



Renew Harbor Island

A stylized lighthouse icon with a red base, a white lantern room, and a blue top section. A yellow and white circular glow is behind the lighthouse.

Work today, protect tomorrow.

4th Quarter 2024 Annual Groundwater Monitoring Report

For Michigan Part 115 CCR Solid Waste
Regulations

Former J.B. Sims Generating Station

January 29, 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 was 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 used to cleanout boilers and infrastructure 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 (SSI) 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 occur into 2025 to further assess the remedy selection process.

This Groundwater Monitoring Report presents the activities completed in the fourth quarter 2024.

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 statistically significant

levels (SSLs) over groundwater protection standards (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 and ceased receiving CCR material in 2012. After adding monitoring wells to the network for 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 around the Island and 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.



Figure 1 | Site Vicinity Map

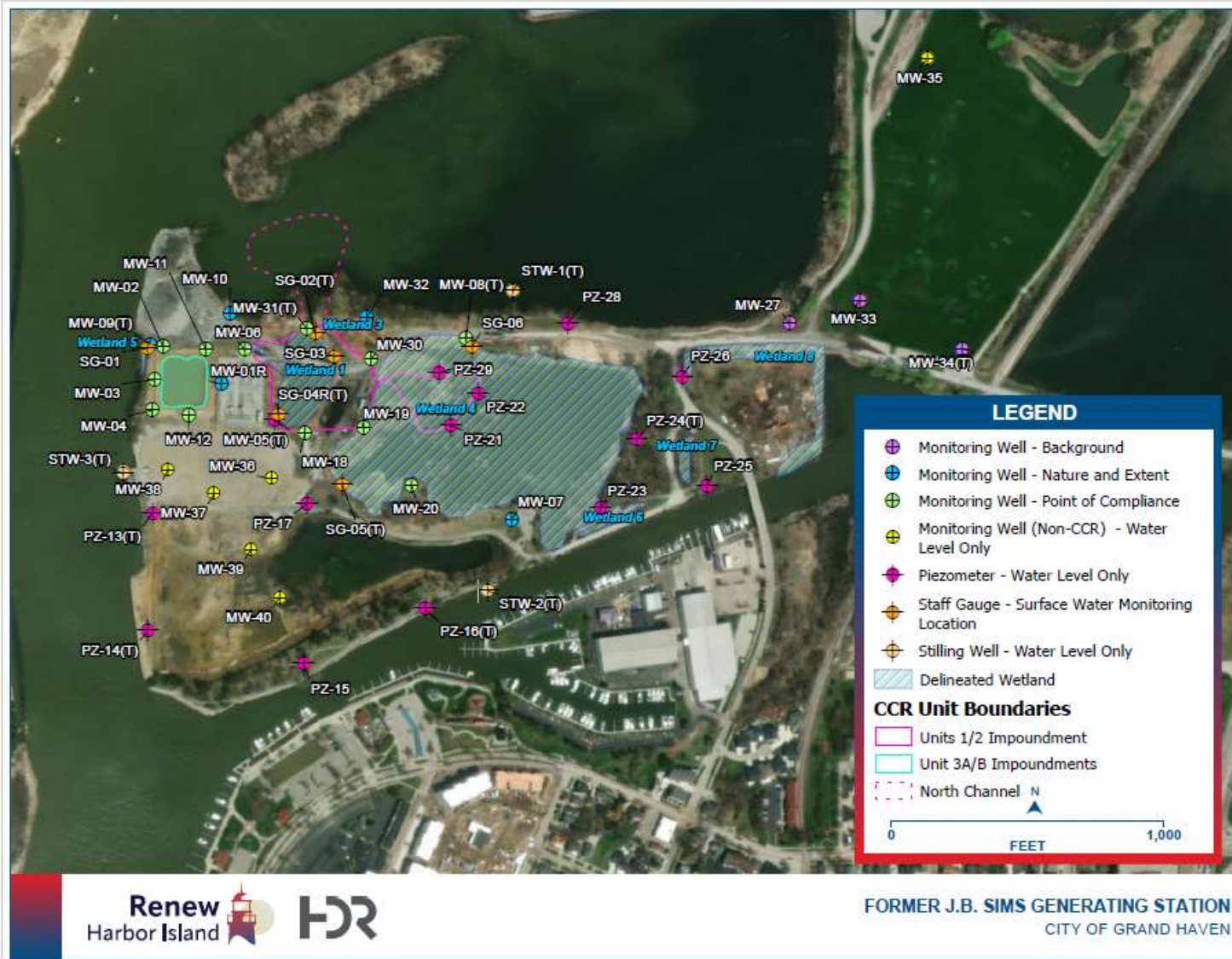


Figure 2 | Former J.B. Sims CCR Units and Monitoring Wells

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 from the Units 1/2 Impoundment would be evaluated for potential inclusion in the revised boundary. 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 will not be associated with Units 1/2 Impoundment. EGLE and EPA indicated that the North Channel ash will be documented 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. 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 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 a 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 yard 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 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). Groundwater contour maps from the four 2024 monitoring events are shown in **Appendix A**. 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 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 A**). The internal wetland east of the Units 1/2 Impoundment appears to provide a hydraulic sink between the CCR impoundments and the wells situated 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 were observed in tests completed at 172.51 feet per day at MW-17 and 242.25 feet per day at MW-20 (Golder, 2022). Additional slug tests were performed in July and August 2024 at MW-10, MW-12, PZ-15, MW-16, MW-17, MW-20, MW-32, MW-36, and MW-45. Data will be included in the revised Hydrogeologic Monitoring Plan. 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 (PX-#) 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 is composed of the following:

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

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.

3.0 Monitoring

3.1 Groundwater Monitoring

Table 1 provides well identification numbers, well locations, the dates samples were collected in Quarter 4 2024, 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**.

Table 1. Dates of Groundwater Monitoring in Fourth Quarter 2024		
Monitoring Well I.D.	Date Monitored	Monitoring Purpose
Background Monitoring Wells		
MW-27	10/17/2024	Detection Monitoring/Initial Assessment Monitoring
MW-33	10/17/2024	Detection Monitoring/Initial Assessment Monitoring
MW-34	10/17/2024	Detection Monitoring/Initial Assessment Monitoring
Units 1/2 Compliance Monitoring Wells		
MW-06	10/16/2024	Detection Monitoring/Initial Assessment Monitoring
MW-08	10/16/2024	Detection Monitoring/Initial Assessment Monitoring
MW-18	10/16/2024	Detection Monitoring/Initial Assessment Monitoring
MW-19	10/16/2024	Detection Monitoring/Initial Assessment Monitoring
MW-20	10/16/2024	Detection Monitoring/Initial Assessment Monitoring
MW-30	10/16/2024	Detection Monitoring/Initial Assessment Monitoring
MW-31	10/15/2024	Detection Monitoring/Initial Assessment Monitoring
Unit 3A/B Compliance Monitoring Wells		
MW-02	10/15/2024	Detection Monitoring/Initial Assessment Monitoring
MW-03	10/15/2024	Detection Monitoring/Initial Assessment Monitoring
MW-04	10/15/2024	Detection Monitoring/Initial Assessment Monitoring
MW-11	10/16/2024	Detection Monitoring/Initial Assessment Monitoring
MW-12	10/16/2024	Detection Monitoring/Initial Assessment Monitoring
Nature and Extent Wells		
MW-01R	10/16/2024	Detection Monitoring/Initial Assessment Monitoring
MW-07	10/15/2024	Detection Monitoring/Initial Assessment Monitoring
MW-09	10/17/2024	Detection Monitoring/Initial Assessment Monitoring
MW-10	10/16/2024	Detection Monitoring/Initial Assessment Monitoring
MW-16	10/17/2024	Detection Monitoring/Initial Assessment Monitoring
MW-17	10/16/2024	Detection Monitoring/Initial Assessment Monitoring
MW-28	10/17/2024	Detection Monitoring/Initial Assessment Monitoring
MW-32	10/16/2024	Detection Monitoring/Initial Assessment Monitoring
MW-36	10/16/2024	Detection Monitoring/Initial Assessment Monitoring
MW-37	10/15/2024	Detection Monitoring/Initial Assessment Monitoring
MW-38	10/16/2024	Detection Monitoring/Initial Assessment Monitoring
Water Level Only Wells		
MW-05	10/15/2024	Water Level Only
PZ-13	10/15/2024	Water Level Only
PZ-14	10/15/2024	Water Level Only
PZ-15	10/15/2024	Water Level Only
PZ-23	10/15/2024	Water Level Only
PZ-24	10/15/2024	Water Level Only
PZ-25	10/15/2024	Water Level Only
PZ-26	10/15/2024	Water Level Only
PZ-29	10/15/2024	Water Level Only
MW-35	10/15/2024	Water Level Only

Monitoring Well I.D.	Date Monitored	Monitoring Purpose
MW-39	10/15/2024	Water Level Only
MW-40	10/15/2024	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 elevations are mapped with the groundwater elevations to evaluate the flow of groundwater under the Island and in connection with the Grand River and wetland surface waters. Surface water monitoring dates are shown in **Table 2**. Deviations from the work plan are outlined in **Section 3.3**.

Well ID	Water Level Date	Sample Date
SG-01	10/15/2024 ¹	Water Level Only
SG-02	10/15/2024	10/17/2024
SG-03	10/15/2024 ¹	Water Level Only
SG-04R	10/15/2024	10/17/2024
SG-05	10/15/2024	10/17/2024
SG-06	10/15/2024 ¹	Water Level Only
SG-07	10/15/2024	10/17/2024
STW-1	Inaccessible	Water Level Only
STW-2	10/15/2024	Water Level Only
STW-3	10/15/2024	Water Level Only

¹ – Monitoring location was dry, no surface water level was collected at the staff 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 fourth quarter 2024 sampling event:

- Water levels were not collected from PZ-21, PZ-22, or PZ-29 due to deep water limiting access.
- Water levels were not collected from SG-01, SG-03, and SG-06 due to low surface water conditions leaving the staff gauges dry.

- SG-05 was dry at the time of sample collection so a surface water sample was collected approximately 15 feet east along the shoreline.

Surface water samples were collected using a clean container affixed to a pole. Before samples were collected, the following water quality parameters were measured: pH, turbidity, conductivity, dissolved oxygen, temperature, and oxidation reduction potential. The results of field measurements were recorded on a field data form, which is maintained as part of the field records. Surface water samples were delivered under Chain of Custody to Trace Analytical Laboratories in Muskegon, Michigan.

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 fourth quarter 2024 sampling event using the data provided in **Table 4**. The map displays the groundwater elevations as well as the potentiometric contours and is provided in **Appendix C**. A hydrograph for wells near the Units 1/2 Impoundment is shown in **Figure 3**. Groundwater beneath the impoundment ranged from 578 to 582 feet above mean sea level (ft. AMSL). The hydrograph for perimeter wells surrounding the Units 3A/B Impoundments, shown in **Figure 4**, indicates groundwater elevation beneath the impoundment ranged from 582 to 580 ft ASML.

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

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 Units 1/2 Impoundment is generally eastward toward the internal wetland, with the exception of flow near the North Channel outlet where groundwater flow is north from SG-02 toward MW-31. The internal wetland has consistently shown to be a sink for Harbor Island.

Groundwater flow observed at background wells MW-27, MW-33, and MW-34 was consistent with previous observations. Flow is southward from MW-35 toward MW-33 and MW-34. The potentiometric contours confirm that groundwater under the CCR impoundments does not flow toward background monitoring wells and confirms they are appropriate background monitoring locations.

Slug tests were performed in July and August 2024 at MW-10, MW-12, PZ-15, MW-16, MW-17, MW-20, MW-32, MW-36, and MW-45. Data will be included in the revised Hydrogeologic Monitoring Plan.

Well ID	Groundwater Elevation (10/15/2024)
MW-01R	581.01
MW-02	579.62
MW-03	579.64
MW-04	579.79
MW-05	580.28
MW-06	580.42
MW-07	579.68
MW-08	579.52
MW-09	579.36
MW-10	579.80

Table 4. Groundwater and Surface Water Elevations in Q4 2024	
MW-11	580.43
MW-12	580.50
PZ-13	579.53
PZ-14	579.73
PZ-15	580.03
MW-16	579.48
MW-17	580.13
MW-18	580.09
MW-19	579.76
MW-20	579.84
PZ-21	Inaccessible
PZ-22	Inaccessible
PZ-23	579.70
PZ-24	579.38
PZ-25	579.78
PZ-26	579.86
MW-27	579.90
MW-28	579.68
PZ-29	579.86
MW-30	580.06
MW-31	580.02
MW-32	579.95
MW-33	580.04
MW-34	579.37
MW-35	580.43
MW-36	580.66
MW-37	580.18
MW-38	580.05
MW-39	580.24
MW-40	581.17
SG-01	DRY
SG-02	580.23
SG-03	DRY
SG-04R	580.23
SG-05	DRY
SG-06	DRY
SG-07	579.25
STW-1	Inaccessible
STW-2	579.46
STW-3	574.42

Table 3. 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	579.78	0.0002	0.005
PZ-26					579.86		
PZ-25		400	0.3	8.342 ²	579.78	0.0002	0.006
PZ-23					579.70		
MW-01R	Western	247	0.3	6.233 ³	581.01	0.0055	0.115
MW-03					579.64		
MW-01R		274	0.3	6.233 ³	581.01	0.0045	0.093
MW-04					579.79		
MW-01R		226	0.3	6.233 ³	581.01	0.0032	0.067
MW-05					580.28		
MW-01R		262	0.3	6.233 ³	581.01	0.0046	0.096
MW-10					579.80		

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).

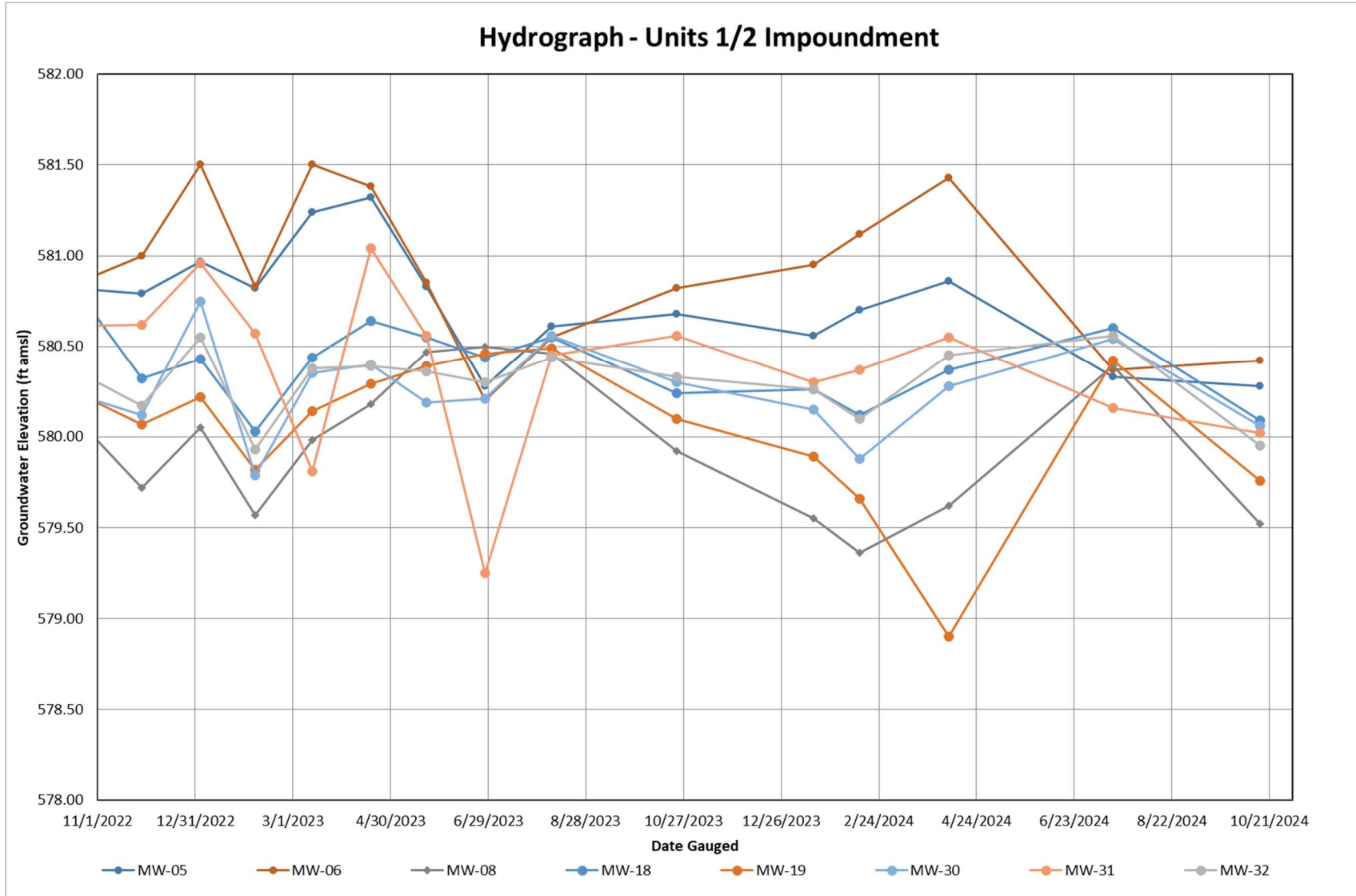


Figure 3 | Hydrograph of Wells Near Units 1/2 Impoundment

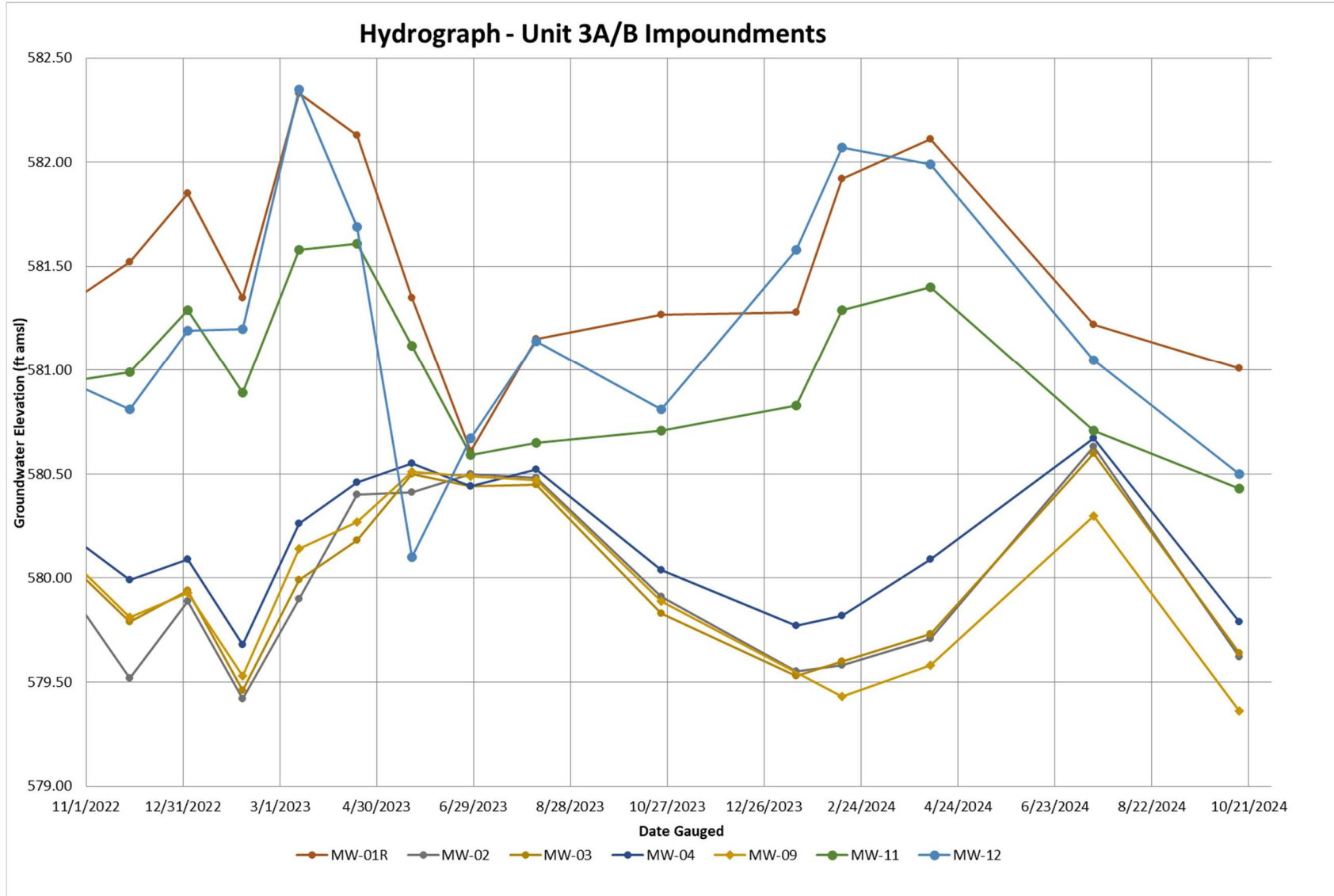


Figure 4 | Hydrograph of Wells and Piezometers Near Unit 3A/B Impoundments

Pressure transducers were installed at the locations shown in **Figure 5**. Transducer data was collected between December 21, 2023 through October 15, 2024. Trends observed from the limited dataset are as follows:

- SG-02 is generally higher in surface water elevation than MW-31, with the exception of specific dates where well MW-31 levels peak. These groundwater peaks coincide with precipitation events producing 0.5 inches or greater. A graph of the measurements is shown on **Figure 6**.
- MW-05 groundwater elevation is higher than the surface water elevation at SG-04R during periods of significant precipitation. The spikes in groundwater elevation at MW-05 coincide with higher precipitation. Surface water is contributing to groundwater part of the time, and groundwater is contributing to surface water at the southern pond part of the recording period. A graph of the measurements is shown on **Figure 7**.
- Surface water at STW-2 is generally at a lower elevation than the groundwater at MW-16 for the duration of the monitoring period. This indicates groundwater at the southern end of the Island is discharging to the South Channel. 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 between December 2023 and middle of May 2024, and then is higher than groundwater between middle of May and September 2024. This indicates groundwater from the eastern side of the Island is discharging into the internal wetland. 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 is consistently discharging to the Grand River. 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 surface appeared to be higher than the groundwater at MW-08. A graph of the measurements is shown on **Figure 12**.



Figure 5 | Transducer Deployment Map

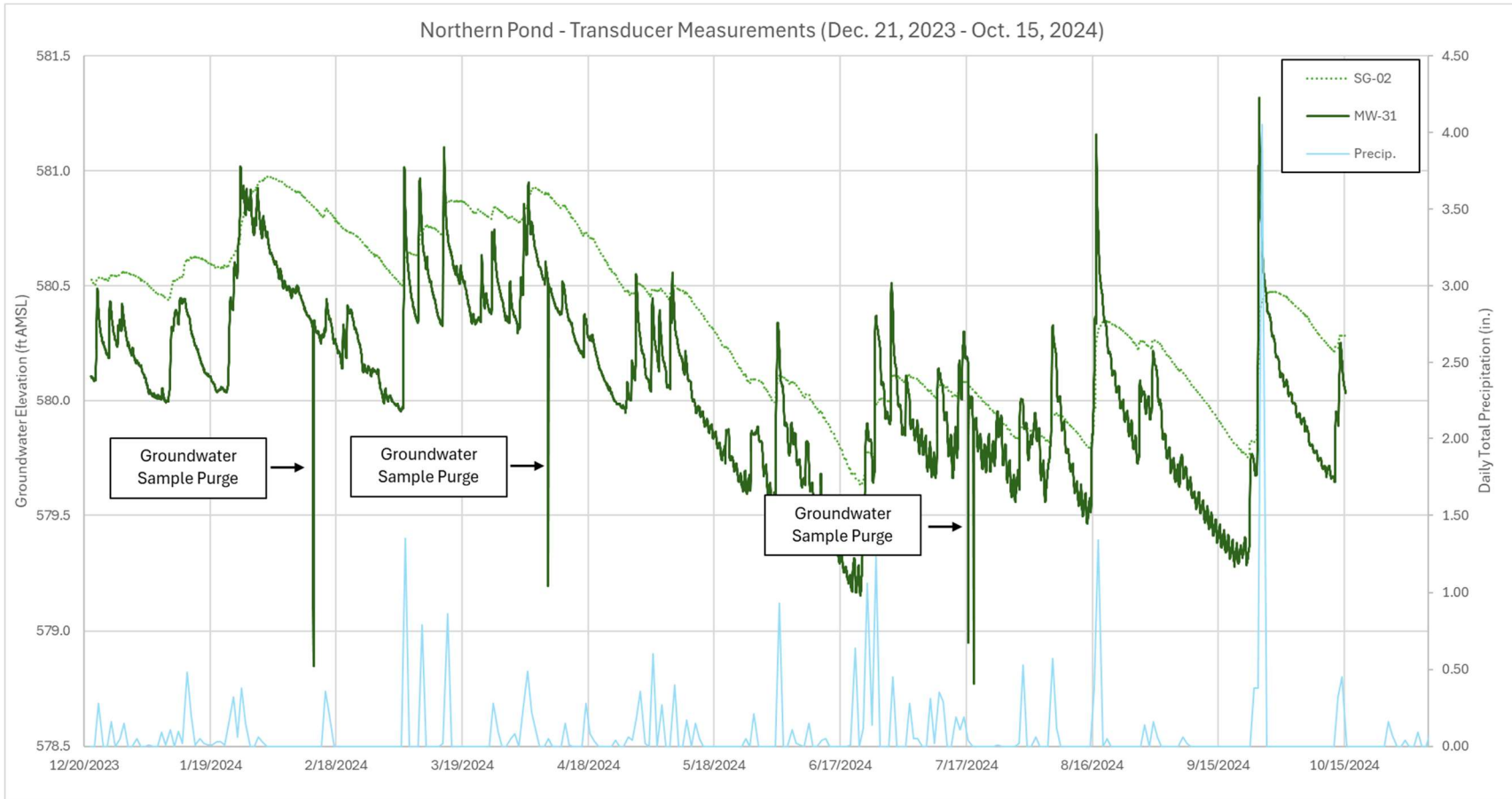


Figure 6 | Transducer Measurement Graph SG-02 and MW-31

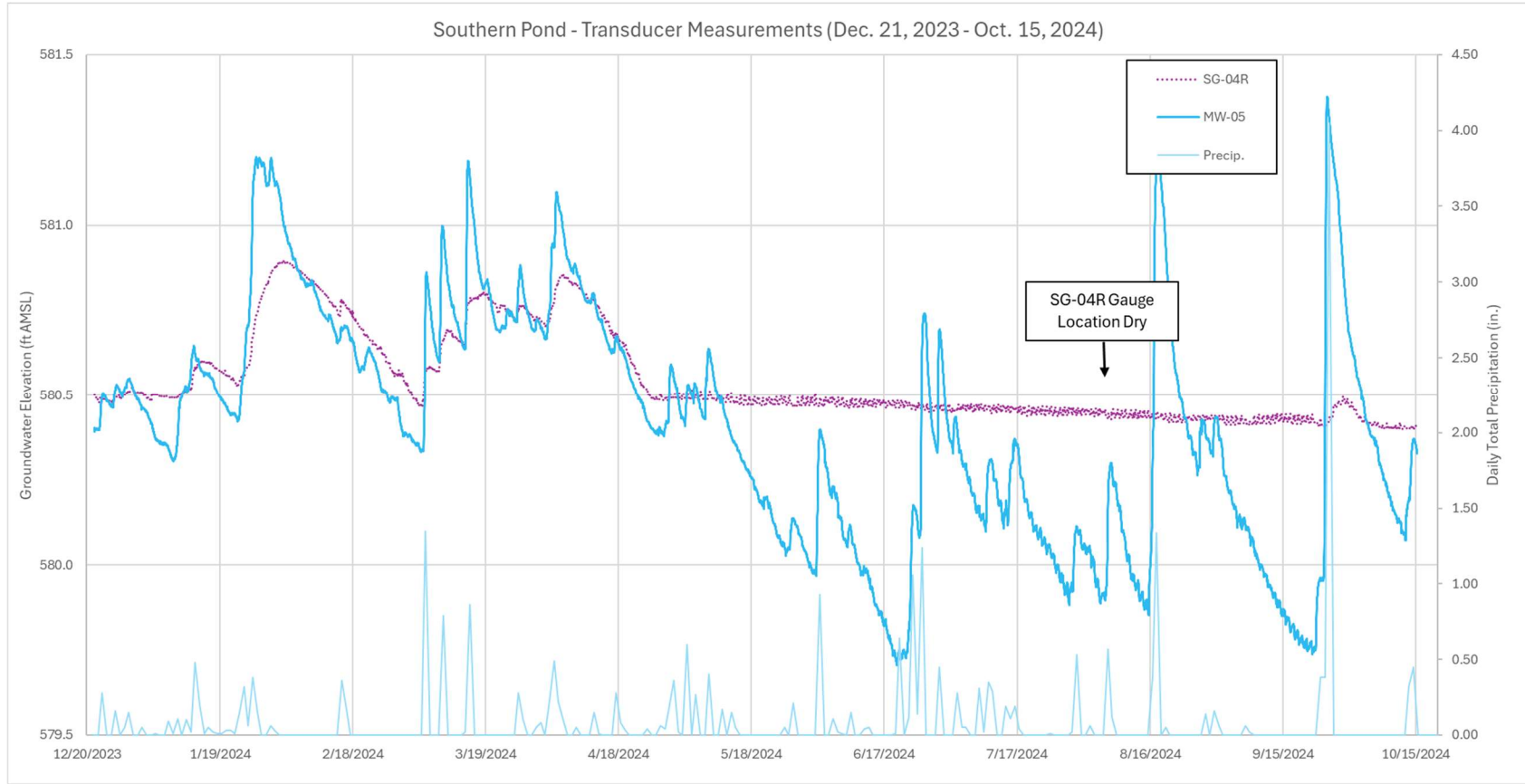


Figure 7 | Transducer Measurement Graph SG-04R and MW-05

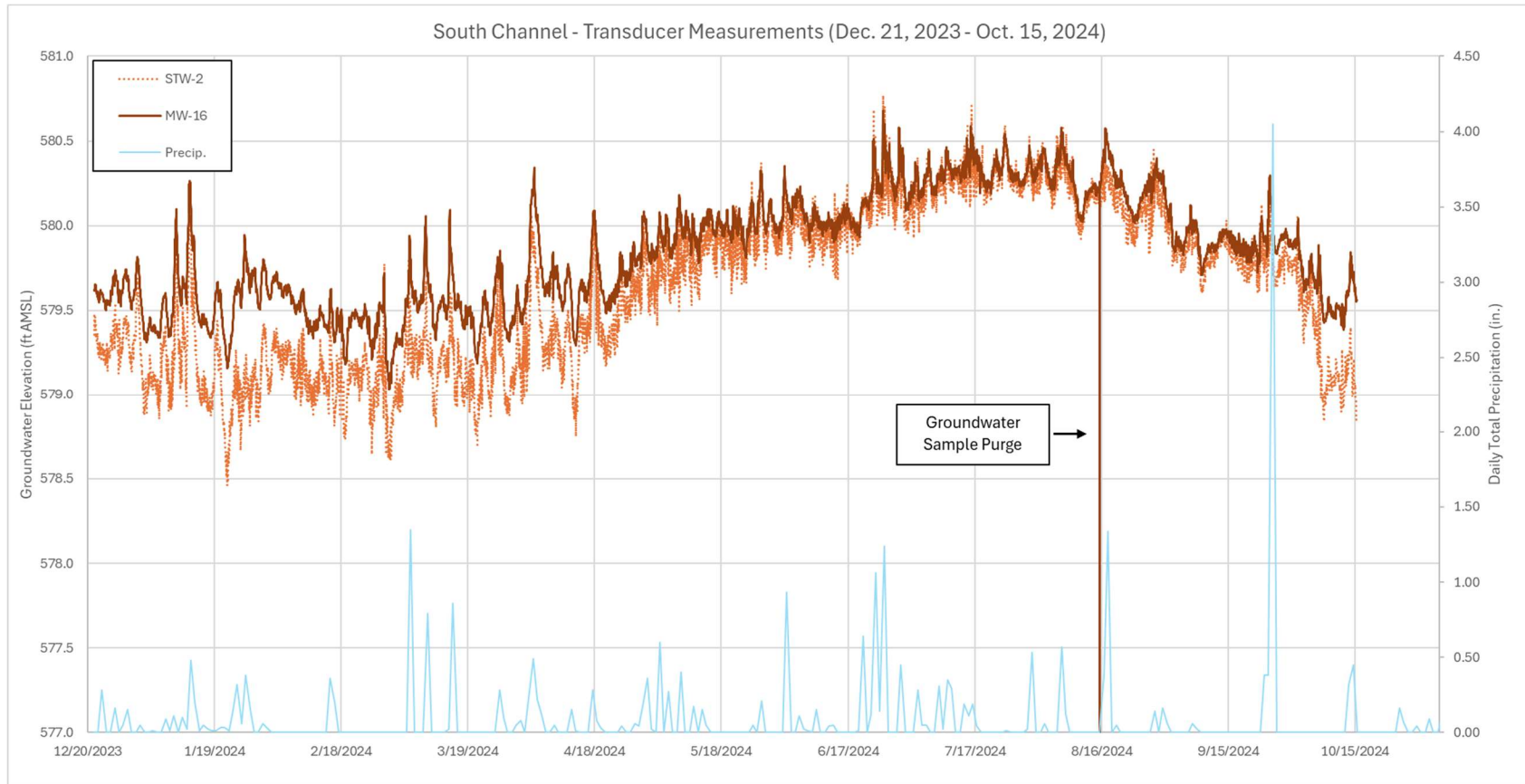


Figure 8 | Transducer Measurement Graph STW-2 and MW-16

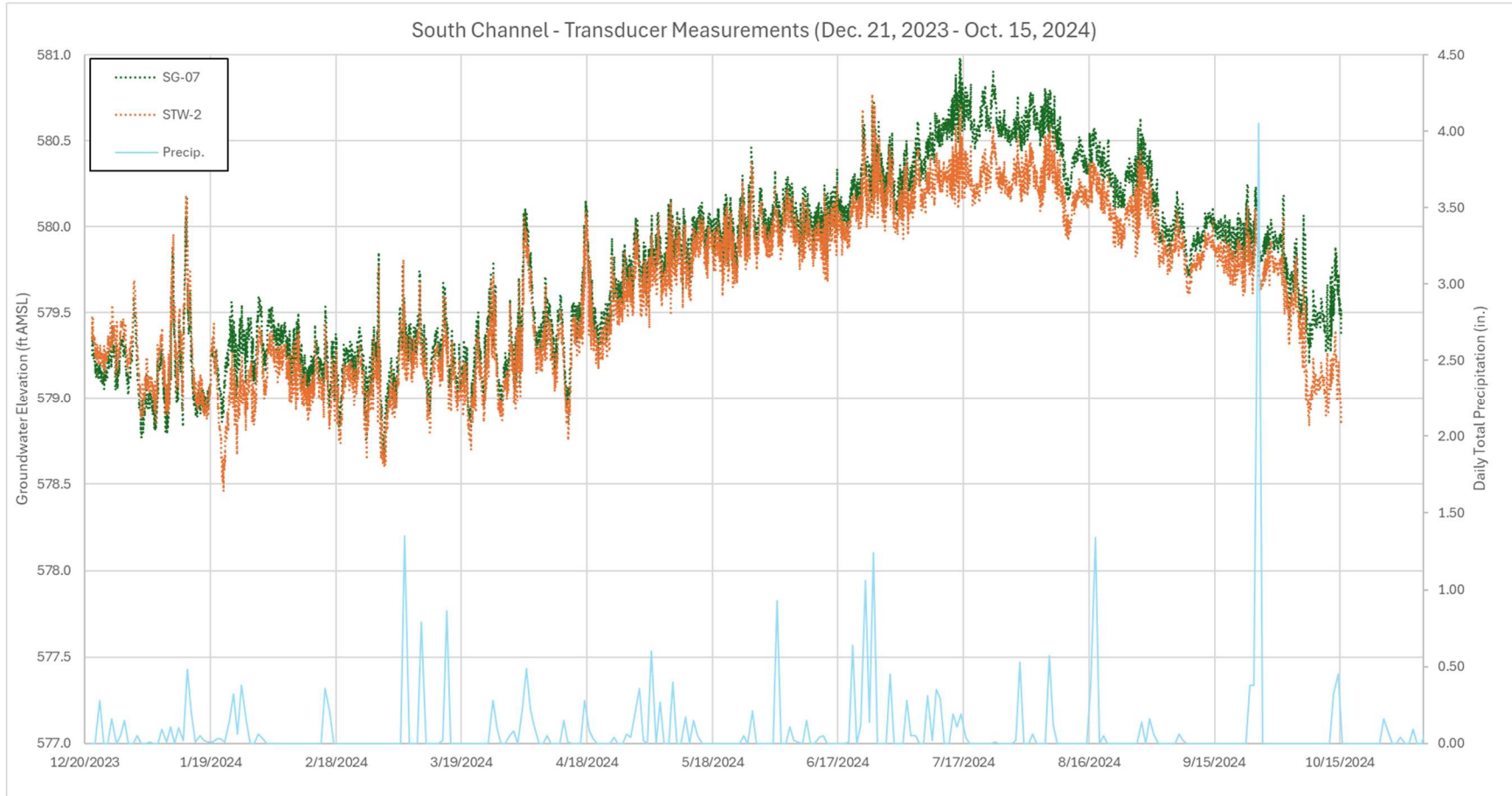


Figure 9 | Transducer Measurement Graph STW-2 and SG-07

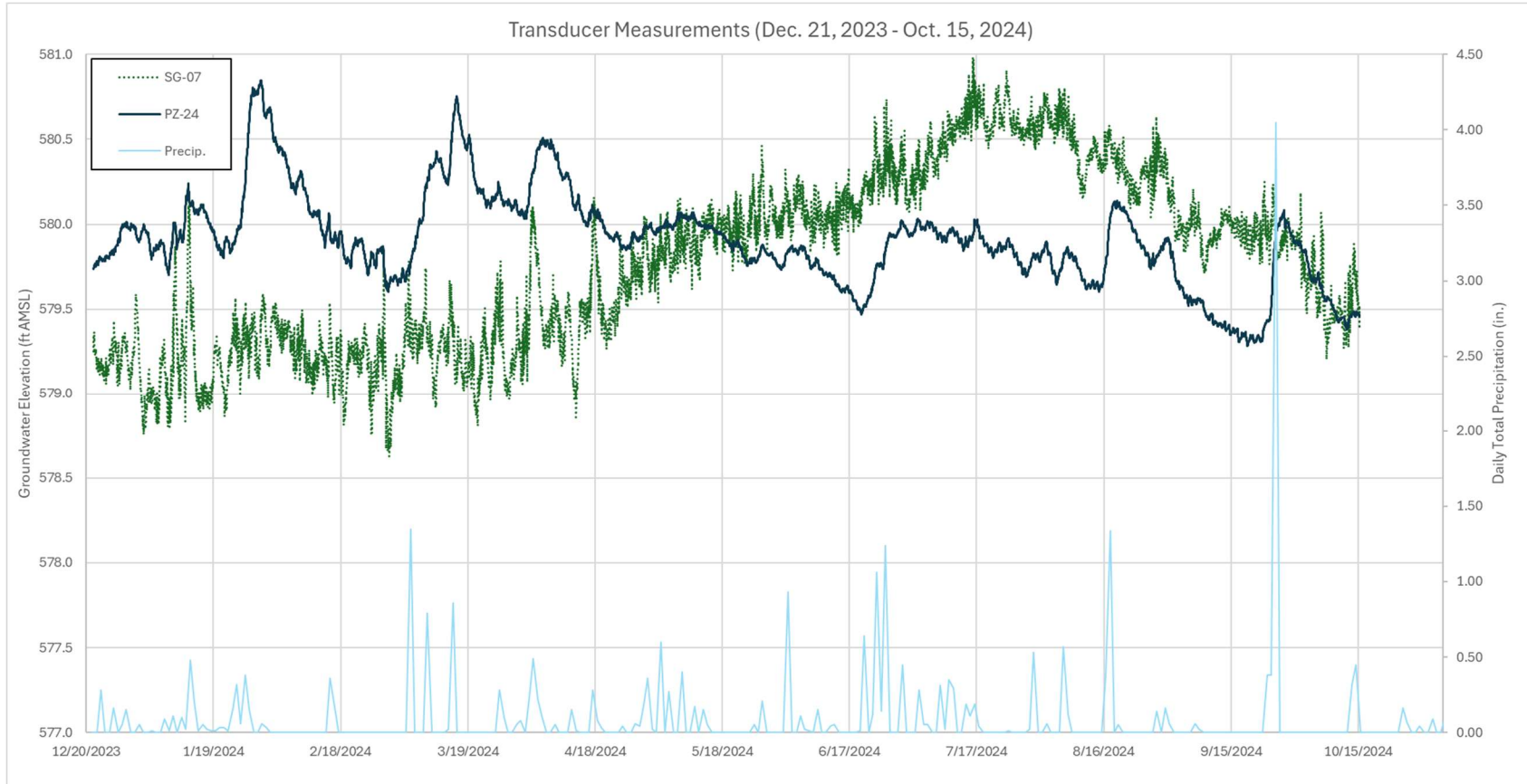


Figure 10 | Transducer Measurement Graph SG-07 and PZ-24

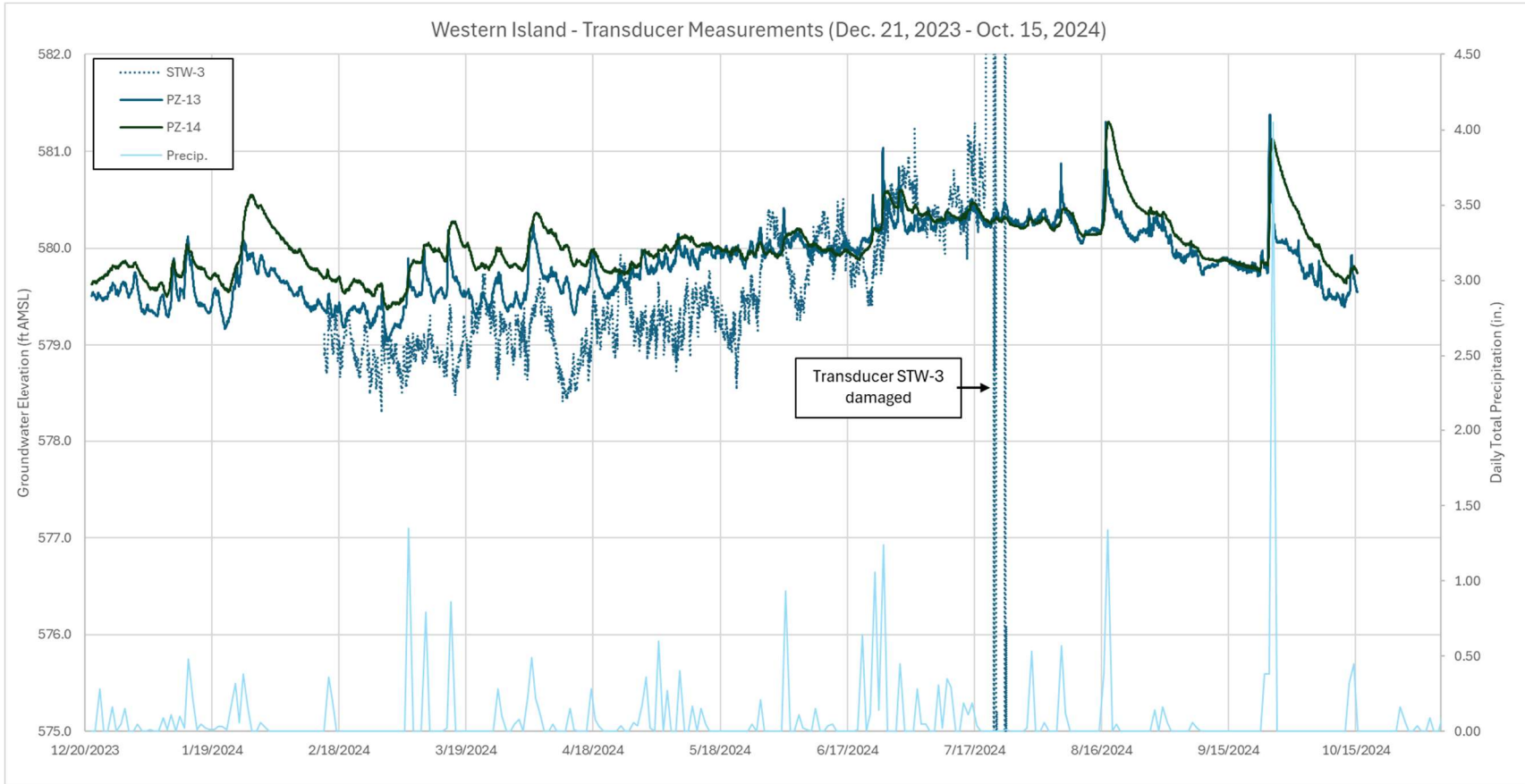


Figure 11 | Transducer Measurement Graph STW-3, PZ-13, and PZ-14

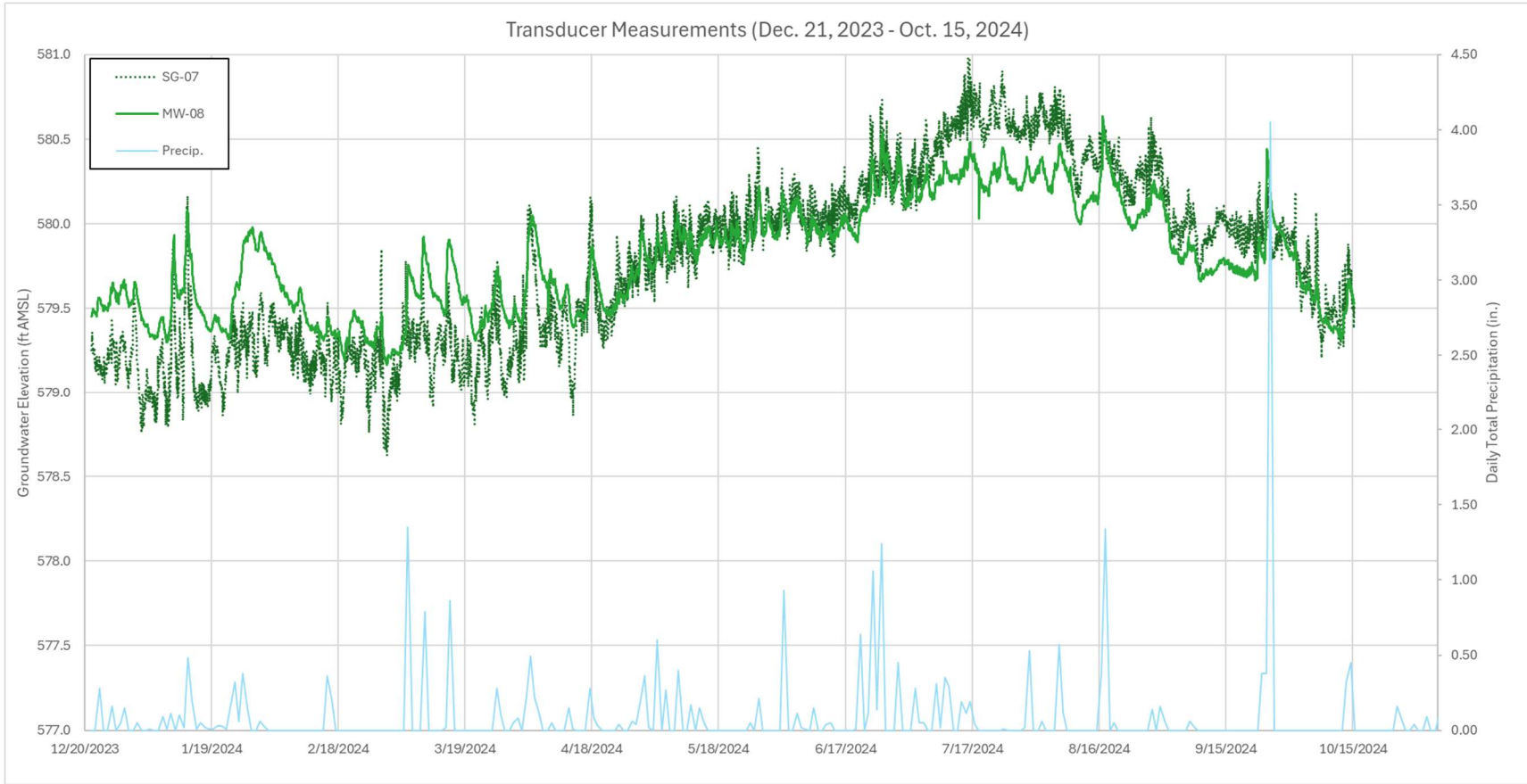


Figure 12 | Transducer Measurement Graph SG-07 and MW-08

4.2 Water Quality

In October 2024, an assessment monitoring event was conducted and the monitoring well 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

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 4. Background Values and State Groundwater Protection Standards for both Units 1/2 Impoundment and Unit 3A/B Impoundments					
Parameter**	Site-Specific Background Level (UTL)	MCL	State Non-Res. Drinking Water Cleanup Criteria for Groundwater*	GSI*	GPS
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	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	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
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.

4.2.2 Identification of Groundwater Protection Standard (GPS) Exceedances

The October 2024 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. SSLs identified are generally consistent with previous observations.

Well	Constituent*	Unit	95% LCL	State GPS
MW-06	Boron	mg/L	8.5	4.0
	Lithium	mg/L	0.16	0.10
	Total Dissolved Solids	mg/L	1200	950
MW-07	Boron	mg/L	11	4.0
MW-08	Arsenic	mg/L	0.027	0.010
	Boron	mg/L	5.4	4.0
MW-10	Boron	mg/L	12	4.0
	Chloride (as Cl)	mg/L	180	120
	Fluoride	mg/L	4.3	2.0
	Lithium	mg/L	0.80	0.10
	Sulfate (as SO ₄)	mg/L	450	250
	Total Dissolved Solids	mg/L	1800	950
MW-18	Arsenic	mg/L	0.023	0.010
	Calcium	mg/L	310	250
	Fluoride	mg/L	3.6	2.0
	Sulfate (as SO ₄)	mg/L	710	250
	Total Dissolved Solids	mg/L	1300	950

Well	Constituent	Unit	95% LCL	State GPS
MW-19	Calcium	mg/L	450	250
	Sulfate (as SO4)	mg/L	910	250
	Total Dissolved Solids	mg/L	1800	950
MW-30	Calcium	mg/L	430	250
	Lithium	mg/L	0.11	0.10
	Sulfate (as SO4)	mg/L	760	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; however, no detections were observed and the LCL is based on the reporting limit; therefore the double quantitation rule is used.

Unit 3A/B Impoundments

Concentrations that exceeded GPS at SSLs are provided in **Table 8** for Unit 3A/B Impoundments. In comparison to the prior 2024 sample events, the October 2024 resulting SSLs are generally consistent with the exception of boron at MW-11 that had an SSL above GPS for the first time.

Well	Constituent*	Unit	95% LCL	State GPS
MW-01R	Boron	mg/L	86	4.0
	Fluoride	mg/L	9.7	2.0
	Lithium	mg/L	1.9	0.10
	Sulfate (as SO4)	mg/L	280	250
	Total Dissolved Solids	mg/L	2300	950
MW-02	Boron	mg/L	93	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 SO4)	mg/L	300	250
	Total Dissolved Solids	mg/L	1900	950
MW-04	Calcium	mg/L	350	250
	Chloride (as Cl)	mg/L	150	120
	Sulfate (as SO4)	mg/L	580	250
	Total Dissolved Solids	mg/L	1800	950

Table 8. October 2024 LCLs that Exceed GPS for Unit 3A/B Impoundments				
MW-09	Boron	mg/L	5.6	4.0
	Calcium	mg/L	330	250
	Fluoride	mg/L	2.4	2.0
	Lithium	mg/L	0.29	0.10
	Sulfate (as SO4)	mg/L	310	250
	Total Dissolved Solids	mg/L	1200	950
MW-10	Boron	mg/L	12	4.0
	Chloride (as Cl)	mg/L	180	120
	Fluoride	mg/L	4.3	2.0
	Lithium	mg/L	0.80	0.10
	Sulfate (as SO4)	mg/L	450	250
	Total Dissolved Solids	mg/L	1800	950
MW-11	Boron	mg/L	4.2	4.0

*Mercury LCLs appear greater than the GPS; however, no detections were observed and the LCL is based on the reporting limit; therefore, the double quantitation rule is used.

Surface Water Monitoring

The surface water samples collected during the October 2024 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 with exceedances are provided in **Table 9**.

Table 5. Surface Water Sample Summary		
Surface Water Sample Location	Waterbody Monitored	Constituents that Exceeded GPS*
SG-02	Units 1/2 Impoundment	Boron, Fluoride, Sulfate, TDS.
SG-03	Units 1/2 Impoundment	Not Sampled ¹
SG-04R	Units 1/2 Impoundment	Boron, Calcium, Fluoride, Sulfate, TDS
SG-05	Internal Wetland South	No GPS exceedances observed
SG-06	Internal Wetland North	No GPS exceedances observed

*GPS criteria not for regulatory compliance, only used as a reference value for comparison to groundwater concentrations. ¹Gauge location was dry during the time of sampling, and SG-02 located within same waterbody.

Based on the sampling results, surface water samples collected at the ponds within the boundary of the Units 1/2 Impoundment had concentrations exceeding GPS values. Samples collected within the internal wetland show no GPS exceedances.

5.0 Summary

The following observations are based on CCR Rule compliance groundwater monitoring during the fourth quarter 2024:

- One groundwater sampling event was conducted in the fourth quarter 2024 in October 2024.
- Groundwater flow measured in the fourth quarter beneath Units 1/2 Impoundment flowed generally eastward toward the wetland and north near MW-31 toward SG-02.
- Groundwater flow measured in the fourth quarter beneath Unit 3A/B Impoundments is primarily west northwest toward the Grand River.
- No monitoring locations were installed or abandoned or repaired in fourth quarter 2024.
- Transducer data indicates surface water from the ponds within Units 1/2 Impoundments contributes to groundwater. Groundwater on the south and eastern sides of the Island appear to be discharging to surface water.
- Surface water sampling locations SG-02 and SG-04R collected within the ponds of the Units 1/2 Impoundment had exceedances of groundwater standards for boron, calcium, fluoride, sulfate, and TDS. Surface water samples from the internal wetland had no GPS exceedances for the October 2024 sampling event.
- The LCLs were calculated after the October 2024 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 calculated after the October 2024 assessment monitoring event and were compared to GPS values. Similar SSLs were identified for the Unit 3A/B Impoundments as in previous monitoring events.
- A Remedial Investigation Site Specific Data Collection Work Plan is being drafted to assist in the remediation alternatives feasibility assessment and remedy selection process. 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 determine the method selected to remove any potential remaining CCR in the target area.
 - Exploratory Borings – During the boring process, sediment samples will be collected to confirm the existence of the suspected clay unit beneath the surficial aquifer, as well as to provide data for potential slurry wall construction. Following drilling, monitoring wells will be installed to investigate potential groundwater flow beneath the Island and to determine the vertical extent of any contamination.
 - Ash Characterization – Bottom ash samples from the Units 1/2 Impoundment will be collected to characterize the CCR.

The Remedial Investigation Site Specific Data Collection Work Plan was developed over the last six months and is anticipated to be published in the first quarter of 2025, as well as submitted to EGLE for review and approval. Work under the plan is anticipated to begin in the first half 2025, pending EGLE review and approval and budget approvals.

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

Appendix A

Field Data Sheets

Water Sample Collection Field Data Sheet

Site Name: C4HH1 Well I.D.: MW-01R
 Sample I.D. (match bottle and COC form exactly): MW-01R
 Personnel: AB Date: 10/16/2A
 Static Depth to Water (ft, btoc): 7.52 Well Total Depth (ft, btoc):
 Date/Time Sample Collected (match bottle and COC form exactly): 10/16/2A ; 1136
 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): dedicated tubing
 Time Completed: 1155 Total Purge: 11 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)
1112	0.8	7.73	2.97	2.01	0.15	16.7	-170.3	7.65	
1116	1.6	7.69	2.85	1.96	0.01	16.7	-265.6	7.68	
1120	2.4	7.69	2.83	1.38	0.01	16.8	-287.0	7.69	
1124	3.2	7.71	2.84	1.29	0.01	16.9	-294.8	7.69	
1128	4.0	7.71	2.86	1.76	0.01	17.0	-300.2	7.69	
1132	4.8	7.72	2.87	1.55	0.02	17.0	-303.8	7.70	
1136	5.6	7.72	2.89	1.36	0.01	17.0	-304.0	7.70	

Flow Rate: ~200 mL/min
 Pump Controller Setting: 40%
 General Comments:
replaced tubing, black particulate @ start of purge

Water Sample Collection Field Data Sheet

Site Name: GHHI Well I.D.: MW-02
 Sample I.D. (match bottle and COC form exactly): MW-02
 Personnel: TJB Date: 10-15-24
 Static Depth to Water (ft, btoc): 15.98 Well Total Depth (ft, btoc): _____
 Date/Time Sample Collected (match bottle and COC form exactly): 10-15-24 16:30
 Sample Method: CF-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): ~2' off bott
 Time Completed: 16:40 Total Purge: _____ 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)
13:10		7.14	3.85	111	1.36	13.0	-65.3	16.85	120
13:14		7.15	3.87	115	1.23	12.9	-78.3	16.83	↓
13:18		7.15	3.88	103	1.01	12.9	-94.0	16.86	
13:34		7.14	3.95	88.3	0.90	13.1	-120.3	17.02	
13:40		7.14	3.95	72.4	0.88	13.2	-125.8	17.04	
13:50		7.13	3.96	60.4	0.90	13.1	-130.2	17.08	
14:10		7.13	3.97	47.3	1.77	13.5	-137.1	17.14	
14:20		7.12	4.00	36.3	1.02	13.2	-138.7	17.15	
14:30		7.13	4.03	28.4	0.99	12.9	-141.7	17.16	
14:40		7.13	4.02	21.8	0.93	13.2	-145.0	17.17	
14:50		7.13	4.07	17.7	0.93	13.3	-146.9	17.18	
15:00		7.14	4.08	14.3	0.90	13.4	-149.0	17.19	
15:10		7.13	4.09	12.5	0.88	13.4	-151.5	17.20	
15:20		7.14	4.10	10.3	0.85	13.3	-154.5	17.21	
15:30		7.14	4.09	88.3	0.85	13.2	-159.6	17.22	
15:40		7.14	4.19	15.0	0.84	13.3	-157.8	17.23	
15:50		7.15	4.20	9.7	0.85	13.4	-158.6	17.24	

Clean YSI cell →

Flow Rate: 120 mL/min
 Pump Controller Setting: 50%
 General Comments:

13:00 - start purge, initial purge had sediment, water line has consistent bubbles
- Replaced tubing
15:51 - Start 16:40 Stop Fill

Start : 1220
 end: 1425

Water Sample Collection Field Data Sheet

Site Name: GHHI Well I.D.: MW-03
 Sample I.D. (match bottle and COC form exactly): MW-03
 Personnel: AB Date: 10/15/24
 Static Depth to Water (ft, btoc): 13.41 Well Total Depth (ft, btoc): •
 Date/Time Sample Collected (match bottle and COC form exactly): 10/15/24, 1308
 Sample Method: LF Peri
 Water level meter, pump, and tubing decontaminated prior: Yes No
 Sample QC: Field Duplicate Yes No Duplicate Sample I.D.: MWT-03
 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 ~2ft from bot
 Time Completed: 1425 Total Purge: 11 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)
1220		START						13.43	
1240	2.5	7.38	2.67	0.62	0.25	14.3	-61.0	13.68	
1244	3	7.39	2.68	0.05	0.27	14.4	-68.4	13.68	
1248	3.5	7.38	2.68	0.55	0.39	14.3	-83.0	13.69	
1252	4	7.38	2.68	0.53	0.35	14.4	89.2	13.69	
1256	4.5	7.38	2.68	0.17	0.34	14.3	-92.1	13.69	
1300	5.0	7.38	2.69	0.48	0.33	14.2	-97.5	13.70	
1304	5.5	7.38	2.69	0.59	0.32	14.1	-101.5	13.70	
1308	6	7.38	2.69	0.31	0.31	14.0	-106.1	13.70	

Flow Rate: 125 mL/min
 Pump Controller Setting: 60%
 General Comments:

Water Sample Collection Field Data Sheet

Site Name: GHH Well I.D.: MW-04
 Sample I.D. (match bottle and COC form exactly): MW-04
 Personnel: AB Date: 10/15/24
 Static Depth to Water (ft, btoc): 11.71 Well Total Depth (ft, btoc): _____
 Date/Time Sample Collected (match bottle and COC form exactly): 10/15/24; 1506
 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): dedicated tube
 Time Completed: 1540 Total Purge: _____ 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)
1442		7.24	2.41	20.2	0.50	16.8	-131.6	11.91	
1446		7.26	2.43	1.57	0.26	16.8	-141.3	11.99	
4500 1450		7.26	2.43	0.39	0.11	16.8	-143.5	12.00	
1454		7.26	2.44	0.02	0.08	16.7	-143.4	12.00	
1458		7.26	2.43	0.02	0.07	16.7	-143.5	12.00	
1502		7.26	2.44	0.02	0.07	16.6	-143.4	12.00	
1506		7.26	2.44	0.21	0.07	16.7	-143.4	12.01	

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

Water Sample Collection Field Data Sheet

Site Name: GHH1 Well I.D.: MW-06
 Sample I.D. (match bottle and COC form exactly): MW-06
 Personnel: AB Date: 10/16/24
 Static Depth to Water (ft, btoc): 10.00 Well Total Depth (ft, btoc):
 Date/Time Sample Collected (match bottle and COC form exactly): 10/16/24, 1520
 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): dedicated tubing
 Time Completed: 1545 Total Purge: 11 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)
1450	.8	7.16	1.90	2.65	0.09	17.1	-118.3	10.11	
1500	1.6	7.21	1.89	2.19	0.05	17.4	-147.0	10.12	
1504	2.4	7.30	1.90	1.63	0.06	17.5	-161.0	10.13	
1508	3.2	7.30	1.91	2.32	0.04	17.4	-166.2	10.13	
1512	4	7.30	1.91	1.81	0.05	17.5	-168.0	10.14	
1516	4.8	7.30	1.90	1.71	0.05	17.5	-169.8	10.15	
1520	5.6	7.29	1.90	1.90	0.05	17.5	-171.6	10.15	

Flow Rate: ~200 mL/min
 Pump Controller Setting: ~45%
 General Comments:

Water Sample Collection Field Data Sheet

GHHI

Site Name: EGDC - Wetland Sampling Well ID.: MW-07

Sample I.D.(match bottle and COC form exactly): MW-07

Personnel: TTB

Date: 10-15-24 Static Depth to Water (ft, btoc) 6.81

Date/Time Sample Collected (match bottle and COC form exactly): 10-15-24 12:30

Sample Method: Henry-Pore Water 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) ~2' off bott

Time Completed: _____ Total Purge _____ Units 2

Field Measurements:

Time (24 hour)	Amount purged (ml)	(+/-0.1) pH	(+/-3%) COND (mS/m)	(+/-10%) TURB (NTU)	(+/-0.3) DO (mg/L)	TEMP (C°)	(+/-10 mV) ORP (mV)	Water Depth (ft, btoc)
11:44		6.86	1.24	2.04	0.46	15.2	-119.6	6.87
11:48		6.87	1.25	3.03	0.65	15.2	-126.4	6.87
11:52		6.86	1.24	1.20	0.61	15.1	-129.0	6.87
11:56		6.87	1.24	0.72	0.64	15.1	-130.3	6.87
12:00		6.87	1.24	0.02	0.62	15.1	-131.4	6.87
12:04		6.86	1.24	0.02	0.60	15.0	-132.0	6.87
12:08		6.87	1.24	0.02	0.57	15.0	-133.2	6.87
12:12		6.87	1.24	0.02	0.56	15.0	-134.1	6.87

Flow Rate 150
 Pump controller setting 50%

General Comments:
Purge Start 11:05
12:13 - Start Fill - 12:40 Stop Fill

Water Sample Collection Field Data Sheet

Site Name: GHHI Well I.D.: MW-08
 Sample I.D. (match bottle and COC form exactly): MW-08
 Personnel: TTB Date: 10-16-24
 Static Depth to Water (ft, btoc): 589 Well Total Depth (ft, btoc): _____
 Date/Time Sample Collected (match bottle and COC form exactly): 10-16-24 16:15
 Sample Method: CF - 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): ~22' off bott
 Time Completed: _____ Total Purge: _____ 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)
15:30		7.14	1.06	16.1	0.31	16.6	-114.2	6.06	150
15:34		7.17	1.07	10.1	0.20	16.5	-124.7	6.06	↓
15:38		7.17	1.09	7.98	0.19	16.5	-130.6	6.06	
15:42		7.17	1.09	5.82	0.18	16.4	-133.0	6.06	
15:46		7.16	1.10	4.11	0.17	16.4	-134.7	6.08	
15:50		7.16	1.10	2.93	0.17	16.4	-135.5	6.08	
15:54		7.15	1.11	1.26	0.17	16.3	-136.5	6.08	
15:58		7.15	1.11	0.02	0.17	16.3	-137.3	6.08	
16:02		7.16	1.11	0.02	0.18	16.2	-138.4	6.08	
16:06		7.15	1.11	0.02	0.17	16.2	-138.6	6.08	

Flow Rate: 150 mL/min
 Pump Controller Setting: 60%
 General Comments:
15:22 Start purge - Blue/Red particulate in purge water + mild sulfur odor.
16:07 - Start F.I. 16:35 Stop P.I.

Water Sample Collection Field Data Sheet

Site Name: GHHI Well I.D.: MW-09
 Sample I.D. (match bottle and COC form exactly): MW-09
 Personnel: TTB Date: 10-17-24
 Static Depth to Water (ft, btoc): 10.20 Well Total Depth (ft, btoc): _____
 Date/Time Sample Collected (match bottle and COC form exactly): 10-17-24 12:00
 Sample Method: CF - 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): 22' off bott
 Time Completed: _____ Total Purge: _____ 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)
11:02		7.05	1.80	0.53	0.63	16.3	-105.8	10.55	200
11:06		7.09	1.81	0.02	1.27	16.3	-121.5	10.55	
11:10		7.11	1.80	0.02	0.62	16.4	-128.4	10.55	
11:14		7.11	1.81	0.02	0.24	16.3	-131.7	10.55	
11:18		7.12	1.81	0.02	0.21	16.4	-133.6	10.55	
11:22		7.12	1.82	0.02	0.18	16.4	-135.2	10.55	
11:26		7.12	1.82	0.02	0.17	16.4	-136.7	10.55	
11:30		7.12	1.82	0.02	0.17	16.3	-137.5	10.55	

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

10:52 start purge - sus Purge @ 200
11:31 start fill 12:02 - stop fill

Water Sample Collection Field Data Sheet

Site Name: GHH1 Well I.D.: MW-10
 Sample I.D. (match bottle and COC form exactly): MW-10
 Personnel: AB Date: 10/16/29
 Static Depth to Water (ft, btoc): 7.10 Well Total Depth (ft, btoc):
 Date/Time Sample Collected (match bottle and COC form exactly): 10/16/29; 1740
 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): dedicated tubing
 Time Completed: 1805 Total Purge: 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)
1704		7.18	4.54	3.91	0.99	16.4	-8.1	7.26	
1708		7.24	4.20	4.47	0.25	16.5	-60.8	7.27	
1712		7.29	3.64	3.61	0.25	16.5	-81.9	7.27	COND = 4.01
1716		7.32	4.05	2.19	0.16	16.5	-97.7	7.27	
1720		7.35	4.10	1.42	0.10	16.5	-106.6	7.27	
1724		7.40	4.11	1.18	0.07	16.5	-117.0	7.27	
1728		7.46	4.08	1.33	0.08	16.5	-127.0	7.27	
1732		7.50	4.05	1.04	0.07	16.5	-136.5	7.27	
1736		7.52	4.03	1.21	0.07	16.5	-139.9	7.27	
1740		7.53	4.00	1.48	0.07	16.5	-144.8	7.27	

Flow Rate: ~200 mL/min
 Pump Controller Setting: 40%
 General Comments:

black flecks @ start of purge

Water Sample Collection Field Data Sheet

Site Name: GHH1 Well I.D.: ^{AB}~~MW-10~~ MW-11
 Sample I.D. (match bottle and COC form exactly): MW-11
 Personnel: AB Date: 10/16/29
 Static Depth to Water (ft, btoc): 14.83 Well Total Depth (ft, btoc):
 Date/Time Sample Collected (match bottle and COC form exactly): 10/16/29 ; 1620
 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): dedicated tubing
 Time Completed: 1645 Total Purge: 11 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)
1550	.8	7.13	1.54	7.78	0.83	16.0	-68.4	14.97	
1600	1.6	7.16	1.54	2.20	0.57	16.1	-99.0	14.97	
1604	2.4	7.20	1.54	1.60	0.35	16.1	-119.1	14.97	
1608	3.2	7.22	1.55	2.09	0.29	16.1	-127.2	14.97	
1612	4.0	7.23	1.56	4.00	0.24	16.1	-133.6	14.97	
1616	4.8	7.24	1.56	0.96	0.23	16.1	-138.4	14.97	
1620	5.6	7.24	1.56	0.08	0.23	16.1	-142.4	14.97	

Flow Rate: ~200 ml/min
 Pump Controller Setting: 40%
 General Comments:

Water Sample Collection Field Data Sheet

Site Name: GHHI Well I.D.: MW-12
 Sample I.D. (match bottle and COC form exactly): MW-12
 Personnel: TB Date: 10-16-24
 Static Depth to Water (ft, btoc): 7.61 Well Total Depth (ft, btoc): _____
 Date/Time Sample Collected (match bottle and COC form exactly): 10-16-24 12:00
 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): 22' at bott
 Time Completed: _____ Total Purge: _____ 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)
11:10		7.29	0.50	0.02	0.56	17.7	1.0	7.75	150
11:14		7.28	0.52	0.02	0.40	17.6	-6.8	7.75	
11:18		7.30	0.53	0.02	0.29	17.5	-13.2	7.75	
11:22		7.31	0.54	0.02	0.18	17.6	-22.0	7.75	
11:26		7.32	0.55	0.02	0.18	17.5	-24.7	7.75	
11:30		7.32	0.55	0.02	0.13	17.6	-29.7	7.75	
11:34		7.32	0.55	0.02	0.12	17.5	-33.2	7.75	
11:38		7.33	0.55	0.02	0.12	17.5	-35.2	7.75	
11:42		7.33	0.55	0.02	0.11	17.6	-38.0	7.75	

Flow Rate: 150 mL/min
 Pump Controller Setting: 60%
 General Comments:

Purge Start 10:57
11:43 - Start Fill 12:13 - Stop Fill

Water Sample Collection Field Data Sheet

Site Name: GHHI Well I.D.: MW-16
 Sample I.D. (match bottle and COC form exactly): MW-16
 Personnel: TJB Date: 10-17-24
 Static Depth to Water (ft, btoc): 5.68 Well Total Depth (ft, btoc): _____
 Date/Time Sample Collected (match bottle and COC form exactly): 10-17-24 10:00
 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): +2' off bott
 Time Completed: _____ Total Purge: _____ 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)
9:38		6.86	1.36	2.19	0.66	18.0	-95.4	5.82	200
9:42		6.89	1.37	1.25	0.33	17.9	-117.3	5.82	
9:46		6.92	1.37	0.02	0.23	18.2	-128.3	5.82	
9:50		6.93	1.37	0.02	0.20	18.2	-132.7	5.82	
9:54		6.92	1.37	0.02	0.19	18.2	-133.8	5.82	
9:58		6.93	1.36	0.02	0.19	18.2	-135.9	5.82	

Flow Rate: 200 mL/min
 Pump Controller Setting: 60%
 General Comments:
Purge Start 9:28
Start Fill 9:54 - Stop fill 10:16

Water Sample Collection Field Data Sheet

Site Name: CHH1 Well I.D.: MW-17
 Sample I.D. (match bottle and COC form exactly): MW-17
 Personnel: AB Date: 10/16/2024
 Static Depth to Water (ft, btoc): 6.94 Well Total Depth (ft, btoc): 6.94
 Date/Time Sample Collected (match bottle and COC form exactly): 10/16/24, 934
 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): dedicated tubing
 Time Completed: 955 Total Purge: 11 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)
858	1.6	7.30	0.98	2.46	1.59	17.9	96.1	6.94	
902	2.4	7.33	0.97	1.24	0.65	18.5	-120.6	6.94	
906	3.2	7.38	0.99	0.81	0.01	18.5	-145.0	6.94	
910	4.0 4.0	7.36	0.99	0.99	0.02	18.5	-157.3	6.94	
914	4.8	7.36	0.99	0.84	0.01	18.5	-169.8	6.94	
918	5.6	7.41	0.99	1.02	0.02	18.6	-173.4	6.94	
922	6.4	7.44	1.01	0.68	0.03	18.5	-181.6	6.94	
926	7.2	7.48	1.02	0.62	0.02	18.5	-186.9	6.94	
930	8.0	7.50	1.03	0.72	0.04	18.5	-191.7	6.94	
934	8.8	7.52	1.03	1.02	0.03	18.6	-194.5	6.94	

Flow Rate: 200ml/min
 Pump Controller Setting: ~40%
 General Comments: _____

Water Sample Collection Field Data Sheet

Site Name: GHHI Well I.D.: MW-18
 Sample I.D. (match bottle and COC form exactly): MW-18
 Personnel: AB Date: 10/16/24
 Static Depth to Water (ft, btoc): 7.22 Well Total Depth (ft, btoc):
 Date/Time Sample Collected (match bottle and COC form exactly): 10/16/24; 1032
 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): dedicated tubing
 Time Completed: 1055 Total Purge: 11 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)
1009	0.8	7.24	1.68	4.53	0.02	15.8	-108.3	7.24	
1012	1.6	7.25	1.65	2.56	0.01	15.9	-118.3	7.24	
1016	2.4	7.19	1.70	2.84	0.04	16.0	-119.9	7.23	
1020	3.2	7.18	1.69	2.77	0.02	16.0	-121.2	7.23	
1024	4.0	7.16	1.69	1.79	0.01	16.0	-122.2	7.23	
1028	4.8	7.17	1.69	1.99	0.02	16.0	-123.1	7.23	
1032	5.6	7.17	1.69	1.39	0.02	16.0	-123.7	7.23	

Flow Rate: ~200 mL/min
 Pump Controller Setting: 40°
 General Comments:

floating black particulate @ start of purge

Water Sample Collection Field Data Sheet

Site Name: GHHI Well I.D.: MW-19
 Sample I.D. (match bottle and COC form exactly): MW-19
 Personnel: TPB Date: 10-16-24
 Static Depth to Water (ft, btoc): 6.22 Well Total Depth (ft, btoc): _____
 Date/Time Sample Collected (match bottle and COC form exactly): 10-16-24 13:30
 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): ~2' off bott
 Time Completed: _____ Total Purge: _____ 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)
12:40		6.73	1.97	0.27	0.34	16.2	-66.7	6.26	200
12:44		6.73	1.97	0.02	0.34	16.1	-69.5	6.26	
12:48		6.74	1.97	0.02	0.32	16.0	-71.7	6.26	
12:52		6.75	1.97	0.02	0.30	15.9	-74.1	6.26	
12:56		6.75	1.97	0.02	0.31	15.9	-76.5	6.26	
13:00		6.75	1.97	0.02	0.30	15.9	-77.9	6.26	

Flow Rate: 200 ml/min
 Pump Controller Setting: 60%

General Comments:
Purge start 12:28
13:01 Start fill - 13:35 Stop fill

Water Sample Collection Field Data Sheet

Site Name: GHHI Well I.D.: MW-20
 Sample I.D. (match bottle and COC form exactly): MW-20
 Personnel: AB Date: 10/16/24
 Static Depth to Water (ft, btoc): 5.96 Well Total Depth (ft, btoc):
 Date/Time Sample Collected (match bottle and COC form exactly): 10/16/24, 1300
 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): dedicated tubing
 Time Completed: 1325 Total Purge: 11 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)
1236	0.8	7.01	1.31	100.7	2.91	16.3	-110.1	5.97	
1240	1.4	7.11	1.18	81.3	2.31	16.3	-160.9	5.97	
1244	2.4	7.31	1.10	22.6	0.89	16.2	-180.1	5.97	
1248	3.2	7.32	1.09	9.25	0.82	16.0	-184.8	5.97	
1252	4.0	7.36	1.09	5.53	0.85	16.2	-189.9	5.97	
1256	4.8	7.33	1.09	3.25	0.91	16.2	-191.7	5.97	
1300	5.6	7.34	1.09	2.11	0.83	16.2	-193.1	5.97	

Flow Rate: 200 mL/min
 Pump Controller Setting: ~409
 General Comments:

Water Sample Collection Field Data Sheet

Site Name: GHH1 Well I.D.: MW-27
 Sample I.D. (match bottle and COC form exactly): MW-27
 Personnel: AB Date: 10/17/24
 Static Depth to Water (ft, btoc): 5.25 Well Total Depth (ft, btoc): _____
 Date/Time Sample Collected (match bottle and COC form exactly): 10/17/24; 1100
 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): _____
 Time Completed: 1122 Total Purge: _____ Units: _____

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)
1026		6.71	3.57	15.7	3.91	16.7	5.3	5.65	
1030		6.77	3.45	10.1	6.1	16.8	-35.2	5.71	
1034		6.72	3.45	84.7	0.42	16.7	-35.9	5.71	
1038		6.71	3.47	52.6	0.24	16.9	-47.0	5.71	
1042		6.71	3.46	40.0	0.19	16.9	-58.1	5.71	
1046		6.68	3.45	24.5	0.22	17.0	-65.7	5.71	
1050		6.68	3.46	17.5	0.24	17.0	-71.5	5.71	
1054		6.67	3.47	10.8	0.23	17.0	-76.5	5.71	
1058		6.66	3.47		0.24	16.9	-80.3	5.71	

Flow Rate: ~200 mL/min.
 Pump Controller Setting: _____
 General Comments: _____

Water Sample Collection Field Data Sheet

Site Name: GHFI Well I.D.: MW-28
 Sample I.D. (match bottle and COC form exactly): MW-28
 Personnel: TJB Date: 10-17-24
 Static Depth to Water (ft, btoc): 8.61 Well Total Depth (ft, btoc): _____
 Date/Time Sample Collected (match bottle and COC form exactly): 10-17-24 9:00
 Sample Method: LF - Per:
 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): ~2' off bott
 Time Completed: _____ Total Purge: _____ Units: C

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)
7:56		6.62	1.76	12.9	1.05	14.7	-158.5	8.76	920
8:04		6.77	1.72	5.25	0.46	15.1	-139.6	8.72	
8:14		6.82	1.73	3.79	0.30	14.6	-128.3	8.72	
8:18		6.83	1.73	2.44	0.29	14.7	-126.6	8.72	
8:22		6.82	1.73	1.65	0.40	14.6	-119.5	8.72	
8:26		6.87	1.68	0.77	0.19	15.7	-129.2	8.72	
8:30		6.85	1.71	0.02	0.17	15.9	-132.4	8.72	
8:34		6.85	1.72	0.02	0.17	16.0	-133.1	8.72	
8:38		6.84	1.72	0.02	0.17	16.0	-133.4	8.72	

Flow Rate: 170 mL/min
 Pump Controller Setting: 40%
 General Comments:
Purge start 7:45 - Black percolate
Start fill 8:34 9:10 Stop fill

Water Sample Collection Field Data Sheet

Site Name: GHEE Well I.D.: MW-30
 Sample I.D. (match bottle and COC form exactly): MW-30
 Personnel: MB Date: 10-16-24
 Static Depth to Water (ft, btoc): 5.95 Well Total Depth (ft, btoc): _____
 Date/Time Sample Collected (match bottle and COC form exactly): 10-16-24 18:15
 Sample Method: CF. Res.
 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): ~2' old bott
 Time Completed: _____ Total Purge: _____ 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)
16:56		7.04	3.16	1.22	0.33	16.4	-202.9	5.99	150
17:00		7.05	3.15	0.02	0.26	16.5	-221.2	5.99	
17:04		7.03	3.13	0.02	0.20	16.4	-244.6	5.99	
17:08		7.02	3.10	0.02	0.15	16.4	-262.3	5.99	
17:12		7.01	3.08	0.02	0.17	16.3	-273.4	5.99	
17:16		7.01	3.08	0.02	0.15	16.3	-289.9	5.99	
17:20		7.01	3.08	0.02	0.13	16.3	-325.7	5.99	
17:36		7.01	3.09	0.02	0.12	16.2	-279.5	5.99	
17:40		7.01	3.07	0.02	0.07	16.2	-289.1	5.99	
17:44		7.01	3.06	0.02	0.06	16.3	-295.9	5.99	
17:48		7.02	3.06	0.02	0.07	16.2	-305.2	5.99	
17:52		7.02	3.05	0.02	0.06	16.2	-309.2	5.99	
17:56		7.02	3.06	0.02	0.06	16.1	-312.6	5.99	
18:00		7.02	3.06	0.02	0.06	16.0	-313.1	5.99	

check ORP cal. x

Flow Rate: 150 ml/min
 Pump Controller Setting: 60%

General Comments:

16:44 Purge Start

18:01 - Start Fill 18:40 - Stop Fill

Water Sample Collection Field Data Sheet

GHHC

Site Name: ECDC - Wetland Sampling Well ID.: MW-31

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

Personnel: TTB

Date: 10-15-24 Static Depth to Water (ft, btoc) 5.73

Date/Time Sample Collected (match bottle and COC form exactly): 10-15-24 11:00

Sample Method: Henry Pore Water Pen

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) ~2' off bott

Time Completed: 11:30 Total Purge _____ Units _____

Field Measurements:

Time (24 hour)	Amount purged (ml)	(+/-0.1) pH	(+/-3%) COND (mS/m)	(+/-10%) TURB (NTU)	(+/-0.3) DO (mg/L)	TEMP (C°)	(+/-10 mV) ORP (mV)	Water Depth (ft, btoc)
9:38	8	7.68	1.24	8.06	0.93	13.1	83.7	6.54
9:42		7.73	1.26	5.68	1.50	13.1	57.5	6.56
9:46		7.74	1.24	4.02	0.34	13.5	23.0	6.57
9:50		7.72	1.25	4.75	0.43	12.8	10.1	6.58
9:54		7.72	1.26	5.33	0.54	13.2	-11.4	6.59
10:12		7.72	1.26	5.17	0.55	13.9	-55.7	6.80
10:16		7.73	1.26	5.24	0.59	14.0	-61.7	6.83
10:20		7.75	1.26	5.01	0.62	14.1	-65.0	6.89
10:24		7.78	1.25	4.95	0.61	14.1	-67.5	6.92
10:28		7.80	1.29	2.05	0.65	14.2	-70.1	6.97
10:32		7.81	1.26	0.02	0.62	14.1	-71.4	7.01
10:36		7.82	1.26	0.02	0.65	14.0	-72.0	7.05
10:40		7.82	1.26	0.02	0.66	14.1	-73.0	7.06

Flow Rate 80 ml/min
 Pump controller setting 25%

General Comments:
9:30 purge start - Air bubbles in water line early time - lowest possible rate.
10:41 - Start Fill

Water Sample Collection Field Data Sheet

Site Name: GHHI Well I.D.: MW-32
 Sample I.D. (match bottle and COC form exactly): MW-32
 Personnel: TJB Date: 10-16-24
 Static Depth to Water (ft, btoc): 6.35 Well Total Depth (ft, btoc): _____
 Date/Time Sample Collected (match bottle and COC form exactly): 10-16-24 15:00
 Sample Method: CF-Per.
 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): ~2' off bott
 Time Completed: _____ Total Purge: _____ Units: 2

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)
14:02		7.47	1.15	16.7	0.38	15.7	-157.7	6.38	150
14:06		7.53	1.11	18.16.19	0.19	15.7	-177.9	6.38	
14:10		7.58	1.09	4.35	0.14	15.8	-186.2	6.38	
14:14		7.58	1.08	3.71	0.13	15.8	-189.2	6.38	
14:18		7.58	1.08	3.01	0.12	15.8	-191.8	6.38	
14:22		7.59	1.07	2.33	0.12	15.9	-193.6	6.38	
14:26		7.59	1.07	1.62	0.12	15.8	-195.4	6.38	
14:30		7.59	1.07	0.02	0.11	15.8	-195.9	6.38	
14:34		7.59	1.07	0.02	0.12	15.8	-197.1	6.38	
14:38		7.59	1.07	0.02	0.11	15.8	-197.4	6.38	

Flow Rate: 150 ml/min
 Pump Controller Setting: 60%

General Comments:

13:50 Start purge - mild sulfuric odor, Replaced tubing
14:40 - Start Fill 15:08 Stop Fill

Water Sample Collection Field Data Sheet

Site Name: CHHI Well I.D.: MW-33
 Sample I.D. (match bottle and COC form exactly): MW-33
 Personnel: BB Date: 10/17/24
 Static Depth to Water (ft, btoc): 2.87 Well Total Depth (ft, btoc): _____
 Date/Time Sample Collected (match bottle and COC form exactly): 10/17/24;
 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): dedicated tubing
 Time Completed: _____ Total Purge: _____ 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)
1022	0.8	6.78	1.12	20.9	0.34	16.1	-14.1	3.25	
1026	1.6	6.87	1.12	11.8	0.08	16.2	-21.6	3.25	
1030	2.4	6.87	1.11	3.97	0.09	16.3	-20.3	3.25	
1034	3.2	6.87	1.11	2.78	0.10	16.3	-19.4	3.25	
1038	4.0	6.87	1.11	2.70	0.10	16.4	-18.5	3.25	
1042	4.8	6.86	1.11	2.70	0.10	16.4	-17.7	3.25	
1046	5.6	6.86	1.11	2.13	0.10	16.4	-16.9	3.25	

Flow Rate: ~ 200 mL/min
 Pump Controller Setting: _____
 General Comments: _____

Water Sample Collection Field Data Sheet

Site Name: C1HH1 Well I.D.: MW-30
 Sample I.D. (match bottle and COC form exactly): MW-30
 Personnel: AB Date: 10/16/24
 Static Depth to Water (ft, btoc): 8.98 Well Total Depth (ft, btoc):
 Date/Time Sample Collected (match bottle and COC form exactly): 10/16/24; 1412
 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): dedicated tubing
 Time Completed: 1436 Total Purge: 16 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)
1332	1	9.92	0.58	13.0	0.14	18.3	-112.3	9.03	
1336	2	9.44	0.63	4.89	0.01	18.3	-131.1	9.03	
1340	3	9.25	0.65	2.63	0.00	18.3	-137.1	9.03	
1344	4	9.13	0.67	2.41	0.01	18.3	-144.3	9.03	
1348	5	9.13	0.67	1.82	0.01	18.3	-149.9	9.03	
1352	6	9.05	0.68	1.55	0.01	18.3	-157.0	9.03	
1356	7	8.97	0.69	1.65	0.01	18.3	-168.0	9.03	
1400	8	8.92	0.69	0.42	0.01	18.3	-203.4	9.04	
1404	9	8.88	0.70	1.73	0.01	18.5	-222.2	9.04	pH 8.82
1408	10	8.80	0.70	0.99	0.01	18.3	-228.8	9.04	
1412	11	8.79	0.70	1.11	0.01	18.3	-230.1	9.04	

Flow Rate: 250 mL/min
 Pump Controller Setting: 452
 General Comments:

Water Sample Collection Field Data Sheet

Site Name: GHH1 Well I.D.: MW-37
 Sample I.D. (match bottle and COC form exactly): MW-37
 Personnel: AB Date: ~~10/15/24~~ 10/15/24
 Static Depth to Water (ft, btoc): 9.43 Well Total Depth (ft, btoc): _____
 Date/Time Sample Collected (match bottle and COC form exactly): 10/15/24; 1610
 Sample Method: LF Peri
 Water level meter, pump, and tubing decontaminated prior: Yes No
 Sample QC: Field Duplicate Yes No Duplicate Sample I.D.: MWT-37
 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
 Time Completed: _____ Total Purge: _____ 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)
1546		7.15	1.15	0.39	0.04	18.2	7.6	9.50	
1550		7.13	1.05	12.2	0.02	18.5	6.5	9.50	
1554		7.17	1.02	8.16	0.01	18.3	6.5	9.50	
1558		7.18	1.02	6.82	0.01	18.3	6.5	9.50	
1602		7.1	1.02	5.11	0.01	18.2	6.6	9.50	
1606		7.19	1.00	6.69	0.01	18.0	7.1	9.50	
1610		7.21	1.00	7.46	0.01	18.1	6.7	9.50	

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

Water Sample Collection Field Data Sheet

Site Name: GHHC Well I.D.: MW-38
 Sample I.D. (match bottle and COC form exactly): MW-38
 Personnel: TTB Date: 10-16-24
 Static Depth to Water (ft, btoc): 10.47 Well Total Depth (ft, btoc): 14.00
 Date/Time Sample Collected (match bottle and COC form exactly): 10-16-24 10:30
 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): due to drawdown, tubing moved to bottom 1'
 Time Completed: _____ Total Purge: _____ 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)
7:40		11.20	1.26	65.8	1.15	16.2	80.7	11.83	90
7:44		11.00	1.21	43.5	0.02	16.8	66.7	12.13	
7:48		10.81	1.15	32.9	0.02	16.8	56.2	12.15	
7:52		10.17	1.10	26.5	0.02	16.6	41.4	12.16	
7:56		10.16	1.08	24.2	0.02	16.7	33.2	12.29	
8:00		10.10	1.06	15.7	0.02	16.8	17.9	12.34	
8:04		9.93	1.07	11.7	0.02	17.2	-40.5	12.68	
8:18		9.76	1.11	10.7	0.02	17.0	-45.7	12.75	
8:40		9.33	1.23	3.48	0.15	17.0	-57.4	12.68	
8:44		9.32	1.22	2.45	0.14	17.0	-60.2	12.70	
8:48		9.37	1.22	2.84	0.30	17.1	-61.0	12.77	
8:52		9.29	1.24	2.62	0.35	17.1	-59.1	12.82	
8:56		9.26	1.25	1.86	0.48	17.1	-58.5	12.84	
9:00		9.21	1.26	0.02	0.55	17.1	-57.0	12.87	
9:04		9.15	1.27	0.02	0.58	17.1	-56.3	12.90	
9:08		9.11	1.29	0.02	0.07	17.2	-56.0	12.94	
9:52		9.00	1.30	0.02	0.13	16.9	-69.8	13.27	

Flow Rate: 90 ml/min
 Pump Controller Setting: 20%
 General Comments:

Purge start 7:19 - lowest possible flow rate. Purge water has reddish/Brown color

9:53 - Start Fill 10:50 - Stop Fill

Final measurement



Water Sample Collection Field Data Sheet

Site Name: GHHI Well I.D.: SG-02
 Sample I.D. (match bottle and COC form exactly): SG-02
 Personnel: TJB Date: 10-17-24
 Static Depth to Water (ft, btoc): N/A Well Total Depth (ft, btoc): N/A
 Date/Time Sample Collected (match bottle and COC form exactly): 10-17-24 12:15
 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): 28" below surface
 Time Completed: _____ Total Purge: N/A Units: N/A

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)
12:15		7.67	1.45	7.03	8.94	12.4	78.5	N/A	N/A
<div style="font-size: 2em; font-family: cursive;"> Surface Water Sample Only </div>									

Flow Rate: N/A
 Pump Controller Setting: N/A

General Comments:

- Approx 1.5' of water @ or near gauge location

Water Sample Collection Field Data Sheet

Site Name: GHHI Well I.D.: SG-04R
Sample I.D. (match bottle and COC form exactly): SG-04R
Personnel: MB Date: 10-17-24
Static Depth to Water (ft, btoc): N/A Well Total Depth (ft, btoc): N/A
Date/Time Sample Collected (match bottle and COC form exactly): 10-17-24; 1245
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): _____
Time Completed: _____ Total Purge: N/A Units: N/A

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)
1245		8.35	2.00	8.89	9.56	13.1	55.1		
Surface Water Sample Only									

Flow Rate: N/A
Pump Controller Setting: N/A
General Comments:
~1ft of H₂O @ sample location

Water Sample Collection Field Data Sheet

Site Name: GHHI Well I.D.: WV 56-05
 Sample I.D. (match bottle and COC form exactly): 56-05
 Personnel: TTB Date: 10-17-24
 Static Depth to Water (ft, btoc): N/A Well Total Depth (ft, btoc): N/A
 Date/Time Sample Collected (match bottle and COC form exactly): 10-17-24 1305
 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): _____
 Time Completed: _____ Total Purge: N/A Units: N/A

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)
1305		7.51	1.06	48.3	4.59	13.8	57.7		
Surface Water Sample Only									

Flow Rate: N/A
 Pump Controller Setting: N/A
 General Comments:
~4" of H₂O @ sample point

Water Sample Collection Field Data Sheet

Site Name: GHHI Well I.D.: SG-06
 Sample I.D. (match bottle and COC form exactly): SG-06
 Personnel: TJB Date: 10-17-24
 Static Depth to Water (ft, btoc): N/A Well Total Depth (ft, btoc): N/A
 Date/Time Sample Collected (match bottle and COC form exactly): 10/17/24; 1325
 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): _____
 Time Completed: 1340 Total Purge: N/A Units: N/A

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)
1325		8.20	0.77	6.37	7.68	15.1	47.6		
<div style="border: 1px solid black; padding: 10px; width: fit-content; margin: 0 auto;">Surface Water Sample Only</div>									

Flow Rate: N/A
 Pump Controller Setting: N/A
 General Comments:

taken @ SG-07 & location

Water Sample Collection Field Data Sheet

Site Name: GHHI Well I.D.: MW-34
 Sample I.D. (match bottle and COC form exactly): MW-34
 Personnel: AB Date: 10/17/24
 Static Depth to Water (ft, btoc): 4.99 Well Total Depth (ft, btoc): _____
 Date/Time Sample Collected (match bottle and COC form exactly): 10/17/24, 844
 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): dedicated tubing
 Time Completed: 905 Total Purge: 11 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)
820	0.8	6.48	1.92	12.8	2.59	14.8	-92.3	5.08	
824	1.6	6.52	1.90	5.46	1.52	15.1	-110.3	5.08	
828	2.4	6.50	1.90	3.31	1.22	15.1	-113.8	5.09	
832	3.2	6.50	1.90	4.06	0.85	15.1	-116.8	5.09	
836	4.0	6.50	1.90	2.96	0.80	15.1	-120.2	5.09	
840	4.8	6.49	1.90	3.00	0.83	15.1	-120.8	5.09	
844	5.6	6.49	1.90	2.76	0.82	15.2	-122.7	5.09	

Flow Rate: ~200 mL/min
 Pump Controller Setting: _____
 General Comments: _____

WL Sweep - C1111 Oct 15 2024

MW	depth to H ₂ O	time
01	7.44	921
02	16.02	912
03	13.44	944
04	11.70	942
05	7.34	925
06	9.98	906
07	6.81	1025
08	5.82	840
09	10.16	914
10	6.93 6.93	917
11	14.84	908
12	7.53	949
13	6.41	954
14	6.58	958
15	12.35	1036
16	5.43	1033
17	6.89	1025
18	7.13	932
19	6.10	936
20	5.90	1022
21		
22 (29)	3.63	846
23	7.51	1048
24	7.87	1054
25	6.59	1046
26	6.41	1057
27	5.19	827
28	8.39	830
29		
30	5.74	854
31	5.71	857
32	6.31	850

WL Sweep - C1111 AT OCT 15 2024

MW/SG depth to H₂O time

33	5.00	805
34	2.77	810
35	9.29	819
36	8.96	1016
37	9.44	1005
38	10.46	999
39	7.12	1009
40	5.61	1011

SG-01	DRY	910	915
SG-02	1.42	858	
SG-03			
SG-04	0.32	929	
SG-05	DRY; 1.22@ +ducer		
SG-06	DRY		
SG-07			

STW-1 (north)			
STW-2 (south house)	6.70	1031	dmg
STW-3 (pump house)	18.07	952	

Appendix B

Data Validation Reports

Data Verification & Validation Report

Grand Haven-Harbor Island

Sampling Event (dates and purpose): Quarterly Assessment Monitoring

Data Package Number: 24G0879, 24G0880

Lab Report Date: 8/23/2024

Data Validator: Andrew Byks

Data Validation Completion Date: 9/4/2024

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-03	X
✓	✓	Surface Water	SG-04R	X
✓	✓	Surface Water	SG-05	X
✓	✓	Surface Water	SG-06	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	24J1137-01	10/15/2024	X	X	X	X	X	X	
MW-03	GW	24J1137-02	10/15/2024	X	X	X	X	X	X	
MW-04	GW	24J1137-03	10/15/2024	X	X	X	X	X	X	
MW-31	GW	24J1137-04	10/15/2024	X	X	X	X	X	X	
MW-37	GW	24J1137-05	10/15/2024	X	X	X	X	X	X	
MW-07	GW	24J1137-06	10/15/2024	X	X	X	X	X	X	
MWT-03	GW	24J1137-07	10/15/2024	X	X	X	X	X	X	
MWT-37	GW	24J1137-08	10/15/2024	X	X	X	X	X	X	
MW-17	GW	24J1137-09	10/16/2024	X	X	X	X	X	X	
MW-18	GW	24J1137-10	10/16/2024	X	X	X	X	X	X	
MW-01R	GW	24J1137-11	10/16/2024	X	X	X	X	X	X	
MW-20	GW	24J1137-12	10/16/2024	X	X	X	X	X	X	
MW-36	GW	24J1137-13	10/16/2024	X	X	X	X	X	X	
MW-06	GW	24J1137-14	10/16/2024	X	X	X	X	X	X	
MW-11	GW	24J1137-15	10/16/2024	X	X	X	X	X	X	
MW-10	GW	24J1137-16	10/16/2024	X	X	X	X	X	X	
MW-38	GW	24J1137-17	10/16/2024	X	X	X	X	X	X	
MW-12	GW	24J1137-18	10/16/2024	X	X	X	X	X	X	
MW-19	GW	24J1137-19	10/16/2024	X	X	X	X	X	X	
MW-32	GW	24J1137-20	10/16/2024	X	X	X	X	X	X	
MW-08	GW	24J1137-21	10/16/2024	X	X	X	X	X	X	
MW-30	GW	24J1137-22	10/16/2024	X	X	X	X	X	X	
MW-34	GW	24J1137-23	10/17/2024	X	X	X	X	X	X	
MW-33	GW	24J1137-24	10/17/2024	X	X	X	X	X	X	
MW-09	GW	24J1137-25	10/17/2024	X	X	X	X	X	X	
MW-27	GW	24J1137-26	10/17/2024	X	X	X	X	X	X	
MW-28	GW	24J1137-27	10/17/2024	X	X	X	X	X	X	
MW-16	GW	24J1137-28	10/17/2024	X	X	X	X	X	X	
SG-02	SW	24J1137-29	10/17/2024	X	X	X	X	X	X	
SG-04R	SW	24J1137-30	10/17/2024	X	X	X	X	X	X	
SG-05	SW	24J1137-31	10/17/2024	X	X	X	X	X	X	
SG-06	SW	24J1137-32	10/17/2024	X	X	X	X	X	X	

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

Any planned sampling or analysis NOT completed? If yes, explain: N/A

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			
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 24 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			RLs as requested				RLs for the following were not met B – 19 samples (results > RL) Fe – 19 sample (results > RL) Li – 22 samples (results > RL) Na – 20 samples (results > RL) SO4 – 5 samples (results > RL, or ND < RL) TDS – all samples (results > RL)
	X				X		
			MDLs<RLs	X			
			MDLs<GPS	X			
QC Validation							
Evaluate Accuracy							
Matrix Spike (Recovery)	X		See “Minimum QC Procedures for Project Parameters” table		X		T158063 – B, K recovery out of control low
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			

Other instances of nonconformance to QC control limits noted on case narrative:

Calcium matrix spikes were outside of control limits in T158063-MS1 and calcium, magnesium, and sodium matrix spikes were outside of control limits in T158063-MS2 and T158238-MS2. Because the background concentration of these analytes is greater than 4x the spike amount, no qualification was needed.

Comments:

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

Boron, Barium, Calcium, and Lead in sample MW-04 required qualification as estimated with low bias (J-) or estimated but not detected (UJ) due to low recovery in an associated laboratory prepared matrix spike sample.

Beryllium was not detected in parent sample MW-03 but was detected in field duplicate MWT-03. Beryllium in parent sample MW-03 required qualification as estimated but not detected (UJ) and in field duplicate MWT-03 as estimated with high bias (J+).

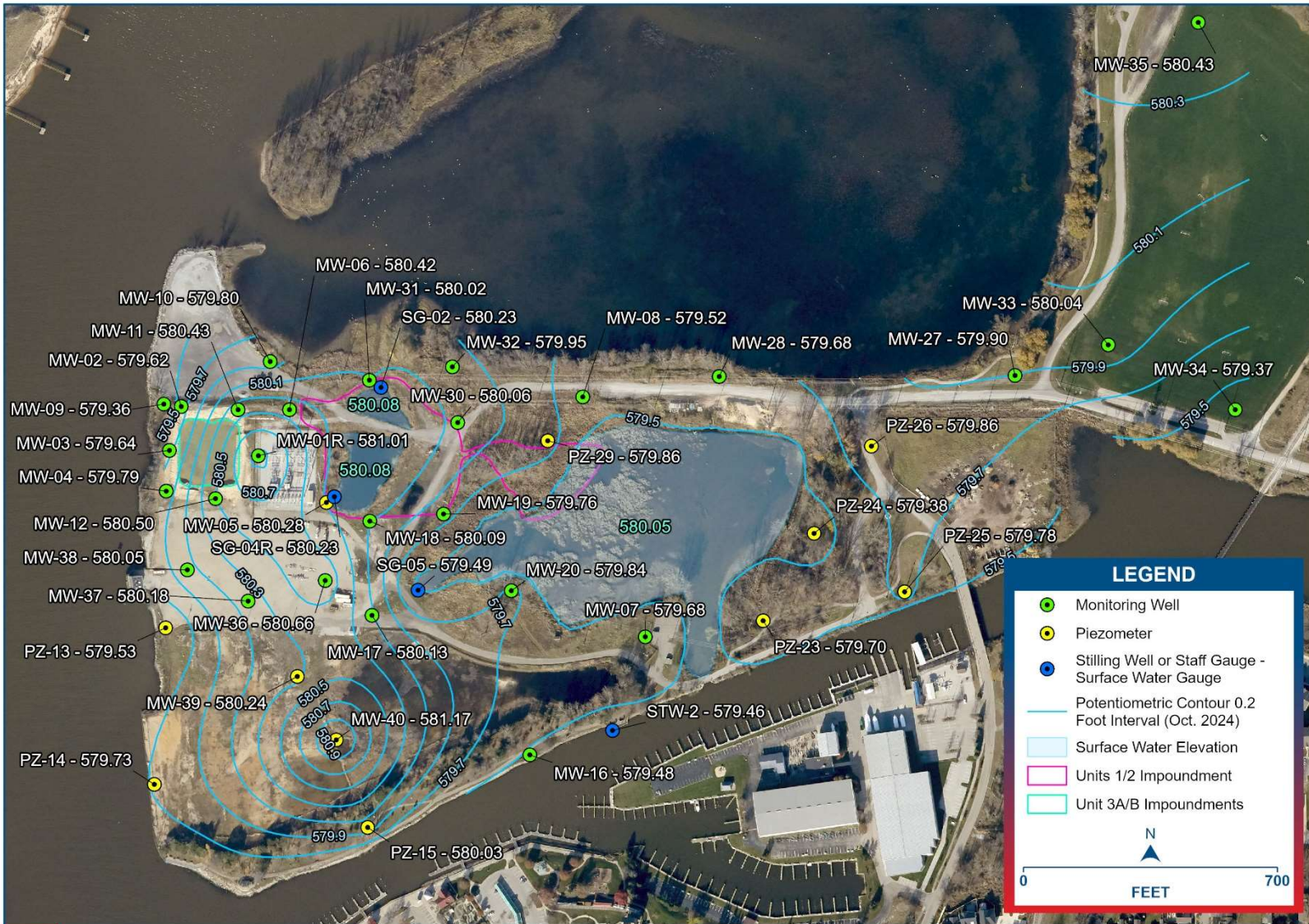
The RPDs of chromium, cobalt, copper, nickel, vanadium, Rad-228, and combined Rad-226+228 between parent sample MW-03 and field duplicate MWT-03 were outside of control limits. Chromium, cobalt, nickel, and vanadium required qualification as estimated with low bias (J-) in parent sample MW-03 and as estimated with high bias (J+) in field duplicate MWT-03. Copper, Radium-228, and combined Radium 226+228 required qualification as estimated with high bias (J+) in parent sample MW-03 and as estimated with low bias (J-) in field duplicate MWT-03.

Silver was detected in parent sample MW-37 but not detected in field duplicate MWT-37. Silver in parent sample MW-37 required qualification as estimated with high bias (J+) and in field duplicate MWT-37 as estimated but not detected (UJ).

The RPDs of Rad-226, Rad-228, and consequently, combined Rad-226+228, were outside of control limits. Rad-226, Rad-228, and combined Rad-226+228 in parent sample MW-37 required qualification as estimated with low bias (J-, or UJ if non-detect) and in field duplicate MWT-37 required qualification as estimated with high bias (J+, or UJ if non-detect).

Appendix C

Potentiometric Surface Map



Appendix D

Analytical Data Tables

Sample Location:			MW-01R												
Compliance Phase:			Background Monitoring						Assessment Monitoring						
Sample Date:			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
Sample Type:			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
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	--	2.89
Conductivity	uS/cm	N	--	--	--	--	--	--	--	--	--	--	--	3.13	--
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
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
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
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
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
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
Calcium	mg/L	T	240	200	290	310	280	240	210 D	160 D	400 D	400 D	350 D	160 D	160 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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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	0.0037 J	0.00034 J
Radium 226 and 228	pCi/L	T	< 0.656 UJ	< 0.828 UJ	1.06	1.28	< 0.737 U	< 1.1 UJ	0.601	1.26	< 0.674 U	1.09	< 0.682 U	< 1.23 UG	1.48
Radium-226	pCi/L	T	< 0.176 UJ	< 0.125 UJ	< 0.139 UJ	< 0.212 UJ	< 0.233 UJ	< 0.322 UJ	< 0.164 UJ	0.152	< 0.182 UJ	< 0.137 UJ	< 0.21 UJ	0.218	< 0.268 UJ
Radium-228	pCi/L	T	< 0.656 UJ	< 0.828 UJ	0.982	1.23	< 0.737 UJ	< 1.1 UJ	< 0.534 UJ	1.11	< 0.674 UJ	1.05	< 0.682 UJ	< 1.23 UG	1.37 G
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
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.00038 U	< 0.00038 U	< 0.00038 U	< 0.00038 U	< 0.00038 UD	< 0.00038 UD	< 0.000075 U	< 0.00038 UD	< 0.000075 U	< 0.00038 UD	< 0.00038 UD
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	< 4.0 UD	< 4.0 U	< 4.0 U	< 4.0 U	5.0
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
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
Nickel	mg/L	T	0.0015	0.0025	0.0018	0.0026	0.0018	0.0013	0.0053	0.0027	0.0021	0.022	0.0012	0.0020	0.0019
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	< 0.00025 UD	< 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
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
Additional Parameters															
Bicarbonate Alkalinity	mg/L	T	1100	1200	870	830	920	1100	1300 D	1400	1700 D	560 D	820 D	1500	1400
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
Magnesium	mg/L	T	110	92	110	110	120	110	100 D	96 D	100 D	110 D	120 D	100 D	99 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
Sodium	mg/L	T	330	370	250	240	280	380	430 D	430 D	500 D	140 D	220 D	430 D	400 D
Total Alkalinity	mg/L	T	1100	1200	870	830	920	1100	1300 D	1400	1700 D	560 D	820 D	1500	1400

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.

Sample Location:			MW-02												
Compliance Phase:			Background Monitoring						Assessment Monitoring						
Sample Date:			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
Sample Type:			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
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	--	4.2
Conductivity	uS/cm	N	--	--	--	--	--	--	--	--	--	--	--	4.42	--
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
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
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
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
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
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
Calcium	mg/L	T	210	180	210	240	190	210	210 D	180 D	190 D	220 D	210 D	200 D	190 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
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
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
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
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
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
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
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
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
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	0.047	0.033
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
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
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
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
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
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
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	1.95	2.24	< 1.21 U	< 1.21 U	1.33
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
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
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
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
Total Suspended Solids	mg/L	T	67	58	58	56	100	90	20 D	16 D	6.1 D	59	40	53	6.0
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
Iron	mg/L	T	23	22	24	30	27	27	24	20	18 D	31 D	25	22 D	19 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
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
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
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
Additional Parameters															
Bicarbonate Alkalinity	mg/L	T	1900	2000	1900	1800	1800	1900	460	2100	2300	1800 D	2000	2200	2200
Carbonate Alkalinity	mg/L	T	< 1.6 U	< 1.6 U	< 0.16 U	< 0.16 U	< 0.31 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
Magnesium	mg/L	T	63	59	70	78	68	71	62	58 D	57 D	77 D	68	63 D	60 D
Potassium	mg/L	T	50	44	53	45	41	44	56 J	46 D	47 D	50 D	53	48 D	48 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
Total Alkalinity	mg/L	T	1900	2000	1900	1800	1800	1900	460	2100	2300	1800 D	2000	2200	2200

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.

Sample Location:			MW-03												
Compliance Phase:			Background Monitoring						Assessment Monitoring						
Sample Date:			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
Sample Type:			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	
Constituent	Unit	Fraction													
Field Parameters															
Conductivity	mS/cm	N	0.344	3.52	3.43	2.459	3.15	3.08	3.19	3.19	3.03	2.98	2.81	--	2.69
Conductivity	uS/cm	N	--	--	--	--	--	--	--	--	--	--	--	2.87	--
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
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
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
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
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
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
Calcium	mg/L	T	390	290	400	410	360	400	430 D	350 D	380 D	360 D	350 D	340 D	330 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
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
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
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
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
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
Barium	mg/L	T	0.43	0.13	0.50	0.30	0.34	0.43	0.38 D	0.38	0.41	0.42 D	0.36	0.27	0.27
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
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
Chromium, Total	mg/L	T	0.0046	0.0061	0.0049	0.0073	0.0033	0.0037	0.0060	0.0053	0.0037	0.0052	0.0052	0.0045	0.0034 J-
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-
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
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
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
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
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
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-
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
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-
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
Thallium	mg/L	T	< 0.000075 U	< 0.000075 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	< 0.00038 UD
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
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+
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
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-
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	< 0.00025 UD	< 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-
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
Additional Parameters															
Bicarbonate Alkalinity	mg/L	T	1800	690	1600	1200	1100	1100	1300 D	1300	1400 D	1300	1200	1300	1400
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
Magnesium	mg/L	T	210	91	220	220	210	220	210 D	200 D	200 D	210 D	200 D	190 D	180 D
Potassium	mg/L	T	20	18	20	15	20	17	20	18 D	18 D	19 D	16	17	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
Total Alkalinity	mg/L	T	1800	690	1600	1200	1100	1100	1300 D	1300	1400 D	1300	1200	1300	1400

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:

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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.

Sample Location:			MW-04												
Compliance Phase:			Background Monitoring						Assessment Monitoring						
Sample Date:			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
Sample Type:			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	
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	--	2.44
Conductivity	uS/cm	N	--	--	--	--	--	--	--	--	--	--	--	2.79	--
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
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
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
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
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
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-
Calcium	mg/L	T	310	360	350	390	340	400	410 D	330 D	360 D	350 D	430 D	380 D	340 J-
Chloride	mg/L	T	180	300	200	220	220	200	190 D	160 D	150 D	130 D	120 D	120 D	96 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
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
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
Appendix IV															
Antimony	mg/L	T	0.00071 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
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
Barium	mg/L	T	0.11	0.46	0.13	0.12	0.10	0.12	0.15 D	0.12	0.11 D	0.12	0.12	0.084	0.085
Beryllium	mg/L	T	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	0.000066 J	0.000054 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 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.00038 UD	< 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	0.0044	0.0027	0.0026	0.0041	0.0047	0.0051
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
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
Lead	mg/L	T	< 0.00022 U	< 0.00022 U	< 0.0011 U	< 0.00022 U	< 0.0011 U	< 0.00050 U	< 0.00050 U	< 0.00010 U	< 0.0001 U	< 0.00050 UD	< 0.00010 U	< 0.00050 UD	< 0.00050 U
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
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
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
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
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
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
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
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.00038 U	< 0.00038 U	< 0.00038 U	< 0.00038 U	< 0.00038 U	< 0.000075 U	< 0.000075 U	< 0.00038 UD	< 0.000075 U	< 0.00038 UD	< 0.00038 UD
Total Suspended Solids	mg/L	T	10	8.0	11	10	11	12	8.1 D	< 4.0 U	8	< 4.0 U	15	5.0	4.0
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
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
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
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	< 0.000050 U	< 0.00025 UD	< 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
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 U	0.0015	< 0.0012 U	< 0.0012 U	< 0.0012 U	0.0051
Additional Parameters															
Bicarbonate Alkalinity	mg/L	T	800	1800	720	690	720	740	730	750	780	680 D	700	710	740
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	< 0.16 U	< 0.31 UD	< 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
Potassium	mg/L	T	21	20	20	18	21	24	26	23 D	24 D	21 D	23	24	23 J-
Sodium	mg/L	T	83	110	84	83	89	100	93 D	87 D	83 D	80 D	90	84	74 D
Total Alkalinity	mg/L	T	800	1800	720	690	720	740	730	750	780	680 D	700	710	740

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.

Sample Location:			MW-06												
Compliance Phase:			Background Monitoring						Assessment Monitoring						
Sample Date:			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
Sample Type:			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
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	--	1.9
Conductivity	uS/cm	N	--	--	--	--	--	--	--	--	--	--	--	1.91	--
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
Oxidation Reduction Potential	mV	N	38.1	-139	-192.2	-148.9	-173.5	-184.3	-182.7	-80.3	-176.8	145.9	-139.9	-234.1	-171.6
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
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
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
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
Calcium	mg/L	T	220	230	250	310	250	270	290 D	230 D	240 D	280 D	250 D	250 D	220 D
Chloride	mg/L	T	160	120	110	82	57	73	71 D	76 D	79 D	18 D	13 D	31 D	57 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
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
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
Appendix IV															
Antimony	mg/L	T	0.00075 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
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
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
Beryllium	mg/L	T	< 0.000054 U	< 0.000052 U	0.000052 J	< 0.000052 U	< 0.000052 U	< 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	< 0.00075 U	< 0.00075 U	< 0.00075 U	< 0.00075 U	< 0.00075 U	< 0.00075 U	< 0.00075 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
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
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
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
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
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
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
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
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
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
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
Thallium	mg/L	T	< 0.000076 U	< 0.000075 U	< 0.00038 U	< 0.00038 U	< 0.00038 U	< 0.00038 U	< 0.00075 U	< 0.00075 U	< 0.00075 U	< 0.00038 UD	< 0.00075 U	< 0.00075 U	< 0.00075 U
Total Suspended Solids	mg/L	T	36	45	42	65	53	43	41 D	37 D	48	73	54 D	27	34
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
Iron	mg/L	T	15	17	16	26	19	18	18	14	19 D	31 D	26	17	12 D
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	< 0.00065 U	0.00095 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	< 0.000050 U	< 0.00025 UD	< 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
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
Additional Parameters															
Bicarbonate Alkalinity	mg/L	T	1100	1100	1000	1100	1100	990	1100 D	1100	1000 D	980 D	1100	1100	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
Magnesium	mg/L	T	110	95	100	96	90	100	100 D	90 D	89 D	81 D	78	81	97 D
Potassium	mg/L	T	32	24	23	20	20	23	26	24 D	26 D	20 D	18	22	25 D
Sodium	mg/L	T	110	78	84	69	63	82	87	77 D	71 D	49 D	49	64	88 D
Total Alkalinity	mg/L	T	1100	1100	1000	1100	1100	990	1100 D	1100	1000 D	980 D	1100	1100	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:

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 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.

Sample Location:			MW-07												
Compliance Phase:			Background Monitoring						Assessment Monitoring						
Sample Date:			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
Sample Type:			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	
Constituent	Unit	Fraction													
Field Parameters															
Conductivity	mS/cm	N	0.46	1.21	1.206	1.209	1.25	1.24	1.25	1.25	1.23	1.25	1.27	--	1.24
Conductivity	uS/cm	N	--	--	--	--	--	--	--	--	--	--	--	1.29	--
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
Oxidation Reduction Potential	mV	N	57.2	-88	-103.1	-143.9	-68	-109.4	-140.5	-17.2	-141	-74.7	-60.1	-176.7	-134.1
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
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
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
Appendix III															
Boron	mg/L	T	13	11	12	11	10	12	11 J+	11	12 D	11 D	13 D	10	11 D
Calcium	mg/L	T	140	140	140	150	130	150	160 D	120 D	140 D	140 D	150 D	150 D	130 D
Chloride	mg/L	T	15	15	14	14	14	13	13 D	13 D	14 D	14 D	14 D	14 D	15 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
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
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
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	< 0.00010 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
Barium	mg/L	T	0.33	0.34	0.36	0.30	0.25	0.34	0.35	0.34	0.38	0.35	0.34	0.36	0.37
Beryllium	mg/L	T	< 0.000052 U	< 0.000052 U	0.000062 J	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	0.000066 J	0.000055 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	< 0.000032 U	< 0.000032 U	< 0.000032 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	0.00034	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
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
Lead	mg/L	T	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00010 U	< 0.00010 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
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
Molybdenum	mg/L	T	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 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
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
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
Selenium	mg/L	T	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	0.00010 J	< 0.00010 U	< 0.00010 U	< 0.00010 U	0.00023 J	< 0.00010 U	0.00011 J	0.00017 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 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
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
Iron	mg/L	T	16	13	13	15	14	19	17	14	18 D	15 D	15	17	17 D
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
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
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
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
Additional Parameters															
Bicarbonate Alkalinity	mg/L	T	660	580	630	610	640	630	620	620	600 D	610 D	630	640	620
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
Magnesium	mg/L	T	37	37	37	38	38	40	36	35 D	38 D	38 D	40	36	35 D
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
Sodium	mg/L	T	53	47	47	47	59	57	56	48 D	51 D	52 D	57	55	47 D
Total Alkalinity	mg/L	T	660	580	630	610	640	630	620	620	600 D	610 D	630	640	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.

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.

Sample Location:			MW-08												
Compliance Phase:			Background Monitoring						Assessment Monitoring						
Sample Date:			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
Sample Type:			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
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	--	1.11
Conductivity	uS/cm	N	--	--	--	--	--	--	--	--	--	--	--	0.99	--
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
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
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
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
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
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
Calcium	mg/L	T	150	160	150	150	130	140	150 D	120 D	130 D	120 D	130 D	120 D	130 D
Chloride	mg/L	T	17	23	35	30	28	25	29 D	30 D	17 D	25 D	24 D	30 D	99 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
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
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
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
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
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
Beryllium	mg/L	T	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 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	< 0.000032 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	0.00067	0.00093	0.0015	0.0011	0.00084	0.0011	0.00094	0.00087	0.00061	0.00070	0.00075	0.00071	0.00063
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
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
Lead	mg/L	T	< 0.00022 U	< 0.00022 U	0.00086	< 0.00022 U	0.00022 J	< 0.00010 U	< 0.00010 U	< 0.00010 U	< 0.0001 U	0.00011 J	< 0.00010 U	< 0.00010 U	0.00029
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
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
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
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
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
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
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
Thallium	mg/L	T	< 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	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	62	55	49	42	36	31	30	20	43	46	36 D	18	31
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
Iron	mg/L	T	32	30	21	22	18	18	15	13	22 D	22 D	19	14	15 D
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
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
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
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
Additional Parameters															
Bicarbonate Alkalinity	mg/L	T	540	510	560	470	510	490	480	480	460 D	440 D	440	460	410
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
Magnesium	mg/L	T	27	30	33	27	29	28	26	26 D	22 D	23 D	24	25	24 D
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
Sodium	mg/L	T	21	27	38	33	35	35	40	36 D	23 D	32 D	32	36	41 D
Total Alkalinity	mg/L	T	540	510	560	470	510	490	480	480	460 D	440 D	440	460	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:

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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.

Sample Location:			MW-09												
Compliance Phase:			Background Monitoring						Assessment Monitoring						
Sample Date:			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
Sample Type:			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
Constituent	Unit	Fraction													
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	--	1.82
Conductivity	uS/cm	N	--	--	--	--	--	--	--	--	--	--	--	2.16	--
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
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
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
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
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
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
Calcium	mg/L	T	270	230	300	400	390	410	430 D	330 D	310 D	420 D	500 D	430 D	310 D
Chloride	mg/L	T	15	17	18	16	12	11	11 D	12 D	12 D	18 D	25 D	25 D	25 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
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
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
Appendix IV															
Antimony	mg/L	T	0.00073 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
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
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
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
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	< 0.000075 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
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
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
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
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
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	0.0021	< 0.00016 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
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
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
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
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
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 U	< 0.00038 U	< 0.00038 UD	< 0.00038 UD	< 0.00038 UD	< 0.00038 UD
Total Suspended Solids	mg/L	T	45	51	52	50	56	52	46	48	39	47	50 D	57 D	47
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
Iron	mg/L	T	17	19	24	25	25	19	16	15 D	22 D	26	20	16 D	
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
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	< 0.000050 U	< 0.00025 UD	< 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
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
Additional Parameters															
Bicarbonate Alkalinity	mg/L	T	750	710	750	620	610	400	720	660	780 D	610 D	600	630	790
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
Magnesium	mg/L	T	38	36	44	50	53	53	47	46 D	41 D	55 D	64	53	44 D
Potassium	mg/L	T	13	16	16	10 J	15	14	16	17	15 D	13 D	14	15	14 D
Sodium	mg/L	T	29	28	26	26	26	29	30	27 D	27 D	26 D	31	28	26 D
Total Alkalinity	mg/L	T	750	710	750	620	610	400	720	660	780 D	610 D	600	630	790

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:

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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.

Sample Location:			MW-10												
Compliance Phase:			Background Monitoring						Assessment Monitoring						
Sample Date:			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
Sample Type:			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	
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	--	4
Conductivity	uS/cm	N	--	--	--	--	--	--	--	--	--	--	--	3.62	--
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
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
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
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
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
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
Calcium	mg/L	T	220	220	280	460	280	210	210 D	160 D	190 D	310 D	590 D	430 D	360 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
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
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
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
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	< 0.00050 UD	< 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
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
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
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	< 0.000075 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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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	< 0.000050 U	< 0.00025 UD	< 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	< 0.00062 U	0.0010 J
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
Additional Parameters															
Bicarbonate Alkalinity	mg/L	T	680	580	320	140	340	540	720	770	700 D	240 D	220	410	560
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
Magnesium	mg/L	T	85	86	91	95	76	63	59	58 D	61 D	86 D	120 D	100 D	91 D
Potassium	mg/L	T	44	33	31	40	42	36	46	48 D	45 D	41 D	60	63	62 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
Total Alkalinity	mg/L	T	680	580	320	140	340	540	720	770	700 D	240 D	220	410	560

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.

Sample Location:			MW-11												
Compliance Phase:			Background Monitoring						Assessment Monitoring						
Sample Date:			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
Sample Type:			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
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	--	1.56
Conductivity	uS/cm	N	--	--	--	--	--	--	--	--	--	--	--	1.72	--
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
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
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
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
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
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
Calcium	mg/L	T	240	130	300	380	320	320	350 D	240 D	150 D	230 D	290 D	270 D	190 D
Chloride	mg/L	T	95	84	78	62	52	53	72 D	73 D	88 D	62 D	38 D	59 D	73 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
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
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
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
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
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
Beryllium	mg/L	T	< 0.000052 U	0.000091 J	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	0.00044	< 0.000052 U	0.000088 J
Cadmium	mg/L	T	< 0.000032 U	0.00073	< 0.000032 U	< 0.000032 U	< 0.00016 U	< 0.00038 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	0.00016 J	< 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
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	0.00024	0.00028 J	0.00032 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
Lead	mg/L	T	0.0025	0.068	0.0018 J	< 0.00022 U	< 0.0011 U	< 0.0050 U	0.0038 J+	0.00017 J	0.00036 J	0.00031 J	0.00043 J	0.00018 J	0.00041 J
Lithium	mg/L	T	0.10	0.22	0.052	0.028	0.059	0.084	0.022	0.095	0.15 D	0.077 D	0.028	0.042	0.065 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	0.0011	< 0.00016 U	< 0.00016 U
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
Radium 226 and 228	pCi/L	T	1.19	1.32	< 0.91 U	1.07	1.67	0.812	< 1 U	1.76	1.13	< 0.775 U	< 0.575 U	2.61	2.61
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
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
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
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.00038 U	< 0.00038 U	< 0.00038 U	< 0.00038 U	< 0.00075 U	< 0.00075 U	< 0.00075 U	< 0.00075 U	0.00021 J	< 0.00075 U	< 0.00075 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
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
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
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
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	< 0.000050 U	< 0.000050 U	0.00017	< 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
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
Additional Parameters															
Bicarbonate Alkalinity	mg/L	T	840	600	860	810	800	840	890	800	660 D	760 D	840	820	770
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
Magnesium	mg/L	T	60	55	63	67	60	55	55	56 D	52 D	61 D	55	49	48 D
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
Sodium	mg/L	T	57	70	37	25	21	26	38	50 D	67 D	51 D	28	36	45 D
Total Alkalinity	mg/L	T	840	600	860	810	800	840	890	800	660 D	760 D	840	820	770

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.

Sample Location:			MW-12												
Compliance Phase:			Background Monitoring						Assessment Monitoring						
Sample Date:			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
Sample Type:			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
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	--	0.55
Conductivity	uS/cm	N	--	--	--	--	--	--	--	--	--	--	--	0.57	--
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
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
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
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
Turbidity	NTU	N	0.02	0.02	0.02	0.02	0.02	0.02	1.92	0.02	0.31	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
Calcium	mg/L	T	77	46	78	77	55	63	64	95 D	95 D	40 D	40	74	79 D
Chloride	mg/L	T	24	16	27	18	16	15	17 D	22 D	26 D	17 D	12 D	18 D	18 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
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
Total Dissolved Solids	mg/L	T	360	210	340	200	260	270	330 D	420	200	100 D	210	380 D	330 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
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
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
Beryllium	mg/L	T	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 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	0.0062	0.012	0.016	0.024 J+	0.022	0.011	0.0054	0.0082	0.032	0.0028
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 U	0.00025
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
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
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
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
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
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
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 U	< 0.578 U	< 0.517 U	< 0.749 U	0.769	< 0.602 U	1.07
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 U	< 0.212 U	< 0.116 U	< 0.146 U	0.119	< 0.148 U
Radium-228	pCi/L	T	< 0.543 U	< 0.459 U	< 0.685 U	< 0.619 U	0.793	1.07	< 0.59 U	< 0.578 U	< 0.517 U	< 0.749 U	0.729	< 0.602 U	1.07
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
Thallium	mg/L	T	< 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	< 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 U	0.98 J+	< 4 U	< 4.0 U	< 4.0 UD	< 3.9 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
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 U	< 0.026 U	0.068	0.15
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
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
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
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
Additional Parameters															
Bicarbonate Alkalinity	mg/L	T	86	55	52	46	85	95	140	140	190 D	47	86	200	220
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
Magnesium	mg/L	T	17	12	2.4	12	13	15	14	19	22 D	11 D	13	21	19 D
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
Sodium	mg/L	T	13	11	14	9.9	9.4	11	11	14	16 D	9.8 D	8.8	12	18 D
Total Alkalinity	mg/L	T	86	55	52	46	85	95	140	140	190 D	47	86	200	220

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.

Sample Location:		MW-16			
Compliance Phase:		Assessment Monitoring			
Sample Date:	4/8/2024	7/18/2024	10/17/2024		
Sample Type:	Field Sample	Field Sample	Field Sample		
Unit:	Unit 1/2				
Sample Matrix:	Groundwater	Groundwater	Groundwater		
Constituent	Unit	Fraction			
Field Parameters					
Conductivity	mS/cm	N	1.1	--	1.36
Conductivity	uS/cm	N	--	1.36	--
Dissolved Oxygen	mg/L	N	0.04	0.18	0.19
Oxidation Reduction Potential	mV	N	-90.4	-15.6	-135.9
pH	su	N	7.29	6.53	6.93
Temperature	deg c	N	7.1	17.6	18.2
Turbidity	NTU	N	0.02	0.02	0.02
Appendix III					
Boron	mg/L	T	0.22	0.43	0.39 D
Calcium	mg/L	T	190 D	250 D	230 D
Chloride	mg/L	T	14 D	21 D	20 D
Fluoride	mg/L	T	0.14 D	0.19 JD	< 0.055 UD
Sulfate (as SO4)	mg/L	T	60 D	< 2.2 UD	< 1.1 UD
Total Dissolved Solids	mg/L	T	680 D	830 D	790 D
Appendix IV					
Antimony	mg/L	T	< 0.00010 U	< 0.00010 U	0.00011 J
Arsenic	mg/L	T	0.0052	0.0034	0.017
Barium	mg/L	T	0.18	0.28	0.29
Beryllium	mg/L	T	< 0.000052 U	< 0.000052 U	< 0.000052 U
Cadmium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.000075 U
Chromium, Total	mg/L	T	0.0064	0.0085	0.0013
Cobalt	mg/L	T	0.00021 J	0.00017 J	0.00030 J
Fluoride	mg/L	T	0.14 D	0.19 JD	< 0.055 UD
Lead	mg/L	T	< 0.00010 U	< 0.00010 U	0.00013 J
Lithium	mg/L	T	0.016	0.025	0.024 D
Mercury	mg/L	T	< 0.00016 U	< 0.00016 U	< 0.00016 U
Molybdenum	mg/L	T	< 0.00025 U	< 0.00025 U	< 0.00025 U
Radium 226 and 228	pCi/L	T	1.01	< 0.623 U	2.31
Radium-226	pCi/L	T	< 0.199 U	0.296	0.371
Radium-228	pCi/L	T	0.902	< 0.623 U	1.94
Selenium	mg/L	T	0.00012 J	0.00011 J	0.00015 J
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	16 D	11	40
Michigan CCR Part 115					
Copper	mg/L	T	0.00025	< 0.00020 U	< 0.00020 U
Iron	mg/L	T	7.1	6.7	13 D
Nickel	mg/L	T	0.00065 J	< 0.00065 U	0.0010 J
Silver	mg/L	T	< 0.000050 U	< 0.000050 U	< 0.000050 U
Vanadium	mg/L	T	< 0.00062 U	0.00066 J	0.00076 J
Zinc	mg/L	T	< 0.0012 U	< 0.0012 U	0.012
Additional Parameters					
Bicarbonate Alkalinity	mg/L	T	550	710	760
Carbonate Alkalinity	mg/L	T	< 0.16 U	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	23	27	26 D
Potassium	mg/L	T	3.9	5.1	5.2 D
Sodium	mg/L	T	17	23	21 D
Total Alkalinity	mg/L	T	550	710	760

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:

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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.

Sample Location:			MW-17		
Compliance Phase:			Assessment Monitoring		
Sample Date:			4/8/2024	7/17/2024	10/16/2024
Sample Type:			Field Sample	Field Sample	Field Sample
Unit:			Unit 1/2		
Sample Matrix:			Groundwater	Groundwater	Groundwater
Constituent	Unit	Fraction			
Field Parameters					
Conductivity	mS/cm	N	1.12	--	1.03
Conductivity	uS/cm	N	--	0.95	--
Dissolved Oxygen	mg/L	N	0.06	0.02	0.03
Oxidation Reduction Potential	mV	N	-157.2	-197.6	-194.5
pH	su	N	7.88	7.31	7.52
Temperature	deg c	N	9.1	20.3	18.6
Turbidity	NTU	N	0.02	0.21	1.02
Appendix III					
Boron	mg/L	T	0.79	0.75	0.89 D
Calcium	mg/L	T	160 D	140 D	130 D
Chloride	mg/L	T	43 D	33 D	47 D
Fluoride	mg/L	T	0.48 D	0.56 D	0.67 D
Sulfate (as SO4)	mg/L	T	4.8 JD	33 D	7.3 D
Total Dissolved Solids	mg/L	T	620 D	620 D	580 D
Appendix IV					
Antimony	mg/L	T	< 0.00010 U	0.00016 J	< 0.00010 U
Arsenic	mg/L	T	0.0018	0.0026	0.0024
Barium	mg/L	T	0.70	0.53	0.65
Beryllium	mg/L	T	< 0.000052 U	< 0.000052 U	< 0.000052 U
Cadmium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.000075 U
Chromium, Total	mg/L	T	0.00076	0.0011	0.00081
Cobalt	mg/L	T	0.00033 J	0.00044 J	0.00052
Fluoride	mg/L	T	0.48 D	0.56 D	0.67 D
Lead	mg/L	T	0.00019 J	0.00042 J	0.00017 J
Lithium	mg/L	T	0.035	0.033	0.036 D
Mercury	mg/L	T	< 0.00016 U	< 0.00016 U	< 0.00016 U
Molybdenum	mg/L	T	0.00079 J	0.0031	0.00077 J
Radium 226 and 228	pCi/L	T	0.656	< 0.918 U	1.56
Radium-226	pCi/L	T	< 0.185 U	0.315	0.334
Radium-228	pCi/L	T	< 0.571 U	< 0.918 U	1.22
Selenium	mg/L	T	0.00014 J	0.00021 J	0.00013 J
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	9.0	9.0	12
Michigan CCR Part 115					
Copper	mg/L	T	0.00088	0.0016	0.00049
Iron	mg/L	T	6.6	3.5	3.8 D
Nickel	mg/L	T	0.0011 J	0.0020	0.0015
Silver	mg/L	T	< 0.000050 U	< 0.000050 U	< 0.000050 U
Vanadium	mg/L	T	0.00084 J	0.0013	0.00089 J
Zinc	mg/L	T	0.0026	0.0059	0.027
Additional Parameters					
Bicarbonate Alkalinity	mg/L	T	530	460	500
Carbonate Alkalinity	mg/L	T	< 0.16 U	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	30	24	24 D
Potassium	mg/L	T	15	16	16 D
Sodium	mg/L	T	59	39	56 D
Total Alkalinity	mg/L	T	530	460	500

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+ 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.

Sample Location:			MW-18												
Compliance Phase:			Background Monitoring						Assessment Monitoring						
Sample Date:			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
Sample Type:			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
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	--	1.69
Conductivity	uS/cm	N	--	--	--	--	--	--	--	--	--	--	--	1.64	--
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
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
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
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
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
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
Calcium	mg/L	T	450	410	380	330	270	340	240 D	250 D	360 D	370 D	330 D	330 D	330 D
Chloride	mg/L	T	28	26	22	19	16	19	24 D	27 D	22 D	24 D	16 D	27 D	24 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
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
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
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
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
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
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
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
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	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U
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
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
Lead	mg/L	T	< 0.00022 U	< 0.00022 U	< 0.00011 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
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
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
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
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
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
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
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
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
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
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
Iron	mg/L	T	10	8.5	6.8	5.4	4.3	5.3	5.8	4.9	7.7 D	7.7 D	7.0	6.2	6.9 D
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
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	< 0.000050 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
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
Additional Parameters															
Bicarbonate Alkalinity	mg/L	T	160	110	100	130	140	130	150	200	200 D	120	120	180	220
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
Magnesium	mg/L	T	37	36	33	26	22	29	28	21	30 D	42 D	39	33	35 D
Potassium	mg/L	T	11	12	11	9.4	8.7	10	11	11	11 D	8.9 D	9.1	10	10 D
Sodium	mg/L	T	21	20	21	17	15	18	20	20	20 D	24 D	23	23	23 D
Total Alkalinity	mg/L	T	160	110	100	130	140	130	150	200	200 D	120	120	180	220

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.

Sample Location:			MW-19												
Compliance Phase:			Background Monitoring						Assessment Monitoring						
Sample Date:			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
Sample Type:			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	
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	--	1.97
Conductivity	uS/cm	N	--	--	--	--	--	--	--	--	--	--	--	2.04	--
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
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
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
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
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
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
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
Chloride	mg/L	T	75	64	66	46	42	40	37 D	38 D	50 D	39 D	23 D	34 D	40 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
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
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
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
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
Barium	mg/L	T	0.046	0.050	0.047	0.036	0.030	0.040	0.037	0.044	0.037	0.044	0.037 D	0.034	0.036
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
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	< 0.000075 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
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
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
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
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
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
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
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
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
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
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
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	< 0.000075 U	< 0.00038 UD	< 0.000075 U	< 0.00038 UD	< 0.00038 UD
Total Suspended Solids	mg/L	T	27	25	16	6.0	23	19	29	33	26	17	6.0	34	37
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
Iron	mg/L	T	15	18	16	13	12	13	16	15	24 D	20 D	17	21	21 D
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
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	< 0.000050 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
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
Additional Parameters															
Bicarbonate Alkalinity	mg/L	T	330	340	310	280	240	260	340	330	270 D	290	270	300	260
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
Magnesium	mg/L	T	49	42	45	38	43	45	32	30 D	39 D	39 D	35	33	36 D
Potassium	mg/L	T	18	22	16	20	16	15	17	16 D	16 D	15 D	14	14	14 D
Sodium	mg/L	T	48	40	44	37	38	38	36	31 D	37 D	33 D	30	29	30 D
Total Alkalinity	mg/L	T	330	340	310	280	240	260	340	330	270 D	290	270	300	260

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:

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 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.

Sample Location:			MW-20												
Compliance Phase:			Background Monitoring						Assessment Monitoring						
Sample Date:			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
Sample Type:			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
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	--	1.09
Conductivity	uS/cm	N	--	--	--	--	--	--	--	--	--	--	--	1.12	--
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
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
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
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
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
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
Calcium	mg/L	T	130	120	140	170	130	130	58	110 D	130 D	120 D	140 D	120 D	120 D
Chloride	mg/L	T	70	66	62	60	88	92	71 D	70 D	70 D	41 D	77 D	62 D	44 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
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
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
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
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
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
Beryllium	mg/L	T	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	0.000059 J	< 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	< 0.000032 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	< 0.00020 U	< 0.0002 U	0.00022 J	0.00026	0.00021 J	0.00022 J
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
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
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
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
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
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
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
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
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
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
Thallium	mg/L	T	< 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	0.00011 J	< 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
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
Iron	mg/L	T	21	19	19	21	22	18	16	20 D	18 D	22	16	18 D	
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
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
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
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
Additional Parameters															
Bicarbonate Alkalinity	mg/L	T	540	470	470	460	520	540	470	460	560 D	460	570	470	500
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
Magnesium	mg/L	T	57	53	52	56	57	62	47	48 D	53 D	45 D	55	41	41 D
Potassium	mg/L	T	13	13	11	12	13	12	13	13	12 D	8.5 D	11	10	9.1 D
Sodium	mg/L	T	65	59	57	56	63	79	67	57 D	61 D	48 D	80	57	47 D
Total Alkalinity	mg/L	T	540	470	470	460	520	540	470	460	560 D	460	570	470	500

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.

Sample Location:			MW-27												
Compliance Phase:			Background Monitoring						Assessment Monitoring						
Sample Date:			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
Sample Type:			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	
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	--	3.47
Conductivity	uS/cm	N	--	--	--	--	--	--	--	--	--	--	--	2.79	--
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
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
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
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
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
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
Calcium	mg/L	T	200	180	180	180	100	130	180 D	150 D	160 D	160 D	130 D	170 D	170 D
Chloride	mg/L	T	120	84	69	60	38	52	110 D	100 D	110 D	44 D	17 D	89 D	120 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
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
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
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
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
Barium	mg/L	T	0.21	0.17	0.16	0.12	0.074	0.15	0.25	0.25	0.16	0.10	0.28	0.32	
Beryllium	mg/L	T	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 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	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000032 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
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
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
Lead	mg/L	T	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00010 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
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
Molybdenum	mg/L	T	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	0.00041 J	< 0.00025 U	< 0.00025 U	< 0.00025 U	< 0.00025 U	< 0.00025 U	< 0.00025 U	0.00026 J
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 UG
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
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
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
Thallium	mg/L	T	< 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	< 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
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
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
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
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
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
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
Additional Parameters															
Bicarbonate Alkalinity	mg/L	T	1200	880	800	590	480	770	1100 D	1100	1400 D	790 D	520	1300	1700
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
Magnesium	mg/L	T	45	45	47	44	26	31	33	35 D	40 D	55 D	39	45	44 D
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
Sodium	mg/L	T	92	68	59	61	41	52	75	80 D	82 D	59 D	41	72	82 D
Total Alkalinity	mg/L	T	1200	880	800	590	480	770	1100 D	1100	1400 D	790 D	520	1300	1700

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.

Sample Location:			MW-28		
Compliance Phase:			Assessment Monitoring		
Sample Date:			4/7/2024	7/18/2024	10/17/2024
Sample Type:			Field Sample	Field Sample	Field Sample
Unit:			Unit 1/2		
Sample Matrix:			Groundwater	Groundwater	Groundwater
Constituent	Unit	Fraction			
Field Parameters					
Conductivity	mS/cm	N	1.18	--	1.22
Conductivity	uS/cm	N	--	1.46	--
Dissolved Oxygen	mg/L	N	0.08	0.01	0.17
Oxidation Reduction Potential	mV	N	-118.7	-158.8	-133.4
pH	su	N	7.02	6.94	6.84
Temperature	deg c	N	8.1	16.8	16
Turbidity	NTU	N	3.17	4.11	0.02
Appendix III					
Boron	mg/L	T	2.2	6.1	3.8 D
Calcium	mg/L	T	170 D	160 D	180 D
Chloride	mg/L	T	18 D	67 D	170 D
Fluoride	mg/L	T	0.90 D	1.5 D	1.4 D
Sulfate (as SO4)	mg/L	T	11 D	< 2.2 UD	< 1.1 UD
Total Dissolved Solids	mg/L	T	610 D	690 D	920 D
Appendix IV					
Antimony	mg/L	T	0.00028	0.00016 J	0.00020 J
Arsenic	mg/L	T	0.0011	0.0014	0.0019
Barium	mg/L	T	0.34	0.70	0.76
Beryllium	mg/L	T	< 0.000052 U	< 0.000052 U	< 0.000052 U
Cadmium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.000075 U
Chromium, Total	mg/L	T	0.017	0.0092	0.015
Cobalt	mg/L	T	0.00064	0.00046 J	0.00041 J
Fluoride	mg/L	T	0.90 D	1.5 D	1.4 D
Lead	mg/L	T	0.0011	0.0013	0.00088
Lithium	mg/L	T	0.050	0.15	0.12 D
Mercury	mg/L	T	0.00024	< 0.00016 U	< 0.00016 U
Molybdenum	mg/L	T	0.00087 J	0.00054 J	0.0020
Radium 226 and 228	pCi/L	T	0.909	1.29	1.27
Radium-226	pCi/L	T	0.282	0.273	< 0.218 U
Radium-228	pCi/L	T	< 0.842 U	1.02	1.06
Selenium	mg/L	T	0.00032 J	0.00024 J	0.00028 J
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	44 D	86	120
Michigan CCR Part 115					
Copper	mg/L	T	0.00052	0.00090	0.00037
Iron	mg/L	T	30	37	47 D
Nickel	mg/L	T	0.0036	0.00072 J	0.0024
Silver	mg/L	T	< 0.000050 U	< 0.000050 U	< 0.000050 U
Vanadium	mg/L	T	0.00063 J	0.00074 J	0.00080 J
Zinc	mg/L	T	0.0090	0.0067	0.031
Additional Parameters					
Bicarbonate Alkalinity	mg/L	T	560	600	590
Carbonate Alkalinity	mg/L	T	< 0.16 U	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	27	27	33 D
Potassium	mg/L	T	12	13	14 D
Sodium	mg/L	T	29	66	51 D
Total Alkalinity	mg/L	T	560	600	590

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:

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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.

Sample Location:			MW-30												
Compliance Phase:			Background Monitoring						Assessment Monitoring						
Sample Date:			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
Sample Type:			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
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	--	3.06
Conductivity	uS/cm	N	--	--	--	--	--	--	--	--	--	--	--	2.93	--
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
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
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
Temperature	deg c	N	10.1	7.2	6.4	4.8	6.7	10.7	13.6	17	15	6.2	7.3	16.9	16
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
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
Calcium	mg/L	T	470	460 E	480	960	430	460 D	400 D	390 D	440 D	470 D	500 D	440 D	490 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
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
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
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
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
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
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
Beryllium	mg/L	T	< 0.000052 U	0.000053 J	< 0.00026 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	0.00011 J+	< 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 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Chromium, Total	mg/L	T	0.014	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
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
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
Lead	mg/L	T	< 0.00022 U	< 0.00022 U	< 0.0011 U	< 0.0011 U	< 0.0011 U	< 0.00050 U	< 0.00050 U	< 0.00050 UD	< 0.0001 U	< 0.0001 U	< 0.00050 UD	< 0.00010 U	< 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
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
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
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
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
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
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
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.00038 U	< 0.00038 U	< 0.00038 U	< 0.00038 U	< 0.00038 UD	< 0.00038 UD	< 0.000075 U	< 0.00038 UD	< 0.000075 U	< 0.00038 UD	< 0.00038 UD
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
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
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
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
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	< 0.00025 UD	< 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
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 U	< 0.0012 U	< 0.0012 U	0.0033
Additional Parameters															
Bicarbonate Alkalinity	mg/L	T	930	760	880	660	630	640	< 0.16 U	690	780 D	690 D	570	630	770
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
Magnesium	mg/L	T	110	120	120	250	120	110	120 D	100 D	95 D	110 D	120 D	110 D	99 D
Potassium	mg/L	T	12	15	16	17	12	9.6	11	13	10 D	10 D	8.9	11	11 D
Sodium	mg/L	T	120	110	120	220	98	95	95 D	88 D	82 D	89 D	73	82	120 D
Total Alkalinity	mg/L	T	930	760	880	660	630	640	< 0.16 U	690	780 D	690 D	570	630	770

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.

Sample Location:			MW-31														
Compliance Phase:			Background Monitoring								Assessment Monitoring						
Sample Date:			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	7/18/2024	10/15/2024	
Sample Type:			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		
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	--	1.26		
Conductivity	uS/cm	N	--	--	--	--	--	--	--	--	--	--	--	1.32	-99999		
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	-99999		
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	-99999		
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	-99999		
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	-99999		
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	-99999		
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	--		
Calcium	mg/L	T	180	190	170	200	170	160	170 D	150 D	170 D	170 D	200 D	170 D	--		
Chloride	mg/L	T	120	100	110	97	94	92	110 D	110 D	100 D	99 DJ+	87 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	--			
Sulfate (as SO4)	mg/L	T	180	250	200	250	250	160	120 D	100 D	72 D	150 D	170 D	--			
Total Dissolved Solids	mg/L	T	850	940 J	780	860	810	760	760 D	860 D	730 D	810 D	810 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	--		
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	--		
Barium	mg/L	T	0.21	0.14	0.19	0.15	0.12	0.13	0.23	0.16	0.16	0.13	0.18	--			
Beryllium	mg/L	T	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	0.000054 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 U	< 0.000075 U	< 0.000075 U	0.000084 J	< 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	0.0023	0.0025	0.0022	0.0017	0.0029	--		
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	--		
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	--			
Lead	mg/L	T	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	0.00031 J	< 0.00010 U	< 0.00010 U	< 0.0001 U	< 0.00010 U	< 0.00010 U	< 0.00025 J	--		
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	--		
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	--		
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	--		
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	--		
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	--		
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	--		
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	--		
Thallium	mg/L	T	< 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	0.000088 J	< 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	< 4.0 U	1.0 J	< 4 U	< 4.0 UD	< 3.9 UD	--		
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	--		
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	--		
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	--		
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	--		
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	--		
Zinc	mg/L	T	0.0082	< 0.0012 U	< 0.0012 U	< 0.0012 U	0.010	0.014	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	--		
Additional Parameters																	
Bicarbonate Alkalinity	ma/L	T	410	340	350	320	290	320	340	410	440 D	340 D	350	--			
Carbonate Alkalinity	ma/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	--			
Maonesium	ma/L	T	37	36	38	42	36	33	34	38 D	35 D	36 D	38	--			
Potassium	ma/L	T	9.9	11	11	11	10	9.9	12	12	11 D	9.6 D	10	12	--		
Sodium	ma/L	T	60	46	51	48	50	53	64	56 D	56 D	54 D	53	54	--		
Total Alkalinity	ma/L	T	410	340	350	320	290	320	340	410	440 D	340 D	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.

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 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.

Sample Location:			MW-32												
Compliance Phase:			Background Monitoring						Assessment Monitoring						
Sample Date:			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
Sample Type:			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	
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	--	1.07
Conductivity	uS/cm	N	--	--	--	--	--	--	--	--	--	--	--	0.99	--
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
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
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
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
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
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
Calcium	mg/L	T	200	180	190	220	190	190	150 D	130 D	150 D	180 D	190 D	140 D	160 D
Chloride	mg/L	T	47	50	50	50	45	42	41 D	44 D	47 D	39 DJ+	38 D	42 D	50 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
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
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
Appendix IV															
Antimony	mg/L	T	0.00067 J	< 0.000050 U	< 0.000050 U	0.000072 J	0.00014 J	< 0.00010 U	< 0.00010 U	< 0.00010 U	< 0.00010 U	0.00070	< 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
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
Beryllium	mg/L	T	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	0.000070 J	< 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 U	< 0.000075 U	< 0.000075 U	0.00019 J	< 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
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	0.00019	0.00021 J	0.00046 J	0.00058
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
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	< 0.00010 U	0.00038 J	< 0.00010 U	< 0.00010 U	0.00042 J
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
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
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
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	< 0.54 U	< 0.57 U	0.732
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
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	< 0.54 U	< 0.57 U	< 0.603 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 U	< 0.00010 U	< 0.00010 U	0.0010	0.00013 J	< 0.00010 U	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 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
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
Iron	mg/L	T	20	18	19	18	17	15	11	11 D	17 D	16	12	13 D	
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
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
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
Zinc	mg/L	T	0.031	0.022	0.026	0.025	0.030	0.037	0.026	0.030	0.035	0.049	0.024	0.024	0.058
Additional Parameters															
Bicarbonate Alkalinity	mg/L	T	560	490	500	450	440	430	440	440	520 D	440 D	470	440	510
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
Magnesium	mg/L	T	38	34	35	37	34	34	28	28 D	30 D	32 D	33	26	31 D
Potassium	mg/L	T	13	13	12	11	9.8	9.7	12	13	13 D	9.1 D	9.2	11	13 D
Sodium	mg/L	T	36	29	29	30	27	30	33	32 D	35 D	30 D	28	30	36 D
Total Alkalinity	mg/L	T	560	490	500	450	440	430	440	440	520 D	440 D	470	440	510

Notes:

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 mg/l = milligrams per liter.
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Sample Location:			MW-33												
Compliance Phase:			Background Monitoring						Assessment Monitoring						
Sample Date:			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
Sample Type:			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
Constituent	Unit	Fraction													
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	--	1.11
Conductivity	uS/cm	N	--	--	--	--	--	--	--	--	--	--	--	1.21	--
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
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
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
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
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
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
Calcium	mg/L	T	200	170	170	190	150	160	150 D	150 D	180 D	170 D	200 D	180 D	
Chloride	mg/L	T	58	51	50	39	27	17	20 D	23 D	45 D	35 DJ+	20 D	36 D	64 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
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
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
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
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
Barium	mg/L	T	0.084	0.086	0.092	0.076	0.073	0.095	0.098	0.098	0.09	0.44 D	0.063	0.16	0.087
Beryllium	mg/L	T	< 0.000052 U	< 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	< 0.000052 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 U	< 0.000075 U	0.00023 J	< 0.00038 UD	0.00023 J	< 0.000075 U	0.00010 J
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
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
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
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
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
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
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
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
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 U	< 0.162 U	< 0.328 U	< 0.144 U	< 0.226 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 U	< 0.892 U	< 0.846 U	0.773	< 0.964 U
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
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.00038 U	< 0.00038 U	< 0.00033 U	< 0.00033 U	< 0.00075 U	< 0.00038 UD	< 0.00075 U	< 0.00075 U	< 0.00075 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
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
Iron	mg/L	T	1.2	2.5	2.8	2.5	4.6	7.4	8.7	4.4 D	1.1 D	1.2	29	0.067	
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
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	< 0.000050 U	< 0.00025 UD	< 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
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
Additional Parameters															
Bicarbonate Alkalinity	mg/L	T	460	430	400	390	440	480	440	480	420 D	330 D	430 D	550	390
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
Magnesium	mg/L	T	22	19	18	17	16	18	16	16	19 D	16 D	19	21	17 D
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
Sodium	mg/L	T	38	25	24	26	22	22	23	22	30 D	25 D	17	21	26 D
Total Alkalinity	mg/L	T	460	430	400	390	440	480	440	480	420 D	330 D	430 D	550	390

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.

Sample Location:			MW-34												
Compliance Phase:			Background Monitoring						Assessment Monitoring						
Sample Date:			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
Sample Type:			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
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	--	1.9
Conductivity	uS/cm	N	--	--	--	--	--	--	--	--	--	--	--	2	--
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
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	-127.7
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
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
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
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
Calcium	mg/L	T	220	190	220	210	210	210	220 D	190 D	220 D	210 D	230 D	220 D	200 D
Chloride	mg/L	T	33	27	24	23	23	22	23 D	24 D	25 D	20 DJ+	16 D	22 D	20 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
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
Total Dissolved Solids	mg/L	T	820	750	800	790	700	760	820 D	770 D	800 D	730 D	800 D	730 D	710 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
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
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
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
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	< 0.000075 U	< 0.00038 UD	< 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
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
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
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
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
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
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
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
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
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
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
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
Total Suspended Solids	mg/L	T	110	52	83	44	160	160	170 D	130	150	120	160	150	140
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
Iron	mg/L	T	73	70	83	78	75	77	77	64 D	70 D	72 D	76	65	59 D
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
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	< 0.000050 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
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
Additional Parameters															
Bicarbonate Alkalinity	mg/L	T	1100	950	920	890	880	950	970 D	970	1000 D	830 D	950 D	960	920
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
Magnesium	mg/L	T	30	23	22	21	20	24	27	26 D	29 D	23 D	25	25	22 D
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
Sodium	mg/L	T	34	30	28	22	23	30	38	33 D	38 D	26 D	25	29	25 D
Total Alkalinity	mg/L	T	1100	950	920	890	880	950	970 D	970	1000 D	830 D	950 D	960	920

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.
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- 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.

Sample Location:			MW-36		
Compliance Phase:			Assessment Monitoring		
Sample Date:			4/8/2024	7/17/2024	10/16/2024
Sample Type:			Field Sample	Field Sample	Field Sample
Unit:			Unit 1/2		
Sample Matrix:			Groundwater	Groundwater	Groundwater
Constituent	Unit	Fraction			
Field Parameters					
Conductivity	mS/cm	N	0.658	--	0.7
Conductivity	uS/cm	N	--	0.66	--
Dissolved Oxygen	mg/L	N	0.08	0.02	0.01
Oxidation Reduction Potential	mV	N	-207.1	-331.7	-230.1
pH	su	N	10.42	9.89	8.79
Temperature	deg c	N	8.4	19.1	18.3
Turbidity	NTU	N	5.41	2.01	1.11
Appendix III					
Boron	mg/L	T	0.28	0.41	0.61 D
Calcium	mg/L	T	67	61	61 D
Chloride	mg/L	T	34 D	39 D	38 D
Fluoride	mg/L	T	0.61 D	0.65 D	0.92 D
Sulfate (as SO4)	mg/L	T	5.7 JD	21 D	10 D
Total Dissolved Solids	mg/L	T	330 D	460 D	390 D
Appendix IV					
Antimony	mg/L	T	0.00076	0.0015	0.00075
Arsenic	mg/L	T	0.029	0.029	0.013
Barium	mg/L	T	0.15	0.17	0.20
Beryllium	mg/L	T	0.000059 J	< 0.000052 U	< 0.000052 U
Cadmium	mg/L	T	0.00032	0.00082	0.00019 J
Chromium, Total	mg/L	T	0.0013	0.0031	0.0018
Cobalt	mg/L	T	0.00027 J	0.00027 J	0.00018 J
Fluoride	mg/L	T	0.61 D	0.65 D	0.92 D
Lead	mg/L	T	0.025	0.051	0.012
Lithium	mg/L	T	0.0057	0.0089	0.012
Mercury	mg/L	T	< 0.00016 U	< 0.00016 U	< 0.00016 U
Molybdenum	mg/L	T	0.019	0.042	0.034
Radium 226 and 228	pCi/L	T	< 0.861 U	< 1.4 UJ	1.08
Radium-226	pCi/L	T	0.467	< 0.207 UJ	< 0.194 U
Radium-228	pCi/L	T	< 0.861 U	< 1.4 UJ	0.959
Selenium	mg/L	T	0.00060	0.00072	0.00065
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	38	4.0 J+	< 4.0 U
Michigan CCR Part 115					
Copper	mg/L	T	0.0077	0.019	0.0086
Iron	mg/L	T	0.40	0.35	0.44
Nickel	mg/L	T	0.011	0.0084	0.0054
Silver	mg/L	T	0.00021	0.00057	0.00011
Vanadium	mg/L	T	0.0024	0.0052	0.0025
Zinc	mg/L	T	0.0088	0.020	0.014
Additional Parameters					
Bicarbonate Alkalinity	mg/L	T	78	160	270
Carbonate Alkalinity	mg/L	T	120	110	34
Magnesium	mg/L	T	6.9	7.5	9.3 D
Potassium	mg/L	T	52	45	30 D
Sodium	mg/L	T	61	65	57 D
Total Alkalinity	mg/L	T	200	260	310

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.

Sample Location:			MW-37		
Compliance Phase:			Assessment Monitoring		
Sample Date:			4/8/2024	7/17/2024	10/15/2024
Sample Type:			Field Sample	Field Sample	Field Sample
Unit:			Unit 1/2		
Sample Matrix:			Groundwater	Groundwater	Groundwater
Constituent	Unit	Fraction			
Field Parameters					
Conductivity	mS/cm	N	1.16	--	1
Conductivity	uS/cm	N	--	1.24	--
Dissolved Oxygen	mg/L	N	1.04	0.04	0.01
Oxidation Reduction Potential	mV	N	-19	65	6.7
pH	su	N	7.47	7.15	7.21
Temperature	deg c	N	9	17.8	18.1
Turbidity	NTU	N	0.02	0.02	7.46
Appendix III					
Boron	mg/L	T	5.2	3.9	1.9 D
Calcium	mg/L	T	160 D	160 D	120 D
Chloride	mg/L	T	22 D	29 D	40 D
Fluoride	mg/L	T	0.63 D	0.39 D	0.50 D
Sulfate (as SO4)	mg/L	T	210 D	260 D	110 D
Total Dissolved Solids	mg/L	T	790 D	840 D	630 D
Appendix IV					
Antimony	mg/L	T	0.00064	0.00040	0.00023 J
Arsenic	mg/L	T	0.00055	0.00046 J	0.00046 J
Barium	mg/L	T	0.040	0.046	0.044
Beryllium	mg/L	T	< 0.000052 U	< 0.000052 U	< 0.000052 U
Cadmium	mg/L	T	0.00012 J	0.00013 J	0.00011 J
Chromium, Total	mg/L	T	0.00039	0.00054	0.00027
Cobalt	mg/L	T	0.00075	0.00053	0.00051 J
Fluoride	mg/L	T	0.63 D	0.39 D	0.50 D
Lead	mg/L	T	0.00017 J	0.00013 J	< 0.00010 U
Lithium	mg/L	T	0.020	0.022	0.019
Mercury	mg/L	T	< 0.00016 U	< 0.00016 U	< 0.00016 U
Molybdenum	mg/L	T	0.015	0.0075	0.0064
Radium 226 and 228	pCi/L	T	< 0.569 U	< 0.764 U	< 0.96 UJ
Radium-226	pCi/L	T	< 0.142 U	0.104	< 0.226 UJ
Radium-228	pCi/L	T	< 0.569 U	< 0.764 U	< 0.96 UJ
Selenium	mg/L	T	0.0046	0.0030	0.0018
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	< 4.0 UD	3.9 JD	< 4.0 UD
Michigan CCR Part 115					
Copper	mg/L	T	0.013	0.014	0.014
Iron	mg/L	T	0.16	< 0.026 U	0.026 J
Nickel	mg/L	T	0.0046	0.0052	0.0039
Silver	mg/L	T	< 0.000050 U	< 0.000050 U	0.00017 J+
Vanadium	mg/L	T	< 0.00062 U	< 0.00062 U	< 0.00062 U
Zinc	mg/L	T	0.017	0.017	0.011
Additional Parameters					
Bicarbonate Alkalinity	mg/L	T	310	340	350
Carbonate Alkalinity	mg/L	T	< 0.16 U	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	13	12	9.8 D
Potassium	mg/L	T	18	20	18 D
Sodium	mg/L	T	100 D	98 D	57 D
Total Alkalinity	mg/L	T	310	340	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.

Sample Location:			MW-38		
Compliance Phase:			Assessment Monitoring		
Sample Date:			4/8/2024	7/17/2024	10/16/2024
Sample Type:			Field Sample	Field Sample	Field Sample
Unit:			Unit 3A/B		
Sample Matrix:			Groundwater	Groundwater	Groundwater
Constituent	Unit	Fraction			
Field Parameters					
Conductivity	mS/cm	N	1.27	--	1.3
Conductivity	uS/cm	N	--	1.18	--
Dissolved Oxygen	mg/L	N	0.4	0.17	0.13
Oxidation Reduction Potential	mV	N	-207.4	-25.1	-69.8
pH	su	N	10	9.23	9
Temperature	deg c	N	11.7	20.6	16.9
Turbidity	NTU	N	7.83	0.02	0.02
Appendix III					
Boron	mg/L	T	1.6 D	2.4	3.0 D
Calcium	mg/L	T	150 D	96 D	110 D
Chloride	mg/L	T	51 D	57 D	58 D
Fluoride	mg/L	T	0.79 D	1.0 D	1.8 D
Sulfate (as SO4)	mg/L	T	280 D	170 D	210 D
Total Dissolved Solids	mg/L	T	840 D	850 D	980 D
Appendix IV					
Antimony	mg/L	T	0.00068	0.0017	0.0011
Arsenic	mg/L	T	0.0050	0.0071	0.0033
Barium	mg/L	T	0.16	0.12	0.17
Beryllium	mg/L	T	< 0.000052 U	0.000067 J	0.000090 J
Cadmium	mg/L	T	0.000096 J	0.00037	0.00015 J
Chromium, Total	mg/L	T	0.0040	0.016	0.0072
Cobalt	mg/L	T	0.00053	0.00071	0.00055
Fluoride	mg/L	T	0.79 D	1.0 D	1.8 D
Lead	mg/L	T	0.015	0.086	0.023
Lithium	mg/L	T	0.12	0.098	0.12 D
Mercury	mg/L	T	< 0.00016 U	< 0.00016 U	< 0.00016 U
Molybdenum	mg/L	T	0.0097	0.014	0.0095
Radium 226 and 228	pCi/L	T	1.21	< 1.72 U	2.12
Radium-226	pCi/L	T	0.492	< 0.314 U	0.278
Radium-228	pCi/L	T	< 1.08 UG	< 1.72 UG	1.84
Selenium	mg/L	T	0.00073	0.00095	0.00059
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	160 D	53	< 4.0 U
Michigan CCR Part 115					
Copper	mg/L	T	0.0031	0.020	0.0063
Iron	mg/L	T	0.39	1.0	0.51
Nickel	mg/L	T	0.0053	0.0096	0.0067
Silver	mg/L	T	< 0.000050 U	0.00019	0.000065
Vanadium	mg/L	T	0.0066	0.010	0.0053
Zinc	mg/L	T	0.0066	0.020	0.015
Additional Parameters					
Bicarbonate Alkalinity	mg/L	T	270	300	380
Carbonate Alkalinity	mg/L	T	12	50	60
Magnesium	mg/L	T	18	13	18 D
Potassium	mg/L	T	91 D	86 D	88 D
Sodium	mg/L	T	97 D	100 D	100 D
Total Alkalinity	mg/L	T	280	350	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.

Sample Location:			SG-02											
Compliance Phase:			Background Monitoring					Assessment Monitoring						
Sample Date:			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
Sample Type:			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	
Constituent	Unit	Fraction												
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	--	1.45
Conductivity	uS/cm	N	--	--	--	--	--	--	--	--	--	--	1.57	--
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
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
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
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
Turbidity	NTU	N	1.62	0.02	1.2	2.41	6.82	4.2	3.26	6.09	0.46	3.59	1.34	7.03
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
Calcium	mg/L	T	210	140	140	130	150	210 D	170 D	180 D	140 D	140 D	170 D	160 D
Chloride	mg/L	T	75	46	41	37	40	86 D	120 D	99 D	52 D	36 D	120 D	110 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
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
Total Dissolved Solids	mg/L	T	1100	660	580	680	740	1200 D	1400 D	1100	690 D	690	1100 D	1100 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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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	< 0.000050 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
Zinc	mg/L	T	0.0041	0.0031	0.0029	0.029	0.014	0.0024	0.0028	0.005	0.0013	0.0020	0.0024	0.0033
Additional Parameters														
Bicarbonate Alkalinity	mg/L	T	96	76	62	71	35	73	65	130 D	93	79	94	110
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
Magnesium	mg/L	T	48	31	28	28	33	53	63 D	57 D	37 D	34	61	56 D
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
Sodium	mg/L	T	40	24	22	21	27	52	62 D	58 D	31 D	28	66	60 D
Total Alkalinity	mg/L	T	96	76	62	71	35	73	83	130 D	93	79	94	110

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.

Sample Location:		SG-03									
Compliance Phase:		Background Monitoring					Assessment Monitoring				
Sample Date:		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	
Sample Type:		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	
Constituent	Unit	Fraction									
Field Parameters											
Conductivity	mS/cm	N	1.45	1	0.896	1.15	1.05	1.53	1.66	1.49	0.84
Dissolved Oxygen	mg/L	N	5.23	9.58	3.98	9.77	7.37	8.71	9.56	8.26	14.36
Oxidation Reduction Potential	mV	N	138.3	-32.4	-50.1	9	17	71.4	-42.1	-135.5	
pH	su	N	8	8.42	7.82	6.24	8.91	8.63	8.67	8.14	8.03
Temperature	deg.c	N	2	3.3	0.9	8.3	28.6	25.9	29.5	17.7	3.6
Turbidity	NTU	N	1.2	0.36	0.02	4.45	38.1	5.36	4.27	5.56	0.44
Appendix III											
Boron	mg/L	T	3.9	2.0	2.1	2.0	2.9	5.8 J+	7.5	6.9 D	3.4 D
Calcium	mg/L	T	200	120	150	140	160	220 D	180 D	180 D	140 D
Chloride	mg/L	T	72	42	43	37	41	86 D	120 D	100 D	53 D
Fluoride	mg/L	T	2.5	1.8	2.5	2.7	3.6	4.6 D	5.0 D	3.6 D	2.2 D
Sulfate (as SO4)	mg/L	T	600	350	350	400	450	620 D	640 D	560 D	370 D
Total Dissolved Solids	mg/L	T	1100	480	630	660	740	1200 D	1400 D	1100	1400 D
Boron	mg/L	D	--	--	--	--	2.7	--	--	--	--
Calcium	mg/L	D	--	--	--	--	150	--	--	--	--
Appendix IV											
Antimony	mg/L	T	0.00049	0.00038	0.00067	0.0010	0.0013	0.00088	0.0012	0.00063	0.00050
Arsenic	mg/L	T	0.0018	0.0011	0.0020	0.0016	0.0040	0.0094	0.0024	0.0024	0.0012
Barium	mg/L	T	0.049	0.031	0.036	0.027	0.097	0.13	0.13	0.061	0.036
Beryllium	mg/L	T	< 0.00052 U	< 0.00052 U	0.00078 J	< 0.00026 U	0.0056	0.0040	0.00091 J	< 0.00052 U	< 0.00052 U
Cadmium	mg/L	T	< 0.000032 U	< 0.000032 U	0.000038 J	< 0.000016 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Chromium, Total	mg/L	T	0.00043	0.00025	0.00092	< 0.00088 U	0.0025	0.0012	0.00069	0.00049	0.00032
Cobalt	mg/L	T	0.00017 J	0.00017 J	0.00033 J	0.00050 J	0.00058	0.00043 J	0.00055	0.0003 J	0.00011 J
Fluoride	mg/L	T	2.5	1.8	2.5	2.7	3.6	4.6 D	5.0 D	3.6 D	2.2 D
Lead	mg/L	T	0.0012	0.00060	0.0020	< 0.0011 U	0.0033	0.0076	0.0061	0.0066	0.0059
Lithium	mg/L	T	0.046	0.028	0.0056	0.037	0.051	0.067	0.090	0.059	0.031 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
Molybdenum	mg/L	T	0.0066	0.0052	0.010	0.0097	0.020	0.0069	0.013	0.0083	0.0066
Radium 226 and 228	pCi/L	T	< 0.443 U	< 0.506 U	< 0.531 U	1.21	< 0.658 U	< 0.653 U	0.969	0.594	< 0.661 U
Radium-226	pCi/L	T	0.14	0.129	< 0.193 U	0.199	0.363	0.353	0.253	< 0.236 U	< 0.139 U
Radium-228	pCi/L	T	< 0.443 U	< 0.506 U	< 0.531 U	1.01	< 0.658 U	< 0.653 U	< 0.842 U	< 0.58 U	< 0.661 U
Selenium	mg/L	T	0.00070	0.00056	0.0010	0.0021 J	0.0018	0.0012	0.0016	0.00081	0.0018
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
Total Suspended Solids	mg/L	T	9.0	1.0 J	6.0	3.0 J	33	34	16	< 4 U	< 4.0 U
Antimony	mg/L	D	--	--	--	--	< 0.00038 U	--	--	--	--
Arsenic	mg/L	D	--	--	--	--	0.0035	--	--	--	--
Barium	mg/L	D	--	--	--	--	0.073	--	--	--	--
Beryllium	mg/L	D	--	--	--	--	< 0.000078 U	--	--	--	--
Cadmium	mg/L	D	--	--	--	--	< 0.000018 U	--	--	--	--
Chromium, Total	mg/L	D	--	--	--	--	< 0.00012 U	--	--	--	--
Cobalt	mg/L	D	--	--	--	--	< 0.000028 U	--	--	--	--
Lead	mg/L	D	--	--	--	--	< 0.00012 U	--	--	--	--
Lithium	mg/L	D	--	--	--	--	0.039	--	--	--	--
Molybdenum	mg/L	D	--	--	--	--	0.018	--	--	--	--
Selenium	mg/L	D	--	--	--	--	0.0020	--	--	--	--
Thallium	mg/L	D	--	--	--	--	< 0.000015 U	--	--	--	--
Michigan CCR Part 115											
Copper	mg/L	T	0.00093	0.00067	0.016	< 0.0010 U	0.0030	0.0013	0.0010	0.00051	0.00083
Iron	mg/L	T	0.18	0.15	0.35	0.20	0.66	0.31	0.48	0.29	0.13
Nickel	mg/L	T	0.0022	0.0017	0.0026	0.0032 J	0.0039	0.0036	0.0039	0.0035	0.0019
Silver	mg/L	T	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.00025 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	0.00092 J	< 0.0031 U	0.0049	0.0020	0.0053	0.0007 J	< 0.00062 U
Zinc	mg/L	T	0.0042	0.0037	0.0047	< 0.0059 U	0.0060	0.0029	0.0024	0.0069	0.0012
Copper	mg/L	D	--	--	--	--	< 0.00012 U	--	--	--	--
Iron	mg/L	D	--	--	--	--	0.10	--	--	--	--
Nickel	mg/L	D	--	--	--	--	< 0.00018 U	--	--	--	--
Silver	mg/L	D	--	--	--	--	< 0.000038 U	--	--	--	--
Vanadium	mg/L	D	--	--	--	--	< 0.00024 U	--	--	--	--
Zinc	mg/L	D	--	--	--	--	< 0.0017 U	--	--	--	--
Additional Parameters											
Bicarbonate Alkalinity	mg/L	T	110	71	73	71	41	73	69	120 D	92
Carbonate Alkalinity	mg/L	T	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	16	< 0.31 UD	< 0.16 U
Magnesium	mg/L	T	47	26	30	29	37	56	67 D	57 D	35 D
Potassium	mg/L	T	13	8.1	8.3	7.2	7.1	19	22 D	17 D	8.7 D
Sodium	mg/L	T	38	20	23	21	28	57	66 D	58 D	30 D
Total Alkalinity	mg/L	T	110	71	73	71	41	73	65	120 D	92
Magnesium	mg/L	D	--	--	--	--	34	--	--	--	--
Potassium	mg/L	D	--	--	--	--	6.7	--	--	--	--
Sodium	mg/L	D	--	--	--	--	25	--	--	--	--

Notes:

ugl - 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.

Sample Location:			SG-04R											
Compliance Phase:			Background Monitoring					Assessment Monitoring						
Sample Date:			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
Sample Type:			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	
Constituent	Unit	Fraction												
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
Conductivity	uS/cm	N	--	--	--	--	--	--	--	--	--	--	2.39	--
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
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
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
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
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
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
Calcium	mg/L	T	430	300	370	310	390	600 D	580 DE	500 D	340 D	370 D	510 D	390 D
Chloride	mg/L	T	27	22	21	20	22	33 D	38 D	35 D	23 D	20 D	38 D	42 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
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
Total Dissolved Solids	mg/L	T	1800	1200	1200	1400	1600	2500 D	2700 D	2200	1400 D	1400 D	2200 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
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
Barium	mg/L	T	0.022	0.019	0.023	0.040	0.039	0.040 D	0.029	0.029	0.027 D	0.024	0.024	0.026
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
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
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
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
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
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	0.0022 J	0.0015 JD	0.00071	< 0.00050 UD	< 0.00010 U
Lithium	mg/L	T	0.044	0.039	0.089	0.043	0.056	0.072	0.084	0.064	0.049 D	0.059	0.091	0.076
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
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
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
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
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
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
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
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
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
Iron	mg/L	T	0.055	0.11	0.13	0.13	0.19	0.31	0.089	0.05	0.36 D	0.10	0.045 J	0.022 J
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
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
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
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
Additional Parameters														
Bicarbonate Alkalinity	mg/L	T	110	87	98	100	62	50	30	61 D	100	93	42	46
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
Magnesium	mg/L	T	41	30	33	29	35	53	62 D	57 D	44 D	43	61	55 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
Sodium	mg/L	T	24	20	21	19	22	39	40 D	34 D	26 D	26	39	34 D
Total Alkalinity	mg/L	T	110	87	98	100	62	50	43	61 D	100	93	43	46

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.

Sample Location:			SG-05											
Compliance Phase:			Background Monitoring					Assessment Monitoring						
Sample Date:			12/2/2023	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
Sample Type:			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	
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	
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	--	1.06
Conductivity	uS/cm	N	--	--	--	--	--	--	--	--	--	--	0.465	--
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
Oxidation Reduction Potential	mV	N	142	-44.0	6.4	18.3	16.3	153.3	39.2	-28.7	134.6	34.6	-29	57.7
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
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
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
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
Calcium	mg/L	T	140	120	120	120	81	34	34	120 D	130 D	99 D	22	140 D
Chloride	mg/L	T	79	51	61	50	54	64 D	29 D	54 D	54 D	37 D	52 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
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
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
Boron	mg/L	D	--	--	--	0.68	--	--	--	--	--	--	--	--
Calcium	mg/L	D	--	--	--	120	--	--	--	--	--	--	--	--
Appendix IV														
Antimony	mg/L	T	0.00018 J	0.00093 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
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
Barium	mg/L	T	0.58	0.23	0.35	0.059	0.20	0.11	0.18	0.51	0.50	0.26	0.10	0.63
Beryllium	mg/L	T	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000026 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
Cadmium	mg/L	T	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.00016 U	< 0.000075 U	0.00011 J	0.00075	0.00094 J	0.00041	0.00013 J	< 0.000075 U	0.00067
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
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
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
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
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
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
Molybdenum	mg/L	T	0.00077 J	0.0029	0.0013	0.0090	0.0083	0.0087	0.0015	0.00085 J	0.00059 J	0.0024	0.0039	0.00078 J
Radium-226 and 228	pCi/L	T	0.851	< 0.537 U	< 0.776 U	0.658	< 0.758 U	< 0.818 U	< 0.82 U	< 0.771 U	< 0.889 U	0.971	< 1.12 U	< 0.773 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
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
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
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
Total Suspended Solids	mg/L	T	5.0	7.9	8.0	17	6.0	14	73	12	120	8.0	4.0	74
Antimony	mg/L	D	--	--	--	0.00047 J	--	--	--	--	--	--	--	--
Arsenic	mg/L	D	--	--	--	0.00063 J	--	--	--	--	--	--	--	--
Barium	mg/L	D	--	--	--	0.37	--	--	--	--	--	--	--	--
Beryllium	mg/L	D	--	--	--	< 0.00026 U	--	--	--	--	--	--	--	--
Cadmium	mg/L	D	--	--	--	< 0.00016 U	--	--	--	--	--	--	--	--
Chromium, Total	mg/L	D	--	--	--	0.025	--	--	--	--	--	--	--	--
Cobalt	mg/L	D	--	--	--	0.0012 J	--	--	--	--	--	--	--	--
Lead	mg/L	D	--	--	--	< 0.0011 U	--	--	--	--	--	--	--	--
Lithium	mg/L	D	--	--	--	0.032	--	--	--	--	--	--	--	--
Mercury	mg/L	D	--	--	--	< 0.00016 U	--	--	--	--	--	--	--	--
Molybdenum	mg/L	D	--	--	--	< 0.0031 U	--	--	--	--	--	--	--	--
Selenium	mg/L	D	--	--	--	< 0.0011 U	--	--	--	--	--	--	--	--
Thallium	mg/L	D	--	--	--	< 0.00038 U	--	--	--	--	--	--	--	--
Michigan CCR Part 115														
Copper	mg/L	T	0.00029	0.00036	0.00089	0.0011 J	0.00084	0.0028	0.0066	0.0012	0.0063	0.0021	0.0015	0.011
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
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
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
Vanadium	mg/L	T	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.0031 U	< 0.00062 U	0.0012	0.00089 J	< 0.00062 U	< 0.00062 U	0.00071 J	0.00090 J	0.0020
Zinc	mg/L	T	0.030	0.0018	0.0022	0.060 J	0.0024	0.0090	0.019	0.043	0.019	0.0065	0.0033	0.055
Copper	mg/L	D	--	--	--	< 0.0010 U	--	--	--	--	--	--	--	--
Iron	mg/L	D	--	--	--	0.12	--	--	--	--	--	--	--	--
Nickel	mg/L	D	--	--	--	< 0.0032 U	--	--	--	--	--	--	--	--
Silver	mg/L	D	--	--	--	< 0.00025 U	--	--	--	--	--	--	--	--
Vanadium	mg/L	D	--	--	--	< 0.0031 U	--	--	--	--	--	--	--	--
Zinc	mg/L	D	--	--	--	0.043	--	--	--	--	--	--	--	--
Additional Parameters														
Bicarbonate Alkalinity	mg/L	T	490	270	290	290	240	65	96	400 D	400	240	63	490
Carbonate Alkalinity	mg/L	T	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	46	16	< 0.31 UG	< 0.16 U	< 0.16 U	42	< 0.16 U
Magnesium	mg/L	T	27	23	26	26	25	21	12	24 D	26 D	23	19	29 D
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
Sodium	mg/L	T	43	30	38	34	37	44	21	40 D	43 D	30	30	45 D
Total Alkalinity	mg/L	T	490	270	290	290	240	110	110	400 D	400	240	100	490
Magnesium	mg/L	D	--	--	--	26	--	--	--	--	--	--	--	--
Potassium	mg/L	D	--	--	--	7.4	--	--	--	--	--	--	--	--
Sodium	mg/L	D	--	--	--	34	--	--	--	--	--	--	--	--

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.

UU 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 appropriate 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.

Sample Location:			SG-06			
Compliance Phase:			Background Monitoring	Assessment Monitoring		
Sample Date:			8/8/2023	10/24/2023	7/17/2024	10/17/2024
Sample Type:			Field Sample	Field Sample	Field Sample	Field Sample
Unit:			Surface Water			
Sample Matrix:			Surface Water	Surface Water	Surface Water	Surface Water
Constituent	Unit	Fraction				
Field Parameters						
Conductivity	mS/cm	N	0.69	0.74	--	0.77
Conductivity	uS/cm	N	--	--	0.55	--
Dissolved Oxygen	mg/L	N	4.93	6.01	4.85	7.68
Oxidation Reduction Potential	mV	N	60.2	-40.4	9.8	47.6
pH	su	N	7.37	7.98	7.94	8.2
Temperature	deg c	N	24.3	19.1	26.2	15.1
Turbidity	NTU	N	7.35	4.89	6.72	6.37
Appendix III						
Boron	mg/L	T	0.21	0.24 D	0.22	0.11 D
Calcium	mg/L	T	69 D	82 D	52	70 D
Chloride	mg/L	T	53 D	56 D	52 D	70 D
Fluoride	mg/L	T	0.18 D	0.18 D	0.23 D	0.14 D
Sulfate (as SO4)	mg/L	T	15 D	30 D	12 D	47 D
Total Dissolved Solids	mg/L	T	380 D	410 D	340 D	460 D
Appendix IV						
Antimony	mg/L	T	< 0.00010 U	0.00014 J	< 0.00010 U	0.00018 J
Arsenic	mg/L	T	0.0016	0.0016	0.0038	0.00098
Barium	mg/L	T	0.10	0.092	0.076	0.059
Beryllium	mg/L	T	< 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
Chromium, Total	mg/L	T	0.00088	0.00044	0.00061	0.00051
Cobalt	mg/L	T	0.00019 J	0.00018 J	0.00010 J	0.00023 J
Fluoride	mg/L	T	0.18 D	0.18 D	0.23 D	0.14 D
Lead	mg/L	T	0.00071	0.00053 J	0.00038 J	0.00027 J
Lithium	mg/L	T	0.0061	0.0087	0.0074	0.0062
Mercury	mg/L	T	< 0.00016 U	0.0002	< 0.00016 U	< 0.00016 U
Molybdenum	mg/L	T	0.00039 J	0.0034	0.00077 J	0.0021
Radium 226 and 228	pCi/L	T	< 0.926 U	< 0.838 U	< 1.88 U	1.04
Radium-226	pCi/L	T	< 0.16 U	< 0.288 U	0.296	< 0.181 U
Radium-228	pCi/L	T	< 0.926 U	< 0.838 U	< 1.88 UG	0.912
Selenium	mg/L	T	0.00015 J	0.00012 J	0.00017 J	0.00012 J
Thallium	mg/L	T	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	120	< 4 UD	36	8.0
Michigan CCR Part 115						
Copper	mg/L	T	0.00089	0.00054	0.00078	0.0016
Iron	mg/L	T	0.55	0.23	0.67	0.19
Nickel	mg/L	T	0.00084 J	0.0011 J	0.00082 J	0.0018
Silver	mg/L	T	< 0.000050 U	< 0.00005 U	< 0.000050 U	< 0.000050 U
Vanadium	mg/L	T	< 0.00062 U	< 0.00062 U	< 0.00062 U	0.00065 J
Zinc	mg/L	T	0.0045	0.008	0.0026	0.0049
Additional Parameters						
Bicarbonate Alkalinity	mg/L	T	230	270 D	180	230
Carbonate Alkalinity	mg/L	T	< 0.16 U	< 0.31 UD	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	21	25 D	21	24 D
Potassium	mg/L	T	0.78	5 D	0.70	4.0 D
Sodium	mg/L	T	29 D	35 D	30	40 D
Total Alkalinity	mg/L	T	230	270 D	180	230

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.
 UU 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.

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

October 30, 2024

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

Phone: (734) 263-7138

RE: Trace Project 24J1136
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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 Muskegon, MI 49444-2673



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SAMPLE SUMMARY

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID	Sample ID	Matrix	Collected By	Date Collected	Date Received
24J1136-01	MW-02	Ground Water	AB/TB	10/15/24 16:30	10/16/24 08:20
24J1136-02	MW-03	Ground Water	AB/TB	10/15/24 13:08	10/16/24 08:20
24J1136-03	MW-04	Ground Water	AB/TB	10/15/24 15:06	10/16/24 08:20
24J1136-04	MW-31	Ground Water	AB/TB	10/15/24 11:00	10/16/24 08:20
24J1136-05	MW-37	Ground Water	AB/TB	10/15/24 16:10	10/16/24 08:20
24J1136-06	MW-07	Ground Water	AB/TB	10/15/24 12:30	10/16/24 08:20
24J1136-07	MWT-03	Ground Water	AB/TB	10/15/24 13:08	10/16/24 08:20
24J1136-08	MWT-37	Ground Water	AB/TB	10/15/24 16:10	10/16/24 08:20
24J1136-09	MW-17	Ground Water	AB/TB	10/16/24 09:34	10/17/24 15:03
24J1136-10	MW-18	Ground Water	AB/TB	10/16/24 10:32	10/17/24 15:03
24J1136-11	MW-01R	Ground Water	AB/TB	10/16/24 11:36	10/17/24 15:03
24J1136-12	MW-20	Ground Water	AB/TB	10/16/24 13:00	10/17/24 15:03
24J1136-13	MW-36	Ground Water	AB/TB	10/16/24 14:12	10/17/24 15:03
24J1136-14	MW-06	Ground Water	AB/TB	10/16/24 15:20	10/17/24 15:03
24J1136-15	MW-11	Ground Water	AB/TB	10/16/24 16:20	10/17/24 15:03
24J1136-16	MW-10	Ground Water	AB/TB	10/16/24 17:40	10/17/24 15:03
24J1136-17	MW-38	Ground Water	AB/TB	10/16/24 10:30	10/17/24 15:03
24J1136-18	MW-12	Ground Water	AB/TB	10/16/24 12:00	10/17/24 15:03
24J1136-19	MW-19	Ground Water	AB/TB	10/16/24 13:30	10/17/24 15:03
24J1136-20	MW-32	Ground Water	AB/TB	10/16/24 15:00	10/17/24 15:03
24J1136-21	MW-08	Ground Water	AB/TB	10/16/24 16:15	10/17/24 15:03
24J1136-22	MW-30	Ground Water	AB/TB	10/16/24 18:15	10/17/24 15:03
24J1136-23	MW-34	Ground Water	AB/TB	10/17/24 08:44	10/17/24 15:03
24J1136-24	MW-33	Ground Water	AB/TB	10/17/24 09:46	10/17/24 15:03
24J1136-25	MW-09	Ground Water	AB/TB	10/17/24 12:00	10/17/24 15:03
24J1136-26	MW-27	Ground Water	AB/TB	10/17/24 11:00	10/17/24 15:03
24J1136-27	MW-28	Ground Water	AB/TB	10/17/24 09:00	10/17/24 15:03
24J1136-28	MW-16	Ground Water	AB/TB	10/17/24 10:00	10/17/24 15:03
24J1136-29	SG-02	Ground Water	AB/TB	10/17/24 12:15	10/17/24 15:03
24J1136-30	SG-04R	Ground Water	AB/TB	10/17/24 12:45	10/17/24 15:03
24J1136-31	SG-05	Ground Water	AB/TB	10/17/24 13:05	10/17/24 15:03
24J1136-32	SG-06	Ground Water	AB/TB	10/17/24 13:25	10/17/24 15:03

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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: 24J1136-01

Analysis: EPA 200.8 Rev. 5.4

Lead	Note DL03 : The reporting limit was raised due to a dilution required because of matrix interference and/or analyte interference.
Thallium	Note DL03 : The reporting limit was raised due to a dilution required because of matrix interference and/or analyte interference.

Analysis: SM 4500-H+ B-11

pH	Note PH01k : The pH was analyzed at 8:56
-----------	--

Trace ID: 24J1136-02

Analysis: EPA 200.8 Rev. 5.4

Lead	Note DL03 : The reporting limit was raised due to a dilution required because of matrix interference and/or analyte interference.
Thallium	Note DL03 : The reporting limit was raised due to a dilution required because of matrix interference and/or analyte interference.

Analysis: SM 4500-H+ B-11

pH	Note PH01m : The pH was analyzed at 8:59
-----------	--

Trace ID: 24J1136-03

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.
--------------	---

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Potassium

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: EPA 200.8 Rev. 5.4

Barium

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.

Lead

Note DL03 : The reporting limit was raised due to a dilution required because of matrix interference and/or analyte interference.

Lead

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.

Thallium

Note DL03 : The reporting limit was raised due to a dilution required because of matrix interference and/or analyte interference.

Analysis: SM 4500-H+ B-11

pH

Note PH01n : The pH was analyzed at 9:00

Trace ID: 24J1136-04

Analysis: SM 4500-H+ B-11

pH

Note PH01o : The pH was analyzed at 9:01

Trace ID: 24J1136-05

Analysis: SM 4500-H+ B-11

pH

Note PH01p : The pH was analyzed at 9:02

Trace ID: 24J1136-06

Analysis: SM 4500-H+ B-11

pH

Note PH01q : The pH was analyzed at 9:03

Trace ID: 24J1136-07

Analysis: EPA 200.8 Rev. 5.4

Lead

Note DL03 : The reporting limit was raised due to a dilution required because of matrix interference and/or analyte interference.

Thallium

Note DL03 : The reporting limit was raised due to a dilution required because of matrix interference and/or analyte interference.

Analysis: SM 4500-H+ B-11

pH

Note PH01r : The pH was analyzed at 9:04

Trace ID: 24J1136-08

Analysis: SM 4500-H+ B-11

pH

Note PH01s : The pH was analyzed at 9:05

Trace ID: 24J1136-09

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.

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pH Note PH01t : The pH was analyzed at 9:49

Trace ID: 24J1136-10

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 9:51

Trace ID: 24J1136-11

Analysis: EPA 200.8 Rev. 5.4

Lead Note DL03 : The reporting limit was raised due to a dilution required because of matrix interference and/or analyte interference.

Thallium Note DL03 : The reporting limit was raised due to a dilution required because of matrix interference and/or analyte interference.

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 9:52

Trace ID: 24J1136-12

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 9:53

Trace ID: 24J1136-13

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 9:54

Trace ID: 24J1136-14

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 PH01z : The pH was analyzed at 9:55

Trace ID: 24J1136-15

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 PH01z : The pH was analyzed at 9:55

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Trace ID: 24J1136-16

Analysis: EPA 200.8 Rev. 5.4

Lead Note DL03 : The reporting limit was raised due to a dilution required because of matrix interference and/or analyte interference.

Thallium Note DL03 : The reporting limit was raised due to a dilution required because of matrix interference and/or analyte interference.

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 PH01aa : The pH was analyzed at 9:56

Trace ID: 24J1136-17

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 9:57

Trace ID: 24J1136-18

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 9:58

Trace ID: 24J1136-19

Analysis: EPA 200.8 Rev. 5.4

Lead Note DL03 : The reporting limit was raised due to a dilution required because of matrix interference and/or analyte interference.

Thallium Note DL03 : The reporting limit was raised due to a dilution required because of matrix interference and/or analyte interference.

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 9:58

Trace ID: 24J1136-20

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 PH01ad : The pH was analyzed at 9:59

Trace ID: 24J1136-21

Analysis: SM 4500-H+ B-11

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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 PH01 : The pH was analyzed at 10:00

Trace ID: 24J1136-22

Analysis: EPA 200.8 Rev. 5.4

Lead Note DL03 : The reporting limit was raised due to a dilution required because of matrix interference and/or analyte interference.

Thallium Note DL03 : The reporting limit was raised due to a dilution required because of matrix interference and/or analyte interference.

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 PH01a : The pH was analyzed at 10:01

Trace ID: 24J1136-23

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 PH01b : The pH was analyzed at 10:02

Trace ID: 24J1136-24

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 PH01c : The pH was analyzed at 10:03

Trace ID: 24J1136-25

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 PH01c : The pH was analyzed at 10:03

Trace ID: 24J1136-26

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 10:05

Trace ID: 24J1136-27

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 .

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pH Note PH01e : The pH was analyzed at 10:06

Trace ID: 24J1136-28

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 PH01f : The pH was analyzed at 10:07

Trace ID: 24J1136-29

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 PH01g : The pH was analyzed at 10:09

Trace ID: 24J1136-30

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 10:11

Trace ID: 24J1136-31

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 10:12

Trace ID: 24J1136-32

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 10:12

Trace ID: T158063-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: T158063-MS2

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.

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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.

Potassium

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 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.

Analysis: EPA 200.8 Rev. 5.4

Barium

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.

Lead

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: T158168-DUP1

Analysis: SM 4500-H+ B-11

pH

Note PH01l : The pH was analyzed at 8:57

Trace ID: T158219-DUP1

Analysis: SM 4500-H+ B-11

pH

Note PH01u : The pH was analyzed at 9:50

Trace ID: T158219-DUP2

Analysis: SM 4500-H+ B-11

pH

Note PH01h : The pH was analyzed at 10:10

Trace ID: T158238-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.

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.

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-01 Date Collected: 10/15/24 16:30 Matrix: Ground Water
 Sample ID: MW-02 Date Received: 10/16/24 08:20

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 7470A									
Batch: T158239									
Mercury	<0.00016 mg/L	0.00020	1	10/24/24	cma	10/25/24	jlh		0.00016
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
Batch: T158063									
Boron	110 mg/L	0.088	10	10/22/24	ejb	10/23/24	jlh		0.051
Calcium	190 mg/L	2.6	10	10/22/24	ejb	10/23/24	jlh		0.37
Iron	19 mg/L	0.50	10	10/22/24	ejb	10/23/24	jlh		0.075
Lithium	1.3 mg/L	0.025	10	10/22/24	ejb	10/23/24	jlh	N	0.019
Magnesium	60 mg/L	0.50	10	10/22/24	ejb	10/23/24	jlh		0.10
Potassium	48 mg/L	2.5	10	10/22/24	ejb	10/23/24	jlh		0.36
Sodium	310 mg/L	1.2	10	10/22/24	ejb	10/23/24	jlh		0.88
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T158063									
Antimony	0.00019 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Arsenic	0.0066 mg/L	0.00055	1	10/22/24	ejb	10/25/24	jma		0.00010
Barium	0.32 mg/L	0.0025	1	10/22/24	ejb	10/25/24	jma		0.00068
Beryllium	0.00018 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma	J	0.000052
Cadmium	<0.000075 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.000075
Chromium	0.033 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Cobalt	0.0055 mg/L	0.00052	1	10/22/24	ejb	10/25/24	jma		0.00010
Copper	0.0015 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Lead	0.0020 mg/L	0.0028	5	10/22/24	ejb	10/25/24	jma	DL03, J	0.00050
Molybdenum	0.0048 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00025
Nickel	0.018 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00065
Selenium	0.0014 mg/L	0.00050	1	10/22/24	ejb	10/25/24	jma		0.00010
Silver	<0.000050 mg/L	0.000050	1	10/22/24	ejb	10/25/24	jma		0.000050
Thallium	<0.00038 mg/L	0.0019	5	10/22/24	ejb	10/25/24	jma	DL03	0.00038
Vanadium	0.0035 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00062
Zinc	0.020 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-01 Date Collected: 10/15/24 16:30 Matrix: Ground Water
 Sample ID: MW-02 Date Received: 10/16/24 08:20

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
WET CHEMISTRY									
Analysis Method: EPA 300.0 Rev. 2.1									
<i>Batch: T157952</i>									
Fluoride	11 mg/L	0.50	25	10/16/24	bm	10/16/24	bm	N	0.28
Chloride	150 mg/L	3.8	25	10/16/24	bm	10/16/24	bm		3.0
Sulfate as SO4	1.8 mg/L	3.0	5	10/16/24	bm	10/16/24	bm	J	1.1
Analysis Method: SM 2320 B-21									
<i>Batch: T158170</i>									
Bicarbonate Alkalinity as CaCO3 at pH 4.5	2200 mg/L	5.0	1	10/21/24	bm	10/21/24	bm	N	0.16
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16 mg/L	5.0	1	10/21/24	bm	10/21/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	2200 mg/L	5.0	1	10/21/24	bm	10/21/24	bm		0.16
Analysis Method: SM 2540 C-20									
<i>Batch: T158001</i>									
Total Dissolved Solids	2000 mg/L	40	4	10/16/24	mr	10/16/24	mr		
Analysis Method: SM 2540 D-20									
<i>Batch: T157993</i>									
Total Suspended Solids	6.0 mg/L	4.0	1	10/16/24	mr	10/16/24	mr		4.0
Analysis Method: SM 4500-H+ B-11									
<i>Batch: T158168</i>									
pH	7.12 pH Units		1	10/15/24	sb	10/16/24	mj	PH01k	

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-02 Date Collected: 10/15/24 13:08 Matrix: Ground Water
 Sample ID: MW-03 Date Received: 10/16/24 08:20

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 7470A									
Batch: T158239									
Mercury	<0.00016 mg/L	0.00020	1	10/24/24	cma	10/25/24	jlh		0.00016
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
Batch: T158063									
Boron	4.4 mg/L	0.088	10	10/22/24	ejb	10/23/24	jlh		0.051
Calcium	330 mg/L	2.6	10	10/22/24	ejb	10/23/24	jlh		0.37
Iron	0.12 mg/L	0.050	1	10/22/24	ejb	10/23/24	jlh		0.0075
Lithium	0.035 mg/L	0.025	10	10/22/24	ejb	10/23/24	jlh	N	0.019
Magnesium	180 mg/L	0.50	10	10/22/24	ejb	10/23/24	jlh		0.10
Potassium	17 mg/L	2.5	10	10/22/24	ejb	10/23/24	jlh		0.36
Sodium	89 mg/L	1.2	10	10/22/24	ejb	10/23/24	jlh		0.88
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T158063									
Antimony	<0.00010 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00010
Arsenic	0.00087 mg/L	0.00055	1	10/22/24	ejb	10/25/24	jma		0.00010
Barium	0.27 mg/L	0.0025	1	10/22/24	ejb	10/25/24	jma		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.000075
Chromium	0.0034 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Cobalt	0.00061 mg/L	0.00052	1	10/22/24	ejb	10/25/24	jma		0.00010
Copper	0.00086 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Lead	<0.00050 mg/L	0.0028	5	10/22/24	ejb	10/25/24	jma	DL03	0.00050
Molybdenum	0.00039 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma	J	0.00025
Nickel	0.0012 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00065
Selenium	0.00051 mg/L	0.00050	1	10/22/24	ejb	10/25/24	jma		0.00010
Silver	<0.000050 mg/L	0.000050	1	10/22/24	ejb	10/25/24	jma		0.000050
Thallium	<0.00038 mg/L	0.0019	5	10/22/24	ejb	10/25/24	jma	DL03	0.00038
Vanadium	0.0015 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00062
Zinc	0.013 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-02 Date Collected: 10/15/24 13:08 Matrix: Ground Water
 Sample ID: MW-03 Date Received: 10/16/24 08:20

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
WET CHEMISTRY									
Analysis Method: EPA 300.0 Rev. 2.1									
<i>Batch: T157952</i>									
Fluoride	0.62 mg/L	0.10	5	10/16/24	bm	10/16/24	bm	N	0.055
Chloride	120 mg/L	3.8	25	10/16/24	bm	10/16/24	bm		3.0
Sulfate as SO4	170 mg/L	15	25	10/16/24	bm	10/16/24	bm		5.5
Analysis Method: SM 2320 B-21									
<i>Batch: T158170</i>									
Bicarbonate Alkalinity as CaCO3 at pH 4.5	1400 mg/L	5.0	1	10/21/24	bm	10/21/24	bm	N	0.16
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16 mg/L	5.0	1	10/21/24	bm	10/21/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	1400 mg/L	5.0	1	10/21/24	bm	10/21/24	bm		0.16
Analysis Method: SM 2540 C-20									
<i>Batch: T158001</i>									
Total Dissolved Solids	1800 mg/L	38	3.846154	10/16/24	mr	10/16/24	mr		
Analysis Method: SM 2540 D-20									
<i>Batch: T157993</i>									
Total Suspended Solids	<4.0 mg/L	4.0	1	10/16/24	mr	10/16/24	mr		4.0
Analysis Method: SM 4500-H+ B-11									
<i>Batch: T158168</i>									
pH	7.48 pH Units		1	10/15/24	sb	10/16/24	mj	PH01m	

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-03 Date Collected: 10/15/24 15:06 Matrix: Ground Water
 Sample ID: MW-04 Date Received: 10/16/24 08:20

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

Analysis Method: EPA 7470A
 Batch: T158239

Mercury	<0.00016	mg/L	0.00020	1	10/24/24	cma	10/25/24	jlh		0.00016
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METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158063

Boron	4.7	mg/L	0.088	10	10/22/24	ejb	10/23/24	jlh	MS07	0.051
Calcium	340	mg/L	2.6	10	10/22/24	ejb	10/23/24	jlh		0.37
Iron	4.8	mg/L	0.50	10	10/22/24	ejb	10/23/24	jlh		0.075
Lithium	0.074	mg/L	0.025	10	10/22/24	ejb	10/23/24	jlh	N	0.019
Magnesium	110	mg/L	0.50	10	10/22/24	ejb	10/23/24	jlh		0.10
Potassium	23	mg/L	2.5	10	10/22/24	ejb	10/23/24	jlh	MS07	0.36
Sodium	74	mg/L	1.2	10	10/22/24	ejb	10/23/24	jlh		0.88

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158063

Antimony	<0.00010	mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00010
Arsenic	0.00088	mg/L	0.00055	1	10/22/24	ejb	10/25/24	jma		0.00010
Barium	0.085	mg/L	0.0025	1	10/22/24	ejb	10/25/24	jma	MS07	0.00068
Beryllium	0.000054	mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma	J	0.000052
Cadmium	<0.000075	mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.000075
Chromium	0.0051	mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Cobalt	0.00032	mg/L	0.00052	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Copper	<0.00020	mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Lead	<0.00050	mg/L	0.0028	5	10/22/24	ejb	10/25/24	jma	DL03, MS07	0.00050
Molybdenum	0.0015	mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00025
Nickel	0.019	mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00065
Selenium	0.00031	mg/L	0.00050	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Silver	<0.000050	mg/L	0.000050	1	10/22/24	ejb	10/25/24	jma		0.000050
Thallium	<0.00038	mg/L	0.0019	5	10/22/24	ejb	10/25/24	jma	DL03	0.00038
Vanadium	0.0012	mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00062
Zinc	0.0051	mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-03 Date Collected: 10/15/24 15:06 Matrix: Ground Water
 Sample ID: MW-04 Date Received: 10/16/24 08:20

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
WET CHEMISTRY										
Analysis Method: EPA 300.0 Rev. 2.1										
<i>Batch: T157952</i>										
Fluoride	1.5	mg/L	0.10	5	10/16/24	bm	10/16/24	bm	N	0.055
Chloride	96	mg/L	3.8	25	10/16/24	bm	10/16/24	bm		3.0
Sulfate as SO4	590	mg/L	30	50	10/16/24	bm	10/16/24	bm		11
Analysis Method: SM 2320 B-21										
<i>Batch: T158170</i>										
Bicarbonate Alkalinity as CaCO3 at pH 4.5	740	mg/L	5.0	1	10/21/24	bm	10/21/24	bm	N	0.16
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16	mg/L	5.0	1	10/21/24	bm	10/21/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	740	mg/L	5.0	1	10/21/24	bm	10/21/24	bm		0.16
Analysis Method: SM 2540 C-20										
<i>Batch: T158001</i>										
Total Dissolved Solids	1700	mg/L	40	4	10/16/24	mr	10/16/24	mr		
Analysis Method: SM 2540 D-20										
<i>Batch: T157993</i>										
Total Suspended Solids	4.0	mg/L	4.0	1	10/16/24	mr	10/16/24	mr		4.0
Analysis Method: SM 4500-H+ B-11										
<i>Batch: T158168</i>										
pH	7.26	pH Units		1	10/15/24	sb	10/16/24	mj	PH01n	

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-04 Date Collected: 10/15/24 11:00 Matrix: Ground Water
 Sample ID: MW-31 Date Received: 10/16/24 08:20

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 7470A									
Batch: T158239									
Mercury	<0.00016 mg/L	0.00020	1	10/24/24	cma	10/25/24	jlh		0.00016
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
Batch: T158063									
Boron	5.8 mg/L	0.088	10	10/22/24	ejb	10/23/24	jlh		0.051
Calcium	150 mg/L	2.6	10	10/22/24	ejb	10/23/24	jlh		0.37
Iron	0.23 mg/L	0.050	1	10/22/24	ejb	10/23/24	jlh		0.0075
Lithium	0.063 mg/L	0.025	10	10/22/24	ejb	10/23/24	jlh	N	0.019
Magnesium	38 mg/L	0.50	10	10/22/24	ejb	10/23/24	jlh		0.10
Potassium	11 mg/L	2.5	10	10/22/24	ejb	10/23/24	jlh		0.36
Sodium	61 mg/L	1.2	10	10/22/24	ejb	10/23/24	jlh		0.88
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T158063									
Antimony	0.00039 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00010
Arsenic	0.00095 mg/L	0.00055	1	10/22/24	ejb	10/25/24	jma		0.00010
Barium	0.29 mg/L	0.0025	1	10/22/24	ejb	10/25/24	jma		0.00068
Beryllium	0.000096 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma	J	0.000052
Cadmium	<0.000075 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.000075
Chromium	0.0041 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Cobalt	0.00036 mg/L	0.00052	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Copper	0.00031 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Lead	<0.00010 mg/L	0.00055	1	10/22/24	ejb	10/25/24	jma		0.00010
Molybdenum	0.0011 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma	J	0.00025
Nickel	0.0027 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00065
Selenium	0.00010 mg/L	0.00050	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Silver	<0.000050 mg/L	0.000050	1	10/22/24	ejb	10/25/24	jma		0.000050
Thallium	<0.000075 mg/L	0.00038	1	10/22/24	ejb	10/25/24	jma		0.000075
Vanadium	0.00083 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma	J	0.00062
Zinc	0.010 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-04 Date Collected: 10/15/24 11:00 Matrix: Ground Water
 Sample ID: MW-31 Date Received: 10/16/24 08:20

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
WET CHEMISTRY									
Analysis Method: EPA 300.0 Rev. 2.1									
<i>Batch: T157952</i>									
Fluoride	4.5 mg/L	0.10	5	10/16/24	bm	10/16/24	bm	N	0.055
Chloride	110 mg/L	3.8	25	10/16/24	bm	10/16/24	bm		3.0
Sulfate as SO4	45 mg/L	3.0	5	10/16/24	bm	10/16/24	bm		1.1
Analysis Method: SM 2320 B-21									
<i>Batch: T158170</i>									
Bicarbonate Alkalinity as CaCO3 at pH 4.5	450 mg/L	5.0	1	10/21/24	bm	10/21/24	bm	N	0.16
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16 mg/L	5.0	1	10/21/24	bm	10/21/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	450 mg/L	5.0	1	10/21/24	bm	10/21/24	bm		0.16
Analysis Method: SM 2540 C-20									
<i>Batch: T158001</i>									
Total Dissolved Solids	730 mg/L	20	2	10/16/24	mr	10/16/24	mr		
Analysis Method: SM 2540 D-20									
<i>Batch: T157993</i>									
Total Suspended Solids	<4.0 mg/L	4.0	1.010101	10/16/24	mr	10/16/24	mr		4.0
Analysis Method: SM 4500-H+ B-11									
<i>Batch: T158168</i>									
pH	8.01 pH Units		1	10/15/24	sb	10/16/24	mj	PH01o	

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-05 Date Collected: 10/15/24 16:10 Matrix: Ground Water
 Sample ID: MW-37 Date Received: 10/16/24 08:20

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 7470A									
Batch: T158239									
Mercury	<0.00016 mg/L	0.00020	1	10/24/24	cma	10/25/24	jlh		0.00016
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
Batch: T158063									
Boron	1.9 mg/L	0.088	10	10/22/24	ejb	10/23/24	jlh		0.051
Calcium	120 mg/L	2.6	10	10/22/24	ejb	10/23/24	jlh		0.37
Iron	0.026 mg/L	0.050	1	10/22/24	ejb	10/23/24	jlh	J	0.0075
Lithium	0.019 mg/L	0.0025	1	10/22/24	ejb	10/23/24	jlh	N	0.0019
Magnesium	9.8 mg/L	0.50	10	10/22/24	ejb	10/23/24	jlh		0.10
Potassium	18 mg/L	2.5	10	10/22/24	ejb	10/23/24	jlh		0.36
Sodium	57 mg/L	1.2	10	10/22/24	ejb	10/23/24	jlh		0.88
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T158063									
Antimony	0.00023 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Arsenic	0.00046 mg/L	0.00055	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Barium	0.044 mg/L	0.0025	1	10/22/24	ejb	10/25/24	jma		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.000052
Cadmium	0.00011 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma	J	0.000075
Chromium	0.00027 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Cobalt	0.00051 mg/L	0.00052	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Copper	0.014 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Lead	<0.00010 mg/L	0.00055	1	10/22/24	ejb	10/25/24	jma		0.00010
Molybdenum	0.0064 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00025
Nickel	0.0039 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00065
Selenium	0.0018 mg/L	0.00050	1	10/22/24	ejb	10/25/24	jma		0.00010
Silver	0.00017 mg/L	0.000050	1	10/22/24	ejb	10/25/24	jma		0.000050
Thallium	<0.000075 mg/L	0.00038	1	10/22/24	ejb	10/25/24	jma		0.000075
Vanadium	<0.00062 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00062
Zinc	0.011 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-05 Date Collected: 10/15/24 16:10 Matrix: Ground Water
 Sample ID: MW-37 Date Received: 10/16/24 08:20

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
WET CHEMISTRY									
Analysis Method: EPA 300.0 Rev. 2.1									
<i>Batch: T157952</i>									
Fluoride	0.50 mg/L	0.10	5	10/16/24	bm	10/16/24	bm	N	0.055
Chloride	40 mg/L	0.75	5	10/16/24	bm	10/16/24	bm		0.60
Sulfate as SO4	110 mg/L	15	25	10/16/24	bm	10/16/24	bm		5.5
Analysis Method: SM 2320 B-21									
<i>Batch: T158170</i>									
Bicarbonate Alkalinity as CaCO3 at pH 4.5	350 mg/L	5.0	1	10/21/24	bm	10/21/24	bm	N	0.16
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16 mg/L	5.0	1	10/21/24	bm	10/21/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	350 mg/L	5.0	1	10/21/24	bm	10/21/24	bm		0.16
Analysis Method: SM 2540 C-20									
<i>Batch: T158001</i>									
Total Dissolved Solids	630 mg/L	20	2	10/16/24	mr	10/16/24	mr		
Analysis Method: SM 2540 D-20									
<i>Batch: T157993</i>									
Total Suspended Solids	<4.0 mg/L	4.0	1.010101	10/16/24	mr	10/16/24	mr		4.0
Analysis Method: SM 4500-H+ B-11									
<i>Batch: T158168</i>									
pH	7.31 pH Units		1	10/15/24	sb	10/16/24	mj	PH01p	

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-06 Date Collected: 10/15/24 12:30 Matrix: Ground Water
 Sample ID: MW-07 Date Received: 10/16/24 08:20

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 7470A									
Batch: T158239									
Mercury	<0.00016 mg/L	0.00020	1	10/24/24	cma	10/25/24	jlh		0.00016
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
Batch: T158063									
Boron	11 mg/L	0.088	10	10/22/24	ejb	10/23/24	jlh		0.051
Calcium	130 mg/L	2.6	10	10/22/24	ejb	10/23/24	jlh		0.37
Iron	17 mg/L	0.50	10	10/22/24	ejb	10/23/24	jlh		0.075
Lithium	0.0056 mg/L	0.0025	1	10/22/24	ejb	10/23/24	jlh	N	0.0019
Magnesium	35 mg/L	0.50	10	10/22/24	ejb	10/23/24	jlh		0.10
Potassium	4.1 mg/L	2.5	10	10/22/24	ejb	10/23/24	jlh		0.36
Sodium	47 mg/L	1.2	10	10/22/24	ejb	10/23/24	jlh		0.88
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T158063									
Antimony	<0.00010 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00010
Arsenic	0.00022 mg/L	0.00055	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Barium	0.37 mg/L	0.0025	1	10/22/24	ejb	10/25/24	jma		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.000075
Chromium	0.00041 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Cobalt	0.0010 mg/L	0.00052	1	10/22/24	ejb	10/25/24	jma		0.00010
Copper	<0.00020 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Lead	<0.00010 mg/L	0.00055	1	10/22/24	ejb	10/25/24	jma		0.00010
Molybdenum	<0.00025 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00025
Nickel	0.00071 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma	J	0.00065
Selenium	0.00017 mg/L	0.00050	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Silver	<0.000050 mg/L	0.000050	1	10/22/24	ejb	10/25/24	jma		0.000050
Thallium	<0.000075 mg/L	0.00038	1	10/22/24	ejb	10/25/24	jma		0.000075
Vanadium	0.00095 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma	J	0.00062
Zinc	0.016 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-06 Date Collected: 10/15/24 12:30 Matrix: Ground Water
 Sample ID: MW-07 Date Received: 10/16/24 08:20

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
WET CHEMISTRY									
Analysis Method: EPA 300.0 Rev. 2.1									
<i>Batch: T157952</i>									
Fluoride	<0.055 mg/L	0.10	5	10/16/24	bm	10/16/24	bm	N	0.055
Chloride	15 mg/L	0.75	5	10/16/24	bm	10/16/24	bm		0.60
Sulfate as SO4	34 mg/L	3.0	5	10/16/24	bm	10/16/24	bm		1.1
Analysis Method: SM 2320 B-21									
<i>Batch: T158170</i>									
Bicarbonate Alkalinity as CaCO3 at pH 4.5	620 mg/L	5.0	1	10/21/24	bm	10/21/24	bm	N	0.16
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16 mg/L	5.0	1	10/21/24	bm	10/21/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	620 mg/L	5.0	1	10/21/24	bm	10/21/24	bm		0.16
Analysis Method: SM 2540 C-20									
<i>Batch: T158001</i>									
Total Dissolved Solids	680 mg/L	20	2	10/16/24	mr	10/16/24	mr		
Analysis Method: SM 2540 D-20									
<i>Batch: T157993</i>									
Total Suspended Solids	43 mg/L	4.0	0.990099	10/16/24	mr	10/16/24	mr		4.0
Analysis Method: SM 4500-H+ B-11									
<i>Batch: T158168</i>									
pH	6.90 pH Units		1	10/15/24	sb	10/16/24	mj	PH01q	

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-07 Date Collected: 10/15/24 13:08 Matrix: Ground Water
 Sample ID: MWT-03 Date Received: 10/16/24 08:20

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

Analysis Method: EPA 7470A
 Batch: T158239

Mercury	<0.00016 mg/L	0.00020	1	10/24/24	cma	10/25/24	jlh		0.00016
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METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158063

Boron	4.1 mg/L	0.088	10	10/22/24	ejb	10/23/24	jlh		0.051
Calcium	320 mg/L	2.6	10	10/22/24	ejb	10/23/24	jlh		0.37
Iron	0.14 mg/L	0.050	1	10/22/24	ejb	10/23/24	jlh		0.0075
Lithium	0.034 mg/L	0.025	10	10/22/24	ejb	10/23/24	jlh	N	0.019
Magnesium	180 mg/L	0.50	10	10/22/24	ejb	10/23/24	jlh		0.10
Potassium	17 mg/L	2.5	10	10/22/24	ejb	10/23/24	jlh		0.36
Sodium	86 mg/L	1.2	10	10/22/24	ejb	10/23/24	jlh		0.88

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158063

Antimony	<0.00010 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00010
Arsenic	0.00087 mg/L	0.00055	1	10/22/24	ejb	10/25/24	jma		0.00010
Barium	0.26 mg/L	0.0025	1	10/22/24	ejb	10/25/24	jma		0.00068
Beryllium	0.000068 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma	J	0.000052
Cadmium	<0.000075 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.000075
Chromium	0.0052 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Cobalt	0.00082 mg/L	0.00052	1	10/22/24	ejb	10/25/24	jma		0.00010
Copper	0.00030 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Lead	<0.00050 mg/L	0.0028	5	10/22/24	ejb	10/25/24	jma	DL03	0.00050
Molybdenum	<0.00025 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00025
Nickel	0.0020 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00065
Selenium	0.00063 mg/L	0.00050	1	10/22/24	ejb	10/25/24	jma		0.00010
Silver	<0.000050 mg/L	0.000050	1	10/22/24	ejb	10/25/24	jma		0.000050
Thallium	<0.00038 mg/L	0.0019	5	10/22/24	ejb	10/25/24	jma	DL03	0.00038
Vanadium	0.0024 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00062
Zinc	0.015 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-07 Date Collected: 10/15/24 13:08 Matrix: Ground Water
 Sample ID: MWT-03 Date Received: 10/16/24 08:20

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
WET CHEMISTRY									
Analysis Method: EPA 300.0 Rev. 2.1									
<i>Batch: T157952</i>									
Fluoride	0.58 mg/L	0.10	5	10/16/24	bm	10/16/24	bm	N	0.055
Chloride	120 mg/L	3.8	25	10/16/24	bm	10/16/24	bm		3.0
Sulfate as SO4	180 mg/L	15	25	10/16/24	bm	10/16/24	bm		5.5
Analysis Method: SM 2320 B-21									
<i>Batch: T158170</i>									
Bicarbonate Alkalinity as CaCO3 at pH 4.5	1400 mg/L	5.0	1	10/21/24	bm	10/21/24	bm	N	0.16
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16 mg/L	5.0	1	10/21/24	bm	10/21/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	1400 mg/L	5.0	1	10/21/24	bm	10/21/24	bm		0.16
Analysis Method: SM 2540 C-20									
<i>Batch: T158001</i>									
Total Dissolved Solids	1800 mg/L	20	2	10/16/24	mr	10/16/24	mr		
Analysis Method: SM 2540 D-20									
<i>Batch: T157993</i>									
Total Suspended Solids	<4.0 mg/L	4.0	0.990099	10/16/24	mr	10/16/24	mr		4.0
Analysis Method: SM 4500-H+ B-11									
<i>Batch: T158168</i>									
pH	7.43 pH Units		1	10/15/24	sb	10/16/24	mj	PH01r	

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-08 Date Collected: 10/15/24 16:10 Matrix: Ground Water
 Sample ID: MWT-37 Date Received: 10/16/24 08:20

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 7470A									
Batch: T158239									
Mercury	<0.00016 mg/L	0.00020	1	10/24/24	cma	10/25/24	jlh		0.00016
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
Batch: T158063									
Boron	1.9 mg/L	0.088	10	10/22/24	ejb	10/23/24	jlh		0.051
Calcium	120 mg/L	2.6	10	10/22/24	ejb	10/23/24	jlh		0.37
Iron	0.024 mg/L	0.050	1	10/22/24	ejb	10/23/24	jlh	J	0.0075
Lithium	0.019 mg/L	0.0025	1	10/22/24	ejb	10/23/24	jlh	N	0.0019
Magnesium	9.9 mg/L	0.50	10	10/22/24	ejb	10/23/24	jlh		0.10
Potassium	18 mg/L	2.5	10	10/22/24	ejb	10/23/24	jlh		0.36
Sodium	58 mg/L	1.2	10	10/22/24	ejb	10/23/24	jlh		0.88
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T158063									
Antimony	0.00021 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Arsenic	0.00040 mg/L	0.00055	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Barium	0.044 mg/L	0.0025	1	10/22/24	ejb	10/25/24	jma		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.000052
Cadmium	0.00012 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma	J	0.000075
Chromium	0.00030 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Cobalt	0.00059 mg/L	0.00052	1	10/22/24	ejb	10/25/24	jma		0.00010
Copper	0.014 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Lead	<0.00010 mg/L	0.00055	1	10/22/24	ejb	10/25/24	jma		0.00010
Molybdenum	0.0063 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00025
Nickel	0.0040 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00065
Selenium	0.0021 mg/L	0.00050	1	10/22/24	ejb	10/25/24	jma		0.00010
Silver	<0.000050 mg/L	0.000050	1	10/22/24	ejb	10/25/24	jma		0.000050
Thallium	<0.000075 mg/L	0.00038	1	10/22/24	ejb	10/25/24	jma		0.000075
Vanadium	<0.00062 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00062
Zinc	0.012 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-08 Date Collected: 10/15/24 16:10 Matrix: Ground Water
 Sample ID: MWT-37 Date Received: 10/16/24 08:20

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
WET CHEMISTRY										
Analysis Method: EPA 300.0 Rev. 2.1										
<i>Batch: T157952</i>										
Fluoride	0.56	mg/L	0.10	5	10/16/24	bm	10/16/24	bm	N	0.055
Chloride	40	mg/L	0.75	5	10/16/24	bm	10/16/24	bm		0.60
Sulfate as SO4	110	mg/L	15	25	10/16/24	bm	10/16/24	bm		5.5
Analysis Method: SM 2320 B-21										
<i>Batch: T158170</i>										
Bicarbonate Alkalinity as CaCO3 at pH 4.5	350	mg/L	5.0	1	10/21/24	bm	10/21/24	bm	N	0.16
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16	mg/L	5.0	1	10/21/24	bm	10/21/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	350	mg/L	5.0	1	10/21/24	bm	10/21/24	bm		0.16
Analysis Method: SM 2540 C-20										
<i>Batch: T158001</i>										
Total Dissolved Solids	630	mg/L	20	2	10/16/24	mr	10/16/24	mr		
Analysis Method: SM 2540 D-20										
<i>Batch: T157993</i>										
Total Suspended Solids	<4.1	mg/L	4.1	1.020408	10/16/24	mr	10/16/24	mr		4.1
Analysis Method: SM 4500-H+ B-11										
<i>Batch: T158168</i>										
pH	7.38	pH Units		1	10/15/24	sb	10/16/24	mj	PH01s	

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-09 Date Collected: 10/16/24 09:34 Matrix: Ground Water
 Sample ID: MW-17 Date Received: 10/17/24 15:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 7470A									
Batch: T158239									
Mercury	<0.00016 mg/L	0.00020	1	10/24/24	cma	10/25/24	jlh		0.00016
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
Batch: T158063									
Boron	0.89 mg/L	0.088	10	10/22/24	ejb	10/23/24	jlh		0.051
Calcium	130 mg/L	2.6	10	10/22/24	ejb	10/23/24	jlh		0.37
Iron	3.8 mg/L	0.50	10	10/22/24	ejb	10/23/24	jlh		0.075
Lithium	0.036 mg/L	0.025	10	10/22/24	ejb	10/23/24	jlh	N	0.019
Magnesium	24 mg/L	0.50	10	10/22/24	ejb	10/23/24	jlh		0.10
Potassium	16 mg/L	2.5	10	10/22/24	ejb	10/23/24	jlh		0.36
Sodium	56 mg/L	1.2	10	10/22/24	ejb	10/23/24	jlh		0.88
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T158063									
Antimony	<0.00010 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00010
Arsenic	0.0024 mg/L	0.00055	1	10/22/24	ejb	10/25/24	jma		0.00010
Barium	0.65 mg/L	0.0025	1	10/22/24	ejb	10/25/24	jma		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.000075
Chromium	0.00081 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Cobalt	0.00052 mg/L	0.00052	1	10/22/24	ejb	10/25/24	jma		0.00010
Copper	0.00049 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Lead	0.00017 mg/L	0.00055	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Molybdenum	0.00077 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma	J	0.00025
Nickel	0.0015 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00065
Selenium	0.00013 mg/L	0.00050	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Silver	<0.000050 mg/L	0.000050	1	10/22/24	ejb	10/25/24	jma		0.000050
Thallium	<0.000075 mg/L	0.00038	1	10/22/24	ejb	10/25/24	jma		0.000075
Vanadium	0.00089 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma	J	0.00062
Zinc	0.027 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-09 Date Collected: 10/16/24 09:34 Matrix: Ground Water
 Sample ID: MW-17 Date Received: 10/17/24 15:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
WET CHEMISTRY									
Analysis Method: EPA 300.0 Rev. 2.1									
<i>Batch: T158101</i>									
Fluoride	0.67 mg/L	0.10	5	10/18/24	bm	10/19/24	bm	N	0.055
Chloride	47 mg/L	0.75	5	10/18/24	bm	10/19/24	bm		0.60
Sulfate as SO4	7.3 mg/L	3.0	5	10/18/24	bm	10/19/24	bm		1.1
Analysis Method: SM 2320 B-21									
<i>Batch: T158357</i>									
Bicarbonate Alkalinity as CaCO3 at pH 4.5	500 mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16 mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	500 mg/L	5.0	1	10/24/24	bm	10/24/24	bm		0.16
Analysis Method: SM 2540 C-20									
<i>Batch: T158220</i>									
Total Dissolved Solids	580 mg/L	20	2	10/22/24	cdj	10/22/24	cdj		
Analysis Method: SM 2540 D-20									
<i>Batch: T158222</i>									
Total Suspended Solids	12 mg/L	4.0	1	10/22/24	cdj	10/22/24	cdj		4.0
Analysis Method: SM 4500-H+ B-11									
<i>Batch: T158219</i>									
pH	7.49 pH Units		1	10/16/24	sb	10/18/24	sb	H04, PH01t	

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-10 Date Collected: 10/16/24 10:32 Matrix: Ground Water
 Sample ID: MW-18 Date Received: 10/17/24 15:03

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

Analysis Method: EPA 7470A
 Batch: T158239

Mercury	<0.00016	mg/L	0.00020	1	10/24/24	cma	10/25/24	jlh		0.00016
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METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158063

Boron	3.9	mg/L	0.088	10	10/22/24	ejb	10/23/24	jlh		0.051
Calcium	330	mg/L	2.6	10	10/22/24	ejb	10/23/24	jlh		0.37
Iron	6.9	mg/L	0.50	10	10/22/24	ejb	10/23/24	jlh		0.075
Lithium	0.042	mg/L	0.025	10	10/22/24	ejb	10/23/24	jlh	N	0.019
Magnesium	35	mg/L	0.50	10	10/22/24	ejb	10/23/24	jlh		0.10
Potassium	10	mg/L	2.5	10	10/22/24	ejb	10/23/24	jlh		0.36
Sodium	23	mg/L	1.2	10	10/22/24	ejb	10/23/24	jlh		0.88

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158063

Antimony	0.00012	mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Arsenic	0.044	mg/L	0.00055	1	10/22/24	ejb	10/25/24	jma		0.00010
Barium	0.028	mg/L	0.0025	1	10/22/24	ejb	10/25/24	jma		0.00068
Beryllium	<0.000052	mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.000052
Cadmium	<0.000075	mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.000075
Chromium	<0.00020	mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Cobalt	0.0016	mg/L	0.00052	1	10/22/24	ejb	10/25/24	jma		0.00010
Copper	0.0017	mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Lead	0.00014	mg/L	0.00055	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Molybdenum	0.021	mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00025
Nickel	0.0049	mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00065
Selenium	0.00014	mg/L	0.00050	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Silver	<0.000050	mg/L	0.000050	1	10/22/24	ejb	10/25/24	jma		0.000050
Thallium	<0.000075	mg/L	0.00038	1	10/22/24	ejb	10/25/24	jma		0.000075
Vanadium	<0.00062	mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00062
Zinc	0.031	mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-10 Date Collected: 10/16/24 10:32 Matrix: Ground Water
 Sample ID: MW-18 Date Received: 10/17/24 15:03

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

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T158101

Fluoride	4.8 mg/L		0.10	5	10/18/24	bm	10/19/24	bm	N	0.055
Chloride	24 mg/L		0.75	5	10/18/24	bm	10/19/24	bm		0.60
Sulfate as SO4	740 mg/L		30	50	10/18/24	bm	10/21/24	bm		11

Analysis Method: SM 2320 B-21

Batch: T158357

Bicarbonate Alkalinity as CaCO3 at pH 4.5	220 mg/L		5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16 mg/L		5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	220 mg/L		5.0	1	10/24/24	bm	10/24/24	bm		0.16

Analysis Method: SM 2540 C-20

Batch: T158220

Total Dissolved Solids	1300 mg/L		20	2	10/22/24	cdj	10/22/24	cdj		
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Analysis Method: SM 2540 D-20

Batch: T158222

Total Suspended Solids	14 mg/L		4.0	1	10/22/24	cdj	10/22/24	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T158219

pH	7.09 pH Units			1	10/16/24	sb	10/18/24	sb	H04, PH01v	
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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-11 Date Collected: 10/16/24 11:36 Matrix: Ground Water
 Sample ID: MW-01R Date Received: 10/17/24 15:03

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

Analysis Method: EPA 7470A
 Batch: T158239

Mercury	<0.00016 mg/L	0.00020	1	10/24/24	cma	10/25/24	jlh		0.00016
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METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158063

Boron	130 mg/L	0.18	20	10/22/24	ejb	10/23/24	jlh		0.10
Calcium	160 mg/L	2.6	10	10/22/24	ejb	10/23/24	jlh		0.37
Iron	0.093 mg/L	0.050	1	10/22/24	ejb	10/23/24	jlh		0.0075
Lithium	2.6 mg/L	0.025	10	10/22/24	ejb	10/23/24	jlh	N	0.019
Magnesium	99 mg/L	0.50	10	10/22/24	ejb	10/23/24	jlh		0.10
Potassium	86 mg/L	2.5	10	10/22/24	ejb	10/23/24	jlh		0.36
Sodium	400 mg/L	1.2	10	10/22/24	ejb	10/23/24	jlh		0.88

