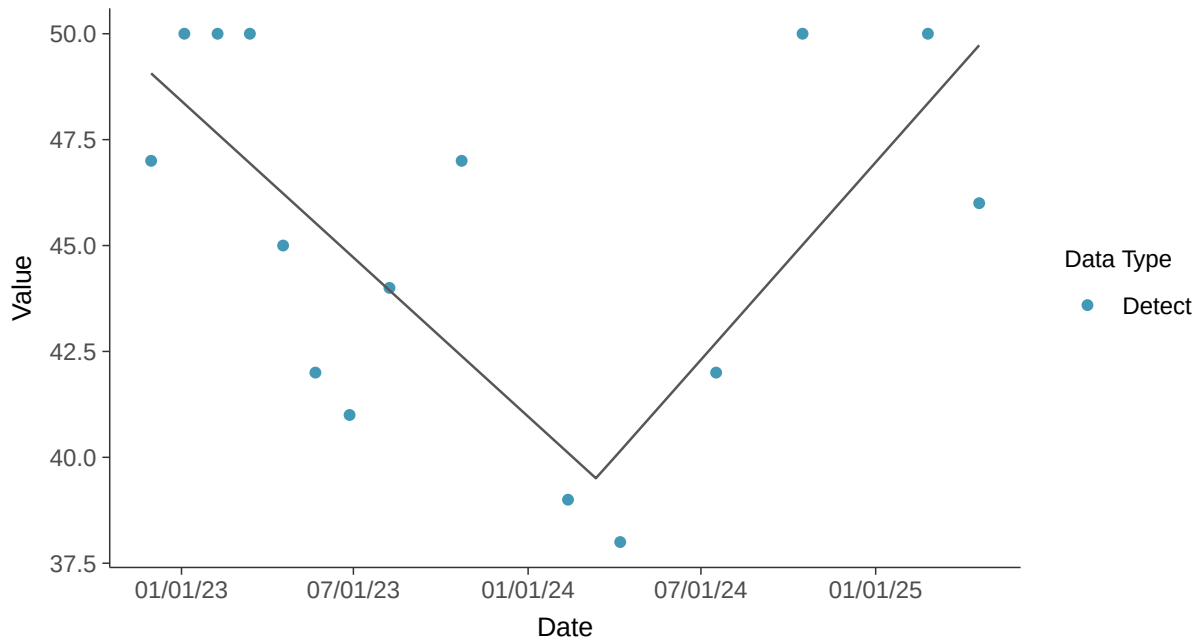
Trend Regression: Lognormal MLE

Chloride (as Cl), MW-32 (mg/L)



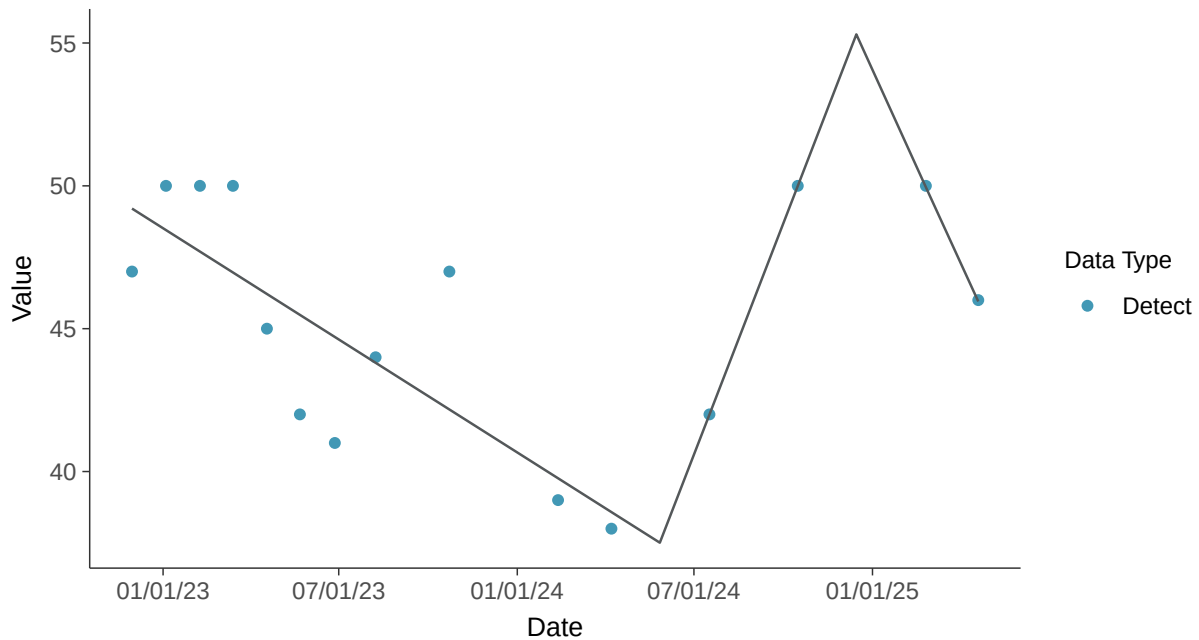
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-32 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Chloride (as Cl), MW-32 (mg/L)

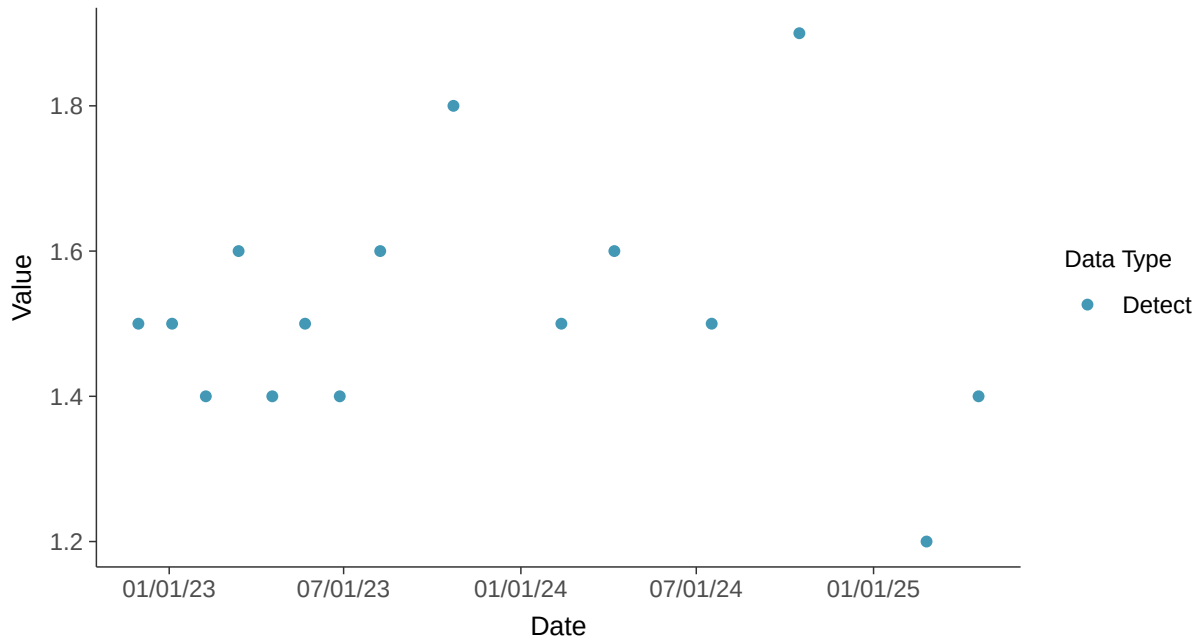


Appendix III: Fluoride, MW-32

ID: 42_1_3_112

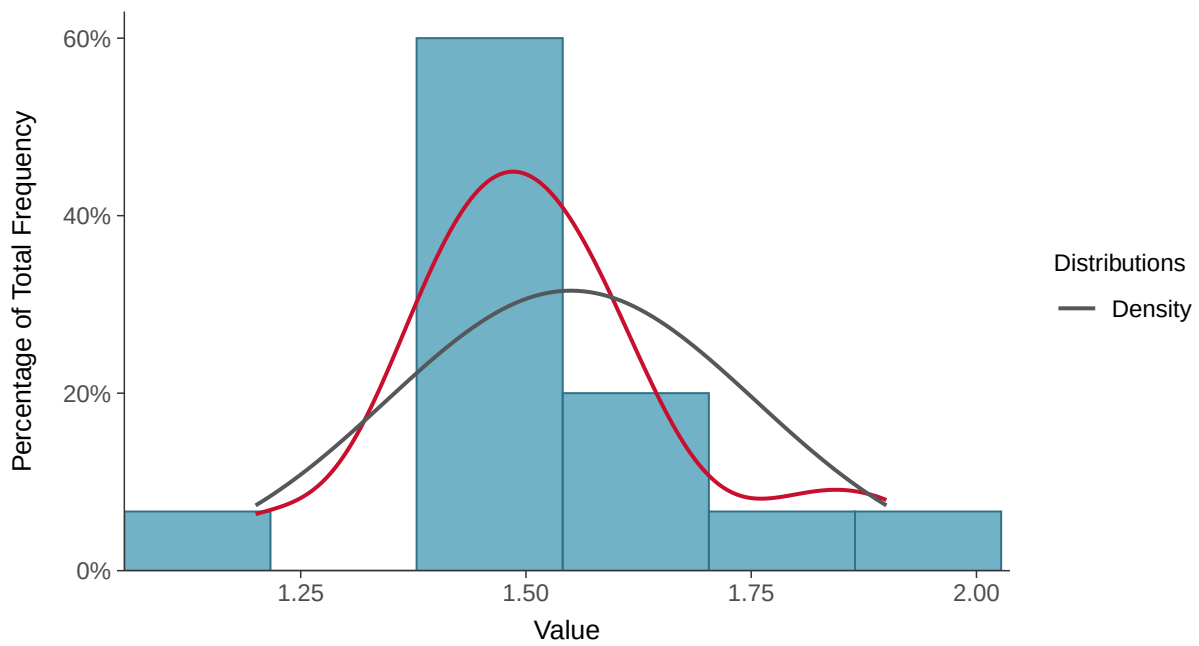
Scatter Plot

Fluoride, MW-32 (mg/L)



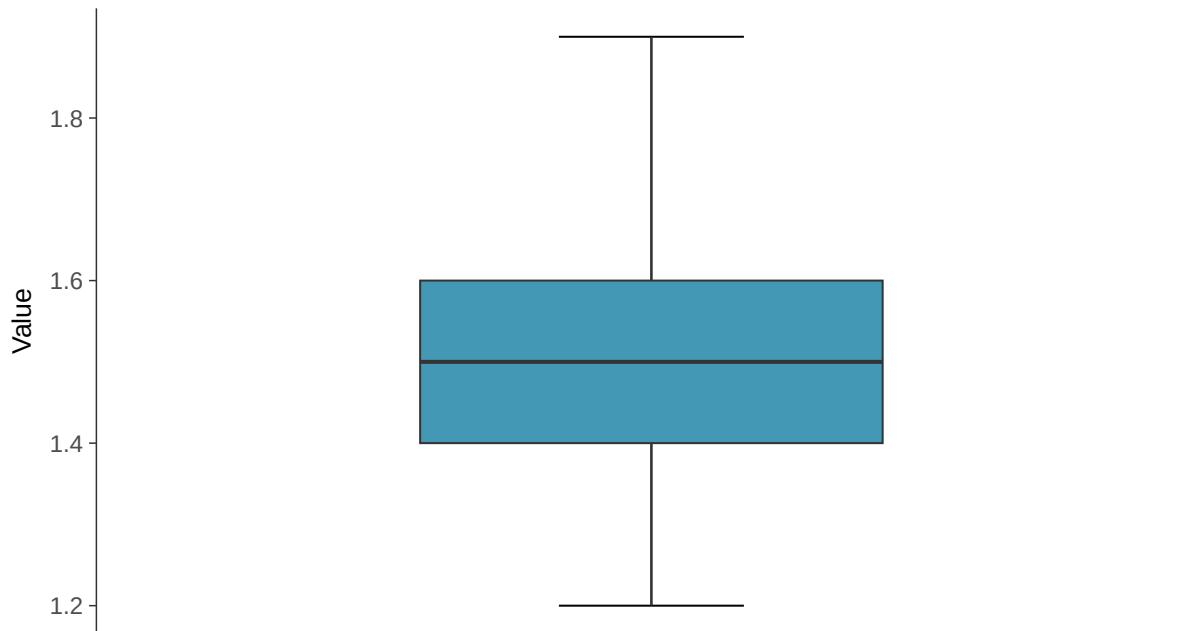
Histogram

Fluoride, MW-32 (mg/L)



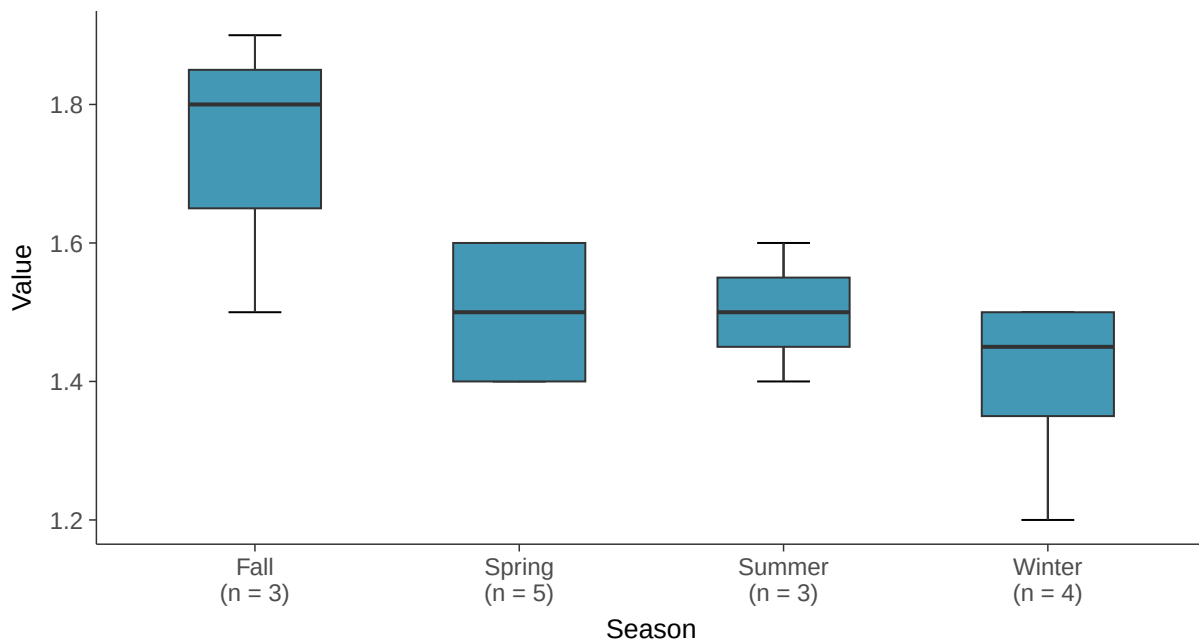
Boxplot

Fluoride, MW-32 (mg/L)



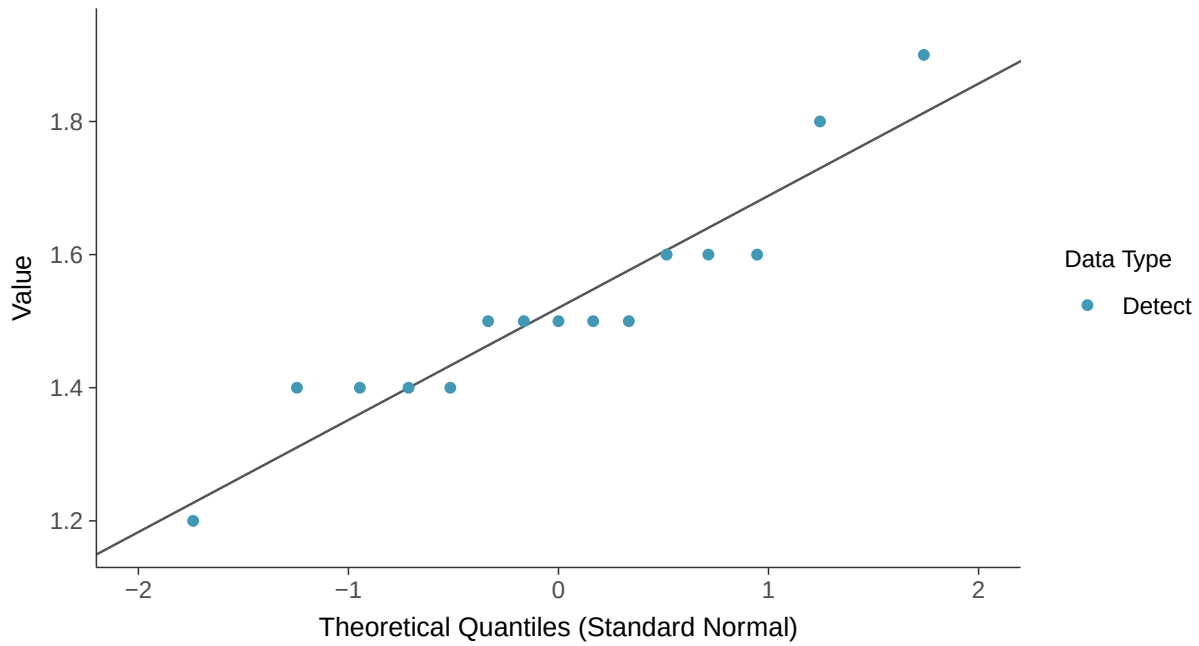
Boxplot by Season

Fluoride, MW-32 (mg/L)



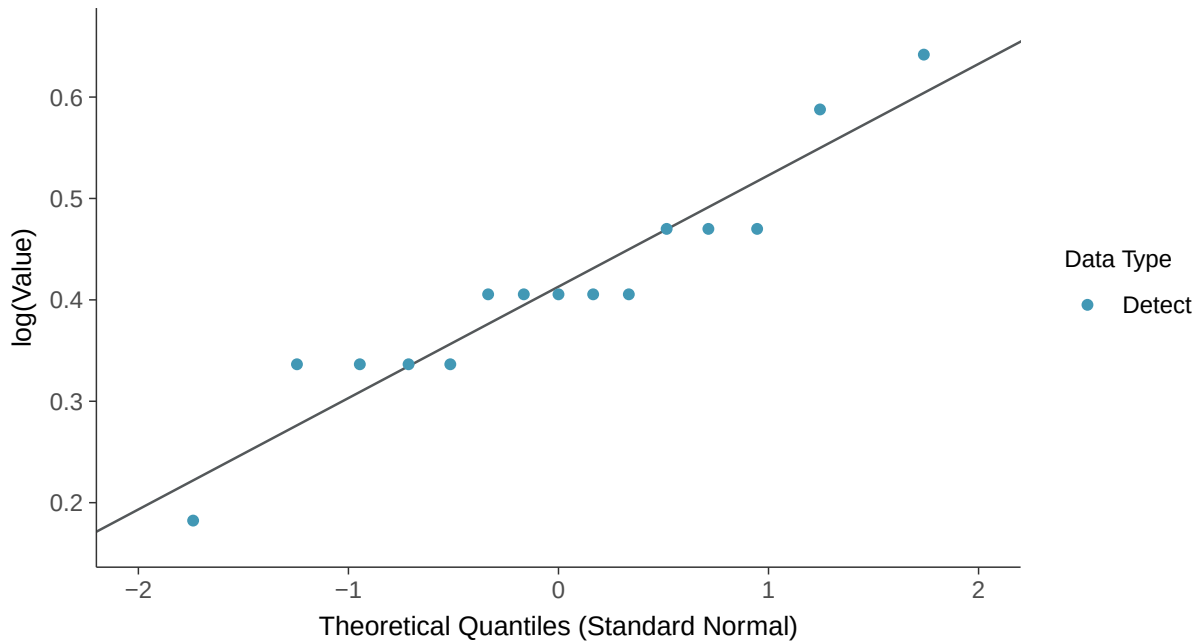
Normal Q-Q plot

Fluoride, MW-32 (mg/L)



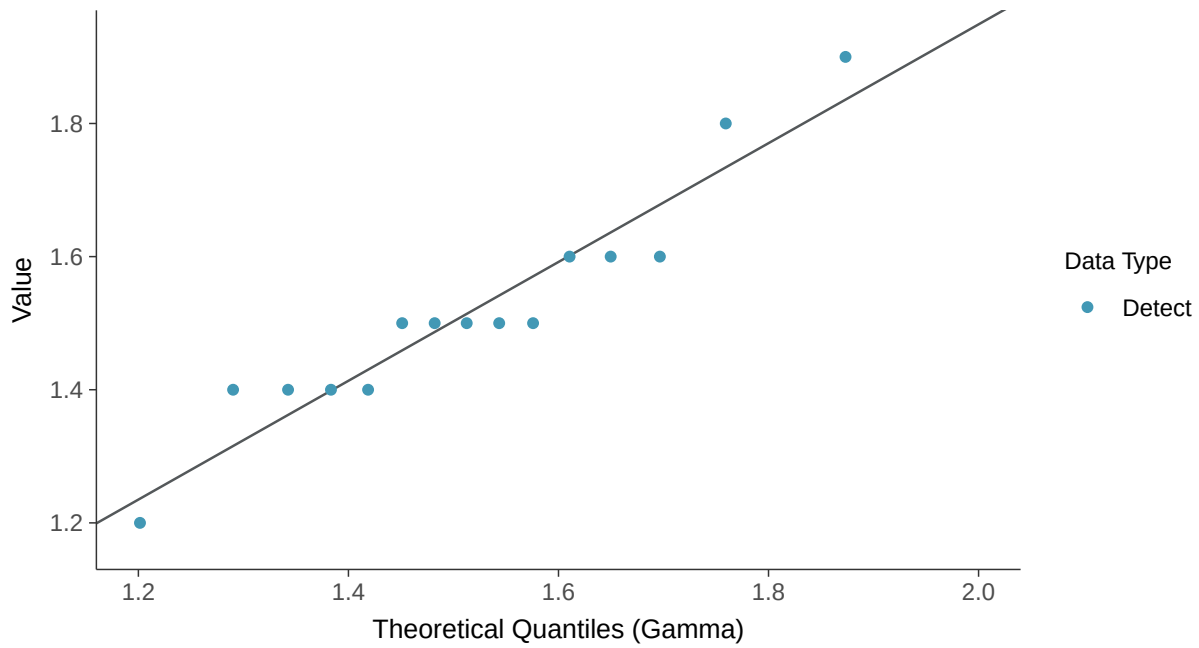
Lognormal Q-Q plot

Fluoride, MW-32 (mg/L)



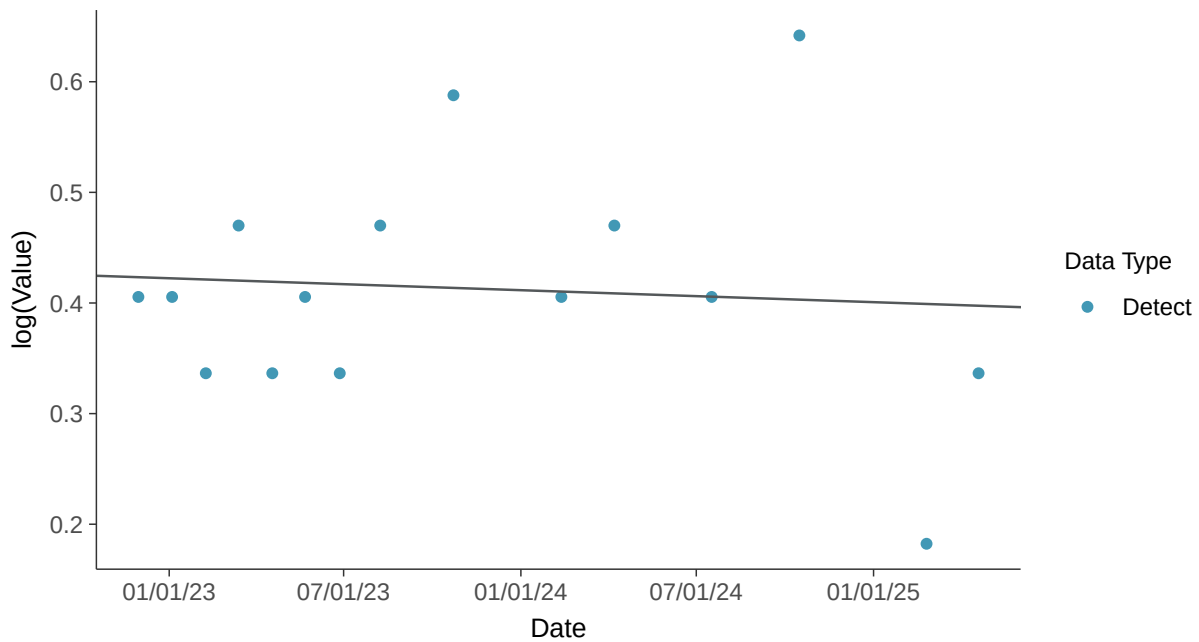
Gamma Q-Q plot

Fluoride, MW-32 (mg/L)



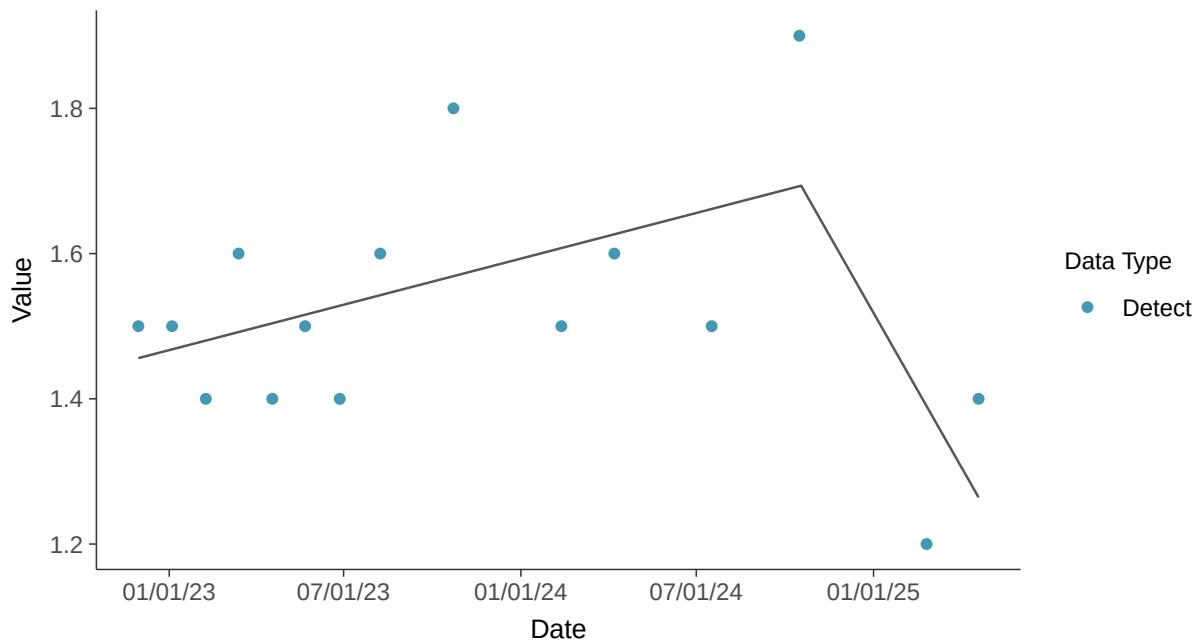
Trend Regression: Lognormal MLE

Fluoride, MW-32 (mg/L)



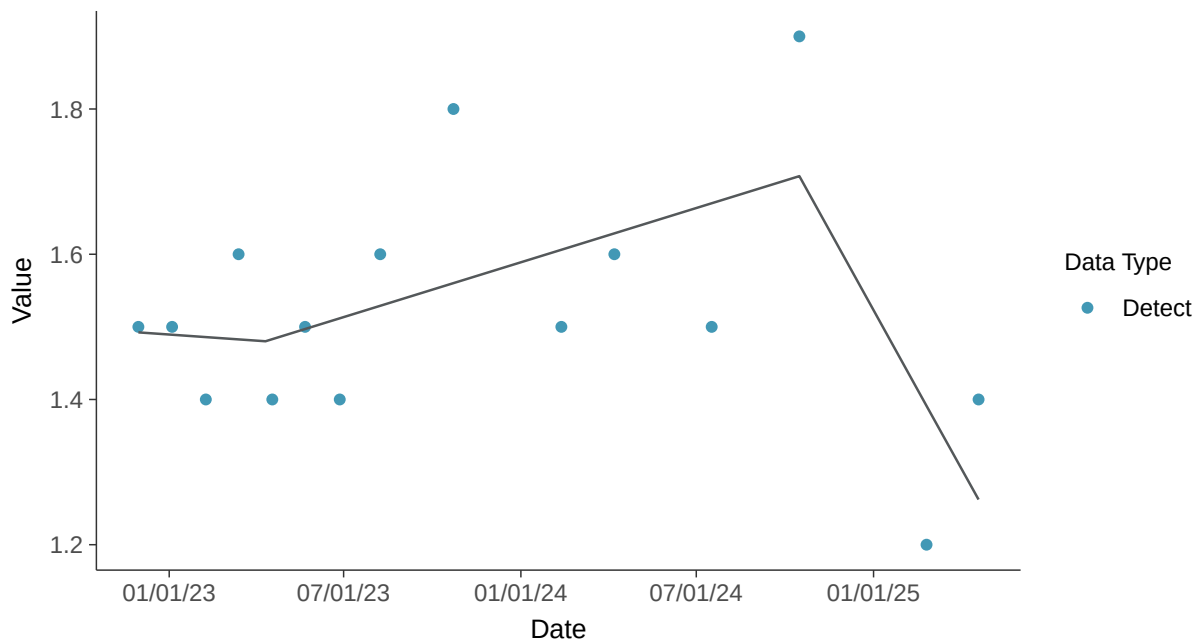
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-32 (mg/L)



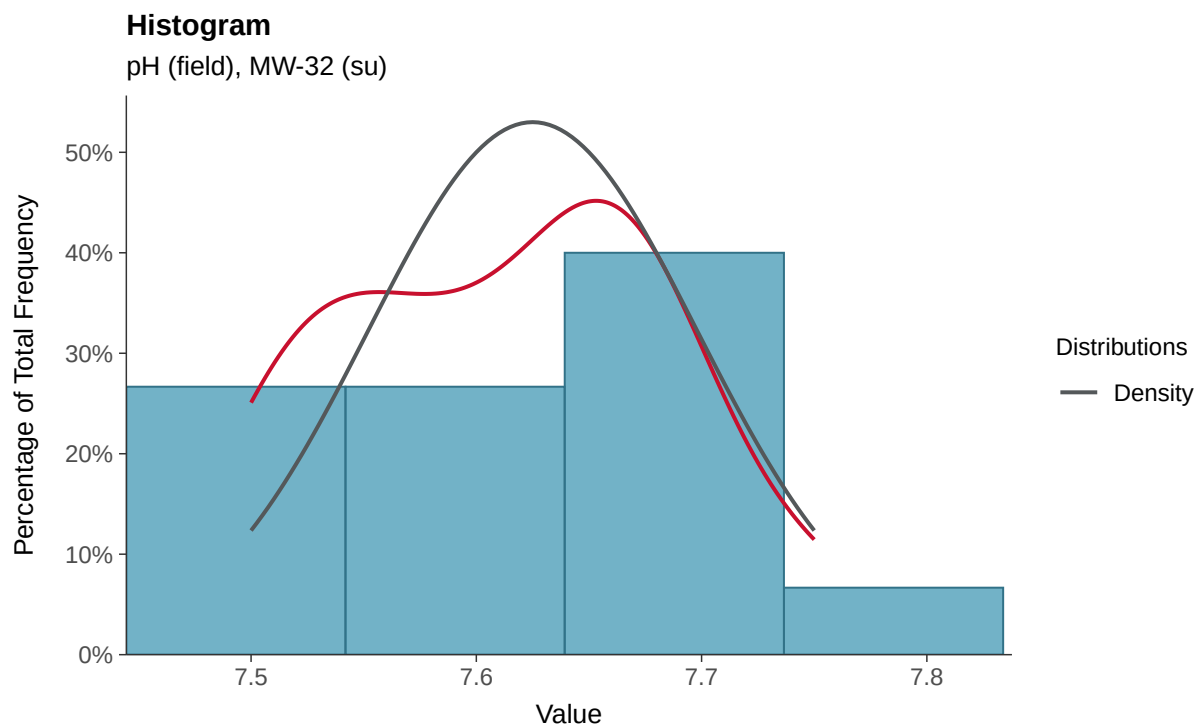
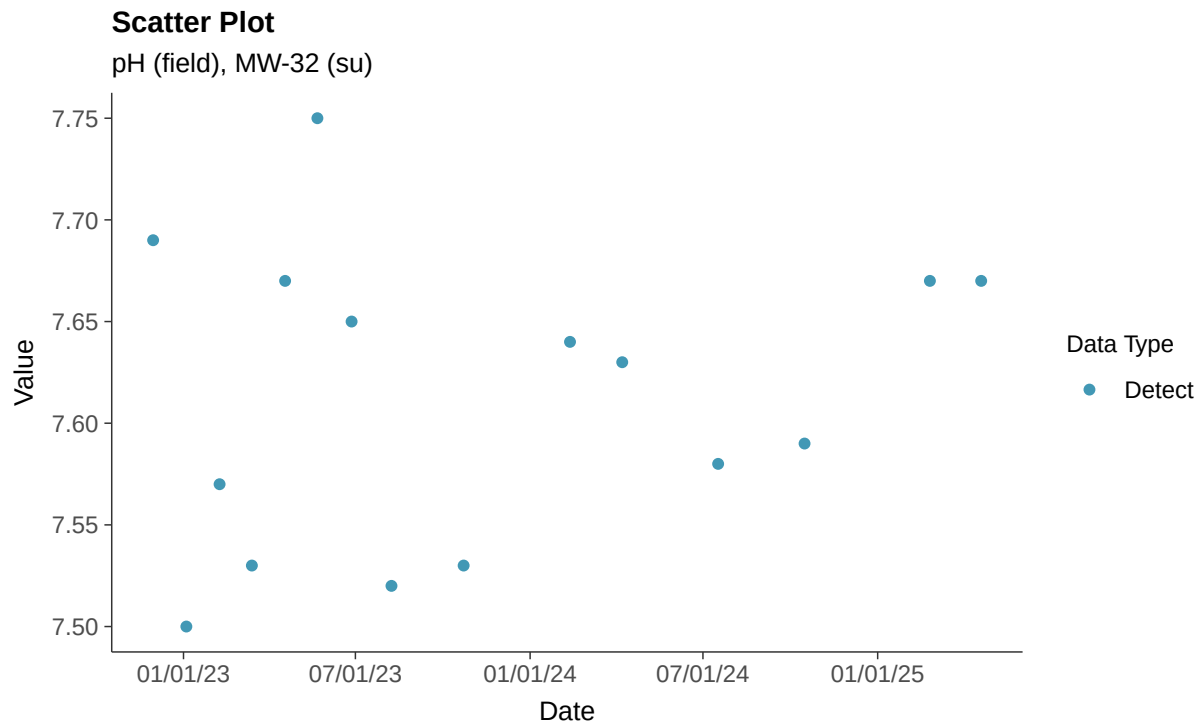
Trend Regression: Piecewise Linear-Linear-Linear

Fluoride, MW-32 (mg/L)



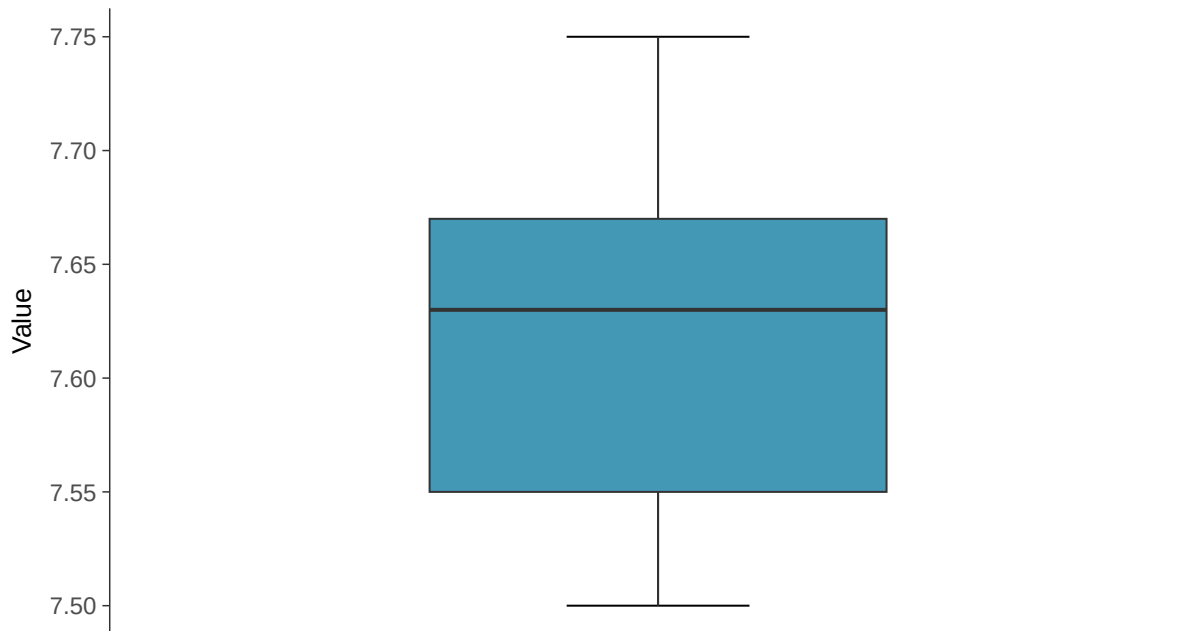
Appendix III: pH (field), MW-32

ID: 42_1_3_120



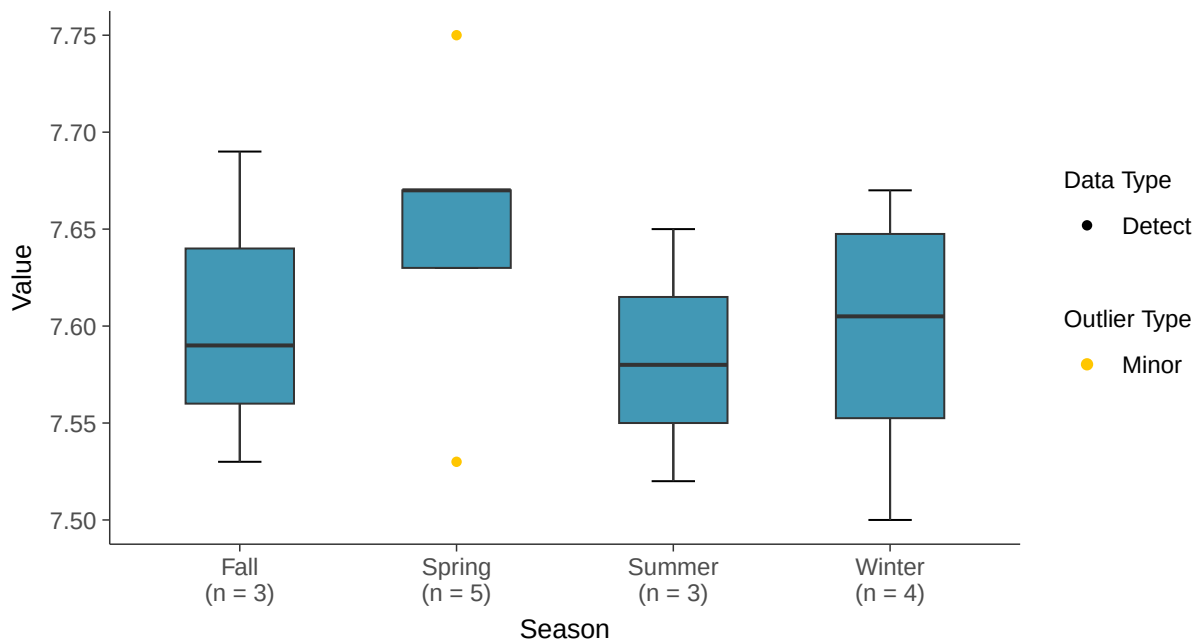
Boxplot

pH (field), MW-32 (su)

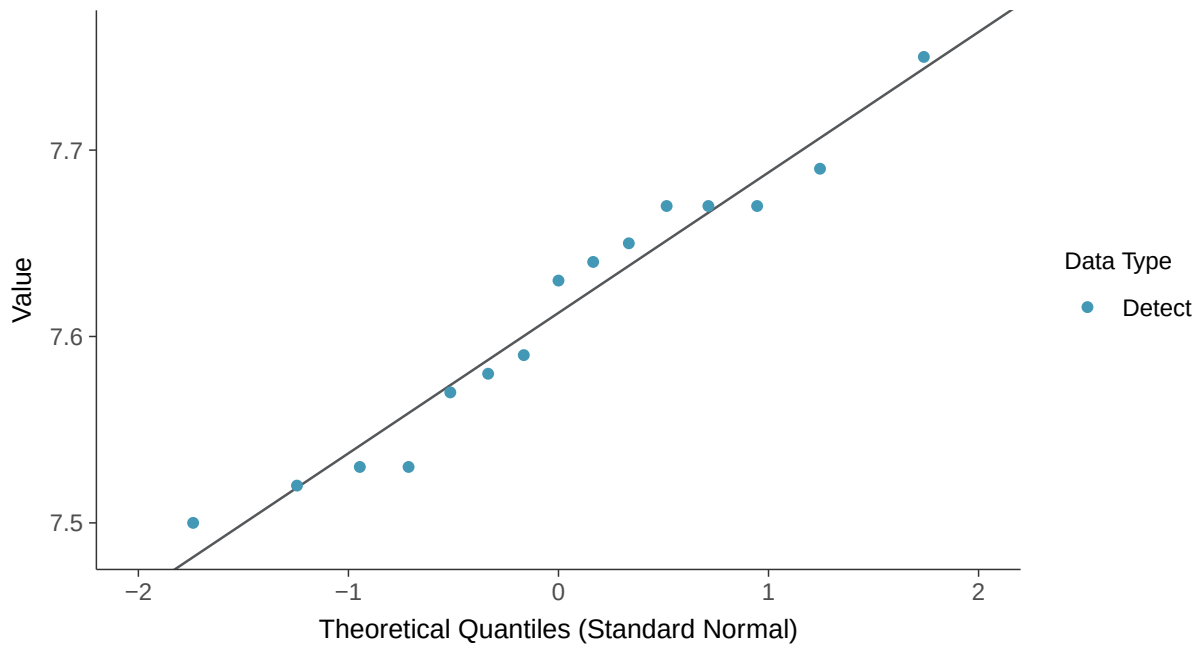


Boxplot by Season

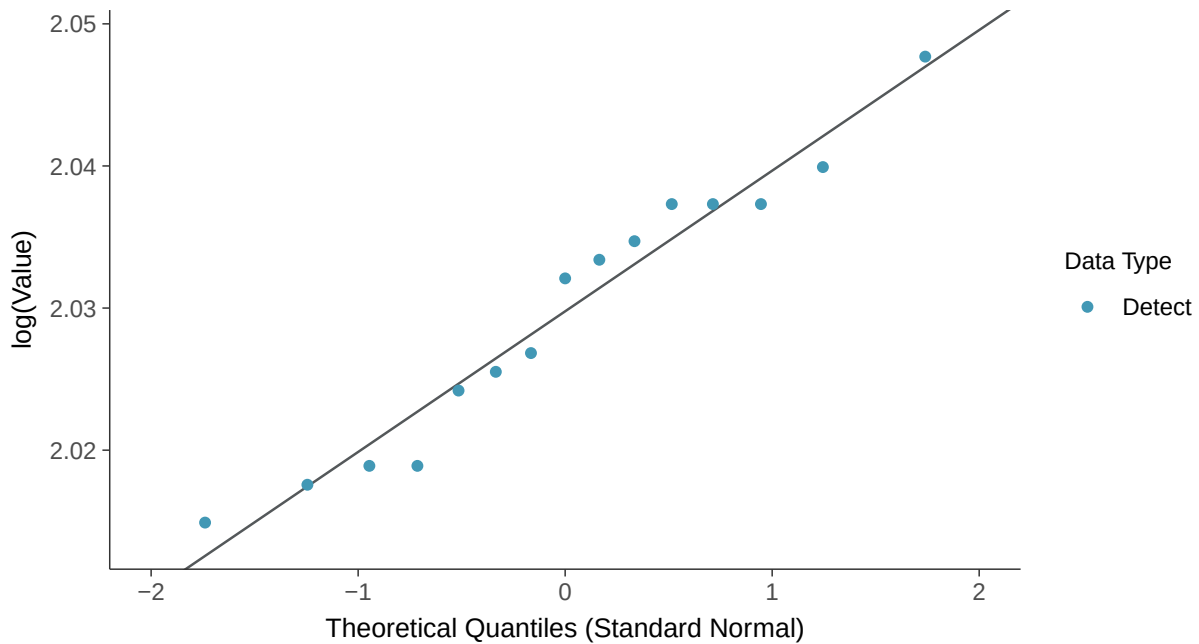
pH (field), MW-32 (su)



Normal Q-Q plot
pH (field), MW-32 (su)

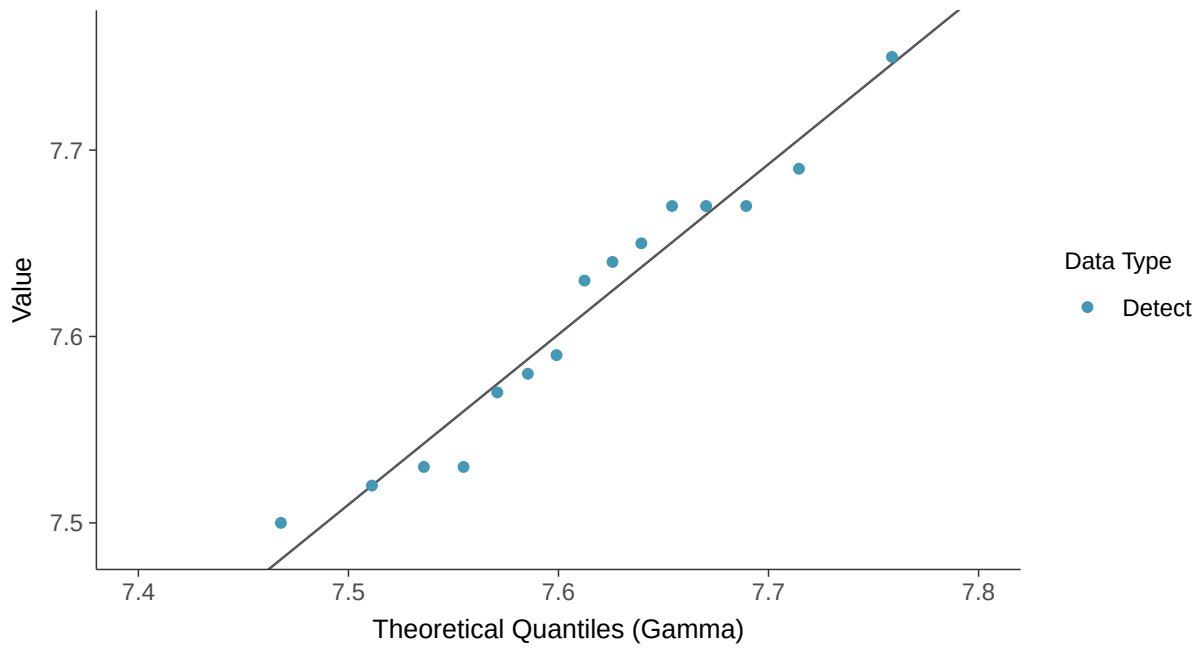


Lognormal Q-Q plot
pH (field), MW-32 (su)



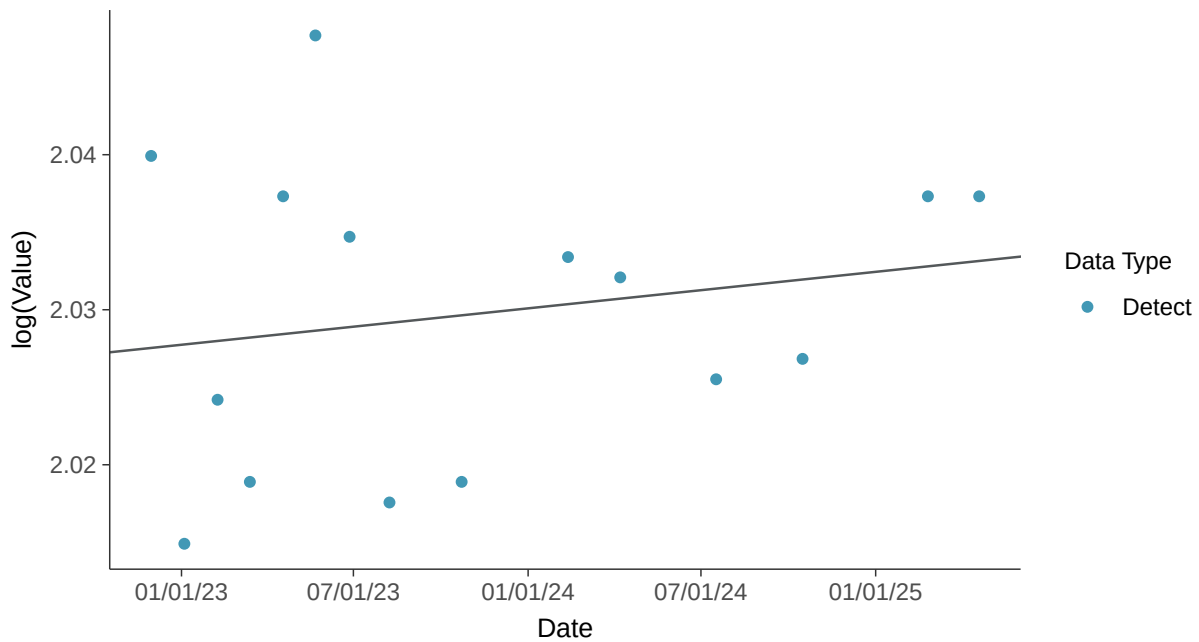
Gamma Q-Q plot

pH (field), MW-32 (su)



Trend Regression: Lognormal MLE

pH (field), MW-32 (su)

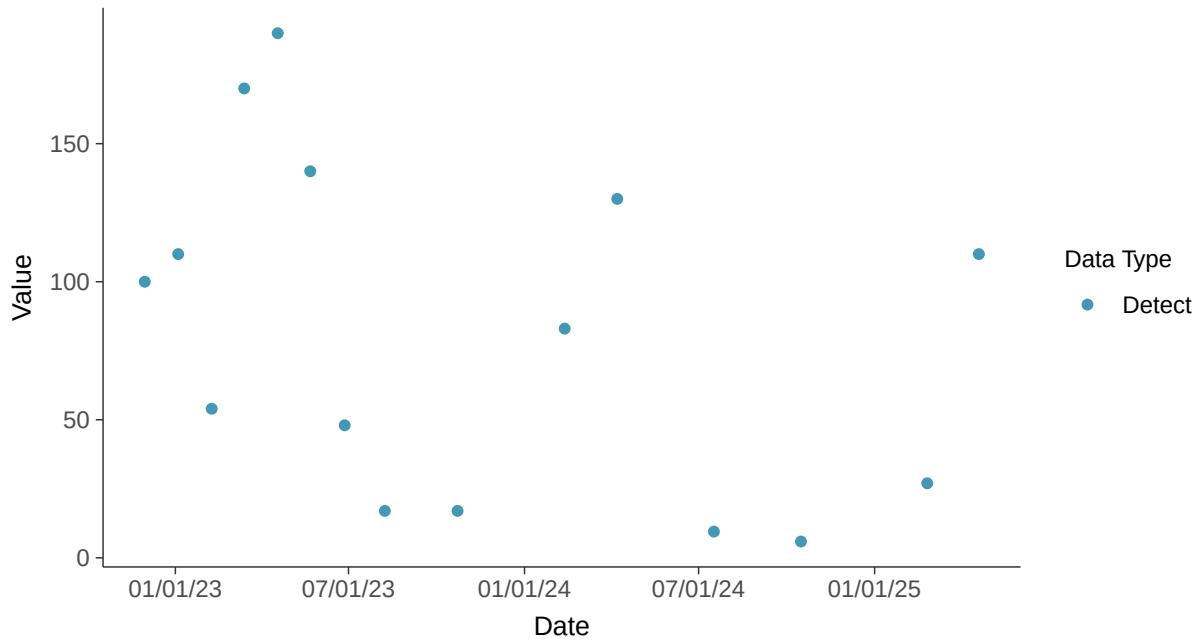


Appendix III: Sulfate (as SO₄), MW-32

ID: 42_1_3_124

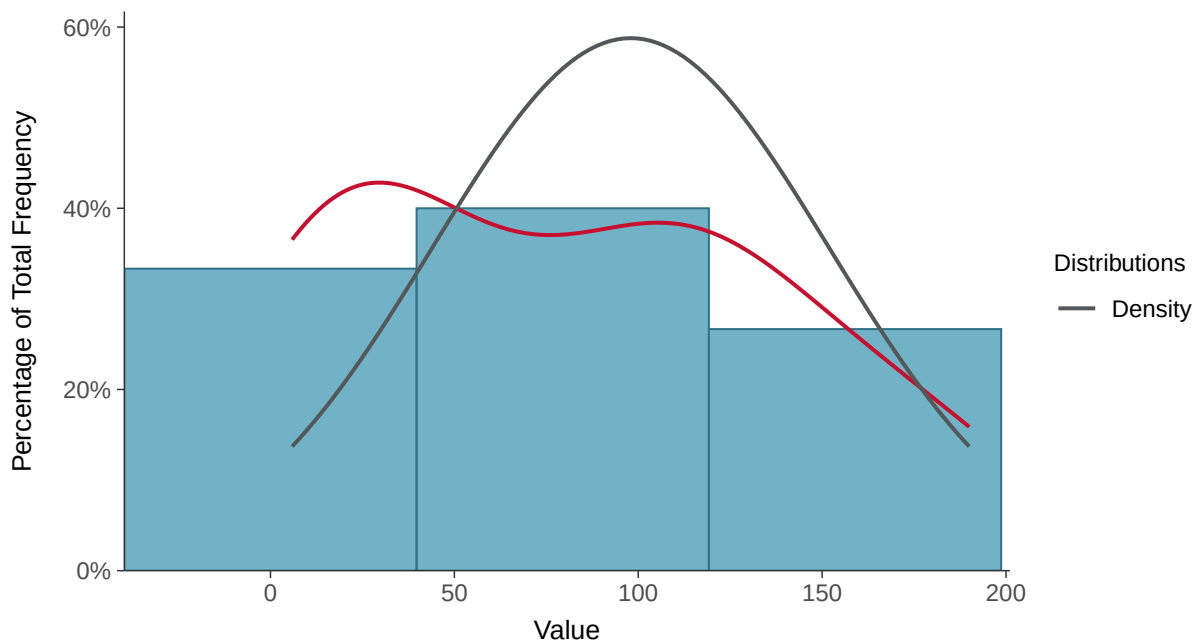
Scatter Plot

Sulfate (as SO₄), MW-32 (mg/L)



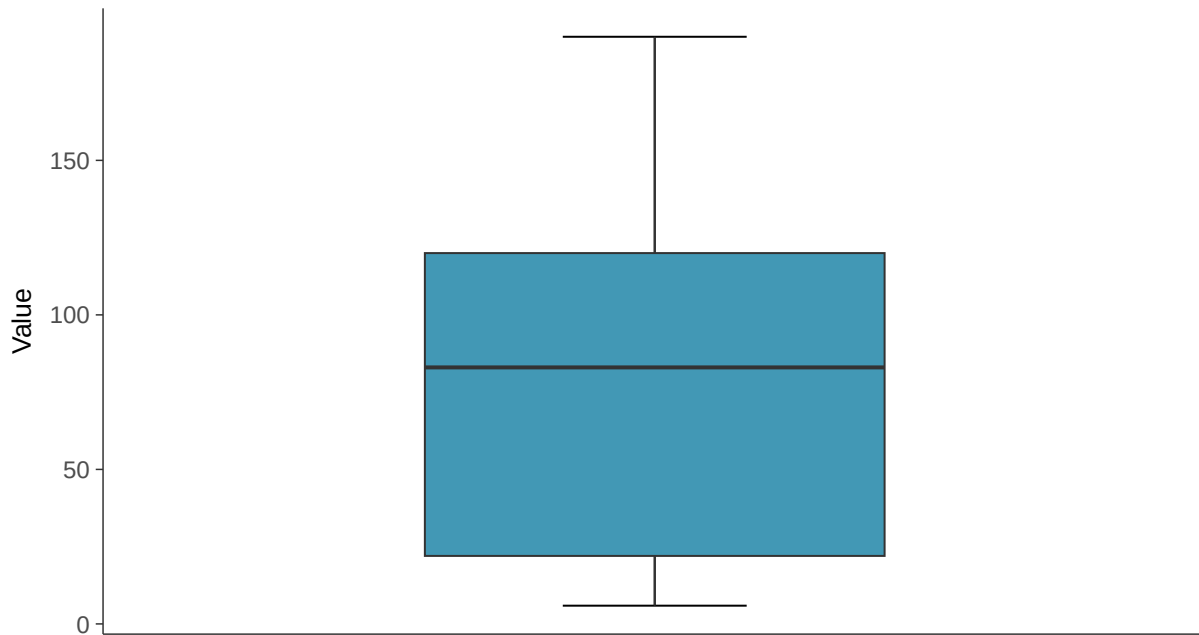
Histogram

Sulfate (as SO₄), MW-32 (mg/L)



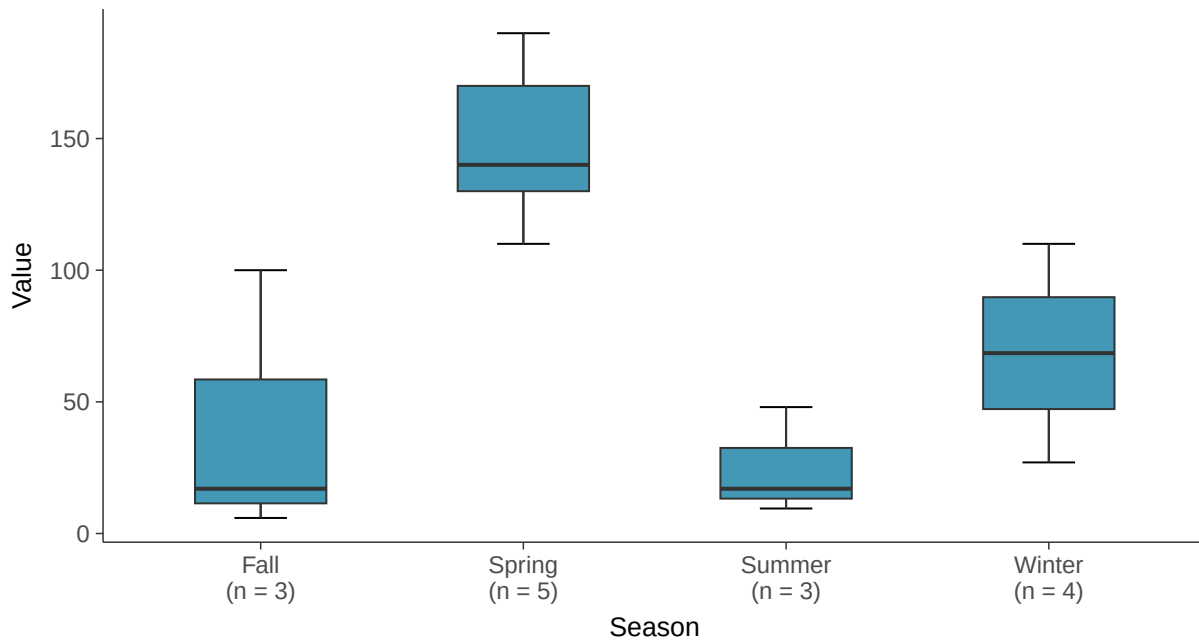
Boxplot

Sulfate (as SO₄), MW-32 (mg/L)



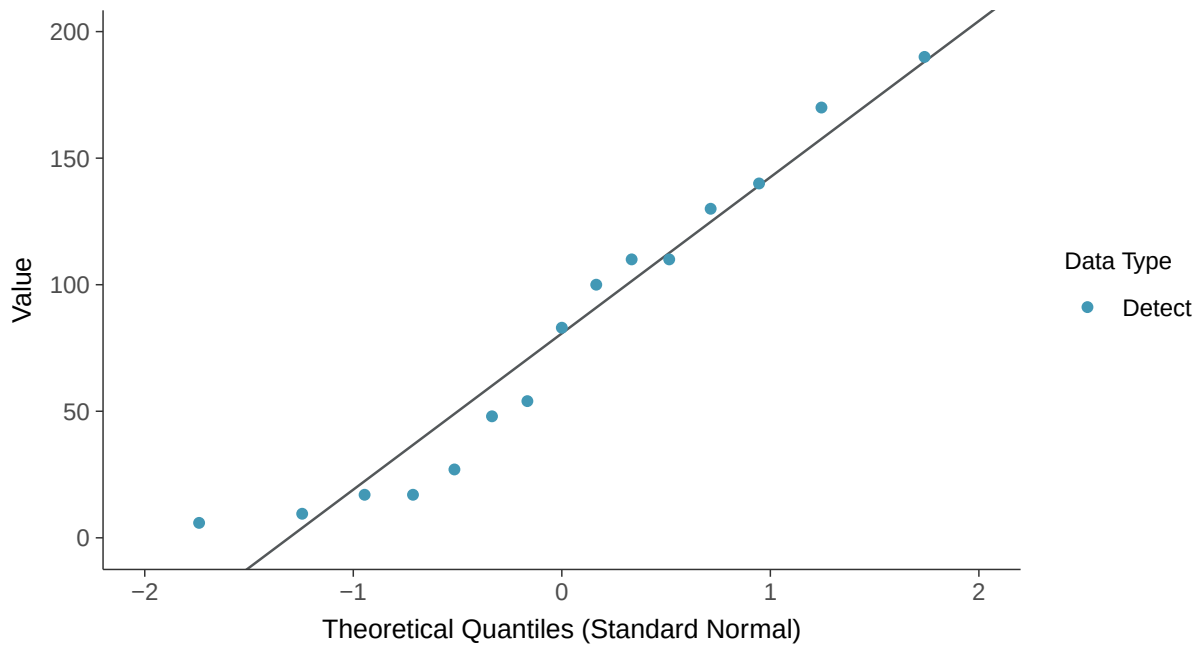
Boxplot by Season

Sulfate (as SO₄), MW-32 (mg/L)



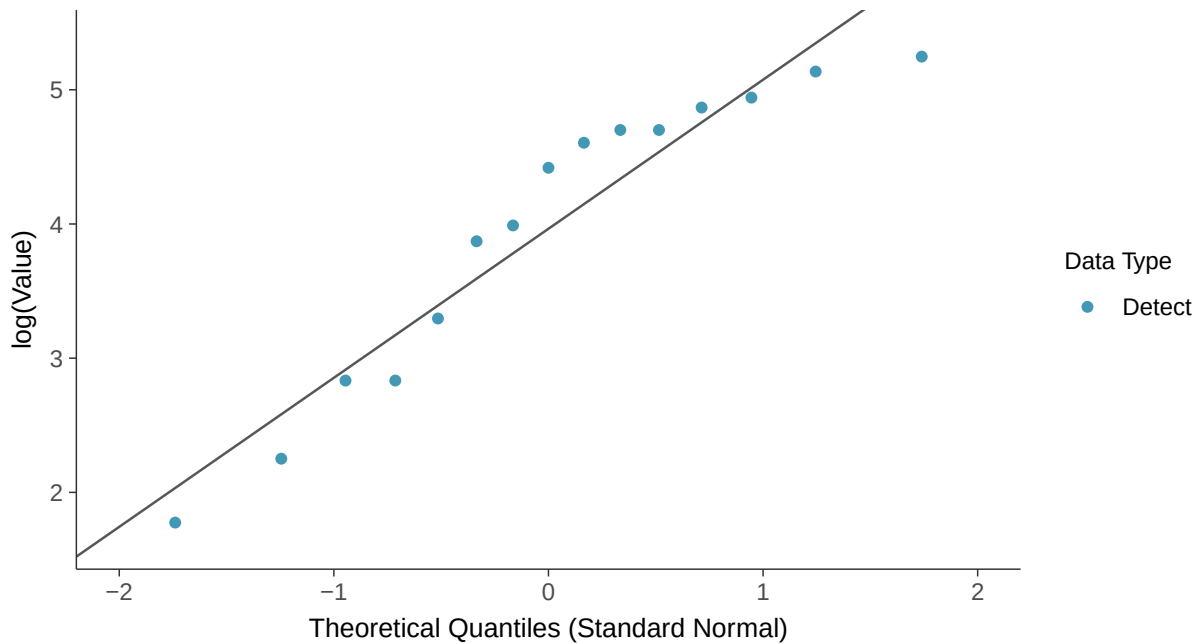
Normal Q-Q plot

Sulfate (as SO₄), MW-32 (mg/L)



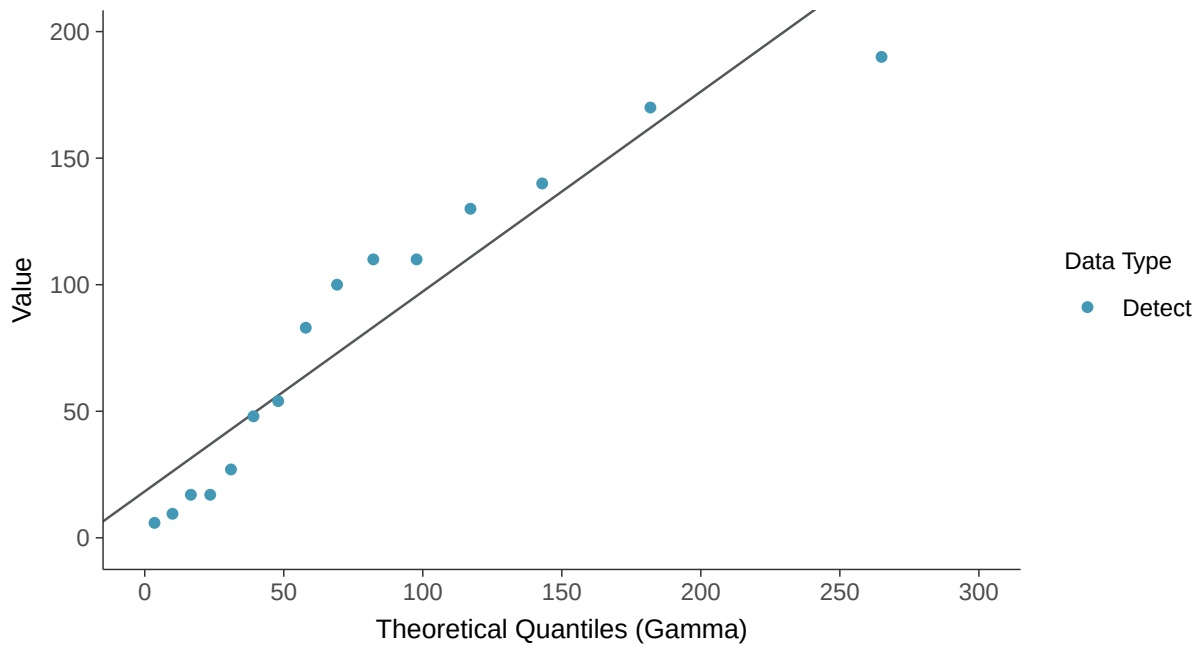
Lognormal Q-Q plot

Sulfate (as SO₄), MW-32 (mg/L)



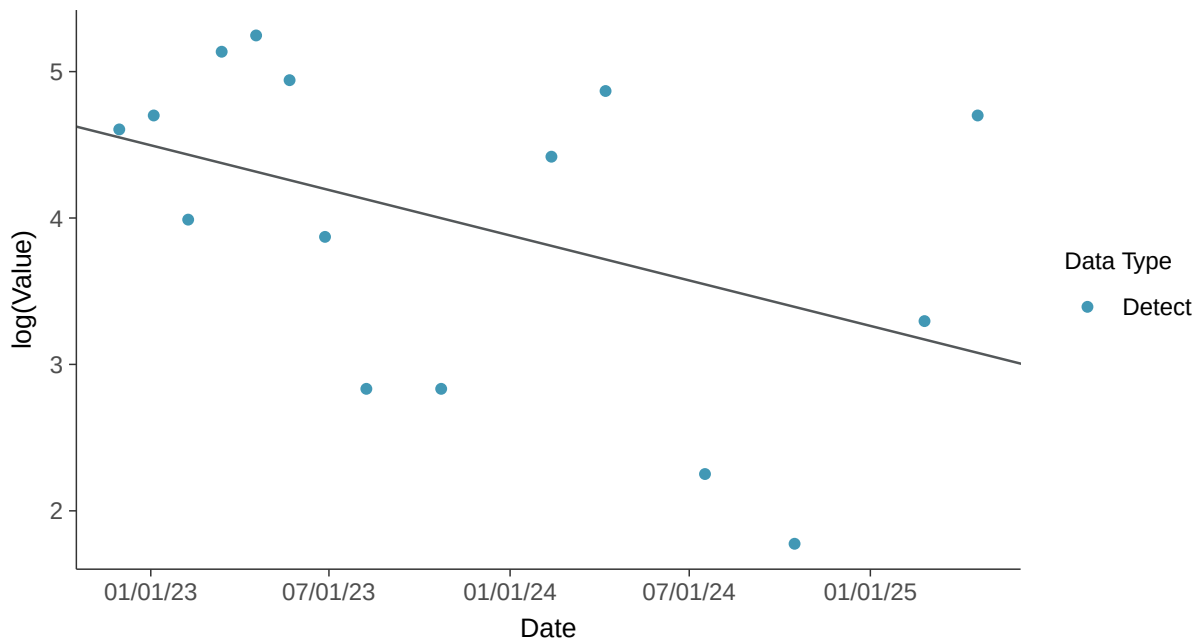
Gamma Q-Q plot

Sulfate (as SO₄), MW-32 (mg/L)