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158063

Antimony	0.00019 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Arsenic	0.0015 mg/L	0.00055	1	10/22/24	ejb	10/25/24	jma		0.00010
Barium	0.42 mg/L	0.0025	1	10/22/24	ejb	10/25/24	jma		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.000075
Chromium	0.0021 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Cobalt	0.00095 mg/L	0.00052	1	10/22/24	ejb	10/25/24	jma		0.00010
Copper	0.00030 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Lead	0.00069 mg/L	0.0028	5	10/22/24	ejb	10/25/24	jma	DL03, J	0.00050
Molybdenum	0.00034 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma	J	0.00025
Nickel	0.0019 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00065
Selenium	0.00073 mg/L	0.00050	1	10/22/24	ejb	10/25/24	jma		0.00010
Silver	<0.000050 mg/L	0.000050	1	10/22/24	ejb	10/25/24	jma		0.000050
Thallium	<0.00038 mg/L	0.0019	5	10/22/24	ejb	10/25/24	jma	DL03	0.00038
Vanadium	0.0020 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00062
Zinc	0.023 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-11 Date Collected: 10/16/24 11:36 Matrix: Ground Water
 Sample ID: MW-01R Date Received: 10/17/24 15:03

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
WET CHEMISTRY										
Analysis Method: EPA 300.0 Rev. 2.1										
<i>Batch: T158101</i>										
Fluoride	16	mg/L	0.10	5	10/18/24	bm	10/19/24	bm	N	0.055
Chloride	150	mg/L	3.8	25	10/18/24	bm	10/19/24	bm		3.0
Sulfate as SO4	130	mg/L	15	25	10/18/24	bm	10/19/24	bm		5.5
Analysis Method: SM 2320 B-21										
<i>Batch: T158357</i>										
Bicarbonate Alkalinity as CaCO3 at pH 4.5	1400	mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16	mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	1400	mg/L	5.0	1	10/24/24	bm	10/24/24	bm		0.16
Analysis Method: SM 2540 C-20										
<i>Batch: T158220</i>										
Total Dissolved Solids	2300	mg/L	20	2	10/22/24	cdj	10/22/24	cdj		
Analysis Method: SM 2540 D-20										
<i>Batch: T158222</i>										
Total Suspended Solids	5.0	mg/L	4.0	1	10/22/24	cdj	10/22/24	cdj		4.0
Analysis Method: SM 4500-H+ B-11										
<i>Batch: T158219</i>										
pH	7.73	pH Units		1	10/16/24	sb	10/18/24	sb	H04, PH01w	

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-12 Date Collected: 10/16/24 13:00 Matrix: Ground Water
 Sample ID: MW-20 Date Received: 10/17/24 15:03

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

Analysis Method: EPA 7470A
 Batch: T158239

Mercury	<0.00016 mg/L	0.00020	1	10/24/24	cma	10/25/24	jlh		0.00016
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METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158063

Boron	1.3 mg/L	0.088	10	10/22/24	ejb	10/23/24	jlh		0.051
Calcium	120 mg/L	2.6	10	10/22/24	ejb	10/23/24	jlh		0.37
Iron	18 mg/L	0.50	10	10/22/24	ejb	10/23/24	jlh		0.075
Lithium	0.058 mg/L	0.025	10	10/22/24	ejb	10/23/24	jlh	N	0.019
Magnesium	41 mg/L	0.50	10	10/22/24	ejb	10/23/24	jlh		0.10
Potassium	9.1 mg/L	2.5	10	10/22/24	ejb	10/23/24	jlh		0.36
Sodium	47 mg/L	1.2	10	10/22/24	ejb	10/23/24	jlh		0.88

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158063

Antimony	0.00012 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Arsenic	0.0019 mg/L	0.00055	1	10/22/24	ejb	10/25/24	jma		0.00010
Barium	0.82 mg/L	0.012	5	10/22/24	ejb	10/25/24	jma		0.0034
Beryllium	<0.000052 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.000075
Chromium	0.00022 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma	J	0.00020
Cobalt	0.0010 mg/L	0.00052	1	10/22/24	ejb	10/25/24	jma		0.00010
Copper	0.00082 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Lead	0.0017 mg/L	0.00055	1	10/22/24	ejb	10/25/24	jma		0.00010
Molybdenum	0.0058 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00025
Nickel	0.0067 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00065
Selenium	<0.00010 mg/L	0.00050	1	10/22/24	ejb	10/25/24	jma		0.00010
Silver	<0.000050 mg/L	0.000050	1	10/22/24	ejb	10/25/24	jma		0.000050
Thallium	<0.000075 mg/L	0.00038	1	10/22/24	ejb	10/25/24	jma		0.000075
Vanadium	<0.00062 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00062
Zinc	0.056 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-12 Date Collected: 10/16/24 13:00 Matrix: Ground Water
 Sample ID: MW-20 Date Received: 10/17/24 15:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
WET CHEMISTRY									
Analysis Method: EPA 300.0 Rev. 2.1									
<i>Batch: T158101</i>									
Fluoride	0.12 mg/L	0.10	5	10/18/24	bm	10/19/24	bm	N	0.055
Chloride	44 mg/L	0.75	5	10/18/24	bm	10/19/24	bm		0.60
Sulfate as SO4	24 mg/L	3.0	5	10/18/24	bm	10/19/24	bm		1.1
Analysis Method: SM 2320 B-21									
<i>Batch: T158357</i>									
Bicarbonate Alkalinity as CaCO3 at pH 4.5	500 mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16 mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	500 mg/L	5.0	1	10/24/24	bm	10/24/24	bm		0.16
Analysis Method: SM 2540 C-20									
<i>Batch: T158220</i>									
Total Dissolved Solids	560 mg/L	20	2	10/22/24	cdj	10/22/24	cdj		
Analysis Method: SM 2540 D-20									
<i>Batch: T158222</i>									
Total Suspended Solids	38 mg/L	4.0	1	10/22/24	cdj	10/22/24	cdj		4.0
Analysis Method: SM 4500-H+ B-11									
<i>Batch: T158219</i>									
pH	7.18 pH Units		1	10/16/24	sb	10/18/24	sb	H04, PH01x	

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-13 Date Collected: 10/16/24 14:12 Matrix: Ground Water
 Sample ID: MW-36 Date Received: 10/17/24 15:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 7470A									
Batch: T158239									
Mercury	<0.00016 mg/L	0.00020	1	10/24/24	cma	10/25/24	jlh		0.00016
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
Batch: T158063									
Boron	0.61 mg/L	0.088	10	10/22/24	ejb	10/23/24	jlh		0.051
Calcium	61 mg/L	2.6	10	10/22/24	ejb	10/23/24	jlh		0.37
Iron	0.44 mg/L	0.050	1	10/22/24	ejb	10/23/24	jlh		0.0075
Lithium	0.012 mg/L	0.0025	1	10/22/24	ejb	10/23/24	jlh	N	0.0019
Magnesium	9.3 mg/L	0.50	10	10/22/24	ejb	10/23/24	jlh		0.10
Potassium	30 mg/L	2.5	10	10/22/24	ejb	10/23/24	jlh		0.36
Sodium	57 mg/L	1.2	10	10/22/24	ejb	10/23/24	jlh		0.88
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T158063									
Antimony	0.00075 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00010
Arsenic	0.013 mg/L	0.00055	1	10/22/24	ejb	10/25/24	jma		0.00010
Barium	0.20 mg/L	0.0025	1	10/22/24	ejb	10/25/24	jma		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.000052
Cadmium	0.00019 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma	J	0.000075
Chromium	0.0018 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Cobalt	0.00018 mg/L	0.00052	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Copper	0.0086 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Lead	0.012 mg/L	0.00055	1	10/22/24	ejb	10/25/24	jma		0.00010
Molybdenum	0.034 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00025
Nickel	0.0054 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00065
Selenium	0.00065 mg/L	0.00050	1	10/22/24	ejb	10/25/24	jma		0.00010
Silver	0.00011 mg/L	0.000050	1	10/22/24	ejb	10/25/24	jma		0.000050
Thallium	<0.000075 mg/L	0.00038	1	10/22/24	ejb	10/25/24	jma		0.000075
Vanadium	0.0025 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00062
Zinc	0.014 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-13 Date Collected: 10/16/24 14:12 Matrix: Ground Water
 Sample ID: MW-36 Date Received: 10/17/24 15:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
WET CHEMISTRY									
Analysis Method: EPA 300.0 Rev. 2.1									
<i>Batch: T158101</i>									
Fluoride	0.92 mg/L	0.10	5	10/18/24	bm	10/19/24	bm	N	0.055
Chloride	38 mg/L	0.75	5	10/18/24	bm	10/19/24	bm		0.60
Sulfate as SO4	10 mg/L	3.0	5	10/18/24	bm	10/19/24	bm		1.1
Analysis Method: SM 2320 B-21									
<i>Batch: T158357</i>									
Bicarbonate Alkalinity as CaCO3 at pH 4.5	270 mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Carbonate Alkalinity as CaCO3 at pH 8.2	34 mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	310 mg/L	5.0	1	10/24/24	bm	10/24/24	bm		0.16
Analysis Method: SM 2540 C-20									
<i>Batch: T158220</i>									
Total Dissolved Solids	390 mg/L	20	2	10/22/24	cdj	10/22/24	cdj		
Analysis Method: SM 2540 D-20									
<i>Batch: T158222</i>									
Total Suspended Solids	<4.0 mg/L	4.0	1	10/22/24	cdj	10/22/24	cdj		4.0
Analysis Method: SM 4500-H+ B-11									
<i>Batch: T158219</i>									
pH	8.72 pH Units		1	10/16/24	sb	10/18/24	sb	H04, PH01y	

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-14 Date Collected: 10/16/24 15:20 Matrix: Ground Water
 Sample ID: MW-06 Date Received: 10/17/24 15:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 7470A									
Batch: T158239									
Mercury	<0.00016 mg/L	0.00020	1	10/24/24	cma	10/25/24	jlh		0.00016
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
Batch: T158063									
Boron	11 mg/L	0.088	10	10/22/24	ejb	10/23/24	jlh		0.051
Calcium	220 mg/L	2.6	10	10/22/24	ejb	10/23/24	jlh		0.37
Iron	12 mg/L	0.50	10	10/22/24	ejb	10/23/24	jlh		0.075
Lithium	0.17 mg/L	0.025	10	10/22/24	ejb	10/23/24	jlh	N	0.019
Magnesium	97 mg/L	0.50	10	10/22/24	ejb	10/23/24	jlh		0.10
Potassium	25 mg/L	2.5	10	10/22/24	ejb	10/23/24	jlh		0.36
Sodium	88 mg/L	1.2	10	10/22/24	ejb	10/23/24	jlh		0.88
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T158063									
Antimony	<0.00010 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00010
Arsenic	0.00082 mg/L	0.00055	1	10/22/24	ejb	10/25/24	jma		0.00010
Barium	1.6 mg/L	0.025	10	10/22/24	ejb	10/25/24	jma		0.0068
Beryllium	<0.000052 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.000075
Chromium	0.0013 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Cobalt	0.00042 mg/L	0.00052	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Copper	0.00025 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Lead	0.00012 mg/L	0.00055	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Molybdenum	0.00043 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma	J	0.00025
Nickel	0.00095 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma	J	0.00065
Selenium	0.00029 mg/L	0.00050	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Silver	<0.000050 mg/L	0.000050	1	10/22/24	ejb	10/25/24	jma		0.000050
Thallium	<0.000075 mg/L	0.00038	1	10/22/24	ejb	10/25/24	jma		0.000075
Vanadium	<0.00062 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00062
Zinc	0.058 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-14 Date Collected: 10/16/24 15:20 Matrix: Ground Water
 Sample ID: MW-06 Date Received: 10/17/24 15:03

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
WET CHEMISTRY										
Analysis Method: EPA 300.0 Rev. 2.1										
<i>Batch: T158101</i>										
Fluoride	1.6	mg/L	0.10	5	10/18/24	bm	10/19/24	bm	N	0.055
Chloride	57	mg/L	0.75	5	10/18/24	bm	10/19/24	bm		0.60
Sulfate as SO4	2.9	mg/L	3.0	5	10/18/24	bm	10/19/24	bm	J	1.1
Analysis Method: SM 2320 B-21										
<i>Batch: T158357</i>										
Bicarbonate Alkalinity as CaCO3 at pH 4.5	1000	mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16	mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	1000	mg/L	5.0	1	10/24/24	bm	10/24/24	bm		0.16
Analysis Method: SM 2540 C-20										
<i>Batch: T158220</i>										
Total Dissolved Solids	1100	mg/L	20	2	10/22/24	cdj	10/22/24	cdj		
Analysis Method: SM 2540 D-20										
<i>Batch: T158222</i>										
Total Suspended Solids	34	mg/L	4.0	1	10/22/24	cdj	10/22/24	cdj		4.0
Analysis Method: SM 4500-H+ B-11										
<i>Batch: T158219</i>										
pH	7.29	pH Units		1	10/16/24	sb	10/18/24	sb	H02, PH01z	

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-15 Date Collected: 10/16/24 16:20 Matrix: Ground Water
 Sample ID: MW-11 Date Received: 10/17/24 15:03

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

Analysis Method: EPA 7470A
 Batch: T158239

Mercury	<0.00016 mg/L	0.00020	1	10/24/24	cma	10/25/24	jlh		0.00016
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METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158063

Boron	7.1 mg/L	0.088	10	10/22/24	ejb	10/23/24	jlh		0.051
Calcium	190 mg/L	2.6	10	10/22/24	ejb	10/23/24	jlh		0.37
Iron	9.5 mg/L	0.50	10	10/22/24	ejb	10/23/24	jlh		0.075
Lithium	0.065 mg/L	0.025	10	10/22/24	ejb	10/23/24	jlh	N	0.019
Magnesium	48 mg/L	0.50	10	10/22/24	ejb	10/23/24	jlh		0.10
Potassium	12 mg/L	2.5	10	10/22/24	ejb	10/23/24	jlh		0.36
Sodium	45 mg/L	1.2	10	10/22/24	ejb	10/23/24	jlh		0.88

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158063

Antimony	<0.00010 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00010
Arsenic	0.0016 mg/L	0.00055	1	10/22/24	ejb	10/25/24	jma		0.00010
Barium	0.78 mg/L	0.0025	1	10/22/24	ejb	10/25/24	jma		0.00068
Beryllium	0.000088 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma	J	0.000052
Cadmium	<0.000075 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.000075
Chromium	0.00091 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Cobalt	0.00032 mg/L	0.00052	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Copper	0.00028 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Lead	0.00041 mg/L	0.00055	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Molybdenum	0.00062 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma	J	0.00025
Nickel	0.0015 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00065
Selenium	0.00015 mg/L	0.00050	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Silver	<0.000050 mg/L	0.000050	1	10/22/24	ejb	10/25/24	jma		0.000050
Thallium	<0.000075 mg/L	0.00038	1	10/22/24	ejb	10/25/24	jma		0.000075
Vanadium	<0.00062 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00062
Zinc	0.032 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-15 Date Collected: 10/16/24 16:20 Matrix: Ground Water
 Sample ID: MW-11 Date Received: 10/17/24 15:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
WET CHEMISTRY									
Analysis Method: EPA 300.0 Rev. 2.1									
<i>Batch: T158101</i>									
Fluoride	0.90 mg/L	0.10	5	10/18/24	bm	10/19/24	bm	N	0.055
Chloride	73 mg/L	0.75	5	10/18/24	bm	10/19/24	bm		0.60
Sulfate as SO4	<1.1 mg/L	3.0	5	10/18/24	bm	10/19/24	bm		1.1
Analysis Method: SM 2320 B-21									
<i>Batch: T158357</i>									
Bicarbonate Alkalinity as CaCO3 at pH 4.5	770 mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16 mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	770 mg/L	5.0	1	10/24/24	bm	10/24/24	bm		0.16
Analysis Method: SM 2540 C-20									
<i>Batch: T158220</i>									
Total Dissolved Solids	890 mg/L	20	2	10/22/24	cdj	10/22/24	cdj		
Analysis Method: SM 2540 D-20									
<i>Batch: T158222</i>									
Total Suspended Solids	28 mg/L	4.0	1	10/22/24	cdj	10/22/24	cdj		4.0
Analysis Method: SM 4500-H+ B-11									
<i>Batch: T158219</i>									
pH	7.24 pH Units		1	10/16/24	sb	10/18/24	sb	H02, PH01z	

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-16 Date Collected: 10/16/24 17:40 Matrix: Ground Water
 Sample ID: MW-10 Date Received: 10/17/24 15:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 7470A									
Batch: T158239									
Mercury	<0.00016 mg/L	0.00020	1	10/24/24	cma	10/25/24	jlh		0.00016
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
Batch: T158063									
Boron	21 mg/L	0.088	10	10/22/24	ejb	10/23/24	jlh		0.051
Calcium	360 mg/L	2.6	10	10/22/24	ejb	10/23/24	jlh		0.37
Iron	5.2 mg/L	0.50	10	10/22/24	ejb	10/23/24	jlh		0.075
Lithium	1.0 mg/L	0.025	10	10/22/24	ejb	10/23/24	jlh	N	0.019
Magnesium	91 mg/L	0.50	10	10/22/24	ejb	10/23/24	jlh		0.10
Potassium	62 mg/L	2.5	10	10/22/24	ejb	10/23/24	jlh		0.36
Sodium	360 mg/L	1.2	10	10/22/24	ejb	10/23/24	jlh		0.88
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T158063									
Antimony	<0.00010 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00010
Arsenic	0.0020 mg/L	0.00055	1	10/22/24	ejb	10/25/24	jma		0.00010
Barium	0.23 mg/L	0.0025	1	10/22/24	ejb	10/25/24	jma		0.00068
Beryllium	0.000063 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma	J	0.000052
Cadmium	<0.000075 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.000075
Chromium	0.0031 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Cobalt	0.00042 mg/L	0.00052	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Copper	<0.00020 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Lead	<0.00050 mg/L	0.0028	5	10/22/24	ejb	10/25/24	jma	DL03	0.00050
Molybdenum	0.0035 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00025
Nickel	0.00085 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma	J	0.00065
Selenium	0.00032 mg/L	0.00050	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Silver	<0.000050 mg/L	0.000050	1	10/22/24	ejb	10/25/24	jma		0.000050
Thallium	<0.00038 mg/L	0.0019	5	10/22/24	ejb	10/25/24	jma	DL03	0.00038
Vanadium	0.0010 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma	J	0.00062
Zinc	0.014 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-16 Date Collected: 10/16/24 17:40 Matrix: Ground Water
 Sample ID: MW-10 Date Received: 10/17/24 15:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
WET CHEMISTRY									
Analysis Method: EPA 300.0 Rev. 2.1									
<i>Batch: T158101</i>									
Fluoride	5.2 mg/L	0.10	5	10/18/24	bm	10/19/24	bm	N	0.055
Chloride	670 mg/L	7.5	50	10/18/24	bm	10/21/24	bm		6.0
Sulfate as SO4	690 mg/L	30	50	10/18/24	bm	10/21/24	bm		11
Analysis Method: SM 2320 B-21									
<i>Batch: T158357</i>									
Bicarbonate Alkalinity as CaCO3 at pH 4.5	560 mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16 mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	560 mg/L	5.0	1	10/24/24	bm	10/24/24	bm		0.16
Analysis Method: SM 2540 C-20									
<i>Batch: T158220</i>									
Total Dissolved Solids	2800 mg/L	20	2	10/22/24	cdj	10/22/24	cdj		
Analysis Method: SM 2540 D-20									
<i>Batch: T158222</i>									
Total Suspended Solids	11 mg/L	4.0	1	10/22/24	cdj	10/22/24	cdj		4.0
Analysis Method: SM 4500-H+ B-11									
<i>Batch: T158219</i>									
pH	7.48 pH Units		1	10/16/24	sb	10/18/24	sb	H02, PH01aa	

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-17 Date Collected: 10/16/24 10:30 Matrix: Ground Water
 Sample ID: MW-38 Date Received: 10/17/24 15:03

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

Analysis Method: EPA 7470A
 Batch: T158239

Mercury	<0.00016	mg/L	0.00020	1	10/24/24	cma	10/25/24	jlh		0.00016
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METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158063

Boron	3.0	mg/L	0.088	10	10/22/24	ejb	10/23/24	jlh		0.051
Calcium	110	mg/L	2.6	10	10/22/24	ejb	10/23/24	jlh		0.37
Iron	0.51	mg/L	0.050	1	10/22/24	ejb	10/23/24	jlh		0.0075
Lithium	0.12	mg/L	0.025	10	10/22/24	ejb	10/23/24	jlh	N	0.019
Magnesium	18	mg/L	0.50	10	10/22/24	ejb	10/23/24	jlh		0.10
Potassium	88	mg/L	2.5	10	10/22/24	ejb	10/23/24	jlh		0.36
Sodium	100	mg/L	1.2	10	10/22/24	ejb	10/23/24	jlh		0.88

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158063

Antimony	0.0011	mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00010
Arsenic	0.0033	mg/L	0.00055	1	10/22/24	ejb	10/25/24	jma		0.00010
Barium	0.17	mg/L	0.0025	1	10/22/24	ejb	10/25/24	jma		0.00068
Beryllium	0.000090	mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma	J	0.000052
Cadmium	0.00015	mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma	J	0.000075
Chromium	0.0072	mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Cobalt	0.00055	mg/L	0.00052	1	10/22/24	ejb	10/25/24	jma		0.00010
Copper	0.0063	mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Lead	0.023	mg/L	0.00055	1	10/22/24	ejb	10/25/24	jma		0.00010
Molybdenum	0.0095	mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00025
Nickel	0.0067	mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00065
Selenium	0.00059	mg/L	0.00050	1	10/22/24	ejb	10/25/24	jma		0.00010
Silver	0.000065	mg/L	0.000050	1	10/22/24	ejb	10/25/24	jma		0.000050
Thallium	<0.000075	mg/L	0.00038	1	10/22/24	ejb	10/25/24	jma		0.000075
Vanadium	0.0053	mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00062
Zinc	0.015	mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-17 Date Collected: 10/16/24 10:30 Matrix: Ground Water
 Sample ID: MW-38 Date Received: 10/17/24 15:03

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
WET CHEMISTRY										
Analysis Method: EPA 300.0 Rev. 2.1										
Batch: T158101										
Fluoride	1.8	mg/L	0.10	5	10/18/24	bm	10/19/24	bm	N	0.055
Chloride	58	mg/L	0.75	5	10/18/24	bm	10/19/24	bm		0.60
Sulfate as SO4	210	mg/L	15	25	10/18/24	bm	10/19/24	bm		5.5
Analysis Method: SM 2320 B-21										
Batch: T158357										
Bicarbonate Alkalinity as CaCO3 at pH 4.5	380	mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Carbonate Alkalinity as CaCO3 at pH 8.2	60	mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	440	mg/L	5.0	1	10/24/24	bm	10/24/24	bm		0.16
Analysis Method: SM 2540 C-20										
Batch: T158220										
Total Dissolved Solids	980	mg/L	20	2	10/22/24	cdj	10/22/24	cdj		
Analysis Method: SM 2540 D-20										
Batch: T158222										
Total Suspended Solids	<4.0	mg/L	4.0	1	10/22/24	cdj	10/22/24	cdj		4.0
Analysis Method: SM 4500-H+ B-11										
Batch: T158219										
pH	8.77	pH Units		1	10/16/24	sb	10/18/24	sb	H04, PH01ab	

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-18 Date Collected: 10/16/24 12:00 Matrix: Ground Water
 Sample ID: MW-12 Date Received: 10/17/24 15:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 7470A									
Batch: T158239									
Mercury	<0.00016 mg/L	0.00020	1	10/24/24	cma	10/25/24	jlh		0.00016
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
Batch: T158063									
Boron	0.40 mg/L	0.088	10	10/22/24	ejb	10/23/24	jlh		0.051
Calcium	79 mg/L	2.6	10	10/22/24	ejb	10/23/24	jlh		0.37
Iron	0.15 mg/L	0.050	1	10/22/24	ejb	10/23/24	jlh		0.0075
Lithium	0.0059 mg/L	0.0025	1	10/22/24	ejb	10/23/24	jlh	N	0.0019
Magnesium	19 mg/L	0.50	10	10/22/24	ejb	10/23/24	jlh		0.10
Potassium	1.8 mg/L	0.25	1	10/22/24	ejb	10/23/24	jlh		0.036
Sodium	18 mg/L	1.2	10	10/22/24	ejb	10/23/24	jlh		0.88
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T158063									
Antimony	0.00084 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00010
Arsenic	0.0030 mg/L	0.00055	1	10/22/24	ejb	10/25/24	jma		0.00010
Barium	0.10 mg/L	0.0025	1	10/22/24	ejb	10/25/24	jma		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.000052
Cadmium	0.0028 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.000075
Chromium	0.00025 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Cobalt	0.00093 mg/L	0.00052	1	10/22/24	ejb	10/25/24	jma		0.00010
Copper	0.0019 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Lead	0.00047 mg/L	0.00055	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Molybdenum	0.018 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00025
Nickel	0.0034 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00065
Selenium	0.00043 mg/L	0.00050	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Silver	<0.000050 mg/L	0.000050	1	10/22/24	ejb	10/25/24	jma		0.000050
Thallium	<0.000075 mg/L	0.00038	1	10/22/24	ejb	10/25/24	jma		0.000075
Vanadium	0.0021 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00062
Zinc	0.017 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-18 Date Collected: 10/16/24 12:00 Matrix: Ground Water
 Sample ID: MW-12 Date Received: 10/17/24 15:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
WET CHEMISTRY									
Analysis Method: EPA 300.0 Rev. 2.1									
<i>Batch: T158101</i>									
Fluoride	0.31 mg/L	0.10	5	10/18/24	bm	10/19/24	bm	N	0.055
Chloride	18 mg/L	0.75	5	10/18/24	bm	10/19/24	bm		0.60
Sulfate as SO4	52 mg/L	3.0	5	10/18/24	bm	10/19/24	bm		1.1
Analysis Method: SM 2320 B-21									
<i>Batch: T158357</i>									
Bicarbonate Alkalinity as CaCO3 at pH 4.5	220 mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16 mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	220 mg/L	5.0	1	10/24/24	bm	10/24/24	bm		0.16
Analysis Method: SM 2540 C-20									
<i>Batch: T158220</i>									
Total Dissolved Solids	330 mg/L	20	2	10/22/24	cdj	10/22/24	cdj		
Analysis Method: SM 2540 D-20									
<i>Batch: T158222</i>									
Total Suspended Solids	<4.0 mg/L	4.0	1	10/22/24	cdj	10/22/24	cdj		4.0
Analysis Method: SM 4500-H+ B-11									
<i>Batch: T158219</i>									
pH	7.58 pH Units		1	10/16/24	sb	10/18/24	sb	H04, PH01ac	

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-19 Date Collected: 10/16/24 13:30 Matrix: Ground Water
 Sample ID: MW-19 Date Received: 10/17/24 15:03

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

Analysis Method: EPA 7470A
 Batch: T158239

Mercury	<0.00016 mg/L	0.00020	1	10/24/24	cma	10/25/24	jlh		0.00016
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METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158063

Boron	2.5 mg/L	0.088	10	10/22/24	ejb	10/23/24	jlh		0.051
Calcium	400 mg/L	2.6	10	10/22/24	ejb	10/23/24	jlh		0.37
Iron	21 mg/L	0.50	10	10/22/24	ejb	10/23/24	jlh		0.075
Lithium	0.087 mg/L	0.025	10	10/22/24	ejb	10/23/24	jlh	N	0.019
Magnesium	36 mg/L	0.50	10	10/22/24	ejb	10/23/24	jlh		0.10
Potassium	14 mg/L	2.5	10	10/22/24	ejb	10/23/24	jlh		0.36
Sodium	30 mg/L	1.2	10	10/22/24	ejb	10/23/24	jlh		0.88

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158063

Antimony	<0.00010 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00010
Arsenic	0.0069 mg/L	0.00055	1	10/22/24	ejb	10/25/24	jma		0.00010
Barium	0.039 mg/L	0.0025	1	10/22/24	ejb	10/25/24	jma		0.00068
Beryllium	0.00011 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma	J	0.000052
Cadmium	<0.000075 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.000075
Chromium	0.00027 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Cobalt	0.00021 mg/L	0.00052	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Copper	<0.00020 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Lead	<0.00050 mg/L	0.0028	5	10/22/24	ejb	10/25/24	jma	DL03	0.00050
Molybdenum	0.013 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00025
Nickel	0.0039 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00065
Selenium	0.00020 mg/L	0.00050	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Silver	<0.000050 mg/L	0.000050	1	10/22/24	ejb	10/25/24	jma		0.000050
Thallium	<0.00038 mg/L	0.0019	5	10/22/24	ejb	10/25/24	jma	DL03	0.00038
Vanadium	<0.00062 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00062
Zinc	0.0019 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-19 Date Collected: 10/16/24 13:30 Matrix: Ground Water
 Sample ID: MW-19 Date Received: 10/17/24 15:03

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

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T158101

Fluoride	2.1 mg/L	0.10	5	10/18/24	bm	10/19/24	bm	N	0.055
Chloride	40 mg/L	0.75	5	10/18/24	bm	10/19/24	bm		0.60
Sulfate as SO4	850 mg/L	30	50	10/18/24	bm	10/21/24	bm		11

Analysis Method: SM 2320 B-21

Batch: T158357

Bicarbonate Alkalinity as CaCO3 at pH 4.5	260 mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16 mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	260 mg/L	5.0	1	10/24/24	bm	10/24/24	bm		0.16

Analysis Method: SM 2540 C-20

Batch: T158220

Total Dissolved Solids	1600 mg/L	20	2	10/22/24	cdj	10/22/24	cdj		
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Analysis Method: SM 2540 D-20

Batch: T158222

Total Suspended Solids	37 mg/L	4.0	1	10/22/24	cdj	10/22/24	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T158219

pH	6.80 pH Units		1	10/16/24	sb	10/18/24	sb	H04, PH01ac	
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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-20 Date Collected: 10/16/24 15:00 Matrix: Ground Water
 Sample ID: MW-32 Date Received: 10/17/24 15:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 7470A									
Batch: T158239									
Mercury	<0.00016 mg/L	0.00020	1	10/24/24	cma	10/25/24	jlh		0.00016
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
Batch: T158063									
Boron	5.6 mg/L	0.088	10	10/22/24	ejb	10/23/24	jlh		0.051
Calcium	160 mg/L	2.6	10	10/22/24	ejb	10/23/24	jlh		0.37
Iron	13 mg/L	0.50	10	10/22/24	ejb	10/23/24	jlh		0.075
Lithium	0.20 mg/L	0.025	10	10/22/24	ejb	10/23/24	jlh	N	0.019
Magnesium	31 mg/L	0.50	10	10/22/24	ejb	10/23/24	jlh		0.10
Potassium	13 mg/L	2.5	10	10/22/24	ejb	10/23/24	jlh		0.36
Sodium	36 mg/L	1.2	10	10/22/24	ejb	10/23/24	jlh		0.88
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T158063									
Antimony	<0.00010 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00010
Arsenic	0.00064 mg/L	0.00055	1	10/22/24	ejb	10/25/24	jma		0.00010
Barium	1.3 mg/L	0.025	10	10/22/24	ejb	10/25/24	jma		0.0068
Beryllium	<0.000052 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.000075
Chromium	0.00050 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Cobalt	0.00058 mg/L	0.00052	1	10/22/24	ejb	10/25/24	jma		0.00010
Copper	0.00035 mg/L	0.00025	1	10/22/24	ejb	10/25/24	jma		0.00020
Lead	0.00042 mg/L	0.00055	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Molybdenum	0.0045 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00025
Nickel	0.0010 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma	J	0.00065
Selenium	0.00014 mg/L	0.00050	1	10/22/24	ejb	10/25/24	jma	J	0.00010
Silver	<0.000050 mg/L	0.000050	1	10/22/24	ejb	10/25/24	jma		0.000050
Thallium	<0.000075 mg/L	0.00038	1	10/22/24	ejb	10/25/24	jma		0.000075
Vanadium	<0.00062 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.00062
Zinc	0.058 mg/L	0.0012	1	10/22/24	ejb	10/25/24	jma		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-20 Date Collected: 10/16/24 15:00 Matrix: Ground Water
 Sample ID: MW-32 Date Received: 10/17/24 15:03

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
WET CHEMISTRY										
Analysis Method: EPA 300.0 Rev. 2.1										
<i>Batch: T158101</i>										
Fluoride	1.9	mg/L	0.10	5	10/18/24	bm	10/19/24	bm	N	0.055
Chloride	50	mg/L	0.75	5	10/18/24	bm	10/19/24	bm		0.60
Sulfate as SO4	5.9	mg/L	3.0	5	10/18/24	bm	10/19/24	bm		1.1
Analysis Method: SM 2320 B-21										
<i>Batch: T158357</i>										
Bicarbonate Alkalinity as CaCO3 at pH 4.5	510	mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16	mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	510	mg/L	5.0	1	10/24/24	bm	10/24/24	bm		0.16
Analysis Method: SM 2540 C-20										
<i>Batch: T158220</i>										
Total Dissolved Solids	580	mg/L	20	2	10/22/24	cdj	10/22/24	cdj		
Analysis Method: SM 2540 D-20										
<i>Batch: T158222</i>										
Total Suspended Solids	20	mg/L	4.0	1	10/22/24	cdj	10/22/24	cdj		4.0
Analysis Method: SM 4500-H+ B-11										
<i>Batch: T158219</i>										
pH	7.47	pH Units		1	10/16/24	sb	10/18/24	sb	H02, PH01ad	

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-21 Date Collected: 10/16/24 16:15 Matrix: Ground Water
 Sample ID: MW-08 Date Received: 10/17/24 15:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 7470A									
Batch: T158240									
Mercury	<0.00016 mg/L	0.00020	1	10/24/24	cma	10/25/24	jlh		0.00016
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
Batch: T158238									
Boron	4.7 mg/L	0.044	5	10/23/24	ejb	10/29/24	jlh		0.026
Calcium	130 mg/L	1.3	5	10/23/24	ejb	10/29/24	jlh		0.18
Iron	15 mg/L	0.25	5	10/23/24	ejb	10/29/24	jlh		0.037
Lithium	0.082 mg/L	0.012	5	10/23/24	ejb	10/29/24	jlh	N	0.0094
Magnesium	24 mg/L	0.25	5	10/23/24	ejb	10/29/24	jlh		0.050
Potassium	9.1 mg/L	1.2	5	10/23/24	ejb	10/29/24	jlh		0.18
Sodium	41 mg/L	0.62	5	10/23/24	ejb	10/29/24	jlh		0.44
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T158238									
Antimony	0.00011 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma	J	0.00010
Arsenic	0.030 mg/L	0.00055	1	10/23/24	ejb	10/25/24	jma		0.00010
Barium	1.3 mg/L	0.025	10	10/23/24	ejb	10/25/24	jma		0.0068
Beryllium	<0.000052 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.000075
Chromium	0.00063 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.00020
Cobalt	0.00034 mg/L	0.00052	1	10/23/24	ejb	10/25/24	jma	J	0.00010
Copper	0.00064 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.00020
Lead	0.0029 mg/L	0.00055	1	10/23/24	ejb	10/25/24	jma		0.00010
Molybdenum	0.00095 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma	J	0.00025
Nickel	0.013 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.00065
Selenium	0.00018 mg/L	0.00050	1	10/23/24	ejb	10/25/24	jma	J	0.00010
Silver	<0.000050 mg/L	0.000050	1	10/23/24	ejb	10/25/24	jma		0.000050
Thallium	<0.000075 mg/L	0.00038	1	10/23/24	ejb	10/25/24	jma		0.000075
Vanadium	<0.00062 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.00062
Zinc	0.16 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-21 Date Collected: 10/16/24 16:15 Matrix: Ground Water
 Sample ID: MW-08 Date Received: 10/17/24 15:03

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

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T158102

Fluoride	0.93 mg/L		0.10	5	10/18/24	bm	10/19/24	bm	N	0.055
Chloride	99 mg/L		0.75	5	10/18/24	bm	10/19/24	bm		0.60
Sulfate as SO4	21 mg/L		3.0	5	10/18/24	bm	10/19/24	bm		1.1

Analysis Method: SM 2320 B-21

Batch: T158357

Bicarbonate Alkalinity as CaCO3 at pH 4.5	410 mg/L		5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16 mg/L		5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	410 mg/L		5.0	1	10/24/24	bm	10/24/24	bm		0.16

Analysis Method: SM 2540 C-20

Batch: T158220

Total Dissolved Solids	660 mg/L		20	2	10/22/24	cdj	10/22/24	cdj		
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Analysis Method: SM 2540 D-20

Batch: T158222

Total Suspended Solids	31 mg/L		4.0	1	10/22/24	cdj	10/22/24	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T158219

pH	7.09 pH Units			1	10/16/24	sb	10/18/24	sb	H02, PH01	
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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-22 Date Collected: 10/16/24 18:15 Matrix: Ground Water
 Sample ID: MW-30 Date Received: 10/17/24 15:03

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

Analysis Method: EPA 7470A
 Batch: T158240

Mercury	<0.00016	mg/L	0.00020	1	10/24/24	cma	10/25/24	jlh		0.00016
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METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158238

Boron	1.9	mg/L	0.044	5	10/23/24	ejb	10/29/24	jlh		0.026
Calcium	440	mg/L	1.3	5	10/23/24	ejb	10/29/24	jlh		0.18
Iron	2.1	mg/L	0.25	5	10/23/24	ejb	10/29/24	jlh		0.037
Lithium	0.12	mg/L	0.012	5	10/23/24	ejb	10/29/24	jlh	N	0.0094
Magnesium	99	mg/L	0.25	5	10/23/24	ejb	10/29/24	jlh		0.050
Potassium	11	mg/L	1.2	5	10/23/24	ejb	10/29/24	jlh		0.18
Sodium	120	mg/L	0.62	5	10/23/24	ejb	10/29/24	jlh		0.44

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158238

Antimony	<0.00010	mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.00010
Arsenic	0.00097	mg/L	0.00055	1	10/23/24	ejb	10/25/24	jma		0.00010
Barium	0.079	mg/L	0.0025	1	10/23/24	ejb	10/25/24	jma		0.00068
Beryllium	<0.000052	mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.000052
Cadmium	<0.000075	mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.000075
Chromium	0.012	mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.00020
Cobalt	0.00047	mg/L	0.00052	1	10/23/24	ejb	10/25/24	jma	J	0.00010
Copper	<0.00020	mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.00020
Lead	0.0017	mg/L	0.0028	5	10/23/24	ejb	10/25/24	jma	DL03, J	0.00050
Molybdenum	0.00051	mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma	J	0.00025
Nickel	<0.00065	mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.00065
Selenium	0.00024	mg/L	0.00050	1	10/23/24	ejb	10/25/24	jma	J	0.00010
Silver	<0.000050	mg/L	0.000050	1	10/23/24	ejb	10/25/24	jma		0.000050
Thallium	<0.00038	mg/L	0.0019	5	10/23/24	ejb	10/25/24	jma	DL03	0.00038
Vanadium	<0.00062	mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.00062
Zinc	0.0033	mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-22 Date Collected: 10/16/24 18:15 Matrix: Ground Water
 Sample ID: MW-30 Date Received: 10/17/24 15:03

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

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T158102

Fluoride	1.2 mg/L		0.10	5	10/18/24	bm	10/19/24	bm	N	0.055
Chloride	430 mg/L		3.8	25	10/18/24	bm	10/20/24	bm		3.0
Sulfate as SO4	440 mg/L		15	25	10/18/24	bm	10/20/24	bm		5.5

Analysis Method: SM 2320 B-21

Batch: T158357

Bicarbonate Alkalinity as CaCO3 at pH 4.5	770 mg/L		5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16 mg/L		5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	770 mg/L		5.0	1	10/24/24	bm	10/24/24	bm		0.16

Analysis Method: SM 2540 C-20

Batch: T158220

Total Dissolved Solids	2200 mg/L		20	2	10/22/24	cdj	10/22/24	cdj		
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Analysis Method: SM 2540 D-20

Batch: T158222

Total Suspended Solids	8.0 mg/L		4.0	1	10/22/24	cdj	10/22/24	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T158219

pH	7.21 pH Units			1	10/16/24	sb	10/18/24	sb	H02, PH01a	
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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-23 Date Collected: 10/17/24 08:44 Matrix: Ground Water
 Sample ID: MW-34 Date Received: 10/17/24 15:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 7470A									
Batch: T158240									
Mercury	<0.00016 mg/L	0.00020	1	10/24/24	cma	10/25/24	jlh		0.00016
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
Batch: T158238									
Boron	2.2 mg/L	0.044	5	10/23/24	ejb	10/29/24	jlh		0.026
Calcium	200 mg/L	1.3	5	10/23/24	ejb	10/29/24	jlh		0.18
Iron	59 mg/L	0.25	5	10/23/24	ejb	10/29/24	jlh		0.037
Lithium	0.065 mg/L	0.012	5	10/23/24	ejb	10/29/24	jlh	N	0.0094
Magnesium	22 mg/L	0.25	5	10/23/24	ejb	10/29/24	jlh		0.050
Potassium	8.6 mg/L	1.2	5	10/23/24	ejb	10/29/24	jlh		0.18
Sodium	25 mg/L	0.62	5	10/23/24	ejb	10/29/24	jlh		0.44
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T158238									
Antimony	0.00021 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma	J	0.00010
Arsenic	0.0010 mg/L	0.00055	1	10/23/24	ejb	10/25/24	jma		0.00010
Barium	0.48 mg/L	0.0025	1	10/23/24	ejb	10/25/24	jma		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.000075
Chromium	0.023 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.00020
Cobalt	0.0012 mg/L	0.00052	1	10/23/24	ejb	10/25/24	jma		0.00010
Copper	0.00055 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.00020
Lead	0.00049 mg/L	0.00055	1	10/23/24	ejb	10/25/24	jma	J	0.00010
Molybdenum	0.00041 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma	J	0.00025
Nickel	0.028 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.00065
Selenium	0.00030 mg/L	0.00050	1	10/23/24	ejb	10/25/24	jma	J	0.00010
Silver	<0.000050 mg/L	0.000050	1	10/23/24	ejb	10/25/24	jma		0.000050
Thallium	<0.000075 mg/L	0.00038	1	10/23/24	ejb	10/25/24	jma		0.000075
Vanadium	0.0012 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.00062
Zinc	0.021 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-23 Date Collected: 10/17/24 08:44 Matrix: Ground Water
 Sample ID: MW-34 Date Received: 10/17/24 15:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
WET CHEMISTRY									
Analysis Method: EPA 300.0 Rev. 2.1									
<i>Batch: T158102</i>									
Fluoride	0.096 mg/L	0.10	5	10/18/24	bm	10/19/24	bm	J, N	0.055
Chloride	20 mg/L	0.75	5	10/18/24	bm	10/19/24	bm		0.60
Sulfate as SO4	<1.1 mg/L	3.0	5	10/18/24	bm	10/19/24	bm		1.1
Analysis Method: SM 2320 B-21									
<i>Batch: T158357</i>									
Bicarbonate Alkalinity as CaCO3 at pH 4.5	920 mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16 mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	920 mg/L	5.0	1	10/24/24	bm	10/24/24	bm		0.16
Analysis Method: SM 2540 C-20									
<i>Batch: T158220</i>									
Total Dissolved Solids	710 mg/L	20	2	10/22/24	cdj	10/22/24	cdj		
Analysis Method: SM 2540 D-20									
<i>Batch: T158222</i>									
Total Suspended Solids	140 mg/L	4.0	1	10/22/24	cdj	10/22/24	cdj		4.0
Analysis Method: SM 4500-H+ B-11									
<i>Batch: T158219</i>									
pH	6.65 pH Units		1	10/17/24	sb	10/18/24	sb	H02, PH01b	

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-24 Date Collected: 10/17/24 09:46 Matrix: Ground Water
 Sample ID: MW-33 Date Received: 10/17/24 15:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 7470A									
Batch: T158240									
Mercury	<0.00016 mg/L	0.00020	1	10/24/24	cma	10/25/24	jlh		0.00016
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
Batch: T158238									
Boron	0.15 mg/L	0.044	5	10/23/24	ejb	10/29/24	jlh		0.026
Calcium	180 mg/L	1.3	5	10/23/24	ejb	10/29/24	jlh		0.18
Iron	0.067 mg/L	0.050	1	10/23/24	ejb	10/29/24	jlh		0.0075
Lithium	0.0053 mg/L	0.0025	1	10/23/24	ejb	10/29/24	jlh	N	0.0019
Magnesium	17 mg/L	0.25	5	10/23/24	ejb	10/29/24	jlh		0.050
Potassium	4.6 mg/L	1.2	5	10/23/24	ejb	10/29/24	jlh		0.18
Sodium	26 mg/L	0.62	5	10/23/24	ejb	10/29/24	jlh		0.44
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T158238									
Antimony	0.0013 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.00010
Arsenic	0.0011 mg/L	0.00055	1	10/23/24	ejb	10/25/24	jma		0.00010
Barium	0.087 mg/L	0.0025	1	10/23/24	ejb	10/25/24	jma		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.000052
Cadmium	0.00010 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma	J	0.000075
Chromium	0.0024 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.00020
Cobalt	0.00064 mg/L	0.00052	1	10/23/24	ejb	10/25/24	jma		0.00010
Copper	0.015 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.00020
Lead	0.00018 mg/L	0.00055	1	10/23/24	ejb	10/25/24	jma	J	0.00010
Molybdenum	0.0067 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.00025
Nickel	0.014 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.00065
Selenium	0.0010 mg/L	0.00050	1	10/23/24	ejb	10/25/24	jma		0.00010
Silver	<0.000050 mg/L	0.000050	1	10/23/24	ejb	10/25/24	jma		0.000050
Thallium	<0.000075 mg/L	0.00038	1	10/23/24	ejb	10/25/24	jma		0.000075
Vanadium	0.0014 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.00062
Zinc	0.011 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-24 Date Collected: 10/17/24 09:46 Matrix: Ground Water
 Sample ID: MW-33 Date Received: 10/17/24 15:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
WET CHEMISTRY									
Analysis Method: EPA 300.0 Rev. 2.1									
<i>Batch: T158102</i>									
Fluoride	0.26 mg/L	0.10	5	10/18/24	bm	10/19/24	bm	N	0.055
Chloride	64 mg/L	0.75	5	10/18/24	bm	10/19/24	bm		0.60
Sulfate as SO4	98 mg/L	3.0	5	10/18/24	bm	10/19/24	bm		1.1
Analysis Method: SM 2320 B-21									
<i>Batch: T158359</i>									
Bicarbonate Alkalinity as CaCO3 at pH 4.5	390 mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16 mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	390 mg/L	5.0	1	10/24/24	bm	10/24/24	bm		0.16
Analysis Method: SM 2540 C-20									
<i>Batch: T158220</i>									
Total Dissolved Solids	760 mg/L	20	2	10/22/24	cdj	10/22/24	cdj		
Analysis Method: SM 2540 D-20									
<i>Batch: T158222</i>									
Total Suspended Solids	<4.0 mg/L	4.0	1	10/22/24	cdj	10/22/24	cdj		4.0
Analysis Method: SM 4500-H+ B-11									
<i>Batch: T158219</i>									
pH	7.06 pH Units		1	10/17/24	sb	10/18/24	sb	H02, PH01c	

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-25 Date Collected: 10/17/24 12:00 Matrix: Ground Water
 Sample ID: MW-09 Date Received: 10/17/24 15:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 7470A									
Batch: T158240									
Mercury	<0.00016 mg/L	0.00020	1	10/24/24	cma	10/25/24	jlh		0.00016
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
Batch: T158238									
Boron	6.2 mg/L	0.044	5	10/23/24	ejb	10/29/24	jlh		0.026
Calcium	310 mg/L	1.3	5	10/23/24	ejb	10/29/24	jlh		0.18
Iron	16 mg/L	0.25	5	10/23/24	ejb	10/29/24	jlh		0.037
Lithium	0.27 mg/L	0.012	5	10/23/24	ejb	10/29/24	jlh	N	0.0094
Magnesium	44 mg/L	0.25	5	10/23/24	ejb	10/29/24	jlh		0.050
Potassium	14 mg/L	1.2	5	10/23/24	ejb	10/29/24	jlh		0.18
Sodium	26 mg/L	0.62	5	10/23/24	ejb	10/29/24	jlh		0.44
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T158238									
Antimony	<0.00010 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.00010
Arsenic	0.0025 mg/L	0.00055	1	10/23/24	ejb	10/25/24	jma		0.00010
Barium	0.23 mg/L	0.0025	1	10/23/24	ejb	10/25/24	jma		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.000075
Chromium	0.0027 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.00020
Cobalt	0.00023 mg/L	0.00052	1	10/23/24	ejb	10/25/24	jma	J	0.00010
Copper	0.00029 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.00020
Lead	<0.00010 mg/L	0.00055	1	10/23/24	ejb	10/25/24	jma		0.00010
Molybdenum	0.028 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.00025
Nickel	0.0020 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.00065
Selenium	0.00040 mg/L	0.00050	1	10/23/24	ejb	10/25/24	jma	J	0.00010
Silver	<0.000050 mg/L	0.000050	1	10/23/24	ejb	10/25/24	jma		0.000050
Thallium	<0.000075 mg/L	0.00038	1	10/23/24	ejb	10/25/24	jma		0.000075
Vanadium	<0.00062 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.00062
Zinc	0.0091 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-25 Date Collected: 10/17/24 12:00 Matrix: Ground Water
 Sample ID: MW-09 Date Received: 10/17/24 15:03

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

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T158102

Fluoride	2.9 mg/L		0.10	5	10/18/24	bm	10/19/24	bm	N	0.055
Chloride	25 mg/L		0.75	5	10/18/24	bm	10/19/24	bm		0.60
Sulfate as SO4	270 mg/L		15	25	10/18/24	bm	10/20/24	bm		5.5

Analysis Method: SM 2320 B-21

Batch: T158359

Bicarbonate Alkalinity as CaCO3 at pH 4.5	790 mg/L		5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16 mg/L		5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	790 mg/L		5.0	1	10/24/24	bm	10/24/24	bm		0.16

Analysis Method: SM 2540 C-20

Batch: T158220

Total Dissolved Solids	1300 mg/L		20	2	10/22/24	cdj	10/22/24	cdj		
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Analysis Method: SM 2540 D-20

Batch: T158222

Total Suspended Solids	47 mg/L		4.0	1	10/22/24	cdj	10/22/24	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T158219

pH	7.08 pH Units			1	10/17/24	sb	10/18/24	sb	H02, PH01c	
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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-26 Date Collected: 10/17/24 11:00 Matrix: Ground Water
 Sample ID: MW-27 Date Received: 10/17/24 15:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 7470A									
Batch: T158240									
Mercury	<0.00016 mg/L	0.00020	1	10/24/24	cma	10/25/24	jlh		0.00016
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
Batch: T158238									
Boron	0.50 mg/L	0.044	5	10/23/24	ejb	10/29/24	jlh		0.026
Calcium	170 mg/L	1.3	5	10/23/24	ejb	10/29/24	jlh		0.18
Iron	8.1 mg/L	0.25	5	10/23/24	ejb	10/29/24	jlh		0.037
Lithium	0.0092 mg/L	0.0025	1	10/23/24	ejb	10/29/24	jlh	N	0.0019
Magnesium	44 mg/L	0.25	5	10/23/24	ejb	10/29/24	jlh		0.050
Potassium	11 mg/L	1.2	5	10/23/24	ejb	10/29/24	jlh		0.18
Sodium	82 mg/L	0.62	5	10/23/24	ejb	10/29/24	jlh		0.44
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T158238									
Antimony	0.00010 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma	J	0.00010
Arsenic	0.0012 mg/L	0.00055	1	10/23/24	ejb	10/25/24	jma		0.00010
Barium	0.32 mg/L	0.0025	1	10/23/24	ejb	10/25/24	jma		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.000075
Chromium	0.050 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.00020
Cobalt	0.0011 mg/L	0.00052	1	10/23/24	ejb	10/25/24	jma		0.00010
Copper	0.00022 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma	J	0.00020
Lead	<0.00010 mg/L	0.00055	1	10/23/24	ejb	10/25/24	jma		0.00010
Molybdenum	0.00026 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma	J	0.00025
Nickel	0.00094 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma	J	0.00065
Selenium	0.00032 mg/L	0.00050	1	10/23/24	ejb	10/25/24	jma	J	0.00010
Silver	<0.000050 mg/L	0.000050	1	10/23/24	ejb	10/25/24	jma		0.000050
Thallium	<0.000075 mg/L	0.00038	1	10/23/24	ejb	10/25/24	jma		0.000075
Vanadium	0.0024 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.00062
Zinc	0.012 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-26 Date Collected: 10/17/24 11:00 Matrix: Ground Water
 Sample ID: MW-27 Date Received: 10/17/24 15:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
WET CHEMISTRY									
Analysis Method: EPA 300.0 Rev. 2.1									
<i>Batch: T158102</i>									
Fluoride	0.23 mg/L	0.10	5	10/18/24	bm	10/19/24	bm	N	0.055
Chloride	120 mg/L	3.8	25	10/18/24	bm	10/20/24	bm		3.0
Sulfate as SO4	1.4 mg/L	3.0	5	10/18/24	bm	10/19/24	bm	J	1.1
Analysis Method: SM 2320 B-21									
<i>Batch: T158359</i>									
Bicarbonate Alkalinity as CaCO3 at pH 4.5	1700 mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16 mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	1700 mg/L	5.0	1	10/24/24	bm	10/24/24	bm		0.16
Analysis Method: SM 2540 C-20									
<i>Batch: T158220</i>									
Total Dissolved Solids	910 mg/L	20	2	10/22/24	cdj	10/22/24	cdj		
Analysis Method: SM 2540 D-20									
<i>Batch: T158222</i>									
Total Suspended Solids	26 mg/L	4.0	1	10/22/24	cdj	10/22/24	cdj		4.0
Analysis Method: SM 4500-H+ B-11									
<i>Batch: T158219</i>									
pH	6.92 pH Units		1	10/17/24	sb	10/18/24	sb	H02, PH01d	

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-27 Date Collected: 10/17/24 09:00 Matrix: Ground Water
 Sample ID: MW-28 Date Received: 10/17/24 15:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 7470A									
Batch: T158240									
Mercury	<0.00016 mg/L	0.00020	1	10/24/24	cma	10/25/24	jlh		0.00016
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
Batch: T158238									
Boron	3.8 mg/L	0.044	5	10/23/24	ejb	10/29/24	jlh		0.026
Calcium	180 mg/L	1.3	5	10/23/24	ejb	10/29/24	jlh		0.18
Iron	47 mg/L	0.25	5	10/23/24	ejb	10/29/24	jlh		0.037
Lithium	0.12 mg/L	0.012	5	10/23/24	ejb	10/29/24	jlh	N	0.0094
Magnesium	33 mg/L	0.25	5	10/23/24	ejb	10/29/24	jlh		0.050
Potassium	14 mg/L	1.2	5	10/23/24	ejb	10/29/24	jlh		0.18
Sodium	51 mg/L	0.62	5	10/23/24	ejb	10/29/24	jlh		0.44
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T158238									
Antimony	0.00020 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma	J	0.00010
Arsenic	0.0019 mg/L	0.00055	1	10/23/24	ejb	10/25/24	jma		0.00010
Barium	0.76 mg/L	0.0025	1	10/23/24	ejb	10/25/24	jma		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.000075
Chromium	0.015 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.00020
Cobalt	0.00041 mg/L	0.00052	1	10/23/24	ejb	10/25/24	jma	J	0.00010
Copper	0.00037 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.00020
Lead	0.00088 mg/L	0.00055	1	10/23/24	ejb	10/25/24	jma		0.00010
Molybdenum	0.0020 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.00025
Nickel	0.0024 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.00065
Selenium	0.00028 mg/L	0.00050	1	10/23/24	ejb	10/25/24	jma	J	0.00010
Silver	<0.000050 mg/L	0.000050	1	10/23/24	ejb	10/25/24	jma		0.000050
Thallium	<0.000075 mg/L	0.00038	1	10/23/24	ejb	10/25/24	jma		0.000075
Vanadium	0.00080 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma	J	0.00062
Zinc	0.031 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-27 Date Collected: 10/17/24 09:00 Matrix: Ground Water
 Sample ID: MW-28 Date Received: 10/17/24 15:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
WET CHEMISTRY									
Analysis Method: EPA 300.0 Rev. 2.1									
<i>Batch: T158102</i>									
Fluoride	1.4 mg/L	0.10	5	10/18/24	bm	10/19/24	bm	N	0.055
Chloride	170 mg/L	3.8	25	10/18/24	bm	10/20/24	bm		3.0
Sulfate as SO4	<1.1 mg/L	3.0	5	10/18/24	bm	10/19/24	bm		1.1
Analysis Method: SM 2320 B-21									
<i>Batch: T158359</i>									
Bicarbonate Alkalinity as CaCO3 at pH 4.5	590 mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16 mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	590 mg/L	5.0	1	10/24/24	bm	10/24/24	bm		0.16
Analysis Method: SM 2540 C-20									
<i>Batch: T158220</i>									
Total Dissolved Solids	920 mg/L	20	2	10/22/24	cdj	10/22/24	cdj		
Analysis Method: SM 2540 D-20									
<i>Batch: T158222</i>									
Total Suspended Solids	120 mg/L	4.0	1	10/22/24	cdj	10/22/24	cdj		4.0
Analysis Method: SM 4500-H+ B-11									
<i>Batch: T158219</i>									
pH	6.84 pH Units		1	10/17/24	sb	10/18/24	sb	H02, PH01e	

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-28 Date Collected: 10/17/24 10:00 Matrix: Ground Water
 Sample ID: MW-16 Date Received: 10/17/24 15:03

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

Analysis Method: EPA 7470A
 Batch: T158240

Mercury	<0.00016	mg/L	0.00020	1	10/24/24	cma	10/25/24	jlh		0.00016
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METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158238

Boron	0.39	mg/L	0.044	5	10/23/24	ejb	10/29/24	jlh		0.026
Calcium	230	mg/L	1.3	5	10/23/24	ejb	10/29/24	jlh		0.18
Iron	13	mg/L	0.25	5	10/23/24	ejb	10/29/24	jlh		0.037
Lithium	0.024	mg/L	0.012	5	10/23/24	ejb	10/29/24	jlh	N	0.0094
Magnesium	26	mg/L	0.25	5	10/23/24	ejb	10/29/24	jlh		0.050
Potassium	5.2	mg/L	1.2	5	10/23/24	ejb	10/29/24	jlh		0.18
Sodium	21	mg/L	0.62	5	10/23/24	ejb	10/29/24	jlh		0.44

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158238

Antimony	0.00011	mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma	J	0.00010
Arsenic	0.017	mg/L	0.00055	1	10/23/24	ejb	10/25/24	jma		0.00010
Barium	0.29	mg/L	0.0025	1	10/23/24	ejb	10/25/24	jma		0.00068
Beryllium	<0.000052	mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.000052
Cadmium	<0.000075	mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.000075
Chromium	0.0013	mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.00020
Cobalt	0.00030	mg/L	0.00052	1	10/23/24	ejb	10/25/24	jma	J	0.00010
Copper	<0.00020	mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.00020
Lead	0.00013	mg/L	0.00055	1	10/23/24	ejb	10/25/24	jma	J	0.00010
Molybdenum	<0.00025	mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.00025
Nickel	0.0010	mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma	J	0.00065
Selenium	0.00015	mg/L	0.00050	1	10/23/24	ejb	10/25/24	jma	J	0.00010
Silver	<0.000050	mg/L	0.000050	1	10/23/24	ejb	10/25/24	jma		0.000050
Thallium	<0.000075	mg/L	0.00038	1	10/23/24	ejb	10/25/24	jma		0.000075
Vanadium	0.00076	mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma	J	0.00062
Zinc	0.012	mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-28 Date Collected: 10/17/24 10:00 Matrix: Ground Water
 Sample ID: MW-16 Date Received: 10/17/24 15:03

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

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T158102

Fluoride	<0.055	mg/L	0.10	5	10/18/24	bm	10/19/24	bm	N	0.055
Chloride	20	mg/L	0.75	5	10/18/24	bm	10/19/24	bm		0.60
Sulfate as SO4	<1.1	mg/L	3.0	5	10/18/24	bm	10/19/24	bm		1.1

Analysis Method: SM 2320 B-21

Batch: T158359

Bicarbonate Alkalinity as CaCO3 at pH 4.5	760	mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16	mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	760	mg/L	5.0	1	10/24/24	bm	10/24/24	bm		0.16

Analysis Method: SM 2540 C-20

Batch: T158220

Total Dissolved Solids	790	mg/L	20	2	10/22/24	cdj	10/22/24	cdj		
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Analysis Method: SM 2540 D-20

Batch: T158222

Total Suspended Solids	40	mg/L	4.0	1	10/22/24	cdj	10/22/24	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T158219

pH	6.98	pH Units		1	10/17/24	sb	10/18/24	sb	H02, PH01f	
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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-29 Date Collected: 10/17/24 12:15 Matrix: Ground Water
 Sample ID: SG-02 Date Received: 10/17/24 15:03

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

Analysis Method: EPA 7470A
 Batch: T158240

Mercury	<0.00016 mg/L	0.00020	1	10/24/24	cma	10/25/24	jlh		0.00016
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METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158238

Boron	7.3 mg/L	0.044	5	10/23/24	ejb	10/29/24	jlh		0.026
Calcium	160 mg/L	1.3	5	10/23/24	ejb	10/29/24	jlh		0.18
Iron	0.21 mg/L	0.050	1	10/23/24	ejb	10/29/24	jlh		0.0075
Lithium	0.072 mg/L	0.0025	1	10/23/24	ejb	10/29/24	jlh	N	0.0019
Magnesium	56 mg/L	0.25	5	10/23/24	ejb	10/29/24	jlh		0.050
Potassium	13 mg/L	1.2	5	10/23/24	ejb	10/29/24	jlh		0.18
Sodium	60 mg/L	0.62	5	10/23/24	ejb	10/29/24	jlh		0.44

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158238

Antimony	0.00076 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.00010
Arsenic	0.0020 mg/L	0.00055	1	10/23/24	ejb	10/25/24	jma		0.00010
Barium	0.060 mg/L	0.0025	1	10/23/24	ejb	10/25/24	jma		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.000075
Chromium	0.00034 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.00020
Cobalt	<0.00010 mg/L	0.00052	1	10/23/24	ejb	10/25/24	jma		0.00010
Copper	0.00061 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.00020
Lead	0.00043 mg/L	0.00055	1	10/23/24	ejb	10/25/24	jma	J	0.00010
Molybdenum	0.0097 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.00025
Nickel	0.0035 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.00065
Selenium	0.00078 mg/L	0.00050	1	10/23/24	ejb	10/25/24	jma		0.00010
Silver	<0.000050 mg/L	0.000050	1	10/23/24	ejb	10/25/24	jma		0.000050
Thallium	<0.000075 mg/L	0.00038	1	10/23/24	ejb	10/25/24	jma		0.000075
Vanadium	0.0020 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.00062
Zinc	0.0033 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-29 Date Collected: 10/17/24 12:15 Matrix: Ground Water
 Sample ID: SG-02 Date Received: 10/17/24 15:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
WET CHEMISTRY									
Analysis Method: EPA 300.0 Rev. 2.1									
<i>Batch: T158102</i>									
Fluoride	3.7 mg/L	0.10	5	10/18/24	bm	10/19/24	bm	N	0.055
Chloride	110 mg/L	3.8	25	10/18/24	bm	10/20/24	bm		3.0
Sulfate as SO4	490 mg/L	15	25	10/18/24	bm	10/20/24	bm		5.5
Analysis Method: SM 2320 B-21									
<i>Batch: T158359</i>									
Bicarbonate Alkalinity as CaCO3 at pH 4.5	110 mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16 mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	110 mg/L	5.0	1	10/24/24	bm	10/24/24	bm		0.16
Analysis Method: SM 2540 C-20									
<i>Batch: T158276</i>									
Total Dissolved Solids	1100 mg/L	20	2	10/23/24	cdj	10/23/24	cdj		
Analysis Method: SM 2540 D-20									
<i>Batch: T158299</i>									
Total Suspended Solids	<4.0 mg/L	4.0	1	10/23/24	cdj	10/23/24	cdj		4.0
Analysis Method: SM 4500-H+ B-11									
<i>Batch: T158219</i>									
pH	7.90 pH Units		1	10/17/24	sb	10/18/24	sb	H02, PH01g	

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-30 Date Collected: 10/17/24 12:45 Matrix: Ground Water
 Sample ID: SG-04R Date Received: 10/17/24 15:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 7470A									
Batch: T158240									
Mercury	<0.00016 mg/L	0.00020	1	10/24/24	cma	10/25/24	jlh		0.00016
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
Batch: T158238									
Boron	5.6 mg/L	0.044	5	10/23/24	ejb	10/29/24	jlh		0.026
Calcium	390 mg/L	1.3	5	10/23/24	ejb	10/29/24	jlh		0.18
Iron	0.022 mg/L	0.050	1	10/23/24	ejb	10/29/24	jlh	J	0.0075
Lithium	0.076 mg/L	0.0025	1	10/23/24	ejb	10/29/24	jlh	N	0.0019
Magnesium	55 mg/L	0.25	5	10/23/24	ejb	10/29/24	jlh		0.050
Potassium	8.4 mg/L	1.2	5	10/23/24	ejb	10/29/24	jlh		0.18
Sodium	34 mg/L	0.62	5	10/23/24	ejb	10/29/24	jlh		0.44
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T158238									
Antimony	0.00052 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.00010
Arsenic	0.0018 mg/L	0.00055	1	10/23/24	ejb	10/25/24	jma		0.00010
Barium	0.026 mg/L	0.0025	1	10/23/24	ejb	10/25/24	jma		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.000075
Chromium	<0.00020 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.00020
Cobalt	<0.00010 mg/L	0.00052	1	10/23/24	ejb	10/25/24	jma		0.00010
Copper	0.00063 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.00020
Lead	<0.00010 mg/L	0.00055	1	10/23/24	ejb	10/25/24	jma		0.00010
Molybdenum	0.014 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.00025
Nickel	0.0024 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.00065
Selenium	0.0034 mg/L	0.00050	1	10/23/24	ejb	10/25/24	jma		0.00010
Silver	<0.000050 mg/L	0.000050	1	10/23/24	ejb	10/25/24	jma		0.000050
Thallium	<0.000075 mg/L	0.00038	1	10/23/24	ejb	10/25/24	jma		0.000075
Vanadium	0.0013 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.00062
Zinc	0.0026 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-30 Date Collected: 10/17/24 12:45 Matrix: Ground Water
 Sample ID: SG-04R Date Received: 10/17/24 15:03

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

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T158102

Fluoride	3.7 mg/L		0.10	5	10/18/24	bm	10/19/24	bm	N	0.055
Chloride	42 mg/L		0.75	5	10/18/24	bm	10/19/24	bm		0.60
Sulfate as SO4	1200 mg/L		60	100	10/18/24	bm	10/21/24	bm		22

Analysis Method: SM 2320 B-21

Batch: T158359

Bicarbonate Alkalinity as CaCO3 at pH 4.5	46 mg/L		5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16 mg/L		5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	46 mg/L		5.0	1	10/24/24	bm	10/24/24	bm		0.16

Analysis Method: SM 2540 C-20

Batch: T158276

Total Dissolved Solids	1900 mg/L		20	2	10/23/24	cdj	10/23/24	cdj		
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Analysis Method: SM 2540 D-20

Batch: T158299

Total Suspended Solids	7.0 mg/L		4.0	1	10/23/24	cdj	10/23/24	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T158219

pH	8.36 pH Units			1	10/17/24	sb	10/18/24	sb	H02, PH01i	
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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-31 Date Collected: 10/17/24 13:05 Matrix: Ground Water
 Sample ID: SG-05 Date Received: 10/17/24 15:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 7470A									
Batch: T158240									
Mercury	<0.00016 mg/L	0.00020	1	10/24/24	cma	10/25/24	jlh		0.00016
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
Batch: T158238									
Boron	0.68 mg/L	0.044	5	10/23/24	ejb	10/29/24	jlh		0.026
Calcium	140 mg/L	1.3	5	10/23/24	ejb	10/29/24	jlh		0.18
Iron	7.2 mg/L	0.25	5	10/23/24	ejb	10/29/24	jlh		0.037
Lithium	0.042 mg/L	0.012	5	10/23/24	ejb	10/29/24	jlh	N	0.0094
Magnesium	29 mg/L	0.25	5	10/23/24	ejb	10/29/24	jlh		0.050
Potassium	7.8 mg/L	1.2	5	10/23/24	ejb	10/29/24	jlh		0.18
Sodium	45 mg/L	0.62	5	10/23/24	ejb	10/29/24	jlh		0.44
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T158238									
Antimony	0.00039 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.00010
Arsenic	0.0016 mg/L	0.00055	1	10/23/24	ejb	10/25/24	jma		0.00010
Barium	0.63 mg/L	0.0025	1	10/23/24	ejb	10/25/24	jma		0.00068
Beryllium	0.000062 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma	J	0.000052
Cadmium	0.00067 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.000075
Chromium	0.0038 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.00020
Cobalt	0.00085 mg/L	0.00052	1	10/23/24	ejb	10/25/24	jma		0.00010
Copper	0.011 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.00020
Lead	0.016 mg/L	0.00055	1	10/23/24	ejb	10/25/24	jma		0.00010
Molybdenum	0.00078 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma	J	0.00025
Nickel	0.0047 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.00065
Selenium	0.00039 mg/L	0.00050	1	10/23/24	ejb	10/25/24	jma	J	0.00010
Silver	<0.000050 mg/L	0.000050	1	10/23/24	ejb	10/25/24	jma		0.000050
Thallium	<0.000075 mg/L	0.00038	1	10/23/24	ejb	10/25/24	jma		0.000075
Vanadium	0.0020 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.00062
Zinc	0.055 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-31 Date Collected: 10/17/24 13:05 Matrix: Ground Water
 Sample ID: SG-05 Date Received: 10/17/24 15:03

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

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T158102

Fluoride	0.65 mg/L		0.10	5	10/18/24	bm	10/19/24	bm	N	0.055
Chloride	46 mg/L		0.75	5	10/18/24	bm	10/19/24	bm		0.60
Sulfate as SO4	6.0 mg/L		3.0	5	10/18/24	bm	10/19/24	bm		1.1

Analysis Method: SM 2320 B-21

Batch: T158359

Bicarbonate Alkalinity as CaCO3 at pH 4.5	490 mg/L		5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16 mg/L		5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	490 mg/L		5.0	1	10/24/24	bm	10/24/24	bm		0.16

Analysis Method: SM 2540 C-20

Batch: T158276

Total Dissolved Solids	630 mg/L		20	2	10/23/24	cdj	10/23/24	cdj		
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Analysis Method: SM 2540 D-20

Batch: T158299

Total Suspended Solids	74 mg/L		4.0	1	10/23/24	cdj	10/23/24	cdj		4.0
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Analysis Method: SM 4500-H+ B-11

Batch: T158219

pH	7.47 pH Units			1	10/17/24	sb	10/18/24	sb	H02, PH01j	
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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-32 Date Collected: 10/17/24 13:25 Matrix: Ground Water
 Sample ID: SG-06 Date Received: 10/17/24 15:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
Analysis Method: EPA 7470A									
Batch: T158240									
Mercury	<0.00016 mg/L	0.00020	1	10/24/24	cma	10/25/24	jlh		0.00016
METALS, TOTAL									
Analysis Method: EPA 200.7 Rev. 4.4									
Batch: T158238									
Boron	0.11 mg/L	0.044	5	10/23/24	ejb	10/29/24	jlh		0.026
Calcium	70 mg/L	1.3	5	10/23/24	ejb	10/29/24	jlh		0.18
Iron	0.19 mg/L	0.050	1	10/23/24	ejb	10/29/24	jlh		0.0075
Lithium	0.0062 mg/L	0.0025	1	10/23/24	ejb	10/29/24	jlh	N	0.0019
Magnesium	24 mg/L	0.25	5	10/23/24	ejb	10/29/24	jlh		0.050
Potassium	4.0 mg/L	1.2	5	10/23/24	ejb	10/29/24	jlh		0.18
Sodium	40 mg/L	0.62	5	10/23/24	ejb	10/29/24	jlh		0.44
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T158238									
Antimony	0.00018 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma	J	0.00010
Arsenic	0.00098 mg/L	0.00055	1	10/23/24	ejb	10/25/24	jma		0.00010
Barium	0.059 mg/L	0.0025	1	10/23/24	ejb	10/25/24	jma		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.000075
Chromium	0.00051 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.00020
Cobalt	0.00023 mg/L	0.00052	1	10/23/24	ejb	10/25/24	jma	J	0.00010
Copper	0.0016 mg/L	0.00025	1	10/23/24	ejb	10/25/24	jma		0.00020
Lead	0.00027 mg/L	0.00055	1	10/23/24	ejb	10/25/24	jma	J	0.00010
Molybdenum	0.0021 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.00025
Nickel	0.0018 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.00065
Selenium	0.00012 mg/L	0.00050	1	10/23/24	ejb	10/25/24	jma	J	0.00010
Silver	<0.000050 mg/L	0.000050	1	10/23/24	ejb	10/25/24	jma		0.000050
Thallium	<0.000075 mg/L	0.00038	1	10/23/24	ejb	10/25/24	jma		0.000075
Vanadium	0.00065 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma	J	0.00062
Zinc	0.0049 mg/L	0.0012	1	10/23/24	ejb	10/25/24	jma		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24J1136-32 Date Collected: 10/17/24 13:25 Matrix: Ground Water
 Sample ID: SG-06 Date Received: 10/17/24 15:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL									
WET CHEMISTRY									
Analysis Method: EPA 300.0 Rev. 2.1									
<i>Batch: T158102</i>									
Fluoride	0.14 mg/L	0.10	5	10/18/24	bm	10/19/24	bm	N	0.055
Chloride	70 mg/L	0.75	5	10/18/24	bm	10/19/24	bm		0.60
Sulfate as SO4	47 mg/L	3.0	5	10/18/24	bm	10/19/24	bm		1.1
Analysis Method: SM 2320 B-21									
<i>Batch: T158359</i>									
Bicarbonate Alkalinity as CaCO3 at pH 4.5	230 mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16 mg/L	5.0	1	10/24/24	bm	10/24/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	230 mg/L	5.0	1	10/24/24	bm	10/24/24	bm		0.16
Analysis Method: SM 2540 C-20									
<i>Batch: T158276</i>									
Total Dissolved Solids	460 mg/L	20	2	10/23/24	cdj	10/23/24	cdj		
Analysis Method: SM 2540 D-20									
<i>Batch: T158299</i>									
Total Suspended Solids	8.0 mg/L	4.0	1	10/23/24	cdj	10/23/24	cdj		4.0
Analysis Method: SM 4500-H+ B-11									
<i>Batch: T158219</i>									
pH	8.19 pH Units		1	10/17/24	sb	10/18/24	sb	H02, PH01j	

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QUALITY CONTROL RESULTS

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T158239	Analysis Description: Mercury, Total, EPA 7470/7471
QC Batch Method: EPA 7470A Prep	Analysis Method: EPA 7470A

METHOD BLANK: T158239-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Mercury	mg/L	<0.00020	0.00020	

LABORATORY CONTROL SAMPLE: T158239-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Mercury	mg/L	0.00200	0.00206	103	77-122	

MATRIX SPIKE / MATRIX SPIKE DUPLICATE: T158239-MSD1 Original: 24J1136-04

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	0.00202	0.00204	101	102	76-123	1	20	

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T158240	Analysis Description: Mercury, Total, EPA 7470/7471
QC Batch Method: EPA 7470A Prep	Analysis Method: EPA 7470A

METHOD BLANK: T158240-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Mercury	mg/L	<0.00020	0.00020	

LABORATORY CONTROL SAMPLE: T158240-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Mercury	mg/L	0.00200	0.00198	99	77-122	

MATRIX SPIKE / MATRIX SPIKE DUPLICATE: T158240-MSD1 Original: 24J1136-21

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	0.00206	0.00193	103	97	76-123	6	20	

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Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T158063	Analysis Description: Calcium, Total
QC Batch Method: EPA 200.2	Analysis Method: EPA 200.7 Rev. 4.4

METHOD BLANK: T158063-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Boron	mg/L	<0.0088	0.0088	
Calcium	mg/L	<0.26	0.26	
Iron	mg/L	<0.050	0.050	
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: T158063-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Boron	mg/L	1.60	1.67	104	85-115	
Calcium	mg/L	16.0	16.4	102	85-115	
Iron	mg/L	16.0	16.4	103	85-115	
Potassium	mg/L	16.0	16.4	102	85-115	
Lithium	mg/L	1.60	1.65	103	85-115	
Magnesium	mg/L	16.0	16.6	104	85-115	
Sodium	mg/L	16.0	16.5	103	85-115	

MATRIX SPIKE: T158063-MS1 Original: 24J1136-02

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Boron	mg/L	4.37	1.60	5.70	83	70-130	
Calcium	mg/L	331	16.0	342	67	70-130	MS09
Iron	mg/L	0	16.0	16.4	103	70-130	
Potassium	mg/L	17.5	16.0	33.2	99	70-130	
Lithium	mg/L	0	1.60	1.68	105	70-130	
Magnesium	mg/L	184	16.0	198	91	70-130	
Sodium	mg/L	89.0	16.0	103	88	70-130	

MATRIX SPIKE: T158063-MS2 Original: 24J1136-03

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Boron	mg/L	4.65	1.60	4.66	0.8	70-130	MS07

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MATRIX SPIKE: T158063-MS2 Original: **24J1136-03**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Calcium	mg/L	339	16.0	289	-309	70-130	MS09
Iron	mg/L	4.84	16.0	17.9	82	70-130	
Potassium	mg/L	22.7	16.0	32.4	61	70-130	MS07
Lithium	mg/L	0	1.60	1.59	100	70-130	
Magnesium	mg/L	115	16.0	107	-49	70-130	MS09
Sodium	mg/L	73.6	16.0	72.2	-9	70-130	MS09

Trace Project ID: 24J1136

Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T158238

Analysis Description: Boron, Total

QC Batch Method: EPA 200.2

Analysis Method: EPA 200.7 Rev. 4.4

METHOD BLANK: T158238-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Boron	mg/L	<0.0088	0.0088	
Calcium	mg/L	<0.26	0.26	
Iron	mg/L	<0.050	0.050	
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: T158238-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Boron	mg/L	1.60	1.63	102	85-115	
Calcium	mg/L	16.0	16.2	101	85-115	
Iron	mg/L	16.0	16.3	102	85-115	
Potassium	mg/L	16.0	16.0	100	85-115	
Lithium	mg/L	1.60	1.62	101	85-115	
Magnesium	mg/L	16.0	16.3	102	85-115	
Sodium	mg/L	16.0	16.1	100	85-115	

MATRIX SPIKE: T158238-MS1 Original: **24J1136-21**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Boron	mg/L	4.74	1.60	6.04	81	70-130	
Calcium	mg/L	129	16.0	141	78	70-130	

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MATRIX SPIKE: T158238-MS1 Original: **24J1136-21**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Iron	mg/L	14.9	16.0	29.9	94	70-130	
Potassium	mg/L	9.06	16.0	24.0	93	70-130	
Lithium	mg/L	0.0824	1.60	1.62	96	70-130	
Magnesium	mg/L	24.3	16.0	39.0	92	70-130	
Sodium	mg/L	41.3	16.0	55.3	88	70-130	

MATRIX SPIKE: T158238-MS2 Original: **24J1136-22**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Boron	mg/L	1.89	1.60	3.02	71	70-130	
Calcium	mg/L	438	16.0	395	-270	70-130	MS09
Iron	mg/L	2.08	16.0	16.1	88	70-130	
Potassium	mg/L	10.6	16.0	23.1	78	70-130	
Lithium	mg/L	0.121	1.60	1.55	89	70-130	
Magnesium	mg/L	99.5	16.0	101	7	70-130	MS09
Sodium	mg/L	119	16.0	115	-27	70-130	MS09

Trace Project ID: 24J1136

Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T158063

Analysis Description: Antimony, Total

QC Batch Method: EPA 200.2

Analysis Method: EPA 200.8 Rev. 5.4

METHOD BLANK: T158063-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Silver	mg/L	<0.000050	0.000050	
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	
Copper	mg/L	<0.00025	0.00025	
Molybdenum	mg/L	<0.0012	0.0012	
Nickel	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	

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METHOD BLANK: T158063-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Vanadium	mg/L	<0.0012	0.0012	
Zinc	mg/L	<0.0012	0.0012	

LABORATORY CONTROL SAMPLE: T158063-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Silver	mg/L	0.0500	0.0443	89	85-115	
Arsenic	mg/L	0.100	0.111	111	85-115	
Barium	mg/L	1.60	1.80	112	85-115	
Beryllium	mg/L	0.200	0.204	102	85-115	
Cadmium	mg/L	0.0500	0.0569	114	85-115	
Cobalt	mg/L	1.60	1.56	97	85-115	
Chromium	mg/L	0.0500	0.0490	98	85-115	
Copper	mg/L	1.60	1.53	96	85-115	
Molybdenum	mg/L	1.60	1.64	102	85-115	
Nickel	mg/L	1.60	1.55	97	85-115	
Lead	mg/L	0.100	0.0907	91	85-115	
Antimony	mg/L	0.100	0.105	105	85-115	
Selenium	mg/L	0.100	0.112	112	85-115	
Thallium	mg/L	0.100	0.0947	95	85-115	
Vanadium	mg/L	1.60	1.59	100	85-115	
Zinc	mg/L	1.60	1.59	100	85-115	

MATRIX SPIKE: T158063-MS1 Original: **24J1136-02**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Silver	mg/L	0	0.0500	0.0562	112	70-130	
Arsenic	mg/L	0.000870	0.100	0.126	126	70-130	
Barium	mg/L	0.270	1.60	2.35	130	70-130	
Beryllium	mg/L	0	0.200	0.189	94	70-130	
Cadmium	mg/L	0	0.0500	0.0527	105	70-130	
Cobalt	mg/L	0.000609	1.60	1.54	96	70-130	
Chromium	mg/L	0.00344	0.0500	0.0536	100	70-130	
Copper	mg/L	0.000860	1.60	1.43	89	70-130	
Molybdenum	mg/L	0	1.60	1.45	91	70-130	
Nickel	mg/L	0	1.60	1.45	90	70-130	
Lead	mg/L	0	0.100	0.0883	88	70-130	
Antimony	mg/L	0	0.100	0.0813	81	70-130	

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MATRIX SPIKE: T158063-MS1 Original: **24J1136-02**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Selenium	mg/L	0.000513	0.100	0.0848	84	70-130	
Thallium	mg/L	0	0.100	0.0946	95	70-130	
Vanadium	mg/L	0	1.60	1.68	105	70-130	
Zinc	mg/L	0.0132	1.60	1.40	86	70-130	

MATRIX SPIKE: T158063-MS2 Original: **24J1136-03**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Silver	mg/L	0	0.0500	0.0497	99	70-130	
Arsenic	mg/L	0.000883	0.100	0.130	129	70-130	
Barium	mg/L	0.0846	1.60	0.611	33	70-130	MS07
Beryllium	mg/L	0	0.200	0.200	100	70-130	
Cadmium	mg/L	0	0.0500	0.0508	102	70-130	
Cobalt	mg/L	0	1.60	1.48	92	70-130	
Chromium	mg/L	0.00514	0.0500	0.0487	87	70-130	
Copper	mg/L	0	1.60	1.42	89	70-130	
Molybdenum	mg/L	0.00153	1.60	1.91	119	70-130	
Nickel	mg/L	0.0194	1.60	1.46	90	70-130	
Lead	mg/L	0	0.100	0.0636	64	70-130	MS07
Antimony	mg/L	0	0.100	0.111	111	70-130	
Selenium	mg/L	0	0.100	0.0943	94	70-130	
Thallium	mg/L	0	0.100	0.0853	85	70-130	
Vanadium	mg/L	0	1.60	1.60	100	70-130	
Zinc	mg/L	0.00509	1.60	1.44	90	70-130	

Trace Project ID: 24J1136

Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T158238

Analysis Description: Vanadium, Total

QC Batch Method: EPA 200.2

Analysis Method: EPA 200.8 Rev. 5.4

METHOD BLANK: T158238-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Silver	mg/L	<0.000050	0.000050	
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	

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METHOD BLANK: T158238-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Chromium	mg/L	<0.00025	0.00025	
Copper	mg/L	<0.00025	0.00025	
Molybdenum	mg/L	<0.0012	0.0012	
Nickel	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	
Vanadium	mg/L	<0.0012	0.0012	
Zinc	mg/L	<0.0012	0.0012	

LABORATORY CONTROL SAMPLE: T158238-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Silver	mg/L	0.0500	0.0539	108	85-115	
Arsenic	mg/L	0.100	0.109	109	85-115	
Barium	mg/L	1.60	1.74	109	85-115	
Beryllium	mg/L	0.200	0.184	92	85-115	
Cadmium	mg/L	0.0500	0.0495	99	85-115	
Cobalt	mg/L	1.60	1.48	93	85-115	
Chromium	mg/L	0.0500	0.0463	93	85-115	
Copper	mg/L	1.60	1.43	90	85-115	
Molybdenum	mg/L	1.60	1.68	105	85-115	
Nickel	mg/L	1.60	1.48	93	85-115	
Lead	mg/L	0.100	0.0917	92	85-115	
Antimony	mg/L	0.100	0.114	114	85-115	
Selenium	mg/L	0.100	0.110	110	85-115	
Thallium	mg/L	0.100	0.0948	95	85-115	
Vanadium	mg/L	1.60	1.54	96	85-115	
Zinc	mg/L	1.60	1.49	93	85-115	

MATRIX SPIKE: T158238-MS1

Original: **24J1136-21**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Silver	mg/L	0	0.0500	0.0528	106	70-130	
Arsenic	mg/L	0.0297	0.100	0.149	119	70-130	
Barium	mg/L	1.28	1.60	3.19	119	70-130	
Beryllium	mg/L	0	0.200	0.167	84	70-130	
Cadmium	mg/L	0	0.0500	0.0495	99	70-130	

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MATRIX SPIKE: T158238-MS1 Original: **24J1136-21**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Cobalt	mg/L	0	1.60	1.43	89	70-130	
Chromium	mg/L	0	0.0500	0.0456	91	70-130	
Copper	mg/L	0	1.60	1.33	83	70-130	
Molybdenum	mg/L	0	1.60	1.98	124	70-130	
Nickel	mg/L	0.0132	1.60	1.38	85	70-130	
Lead	mg/L	0.00292	0.100	0.0891	86	70-130	
Antimony	mg/L	0	0.100	0.104	104	70-130	
Selenium	mg/L	0	0.100	0.116	116	70-130	
Thallium	mg/L	0	0.100	0.0928	93	70-130	
Vanadium	mg/L	0	1.60	1.50	94	70-130	
Zinc	mg/L	0.160	1.60	1.40	78	70-130	

MATRIX SPIKE: T158238-MS2 Original: **24J1136-22**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Silver	mg/L	0	0.0500	0.0476	95	70-130	
Arsenic	mg/L	0.000971	0.100	0.113	112	70-130	
Barium	mg/L	0.0792	1.60	1.79	107	70-130	
Beryllium	mg/L	0	0.200	0.199	100	70-130	
Cadmium	mg/L	0	0.0500	0.0453	91	70-130	
Cobalt	mg/L	0.000474	1.60	1.56	98	70-130	
Chromium	mg/L	0.0124	0.0500	0.0609	97	70-130	
Copper	mg/L	0	1.60	1.35	85	70-130	
Molybdenum	mg/L	0	1.60	1.87	117	70-130	
Nickel	mg/L	0	1.60	1.47	92	70-130	
Lead	mg/L	0.00167	0.100	0.0768	75	70-130	
Antimony	mg/L	0	0.100	0.0856	86	70-130	
Selenium	mg/L	0	0.100	0.0947	95	70-130	
Thallium	mg/L	0	0.100	0.0814	81	70-130	
Vanadium	mg/L	0	1.60	1.81	113	70-130	
Zinc	mg/L	0	1.60	1.29	81	70-130	

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T157952
 QC Batch Method: IC Prep W

Analysis Description: Sulfate
 Analysis Method: EPA 300.0 Rev. 2.1

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METHOD BLANK: T157952-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	<1.0	1.0	

LABORATORY CONTROL SAMPLE: T157952-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Chloride	mg/L	5.00	<10	93	90-110	J
Fluoride	mg/L	1.00	0.921	92	90-110	
Sulfate as SO4	mg/L	5.00	4.60	92	90-110	

MATRIX SPIKE: T157952-MS1 Original: **24J1136-06**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Chloride	mg/L	14.7	25.0	38.9	97	80-120	
Fluoride	mg/L	0	5.00	5.15	103	80-120	
Sulfate as SO4	mg/L	33.6	25.0	57.9	97	80-120	

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T158101	Analysis Description: Sulfate
QC Batch Method: IC Prep W	Analysis Method: EPA 300.0 Rev. 2.1

METHOD BLANK: T158101-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	<1.0	1.0	

LABORATORY CONTROL SAMPLE: T158101-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Chloride	mg/L	5.00	<10	92	90-110	J
Fluoride	mg/L	1.00	1.07	107	90-110	
Sulfate as SO4	mg/L	5.00	4.63	93	90-110	

MATRIX SPIKE: T158101-MS1 Original: **24J1136-09**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
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MATRIX SPIKE: T158101-MS1 Original: **24J1136-09**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Chloride	mg/L	47.0	25.0	68.9	88	80-120	
Fluoride	mg/L	0.672	5.00	5.60	99	80-120	
Sulfate as SO4	mg/L	7.32	25.0	30.0	91	80-120	

MATRIX SPIKE: T158101-MS2 Original: **24J1136-13**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Chloride	mg/L	38.3	25.0	63.0	99	80-120	
Fluoride	mg/L	0.925	5.00	5.90	100	80-120	
Sulfate as SO4	mg/L	10.2	25.0	34.7	98	80-120	

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T158102	Analysis Description: Chloride
QC Batch Method: IC Prep W	Analysis Method: EPA 300.0 Rev. 2.1

METHOD BLANK: T158102-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	<1.0	1.0	

LABORATORY CONTROL SAMPLE: T158102-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Chloride	mg/L	5.00	<10	92	90-110	J
Fluoride	mg/L	1.00	1.02	102	90-110	
Sulfate as SO4	mg/L	5.00	4.64	93	90-110	

MATRIX SPIKE: T158102-MS1 Original: **24J1136-23**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Chloride	mg/L	20.2	25.0	43.6	93	80-120	
Fluoride	mg/L	0.0963	5.00	5.42	106	80-120	
Sulfate as SO4	mg/L	0	25.0	23.8	95	80-120	

MATRIX SPIKE: T158102-MS2 Original: **24J1136-28**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Chloride	mg/L	20.3	25.0	42.8	90	80-120	

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MATRIX SPIKE: T158102-MS2 Original: **24J1136-28**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Fluoride	mg/L	0	5.00	5.04	101	80-120	
Sulfate as SO4	mg/L	0	25.0	23.3	93	80-120	

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T158170	Analysis Description: Alkalinity, Total
QC Batch Method: SM 2320 B-21	Analysis Method: SM 2320 B-21

LABORATORY CONTROL SAMPLE: T158170-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Bicarbonate Alkalinity as CaCO3 at pH 4.5	mg/L	100	97.4	97	88-112	
Carbonate Alkalinity as CaCO3 at pH 8.2	mg/L	100	97.4	97	88-112	
Total Alkalinity as CaCO3 at pH 4.5	mg/L	100	97.4	97	88-112	

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T158357	Analysis Description: Alkalinity, Total
QC Batch Method: SM 2320 B-21	Analysis Method: SM 2320 B-21

LABORATORY CONTROL SAMPLE: T158357-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Bicarbonate Alkalinity as CaCO3 at pH 4.5	mg/L	100	91.0	91	88-112	
Carbonate Alkalinity as CaCO3 at pH 8.2	mg/L	100	91.0	91	88-112	
Total Alkalinity as CaCO3 at pH 4.5	mg/L	100	91.0	91	88-112	

SAMPLE DUPLICATE: T158357-DUP1 Original: **24J1136-09**

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Notes
Bicarbonate Alkalinity as CaCO3 at pH 4.5	mg/L	496	493	0.7	20	
Carbonate Alkalinity as CaCO3 at pH 8.2	mg/L	0	<10		20	
Total Alkalinity as CaCO3 at pH 4.5	mg/L	496	493	0.7	20	

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Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T158359	Analysis Description: Alkalinity, Carbonate
QC Batch Method: SM 2320 B-21	Analysis Method: SM 2320 B-21

LABORATORY CONTROL SAMPLE: T158359-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Bicarbonate Alkalinity as CaCO3 at pH 4.5	mg/L	100	91.3	91	88-112	
Carbonate Alkalinity as CaCO3 at pH 8.2	mg/L	100	91.3	91	88-112	
Total Alkalinity as CaCO3 at pH 4.5	mg/L	100	91.3	91	88-112	

SAMPLE DUPLICATE: T158359-DUP1 Original: 24J1136-24

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Notes
Bicarbonate Alkalinity as CaCO3 at pH 4.5	mg/L	392	398	1	20	
Carbonate Alkalinity as CaCO3 at pH 8.2	mg/L	0	<10		20	
Total Alkalinity as CaCO3 at pH 4.5	mg/L	392	398	1	20	

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T158001	Analysis Description: Total Dissolved Solids
QC Batch Method: SM 2540 C-20	Analysis Method: SM 2540 C-20

METHOD BLANK: T158001-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Total Dissolved Solids	mg/L	<10	10	

LABORATORY CONTROL SAMPLE: T158001-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Total Dissolved Solids	mg/L	500	492	98	80-120	

SAMPLE DUPLICATE: T158001-DUP1 Original: 24J1136-01

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Notes
Total Dissolved Solids	mg/L	1960	2040	4	10	

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 Muskegon, MI 49444-2673



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

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T158220	Analysis Description: Total Dissolved Solids
QC Batch Method: SM 2540 C-20	Analysis Method: SM 2540 C-20

METHOD BLANK: T158220-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Total Dissolved Solids	mg/L	<10	10	

LABORATORY CONTROL SAMPLE: T158220-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Total Dissolved Solids	mg/L	500	476	95	80-120	

SAMPLE DUPLICATE: T158220-DUP1 Original: 24J1136-28

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Notes
Total Dissolved Solids	mg/L	792	794	0.3	10	

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T158276	Analysis Description: Total Dissolved Solids
QC Batch Method: SM 2540 C-20	Analysis Method: SM 2540 C-20

METHOD BLANK: T158276-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Total Dissolved Solids	mg/L	2.00	10	J

LABORATORY CONTROL SAMPLE: T158276-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Total Dissolved Solids	mg/L	500	500	100	80-120	

SAMPLE DUPLICATE: T158276-DUP1 Original: 24J1136-29

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Notes
Total Dissolved Solids	mg/L	1080	1070	0.4	10	

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

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QC Batch: T157993 Analysis Description: Total Suspended Solids
 QC Batch Method: SM 2540 D-20 Analysis Method: SM 2540 D-20

METHOD BLANK: T157993-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Total Suspended Solids	mg/L	<4.0	4.0	

LABORATORY CONTROL SAMPLE: T157993-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Total Suspended Solids	mg/L	100	92.2	92	85-115	

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T158222 Analysis Description: Total Suspended Solids
 QC Batch Method: SM 2540 D-20 Analysis Method: SM 2540 D-20

METHOD BLANK: T158222-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Total Suspended Solids	mg/L	<4.0	4.0	

LABORATORY CONTROL SAMPLE: T158222-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Total Suspended Solids	mg/L	100	87.0	87	85-115	

SAMPLE DUPLICATE: T158222-DUP1 Original: 24J1136-09

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Notes
Total Suspended Solids	mg/L	12.0	12.0	0	10	

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T158299 Analysis Description: Total Suspended Solids
 QC Batch Method: SM 2540 D-20 Analysis Method: SM 2540 D-20

METHOD BLANK: T158299-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Total Suspended Solids	mg/L	<4.0	4.0	

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LABORATORY CONTROL SAMPLE: T158299-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Total Suspended Solids	mg/L	100	90.0	90	85-115	

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T158168	Analysis Description: pH, SM 4500
QC Batch Method: *** DEFAULT PREP ***	Analysis Method: SM 4500-H+ B-11

SAMPLE DUPLICATE: T158168-DUP1 Original: 24J1136-01

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Notes
pH	pH Units	7.12	7.17	0.7	20	PH01I

Trace Project ID: 24J1136
 Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T158219	Analysis Description: pH, SM 4500
QC Batch Method: *** DEFAULT PREP ***	Analysis Method: SM 4500-H+ B-11

SAMPLE DUPLICATE: T158219-DUP1 Original: 24J1136-29

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Notes
pH	pH Units	7.90	7.55	5	20	PH01u

SAMPLE DUPLICATE: T158219-DUP2 Original: 24J1136-09

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Notes
pH	pH Units	7.49	7.95	6	20	PH01h

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Trace Analytical Laboratories, Inc.
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 Muskegon, MI 49444-2673

Phone 231.773.5998
 Fax 888.979.4469
 www.trace-labs.com

Report Results To: PO # 10337505
 Company Name: HDR Inc.
 Report To: Mely Reeves
 Contact Name: Lara Zawalden
 Mailing Address: 1000 Oakbrook Drive, Suite 200
 Billing Address (if different): 1000 Oakbrook Drive, Suite 200
 City, State, Zip Code: Ann Arbor, MI 48104
 Office Phone: Cell Phone: 734.263.7138
 Phone Number: 734.223.9074
 Billing Email Address: lara.zawalden@hdrinc.com

Trace Use:
 Logged By: SRB
 Checked By: AV
 Soil Volatiles Preserved (circle if applicable):
 MeOH _____ Low Level _____
 Lab _____
 Sample Collection Time (Hrs): _____

Requested Turnaround Times (TAT)
 Standard: 5-10 Business days
 3 Business Days*
 1 Business Day*
 * Rush TAT Requires Prior Approval

Matrix Key:
 WW = Wastewater O = Oil A = Air
 DW = Drinking Water WI = Wipes U = Unknown
 GW = Groundwater S = Solid
 LW = Liquid Waste SL = Sludge

Trace No.	Sample Collection Date	Sample Collection Time	Sample ID/Name	Metals	Field Filtered (Y or N)	Matrix - see above →	Number of Containers	Cool ≤ 4°C	Hydrochloric Acid (HCl)	Nitric Acid (HNO3)	Sulfuric Acid (H2SO4)	Sodium Thiosulfate	Sodium Hydroxide (NaOH)	Ascorbic Acid	Trizma	Other	40 CFR Part 257 Appendix III	40 CFR Part 257 Appendix IV	Additional Part 115 Metals	Total Suspended Solids (TSS)	Analysis Requested	Remarks/Notes	Possible Health Hazards?
1	15/12/14	1630	MW-02	N			2										X	X	X	X		2 nitric	
2	15/12/14	1308	MW-03	N			3										X	X	X	X		1 unprocessed	
3	15/12/14	1500	MW-04	N			3										X	X	X	X		For all	
4	15/12/14	1100	MW-31	N			2										X	X	X	X		samples	
5	15/12/14	1010	MW-37	N			3										X	X	X	X			
6	15/12/14	1230	MW-07	N			3										X	X	X	X			
7	15/12/14	1308	MW-T-03	N			3										X	X	X	X			
8	15/12/14	1010	MW-T-37	N			3										X	X	X	X			
							N										X	X	X	X			
							N										X	X	X	X			
							N										X	X	X	X			
							N										X	X	X	X			
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							N										X	X	X	X			
							N										X	X	X	X			
							N										X	X	X	X			

Please Sign
 Released By: [Signature] Date: 10/11/14 Time: 9:20
 Received By: [Signature] Date: 10/11/14 Time: 9:20

In executing this Chain of Custody, the client acknowledges the terms as set forth at www.trace-labs.com/terms-of-agreement.

Form 70-Z-2

Trace ID No.
24J1136

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24J1136
 HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date: 10/10/24	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -1.0°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 8:20									
Initials: SB									
Package Description: Cooler									
Package Temp °C	1.9	1.9							
Representative Sample Temp °C	11.0	10.8							

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:

Radiums
 MW-07, MW-31, MW-02
 500's
 MW-31, MW-02, MW-07,

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24J1136
 HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date: 10/16/24	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -1.0°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 837									
Initials: MJ									
Package Description: Cooler									
Package Temp °C	0.4	0.4							
Representative Sample Temp °C	10.4	10.4							

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-03
 MW-04
 MWT-03
 MW-37
 MWT-37

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TRACE
 ANALYTICAL LABORATORIES, INC.

CHAIN-OF-CUSTODY RECORD

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 2241 Black Creek Road
 Muskegon, MI 49444-2673
 Phone 231.773.5998
 Fax 888.979.4469
 www.trace-labs.com

Trace ID No.
 24J11310

Report Results To:

Bill To:

Company Name: **HDR Inc**
 Report To: **Molly Reeves**
 Mailing Address: **1006 Oakbrook Drive, Suite 200**
 City, State, Zip Code: **Ann Arbor, MI 48104**
 Office Phone: **(734) 263-7138**
 Email Address: **molly.reeves@hdr-inc.com**
 Cell Phone: **(734) 263-7138**
 PO #: **10337505**
 Contact Name: **Lara Zawaideh**
 Billing Address (if different):
 City, State, Zip Code:
 Phone Number: **(734) 223-9074**
 Billing Email Address: **lara.zawaideh@hdr-inc.com**

Trace Use:
 Logged By: **SR**
 Checked By: **SR**
 Soil Volatiles Preserved (circle if applicable):
 MeOH Low Level Lab
 Sample Collection Time (Hrs):

Requested Turnaround Times (TAT)
 Standard: 5-10 Business days
 3 Business Days*
 1 Business Day*
 * Rush TAT Requires Prior Approval

Matrix Key:
 WW = Wastewater O = Oil A = Air
 DW = Drinking Water WI = Wipes U = Unknown
 GW = Groundwater S = Solid
 LW = Liquid Waste SL = Sludge

Analysis Requested

Trace No.	Sample Collection Date	Sample Collection Time	Sample ID/Name	Metals	Field Filtered (Y or N)	Matrix - see above	Number of Containers	Cool ≤ 4°C	Hydrochloric Acid (HCl)	Nitric Acid (HNO3)	Sulfuric Acid (H2SO4)	Sodium Thiosulfate	Sodium Hydroxide (NaOH)	Ascorbic Acid	Trizma	Other	40 CFR App III Part 257	40 CFR Part 257 App IV	Part 115 Metals	Total Suspended Solids
9	10/16/24	934	MW-17	N	GW	3	3										X	X	X	X
10	10/16/24	1032	MW-18	N	GW	3	3										X	X	X	X
11	10/16/24	1136	MW-01R	N	GW	3	3										X	X	X	X
12	10/16/24	1300	MW-20	N	GW	3	3										X	X	X	X
13	10/16/24	1412	MW-36	N	GW	3	3										X	X	X	X
14	10/16/24	1520	MW-06	N	GW	3	3										X	X	X	X
15	10/16/24	1620	MW-11	N	GW	3	3										X	X	X	X
16	10/16/24	1740	MW-10	N	GW	3	3										X	X	X	X
17	10/16/24	1030	MW-38	N	GW	3	3										X	X	X	X
18	10/16/24	1200	MW-12	N	GW	3	3										X	X	X	X

Project Name: **Grand Haven Harbor Island**
 Sampled By (print): **Andrew Byks / Tanten Buszka**
 Trace No. **31**
 Sample Collection Date **10/17/24**
 Sample Collection Time **1503**
 Sample ID/Name **4)**
 Metals **40 CFR App III Part 257**
 Field Filtered (Y or N) **40 CFR Part 257 App IV**
 Matrix - see above **Part 115 Metals**
 Number of Containers **Total Suspended Solids**
 Cool ≤ 4°C
 Hydrochloric Acid (HCl)
 Nitric Acid (HNO3)
 Sulfuric Acid (H2SO4)
 Sodium Thiosulfate
 Sodium Hydroxide (NaOH)
 Ascorbic Acid
 Trizma
 Other
 Preservation
 40 CFR App III Part 257
 40 CFR Part 257 App IV
 Part 115 Metals
 Total Suspended Solids
 Analysis Requested
 Remarks/Notes
 Possible Health Hazards?

Please Sign
 Released By: **Andrew Buszka**
 Received By: **SR**
 Date: **10/17/24**
 Time: **1503**
 Released By: **SR**
 Received By: **SR**
 Date: **10/17/24**
 Time: **1503**

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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

Report Results To:

Bill To:

Company Name: HDK INC PO #: LD337505
 Report To: Molly Reeves Contact Name: Lara Zawadows
 Mailing Address: 1080 Oakbrook Drive, Suite 200 Billing Address (if different):
 City, State, Zip Code: Ann Arbor, MI 48104 City, State, Zip Code:
 Office Phone: Call Phone: (734) 203-7138 Phone Number: (734) 223-9074
 Email Address: molly-reeves@mdrinc.com Billing Email Address: lara.zawadows@mdrinc.com

Requested Turnaround Times (TAT)

- Standard: 5-10 Business days
 3 Business Days*
 1 Business Day*
 * Rush TAT Requires Prior Approval

Matrix Key:

- WW = Wastewater O = Oil A = Air
 DW = Drinking Water WI = Wipes U = Unknown
 GW = Groundwater S = Solid
 LW = Liquid Waste SL = Sludge

Analysis Requested

Trace Use:
 Logged By: NR
 Checked By: NR
 Soil/Volatiles Preserved (circle if applicable):
 MeOH Low Level Lab
 Sample Collection Time (Hrs):

Trace No.	Sample Collection Date	Sample Collection Time	Sample ID/Name	Metals Field Filtered (Y or N)	Matrix - see above →	Number of Containers	Preservation										Remarks/Notes	Possible Health Hazards?		
							Cool ≤ 4°C	Hydrochloric Acid (HCl)	Nitric Acid (HNO3)	Sulfuric Acid (H2SO4)	Sodium Thiosulfate	Sodium Hydroxide (NaOH)	Ascorbic Acid	Trizma	Other	40 CFR Part 257 App III			40 CFR Part 257 App IV	Part 115 Metals
19	10/16/24	1330	MW-19	N	GW	3														
20	10/16/24	1500	MW-32	N	GW	3														
21	10/16/24	1615	MW-08	N	GW	3														
22	10/16/24	1815	MW-30	N	GW	3														
<p><i>[Large handwritten scribbles covering the bottom half of the table]</i></p>																				

Please Sign

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Form 70-Z-2

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 2241 Black Creek Road
 Muskegon, MI 49444-2673



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



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 Fax 888.979.4469
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CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Report Results To:

Bill To:

Company Name: **HDR, INC** PO #: **10337505**
 Report To: **Molly Reeves** Contact Name: **Lara Zawajden**
 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: Cell Phone: Phone Number:
 Email Address: **molly.reeves@hdrinc.com** Billing Email Address: **lara.zawajden@hdrinc.com**

Trace Use:
 Logged By: **PR**
 Checked By:
 Soil/Volatiles Preserved (circle if applicable):
 MeOH Low Level Lab
 Sample Collection Time (hrs):

Requested Turnaround Times (TAT)
 Standard: 5-10 Business days
 3 Business Days*
 1 Business Day*
 *Rush TAT Requires Prior Approval

Matrix Key:
 WW = Wastewater O = Oil A = Air
 DW = Drinking Water WI = Wipes U = Unknown
 GW = Groundwater S = Solid
 LW = Liquid Waste SL = Sludge

Trace No.	Sample Date	Sample Collection Time	Sample ID/Name	Metals	Field Filtered (Y or N)	Matrix	Number of Containers	Cool ≤ 4°C	Hydrochloric Acid (HCl)	Nitric Acid (HNO3)	Sulfuric Acid (H2SO4)	Sodium Thiosulfate	Sodium Hydroxide (NaOH)	Ascorbic Acid	Trizma	Other	Analysis Requested	Remarks/Notes	Possible Health Hazards?
23	10/1/24	844	MW-34	N	GW	3	3												
24	10/1/24	946	MW-33	N	GW	3	3												
25	10/1/24	1200	MW-09	N	GW	3	3												
26	10/1/24	1100	MW-27	N	GW	3	3												
27	10/1/24	900	MW-28	N	GW	3	3												
28	10/1/24	1000	MW-16	N	GW	3	3												
29	10/1/24	1215	SG-02	N	SW	3	3												
30	10/1/24	1245	SG-04R	N	SW	3	3												
31	10/1/24	1305	SG-05	N	SW	3	3												
32	10/1/24	1325	SG-06	N	SW	3	3												

Please Sign
 Released By: **[Signature]** Received By: **[Signature]**
 Date: **10/1/24** Time: **1509**
 Released By: **[Signature]** Received By: **[Signature]**
 Date: **10/1/24** Time: **1509**

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 Form 70-2.2

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24J1136

HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date: 10/18/24	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -1.0°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 800									
Initials: SB									
Package Description: Cooler									
Package Temp °C	3.8	3.8			Y				
Representative Sample Temp °C	9.0	9.4				Y		Y	

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-10, MW-18, MW-17, MW-36, MW-01R,

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24J1136

HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date:	10/18/24		Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -1.0°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time:	800										
Initials:	SB										
Package Description:	Cooler										
Package Temp °C	2.0	2.0									
Representative Sample Temp °C	7.4	7.2									

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-19, MW-30, MW-12, MW-32, MW-08

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24J1136
 HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date: 10/19/24	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -1.0°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 900									
Initials: SB									
Package Description: cooler									
Package Temp °C	2.2	2.2							
Representative Sample Temp °C	7.9	7.9							X

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:

NO TEMP BLANK
 SG-06, MW-16, MW-28, SG-04R, SG-05

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24J1136
 HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date:	10/18/24		Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -1.0°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time:	900										
Initials:	SB										
Package Description:	cooler										
Package Temp °C	1.7	1.7									
Representative Sample Temp °C	0.9	0.0									

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:

MW-10, MW-30, MW-11, MW-06

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24J1136
 HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date: 10/19/24	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -1.0°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 900									
Initials: SB									
Package Description: COOLER									
Package Temp °C	3.0	3.0			✓				
Representative Sample Temp °C	8.4	8.2				✓		✓	

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-34, SG02, MW-27, MW-33

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24J1137
 HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date: 10/19/24	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -1.0°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 900									
Initials: SB									
Package Description: COOLER									
Package Temp °C	3.0	3.0			✓				
Representative Sample Temp °C	8.4	8.2				✓		✓	

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-34, SG02, MW-27, MW-33

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ANALYTICAL REPORT

PREPARED FOR

Attn: Jon Mink
Trace Analytical Laboratories
2241 Black Creek Road
Muskegon, Michigan 49444

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JOB DESCRIPTION

24J1137

JOB NUMBER

810-125047-1

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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Authorized for release by
Karen Fullmer, Project Manager
Karen.Fullmer@et.eurofinsus.com
(574)233-4777



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Definitions/Glossary

Client: Trace Analytical Laboratories
Project/Site: 24J1137

Job ID: 810-125047-1

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: 24J1137

Job ID: 810-125047-1

Job ID: 810-125047-1

Eurofins Eaton Analytical South Bend

Job Narrative 810-125047-1

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 10/21/2024 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 685130

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-30 (810-125047-22), MW-34 (810-125047-23) and MW-27 (810-125047-26)

Method 904.0: Radium 228 Batch 685128

The Radium-228 laboratory control sample (LCS) associated with the following samples recovered at 130%: (LCS 160-685128/2-A). The limits in our LIMS system at 75-125% reflect the requirements of a regulatory agency that represents a large amount of our work. However the samples associated with this LCS are not from this agency and are therefore held to our in-house statistical limits of 69-145%. The LCS is within criteria and no further action is required.

Method 904.0: Radium 228 Batch 685128

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 (810-125047-1), MWT-03 (810-125047-7) and MW-01R (810-125047-11)

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: 24J1137

Job ID: 810-125047-1

Client Sample ID: MW-02	Lab Sample ID: 810-125047-1
No Detections.	
Client Sample ID: MW-03	Lab Sample ID: 810-125047-2
No Detections.	
Client Sample ID: MW-04	Lab Sample ID: 810-125047-3
No Detections.	
Client Sample ID: MW-31	Lab Sample ID: 810-125047-4
No Detections.	
Client Sample ID: MW-37	Lab Sample ID: 810-125047-5
No Detections.	
Client Sample ID: MW-07	Lab Sample ID: 810-125047-6
No Detections.	
Client Sample ID: MWT-03	Lab Sample ID: 810-125047-7
No Detections.	
Client Sample ID: MWT-37	Lab Sample ID: 810-125047-8
No Detections.	
Client Sample ID: MW-17	Lab Sample ID: 810-125047-9
No Detections.	
Client Sample ID: MW-18	Lab Sample ID: 810-125047-10
No Detections.	
Client Sample ID: MW-01R	Lab Sample ID: 810-125047-11
No Detections.	
Client Sample ID: MW-20	Lab Sample ID: 810-125047-12
No Detections.	
Client Sample ID: MW-36	Lab Sample ID: 810-125047-13
No Detections.	
Client Sample ID: MW-06	Lab Sample ID: 810-125047-14
No Detections.	
Client Sample ID: MW-11	Lab Sample ID: 810-125047-15
No Detections.	
Client Sample ID: MW-10	Lab Sample ID: 810-125047-16
No Detections.	

This Detection Summary does not include radiochemical test results.

Eurofins Eaton Analytical South Bend

Detection Summary

Client: Trace Analytical Laboratories
Project/Site: 24J1137

Job ID: 810-125047-1

Client Sample ID: MW-38	Lab Sample ID: 810-125047-17
No Detections.	
Client Sample ID: MW-12	Lab Sample ID: 810-125047-18
No Detections.	
Client Sample ID: MW-19	Lab Sample ID: 810-125047-19
No Detections.	
Client Sample ID: MW-32	Lab Sample ID: 810-125047-20
No Detections.	
Client Sample ID: MW-08	Lab Sample ID: 810-125047-21
No Detections.	
Client Sample ID: MW-30	Lab Sample ID: 810-125047-22
No Detections.	
Client Sample ID: MW-34	Lab Sample ID: 810-125047-23
No Detections.	
Client Sample ID: MW-33	Lab Sample ID: 810-125047-24
No Detections.	
Client Sample ID: MW-09	Lab Sample ID: 810-125047-25
No Detections.	
Client Sample ID: MW-27	Lab Sample ID: 810-125047-26
No Detections.	
Client Sample ID: MW-28	Lab Sample ID: 810-125047-27
No Detections.	
Client Sample ID: MW-16	Lab Sample ID: 810-125047-28
No Detections.	
Client Sample ID: SG-02	Lab Sample ID: 810-125047-29
No Detections.	
Client Sample ID: SG-04R	Lab Sample ID: 810-125047-30
No Detections.	
Client Sample ID: SG-05	Lab Sample ID: 810-125047-31
No Detections.	
Client Sample ID: SG-06	Lab Sample ID: 810-125047-32
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: 24J1137

Job ID: 810-125047-1

Client Sample ID: MW-02

Lab Sample ID: 810-125047-1

Date Collected: 10/15/24 16:30

Matrix: Ground Water

Date Received: 10/21/24 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	0.772		0.331	0.338	1.00	0.389	pCi/L	10/25/24 08:51	11/18/24 09:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.1		30 - 110					10/25/24 08:51	11/18/24 09:52	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	0.554	U G	0.667	0.669	1.00	1.10	pCi/L	10/25/24 08:56	11/14/24 13:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.1		30 - 110					10/25/24 08:56	11/14/24 13:53	1
Y Carrier	80.4		30 - 110					10/25/24 08:56	11/14/24 13:53	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	1.33		0.745	0.750	5.00	1.10	pCi/L		11/19/24 13:12	1

Client Sample ID: MW-03

Lab Sample ID: 810-125047-2

Date Collected: 10/15/24 13:08

Matrix: Ground Water

Date Received: 10/21/24 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	0.348		0.172	0.175	1.00	0.202	pCi/L	10/25/24 08:51	11/18/24 09:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.8		30 - 110					10/25/24 08:51	11/18/24 09:52	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	1.36		0.595	0.608	1.00	0.767	pCi/L	10/25/24 08:56	11/14/24 13:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.8		30 - 110					10/25/24 08:56	11/14/24 13:53	1
Y Carrier	79.6		30 - 110					10/25/24 08:56	11/14/24 13:53	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	1.70		0.619	0.633	5.00	0.767	pCi/L		11/19/24 13:12	1

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24J1137

Job ID: 810-125047-1

Client Sample ID: MW-04

Lab Sample ID: 810-125047-3

Date Collected: 10/15/24 15:06

Matrix: Ground Water

Date Received: 10/21/24 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	0.104	U	0.140	0.140	1.00	0.235	pCi/L	10/25/24 08:51	11/18/24 09:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.0		30 - 110					10/25/24 08:51	11/18/24 09:52	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		0.439	0.444	1.00	0.634	pCi/L	10/25/24 08:56	11/14/24 13:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.0		30 - 110					10/25/24 08:56	11/14/24 13:53	1
Y Carrier	83.0		30 - 110					10/25/24 08:56	11/14/24 13:53	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	0.796		0.461	0.466	5.00	0.634	pCi/L		11/19/24 13:12	1

Client Sample ID: MW-31

Lab Sample ID: 810-125047-4

Date Collected: 10/15/24 11:00

Matrix: Ground Water

Date Received: 10/21/24 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	0.270		0.149	0.151	1.00	0.184	pCi/L	10/25/24 08:51	11/18/24 09:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.8		30 - 110					10/25/24 08:51	11/18/24 09:52	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	0.197	U	0.421	0.422	1.00	0.736	pCi/L	10/25/24 08:56	11/14/24 13:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.8		30 - 110					10/25/24 08:56	11/14/24 13:48	1
Y Carrier	80.0		30 - 110					10/25/24 08:56	11/14/24 13:48	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	0.467	U	0.447	0.448	5.00	0.736	pCi/L		11/19/24 13:12	1

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24J1137

Job ID: 810-125047-1

Client Sample ID: MW-37

Lab Sample ID: 810-125047-5

Date Collected: 10/15/24 16:10

Matrix: Ground Water

Date Received: 10/21/24 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0117	U	0.114	0.114	1.00	0.226	pCi/L	10/25/24 08:51	11/18/24 09:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.1		30 - 110					10/25/24 08:51	11/18/24 09:52	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.233	U	0.552	0.552	1.00	0.960	pCi/L	10/25/24 08:56	11/14/24 13:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.1		30 - 110					10/25/24 08:56	11/14/24 13:48	1
Y Carrier	78.5		30 - 110					10/25/24 08:56	11/14/24 13:48	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium 226 and 228	0.245	U	0.564	0.564	5.00	0.960	pCi/L		11/19/24 13:12	1

Client Sample ID: MW-07

Lab Sample ID: 810-125047-6

Date Collected: 10/15/24 12:30

Matrix: Ground Water

Date Received: 10/21/24 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.333		0.199	0.202	1.00	0.274	pCi/L	10/25/24 08:51	11/18/24 09:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.5		30 - 110					10/25/24 08:51	11/18/24 09:52	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.959		0.581	0.588	1.00	0.842	pCi/L	10/25/24 08:56	11/14/24 13:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.5		30 - 110					10/25/24 08:56	11/14/24 13:56	1
Y Carrier	73.3		30 - 110					10/25/24 08:56	11/14/24 13:56	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium 226 and 228	1.29		0.614	0.622	5.00	0.842	pCi/L		11/19/24 13:12	1

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24J1137

Job ID: 810-125047-1

Client Sample ID: MWT-03

Lab Sample ID: 810-125047-7

Date Collected: 10/15/24 13:08

Matrix: Ground Water

Date Received: 10/21/24 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	0.376		0.199	0.202	1.00	0.230	pCi/L	10/25/24 08:51	11/18/24 14:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.3		30 - 110					10/25/24 08:51	11/18/24 14:21	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	3.10	G	0.980	1.02	1.00	1.16	pCi/L	10/25/24 08:56	11/14/24 13:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.3		30 - 110					10/25/24 08:56	11/14/24 13:56	1
Y Carrier	77.8		30 - 110					10/25/24 08:56	11/14/24 13:56	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	3.48		1.00	1.04	5.00	1.16	pCi/L		11/19/24 13:12	1

Client Sample ID: MWT-37

Lab Sample ID: 810-125047-8

Date Collected: 10/15/24 16:10

Matrix: Ground Water

Date Received: 10/21/24 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	0.0429	U	0.0950	0.0951	1.00	0.176	pCi/L	10/25/24 08:51	11/18/24 14:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.3		30 - 110					10/25/24 08:51	11/18/24 14:21	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	1.00		0.654	0.660	1.00	0.983	pCi/L	10/25/24 08:56	11/14/24 13:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.3		30 - 110					10/25/24 08:56	11/14/24 13:56	1
Y Carrier	75.1		30 - 110					10/25/24 08:56	11/14/24 13:56	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	1.05		0.661	0.667	5.00	0.983	pCi/L		11/19/24 17:16	1

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24J1137

Job ID: 810-125047-1

Client Sample ID: MW-17

Lab Sample ID: 810-125047-9

Date Collected: 10/16/24 09:34

Matrix: Ground Water

Date Received: 10/21/24 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	0.334		0.146	0.149	1.00	0.144	pCi/L	10/25/24 08:51	11/18/24 14:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.7		30 - 110					10/25/24 08:51	11/18/24 14:21	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	1.22		0.582	0.593	1.00	0.798	pCi/L	10/25/24 08:56	11/14/24 13:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.7		30 - 110					10/25/24 08:56	11/14/24 13:55	1
Y Carrier	78.1		30 - 110					10/25/24 08:56	11/14/24 13:55	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	1.56		0.600	0.611	5.00	0.798	pCi/L		11/19/24 17:16	1

Client Sample ID: MW-18

Lab Sample ID: 810-125047-10

Date Collected: 10/16/24 10:32

Matrix: Ground Water

Date Received: 10/21/24 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	0.0215	U	0.0775	0.0775	1.00	0.149	pCi/L	10/25/24 08:51	11/18/24 14:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.1		30 - 110					10/25/24 08:51	11/18/24 14:21	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	0.991		0.438	0.448	1.00	0.567	pCi/L	10/25/24 08:56	11/14/24 13:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.1		30 - 110					10/25/24 08:56	11/14/24 13:55	1
Y Carrier	78.9		30 - 110					10/25/24 08:56	11/14/24 13:55	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	1.01		0.445	0.455	5.00	0.567	pCi/L		11/19/24 17:16	1

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24J1137

Job ID: 810-125047-1

Client Sample ID: MW-01R

Lab Sample ID: 810-125047-11

Date Collected: 10/16/24 11:36

Matrix: Ground Water

Date Received: 10/21/24 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	0.111	U	0.157	0.158	1.00	0.268	pCi/L	10/25/24 08:51	11/18/24 14:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		30 - 110					10/25/24 08:51	11/18/24 14:21	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	1.37	G	0.759	0.769	1.00	1.07	pCi/L	10/25/24 08:56	11/14/24 13:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		30 - 110					10/25/24 08:56	11/14/24 13:56	1
Y Carrier	76.6		30 - 110					10/25/24 08:56	11/14/24 13:56	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	1.48		0.775	0.785	5.00	1.07	pCi/L		11/19/24 17:16	1

Client Sample ID: MW-20

Lab Sample ID: 810-125047-12

Date Collected: 10/16/24 13:00

Matrix: Ground Water

Date Received: 10/21/24 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	0.227		0.114	0.116	1.00	0.132	pCi/L	10/25/24 08:51	11/18/24 14:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.4		30 - 110					10/25/24 08:51	11/18/24 14:21	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	0.775		0.388	0.394	1.00	0.534	pCi/L	10/25/24 08:56	11/14/24 13:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.4		30 - 110					10/25/24 08:56	11/14/24 13:56	1
Y Carrier	83.7		30 - 110					10/25/24 08:56	11/14/24 13:56	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	1.00		0.404	0.411	5.00	0.534	pCi/L		11/19/24 17:16	1

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24J1137

Job ID: 810-125047-1

Client Sample ID: MW-36

Lab Sample ID: 810-125047-13

Date Collected: 10/16/24 14:12

Matrix: Ground Water

Date Received: 10/21/24 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	0.119	U	0.124	0.124	1.00	0.194	pCi/L	10/25/24 08:51	11/18/24 14:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.3		30 - 110					10/25/24 08:51	11/18/24 14:19	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	0.959		0.632	0.638	1.00	0.943	pCi/L	10/25/24 08:56	11/14/24 14:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.3		30 - 110					10/25/24 08:56	11/14/24 14:01	1
Y Carrier	76.3		30 - 110					10/25/24 08:56	11/14/24 14:01	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	1.08		0.644	0.650	5.00	0.943	pCi/L		11/19/24 17:16	1

Client Sample ID: MW-06

Lab Sample ID: 810-125047-14

Date Collected: 10/16/24 15:20

Matrix: Ground Water

Date Received: 10/21/24 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	0.360		0.203	0.206	1.00	0.254	pCi/L	10/25/24 08:51	11/18/24 14:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.3		30 - 110					10/25/24 08:51	11/18/24 14:19	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	2.51		0.847	0.878	1.00	0.982	pCi/L	10/25/24 08:56	11/14/24 14:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.3		30 - 110					10/25/24 08:56	11/14/24 14:01	1
Y Carrier	77.8		30 - 110					10/25/24 08:56	11/14/24 14:01	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	2.87		0.871	0.902	5.00	0.982	pCi/L		11/19/24 17:16	1

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24J1137

Job ID: 810-125047-1

Client Sample ID: MW-11

Lab Sample ID: 810-125047-15

Date Collected: 10/16/24 16:20

Matrix: Ground Water

Date Received: 10/21/24 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	0.319		0.154	0.156	1.00	0.171	pCi/L	10/25/24 08:51	11/18/24 14:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.7		30 - 110					10/25/24 08:51	11/18/24 14:20	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	2.30		0.708	0.739	1.00	0.852	pCi/L	10/25/24 08:56	11/14/24 14:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.7		30 - 110					10/25/24 08:56	11/14/24 14:02	1
Y Carrier	78.5		30 - 110					10/25/24 08:56	11/14/24 14:02	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	2.61		0.725	0.755	5.00	0.852	pCi/L		11/19/24 17:16	1

Client Sample ID: MW-10

Lab Sample ID: 810-125047-16

Date Collected: 10/16/24 17:40

Matrix: Ground Water

Date Received: 10/21/24 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	0.417		0.161	0.165	1.00	0.143	pCi/L	10/25/24 08:51	11/18/24 14:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		30 - 110					10/25/24 08:51	11/18/24 14:20	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	1.54		0.624	0.639	1.00	0.817	pCi/L	10/25/24 08:56	11/14/24 14:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		30 - 110					10/25/24 08:56	11/14/24 14:02	1
Y Carrier	79.3		30 - 110					10/25/24 08:56	11/14/24 14:02	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	1.96		0.644	0.660	5.00	0.817	pCi/L		11/19/24 17:16	1

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24J1137

Job ID: 810-125047-1

Client Sample ID: MW-38

Lab Sample ID: 810-125047-17

Date Collected: 10/16/24 10:30

Matrix: Ground Water

Date Received: 10/21/24 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	0.278		0.158	0.160	1.00	0.194	pCi/L	10/25/24 08:51	11/18/24 14:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.0		30 - 110					10/25/24 08:51	11/18/24 14:20	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	1.84		0.709	0.729	1.00	0.917	pCi/L	10/25/24 08:56	11/14/24 14:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.0		30 - 110					10/25/24 08:56	11/14/24 14:02	1
Y Carrier	80.0		30 - 110					10/25/24 08:56	11/14/24 14:02	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	2.12		0.726	0.746	5.00	0.917	pCi/L		11/19/24 17:16	1

Client Sample ID: MW-12

Lab Sample ID: 810-125047-18

Date Collected: 10/16/24 12:00

Matrix: Ground Water

Date Received: 10/21/24 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	-0.00212	U	0.0703	0.0703	1.00	0.148	pCi/L	10/25/24 08:51	11/18/24 14:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.3		30 - 110					10/25/24 08:51	11/18/24 14:20	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	1.07		0.467	0.477	1.00	0.623	pCi/L	10/25/24 08:56	11/14/24 14:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.3		30 - 110					10/25/24 08:56	11/14/24 14:02	1
Y Carrier	78.9		30 - 110					10/25/24 08:56	11/14/24 14:02	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		0.472	0.482	5.00	0.623	pCi/L		11/19/24 17:16	1

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24J1137

Job ID: 810-125047-1

Client Sample ID: MW-19

Lab Sample ID: 810-125047-19

Date Collected: 10/16/24 13:30

Matrix: Ground Water

Date Received: 10/21/24 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	0.221		0.114	0.116	1.00	0.124	pCi/L	10/25/24 08:58	11/18/24 16:25	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.6		30 - 110					10/25/24 08:58	11/18/24 16:25	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	0.323	U	0.362	0.363	1.00	0.592	pCi/L	10/25/24 09:03	11/15/24 12:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.6		30 - 110					10/25/24 09:03	11/15/24 12:04	1
Y Carrier	77.4		30 - 110					10/25/24 09:03	11/15/24 12:04	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	0.545	U	0.380	0.381	5.00	0.592	pCi/L		11/19/24 12:38	1

Client Sample ID: MW-32

Lab Sample ID: 810-125047-20

Date Collected: 10/16/24 15:00

Matrix: Ground Water

Date Received: 10/21/24 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	0.172		0.112	0.113	1.00	0.150	pCi/L	10/25/24 08:58	11/18/24 16:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.4		30 - 110					10/25/24 08:58	11/18/24 16:26	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	0.559	U	0.396	0.399	1.00	0.603	pCi/L	10/25/24 09:03	11/15/24 12:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.4		30 - 110					10/25/24 09:03	11/15/24 12:04	1
Y Carrier	82.6		30 - 110					10/25/24 09:03	11/15/24 12:04	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	0.732		0.412	0.415	5.00	0.603	pCi/L		11/19/24 12:38	1

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24J1137

Job ID: 810-125047-1

Client Sample ID: MW-08

Lab Sample ID: 810-125047-21

Date Collected: 10/16/24 16:15

Matrix: Ground Water

Date Received: 10/21/24 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	0.367		0.182	0.185	1.00	0.216	pCi/L	10/25/24 08:58	11/18/24 16:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.0		30 - 110					10/25/24 08:58	11/18/24 16:26	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	1.75		0.659	0.679	1.00	0.827	pCi/L	10/25/24 09:03	11/15/24 12:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.0		30 - 110					10/25/24 09:03	11/15/24 12:05	1
Y Carrier	77.0		30 - 110					10/25/24 09:03	11/15/24 12:05	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	2.11		0.684	0.704	5.00	0.827	pCi/L		11/19/24 12:38	1

Client Sample ID: MW-30

Lab Sample ID: 810-125047-22

Date Collected: 10/16/24 18:15

Matrix: Ground Water

Date Received: 10/21/24 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	0.0755	U	0.125	0.125	1.00	0.219	pCi/L	10/25/24 08:58	11/18/24 16:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.7		30 - 110					10/25/24 08:58	11/18/24 16:26	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	0.429	U G	0.661	0.662	1.00	1.12	pCi/L	10/25/24 09:03	11/15/24 12:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.7		30 - 110					10/25/24 09:03	11/15/24 12:05	1
Y Carrier	74.8		30 - 110					10/25/24 09:03	11/15/24 12:05	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	0.505	U	0.673	0.674	5.00	1.12	pCi/L		11/19/24 12:38	1

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24J1137

Job ID: 810-125047-1

Client Sample ID: MW-34

Lab Sample ID: 810-125047-23

Date Collected: 10/17/24 08:44

Matrix: Ground Water

Date Received: 10/21/24 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	0.369		0.222	0.224	1.00	0.280	pCi/L	10/25/24 08:58	11/18/24 16:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		30 - 110					10/25/24 08:58	11/18/24 16:26	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	1.70	G	0.821	0.835	1.00	1.11	pCi/L	10/25/24 09:03	11/15/24 12:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		30 - 110					10/25/24 09:03	11/15/24 12:03	1
Y Carrier	78.5		30 - 110					10/25/24 09:03	11/15/24 12:03	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	2.07		0.850	0.865	5.00	1.11	pCi/L		11/19/24 12:38	1

Client Sample ID: MW-33

Lab Sample ID: 810-125047-24

Date Collected: 10/17/24 09:46

Matrix: Ground Water

Date Received: 10/21/24 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	0.0889	U	0.132	0.132	1.00	0.226	pCi/L	10/25/24 08:58	11/18/24 16:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.5		30 - 110					10/25/24 08:58	11/18/24 16:26	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	0.538	U	0.591	0.593	1.00	0.964	pCi/L	10/25/24 09:03	11/15/24 12:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.5		30 - 110					10/25/24 09:03	11/15/24 12:03	1
Y Carrier	75.5		30 - 110					10/25/24 09:03	11/15/24 12:03	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	0.627	U	0.606	0.608	5.00	0.964	pCi/L		11/19/24 12:38	1

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24J1137

Job ID: 810-125047-1

Client Sample ID: MW-09

Lab Sample ID: 810-125047-25

Date Collected: 10/17/24 12:00

Matrix: Ground Water

Date Received: 10/21/24 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	-0.00885	U	0.0822	0.0822	1.00	0.185	pCi/L	10/25/24 08:58	11/18/24 16:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.4		30 - 110					10/25/24 08:58	11/18/24 16:26	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	-0.217	U	0.430	0.431	1.00	0.851	pCi/L	10/25/24 09:03	11/15/24 12:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.4		30 - 110					10/25/24 09:03	11/15/24 12:03	1
Y Carrier	79.3		30 - 110					10/25/24 09:03	11/15/24 12:03	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium 226 and 228	0.000	U	0.438	0.439	5.00	0.851	pCi/L		11/19/24 12:38	1

Client Sample ID: MW-27

Lab Sample ID: 810-125047-26

Date Collected: 10/17/24 11:00

Matrix: Ground Water

Date Received: 10/21/24 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.340		0.208	0.210	1.00	0.249	pCi/L	10/25/24 08:58	11/18/24 16:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.6		30 - 110					10/25/24 08:58	11/18/24 16:26	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.000	U G	0.665	0.665	1.00	1.24	pCi/L	10/25/24 09:03	11/15/24 12:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.6		30 - 110					10/25/24 09:03	11/15/24 12:03	1
Y Carrier	80.0		30 - 110					10/25/24 09:03	11/15/24 12:03	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium 226 and 228	0.340	U	0.697	0.697	5.00	1.24	pCi/L		11/19/24 12:38	1

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24J1137

Job ID: 810-125047-1

Client Sample ID: MW-28

Lab Sample ID: 810-125047-27

Date Collected: 10/17/24 09:00

Matrix: Ground Water

Date Received: 10/21/24 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	0.211	U	0.157	0.158	1.00	0.218	pCi/L	10/25/24 08:58	11/18/24 16:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.5		30 - 110					10/25/24 08:58	11/18/24 16:26	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	1.06		0.591	0.599	1.00	0.826	pCi/L	10/25/24 09:03	11/15/24 12:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.5		30 - 110					10/25/24 09:03	11/15/24 12:04	1
Y Carrier	75.9		30 - 110					10/25/24 09:03	11/15/24 12:04	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	1.27		0.611	0.619	5.00	0.826	pCi/L		11/19/24 12:38	1

Client Sample ID: MW-16

Lab Sample ID: 810-125047-28

Date Collected: 10/17/24 10:00

Matrix: Ground Water

Date Received: 10/21/24 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	0.371		0.180	0.183	1.00	0.210	pCi/L	10/25/24 08:58	11/18/24 16:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.8		30 - 110					10/25/24 08:58	11/18/24 16:27	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	1.94		0.620	0.645	1.00	0.712	pCi/L	10/25/24 09:03	11/15/24 12:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.8		30 - 110					10/25/24 09:03	11/15/24 12:04	1
Y Carrier	81.5		30 - 110					10/25/24 09:03	11/15/24 12:04	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	2.31		0.646	0.670	5.00	0.712	pCi/L		11/19/24 12:38	1

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24J1137

Job ID: 810-125047-1

Client Sample ID: SG-02

Lab Sample ID: 810-125047-29

Date Collected: 10/17/24 12:15

Matrix: Ground Water

Date Received: 10/21/24 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	0.175		0.119	0.120	1.00	0.161	pCi/L	10/25/24 08:58	11/18/24 21:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.3		30 - 110					10/25/24 08:58	11/18/24 21:28	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	0.0682	U	0.382	0.382	1.00	0.700	pCi/L	10/25/24 09:03	11/15/24 12:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.3		30 - 110					10/25/24 09:03	11/15/24 12:04	1
Y Carrier	75.1		30 - 110					10/25/24 09:03	11/15/24 12:04	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	0.243	U	0.400	0.400	5.00	0.700	pCi/L		11/19/24 12:38	1

Client Sample ID: SG-04R

Lab Sample ID: 810-125047-30

Date Collected: 10/17/24 12:45

Matrix: Ground Water

Date Received: 10/21/24 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	0.109	U	0.0954	0.0959	1.00	0.140	pCi/L	10/25/24 08:58	11/18/24 21:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.6		30 - 110					10/25/24 08:58	11/18/24 21:28	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	-0.130	U	0.296	0.296	1.00	0.591	pCi/L	10/25/24 09:03	11/15/24 12:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.6		30 - 110					10/25/24 09:03	11/15/24 12:06	1
Y Carrier	86.4		30 - 110					10/25/24 09:03	11/15/24 12:06	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	0.109	U	0.311	0.311	5.00	0.591	pCi/L		11/19/24 12:38	1

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24J1137

Job ID: 810-125047-1

Client Sample ID: SG-05

Lab Sample ID: 810-125047-31

Date Collected: 10/17/24 13:05

Matrix: Ground Water

Date Received: 10/21/24 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	0.243	U	0.171	0.172	1.00	0.244	pCi/L	10/25/24 08:58	11/18/24 21:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.7		30 - 110					10/25/24 08:58	11/18/24 21:28	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	0.294	U	0.454	0.455	1.00	0.773	pCi/L	10/25/24 09:03	11/15/24 12:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.7		30 - 110					10/25/24 09:03	11/15/24 12:06	1
Y Carrier	77.8		30 - 110					10/25/24 09:03	11/15/24 12:06	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	0.537	U	0.485	0.486	5.00	0.773	pCi/L		11/19/24 12:38	1

Client Sample ID: SG-06

Lab Sample ID: 810-125047-32

Date Collected: 10/17/24 13:25

Matrix: Ground Water

Date Received: 10/21/24 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	0.121	0.122	1.00	0.181	pCi/L	10/25/24 08:58	11/18/24 21:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.2		30 - 110					10/25/24 08:58	11/18/24 21:30	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	0.912		0.552	0.558	1.00	0.799	pCi/L	10/25/24 09:03	11/15/24 12:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.2		30 - 110					10/25/24 09:03	11/15/24 12:06	1
Y Carrier	74.8		30 - 110					10/25/24 09:03	11/15/24 12:06	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	1.04		0.565	0.571	5.00	0.799	pCi/L		11/19/24 12:38	1

Eurofins Eaton Analytical South Bend

Tracer/Carrier Summary

Client: Trace Analytical Laboratories
Project/Site: 24J1137

Job ID: 810-125047-1

Method: 903.0 - Radium-226 (GFPC)

Matrix: Ground Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits)	
		Ba (30-110)	
810-125047-1	MW-02	84.1	
810-125047-2	MW-03	76.8	
810-125047-3	MW-04	89.0	
810-125047-4	MW-31	88.8	
810-125047-5	MW-37	84.1	
810-125047-6	MW-07	88.5	
810-125047-7	MWT-03	87.3	
810-125047-8	MWT-37	86.3	
810-125047-9	MW-17	89.7	
810-125047-10	MW-18	83.1	
810-125047-11	MW-01R	90.0	
810-125047-12	MW-20	91.4	
810-125047-13	MW-36	77.3	
810-125047-14	MW-06	96.3	
810-125047-15	MW-11	92.7	
810-125047-16	MW-10	94.1	
810-125047-17	MW-38	77.0	
810-125047-18	MW-12	86.3	
810-125047-19	MW-19	84.6	
810-125047-20	MW-32	93.4	
810-125047-21	MW-08	89.0	
810-125047-22	MW-30	78.7	
810-125047-23	MW-34	92.9	
810-125047-24	MW-33	79.5	
810-125047-25	MW-09	92.4	
810-125047-26	MW-27	85.6	
810-125047-27	MW-28	79.5	
810-125047-28	MW-16	87.8	
810-125047-29	SG-02	77.3	
810-125047-30	SG-04R	83.6	
810-125047-30 DU	SG-04R	82.4	
810-125047-31	SG-05	80.7	
810-125047-32	SG-06	90.2	

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits)	
		Ba (30-110)	
LCS 160-685127/2-A	Lab Control Sample	96.8	
LCS 160-685129/2-A	Lab Control Sample	92.2	
MB 160-685127/1-A	Method Blank	97.6	
MB 160-685129/1-A	Method Blank	84.8	

Tracer/Carrier Legend

Ba = Ba Carrier

Tracer/Carrier Summary

Client: Trace Analytical Laboratories
 Project/Site: 24J1137

Job ID: 810-125047-1

Method: 904.0 - Radium-228 (GFPC)

Matrix: Ground Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits)	
		Ba (30-110)	Y (30-110)
810-125047-1	MW-02	84.1	80.4
810-125047-2	MW-03	76.8	79.6
810-125047-3	MW-04	89.0	83.0
810-125047-4	MW-31	88.8	80.0
810-125047-5	MW-37	84.1	78.5
810-125047-6	MW-07	88.5	73.3
810-125047-7	MWT-03	87.3	77.8
810-125047-8	MWT-37	86.3	75.1
810-125047-9	MW-17	89.7	78.1
810-125047-10	MW-18	83.1	78.9
810-125047-11	MW-01R	90.0	76.6
810-125047-12	MW-20	91.4	83.7
810-125047-13	MW-36	77.3	76.3
810-125047-14	MW-06	96.3	77.8
810-125047-15	MW-11	92.7	78.5
810-125047-16	MW-10	94.1	79.3
810-125047-17	MW-38	77.0	80.0
810-125047-18	MW-12	86.3	78.9
810-125047-19	MW-19	84.6	77.4
810-125047-20	MW-32	93.4	82.6
810-125047-21	MW-08	89.0	77.0
810-125047-22	MW-30	78.7	74.8
810-125047-23	MW-34	92.9	78.5
810-125047-24	MW-33	79.5	75.5
810-125047-25	MW-09	92.4	79.3
810-125047-26	MW-27	85.6	80.0
810-125047-27	MW-28	79.5	75.9
810-125047-28	MW-16	87.8	81.5
810-125047-29	SG-02	77.3	75.1
810-125047-30	SG-04R	83.6	86.4
810-125047-30 DU	SG-04R	82.4	73.3
810-125047-31	SG-05	80.7	77.8
810-125047-32	SG-06	90.2	74.8

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits)	
		Ba (30-110)	Y (30-110)
LCS 160-685128/2-A	Lab Control Sample	96.8	77.4
LCS 160-685130/2-A	Lab Control Sample	92.2	82.2
MB 160-685128/1-A	Method Blank	97.6	81.9
MB 160-685130/1-A	Method Blank	84.8	80.4

Tracer/Carrier Legend

Ba = Ba Carrier

Tracer/Carrier Summary

Client: Trace Analytical Laboratories

Project/Site: 24J1137

Y = Y Carrier

Job ID: 810-125047-1

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QC Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24J1137

Job ID: 810-125047-1

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-685127/1-A
Matrix: Water
Analysis Batch: 689051

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 685127

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.05286	U	0.0665	0.0667	1.00	0.162	pCi/L	10/25/24 08:51	11/18/24 09:51	1
Carrier	MB %Yield	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	97.6		30 - 110		10/25/24 08:51	11/18/24 09:51	1			

Lab Sample ID: LCS 160-685127/2-A
Matrix: Water
Analysis Batch: 689051

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 685127

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec
				Uncert. (2σ+/-)					Limits
Radium-226	9.58	8.775		0.986	1.00	0.133	pCi/L	92	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	96.8		30 - 110						

Lab Sample ID: MB 160-685129/1-A
Matrix: Water
Analysis Batch: 689048

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 685129

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.001144	U	0.0635	0.0635	1.00	0.140	pCi/L	10/25/24 08:58	11/18/24 16:25	1
Carrier	MB %Yield	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	84.8		30 - 110		10/25/24 08:58	11/18/24 16:25	1			

Lab Sample ID: LCS 160-685129/2-A
Matrix: Water
Analysis Batch: 689048

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 685129

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec
				Uncert. (2σ+/-)					Limits
Radium-226	9.58	10.01		1.11	1.00	0.134	pCi/L	104	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	92.2		30 - 110						

Lab Sample ID: 810-125047-30 DU
Matrix: Ground Water
Analysis Batch: 689048

Client Sample ID: SG-04R
Prep Type: Total/NA
Prep Batch: 685129

Analyte	Sample	Sample	DU	DU	Total	RL	MDC	Unit	RER	RER
	Result	Qual	Result	Qual	Uncert. (2σ+/-)					Limit
Radium-226	0.109	U	-0.01645	U	0.116	1.00	0.231	pCi/L	0.59	1

QC Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24J1137

Job ID: 810-125047-1

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

Lab Sample ID: 810-125047-30 DU
Matrix: Ground Water
Analysis Batch: 689048

Client Sample ID: SG-04R
Prep Type: Total/NA
Prep Batch: 685129

Carrier	<i>DU</i> %Yield	<i>DU</i> Qualifier	Limits
Ba Carrier	82.4		30 - 110

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-685128/1-A
Matrix: Water
Analysis Batch: 688429

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 685128

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.09530	U	0.297	0.297	1.00	0.529	pCi/L	10/25/24 08:56	11/14/24 13:53	1

Carrier	<i>MB</i> %Yield	<i>MB</i> Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	97.6		30 - 110	10/25/24 08:56	11/14/24 13:53	1
Y Carrier	81.9		30 - 110	10/25/24 08:56	11/14/24 13:53	1

Lab Sample ID: LCS 160-685128/2-A
Matrix: Water
Analysis Batch: 688429

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 685128

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec
				Uncert. (2σ+/-)					Limits
Radium-228	8.34	10.82		1.42	1.00	0.484	pCi/L	130	75 - 125

Carrier	<i>LCS</i> %Yield	<i>LCS</i> Qualifier	Limits
Ba Carrier	96.8		30 - 110
Y Carrier	77.4		30 - 110

Lab Sample ID: MB 160-685130/1-A
Matrix: Water
Analysis Batch: 688645

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 685130

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.5440	U	0.390	0.393	1.00	0.589	pCi/L	10/25/24 09:03	11/15/24 12:04	1

Carrier	<i>MB</i> %Yield	<i>MB</i> Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	84.8		30 - 110	10/25/24 09:03	11/15/24 12:04	1
Y Carrier	80.4		30 - 110	10/25/24 09:03	11/15/24 12:04	1

Lab Sample ID: LCS 160-685130/2-A
Matrix: Water
Analysis Batch: 688645

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 685130

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec
				Uncert. (2σ+/-)					Limits
Radium-228	8.34	10.01		1.35	1.00	0.476	pCi/L	120	75 - 125

QC Sample Results

Client: Trace Analytical Laboratories
 Project/Site: 24J1137

Job ID: 810-125047-1

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

Lab Sample ID: LCS 160-685130/2-A
Matrix: Water
Analysis Batch: 688645

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 685130

Carrier	LCS	LCS	Limits
	%Yield	Qualifier	
Ba Carrier	92.2		30 - 110
Y Carrier	82.2		30 - 110

Lab Sample ID: 810-125047-30 DU
Matrix: Ground Water
Analysis Batch: 688645

Client Sample ID: SG-04R
Prep Type: Total/NA
Prep Batch: 685130

Analyte	Sample	Sample	DU	DU	Total	RL	MDC	Unit	RER	Limit
	Result	Qual	Result	Qual	Uncert. (2σ+/-)					
Radium-228	-0.130	U	0.5970	U	0.419	1.00	0.617	pCi/L	1.02	1

Carrier	DU	DU	Limits
	%Yield	Qualifier	
Ba Carrier	82.4		30 - 110
Y Carrier	73.3		30 - 110

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QC Association Summary

Client: Trace Analytical Laboratories
Project/Site: 24J1137

Job ID: 810-125047-1

Rad

Prep Batch: 685127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-125047-1	MW-02	Total/NA	Ground Water	PrecSep-21	
810-125047-2	MW-03	Total/NA	Ground Water	PrecSep-21	
810-125047-3	MW-04	Total/NA	Ground Water	PrecSep-21	
810-125047-4	MW-31	Total/NA	Ground Water	PrecSep-21	
810-125047-5	MW-37	Total/NA	Ground Water	PrecSep-21	
810-125047-6	MW-07	Total/NA	Ground Water	PrecSep-21	
810-125047-7	MWT-03	Total/NA	Ground Water	PrecSep-21	
810-125047-8	MWT-37	Total/NA	Ground Water	PrecSep-21	
810-125047-9	MW-17	Total/NA	Ground Water	PrecSep-21	
810-125047-10	MW-18	Total/NA	Ground Water	PrecSep-21	
810-125047-11	MW-01R	Total/NA	Ground Water	PrecSep-21	
810-125047-12	MW-20	Total/NA	Ground Water	PrecSep-21	
810-125047-13	MW-36	Total/NA	Ground Water	PrecSep-21	
810-125047-14	MW-06	Total/NA	Ground Water	PrecSep-21	
810-125047-15	MW-11	Total/NA	Ground Water	PrecSep-21	
810-125047-16	MW-10	Total/NA	Ground Water	PrecSep-21	
810-125047-17	MW-38	Total/NA	Ground Water	PrecSep-21	
810-125047-18	MW-12	Total/NA	Ground Water	PrecSep-21	
MB 160-685127/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-685127/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 685128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-125047-1	MW-02	Total/NA	Ground Water	PrecSep_0	
810-125047-2	MW-03	Total/NA	Ground Water	PrecSep_0	
810-125047-3	MW-04	Total/NA	Ground Water	PrecSep_0	
810-125047-4	MW-31	Total/NA	Ground Water	PrecSep_0	
810-125047-5	MW-37	Total/NA	Ground Water	PrecSep_0	
810-125047-6	MW-07	Total/NA	Ground Water	PrecSep_0	
810-125047-7	MWT-03	Total/NA	Ground Water	PrecSep_0	
810-125047-8	MWT-37	Total/NA	Ground Water	PrecSep_0	
810-125047-9	MW-17	Total/NA	Ground Water	PrecSep_0	
810-125047-10	MW-18	Total/NA	Ground Water	PrecSep_0	
810-125047-11	MW-01R	Total/NA	Ground Water	PrecSep_0	
810-125047-12	MW-20	Total/NA	Ground Water	PrecSep_0	
810-125047-13	MW-36	Total/NA	Ground Water	PrecSep_0	
810-125047-14	MW-06	Total/NA	Ground Water	PrecSep_0	
810-125047-15	MW-11	Total/NA	Ground Water	PrecSep_0	
810-125047-16	MW-10	Total/NA	Ground Water	PrecSep_0	
810-125047-17	MW-38	Total/NA	Ground Water	PrecSep_0	
810-125047-18	MW-12	Total/NA	Ground Water	PrecSep_0	
MB 160-685128/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-685128/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Prep Batch: 685129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-125047-19	MW-19	Total/NA	Ground Water	PrecSep-21	
810-125047-20	MW-32	Total/NA	Ground Water	PrecSep-21	
810-125047-21	MW-08	Total/NA	Ground Water	PrecSep-21	
810-125047-22	MW-30	Total/NA	Ground Water	PrecSep-21	
810-125047-23	MW-34	Total/NA	Ground Water	PrecSep-21	

QC Association Summary

Client: Trace Analytical Laboratories
 Project/Site: 24J1137

Job ID: 810-125047-1

Rad (Continued)

Prep Batch: 685129 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-125047-24	MW-33	Total/NA	Ground Water	PrecSep-21	
810-125047-25	MW-09	Total/NA	Ground Water	PrecSep-21	
810-125047-26	MW-27	Total/NA	Ground Water	PrecSep-21	
810-125047-27	MW-28	Total/NA	Ground Water	PrecSep-21	
810-125047-28	MW-16	Total/NA	Ground Water	PrecSep-21	
810-125047-29	SG-02	Total/NA	Ground Water	PrecSep-21	
810-125047-30	SG-04R	Total/NA	Ground Water	PrecSep-21	
810-125047-31	SG-05	Total/NA	Ground Water	PrecSep-21	
810-125047-32	SG-06	Total/NA	Ground Water	PrecSep-21	
MB 160-685129/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-685129/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
810-125047-30 DU	SG-04R	Total/NA	Ground Water	PrecSep-21	

Prep Batch: 685130

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-125047-19	MW-19	Total/NA	Ground Water	PrecSep_0	
810-125047-20	MW-32	Total/NA	Ground Water	PrecSep_0	
810-125047-21	MW-08	Total/NA	Ground Water	PrecSep_0	
810-125047-22	MW-30	Total/NA	Ground Water	PrecSep_0	
810-125047-23	MW-34	Total/NA	Ground Water	PrecSep_0	
810-125047-24	MW-33	Total/NA	Ground Water	PrecSep_0	
810-125047-25	MW-09	Total/NA	Ground Water	PrecSep_0	
810-125047-26	MW-27	Total/NA	Ground Water	PrecSep_0	
810-125047-27	MW-28	Total/NA	Ground Water	PrecSep_0	
810-125047-28	MW-16	Total/NA	Ground Water	PrecSep_0	
810-125047-29	SG-02	Total/NA	Ground Water	PrecSep_0	
810-125047-30	SG-04R	Total/NA	Ground Water	PrecSep_0	
810-125047-31	SG-05	Total/NA	Ground Water	PrecSep_0	
810-125047-32	SG-06	Total/NA	Ground Water	PrecSep_0	
MB 160-685130/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-685130/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
810-125047-30 DU	SG-04R	Total/NA	Ground Water	PrecSep_0	

Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 24J1137

Job ID: 810-125047-1

Client Sample ID: MW-02

Lab Sample ID: 810-125047-1

Date Collected: 10/15/24 16:30

Matrix: Ground Water

Date Received: 10/21/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			685127	BCE	EET SL	10/25/24 08:51
Total/NA	Analysis	903.0		1	689051	SWS	EET SL	11/18/24 09:52
Total/NA	Prep	PrecSep_0			685128	BCE	EET SL	10/25/24 08:56
Total/NA	Analysis	904.0		1	688429	SCB	EET SL	11/14/24 13:53
Total/NA	Analysis	Ra226_Ra228 Pos		1	689322	SCB	EET SL	11/19/24 13:12

Client Sample ID: MW-03

Lab Sample ID: 810-125047-2

Date Collected: 10/15/24 13:08

Matrix: Ground Water

Date Received: 10/21/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			685127	BCE	EET SL	10/25/24 08:51
Total/NA	Analysis	903.0		1	689051	SWS	EET SL	11/18/24 09:52
Total/NA	Prep	PrecSep_0			685128	BCE	EET SL	10/25/24 08:56
Total/NA	Analysis	904.0		1	688429	SCB	EET SL	11/14/24 13:53
Total/NA	Analysis	Ra226_Ra228 Pos		1	689322	SCB	EET SL	11/19/24 13:12

Client Sample ID: MW-04

Lab Sample ID: 810-125047-3

Date Collected: 10/15/24 15:06

Matrix: Ground Water

Date Received: 10/21/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			685127	BCE	EET SL	10/25/24 08:51
Total/NA	Analysis	903.0		1	689051	SWS	EET SL	11/18/24 09:52
Total/NA	Prep	PrecSep_0			685128	BCE	EET SL	10/25/24 08:56
Total/NA	Analysis	904.0		1	688429	SCB	EET SL	11/14/24 13:53
Total/NA	Analysis	Ra226_Ra228 Pos		1	689322	SCB	EET SL	11/19/24 13:12

Client Sample ID: MW-31

Lab Sample ID: 810-125047-4

Date Collected: 10/15/24 11:00

Matrix: Ground Water

Date Received: 10/21/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			685127	BCE	EET SL	10/25/24 08:51
Total/NA	Analysis	903.0		1	689051	SWS	EET SL	11/18/24 09:52
Total/NA	Prep	PrecSep_0			685128	BCE	EET SL	10/25/24 08:56
Total/NA	Analysis	904.0		1	688429	SCB	EET SL	11/14/24 13:48
Total/NA	Analysis	Ra226_Ra228 Pos		1	689322	SCB	EET SL	11/19/24 13:12

Lab Chronicle

Client: Trace Analytical Laboratories
 Project/Site: 24J1137

Job ID: 810-125047-1

Client Sample ID: MW-37

Lab Sample ID: 810-125047-5

Date Collected: 10/15/24 16:10

Matrix: Ground Water

Date Received: 10/21/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			685127	BCE	EET SL	10/25/24 08:51
Total/NA	Analysis	903.0		1	689051	SWS	EET SL	11/18/24 09:52
Total/NA	Prep	PrecSep_0			685128	BCE	EET SL	10/25/24 08:56
Total/NA	Analysis	904.0		1	688429	SCB	EET SL	11/14/24 13:48
Total/NA	Analysis	Ra226_Ra228 Pos		1	689322	SCB	EET SL	11/19/24 13:12

Client Sample ID: MW-07

Lab Sample ID: 810-125047-6

Date Collected: 10/15/24 12:30

Matrix: Ground Water

Date Received: 10/21/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			685127	BCE	EET SL	10/25/24 08:51
Total/NA	Analysis	903.0		1	689051	SWS	EET SL	11/18/24 09:52
Total/NA	Prep	PrecSep_0			685128	BCE	EET SL	10/25/24 08:56
Total/NA	Analysis	904.0		1	688429	SCB	EET SL	11/14/24 13:56
Total/NA	Analysis	Ra226_Ra228 Pos		1	689322	SCB	EET SL	11/19/24 13:12

Client Sample ID: MWT-03

Lab Sample ID: 810-125047-7

Date Collected: 10/15/24 13:08

Matrix: Ground Water

Date Received: 10/21/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			685127	BCE	EET SL	10/25/24 08:51
Total/NA	Analysis	903.0		1	689048	SWS	EET SL	11/18/24 14:21
Total/NA	Prep	PrecSep_0			685128	BCE	EET SL	10/25/24 08:56
Total/NA	Analysis	904.0		1	688429	SCB	EET SL	11/14/24 13:56
Total/NA	Analysis	Ra226_Ra228 Pos		1	689322	SCB	EET SL	11/19/24 13:12

Client Sample ID: MWT-37

Lab Sample ID: 810-125047-8

Date Collected: 10/15/24 16:10

Matrix: Ground Water

Date Received: 10/21/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			685127	BCE	EET SL	10/25/24 08:51
Total/NA	Analysis	903.0		1	689048	SWS	EET SL	11/18/24 14:21
Total/NA	Prep	PrecSep_0			685128	BCE	EET SL	10/25/24 08:56
Total/NA	Analysis	904.0		1	688429	SCB	EET SL	11/14/24 13:56
Total/NA	Analysis	Ra226_Ra228 Pos		1	689322	SCB	EET SL	11/19/24 17:16

Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 24J1137

Job ID: 810-125047-1

Client Sample ID: MW-17

Lab Sample ID: 810-125047-9

Date Collected: 10/16/24 09:34

Matrix: Ground Water

Date Received: 10/21/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			685127	BCE	EET SL	10/25/24 08:51
Total/NA	Analysis	903.0		1	689048	SWS	EET SL	11/18/24 14:21
Total/NA	Prep	PrecSep_0			685128	BCE	EET SL	10/25/24 08:56
Total/NA	Analysis	904.0		1	688429	SCB	EET SL	11/14/24 13:55
Total/NA	Analysis	Ra226_Ra228 Pos		1	689322	SCB	EET SL	11/19/24 17:16

Client Sample ID: MW-18

Lab Sample ID: 810-125047-10

Date Collected: 10/16/24 10:32

Matrix: Ground Water

Date Received: 10/21/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			685127	BCE	EET SL	10/25/24 08:51
Total/NA	Analysis	903.0		1	689048	SWS	EET SL	11/18/24 14:21
Total/NA	Prep	PrecSep_0			685128	BCE	EET SL	10/25/24 08:56
Total/NA	Analysis	904.0		1	688429	SCB	EET SL	11/14/24 13:55
Total/NA	Analysis	Ra226_Ra228 Pos		1	689322	SCB	EET SL	11/19/24 17:16

Client Sample ID: MW-01R

Lab Sample ID: 810-125047-11

Date Collected: 10/16/24 11:36

Matrix: Ground Water

Date Received: 10/21/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			685127	BCE	EET SL	10/25/24 08:51
Total/NA	Analysis	903.0		1	689048	SWS	EET SL	11/18/24 14:21
Total/NA	Prep	PrecSep_0			685128	BCE	EET SL	10/25/24 08:56
Total/NA	Analysis	904.0		1	688429	SCB	EET SL	11/14/24 13:56
Total/NA	Analysis	Ra226_Ra228 Pos		1	689322	SCB	EET SL	11/19/24 17:16

Client Sample ID: MW-20

Lab Sample ID: 810-125047-12

Date Collected: 10/16/24 13:00

Matrix: Ground Water

Date Received: 10/21/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			685127	BCE	EET SL	10/25/24 08:51
Total/NA	Analysis	903.0		1	689048	SWS	EET SL	11/18/24 14:21
Total/NA	Prep	PrecSep_0			685128	BCE	EET SL	10/25/24 08:56
Total/NA	Analysis	904.0		1	688429	SCB	EET SL	11/14/24 13:56
Total/NA	Analysis	Ra226_Ra228 Pos		1	689322	SCB	EET SL	11/19/24 17:16

Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 24J1137

Job ID: 810-125047-1

Client Sample ID: MW-36

Lab Sample ID: 810-125047-13

Date Collected: 10/16/24 14:12

Matrix: Ground Water

Date Received: 10/21/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			685127	BCE	EET SL	10/25/24 08:51
Total/NA	Analysis	903.0		1	689048	SWS	EET SL	11/18/24 14:19
Total/NA	Prep	PrecSep_0			685128	BCE	EET SL	10/25/24 08:56
Total/NA	Analysis	904.0		1	688561	SCB	EET SL	11/14/24 14:01
Total/NA	Analysis	Ra226_Ra228 Pos		1	689322	SCB	EET SL	11/19/24 17:16

Client Sample ID: MW-06

Lab Sample ID: 810-125047-14

Date Collected: 10/16/24 15:20

Matrix: Ground Water

Date Received: 10/21/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			685127	BCE	EET SL	10/25/24 08:51
Total/NA	Analysis	903.0		1	689048	SWS	EET SL	11/18/24 14:19
Total/NA	Prep	PrecSep_0			685128	BCE	EET SL	10/25/24 08:56
Total/NA	Analysis	904.0		1	688561	SCB	EET SL	11/14/24 14:01
Total/NA	Analysis	Ra226_Ra228 Pos		1	689322	SCB	EET SL	11/19/24 17:16

Client Sample ID: MW-11

Lab Sample ID: 810-125047-15

Date Collected: 10/16/24 16:20

Matrix: Ground Water

Date Received: 10/21/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			685127	BCE	EET SL	10/25/24 08:51
Total/NA	Analysis	903.0		1	689048	SWS	EET SL	11/18/24 14:20
Total/NA	Prep	PrecSep_0			685128	BCE	EET SL	10/25/24 08:56
Total/NA	Analysis	904.0		1	688561	SCB	EET SL	11/14/24 14:02
Total/NA	Analysis	Ra226_Ra228 Pos		1	689322	SCB	EET SL	11/19/24 17:16

Client Sample ID: MW-10

Lab Sample ID: 810-125047-16

Date Collected: 10/16/24 17:40

Matrix: Ground Water

Date Received: 10/21/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			685127	BCE	EET SL	10/25/24 08:51
Total/NA	Analysis	903.0		1	689048	SWS	EET SL	11/18/24 14:20
Total/NA	Prep	PrecSep_0			685128	BCE	EET SL	10/25/24 08:56
Total/NA	Analysis	904.0		1	688561	SCB	EET SL	11/14/24 14:02
Total/NA	Analysis	Ra226_Ra228 Pos		1	689322	SCB	EET SL	11/19/24 17:16

Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 24J1137

Job ID: 810-125047-1

Client Sample ID: MW-38

Lab Sample ID: 810-125047-17

Date Collected: 10/16/24 10:30

Matrix: Ground Water

Date Received: 10/21/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			685127	BCE	EET SL	10/25/24 08:51
Total/NA	Analysis	903.0		1	689048	SWS	EET SL	11/18/24 14:20
Total/NA	Prep	PrecSep_0			685128	BCE	EET SL	10/25/24 08:56
Total/NA	Analysis	904.0		1	688561	SCB	EET SL	11/14/24 14:02
Total/NA	Analysis	Ra226_Ra228 Pos		1	689322	SCB	EET SL	11/19/24 17:16

Client Sample ID: MW-12

Lab Sample ID: 810-125047-18

Date Collected: 10/16/24 12:00

Matrix: Ground Water

Date Received: 10/21/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			685127	BCE	EET SL	10/25/24 08:51
Total/NA	Analysis	903.0		1	689048	SWS	EET SL	11/18/24 14:20
Total/NA	Prep	PrecSep_0			685128	BCE	EET SL	10/25/24 08:56
Total/NA	Analysis	904.0		1	688561	SCB	EET SL	11/14/24 14:02
Total/NA	Analysis	Ra226_Ra228 Pos		1	689322	SCB	EET SL	11/19/24 17:16

Client Sample ID: MW-19

Lab Sample ID: 810-125047-19

Date Collected: 10/16/24 13:30

Matrix: Ground Water

Date Received: 10/21/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			685129	BCE	EET SL	10/25/24 08:58
Total/NA	Analysis	903.0		1	689048	SWS	EET SL	11/18/24 16:25
Total/NA	Prep	PrecSep_0			685130	BCE	EET SL	10/25/24 09:03
Total/NA	Analysis	904.0		1	688645	SWS	EET SL	11/15/24 12:04
Total/NA	Analysis	Ra226_Ra228 Pos		1	689318	SCB	EET SL	11/19/24 12:38

Client Sample ID: MW-32

Lab Sample ID: 810-125047-20

Date Collected: 10/16/24 15:00

Matrix: Ground Water

Date Received: 10/21/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			685129	BCE	EET SL	10/25/24 08:58
Total/NA	Analysis	903.0		1	689048	SWS	EET SL	11/18/24 16:26
Total/NA	Prep	PrecSep_0			685130	BCE	EET SL	10/25/24 09:03
Total/NA	Analysis	904.0		1	688645	SWS	EET SL	11/15/24 12:04
Total/NA	Analysis	Ra226_Ra228 Pos		1	689318	SCB	EET SL	11/19/24 12:38

Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 24J1137

Job ID: 810-125047-1

Client Sample ID: MW-08

Lab Sample ID: 810-125047-21

Date Collected: 10/16/24 16:15

Matrix: Ground Water

Date Received: 10/21/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			685129	BCE	EET SL	10/25/24 08:58
Total/NA	Analysis	903.0		1	689048	SWS	EET SL	11/18/24 16:26
Total/NA	Prep	PrecSep_0			685130	BCE	EET SL	10/25/24 09:03
Total/NA	Analysis	904.0		1	688645	SWS	EET SL	11/15/24 12:05
Total/NA	Analysis	Ra226_Ra228 Pos		1	689318	SCB	EET SL	11/19/24 12:38

Client Sample ID: MW-30

Lab Sample ID: 810-125047-22

Date Collected: 10/16/24 18:15

Matrix: Ground Water

Date Received: 10/21/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			685129	BCE	EET SL	10/25/24 08:58
Total/NA	Analysis	903.0		1	689048	SWS	EET SL	11/18/24 16:26
Total/NA	Prep	PrecSep_0			685130	BCE	EET SL	10/25/24 09:03
Total/NA	Analysis	904.0		1	688645	SWS	EET SL	11/15/24 12:05
Total/NA	Analysis	Ra226_Ra228 Pos		1	689318	SCB	EET SL	11/19/24 12:38

Client Sample ID: MW-34

Lab Sample ID: 810-125047-23

Date Collected: 10/17/24 08:44

Matrix: Ground Water

Date Received: 10/21/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			685129	BCE	EET SL	10/25/24 08:58
Total/NA	Analysis	903.0		1	689048	SWS	EET SL	11/18/24 16:26
Total/NA	Prep	PrecSep_0			685130	BCE	EET SL	10/25/24 09:03
Total/NA	Analysis	904.0		1	688645	SWS	EET SL	11/15/24 12:03
Total/NA	Analysis	Ra226_Ra228 Pos		1	689318	SCB	EET SL	11/19/24 12:38

Client Sample ID: MW-33

Lab Sample ID: 810-125047-24

Date Collected: 10/17/24 09:46

Matrix: Ground Water

Date Received: 10/21/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			685129	BCE	EET SL	10/25/24 08:58
Total/NA	Analysis	903.0		1	689048	SWS	EET SL	11/18/24 16:26
Total/NA	Prep	PrecSep_0			685130	BCE	EET SL	10/25/24 09:03
Total/NA	Analysis	904.0		1	688645	SWS	EET SL	11/15/24 12:03
Total/NA	Analysis	Ra226_Ra228 Pos		1	689318	SCB	EET SL	11/19/24 12:38

Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 24J1137

Job ID: 810-125047-1

Client Sample ID: MW-09

Lab Sample ID: 810-125047-25

Date Collected: 10/17/24 12:00

Matrix: Ground Water

Date Received: 10/21/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			685129	BCE	EET SL	10/25/24 08:58
Total/NA	Analysis	903.0		1	689048	SWS	EET SL	11/18/24 16:26
Total/NA	Prep	PrecSep_0			685130	BCE	EET SL	10/25/24 09:03
Total/NA	Analysis	904.0		1	688645	SWS	EET SL	11/15/24 12:03
Total/NA	Analysis	Ra226_Ra228 Pos		1	689318	SCB	EET SL	11/19/24 12:38

Client Sample ID: MW-27

Lab Sample ID: 810-125047-26

Date Collected: 10/17/24 11:00

Matrix: Ground Water

Date Received: 10/21/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			685129	BCE	EET SL	10/25/24 08:58
Total/NA	Analysis	903.0		1	689048	SWS	EET SL	11/18/24 16:26
Total/NA	Prep	PrecSep_0			685130	BCE	EET SL	10/25/24 09:03
Total/NA	Analysis	904.0		1	688645	SWS	EET SL	11/15/24 12:03
Total/NA	Analysis	Ra226_Ra228 Pos		1	689318	SCB	EET SL	11/19/24 12:38

Client Sample ID: MW-28

Lab Sample ID: 810-125047-27

Date Collected: 10/17/24 09:00

Matrix: Ground Water

Date Received: 10/21/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			685129	BCE	EET SL	10/25/24 08:58
Total/NA	Analysis	903.0		1	689048	SWS	EET SL	11/18/24 16:26
Total/NA	Prep	PrecSep_0			685130	BCE	EET SL	10/25/24 09:03
Total/NA	Analysis	904.0		1	688645	SWS	EET SL	11/15/24 12:04
Total/NA	Analysis	Ra226_Ra228 Pos		1	689318	SCB	EET SL	11/19/24 12:38

Client Sample ID: MW-16

Lab Sample ID: 810-125047-28

Date Collected: 10/17/24 10:00

Matrix: Ground Water

Date Received: 10/21/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			685129	BCE	EET SL	10/25/24 08:58
Total/NA	Analysis	903.0		1	689048	SWS	EET SL	11/18/24 16:27
Total/NA	Prep	PrecSep_0			685130	BCE	EET SL	10/25/24 09:03
Total/NA	Analysis	904.0		1	688645	SWS	EET SL	11/15/24 12:04
Total/NA	Analysis	Ra226_Ra228 Pos		1	689318	SCB	EET SL	11/19/24 12:38

Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 24J1137

Job ID: 810-125047-1

Client Sample ID: SG-02

Lab Sample ID: 810-125047-29

Date Collected: 10/17/24 12:15

Matrix: Ground Water

Date Received: 10/21/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			685129	BCE	EET SL	10/25/24 08:58
Total/NA	Analysis	903.0		1	689048	SWS	EET SL	11/18/24 21:28
Total/NA	Prep	PrecSep_0			685130	BCE	EET SL	10/25/24 09:03
Total/NA	Analysis	904.0		1	688645	SWS	EET SL	11/15/24 12:04
Total/NA	Analysis	Ra226_Ra228 Pos		1	689318	SCB	EET SL	11/19/24 12:38

Client Sample ID: SG-04R

Lab Sample ID: 810-125047-30

Date Collected: 10/17/24 12:45

Matrix: Ground Water

Date Received: 10/21/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			685129	BCE	EET SL	10/25/24 08:58
Total/NA	Analysis	903.0		1	689048	SWS	EET SL	11/18/24 21:28
Total/NA	Prep	PrecSep_0			685130	BCE	EET SL	10/25/24 09:03
Total/NA	Analysis	904.0		1	688645	SWS	EET SL	11/15/24 12:06
Total/NA	Analysis	Ra226_Ra228 Pos		1	689318	SCB	EET SL	11/19/24 12:38

Client Sample ID: SG-05

Lab Sample ID: 810-125047-31

Date Collected: 10/17/24 13:05

Matrix: Ground Water

Date Received: 10/21/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			685129	BCE	EET SL	10/25/24 08:58
Total/NA	Analysis	903.0		1	689048	SWS	EET SL	11/18/24 21:28
Total/NA	Prep	PrecSep_0			685130	BCE	EET SL	10/25/24 09:03
Total/NA	Analysis	904.0		1	688645	SWS	EET SL	11/15/24 12:06
Total/NA	Analysis	Ra226_Ra228 Pos		1	689318	SCB	EET SL	11/19/24 12:38

Client Sample ID: SG-06

Lab Sample ID: 810-125047-32

Date Collected: 10/17/24 13:25

Matrix: Ground Water

Date Received: 10/21/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			685129	BCE	EET SL	10/25/24 08:58
Total/NA	Analysis	903.0		1	689048	SWS	EET SL	11/18/24 21:30
Total/NA	Prep	PrecSep_0			685130	BCE	EET SL	10/25/24 09:03
Total/NA	Analysis	904.0		1	688645	SWS	EET SL	11/15/24 12:06
Total/NA	Analysis	Ra226_Ra228 Pos		1	689318	SCB	EET SL	11/19/24 12:38

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: 24J1137

Job ID: 810-125047-1

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	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-25
ANAB	Dept. of Energy	L2305.01	04-08-25
ANAB	ISO/IEC 17025	L2305	04-06-25
Arizona	State	AZ0813	12-08-24
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-25
HI - RadChem Recognition	State	n/a	06-30-25
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-24
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-24
Louisiana	NELAP	04080	06-30-22 *
Louisiana (All)	NELAP	04080	06-30-25
Louisiana (DW)	State	LA011	12-31-24
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	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	03-31-25
North Carolina (DW)	State	29700	07-31-25
North Dakota	State	R-207	12-31-24
Oregon	NELAP	4157	09-01-25
Pennsylvania	NELAP	68-00540	02-28-25
South Carolina	State	85002001	06-30-25
Texas	NELAP	T104704193	07-31-25
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	P330-17-00028	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.

Method Summary

Client: Trace Analytical Laboratories
Project/Site: 24J1137

Job ID: 810-125047-1

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



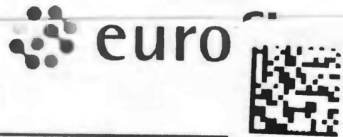
Sample Summary

Client: Trace Analytical Laboratories
 Project/Site: 24J1137

Job ID: 810-125047-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
810-125047-1	MW-02	Ground Water	10/15/24 16:30	10/21/24 09:00
810-125047-2	MW-03	Ground Water	10/15/24 13:08	10/21/24 09:00
810-125047-3	MW-04	Ground Water	10/15/24 15:06	10/21/24 09:00
810-125047-4	MW-31	Ground Water	10/15/24 11:00	10/21/24 09:00
810-125047-5	MW-37	Ground Water	10/15/24 16:10	10/21/24 09:00
810-125047-6	MW-07	Ground Water	10/15/24 12:30	10/21/24 09:00
810-125047-7	MWT-03	Ground Water	10/15/24 13:08	10/21/24 09:00
810-125047-8	MWT-37	Ground Water	10/15/24 16:10	10/21/24 09:00
810-125047-9	MW-17	Ground Water	10/16/24 09:34	10/21/24 09:00
810-125047-10	MW-18	Ground Water	10/16/24 10:32	10/21/24 09:00
810-125047-11	MW-01R	Ground Water	10/16/24 11:36	10/21/24 09:00
810-125047-12	MW-20	Ground Water	10/16/24 13:00	10/21/24 09:00
810-125047-13	MW-36	Ground Water	10/16/24 14:12	10/21/24 09:00
810-125047-14	MW-06	Ground Water	10/16/24 15:20	10/21/24 09:00
810-125047-15	MW-11	Ground Water	10/16/24 16:20	10/21/24 09:00
810-125047-16	MW-10	Ground Water	10/16/24 17:40	10/21/24 09:00
810-125047-17	MW-38	Ground Water	10/16/24 10:30	10/21/24 09:00
810-125047-18	MW-12	Ground Water	10/16/24 12:00	10/21/24 09:00
810-125047-19	MW-19	Ground Water	10/16/24 13:30	10/21/24 09:00
810-125047-20	MW-32	Ground Water	10/16/24 15:00	10/21/24 09:00
810-125047-21	MW-08	Ground Water	10/16/24 16:15	10/21/24 09:00
810-125047-22	MW-30	Ground Water	10/16/24 18:15	10/21/24 09:00
810-125047-23	MW-34	Ground Water	10/17/24 08:44	10/21/24 09:00
810-125047-24	MW-33	Ground Water	10/17/24 09:46	10/21/24 09:00
810-125047-25	MW-09	Ground Water	10/17/24 12:00	10/21/24 09:00
810-125047-26	MW-27	Ground Water	10/17/24 11:00	10/21/24 09:00
810-125047-27	MW-28	Ground Water	10/17/24 09:00	10/21/24 09:00
810-125047-28	MW-16	Ground Water	10/17/24 10:00	10/21/24 09:00
810-125047-29	SG-02	Ground Water	10/17/24 12:15	10/21/24 09:00
810-125047-30	SG-04R	Ground Water	10/17/24 12:45	10/21/24 09:00
810-125047-31	SG-05	Ground Water	10/17/24 13:05	10/21/24 09:00
810-125047-32	SG-06	Ground Water	10/17/24 13:25	10/21/24 09:00





Eaton Analytical

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 South Bend, IN 46617
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Order # _____
 Batch # _____

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 310-1250-17 COC
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CHAIN OF CUSTODY RECORD

Page _____ of _____

REPORT TO:					SAMPLER (Signature)		PWS ID #	STATE (sample origin)	PROJECT NAME	PO#	# OF CONTAINERS	MATRIX CODE	TURNAROUND TIME
Jon Mink, Tim Brewer (jmink@trace-labs.com, tbrewer@trace-labs.com) Trace Analytical Laboratories, Inc., 2241 Black Creek Rd., Muskegon, MI 49444 231-773-5998								MI					
BILL TO:					COMPLIANCE MONITORING	Yes	No	POPULATION SERVED	SOURCE WATER	24J1137	24J1137		
Accounts Payable, Trace Analytical Laboratories, Inc., 2241 Black Creek Rd., Muskegon, MI 49444						X							
LAB Number	COLLECTION				SAMPLING SITE	TEST NAME	SAMPLE REMARKS	CHLORINATED		# OF CONTAINERS	MATRIX CODE	TURNAROUND TIME	
	DATE	TIME	AM	PM				YES	NO				
1	10/15/24	16:30		X	MW-02	RADIUM 226/228				1	GW	SW	
2	10/15/24	13:08		X	MW-03	RADIUM 226/228				1	GW	SW	
3	10/15/24	15:06		X	MW-04	RADIUM 226/228				1	GW	SW	
4	10/15/24	11:00	X		MW-31	RADIUM 226/228				1	GW	SW	
5	10/15/24	16:10		X	MW-37	RADIUM 226/228				1	GW	SW	
6	10/15/24	12:30		X	MW-07	RADIUM 226/228				1	GW	SW	
7	10/15/24	13:08		X	MW-03 Im 10-21-24	RADIUM 226/228	updated COC 10-21-24 ID			1	GW	SW	
8	10/15/24	16:10		X	MW-37	RADIUM 226/228				1	GW	SW	
9	10/16/24	9:34	X		MW-17	RADIUM 226/228				1	GW	SW	
10	10/16/24	10:32	X		MW-18	RADIUM 226/228				1	GW	SW	
11	10/16/24	11:36	X		MW-01R	RADIUM 226/228				1	GW	SW	
12	10/16/24	13:00		X	MW-20	RADIUM 226/228				1	GW	SW	
13	10/16/24	14:12		X	MW-36	RADIUM 226/228				1	GW	SW	
14	10/16/24	15:20		X	MW-06	RADIUM 226/228				1	GW	SW	

RELINQUISHED BY:(Signature) Sydney Boyce	DATE 10/18/24	TIME 17:00	RECEIVED BY:(Signature) Fedex	DATE	TIME	LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT LAB COMMENTS
RELINQUISHED BY:(Signature) Fedex	DATE	TIME	RECEIVED BY:(Signature)	DATE	TIME	
RELINQUISHED BY:(Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY: K. D. [Signature]	DATE 10-21-24	TIME 0900	

MATRIX CODES: DW-DRINKING WATER RW-REAGENT WATER GW-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%	IV* = Immediate Verbal: (3 working days) 100% IW* = Immediate Written: (3 working days) 125% SP* = Weekend, Holiday CALL STAT* = Less than 48 hours CALL	Samples received unannounced with less than 48 hours holding time remaining may be subject to additional charges.
--	--	---	---

Sample analysis will be provided according to the standard EEA/Water Services Terms, which are available upon request. Any other terms proposed by Customer are deemed material alterations and are rejected unless expressly agreed to in writing by EEA.



Eaton Analytical

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CHAIN OF CUSTODY RECORD

Page 2 of 3

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REPORT TO:				SAMPLER (Signature)		PWS ID #	STATE (sample origin)	PROJECT NAME	PO#	# OF CONTAINERS	MATRIX CODE	TURNAROUND TIME
Jon Mink, Tim Brewer (jmink@trace-labs.com, tbrewer@trace-labs.com) Trace Analytical Laboratories, Inc., 2241 Black Creek Rd., Muskegon, MI 49444 231-773-5998							MI					
BILL TO:				COMPLIANCE MONITORING	Yes	No	POPULATION SERVED	SOURCE WATER	24J1137	24J1137		
Accounts Payable, Trace Analytical Laboratories, Inc., 2241 Black Creek Rd., Muskegon, MI 49444					X							
LAB Number	COLLECTION				SAMPLING SITE	TEST NAME	SAMPLE REMARKS	CHLORINATED		# OF CONTAINERS	MATRIX CODE	TURNAROUND TIME
	DATE	TIME	AM	PM				YES	NO			
1	10/16/24	16:20		x	MW-11	RADIUM 226/228				1	GW	SW
2	10/16/24	17:40		x	MW-10	RADIUM 226/228				1	GW	SW
3	10/16/24	10:30	x		MW-38	RADIUM 226/228				1	GW	SW
4	10/16/24	12:00		x	MW-12	RADIUM 226/228				1	GW	SW
5	10/16/24	13:30		x	MW-19	RADIUM 226/228				1	GW	SW
6	10/16/24	15:00		x	MW-32	RADIUM 226/228				1	GW	SW
7	10/16/24	16:15		x	MW-08	RADIUM 226/228				1	GW	SW
8	10/16/24	18:15		x	MW-30	RADIUM 226/228				1	GW	SW
9	10/17/24	8:44	x		MW-34	RADIUM 226/228				1	GW	SW
10	10/17/24	9:46	x		MW-33	RADIUM 226/228				1	GW	SW
11	10/17/24	12:00		x	MW-09	RADIUM 226/228				1	GW	SW
12	10/17/24	11:00	x		MW-27	RADIUM 226/228				1	GW	SW
13	10/17/24	9:00	x		MW-28	RADIUM 226/228				1	GW	SW
14	10/17/24	10:00	x		MW-16	RADIUM 226/228				1	GW	SW

RELINQUISHED BY:(Signature)	DATE	TIME	RECEIVED BY:(Signature)	DATE	TIME	LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT LAB COMMENTS
Sydney Boyce	10/18/24	17:00	Fedex			
		AM PM			AM PM	
RELINQUISHED BY:(Signature)	DATE	TIME	RECEIVED BY:(Signature)	DATE	TIME	CONDITIONS UPON RECEIPT (check one): <input type="checkbox"/> Iced/Wet/Blue <input checked="" type="checkbox"/> Ambient <input type="checkbox"/> °C Upon Receipt <input checked="" type="checkbox"/> N/A
Fedex						
		AM PM			AM PM	
RELINQUISHED BY:(Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME	
			<i>[Signature]</i>	10/21/24	0900	
		AM PM			AM PM	

MATRIX CODES: DW-DRINKING WATER RW-REAGENT WATER GW-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%	IV* = Immediate Verbal: (3 working days) 100% IW* = Immediate Written: (3 working days) 125% SP* = Weekend, Holiday CALL STAT* = Less than 48 hours CALL	Samples received unannounced with less than 48 hours holding time remaining may be subject to additional charges.
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* Please call, expedited service not available for all testing

06-LO-F0435 Issue 6.0 Effective Date: 2016-09-20

Sample analysis will be provided according to the standard EEA/Water Services Terms, which are available upon request. Any other terms proposed by Customer are deemed material alterations and are rejected unless expressly agreed to in writing by EEA.



Eaton Analytical

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CHAIN OF CUSTODY RECORD

Page 3 of 3

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Table with columns: REPORT TO, SAMPLER (Signature), PWS ID #, STATE (sample origin), PROJECT NAME, PO#, COMPLIANCE MONITORING, LAB Number, COLLECTION (DATE, TIME, AM, PM), SAMPLING SITE, TEST NAME, SAMPLE REMARKS, CHLORINATED (YES, NO), # OF CONTAINERS, MATRIX CODE, TURNAROUND TIME. Includes sample data for Radium 226/228.

Table for Chain of Custody with columns: RELINQUISHED BY:(Signature), DATE, TIME, RECEIVED BY:(Signature), DATE, TIME. Includes handwritten signatures and dates.

Table for Matrix Codes and Turn-Around Time (TAT) - Surcharges. Lists codes like DW-DRINKING WATER, RW-REAGENT WATER, etc., and TAT options like SW = Standard Written (15 working days) 0%.

Sample analysis will be provided according to the standard EEA/Water Services Terms, which are available upon request. Any other terms proposed by Customer are deemed material alterations and are rejected unless expressly agreed to in writing by EEA.



Chain of Custody Record



Client Information (Sub Contract Lab)
 Client Contact: **TestAmerica Laboratories, Inc.**
 Shipping/Receiving: **TestAmerica Laboratories, Inc.**
 Company: **TestAmerica Laboratories, Inc.**
 Address: **13715 Rider Trail North,**
 City: **MO, 63045**
 State, Zip: **MO, 63045**
 Phone: **314-298-8566(Tel) 314-298-8757(Fax)**
 Email: **N/A**
 Project Name: **24J1137**
 Site: **N/A**

Sampler: **N/A**
 Lab PM: **Karen Fulmer, Karen**
 Fullmer, Karen
 E-Mail: **Karen.Fulmer@eai.eurofins.com**
 Accreditations Required (See note):
 State - Michigan

Due Date Requested: **11/20/2024**
 TAT Requested (days): **N/A**
 Analysis Requested

PO #: **N/A**
 WO #: **N/A**
 Project #: **81000263**
 SSO/W#: **N/A**
 Carrier Tracking No(s): **N/A**
 State of Origin: **Michigan**
 COC No: **810-47619-1**
 Page: **Page 1 of 4**
 Job #: **810-125047-1**
 Preservation Codes:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Sediment, Overstabil, BT=Trans, A=As)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of containers	Special Instructions/Note:
MMW-02 (810-125047-1)	10/15/24	16:30	G	Water	X	X	1	
MMW-03 (810-125047-2)	10/15/24	13:08	G	Water	X	X	1	
MMW-04 (810-125047-3)	10/15/24	15:06	G	Water	X	X	1	
MMW-31 (810-125047-4)	10/15/24	11:00	G	Water	X	X	1	
MMW-37 (810-125047-5)	10/15/24	16:10	G	Water	X	X	1	
MMW-07 (810-125047-6)	10/15/24	12:30	G	Water	X	X	1	
MMWT-01 (810-125047-7)	10/15/24	13:08	G	Water	X	X	1	
MMWT-37 (810-125047-8)	10/15/24	16:10	G	Water	X	X	1	
MMW-47 (810-125047-9)	10/16/24	09:34	G	Water	X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analysis & accreditation compliance upon our subcontracted 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
 Special Instructions/QC Requirements: _____

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Dispose By Lab Archive For _____ Months

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: <i>Karen Depurus</i>	Date/Time: <i>10-21-24 1300</i>	Received by:	Date/Time:
Relinquished by:	Date/Time:	Received by:	Date/Time:
Relinquished by:	Date/Time:	Received by:	Date/Time:
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:	

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



Client Information (Sub Contract Lab)	Sampler: N/A	Lab P#:	Fullmer, Karen	Carrier Tracking No(s):	N/A	COC No:	810-476192
Shipping/Receiving	Phone: N/A	E-Mail:	Karen.Fullmer@et.eurofins.com	State of Origin:	Michigan	Page:	Page 2 of 4
Company: TestAmerica Laboratories, Inc.	Due Date Requested: 11/20/2024	Accreditations Required (See note):	State - Michigan	Job #:	810-125047-1	Preservation Codes:	

Address: 13715 Rider Trail North,	TAT Requested (days):	N/A	Analysis Requested			
City: Earth City	PO #:	N/A	Field Filtered Sample (Yes or No)			
State Zip: MO, 63045	WO #:	N/A	Perform MS/MSD (Yes or No)			
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	Project #:	81000263	903.0/PrecSep_21 EPA 903.0 - Radium 226 (St. Louis)			
Email: N/A	SSOW#:	N/A	904.0/PrecSep_0 EPA 904.0 - Radium 226 (St. Louis)			
Project Name: 24J1137	Site:	N/A	Ra226_228GFPC_PI Combined Radium-226 and Radium-228			
Other: N/A			Total Number of containers			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=Water, S=Soil, O=Other, A=Air)	Preservation Code:	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of containers	Special Instructions/Note:
MMW-18 (810-125047-10)	10/16/24	10:32	G	Water		X	X	1	
MMW-01R (810-125047-11)	10/16/24	11:36	G	Water		X	X	1	
MMW-20 (810-125047-12)	10/16/24	13:00	G	Water		X	X	1	
MMW-36 (810-125047-13)	10/16/24	14:12	G	Water		X	X	1	
MMW-06 (810-125047-14)	10/16/24	15:20	G	Water		X	X	1	
MMW-11 (810-125047-15)	10/16/24	16:20	G	Water		X	X	1	
MMW-10 (810-125047-16)	10/16/24	17:40	G	Water		X	X	1	
MMW-38 (810-125047-17)	10/16/24	10:30	G	Water		X	X	1	
MMW-12 (810-125047-18)	10/16/24	12:00	G	Water		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/assessments 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/QCC Requirements: _____

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

Relinquished by: *Michelle Demers* Date/Time: *10/21/24 1300* Company: _____ Received by: _____ Date/Time: _____ Company: _____

Relinquished by: _____ Date/Time: _____ Company: _____ Received by: _____ Date/Time: _____ Company: _____

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

Client Information (Sub Contract Lab)	Sampler: N/A	Lab P.M.: Fullmer, Karen	COG No.: 810-47619.3
Client Contact: N/A	Phone: N/A	E-Mail: Karen.Fullmer@et.eurofins.com	Page: Page 3 of 4
Shipping/Receiving: N/A	Due Date Requested: 11/20/2024	Accreditations Required (See note): State - Michigan	Job #: 810-125047-1
Company: TestAmerica Laboratories, Inc.	TAT Requested (days): N/A	Analysis Requested	Preservation Codes:
Address: 13715 Rider Trail North	City: Earth City	State Zip: MO, 63045	Other: N/A
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A	WO #: N/A	
Email: N/A	Project #: 81000263	SSOW#: N/A	
Project Name: 24J137	Site: N/A		

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Solid, Organic)	Field Filtered Sample (Yes or No)	Perforated 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_PI Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
MMW-19 (810-125047-19)	10/16/24	13:30 Eastern	G	Water	X	X	X	X	X	1	
MMW-32 (810-125047-20)	10/16/24	15:00 Eastern	G	Water	X	X	X	X	X	1	
MMW-08 (810-125047-21)	10/16/24	16:15 Eastern	G	Water	X	X	X	X	X	1	
MMW-30 (810-125047-22)	10/16/24	18:15 Eastern	G	Water	X	X	X	X	X	1	
MMW-34 (810-125047-23)	10/17/24	08:44 Eastern	G	Water	X	X	X	X	X	1	
MMW-33 (810-125047-24)	10/17/24	09:46 Eastern	G	Water	X	X	X	X	X	1	
MMW-09 (810-125047-25)	10/17/24	12:00 Eastern	G	Water	X	X	X	X	X	1	
MMW-27 (810-125047-26)	10/17/24	11:00 Eastern	G	Water	X	X	X	X	X	1	
MMW-28 (810-125047-27)	10/17/24	09:00 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/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: Return To Client Disposal By Lab Archive For _____ Months

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: <i>Heidi Davis</i>	10-21-24	13:00	
Relinquished by:	Date/Time:	Company:	Received by:
Relinquished by:	Date/Time:	Company:	Received by:
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks	

Eurofins Eaton Analytical South Bend

Chain of Custody Record



Environment Testing

110 S Hill Street
 South Bend, IN 46617
 Phone: 574-233-4777 Fax: 574-233-8207

Client Information (Sub Contract Lab)	Sampler: N/A	Lab P/N: Fullmer, Karen	Carrier Tracking No(s): N/A	COC No: 810-476194
Shipping/Receiving	Phone: N/A	E-Mail: Karen.Fullmer@eurofins.com	State of Origin: Michigan	Page: 4 of 4
Company: TestAmerica Laboratories, Inc.	Due Date Requested: 11/20/2024	Accreditations Required (See note): State - Michigan	Job #: 810-125047-1	Preservation Codes:

Address: 13715 Rider Trail North,	TAT Requested (days): N/A	Analysis Requested		
City/Earth City:	PO #: N/A	903.0/PrecSep_21 EPA 903.0 - Radium 226 (St. Louis)		
State, Zip: MO, 63045	WC #: N/A	904.0/PrecSep_0 EPA 904.0 - Radium 226 (St. Louis)		
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	Project #: 81000263	Ra226_228GFPC_P/ Combined Radium-226 and Radium-228		
Email: N/A	SSOW#: N/A			
Project Name: 24J1137				
Site: N/A				

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (G=Comp, G=grab)	Matrix (Water, Soil, Sediment, Other)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of containers	Special Instructions/Note:
MM-16 (810-125047-28)	10/17/24	10:00	G	Water	X	X	1	
SG-02 (810-125047-29)	10/17/24	12:15	G	Water	X	X	1	
SG-04R (810-125047-30)	10/17/24	12:45	G	Water	X	X	1	
SG-05 (810-125047-31)	10/17/24	13:05	G	Water	X	X	1	
SG-06 (810-125047-32)	10/17/24	13:25	G	Water	X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analyze & 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/mark 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

Empty Kit Relinquished by: _____ Date: _____

Relinquished by: *Kacie Deans* Date/Time: *10-21-24 1:30P* Company: _____

Relinquished by: _____ Date/Time: _____ Company: _____

Custody Seals Intact: Yes No

Custody Seal No.: _____

Cooler Temperature(s) °C and Other Remarks: _____



Client Information (Sub Contract Lab)
 Client Contact: N/A
 Shipping/Receiving: N/A
 Company: TestAmerica Laboratories, Inc.
 Address: 13715 Rider Trail North, Earth City, MO, 63045
 City: Earth City
 State, Zip: MO, 63045
 Phone: 314-298-8566(Tel) 314-298-8757(Fax)
 Email: N/A
 Project Name: 24J1137
 Site: N/A
 PO #: N/A
 W/O #: N/A
 Project #: 81000263
 SSON#: N/A

Due Date Requested: 11/20/2024
 TAT Requested (days): N/A
 Lab PM: Karen Fulmer, Karen
 E-Mail: Karen.Fulmer@et.eurofins.com
 Accreditation Required (See note): State - Michigan
 Carrier Tracking No(s): N/A
 State of Origin: Michigan
 COC No: 810-47681-1
 Page: Page 1 of 1
 Job #: 810-125047-1
 Preservation Codes:

Analysis Requested

Sample ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=Water, S=solid, O=Other, A=Asst)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of containers	Special Instructions/Note:
MWT-03 (810-125047-7)	10/15/24	13:08 Eastern	G	Water	X	X	X	
UP dated CDC 10.2224110								

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

Empty Kit Relinquished by: _____ Date: _____ Time: _____ Method of Shipment: _____
 Relinquished by: *K Davis* Date/Time: 10-21-24 1300 Company: _____ Received by: _____ Date/Time: _____ Company: _____
 Relinquished by: _____ Date/Time: _____ Company: _____ Received by: _____ Date/Time: _____ Company: _____

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

Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler: N/A	Lab PM: Fullimer, Karen	Carrier Tracking No(s): N/A	COC No: 810-47619.1					
Client Contact:		Phone: N/A	E-Mail: Karen.Fullimer@et.eurofins.com	State of Origin: Michigan	Page: Page 1 of 4					
Shipping/Receiving Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Michigan		Job #: 810-125047-1	Preservation Codes:					
Address: 13715 Rider Trail North,		Due Date Requested: 11/20/2024	Analysis Requested:							
City: Earth City		TAT Requested (days): N/A	903.0/PreSep_21 EPA 903.0 - Radium 228 (St. Louis)							
State: MO, Zip: 63045		PO #: N/A	904.0/PreSep_0 EPA 904.0 - Radium 228 (St. Louis)							
Phone: 314-298-8566(Tel) 314-298-8757(Fax)		WO #: N/A	Radium-228							
Email: N/A		Project #: 81000263	Perform MS/MSD (Yes or No)							
Project Name: 24J1137		SSOW#: N/A	Field Filtered Sample (Yes or No)							
Site: N/A		Special Instructions/Note:								
Other: N/A		Total Number of Containers								
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C-comp, G-grab)	Matrix (Water, Sealed, Open-air)	Preservation Code	Field Filtered Sample (Yes or No)	903.0/PreSep_21 EPA 903.0 - Radium 228 (St. Louis)	904.0/PreSep_0 EPA 904.0 - Radium 228 (St. Louis)	Radium-228	Analysis Requested
MW-02 (810-125047-1)	10/15/24	16:30 Eastern	G	Water	G	X	X	X	X	1
MW-03 (810-125047-2)	10/15/24	13:08 Eastern	G	Water	G	X	X	X	X	1
MW-04 (810-125047-3)	10/15/24	15:06 Eastern	G	Water	G	X	X	X	X	1
MW-31 (810-125047-4)	10/15/24	11:00 Eastern	G	Water	G	X	X	X	X	1
MW-37 (810-125047-5)	10/15/24	16:10 Eastern	G	Water	G	X	X	X	X	1
MW-07 (810-125047-6)	10/15/24	12:30 Eastern	G	Water	G	X	X	X	X	1
MWT-01 (810-125047-7)	10/15/24	13:08 Eastern	G	Water	G	X	X	X	X	1
MWT-37 (810-125047-8)	10/15/24	16:10 Eastern	G	Water	G	X	X	X	X	1
MW-17 (810-125047-9)	10/16/24	09:34 Eastern	G	Water	G	X	X	X	X	1

Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analysis & 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: _____
 Relinquished by: *Heidi Depew* Date: 10.21.24 1300 Company: _____
 Relinquished by: _____ Date: _____ Company: _____
 Relinquished by: _____ Date: _____ Company: _____
 Custody Seals Intact: Yes No Custody Seal No.: _____
 Cooler Temperature(s) °C and Other Remarks: _____

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: _____
 Method of Shipment: _____
 Received by: *M. Pinette* Date/Time: 10.23.2024 0930 Company: _____
 Received by: *Meadow Pinette* Date/Time: _____ Company: _____
 Received by: _____ Date/Time: _____ Company: _____

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



Environmental Testing

Client Information (Sub Contract Lab)
 Client Contact: N/A
 Shipping/Receiving: N/A
 Company: TestAmerica Laboratories, Inc.
 Address: 13715 Rider Trail North, Earth City, MO, 63045
 Phone: 314-298-8566(Tel) 314-298-8757(Fax)
 Email: N/A
 Project Name: 24J1137
 Site: N/A

Client Information (Sub Contract Lab)
 Sampler: N/A
 Lab PM: Fullimer, Karen
 Phone: N/A
 E-Mail: Karen.Fullimer@et.eurofins.com
 Carmer Tracking No(s): N/A
 State of Origin: Michigan
 Page: Page 2 of 4
 Job #: 810-125047-1
 ICC No: 810-47619.2
 Preservation Codes:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Solid, Wastewater, BT=Tissue, A=Air)	Preservation Code:	Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		903.0/P/PreSep_21 EPA 903.0 - Radium 226 (St. Louis)		904.0/P/PreSep_0 EPA 904.0 - Radium 228 (St. Louis)		Radium-228 R226 228GFPC_P/ Combined Radium-226 and		Total Number of Containers	Special Instructions/Note:
						Yes	No	Yes	No	Yes	No	Yes	No	Yes	No		
MW-18 (810-125047-10)	10/16/24	10:32 Eastern	G	Water		X	X	X	X	X	X	X	X	X	X	1	
MW-01R (810-125047-11)	10/16/24	11:36 Eastern	G	Water		X	X	X	X	X	X	X	X	X	X	1	
MW-20 (810-125047-12)	10/16/24	13:00 Eastern	G	Water		X	X	X	X	X	X	X	X	X	X	1	
MW-36 (810-125047-13)	10/16/24	14:12 Eastern	G	Water		X	X	X	X	X	X	X	X	X	X	1	
MW-06 (810-125047-14)	10/16/24	15:20 Eastern	G	Water		X	X	X	X	X	X	X	X	X	X	1	
MW-11 (810-125047-15)	10/16/24	16:20 Eastern	G	Water		X	X	X	X	X	X	X	X	X	X	1	
MW-10 (810-125047-16)	10/16/24	17:40 Eastern	G	Water		X	X	X	X	X	X	X	X	X	X	1	
MW-38 (810-125047-17)	10/16/24	10:30 Eastern	G	Water		X	X	X	X	X	X	X	X	X	X	1	
MW-12 (810-125047-18)	10/16/24	12:00 Eastern	G	Water		X	X	X	X	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: _____
 Relinquished by: _____ Date: _____
 Relinquished by: _____ Date: _____
 Relinquished by: _____ Date: _____
 Custody Seals Intact: Yes No Δ No
 Custody Seal No.: _____

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: _____
 Method of Shipment: _____
 Received by: *M. Penetta* Date/Time: *OCT 23 2024 09:30* Company: _____
 Received by: *Meadow Pinette* Date/Time: _____ Company: _____
 Received by: _____ Date/Time: _____ Company: _____
 Cooler Temperature(s) °C and Other Remarks: _____

Client Information (Sub Contract Lab)		Sample: N/A	Lab PM: Fuller, Karen	Carrier Tracking No(s): N/A	COC No: 810-47619.3
Shipping/Receiving		Phone: N/A	E-Mail: Karen.Fullmer@et.eurofins.com	State of Origin: Michigan	Page: Page 3 of 4
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Michigan		Job #: 810-125047-1	Preservation Codes:
Address: 13715 Rider Trail North, Earth City, MO, 63045		Due Date Requested: 11/20/2024		Analysis Requested:	
City: Earth City		TAT Requested (days): N/A		904.0/PreSep_21 EPA 903.0 - Radium 226 (St. Louis)	
State, Zip: MO, 63045		PO #: N/A		904.0/PreSep_0 EPA 904.0 - Radium 226 (St. Louis)	
Phone: 314-298-8566(Tel) 314-298-8757(Fax)		WO #: N/A		Ra226_Z28GFC_P/ Combined Radium-226 and	
Email: N/A		Project #: 81000263		Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/>	
Project Name: 24J1137		SSOW#: N/A		Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/>	
Site: N/A		Sample Date		Sample Time	
Sample Identification - Client ID (Lab ID)		Sample Type (C=comp, G=grab)		Matrix (Water, Soak, On-site, etc.)	
MW-19 (810-125047-19)		G		Water	
MW-32 (810-125047-20)		G		Water	
MW-08 (810-125047-21)		G		Water	
MW-30 (810-125047-22)		G		Water	
MW-34 (810-125047-23)		G		Water	
MW-33 (810-125047-24)		G		Water	
MW-09 (810-125047-25)		G		Water	
MW-27 (810-125047-26)		G		Water	
MW-28 (810-125047-27)		G		Water	
Total Number of Containers		1		Special Instructions/Note:	

Possible Hazard Identification
 Unconfirmed
 Deliverable Requested: I, II, III, IV, Other (specify) _____
 Primary Deliverable Rank: 2
 Empty Kit Relinquished by: _____ Date: _____
 Relinquished by: *Heleen Demus* 10-21-24 1:30
 Relinquished by: _____ Date/Time: _____
 Relinquished by: _____ Date/Time: _____
 Custody Seals Intact: _____
 Custody Seal No.: _____
 Cooler Temperature(s) °C and Other Remarks: _____

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: _____
 Method of Shipment: _____
 Received by: *M. Pinette* Date/Time: *Oct 23 2024 0930*
 Received by: *Meadow Pinette* Date/Time: _____
 Received by: _____ Date/Time: _____
 Copier Temperature(s) °C and Other Remarks: _____



Client Information (Sub Contract Lab)		Sampler: N/A	Lab PM: Fullimer, Karen	Carrier Tracking Net(s): N/A	COG No: 810-47619.4
Client Contact: N/A		Phone: N/A	E-Mail: Karen.Fullimer@et.eurofins.com	State of Origin: Michigan	Page: Page 4 of 4
Shipping/Receiving Company: TestAmerica Laboratories, Inc.		Address: 13715 Rider Trail North, Earth City, MO, 63045	Project Name: 24J1137	Accreditations Required (See note): State - Michigan	Job #: 810-125047-1
Phone: 314-298-8566(Tel) 314-298-8757(Fax)		PO #: N/A	Project #: 81000263	Preservation Codes:	
Email: N/A		WO #: N/A	SSOW#: N/A	Analysis Requested	
Due Date Requested: 11/20/2024		TAT Requested (days): N/A		903.0/PreSep_21 EPA 903.0 - Radium 226 (St. Louis)	
City: Earth City		State: N/A		904.0/PreSep_0 EPA 904.0 - Radium 228 (St. Louis)	
State, Zip: MO, 63045		Matrix (W=water, S=solid, O=soil, BT=soil, AA=air)		Radium-228	
Phone: 314-298-8566(Tel) 314-298-8757(Fax)		Sample Type (C=comp, G=grab)		904.0/PreSep_PI Combined Radium-226 and Radium-228	
Email: N/A		Sample Time		Perform MS/MSD (Yes or No)	
Project Name: 24J1137		Sample Date		Field Filtered Sample (Yes or No)	
Site: N/A		Sample Time		Total Number of Containers	
Sample Identification - Client ID (Lab ID)		Sample Date		Special Instructions/Note:	
MW-16 (810-125047-28)	10/17/24	10:00 Eastern	G	Water	1
SG-02 (810-125047-29)	10/17/24	12:15 Eastern	G	Water	1
SG-04R (810-125047-30)	10/17/24	12:45 Eastern	G	Water	1
SG-05 (810-125047-31)	10/17/24	13:05 Eastern	G	Water	1
SG-06 (810-125047-32)	10/17/24	13:25 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/rests/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: *Phillie Depire* Date/Time: 10-21-24 1300
 Relinquished by: _____ Date/Time: _____
 Relinquished by: _____ Date/Time: _____
 Custody Seals Intact: _____ Custody Seal No.: _____
 Δ Yes Δ No

Received by: *M. Pinette* Date/Time: OCT 23 2024 0930
 Received by: **Meadow Pinette** Date/Time: _____
 Received by: _____ Date/Time: _____
 Cooler Temperature(s) °C and Other Remarks: _____

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: _____



Login Sample Receipt Checklist

Client: Trace Analytical Laboratories

Job Number: 810-125047-1

Login Number: 125047

List Source: Eurofins Eaton Analytical South Bend

List Number: 1

Creator: DePriest, Kellie

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	
Container provided by EEA	True	

Login Sample Receipt Checklist

Client: Trace Analytical Laboratories

Job Number: 810-125047-1

Login Number: 125047

List Number: 2

Creator: Pinette, Meadow L

List Source: Eurofins St. Louis

List Creation: 10/23/24 02:29 PM

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ 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 <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



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	Kurtosis
1_16_1_3_127	MW-06	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	46.0	43.0	27.0	73.0	12.7	0.277	0.806	0.469
1_16_1_4_105	MW-06	Appendix III	Boron	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	9.28	9.50	6.40	12.0	1.61	0.174	-0.186	-0.518
1_16_1_4_107	MW-06	Appendix III	Calcium	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	258	250	220	310	31.7	0.123	0.547	-0.957
1_16_1_4_108	MW-06	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	72.8	73.0	13.0	160	41.0	0.563	0.512	0.443
1_16_1_4_112	MW-06	Appendix III	Fluoride	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal	Gamma	1.17	1.10	0.980	1.60	0.195	0.166	1.02	0.187
1_16_1_4_120	MW-06	Appendix III	pH (field)	su	13	0	0%	2022-11-29 to 2024-10-16	Nonparametric	Nonparametric	7.20	7.26	6.42	7.39	0.244	0.0339	-3.13	10.7
1_16_1_4_124	MW-06	Appendix III	Sulfate (as SO4)	mg/L	13	2	15%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Gamma	8.88	9.20	0.410	20.0	7.19	0.810	0.383	-1.30
1_16_1_4_126	MW-06	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2022-11-29 to 2024-10-16		Nonparametric	1200	1200	1100	1300	70.7	0.0589	0	-0.618
1_16_1_5_101	MW-06	Appendix IV	Antimony	mg/L	13	11	85%	2022-11-29 to 2024-10-16		Nonparametric	0.000183	0.000100	0.0000500	0.000500	0.000165	0.897	1.32	0.229
1_16_1_5_102	MW-06	Appendix IV	Arsenic	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.000706	0.000650	0.000470	0.00100	0.000165	0.234	0.574	-0.605
1_16_1_5_103	MW-06	Appendix IV	Barium	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	1.43	1.40	0.990	1.70	0.177	0.124	-1.05	2.39
1_16_1_5_104	MW-06	Appendix IV	Beryllium	mg/L	13	12	92%	2022-11-29 to 2024-10-16		Nonparametric	0.0000522	0.0000520	0.0000520	0.0000540	0.000000550	0.0106	3.61	13.0
1_16_1_5_106	MW-06	Appendix IV	Cadmium	mg/L	13	13	100%	2022-11-29 to 2024-10-16		Nonparametric	0.000125	0.0000750	0.0000320	0.000380	0.000120	0.961	1.70	1.82
1_16_1_5_109	MW-06	Appendix IV	Chromium, Total	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.00170	0.00150	0.00110	0.00300	0.000558	0.328	1.11	0.820
1_16_1_5_110	MW-06	Appendix IV	Cobalt	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.000532	0.000480	0.000350	0.000800	0.000144	0.270	0.624	-0.820
1_16_1_5_113	MW-06	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal	Gamma	1.17	1.10	0.980	1.60	0.195	0.166	1.02	0.187
1_16_1_5_115	MW-06	Appendix IV	Lead	mg/L	13	9	69%	2022-11-29 to 2024-10-16		Nonparametric	0.000370	0.000250	0.000100	0.00110	0.000354	0.956	1.52	1.31
1_16_1_5_116	MW-06	Appendix IV	Lithium	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.179	0.190	0.110	0.230	0.0405	0.226	-0.227	-1.28
1_16_1_5_117	MW-06	Appendix IV	Mercury	mg/L	13	13	100%	2022-11-29 to 2024-10-16		Nonparametric	0.000160	0.000160	0.000160	0.000160	0	0	NA	NA
1_16_1_5_118	MW-06	Appendix IV	Molybdenum	mg/L	13	8	62%	2022-11-29 to 2024-10-16	Nonparametric	Nonparametric	0.000603	0.000280	0.000250	0.00310	0.000769	1.28	3.31	11.4
1_16_1_5_121	MW-06	Appendix IV	Radium 226 and 228	pCi/L	13	3	23%	2022-11-29 to 2024-10-16	Lognormal	Lognormal	0.862	0.824	0.619	1.91	0.341	0.396	2.72	8.55
1_16_1_5_122	MW-06	Appendix IV	Selenium	mg/L	13	5	38%	2022-11-29 to 2024-10-16	Nonparametric	Nonparametric	0.000238	0.000220	0.000190	0.000470	0.0000737	0.309	3.01	9.60
1_16_1_5_125	MW-06	Appendix IV	Thallium	mg/L	13	13	100%	2022-11-29 to 2024-10-16		Nonparametric	0.000169	0.0000750	0.0000750	0.000380	0.000146	0.867	0.946	-1.34
1_17_1_3_127	MW-07	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	2022-11-30 to 2024-10-15	Gamma; Lognormal; Normal	Normal	37.5	38.0	29.0	46.0	5.11	0.136	0.0642	-0.879
1_17_1_4_105	MW-07	Appendix III	Boron	mg/L	13	0	0%	2022-11-30 to 2024-10-15	Lognormal; Normal	Normal	11.4	11.0	10.0	13.0	0.961	0.0844	0.386	-0.443
1_17_1_4_107	MW-07	Appendix III	Calcium	mg/L	13	0	0%	2022-11-30 to 2024-10-15	Gamma; Lognormal; Normal	Normal	143	140	120	160	11.8	0.0826	-0.349	-0.286
1_17_1_4_108	MW-07	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	2022-11-30 to 2024-10-15		Nonparametric	14.0	14.0	13.0	15.0	0.707	0.0505	0	-0.618
1_17_1_4_112	MW-07	Appendix III	Fluoride	mg/L	13	2	15%	2022-11-30 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.102	0.0830	0.0550	0.190	0.0412	0.403	0.733	-0.190
1_17_1_4_120	MW-07	Appendix III	pH (field)	su	13	0	0%	2022-11-30 to 2024-10-15	Nonparametric	Nonparametric	6.89	6.88	6.58	7.05	0.138	0.0200	-1.18	1.29
1_17_1_4_124	MW-07	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	2022-11-30 to 2024-10-15	Gamma; Lognormal; Normal	Normal	24.9	26.0	15.0	36.0	7.80	0.313	0.0161	-1.81
1_17_1_4_126	MW-07	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2022-11-30 to 2024-10-15	Nonparametric	Nonparametric	639	660	470	720	77.2	0.121	-1.29	1.17
1_17_1_5_101	MW-07	Appendix IV	Antimony	mg/L	13	12	92%	2022-11-30 to 2024-10-15		Nonparametric	0.0000824	0.000100	0.0000500	0.000100	0.0000238	0.289	-0.682	-1.70
1_17_1_5_102	MW-07	Appendix IV	Arsenic	mg/L	13	0	0%	2022-11-30 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.000215	0.000220	0.000130	0.000290	0.0000367	0.170	-0.463	2.67
1_17_1_5_103	MW-07	Appendix IV	Barium	mg/L	13	0	0%	2022-11-30 to 2024-10-15	Nonparametric	Nonparametric	0.339	0.340	0.250	0.380	0.0333	0.0981	-1.75	3.92
1_17_1_5_104	MW-07	Appendix IV	Beryllium	mg/L	13	10	77%	2022-11-30 to 2024-10-15		Nonparametric	0.0000541	0.0000520	0.0000520	0.0000660	0.00000455	0.0842	2.19	3.87
1_17_1_5_106	MW-07	Appendix IV	Cadmium	mg/L	13	13	100%	2022-11-30 to 2024-10-15		Nonparametric	0.0000585	0.0000750	0.0000320	0.0000750	0.0000218	0.372	-0.539	-2.06
1_17_1_5_109	MW-07	Appendix IV	Chromium, Total	mg/L	13	0	0%	2022-11-30 to 2024-10-15	Gamma; Lognormal	Gamma	0.000374	0.000340	0.000280	0.000740	0.000118	0.316	2.80	8.86
1_17_1_5_110	MW-07	Appendix IV	Cobalt	mg/L	13	0	0%	2022-11-30 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.000909	0.000950	0.000710	0.00110	0.000115	0.126	-0.333	-0.670
1_17_1_5_113	MW-07	Appendix IV	Fluoride (App IV)	mg/L	13	2	15%	2022-11-30 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.102	0.0830	0.0550	0.190	0.0412	0.403	0.733	-0.190
1_17_1_5_115	MW-07	Appendix IV	Lead	mg/L	13	13	100%	2022-11-30 to 2024-10-15		Nonparametric	0.000146	0.000100	0.000100	0.000220	0.0000608	0.416	0.539	-2.06
1_17_1_5_116	MW-07	Appendix IV	Lithium	mg/L	13	0	0%	2022-11-30 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.00605	0.00570	0.00310	0.0100	0.00173	0.287	0.782	1.56
1_17_1_5_117	MW-07	Appendix IV	Mercury	mg/L	13	13	100%	2022-11-30 to 2024-10-15		Nonparametric	0.000160	0.000160	0.000160	0.000160	0	0	NA	NA

(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	Kurtosis
1_17_1_5_118	MW-07	Appendix IV	Molybdenum	mg/L	13	13	100%	2022-11-30 to 2024-10-15		Nonparametric	0.000392	0.000250	0.000250	0.000620	0.000187	0.478	0.539	-2.06
1_17_1_5_121	MW-07	Appendix IV	Radium 226 and 228	pCi/L	13	2	15%	2022-11-30 to 2024-10-15	Gamma; Lognormal	Gamma	1.02	0.928	0.670	2.36	0.446	0.439	2.55	7.62
1_17_1_5_122	MW-07	Appendix IV	Selenium	mg/L	13	9	69%	2022-11-30 to 2024-10-15		Nonparametric	0.000162	0.000170	0.000100	0.000230	0.0000602	0.371	-0.0370	-2.25
1_17_1_5_125	MW-07	Appendix IV	Thallium	mg/L	13	13	100%	2022-11-30 to 2024-10-15		Nonparametric	0.0000750	0.0000750	0.0000750	0.0000750	0	0	NA	NA
1_18_1_3_127	MW-08	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	2022-12-01 to 2024-10-16	Gamma; Lognormal; Normal	Normal	38.4	36.0	18.0	62.0	12.9	0.335	0.159	-0.384
1_18_1_4_105	MW-08	Appendix III	Boron	mg/L	13	0	0%	2022-12-01 to 2024-10-16	Normal	Normal	6.31	7.00	2.50	9.30	1.86	0.295	-0.628	0.0410
1_18_1_4_107	MW-08	Appendix III	Calcium	mg/L	13	0	0%	2022-12-01 to 2024-10-16	Gamma; Lognormal; Normal	Normal	137	130	120	160	13.8	0.101	0.203	-1.42
1_18_1_4_108	MW-08	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	2022-12-01 to 2024-10-16	Nonparametric	Nonparametric	31.7	28.0	17.0	99.0	20.9	0.659	3.22	11.1
1_18_1_4_112	MW-08	Appendix III	Fluoride	mg/L	13	0	0%	2022-12-01 to 2024-10-16	Normal	Normal	0.935	1.00	0.400	1.30	0.270	0.288	-0.915	-0.0491
1_18_1_4_120	MW-08	Appendix III	pH (field)	su	13	0	0%	2022-12-01 to 2024-10-16	Nonparametric	Nonparametric	7.18	7.25	6.21	7.51	0.317	0.0442	-2.62	8.22
1_18_1_4_124	MW-08	Appendix III	Sulfate (as SO4)	mg/L	13	4	31%	2022-12-01 to 2024-10-16	Gamma; Lognormal; Normal	Gamma	8.46	5.30	0.410	26.0	9.58	1.13	1.07	-0.441
1_18_1_4_126	MW-08	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2022-12-01 to 2024-10-16	Gamma; Lognormal; Normal	Normal	545	550	440	660	62.1	0.114	0.249	-0.199
1_18_1_5_101	MW-08	Appendix IV	Antimony	mg/L	13	6	46%	2022-12-01 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.000124	0.000100	0.0000540	0.000280	0.0000584	0.472	1.90	3.84
1_18_1_5_102	MW-08	Appendix IV	Arsenic	mg/L	13	0	0%	2022-12-01 to 2024-10-16	Gamma; Normal	Normal	0.0340	0.0380	0.00690	0.0500	0.0142	0.418	-0.756	-0.484
1_18_1_5_103	MW-08	Appendix IV	Barium	mg/L	13	0	0%	2022-12-01 to 2024-10-16	Gamma; Lognormal; Normal	Normal	1.23	1.20	0.980	1.50	0.157	0.128	-0.0263	-0.708
1_18_1_5_104	MW-08	Appendix IV	Beryllium	mg/L	13	13	100%	2022-12-01 to 2024-10-16		Nonparametric	0.0000520	0.0000520	0.0000520	0.0000520	0	0	NA	NA
1_18_1_5_106	MW-08	Appendix IV	Cadmium	mg/L	13	13	100%	2022-12-01 to 2024-10-16		Nonparametric	0.0000585	0.0000750	0.0000320	0.0000750	0.0000218	0.372	-0.539	-2.06
1_18_1_5_109	MW-08	Appendix IV	Chromium, Total	mg/L	13	0	0%	2022-12-01 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.000873	0.000840	0.000610	0.00150	0.000249	0.286	1.38	2.19
1_18_1_5_110	MW-08	Appendix IV	Cobalt	mg/L	13	0	0%	2022-12-01 to 2024-10-16	Nonparametric	Nonparametric	0.000473	0.000450	0.000340	0.000700	0.000132	0.278	0.351	-1.56
1_18_1_5_113	MW-08	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	2022-12-01 to 2024-10-16	Normal	Normal	0.935	1.00	0.400	1.30	0.270	0.288	-0.915	-0.0491
1_18_1_5_115	MW-08	Appendix IV	Lead	mg/L	13	9	69%	2022-12-01 to 2024-10-16		Nonparametric	0.000412	0.000110	0.000100	0.00290	0.000775	1.88	3.23	10.7
1_18_1_5_116	MW-08	Appendix IV	Lithium	mg/L	13	0	0%	2022-12-01 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.107	0.110	0.0630	0.140	0.0235	0.220	-0.292	-0.434
1_18_1_5_117	MW-08	Appendix IV	Mercury	mg/L	13	13	100%	2022-12-01 to 2024-10-16		Nonparametric	0.000160	0.000160	0.000160	0.000160	0	0	NA	NA
1_18_1_5_118	MW-08	Appendix IV	Molybdenum	mg/L	13	0	0%	2022-12-01 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.00134	0.00150	0.000310	0.00280	0.000806	0.601	0.268	-0.932
1_18_1_5_121	MW-08	Appendix IV	Radium 226 and 228	pCi/L	13	3	23%	2022-12-01 to 2024-10-16	Gamma; Lognormal; Normal	Normal	1.08	0.984	0.604	2.10	0.430	0.398	1.19	1.32
1_18_1_5_122	MW-08	Appendix IV	Selenium	mg/L	13	5	38%	2022-12-01 to 2024-10-16	Gamma; Lognormal	Gamma	0.000188	0.000180	0.000120	0.000340	0.0000608	0.323	1.18	2.02
1_18_1_5_125	MW-08	Appendix IV	Thallium	mg/L	13	13	100%	2022-12-01 to 2024-10-16		Nonparametric	0.0000750	0.0000750	0.0000750	0.0000750	0	0	NA	NA
1_28_1_3_127	MW-18	Additional Parameters	Total Suspended Solids	mg/L	13	1	8%	2022-11-30 to 2024-10-16	Lognormal	Lognormal	15.8	11.0	2.00	100	25.6	1.62	3.43	12.1
1_28_1_4_105	MW-18	Appendix III	Boron	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	2.78	2.60	1.80	4.00	0.803	0.289	0.487	-1.35
1_28_1_4_107	MW-18	Appendix III	Calcium	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	339	340	240	450	60.1	0.177	-0.0914	-0.0836
1_28_1_4_108	MW-18	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	22.6	24.0	16.0	28.0	4.07	0.180	-0.441	-0.974
1_28_1_4_112	MW-18	Appendix III	Fluoride	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	3.94	3.80	2.70	5.10	0.683	0.173	0.0524	-0.565
1_28_1_4_120	MW-18	Appendix III	pH (field)	su	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	7.17	7.17	7.02	7.31	0.0801	0.0112	-0.282	0.279
1_28_1_4_124	MW-18	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	808	760	480	1200	208	0.257	0.878	0.631
1_28_1_4_126	MW-18	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	1400	1400	1100	1800	200	0.143	0.665	0.106
1_28_1_5_101	MW-18	Appendix IV	Antimony	mg/L	13	3	23%	2022-11-30 to 2024-10-16	Nonparametric	Nonparametric	0.000213	0.000130	0.000100	0.000500	0.000145	0.682	1.37	0.520
1_28_1_5_102	MW-18	Appendix IV	Arsenic	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.0273	0.0290	0.0150	0.0440	0.00836	0.306	0.692	0.183
1_28_1_5_103	MW-18	Appendix IV	Barium	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.0195	0.0210	0.0120	0.0280	0.00522	0.268	-0.0238	-1.41
1_28_1_5_104	MW-18	Appendix IV	Beryllium	mg/L	13	12	92%	2022-11-30 to 2024-10-16		Nonparametric	0.0000525	0.0000520	0.0000520	0.0000590	0.00000194	0.0370	3.61	13.0
1_28_1_5_106	MW-18	Appendix IV	Cadmium	mg/L	13	6	46%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.000196	0.000180	0.0000750	0.000440	0.000125	0.637	0.737	-0.586
1_28_1_5_109	MW-18	Appendix IV	Chromium, Total	mg/L	13	12	92%	2022-11-30 to 2024-10-16		Nonparametric	0.000196	0.000200	0.000180	0.000250	0.0000189	0.0966	1.96	5.43
1_28_1_5_110	MW-18	Appendix IV	Cobalt	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal	Gamma	0.00291	0.00230	0.00140	0.00600	0.00154	0.529	1.12	-0.0852

(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	Kurtosis
1_28_1_5_113	MW-18	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	3.94	3.80	2.70	5.10	0.683	0.173	0.0524	-0.565
1_28_1_5_115	MW-18	Appendix IV	Lead	mg/L	13	8	62%	2022-11-30 to 2024-10-16	Nonparametric	Nonparametric	0.000307	0.000220	0.000100	0.00110	0.000271	0.882	2.41	6.44
1_28_1_5_116	MW-18	Appendix IV	Lithium	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Lognormal; Normal	Normal	0.0350	0.0390	0.0200	0.0450	0.00834	0.238	-0.384	-1.40
1_28_1_5_117	MW-18	Appendix IV	Mercury	mg/L	13	13	100%	2022-11-30 to 2024-10-16		Nonparametric	0.000160	0.000160	0.000160	0.000160	0	0	NA	NA
1_28_1_5_118	MW-18	Appendix IV	Molybdenum	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.0150	0.0130	0.00900	0.0210	0.00420	0.280	0.334	-1.50
1_28_1_5_121	MW-18	Appendix IV	Radium 226 and 228	pCi/L	13	8	62%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Nonparametric	0.663	0.618	0.462	1.27	0.213	0.322	2.16	5.52
1_28_1_5_122	MW-18	Appendix IV	Selenium	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal	Gamma	0.000579	0.000340	0.000140	0.00200	0.000549	0.949	1.63	2.73
1_28_1_5_125	MW-18	Appendix IV	Thallium	mg/L	13	13	100%	2022-11-30 to 2024-10-16		Nonparametric	0.000145	0.0000750	0.0000750	0.000380	0.000134	0.920	1.45	0.0945
1_29_1_3_127	MW-19	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	22.9	25.0	6.00	37.0	9.84	0.429	-0.496	-0.477
1_29_1_4_105	MW-19	Appendix III	Boron	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	2.02	2.00	1.50	2.60	0.392	0.194	0.218	-1.20
1_29_1_4_107	MW-19	Appendix III	Calcium	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	472	480	360	550	51.8	0.110	-0.704	0.606
1_29_1_4_108	MW-19	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	45.7	40.0	23.0	75.0	14.5	0.318	0.791	0.145
1_29_1_4_112	MW-19	Appendix III	Fluoride	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	1.91	1.90	1.50	2.30	0.247	0.129	0.0142	-0.934
1_29_1_4_120	MW-19	Appendix III	pH (field)	su	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	6.85	6.88	6.39	7.07	0.167	0.0244	-1.74	4.54
1_29_1_4_124	MW-19	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	1009	1000	600	1300	205	0.203	-0.337	-0.214
1_29_1_4_126	MW-19	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	1892	1900	1600	2200	240	0.127	0.0638	-1.68
1_29_1_5_101	MW-19	Appendix IV	Antimony	mg/L	13	12	92%	2022-11-30 to 2024-10-16		Nonparametric	0.000209	0.000100	0.0000500	0.000720	0.000220	1.05	1.51	1.11
1_29_1_5_102	MW-19	Appendix IV	Arsenic	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.00531	0.00550	0.00260	0.00730	0.00162	0.306	-0.481	-1.27
1_29_1_5_103	MW-19	Appendix IV	Barium	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.0397	0.0390	0.0300	0.0500	0.00568	0.143	0.313	-0.421
1_29_1_5_104	MW-19	Appendix IV	Beryllium	mg/L	13	3	23%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.0000870	0.0000720	0.0000520	0.000260	0.0000545	0.626	3.06	10.1
1_29_1_5_106	MW-19	Appendix IV	Cadmium	mg/L	13	13	100%	2022-11-30 to 2024-10-16		Nonparametric	0.000125	0.0000750	0.0000320	0.000380	0.000120	0.961	1.70	1.82
1_29_1_5_109	MW-19	Appendix IV	Chromium, Total	mg/L	13	5	38%	2022-11-30 to 2024-10-16	Gamma; Lognormal	Gamma	0.000325	0.000270	0.000180	0.000880	0.000191	0.587	2.42	6.32
1_29_1_5_110	MW-19	Appendix IV	Cobalt	mg/L	13	1	8%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.000467	0.000460	0.000100	0.000960	0.000261	0.558	0.305	-0.574
1_29_1_5_113	MW-19	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	1.91	1.90	1.50	2.30	0.247	0.129	0.0142	-0.934
1_29_1_5_115	MW-19	Appendix IV	Lead	mg/L	13	13	100%	2022-11-30 to 2024-10-16		Nonparametric	0.000472	0.000500	0.000100	0.00110	0.000394	0.835	0.808	-0.790
1_29_1_5_116	MW-19	Appendix IV	Lithium	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.0918	0.0900	0.0730	0.110	0.0114	0.124	0.00510	-0.229
1_29_1_5_117	MW-19	Appendix IV	Mercury	mg/L	13	13	100%	2022-11-30 to 2024-10-16		Nonparametric	0.000160	0.000160	0.000160	0.000160	0	0	NA	NA
1_29_1_5_118	MW-19	Appendix IV	Molybdenum	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.00988	0.0100	0.00390	0.0130	0.00287	0.290	-0.946	0.381
1_29_1_5_121	MW-19	Appendix IV	Radium 226 and 228	pCi/L	13	5	38%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.785	0.626	0.514	1.17	0.258	0.328	0.364	-1.84
1_29_1_5_122	MW-19	Appendix IV	Selenium	mg/L	13	10	77%	2022-11-30 to 2024-10-16		Nonparametric	0.000225	0.000120	0.000100	0.00110	0.000269	1.20	3.34	11.6
1_29_1_5_125	MW-19	Appendix IV	Thallium	mg/L	13	13	100%	2022-11-30 to 2024-10-16		Nonparametric	0.000239	0.000380	0.0000750	0.000380	0.000158	0.662	-0.175	-2.36
1_30_1_3_127	MW-20	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	38.3	38.0	33.0	44.0	3.71	0.0967	0.0146	-1.11
1_30_1_4_105	MW-20	Appendix III	Boron	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.963	0.920	0.720	1.30	0.179	0.185	0.308	-1.04
1_30_1_4_107	MW-20	Appendix III	Calcium	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Nonparametric	Nonparametric	124	130	58.0	170	24.8	0.199	-1.25	4.80
1_30_1_4_108	MW-20	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	67.2	70.0	41.0	92.0	14.5	0.216	-0.178	0.280
1_30_1_4_112	MW-20	Appendix III	Fluoride	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Nonparametric	Nonparametric	0.257	0.240	0.120	0.550	0.0972	0.378	2.39	8.01
1_30_1_4_120	MW-20	Appendix III	pH (field)	su	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	7.34	7.34	7.14	7.50	0.111	0.0151	-0.327	-0.849
1_30_1_4_124	MW-20	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	59.6	62.0	18.0	120	34.6	0.580	0.350	-1.11
1_30_1_4_126	MW-20	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	675	660	560	840	77.5	0.115	0.687	0.577
1_30_1_5_101	MW-20	Appendix IV	Antimony	mg/L	13	4	31%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.000101	0.000100	0.0000540	0.000160	0.0000295	0.293	0.301	0.341
1_30_1_5_102	MW-20	Appendix IV	Arsenic	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.00146	0.00150	0.00110	0.00190	0.000263	0.180	0.236	-1.36
1_30_1_5_103	MW-20	Appendix IV	Barium	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal	Gamma	0.517	0.460	0.310	0.940	0.178	0.345	1.55	1.97

(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	Kurtosis
1_30_1_5_104	MW-20	Appendix IV	Beryllium	mg/L	13	12	92%	2022-11-30 to 2024-10-16		Nonparametric	0.0000525	0.0000520	0.0000520	0.0000590	0.0000194	0.0370	3.61	13.0
1_30_1_5_106	MW-20	Appendix IV	Cadmium	mg/L	13	13	100%	2022-11-30 to 2024-10-16		Nonparametric	0.0000585	0.0000750	0.0000320	0.0000750	0.0000218	0.372	-0.539	-2.06
1_30_1_5_109	MW-20	Appendix IV	Chromium, Total	mg/L	13	5	38%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.000218	0.000210	0.000180	0.000290	0.0000311	0.143	1.27	1.16
1_30_1_5_110	MW-20	Appendix IV	Cobalt	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.00123	0.00130	0.000890	0.00160	0.000232	0.188	0.196	-0.959
1_30_1_5_113	MW-20	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Nonparametric	Nonparametric	0.257	0.240	0.120	0.550	0.0972	0.378	2.39	8.01
1_30_1_5_115	MW-20	Appendix IV	Lead	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.00196	0.00180	0.00130	0.00280	0.000499	0.255	0.526	-0.874
1_30_1_5_116	MW-20	Appendix IV	Lithium	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.0617	0.0620	0.0290	0.0830	0.0141	0.228	-0.722	1.36
1_30_1_5_117	MW-20	Appendix IV	Mercury	mg/L	13	13	100%	2022-11-30 to 2024-10-16		Nonparametric	0.000160	0.000160	0.000160	0.000160	0	0	NA	NA
1_30_1_5_118	MW-20	Appendix IV	Molybdenum	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.00441	0.00450	0.00330	0.00580	0.000687	0.156	0.285	-0.0862
1_30_1_5_121	MW-20	Appendix IV	Radium 226 and 228	pCi/L	13	7	54%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Nonparametric	0.713	0.590	0.467	1.47	0.288	0.404	1.84	3.22
1_30_1_5_122	MW-20	Appendix IV	Selenium	mg/L	13	7	54%	2022-11-30 to 2024-10-16	Nonparametric	Nonparametric	0.000165	0.000130	0.000100	0.000260	0.0000615	0.373	0.212	-1.97
1_30_1_5_125	MW-20	Appendix IV	Thallium	mg/L	13	12	92%	2022-11-30 to 2024-10-16		Nonparametric	0.0000777	0.0000750	0.0000750	0.000110	0.00000971	0.125	3.61	13.0
1_40_1_3_127	MW-30	Additional Parameters	Total Suspended Solids	mg/L	11	1	9%	2022-11-30 to 2024-10-16	Gamma; Lognormal	Gamma	6.74	5.00	4.00	18.0	4.31	0.640	2.15	4.69
1_40_1_4_105	MW-30	Appendix III	Boron	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Nonparametric	Nonparametric	2.02	1.90	1.60	3.50	0.478	0.237	2.83	9.09
1_40_1_4_107	MW-30	Appendix III	Calcium	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Nonparametric	Nonparametric	487	460	390	960	145	0.299	3.32	11.6
1_40_1_4_108	MW-30	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal	Gamma	157	120	82.0	430	91.8	0.584	2.43	6.97
1_40_1_4_112	MW-30	Appendix III	Fluoride	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	1.12	1.10	0.910	1.40	0.122	0.109	0.497	1.37
1_40_1_4_120	MW-30	Appendix III	pH (field)	su	13	0	0%	2022-11-30 to 2024-10-16	Nonparametric	Nonparametric	7.07	7.15	6.48	7.25	0.197	0.0278	-2.50	7.36
1_40_1_4_124	MW-30	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Normal	Normal	845	860	440	1000	162	0.191	-1.58	2.40
1_40_1_4_126	MW-30	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	2223	2200	1800	2800	231	0.104	0.860	3.12
1_40_1_5_101	MW-30	Appendix IV	Antimony	mg/L	13	12	92%	2022-11-30 to 2024-10-16		Nonparametric	0.000215	0.000100	0.0000500	0.000500	0.000189	0.876	0.796	-1.32
1_40_1_5_102	MW-30	Appendix IV	Arsenic	mg/L	13	2	15%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.000446	0.000440	0.000100	0.000970	0.000243	0.545	0.506	0.431
1_40_1_5_103	MW-30	Appendix IV	Barium	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.0653	0.0580	0.0410	0.100	0.0206	0.316	0.691	-0.872
1_40_1_5_104	MW-30	Appendix IV	Beryllium	mg/L	13	11	85%	2022-11-30 to 2024-10-16		Nonparametric	0.0000725	0.0000520	0.0000520	0.000260	0.0000586	0.807	3.21	10.6
1_40_1_5_106	MW-30	Appendix IV	Cadmium	mg/L	13	13	100%	2022-11-30 to 2024-10-16		Nonparametric	0.000125	0.0000750	0.0000320	0.000380	0.000120	0.961	1.70	1.82
1_40_1_5_109	MW-30	Appendix IV	Chromium, Total	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.00948	0.0100	0.00490	0.0140	0.00305	0.322	-0.173	-1.27
1_40_1_5_110	MW-30	Appendix IV	Cobalt	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal	Gamma	0.00134	0.00110	0.000470	0.00440	0.00110	0.815	2.21	5.0
1_40_1_5_113	MW-30	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	1.12	1.10	0.910	1.40	0.122	0.109	0.497	1.37
1_40_1_5_115	MW-30	Appendix IV	Lead	mg/L	13	12	92%	2022-11-30 to 2024-10-16		Nonparametric	0.000626	0.000500	0.000100	0.00170	0.000482	0.770	0.986	0.384
1_40_1_5_116	MW-30	Appendix IV	Lithium	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Nonparametric	Nonparametric	0.133	0.120	0.100	0.270	0.0433	0.325	3.03	9.97
1_40_1_5_117	MW-30	Appendix IV	Mercury	mg/L	13	12	92%	2022-11-30 to 2024-10-16		Nonparametric	0.000178	0.000160	0.000160	0.000390	0.0000638	0.359	3.61	13.0
1_40_1_5_118	MW-30	Appendix IV	Molybdenum	mg/L	13	3	23%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.00142	0.000890	0.000320	0.00360	0.00112	0.791	1.14	-0.220
1_40_1_5_121	MW-30	Appendix IV	Radium 226 and 228	pCi/L	13	7	54%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Nonparametric	0.700	0.624	0.445	1.12	0.196	0.280	0.821	-0.0317
1_40_1_5_122	MW-30	Appendix IV	Selenium	mg/L	13	6	46%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.000257	0.000220	0.000100	0.00110	0.000266	1.03	3.07	10.1
1_40_1_5_125	MW-30	Appendix IV	Thallium	mg/L	13	13	100%	2022-11-30 to 2024-10-16		Nonparametric	0.000286	0.000380	0.0000750	0.000380	0.000147	0.512	-0.946	-1.34
1_41_1_3_127	MW-31	Additional Parameters	Total Suspended Solids	mg/L	8	5	62%	2022-12-01 to 2024-10-15		Nonparametric	3.36	4.00	1.00	4.00	1.18	0.351	-1.65	1.36
1_41_1_4_105	MW-31	Appendix III	Boron	mg/L	13	0	0%	2022-12-01 to 2024-10-15	Gamma; Lognormal; Normal	Normal	4.64	4.50	3.60	5.80	0.661	0.143	0.165	-0.756
1_41_1_4_107	MW-31	Appendix III	Calcium	mg/L	13	0	0%	2022-12-01 to 2024-10-15	Gamma; Lognormal; Normal	Normal	170	170	130	200	20.0	0.118	-0.222	0.106
1_41_1_4_108	MW-31	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	2022-12-01 to 2024-10-15	Gamma; Lognormal; Normal	Normal	102	100	87.0	120	9.19	0.0899	0.268	-0.366
1_41_1_4_112	MW-31	Appendix III	Fluoride	mg/L	13	0	0%	2022-12-01 to 2024-10-15	Nonparametric	Nonparametric	4.76	4.70	4.50	5.20	0.236	0.0497	0.858	-0.616
1_41_1_4_120	MW-31	Appendix III	pH (field)	su	13	0	0%	2022-12-01 to 2024-10-15	Gamma; Lognormal; Normal	Normal	7.82	7.82	7.67	8.01	0.101	0.0129	0.589	0.167
1_41_1_4_124	MW-31	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	2022-12-01 to 2024-10-15	Gamma; Lognormal; Normal	Normal	159	160	45.0	250	67.2	0.423	-0.0404	-0.881

(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	Kurtosis
1_41_1_4_126	MW-31	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2022-12-01 to 2024-10-15	Gamma; Lognormal; Normal	Normal	806	810	730	940	59.8	0.0742	0.773	0.588
1_41_1_5_101	MW-31	Appendix IV	Antimony	mg/L	13	6	46%	2022-12-01 to 2024-10-15	Lognormal	Lognormal	0.000141	0.000100	0.0000500	0.000390	0.000110	0.779	2.0	2.79
1_41_1_5_102	MW-31	Appendix IV	Arsenic	mg/L	13	0	0%	2022-12-01 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.00127	0.00120	0.000950	0.00180	0.000260	0.204	0.765	-0.227
1_41_1_5_103	MW-31	Appendix IV	Barium	mg/L	13	0	0%	2022-12-01 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.171	0.160	0.120	0.290	0.0491	0.287	1.33	1.61
1_41_1_5_104	MW-31	Appendix IV	Beryllium	mg/L	13	11	85%	2022-12-01 to 2024-10-15		Nonparametric	0.0000555	0.0000520	0.0000520	0.0000960	0.0000122	0.219	3.59	12.9
1_41_1_5_106	MW-31	Appendix IV	Cadmium	mg/L	13	12	92%	2022-12-01 to 2024-10-15		Nonparametric	0.0000592	0.0000750	0.0000320	0.0000840	0.0000225	0.380	-0.494	-2.01
1_41_1_5_109	MW-31	Appendix IV	Chromium, Total	mg/L	13	0	0%	2022-12-01 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.00238	0.00230	0.00170	0.00410	0.000639	0.268	1.72	3.74
1_41_1_5_110	MW-31	Appendix IV	Cobalt	mg/L	13	1	8%	2022-12-01 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.000183	0.000180	0.000100	0.000360	0.0000713	0.390	1.38	2.32
1_41_1_5_113	MW-31	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	2022-12-01 to 2024-10-15	Nonparametric	Nonparametric	4.76	4.70	4.50	5.20	0.236	0.0497	0.858	-0.616
1_41_1_5_115	MW-31	Appendix IV	Lead	mg/L	13	11	85%	2022-12-01 to 2024-10-15		Nonparametric	0.000174	0.000220	0.000100	0.000310	0.0000751	0.432	0.242	-1.42
1_41_1_5_116	MW-31	Appendix IV	Lithium	mg/L	13	0	0%	2022-12-01 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.0505	0.0520	0.0390	0.0630	0.00657	0.130	-0.341	0.619
1_41_1_5_117	MW-31	Appendix IV	Mercury	mg/L	13	13	100%	2022-12-01 to 2024-10-15		Nonparametric	0.000160	0.000160	0.000160	0.000160	0	0	NA	NA
1_41_1_5_118	MW-31	Appendix IV	Molybdenum	mg/L	13	0	0%	2022-12-01 to 2024-10-15	Lognormal; Normal	Normal	0.00122	0.00110	0.000520	0.00210	0.000392	0.322	0.770	1.78
1_41_1_5_121	MW-31	Appendix IV	Radium 226 and 228	pCi/L	13	4	31%	2022-12-01 to 2024-10-15	Gamma; Lognormal	Gamma	0.720	0.673	0.497	1.23	0.224	0.311	1.55	1.82
1_41_1_5_122	MW-31	Appendix IV	Selenium	mg/L	13	5	38%	2022-12-01 to 2024-10-15	Nonparametric	Nonparametric	0.000212	0.000160	0.000100	0.000740	0.000166	0.783	3.11	10.5
1_41_1_5_125	MW-31	Appendix IV	Thallium	mg/L	13	12	92%	2022-12-01 to 2024-10-15		Nonparametric	0.0000760	0.0000750	0.0000750	0.0000880	0.00000361	0.0474	3.61	13.0
1_42_1_3_127	MW-32	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	31.2	32.0	11.0	43.0	9.73	0.312	-0.674	-0.260
1_42_1_4_105	MW-32	Appendix III	Boron	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal	Gamma	3.59	3.10	2.60	5.60	0.882	0.245	1.27	1.07
1_42_1_4_107	MW-32	Appendix III	Calcium	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	175	180	130	220	26.3	0.151	-0.208	-0.757
1_42_1_4_108	MW-32	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	45.0	45.0	38.0	50.0	4.36	0.0969	-0.193	-1.39
1_42_1_4_112	MW-32	Appendix III	Fluoride	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Nonparametric	Nonparametric	1.55	1.50	1.40	1.90	0.151	0.0969	1.30	1.36
1_42_1_4_120	MW-32	Appendix III	pH (field)	su	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	7.60	7.59	7.50	7.75	0.0752	0.00989	0.380	-0.637
1_42_1_4_124	MW-32	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Gamma	82.6	83.0	5.90	190	63	0.762	0.296	-1.21
1_42_1_4_126	MW-32	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	689	700	550	800	93.9	0.136	-0.293	-1.61
1_42_1_5_101	MW-32	Appendix IV	Antimony	mg/L	13	9	69%	2022-11-30 to 2024-10-16		Nonparametric	0.000137	0.000100	0.0000500	0.000700	0.000171	1.25	3.47	12.3
1_42_1_5_102	MW-32	Appendix IV	Arsenic	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Nonparametric	Nonparametric	0.000685	0.000580	0.000440	0.00240	0.000520	0.758	3.49	12.4
1_42_1_5_103	MW-32	Appendix IV	Barium	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.540	0.570	0.0590	1.30	0.301	0.558	1.17	2.81
1_42_1_5_104	MW-32	Appendix IV	Beryllium	mg/L	13	12	92%	2022-11-30 to 2024-10-16		Nonparametric	0.0000534	0.0000520	0.0000520	0.0000700	0.00000499	0.0935	3.61	13.0
1_42_1_5_106	MW-32	Appendix IV	Cadmium	mg/L	13	12	92%	2022-11-30 to 2024-10-16		Nonparametric	0.0000673	0.0000750	0.0000320	0.000190	0.0000425	0.632	2.09	5.96
1_42_1_5_109	MW-32	Appendix IV	Chromium, Total	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Nonparametric	Nonparametric	0.000629	0.000390	0.000310	0.00300	0.000720	1.15	3.46	12.3
1_42_1_5_110	MW-32	Appendix IV	Cobalt	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal	Gamma	0.000536	0.000390	0.000210	0.00190	0.000429	0.800	3.08	10.3
1_42_1_5_113	MW-32	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Nonparametric	Nonparametric	1.55	1.50	1.40	1.90	0.151	0.0969	1.30	1.36
1_42_1_5_115	MW-32	Appendix IV	Lead	mg/L	13	9	69%	2022-11-30 to 2024-10-16		Nonparametric	0.000197	0.000220	0.000100	0.000420	0.000105	0.534	1.10	0.584
1_42_1_5_116	MW-32	Appendix IV	Lithium	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.131	0.130	0.0940	0.200	0.0338	0.258	0.991	0.316
1_42_1_5_117	MW-32	Appendix IV	Mercury	mg/L	13	12	92%	2022-11-30 to 2024-10-16		Nonparametric	0.000294	0.000160	0.000160	0.00190	0.000483	1.64	3.61	13.0
1_42_1_5_118	MW-32	Appendix IV	Molybdenum	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.00439	0.00450	0.00320	0.00730	0.00105	0.239	1.78	4.69
1_42_1_5_121	MW-32	Appendix IV	Radium 226 and 228	pCi/L	13	8	62%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Nonparametric	0.661	0.603	0.497	0.985	0.151	0.229	1.16	0.215
1_42_1_5_122	MW-32	Appendix IV	Selenium	mg/L	13	10	77%	2022-11-30 to 2024-10-16		Nonparametric	0.000221	0.000140	0.000100	0.00100	0.000241	1.09	3.27	11.3
1_42_1_5_125	MW-32	Appendix IV	Thallium	mg/L	13	13	100%	2022-11-30 to 2024-10-16		Nonparametric	0.0000750	0.0000750	0.0000750	0.0000750	0	0	NA	NA
2_11_2_3_127	MW-01R	Additional Parameters	Total Suspended Solids	mg/L	12	4	33%	2022-11-29 to 2024-10-16		Nonparametric	3.33	3.50	2.00	5.00	1.15	0.346	0.0630	-1.47
2_11_2_4_105	MW-01R	Appendix III	Boron	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	106	110	38.0	160	38.9	0.368	-0.153	-1.18
2_11_2_4_107	MW-01R	Appendix III	Calcium	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	241	240	130	400	81.9	0.340	0.505	-0.562

(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	Kurtosis
2_11_2_4_108	MW-01R	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Normal	Normal	135	150	49.0	210	50.5	0.373	-0.707	-0.446
2_11_2_4_112	MW-01R	Appendix III	Fluoride	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Normal	Normal	11.5	14.0	4.80	16.0	3.68	0.319	-0.507	-1.19
2_11_2_4_120	MW-01R	Appendix III	pH (field)	su	13	0	0%	2022-11-29 to 2024-10-16	Nonparametric	Nonparametric	7.58	7.73	6.02	7.81	0.476	0.0628	-3.43	12.0
2_11_2_4_124	MW-01R	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Gamma	451	400	8.80	980	320	0.709	0.179	-1.34
2_11_2_4_126	MW-01R	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	2346	2400	2100	2600	133	0.0567	-0.0282	0.192
2_11_2_5_101	MW-01R	Appendix IV	Antimony	mg/L	13	3	23%	2022-11-29 to 2024-10-16	Lognormal	Lognormal	0.000390	0.000250	0.000170	0.00120	0.000291	0.746	2.10	4.73
2_11_2_5_102	MW-01R	Appendix IV	Arsenic	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal	Gamma	0.00160	0.00140	0.000730	0.00410	0.000835	0.522	2.43	7.44
2_11_2_5_103	MW-01R	Appendix IV	Barium	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.330	0.300	0.200	0.560	0.116	0.353	1.02	0.215
2_11_2_5_104	MW-01R	Appendix IV	Beryllium	mg/L	13	2	15%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.000200	0.000200	0.0000520	0.000360	0.000102	0.507	0.173	-0.805
2_11_2_5_106	MW-01R	Appendix IV	Cadmium	mg/L	13	10	77%	2022-11-29 to 2024-10-16		Nonparametric	0.000154	0.0000750	0.0000320	0.000380	0.000127	0.825	1.18	-0.246
2_11_2_5_109	MW-01R	Appendix IV	Chromium, Total	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Lognormal	Lognormal	0.00377	0.00210	0.00130	0.0220	0.00556	1.48	3.42	12.0
2_11_2_5_110	MW-01R	Appendix IV	Cobalt	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Lognormal	Lognormal	0.00169	0.00110	0.000640	0.00450	0.00122	0.720	1.71	1.93
2_11_2_5_113	MW-01R	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Normal	Normal	11.5	14.0	4.80	16.0	3.68	0.319	-0.507	-1.19
2_11_2_5_115	MW-01R	Appendix IV	Lead	mg/L	13	2	15%	2022-11-29 to 2024-10-16	Gamma; Lognormal	Gamma	0.00124	0.000820	0.000350	0.00530	0.00128	1.03	3.09	10.3
2_11_2_5_116	MW-01R	Appendix IV	Lithium	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	2.29	2.30	0.770	3.40	0.827	0.361	-0.260	-0.996
2_11_2_5_117	MW-01R	Appendix IV	Mercury	mg/L	13	13	100%	2022-11-29 to 2024-10-16		Nonparametric	0.000160	0.000160	0.000160	0.000160	0	0	NA	NA
2_11_2_5_118	MW-01R	Appendix IV	Molybdenum	mg/L	13	1	8%	2022-11-29 to 2024-10-16	Gamma; Lognormal	Gamma	0.00140	0.000770	0.000330	0.00560	0.00149	1.07	2.23	5.25
2_11_2_5_121	MW-01R	Appendix IV	Radium 226 and 228	pCi/L	13	7	54%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Nonparametric	0.918	0.828	0.601	1.28	0.254	0.277	0.253	-1.75
2_11_2_5_122	MW-01R	Appendix IV	Selenium	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal	Gamma	0.000736	0.000660	0.000300	0.00180	0.000358	0.486	2.37	7.21
2_11_2_5_125	MW-01R	Appendix IV	Thallium	mg/L	13	13	100%	2022-11-29 to 2024-10-16		Nonparametric	0.000263	0.000380	0.0000750	0.000380	0.000154	0.588	-0.539	-2.06
2_12_2_3_127	MW-02	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Normal	Normal	48.4	56.0	6.00	100	29.8	0.615	0.0379	-0.688
2_12_2_4_105	MW-02	Appendix III	Boron	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	99.2	100	73.0	110	11.5	0.116	-0.985	0.652
2_12_2_4_107	MW-02	Appendix III	Calcium	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	203	210	180	240	17.0	0.0838	0.510	0.355
2_12_2_4_108	MW-02	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Nonparametric	Nonparametric	137	140	67.0	160	22.4	0.163	-2.90	9.65
2_12_2_4_112	MW-02	Appendix III	Fluoride	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Nonparametric	Nonparametric	9.30	9.70	4.50	11.0	1.54	0.166	-2.79	9.15
2_12_2_4_120	MW-02	Appendix III	pH (field)	su	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	7.22	7.21	7.06	7.45	0.116	0.0160	0.554	-0.497
2_12_2_4_124	MW-02	Appendix III	Sulfate (as SO4)	mg/L	13	8	62%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Nonparametric	1.31	0.860	0.410	5.50	1.43	1.09	2.36	6.32
2_12_2_4_126	MW-02	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	1854	1800	1600	2100	161	0.0870	0.200	-1.05
2_12_2_5_101	MW-02	Appendix IV	Antimony	mg/L	13	3	23%	2022-11-28 to 2024-10-15	Gamma; Lognormal	Gamma	0.000252	0.000190	0.000100	0.000630	0.000150	0.598	1.81	2.87
2_12_2_5_102	MW-02	Appendix IV	Arsenic	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Nonparametric	Nonparametric	0.00760	0.00780	0.000440	0.0120	0.00260	0.342	-1.55	5.26
2_12_2_5_103	MW-02	Appendix IV	Barium	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.472	0.470	0.320	0.730	0.106	0.224	0.878	2.14
2_12_2_5_104	MW-02	Appendix IV	Beryllium	mg/L	13	1	8%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.000269	0.000280	0.0000520	0.000520	0.000136	0.504	0.278	-0.592
2_12_2_5_106	MW-02	Appendix IV	Cadmium	mg/L	13	10	77%	2022-11-28 to 2024-10-15		Nonparametric	0.000135	0.0000750	0.0000320	0.000490	0.000140	1.04	1.97	3.10
2_12_2_5_109	MW-02	Appendix IV	Chromium, Total	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Normal	Normal	0.0386	0.0390	0.000380	0.0680	0.0184	0.478	-0.452	0.0770
2_12_2_5_110	MW-02	Appendix IV	Cobalt	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Normal	Normal	0.00556	0.00610	0.000240	0.00890	0.00231	0.415	-0.908	1.07
2_12_2_5_113	MW-02	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Nonparametric	Nonparametric	9.30	9.70	4.50	11.0	1.54	0.166	-2.79	9.15
2_12_2_5_115	MW-02	Appendix IV	Lead	mg/L	13	1	8%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.00251	0.00230	0.000100	0.00560	0.00142	0.565	0.619	0.898
2_12_2_5_116	MW-02	Appendix IV	Lithium	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	1.36	1.40	0.870	1.70	0.216	0.159	-0.662	0.977
2_12_2_5_117	MW-02	Appendix IV	Mercury	mg/L	13	13	100%	2022-11-28 to 2024-10-15		Nonparametric	0.000160	0.000160	0.000160	0.000160	0	0	NA	NA
2_12_2_5_118	MW-02	Appendix IV	Molybdenum	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal	Gamma	0.00642	0.00520	0.00380	0.0110	0.00236	0.369	1.26	0.450
2_12_2_5_121	MW-02	Appendix IV	Radium 226 and 228	pCi/L	13	4	31%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	1.64	1.56	0.686	3.35	0.834	0.508	0.793	-0.244
2_12_2_5_122	MW-02	Appendix IV	Selenium	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.00115	0.00120	0.000500	0.00180	0.000358	0.310	-0.384	0.280

(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	Kurtosis
2_12_2_5_125	MW-02	Appendix IV	Thallium	mg/L	13	12	92%	2022-11-28 to 2024-10-15		Nonparametric	0.000234	0.0000750	0.0000750	0.000620	0.000190	0.811	0.642	-0.860
2_13_2_3_127	MW-03	Additional Parameters	Total Suspended Solids	mg/L	10	5	50%	2022-11-28 to 2024-10-15	Gamma; Lognormal	Nonparametric	4.70	4.00	1.00	15.0	3.74	0.796	2.74	8.39
2_13_2_4_105	MW-03	Appendix III	Boron	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	4.12	4.20	3.30	4.50	0.319	0.0774	-1.45	2.73
2_13_2_4_107	MW-03	Appendix III	Calcium	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	368	360	290	430	38.0	0.103	-0.354	0.0554
2_13_2_4_108	MW-03	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	169	160	99.0	300	54.0	0.319	1.23	1.84
2_13_2_4_112	MW-03	Appendix III	Fluoride	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Nonparametric	Nonparametric	0.672	0.610	0.520	1.60	0.282	0.419	3.49	12.4
2_13_2_4_120	MW-03	Appendix III	pH (field)	su	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	7.36	7.32	7.20	7.59	0.107	0.0145	0.563	0.0647
2_13_2_4_124	MW-03	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	404	380	42.0	760	201	0.498	0.0743	-0.180
2_13_2_4_126	MW-03	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Nonparametric	Nonparametric	2115	2200	1700	2300	223	0.105	-0.760	-1.07
2_13_2_5_101	MW-03	Appendix IV	Antimony	mg/L	13	8	62%	2022-11-28 to 2024-10-15	Gamma; Lognormal	Nonparametric	0.000235	0.000110	0.0000870	0.000500	0.000181	0.772	0.795	-1.43
2_13_2_5_102	MW-03	Appendix IV	Arsenic	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.000924	0.000910	0.000490	0.00140	0.000262	0.284	-0.115	-0.175
2_13_2_5_103	MW-03	Appendix IV	Barium	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.355	0.380	0.130	0.500	0.0954	0.268	-0.971	1.45
2_13_2_5_104	MW-03	Appendix IV	Beryllium	mg/L	13	8	62%	2022-11-28 to 2024-10-15	Lognormal	Nonparametric	0.0000860	0.0000520	0.0000520	0.000260	0.0000672	0.782	1.94	2.98
2_13_2_5_106	MW-03	Appendix IV	Cadmium	mg/L	13	12	92%	2022-11-28 to 2024-10-15		Nonparametric	0.000128	0.0000750	0.0000320	0.000380	0.000119	0.934	1.67	1.76
2_13_2_5_109	MW-03	Appendix IV	Chromium, Total	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.00469	0.00460	0.00300	0.00730	0.00128	0.273	0.538	-0.328
2_13_2_5_110	MW-03	Appendix IV	Cobalt	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.000808	0.000810	0.000370	0.00130	0.000341	0.422	0.235	-1.54
2_13_2_5_113	MW-03	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Nonparametric	Nonparametric	0.672	0.610	0.520	1.60	0.282	0.419	3.49	12.4
2_13_2_5_115	MW-03	Appendix IV	Lead	mg/L	13	12	92%	2022-11-28 to 2024-10-15		Nonparametric	0.000543	0.000500	0.000100	0.00110	0.000348	0.640	0.772	-0.534
2_13_2_5_116	MW-03	Appendix IV	Lithium	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.0399	0.0370	0.0290	0.0650	0.00959	0.240	1.59	3.11
2_13_2_5_117	MW-03	Appendix IV	Mercury	mg/L	13	12	92%	2022-11-28 to 2024-10-15		Nonparametric	0.000166	0.000160	0.000160	0.000240	0.0000222	0.134	3.61	13.0
2_13_2_5_118	MW-03	Appendix IV	Molybdenum	mg/L	13	9	69%	2022-11-28 to 2024-10-15		Nonparametric	0.000904	0.000620	0.000250	0.00310	0.00101	1.12	1.86	2.33
2_13_2_5_121	MW-03	Appendix IV	Radium 226 and 228	pCi/L	13	1	8%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	1.12	0.996	0.609	1.92	0.396	0.353	0.831	-0.0135
2_13_2_5_122	MW-03	Appendix IV	Selenium	mg/L	13	3	23%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.000448	0.000420	0.000170	0.00110	0.000236	0.527	1.77	4.67
2_13_2_5_125	MW-03	Appendix IV	Thallium	mg/L	13	12	92%	2022-11-28 to 2024-10-15		Nonparametric	0.000294	0.000380	0.0000750	0.000380	0.000136	0.464	-1.06	-0.910
2_14_2_3_127	MW-04	Additional Parameters	Total Suspended Solids	mg/L	12	1	8%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	8.84	9.05	4.00	15.0	3.35	0.379	0.00866	-0.405
2_14_2_4_105	MW-04	Appendix III	Boron	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	4.12	4.10	3.50	4.70	0.348	0.0847	0.281	-0.119
2_14_2_4_107	MW-04	Appendix III	Calcium	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	365	360	310	430	34.5	0.0946	0.391	-0.524
2_14_2_4_108	MW-04	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	176	180	96.0	300	55.0	0.313	0.675	0.750
2_14_2_4_112	MW-04	Appendix III	Fluoride	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma	Gamma	1.34	1.30	0.760	1.90	0.248	0.185	-0.0656	3.88
2_14_2_4_120	MW-04	Appendix III	pH (field)	su	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	7.37	7.35	7.23	7.66	0.115	0.0156	1.22	2.44
2_14_2_4_124	MW-04	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Nonparametric	Nonparametric	586	610	1.80	810	205	0.351	-2.04	5.58
2_14_2_4_126	MW-04	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	1900	1900	1700	2100	163	0.0859	0.136	-1.68
2_14_2_5_101	MW-04	Appendix IV	Antimony	mg/L	13	10	77%	2022-11-28 to 2024-10-15		Nonparametric	0.000219	0.000100	0.0000500	0.000500	0.000187	0.853	0.791	-1.34
2_14_2_5_102	MW-04	Appendix IV	Arsenic	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.000905	0.000880	0.000470	0.00120	0.000252	0.279	-0.272	-0.992
2_14_2_5_103	MW-04	Appendix IV	Barium	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Nonparametric	Nonparametric	0.141	0.120	0.0840	0.460	0.0975	0.693	3.40	11.9
2_14_2_5_104	MW-04	Appendix IV	Beryllium	mg/L	13	11	85%	2022-11-28 to 2024-10-15		Nonparametric	0.0000532	0.0000520	0.0000520	0.0000660	0.00000388	0.0728	3.49	12.3
2_14_2_5_106	MW-04	Appendix IV	Cadmium	mg/L	13	13	100%	2022-11-28 to 2024-10-15		Nonparametric	0.000125	0.0000750	0.0000320	0.000380	0.000120	0.961	1.70	1.82
2_14_2_5_109	MW-04	Appendix IV	Chromium, Total	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.00402	0.00440	0.00260	0.00600	0.00114	0.284	-0.0202	-1.26
2_14_2_5_110	MW-04	Appendix IV	Cobalt	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.000470	0.000360	0.000180	0.000930	0.000222	0.472	0.724	-0.297
2_14_2_5_113	MW-04	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma	Gamma	1.34	1.30	0.760	1.90	0.248	0.185	-0.0656	3.88
2_14_2_5_115	MW-04	Appendix IV	Lead	mg/L	13	13	100%	2022-11-28 to 2024-10-15		Nonparametric	0.000435	0.000500	0.000100	0.00110	0.000339	0.779	1.12	0.599
2_14_2_5_116	MW-04	Appendix IV	Lithium	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.0638	0.0660	0.0470	0.0740	0.00956	0.150	-0.617	-0.685

(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	Kurtosis
2_14_2_5_117	MW-04	Appendix IV	Mercury	mg/L	13	13	100%	2022-11-28 to 2024-10-15		Nonparametric	0.000160	0.000160	0.000160	0.000160	0	0	NA	NA
2_14_2_5_118	MW-04	Appendix IV	Molybdenum	mg/L	13	2	15%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.00111	0.000970	0.000370	0.00310	0.000727	0.656	1.75	4.28
2_14_2_5_121	MW-04	Appendix IV	Radium 226 and 228	pCi/L	13	3	23%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	1.05	1.08	0.634	1.55	0.337	0.322	0.153	-1.67
2_14_2_5_122	MW-04	Appendix IV	Selenium	mg/L	13	5	38%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.000245	0.000220	0.000100	0.000430	0.0000901	0.367	0.990	1.08
2_14_2_5_125	MW-04	Appendix IV	Thallium	mg/L	13	13	100%	2022-11-28 to 2024-10-15		Nonparametric	0.000239	0.000380	0.0000750	0.000380	0.000158	0.662	-0.175	-2.36
2_19_2_3_127	MW-09	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	2022-11-28 to 2024-10-17	Gamma; Lognormal; Normal	Normal	49.2	50.0	39.0	57.0	4.75	0.0964	-0.347	0.776
2_19_2_4_105	MW-09	Appendix III	Boron	mg/L	13	0	0%	2022-11-28 to 2024-10-17	Gamma; Lognormal; Normal	Normal	5.82	5.90	4.90	6.90	0.534	0.0918	0.113	0.347
2_19_2_4_107	MW-09	Appendix III	Calcium	mg/L	13	0	0%	2022-11-28 to 2024-10-17	Gamma; Lognormal; Normal	Normal	364	390	230	500	77.6	0.213	-0.0825	-0.768
2_19_2_4_108	MW-09	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	2022-11-28 to 2024-10-17	Gamma; Lognormal; Normal	Normal	16.7	16.0	11.0	25.0	5.36	0.321	0.665	-0.944
2_19_2_4_112	MW-09	Appendix III	Fluoride	mg/L	13	0	0%	2022-11-28 to 2024-10-17	Gamma; Lognormal; Normal	Normal	2.57	2.60	2.10	2.90	0.269	0.105	-0.281	-0.968
2_19_2_4_120	MW-09	Appendix III	pH (field)	su	13	0	0%	2022-11-28 to 2024-10-17	Nonparametric	Nonparametric	7.24	7.22	7.12	7.52	0.109	0.0150	1.69	3.01
2_19_2_4_124	MW-09	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	2022-11-28 to 2024-10-17	Gamma; Normal	Normal	423	480	83.0	720	220	0.519	-0.330	-1.46
2_19_2_4_126	MW-09	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2022-11-28 to 2024-10-17	Gamma; Lognormal; Normal	Normal	1362	1400	740	1700	304	0.223	-0.770	-0.367
2_19_2_5_101	MW-09	Appendix IV	Antimony	mg/L	13	8	62%	2022-11-28 to 2024-10-17	Gamma; Lognormal; Normal	Nonparametric	0.000187	0.000100	0.0000500	0.000500	0.000162	0.864	1.36	0.322
2_19_2_5_102	MW-09	Appendix IV	Arsenic	mg/L	13	0	0%	2022-11-28 to 2024-10-17	Nonparametric	Nonparametric	0.00222	0.00230	0.00130	0.00300	0.000528	0.237	-0.872	-0.0896
2_19_2_5_103	MW-09	Appendix IV	Barium	mg/L	13	0	0%	2022-11-28 to 2024-10-17	Lognormal	Lognormal	0.438	0.230	0.170	2.40	0.601	1.37	3.38	11.8
2_19_2_5_104	MW-09	Appendix IV	Beryllium	mg/L	13	11	85%	2022-11-28 to 2024-10-17		Nonparametric	0.0000528	0.0000520	0.0000520	0.0000580	0.00000208	0.0393	2.22	3.57
2_19_2_5_106	MW-09	Appendix IV	Cadmium	mg/L	13	13	100%	2022-11-28 to 2024-10-17		Nonparametric	0.000115	0.0000750	0.0000320	0.000380	0.000122	1.06	1.86	2.25
2_19_2_5_109	MW-09	Appendix IV	Chromium, Total	mg/L	13	0	0%	2022-11-28 to 2024-10-17	Gamma; Lognormal; Normal	Normal	0.00242	0.00260	0.00160	0.00320	0.000548	0.226	-0.0937	-1.53
2_19_2_5_110	MW-09	Appendix IV	Cobalt	mg/L	13	0	0%	2022-11-28 to 2024-10-17	Gamma; Lognormal; Normal	Normal	0.000521	0.000530	0.000230	0.000990	0.000235	0.452	0.431	-0.485
2_19_2_5_113	MW-09	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	2022-11-28 to 2024-10-17	Gamma; Lognormal; Normal	Normal	2.57	2.60	2.10	2.90	0.269	0.105	-0.281	-0.968
2_19_2_5_115	MW-09	Appendix IV	Lead	mg/L	13	13	100%	2022-11-28 to 2024-10-17		Nonparametric	0.000374	0.000220	0.000100	0.00110	0.000359	0.961	1.40	0.931
2_19_2_5_116	MW-09	Appendix IV	Lithium	mg/L	13	0	0%	2022-11-28 to 2024-10-17	Gamma; Lognormal; Normal	Normal	0.300	0.290	0.260	0.340	0.0283	0.0943	0.104	-1.19
2_19_2_5_117	MW-09	Appendix IV	Mercury	mg/L	13	11	85%	2022-11-28 to 2024-10-17		Nonparametric	0.000482	0.000160	0.000160	0.00240	0.000787	1.63	2.21	3.44
2_19_2_5_118	MW-09	Appendix IV	Molybdenum	mg/L	13	0	0%	2022-11-28 to 2024-10-17	Gamma; Lognormal; Normal	Normal	0.0213	0.0210	0.00970	0.0330	0.00676	0.317	0.0461	-0.437
2_19_2_5_121	MW-09	Appendix IV	Radium 226 and 228	pCi/L	13	12	92%	2022-11-28 to 2024-10-17		Nonparametric	0.777	0.771	0.642	0.980	0.0973	0.125	0.684	0.102
2_19_2_5_122	MW-09	Appendix IV	Selenium	mg/L	13	2	15%	2022-11-28 to 2024-10-17	Gamma; Normal	Normal	0.000258	0.000260	0.000120	0.000400	0.0000648	0.251	0.160	2.35
2_19_2_5_125	MW-09	Appendix IV	Thallium	mg/L	13	13	100%	2022-11-28 to 2024-10-17		Nonparametric	0.000192	0.0000750	0.0000750	0.000380	0.000154	0.803	0.539	-2.06
2_21_2_3_127	MW-11	Additional Parameters	Total Suspended Solids	mg/L	12	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	12.9	9.50	4.00	35.0	10.5	0.812	1.10	0.168
2_21_2_4_105	MW-11	Appendix III	Boron	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	6.00	4.80	1.50	13.0	3.70	0.617	0.673	-0.497
2_21_2_4_107	MW-11	Appendix III	Calcium	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	262	270	130	380	75.2	0.287	-0.325	-0.604
2_21_2_4_108	MW-11	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	68.4	72.0	38.0	95.0	16.0	0.234	-0.146	-0.355
2_21_2_4_112	MW-11	Appendix III	Fluoride	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.631	0.610	0.210	1.40	0.379	0.600	0.755	-0.187
2_21_2_4_120	MW-11	Appendix III	pH (field)	su	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	7.32	7.33	7.13	7.47	0.0920	0.0126	-0.417	0.382
2_21_2_4_124	MW-11	Appendix III	Sulfate (as SO4)	mg/L	13	4	31%	2022-11-29 to 2024-10-16	Gamma; Lognormal	Gamma	44.5	13.0	0.410	210	71.2	1.60	1.79	2.04
2_21_2_4_126	MW-11	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal	Gamma	1070	1000	680	1800	267	0.249	1.65	4.57
2_21_2_5_101	MW-11	Appendix IV	Antimony	mg/L	13	9	69%	2022-11-29 to 2024-10-16		Nonparametric	0.000195	0.000100	0.0000500	0.000690	0.000196	1.01	1.81	2.64
2_21_2_5_102	MW-11	Appendix IV	Arsenic	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.00162	0.00150	0.000610	0.00410	0.000858	0.529	2.16	6.02
2_21_2_5_103	MW-11	Appendix IV	Barium	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.657	0.590	0.360	1.20	0.225	0.342	1.11	1.61
2_21_2_5_104	MW-11	Appendix IV	Beryllium	mg/L	13	10	77%	2022-11-29 to 2024-10-16		Nonparametric	0.0000876	0.0000520	0.0000520	0.000440	0.000107	1.22	3.50	12.4
2_21_2_5_106	MW-11	Appendix IV	Cadmium	mg/L	13	11	85%	2022-11-29 to 2024-10-16		Nonparametric	0.000152	0.0000750	0.0000320	0.000730	0.000197	1.30	2.54	6.65
2_21_2_5_109	MW-11	Appendix IV	Chromium, Total	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Nonparametric	Nonparametric	0.00148	0.000870	0.000450	0.00860	0.00217	1.47	3.45	12.2

(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	Kurtosis
2_21_2_5_110	MW-11	Appendix IV	Cobalt	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal	Gamma	0.000650	0.000400	0.000230	0.00240	0.000589	0.905	2.54	7.07
2_21_2_5_113	MW-11	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.631	0.610	0.210	1.40	0.379	0.600	0.755	-0.187
2_21_2_5_115	MW-11	Appendix IV	Lead	mg/L	13	3	23%	2022-11-29 to 2024-10-16	Nonparametric	Nonparametric	0.00614	0.000430	0.000170	0.0680	0.0186	3.03	3.58	12.9
2_21_2_5_116	MW-11	Appendix IV	Lithium	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Gamma	0.0687	0.0520	0.00590	0.220	0.0615	0.894	1.41	1.96
2_21_2_5_117	MW-11	Appendix IV	Mercury	mg/L	13	12	92%	2022-11-29 to 2024-10-16		Nonparametric	0.000232	0.000160	0.000160	0.00110	0.000261	1.12	3.61	13.0
2_21_2_5_118	MW-11	Appendix IV	Molybdenum	mg/L	13	2	15%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.00127	0.00100	0.000430	0.00300	0.000853	0.672	1.23	0.597
2_21_2_5_121	MW-11	Appendix IV	Radium 226 and 228	pCi/L	13	4	31%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	1.02	0.910	0.575	1.76	0.371	0.362	0.945	0.0738
2_21_2_5_122	MW-11	Appendix IV	Selenium	mg/L	13	3	23%	2022-11-29 to 2024-10-16	Lognormal	Lognormal	0.000257	0.000220	0.000140	0.000710	0.000154	0.599	2.48	6.67
2_21_2_5_125	MW-11	Appendix IV	Thallium	mg/L	13	12	92%	2022-11-29 to 2024-10-16		Nonparametric	0.000156	0.0000750	0.0000750	0.000380	0.000133	0.854	1.22	-0.420
2_22_2_3_127	MW-12	Additional Parameters	Total Suspended Solids	mg/L	8	5	62%	2023-02-07 to 2024-10-16		Nonparametric	2.98	3.95	0.980	4.00	1.41	0.472	-0.810	-1.63
2_22_2_4_105	MW-12	Appendix III	Boron	mg/L	13	0	0%	2022-11-28 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.303	0.270	0.190	0.420	0.0847	0.279	0.156	-1.71
2_22_2_4_107	MW-12	Appendix III	Calcium	mg/L	13	0	0%	2022-11-28 to 2024-10-16	Gamma; Lognormal; Normal	Normal	67.9	74.0	40.0	95.0	18.6	0.273	-0.194	-0.924
2_22_2_4_108	MW-12	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	2022-11-28 to 2024-10-16	Gamma; Lognormal; Normal	Normal	18.9	18.0	12.0	27.0	4.48	0.237	0.638	-0.429
2_22_2_4_112	MW-12	Appendix III	Fluoride	mg/L	13	0	0%	2022-11-28 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.338	0.290	0.220	0.540	0.110	0.325	0.623	-1.17
2_22_2_4_120	MW-12	Appendix III	pH (field)	su	13	0	0%	2022-11-28 to 2024-10-16	Gamma; Lognormal; Normal	Normal	7.68	7.67	7.00	8.32	0.356	0.0464	0.0583	0.0345
2_22_2_4_124	MW-12	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	2022-11-28 to 2024-10-16	Gamma; Lognormal; Normal	Normal	112	110	52.0	180	40.1	0.358	0.307	-0.363
2_22_2_4_126	MW-12	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2022-11-28 to 2024-10-16	Gamma; Lognormal; Normal	Normal	278	270	100	420	91.3	0.329	-0.276	-0.539
2_22_2_5_101	MW-12	Appendix IV	Antimony	mg/L	13	0	0%	2022-11-28 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.000656	0.000640	0.000350	0.00110	0.000244	0.371	0.374	-1.07
2_22_2_5_102	MW-12	Appendix IV	Arsenic	mg/L	13	0	0%	2022-11-28 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.00239	0.00240	0.00140	0.00340	0.000701	0.293	0.0215	-1.77
2_22_2_5_103	MW-12	Appendix IV	Barium	mg/L	13	0	0%	2022-11-28 to 2024-10-16	Gamma; Lognormal	Gamma	0.0403	0.0300	0.0170	0.100	0.0245	0.607	1.43	1.64
2_22_2_5_104	MW-12	Appendix IV	Beryllium	mg/L	13	13	100%	2022-11-28 to 2024-10-16		Nonparametric	0.0000520	0.0000520	0.0000520	0.0000520	0	0	NA	NA
2_22_2_5_106	MW-12	Appendix IV	Cadmium	mg/L	13	0	0%	2022-11-28 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.00149	0.00120	0.000540	0.00320	0.000890	0.599	0.787	-0.674
2_22_2_5_109	MW-12	Appendix IV	Chromium, Total	mg/L	13	5	38%	2022-11-28 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.000437	0.000340	0.000200	0.000990	0.000283	0.648	1.06	0.00314
2_22_2_5_110	MW-12	Appendix IV	Cobalt	mg/L	13	5	38%	2022-11-28 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.000307	0.000190	0.000100	0.000930	0.000259	0.843	1.29	1.28
2_22_2_5_113	MW-12	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	2022-11-28 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.338	0.290	0.220	0.540	0.110	0.325	0.623	-1.17
2_22_2_5_115	MW-12	Appendix IV	Lead	mg/L	13	6	46%	2022-11-28 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.000242	0.000220	0.000100	0.000470	0.000107	0.440	1.04	0.466
2_22_2_5_116	MW-12	Appendix IV	Lithium	mg/L	13	0	0%	2022-11-28 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.00384	0.00370	0.00190	0.00640	0.00141	0.367	0.331	-0.661
2_22_2_5_117	MW-12	Appendix IV	Mercury	mg/L	13	11	85%	2022-11-28 to 2024-10-16		Nonparametric	0.000165	0.000160	0.000160	0.000230	0.0000194	0.117	3.61	13.0
2_22_2_5_118	MW-12	Appendix IV	Molybdenum	mg/L	13	0	0%	2022-11-28 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.00781	0.00690	0.00460	0.0180	0.00342	0.438	2.43	7.17
2_22_2_5_121	MW-12	Appendix IV	Radium 226 and 228	pCi/L	13	9	69%	2022-11-28 to 2024-10-16		Nonparametric	0.645	0.602	0.459	1.09	0.164	0.255	1.81	3.97
2_22_2_5_122	MW-12	Appendix IV	Selenium	mg/L	13	0	0%	2022-11-28 to 2024-10-16	Gamma; Lognormal; Normal	Gamma	0.000975	0.000890	0.000130	0.00230	0.000760	0.779	0.576	-0.892
2_22_2_5_125	MW-12	Appendix IV	Thallium	mg/L	13	13	100%	2022-11-28 to 2024-10-16		Nonparametric	0.0000750	0.0000750	0.0000750	0.0000750	0	0	NA	NA
3_20_3_3_127	MW-10	Additional Parameters	Total Suspended Solids	mg/L	12	2	17%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	6.25	4.00	1.00	20.0	5.28	0.844	1.77	3.66
3_20_3_4_105	MW-10	Appendix III	Boron	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	16	15.0	4.50	28.0	8.00	0.501	0.124	-1.47
3_20_3_4_107	MW-10	Appendix III	Calcium	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	302	280	160	590	126	0.419	1.14	0.729
3_20_3_4_108	MW-10	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	265	220	92.0	670	164	0.619	1.37	1.84
3_20_3_4_112	MW-10	Appendix III	Fluoride	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	5.15	5.20	2.70	7.70	1.73	0.335	-0.0292	-1.31
3_20_3_4_120	MW-10	Appendix III	pH (field)	su	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	7.79	7.80	7.05	8.81	0.418	0.0536	0.850	2.62
3_20_3_4_124	MW-10	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	662	620	140	1700	422	0.637	1.14	1.85
3_20_3_4_126	MW-10	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Lognormal	Lognormal	2062	1800	1500	3200	533	0.259	1.13	0.0850
3_20_3_5_101	MW-10	Appendix IV	Antimony	mg/L	13	9	69%	2022-11-29 to 2024-10-16		Nonparametric	0.000188	0.000110	0.0000500	0.000500	0.000160	0.851	1.34	0.438
3_20_3_5_102	MW-10	Appendix IV	Arsenic	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.000723	0.000550	0.000200	0.00200	0.000503	0.695	1.43	2.35

(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	Kurtosis
3_20_3_5_103	MW-10	Appendix IV	Barium	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.283	0.270	0.140	0.570	0.119	0.420	1.36	1.97
3_20_3_5_104	MW-10	Appendix IV	Beryllium	mg/L	13	6	46%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.0000782	0.0000540	0.0000520	0.000220	0.0000509	0.651	2.31	5.05
3_20_3_5_106	MW-10	Appendix IV	Cadmium	mg/L	13	13	100%	2022-11-29 to 2024-10-16		Nonparametric	0.000125	0.0000750	0.0000320	0.000380	0.000120	0.961	1.70	1.82
3_20_3_5_109	MW-10	Appendix IV	Chromium, Total	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.00369	0.00310	0.00130	0.00850	0.00215	0.583	1.11	0.787
3_20_3_5_110	MW-10	Appendix IV	Cobalt	mg/L	13	1	8%	2022-11-29 to 2024-10-16	Gamma; Lognormal	Gamma	0.000512	0.000400	0.000100	0.00180	0.000443	0.866	2.29	6.24
3_20_3_5_113	MW-10	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	5.15	5.20	2.70	7.70	1.73	0.335	-0.0292	-1.31
3_20_3_5_115	MW-10	Appendix IV	Lead	mg/L	13	11	85%	2022-11-29 to 2024-10-16		Nonparametric	0.000480	0.000500	0.000100	0.00110	0.000387	0.807	0.841	-0.742
3_20_3_5_116	MW-10	Appendix IV	Lithium	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.939	0.940	0.540	1.60	0.273	0.291	0.889	2.09
3_20_3_5_117	MW-10	Appendix IV	Mercury	mg/L	13	12	92%	2022-11-29 to 2024-10-16		Nonparametric	0.000294	0.000160	0.000160	0.00190	0.000483	1.64	3.61	13.0
3_20_3_5_118	MW-10	Appendix IV	Molybdenum	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.00345	0.00350	0.000800	0.00720	0.00170	0.493	0.683	0.850
3_20_3_5_121	MW-10	Appendix IV	Radium 226 and 228	pCi/L	13	10	77%	2022-11-29 to 2024-10-16		Nonparametric	0.826	0.775	0.590	1.36	0.215	0.260	1.40	2.15
3_20_3_5_122	MW-10	Appendix IV	Selenium	mg/L	13	1	8%	2022-11-29 to 2024-10-16	Gamma; Lognormal	Gamma	0.000376	0.000340	0.000220	0.000830	0.000149	0.397	2.61	8.07
3_20_3_5_125	MW-10	Appendix IV	Thallium	mg/L	13	13	100%	2022-11-29 to 2024-10-16		Nonparametric	0.000239	0.000380	0.0000750	0.000380	0.000158	0.661	-0.175	-2.36

^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	Kurtosis
1_16_1_3_127	MW-06	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	46.0	43.0	27.0	73.0	12.7	0.277	0.806	0.469
1_16_1_4_105	MW-06	Appendix III	Boron	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	9.28	9.50	6.40	12.0	1.61	0.174	-0.186	-0.518
1_16_1_4_107	MW-06	Appendix III	Calcium	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	258	250	220	310	31.7	0.123	0.547	-0.957
1_16_1_4_108	MW-06	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	72.8	73.0	13.0	160	41.0	0.563	0.512	0.443
1_16_1_4_112	MW-06	Appendix III	Fluoride	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal	Gamma	1.17	1.10	0.980	1.60	0.195	0.166	1.02	0.187
1_16_1_4_120	MW-06	Appendix III	pH (field)	su	13	0	0%	2022-11-29 to 2024-10-16	Nonparametric	Nonparametric	7.20	7.26	6.42	7.39	0.244	0.0339	-3.13	10.7
1_16_1_4_124	MW-06	Appendix III	Sulfate (as SO4)	mg/L	13	2	15%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Gamma	8.88	9.20	0.410	20.0	7.19	0.810	0.383	-1.30
1_16_1_4_126	MW-06	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2022-11-29 to 2024-10-16		Nonparametric	1200	1200	1100	1300	70.7	0.0589	0	-0.618
1_16_1_5_101	MW-06	Appendix IV	Antimony	mg/L	13	11	85%	2022-11-29 to 2024-10-16		Nonparametric	0.000183	0.000100	0.0000500	0.000500	0.000165	0.897	1.32	0.229
1_16_1_5_102	MW-06	Appendix IV	Arsenic	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.000706	0.000650	0.000470	0.00100	0.000165	0.234	0.574	-0.605
1_16_1_5_103	MW-06	Appendix IV	Barium	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	1.43	1.40	0.990	1.70	0.177	0.124	-1.05	2.39
1_16_1_5_104	MW-06	Appendix IV	Beryllium	mg/L	13	12	92%	2022-11-29 to 2024-10-16		Nonparametric	0.0000522	0.0000520	0.0000520	0.0000540	0.000000550	0.0106	3.61	13.0
1_16_1_5_106	MW-06	Appendix IV	Cadmium	mg/L	13	13	100%	2022-11-29 to 2024-10-16		Nonparametric	0.000125	0.0000750	0.0000320	0.000380	0.000120	0.961	1.70	1.82
1_16_1_5_109	MW-06	Appendix IV	Chromium, Total	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.00170	0.00150	0.00110	0.00300	0.000558	0.328	1.11	0.820
1_16_1_5_110	MW-06	Appendix IV	Cobalt	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.000532	0.000480	0.000350	0.000800	0.000144	0.270	0.624	-0.820
1_16_1_5_113	MW-06	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal	Gamma	1.17	1.10	0.980	1.60	0.195	0.166	1.02	0.187
1_16_1_5_115	MW-06	Appendix IV	Lead	mg/L	13	9	69%	2022-11-29 to 2024-10-16		Nonparametric	0.000370	0.000250	0.000100	0.00110	0.000354	0.956	1.52	1.31
1_16_1_5_116	MW-06	Appendix IV	Lithium	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.179	0.190	0.110	0.230	0.0405	0.226	-0.227	-1.28
1_16_1_5_117	MW-06	Appendix IV	Mercury	mg/L	13	13	100%	2022-11-29 to 2024-10-16		Nonparametric	0.000160	0.000160	0.000160	0.000160	0	0	NA	NA
1_16_1_5_118	MW-06	Appendix IV	Molybdenum	mg/L	13	8	62%	2022-11-29 to 2024-10-16	Nonparametric	Nonparametric	0.000603	0.000280	0.000250	0.00310	0.000769	1.28	3.31	11.4
1_16_1_5_121	MW-06	Appendix IV	Radium 226 and 228	pCi/L	13	3	23%	2022-11-29 to 2024-10-16	Lognormal	Lognormal	0.862	0.824	0.619	1.91	0.341	0.396	2.72	8.55
1_16_1_5_122	MW-06	Appendix IV	Selenium	mg/L	13	5	38%	2022-11-29 to 2024-10-16	Nonparametric	Nonparametric	0.000238	0.000220	0.000190	0.000470	0.0000737	0.309	3.01	9.60
1_16_1_5_125	MW-06	Appendix IV	Thallium	mg/L	13	13	100%	2022-11-29 to 2024-10-16		Nonparametric	0.000169	0.0000750	0.0000750	0.000380	0.000146	0.867	0.946	-1.34
1_17_1_3_127	MW-07	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	2022-11-30 to 2024-10-15	Gamma; Lognormal; Normal	Normal	37.5	38.0	29.0	46.0	5.11	0.136	0.0642	-0.879
1_17_1_4_105	MW-07	Appendix III	Boron	mg/L	13	0	0%	2022-11-30 to 2024-10-15	Lognormal; Normal	Normal	11.4	11.0	10.0	13.0	0.961	0.0844	0.386	-0.443
1_17_1_4_107	MW-07	Appendix III	Calcium	mg/L	13	0	0%	2022-11-30 to 2024-10-15	Gamma; Lognormal; Normal	Normal	143	140	120	160	11.8	0.0826	-0.349	-0.286
1_17_1_4_108	MW-07	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	2022-11-30 to 2024-10-15		Nonparametric	14.0	14.0	13.0	15.0	0.707	0.0505	0	-0.618
1_17_1_4_112	MW-07	Appendix III	Fluoride	mg/L	13	2	15%	2022-11-30 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.102	0.0830	0.0550	0.190	0.0412	0.403	0.733	-0.190
1_17_1_4_120	MW-07	Appendix III	pH (field)	su	13	0	0%	2022-11-30 to 2024-10-15	Nonparametric	Nonparametric	6.89	6.88	6.58	7.05	0.138	0.0200	-1.18	1.29
1_17_1_4_124	MW-07	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	2022-11-30 to 2024-10-15	Gamma; Lognormal; Normal	Normal	24.9	26.0	15.0	36.0	7.80	0.313	0.0161	-1.81
1_17_1_4_126	MW-07	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2022-11-30 to 2024-10-15	Nonparametric	Nonparametric	639	660	470	720	77.2	0.121	-1.29	1.17
1_17_1_5_101	MW-07	Appendix IV	Antimony	mg/L	13	12	92%	2022-11-30 to 2024-10-15		Nonparametric	0.0000824	0.000100	0.0000500	0.000100	0.0000238	0.289	-0.682	-1.70
1_17_1_5_102	MW-07	Appendix IV	Arsenic	mg/L	13	0	0%	2022-11-30 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.000215	0.000220	0.000130	0.000290	0.0000367	0.170	-0.463	2.67
1_17_1_5_103	MW-07	Appendix IV	Barium	mg/L	13	0	0%	2022-11-30 to 2024-10-15	Nonparametric	Nonparametric	0.339	0.340	0.250	0.380	0.0333	0.0981	-1.75	3.92
1_17_1_5_104	MW-07	Appendix IV	Beryllium	mg/L	13	10	77%	2022-11-30 to 2024-10-15		Nonparametric	0.0000541	0.0000520	0.0000520	0.0000660	0.00000455	0.0842	2.19	3.87
1_17_1_5_106	MW-07	Appendix IV	Cadmium	mg/L	13	13	100%	2022-11-30 to 2024-10-15		Nonparametric	0.0000585	0.0000750	0.0000320	0.0000750	0.0000218	0.372	-0.539	-2.06
1_17_1_5_109	MW-07	Appendix IV	Chromium, Total	mg/L	13	0	0%	2022-11-30 to 2024-10-15	Gamma; Lognormal	Gamma	0.000374	0.000340	0.000280	0.000740	0.000118	0.316	2.80	8.86
1_17_1_5_110	MW-07	Appendix IV	Cobalt	mg/L	13	0	0%	2022-11-30 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.000909	0.000950	0.000710	0.00110	0.000115	0.126	-0.333	-0.670
1_17_1_5_113	MW-07	Appendix IV	Fluoride (App IV)	mg/L	13	2	15%	2022-11-30 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.102	0.0830	0.0550	0.190	0.0412	0.403	0.733	-0.190
1_17_1_5_115	MW-07	Appendix IV	Lead	mg/L	13	13	100%	2022-11-30 to 2024-10-15		Nonparametric	0.000146	0.000100	0.000100	0.000220	0.0000608	0.416	0.539	-2.06
1_17_1_5_116	MW-07	Appendix IV	Lithium	mg/L	13	0	0%	2022-11-30 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.00605	0.00570	0.00310	0.0100	0.00173	0.287	0.782	1.56
1_17_1_5_117	MW-07	Appendix IV	Mercury	mg/L	13	13	100%	2022-11-30 to 2024-10-15		Nonparametric	0.000160	0.000160	0.000160	0.000160	0	0	NA	NA
1_17_1_5_118	MW-07	Appendix IV	Molybdenum	mg/L	13	13	100%	2022-11-30 to 2024-10-15		Nonparametric	0.000392	0.000250	0.000250	0.000620	0.000187	0.478	0.539	-2.06

(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	Kurtosis
1_17_1_5_121	MW-07	Appendix IV	Radium 226 and 228	pCi/L	13	2	15%	2022-11-30 to 2024-10-15	Gamma; Lognormal	Gamma	1.02	0.928	0.670	2.36	0.446	0.439	2.55	7.62
1_17_1_5_122	MW-07	Appendix IV	Selenium	mg/L	13	9	69%	2022-11-30 to 2024-10-15		Nonparametric	0.000162	0.000170	0.000100	0.000230	0.0000602	0.371	-0.0370	-2.25
1_17_1_5_125	MW-07	Appendix IV	Thallium	mg/L	13	13	100%	2022-11-30 to 2024-10-15		Nonparametric	0.0000750	0.0000750	0.0000750	0.0000750	0	0	NA	NA
1_18_1_3_127	MW-08	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	2022-12-01 to 2024-10-16	Gamma; Lognormal; Normal	Normal	38.4	36.0	18.0	62.0	12.9	0.335	0.159	-0.384
1_18_1_4_105	MW-08	Appendix III	Boron	mg/L	13	0	0%	2022-12-01 to 2024-10-16	Normal	Normal	6.31	7.00	2.50	9.30	1.86	0.295	-0.628	0.0410
1_18_1_4_107	MW-08	Appendix III	Calcium	mg/L	13	0	0%	2022-12-01 to 2024-10-16	Gamma; Lognormal; Normal	Normal	137	130	120	160	13.8	0.101	0.203	-1.42
1_18_1_4_108	MW-08	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	2022-12-01 to 2024-10-16	Nonparametric	Nonparametric	31.7	28.0	17.0	99.0	20.9	0.659	3.22	11.1
1_18_1_4_112	MW-08	Appendix III	Fluoride	mg/L	13	0	0%	2022-12-01 to 2024-10-16	Normal	Normal	0.935	1.00	0.400	1.30	0.270	0.288	-0.915	-0.0491
1_18_1_4_120	MW-08	Appendix III	pH (field)	su	13	0	0%	2022-12-01 to 2024-10-16	Nonparametric	Nonparametric	7.18	7.25	6.21	7.51	0.317	0.0442	-2.62	8.22
1_18_1_4_124	MW-08	Appendix III	Sulfate (as SO4)	mg/L	13	4	31%	2022-12-01 to 2024-10-16	Gamma; Lognormal; Normal	Gamma	8.46	5.30	0.410	26.0	9.58	1.13	1.07	-0.441
1_18_1_4_126	MW-08	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2022-12-01 to 2024-10-16	Gamma; Lognormal; Normal	Normal	545	550	440	660	62.1	0.114	0.249	-0.199
1_18_1_5_101	MW-08	Appendix IV	Antimony	mg/L	13	6	46%	2022-12-01 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.000124	0.000100	0.0000540	0.000280	0.0000584	0.472	1.90	3.84
1_18_1_5_102	MW-08	Appendix IV	Arsenic	mg/L	13	0	0%	2022-12-01 to 2024-10-16	Gamma; Normal	Normal	0.0340	0.0380	0.00690	0.0500	0.0142	0.418	-0.756	-0.484
1_18_1_5_103	MW-08	Appendix IV	Barium	mg/L	13	0	0%	2022-12-01 to 2024-10-16	Gamma; Lognormal; Normal	Normal	1.23	1.20	0.980	1.50	0.157	0.128	-0.0263	-0.708
1_18_1_5_104	MW-08	Appendix IV	Beryllium	mg/L	13	13	100%	2022-12-01 to 2024-10-16		Nonparametric	0.0000520	0.0000520	0.0000520	0.0000520	0	0	NA	NA
1_18_1_5_106	MW-08	Appendix IV	Cadmium	mg/L	13	13	100%	2022-12-01 to 2024-10-16		Nonparametric	0.0000585	0.0000750	0.0000320	0.0000750	0.0000218	0.372	-0.539	-2.06
1_18_1_5_109	MW-08	Appendix IV	Chromium, Total	mg/L	13	0	0%	2022-12-01 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.000873	0.000840	0.000610	0.00150	0.000249	0.286	1.38	2.19
1_18_1_5_110	MW-08	Appendix IV	Cobalt	mg/L	13	0	0%	2022-12-01 to 2024-10-16	Nonparametric	Nonparametric	0.000473	0.000450	0.000340	0.000700	0.000132	0.278	0.351	-1.56
1_18_1_5_113	MW-08	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	2022-12-01 to 2024-10-16	Normal	Normal	0.935	1.00	0.400	1.30	0.270	0.288	-0.915	-0.0491
1_18_1_5_115	MW-08	Appendix IV	Lead	mg/L	13	9	69%	2022-12-01 to 2024-10-16		Nonparametric	0.000412	0.000110	0.000100	0.00290	0.000775	1.88	3.23	10.7
1_18_1_5_116	MW-08	Appendix IV	Lithium	mg/L	13	0	0%	2022-12-01 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.107	0.110	0.0630	0.140	0.0235	0.220	-0.292	-0.434
1_18_1_5_117	MW-08	Appendix IV	Mercury	mg/L	13	13	100%	2022-12-01 to 2024-10-16		Nonparametric	0.000160	0.000160	0.000160	0.000160	0	0	NA	NA
1_18_1_5_118	MW-08	Appendix IV	Molybdenum	mg/L	13	0	0%	2022-12-01 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.00134	0.00150	0.000310	0.00280	0.000806	0.601	0.268	-0.932
1_18_1_5_121	MW-08	Appendix IV	Radium 226 and 228	pCi/L	13	3	23%	2022-12-01 to 2024-10-16	Gamma; Lognormal; Normal	Normal	1.08	0.984	0.604	2.10	0.430	0.398	1.19	1.32
1_18_1_5_122	MW-08	Appendix IV	Selenium	mg/L	13	5	38%	2022-12-01 to 2024-10-16	Gamma; Lognormal	Gamma	0.000188	0.000180	0.000120	0.000340	0.0000608	0.323	1.18	2.02
1_18_1_5_125	MW-08	Appendix IV	Thallium	mg/L	13	13	100%	2022-12-01 to 2024-10-16		Nonparametric	0.0000750	0.0000750	0.0000750	0.0000750	0	0	NA	NA
1_28_1_3_127	MW-18	Additional Parameters	Total Suspended Solids	mg/L	13	1	8%	2022-11-30 to 2024-10-16	Lognormal	Lognormal	15.8	11.0	2.00	100	25.6	1.62	3.43	12.1
1_28_1_4_105	MW-18	Appendix III	Boron	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	2.78	2.60	1.80	4.00	0.803	0.289	0.487	-1.35
1_28_1_4_107	MW-18	Appendix III	Calcium	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	339	340	240	450	60.1	0.177	-0.0914	-0.0836
1_28_1_4_108	MW-18	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	22.6	24.0	16.0	28.0	4.07	0.180	-0.441	-0.974
1_28_1_4_112	MW-18	Appendix III	Fluoride	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	3.94	3.80	2.70	5.10	0.683	0.173	0.0524	-0.565
1_28_1_4_120	MW-18	Appendix III	pH (field)	su	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	7.17	7.17	7.02	7.31	0.0801	0.0112	-0.282	0.279
1_28_1_4_124	MW-18	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	808	760	480	1200	208	0.257	0.878	0.631
1_28_1_4_126	MW-18	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	1400	1400	1100	1800	200	0.143	0.665	0.106
1_28_1_5_101	MW-18	Appendix IV	Antimony	mg/L	13	3	23%	2022-11-30 to 2024-10-16	Nonparametric	Nonparametric	0.000213	0.000130	0.000100	0.000500	0.000145	0.682	1.37	0.520
1_28_1_5_102	MW-18	Appendix IV	Arsenic	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.0273	0.0290	0.0150	0.0440	0.00836	0.306	0.692	0.183
1_28_1_5_103	MW-18	Appendix IV	Barium	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.0195	0.0210	0.0120	0.0280	0.00522	0.268	-0.0238	-1.41
1_28_1_5_104	MW-18	Appendix IV	Beryllium	mg/L	13	12	92%	2022-11-30 to 2024-10-16		Nonparametric	0.0000525	0.0000520	0.0000520	0.0000590	0.00000194	0.0370	3.61	13.0
1_28_1_5_106	MW-18	Appendix IV	Cadmium	mg/L	13	6	46%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.000196	0.000180	0.0000750	0.000440	0.000125	0.637	0.737	-0.586
1_28_1_5_109	MW-18	Appendix IV	Chromium, Total	mg/L	13	12	92%	2022-11-30 to 2024-10-16		Nonparametric	0.000196	0.000200	0.000180	0.000250	0.0000189	0.0966	1.96	5.43
1_28_1_5_110	MW-18	Appendix IV	Cobalt	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal	Gamma	0.00291	0.00230	0.00140	0.00600	0.00154	0.529	1.12	-0.0852
1_28_1_5_113	MW-18	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	3.94	3.80	2.70	5.10	0.683	0.173	0.0524	-0.565
1_28_1_5_115	MW-18	Appendix IV	Lead	mg/L	13	8	62%	2022-11-30 to 2024-10-16	Nonparametric	Nonparametric	0.000307	0.000220	0.000100	0.00110	0.000271	0.882	2.41	6.44

(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	Kurtosis
1_28_1_5_116	MW-18	Appendix IV	Lithium	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Lognormal; Normal	Normal	0.0350	0.0390	0.0200	0.0450	0.00834	0.238	-0.384	-1.40
1_28_1_5_117	MW-18	Appendix IV	Mercury	mg/L	13	13	100%	2022-11-30 to 2024-10-16		Nonparametric	0.000160	0.000160	0.000160	0.000160	0	0	NA	NA
1_28_1_5_118	MW-18	Appendix IV	Molybdenum	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.0150	0.0130	0.00900	0.0210	0.00420	0.280	0.334	-1.50
1_28_1_5_121	MW-18	Appendix IV	Radium 226 and 228	pCi/L	13	8	62%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Nonparametric	0.663	0.618	0.462	1.27	0.213	0.322	2.16	5.52
1_28_1_5_122	MW-18	Appendix IV	Selenium	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal	Gamma	0.000579	0.000340	0.000140	0.00200	0.000549	0.949	1.63	2.73
1_28_1_5_125	MW-18	Appendix IV	Thallium	mg/L	13	13	100%	2022-11-30 to 2024-10-16		Nonparametric	0.000145	0.0000750	0.0000750	0.000380	0.000134	0.920	1.45	0.0945
1_29_1_3_127	MW-19	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	22.9	25.0	6.00	37.0	9.84	0.429	-0.496	-0.477
1_29_1_4_105	MW-19	Appendix III	Boron	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	2.02	2.00	1.50	2.60	0.392	0.194	0.218	-1.20
1_29_1_4_107	MW-19	Appendix III	Calcium	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	472	480	360	550	51.8	0.110	-0.704	0.606
1_29_1_4_108	MW-19	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	45.7	40.0	23.0	75.0	14.5	0.318	0.791	0.145
1_29_1_4_112	MW-19	Appendix III	Fluoride	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	1.91	1.90	1.50	2.30	0.247	0.129	0.0142	-0.934
1_29_1_4_120	MW-19	Appendix III	pH (field)	su	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	6.85	6.88	6.39	7.07	0.167	0.0244	-1.74	4.54
1_29_1_4_124	MW-19	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	1009	1000	600	1300	205	0.203	-0.337	-0.214
1_29_1_4_126	MW-19	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	1892	1900	1600	2200	240	0.127	0.0638	-1.68
1_29_1_5_101	MW-19	Appendix IV	Antimony	mg/L	13	12	92%	2022-11-30 to 2024-10-16		Nonparametric	0.000209	0.000100	0.0000500	0.000720	0.000220	1.05	1.51	1.11
1_29_1_5_102	MW-19	Appendix IV	Arsenic	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.00531	0.00550	0.00260	0.00730	0.00162	0.306	-0.481	-1.27
1_29_1_5_103	MW-19	Appendix IV	Barium	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.0397	0.0390	0.0300	0.0500	0.00568	0.143	0.313	-0.421
1_29_1_5_104	MW-19	Appendix IV	Beryllium	mg/L	13	3	23%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.0000870	0.0000720	0.0000520	0.000260	0.0000545	0.626	3.06	10.1
1_29_1_5_106	MW-19	Appendix IV	Cadmium	mg/L	13	13	100%	2022-11-30 to 2024-10-16		Nonparametric	0.000125	0.0000750	0.0000320	0.000380	0.000120	0.961	1.70	1.82
1_29_1_5_109	MW-19	Appendix IV	Chromium, Total	mg/L	13	5	38%	2022-11-30 to 2024-10-16	Gamma; Lognormal	Gamma	0.000325	0.000270	0.000180	0.000880	0.000191	0.587	2.42	6.32
1_29_1_5_110	MW-19	Appendix IV	Cobalt	mg/L	13	1	8%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.000467	0.000460	0.000100	0.000960	0.000261	0.558	0.305	-0.574
1_29_1_5_113	MW-19	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	1.91	1.90	1.50	2.30	0.247	0.129	0.0142	-0.934
1_29_1_5_115	MW-19	Appendix IV	Lead	mg/L	13	13	100%	2022-11-30 to 2024-10-16		Nonparametric	0.000472	0.000500	0.000100	0.00110	0.000394	0.835	0.808	-0.790
1_29_1_5_116	MW-19	Appendix IV	Lithium	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.0918	0.0900	0.0730	0.110	0.0114	0.124	0.00510	-0.229
1_29_1_5_117	MW-19	Appendix IV	Mercury	mg/L	13	13	100%	2022-11-30 to 2024-10-16		Nonparametric	0.000160	0.000160	0.000160	0.000160	0	0	NA	NA
1_29_1_5_118	MW-19	Appendix IV	Molybdenum	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.00988	0.0100	0.00390	0.0130	0.00287	0.290	-0.946	0.381
1_29_1_5_121	MW-19	Appendix IV	Radium 226 and 228	pCi/L	13	5	38%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.785	0.626	0.514	1.17	0.258	0.328	0.364	-1.84
1_29_1_5_122	MW-19	Appendix IV	Selenium	mg/L	13	10	77%	2022-11-30 to 2024-10-16		Nonparametric	0.000225	0.000120	0.000100	0.00110	0.000269	1.20	3.34	11.6
1_29_1_5_125	MW-19	Appendix IV	Thallium	mg/L	13	13	100%	2022-11-30 to 2024-10-16		Nonparametric	0.000239	0.000380	0.0000750	0.000380	0.000158	0.662	-0.175	-2.36
1_30_1_3_127	MW-20	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	38.3	38.0	33.0	44.0	3.71	0.0967	0.0146	-1.11
1_30_1_4_105	MW-20	Appendix III	Boron	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.963	0.920	0.720	1.30	0.179	0.185	0.308	-1.04
1_30_1_4_107	MW-20	Appendix III	Calcium	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Nonparametric	Nonparametric	124	130	58.0	170	24.8	0.199	-1.25	4.80
1_30_1_4_108	MW-20	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	67.2	70.0	41.0	92.0	14.5	0.216	-0.178	0.280
1_30_1_4_112	MW-20	Appendix III	Fluoride	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Nonparametric	Nonparametric	0.257	0.240	0.120	0.550	0.0972	0.378	2.39	8.01
1_30_1_4_120	MW-20	Appendix III	pH (field)	su	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	7.34	7.34	7.14	7.50	0.111	0.0151	-0.327	-0.849
1_30_1_4_124	MW-20	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	59.6	62.0	18.0	120	34.6	0.580	0.350	-1.11
1_30_1_4_126	MW-20	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	675	660	560	840	77.5	0.115	0.687	0.577
1_30_1_5_101	MW-20	Appendix IV	Antimony	mg/L	13	4	31%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.000101	0.000100	0.0000540	0.000160	0.0000295	0.293	0.301	0.341
1_30_1_5_102	MW-20	Appendix IV	Arsenic	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.00146	0.00150	0.00110	0.00190	0.000263	0.180	0.236	-1.36
1_30_1_5_103	MW-20	Appendix IV	Barium	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal	Gamma	0.517	0.460	0.310	0.940	0.178	0.345	1.55	1.97
1_30_1_5_104	MW-20	Appendix IV	Beryllium	mg/L	13	12	92%	2022-11-30 to 2024-10-16		Nonparametric	0.0000525	0.0000520	0.0000520	0.0000590	0.00000194	0.0370	3.61	13.0
1_30_1_5_106	MW-20	Appendix IV	Cadmium	mg/L	13	13	100%	2022-11-30 to 2024-10-16		Nonparametric	0.0000585	0.0000750	0.0000320	0.0000750	0.0000218	0.372	-0.539	-2.06
1_30_1_5_109	MW-20	Appendix IV	Chromium, Total	mg/L	13	5	38%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.000218	0.000210	0.000180	0.000290	0.0000311	0.143	1.27	1.16

(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	Kurtosis
1_30_1_5_110	MW-20	Appendix IV	Cobalt	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.00123	0.00130	0.000890	0.00160	0.000232	0.188	0.196	-0.959
1_30_1_5_113	MW-20	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Nonparametric	Nonparametric	0.257	0.240	0.120	0.550	0.0972	0.378	2.39	8.01
1_30_1_5_115	MW-20	Appendix IV	Lead	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.00196	0.00180	0.00130	0.00280	0.000499	0.255	0.526	-0.874
1_30_1_5_116	MW-20	Appendix IV	Lithium	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.0617	0.0620	0.0290	0.0830	0.0141	0.228	-0.722	1.36
1_30_1_5_117	MW-20	Appendix IV	Mercury	mg/L	13	13	100%	2022-11-30 to 2024-10-16		Nonparametric	0.000160	0.000160	0.000160	0.000160	0	0	NA	NA
1_30_1_5_118	MW-20	Appendix IV	Molybdenum	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.00441	0.00450	0.00330	0.00580	0.000687	0.156	0.285	-0.0862
1_30_1_5_121	MW-20	Appendix IV	Radium 226 and 228	pCi/L	13	7	54%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Nonparametric	0.713	0.590	0.467	1.47	0.288	0.404	1.84	3.22
1_30_1_5_122	MW-20	Appendix IV	Selenium	mg/L	13	7	54%	2022-11-30 to 2024-10-16	Nonparametric	Nonparametric	0.000165	0.000130	0.000100	0.000260	0.0000615	0.373	0.212	-1.97
1_30_1_5_125	MW-20	Appendix IV	Thallium	mg/L	13	12	92%	2022-11-30 to 2024-10-16		Nonparametric	0.0000777	0.0000750	0.0000750	0.000110	0.00000971	0.125	3.61	13.0
1_40_1_3_127	MW-30	Additional Parameters	Total Suspended Solids	mg/L	11	1	9%	2022-11-30 to 2024-10-16	Gamma; Lognormal	Gamma	6.74	5.00	4.00	18.0	4.31	0.640	2.15	4.69
1_40_1_4_105	MW-30	Appendix III	Boron	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Nonparametric	Nonparametric	2.02	1.90	1.60	3.50	0.478	0.237	2.83	9.09
1_40_1_4_107	MW-30	Appendix III	Calcium	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Nonparametric	Nonparametric	487	460	390	960	145	0.299	3.32	11.6
1_40_1_4_108	MW-30	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal	Gamma	157	120	82.0	430	91.8	0.584	2.43	6.97
1_40_1_4_112	MW-30	Appendix III	Fluoride	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	1.12	1.10	0.910	1.40	0.122	0.109	0.497	1.37
1_40_1_4_120	MW-30	Appendix III	pH (field)	su	13	0	0%	2022-11-30 to 2024-10-16	Nonparametric	Nonparametric	7.07	7.15	6.48	7.25	0.197	0.0278	-2.50	7.36
1_40_1_4_124	MW-30	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Normal	Normal	845	860	440	1000	162	0.191	-1.58	2.40
1_40_1_4_126	MW-30	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	2223	2200	1800	2800	231	0.104	0.860	3.12
1_40_1_5_101	MW-30	Appendix IV	Antimony	mg/L	13	12	92%	2022-11-30 to 2024-10-16		Nonparametric	0.000215	0.000100	0.0000500	0.000500	0.000189	0.876	0.796	-1.32
1_40_1_5_102	MW-30	Appendix IV	Arsenic	mg/L	13	2	15%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.000446	0.000440	0.000100	0.000970	0.000243	0.545	0.506	0.431
1_40_1_5_103	MW-30	Appendix IV	Barium	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.0653	0.0580	0.0410	0.100	0.0206	0.316	0.691	-0.872
1_40_1_5_104	MW-30	Appendix IV	Beryllium	mg/L	13	11	85%	2022-11-30 to 2024-10-16		Nonparametric	0.0000725	0.0000520	0.0000520	0.000260	0.0000586	0.807	3.21	10.6
1_40_1_5_106	MW-30	Appendix IV	Cadmium	mg/L	13	13	100%	2022-11-30 to 2024-10-16		Nonparametric	0.000125	0.0000750	0.0000320	0.000380	0.000120	0.961	1.70	1.82
1_40_1_5_109	MW-30	Appendix IV	Chromium, Total	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.00948	0.0100	0.00490	0.0140	0.00305	0.322	-0.173	-1.27
1_40_1_5_110	MW-30	Appendix IV	Cobalt	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal	Gamma	0.00134	0.00110	0.000470	0.00440	0.00110	0.815	2.21	5.0
1_40_1_5_113	MW-30	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	1.12	1.10	0.910	1.40	0.122	0.109	0.497	1.37
1_40_1_5_115	MW-30	Appendix IV	Lead	mg/L	13	12	92%	2022-11-30 to 2024-10-16		Nonparametric	0.000626	0.000500	0.000100	0.00170	0.000482	0.770	0.986	0.384
1_40_1_5_116	MW-30	Appendix IV	Lithium	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Nonparametric	Nonparametric	0.133	0.120	0.100	0.270	0.0433	0.325	3.03	9.97
1_40_1_5_117	MW-30	Appendix IV	Mercury	mg/L	13	12	92%	2022-11-30 to 2024-10-16		Nonparametric	0.000178	0.000160	0.000160	0.000390	0.0000638	0.359	3.61	13.0
1_40_1_5_118	MW-30	Appendix IV	Molybdenum	mg/L	13	3	23%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.00142	0.000890	0.000320	0.00360	0.00112	0.791	1.14	-0.220
1_40_1_5_121	MW-30	Appendix IV	Radium 226 and 228	pCi/L	13	7	54%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Nonparametric	0.700	0.624	0.445	1.12	0.196	0.280	0.821	-0.0317
1_40_1_5_122	MW-30	Appendix IV	Selenium	mg/L	13	6	46%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.000257	0.000220	0.000100	0.00110	0.000266	1.03	3.07	10.1
1_40_1_5_125	MW-30	Appendix IV	Thallium	mg/L	13	13	100%	2022-11-30 to 2024-10-16		Nonparametric	0.000286	0.000380	0.0000750	0.000380	0.000147	0.512	-0.946	-1.34
1_41_1_3_127	MW-31	Additional Parameters	Total Suspended Solids	mg/L	8	5	62%	2022-12-01 to 2024-10-15		Nonparametric	3.36	4.00	1.00	4.00	1.18	0.351	-1.65	1.36
1_41_1_4_105	MW-31	Appendix III	Boron	mg/L	13	0	0%	2022-12-01 to 2024-10-15	Gamma; Lognormal; Normal	Normal	4.64	4.50	3.60	5.80	0.661	0.143	0.165	-0.756
1_41_1_4_107	MW-31	Appendix III	Calcium	mg/L	13	0	0%	2022-12-01 to 2024-10-15	Gamma; Lognormal; Normal	Normal	170	170	130	200	20.0	0.118	-0.222	0.106
1_41_1_4_108	MW-31	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	2022-12-01 to 2024-10-15	Gamma; Lognormal; Normal	Normal	102	100	87.0	120	9.19	0.0899	0.268	-0.366
1_41_1_4_112	MW-31	Appendix III	Fluoride	mg/L	13	0	0%	2022-12-01 to 2024-10-15	Nonparametric	Nonparametric	4.76	4.70	4.50	5.20	0.236	0.0497	0.858	-0.616
1_41_1_4_120	MW-31	Appendix III	pH (field)	su	13	0	0%	2022-12-01 to 2024-10-15	Gamma; Lognormal; Normal	Normal	7.82	7.82	7.67	8.01	0.101	0.0129	0.589	0.167
1_41_1_4_124	MW-31	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	2022-12-01 to 2024-10-15	Gamma; Lognormal; Normal	Normal	159	160	45.0	250	67.2	0.423	-0.0404	-0.881
1_41_1_4_126	MW-31	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2022-12-01 to 2024-10-15	Gamma; Lognormal; Normal	Normal	806	810	730	940	59.8	0.0742	0.773	0.588
1_41_1_5_101	MW-31	Appendix IV	Antimony	mg/L	13	6	46%	2022-12-01 to 2024-10-15	Lognormal	Lognormal	0.000141	0.000100	0.0000500	0.000390	0.000110	0.779	2.0	2.79
1_41_1_5_102	MW-31	Appendix IV	Arsenic	mg/L	13	0	0%	2022-12-01 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.00127	0.00120	0.000950	0.00180	0.000260	0.204	0.765	-0.227
1_41_1_5_103	MW-31	Appendix IV	Barium	mg/L	13	0	0%	2022-12-01 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.171	0.160	0.120	0.290	0.0491	0.287	1.33	1.61

(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	Kurtosis
1_41_1_5_104	MW-31	Appendix IV	Beryllium	mg/L	13	11	85%	2022-12-01 to 2024-10-15		Nonparametric	0.0000555	0.0000520	0.0000520	0.0000960	0.0000122	0.219	3.59	12.9
1_41_1_5_106	MW-31	Appendix IV	Cadmium	mg/L	13	12	92%	2022-12-01 to 2024-10-15		Nonparametric	0.0000592	0.0000750	0.0000320	0.0000840	0.0000225	0.380	-0.494	-2.01
1_41_1_5_109	MW-31	Appendix IV	Chromium, Total	mg/L	13	0	0%	2022-12-01 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.00238	0.00230	0.00170	0.00410	0.000639	0.268	1.72	3.74
1_41_1_5_110	MW-31	Appendix IV	Cobalt	mg/L	13	1	8%	2022-12-01 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.000183	0.000180	0.000100	0.000360	0.0000713	0.390	1.38	2.32
1_41_1_5_113	MW-31	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	2022-12-01 to 2024-10-15	Nonparametric	Nonparametric	4.76	4.70	4.50	5.20	0.236	0.0497	0.858	-0.616
1_41_1_5_115	MW-31	Appendix IV	Lead	mg/L	13	11	85%	2022-12-01 to 2024-10-15		Nonparametric	0.000174	0.000220	0.000100	0.000310	0.0000751	0.432	0.242	-1.42
1_41_1_5_116	MW-31	Appendix IV	Lithium	mg/L	13	0	0%	2022-12-01 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.0505	0.0520	0.0390	0.0630	0.00657	0.130	-0.341	0.619
1_41_1_5_117	MW-31	Appendix IV	Mercury	mg/L	13	13	100%	2022-12-01 to 2024-10-15		Nonparametric	0.000160	0.000160	0.000160	0.000160	0	0	NA	NA
1_41_1_5_118	MW-31	Appendix IV	Molybdenum	mg/L	13	0	0%	2022-12-01 to 2024-10-15	Lognormal; Normal	Normal	0.00122	0.00110	0.000520	0.00210	0.000392	0.322	0.770	1.78
1_41_1_5_121	MW-31	Appendix IV	Radium 226 and 228	pCi/L	13	4	31%	2022-12-01 to 2024-10-15	Gamma; Lognormal	Gamma	0.720	0.673	0.497	1.23	0.224	0.311	1.55	1.82
1_41_1_5_122	MW-31	Appendix IV	Selenium	mg/L	13	5	38%	2022-12-01 to 2024-10-15	Nonparametric	Nonparametric	0.000212	0.000160	0.000100	0.000740	0.000166	0.783	3.11	10.5
1_41_1_5_125	MW-31	Appendix IV	Thallium	mg/L	13	12	92%	2022-12-01 to 2024-10-15		Nonparametric	0.0000760	0.0000750	0.0000750	0.0000880	0.00000361	0.0474	3.61	13.0
1_42_1_3_127	MW-32	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	31.2	32.0	11.0	43.0	9.73	0.312	-0.674	-0.260
1_42_1_4_105	MW-32	Appendix III	Boron	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal	Gamma	3.59	3.10	2.60	5.60	0.882	0.245	1.27	1.07
1_42_1_4_107	MW-32	Appendix III	Calcium	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	175	180	130	220	26.3	0.151	-0.208	-0.757
1_42_1_4_108	MW-32	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	45.0	45.0	38.0	50.0	4.36	0.0969	-0.193	-1.39
1_42_1_4_112	MW-32	Appendix III	Fluoride	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Nonparametric	Nonparametric	1.55	1.50	1.40	1.90	0.151	0.0969	1.30	1.36
1_42_1_4_120	MW-32	Appendix III	pH (field)	su	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	7.60	7.59	7.50	7.75	0.0752	0.00989	0.380	-0.637
1_42_1_4_124	MW-32	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Gamma	82.6	83.0	5.90	190	63	0.762	0.296	-1.21
1_42_1_4_126	MW-32	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	689	700	550	800	93.9	0.136	-0.293	-1.61
1_42_1_5_101	MW-32	Appendix IV	Antimony	mg/L	13	9	69%	2022-11-30 to 2024-10-16		Nonparametric	0.000137	0.000100	0.0000500	0.000700	0.000171	1.25	3.47	12.3
1_42_1_5_102	MW-32	Appendix IV	Arsenic	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Nonparametric	Nonparametric	0.000685	0.000580	0.000440	0.00240	0.000520	0.758	3.49	12.4
1_42_1_5_103	MW-32	Appendix IV	Barium	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.540	0.570	0.0590	1.30	0.301	0.558	1.17	2.81
1_42_1_5_104	MW-32	Appendix IV	Beryllium	mg/L	13	12	92%	2022-11-30 to 2024-10-16		Nonparametric	0.0000534	0.0000520	0.0000520	0.0000700	0.00000499	0.0935	3.61	13.0
1_42_1_5_106	MW-32	Appendix IV	Cadmium	mg/L	13	12	92%	2022-11-30 to 2024-10-16		Nonparametric	0.0000673	0.0000750	0.0000320	0.000190	0.0000425	0.632	2.09	5.96
1_42_1_5_109	MW-32	Appendix IV	Chromium, Total	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Nonparametric	Nonparametric	0.000629	0.000390	0.000310	0.00300	0.000720	1.15	3.46	12.3
1_42_1_5_110	MW-32	Appendix IV	Cobalt	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal	Gamma	0.000536	0.000390	0.000210	0.00190	0.000429	0.800	3.08	10.3
1_42_1_5_113	MW-32	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Nonparametric	Nonparametric	1.55	1.50	1.40	1.90	0.151	0.0969	1.30	1.36
1_42_1_5_115	MW-32	Appendix IV	Lead	mg/L	13	9	69%	2022-11-30 to 2024-10-16		Nonparametric	0.000197	0.000220	0.000100	0.000420	0.000105	0.534	1.10	0.584
1_42_1_5_116	MW-32	Appendix IV	Lithium	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.131	0.130	0.0940	0.200	0.0338	0.258	0.991	0.316
1_42_1_5_117	MW-32	Appendix IV	Mercury	mg/L	13	12	92%	2022-11-30 to 2024-10-16		Nonparametric	0.000294	0.000160	0.000160	0.00190	0.000483	1.64	3.61	13.0
1_42_1_5_118	MW-32	Appendix IV	Molybdenum	mg/L	13	0	0%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.00439	0.00450	0.00320	0.00730	0.00105	0.239	1.78	4.69
1_42_1_5_121	MW-32	Appendix IV	Radium 226 and 228	pCi/L	13	8	62%	2022-11-30 to 2024-10-16	Gamma; Lognormal; Normal	Nonparametric	0.661	0.603	0.497	0.985	0.151	0.229	1.16	0.215
1_42_1_5_122	MW-32	Appendix IV	Selenium	mg/L	13	10	77%	2022-11-30 to 2024-10-16		Nonparametric	0.000221	0.000140	0.000100	0.00100	0.000241	1.09	3.27	11.3
1_42_1_5_125	MW-32	Appendix IV	Thallium	mg/L	13	13	100%	2022-11-30 to 2024-10-16		Nonparametric	0.0000750	0.0000750	0.0000750	0.0000750	0	0	NA	NA
2_11_2_3_127	MW-01R	Additional Parameters	Total Suspended Solids	mg/L	12	4	33%	2022-11-29 to 2024-10-16		Nonparametric	3.33	3.50	2.00	5.00	1.15	0.346	0.0630	-1.47
2_11_2_4_105	MW-01R	Appendix III	Boron	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	106	110	38.0	160	38.9	0.368	-0.153	-1.18
2_11_2_4_107	MW-01R	Appendix III	Calcium	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	241	240	130	400	81.9	0.340	0.505	-0.562
2_11_2_4_108	MW-01R	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Normal	Normal	135	150	49.0	210	50.5	0.373	-0.707	-0.446
2_11_2_4_112	MW-01R	Appendix III	Fluoride	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Normal	Normal	11.5	14.0	4.80	16.0	3.68	0.319	-0.507	-1.19
2_11_2_4_120	MW-01R	Appendix III	pH (field)	su	13	0	0%	2022-11-29 to 2024-10-16	Nonparametric	Nonparametric	7.58	7.73	6.02	7.81	0.476	0.0628	-3.43	12.0
2_11_2_4_124	MW-01R	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Gamma	451	400	8.80	980	320	0.709	0.179	-1.34
2_11_2_4_126	MW-01R	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	2346	2400	2100	2600	133	0.0567	-0.0282	0.192

(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	Kurtosis
2_11_2_5_101	MW-01R	Appendix IV	Antimony	mg/L	13	3	23%	2022-11-29 to 2024-10-16	Lognormal	Lognormal	0.000390	0.000250	0.000170	0.00120	0.000291	0.746	2.10	4.73
2_11_2_5_102	MW-01R	Appendix IV	Arsenic	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal	Gamma	0.00160	0.00140	0.000730	0.00410	0.000835	0.522	2.43	7.44
2_11_2_5_103	MW-01R	Appendix IV	Barium	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.330	0.300	0.200	0.560	0.116	0.353	1.02	0.215
2_11_2_5_104	MW-01R	Appendix IV	Beryllium	mg/L	13	2	15%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.000200	0.000200	0.0000520	0.000360	0.000102	0.507	0.173	-0.805
2_11_2_5_106	MW-01R	Appendix IV	Cadmium	mg/L	13	10	77%	2022-11-29 to 2024-10-16		Nonparametric	0.000154	0.0000750	0.0000320	0.000380	0.000127	0.825	1.18	-0.246
2_11_2_5_109	MW-01R	Appendix IV	Chromium, Total	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Lognormal	Lognormal	0.00377	0.00210	0.00130	0.0220	0.00556	1.48	3.42	12.0
2_11_2_5_110	MW-01R	Appendix IV	Cobalt	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Lognormal	Lognormal	0.00169	0.00110	0.000640	0.00450	0.00122	0.720	1.71	1.93
2_11_2_5_113	MW-01R	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Normal	Normal	11.5	14.0	4.80	16.0	3.68	0.319	-0.507	-1.19
2_11_2_5_115	MW-01R	Appendix IV	Lead	mg/L	13	2	15%	2022-11-29 to 2024-10-16	Gamma; Lognormal	Gamma	0.00124	0.000820	0.000350	0.00530	0.00128	1.03	3.09	10.3
2_11_2_5_116	MW-01R	Appendix IV	Lithium	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	2.29	2.30	0.770	3.40	0.827	0.361	-0.260	-0.996
2_11_2_5_117	MW-01R	Appendix IV	Mercury	mg/L	13	13	100%	2022-11-29 to 2024-10-16		Nonparametric	0.000160	0.000160	0.000160	0.000160	0	0	NA	NA
2_11_2_5_118	MW-01R	Appendix IV	Molybdenum	mg/L	13	1	8%	2022-11-29 to 2024-10-16	Gamma; Lognormal	Gamma	0.00140	0.000770	0.000330	0.00560	0.00149	1.07	2.23	5.25
2_11_2_5_121	MW-01R	Appendix IV	Radium 226 and 228	pCi/L	13	7	54%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Nonparametric	0.918	0.828	0.601	1.28	0.254	0.277	0.253	-1.75
2_11_2_5_122	MW-01R	Appendix IV	Selenium	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal	Gamma	0.000736	0.000660	0.000300	0.00180	0.000358	0.486	2.37	7.21
2_11_2_5_125	MW-01R	Appendix IV	Thallium	mg/L	13	13	100%	2022-11-29 to 2024-10-16		Nonparametric	0.000263	0.000380	0.0000750	0.000380	0.000154	0.588	-0.539	-2.06
2_12_2_3_127	MW-02	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Normal	Normal	48.4	56.0	6.00	100	29.8	0.615	0.0379	-0.688
2_12_2_4_105	MW-02	Appendix III	Boron	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	99.2	100	73.0	110	11.5	0.116	-0.985	0.652
2_12_2_4_107	MW-02	Appendix III	Calcium	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	203	210	180	240	17.0	0.0838	0.510	0.355
2_12_2_4_108	MW-02	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Nonparametric	Nonparametric	137	140	67.0	160	22.4	0.163	-2.90	9.65
2_12_2_4_112	MW-02	Appendix III	Fluoride	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Nonparametric	Nonparametric	9.30	9.70	4.50	11.0	1.54	0.166	-2.79	9.15
2_12_2_4_120	MW-02	Appendix III	pH (field)	su	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	7.22	7.21	7.06	7.45	0.116	0.0160	0.554	-0.497
2_12_2_4_124	MW-02	Appendix III	Sulfate (as SO4)	mg/L	13	8	62%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Nonparametric	1.31	0.860	0.410	5.50	1.43	1.09	2.36	6.32
2_12_2_4_126	MW-02	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	1854	1800	1600	2100	161	0.0870	0.200	-1.05
2_12_2_5_101	MW-02	Appendix IV	Antimony	mg/L	13	3	23%	2022-11-28 to 2024-10-15	Gamma; Lognormal	Gamma	0.000252	0.000190	0.000100	0.000630	0.000150	0.598	1.81	2.87
2_12_2_5_102	MW-02	Appendix IV	Arsenic	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Nonparametric	Nonparametric	0.00760	0.00780	0.000440	0.0120	0.00260	0.342	-1.55	5.26
2_12_2_5_103	MW-02	Appendix IV	Barium	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.472	0.470	0.320	0.730	0.106	0.224	0.878	2.14
2_12_2_5_104	MW-02	Appendix IV	Beryllium	mg/L	13	1	8%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.000269	0.000280	0.0000520	0.000520	0.000136	0.504	0.278	-0.592
2_12_2_5_106	MW-02	Appendix IV	Cadmium	mg/L	13	10	77%	2022-11-28 to 2024-10-15		Nonparametric	0.000135	0.0000750	0.0000320	0.000490	0.000140	1.04	1.97	3.10
2_12_2_5_109	MW-02	Appendix IV	Chromium, Total	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Normal	Normal	0.0386	0.0390	0.000380	0.0680	0.0184	0.478	-0.452	0.0770
2_12_2_5_110	MW-02	Appendix IV	Cobalt	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Normal	Normal	0.00556	0.00610	0.000240	0.00890	0.00231	0.415	-0.908	1.07
2_12_2_5_113	MW-02	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Nonparametric	Nonparametric	9.30	9.70	4.50	11.0	1.54	0.166	-2.79	9.15
2_12_2_5_115	MW-02	Appendix IV	Lead	mg/L	13	1	8%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.00251	0.00230	0.000100	0.00560	0.00142	0.565	0.619	0.898
2_12_2_5_116	MW-02	Appendix IV	Lithium	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	1.36	1.40	0.870	1.70	0.216	0.159	-0.662	0.977
2_12_2_5_117	MW-02	Appendix IV	Mercury	mg/L	13	13	100%	2022-11-28 to 2024-10-15		Nonparametric	0.000160	0.000160	0.000160	0.000160	0	0	NA	NA
2_12_2_5_118	MW-02	Appendix IV	Molybdenum	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal	Gamma	0.00642	0.00520	0.00380	0.0110	0.00236	0.369	1.26	0.450
2_12_2_5_121	MW-02	Appendix IV	Radium 226 and 228	pCi/L	13	4	31%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	1.64	1.56	0.686	3.35	0.834	0.508	0.793	-0.244
2_12_2_5_122	MW-02	Appendix IV	Selenium	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.00115	0.00120	0.000500	0.00180	0.000358	0.310	-0.384	0.280
2_12_2_5_125	MW-02	Appendix IV	Thallium	mg/L	13	12	92%	2022-11-28 to 2024-10-15		Nonparametric	0.000234	0.0000750	0.0000750	0.000620	0.000190	0.811	0.642	-0.860
2_13_2_3_127	MW-03	Additional Parameters	Total Suspended Solids	mg/L	10	5	50%	2022-11-28 to 2024-10-15	Gamma; Lognormal	Nonparametric	4.70	4.00	1.00	15.0	3.74	0.796	2.74	8.39
2_13_2_4_105	MW-03	Appendix III	Boron	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	4.12	4.20	3.30	4.50	0.319	0.0774	-1.45	2.73
2_13_2_4_107	MW-03	Appendix III	Calcium	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	368	360	290	430	38.0	0.103	-0.354	0.0554
2_13_2_4_108	MW-03	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	169	160	99.0	300	54.0	0.319	1.23	1.84
2_13_2_4_112	MW-03	Appendix III	Fluoride	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Nonparametric	Nonparametric	0.672	0.610	0.520	1.60	0.282	0.419	3.49	12.4

(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	Kurtosis
2_13_2_4_120	MW-03	Appendix III	pH (field)	su	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	7.36	7.32	7.20	7.59	0.107	0.0145	0.563	0.0647
2_13_2_4_124	MW-03	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	404	380	42.0	760	201	0.498	0.0743	-0.180
2_13_2_4_126	MW-03	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Nonparametric	Nonparametric	2115	2200	1700	2300	223	0.105	-0.760	-1.07
2_13_2_5_101	MW-03	Appendix IV	Antimony	mg/L	13	8	62%	2022-11-28 to 2024-10-15	Gamma; Lognormal	Nonparametric	0.000235	0.000110	0.0000870	0.000500	0.000181	0.772	0.795	-1.43
2_13_2_5_102	MW-03	Appendix IV	Arsenic	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.000924	0.000910	0.000490	0.00140	0.000262	0.284	-0.115	-0.175
2_13_2_5_103	MW-03	Appendix IV	Barium	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.355	0.380	0.130	0.500	0.0954	0.268	-0.971	1.45
2_13_2_5_104	MW-03	Appendix IV	Beryllium	mg/L	13	8	62%	2022-11-28 to 2024-10-15	Lognormal	Nonparametric	0.0000860	0.0000520	0.0000520	0.000260	0.0000672	0.782	1.94	2.98
2_13_2_5_106	MW-03	Appendix IV	Cadmium	mg/L	13	12	92%	2022-11-28 to 2024-10-15		Nonparametric	0.000128	0.0000750	0.0000320	0.000380	0.000119	0.934	1.67	1.76
2_13_2_5_109	MW-03	Appendix IV	Chromium, Total	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.00469	0.00460	0.00300	0.00730	0.00128	0.273	0.538	-0.328
2_13_2_5_110	MW-03	Appendix IV	Cobalt	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.000808	0.000810	0.000370	0.00130	0.000341	0.422	0.235	-1.54
2_13_2_5_113	MW-03	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Nonparametric	Nonparametric	0.672	0.610	0.520	1.60	0.282	0.419	3.49	12.4
2_13_2_5_115	MW-03	Appendix IV	Lead	mg/L	13	12	92%	2022-11-28 to 2024-10-15		Nonparametric	0.000543	0.000500	0.000100	0.00110	0.000348	0.640	0.772	-0.534
2_13_2_5_116	MW-03	Appendix IV	Lithium	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.0399	0.0370	0.0290	0.0650	0.00959	0.240	1.59	3.11
2_13_2_5_117	MW-03	Appendix IV	Mercury	mg/L	13	12	92%	2022-11-28 to 2024-10-15		Nonparametric	0.000166	0.000160	0.000160	0.000240	0.0000222	0.134	3.61	13.0
2_13_2_5_118	MW-03	Appendix IV	Molybdenum	mg/L	13	9	69%	2022-11-28 to 2024-10-15		Nonparametric	0.000904	0.000620	0.000250	0.00310	0.00101	1.12	1.86	2.33
2_13_2_5_121	MW-03	Appendix IV	Radium 226 and 228	pCi/L	13	1	8%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	1.12	0.996	0.609	1.92	0.396	0.353	0.831	-0.0135
2_13_2_5_122	MW-03	Appendix IV	Selenium	mg/L	13	3	23%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.000448	0.000420	0.000170	0.00110	0.000236	0.527	1.77	4.67
2_13_2_5_125	MW-03	Appendix IV	Thallium	mg/L	13	12	92%	2022-11-28 to 2024-10-15		Nonparametric	0.000294	0.000380	0.0000750	0.000380	0.000136	0.464	-1.06	-0.910
2_14_2_3_127	MW-04	Additional Parameters	Total Suspended Solids	mg/L	12	1	8%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	8.84	9.05	4.00	15.0	3.35	0.379	0.00866	-0.405
2_14_2_4_105	MW-04	Appendix III	Boron	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	4.12	4.10	3.50	4.70	0.348	0.0847	0.281	-0.119
2_14_2_4_107	MW-04	Appendix III	Calcium	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	365	360	310	430	34.5	0.0946	0.391	-0.524
2_14_2_4_108	MW-04	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	176	180	96.0	300	55.0	0.313	0.675	0.750
2_14_2_4_112	MW-04	Appendix III	Fluoride	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma	Gamma	1.34	1.30	0.760	1.90	0.248	0.185	-0.0656	3.88
2_14_2_4_120	MW-04	Appendix III	pH (field)	su	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	7.37	7.35	7.23	7.66	0.115	0.0156	1.22	2.44
2_14_2_4_124	MW-04	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Nonparametric	Nonparametric	586	610	1.80	810	205	0.351	-2.04	5.58
2_14_2_4_126	MW-04	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	1900	1900	1700	2100	163	0.0859	0.136	-1.68
2_14_2_5_101	MW-04	Appendix IV	Antimony	mg/L	13	10	77%	2022-11-28 to 2024-10-15		Nonparametric	0.000219	0.000100	0.0000500	0.000500	0.000187	0.853	0.791	-1.34
2_14_2_5_102	MW-04	Appendix IV	Arsenic	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.000905	0.000880	0.000470	0.00120	0.000252	0.279	-0.272	-0.992
2_14_2_5_103	MW-04	Appendix IV	Barium	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Nonparametric	Nonparametric	0.141	0.120	0.0840	0.460	0.0975	0.693	3.40	11.9
2_14_2_5_104	MW-04	Appendix IV	Beryllium	mg/L	13	11	85%	2022-11-28 to 2024-10-15		Nonparametric	0.0000532	0.0000520	0.0000520	0.0000660	0.00000388	0.0728	3.49	12.3
2_14_2_5_106	MW-04	Appendix IV	Cadmium	mg/L	13	13	100%	2022-11-28 to 2024-10-15		Nonparametric	0.000125	0.0000750	0.0000320	0.000380	0.000120	0.961	1.70	1.82
2_14_2_5_109	MW-04	Appendix IV	Chromium, Total	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.00402	0.00440	0.00260	0.00600	0.00114	0.284	-0.0202	-1.26
2_14_2_5_110	MW-04	Appendix IV	Cobalt	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.000470	0.000360	0.000180	0.000930	0.000222	0.472	0.724	-0.297
2_14_2_5_113	MW-04	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma	Gamma	1.34	1.30	0.760	1.90	0.248	0.185	-0.0656	3.88
2_14_2_5_115	MW-04	Appendix IV	Lead	mg/L	13	13	100%	2022-11-28 to 2024-10-15		Nonparametric	0.000435	0.000500	0.000100	0.00110	0.000339	0.779	1.12	0.599
2_14_2_5_116	MW-04	Appendix IV	Lithium	mg/L	13	0	0%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.0638	0.0660	0.0470	0.0740	0.00956	0.150	-0.617	-0.685
2_14_2_5_117	MW-04	Appendix IV	Mercury	mg/L	13	13	100%	2022-11-28 to 2024-10-15		Nonparametric	0.000160	0.000160	0.000160	0.000160	0	0	NA	NA
2_14_2_5_118	MW-04	Appendix IV	Molybdenum	mg/L	13	2	15%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.00111	0.000970	0.000370	0.00310	0.000727	0.656	1.75	4.28
2_14_2_5_121	MW-04	Appendix IV	Radium 226 and 228	pCi/L	13	3	23%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	1.05	1.08	0.634	1.55	0.337	0.322	0.153	-1.67
2_14_2_5_122	MW-04	Appendix IV	Selenium	mg/L	13	5	38%	2022-11-28 to 2024-10-15	Gamma; Lognormal; Normal	Normal	0.000245	0.000220	0.000100	0.000430	0.0000901	0.367	0.990	1.08
2_14_2_5_125	MW-04	Appendix IV	Thallium	mg/L	13	13	100%	2022-11-28 to 2024-10-15		Nonparametric	0.000239	0.000380	0.0000750	0.000380	0.000158	0.662	-0.175	-2.36
2_19_2_3_127	MW-09	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	2022-11-28 to 2024-10-17	Gamma; Lognormal; Normal	Normal	49.2	50.0	39.0	57.0	4.75	0.0964	-0.347	0.776
2_19_2_4_105	MW-09	Appendix III	Boron	mg/L	13	0	0%	2022-11-28 to 2024-10-17	Gamma; Lognormal; Normal	Normal	5.82	5.90	4.90	6.90	0.534	0.0918	0.113	0.347

(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	Kurtosis
2_19_2_4_107	MW-09	Appendix III	Calcium	mg/L	13	0	0%	2022-11-28 to 2024-10-17	Gamma; Lognormal; Normal	Normal	364	390	230	500	77.6	0.213	-0.0825	-0.768
2_19_2_4_108	MW-09	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	2022-11-28 to 2024-10-17	Gamma; Lognormal; Normal	Normal	16.7	16.0	11.0	25.0	5.36	0.321	0.665	-0.944
2_19_2_4_112	MW-09	Appendix III	Fluoride	mg/L	13	0	0%	2022-11-28 to 2024-10-17	Gamma; Lognormal; Normal	Normal	2.57	2.60	2.10	2.90	0.269	0.105	-0.281	-0.968
2_19_2_4_120	MW-09	Appendix III	pH (field)	su	13	0	0%	2022-11-28 to 2024-10-17	Nonparametric	Nonparametric	7.24	7.22	7.12	7.52	0.109	0.0150	1.69	3.01
2_19_2_4_124	MW-09	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	2022-11-28 to 2024-10-17	Gamma; Normal	Normal	423	480	83.0	720	220	0.519	-0.330	-1.46
2_19_2_4_126	MW-09	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2022-11-28 to 2024-10-17	Gamma; Lognormal; Normal	Normal	1362	1400	740	1700	304	0.223	-0.770	-0.367
2_19_2_5_101	MW-09	Appendix IV	Antimony	mg/L	13	8	62%	2022-11-28 to 2024-10-17	Gamma; Lognormal; Normal	Nonparametric	0.000187	0.000100	0.0000500	0.000500	0.000162	0.864	1.36	0.322
2_19_2_5_102	MW-09	Appendix IV	Arsenic	mg/L	13	0	0%	2022-11-28 to 2024-10-17	Nonparametric	Nonparametric	0.00222	0.00230	0.00130	0.00300	0.000528	0.237	-0.872	-0.0896
2_19_2_5_103	MW-09	Appendix IV	Barium	mg/L	13	0	0%	2022-11-28 to 2024-10-17	Lognormal	Lognormal	0.438	0.230	0.170	2.40	0.601	1.37	3.38	11.8
2_19_2_5_104	MW-09	Appendix IV	Beryllium	mg/L	13	11	85%	2022-11-28 to 2024-10-17		Nonparametric	0.0000528	0.0000520	0.0000520	0.0000580	0.00000208	0.0393	2.22	3.57
2_19_2_5_106	MW-09	Appendix IV	Cadmium	mg/L	13	13	100%	2022-11-28 to 2024-10-17		Nonparametric	0.000115	0.0000750	0.0000320	0.000380	0.000122	1.06	1.86	2.25
2_19_2_5_109	MW-09	Appendix IV	Chromium, Total	mg/L	13	0	0%	2022-11-28 to 2024-10-17	Gamma; Lognormal; Normal	Normal	0.00242	0.00260	0.00160	0.00320	0.000548	0.226	-0.0937	-1.53
2_19_2_5_110	MW-09	Appendix IV	Cobalt	mg/L	13	0	0%	2022-11-28 to 2024-10-17	Gamma; Lognormal; Normal	Normal	0.000521	0.000530	0.000230	0.000990	0.000235	0.452	0.431	-0.485
2_19_2_5_113	MW-09	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	2022-11-28 to 2024-10-17	Gamma; Lognormal; Normal	Normal	2.57	2.60	2.10	2.90	0.269	0.105	-0.281	-0.968
2_19_2_5_115	MW-09	Appendix IV	Lead	mg/L	13	13	100%	2022-11-28 to 2024-10-17		Nonparametric	0.000374	0.000220	0.000100	0.00110	0.000359	0.961	1.40	0.931
2_19_2_5_116	MW-09	Appendix IV	Lithium	mg/L	13	0	0%	2022-11-28 to 2024-10-17	Gamma; Lognormal; Normal	Normal	0.300	0.290	0.260	0.340	0.0283	0.0943	0.104	-1.19
2_19_2_5_117	MW-09	Appendix IV	Mercury	mg/L	13	11	85%	2022-11-28 to 2024-10-17		Nonparametric	0.000482	0.000160	0.000160	0.00240	0.000787	1.63	2.21	3.44
2_19_2_5_118	MW-09	Appendix IV	Molybdenum	mg/L	13	0	0%	2022-11-28 to 2024-10-17	Gamma; Lognormal; Normal	Normal	0.0213	0.0210	0.00970	0.0330	0.00676	0.317	0.0461	-0.437
2_19_2_5_121	MW-09	Appendix IV	Radium 226 and 228	pCi/L	13	12	92%	2022-11-28 to 2024-10-17		Nonparametric	0.777	0.771	0.642	0.980	0.0973	0.125	0.684	0.102
2_19_2_5_122	MW-09	Appendix IV	Selenium	mg/L	13	2	15%	2022-11-28 to 2024-10-17	Gamma; Normal	Normal	0.000258	0.000260	0.000120	0.000400	0.0000648	0.251	0.160	2.35
2_19_2_5_125	MW-09	Appendix IV	Thallium	mg/L	13	13	100%	2022-11-28 to 2024-10-17		Nonparametric	0.000192	0.0000750	0.0000750	0.000380	0.000154	0.803	0.539	-2.06
2_21_2_3_127	MW-11	Additional Parameters	Total Suspended Solids	mg/L	12	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	12.9	9.50	4.00	35.0	10.5	0.812	1.10	0.168
2_21_2_4_105	MW-11	Appendix III	Boron	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	6.00	4.80	1.50	13.0	3.70	0.617	0.673	-0.497
2_21_2_4_107	MW-11	Appendix III	Calcium	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	262	270	130	380	75.2	0.287	-0.325	-0.604
2_21_2_4_108	MW-11	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	68.4	72.0	38.0	95.0	16.0	0.234	-0.146	-0.355
2_21_2_4_112	MW-11	Appendix III	Fluoride	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.631	0.610	0.210	1.40	0.379	0.600	0.755	-0.187
2_21_2_4_120	MW-11	Appendix III	pH (field)	su	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	7.32	7.33	7.13	7.47	0.0920	0.0126	-0.417	0.382
2_21_2_4_124	MW-11	Appendix III	Sulfate (as SO4)	mg/L	13	4	31%	2022-11-29 to 2024-10-16	Gamma; Lognormal	Gamma	44.5	13.0	0.410	210	71.2	1.60	1.79	2.04
2_21_2_4_126	MW-11	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal	Gamma	1070	1000	680	1800	267	0.249	1.65	4.57
2_21_2_5_101	MW-11	Appendix IV	Antimony	mg/L	13	9	69%	2022-11-29 to 2024-10-16		Nonparametric	0.000195	0.000100	0.0000500	0.000690	0.000196	1.01	1.81	2.64
2_21_2_5_102	MW-11	Appendix IV	Arsenic	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.00162	0.00150	0.000610	0.00410	0.000858	0.529	2.16	6.02
2_21_2_5_103	MW-11	Appendix IV	Barium	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.657	0.590	0.360	1.20	0.225	0.342	1.11	1.61
2_21_2_5_104	MW-11	Appendix IV	Beryllium	mg/L	13	10	77%	2022-11-29 to 2024-10-16		Nonparametric	0.0000876	0.0000520	0.0000520	0.000440	0.000107	1.22	3.50	12.4
2_21_2_5_106	MW-11	Appendix IV	Cadmium	mg/L	13	11	85%	2022-11-29 to 2024-10-16		Nonparametric	0.000152	0.0000750	0.0000320	0.000730	0.000197	1.30	2.54	6.65
2_21_2_5_109	MW-11	Appendix IV	Chromium, Total	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Nonparametric	Nonparametric	0.00148	0.000870	0.000450	0.00860	0.00217	1.47	3.45	12.2
2_21_2_5_110	MW-11	Appendix IV	Cobalt	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal	Gamma	0.000650	0.000400	0.000230	0.00240	0.000589	0.905	2.54	7.07
2_21_2_5_113	MW-11	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.631	0.610	0.210	1.40	0.379	0.600	0.755	-0.187
2_21_2_5_115	MW-11	Appendix IV	Lead	mg/L	13	3	23%	2022-11-29 to 2024-10-16	Nonparametric	Nonparametric	0.00614	0.000430	0.000170	0.0680	0.0186	3.03	3.58	12.9
2_21_2_5_116	MW-11	Appendix IV	Lithium	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Gamma	0.0687	0.0520	0.00590	0.220	0.0615	0.894	1.41	1.96
2_21_2_5_117	MW-11	Appendix IV	Mercury	mg/L	13	12	92%	2022-11-29 to 2024-10-16		Nonparametric	0.000232	0.000160	0.000160	0.00110	0.000261	1.12	3.61	13.0
2_21_2_5_118	MW-11	Appendix IV	Molybdenum	mg/L	13	2	15%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.00127	0.00100	0.000430	0.00300	0.000853	0.672	1.23	0.597
2_21_2_5_121	MW-11	Appendix IV	Radium 226 and 228	pCi/L	13	4	31%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	1.02	0.910	0.575	1.76	0.371	0.362	0.945	0.0738
2_21_2_5_122	MW-11	Appendix IV	Selenium	mg/L	13	3	23%	2022-11-29 to 2024-10-16	Lognormal	Lognormal	0.000257	0.000220	0.000140	0.000710	0.000154	0.599	2.48	6.67

(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	Kurtosis
3_20_3_5_118	MW-10	Appendix IV	Molybdenum	mg/L	13	0	0%	2022-11-29 to 2024-10-16	Gamma; Lognormal; Normal	Normal	0.00345	0.00350	0.000800	0.00720	0.00170	0.493	0.683	0.850
3_20_3_5_121	MW-10	Appendix IV	Radium 226 and 228	pCi/L	13	10	77%	2022-11-29 to 2024-10-16		Nonparametric	0.826	0.775	0.590	1.36	0.215	0.260	1.40	2.15
3_20_3_5_122	MW-10	Appendix IV	Selenium	mg/L	13	1	8%	2022-11-29 to 2024-10-16	Gamma; Lognormal	Gamma	0.000376	0.000340	0.000220	0.000830	0.000149	0.397	2.61	8.07
3_20_3_5_125	MW-10	Appendix IV	Thallium	mg/L	13	13	100%	2022-11-29 to 2024-10-16		Nonparametric	0.000239	0.000380	0.0000750	0.000380	0.000158	0.661	-0.175	-2.36

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded

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
1_16_1_3_127	MW-06	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	0.949	0.590	0.147	0.622	0.986	0.997	0.098	0.982	0.115	>= 0.10	0.193	>= 0.10	0.270	Gamma; Lognormal; Normal	Normal
1_16_1_4_105	MW-06	Appendix III	Boron	mg/L	13	0	0%	0.973	0.929	0.168	0.399	0.958	0.725	0.198	0.178	0.192	>= 0.10	0.292	>= 0.10	0.181	Gamma; Lognormal; Normal	Normal
1_16_1_4_107	MW-06	Appendix III	Calcium	mg/L	13	0	0%	0.907	0.167	0.211	0.116	0.919	0.240	0.193	0.207	0.202	>= 0.10	0.436	>= 0.10	0.121	Gamma; Lognormal; Normal	Normal
1_16_1_4_108	MW-06	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.953	0.648	0.181	0.290	0.896	0.119	0.242	0.036	0.198	>= 0.10	0.433	>= 0.10	0.727	Gamma; Lognormal; Normal	Normal
1_16_1_4_112	MW-06	Appendix III	Fluoride	mg/L	13	0	0%	0.866	0.047	0.265	0.013	0.887	0.089	0.249	0.027	0.254	0.01 <= p < 0.05	0.644	0.05 <= p < 0.10	0.157	Gamma; Lognormal	Gamma
1_16_1_4_120	MW-06	Appendix III	pH (field)	su	13	0	0%	0.578	0.000	0.372	0.000	0.562	0.000	0.380	0.000	0.374	< 0.01	2.190	< 0.01	0.036	Nonparametric	Nonparametric
1_16_1_4_124	MW-06	Appendix III	Sulfate (as SO4)	mg/L	13	2	15%	0.913	0.267	0.174	0.461	0.858	0.053	0.233	0.097	0.192	>= 0.10	0.512	>= 0.10	1.041	Gamma; Lognormal; Normal	Gamma
1_16_1_4_126	MW-06	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.059		Nonparametric
1_16_1_5_101	MW-06	Appendix IV	Antimony	mg/L	13	11	85%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		1.109		Nonparametric
1_16_1_5_102	MW-06	Appendix IV	Arsenic	mg/L	13	0	0%	0.932	0.357	0.178	0.312	0.958	0.722	0.138	0.711	0.155	>= 0.10	0.328	>= 0.10	0.230	Gamma; Lognormal; Normal	Normal
1_16_1_5_103	MW-06	Appendix IV	Barium	mg/L	13	0	0%	0.912	0.197	0.202	0.156	0.862	0.041	0.230	0.059	0.219	>= 0.10	0.592	>= 0.10	0.134	Gamma; Lognormal; Normal	Normal
1_16_1_5_104	MW-06	Appendix IV	Beryllium	mg/L	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_16_1_5_106	MW-06	Appendix IV	Cadmium	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_16_1_5_109	MW-06	Appendix IV	Chromium, Total	mg/L	13	0	0%	0.875	0.061	0.255	0.020	0.922	0.269	0.219	0.088	0.238	0.05 <= p < 0.10	0.560	>= 0.10	0.305	Gamma; Lognormal; Normal	Normal
1_16_1_5_110	MW-06	Appendix IV	Cobalt	mg/L	13	0	0%	0.920	0.254	0.202	0.155	0.947	0.554	0.159	0.496	0.176	>= 0.10	0.392	>= 0.10	0.263	Gamma; Lognormal; Normal	Normal
1_16_1_5_113	MW-06	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.866	0.047	0.265	0.013	0.887	0.089	0.249	0.027	0.254	0.01 <= p < 0.05	0.644	0.05 <= p < 0.10	0.157	Gamma; Lognormal	Gamma
1_16_1_5_115	MW-06	Appendix IV	Lead	mg/L	13	9	69%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.459		Nonparametric
1_16_1_5_116	MW-06	Appendix IV	Lithium	mg/L	13	0	0%	0.931	0.348	0.151	0.581	0.924	0.283	0.175	0.337	0.170	>= 0.10	0.399	>= 0.10	0.239	Gamma; Lognormal; Normal	Normal
1_16_1_5_117	MW-06	Appendix IV	Mercury	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_16_1_5_118	MW-06	Appendix IV	Molybdenum	mg/L	13	8	62%	0.695	0.009	0.395	0.010	0.733	0.021	0.374	0.021	0.391	0.01 <= p < 0.05	0.822	0.01 <= p < 0.05	0.221	Nonparametric	Nonparametric
1_16_1_5_121	MW-06	Appendix IV	Radium 226 and 228	pCi/L	13	3	23%	0.688	0.001	0.336	0.002	0.822	0.027	0.258	0.057	0.280	0.01 <= p < 0.05	0.867	0.01 <= p < 0.05	0.320	Lognormal	Lognormal
1_16_1_5_122	MW-06	Appendix IV	Selenium	mg/L	13	5	38%	0.669	0.001	0.334	0.009	0.743	0.007	0.298	0.036	0.317	0.01 <= p < 0.05	1.052	< 0.01	0.305	Nonparametric	Nonparametric
1_16_1_5_125	MW-06	Appendix IV	Thallium	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_17_1_3_127	MW-07	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	0.975	0.949	0.121	0.872	0.975	0.944	0.117	0.899	0.128	>= 0.10	0.186	>= 0.10	0.137	Gamma; Lognormal; Normal	Normal
1_17_1_4_105	MW-07	Appendix III	Boron	mg/L	13	0	0%	0.883	0.078	0.271	0.010	0.888	0.091	0.260	0.016	0.269	0.01 <= p < 0.05	0.753	0.01 <= p < 0.05	0.084	Lognormal; Normal	Normal
1_17_1_4_107	MW-07	Appendix III	Calcium	mg/L	13	0	0%	0.934	0.386	0.182	0.278	0.928	0.318	0.187	0.243	0.196	>= 0.10	0.476	>= 0.10	0.084	Gamma; Lognormal; Normal	Normal
1_17_1_4_108	MW-07	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.051		Nonparametric
1_17_1_4_112	MW-07	Appendix III	Fluoride	mg/L	13	2	15%	0.896	0.167	0.219	0.148	0.915	0.281	0.209	0.194	0.225	>= 0.10	0.492	>= 0.10	0.343	Gamma; Lognormal; Normal	Normal
1_17_1_4_120	MW-07	Appendix III	pH (field)	su	13	0	0%	0.861	0.040	0.271	0.010	0.855	0.034	0.275	0.008	0.270	0.01 <= p < 0.05	0.810	0.01 <= p < 0.05	0.020	Nonparametric	Nonparametric
1_17_1_4_124	MW-07	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	0.891	0.100	0.197	0.179	0.886	0.086	0.190	0.223	0.189	>= 0.10	0.644	0.05 <= p < 0.10	0.328	Gamma; Lognormal; Normal	Normal
1_17_1_4_126	MW-07	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	0.848	0.027	0.248	0.028	0.812	0.009	0.276	0.008	0.264	0.01 <= p < 0.05	0.927	0.01 <= p < 0.05	0.131	Nonparametric	Nonparametric
1_17_1_5_101	MW-07	Appendix IV	Antimony	mg/L	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_17_1_5_102	MW-07	Appendix IV	Arsenic	mg/L	13	0	0%	0.913	0.201	0.191	0.217	0.863	0.042	0.221	0.082	0.203	>= 0.10	0.696	0.05 <= p < 0.10	0.186	Gamma; Lognormal; Normal	Normal
1_17_1_5_103	MW-07	Appendix IV	Barium	mg/L	13	0	0%	0.833	0.017	0.278	0.007	0.786	0.005	0.296	0.003	0.291	< 0.01	1.006	< 0.01	0.107	Nonparametric	Nonparametric
1_17_1_5_104	MW-07	Appendix IV	Beryllium	mg/L	13	10	77%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.093		Nonparametric
1_17_1_5_106	MW-07	Appendix IV	Cadmium	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_17_1_5_109	MW-07	Appendix IV	Chromium, Total	mg/L	13	0	0%	0.663	0.000	0.271	0.010	0.794	0.006	0.197	0.182	0.215	>= 0.10	1.072	< 0.01	0.249	Gamma; Lognormal	Gamma
1_17_1_5_110	MW-07	Appendix IV	Cobalt	mg/L	13	0	0%	0.942	0.478	0.193	0.207	0.930	0.344	0.199	0.173	0.209	>= 0.10	0.492	>= 0.10	0.130	Gamma; Lognormal; Normal	Normal
1_17_1_5_113	MW-07	Appendix IV	Fluoride (App IV)	mg/L	13	2	15%	0.896	0.167	0.219	0.148	0.915	0.281	0.209	0.194	0.225	>= 0.10	0.492	>= 0.10	0.343	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
1_17_1_5_115	MW-07	Appendix IV	Lead	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric			
1_17_1_5_116	MW-07	Appendix IV	Lithium	mg/L	13	0	0%	0.933	0.376	0.195	0.196	0.950	0.602	0.194	0.198	0.174	>= 0.10	0.398	>= 0.10	0.289	Gamma; Lognormal; Normal	Normal
1_17_1_5_117	MW-07	Appendix IV	Mercury	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
1_17_1_5_118	MW-07	Appendix IV	Molybdenum	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
1_17_1_5_121	MW-07	Appendix IV	Radium 226 and 228	pCi/L	13	2	15%	0.729	0.001	0.262	0.033	0.876	0.094	0.178	0.426	0.203	>= 0.10	0.641	0.05 <= p < 0.10	0.360	Gamma; Lognormal	Gamma
1_17_1_5_122	MW-07	Appendix IV	Selenium	mg/L	13	9	69%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.388	Nonparametric	
1_17_1_5_125	MW-07	Appendix IV	Thallium	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
1_18_1_3_127	MW-08	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	0.976	0.957	0.112	0.927	0.951	0.611	0.148	0.612	0.123	>= 0.10	0.224	>= 0.10	0.364	Gamma; Lognormal; Normal	Normal
1_18_1_4_105	MW-08	Appendix III	Boron	mg/L	13	0	0%	0.930	0.343	0.233	0.051	0.858	0.036	0.282	0.006	0.272	0.01 <= p < 0.05	0.744	0.01 <= p < 0.05	0.356	Normal	Normal
1_18_1_4_107	MW-08	Appendix III	Calcium	mg/L	13	0	0%	0.881	0.074	0.231	0.057	0.882	0.076	0.220	0.087	0.230	0.05 <= p < 0.10	0.737	0.01 <= p < 0.05	0.100	Gamma; Lognormal; Normal	Normal
1_18_1_4_108	MW-08	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.546	0.000	0.378	0.000	0.770	0.003	0.293	0.003	0.330	< 0.01	1.509	< 0.01	0.432	Nonparametric	Nonparametric
1_18_1_4_112	MW-08	Appendix III	Fluoride	mg/L	13	0	0%	0.883	0.078	0.246	0.030	0.812	0.010	0.307	0.002	0.290	< 0.01	1.054	< 0.01	0.353	Normal	Normal
1_18_1_4_120	MW-08	Appendix III	pH (field)	su	13	0	0%	0.701	0.001	0.312	0.001	0.676	0.000	0.322	0.001	0.317	< 0.01	1.519	< 0.01	0.047	Nonparametric	Nonparametric
1_18_1_4_124	MW-08	Appendix III	Sulfate (as SO4)	mg/L	13	4	31%	0.857	0.088	0.246	0.122	0.909	0.307	0.161	0.721	0.179	>= 0.10	0.381	>= 0.10	1.030	Gamma; Lognormal; Normal	Gamma
1_18_1_4_126	MW-08	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	0.970	0.898	0.176	0.328	0.975	0.942	0.157	0.511	0.159	>= 0.10	0.231	>= 0.10	0.114	Gamma; Lognormal; Normal	Normal
1_18_1_5_101	MW-08	Appendix IV	Antimony	mg/L	13	6	46%	0.931	0.555	0.245	0.232	0.976	0.941	0.181	0.697	0.217	>= 0.10	0.222	>= 0.10	0.539	Gamma; Lognormal; Normal	Normal
1_18_1_5_102	MW-08	Appendix IV	Arsenic	mg/L	13	0	0%	0.906	0.160	0.151	0.582	0.797	0.006	0.251	0.025	0.214	>= 0.10	0.839	0.01 <= p < 0.05	0.610	Gamma; Normal	Normal
1_18_1_5_103	MW-08	Appendix IV	Barium	mg/L	13	0	0%	0.961	0.770	0.135	0.745	0.955	0.680	0.150	0.592	0.153	>= 0.10	0.297	>= 0.10	0.130	Gamma; Lognormal; Normal	Normal
1_18_1_5_104	MW-08	Appendix IV	Beryllium	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
1_18_1_5_106	MW-08	Appendix IV	Cadmium	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
1_18_1_5_109	MW-08	Appendix IV	Chromium, Total	mg/L	13	0	0%	0.876	0.063	0.163	0.447	0.938	0.434	0.137	0.723	0.150	>= 0.10	0.377	>= 0.10	0.261	Gamma; Lognormal; Normal	Normal
1_18_1_5_110	MW-08	Appendix IV	Cobalt	mg/L	13	0	0%	0.855	0.033	0.245	0.032	0.848	0.027	0.237	0.044	0.250	0.01 <= p < 0.05	0.878	0.01 <= p < 0.05	0.277	Nonparametric	Nonparametric
1_18_1_5_113	MW-08	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.883	0.078	0.246	0.030	0.812	0.010	0.307	0.002	0.290	< 0.01	1.054	< 0.01	0.353	Normal	Normal
1_18_1_5_115	MW-08	Appendix IV	Lead	mg/L	13	9	69%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.455	Nonparametric	
1_18_1_5_116	MW-08	Appendix IV	Lithium	mg/L	13	0	0%	0.952	0.634	0.173	0.359	0.929	0.326	0.208	0.127	0.201	>= 0.10	0.367	>= 0.10	0.237	Gamma; Lognormal; Normal	Normal
1_18_1_5_117	MW-08	Appendix IV	Mercury	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
1_18_1_5_118	MW-08	Appendix IV	Molybdenum	mg/L	13	0	0%	0.943	0.492	0.148	0.608	0.905	0.155	0.209	0.123	0.191	>= 0.10	0.416	>= 0.10	0.747	Gamma; Lognormal; Normal	Normal
1_18_1_5_121	MW-08	Appendix IV	Radium 226 and 228	pCi/L	13	3	23%	0.944	0.595	0.196	0.336	0.988	0.993	0.130	0.905	0.149	>= 0.10	0.168	>= 0.10	0.373	Gamma; Lognormal; Normal	Normal
1_18_1_5_122	MW-08	Appendix IV	Selenium	mg/L	13	5	38%	0.672	0.001	0.313	0.020	0.784	0.019	0.245	0.170	0.268	>= 0.10	0.898	0.01 <= p < 0.05	0.335	Gamma; Lognormal	Gamma
1_18_1_5_125	MW-08	Appendix IV	Thallium	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
1_28_1_3_127	MW-18	Additional Parameters	Total Suspended Solids	mg/L	13	1	8%	0.476	0.000	0.444	0.000	0.891	0.123	0.246	0.043	0.334	< 0.01	1.224	< 0.01	0.939	Lognormal	Lognormal
1_28_1_4_105	MW-18	Appendix III	Boron	mg/L	13	0	0%	0.888	0.092	0.185	0.258	0.916	0.224	0.163	0.453	0.179	>= 0.10	0.489	>= 0.10	0.285	Gamma; Lognormal; Normal	Normal
1_28_1_4_107	MW-18	Appendix III	Calcium	mg/L	13	0	0%	0.956	0.694	0.208	0.128	0.937	0.419	0.242	0.036	0.229	0.05 <= p < 0.10	0.403	>= 0.10	0.184	Gamma; Lognormal; Normal	Normal
1_28_1_4_108	MW-18	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.921	0.258	0.172	0.370	0.898	0.127	0.192	0.209	0.192	>= 0.10	0.500	>= 0.10	0.191	Gamma; Lognormal; Normal	Normal
1_28_1_4_112	MW-18	Appendix III	Fluoride	mg/L	13	0	0%	0.967	0.857	0.138	0.716	0.963	0.794	0.144	0.647	0.151	>= 0.10	0.276	>= 0.10	0.177	Gamma; Lognormal; Normal	Normal
1_28_1_4_120	MW-18	Appendix III	pH (field)	su	13	0	0%	0.954	0.661	0.208	0.128	0.953	0.645	0.210	0.120	0.207	>= 0.10	0.368	>= 0.10	0.011	Gamma; Lognormal; Normal	Normal
1_28_1_4_124	MW-18	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	0.875	0.061	0.284	0.005	0.918	0.235	0.238	0.042	0.253	0.01 <= p < 0.05	0.658	0.05 <= p < 0.10	0.250	Gamma; Lognormal; Normal	Normal
1_28_1_4_126	MW-18	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	0.924	0.280	0.269	0.011	0.942	0.488	0.243	0.034	0.251	0.01 <= p < 0.05	0.482	>= 0.10	0.140	Gamma; Lognormal; Normal	Normal
1_28_1_5_101	MW-18	Appendix IV	Antimony	mg/L	13	3	23%	0.696	0.001	0.336	0.002	0.759	0.005	0.300	0.011	0.321	< 0.01	1.282	< 0.01	0.390	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
1_28_1_5_102	MW-18	Appendix IV	Arsenic	mg/L	13	0	0%	0.933	0.373	0.176	0.334	0.967	0.850	0.171	0.378	0.159	>= 0.10	0.302	>= 0.10	0.304	Gamma; Lognormal; Normal	Normal
1_28_1_5_103	MW-18	Appendix IV	Barium	mg/L	13	0	0%	0.929	0.333	0.188	0.237	0.919	0.240	0.193	0.208	0.188	>= 0.10	0.520	>= 0.10	0.281	Gamma; Lognormal; Normal	Normal
1_28_1_5_104	MW-18	Appendix IV	Beryllium	mg/L	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	Nonparametric	Nonparametric
1_28_1_5_106	MW-18	Appendix IV	Cadmium	mg/L	13	6	46%	0.955	0.774	0.169	0.791	0.951	0.737	0.204	0.509	0.167	>= 0.10	0.245	>= 0.10	0.512	Gamma; Lognormal; Normal	Normal
1_28_1_5_109	MW-18	Appendix IV	Chromium, Total	mg/L	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	Nonparametric	Nonparametric
1_28_1_5_110	MW-18	Appendix IV	Cobalt	mg/L	13	0	0%	0.828	0.015	0.269	0.011	0.907	0.168	0.215	0.102	0.242	0.01 <= p < 0.05	0.698	0.05 <= p < 0.10	0.480	Gamma; Lognormal	Gamma
1_28_1_5_113	MW-18	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.967	0.857	0.138	0.716	0.963	0.794	0.144	0.647	0.151	>= 0.10	0.276	>= 0.10	0.177	Gamma; Lognormal; Normal	Normal
1_28_1_5_115	MW-18	Appendix IV	Lead	mg/L	13	8	62%	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
1_28_1_5_116	MW-18	Appendix IV	Lithium	mg/L	13	0	0%	0.883	0.078	0.226	0.069	0.874	0.059	0.241	0.037	0.244	0.01 <= p < 0.05	0.788	0.01 <= p < 0.05	0.258	Lognormal; Normal	Normal
1_28_1_5_117	MW-18	Appendix IV	Mercury	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	Nonparametric	Nonparametric
1_28_1_5_118	MW-18	Appendix IV	Molybdenum	mg/L	13	0	0%	0.889	0.093	0.221	0.081	0.913	0.201	0.186	0.251	0.205	>= 0.10	0.596	>= 0.10	0.281	Gamma; Lognormal; Normal	Normal
1_28_1_5_121	MW-18	Appendix IV	Radium 226 and 228	pCi/L	13	8	62%	0.825	0.128	0.299	0.148	0.916	0.505	0.233	0.497	0.252	>= 0.10	0.408	>= 0.10	0.383	Gamma; Lognormal; Normal	Nonparametric
1_28_1_5_122	MW-18	Appendix IV	Selenium	mg/L	13	0	0%	0.794	0.006	0.236	0.045	0.901	0.136	0.195	0.196	0.197	>= 0.10	0.629	>= 0.10	0.900	Gamma; Lognormal	Gamma
1_28_1_5_125	MW-18	Appendix IV	Thallium	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	Nonparametric	Nonparametric
1_29_1_3_127	MW-19	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	0.944	0.517	0.122	0.860	0.816	0.010	0.203	0.150	0.184	>= 0.10	0.689	0.05 <= p < 0.10	0.595	Gamma; Lognormal; Normal	Normal
1_29_1_4_105	MW-19	Appendix III	Boron	mg/L	13	0	0%	0.927	0.309	0.139	0.705	0.933	0.368	0.111	0.933	0.123	>= 0.10	0.315	>= 0.10	0.195	Gamma; Lognormal; Normal	Normal
1_29_1_4_107	MW-19	Appendix III	Calcium	mg/L	13	0	0%	0.963	0.799	0.117	0.894	0.937	0.418	0.137	0.723	0.119	>= 0.10	0.316	>= 0.10	0.115	Gamma; Lognormal; Normal	Normal
1_29_1_4_108	MW-19	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.907	0.165	0.216	0.100	0.940	0.463	0.165	0.434	0.186	>= 0.10	0.510	>= 0.10	0.314	Gamma; Lognormal; Normal	Normal
1_29_1_4_112	MW-19	Appendix III	Fluoride	mg/L	13	0	0%	0.965	0.834	0.128	0.812	0.965	0.826	0.127	0.820	0.119	>= 0.10	0.239	>= 0.10	0.131	Gamma; Lognormal; Normal	Normal
1_29_1_4_120	MW-19	Appendix III	pH (field)	su	13	0	0%	0.853	0.031	0.200	0.167	0.841	0.022	0.205	0.140	0.200	>= 0.10	0.706	0.05 <= p < 0.10	0.025	Gamma; Lognormal; Normal	Normal
1_29_1_4_124	MW-19	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	0.962	0.785	0.133	0.768	0.934	0.387	0.149	0.593	0.152	>= 0.10	0.282	>= 0.10	0.218	Gamma; Lognormal; Normal	Normal
1_29_1_4_126	MW-19	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	0.878	0.066	0.173	0.353	0.878	0.066	0.168	0.403	0.180	>= 0.10	0.603	>= 0.10	0.127	Gamma; Lognormal; Normal	Normal
1_29_1_5_101	MW-19	Appendix IV	Antimony	mg/L	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	Nonparametric	Nonparametric
1_29_1_5_102	MW-19	Appendix IV	Arsenic	mg/L	13	0	0%	0.905	0.157	0.163	0.456	0.875	0.061	0.214	0.107	0.202	>= 0.10	0.645	0.05 <= p < 0.10	0.348	Gamma; Lognormal; Normal	Normal
1_29_1_5_103	MW-19	Appendix IV	Barium	mg/L	13	0	0%	0.964	0.813	0.171	0.378	0.971	0.907	0.145	0.645	0.152	>= 0.10	0.266	>= 0.10	0.143	Gamma; Lognormal; Normal	Normal
1_29_1_5_104	MW-19	Appendix IV	Beryllium	mg/L	13	3	23%	0.927	0.420	0.176	0.507	0.958	0.757	0.151	0.745	0.148	>= 0.10	0.273	>= 0.10	0.197	Gamma; Lognormal; Normal	Normal
1_29_1_5_106	MW-19	Appendix IV	Cadmium	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	Nonparametric	Nonparametric
1_29_1_5_109	MW-19	Appendix IV	Chromium, Total	mg/L	13	5	38%	0.729	0.005	0.293	0.042	0.795	0.025	0.253	0.136	0.270	>= 0.10	0.859	0.01 <= p < 0.05	0.247	Gamma; Lognormal	Gamma
1_29_1_5_110	MW-19	Appendix IV	Cobalt	mg/L	13	1	8%	0.957	0.740	0.163	0.513	0.926	0.336	0.229	0.082	0.192	>= 0.10	0.351	>= 0.10	0.589	Gamma; Lognormal; Normal	Normal
1_29_1_5_113	MW-19	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.965	0.834	0.128	0.812	0.965	0.826	0.127	0.820	0.119	>= 0.10	0.239	>= 0.10	0.131	Gamma; Lognormal; Normal	Normal
1_29_1_5_115	MW-19	Appendix IV	Lead	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	Nonparametric	Nonparametric
1_29_1_5_116	MW-19	Appendix IV	Lithium	mg/L	13	0	0%	0.935	0.396	0.180	0.300	0.931	0.347	0.157	0.516	0.167	>= 0.10	0.408	>= 0.10	0.126	Gamma; Lognormal; Normal	Normal
1_29_1_5_117	MW-19	Appendix IV	Mercury	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	Nonparametric	Nonparametric
1_29_1_5_118	MW-19	Appendix IV	Molybdenum	mg/L	13	0	0%	0.897	0.123	0.148	0.606	0.813	0.010	0.224	0.073	0.198	>= 0.10	0.781	0.01 <= p < 0.05	0.365	Gamma; Lognormal; Normal	Normal
1_29_1_5_121	MW-19	Appendix IV	Radium 226 and 228	pCi/L	13	5	38%	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
1_29_1_5_122	MW-19	Appendix IV	Selenium	mg/L	13	10	77%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.295	Nonparametric	Nonparametric
1_29_1_5_125	MW-19	Appendix IV	Thallium	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	Nonparametric	Nonparametric
1_30_1_3_127	MW-20	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	0.931	0.352	0.148	0.603	0.929	0.328	0.147	0.622	0.157	>= 0.10	0.393	>= 0.10	0.097	Gamma; Lognormal; Normal	Normal
1_30_1_4_105	MW-20	Appendix III	Boron	mg/L	13	0	0%	0.897	0.123	0.240	0.039	0.907	0.165	0.251	0.025	0.256	0.01 <= p < 0.05	0.691	0.05 <= p < 0.10	0.185	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
1_30_1_4_107	MW-20	Appendix III	Calcium	mg/L	13	0	0%	0.827	0.015	0.275	0.008	0.712	0.001	0.326	0.001	0.309	< 0.01	1.321	< 0.01	0.246	Nonparametric	Nonparametric
1_30_1_4_108	MW-20	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.943	0.500	0.164	0.437	0.911	0.187	0.196	0.189	0.176	>= 0.10	0.491	>= 0.10	0.231	Gamma; Lognormal; Normal	Normal
1_30_1_4_112	MW-20	Appendix III	Fluoride	mg/L	13	0	0%	0.704	0.001	0.293	0.003	0.832	0.017	0.247	0.030	0.243	0.01 <= p < 0.05	1.143	< 0.01	0.326	Nonparametric	Nonparametric
1_30_1_4_120	MW-20	Appendix III	pH (field)	su	13	0	0%	0.939	0.441	0.193	0.202	0.938	0.434	0.193	0.204	0.203	>= 0.10	0.410	>= 0.10	0.015	Gamma; Lognormal; Normal	Normal
1_30_1_4_124	MW-20	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	0.917	0.228	0.164	0.441	0.915	0.213	0.202	0.157	0.195	>= 0.10	0.453	>= 0.10	0.663	Gamma; Lognormal; Normal	Normal
1_30_1_4_126	MW-20	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	0.922	0.265	0.191	0.221	0.935	0.400	0.185	0.258	0.179	>= 0.10	0.496	>= 0.10	0.113	Gamma; Lognormal; Normal	Normal
1_30_1_5_101	MW-20	Appendix IV	Antimony	mg/L	13	4	31%	0.954	0.734	0.166	0.670	0.944	0.623	0.178	0.562	0.182	>= 0.10	0.271	>= 0.10	0.377	Gamma; Lognormal; Normal	Normal
1_30_1_5_102	MW-20	Appendix IV	Arsenic	mg/L	13	0	0%	0.928	0.319	0.192	0.212	0.930	0.340	0.176	0.328	0.189	>= 0.10	0.450	>= 0.10	0.180	Gamma; Lognormal; Normal	Normal
1_30_1_5_103	MW-20	Appendix IV	Barium	mg/L	13	0	0%	0.821	0.012	0.252	0.023	0.912	0.193	0.202	0.156	0.222	0.05 <= p < 0.10	0.737	0.01 <= p < 0.05	0.304	Gamma; Lognormal	Gamma
1_30_1_5_104	MW-20	Appendix IV	Beryllium	mg/L	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_30_1_5_106	MW-20	Appendix IV	Cadmium	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_30_1_5_109	MW-20	Appendix IV	Chromium, Total	mg/L	13	5	38%	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
1_30_1_5_110	MW-20	Appendix IV	Cobalt	mg/L	13	0	0%	0.938	0.433	0.180	0.298	0.944	0.507	0.180	0.297	0.176	>= 0.10	0.360	>= 0.10	0.189	Gamma; Lognormal; Normal	Normal
1_30_1_5_113	MW-20	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.704	0.001	0.293	0.003	0.832	0.017	0.247	0.030	0.243	0.01 <= p < 0.05	1.143	< 0.01	0.326	Nonparametric	Nonparametric
1_30_1_5_115	MW-20	Appendix IV	Lead	mg/L	13	0	0%	0.911	0.191	0.165	0.429	0.936	0.402	0.159	0.497	0.161	>= 0.10	0.432	>= 0.10	0.251	Gamma; Lognormal; Normal	Normal
1_30_1_5_116	MW-20	Appendix IV	Lithium	mg/L	13	0	0%	0.958	0.719	0.114	0.913	0.866	0.046	0.170	0.388	0.143	>= 0.10	0.414	>= 0.10	0.267	Gamma; Lognormal; Normal	Normal
1_30_1_5_117	MW-20	Appendix IV	Mercury	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_30_1_5_118	MW-20	Appendix IV	Molybdenum	mg/L	13	0	0%	0.968	0.870	0.134	0.752	0.973	0.930	0.147	0.621	0.147	>= 0.10	0.260	>= 0.10	0.156	Gamma; Lognormal; Normal	Normal
1_30_1_5_121	MW-20	Appendix IV	Radium 226 and 228	pCi/L	13	7	54%	0.874	0.243	0.234	0.382	0.920	0.504	0.229	0.418	0.251	>= 0.10	0.363	>= 0.10	0.394	Gamma; Lognormal; Normal	Nonparametric
1_30_1_5_122	MW-20	Appendix IV	Selenium	mg/L	13	7	54%	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
1_30_1_5_125	MW-20	Appendix IV	Thallium	mg/L	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_40_1_3_127	MW-30	Additional Parameters	Total Suspended Solids	mg/L	11	1	9%	0.721	0.002	0.290	0.017	0.836	0.039	0.247	0.086	0.267	0.05 <= p < 0.10	0.863	0.01 <= p < 0.05	0.499	Gamma; Lognormal	Gamma
1_40_1_4_105	MW-30	Appendix III	Boron	mg/L	13	0	0%	0.648	0.000	0.288	0.004	0.750	0.002	0.272	0.009	0.283	< 0.01	1.349	< 0.01	0.194	Nonparametric	Nonparametric
1_40_1_4_107	MW-30	Appendix III	Calcium	mg/L	13	0	0%	0.516	0.000	0.387	0.000	0.617	0.000	0.327	0.000	0.347	< 0.01	2.139	< 0.01	0.224	Nonparametric	Nonparametric
1_40_1_4_108	MW-30	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.698	0.001	0.284	0.005	0.868	0.049	0.178	0.314	0.206	>= 0.10	0.868	0.01 <= p < 0.05	0.452	Gamma; Lognormal	Gamma
1_40_1_4_112	MW-30	Appendix III	Fluoride	mg/L	13	0	0%	0.919	0.246	0.193	0.206	0.930	0.342	0.210	0.121	0.202	>= 0.10	0.553	>= 0.10	0.108	Gamma; Lognormal; Normal	Normal
1_40_1_4_120	MW-30	Appendix III	pH (field)	su	13	0	0%	0.717	0.001	0.247	0.029	0.703	0.001	0.255	0.021	0.247	0.01 <= p < 0.05	1.341	< 0.01	0.029	Nonparametric	Nonparametric
1_40_1_4_124	MW-30	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	0.828	0.015	0.209	0.126	0.755	0.002	0.256	0.020	0.240	0.01 <= p < 0.05	1.091	< 0.01	0.231	Normal	Normal
1_40_1_4_126	MW-30	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	0.903	0.149	0.216	0.099	0.924	0.283	0.198	0.178	0.200	>= 0.10	0.555	>= 0.10	0.102	Gamma; Lognormal; Normal	Normal
1_40_1_5_101	MW-30	Appendix IV	Antimony	mg/L	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_40_1_5_102	MW-30	Appendix IV	Arsenic	mg/L	13	2	15%	0.968	0.868	0.157	0.625	0.953	0.676	0.191	0.316	0.153	>= 0.10	0.196	>= 0.10	0.591	Gamma; Lognormal; Normal	Normal
1_40_1_5_103	MW-30	Appendix IV	Barium	mg/L	13	0	0%	0.892	0.105	0.177	0.323	0.929	0.330	0.135	0.744	0.155	>= 0.10	0.431	>= 0.10	0.305	Gamma; Lognormal; Normal	Normal
1_40_1_5_104	MW-30	Appendix IV	Beryllium	mg/L	13	11	85%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.516		Nonparametric
1_40_1_5_106	MW-30	Appendix IV	Cadmium	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_40_1_5_109	MW-30	Appendix IV	Chromium, Total	mg/L	13	0	0%	0.938	0.425	0.181	0.293	0.912	0.196	0.178	0.313	0.190	>= 0.10	0.429	>= 0.10	0.355	Gamma; Lognormal; Normal	Normal
1_40_1_5_110	MW-30	Appendix IV	Cobalt	mg/L	13	0	0%	0.716	0.001	0.290	0.004	0.921	0.259	0.184	0.268	0.228	0.05 <= p < 0.10	0.724	0.05 <= p < 0.10	0.636	Gamma; Lognormal	Gamma
1_40_1_5_113	MW-30	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.919	0.246	0.193	0.206	0.930	0.342	0.210	0.121	0.202	>= 0.10	0.553	>= 0.10	0.108	Gamma; Lognormal; Normal	Normal
1_40_1_5_115	MW-30	Appendix IV	Lead	mg/L	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_40_1_5_116	MW-30	Appendix IV	Lithium	mg/L	13	0	0%	0.600	0.000	0.298	0.003	0.725	0.001	0.252	0.023	0.271	0.01 <= p < 0.05	1.528	< 0.01	0.248	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
1_40_1_5_117	MW-30	Appendix IV	Mercury	mg/L	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric			
1_40_1_5_118	MW-30	Appendix IV	Molybdenum	mg/L	13	3	23%	0.755	0.004	0.240	0.104	0.979	0.957	0.124	0.936	0.167	>= 0.10	0.356	>= 0.10	0.674	Gamma; Lognormal; Normal	Normal
1_40_1_5_121	MW-30	Appendix IV	Radium 226 and 228	pCi/L	13	7	54%	0.876	0.249	0.282	0.140	0.909	0.432	0.244	0.320	0.266	>= 0.10	0.423	>= 0.10	0.282	Gamma; Lognormal; Normal	Nonparametric
1_40_1_5_122	MW-30	Appendix IV	Selenium	mg/L	13	6	46%	0.791	0.034	0.256	0.180	0.887	0.258	0.237	0.275	0.260	>= 0.10	0.521	>= 0.10	0.491	Gamma; Lognormal; Normal	Normal
1_40_1_5_125	MW-30	Appendix IV	Thallium	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
1_41_1_3_127	MW-31	Additional Parameters	Total Suspended Solids	mg/L	8	5	62%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.693	Nonparametric	Nonparametric
1_41_1_4_105	MW-31	Appendix III	Boron	mg/L	13	0	0%	0.975	0.943	0.121	0.866	0.977	0.961	0.101	0.974	0.112	>= 0.10	0.172	>= 0.10	0.143	Gamma; Lognormal; Normal	Normal
1_41_1_4_107	MW-31	Appendix III	Calcium	mg/L	13	0	0%	0.941	0.464	0.192	0.210	0.931	0.355	0.214	0.106	0.208	>= 0.10	0.430	>= 0.10	0.121	Gamma; Lognormal; Normal	Normal
1_41_1_4_108	MW-31	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.945	0.521	0.211	0.116	0.950	0.605	0.196	0.185	0.205	>= 0.10	0.435	>= 0.10	0.090	Gamma; Lognormal; Normal	Normal
1_41_1_4_112	MW-31	Appendix III	Fluoride	mg/L	13	0	0%	0.855	0.033	0.295	0.003	0.862	0.041	0.289	0.004	0.293	< 0.01	0.850	0.01 <= p < 0.05	0.049	Nonparametric	Nonparametric
1_41_1_4_120	MW-31	Appendix III	pH (field)	su	13	0	0%	0.939	0.446	0.164	0.439	0.941	0.476	0.162	0.460	0.156	>= 0.10	0.342	>= 0.10	0.013	Gamma; Lognormal; Normal	Normal
1_41_1_4_124	MW-31	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	0.946	0.537	0.143	0.664	0.911	0.189	0.151	0.575	0.124	>= 0.10	0.305	>= 0.10	0.512	Gamma; Lognormal; Normal	Normal
1_41_1_4_126	MW-31	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	0.934	0.380	0.167	0.416	0.945	0.523	0.153	0.558	0.156	>= 0.10	0.313	>= 0.10	0.073	Gamma; Lognormal; Normal	Normal
1_41_1_5_101	MW-31	Appendix IV	Antimony	mg/L	13	6	46%	0.737	0.009	0.366	0.005	0.844	0.108	0.287	0.084	0.329	0.01 <= p < 0.05	0.745	0.01 <= p < 0.05	0.694	Lognormal	Lognormal
1_41_1_5_102	MW-31	Appendix IV	Arsenic	mg/L	13	0	0%	0.913	0.205	0.226	0.068	0.938	0.433	0.197	0.181	0.211	>= 0.10	0.435	>= 0.10	0.197	Gamma; Lognormal; Normal	Normal
1_41_1_5_103	MW-31	Appendix IV	Barium	mg/L	13	0	0%	0.873	0.057	0.202	0.155	0.927	0.315	0.163	0.448	0.180	>= 0.10	0.452	>= 0.10	0.262	Gamma; Lognormal; Normal	Normal
1_41_1_5_104	MW-31	Appendix IV	Beryllium	mg/L	13	11	85%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.407	Nonparametric	Nonparametric	
1_41_1_5_106	MW-31	Appendix IV	Cadmium	mg/L	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
1_41_1_5_109	MW-31	Appendix IV	Chromium, Total	mg/L	13	0	0%	0.845	0.024	0.198	0.179	0.926	0.305	0.145	0.638	0.159	>= 0.10	0.447	>= 0.10	0.239	Gamma; Lognormal; Normal	Normal
1_41_1_5_110	MW-31	Appendix IV	Cobalt	mg/L	13	1	8%	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
1_41_1_5_113	MW-31	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.855	0.033	0.295	0.003	0.862	0.041	0.289	0.004	0.293	< 0.01	0.850	0.01 <= p < 0.05	0.049	Nonparametric	Nonparametric
1_41_1_5_115	MW-31	Appendix IV	Lead	mg/L	13	11	85%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.152	Nonparametric	Nonparametric	
1_41_1_5_116	MW-31	Appendix IV	Lithium	mg/L	13	0	0%	0.928	0.319	0.203	0.149	0.905	0.156	0.223	0.078	0.221	0.05 <= p < 0.10	0.578	>= 0.10	0.135	Gamma; Lognormal; Normal	Normal
1_41_1_5_117	MW-31	Appendix IV	Mercury	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
1_41_1_5_118	MW-31	Appendix IV	Molybdenum	mg/L	13	0	0%	0.887	0.089	0.265	0.013	0.888	0.093	0.283	0.005	0.259	0.01 <= p < 0.05	0.735	0.01 <= p < 0.05	0.336	Lognormal; Normal	Normal
1_41_1_5_121	MW-31	Appendix IV	Radium 226 and 228	pCi/L	13	4	31%	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
1_41_1_5_122	MW-31	Appendix IV	Selenium	mg/L	13	5	38%	0.509	0.000	0.460	0.000	0.660	0.001	0.374	0.002	0.422	< 0.01	1.566	< 0.01	0.639	Nonparametric	Nonparametric
1_41_1_5_125	MW-31	Appendix IV	Thallium	mg/L	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
1_42_1_3_127	MW-32	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	0.933	0.370	0.172	0.363	0.855	0.033	0.177	0.325	0.170	>= 0.10	0.529	>= 0.10	0.387	Gamma; Lognormal; Normal	Normal
1_42_1_4_105	MW-32	Appendix III	Boron	mg/L	13	0	0%	0.853	0.031	0.250	0.025	0.900	0.133	0.245	0.032	0.255	0.01 <= p < 0.05	0.697	0.05 <= p < 0.10	0.226	Gamma; Lognormal	Gamma
1_42_1_4_107	MW-32	Appendix III	Calcium	mg/L	13	0	0%	0.941	0.469	0.196	0.185	0.930	0.345	0.220	0.085	0.218	>= 0.10	0.542	>= 0.10	0.156	Gamma; Lognormal; Normal	Normal
1_42_1_4_108	MW-32	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.901	0.140	0.182	0.281	0.903	0.148	0.176	0.331	0.189	>= 0.10	0.511	>= 0.10	0.098	Gamma; Lognormal; Normal	Normal
1_42_1_4_112	MW-32	Appendix III	Fluoride	mg/L	13	0	0%	0.836	0.019	0.255	0.021	0.857	0.035	0.247	0.029	0.250	0.01 <= p < 0.05	0.815	0.01 <= p < 0.05	0.093	Nonparametric	Nonparametric
1_42_1_4_120	MW-32	Appendix III	pH (field)	su	13	0	0%	0.959	0.732	0.145	0.645	0.959	0.740	0.145	0.641	0.154	>= 0.10	0.258	>= 0.10	0.010	Gamma; Lognormal; Normal	Normal
1_42_1_4_124	MW-32	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	0.929	0.327	0.159	0.492	0.889	0.094	0.192	0.211	0.165	>= 0.10	0.454	>= 0.10	1.163	Gamma; Lognormal; Normal	Gamma
1_42_1_4_126	MW-32	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	0.891	0.100	0.190	0.226	0.886	0.086	0.188	0.236	0.198	>= 0.10	0.592	>= 0.10	0.140	Gamma; Lognormal; Normal	Normal
1_42_1_5_101	MW-32	Appendix IV	Antimony	mg/L	13	9	69%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.090	Nonparametric	Nonparametric
1_42_1_5_102	MW-32	Appendix IV	Arsenic	mg/L	13	0	0%	0.433	0.000	0.458	0.000	0.593	0.000	0.369	0.000	0.411	< 0.01	2.473	< 0.01	0.435	Nonparametric	Nonparametric
1_42_1_5_103	MW-32	Appendix IV	Barium	mg/L	13	0	0%	0.905	0.157	0.229	0.062	0.835	0.018	0.197	0.180	0.167	>= 0.10	0.508	>= 0.10	0.730	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
1_42_1_5_104	MW-32	Appendix IV	Beryllium	mg/L	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric				
1_42_1_5_106	MW-32	Appendix IV	Cadmium	mg/L	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric				
1_42_1_5_109	MW-32	Appendix IV	Chromium, Total	mg/L	13	0	0%	0.445	0.000	0.412	0.000	0.687	0.000	0.243	0.035	0.313	< 0.01	2.058	< 0.01	0.597	Nonparametric	Nonparametric
1_42_1_5_110	MW-32	Appendix IV	Cobalt	mg/L	13	0	0%	0.584	0.000	0.305	0.002	0.851	0.029	0.194	0.200	0.223	0.05 <= p < 0.10	1.184	< 0.01	0.526	Gamma; Lognormal	Gamma
1_42_1_5_113	MW-32	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.836	0.019	0.255	0.021	0.857	0.035	0.247	0.029	0.250	0.01 <= p < 0.05	0.815	0.01 <= p < 0.05	0.093	Nonparametric	Nonparametric
1_42_1_5_115	MW-32	Appendix IV	Lead	mg/L	13	9	69%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.654	Nonparametric	
1_42_1_5_116	MW-32	Appendix IV	Lithium	mg/L	13	0	0%	0.885	0.082	0.163	0.448	0.923	0.277	0.146	0.625	0.151	>= 0.10	0.440	>= 0.10	0.244	Gamma; Lognormal; Normal	Normal
1_42_1_5_117	MW-32	Appendix IV	Mercury	mg/L	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
1_42_1_5_118	MW-32	Appendix IV	Molybdenum	mg/L	13	0	0%	0.823	0.013	0.231	0.056	0.903	0.146	0.183	0.272	0.193	>= 0.10	0.575	>= 0.10	0.215	Gamma; Lognormal; Normal	Normal
1_42_1_5_121	MW-32	Appendix IV	Radium 226 and 228	pCi/L	13	8	62%	0.878	0.302	0.244	0.422	0.860	0.227	0.266	0.292	0.276	>= 0.10	0.475	>= 0.10	0.222	Gamma; Lognormal; Normal	Nonparametric
1_42_1_5_122	MW-32	Appendix IV	Selenium	mg/L	13	10	77%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.157	Nonparametric	
1_42_1_5_125	MW-32	Appendix IV	Thallium	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
2_11_2_3_127	MW-01R	Additional Parameters	Total Suspended Solids	mg/L	12	4	33%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.403	Nonparametric	
2_11_2_4_105	MW-01R	Appendix III	Boron	mg/L	13	0	0%	0.945	0.529	0.146	0.632	0.917	0.227	0.146	0.634	0.139	>= 0.10	0.367	>= 0.10	0.425	Gamma; Lognormal; Normal	Normal
2_11_2_4_107	MW-01R	Appendix III	Calcium	mg/L	13	0	0%	0.951	0.610	0.146	0.633	0.964	0.808	0.157	0.513	0.164	>= 0.10	0.252	>= 0.10	0.343	Gamma; Lognormal; Normal	Normal
2_11_2_4_108	MW-01R	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.896	0.119	0.230	0.057	0.806	0.008	0.271	0.010	0.267	0.01 <= p < 0.05	1.025	< 0.01	0.482	Normal	Normal
2_11_2_4_112	MW-01R	Appendix III	Fluoride	mg/L	13	0	0%	0.888	0.092	0.287	0.004	0.864	0.044	0.288	0.004	0.299	< 0.01	0.770	0.01 <= p < 0.05	0.373	Normal	Normal
2_11_2_4_120	MW-01R	Appendix III	pH (field)	su	13	0	0%	0.455	0.000	0.371	0.000	0.439	0.000	0.388	0.000	0.377	< 0.01	3.190	< 0.01	0.070	Nonparametric	Nonparametric
2_11_2_4_124	MW-01R	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	0.935	0.400	0.155	0.530	0.822	0.013	0.199	0.173	0.155	>= 0.10	0.471	>= 0.10	1.306	Gamma; Lognormal; Normal	Gamma
2_11_2_4_126	MW-01R	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	0.951	0.616	0.196	0.189	0.950	0.597	0.203	0.151	0.207	>= 0.10	0.442	>= 0.10	0.057	Gamma; Lognormal; Normal	Normal
2_11_2_5_101	MW-01R	Appendix IV	Antimony	mg/L	13	3	23%	0.679	0.000	0.351	0.001	0.833	0.037	0.233	0.128	0.283	0.01 <= p < 0.05	0.981	0.01 <= p < 0.05	0.639	Lognormal	Lognormal
2_11_2_5_102	MW-01R	Appendix IV	Arsenic	mg/L	13	0	0%	0.723	0.001	0.240	0.039	0.893	0.106	0.241	0.038	0.218	>= 0.10	0.795	0.01 <= p < 0.05	0.429	Gamma; Lognormal	Gamma
2_11_2_5_103	MW-01R	Appendix IV	Barium	mg/L	13	0	0%	0.880	0.071	0.217	0.095	0.937	0.423	0.167	0.412	0.188	>= 0.10	0.419	>= 0.10	0.331	Gamma; Lognormal; Normal	Normal
2_11_2_5_104	MW-01R	Appendix IV	Beryllium	mg/L	13	2	15%	0.906	0.217	0.217	0.156	0.931	0.416	0.161	0.594	0.176	>= 0.10	0.384	>= 0.10	0.379	Gamma; Lognormal; Normal	Normal
2_11_2_5_106	MW-01R	Appendix IV	Cadmium	mg/L	13	10	77%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.866	Nonparametric	
2_11_2_5_109	MW-01R	Appendix IV	Chromium, Total	mg/L	13	0	0%	0.460	0.000	0.385	0.000	0.777	0.004	0.210	0.120	0.266	0.01 <= p < 0.05	1.678	< 0.01	0.767	Lognormal	Lognormal
2_11_2_5_110	MW-01R	Appendix IV	Cobalt	mg/L	13	0	0%	0.742	0.002	0.272	0.009	0.896	0.117	0.224	0.072	0.254	0.01 <= p < 0.05	0.911	0.01 <= p < 0.05	0.587	Lognormal	Lognormal
2_11_2_5_113	MW-01R	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.888	0.092	0.287	0.004	0.864	0.044	0.288	0.004	0.299	< 0.01	0.770	0.01 <= p < 0.05	0.373	Normal	Normal
2_11_2_5_115	MW-01R	Appendix IV	Lead	mg/L	13	2	15%	0.598	0.000	0.301	0.006	0.904	0.208	0.199	0.259	0.241	0.05 <= p < 0.10	0.868	0.01 <= p < 0.05	0.736	Gamma; Lognormal	Gamma
2_11_2_5_116	MW-01R	Appendix IV	Lithium	mg/L	13	0	0%	0.944	0.512	0.147	0.620	0.896	0.118	0.147	0.615	0.141	>= 0.10	0.406	>= 0.10	0.429	Gamma; Lognormal; Normal	Normal
2_11_2_5_117	MW-01R	Appendix IV	Mercury	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
2_11_2_5_118	MW-01R	Appendix IV	Molybdenum	mg/L	13	1	8%	0.620	0.000	0.292	0.006	0.912	0.228	0.194	0.243	0.247	0.05 <= p < 0.10	0.772	0.01 <= p < 0.05	0.816	Gamma; Lognormal	Gamma
2_11_2_5_121	MW-01R	Appendix IV	Radium 226 and 228	pCi/L	13	7	54%	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
2_11_2_5_122	MW-01R	Appendix IV	Selenium	mg/L	13	0	0%	0.743	0.002	0.286	0.005	0.911	0.187	0.199	0.170	0.224	0.05 <= p < 0.10	0.727	0.05 <= p < 0.10	0.406	Gamma; Lognormal	Gamma
2_11_2_5_125	MW-01R	Appendix IV	Thallium	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
2_12_2_3_127	MW-02	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	0.931	0.351	0.177	0.323	0.830	0.016	0.275	0.008	0.260	0.01 <= p < 0.05	0.760	0.01 <= p < 0.05	0.944	Normal	Normal
2_12_2_4_105	MW-02	Appendix III	Boron	mg/L	13	0	0%	0.863	0.043	0.212	0.115	0.844	0.024	0.199	0.172	0.222	0.05 <= p < 0.10	0.764	0.01 <= p < 0.05	0.124	Gamma; Lognormal; Normal	Normal
2_12_2_4_107	MW-02	Appendix III	Calcium	mg/L	13	0	0%	0.916	0.221	0.196	0.185	0.923	0.272	0.210	0.123	0.210	>= 0.10	0.528	>= 0.10	0.083	Gamma; Lognormal; Normal	Normal
2_12_2_4_108	MW-02	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.607	0.000	0.391	0.000	0.522	0.000	0.412	0.000	0.410	< 0.01	2.466	< 0.01	0.217	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
2_12_2_4_112	MW-02	Appendix III	Fluoride	mg/L	13	0	0%	0.652	0.000	0.320	0.001	0.555	0.000	0.360	0.000	0.349	< 0.01	2.170	< 0.01	0.220	Nonparametric	Nonparametric
2_12_2_4_120	MW-02	Appendix III	pH (field)	su	13	0	0%	0.944	0.506	0.183	0.277	0.945	0.527	0.182	0.284	0.189	>= 0.10	0.360	>= 0.10	0.016	Gamma; Lognormal; Normal	Normal
2_12_2_4_124	MW-02	Appendix III	Sulfate (as SO4)	mg/L	13	8	62%	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
2_12_2_4_126	MW-02	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	0.937	0.417	0.169	0.392	0.941	0.472	0.156	0.522	0.165	>= 0.10	0.371	>= 0.10	0.087	Gamma; Lognormal; Normal	Normal
2_12_2_5_101	MW-02	Appendix IV	Antimony	mg/L	13	3	23%	0.644	0.000	0.306	0.009	0.806	0.017	0.226	0.155	0.248	0.05 <= p < 0.10	0.964	0.01 <= p < 0.05	0.432	Gamma; Lognormal	Gamma
2_12_2_5_102	MW-02	Appendix IV	Arsenic	mg/L	13	0	0%	0.825	0.014	0.239	0.040	0.504	0.000	0.396	0.000	0.348	< 0.01	2.197	< 0.01	0.824	Nonparametric	Nonparametric
2_12_2_5_103	MW-02	Appendix IV	Barium	mg/L	13	0	0%	0.925	0.291	0.154	0.542	0.954	0.660	0.145	0.642	0.131	>= 0.10	0.317	>= 0.10	0.219	Gamma; Lognormal; Normal	Normal
2_12_2_5_104	MW-02	Appendix IV	Beryllium	mg/L	13	1	8%	0.955	0.708	0.150	0.640	0.968	0.894	0.140	0.747	0.131	>= 0.10	0.207	>= 0.10	0.455	Gamma; Lognormal; Normal	Normal
2_12_2_5_106	MW-02	Appendix IV	Cadmium	mg/L	13	10	77%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.400	Nonparametric	Nonparametric
2_12_2_5_109	MW-02	Appendix IV	Chromium, Total	mg/L	13	0	0%	0.976	0.952	0.118	0.888	0.576	0.000	0.316	0.001	0.256	0.01 <= p < 0.05	1.288	< 0.01	1.339	Normal	Normal
2_12_2_5_110	MW-02	Appendix IV	Cobalt	mg/L	13	0	0%	0.937	0.415	0.190	0.224	0.611	0.000	0.277	0.007	0.269	0.01 <= p < 0.05	1.316	< 0.01	0.933	Normal	Normal
2_12_2_5_113	MW-02	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.652	0.000	0.320	0.001	0.555	0.000	0.360	0.000	0.349	< 0.01	2.170	< 0.01	0.220	Nonparametric	Nonparametric
2_12_2_5_115	MW-02	Appendix IV	Lead	mg/L	13	1	8%	0.913	0.236	0.179	0.358	0.978	0.975	0.128	0.849	0.134	>= 0.10	0.254	>= 0.10	0.461	Gamma; Lognormal; Normal	Normal
2_12_2_5_116	MW-02	Appendix IV	Lithium	mg/L	13	0	0%	0.949	0.591	0.153	0.550	0.903	0.148	0.181	0.289	0.150	>= 0.10	0.411	>= 0.10	0.172	Gamma; Lognormal; Normal	Normal
2_12_2_5_117	MW-02	Appendix IV	Mercury	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
2_12_2_5_118	MW-02	Appendix IV	Molybdenum	mg/L	13	0	0%	0.809	0.009	0.272	0.009	0.888	0.092	0.220	0.087	0.234	0.05 <= p < 0.10	0.844	0.01 <= p < 0.05	0.331	Gamma; Lognormal	Gamma
2_12_2_5_121	MW-02	Appendix IV	Radium 226 and 228	pCi/L	13	4	31%	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
2_12_2_5_122	MW-02	Appendix IV	Selenium	mg/L	13	0	0%	0.933	0.371	0.169	0.389	0.861	0.040	0.216	0.099	0.205	>= 0.10	0.686	0.05 <= p < 0.10	0.367	Gamma; Lognormal; Normal	Normal
2_12_2_5_125	MW-02	Appendix IV	Thallium	mg/L	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
2_13_2_3_127	MW-03	Additional Parameters	Total Suspended Solids	mg/L	10	5	50%	0.752	0.031	0.400	0.009	0.938	0.649	0.271	0.264	0.327	>= 0.10	0.426	>= 0.10	0.965	Gamma; Lognormal	Nonparametric
2_13_2_4_105	MW-03	Appendix III	Boron	mg/L	13	0	0%	0.869	0.051	0.172	0.367	0.838	0.020	0.183	0.271	0.185	>= 0.10	0.687	0.05 <= p < 0.10	0.082	Gamma; Lognormal; Normal	Normal
2_13_2_4_107	MW-03	Appendix III	Calcium	mg/L	13	0	0%	0.975	0.942	0.126	0.824	0.961	0.768	0.106	0.954	0.118	>= 0.10	0.240	>= 0.10	0.106	Gamma; Lognormal; Normal	Normal
2_13_2_4_108	MW-03	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.910	0.181	0.196	0.188	0.976	0.956	0.144	0.656	0.153	>= 0.10	0.254	>= 0.10	0.299	Gamma; Lognormal; Normal	Normal
2_13_2_4_112	MW-03	Appendix III	Fluoride	mg/L	13	0	0%	0.432	0.000	0.454	0.000	0.521	0.000	0.401	0.000	0.424	< 0.01	2.870	< 0.01	0.283	Nonparametric	Nonparametric
2_13_2_4_120	MW-03	Appendix III	pH (field)	su	13	0	0%	0.944	0.510	0.201	0.162	0.946	0.538	0.199	0.169	0.206	>= 0.10	0.414	>= 0.10	0.014	Gamma; Lognormal; Normal	Normal
2_13_2_4_124	MW-03	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	0.988	0.999	0.089	0.995	0.830	0.016	0.226	0.067	0.179	>= 0.10	0.394	>= 0.10	0.752	Gamma; Lognormal; Normal	Normal
2_13_2_4_126	MW-03	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	0.800	0.007	0.263	0.014	0.798	0.007	0.273	0.009	0.279	< 0.01	1.267	< 0.01	0.110	Nonparametric	Nonparametric
2_13_2_5_101	MW-03	Appendix IV	Antimony	mg/L	13	8	62%	0.702	0.010	0.351	0.043	0.818	0.113	0.257	0.340	0.288	>= 0.10	0.648	0.05 <= p < 0.10	0.678	Gamma; Lognormal	Nonparametric
2_13_2_5_102	MW-03	Appendix IV	Arsenic	mg/L	13	0	0%	0.964	0.815	0.134	0.760	0.919	0.244	0.158	0.499	0.149	>= 0.10	0.365	>= 0.10	0.313	Gamma; Lognormal; Normal	Normal
2_13_2_5_103	MW-03	Appendix IV	Barium	mg/L	13	0	0%	0.934	0.387	0.140	0.690	0.810	0.009	0.194	0.202	0.174	>= 0.10	0.669	0.05 <= p < 0.10	0.343	Gamma; Lognormal; Normal	Normal
2_13_2_5_104	MW-03	Appendix IV	Beryllium	mg/L	13	8	62%	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
2_13_2_5_106	MW-03	Appendix IV	Cadmium	mg/L	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
2_13_2_5_109	MW-03	Appendix IV	Chromium, Total	mg/L	13	0	0%	0.951	0.607	0.166	0.426	0.964	0.820	0.159	0.495	0.171	>= 0.10	0.252	>= 0.10	0.271	Gamma; Lognormal; Normal	Normal
2_13_2_5_110	MW-03	Appendix IV	Cobalt	mg/L	13	0	0%	0.907	0.167	0.181	0.289	0.918	0.237	0.128	0.807	0.155	>= 0.10	0.433	>= 0.10	0.447	Gamma; Lognormal; Normal	Normal
2_13_2_5_113	MW-03	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.432	0.000	0.454	0.000	0.521	0.000	0.401	0.000	0.424	< 0.01	2.870	< 0.01	0.283	Nonparametric	Nonparametric
2_13_2_5_115	MW-03	Appendix IV	Lead	mg/L	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
2_13_2_5_116	MW-03	Appendix IV	Lithium	mg/L	13	0	0%	0.867	0.047	0.158	0.500	0.937	0.419	0.153	0.559	0.163	>= 0.10	0.420	>= 0.10	0.217	Gamma; Lognormal; Normal	Normal
2_13_2_5_117	MW-03	Appendix IV	Mercury	mg/L	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
2_13_2_5_118	MW-03	Appendix IV	Molybdenum	mg/L	13	9	69%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.441	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
2_13_2_5_121	MW-03	Appendix IV	Radium 226 and 228	pCi/L	13	1	8%	0.906	0.191	0.188	0.282	0.965	0.846	0.135	0.788	0.158	>= 0.10	0.298	>= 0.10	0.350	Gamma; Lognormal; Normal	Normal
2_13_2_5_122	MW-03	Appendix IV	Selenium	mg/L	13	3	23%	0.955	0.731	0.148	0.775	0.841	0.045	0.221	0.180	0.192	>= 0.10	0.490	>= 0.10	0.355	Gamma; Lognormal; Normal	Normal
2_13_2_5_125	MW-03	Appendix IV	Thallium	mg/L	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
2_14_2_3_127	MW-04	Additional Parameters	Total Suspended Solids	mg/L	12	1	8%	0.965	0.831	0.159	0.608	0.914	0.275	0.228	0.114	0.199	>= 0.10	0.396	>= 0.10	0.385	Gamma; Lognormal; Normal	Normal
2_14_2_4_105	MW-04	Appendix III	Boron	mg/L	13	0	0%	0.960	0.754	0.133	0.765	0.966	0.849	0.118	0.893	0.123	>= 0.10	0.230	>= 0.10	0.084	Gamma; Lognormal; Normal	Normal
2_14_2_4_107	MW-04	Appendix III	Calcium	mg/L	13	0	0%	0.968	0.869	0.177	0.319	0.975	0.948	0.161	0.471	0.168	>= 0.10	0.238	>= 0.10	0.094	Gamma; Lognormal; Normal	Normal
2_14_2_4_108	MW-04	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.950	0.592	0.134	0.753	0.973	0.925	0.125	0.840	0.114	>= 0.10	0.234	>= 0.10	0.314	Gamma; Lognormal; Normal	Normal
2_14_2_4_112	MW-04	Appendix III	Fluoride	mg/L	13	0	0%	0.854	0.032	0.243	0.034	0.809	0.009	0.251	0.024	0.237	0.05 <= p < 0.10	1.035	< 0.01	0.201	Gamma	Gamma
2_14_2_4_120	MW-04	Appendix III	pH (field)	su	13	0	0%	0.888	0.092	0.163	0.455	0.893	0.107	0.160	0.482	0.153	>= 0.10	0.477	>= 0.10	0.016	Gamma; Lognormal; Normal	Normal
2_14_2_4_124	MW-04	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	0.791	0.005	0.258	0.018	0.407	0.000	0.430	0.000	0.412	< 0.01	3.016	< 0.01	1.632	Nonparametric	Nonparametric
2_14_2_4_126	MW-04	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	0.853	0.031	0.197	0.180	0.857	0.035	0.194	0.201	0.204	>= 0.10	0.742	0.01 <= p < 0.05	0.086	Gamma; Lognormal; Normal	Normal
2_14_2_5_101	MW-04	Appendix IV	Antimony	mg/L	13	10	77%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.900	NA	Nonparametric	Nonparametric
2_14_2_5_102	MW-04	Appendix IV	Arsenic	mg/L	13	0	0%	0.904	0.153	0.186	0.250	0.891	0.102	0.178	0.312	0.180	>= 0.10	0.530	>= 0.10	0.307	Gamma; Lognormal; Normal	Normal
2_14_2_5_103	MW-04	Appendix IV	Barium	mg/L	13	0	0%	0.476	0.000	0.390	0.000	0.662	0.000	0.313	0.001	0.350	< 0.01	2.147	< 0.01	0.421	Nonparametric	Nonparametric
2_14_2_5_104	MW-04	Appendix IV	Beryllium	mg/L	13	11	85%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.142	NA	Nonparametric	Nonparametric
2_14_2_5_106	MW-04	Appendix IV	Cadmium	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
2_14_2_5_109	MW-04	Appendix IV	Chromium, Total	mg/L	13	0	0%	0.889	0.094	0.183	0.273	0.863	0.042	0.208	0.128	0.203	>= 0.10	0.817	0.01 <= p < 0.05	0.299	Gamma; Lognormal; Normal	Normal
2_14_2_5_110	MW-04	Appendix IV	Cobalt	mg/L	13	0	0%	0.921	0.257	0.228	0.062	0.961	0.770	0.172	0.368	0.200	>= 0.10	0.373	>= 0.10	0.479	Gamma; Lognormal; Normal	Normal
2_14_2_5_113	MW-04	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.854	0.032	0.243	0.034	0.809	0.009	0.251	0.024	0.237	0.05 <= p < 0.10	1.035	< 0.01	0.201	Gamma	Gamma
2_14_2_5_115	MW-04	Appendix IV	Lead	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
2_14_2_5_116	MW-04	Appendix IV	Lithium	mg/L	13	0	0%	0.888	0.092	0.164	0.444	0.871	0.054	0.183	0.273	0.172	>= 0.10	0.644	0.05 <= p < 0.10	0.158	Gamma; Lognormal; Normal	Normal
2_14_2_5_117	MW-04	Appendix IV	Mercury	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
2_14_2_5_118	MW-04	Appendix IV	Molybdenum	mg/L	13	2	15%	0.897	0.170	0.160	0.602	0.865	0.067	0.184	0.377	0.186	>= 0.10	0.554	>= 0.10	0.537	Gamma; Lognormal; Normal	Normal
2_14_2_5_121	MW-04	Appendix IV	Radium 226 and 228	pCi/L	13	3	23%	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
2_14_2_5_122	MW-04	Appendix IV	Selenium	mg/L	13	5	38%	0.861	0.121	0.270	0.088	0.908	0.341	0.231	0.237	0.254	>= 0.10	0.490	>= 0.10	0.335	Gamma; Lognormal; Normal	Normal
2_14_2_5_125	MW-04	Appendix IV	Thallium	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
2_19_2_3_127	MW-09	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	0.965	0.830	0.126	0.829	0.951	0.606	0.121	0.868	0.117	>= 0.10	0.261	>= 0.10	0.099	Gamma; Lognormal; Normal	Normal
2_19_2_4_105	MW-09	Appendix III	Boron	mg/L	13	0	0%	0.979	0.972	0.107	0.953	0.978	0.968	0.123	0.854	0.115	>= 0.10	0.204	>= 0.10	0.092	Gamma; Lognormal; Normal	Normal
2_19_2_4_107	MW-09	Appendix III	Calcium	mg/L	13	0	0%	0.955	0.677	0.170	0.381	0.945	0.520	0.198	0.177	0.195	>= 0.10	0.407	>= 0.10	0.223	Gamma; Lognormal; Normal	Normal
2_19_2_4_108	MW-09	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.846	0.026	0.194	0.200	0.879	0.068	0.204	0.145	0.211	>= 0.10	0.660	0.05 <= p < 0.10	0.311	Gamma; Lognormal; Normal	Normal
2_19_2_4_112	MW-09	Appendix III	Fluoride	mg/L	13	0	0%	0.937	0.422	0.121	0.865	0.934	0.383	0.119	0.886	0.127	>= 0.10	0.324	>= 0.10	0.107	Gamma; Lognormal; Normal	Normal
2_19_2_4_120	MW-09	Appendix III	pH (field)	su	13	0	0%	0.820	0.012	0.271	0.010	0.826	0.014	0.269	0.011	0.272	0.01 <= p < 0.05	0.980	0.01 <= p < 0.05	0.015	Nonparametric	Nonparametric
2_19_2_4_124	MW-09	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	0.912	0.197	0.164	0.445	0.856	0.034	0.252	0.024	0.234	0.05 <= p < 0.10	0.695	0.05 <= p < 0.10	0.713	Gamma; Normal	Normal
2_19_2_4_126	MW-09	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	0.910	0.182	0.168	0.402	0.872	0.055	0.201	0.159	0.194	>= 0.10	0.602	>= 0.10	0.253	Gamma; Lognormal; Normal	Normal
2_19_2_5_101	MW-09	Appendix IV	Antimony	mg/L	13	8	62%	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
2_19_2_5_102	MW-09	Appendix IV	Arsenic	mg/L	13	0	0%	0.843	0.023	0.327	0.000	0.786	0.005	0.364	0.000	0.356	< 0.01	1.297	< 0.01	0.273	Nonparametric	Nonparametric
2_19_2_5_103	MW-09	Appendix IV	Barium	mg/L	13	0	0%	0.464	0.000	0.385	0.000	0.737	0.001	0.224	0.073	0.304	< 0.01	1.874	< 0.01	0.718	Lognormal	Lognormal
2_19_2_5_104	MW-09	Appendix IV	Beryllium	mg/L	13	11	85%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.012	NA	Nonparametric	Nonparametric
2_19_2_5_106	MW-09	Appendix IV	Cadmium	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	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
2_19_2_5_109	MW-09	Appendix IV	Chromium, Total	mg/L	13	0	0%	0.925	0.293	0.165	0.431	0.918	0.239	0.196	0.188	0.192	>= 0.10	0.479	>= 0.10	0.235	Gamma; Lognormal; Normal	Normal
2_19_2_5_110	MW-09	Appendix IV	Cobalt	mg/L	13	0	0%	0.942	0.488	0.124	0.846	0.930	0.346	0.148	0.605	0.148	>= 0.10	0.324	>= 0.10	0.484	Gamma; Lognormal; Normal	Normal
2_19_2_5_113	MW-09	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.937	0.422	0.121	0.865	0.934	0.383	0.119	0.886	0.127	>= 0.10	0.324	>= 0.10	0.107	Gamma; Lognormal; Normal	Normal
2_19_2_5_115	MW-09	Appendix IV	Lead	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
2_19_2_5_116	MW-09	Appendix IV	Lithium	mg/L	13	0	0%	0.911	0.188	0.177	0.325	0.913	0.201	0.162	0.459	0.172	>= 0.10	0.478	>= 0.10	0.094	Gamma; Lognormal; Normal	Normal
2_19_2_5_117	MW-09	Appendix IV	Mercury	mg/L	13	11	85%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.094	Nonparametric	
2_19_2_5_118	MW-09	Appendix IV	Molybdenum	mg/L	13	0	0%	0.953	0.640	0.209	0.124	0.928	0.321	0.199	0.169	0.174	>= 0.10	0.401	>= 0.10	0.349	Gamma; Lognormal; Normal	Normal
2_19_2_5_121	MW-09	Appendix IV	Radium 226 and 228	pCi/L	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
2_19_2_5_122	MW-09	Appendix IV	Selenium	mg/L	13	2	15%	0.920	0.321	0.211	0.184	0.839	0.031	0.268	0.026	0.240	0.05 <= p < 0.10	0.651	0.05 <= p < 0.10	0.297	Gamma; Normal	Normal
2_19_2_5_125	MW-09	Appendix IV	Thallium	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
2_21_2_3_127	MW-11	Additional Parameters	Total Suspended Solids	mg/L	12	0	0%	0.836	0.025	0.239	0.056	0.888	0.111	0.193	0.250	0.188	>= 0.10	0.573	>= 0.10	0.810	Gamma; Lognormal; Normal	Normal
2_21_2_4_105	MW-11	Appendix III	Boron	mg/L	13	0	0%	0.919	0.245	0.166	0.427	0.956	0.694	0.166	0.424	0.150	>= 0.10	0.268	>= 0.10	0.679	Gamma; Lognormal; Normal	Normal
2_21_2_4_107	MW-11	Appendix III	Calcium	mg/L	13	0	0%	0.970	0.892	0.105	0.959	0.925	0.293	0.162	0.459	0.137	>= 0.10	0.334	>= 0.10	0.322	Gamma; Lognormal; Normal	Normal
2_21_2_4_108	MW-11	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.982	0.989	0.128	0.814	0.955	0.682	0.162	0.461	0.156	>= 0.10	0.216	>= 0.10	0.251	Gamma; Lognormal; Normal	Normal
2_21_2_4_112	MW-11	Appendix III	Fluoride	mg/L	13	0	0%	0.920	0.249	0.139	0.702	0.945	0.530	0.128	0.811	0.124	>= 0.10	0.266	>= 0.10	0.637	Gamma; Lognormal; Normal	Normal
2_21_2_4_120	MW-11	Appendix III	pH (field)	su	13	0	0%	0.975	0.948	0.139	0.703	0.974	0.935	0.141	0.678	0.139	>= 0.10	0.208	>= 0.10	0.013	Gamma; Lognormal; Normal	Normal
2_21_2_4_124	MW-11	Appendix III	Sulfate (as SO4)	mg/L	13	4	31%	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
2_21_2_4_126	MW-11	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	0.847	0.026	0.236	0.046	0.927	0.311	0.193	0.204	0.199	>= 0.10	0.512	>= 0.10	0.228	Gamma; Lognormal	Gamma
2_21_2_5_101	MW-11	Appendix IV	Antimony	mg/L	13	9	69%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.875	Nonparametric	
2_21_2_5_102	MW-11	Appendix IV	Arsenic	mg/L	13	0	0%	0.789	0.005	0.234	0.050	0.955	0.674	0.142	0.672	0.170	>= 0.10	0.462	>= 0.10	0.453	Gamma; Lognormal; Normal	Normal
2_21_2_5_103	MW-11	Appendix IV	Barium	mg/L	13	0	0%	0.919	0.242	0.215	0.102	0.976	0.958	0.165	0.434	0.186	>= 0.10	0.265	>= 0.10	0.326	Gamma; Lognormal; Normal	Normal
2_21_2_5_104	MW-11	Appendix IV	Beryllium	mg/L	13	10	77%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.920	Nonparametric	
2_21_2_5_106	MW-11	Appendix IV	Cadmium	mg/L	13	11	85%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.073	Nonparametric	
2_21_2_5_109	MW-11	Appendix IV	Chromium, Total	mg/L	13	0	0%	0.448	0.000	0.397	0.000	0.772	0.003	0.262	0.015	0.324	< 0.01	1.860	< 0.01	0.745	Nonparametric	Nonparametric
2_21_2_5_110	MW-11	Appendix IV	Cobalt	mg/L	13	0	0%	0.678	0.000	0.299	0.002	0.914	0.206	0.181	0.288	0.206	>= 0.10	0.737	0.05 <= p < 0.10	0.664	Gamma; Lognormal	Gamma
2_21_2_5_113	MW-11	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.920	0.249	0.139	0.702	0.945	0.530	0.128	0.811	0.124	>= 0.10	0.266	>= 0.10	0.637	Gamma; Lognormal; Normal	Normal
2_21_2_5_115	MW-11	Appendix IV	Lead	mg/L	13	3	23%	0.411	0.000	0.475	0.000	0.841	0.046	0.269	0.039	0.309	0.01 <= p < 0.05	1.495	< 0.01	1.849	Nonparametric	Nonparametric
2_21_2_5_116	MW-11	Appendix IV	Lithium	mg/L	13	0	0%	0.871	0.054	0.153	0.551	0.962	0.782	0.099	0.980	0.105	>= 0.10	0.134	>= 0.10	1.061	Gamma; Lognormal; Normal	Gamma
2_21_2_5_117	MW-11	Appendix IV	Mercury	mg/L	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
2_21_2_5_118	MW-11	Appendix IV	Molybdenum	mg/L	13	2	15%	0.864	0.066	0.180	0.412	0.943	0.559	0.175	0.458	0.186	>= 0.10	0.365	>= 0.10	0.638	Gamma; Lognormal; Normal	Normal
2_21_2_5_121	MW-11	Appendix IV	Radium 226 and 228	pCi/L	13	4	31%	0.924	0.423	0.190	0.458	0.954	0.731	0.169	0.643	0.190	>= 0.10	0.272	>= 0.10	0.359	Gamma; Lognormal; Normal	Normal
2_21_2_5_122	MW-11	Appendix IV	Selenium	mg/L	13	3	23%	0.729	0.002	0.307	0.008	0.871	0.102	0.245	0.090	0.277	0.01 <= p < 0.05	0.743	0.01 <= p < 0.05	0.514	Lognormal	Lognormal
2_21_2_5_125	MW-11	Appendix IV	Thallium	mg/L	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
2_22_2_3_127	MW-12	Additional Parameters	Total Suspended Solids	mg/L	8	5	62%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.406	Nonparametric	
2_22_2_4_105	MW-12	Appendix III	Boron	mg/L	13	0	0%	0.898	0.124	0.190	0.222	0.910	0.182	0.153	0.559	0.167	>= 0.10	0.523	>= 0.10	0.286	Gamma; Lognormal; Normal	Normal
2_22_2_4_107	MW-12	Appendix III	Calcium	mg/L	13	0	0%	0.925	0.296	0.167	0.415	0.899	0.131	0.201	0.163	0.197	>= 0.10	0.504	>= 0.10	0.296	Gamma; Lognormal; Normal	Normal
2_22_2_4_108	MW-12	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.911	0.188	0.274	0.009	0.938	0.438	0.235	0.048	0.251	0.01 <= p < 0.05	0.517	>= 0.10	0.232	Gamma; Lognormal; Normal	Normal
2_22_2_4_112	MW-12	Appendix III	Fluoride	mg/L	13	0	0%	0.878	0.066	0.217	0.094	0.899	0.128	0.172	0.363	0.191	>= 0.10	0.649	0.05 <= p < 0.10	0.315	Gamma; Lognormal; Normal	Normal
2_22_2_4_120	MW-12	Appendix III	pH (field)	su	13	0	0%	0.978	0.968	0.131	0.785	0.978	0.966	0.125	0.840	0.133	>= 0.10	0.214	>= 0.10	0.046	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
2_22_2_4_124	MW-12	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	0.939	0.449	0.172	0.364	0.942	0.485	0.164	0.443	0.143	>= 0.10	0.319	>= 0.10	0.382	Gamma; Lognormal; Normal	Normal
2_22_2_4_126	MW-12	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	0.955	0.676	0.178	0.312	0.890	0.099	0.188	0.238	0.196	>= 0.10	0.437	>= 0.10	0.388	Gamma; Lognormal; Normal	Normal
2_22_2_5_101	MW-12	Appendix IV	Antimony	mg/L	13	0	0%	0.933	0.374	0.159	0.490	0.936	0.406	0.164	0.445	0.170	>= 0.10	0.366	>= 0.10	0.381	Gamma; Lognormal; Normal	Normal
2_22_2_5_102	MW-12	Appendix IV	Arsenic	mg/L	13	0	0%	0.902	0.143	0.220	0.084	0.904	0.152	0.205	0.144	0.212	>= 0.10	0.617	>= 0.10	0.305	Gamma; Lognormal; Normal	Normal
2_22_2_5_103	MW-12	Appendix IV	Barium	mg/L	13	0	0%	0.830	0.016	0.248	0.028	0.925	0.294	0.195	0.195	0.212	>= 0.10	0.613	>= 0.10	0.537	Gamma; Lognormal	Gamma
2_22_2_5_104	MW-12	Appendix IV	Beryllium	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	Nonparametric	
2_22_2_5_106	MW-12	Appendix IV	Cadmium	mg/L	13	0	0%	0.891	0.101	0.165	0.433	0.942	0.490	0.146	0.625	0.163	>= 0.10	0.367	>= 0.10	0.602	Gamma; Lognormal; Normal	Normal
2_22_2_5_109	MW-12	Appendix IV	Chromium, Total	mg/L	13	5	38%	0.917	0.408	0.192	0.525	0.959	0.803	0.139	0.919	0.164	>= 0.10	0.242	>= 0.10	0.475	Gamma; Lognormal; Normal	Normal
2_22_2_5_110	MW-12	Appendix IV	Cobalt	mg/L	13	5	38%	0.927	0.487	0.189	0.549	0.962	0.828	0.182	0.606	0.169	>= 0.10	0.230	>= 0.10	0.627	Gamma; Lognormal; Normal	Normal
2_22_2_5_113	MW-12	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.878	0.066	0.217	0.094	0.899	0.128	0.172	0.363	0.191	>= 0.10	0.649	0.05 <= p < 0.10	0.315	Gamma; Lognormal; Normal	Normal
2_22_2_5_115	MW-12	Appendix IV	Lead	mg/L	13	6	46%	0.875	0.205	0.270	0.128	0.890	0.276	0.229	0.327	0.249	>= 0.10	0.479	>= 0.10	0.488	Gamma; Lognormal; Normal	Normal
2_22_2_5_116	MW-12	Appendix IV	Lithium	mg/L	13	0	0%	0.953	0.642	0.137	0.725	0.950	0.605	0.145	0.636	0.147	>= 0.10	0.276	>= 0.10	0.385	Gamma; Lognormal; Normal	Normal
2_22_2_5_117	MW-12	Appendix IV	Mercury	mg/L	13	11	85%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.257	Nonparametric	
2_22_2_5_118	MW-12	Appendix IV	Molybdenum	mg/L	13	0	0%	0.739	0.001	0.232	0.054	0.905	0.159	0.145	0.635	0.169	>= 0.10	0.605	>= 0.10	0.350	Gamma; Lognormal; Normal	Normal
2_22_2_5_121	MW-12	Appendix IV	Radium 226 and 228	pCi/L	13	9	69%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.321	Nonparametric	
2_22_2_5_122	MW-12	Appendix IV	Selenium	mg/L	13	0	0%	0.908	0.171	0.148	0.606	0.914	0.211	0.170	0.386	0.126	>= 0.10	0.324	>= 0.10	1.016	Gamma; Lognormal; Normal	Gamma
2_22_2_5_125	MW-12	Appendix IV	Thallium	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	Nonparametric	
3_20_3_3_127	MW-10	Additional Parameters	Total Suspended Solids	mg/L	12	2	17%	0.863	0.083	0.182	0.460	0.976	0.938	0.130	0.905	0.141	>= 0.10	0.190	>= 0.10	0.912	Gamma; Lognormal; Normal	Normal
3_20_3_4_105	MW-10	Appendix III	Boron	mg/L	13	0	0%	0.935	0.391	0.168	0.406	0.932	0.359	0.146	0.630	0.150	>= 0.10	0.337	>= 0.10	0.584	Gamma; Lognormal; Normal	Normal
3_20_3_4_107	MW-10	Appendix III	Calcium	mg/L	13	0	0%	0.885	0.084	0.202	0.155	0.949	0.585	0.196	0.189	0.209	>= 0.10	0.433	>= 0.10	0.388	Gamma; Lognormal; Normal	Normal
3_20_3_4_108	MW-10	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.865	0.044	0.180	0.298	0.965	0.831	0.151	0.572	0.175	>= 0.10	0.353	>= 0.10	0.576	Gamma; Lognormal; Normal	Normal
3_20_3_4_112	MW-10	Appendix III	Fluoride	mg/L	13	0	0%	0.944	0.517	0.101	0.973	0.926	0.302	0.130	0.793	0.123	>= 0.10	0.307	>= 0.10	0.363	Gamma; Lognormal; Normal	Normal
3_20_3_4_120	MW-10	Appendix III	pH (field)	su	13	0	0%	0.916	0.218	0.211	0.116	0.928	0.320	0.201	0.160	0.202	>= 0.10	0.520	>= 0.10	0.053	Gamma; Lognormal; Normal	Normal
3_20_3_4_124	MW-10	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	0.915	0.215	0.135	0.746	0.970	0.898	0.121	0.872	0.112	>= 0.10	0.172	>= 0.10	0.697	Gamma; Lognormal; Normal	Normal
3_20_3_4_126	MW-10	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	0.834	0.018	0.311	0.001	0.873	0.058	0.282	0.006	0.297	< 0.01	0.916	0.01 <= p < 0.05	0.238	Lognormal	Lognormal
3_20_3_5_101	MW-10	Appendix IV	Antimony	mg/L	13	9	69%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.542	Nonparametric	
3_20_3_5_102	MW-10	Appendix IV	Arsenic	mg/L	13	0	0%	0.871	0.054	0.173	0.356	0.979	0.975	0.126	0.830	0.146	>= 0.10	0.229	>= 0.10	0.673	Gamma; Lognormal; Normal	Normal
3_20_3_5_103	MW-10	Appendix IV	Barium	mg/L	13	0	0%	0.876	0.063	0.224	0.073	0.965	0.822	0.154	0.545	0.170	>= 0.10	0.359	>= 0.10	0.387	Gamma; Lognormal; Normal	Normal
3_20_3_5_104	MW-10	Appendix IV	Beryllium	mg/L	13	6	46%	0.806	0.047	0.267	0.138	0.885	0.251	0.217	0.406	0.245	>= 0.10	0.513	>= 0.10	0.547	Gamma; Lognormal; Normal	Normal
3_20_3_5_106	MW-10	Appendix IV	Cadmium	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	Nonparametric	
3_20_3_5_109	MW-10	Appendix IV	Chromium, Total	mg/L	13	0	0%	0.896	0.118	0.176	0.330	0.971	0.903	0.124	0.848	0.131	>= 0.10	0.242	>= 0.10	0.572	Gamma; Lognormal; Normal	Normal
3_20_3_5_110	MW-10	Appendix IV	Cobalt	mg/L	13	1	8%	0.735	0.002	0.278	0.011	0.942	0.521	0.184	0.316	0.229	>= 0.10	0.578	>= 0.10	0.703	Gamma; Lognormal	Gamma
3_20_3_5_113	MW-10	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.944	0.517	0.101	0.973	0.926	0.302	0.130	0.793	0.123	>= 0.10	0.307	>= 0.10	0.363	Gamma; Lognormal; Normal	Normal
3_20_3_5_115	MW-10	Appendix IV	Lead	mg/L	13	11	85%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.246	Nonparametric	
3_20_3_5_116	MW-10	Appendix IV	Lithium	mg/L	13	0	0%	0.925	0.292	0.181	0.287	0.949	0.580	0.153	0.552	0.143	>= 0.10	0.351	>= 0.10	0.290	Gamma; Lognormal; Normal	Normal
3_20_3_5_117	MW-10	Appendix IV	Mercury	mg/L	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	Nonparametric	
3_20_3_5_118	MW-10	Appendix IV	Molybdenum	mg/L	13	0	0%	0.953	0.643	0.212	0.114	0.934	0.382	0.190	0.223	0.152	>= 0.10	0.303	>= 0.10	0.575	Gamma; Lognormal; Normal	Normal
3_20_3_5_121	MW-10	Appendix IV	Radium 226 and 228	pCi/L	13	10	77%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.259	Nonparametric	
3_20_3_5_122	MW-10	Appendix IV	Selenium	mg/L	13	1	8%	0.646	0.000	0.277	0.011	0.782	0.006	0.210	0.150	0.228	>= 0.10	1.141	< 0.01	0.290	Gamma; Lognormal	Gamma

(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
3_20_3_5_125	MW-10	Appendix IV	Thallium	mg/L	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	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.
1_16_1_3_127	MW-06	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	0.225	0.364	
1_16_1_4_105	MW-06	Appendix III	Boron	mg/L	13	0	0%	0.199	0.422	
1_16_1_4_107	MW-06	Appendix III	Calcium	mg/L	13	0	0%	0.084	0.735	
1_16_1_4_108	MW-06	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.604	0.015	*
1_16_1_4_112	MW-06	Appendix III	Fluoride	mg/L	13	0	0%	-0.006	0.981	
1_16_1_4_120	MW-06	Appendix III	pH (field)	su	13	0	0%	-0.017	0.945	
1_16_1_4_124	MW-06	Appendix III	Sulfate (as SO4)	mg/L	13	2	15%	0.116	0.661	
1_16_1_4_126	MW-06	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	0.167	0.502	
1_16_1_5_101	MW-06	Appendix IV	Antimony	mg/L	13	11	85%	-0.500	0.157	
1_16_1_5_102	MW-06	Appendix IV	Arsenic	mg/L	13	0	0%	0.278	0.262	
1_16_1_5_103	MW-06	Appendix IV	Barium	mg/L	13	0	0%	0.259	0.297	
1_16_1_5_104	MW-06	Appendix IV	Beryllium	mg/L	13	12	92%	NA	NA	
1_16_1_5_109	MW-06	Appendix IV	Chromium, Total	mg/L	13	0	0%	0.259	0.296	
1_16_1_5_110	MW-06	Appendix IV	Cobalt	mg/L	13	0	0%	0.419	0.092	
1_16_1_5_113	MW-06	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	-0.006	0.981	
1_16_1_5_115	MW-06	Appendix IV	Lead	mg/L	13	9	69%	-0.094	0.791	
1_16_1_5_116	MW-06	Appendix IV	Lithium	mg/L	13	0	0%	0.501	0.044	*
1_16_1_5_118	MW-06	Appendix IV	Molybdenum	mg/L	13	8	62%	0.040	0.905	
1_16_1_5_121	MW-06	Appendix IV	Radium 226 and 228	pCi/L	13	3	23%	-0.202	0.461	
1_16_1_5_122	MW-06	Appendix IV	Selenium	mg/L	13	5	38%	-0.162	0.584	
1_17_1_3_127	MW-07	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	0.226	0.361	
1_17_1_4_105	MW-07	Appendix III	Boron	mg/L	13	0	0%	-0.388	0.117	
1_17_1_4_107	MW-07	Appendix III	Calcium	mg/L	13	0	0%	-0.396	0.111	
1_17_1_4_108	MW-07	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.500	0.044	*
1_17_1_4_112	MW-07	Appendix III	Fluoride	mg/L	13	2	15%	-0.239	0.366	
1_17_1_4_120	MW-07	Appendix III	pH (field)	su	13	0	0%	0.143	0.565	
1_17_1_4_124	MW-07	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	0.176	0.477	
1_17_1_4_126	MW-07	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	0.099	0.691	
1_17_1_5_101	MW-07	Appendix IV	Antimony	mg/L	13	12	92%	NA	NA	
1_17_1_5_102	MW-07	Appendix IV	Arsenic	mg/L	13	0	0%	-0.009	0.971	
1_17_1_5_103	MW-07	Appendix IV	Barium	mg/L	13	0	0%	0.284	0.252	
1_17_1_5_104	MW-07	Appendix IV	Beryllium	mg/L	13	10	77%	-0.403	0.269	
1_17_1_5_109	MW-07	Appendix IV	Chromium, Total	mg/L	13	0	0%	0.080	0.748	
1_17_1_5_110	MW-07	Appendix IV	Cobalt	mg/L	13	0	0%	0.200	0.420	
1_17_1_5_113	MW-07	Appendix IV	Fluoride (App IV)	mg/L	13	2	15%	-0.239	0.366	
1_17_1_5_116	MW-07	Appendix IV	Lithium	mg/L	13	0	0%	-0.295	0.234	
1_17_1_5_121	MW-07	Appendix IV	Radium 226 and 228	pCi/L	13	2	15%	-0.349	0.187	
1_17_1_5_122	MW-07	Appendix IV	Selenium	mg/L	13	9	69%	-0.745	0.035	*
1_18_1_3_127	MW-08	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	0.486	0.050	
1_18_1_4_105	MW-08	Appendix III	Boron	mg/L	13	0	0%	0.028	0.909	
1_18_1_4_107	MW-08	Appendix III	Calcium	mg/L	13	0	0%	0.469	0.059	
1_18_1_4_108	MW-08	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.042	0.865	

(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.
1_18_1_4_112	MW-08	Appendix III	Fluoride	mg/L	13	0	0%	0.309	0.213	
1_18_1_4_120	MW-08	Appendix III	pH (field)	su	13	0	0%	0.076	0.758	
1_18_1_4_124	MW-08	Appendix III	Sulfate (as SO4)	mg/L	13	4	31%	-0.201	0.479	
1_18_1_4_126	MW-08	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	-0.204	0.411	
1_18_1_5_101	MW-08	Appendix IV	Antimony	mg/L	13	6	46%	-0.030	0.923	
1_18_1_5_102	MW-08	Appendix IV	Arsenic	mg/L	13	0	0%	0.356	0.151	
1_18_1_5_103	MW-08	Appendix IV	Barium	mg/L	13	0	0%	0.420	0.090	
1_18_1_5_109	MW-08	Appendix IV	Chromium, Total	mg/L	13	0	0%	0.394	0.113	
1_18_1_5_110	MW-08	Appendix IV	Cobalt	mg/L	13	0	0%	0.528	0.033	*
1_18_1_5_113	MW-08	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.309	0.213	
1_18_1_5_115	MW-08	Appendix IV	Lead	mg/L	13	9	69%	-0.169	0.632	
1_18_1_5_116	MW-08	Appendix IV	Lithium	mg/L	13	0	0%	0.219	0.376	
1_18_1_5_118	MW-08	Appendix IV	Molybdenum	mg/L	13	0	0%	0.236	0.341	
1_18_1_5_121	MW-08	Appendix IV	Radium 226 and 228	pCi/L	13	3	23%	0.029	0.916	
1_18_1_5_122	MW-08	Appendix IV	Selenium	mg/L	13	5	38%	-0.224	0.450	
1_28_1_3_127	MW-18	Additional Parameters	Total Suspended Solids	mg/L	13	1	8%	-0.002	0.992	
1_28_1_4_105	MW-18	Appendix III	Boron	mg/L	13	0	0%	0.761	0.002	**
1_28_1_4_107	MW-18	Appendix III	Calcium	mg/L	13	0	0%	0.435	0.080	
1_28_1_4_108	MW-18	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.159	0.522	
1_28_1_4_112	MW-18	Appendix III	Fluoride	mg/L	13	0	0%	0.352	0.156	
1_28_1_4_120	MW-18	Appendix III	pH (field)	su	13	0	0%	0.134	0.588	
1_28_1_4_124	MW-18	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	0.143	0.565	
1_28_1_4_126	MW-18	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	0.396	0.111	
1_28_1_5_101	MW-18	Appendix IV	Antimony	mg/L	13	3	23%	-0.269	0.326	
1_28_1_5_102	MW-18	Appendix IV	Arsenic	mg/L	13	0	0%	0.265	0.285	
1_28_1_5_103	MW-18	Appendix IV	Barium	mg/L	13	0	0%	0.373	0.133	
1_28_1_5_104	MW-18	Appendix IV	Beryllium	mg/L	13	12	92%	NA	NA	
1_28_1_5_106	MW-18	Appendix IV	Cadmium	mg/L	13	6	46%	-0.143	0.642	
1_28_1_5_109	MW-18	Appendix IV	Chromium, Total	mg/L	13	12	92%	NA	NA	
1_28_1_5_110	MW-18	Appendix IV	Cobalt	mg/L	13	0	0%	0.653	0.009	**
1_28_1_5_113	MW-18	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.352	0.156	
1_28_1_5_115	MW-18	Appendix IV	Lead	mg/L	13	8	62%	-0.255	0.450	
1_28_1_5_116	MW-18	Appendix IV	Lithium	mg/L	13	0	0%	0.343	0.167	
1_28_1_5_118	MW-18	Appendix IV	Molybdenum	mg/L	13	0	0%	0.302	0.224	
1_28_1_5_121	MW-18	Appendix IV	Radium 226 and 228	pCi/L	13	8	62%	-0.041	0.903	
1_28_1_5_122	MW-18	Appendix IV	Selenium	mg/L	13	0	0%	0.233	0.348	
1_29_1_3_127	MW-19	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	0.197	0.427	
1_29_1_4_105	MW-19	Appendix III	Boron	mg/L	13	0	0%	0.015	0.951	
1_29_1_4_107	MW-19	Appendix III	Calcium	mg/L	13	0	0%	0.334	0.178	
1_29_1_4_108	MW-19	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.581	0.019	*
1_29_1_4_112	MW-19	Appendix III	Fluoride	mg/L	13	0	0%	0.416	0.094	
1_29_1_4_120	MW-19	Appendix III	pH (field)	su	13	0	0%	-0.293	0.237	

(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.
1_29_1_4_124	MW-19	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	-0.047	0.849	
1_29_1_4_126	MW-19	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	0.652	0.009	**
1_29_1_5_101	MW-19	Appendix IV	Antimony	mg/L	13	12	92%	NA	NA	
1_29_1_5_102	MW-19	Appendix IV	Arsenic	mg/L	13	0	0%	0.276	0.266	
1_29_1_5_103	MW-19	Appendix IV	Barium	mg/L	13	0	0%	0.417	0.093	
1_29_1_5_104	MW-19	Appendix IV	Beryllium	mg/L	13	3	23%	0.458	0.094	
1_29_1_5_109	MW-19	Appendix IV	Chromium, Total	mg/L	13	5	38%	0.132	0.656	
1_29_1_5_110	MW-19	Appendix IV	Cobalt	mg/L	13	1	8%	0.586	0.022	*
1_29_1_5_113	MW-19	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.416	0.094	
1_29_1_5_116	MW-19	Appendix IV	Lithium	mg/L	13	0	0%	0.323	0.193	
1_29_1_5_118	MW-19	Appendix IV	Molybdenum	mg/L	13	0	0%	-0.037	0.881	
1_29_1_5_121	MW-19	Appendix IV	Radium 226 and 228	pCi/L	13	5	38%	0.103	0.729	
1_29_1_5_122	MW-19	Appendix IV	Selenium	mg/L	13	10	77%	-0.167	0.648	
1_30_1_3_127	MW-20	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	-0.229	0.356	
1_30_1_4_105	MW-20	Appendix III	Boron	mg/L	13	0	0%	0.271	0.274	
1_30_1_4_107	MW-20	Appendix III	Calcium	mg/L	13	0	0%	0.171	0.490	
1_30_1_4_108	MW-20	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.103	0.677	
1_30_1_4_112	MW-20	Appendix III	Fluoride	mg/L	13	0	0%	0.020	0.935	
1_30_1_4_120	MW-20	Appendix III	pH (field)	su	13	0	0%	-0.037	0.881	
1_30_1_4_124	MW-20	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	0.577	0.020	*
1_30_1_4_126	MW-20	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	0.067	0.786	
1_30_1_5_101	MW-20	Appendix IV	Antimony	mg/L	13	4	31%	0.169	0.551	
1_30_1_5_102	MW-20	Appendix IV	Arsenic	mg/L	13	0	0%	0.390	0.116	
1_30_1_5_103	MW-20	Appendix IV	Barium	mg/L	13	0	0%	0.248	0.317	
1_30_1_5_104	MW-20	Appendix IV	Beryllium	mg/L	13	12	92%	NA	NA	
1_30_1_5_109	MW-20	Appendix IV	Chromium, Total	mg/L	13	5	38%	-0.184	0.534	
1_30_1_5_110	MW-20	Appendix IV	Cobalt	mg/L	13	0	0%	0.689	0.005	**
1_30_1_5_113	MW-20	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.020	0.935	
1_30_1_5_115	MW-20	Appendix IV	Lead	mg/L	13	0	0%	0.361	0.146	
1_30_1_5_116	MW-20	Appendix IV	Lithium	mg/L	13	0	0%	0.245	0.323	
1_30_1_5_118	MW-20	Appendix IV	Molybdenum	mg/L	13	0	0%	0.236	0.342	
1_30_1_5_121	MW-20	Appendix IV	Radium 226 and 228	pCi/L	13	7	54%	-0.076	0.815	
1_30_1_5_122	MW-20	Appendix IV	Selenium	mg/L	13	7	54%	-0.117	0.718	
1_30_1_5_125	MW-20	Appendix IV	Thallium	mg/L	13	12	92%	NA	NA	
1_40_1_3_127	MW-30	Additional Parameters	Total Suspended Solids	mg/L	11	1	9%	-0.041	0.882	
1_40_1_4_105	MW-30	Appendix III	Boron	mg/L	13	0	0%	-0.099	0.689	
1_40_1_4_107	MW-30	Appendix III	Calcium	mg/L	13	0	0%	-0.037	0.880	
1_40_1_4_108	MW-30	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.262	0.291	
1_40_1_4_112	MW-30	Appendix III	Fluoride	mg/L	13	0	0%	-0.436	0.079	
1_40_1_4_120	MW-30	Appendix III	pH (field)	su	13	0	0%	-0.014	0.955	
1_40_1_4_124	MW-30	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	-0.100	0.687	
1_40_1_4_126	MW-30	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	-0.105	0.672	

(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.
1_40_1_5_101	MW-30	Appendix IV	Antimony	mg/L	13	12	92%	NA	NA	
1_40_1_5_102	MW-30	Appendix IV	Arsenic	mg/L	13	2	15%	0.169	0.522	
1_40_1_5_103	MW-30	Appendix IV	Barium	mg/L	13	0	0%	0.300	0.226	
1_40_1_5_104	MW-30	Appendix IV	Beryllium	mg/L	13	11	85%	-0.500	0.157	
1_40_1_5_109	MW-30	Appendix IV	Chromium, Total	mg/L	13	0	0%	0.284	0.252	
1_40_1_5_110	MW-30	Appendix IV	Cobalt	mg/L	13	0	0%	-0.167	0.501	
1_40_1_5_113	MW-30	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	-0.436	0.079	
1_40_1_5_115	MW-30	Appendix IV	Lead	mg/L	13	12	92%	NA	NA	
1_40_1_5_116	MW-30	Appendix IV	Lithium	mg/L	13	0	0%	-0.145	0.558	
1_40_1_5_117	MW-30	Appendix IV	Mercury	mg/L	13	12	92%	NA	NA	
1_40_1_5_118	MW-30	Appendix IV	Molybdenum	mg/L	13	3	23%	0.187	0.494	
1_40_1_5_121	MW-30	Appendix IV	Radium 226 and 228	pCi/L	13	7	54%	-0.490	0.129	
1_40_1_5_122	MW-30	Appendix IV	Selenium	mg/L	13	6	46%	-0.305	0.323	
1_41_1_3_127	MW-31	Additional Parameters	Total Suspended Solids	mg/L	8	5	62%	-0.595	0.103	
1_41_1_4_105	MW-31	Appendix III	Boron	mg/L	13	0	0%	0.402	0.105	
1_41_1_4_107	MW-31	Appendix III	Calcium	mg/L	13	0	0%	0.292	0.240	
1_41_1_4_108	MW-31	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.065	0.792	
1_41_1_4_112	MW-31	Appendix III	Fluoride	mg/L	13	0	0%	0.072	0.771	
1_41_1_4_120	MW-31	Appendix III	pH (field)	su	13	0	0%	-0.173	0.485	
1_41_1_4_124	MW-31	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	0.550	0.027	*
1_41_1_4_126	MW-31	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	-0.043	0.862	
1_41_1_5_101	MW-31	Appendix IV	Antimony	mg/L	13	6	46%	0.460	0.136	
1_41_1_5_102	MW-31	Appendix IV	Arsenic	mg/L	13	0	0%	0.308	0.214	
1_41_1_5_103	MW-31	Appendix IV	Barium	mg/L	13	0	0%	0.028	0.909	
1_41_1_5_104	MW-31	Appendix IV	Beryllium	mg/L	13	11	85%	-0.500	0.157	
1_41_1_5_106	MW-31	Appendix IV	Cadmium	mg/L	13	12	92%	NA	NA	
1_41_1_5_109	MW-31	Appendix IV	Chromium, Total	mg/L	13	0	0%	0.148	0.551	
1_41_1_5_110	MW-31	Appendix IV	Cobalt	mg/L	13	1	8%	-0.513	0.045	*
1_41_1_5_113	MW-31	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.072	0.771	
1_41_1_5_115	MW-31	Appendix IV	Lead	mg/L	13	11	85%	-0.500	0.157	
1_41_1_5_116	MW-31	Appendix IV	Lithium	mg/L	13	0	0%	0.290	0.242	
1_41_1_5_118	MW-31	Appendix IV	Molybdenum	mg/L	13	0	0%	0.210	0.398	
1_41_1_5_121	MW-31	Appendix IV	Radium 226 and 228	pCi/L	13	4	31%	-0.423	0.137	
1_41_1_5_122	MW-31	Appendix IV	Selenium	mg/L	13	5	38%	-0.155	0.601	
1_41_1_5_125	MW-31	Appendix IV	Thallium	mg/L	13	12	92%	NA	NA	
1_42_1_3_127	MW-32	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	0.555	0.025	*
1_42_1_4_105	MW-32	Appendix III	Boron	mg/L	13	0	0%	0.206	0.406	
1_42_1_4_107	MW-32	Appendix III	Calcium	mg/L	13	0	0%	0.432	0.082	
1_42_1_4_108	MW-32	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.482	0.052	
1_42_1_4_112	MW-32	Appendix III	Fluoride	mg/L	13	0	0%	-0.070	0.778	
1_42_1_4_120	MW-32	Appendix III	pH (field)	su	13	0	0%	0.131	0.597	
1_42_1_4_124	MW-32	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	0.409	0.099	