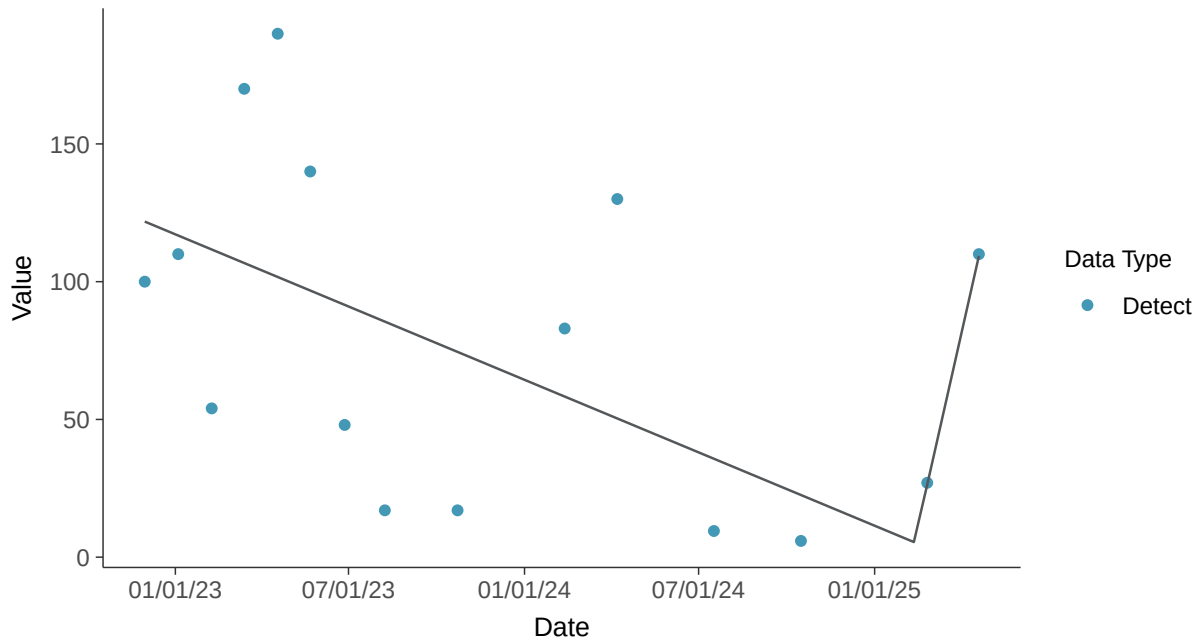
Trend Regression: Lognormal MLE

Sulfate (as SO₄), MW-32 (mg/L)



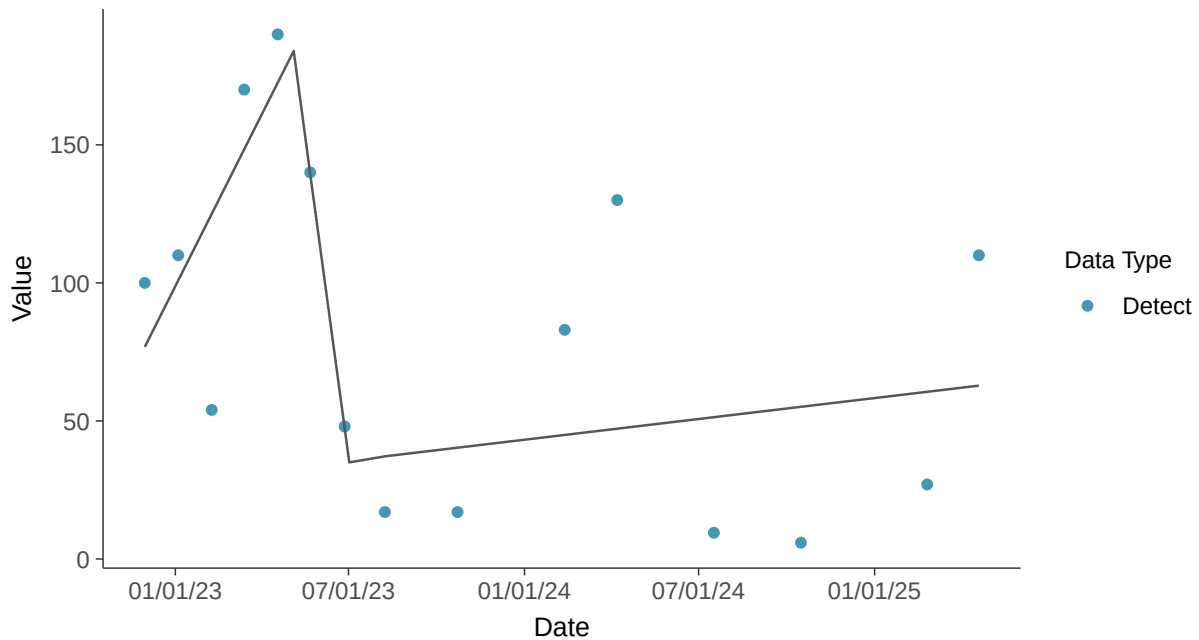
Trend Regression: Piecewise Linear-Linear

Sulfate (as SO₄), MW-32 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Sulfate (as SO₄), MW-32 (mg/L)

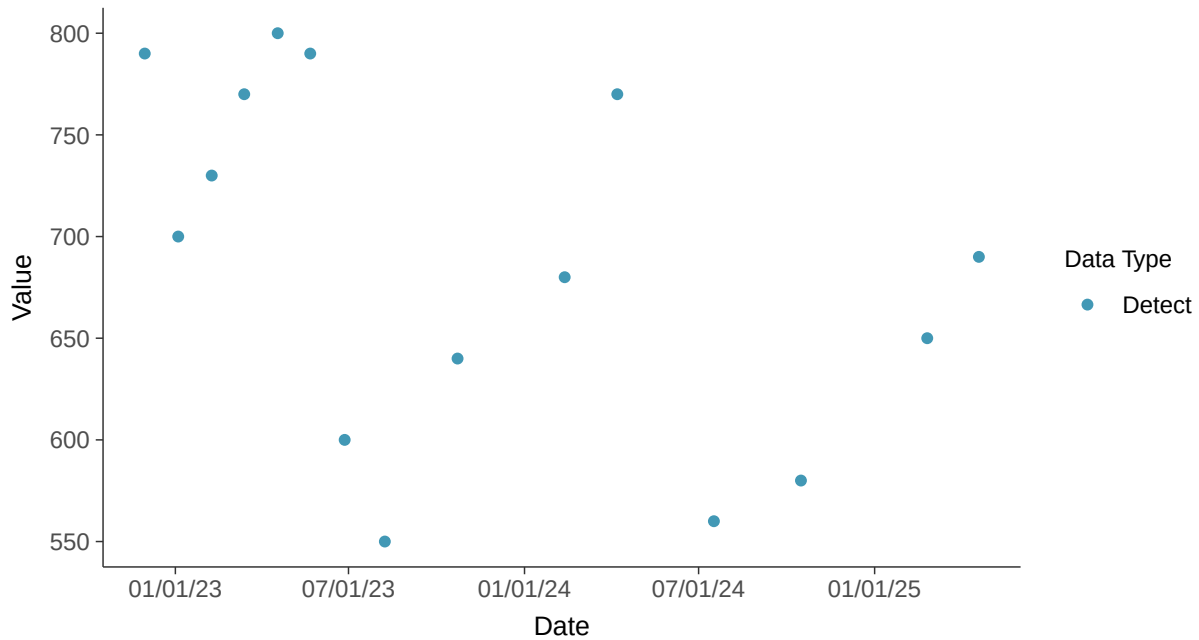


Appendix III: Total Dissolved Solids, MW-32

ID: 42_1_3_126

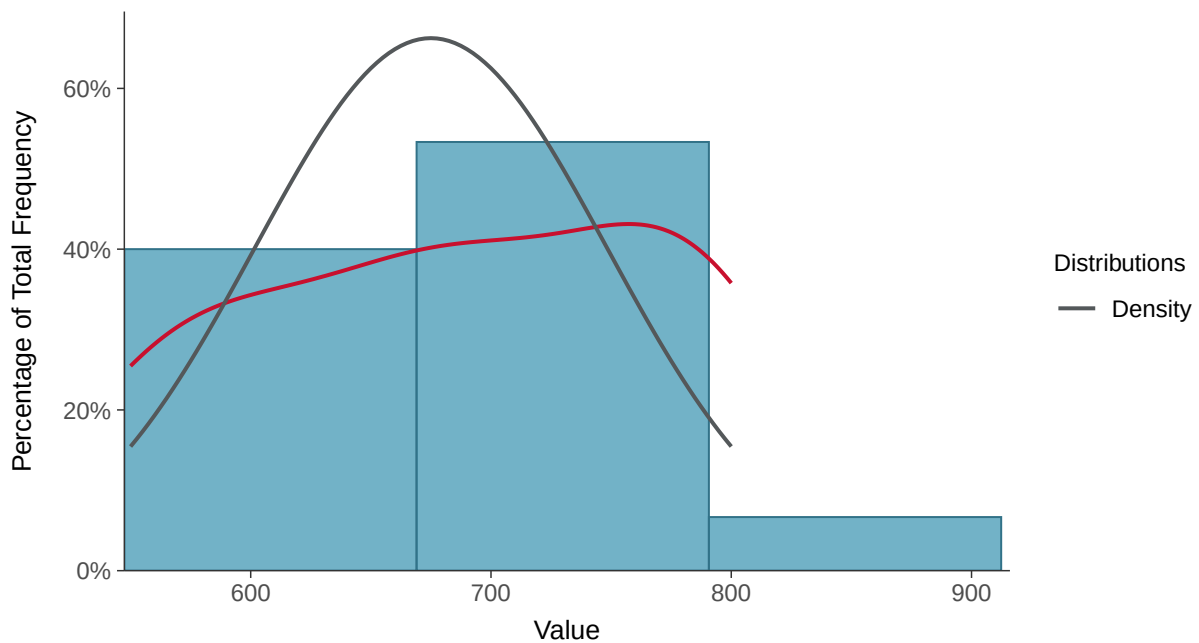
Scatter Plot

Total Dissolved Solids, MW-32 (mg/L)



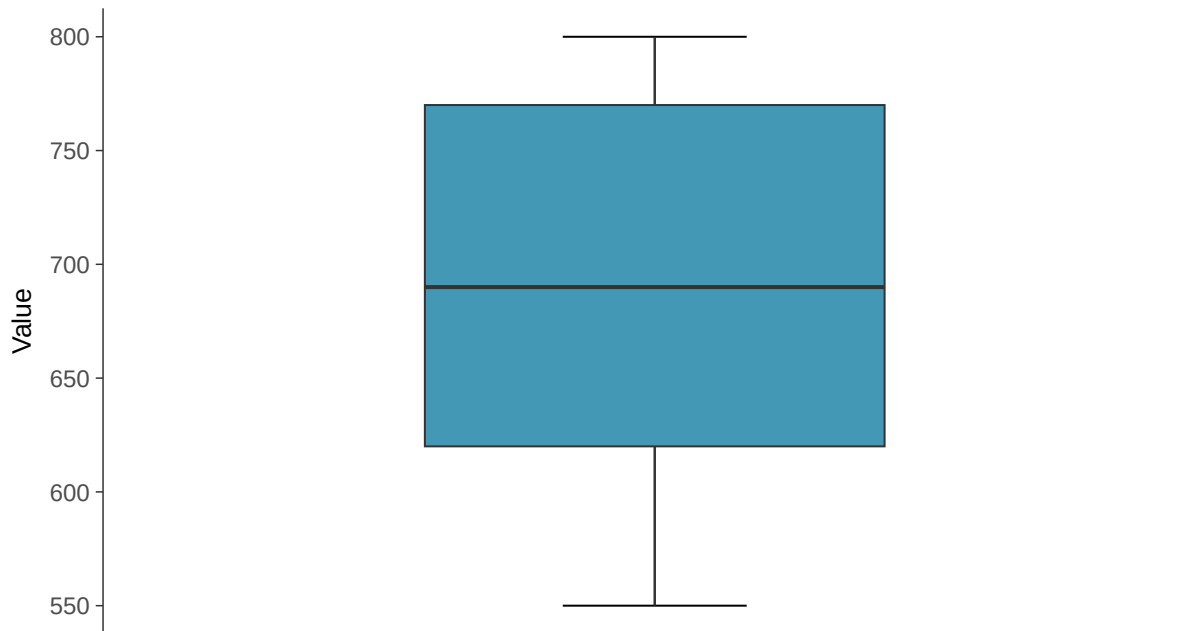
Histogram

Total Dissolved Solids, MW-32 (mg/L)



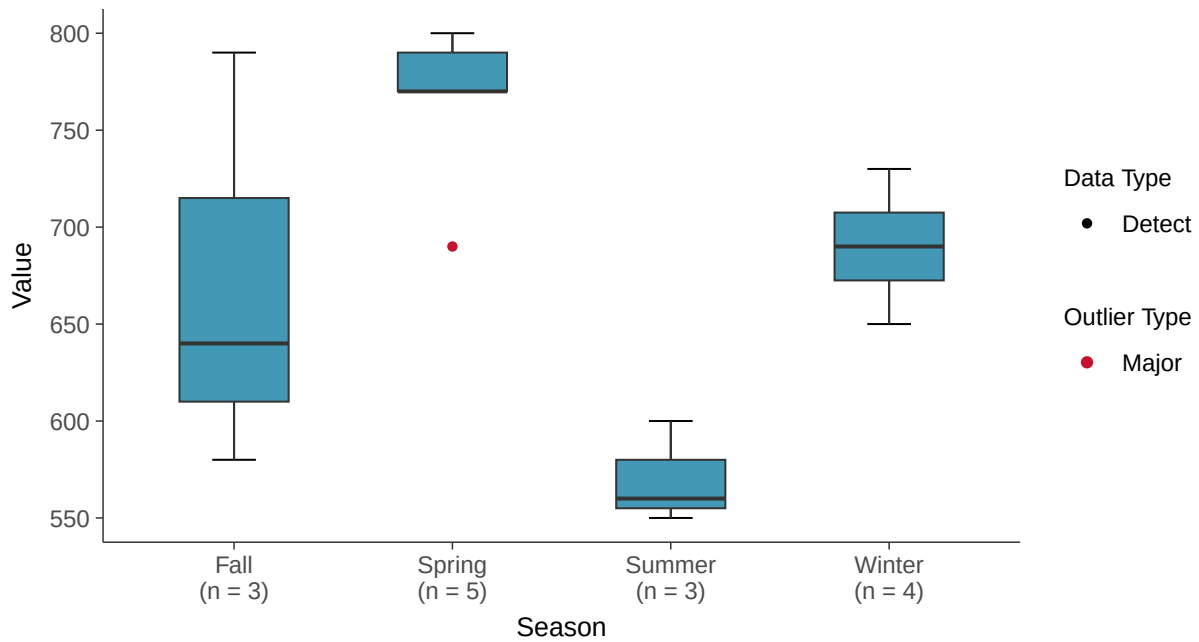
Boxplot

Total Dissolved Solids, MW-32 (mg/L)



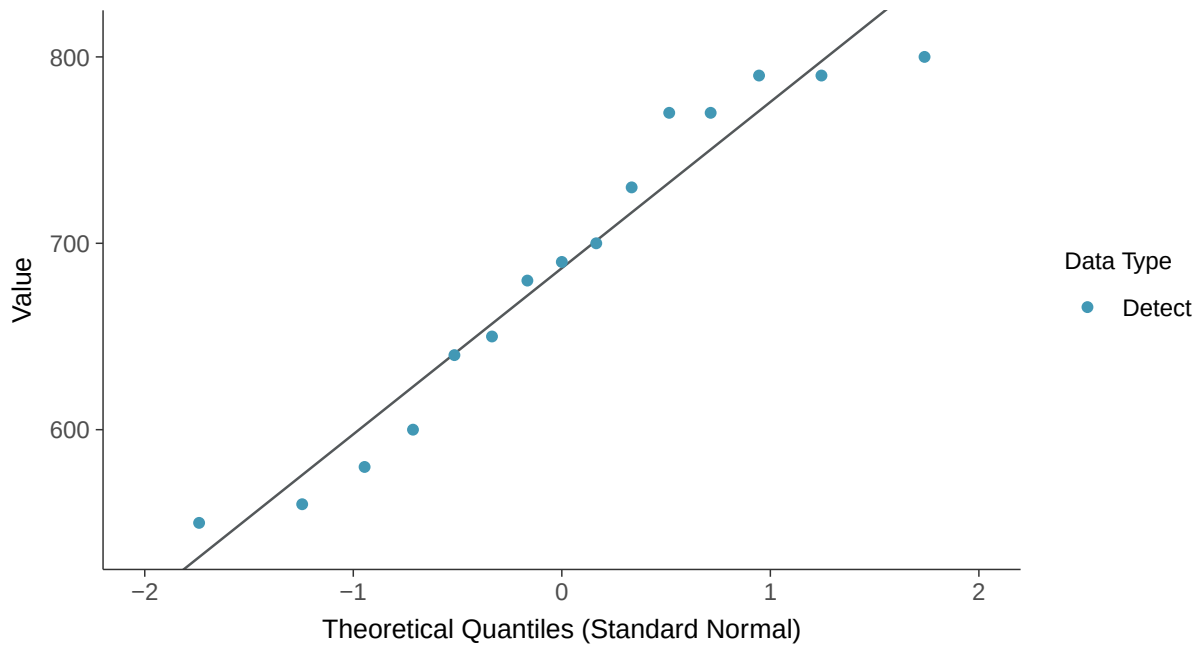
Boxplot by Season

Total Dissolved Solids, MW-32 (mg/L)



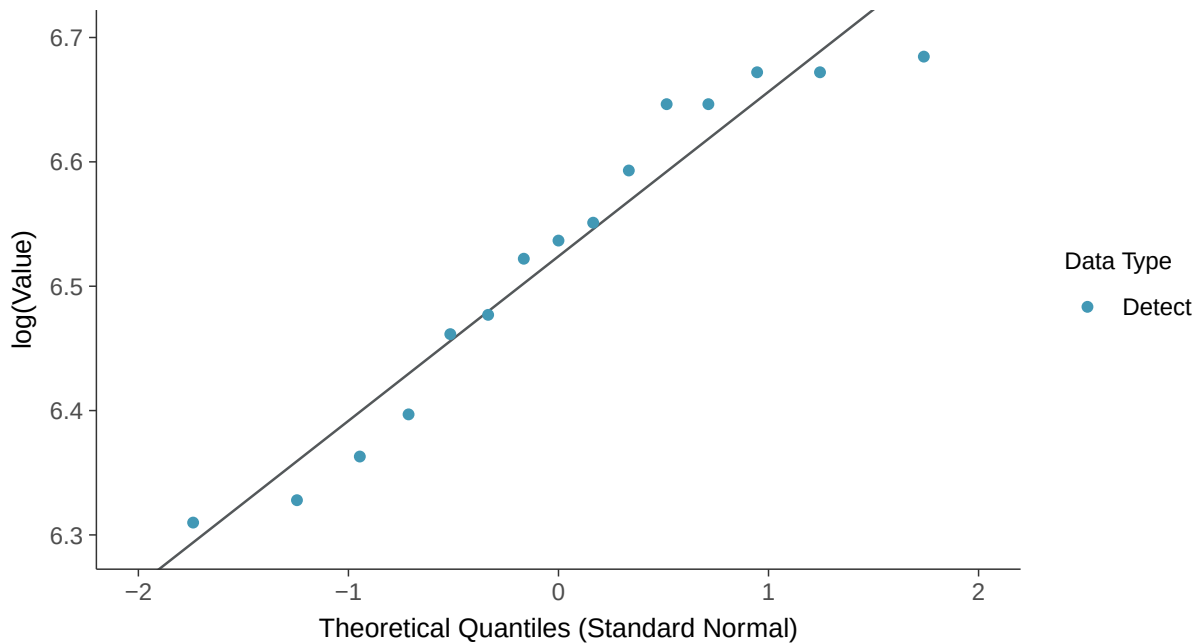
Normal Q-Q plot

Total Dissolved Solids, MW-32 (mg/L)



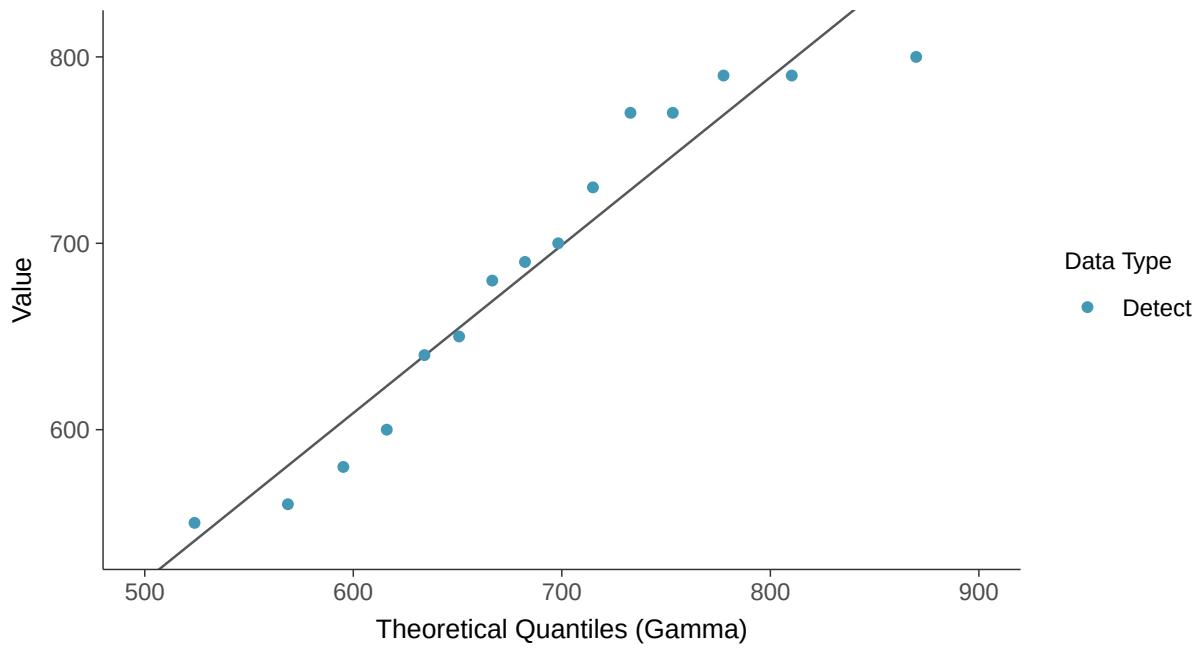
Lognormal Q-Q plot

Total Dissolved Solids, MW-32 (mg/L)



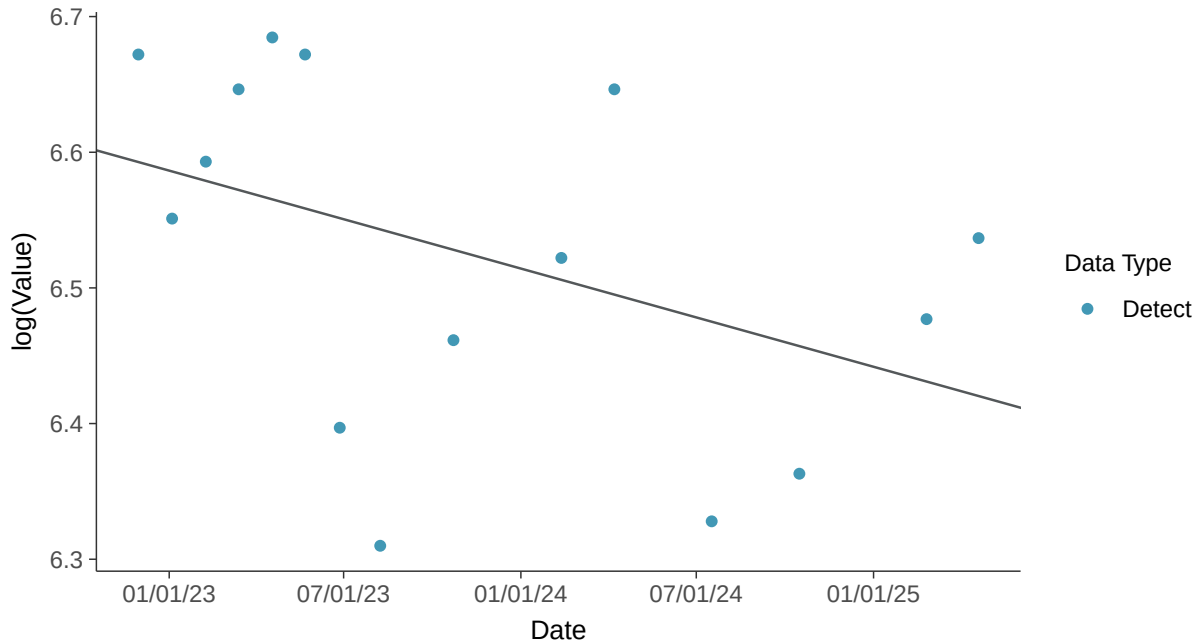
Gamma Q-Q plot

Total Dissolved Solids, MW-32 (mg/L)



Trend Regression: Lognormal MLE

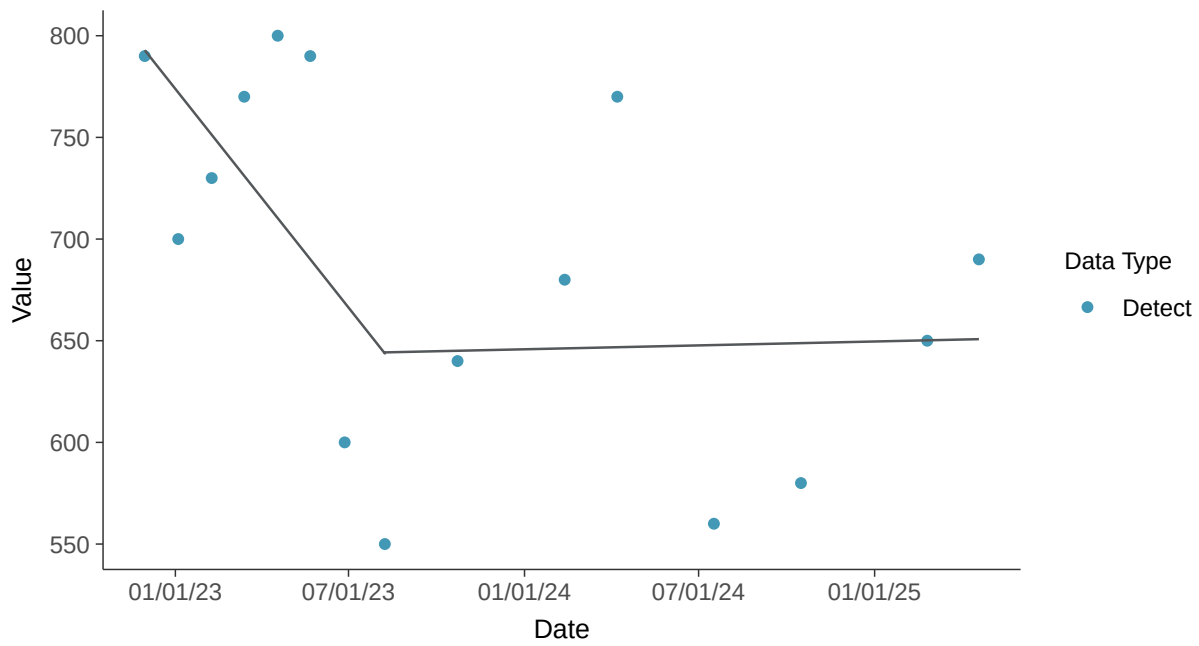
Total Dissolved Solids, MW-32 (mg/L)





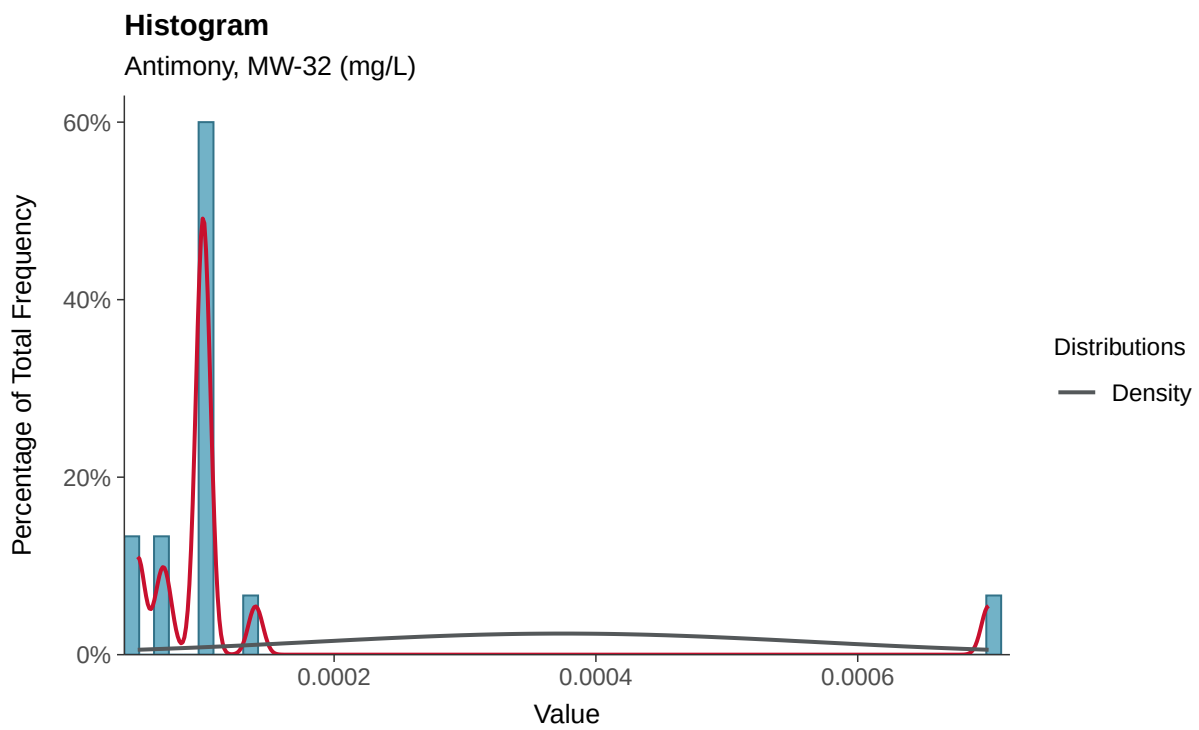
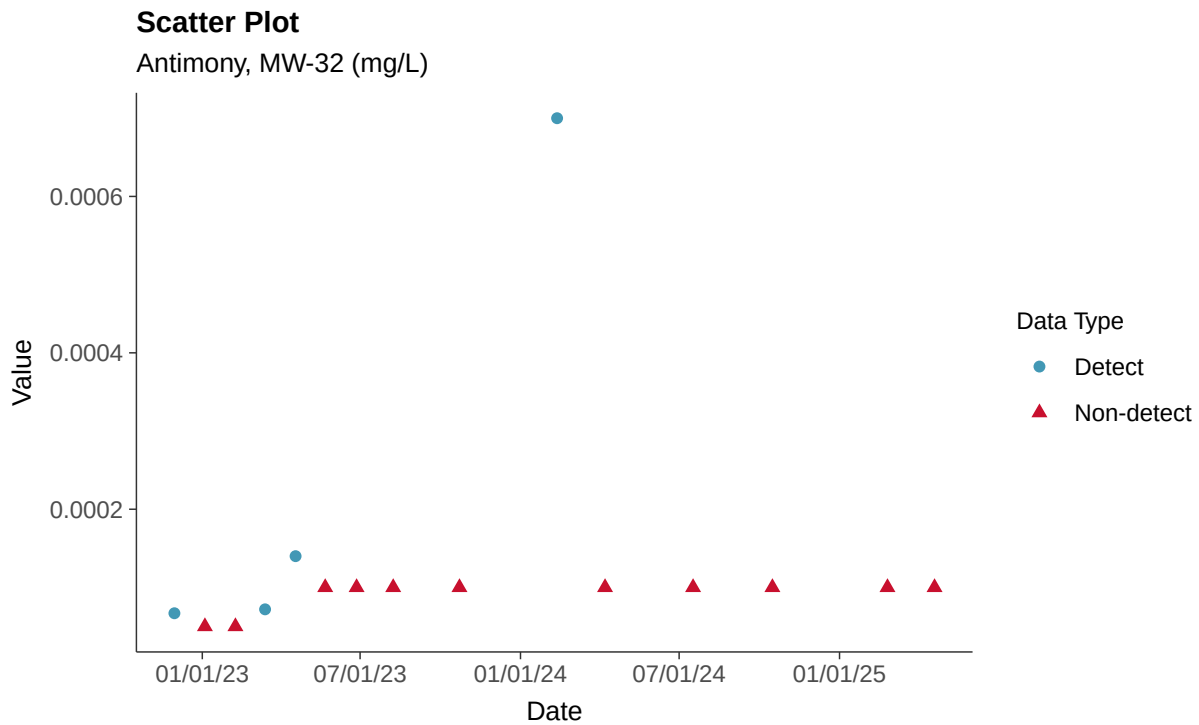
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-32 (mg/L)



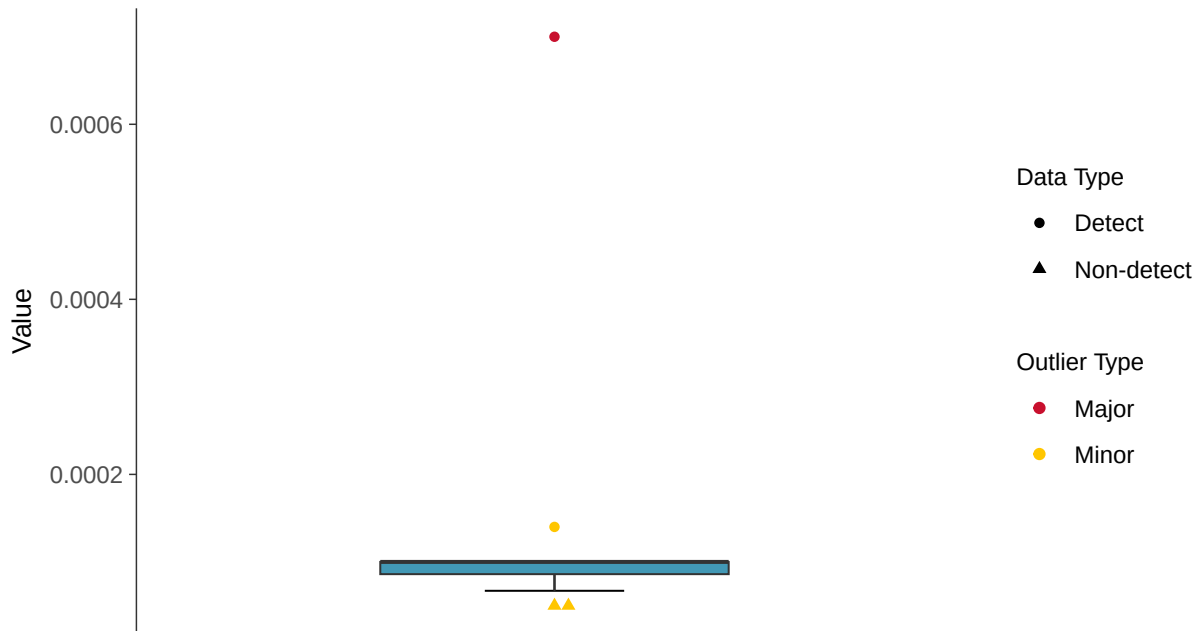
Appendix IV: Antimony, MW-32

ID: 42_1_4_101



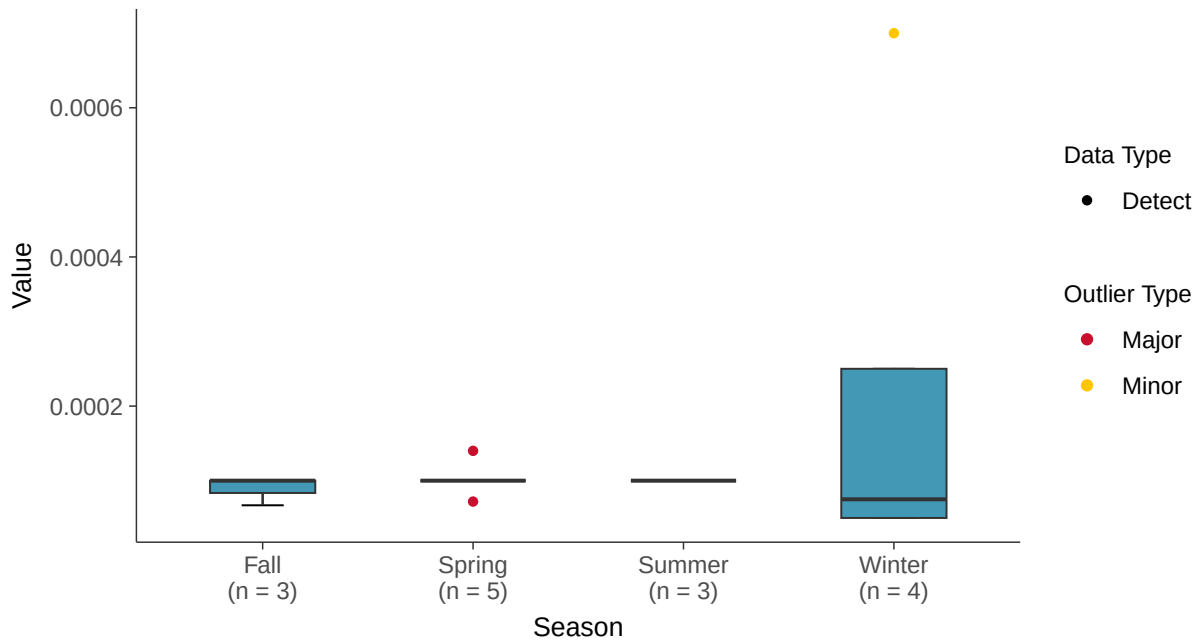
Boxplot

Antimony, MW-32 (mg/L)



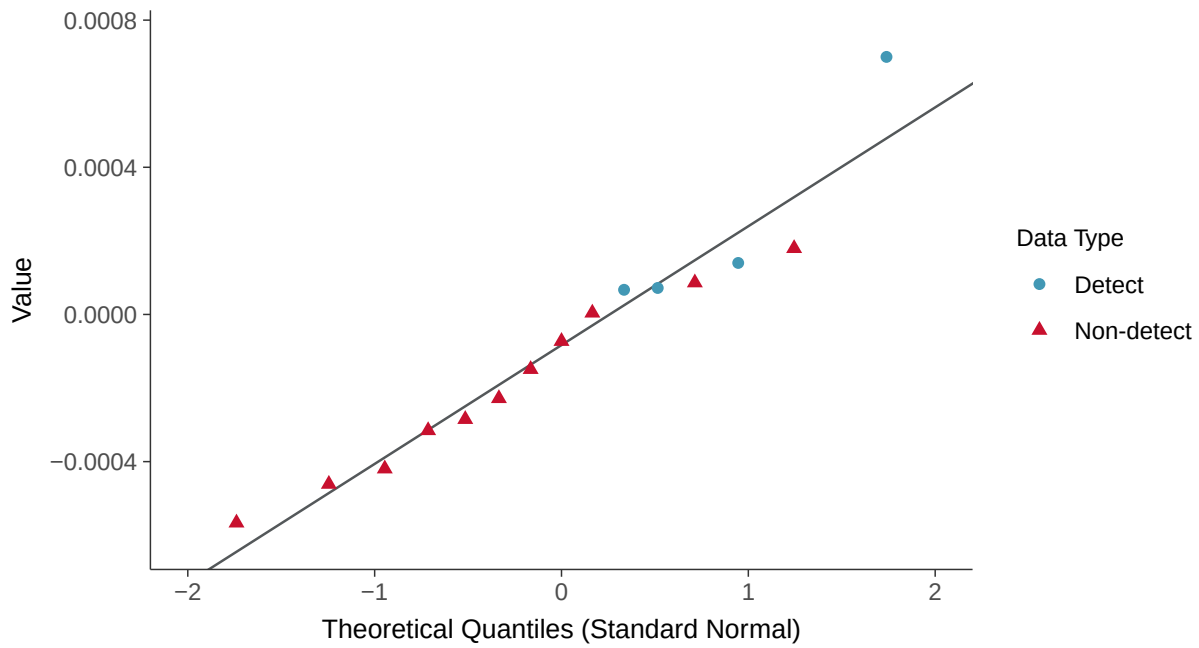
Boxplot by Season

Antimony, MW-32 (mg/L)



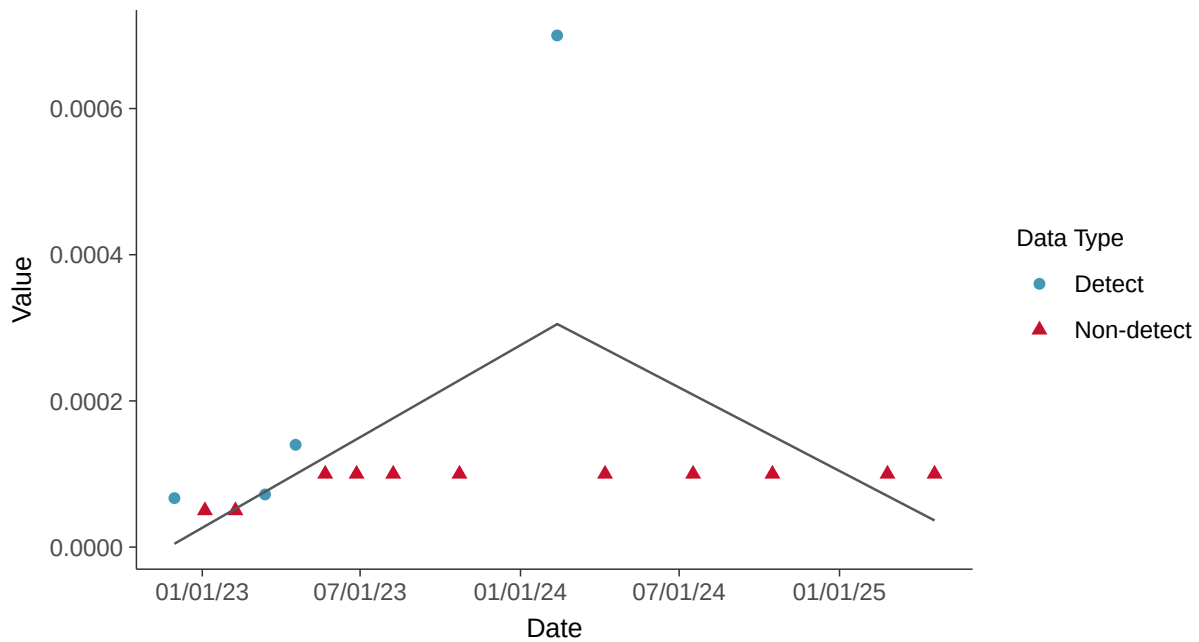
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-32 (mg/L)

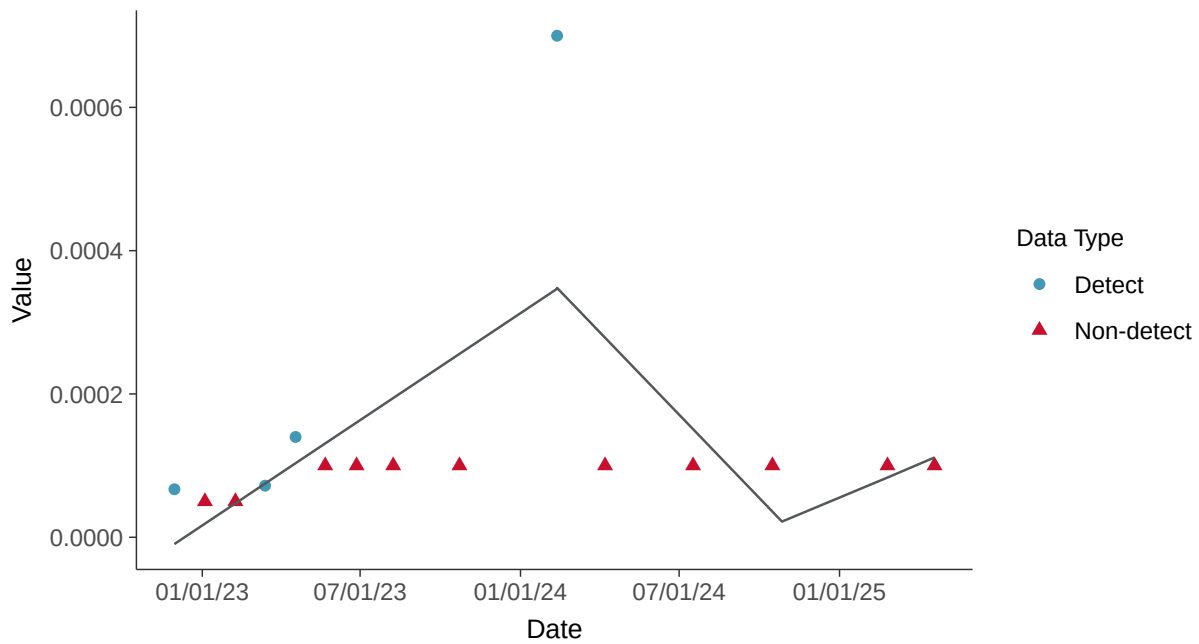


Trend Regression: Piecewise Linear-Linear

Antimony, MW-32 (mg/L)

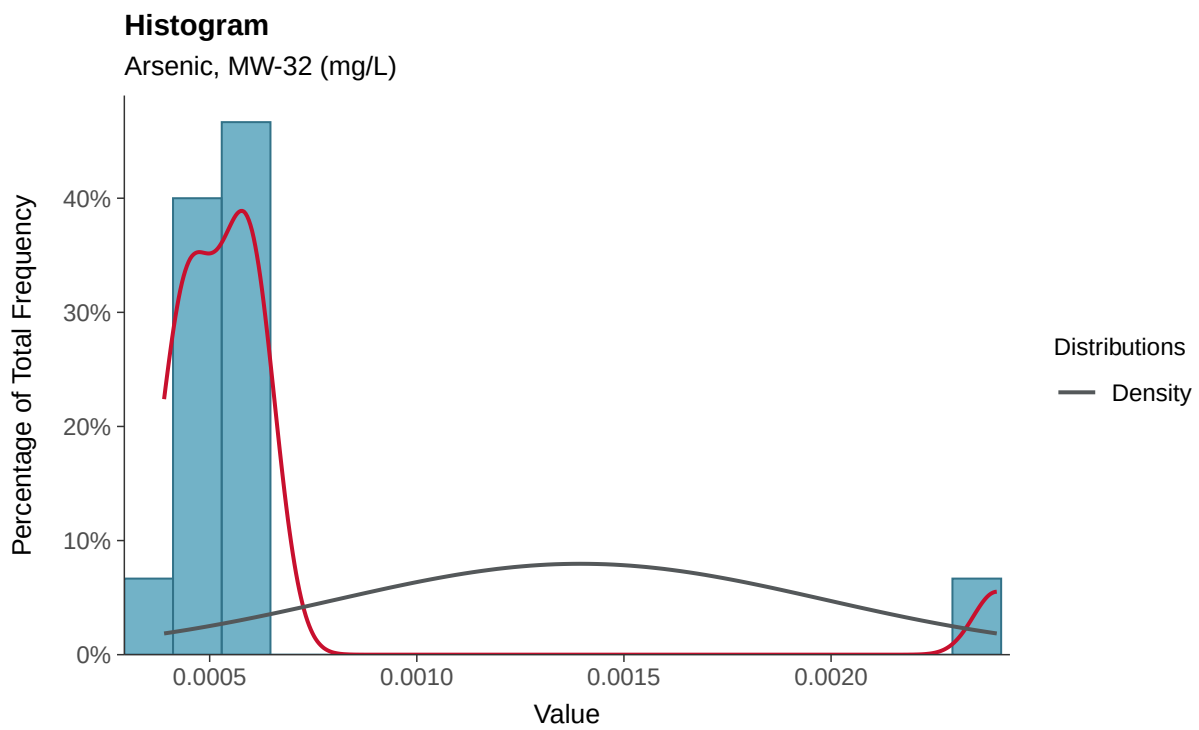
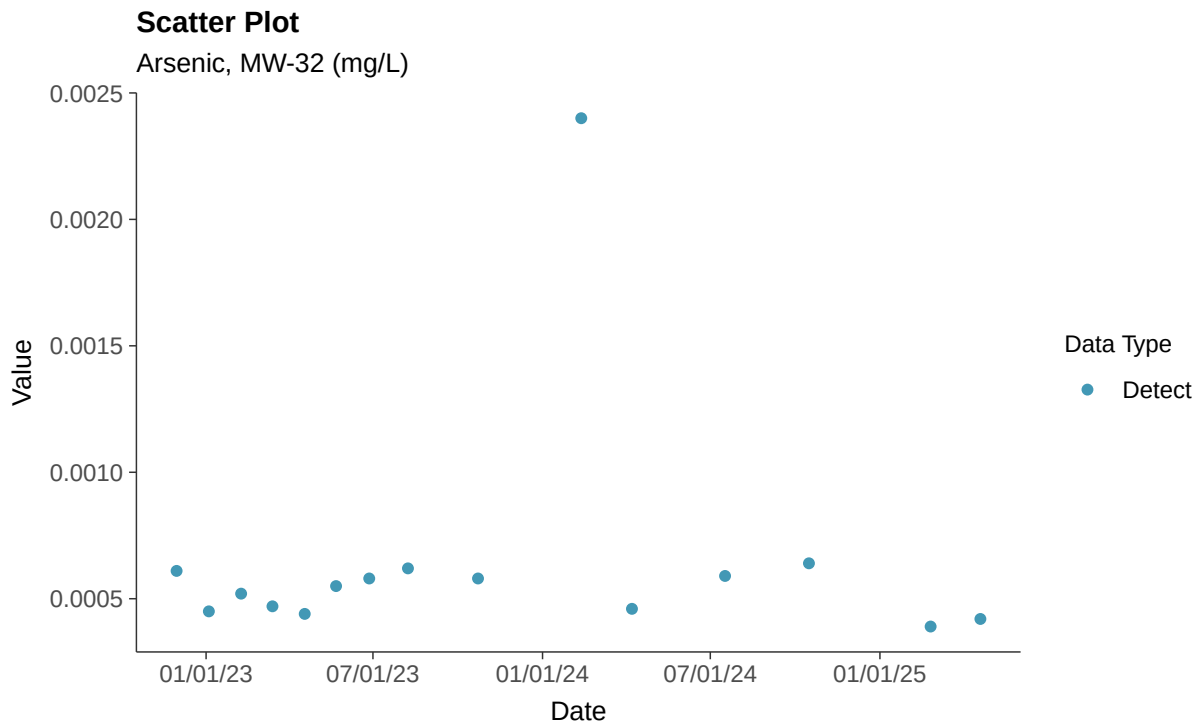


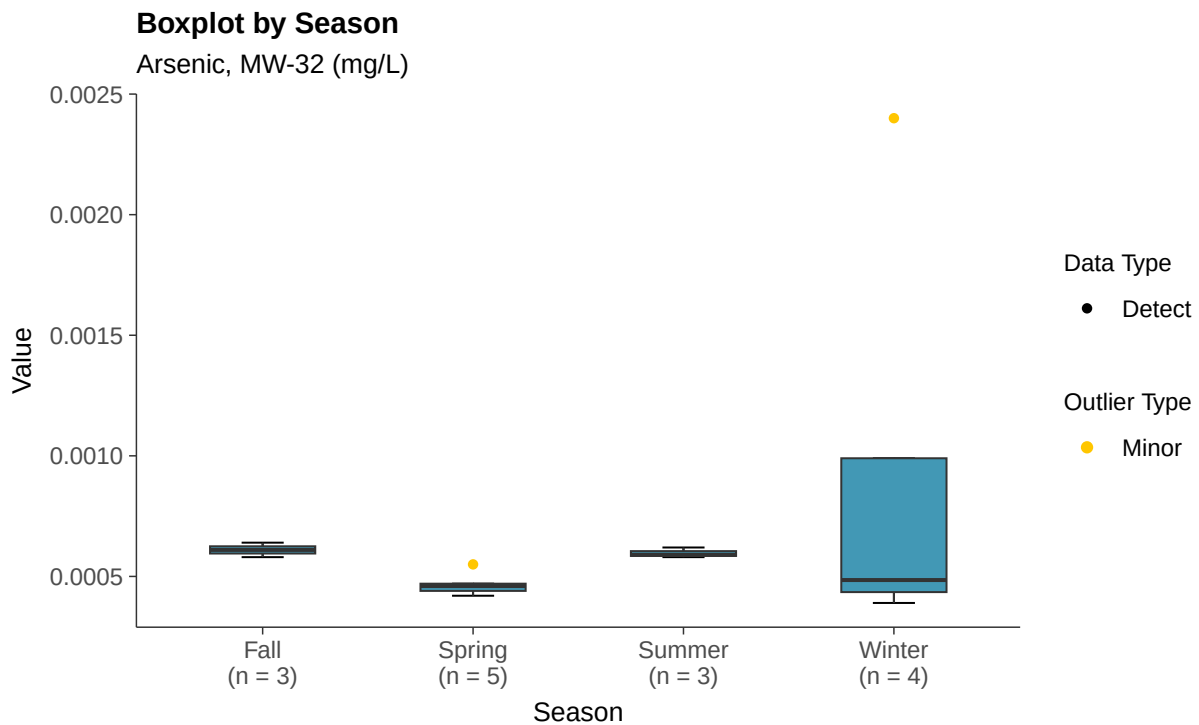
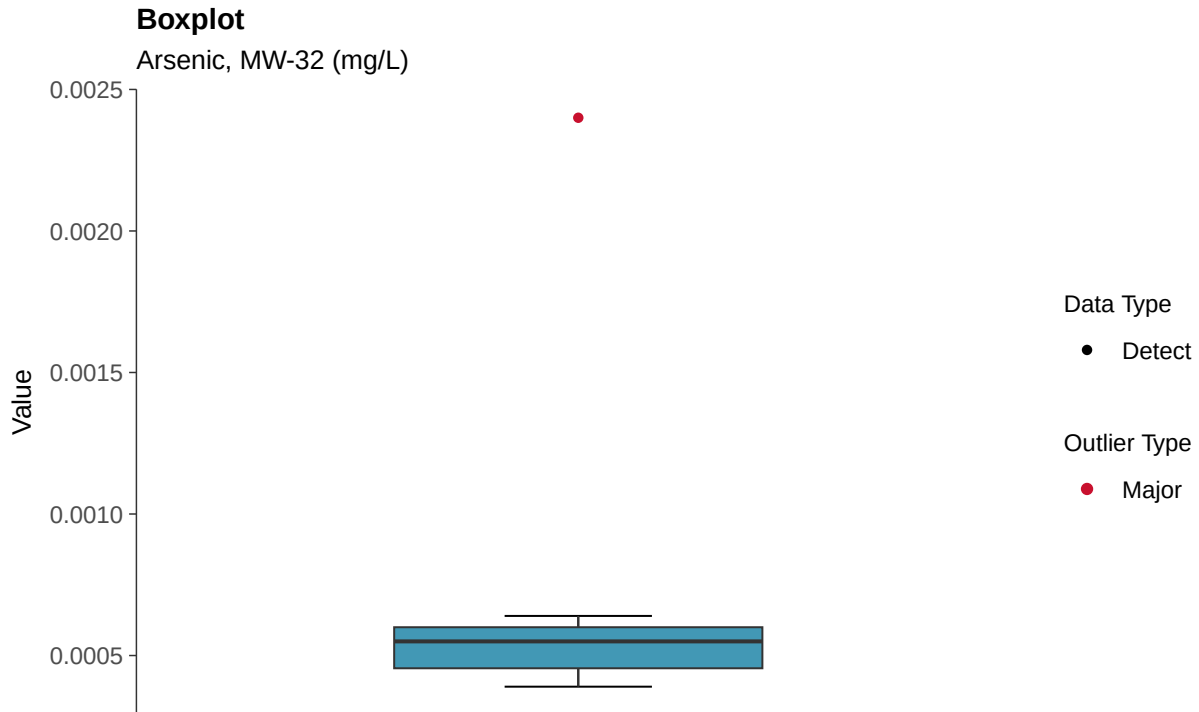
Antimony, MW-32 (mg/L)



Appendix IV: Arsenic, MW-32

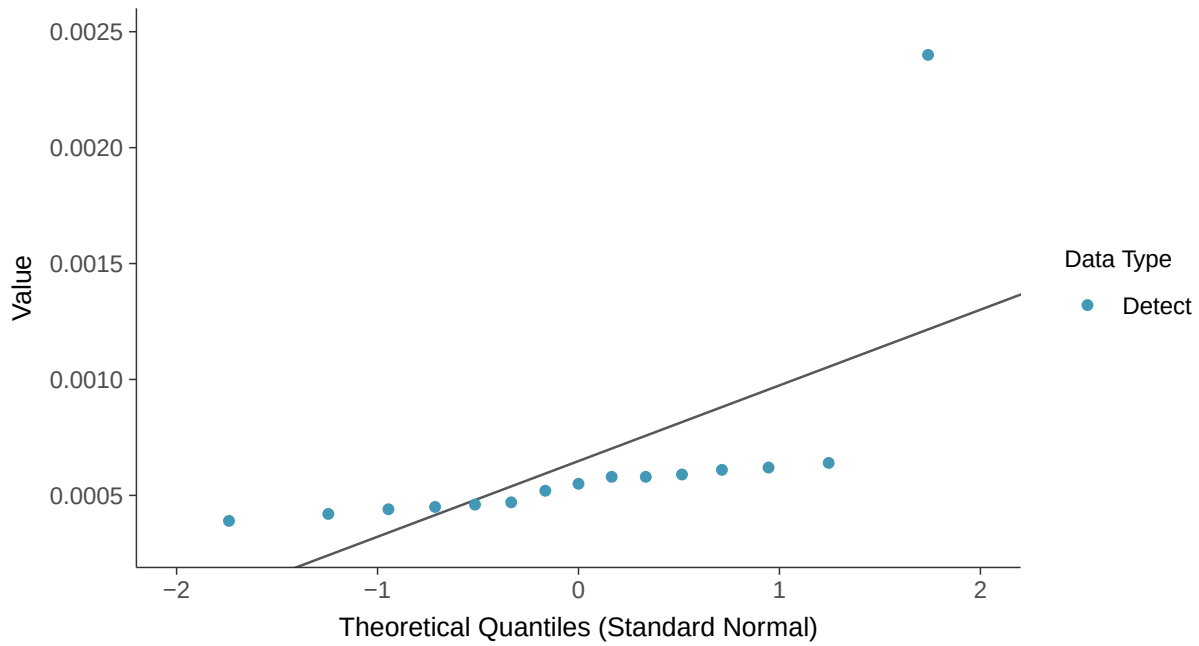
ID: 42_1_4_102





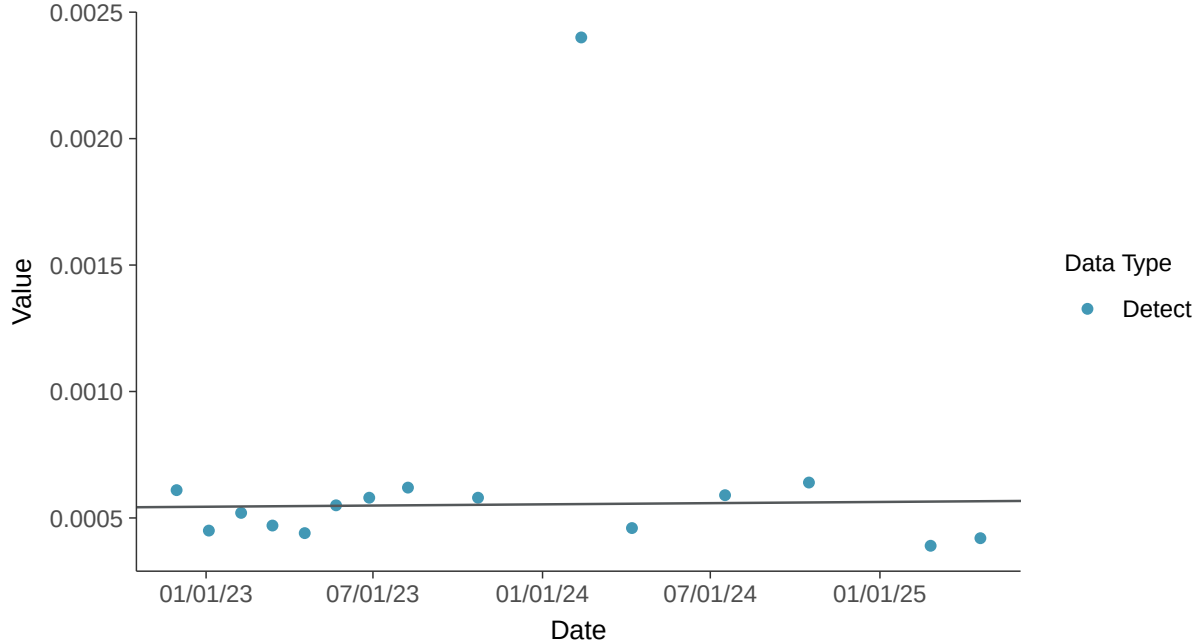
Normal Q-Q plot

Arsenic, MW-32 (mg/L)



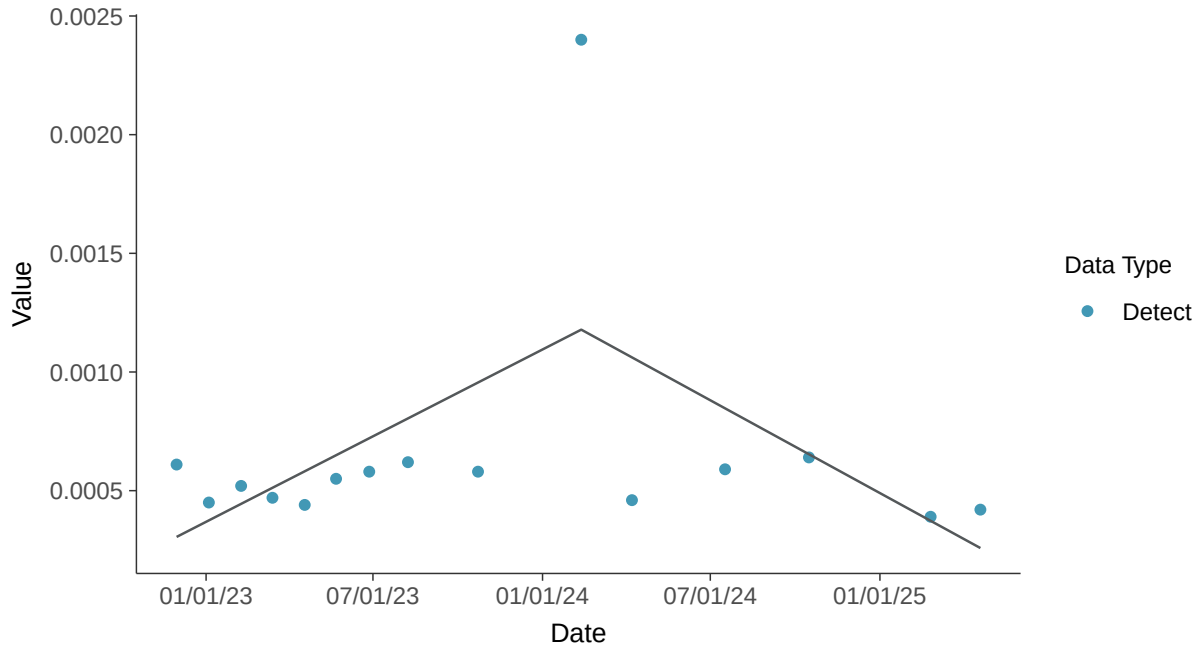
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Arsenic, MW-32 (mg/L)



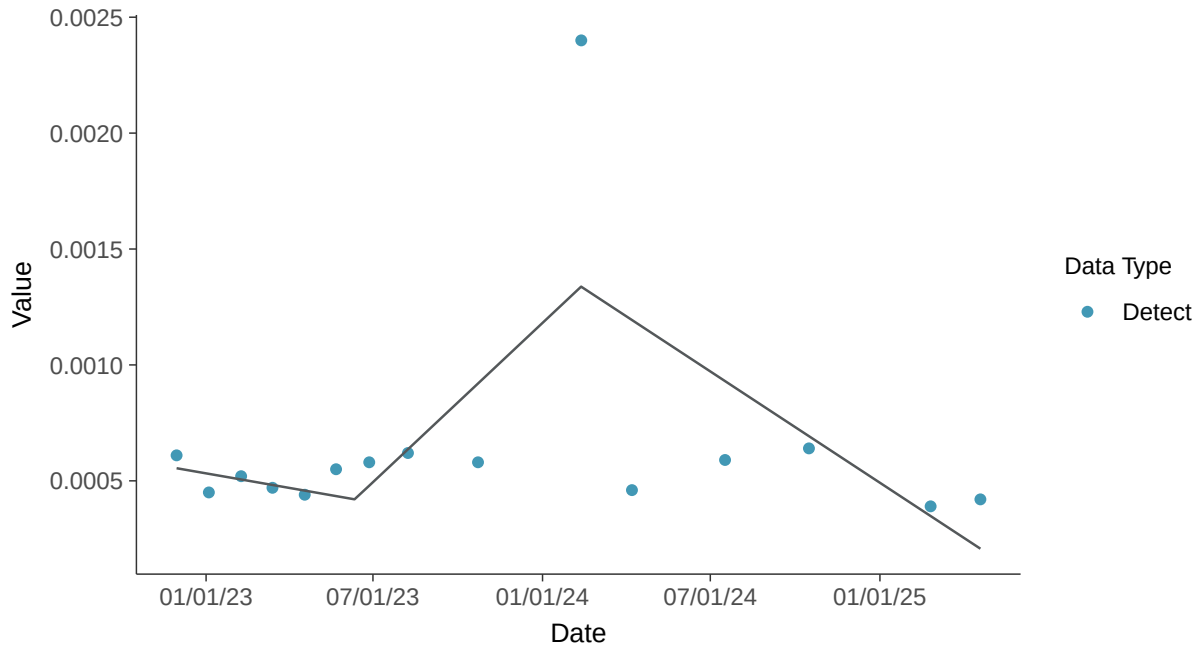
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-32 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-32 (mg/L)

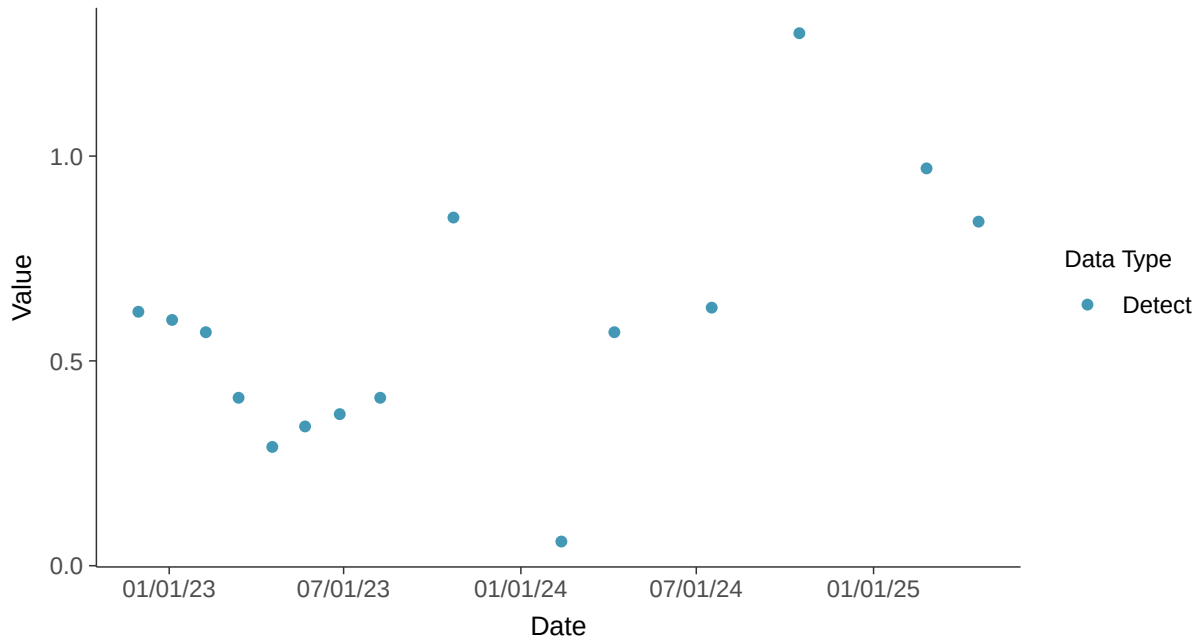


Appendix IV: Barium, MW-32

ID: 42_1_4_103

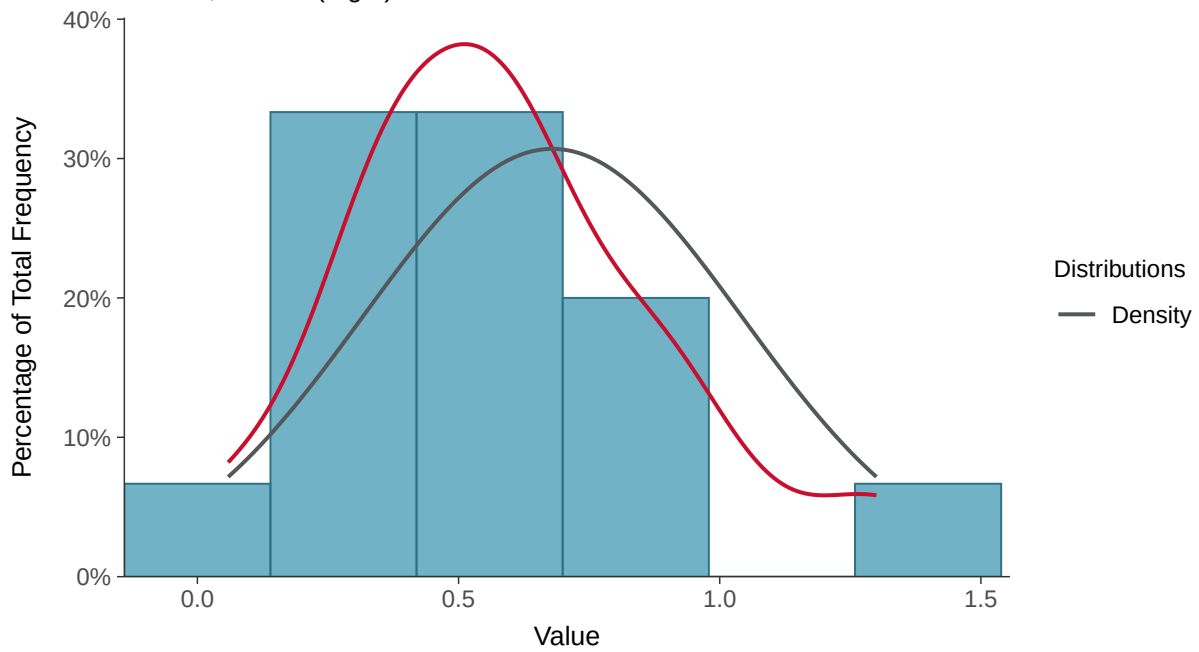
Scatter Plot

Barium, MW-32 (mg/L)