(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.
1_42_1_4_126	MW-32	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	0.365	0.142	
1_42_1_5_101	MW-32	Appendix IV	Antimony	mg/L	13	9	69%	0.004	0.991	
1_42_1_5_102	MW-32	Appendix IV	Arsenic	mg/L	13	0	0%	-0.103	0.677	
1_42_1_5_103	MW-32	Appendix IV	Barium	mg/L	13	0	0%	0.008	0.975	
1_42_1_5_104	MW-32	Appendix IV	Beryllium	mg/L	13	12	92%	NA	NA	
1_42_1_5_106	MW-32	Appendix IV	Cadmium	mg/L	13	12	92%	NA	NA	
1_42_1_5_109	MW-32	Appendix IV	Chromium, Total	mg/L	13	0	0%	-0.143	0.565	
1_42_1_5_110	MW-32	Appendix IV	Cobalt	mg/L	13	0	0%	-0.234	0.346	
1_42_1_5_113	MW-32	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	-0.070	0.778	
1_42_1_5_115	MW-32	Appendix IV	Lead	mg/L	13	9	69%	0.292	0.409	
1_42_1_5_116	MW-32	Appendix IV	Lithium	mg/L	13	0	0%	0.141	0.570	
1_42_1_5_117	MW-32	Appendix IV	Mercury	mg/L	13	12	92%	NA	NA	
1_42_1_5_118	MW-32	Appendix IV	Molybdenum	mg/L	13	0	0%	-0.012	0.962	
1_42_1_5_121	MW-32	Appendix IV	Radium 226 and 228	pCi/L	13	8	62%	-0.297	0.379	
1_42_1_5_122	MW-32	Appendix IV	Selenium	mg/L	13	10	77%	-0.172	0.637	
2_11_2_3_127	MW-01R	Additional Parameters	Total Suspended Solids	mg/L	12	4	33%	-0.167	0.573	
2_11_2_4_105	MW-01R	Appendix III	Boron	mg/L	13	0	0%	0.210	0.396	
2_11_2_4_107	MW-01R	Appendix III	Calcium	mg/L	13	0	0%	0.162	0.514	
2_11_2_4_108	MW-01R	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.084	0.735	
2_11_2_4_112	MW-01R	Appendix III	Fluoride	mg/L	13	0	0%	0.280	0.259	
2_11_2_4_120	MW-01R	Appendix III	pH (field)	su	13	0	0%	-0.116	0.640	
2_11_2_4_124	MW-01R	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	0.192	0.438	
2_11_2_4_126	MW-01R	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	0.023	0.927	
2_11_2_5_101	MW-01R	Appendix IV	Antimony	mg/L	13	3	23%	0.353	0.198	
2_11_2_5_102	MW-01R	Appendix IV	Arsenic	mg/L	13	0	0%	-0.075	0.762	
2_11_2_5_103	MW-01R	Appendix IV	Barium	mg/L	13	0	0%	0.383	0.123	
2_11_2_5_104	MW-01R	Appendix IV	Beryllium	mg/L	13	2	15%	0.336	0.204	
2_11_2_5_106	MW-01R	Appendix IV	Cadmium	mg/L	13	10	77%	-0.267	0.464	
2_11_2_5_109	MW-01R	Appendix IV	Chromium, Total	mg/L	13	0	0%	-0.139	0.575	
2_11_2_5_110	MW-01R	Appendix IV	Cobalt	mg/L	13	0	0%	-0.304	0.220	
2_11_2_5_113	MW-01R	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.280	0.259	
2_11_2_5_115	MW-01R	Appendix IV	Lead	mg/L	13	2	15%	-0.091	0.730	
2_11_2_5_116	MW-01R	Appendix IV	Lithium	mg/L	13	0	0%	0.212	0.393	
2_11_2_5_118	MW-01R	Appendix IV	Molybdenum	mg/L	13	1	8%	0.000	0.999	
2_11_2_5_121	MW-01R	Appendix IV	Radium 226 and 228	pCi/L	13	7	54%	-0.747	0.021	*
2_11_2_5_122	MW-01R	Appendix IV	Selenium	mg/L	13	0	0%	-0.157	0.528	
2_12_2_3_127	MW-02	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	0.303	0.222	
2_12_2_4_105	MW-02	Appendix III	Boron	mg/L	13	0	0%	0.301	0.225	
2_12_2_4_107	MW-02	Appendix III	Calcium	mg/L	13	0	0%	-0.153	0.537	
2_12_2_4_108	MW-02	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.010	0.969	
2_12_2_4_112	MW-02	Appendix III	Fluoride	mg/L	13	0	0%	-0.057	0.817	
2_12_2_4_120	MW-02	Appendix III	pH (field)	su	13	0	0%	-0.004	0.987	

(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.
2_12_2_4_124	MW-02	Appendix III	Sulfate (as SO4)	mg/L	13	8	62%	-0.513	0.129	
2_12_2_4_126	MW-02	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	0.304	0.221	
2_12_2_5_101	MW-02	Appendix IV	Antimony	mg/L	13	3	23%	-0.038	0.889	
2_12_2_5_102	MW-02	Appendix IV	Arsenic	mg/L	13	0	0%	0.220	0.374	
2_12_2_5_103	MW-02	Appendix IV	Barium	mg/L	13	0	0%	0.100	0.688	
2_12_2_5_104	MW-02	Appendix IV	Beryllium	mg/L	13	1	8%	0.237	0.354	
2_12_2_5_106	MW-02	Appendix IV	Cadmium	mg/L	13	10	77%	-0.172	0.637	
2_12_2_5_109	MW-02	Appendix IV	Chromium, Total	mg/L	13	0	0%	0.118	0.635	
2_12_2_5_110	MW-02	Appendix IV	Cobalt	mg/L	13	0	0%	0.011	0.966	
2_12_2_5_113	MW-02	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	-0.057	0.817	
2_12_2_5_115	MW-02	Appendix IV	Lead	mg/L	13	1	8%	-0.145	0.570	
2_12_2_5_116	MW-02	Appendix IV	Lithium	mg/L	13	0	0%	-0.109	0.660	
2_12_2_5_118	MW-02	Appendix IV	Molybdenum	mg/L	13	0	0%	0.672	0.007	**
2_12_2_5_121	MW-02	Appendix IV	Radium 226 and 228	pCi/L	13	4	31%	0.135	0.635	
2_12_2_5_122	MW-02	Appendix IV	Selenium	mg/L	13	0	0%	-0.121	0.626	
2_12_2_5_125	MW-02	Appendix IV	Thallium	mg/L	13	12	92%	NA	NA	
2_13_2_3_127	MW-03	Additional Parameters	Total Suspended Solids	mg/L	10	5	50%	-0.084	0.804	
2_13_2_4_105	MW-03	Appendix III	Boron	mg/L	13	0	0%	-0.289	0.244	
2_13_2_4_107	MW-03	Appendix III	Calcium	mg/L	13	0	0%	-0.069	0.780	
2_13_2_4_108	MW-03	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.391	0.115	
2_13_2_4_112	MW-03	Appendix III	Fluoride	mg/L	13	0	0%	0.005	0.983	
2_13_2_4_120	MW-03	Appendix III	pH (field)	su	13	0	0%	-0.188	0.448	
2_13_2_4_124	MW-03	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	0.344	0.165	
2_13_2_4_126	MW-03	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	0.341	0.169	
2_13_2_5_101	MW-03	Appendix IV	Antimony	mg/L	13	8	62%	-0.105	0.756	
2_13_2_5_102	MW-03	Appendix IV	Arsenic	mg/L	13	0	0%	0.165	0.506	
2_13_2_5_103	MW-03	Appendix IV	Barium	mg/L	13	0	0%	-0.396	0.110	
2_13_2_5_104	MW-03	Appendix IV	Beryllium	mg/L	13	8	62%	-0.764	0.024	*
2_13_2_5_106	MW-03	Appendix IV	Cadmium	mg/L	13	12	92%	NA	NA	
2_13_2_5_109	MW-03	Appendix IV	Chromium, Total	mg/L	13	0	0%	-0.089	0.720	
2_13_2_5_110	MW-03	Appendix IV	Cobalt	mg/L	13	0	0%	-0.237	0.340	
2_13_2_5_113	MW-03	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.005	0.983	
2_13_2_5_115	MW-03	Appendix IV	Lead	mg/L	13	12	92%	NA	NA	
2_13_2_5_116	MW-03	Appendix IV	Lithium	mg/L	13	0	0%	0.255	0.304	
2_13_2_5_117	MW-03	Appendix IV	Mercury	mg/L	13	12	92%	NA	NA	
2_13_2_5_118	MW-03	Appendix IV	Molybdenum	mg/L	13	9	69%	-0.385	0.276	
2_13_2_5_121	MW-03	Appendix IV	Radium 226 and 228	pCi/L	13	1	8%	-0.311	0.224	
2_13_2_5_122	MW-03	Appendix IV	Selenium	mg/L	13	3	23%	0.191	0.486	
2_13_2_5_125	MW-03	Appendix IV	Thallium	mg/L	13	12	92%	NA	NA	
2_14_2_3_127	MW-04	Additional Parameters	Total Suspended Solids	mg/L	12	1	8%	-0.070	0.790	
2_14_2_4_105	MW-04	Appendix III	Boron	mg/L	13	0	0%	0.264	0.288	
2_14_2_4_107	MW-04	Appendix III	Calcium	mg/L	13	0	0%	-0.117	0.636	

(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.
2_14_2_4_108	MW-04	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.535	0.031	*
2_14_2_4_112	MW-04	Appendix III	Fluoride	mg/L	13	0	0%	0.231	0.351	
2_14_2_4_120	MW-04	Appendix III	pH (field)	su	13	0	0%	0.010	0.968	
2_14_2_4_124	MW-04	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	0.429	0.084	
2_14_2_4_126	MW-04	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	-0.156	0.529	
2_14_2_5_101	MW-04	Appendix IV	Antimony	mg/L	13	10	77%	-0.655	0.073	
2_14_2_5_102	MW-04	Appendix IV	Arsenic	mg/L	13	0	0%	-0.121	0.627	
2_14_2_5_103	MW-04	Appendix IV	Barium	mg/L	13	0	0%	-0.050	0.841	
2_14_2_5_104	MW-04	Appendix IV	Beryllium	mg/L	13	11	85%	-0.500	0.157	
2_14_2_5_109	MW-04	Appendix IV	Chromium, Total	mg/L	13	0	0%	0.072	0.772	
2_14_2_5_110	MW-04	Appendix IV	Cobalt	mg/L	13	0	0%	0.246	0.321	
2_14_2_5_113	MW-04	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.231	0.351	
2_14_2_5_116	MW-04	Appendix IV	Lithium	mg/L	13	0	0%	0.018	0.942	
2_14_2_5_118	MW-04	Appendix IV	Molybdenum	mg/L	13	2	15%	0.114	0.667	
2_14_2_5_121	MW-04	Appendix IV	Radium 226 and 228	pCi/L	13	3	23%	0.355	0.194	
2_14_2_5_122	MW-04	Appendix IV	Selenium	mg/L	13	5	38%	-0.287	0.331	
2_19_2_3_127	MW-09	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	0.151	0.542	
2_19_2_4_105	MW-09	Appendix III	Boron	mg/L	13	0	0%	-0.048	0.847	
2_19_2_4_107	MW-09	Appendix III	Calcium	mg/L	13	0	0%	0.465	0.061	
2_19_2_4_108	MW-09	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.733	0.003	**
2_19_2_4_112	MW-09	Appendix III	Fluoride	mg/L	13	0	0%	0.361	0.146	
2_19_2_4_120	MW-09	Appendix III	pH (field)	su	13	0	0%	0.090	0.718	
2_19_2_4_124	MW-09	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	0.464	0.061	
2_19_2_4_126	MW-09	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	0.548	0.027	*
2_19_2_5_101	MW-09	Appendix IV	Antimony	mg/L	13	8	62%	-0.610	0.071	
2_19_2_5_102	MW-09	Appendix IV	Arsenic	mg/L	13	0	0%	0.044	0.860	
2_19_2_5_103	MW-09	Appendix IV	Barium	mg/L	13	0	0%	0.127	0.610	
2_19_2_5_104	MW-09	Appendix IV	Beryllium	mg/L	13	11	85%	-0.500	0.157	
2_19_2_5_109	MW-09	Appendix IV	Chromium, Total	mg/L	13	0	0%	0.140	0.572	
2_19_2_5_110	MW-09	Appendix IV	Cobalt	mg/L	13	0	0%	-0.002	0.992	
2_19_2_5_113	MW-09	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.361	0.146	
2_19_2_5_116	MW-09	Appendix IV	Lithium	mg/L	13	0	0%	0.250	0.314	
2_19_2_5_117	MW-09	Appendix IV	Mercury	mg/L	13	11	85%	-0.500	0.157	
2_19_2_5_118	MW-09	Appendix IV	Molybdenum	mg/L	13	0	0%	0.327	0.188	
2_19_2_5_121	MW-09	Appendix IV	Radium 226 and 228	pCi/L	13	12	92%	NA	NA	
2_19_2_5_122	MW-09	Appendix IV	Selenium	mg/L	13	2	15%	0.147	0.577	
2_21_2_3_127	MW-11	Additional Parameters	Total Suspended Solids	mg/L	12	0	0%	0.159	0.536	
2_21_2_4_105	MW-11	Appendix III	Boron	mg/L	13	0	0%	0.424	0.088	
2_21_2_4_107	MW-11	Appendix III	Calcium	mg/L	13	0	0%	0.302	0.223	
2_21_2_4_108	MW-11	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.397	0.110	
2_21_2_4_112	MW-11	Appendix III	Fluoride	mg/L	13	0	0%	0.299	0.227	
2_21_2_4_120	MW-11	Appendix III	pH (field)	su	13	0	0%	0.076	0.759	

(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.
2_21_2_4_124	MW-11	Appendix III	Sulfate (as SO4)	mg/L	13	4	31%	0.534	0.060	
2_21_2_4_126	MW-11	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	-0.219	0.377	
2_21_2_5_101	MW-11	Appendix IV	Antimony	mg/L	13	9	69%	-0.539	0.127	
2_21_2_5_102	MW-11	Appendix IV	Arsenic	mg/L	13	0	0%	0.173	0.485	
2_21_2_5_103	MW-11	Appendix IV	Barium	mg/L	13	0	0%	0.250	0.313	
2_21_2_5_104	MW-11	Appendix IV	Beryllium	mg/L	13	10	77%	-0.667	0.068	
2_21_2_5_106	MW-11	Appendix IV	Cadmium	mg/L	13	11	85%	-0.500	0.157	
2_21_2_5_109	MW-11	Appendix IV	Chromium, Total	mg/L	13	0	0%	-0.080	0.748	
2_21_2_5_110	MW-11	Appendix IV	Cobalt	mg/L	13	0	0%	-0.281	0.257	
2_21_2_5_113	MW-11	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.299	0.227	
2_21_2_5_115	MW-11	Appendix IV	Lead	mg/L	13	3	23%	-0.086	0.755	
2_21_2_5_116	MW-11	Appendix IV	Lithium	mg/L	13	0	0%	0.320	0.198	
2_21_2_5_117	MW-11	Appendix IV	Mercury	mg/L	13	12	92%	NA	NA	
2_21_2_5_118	MW-11	Appendix IV	Molybdenum	mg/L	13	2	15%	-0.038	0.884	
2_21_2_5_121	MW-11	Appendix IV	Radium 226 and 228	pCi/L	13	4	31%	-0.336	0.238	
2_21_2_5_122	MW-11	Appendix IV	Selenium	mg/L	13	3	23%	0.168	0.539	
2_21_2_5_125	MW-11	Appendix IV	Thallium	mg/L	13	12	92%	NA	NA	
2_22_2_3_127	MW-12	Additional Parameters	Total Suspended Solids	mg/L	8	5	62%	-0.157	0.667	
2_22_2_4_105	MW-12	Appendix III	Boron	mg/L	13	0	0%	0.277	0.264	
2_22_2_4_107	MW-12	Appendix III	Calcium	mg/L	13	0	0%	0.045	0.857	
2_22_2_4_108	MW-12	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	-0.006	0.981	
2_22_2_4_112	MW-12	Appendix III	Fluoride	mg/L	13	0	0%	0.043	0.863	
2_22_2_4_120	MW-12	Appendix III	pH (field)	su	13	0	0%	0.144	0.563	
2_22_2_4_124	MW-12	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	0.479	0.053	
2_22_2_4_126	MW-12	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	0.071	0.774	
2_22_2_5_101	MW-12	Appendix IV	Antimony	mg/L	13	0	0%	0.362	0.144	
2_22_2_5_102	MW-12	Appendix IV	Arsenic	mg/L	13	0	0%	0.392	0.114	
2_22_2_5_103	MW-12	Appendix IV	Barium	mg/L	13	0	0%	0.396	0.110	
2_22_2_5_106	MW-12	Appendix IV	Cadmium	mg/L	13	0	0%	0.369	0.137	
2_22_2_5_109	MW-12	Appendix IV	Chromium, Total	mg/L	13	5	38%	0.063	0.832	
2_22_2_5_110	MW-12	Appendix IV	Cobalt	mg/L	13	5	38%	0.371	0.209	
2_22_2_5_113	MW-12	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.043	0.863	
2_22_2_5_115	MW-12	Appendix IV	Lead	mg/L	13	6	46%	0.527	0.088	
2_22_2_5_116	MW-12	Appendix IV	Lithium	mg/L	13	0	0%	0.309	0.213	
2_22_2_5_117	MW-12	Appendix IV	Mercury	mg/L	13	11	85%	-0.500	0.157	
2_22_2_5_118	MW-12	Appendix IV	Molybdenum	mg/L	13	0	0%	0.035	0.887	
2_22_2_5_121	MW-12	Appendix IV	Radium 226 and 228	pCi/L	13	9	69%	-0.160	0.651	
2_22_2_5_122	MW-12	Appendix IV	Selenium	mg/L	13	0	0%	0.536	0.031	*
3_20_3_3_127	MW-10	Additional Parameters	Total Suspended Solids	mg/L	12	2	17%	0.271	0.322	
3_20_3_4_105	MW-10	Appendix III	Boron	mg/L	13	0	0%	0.489	0.049	*
3_20_3_4_107	MW-10	Appendix III	Calcium	mg/L	13	0	0%	0.452	0.068	
3_20_3_4_108	MW-10	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.441	0.075	

(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.
3_20_3_4_112	MW-10	Appendix III	Fluoride	mg/L	13	0	0%	0.550	0.027	*
3_20_3_4_120	MW-10	Appendix III	pH (field)	su	13	0	0%	0.052	0.834	
3_20_3_4_124	MW-10	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	0.369	0.136	
3_20_3_4_126	MW-10	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	0.430	0.083	
3_20_3_5_101	MW-10	Appendix IV	Antimony	mg/L	13	9	69%	-0.363	0.304	
3_20_3_5_102	MW-10	Appendix IV	Arsenic	mg/L	13	0	0%	0.398	0.109	
3_20_3_5_103	MW-10	Appendix IV	Barium	mg/L	13	0	0%	0.316	0.203	
3_20_3_5_104	MW-10	Appendix IV	Beryllium	mg/L	13	6	46%	-0.262	0.395	
3_20_3_5_109	MW-10	Appendix IV	Chromium, Total	mg/L	13	0	0%	0.535	0.031	*
3_20_3_5_110	MW-10	Appendix IV	Cobalt	mg/L	13	1	8%	0.065	0.799	
3_20_3_5_113	MW-10	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.550	0.027	*
3_20_3_5_115	MW-10	Appendix IV	Lead	mg/L	13	11	85%	-0.500	0.157	
3_20_3_5_116	MW-10	Appendix IV	Lithium	mg/L	13	0	0%	-0.109	0.660	
3_20_3_5_117	MW-10	Appendix IV	Mercury	mg/L	13	12	92%	NA	NA	
3_20_3_5_118	MW-10	Appendix IV	Molybdenum	mg/L	13	0	0%	0.127	0.610	
3_20_3_5_121	MW-10	Appendix IV	Radium 226 and 228	pCi/L	13	10	77%	-0.037	0.920	
3_20_3_5_122	MW-10	Appendix IV	Selenium	mg/L	13	1	8%	-0.141	0.583	

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 5: Outlier Counts by Date

Date	Count
2022-11-30	2
2022-12-01	1
2023-01-03	7
2023-01-04	6
2023-01-05	1
2023-02-06	1
2023-02-08	3
2023-03-13	3
2023-03-14	1
2023-04-18	5
2023-05-23	2
2023-06-27	1
2023-06-28	2
2023-08-07	1
2023-08-08	1
2023-10-24	2
2024-02-12	6
2024-02-13	8
2024-04-07	2
2024-04-10	2
2024-07-17	1
2024-10-15	1
2024-10-16	7

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
1_16_1_4_120	MW-06	Appendix III	pH (field)	su	13	0	0%	13	2023-02-06	NA	6.42
1_16_1_5_118	MW-06	Appendix IV	Molybdenum	mg/L	13	8	62%	5	2024-10-16	1	0.000430
1_16_1_5_121	MW-06	Appendix IV	Radium 226 and 228	pCi/L	13	3	23%	10	2023-03-14	NA	1.91
1_17_1_5_102	MW-07	Appendix IV	Arsenic	mg/L	13	0	0%	13	2023-04-18	1	0.000130
1_17_1_5_103	MW-07	Appendix IV	Barium	mg/L	13	0	0%	13	2023-04-18	10	0.250
1_17_1_5_109	MW-07	Appendix IV	Chromium, Total	mg/L	13	0	0%	13	2024-07-17	1	0.000740
1_17_1_5_121	MW-07	Appendix IV	Radium 226 and 228	pCi/L	13	2	15%	11	2023-08-07	1	2.36
1_18_1_4_108	MW-08	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	13	2024-10-16	5	99.0
1_18_1_4_120	MW-08	Appendix III	pH (field)	su	13	0	0%	13	2023-01-05	NA	6.21
1_18_1_5_122	MW-08	Appendix IV	Selenium	mg/L	13	5	38%	8	2024-02-13	1	0.000340
1_28_1_3_127	MW-18	Additional Parameters	Total Suspended Solids	mg/L	13	1	8%	12	2024-04-10	1	100
1_28_1_5_115	MW-18	Appendix IV	Lead	mg/L	13	8	62%	5	2023-08-08	1	0.000320
1_28_1_5_122	MW-18	Appendix IV	Selenium	mg/L	13	0	0%	13	2024-04-10	1	0.00200
1_29_1_5_122	MW-19	Appendix IV	Selenium	mg/L	13	10	77%	3	2024-10-16	1	0.000200

(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
1_30_1_4_107	MW-20	Appendix III	Calcium	mg/L	13	0	0%	13	2023-06-28	1	58.0
1_30_1_4_112	MW-20	Appendix III	Fluoride	mg/L	13	0	0%	13	2022-11-30	25	0.550
1_30_1_5_113	MW-20	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	13	2022-11-30	25	0.550
1_30_1_5_122	MW-20	Appendix IV	Selenium	mg/L	13	7	54%	6	2024-02-13	1	0.000260
1_40_1_4_105	MW-30	Appendix III	Boron	mg/L	13	0	0%	13	2023-03-13	50	3.50
1_40_1_4_107	MW-30	Appendix III	Calcium	mg/L	13	0	0%	13	2023-03-13	50	960
1_40_1_4_108	MW-30	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	13	2024-10-16	25	430
1_40_1_4_120	MW-30	Appendix III	pH (field)	su	13	0	0%	13	2023-01-03	NA	6.48
1_40_1_4_124	MW-30	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	13	2024-10-16	25	440
1_40_1_4_126	MW-30	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	13	2023-06-27	2	2800
1_40_1_5_110	MW-30	Appendix IV	Cobalt	mg/L	13	0	0%	13	2023-01-03	1	0.00440
1_40_1_5_116	MW-30	Appendix IV	Lithium	mg/L	13	0	0%	13	2023-03-13	50	0.270
1_40_1_5_118	MW-30	Appendix IV	Molybdenum	mg/L	13	3	23%	10	2023-01-03	1	0.00360
1_41_1_5_110	MW-31	Appendix IV	Cobalt	mg/L	13	1	8%	12	2024-10-15	1	0.000360
1_41_1_5_118	MW-31	Appendix IV	Molybdenum	mg/L	13	0	0%	13	2022-12-01	1	0.00210
1_41_1_5_122	MW-31	Appendix IV	Selenium	mg/L	13	5	38%	8	2024-02-12	1	0.000740
1_42_1_5_102	MW-32	Appendix IV	Arsenic	mg/L	13	0	0%	13	2024-02-12	1	0.00240
1_42_1_5_103	MW-32	Appendix IV	Barium	mg/L	13	0	0%	13	2024-10-16	10	1.30
1_42_1_5_109	MW-32	Appendix IV	Chromium, Total	mg/L	13	0	0%	13	2024-02-12	1	0.00300
1_42_1_5_110	MW-32	Appendix IV	Cobalt	mg/L	13	0	0%	13	2024-02-12	1	0.00190
1_42_1_5_118	MW-32	Appendix IV	Molybdenum	mg/L	13	0	0%	13	2024-02-12	1	0.00730
1_42_1_5_122	MW-32	Appendix IV	Selenium	mg/L	13	10	77%	3	2024-02-12	1	0.00100
2_11_2_4_120	MW-01R	Appendix III	pH (field)	su	13	0	0%	13	2023-01-03	NA	6.02
2_11_2_5_102	MW-01R	Appendix IV	Arsenic	mg/L	13	0	0%	13	2024-02-13	1	0.00410
2_11_2_5_109	MW-01R	Appendix IV	Chromium, Total	mg/L	13	0	0%	13	2024-02-13	1	0.0220
2_11_2_5_115	MW-01R	Appendix IV	Lead	mg/L	13	2	15%	11	2023-06-28	5	0.00530
2_11_2_5_118	MW-01R	Appendix IV	Molybdenum	mg/L	13	1	8%	12	2024-02-13	1	0.00560
2_11_2_5_122	MW-01R	Appendix IV	Selenium	mg/L	13	0	0%	13	2024-02-13	1	0.00180
2_12_2_4_108	MW-02	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	13	2023-02-08	50	67.0
2_12_2_4_112	MW-02	Appendix III	Fluoride	mg/L	13	0	0%	13	2023-02-08	50	4.50
2_12_2_5_101	MW-02	Appendix IV	Antimony	mg/L	13	3	23%	10	2023-04-18	5	0.000630
2_12_2_5_102	MW-02	Appendix IV	Arsenic	mg/L	13	0	0%	13	2024-02-13	1	0.000440
2_12_2_5_106	MW-02	Appendix IV	Cadmium	mg/L	13	10	77%	3	2023-10-24	1	0.000490
2_12_2_5_113	MW-02	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	13	2023-02-08	50	4.50
2_13_2_3_127	MW-03	Additional Parameters	Total Suspended Solids	mg/L	10	5	50%	5	2023-01-04	1	15.0
2_13_2_4_112	MW-03	Appendix III	Fluoride	mg/L	13	0	0%	13	2023-01-04	5	1.60
2_13_2_5_101	MW-03	Appendix IV	Antimony	mg/L	13	8	62%	5	2023-04-18	5	0.000450
2_13_2_5_113	MW-03	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	13	2023-01-04	5	1.60
2_14_2_4_124	MW-04	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	13	2023-01-04	5	1.80
2_14_2_5_103	MW-04	Appendix IV	Barium	mg/L	13	0	0%	13	2023-01-04	1	0.460
2_19_2_4_120	MW-09	Appendix III	pH (field)	su	13	0	0%	13	2023-05-23	NA	7.52
2_19_2_5_103	MW-09	Appendix IV	Barium	mg/L	13	0	0%	13	2023-01-04	5	2.40
2_21_2_4_126	MW-11	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	13	2023-10-24	4	1800

(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
2_21_2_5_102	MW-11	Appendix IV	Arsenic	mg/L	13	0	0%	13	2023-01-03	1	0.00410
2_21_2_5_104	MW-11	Appendix IV	Beryllium	mg/L	13	10	77%	3	2024-04-07	1	0.000440
2_21_2_5_109	MW-11	Appendix IV	Chromium, Total	mg/L	13	0	0%	13	2023-01-03	1	0.00860
2_21_2_5_110	MW-11	Appendix IV	Cobalt	mg/L	13	0	0%	13	2024-04-07	1	0.00240
2_21_2_5_115	MW-11	Appendix IV	Lead	mg/L	13	3	23%	10	2023-01-03	1	0.0680
2_22_2_5_118	MW-12	Appendix IV	Molybdenum	mg/L	13	0	0%	13	2024-10-16	1	0.0180
3_20_3_5_101	MW-10	Appendix IV	Antimony	mg/L	13	9	69%	4	2023-04-18	5	0.000340
3_20_3_5_110	MW-10	Appendix IV	Cobalt	mg/L	13	1	8%	12	2023-05-23	1	0.00180
3_20_3_5_122	MW-10	Appendix IV	Selenium	mg/L	13	1	8%	12	2024-02-13	1	0.000830



Table 7: Seasonality Tests

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
1_16_1_3_127	MW-06	Additional Parameters	Total Suspended Solids	mg/L	0%	3	4	3	3	13	0.075	0.119	0.082	3	4	3	3	13	0.075	0.119	0.082
1_16_1_4_105	MW-06	Appendix III	Boron	mg/L	0%	3	4	3	3	13	0.053	0.026 *	0.046 *	3	4	3	3	13	0.053	0.026 *	0.046 *
1_16_1_4_107	MW-06	Appendix III	Calcium	mg/L	0%	3	4	3	3	13	0.084	0.093	0.084	3	4	3	3	13	0.084	0.093	0.084
1_16_1_4_108	MW-06	Appendix III	Chloride (as Cl)	mg/L	0%	3	4	3	3	13	0.599	0.561	0.736	3	4	3	3	13	0.599	0.561	0.736
1_16_1_4_112	MW-06	Appendix III	Fluoride	mg/L	0%	3	4	3	3	13	0.266	0.207	0.203	3	4	3	3	13	0.266	0.207	0.203
1_16_1_4_120	MW-06	Appendix III	pH (field)	su	0%	3	4	3	3	13	0.388	0.300	0.302	3	4	3	3	13	0.388	0.300	0.302
1_16_1_4_124	MW-06	Appendix III	Sulfate (as SO4)	mg/L	15%	3	4	3	3	13	0.644	0.769	0.506	3	4	2	2	11	0.936	0.976	0.804
1_16_1_4_126	MW-06	Appendix III	Total Dissolved Solids	mg/L	0%	3	4	3	3	13	0.721	0.773	0.748	3	4	3	3	13	0.721	0.773	0.748
1_16_1_5_101	MW-06	Appendix IV	Antimony	mg/L	85%	3	4	3	3	13	0.774	0.406	0.629	0	1	0	1	2	0.317	NA	NA
1_16_1_5_102	MW-06	Appendix IV	Arsenic	mg/L	0%	3	4	3	3	13	0.074	0.025 *	0.024 *	3	4	3	3	13	0.074	0.025 *	0.024 *
1_16_1_5_103	MW-06	Appendix IV	Barium	mg/L	0%	3	4	3	3	13	0.068	0.076	0.083	3	4	3	3	13	0.068	0.076	0.083
1_16_1_5_104	MW-06	Appendix IV	Beryllium	mg/L	92%	3	4	3	3	13	0.343	0.379	0.379	1	0	0	0	1	NA	NA	NA
1_16_1_5_106	MW-06	Appendix IV	Cadmium	mg/L	100%	3	4	3	3	13	0.666	0.501	0.674	NA	NA	NA	NA	NA	NA	NA	NA
1_16_1_5_109	MW-06	Appendix IV	Chromium, Total	mg/L	0%	3	4	3	3	13	0.682	0.807	0.755	3	4	3	3	13	0.682	0.807	0.755
1_16_1_5_110	MW-06	Appendix IV	Cobalt	mg/L	0%	3	4	3	3	13	0.824	0.675	0.778	3	4	3	3	13	0.824	0.675	0.778
1_16_1_5_113	MW-06	Appendix IV	Fluoride (App IV)	mg/L	0%	3	4	3	3	13	0.266	0.207	0.203	3	4	3	3	13	0.266	0.207	0.203
1_16_1_5_115	MW-06	Appendix IV	Lead	mg/L	69%	3	4	3	3	13	0.265	0.320	0.221	1	0	1	2	4	0.861	0.985	0.952
1_16_1_5_116	MW-06	Appendix IV	Lithium	mg/L	0%	3	4	3	3	13	0.785	0.733	0.678	3	4	3	3	13	0.785	0.733	0.678
1_16_1_5_117	MW-06	Appendix IV	Mercury	mg/L	100%	3	4	3	3	13	NA	0.379	0.379	NA	NA	NA	NA	NA	NA	NA	NA
1_16_1_5_118	MW-06	Appendix IV	Molybdenum	mg/L	62%	3	4	3	3	13	0.825	0.597	0.600	0	1	2	2	5	0.741	0.729	0.756
1_16_1_5_121	MW-06	Appendix IV	Radium 226 and 228	pCi/L	23%	3	4	3	3	13	0.852	0.710	0.790	2	3	2	3	10	0.710	0.651	0.695
1_16_1_5_122	MW-06	Appendix IV	Selenium	mg/L	38%	3	4	3	3	13	0.321	0.380	0.366	1	2	3	2	8	0.332	0.012 *	0.034 *
1_16_1_5_125	MW-06	Appendix IV	Thallium	mg/L	100%	3	4	3	3	13	0.316	0.187	0.188	NA	NA	NA	NA	NA	NA	NA	NA
1_17_1_3_127	MW-07	Additional Parameters	Total Suspended Solids	mg/L	0%	3	4	3	3	13	0.049 *	0.017 *	0.019 *	3	4	3	3	13	0.049 *	0.017 *	0.019 *
1_17_1_4_105	MW-07	Appendix III	Boron	mg/L	0%	3	4	3	3	13	0.385	0.441	0.443	3	4	3	3	13	0.385	0.441	0.443
1_17_1_4_107	MW-07	Appendix III	Calcium	mg/L	0%	3	4	3	3	13	0.686	0.850	0.873	3	4	3	3	13	0.686	0.850	0.873
1_17_1_4_108	MW-07	Appendix III	Chloride (as Cl)	mg/L	0%	3	4	3	3	13	0.090	0.061	0.062	3	4	3	3	13	0.090	0.061	0.062
1_17_1_4_112	MW-07	Appendix III	Fluoride	mg/L	15%	3	4	3	3	13	0.749	0.817	0.878	3	3	3	2	11	0.291	0.553	0.474
1_17_1_4_120	MW-07	Appendix III	pH (field)	su	0%	3	4	3	3	13	0.345	0.488	0.494	3	4	3	3	13	0.345	0.488	0.494
1_17_1_4_124	MW-07	Appendix III	Sulfate (as SO4)	mg/L	0%	3	4	3	3	13	0.148	0.050	0.036 *	3	4	3	3	13	0.148	0.050	0.036 *
1_17_1_4_126	MW-07	Appendix III	Total Dissolved Solids	mg/L	0%	3	4	3	3	13	0.553	0.590	0.596	3	4	3	3	13	0.553	0.590	0.596
1_17_1_5_101	MW-07	Appendix IV	Antimony	mg/L	92%	3	4	3	3	13	0.395	0.439	0.437	0	1	0	0	1	NA	NA	NA
1_17_1_5_102	MW-07	Appendix IV	Arsenic	mg/L	0%	3	4	3	3	13	0.509	0.354	0.385	3	4	3	3	13	0.509	0.354	0.385
1_17_1_5_103	MW-07	Appendix IV	Barium	mg/L	0%	3	4	3	3	13	0.171	0.127	0.144	3	4	3	3	13	0.171	0.127	0.144
1_17_1_5_104	MW-07	Appendix IV	Beryllium	mg/L	77%	3	4	3	3	13	0.649	0.590	0.598	1	0	1	1	3	0.368	NA	NA
1_17_1_5_106	MW-07	Appendix IV	Cadmium	mg/L	100%	3	4	3	3	13	0.407	0.454	0.454	NA	NA	NA	NA	NA	NA	NA	NA
1_17_1_5_109	MW-07	Appendix IV	Chromium, Total	mg/L	0%	3	4	3	3	13	0.459	0.503	0.518	3	4	3	3	13	0.459	0.503	0.518
1_17_1_5_110	MW-07	Appendix IV	Cobalt	mg/L	0%	3	4	3	3	13	0.929	0.849	0.863	3	4	3	3	13	0.929	0.849	0.863
1_17_1_5_113	MW-07	Appendix IV	Fluoride (App IV)	mg/L	15%	3	4	3	3	13	0.749	0.817	0.878	3	3	3	2	11	0.291	0.553	0.474

(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		
1_17_1_5_115	MW-07	Appendix IV	Lead	mg/L	100%	3	4	3	3	13	0.407	0.454	0.454	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1_17_1_5_116	MW-07	Appendix IV	Lithium	mg/L	0%	3	4	3	3	13	0.653	0.700	0.647	3	4	3	3	13	0.653	0.700	0.647		
1_17_1_5_117	MW-07	Appendix IV	Mercury	mg/L	100%	3	4	3	3	13	NA	0.379	0.379	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1_17_1_5_118	MW-07	Appendix IV	Molybdenum	mg/L	100%	3	4	3	3	13	0.407	0.454	0.454	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1_17_1_5_121	MW-07	Appendix IV	Radium 226 and 228	pCi/L	15%	3	4	3	3	13	0.716	0.566	0.667	3	3	2	3	11	0.493	0.248	0.291		
1_17_1_5_122	MW-07	Appendix IV	Selenium	mg/L	69%	3	4	3	3	13	0.130	0.089	0.099	1	1	1	1	4	0.392	NA	NA		
1_17_1_5_125	MW-07	Appendix IV	Thallium	mg/L	100%	3	4	3	3	13	NA	NA	0.379	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1_18_1_3_127	MW-08	Additional Parameters	Total Suspended Solids	mg/L	0%	4	4	3	2	13	0.015 *	0.001 **	0.001 **	4	4	3	2	13	0.015 *	0.001 **	0.001 **	0.001 **	
1_18_1_4_105	MW-08	Appendix III	Boron	mg/L	0%	4	4	3	2	13	0.155	0.264	0.276	4	4	3	2	13	0.155	0.264	0.276		
1_18_1_4_107	MW-08	Appendix III	Calcium	mg/L	0%	4	4	3	2	13	0.479	0.502	0.519	4	4	3	2	13	0.479	0.502	0.519		
1_18_1_4_108	MW-08	Appendix III	Chloride (as Cl)	mg/L	0%	4	4	3	2	13	0.627	0.302	0.607	4	4	3	2	13	0.627	0.302	0.607		
1_18_1_4_112	MW-08	Appendix III	Fluoride	mg/L	0%	4	4	3	2	13	0.194	0.153	0.190	4	4	3	2	13	0.194	0.153	0.190		
1_18_1_4_120	MW-08	Appendix III	pH (field)	su	0%	4	4	3	2	13	0.194	0.387	0.404	4	4	3	2	13	0.194	0.387	0.404		
1_18_1_4_124	MW-08	Appendix III	Sulfate (as SO4)	mg/L	31%	4	4	3	2	13	0.252	0.506	0.144	4	3	0	2	9	0.842	0.995	0.868		
1_18_1_4_126	MW-08	Appendix III	Total Dissolved Solids	mg/L	0%	4	4	3	2	13	0.902	0.901	0.903	4	4	3	2	13	0.902	0.901	0.903		
1_18_1_5_101	MW-08	Appendix IV	Antimony	mg/L	46%	4	4	3	2	13	0.579	0.576	0.604	3	2	1	1	7	0.474	0.544	0.608		
1_18_1_5_102	MW-08	Appendix IV	Arsenic	mg/L	0%	4	4	3	2	13	0.147	0.106	0.190	4	4	3	2	13	0.147	0.106	0.190		
1_18_1_5_103	MW-08	Appendix IV	Barium	mg/L	0%	4	4	3	2	13	0.682	0.747	0.728	4	4	3	2	13	0.682	0.747	0.728		
1_18_1_5_104	MW-08	Appendix IV	Beryllium	mg/L	100%	4	4	3	2	13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1_18_1_5_106	MW-08	Appendix IV	Cadmium	mg/L	100%	4	4	3	2	13	0.159	0.149	0.149	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1_18_1_5_109	MW-08	Appendix IV	Chromium, Total	mg/L	0%	4	4	3	2	13	0.160	0.463	0.329	4	4	3	2	13	0.160	0.463	0.329		
1_18_1_5_110	MW-08	Appendix IV	Cobalt	mg/L	0%	4	4	3	2	13	0.230	0.438	0.360	4	4	3	2	13	0.230	0.438	0.360		
1_18_1_5_113	MW-08	Appendix IV	Fluoride (App IV)	mg/L	0%	4	4	3	2	13	0.194	0.153	0.190	4	4	3	2	13	0.194	0.153	0.190		
1_18_1_5_115	MW-08	Appendix IV	Lead	mg/L	69%	4	4	3	2	13	0.175	0.177	0.300	2	1	0	1	4	0.407	0.237	0.577		
1_18_1_5_116	MW-08	Appendix IV	Lithium	mg/L	0%	4	4	3	2	13	0.210	0.239	0.215	4	4	3	2	13	0.210	0.239	0.215		
1_18_1_5_117	MW-08	Appendix IV	Mercury	mg/L	100%	4	4	3	2	13	NA	0.579	0.579	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1_18_1_5_118	MW-08	Appendix IV	Molybdenum	mg/L	0%	4	4	3	2	13	0.068	0.058	0.003 **	4	4	3	2	13	0.068	0.058	0.003 **		
1_18_1_5_121	MW-08	Appendix IV	Radium 226 and 228	pCi/L	23%	4	4	3	2	13	0.341	0.803	0.684	2	4	2	2	10	0.269	0.425	0.423		
1_18_1_5_122	MW-08	Appendix IV	Selenium	mg/L	38%	4	4	3	2	13	0.052	0.043 *	0.030 *	1	2	3	2	8	0.215	0.003 **	0.016 *		
1_18_1_5_125	MW-08	Appendix IV	Thallium	mg/L	100%	4	4	3	2	13	NA	NA	0.579	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1_28_1_3_127	MW-18	Additional Parameters	Total Suspended Solids	mg/L	8%	3	4	3	3	13	0.458	0.741	0.833	2	4	3	3	12	0.630	0.809	0.951		
1_28_1_4_105	MW-18	Appendix III	Boron	mg/L	0%	3	4	3	3	13	0.759	0.870	0.819	3	4	3	3	13	0.759	0.870	0.819		
1_28_1_4_107	MW-18	Appendix III	Calcium	mg/L	0%	3	4	3	3	13	0.043 *	0.035 *	0.031 *	3	4	3	3	13	0.043 *	0.035 *	0.031 *		
1_28_1_4_108	MW-18	Appendix III	Chloride (as Cl)	mg/L	0%	3	4	3	3	13	0.036 *	0.002 **	0.001 **	3	4	3	3	13	0.036 *	0.002 **	0.001 **		
1_28_1_4_112	MW-18	Appendix III	Fluoride	mg/L	0%	3	4	3	3	13	0.064	0.032 *	0.047 *	3	4	3	3	13	0.064	0.032 *	0.047 *		
1_28_1_4_120	MW-18	Appendix III	pH (field)	su	0%	3	4	3	3	13	0.432	0.400	0.403	3	4	3	3	13	0.432	0.400	0.403		
1_28_1_4_124	MW-18	Appendix III	Sulfate (as SO4)	mg/L	0%	3	4	3	3	13	0.559	0.576	0.703	3	4	3	3	13	0.559	0.576	0.703		
1_28_1_4_126	MW-18	Appendix III	Total Dissolved Solids	mg/L	0%	3	4	3	3	13	0.173	0.150	0.144	3	4	3	3	13	0.173	0.150	0.144		
1_28_1_5_101	MW-18	Appendix IV	Antimony	mg/L	23%	3	4	3	3	13	0.025 *	0.162	0.071	2	3	2	3	10	0.074	0.329	0.242		

(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						
1_28_1_5_102	MW-18	Appendix IV	Arsenic	mg/L	0%	3	4	3	3	13	0.036	*	0.008	**	0.012	*	3	4	3	3	13	0.036	*	0.008	**	0.012	*
1_28_1_5_103	MW-18	Appendix IV	Barium	mg/L	0%	3	4	3	3	13	0.063		0.016	*	0.018	*	3	4	3	3	13	0.063		0.016	*	0.018	*
1_28_1_5_104	MW-18	Appendix IV	Beryllium	mg/L	92%	3	4	3	3	13	0.522		0.579		0.579		0	1	0	0	1	NA		NA		NA	
1_28_1_5_106	MW-18	Appendix IV	Cadmium	mg/L	46%	3	4	3	3	13	0.440		0.467		0.390		1	3	2	1	7	0.861		0.923		0.866	
1_28_1_5_109	MW-18	Appendix IV	Chromium, Total	mg/L	92%	3	4	3	3	13	0.572		0.761		0.759		0	1	0	0	1	NA		NA		NA	
1_28_1_5_110	MW-18	Appendix IV	Cobalt	mg/L	0%	3	4	3	3	13	0.457		0.401		0.434		3	4	3	3	13	0.457		0.401		0.434	
1_28_1_5_113	MW-18	Appendix IV	Fluoride (App IV)	mg/L	0%	3	4	3	3	13	0.064		0.032	*	0.047	*	3	4	3	3	13	0.064		0.032	*	0.047	*
1_28_1_5_115	MW-18	Appendix IV	Lead	mg/L	62%	3	4	3	3	13	0.213		0.166		0.170		0	0	3	2	5	0.076		0.397		0.353	
1_28_1_5_116	MW-18	Appendix IV	Lithium	mg/L	0%	3	4	3	3	13	0.088		0.016	*	0.027	*	3	4	3	3	13	0.088		0.016	*	0.027	*
1_28_1_5_117	MW-18	Appendix IV	Mercury	mg/L	100%	3	4	3	3	13	NA		0.379		0.379		NA	NA	NA	NA	NA	NA		NA		NA	
1_28_1_5_118	MW-18	Appendix IV	Molybdenum	mg/L	0%	3	4	3	3	13	0.044	*	0.007	**	0.009	**	3	4	3	3	13	0.044	*	0.007	**	0.009	**
1_28_1_5_121	MW-18	Appendix IV	Radium 226 and 228	pCi/L	62%	3	4	3	3	13	0.176		0.478		0.393		0	2	1	2	5	0.741		0.814		0.878	
1_28_1_5_122	MW-18	Appendix IV	Selenium	mg/L	0%	3	4	3	3	13	0.217		0.304		0.186		3	4	3	3	13	0.217		0.304		0.186	
1_28_1_5_125	MW-18	Appendix IV	Thallium	mg/L	100%	3	4	3	3	13	0.201		0.202		0.202		NA	NA	NA	NA	NA	NA		NA		NA	
1_29_1_3_127	MW-19	Additional Parameters	Total Suspended Solids	mg/L	0%	3	4	3	3	13	0.026	*	0.013	*	0.042	*	3	4	3	3	13	0.026	*	0.013	*	0.042	*
1_29_1_4_105	MW-19	Appendix III	Boron	mg/L	0%	3	4	3	3	13	0.017	*	0.000	***	0.000	***	3	4	3	3	13	0.017	*	0.000	***	0.000	***
1_29_1_4_107	MW-19	Appendix III	Calcium	mg/L	0%	3	4	3	3	13	0.104		0.131		0.138		3	4	3	3	13	0.104		0.131		0.138	
1_29_1_4_108	MW-19	Appendix III	Chloride (as Cl)	mg/L	0%	3	4	3	3	13	0.109		0.140		0.156		3	4	3	3	13	0.109		0.140		0.156	
1_29_1_4_112	MW-19	Appendix III	Fluoride	mg/L	0%	3	4	3	3	13	0.233		0.268		0.265		3	4	3	3	13	0.233		0.268		0.265	
1_29_1_4_120	MW-19	Appendix III	pH (field)	su	0%	3	4	3	3	13	0.449		0.348		0.343		3	4	3	3	13	0.449		0.348		0.343	
1_29_1_4_124	MW-19	Appendix III	Sulfate (as SO4)	mg/L	0%	3	4	3	3	13	0.249		0.442		0.446		3	4	3	3	13	0.249		0.442		0.446	
1_29_1_4_126	MW-19	Appendix III	Total Dissolved Solids	mg/L	0%	3	4	3	3	13	0.135		0.136		0.124		3	4	3	3	13	0.135		0.136		0.124	
1_29_1_5_101	MW-19	Appendix IV	Antimony	mg/L	92%	3	4	3	3	13	0.668		0.368		0.527		0	1	0	0	1	NA		NA		NA	
1_29_1_5_102	MW-19	Appendix IV	Arsenic	mg/L	0%	3	4	3	3	13	0.025	*	0.004	**	0.017	*	3	4	3	3	13	0.025	*	0.004	**	0.017	*
1_29_1_5_103	MW-19	Appendix IV	Barium	mg/L	0%	3	4	3	3	13	0.104		0.064		0.066		3	4	3	3	13	0.104		0.064		0.066	
1_29_1_5_104	MW-19	Appendix IV	Beryllium	mg/L	23%	3	4	3	3	13	0.394		0.394		0.424		2	4	3	1	10	0.265		0.094		0.160	
1_29_1_5_106	MW-19	Appendix IV	Cadmium	mg/L	100%	3	4	3	3	13	0.666		0.501		0.674		NA	NA	NA	NA	NA	NA		NA		NA	
1_29_1_5_109	MW-19	Appendix IV	Chromium, Total	mg/L	38%	3	4	3	3	13	0.376		0.172		0.246		1	2	3	2	8	0.387		0.032	*	0.071	
1_29_1_5_110	MW-19	Appendix IV	Cobalt	mg/L	8%	3	4	3	3	13	0.275		0.221		0.250		3	4	2	3	12	0.297		0.269		0.188	
1_29_1_5_113	MW-19	Appendix IV	Fluoride (App IV)	mg/L	0%	3	4	3	3	13	0.233		0.268		0.265		3	4	3	3	13	0.233		0.268		0.265	
1_29_1_5_115	MW-19	Appendix IV	Lead	mg/L	100%	3	4	3	3	13	0.353		0.346		0.409		NA	NA	NA	NA	NA	NA		NA		NA	
1_29_1_5_116	MW-19	Appendix IV	Lithium	mg/L	0%	3	4	3	3	13	0.909		0.977		0.976		3	4	3	3	13	0.909		0.977		0.976	
1_29_1_5_117	MW-19	Appendix IV	Mercury	mg/L	100%	3	4	3	3	13	NA		0.379		0.379		NA	NA	NA	NA	NA	NA		NA		NA	
1_29_1_5_118	MW-19	Appendix IV	Molybdenum	mg/L	0%	3	4	3	3	13	0.215		0.301		0.379		3	4	3	3	13	0.215		0.301		0.379	
1_29_1_5_121	MW-19	Appendix IV	Radium 226 and 228	pCi/L	38%	3	4	3	3	13	0.975		0.942		0.924		3	4	1	0	8	0.297		0.388		0.468	
1_29_1_5_122	MW-19	Appendix IV	Selenium	mg/L	77%	3	4	3	3	13	0.295		0.333		0.286		1	0	1	1	3	0.368		NA		NA	
1_29_1_5_125	MW-19	Appendix IV	Thallium	mg/L	100%	3	4	3	3	13	0.618		0.676		0.676		NA	NA	NA	NA	NA	NA		NA		NA	
1_30_1_3_127	MW-20	Additional Parameters	Total Suspended Solids	mg/L	0%	3	4	3	3	13	0.137		0.136		0.137		3	4	3	3	13	0.137		0.136		0.137	
1_30_1_4_105	MW-20	Appendix III	Boron	mg/L	0%	3	4	3	3	13	0.022	*	0.000	***	0.000	***	3	4	3	3	13	0.022	*	0.000	***	0.000	***

(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						
1_30_1_4_107	MW-20	Appendix III	Calcium	mg/L	0%	3	4	3	3	13	0.059	0.081	0.108	3	4	3	3	13	0.059	0.081	0.108						
1_30_1_4_108	MW-20	Appendix III	Chloride (as Cl)	mg/L	0%	3	4	3	3	13	0.232	0.169	0.216	3	4	3	3	13	0.232	0.169	0.216						
1_30_1_4_112	MW-20	Appendix III	Fluoride	mg/L	0%	3	4	3	3	13	0.934	0.885	0.997	3	4	3	3	13	0.934	0.885	0.997						
1_30_1_4_120	MW-20	Appendix III	pH (field)	su	0%	3	4	3	3	13	0.360	0.292	0.296	3	4	3	3	13	0.360	0.292	0.296						
1_30_1_4_124	MW-20	Appendix III	Sulfate (as SO4)	mg/L	0%	3	4	3	3	13	0.021	*	0.001	**	0.000	***	3	4	3	3	13	0.021	*	0.001	**	0.000	***
1_30_1_4_126	MW-20	Appendix III	Total Dissolved Solids	mg/L	0%	3	4	3	3	13	0.044	*	0.016	*	0.018	*	3	4	3	3	13	0.044	*	0.016	*	0.018	*
1_30_1_5_101	MW-20	Appendix IV	Antimony	mg/L	31%	3	4	3	3	13	0.278	0.330	0.244	2	2	3	2	9	0.355	0.395	0.274						
1_30_1_5_102	MW-20	Appendix IV	Arsenic	mg/L	0%	3	4	3	3	13	0.020	*	0.001	**	0.001	***	3	4	3	3	13	0.020	*	0.001	**	0.001	***
1_30_1_5_103	MW-20	Appendix IV	Barium	mg/L	0%	3	4	3	3	13	0.039	*	0.013	*	0.011	*	3	4	3	3	13	0.039	*	0.013	*	0.011	*
1_30_1_5_104	MW-20	Appendix IV	Beryllium	mg/L	92%	3	4	3	3	13	0.343	0.379	0.379	1	0	0	0	1	NA	NA	NA						
1_30_1_5_106	MW-20	Appendix IV	Cadmium	mg/L	100%	3	4	3	3	13	0.407	0.454	0.454	NA	NA	NA	NA	NA	NA	NA	NA						
1_30_1_5_109	MW-20	Appendix IV	Chromium, Total	mg/L	38%	3	4	3	3	13	0.491	0.379	0.404	2	3	1	2	8	0.418	0.458	0.448						
1_30_1_5_110	MW-20	Appendix IV	Cobalt	mg/L	0%	3	4	3	3	13	0.328	0.364	0.345	3	4	3	3	13	0.328	0.364	0.345						
1_30_1_5_113	MW-20	Appendix IV	Fluoride (App IV)	mg/L	0%	3	4	3	3	13	0.934	0.885	0.997	3	4	3	3	13	0.934	0.885	0.997						
1_30_1_5_115	MW-20	Appendix IV	Lead	mg/L	0%	3	4	3	3	13	0.146	0.204	0.172	3	4	3	3	13	0.146	0.204	0.172						
1_30_1_5_116	MW-20	Appendix IV	Lithium	mg/L	0%	3	4	3	3	13	0.088	0.052	0.083	3	4	3	3	13	0.088	0.052	0.083						
1_30_1_5_117	MW-20	Appendix IV	Mercury	mg/L	100%	3	4	3	3	13	NA	0.379	0.379	NA	NA	NA	NA	NA	NA	NA	NA						
1_30_1_5_118	MW-20	Appendix IV	Molybdenum	mg/L	0%	3	4	3	3	13	0.101	0.111	0.099	3	4	3	3	13	0.101	0.111	0.099						
1_30_1_5_121	MW-20	Appendix IV	Radium 226 and 228	pCi/L	54%	3	4	3	3	13	0.959	0.716	0.788	1	2	1	2	6	0.733	0.811	0.805						
1_30_1_5_122	MW-20	Appendix IV	Selenium	mg/L	54%	3	4	3	3	13	0.045	*	0.034	*	0.029	*	1	2	2	1	6	0.199	0.004	**	0.011	*	
1_30_1_5_125	MW-20	Appendix IV	Thallium	mg/L	92%	3	4	3	3	13	0.343	0.379	0.379	1	0	0	0	1	NA	NA	NA						
1_40_1_3_127	MW-30	Additional Parameters	Total Suspended Solids	mg/L	9%	2	4	2	3	11	0.679	0.368	0.487	1	4	2	3	10	0.391	0.274	0.274						
1_40_1_4_105	MW-30	Appendix III	Boron	mg/L	0%	3	4	3	3	13	0.517	0.854	0.894	3	4	3	3	13	0.517	0.854	0.894						
1_40_1_4_107	MW-30	Appendix III	Calcium	mg/L	0%	3	4	3	3	13	0.850	0.620	0.636	3	4	3	3	13	0.850	0.620	0.636						
1_40_1_4_108	MW-30	Appendix III	Chloride (as Cl)	mg/L	0%	3	4	3	3	13	0.488	0.327	0.347	3	4	3	3	13	0.488	0.327	0.347						
1_40_1_4_112	MW-30	Appendix III	Fluoride	mg/L	0%	3	4	3	3	13	0.543	0.610	0.593	3	4	3	3	13	0.543	0.610	0.593						
1_40_1_4_120	MW-30	Appendix III	pH (field)	su	0%	3	4	3	3	13	0.344	0.499	0.500	3	4	3	3	13	0.344	0.499	0.500						
1_40_1_4_124	MW-30	Appendix III	Sulfate (as SO4)	mg/L	0%	3	4	3	3	13	0.075	0.010	*	0.014	*	3	4	3	3	13	0.075	0.010	*	0.014	*		
1_40_1_4_126	MW-30	Appendix III	Total Dissolved Solids	mg/L	0%	3	4	3	3	13	0.192	0.174	0.181	3	4	3	3	13	0.192	0.174	0.181						
1_40_1_5_101	MW-30	Appendix IV	Antimony	mg/L	92%	3	4	3	3	13	0.671	0.638	0.672	0	1	0	0	1	NA	NA	NA						
1_40_1_5_102	MW-30	Appendix IV	Arsenic	mg/L	15%	3	4	3	3	13	0.129	0.141	0.162	2	3	3	3	11	0.255	0.320	0.392						
1_40_1_5_103	MW-30	Appendix IV	Barium	mg/L	0%	3	4	3	3	13	0.047	*	0.024	*	0.019	*	3	4	3	3	13	0.047	*	0.024	*	0.019	*
1_40_1_5_104	MW-30	Appendix IV	Beryllium	mg/L	85%	3	4	3	3	13	0.008	**	0.135	0.066	2	0	0	0	2	NA	NA	NA					
1_40_1_5_106	MW-30	Appendix IV	Cadmium	mg/L	100%	3	4	3	3	13	0.666	0.501	0.674	NA	NA	NA	NA	NA	NA	NA	NA						
1_40_1_5_109	MW-30	Appendix IV	Chromium, Total	mg/L	0%	3	4	3	3	13	0.153	0.133	0.151	3	4	3	3	13	0.153	0.133	0.151						
1_40_1_5_110	MW-30	Appendix IV	Cobalt	mg/L	0%	3	4	3	3	13	0.159	0.408	0.271	3	4	3	3	13	0.159	0.408	0.271						
1_40_1_5_113	MW-30	Appendix IV	Fluoride (App IV)	mg/L	0%	3	4	3	3	13	0.543	0.610	0.593	3	4	3	3	13	0.543	0.610	0.593						
1_40_1_5_115	MW-30	Appendix IV	Lead	mg/L	92%	3	4	3	3	13	0.954	0.966	0.949	0	0	0	1	1	NA	NA	NA						
1_40_1_5_116	MW-30	Appendix IV	Lithium	mg/L	0%	3	4	3	3	13	0.671	0.858	0.931	3	4	3	3	13	0.671	0.858	0.931						

(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
1_40_1_5_117	MW-30	Appendix IV	Mercury	mg/L	92%	3	4	3	3	13	0.522	0.579	0.579	0	1	0	0	1	NA	NA	NA
1_40_1_5_118	MW-30	Appendix IV	Molybdenum	mg/L	23%	3	4	3	3	13	0.174	0.162	0.240	2	3	3	2	10	0.454	0.412	0.548
1_40_1_5_121	MW-30	Appendix IV	Radium 226 and 228	pCi/L	54%	3	4	3	3	13	0.634	0.403	0.423	2	1	3	0	6	0.538	0.388	0.378
1_40_1_5_122	MW-30	Appendix IV	Selenium	mg/L	46%	3	4	3	3	13	0.095	0.122	0.050	1	1	3	2	7	0.206	0.072	0.145
1_40_1_5_125	MW-30	Appendix IV	Thallium	mg/L	100%	3	4	3	3	13	0.396	0.441	0.441	NA	NA	NA	NA	NA	NA	NA	NA
1_41_1_3_127	MW-31	Additional Parameters	Total Suspended Solids	mg/L	62%	3	1	2	2	8	0.587	0.712	0.653	2	0	1	0	3	0.221	0.454	0.333
1_41_1_4_105	MW-31	Appendix III	Boron	mg/L	0%	4	4	3	2	13	0.039 *	0.010 **	0.014 *	4	4	3	2	13	0.039 *	0.010 **	0.014 *
1_41_1_4_107	MW-31	Appendix III	Calcium	mg/L	0%	4	4	3	2	13	0.153	0.113	0.106	4	4	3	2	13	0.153	0.113	0.106
1_41_1_4_108	MW-31	Appendix III	Chloride (as Cl)	mg/L	0%	4	4	3	2	13	0.045 *	0.059	0.046 *	4	4	3	2	13	0.045 *	0.059	0.046 *
1_41_1_4_112	MW-31	Appendix III	Fluoride	mg/L	0%	4	4	3	2	13	0.193	0.310	0.304	4	4	3	2	13	0.193	0.310	0.304
1_41_1_4_120	MW-31	Appendix III	pH (field)	su	0%	4	4	3	2	13	0.422	0.529	0.528	4	4	3	2	13	0.422	0.529	0.528
1_41_1_4_124	MW-31	Appendix III	Sulfate (as SO4)	mg/L	0%	4	4	3	2	13	0.026 *	0.004 **	0.000 ***	4	4	3	2	13	0.026 *	0.004 **	0.000 ***
1_41_1_4_126	MW-31	Appendix III	Total Dissolved Solids	mg/L	0%	4	4	3	2	13	0.141	0.167	0.141	4	4	3	2	13	0.141	0.167	0.141
1_41_1_5_101	MW-31	Appendix IV	Antimony	mg/L	46%	4	4	3	2	13	0.082	0.234	0.133	2	2	2	1	7	0.174	0.243	0.179
1_41_1_5_102	MW-31	Appendix IV	Arsenic	mg/L	0%	4	4	3	2	13	0.300	0.346	0.329	4	4	3	2	13	0.300	0.346	0.329
1_41_1_5_103	MW-31	Appendix IV	Barium	mg/L	0%	4	4	3	2	13	0.092	0.134	0.108	4	4	3	2	13	0.092	0.134	0.108
1_41_1_5_104	MW-31	Appendix IV	Beryllium	mg/L	85%	4	4	3	2	13	0.332	0.126	0.128	1	0	0	1	2	0.317	NA	NA
1_41_1_5_106	MW-31	Appendix IV	Cadmium	mg/L	92%	4	4	3	2	13	0.432	0.238	0.203	1	0	0	0	1	NA	NA	NA
1_41_1_5_109	MW-31	Appendix IV	Chromium, Total	mg/L	0%	4	4	3	2	13	0.160	0.110	0.119	4	4	3	2	13	0.160	0.110	0.119
1_41_1_5_110	MW-31	Appendix IV	Cobalt	mg/L	8%	4	4	3	2	13	0.897	0.535	0.663	4	3	3	2	12	0.861	0.613	0.701
1_41_1_5_113	MW-31	Appendix IV	Fluoride (App IV)	mg/L	0%	4	4	3	2	13	0.193	0.310	0.304	4	4	3	2	13	0.193	0.310	0.304
1_41_1_5_115	MW-31	Appendix IV	Lead	mg/L	85%	4	4	3	2	13	0.400	0.356	0.328	0	1	1	0	2	0.317	NA	NA
1_41_1_5_116	MW-31	Appendix IV	Lithium	mg/L	0%	4	4	3	2	13	0.304	0.347	0.381	4	4	3	2	13	0.304	0.347	0.381
1_41_1_5_117	MW-31	Appendix IV	Mercury	mg/L	100%	4	4	3	2	13	NA	0.579	0.579	NA	NA	NA	NA	NA	NA	NA	NA
1_41_1_5_118	MW-31	Appendix IV	Molybdenum	mg/L	0%	4	4	3	2	13	0.344	0.456	0.432	4	4	3	2	13	0.344	0.456	0.432
1_41_1_5_121	MW-31	Appendix IV	Radium 226 and 228	pCi/L	31%	4	4	3	2	13	0.920	0.770	0.806	3	3	3	0	9	0.837	0.827	0.864
1_41_1_5_122	MW-31	Appendix IV	Selenium	mg/L	38%	4	4	3	2	13	0.078	0.257	0.089	1	2	3	2	8	0.274	0.000 ***	0.003 **
1_41_1_5_125	MW-31	Appendix IV	Thallium	mg/L	92%	4	4	3	2	13	0.522	0.579	0.579	1	0	0	0	1	NA	NA	NA
1_42_1_3_127	MW-32	Additional Parameters	Total Suspended Solids	mg/L	0%	3	4	3	3	13	0.139	0.088	0.094	3	4	3	3	13	0.139	0.088	0.094
1_42_1_4_105	MW-32	Appendix III	Boron	mg/L	0%	3	4	3	3	13	0.024 *	0.002 **	0.001 ***	3	4	3	3	13	0.024 *	0.002 **	0.001 ***
1_42_1_4_107	MW-32	Appendix III	Calcium	mg/L	0%	3	4	3	3	13	0.047 *	0.008 **	0.005 **	3	4	3	3	13	0.047 *	0.008 **	0.005 **
1_42_1_4_108	MW-32	Appendix III	Chloride (as Cl)	mg/L	0%	3	4	3	3	13	0.363	0.410	0.428	3	4	3	3	13	0.363	0.410	0.428
1_42_1_4_112	MW-32	Appendix III	Fluoride	mg/L	0%	3	4	3	3	13	0.288	0.101	0.114	3	4	3	3	13	0.288	0.101	0.114
1_42_1_4_120	MW-32	Appendix III	pH (field)	su	0%	3	4	3	3	13	0.578	0.625	0.627	3	4	3	3	13	0.578	0.625	0.627
1_42_1_4_124	MW-32	Appendix III	Sulfate (as SO4)	mg/L	0%	3	4	3	3	13	0.024 *	0.002 **	0.021 *	3	4	3	3	13	0.024 *	0.002 **	0.021 *
1_42_1_4_126	MW-32	Appendix III	Total Dissolved Solids	mg/L	0%	3	4	3	3	13	0.039 *	0.005 **	0.004 **	3	4	3	3	13	0.039 *	0.005 **	0.004 **
1_42_1_5_101	MW-32	Appendix IV	Antimony	mg/L	69%	3	4	3	3	13	0.728	0.577	0.961	1	2	0	1	4	0.259	0.091	0.249
1_42_1_5_102	MW-32	Appendix IV	Arsenic	mg/L	0%	3	4	3	3	13	0.123	0.453	0.491	3	4	3	3	13	0.123	0.453	0.491
1_42_1_5_103	MW-32	Appendix IV	Barium	mg/L	0%	3	4	3	3	13	0.099	0.065	0.263	3	4	3	3	13	0.099	0.065	0.263

(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
1_42_1_5_104	MW-32	Appendix IV	Beryllium	mg/L	92%	3	4	3	3	13	0.343	0.379	0.379	1	0	0	0	1	NA	NA	NA
1_42_1_5_106	MW-32	Appendix IV	Cadmium	mg/L	92%	3	4	3	3	13	0.695	0.824	0.836	1	0	0	0	1	NA	NA	NA
1_42_1_5_109	MW-32	Appendix IV	Chromium, Total	mg/L	0%	3	4	3	3	13	0.036 *	0.209	0.059	3	4	3	3	13	0.036 *	0.209	0.059
1_42_1_5_110	MW-32	Appendix IV	Cobalt	mg/L	0%	3	4	3	3	13	0.168	0.413	0.302	3	4	3	3	13	0.168	0.413	0.302
1_42_1_5_113	MW-32	Appendix IV	Fluoride (App IV)	mg/L	0%	3	4	3	3	13	0.288	0.101	0.114	3	4	3	3	13	0.288	0.101	0.114
1_42_1_5_115	MW-32	Appendix IV	Lead	mg/L	69%	3	4	3	3	13	0.192	0.215	0.171	1	1	1	1	4	0.392	NA	NA
1_42_1_5_116	MW-32	Appendix IV	Lithium	mg/L	0%	3	4	3	3	13	0.020 *	0.001 ***	0.001 ***	3	4	3	3	13	0.020 *	0.001 ***	0.001 ***
1_42_1_5_117	MW-32	Appendix IV	Mercury	mg/L	92%	3	4	3	3	13	0.522	0.579	0.579	0	1	0	0	1	NA	NA	NA
1_42_1_5_118	MW-32	Appendix IV	Molybdenum	mg/L	0%	3	4	3	3	13	0.174	0.295	0.220	3	4	3	3	13	0.174	0.295	0.220
1_42_1_5_121	MW-32	Appendix IV	Radium 226 and 228	pCi/L	62%	3	4	3	3	13	0.206	0.259	0.226	0	2	1	2	5	0.165	0.004 **	0.004 **
1_42_1_5_122	MW-32	Appendix IV	Selenium	mg/L	77%	3	4	3	3	13	0.067	0.198	0.063	1	1	0	1	3	0.368	NA	NA
1_42_1_5_125	MW-32	Appendix IV	Thallium	mg/L	100%	3	4	3	3	13	NA	NA	0.379	NA	NA	NA	NA	NA	NA	NA	NA
2_11_2_3_127	MW-01R	Additional Parameters	Total Suspended Solids	mg/L	33%	3	3	3	3	12	0.475	0.535	0.540	2	2	2	2	8	0.347	0.496	0.459
2_11_2_4_105	MW-01R	Appendix III	Boron	mg/L	0%	3	4	3	3	13	0.053	0.012 *	0.033 *	3	4	3	3	13	0.053	0.012 *	0.033 *
2_11_2_4_107	MW-01R	Appendix III	Calcium	mg/L	0%	3	4	3	3	13	0.068	0.047 *	0.033 *	3	4	3	3	13	0.068	0.047 *	0.033 *
2_11_2_4_108	MW-01R	Appendix III	Chloride (as Cl)	mg/L	0%	3	4	3	3	13	0.067	0.065	0.075	3	4	3	3	13	0.067	0.065	0.075
2_11_2_4_112	MW-01R	Appendix III	Fluoride	mg/L	0%	3	4	3	3	13	0.043 *	0.012 *	0.039 *	3	4	3	3	13	0.043 *	0.012 *	0.039 *
2_11_2_4_120	MW-01R	Appendix III	pH (field)	su	0%	3	4	3	3	13	0.422	0.272	0.281	3	4	3	3	13	0.422	0.272	0.281
2_11_2_4_124	MW-01R	Appendix III	Sulfate (as SO4)	mg/L	0%	3	4	3	3	13	0.069	0.038 *	0.098	3	4	3	3	13	0.069	0.038 *	0.098
2_11_2_4_126	MW-01R	Appendix III	Total Dissolved Solids	mg/L	0%	3	4	3	3	13	0.117	0.145	0.148	3	4	3	3	13	0.117	0.145	0.148
2_11_2_5_101	MW-01R	Appendix IV	Antimony	mg/L	23%	3	4	3	3	13	0.723	0.605	0.681	1	3	3	3	10	0.921	0.715	0.803
2_11_2_5_102	MW-01R	Appendix IV	Arsenic	mg/L	0%	3	4	3	3	13	0.094	0.277	0.139	3	4	3	3	13	0.094	0.277	0.139
2_11_2_5_103	MW-01R	Appendix IV	Barium	mg/L	0%	3	4	3	3	13	0.061	0.140	0.078	3	4	3	3	13	0.061	0.140	0.078
2_11_2_5_104	MW-01R	Appendix IV	Beryllium	mg/L	15%	3	4	3	3	13	0.387	0.357	0.484	3	3	3	2	11	0.435	0.563	0.665
2_11_2_5_106	MW-01R	Appendix IV	Cadmium	mg/L	77%	3	4	3	3	13	0.936	0.784	0.854	1	0	1	1	3	0.368	NA	NA
2_11_2_5_109	MW-01R	Appendix IV	Chromium, Total	mg/L	0%	3	4	3	3	13	0.063	0.380	0.194	3	4	3	3	13	0.063	0.380	0.194
2_11_2_5_110	MW-01R	Appendix IV	Cobalt	mg/L	0%	3	4	3	3	13	0.343	0.517	0.492	3	4	3	3	13	0.343	0.517	0.492
2_11_2_5_113	MW-01R	Appendix IV	Fluoride (App IV)	mg/L	0%	3	4	3	3	13	0.043 *	0.012 *	0.039 *	3	4	3	3	13	0.043 *	0.012 *	0.039 *
2_11_2_5_115	MW-01R	Appendix IV	Lead	mg/L	15%	3	4	3	3	13	0.399	0.428	0.377	2	3	3	3	11	0.253	0.512	0.344
2_11_2_5_116	MW-01R	Appendix IV	Lithium	mg/L	0%	3	4	3	3	13	0.070	0.037 *	0.076	3	4	3	3	13	0.070	0.037 *	0.076
2_11_2_5_117	MW-01R	Appendix IV	Mercury	mg/L	100%	3	4	3	3	13	NA	0.379	0.379	NA	NA	NA	NA	NA	NA	NA	NA
2_11_2_5_118	MW-01R	Appendix IV	Molybdenum	mg/L	8%	3	4	3	3	13	0.699	0.479	0.514	3	3	3	3	12	0.875	0.530	0.639
2_11_2_5_121	MW-01R	Appendix IV	Radium 226 and 228	pCi/L	54%	3	4	3	3	13	0.673	0.767	0.827	2	1	2	1	6	0.463	0.840	0.859
2_11_2_5_122	MW-01R	Appendix IV	Selenium	mg/L	0%	3	4	3	3	13	0.416	0.569	0.544	3	4	3	3	13	0.416	0.569	0.544
2_11_2_5_125	MW-01R	Appendix IV	Thallium	mg/L	100%	3	4	3	3	13	0.407	0.454	0.454	NA	NA	NA	NA	NA	NA	NA	NA
2_12_2_3_127	MW-02	Additional Parameters	Total Suspended Solids	mg/L	0%	3	4	3	3	13	0.202	0.116	0.079	3	4	3	3	13	0.202	0.116	0.079
2_12_2_4_105	MW-02	Appendix III	Boron	mg/L	0%	3	4	3	3	13	0.432	0.514	0.534	3	4	3	3	13	0.432	0.514	0.534
2_12_2_4_107	MW-02	Appendix III	Calcium	mg/L	0%	3	4	3	3	13	0.620	0.615	0.632	3	4	3	3	13	0.620	0.615	0.632
2_12_2_4_108	MW-02	Appendix III	Chloride (as Cl)	mg/L	0%	3	4	3	3	13	0.393	0.316	0.326	3	4	3	3	13	0.393	0.316	0.326

(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
2_12_2_4_112	MW-02	Appendix III	Fluoride	mg/L	0%	3	4	3	3	13	0.458	0.412	0.406	3	4	3	3	13	0.458	0.412	0.406
2_12_2_4_120	MW-02	Appendix III	pH (field)	su	0%	3	4	3	3	13	0.255	0.290	0.291	3	4	3	3	13	0.255	0.290	0.291
2_12_2_4_124	MW-02	Appendix III	Sulfate (as SO4)	mg/L	62%	3	4	3	3	13	0.965	0.873	0.974	1	1	1	2	5	0.532	0.676	0.743
2_12_2_4_126	MW-02	Appendix III	Total Dissolved Solids	mg/L	0%	3	4	3	3	13	0.170	0.157	0.166	3	4	3	3	13	0.170	0.157	0.166
2_12_2_5_101	MW-02	Appendix IV	Antimony	mg/L	23%	3	4	3	3	13	0.288	0.164	0.165	1	3	3	3	10	0.436	0.518	0.481
2_12_2_5_102	MW-02	Appendix IV	Arsenic	mg/L	0%	3	4	3	3	13	0.587	0.434	0.391	3	4	3	3	13	0.587	0.434	0.391
2_12_2_5_103	MW-02	Appendix IV	Barium	mg/L	0%	3	4	3	3	13	0.072	0.068	0.095	3	4	3	3	13	0.072	0.068	0.095
2_12_2_5_104	MW-02	Appendix IV	Beryllium	mg/L	8%	3	4	3	3	13	0.551	0.603	0.680	2	4	3	3	12	0.253	0.299	0.239
2_12_2_5_106	MW-02	Appendix IV	Cadmium	mg/L	77%	3	4	3	3	13	0.969	0.715	0.910	1	1	0	1	3	0.368	NA	NA
2_12_2_5_109	MW-02	Appendix IV	Chromium, Total	mg/L	0%	3	4	3	3	13	0.176	0.291	0.545	3	4	3	3	13	0.176	0.291	0.545
2_12_2_5_110	MW-02	Appendix IV	Cobalt	mg/L	0%	3	4	3	3	13	0.277	0.422	0.508	3	4	3	3	13	0.277	0.422	0.508
2_12_2_5_113	MW-02	Appendix IV	Fluoride (App IV)	mg/L	0%	3	4	3	3	13	0.458	0.412	0.406	3	4	3	3	13	0.458	0.412	0.406
2_12_2_5_115	MW-02	Appendix IV	Lead	mg/L	8%	3	4	3	3	13	0.369	0.290	0.400	2	4	3	3	12	0.266	0.315	0.248
2_12_2_5_116	MW-02	Appendix IV	Lithium	mg/L	0%	3	4	3	3	13	0.305	0.456	0.477	3	4	3	3	13	0.305	0.456	0.477
2_12_2_5_117	MW-02	Appendix IV	Mercury	mg/L	100%	3	4	3	3	13	NA	0.379	0.379	NA	NA	NA	NA	NA	NA	NA	NA
2_12_2_5_118	MW-02	Appendix IV	Molybdenum	mg/L	0%	3	4	3	3	13	0.249	0.377	0.384	3	4	3	3	13	0.249	0.377	0.384
2_12_2_5_121	MW-02	Appendix IV	Radium 226 and 228	pCi/L	31%	3	4	3	3	13	0.500	0.432	0.654	2	3	2	2	9	0.485	0.610	0.637
2_12_2_5_122	MW-02	Appendix IV	Selenium	mg/L	0%	3	4	3	3	13	0.239	0.283	0.339	3	4	3	3	13	0.239	0.283	0.339
2_12_2_5_125	MW-02	Appendix IV	Thallium	mg/L	92%	3	4	3	3	13	0.682	0.665	0.792	0	0	0	1	1	NA	NA	NA
2_13_2_3_127	MW-03	Additional Parameters	Total Suspended Solids	mg/L	50%	3	2	2	3	10	0.278	0.476	0.319	2	1	1	1	5	0.317	0.818	0.591
2_13_2_4_105	MW-03	Appendix III	Boron	mg/L	0%	3	4	3	3	13	0.265	0.546	0.558	3	4	3	3	13	0.265	0.546	0.558
2_13_2_4_107	MW-03	Appendix III	Calcium	mg/L	0%	3	4	3	3	13	0.850	0.816	0.789	3	4	3	3	13	0.850	0.816	0.789
2_13_2_4_108	MW-03	Appendix III	Chloride (as Cl)	mg/L	0%	3	4	3	3	13	0.585	0.507	0.547	3	4	3	3	13	0.585	0.507	0.547
2_13_2_4_112	MW-03	Appendix III	Fluoride	mg/L	0%	3	4	3	3	13	0.092	0.321	0.280	3	4	3	3	13	0.092	0.321	0.280
2_13_2_4_120	MW-03	Appendix III	pH (field)	su	0%	3	4	3	3	13	0.482	0.430	0.434	3	4	3	3	13	0.482	0.430	0.434
2_13_2_4_124	MW-03	Appendix III	Sulfate (as SO4)	mg/L	0%	3	4	3	3	13	0.082	0.040 *	0.069	3	4	3	3	13	0.082	0.040 *	0.069
2_13_2_4_126	MW-03	Appendix III	Total Dissolved Solids	mg/L	0%	3	4	3	3	13	0.462	0.699	0.696	3	4	3	3	13	0.462	0.699	0.696
2_13_2_5_101	MW-03	Appendix IV	Antimony	mg/L	62%	3	4	3	3	13	0.236	0.517	0.395	1	3	0	1	5	0.202	0.713	0.580
2_13_2_5_102	MW-03	Appendix IV	Arsenic	mg/L	0%	3	4	3	3	13	0.399	0.653	0.590	3	4	3	3	13	0.399	0.653	0.590
2_13_2_5_103	MW-03	Appendix IV	Barium	mg/L	0%	3	4	3	3	13	0.897	0.991	0.933	3	4	3	3	13	0.897	0.991	0.933
2_13_2_5_104	MW-03	Appendix IV	Beryllium	mg/L	62%	3	4	3	3	13	0.693	0.705	0.757	1	2	1	1	5	0.849	0.840	0.823
2_13_2_5_106	MW-03	Appendix IV	Cadmium	mg/L	92%	3	4	3	3	13	0.770	0.551	0.771	0	0	0	1	1	NA	NA	NA
2_13_2_5_109	MW-03	Appendix IV	Chromium, Total	mg/L	0%	3	4	3	3	13	0.352	0.493	0.412	3	4	3	3	13	0.352	0.493	0.412
2_13_2_5_110	MW-03	Appendix IV	Cobalt	mg/L	0%	3	4	3	3	13	0.301	0.463	0.383	3	4	3	3	13	0.301	0.463	0.383
2_13_2_5_113	MW-03	Appendix IV	Fluoride (App IV)	mg/L	0%	3	4	3	3	13	0.092	0.321	0.280	3	4	3	3	13	0.092	0.321	0.280
2_13_2_5_115	MW-03	Appendix IV	Lead	mg/L	92%	3	4	3	3	13	0.595	0.575	0.781	0	0	0	1	1	NA	NA	NA
2_13_2_5_116	MW-03	Appendix IV	Lithium	mg/L	0%	3	4	3	3	13	0.902	0.689	0.747	3	4	3	3	13	0.902	0.689	0.747
2_13_2_5_117	MW-03	Appendix IV	Mercury	mg/L	92%	3	4	3	3	13	0.343	0.379	0.379	0	0	0	1	1	NA	NA	NA
2_13_2_5_118	MW-03	Appendix IV	Molybdenum	mg/L	69%	3	4	3	3	13	0.218	0.509	0.318	1	1	0	2	4	0.407	0.635	0.722

(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
2_13_2_5_121	MW-03	Appendix IV	Radium 226 and 228	pCi/L	8%	3	4	3	3	13	0.716	0.747	0.750	2	4	3	3	12	0.558	0.642	0.634
2_13_2_5_122	MW-03	Appendix IV	Selenium	mg/L	23%	3	4	3	3	13	0.249	0.332	0.413	1	3	3	3	10	0.133	0.190	0.355
2_13_2_5_125	MW-03	Appendix IV	Thallium	mg/L	92%	3	4	3	3	13	0.483	0.561	0.640	0	0	0	1	1	NA	NA	NA
2_14_2_3_127	MW-04	Additional Parameters	Total Suspended Solids	mg/L	8%	3	4	2	3	12	0.122	0.122	0.213	2	4	2	3	11	0.113	0.098	0.143
2_14_2_4_105	MW-04	Appendix III	Boron	mg/L	0%	3	4	3	3	13	0.284	0.181	0.200	3	4	3	3	13	0.284	0.181	0.200
2_14_2_4_107	MW-04	Appendix III	Calcium	mg/L	0%	3	4	3	3	13	0.318	0.203	0.207	3	4	3	3	13	0.318	0.203	0.207
2_14_2_4_108	MW-04	Appendix III	Chloride (as Cl)	mg/L	0%	3	4	3	3	13	0.340	0.451	0.498	3	4	3	3	13	0.340	0.451	0.498
2_14_2_4_112	MW-04	Appendix III	Fluoride	mg/L	0%	3	4	3	3	13	0.649	0.345	0.366	3	4	3	3	13	0.649	0.345	0.366
2_14_2_4_120	MW-04	Appendix III	pH (field)	su	0%	3	4	3	3	13	0.139	0.152	0.151	3	4	3	3	13	0.139	0.152	0.151
2_14_2_4_124	MW-04	Appendix III	Sulfate (as SO4)	mg/L	0%	3	4	3	3	13	0.245	0.210	0.345	3	4	3	3	13	0.245	0.210	0.345
2_14_2_4_126	MW-04	Appendix III	Total Dissolved Solids	mg/L	0%	3	4	3	3	13	0.133	0.145	0.131	3	4	3	3	13	0.133	0.145	0.131
2_14_2_5_101	MW-04	Appendix IV	Antimony	mg/L	77%	3	4	3	3	13	0.647	0.653	0.737	0	1	1	1	3	0.368	NA	NA
2_14_2_5_102	MW-04	Appendix IV	Arsenic	mg/L	0%	3	4	3	3	13	0.762	0.859	0.792	3	4	3	3	13	0.762	0.859	0.792
2_14_2_5_103	MW-04	Appendix IV	Barium	mg/L	0%	3	4	3	3	13	0.510	0.345	0.332	3	4	3	3	13	0.510	0.345	0.332
2_14_2_5_104	MW-04	Appendix IV	Beryllium	mg/L	85%	3	4	3	3	13	0.465	0.414	0.418	0	0	1	1	2	0.317	NA	NA
2_14_2_5_106	MW-04	Appendix IV	Cadmium	mg/L	100%	3	4	3	3	13	0.666	0.501	0.674	NA	NA	NA	NA	NA	NA	NA	NA
2_14_2_5_109	MW-04	Appendix IV	Chromium, Total	mg/L	0%	3	4	3	3	13	0.826	0.617	0.600	3	4	3	3	13	0.826	0.617	0.600
2_14_2_5_110	MW-04	Appendix IV	Cobalt	mg/L	0%	3	4	3	3	13	0.910	0.683	0.910	3	4	3	3	13	0.910	0.683	0.910
2_14_2_5_113	MW-04	Appendix IV	Fluoride (App IV)	mg/L	0%	3	4	3	3	13	0.649	0.345	0.366	3	4	3	3	13	0.649	0.345	0.366
2_14_2_5_115	MW-04	Appendix IV	Lead	mg/L	100%	3	4	3	3	13	0.718	0.707	0.759	NA	NA	NA	NA	NA	NA	NA	NA
2_14_2_5_116	MW-04	Appendix IV	Lithium	mg/L	0%	3	4	3	3	13	0.052	0.021 *	0.019 *	3	4	3	3	13	0.052	0.021 *	0.019 *
2_14_2_5_117	MW-04	Appendix IV	Mercury	mg/L	100%	3	4	3	3	13	NA	0.379	0.379	NA	NA	NA	NA	NA	NA	NA	NA
2_14_2_5_118	MW-04	Appendix IV	Molybdenum	mg/L	15%	3	4	3	3	13	0.149	0.501	0.326	2	3	3	3	11	0.082	0.083	0.174
2_14_2_5_121	MW-04	Appendix IV	Radium 226 and 228	pCi/L	23%	3	4	3	3	13	0.639	0.868	0.799	2	3	2	3	10	0.631	0.637	0.546
2_14_2_5_122	MW-04	Appendix IV	Selenium	mg/L	38%	3	4	3	3	13	0.098	0.054	0.101	2	1	3	2	8	0.108	0.009 **	0.020 *
2_14_2_5_125	MW-04	Appendix IV	Thallium	mg/L	100%	3	4	3	3	13	0.836	0.873	0.873	NA	NA	NA	NA	NA	NA	NA	NA
2_19_2_3_127	MW-09	Additional Parameters	Total Suspended Solids	mg/L	0%	3	4	3	3	13	0.124	0.106	0.090	3	4	3	3	13	0.124	0.106	0.090
2_19_2_4_105	MW-09	Appendix III	Boron	mg/L	0%	3	4	3	3	13	0.088	0.058	0.059	3	4	3	3	13	0.088	0.058	0.059
2_19_2_4_107	MW-09	Appendix III	Calcium	mg/L	0%	3	4	3	3	13	0.109	0.067	0.068	3	4	3	3	13	0.109	0.067	0.068
2_19_2_4_108	MW-09	Appendix III	Chloride (as Cl)	mg/L	0%	3	4	3	3	13	0.724	0.977	0.920	3	4	3	3	13	0.724	0.977	0.920
2_19_2_4_112	MW-09	Appendix III	Fluoride	mg/L	0%	3	4	3	3	13	0.238	0.322	0.360	3	4	3	3	13	0.238	0.322	0.360
2_19_2_4_120	MW-09	Appendix III	pH (field)	su	0%	3	4	3	3	13	0.059	0.081	0.079	3	4	3	3	13	0.059	0.081	0.079
2_19_2_4_124	MW-09	Appendix III	Sulfate (as SO4)	mg/L	0%	3	4	3	3	13	0.089	0.024 *	0.043 *	3	4	3	3	13	0.089	0.024 *	0.043 *
2_19_2_4_126	MW-09	Appendix III	Total Dissolved Solids	mg/L	0%	3	4	3	3	13	0.100	0.070	0.088	3	4	3	3	13	0.100	0.070	0.088
2_19_2_5_101	MW-09	Appendix IV	Antimony	mg/L	62%	3	4	3	3	13	0.650	0.378	0.476	1	2	1	1	5	0.532	0.891	0.841
2_19_2_5_102	MW-09	Appendix IV	Arsenic	mg/L	0%	3	4	3	3	13	0.244	0.475	0.415	3	4	3	3	13	0.244	0.475	0.415
2_19_2_5_103	MW-09	Appendix IV	Barium	mg/L	0%	3	4	3	3	13	0.075	0.303	0.140	3	4	3	3	13	0.075	0.303	0.140
2_19_2_5_104	MW-09	Appendix IV	Beryllium	mg/L	85%	3	4	3	3	13	0.599	0.660	0.659	0	1	1	0	2	0.317	NA	NA
2_19_2_5_106	MW-09	Appendix IV	Cadmium	mg/L	100%	3	4	3	3	13	0.743	0.691	0.822	NA	NA	NA	NA	NA	NA	NA	NA

(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
2_19_2_5_109	MW-09	Appendix IV	Chromium, Total	mg/L	0%	3	4	3	3	13	0.752	0.833	0.861	3	4	3	3	13	0.752	0.833	0.861
2_19_2_5_110	MW-09	Appendix IV	Cobalt	mg/L	0%	3	4	3	3	13	0.133	0.177	0.115	3	4	3	3	13	0.133	0.177	0.115
2_19_2_5_113	MW-09	Appendix IV	Fluoride (App IV)	mg/L	0%	3	4	3	3	13	0.238	0.322	0.360	3	4	3	3	13	0.238	0.322	0.360
2_19_2_5_115	MW-09	Appendix IV	Lead	mg/L	100%	3	4	3	3	13	0.239	0.378	0.269	NA	NA	NA	NA	NA	NA	NA	NA
2_19_2_5_116	MW-09	Appendix IV	Lithium	mg/L	0%	3	4	3	3	13	0.222	0.248	0.276	3	4	3	3	13	0.222	0.248	0.276
2_19_2_5_117	MW-09	Appendix IV	Mercury	mg/L	85%	3	4	3	3	13	0.561	0.621	0.634	0	1	0	1	2	0.317	NA	NA
2_19_2_5_118	MW-09	Appendix IV	Molybdenum	mg/L	0%	3	4	3	3	13	0.254	0.419	0.607	3	4	3	3	13	0.254	0.419	0.607
2_19_2_5_121	MW-09	Appendix IV	Radium 226 and 228	pCi/L	92%	3	4	3	3	13	0.867	0.997	0.987	0	0	0	1	1	NA	NA	NA
2_19_2_5_122	MW-09	Appendix IV	Selenium	mg/L	15%	3	4	3	3	13	0.528	0.587	0.555	2	3	3	3	11	0.857	0.754	0.679
2_19_2_5_125	MW-09	Appendix IV	Thallium	mg/L	100%	3	4	3	3	13	0.407	0.454	0.454	NA	NA	NA	NA	NA	NA	NA	NA
2_21_2_3_127	MW-11	Additional Parameters	Total Suspended Solids	mg/L	0%	3	3	3	3	12	0.064	0.065	0.013 *	3	3	3	3	12	0.064	0.065	0.013 *
2_21_2_4_105	MW-11	Appendix III	Boron	mg/L	0%	3	4	3	3	13	0.035 *	0.019 *	0.004 **	3	4	3	3	13	0.035 *	0.019 *	0.004 **
2_21_2_4_107	MW-11	Appendix III	Calcium	mg/L	0%	3	4	3	3	13	0.071	0.048 *	0.069	3	4	3	3	13	0.071	0.048 *	0.069
2_21_2_4_108	MW-11	Appendix III	Chloride (as Cl)	mg/L	0%	3	4	3	3	13	0.034 *	0.010 *	0.013 *	3	4	3	3	13	0.034 *	0.010 *	0.013 *
2_21_2_4_112	MW-11	Appendix III	Fluoride	mg/L	0%	3	4	3	3	13	0.057	0.075	0.060	3	4	3	3	13	0.057	0.075	0.060
2_21_2_4_120	MW-11	Appendix III	pH (field)	su	0%	3	4	3	3	13	0.099	0.118	0.116	3	4	3	3	13	0.099	0.118	0.116
2_21_2_4_124	MW-11	Appendix III	Sulfate (as SO4)	mg/L	31%	3	4	3	3	13	0.083	0.040 *	0.061	2	4	2	1	9	0.261	0.280	0.209
2_21_2_4_126	MW-11	Appendix III	Total Dissolved Solids	mg/L	0%	3	4	3	3	13	0.551	0.597	0.562	3	4	3	3	13	0.551	0.597	0.562
2_21_2_5_101	MW-11	Appendix IV	Antimony	mg/L	69%	3	4	3	3	13	0.696	0.478	0.591	1	2	0	1	4	0.223	0.000 ***	0.000 ***
2_21_2_5_102	MW-11	Appendix IV	Arsenic	mg/L	0%	3	4	3	3	13	0.077	0.250	0.120	3	4	3	3	13	0.077	0.250	0.120
2_21_2_5_103	MW-11	Appendix IV	Barium	mg/L	0%	3	4	3	3	13	0.041 *	0.031 *	0.018 *	3	4	3	3	13	0.041 *	0.031 *	0.018 *
2_21_2_5_104	MW-11	Appendix IV	Beryllium	mg/L	77%	3	4	3	3	13	0.781	0.644	0.741	1	1	0	1	3	0.368	NA	NA
2_21_2_5_106	MW-11	Appendix IV	Cadmium	mg/L	85%	3	4	3	3	13	0.602	0.539	0.668	1	1	0	0	2	0.317	NA	NA
2_21_2_5_109	MW-11	Appendix IV	Chromium, Total	mg/L	0%	3	4	3	3	13	0.096	0.389	0.289	3	4	3	3	13	0.096	0.389	0.289
2_21_2_5_110	MW-11	Appendix IV	Cobalt	mg/L	0%	3	4	3	3	13	0.254	0.536	0.400	3	4	3	3	13	0.254	0.536	0.400
2_21_2_5_113	MW-11	Appendix IV	Fluoride (App IV)	mg/L	0%	3	4	3	3	13	0.057	0.075	0.060	3	4	3	3	13	0.057	0.075	0.060
2_21_2_5_115	MW-11	Appendix IV	Lead	mg/L	23%	3	4	3	3	13	0.655	0.378	0.454	3	1	3	3	10	0.749	0.589	0.645
2_21_2_5_116	MW-11	Appendix IV	Lithium	mg/L	0%	3	4	3	3	13	0.047 *	0.100	0.016 *	3	4	3	3	13	0.047 *	0.100	0.016 *
2_21_2_5_117	MW-11	Appendix IV	Mercury	mg/L	92%	3	4	3	3	13	0.522	0.579	0.579	0	1	0	0	1	NA	NA	NA
2_21_2_5_118	MW-11	Appendix IV	Molybdenum	mg/L	15%	3	4	3	3	13	0.568	0.822	0.766	3	2	3	3	11	0.883	0.792	0.927
2_21_2_5_121	MW-11	Appendix IV	Radium 226 and 228	pCi/L	31%	3	4	3	3	13	0.963	0.908	0.935	2	3	1	3	9	0.399	0.344	0.432
2_21_2_5_122	MW-11	Appendix IV	Selenium	mg/L	23%	3	4	3	3	13	0.159	0.226	0.185	2	2	3	3	10	0.334	0.144	0.151
2_21_2_5_125	MW-11	Appendix IV	Thallium	mg/L	92%	3	4	3	3	13	0.141	0.185	0.139	0	1	0	0	1	NA	NA	NA
2_22_2_3_127	MW-12	Additional Parameters	Total Suspended Solids	mg/L	62%	2	2	2	2	8	0.380	0.769	0.747	1	1	1	0	3	0.368	NA	NA
2_22_2_4_105	MW-12	Appendix III	Boron	mg/L	0%	3	4	3	3	13	0.025 *	0.000 ***	0.000 ***	3	4	3	3	13	0.025 *	0.000 ***	0.000 ***
2_22_2_4_107	MW-12	Appendix III	Calcium	mg/L	0%	3	4	3	3	13	0.144	0.123	0.132	3	4	3	3	13	0.144	0.123	0.132
2_22_2_4_108	MW-12	Appendix III	Chloride (as Cl)	mg/L	0%	3	4	3	3	13	0.142	0.169	0.140	3	4	3	3	13	0.142	0.169	0.140
2_22_2_4_112	MW-12	Appendix III	Fluoride	mg/L	0%	3	4	3	3	13	0.787	0.738	0.785	3	4	3	3	13	0.787	0.738	0.785
2_22_2_4_120	MW-12	Appendix III	pH (field)	su	0%	3	4	3	3	13	0.144	0.288	0.297	3	4	3	3	13	0.144	0.288	0.297

(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
2_22_2_4_124	MW-12	Appendix III	Sulfate (as SO4)	mg/L	0%	3	4	3	3	13	0.691	0.741	0.849	3	4	3	3	13	0.691	0.741	0.849
2_22_2_4_126	MW-12	Appendix III	Total Dissolved Solids	mg/L	0%	3	4	3	3	13	0.156	0.096	0.167	3	4	3	3	13	0.156	0.096	0.167
2_22_2_5_101	MW-12	Appendix IV	Antimony	mg/L	0%	3	4	3	3	13	0.476	0.577	0.599	3	4	3	3	13	0.476	0.577	0.599
2_22_2_5_102	MW-12	Appendix IV	Arsenic	mg/L	0%	3	4	3	3	13	0.025 *	0.000 ***	0.001 ***	3	4	3	3	13	0.025 *	0.000 ***	0.001 ***
2_22_2_5_103	MW-12	Appendix IV	Barium	mg/L	0%	3	4	3	3	13	0.027 *	0.038 *	0.008 **	3	4	3	3	13	0.027 *	0.038 *	0.008 **
2_22_2_5_104	MW-12	Appendix IV	Beryllium	mg/L	100%	3	4	3	3	13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2_22_2_5_106	MW-12	Appendix IV	Cadmium	mg/L	0%	3	4	3	3	13	0.137	0.045 *	0.078	3	4	3	3	13	0.137	0.045 *	0.078
2_22_2_5_109	MW-12	Appendix IV	Chromium, Total	mg/L	38%	3	4	3	3	13	0.074	0.088	0.038 *	3	3	0	2	8	0.119	0.213	0.082
2_22_2_5_110	MW-12	Appendix IV	Cobalt	mg/L	38%	3	4	3	3	13	0.032 *	0.033 *	0.005 **	1	1	3	3	8	0.314	0.597	0.333
2_22_2_5_113	MW-12	Appendix IV	Fluoride (App IV)	mg/L	0%	3	4	3	3	13	0.787	0.738	0.785	3	4	3	3	13	0.787	0.738	0.785
2_22_2_5_115	MW-12	Appendix IV	Lead	mg/L	46%	3	4	3	3	13	0.732	0.651	0.607	0	2	3	2	7	0.567	0.793	0.809
2_22_2_5_116	MW-12	Appendix IV	Lithium	mg/L	0%	3	4	3	3	13	0.060	0.033 *	0.036 *	3	4	3	3	13	0.060	0.033 *	0.036 *
2_22_2_5_117	MW-12	Appendix IV	Mercury	mg/L	85%	3	4	3	3	13	0.522	0.579	0.579	0	1	0	1	2	0.317	NA	NA
2_22_2_5_118	MW-12	Appendix IV	Molybdenum	mg/L	0%	3	4	3	3	13	0.046 *	0.048 *	0.020 *	3	4	3	3	13	0.046 *	0.048 *	0.020 *
2_22_2_5_121	MW-12	Appendix IV	Radium 226 and 228	pCi/L	69%	3	4	3	3	13	0.559	0.419	0.465	0	3	0	1	4	0.655	0.631	0.666
2_22_2_5_122	MW-12	Appendix IV	Selenium	mg/L	0%	3	4	3	3	13	0.040 *	0.027 *	0.002 **	3	4	3	3	13	0.040 *	0.027 *	0.002 **
2_22_2_5_125	MW-12	Appendix IV	Thallium	mg/L	100%	3	4	3	3	13	NA	NA	0.379	NA	NA	NA	NA	NA	NA	NA	NA
3_20_3_3_127	MW-10	Additional Parameters	Total Suspended Solids	mg/L	17%	3	4	2	3	12	0.572	0.485	0.594	2	4	2	2	10	0.532	0.597	0.583
3_20_3_4_105	MW-10	Appendix III	Boron	mg/L	0%	3	4	3	3	13	0.040 *	0.007 **	0.015 *	3	4	3	3	13	0.040 *	0.007 **	0.015 *
3_20_3_4_107	MW-10	Appendix III	Calcium	mg/L	0%	3	4	3	3	13	0.567	0.522	0.577	3	4	3	3	13	0.567	0.522	0.577
3_20_3_4_108	MW-10	Appendix III	Chloride (as Cl)	mg/L	0%	3	4	3	3	13	0.039 *	0.039 *	0.011 *	3	4	3	3	13	0.039 *	0.039 *	0.011 *
3_20_3_4_112	MW-10	Appendix III	Fluoride	mg/L	0%	3	4	3	3	13	0.194	0.210	0.214	3	4	3	3	13	0.194	0.210	0.214
3_20_3_4_120	MW-10	Appendix III	pH (field)	su	0%	3	4	3	3	13	0.121	0.126	0.129	3	4	3	3	13	0.121	0.126	0.129
3_20_3_4_124	MW-10	Appendix III	Sulfate (as SO4)	mg/L	0%	3	4	3	3	13	0.551	0.574	0.359	3	4	3	3	13	0.551	0.574	0.359
3_20_3_4_126	MW-10	Appendix III	Total Dissolved Solids	mg/L	0%	3	4	3	3	13	0.825	0.792	0.828	3	4	3	3	13	0.825	0.792	0.828
3_20_3_5_101	MW-10	Appendix IV	Antimony	mg/L	69%	3	4	3	3	13	0.919	0.477	0.770	0	1	2	1	4	0.223	0.000 ***	0.000 ***
3_20_3_5_102	MW-10	Appendix IV	Arsenic	mg/L	0%	3	4	3	3	13	0.070	0.100	0.048 *	3	4	3	3	13	0.070	0.100	0.048 *
3_20_3_5_103	MW-10	Appendix IV	Barium	mg/L	0%	3	4	3	3	13	0.074	0.120	0.081	3	4	3	3	13	0.074	0.120	0.081
3_20_3_5_104	MW-10	Appendix IV	Beryllium	mg/L	46%	3	4	3	3	13	0.763	0.657	0.614	1	2	2	2	7	0.426	0.698	0.658
3_20_3_5_106	MW-10	Appendix IV	Cadmium	mg/L	100%	3	4	3	3	13	0.666	0.501	0.674	NA	NA	NA	NA	NA	NA	NA	NA
3_20_3_5_109	MW-10	Appendix IV	Chromium, Total	mg/L	0%	3	4	3	3	13	0.229	0.115	0.153	3	4	3	3	13	0.229	0.115	0.153
3_20_3_5_110	MW-10	Appendix IV	Cobalt	mg/L	8%	3	4	3	3	13	0.795	0.712	0.761	2	4	3	3	12	0.920	0.849	0.962
3_20_3_5_113	MW-10	Appendix IV	Fluoride (App IV)	mg/L	0%	3	4	3	3	13	0.194	0.210	0.214	3	4	3	3	13	0.194	0.210	0.214
3_20_3_5_115	MW-10	Appendix IV	Lead	mg/L	85%	3	4	3	3	13	0.441	0.367	0.453	0	0	1	1	2	0.317	NA	NA
3_20_3_5_116	MW-10	Appendix IV	Lithium	mg/L	0%	3	4	3	3	13	0.102	0.173	0.072	3	4	3	3	13	0.102	0.173	0.072
3_20_3_5_117	MW-10	Appendix IV	Mercury	mg/L	92%	3	4	3	3	13	0.522	0.579	0.579	0	1	0	0	1	NA	NA	NA
3_20_3_5_118	MW-10	Appendix IV	Molybdenum	mg/L	0%	3	4	3	3	13	0.857	0.682	0.718	3	4	3	3	13	0.857	0.682	0.718
3_20_3_5_121	MW-10	Appendix IV	Radium 226 and 228	pCi/L	77%	3	4	3	3	13	0.467	0.491	0.547	2	0	0	1	3	0.221	0.484	0.445
3_20_3_5_122	MW-10	Appendix IV	Selenium	mg/L	8%	3	4	3	3	13	0.832	0.680	0.802	3	3	3	3	12	0.771	0.742	0.851

(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	
3_20_3_5_125	MW-10	Appendix IV	Thallium	mg/L	100%	3	4	3	3	13	0.697	0.677	0.678	NA	NA	NA	NA	NA	NA	NA	NA	NA

*** 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
1_16_1_3_127	MW-06	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000255	0.439	↔
1_16_1_4_105	MW-06	Appendix III	Boron	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000242	0.264	↔
1_16_1_4_107	MW-06	Appendix III	Calcium	mg/L	13	0	0%	Parametric	Lognormal MLE	0.0000263	0.861	↔
1_16_1_4_108	MW-06	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.00237	0.000	↓
1_16_1_4_112	MW-06	Appendix III	Fluoride	mg/L	13	0	0%	Parametric	Lognormal MLE	0.0000414	0.833	↔
1_16_1_4_120	MW-06	Appendix III	pH (field)	su	13	0	0%	Nonparametric	MK	0.0000297	0.903	↔
1_16_1_4_124	MW-06	Appendix III	Sulfate (as SO4)	mg/L	13	2	15%	Parametric	Lognormal MLE	-0.00366	0.021	↔
1_16_1_4_126	MW-06	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	Nonparametric	MK	-0.177	0.030	↔
1_16_1_5_102	MW-06	Appendix IV	Arsenic	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000476	0.062	↔
1_16_1_5_103	MW-06	Appendix IV	Barium	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000164	0.311	↔
1_16_1_5_109	MW-06	Appendix IV	Chromium, Total	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000760	0.017	↔
1_16_1_5_110	MW-06	Appendix IV	Cobalt	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000749	0.003	↓
1_16_1_5_113	MW-06	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	Parametric	Lognormal MLE	0.0000414	0.833	↔
1_16_1_5_116	MW-06	Appendix IV	Lithium	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000694	0.002	↓
1_16_1_5_121	MW-06	Appendix IV	Radium 226 and 228	pCi/L	13	3	23%	Parametric	Lognormal MLE	-0.000201	0.673	↔
1_16_1_5_122	MW-06	Appendix IV	Selenium	mg/L	13	5	38%	Nonparametric	MK	0	0.845	↔
1_17_1_3_127	MW-07	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	Parametric	Lognormal MLE	0.0000938	0.582	↔
1_17_1_4_105	MW-07	Appendix III	Boron	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.0000803	0.434	↔
1_17_1_4_107	MW-07	Appendix III	Calcium	mg/L	13	0	0%	Parametric	Lognormal MLE	0.0000204	0.846	↔
1_17_1_4_108	MW-07	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	Nonparametric	MK	0	0.684	↔
1_17_1_4_112	MW-07	Appendix III	Fluoride	mg/L	13	2	15%	Parametric	Lognormal MLE	-0.000305	0.606	↔
1_17_1_4_120	MW-07	Appendix III	pH (field)	su	13	0	0%	Nonparametric	MK	0.0000299	0.667	↔
1_17_1_4_124	MW-07	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000191	0.640	↔
1_17_1_4_126	MW-07	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	Nonparametric	MK	0.142	0.041	↔
1_17_1_5_102	MW-07	Appendix IV	Arsenic	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000236	0.292	↔
1_17_1_5_103	MW-07	Appendix IV	Barium	mg/L	13	0	0%	Nonparametric	MK	0.0000515	0.054	↔
1_17_1_5_109	MW-07	Appendix IV	Chromium, Total	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000534	0.052	↔
1_17_1_5_110	MW-07	Appendix IV	Cobalt	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.0000368	0.821	↔
1_17_1_5_113	MW-07	Appendix IV	Fluoride (App IV)	mg/L	13	2	15%	Parametric	Lognormal MLE	-0.000305	0.606	↔
1_17_1_5_116	MW-07	Appendix IV	Lithium	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000379	0.275	↔
1_17_1_5_121	MW-07	Appendix IV	Radium 226 and 228	pCi/L	13	2	15%	Parametric	Lognormal MLE	-0.000368	0.428	↔
1_18_1_3_127	MW-08	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000907	0.017	↔
1_18_1_4_105	MW-08	Appendix III	Boron	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000265	0.547	↔
1_18_1_4_107	MW-08	Appendix III	Calcium	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000331	0.000	↓
1_18_1_4_108	MW-08	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	Nonparametric	MK	0.0122	0.388	↔
1_18_1_4_112	MW-08	Appendix III	Fluoride	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000552	0.184	↔
1_18_1_4_120	MW-08	Appendix III	pH (field)	su	13	0	0%	Nonparametric	MK	0.000276	0.502	↔
1_18_1_4_124	MW-08	Appendix III	Sulfate (as SO4)	mg/L	13	4	31%	Parametric	Lognormal MLE	-0.000551	0.840	↔
1_18_1_4_126	MW-08	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	Parametric	Lognormal MLE	0.0000924	0.511	↔
1_18_1_5_101	MW-08	Appendix IV	Antimony	mg/L	13	6	46%	Parametric	Lognormal MLE	-0.000983	0.245	↔
1_18_1_5_102	MW-08	Appendix IV	Arsenic	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000629	0.398	↔
1_18_1_5_103	MW-08	Appendix IV	Barium	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000154	0.328	↔
1_18_1_5_109	MW-08	Appendix IV	Chromium, Total	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000693	0.009	↓

(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
1_18_1_5_110	MW-08	Appendix IV	Cobalt	mg/L	13	0	0%	Nonparametric	MK	-0.00000289	0.172	↔
1_18_1_5_113	MW-08	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000552	0.184	↔
1_18_1_5_116	MW-08	Appendix IV	Lithium	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000239	0.409	↔
1_18_1_5_118	MW-08	Appendix IV	Molybdenum	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.00108	0.222	↔
1_18_1_5_121	MW-08	Appendix IV	Radium 226 and 228	pCi/L	13	3	23%	Parametric	Lognormal MLE	-0.000855	0.087	↔
1_18_1_5_122	MW-08	Appendix IV	Selenium	mg/L	13	5	38%	Parametric	Lognormal MLE	0.000370	0.482	↔
1_28_1_3_127	MW-18	Additional Parameters	Total Suspended Solids	mg/L	13	1	8%	Parametric	Lognormal MLE	0.00183	0.102	↔
1_28_1_4_105	MW-18	Appendix III	Boron	mg/L	13	0	0%	Parametric	Lognormal MLE	0.00117	0.000	↑
1_28_1_4_107	MW-18	Appendix III	Calcium	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000131	0.565	↔
1_28_1_4_108	MW-18	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	Parametric	Lognormal MLE	0.0000205	0.932	↔
1_28_1_4_112	MW-18	Appendix III	Fluoride	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000203	0.344	↔
1_28_1_4_120	MW-18	Appendix III	pH (field)	su	13	0	0%	Parametric	Lognormal MLE	0.0000312	0.005	↑
1_28_1_4_124	MW-18	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000127	0.682	↔
1_28_1_4_126	MW-18	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000245	0.129	↔
1_28_1_5_102	MW-18	Appendix IV	Arsenic	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000840	0.005	↑
1_28_1_5_103	MW-18	Appendix IV	Barium	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000405	0.224	↔
1_28_1_5_106	MW-18	Appendix IV	Cadmium	mg/L	13	6	46%	Parametric	Lognormal MLE	-0.00415	0.006	↓
1_28_1_5_110	MW-18	Appendix IV	Cobalt	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.00171	0.000	↓
1_28_1_5_113	MW-18	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000203	0.344	↔
1_28_1_5_116	MW-18	Appendix IV	Lithium	mg/L	13	0	0%	Parametric	Lognormal MLE	0.0000394	0.903	↔
1_28_1_5_118	MW-18	Appendix IV	Molybdenum	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000588	0.060	↔
1_28_1_5_122	MW-18	Appendix IV	Selenium	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000182	0.872	↔
1_29_1_3_127	MW-19	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000360	0.626	↔
1_29_1_4_105	MW-19	Appendix III	Boron	mg/L	13	0	0%	Parametric	Lognormal MLE	0.0000267	0.913	↔
1_29_1_4_107	MW-19	Appendix III	Calcium	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000277	0.023	↔
1_29_1_4_108	MW-19	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000976	0.001	↓
1_29_1_4_112	MW-19	Appendix III	Fluoride	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000231	0.125	↔
1_29_1_4_120	MW-19	Appendix III	pH (field)	su	13	0	0%	Parametric	Lognormal MLE	-0.0000136	0.659	↔
1_29_1_4_124	MW-19	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000245	0.354	↔
1_29_1_4_126	MW-19	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000441	0.000	↓
1_29_1_5_102	MW-19	Appendix IV	Arsenic	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000177	0.683	↔
1_29_1_5_103	MW-19	Appendix IV	Barium	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000263	0.108	↔
1_29_1_5_104	MW-19	Appendix IV	Beryllium	mg/L	13	3	23%	Parametric	Lognormal MLE	0.000891	0.000	↑
1_29_1_5_109	MW-19	Appendix IV	Chromium, Total	mg/L	13	5	38%	Parametric	Lognormal MLE	-0.000391	0.466	↔
1_29_1_5_110	MW-19	Appendix IV	Cobalt	mg/L	13	1	8%	Parametric	Lognormal MLE	-0.00248	0.000	↓
1_29_1_5_113	MW-19	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000231	0.125	↔
1_29_1_5_116	MW-19	Appendix IV	Lithium	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000355	0.004	↓
1_29_1_5_118	MW-19	Appendix IV	Molybdenum	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000267	0.555	↔
1_29_1_5_121	MW-19	Appendix IV	Radium 226 and 228	pCi/L	13	5	38%	Parametric	Lognormal MLE	-0.00111	0.040	↔
1_30_1_3_127	MW-20	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000108	0.360	↔
1_30_1_4_105	MW-20	Appendix III	Boron	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000234	0.293	↔
1_30_1_4_107	MW-20	Appendix III	Calcium	mg/L	13	0	0%	Nonparametric	MK	-0.0157	0.376	↔
1_30_1_4_108	MW-20	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000500	0.049	↔

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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
1_30_1_4_112	MW-20	Appendix III	Fluoride	mg/L	13	0	0%	Nonparametric	MK	-0.0000341	0.713	↔
1_30_1_4_120	MW-20	Appendix III	pH (field)	su	13	0	0%	Parametric	Lognormal MLE	0.0000120	0.520	↔
1_30_1_4_124	MW-20	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.00164	0.019	↔
1_30_1_4_126	MW-20	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000125	0.359	↔
1_30_1_5_101	MW-20	Appendix IV	Antimony	mg/L	13	4	31%	Parametric	Lognormal MLE	0.000383	0.391	↔
1_30_1_5_102	MW-20	Appendix IV	Arsenic	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000387	0.052	↔
1_30_1_5_103	MW-20	Appendix IV	Barium	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000108	0.777	↔
1_30_1_5_109	MW-20	Appendix IV	Chromium, Total	mg/L	13	5	38%	Parametric	Lognormal MLE	0.000172	0.486	↔
1_30_1_5_110	MW-20	Appendix IV	Cobalt	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000685	0.000	↓
1_30_1_5_113	MW-20	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	Nonparametric	MK	-0.0000341	0.713	↔
1_30_1_5_115	MW-20	Appendix IV	Lead	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000357	0.230	↔
1_30_1_5_116	MW-20	Appendix IV	Lithium	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000311	0.336	↔
1_30_1_5_118	MW-20	Appendix IV	Molybdenum	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000310	0.079	↔
1_40_1_3_127	MW-30	Additional Parameters	Total Suspended Solids	mg/L	11	1	9%	Parametric	Lognormal MLE	0.000664	0.306	↔
1_40_1_4_105	MW-30	Appendix III	Boron	mg/L	13	0	0%	Nonparametric	MK	-0.000250	0.411	↔
1_40_1_4_107	MW-30	Appendix III	Calcium	mg/L	13	0	0%	Nonparametric	MK	-0.0428	0.580	↔
1_40_1_4_108	MW-30	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000416	0.453	↔
1_40_1_4_112	MW-30	Appendix III	Fluoride	mg/L	13	0	0%	Parametric	Lognormal MLE	0.0000774	0.561	↔
1_40_1_4_120	MW-30	Appendix III	pH (field)	su	13	0	0%	Nonparametric	MK	-0.0000588	0.625	↔
1_40_1_4_124	MW-30	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000472	0.068	↔
1_40_1_4_126	MW-30	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.0000418	0.743	↔
1_40_1_5_102	MW-30	Appendix IV	Arsenic	mg/L	13	2	15%	Parametric	Lognormal MLE	0.00126	0.156	↔
1_40_1_5_103	MW-30	Appendix IV	Barium	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000479	0.181	↔
1_40_1_5_109	MW-30	Appendix IV	Chromium, Total	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000182	0.680	↔
1_40_1_5_110	MW-30	Appendix IV	Cobalt	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.00134	0.058	↔
1_40_1_5_113	MW-30	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	Parametric	Lognormal MLE	0.0000774	0.561	↔
1_40_1_5_116	MW-30	Appendix IV	Lithium	mg/L	13	0	0%	Nonparametric	MK	-0.0000320	0.287	↔
1_40_1_5_118	MW-30	Appendix IV	Molybdenum	mg/L	13	3	23%	Parametric	Lognormal MLE	-0.000608	0.493	↔
1_40_1_5_122	MW-30	Appendix IV	Selenium	mg/L	13	6	46%	Parametric	Lognormal MLE	0.00178	0.032	↔
1_41_1_4_105	MW-31	Appendix III	Boron	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000410	0.003	↑
1_41_1_4_107	MW-31	Appendix III	Calcium	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000101	0.498	↔
1_41_1_4_108	MW-31	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.0000823	0.455	↔
1_41_1_4_112	MW-31	Appendix III	Fluoride	mg/L	13	0	0%	Nonparametric	MK	-0.000200	0.380	↔
1_41_1_4_120	MW-31	Appendix III	pH (field)	su	13	0	0%	Parametric	Lognormal MLE	0.00000252	0.876	↔
1_41_1_4_124	MW-31	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.00162	0.000	↓
1_41_1_4_126	MW-31	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000175	0.024	↔
1_41_1_5_101	MW-31	Appendix IV	Antimony	mg/L	13	6	46%	Parametric	Lognormal MLE	0.00215	0.004	↑
1_41_1_5_102	MW-31	Appendix IV	Arsenic	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000430	0.047	↔
1_41_1_5_103	MW-31	Appendix IV	Barium	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000295	0.354	↔
1_41_1_5_109	MW-31	Appendix IV	Chromium, Total	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000600	0.016	↔
1_41_1_5_110	MW-31	Appendix IV	Cobalt	mg/L	13	1	8%	Parametric	Lognormal MLE	0.0000951	0.845	↔
1_41_1_5_113	MW-31	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	Nonparametric	MK	-0.000200	0.380	↔
1_41_1_5_116	MW-31	Appendix IV	Lithium	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.0000258	0.879	↔

(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
1_41_1_5_118	MW-31	Appendix IV	Molybdenum	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000915	0.007	↓
1_41_1_5_121	MW-31	Appendix IV	Radium 226 and 228	pCi/L	13	4	31%	Parametric	Lognormal MLE	-0.000399	0.395	↔
1_41_1_5_122	MW-31	Appendix IV	Selenium	mg/L	13	5	38%	Nonparametric	MK	-0.00000115	0.115	↔
1_42_1_3_127	MW-32	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000891	0.033	↔
1_42_1_4_105	MW-32	Appendix III	Boron	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000554	0.020	↔
1_42_1_4_107	MW-32	Appendix III	Calcium	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000334	0.052	↔
1_42_1_4_108	MW-32	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000171	0.132	↔
1_42_1_4_112	MW-32	Appendix III	Fluoride	mg/L	13	0	0%	Nonparametric	MK	0.000265	0.110	↔
1_42_1_4_120	MW-32	Appendix III	pH (field)	su	13	0	0%	Parametric	Lognormal MLE	-0.00000205	0.869	↔
1_42_1_4_124	MW-32	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.00346	0.002	↓
1_42_1_4_126	MW-32	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000360	0.013	↔
1_42_1_5_102	MW-32	Appendix IV	Arsenic	mg/L	13	0	0%	Nonparametric	MK	0.00000214	0.087	↔
1_42_1_5_103	MW-32	Appendix IV	Barium	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000356	0.696	↔
1_42_1_5_109	MW-32	Appendix IV	Chromium, Total	mg/L	13	0	0%	Nonparametric	MK	-0.00000266	0.159	↔
1_42_1_5_110	MW-32	Appendix IV	Cobalt	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000657	0.300	↔
1_42_1_5_113	MW-32	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	Nonparametric	MK	0.000265	0.110	↔
1_42_1_5_116	MW-32	Appendix IV	Lithium	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000252	0.398	↔
1_42_1_5_118	MW-32	Appendix IV	Molybdenum	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000112	0.677	↔
2_11_2_3_127	MW-01R	Additional Parameters	Total Suspended Solids	mg/L	12	4	33%	Nonparametric	MK	0.00330	0.052	↔
2_11_2_4_105	MW-01R	Appendix III	Boron	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000162	0.760	↔
2_11_2_4_107	MW-01R	Appendix III	Calcium	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000347	0.407	↔
2_11_2_4_108	MW-01R	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000115	0.848	↔
2_11_2_4_112	MW-01R	Appendix III	Fluoride	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.0000158	0.973	↔
2_11_2_4_120	MW-01R	Appendix III	pH (field)	su	13	0	0%	Nonparametric	MK	-0.0000462	0.625	↔
2_11_2_4_124	MW-01R	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.00184	0.236	↔
2_11_2_4_126	MW-01R	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	Parametric	Lognormal MLE	0.0000438	0.532	↔
2_11_2_5_101	MW-01R	Appendix IV	Antimony	mg/L	13	3	23%	Parametric	Lognormal MLE	-0.00112	0.122	↔
2_11_2_5_102	MW-01R	Appendix IV	Arsenic	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000377	0.473	↔
2_11_2_5_103	MW-01R	Appendix IV	Barium	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000593	0.118	↔
2_11_2_5_104	MW-01R	Appendix IV	Beryllium	mg/L	13	2	15%	Parametric	Lognormal MLE	-0.00227	0.002	↓
2_11_2_5_109	MW-01R	Appendix IV	Chromium, Total	mg/L	13	0	0%	Parametric	Lognormal MLE	0.00111	0.222	↔
2_11_2_5_110	MW-01R	Appendix IV	Cobalt	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000401	0.581	↔
2_11_2_5_113	MW-01R	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.0000158	0.973	↔
2_11_2_5_115	MW-01R	Appendix IV	Lead	mg/L	13	2	15%	Parametric	Lognormal MLE	-0.000495	0.584	↔
2_11_2_5_116	MW-01R	Appendix IV	Lithium	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.0000249	0.963	↔
2_11_2_5_118	MW-01R	Appendix IV	Molybdenum	mg/L	13	1	8%	Parametric	Lognormal MLE	-0.000357	0.725	↔
2_11_2_5_122	MW-01R	Appendix IV	Selenium	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000536	0.270	↔
2_12_2_3_127	MW-02	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.00209	0.042	↔
2_12_2_4_105	MW-02	Appendix III	Boron	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000360	0.002	↑
2_12_2_4_107	MW-02	Appendix III	Calcium	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.0000418	0.685	↔
2_12_2_4_108	MW-02	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	Nonparametric	MK	0	0.459	↔
2_12_2_4_112	MW-02	Appendix III	Fluoride	mg/L	13	0	0%	Nonparametric	MK	0.00189	0.021	↔
2_12_2_4_120	MW-02	Appendix III	pH (field)	su	13	0	0%	Parametric	Lognormal MLE	-0.00000937	0.636	↔

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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
2_12_2_4_126	MW-02	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000207	0.025	↔
2_12_2_5_101	MW-02	Appendix IV	Antimony	mg/L	13	3	23%	Parametric	Lognormal MLE	-0.000304	0.633	↔
2_12_2_5_102	MW-02	Appendix IV	Arsenic	mg/L	13	0	0%	Nonparametric	MK	-0.00000290	0.112	↔
2_12_2_5_103	MW-02	Appendix IV	Barium	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000475	0.048	↔
2_12_2_5_104	MW-02	Appendix IV	Beryllium	mg/L	13	1	8%	Parametric	Lognormal MLE	-0.00140	0.061	↔
2_12_2_5_109	MW-02	Appendix IV	Chromium, Total	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.00127	0.439	↔
2_12_2_5_110	MW-02	Appendix IV	Cobalt	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000690	0.549	↔
2_12_2_5_113	MW-02	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	Nonparametric	MK	0.00189	0.021	↔
2_12_2_5_115	MW-02	Appendix IV	Lead	mg/L	13	1	8%	Parametric	Lognormal MLE	-0.000610	0.647	↔
2_12_2_5_116	MW-02	Appendix IV	Lithium	mg/L	13	0	0%	Parametric	Lognormal MLE	0.0000128	0.953	↔
2_12_2_5_118	MW-02	Appendix IV	Molybdenum	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000938	0.004	↓
2_12_2_5_121	MW-02	Appendix IV	Radium 226 and 228	pCi/L	13	4	31%	Parametric	Lognormal MLE	-0.00106	0.126	↔
2_12_2_5_122	MW-02	Appendix IV	Selenium	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000434	0.327	↔
2_13_2_4_105	MW-03	Appendix III	Boron	mg/L	13	0	0%	Parametric	Lognormal MLE	0.0000734	0.466	↔
2_13_2_4_107	MW-03	Appendix III	Calcium	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000156	0.213	↔
2_13_2_4_108	MW-03	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.00108	0.000	↓
2_13_2_4_112	MW-03	Appendix III	Fluoride	mg/L	13	0	0%	Nonparametric	MK	0	1.000	↔
2_13_2_4_120	MW-03	Appendix III	pH (field)	su	13	0	0%	Parametric	Lognormal MLE	0.0000111	0.532	↔
2_13_2_4_124	MW-03	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.0000377	0.968	↔
2_13_2_4_126	MW-03	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	Nonparametric	MK	-0.526	0.092	↔
2_13_2_5_102	MW-03	Appendix IV	Arsenic	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000131	0.737	↔
2_13_2_5_103	MW-03	Appendix IV	Barium	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.0000631	0.883	↔
2_13_2_5_109	MW-03	Appendix IV	Chromium, Total	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000471	0.133	↔
2_13_2_5_110	MW-03	Appendix IV	Cobalt	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.0000559	0.921	↔
2_13_2_5_113	MW-03	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	Nonparametric	MK	0	1.000	↔
2_13_2_5_116	MW-03	Appendix IV	Lithium	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000673	0.001	↓
2_13_2_5_121	MW-03	Appendix IV	Radium 226 and 228	pCi/L	13	1	8%	Parametric	Lognormal MLE	-0.000847	0.019	↔
2_13_2_5_122	MW-03	Appendix IV	Selenium	mg/L	13	3	23%	Parametric	Lognormal MLE	0.00114	0.029	↔
2_14_2_3_127	MW-04	Additional Parameters	Total Suspended Solids	mg/L	12	1	8%	Parametric	Lognormal MLE	-0.00117	0.011	↔
2_14_2_4_105	MW-04	Appendix III	Boron	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000265	0.000	↑
2_14_2_4_107	MW-04	Appendix III	Calcium	mg/L	13	0	0%	Parametric	Lognormal MLE	0.0000901	0.432	↔
2_14_2_4_108	MW-04	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.00129	0.000	↓
2_14_2_4_112	MW-04	Appendix III	Fluoride	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000437	0.048	↔
2_14_2_4_120	MW-04	Appendix III	pH (field)	su	13	0	0%	Parametric	Lognormal MLE	-0.0000190	0.310	↔
2_14_2_4_124	MW-04	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	Nonparametric	MK	0.455	0.017	↔
2_14_2_4_126	MW-04	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	Parametric	Lognormal MLE	0.0000373	0.728	↔
2_14_2_5_102	MW-04	Appendix IV	Arsenic	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000109	0.776	↔
2_14_2_5_103	MW-04	Appendix IV	Barium	mg/L	13	0	0%	Nonparametric	MK	-0.0000531	0.077	↔
2_14_2_5_109	MW-04	Appendix IV	Chromium, Total	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000134	0.720	↔
2_14_2_5_110	MW-04	Appendix IV	Cobalt	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.00129	0.007	↓
2_14_2_5_113	MW-04	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000437	0.048	↔
2_14_2_5_116	MW-04	Appendix IV	Lithium	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000147	0.450	↔
2_14_2_5_118	MW-04	Appendix IV	Molybdenum	mg/L	13	2	15%	Parametric	Lognormal MLE	0.000879	0.193	↔

(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
2_14_2_5_121	MW-04	Appendix IV	Radium 226 and 228	pCi/L	13	3	23%	Parametric	Lognormal MLE	-0.00133	0.000	↓
2_14_2_5_122	MW-04	Appendix IV	Selenium	mg/L	13	5	38%	Parametric	Lognormal MLE	0.00109	0.115	↔
2_19_2_3_127	MW-09	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.00000776	0.950	↔
2_19_2_4_105	MW-09	Appendix III	Boron	mg/L	13	0	0%	Parametric	Lognormal MLE	0.0000575	0.615	↔
2_19_2_4_107	MW-09	Appendix III	Calcium	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000436	0.083	↔
2_19_2_4_108	MW-09	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000875	0.004	↑
2_19_2_4_112	MW-09	Appendix III	Fluoride	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000119	0.357	↔
2_19_2_4_120	MW-09	Appendix III	pH (field)	su	13	0	0%	Nonparametric	MK	-0.000114	0.157	↔
2_19_2_4_124	MW-09	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	Parametric	Lognormal MLE	0.00145	0.068	↔
2_19_2_4_126	MW-09	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000596	0.027	↔
2_19_2_5_102	MW-09	Appendix IV	Arsenic	mg/L	13	0	0%	Nonparametric	MK	0.00000299	0.416	↔
2_19_2_5_103	MW-09	Appendix IV	Barium	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.00158	0.044	↔
2_19_2_5_109	MW-09	Appendix IV	Chromium, Total	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000216	0.454	↔
2_19_2_5_110	MW-09	Appendix IV	Cobalt	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000878	0.113	↔
2_19_2_5_113	MW-09	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000119	0.357	↔
2_19_2_5_116	MW-09	Appendix IV	Lithium	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000187	0.079	↔
2_19_2_5_118	MW-09	Appendix IV	Molybdenum	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000476	0.253	↔
2_19_2_5_122	MW-09	Appendix IV	Selenium	mg/L	13	2	15%	Parametric	Lognormal MLE	0.000783	0.020	↔
2_21_2_3_127	MW-11	Additional Parameters	Total Suspended Solids	mg/L	12	0	0%	Parametric	Lognormal MLE	-0.000656	0.513	↔
2_21_2_4_105	MW-11	Appendix III	Boron	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000289	0.733	↔
2_21_2_4_107	MW-11	Appendix III	Calcium	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000197	0.623	↔
2_21_2_4_108	MW-11	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000418	0.154	↔
2_21_2_4_112	MW-11	Appendix III	Fluoride	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000639	0.411	↔
2_21_2_4_120	MW-11	Appendix III	pH (field)	su	13	0	0%	Parametric	Lognormal MLE	-0.0000243	0.089	↔
2_21_2_4_124	MW-11	Appendix III	Sulfate (as SO4)	mg/L	13	4	31%	Parametric	Lognormal MLE	-0.0104	0.004	↓
2_21_2_4_126	MW-11	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.0000758	0.790	↔
2_21_2_5_102	MW-11	Appendix IV	Arsenic	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000144	0.798	↔
2_21_2_5_103	MW-11	Appendix IV	Barium	mg/L	13	0	0%	Parametric	Lognormal MLE	0.0000566	0.890	↔
2_21_2_5_109	MW-11	Appendix IV	Chromium, Total	mg/L	13	0	0%	Nonparametric	MK	-0.000000648	0.903	↔
2_21_2_5_110	MW-11	Appendix IV	Cobalt	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000624	0.443	↔
2_21_2_5_113	MW-11	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000639	0.411	↔
2_21_2_5_116	MW-11	Appendix IV	Lithium	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000170	0.898	↔
2_21_2_5_118	MW-11	Appendix IV	Molybdenum	mg/L	13	2	15%	Parametric	Lognormal MLE	-0.000195	0.828	↔
2_21_2_5_121	MW-11	Appendix IV	Radium 226 and 228	pCi/L	13	4	31%	Parametric	Lognormal MLE	-0.00106	0.025	↔
2_21_2_5_122	MW-11	Appendix IV	Selenium	mg/L	13	3	23%	Parametric	Lognormal MLE	0.000503	0.452	↔
2_22_2_4_105	MW-12	Appendix III	Boron	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000486	0.142	↔
2_22_2_4_107	MW-12	Appendix III	Calcium	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.0000988	0.789	↔
2_22_2_4_108	MW-12	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000305	0.272	↔
2_22_2_4_112	MW-12	Appendix III	Fluoride	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.0000998	0.800	↔
2_22_2_4_120	MW-12	Appendix III	pH (field)	su	13	0	0%	Parametric	Lognormal MLE	-0.00000769	0.895	↔
2_22_2_4_124	MW-12	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.00156	0.000	↓
2_22_2_4_126	MW-12	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000134	0.782	↔
2_22_2_5_101	MW-12	Appendix IV	Antimony	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000753	0.079	↔

(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
2_22_2_5_102	MW-12	Appendix IV	Arsenic	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000386	0.292	↔
2_22_2_5_103	MW-12	Appendix IV	Barium	mg/L	13	0	0%	Parametric	Lognormal MLE	0.00159	0.002	↑
2_22_2_5_106	MW-12	Appendix IV	Cadmium	mg/L	13	0	0%	Parametric	Lognormal MLE	0.00119	0.079	↔
2_22_2_5_109	MW-12	Appendix IV	Chromium, Total	mg/L	13	5	38%	Parametric	Lognormal MLE	-0.000465	0.696	↔
2_22_2_5_110	MW-12	Appendix IV	Cobalt	mg/L	13	5	38%	Parametric	Lognormal MLE	0.00219	0.119	↔
2_22_2_5_113	MW-12	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.0000998	0.800	↔
2_22_2_5_115	MW-12	Appendix IV	Lead	mg/L	13	6	46%	Parametric	Lognormal MLE	0.00230	0.002	↑
2_22_2_5_116	MW-12	Appendix IV	Lithium	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000344	0.466	↔
2_22_2_5_118	MW-12	Appendix IV	Molybdenum	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000385	0.364	↔
2_22_2_5_122	MW-12	Appendix IV	Selenium	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.00236	0.030	↔
3_20_3_3_127	MW-10	Additional Parameters	Total Suspended Solids	mg/L	12	2	17%	Parametric	Lognormal MLE	0.00180	0.069	↔
3_20_3_4_105	MW-10	Appendix III	Boron	mg/L	13	0	0%	Parametric	Lognormal MLE	0.0000920	0.900	↔
3_20_3_4_107	MW-10	Appendix III	Calcium	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000852	0.045	↔
3_20_3_4_108	MW-10	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	Parametric	Lognormal MLE	0.00170	0.002	↑
3_20_3_4_112	MW-10	Appendix III	Fluoride	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000446	0.309	↔
3_20_3_4_120	MW-10	Appendix III	pH (field)	su	13	0	0%	Parametric	Lognormal MLE	-0.0000629	0.324	↔
3_20_3_4_124	MW-10	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	Parametric	Lognormal MLE	0.00103	0.211	↔
3_20_3_4_126	MW-10	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	Parametric	Lognormal MLE	0.000709	0.002	↑
3_20_3_5_102	MW-10	Appendix IV	Arsenic	mg/L	13	0	0%	Parametric	Lognormal MLE	0.00199	0.002	↑
3_20_3_5_103	MW-10	Appendix IV	Barium	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000303	0.526	↔
3_20_3_5_104	MW-10	Appendix IV	Beryllium	mg/L	13	6	46%	Parametric	Lognormal MLE	-0.000557	0.587	↔
3_20_3_5_109	MW-10	Appendix IV	Chromium, Total	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000682	0.323	↔
3_20_3_5_110	MW-10	Appendix IV	Cobalt	mg/L	13	1	8%	Parametric	Lognormal MLE	-0.00158	0.101	↔
3_20_3_5_113	MW-10	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000446	0.309	↔
3_20_3_5_116	MW-10	Appendix IV	Lithium	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.000102	0.779	↔
3_20_3_5_118	MW-10	Appendix IV	Molybdenum	mg/L	13	0	0%	Parametric	Lognormal MLE	-0.00117	0.068	↔
3_20_3_5_122	MW-10	Appendix IV	Selenium	mg/L	13	1	8%	Parametric	Lognormal MLE	0.000334	0.418	↔

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			
1_16_1_3_127	MW-06	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	0.0396	0.191	↔	-0.128	0.166	↔	2024-02-13	0.385	↔
1_16_1_4_105	MW-06	Appendix III	Boron	mg/L	13	0	0%	-0.00625	0.046	↔	0.0300	0.200	↔	2024-06-05	0.453	↔
1_16_1_4_107	MW-06	Appendix III	Calcium	mg/L	13	0	0%	0.0964	0.130	↔	-0.369	0.448	↔	2024-04-07	0.345	↔
1_16_1_4_108	MW-06	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	-0.700	0.025	↔	-0.0745	0.074	↔	2023-03-27	0.815	↔
1_16_1_4_120	MW-06	Appendix III	pH (field)	su	13	0	0%	-0.00433	0.423	↔	0.000518	0.244	↔	2023-02-06	0.201	↔
1_16_1_4_124	MW-06	Appendix III	Sulfate (as SO4)	mg/L	13	2	15%	-0.0373	0.102	↔	-0.00252	0.940	↔	2023-10-24	0.447	↔
1_16_1_4_126	MW-06	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	-0.368	0.099	↔	-0.0278	0.932	↔	2023-10-24	0.455	↔
1_16_1_5_101	MW-06	Appendix IV	Antimony	mg/L	13	11	85%	0.00000162	0.324	↔	-0.00000295	0.417	↔	2023-04-20	0.182	↔
1_16_1_5_102	MW-06	Appendix IV	Arsenic	mg/L	13	0	0%	-0.00000429	0.501	↔	0.00000502	0.056	↔	2023-01-21	0.372	↔

(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			
1_16_1_5_103	MW-06	Appendix IV	Barium	mg/L	13	0	0%	-0.00237	0.248	↔	0.000658	0.038	↔	2023-04-17	0.465	↔
1_16_1_5_104	MW-06	Appendix IV	Beryllium	mg/L	13	12	92%	-0.000000240	0.003	↓	0.00000000246	0.624	↔	2023-02-08	0.789	↔
1_16_1_5_106	MW-06	Appendix IV	Cadmium	mg/L	13	13	100%	0.000000355	0.270	↔	-0.000000779	0.417	↔	2024-02-13	0.196	↔
1_16_1_5_109	MW-06	Appendix IV	Chromium, Total	mg/L	13	0	0%	-0.00000172	0.138	↔	0.000000419	0.962	↔	2024-04-07	0.295	↔
1_16_1_5_110	MW-06	Appendix IV	Cobalt	mg/L	13	0	0%	0.00000266	0.589	↔	-0.000000522	0.017	↔	2023-02-05	0.497	↔
1_16_1_5_115	MW-06	Appendix IV	Lead	mg/L	13	9	69%	0.00000544	0.451	↔	-0.00000103	0.098	↔	2023-02-06	0.319	↔
1_16_1_5_116	MW-06	Appendix IV	Lithium	mg/L	13	0	0%	-0.000194	0.009	↓	0.000333	0.495	↔	2024-05-17	0.594	↔
1_16_1_5_118	MW-06	Appendix IV	Molybdenum	mg/L	13	8	62%	-0.00000170	0.425	↔	0.000000923	0.884	↔	2024-03-06	0.115	↔
1_16_1_5_121	MW-06	Appendix IV	Radium 226 and 228	pCi/L	13	3	23%	0.00321	0.681	↔	-0.000600	0.350	↔	2023-03-13	0.123	↔
1_16_1_5_122	MW-06	Appendix IV	Selenium	mg/L	13	5	38%	0.000000257	0.193	↔	-0.000000246	0.667	↔	2024-02-13	0.221	↔
1_16_1_5_125	MW-06	Appendix IV	Thallium	mg/L	13	13	100%	0.000000313	0.334	↔	-0.000000292	0.266	↔	2023-02-06	0.219	↔
1_17_1_3_127	MW-07	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	-0.0121	0.312	↔	0.0594	0.120	↔	2024-03-14	0.380	↔
1_17_1_4_105	MW-07	Appendix III	Boron	mg/L	13	0	0%	-0.0147	0.493	↔	0.000202	0.905	↔	2023-03-02	0.181	↔
1_17_1_4_107	MW-07	Appendix III	Calcium	mg/L	13	0	0%	0.0214	0.393	↔	-0.222	0.275	↔	2024-07-08	0.204	↔
1_17_1_4_108	MW-07	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	-0.0107	0.001	↓	0.00348	0.001	↑	2023-06-10	0.833	↔
1_17_1_4_120	MW-07	Appendix III	pH (field)	su	13	0	0%	-0.00182	0.540	↔	0.000329	0.187	↔	2023-03-12	0.229	↔
1_17_1_4_124	MW-07	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	-0.0983	0.160	↔	0.0259	0.101	↔	2023-04-28	0.392	↔
1_17_1_5_101	MW-07	Appendix IV	Antimony	mg/L	13	12	92%	0.000000279	0.000	↑	0.000000000000335	1.000	↔	2023-07-09	0.896	↔
1_17_1_5_102	MW-07	Appendix IV	Arsenic	mg/L	13	0	0%	-0.000000368	0.479	↔	0.0000000850	0.250	↔	2023-03-13	0.188	↔
1_17_1_5_103	MW-07	Appendix IV	Barium	mg/L	13	0	0%	-0.000202	0.643	↔	0.000106	0.104	↔	2023-04-08	0.294	↔
1_17_1_5_104	MW-07	Appendix IV	Beryllium	mg/L	13	10	77%	0.0000000181	0.409	↔	-0.0000000152	0.403	↔	2023-08-07	0.172	↔
1_17_1_5_106	MW-07	Appendix IV	Cadmium	mg/L	13	13	100%	0.000000221	0.004	↑	0.000000000000170	1.000	↔	2023-07-30	0.828	↔
1_17_1_5_109	MW-07	Appendix IV	Chromium, Total	mg/L	13	0	0%	-0.000000800	0.833	↔	0.000000792	0.210	↔	2023-12-20	0.348	↔
1_17_1_5_110	MW-07	Appendix IV	Cobalt	mg/L	13	0	0%	0.00000292	0.206	↔	-0.000000244	0.191	↔	2023-02-23	0.377	↔
1_17_1_5_115	MW-07	Appendix IV	Lead	mg/L	13	13	100%	-0.000000617	0.004	↓	0.0000000000000828	1.000	↔	2023-07-30	0.828	↔
1_17_1_5_116	MW-07	Appendix IV	Lithium	mg/L	13	0	0%	0.00000944	0.702	↔	-0.00000412	0.247	↔	2023-04-17	0.159	↔
1_17_1_5_118	MW-07	Appendix IV	Molybdenum	mg/L	13	13	100%	-0.00000190	0.004	↓	-0.0000000000000617	1.000	↔	2023-07-30	0.828	↔
1_17_1_5_121	MW-07	Appendix IV	Radium 226 and 228	pCi/L	13	2	15%	-0.000575	0.572	↔	0.0000727	0.993	↔	2024-04-08	0.054	↔
1_17_1_5_122	MW-07	Appendix IV	Selenium	mg/L	13	9	69%	-0.000000618	0.042	↔	0.000000101	0.464	↔	2023-07-13	0.521	↔
1_18_1_3_127	MW-08	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	-0.189	0.042	↔	-0.00201	0.911	↔	2023-05-05	0.658	↔
1_18_1_4_105	MW-08	Appendix III	Boron	mg/L	13	0	0%	0.0778	0.193	↔	-0.00289	0.197	↔	2023-02-06	0.595	↔
1_18_1_4_107	MW-08	Appendix III	Calcium	mg/L	13	0	0%	-0.0897	0.015	↔	0.0201	0.680	↔	2023-12-12	0.684	↔
1_18_1_4_108	MW-08	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	-0.00428	0.713	↔	0.767	0.000	↑	2024-07-10	0.943	↔
1_18_1_4_112	MW-08	Appendix III	Fluoride	mg/L	13	0	0%	0.0102	0.041	↔	-0.000109	0.756	↔	2023-02-07	0.559	↔
1_18_1_4_120	MW-08	Appendix III	pH (field)	su	13	0	0%	0.00567	0.190	↔	-0.000256	0.655	↔	2023-03-16	0.302	↔
1_18_1_4_124	MW-08	Appendix III	Sulfate (as SO4)	mg/L	13	4	31%	-0.0930	0.066	↔	0.0351	0.151	↔	2023-07-22	0.459	↔
1_18_1_4_126	MW-08	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	-0.0973	0.408	↔	1.22	0.207	↔	2024-06-07	0.365	↔
1_18_1_5_101	MW-08	Appendix IV	Antimony	mg/L	13	6	46%	-0.000000862	0.516	↔	0.000000111	0.916	↔	2024-06-14	0.069	↔
1_18_1_5_102	MW-08	Appendix IV	Arsenic	mg/L	13	0	0%	0.000528	0.300	↔	-0.0000156	0.410	↔	2023-02-06	0.476	↔
1_18_1_5_103	MW-08	Appendix IV	Barium	mg/L	13	0	0%	-0.000770	0.125	↔	0.00129	0.107	↔	2024-02-12	0.437	↔
1_18_1_5_106	MW-08	Appendix IV	Cadmium	mg/L	13	13	100%	0.000000222	0.004	↑	0.0000000000000109	1.000	↔	2023-07-30	0.828	↔
1_18_1_5_109	MW-08	Appendix IV	Chromium, Total	mg/L	13	0	0%	0.00000743	0.338	↔	-0.000000961	0.007	↓	2023-02-01	0.601	↔

(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			
1_18_1_5_110	MW-08	Appendix IV	Cobalt	mg/L	13	0	0%	0.00000436	0.192	↔	-0.00000551	0.001	↓	2023-02-06	0.747	↔
1_18_1_5_113	MW-08	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.0102	0.041	↔	-0.000109	0.756	↔	2023-02-07	0.559	↔
1_18_1_5_115	MW-08	Appendix IV	Lead	mg/L	13	9	69%	-0.00000633	0.155	↔	0.0000311	0.000	↑	2024-07-13	0.946	↔
1_18_1_5_116	MW-08	Appendix IV	Lithium	mg/L	13	0	0%	0.00134	0.069	↔	-0.0000713	0.017	↔	2023-01-19	0.647	↔
1_18_1_5_118	MW-08	Appendix IV	Molybdenum	mg/L	13	0	0%	-0.00000818	0.146	↔	0.00000701	0.692	↔	2023-06-04	0.363	↔
1_18_1_5_121	MW-08	Appendix IV	Radium 226 and 228	pCi/L	13	3	23%	-0.00547	0.760	↔	-0.000691	0.316	↔	2023-02-06	0.254	↔
1_18_1_5_122	MW-08	Appendix IV	Selenium	mg/L	13	5	38%	-0.00000330	0.482	↔	0.000000200	0.896	↔	2023-06-26	0.146	↔
1_28_1_3_127	MW-18	Additional Parameters	Total Suspended Solids	mg/L	13	1	8%	0.0949	0.078	↔	-0.184	0.639	↔	2024-04-10	0.318	↔
1_28_1_4_105	MW-18	Appendix III	Boron	mg/L	13	0	0%	0.00383	0.000	↑	0.000000000811	1.000	↔	2024-06-03	0.881	↔
1_28_1_4_107	MW-18	Appendix III	Calcium	mg/L	13	0	0%	-1.20	0.045	↔	0.127	0.111	↔	2023-04-17	0.673	↔
1_28_1_4_108	MW-18	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	-0.0854	0.293	↔	0.00797	0.233	↔	2023-03-09	0.352	↔
1_28_1_4_112	MW-18	Appendix III	Fluoride	mg/L	13	0	0%	-0.000231	0.869	↔	0.00601	0.592	↔	2024-04-10	0.220	↔
1_28_1_4_124	MW-18	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	-8.70	0.150	↔	0.215	0.341	↔	2023-02-07	0.655	↔
1_28_1_4_126	MW-18	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	-5.48	0.006	↓	0.0905	0.678	↔	2023-03-13	0.745	↔
1_28_1_5_101	MW-18	Appendix IV	Antimony	mg/L	13	3	23%	0.000000298	0.446	↔	-0.000000957	0.426	↔	2024-02-13	0.165	↔
1_28_1_5_102	MW-18	Appendix IV	Arsenic	mg/L	13	0	0%	-0.000250	0.373	↔	0.0000289	0.020	↔	2023-01-06	0.505	↔
1_28_1_5_103	MW-18	Appendix IV	Barium	mg/L	13	0	0%	-0.00000693	0.946	↔	0.0000659	0.429	↔	2024-05-20	0.277	↔
1_28_1_5_104	MW-18	Appendix IV	Beryllium	mg/L	13	12	92%	0.0000000726	0.072	↔	-0.000000172	0.559	↔	2024-04-10	0.337	↔
1_28_1_5_106	MW-18	Appendix IV	Cadmium	mg/L	13	6	46%	-0.000000574	0.856	↔	-0.00000699	0.479	↔	2024-02-13	0.233	↔
1_28_1_5_109	MW-18	Appendix IV	Chromium, Total	mg/L	13	12	92%	0.000000222	0.093	↔	-0.000000223	0.584	↔	2023-05-22	0.395	↔
1_28_1_5_110	MW-18	Appendix IV	Cobalt	mg/L	13	0	0%	-0.0000278	0.001	↓	-0.00000152	0.106	↔	2023-04-17	0.931	↔
1_28_1_5_113	MW-18	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	-0.000231	0.869	↔	0.00601	0.592	↔	2024-04-10	0.220	↔
1_28_1_5_115	MW-18	Appendix IV	Lead	mg/L	13	8	62%	0.00000442	0.691	↔	-0.00000645	0.154	↔	2023-02-07	0.231	↔
1_28_1_5_116	MW-18	Appendix IV	Lithium	mg/L	13	0	0%	-0.000213	0.237	↔	0.0000127	0.379	↔	2023-02-09	0.256	↔
1_28_1_5_118	MW-18	Appendix IV	Molybdenum	mg/L	13	0	0%	0.0000237	0.212	↔	0.00000127	0.933	↔	2023-08-08	0.306	↔
1_28_1_5_121	MW-18	Appendix IV	Radium 226 and 228	pCi/L	13	8	62%	0.00288	0.277	↔	-0.000689	0.077	↔	2023-04-17	0.398	↔
1_28_1_5_122	MW-18	Appendix IV	Selenium	mg/L	13	0	0%	0.00000228	0.028	↔	-0.00000733	0.317	↔	2024-04-10	0.506	↔
1_28_1_5_125	MW-18	Appendix IV	Thallium	mg/L	13	13	100%	0.00000212	0.719	↔	-0.000000173	0.453	↔	2023-02-07	0.110	↔
1_29_1_3_127	MW-19	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	-0.0122	0.512	↔	0.117	0.439	↔	2024-04-08	0.347	↔
1_29_1_4_105	MW-19	Appendix III	Boron	mg/L	13	0	0%	-0.00683	0.404	↔	0.000708	0.294	↔	2023-03-12	0.273	↔
1_29_1_4_107	MW-19	Appendix III	Calcium	mg/L	13	0	0%	-0.412	0.106	↔	0.0187	0.876	↔	2023-08-06	0.498	↔
1_29_1_4_108	MW-19	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	-0.241	0.005	↓	-0.0111	0.456	↔	2023-04-23	0.822	↔
1_29_1_4_112	MW-19	Appendix III	Fluoride	mg/L	13	0	0%	-0.00101	0.034	↔	0.00444	0.204	↔	2024-06-13	0.474	↔
1_29_1_4_120	MW-19	Appendix III	pH (field)	su	13	0	0%	0.00104	0.541	↔	-0.000367	0.335	↔	2023-05-16	0.141	↔
1_29_1_4_124	MW-19	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	-1.15	0.455	↔	-0.00947	0.985	↔	2023-06-27	0.188	↔
1_29_1_4_126	MW-19	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	-2.47	0.004	↓	-0.231	0.503	↔	2023-06-30	0.810	↔
1_29_1_5_101	MW-19	Appendix IV	Antimony	mg/L	13	12	92%	0.00000263	0.374	↔	-0.00000525	0.213	↔	2023-04-17	0.272	↔
1_29_1_5_102	MW-19	Appendix IV	Arsenic	mg/L	13	0	0%	-0.00000198	0.646	↔	0.0000132	0.322	↔	2024-03-28	0.171	↔
1_29_1_5_103	MW-19	Appendix IV	Barium	mg/L	13	0	0%	-0.0000950	0.141	↔	0.000000946	0.911	↔	2023-04-10	0.522	↔
1_29_1_5_104	MW-19	Appendix IV	Beryllium	mg/L	13	3	23%	-0.000000133	0.530	↔	0.000000126	0.704	↔	2023-10-24	0.062	↔
1_29_1_5_106	MW-19	Appendix IV	Cadmium	mg/L	13	13	100%	0.000000357	0.411	↔	-0.000000783	0.265	↔	2024-02-12	0.197	↔
1_29_1_5_109	MW-19	Appendix IV	Chromium, Total	mg/L	13	5	38%	-0.00000106	0.224	↔	0.000000232	0.738	↔	2023-09-26	0.285	↔

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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			
1_29_1_5_110	MW-19	Appendix IV	Cobalt	mg/L	13	1	8%	0.00000676	0.396	↔	-0.00000103	0.005	↓	2023-01-09	0.633	↔
1_29_1_5_113	MW-19	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	-0.00101	0.034	↔	0.00444	0.204	↔	2024-06-13	0.474	↔
1_29_1_5_115	MW-19	Appendix IV	Lead	mg/L	13	13	100%	-0.00000155	0.296	↔	0.000000768	0.738	↔	2023-10-24	0.146	↔
1_29_1_5_116	MW-19	Appendix IV	Lithium	mg/L	13	0	0%	-0.0000599	0.015	↔	0.0000699	0.280	↔	2024-03-25	0.611	↔
1_29_1_5_118	MW-19	Appendix IV	Molybdenum	mg/L	13	0	0%	-0.0000107	0.155	↔	0.0000207	0.348	↔	2024-02-13	0.275	↔
1_29_1_5_121	MW-19	Appendix IV	Radium 226 and 228	pCi/L	13	5	38%	0.00635	0.171	↔	-0.000888	0.031	↔	2023-02-16	0.496	↔
1_29_1_5_122	MW-19	Appendix IV	Selenium	mg/L	13	10	77%	-0.00000148	0.245	↔	0.000000236	0.816	↔	2023-08-24	0.226	↔
1_29_1_5_125	MW-19	Appendix IV	Thallium	mg/L	13	13	100%	0.00000322	0.358	↔	0.0000000102	0.971	↔	2023-02-08	0.189	↔
1_30_1_4_105	MW-20	Appendix III	Boron	mg/L	13	0	0%	-0.000221	0.486	↔	0.00235	0.356	↔	2024-04-08	0.433	↔
1_30_1_4_107	MW-20	Appendix III	Calcium	mg/L	13	0	0%	-0.165	0.270	↔	0.0410	0.580	↔	2023-06-28	0.178	↔
1_30_1_4_108	MW-20	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.0934	0.449	↔	-0.0596	0.048	↔	2023-05-22	0.403	↔
1_30_1_4_112	MW-20	Appendix III	Fluoride	mg/L	13	0	0%	-0.00829	0.002	↓	-0.0000361	0.617	↔	2023-01-06	0.832	↔
1_30_1_4_124	MW-20	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	1.03	0.420	↔	-0.113	0.036	↔	2023-01-15	0.431	↔
1_30_1_4_126	MW-20	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	0.101	0.519	↔	-0.879	0.480	↔	2024-04-18	0.264	↔
1_30_1_5_101	MW-20	Appendix IV	Antimony	mg/L	13	4	31%	0.000000371	0.184	↔	-0.0000000128	0.827	↔	2023-04-18	0.313	↔
1_30_1_5_102	MW-20	Appendix IV	Arsenic	mg/L	13	0	0%	0.000000114	0.843	↔	0.00000274	0.144	↔	2024-04-07	0.421	↔
1_30_1_5_103	MW-20	Appendix IV	Barium	mg/L	13	0	0%	-0.00682	0.009	↓	0.000482	0.017	↔	2023-02-20	0.765	↔
1_30_1_5_104	MW-20	Appendix IV	Beryllium	mg/L	13	12	92%	0.0000000833	0.093	↔	-0.0000000143	0.318	↔	2024-02-13	0.340	↔
1_30_1_5_106	MW-20	Appendix IV	Cadmium	mg/L	13	13	100%	0.000000221	0.004	↑	-0.000000000000972	1.000	↔	2023-07-31	0.828	↔
1_30_1_5_109	MW-20	Appendix IV	Chromium, Total	mg/L	13	5	38%	0.000000746	0.586	↔	-0.0000000154	0.762	↔	2023-02-01	0.174	↔
1_30_1_5_110	MW-20	Appendix IV	Cobalt	mg/L	13	0	0%	-0.00000121	0.049	↔	-0.000000422	0.630	↔	2023-10-24	0.645	↔
1_30_1_5_113	MW-20	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	-0.00829	0.002	↓	-0.0000361	0.617	↔	2023-01-06	0.832	↔
1_30_1_5_115	MW-20	Appendix IV	Lead	mg/L	13	0	0%	0.00000299	0.397	↔	-0.00000177	0.151	↔	2023-06-03	0.279	↔
1_30_1_5_116	MW-20	Appendix IV	Lithium	mg/L	13	0	0%	-0.0000346	0.378	↔	0.0000306	0.793	↔	2024-02-13	0.112	↔
1_30_1_5_118	MW-20	Appendix IV	Molybdenum	mg/L	13	0	0%	0.000000237	0.845	↔	0.0000110	0.271	↔	2024-06-04	0.423	↔
1_30_1_5_121	MW-20	Appendix IV	Radium 226 and 228	pCi/L	13	7	54%	-0.0185	0.043	↔	0.0000799	0.792	↔	2023-01-15	0.659	↔
1_30_1_5_122	MW-20	Appendix IV	Selenium	mg/L	13	7	54%	-0.000000507	0.109	↔	-0.0000000242	0.871	↔	2023-06-28	0.450	↔
1_30_1_5_125	MW-20	Appendix IV	Thallium	mg/L	13	12	92%	0.0000000416	0.093	↔	-0.0000000713	0.318	↔	2024-02-13	0.340	↔
1_40_1_3_127	MW-30	Additional Parameters	Total Suspended Solids	mg/L	11	1	9%	-0.00927	0.549	↔	0.0293	0.225	↔	2023-12-07	0.344	↔
1_40_1_4_105	MW-30	Appendix III	Boron	mg/L	13	0	0%	0.00268	0.808	↔	-0.000944	0.295	↔	2023-03-12	0.127	↔
1_40_1_4_107	MW-30	Appendix III	Calcium	mg/L	13	0	0%	-0.439	0.431	↔	0.161	0.852	↔	2023-10-23	0.093	↔
1_40_1_4_108	MW-30	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	-0.208	0.003	↓	2.67	0.000	↑	2024-05-29	0.941	↔
1_40_1_4_112	MW-30	Appendix III	Fluoride	mg/L	13	0	0%	-0.000492	0.513	↔	0.000273	0.474	↔	2023-06-27	0.107	↔
1_40_1_4_120	MW-30	Appendix III	pH (field)	su	13	0	0%	0.00332	0.437	↔	-0.000179	0.594	↔	2023-03-12	0.253	↔
1_40_1_4_126	MW-30	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	-0.416	0.645	↔	0.436	0.759	↔	2023-12-28	0.040	↔
1_40_1_5_101	MW-30	Appendix IV	Antimony	mg/L	13	12	92%	0.00000211	0.210	↔	-0.0000000592	0.120	↔	2023-05-21	0.382	↔
1_40_1_5_102	MW-30	Appendix IV	Arsenic	mg/L	13	2	15%	-0.000000410	0.423	↔	0.00000273	0.097	↔	2024-02-20	0.492	↔
1_40_1_5_103	MW-30	Appendix IV	Barium	mg/L	13	0	0%	-0.000452	0.042	↔	0.0000163	0.552	↔	2023-03-28	0.625	↔
1_40_1_5_104	MW-30	Appendix IV	Beryllium	mg/L	13	11	85%	-0.000000204	0.660	↔	-0.00000000136	0.993	↔	2023-06-26	0.072	↔
1_40_1_5_106	MW-30	Appendix IV	Cadmium	mg/L	13	13	100%	0.000000357	0.411	↔	-0.000000778	0.266	↔	2024-02-11	0.196	↔
1_40_1_5_109	MW-30	Appendix IV	Chromium, Total	mg/L	13	0	0%	-0.0000120	0.126	↔	0.0000237	0.298	↔	2024-02-12	0.314	↔
1_40_1_5_110	MW-30	Appendix IV	Cobalt	mg/L	13	0	0%	-0.00000766	0.333	↔	-0.000000757	0.770	↔	2023-05-22	0.259	↔

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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			
1_40_1_5_113	MW-30	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	-0.000492	0.513	↔	0.000273	0.474	↔	2023-06-27	0.107	↔
1_40_1_5_115	MW-30	Appendix IV	Lead	mg/L	13	12	92%	-0.00000925	0.248	↔	0.0000133	0.054	↔	2024-06-25	0.528	↔
1_40_1_5_116	MW-30	Appendix IV	Lithium	mg/L	13	0	0%	-0.000115	0.337	↔	0.0000791	0.822	↔	2024-02-12	0.138	↔
1_40_1_5_117	MW-30	Appendix IV	Mercury	mg/L	13	12	92%	0.00000239	0.072	↔	-0.00000554	0.572	↔	2024-04-07	0.336	↔
1_40_1_5_122	MW-30	Appendix IV	Selenium	mg/L	13	6	46%	-0.00000151	0.350	↔	0.000000180	0.822	↔	2023-07-02	0.152	↔
1_40_1_5_125	MW-30	Appendix IV	Thallium	mg/L	13	13	100%	0.00000449	0.140	↔	-0.000000114	0.616	↔	2023-02-10	0.381	↔
1_41_1_3_127	MW-31	Additional Parameters	Total Suspended Solids	mg/L	8	5	62%	-0.00180	0.974	↔	0.00460	0.258	↔	2023-08-05	0.339	↔
1_41_1_4_107	MW-31	Appendix III	Calcium	mg/L	13	0	0%	-0.168	0.152	↔	0.0371	0.511	↔	2023-06-27	0.278	↔
1_41_1_4_108	MW-31	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	-0.0306	0.111	↔	0.112	0.444	↔	2024-05-07	0.307	↔
1_41_1_4_112	MW-31	Appendix III	Fluoride	mg/L	13	0	0%	0.00204	0.322	↔	-0.000934	0.057	↔	2023-05-11	0.397	↔
1_41_1_4_120	MW-31	Appendix III	pH (field)	su	13	0	0%	0.000131	0.568	↔	-0.000456	0.804	↔	2024-04-08	0.054	↔
1_41_1_4_124	MW-31	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	-0.445	0.151	↔	-0.0829	0.577	↔	2023-08-07	0.551	↔
1_41_1_4_126	MW-31	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	-0.529	0.309	↔	-0.0483	0.666	↔	2023-05-21	0.399	↔
1_41_1_5_101	MW-31	Appendix IV	Antimony	mg/L	13	6	46%	0.000000809	0.441	↔	0.00000155	0.001	↑	2024-03-27	0.896	↔
1_41_1_5_102	MW-31	Appendix IV	Arsenic	mg/L	13	0	0%	-0.00000741	0.465	↔	-0.000000296	0.425	↔	2023-01-28	0.397	↔
1_41_1_5_103	MW-31	Appendix IV	Barium	mg/L	13	0	0%	-0.0000834	0.260	↔	0.00122	0.056	↔	2024-06-05	0.610	↔
1_41_1_5_106	MW-31	Appendix IV	Cadmium	mg/L	13	12	92%	0.000000217	0.001	↑	-0.0000000813	0.840	↔	2023-08-20	0.827	↔
1_41_1_5_109	MW-31	Appendix IV	Chromium, Total	mg/L	13	0	0%	-0.000000566	0.940	↔	0.0000133	0.048	↔	2024-05-22	0.748	↔
1_41_1_5_113	MW-31	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.00204	0.322	↔	-0.000934	0.057	↔	2023-05-11	0.397	↔
1_41_1_5_115	MW-31	Appendix IV	Lead	mg/L	13	11	85%	-0.000000442	0.083	↔	0.000000175	0.638	↔	2023-11-11	0.388	↔
1_41_1_5_116	MW-31	Appendix IV	Lithium	mg/L	13	0	0%	-0.0000240	0.026	↔	0.000122	0.126	↔	2024-04-25	0.630	↔
1_41_1_5_118	MW-31	Appendix IV	Molybdenum	mg/L	13	0	0%	-0.00000156	0.042	↔	0.000000300	0.584	↔	2024-06-08	0.448	↔
1_41_1_5_121	MW-31	Appendix IV	Radium 226 and 228	pCi/L	13	4	31%	0.000962	0.677	↔	-0.000474	0.361	↔	2023-05-21	0.110	↔
1_41_1_5_122	MW-31	Appendix IV	Selenium	mg/L	13	5	38%	0.000000500	0.255	↔	-0.00000121	0.361	↔	2024-02-12	0.226	↔
1_41_1_5_125	MW-31	Appendix IV	Thallium	mg/L	13	12	92%	0.0000000156	0.092	↔	-0.0000000266	0.318	↔	2024-02-12	0.342	↔
1_42_1_3_127	MW-32	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	-0.0898	0.035	↔	0.00571	0.762	↔	2023-08-07	0.650	↔
1_42_1_4_105	MW-32	Appendix III	Boron	mg/L	13	0	0%	0.000705	0.623	↔	0.0176	0.143	↔	2024-06-26	0.521	↔
1_42_1_4_107	MW-32	Appendix III	Calcium	mg/L	13	0	0%	-0.200	0.146	↔	0.0176	0.788	↔	2023-08-07	0.421	↔
1_42_1_4_108	MW-32	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	-0.0215	0.004	↓	0.0879	0.079	↔	2024-05-26	0.678	↔
1_42_1_4_124	MW-32	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	0.334	0.790	↔	-0.191	0.088	↔	2023-03-13	0.310	↔
1_42_1_4_126	MW-32	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	-0.170	0.349	↔	-0.539	0.702	↔	2024-04-07	0.345	↔
1_42_1_5_101	MW-32	Appendix IV	Antimony	mg/L	13	9	69%	0.000000814	0.144	↔	-0.00000128	0.145	↔	2024-02-11	0.405	↔
1_42_1_5_102	MW-32	Appendix IV	Arsenic	mg/L	13	0	0%	0.00000225	0.094	↔	-0.00000343	0.367	↔	2024-02-12	0.332	↔
1_42_1_5_103	MW-32	Appendix IV	Barium	mg/L	13	0	0%	-0.000263	0.550	↔	0.00736	0.056	↔	2024-06-11	0.614	↔
1_42_1_5_104	MW-32	Appendix IV	Beryllium	mg/L	13	12	92%	0.0000000215	0.093	↔	-0.0000000365	0.318	↔	2024-02-12	0.340	↔
1_42_1_5_106	MW-32	Appendix IV	Cadmium	mg/L	13	12	92%	0.000000262	0.022	↔	-0.000000288	0.086	↔	2024-02-11	0.666	↔
1_42_1_5_109	MW-32	Appendix IV	Chromium, Total	mg/L	13	0	0%	0.00000255	0.185	↔	-0.00000450	0.422	↔	2024-02-12	0.235	↔
1_42_1_5_110	MW-32	Appendix IV	Cobalt	mg/L	13	0	0%	0.00000176	0.238	↔	-0.00000253	0.280	↔	2024-02-11	0.294	↔
1_42_1_5_116	MW-32	Appendix IV	Lithium	mg/L	13	0	0%	-0.0000294	0.633	↔	0.000769	0.137	↔	2024-06-25	0.395	↔
1_42_1_5_117	MW-32	Appendix IV	Mercury	mg/L	13	12	92%	0.00000181	0.073	↔	-0.00000419	0.567	↔	2024-04-07	0.336	↔
1_42_1_5_118	MW-32	Appendix IV	Molybdenum	mg/L	13	0	0%	0.00000310	0.281	↔	-0.00000567	0.504	↔	2024-02-12	0.167	↔
1_42_1_5_121	MW-32	Appendix IV	Radium 226 and 228	pCi/L	13	8	62%	0.00204	0.120	↔	-0.000537	0.072	↔	2023-04-18	0.441	↔

(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			
1_42_1_5_122	MW-32	Appendix IV	Selenium	mg/L	13	10	77%	0.00000739	0.255	↔	-0.0000156	0.416	↔	2024-02-12	0.202	↔
2_11_2_3_127	MW-01R	Additional Parameters	Total Suspended Solids	mg/L	12	4	33%	-0.00553	0.552	↔	0.00464	0.076	↔	2023-04-22	0.468	↔
2_11_2_4_105	MW-01R	Appendix III	Boron	mg/L	13	0	0%	-0.0206	0.808	↔	0.269	0.694	↔	2024-04-11	0.120	↔
2_11_2_4_107	MW-01R	Appendix III	Calcium	mg/L	13	0	0%	0.137	0.419	↔	-0.843	0.532	↔	2024-04-10	0.236	↔
2_11_2_4_108	MW-01R	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	-0.0727	0.521	↔	0.293	0.746	↔	2024-04-10	0.081	↔
2_11_2_4_112	MW-01R	Appendix III	Fluoride	mg/L	13	0	0%	-0.00894	0.309	↔	0.0467	0.100	↔	2024-04-09	0.358	↔
2_11_2_4_120	MW-01R	Appendix III	pH (field)	su	13	0	0%	0.00515	0.428	↔	-0.000202	0.825	↔	2023-04-14	0.213	↔
2_11_2_4_124	MW-01R	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	0.659	0.928	↔	-0.431	0.483	↔	2023-03-13	0.063	↔
2_11_2_4_126	MW-01R	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	0.544	0.276	↔	-0.348	0.655	↔	2023-10-24	0.152	↔
2_11_2_5_101	MW-01R	Appendix IV	Antimony	mg/L	13	3	23%	0.00000344	0.327	↔	-0.00000103	0.058	↔	2023-04-17	0.399	↔
2_11_2_5_102	MW-01R	Appendix IV	Arsenic	mg/L	13	0	0%	0.00000286	0.203	↔	-0.00000474	0.478	↔	2024-02-13	0.213	↔
2_11_2_5_103	MW-01R	Appendix IV	Barium	mg/L	13	0	0%	0.000659	0.104	↔	-0.000235	0.697	↔	2023-10-24	0.331	↔
2_11_2_5_104	MW-01R	Appendix IV	Beryllium	mg/L	13	2	15%	0.000000317	0.381	↔	-0.000000576	0.076	↔	2023-08-08	0.540	↔
2_11_2_5_106	MW-01R	Appendix IV	Cadmium	mg/L	13	10	77%	0.00000113	0.226	↔	-0.000000330	0.289	↔	2023-05-23	0.250	↔
2_11_2_5_109	MW-01R	Appendix IV	Chromium, Total	mg/L	13	0	0%	0.0000253	0.071	↔	-0.0000417	0.301	↔	2024-02-13	0.376	↔
2_11_2_5_110	MW-01R	Appendix IV	Cobalt	mg/L	13	0	0%	0.00000772	0.395	↔	-0.00000324	0.295	↔	2023-06-27	0.193	↔
2_11_2_5_113	MW-01R	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	-0.00894	0.309	↔	0.0467	0.100	↔	2024-04-09	0.358	↔
2_11_2_5_115	MW-01R	Appendix IV	Lead	mg/L	13	2	15%	0.00000720	0.336	↔	-0.00000390	0.309	↔	2023-06-28	0.204	↔
2_11_2_5_116	MW-01R	Appendix IV	Lithium	mg/L	13	0	0%	-0.000762	0.682	↔	0.00445	0.766	↔	2024-04-10	0.064	↔
2_11_2_5_118	MW-01R	Appendix IV	Molybdenum	mg/L	13	1	8%	0.00000529	0.162	↔	-0.0000126	0.270	↔	2024-02-13	0.308	↔
2_11_2_5_121	MW-01R	Appendix IV	Radium 226 and 228	pCi/L	13	7	54%	-0.000276	0.686	↔	0.00203	0.344	↔	2024-04-09	0.145	↔
2_11_2_5_122	MW-01R	Appendix IV	Selenium	mg/L	13	0	0%	0.00000137	0.278	↔	-0.00000187	0.350	↔	2024-02-12	0.254	↔
2_11_2_5_125	MW-01R	Appendix IV	Thallium	mg/L	13	13	100%	0.00000444	0.499	↔	0.0000000625	0.797	↔	2023-01-21	0.234	↔
2_12_2_3_127	MW-02	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	-0.140	0.297	↔	-0.000541	0.996	↔	2023-09-28	0.283	↔
2_12_2_4_105	MW-02	Appendix III	Boron	mg/L	13	0	0%	0.0573	0.101	↔	0.0121	0.816	↔	2023-10-24	0.494	↔
2_12_2_4_107	MW-02	Appendix III	Calcium	mg/L	13	0	0%	0.00701	0.854	↔	-0.111	0.719	↔	2024-05-16	0.062	↔
2_12_2_4_108	MW-02	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.0285	0.639	↔	0.0569	0.761	↔	2024-02-13	0.133	↔
2_12_2_4_112	MW-02	Appendix III	Fluoride	mg/L	13	0	0%	-0.0221	0.699	↔	0.00464	0.064	↔	2023-02-07	0.339	↔
2_12_2_4_120	MW-02	Appendix III	pH (field)	su	13	0	0%	0.00301	0.182	↔	-0.000261	0.171	↔	2023-02-17	0.366	↔
2_12_2_4_124	MW-02	Appendix III	Sulfate (as SO4)	mg/L	13	8	62%	-0.00562	0.667	↔	0.00483	0.122	↔	2023-05-20	0.281	↔
2_12_2_4_126	MW-02	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	0.0562	0.913	↔	0.767	0.367	↔	2023-11-05	0.339	↔
2_12_2_5_101	MW-02	Appendix IV	Antimony	mg/L	13	3	23%	0.00000201	0.258	↔	-0.000000520	0.057	↔	2023-04-17	0.428	↔
2_12_2_5_102	MW-02	Appendix IV	Arsenic	mg/L	13	0	0%	0.00000856	0.629	↔	-0.00000896	0.155	↔	2023-05-23	0.301	↔
2_12_2_5_103	MW-02	Appendix IV	Barium	mg/L	13	0	0%	0.000160	0.616	↔	-0.00105	0.063	↔	2024-02-12	0.418	↔
2_12_2_5_104	MW-02	Appendix IV	Beryllium	mg/L	13	1	8%	0.000000111	0.808	↔	-0.000000653	0.383	↔	2023-10-24	0.276	↔
2_12_2_5_106	MW-02	Appendix IV	Cadmium	mg/L	13	10	77%	0.000000732	0.239	↔	-0.000000782	0.141	↔	2023-10-23	0.318	↔
2_12_2_5_110	MW-02	Appendix IV	Cobalt	mg/L	13	0	0%	0.0000595	0.556	↔	-0.00000232	0.562	↔	2023-01-09	0.091	↔
2_12_2_5_113	MW-02	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	-0.0221	0.699	↔	0.00464	0.064	↔	2023-02-07	0.339	↔
2_12_2_5_115	MW-02	Appendix IV	Lead	mg/L	13	1	8%	0.0000378	0.536	↔	-0.000000809	0.737	↔	2023-01-16	0.116	↔
2_12_2_5_118	MW-02	Appendix IV	Molybdenum	mg/L	13	0	0%	0.0000547	0.431	↔	-0.00000925	0.007	↓	2023-02-07	0.595	↔
2_12_2_5_121	MW-02	Appendix IV	Radium 226 and 228	pCi/L	13	4	31%	-0.00413	0.113	↔	0.00144	0.713	↔	2024-01-15	0.459	↔
2_12_2_5_122	MW-02	Appendix IV	Selenium	mg/L	13	0	0%	0.000000267	0.840	↔	0.00000123	0.567	↔	2024-02-12	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			
2_12_2_5_125	MW-02	Appendix IV	Thallium	mg/L	13	12	92%	0.00000273	0.735	↔	0.000000862	0.787	↔	2023-02-07	0.129	↔
2_13_2_3_127	MW-03	Additional Parameters	Total Suspended Solids	mg/L	10	5	50%	-0.0542	0.327	↔	0.00180	0.875	↔	2023-03-14	0.239	↔
2_13_2_4_107	MW-03	Appendix III	Calcium	mg/L	13	0	0%	0.215	0.409	↔	-0.145	0.119	↔	2023-06-08	0.312	↔
2_13_2_4_112	MW-03	Appendix III	Fluoride	mg/L	13	0	0%	-0.00372	0.316	↔	0.000104	0.840	↔	2023-04-05	0.282	↔
2_13_2_4_120	MW-03	Appendix III	pH (field)	su	13	0	0%	0.000836	0.427	↔	-0.000109	0.640	↔	2023-05-22	0.176	↔
2_13_2_4_124	MW-03	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	3.72	0.032	↔	-0.887	0.002	↓	2023-04-17	0.752	↔
2_13_2_4_126	MW-03	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2.23	0.152	↔	-1.10	0.008	↓	2023-05-04	0.622	↔
2_13_2_5_101	MW-03	Appendix IV	Antimony	mg/L	13	8	62%	0.00000211	0.190	↔	-0.00000575	0.120	↔	2023-05-10	0.374	↔
2_13_2_5_102	MW-03	Appendix IV	Arsenic	mg/L	13	0	0%	-0.00000191	0.474	↔	0.00000463	0.440	↔	2023-04-28	0.124	↔
2_13_2_5_103	MW-03	Appendix IV	Barium	mg/L	13	0	0%	0.000237	0.484	↔	-0.000633	0.255	↔	2024-01-04	0.211	↔
2_13_2_5_104	MW-03	Appendix IV	Beryllium	mg/L	13	8	62%	0.000000747	0.621	↔	-0.00000376	0.759	↔	2024-04-07	0.072	↔
2_13_2_5_106	MW-03	Appendix IV	Cadmium	mg/L	13	12	92%	0.00000378	0.232	↔	-0.00000833	0.378	↔	2024-02-14	0.224	↔
2_13_2_5_109	MW-03	Appendix IV	Chromium, Total	mg/L	13	0	0%	-0.00000417	0.372	↔	-0.00000360	0.961	↔	2023-10-24	0.181	↔
2_13_2_5_110	MW-03	Appendix IV	Cobalt	mg/L	13	0	0%	0.00000146	0.365	↔	-0.00000149	0.272	↔	2023-10-23	0.204	↔
2_13_2_5_113	MW-03	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	-0.00372	0.316	↔	0.000104	0.840	↔	2023-04-05	0.282	↔
2_13_2_5_115	MW-03	Appendix IV	Lead	mg/L	13	12	92%	0.0000104	0.117	↔	-0.00000975	0.080	↔	2023-02-07	0.442	↔
2_13_2_5_116	MW-03	Appendix IV	Lithium	mg/L	13	0	0%	-0.0000398	0.030	↔	0.0000449	0.730	↔	2024-05-15	0.486	↔
2_13_2_5_117	MW-03	Appendix IV	Mercury	mg/L	13	12	92%	0.000000126	0.107	↔	-0.000000113	0.342	↔	2023-10-24	0.321	↔
2_13_2_5_118	MW-03	Appendix IV	Molybdenum	mg/L	13	9	69%	0.0000148	0.488	↔	-0.00000241	0.191	↔	2023-02-07	0.222	↔
2_13_2_5_121	MW-03	Appendix IV	Radium 226 and 228	pCi/L	13	1	8%	-0.0162	0.205	↔	-0.000749	0.146	↔	2023-01-09	0.539	↔
2_13_2_5_122	MW-03	Appendix IV	Selenium	mg/L	13	3	23%	-0.00000985	0.688	↔	0.00000345	0.534	↔	2023-05-22	0.065	↔
2_13_2_5_125	MW-03	Appendix IV	Thallium	mg/L	13	12	92%	0.00000423	0.098	↔	-0.000000118	0.548	↔	2023-02-15	0.467	↔
2_14_2_3_127	MW-04	Additional Parameters	Total Suspended Solids	mg/L	12	1	8%	0.0109	0.804	↔	-0.00986	0.152	↔	2023-04-18	0.277	↔
2_14_2_4_105	MW-04	Appendix III	Boron	mg/L	13	0	0%	-0.00270	0.804	↔	0.00127	0.014	↔	2023-02-01	0.528	↔
2_14_2_4_107	MW-04	Appendix III	Calcium	mg/L	13	0	0%	0.575	0.428	↔	-0.0159	0.789	↔	2023-03-08	0.240	↔
2_14_2_4_108	MW-04	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	-0.253	0.045	↔	-0.121	0.505	↔	2024-01-23	0.735	↔
2_14_2_4_112	MW-04	Appendix III	Fluoride	mg/L	13	0	0%	0.00166	0.043	↔	-0.000633	0.588	↔	2023-10-24	0.453	↔
2_14_2_4_120	MW-04	Appendix III	pH (field)	su	13	0	0%	0.000856	0.416	↔	-0.000391	0.118	↔	2023-05-22	0.292	↔
2_14_2_4_124	MW-04	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	3.03	0.152	↔	0.105	0.712	↔	2023-04-18	0.586	↔
2_14_2_5_101	MW-04	Appendix IV	Antimony	mg/L	13	10	77%	0.00000205	0.211	↔	-0.00000597	0.116	↔	2023-05-22	0.381	↔
2_14_2_5_102	MW-04	Appendix IV	Arsenic	mg/L	13	0	0%	-0.00000226	0.355	↔	0.00000366	0.501	↔	2023-05-20	0.213	↔
2_14_2_5_103	MW-04	Appendix IV	Barium	mg/L	13	0	0%	-0.000852	0.508	↔	-0.0000696	0.702	↔	2023-04-18	0.255	↔
2_14_2_5_104	MW-04	Appendix IV	Beryllium	mg/L	13	11	85%	-0.000000000000452	1.000	↔	0.000000241	0.238	↔	2023-12-22	0.359	↔
2_14_2_5_106	MW-04	Appendix IV	Cadmium	mg/L	13	13	100%	0.00000355	0.270	↔	-0.00000786	0.416	↔	2024-02-14	0.196	↔
2_14_2_5_109	MW-04	Appendix IV	Chromium, Total	mg/L	13	0	0%	-0.00000325	0.411	↔	0.00000923	0.161	↔	2024-02-07	0.258	↔
2_14_2_5_113	MW-04	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.00166	0.043	↔	-0.000633	0.588	↔	2023-10-24	0.453	↔
2_14_2_5_115	MW-04	Appendix IV	Lead	mg/L	13	13	100%	0.00000635	0.656	↔	-0.00000513	0.372	↔	2023-02-06	0.155	↔
2_14_2_5_116	MW-04	Appendix IV	Lithium	mg/L	13	0	0%	-0.00000615	0.811	↔	0.0000627	0.431	↔	2024-03-20	0.133	↔
2_14_2_5_118	MW-04	Appendix IV	Molybdenum	mg/L	13	2	15%	-0.000000759	0.710	↔	0.00000288	0.644	↔	2024-02-14	0.059	↔
2_14_2_5_121	MW-04	Appendix IV	Radium 226 and 228	pCi/L	13	3	23%	-0.00139	0.138	↔	-0.000872	0.541	↔	2023-10-26	0.563	↔
2_14_2_5_122	MW-04	Appendix IV	Selenium	mg/L	13	5	38%	-0.000000711	0.399	↔	0.00000275	0.163	↔	2023-05-22	0.260	↔
2_14_2_5_125	MW-04	Appendix IV	Thallium	mg/L	13	13	100%	0.00000120	0.585	↔	0.000000522	0.867	↔	2023-04-18	0.162	↔

(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			
2_19_2_3_127	MW-09	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	-0.0181	0.427	↔	0.0181	0.343	↔	2023-10-23	0.160	↔
2_19_2_4_105	MW-09	Appendix III	Boron	mg/L	13	0	0%	-0.00423	0.730	↔	0.000767	0.450	↔	2023-03-13	0.085	↔
2_19_2_4_107	MW-09	Appendix III	Calcium	mg/L	13	0	0%	0.339	0.021	↔	-1.30	0.207	↔	2024-06-07	0.516	↔
2_19_2_4_108	MW-09	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	-0.0305	0.044	↔	0.0360	0.000	↑	2023-07-09	0.846	↔
2_19_2_4_112	MW-09	Appendix III	Fluoride	mg/L	13	0	0%	0.00261	0.161	↔	-0.000456	0.449	↔	2023-06-17	0.349	↔
2_19_2_4_120	MW-09	Appendix III	pH (field)	su	13	0	0%	0.00148	0.269	↔	-0.000360	0.075	↔	2023-03-14	0.380	↔
2_19_2_4_124	MW-09	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	3.63	0.129	↔	-0.127	0.690	↔	2023-04-17	0.549	↔
2_19_2_4_126	MW-09	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	5.01	0.029	↔	0.0131	0.976	↔	2023-04-18	0.629	↔
2_19_2_5_101	MW-09	Appendix IV	Antimony	mg/L	13	8	62%	0.00000171	0.284	↔	-0.00000294	0.406	↔	2023-04-18	0.202	↔
2_19_2_5_102	MW-09	Appendix IV	Arsenic	mg/L	13	0	0%	-0.00000491	0.486	↔	0.00000143	0.171	↔	2023-04-17	0.240	↔
2_19_2_5_103	MW-09	Appendix IV	Barium	mg/L	13	0	0%	-0.00789	0.138	↔	0.0000550	0.961	↔	2023-04-20	0.398	↔
2_19_2_5_104	MW-09	Appendix IV	Beryllium	mg/L	13	11	85%	0.00000000692	0.931	↔	0.00000000451	0.724	↔	2024-02-12	0.043	↔
2_19_2_5_106	MW-09	Appendix IV	Cadmium	mg/L	13	13	100%	0.000000429	0.320	↔	-0.000000810	0.243	↔	2024-02-12	0.242	↔
2_19_2_5_109	MW-09	Appendix IV	Chromium, Total	mg/L	13	0	0%	-0.00000182	0.357	↔	0.00000275	0.382	↔	2024-02-12	0.198	↔
2_19_2_5_110	MW-09	Appendix IV	Cobalt	mg/L	13	0	0%	0.00000340	0.469	↔	-0.000000695	0.090	↔	2023-03-13	0.329	↔
2_19_2_5_113	MW-09	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.00261	0.161	↔	-0.000456	0.449	↔	2023-06-17	0.349	↔
2_19_2_5_115	MW-09	Appendix IV	Lead	mg/L	13	13	100%	0.00000623	0.671	↔	-0.000000755	0.213	↔	2023-02-05	0.197	↔
2_19_2_5_117	MW-09	Appendix IV	Mercury	mg/L	13	11	85%	0.00000297	0.066	↔	-0.00000758	0.516	↔	2024-04-07	0.358	↔
2_19_2_5_118	MW-09	Appendix IV	Molybdenum	mg/L	13	0	0%	-0.0000948	0.024	↔	0.0000115	0.354	↔	2023-05-23	0.569	↔
2_19_2_5_121	MW-09	Appendix IV	Radium 226 and 228	pCi/L	13	12	92%	0.000278	0.292	↔	-0.000145	0.850	↔	2024-02-14	0.174	↔
2_19_2_5_122	MW-09	Appendix IV	Selenium	mg/L	13	2	15%	-0.000000300	0.394	↔	0.000000324	0.019	↔	2023-06-09	0.567	↔
2_21_2_3_127	MW-11	Additional Parameters	Total Suspended Solids	mg/L	12	0	0%	-0.166	0.081	↔	0.0231	0.310	↔	2023-04-21	0.438	↔
2_21_2_4_105	MW-11	Appendix III	Boron	mg/L	13	0	0%	-0.0691	0.353	↔	0.00617	0.318	↔	2023-03-13	0.315	↔
2_21_2_4_107	MW-11	Appendix III	Calcium	mg/L	13	0	0%	1.32	0.365	↔	-0.205	0.108	↔	2023-03-13	0.357	↔
2_21_2_4_108	MW-11	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	-0.299	0.131	↔	-0.000292	0.991	↔	2023-03-16	0.420	↔
2_21_2_4_112	MW-11	Appendix III	Fluoride	mg/L	13	0	0%	-0.00707	0.342	↔	0.000868	0.171	↔	2023-03-13	0.344	↔
2_21_2_4_120	MW-11	Appendix III	pH (field)	su	13	0	0%	0.00000411	0.985	↔	-0.000767	0.269	↔	2024-03-11	0.308	↔
2_21_2_4_124	MW-11	Appendix III	Sulfate (as SO4)	mg/L	13	4	31%	1.13	0.373	↔	-0.254	0.032	↔	2023-03-13	0.455	↔
2_21_2_4_126	MW-11	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	2.53	0.332	↔	-0.609	0.298	↔	2023-05-02	0.214	↔
2_21_2_5_101	MW-11	Appendix IV	Antimony	mg/L	13	9	69%	-0.000000433	0.656	↔	-0.000000356	0.965	↔	2023-10-23	0.083	↔
2_21_2_5_102	MW-11	Appendix IV	Arsenic	mg/L	13	0	0%	-0.0000123	0.276	↔	0.000000837	0.593	↔	2023-04-06	0.294	↔
2_21_2_5_103	MW-11	Appendix IV	Barium	mg/L	13	0	0%	-0.00329	0.243	↔	0.000495	0.218	↔	2023-04-17	0.369	↔
2_21_2_5_104	MW-11	Appendix IV	Beryllium	mg/L	13	10	77%	0.000000370	0.104	↔	-0.000000745	0.661	↔	2024-04-07	0.278	↔
2_21_2_5_106	MW-11	Appendix IV	Cadmium	mg/L	13	11	85%	-0.00000131	0.767	↔	-0.000000152	0.678	↔	2023-03-13	0.108	↔
2_21_2_5_109	MW-11	Appendix IV	Chromium, Total	mg/L	13	0	0%	-0.0000221	0.449	↔	0.0000000415	0.992	↔	2023-04-17	0.234	↔
2_21_2_5_110	MW-11	Appendix IV	Cobalt	mg/L	13	0	0%	0.00000118	0.358	↔	-0.00000459	0.651	↔	2024-04-07	0.153	↔
2_21_2_5_113	MW-11	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	-0.00707	0.342	↔	0.000868	0.171	↔	2023-03-13	0.344	↔
2_21_2_5_115	MW-11	Appendix IV	Lead	mg/L	13	3	23%	-0.000210	0.394	↔	-0.00000243	0.944	↔	2023-04-10	0.266	↔
2_21_2_5_116	MW-11	Appendix IV	Lithium	mg/L	13	0	0%	-0.00110	0.179	↔	0.0000506	0.648	↔	2023-03-15	0.306	↔
2_21_2_5_117	MW-11	Appendix IV	Mercury	mg/L	13	12	92%	0.000000974	0.138	↔	-0.00000225	0.244	↔	2024-04-06	0.334	↔
2_21_2_5_118	MW-11	Appendix IV	Molybdenum	mg/L	13	2	15%	-0.0000132	0.250	↔	0.000000993	0.532	↔	2023-03-25	0.269	↔
2_21_2_5_122	MW-11	Appendix IV	Selenium	mg/L	13	3	23%	0.000000660	0.084	↔	-0.00000138	0.213	↔	2024-02-21	0.384	↔

(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			
2_21_2_5_125	MW-11	Appendix IV	Thallium	mg/L	13	12	92%	0.00000292	0.591	↔	-0.00000325	0.132	↔	2023-02-07	0.287	↔
2_22_2_3_127	MW-12	Additional Parameters	Total Suspended Solids	mg/L	8	5	62%	0.00753	0.100	↔	-0.0000164	0.998	↔	2024-02-27	0.687	↔
2_22_2_4_105	MW-12	Appendix III	Boron	mg/L	13	0	0%	-0.00417	0.198	↔	0.000225	0.083	↔	2023-01-03	0.391	↔
2_22_2_4_107	MW-12	Appendix III	Calcium	mg/L	13	0	0%	-0.0343	0.501	↔	0.130	0.406	↔	2024-04-07	0.124	↔
2_22_2_4_108	MW-12	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	-0.0299	0.504	↔	-0.00195	0.845	↔	2023-04-19	0.139	↔
2_22_2_4_112	MW-12	Appendix III	Fluoride	mg/L	13	0	0%	-0.00163	0.096	↔	0.000202	0.334	↔	2023-04-22	0.404	↔
2_22_2_4_120	MW-12	Appendix III	pH (field)	su	13	0	0%	0.000929	0.315	↔	-0.00306	0.279	↔	2024-03-03	0.239	↔
2_22_2_4_124	MW-12	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	-0.371	0.217	↔	-0.123	0.012	↔	2023-04-08	0.777	↔
2_22_2_4_126	MW-12	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	-0.292	0.357	↔	0.729	0.162	↔	2024-02-12	0.266	↔
2_22_2_5_101	MW-12	Appendix IV	Antimony	mg/L	13	0	0%	-0.00000101	0.027	↔	0.00000484	0.146	↔	2024-06-24	0.516	↔
2_22_2_5_102	MW-12	Appendix IV	Arsenic	mg/L	13	0	0%	0.000000618	0.967	↔	0.00000482	0.685	↔	2024-04-08	0.165	↔
2_22_2_5_103	MW-12	Appendix IV	Barium	mg/L	13	0	0%	0.0000210	0.470	↔	0.000324	0.177	↔	2024-04-08	0.746	↔
2_22_2_5_106	MW-12	Appendix IV	Cadmium	mg/L	13	0	0%	0.000000352	0.851	↔	0.00000993	0.106	↔	2024-04-07	0.472	↔
2_22_2_5_109	MW-12	Appendix IV	Chromium, Total	mg/L	13	5	38%	0.000000752	0.206	↔	-0.00000284	0.534	↔	2024-04-08	0.255	↔
2_22_2_5_110	MW-12	Appendix IV	Cobalt	mg/L	13	5	38%	0.000000107	0.762	↔	0.00000407	0.170	↔	2024-05-04	0.654	↔
2_22_2_5_113	MW-12	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	-0.00163	0.096	↔	0.000202	0.334	↔	2023-04-22	0.404	↔
2_22_2_5_115	MW-12	Appendix IV	Lead	mg/L	13	6	46%	-0.000000111	0.596	↔	0.00000121	0.004	↑	2024-01-22	0.757	↔
2_22_2_5_116	MW-12	Appendix IV	Lithium	mg/L	13	0	0%	-0.000000115	0.683	↔	0.0000141	0.534	↔	2024-04-08	0.258	↔
2_22_2_5_117	MW-12	Appendix IV	Mercury	mg/L	13	11	85%	0.0000000724	0.073	↔	-0.000000169	0.566	↔	2024-04-08	0.335	↔
2_22_2_5_118	MW-12	Appendix IV	Molybdenum	mg/L	13	0	0%	-0.000000326	0.340	↔	0.000127	0.001	↑	2024-07-11	0.824	↔
2_22_2_5_121	MW-12	Appendix IV	Radium 226 and 228	pCi/L	13	9	69%	0.00192	0.219	↔	-0.000384	0.271	↔	2023-04-19	0.268	↔
2_22_2_5_122	MW-12	Appendix IV	Selenium	mg/L	13	0	0%	-0.000000742	0.031	↔	0.000000434	0.776	↔	2023-07-21	0.622	↔
3_20_3_3_127	MW-10	Additional Parameters	Total Suspended Solids	mg/L	12	2	17%	-0.00294	0.847	↔	0.0411	0.110	↔	2023-12-24	0.513	↔
3_20_3_4_105	MW-10	Appendix III	Boron	mg/L	13	0	0%	-0.306	0.390	↔	0.00517	0.701	↔	2023-01-04	0.132	↔
3_20_3_4_107	MW-10	Appendix III	Calcium	mg/L	13	0	0%	-0.240	0.650	↔	0.560	0.220	↔	2023-08-08	0.348	↔
3_20_3_4_108	MW-10	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.187	0.380	↔	2.75	0.122	↔	2024-05-26	0.701	↔
3_20_3_4_112	MW-10	Appendix III	Fluoride	mg/L	13	0	0%	0.00393	0.629	↔	-0.00567	0.409	↔	2023-08-08	0.170	↔
3_20_3_4_120	MW-10	Appendix III	pH (field)	su	13	0	0%	0.00283	0.344	↔	-0.00135	0.193	↔	2023-05-23	0.259	↔
3_20_3_4_124	MW-10	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	-1.25	0.585	↔	1.76	0.152	↔	2023-07-28	0.294	↔
3_20_3_4_126	MW-10	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	-0.224	0.899	↔	3.49	0.037	↔	2023-10-22	0.588	↔
3_20_3_5_101	MW-10	Appendix IV	Antimony	mg/L	13	9	69%	0.000000331	0.573	↔	-0.000000988	0.301	↔	2024-02-12	0.148	↔
3_20_3_5_102	MW-10	Appendix IV	Arsenic	mg/L	13	0	0%	0.000000775	0.200	↔	0.00000879	0.080	↔	2024-06-05	0.756	↔
3_20_3_5_103	MW-10	Appendix IV	Barium	mg/L	13	0	0%	-0.00157	0.330	↔	0.0000699	0.753	↔	2023-04-02	0.250	↔
3_20_3_5_104	MW-10	Appendix IV	Beryllium	mg/L	13	6	46%	0.000000496	0.279	↔	-0.000000170	0.110	↔	2023-05-22	0.345	↔
3_20_3_5_106	MW-10	Appendix IV	Cadmium	mg/L	13	13	100%	0.000000356	0.412	↔	-0.000000781	0.266	↔	2024-02-12	0.196	↔
3_20_3_5_109	MW-10	Appendix IV	Chromium, Total	mg/L	13	0	0%	0.0000101	0.301	↔	-0.00000898	0.273	↔	2023-08-08	0.266	↔
3_20_3_5_110	MW-10	Appendix IV	Cobalt	mg/L	13	1	8%	0.000000377	0.338	↔	-0.00000164	0.079	↔	2023-05-22	0.355	↔
3_20_3_5_113	MW-10	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.00393	0.629	↔	-0.00567	0.409	↔	2023-08-08	0.170	↔
3_20_3_5_115	MW-10	Appendix IV	Lead	mg/L	13	11	85%	0.00000865	0.305	↔	-0.000000830	0.227	↔	2023-02-06	0.245	↔
3_20_3_5_116	MW-10	Appendix IV	Lithium	mg/L	13	0	0%	0.00305	0.624	↔	-0.000456	0.371	↔	2023-03-13	0.136	↔
3_20_3_5_117	MW-10	Appendix IV	Mercury	mg/L	13	12	92%	0.00000180	0.073	↔	-0.00000418	0.569	↔	2024-04-07	0.334	↔
3_20_3_5_118	MW-10	Appendix IV	Molybdenum	mg/L	13	0	0%	-0.000000990	0.042	↔	0.0000121	0.102	↔	2024-02-12	0.593	↔

(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			
3_20_3_5_121	MW-10	Appendix IV	Radium 226 and 228	pCi/L	13	10	77%	0.00360	0.697	↔	-0.000392	0.285	↔	2023-02-05	0.157	↔
3_20_3_5_122	MW-10	Appendix IV	Selenium	mg/L	13	1	8%	0.00000653	0.083	↔	-0.00000118	0.274	↔	2024-02-13	0.365	↔
3_20_3_5_125	MW-10	Appendix IV	Thallium	mg/L	13	13	100%	0.00000324	0.629	↔	0.000000147	0.955	↔	2023-02-05	0.184	↔

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				
1_16_1_4_105	MW-06	Appendix III	Boron	mg/L	13	0	0%	-0.00101	0.830	↔	-0.0195	0.604	↔	0.0293	0.216	↔	2023-10-24	2024-04-26	0.580	↔
1_16_1_4_107	MW-06	Appendix III	Calcium	mg/L	13	0	0%	0.470	0.265	↔	0.0340	0.721	↔	-0.326	0.516	↔	2023-03-14	2024-04-14	0.466	↔
1_16_1_4_108	MW-06	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	-0.727	0.076	↔	-0.157	0.011	↔	0.289	0.316	↔	2023-03-04	2024-05-25	0.899	↔
1_16_1_4_120	MW-06	Appendix III	pH (field)	su	13	0	0%	-0.0109	0.024	↔	0.00769	0.342	↔	-0.000107	0.784	↔	2023-02-06	2023-04-29	0.658	↔
1_16_1_5_101	MW-06	Appendix IV	Antimony	mg/L	13	11	85%	0.00000159	0.395	↔	-0.00000238	0.735	↔	-0.00000678	0.831	↔	2023-04-18	2024-06-30	0.185	↔
1_16_1_5_102	MW-06	Appendix IV	Arsenic	mg/L	13	0	0%	-0.00000243	0.239	↔	0.00000276	0.164	↔	0.0000000886	0.987	↔	2023-04-06	2023-08-11	0.537	↔
1_16_1_5_103	MW-06	Appendix IV	Barium	mg/L	13	0	0%	-0.00221	0.337	↔	0.000486	0.367	↔	0.00115	0.674	↔	2023-04-17	2024-04-09	0.482	↔
1_16_1_5_106	MW-06	Appendix IV	Cadmium	mg/L	13	13	100%	0.00000167	0.775	↔	0.00000254	0.570	↔	-0.000000705	0.512	↔	2023-01-27	2024-02-13	0.223	↔
1_16_1_5_109	MW-06	Appendix IV	Chromium, Total	mg/L	13	0	0%	0.0000136	0.252	↔	-0.00000834	0.711	↔	-0.000000965	0.401	↔	2023-02-11	2023-05-22	0.467	↔
1_16_1_5_110	MW-06	Appendix IV	Cobalt	mg/L	13	0	0%	0.00000652	0.341	↔	-0.00000222	0.343	↔	0.000000166	0.799	↔	2023-07-20	2023-12-14	0.602	↔
1_16_1_5_115	MW-06	Appendix IV	Lead	mg/L	13	9	69%	0.00000352	0.280	↔	0.0000150	0.303	↔	-0.000000205	0.983	↔	2023-07-03	2023-05-02	0.482	↔
1_16_1_5_118	MW-06	Appendix IV	Molybdenum	mg/L	13	8	62%	0.00000706	0.373	↔	-0.00000726	0.345	↔	0.00000220	0.628	↔	2023-04-18	2023-11-20	0.336	↔
1_16_1_5_121	MW-06	Appendix IV	Radium 226 and 228	pCi/L	13	3	23%	0.00618	0.240	↔	-0.00436	0.578	↔	0.000276	0.797	↔	2023-03-14	2023-07-23	0.293	↔
1_16_1_5_122	MW-06	Appendix IV	Selenium	mg/L	13	5	38%	-0.00000201	0.628	↔	0.000000727	0.609	↔	-0.000000476	0.262	↔	2023-07-11	2024-02-12	0.414	↔
1_16_1_5_125	MW-06	Appendix IV	Thallium	mg/L	13	13	100%	0.00000306	0.668	↔	-0.00000263	0.536	↔	-0.000000418	0.879	↔	2023-02-05	2024-05-03	0.220	↔
1_17_1_4_105	MW-07	Appendix III	Boron	mg/L	13	0	0%	-0.0380	0.387	↔	0.00199	0.440	↔	-0.00824	0.623	↔	2023-01-18	2024-04-24	0.345	↔
1_17_1_4_120	MW-07	Appendix III	pH (field)	su	13	0	0%	-0.000697	0.290	↔	0.00139	0.456	↔	-0.000981	0.376	↔	2023-08-07	2024-03-20	0.399	↔
1_17_1_4_124	MW-07	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	-0.100	0.076	↔	0.0702	0.420	↔	-0.0191	0.624	↔	2023-05-25	2024-01-21	0.531	↔
1_17_1_5_101	MW-07	Appendix IV	Antimony	mg/L	13	12	92%	-0.0000000619	0.515	↔	0.000000760	0.000	↑	-0.00000000813	0.626	↔	2023-03-19	2023-05-24	1.000	↔
1_17_1_5_102	MW-07	Appendix IV	Arsenic	mg/L	13	0	0%	-0.000000503	0.128	↔	0.000000508	0.420	↔	-0.000000137	0.274	↔	2023-04-18	2023-10-23	0.558	↔
1_17_1_5_103	MW-07	Appendix IV	Barium	mg/L	13	0	0%	-0.000397	0.191	↔	0.000485	0.413	↔	-0.0000396	0.726	↔	2023-04-18	2023-09-21	0.526	↔
1_17_1_5_104	MW-07	Appendix IV	Beryllium	mg/L	13	10	77%	0.000000230	0.449	↔	-0.000000300	0.467	↔	0.0000000261	0.949	↔	2023-08-06	2024-03-05	0.218	↔
1_17_1_5_106	MW-07	Appendix IV	Cadmium	mg/L	13	13	100%	-0.000000766	0.630	↔	0.000000468	0.016	↔	-0.0000000398	0.822	↔	2023-03-06	2023-06-21	0.932	↔
1_17_1_5_110	MW-07	Appendix IV	Cobalt	mg/L	13	0	0%	0.00000486	0.222	↔	-0.000000442	0.077	↔	0.00000222	0.159	↔	2023-02-01	2024-07-10	0.644	↔
1_17_1_5_115	MW-07	Appendix IV	Lead	mg/L	13	13	100%	0.000000245	0.833	↔	-0.000000797	0.015	↔	0.0000000386	0.628	↔	2023-02-04	2023-08-06	0.879	↔
1_17_1_5_116	MW-07	Appendix IV	Lithium	mg/L	13	0	0%	0.00000879	0.507	↔	-0.0000175	0.439	↔	0.00000834	0.420	↔	2023-06-26	2024-01-21	0.351	↔
1_17_1_5_118	MW-07	Appendix IV	Molybdenum	mg/L	13	13	100%	-0.00000190	0.011	↔	0.0000000000178	1.000	↔	-0.00000000000248	1.000	↔	2023-07-30	2024-02-01	0.828	↔
1_17_1_5_121	MW-07	Appendix IV	Radium 226 and 228	pCi/L	13	2	15%	0.00124	0.613	↔	-0.00273	0.699	↔	0.00122	0.768	↔	2023-08-07	2024-03-15	0.158	↔
1_17_1_5_122	MW-07	Appendix IV	Selenium	mg/L	13	9	69%	0.000000209	0.743	↔	-0.00000186	0.360	↔	0.000000106	0.360	↔	2023-03-17	2023-05-28	0.644	↔
1_18_1_3_127	MW-08	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	-0.162	0.002	↓	0.299	0.029	↔	-0.0714	0.057	↔	2023-08-07	2023-11-08	0.876	↔
1_18_1_4_108	MW-08	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.207	0.258	↔	-0.0212	0.071	↔	0.768	0.000	↑	2023-02-06	2024-07-04	0.977	↔
1_18_1_4_112	MW-08	Appendix III	Fluoride	mg/L	13	0	0%	0.0102	0.033	↔	-0.00188	0.281	↔	0.000975	0.189	↔	2023-02-26	2023-10-23	0.724	↔

(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				
1_18_1_4_120	MW-08	Appendix III	pH (field)	su	13	0	0%	0.00526	0.275	↔	0.000132	0.926	↔	-0.00132	0.613	↔	2023-03-14	2024-03-29	0.330	↔
1_18_1_4_126	MW-08	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	0.0556	0.877	↔	-0.210	0.551	↔	1.13	0.296	↔	2023-06-27	2024-05-14	0.389	↔
1_18_1_5_101	MW-08	Appendix IV	Antimony	mg/L	13	6	46%	0.00000165	0.215	↔	-0.000000425	0.228	↔	0.000000114	0.721	↔	2023-02-19	2023-11-22	0.424	↔
1_18_1_5_102	MW-08	Appendix IV	Arsenic	mg/L	13	0	0%	0.000414	0.019	↔	-0.000178	0.200	↔	0.0000575	0.172	↔	2023-03-20	2023-09-26	0.684	↔
1_18_1_5_103	MW-08	Appendix IV	Barium	mg/L	13	0	0%	0.00337	0.232	↔	-0.00150	0.064	↔	0.00128	0.090	↔	2023-02-07	2023-12-16	0.640	↔
1_18_1_5_106	MW-08	Appendix IV	Cadmium	mg/L	13	13	100%	-0.000000184	0.677	↔	0.000000261	0.007	↑	-0.000000178	0.651	↔	2023-01-17	2023-08-19	0.866	↔
1_18_1_5_110	MW-08	Appendix IV	Cobalt	mg/L	13	0	0%	0.00000475	0.212	↔	-0.000000879	0.448	↔	-0.000000498	0.039	↔	2023-02-06	2023-06-04	0.754	↔
1_18_1_5_113	MW-08	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.0102	0.033	↔	-0.00188	0.281	↔	0.000975	0.189	↔	2023-02-26	2023-10-23	0.724	↔
1_18_1_5_116	MW-08	Appendix IV	Lithium	mg/L	13	0	0%	0.00136	0.077	↔	-0.000412	0.250	↔	-0.0000506	0.166	↔	2023-02-01	2023-04-18	0.721	↔
1_18_1_5_118	MW-08	Appendix IV	Molybdenum	mg/L	13	0	0%	-0.00000911	0.035	↔	0.0000161	0.214	↔	-0.00000490	0.192	↔	2023-07-31	2023-11-28	0.630	↔
1_18_1_5_122	MW-08	Appendix IV	Selenium	mg/L	13	5	38%	-0.000000480	0.216	↔	0.000000392	0.751	↔	-0.000000410	0.269	↔	2023-07-02	2024-02-12	0.341	↔
1_28_1_3_127	MW-18	Additional Parameters	Total Suspended Solids	mg/L	13	1	8%	-0.0369	0.721	↔	0.320	0.302	↔	-0.307	0.114	↔	2023-09-26	2024-04-09	0.541	↔
1_28_1_4_105	MW-18	Appendix III	Boron	mg/L	13	0	0%	-0.00173	0.633	↔	0.00505	0.000	↑	0.0000000000650	1.000	↔	2023-03-30	2024-04-13	0.936	↔
1_28_1_4_107	MW-18	Appendix III	Calcium	mg/L	13	0	0%	-0.908	0.001	↓	1.43	0.031	↔	-0.162	0.326	↔	2023-07-22	2023-11-06	0.865	↔
1_28_1_4_112	MW-18	Appendix III	Fluoride	mg/L	13	0	0%	0.00610	0.004	↑	-0.00982	0.052	↔	0.0112	0.003	↑	2023-09-12	2024-04-05	0.861	↔
1_28_1_5_101	MW-18	Appendix IV	Antimony	mg/L	13	3	23%	0.0000000847	0.932	↔	0.000000447	0.741	↔	-0.00000110	0.426	↔	2023-07-16	2024-03-01	0.158	↔
1_28_1_5_102	MW-18	Appendix IV	Arsenic	mg/L	13	0	0%	-0.0000795	0.422	↔	0.000111	0.238	↔	0.0000130	0.630	↔	2023-04-08	2023-08-10	0.572	↔
1_28_1_5_104	MW-18	Appendix IV	Beryllium	mg/L	13	12	92%	-0.0000000378	0.713	↔	0.000000159	0.136	↔	-0.000000236	0.429	↔	2023-07-13	2024-04-10	0.493	↔
1_28_1_5_106	MW-18	Appendix IV	Cadmium	mg/L	13	6	46%	0.000000298	0.773	↔	-0.000000370	0.549	↔	-0.000000364	0.875	↔	2023-05-22	2024-06-26	0.229	↔
1_28_1_5_109	MW-18	Appendix IV	Chromium, Total	mg/L	13	12	92%	-0.000000292	0.898	↔	0.000000738	0.326	↔	-0.000000435	0.298	↔	2023-04-04	2023-05-26	0.541	↔
1_28_1_5_110	MW-18	Appendix IV	Cobalt	mg/L	13	0	0%	-0.0000317	0.002	↓	0.00000486	0.823	↔	-0.00000228	0.090	↔	2023-04-12	2023-06-26	0.937	↔
1_28_1_5_113	MW-18	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.00610	0.004	↑	-0.00982	0.052	↔	0.0112	0.003	↑	2023-09-12	2024-04-05	0.861	↔
1_28_1_5_115	MW-18	Appendix IV	Lead	mg/L	13	8	62%	0.0000124	0.253	↔	-0.00000967	0.402	↔	-0.00000187	0.696	↔	2023-02-01	2023-04-02	0.491	↔
1_28_1_5_118	MW-18	Appendix IV	Molybdenum	mg/L	13	0	0%	0.0000296	0.067	↔	-0.0000804	0.081	↔	0.0000424	0.113	↔	2023-10-23	2024-02-14	0.677	↔
1_28_1_5_121	MW-18	Appendix IV	Radium 226 and 228	pCi/L	13	8	62%	0.00356	0.093	↔	-0.00161	0.382	↔	0.000196	0.859	↔	2023-04-18	2023-12-19	0.489	↔
1_28_1_5_122	MW-18	Appendix IV	Selenium	mg/L	13	0	0%	-0.000000797	0.651	↔	0.00000583	0.271	↔	-0.00000962	0.013	↔	2023-08-19	2024-04-09	0.712	↔
1_28_1_5_125	MW-18	Appendix IV	Thallium	mg/L	13	13	100%	0.00000224	0.738	↔	0.00000171	0.803	↔	-0.000000554	0.666	↔	2024-03-13	2023-01-23	0.123	↔
1_29_1_3_127	MW-19	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	0.0319	0.435	↔	-0.0938	0.242	↔	0.160	0.289	↔	2023-10-02	2024-04-08	0.528	↔
1_29_1_4_105	MW-19	Appendix III	Boron	mg/L	13	0	0%	-0.00930	0.114	↔	0.00656	0.704	↔	-0.0000408	0.966	↔	2023-03-25	2023-06-27	0.399	↔
1_29_1_4_108	MW-19	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	-0.244	0.038	↔	-0.0292	0.230	↔	0.0667	0.584	↔	2023-04-11	2024-06-01	0.849	↔
1_29_1_4_112	MW-19	Appendix III	Fluoride	mg/L	13	0	0%	-0.000338	0.728	↔	-0.00270	0.173	↔	0.00424	0.248	↔	2023-10-23	2024-05-05	0.560	↔
1_29_1_5_101	MW-19	Appendix IV	Antimony	mg/L	13	12	92%	0.00000266	0.273	↔	-0.000000562	0.641	↔	-0.000000426	0.821	↔	2023-04-18	2024-04-04	0.273	↔
1_29_1_5_103	MW-19	Appendix IV	Barium	mg/L	13	0	0%	-0.000116	0.097	↔	0.0000593	0.543	↔	-0.00000945	0.484	↔	2023-04-17	2023-07-28	0.607	↔
1_29_1_5_104	MW-19	Appendix IV	Beryllium	mg/L	13	3	23%	0.00000104	0.710	↔	-0.000000158	0.452	↔	0.000000277	0.580	↔	2023-02-07	2024-03-17	0.179	↔
1_29_1_5_106	MW-19	Appendix IV	Cadmium	mg/L	13	13	100%	0.00000169	0.778	↔	0.000000255	0.568	↔	-0.000000708	0.512	↔	2023-01-27	2024-02-13	0.224	↔
1_29_1_5_109	MW-19	Appendix IV	Chromium, Total	mg/L	13	5	38%	0.00000972	0.212	↔	-0.00000231	0.176	↔	0.000000245	0.616	↔	2023-01-06	2023-07-25	0.536	↔
1_29_1_5_110	MW-19	Appendix IV	Cobalt	mg/L	13	1	8%	0.00000676	0.308	↔	-0.00000266	0.031	↔	0.00000000397	0.999	↔	2023-01-31	2023-10-06	0.812	↔
1_29_1_5_113	MW-19	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	-0.000338	0.728	↔	-0.00270	0.173	↔	0.00424	0.248	↔	2023-10-23	2024-05-05	0.560	↔
1_29_1_5_115	MW-19	Appendix IV	Lead	mg/L	13	13	100%	0.0000103	0.005	↑	-0.0000176	0.064	↔	0.000000921	0.077	↔	2023-04-01	2023-06-16	0.860	↔
1_29_1_5_122	MW-19	Appendix IV	Selenium	mg/L	13	10	77%	0.00000418	0.749	↔	0.00000689	0.624	↔	0.00000167	0.736	↔	2024-05-04	2023-01-29	0.263	↔
1_29_1_5_125	MW-19	Appendix IV	Thallium	mg/L	13	13	100%	0.00000281	0.038	↔	-0.00000462	0.352	↔	0.000000790	0.049	↔	2023-04-19	2023-07-19	0.658	↔
1_30_1_3_127	MW-20	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	-0.105	0.562	↔	0.0574	0.528	↔	-0.00787	0.392	↔	2023-01-30	2023-04-26	0.222	↔

(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				
1_30_1_4_107	MW-20	Appendix III	Calcium	mg/L	13	0	0%	-0.197	0.239	↔	0.106	0.628	↔	-0.0903	0.679	↔	2023-06-28	2024-04-02	0.243	↔
1_30_1_4_124	MW-20	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	1.11	0.043	↔	-0.687	0.162	↔	-0.00358	0.946	↔	2023-02-17	2023-06-27	0.762	↔
1_30_1_5_101	MW-20	Appendix IV	Antimony	mg/L	13	4	31%	0.00000246	0.184	↔	-0.00000182	0.450	↔	0.000000104	0.663	↔	2023-08-06	2024-02-24	0.364	↔
1_30_1_5_104	MW-20	Appendix IV	Beryllium	mg/L	13	12	92%	-0.000000288	0.773	↔	0.000000206	0.543	↔	-0.000000201	0.070	↔	2023-07-17	2024-02-12	0.514	↔
1_30_1_5_106	MW-20	Appendix IV	Cadmium	mg/L	13	13	100%	-0.00000187	0.671	↔	0.00000260	0.007	↑	-0.000000184	0.640	↔	2023-01-16	2023-08-20	0.866	↔
1_30_1_5_109	MW-20	Appendix IV	Chromium, Total	mg/L	13	5	38%	0.0000117	0.100	↔	-0.00000411	0.313	↔	0.000000768	0.384	↔	2023-02-11	2023-07-08	0.456	↔
1_30_1_5_110	MW-20	Appendix IV	Cobalt	mg/L	13	0	0%	0.0000349	0.287	↔	-0.0000126	0.015	↔	0.00000120	0.616	↔	2023-02-07	2024-06-26	0.763	↔
1_30_1_5_115	MW-20	Appendix IV	Lead	mg/L	13	0	0%	-0.0000176	0.350	↔	0.0000153	0.125	↔	-0.00000192	0.065	↔	2023-01-27	2023-04-18	0.558	↔
1_30_1_5_118	MW-20	Appendix IV	Molybdenum	mg/L	13	0	0%	0.00000467	0.046	↔	-0.00000703	0.098	↔	0.0000114	0.143	↔	2023-09-17	2024-04-08	0.757	↔
1_30_1_5_121	MW-20	Appendix IV	Radium 226 and 228	pCi/L	13	7	54%	-0.0185	0.043	↔	0.000905	0.324	↔	-0.00126	0.244	↔	2023-01-21	2024-01-19	0.756	↔
1_30_1_5_122	MW-20	Appendix IV	Selenium	mg/L	13	7	54%	-0.000000639	0.032	↔	0.000000476	0.189	↔	-0.000000506	0.165	↔	2023-07-23	2024-02-13	0.700	↔
1_30_1_5_125	MW-20	Appendix IV	Thallium	mg/L	13	12	92%	-0.000000127	0.797	↔	0.000000108	0.520	↔	-0.000000102	0.065	↔	2023-07-26	2024-02-12	0.521	↔
1_40_1_4_105	MW-30	Appendix III	Boron	mg/L	13	0	0%	0.00916	0.387	↔	-0.0113	0.280	↔	0.000278	0.808	↔	2023-03-12	2023-06-08	0.417	↔
1_40_1_4_107	MW-30	Appendix III	Calcium	mg/L	13	0	0%	2.57	0.220	↔	-1.93	0.307	↔	0.407	0.465	↔	2023-03-13	2023-09-02	0.412	↔
1_40_1_4_108	MW-30	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	-0.576	0.003	↓	-0.0419	0.413	↔	2.63	0.000	↑	2023-05-21	2024-06-08	0.987	↔
1_40_1_4_120	MW-30	Appendix III	pH (field)	su	13	0	0%	0.00374	0.231	↔	-0.00104	0.820	↔	0.0000275	0.965	↔	2023-03-20	2023-08-07	0.277	↔
1_40_1_5_101	MW-30	Appendix IV	Antimony	mg/L	13	12	92%	0.000000430	0.959	↔	0.00000232	0.565	↔	-0.000000608	0.163	↔	2023-01-03	2023-05-21	0.387	↔
1_40_1_5_102	MW-30	Appendix IV	Arsenic	mg/L	13	2	15%	-0.00000279	0.141	↔	0.000000611	0.372	↔	0.00000465	0.153	↔	2023-04-18	2024-07-09	0.664	↔
1_40_1_5_104	MW-30	Appendix IV	Beryllium	mg/L	13	11	85%	0.00000136	0.342	↔	0.00000219	0.208	↔	0.000000698	0.705	↔	2023-07-09	2023-02-13	0.296	↔
1_40_1_5_106	MW-30	Appendix IV	Cadmium	mg/L	13	13	100%	0.00000170	0.777	↔	0.00000255	0.700	↔	-0.000000704	0.368	↔	2023-01-27	2024-02-11	0.223	↔
1_40_1_5_115	MW-30	Appendix IV	Lead	mg/L	13	12	92%	0.0000131	0.060	↔	-0.00000208	0.027	↔	0.0000130	0.022	↔	2023-02-06	2024-06-03	0.802	↔
1_40_1_5_116	MW-30	Appendix IV	Lithium	mg/L	13	0	0%	0.00101	0.650	↔	0.00125	0.581	↔	0.0000326	0.865	↔	2023-10-11	2023-01-08	0.183	↔
1_40_1_5_117	MW-30	Appendix IV	Mercury	mg/L	13	12	92%	-0.000000103	0.685	↔	0.000000717	0.347	↔	-0.000000832	0.085	↔	2023-09-04	2024-04-06	0.546	↔
1_40_1_5_118	MW-30	Appendix IV	Molybdenum	mg/L	13	3	23%	0.0000876	0.019	↔	-0.0000195	0.064	↔	-0.000000350	0.833	↔	2023-01-04	2023-05-26	0.774	↔
1_40_1_5_122	MW-30	Appendix IV	Selenium	mg/L	13	6	46%	0.00000646	0.589	↔	-0.00000283	0.162	↔	0.000000693	0.505	↔	2023-02-05	2023-08-31	0.380	↔
1_40_1_5_125	MW-30	Appendix IV	Thallium	mg/L	13	13	100%	0.00000354	0.061	↔	-0.00000147	0.350	↔	0.000000597	0.216	↔	2023-03-29	2023-10-22	0.596	↔
1_41_1_3_127	MW-31	Additional Parameters	Total Suspended Solids	mg/L	8	5	62%	-0.00604	0.934	↔	0.0116	0.425	↔	-0.00180	0.891	↔	2023-07-14	2024-02-29	0.501	↔
1_41_1_4_107	MW-31	Appendix III	Calcium	mg/L	13	0	0%	-0.217	0.040	↔	0.167	0.085	↔	-0.222	0.402	↔	2023-07-08	2024-04-08	0.633	↔
1_41_1_4_108	MW-31	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	-0.147	0.466	↔	-0.0133	0.604	↔	0.112	0.466	↔	2023-03-06	2024-06-02	0.419	↔
1_41_1_4_124	MW-31	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	-0.498	0.013	↔	0.514	0.667	↔	-0.902	0.252	↔	2023-10-23	2024-05-08	0.734	↔
1_41_1_4_126	MW-31	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	-0.608	0.168	↔	0.0628	0.797	↔	-0.619	0.517	↔	2023-05-22	2024-06-12	0.467	↔
1_41_1_5_101	MW-31	Appendix IV	Antimony	mg/L	13	6	46%	0.000000250	0.332	↔	-0.0000000984	0.774	↔	0.00000155	0.002	↑	2023-06-28	2024-03-09	0.907	↔
1_41_1_5_102	MW-31	Appendix IV	Arsenic	mg/L	13	0	0%	-0.0000160	0.064	↔	0.00000311	0.091	↔	-0.00000109	0.058	↔	2023-01-21	2023-06-27	0.737	↔
1_41_1_5_103	MW-31	Appendix IV	Barium	mg/L	13	0	0%	-0.0000357	0.842	↔	-0.000191	0.577	↔	0.00122	0.090	↔	2023-10-15	2024-05-26	0.620	↔
1_41_1_5_106	MW-31	Appendix IV	Cadmium	mg/L	13	12	92%	0.000000225	0.011	↔	0.0000000372	0.873	↔	-0.000000278	0.678	↔	2023-07-17	2024-02-11	0.831	↔
1_41_1_5_109	MW-31	Appendix IV	Chromium, Total	mg/L	13	0	0%	0.00000166	0.170	↔	-0.00000893	0.311	↔	0.0000133	0.034	↔	2023-12-24	2024-04-13	0.850	↔
1_41_1_5_116	MW-31	Appendix IV	Lithium	mg/L	13	0	0%	0.0000165	0.246	↔	-0.0000893	0.050	↔	0.000126	0.001	↑	2023-08-24	2024-03-15	0.879	↔
1_41_1_5_118	MW-31	Appendix IV	Molybdenum	mg/L	13	0	0%	-0.000000821	0.519	↔	-0.00000571	0.552	↔	0.00000326	0.585	↔	2023-12-30	2024-04-21	0.502	↔
1_41_1_5_122	MW-31	Appendix IV	Selenium	mg/L	13	5	38%	-0.000000728	0.407	↔	0.00000187	0.528	↔	-0.000000185	0.054	↔	2023-07-18	2024-02-11	0.513	↔
1_41_1_5_125	MW-31	Appendix IV	Thallium	mg/L	13	12	92%	-0.0000000550	0.767	↔	0.0000000388	0.545	↔	-0.0000000376	0.067	↔	2023-07-17	2024-02-11	0.518	↔
1_42_1_3_127	MW-32	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	-0.106	0.003	↓	0.0804	0.279	↔	-0.0736	0.108	↔	2023-08-27	2024-03-14	0.819	↔
1_42_1_4_107	MW-32	Appendix III	Calcium	mg/L	13	0	0%	-0.229	0.056	↔	0.268	0.387	↔	-0.162	0.369	↔	2023-09-21	2024-03-01	0.556	↔