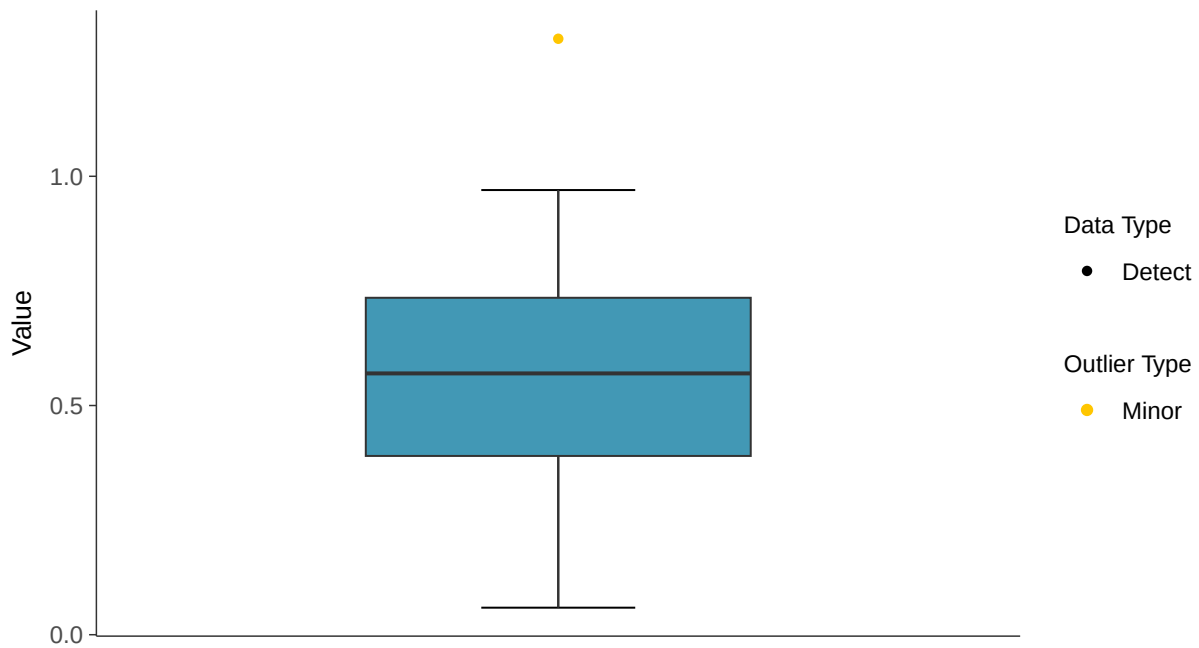
Histogram

Barium, MW-32 (mg/L)



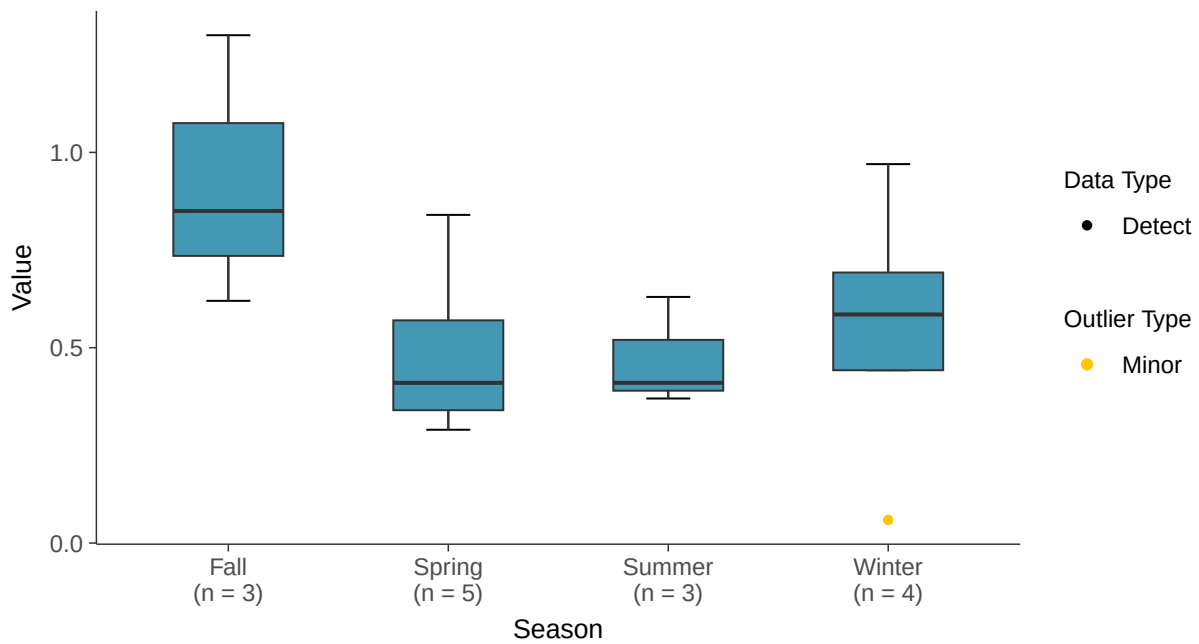
Boxplot

Barium, MW-32 (mg/L)

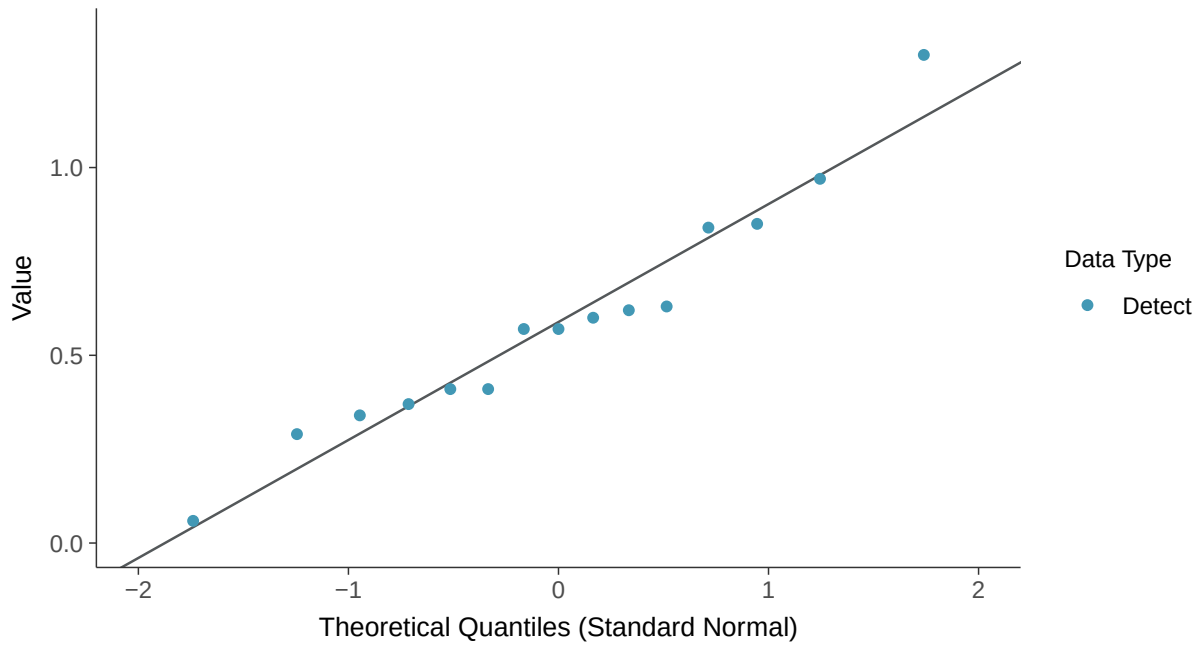


Boxplot by Season

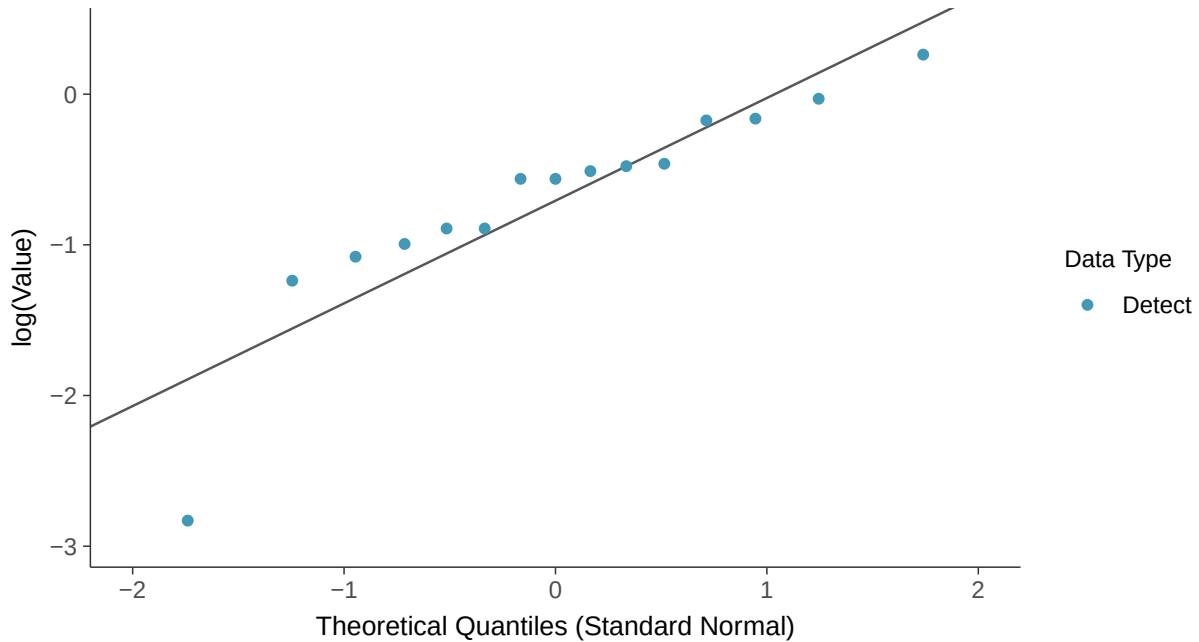
Barium, MW-32 (mg/L)



Normal Q-Q plot
Barium, MW-32 (mg/L)

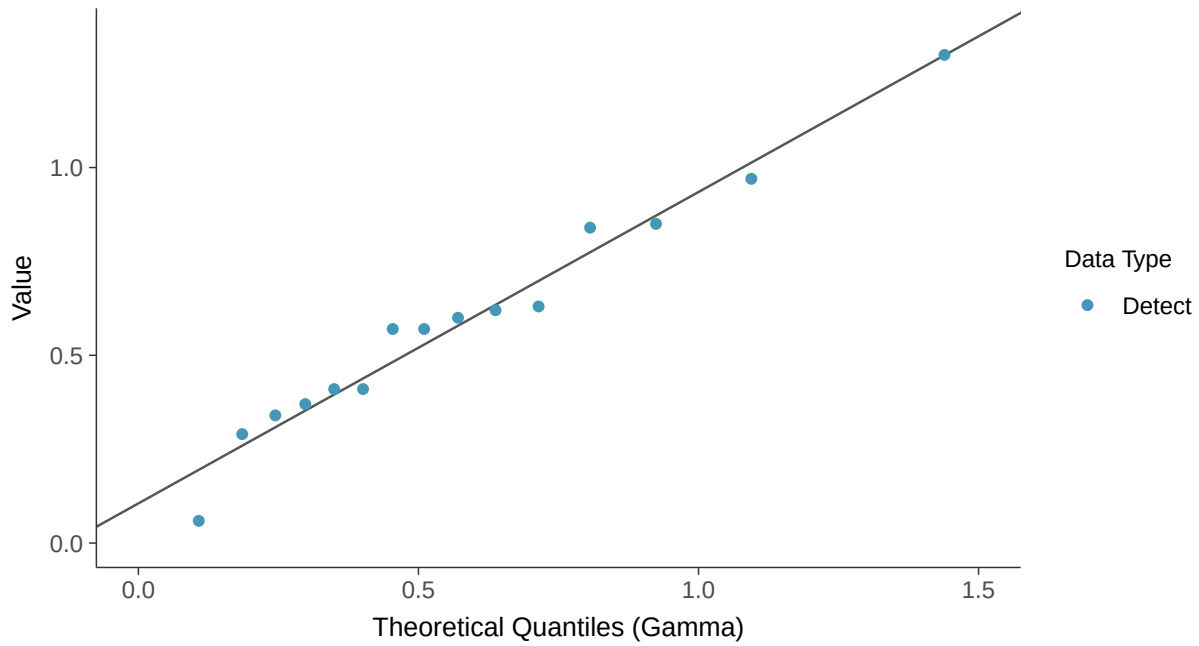


Lognormal Q-Q plot
Barium, MW-32 (mg/L)



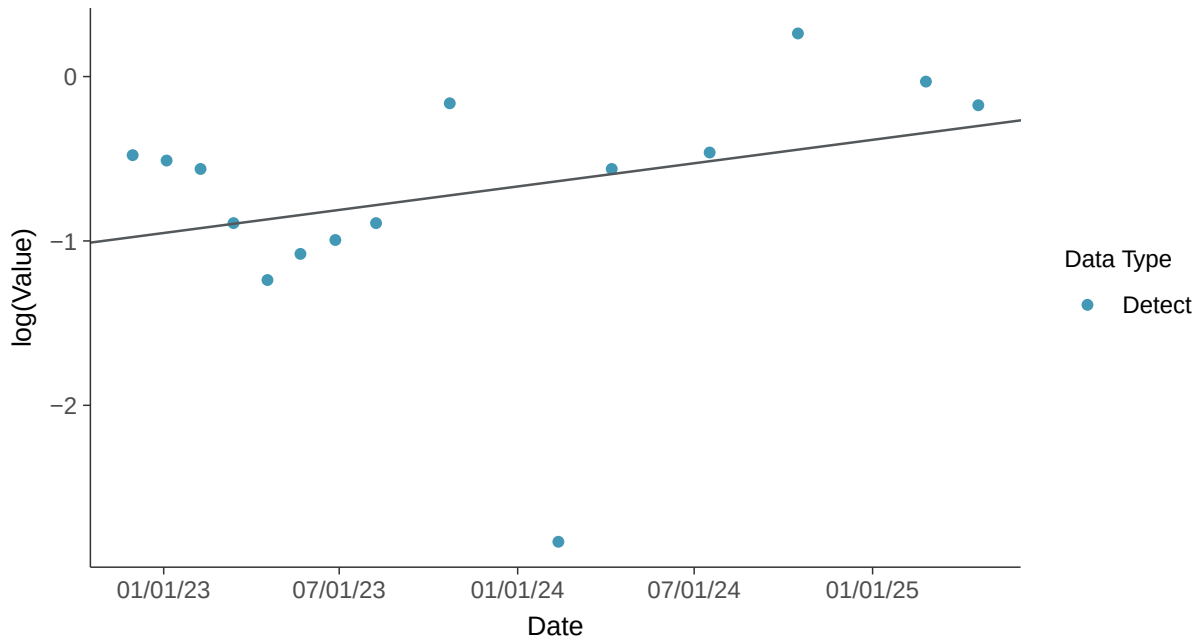
Gamma Q-Q plot

Barium, MW-32 (mg/L)



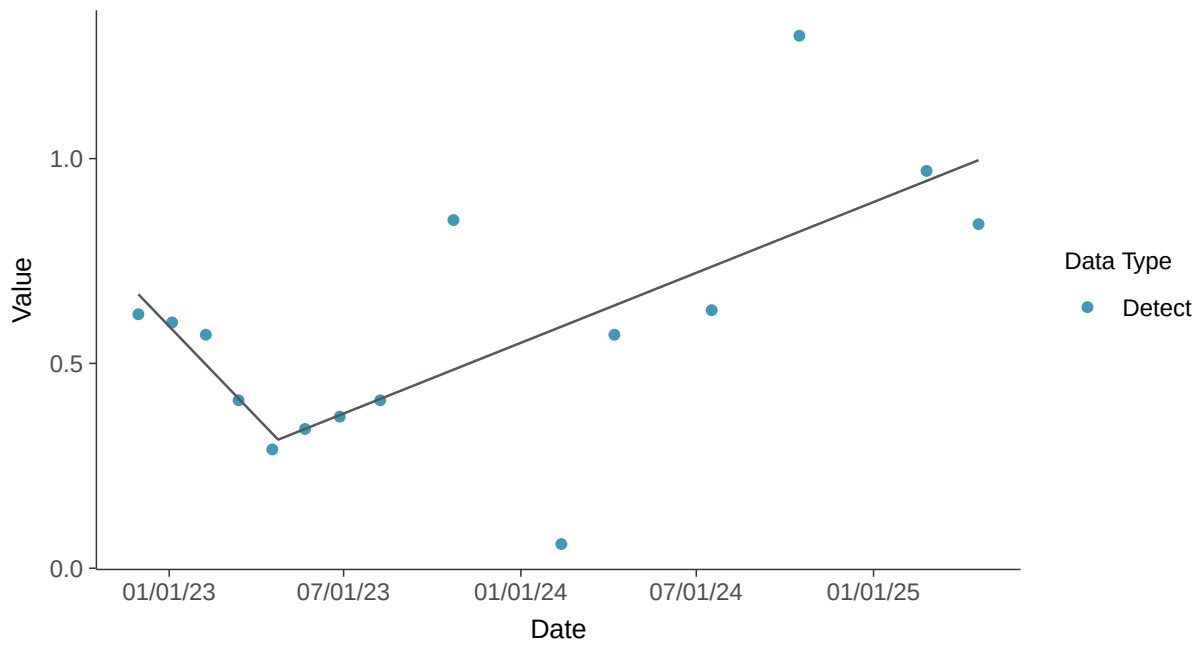
Trend Regression: Lognormal MLE

Barium, MW-32 (mg/L)



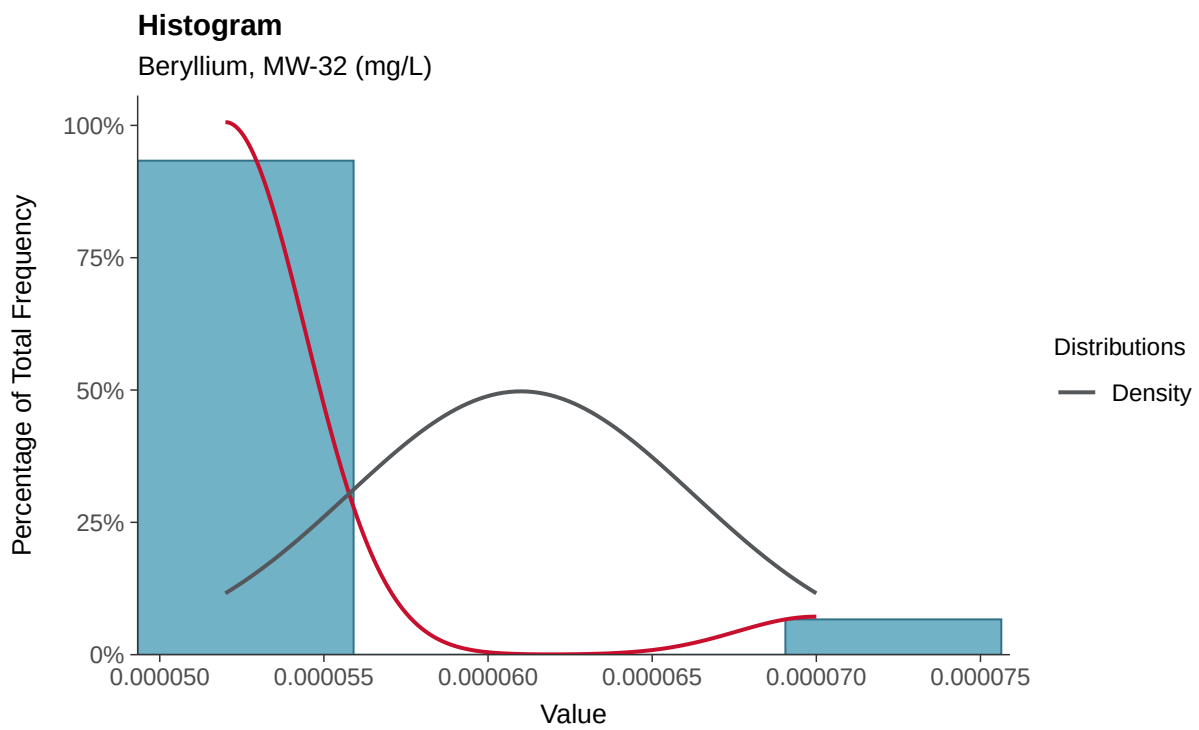
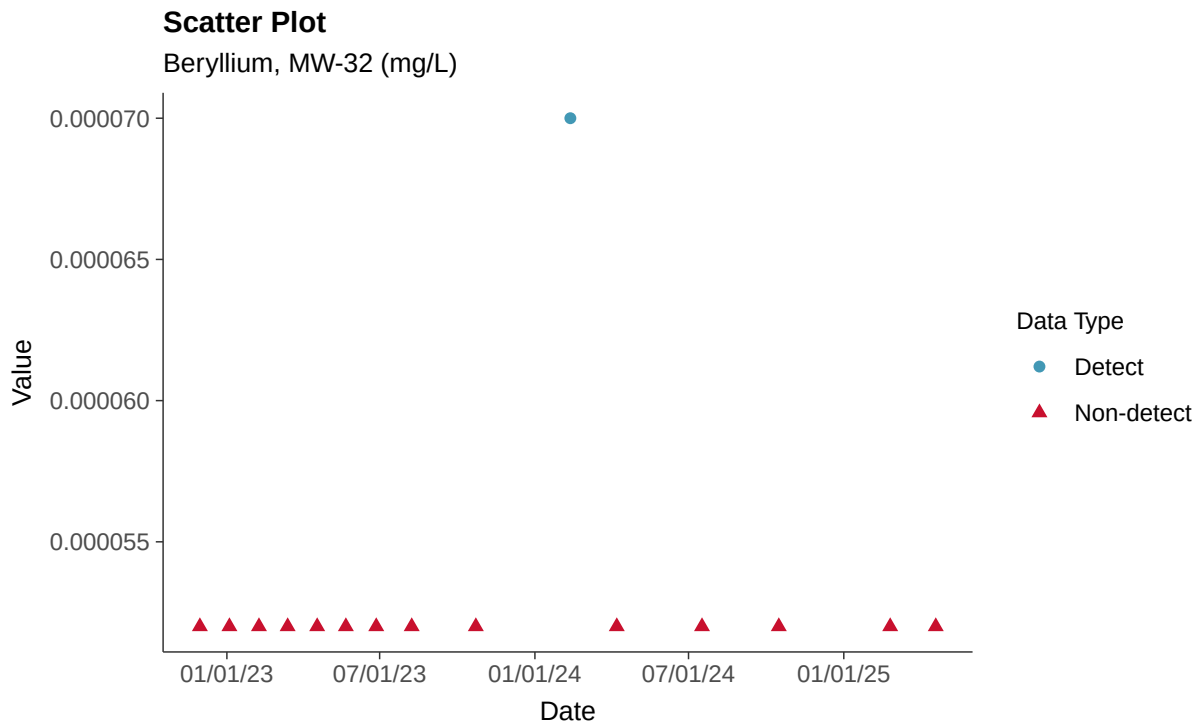


Trend Regression: Piecewise Linear-Linear
Barium, MW-32 (mg/L)



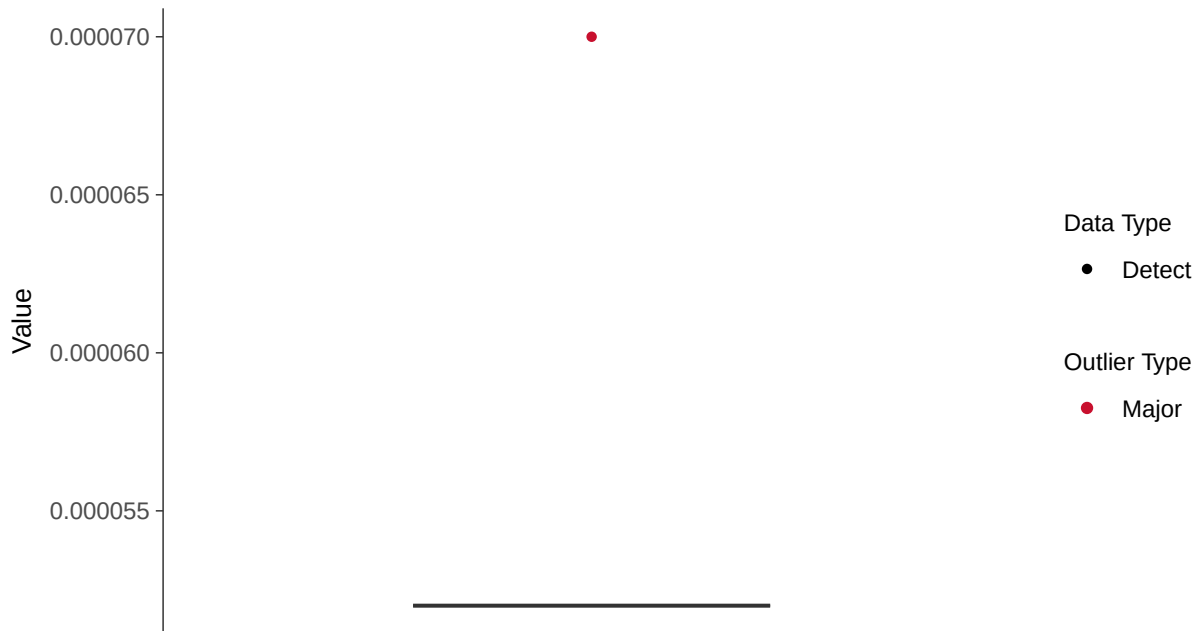
Appendix IV: Beryllium, MW-32

ID: 42_1_4_104



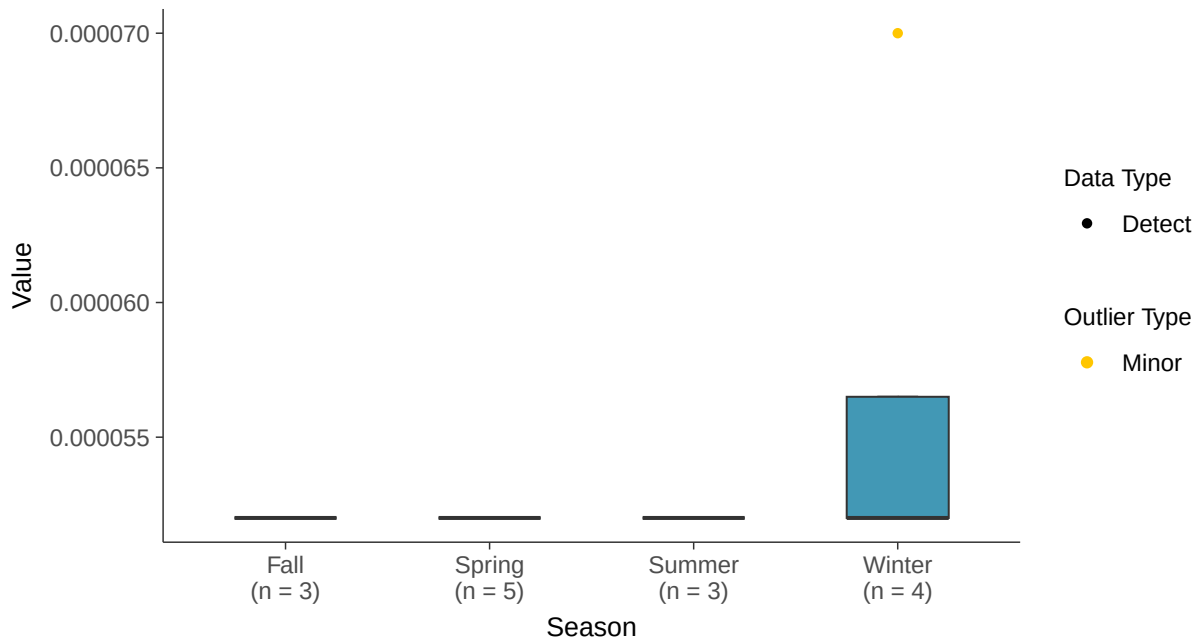
Boxplot

Beryllium, MW-32 (mg/L)



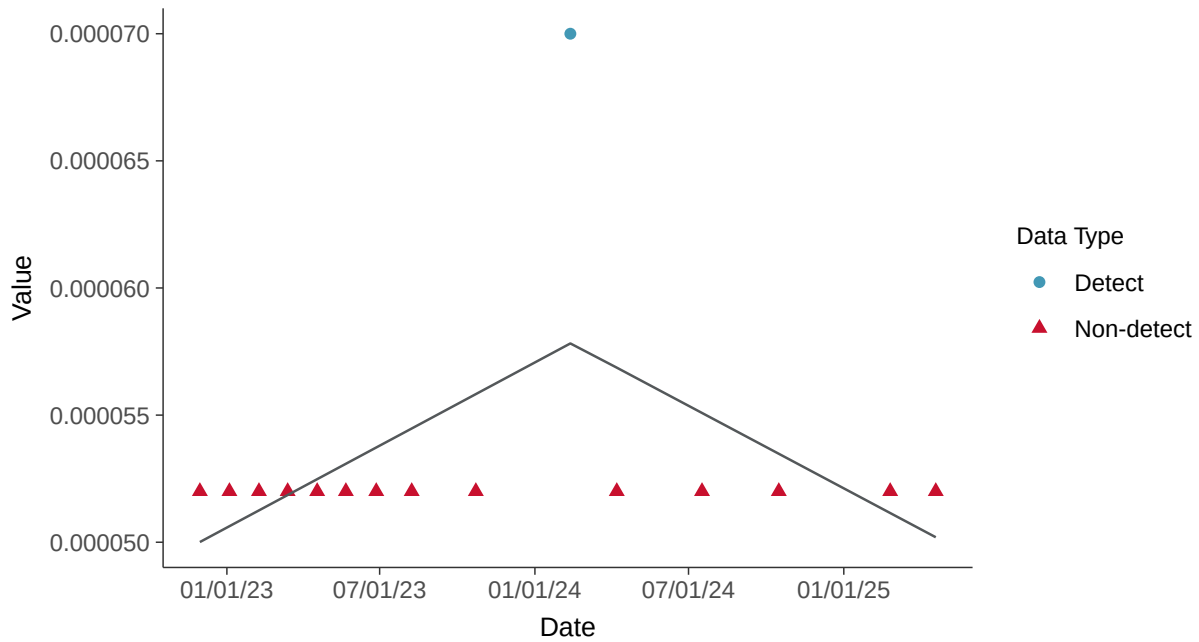
Boxplot by Season

Beryllium, MW-32 (mg/L)



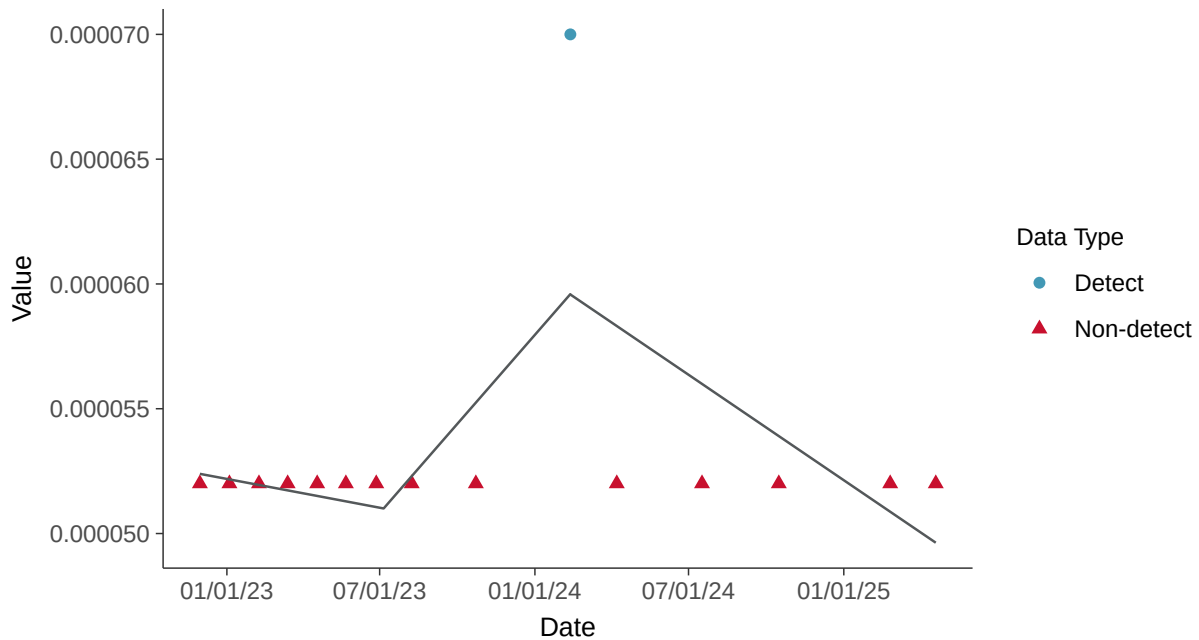
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-32 (mg/L)



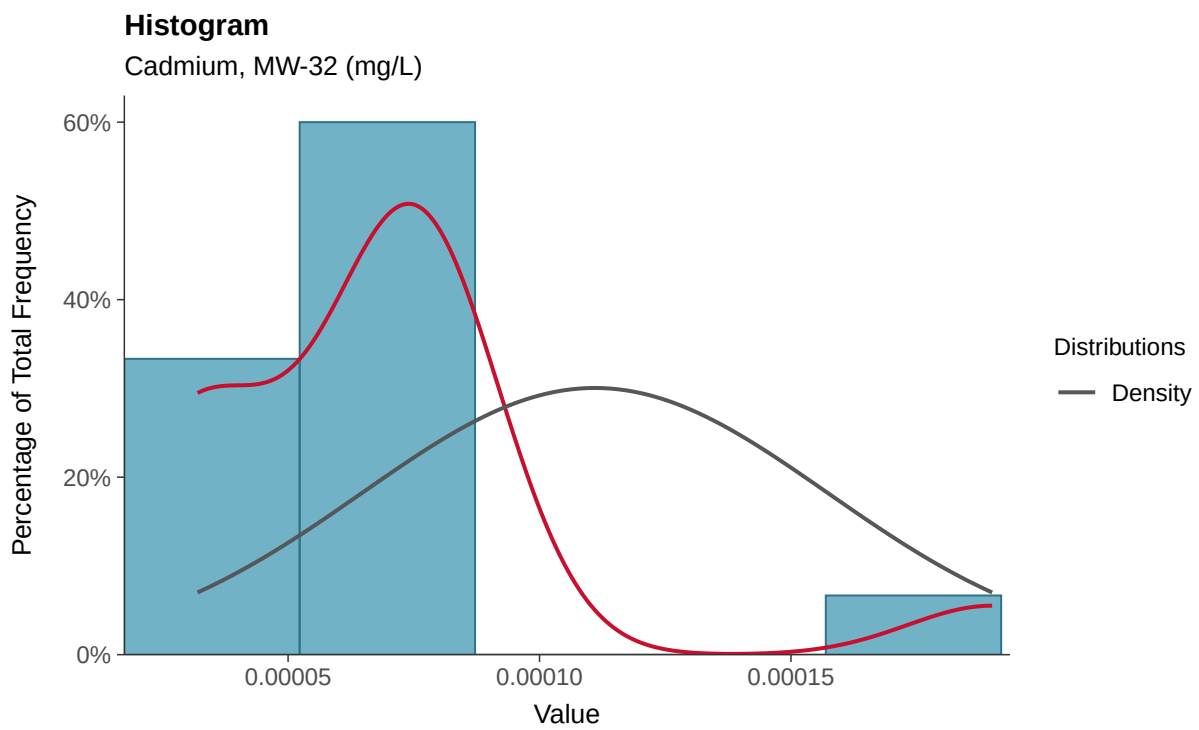
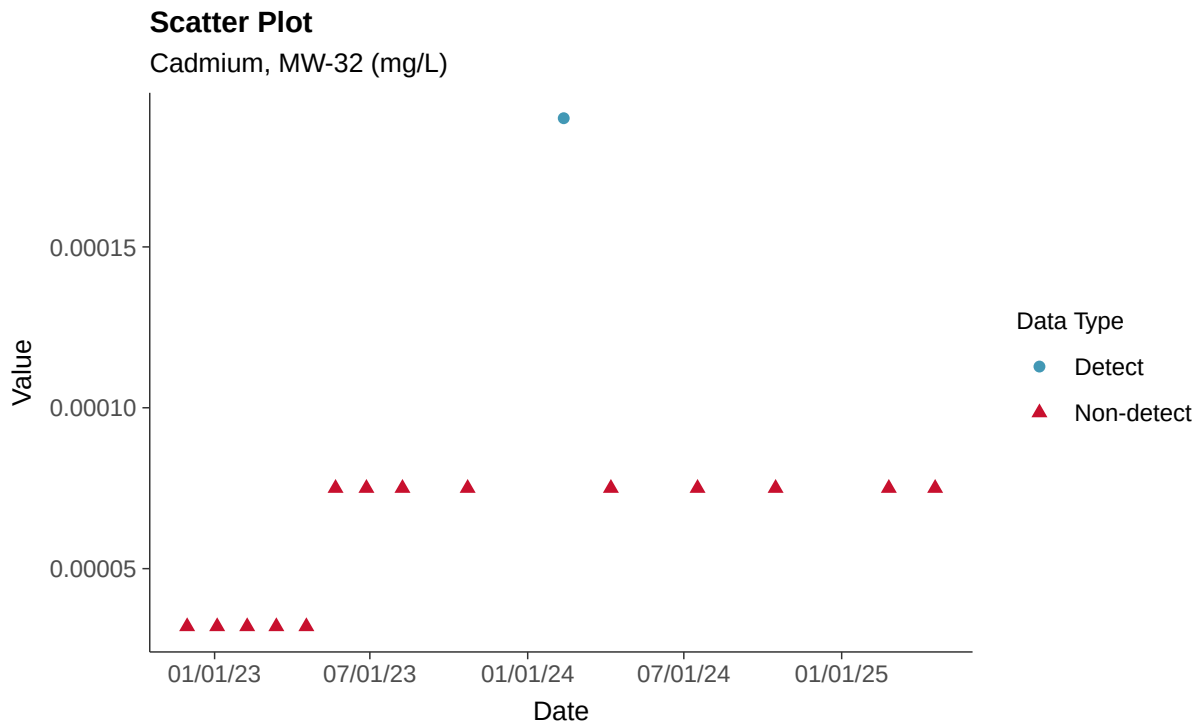
Trend Regression: Piecewise Linear-Linear-Linear

Beryllium, MW-32 (mg/L)



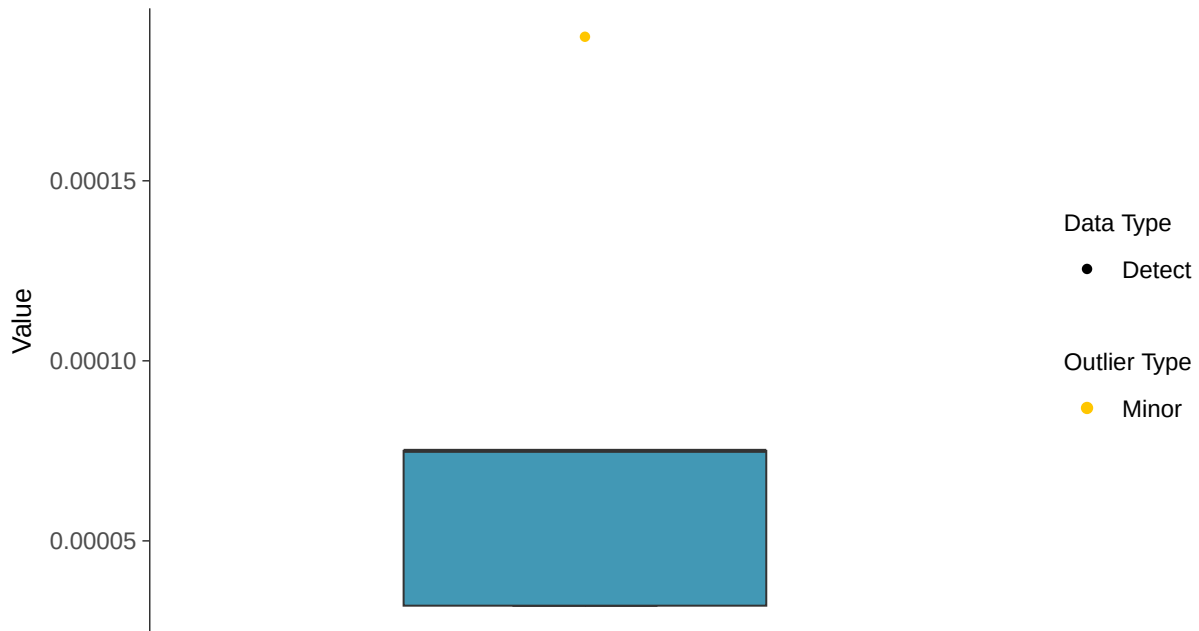
Appendix IV: Cadmium, MW-32

ID: 42_1_4_106



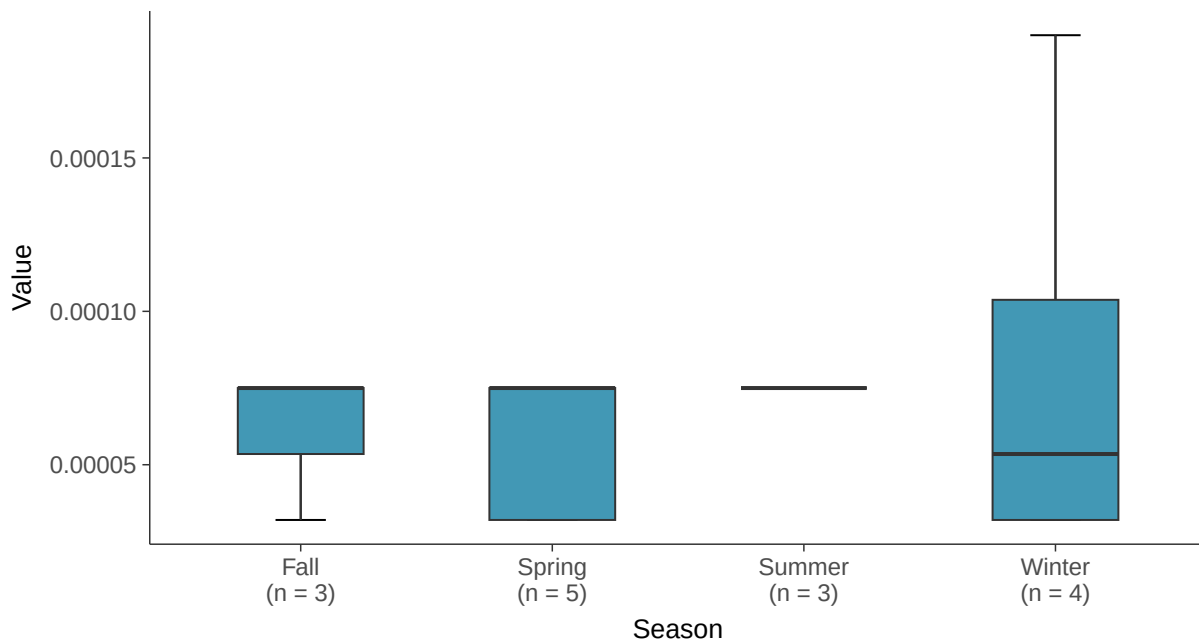
Boxplot

Cadmium, MW-32 (mg/L)



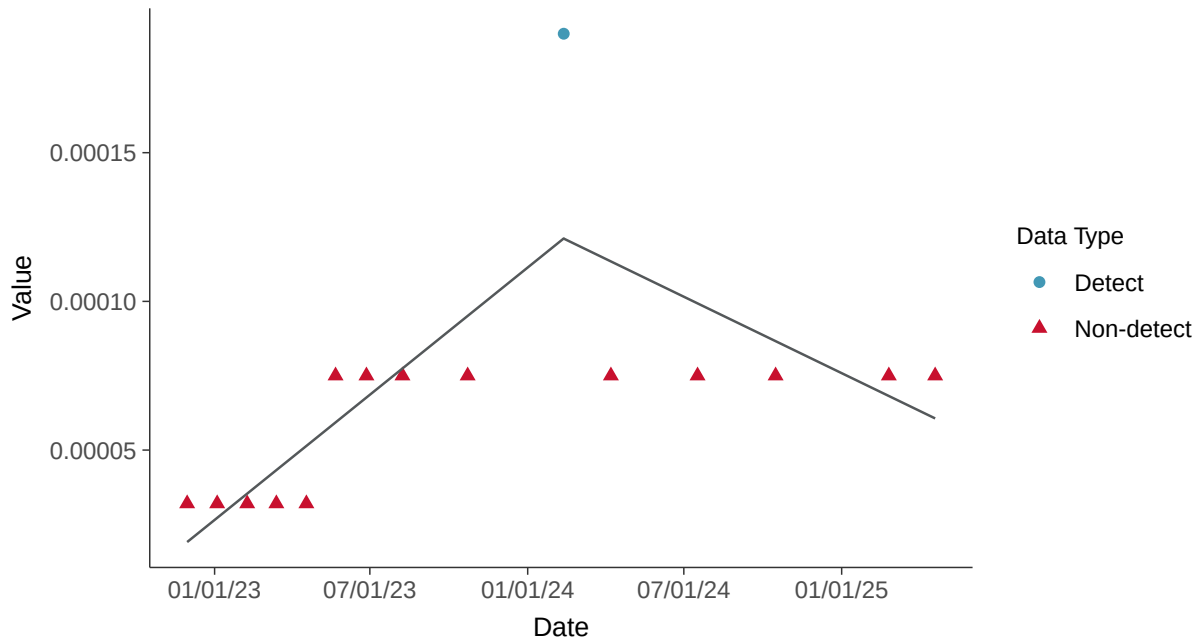
Boxplot by Season

Cadmium, MW-32 (mg/L)



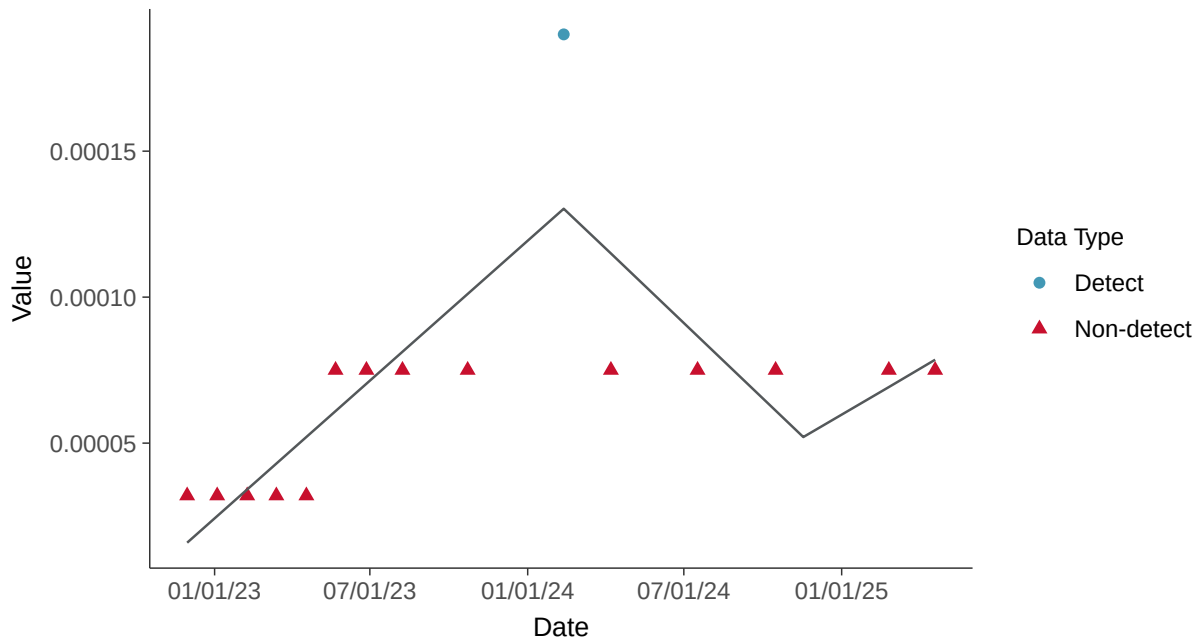
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-32 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cadmium, MW-32 (mg/L)

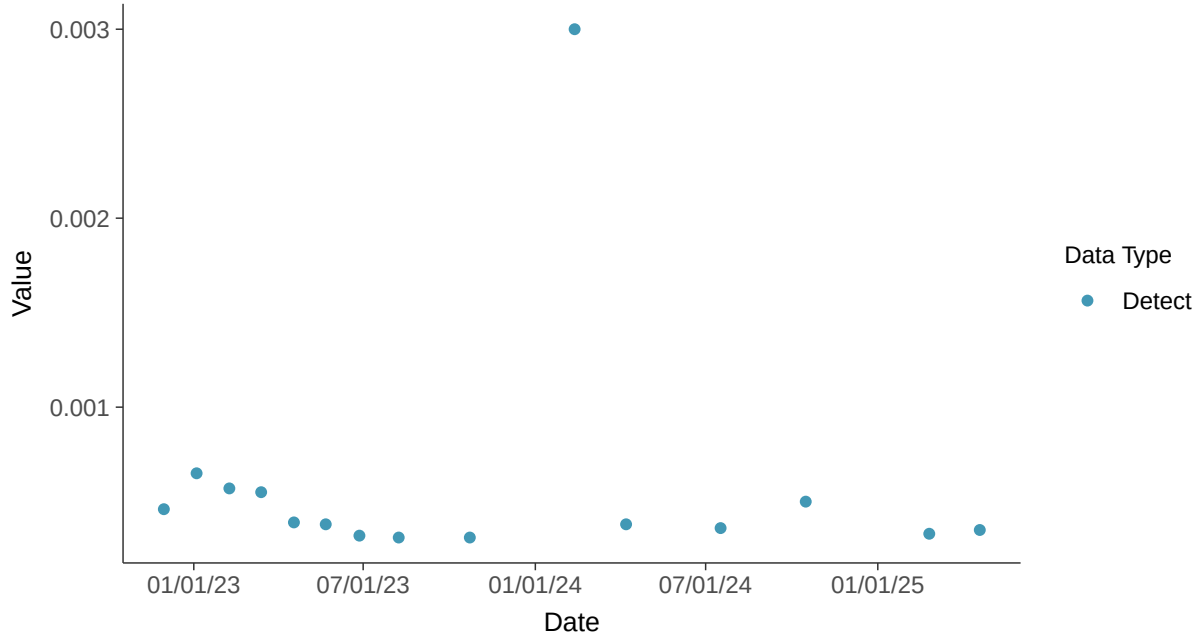


Appendix IV: Chromium, Total, MW-32

ID: 42_1_4_109

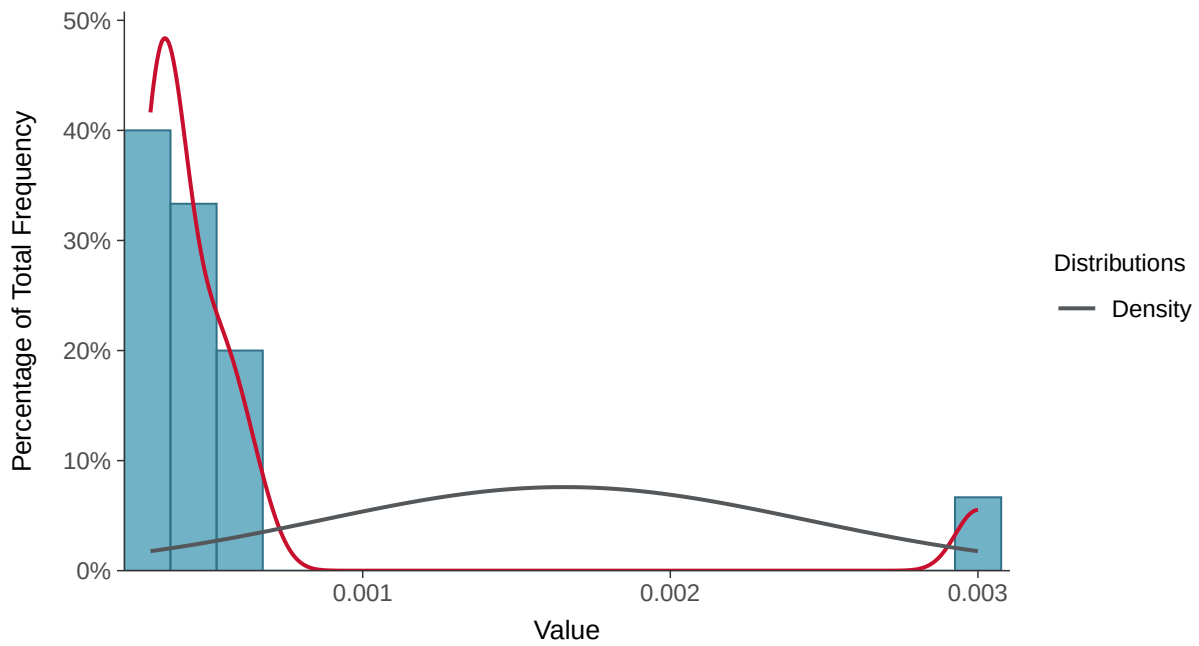
Scatter Plot

Chromium, Total, MW-32 (mg/L)



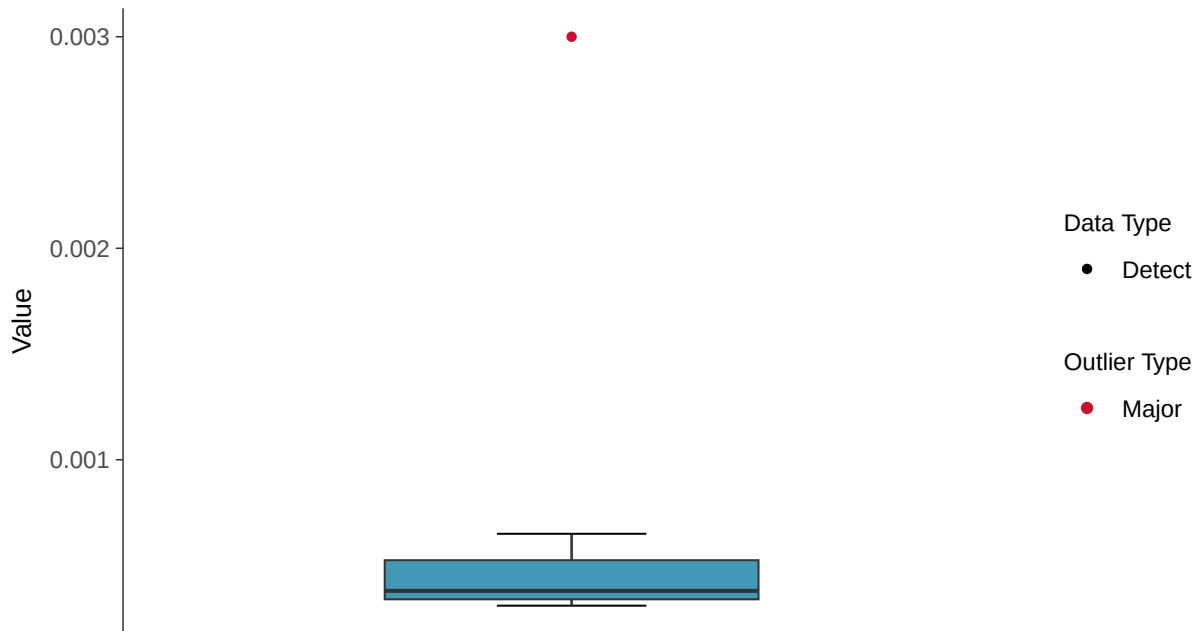
Histogram

Chromium, Total, MW-32 (mg/L)



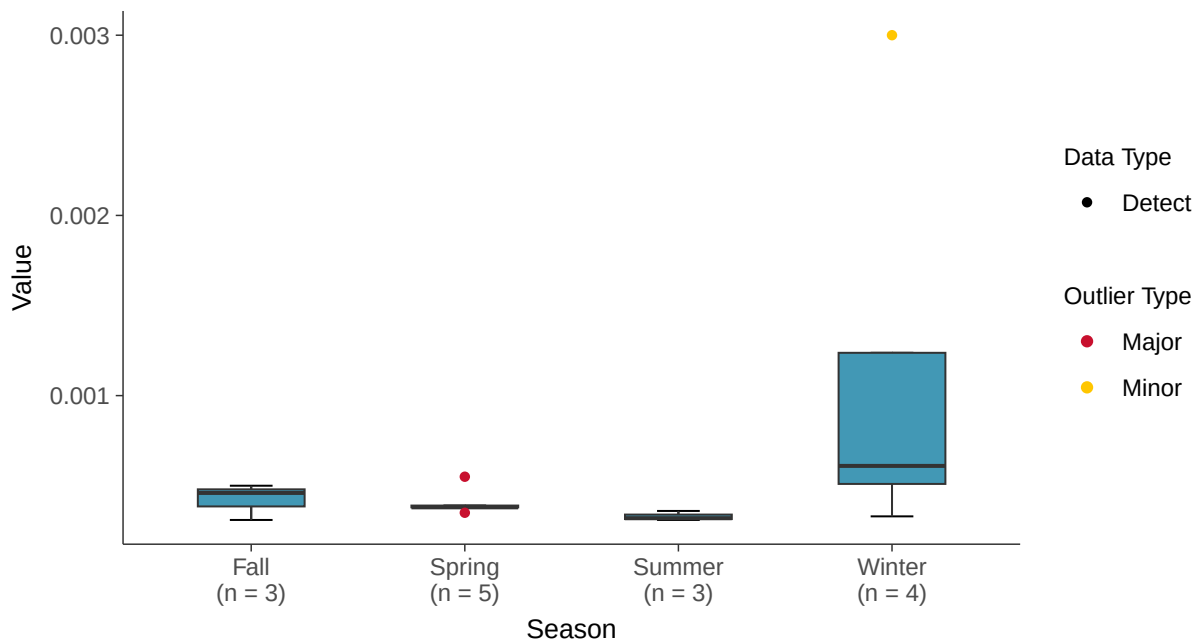
Boxplot

Chromium, Total, MW-32 (mg/L)



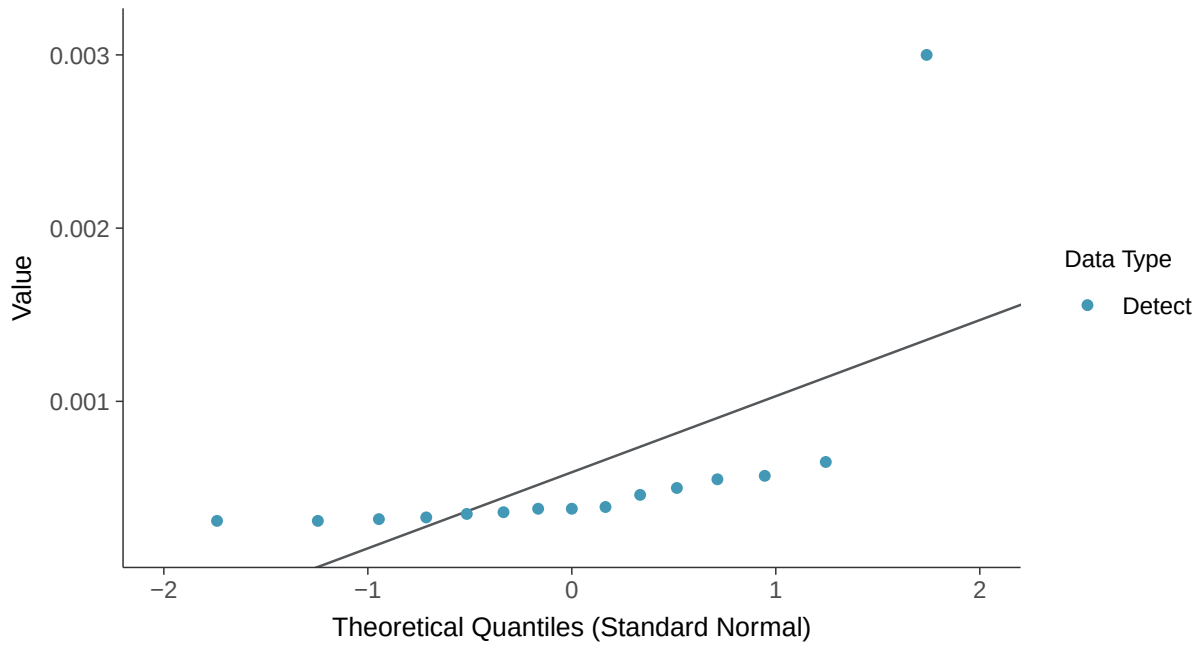
Boxplot by Season

Chromium, Total, MW-32 (mg/L)



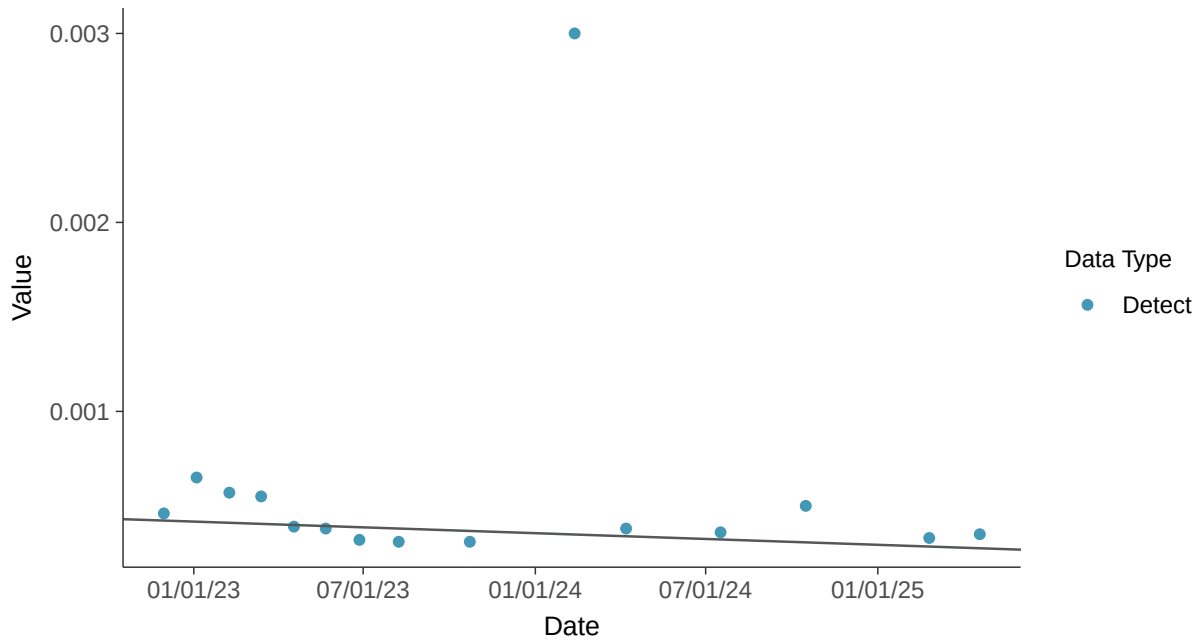
Normal Q-Q plot

Chromium, Total, MW-32 (mg/L)



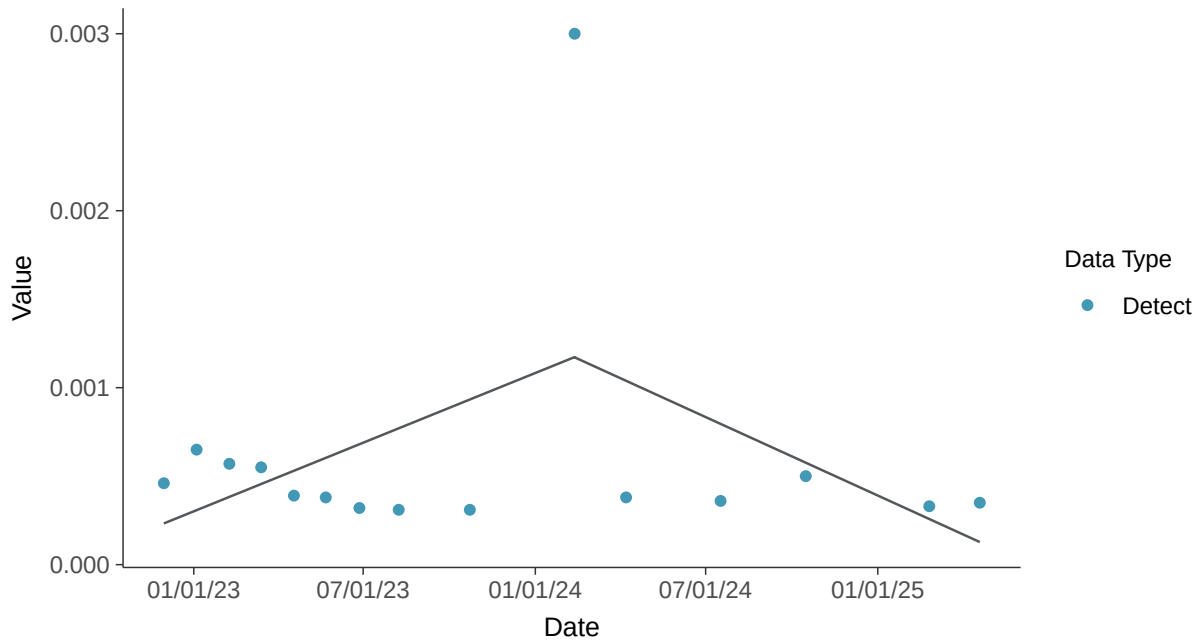
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Chromium, Total, MW-32 (mg/L)



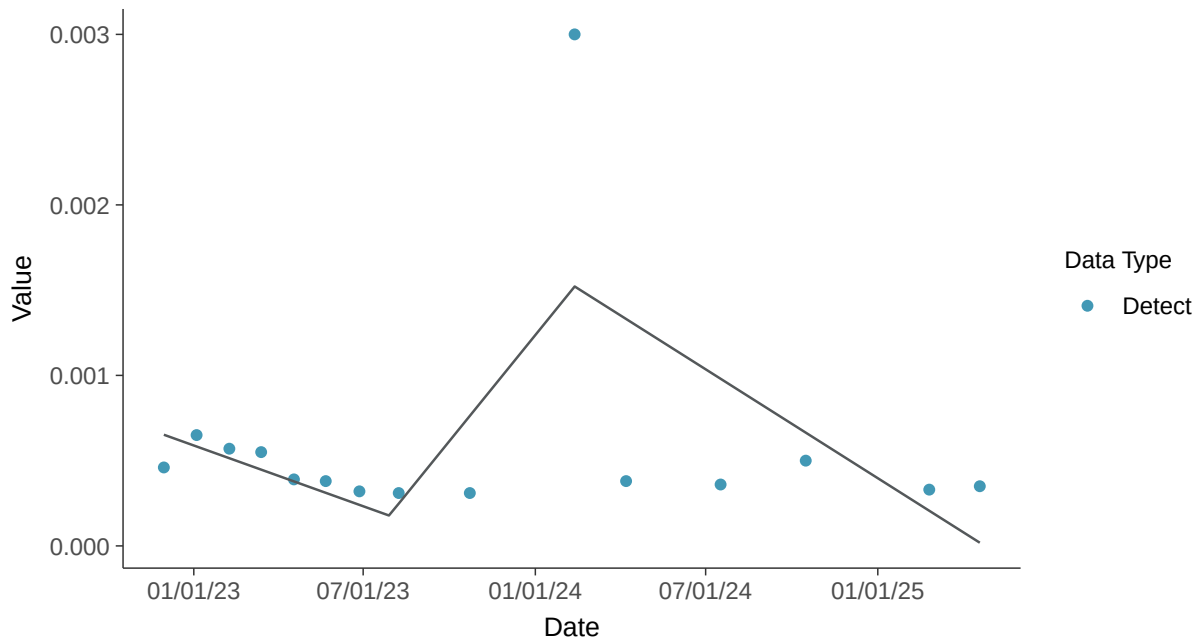
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-32 (mg/L)



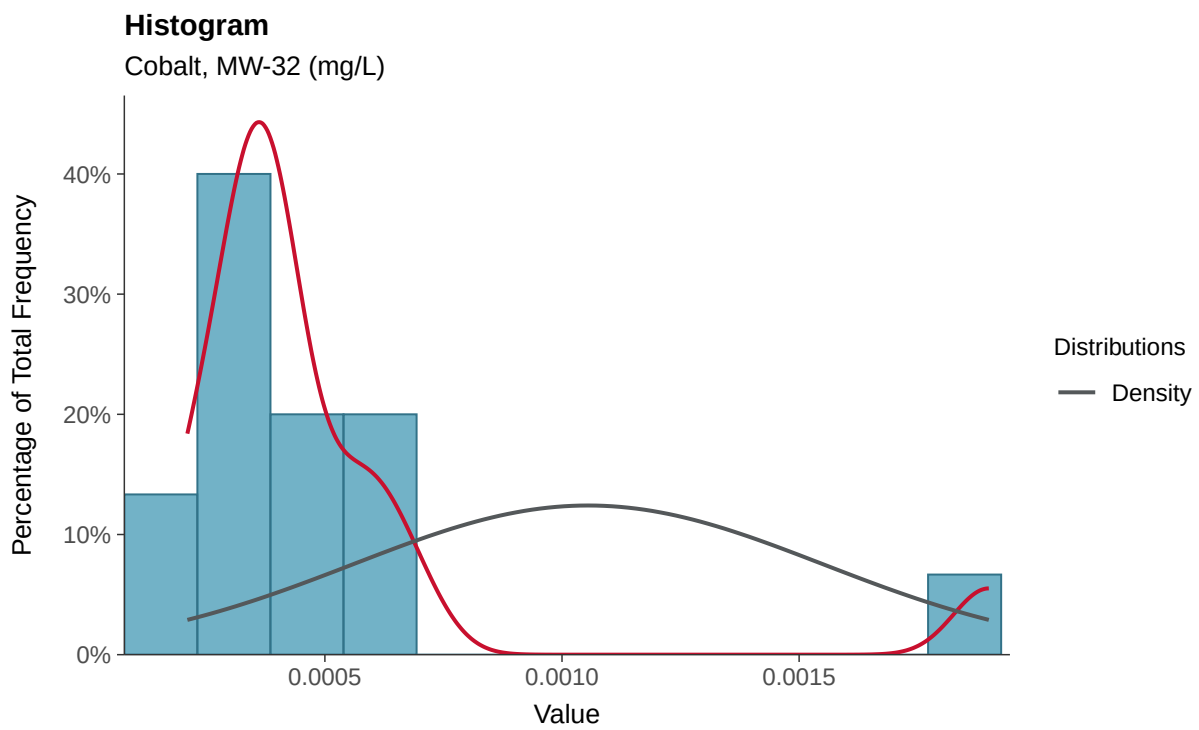
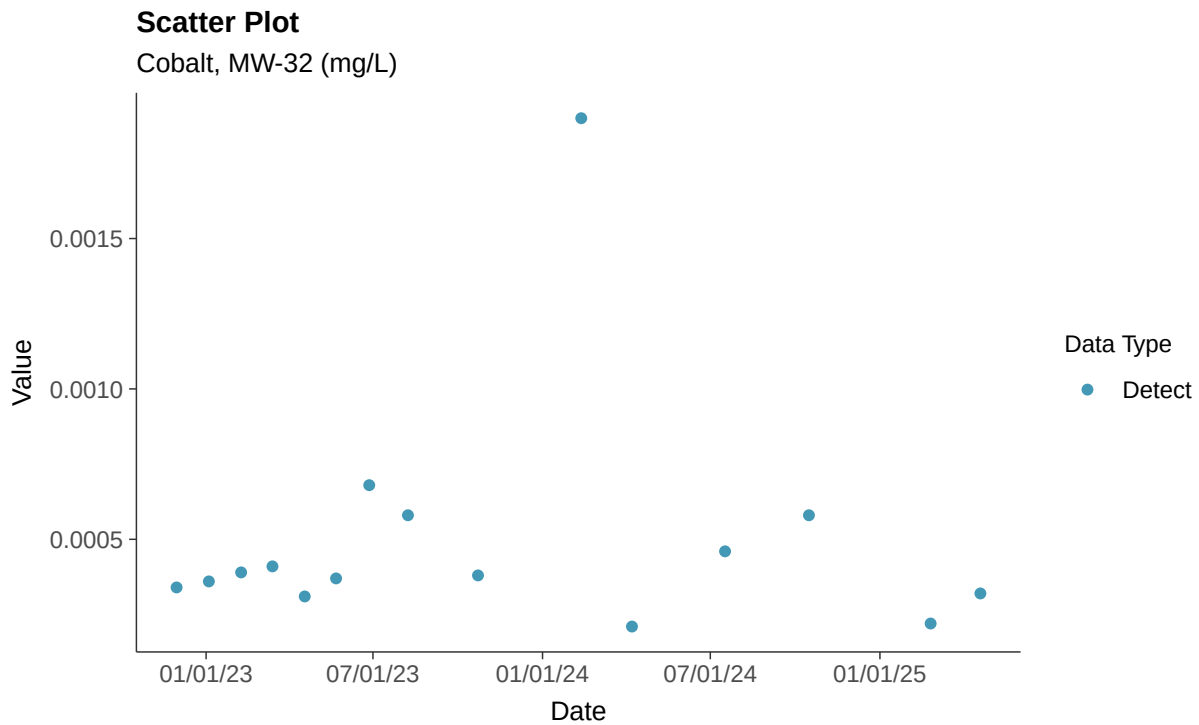
Trend Regression: Piecewise Linear-Linear-Linear

Chromium, Total, MW-32 (mg/L)



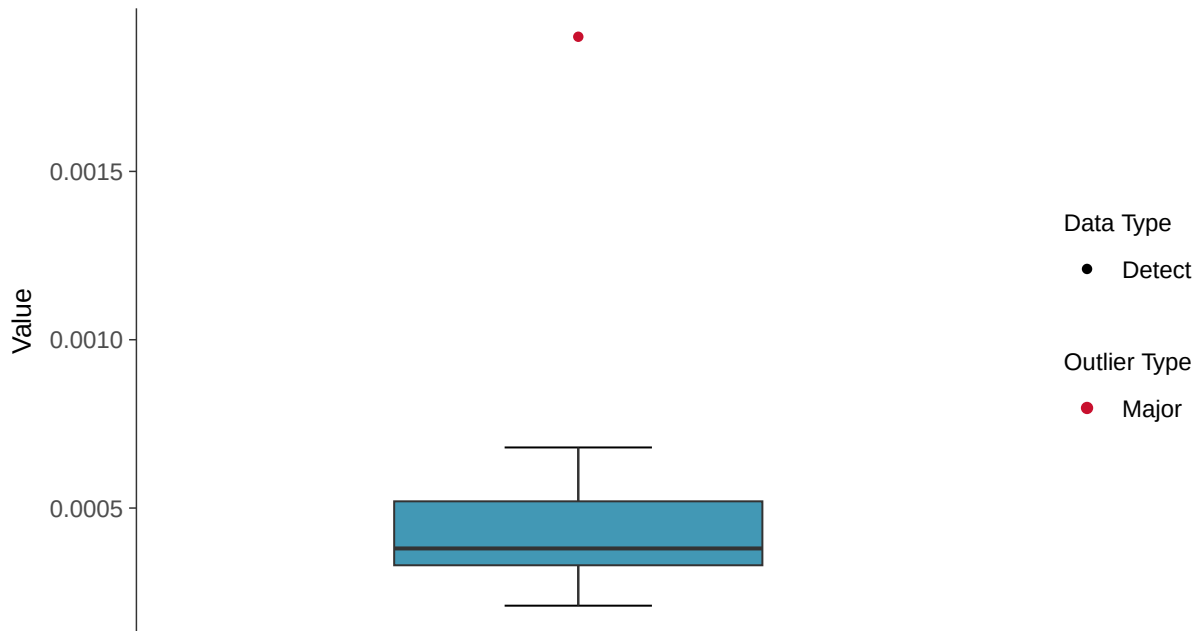
Appendix IV: Cobalt, MW-32

ID: 42_1_4_110



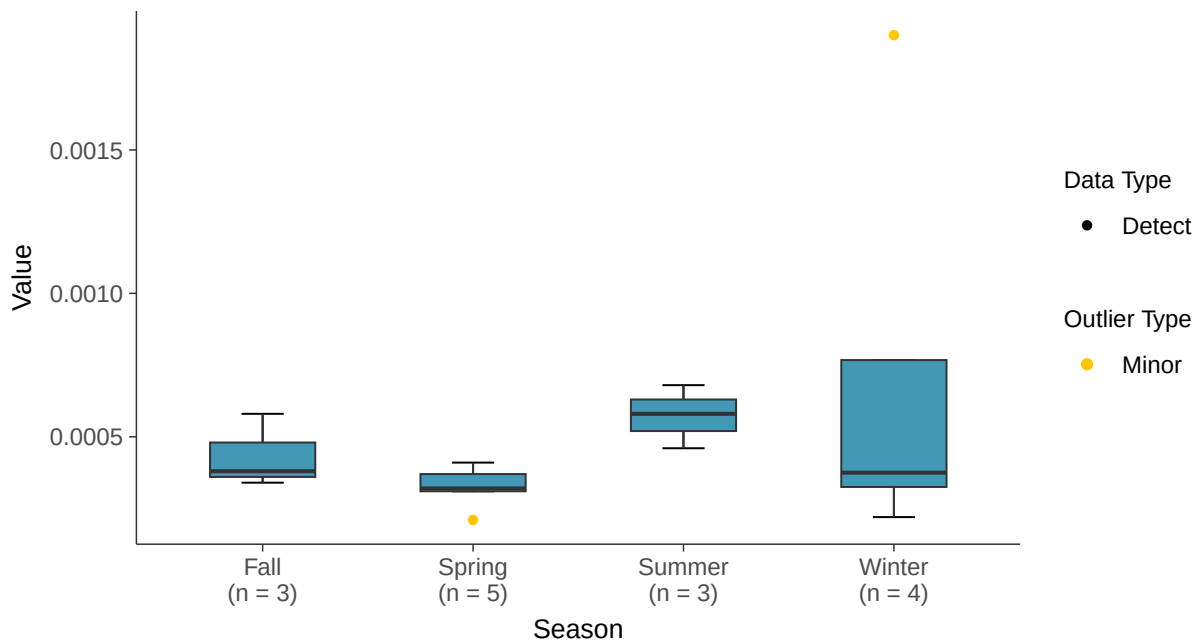
Boxplot

Cobalt, MW-32 (mg/L)

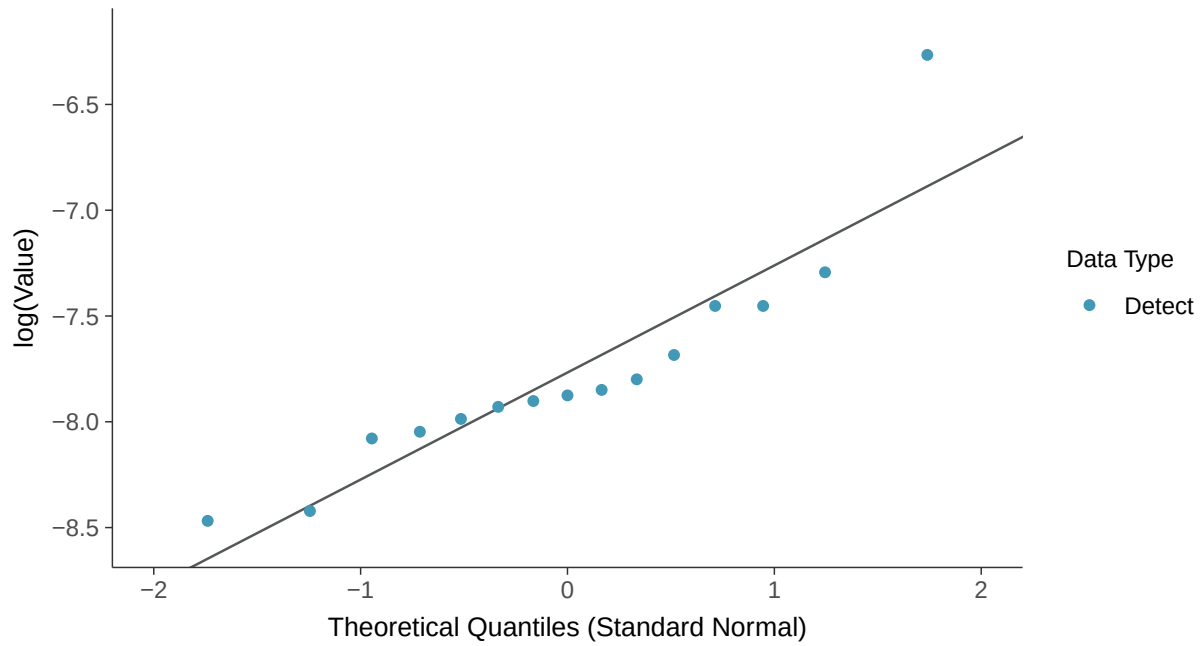


Boxplot by Season

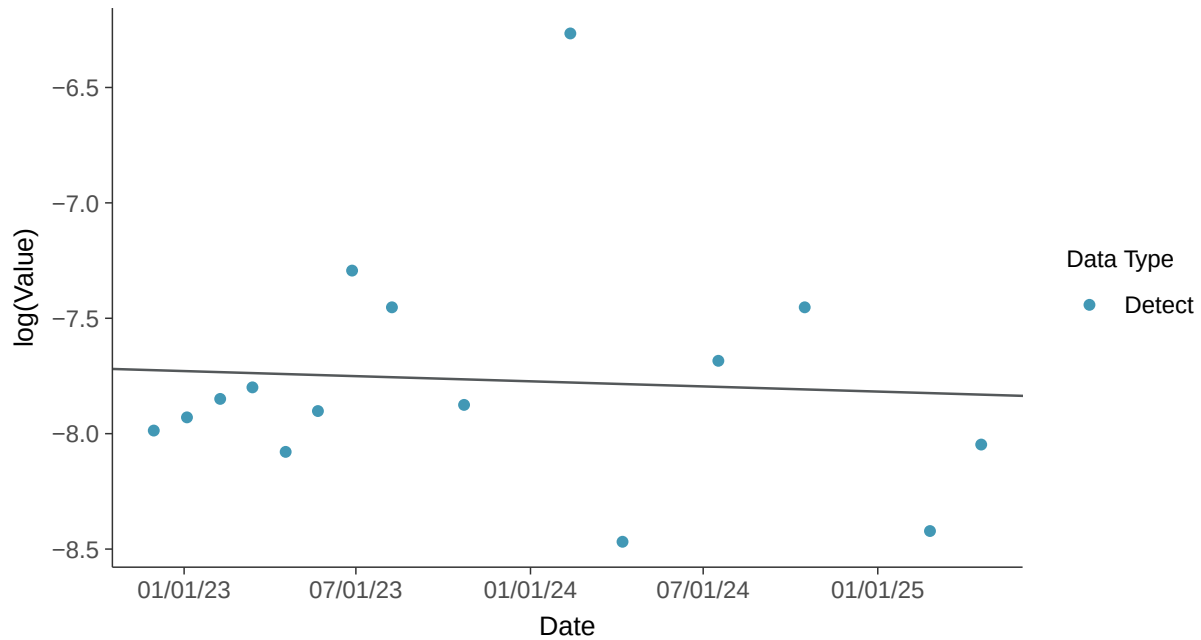
Cobalt, MW-32 (mg/L)



Lognormal Q-Q plot
Cobalt, MW-32 (mg/L)

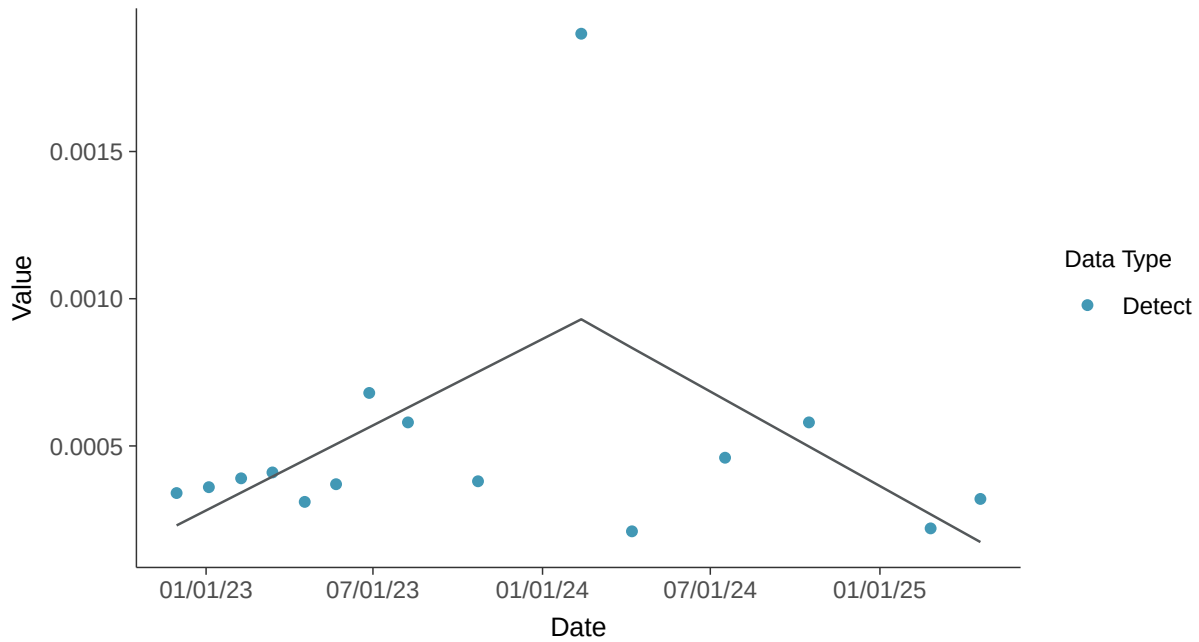


Trend Regression: Lognormal MLE
Cobalt, MW-32 (mg/L)



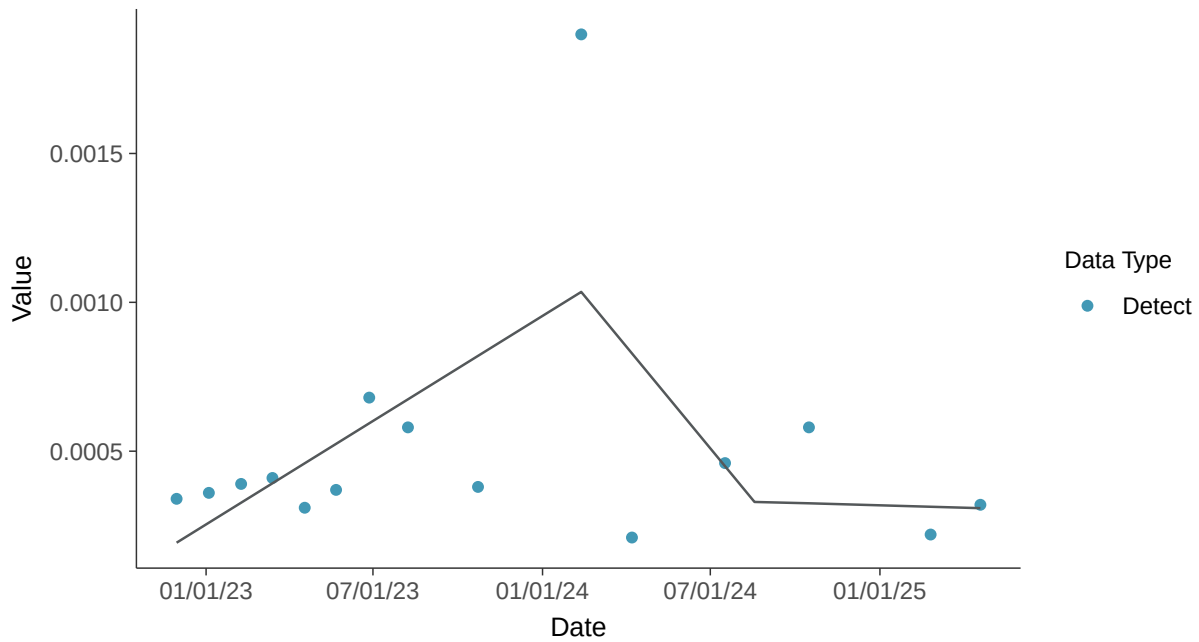
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-32 (mg/L)



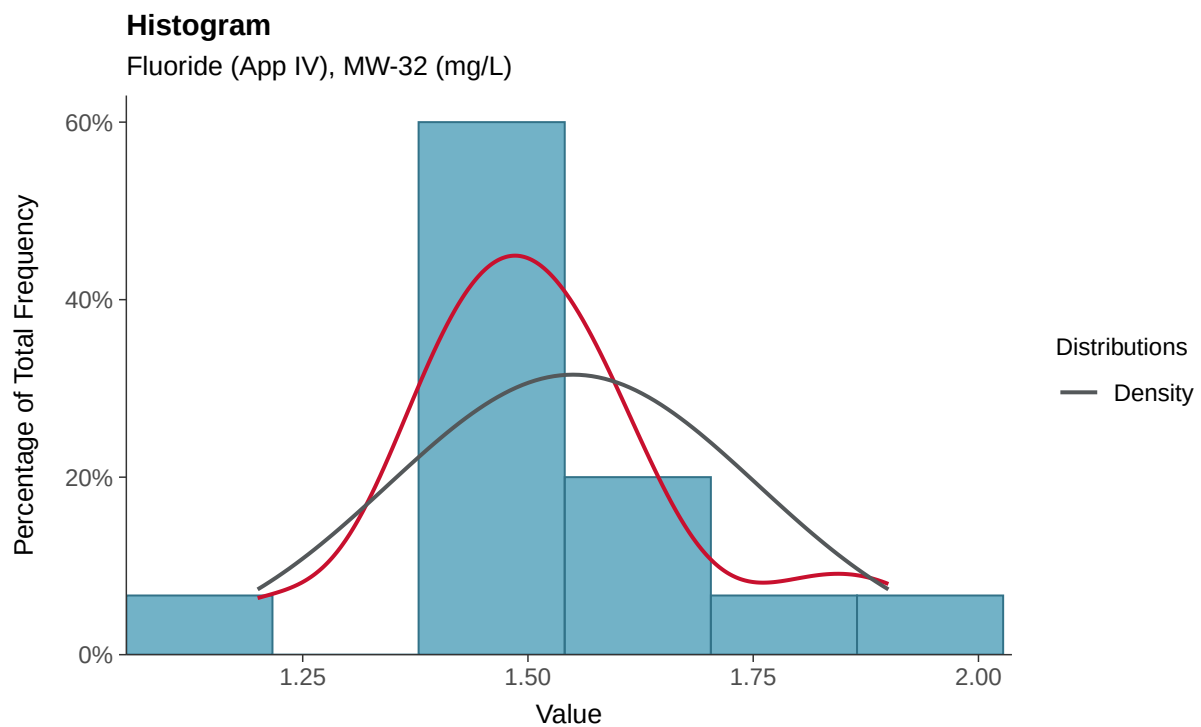
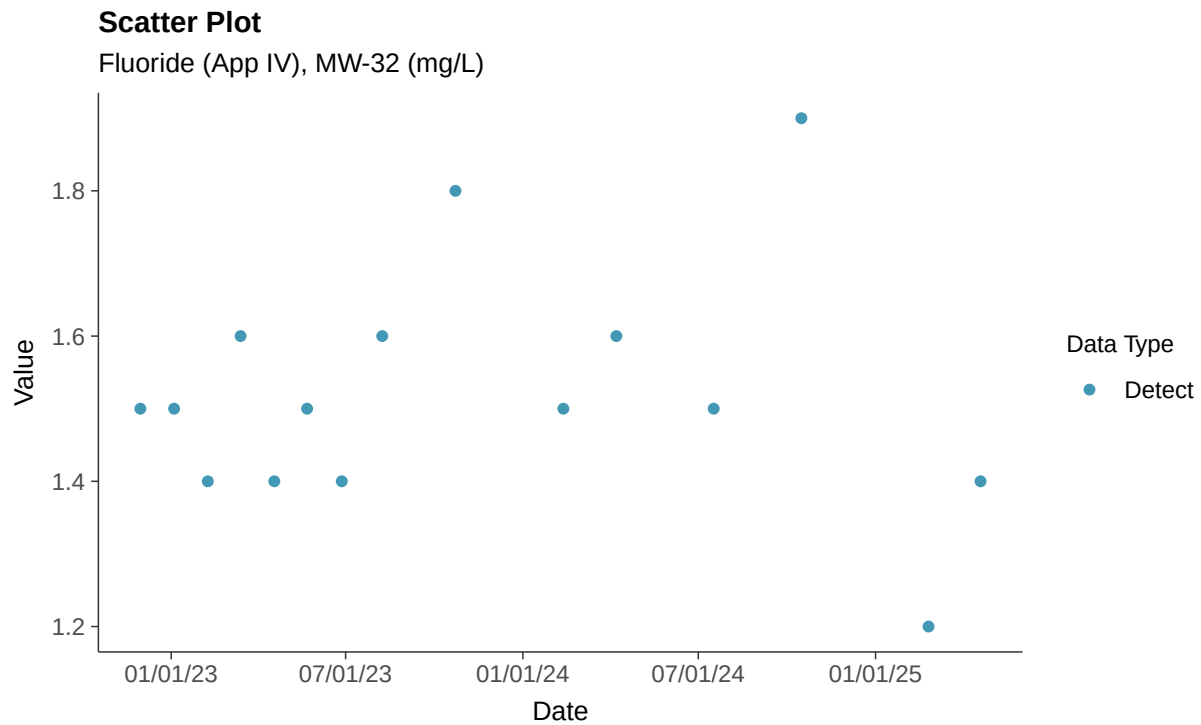
Trend Regression: Piecewise Linear-Linear-Linear

Cobalt, MW-32 (mg/L)



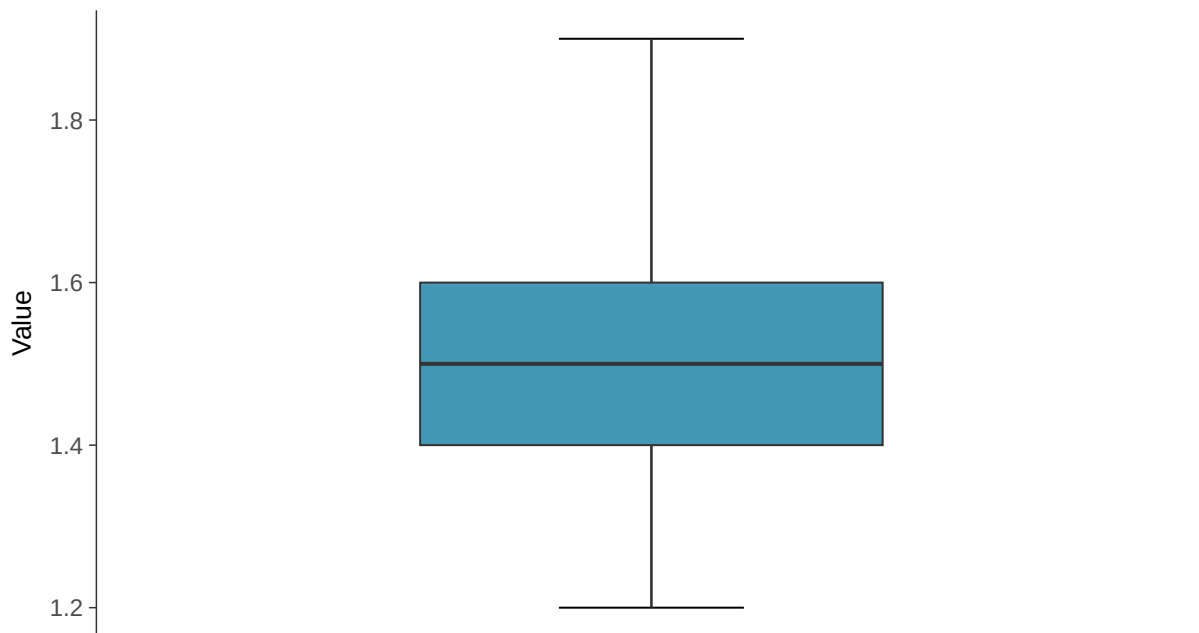
Appendix IV: Fluoride (App IV), MW-32

ID: 42_1_4_113



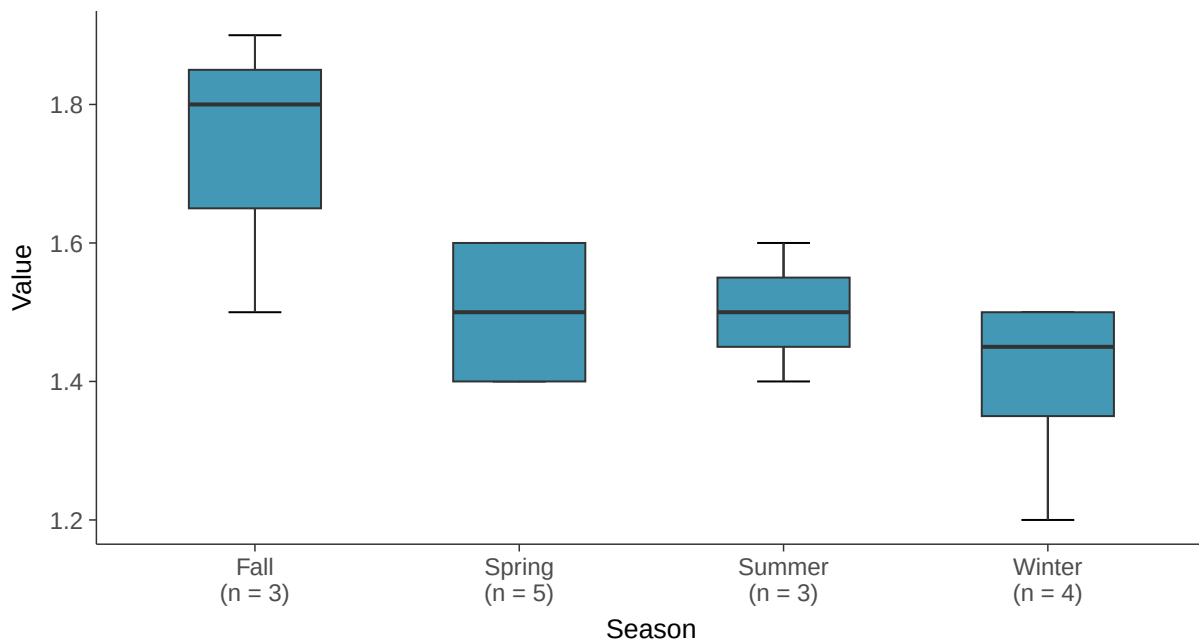
Boxplot

Fluoride (App IV), MW-32 (mg/L)



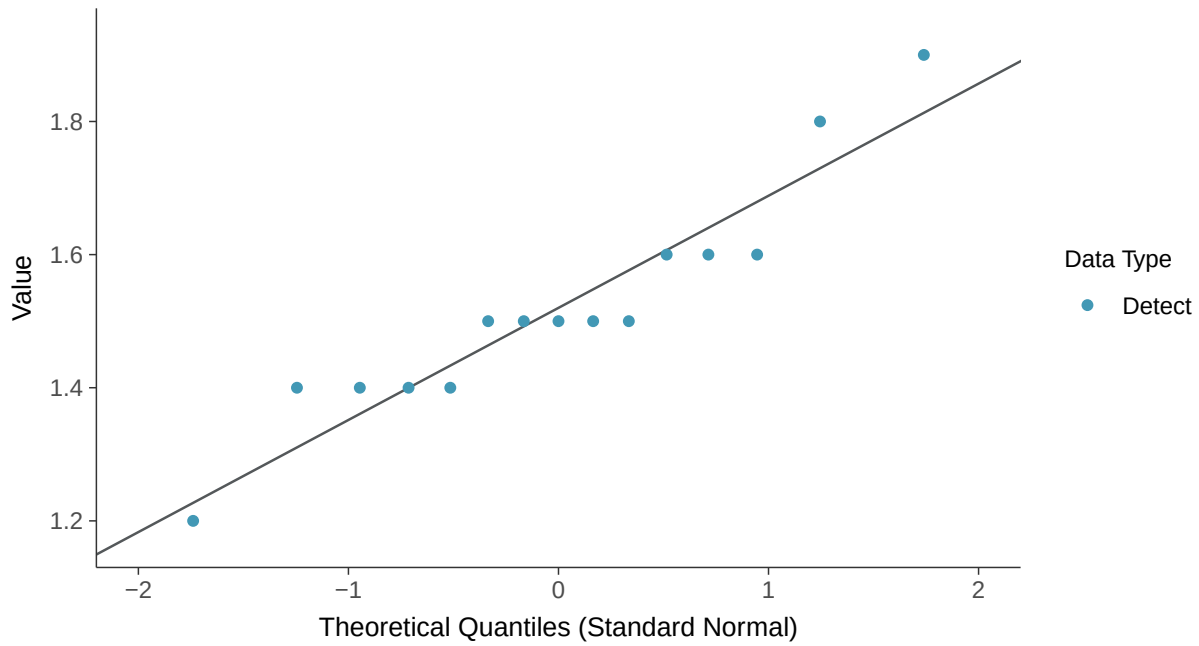
Boxplot by Season

Fluoride (App IV), MW-32 (mg/L)



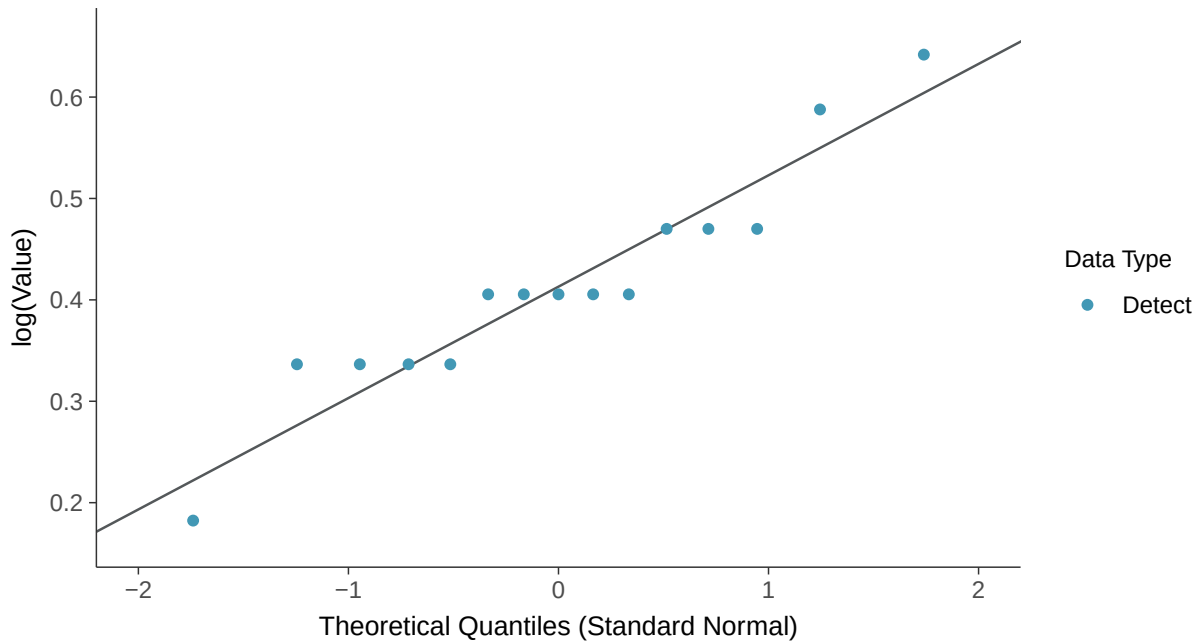
Normal Q-Q plot

Fluoride (App IV), MW-32 (mg/L)



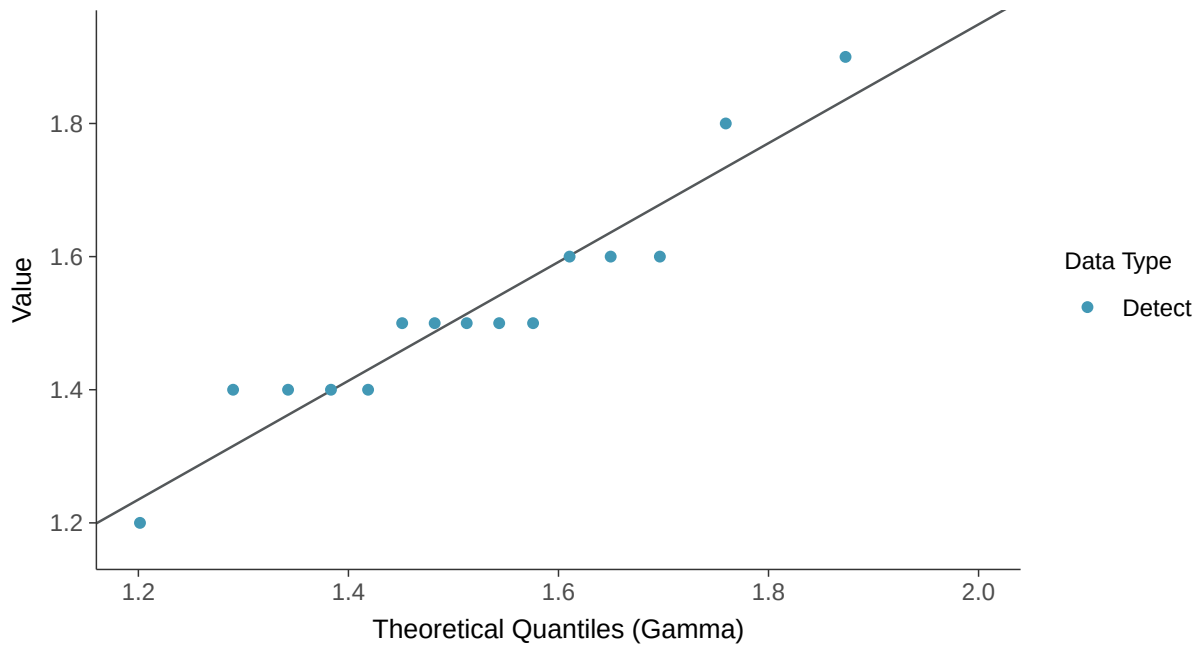
Lognormal Q-Q plot

Fluoride (App IV), MW-32 (mg/L)



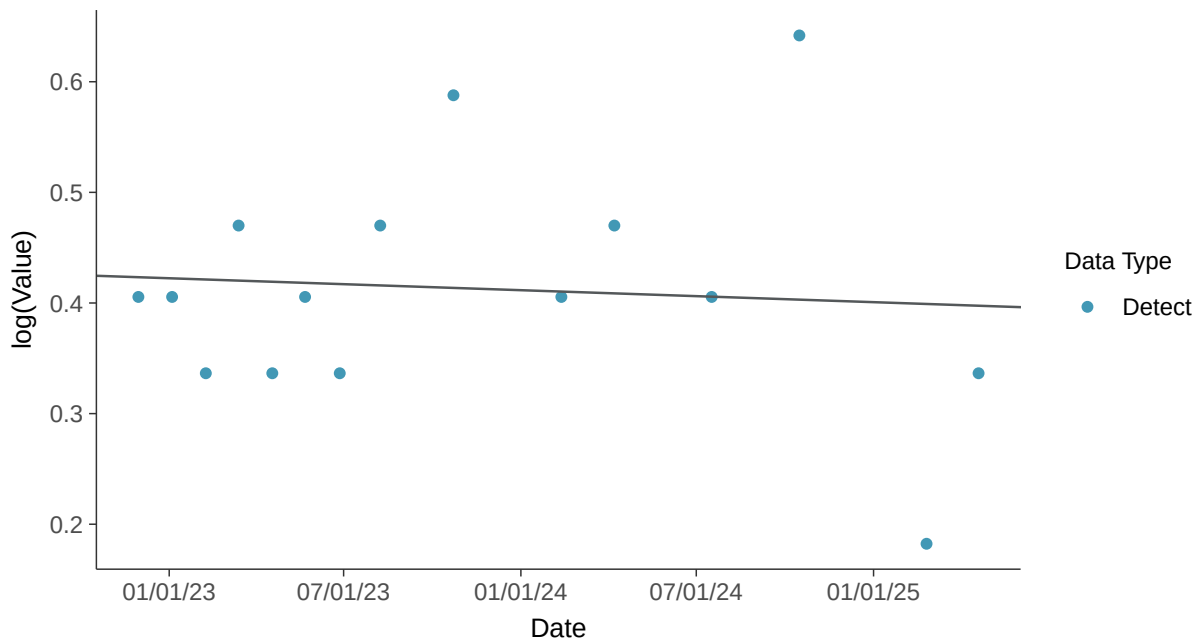
Gamma Q-Q plot

Fluoride (App IV), MW-32 (mg/L)



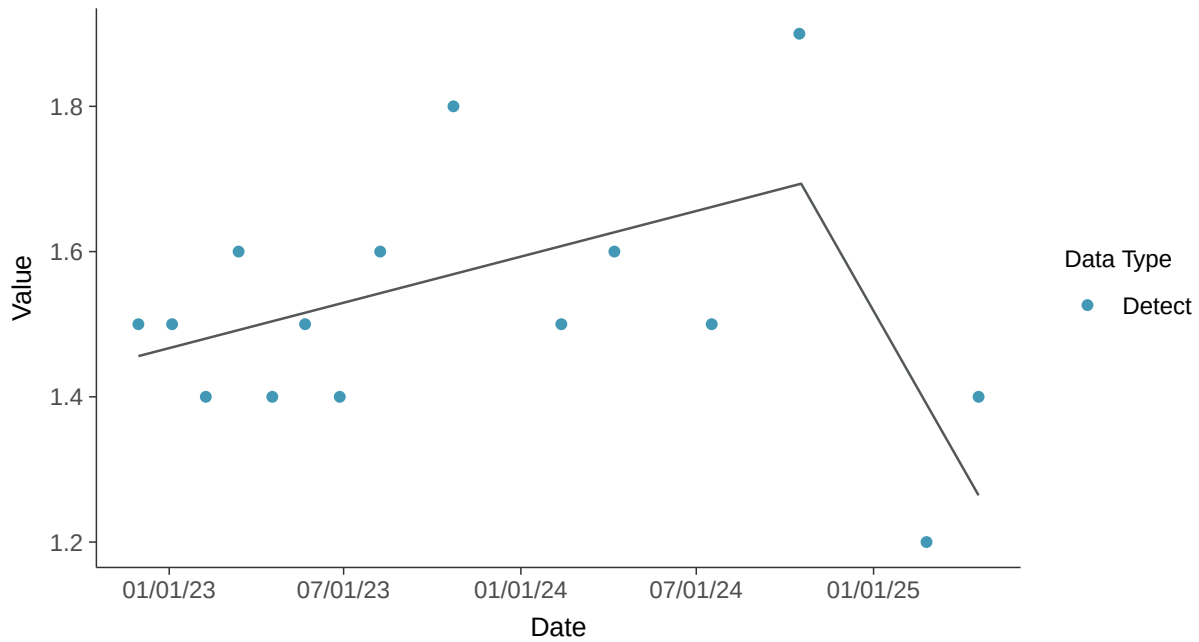
Trend Regression: Lognormal MLE

Fluoride (App IV), MW-32 (mg/L)



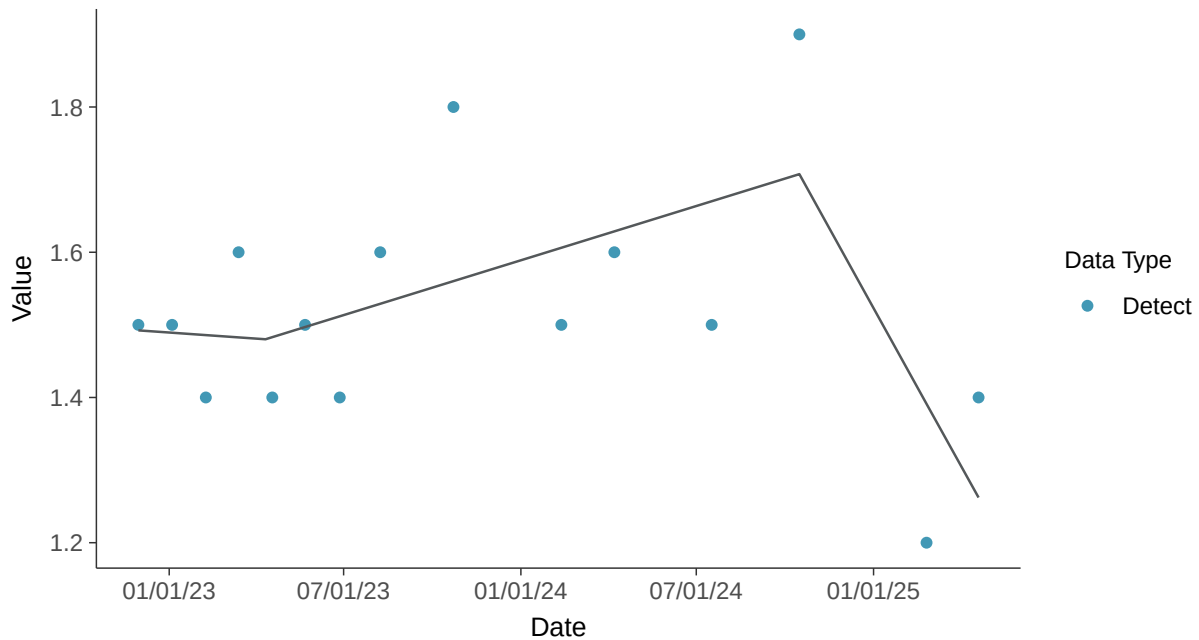
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-32 (mg/L)



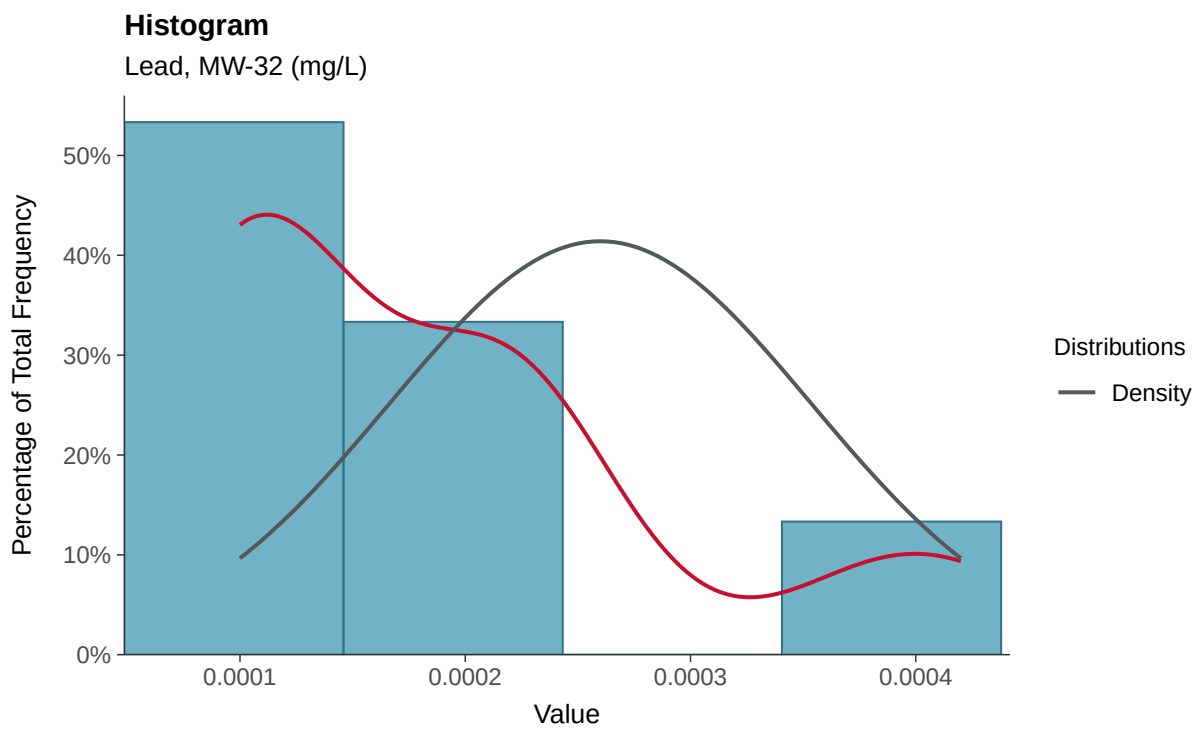
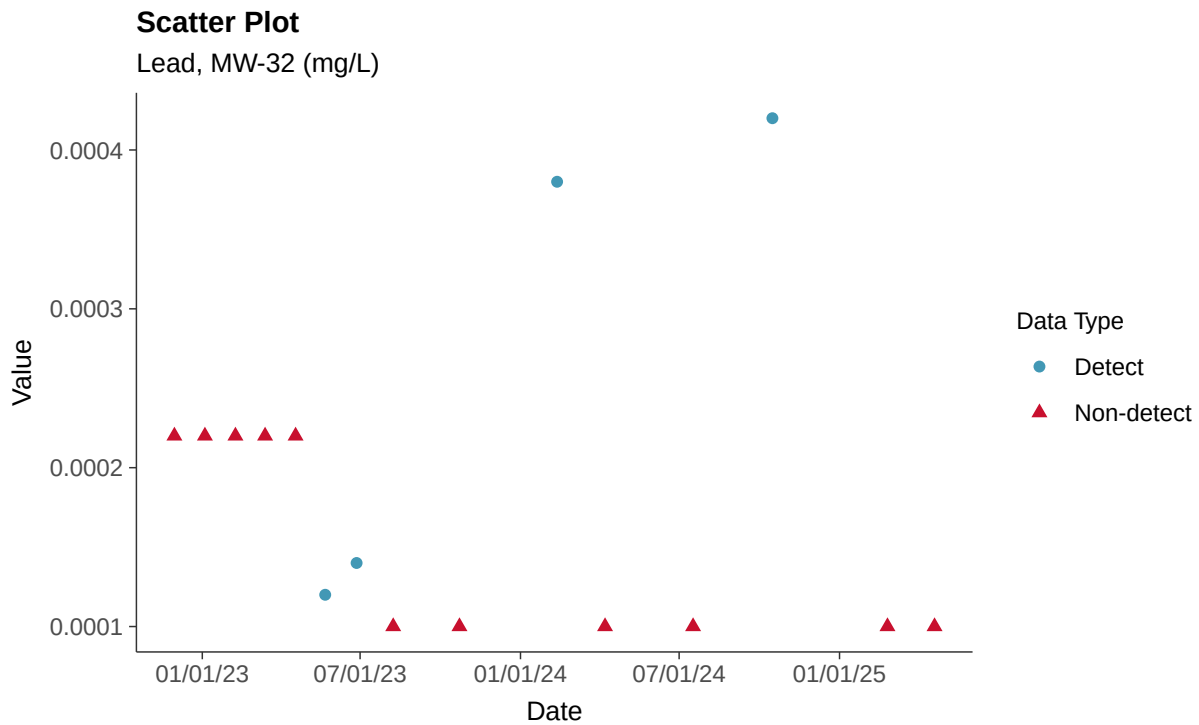
Trend Regression: Piecewise Linear-Linear-Linear

Fluoride (App IV), MW-32 (mg/L)



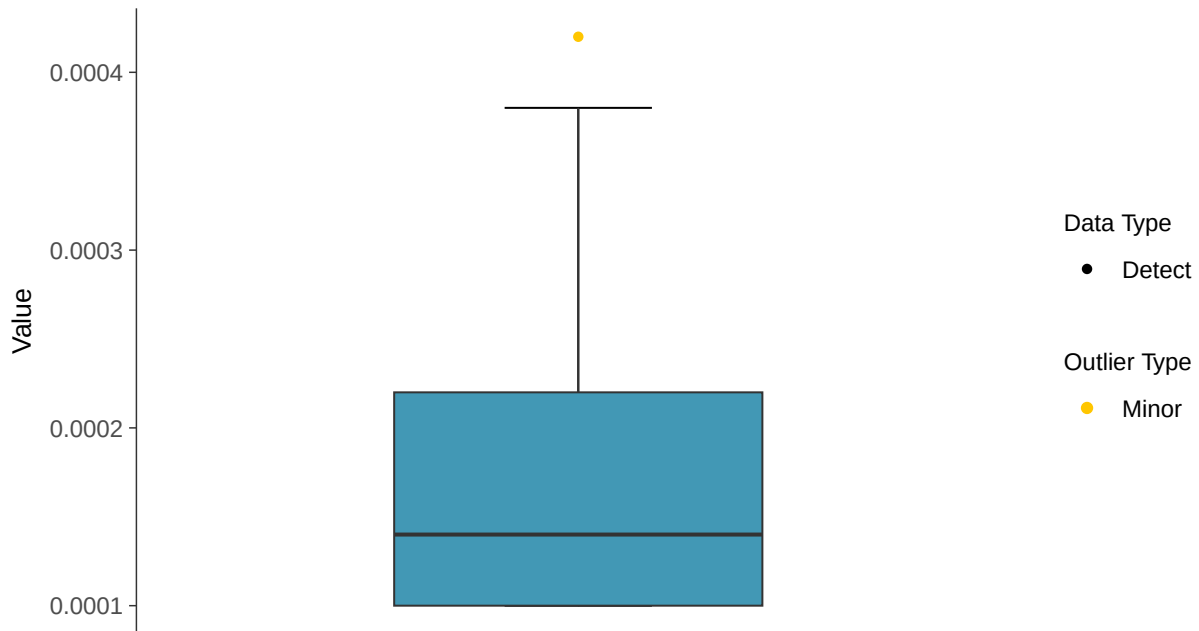
Appendix IV: Lead, MW-32

ID: 42_1_4_115



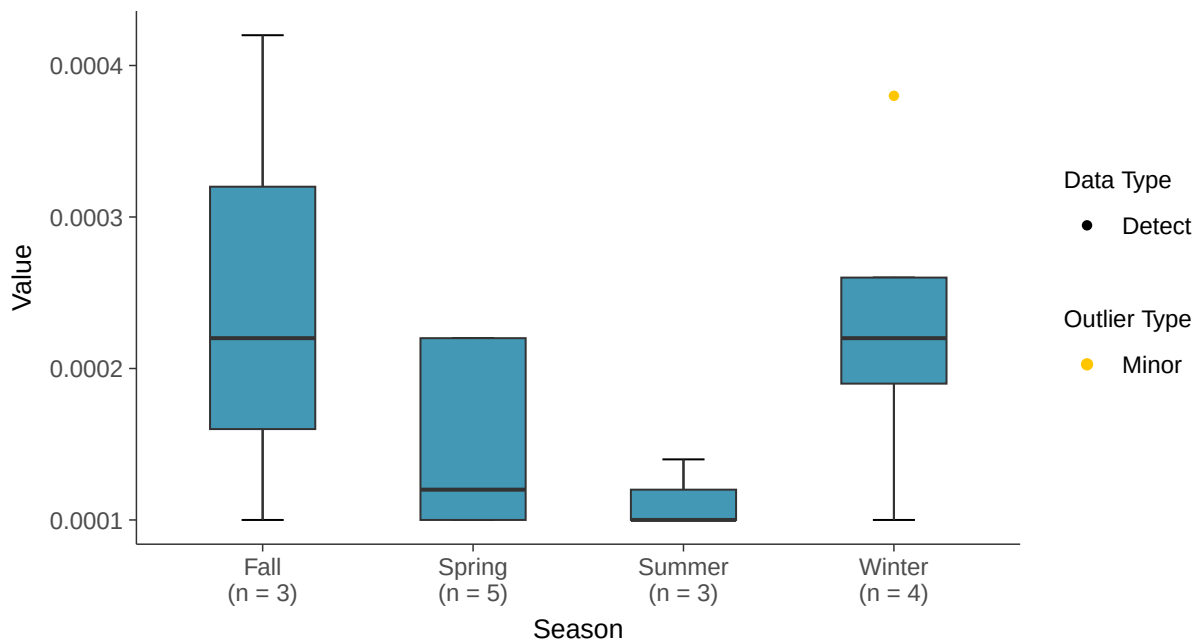
Boxplot

Lead, MW-32 (mg/L)



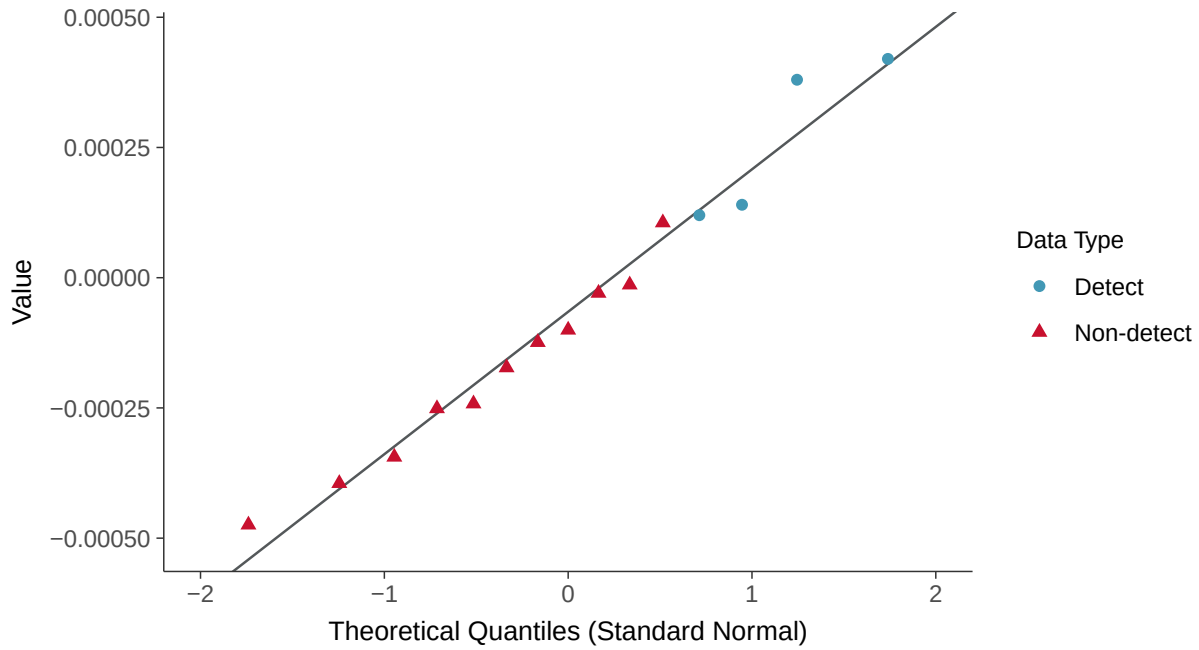
Boxplot by Season

Lead, MW-32 (mg/L)



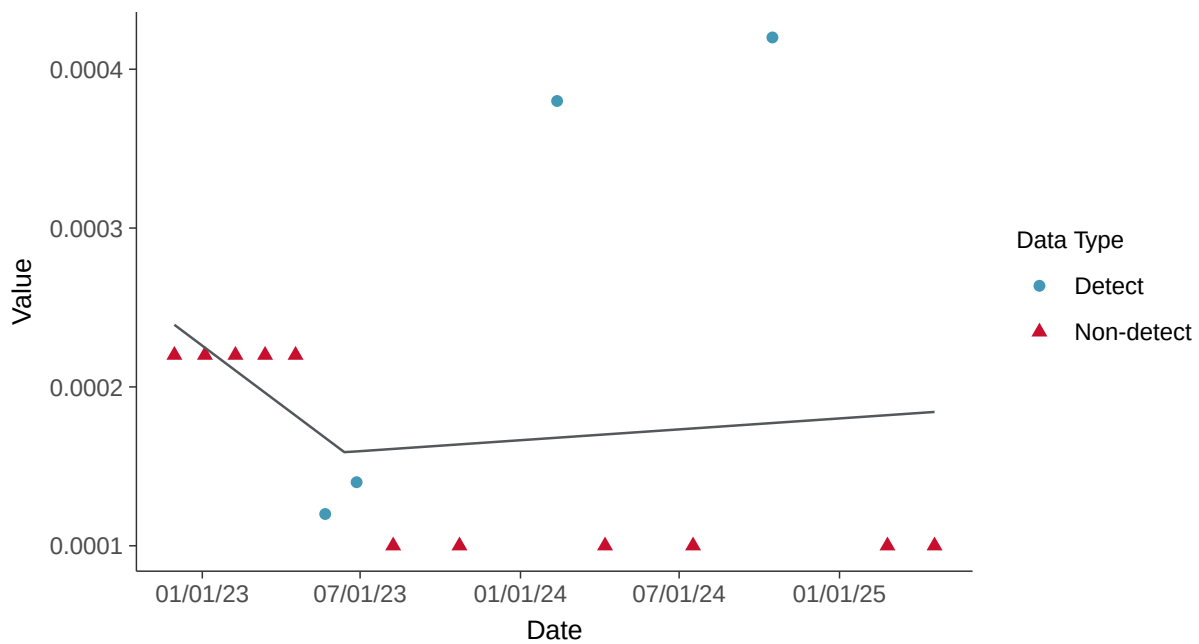
Normal Q-Q plot using ROS Imputed Estimates

Lead, MW-32 (mg/L)



Trend Regression: Piecewise Linear-Linear

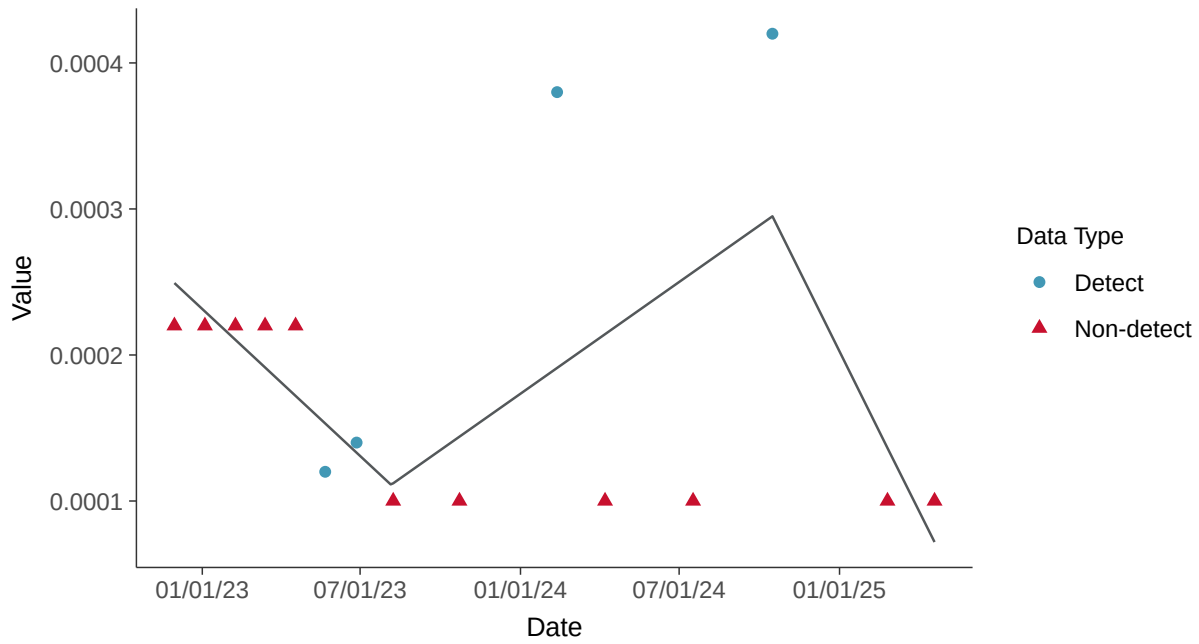
Lead, MW-32 (mg/L)





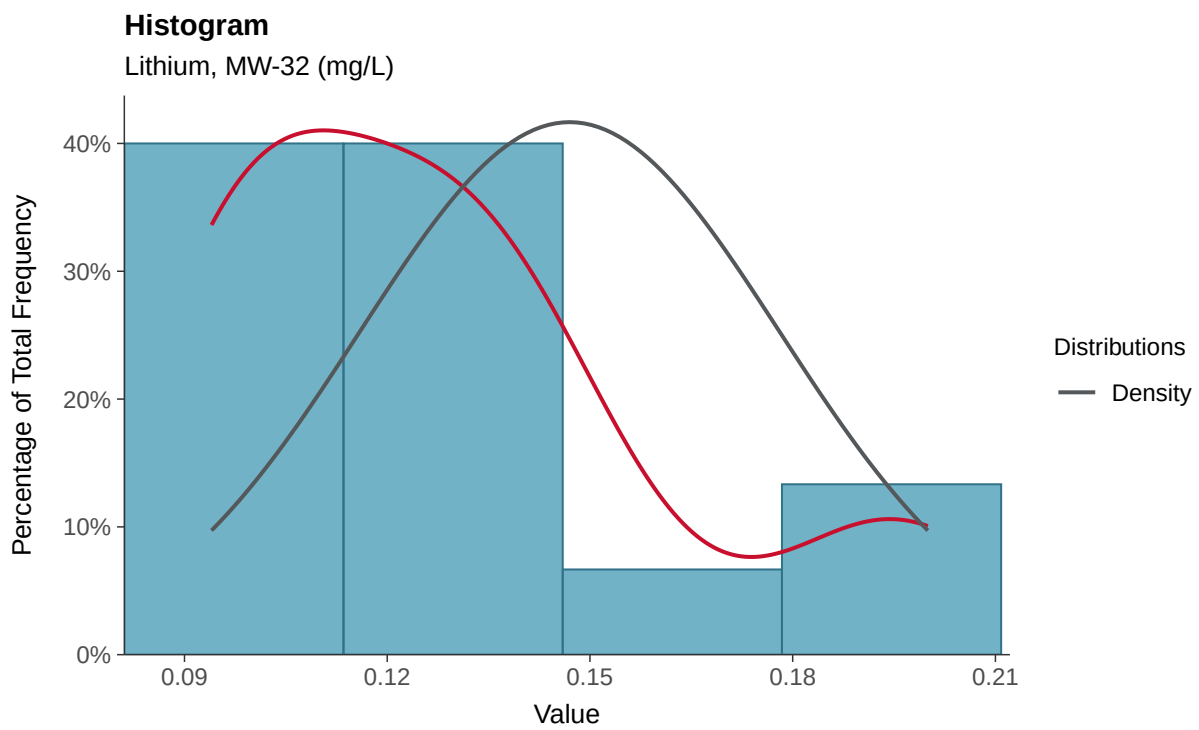
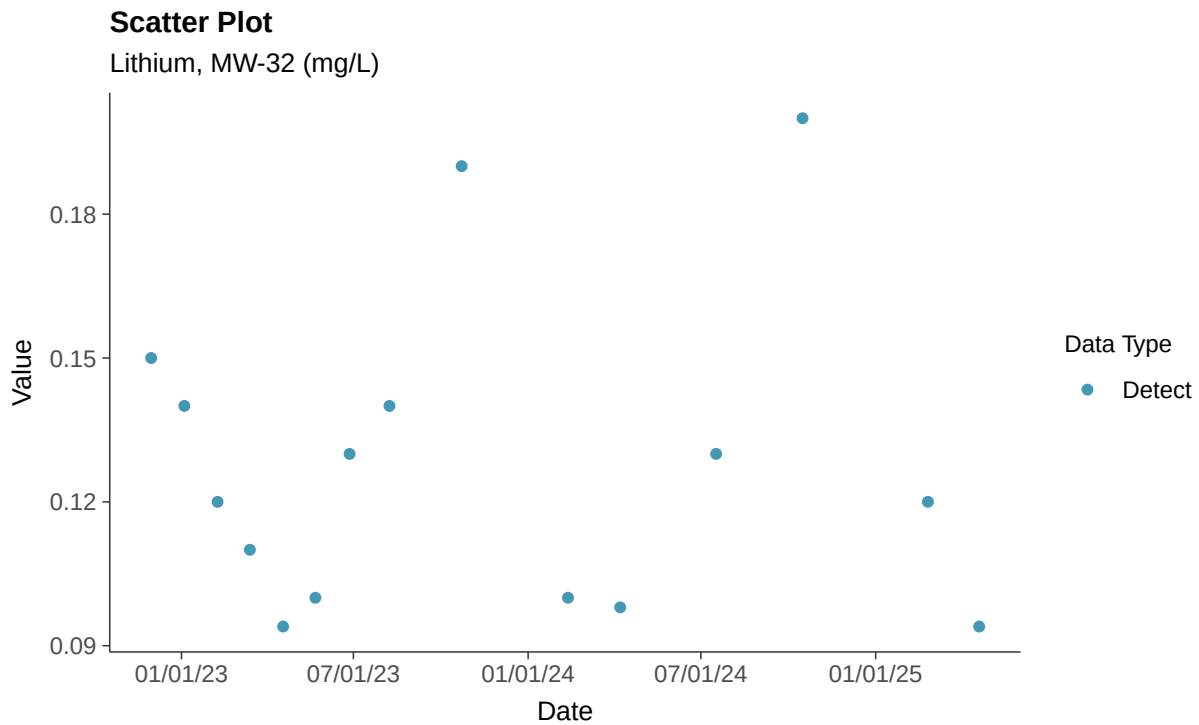
Trend Regression: Piecewise Linear-Linear-Linear