(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				
1_42_1_4_120	MW-32	Appendix III	pH (field)	su	13	0	0%	-0.00408	0.236	↔	0.00191	0.574	↔	-0.000126	0.403	↔	2023-01-19	2023-04-17	0.373	↔
1_42_1_4_124	MW-32	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	0.688	0.195	↔	-2.56	0.257	↔	-0.0145	0.923	↔	2023-05-04	2023-06-27	0.592	↔
1_42_1_4_126	MW-32	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	-0.672	0.101	↔	0.565	0.433	↔	-0.956	0.476	↔	2023-09-09	2024-04-07	0.559	↔
1_42_1_5_101	MW-32	Appendix IV	Antimony	mg/L	13	9	69%	-0.0000000203	0.998	↔	0.00000171	0.572	↔	-0.00000171	0.075	↔	2023-07-17	2024-02-11	0.522	↔
1_42_1_5_102	MW-32	Appendix IV	Arsenic	mg/L	13	0	0%	-0.000000513	0.854	↔	0.00000511	0.596	↔	-0.00000481	0.108	↔	2023-07-12	2024-02-11	0.471	↔
1_42_1_5_103	MW-32	Appendix IV	Barium	mg/L	13	0	0%	-0.00196	0.526	↔	0.000224	0.754	↔	0.00731	0.078	↔	2023-04-17	2024-06-25	0.667	↔
1_42_1_5_104	MW-32	Appendix IV	Beryllium	mg/L	13	12	92%	-0.0000000757	0.769	↔	0.000000533	0.549	↔	-0.000000515	0.069	↔	2023-07-17	2024-02-11	0.515	↔
1_42_1_5_106	MW-32	Appendix IV	Cadmium	mg/L	13	12	92%	-0.00000000531	0.999	↔	0.000000311	0.111	↔	-0.000000322	0.088	↔	2023-03-10	2024-02-11	0.695	↔
1_42_1_5_109	MW-32	Appendix IV	Chromium, Total	mg/L	13	0	0%	-0.00000236	0.547	↔	0.00000788	0.556	↔	-0.00000703	0.093	↔	2023-07-16	2024-02-11	0.473	↔
1_42_1_5_110	MW-32	Appendix IV	Cobalt	mg/L	13	0	0%	0.000000463	0.858	↔	0.00000290	0.744	↔	-0.00000311	0.239	↔	2023-06-28	2024-02-11	0.334	↔
1_42_1_5_116	MW-32	Appendix IV	Lithium	mg/L	13	0	0%	-0.000429	0.536	↔	0.0000122	0.893	↔	0.000769	0.173	↔	2023-02-16	2024-07-09	0.456	↔
1_42_1_5_117	MW-32	Appendix IV	Mercury	mg/L	13	12	92%	-0.000000771	0.697	↔	0.00000482	0.225	↔	-0.00000608	0.399	↔	2023-08-18	2024-04-07	0.525	↔
1_42_1_5_118	MW-32	Appendix IV	Molybdenum	mg/L	13	0	0%	-0.0000186	0.420	↔	0.00000626	0.327	↔	-0.00000786	0.207	↔	2023-02-24	2024-02-11	0.392	↔
1_42_1_5_122	MW-32	Appendix IV	Selenium	mg/L	13	10	77%	-0.00000102	0.438	↔	0.00000267	0.549	↔	-0.00000247	0.079	↔	2023-07-17	2024-02-11	0.478	↔
2_11_2_4_120	MW-01R	Appendix III	pH (field)	su	13	0	0%	0.00504	0.342	↔	-0.00100	0.840	↔	0.000830	0.783	↔	2023-05-03	2024-02-12	0.231	↔
2_11_2_4_126	MW-01R	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	-2.82	0.340	↔	1.61	0.220	↔	-0.394	0.456	↔	2023-02-14	2023-08-18	0.371	↔
2_11_2_5_101	MW-01R	Appendix IV	Antimony	mg/L	13	3	23%	0.00000460	0.100	↔	-0.00000288	0.577	↔	-0.000000117	0.908	↔	2023-04-18	2023-10-12	0.502	↔
2_11_2_5_102	MW-01R	Appendix IV	Arsenic	mg/L	13	0	0%	-0.00000564	0.458	↔	0.00000723	0.095	↔	-0.00000735	0.256	↔	2023-05-15	2024-02-13	0.472	↔
2_11_2_5_103	MW-01R	Appendix IV	Barium	mg/L	13	0	0%	0.000604	0.155	↔	-0.00144	0.627	↔	0.00188	0.329	↔	2024-01-31	2024-07-11	0.438	↔
2_11_2_5_104	MW-01R	Appendix IV	Beryllium	mg/L	13	2	15%	-0.00000104	0.254	↔	0.00000261	0.086	↔	-0.00000653	0.008	↓	2023-04-13	2023-06-28	0.757	↔
2_11_2_5_110	MW-01R	Appendix IV	Cobalt	mg/L	13	0	0%	0.000000216	1.000	↔	0.00000967	0.615	↔	-0.00000345	0.329	↔	2023-01-28	2023-06-27	0.201	↔
2_11_2_5_115	MW-01R	Appendix IV	Lead	mg/L	13	2	15%	-0.00000932	0.606	↔	0.0000234	0.683	↔	-0.00000521	0.139	↔	2023-03-23	2023-06-27	0.342	↔
2_11_2_5_118	MW-01R	Appendix IV	Molybdenum	mg/L	13	1	8%	-0.00000265	0.738	↔	0.0000150	0.196	↔	-0.0000171	0.150	↔	2023-07-26	2024-02-13	0.473	↔
2_11_2_5_121	MW-01R	Appendix IV	Radium 226 and 228	pCi/L	13	7	54%	0.00541	0.347	↔	-0.000790	0.306	↔	0.00260	0.559	↔	2023-02-12	2024-04-12	0.343	↔
2_11_2_5_122	MW-01R	Appendix IV	Selenium	mg/L	13	0	0%	-0.000000413	0.842	↔	0.00000311	0.662	↔	-0.00000275	0.206	↔	2023-07-07	2024-02-12	0.373	↔
2_11_2_5_125	MW-01R	Appendix IV	Thallium	mg/L	13	13	100%	0.00000171	0.258	↔	-0.000000627	0.416	↔	0.00000131	0.291	↔	2023-05-22	2024-04-09	0.422	↔
2_12_2_4_105	MW-02	Appendix III	Boron	mg/L	13	0	0%	-0.00612	0.963	↔	0.102	0.431	↔	0.000260	0.995	↔	2023-04-17	2023-10-15	0.544	↔
2_12_2_4_120	MW-02	Appendix III	pH (field)	su	13	0	0%	0.00298	0.239	↔	-0.000562	0.600	↔	-0.0000760	0.864	↔	2023-02-27	2023-10-23	0.392	↔
2_12_2_4_124	MW-02	Appendix III	Sulfate (as SO4)	mg/L	13	8	62%	-0.00602	0.432	↔	0.0131	0.229	↔	-0.00926	0.388	↔	2023-07-25	2024-04-09	0.490	↔
2_12_2_5_101	MW-02	Appendix IV	Antimony	mg/L	13	3	23%	0.00000295	0.028	↔	-0.00000328	0.514	↔	-0.000000479	0.887	↔	2023-04-27	2023-08-02	0.640	↔
2_12_2_5_102	MW-02	Appendix IV	Arsenic	mg/L	13	0	0%	0.0000184	0.221	↔	-0.0000267	0.291	↔	0.0000162	0.174	↔	2023-05-26	2024-02-12	0.653	↔
2_12_2_5_103	MW-02	Appendix IV	Barium	mg/L	13	0	0%	-0.000522	0.280	↔	0.000942	0.554	↔	-0.00143	0.014	↔	2023-07-20	2024-02-12	0.644	↔
2_12_2_5_104	MW-02	Appendix IV	Beryllium	mg/L	13	1	8%	0.000000457	0.391	↔	-0.00000264	0.113	↔	0.000000709	0.440	↔	2023-10-23	2024-03-07	0.579	↔
2_12_2_5_106	MW-02	Appendix IV	Cadmium	mg/L	13	10	77%	0.000000943	0.761	↔	0.000000683	0.442	↔	-0.000000766	0.375	↔	2023-02-20	2023-10-24	0.320	↔
2_12_2_5_116	MW-02	Appendix IV	Lithium	mg/L	13	0	0%	0.00791	0.436	↔	-0.00451	0.678	↔	0.000198	0.676	↔	2023-01-24	2023-04-16	0.217	↔
2_12_2_5_118	MW-02	Appendix IV	Molybdenum	mg/L	13	0	0%	0.0000800	0.002	↑	-0.0000657	0.006	↓	-0.00000236	0.258	↔	2023-02-28	2023-06-05	0.928	↔
2_12_2_5_121	MW-02	Appendix IV	Radium 226 and 228	pCi/L	13	4	31%	0.0296	0.295	↔	-0.0233	0.440	↔	-0.00104	0.429	↔	2023-01-05	2023-03-21	0.607	↔
2_12_2_5_122	MW-02	Appendix IV	Selenium	mg/L	13	0	0%	-0.00000255	0.502	↔	0.00000395	0.607	↔	-0.000000459	0.761	↔	2023-04-18	2023-09-18	0.271	↔
2_12_2_5_125	MW-02	Appendix IV	Thallium	mg/L	13	12	92%	0.00000313	0.491	↔	-0.00000275	0.652	↔	0.00000134	0.709	↔	2023-02-13	2024-04-10	0.219	↔
2_13_2_3_127	MW-03	Additional Parameters	Total Suspended Solids	mg/L	10	5	50%	-0.0547	0.428	↔	0.0128	0.892	↔	-0.00000000215	1.000	↔	2023-04-12	2023-10-24	0.243	↔
2_13_2_4_112	MW-03	Appendix III	Fluoride	mg/L	13	0	0%	-0.00372	0.380	↔	0.000173	0.938	↔	0.0000660	0.969	↔	2023-04-07	2023-11-02	0.282	↔
2_13_2_4_120	MW-03	Appendix III	pH (field)	su	13	0	0%	0.00125	0.289	↔	-0.00180	0.717	↔	0.0000733	0.833	↔	2023-05-18	2023-07-19	0.243	↔

(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				
2_13_2_4_124	MW-03	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	3.76	0.058	↔	-0.934	0.050	↔	-0.533	0.805	↔	2023-04-17	2024-07-02	0.754	↔
2_13_2_5_101	MW-03	Appendix IV	Antimony	mg/L	13	8	62%	0.0000222	0.227	↔	-0.00000325	0.847	↔	-0.00000858	0.416	↔	2023-04-22	2024-02-13	0.381	↔
2_13_2_5_102	MW-03	Appendix IV	Arsenic	mg/L	13	0	0%	-0.0000258	0.316	↔	0.0000162	0.121	↔	-0.0000250	0.572	↔	2023-05-11	2024-04-09	0.403	↔
2_13_2_5_104	MW-03	Appendix IV	Beryllium	mg/L	13	8	62%	0.0000218	0.504	↔	-0.00000568	0.600	↔	0.000000617	0.751	↔	2023-01-19	2023-06-16	0.157	↔
2_13_2_5_106	MW-03	Appendix IV	Cadmium	mg/L	13	12	92%	0.00000857	0.502	↔	0.00000147	0.904	↔	-0.00000692	0.365	↔	2023-05-11	2024-02-13	0.262	↔
2_13_2_5_109	MW-03	Appendix IV	Chromium, Total	mg/L	13	0	0%	-0.00000491	0.332	↔	0.0000283	0.479	↔	-0.0000124	0.600	↔	2024-02-06	2024-04-20	0.283	↔
2_13_2_5_113	MW-03	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	-0.00372	0.380	↔	0.000173	0.938	↔	0.0000660	0.969	↔	2023-04-07	2023-11-02	0.282	↔
2_13_2_5_115	MW-03	Appendix IV	Lead	mg/L	13	12	92%	0.0000122	0.030	↔	-0.00000490	0.042	↔	0.000000742	0.396	↔	2023-02-25	2023-09-11	0.753	↔
2_13_2_5_117	MW-03	Appendix IV	Mercury	mg/L	13	12	92%	-0.000000816	0.679	↔	0.00000279	0.171	↔	-0.000000157	0.203	↔	2023-04-26	2023-10-24	0.479	↔
2_13_2_5_118	MW-03	Appendix IV	Molybdenum	mg/L	13	9	69%	0.0000388	0.397	↔	0.0000490	0.348	↔	-0.000000995	0.675	↔	2023-05-11	2023-01-13	0.278	↔
2_13_2_5_122	MW-03	Appendix IV	Selenium	mg/L	13	3	23%	-0.00000148	0.475	↔	0.00000139	0.695	↔	-0.000000498	0.755	↔	2023-05-23	2023-12-18	0.130	↔
2_13_2_5_125	MW-03	Appendix IV	Thallium	mg/L	13	12	92%	0.00000302	0.062	↔	-0.000000630	0.092	↔	0.00000119	0.508	↔	2023-03-30	2024-04-07	0.639	↔
2_14_2_4_107	MW-04	Appendix III	Calcium	mg/L	13	0	0%	0.575	0.459	↔	0.0403	0.694	↔	-0.449	0.468	↔	2023-02-22	2024-06-28	0.335	↔
2_14_2_4_112	MW-04	Appendix III	Fluoride	mg/L	13	0	0%	0.00202	0.025	↔	-0.00231	0.698	↔	0.00115	0.744	↔	2023-10-24	2024-04-10	0.566	↔
2_14_2_4_120	MW-04	Appendix III	pH (field)	su	13	0	0%	0.000819	0.494	↔	-0.000331	0.595	↔	-0.000510	0.603	↔	2023-05-22	2024-03-18	0.295	↔
2_14_2_5_101	MW-04	Appendix IV	Antimony	mg/L	13	10	77%	0.00000237	0.950	↔	0.00000686	0.376	↔	-0.000000598	0.153	↔	2023-03-06	2023-04-19	0.432	↔
2_14_2_5_102	MW-04	Appendix IV	Arsenic	mg/L	13	0	0%	-0.00000291	0.288	↔	0.00000167	0.759	↔	-0.000000243	0.819	↔	2023-05-17	2023-10-23	0.269	↔
2_14_2_5_106	MW-04	Appendix IV	Cadmium	mg/L	13	13	100%	0.00000160	0.771	↔	0.000000256	0.566	↔	-0.000000713	0.510	↔	2023-01-28	2024-02-14	0.222	↔
2_14_2_5_113	MW-04	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.00202	0.025	↔	-0.00231	0.698	↔	0.00115	0.744	↔	2023-10-24	2024-04-10	0.566	↔
2_14_2_5_115	MW-04	Appendix IV	Lead	mg/L	13	13	100%	0.00000459	0.166	↔	-0.00000685	0.302	↔	0.00000107	0.402	↔	2023-04-19	2023-08-15	0.445	↔
2_14_2_5_122	MW-04	Appendix IV	Selenium	mg/L	13	5	38%	-0.000000957	0.278	↔	0.000000658	0.435	↔	-0.000000292	0.566	↔	2023-05-20	2024-02-13	0.407	↔
2_14_2_5_125	MW-04	Appendix IV	Thallium	mg/L	13	13	100%	0.00000174	0.113	↔	-0.00000763	0.170	↔	0.000000783	0.169	↔	2023-06-21	2023-08-09	0.536	↔
2_19_2_3_127	MW-09	Additional Parameters	Total Suspended Solids	mg/L	13	0	0%	0.0535	0.370	↔	-0.0723	0.213	↔	0.0298	0.101	↔	2023-04-17	2023-10-05	0.503	↔
2_19_2_4_107	MW-09	Appendix III	Calcium	mg/L	13	0	0%	1.26	0.339	↔	0.181	0.304	↔	-1.30	0.207	↔	2023-03-13	2024-06-30	0.640	↔
2_19_2_4_112	MW-09	Appendix III	Fluoride	mg/L	13	0	0%	0.00280	0.000	↑	-0.00536	0.005	↓	0.00311	0.005	↑	2023-09-10	2024-02-21	0.912	↔
2_19_2_4_120	MW-09	Appendix III	pH (field)	su	13	0	0%	0.00150	0.329	↔	-0.000369	0.311	↔	-0.000285	0.873	↔	2023-03-14	2024-07-02	0.380	↔
2_19_2_5_101	MW-09	Appendix IV	Antimony	mg/L	13	8	62%	0.00000161	0.374	↔	-0.000000183	0.787	↔	-0.000000614	0.838	↔	2023-04-18	2024-04-11	0.210	↔
2_19_2_5_102	MW-09	Appendix IV	Arsenic	mg/L	13	0	0%	-0.00000539	0.348	↔	0.00000193	0.380	↔	-0.000000381	0.968	↔	2023-04-18	2024-05-04	0.258	↔
2_19_2_5_103	MW-09	Appendix IV	Barium	mg/L	13	0	0%	-0.00789	0.194	↔	0.000603	0.913	↔	-0.000238	0.943	↔	2023-04-27	2023-11-20	0.400	↔
2_19_2_5_104	MW-09	Appendix IV	Beryllium	mg/L	13	11	85%	0.000000173	0.450	↔	-0.0000000169	0.444	↔	0.0000000815	0.540	↔	2023-05-22	2023-11-05	0.221	↔
2_19_2_5_106	MW-09	Appendix IV	Cadmium	mg/L	13	13	100%	0.000000978	0.448	↔	0.000000165	0.803	↔	-0.000000652	0.531	↔	2023-05-10	2024-02-13	0.289	↔
2_19_2_5_109	MW-09	Appendix IV	Chromium, Total	mg/L	13	0	0%	0.000000176	0.959	↔	-0.00000865	0.465	↔	0.00000291	0.395	↔	2023-07-23	2023-11-12	0.277	↔
2_19_2_5_110	MW-09	Appendix IV	Cobalt	mg/L	13	0	0%	0.00000311	0.542	↔	-0.000000304	0.650	↔	-0.00000189	0.624	↔	2023-03-07	2024-04-07	0.390	↔
2_19_2_5_113	MW-09	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	0.00280	0.000	↑	-0.00536	0.005	↓	0.00311	0.005	↑	2023-09-10	2024-02-21	0.912	↔
2_19_2_5_115	MW-09	Appendix IV	Lead	mg/L	13	13	100%	0.00000971	0.553	↔	0.0000119	0.478	↔	0.000000569	0.799	↔	2024-01-05	2023-01-24	0.249	↔
2_19_2_5_118	MW-09	Appendix IV	Molybdenum	mg/L	13	0	0%	-0.0000842	0.040	↔	-0.00000306	0.884	↔	0.000108	0.195	↔	2023-05-23	2024-06-30	0.691	↔
2_19_2_5_121	MW-09	Appendix IV	Radium 226 and 228	pCi/L	13	12	92%	-0.00351	0.418	↔	0.00109	0.445	↔	0.0000357	0.889	↔	2023-01-06	2023-05-23	0.298	↔
2_19_2_5_122	MW-09	Appendix IV	Selenium	mg/L	13	2	15%	-0.000000321	0.523	↔	0.000000207	0.669	↔	0.000000439	0.160	↔	2023-05-22	2024-01-14	0.608	↔
2_19_2_5_125	MW-09	Appendix IV	Thallium	mg/L	13	13	100%	0.00000259	0.724	↔	0.0000000452	0.921	↔	-0.00000177	0.552	↔	2023-01-31	2024-07-16	0.168	↔
2_21_2_4_105	MW-11	Appendix III	Boron	mg/L	13	0	0%	-0.0564	0.028	↔	0.102	0.355	↔	-0.0143	0.227	↔	2023-05-30	2023-09-07	0.618	↔
2_21_2_4_107	MW-11	Appendix III	Calcium	mg/L	13	0	0%	1.67	0.094	↔	-0.737	0.155	↔	0.114	0.760	↔	2023-03-23	2023-10-24	0.527	↔
2_21_2_4_108	MW-11	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	-0.308	0.040	↔	0.528	0.355	↔	-0.0348	0.383	↔	2023-05-09	2023-07-02	0.581	↔

(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				
2_21_2_4_124	MW-11	Appendix III	Sulfate (as SO4)	mg/L	13	4	31%	1.55	0.001	↑	-2.65	0.055	↔	0.00633	0.940	↔	2023-04-18	2023-07-01	0.901	↔
2_21_2_4_126	MW-11	Appendix III	Total Dissolved Solids	mg/L	13	0	0%	1.32	0.625	↔	1.43	0.792	↔	-1.57	0.171	↔	2023-05-14	2023-10-21	0.335	↔
2_21_2_5_101	MW-11	Appendix IV	Antimony	mg/L	13	9	69%	-0.00000561	0.507	↔	0.00000122	0.853	↔	-0.00000103	0.795	↔	2023-12-19	2024-04-30	0.111	↔
2_21_2_5_102	MW-11	Appendix IV	Arsenic	mg/L	13	0	0%	-0.0000148	0.099	↔	0.0000118	0.479	↔	-0.00000135	0.678	↔	2023-04-28	2023-08-15	0.412	↔
2_21_2_5_103	MW-11	Appendix IV	Barium	mg/L	13	0	0%	-0.00400	0.066	↔	0.00243	0.213	↔	-0.000419	0.708	↔	2023-05-01	2023-10-24	0.525	↔
2_21_2_5_104	MW-11	Appendix IV	Beryllium	mg/L	13	10	77%	-0.00000280	0.634	↔	0.000000817	0.329	↔	-0.00000108	0.202	↔	2023-06-28	2024-04-06	0.441	↔
2_21_2_5_106	MW-11	Appendix IV	Cadmium	mg/L	13	11	85%	0.00000921	0.330	↔	-0.00000160	0.444	↔	0.000000609	0.922	↔	2023-01-04	2023-07-15	0.287	↔
2_21_2_5_109	MW-11	Appendix IV	Chromium, Total	mg/L	13	0	0%	-0.0000248	0.304	↔	0.00000703	0.944	↔	-0.00000112	0.874	↔	2023-04-20	2023-07-27	0.241	↔
2_21_2_5_116	MW-11	Appendix IV	Lithium	mg/L	13	0	0%	-0.00109	0.058	↔	0.00114	0.282	↔	-0.000230	0.270	↔	2023-05-08	2023-09-09	0.562	↔
2_21_2_5_117	MW-11	Appendix IV	Mercury	mg/L	13	12	92%	-0.00000412	0.699	↔	0.00000260	0.228	↔	-0.00000328	0.406	↔	2023-08-18	2024-04-07	0.523	↔
2_21_2_5_118	MW-11	Appendix IV	Molybdenum	mg/L	13	2	15%	-0.0000121	0.122	↔	0.00000495	0.104	↔	-0.00000842	0.505	↔	2023-05-05	2024-04-07	0.535	↔
2_21_2_5_121	MW-11	Appendix IV	Radium 226 and 228	pCi/L	13	4	31%	0.000389	0.820	↔	-0.00307	0.542	↔	0.000697	0.810	↔	2023-08-08	2024-02-25	0.389	↔
2_21_2_5_122	MW-11	Appendix IV	Selenium	mg/L	13	3	23%	-0.00000596	0.277	↔	0.00000225	0.015	↔	-0.00000203	0.022	↔	2023-07-28	2024-02-13	0.783	↔
2_21_2_5_125	MW-11	Appendix IV	Thallium	mg/L	13	12	92%	0.00000209	0.088	↔	-0.00000599	0.232	↔	0.000000504	0.880	↔	2023-05-09	2023-07-01	0.552	↔
2_22_2_3_127	MW-12	Additional Parameters	Total Suspended Solids	mg/L	8	5	62%	-0.0141	0.007	↓	0.0392	0.001	↑	-0.000115	0.749	↔	2023-07-09	2023-10-23	0.999	↔
2_22_2_4_105	MW-12	Appendix III	Boron	mg/L	13	0	0%	-0.00184	0.277	↔	0.00139	0.207	↔	0.0000552	0.805	↔	2023-03-11	2023-07-03	0.500	↔
2_22_2_4_108	MW-12	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	-0.0439	0.219	↔	0.122	0.484	↔	-0.0170	0.359	↔	2023-06-08	2023-08-11	0.335	↔
2_22_2_4_112	MW-12	Appendix III	Fluoride	mg/L	13	0	0%	-0.00158	0.040	↔	0.000826	0.161	↔	-0.000564	0.438	↔	2023-05-28	2024-02-13	0.586	↔
2_22_2_4_124	MW-12	Appendix III	Sulfate (as SO4)	mg/L	13	0	0%	-0.501	0.328	↔	-0.0614	0.658	↔	-0.201	0.157	↔	2023-03-12	2023-12-15	0.793	↔
2_22_2_5_101	MW-12	Appendix IV	Antimony	mg/L	13	0	0%	-0.00000254	0.862	↔	-0.00000290	0.276	↔	0.00000169	0.168	↔	2023-05-25	2023-12-06	0.575	↔
2_22_2_5_102	MW-12	Appendix IV	Arsenic	mg/L	13	0	0%	0.00000390	0.201	↔	-0.0000133	0.140	↔	0.00000694	0.185	↔	2023-10-22	2024-02-14	0.517	↔
2_22_2_5_106	MW-12	Appendix IV	Cadmium	mg/L	13	0	0%	0.00000674	0.054	↔	-0.0000143	0.195	↔	0.0000110	0.007	↑	2023-08-05	2023-12-31	0.784	↔
2_22_2_5_109	MW-12	Appendix IV	Chromium, Total	mg/L	13	5	38%	-0.00000110	0.226	↔	0.00000699	0.023	↔	-0.00000373	0.034	↔	2023-10-18	2024-02-17	0.732	↔
2_22_2_5_110	MW-12	Appendix IV	Cobalt	mg/L	13	5	38%	0.00000159	0.014	↔	-0.00000255	0.114	↔	0.00000433	0.001	↑	2023-09-09	2024-03-16	0.889	↔
2_22_2_5_113	MW-12	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	-0.00158	0.040	↔	0.000826	0.161	↔	-0.000564	0.438	↔	2023-05-28	2024-02-13	0.586	↔
2_22_2_5_115	MW-12	Appendix IV	Lead	mg/L	13	6	46%	-0.00000234	0.537	↔	0.000000143	0.783	↔	0.00000117	0.051	↔	2023-07-18	2024-02-13	0.768	↔
2_22_2_5_116	MW-12	Appendix IV	Lithium	mg/L	13	0	0%	0.00000878	0.099	↔	-0.0000221	0.140	↔	0.0000211	0.032	↔	2023-09-27	2024-03-14	0.667	↔
2_22_2_5_117	MW-12	Appendix IV	Mercury	mg/L	13	11	85%	-0.000000221	0.575	↔	0.000000862	0.021	↔	-0.000000358	0.080	↔	2024-01-24	2024-04-08	0.803	↔
2_22_2_5_118	MW-12	Appendix IV	Molybdenum	mg/L	13	0	0%	0.00000599	0.231	↔	-0.0000270	0.469	↔	0.000123	0.001	↑	2023-10-23	2024-06-11	0.906	↔
2_22_2_5_122	MW-12	Appendix IV	Selenium	mg/L	13	0	0%	0.0000200	0.347	↔	-0.0000116	0.038	↔	0.000000609	0.674	↔	2023-01-09	2023-06-30	0.742	↔
3_20_3_4_105	MW-10	Appendix III	Boron	mg/L	13	0	0%	-0.230	0.142	↔	0.186	0.215	↔	-0.0241	0.167	↔	2023-03-04	2023-06-26	0.581	↔
3_20_3_4_108	MW-10	Appendix III	Chloride (as Cl)	mg/L	13	0	0%	0.807	0.078	↔	-1.50	0.224	↔	2.23	0.012	↔	2023-09-25	2024-02-22	0.824	↔
3_20_3_4_112	MW-10	Appendix III	Fluoride	mg/L	13	0	0%	-0.0448	0.148	↔	0.0543	0.086	↔	-0.00710	0.056	↔	2023-03-11	2023-05-31	0.645	↔
3_20_3_5_101	MW-10	Appendix IV	Antimony	mg/L	13	9	69%	0.000000987	0.582	↔	0.000000304	0.974	↔	-0.000000806	0.580	↔	2023-05-06	2024-02-13	0.185	↔
3_20_3_5_103	MW-10	Appendix IV	Barium	mg/L	13	0	0%	-0.00200	0.055	↔	0.00164	0.383	↔	-0.000668	0.095	↔	2023-05-04	2023-10-22	0.618	↔
3_20_3_5_104	MW-10	Appendix IV	Beryllium	mg/L	13	6	46%	0.000000633	0.105	↔	-0.000000464	0.456	↔	0.0000000399	0.884	↔	2023-05-23	2023-12-06	0.442	↔
3_20_3_5_106	MW-10	Appendix IV	Cadmium	mg/L	13	13	100%	0.00000140	0.292	↔	-0.00000181	0.751	↔	0.0000000248	0.949	↔	2023-05-22	2023-08-04	0.262	↔
3_20_3_5_109	MW-10	Appendix IV	Chromium, Total	mg/L	13	0	0%	-0.0000256	0.311	↔	0.0000660	0.401	↔	-0.0000111	0.033	↔	2023-04-09	2023-06-26	0.580	↔
3_20_3_5_110	MW-10	Appendix IV	Cobalt	mg/L	13	1	8%	0.00000505	0.196	↔	-0.00000379	0.079	↔	0.00000160	0.596	↔	2023-05-22	2024-02-18	0.548	↔
3_20_3_5_113	MW-10	Appendix IV	Fluoride (App IV)	mg/L	13	0	0%	-0.0448	0.148	↔	0.0543	0.086	↔	-0.00710	0.056	↔	2023-03-11	2023-05-31	0.645	↔
3_20_3_5_115	MW-10	Appendix IV	Lead	mg/L	13	11	85%	0.0000143	0.025	↔	-0.00000673	0.016	↔	0.00000119	0.221	↔	2023-02-18	2023-08-14	0.764	↔
3_20_3_5_117	MW-10	Appendix IV	Mercury	mg/L	13	12	92%	-0.00000124	0.710	↔	0.00000319	0.143	↔	-0.00000533	0.489	↔	2023-05-24	2024-04-07	0.449	↔

(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				
3_20_3_5_122	MW-10	Appendix IV	Selenium	mg/L	13	1	8%	0.00000177	0.833	↔	0.0000114	0.695	↔	-0.0000142	0.117	↔	2023-07-10	2024-02-12	0.415	↔
3_20_3_5_125	MW-10	Appendix IV	Thallium	mg/L	13	13	100%	0.0000389	0.043	↔	-0.0000338	0.215	↔	0.00000742	0.064	↔	2023-03-21	2023-07-22	0.649	↔

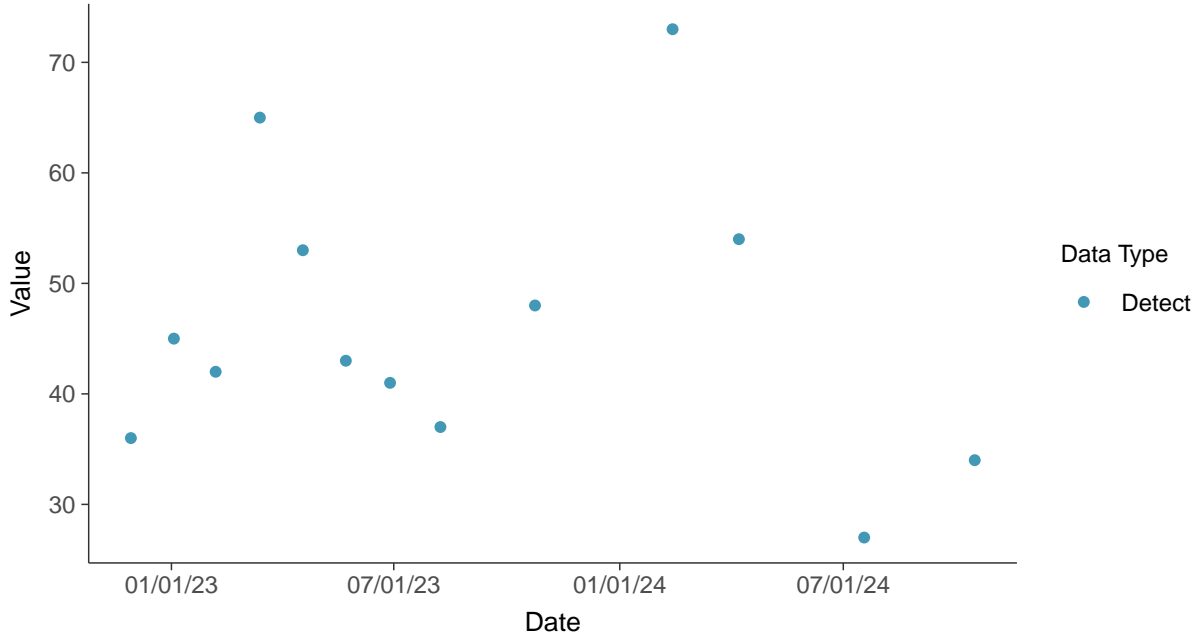


Additional Parameters: Total Suspended Solids, MW-06

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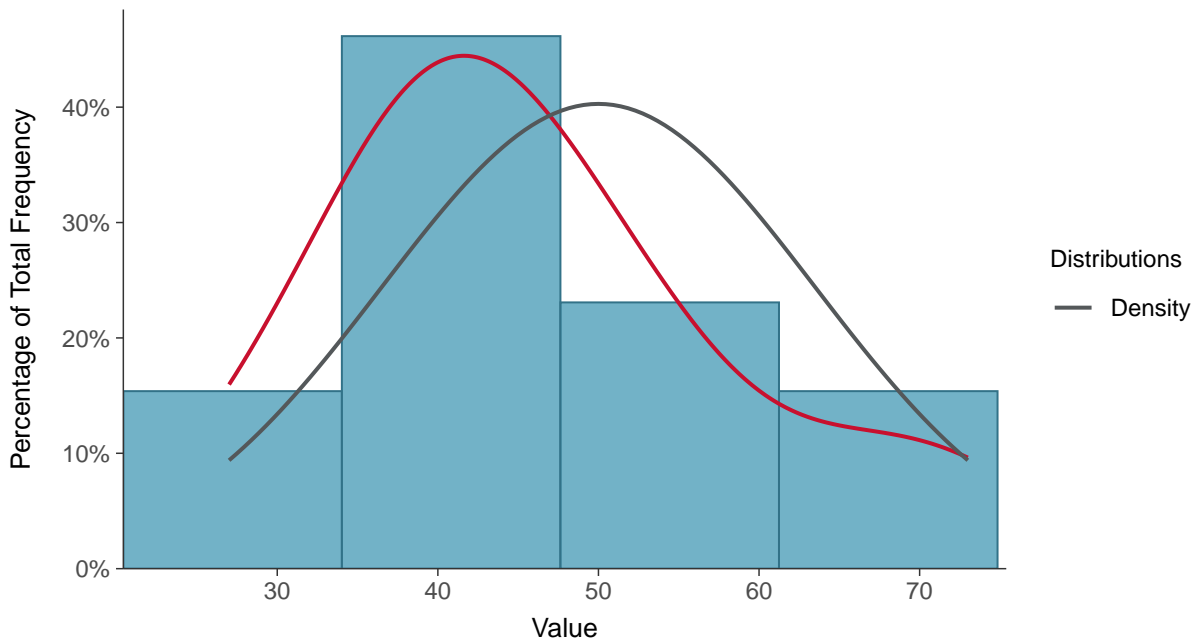
Scatter Plot

Total Suspended Solids, MW-06 (mg/L)



Histogram

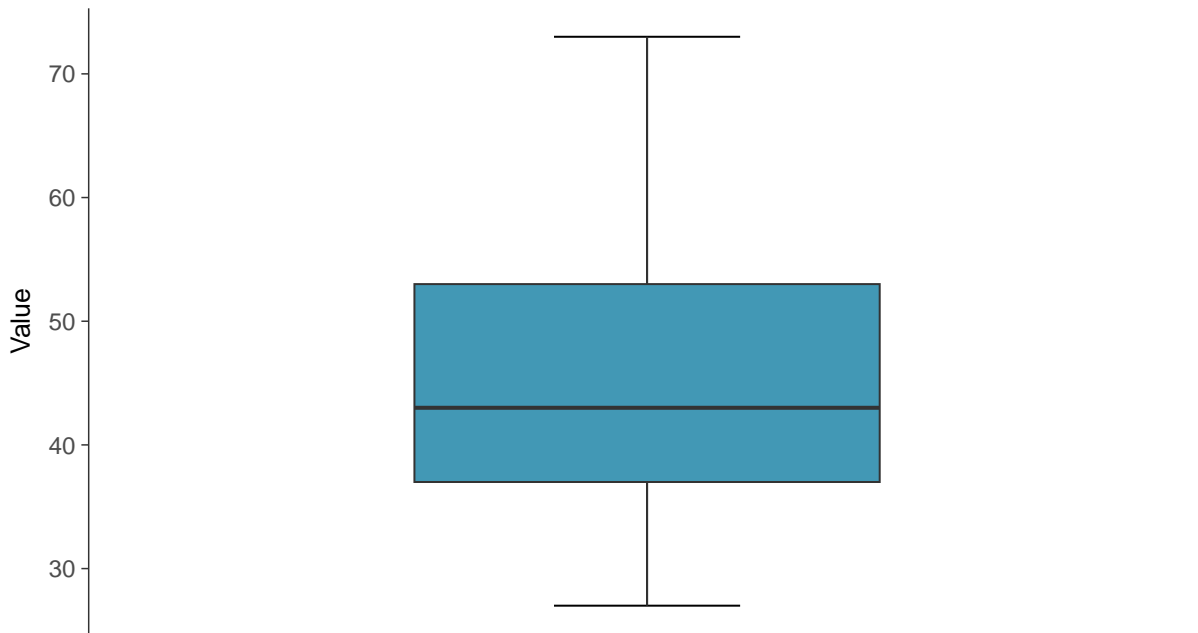
Total Suspended Solids, MW-06 (mg/L)





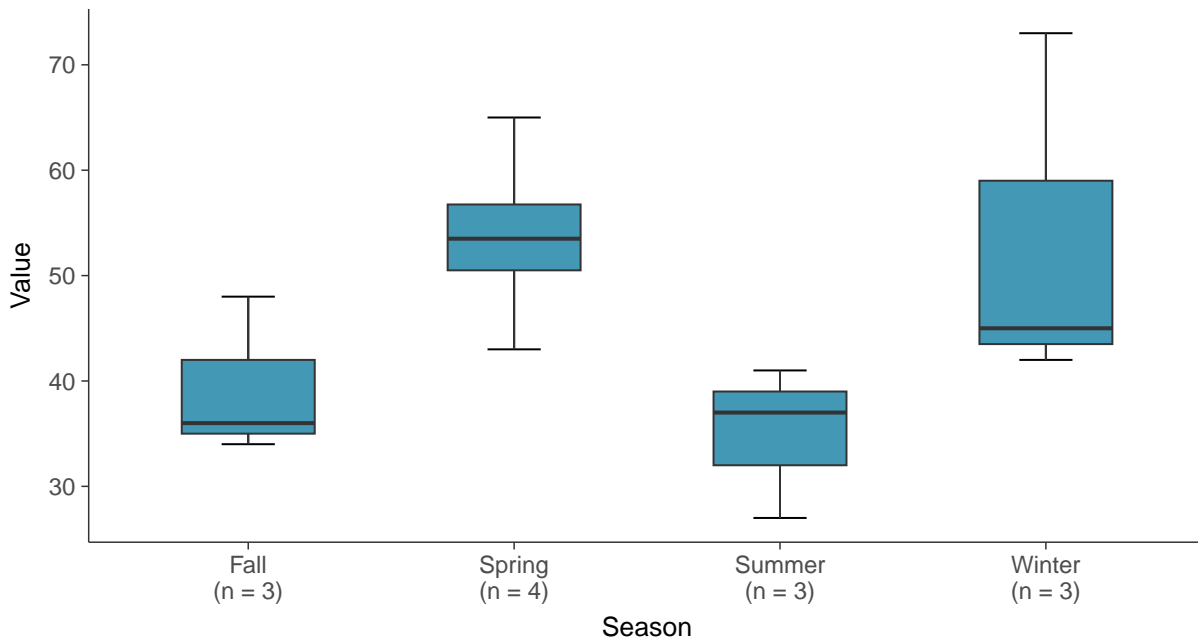
Boxplot

Total Suspended Solids, MW-06 (mg/L)



Boxplot by Season

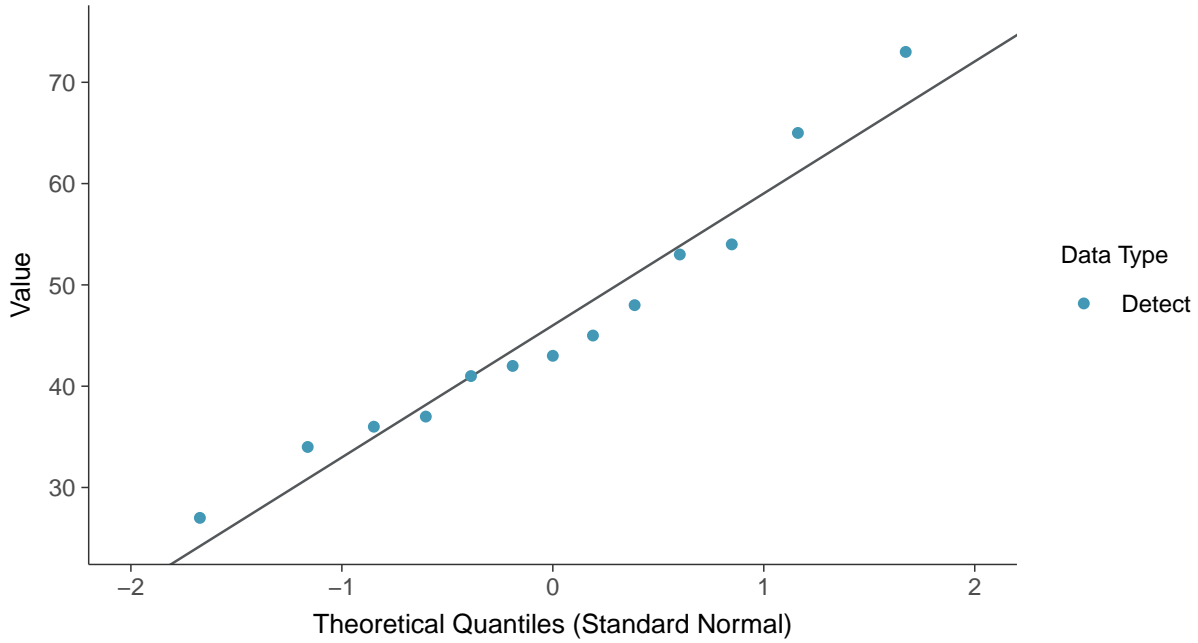
Total Suspended Solids, MW-06 (mg/L)





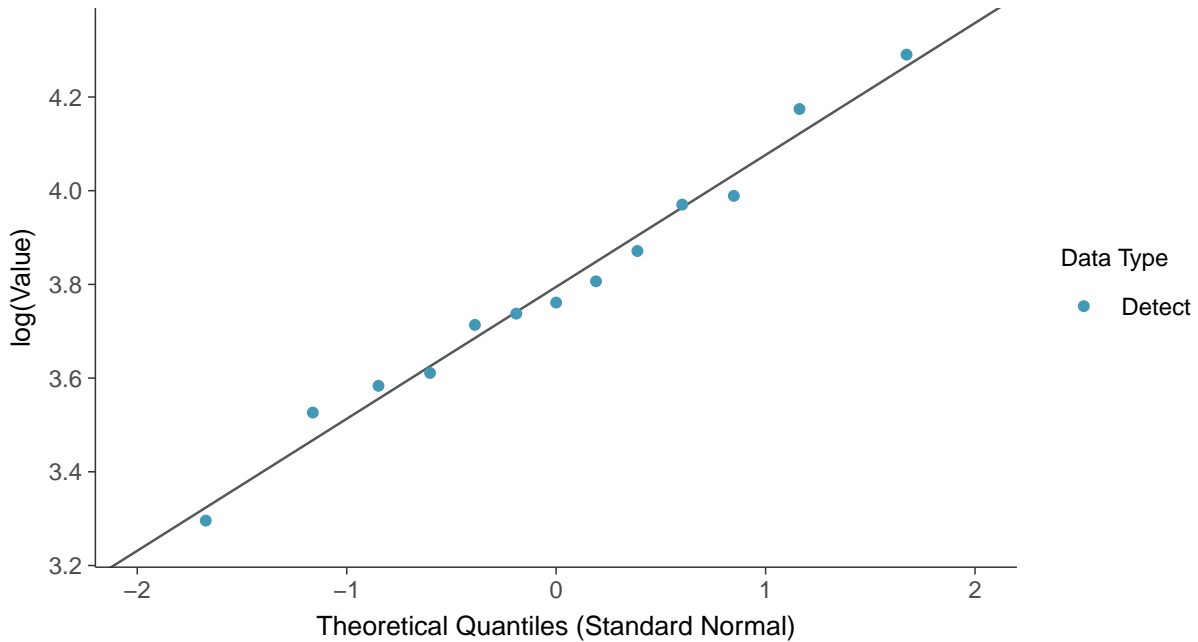
Normal Q-Q plot

Total Suspended Solids, MW-06 (mg/L)



Lognormal Q-Q plot

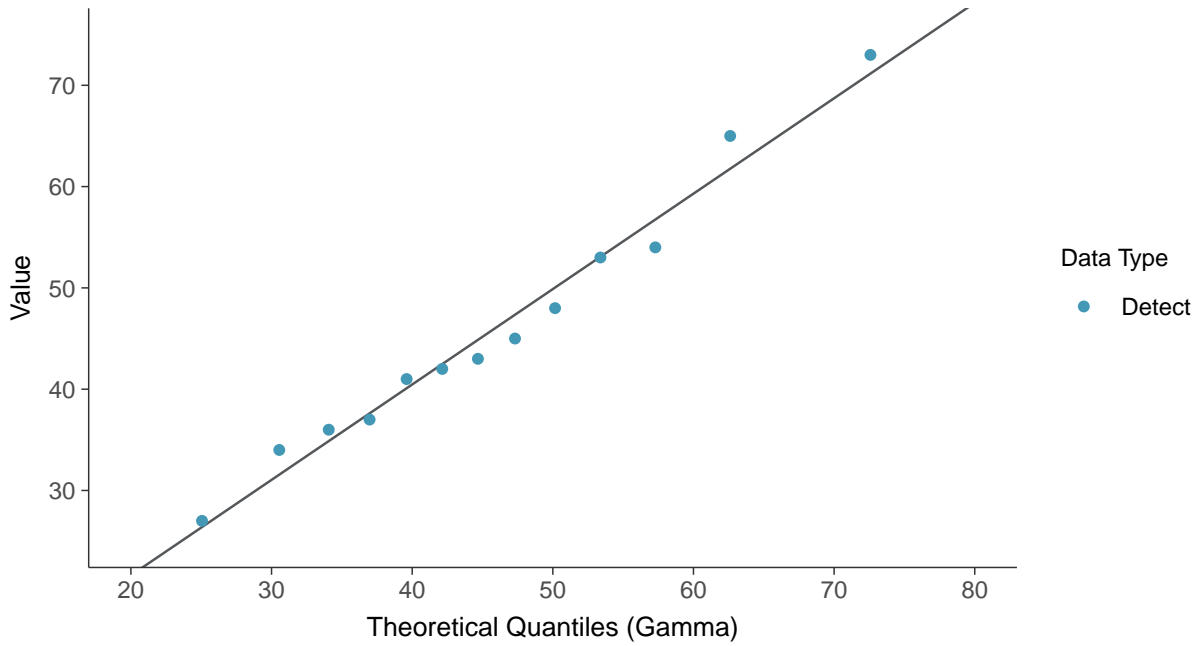
Total Suspended Solids, MW-06 (mg/L)





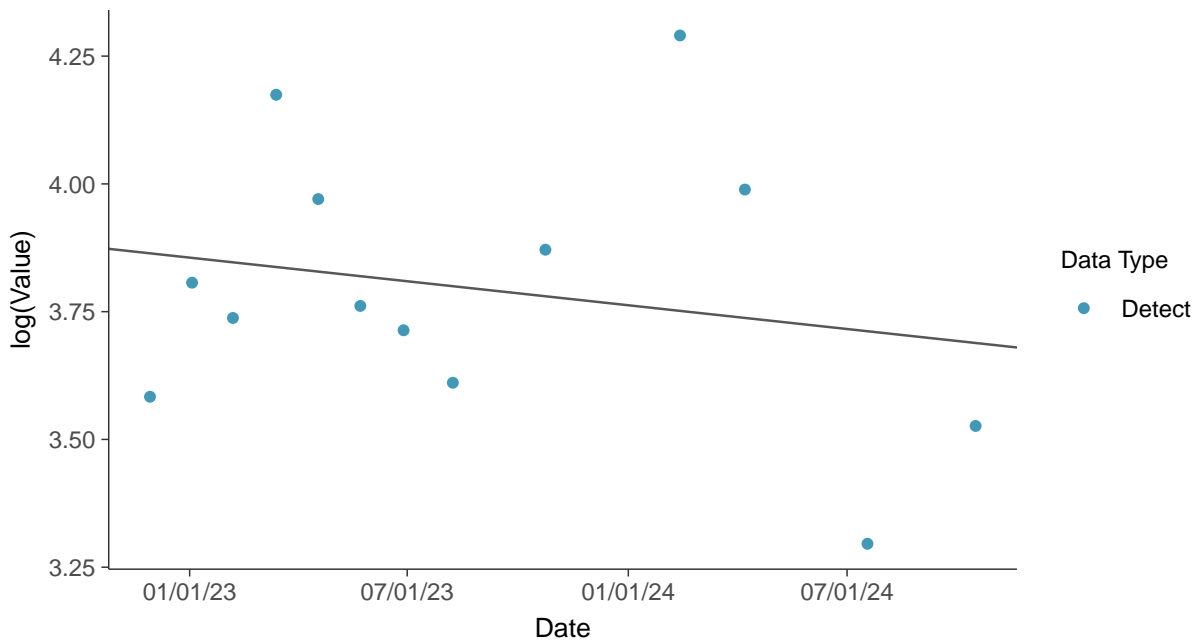
Gamma Q-Q plot

Total Suspended Solids, MW-06 (mg/L)



Trend Regression: Lognormal MLE

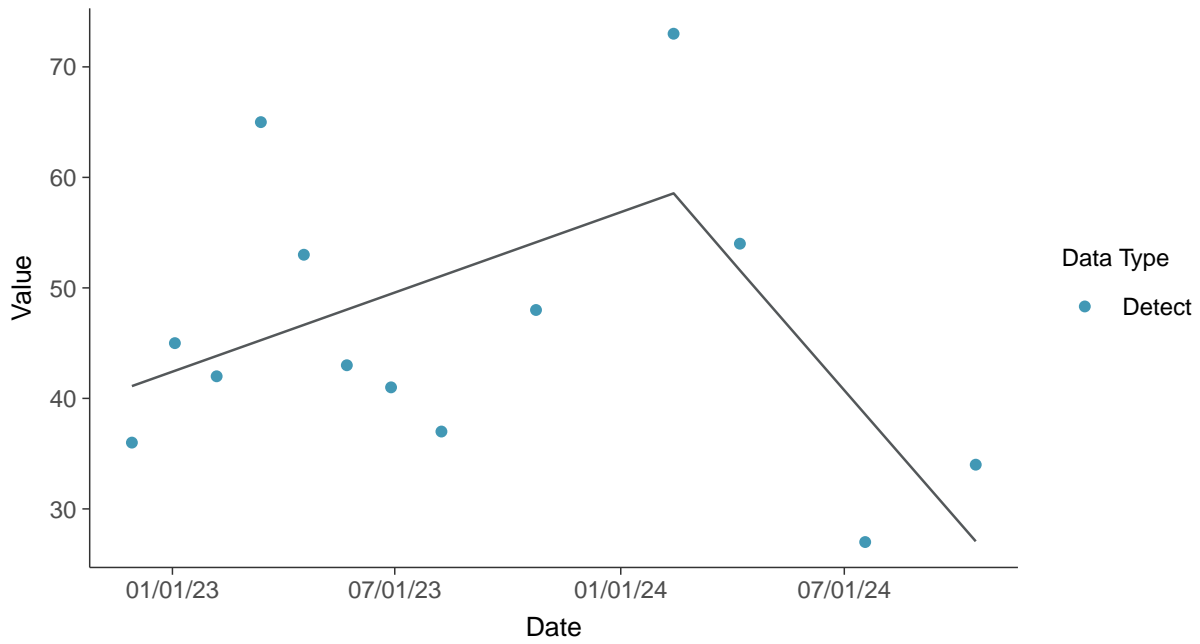
Total Suspended Solids, MW-06 (mg/L)





Trend Regression: Piecewise Linear-Linear

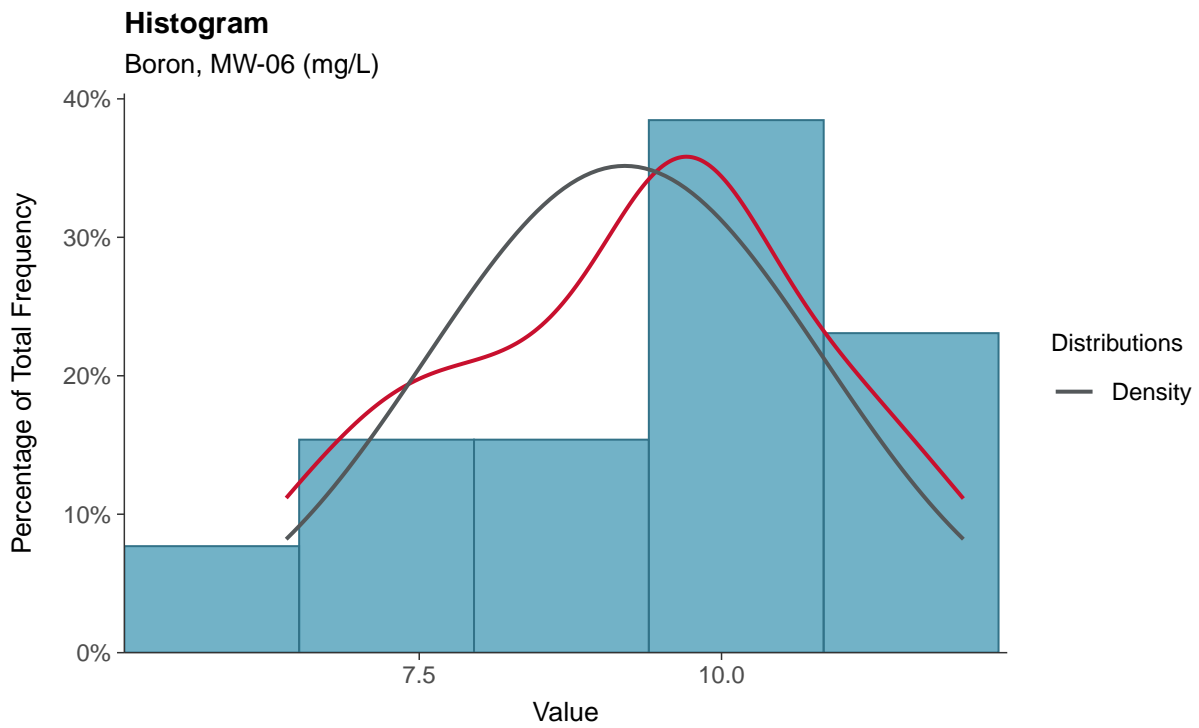
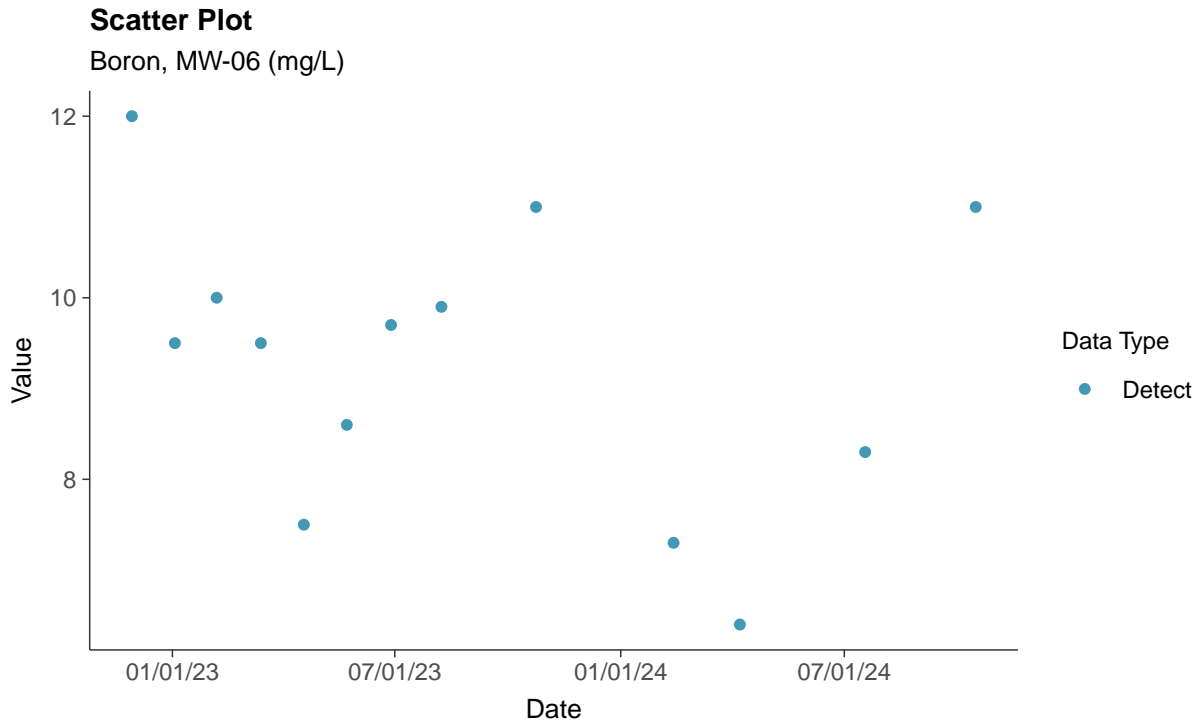
Total Suspended Solids, MW-06 (mg/L)





Appendix III: Boron, MW-06

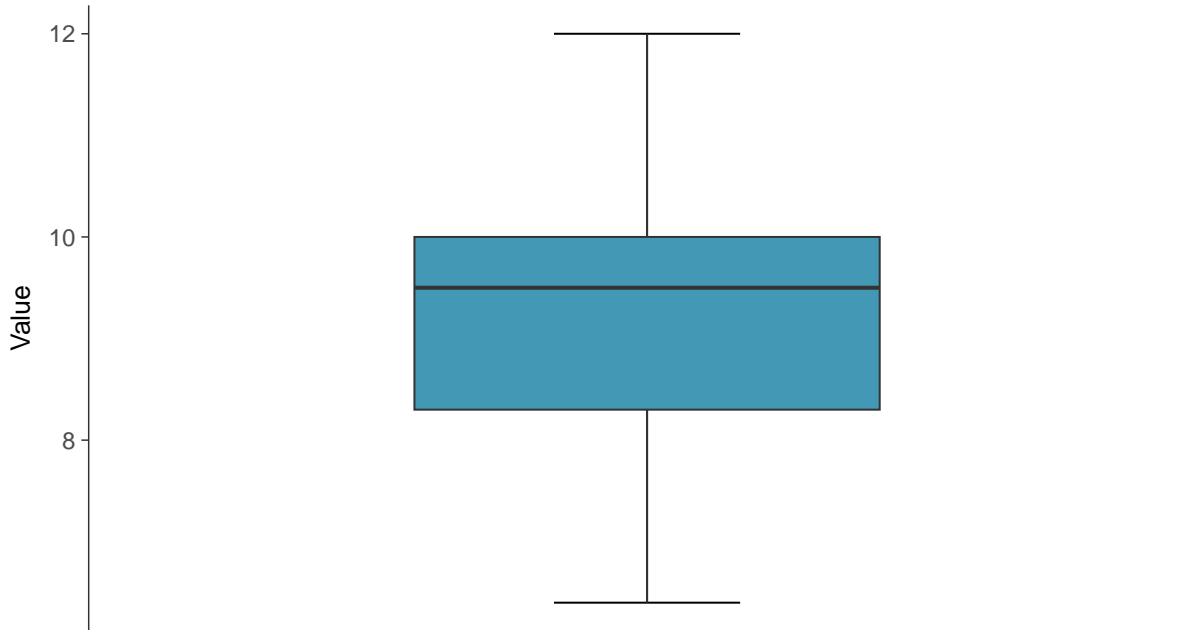
ID: 1_16_1_4_105





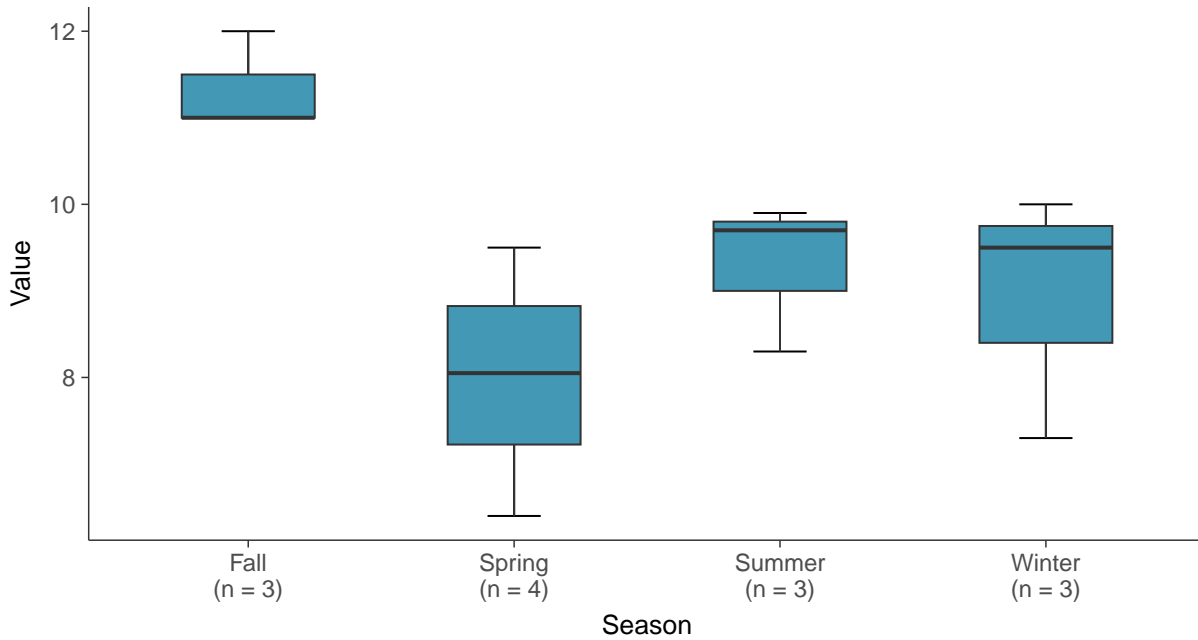
Boxplot

Boron, MW-06 (mg/L)



Boxplot by Season

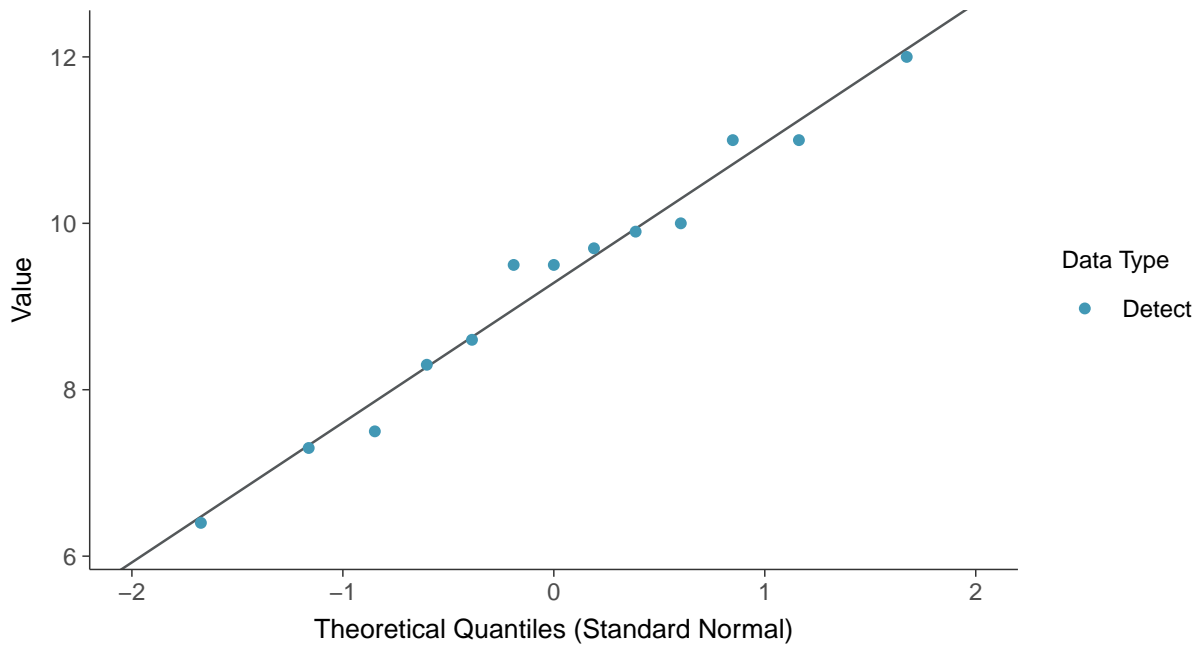
Boron, MW-06 (mg/L)





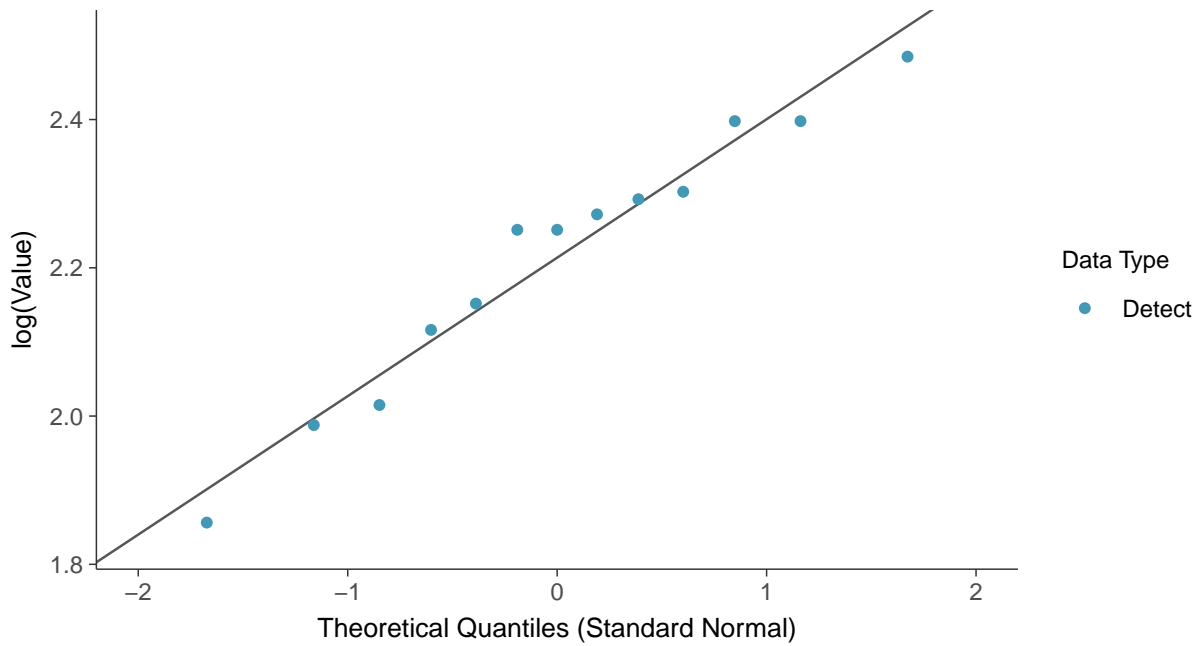
Normal Q-Q plot

Boron, MW-06 (mg/L)



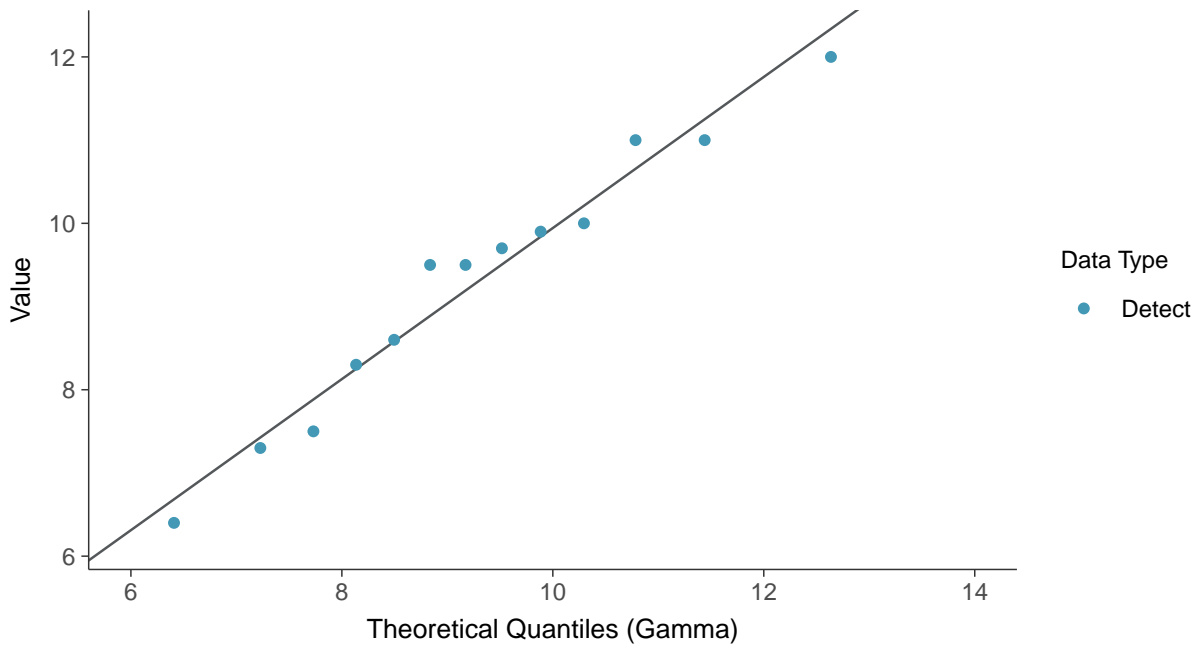
Lognormal Q-Q plot

Boron, MW-06 (mg/L)

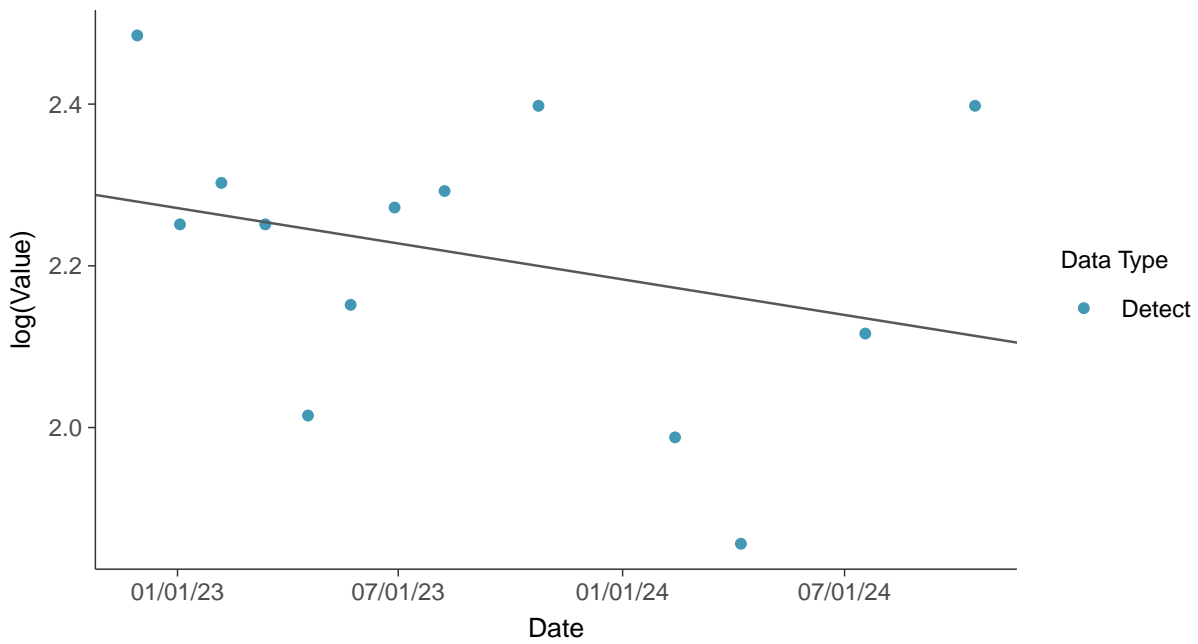




Gamma Q-Q plot
Boron, MW-06 (mg/L)



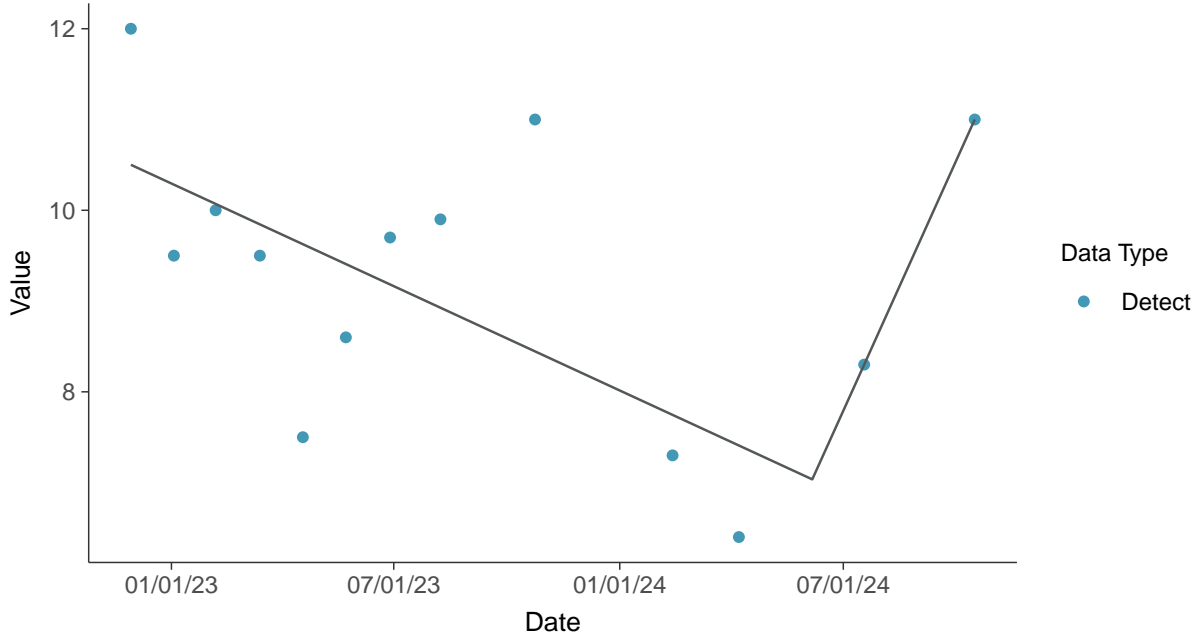
Trend Regression: Lognormal MLE
Boron, MW-06 (mg/L)





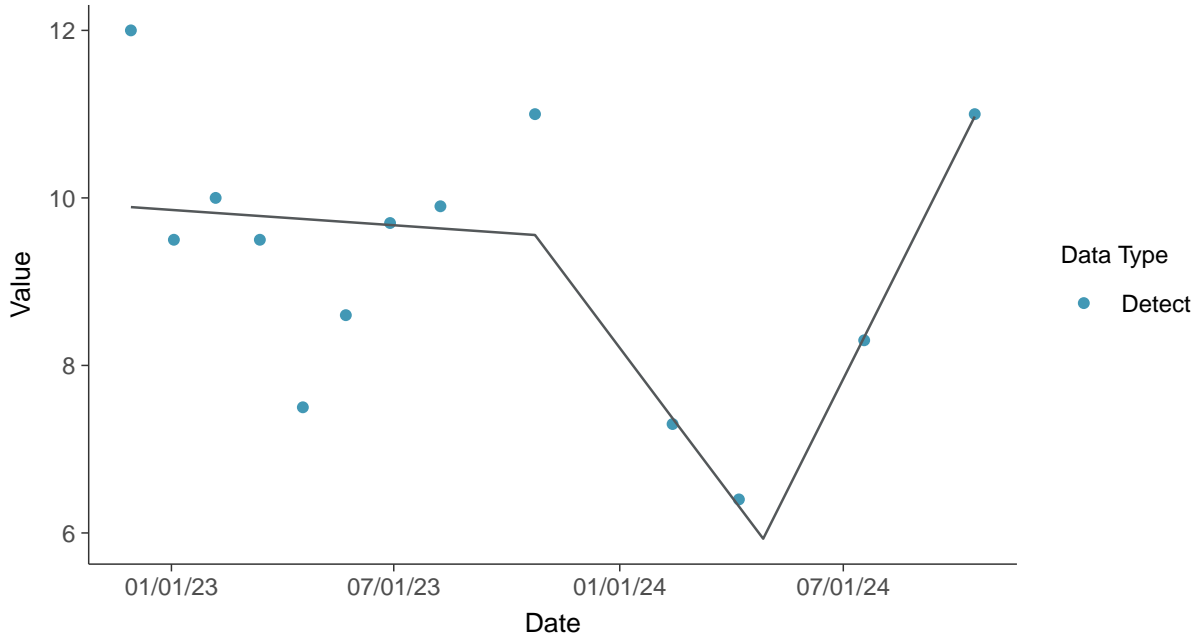
Trend Regression: Piecewise Linear-Linear

Boron, MW-06 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

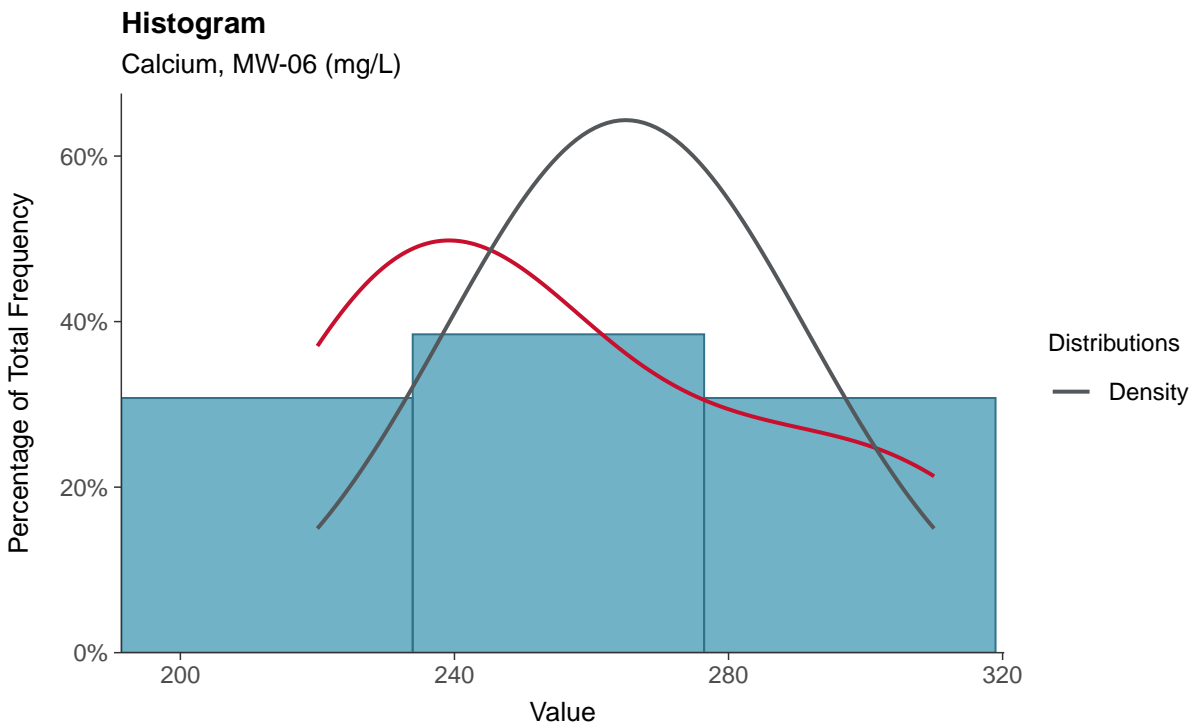
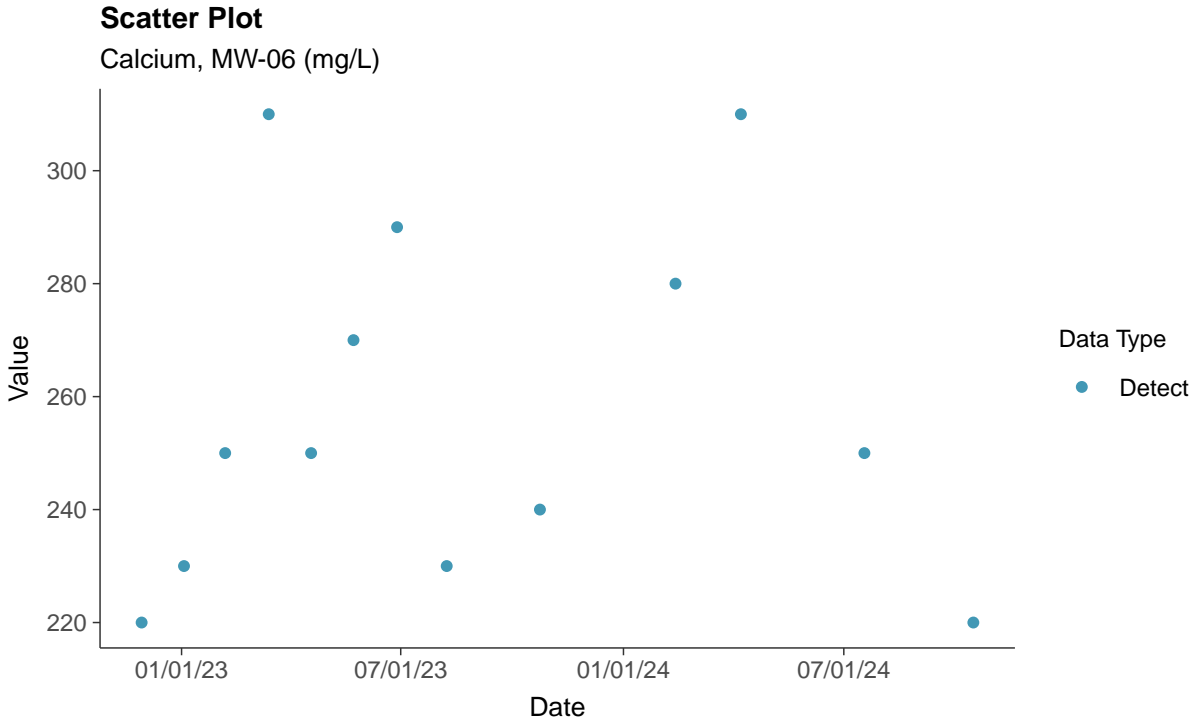
Boron, MW-06 (mg/L)





Appendix III: Calcium, MW-06

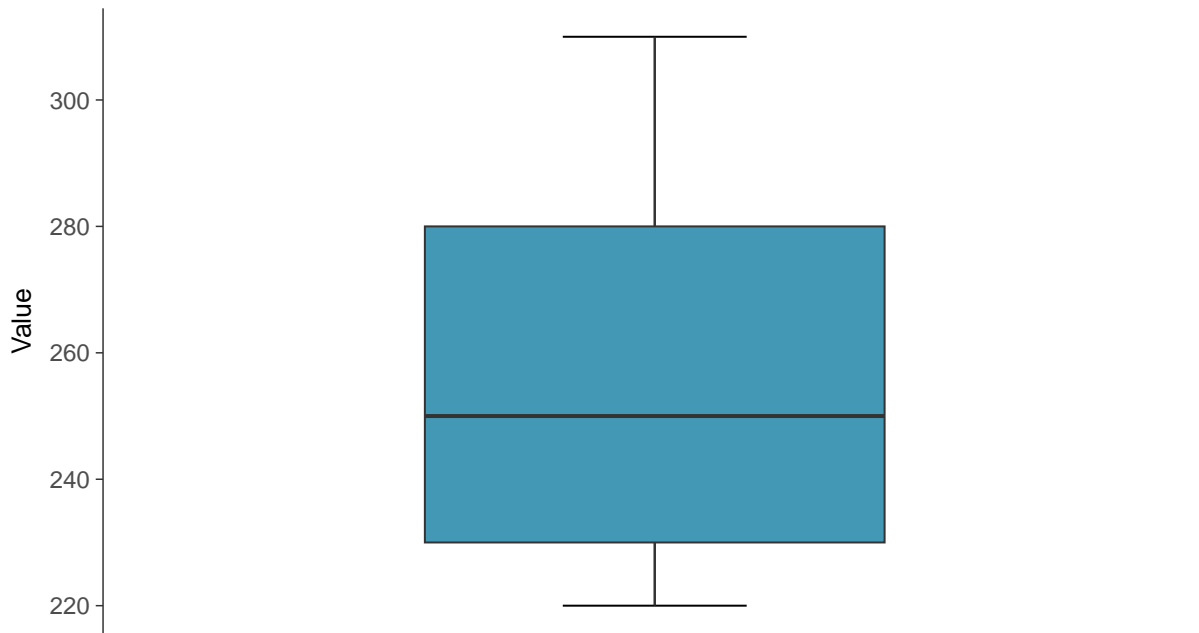
ID: 1_16_1_4_107





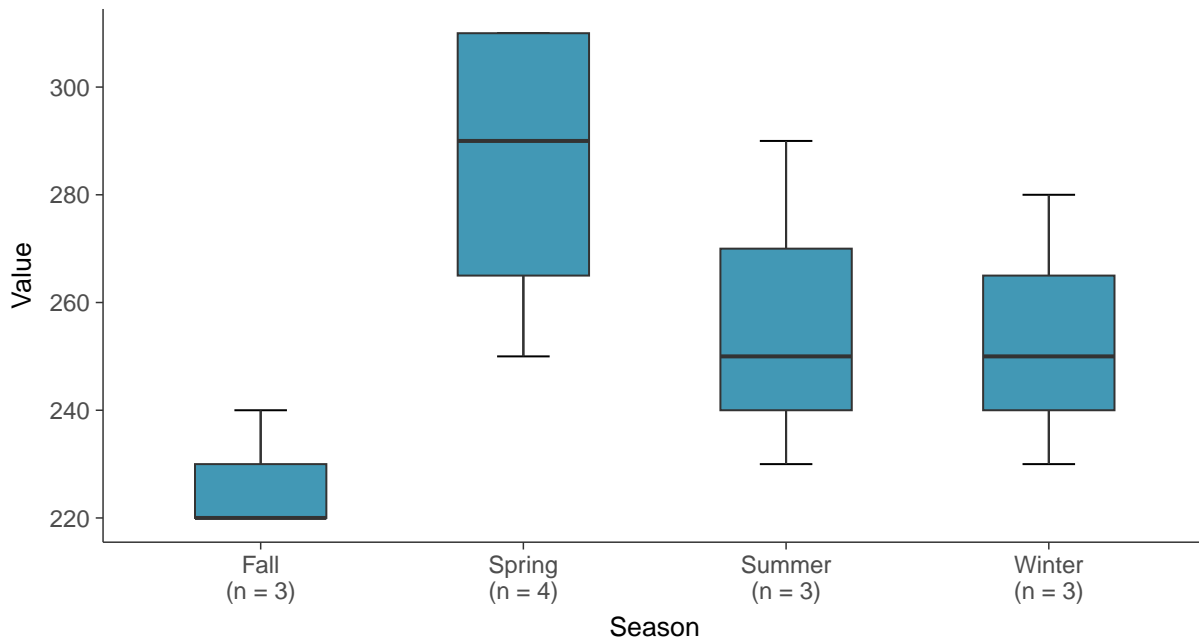
Boxplot

Calcium, MW-06 (mg/L)



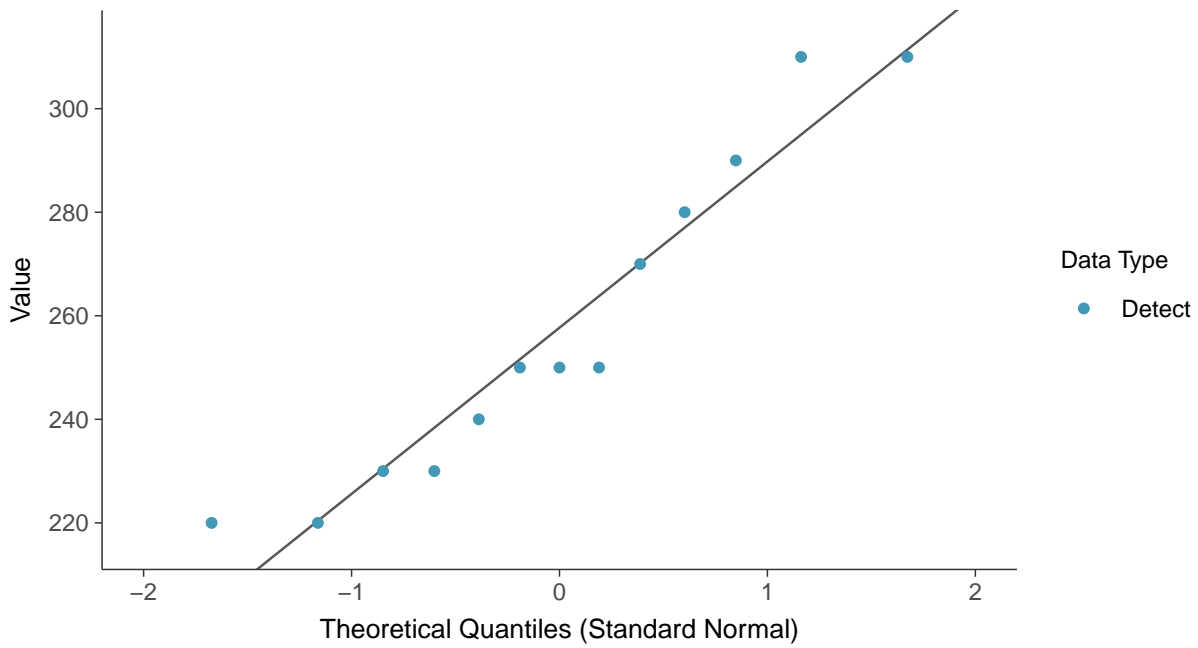
Boxplot by Season

Calcium, MW-06 (mg/L)

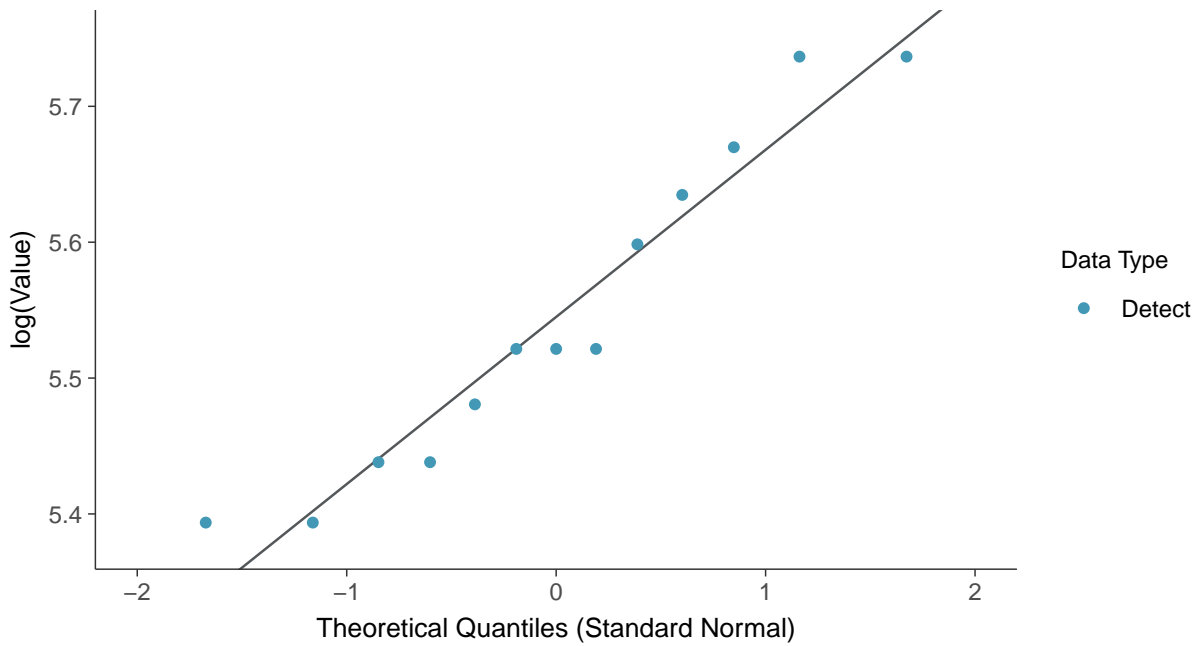




Normal Q-Q plot
Calcium, MW-06 (mg/L)

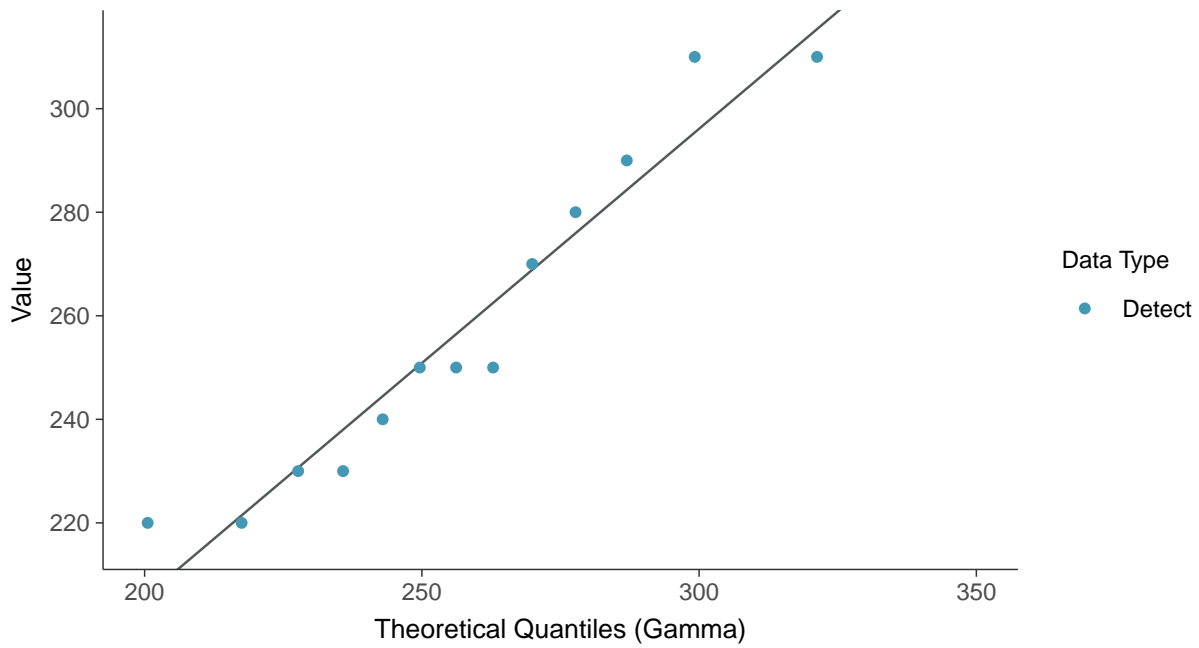


Lognormal Q-Q plot
Calcium, MW-06 (mg/L)

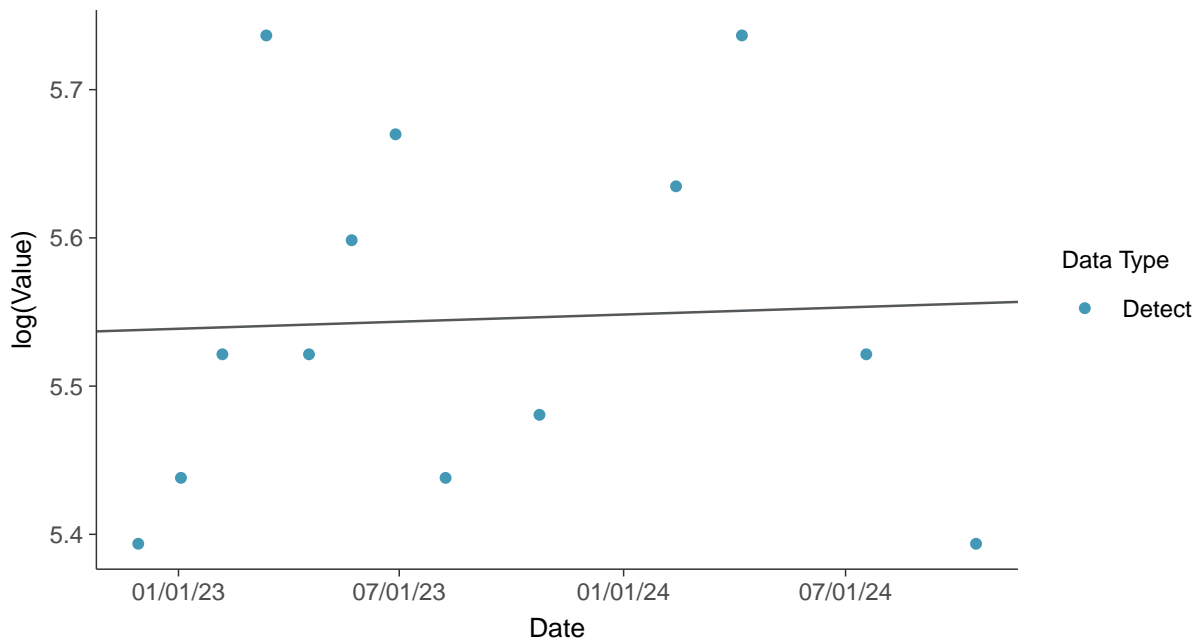




Gamma Q-Q plot
Calcium, MW-06 (mg/L)



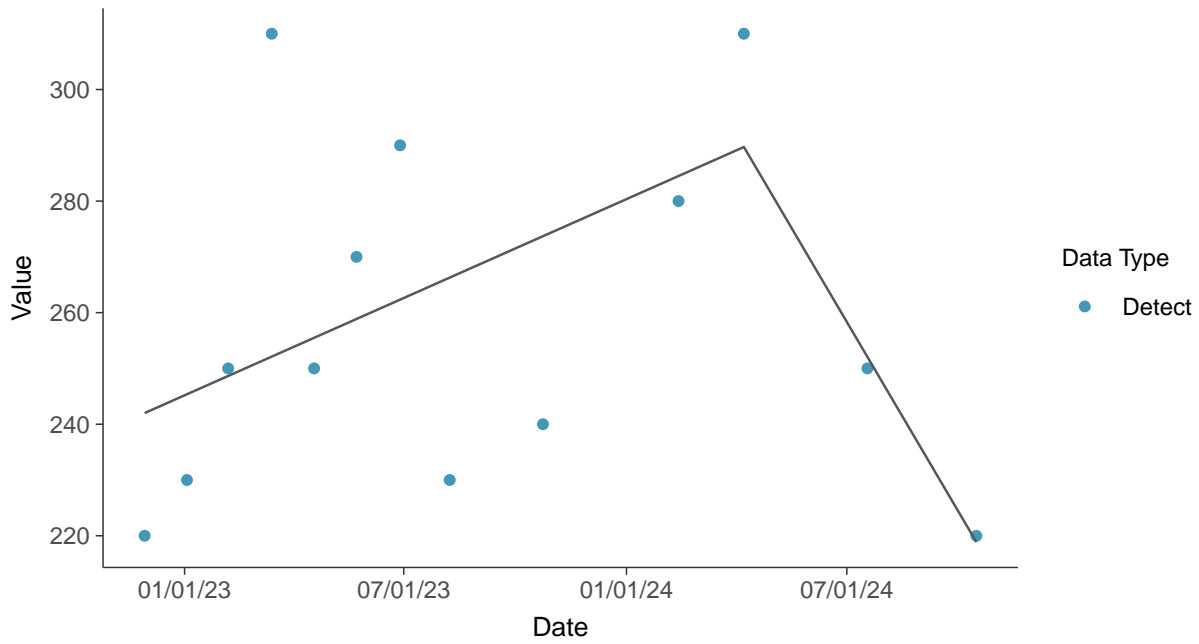
Trend Regression: Lognormal MLE
Calcium, MW-06 (mg/L)





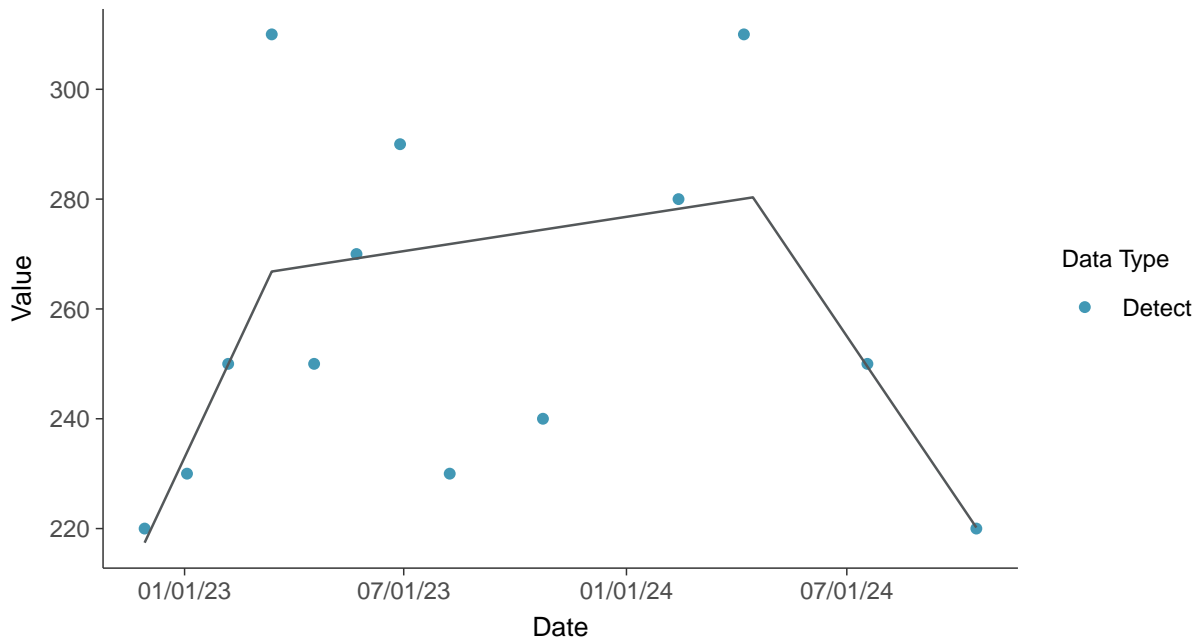
Trend Regression: Piecewise Linear-Linear

Calcium, MW-06 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Calcium, MW-06 (mg/L)



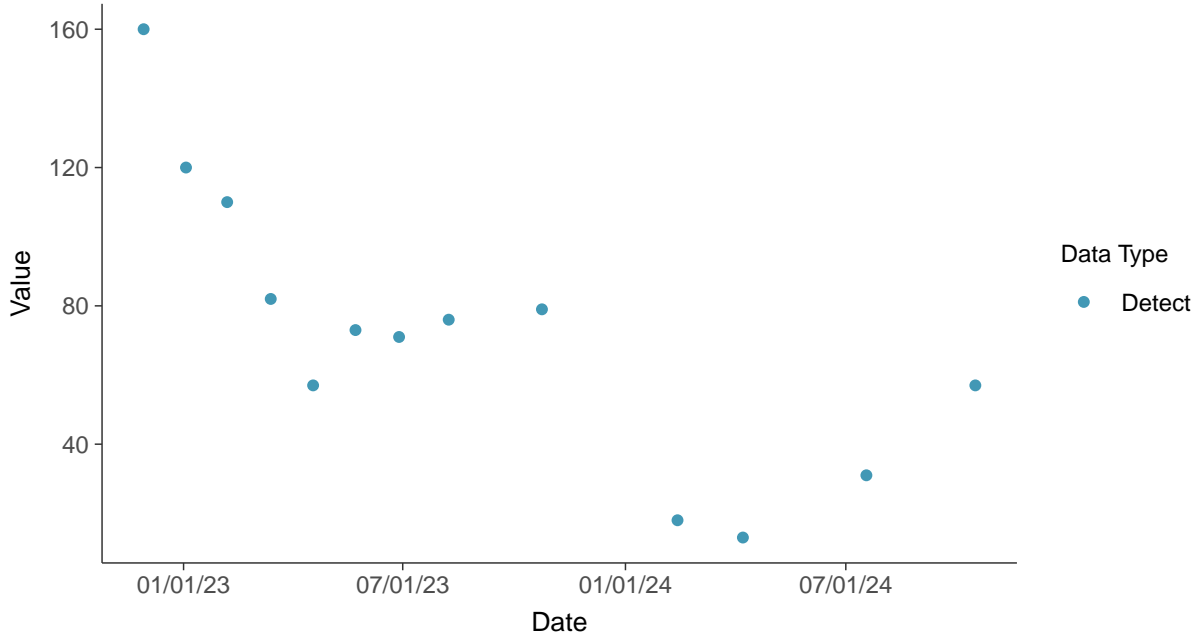


Appendix III: Chloride (as Cl), MW-06

ID: 1_16_1_4_108

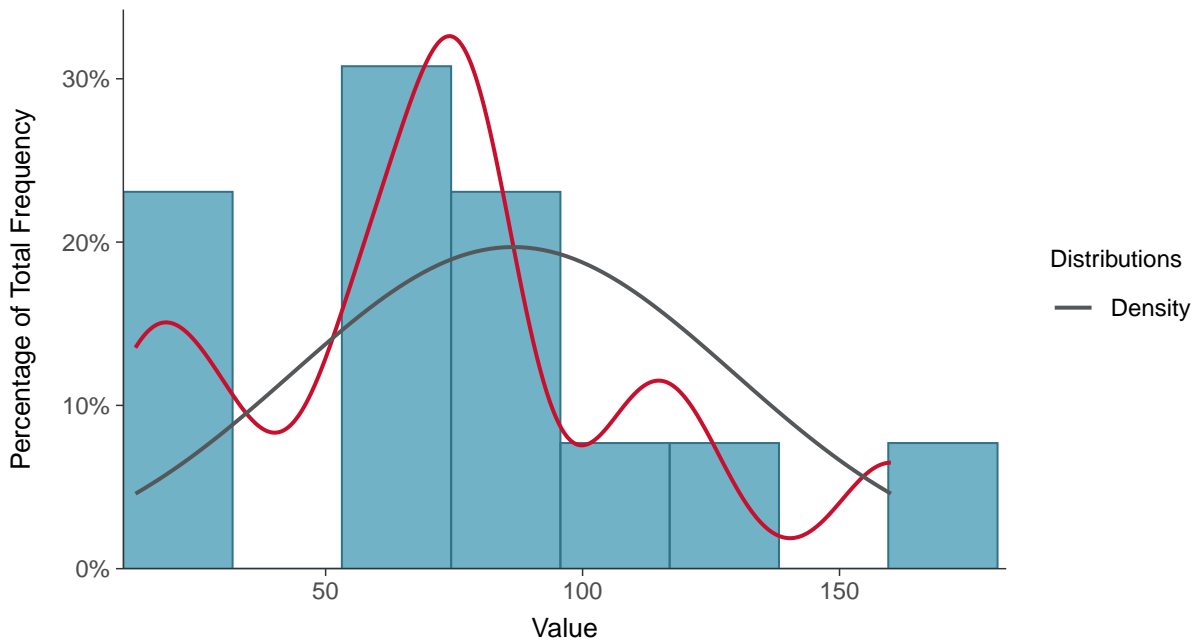
Scatter Plot

Chloride (as Cl), MW-06 (mg/L)



Histogram

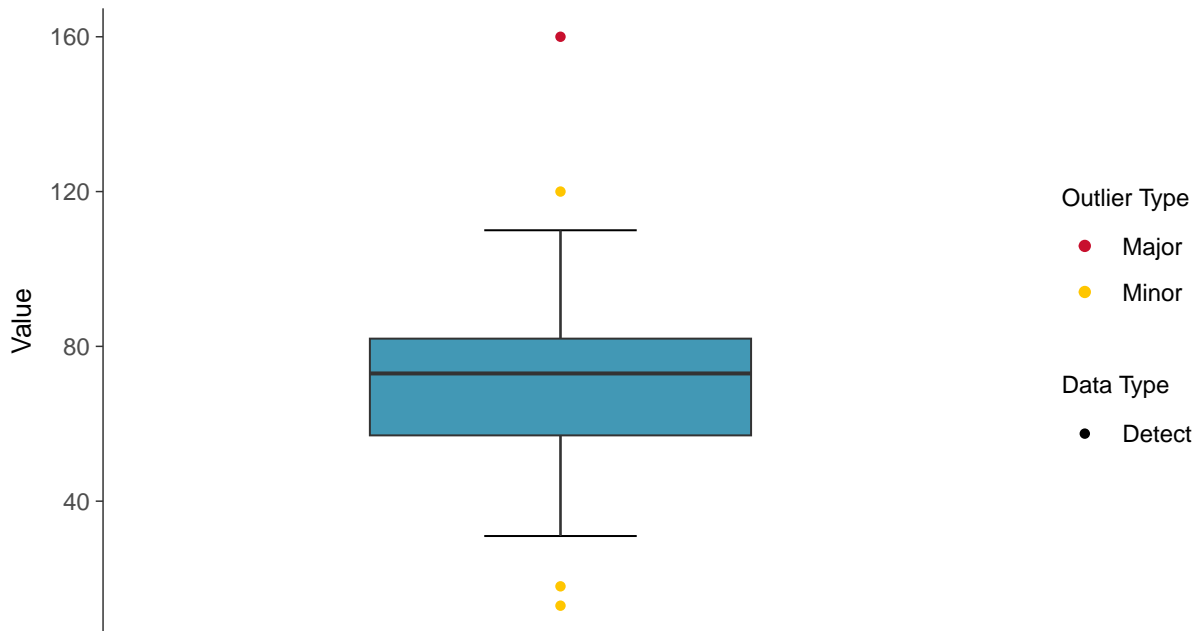
Chloride (as Cl), MW-06 (mg/L)





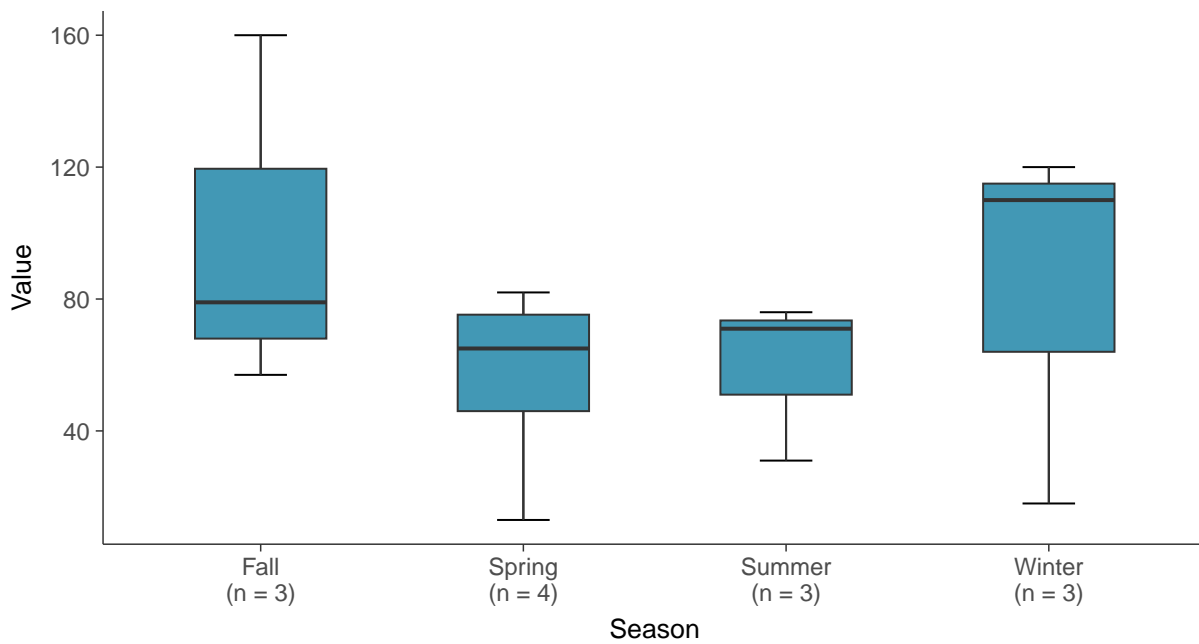
Boxplot

Chloride (as Cl), MW-06 (mg/L)



Boxplot by Season

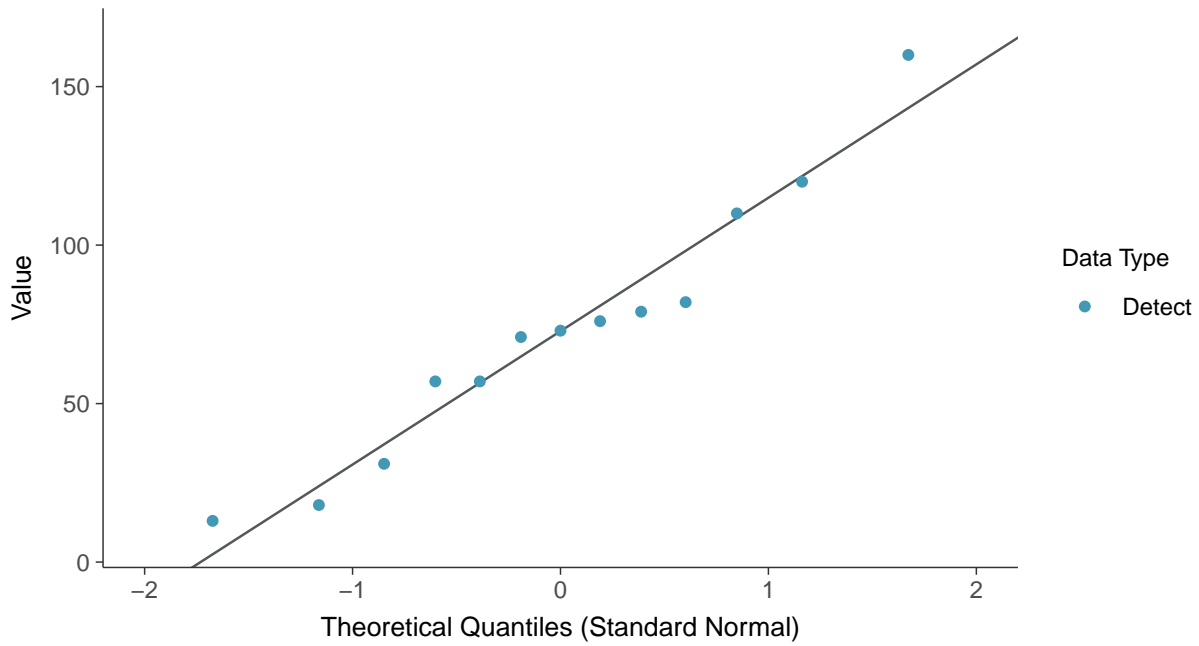
Chloride (as Cl), MW-06 (mg/L)





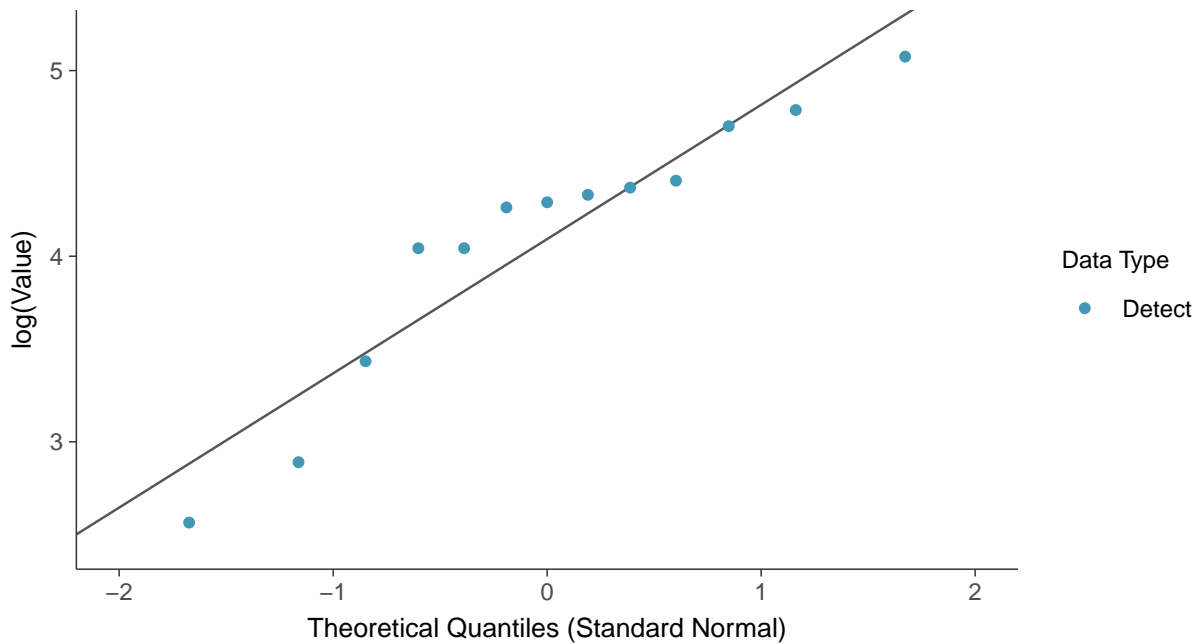
Normal Q-Q plot

Chloride (as Cl), MW-06 (mg/L)



Lognormal Q-Q plot

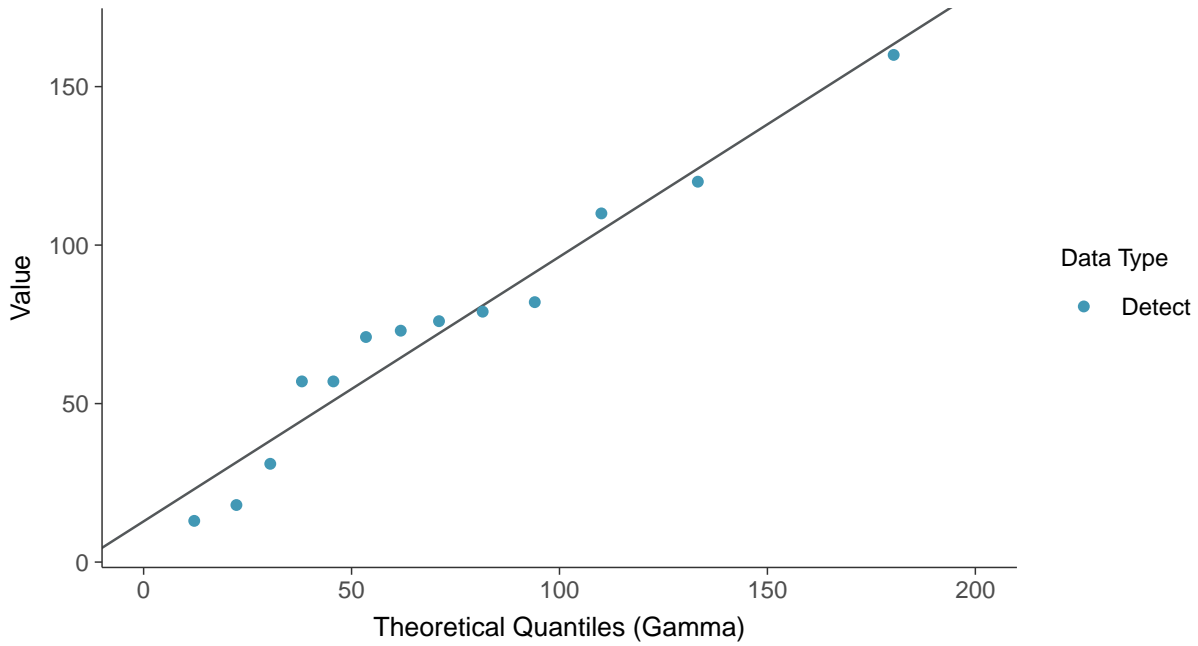
Chloride (as Cl), MW-06 (mg/L)





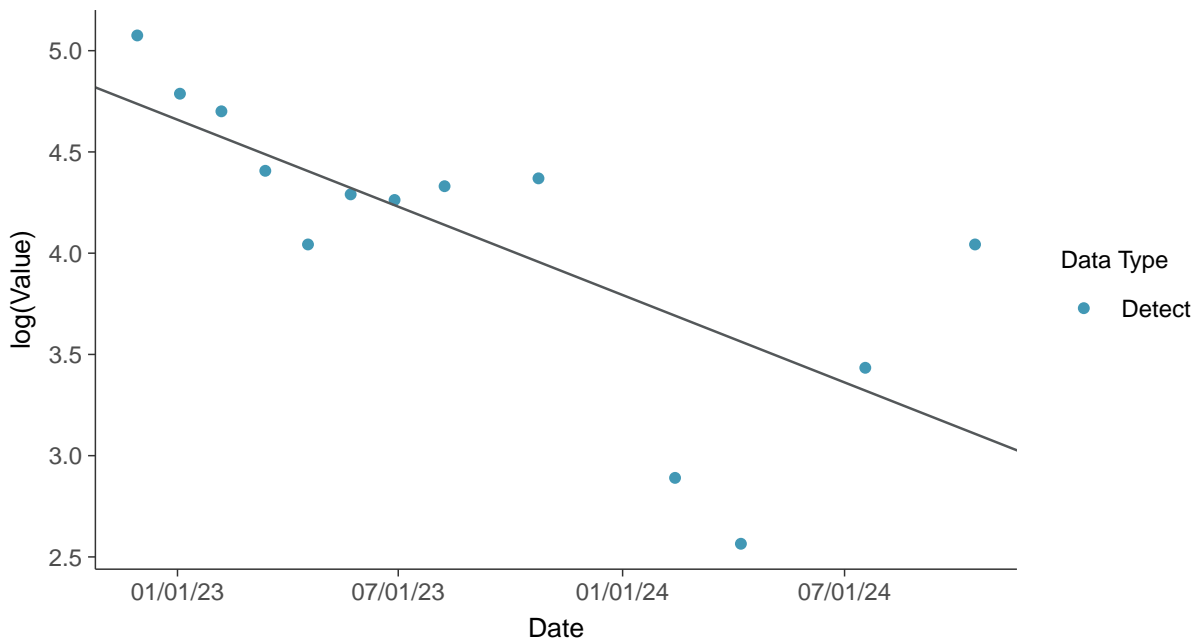
Gamma Q-Q plot

Chloride (as Cl), MW-06 (mg/L)



Trend Regression: Lognormal MLE

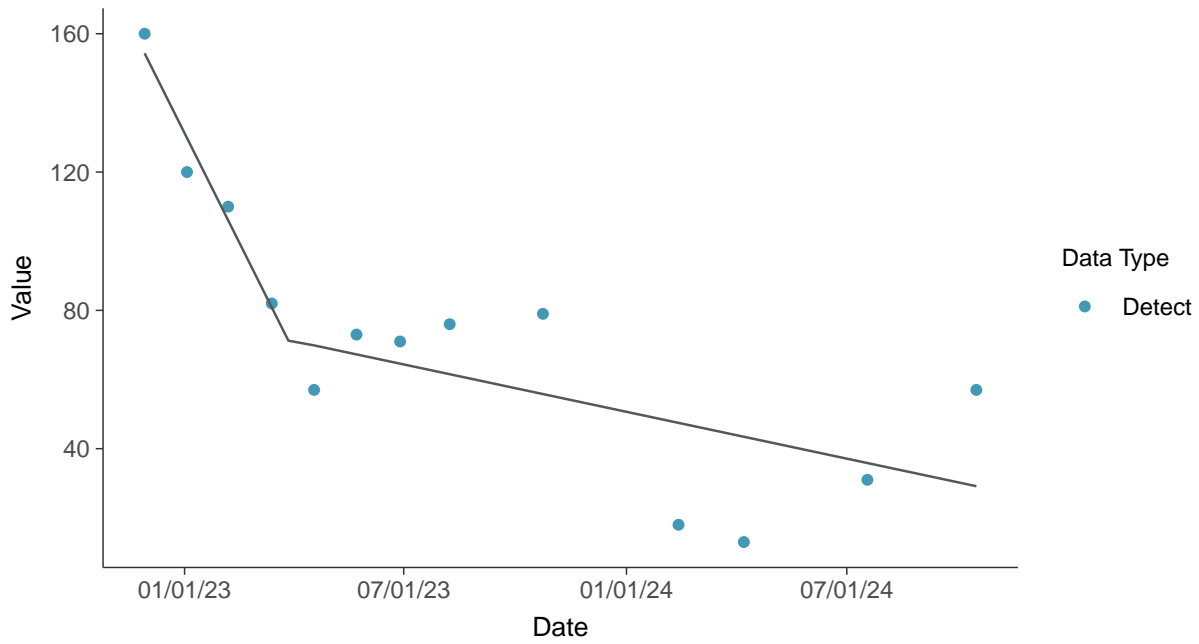
Chloride (as Cl), MW-06 (mg/L)





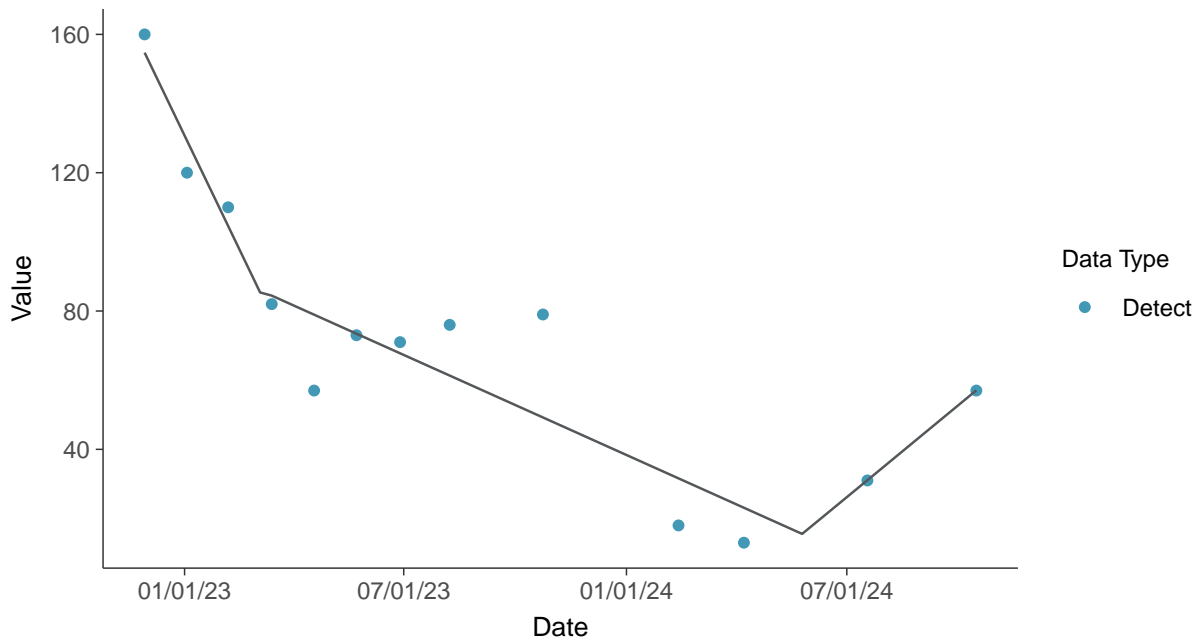
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-06 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Chloride (as Cl), MW-06 (mg/L)



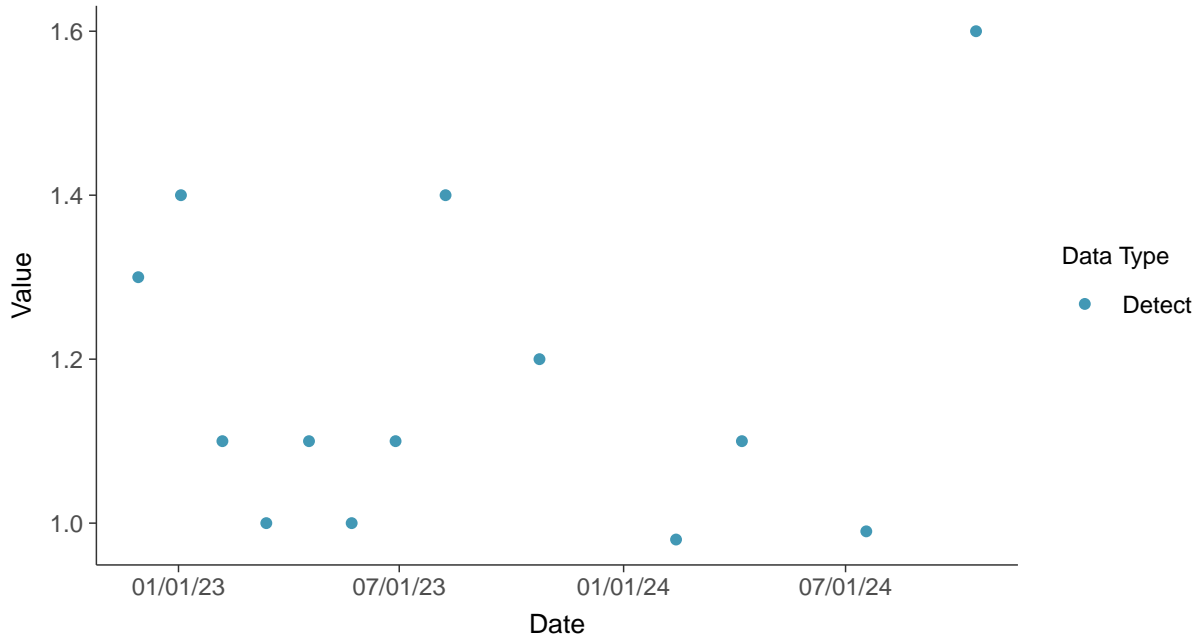


Appendix III: Fluoride, MW-06

ID: 1_16_1_4_112

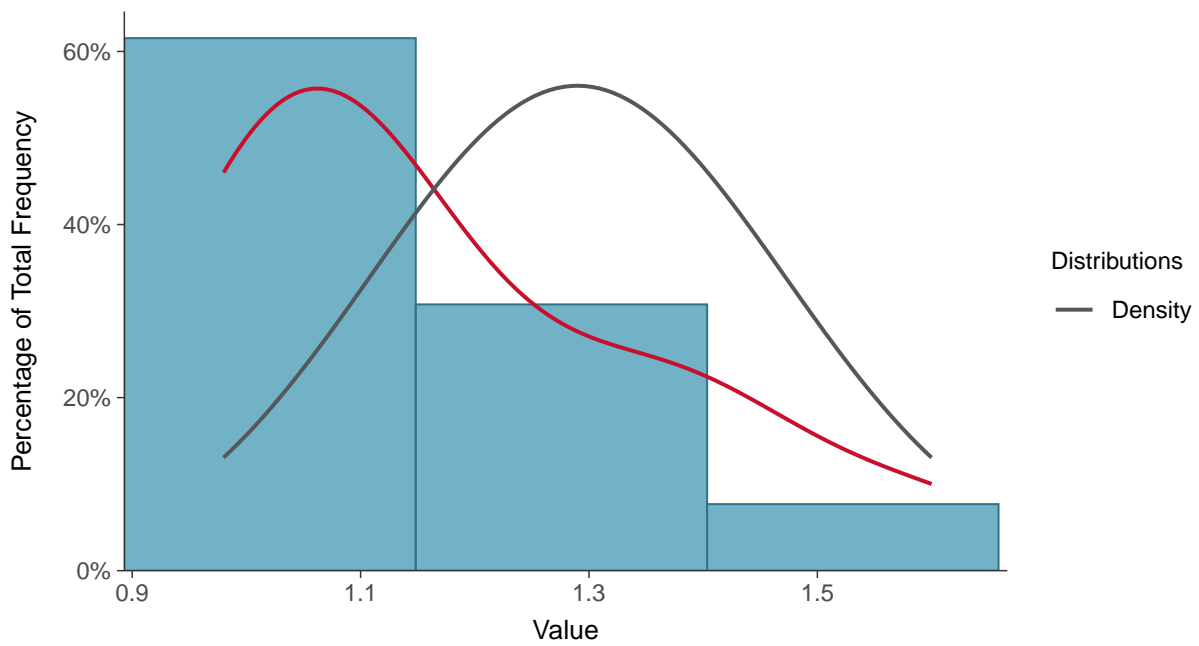
Scatter Plot

Fluoride, MW-06 (mg/L)



Histogram

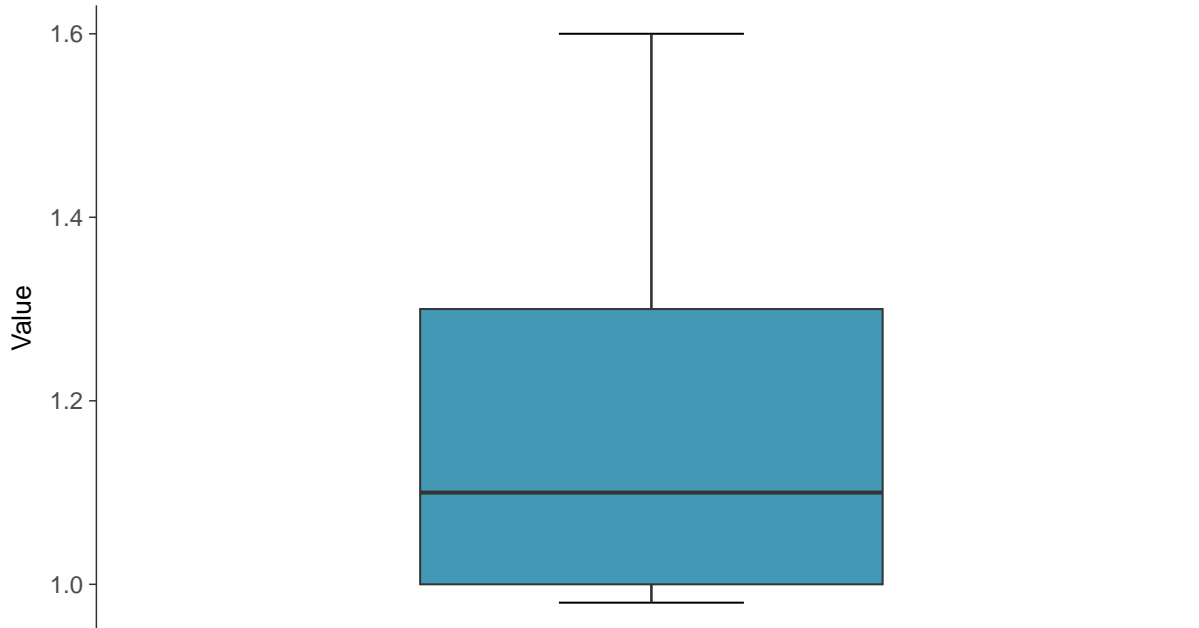
Fluoride, MW-06 (mg/L)





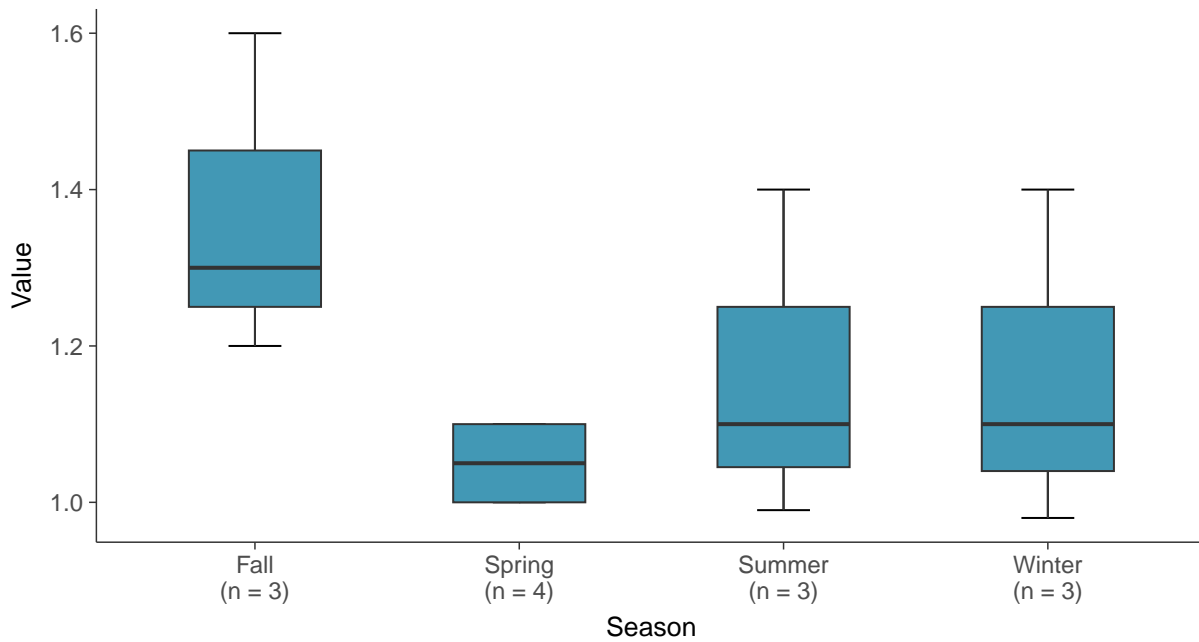
Boxplot

Fluoride, MW-06 (mg/L)



Boxplot by Season

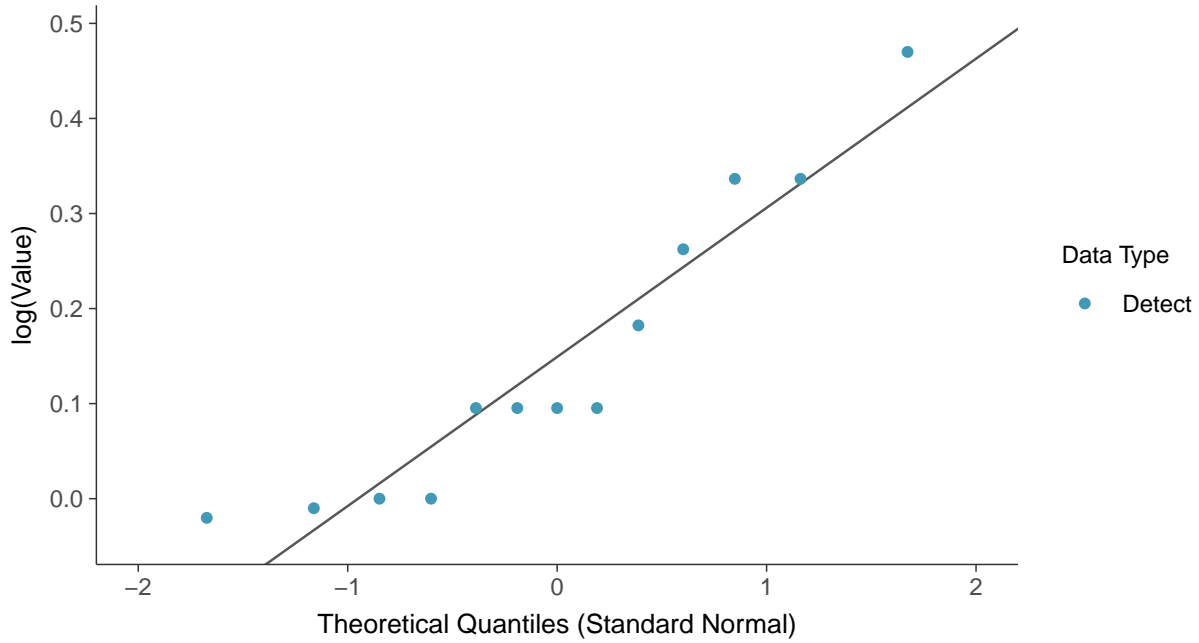
Fluoride, MW-06 (mg/L)





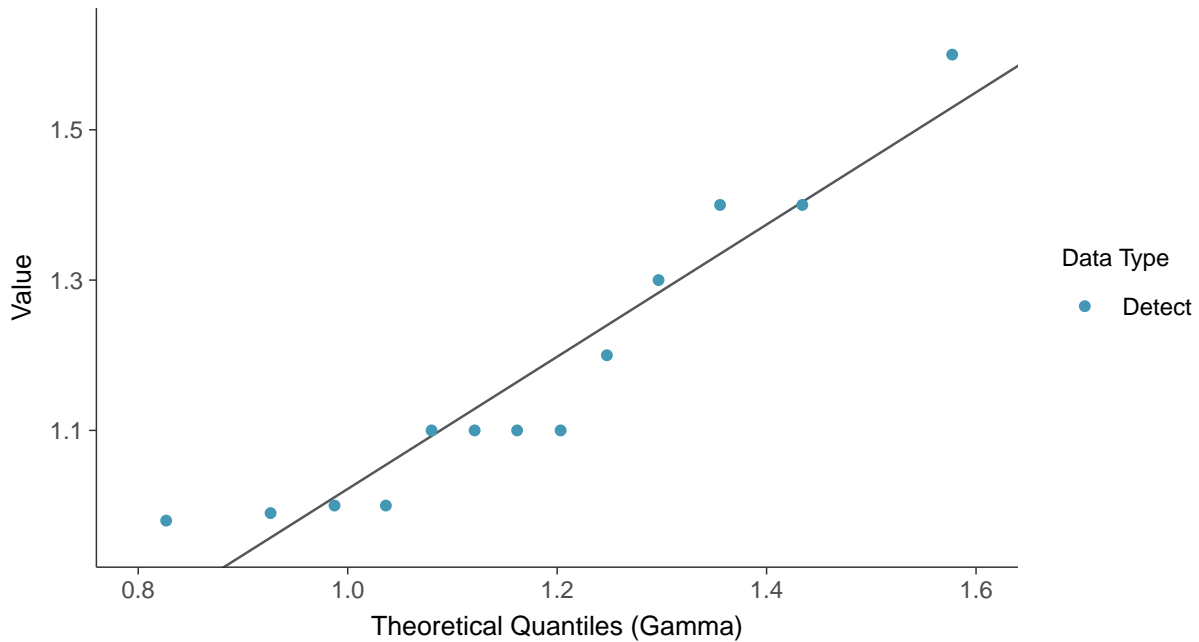
Lognormal Q-Q plot

Fluoride, MW-06 (mg/L)



Gamma Q-Q plot

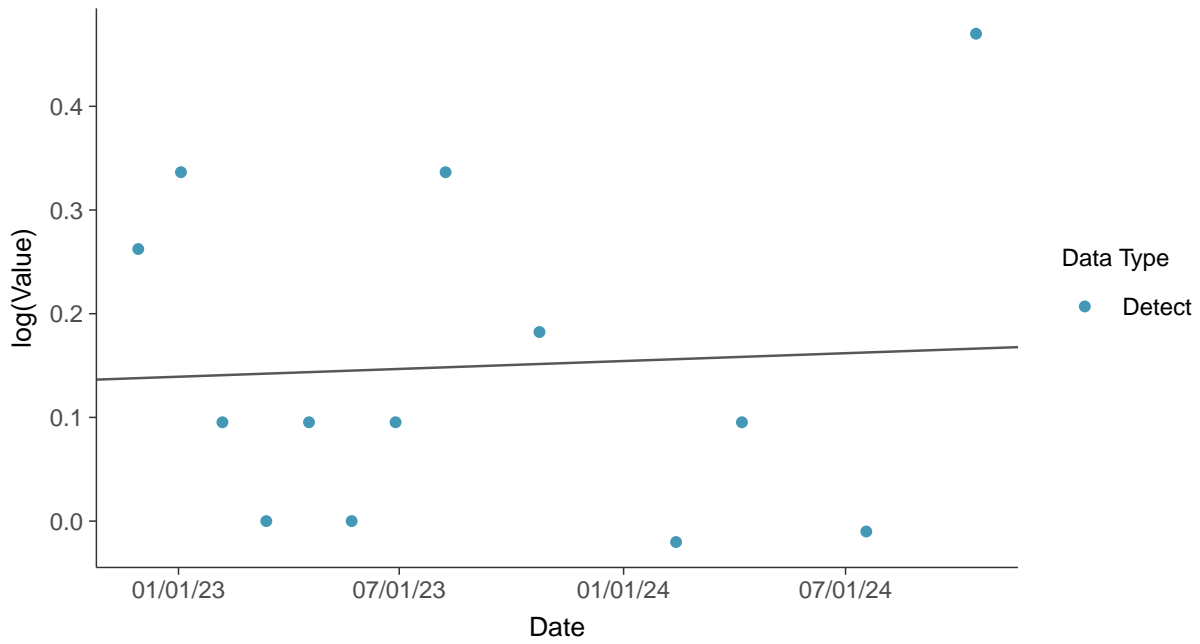
Fluoride, MW-06 (mg/L)





Trend Regression: Lognormal MLE

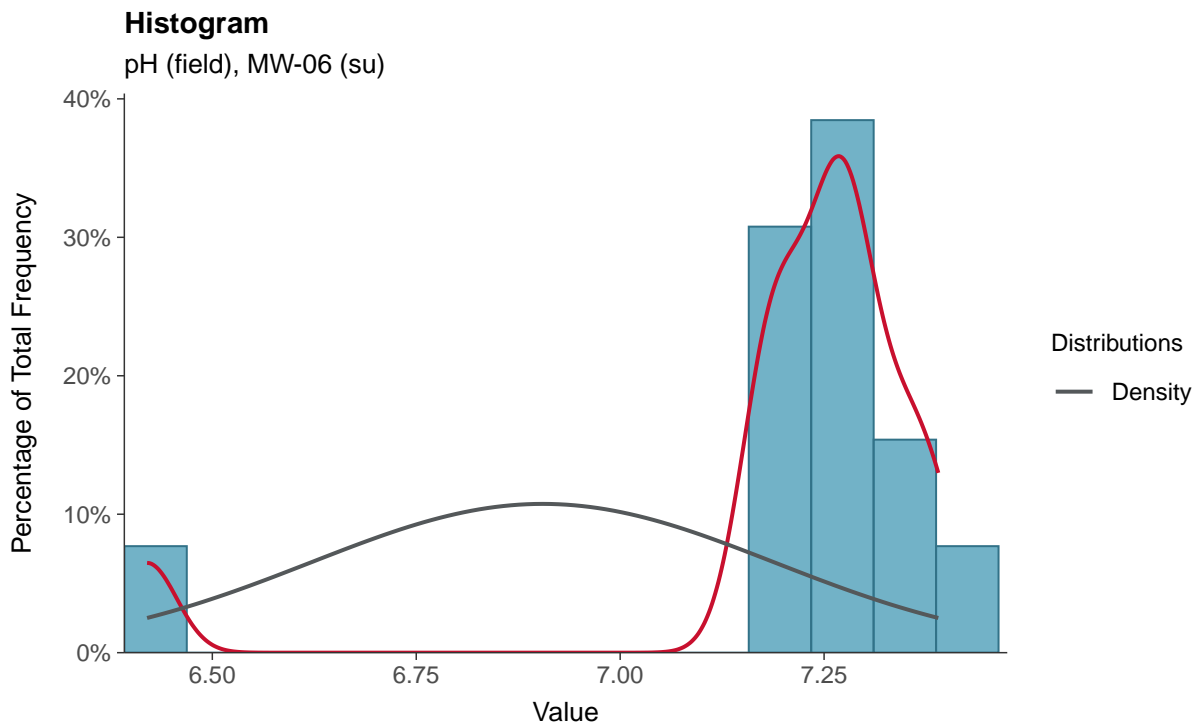
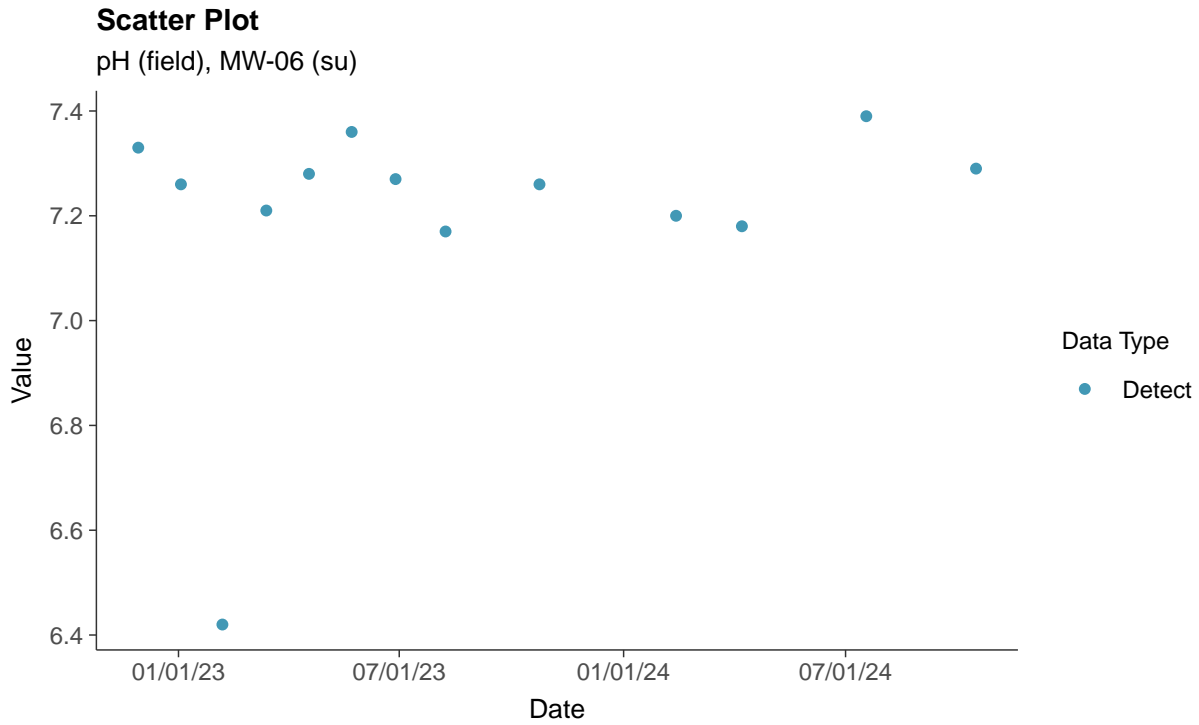
Fluoride, MW-06 (mg/L)





Appendix III: pH (field), MW-06

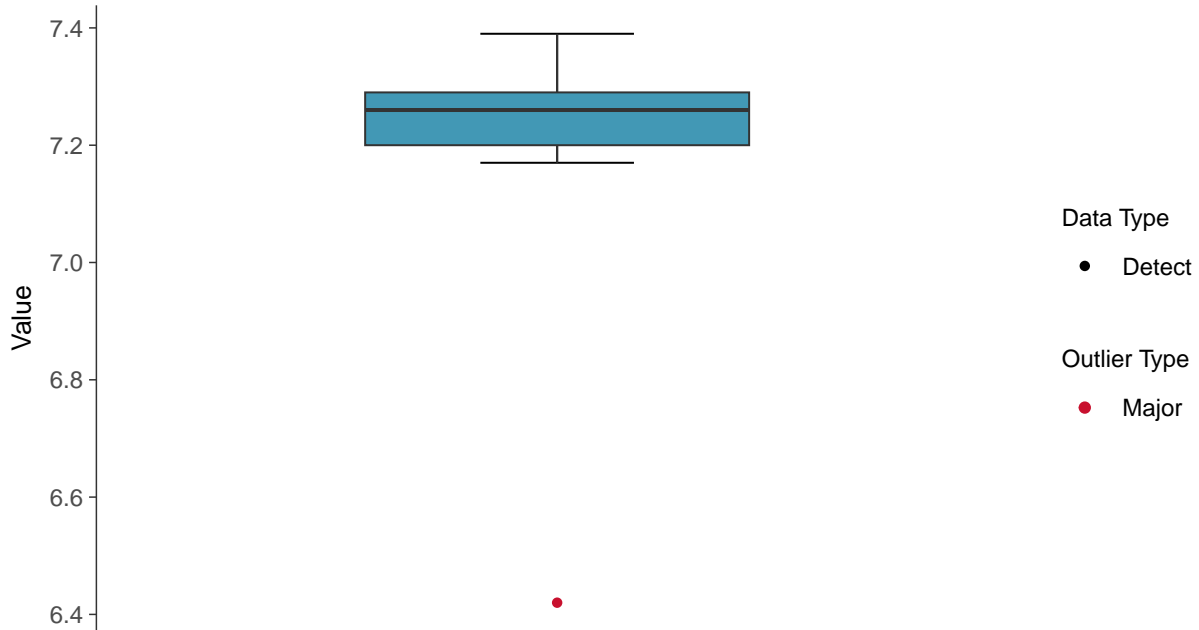
ID: 1_16_1_4_120





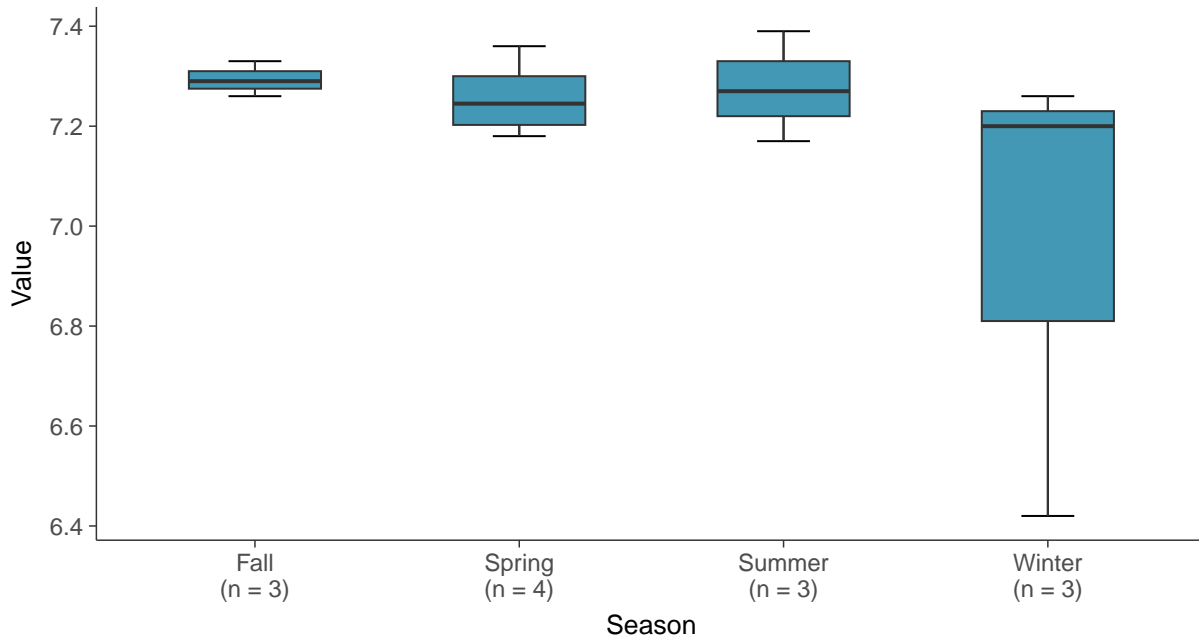
Boxplot

pH (field), MW-06 (su)



Boxplot by Season

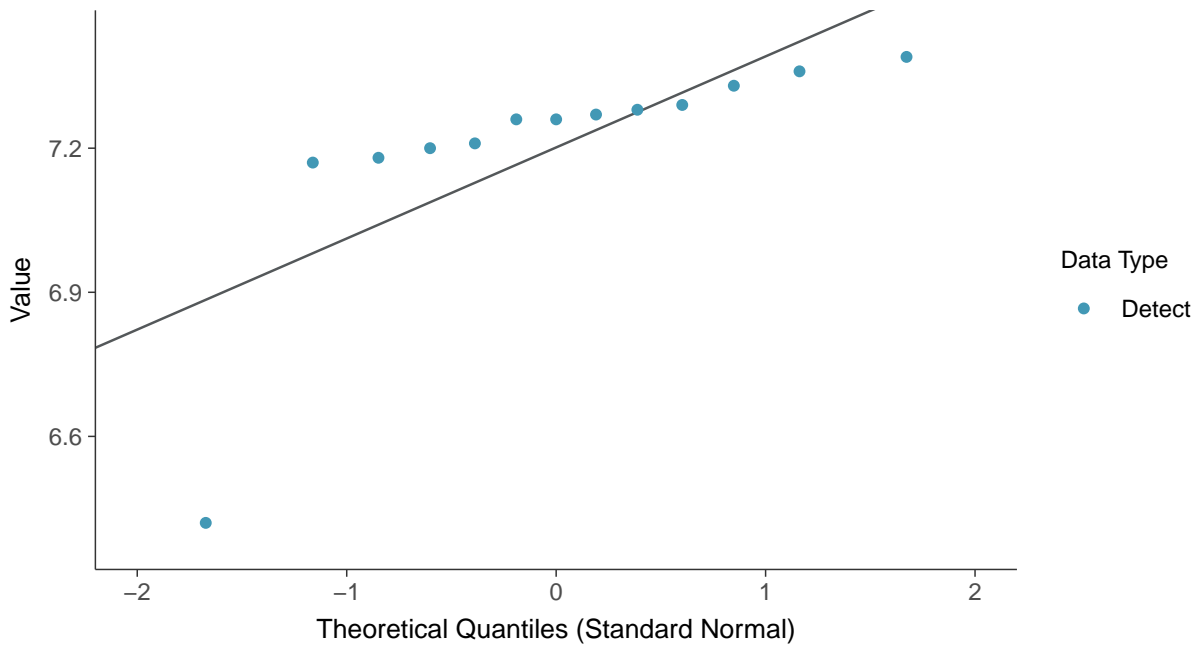
pH (field), MW-06 (su)





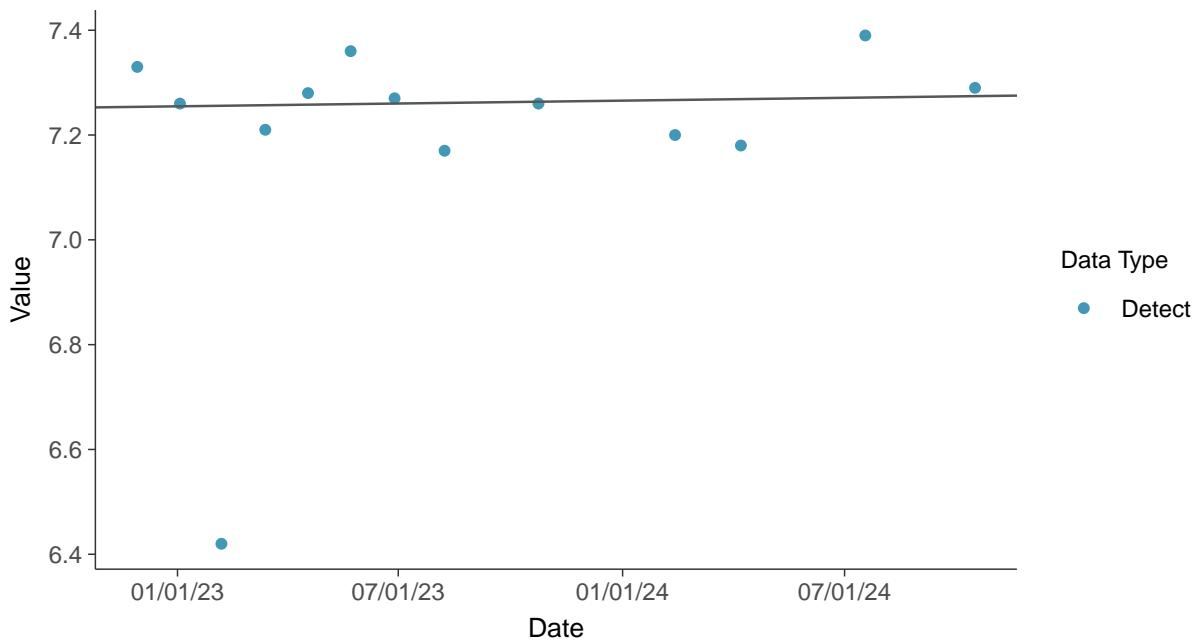
Normal Q-Q plot

pH (field), MW-06 (su)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

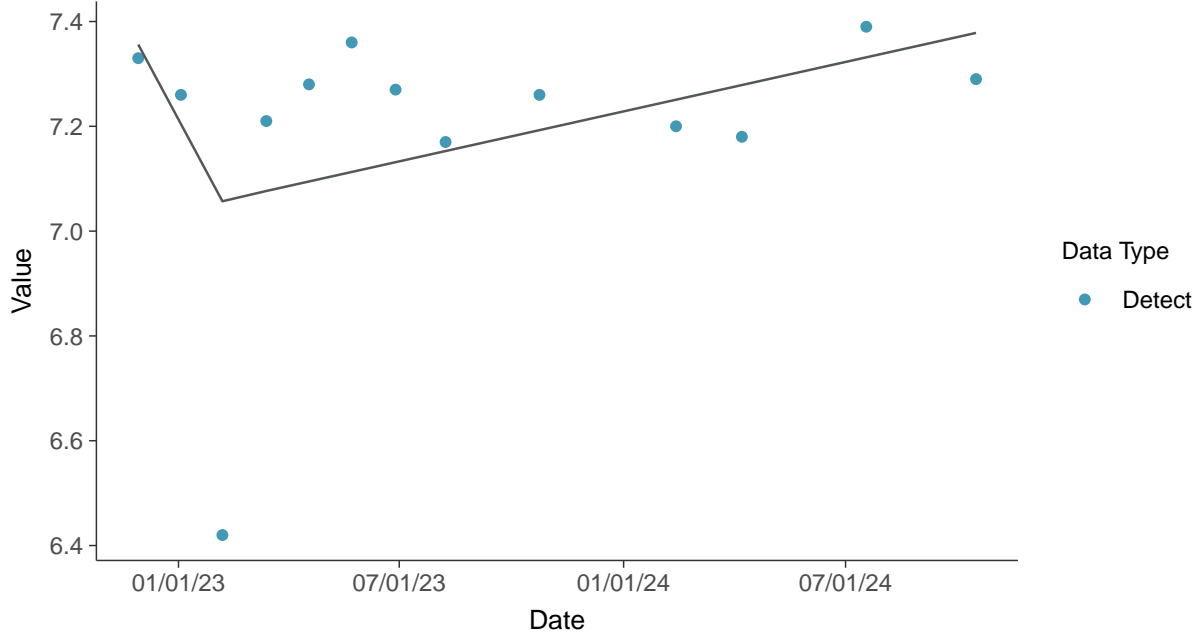
pH (field), MW-06 (su)





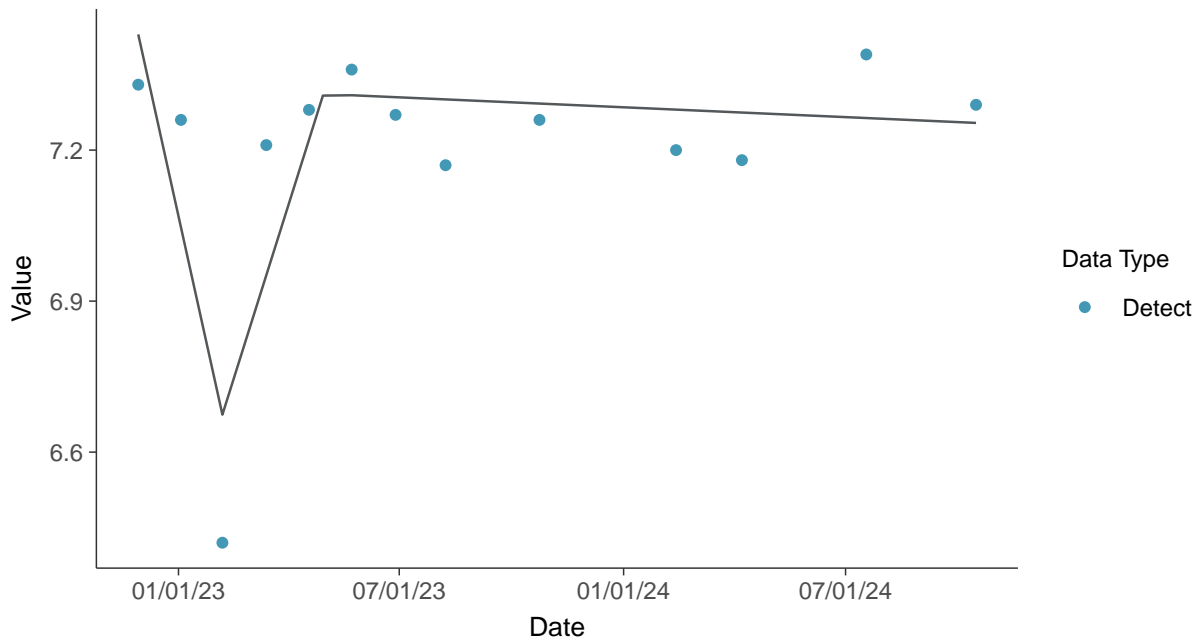
Trend Regression: Piecewise Linear-Linear

pH (field), MW-06 (su)



Trend Regression: Piecewise Linear-Linear-Linear

pH (field), MW-06 (su)



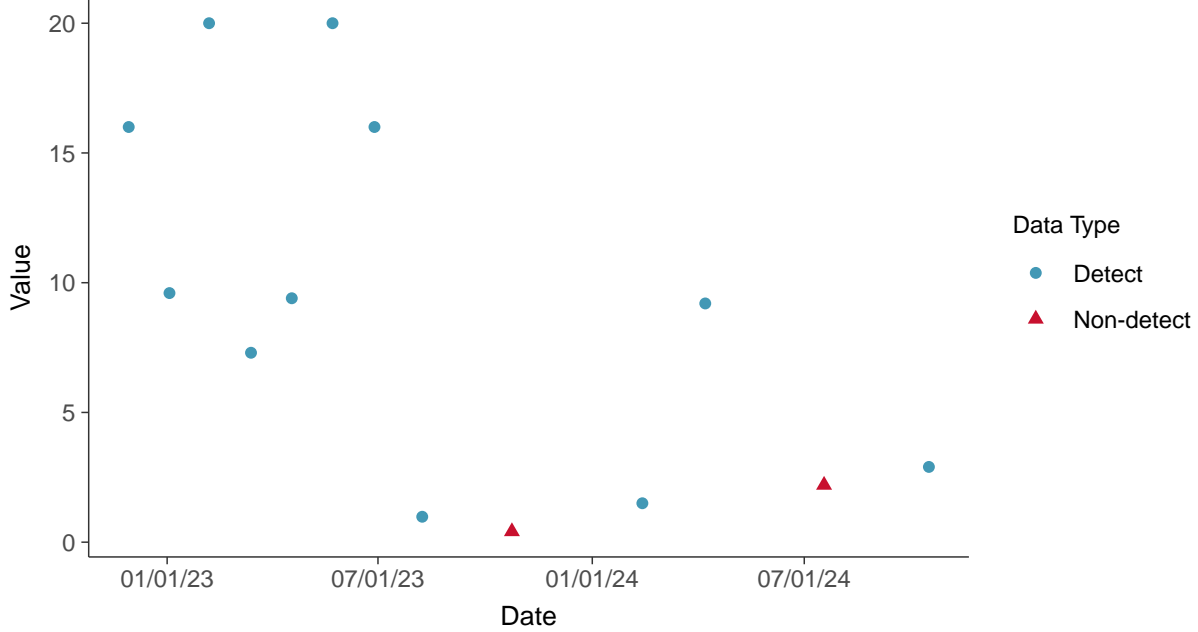


Appendix III: Sulfate (as SO₄), MW-06

ID: 1_16_1_4_124

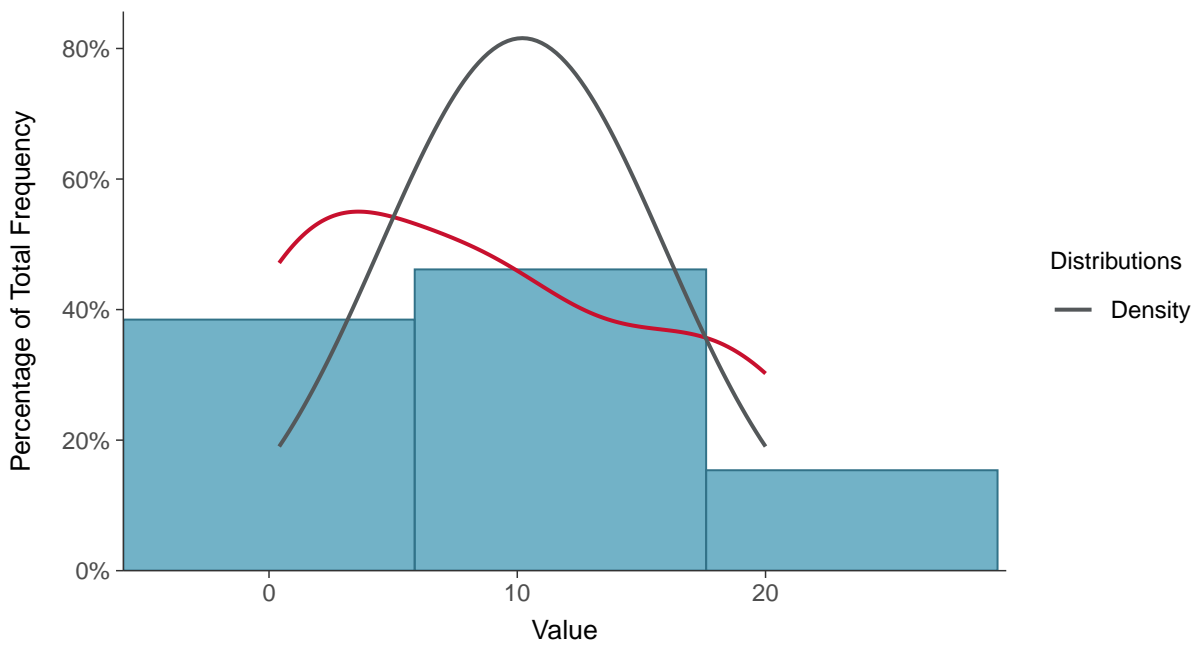
Scatter Plot

Sulfate (as SO₄), MW-06 (mg/L)



Histogram

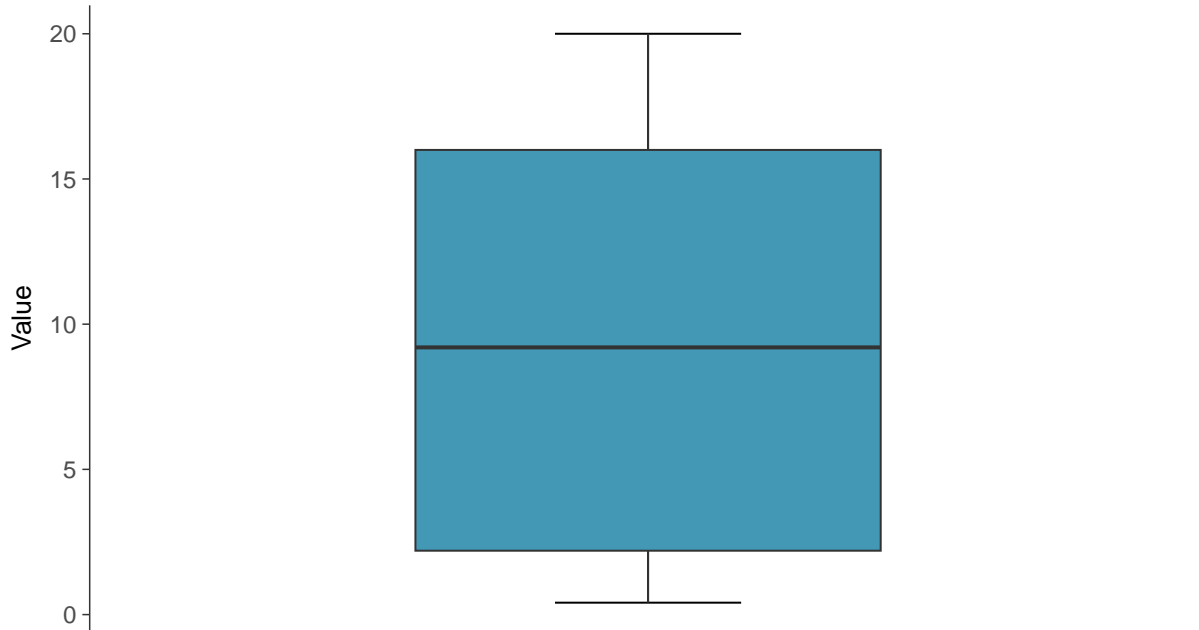
Sulfate (as SO₄), MW-06 (mg/L)





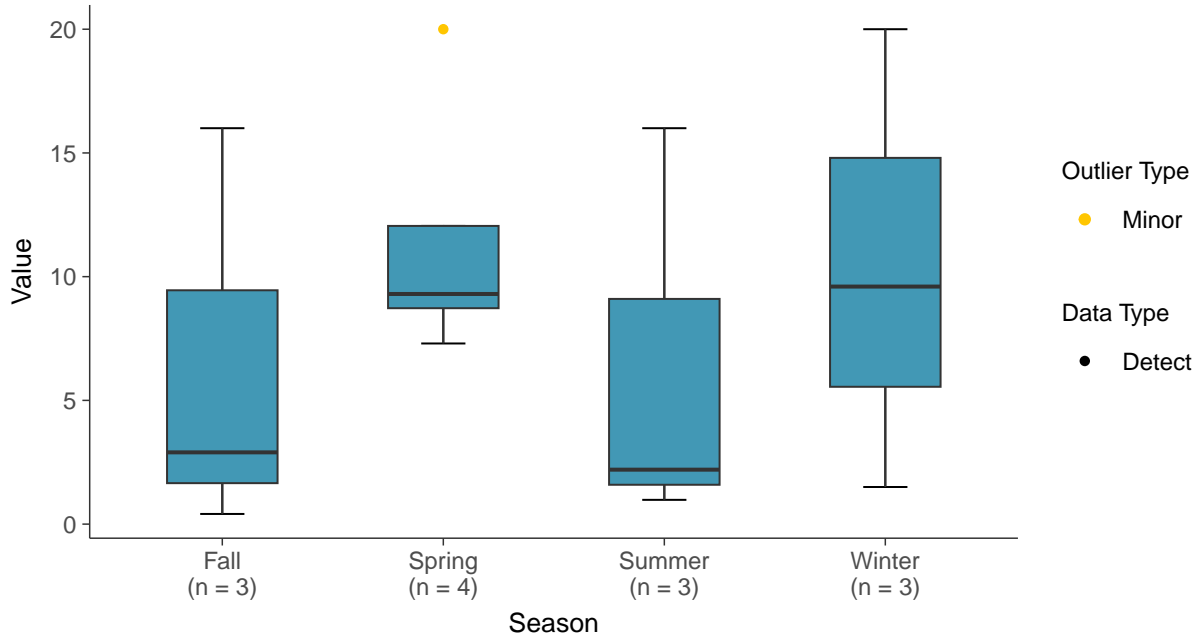
Boxplot

Sulfate (as SO₄), MW-06 (mg/L)



Boxplot by Season

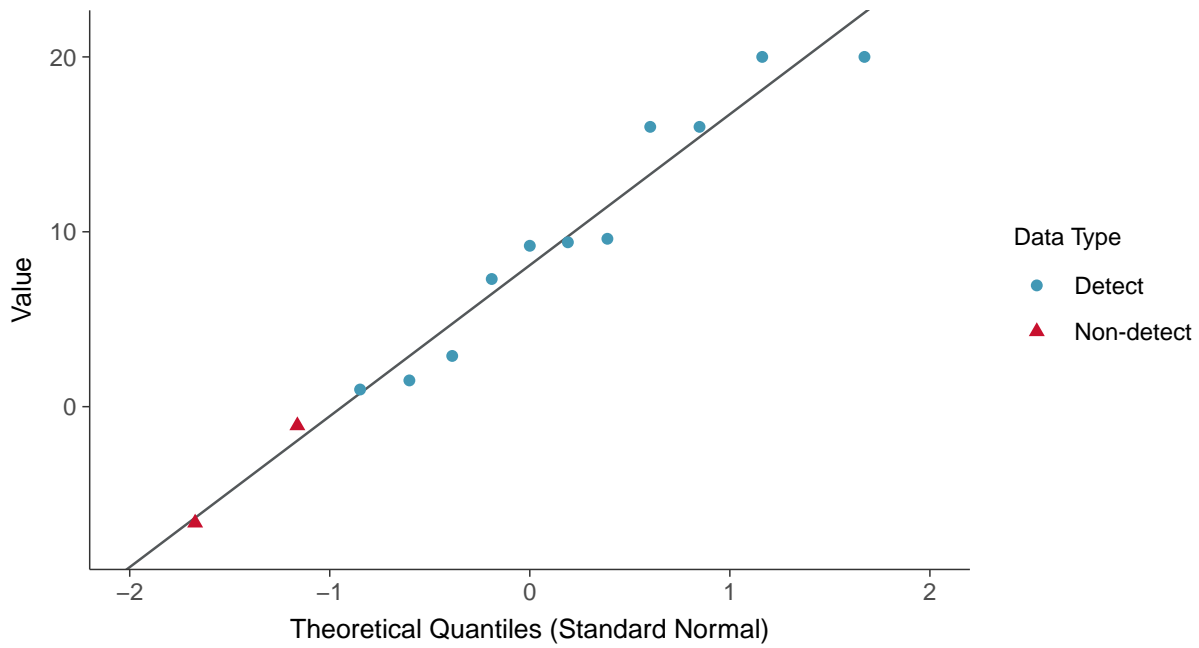
Sulfate (as SO₄), MW-06 (mg/L)





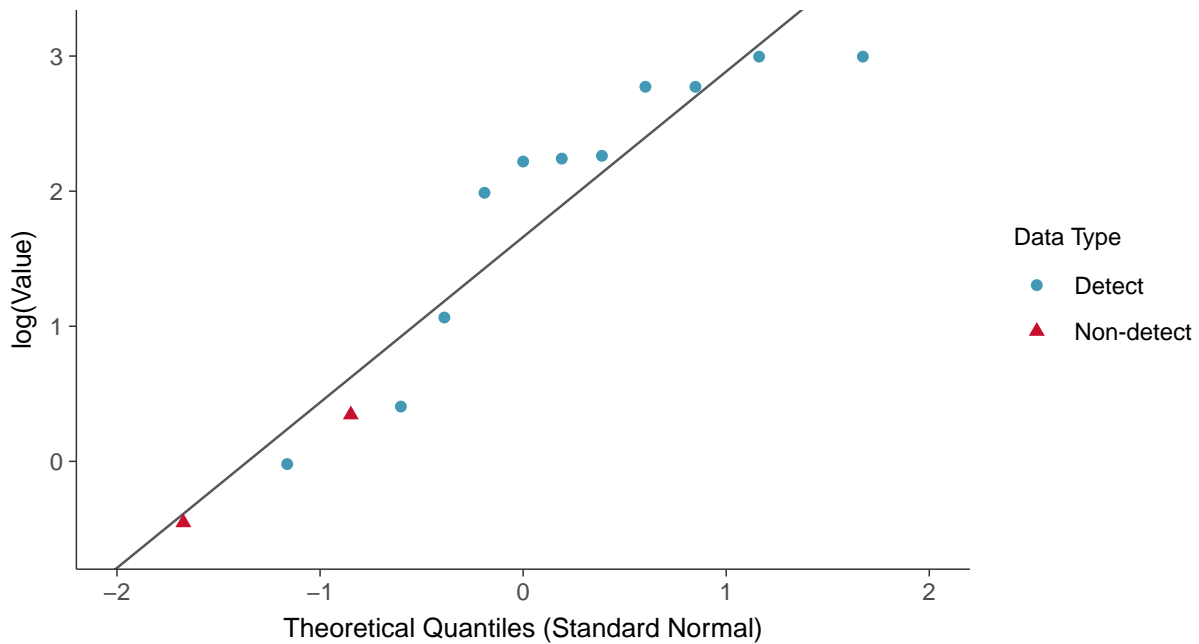
Normal Q-Q plot using ROS Imputed Estimates

Sulfate (as SO₄), MW-06 (mg/L)



Lognormal Q-Q plot using ROS Imputed Estimates

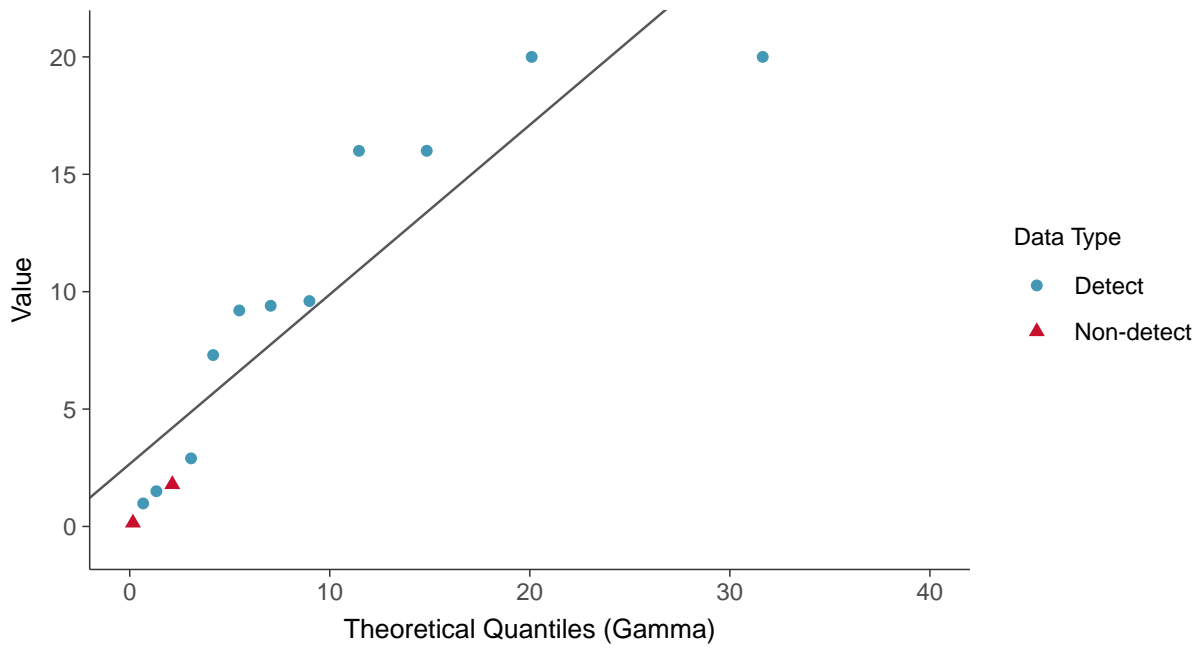
Sulfate (as SO₄), MW-06 (mg/L)





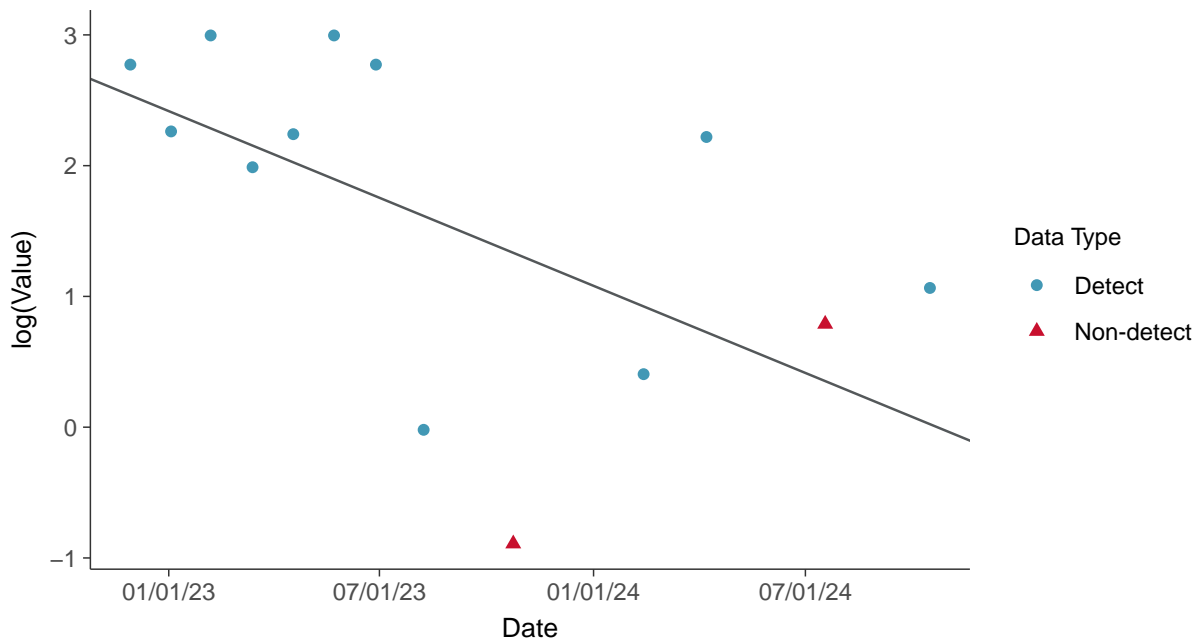
Gamma Q-Q plot using ROS Imputed Estimates

Sulfate (as SO₄), MW-06 (mg/L)



Trend Regression: Lognormal MLE

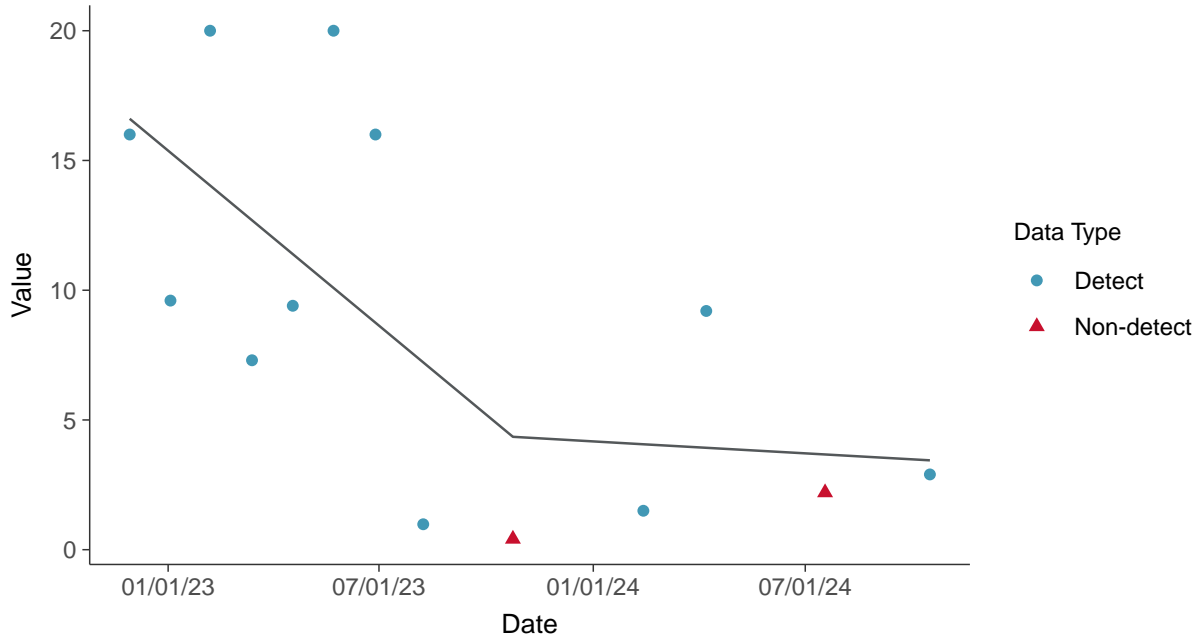
Sulfate (as SO₄), MW-06 (mg/L)





Trend Regression: Piecewise Linear-Linear

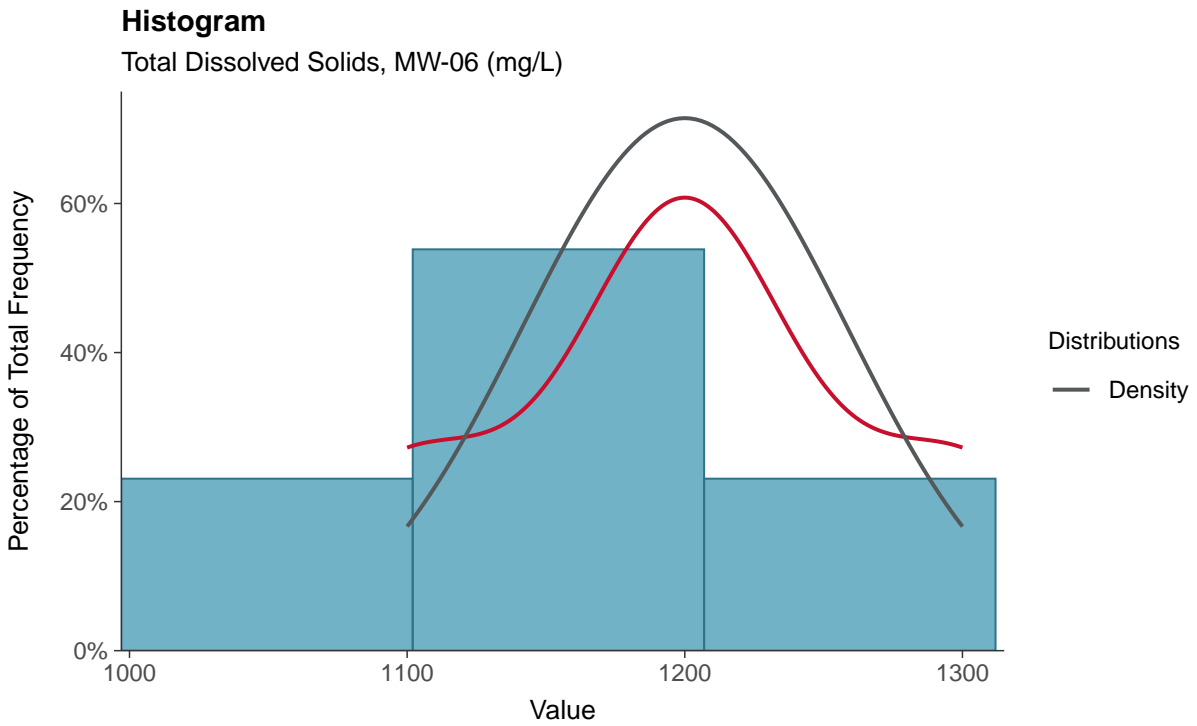
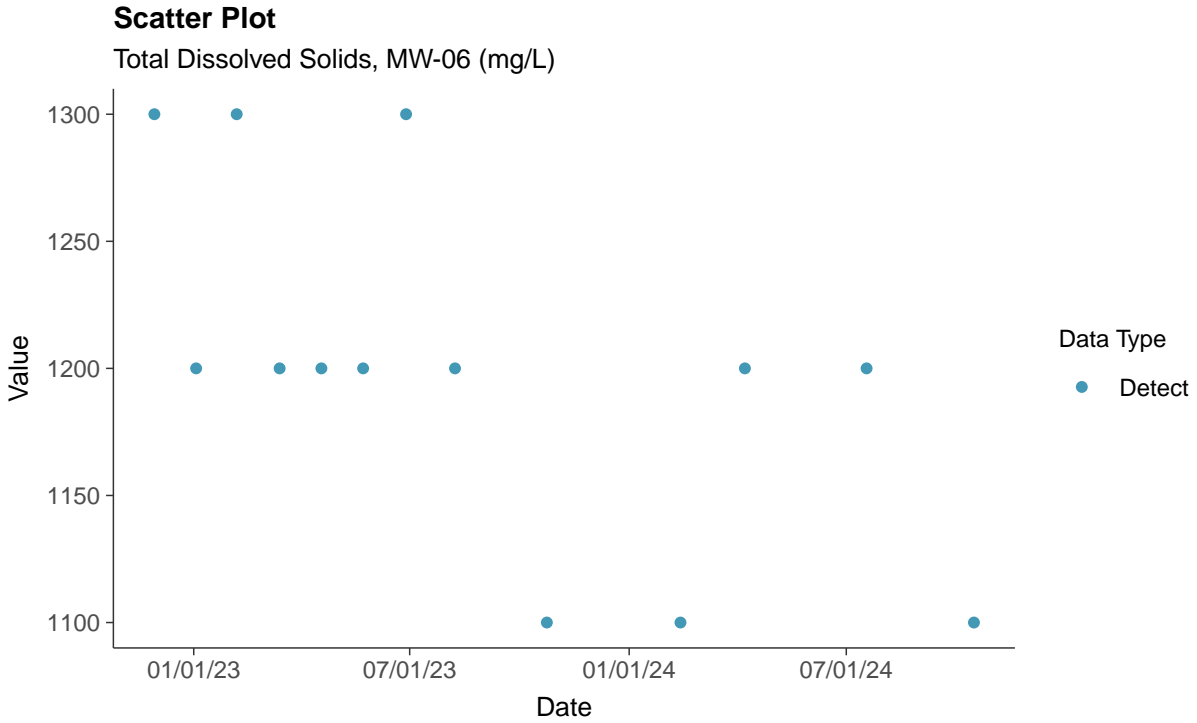
Sulfate (as SO₄), MW-06 (mg/L)





Appendix III: Total Dissolved Solids, MW-06

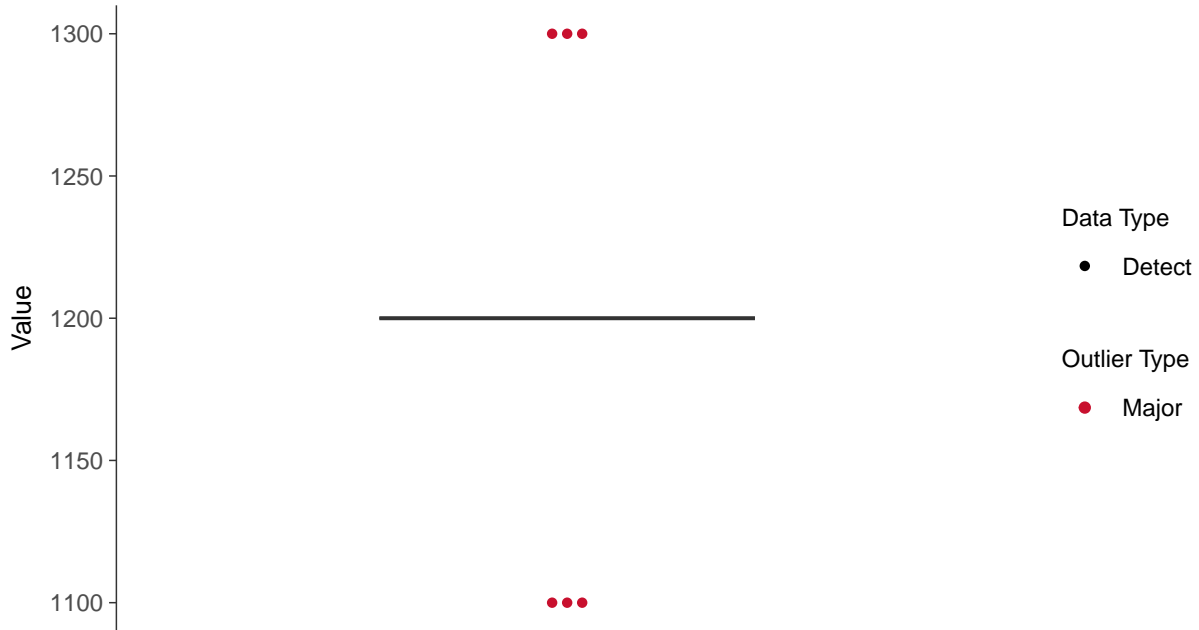
ID: 1_16_1_4_126





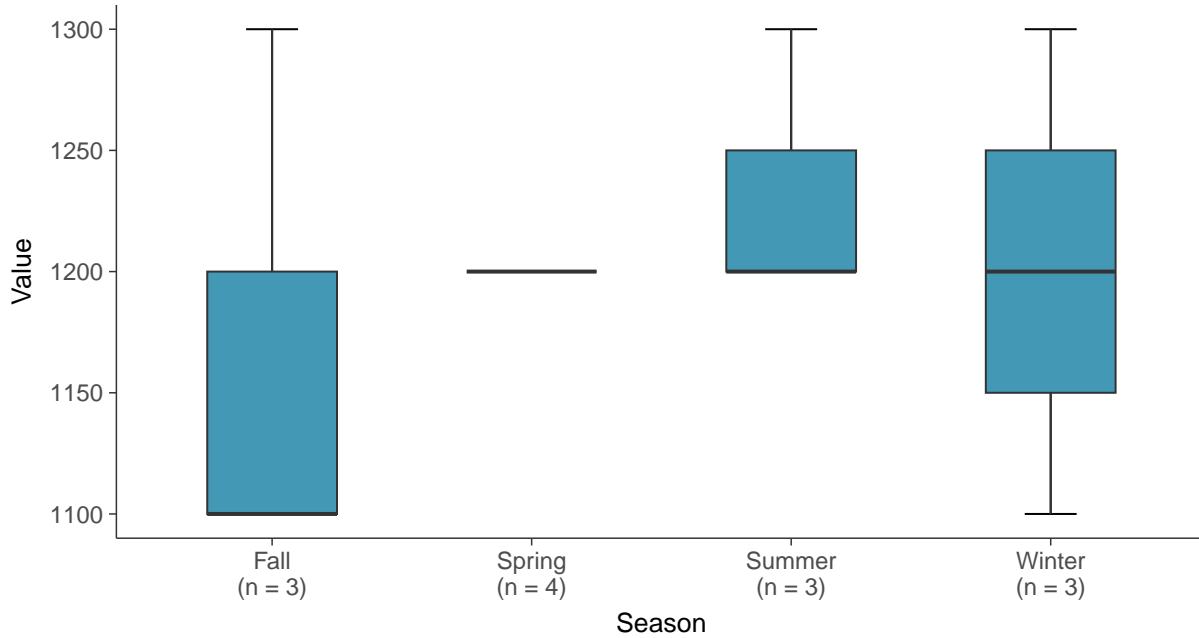
Boxplot

Total Dissolved Solids, MW-06 (mg/L)



Boxplot by Season

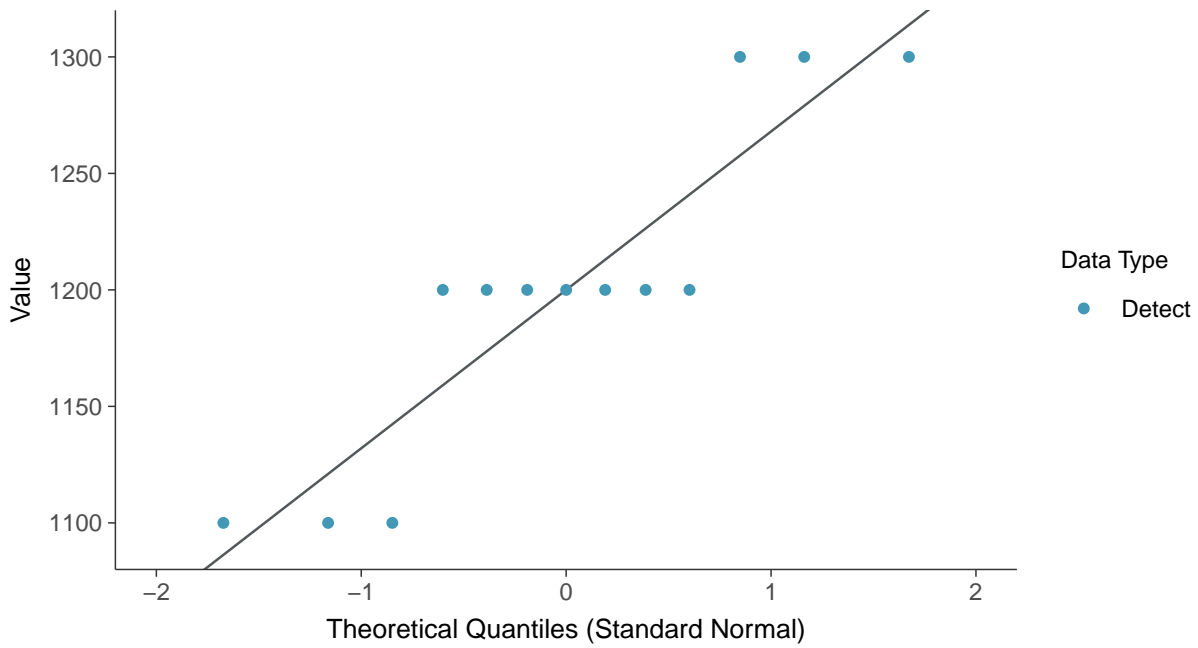
Total Dissolved Solids, MW-06 (mg/L)





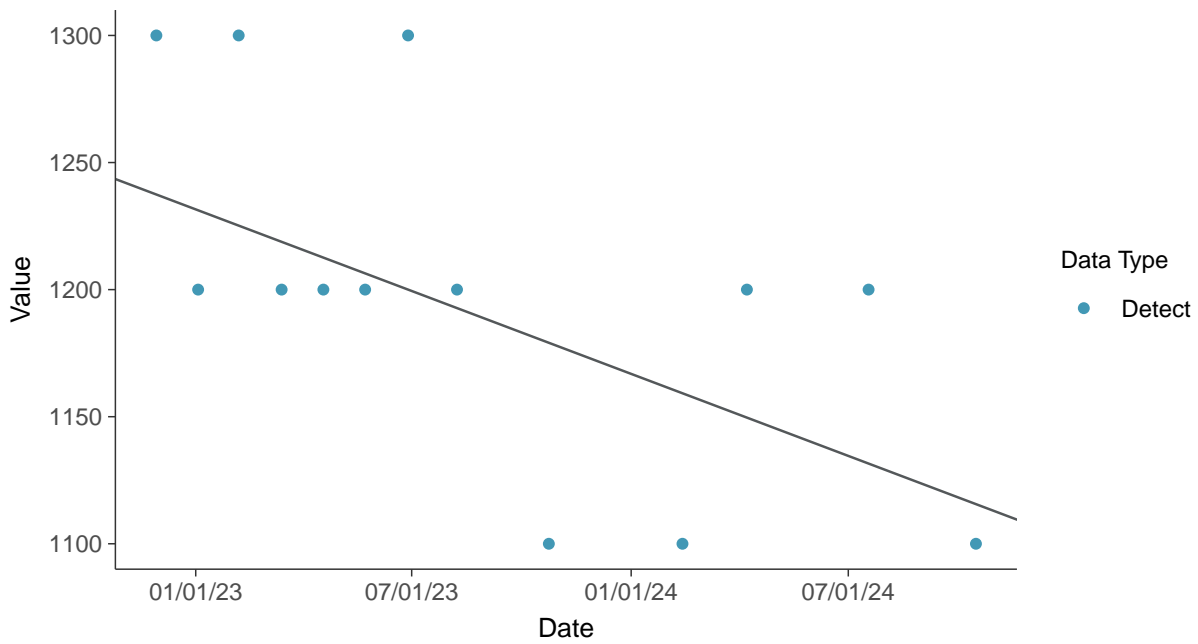
Normal Q-Q plot

Total Dissolved Solids, MW-06 (mg/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

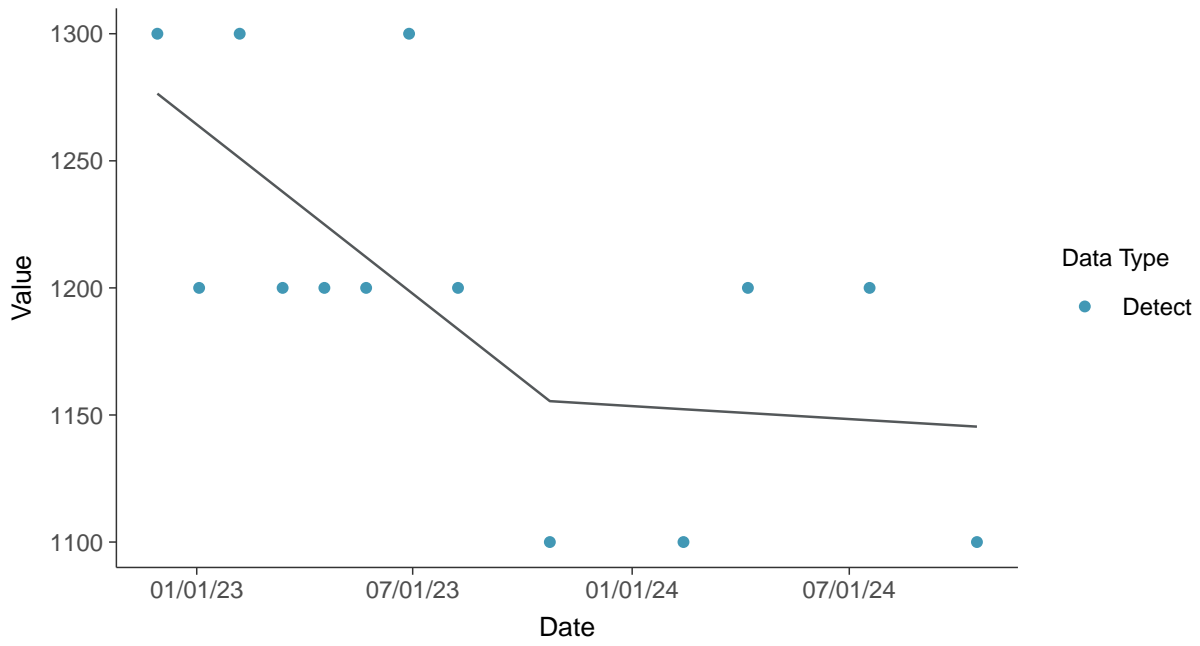
Total Dissolved Solids, MW-06 (mg/L)





Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-06 (mg/L)



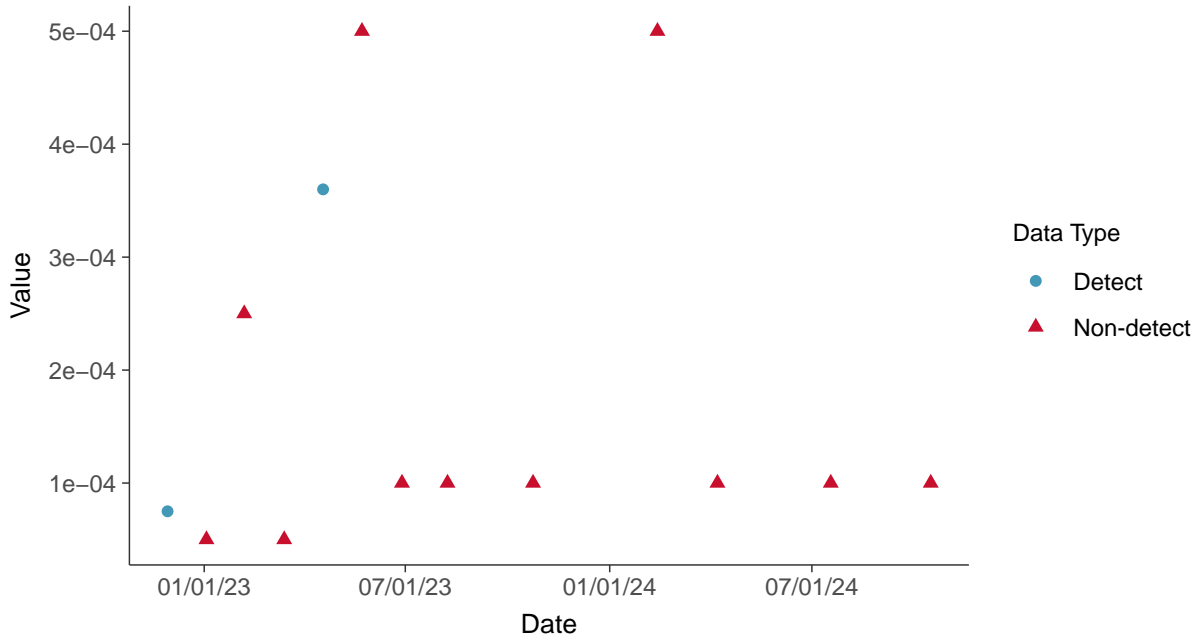


Appendix IV: Antimony, MW-06

ID: 1_16_1_5_101

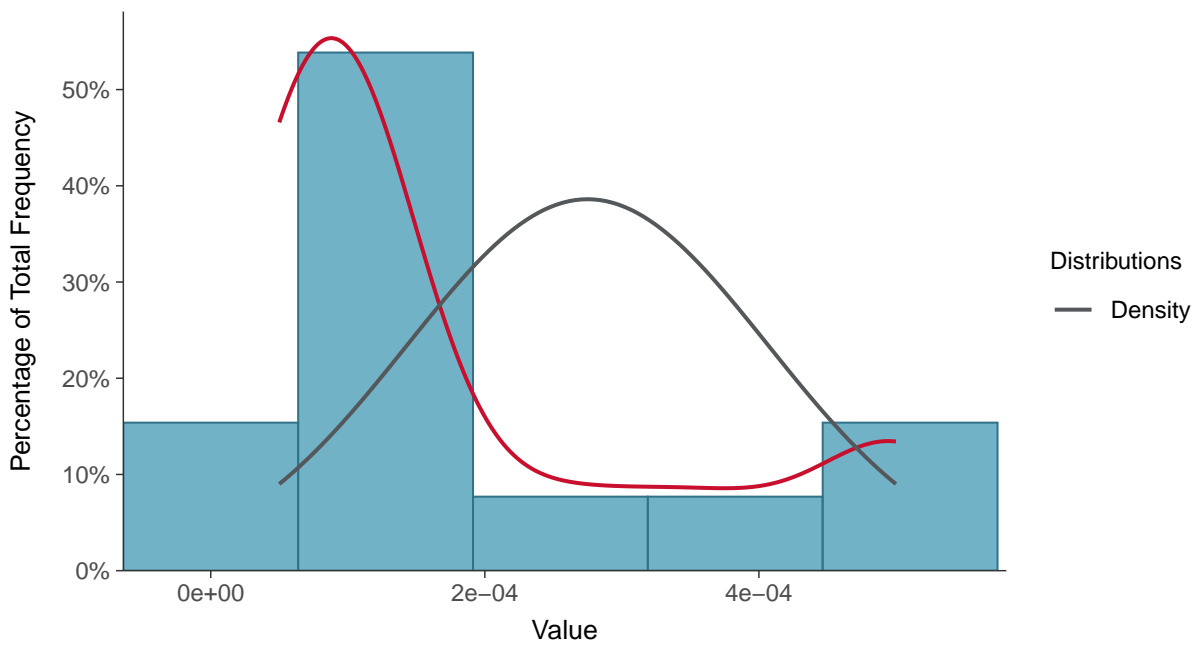
Scatter Plot

Antimony, MW-06 (mg/L)



Histogram

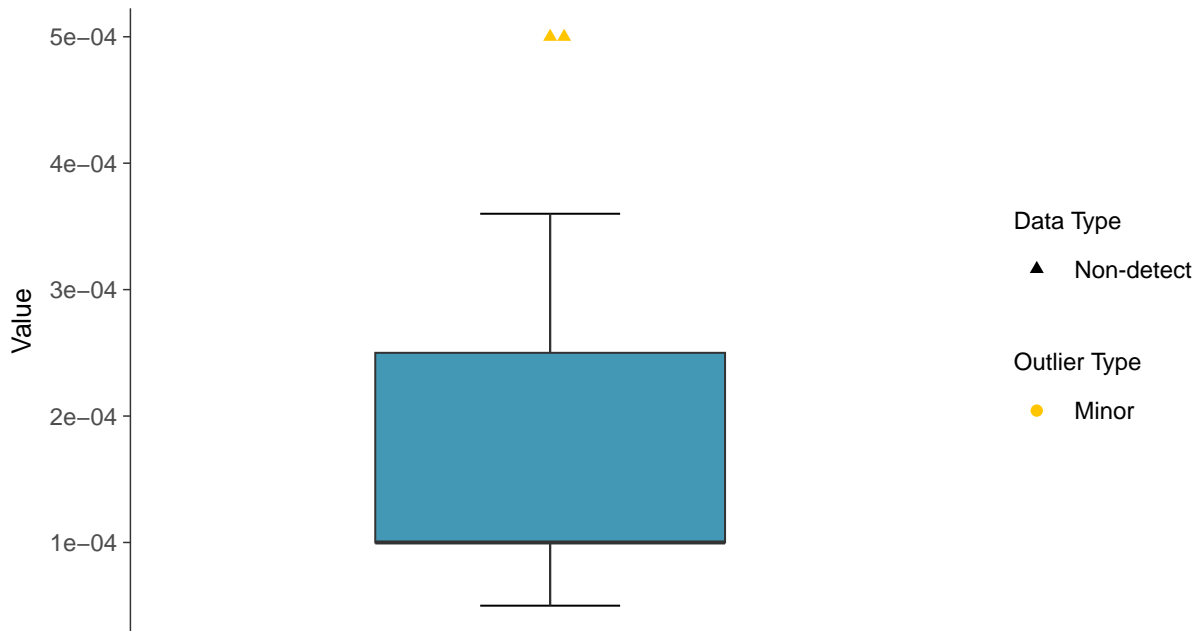
Antimony, MW-06 (mg/L)





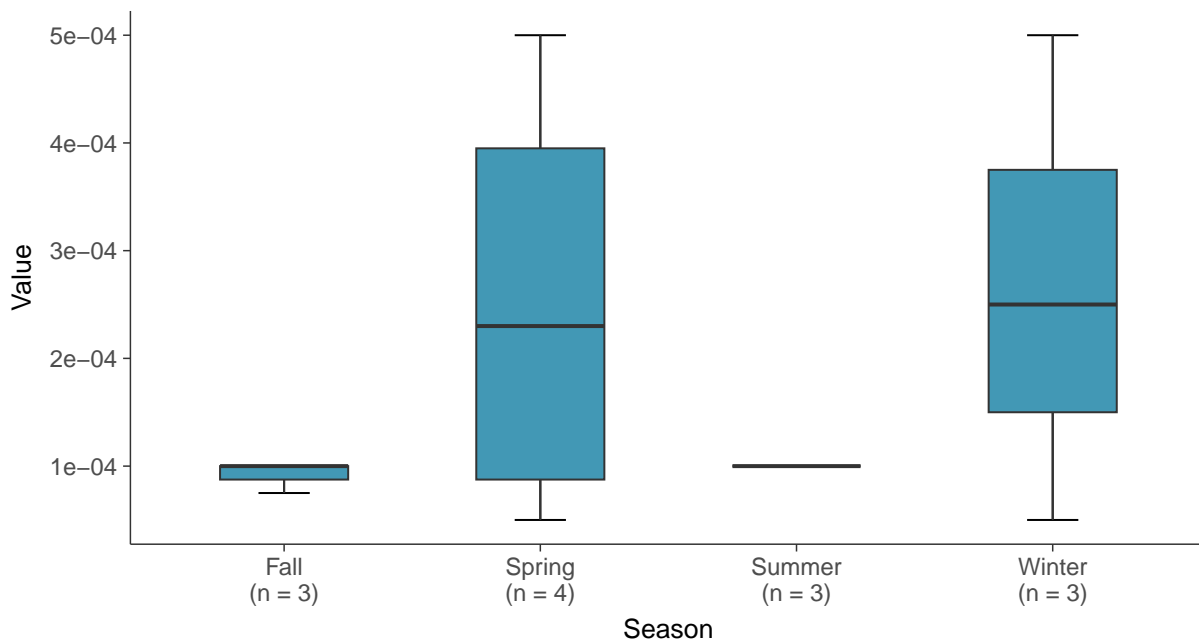
Boxplot

Antimony, MW-06 (mg/L)



Boxplot by Season

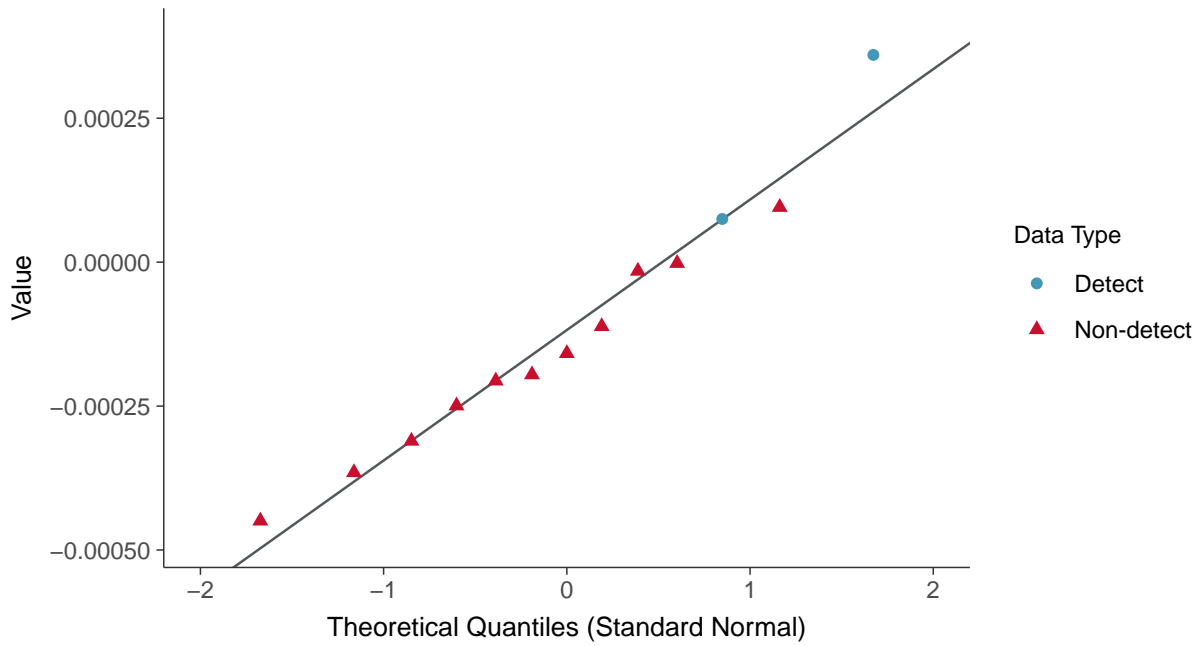
Antimony, MW-06 (mg/L)





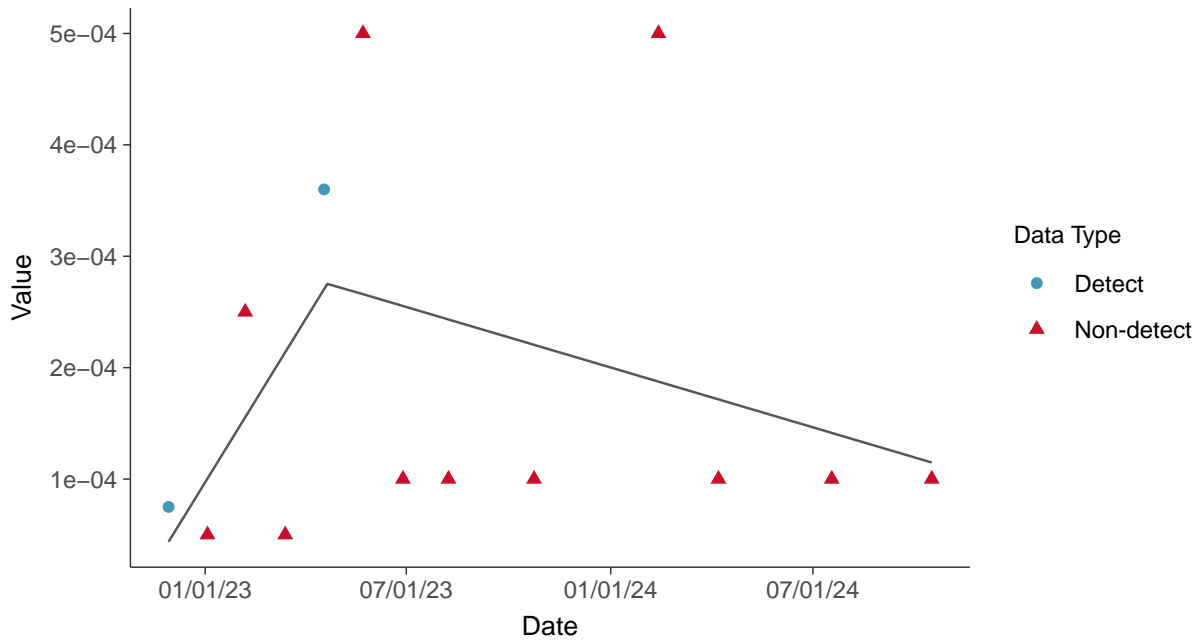
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-06 (mg/L)



Trend Regression: Piecewise Linear-Linear

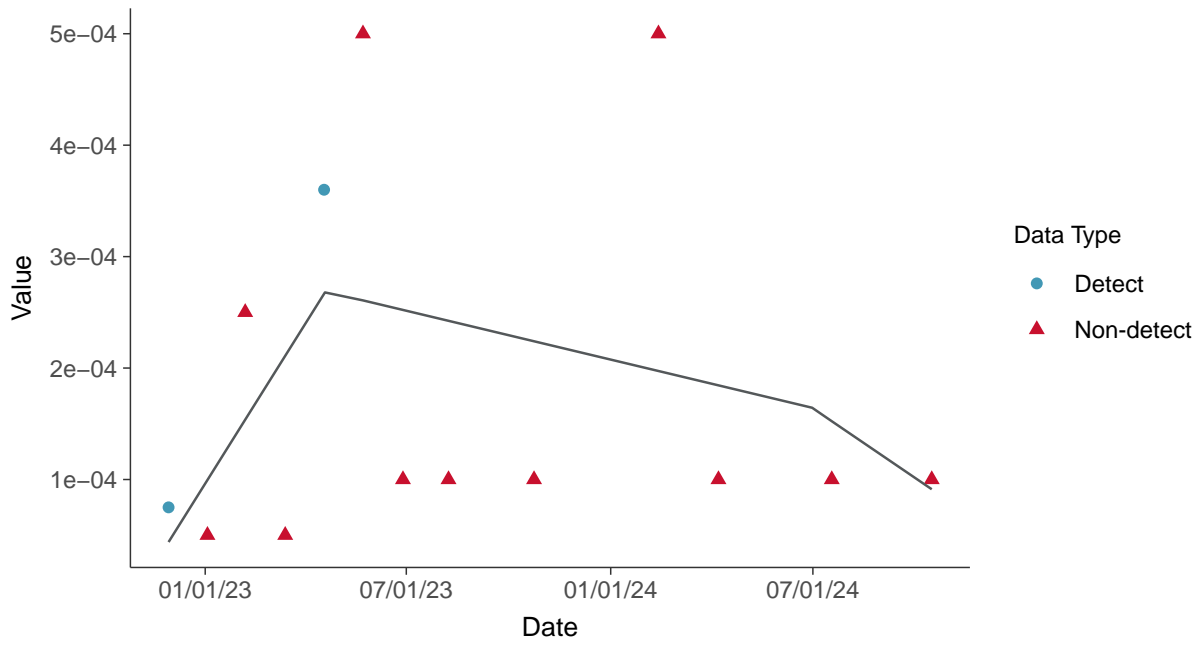
Antimony, MW-06 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

Antimony, MW-06 (mg/L)



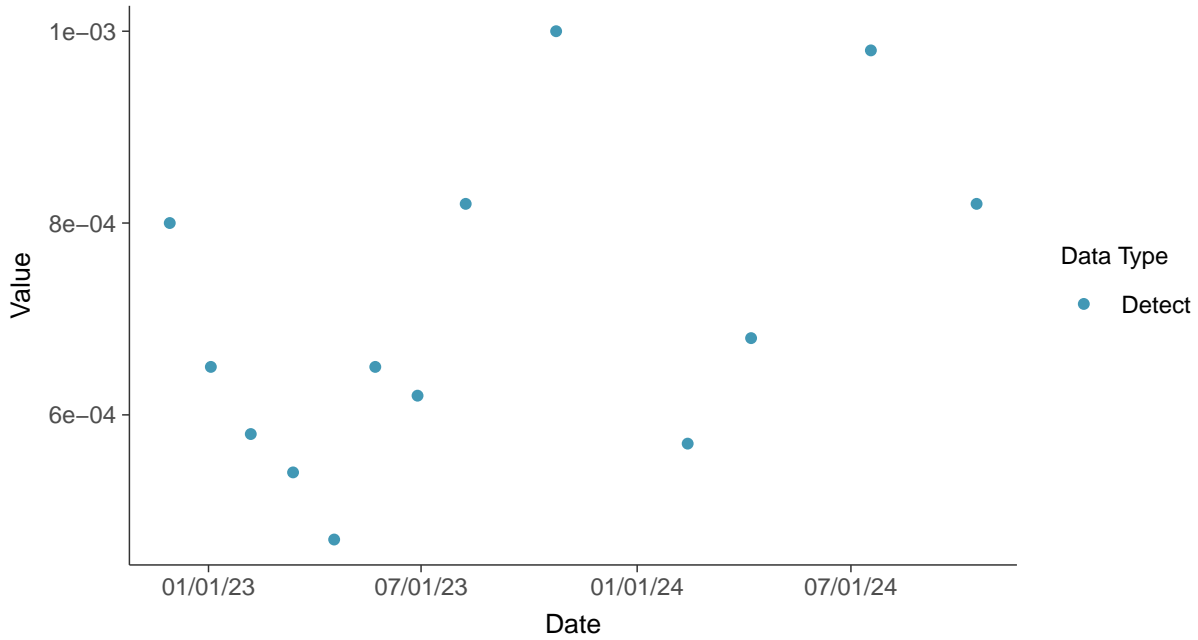


Appendix IV: Arsenic, MW-06

ID: 1_16_1_5_102

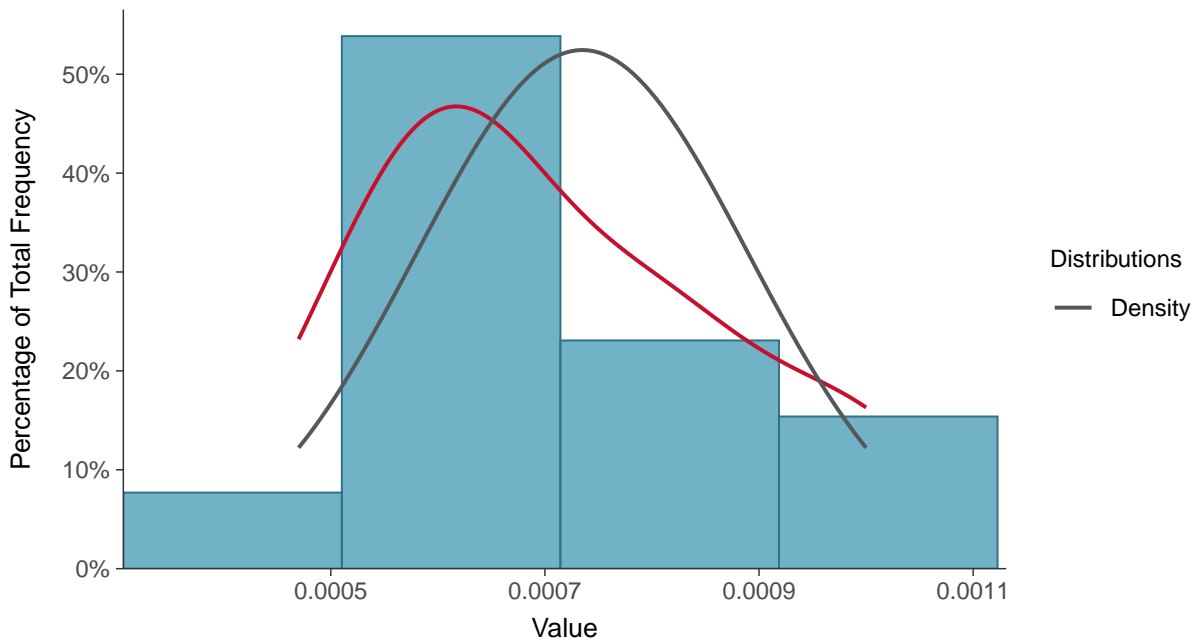
Scatter Plot

Arsenic, MW-06 (mg/L)



Histogram

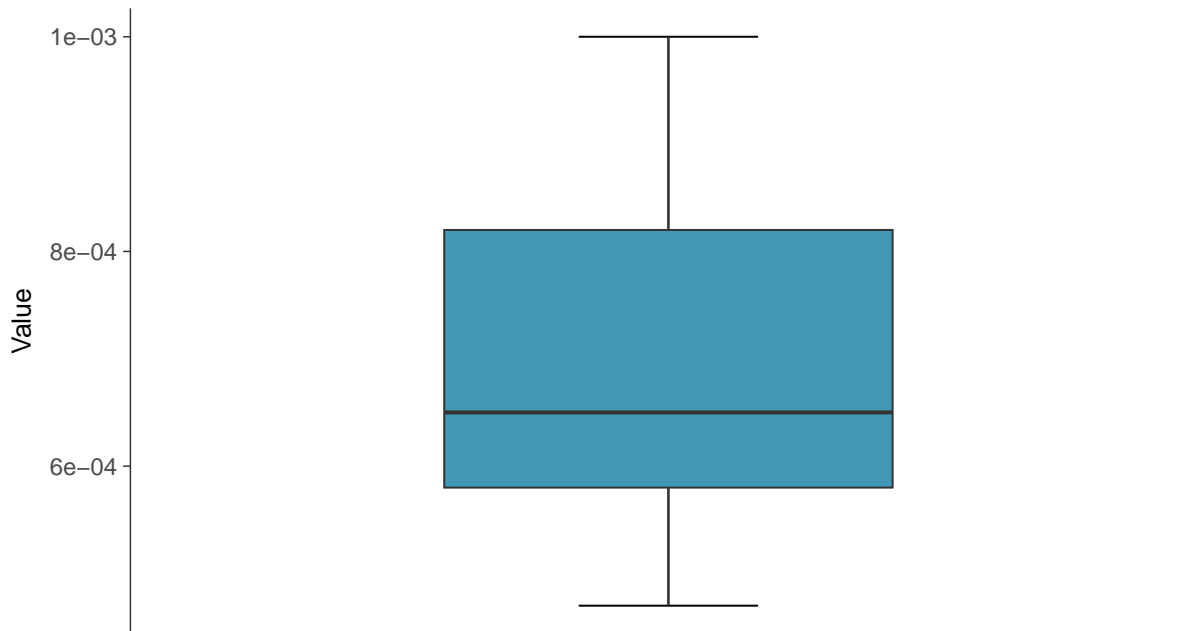
Arsenic, MW-06 (mg/L)





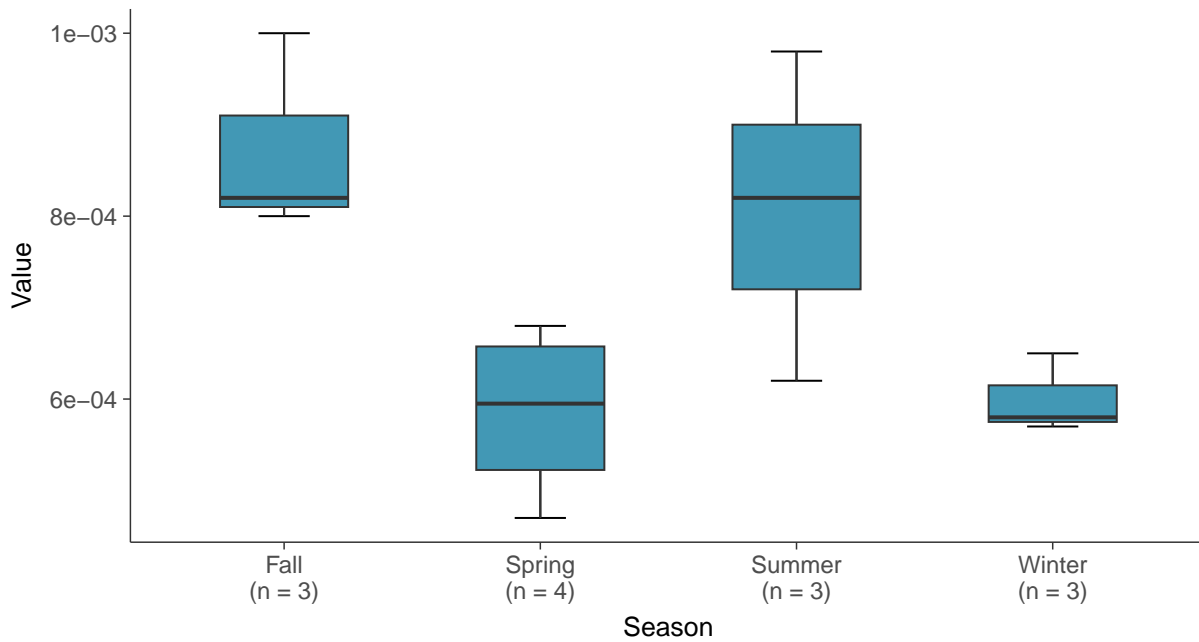
Boxplot

Arsenic, MW-06 (mg/L)