Lead, MW-32 (mg/L)



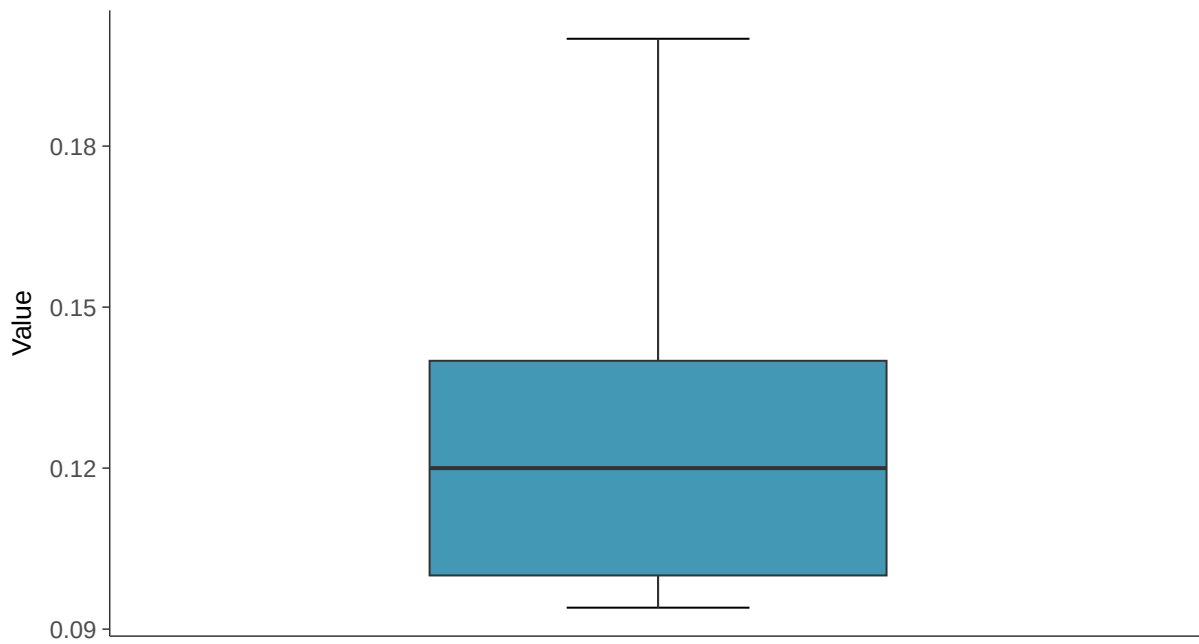
Appendix IV: Lithium, MW-32

ID: 42_1_4_116



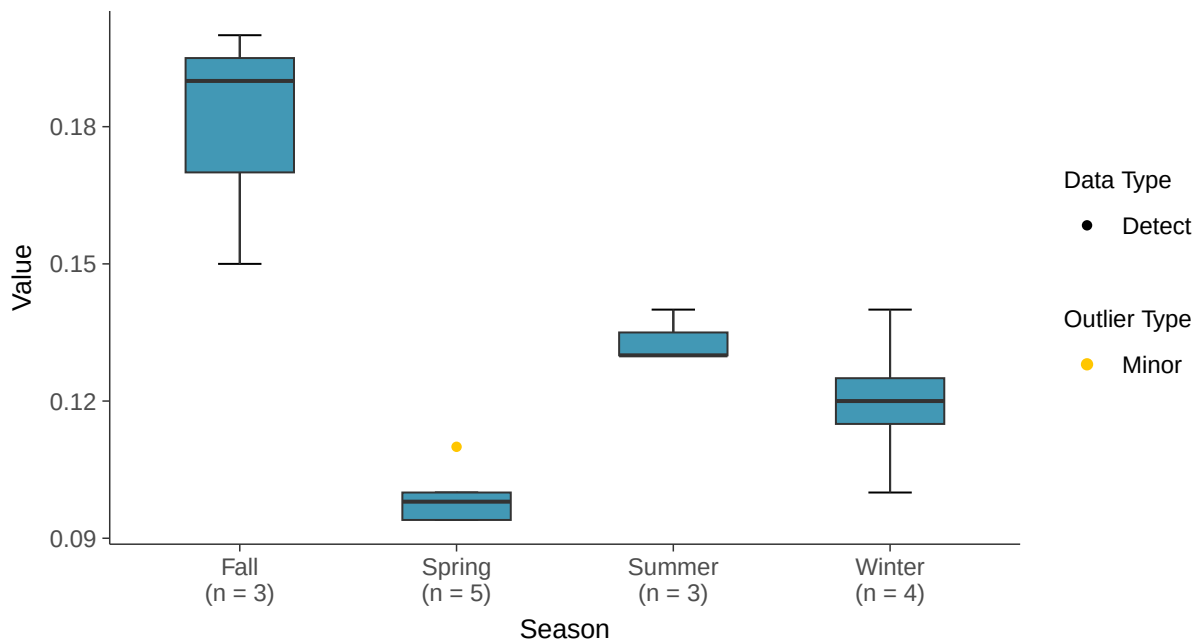
Boxplot

Lithium, MW-32 (mg/L)



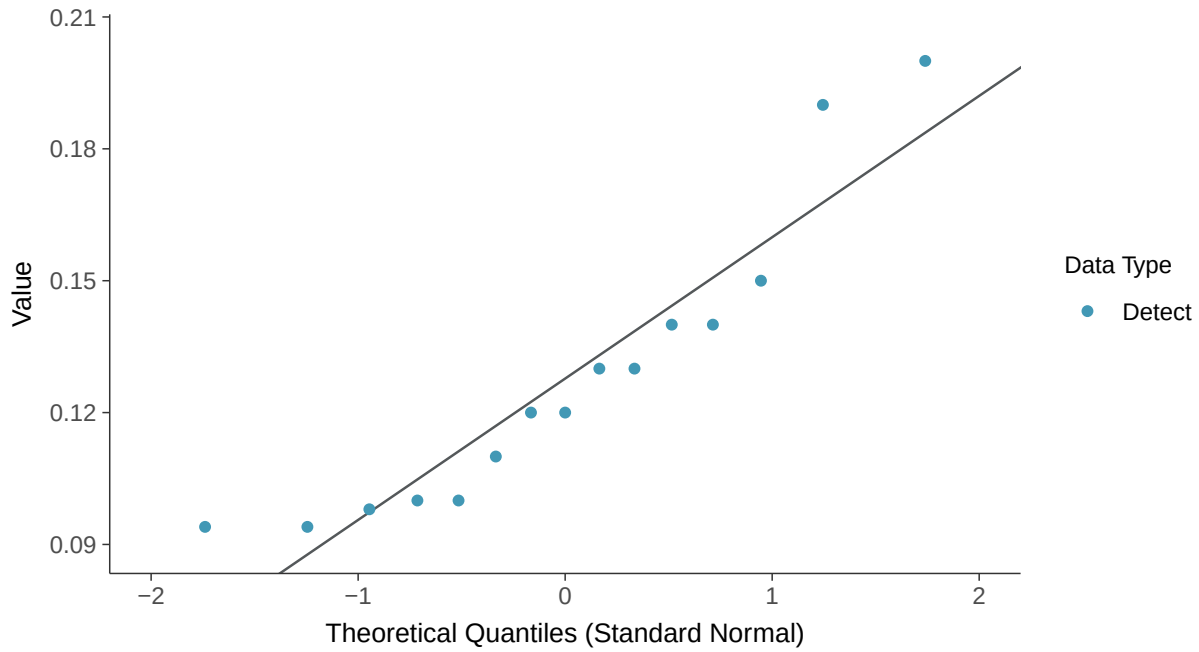
Boxplot by Season

Lithium, MW-32 (mg/L)



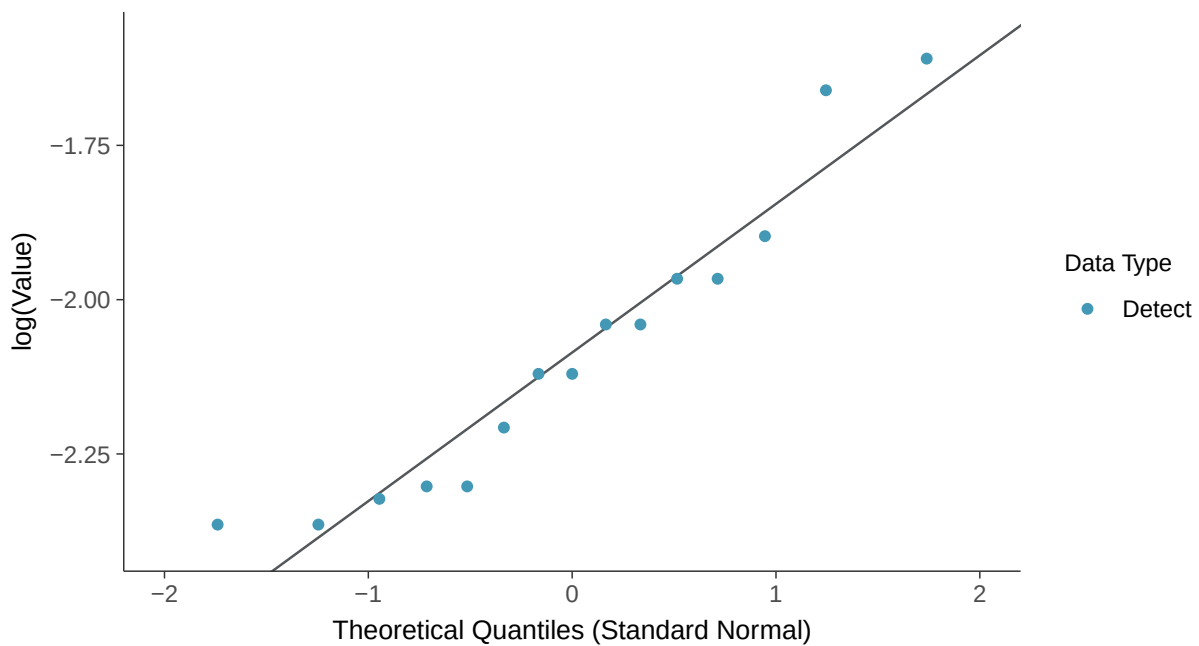
Normal Q-Q plot

Lithium, MW-32 (mg/L)



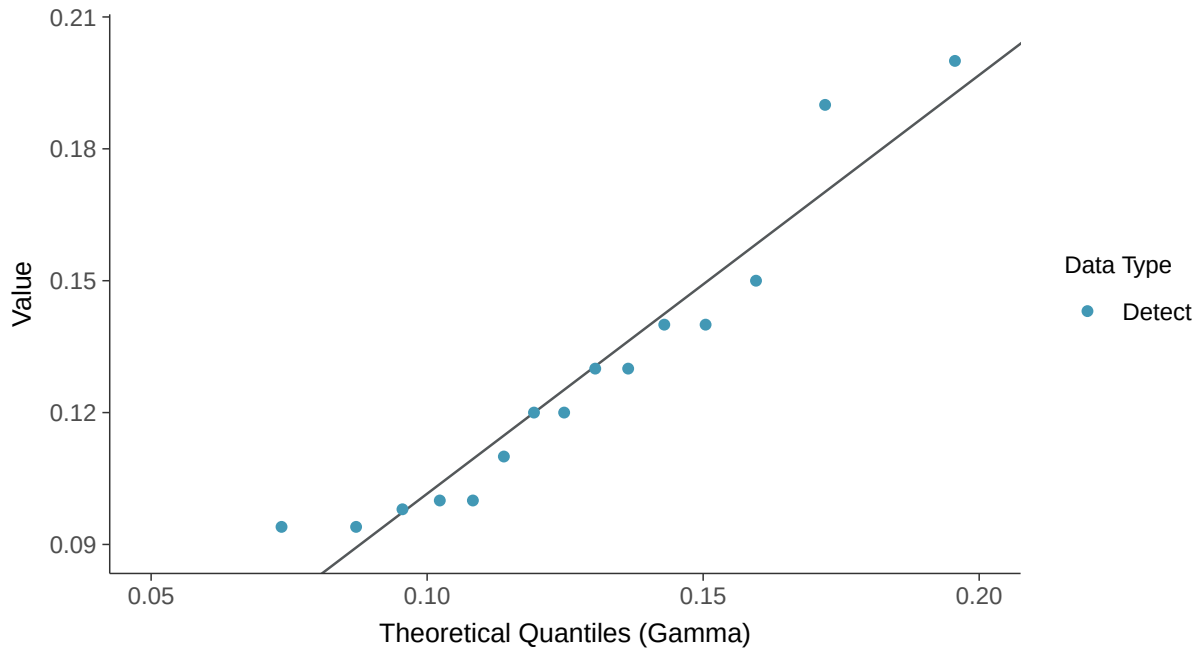
Lognormal Q-Q plot

Lithium, MW-32 (mg/L)



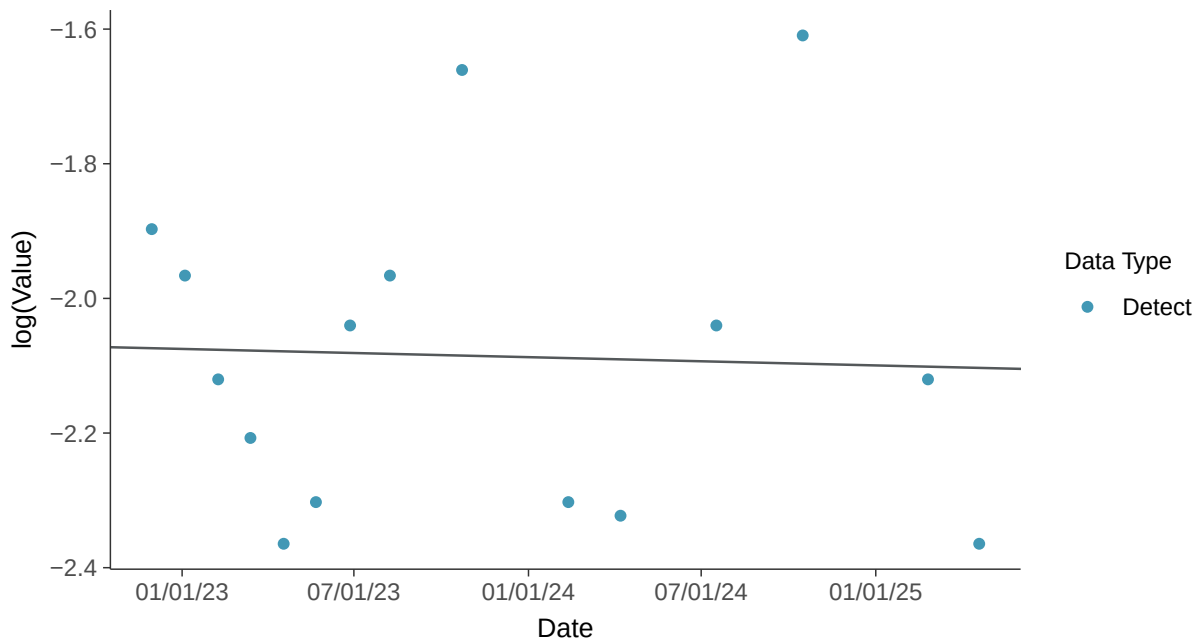
Gamma Q-Q plot

Lithium, MW-32 (mg/L)



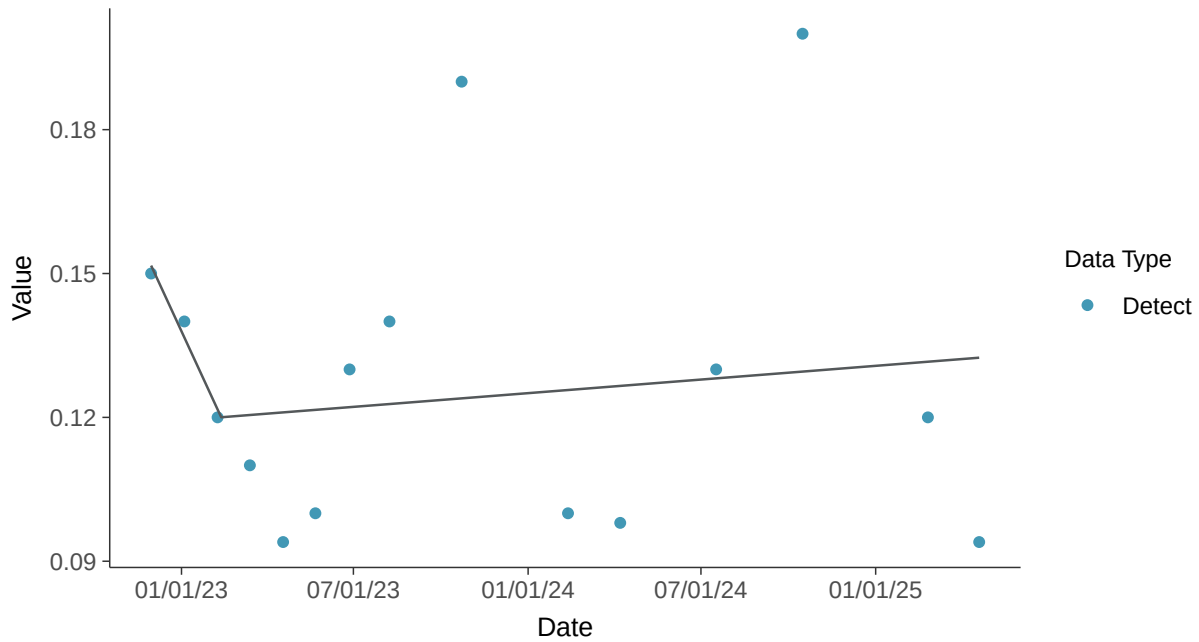
Trend Regression: Lognormal MLE

Lithium, MW-32 (mg/L)



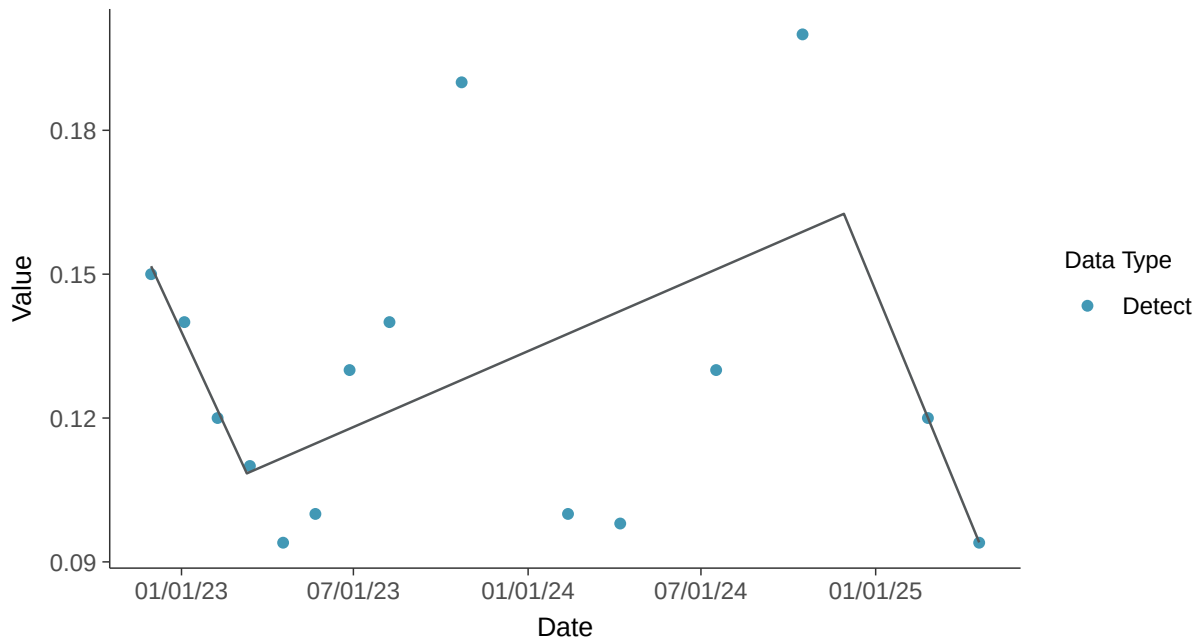
Trend Regression: Piecewise Linear-Linear

Lithium, MW-32 (mg/L)



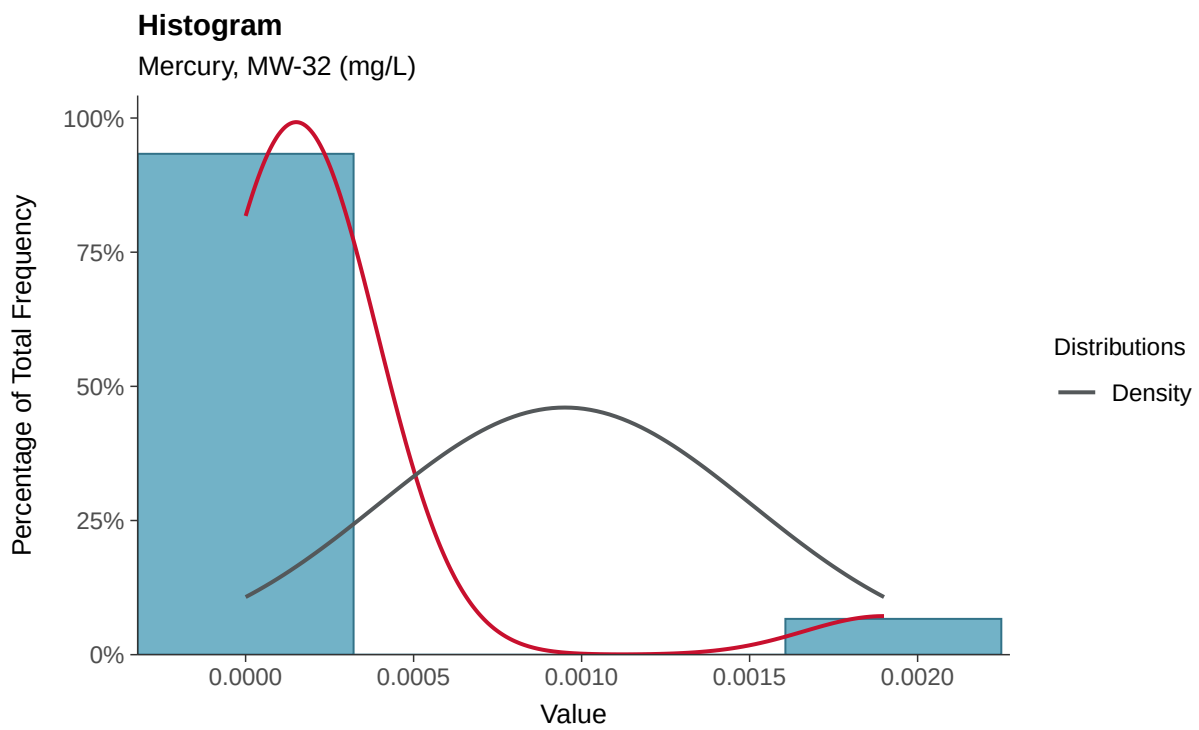
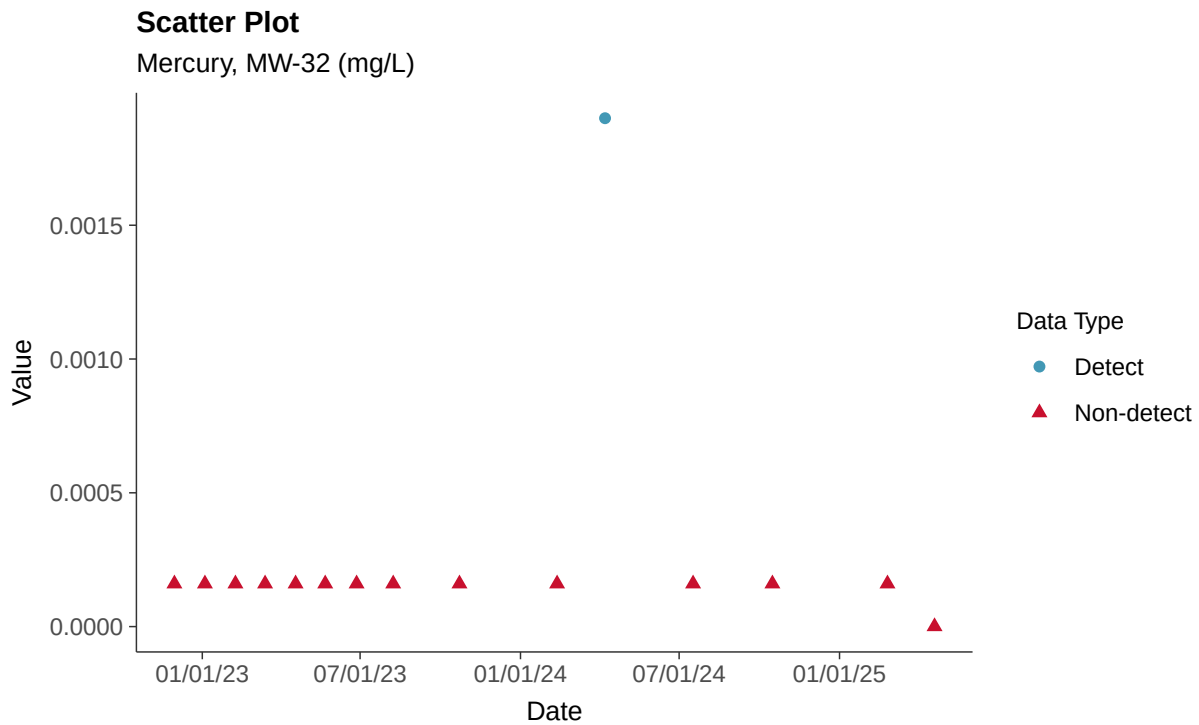
Trend Regression: Piecewise Linear-Linear-Linear

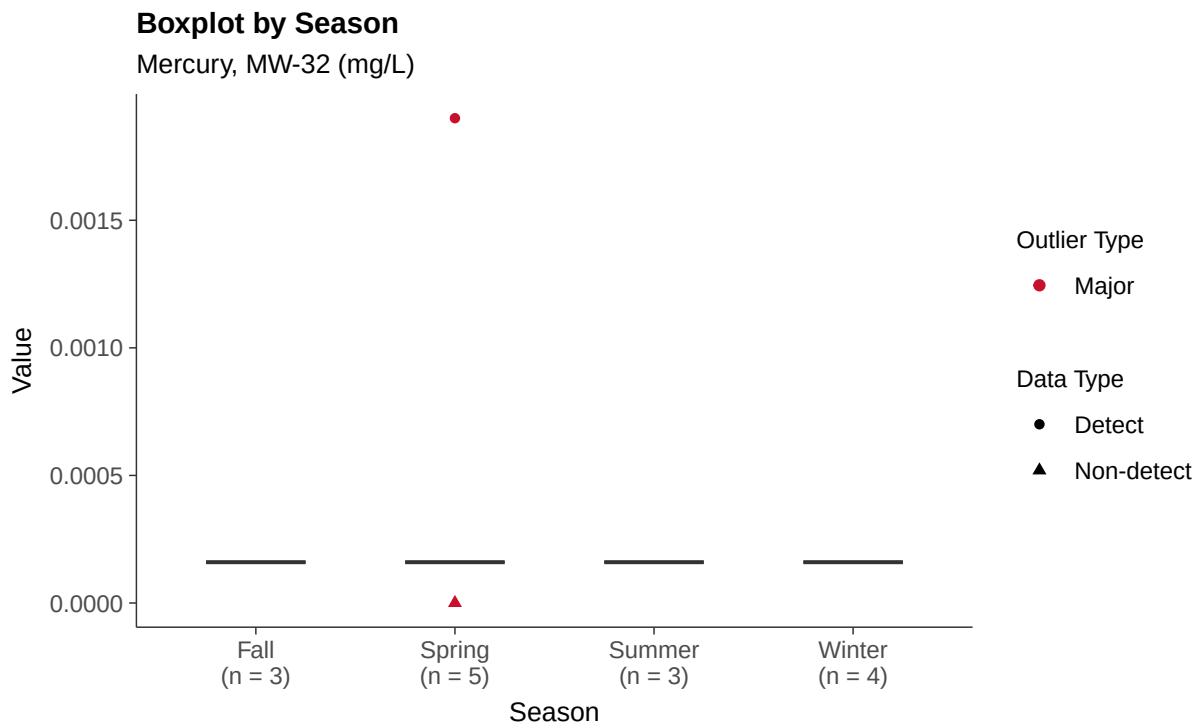
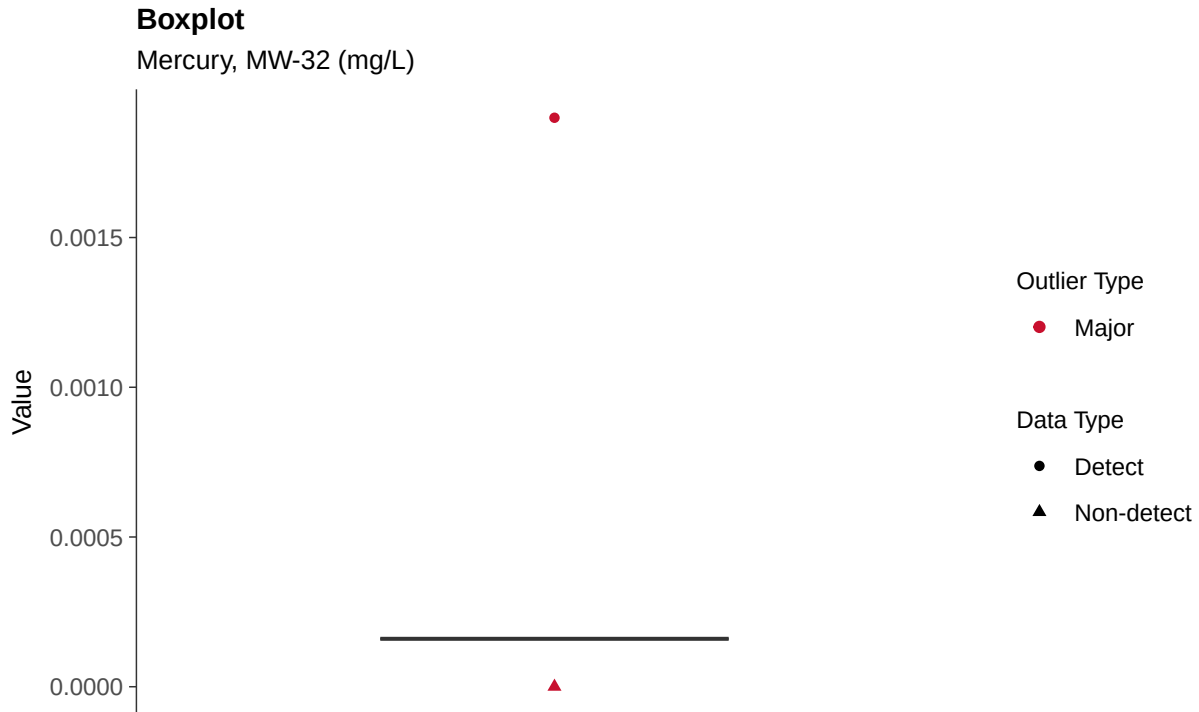
Lithium, MW-32 (mg/L)



Appendix IV: Mercury, MW-32

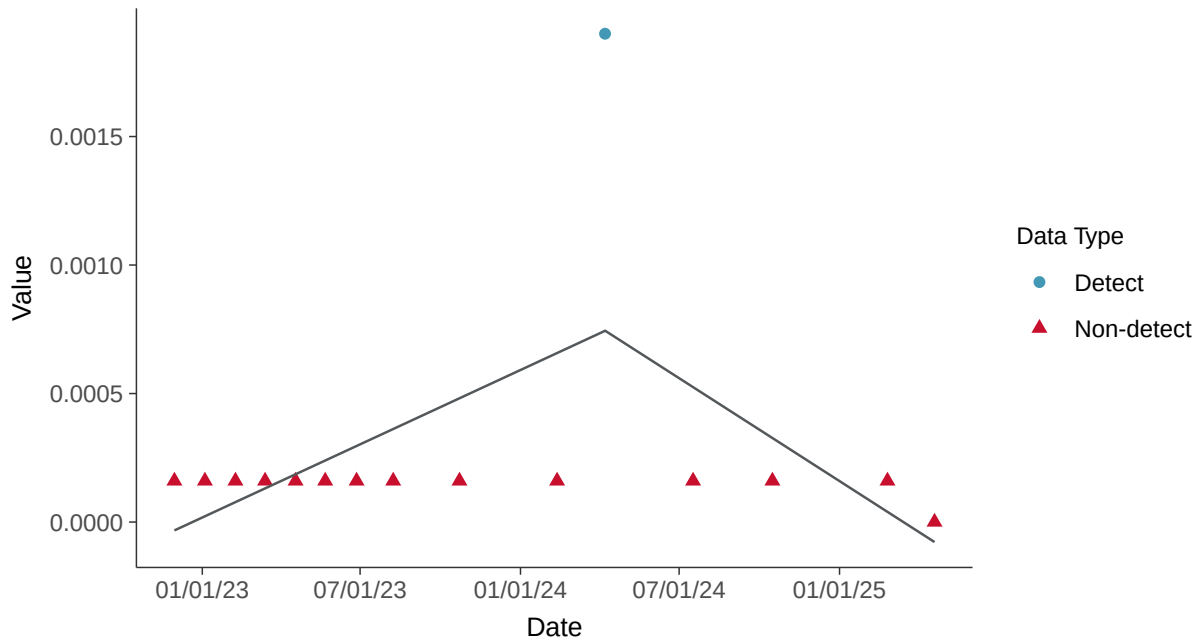
ID: 42_1_4_117





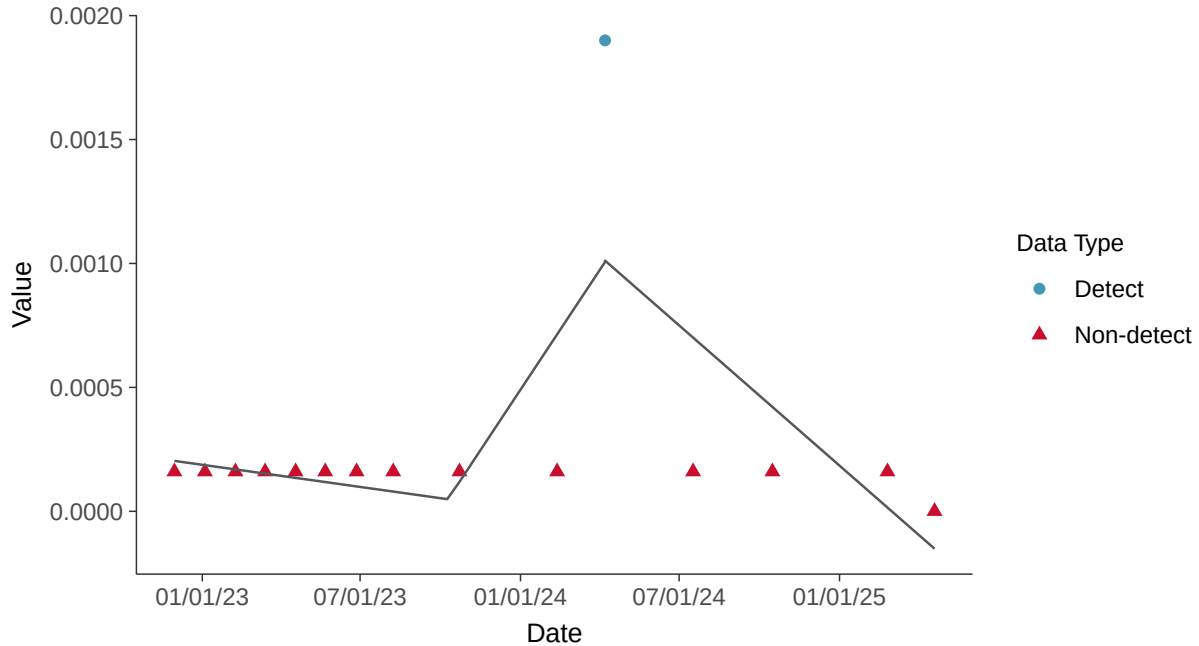
Trend Regression: Piecewise Linear-Linear

Mercury, MW-32 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Mercury, MW-32 (mg/L)

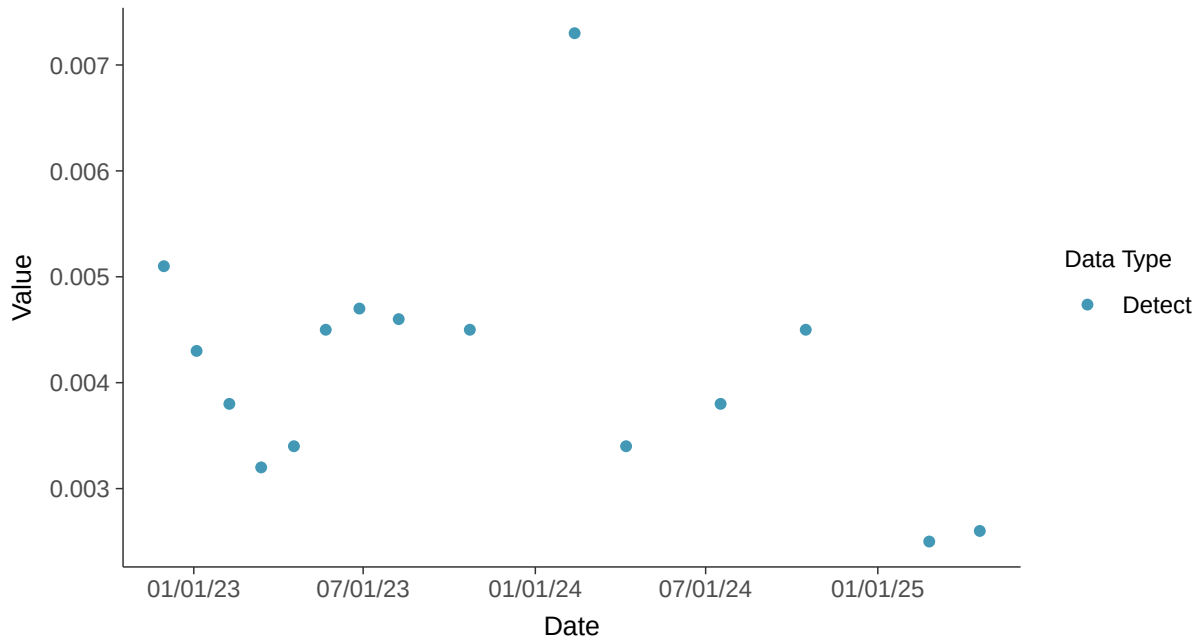


Appendix IV: Molybdenum, MW-32

ID: 42_1_4_118

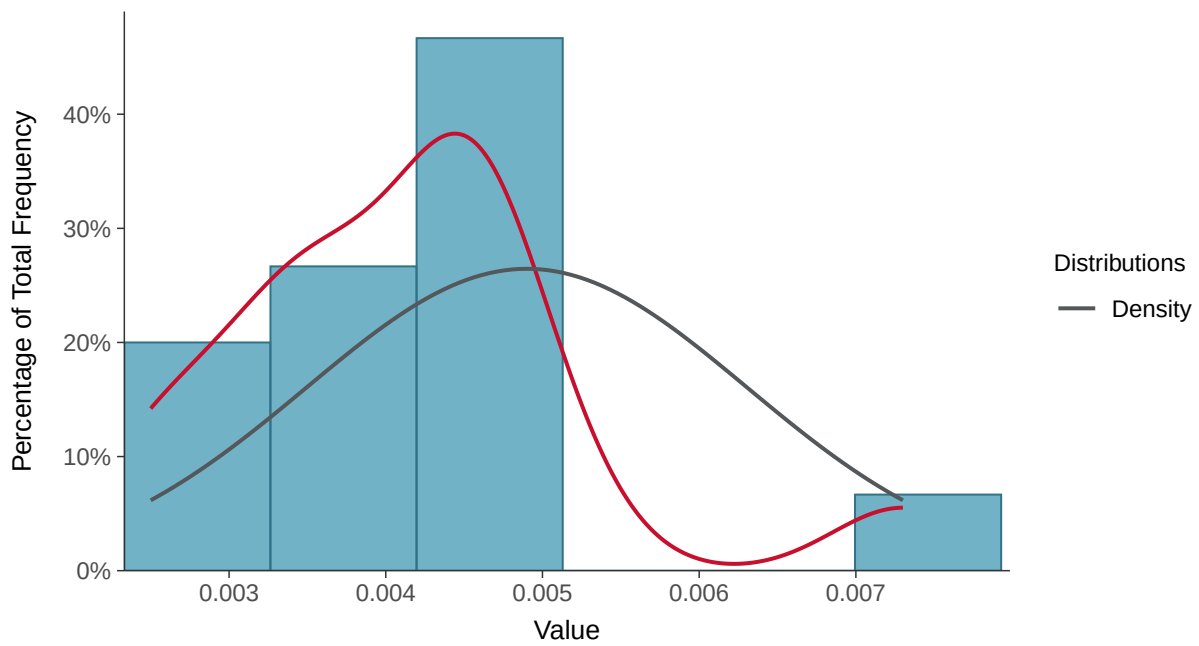
Scatter Plot

Molybdenum, MW-32 (mg/L)



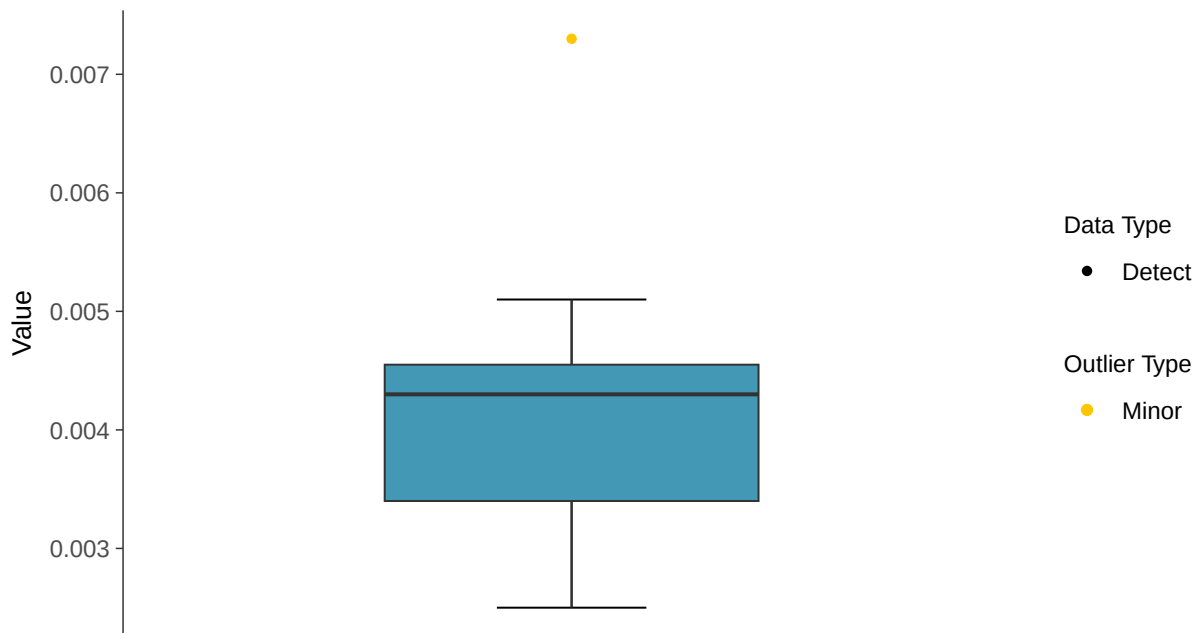
Histogram

Molybdenum, MW-32 (mg/L)



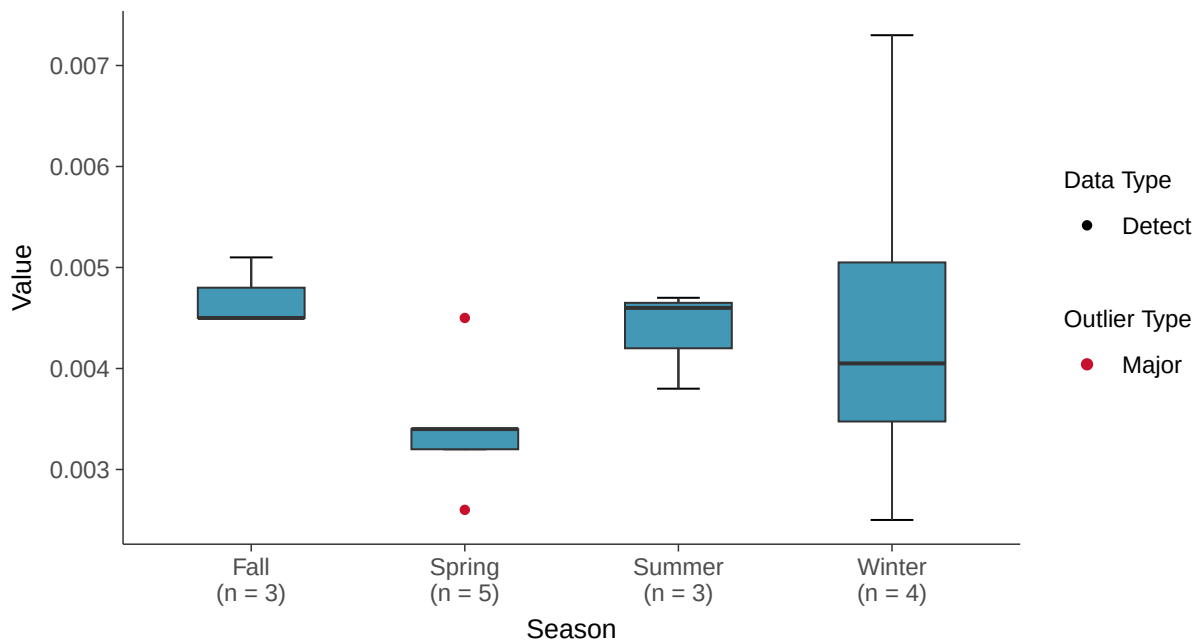
Boxplot

Molybdenum, MW-32 (mg/L)



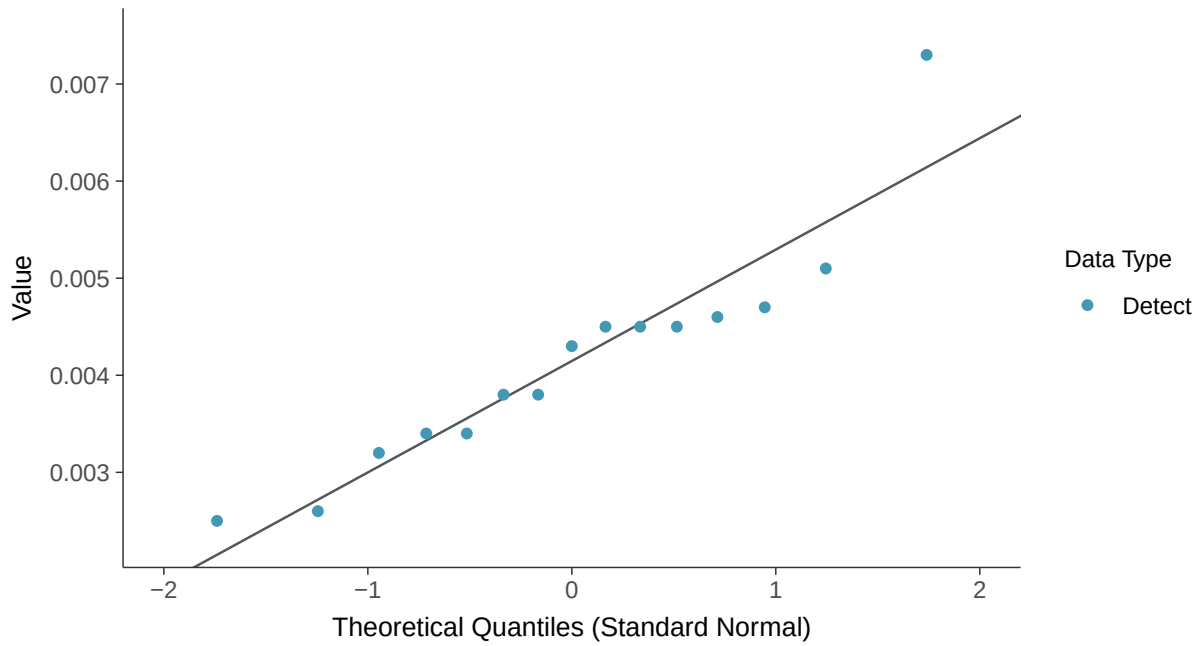
Boxplot by Season

Molybdenum, MW-32 (mg/L)



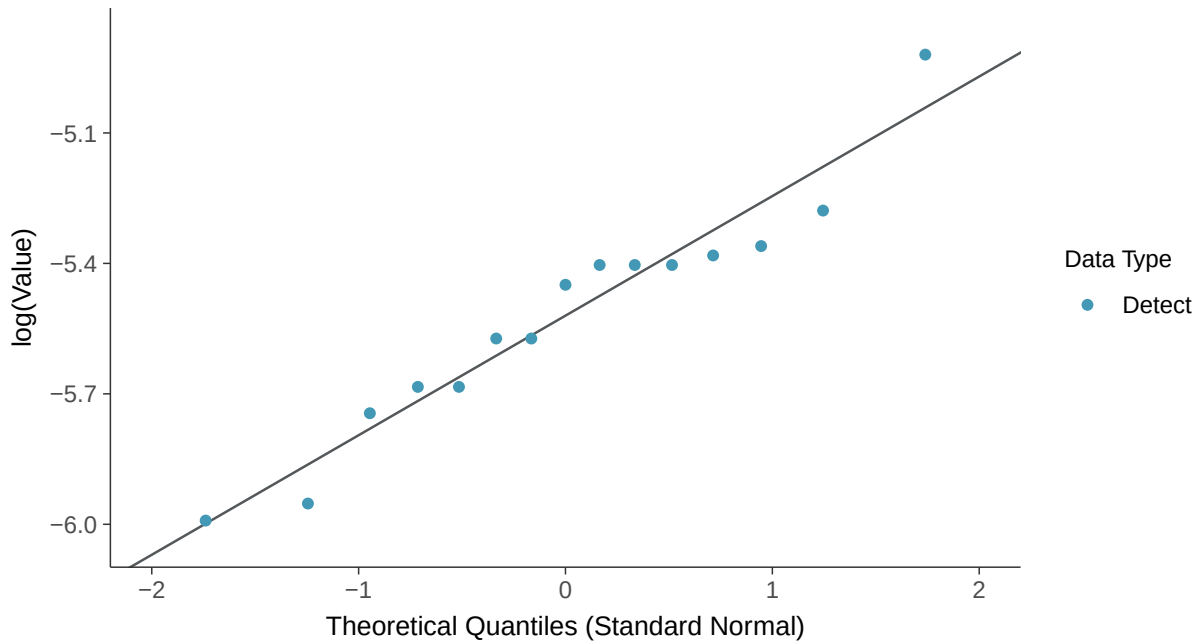
Normal Q-Q plot

Molybdenum, MW-32 (mg/L)



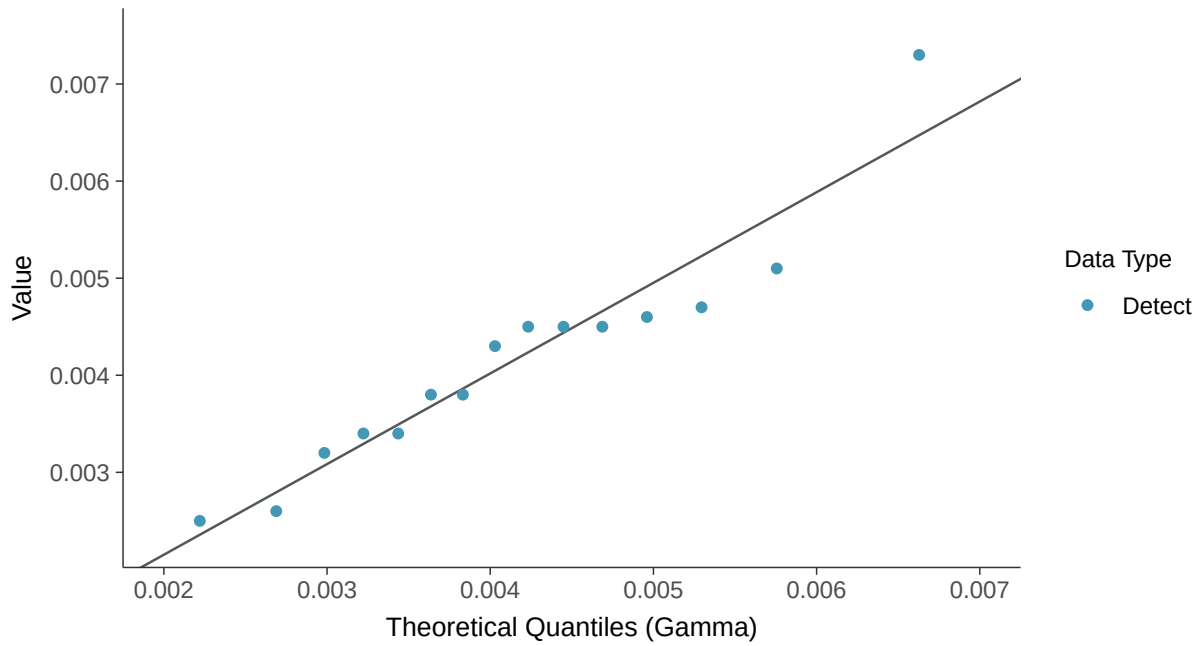
Lognormal Q-Q plot

Molybdenum, MW-32 (mg/L)



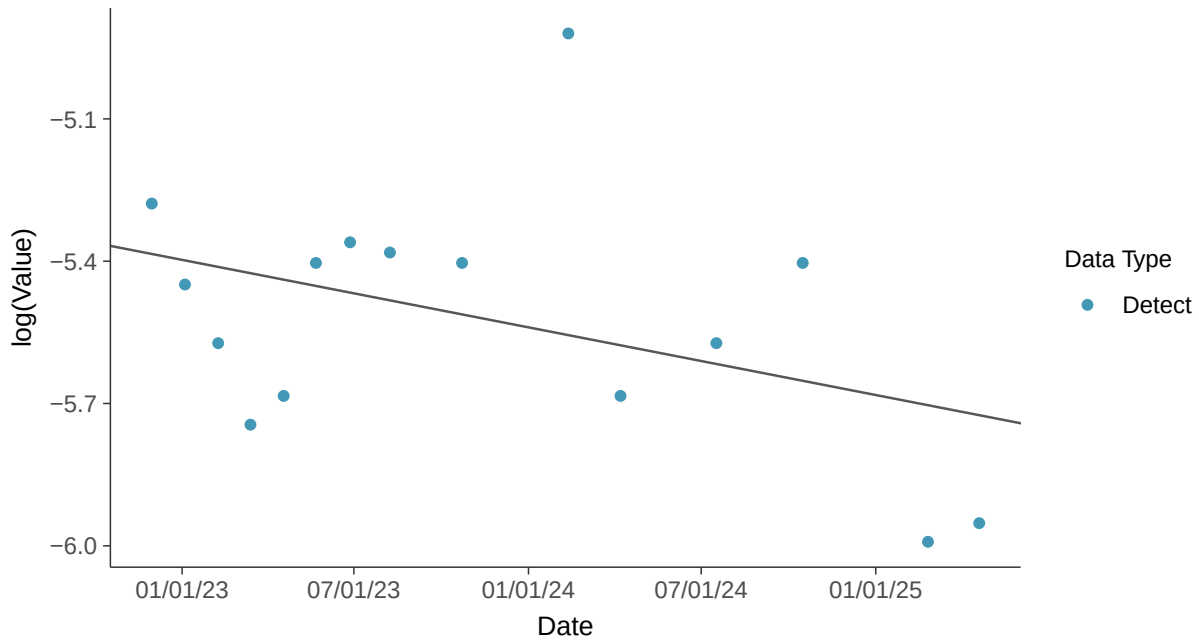
Gamma Q-Q plot

Molybdenum, MW-32 (mg/L)



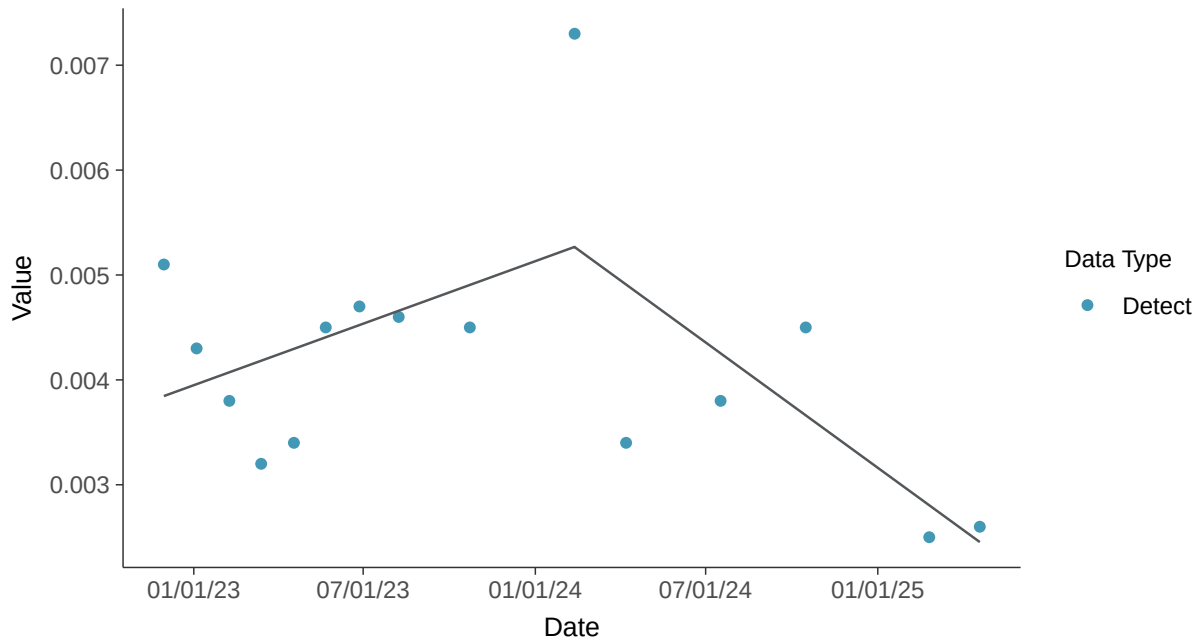
Trend Regression: Lognormal MLE

Molybdenum, MW-32 (mg/L)



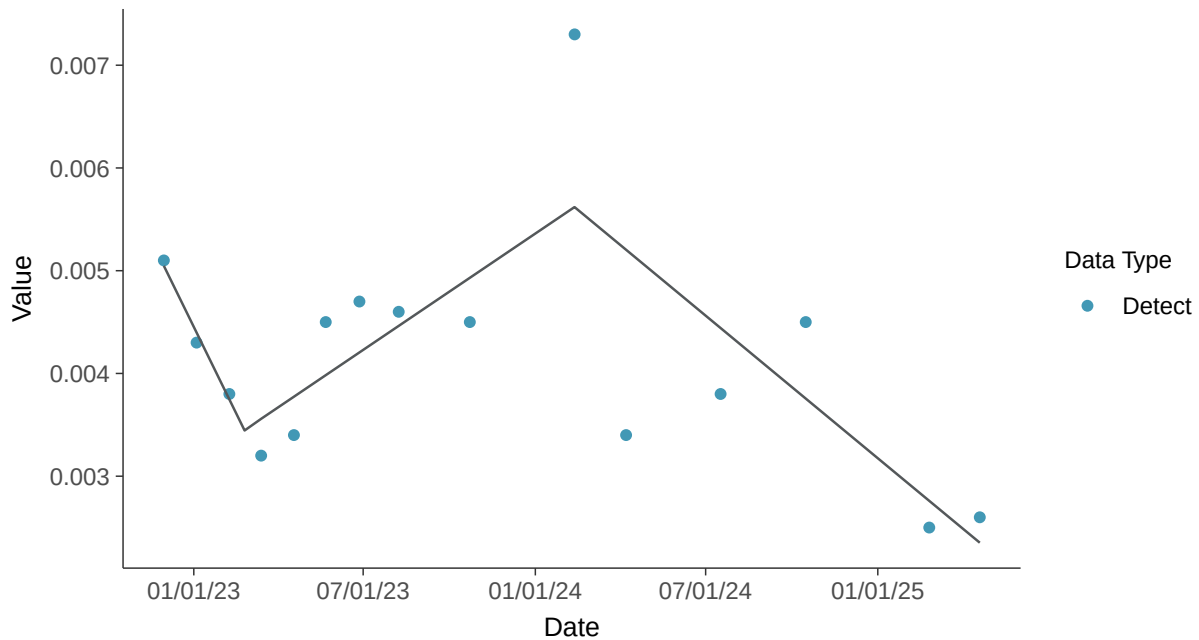
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-32 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-32 (mg/L)

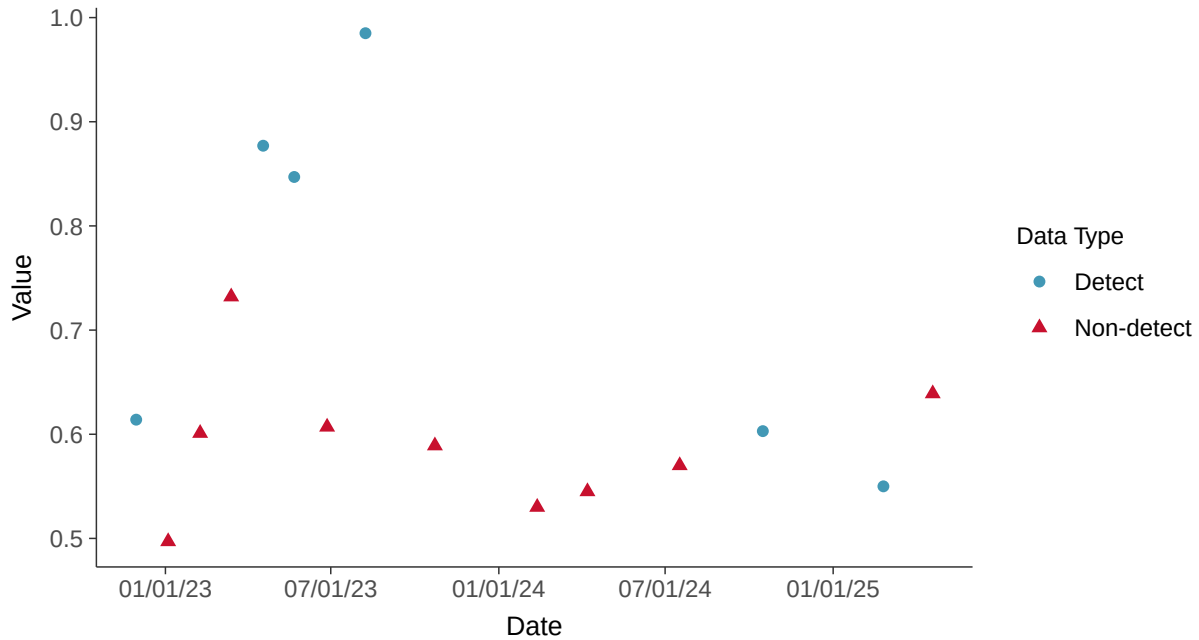


Appendix IV: Radium 226 and 228, MW-32

ID: 42_1_4_121

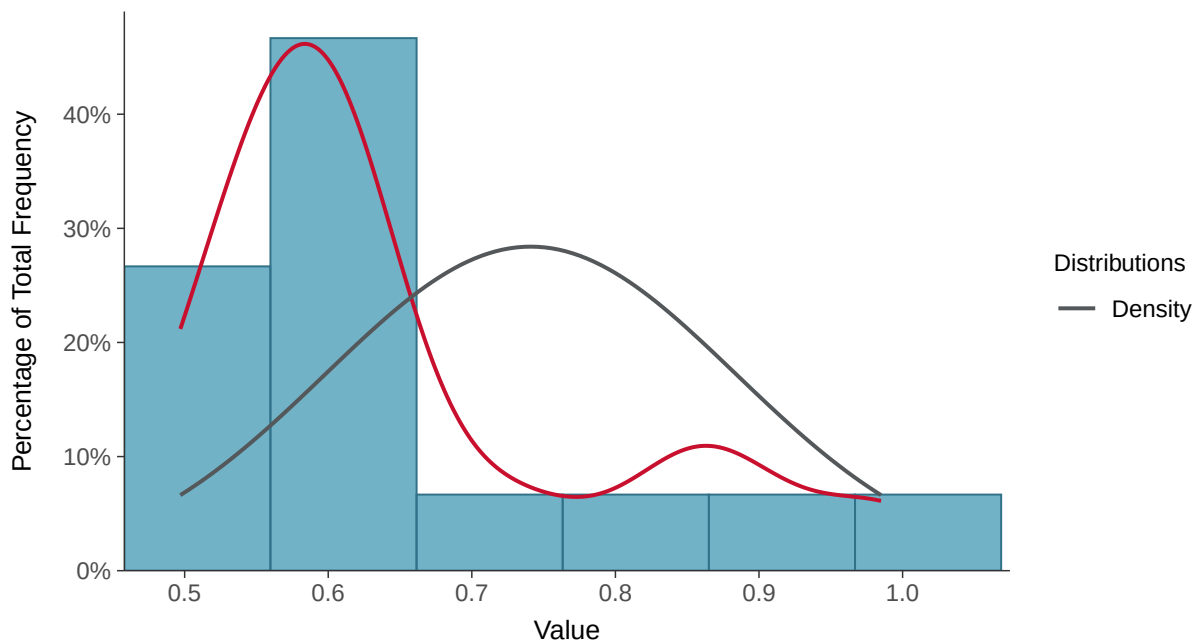
Scatter Plot

Radium 226 and 228, MW-32 (pCi/L)



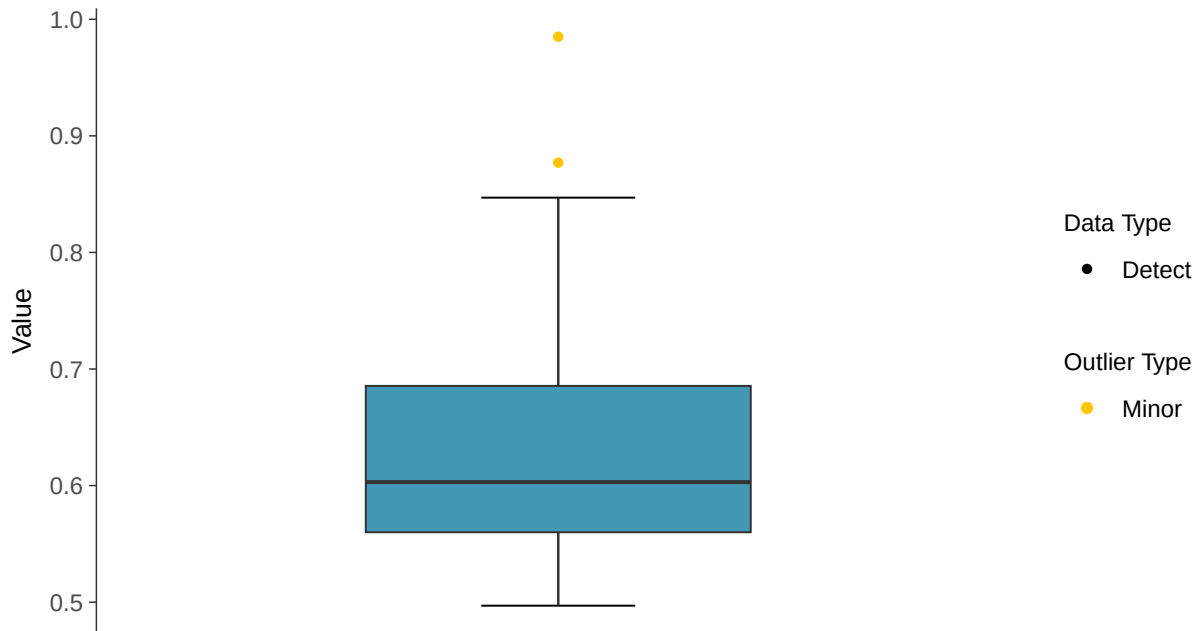
Histogram

Radium 226 and 228, MW-32 (pCi/L)



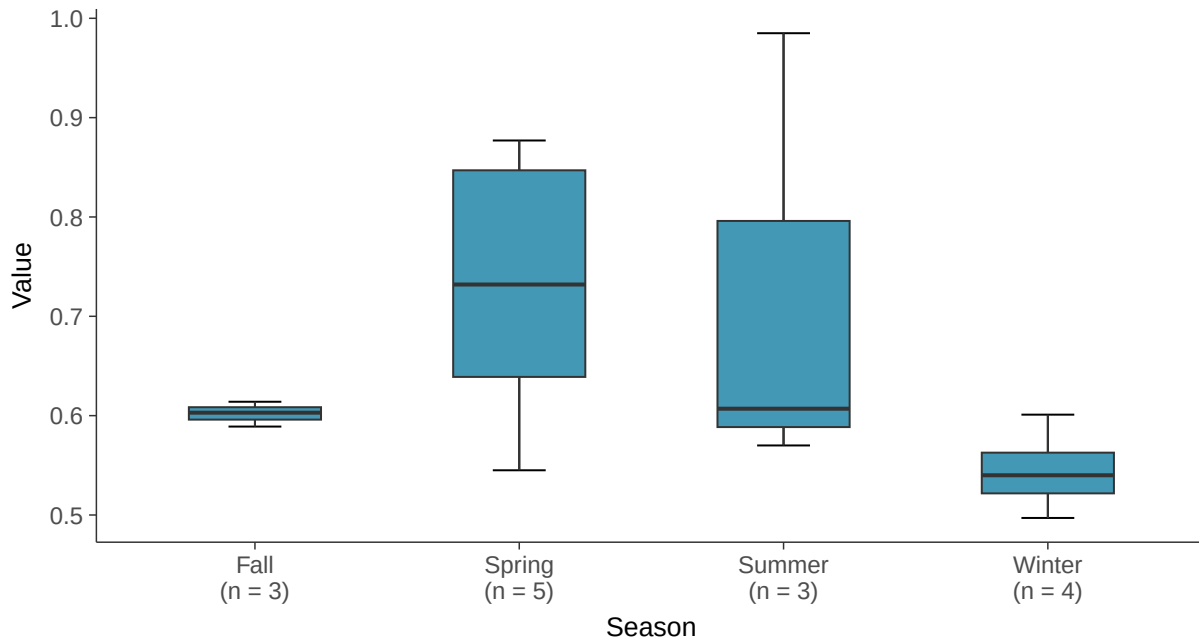
Boxplot

Radium 226 and 228, MW-32 (pCi/L)



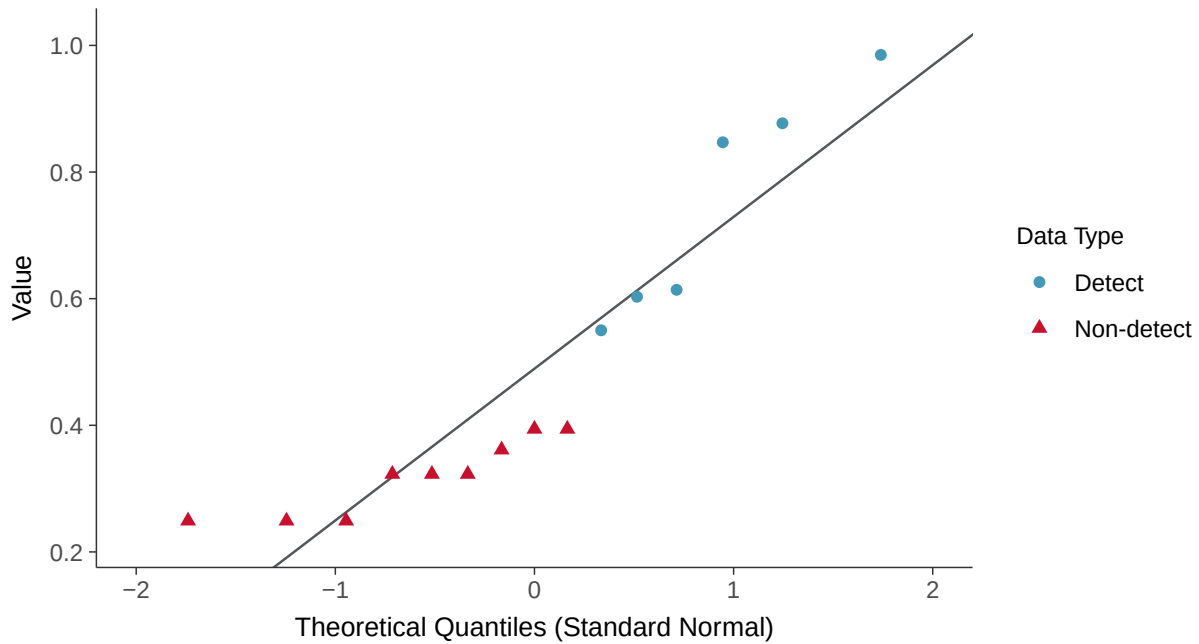
Boxplot by Season

Radium 226 and 228, MW-32 (pCi/L)



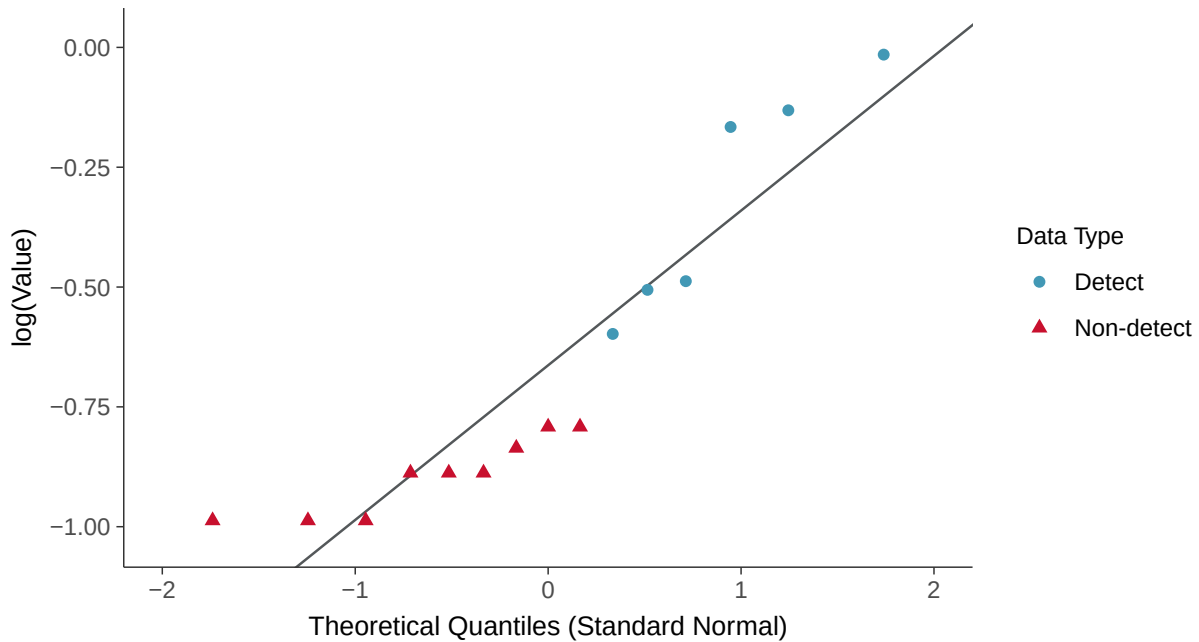
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-32 (pCi/L)



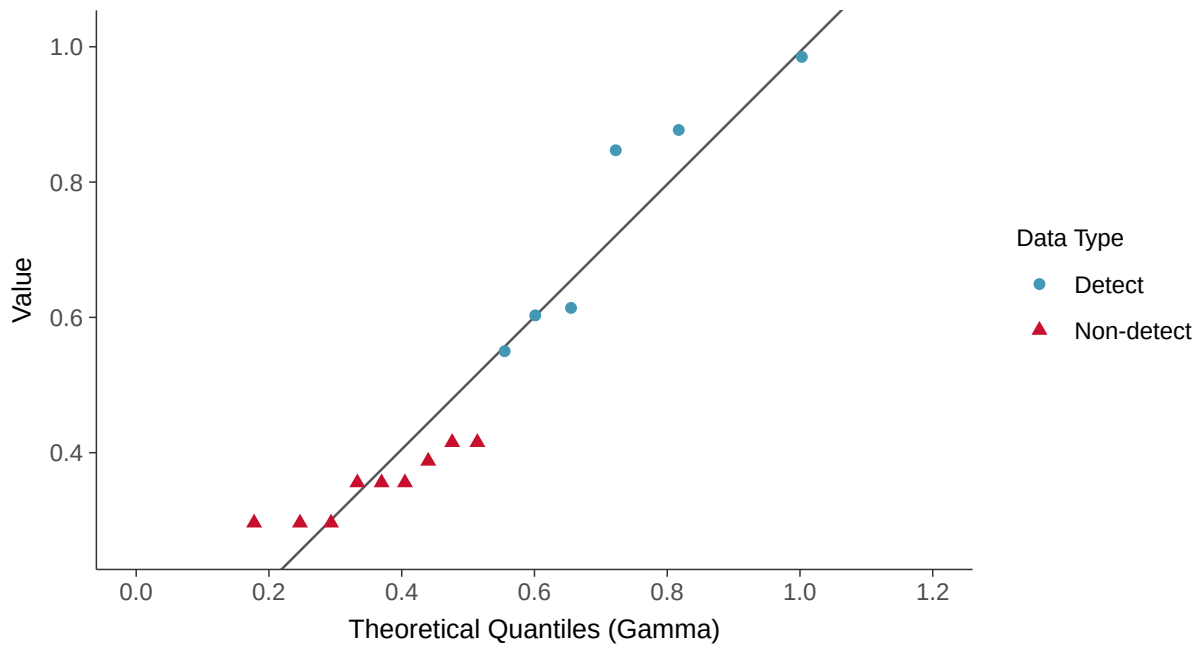
Lognormal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-32 (pCi/L)



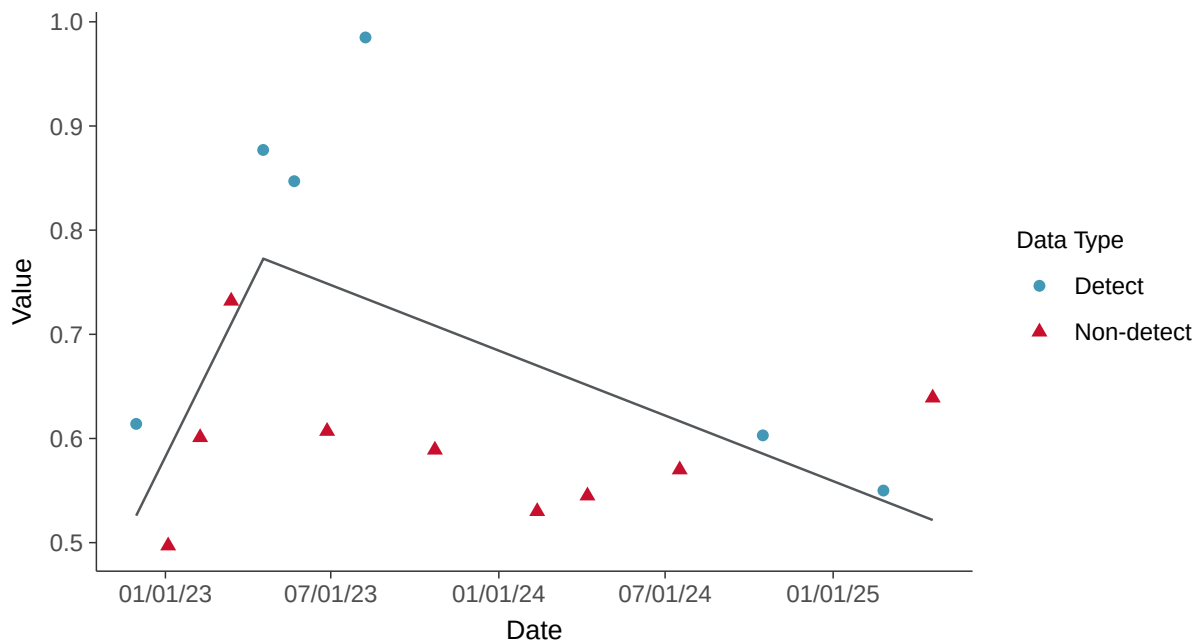
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-32 (pCi/L)

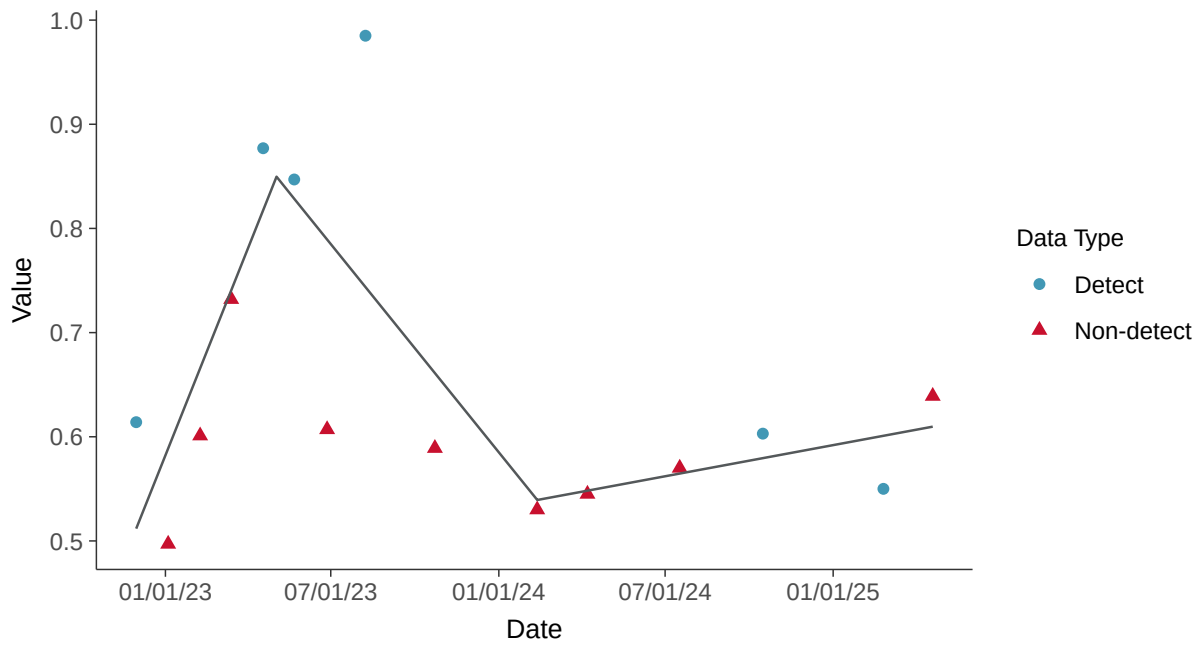


Trend Regression: Piecewise Linear-Linear

Radium 226 and 228, MW-32 (pCi/L)

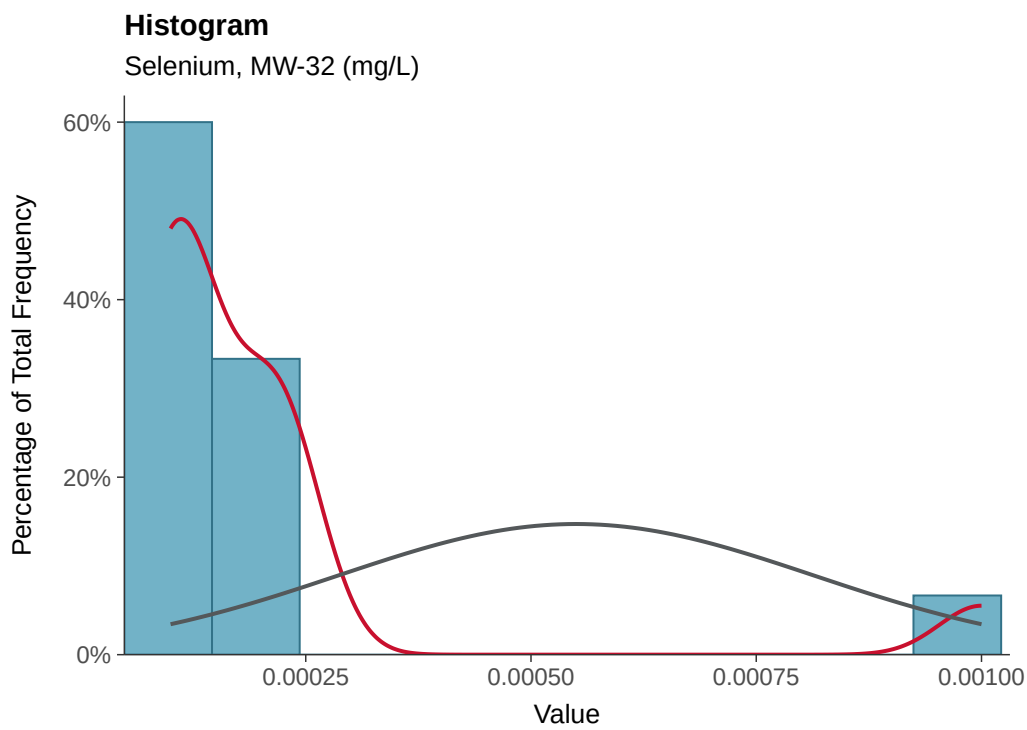
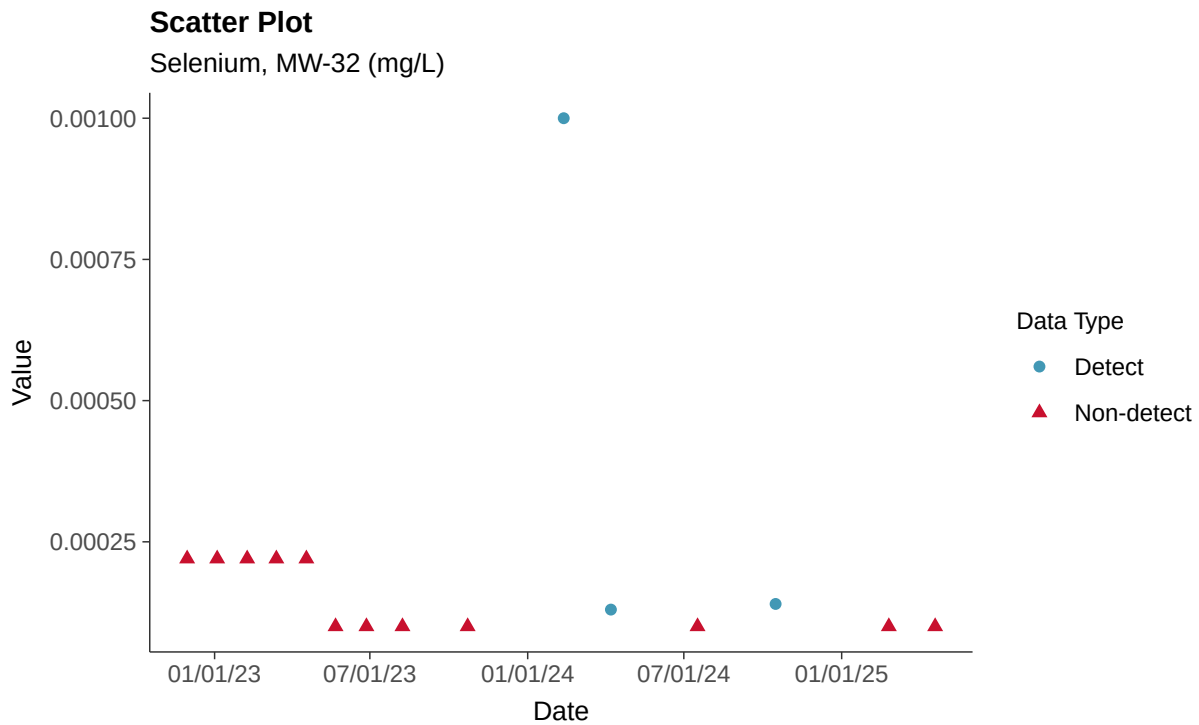


Trend Regression: Piecewise Linear-Linear-Linear
Radium 226 and 228, MW-32 (pCi/L)



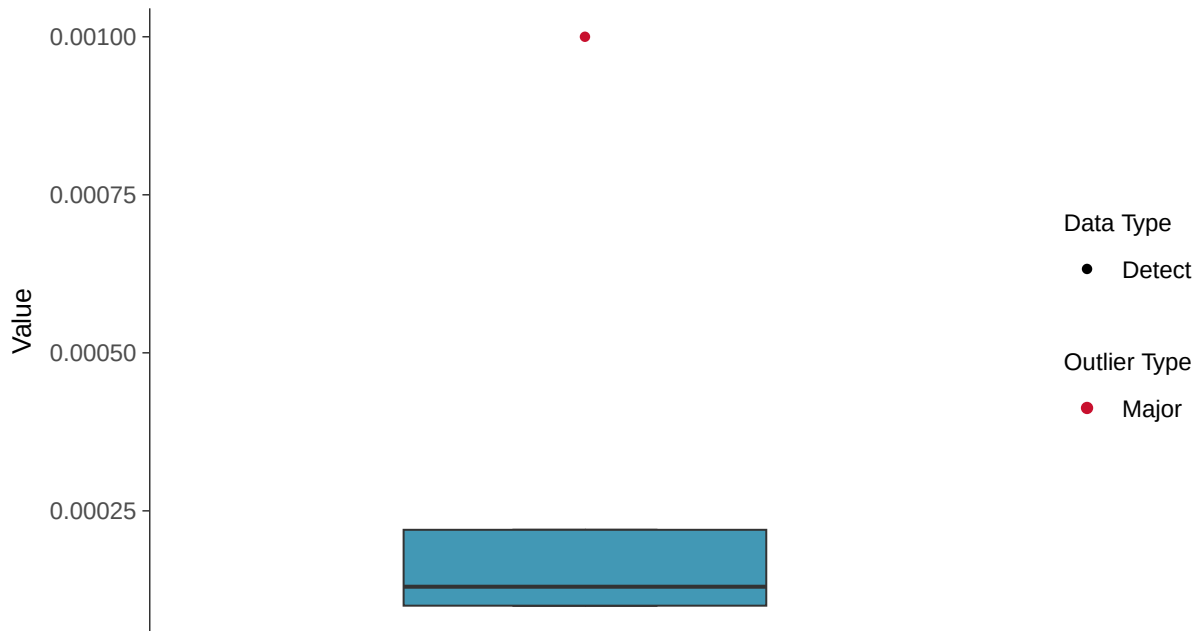
Appendix IV: Selenium, MW-32

ID: 42_1_4_122



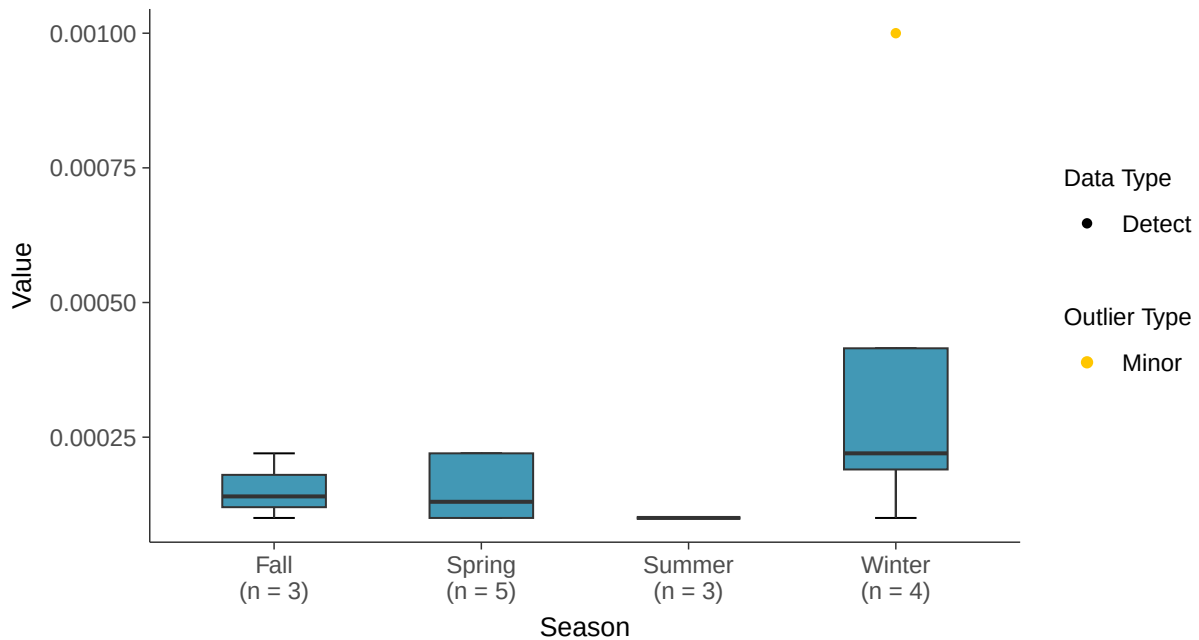
Boxplot

Selenium, MW-32 (mg/L)



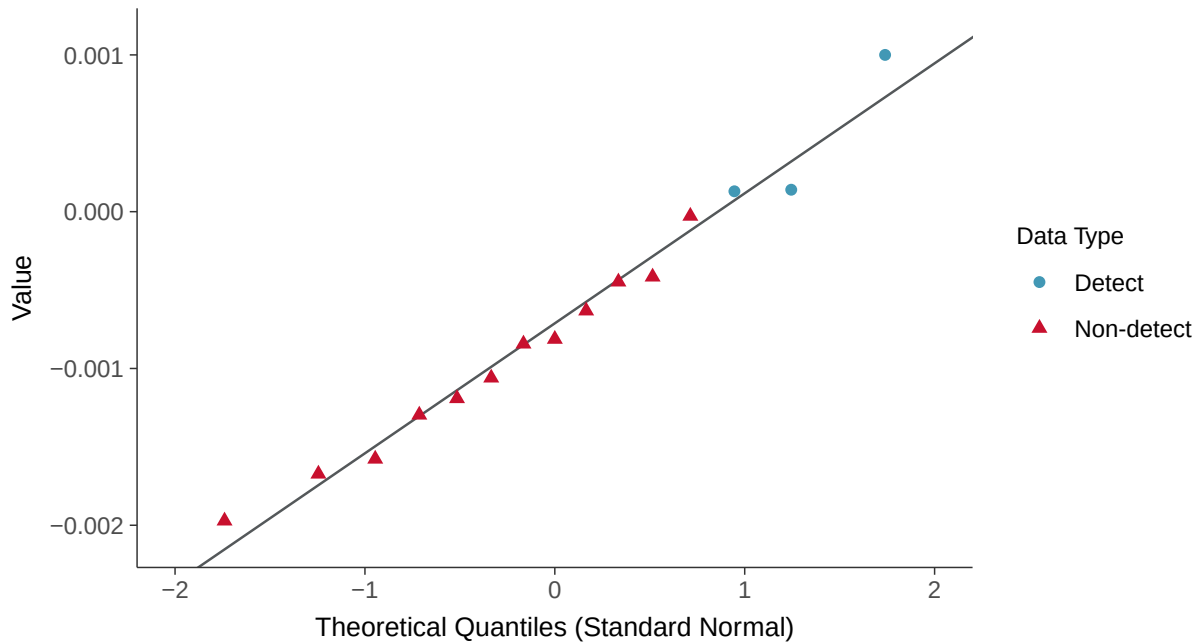
Boxplot by Season

Selenium, MW-32 (mg/L)



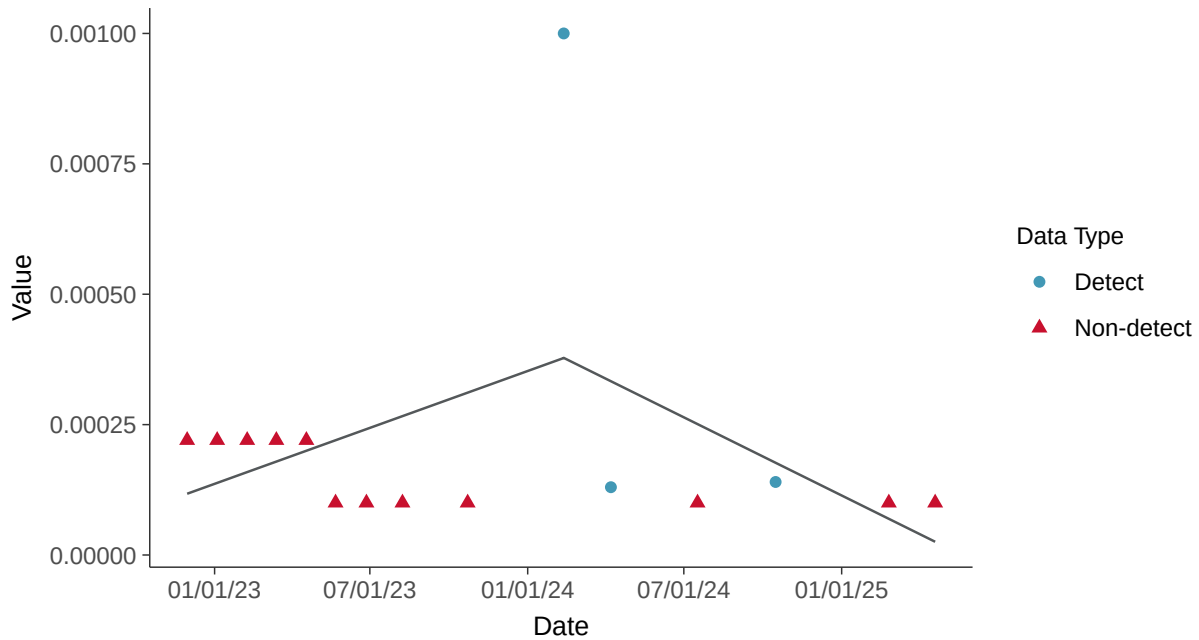
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-32 (mg/L)



Trend Regression: Piecewise Linear-Linear

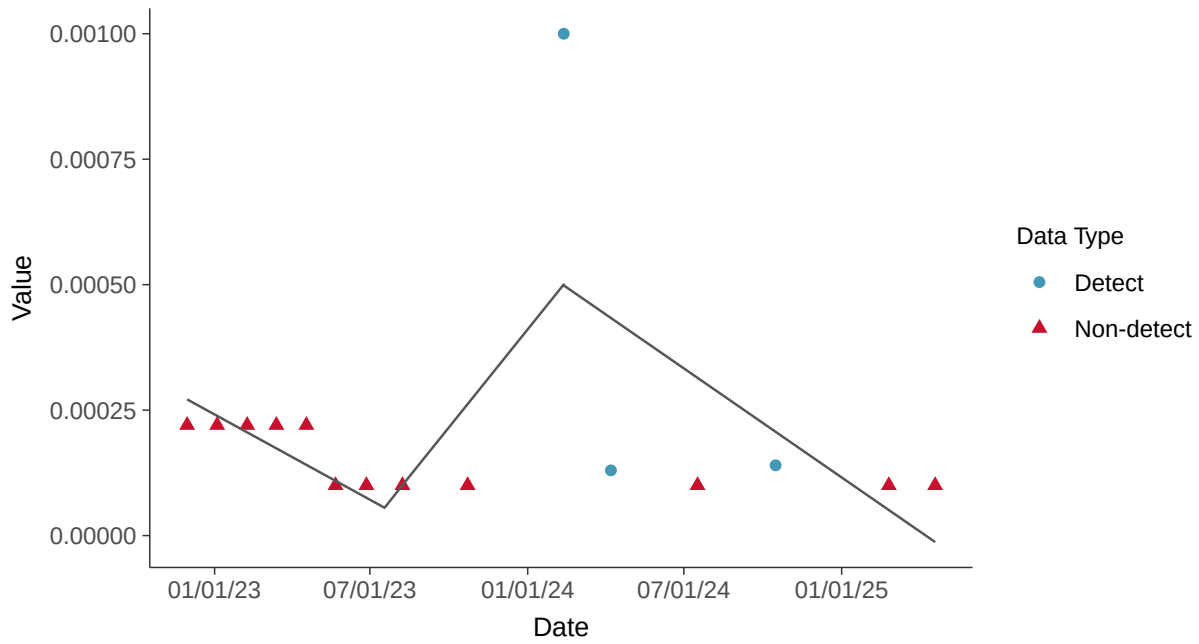
Selenium, MW-32 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

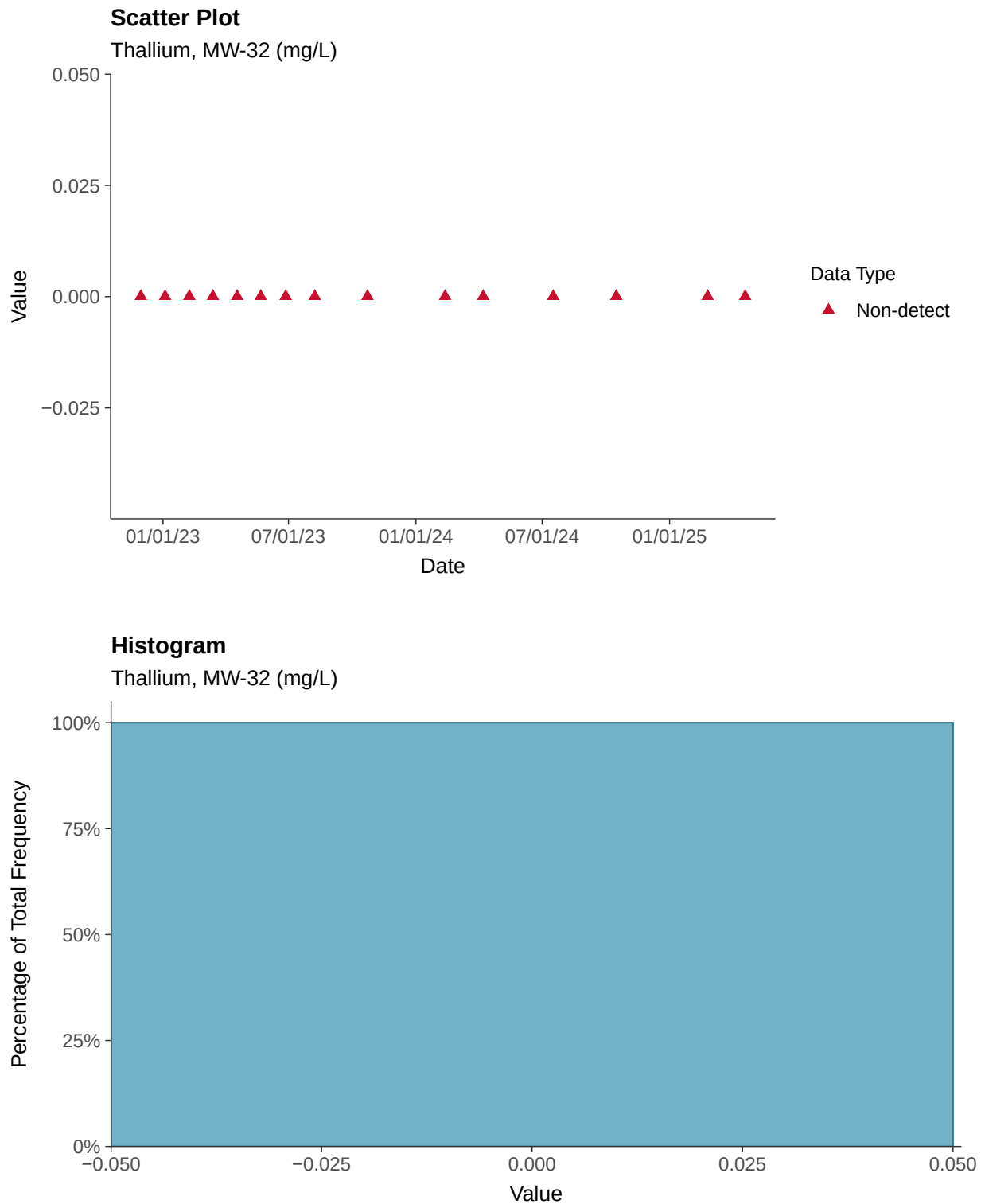
Selenium, MW-32 (mg/L)





Appendix IV: Thallium, MW-32

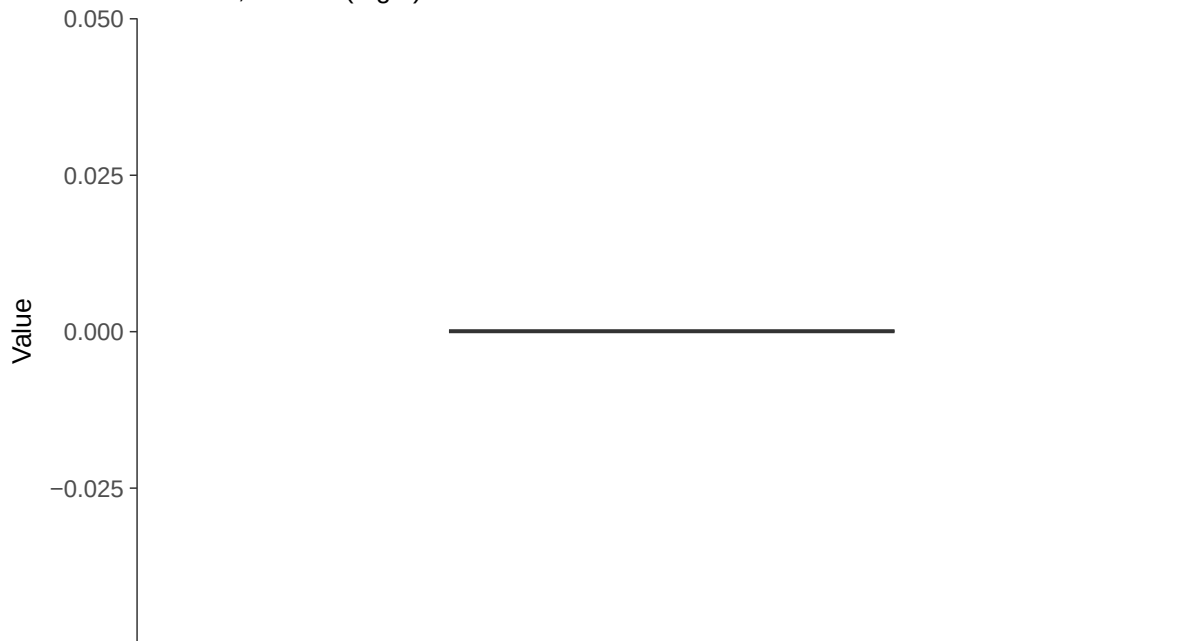
ID: 42_1_4_125





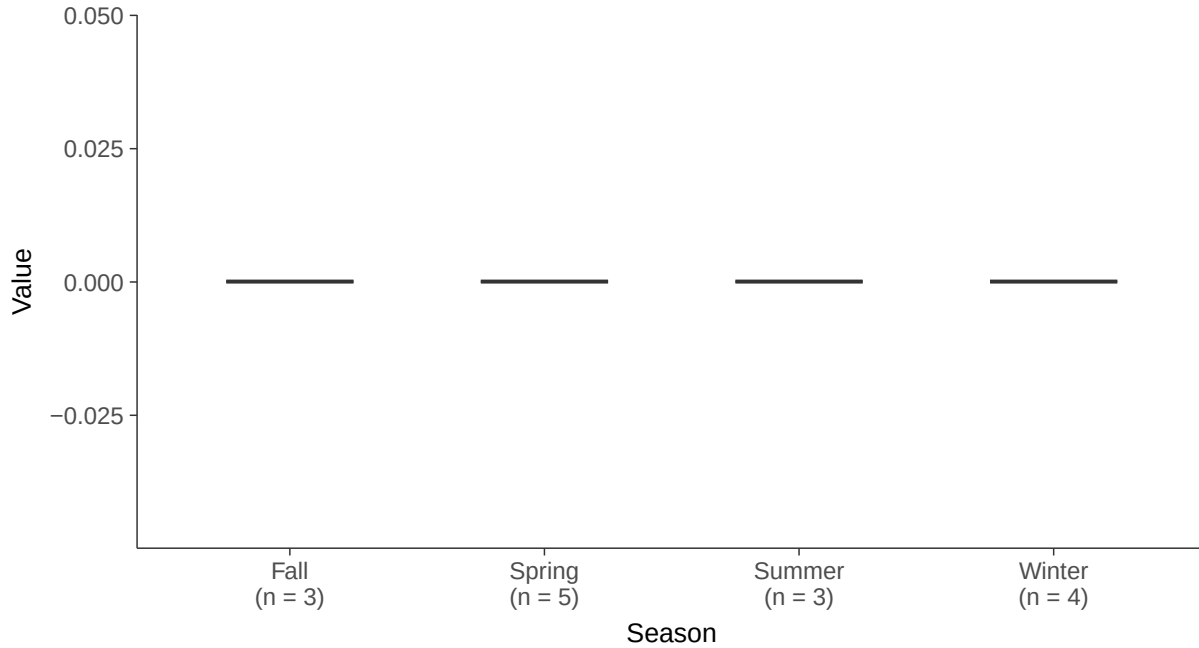
Boxplot

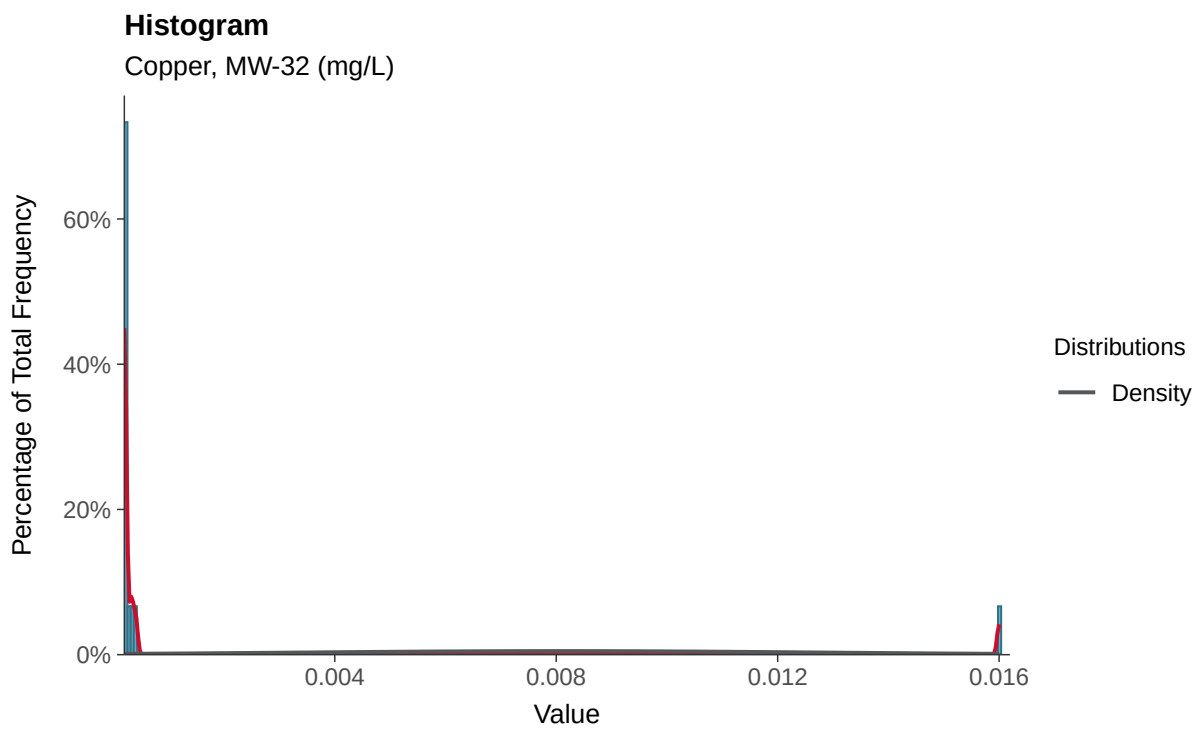
Thallium, MW-32 (mg/L)

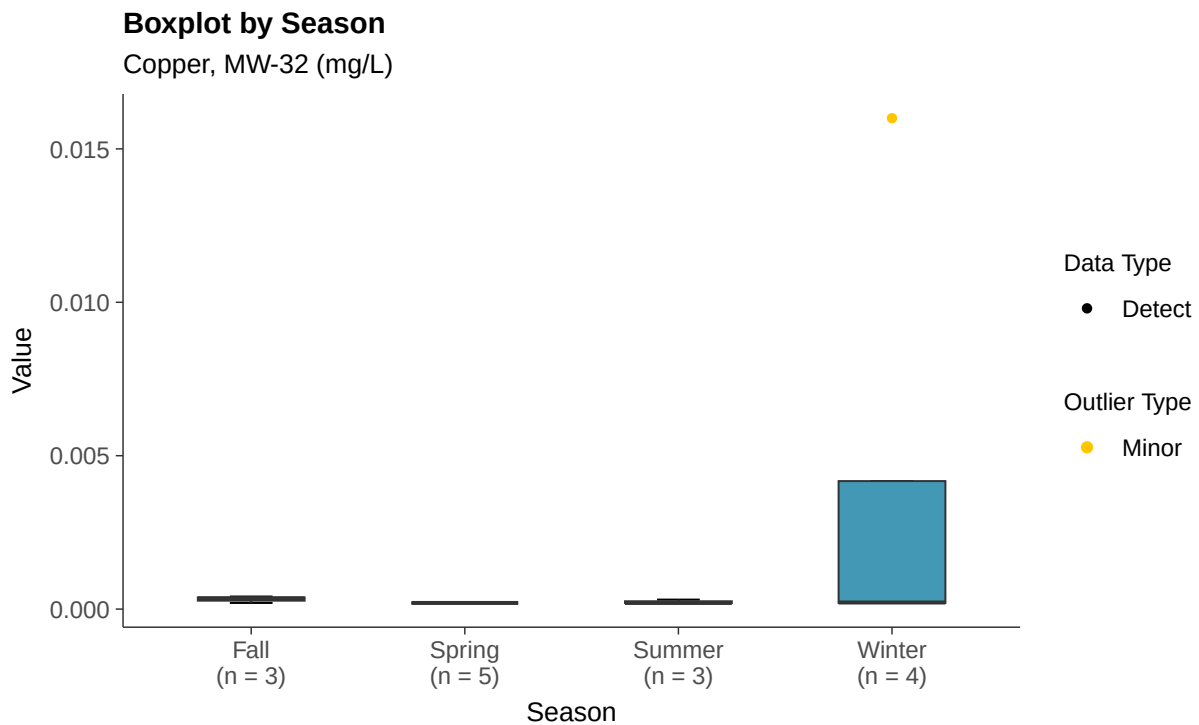
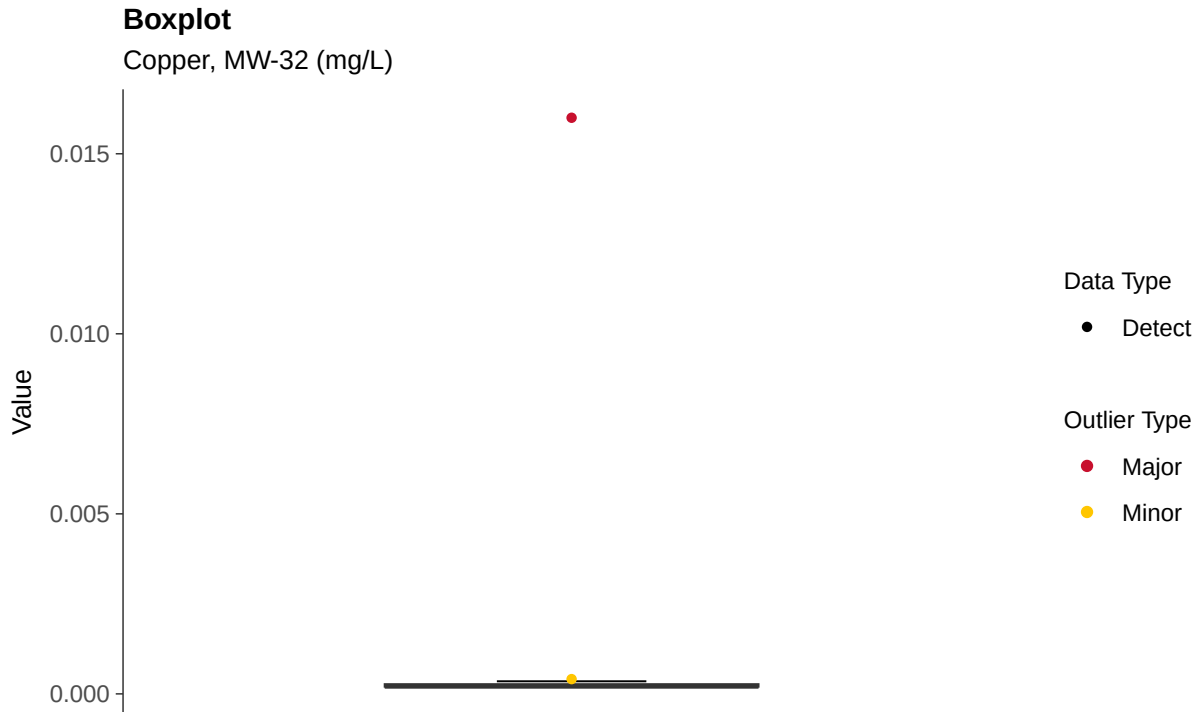


Boxplot by Season

Thallium, MW-32 (mg/L)

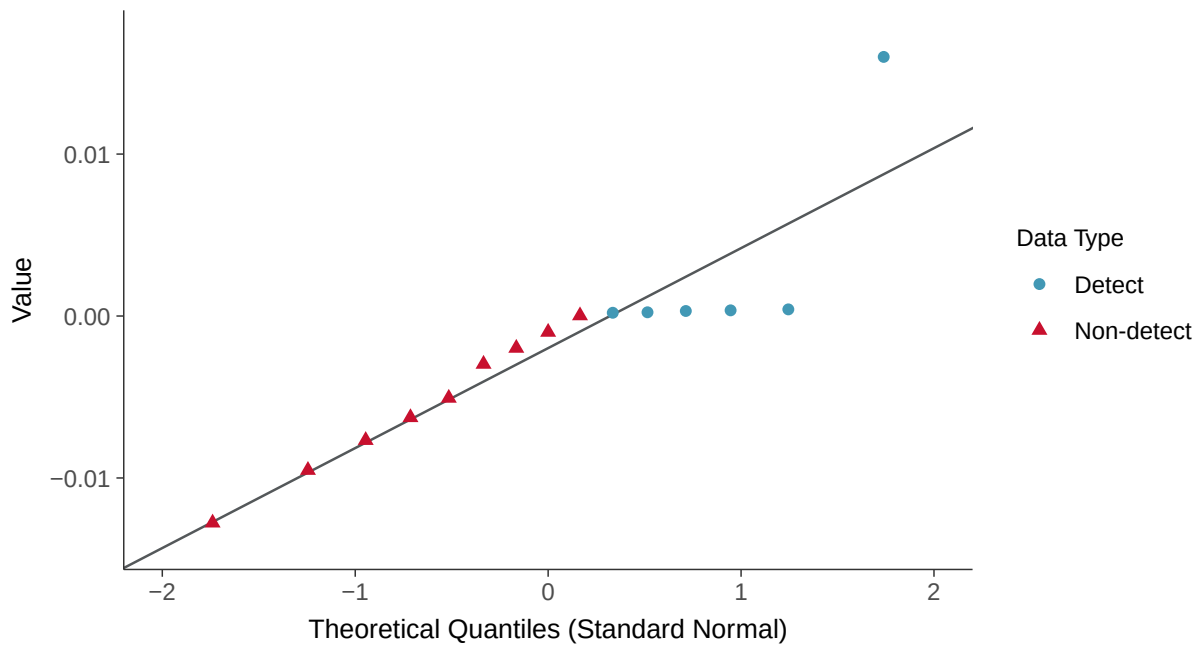






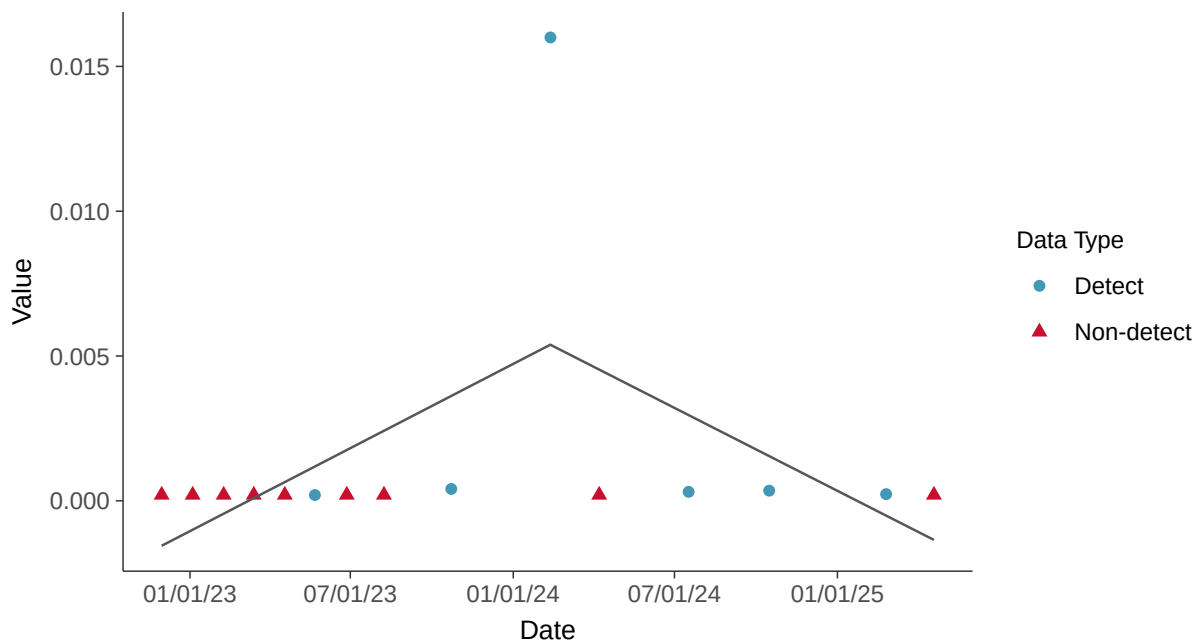
Normal Q-Q plot using ROS Imputed Estimates

Copper, MW-32 (mg/L)

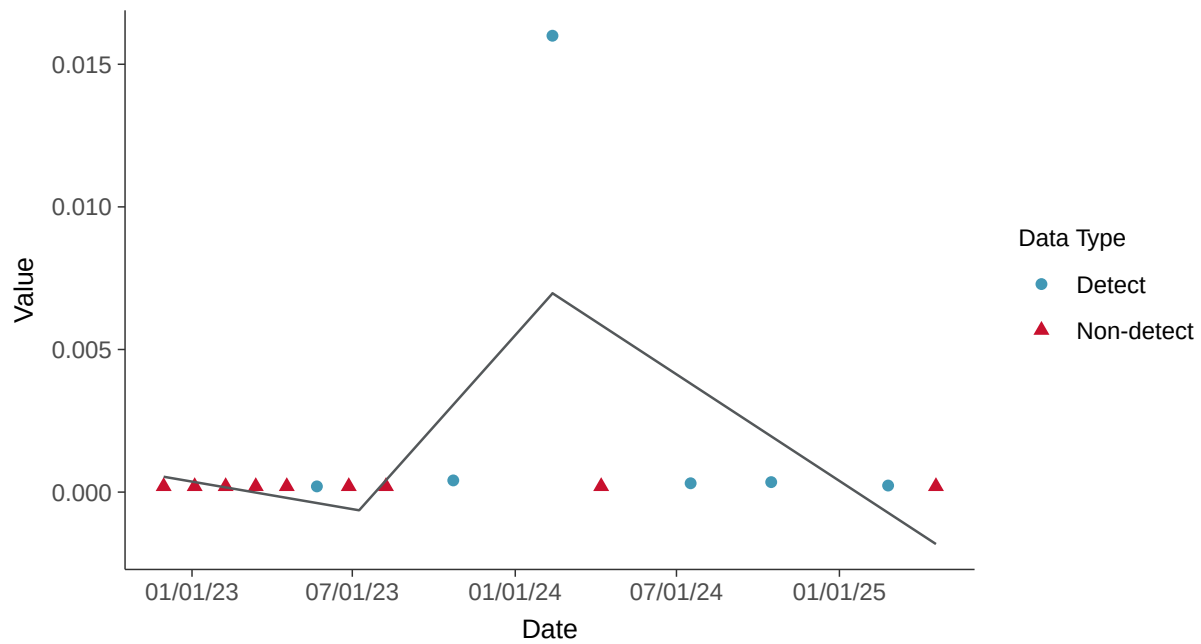


Trend Regression: Piecewise Linear-Linear

Copper, MW-32 (mg/L)

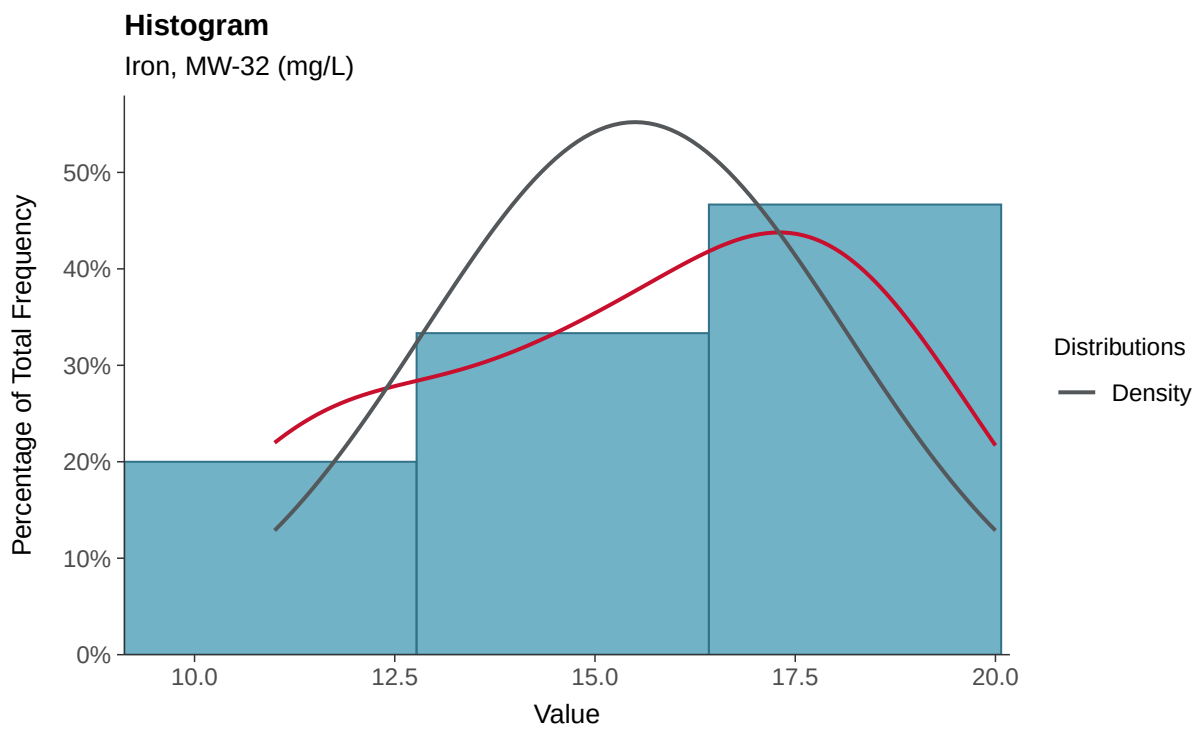
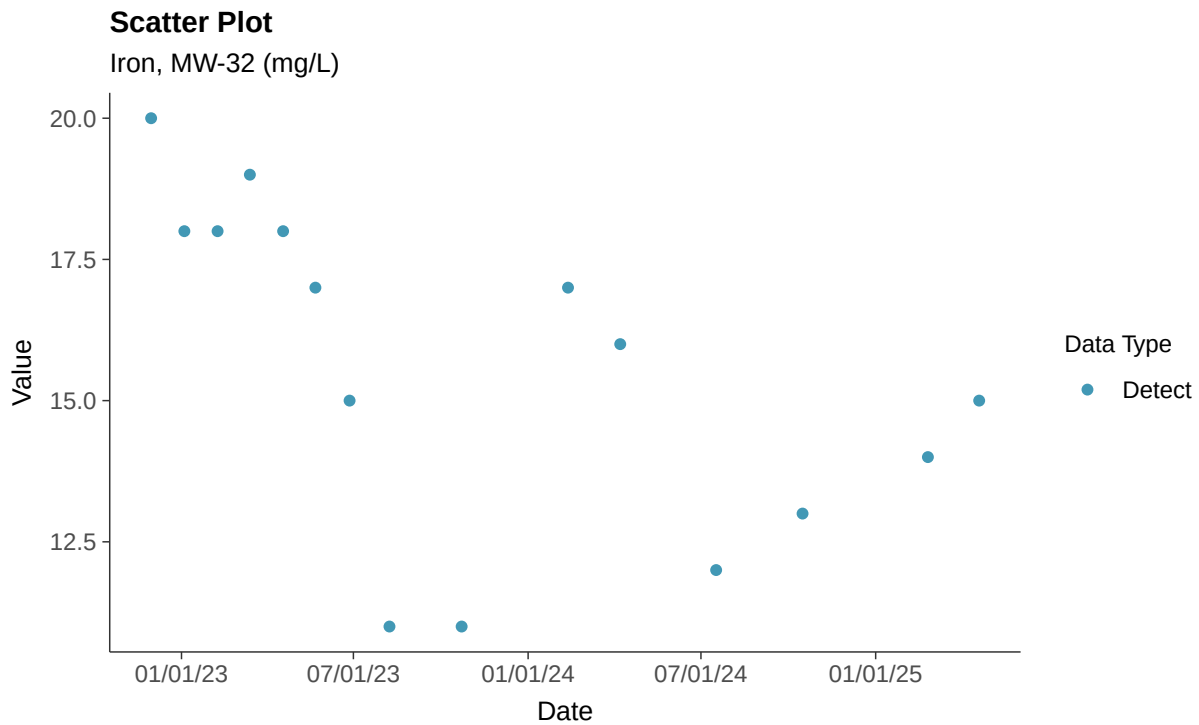


Copper, MW-32 (mg/L)



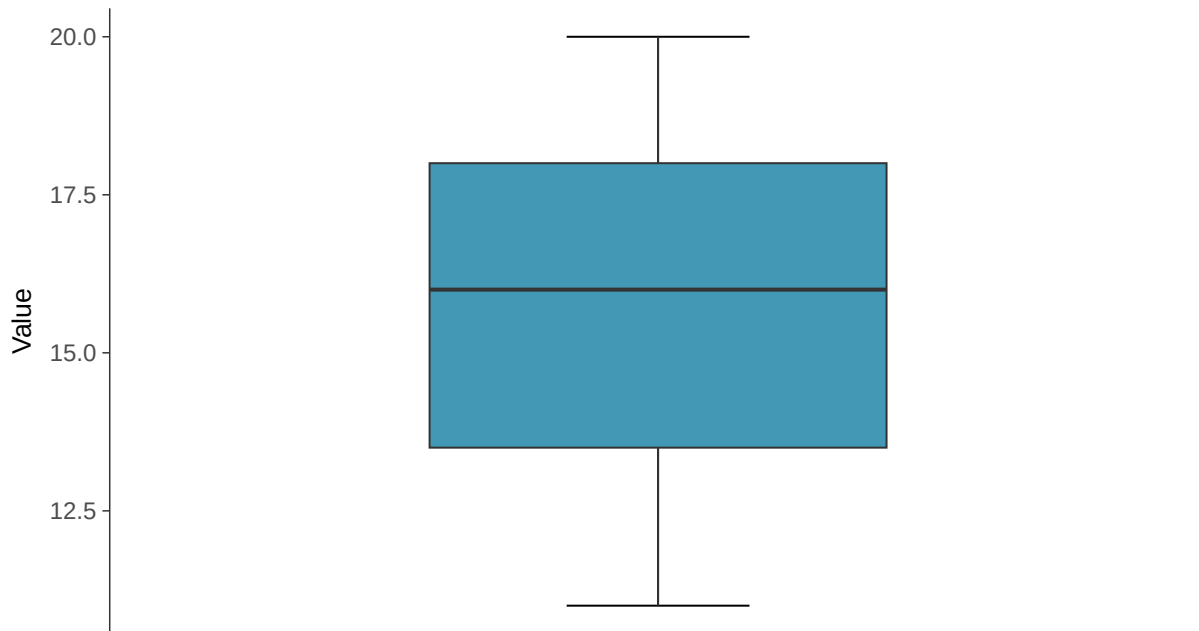
Part 115: Iron, MW-32

ID: 42_1_5_114



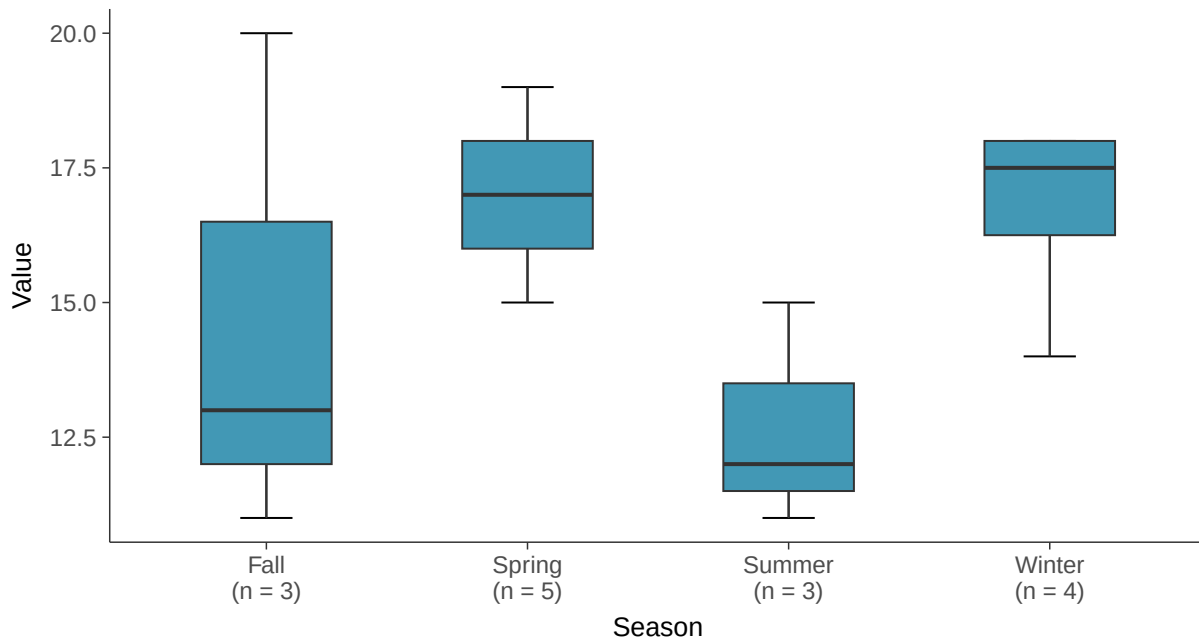
Boxplot

Iron, MW-32 (mg/L)

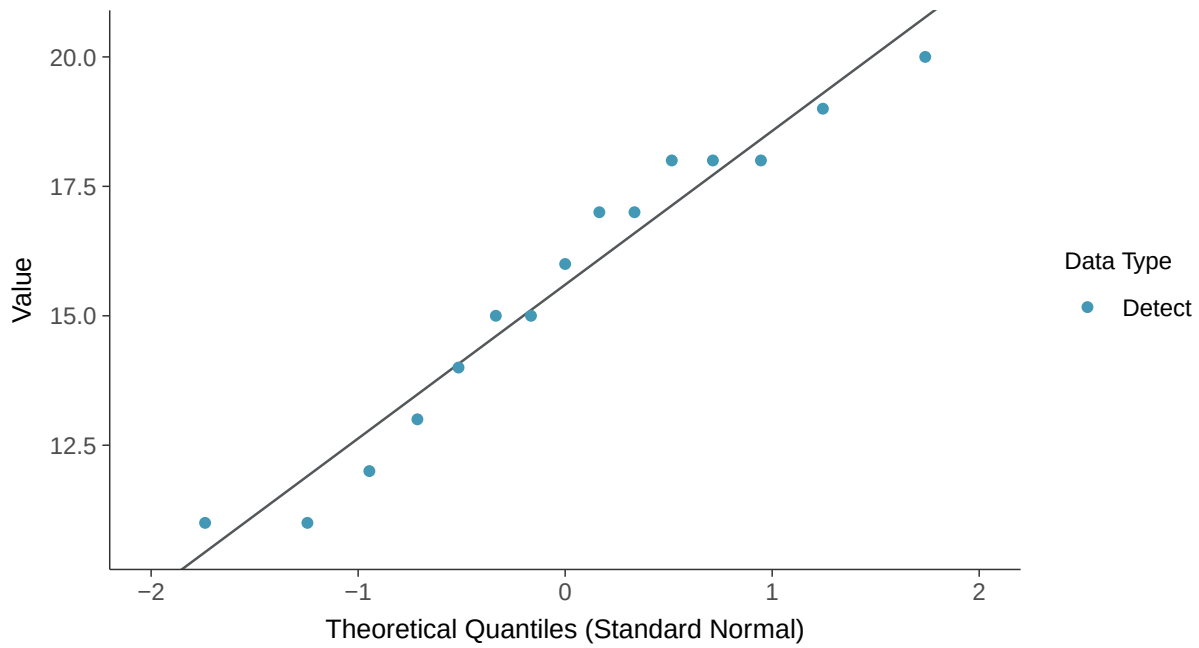


Boxplot by Season

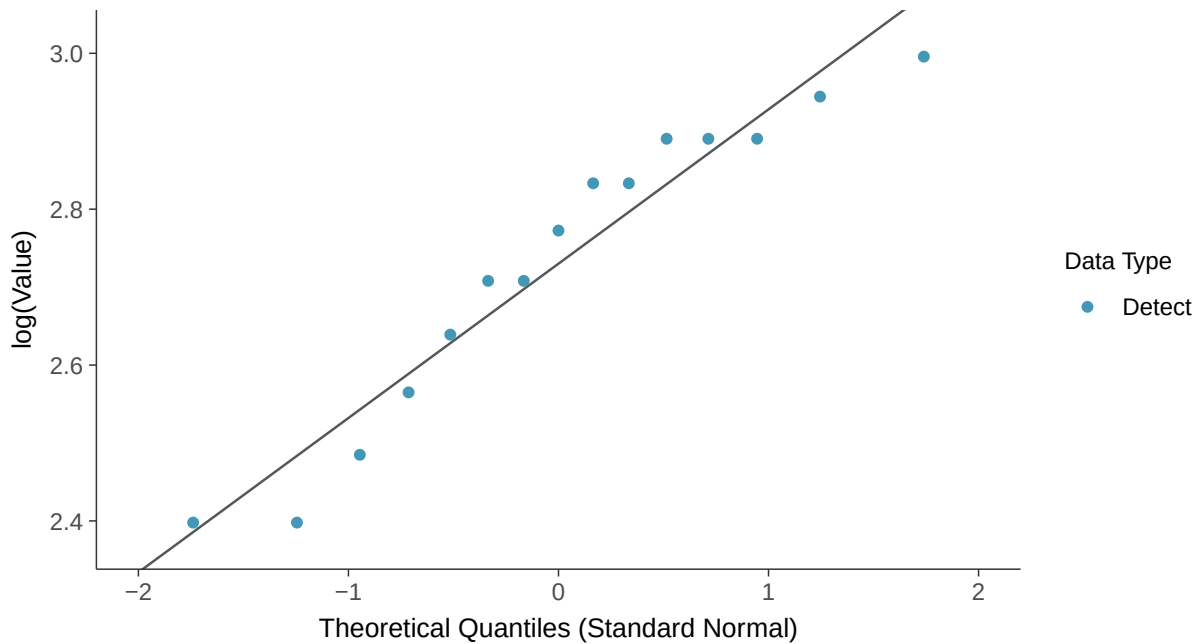
Iron, MW-32 (mg/L)