Boxplot by Season

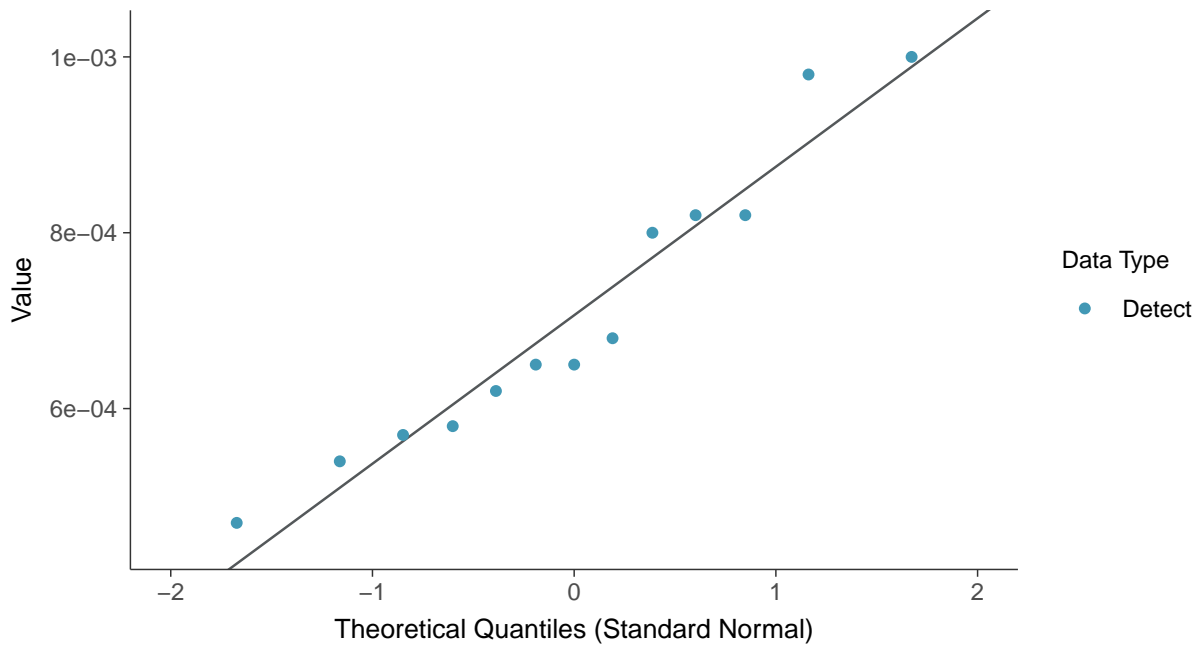
Arsenic, MW-06 (mg/L)





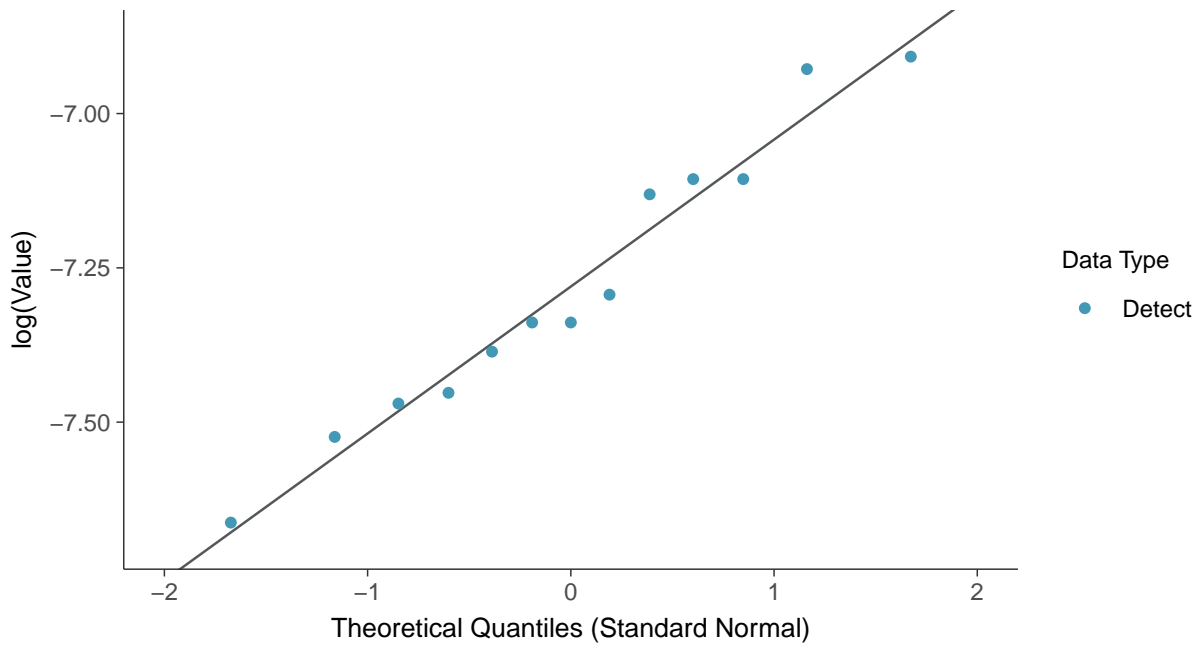
Normal Q-Q plot

Arsenic, MW-06 (mg/L)



Lognormal Q-Q plot

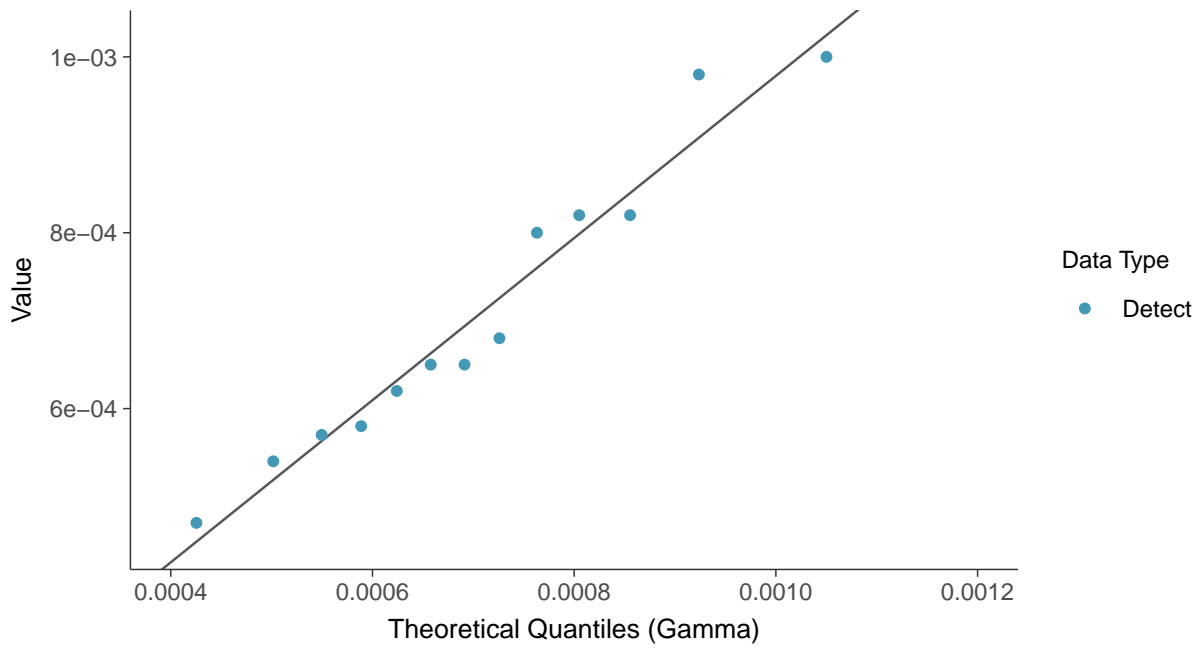
Arsenic, MW-06 (mg/L)





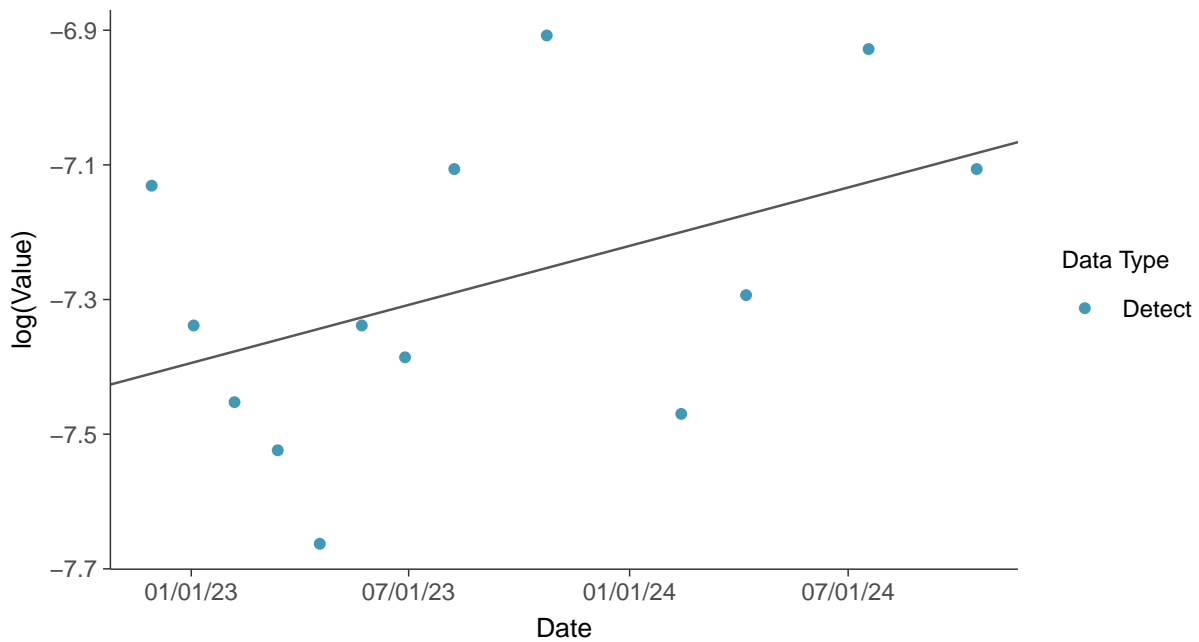
Gamma Q-Q plot

Arsenic, MW-06 (mg/L)



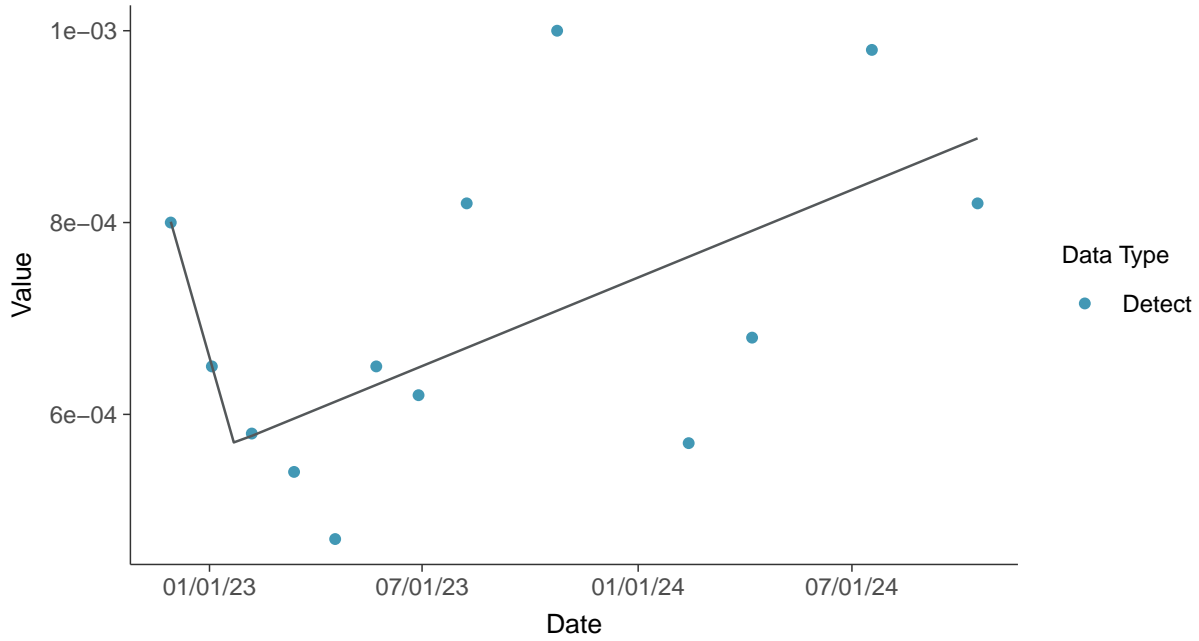
Trend Regression: Lognormal MLE

Arsenic, MW-06 (mg/L)

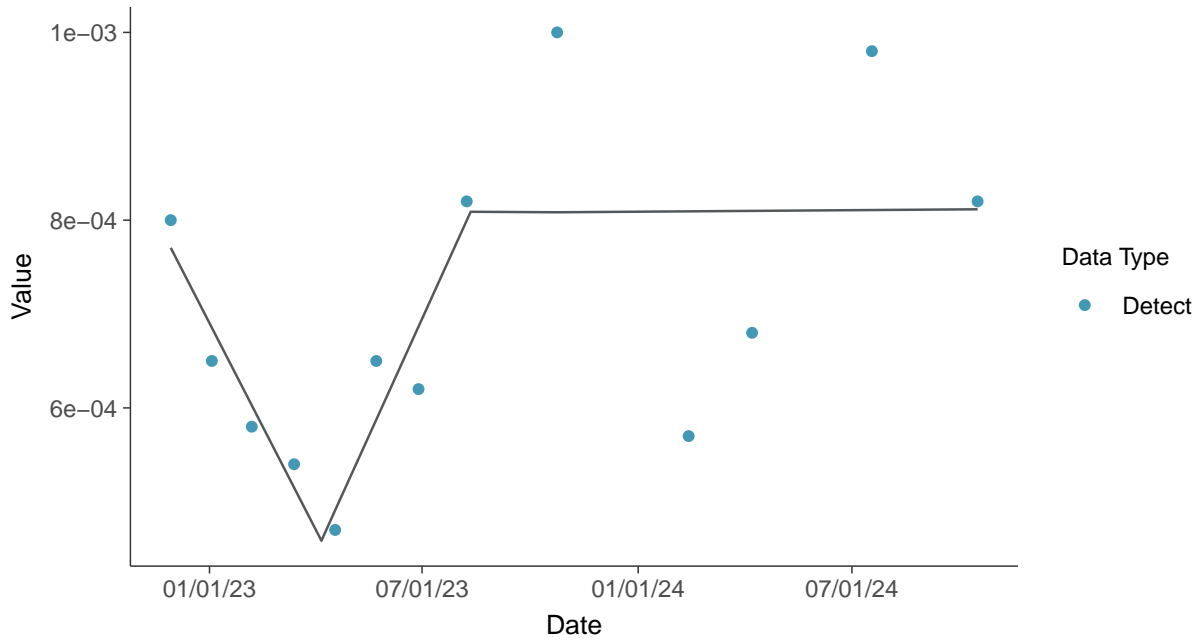




Trend Regression: Piecewise Linear-Linear
Arsenic, MW-06 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Arsenic, MW-06 (mg/L)



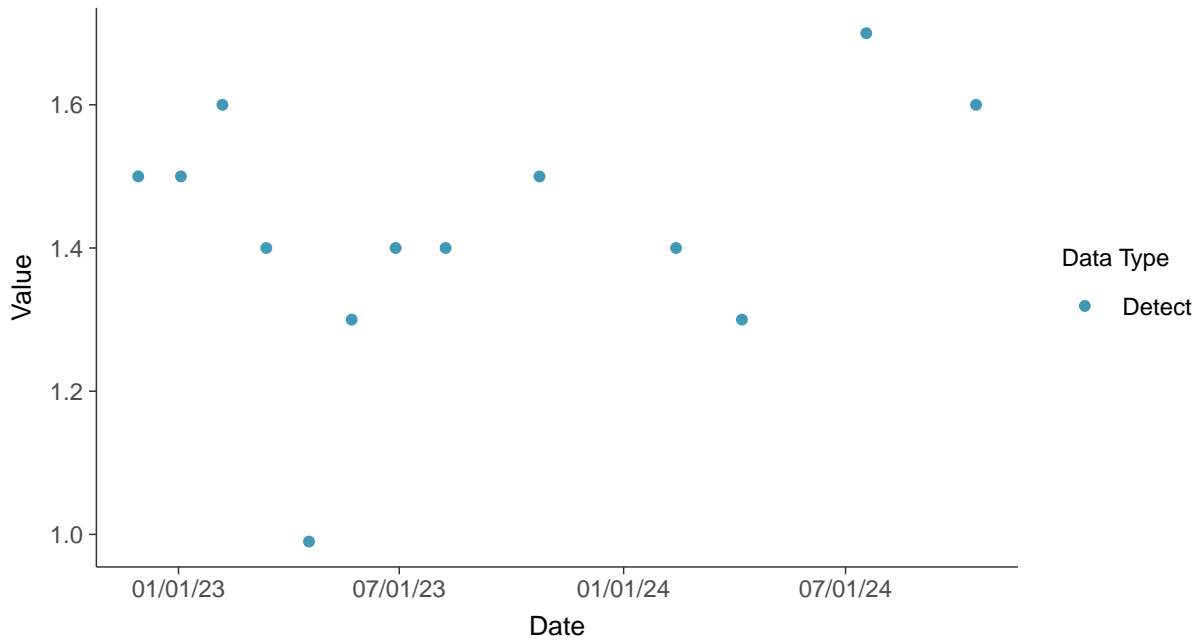


Appendix IV: Barium, MW-06

ID: 1_16_1_5_103

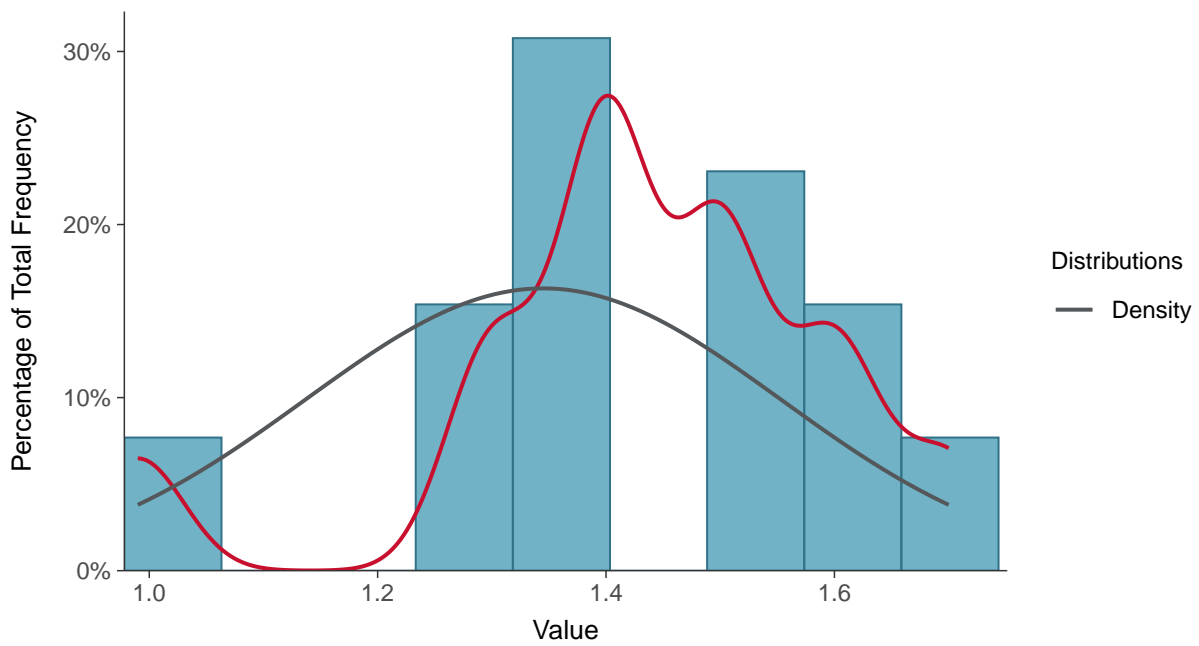
Scatter Plot

Barium, MW-06 (mg/L)



Histogram

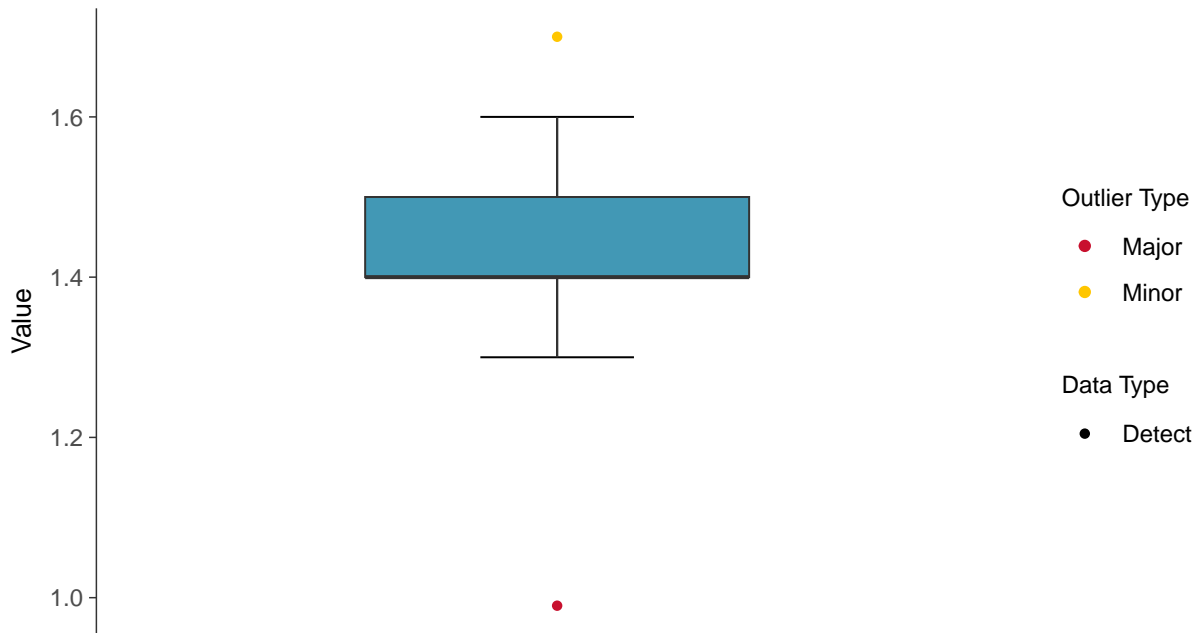
Barium, MW-06 (mg/L)





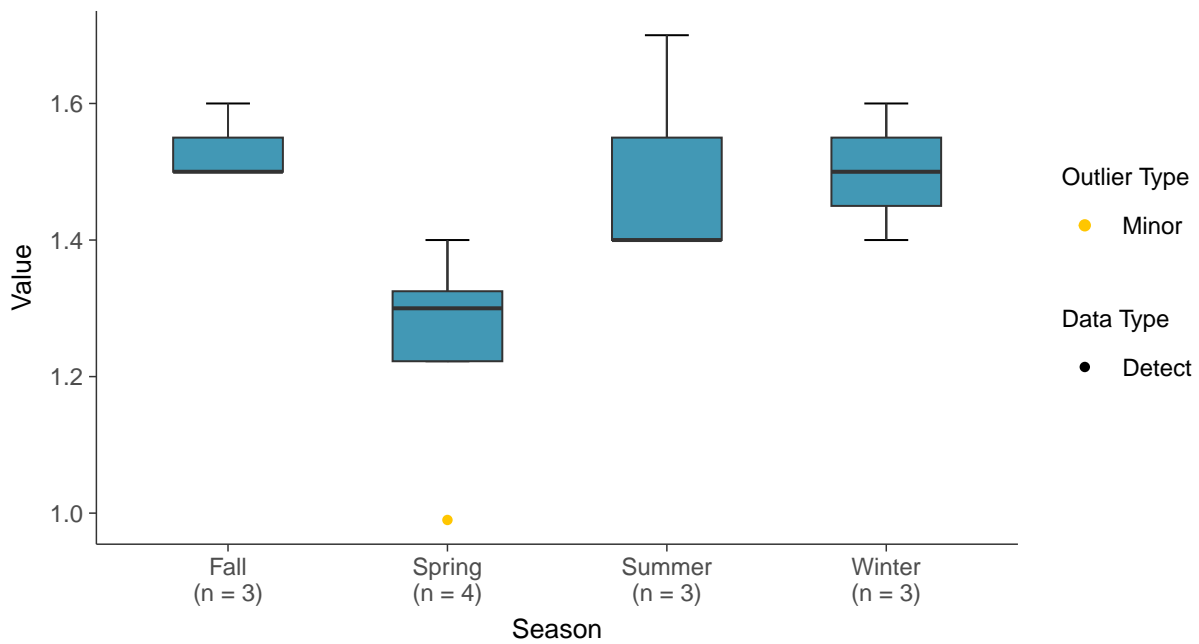
Boxplot

Barium, MW-06 (mg/L)



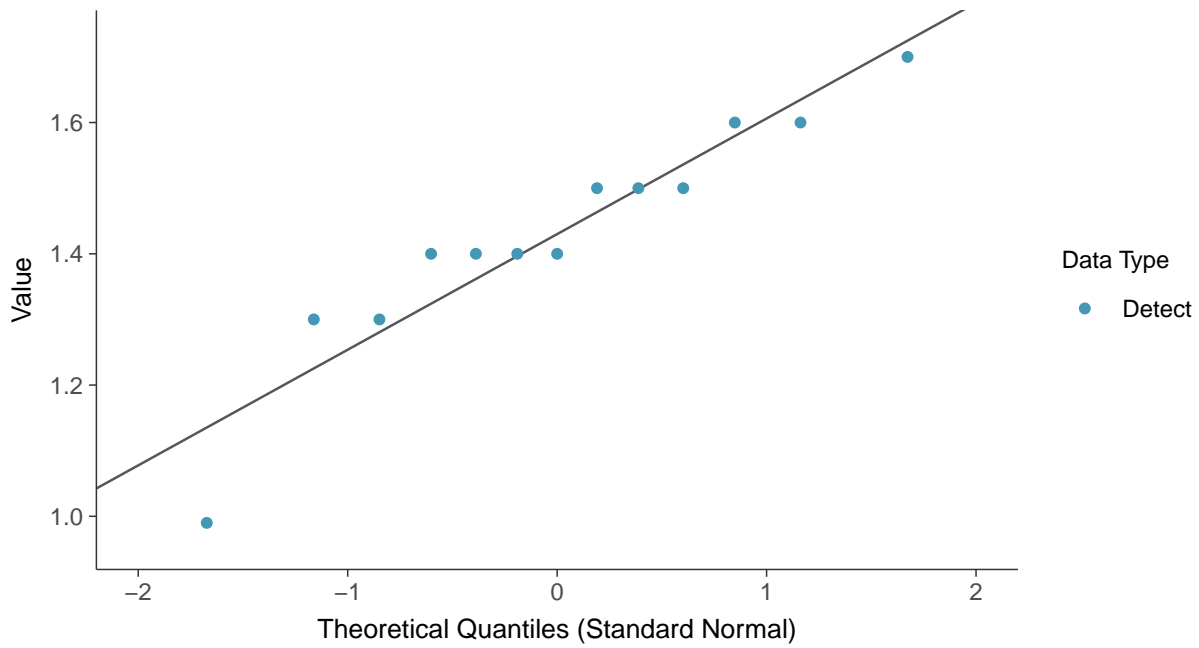
Boxplot by Season

Barium, MW-06 (mg/L)

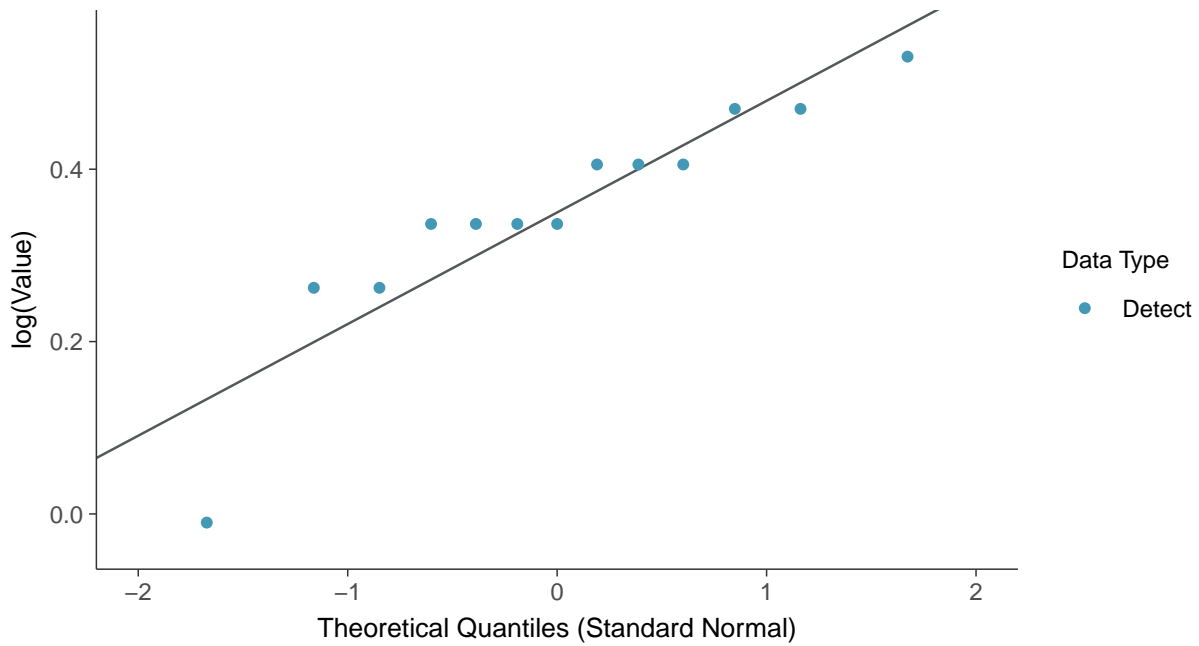




Normal Q-Q plot
Barium, MW-06 (mg/L)

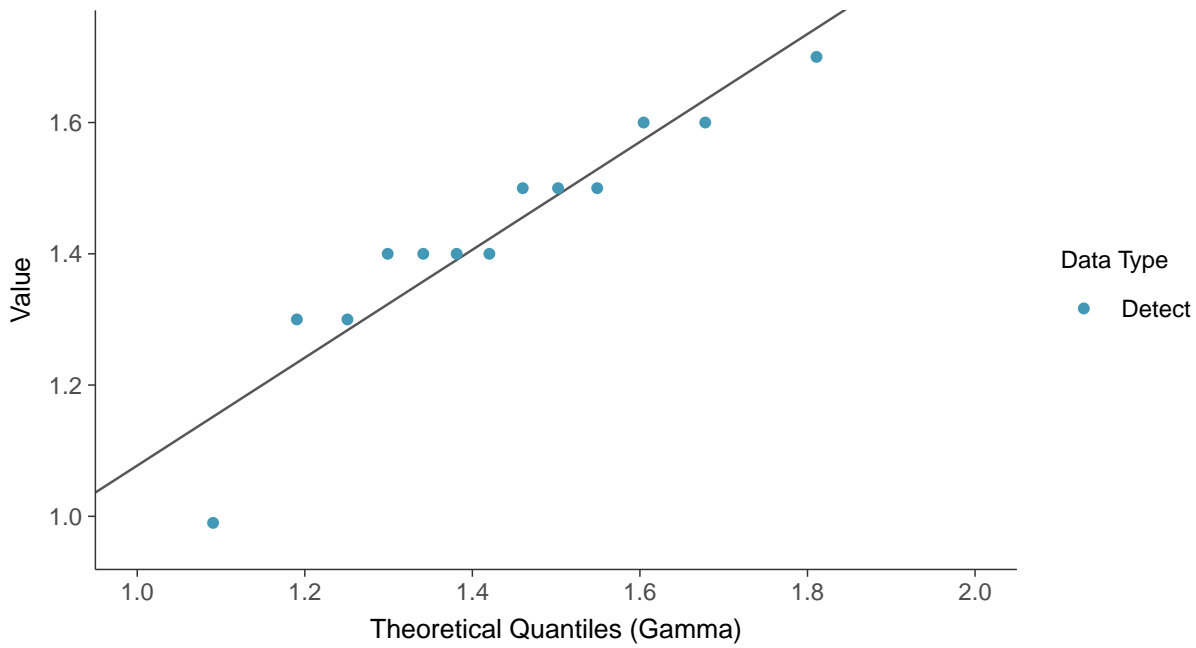


Lognormal Q-Q plot
Barium, MW-06 (mg/L)

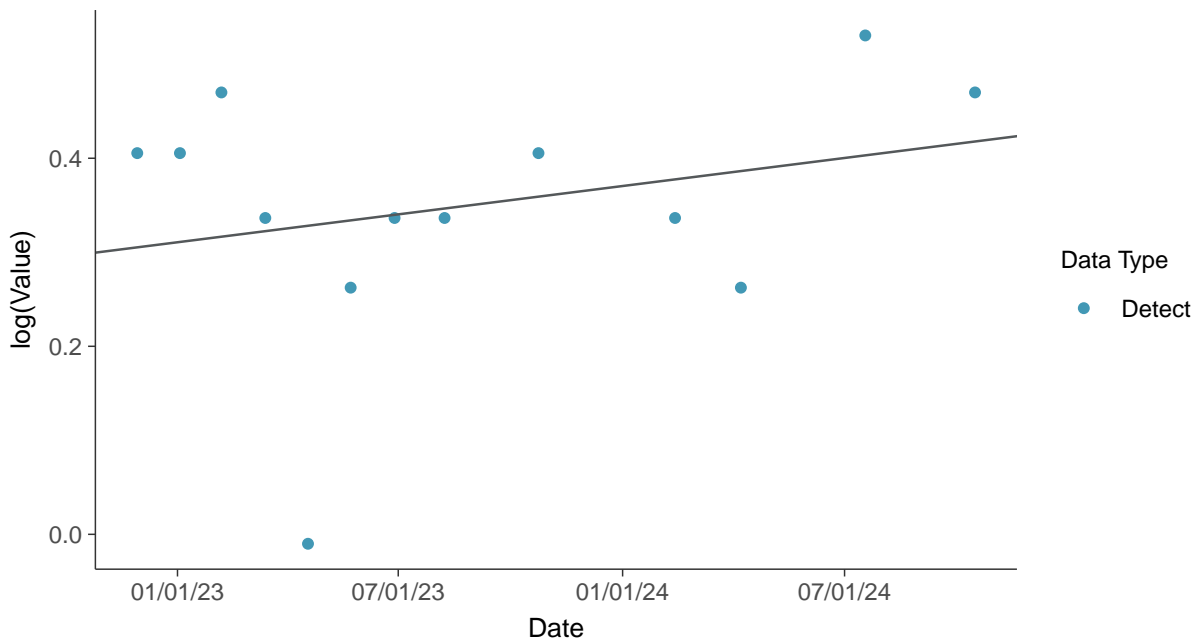




Gamma Q-Q plot
Barium, MW-06 (mg/L)

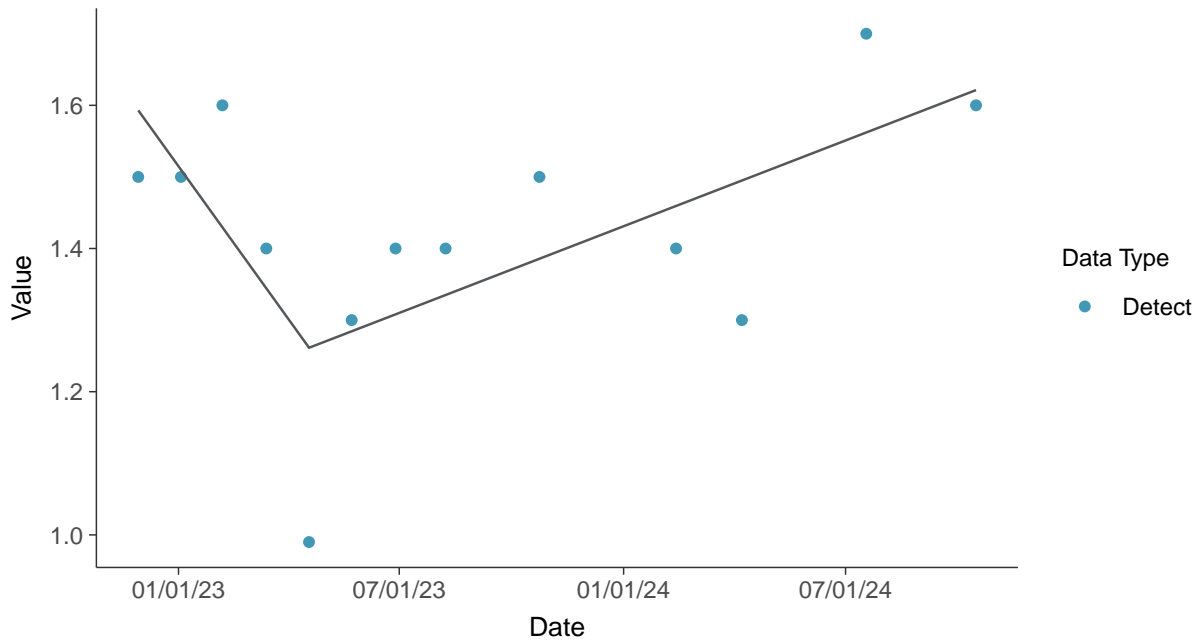


Trend Regression: Lognormal MLE
Barium, MW-06 (mg/L)

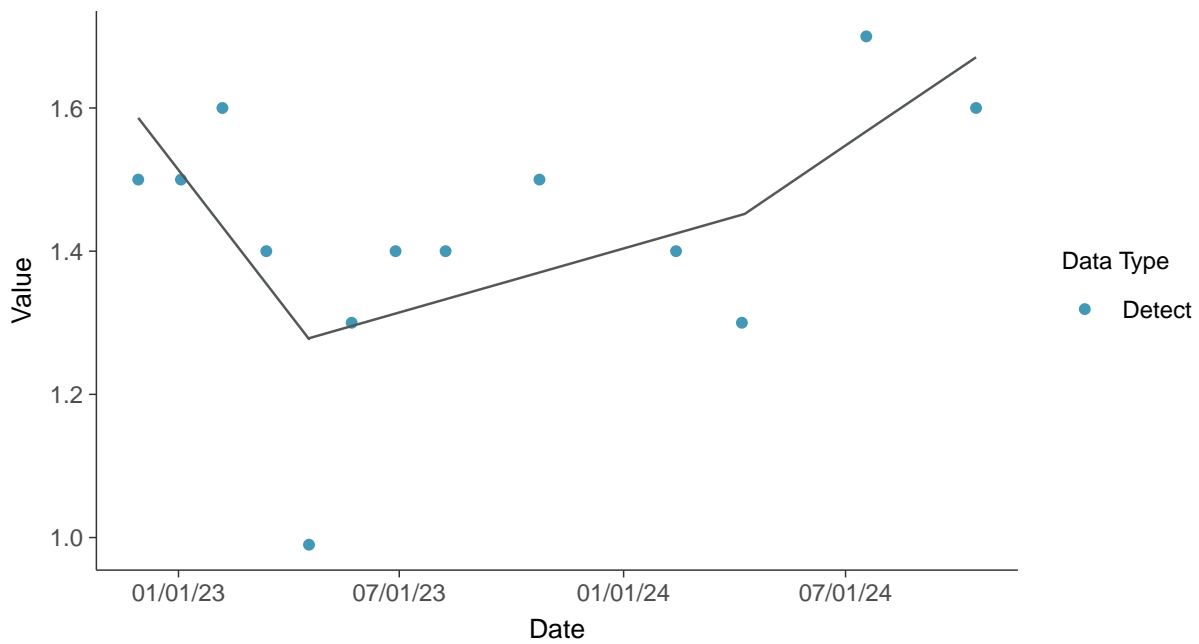




Trend Regression: Piecewise Linear-Linear
Barium, MW-06 (mg/L)



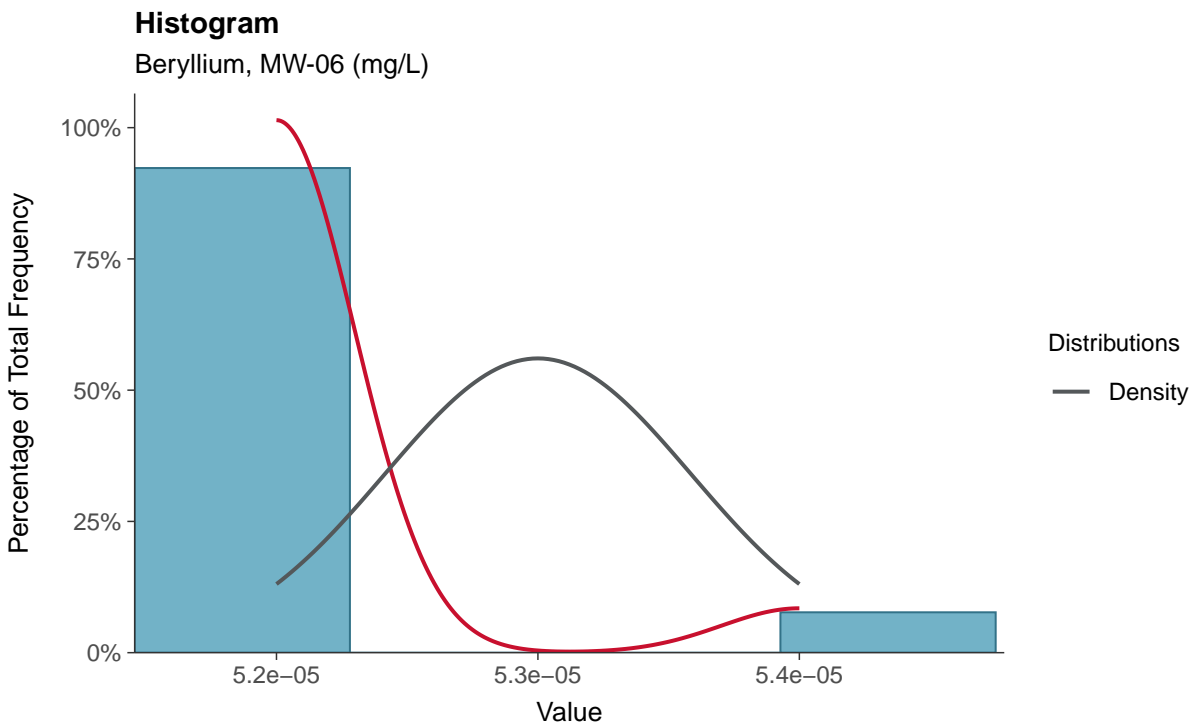
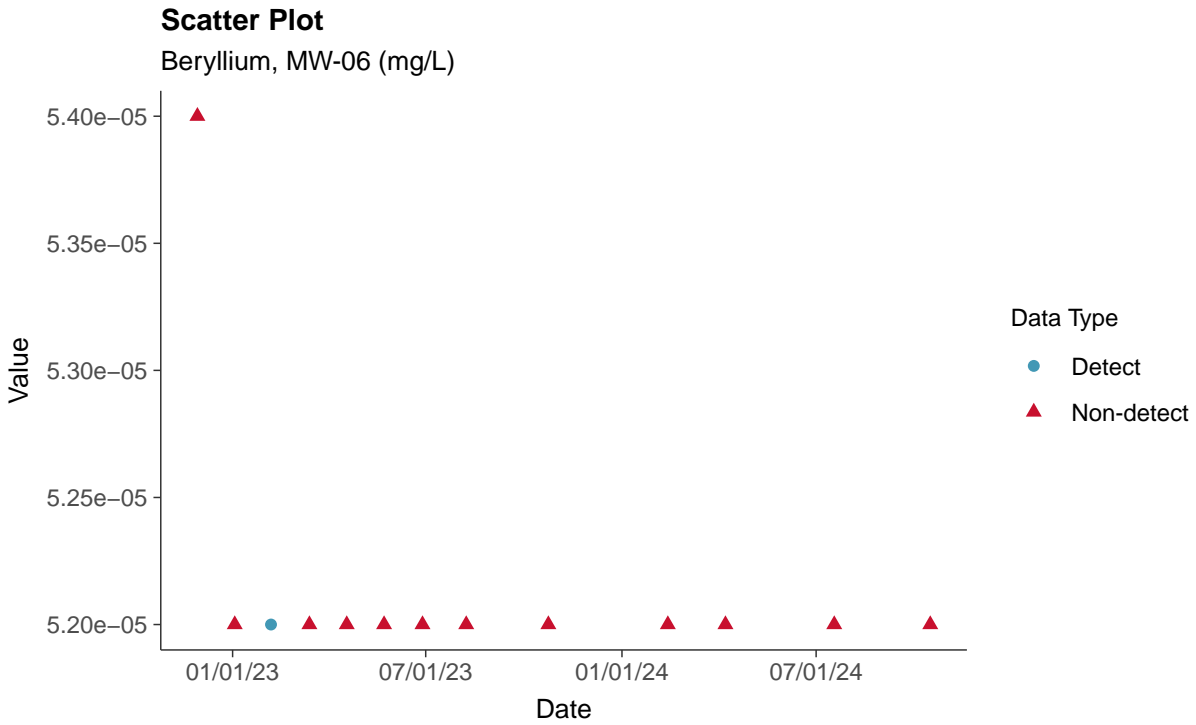
Trend Regression: Piecewise Linear-Linear-Linear
Barium, MW-06 (mg/L)





Appendix IV: Beryllium, MW-06

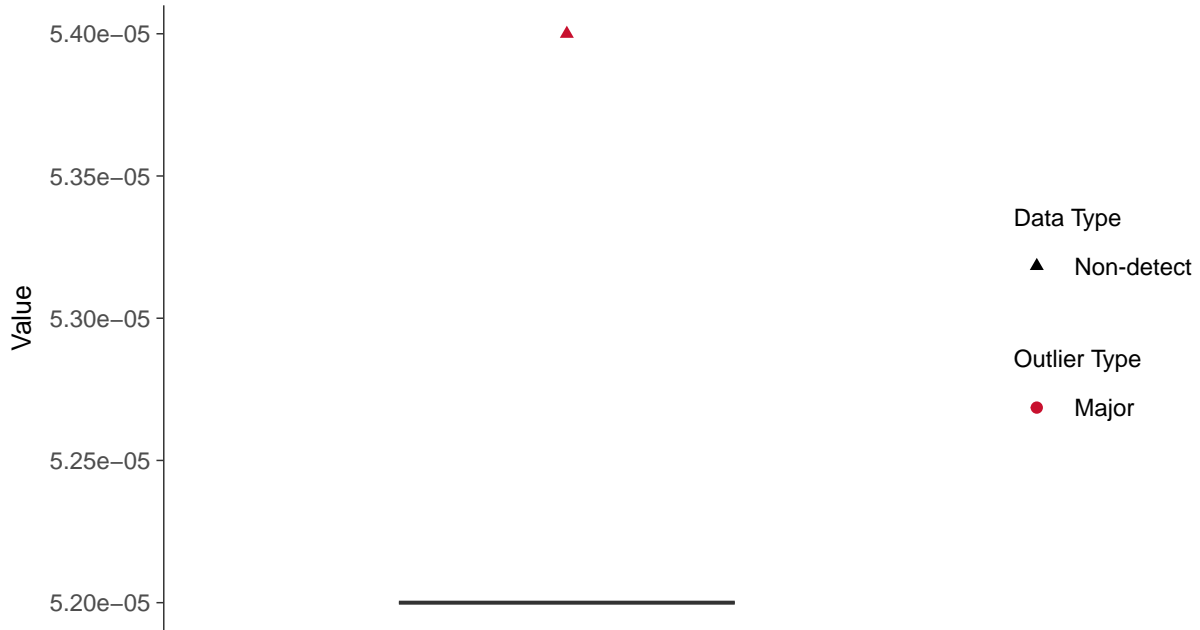
ID: 1_16_1_5_104





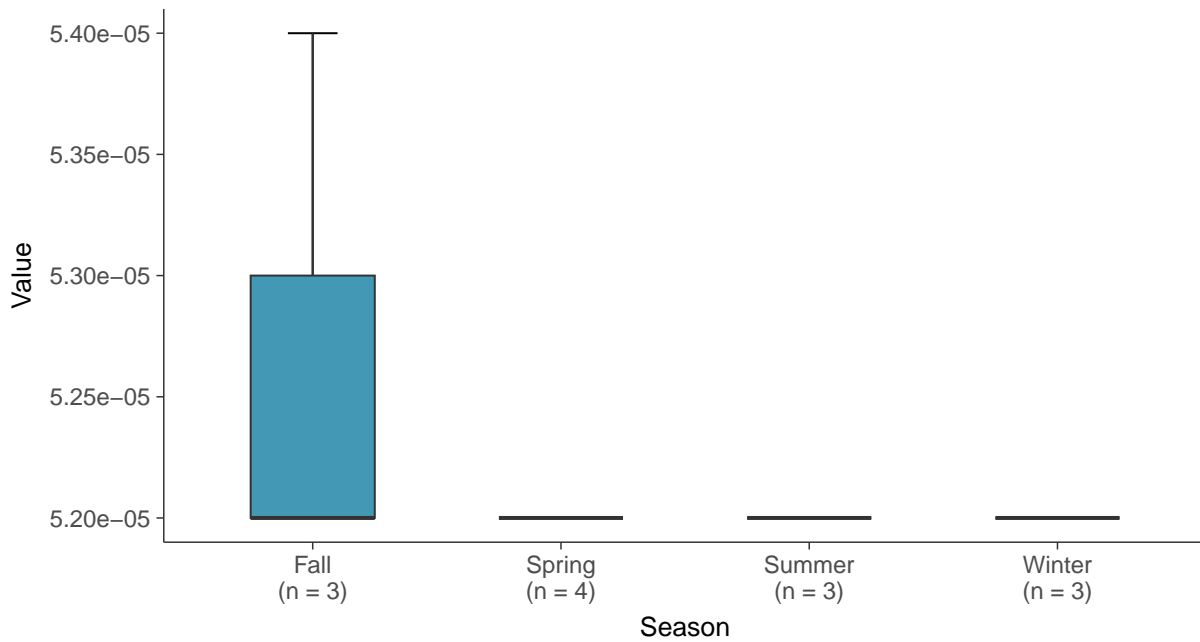
Boxplot

Beryllium, MW-06 (mg/L)



Boxplot by Season

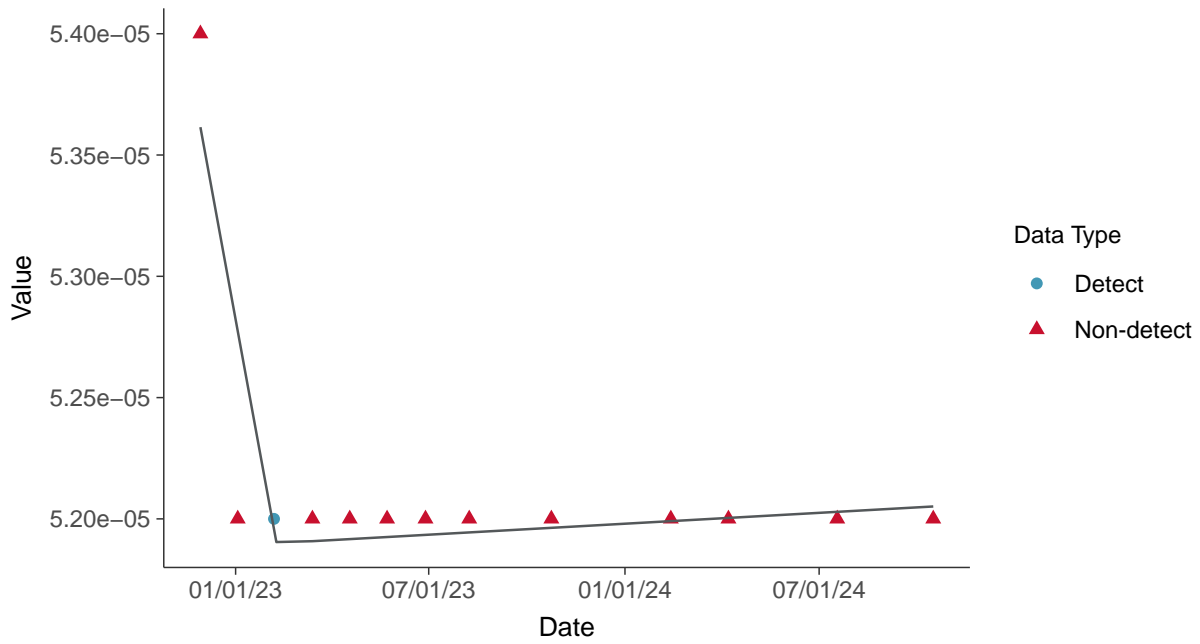
Beryllium, MW-06 (mg/L)





Trend Regression: Piecewise Linear-Linear

Beryllium, MW-06 (mg/L)



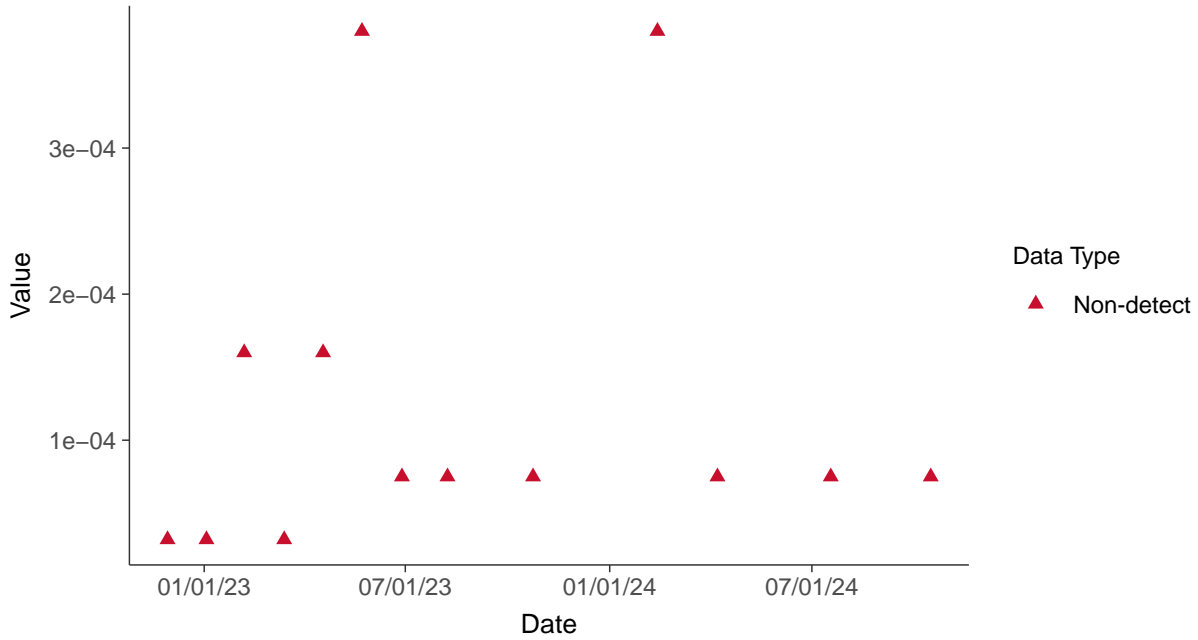


Appendix IV: Cadmium, MW-06

ID: 1_16_1_5_106

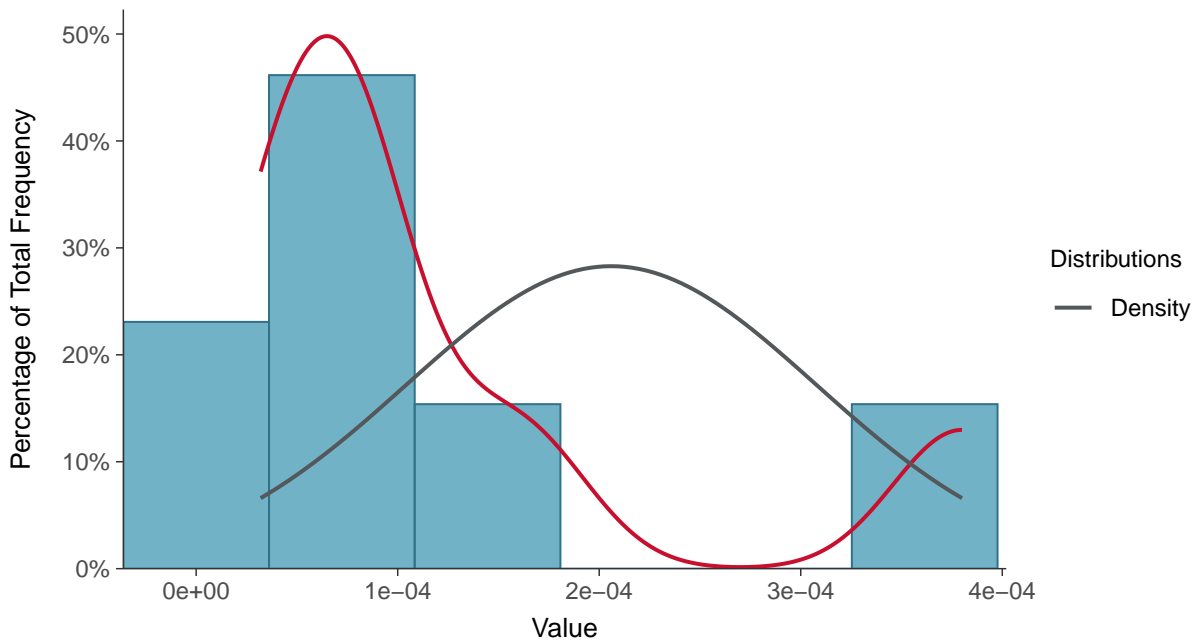
Scatter Plot

Cadmium, MW-06 (mg/L)



Histogram

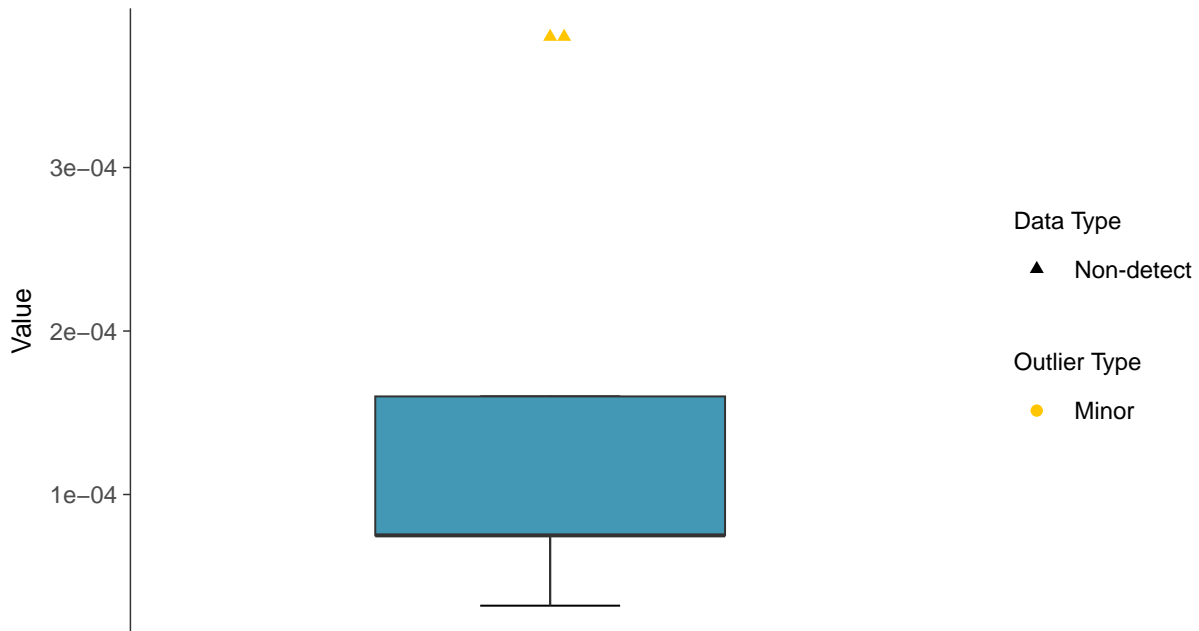
Cadmium, MW-06 (mg/L)





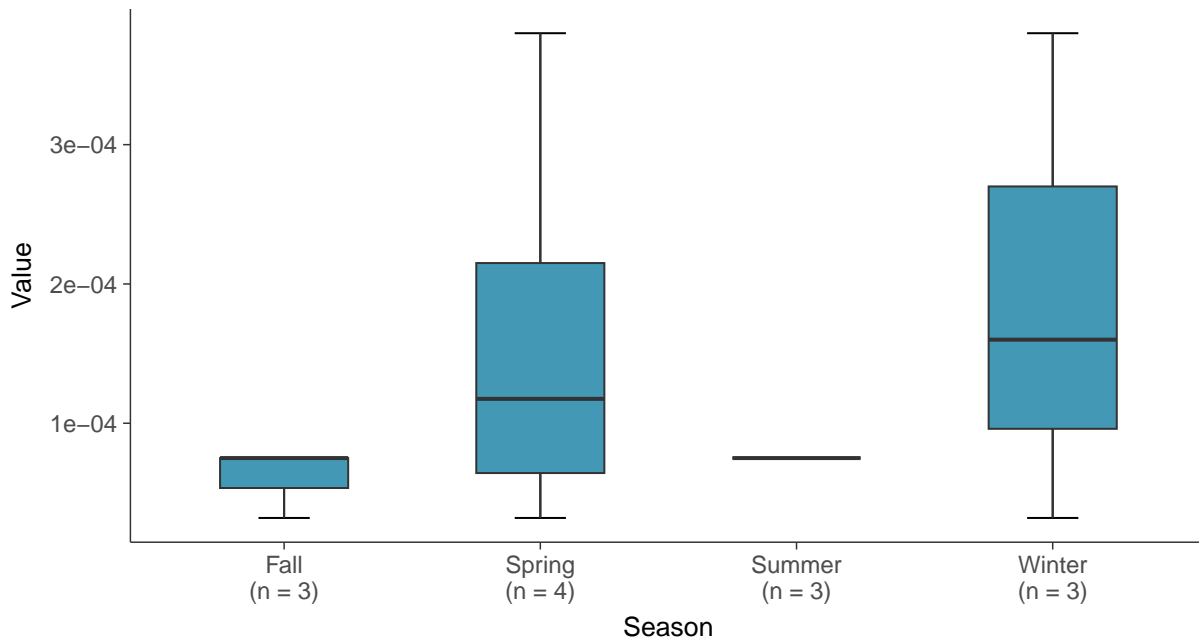
Boxplot

Cadmium, MW-06 (mg/L)



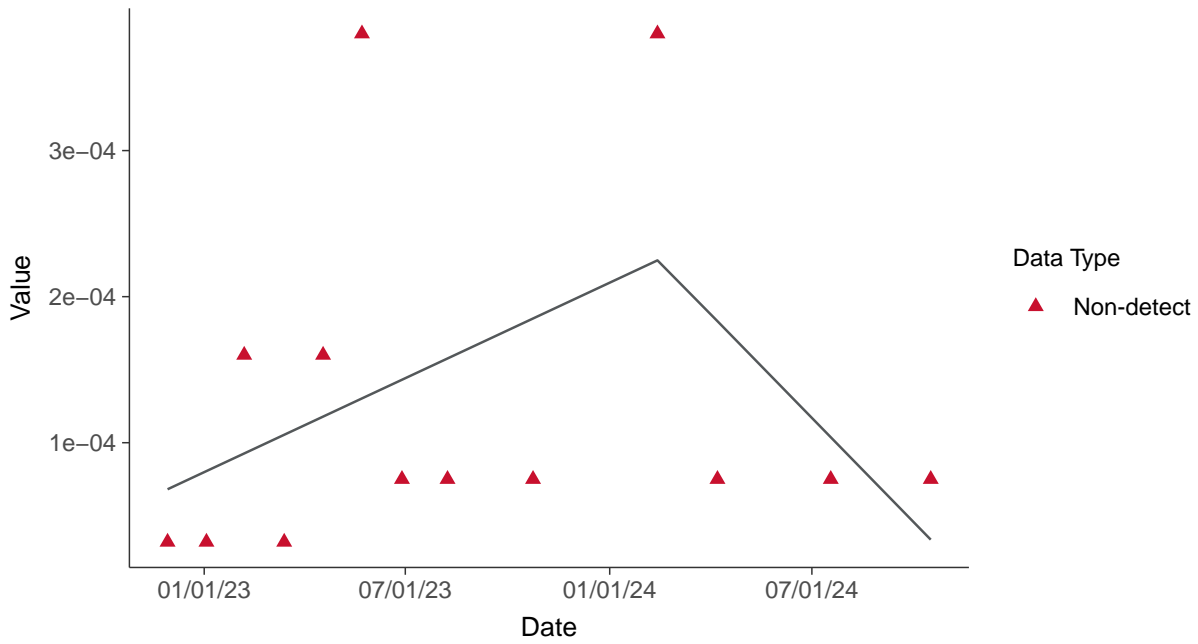
Boxplot by Season

Cadmium, MW-06 (mg/L)

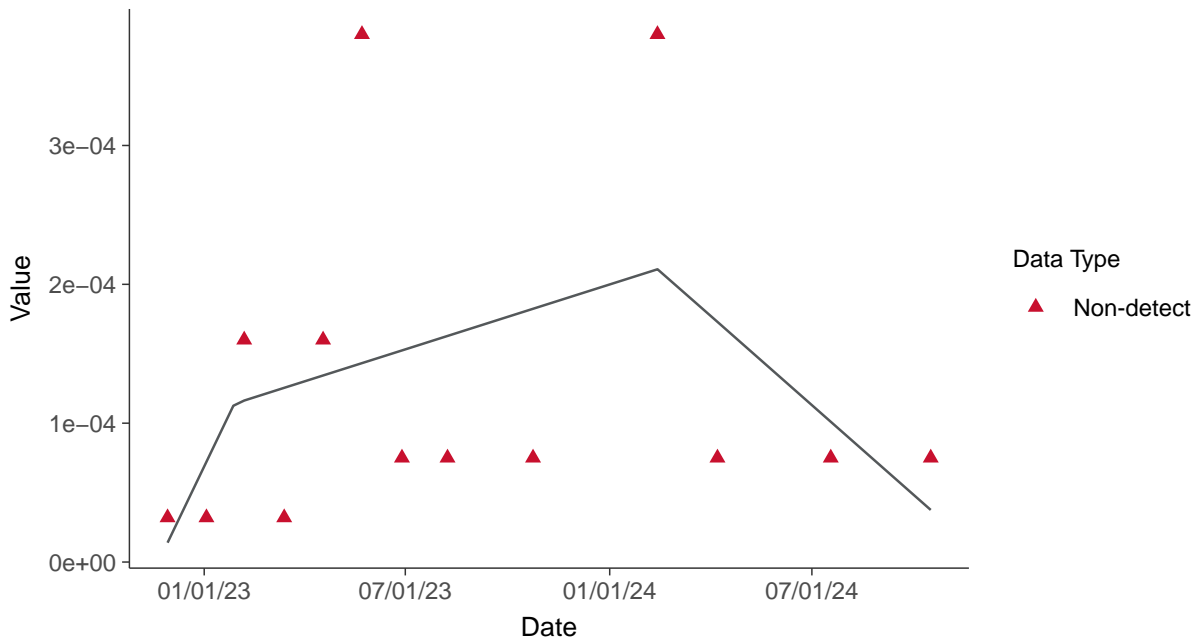




Trend Regression: Piecewise Linear-Linear
Cadmium, MW-06 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Cadmium, MW-06 (mg/L)



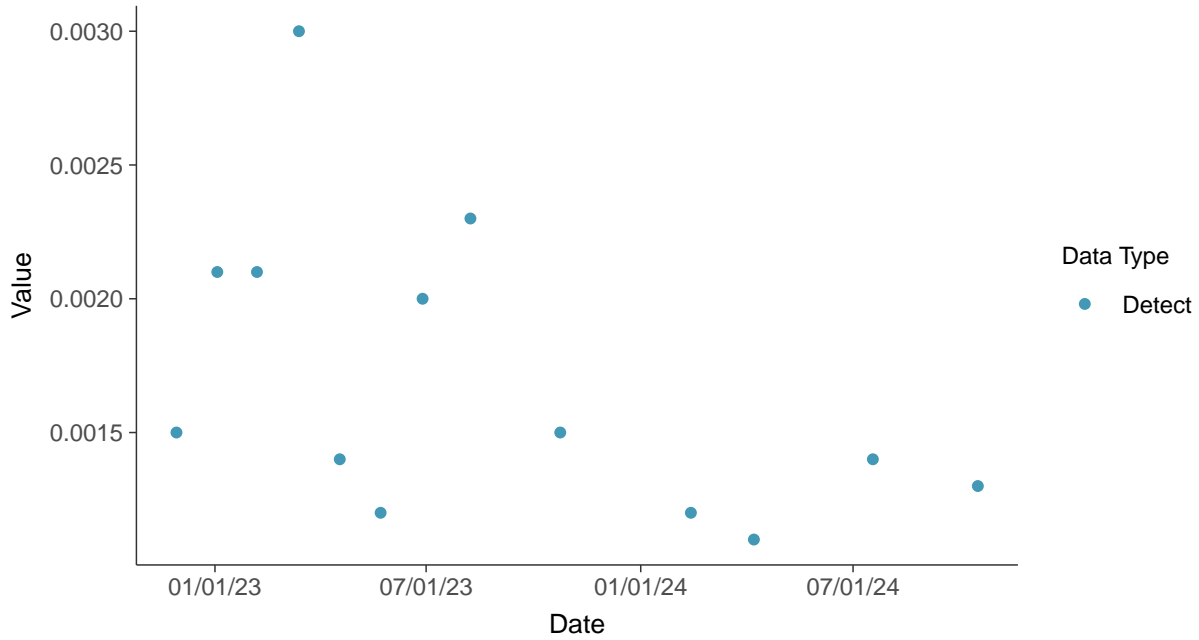


Appendix IV: Chromium, Total, MW-06

ID: 1_16_1_5_109

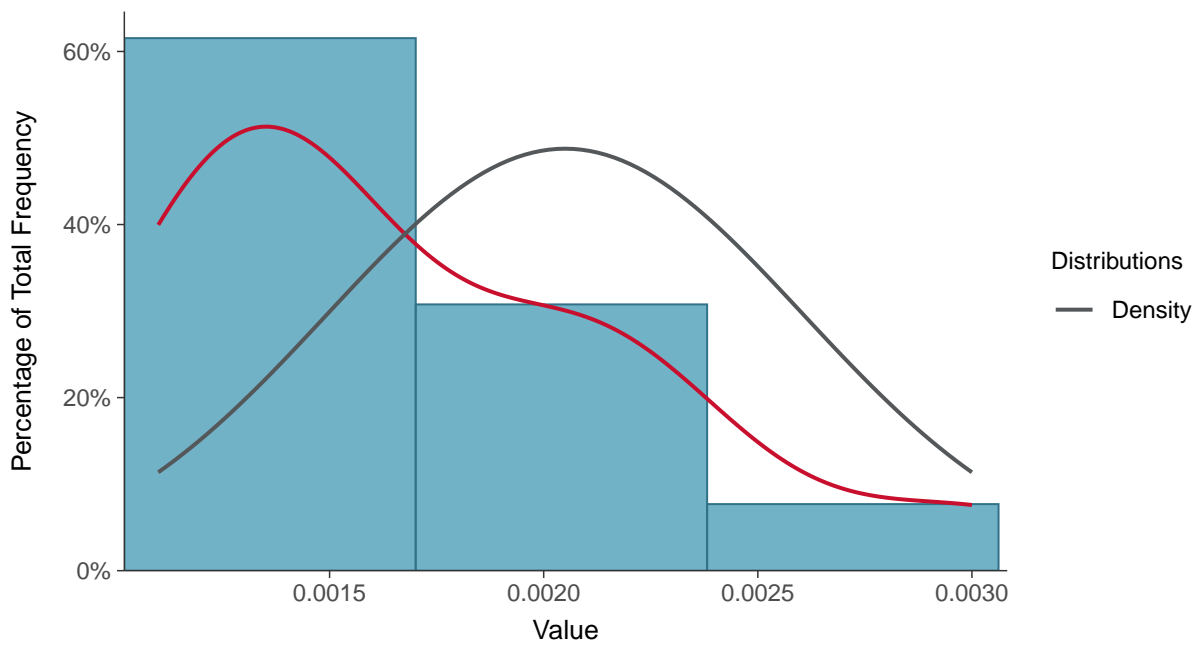
Scatter Plot

Chromium, Total, MW-06 (mg/L)



Histogram

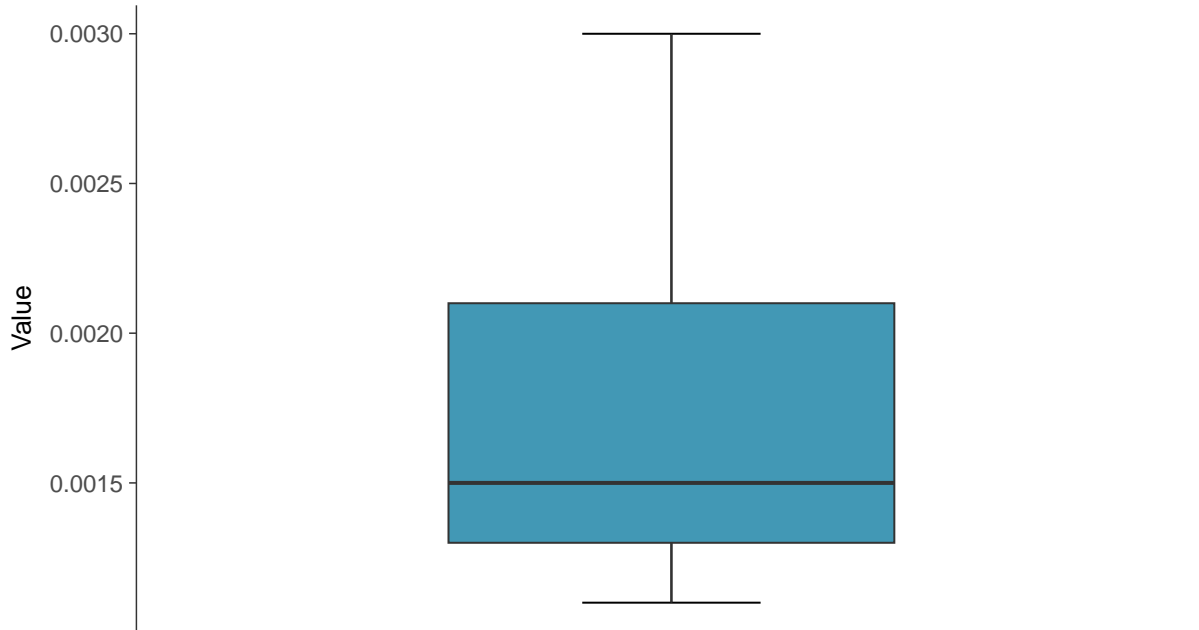
Chromium, Total, MW-06 (mg/L)





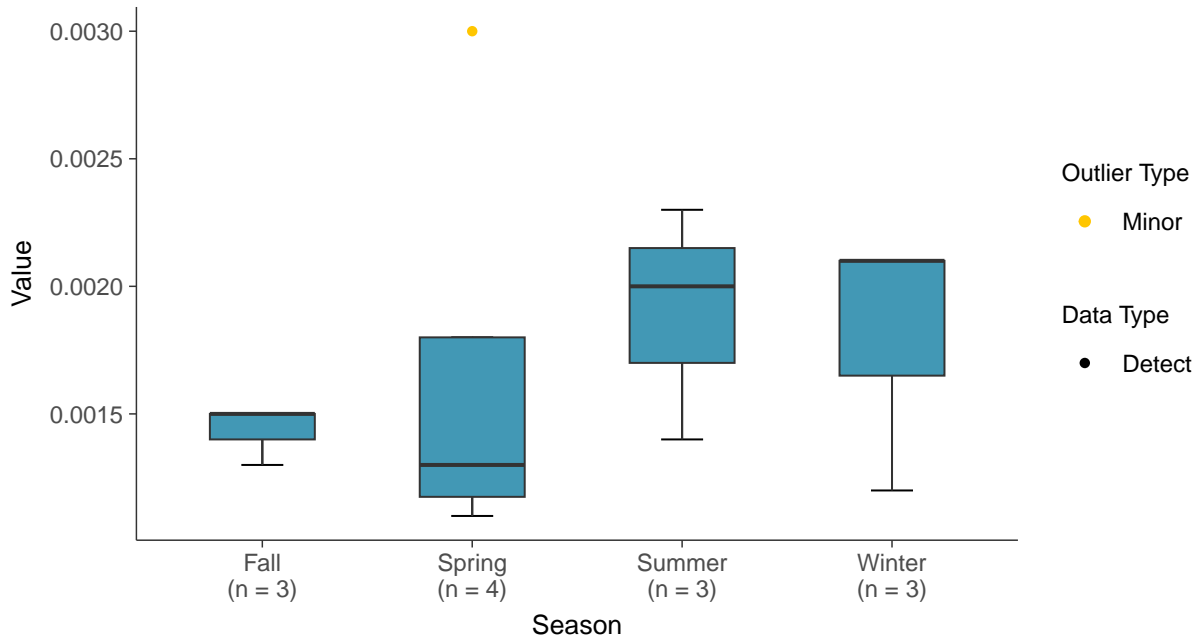
Boxplot

Chromium, Total, MW-06 (mg/L)



Boxplot by Season

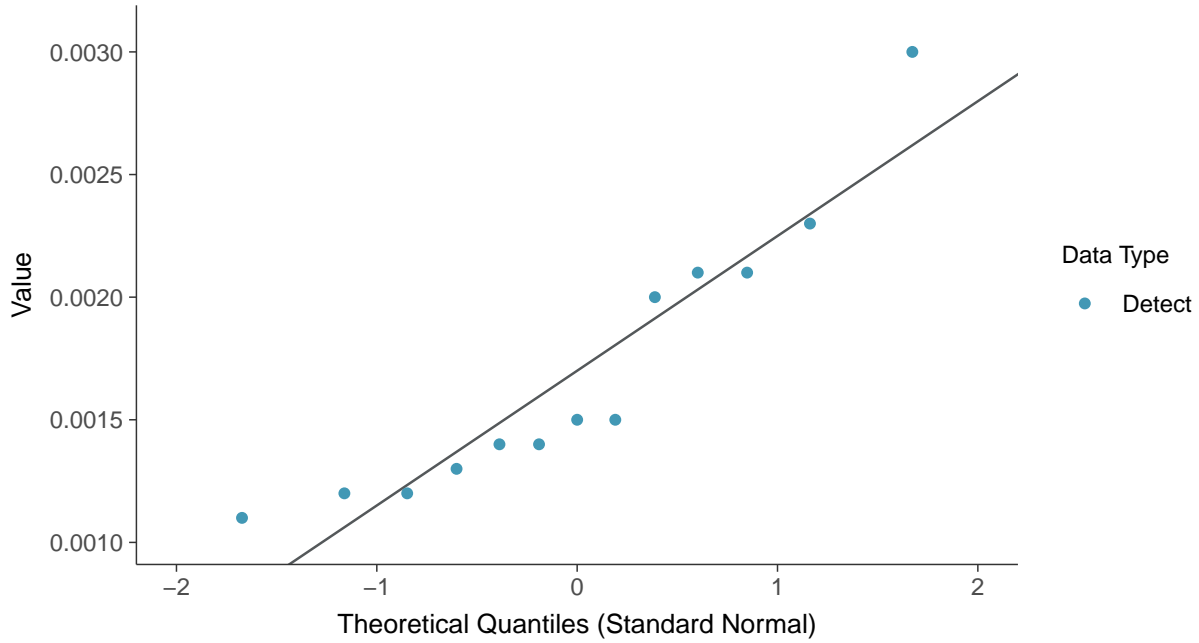
Chromium, Total, MW-06 (mg/L)





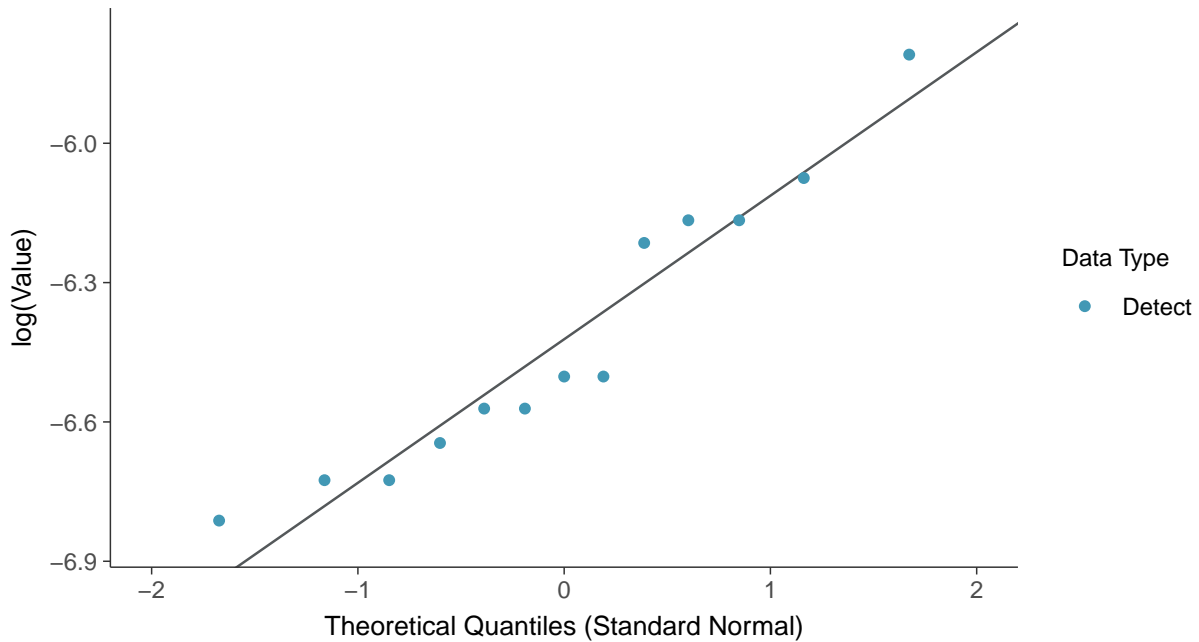
Normal Q-Q plot

Chromium, Total, MW-06 (mg/L)



Lognormal Q-Q plot

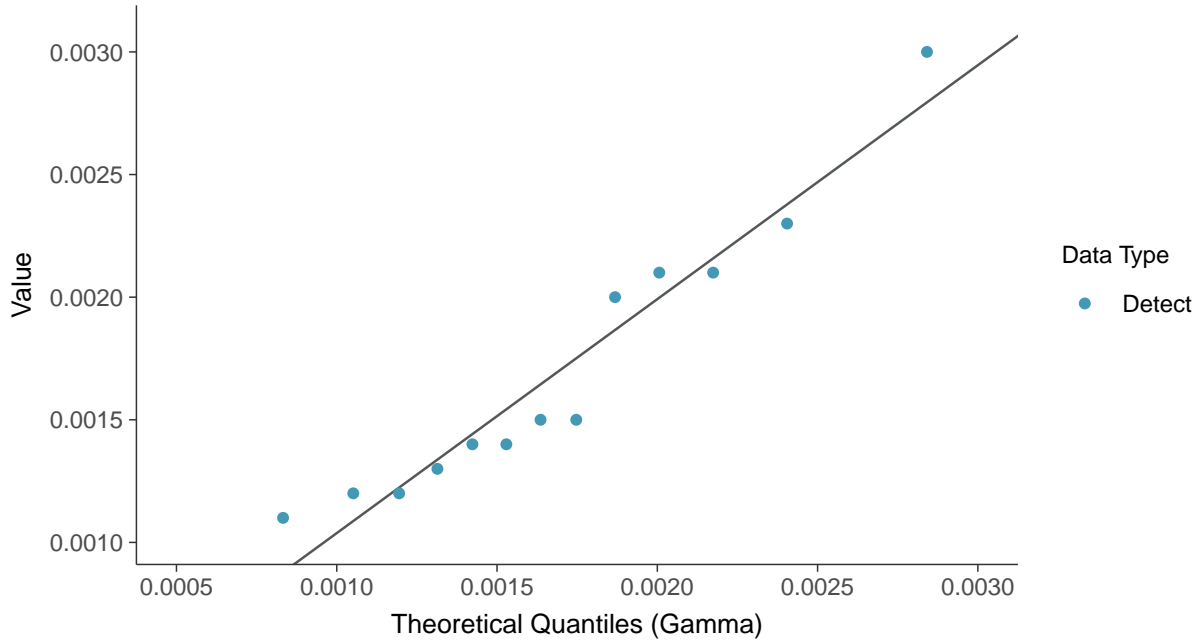
Chromium, Total, MW-06 (mg/L)





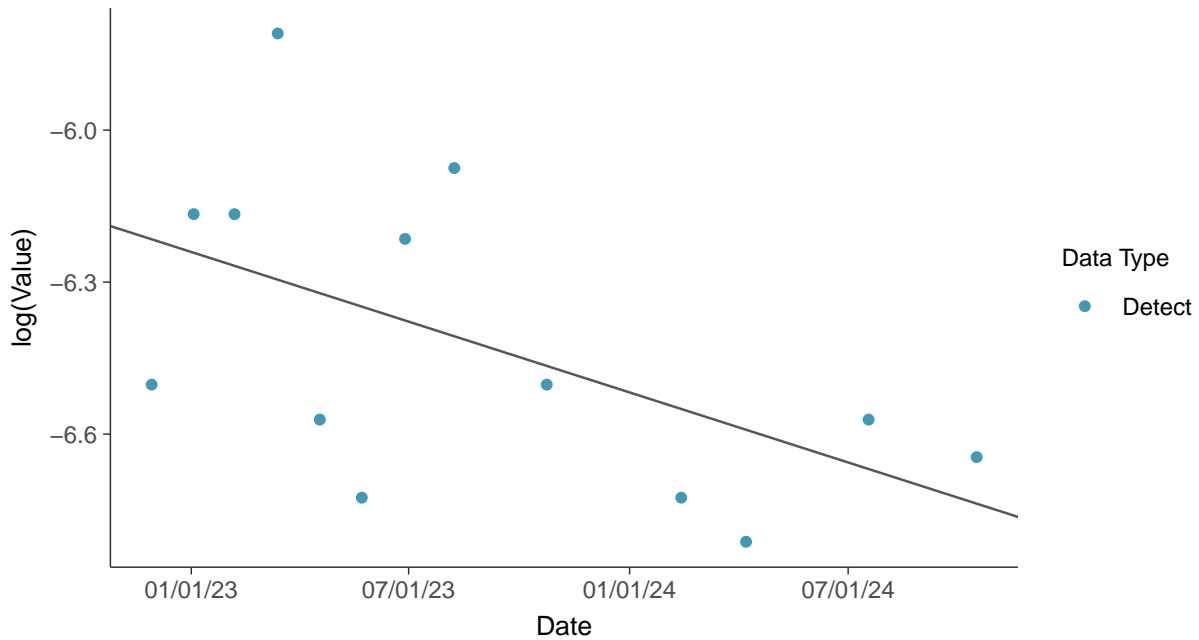
Gamma Q-Q plot

Chromium, Total, MW-06 (mg/L)



Trend Regression: Lognormal MLE

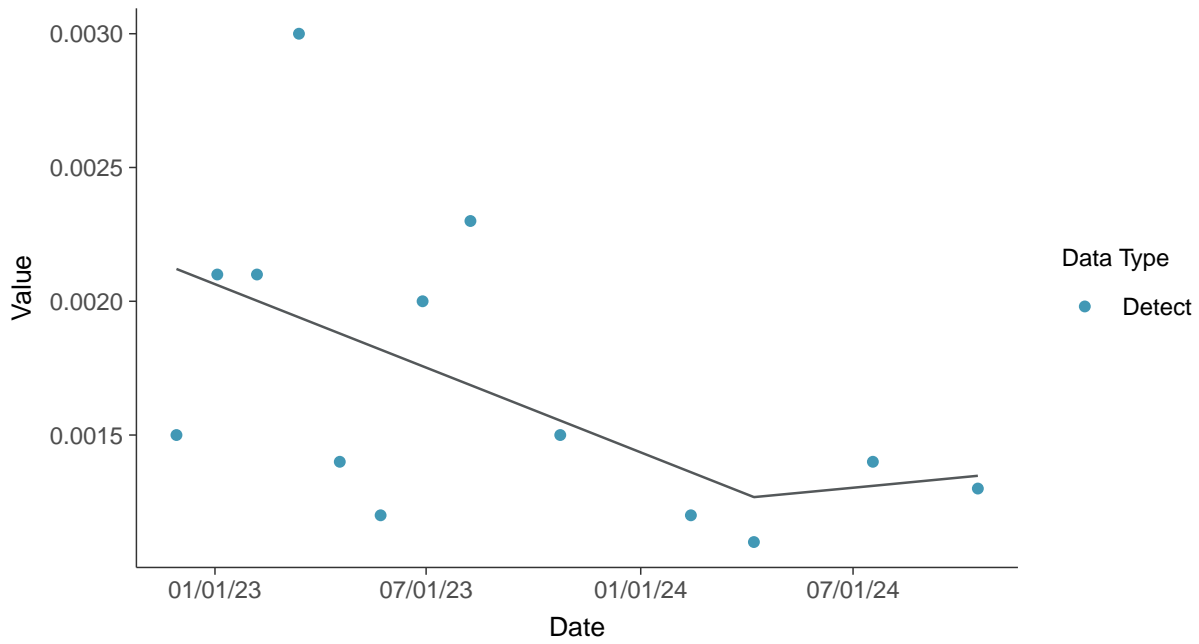
Chromium, Total, MW-06 (mg/L)





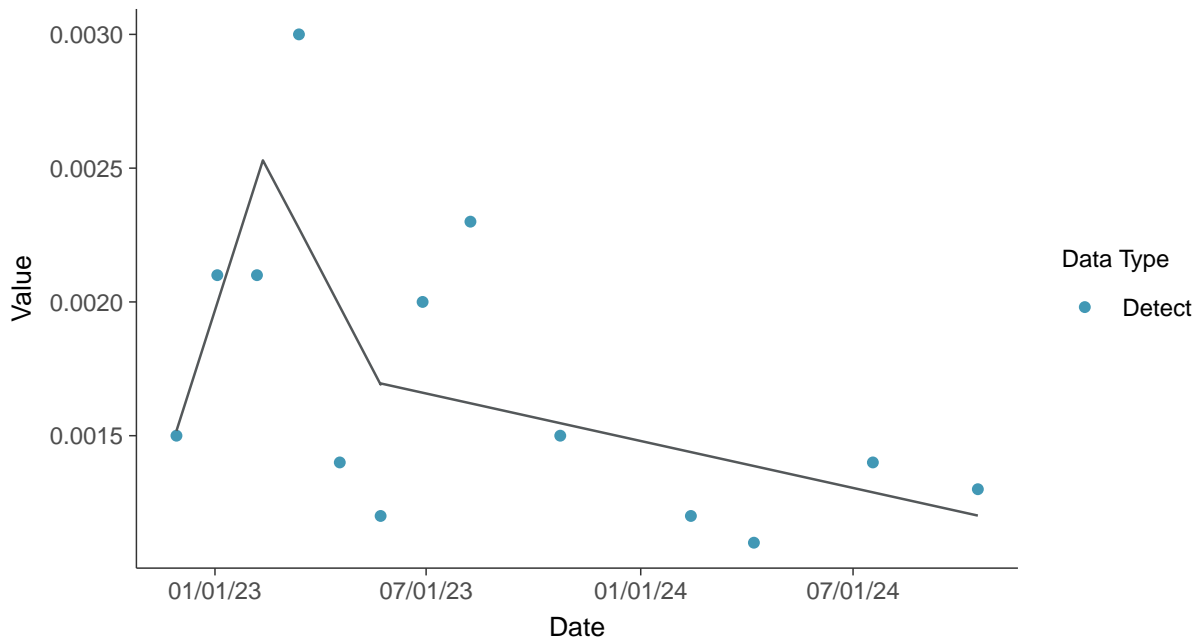
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-06 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Chromium, Total, MW-06 (mg/L)



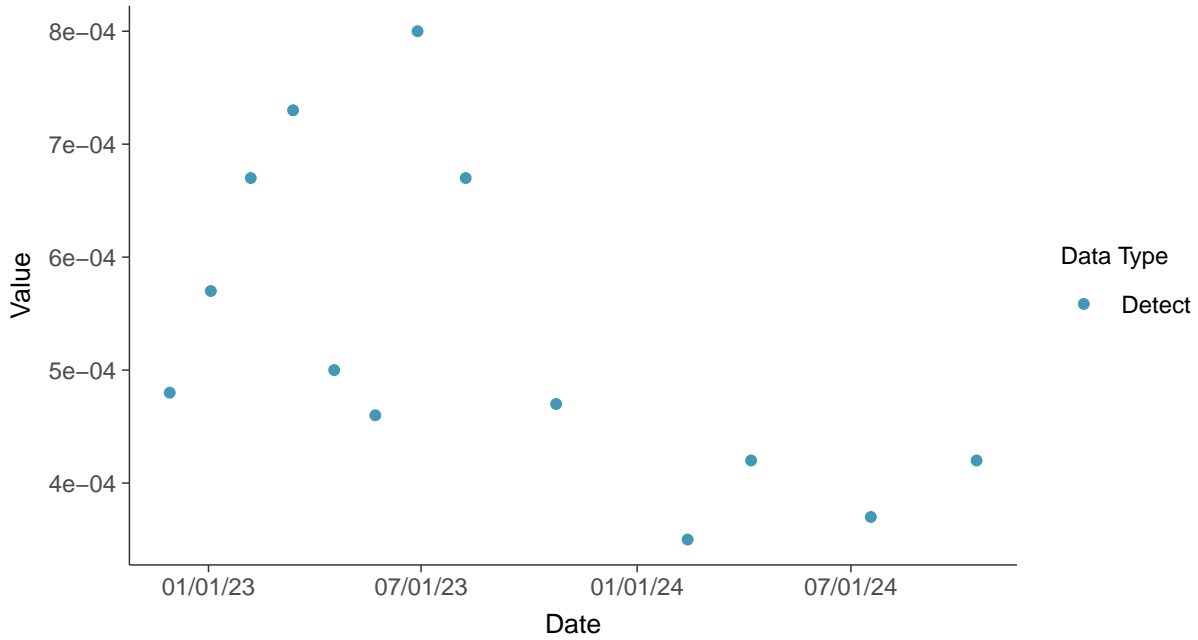


Appendix IV: Cobalt, MW-06

ID: 1_16_1_5_110

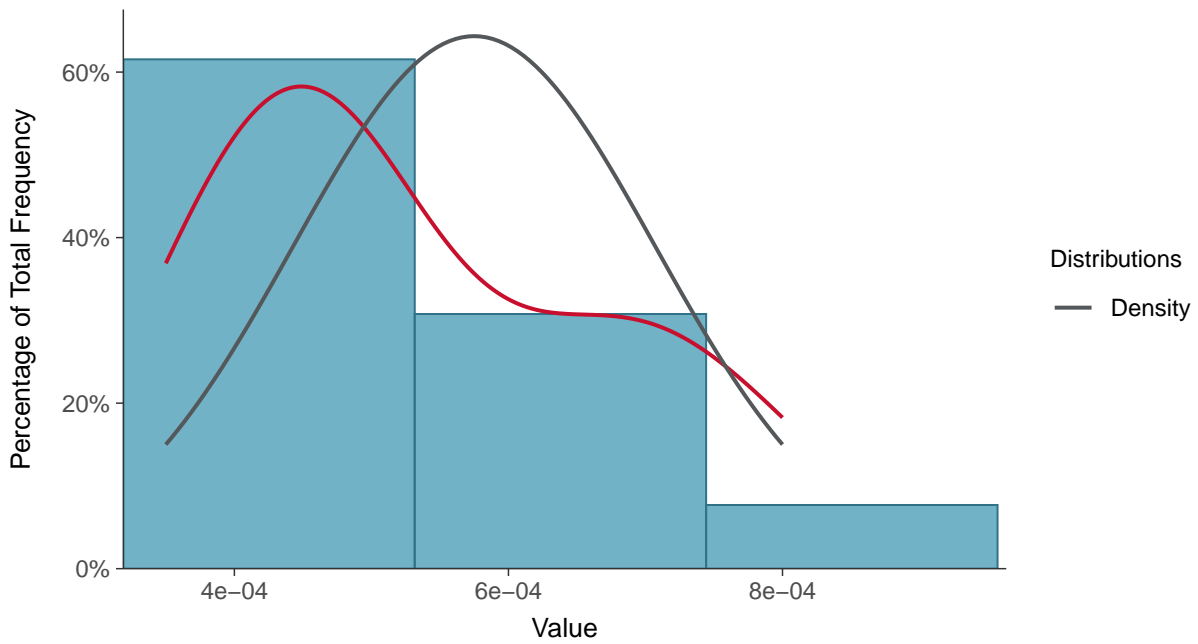
Scatter Plot

Cobalt, MW-06 (mg/L)



Histogram

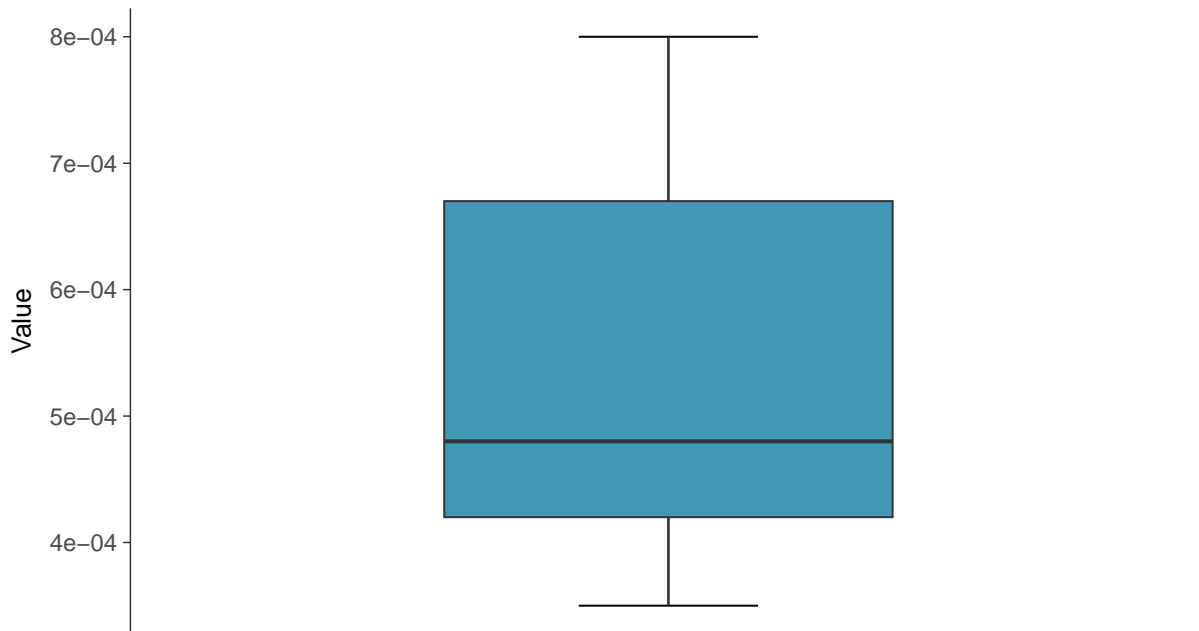
Cobalt, MW-06 (mg/L)





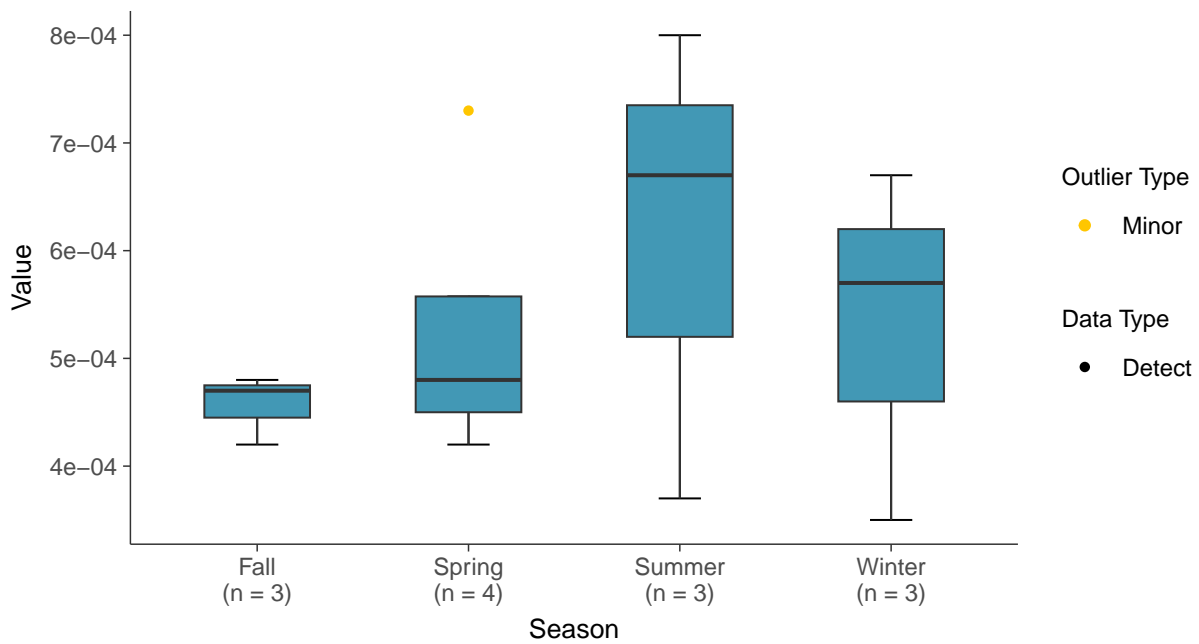
Boxplot

Cobalt, MW-06 (mg/L)



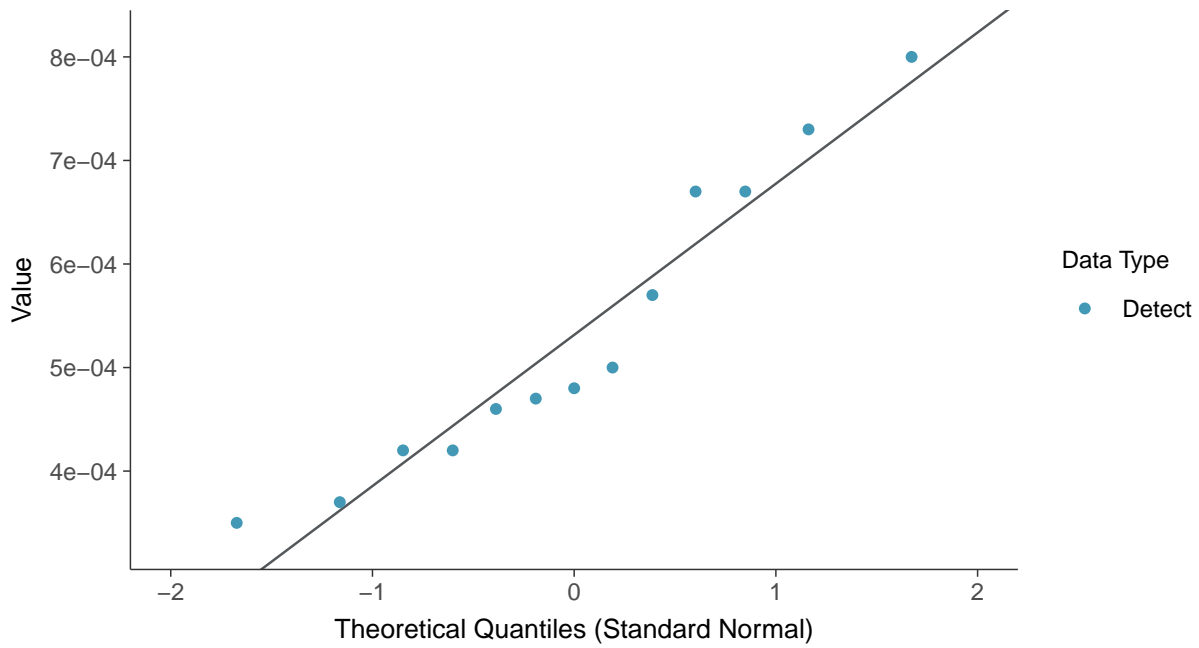
Boxplot by Season

Cobalt, MW-06 (mg/L)

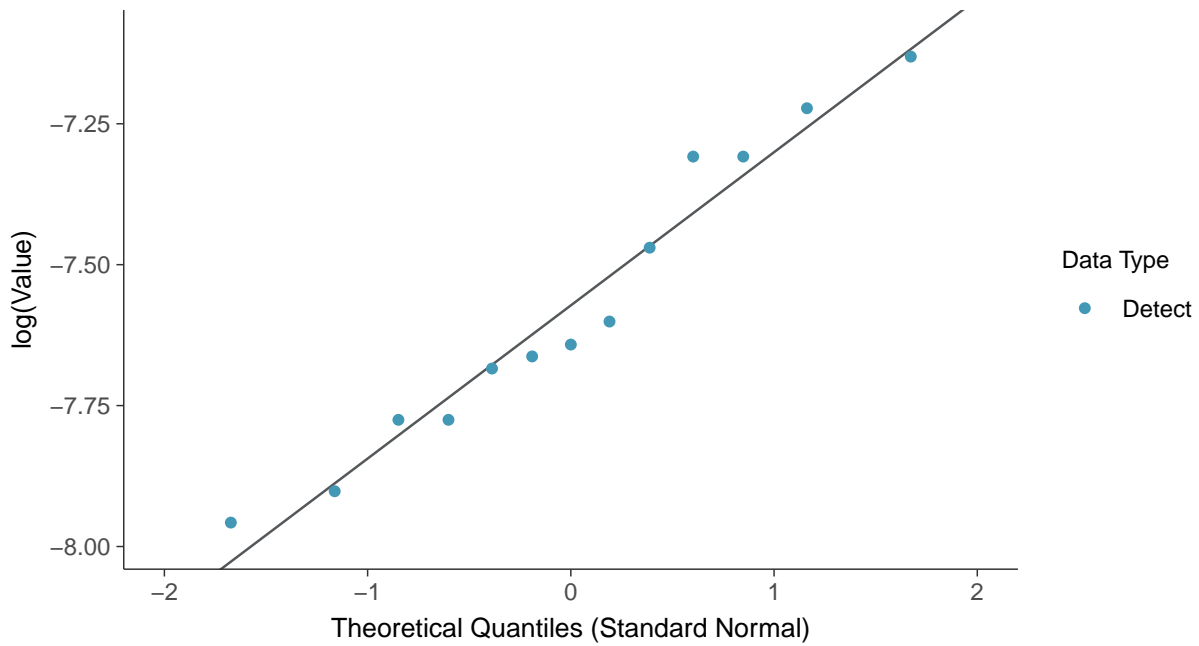




Normal Q-Q plot
Cobalt, MW-06 (mg/L)



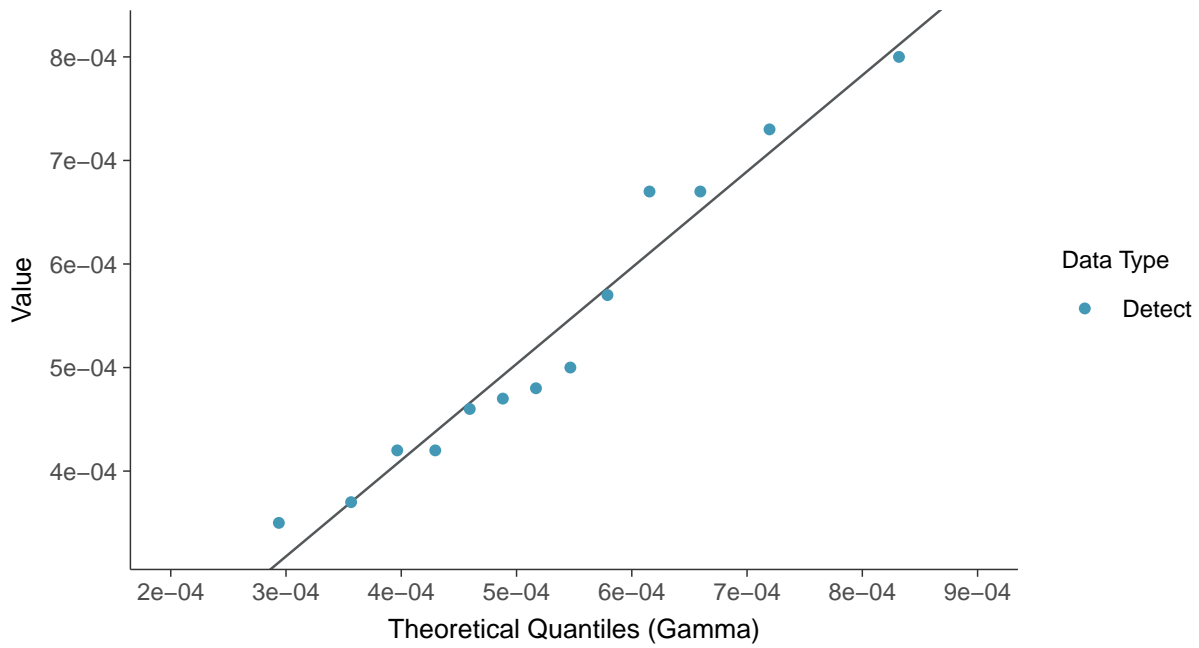
Lognormal Q-Q plot
Cobalt, MW-06 (mg/L)





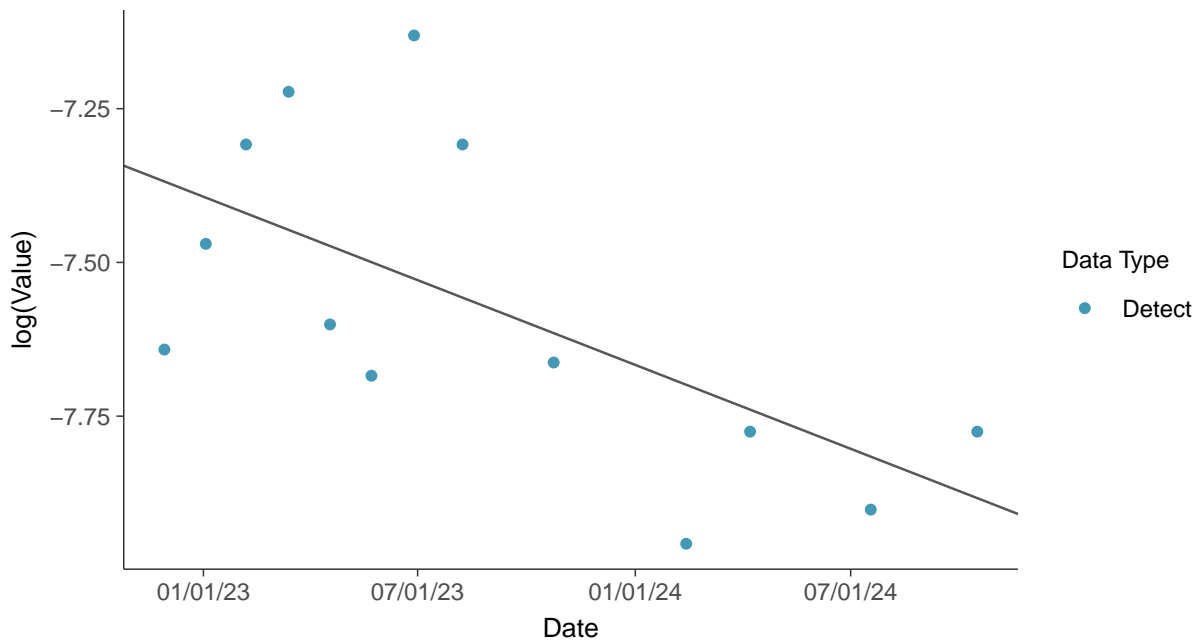
Gamma Q-Q plot

Cobalt, MW-06 (mg/L)



Trend Regression: Lognormal MLE

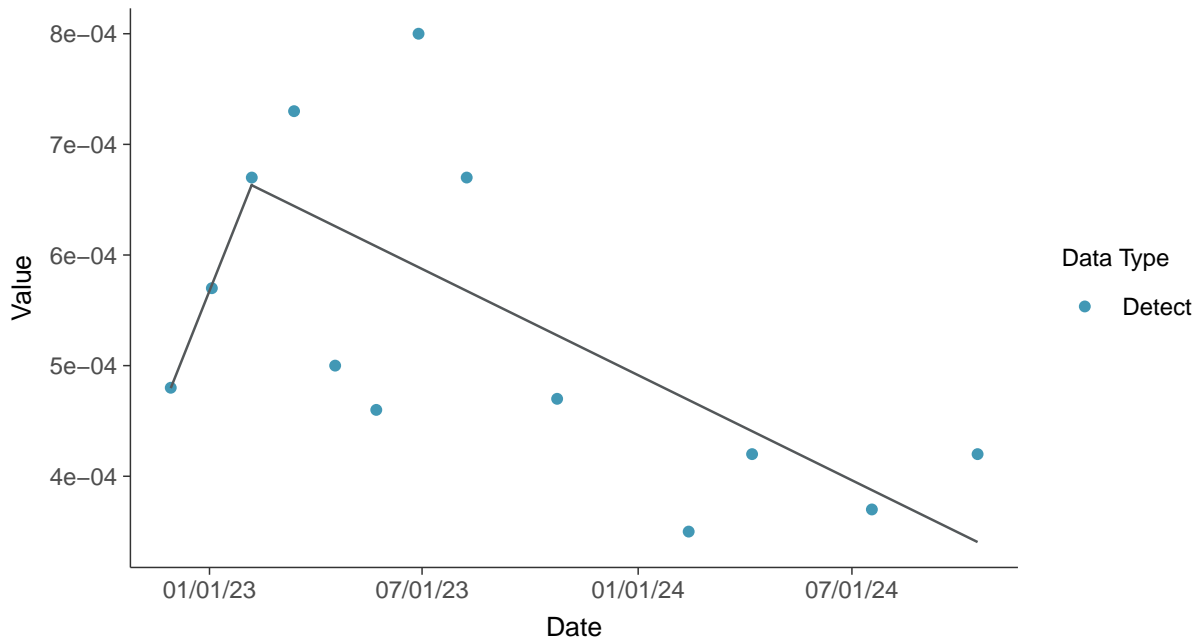
Cobalt, MW-06 (mg/L)





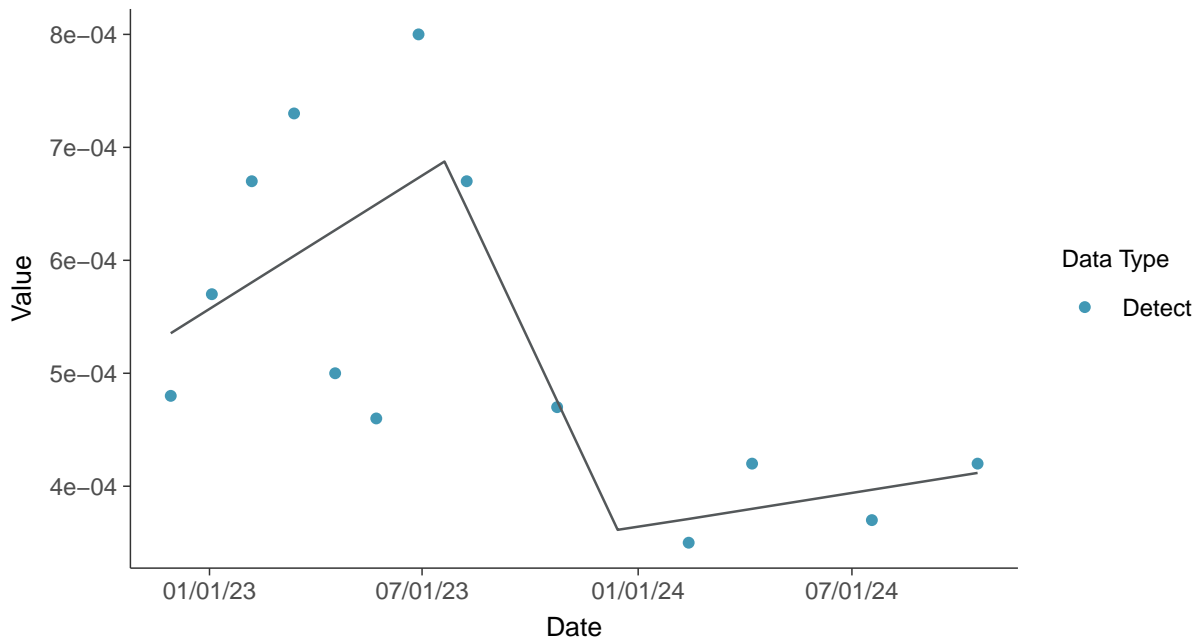
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-06 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cobalt, MW-06 (mg/L)



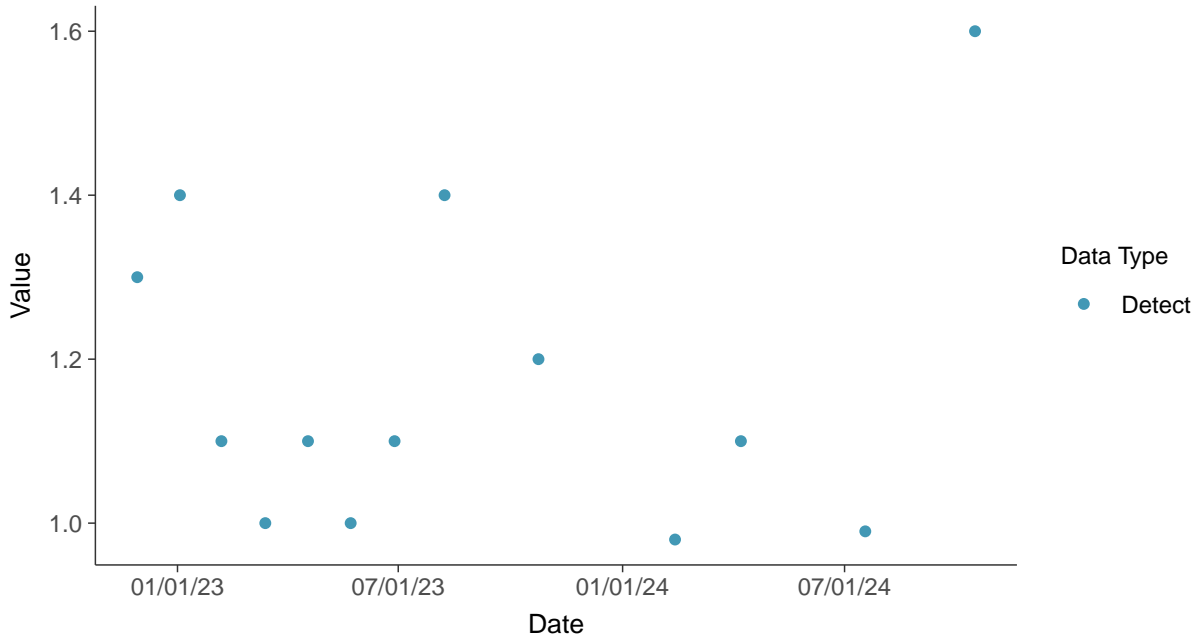


Appendix IV: Fluoride (App IV), MW-06

ID: 1_16_1_5_113

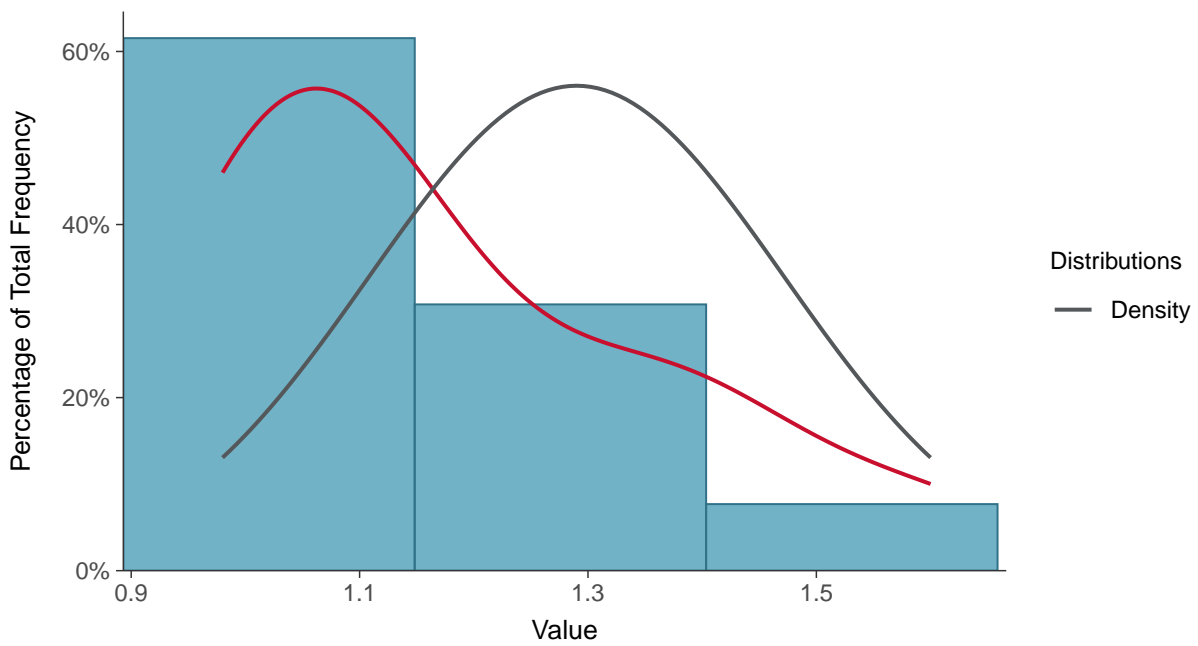
Scatter Plot

Fluoride (App IV), MW-06 (mg/L)



Histogram

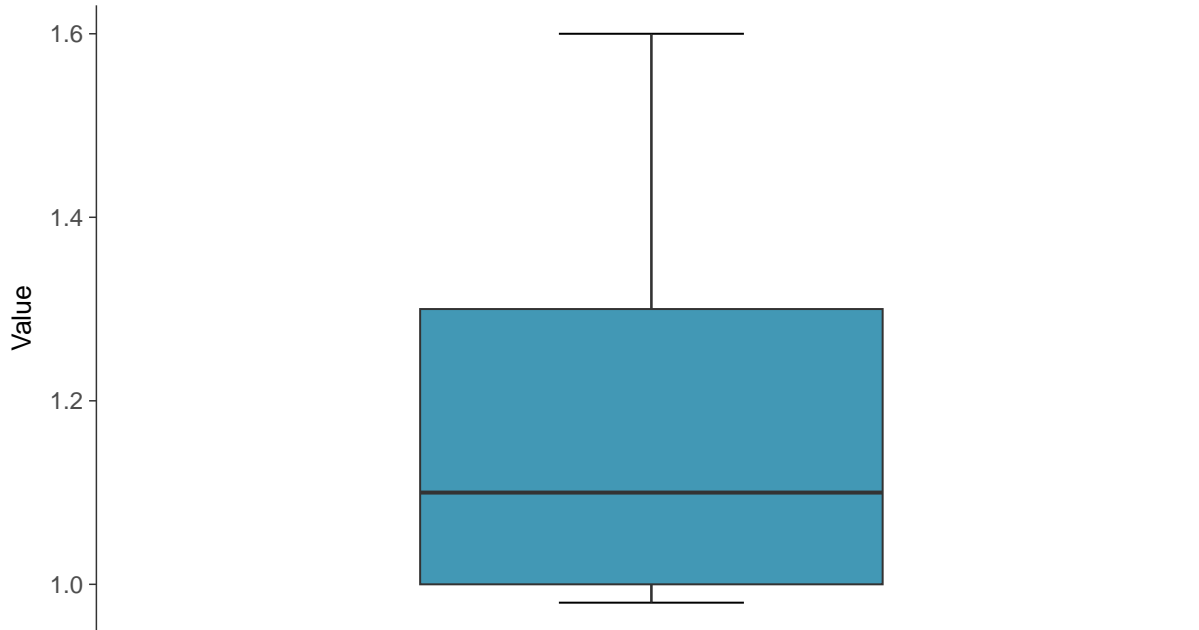
Fluoride (App IV), MW-06 (mg/L)





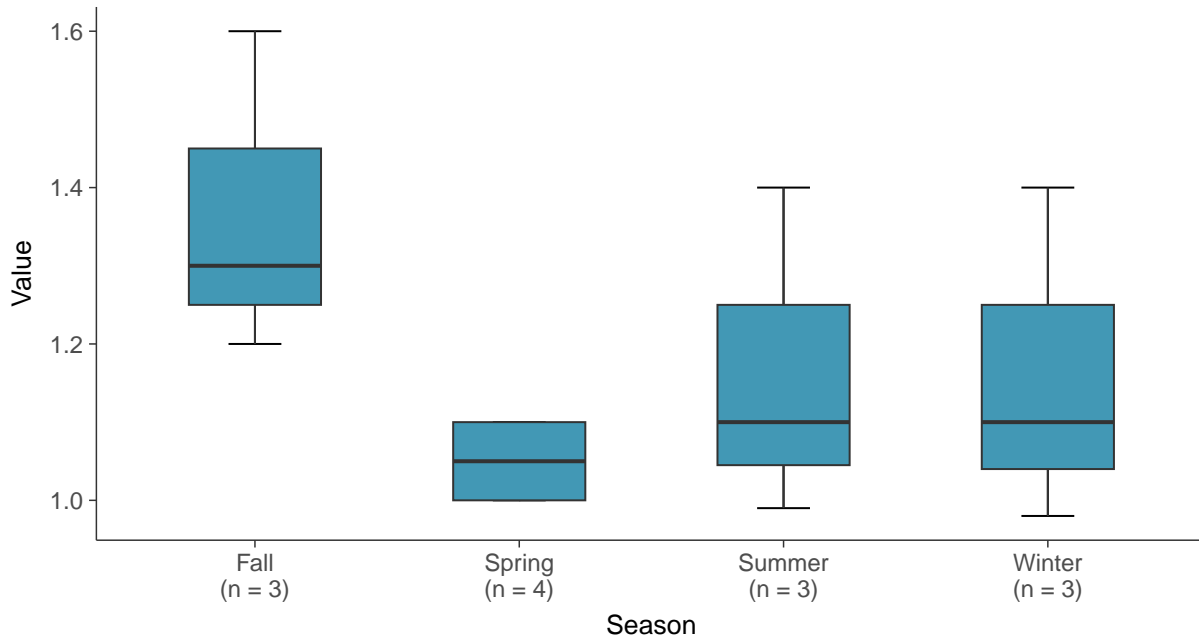
Boxplot

Fluoride (App IV), MW-06 (mg/L)



Boxplot by Season

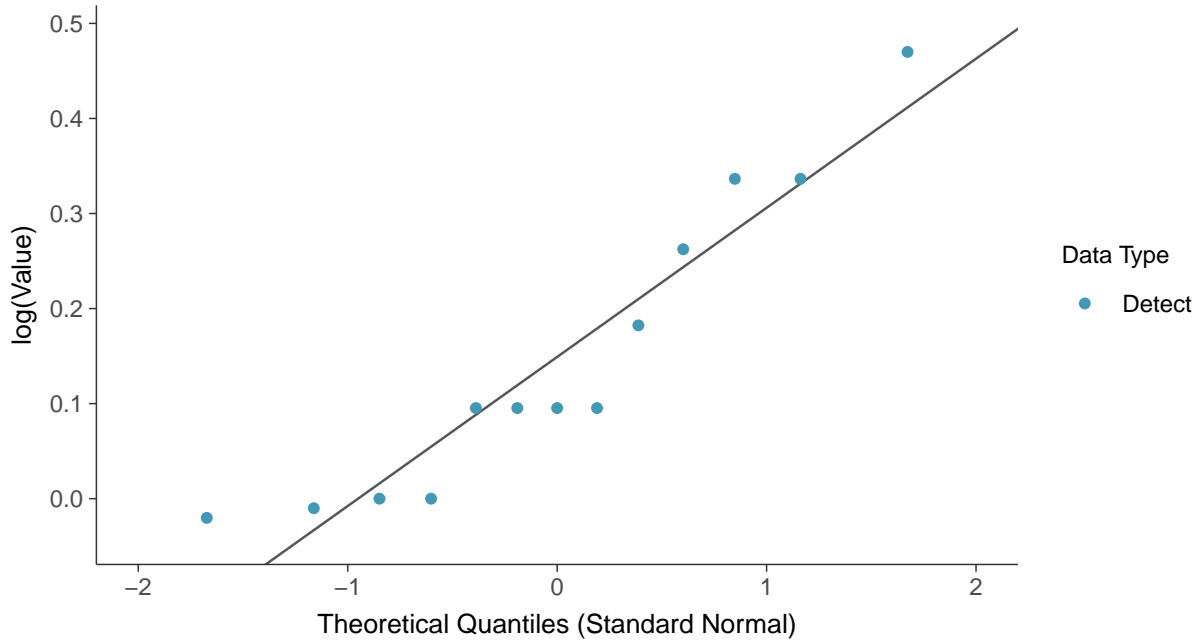
Fluoride (App IV), MW-06 (mg/L)





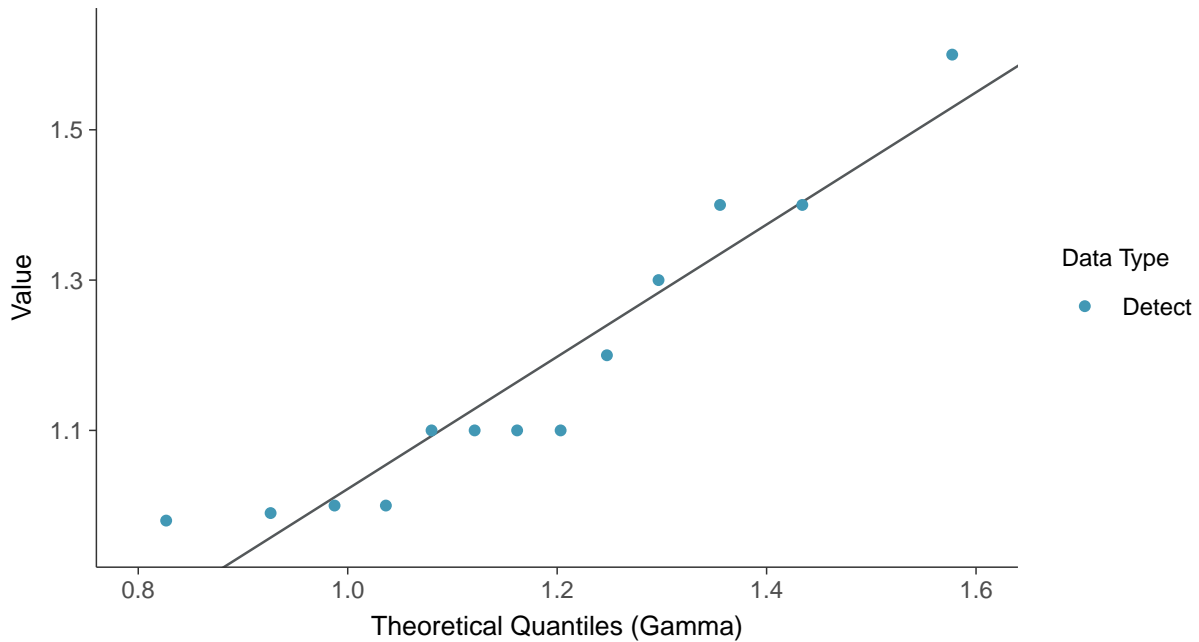
Lognormal Q-Q plot

Fluoride (App IV), MW-06 (mg/L)



Gamma Q-Q plot

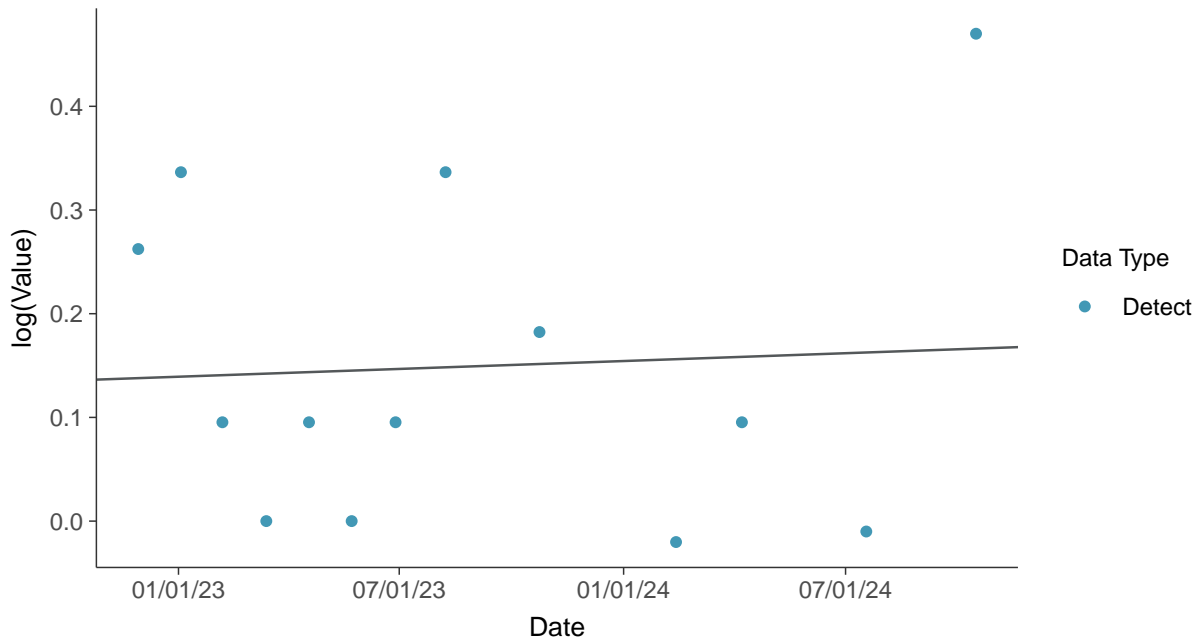
Fluoride (App IV), MW-06 (mg/L)





Trend Regression: Lognormal MLE

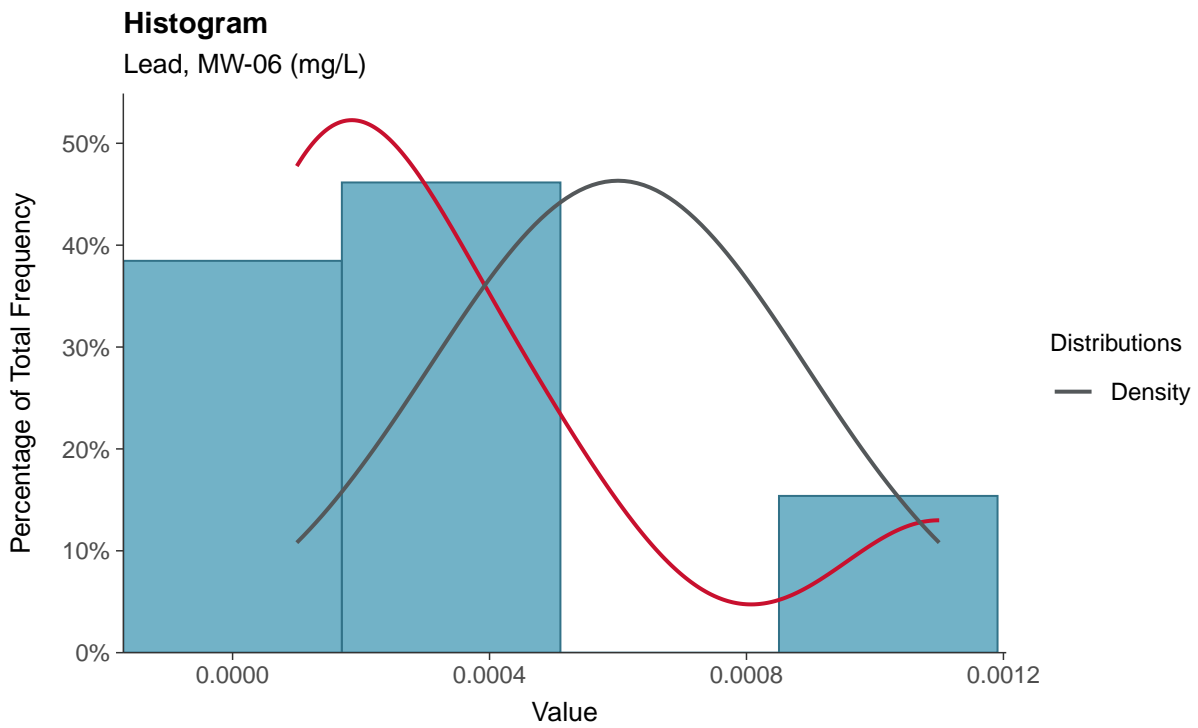
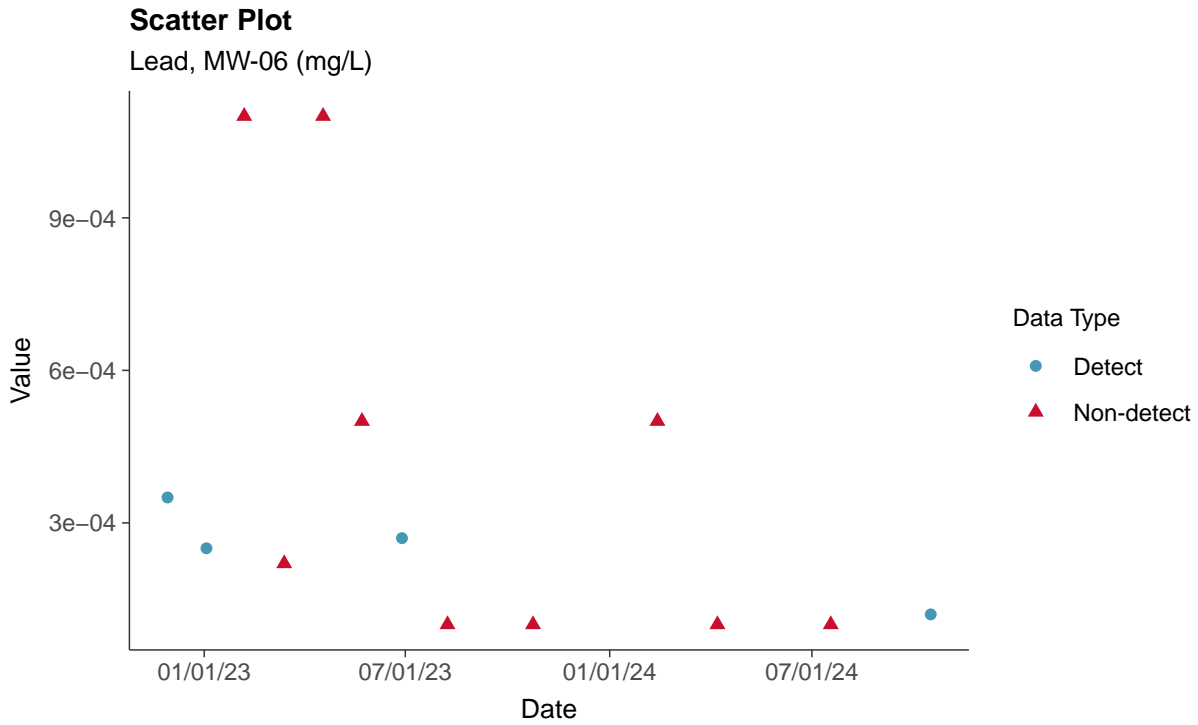
Fluoride (App IV), MW-06 (mg/L)





Appendix IV: Lead, MW-06

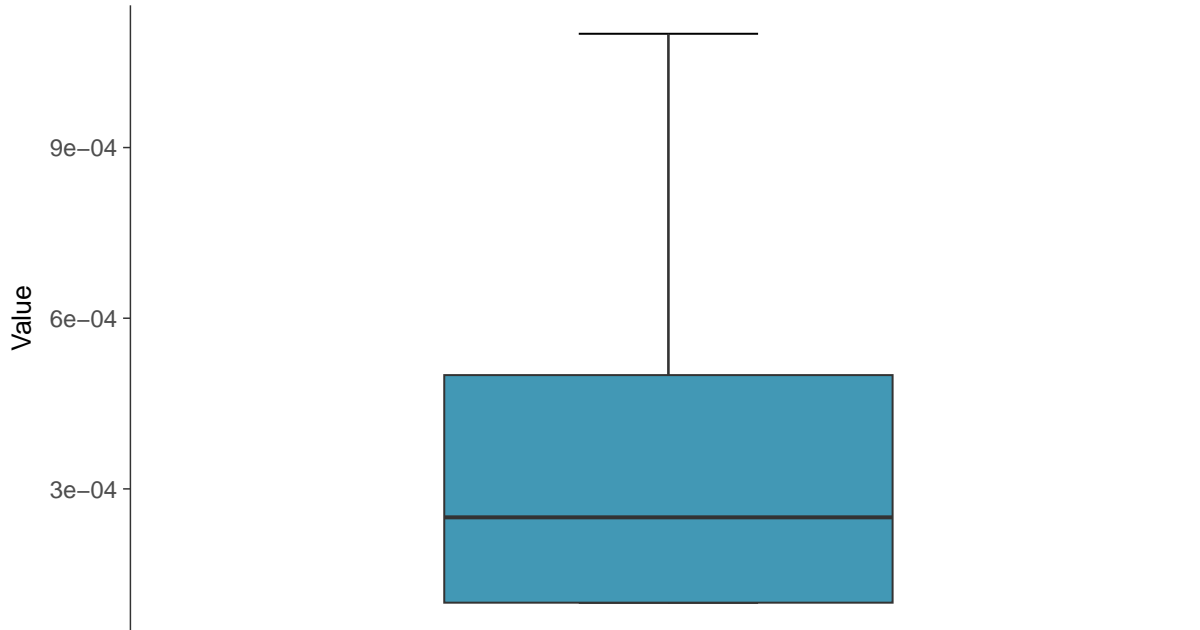
ID: 1_16_1_5_115





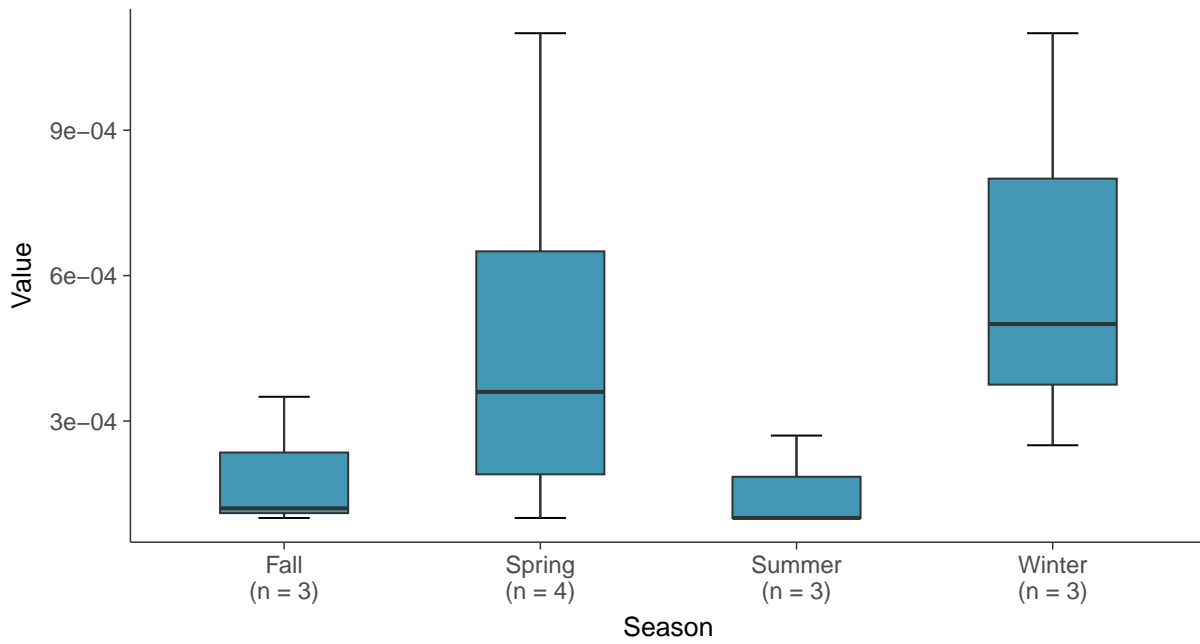
Boxplot

Lead, MW-06 (mg/L)



Boxplot by Season

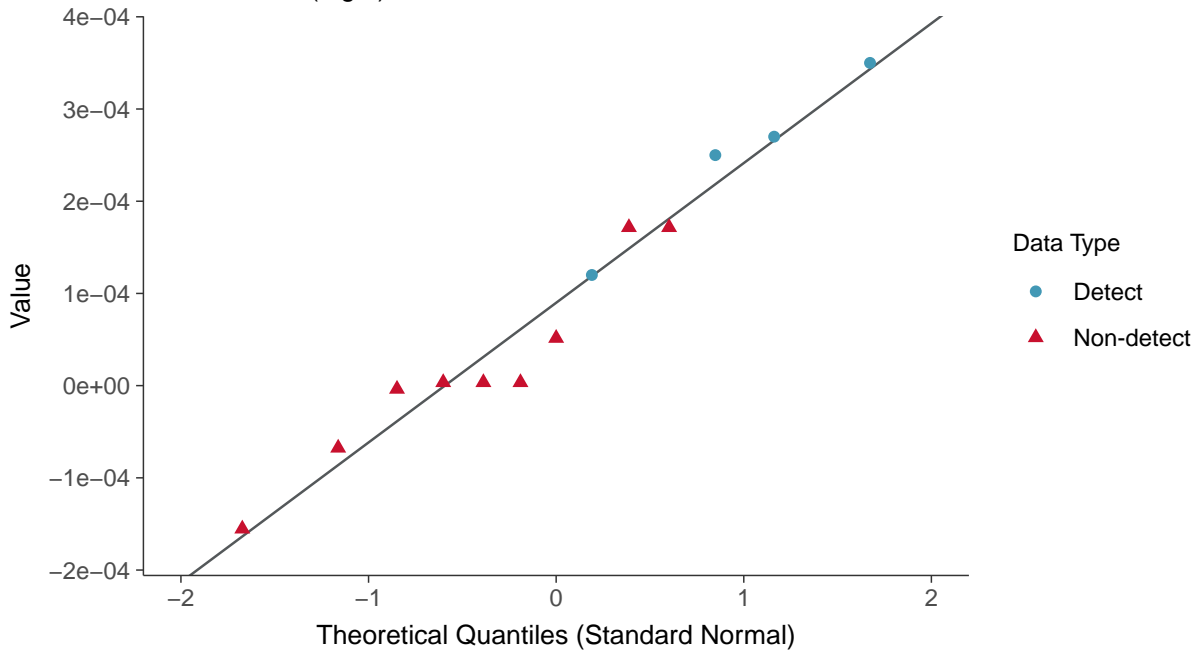
Lead, MW-06 (mg/L)





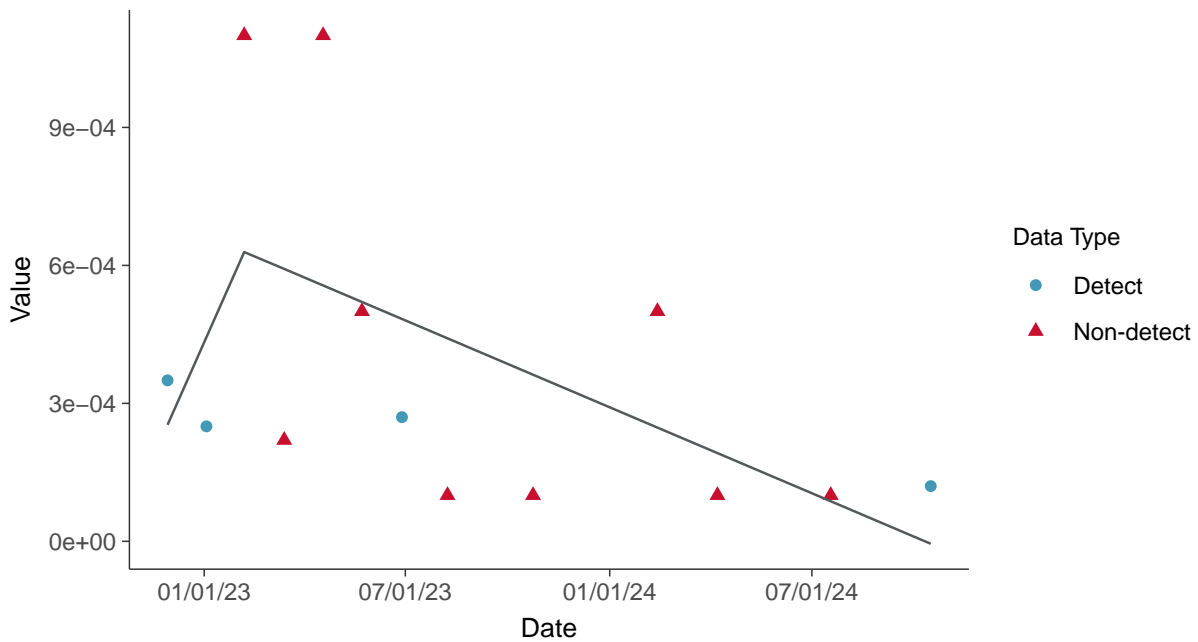
Normal Q-Q plot using ROS Imputed Estimates

Lead, MW-06 (mg/L)



Trend Regression: Piecewise Linear-Linear

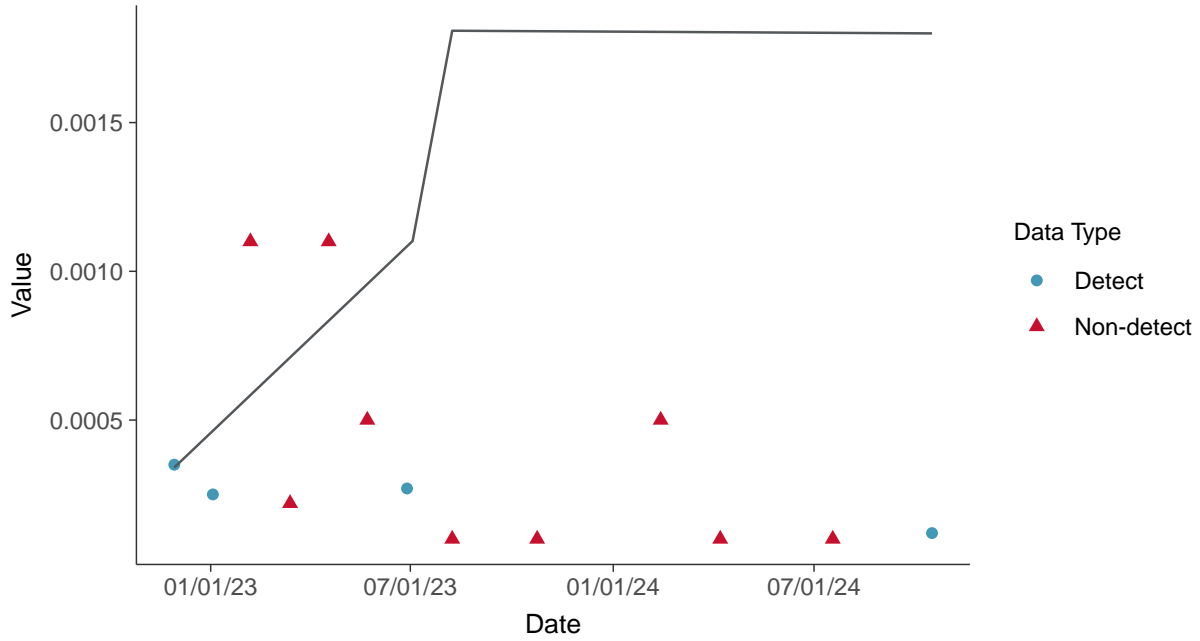
Lead, MW-06 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

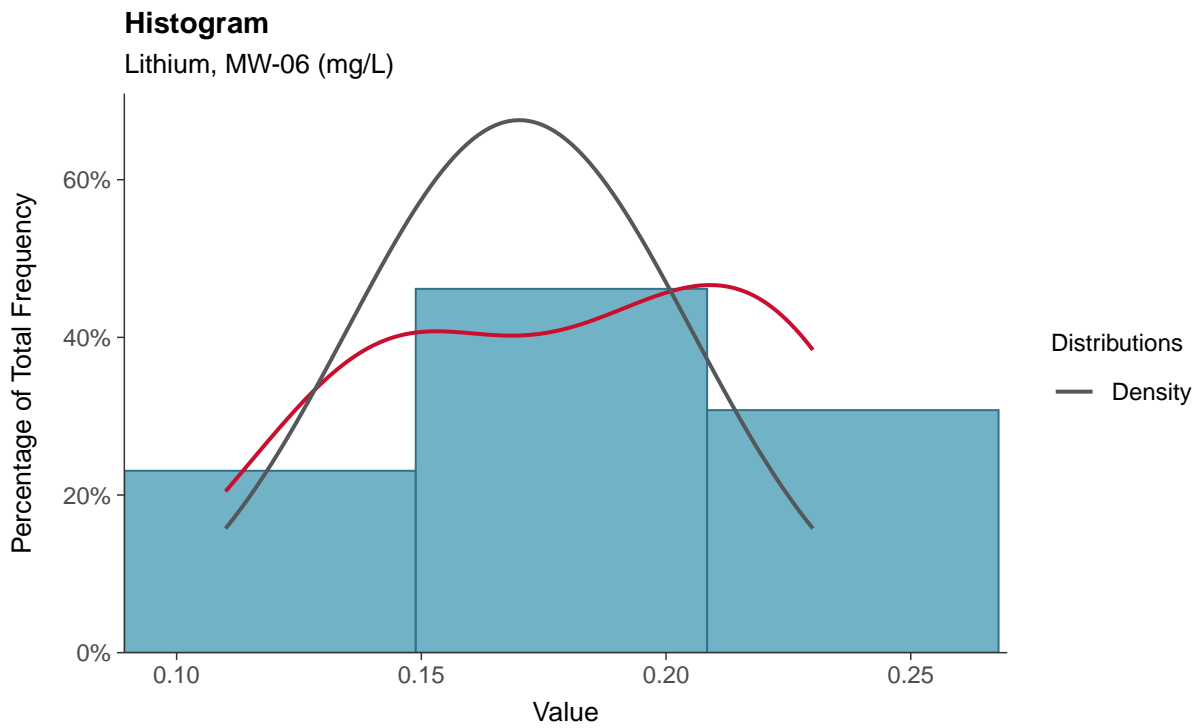
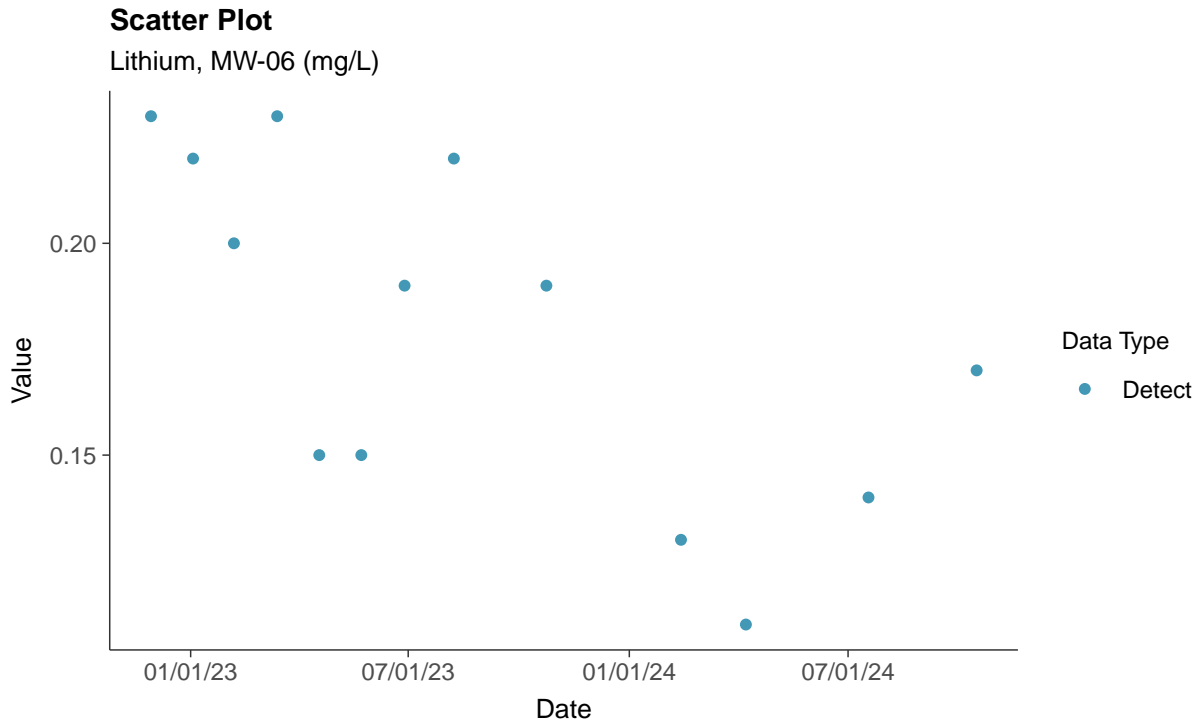
Lead, MW-06 (mg/L)





Appendix IV: Lithium, MW-06

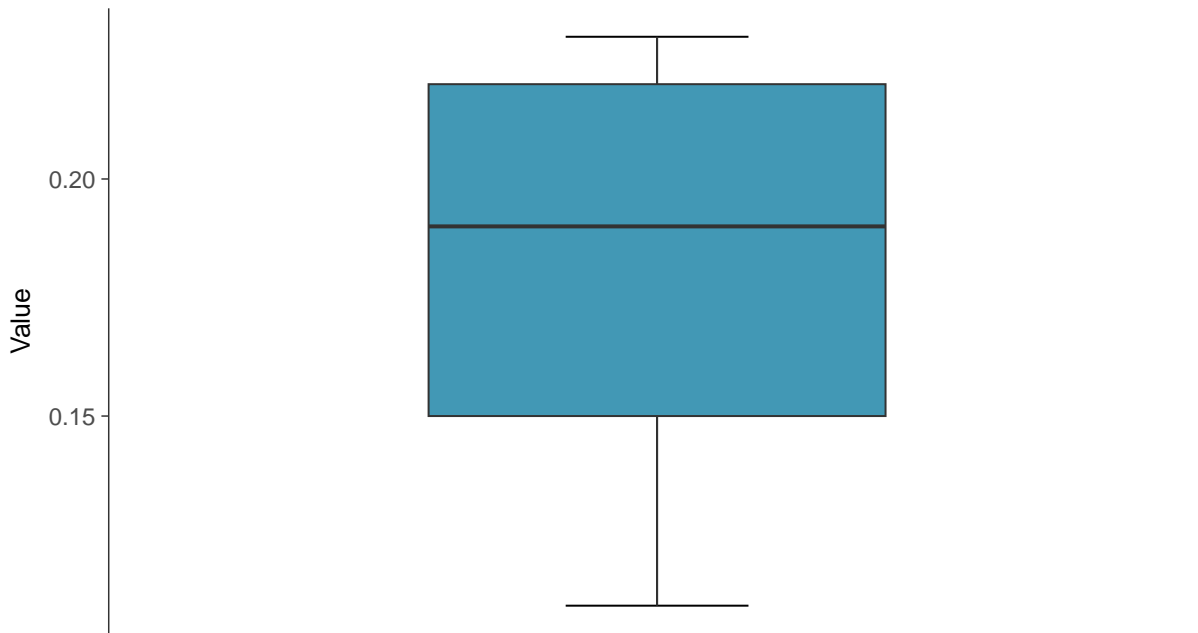
ID: 1_16_1_5_116





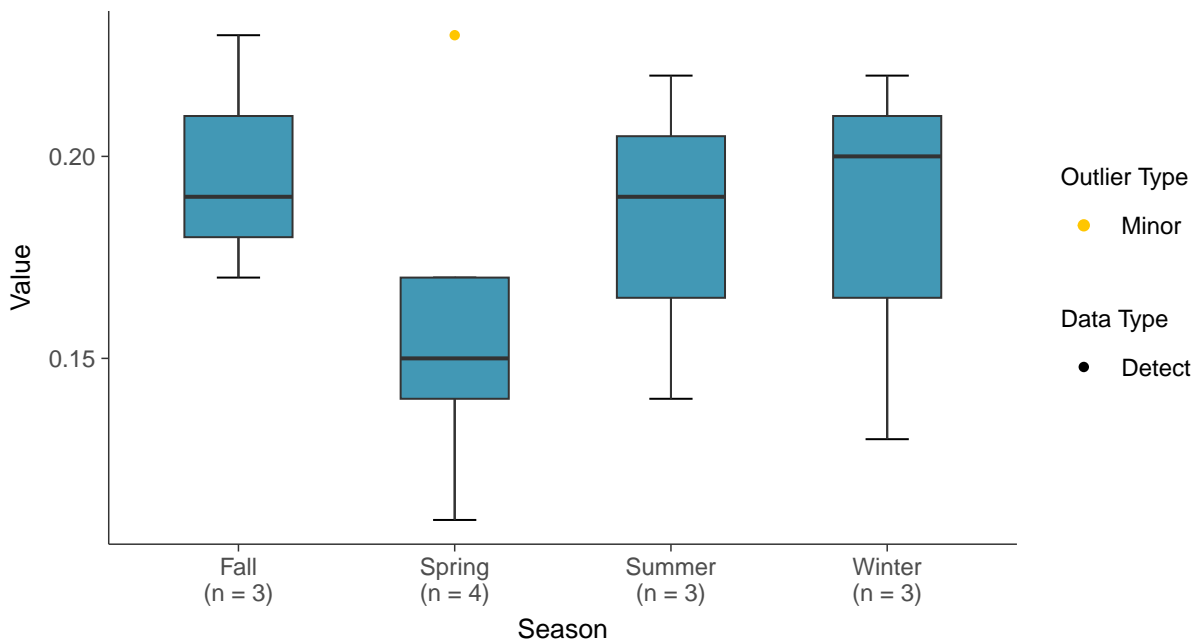
Boxplot

Lithium, MW-06 (mg/L)



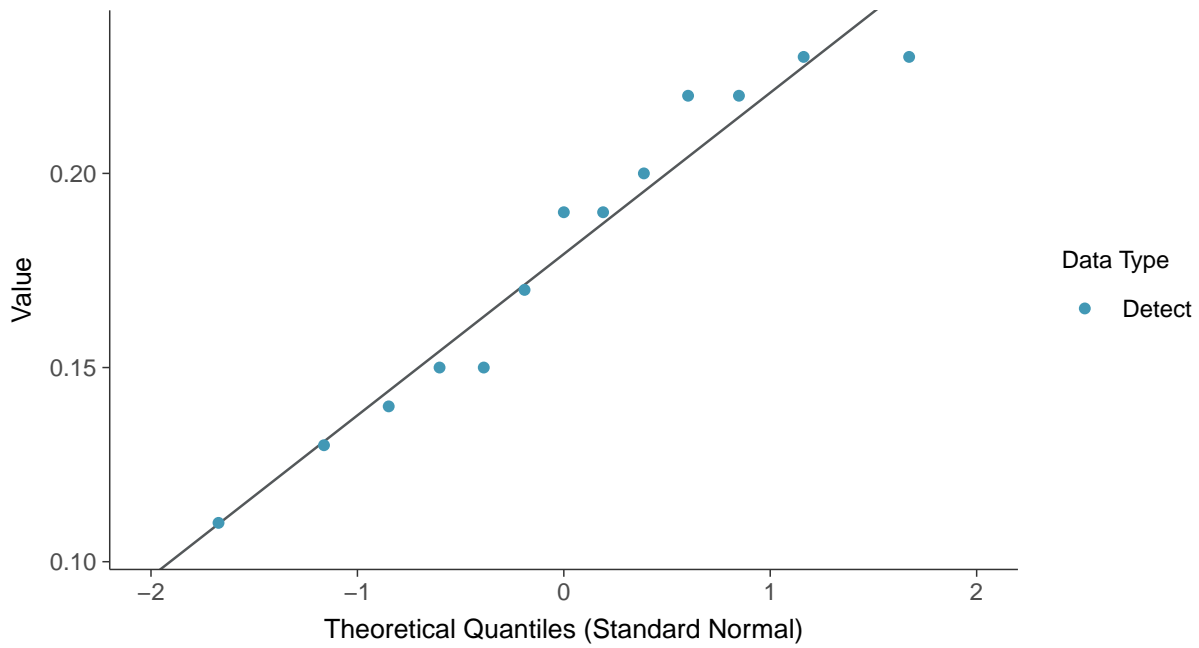
Boxplot by Season

Lithium, MW-06 (mg/L)

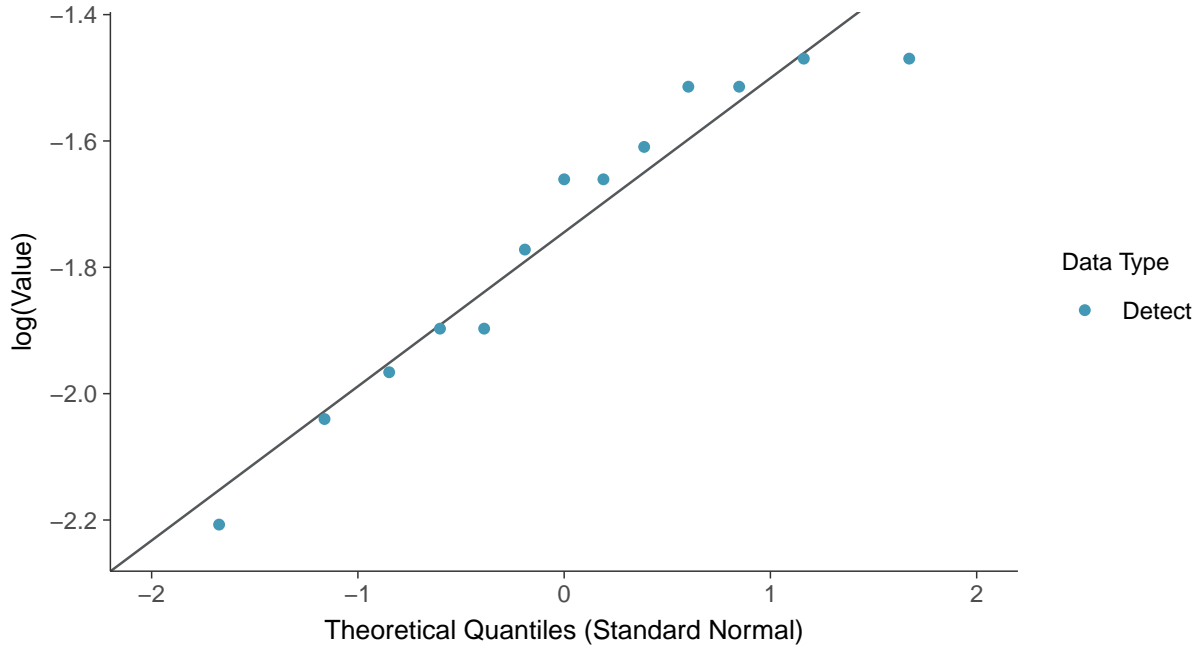




Normal Q-Q plot
Lithium, MW-06 (mg/L)

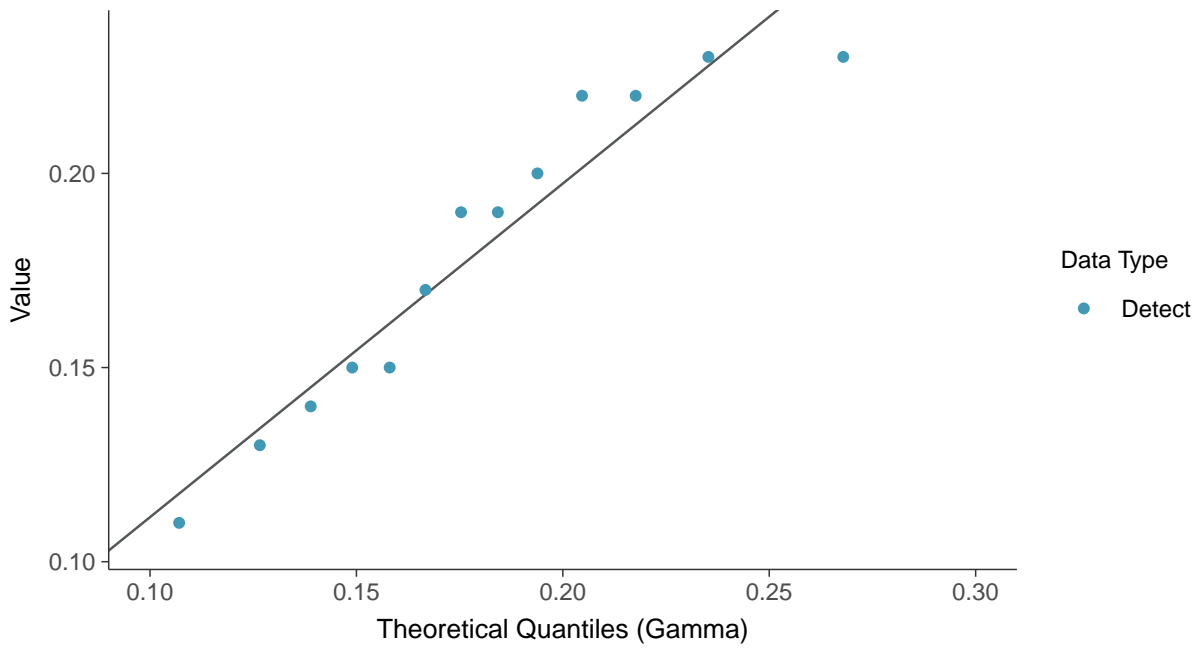


Lognormal Q-Q plot
Lithium, MW-06 (mg/L)

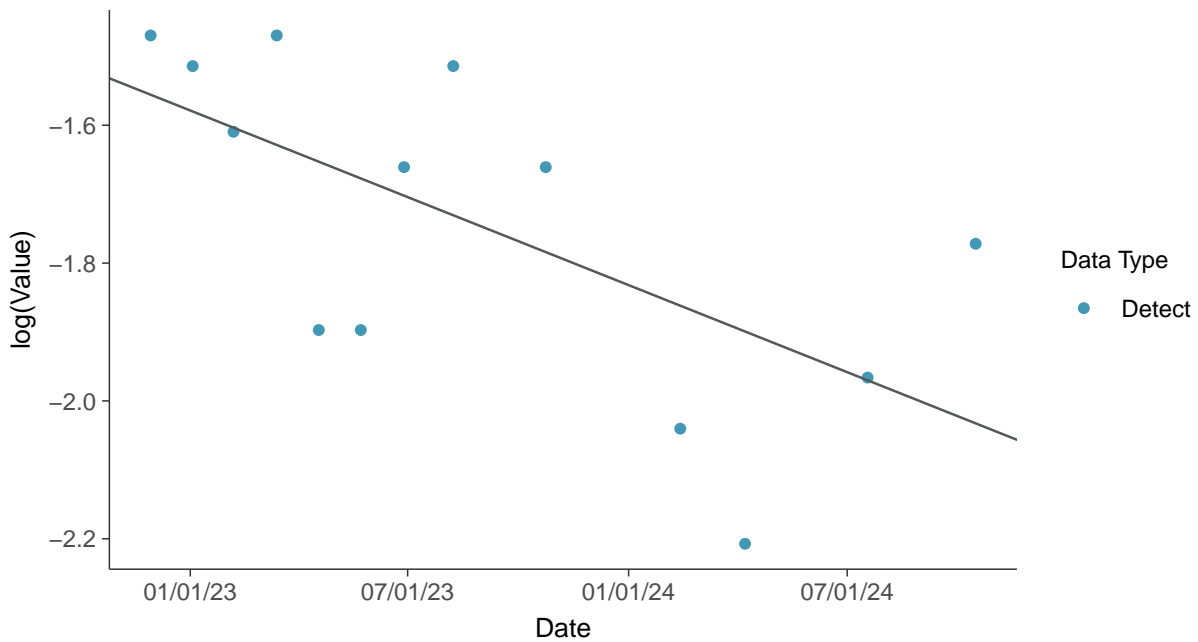




Gamma Q-Q plot
Lithium, MW-06 (mg/L)

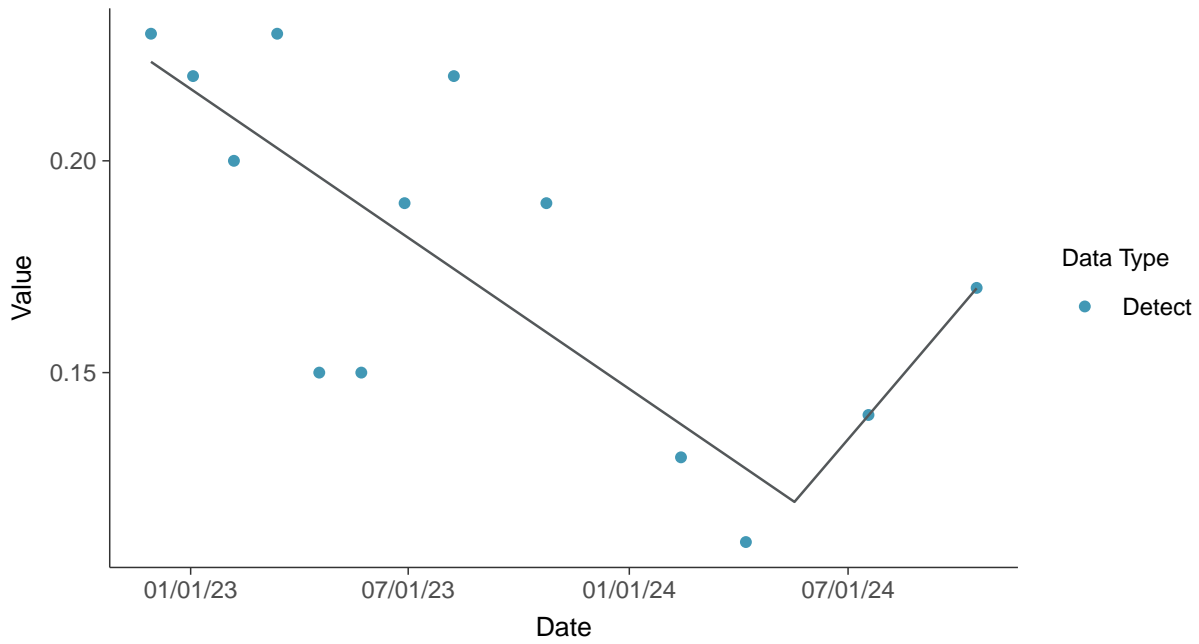


Trend Regression: Lognormal MLE
Lithium, MW-06 (mg/L)





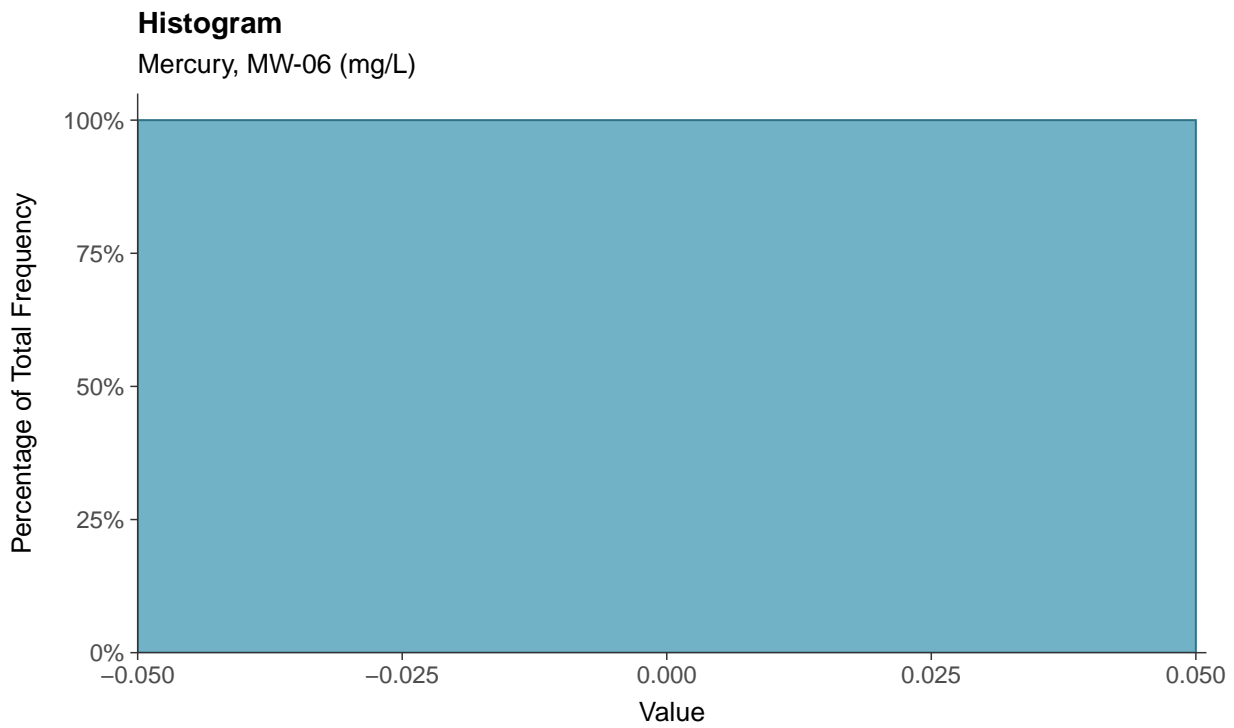
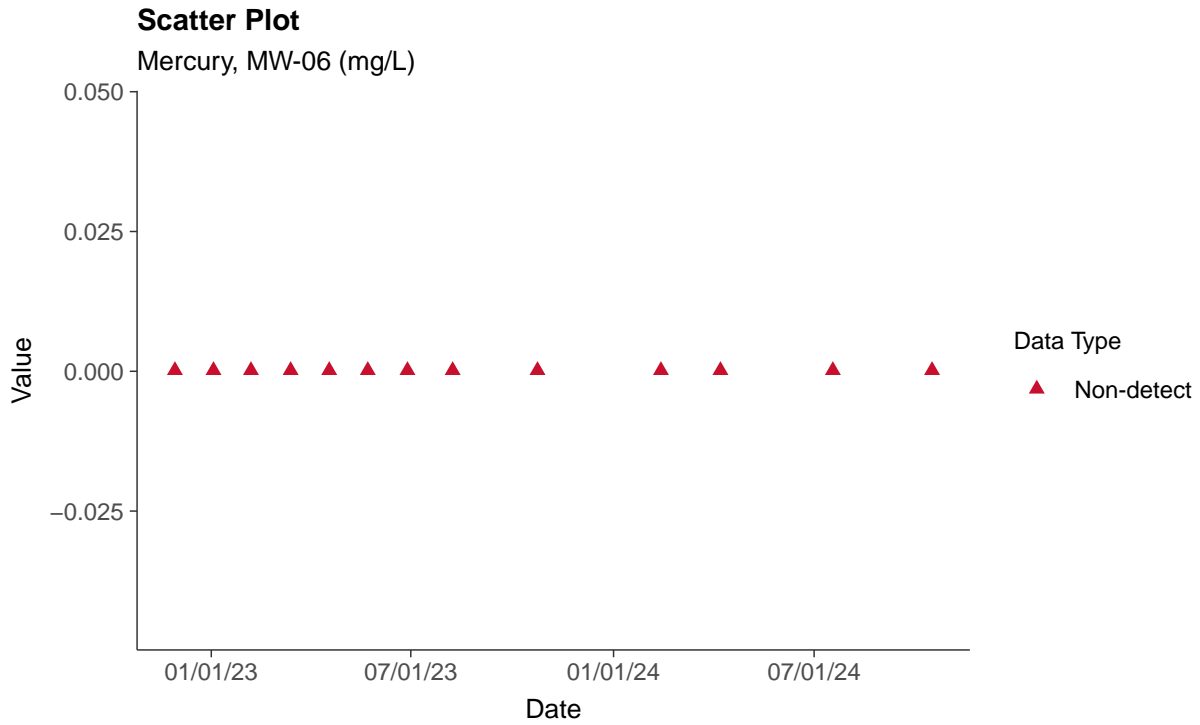
Trend Regression: Piecewise Linear-Linear
Lithium, MW-06 (mg/L)





Appendix IV: Mercury, MW-06

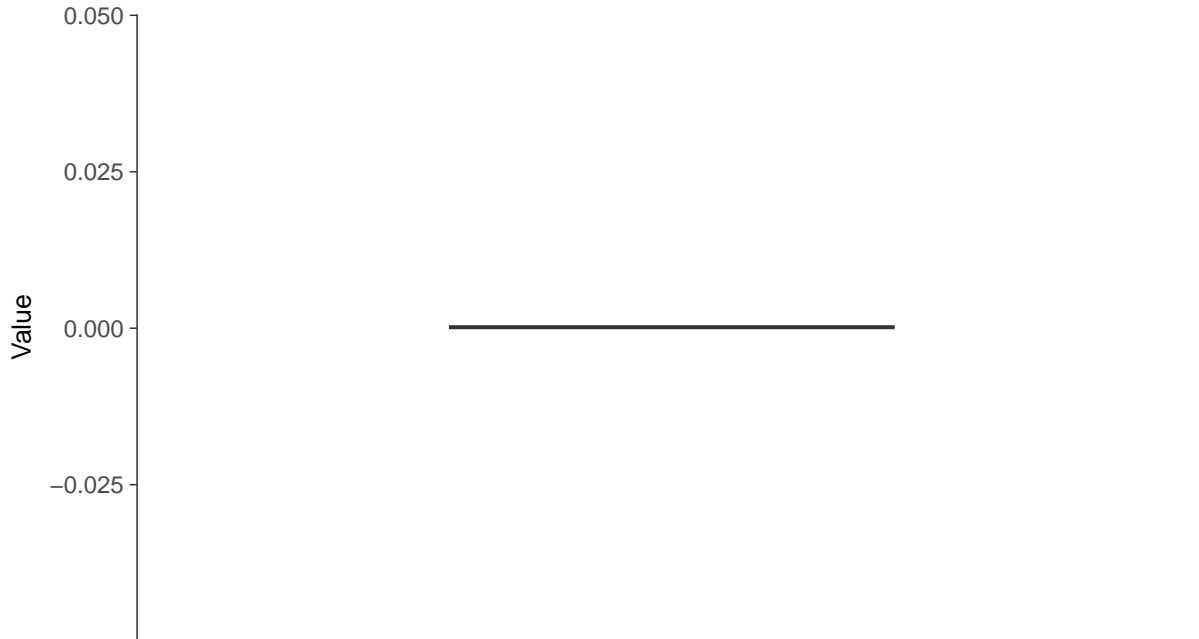
ID: 1_16_1_5_117





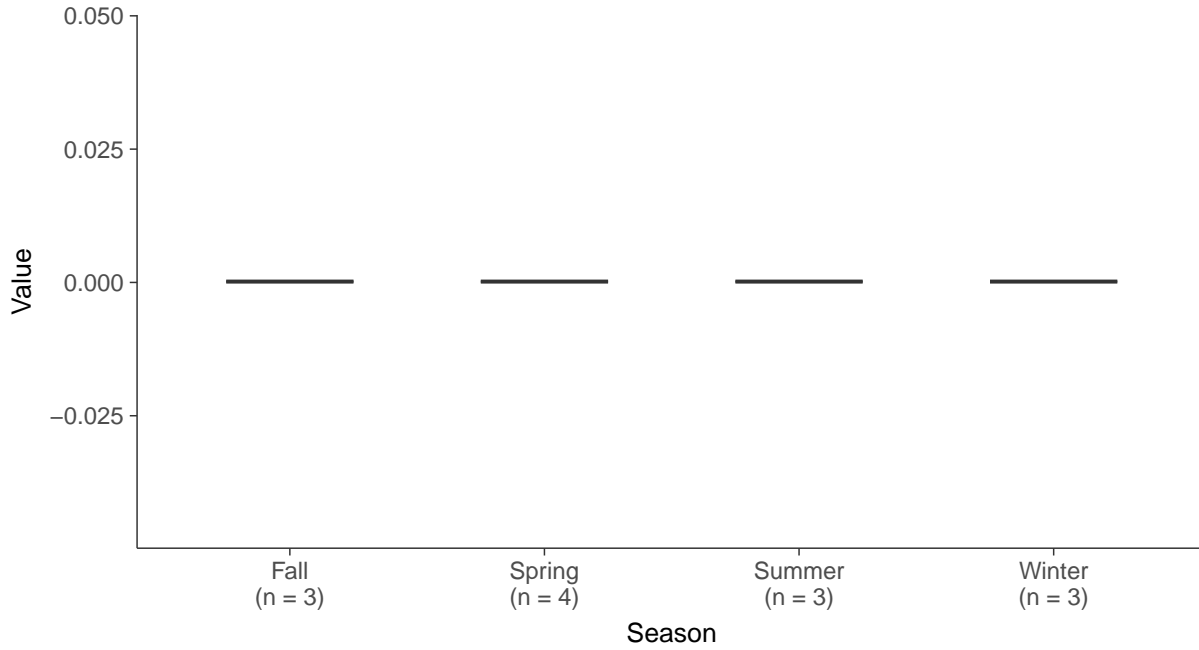
Boxplot

Mercury, MW-06 (mg/L)



Boxplot by Season

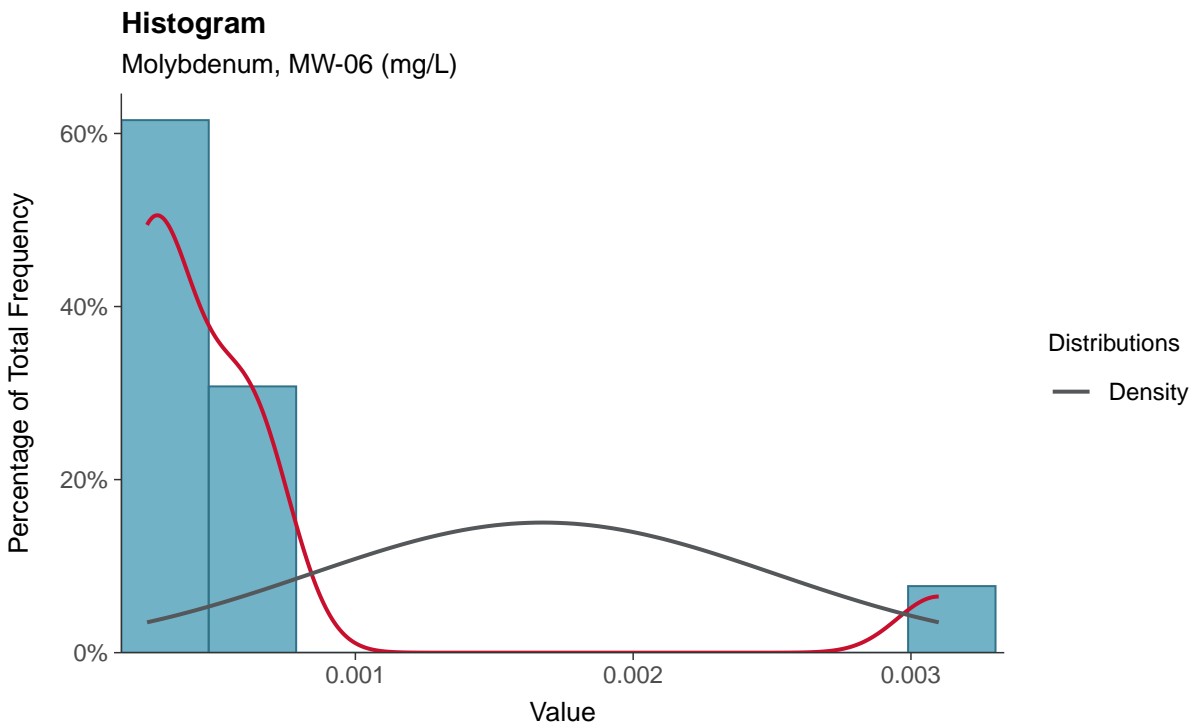
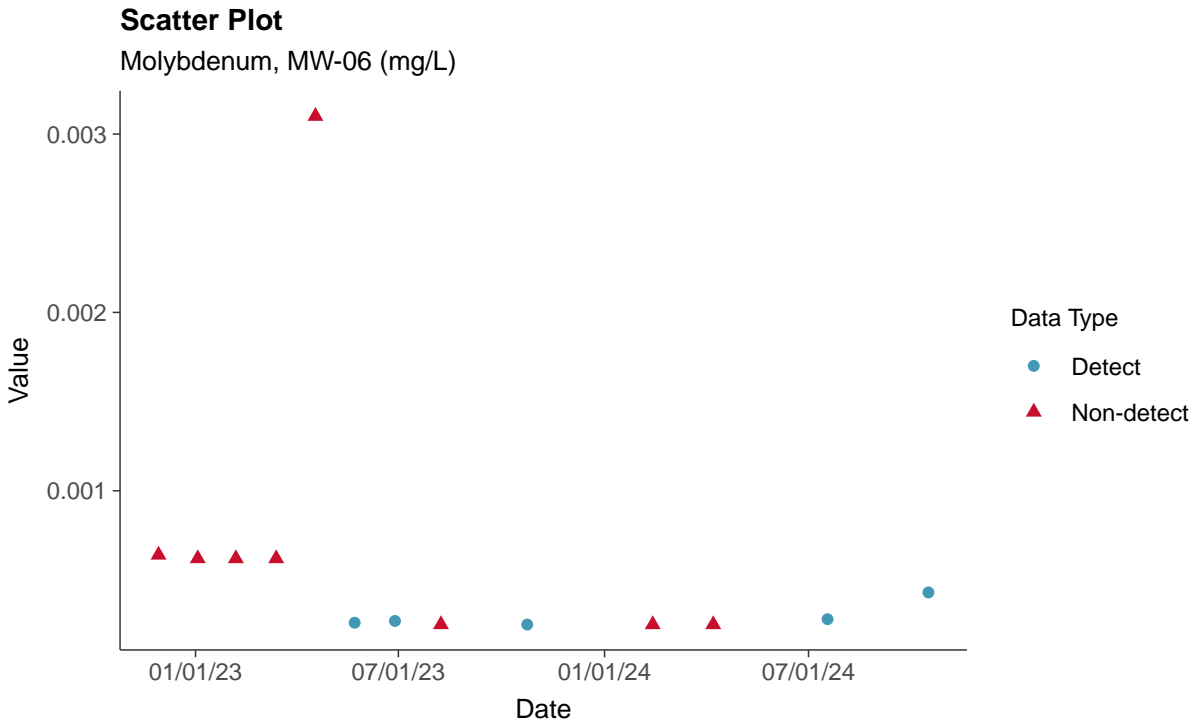
Mercury, MW-06 (mg/L)





Appendix IV: Molybdenum, MW-06

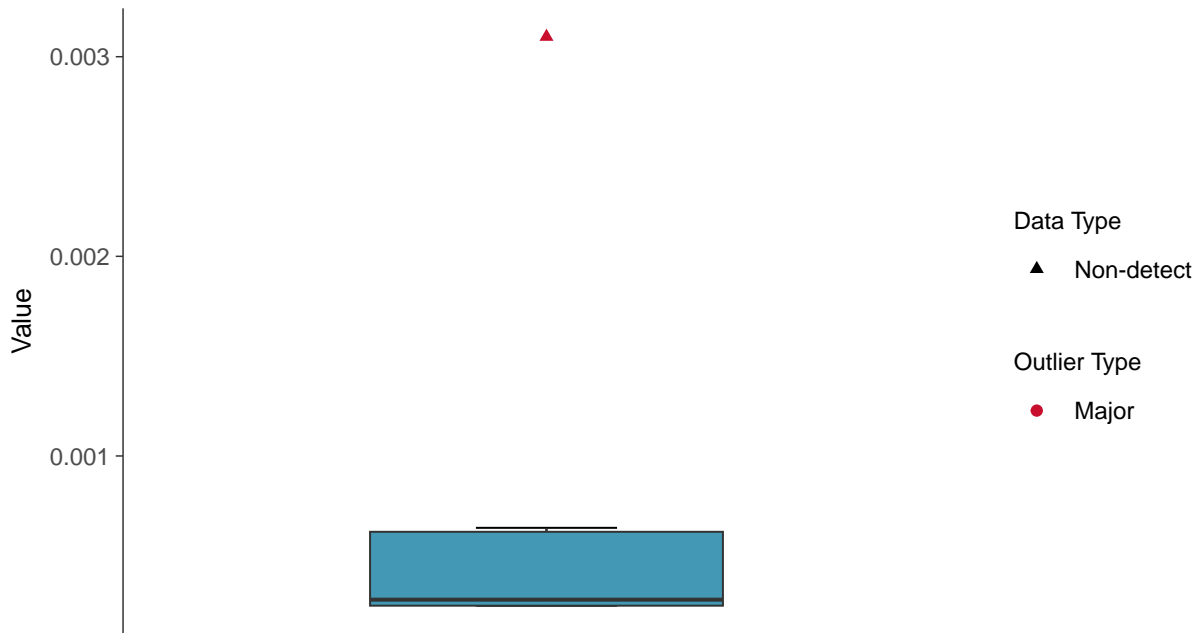
ID: 1_16_1_5_118





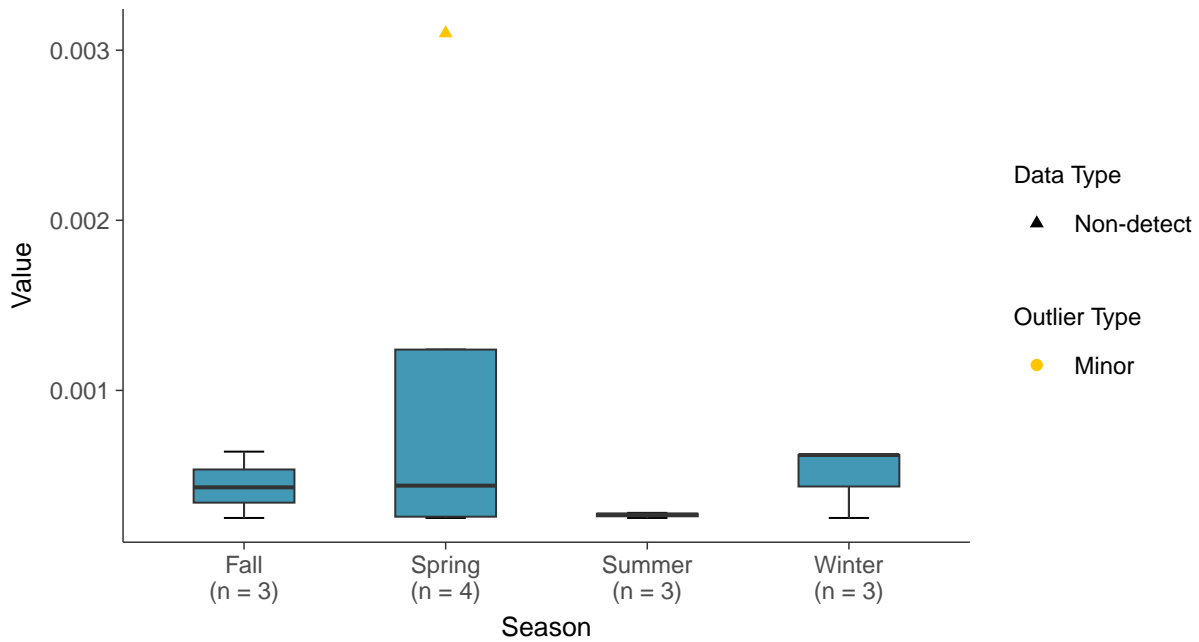
Boxplot

Molybdenum, MW-06 (mg/L)



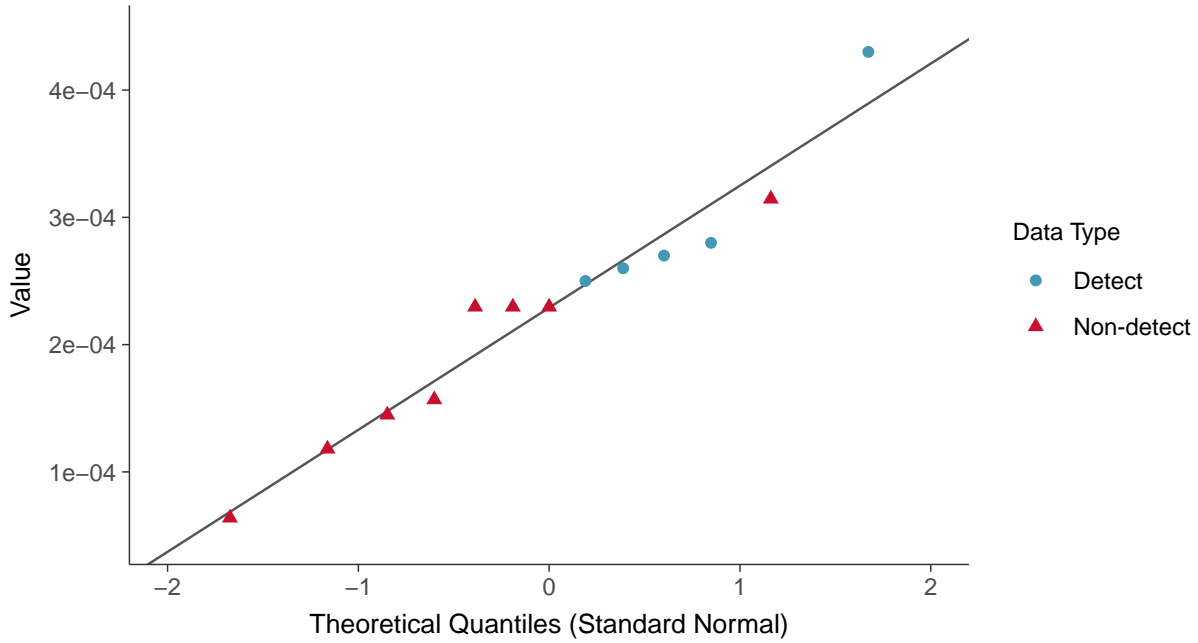
Boxplot by Season

Molybdenum, MW-06 (mg/L)

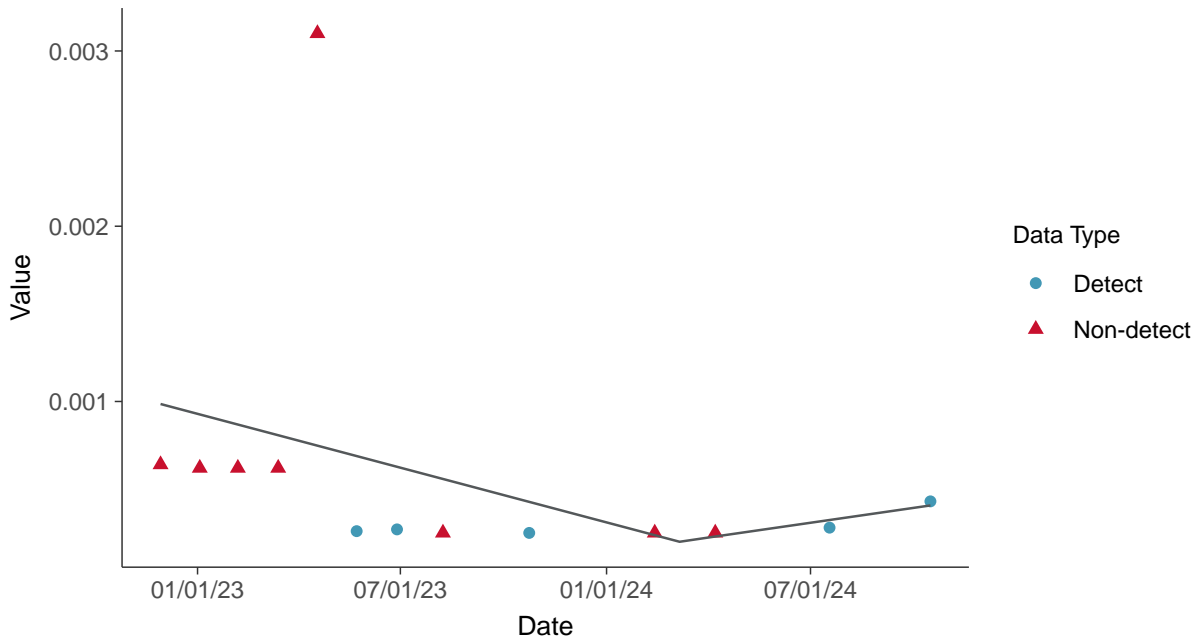




Normal Q-Q plot using ROS Imputed Estimates
Molybdenum, MW-06 (mg/L)



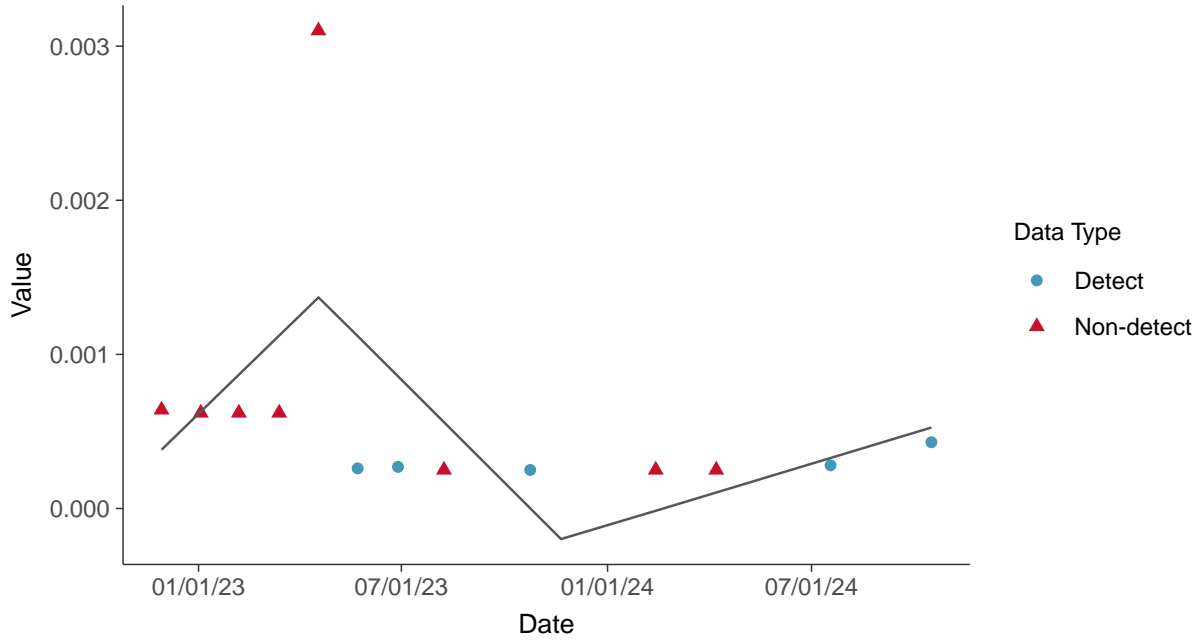
Trend Regression: Piecewise Linear-Linear
Molybdenum, MW-06 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-06 (mg/L)



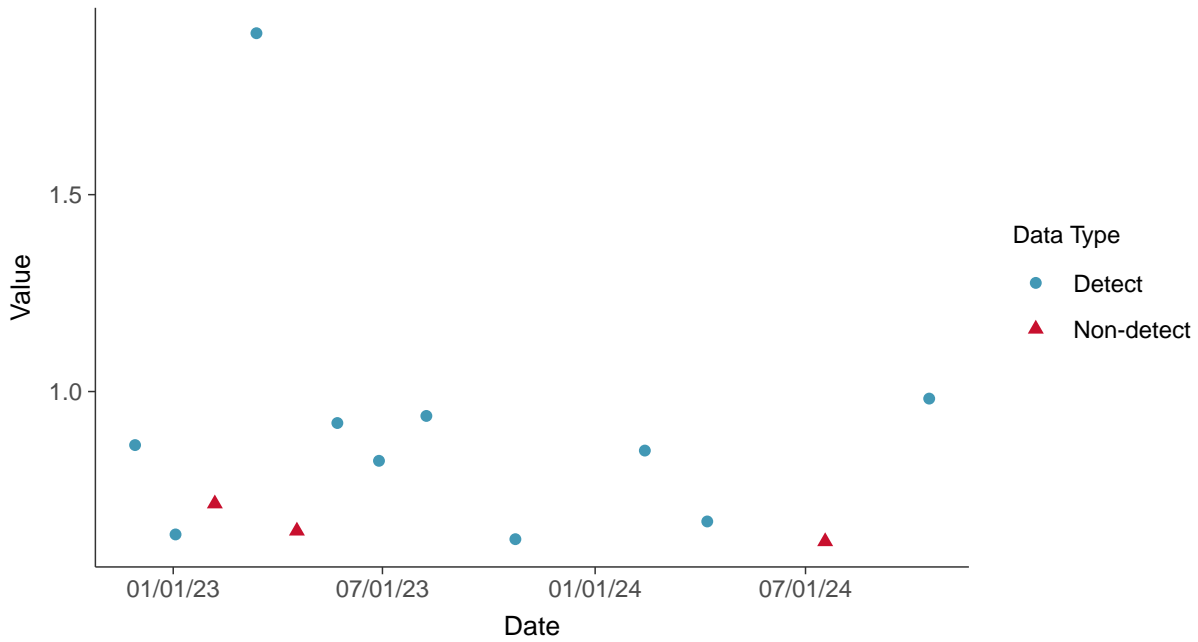


Appendix IV: Radium 226 and 228, MW-06

ID: 1_16_1_5_121

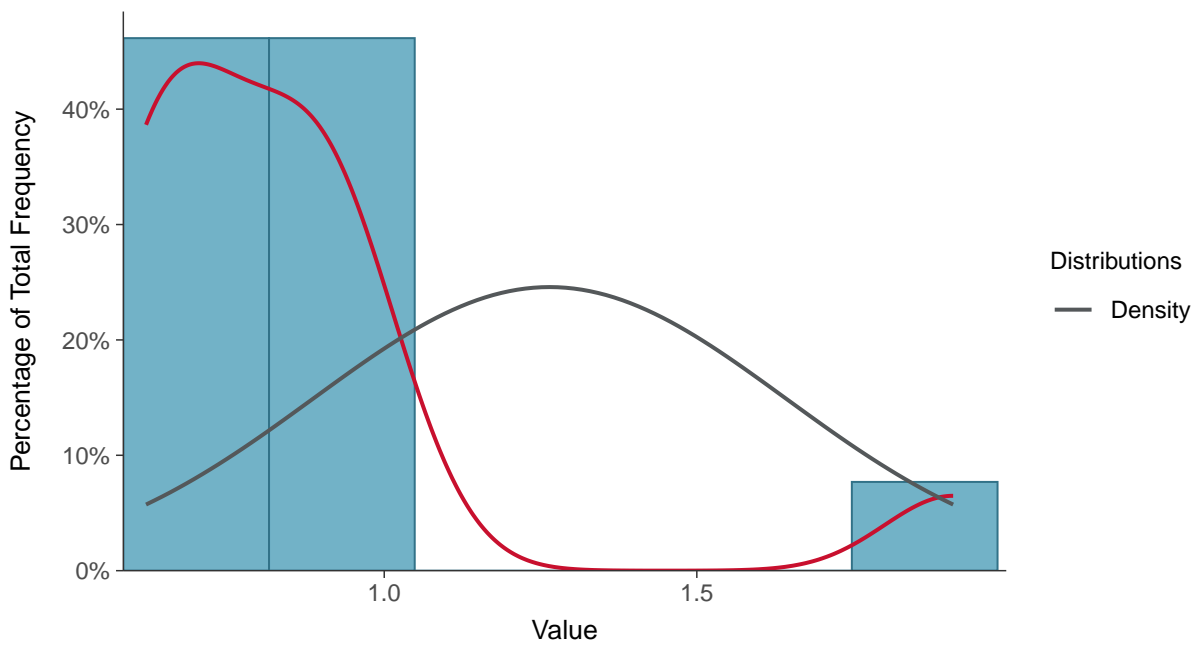
Scatter Plot

Radium 226 and 228, MW-06 (pCi/L)



Histogram

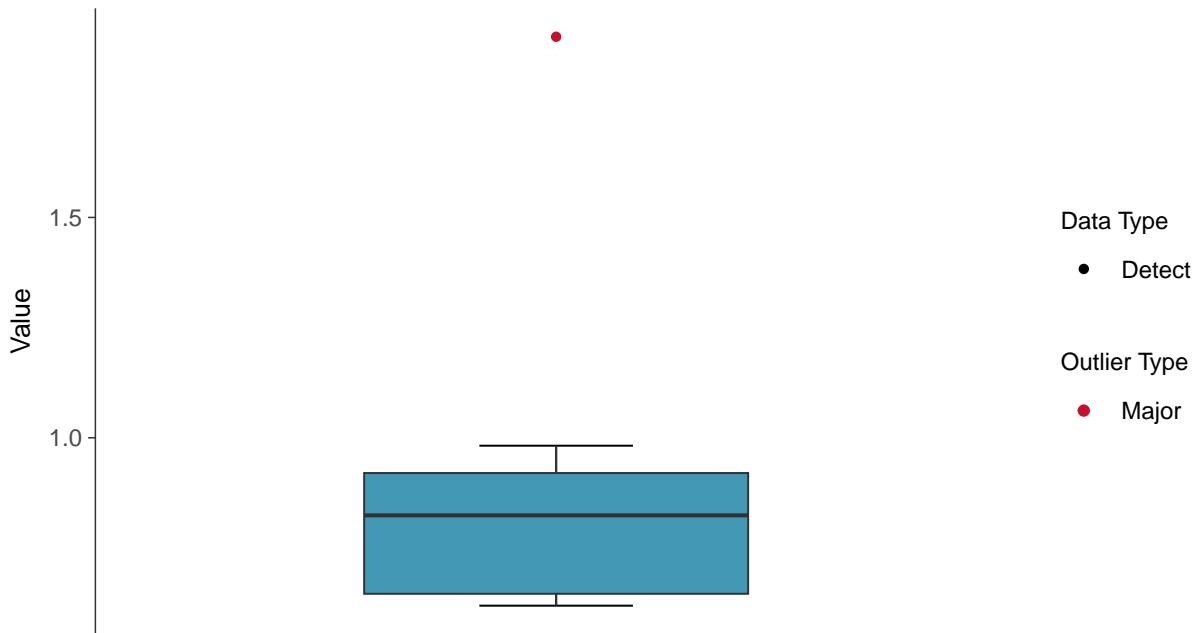
Radium 226 and 228, MW-06 (pCi/L)





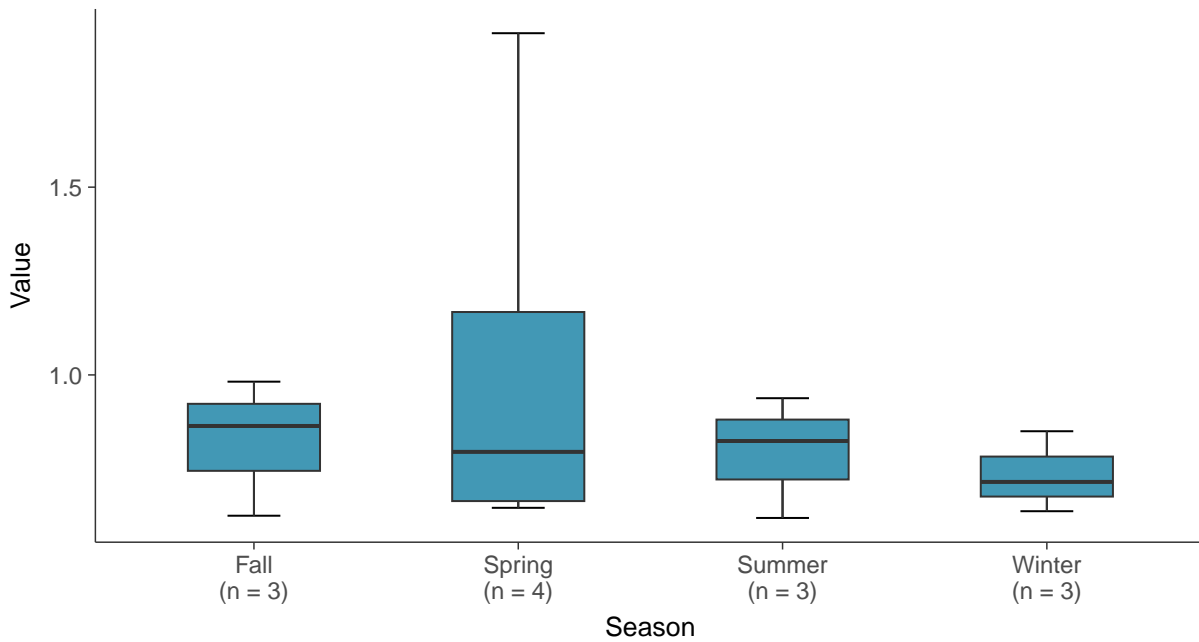
Boxplot

Radium 226 and 228, MW-06 (pCi/L)



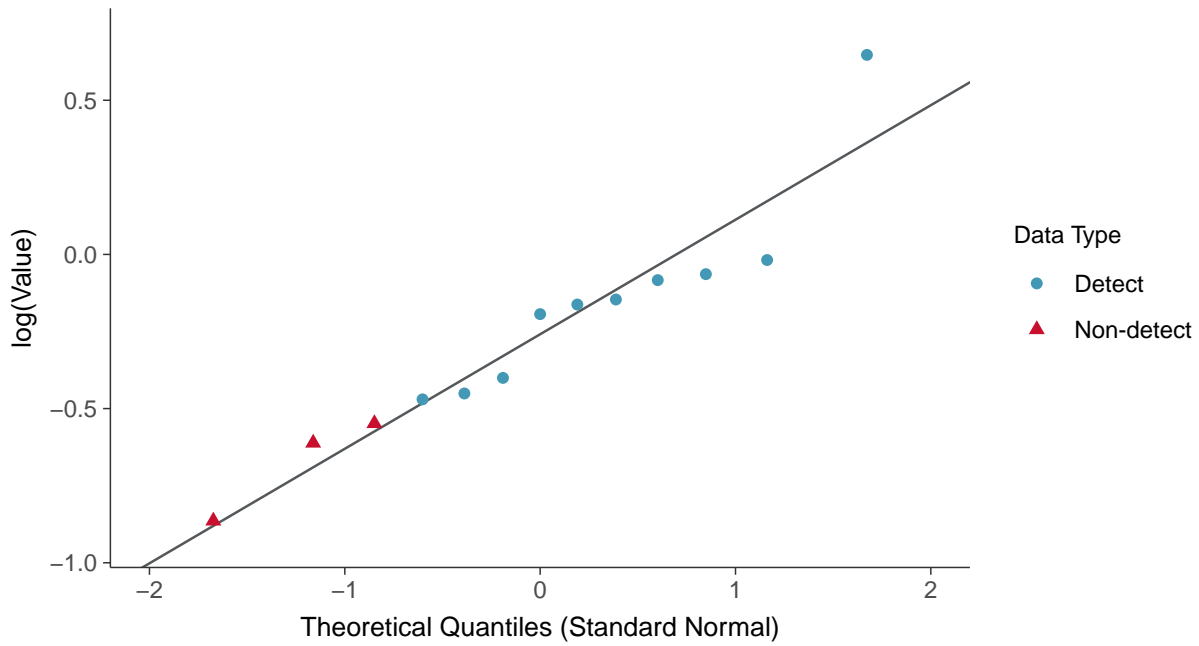
Boxplot by Season

Radium 226 and 228, MW-06 (pCi/L)

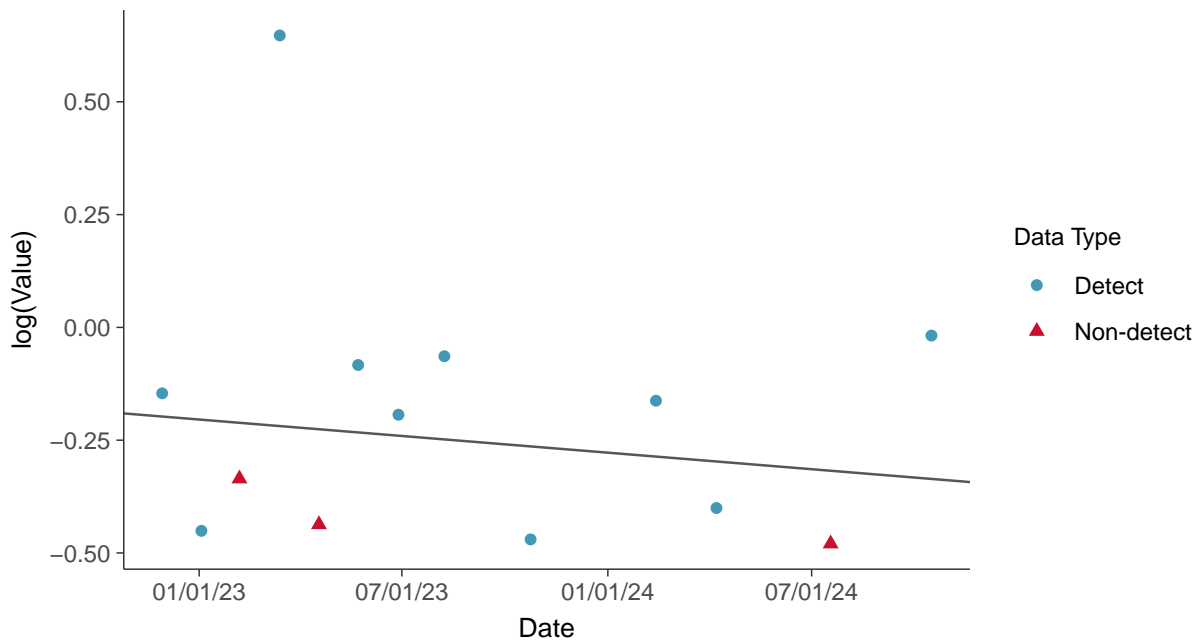




Lognormal Q-Q plot using ROS Imputed Estimates Radium 226 and 228, MW-06 (pCi/L)



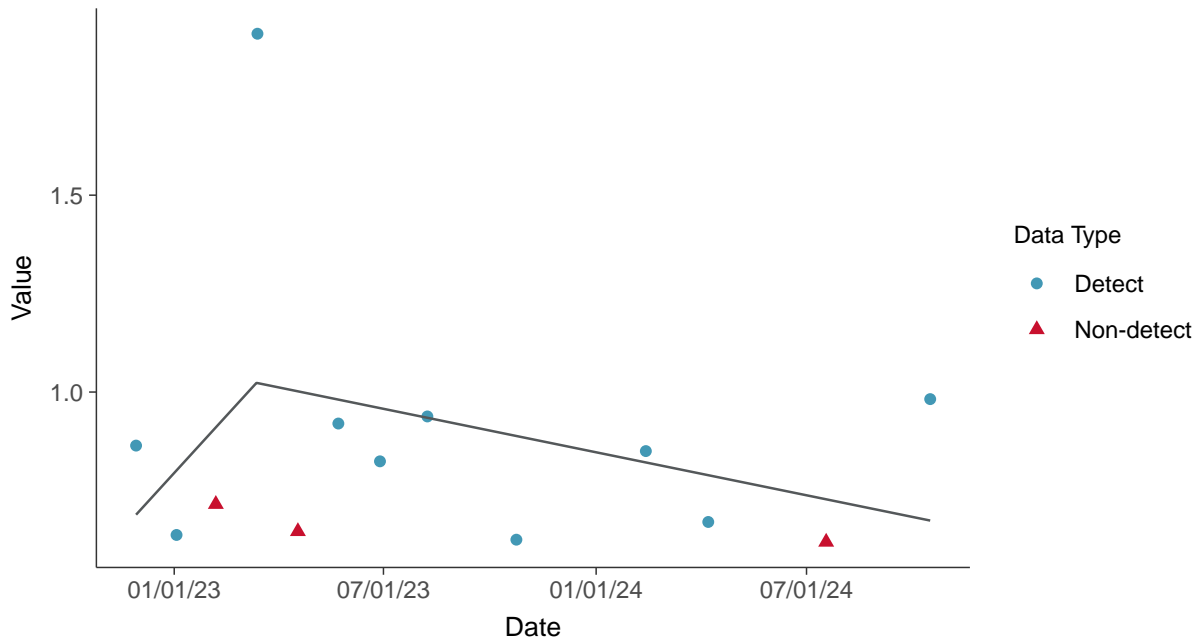
Trend Regression: Lognormal MLE Radium 226 and 228, MW-06 (pCi/L)





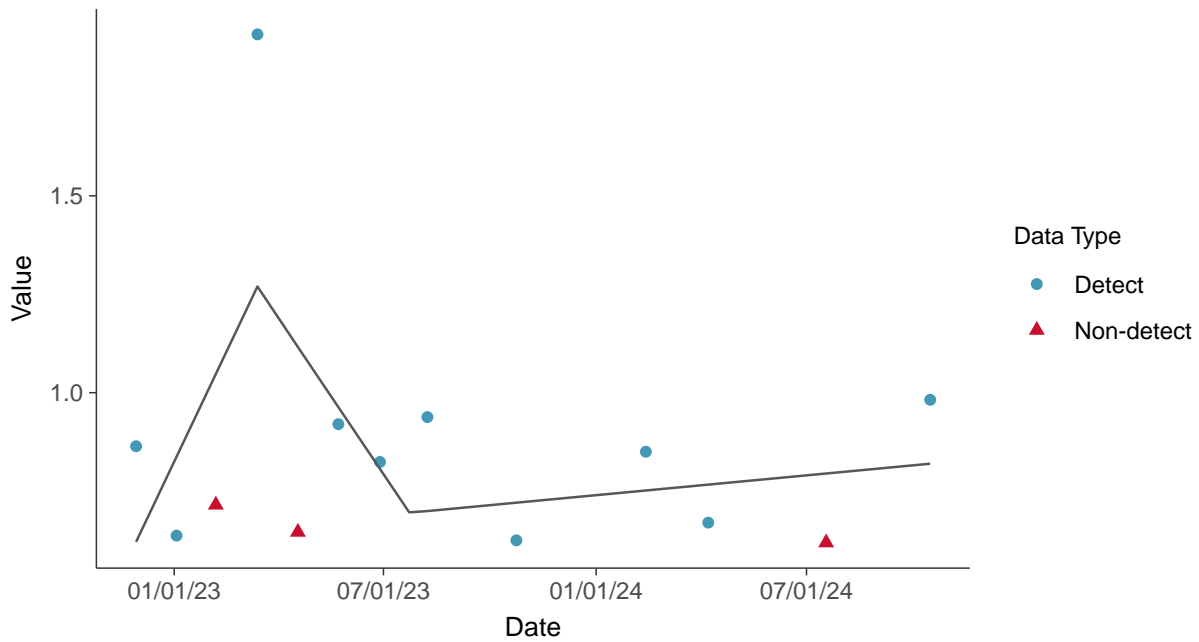
Trend Regression: Piecewise Linear-Linear

Radium 226 and 228, MW-06 (pCi/L)



Trend Regression: Piecewise Linear-Linear-Linear

Radium 226 and 228, MW-06 (pCi/L)



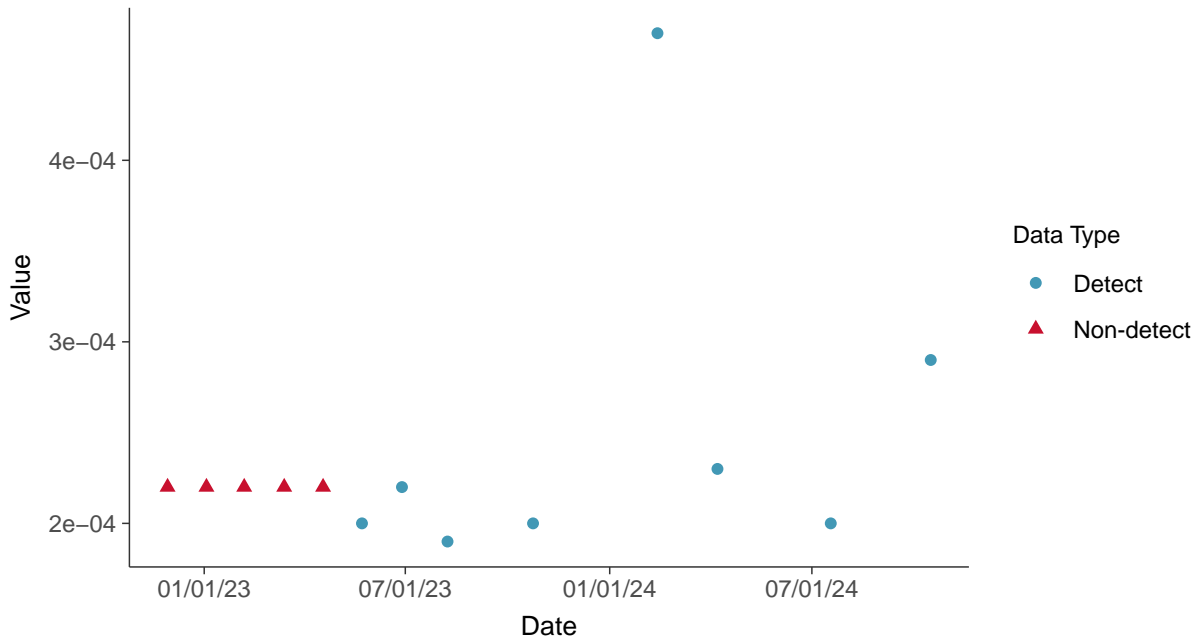


Appendix IV: Selenium, MW-06

ID: 1_16_1_5_122

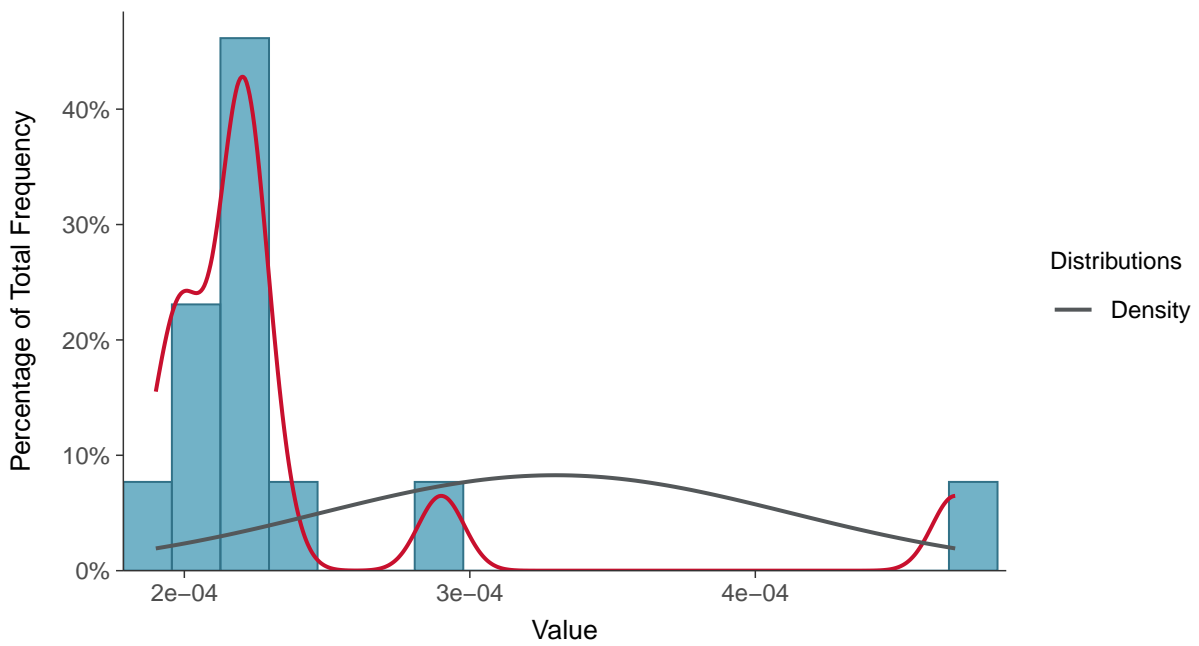
Scatter Plot

Selenium, MW-06 (mg/L)