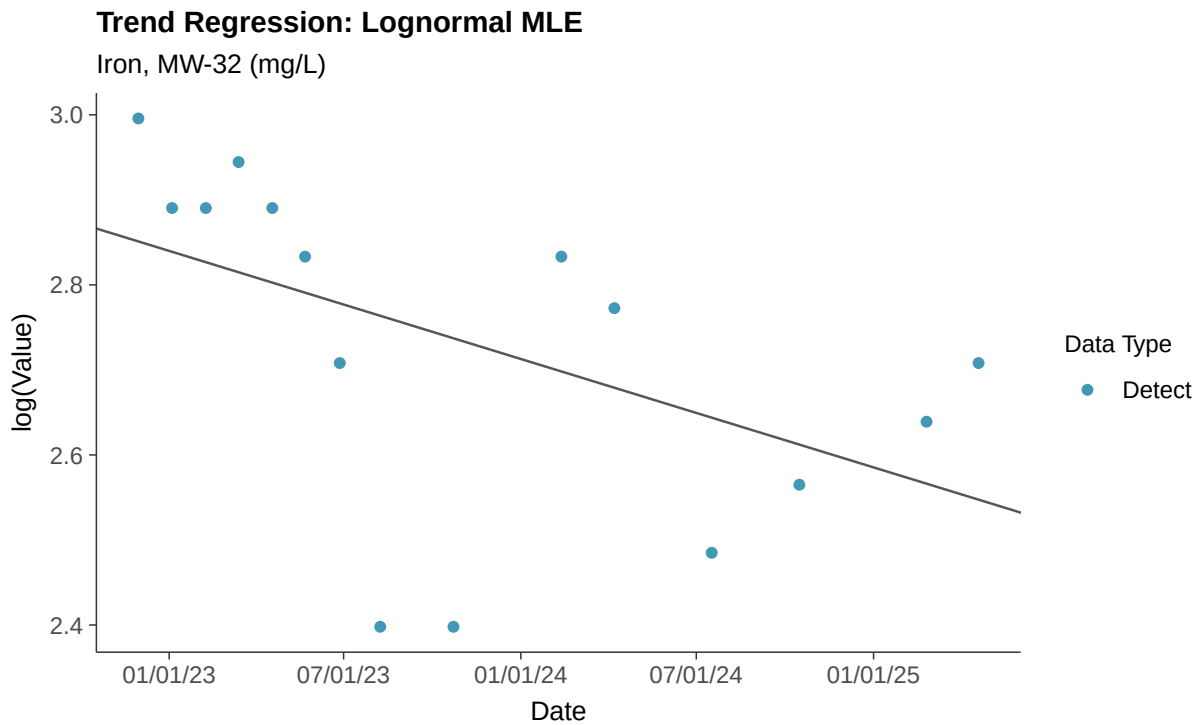
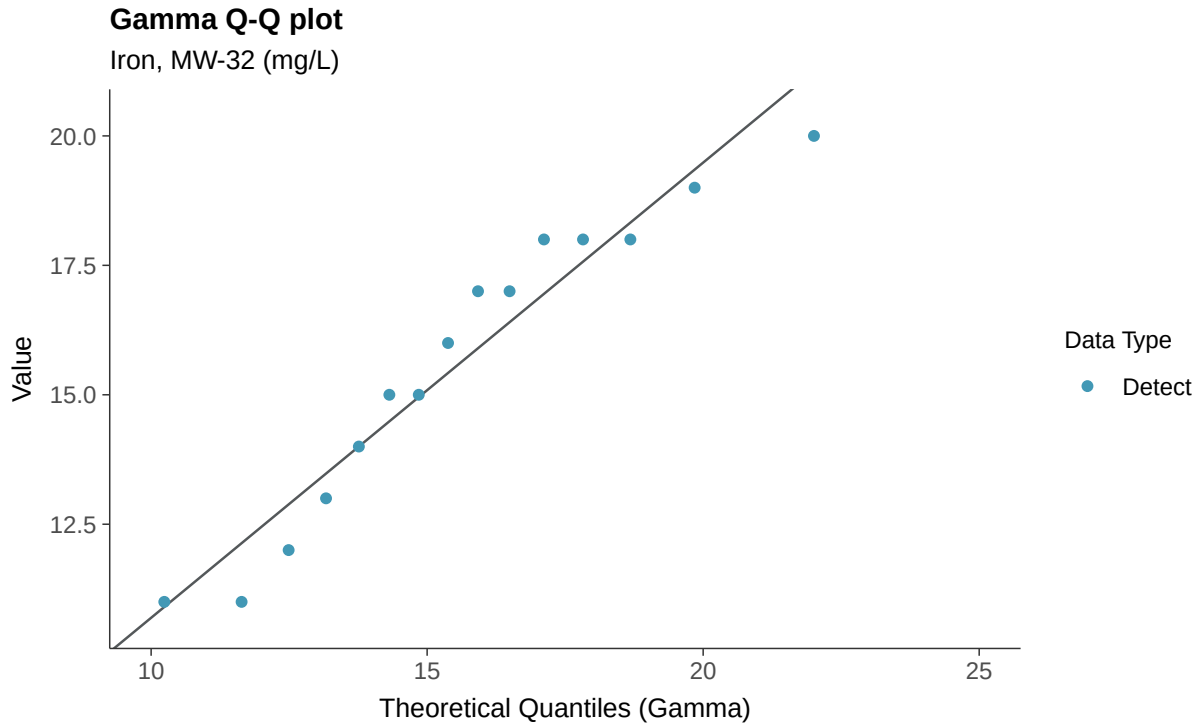


Normal Q-Q plot
Iron, MW-32 (mg/L)



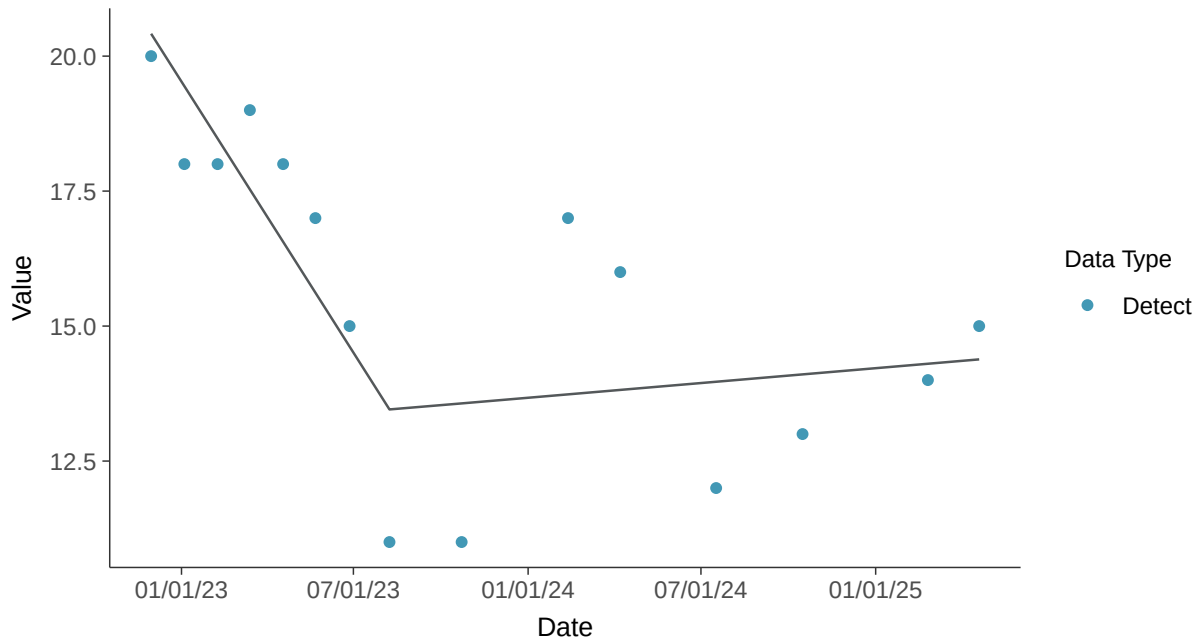
Lognormal Q-Q plot
Iron, MW-32 (mg/L)





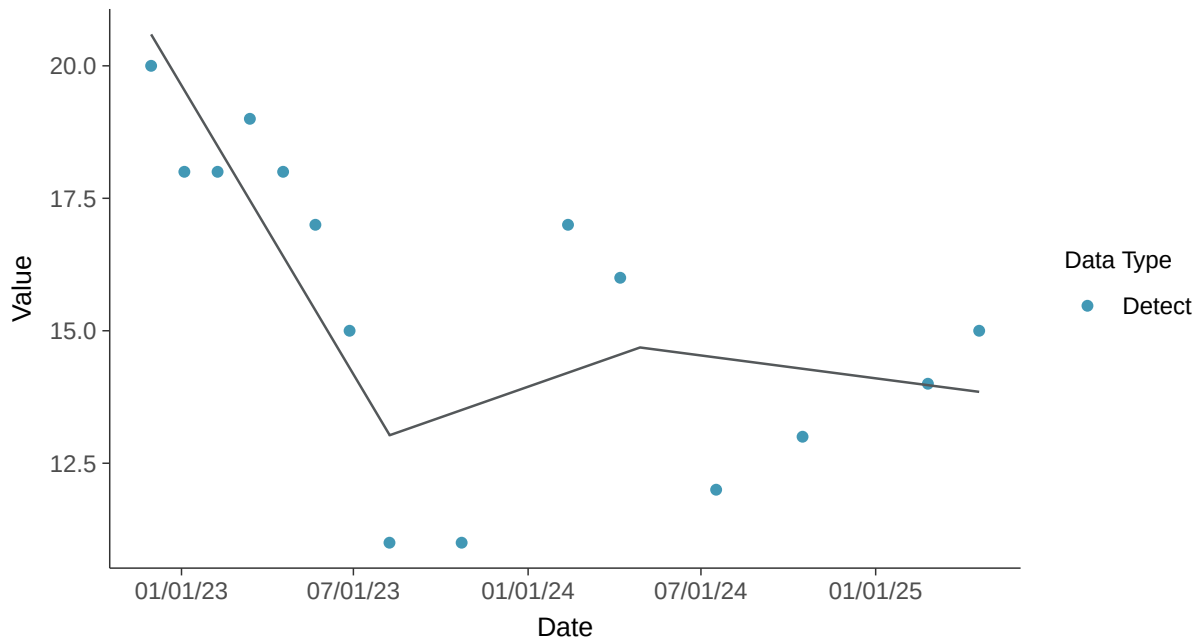
Trend Regression: Piecewise Linear-Linear

Iron, MW-32 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Iron, MW-32 (mg/L)

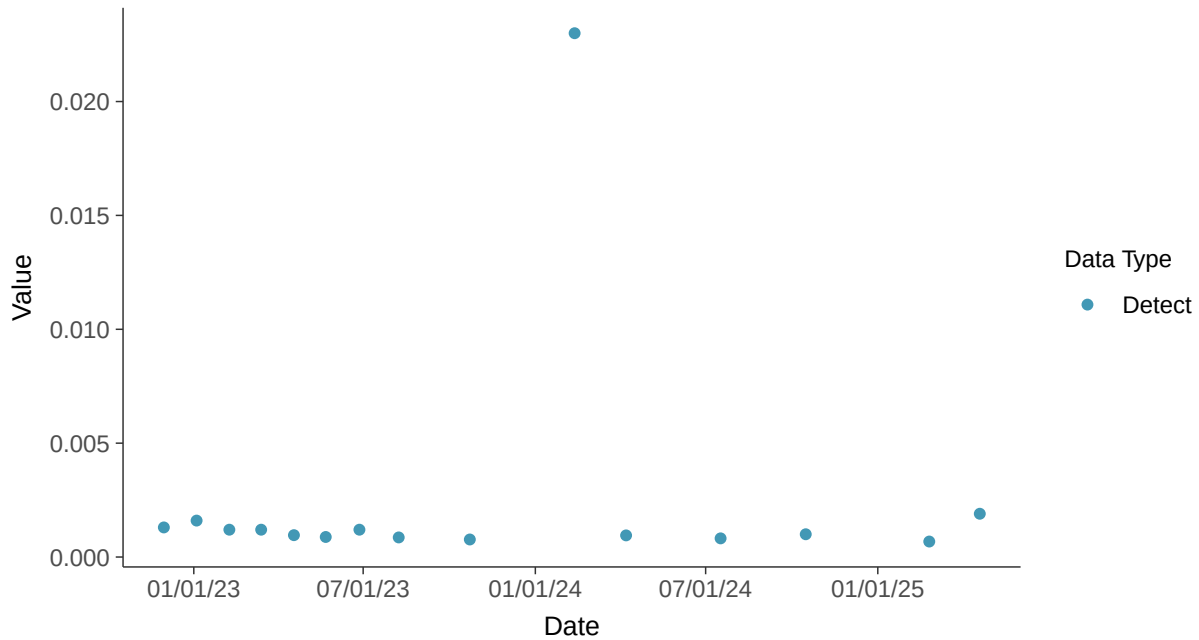


Part 115: Nickel, MW-32

ID: 42_1_5_119

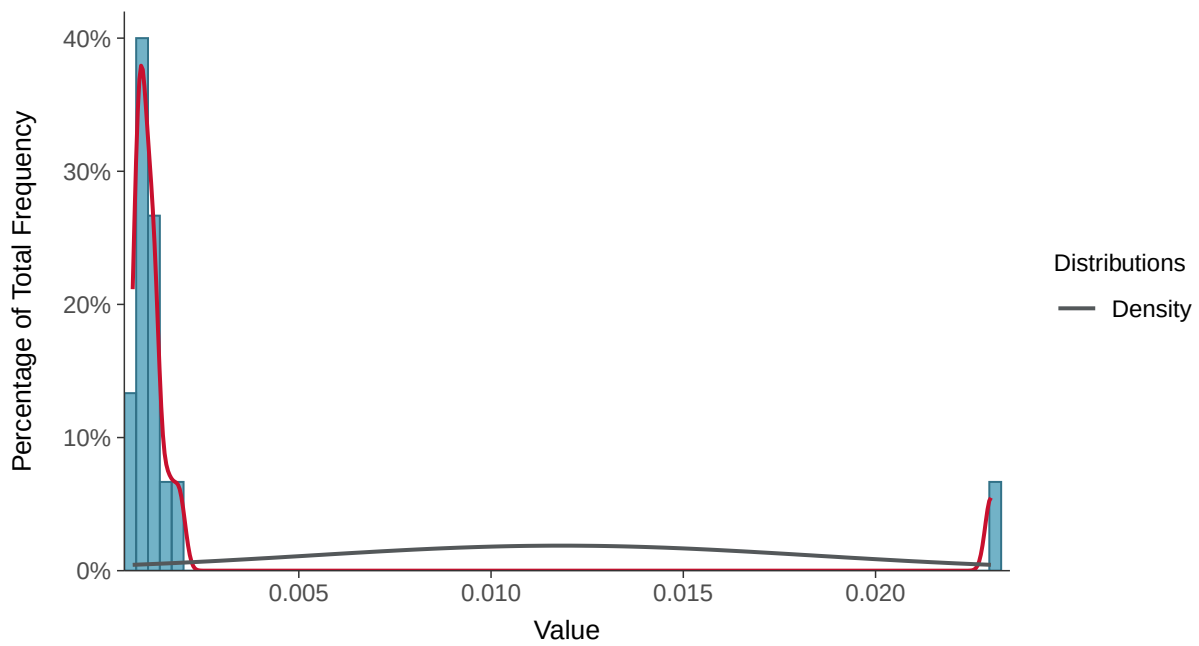
Scatter Plot

Nickel, MW-32 (mg/L)



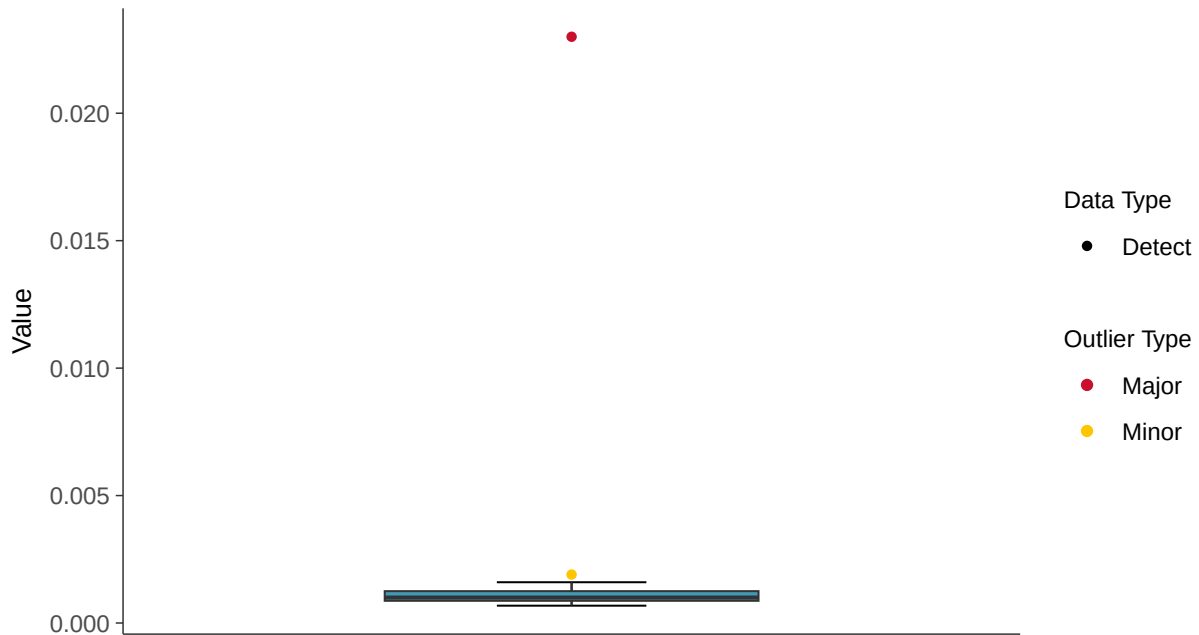
Histogram

Nickel, MW-32 (mg/L)



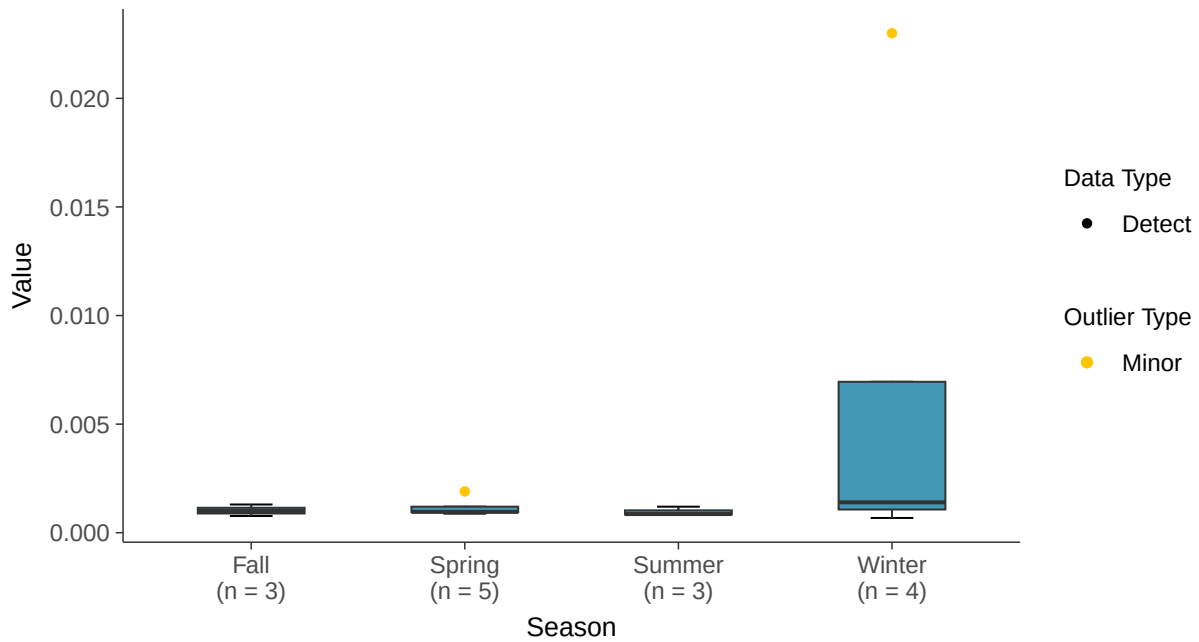
Boxplot

Nickel, MW-32 (mg/L)



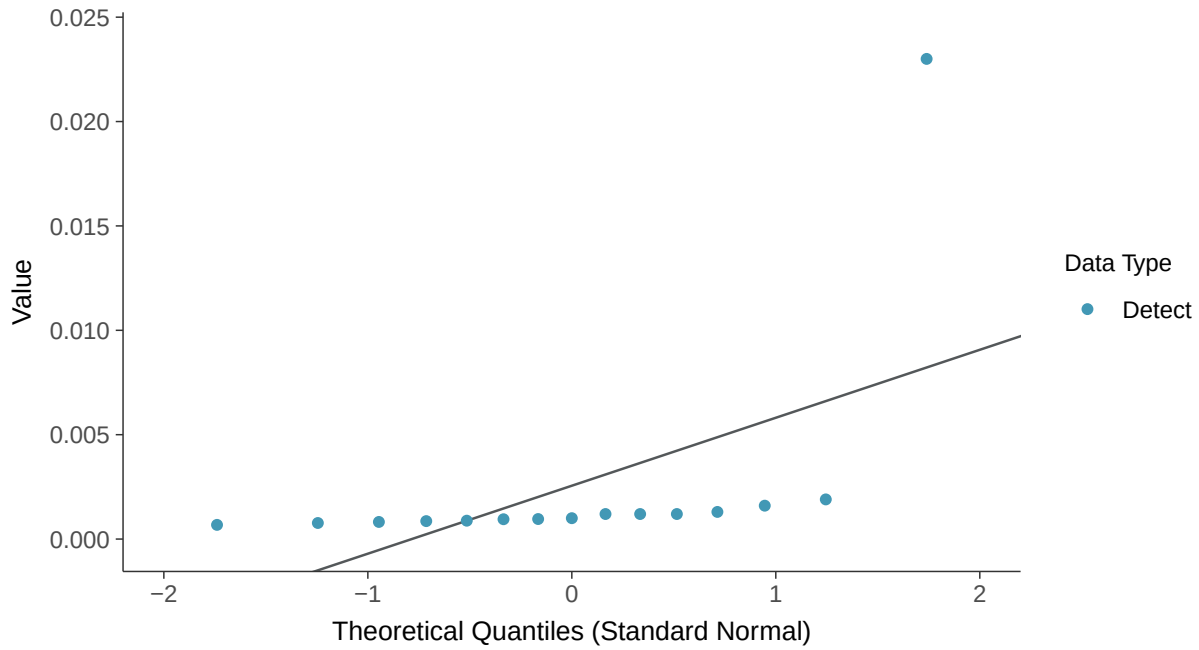
Boxplot by Season

Nickel, MW-32 (mg/L)



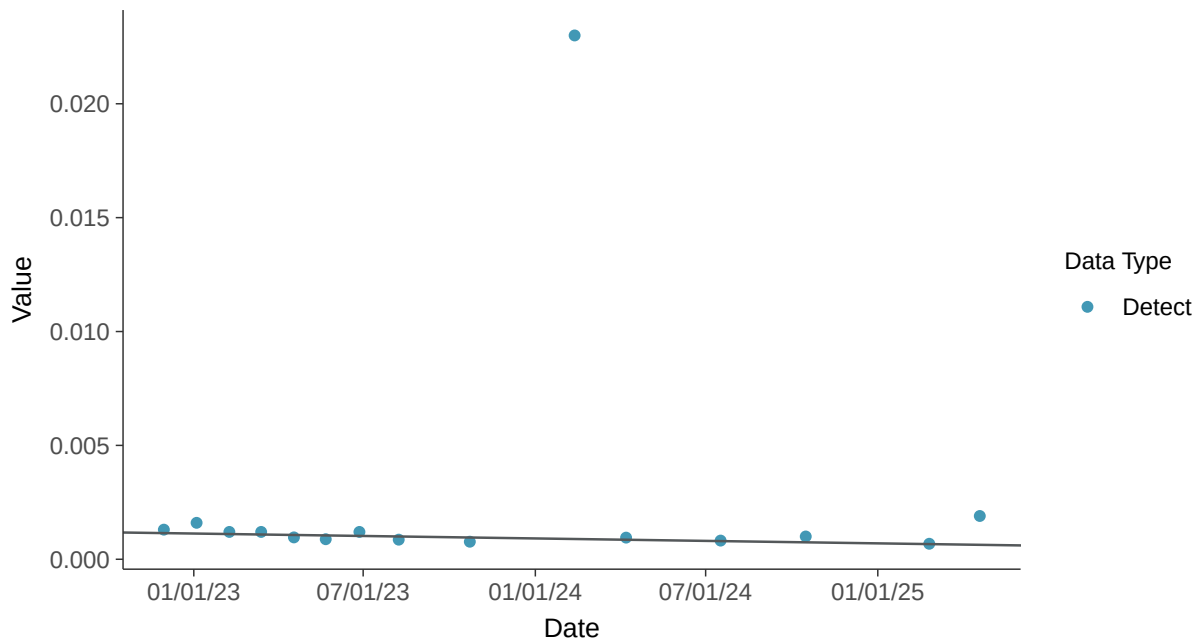
Normal Q-Q plot

Nickel, MW-32 (mg/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

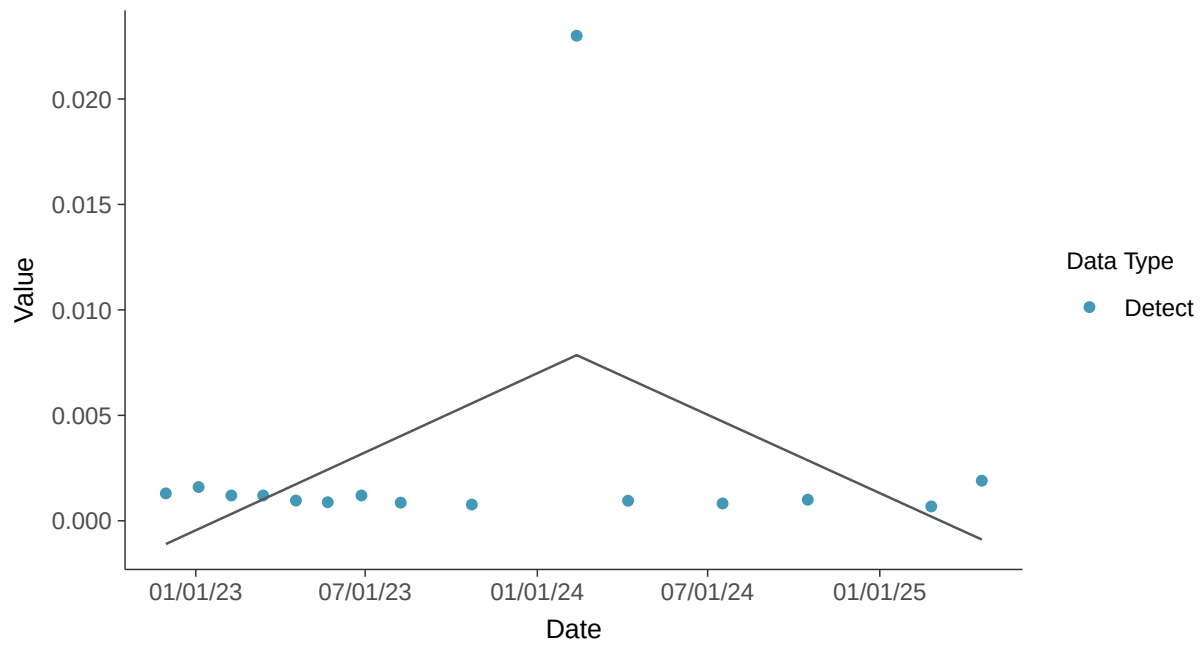
Nickel, MW-32 (mg/L)





Trend Regression: Piecewise Linear-Linear

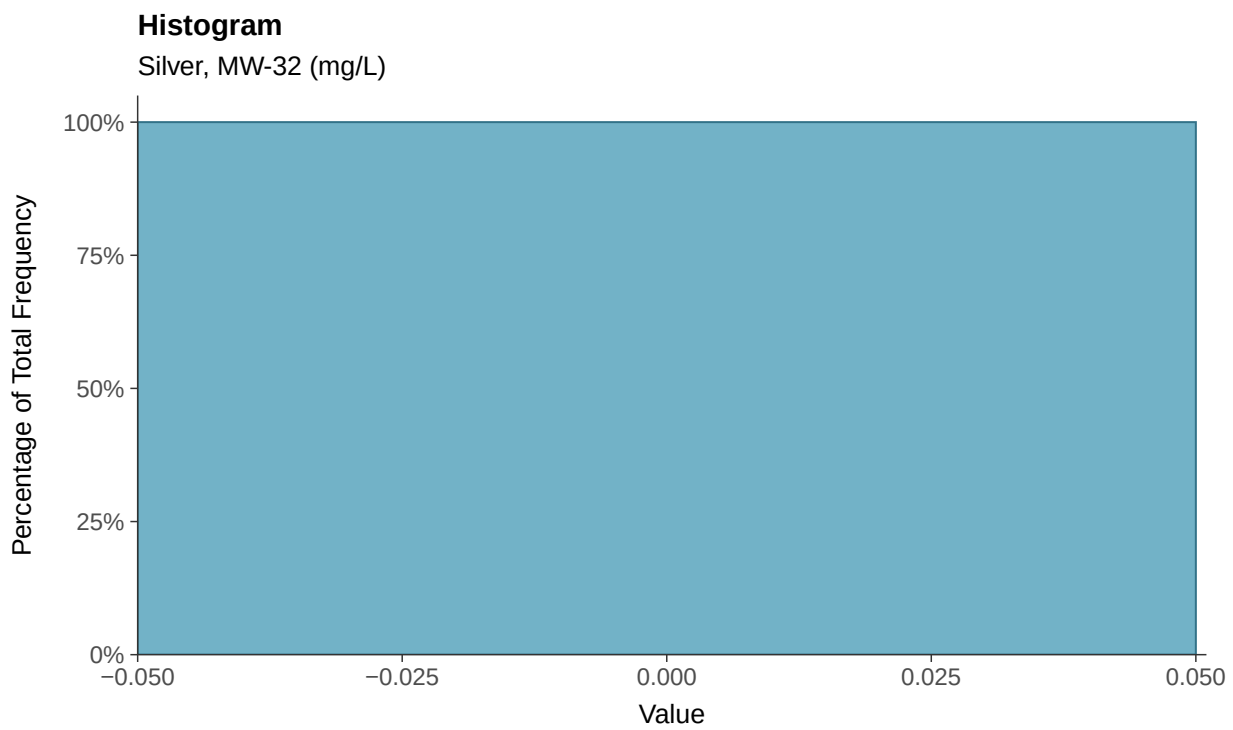
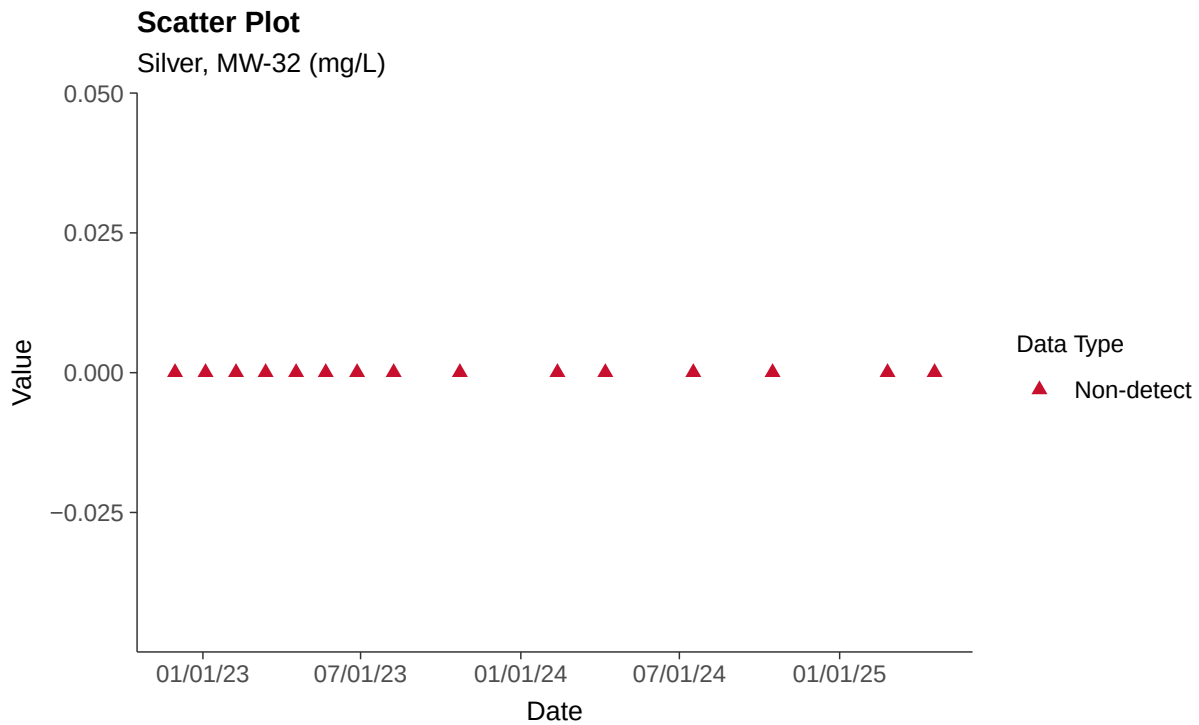
Nickel, MW-32 (mg/L)





Part 115: Silver, MW-32

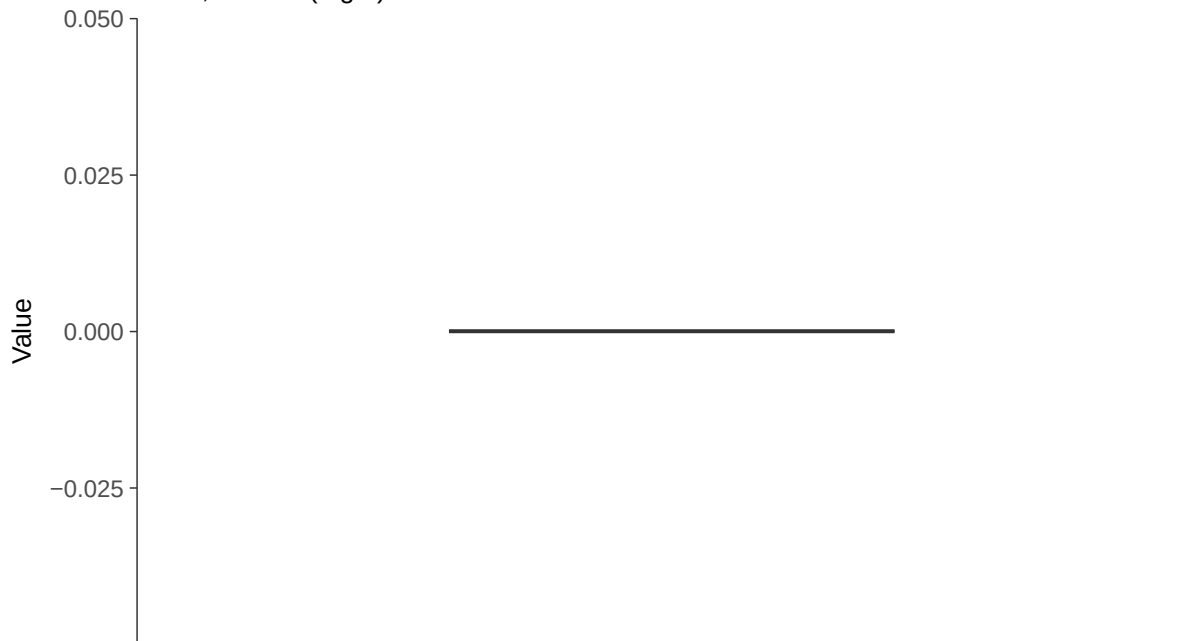
ID: 42_1_5_123





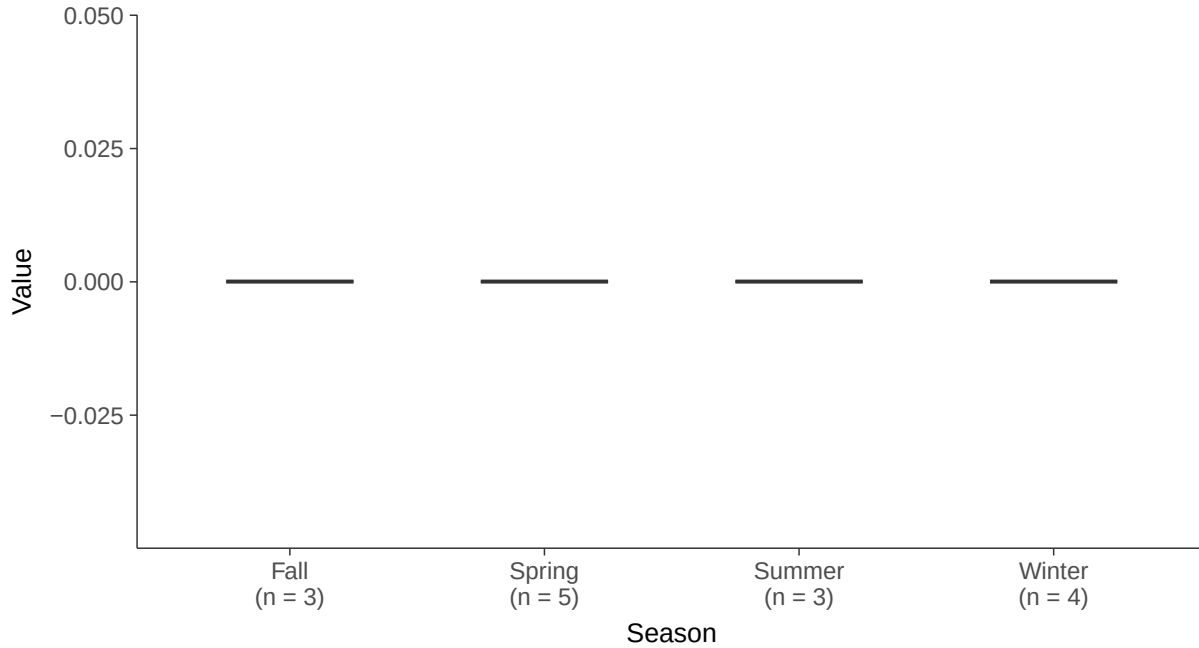
Boxplot

Silver, MW-32 (mg/L)



Boxplot by Season

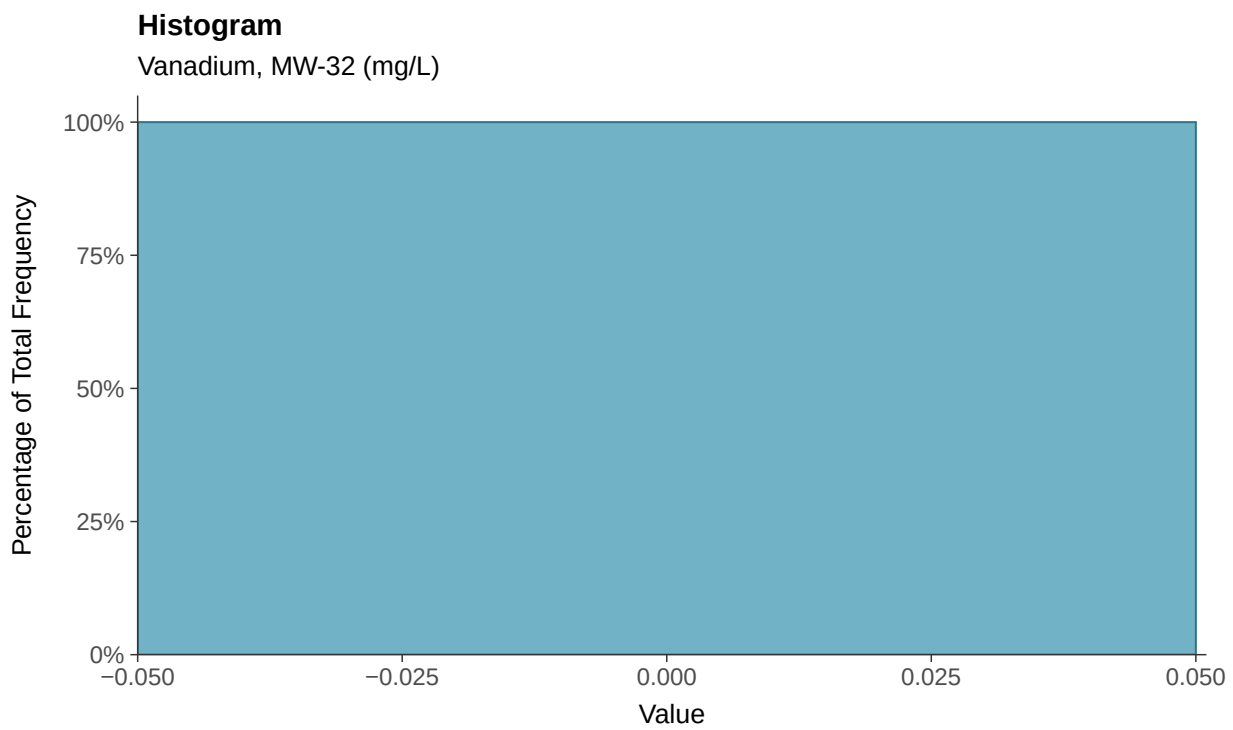
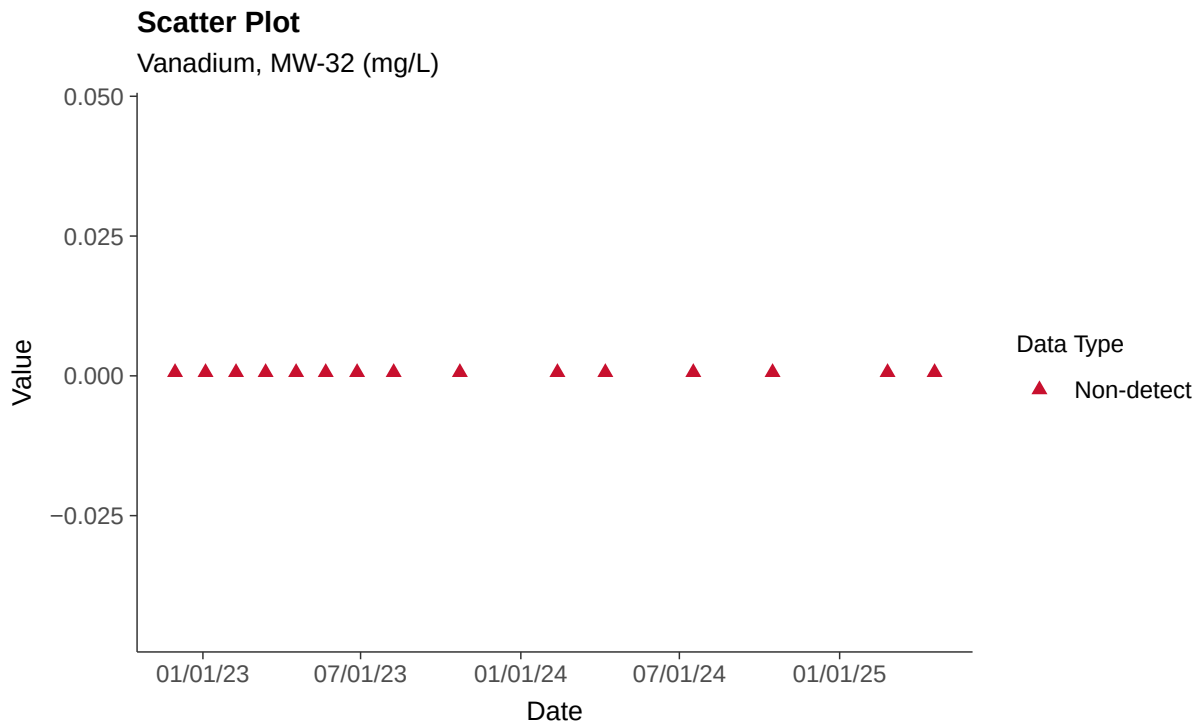
Silver, MW-32 (mg/L)





Part 115: Vanadium, MW-32

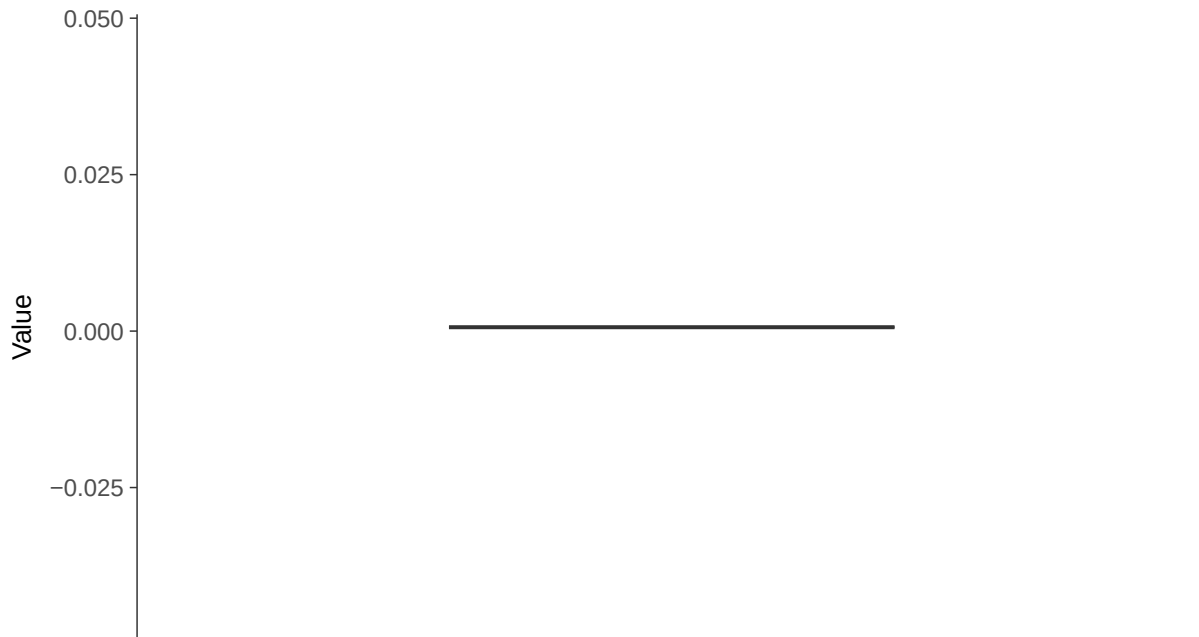
ID: 42_1_5_128





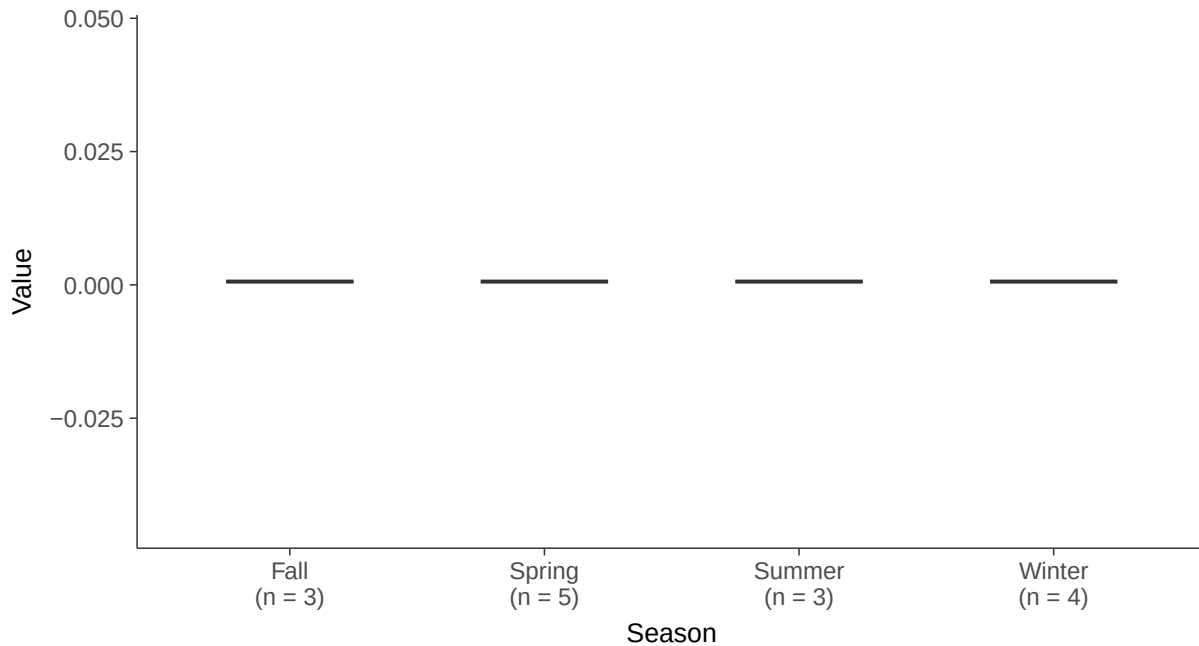
Boxplot

Vanadium, MW-32 (mg/L)



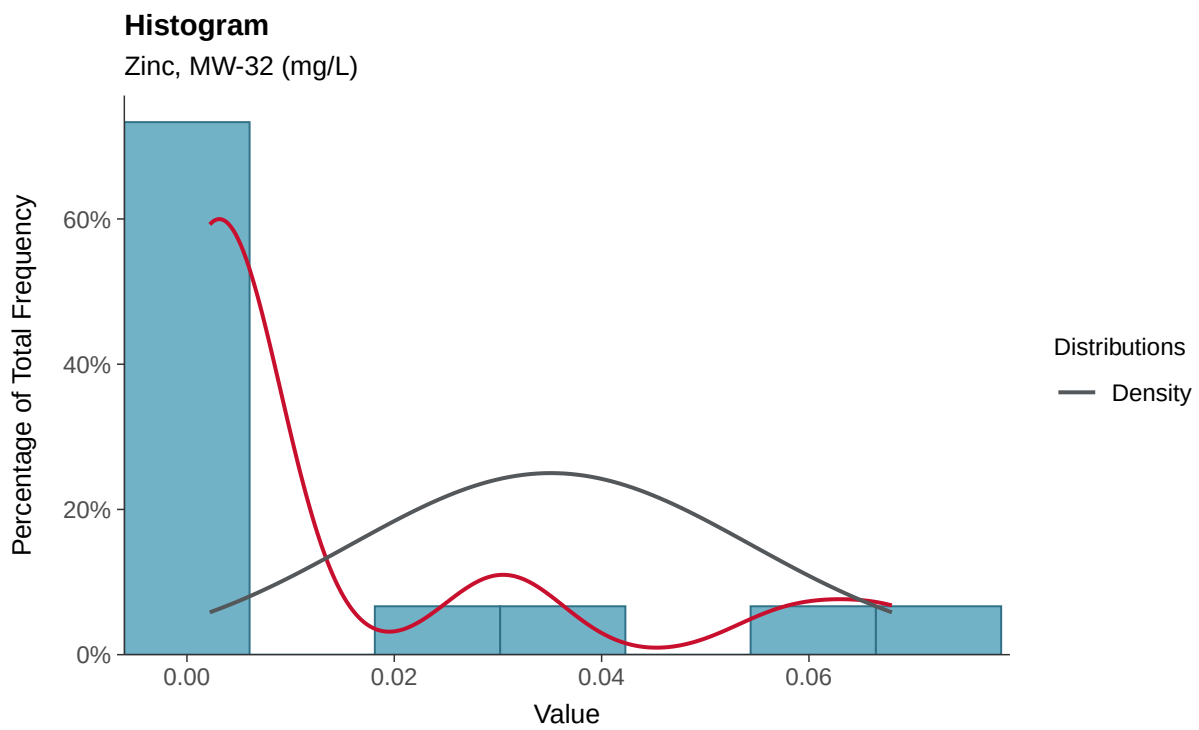
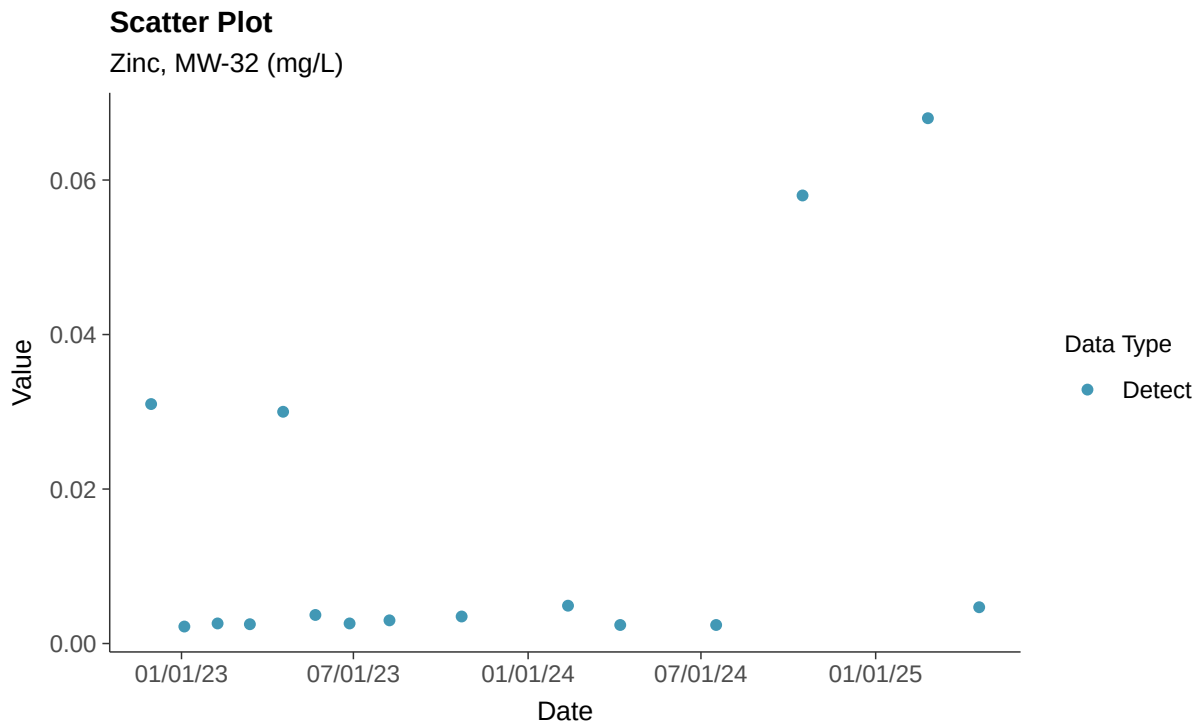
Boxplot by Season

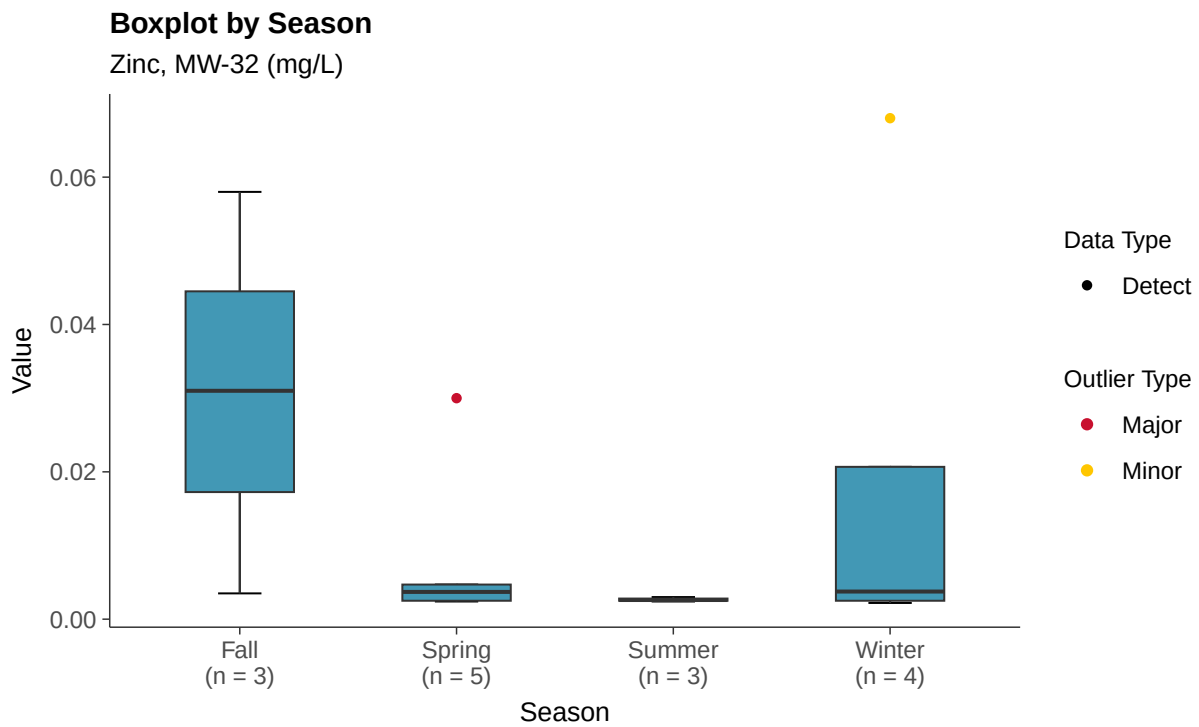
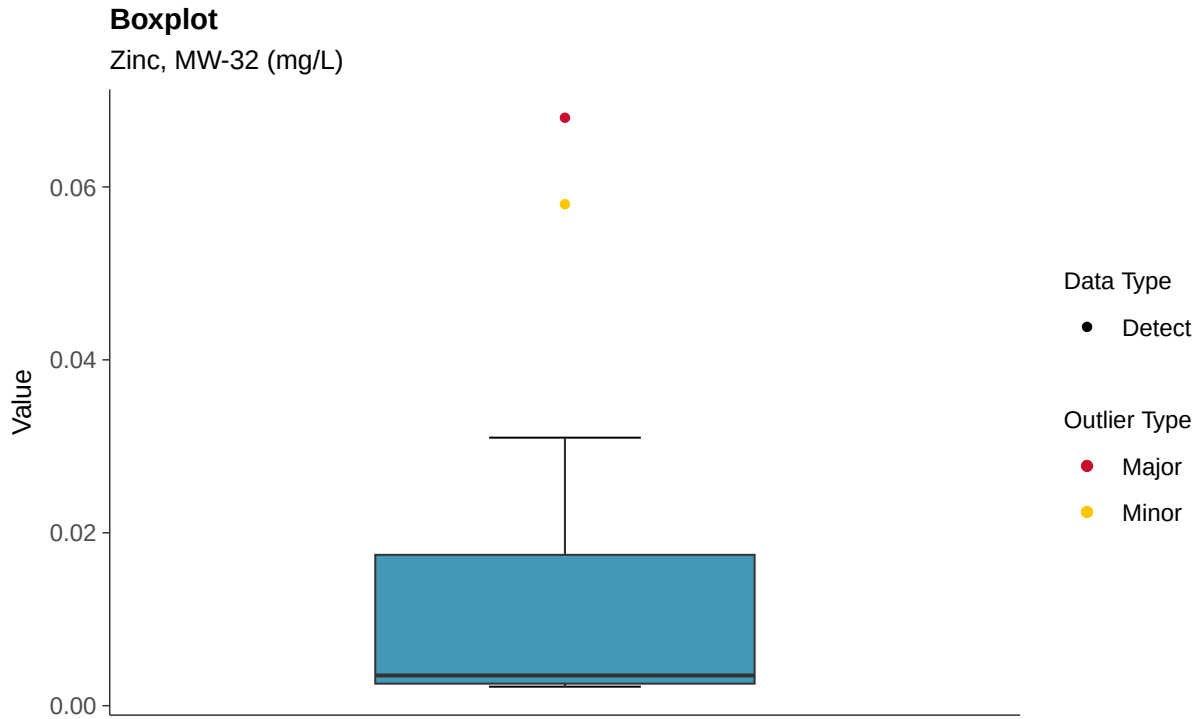
Vanadium, MW-32 (mg/L)



Part 115: Zinc, MW-32

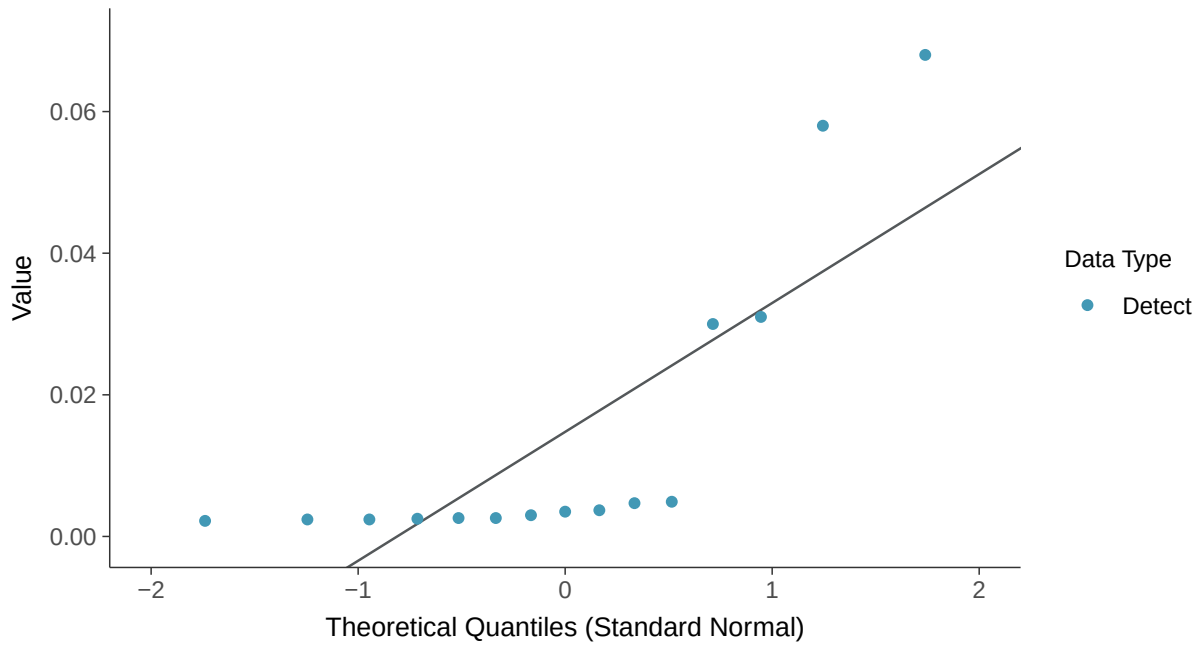
ID: 42_1_5_129





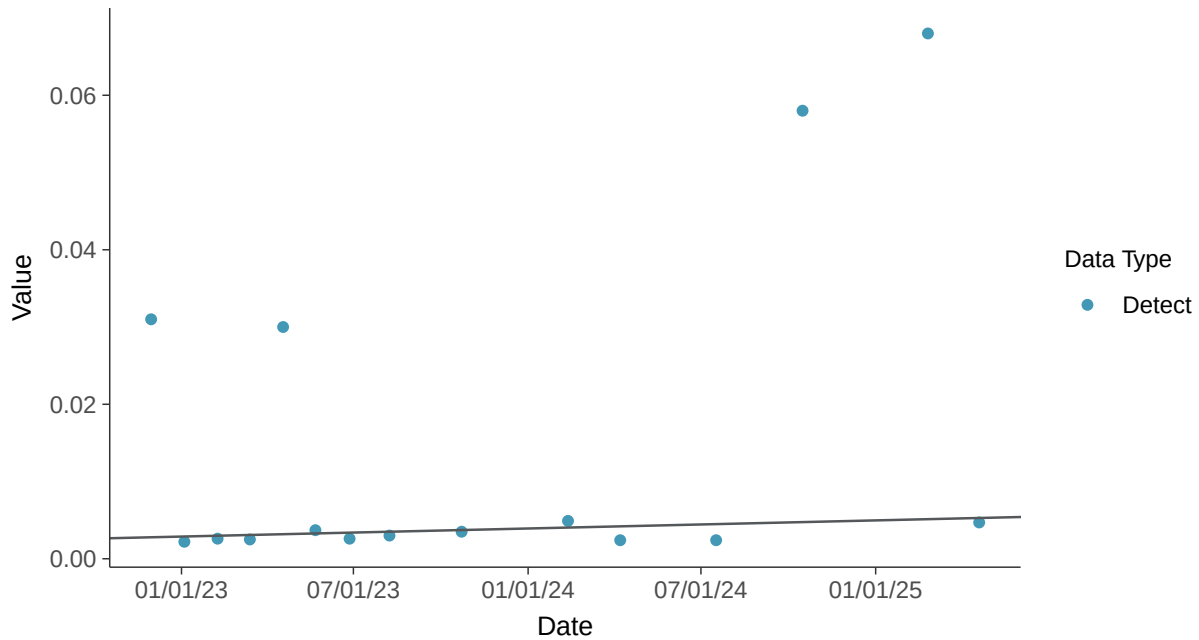
Normal Q-Q plot

Zinc, MW-32 (mg/L)



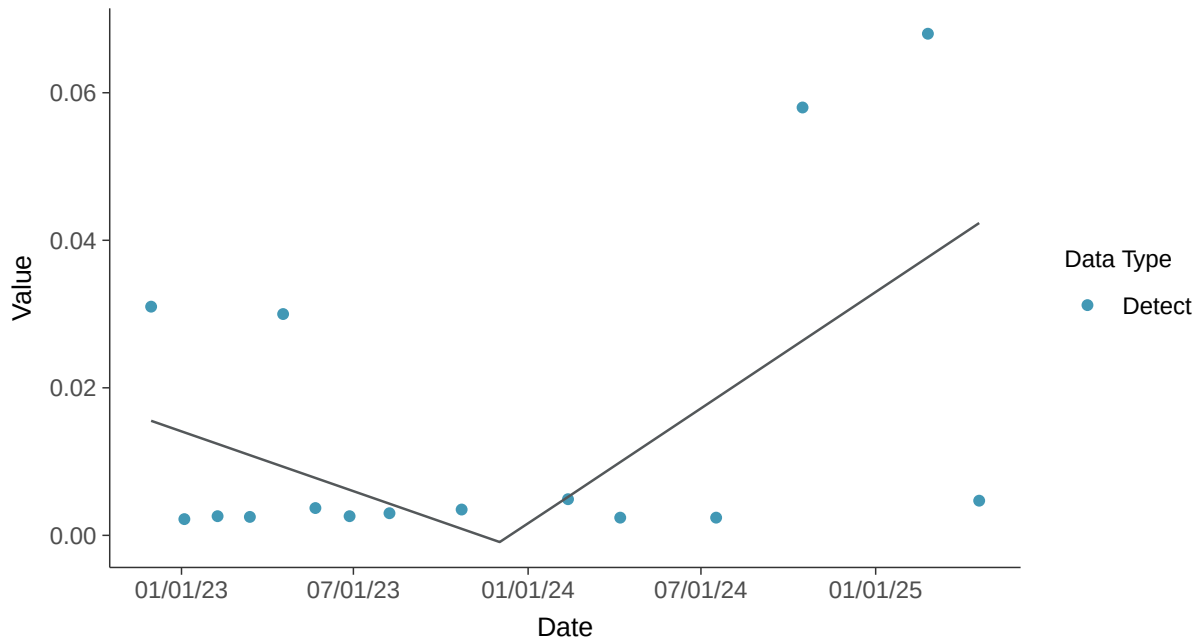
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Zinc, MW-32 (mg/L)



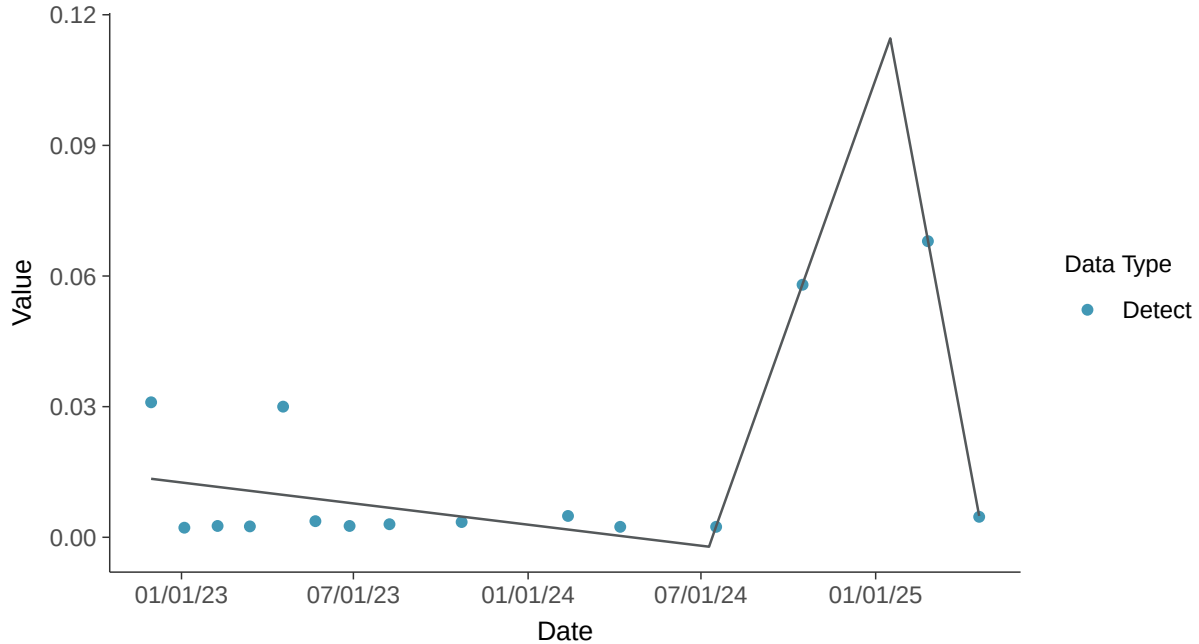
Trend Regression: Piecewise Linear-Linear

Zinc, MW-32 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Zinc, MW-32 (mg/L)



Grand Haven, Downgradient Wells
95% Lower Confidence Limits

Well	Constituent Type	Constituent	Unit	n	% NDs	Date Range	LCL	Method
MW-01R	Appendix III	Boron	mg/L	15	0%	2022-11-29 to 2025-04-20	90	Normal LCL
MW-01R	Appendix III	Calcium	mg/L	15	0%	2022-11-29 to 2025-04-20	200	Normal LCL
MW-01R	Appendix III	Chloride (as Cl)	mg/L	15	0%	2022-11-29 to 2025-04-20	110	Normal LCL
MW-01R	Appendix III	Fluoride	mg/L	15	0%	2022-11-29 to 2025-04-20	10	Normal LCL
MW-01R	Appendix III	pH (field)	su	15	0%	2022-11-29 to 2025-04-20	7.7	Nonparametric LCL around the Median
MW-01R	Appendix III	Sulfate (as SO4)	mg/L	15	0%	2022-11-29 to 2025-04-20	300	Adjusted Gamma LCL
MW-01R	Appendix III	Total Dissolved Solids	mg/L	15	0%	2022-11-29 to 2025-04-20	2300	Normal LCL
MW-01R	Appendix IV	Antimony	mg/L	15	20%	2022-11-29 to 2025-04-20	0.00019	Nonparametric LCL around the Median
MW-01R	Appendix IV	Arsenic	mg/L	15	0%	2022-11-29 to 2025-04-20	0.0013	Nonparametric LCL around the Median
MW-01R	Appendix IV	Barium	mg/L	15	0%	2022-11-29 to 2025-04-20	0.29	Normal LCL
MW-01R	Appendix IV	Beryllium	mg/L	15	13%	2022-11-29 to 2025-04-20	0.00014	Normal MLE LCL
MW-01R	Appendix IV	Cadmium	mg/L	15	80%	2022-11-29 to 2025-04-20	0.000075	Nonparametric LCL around the Median
MW-01R	Appendix IV	Chromium, Total	mg/L	15	0%	2022-11-29 to 2025-04-20	0.0016	Nonparametric LCL around the Median
MW-01R	Appendix IV	Cobalt	mg/L	15	0%	2022-11-29 to 2025-04-20	0.00098	Nonparametric LCL around the Median
MW-01R	Appendix IV	Fluoride (App IV)	mg/L	15	0%	2022-11-29 to 2025-04-20	10	Normal LCL
MW-01R	Appendix IV	Lead	mg/L	15	13%	2022-11-29 to 2025-04-20	0.00076	Lognormal MLE Likelihood Profile LCL
MW-01R	Appendix IV	Lithium	mg/L	15	0%	2022-11-29 to 2025-04-20	2.0	Normal LCL
MW-01R	Appendix IV	Mercury	mg/L	15	100%	2022-11-29 to 2025-04-20	0.00016	Nonparametric LCL around the Median
MW-01R	Appendix IV	Molybdenum	mg/L	15	13%	2022-11-29 to 2025-04-20	0.00073	Lognormal MLE Likelihood Profile LCL
MW-01R	Appendix IV	Radium 226 and 228	pCi/L	15	60%	2022-11-29 to 2025-04-20	0.68	Nonparametric LCL around the Median
MW-01R	Appendix IV	Selenium	mg/L	15	0%	2022-11-29 to 2025-04-20	0.00058	Adjusted Gamma LCL
MW-01R	Appendix IV	Thallium	mg/L	15	100%	2022-11-29 to 2025-04-20	0.000075	Nonparametric LCL around the Median
MW-01R	Part 115	Copper	mg/L	15	40%	2022-11-29 to 2025-04-20	0.00020	Nonparametric LCL around the Median
MW-01R	Part 115	Iron	mg/L	15	0%	2022-11-29 to 2025-04-20	0.33	Normal LCL
MW-01R	Part 115	Nickel	mg/L	15	0%	2022-11-29 to 2025-04-20	0.0016	Nonparametric LCL around the Median
MW-01R	Part 115	Silver	mg/L	15	100%	2022-11-29 to 2025-04-20	0.000050	Nonparametric LCL around the Median
MW-01R	Part 115	Vanadium	mg/L	15	13%	2022-11-29 to 2025-04-20	0.0012	Normal MLE LCL
MW-01R	Part 115	Zinc	mg/L	15	20%	2022-11-29 to 2025-04-20	0.0012	Nonparametric LCL around the Median
MW-02	Appendix III	Boron	mg/L	15	0%	2022-11-28 to 2025-04-19	95	Nonparametric LCL around the Median
MW-02	Appendix III	Calcium	mg/L	15	0%	2022-11-28 to 2025-04-19	190	Normal LCL
MW-02	Appendix III	Chloride (as Cl)	mg/L	15	0%	2022-11-28 to 2025-04-19	140	Nonparametric LCL around the Median
MW-02	Appendix III	Fluoride	mg/L	15	0%	2022-11-28 to 2025-04-19	9.2	Nonparametric LCL around the Median
MW-02	Appendix III	pH (field)	su	15	0%	2022-11-28 to 2025-04-19	7.2	Normal LCL
MW-02	Appendix III	Sulfate (as SO4)	mg/L	15	67%	2022-11-28 to 2025-04-19	0.41	Nonparametric LCL around the Median
MW-02	Appendix III	Total Dissolved Solids	mg/L	15	0%	2022-11-28 to 2025-04-19	1800	Normal LCL
MW-02	Appendix IV	Antimony	mg/L	15	20%	2022-11-28 to 2025-04-19	0.00018	Gamma MLE Normal Approx. LCL
MW-02	Appendix IV	Arsenic	mg/L	15	0%	2022-11-28 to 2025-04-19	0.0065	Normal LCL
MW-02	Appendix IV	Barium	mg/L	15	0%	2022-11-28 to 2025-04-19	0.42	Normal LCL
MW-02	Appendix IV	Beryllium	mg/L	15	7%	2022-11-28 to 2025-04-19	0.00021	Normal MLE LCL
MW-02	Appendix IV	Cadmium	mg/L	15	67%	2022-11-28 to 2025-04-19	0.000075	Nonparametric LCL around the Median
MW-02	Appendix IV	Chromium, Total	mg/L	15	0%	2022-11-28 to 2025-04-19	0.033	Normal LCL
MW-02	Appendix IV	Cobalt	mg/L	15	0%	2022-11-28 to 2025-04-19	0.0049	Normal LCL
MW-02	Appendix IV	Fluoride (App IV)	mg/L	15	0%	2022-11-28 to 2025-04-19	9.2	Nonparametric LCL around the Median
MW-02	Appendix IV	Lead	mg/L	15	7%	2022-11-28 to 2025-04-19	0.0021	Normal MLE LCL
MW-02	Appendix IV	Lithium	mg/L	15	0%	2022-11-28 to 2025-04-19	1.3	Normal LCL
MW-02	Appendix IV	Mercury	mg/L	15	93%	2022-11-28 to 2025-04-19	0.00016	Nonparametric LCL around the Median
MW-02	Appendix IV	Molybdenum	mg/L	15	0%	2022-11-28 to 2025-04-19	0.0062	Lognormal H-LCL
MW-02	Appendix IV	Radium 226 and 228	pCi/L	14	36%	2022-11-28 to 2025-04-19	0.75	Normal MLE LCL
MW-02	Appendix IV	Selenium	mg/L	15	0%	2022-11-28 to 2025-04-19	0.0011	Normal LCL
MW-02	Appendix IV	Thallium	mg/L	15	93%	2022-11-28 to 2025-04-19	0.000075	Nonparametric LCL around the Median
MW-02	Part 115	Copper	mg/L	15	0%	2022-11-28 to 2025-04-19	0.0016	Normal LCL
MW-02	Part 115	Iron	mg/L	15	0%	2022-11-28 to 2025-04-19	22	Normal LCL
MW-02	Part 115	Nickel	mg/L	15	0%	2022-11-28 to 2025-04-19	0.018	Normal LCL
MW-02	Part 115	Silver	mg/L	15	100%	2022-11-28 to 2025-04-19	0.000050	Nonparametric LCL around the Median
MW-02	Part 115	Vanadium	mg/L	15	7%	2022-11-28 to 2025-04-19	0.0030	Normal MLE LCL
MW-02	Part 115	Zinc	mg/L	15	0%	2022-11-28 to 2025-04-19	0.0024	Nonparametric LCL around the Median
MW-03	Appendix III	Boron	mg/L	15	0%	2022-11-28 to 2025-04-21	4.0	Normal LCL
MW-03	Appendix III	Calcium	mg/L	15	0%	2022-11-28 to 2025-04-21	350	Normal LCL
MW-03	Appendix III	Chloride (as Cl)	mg/L	15	0%	2022-11-28 to 2025-04-21	140	Normal LCL
MW-03	Appendix III	Fluoride	mg/L	15	0%	2022-11-28 to 2025-04-21	0.60	Nonparametric LCL around the Median
MW-03	Appendix III	pH (field)	su	15	0%	2022-11-28 to 2025-04-21	7.3	Normal LCL
MW-03	Appendix III	Sulfate (as SO4)	mg/L	15	0%	2022-11-28 to 2025-04-21	270	Normal LCL
MW-03	Appendix III	Total Dissolved Solids	mg/L	15	0%	2022-11-28 to 2025-04-21	1800	Nonparametric LCL around the Median
MW-03	Appendix IV	Antimony	mg/L	15	60%	2022-11-28 to 2025-04-21	0.00010	Nonparametric LCL around the Median
MW-03	Appendix IV	Arsenic	mg/L	15	0%	2022-11-28 to 2025-04-21	0.00084	Normal LCL
MW-03	Appendix IV	Barium	mg/L	15	0%	2022-11-28 to 2025-04-21	0.31	Normal LCL
MW-03	Appendix IV	Beryllium	mg/L	15	67%	2022-11-28 to 2025-04-21	0.000052	Nonparametric LCL around the Median
MW-03	Appendix IV	Cadmium	mg/L	15	93%	2022-11-28 to 2025-04-21	0.000075	Nonparametric LCL around the Median
MW-03	Appendix IV	Chromium, Total	mg/L	15	0%	2022-11-28 to 2025-04-21	0.0041	Normal LCL
MW-03	Appendix IV	Cobalt	mg/L	15	0%	2022-11-28 to 2025-04-21	0.00063	Normal LCL
MW-03	Appendix IV	Fluoride (App IV)	mg/L	15	0%	2022-11-28 to 2025-04-21	0.60	Nonparametric LCL around the Median
MW-03	Appendix IV	Lead	mg/L	15	93%	2022-11-28 to 2025-04-21	0.00022	Nonparametric LCL around the Median
MW-03	Appendix IV	Lithium	mg/L	15	0%	2022-11-28 to 2025-04-21	0.034	Normal LCL

Well	Constituent Type	Constituent	Unit	n	% NDs	Date Range	LCL	Method
MW-03	Appendix IV	Mercury	mg/L	15	87%	2022-11-28 to 2025-04-21	0.00016	Nonparametric LCL around the Median
MW-03	Appendix IV	Molybdenum	mg/L	15	73%	2022-11-28 to 2025-04-21	0.00025	Nonparametric LCL around the Median
MW-03	Appendix IV	Radium 226 and 228	pCi/L	14	7%	2022-11-28 to 2025-02-26	0.86	Normal MLE LCL
MW-03	Appendix IV	Selenium	mg/L	15	20%	2022-11-28 to 2025-04-21	0.00031	Normal MLE LCL
MW-03	Appendix IV	Thallium	mg/L	15	93%	2022-11-28 to 2025-04-21	0.000075	Nonparametric LCL around the Median
MW-03	Part 115	Copper	mg/L	15	47%	2022-11-28 to 2025-04-21	0.00020	Nonparametric LCL around the Median
MW-03	Part 115	Iron	mg/L	15	0%	2022-11-28 to 2025-04-21	0.93	Adjusted Gamma LCL
MW-03	Part 115	Nickel	mg/L	15	7%	2022-11-28 to 2025-04-21	0.0011	Nonparametric LCL around the Median
MW-03	Part 115	Silver	mg/L	15	100%	2022-11-28 to 2025-04-21	0.000050	Nonparametric LCL around the Median
MW-03	Part 115	Vanadium	mg/L	15	60%	2022-11-28 to 2025-04-21	0.00062	Nonparametric LCL around the Median
MW-03	Part 115	Zinc	mg/L	15	60%	2022-11-28 to 2025-04-21	0.0012	Nonparametric LCL around the Median
MW-04	Appendix III	Boron	mg/L	15	0%	2022-11-28 to 2025-04-21	3.9	Normal LCL
MW-04	Appendix III	Calcium	mg/L	15	0%	2022-11-28 to 2025-04-21	340	Normal LCL
MW-04	Appendix III	Chloride (as Cl)	mg/L	15	0%	2022-11-28 to 2025-04-21	130	Normal LCL
MW-04	Appendix III	Fluoride	mg/L	15	0%	2022-11-28 to 2025-04-21	1.2	Lognormal H-LCL
MW-04	Appendix III	pH (field)	su	15	0%	2022-11-28 to 2025-04-21	7.3	Normal LCL
MW-04	Appendix III	Sulfate (as SO4)	mg/L	15	0%	2022-11-28 to 2025-04-21	530	Nonparametric LCL around the Median
MW-04	Appendix III	Total Dissolved Solids	mg/L	15	0%	2022-11-28 to 2025-04-21	1700	Normal LCL
MW-04	Appendix IV	Antimony	mg/L	15	67%	2022-11-28 to 2025-04-21	0.00010	Nonparametric LCL around the Median
MW-04	Appendix IV	Arsenic	mg/L	15	0%	2022-11-28 to 2025-04-21	0.00086	Adjusted Gamma LCL
MW-04	Appendix IV	Barium	mg/L	15	0%	2022-11-28 to 2025-04-21	0.10	Nonparametric LCL around the Median
MW-04	Appendix IV	Beryllium	mg/L	15	87%	2022-11-28 to 2025-04-21	0.000052	Nonparametric LCL around the Median
MW-04	Appendix IV	Cadmium	mg/L	15	100%	2022-11-28 to 2025-04-21	0.000075	Nonparametric LCL around the Median
MW-04	Appendix IV	Chromium, Total	mg/L	15	0%	2022-11-28 to 2025-04-21	0.0031	Normal LCL
MW-04	Appendix IV	Cobalt	mg/L	15	0%	2022-11-28 to 2025-04-21	0.00033	Normal LCL
MW-04	Appendix IV	Fluoride (App IV)	mg/L	15	0%	2022-11-28 to 2025-04-21	1.2	Lognormal H-LCL
MW-04	Appendix IV	Lead	mg/L	15	93%	2022-11-28 to 2025-04-21	0.00010	Nonparametric LCL around the Median
MW-04	Appendix IV	Lithium	mg/L	15	0%	2022-11-28 to 2025-04-21	0.055	Normal LCL
MW-04	Appendix IV	Mercury	mg/L	15	93%	2022-11-28 to 2025-04-21	0.00016	Nonparametric LCL around the Median
MW-04	Appendix IV	Molybdenum	mg/L	15	13%	2022-11-28 to 2025-04-21	0.0010	Lognormal MLE Likelihood Profile LCL
MW-04	Appendix IV	Radium 226 and 228	pCi/L	15	33%	2022-11-28 to 2025-04-21	0.62	Normal MLE LCL
MW-04	Appendix IV	Selenium	mg/L	15	33%	2022-11-28 to 2025-04-21	0.00018	Gamma MLE Normal Approx. LCL
MW-04	Appendix IV	Thallium	mg/L	15	100%	2022-11-28 to 2025-04-21	0.000075	Nonparametric LCL around the Median
MW-04	Part 115	Copper	mg/L	15	80%	2022-11-28 to 2025-04-21	0.00020	Nonparametric LCL around the Median
MW-04	Part 115	Iron	mg/L	15	0%	2022-11-28 to 2025-04-21	4.8	Nonparametric LCL around the Median
MW-04	Part 115	Nickel	mg/L	15	0%	2022-11-28 to 2025-04-21	0.011	Normal LCL
MW-04	Part 115	Silver	mg/L	15	100%	2022-11-28 to 2025-04-21	0.000050	Nonparametric LCL around the Median
MW-04	Part 115	Vanadium	mg/L	15	67%	2022-11-28 to 2025-04-21	0.00062	Nonparametric LCL around the Median
MW-04	Part 115	Zinc	mg/L	15	67%	2022-11-28 to 2025-04-21	0.0012	Nonparametric LCL around the Median
MW-06	Appendix III	Boron	mg/L	15	0%	2022-11-29 to 2025-04-20	8.4	Normal LCL
MW-06	Appendix III	Calcium	mg/L	15	0%	2022-11-29 to 2025-04-20	230	Normal LCL
MW-06	Appendix III	Chloride (as Cl)	mg/L	15	0%	2022-11-29 to 2025-04-20	51	Normal LCL
MW-06	Appendix III	Fluoride	mg/L	15	0%	2022-11-29 to 2025-04-20	1.1	Normal LCL
MW-06	Appendix III	pH (field)	su	15	0%	2022-11-29 to 2025-04-20	7.2	Nonparametric LCL around the Median
MW-06	Appendix III	Sulfate (as SO4)	mg/L	15	13%	2022-11-29 to 2025-04-20	5.8	Gamma MLE Normal Approx. LCL
MW-06	Appendix III	Total Dissolved Solids	mg/L	15	0%	2022-11-29 to 2025-04-20	1200	Nonparametric LCL around the Median
MW-06	Appendix IV	Antimony	mg/L	15	87%	2022-11-29 to 2025-04-20	0.00010	Nonparametric LCL around the Median
MW-06	Appendix IV	Arsenic	mg/L	15	0%	2022-11-29 to 2025-04-20	0.00060	Normal LCL
MW-06	Appendix IV	Barium	mg/L	15	0%	2022-11-29 to 2025-04-20	1.3	Normal LCL
MW-06	Appendix IV	Beryllium	mg/L	15	93%	2022-11-29 to 2025-04-20	0.000052	Nonparametric LCL around the Median
MW-06	Appendix IV	Cadmium	mg/L	15	100%	2022-11-29 to 2025-04-20	0.000075	Nonparametric LCL around the Median
MW-06	Appendix IV	Chromium, Total	mg/L	15	0%	2022-11-29 to 2025-04-20	0.0014	Normal LCL
MW-06	Appendix IV	Cobalt	mg/L	15	0%	2022-11-29 to 2025-04-20	0.00044	Normal LCL
MW-06	Appendix IV	Fluoride (App IV)	mg/L	15	0%	2022-11-29 to 2025-04-20	1.1	Normal LCL
MW-06	Appendix IV	Lead	mg/L	15	67%	2022-11-29 to 2025-04-20	0.00010	Nonparametric LCL around the Median
MW-06	Appendix IV	Lithium	mg/L	15	0%	2022-11-29 to 2025-04-20	0.16	Normal LCL
MW-06	Appendix IV	Mercury	mg/L	15	93%	2022-11-29 to 2025-04-20	0.00016	Nonparametric LCL around the Median
MW-06	Appendix IV	Molybdenum	mg/L	15	60%	2022-11-29 to 2025-04-20	0.00025	Nonparametric LCL around the Median
MW-06	Appendix IV	Radium 226 and 228	pCi/L	15	20%	2022-11-29 to 2025-04-20	0.68	Gamma MLE Normal Approx. LCL
MW-06	Appendix IV	Selenium	mg/L	15	33%	2022-11-29 to 2025-04-20	0.00020	Nonparametric LCL around the Median
MW-06	Appendix IV	Thallium	mg/L	15	100%	2022-11-29 to 2025-04-20	0.000075	Nonparametric LCL around the Median
MW-06	Part 115	Copper	mg/L	15	80%	2022-11-29 to 2025-04-20	0.00020	Nonparametric LCL around the Median
MW-06	Part 115	Iron	mg/L	15	0%	2022-11-29 to 2025-04-20	15	Normal LCL
MW-06	Part 115	Nickel	mg/L	15	40%	2022-11-29 to 2025-04-20	0.00043	Normal MLE LCL
MW-06	Part 115	Silver	mg/L	15	100%	2022-11-29 to 2025-04-20	0.000050	Nonparametric LCL around the Median
MW-06	Part 115	Vanadium	mg/L	15	93%	2022-11-29 to 2025-04-20	0.00062	Nonparametric LCL around the Median
MW-06	Part 115	Zinc	mg/L	15	13%	2022-11-29 to 2025-04-20	0.0012	Nonparametric LCL around the Median
MW-07	Appendix III	Boron	mg/L	15	0%	2022-11-30 to 2025-04-21	11	Normal LCL
MW-07	Appendix III	Calcium	mg/L	15	0%	2022-11-30 to 2025-04-21	140	Normal LCL
MW-07	Appendix III	Chloride (as Cl)	mg/L	15	0%	2022-11-30 to 2025-04-21	14	Nonparametric LCL around the Median
MW-07	Appendix III	Fluoride	mg/L	15	20%	2022-11-30 to 2025-04-21	0.078	Normal MLE LCL
MW-07	Appendix III	pH (field)	su	15	0%	2022-11-30 to 2025-04-21	6.9	Nonparametric LCL around the Median
MW-07	Appendix III	Sulfate (as SO4)	mg/L	15	0%	2022-11-30 to 2025-04-21	22	Normal LCL
MW-07	Appendix III	Total Dissolved Solids	mg/L	15	0%	2022-11-30 to 2025-04-21	610	Normal LCL
MW-07	Appendix IV	Antimony	mg/L	15	93%	2022-11-30 to 2025-04-21	0.000050	Nonparametric LCL around the Median

Well	Constituent Type	Constituent	Unit	n	% NDs	Date Range	LCL	Method
MW-07	Appendix IV	Arsenic	mg/L	15	0%	2022-11-30 to 2025-04-21	0.00020	Normal LCL
MW-07	Appendix IV	Barium	mg/L	15	0%	2022-11-30 to 2025-04-21	0.33	Normal LCL
MW-07	Appendix IV	Beryllium	mg/L	15	80%	2022-11-30 to 2025-04-21	0.000052	Nonparametric LCL around the Median
MW-07	Appendix IV	Cadmium	mg/L	15	100%	2022-11-30 to 2025-04-21	0.000032	Nonparametric LCL around the Median
MW-07	Appendix IV	Chromium, Total	mg/L	15	0%	2022-11-30 to 2025-04-21	0.00033	Adjusted Gamma LCL
MW-07	Appendix IV	Cobalt	mg/L	15	0%	2022-11-30 to 2025-04-21	0.00086	Normal LCL
MW-07	Appendix IV	Fluoride (App IV)	mg/L	15	20%	2022-11-30 to 2025-04-21	0.078	Normal MLE LCL
MW-07	Appendix IV	Lead	mg/L	15	100%	2022-11-30 to 2025-04-21	0.00010	Nonparametric LCL around the Median
MW-07	Appendix IV	Lithium	mg/L	15	0%	2022-11-30 to 2025-04-21	0.0053	Normal LCL
MW-07	Appendix IV	Mercury	mg/L	15	100%	2022-11-30 to 2025-04-21	0.00016	Nonparametric LCL around the Median
MW-07	Appendix IV	Molybdenum	mg/L	15	100%	2022-11-30 to 2025-04-21	0.00025	Nonparametric LCL around the Median
MW-07	Appendix IV	Radium 226 and 228	pCi/L	15	13%	2022-11-30 to 2025-04-21	0.78	Gamma MLE Normal Approx. LCL
MW-07	Appendix IV	Selenium	mg/L	15	60%	2022-11-30 to 2025-04-21	0.00010	Nonparametric LCL around the Median
MW-07	Appendix IV	Thallium	mg/L	15	100%	2022-11-30 to 2025-04-21	0.000075	Nonparametric LCL around the Median
MW-07	Part 115	Copper	mg/L	15	73%	2022-11-30 to 2025-04-21	0.00020	Nonparametric LCL around the Median
MW-07	Part 115	Iron	mg/L	15	0%	2022-11-30 to 2025-04-21	15	Normal LCL
MW-07	Part 115	Nickel	mg/L	15	93%	2022-11-30 to 2025-04-21	0.00065	Nonparametric LCL around the Median
MW-07	Part 115	Silver	mg/L	15	100%	2022-11-30 to 2025-04-21	0.000050	Nonparametric LCL around the Median
MW-07	Part 115	Vanadium	mg/L	15	80%	2022-11-30 to 2025-04-21	0.00062	Nonparametric LCL around the Median
MW-07	Part 115	Zinc	mg/L	15	67%	2022-11-30 to 2025-04-21	0.0012	Nonparametric LCL around the Median
MW-08	Appendix III	Boron	mg/L	15	0%	2022-12-01 to 2025-04-20	5.1	Normal LCL
MW-08	Appendix III	Calcium	mg/L	15	0%	2022-12-01 to 2025-04-20	130	Normal LCL
MW-08	Appendix III	Chloride (as Cl)	mg/L	15	0%	2022-12-01 to 2025-04-20	27	Lognormal H-LCL
MW-08	Appendix III	Fluoride	mg/L	15	0%	2022-12-01 to 2025-04-20	0.79	Normal LCL
MW-08	Appendix III	pH (field)	su	15	0%	2022-12-01 to 2025-04-20	7.2	Nonparametric LCL around the Median
MW-08	Appendix III	Sulfate (as SO4)	mg/L	15	27%	2022-12-01 to 2025-04-20	4.6	Gamma MLE Normal Approx. LCL
MW-08	Appendix III	Total Dissolved Solids	mg/L	15	0%	2022-12-01 to 2025-04-20	520	Normal LCL
MW-08	Appendix IV	Antimony	mg/L	15	47%	2022-12-01 to 2025-04-20	0.000036	Normal MLE LCL
MW-08	Appendix IV	Arsenic	mg/L	15	0%	2022-12-01 to 2025-04-20	0.029	Normal LCL
MW-08	Appendix IV	Barium	mg/L	15	0%	2022-12-01 to 2025-04-20	1.1	Normal LCL
MW-08	Appendix IV	Beryllium	mg/L	15	93%	2022-12-01 to 2025-04-20	0.000052	Nonparametric LCL around the Median
MW-08	Appendix IV	Cadmium	mg/L	15	93%	2022-12-01 to 2025-04-20	0.000032	Nonparametric LCL around the Median
MW-08	Appendix IV	Chromium, Total	mg/L	15	0%	2022-12-01 to 2025-04-20	0.00073	Normal LCL
MW-08	Appendix IV	Cobalt	mg/L	15	0%	2022-12-01 to 2025-04-20	0.00041	Normal LCL
MW-08	Appendix IV	Fluoride (App IV)	mg/L	15	0%	2022-12-01 to 2025-04-20	0.79	Normal LCL
MW-08	Appendix IV	Lead	mg/L	15	60%	2022-12-01 to 2025-04-20	0.00010	Nonparametric LCL around the Median
MW-08	Appendix IV	Lithium	mg/L	15	0%	2022-12-01 to 2025-04-20	0.091	Normal LCL
MW-08	Appendix IV	Mercury	mg/L	15	100%	2022-12-01 to 2025-04-20	0.00016	Nonparametric LCL around the Median
MW-08	Appendix IV	Molybdenum	mg/L	15	0%	2022-12-01 to 2025-04-20	0.0011	Normal LCL
MW-08	Appendix IV	Radium 226 and 228	pCi/L	15	20%	2022-12-01 to 2025-04-20	0.74	Normal MLE LCL
MW-08	Appendix IV	Selenium	mg/L	15	33%	2022-12-01 to 2025-04-20	0.00014	Lognormal MLE Likelihood Profile LCL
MW-08	Appendix IV	Thallium	mg/L	15	93%	2022-12-01 to 2025-04-20	0.000075	Nonparametric LCL around the Median
MW-08	Part 115	Copper	mg/L	15	33%	2022-12-01 to 2025-04-20	0.00016	Normal MLE LCL
MW-08	Part 115	Iron	mg/L	15	0%	2022-12-01 to 2025-04-20	18	Normal LCL
MW-08	Part 115	Nickel	mg/L	15	0%	2022-12-01 to 2025-04-20	0.0011	Nonparametric LCL around the Median
MW-08	Part 115	Silver	mg/L	15	100%	2022-12-01 to 2025-04-20	0.000050	Nonparametric LCL around the Median
MW-08	Part 115	Vanadium	mg/L	15	93%	2022-12-01 to 2025-04-20	0.00062	Nonparametric LCL around the Median
MW-08	Part 115	Zinc	mg/L	15	20%	2022-12-01 to 2025-04-20	0.0013	Nonparametric LCL around the Median
MW-09	Appendix III	Boron	mg/L	15	0%	2022-11-28 to 2025-04-19	5.4	Normal LCL
MW-09	Appendix III	Calcium	mg/L	15	0%	2022-11-28 to 2025-04-19	340	Normal LCL
MW-09	Appendix III	Chloride (as Cl)	mg/L	15	0%	2022-11-28 to 2025-04-19	18	Lognormal H-LCL
MW-09	Appendix III	Fluoride	mg/L	15	0%	2022-11-28 to 2025-04-19	2.4	Normal LCL
MW-09	Appendix III	pH (field)	su	15	0%	2022-11-28 to 2025-04-19	7.2	Normal LCL
MW-09	Appendix III	Sulfate (as SO4)	mg/L	15	0%	2022-11-28 to 2025-04-19	360	Normal LCL
MW-09	Appendix III	Total Dissolved Solids	mg/L	15	0%	2022-11-28 to 2025-04-19	1300	Normal LCL
MW-09	Appendix IV	Antimony	mg/L	15	67%	2022-11-28 to 2025-04-19	0.00010	Nonparametric LCL around the Median
MW-09	Appendix IV	Arsenic	mg/L	15	0%	2022-11-28 to 2025-04-19	0.0015	Nonparametric LCL around the Median
MW-09	Appendix IV	Barium	mg/L	15	0%	2022-11-28 to 2025-04-19	0.25	Lognormal H-LCL
MW-09	Appendix IV	Beryllium	mg/L	15	80%	2022-11-28 to 2025-04-19	0.000052	Nonparametric LCL around the Median
MW-09	Appendix IV	Cadmium	mg/L	15	100%	2022-11-28 to 2025-04-19	0.000032	Nonparametric LCL around the Median
MW-09	Appendix IV	Chromium, Total	mg/L	15	0%	2022-11-28 to 2025-04-19	0.0022	Normal LCL
MW-09	Appendix IV	Cobalt	mg/L	15	0%	2022-11-28 to 2025-04-19	0.00042	Normal LCL
MW-09	Appendix IV	Fluoride (App IV)	mg/L	15	0%	2022-11-28 to 2025-04-19	2.4	Normal LCL
MW-09	Appendix IV	Lead	mg/L	15	100%	2022-11-28 to 2025-04-19	0.00010	Nonparametric LCL around the Median
MW-09	Appendix IV	Lithium	mg/L	15	0%	2022-11-28 to 2025-04-19	0.29	Normal LCL
MW-09	Appendix IV	Mercury	mg/L	15	87%	2022-11-28 to 2025-04-19	0.00016	Nonparametric LCL around the Median
MW-09	Appendix IV	Molybdenum	mg/L	15	0%	2022-11-28 to 2025-04-19	0.019	Normal LCL
MW-09	Appendix IV	Radium 226 and 228	pCi/L	15	93%	2022-11-28 to 2025-04-19	0.69	Nonparametric LCL around the Median
MW-09	Appendix IV	Selenium	mg/L	15	13%	2022-11-28 to 2025-04-19	0.00024	Gamma MLE Normal Approx. LCL
MW-09	Appendix IV	Thallium	mg/L	15	100%	2022-11-28 to 2025-04-19	0.000075	Nonparametric LCL around the Median
MW-09	Part 115	Copper	mg/L	15	67%	2022-11-28 to 2025-04-19	0.00020	Nonparametric LCL around the Median
MW-09	Part 115	Iron	mg/L	15	0%	2022-11-28 to 2025-04-19	18	Normal LCL
MW-09	Part 115	Nickel	mg/L	15	0%	2022-11-28 to 2025-04-19	0.0012	Nonparametric LCL around the Median
MW-09	Part 115	Silver	mg/L	15	100%	2022-11-28 to 2025-04-19	0.000050	Nonparametric LCL around the Median
MW-09	Part 115	Vanadium	mg/L	15	100%	2022-11-28 to 2025-04-19	0.00062	Nonparametric LCL around the Median

Well	Constituent Type	Constituent	Unit	n	% NDs	Date Range	LCL	Method
MW-09	Part 115	Zinc	mg/L	15	53%	2022-11-28 to 2025-04-19	0.0012	Nonparametric LCL around the Median
MW-10	Appendix III	Boron	mg/L	15	0%	2022-11-29 to 2025-04-20	13	Normal LCL
MW-10	Appendix III	Calcium	mg/L	15	0%	2022-11-29 to 2025-04-20	250	Normal LCL
MW-10	Appendix III	Chloride (as Cl)	mg/L	15	0%	2022-11-29 to 2025-04-20	200	Normal LCL
MW-10	Appendix III	Fluoride	mg/L	15	0%	2022-11-29 to 2025-04-20	4.5	Normal LCL
MW-10	Appendix III	pH (field)	su	15	0%	2022-11-29 to 2025-04-20	7.6	Normal LCL
MW-10	Appendix III	Sulfate (as SO4)	mg/L	15	0%	2022-11-29 to 2025-04-20	450	Normal LCL
MW-10	Appendix III	Total Dissolved Solids	mg/L	15	0%	2022-11-29 to 2025-04-20	1700	Nonparametric LCL around the Median
MW-10	Appendix IV	Antimony	mg/L	15	73%	2022-11-29 to 2025-04-20	0.00010	Nonparametric LCL around the Median
MW-10	Appendix IV	Arsenic	mg/L	15	0%	2022-11-29 to 2025-04-20	0.00050	Normal LCL
MW-10	Appendix IV	Barium	mg/L	15	0%	2022-11-29 to 2025-04-20	0.24	Normal LCL
MW-10	Appendix IV	Beryllium	mg/L	15	47%	2022-11-29 to 2025-04-20	0.000042	Gamma MLE Normal Approx. LCL
MW-10	Appendix IV	Cadmium	mg/L	15	100%	2022-11-29 to 2025-04-20	0.000075	Nonparametric LCL around the Median
MW-10	Appendix IV	Chromium, Total	mg/L	15	0%	2022-11-29 to 2025-04-20	0.0029	Normal LCL
MW-10	Appendix IV	Cobalt	mg/L	15	7%	2022-11-29 to 2025-04-20	0.00033	Gamma MLE Normal Approx. LCL
MW-10	Appendix IV	Fluoride (App IV)	mg/L	15	0%	2022-11-29 to 2025-04-20	4.5	Normal LCL
MW-10	Appendix IV	Lead	mg/L	15	87%	2022-11-29 to 2025-04-20	0.00010	Nonparametric LCL around the Median
MW-10	Appendix IV	Lithium	mg/L	15	0%	2022-11-29 to 2025-04-20	0.82	Normal LCL
MW-10	Appendix IV	Mercury	mg/L	15	93%	2022-11-29 to 2025-04-20	0.00016	Nonparametric LCL around the Median
MW-10	Appendix IV	Molybdenum	mg/L	15	0%	2022-11-29 to 2025-04-20	0.0023	Normal LCL
MW-10	Appendix IV	Radium 226 and 228	pCi/L	15	80%	2022-11-29 to 2025-04-20	0.70	Nonparametric LCL around the Median
MW-10	Appendix IV	Selenium	mg/L	15	7%	2022-11-29 to 2025-04-20	0.00030	Gamma MLE Normal Approx. LCL
MW-10	Appendix IV	Thallium	mg/L	15	100%	2022-11-29 to 2025-04-20	0.000075	Nonparametric LCL around the Median
MW-10	Part 115	Copper	mg/L	15	80%	2022-11-29 to 2025-04-20	0.00020	Nonparametric LCL around the Median
MW-10	Part 115	Iron	mg/L	15	0%	2022-11-29 to 2025-04-20	4.4	Normal LCL
MW-10	Part 115	Nickel	mg/L	15	47%	2022-11-29 to 2025-04-20	0.00065	Nonparametric LCL around the Median
MW-10	Part 115	Silver	mg/L	15	100%	2022-11-29 to 2025-04-20	0.000050	Nonparametric LCL around the Median
MW-10	Part 115	Vanadium	mg/L	15	80%	2022-11-29 to 2025-04-20	0.00062	Nonparametric LCL around the Median
MW-10	Part 115	Zinc	mg/L	15	47%	2022-11-29 to 2025-04-20	0.0011	Gamma MLE Normal Approx. LCL
MW-11	Appendix III	Boron	mg/L	15	0%	2022-11-29 to 2025-04-20	4.3	Normal LCL
MW-11	Appendix III	Calcium	mg/L	15	0%	2022-11-29 to 2025-04-20	230	Normal LCL
MW-11	Appendix III	Chloride (as Cl)	mg/L	15	0%	2022-11-29 to 2025-04-20	59	Normal LCL
MW-11	Appendix III	Fluoride	mg/L	15	0%	2022-11-29 to 2025-04-20	0.46	Normal LCL
MW-11	Appendix III	pH (field)	su	15	0%	2022-11-29 to 2025-04-20	7.3	Normal LCL
MW-11	Appendix III	Sulfate (as SO4)	mg/L	15	40%	2022-11-29 to 2025-04-20	2.4	Gamma MLE Normal Approx. LCL
MW-11	Appendix III	Total Dissolved Solids	mg/L	15	0%	2022-11-29 to 2025-04-20	940	Normal LCL
MW-11	Appendix IV	Antimony	mg/L	15	73%	2022-11-29 to 2025-04-20	0.00010	Nonparametric LCL around the Median
MW-11	Appendix IV	Arsenic	mg/L	15	0%	2022-11-29 to 2025-04-20	0.0013	Normal LCL
MW-11	Appendix IV	Barium	mg/L	15	0%	2022-11-29 to 2025-04-20	0.55	Normal LCL
MW-11	Appendix IV	Beryllium	mg/L	15	80%	2022-11-29 to 2025-04-20	0.000052	Nonparametric LCL around the Median
MW-11	Appendix IV	Cadmium	mg/L	15	87%	2022-11-29 to 2025-04-20	0.000075	Nonparametric LCL around the Median
MW-11	Appendix IV	Chromium, Total	mg/L	15	0%	2022-11-29 to 2025-04-20	0.00063	Nonparametric LCL around the Median
MW-11	Appendix IV	Cobalt	mg/L	15	0%	2022-11-29 to 2025-04-20	0.00044	Lognormal H-LCL
MW-11	Appendix IV	Fluoride (App IV)	mg/L	15	0%	2022-11-29 to 2025-04-20	0.46	Normal LCL
MW-11	Appendix IV	Lead	mg/L	15	20%	2022-11-29 to 2025-04-20	0.00031	Nonparametric LCL around the Median
MW-11	Appendix IV	Lithium	mg/L	15	0%	2022-11-29 to 2025-04-20	0.041	Normal LCL
MW-11	Appendix IV	Mercury	mg/L	15	87%	2022-11-29 to 2025-04-20	0.00016	Nonparametric LCL around the Median
MW-11	Appendix IV	Molybdenum	mg/L	15	13%	2022-11-29 to 2025-04-20	0.00076	Normal MLE LCL
MW-11	Appendix IV	Radium 226 and 228	pCi/L	14	29%	2022-11-29 to 2025-02-25	0.63	Normal MLE LCL
MW-11	Appendix IV	Selenium	mg/L	15	20%	2022-11-29 to 2025-04-20	0.00016	Nonparametric LCL around the Median
MW-11	Appendix IV	Thallium	mg/L	15	93%	2022-11-29 to 2025-04-20	0.000075	Nonparametric LCL around the Median
MW-11	Part 115	Copper	mg/L	15	27%	2022-11-29 to 2025-04-20	0.00020	Nonparametric LCL around the Median
MW-11	Part 115	Iron	mg/L	15	0%	2022-11-29 to 2025-04-20	6.0	Normal LCL
MW-11	Part 115	Nickel	mg/L	15	0%	2022-11-29 to 2025-04-20	0.0011	Nonparametric LCL around the Median
MW-11	Part 115	Silver	mg/L	15	87%	2022-11-29 to 2025-04-20	0.000050	Nonparametric LCL around the Median
MW-11	Part 115	Vanadium	mg/L	15	87%	2022-11-29 to 2025-04-20	0.00062	Nonparametric LCL around the Median
MW-11	Part 115	Zinc	mg/L	15	27%	2022-11-29 to 2025-04-20	0.0054	Gamma MLE Normal Approx. LCL
MW-12	Appendix III	Boron	mg/L	15	0%	2022-11-28 to 2025-04-21	0.26	Normal LCL
MW-12	Appendix III	Calcium	mg/L	15	0%	2022-11-28 to 2025-04-21	57	Normal LCL
MW-12	Appendix III	Chloride (as Cl)	mg/L	15	0%	2022-11-28 to 2025-04-21	17	Normal LCL
MW-12	Appendix III	Fluoride	mg/L	15	0%	2022-11-28 to 2025-04-21	0.28	Adjusted Gamma LCL
MW-12	Appendix III	pH (field)	su	15	0%	2022-11-28 to 2025-04-21	7.5	Normal LCL
MW-12	Appendix III	Sulfate (as SO4)	mg/L	15	0%	2022-11-28 to 2025-04-21	90	Normal LCL
MW-12	Appendix III	Total Dissolved Solids	mg/L	15	0%	2022-11-28 to 2025-04-21	230	Normal LCL
MW-12	Appendix IV	Antimony	mg/L	15	0%	2022-11-28 to 2025-04-21	0.00057	Normal LCL
MW-12	Appendix IV	Arsenic	mg/L	15	0%	2022-11-28 to 2025-04-21	0.0020	Adjusted Gamma LCL
MW-12	Appendix IV	Barium	mg/L	15	0%	2022-11-28 to 2025-04-21	0.030	Normal LCL
MW-12	Appendix IV	Beryllium	mg/L	15	100%	2022-11-28 to 2025-04-21	0.000052	Nonparametric LCL around the Median
MW-12	Appendix IV	Cadmium	mg/L	15	0%	2022-11-28 to 2025-04-21	0.0011	Normal LCL
MW-12	Appendix IV	Chromium, Total	mg/L	15	33%	2022-11-28 to 2025-04-21	0.00017	Normal MLE LCL
MW-12	Appendix IV	Cobalt	mg/L	15	33%	2022-11-28 to 2025-04-21	0.000028	Normal MLE LCL
MW-12	Appendix IV	Fluoride (App IV)	mg/L	15	0%	2022-11-28 to 2025-04-21	0.28	Adjusted Gamma LCL
MW-12	Appendix IV	Lead	mg/L	15	40%	2022-11-28 to 2025-04-21	0.000097	Normal MLE LCL
MW-12	Appendix IV	Lithium	mg/L	15	0%	2022-11-28 to 2025-04-21	0.0029	Normal LCL
MW-12	Appendix IV	Mercury	mg/L	15	80%	2022-11-28 to 2025-04-21	0.00016	Nonparametric LCL around the Median

Well	Constituent Type	Constituent	Unit	n	% NDs	Date Range	LCL	Method
MW-12	Appendix IV	Molybdenum	mg/L	15	0%	2022-11-28 to 2025-04-21	0.0065	Adjusted Gamma LCL
MW-12	Appendix IV	Radium 226 and 228	pCi/L	15	67%	2022-11-28 to 2025-04-21	0.52	Nonparametric LCL around the Median
MW-12	Appendix IV	Selenium	mg/L	15	0%	2022-11-28 to 2025-04-21	0.00082	Adjusted Gamma LCL
MW-12	Appendix IV	Thallium	mg/L	15	100%	2022-11-28 to 2025-04-21	0.000075	Nonparametric LCL around the Median
MW-12	Part 115	Copper	mg/L	15	0%	2022-11-28 to 2025-04-21	0.0011	Normal LCL
MW-12	Part 115	Iron	mg/L	15	40%	2022-11-28 to 2025-04-21	0.0064	Normal MLE LCL
MW-12	Part 115	Nickel	mg/L	15	0%	2022-11-28 to 2025-04-21	0.0022	Normal LCL
MW-12	Part 115	Silver	mg/L	15	100%	2022-11-28 to 2025-04-21	0.000050	Nonparametric LCL around the Median
MW-12	Part 115	Vanadium	mg/L	15	40%	2022-11-28 to 2025-04-21	0.00040	Normal MLE LCL
MW-12	Part 115	Zinc	mg/L	15	0%	2022-11-28 to 2025-04-21	0.0066	Normal LCL
MW-18	Appendix III	Boron	mg/L	15	0%	2022-11-30 to 2025-04-21	2.5	Normal LCL
MW-18	Appendix III	Calcium	mg/L	15	0%	2022-11-30 to 2025-04-21	310	Normal LCL
MW-18	Appendix III	Chloride (as Cl)	mg/L	15	0%	2022-11-30 to 2025-04-21	21	Normal LCL
MW-18	Appendix III	Fluoride	mg/L	15	0%	2022-11-30 to 2025-04-21	3.5	Normal LCL
MW-18	Appendix III	pH (field)	su	15	0%	2022-11-30 to 2025-04-21	7.1	Normal LCL
MW-18	Appendix III	Sulfate (as SO4)	mg/L	15	0%	2022-11-30 to 2025-04-21	730	Normal LCL
MW-18	Appendix III	Total Dissolved Solids	mg/L	15	0%	2022-11-30 to 2025-04-21	1300	Normal LCL
MW-18	Appendix IV	Antimony	mg/L	15	20%	2022-11-30 to 2025-04-21	0.00013	Gamma MLE Normal Approx. LCL
MW-18	Appendix IV	Arsenic	mg/L	15	0%	2022-11-30 to 2025-04-21	0.024	Normal LCL
MW-18	Appendix IV	Barium	mg/L	15	0%	2022-11-30 to 2025-04-21	0.017	Normal LCL
MW-18	Appendix IV	Beryllium	mg/L	15	87%	2022-11-30 to 2025-04-21	0.000052	Nonparametric LCL around the Median
MW-18	Appendix IV	Cadmium	mg/L	15	40%	2022-11-30 to 2025-04-21	0.000043	Normal MLE LCL
MW-18	Appendix IV	Chromium, Total	mg/L	15	87%	2022-11-30 to 2025-04-21	0.00018	Nonparametric LCL around the Median
MW-18	Appendix IV	Cobalt	mg/L	15	0%	2022-11-30 to 2025-04-21	0.0023	Lognormal H-LCL
MW-18	Appendix IV	Fluoride (App IV)	mg/L	15	0%	2022-11-30 to 2025-04-21	3.5	Normal LCL
MW-18	Appendix IV	Lead	mg/L	15	67%	2022-11-30 to 2025-04-21	0.00014	Nonparametric LCL around the Median
MW-18	Appendix IV	Lithium	mg/L	15	0%	2022-11-30 to 2025-04-21	0.031	Normal LCL
MW-18	Appendix IV	Mercury	mg/L	15	100%	2022-11-30 to 2025-04-21	0.00016	Nonparametric LCL around the Median
MW-18	Appendix IV	Molybdenum	mg/L	15	0%	2022-11-30 to 2025-04-21	0.013	Normal LCL
MW-18	Appendix IV	Radium 226 and 228	pCi/L	15	60%	2022-11-30 to 2025-04-21	0.56	Nonparametric LCL around the Median
MW-18	Appendix IV	Selenium	mg/L	15	0%	2022-11-30 to 2025-04-21	0.00037	Normal LCL
MW-18	Appendix IV	Thallium	mg/L	15	100%	2022-11-30 to 2025-04-21	0.000075	Nonparametric LCL around the Median
MW-18	Part 115	Copper	mg/L	15	0%	2022-11-30 to 2025-04-21	0.00043	Nonparametric LCL around the Median
MW-18	Part 115	Iron	mg/L	15	0%	2022-11-30 to 2025-04-21	6.0	Normal LCL
MW-18	Part 115	Nickel	mg/L	15	0%	2022-11-30 to 2025-04-21	0.0056	Lognormal H-LCL
MW-18	Part 115	Silver	mg/L	15	100%	2022-11-30 to 2025-04-21	0.000050	Nonparametric LCL around the Median
MW-18	Part 115	Vanadium	mg/L	15	100%	2022-11-30 to 2025-04-21	0.00062	Nonparametric LCL around the Median
MW-18	Part 115	Zinc	mg/L	15	0%	2022-11-30 to 2025-04-21	0.040	Normal LCL
MW-19	Appendix III	Boron	mg/L	15	0%	2022-11-30 to 2025-04-21	1.8	Normal LCL
MW-19	Appendix III	Calcium	mg/L	15	0%	2022-11-30 to 2025-04-21	440	Normal LCL
MW-19	Appendix III	Chloride (as Cl)	mg/L	15	0%	2022-11-30 to 2025-04-21	36	Normal LCL
MW-19	Appendix III	Fluoride	mg/L	15	0%	2022-11-30 to 2025-04-21	1.7	Normal LCL
MW-19	Appendix III	pH (field)	su	15	0%	2022-11-30 to 2025-04-21	6.8	Normal LCL
MW-19	Appendix III	Sulfate (as SO4)	mg/L	15	0%	2022-11-30 to 2025-04-21	910	Normal LCL
MW-19	Appendix III	Total Dissolved Solids	mg/L	15	0%	2022-11-30 to 2025-04-21	1800	Normal LCL
MW-19	Appendix IV	Antimony	mg/L	15	80%	2022-11-30 to 2025-04-21	0.00010	Nonparametric LCL around the Median
MW-19	Appendix IV	Arsenic	mg/L	15	0%	2022-11-30 to 2025-04-21	0.0044	Normal LCL
MW-19	Appendix IV	Barium	mg/L	15	0%	2022-11-30 to 2025-04-21	0.036	Normal LCL
MW-19	Appendix IV	Beryllium	mg/L	15	20%	2022-11-30 to 2025-04-21	0.000062	Normal MLE LCL
MW-19	Appendix IV	Cadmium	mg/L	15	100%	2022-11-30 to 2025-04-21	0.000075	Nonparametric LCL around the Median
MW-19	Appendix IV	Chromium, Total	mg/L	15	33%	2022-11-30 to 2025-04-21	0.00021	Gamma MLE Normal Approx. LCL
MW-19	Appendix IV	Cobalt	mg/L	15	7%	2022-11-30 to 2025-04-21	0.00039	Normal MLE LCL
MW-19	Appendix IV	Fluoride (App IV)	mg/L	15	0%	2022-11-30 to 2025-04-21	1.7	Normal LCL
MW-19	Appendix IV	Lead	mg/L	15	100%	2022-11-30 to 2025-04-21	0.00010	Nonparametric LCL around the Median
MW-19	Appendix IV	Lithium	mg/L	15	0%	2022-11-30 to 2025-04-21	0.085	Normal LCL
MW-19	Appendix IV	Mercury	mg/L	15	100%	2022-11-30 to 2025-04-21	0.00016	Nonparametric LCL around the Median
MW-19	Appendix IV	Molybdenum	mg/L	15	0%	2022-11-30 to 2025-04-21	0.0092	Normal LCL
MW-19	Appendix IV	Radium 226 and 228	pCi/L	15	47%	2022-11-30 to 2025-04-21	0.42	Normal MLE LCL
MW-19	Appendix IV	Selenium	mg/L	15	67%	2022-11-30 to 2025-04-21	0.00010	Nonparametric LCL around the Median
MW-19	Appendix IV	Thallium	mg/L	15	100%	2022-11-30 to 2025-04-21	0.000075	Nonparametric LCL around the Median
MW-19	Part 115	Copper	mg/L	15	87%	2022-11-30 to 2025-04-21	0.00020	Nonparametric LCL around the Median
MW-19	Part 115	Iron	mg/L	15	0%	2022-11-30 to 2025-04-21	15	Normal LCL
MW-19	Part 115	Nickel	mg/L	15	7%	2022-11-30 to 2025-04-21	0.0015	Nonparametric LCL around the Median
MW-19	Part 115	Silver	mg/L	15	100%	2022-11-30 to 2025-04-21	0.000050	Nonparametric LCL around the Median
MW-19	Part 115	Vanadium	mg/L	15	93%	2022-11-30 to 2025-04-21	0.00062	Nonparametric LCL around the Median
MW-19	Part 115	Zinc	mg/L	15	67%	2022-11-30 to 2025-04-21	0.0012	Nonparametric LCL around the Median
MW-20	Appendix III	Boron	mg/L	15	0%	2022-11-30 to 2025-04-21	0.87	Normal LCL
MW-20	Appendix III	Calcium	mg/L	15	0%	2022-11-30 to 2025-04-21	110	Nonparametric LCL around the Median
MW-20	Appendix III	Chloride (as Cl)	mg/L	15	0%	2022-11-30 to 2025-04-21	53	Normal LCL
MW-20	Appendix III	Fluoride	mg/L	15	0%	2022-11-30 to 2025-04-21	0.22	Nonparametric LCL around the Median
MW-20	Appendix III	pH (field)	su	15	0%	2022-11-30 to 2025-04-21	7.3	Normal LCL
MW-20	Appendix III	Sulfate (as SO4)	mg/L	15	0%	2022-11-30 to 2025-04-21	43	Normal LCL
MW-20	Appendix III	Total Dissolved Solids	mg/L	15	0%	2022-11-30 to 2025-04-21	610	Normal LCL
MW-20	Appendix IV	Antimony	mg/L	15	33%	2022-11-30 to 2025-04-21	0.000073	Normal MLE LCL
MW-20	Appendix IV	Arsenic	mg/L	15	0%	2022-11-30 to 2025-04-21	0.0013	Normal LCL

Well	Constituent Type	Constituent	Unit	n	% NDs	Date Range	LCL	Method
MW-20	Appendix IV	Barium	mg/L	15	0%	2022-11-30 to 2025-04-21	0.45	Lognormal H-LCL
MW-20	Appendix IV	Beryllium	mg/L	15	93%	2022-11-30 to 2025-04-21	0.000052	Nonparametric LCL around the Median
MW-20	Appendix IV	Cadmium	mg/L	15	100%	2022-11-30 to 2025-04-21	0.000032	Nonparametric LCL around the Median
MW-20	Appendix IV	Chromium, Total	mg/L	15	47%	2022-11-30 to 2025-04-21	0.00017	Normal MLE LCL
MW-20	Appendix IV	Cobalt	mg/L	15	0%	2022-11-30 to 2025-04-21	0.0010	Normal LCL
MW-20	Appendix IV	Fluoride (App IV)	mg/L	15	0%	2022-11-30 to 2025-04-21	0.22	Nonparametric LCL around the Median
MW-20	Appendix IV	Lead	mg/L	15	0%	2022-11-30 to 2025-04-21	0.0017	Normal LCL
MW-20	Appendix IV	Lithium	mg/L	15	0%	2022-11-30 to 2025-04-21	0.051	Normal LCL
MW-20	Appendix IV	Mercury	mg/L	15	93%	2022-11-30 to 2025-04-21	0.00016	Nonparametric LCL around the Median
MW-20	Appendix IV	Molybdenum	mg/L	15	0%	2022-11-30 to 2025-04-21	0.0041	Normal LCL
MW-20	Appendix IV	Radium 226 and 228	pCi/L	14	50%	2022-11-30 to 2025-04-21	0.54	Nonparametric LCL around the Median
MW-20	Appendix IV	Selenium	mg/L	15	60%	2022-11-30 to 2025-04-21	0.00010	Nonparametric LCL around the Median
MW-20	Appendix IV	Thallium	mg/L	15	93%	2022-11-30 to 2025-04-21	0.000075	Nonparametric LCL around the Median
MW-20	Part 115	Copper	mg/L	15	13%	2022-11-30 to 2025-04-21	0.00024	Normal MLE LCL
MW-20	Part 115	Iron	mg/L	15	0%	2022-11-30 to 2025-04-21	17	Normal LCL
MW-20	Part 115	Nickel	mg/L	15	0%	2022-11-30 to 2025-04-21	0.0072	Normal LCL
MW-20	Part 115	Silver	mg/L	15	100%	2022-11-30 to 2025-04-21	0.000050	Nonparametric LCL around the Median
MW-20	Part 115	Vanadium	mg/L	15	100%	2022-11-30 to 2025-04-21	0.00062	Nonparametric LCL around the Median
MW-20	Part 115	Zinc	mg/L	15	0%	2022-11-30 to 2025-04-21	0.025	Lognormal H-LCL
MW-30	Appendix III	Boron	mg/L	15	0%	2022-11-30 to 2025-04-20	1.7	Nonparametric LCL around the Median
MW-30	Appendix III	Calcium	mg/L	15	0%	2022-11-30 to 2025-04-20	430	Nonparametric LCL around the Median
MW-30	Appendix III	Chloride (as Cl)	mg/L	15	0%	2022-11-30 to 2025-04-20	98	Nonparametric LCL around the Median
MW-30	Appendix III	Fluoride	mg/L	15	0%	2022-11-30 to 2025-04-20	1.0	Nonparametric LCL around the Median
MW-30	Appendix III	pH (field)	su	15	0%	2022-11-30 to 2025-04-20	7.0	Nonparametric LCL around the Median
MW-30	Appendix III	Sulfate (as SO4)	mg/L	15	0%	2022-11-30 to 2025-04-20	790	Normal LCL
MW-30	Appendix III	Total Dissolved Solids	mg/L	15	0%	2022-11-30 to 2025-04-20	2100	Nonparametric LCL around the Median
MW-30	Appendix IV	Antimony	mg/L	15	87%	2022-11-30 to 2025-04-20	0.00010	Nonparametric LCL around the Median
MW-30	Appendix IV	Arsenic	mg/L	15	13%	2022-11-30 to 2025-04-20	0.00042	Gamma MLE Normal Approx. LCL
MW-30	Appendix IV	Barium	mg/L	15	0%	2022-11-30 to 2025-04-20	0.058	Normal LCL
MW-30	Appendix IV	Beryllium	mg/L	15	87%	2022-11-30 to 2025-04-20	0.000052	Nonparametric LCL around the Median
MW-30	Appendix IV	Cadmium	mg/L	15	100%	2022-11-30 to 2025-04-20	0.000075	Nonparametric LCL around the Median
MW-30	Appendix IV	Chromium, Total	mg/L	15	0%	2022-11-30 to 2025-04-20	0.0073	Normal LCL
MW-30	Appendix IV	Cobalt	mg/L	15	0%	2022-11-30 to 2025-04-20	0.00077	Nonparametric LCL around the Median
MW-30	Appendix IV	Fluoride (App IV)	mg/L	15	0%	2022-11-30 to 2025-04-20	1.0	Nonparametric LCL around the Median
MW-30	Appendix IV	Lead	mg/L	15	93%	2022-11-30 to 2025-04-20	0.00022	Nonparametric LCL around the Median
MW-30	Appendix IV	Lithium	mg/L	15	0%	2022-11-30 to 2025-04-20	0.12	Lognormal H-LCL
MW-30	Appendix IV	Mercury	mg/L	15	93%	2022-11-30 to 2025-04-20	0.00016	Nonparametric LCL around the Median
MW-30	Appendix IV	Molybdenum	mg/L	15	20%	2022-11-30 to 2025-04-20	0.00062	Nonparametric LCL around the Median
MW-30	Appendix IV	Radium 226 and 228	pCi/L	15	53%	2022-11-30 to 2025-04-20	0.54	Nonparametric LCL around the Median
MW-30	Appendix IV	Selenium	mg/L	15	47%	2022-11-30 to 2025-04-20	0.000086	Normal MLE LCL
MW-30	Appendix IV	Thallium	mg/L	15	100%	2022-11-30 to 2025-04-20	0.000075	Nonparametric LCL around the Median
MW-30	Part 115	Copper	mg/L	15	67%	2022-11-30 to 2025-04-20	0.00020	Nonparametric LCL around the Median
MW-30	Part 115	Iron	mg/L	15	0%	2022-11-30 to 2025-04-20	2.9	Adjusted Gamma LCL
MW-30	Part 115	Nickel	mg/L	15	20%	2022-11-30 to 2025-04-20	0.00080	Nonparametric LCL around the Median
MW-30	Part 115	Silver	mg/L	15	100%	2022-11-30 to 2025-04-20	0.000050	Nonparametric LCL around the Median
MW-30	Part 115	Vanadium	mg/L	15	100%	2022-11-30 to 2025-04-20	0.00062	Nonparametric LCL around the Median
MW-30	Part 115	Zinc	mg/L	15	67%	2022-11-30 to 2025-04-20	0.0012	Nonparametric LCL around the Median
MW-31	Appendix III	Boron	mg/L	15	0%	2022-12-01 to 2025-04-20	4.3	Normal LCL
MW-31	Appendix III	Calcium	mg/L	15	0%	2022-12-01 to 2025-04-20	160	Normal LCL
MW-31	Appendix III	Chloride (as Cl)	mg/L	15	0%	2022-12-01 to 2025-04-20	99	Normal LCL
MW-31	Appendix III	Fluoride	mg/L	15	0%	2022-12-01 to 2025-04-20	4.6	Normal LCL
MW-31	Appendix III	pH (field)	su	15	0%	2022-12-01 to 2025-04-20	7.8	Normal LCL
MW-31	Appendix III	Sulfate (as SO4)	mg/L	15	0%	2022-12-01 to 2025-04-20	130	Normal LCL
MW-31	Appendix III	Total Dissolved Solids	mg/L	15	0%	2022-12-01 to 2025-04-20	780	Normal LCL
MW-31	Appendix IV	Antimony	mg/L	15	47%	2022-12-01 to 2025-04-20	0.000072	Gamma MLE Normal Approx. LCL
MW-31	Appendix IV	Arsenic	mg/L	15	0%	2022-12-01 to 2025-04-20	0.0011	Normal LCL
MW-31	Appendix IV	Barium	mg/L	15	0%	2022-12-01 to 2025-04-20	0.15	Normal LCL
MW-31	Appendix IV	Beryllium	mg/L	15	87%	2022-12-01 to 2025-04-20	0.000052	Nonparametric LCL around the Median
MW-31	Appendix IV	Cadmium	mg/L	15	93%	2022-12-01 to 2025-04-20	0.000032	Nonparametric LCL around the Median
MW-31	Appendix IV	Chromium, Total	mg/L	15	0%	2022-12-01 to 2025-04-20	0.0021	Normal LCL
MW-31	Appendix IV	Cobalt	mg/L	15	20%	2022-12-01 to 2025-04-20	0.00012	Normal MLE LCL
MW-31	Appendix IV	Fluoride (App IV)	mg/L	15	0%	2022-12-01 to 2025-04-20	4.6	Normal LCL
MW-31	Appendix IV	Lead	mg/L	15	87%	2022-12-01 to 2025-04-20	0.00010	Nonparametric LCL around the Median
MW-31	Appendix IV	Lithium	mg/L	15	0%	2022-12-01 to 2025-04-20	0.045	Normal LCL
MW-31	Appendix IV	Mercury	mg/L	15	93%	2022-12-01 to 2025-04-20	0.00016	Nonparametric LCL around the Median
MW-31	Appendix IV	Molybdenum	mg/L	15	0%	2022-12-01 to 2025-04-20	0.00099	Normal LCL
MW-31	Appendix IV	Radium 226 and 228	pCi/L	15	40%	2022-12-01 to 2025-04-20	0.53	Gamma MLE Normal Approx. LCL
MW-31	Appendix IV	Selenium	mg/L	15	40%	2022-12-01 to 2025-04-20	0.00012	Nonparametric LCL around the Median
MW-31	Appendix IV	Thallium	mg/L	15	93%	2022-12-01 to 2025-04-20	0.000075	Nonparametric LCL around the Median
MW-31	Part 115	Copper	mg/L	15	67%	2022-12-01 to 2025-04-20	0.00020	Nonparametric LCL around the Median
MW-31	Part 115	Iron	mg/L	15	0%	2022-12-01 to 2025-04-20	0.15	Nonparametric LCL around the Median
MW-31	Part 115	Nickel	mg/L	15	67%	2022-12-01 to 2025-04-20	0.00065	Nonparametric LCL around the Median
MW-31	Part 115	Silver	mg/L	15	100%	2022-12-01 to 2025-04-20	0.000050	Nonparametric LCL around the Median
MW-31	Part 115	Vanadium	mg/L	15	80%	2022-12-01 to 2025-04-20	0.00062	Nonparametric LCL around the Median
MW-31	Part 115	Zinc	mg/L	15	60%	2022-12-01 to 2025-04-20	0.0012	Nonparametric LCL around the Median

Well	Constituent Type	Constituent	Unit	n	% NDs	Date Range	LCL	Method
MW-32	Appendix III	Boron	mg/L	15	0%	2022-11-30 to 2025-04-20	3.0	Nonparametric LCL around the Median
MW-32	Appendix III	Calcium	mg/L	15	0%	2022-11-30 to 2025-04-20	160	Normal LCL
MW-32	Appendix III	Chloride (as Cl)	mg/L	15	0%	2022-11-30 to 2025-04-20	43	Normal LCL
MW-32	Appendix III	Fluoride	mg/L	15	0%	2022-11-30 to 2025-04-20	1.4	Normal LCL
MW-32	Appendix III	pH (field)	su	15	0%	2022-11-30 to 2025-04-20	7.6	Normal LCL
MW-32	Appendix III	Sulfate (as SO4)	mg/L	15	0%	2022-11-30 to 2025-04-20	54	Adjusted Gamma LCL
MW-32	Appendix III	Total Dissolved Solids	mg/L	15	0%	2022-11-30 to 2025-04-20	650	Normal LCL
MW-32	Appendix IV	Antimony	mg/L	15	73%	2022-11-30 to 2025-04-20	0.00072	Nonparametric LCL around the Median
MW-32	Appendix IV	Arsenic	mg/L	15	0%	2022-11-30 to 2025-04-20	0.00045	Nonparametric LCL around the Median
MW-32	Appendix IV	Barium	mg/L	15	0%	2022-11-30 to 2025-04-20	0.45	Normal LCL
MW-32	Appendix IV	Beryllium	mg/L	15	93%	2022-11-30 to 2025-04-20	0.000052	Nonparametric LCL around the Median
MW-32	Appendix IV	Cadmium	mg/L	15	93%	2022-11-30 to 2025-04-20	0.000032	Nonparametric LCL around the Median
MW-32	Appendix IV	Chromium, Total	mg/L	15	0%	2022-11-30 to 2025-04-20	0.00033	Nonparametric LCL around the Median
MW-32	Appendix IV	Cobalt	mg/L	15	0%	2022-11-30 to 2025-04-20	0.00039	Lognormal H-LCL
MW-32	Appendix IV	Fluoride (App IV)	mg/L	15	0%	2022-11-30 to 2025-04-20	1.4	Normal LCL
MW-32	Appendix IV	Lead	mg/L	15	73%	2022-11-30 to 2025-04-20	0.00010	Nonparametric LCL around the Median
MW-32	Appendix IV	Lithium	mg/L	15	0%	2022-11-30 to 2025-04-20	0.11	Normal LCL
MW-32	Appendix IV	Mercury	mg/L	15	93%	2022-11-30 to 2025-04-20	0.00016	Nonparametric LCL around the Median
MW-32	Appendix IV	Molybdenum	mg/L	15	0%	2022-11-30 to 2025-04-20	0.0036	Normal LCL
MW-32	Appendix IV	Radium 226 and 228	pCi/L	15	60%	2022-11-30 to 2025-04-20	0.55	Nonparametric LCL around the Median
MW-32	Appendix IV	Selenium	mg/L	15	80%	2022-11-30 to 2025-04-20	0.00010	Nonparametric LCL around the Median
MW-32	Appendix IV	Thallium	mg/L	15	100%	2022-11-30 to 2025-04-20	0.000075	Nonparametric LCL around the Median
MW-32	Part 115	Copper	mg/L	15	60%	2022-11-30 to 2025-04-20	0.00020	Nonparametric LCL around the Median
MW-32	Part 115	Iron	mg/L	15	0%	2022-11-30 to 2025-04-20	14	Normal LCL
MW-32	Part 115	Nickel	mg/L	15	0%	2022-11-30 to 2025-04-20	0.00086	Nonparametric LCL around the Median
MW-32	Part 115	Silver	mg/L	15	100%	2022-11-30 to 2025-04-20	0.000050	Nonparametric LCL around the Median
MW-32	Part 115	Vanadium	mg/L	15	100%	2022-11-30 to 2025-04-20	0.00062	Nonparametric LCL around the Median
MW-32	Part 115	Zinc	mg/L	15	0%	2022-11-30 to 2025-04-20	0.0025	Nonparametric LCL around the Median