Histogram

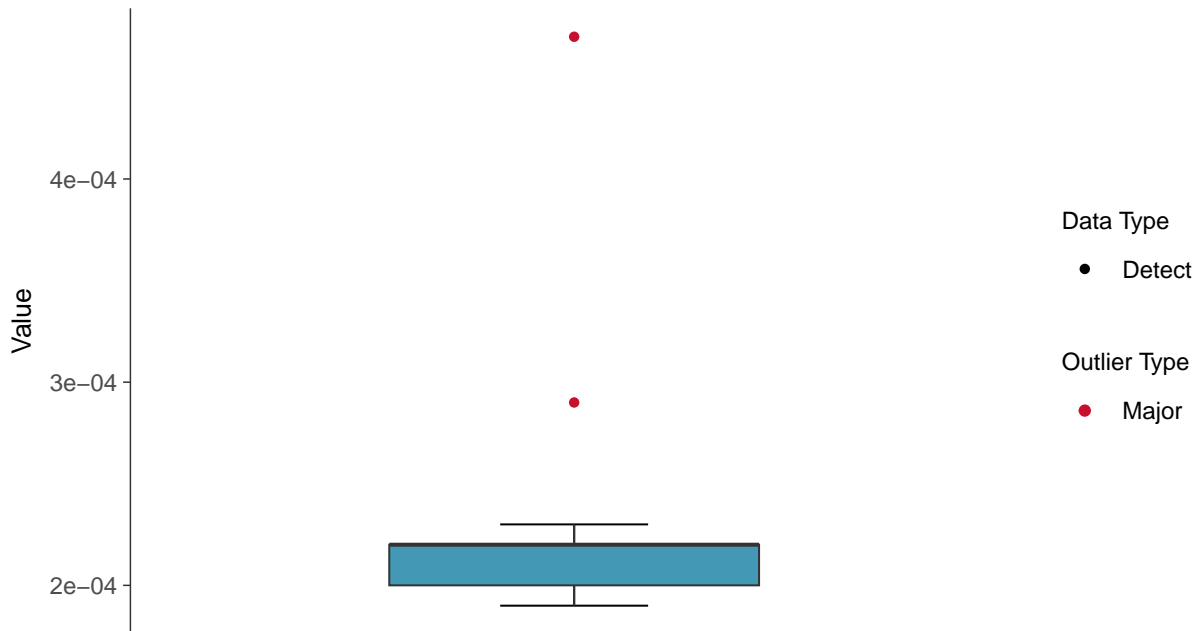
Selenium, MW-06 (mg/L)





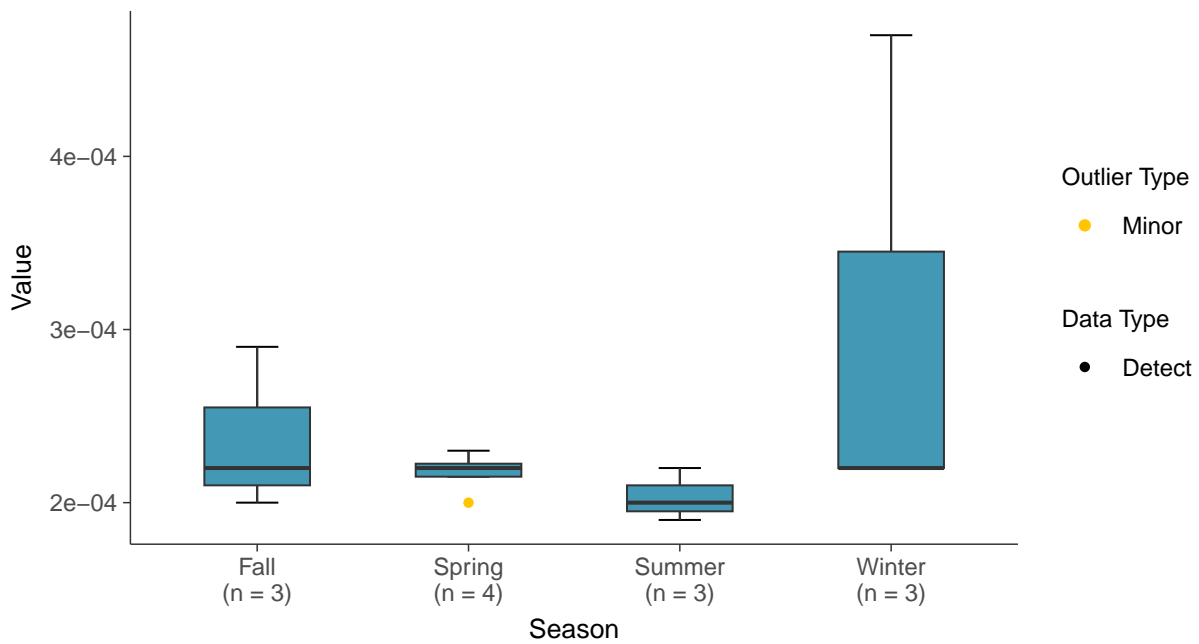
Boxplot

Selenium, MW-06 (mg/L)



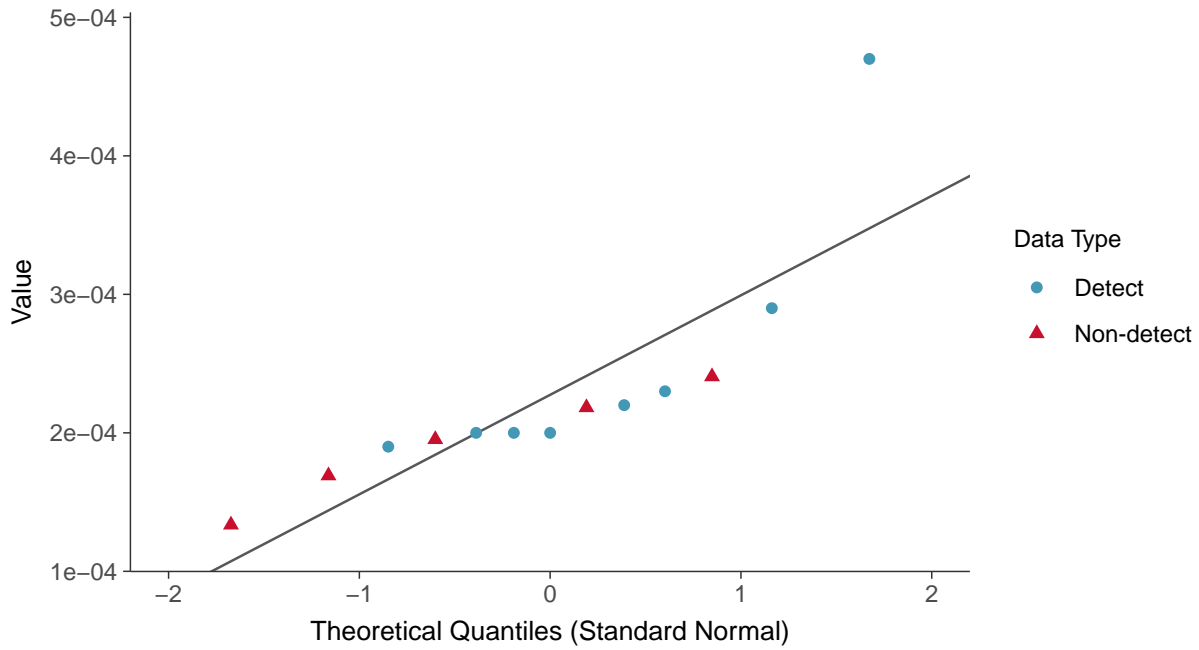
Boxplot by Season

Selenium, MW-06 (mg/L)

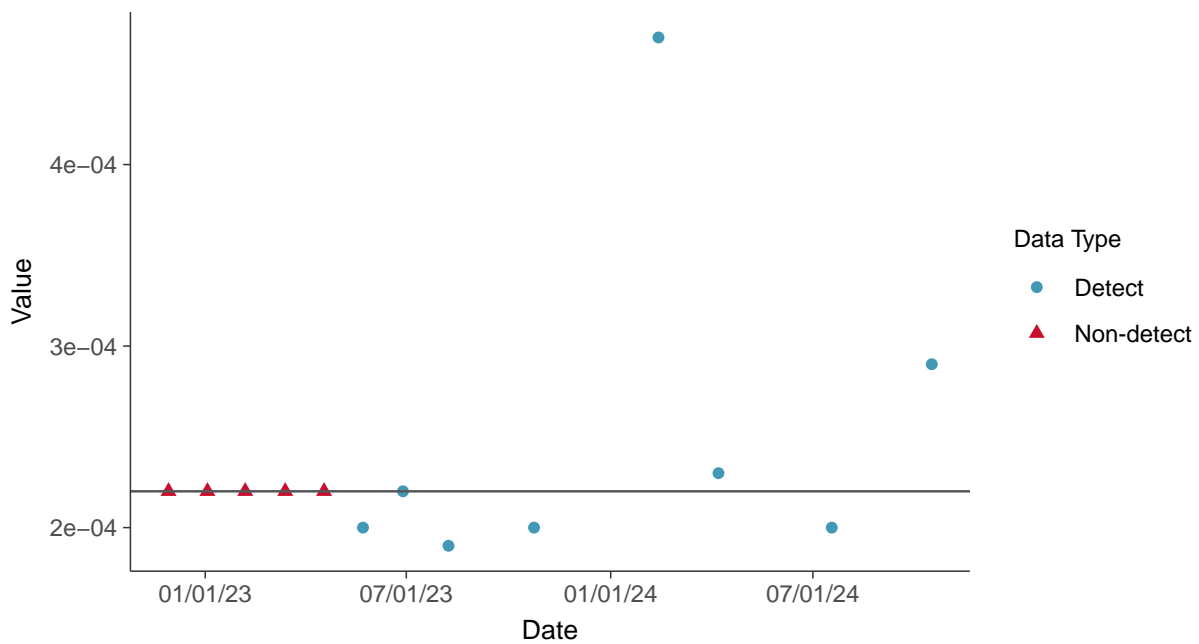




Normal Q-Q plot using ROS Imputed Estimates Selenium, MW-06 (mg/L)



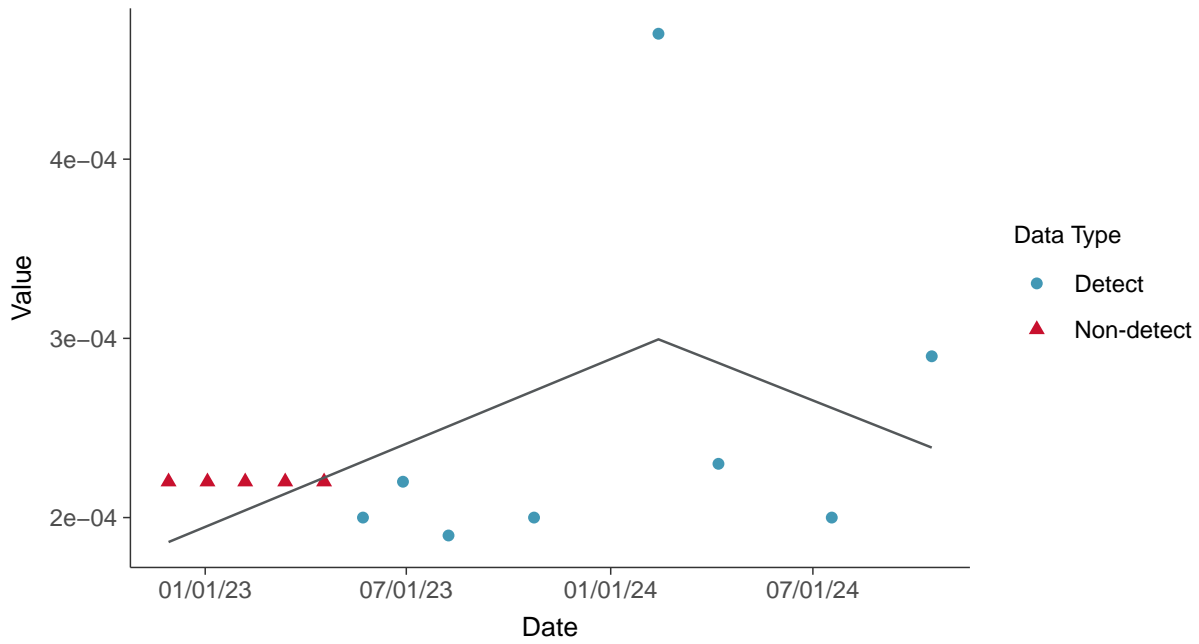
Trend Regression: Mann-Kendall/Theil-Sen Estimate Selenium, MW-06 (mg/L)





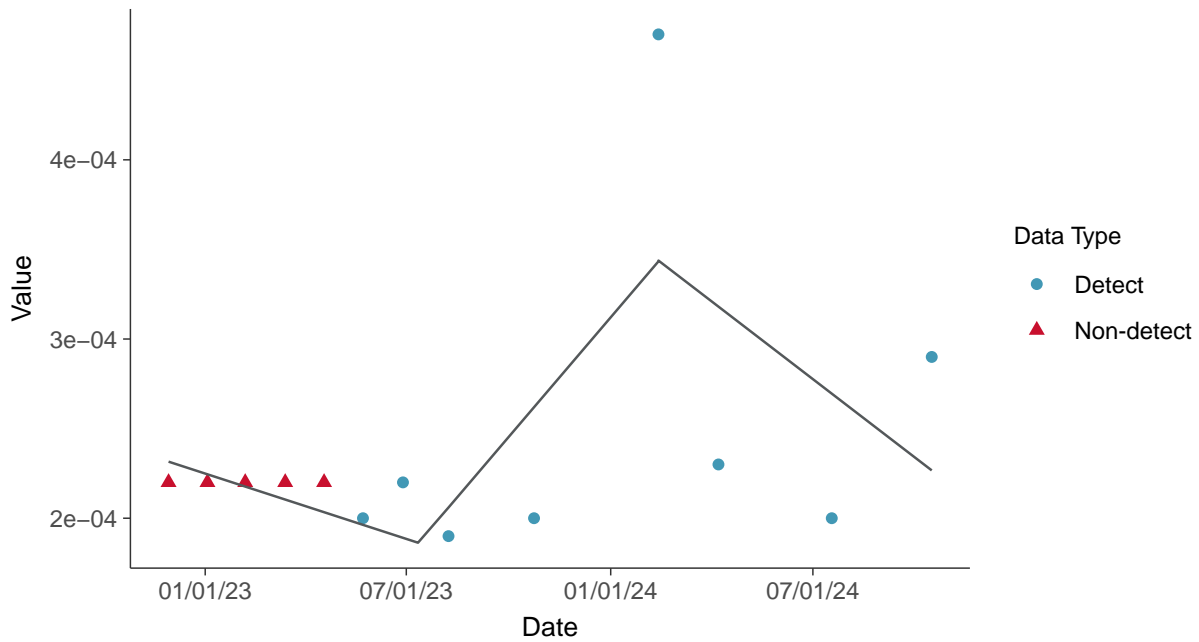
Trend Regression: Piecewise Linear-Linear

Selenium, MW-06 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Selenium, MW-06 (mg/L)



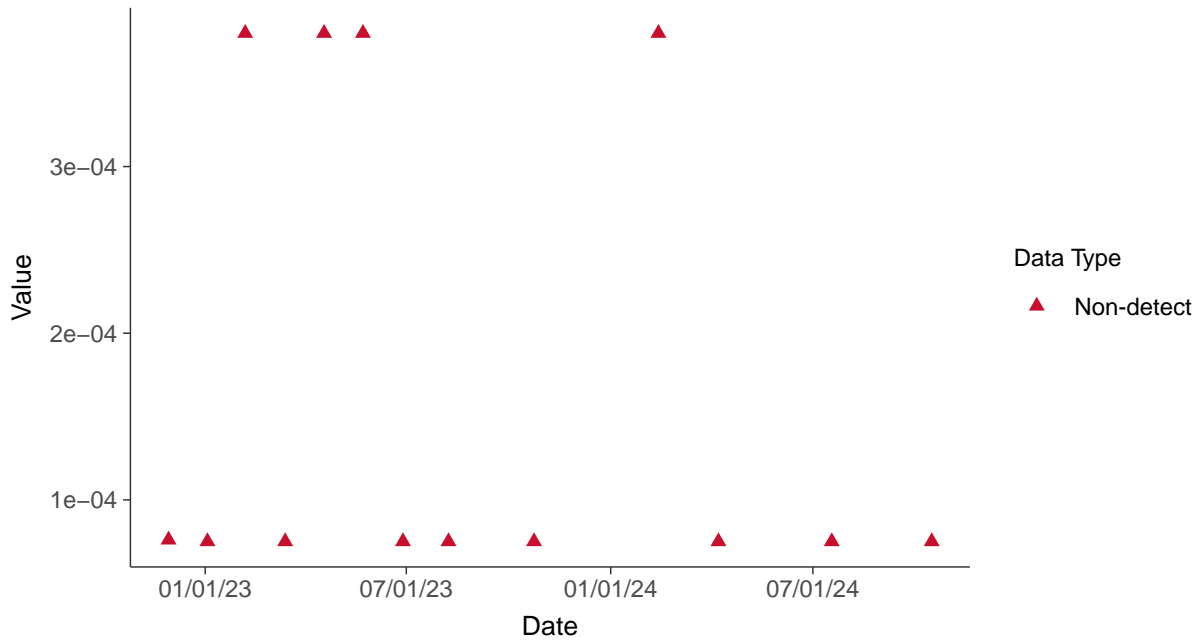


Appendix IV: Thallium, MW-06

ID: 1_16_1_5_125

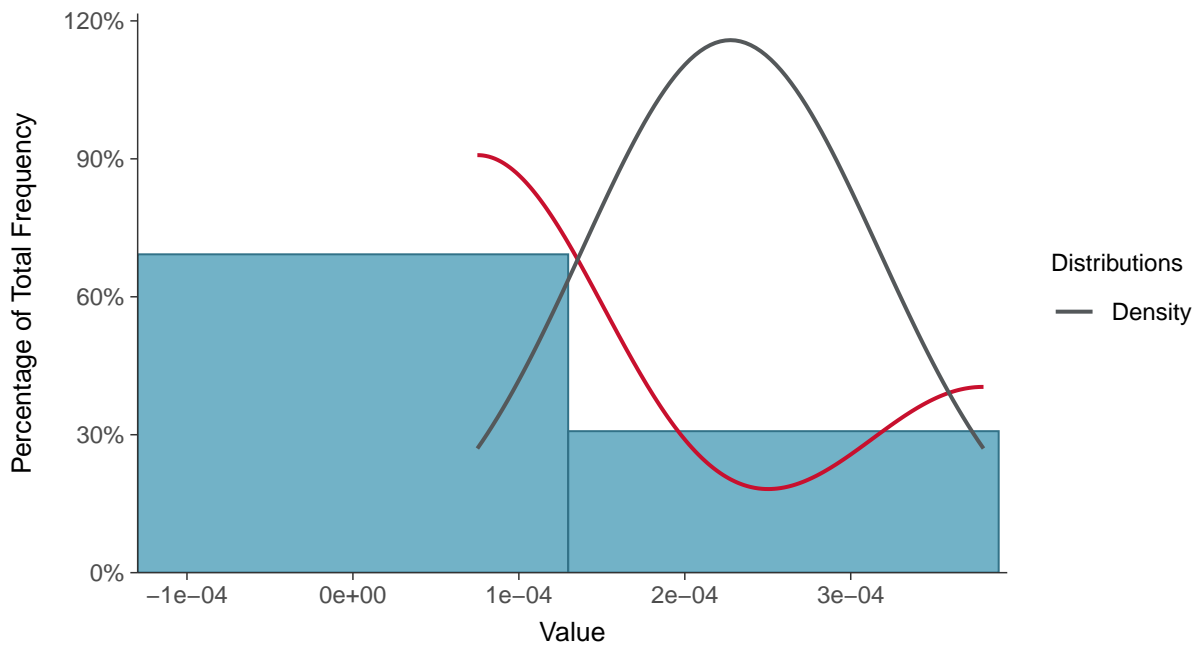
Scatter Plot

Thallium, MW-06 (mg/L)



Histogram

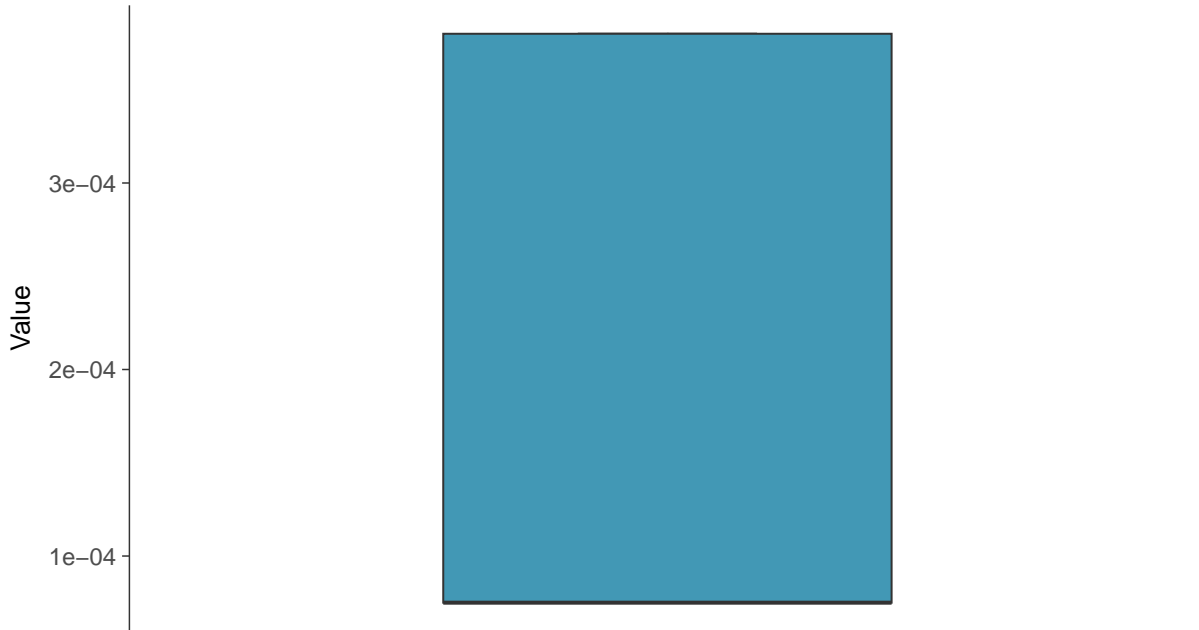
Thallium, MW-06 (mg/L)





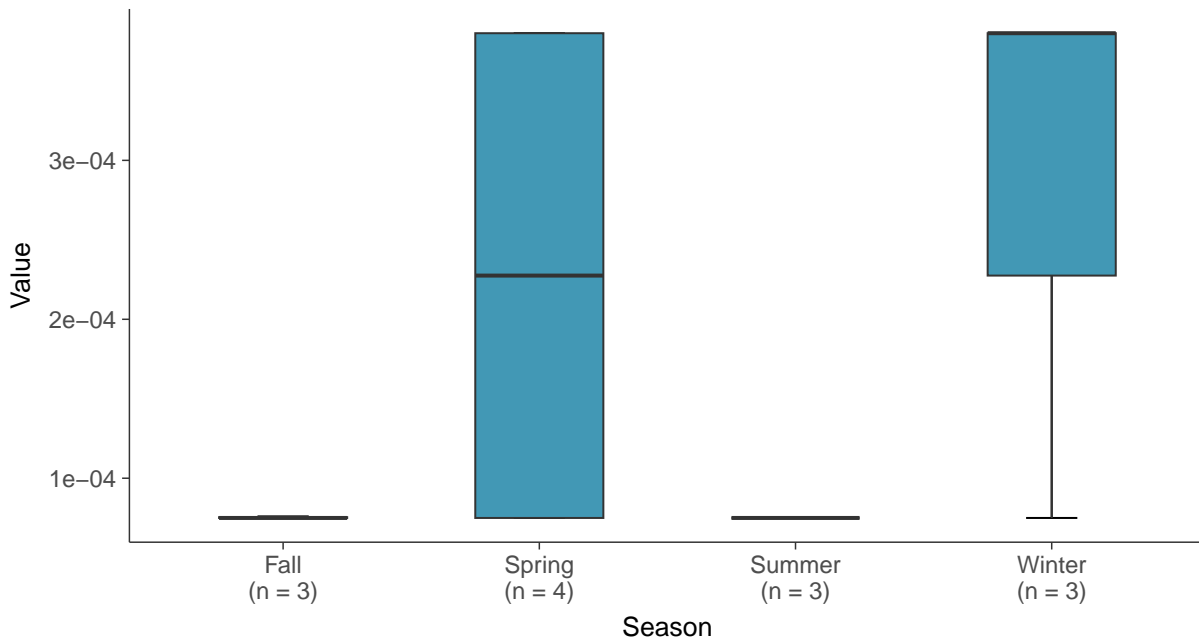
Boxplot

Thallium, MW-06 (mg/L)



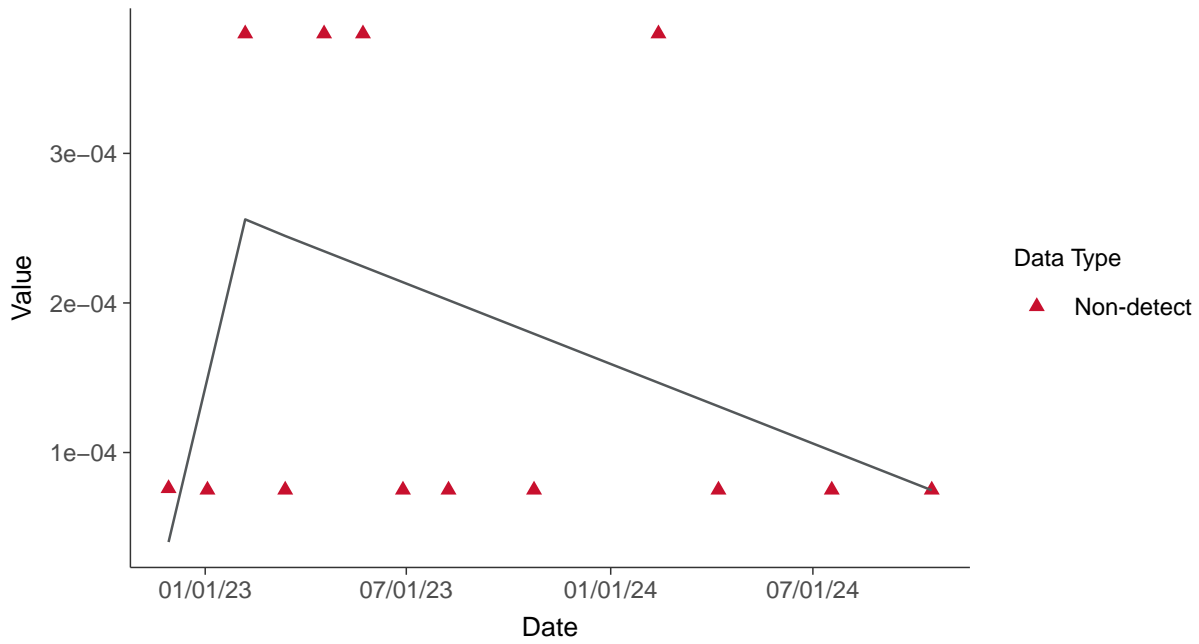
Boxplot by Season

Thallium, MW-06 (mg/L)

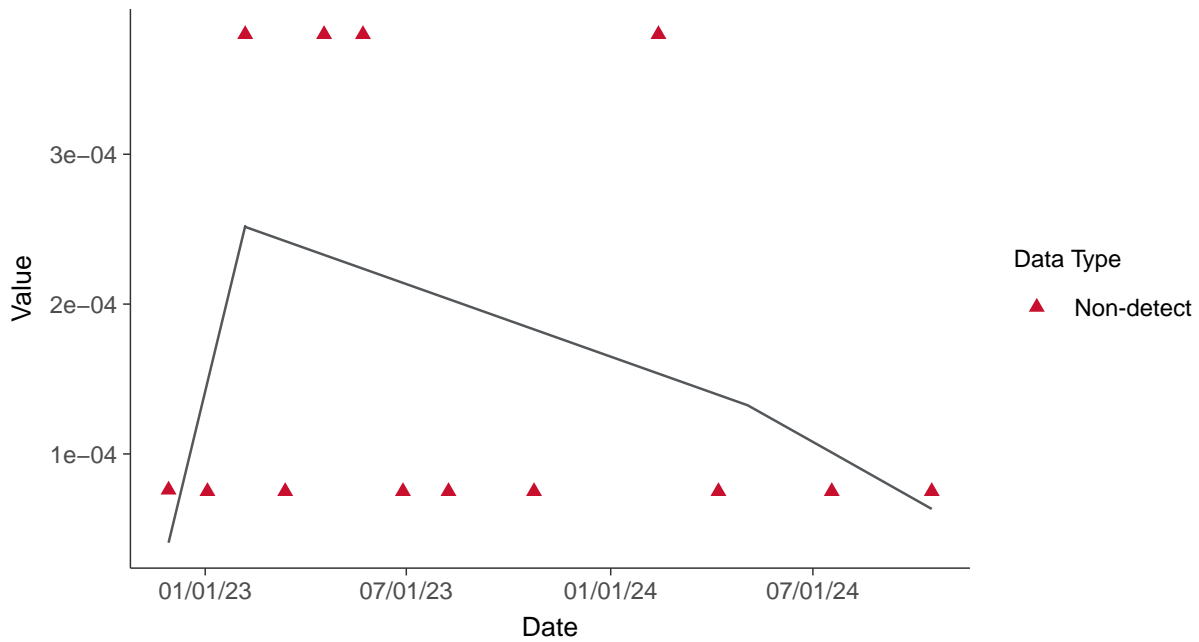




Trend Regression: Piecewise Linear-Linear
Thallium, MW-06 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Thallium, MW-06 (mg/L)



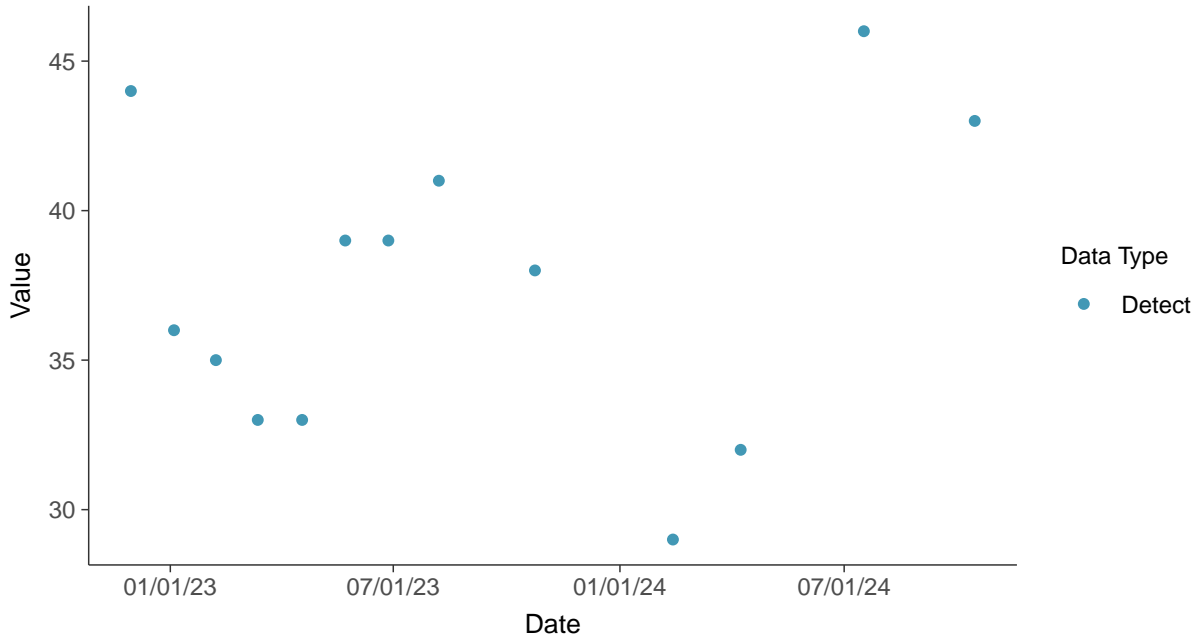


Additional Parameters: Total Suspended Solids, MW-07

ID: 1_17_1_3_127

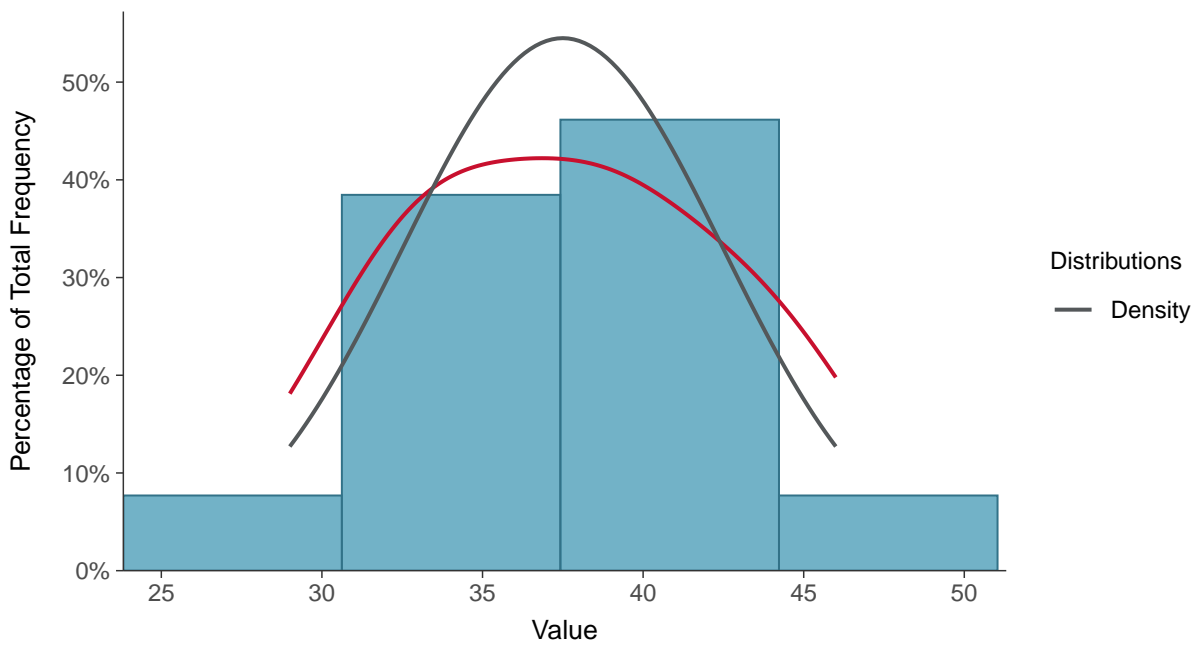
Scatter Plot

Total Suspended Solids, MW-07 (mg/L)



Histogram

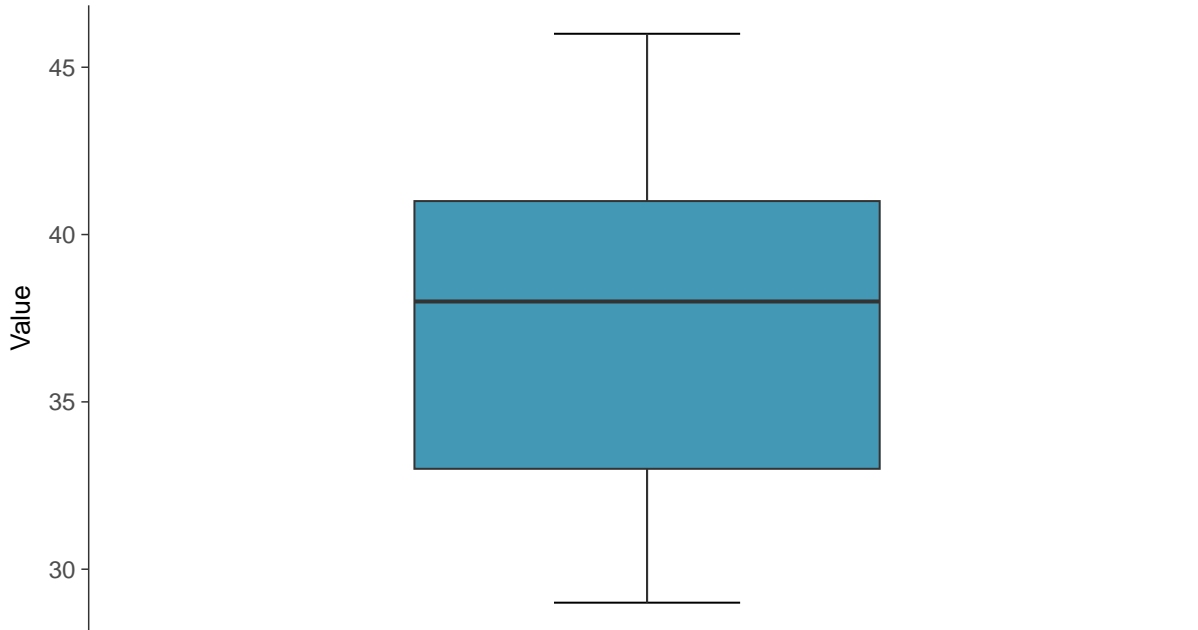
Total Suspended Solids, MW-07 (mg/L)





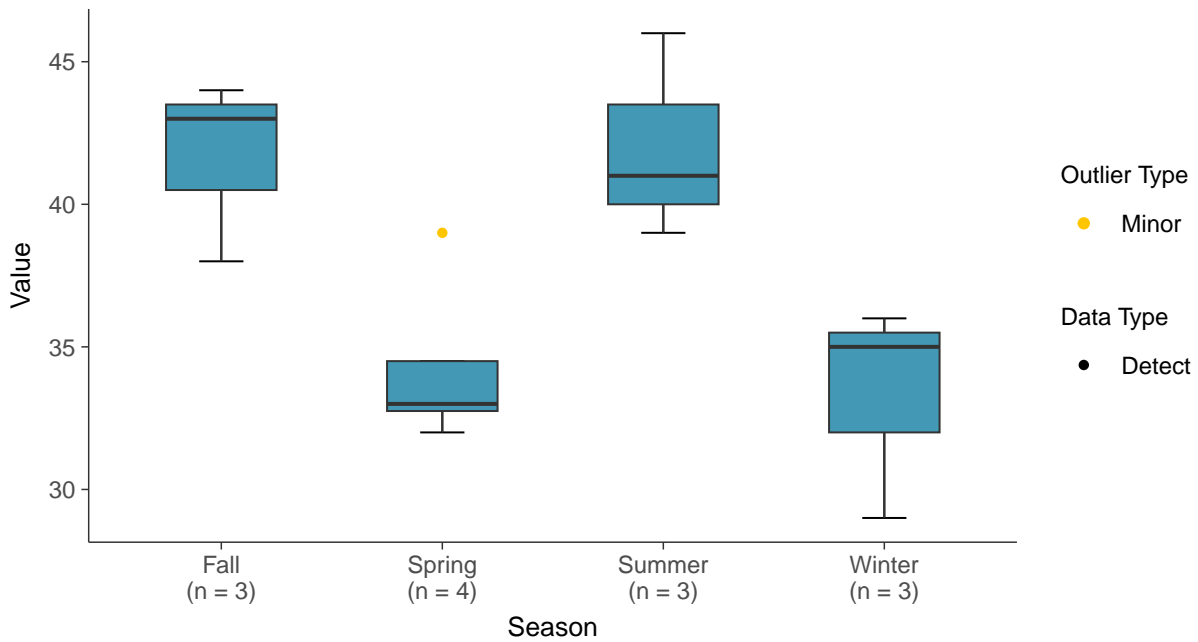
Boxplot

Total Suspended Solids, MW-07 (mg/L)



Boxplot by Season

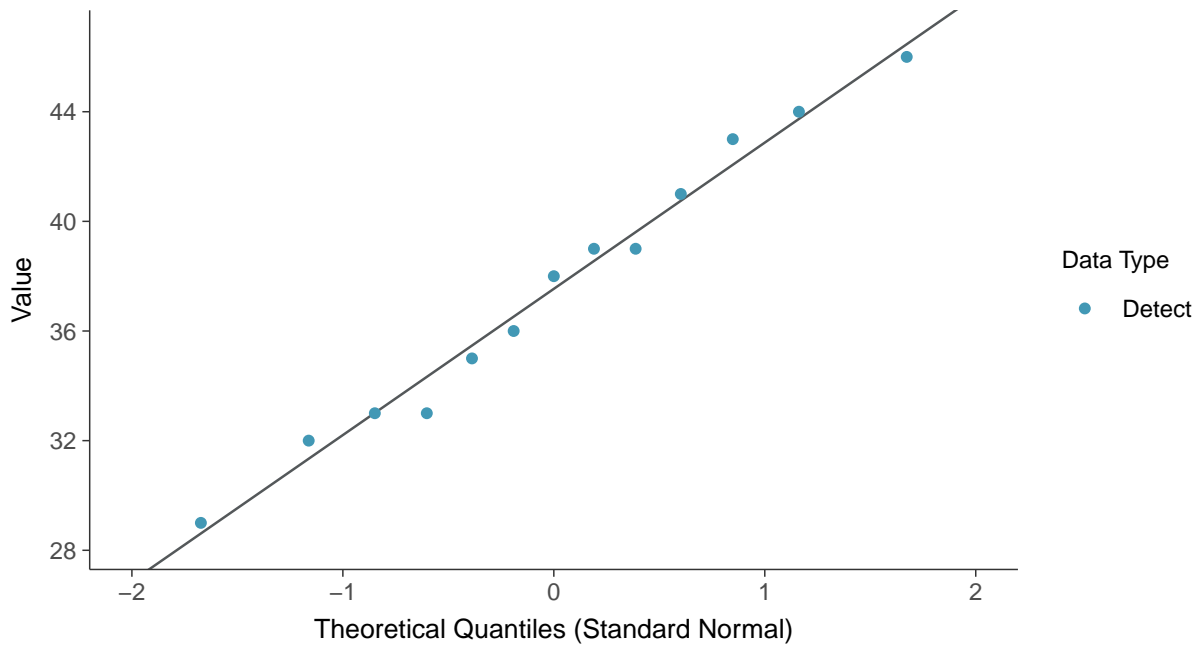
Total Suspended Solids, MW-07 (mg/L)





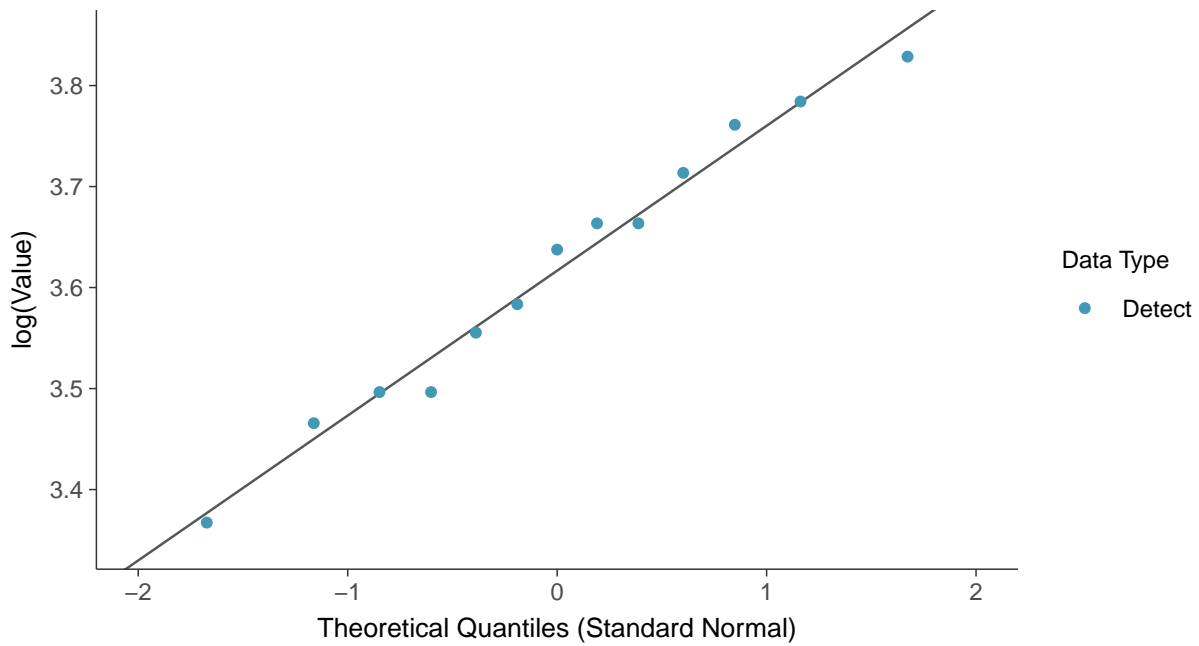
Normal Q-Q plot

Total Suspended Solids, MW-07 (mg/L)



Lognormal Q-Q plot

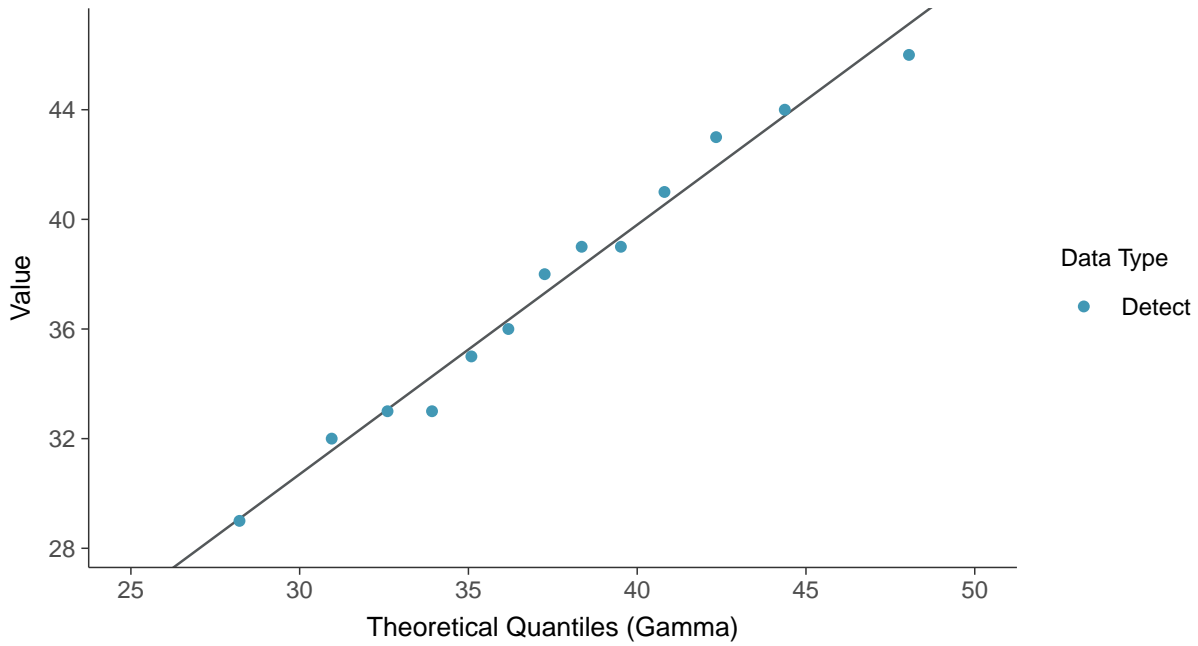
Total Suspended Solids, MW-07 (mg/L)





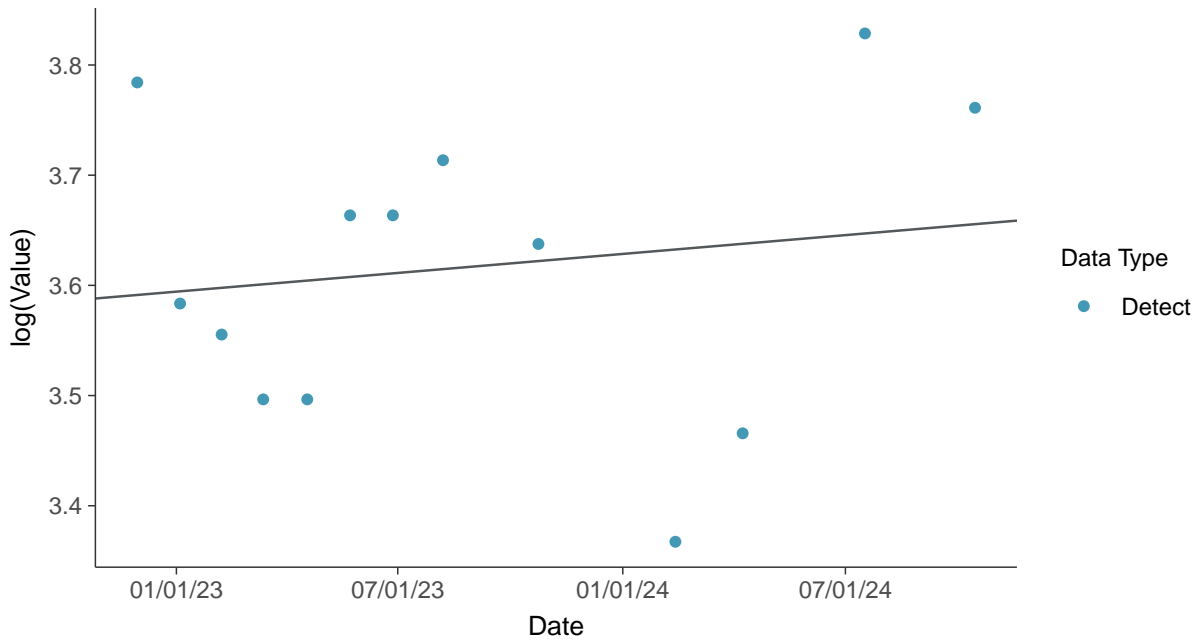
Gamma Q-Q plot

Total Suspended Solids, MW-07 (mg/L)



Trend Regression: Lognormal MLE

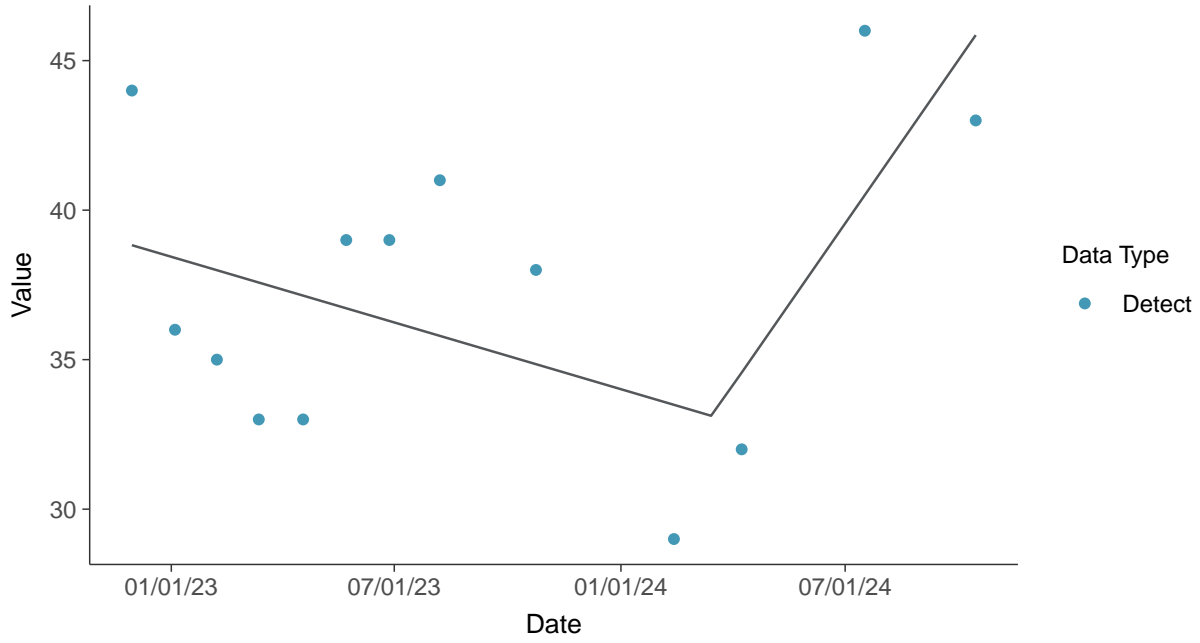
Total Suspended Solids, MW-07 (mg/L)





Trend Regression: Piecewise Linear-Linear

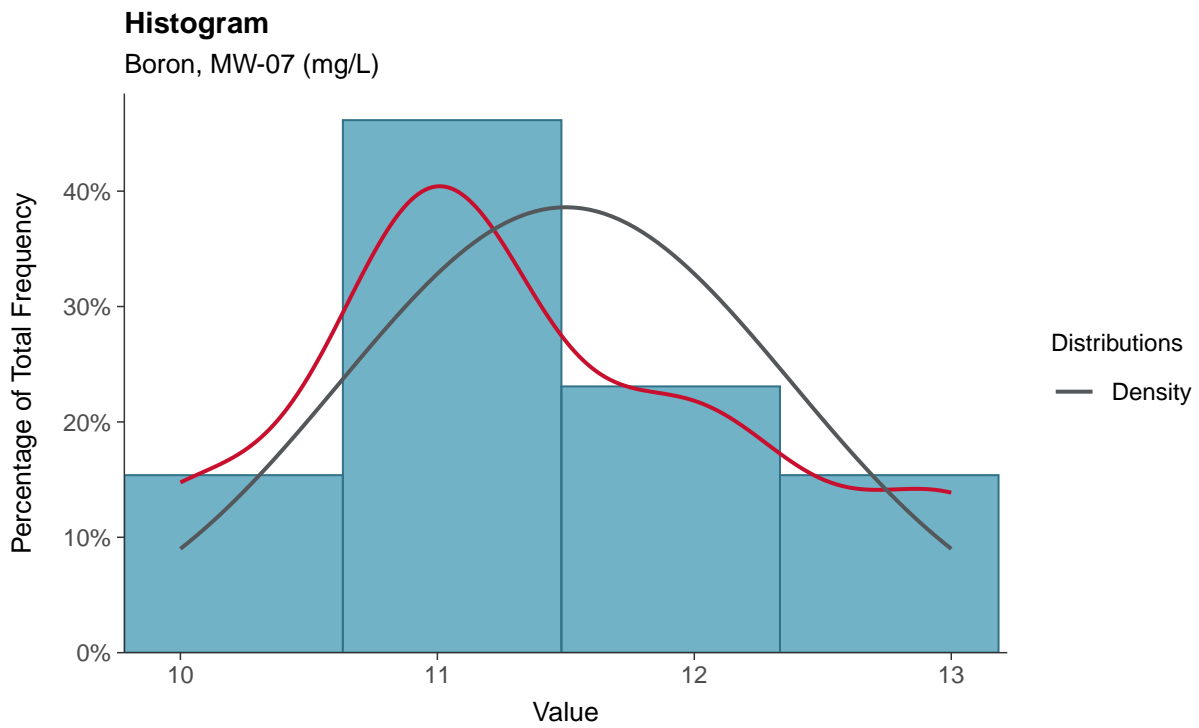
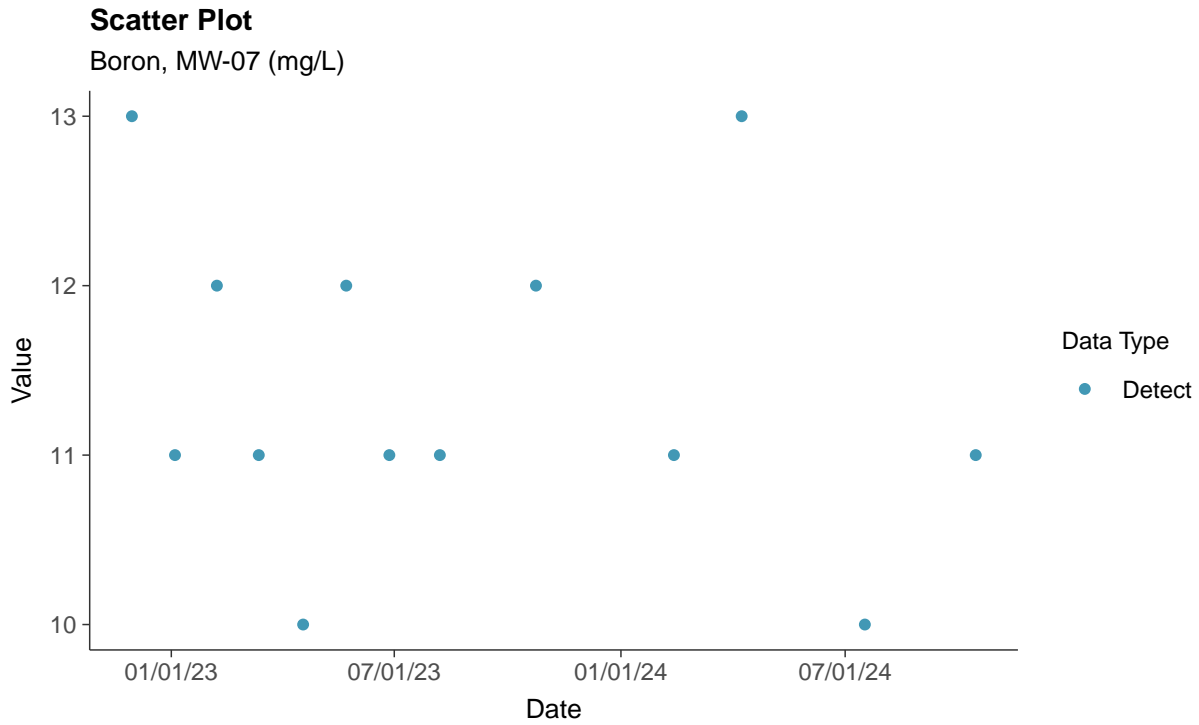
Total Suspended Solids, MW-07 (mg/L)





Appendix III: Boron, MW-07

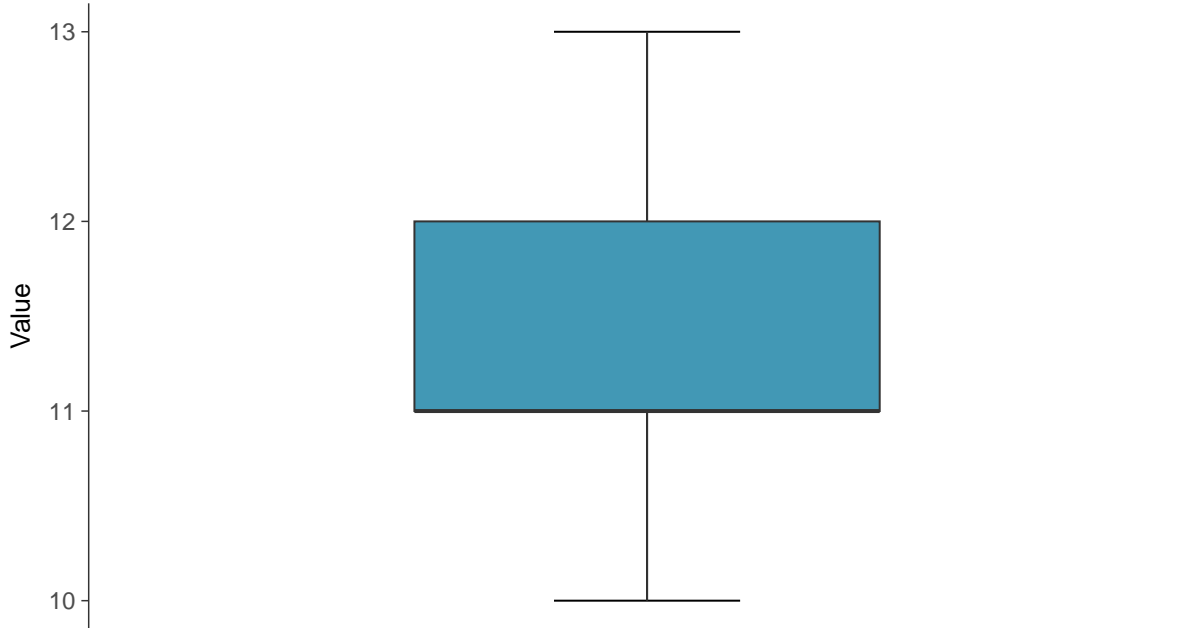
ID: 1_17_1_4_105





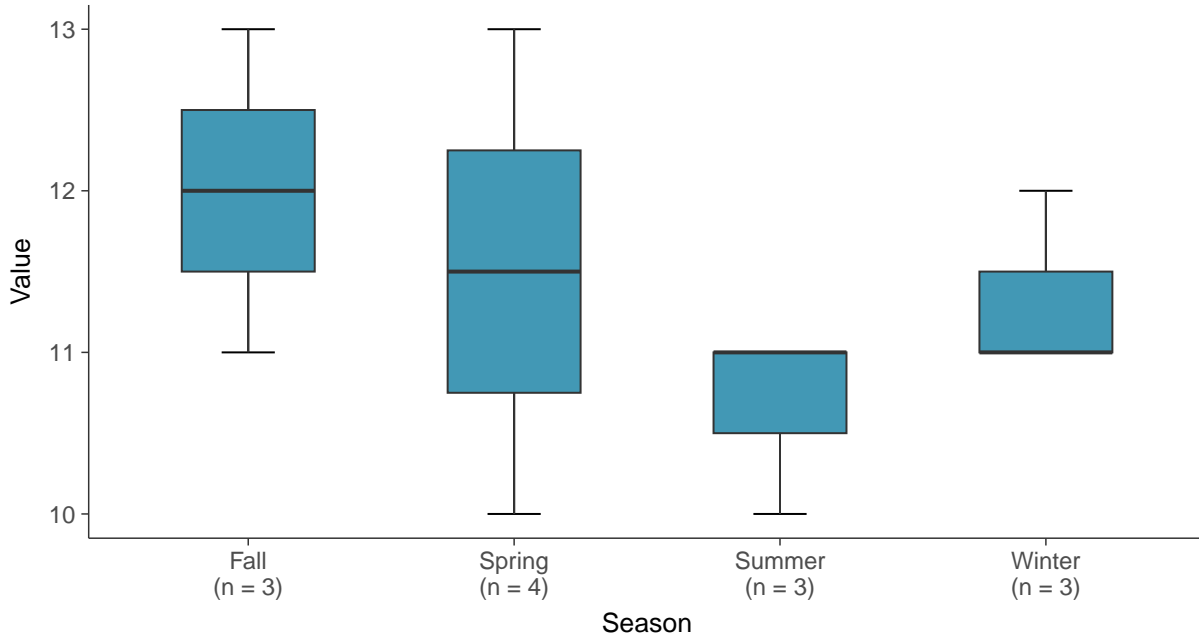
Boxplot

Boron, MW-07 (mg/L)



Boxplot by Season

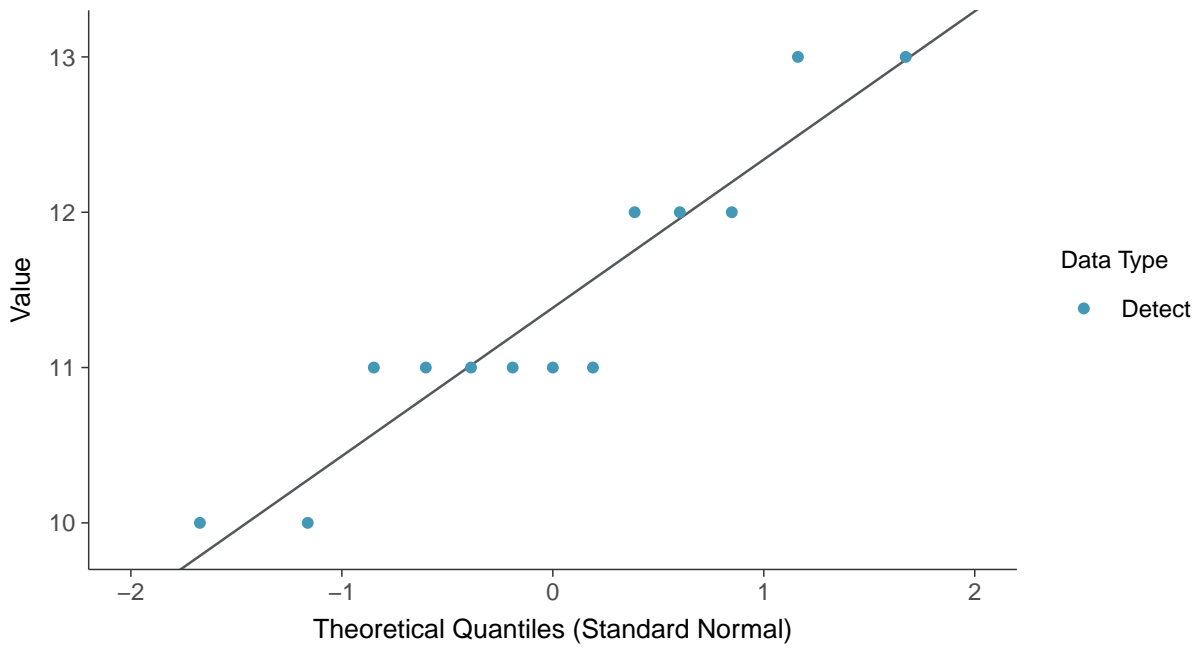
Boron, MW-07 (mg/L)





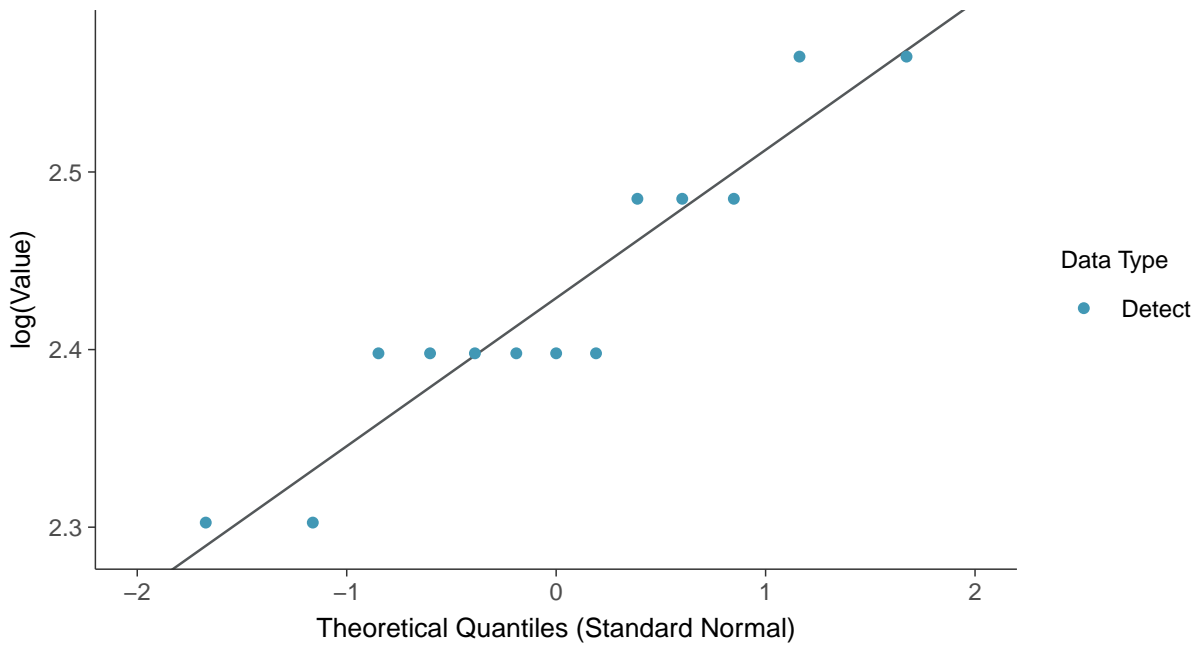
Normal Q-Q plot

Boron, MW-07 (mg/L)



Lognormal Q-Q plot

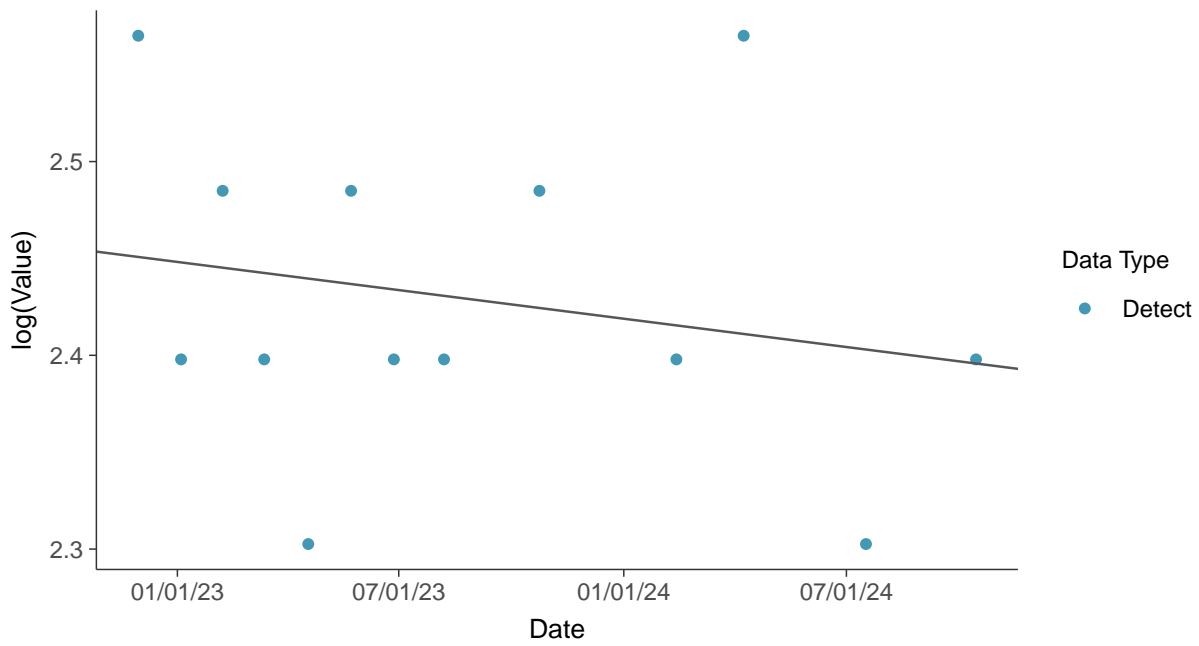
Boron, MW-07 (mg/L)





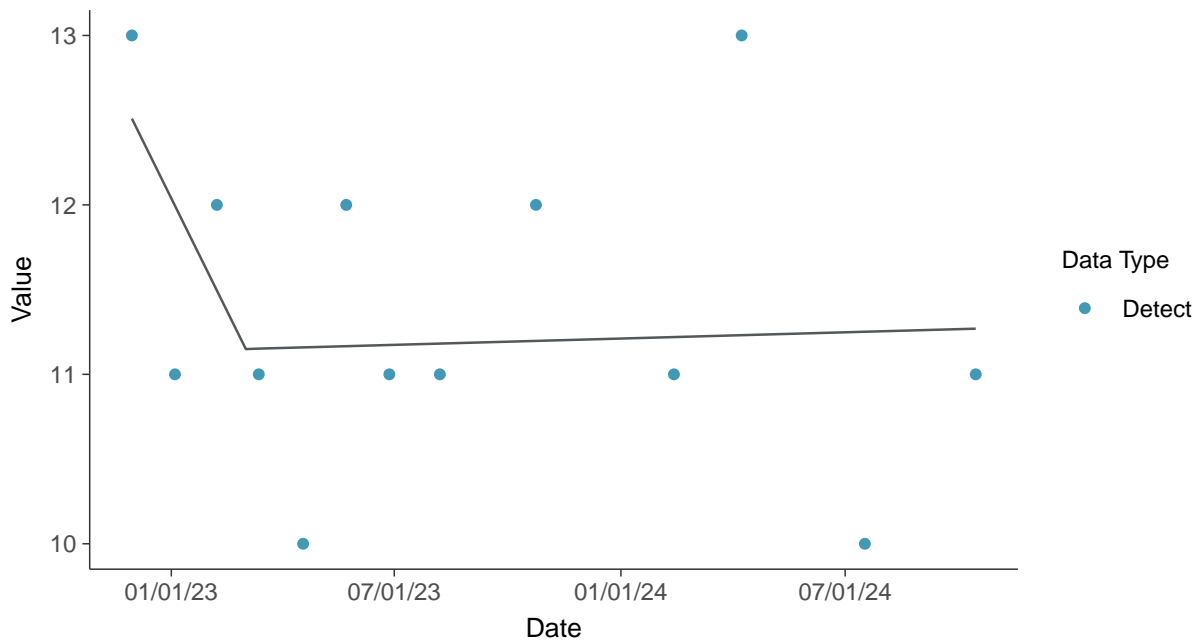
Trend Regression: Lognormal MLE

Boron, MW-07 (mg/L)



Trend Regression: Piecewise Linear-Linear

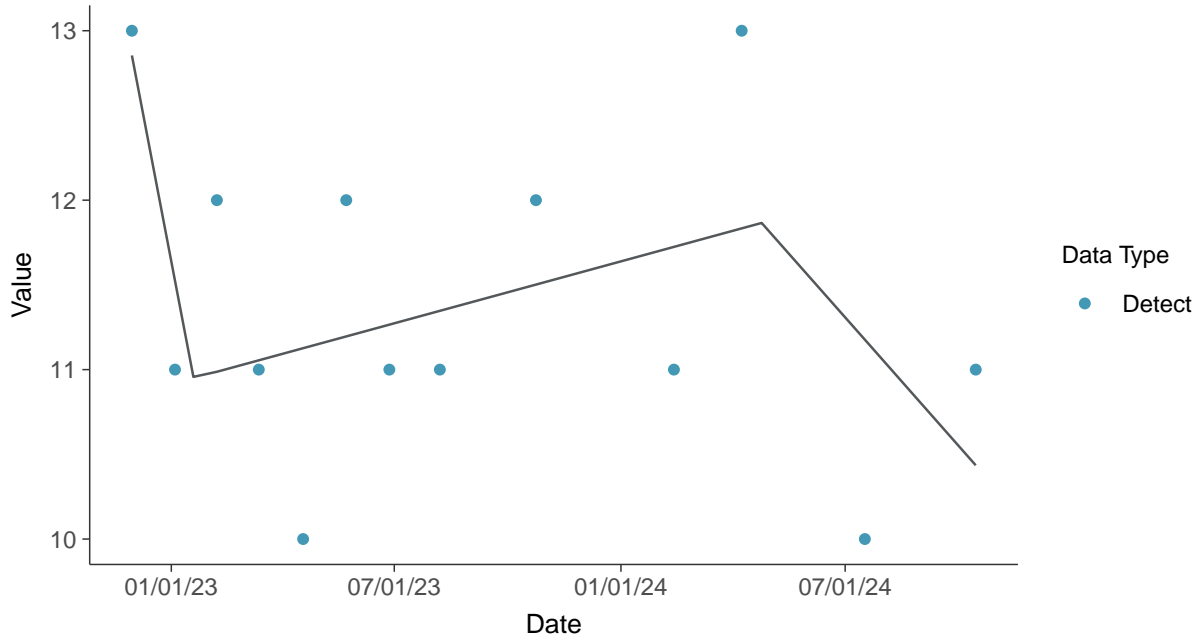
Boron, MW-07 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

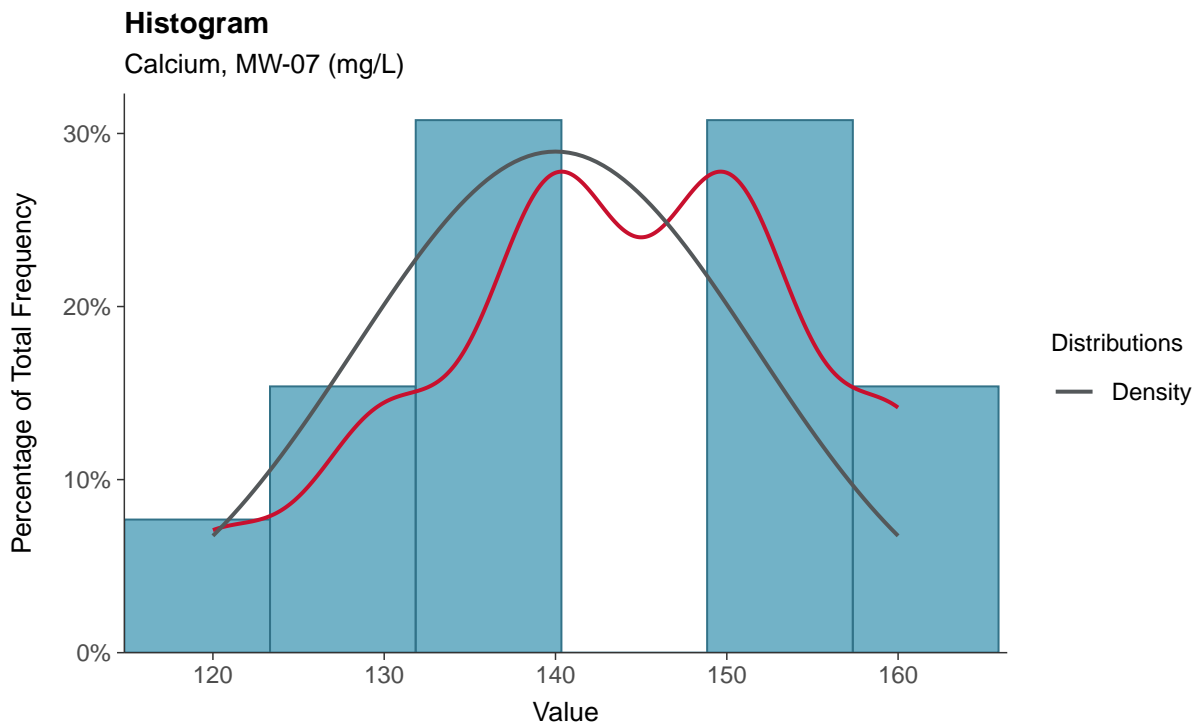
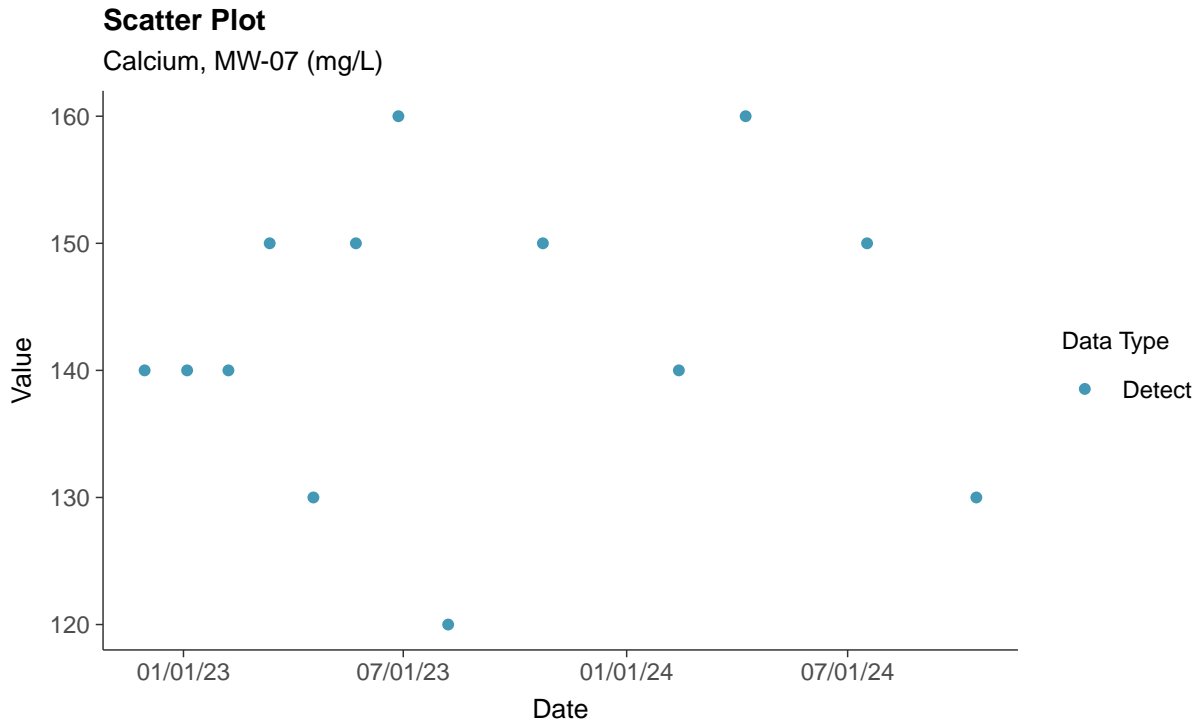
Boron, MW-07 (mg/L)





Appendix III: Calcium, MW-07

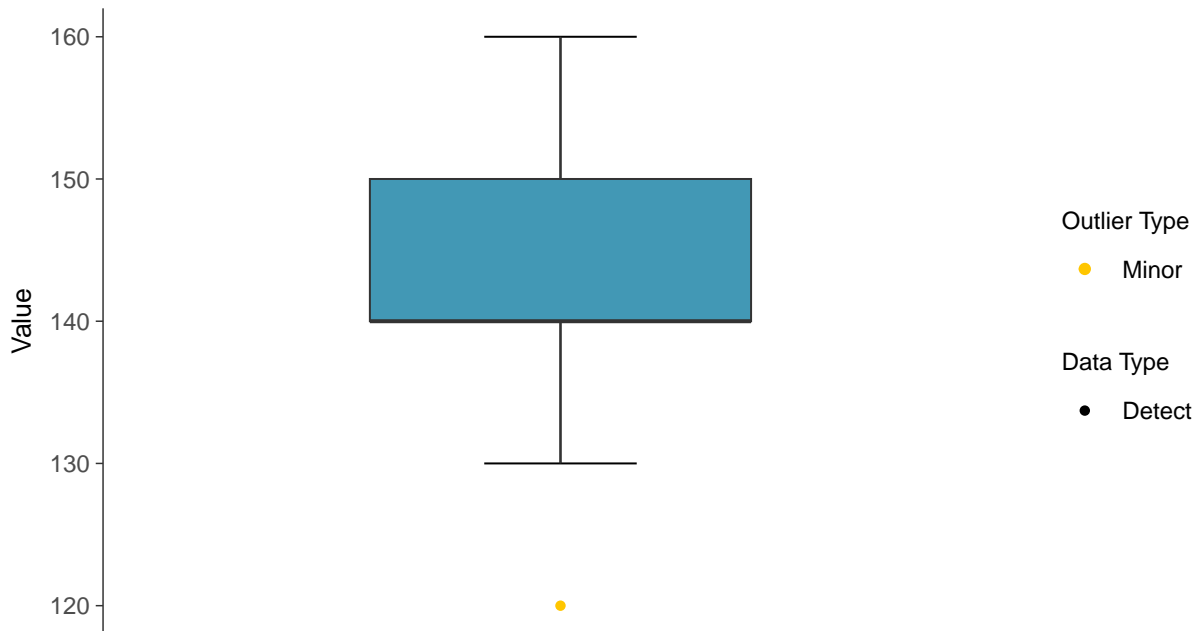
ID: 1_17_1_4_107





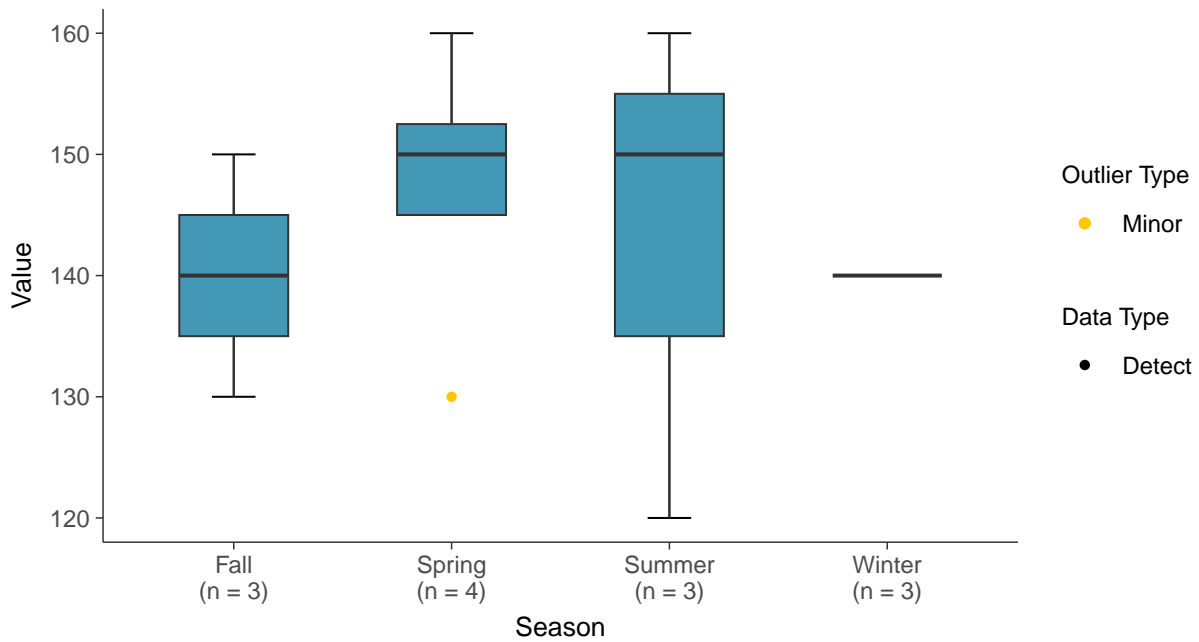
Boxplot

Calcium, MW-07 (mg/L)



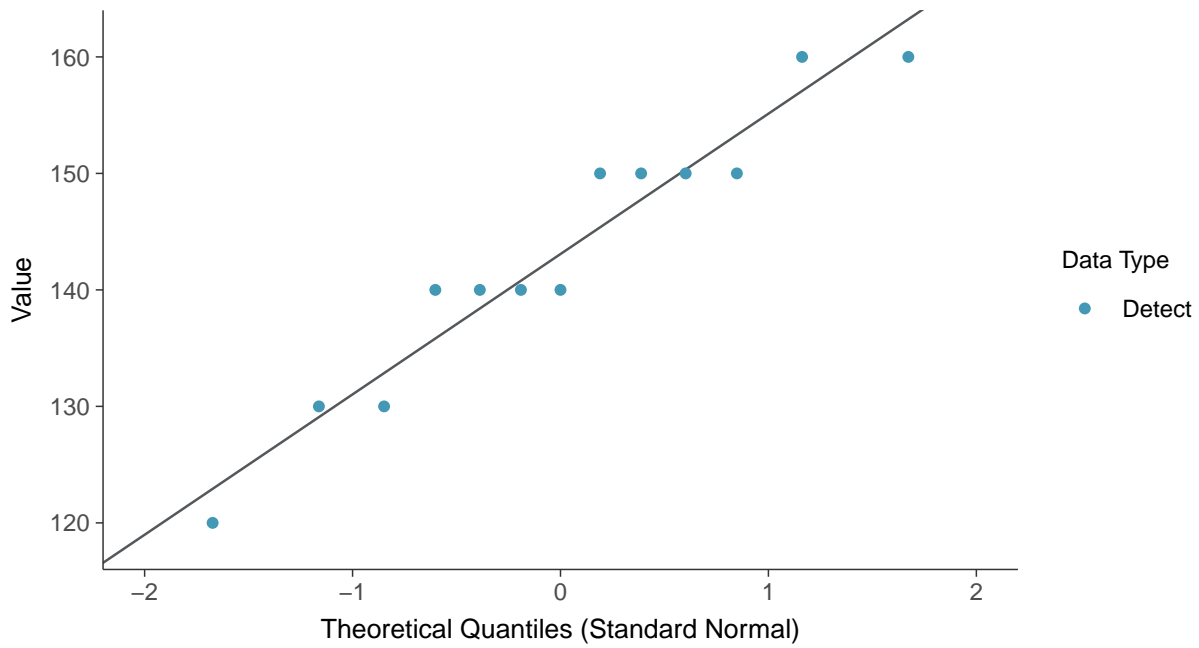
Boxplot by Season

Calcium, MW-07 (mg/L)

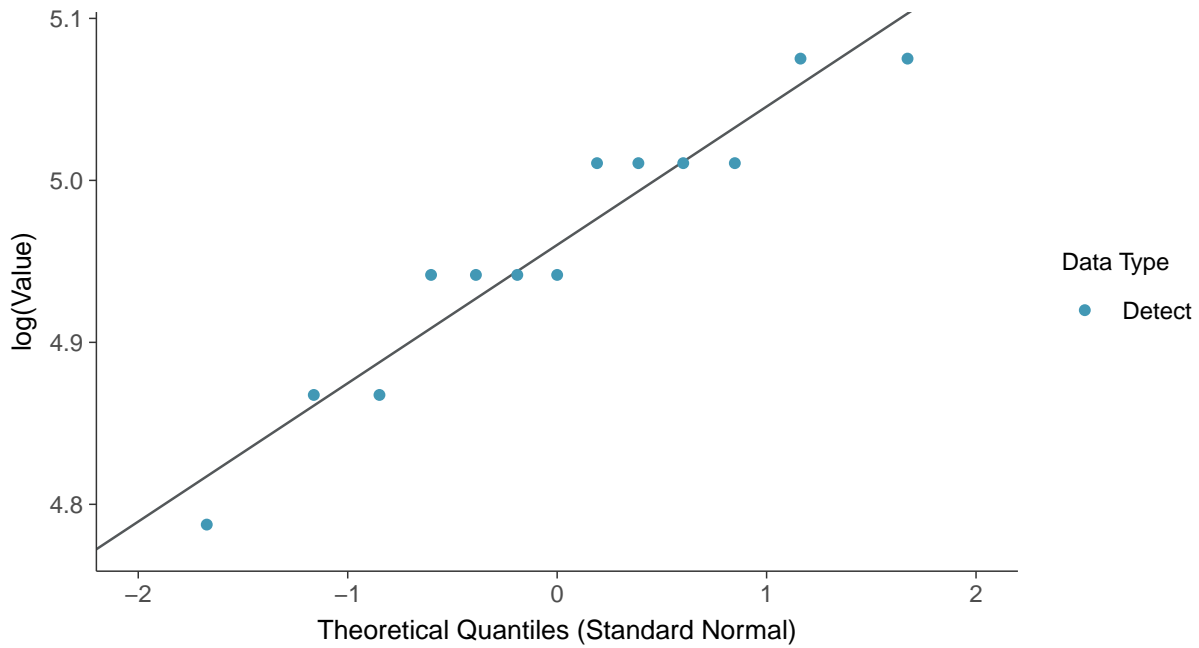




Normal Q-Q plot
Calcium, MW-07 (mg/L)

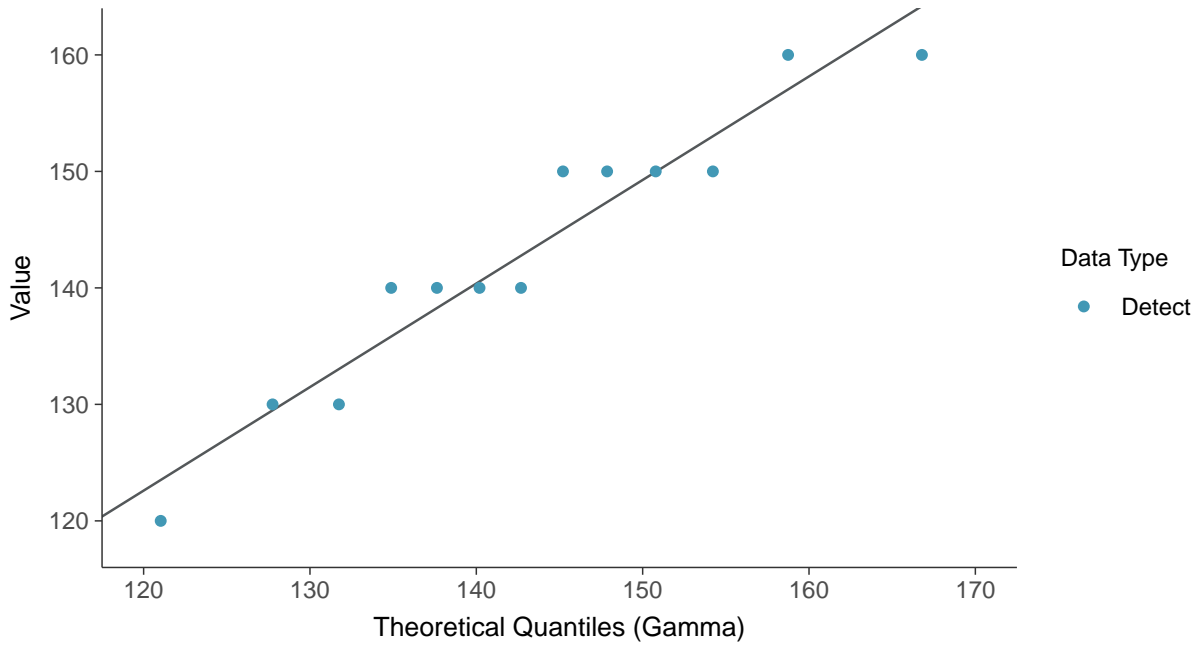


Lognormal Q-Q plot
Calcium, MW-07 (mg/L)

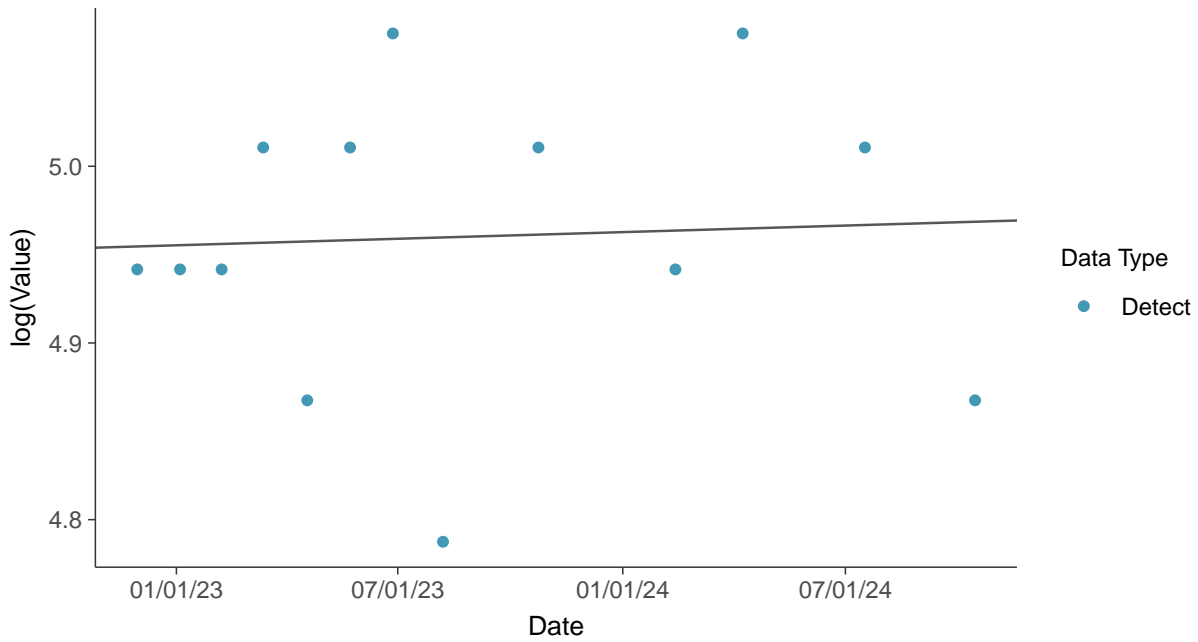




Gamma Q-Q plot
Calcium, MW-07 (mg/L)



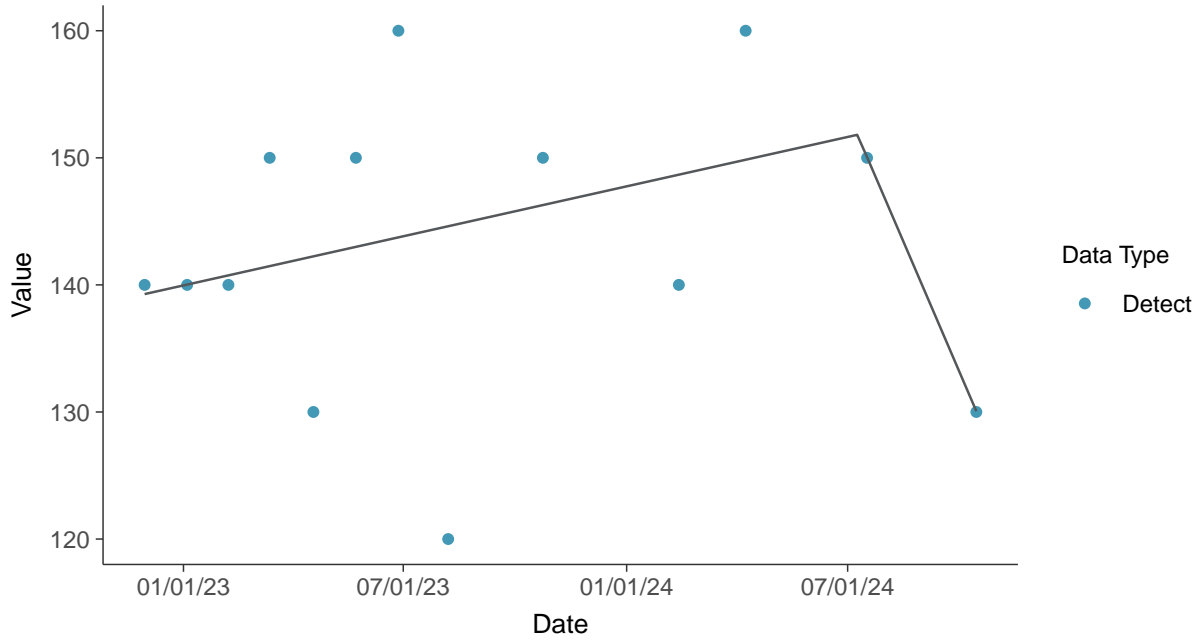
Trend Regression: Lognormal MLE
Calcium, MW-07 (mg/L)





Trend Regression: Piecewise Linear-Linear

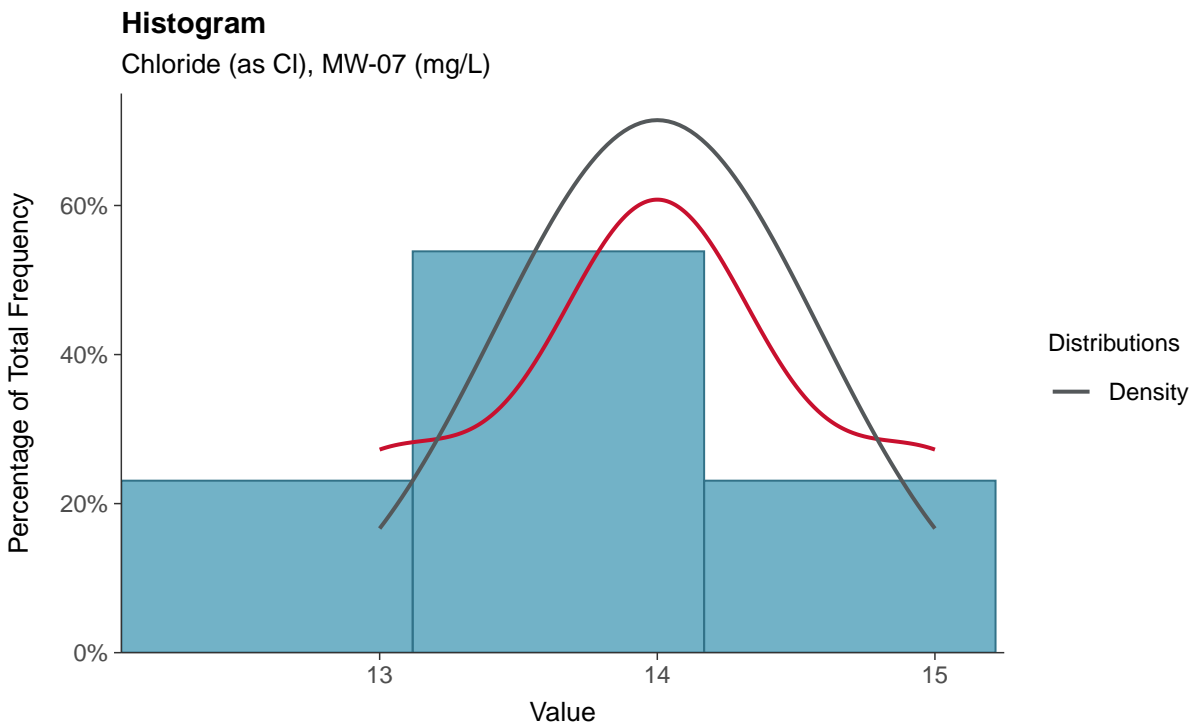
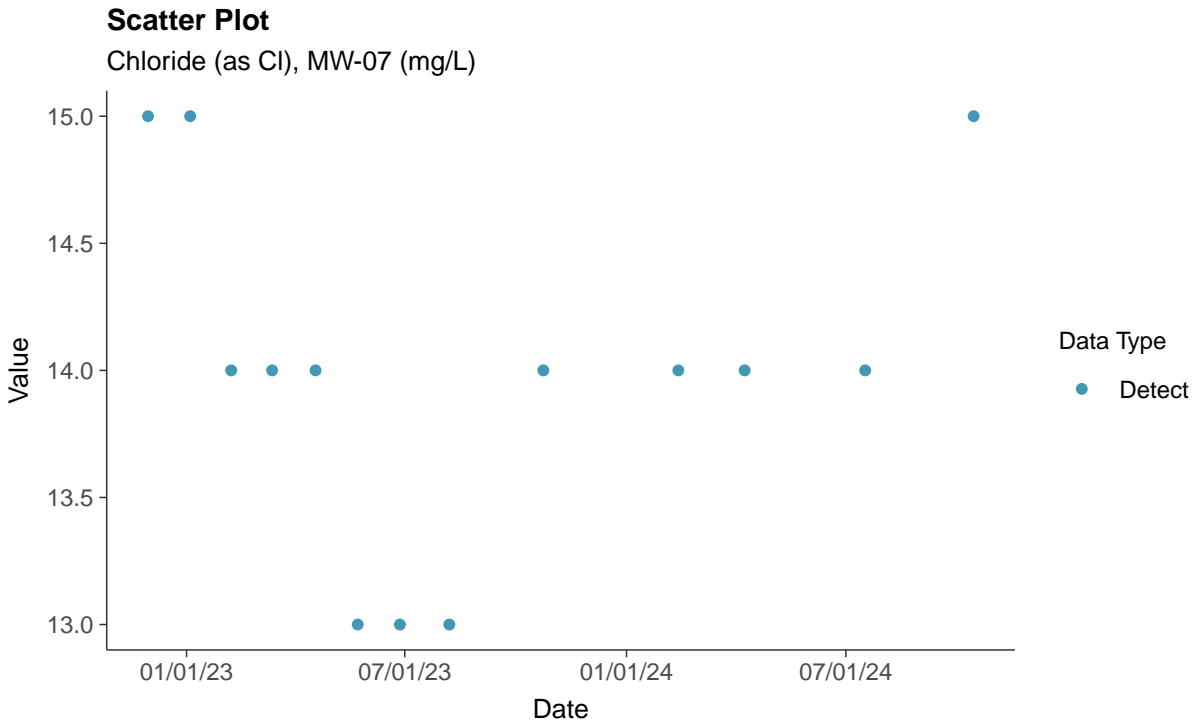
Calcium, MW-07 (mg/L)





Appendix III: Chloride (as Cl), MW-07

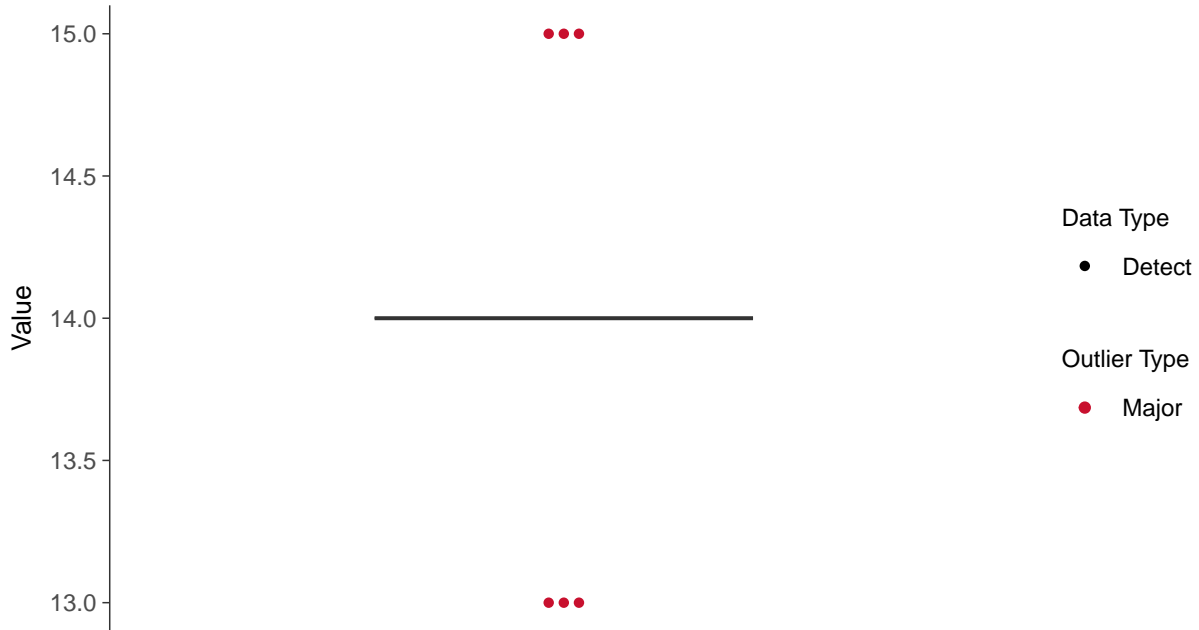
ID: 1_17_1_4_108





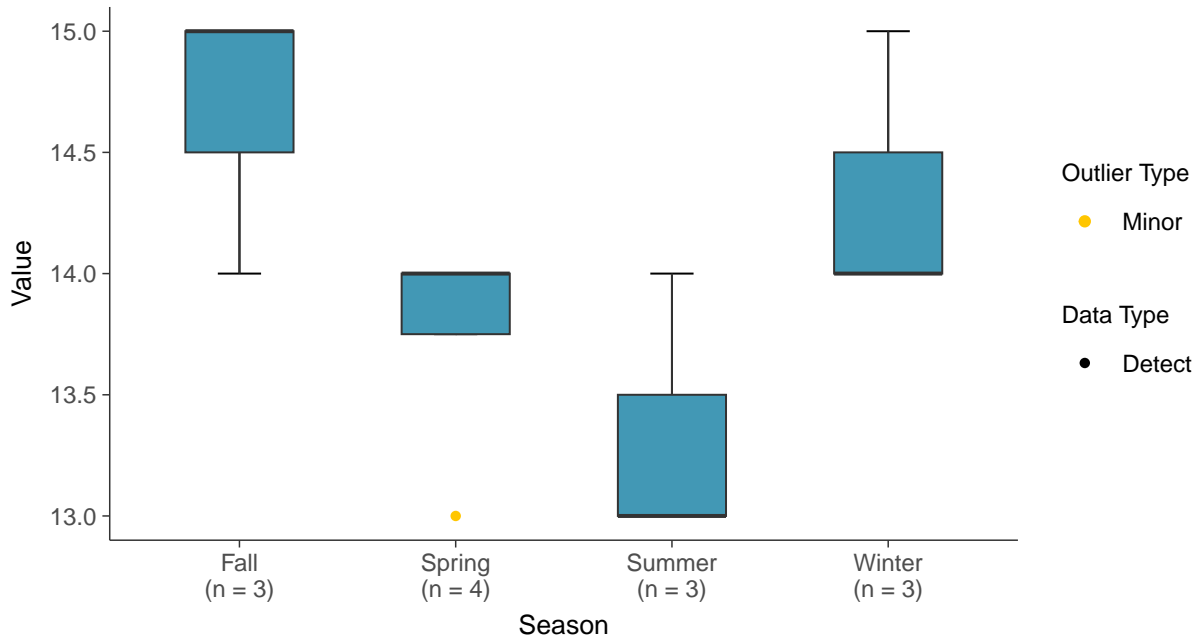
Boxplot

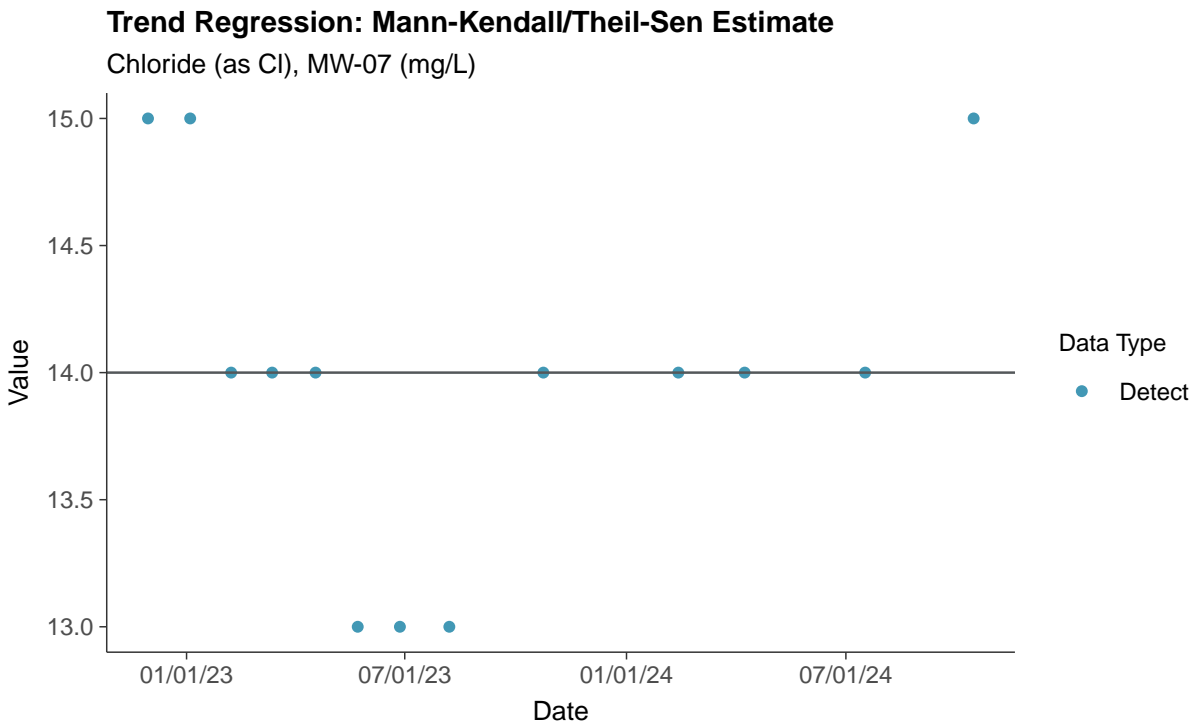
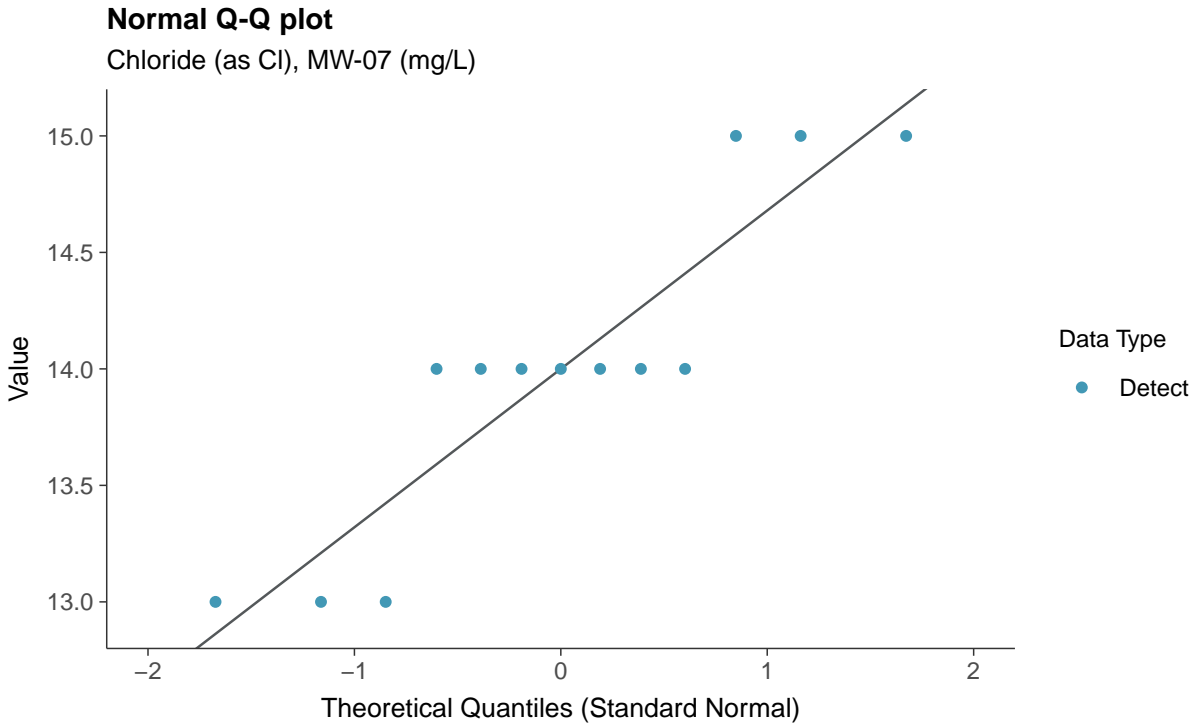
Chloride (as Cl), MW-07 (mg/L)



Boxplot by Season

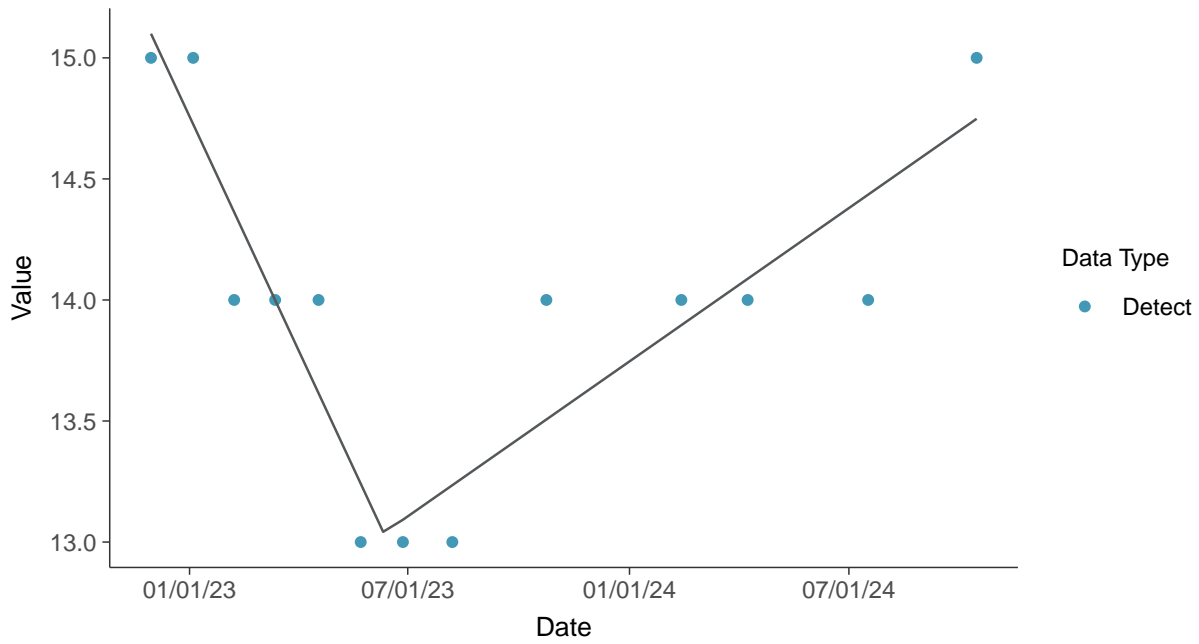
Chloride (as Cl), MW-07 (mg/L)







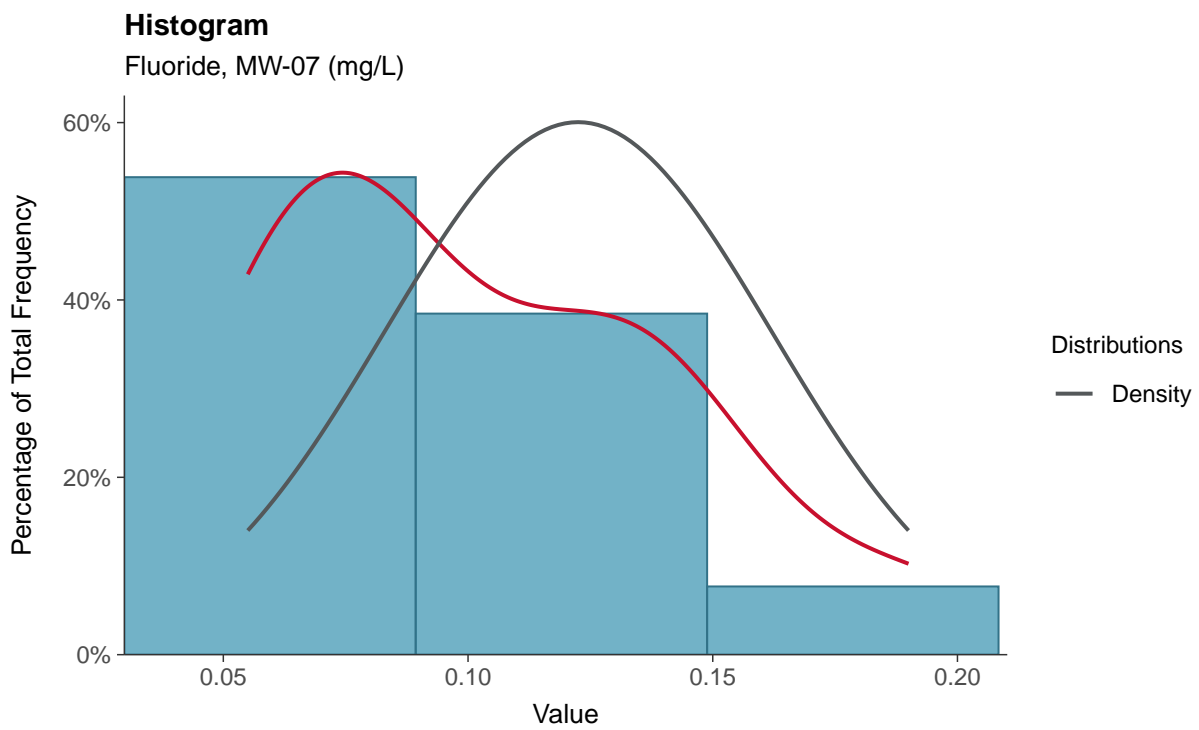
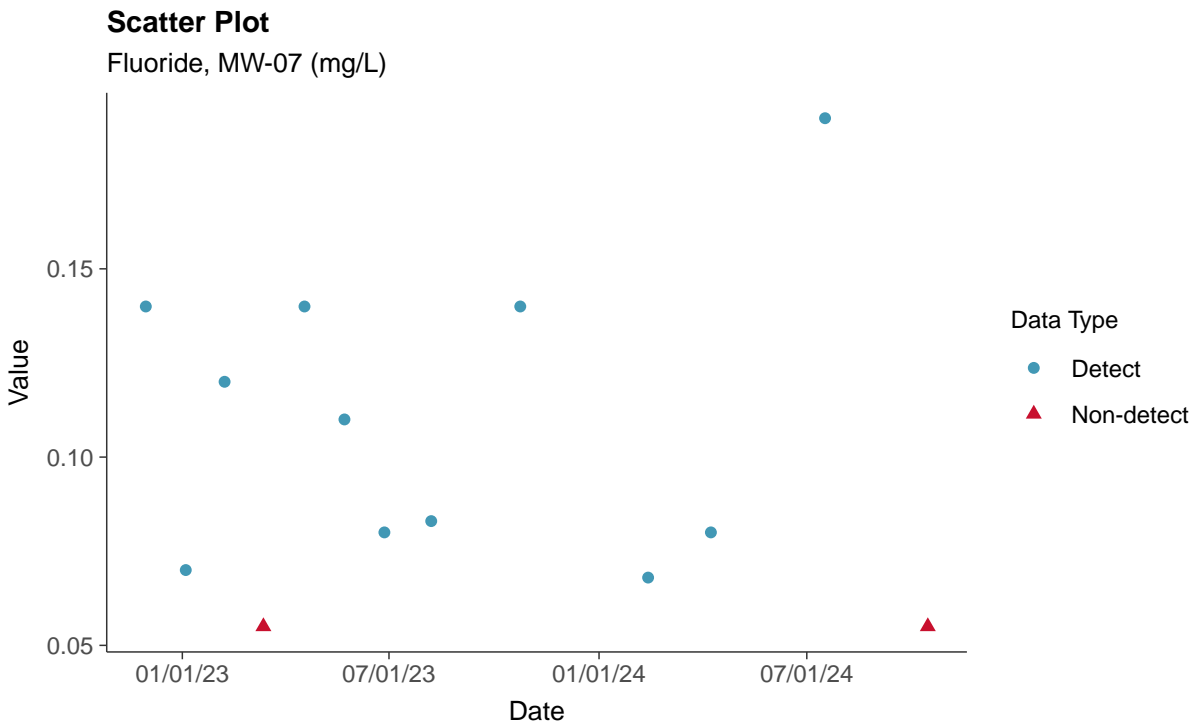
Trend Regression: Piecewise Linear-Linear
Chloride (as Cl), MW-07 (mg/L)





Appendix III: Fluoride, MW-07

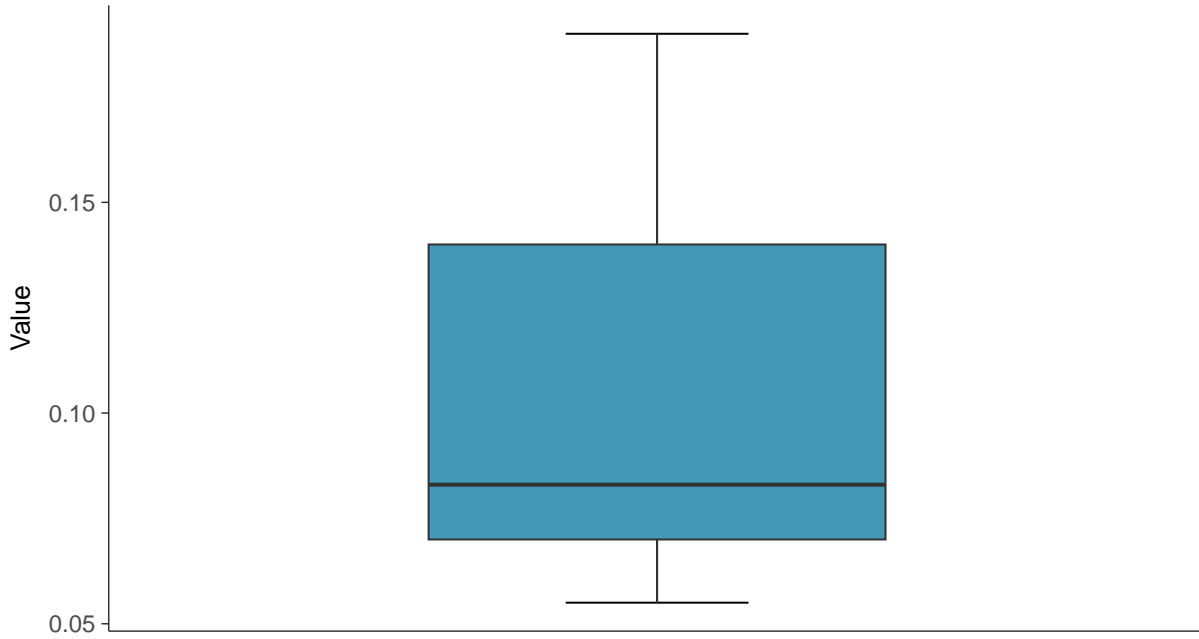
ID: 1_17_1_4_112





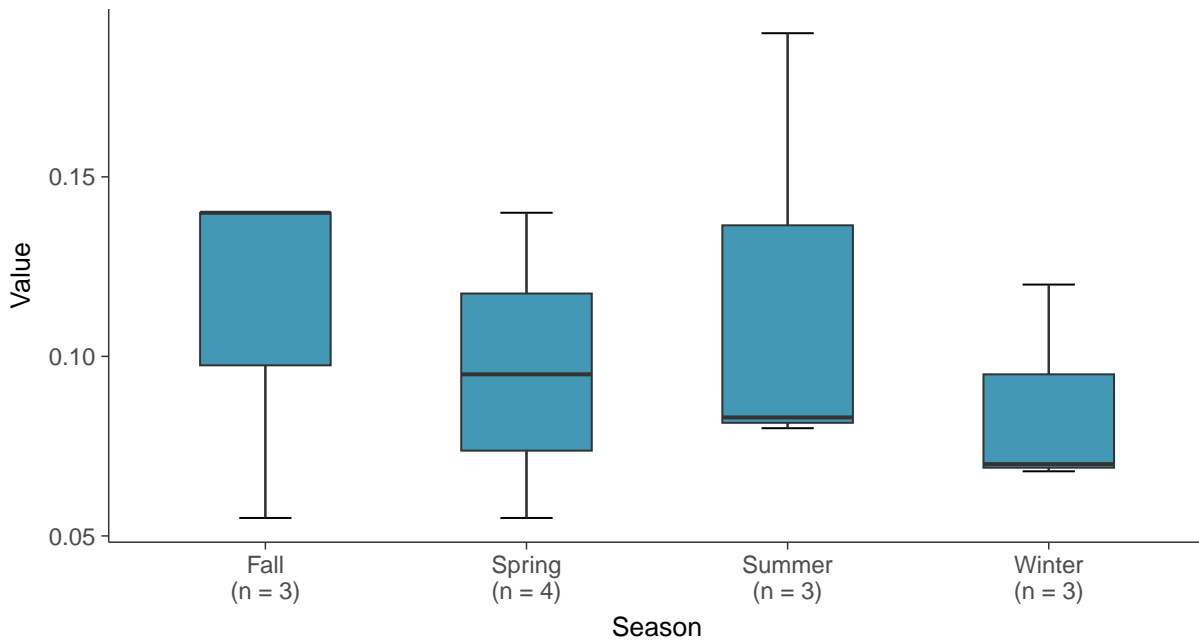
Boxplot

Fluoride, MW-07 (mg/L)



Boxplot by Season

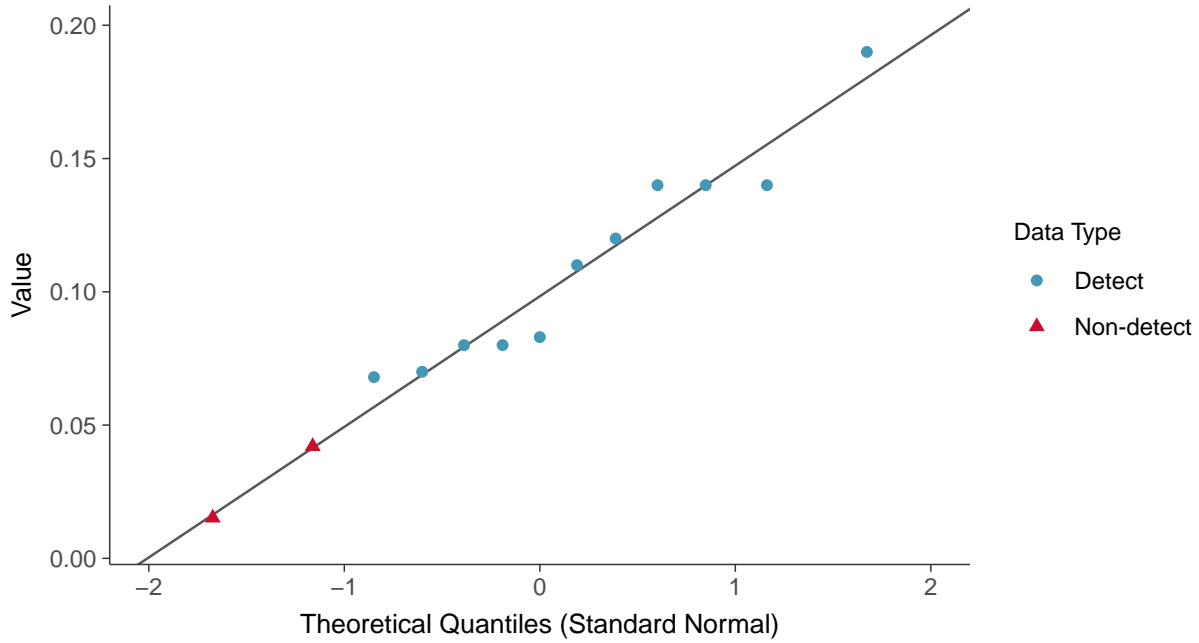
Fluoride, MW-07 (mg/L)





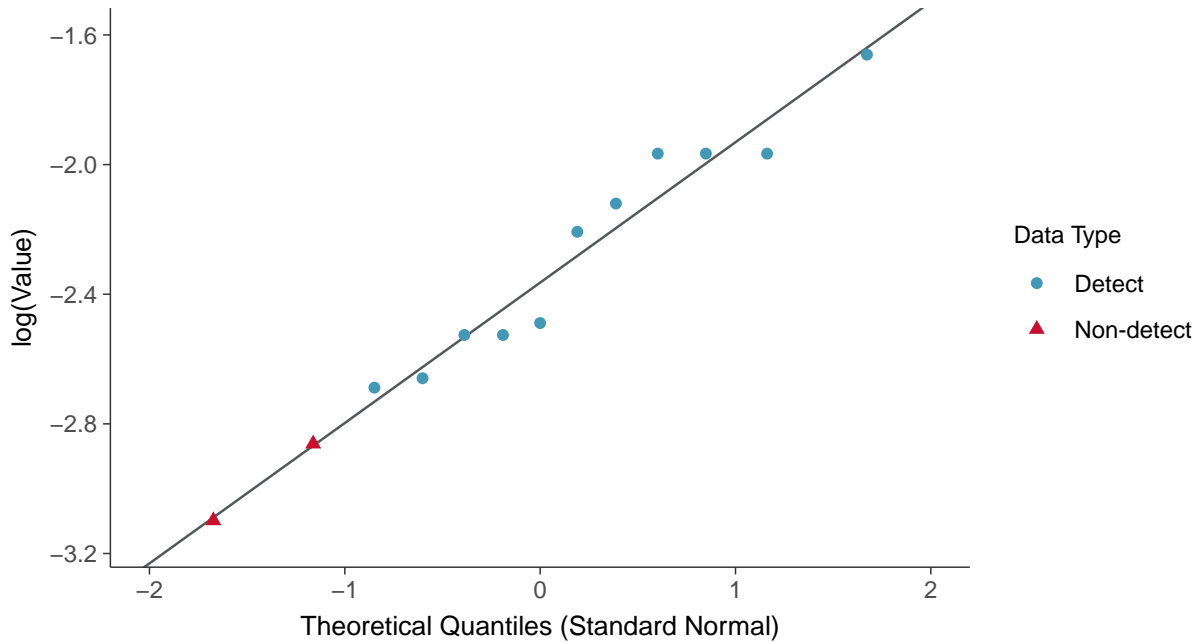
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-07 (mg/L)



Lognormal Q-Q plot using ROS Imputed Estimates

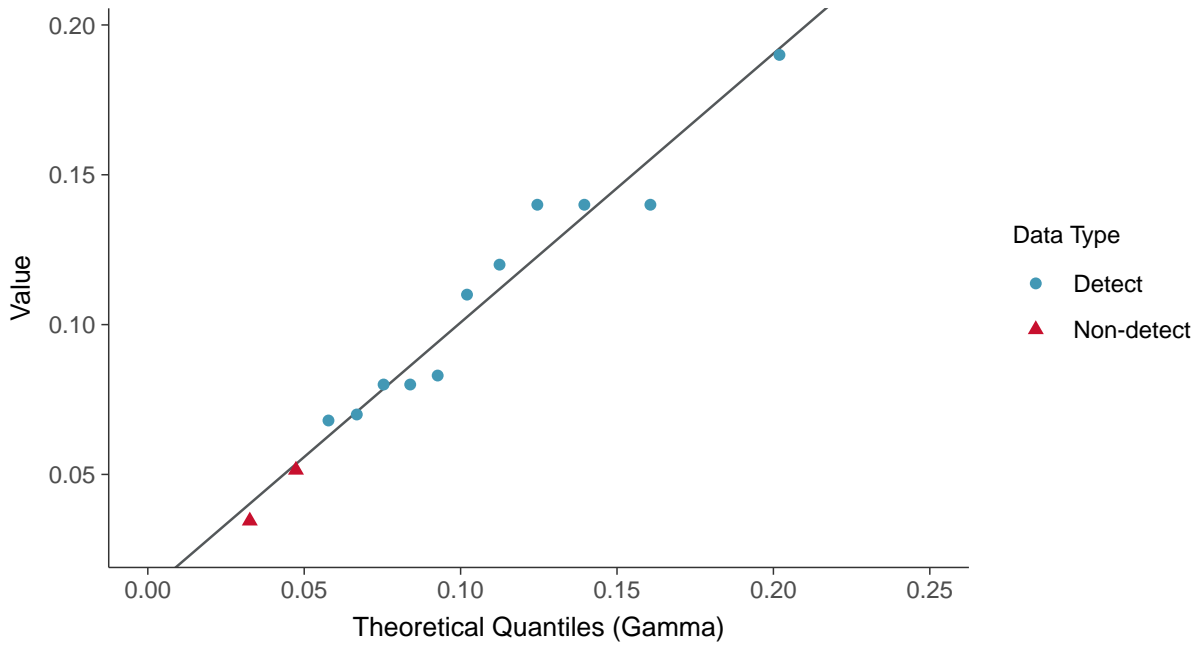
Fluoride, MW-07 (mg/L)





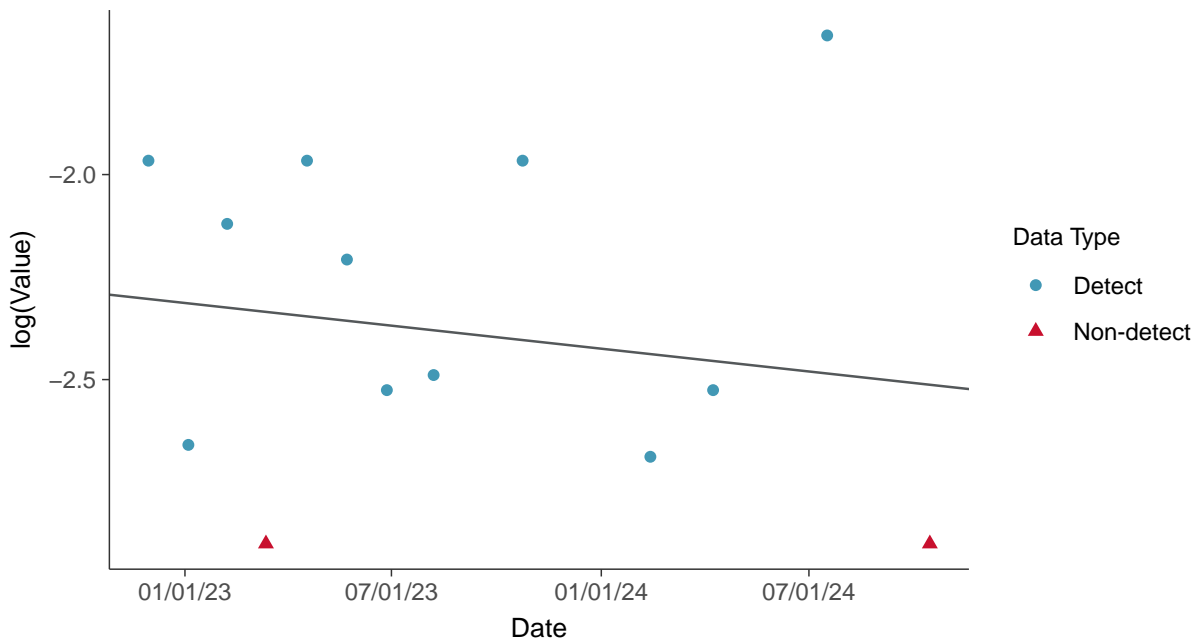
Gamma Q-Q plot using ROS Imputed Estimates

Fluoride, MW-07 (mg/L)



Trend Regression: Lognormal MLE

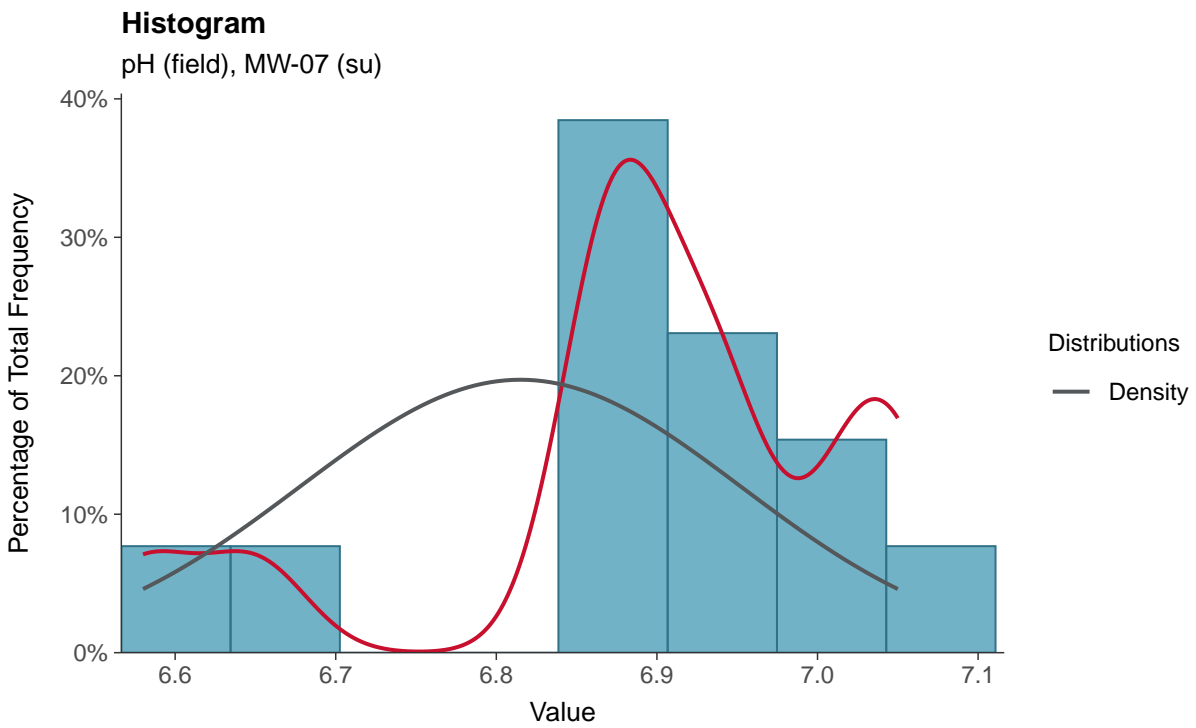
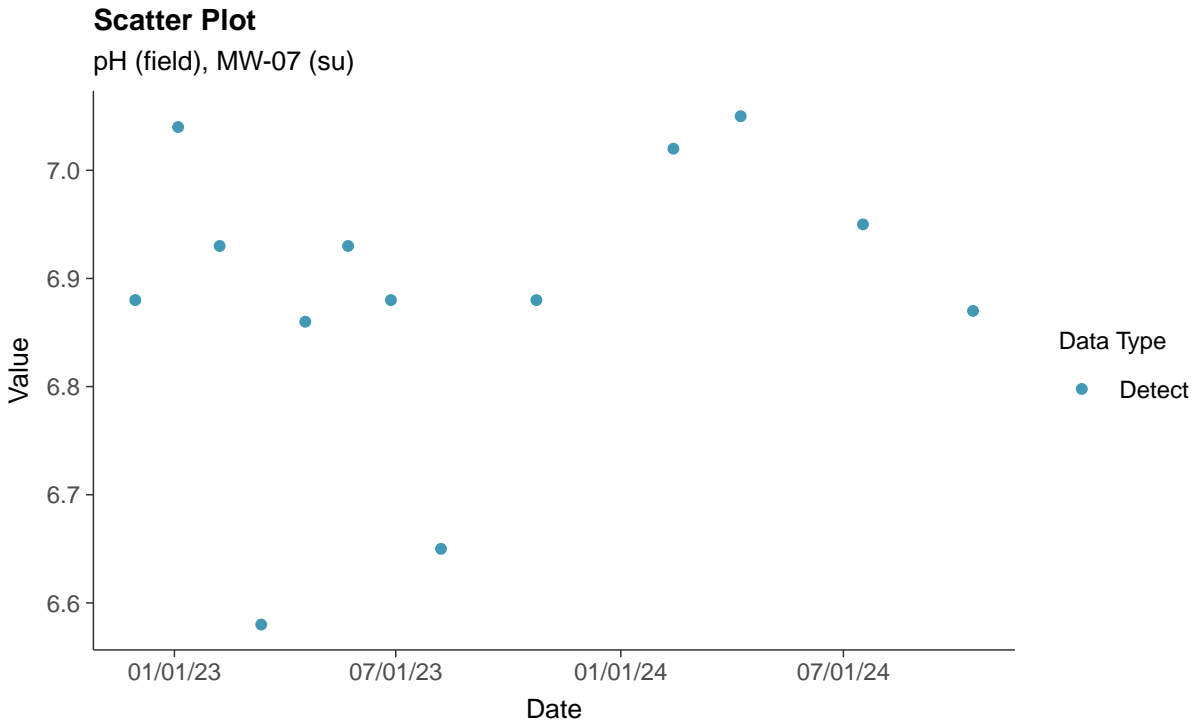
Fluoride, MW-07 (mg/L)





Appendix III: pH (field), MW-07

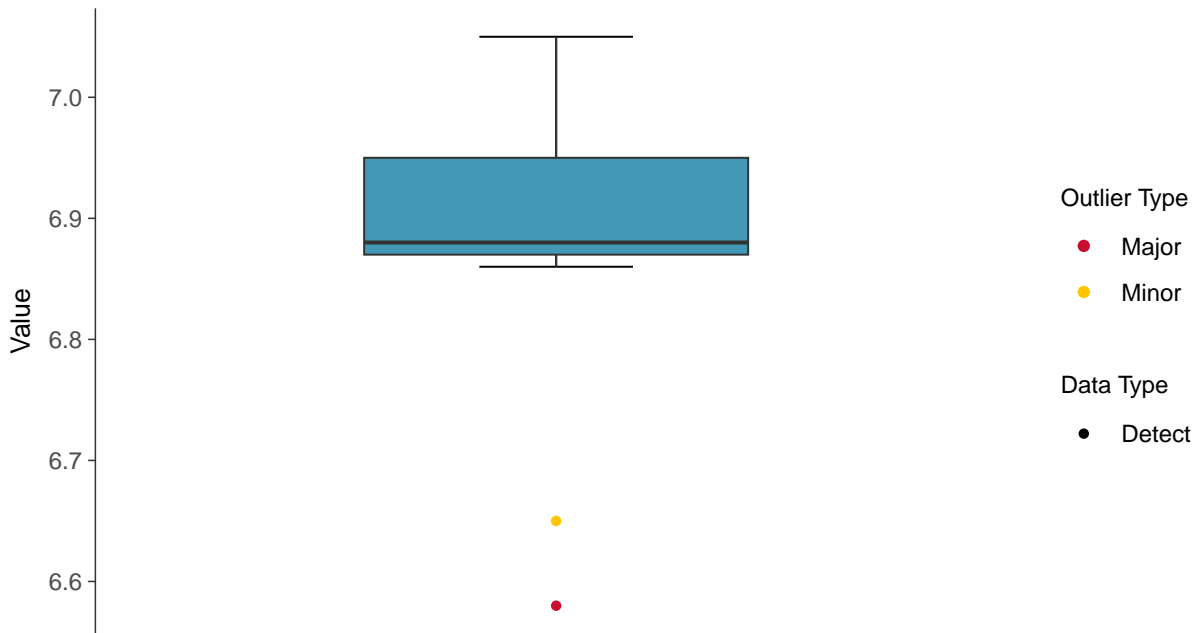
ID: 1_17_1_4_120





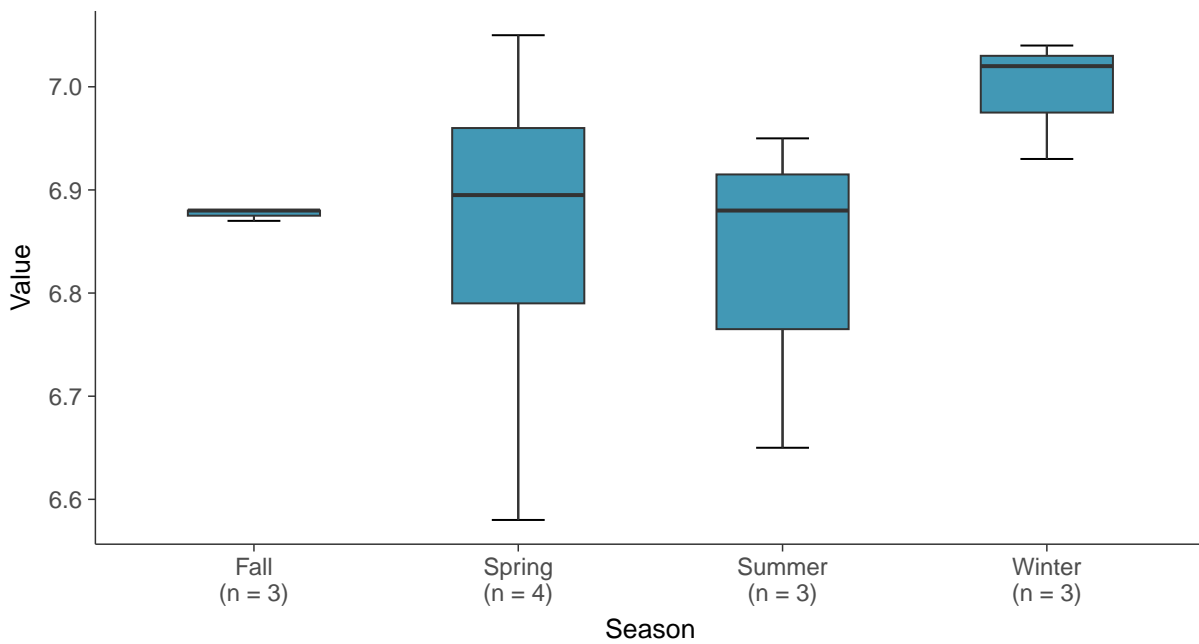
Boxplot

pH (field), MW-07 (su)



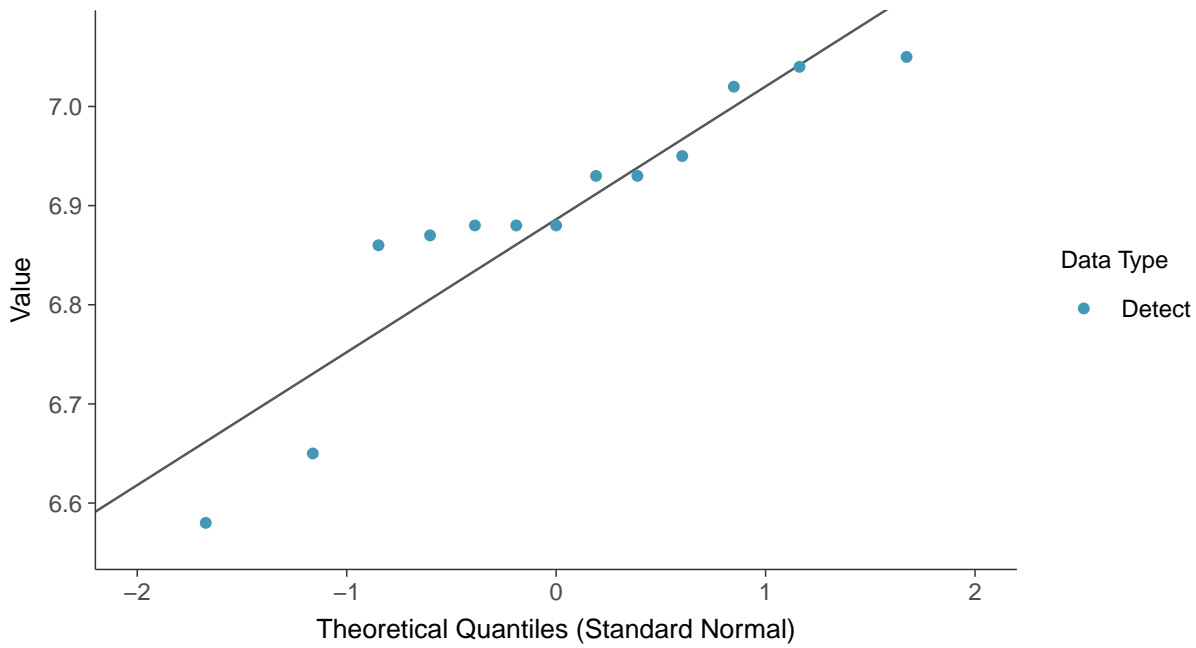
Boxplot by Season

pH (field), MW-07 (su)

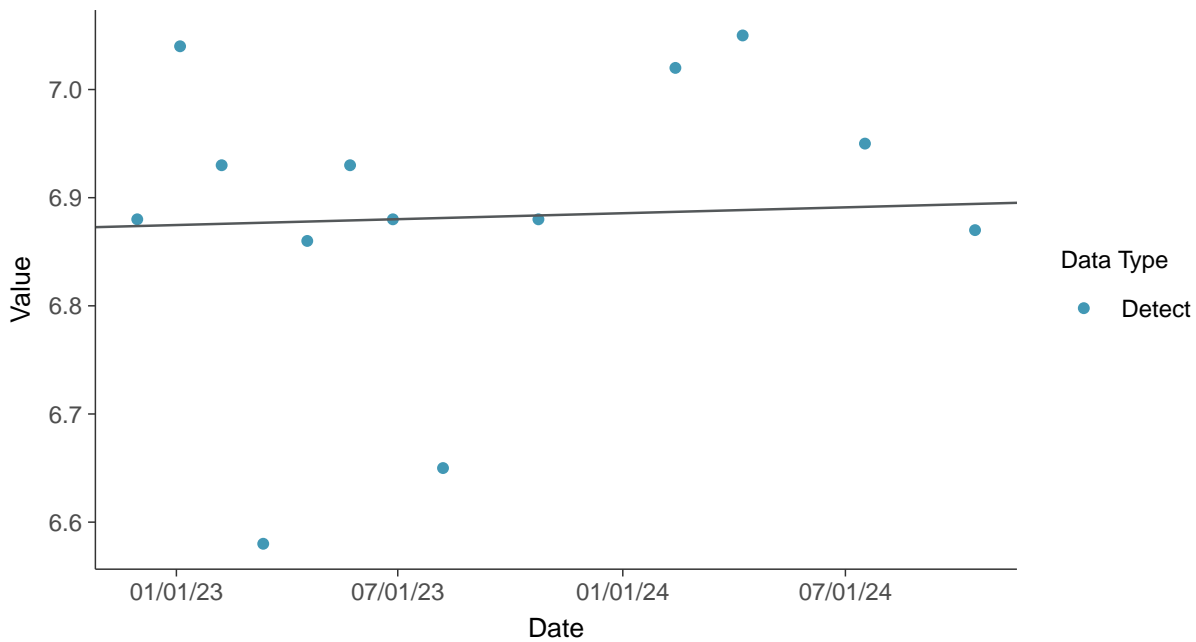




Normal Q-Q plot
pH (field), MW-07 (su)



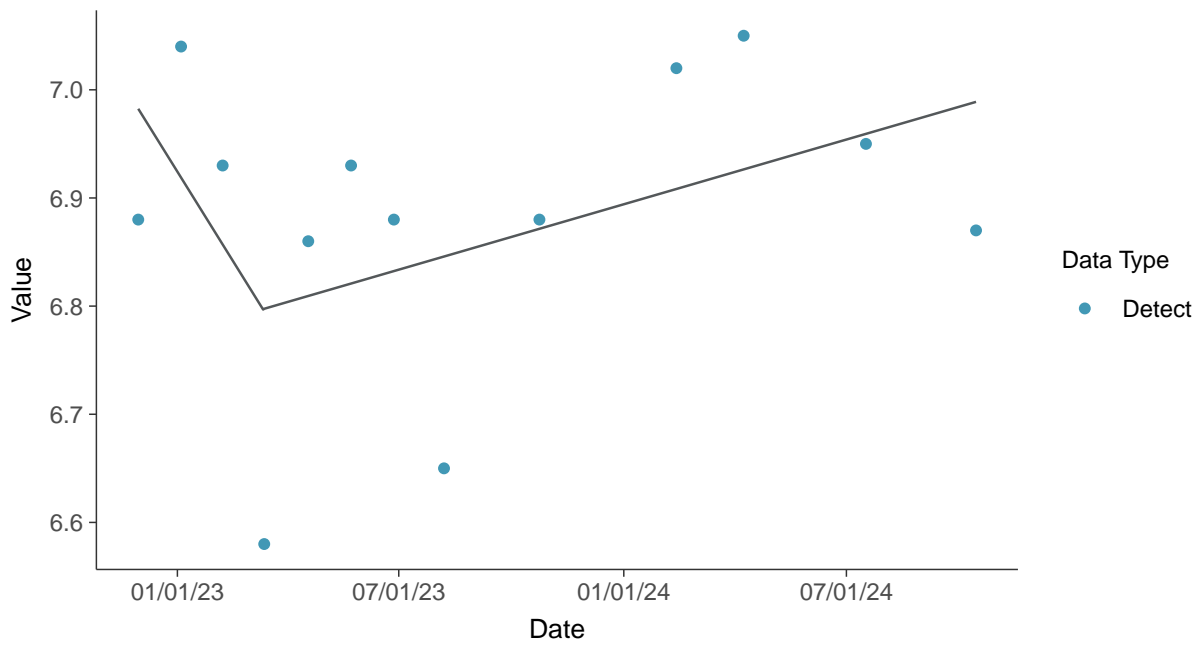
Trend Regression: Mann-Kendall/Theil-Sen Estimate
pH (field), MW-07 (su)





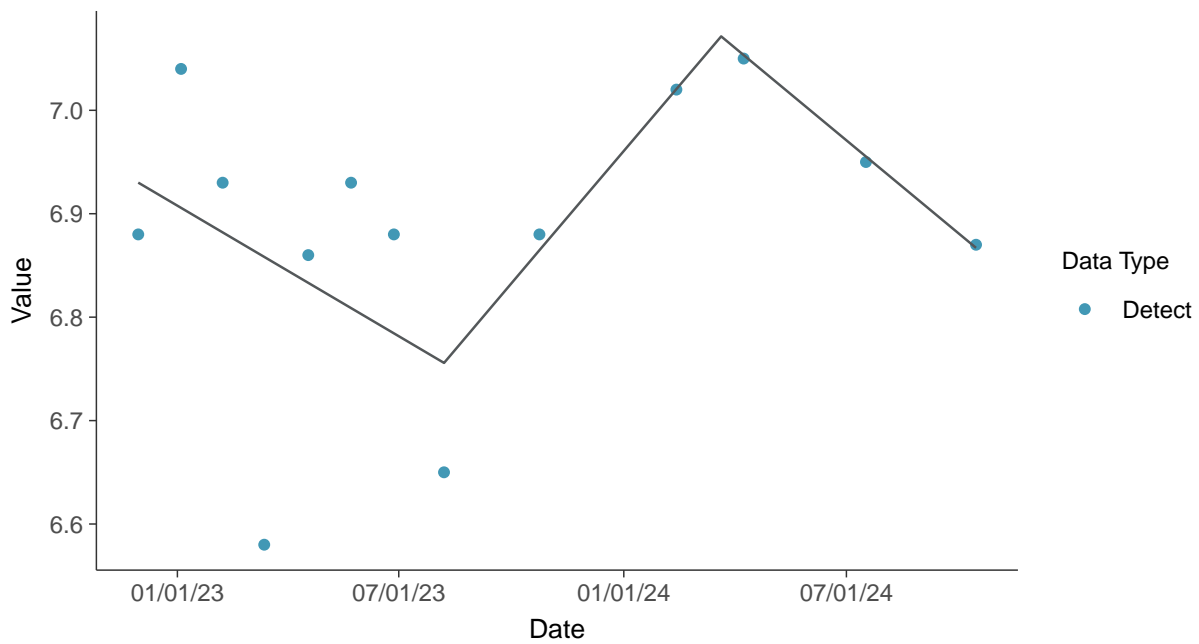
Trend Regression: Piecewise Linear-Linear

pH (field), MW-07 (su)



Trend Regression: Piecewise Linear-Linear-Linear

pH (field), MW-07 (su)



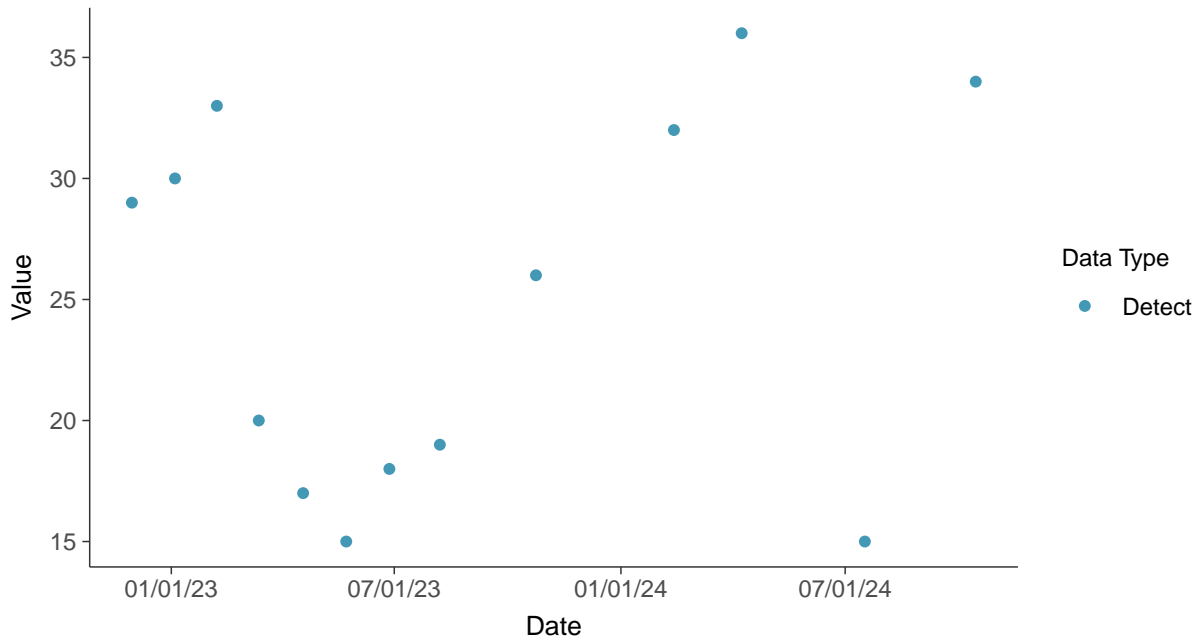


Appendix III: Sulfate (as SO₄), MW-07

ID: 1_17_1_4_124

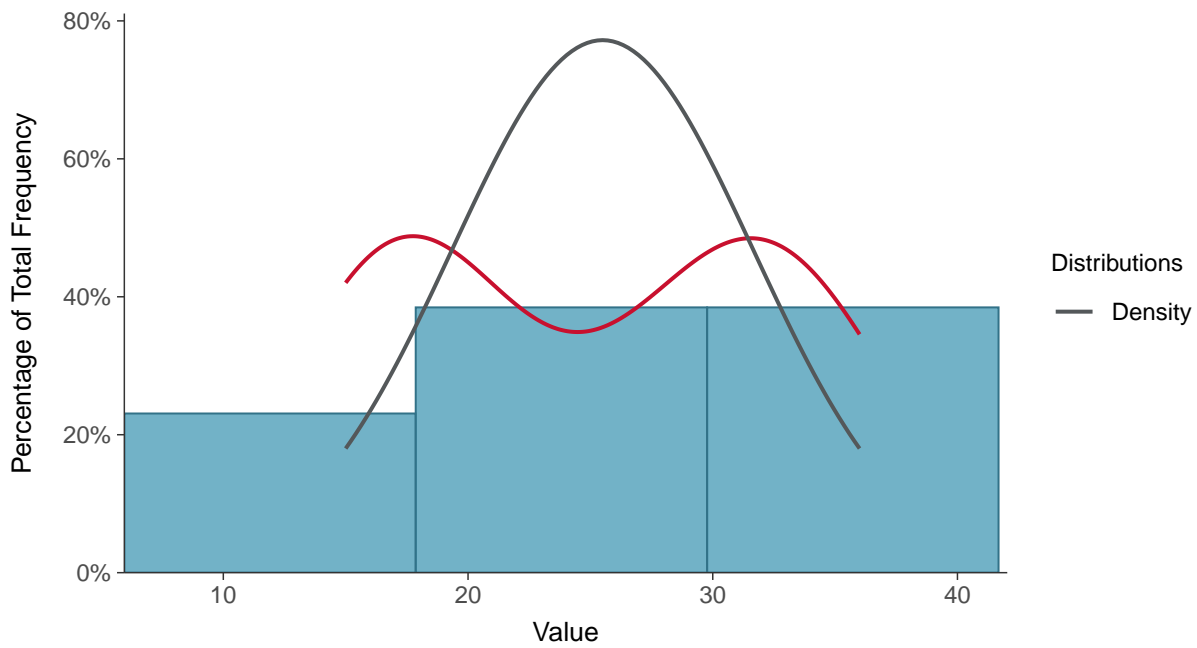
Scatter Plot

Sulfate (as SO₄), MW-07 (mg/L)



Histogram

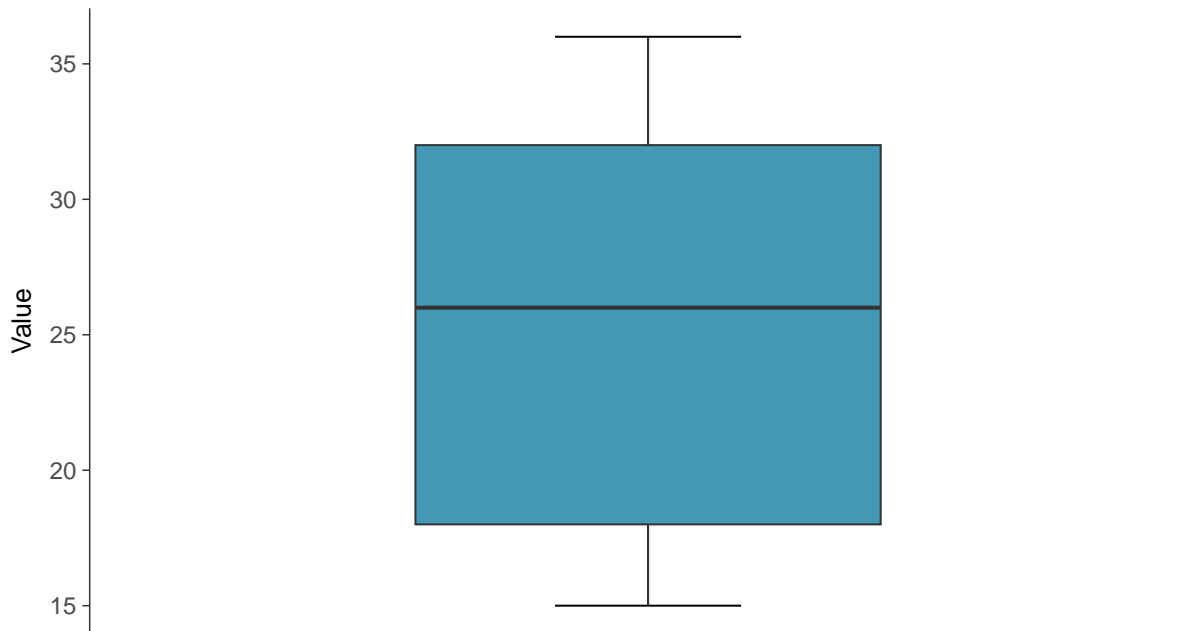
Sulfate (as SO₄), MW-07 (mg/L)





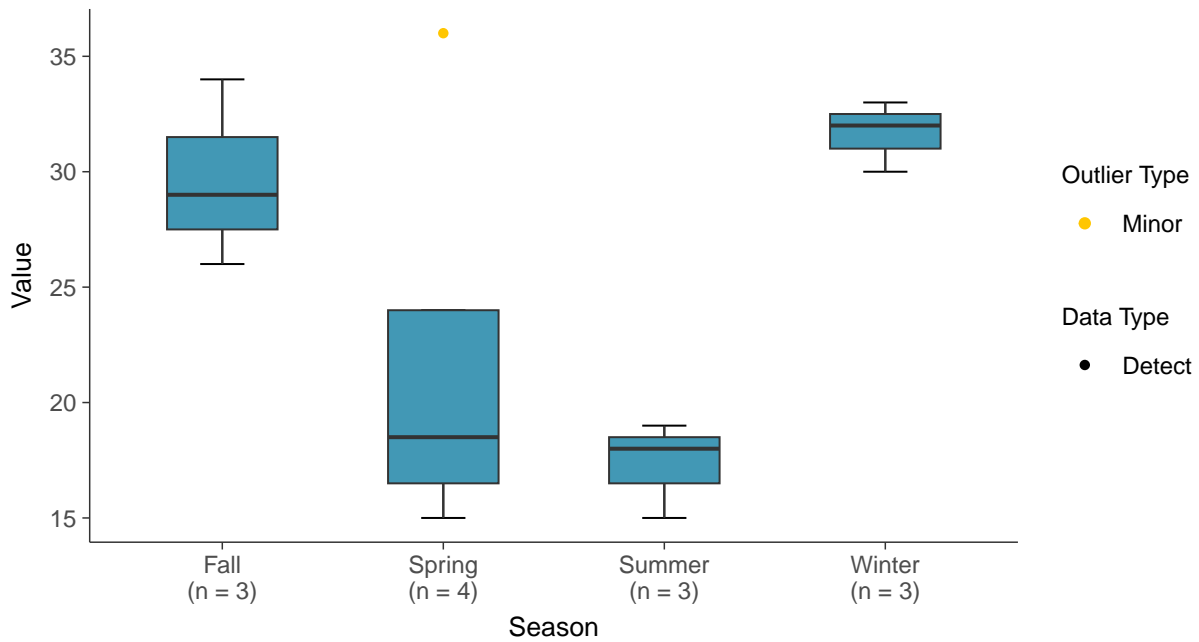
Boxplot

Sulfate (as SO₄), MW-07 (mg/L)



Boxplot by Season

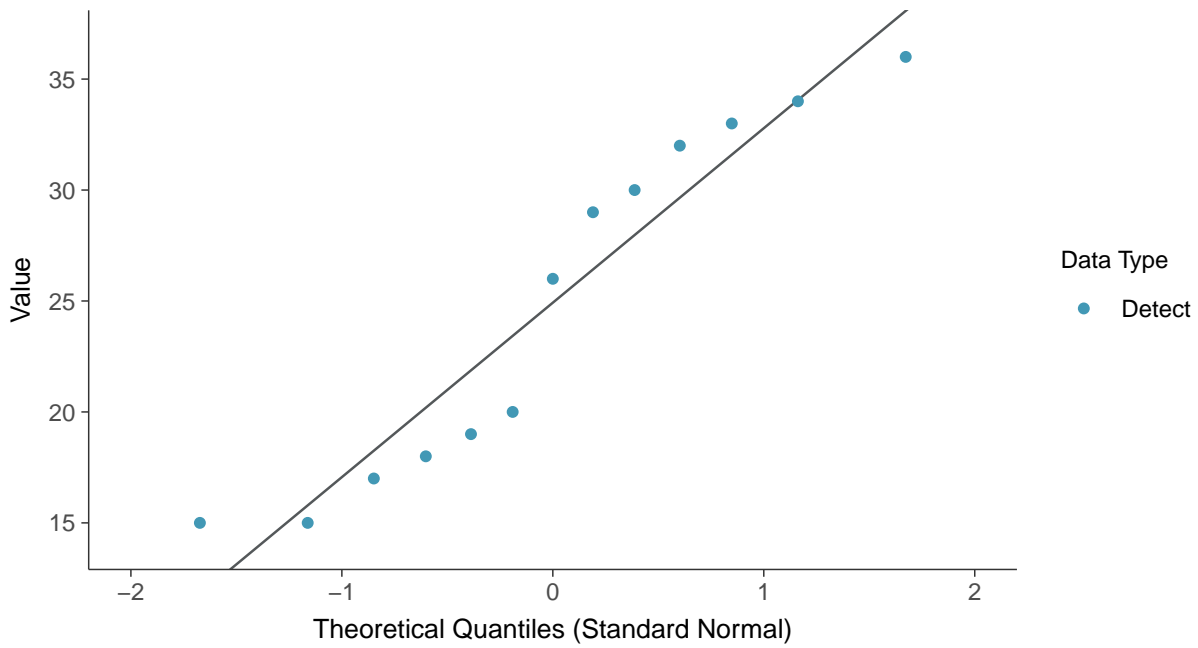
Sulfate (as SO₄), MW-07 (mg/L)





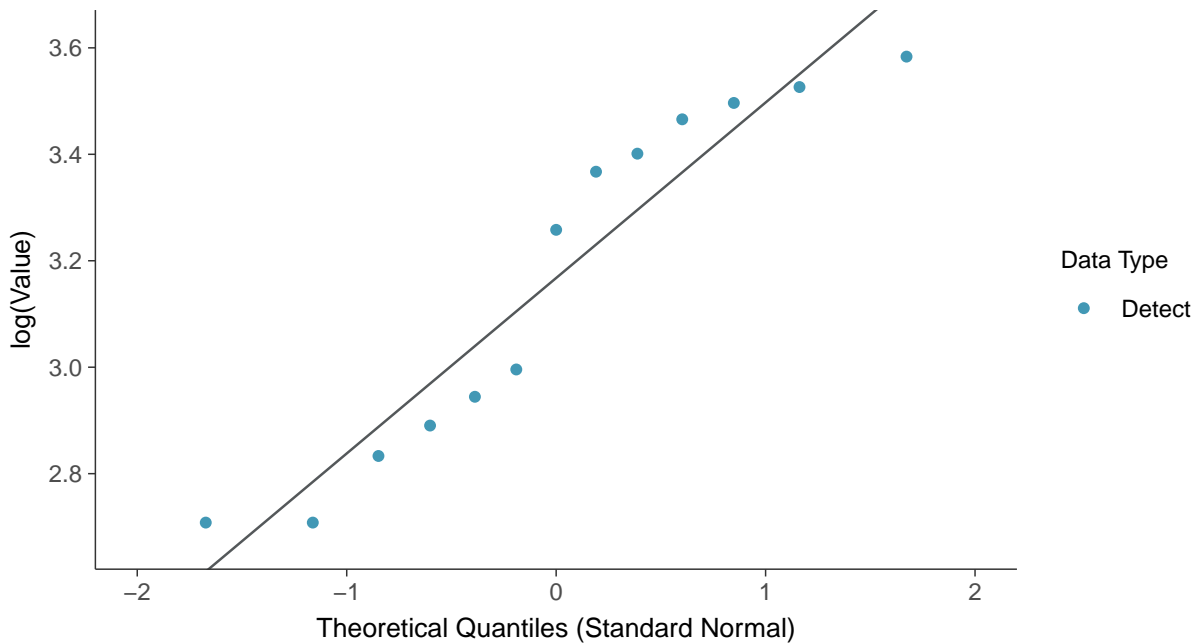
Normal Q-Q plot

Sulfate (as SO₄), MW-07 (mg/L)



Lognormal Q-Q plot

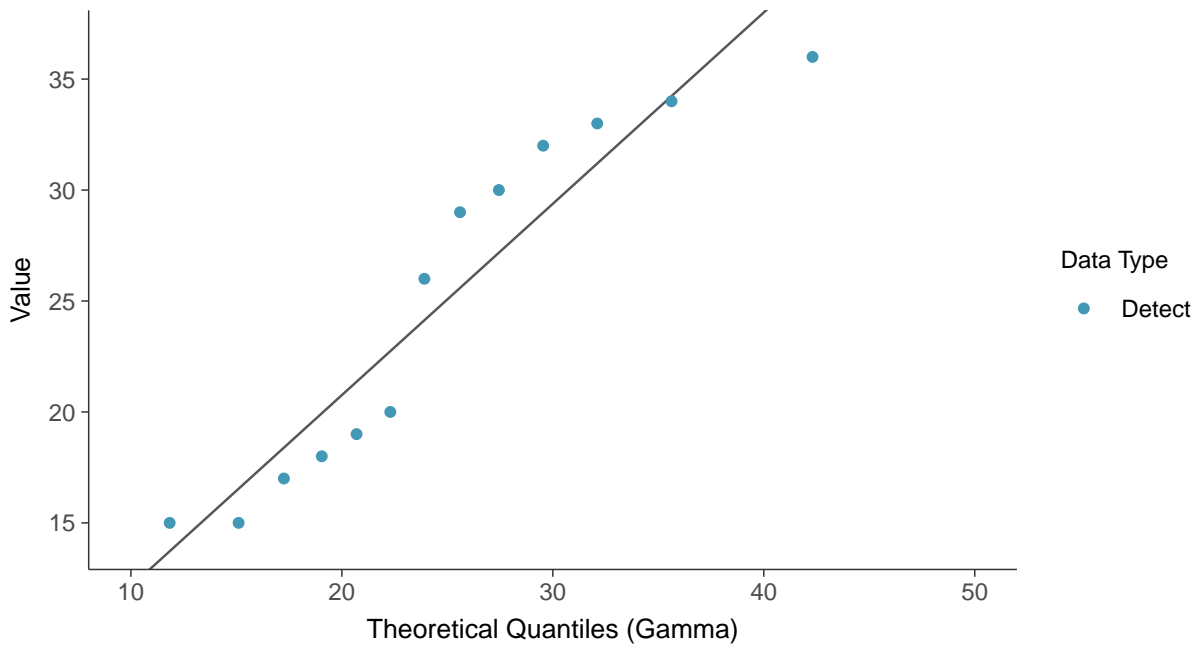
Sulfate (as SO₄), MW-07 (mg/L)





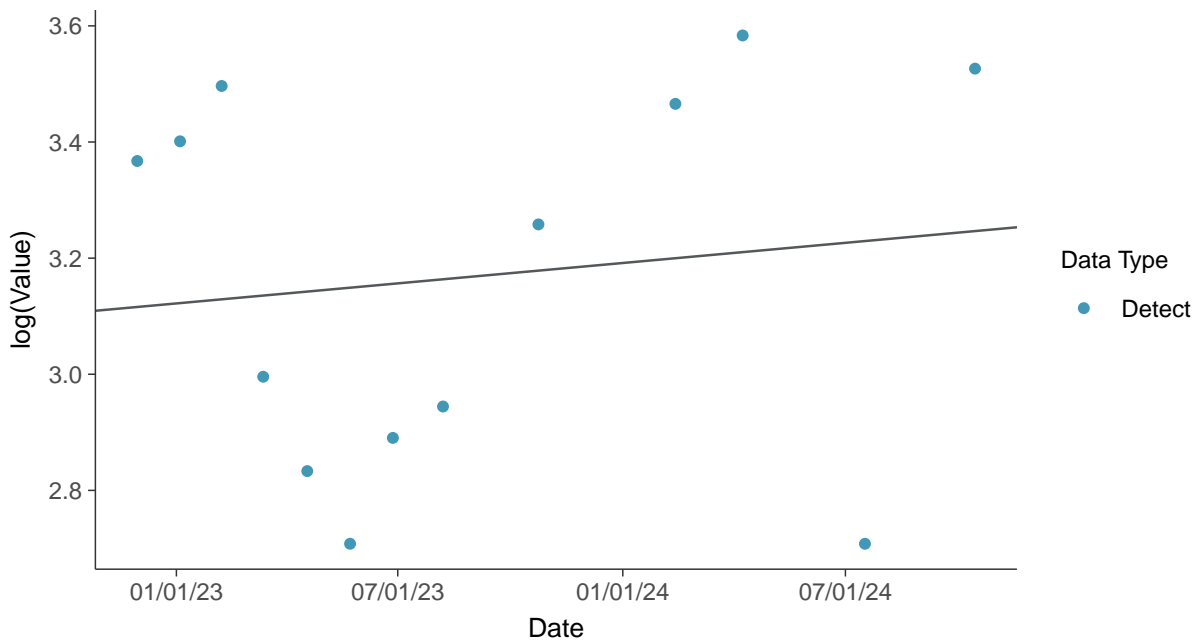
Gamma Q-Q plot

Sulfate (as SO₄), MW-07 (mg/L)



Trend Regression: Lognormal MLE

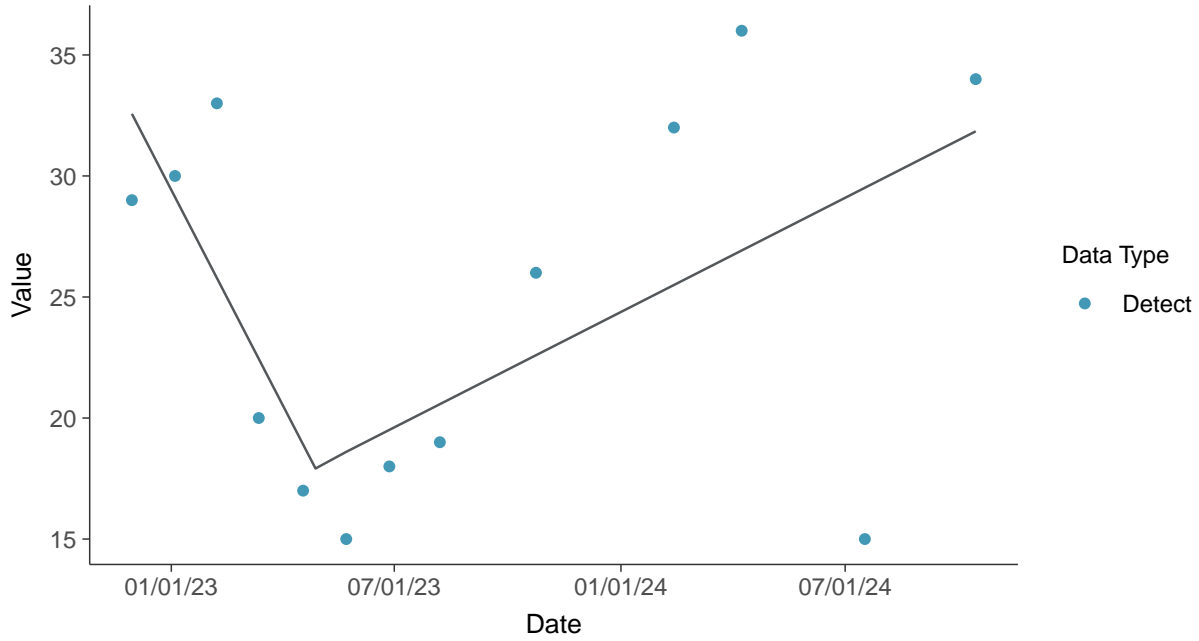
Sulfate (as SO₄), MW-07 (mg/L)





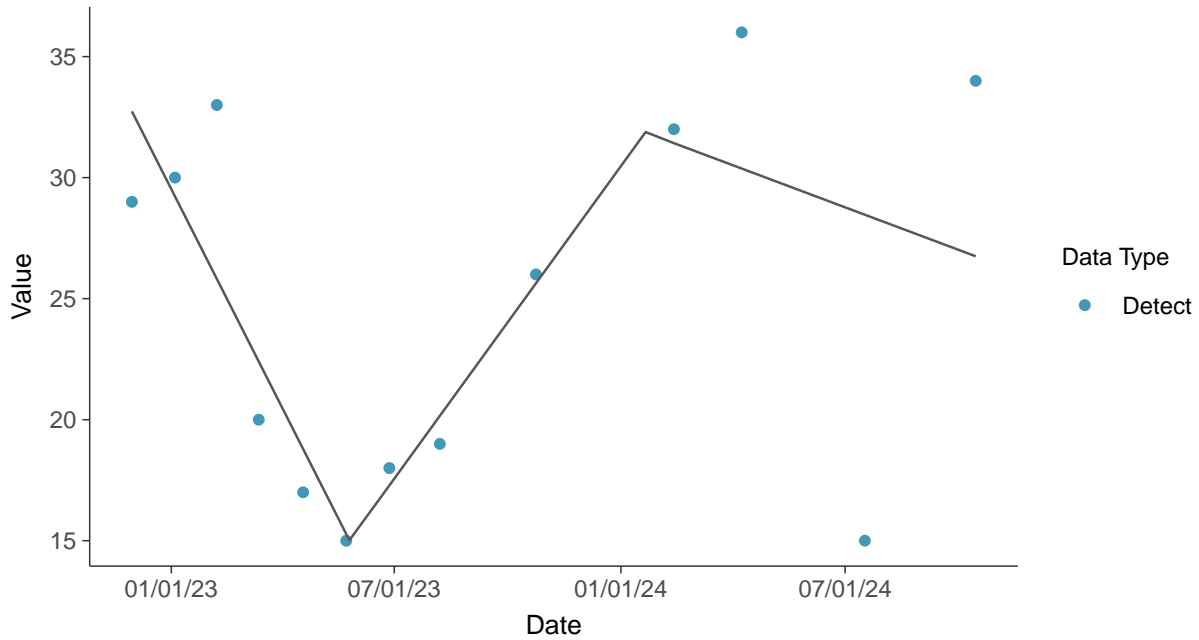
Trend Regression: Piecewise Linear-Linear

Sulfate (as SO₄), MW-07 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Sulfate (as SO₄), MW-07 (mg/L)



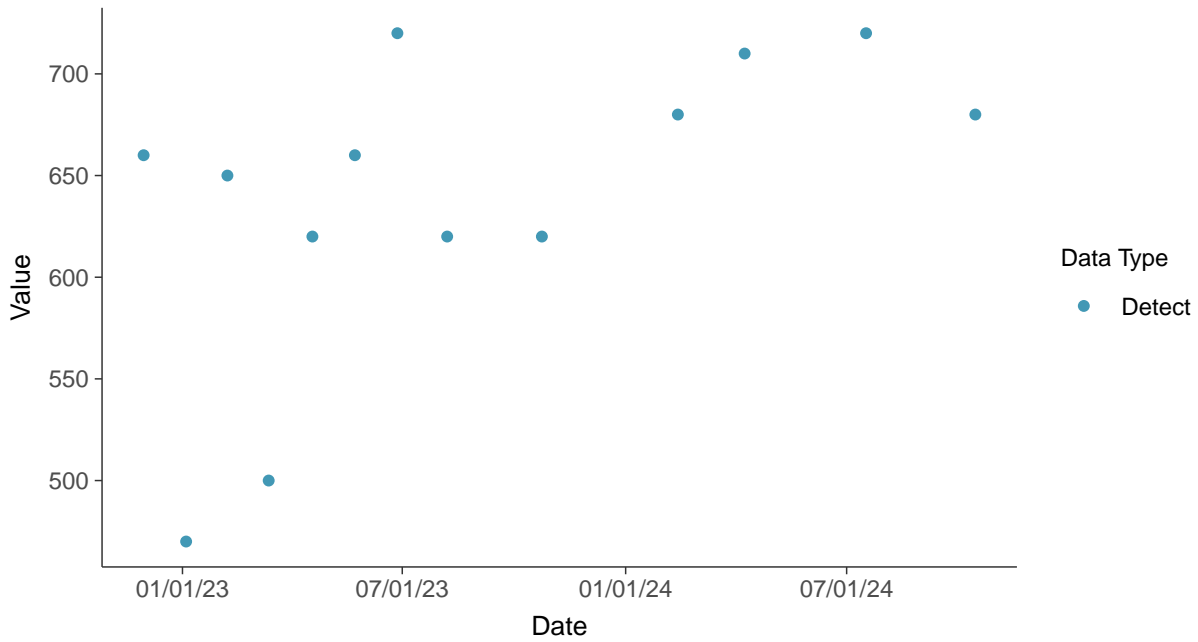


Appendix III: Total Dissolved Solids, MW-07

ID: 1_17_1_4_126

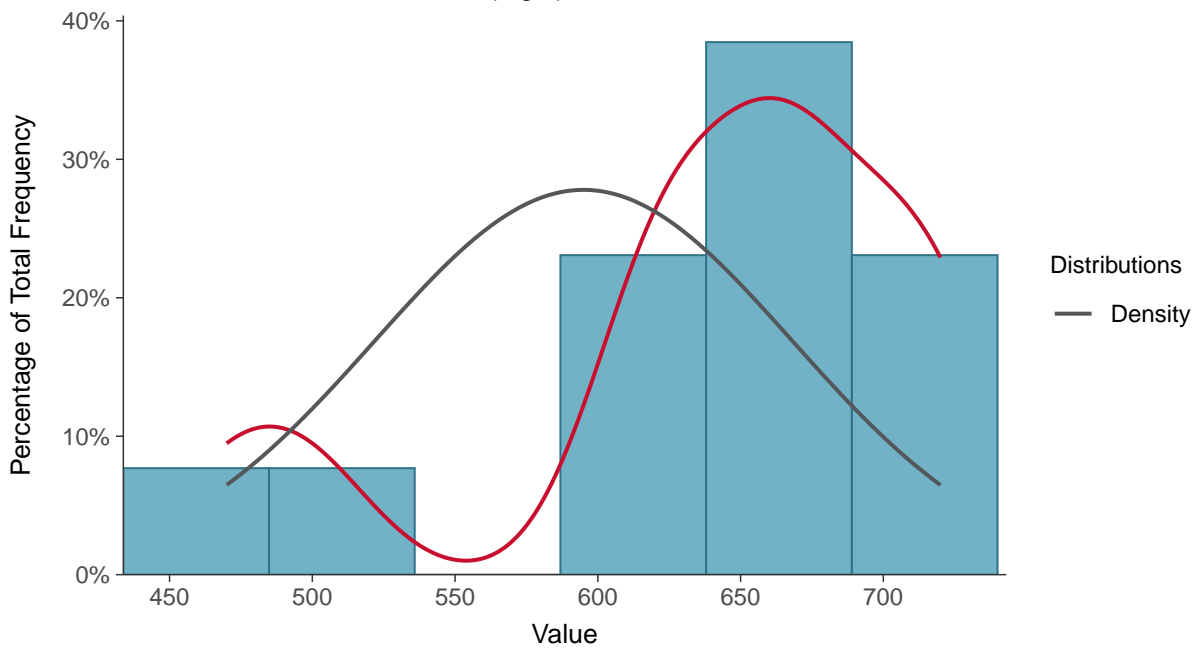
Scatter Plot

Total Dissolved Solids, MW-07 (mg/L)



Histogram

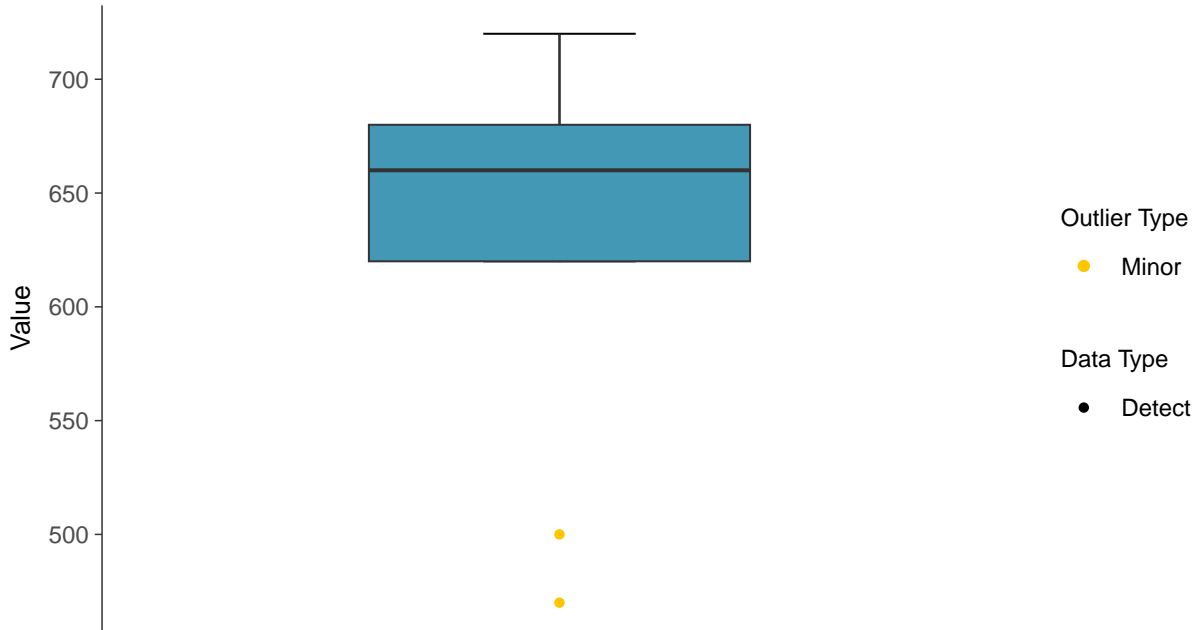
Total Dissolved Solids, MW-07 (mg/L)





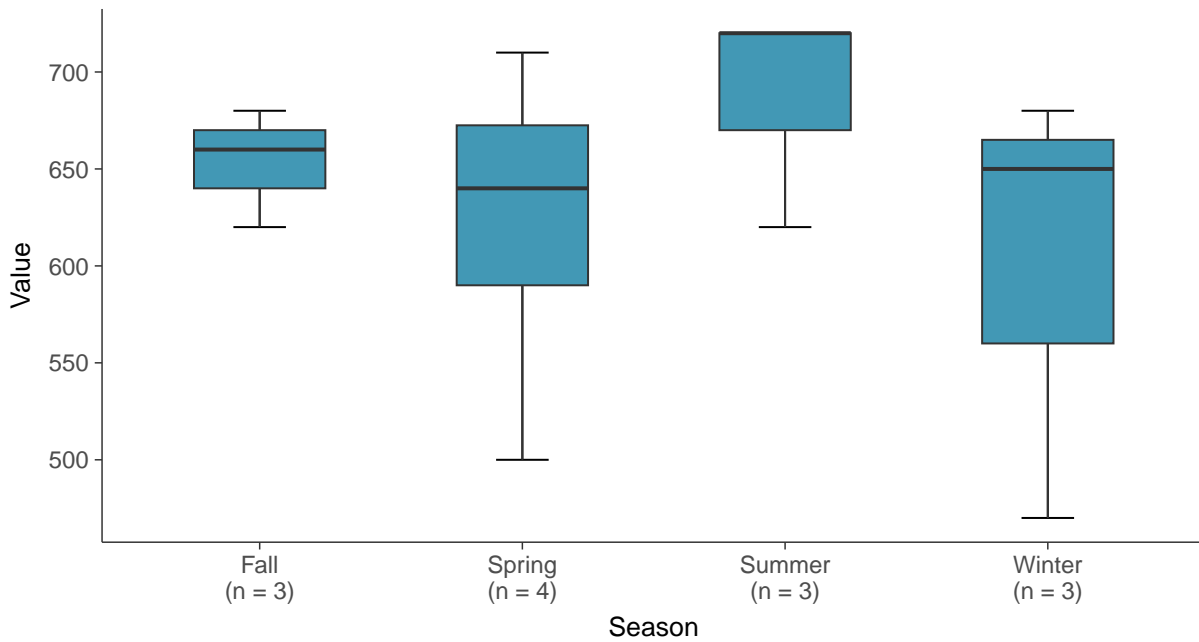
Boxplot

Total Dissolved Solids, MW-07 (mg/L)



Boxplot by Season

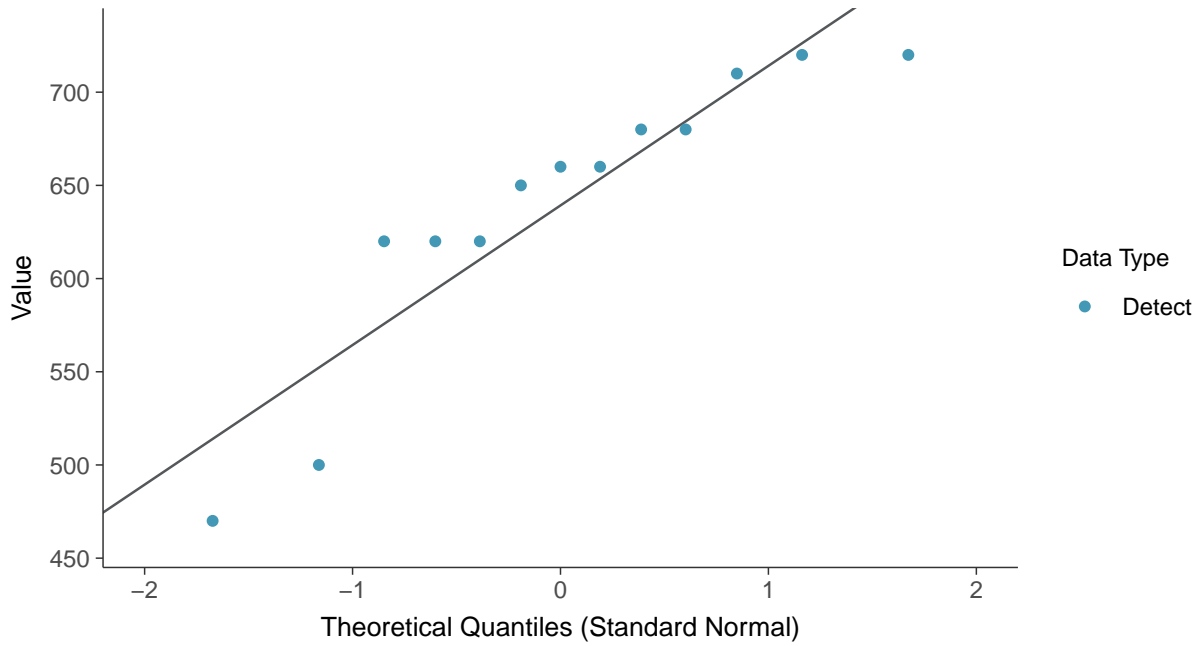
Total Dissolved Solids, MW-07 (mg/L)





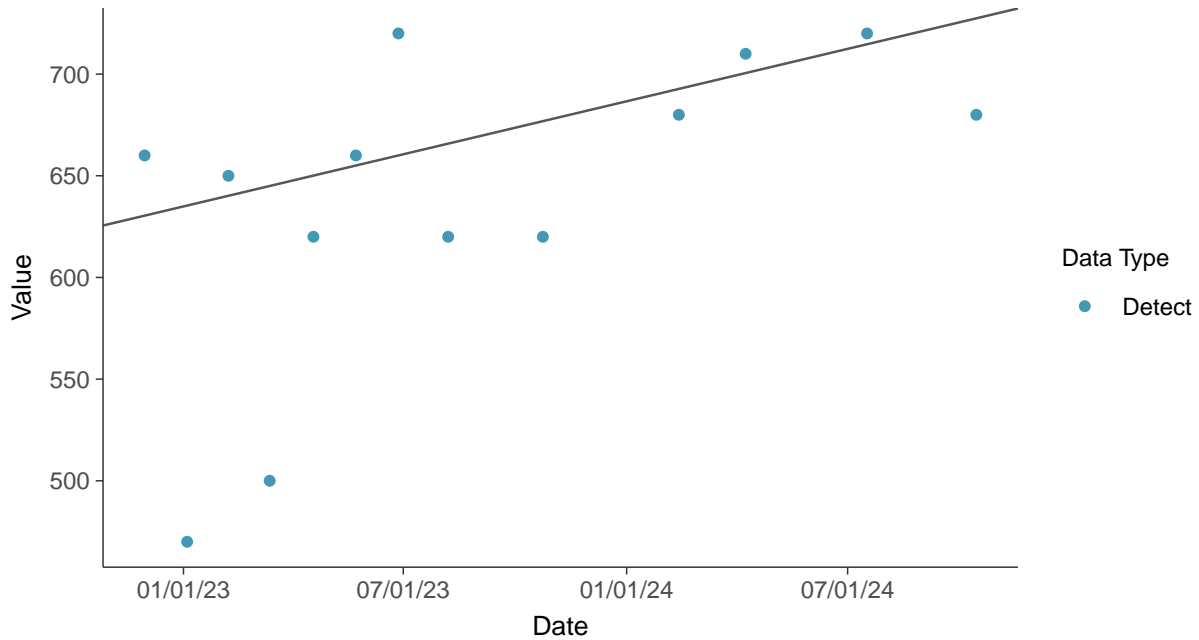
Normal Q-Q plot

Total Dissolved Solids, MW-07 (mg/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

Total Dissolved Solids, MW-07 (mg/L)



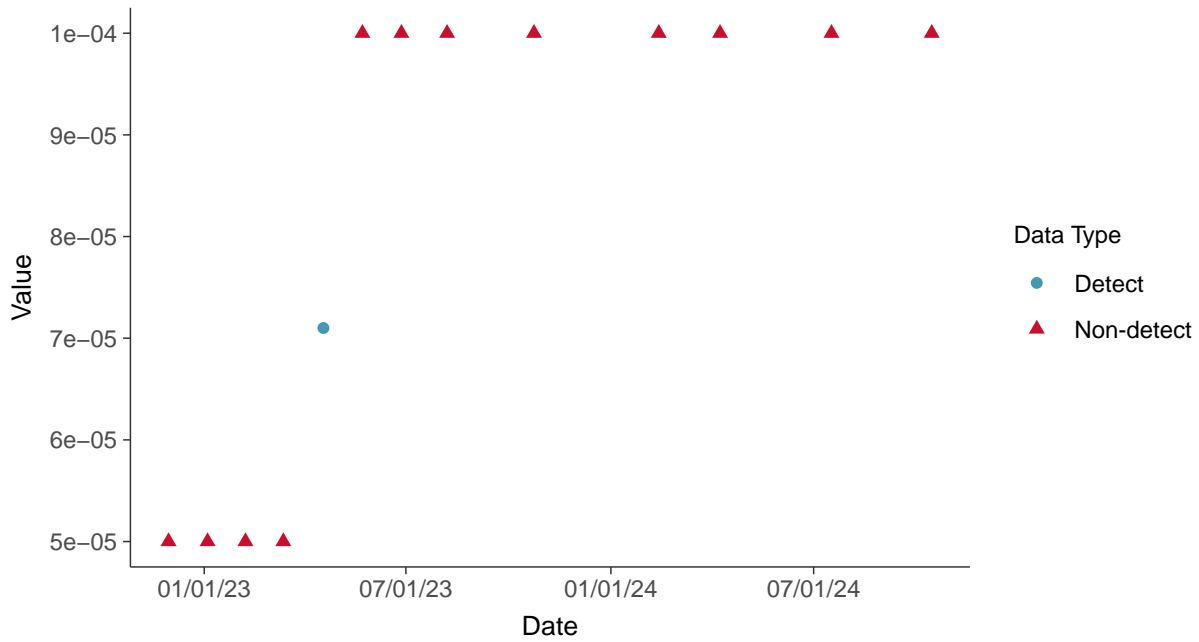


Appendix IV: Antimony, MW-07

ID: 1_17_1_5_101

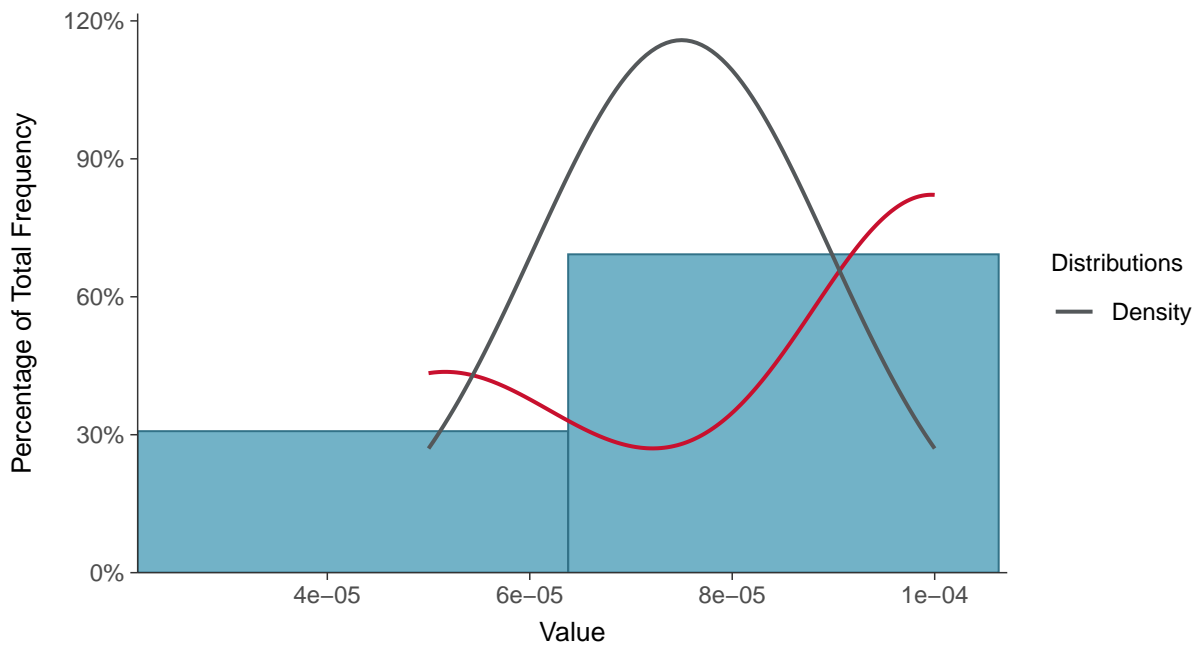
Scatter Plot

Antimony, MW-07 (mg/L)



Histogram

Antimony, MW-07 (mg/L)





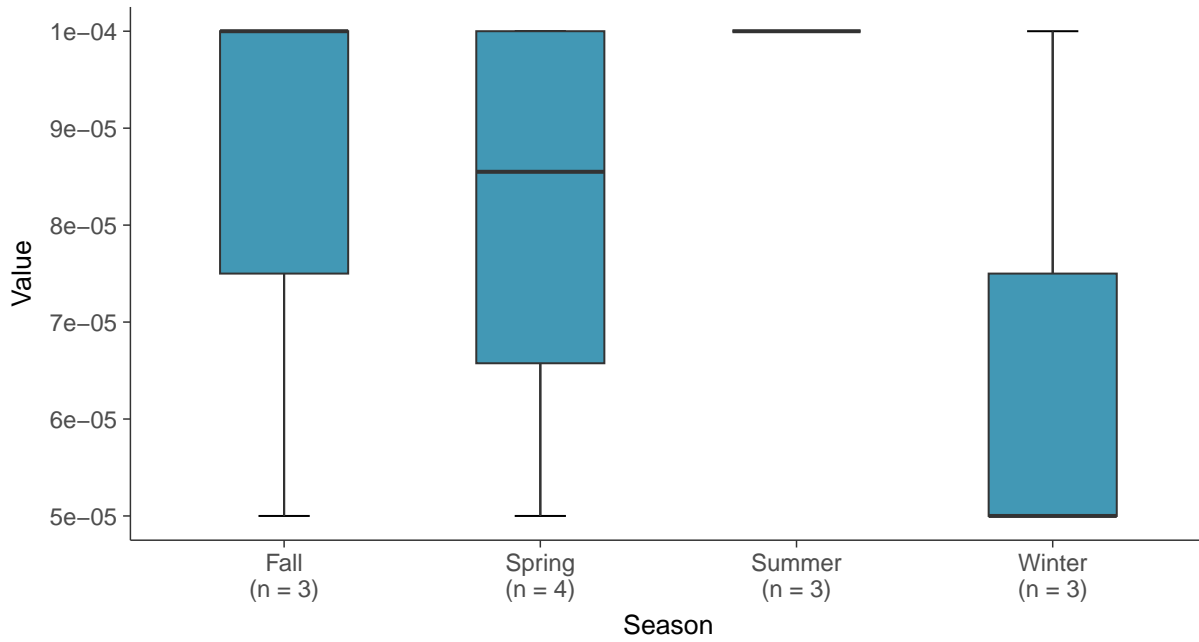
Boxplot

Antimony, MW-07 (mg/L)



Boxplot by Season

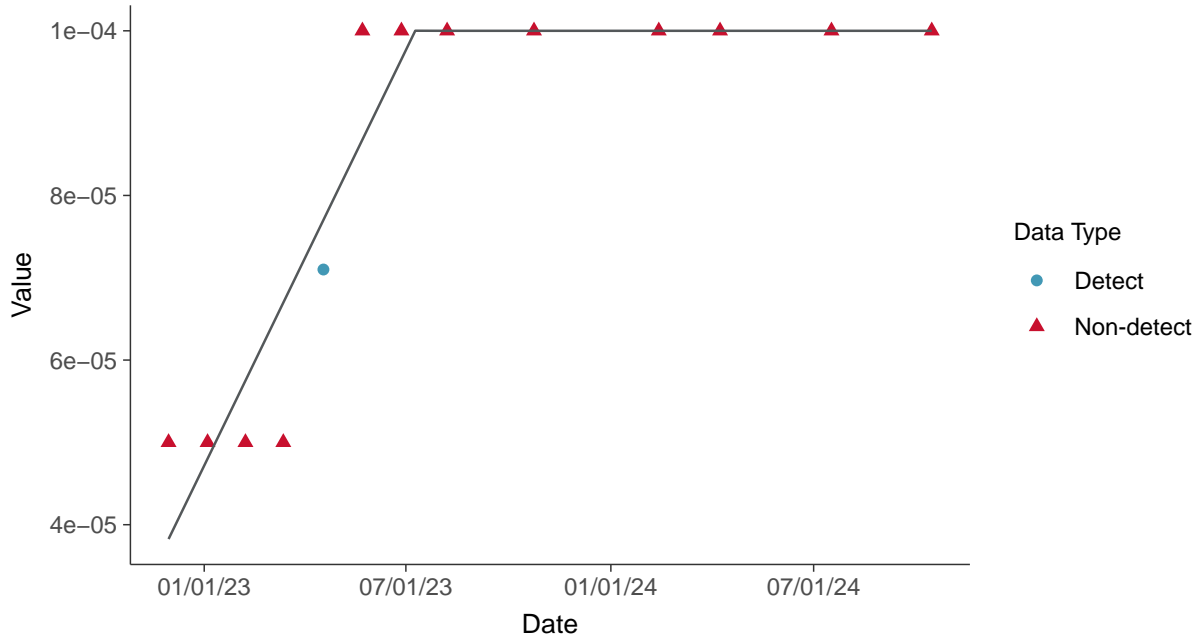
Antimony, MW-07 (mg/L)





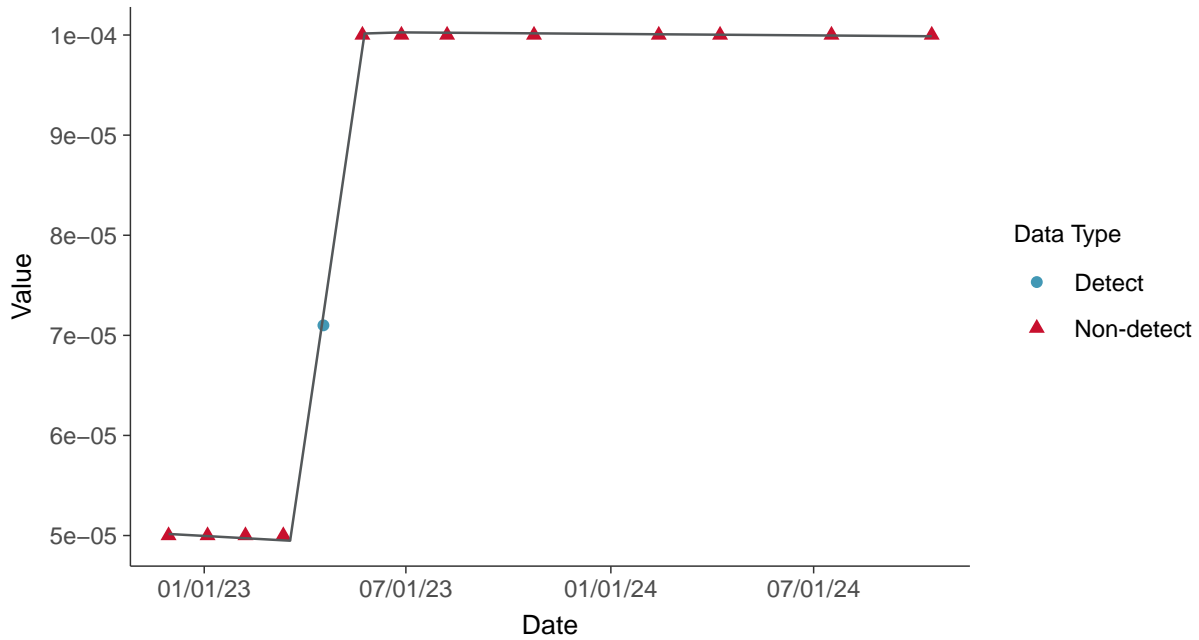
Trend Regression: Piecewise Linear-Linear

Antimony, MW-07 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Antimony, MW-07 (mg/L)



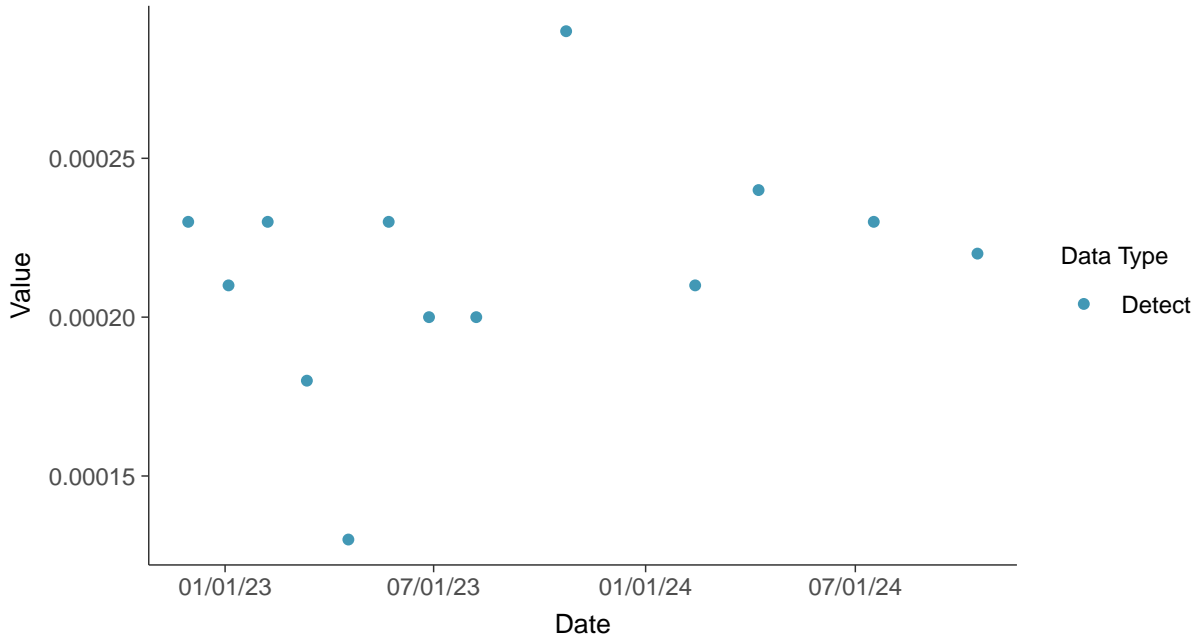


Appendix IV: Arsenic, MW-07

ID: 1_17_1_5_102

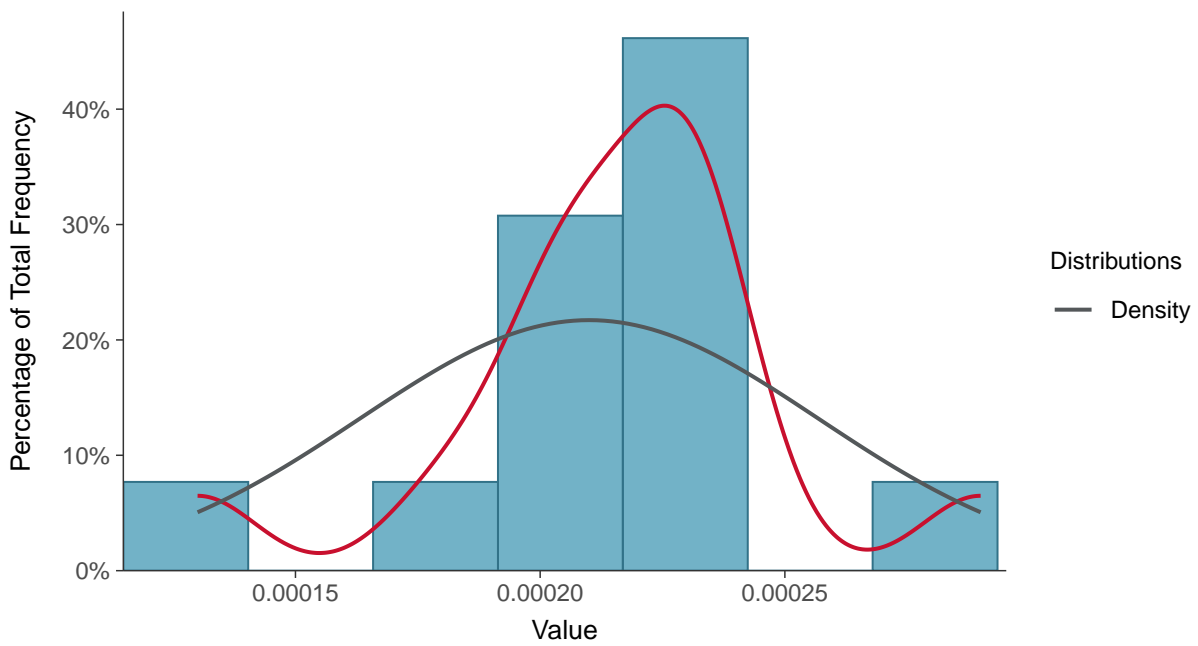
Scatter Plot

Arsenic, MW-07 (mg/L)



Histogram

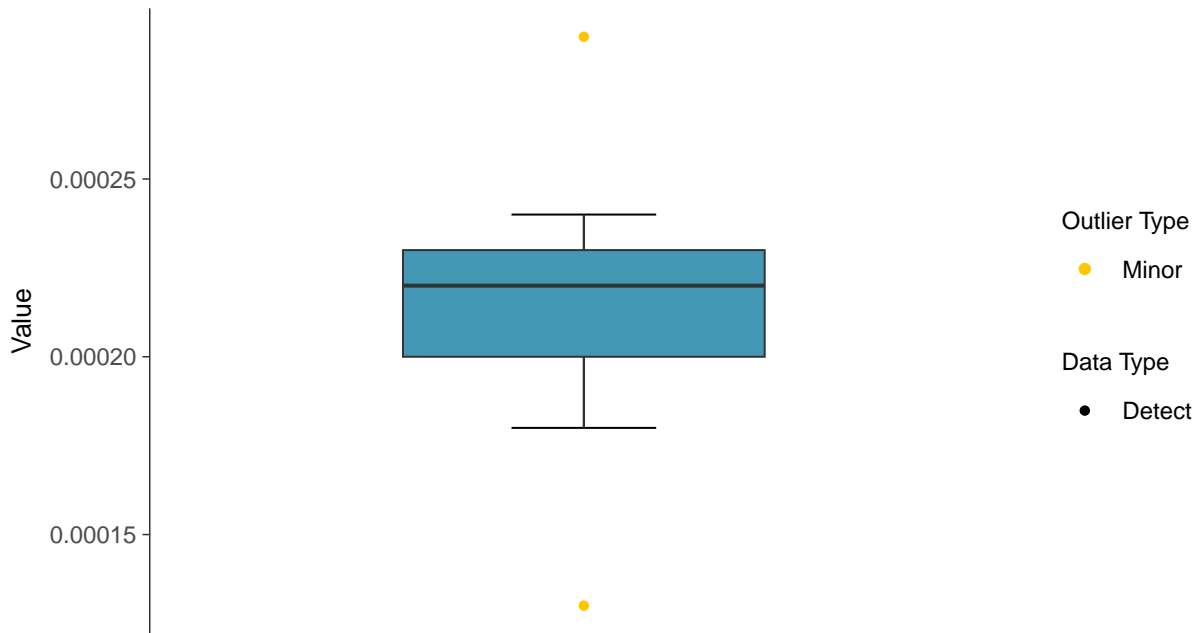
Arsenic, MW-07 (mg/L)





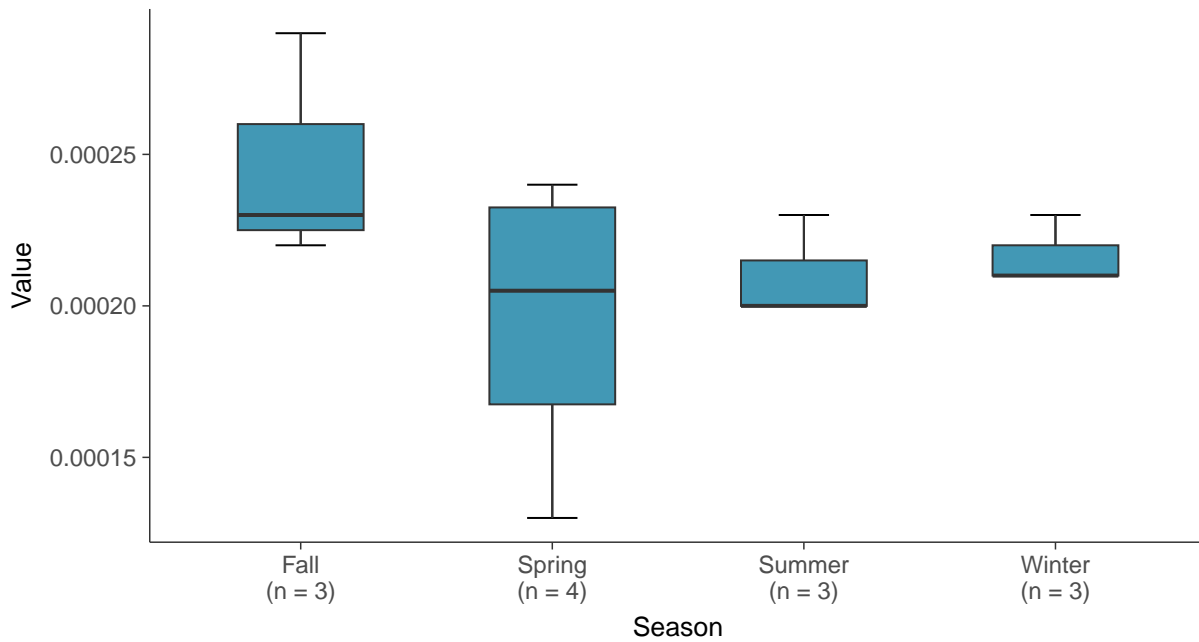
Boxplot

Arsenic, MW-07 (mg/L)



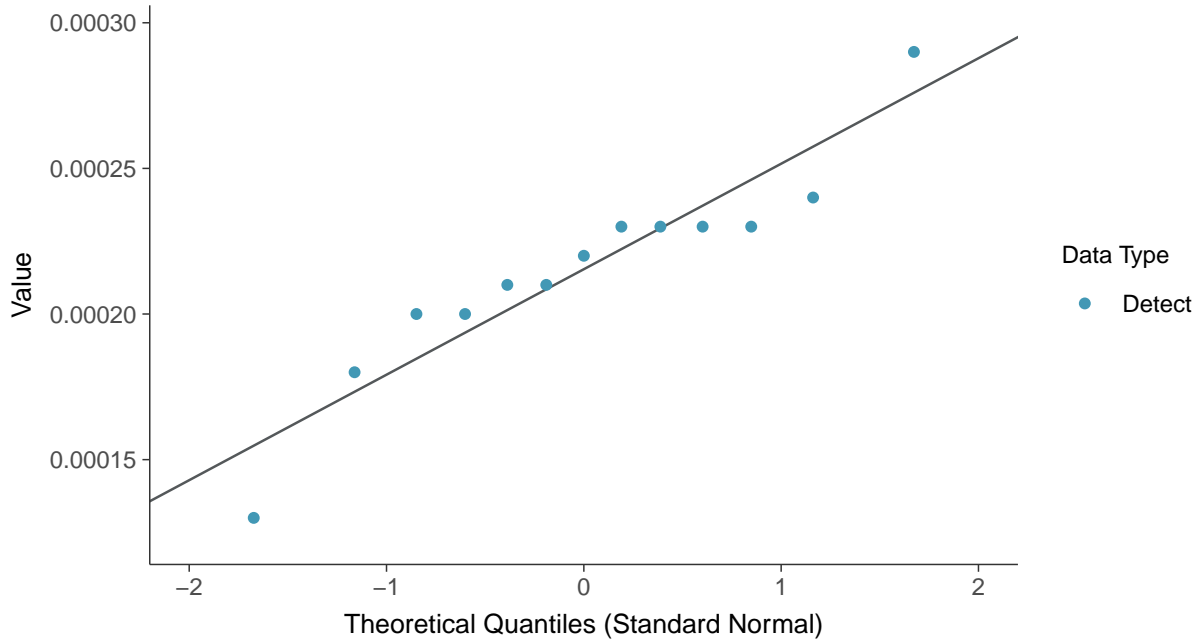
Boxplot by Season

Arsenic, MW-07 (mg/L)

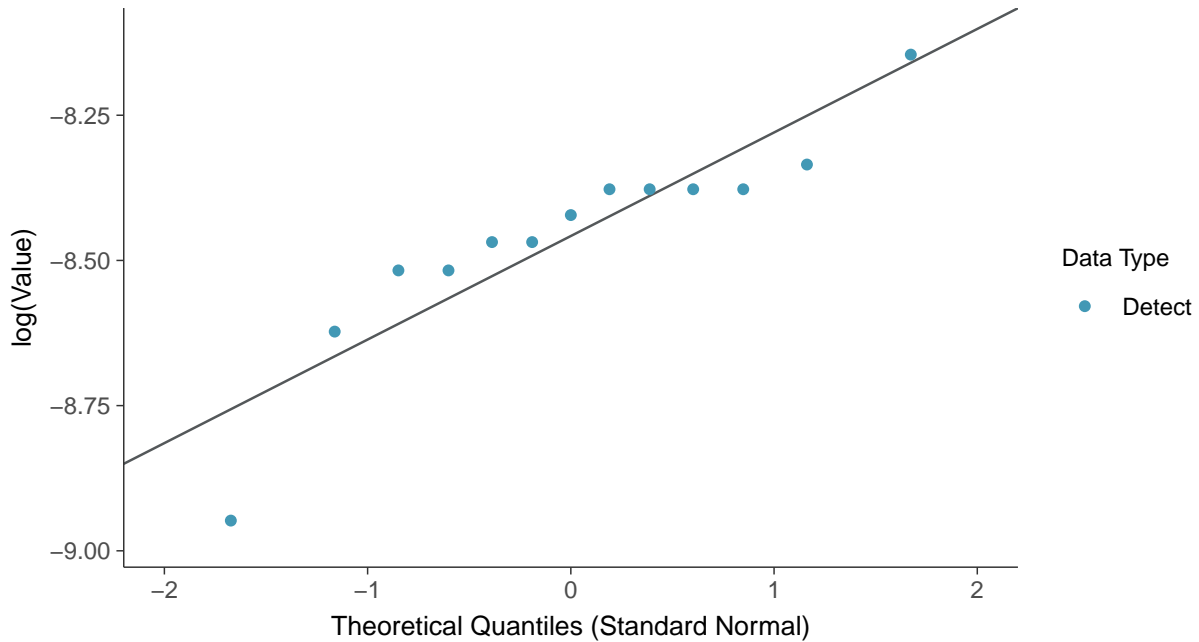




Normal Q-Q plot
Arsenic, MW-07 (mg/L)



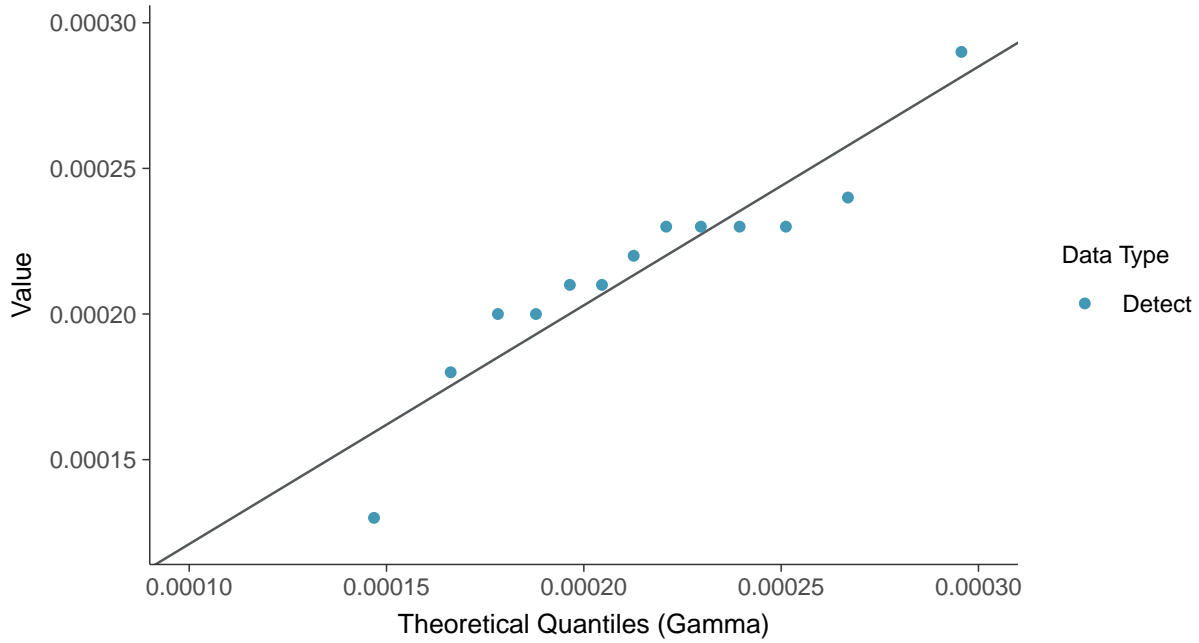
Lognormal Q-Q plot
Arsenic, MW-07 (mg/L)





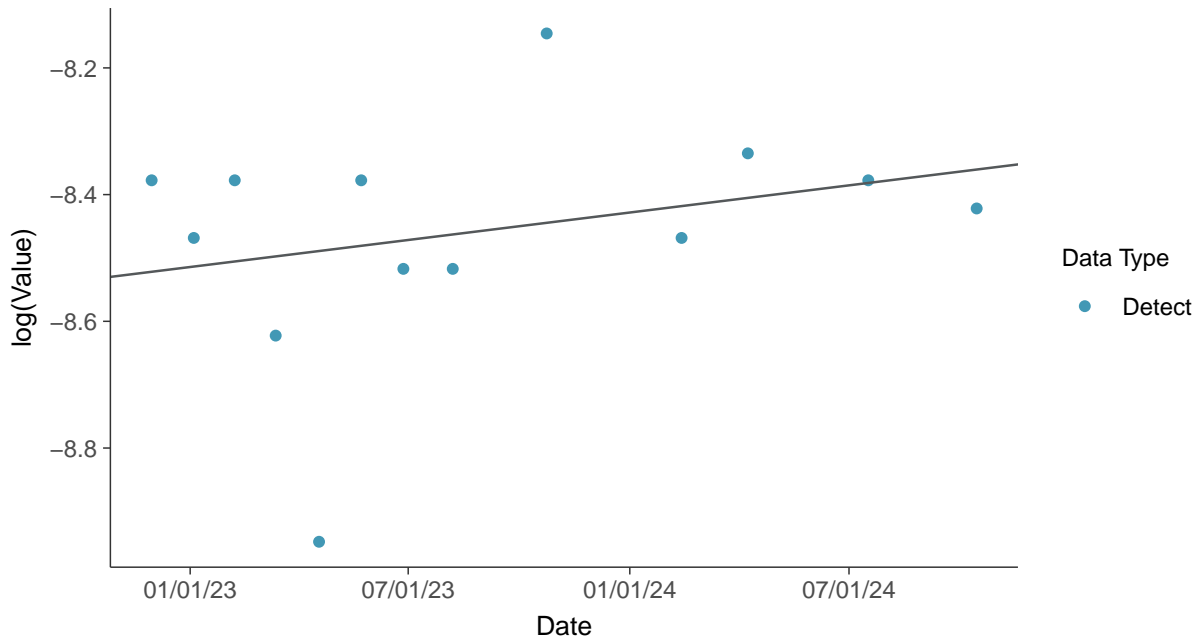
Gamma Q-Q plot

Arsenic, MW-07 (mg/L)



Trend Regression: Lognormal MLE

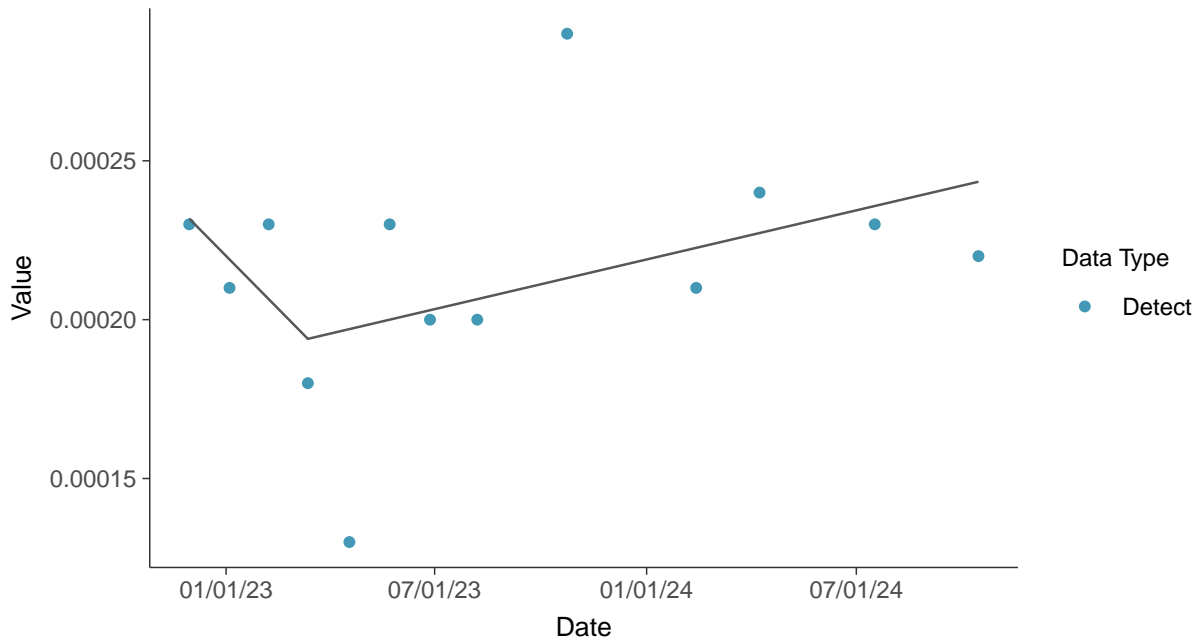
Arsenic, MW-07 (mg/L)





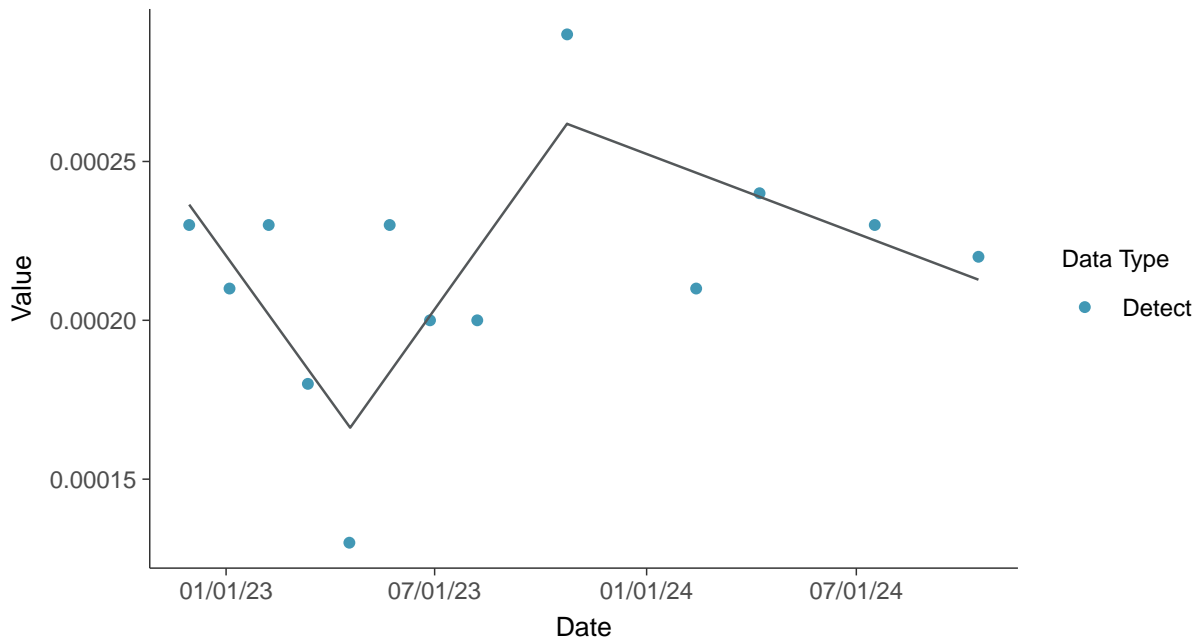
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-07 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

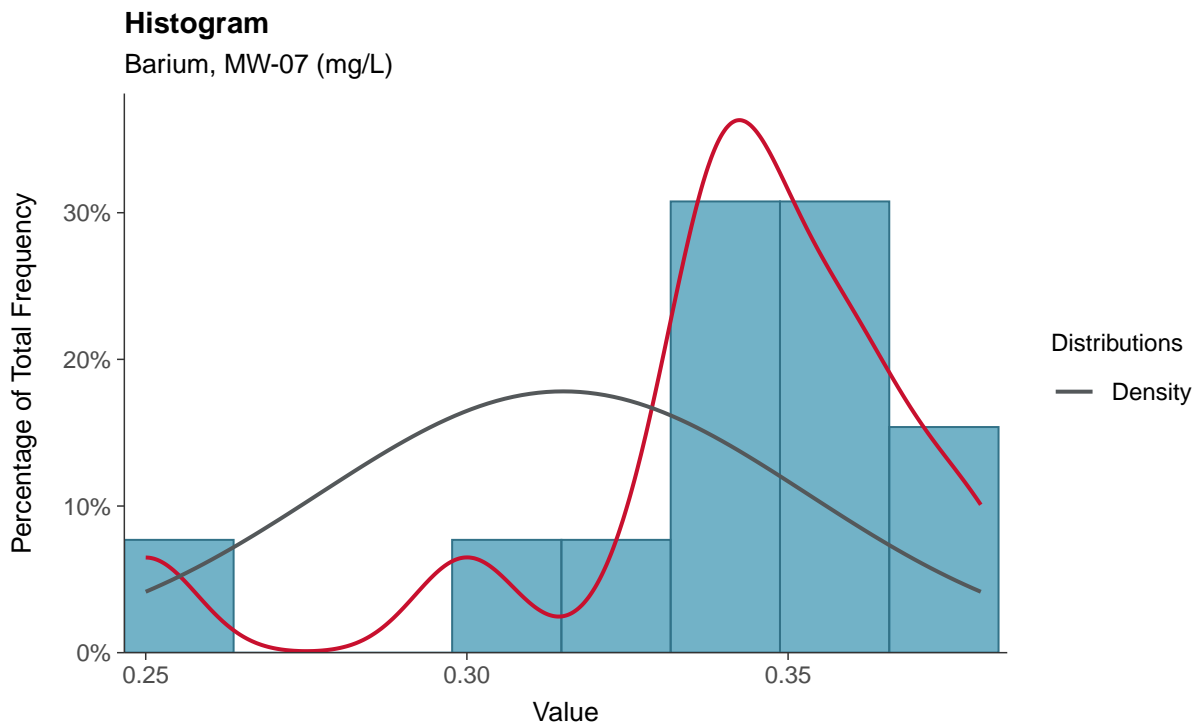
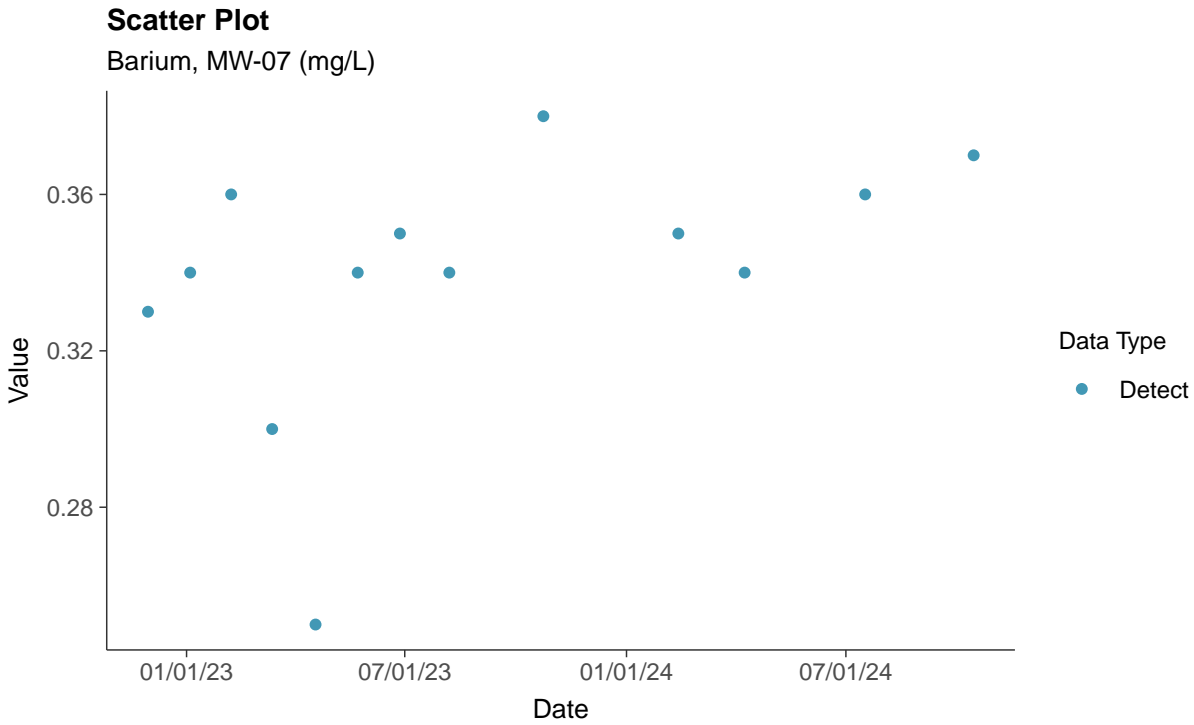
Arsenic, MW-07 (mg/L)





Appendix IV: Barium, MW-07

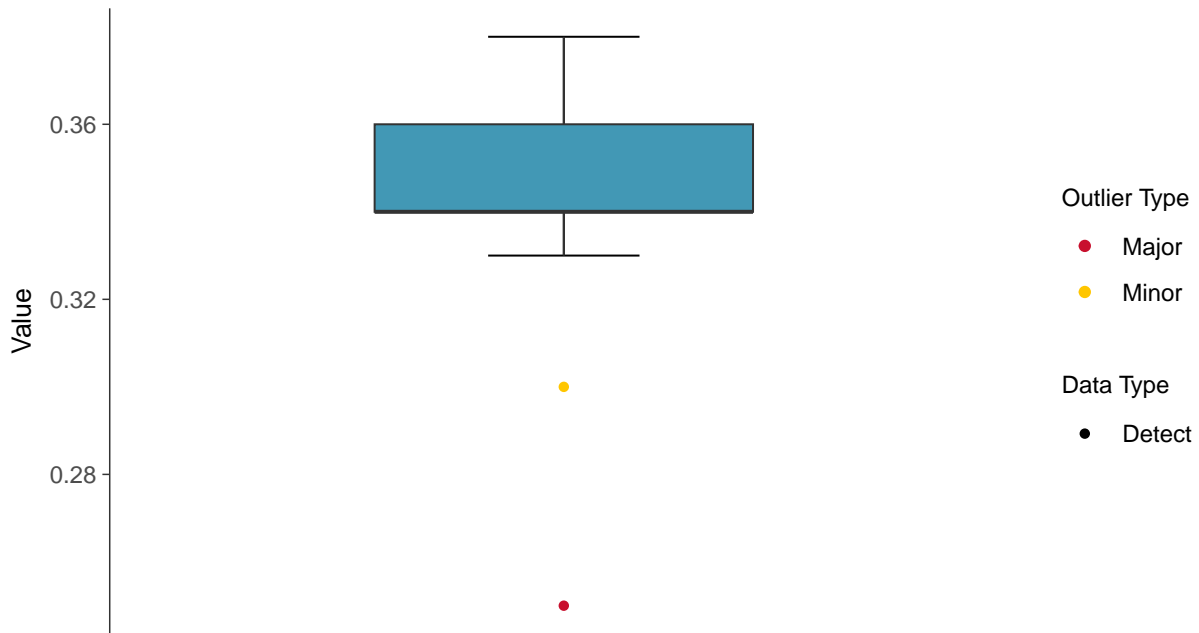
ID: 1_17_1_5_103





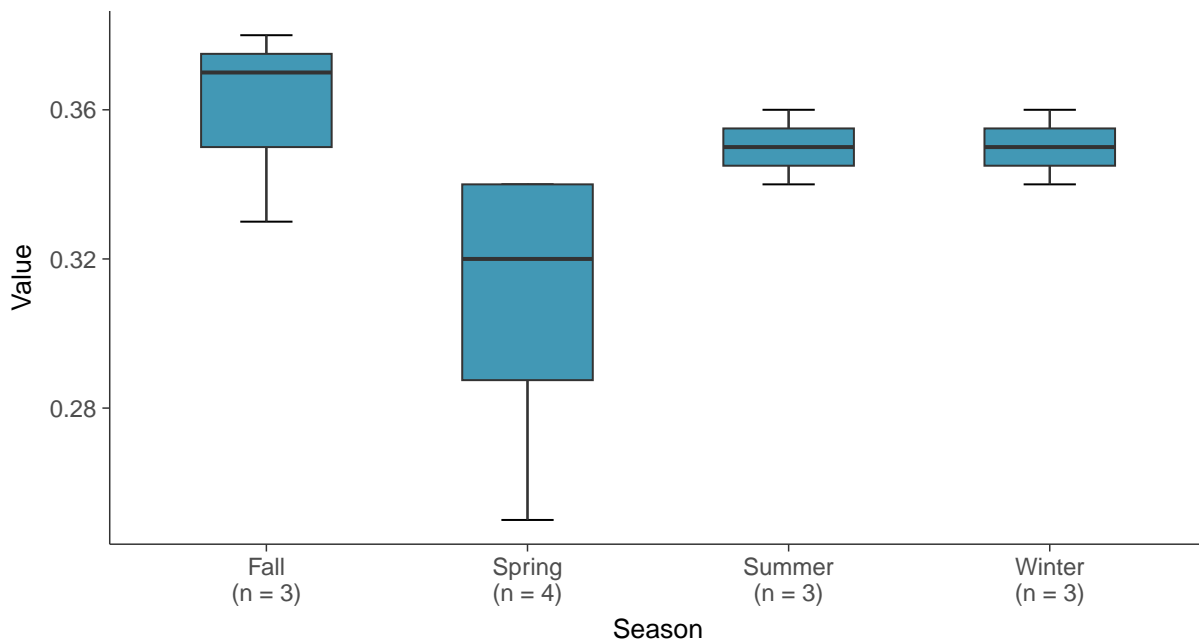
Boxplot

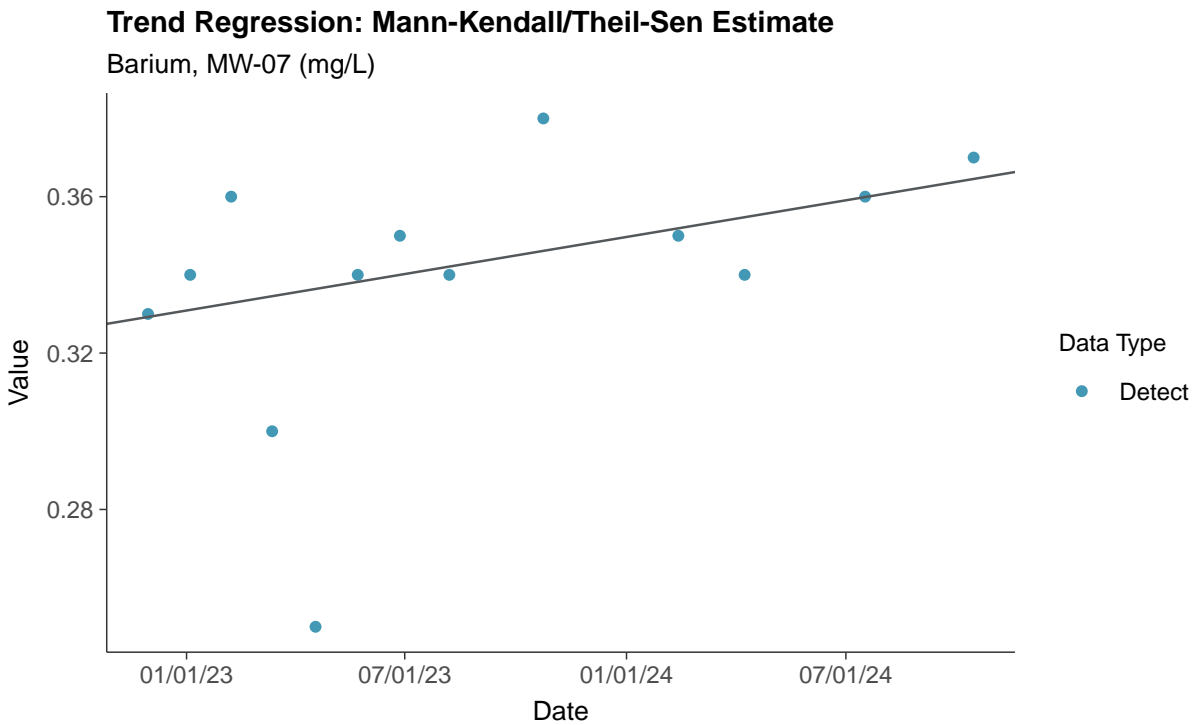
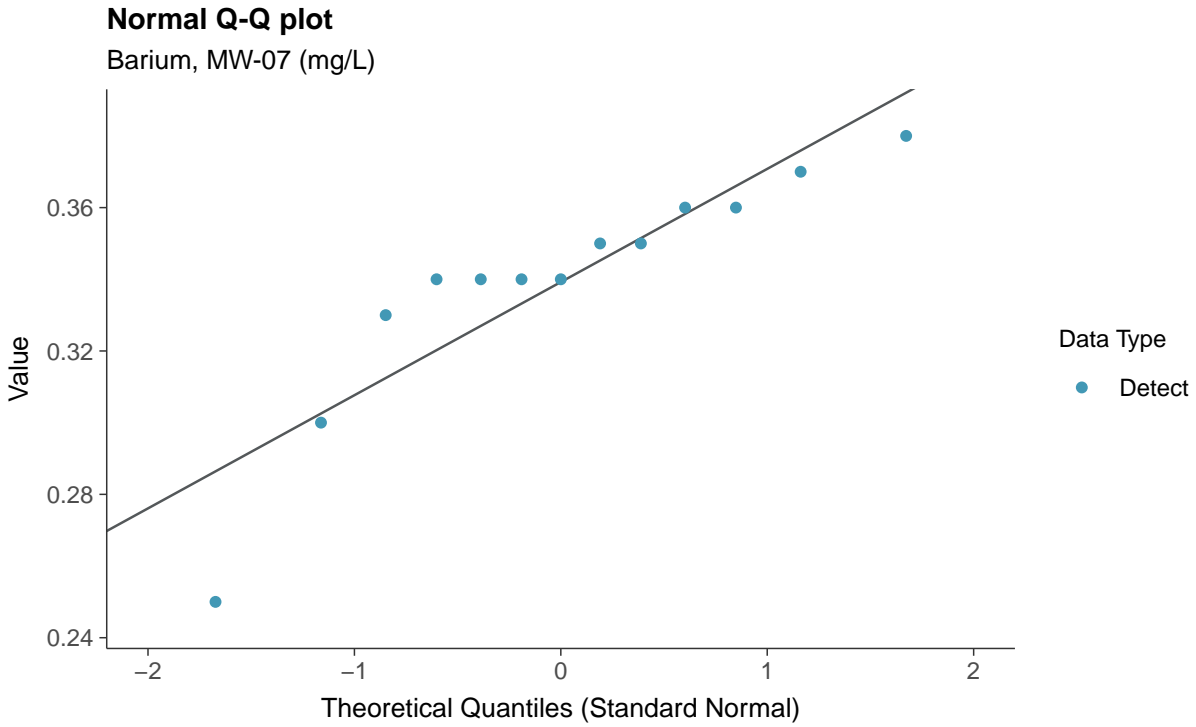
Barium, MW-07 (mg/L)



Boxplot by Season

Barium, MW-07 (mg/L)

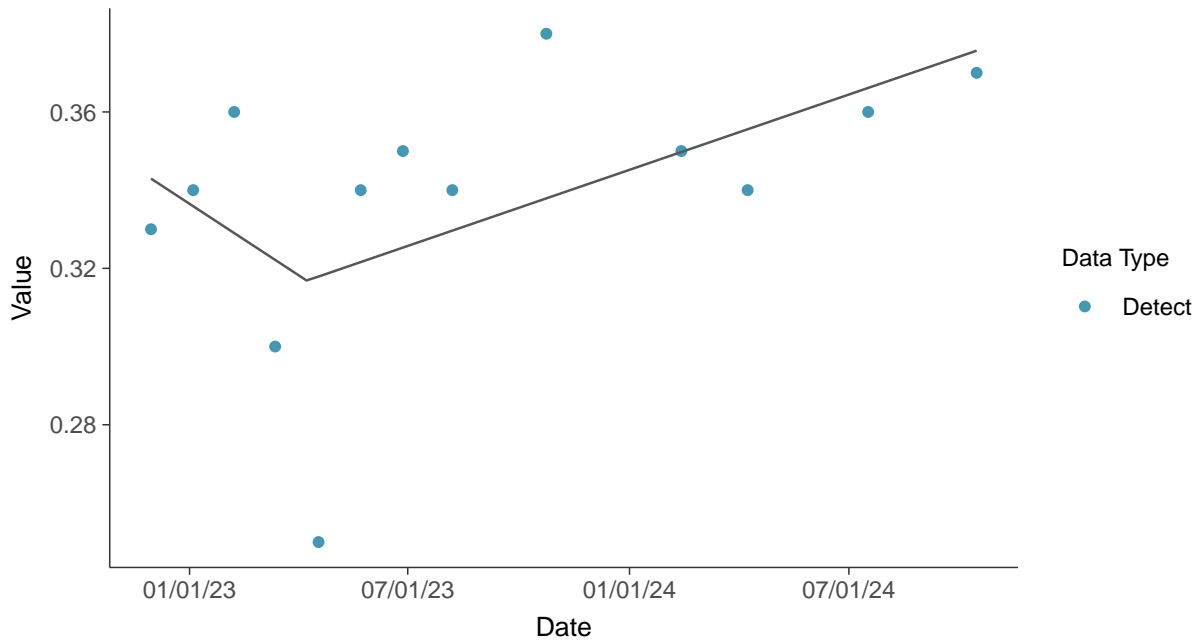






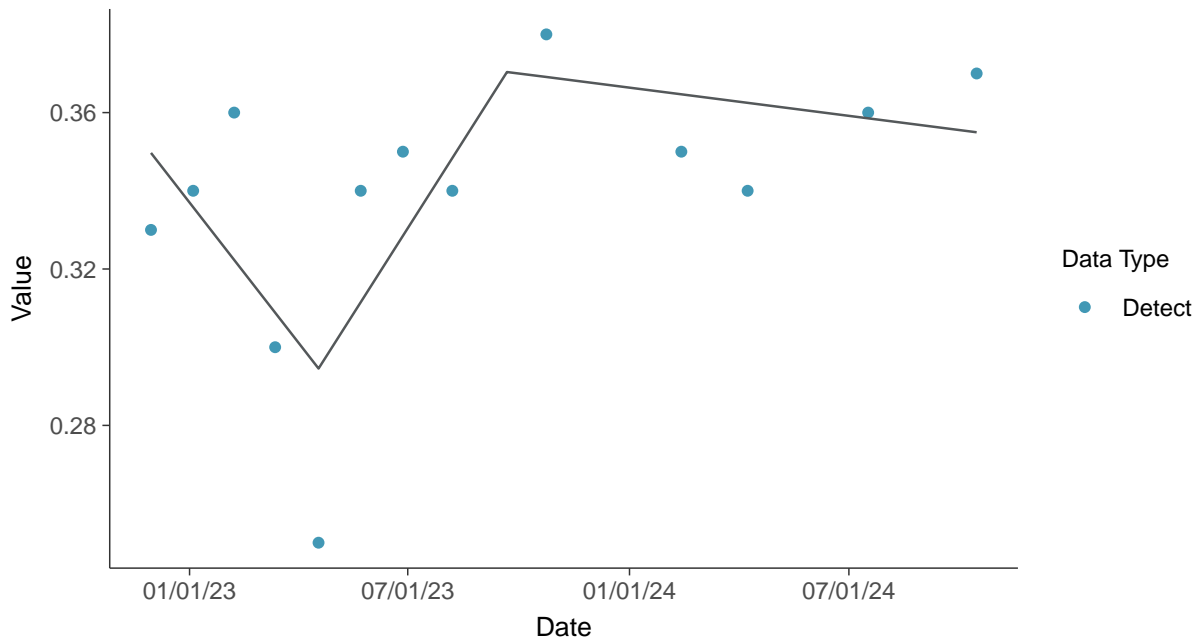
Trend Regression: Piecewise Linear-Linear

Barium, MW-07 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

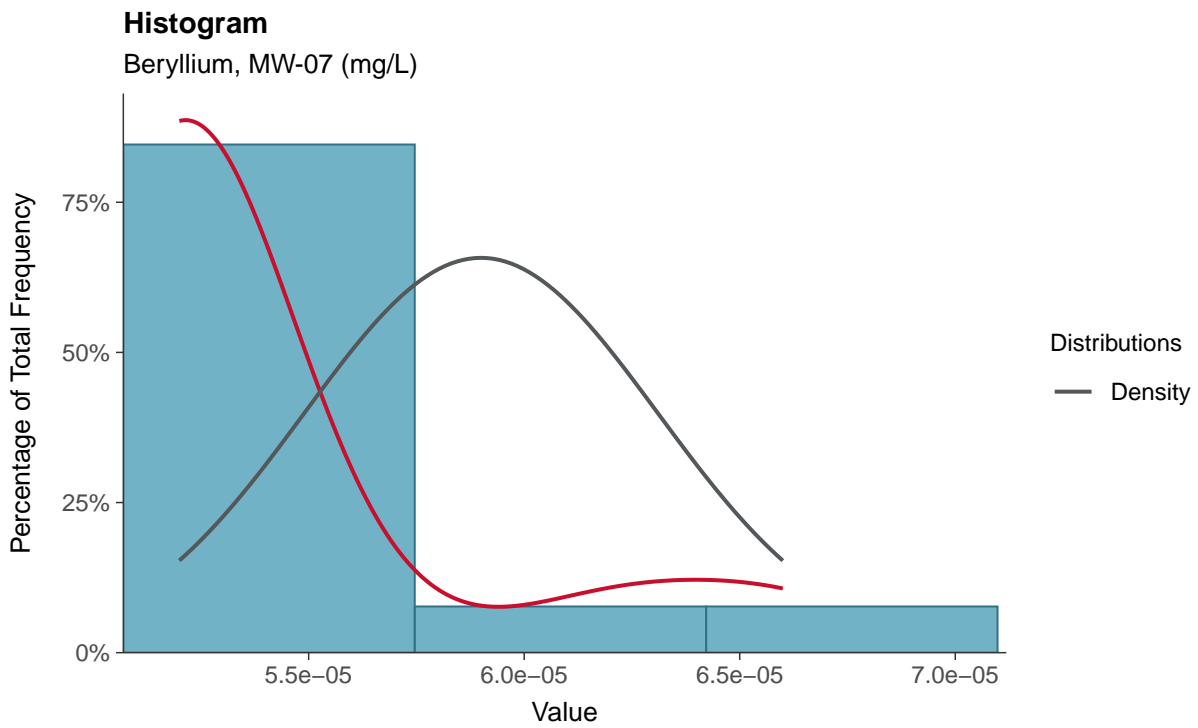
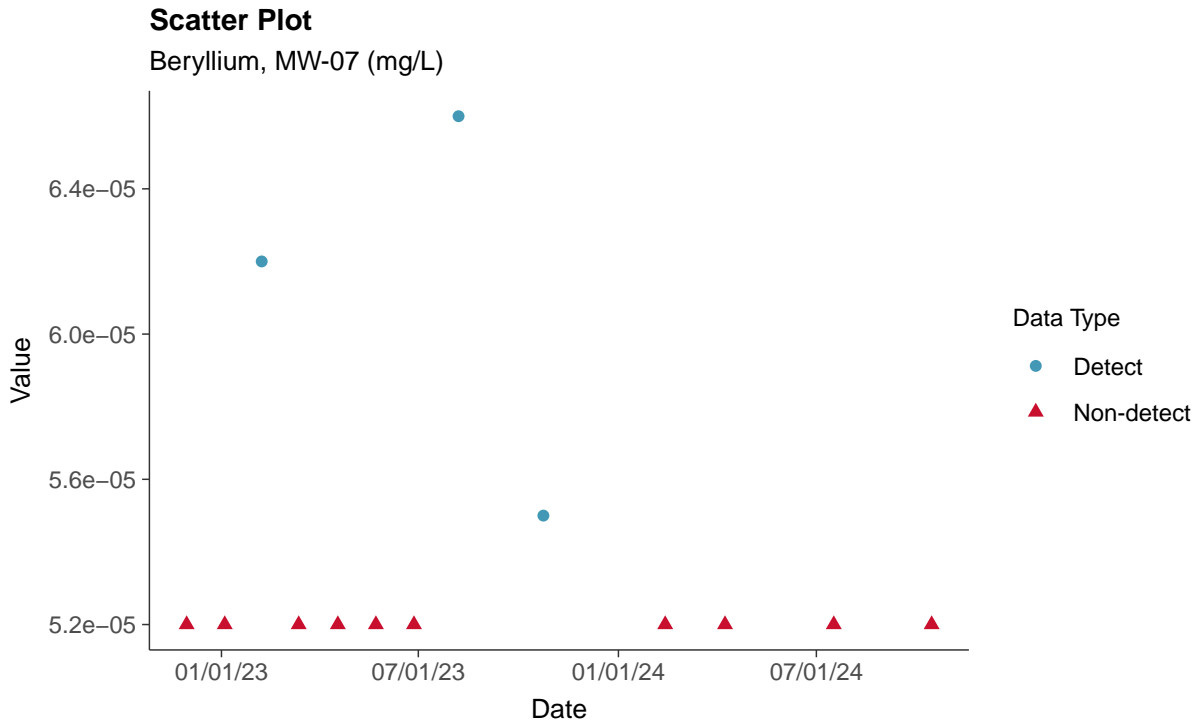
Barium, MW-07 (mg/L)





Appendix IV: Beryllium, MW-07

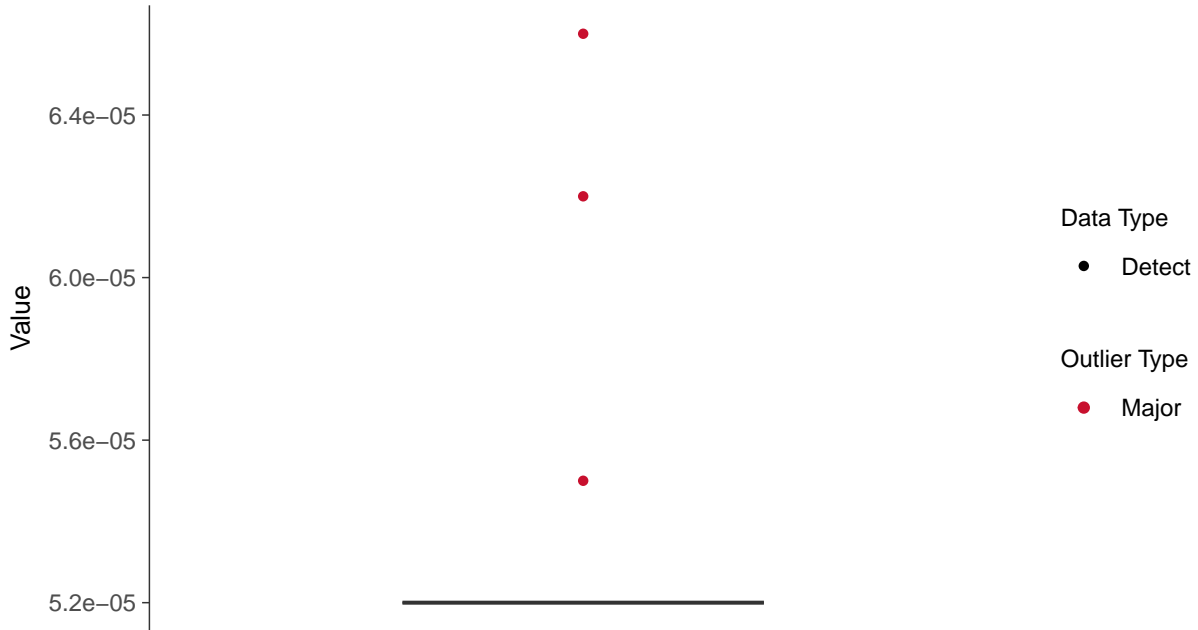
ID: 1_17_1_5_104





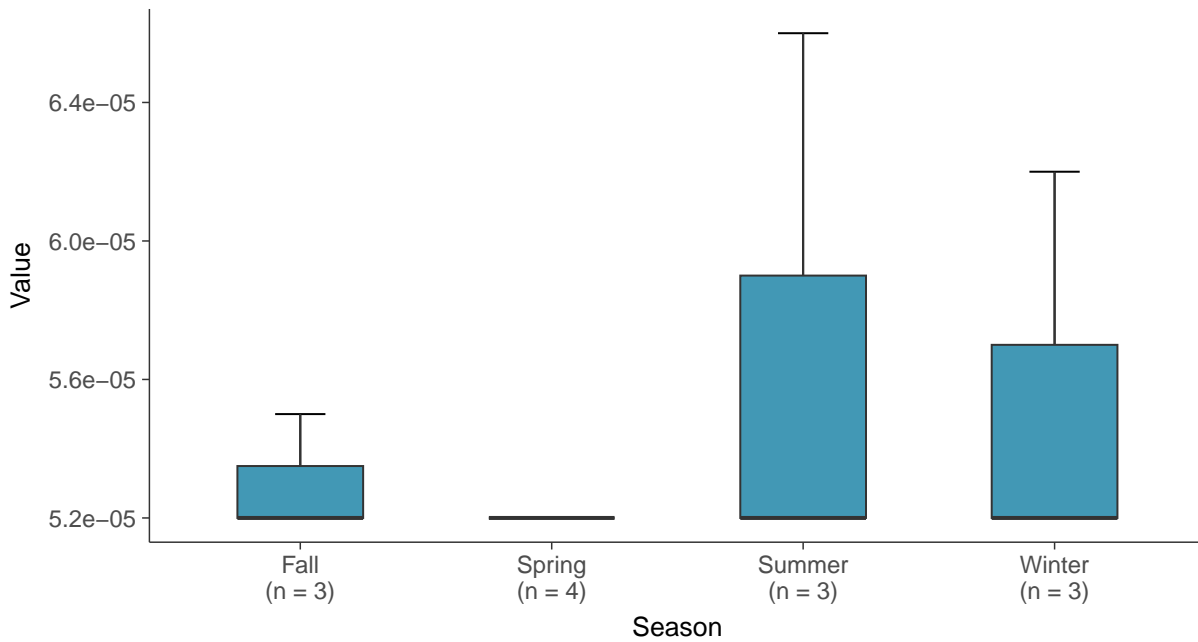
Boxplot

Beryllium, MW-07 (mg/L)



Boxplot by Season

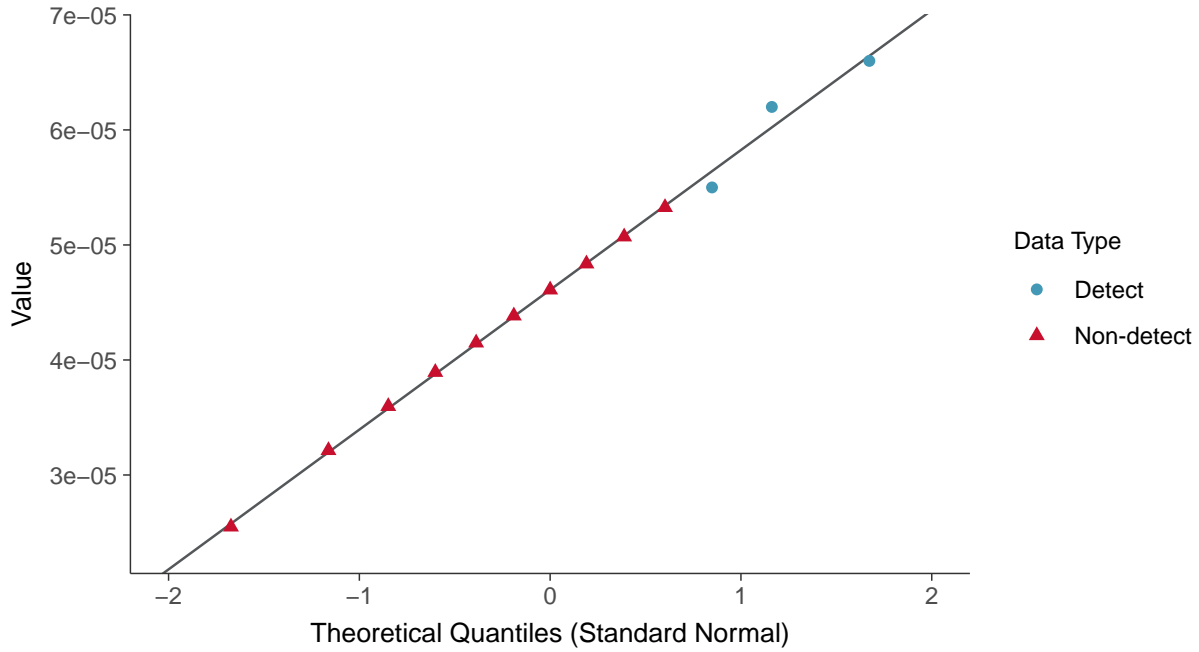
Beryllium, MW-07 (mg/L)





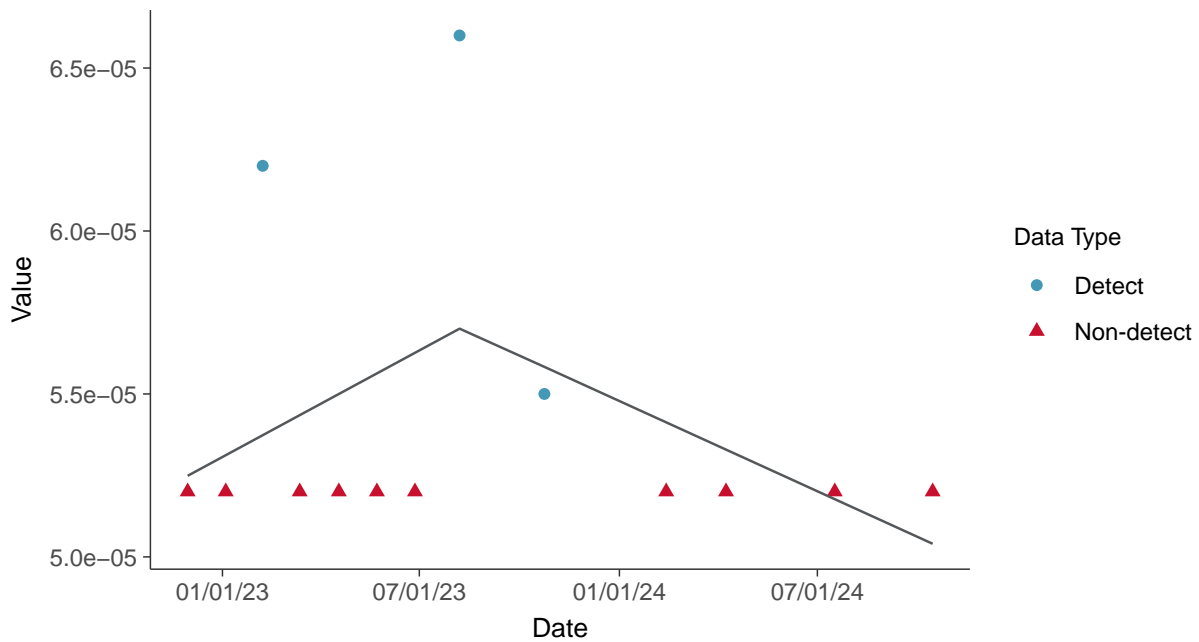
Normal Q-Q plot using ROS Imputed Estimates

Beryllium, MW-07 (mg/L)



Trend Regression: Piecewise Linear-Linear

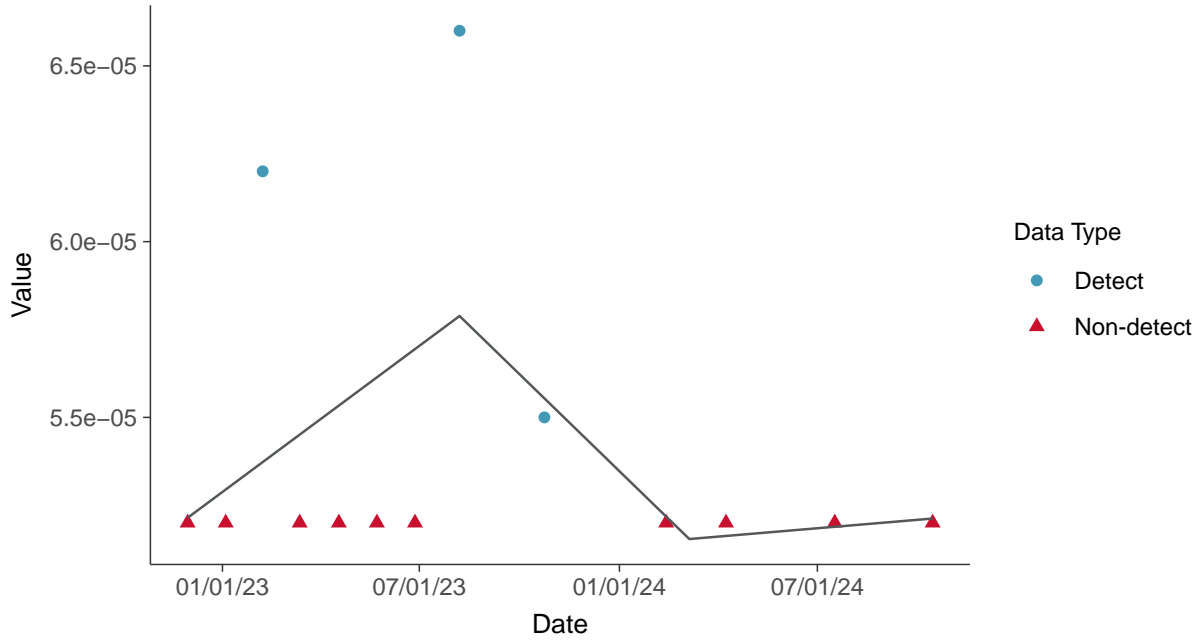
Beryllium, MW-07 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

Beryllium, MW-07 (mg/L)



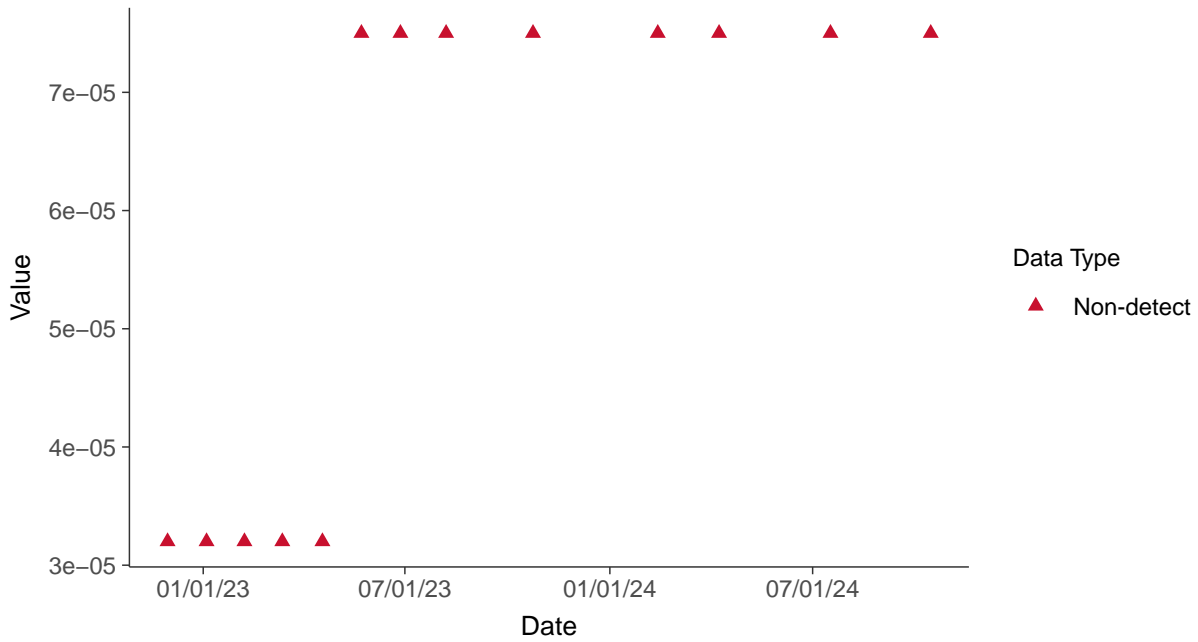


Appendix IV: Cadmium, MW-07

ID: 1_17_1_5_106

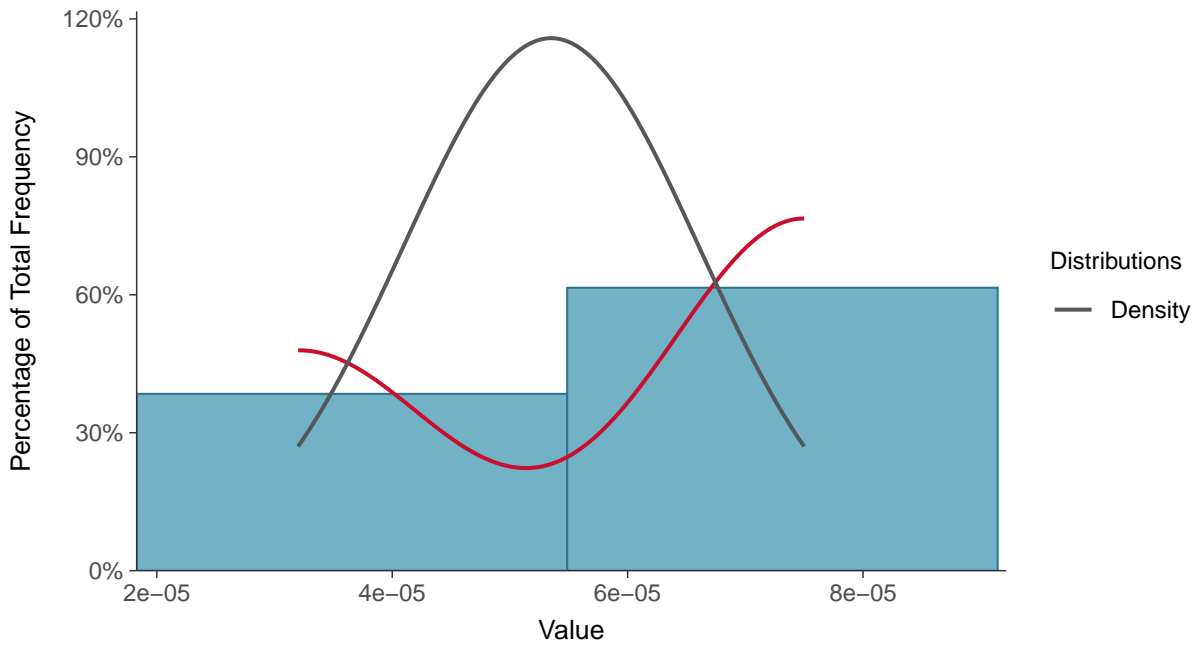
Scatter Plot

Cadmium, MW-07 (mg/L)



Histogram

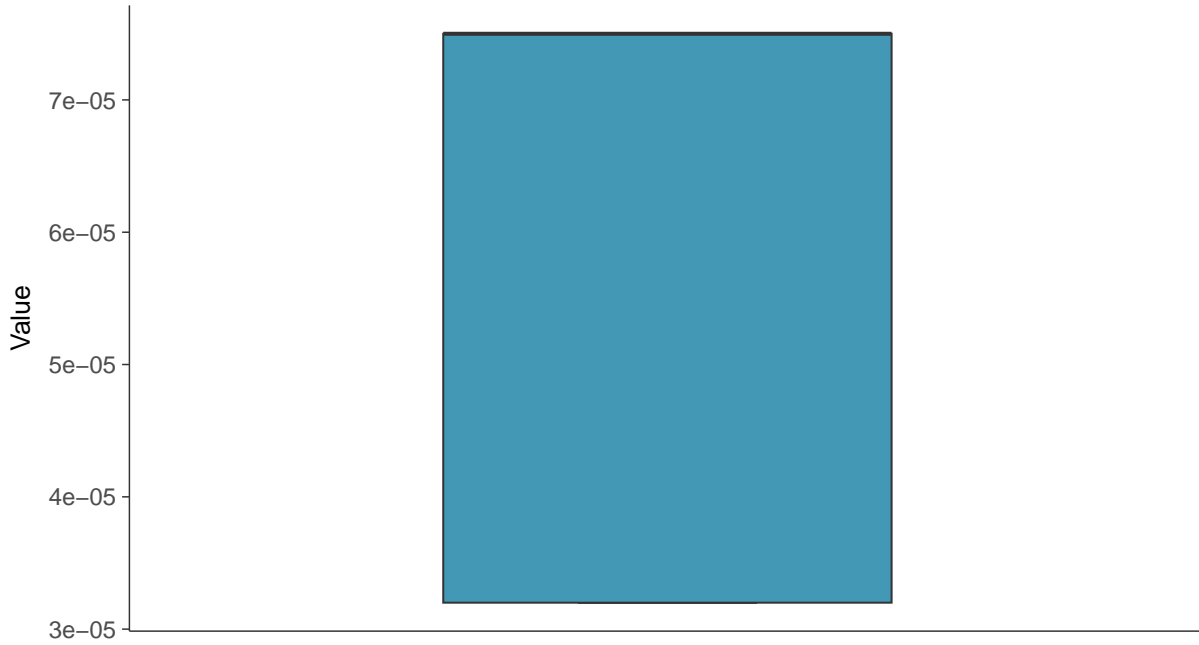
Cadmium, MW-07 (mg/L)





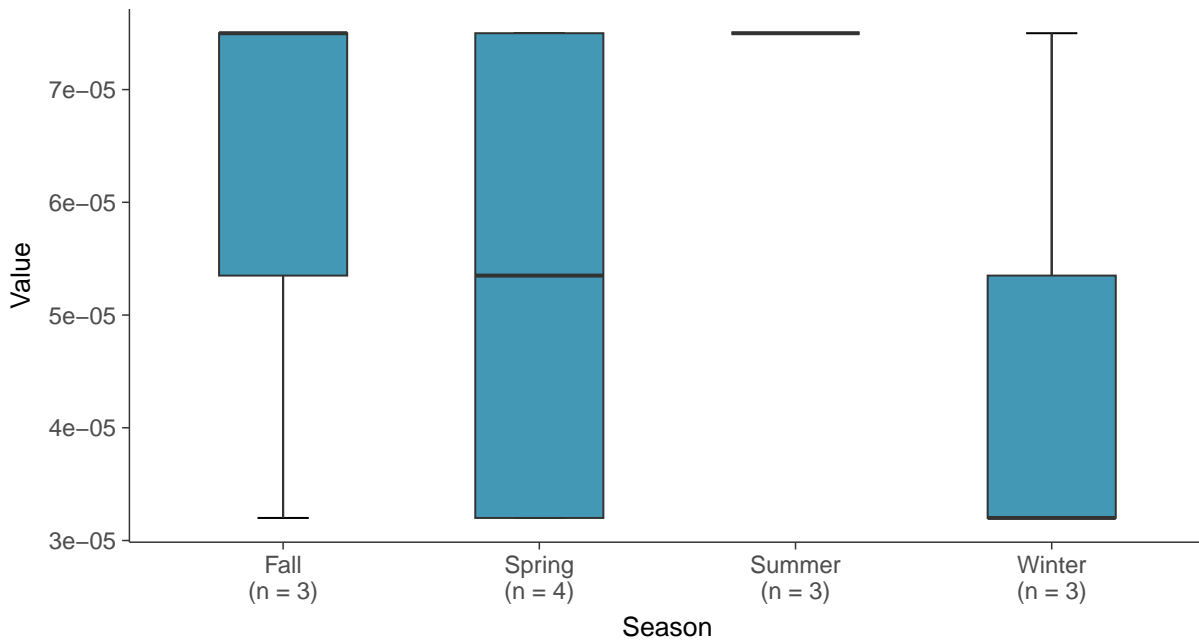
Boxplot

Cadmium, MW-07 (mg/L)



Boxplot by Season

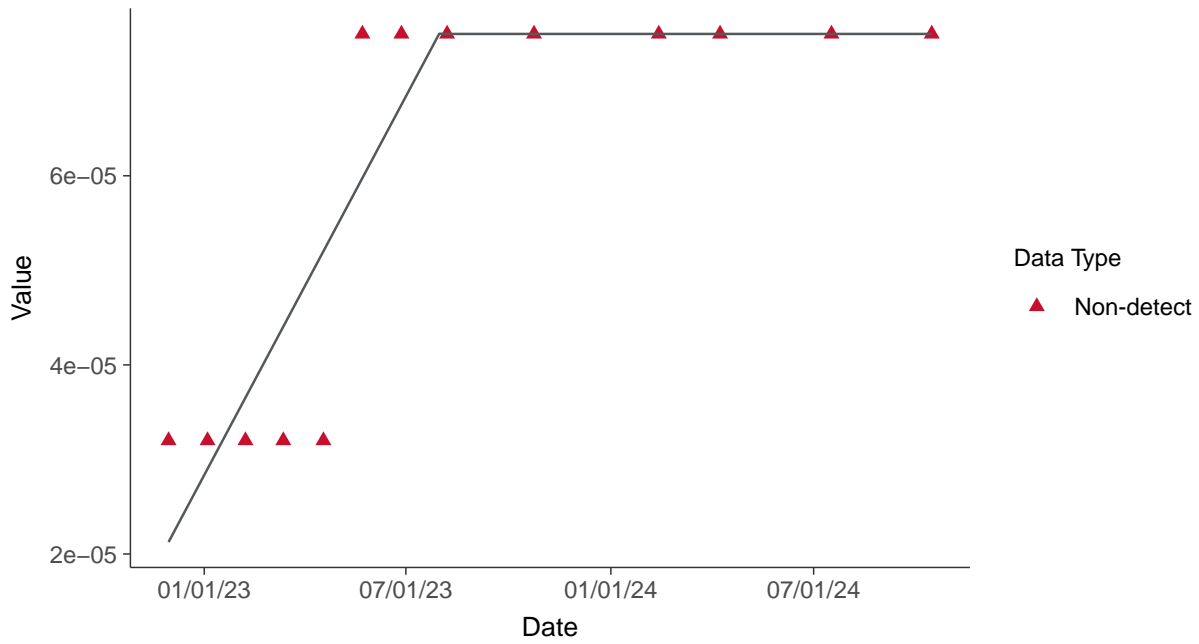
Cadmium, MW-07 (mg/L)





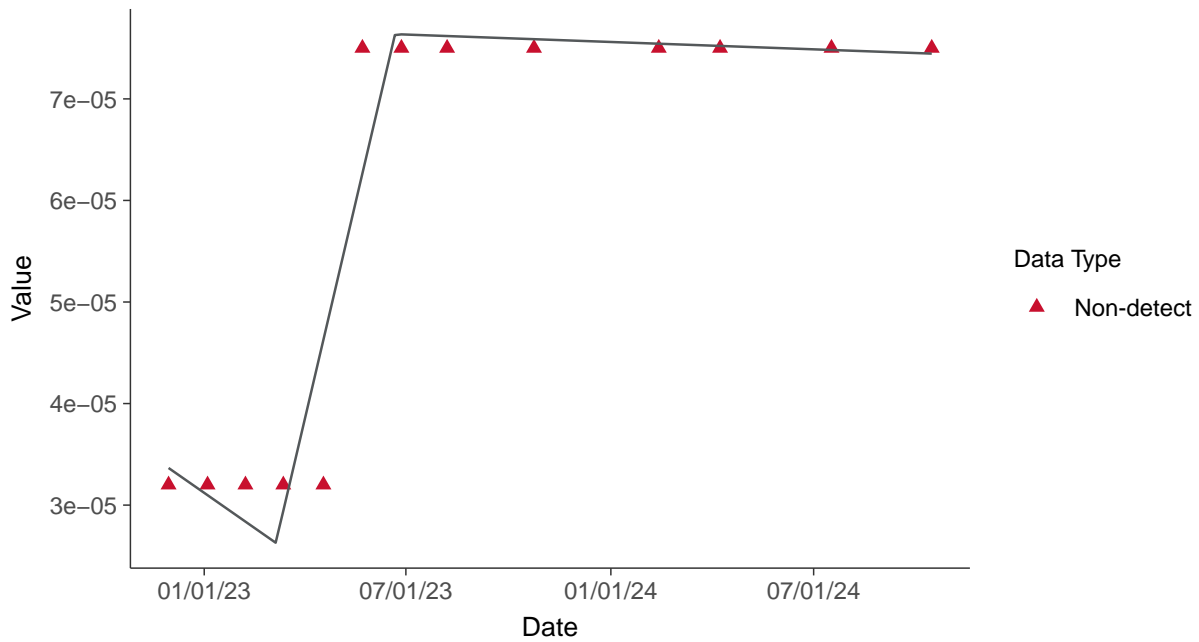
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-07 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cadmium, MW-07 (mg/L)



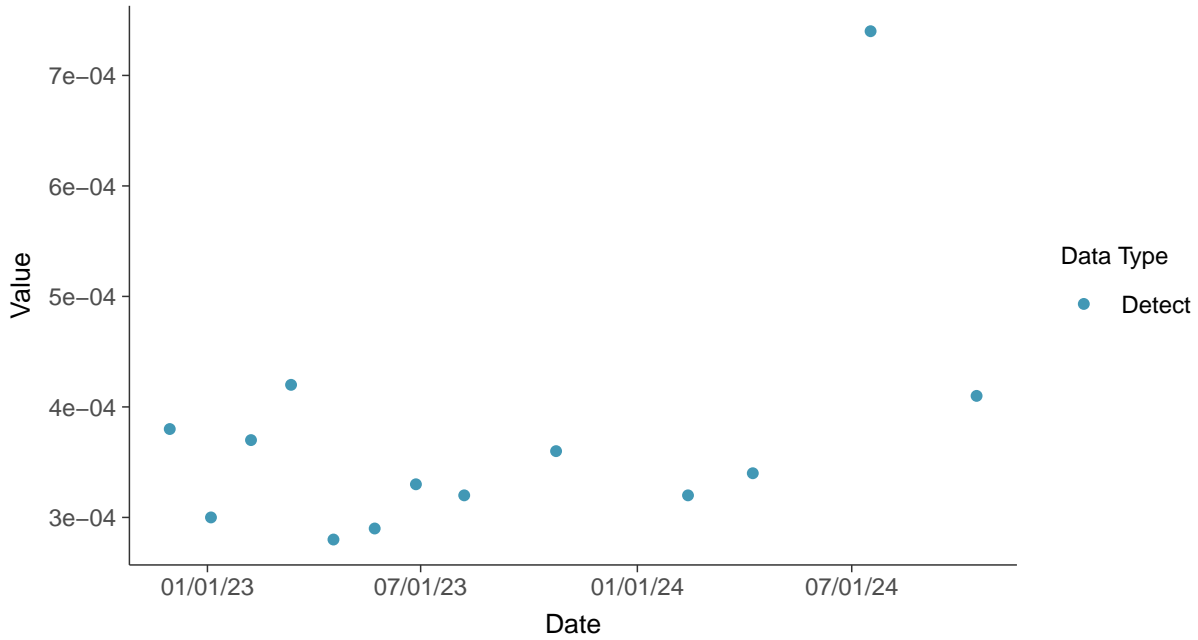


Appendix IV: Chromium, Total, MW-07

ID: 1_17_1_5_109

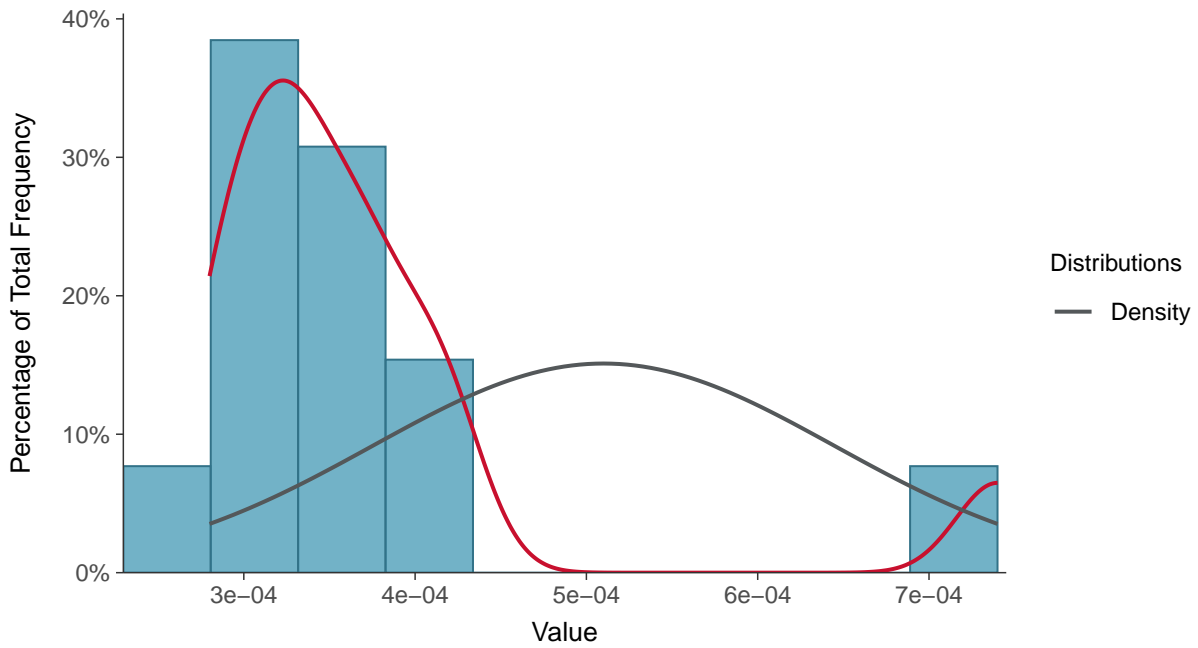
Scatter Plot

Chromium, Total, MW-07 (mg/L)



Histogram

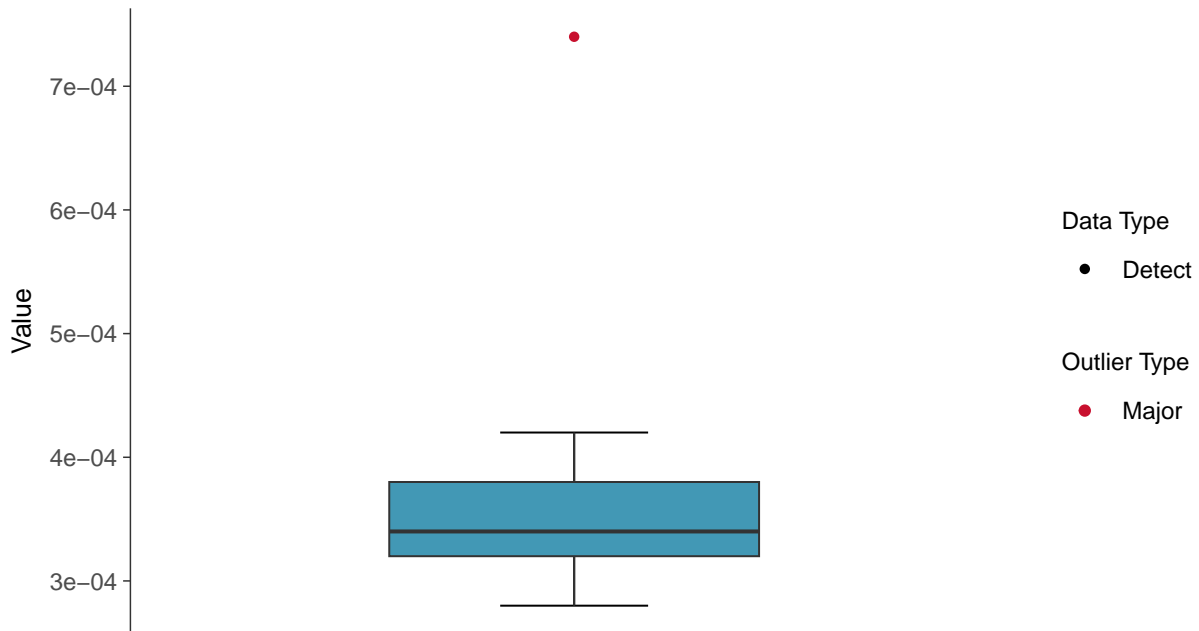
Chromium, Total, MW-07 (mg/L)





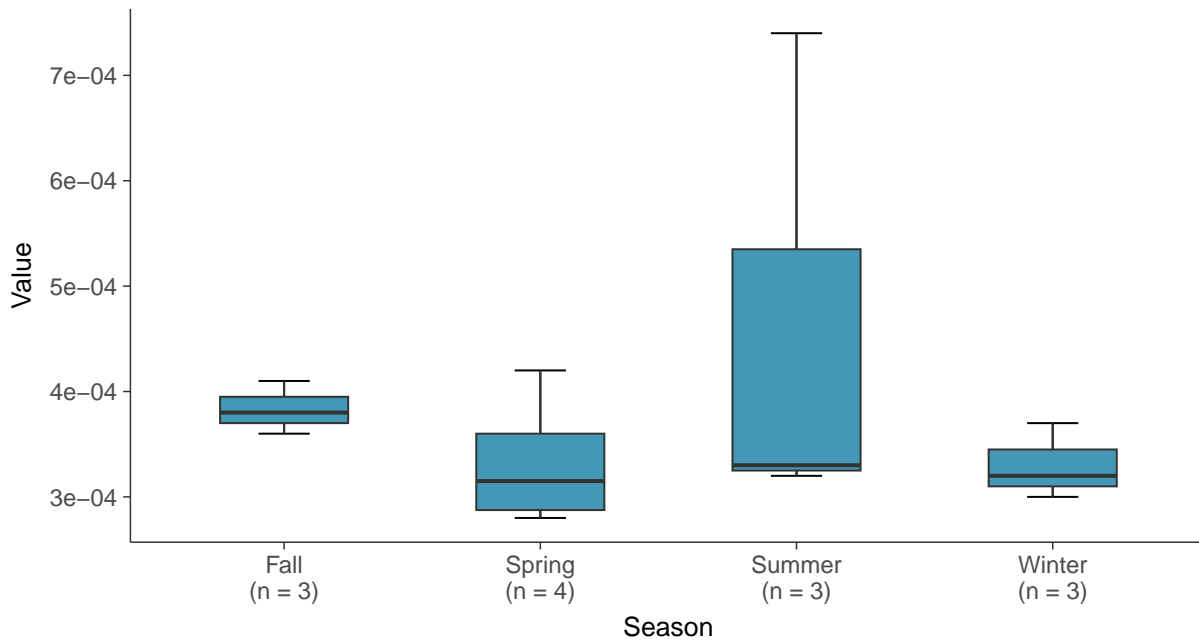
Boxplot

Chromium, Total, MW-07 (mg/L)



Boxplot by Season

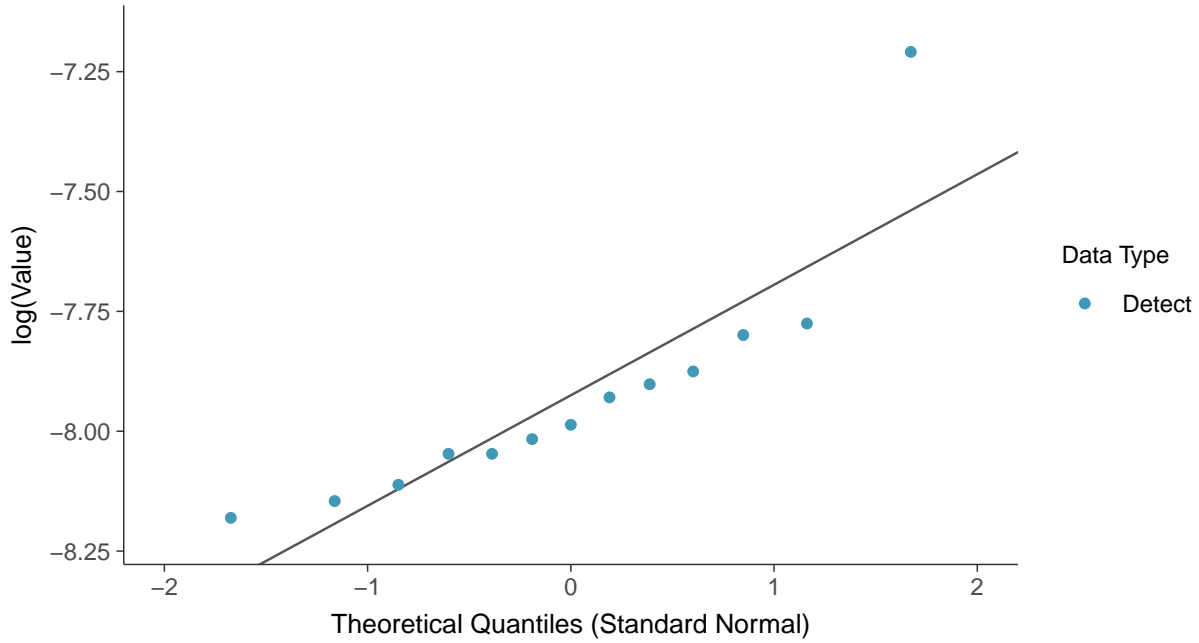
Chromium, Total, MW-07 (mg/L)





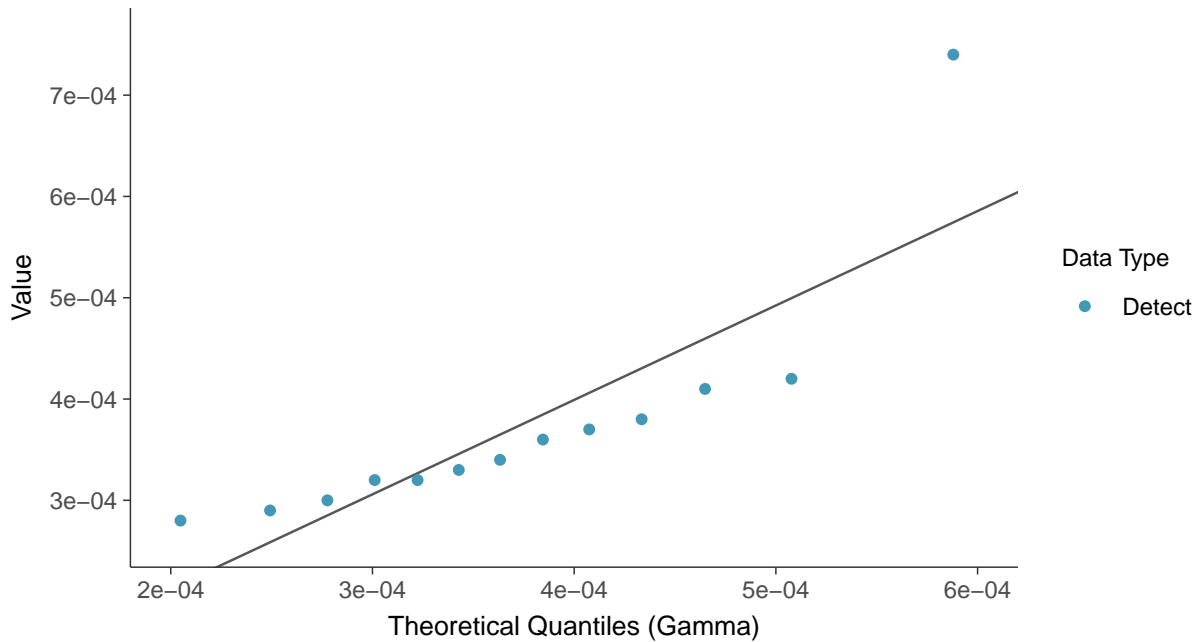
Lognormal Q-Q plot

Chromium, Total, MW-07 (mg/L)



Gamma Q-Q plot

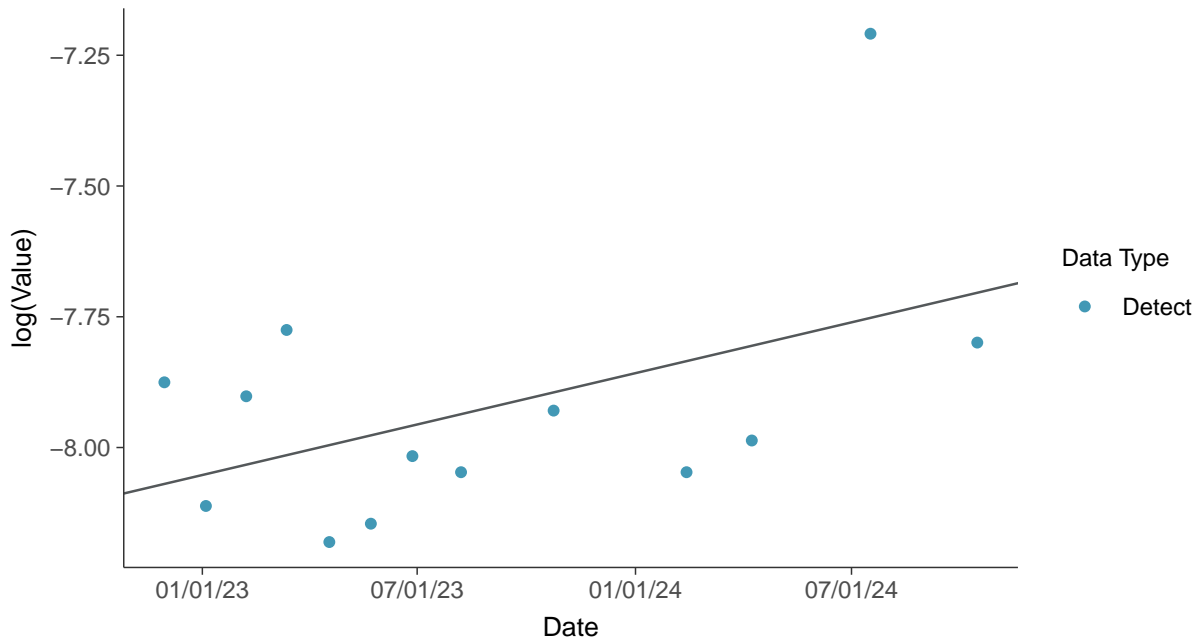
Chromium, Total, MW-07 (mg/L)





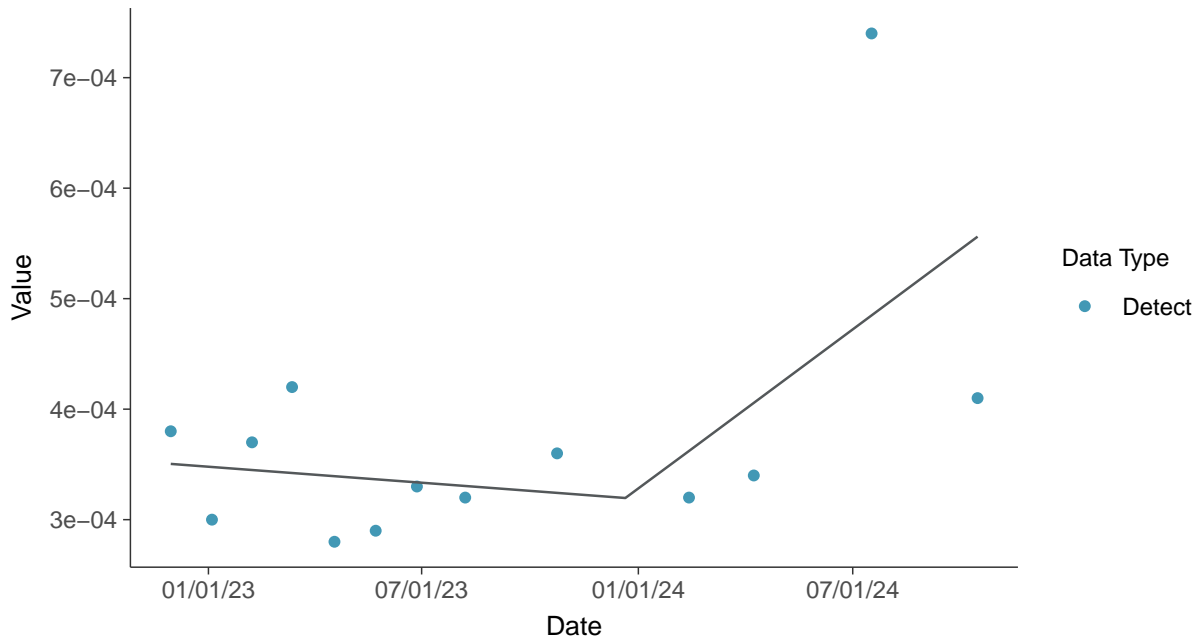
Trend Regression: Lognormal MLE

Chromium, Total, MW-07 (mg/L)



Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-07 (mg/L)



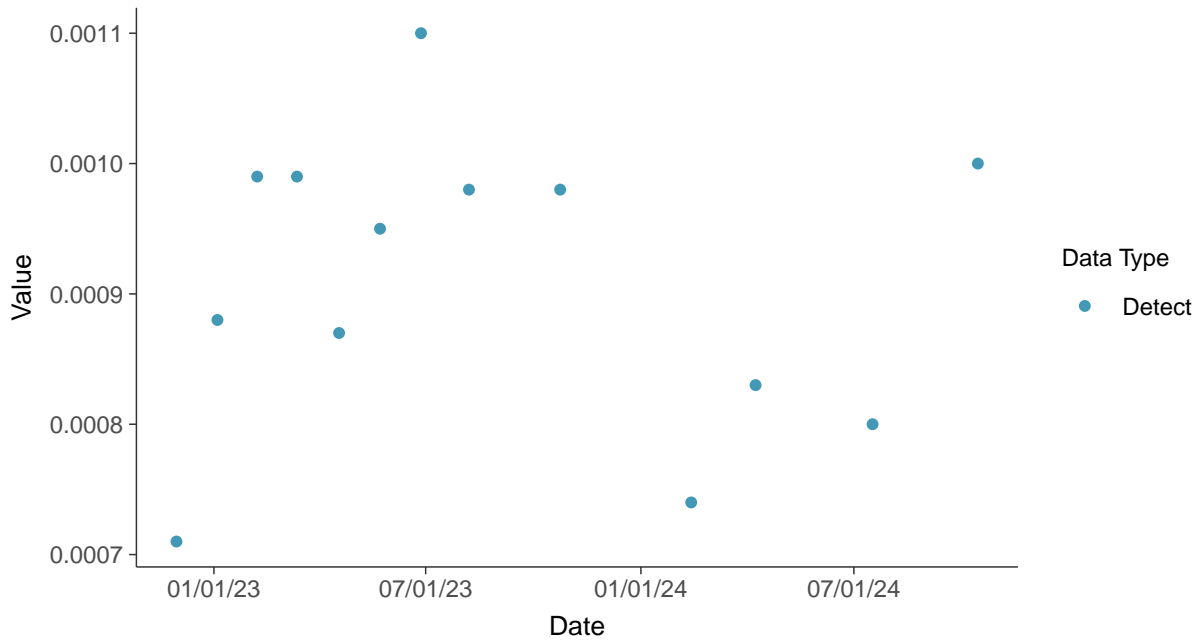


Appendix IV: Cobalt, MW-07

ID: 1_17_1_5_110

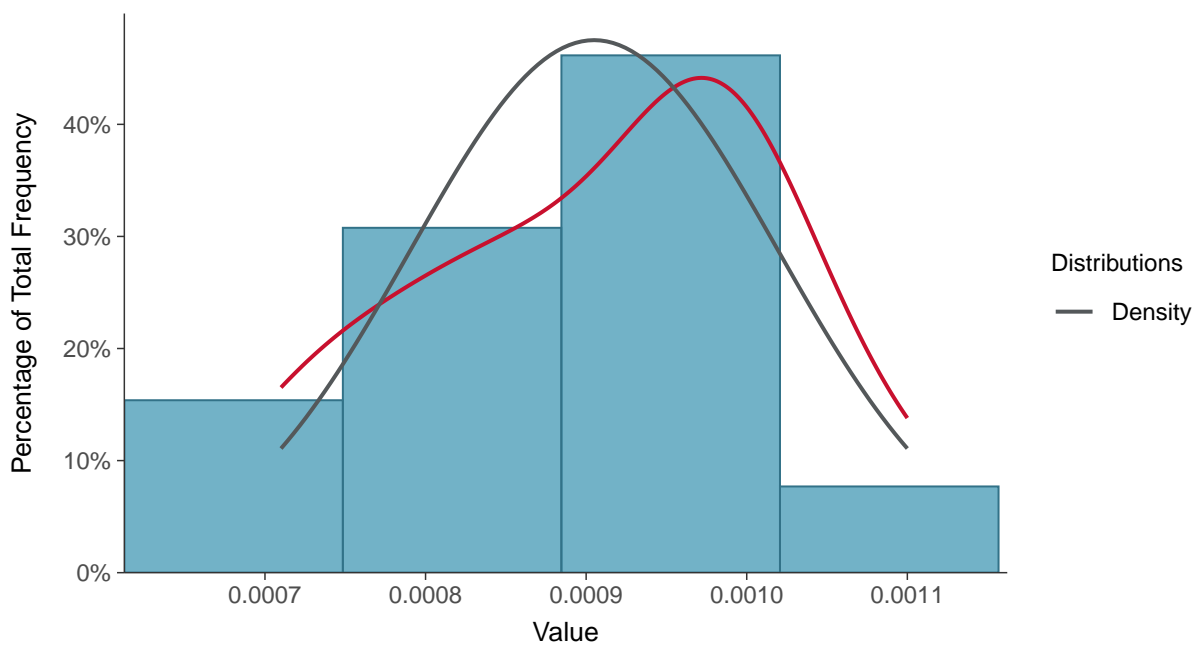
Scatter Plot

Cobalt, MW-07 (mg/L)



Histogram

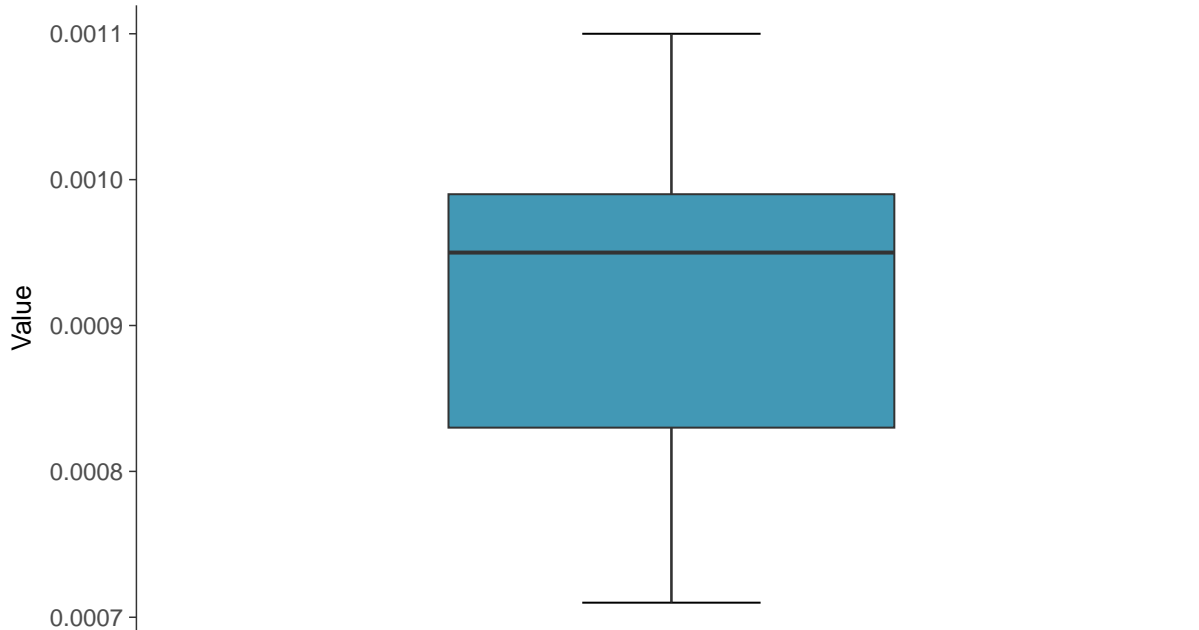
Cobalt, MW-07 (mg/L)





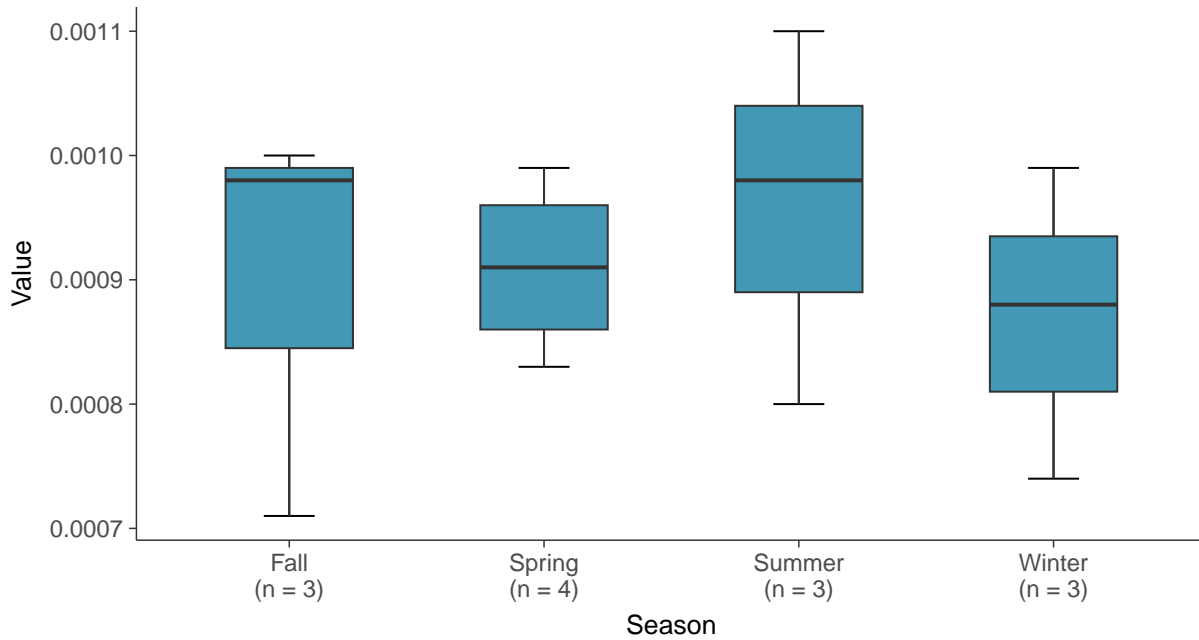
Boxplot

Cobalt, MW-07 (mg/L)



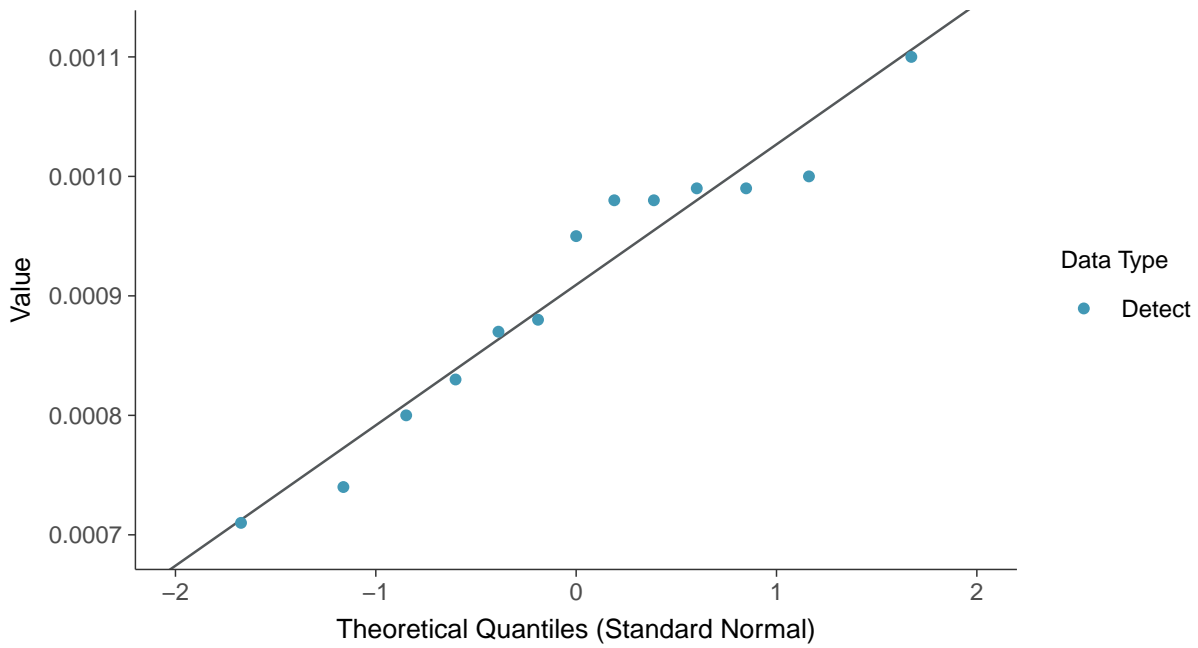
Boxplot by Season

Cobalt, MW-07 (mg/L)

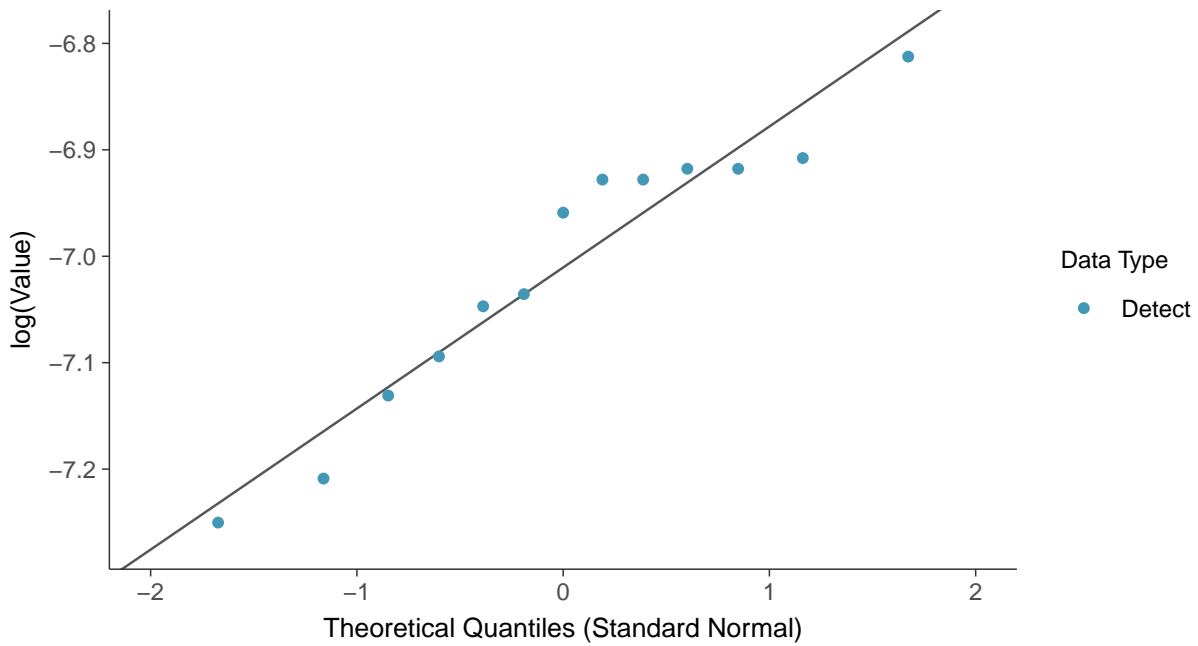




Normal Q-Q plot
Cobalt, MW-07 (mg/L)

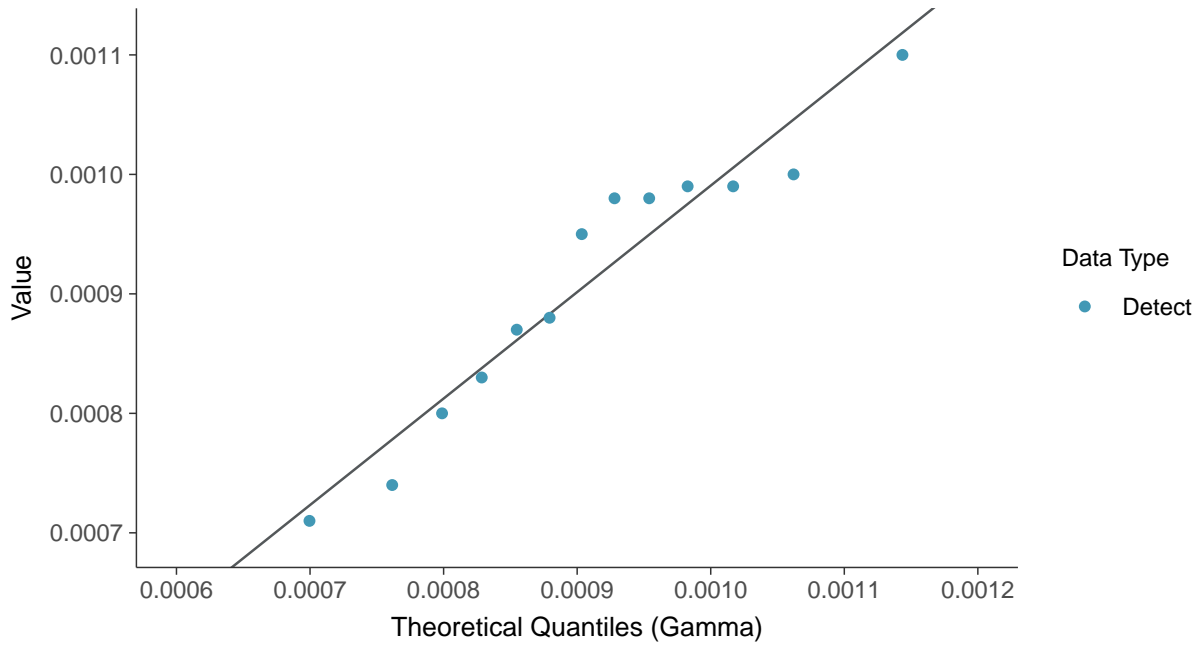


Lognormal Q-Q plot
Cobalt, MW-07 (mg/L)

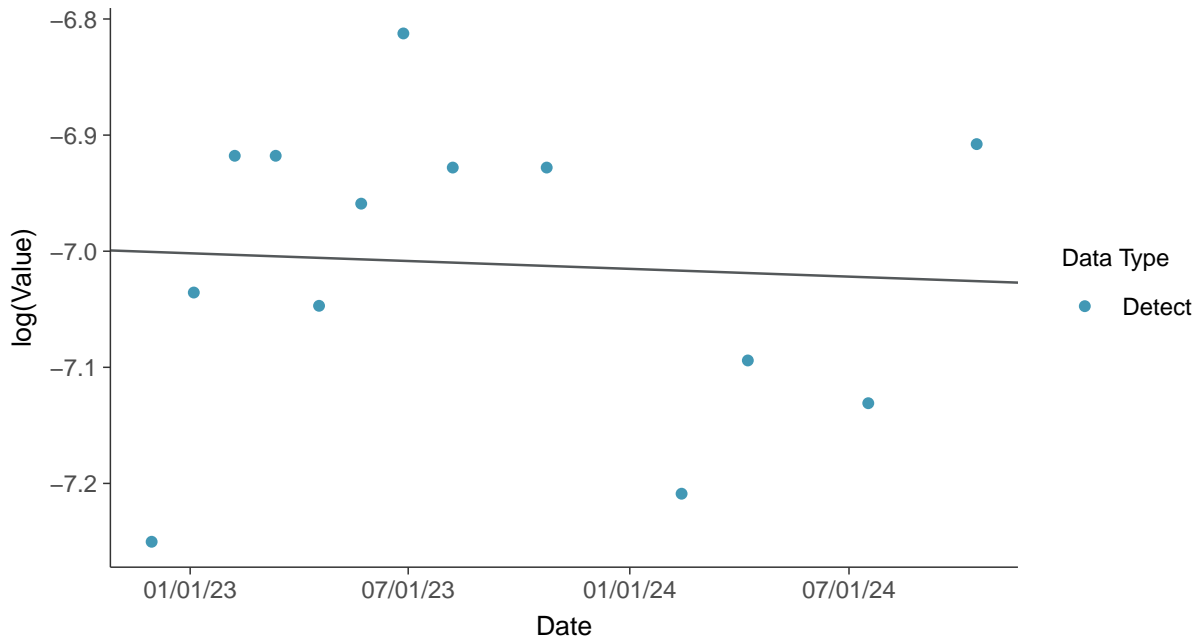




Gamma Q-Q plot
Cobalt, MW-07 (mg/L)



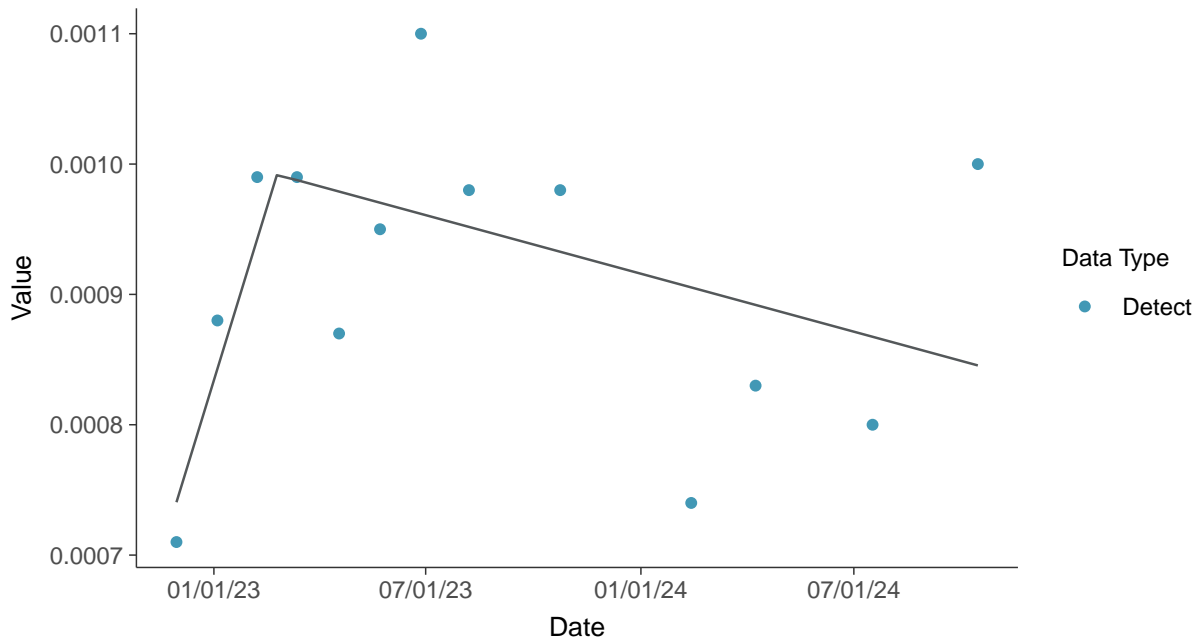
Trend Regression: Lognormal MLE
Cobalt, MW-07 (mg/L)





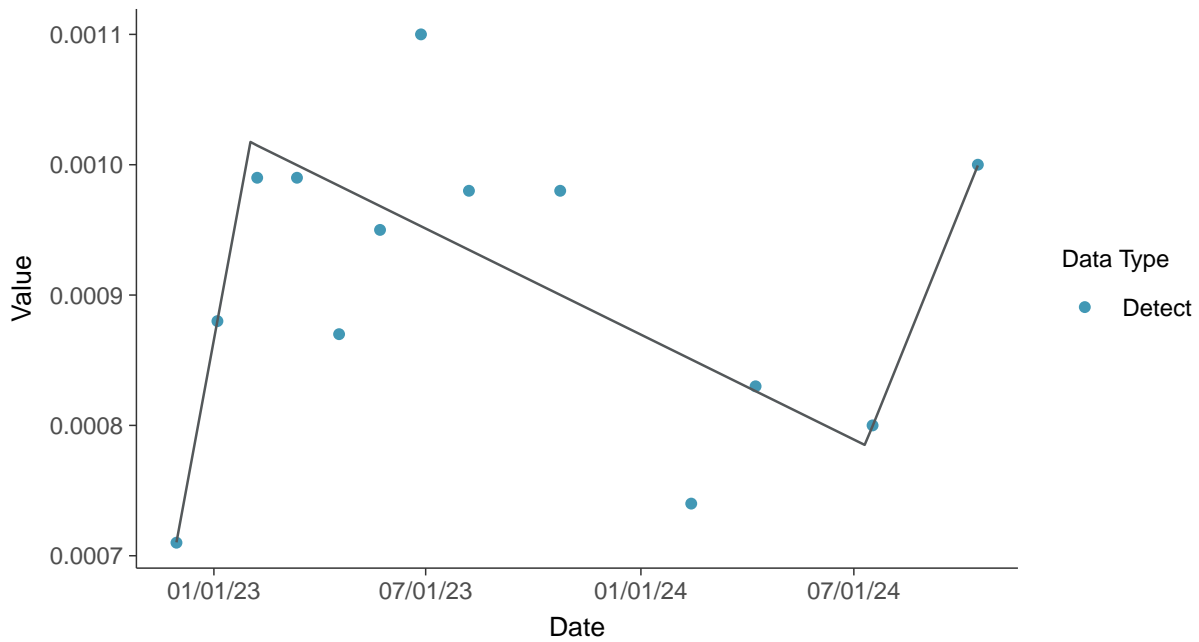
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-07 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

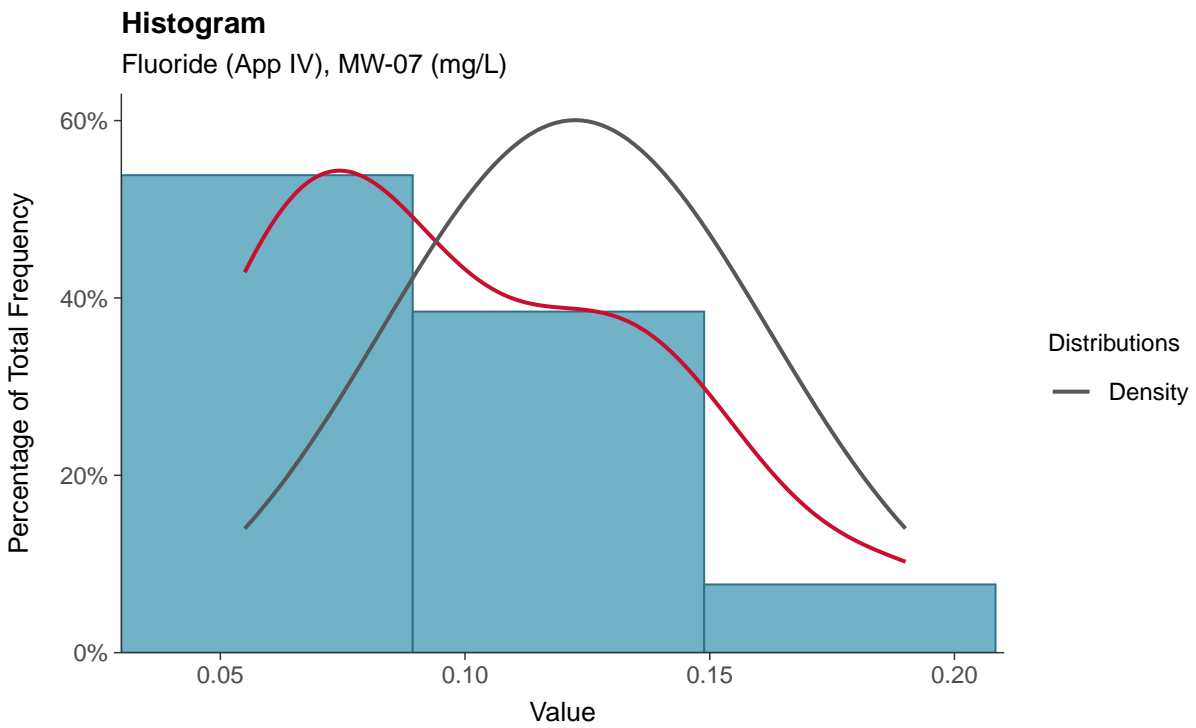
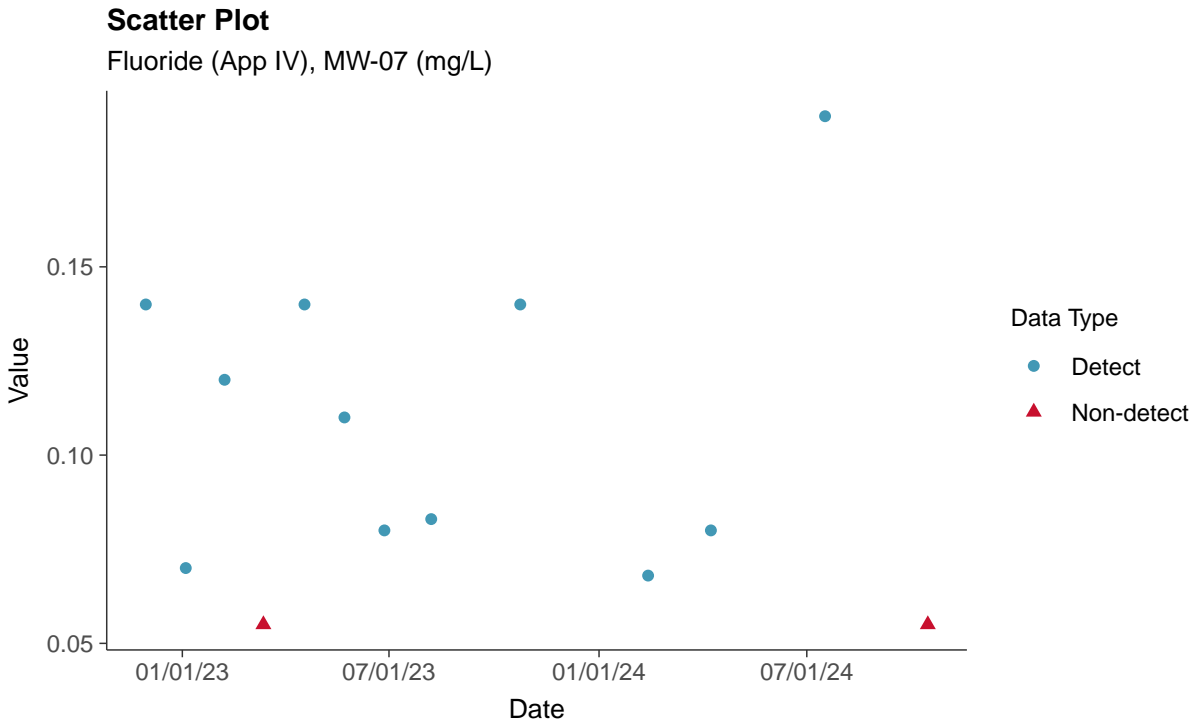
Cobalt, MW-07 (mg/L)





Appendix IV: Fluoride (App IV), MW-07

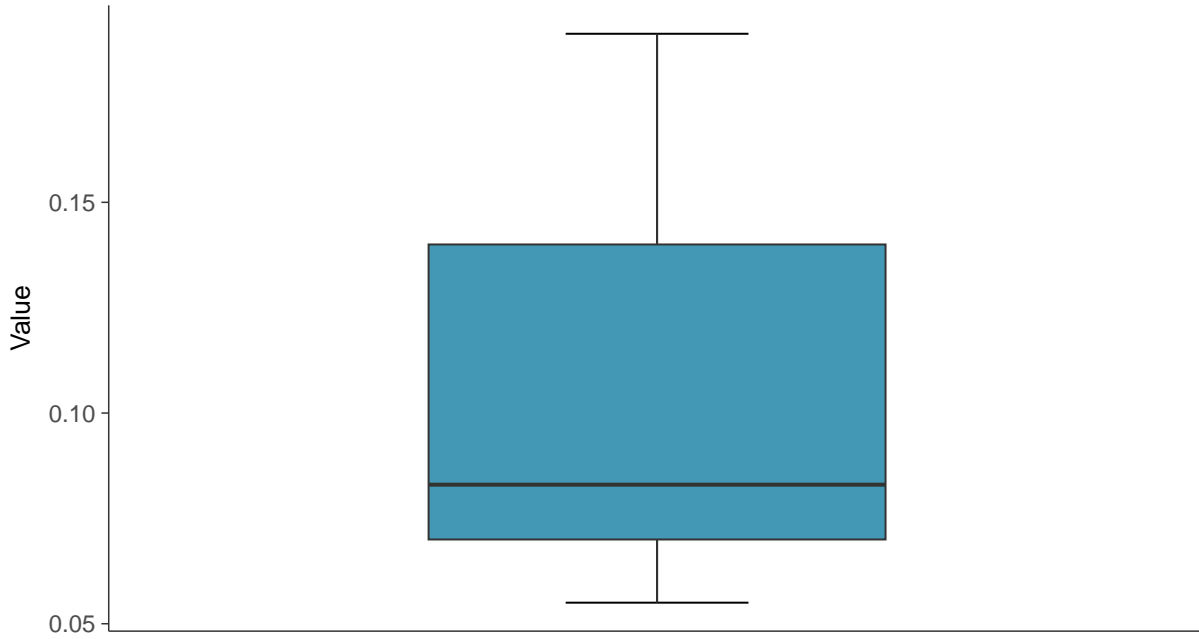
ID: 1_17_1_5_113





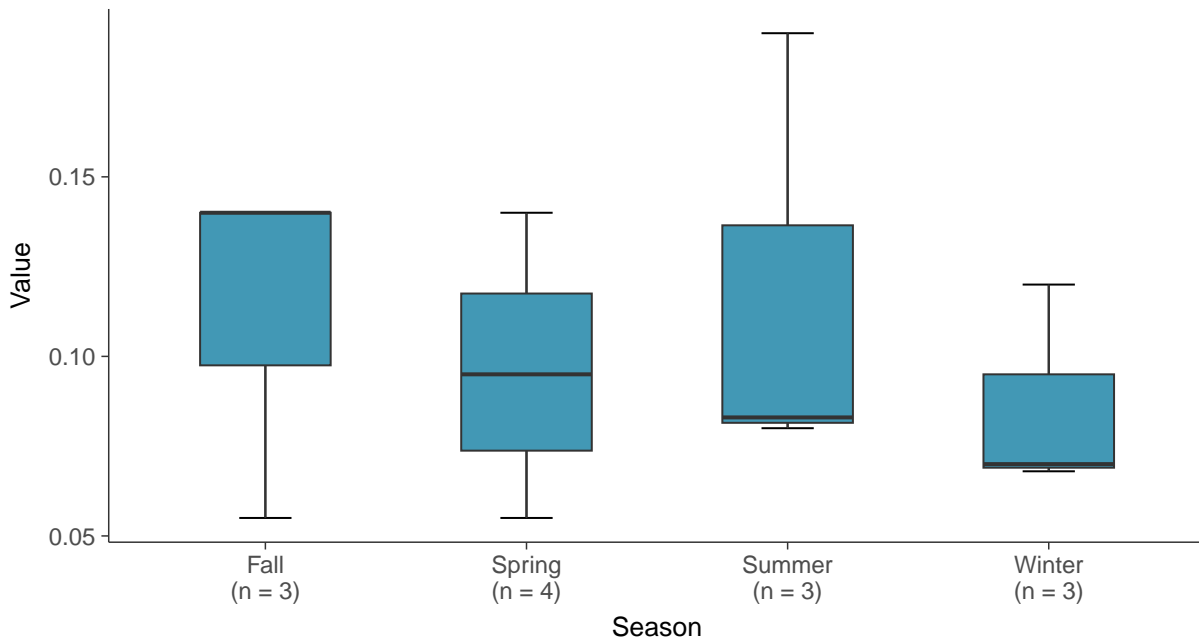
Boxplot

Fluoride (App IV), MW-07 (mg/L)



Boxplot by Season

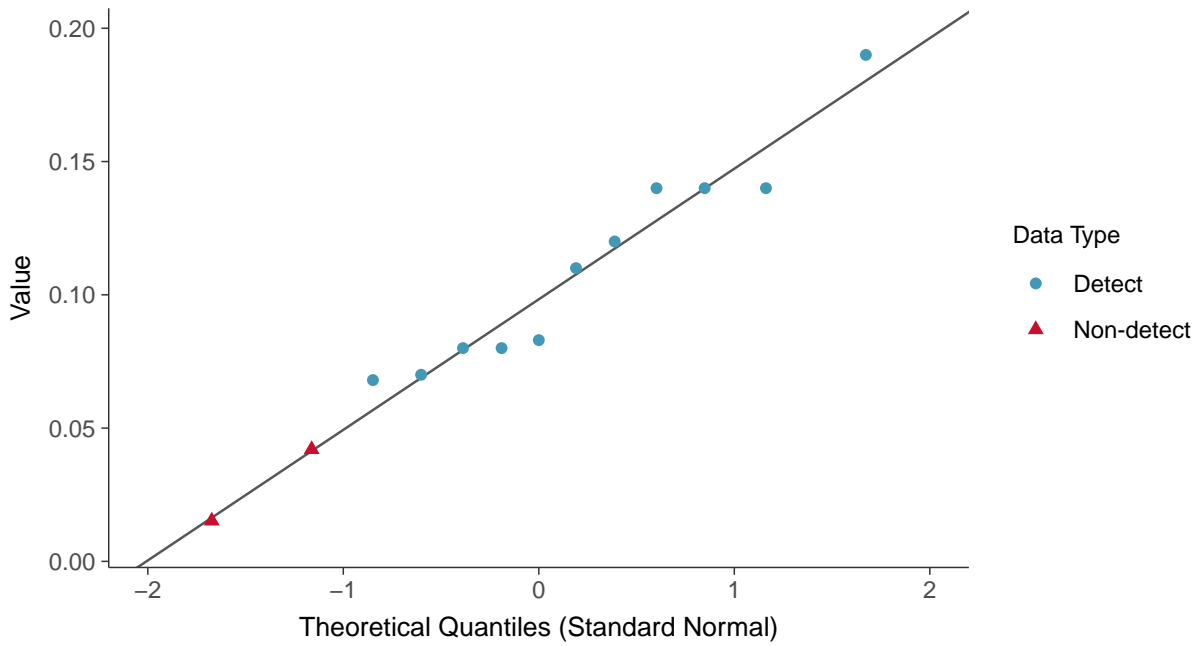
Fluoride (App IV), MW-07 (mg/L)





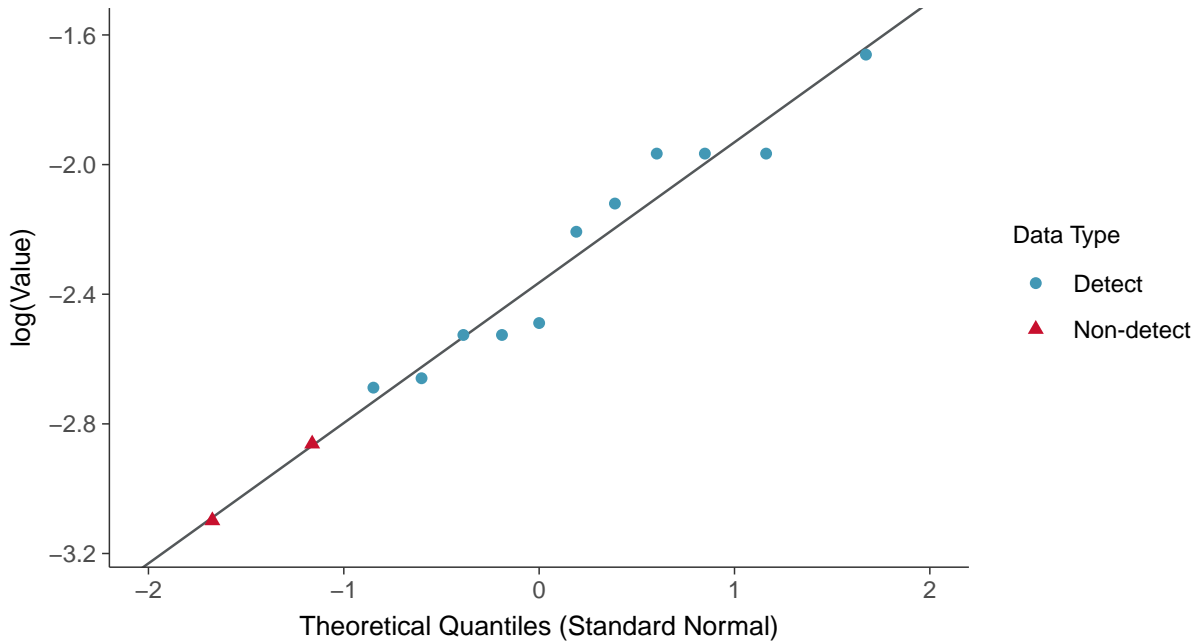
Normal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-07 (mg/L)



Lognormal Q-Q plot using ROS Imputed Estimates

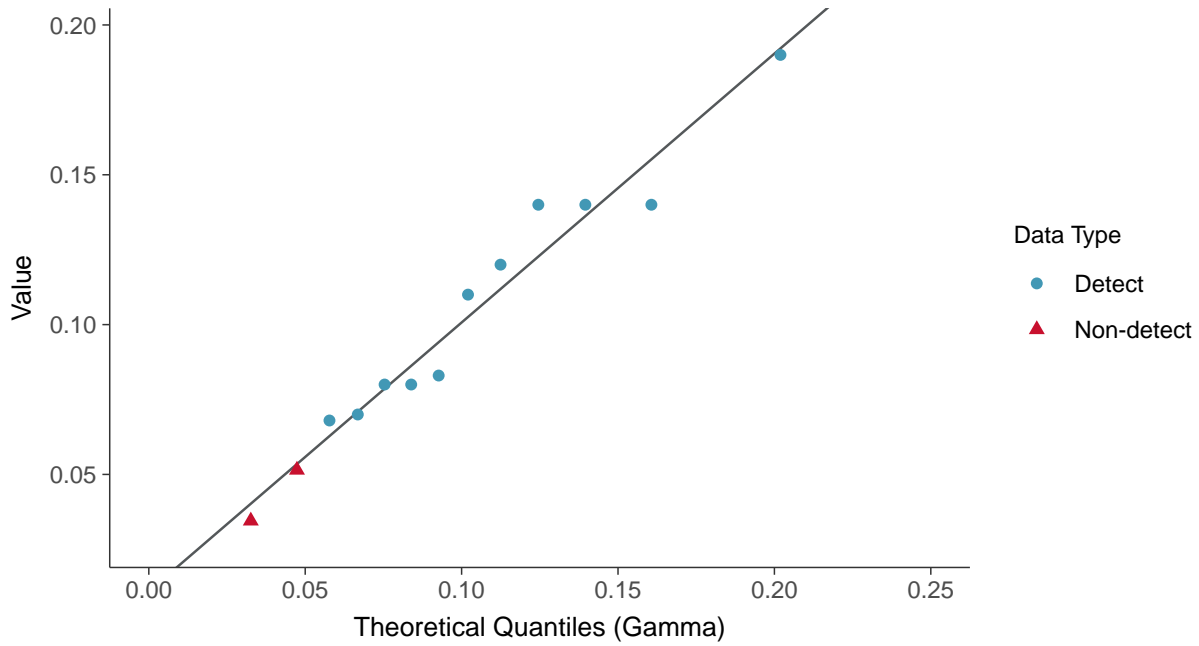
Fluoride (App IV), MW-07 (mg/L)





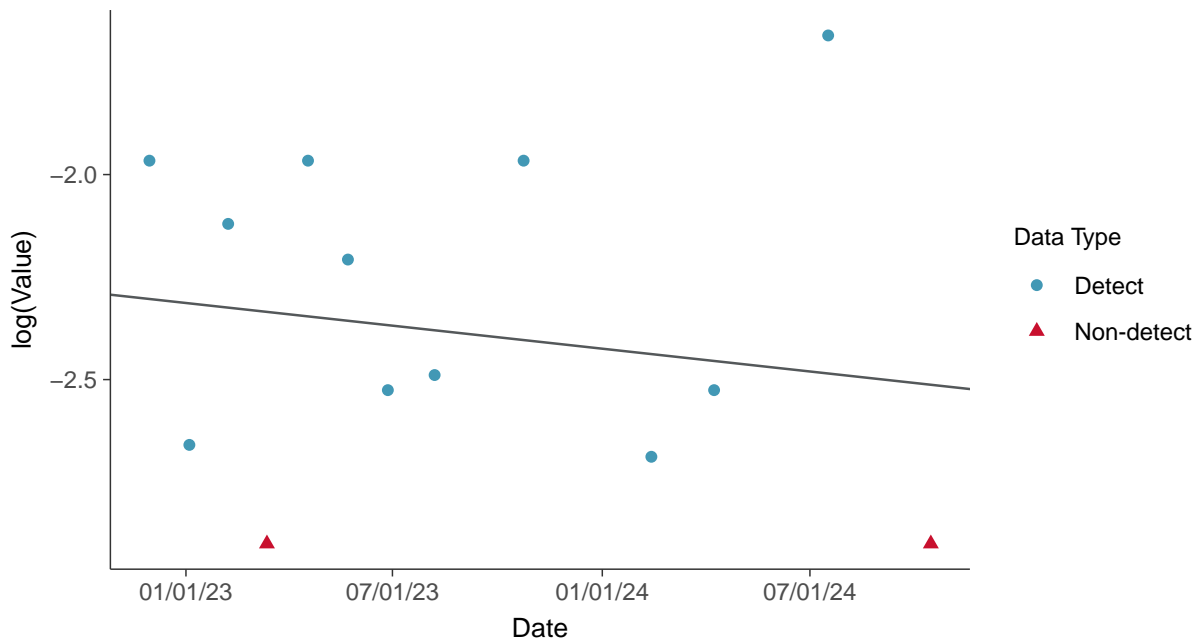
Gamma Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-07 (mg/L)



Trend Regression: Lognormal MLE

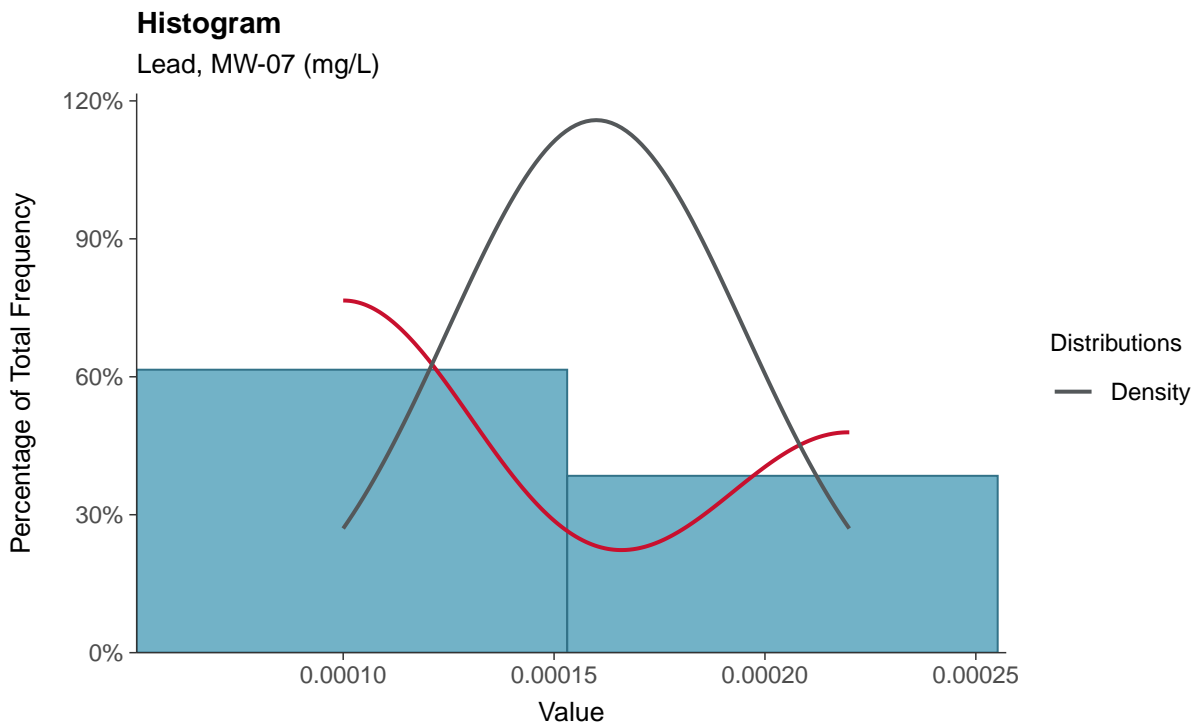
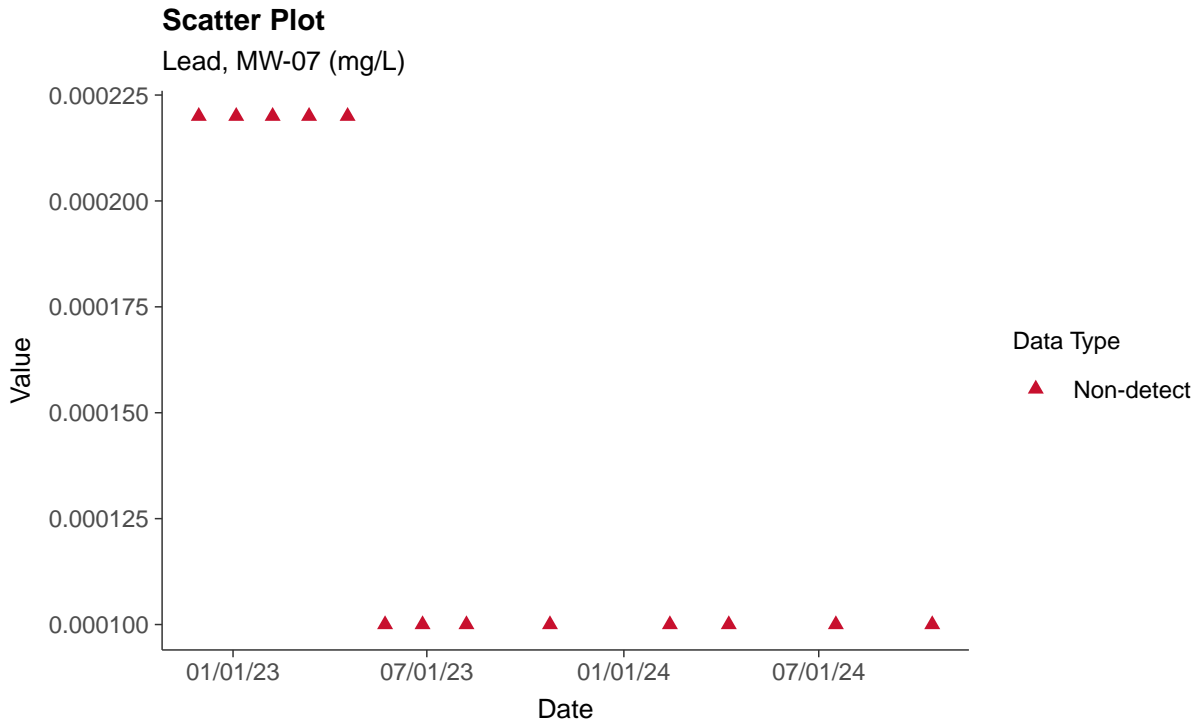
Fluoride (App IV), MW-07 (mg/L)





Appendix IV: Lead, MW-07

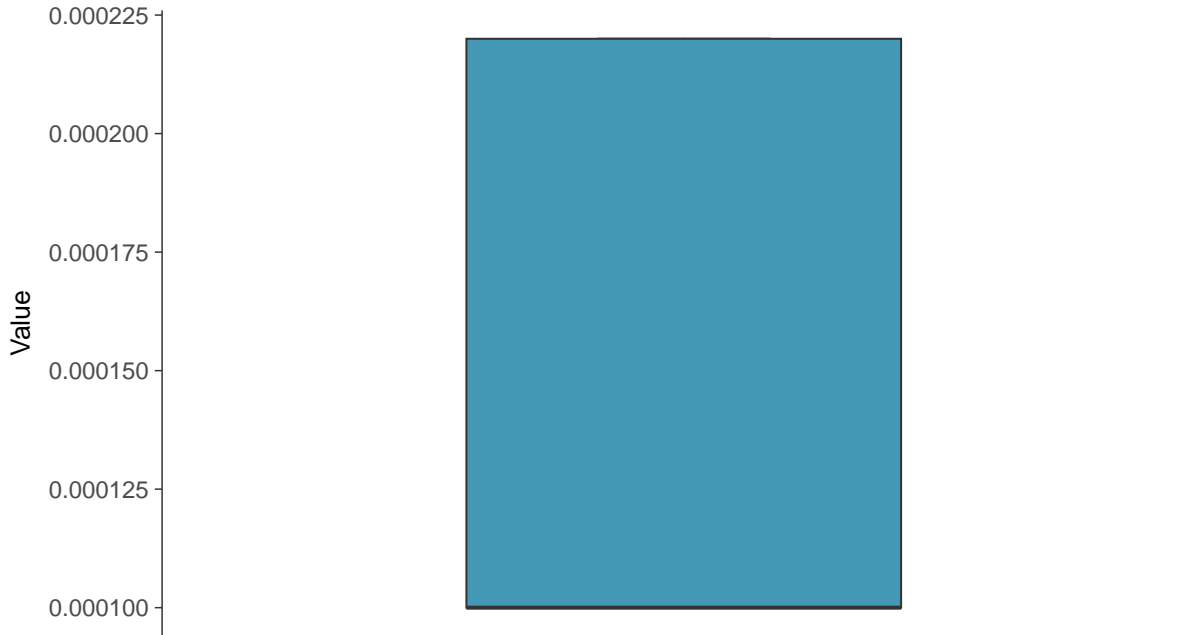
ID: 1_17_1_5_115





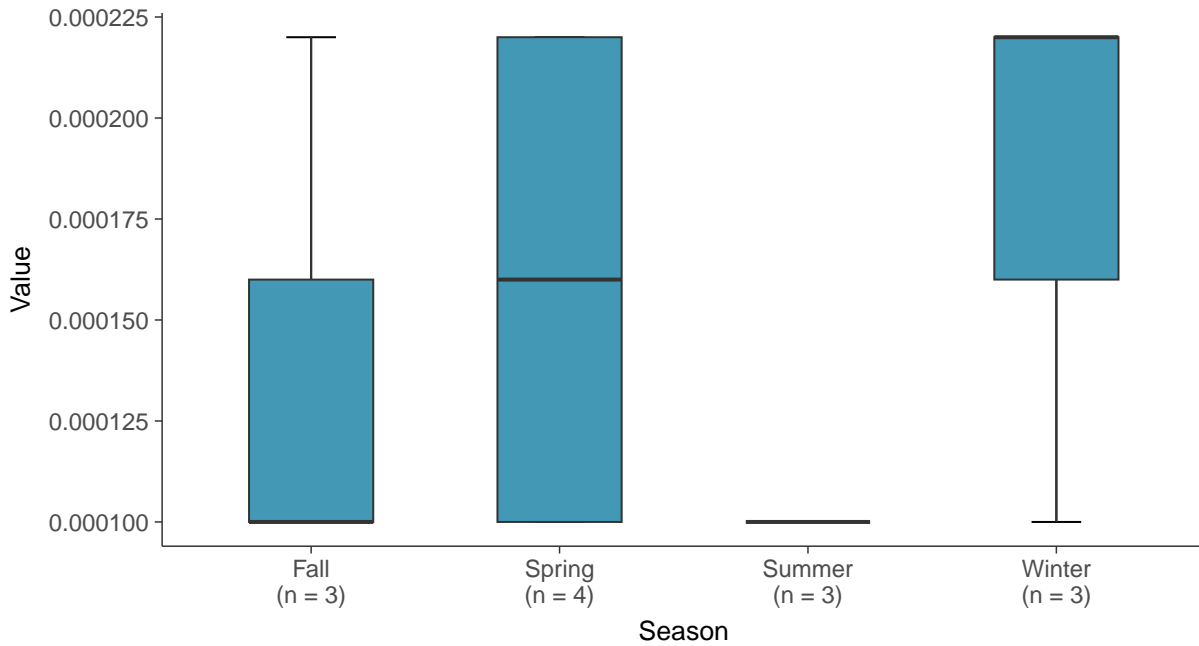
Boxplot

Lead, MW-07 (mg/L)



Boxplot by Season

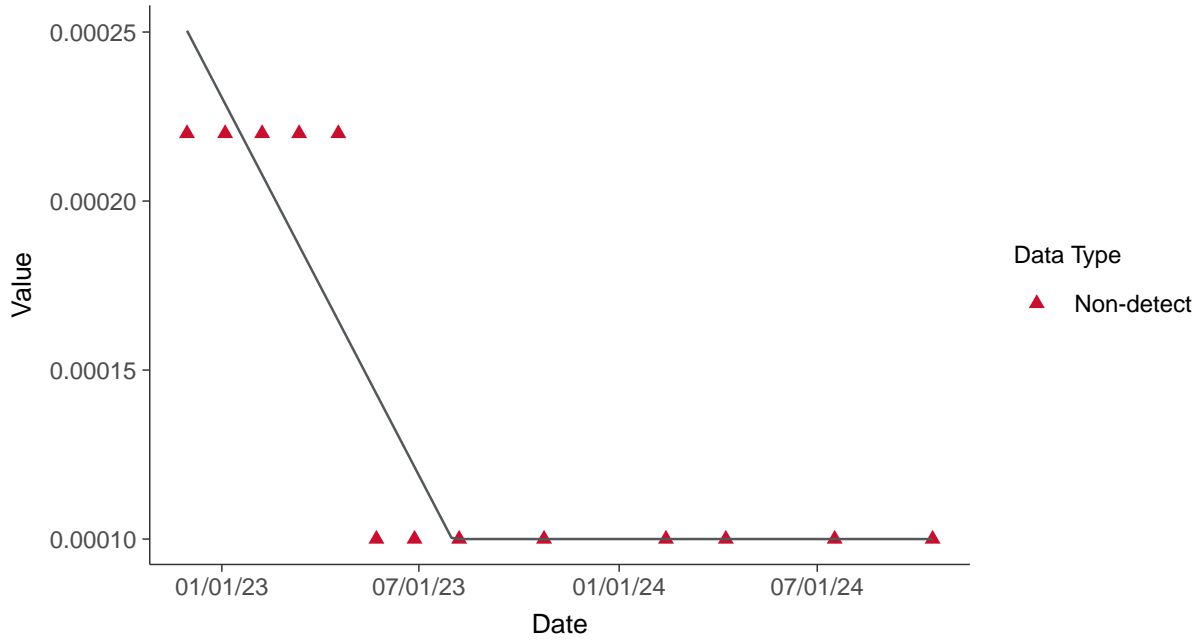
Lead, MW-07 (mg/L)





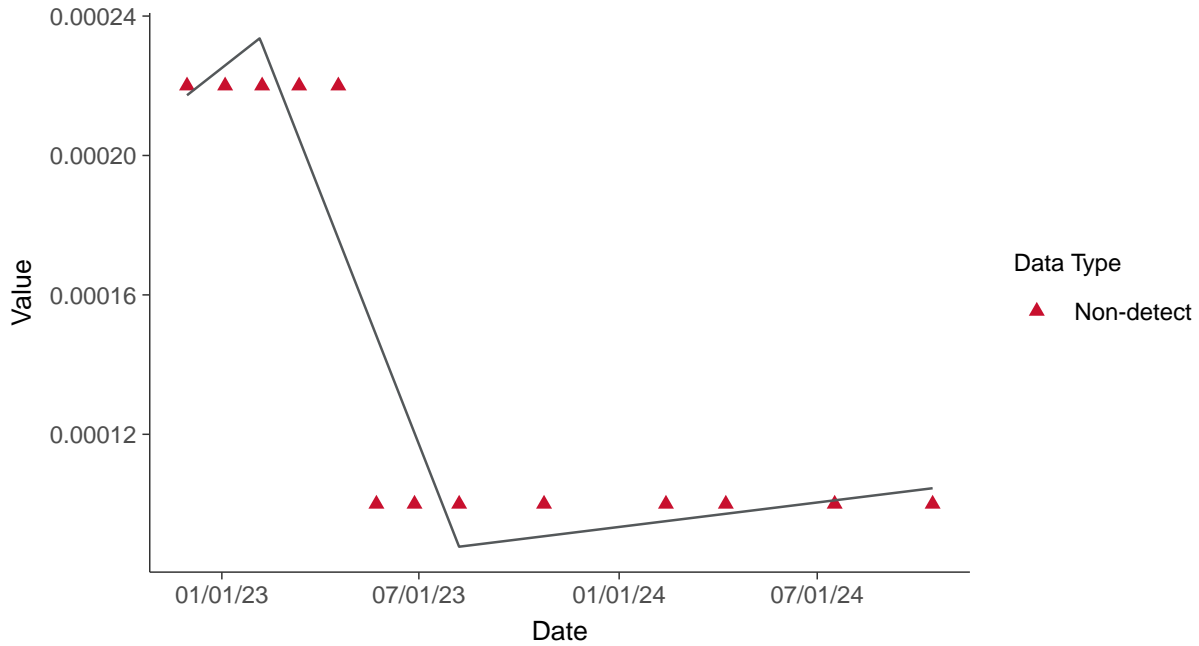
Trend Regression: Piecewise Linear-Linear

Lead, MW-07 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

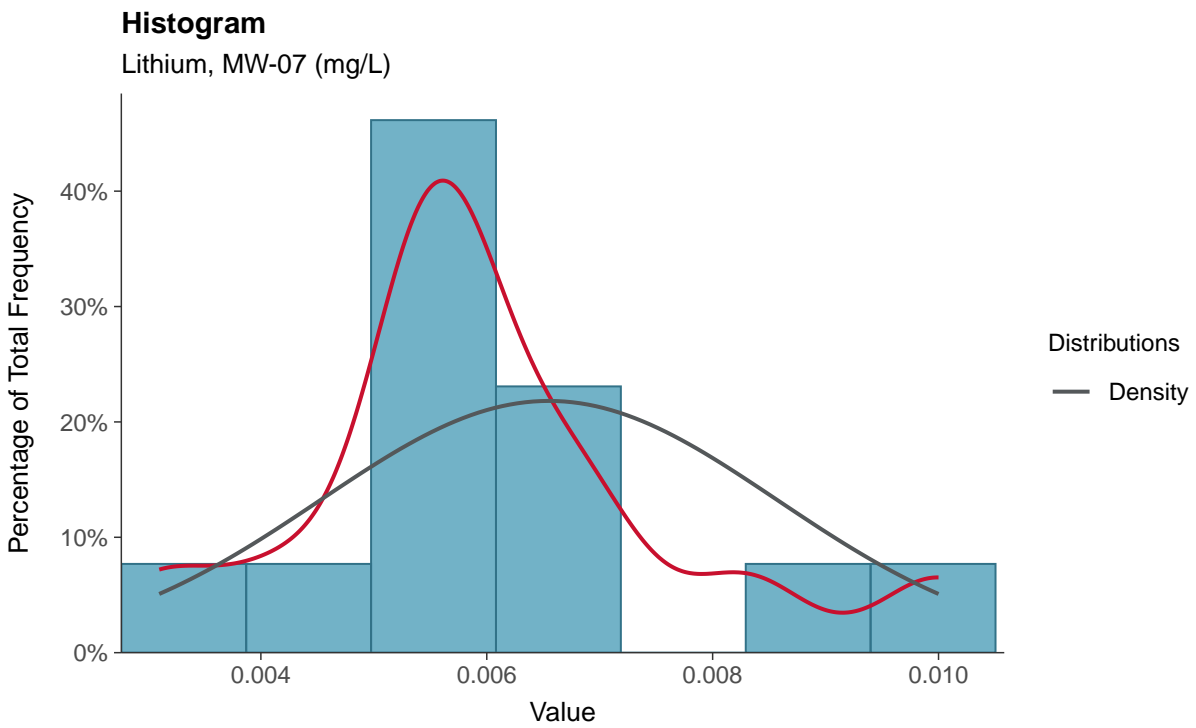
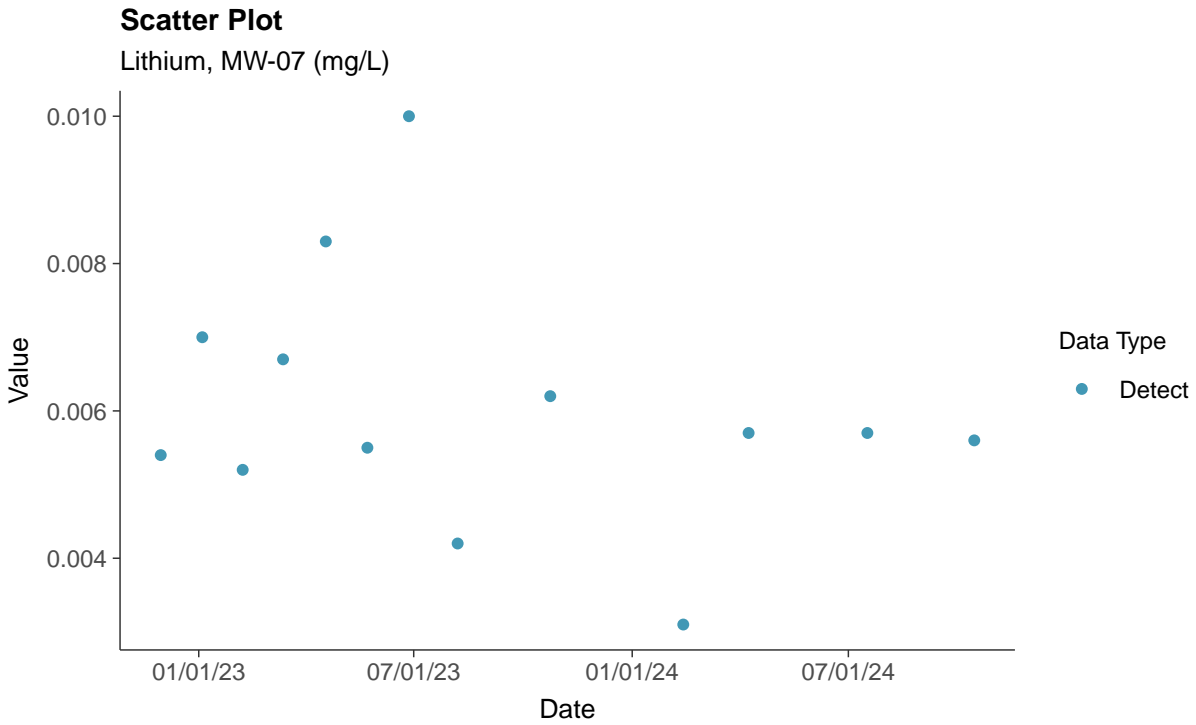
Lead, MW-07 (mg/L)





Appendix IV: Lithium, MW-07

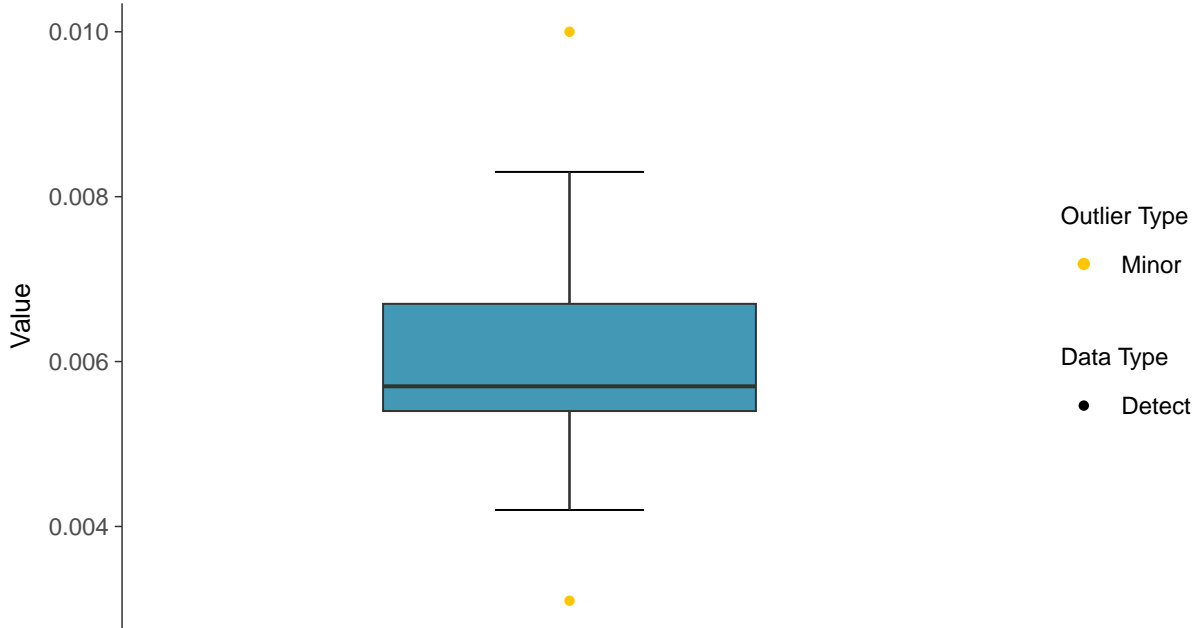
ID: 1_17_1_5_116





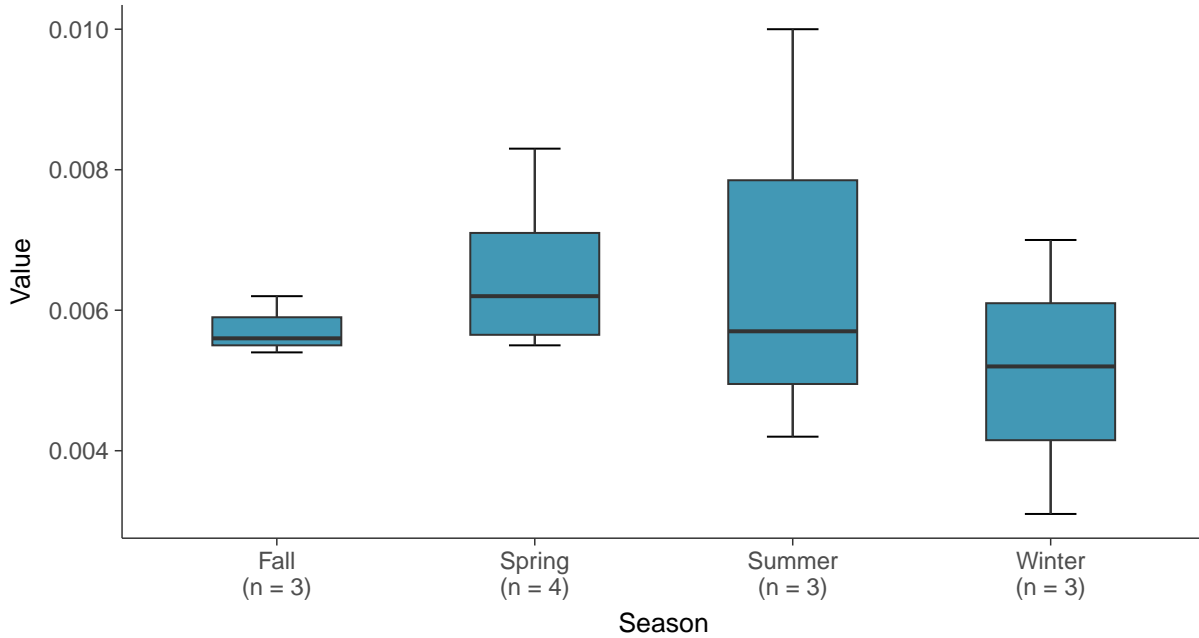
Boxplot

Lithium, MW-07 (mg/L)



Boxplot by Season

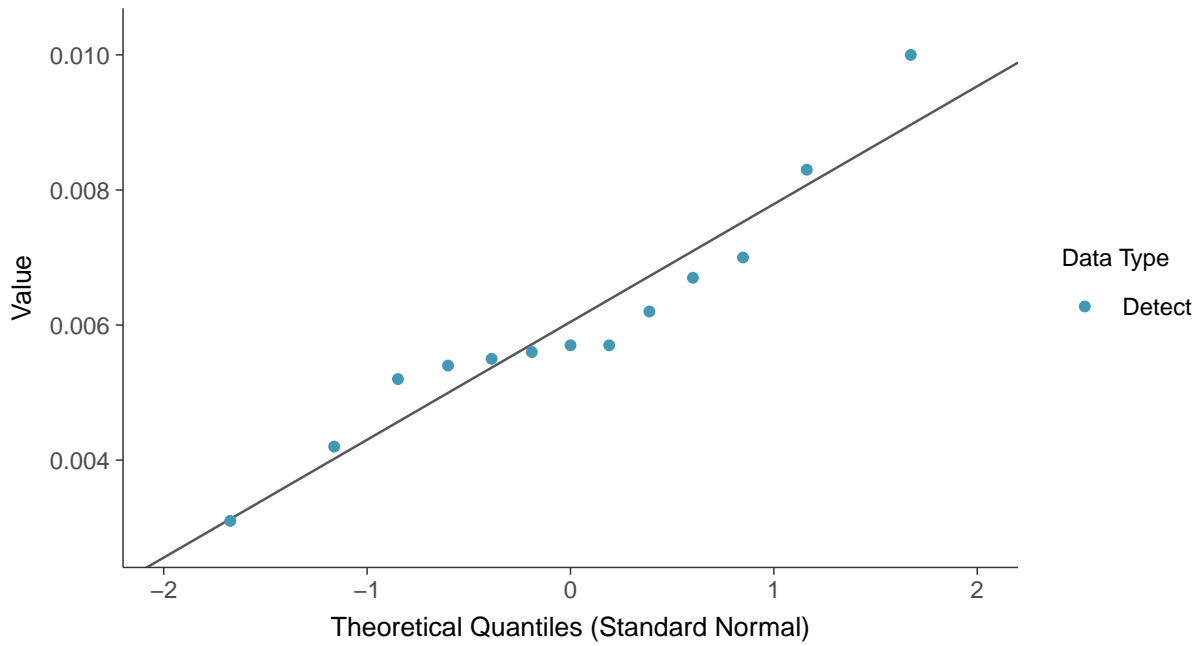
Lithium, MW-07 (mg/L)





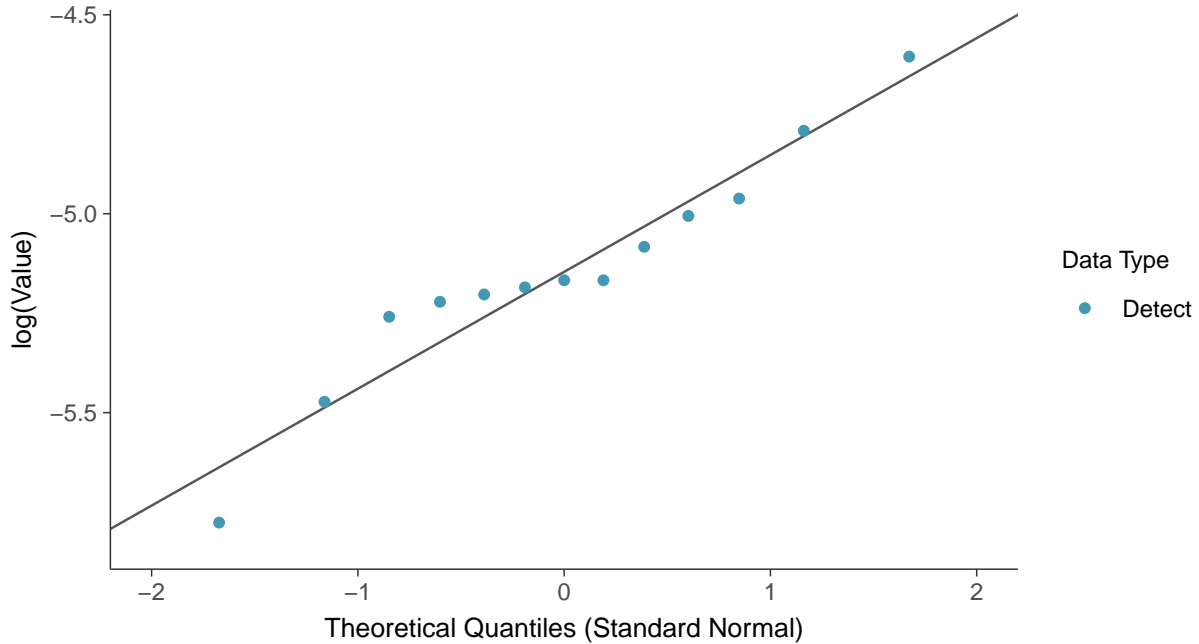
Normal Q-Q plot

Lithium, MW-07 (mg/L)



Lognormal Q-Q plot

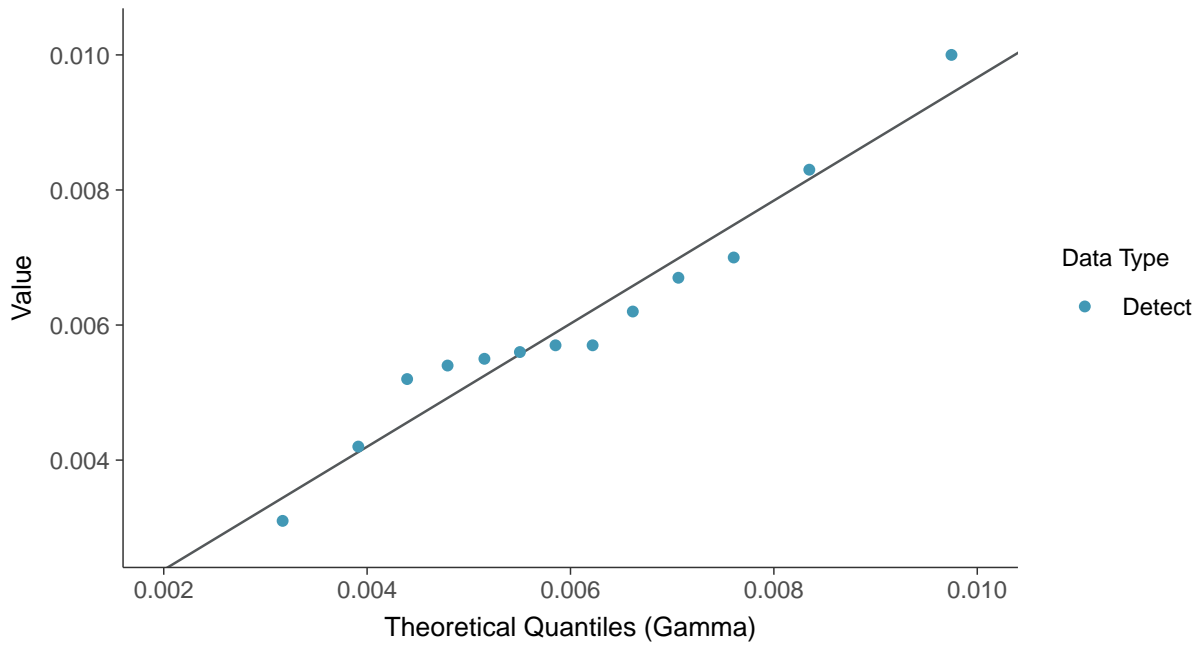
Lithium, MW-07 (mg/L)





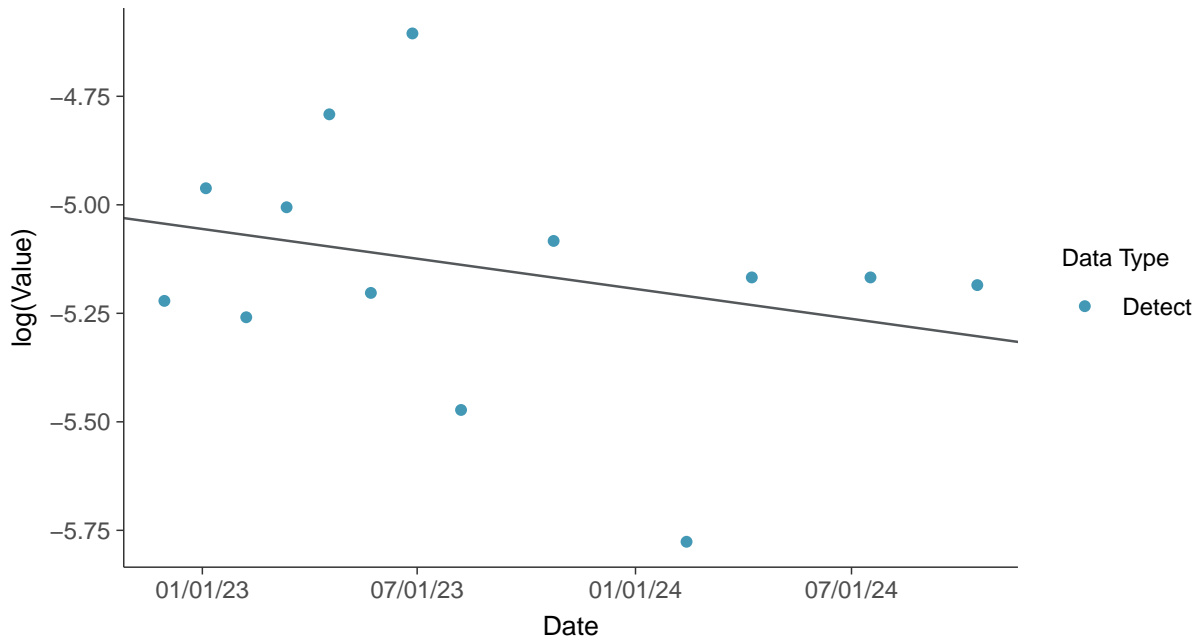
Gamma Q-Q plot

Lithium, MW-07 (mg/L)



Trend Regression: Lognormal MLE

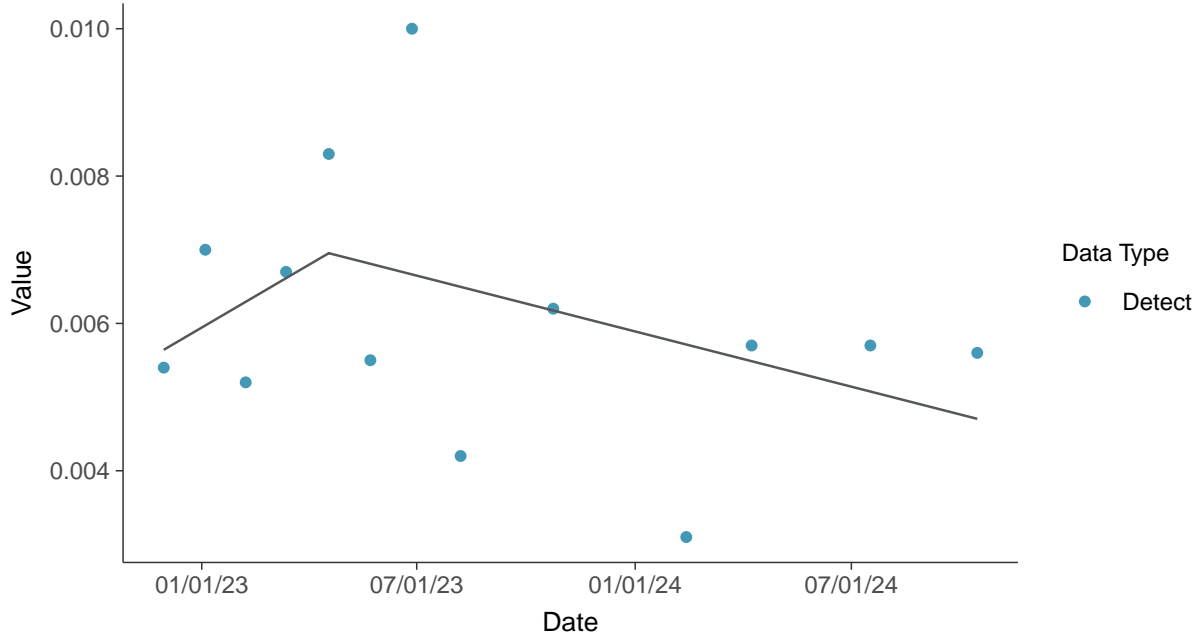
Lithium, MW-07 (mg/L)





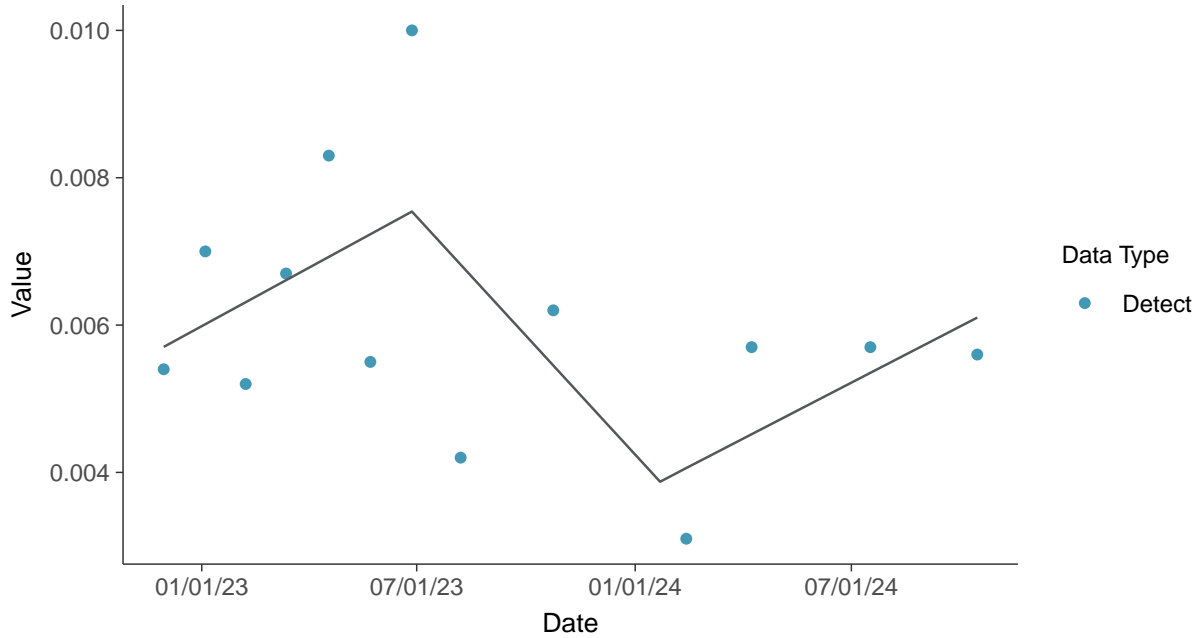
Trend Regression: Piecewise Linear-Linear

Lithium, MW-07 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

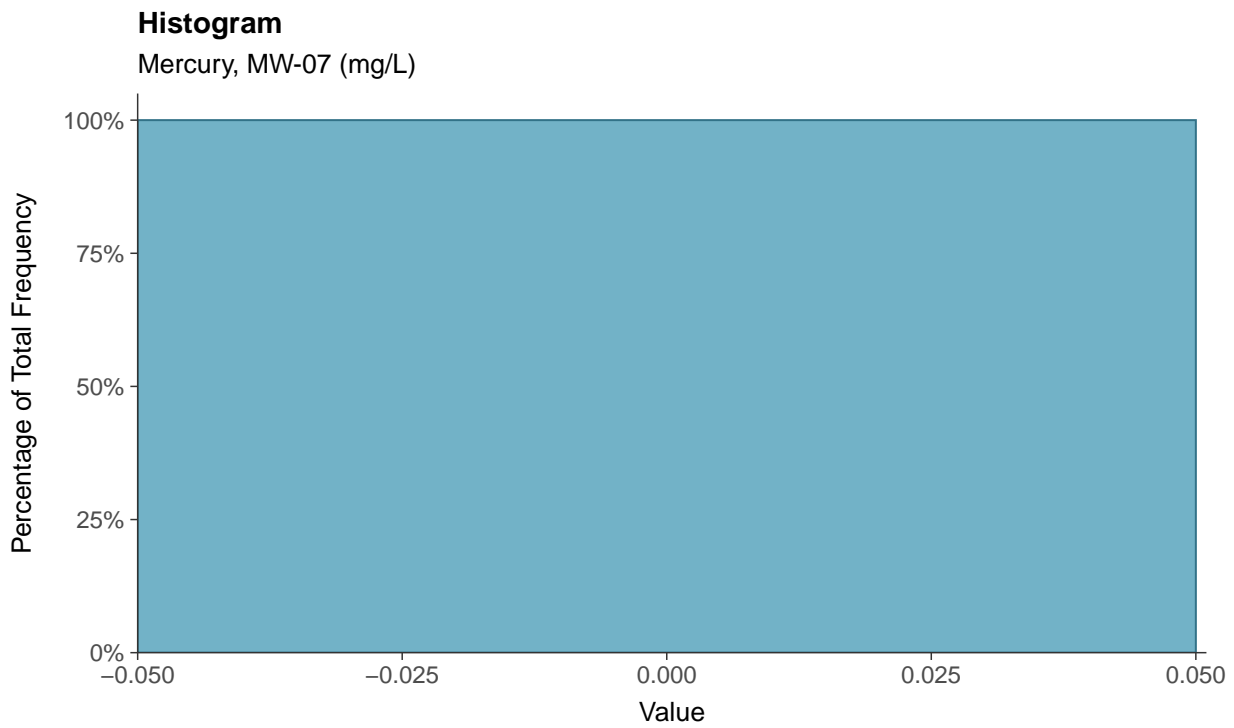
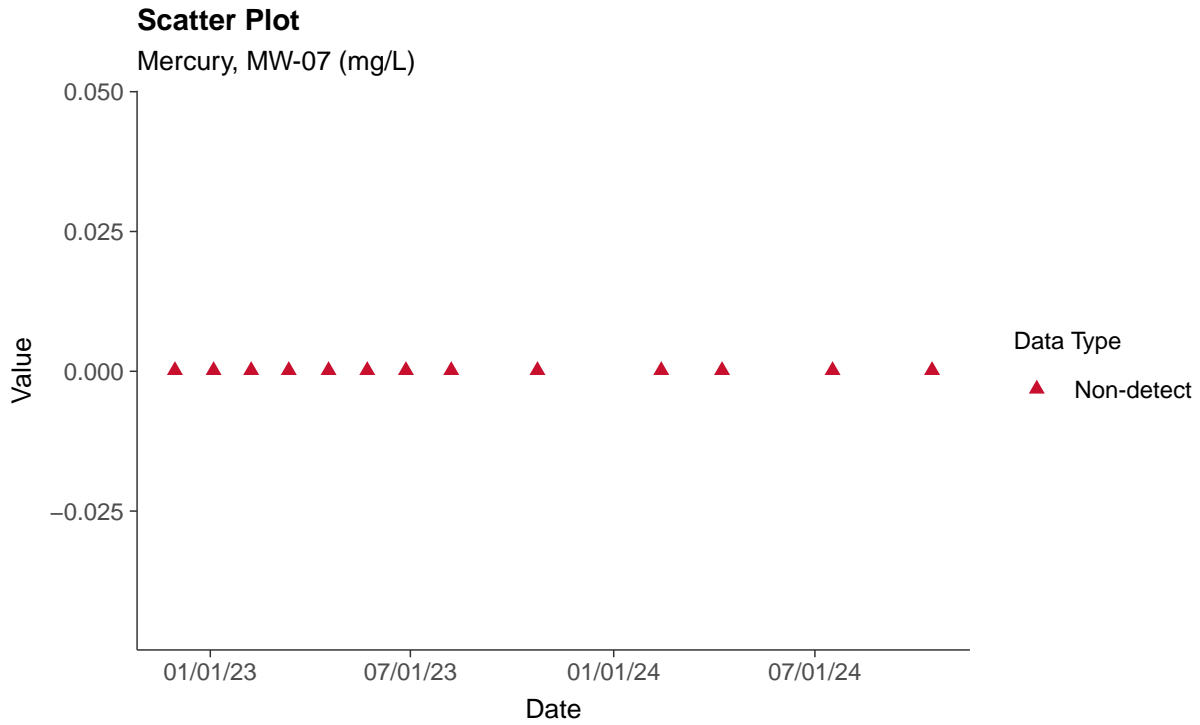
Lithium, MW-07 (mg/L)





Appendix IV: Mercury, MW-07

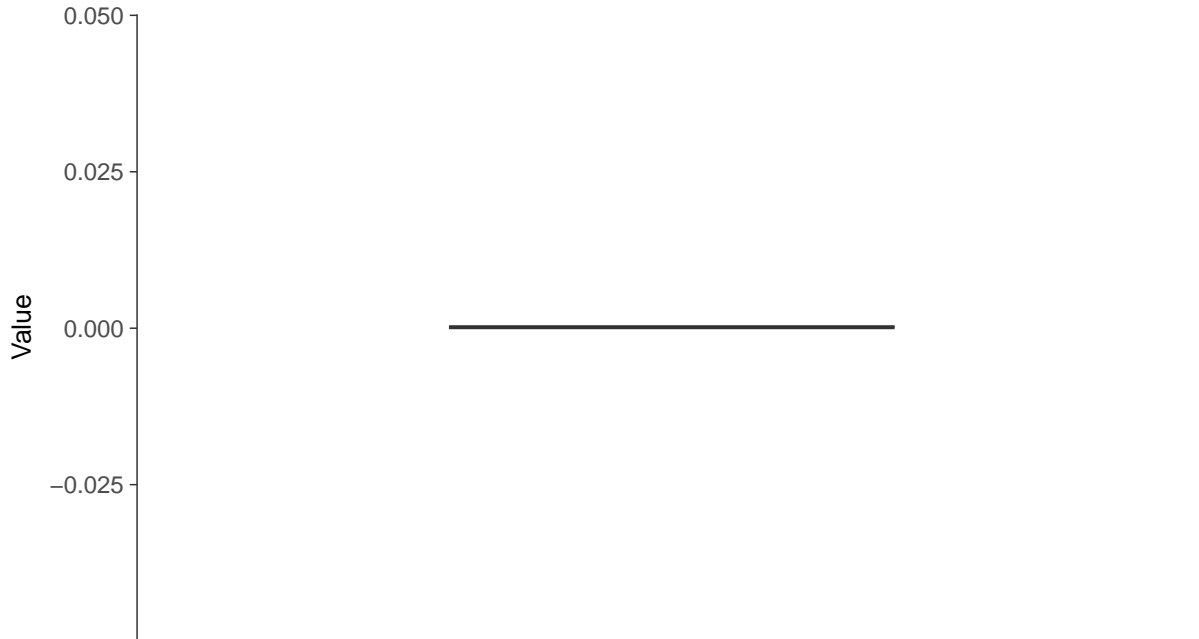
ID: 1_17_1_5_117





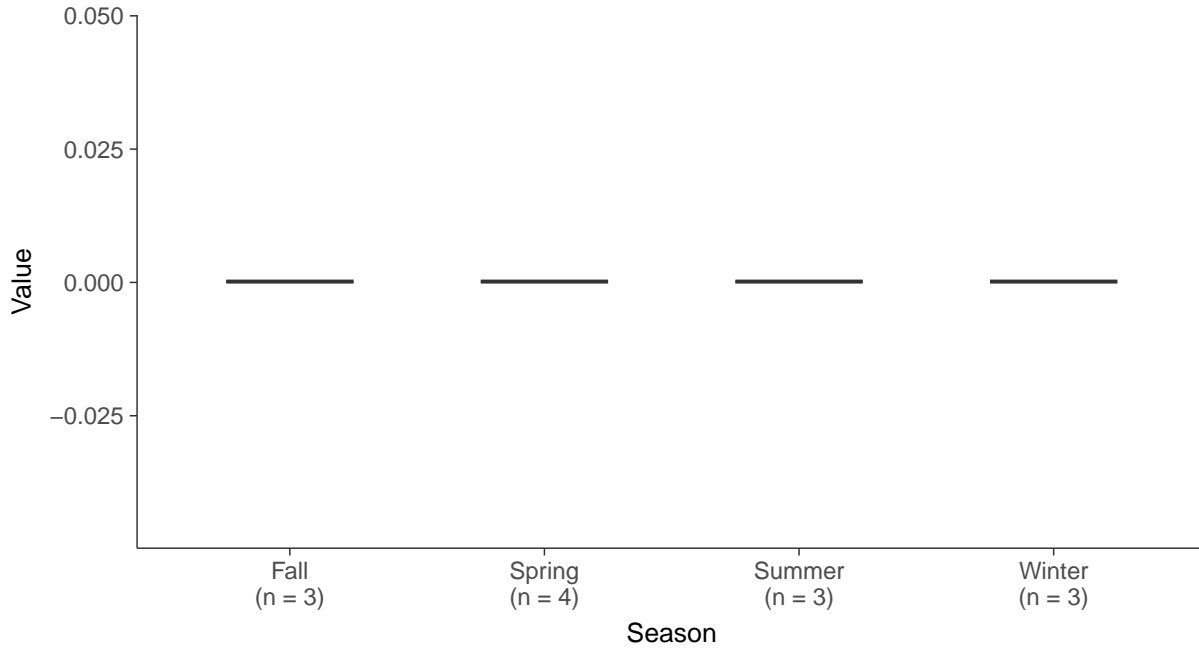
Boxplot

Mercury, MW-07 (mg/L)



Boxplot by Season

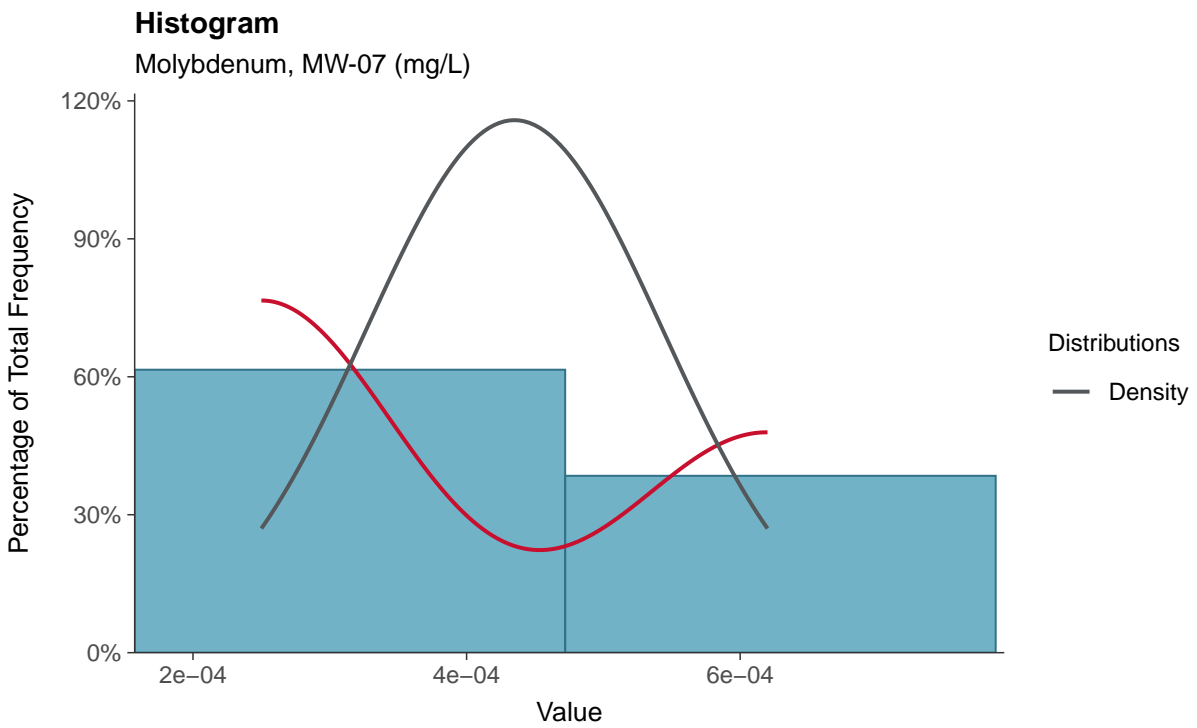
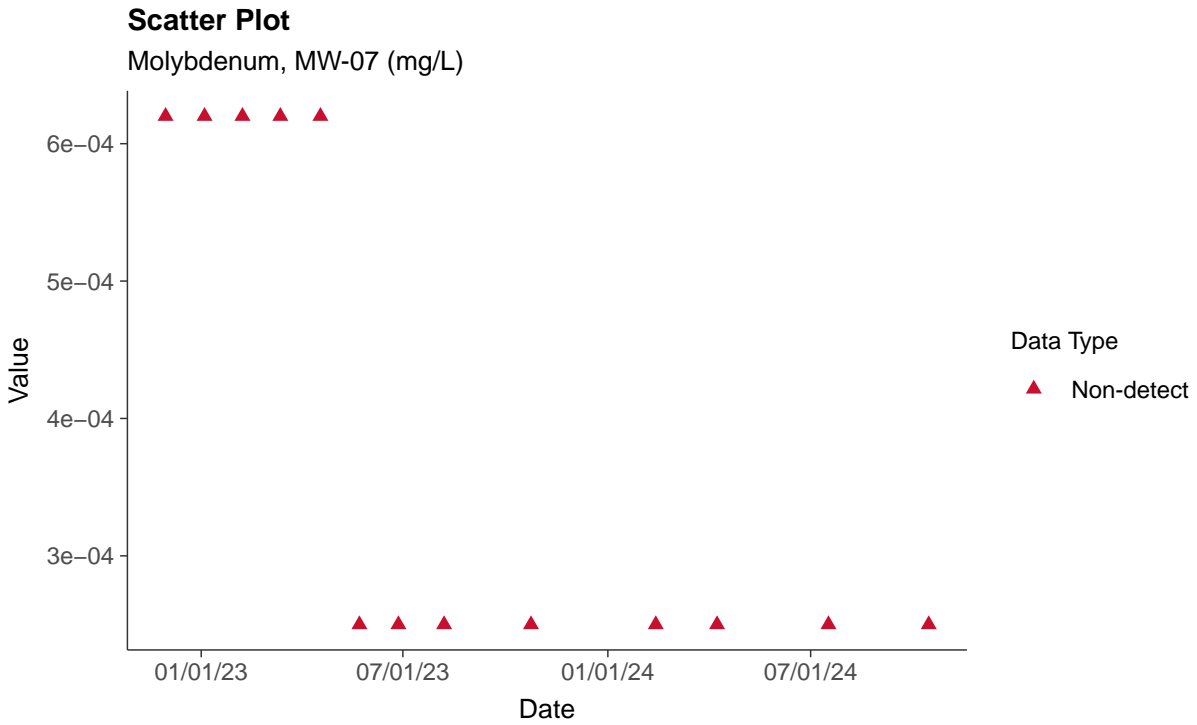
Mercury, MW-07 (mg/L)





Appendix IV: Molybdenum, MW-07

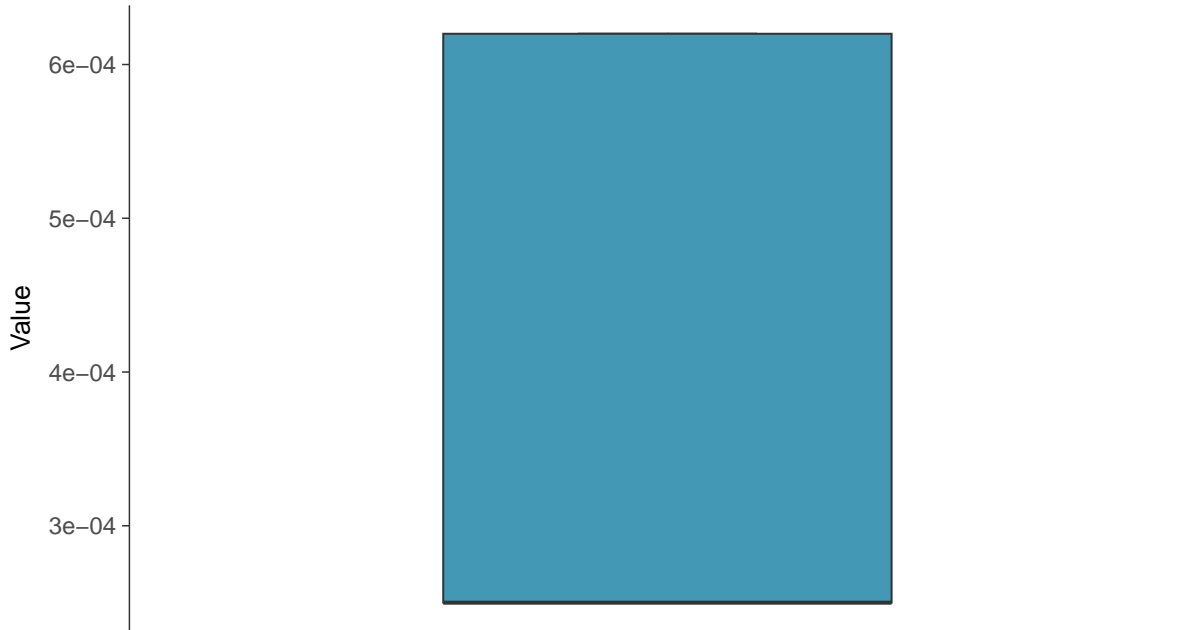
ID: 1_17_1_5_118





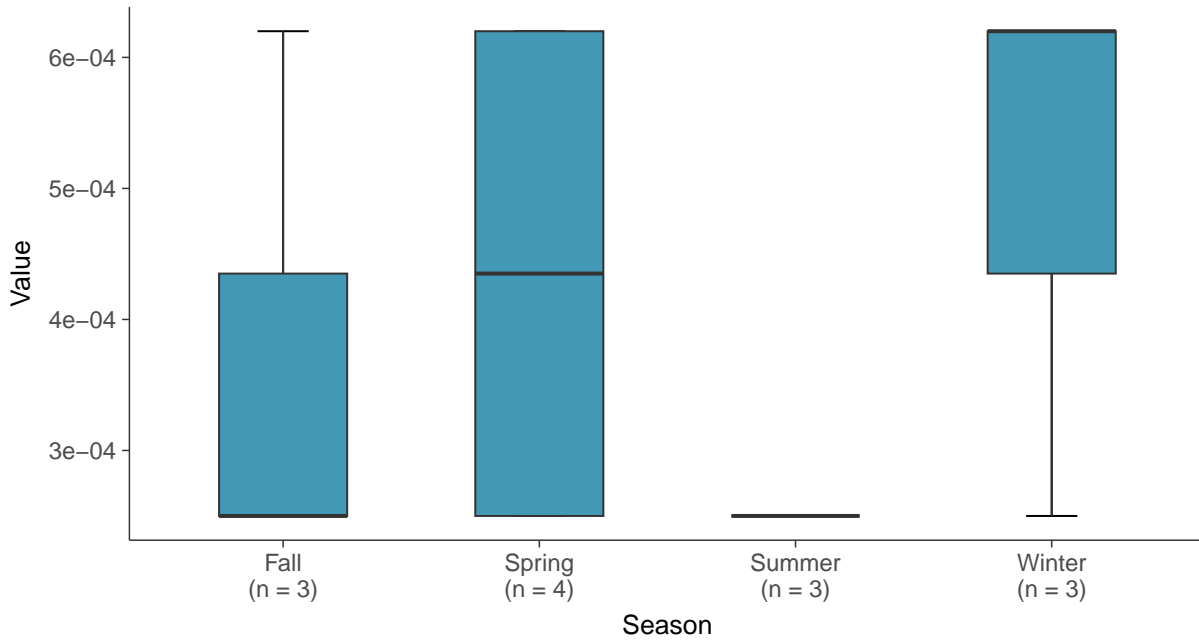
Boxplot

Molybdenum, MW-07 (mg/L)



Boxplot by Season

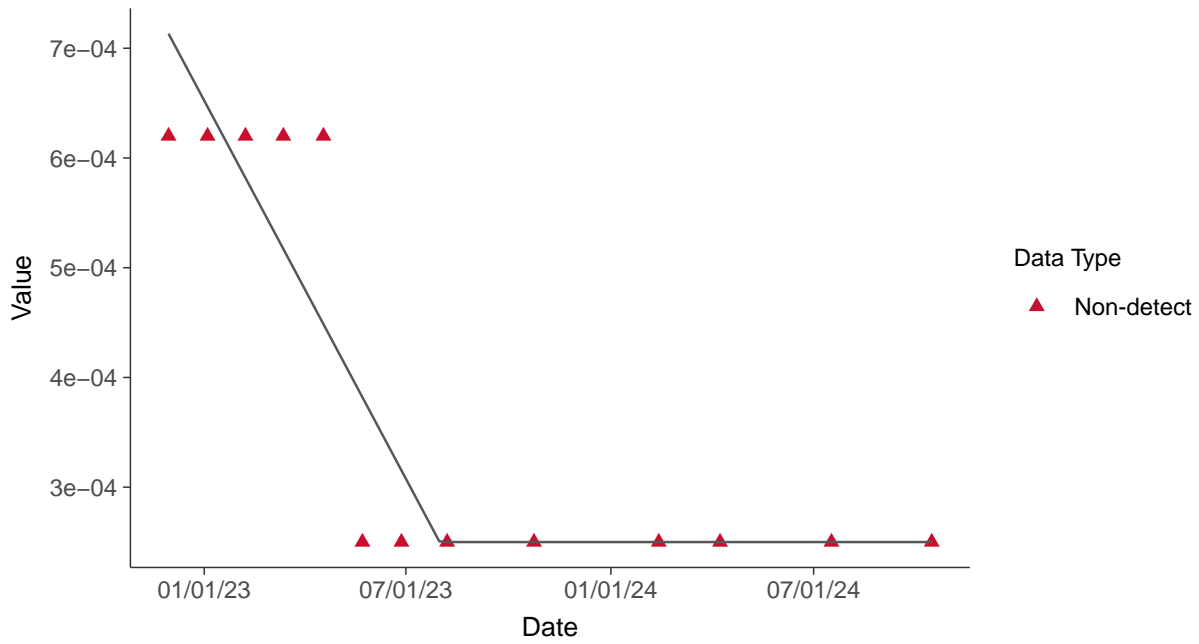
Molybdenum, MW-07 (mg/L)





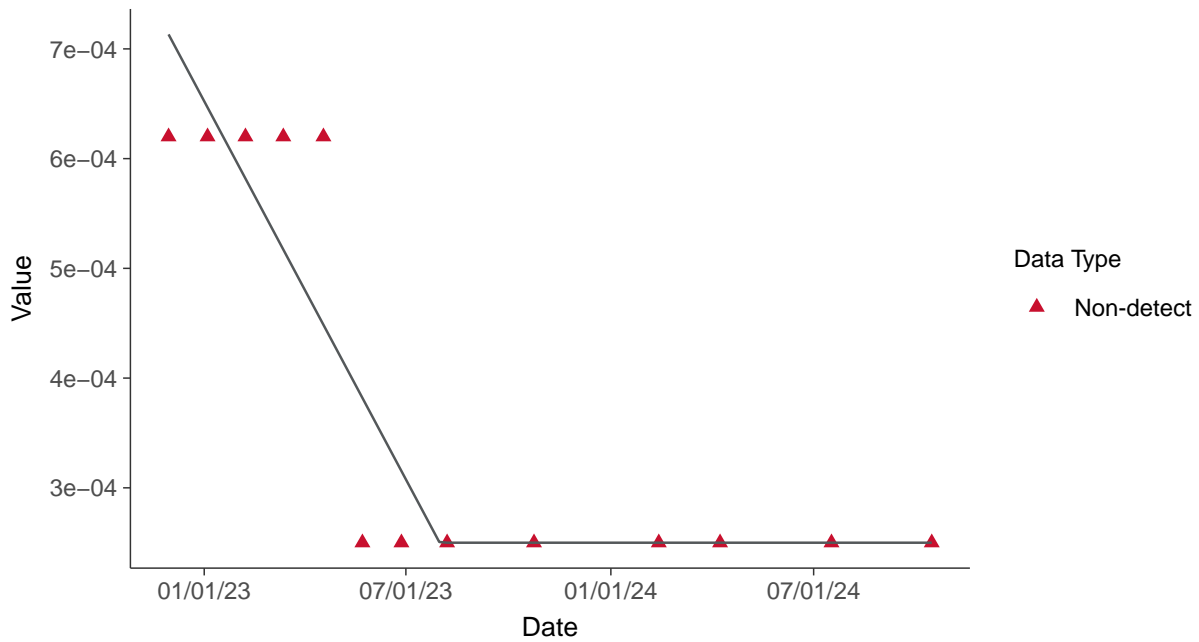
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-07 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-07 (mg/L)



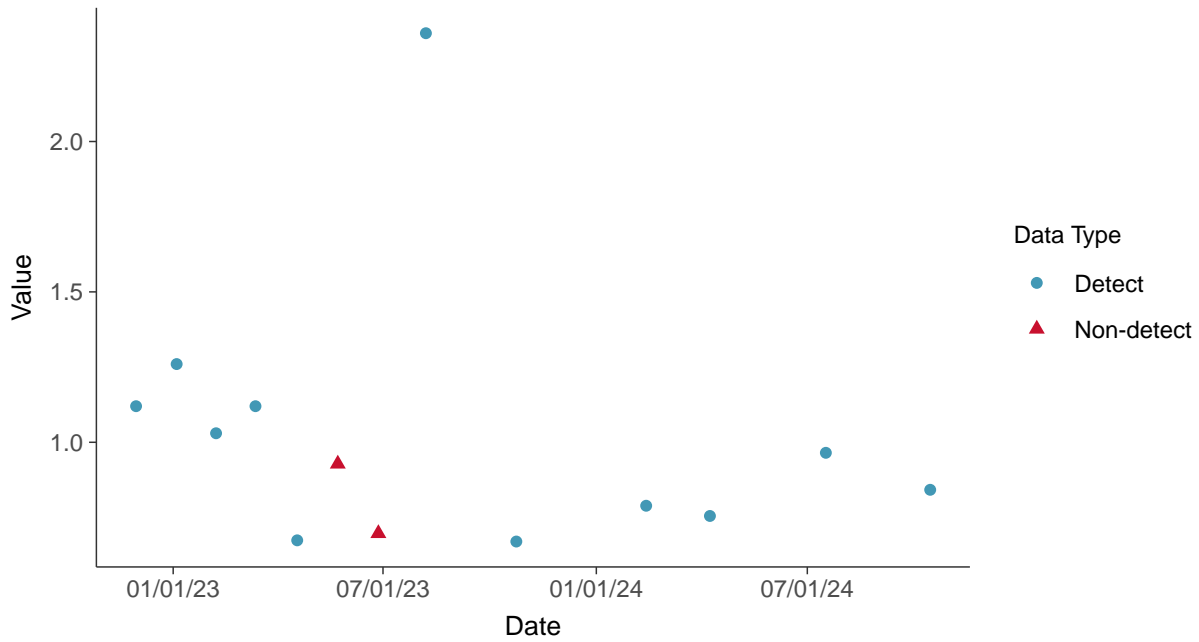


Appendix IV: Radium 226 and 228, MW-07

ID: 1_17_1_5_121

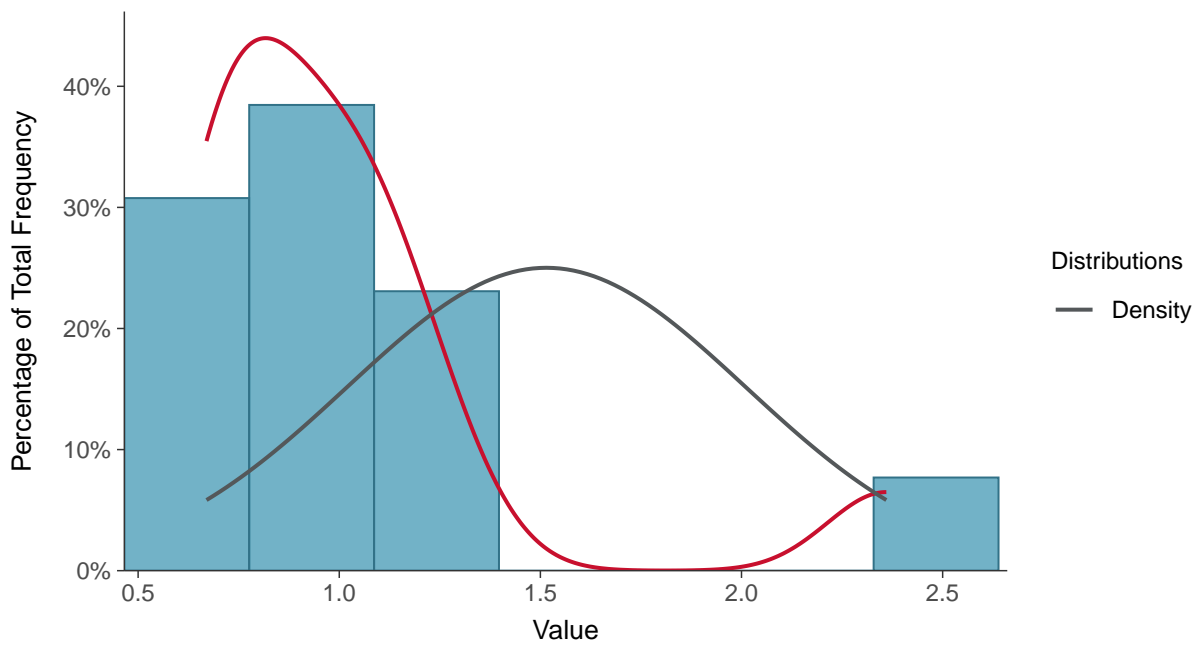
Scatter Plot

Radium 226 and 228, MW-07 (pCi/L)



Histogram

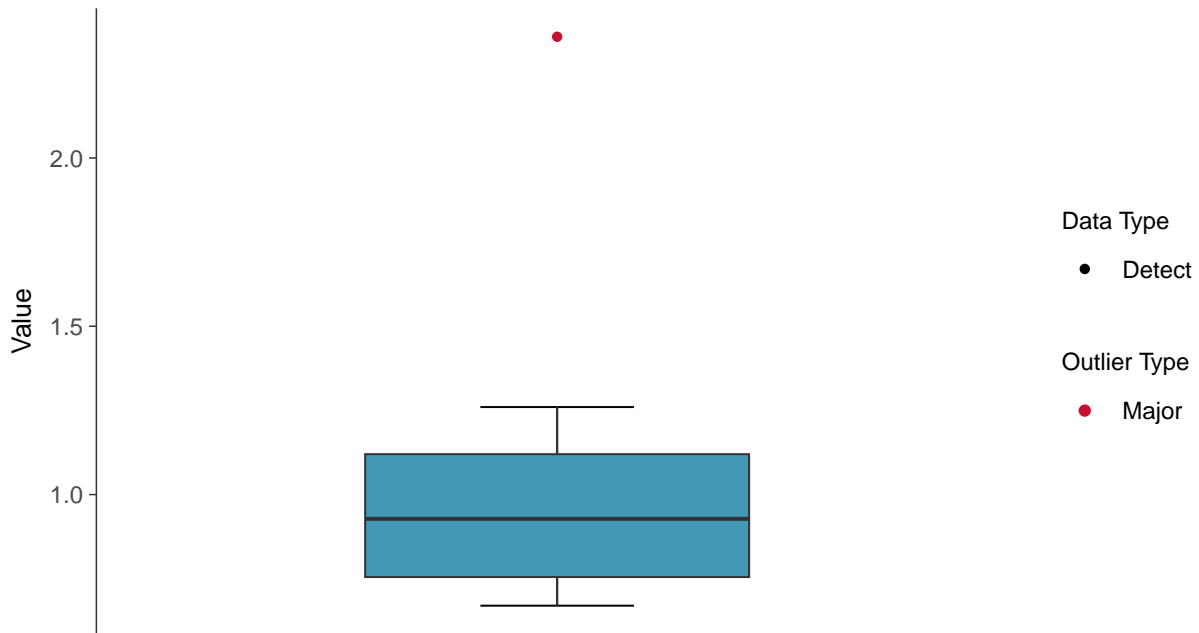
Radium 226 and 228, MW-07 (pCi/L)





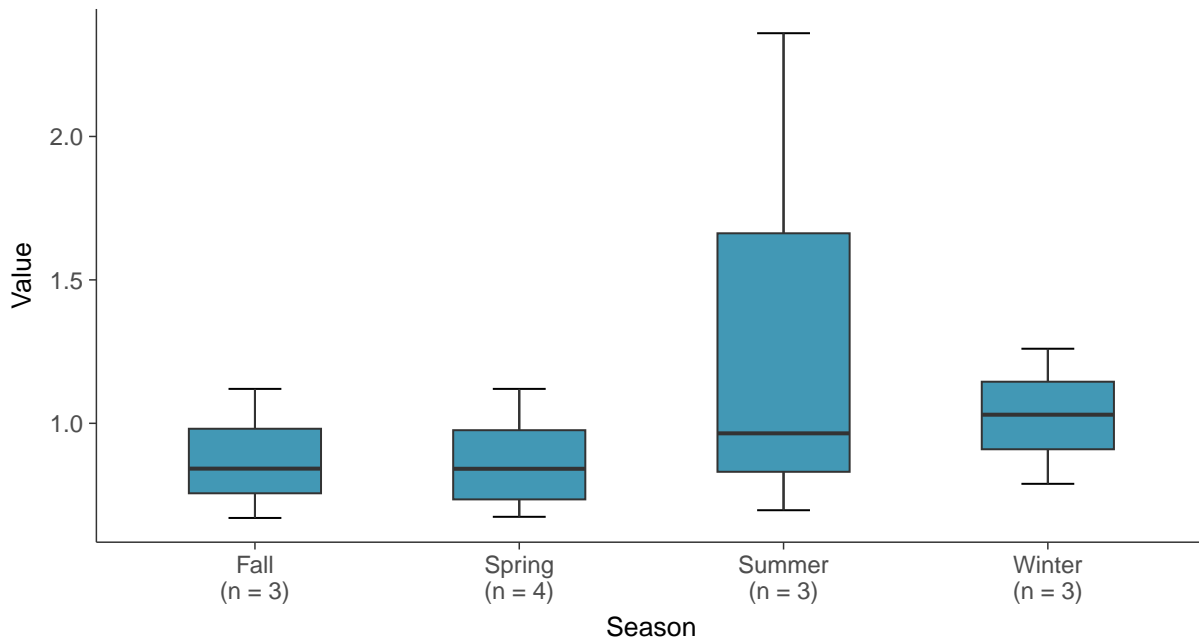
Boxplot

Radium 226 and 228, MW-07 (pCi/L)



Boxplot by Season

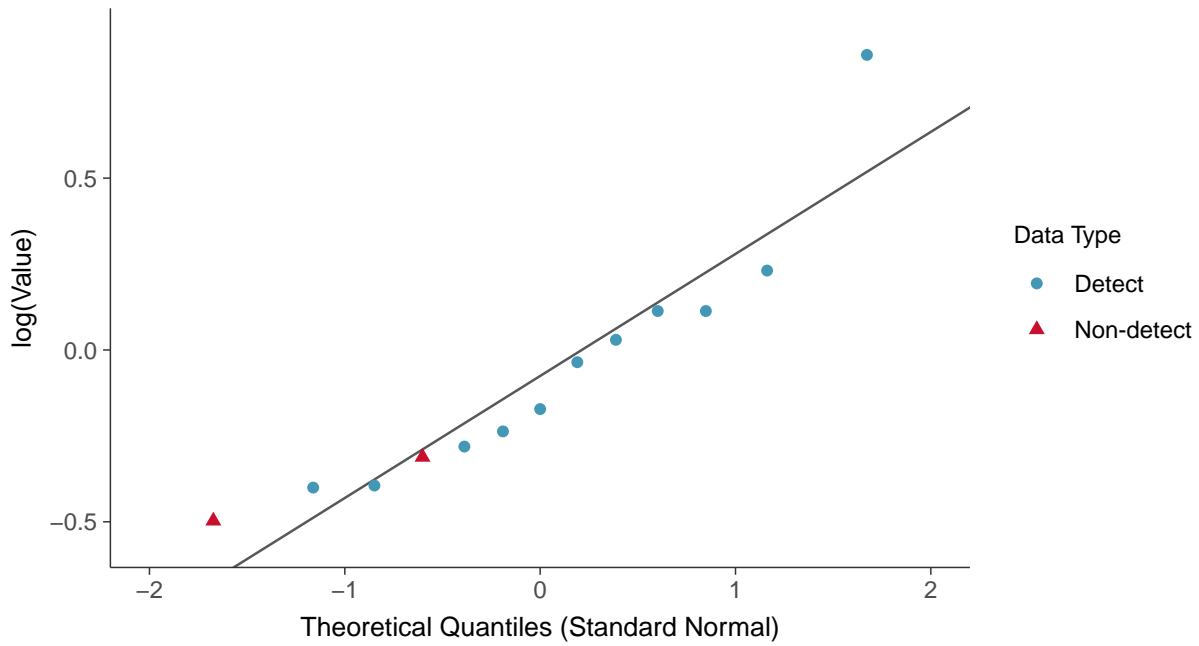
Radium 226 and 228, MW-07 (pCi/L)





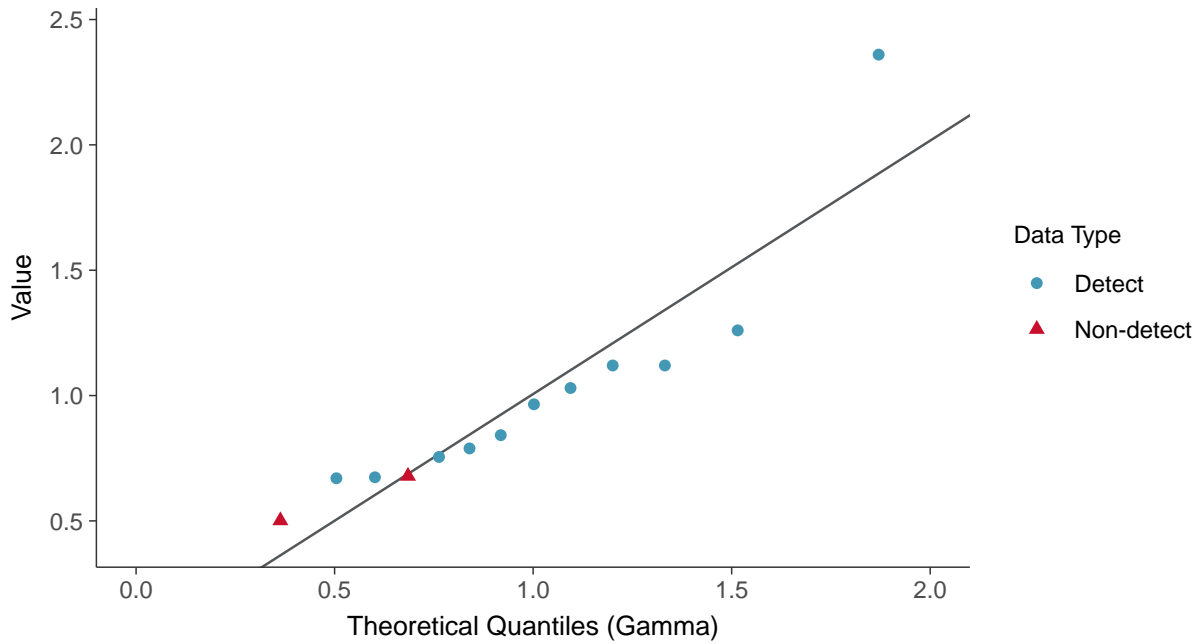
Lognormal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-07 (pCi/L)



Gamma Q-Q plot using ROS Imputed Estimates

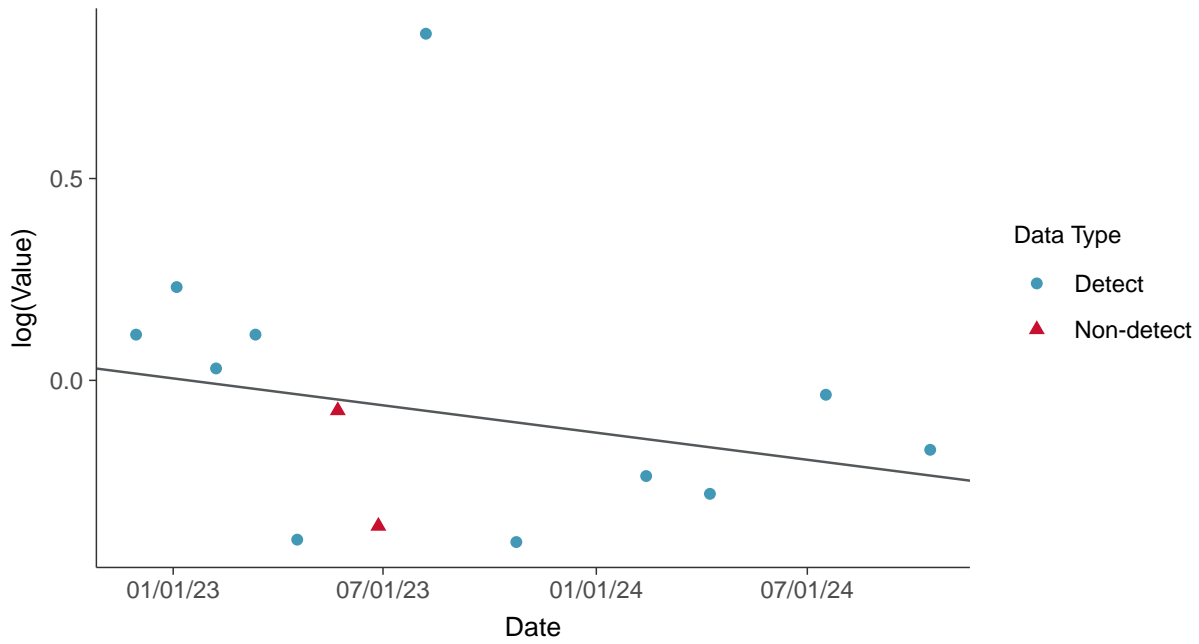
Radium 226 and 228, MW-07 (pCi/L)





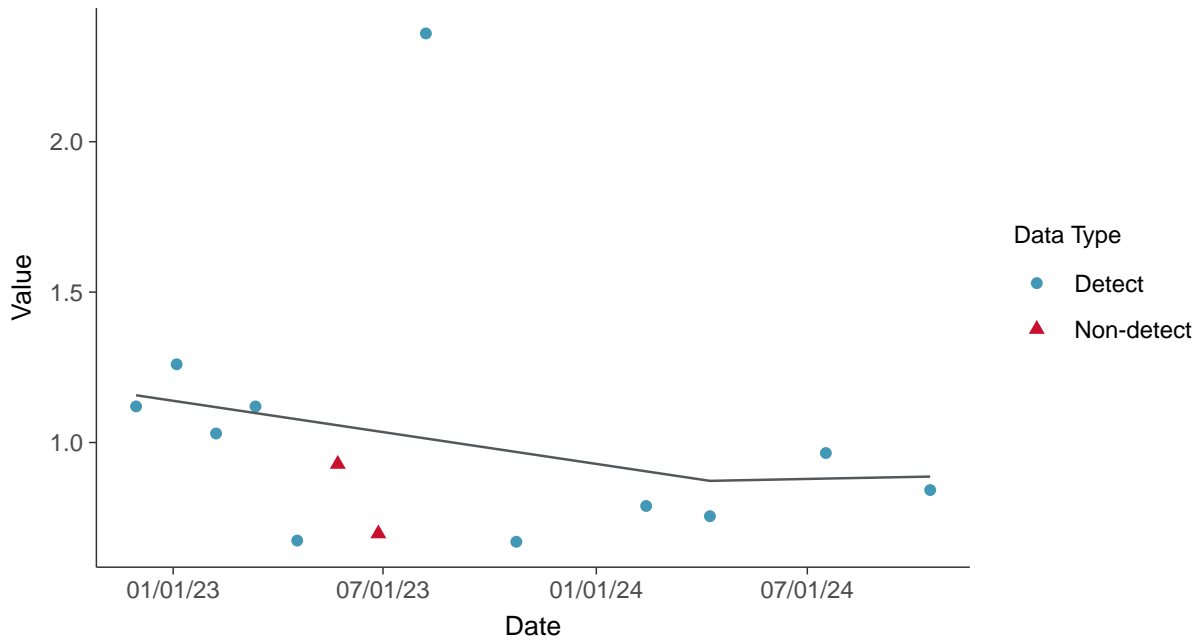
Trend Regression: Lognormal MLE

Radium 226 and 228, MW-07 (pCi/L)



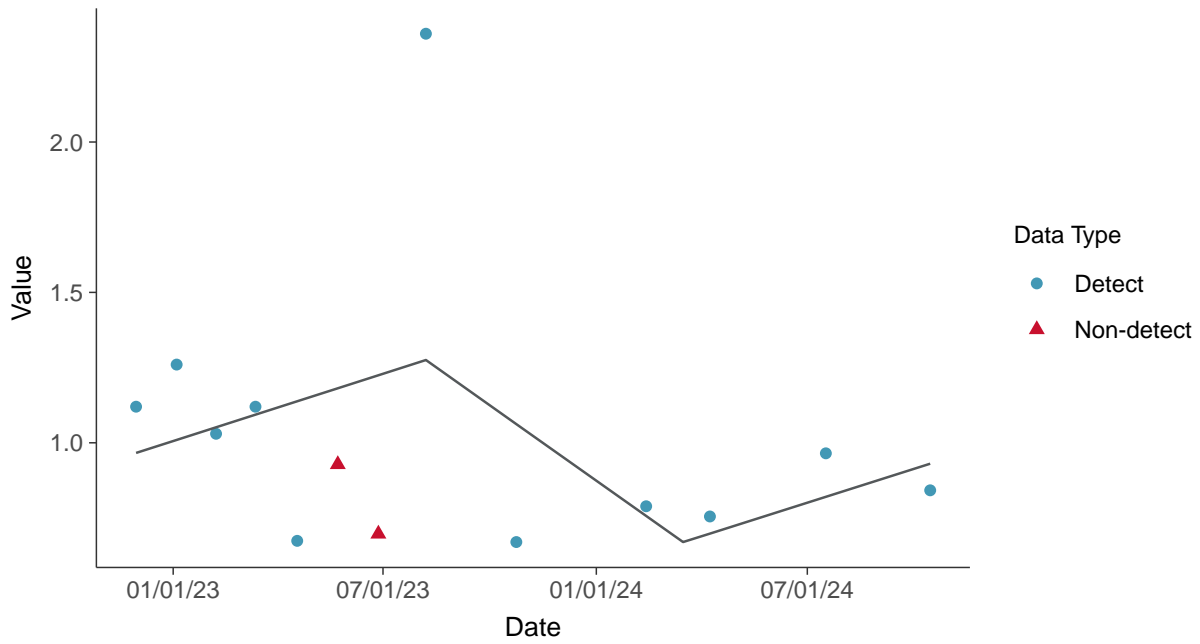
Trend Regression: Piecewise Linear-Linear

Radium 226 and 228, MW-07 (pCi/L)



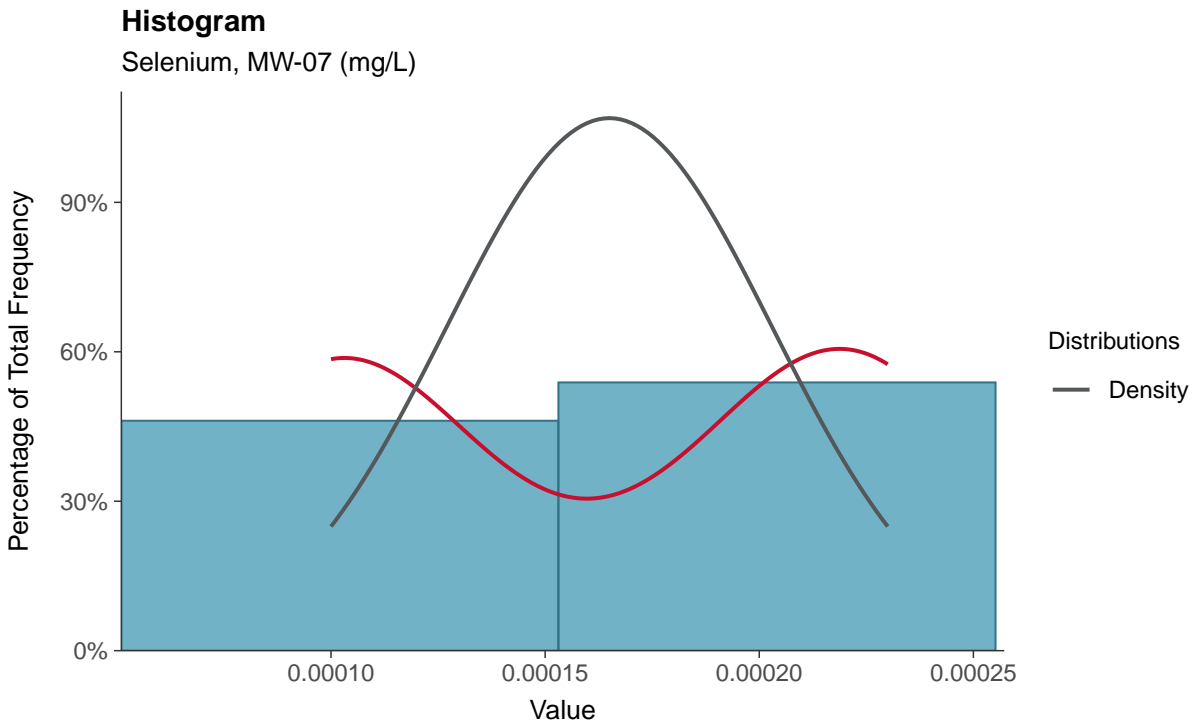
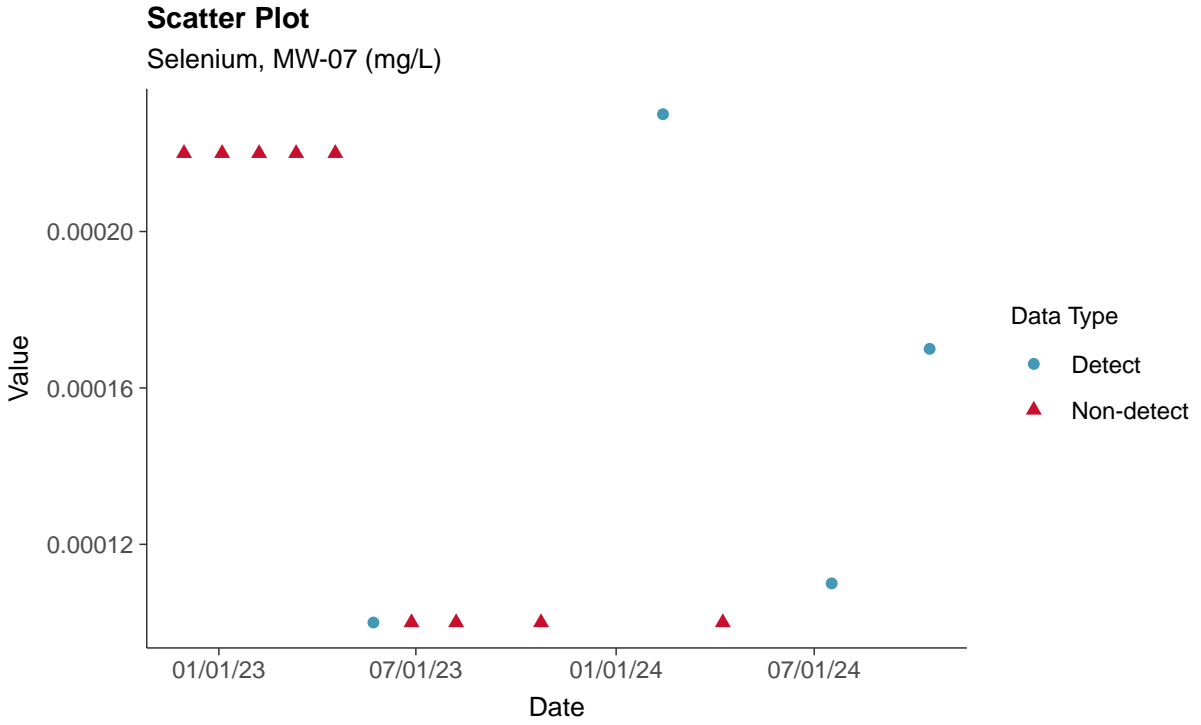


Trend Regression: Piecewise Linear-Linear-Linear
Radium 226 and 228, MW-07 (pCi/L)



Appendix IV: Selenium, MW-07

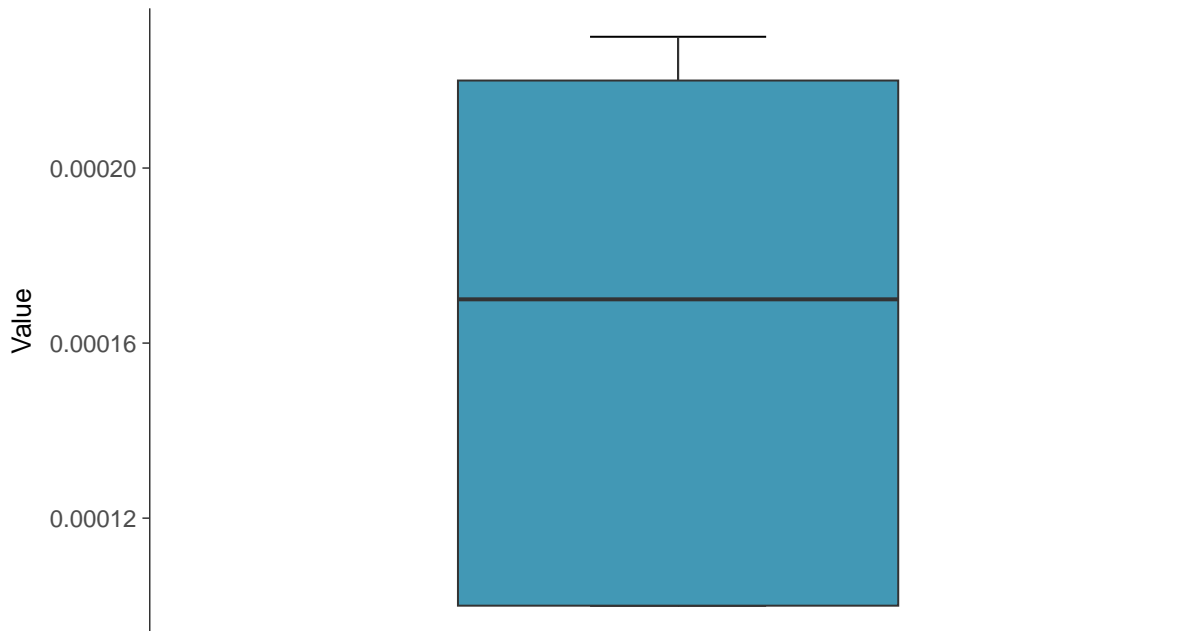
ID: 1_17_1_5_122





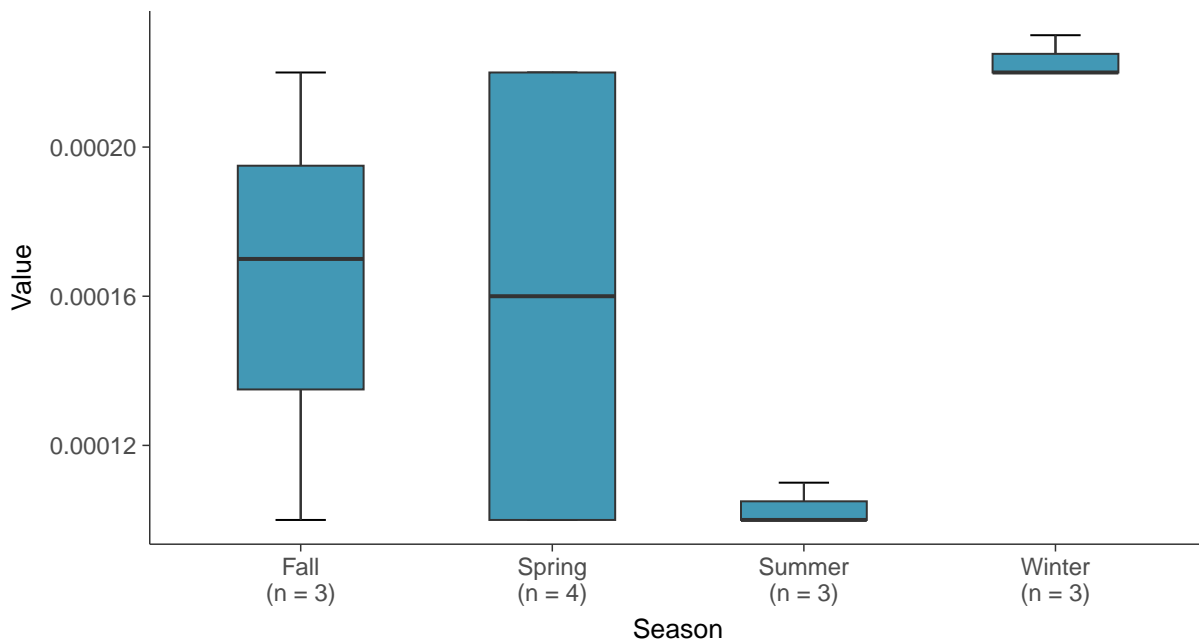
Boxplot

Selenium, MW-07 (mg/L)



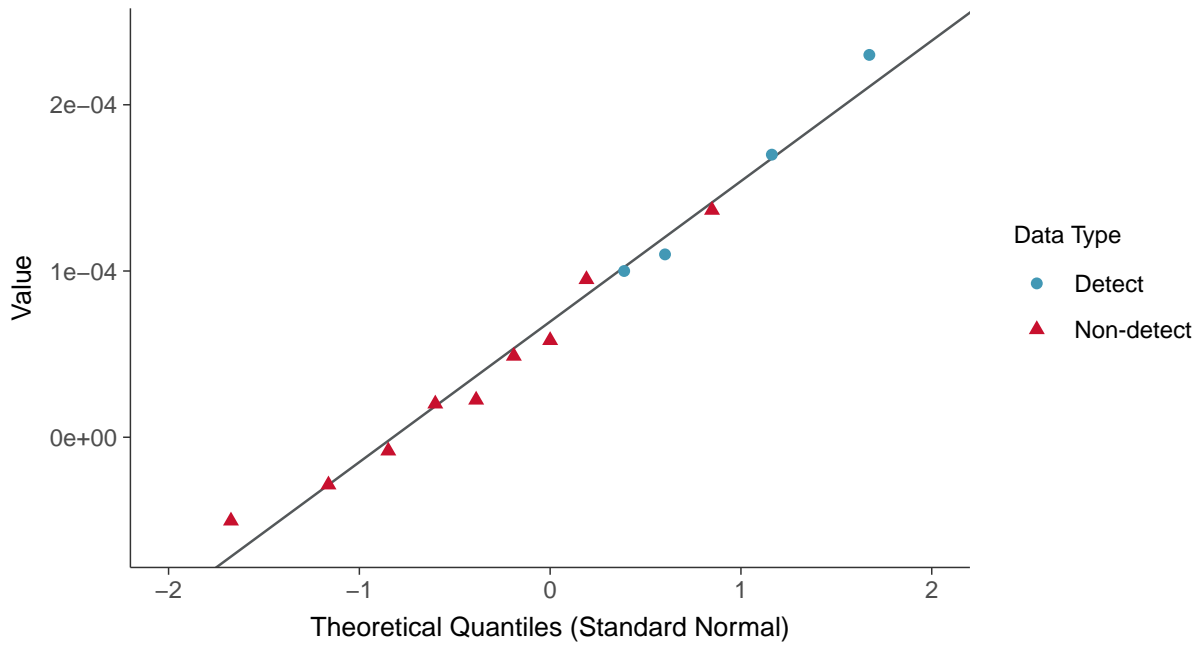
Boxplot by Season

Selenium, MW-07 (mg/L)

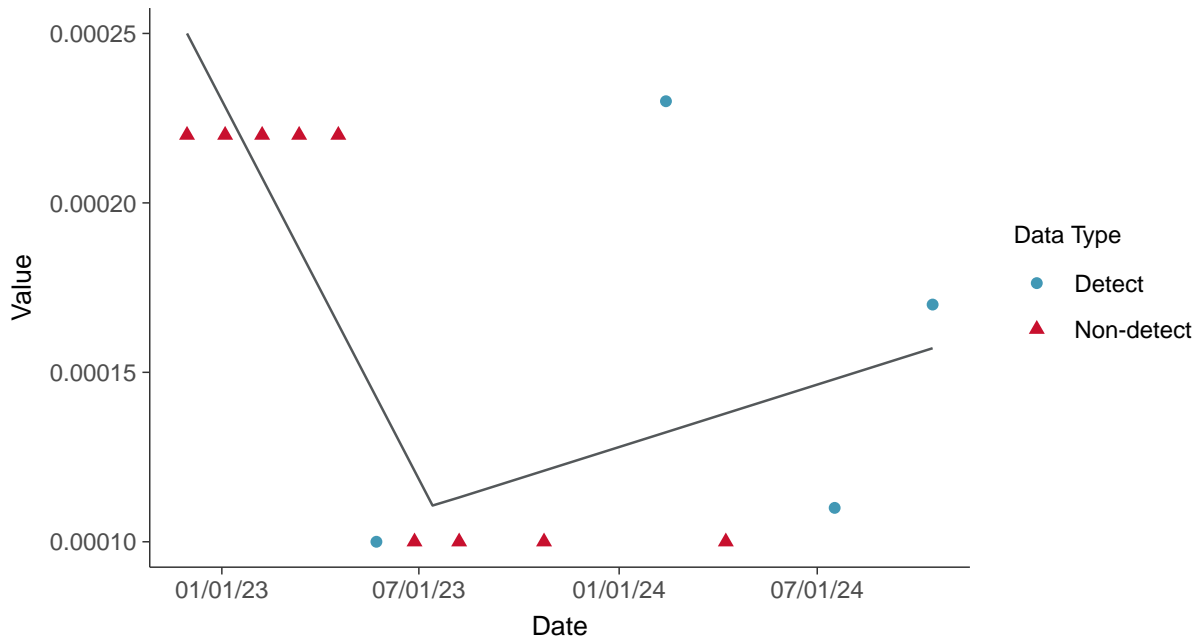




Normal Q-Q plot using ROS Imputed Estimates
Selenium, MW-07 (mg/L)

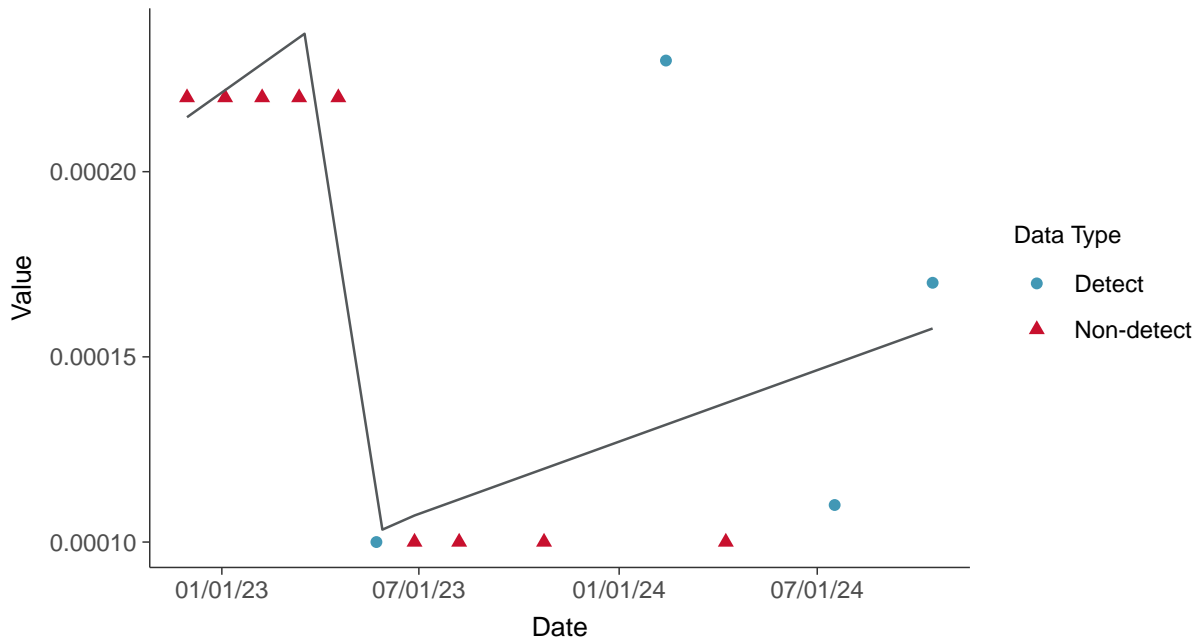


Trend Regression: Piecewise Linear-Linear
Selenium, MW-07 (mg/L)





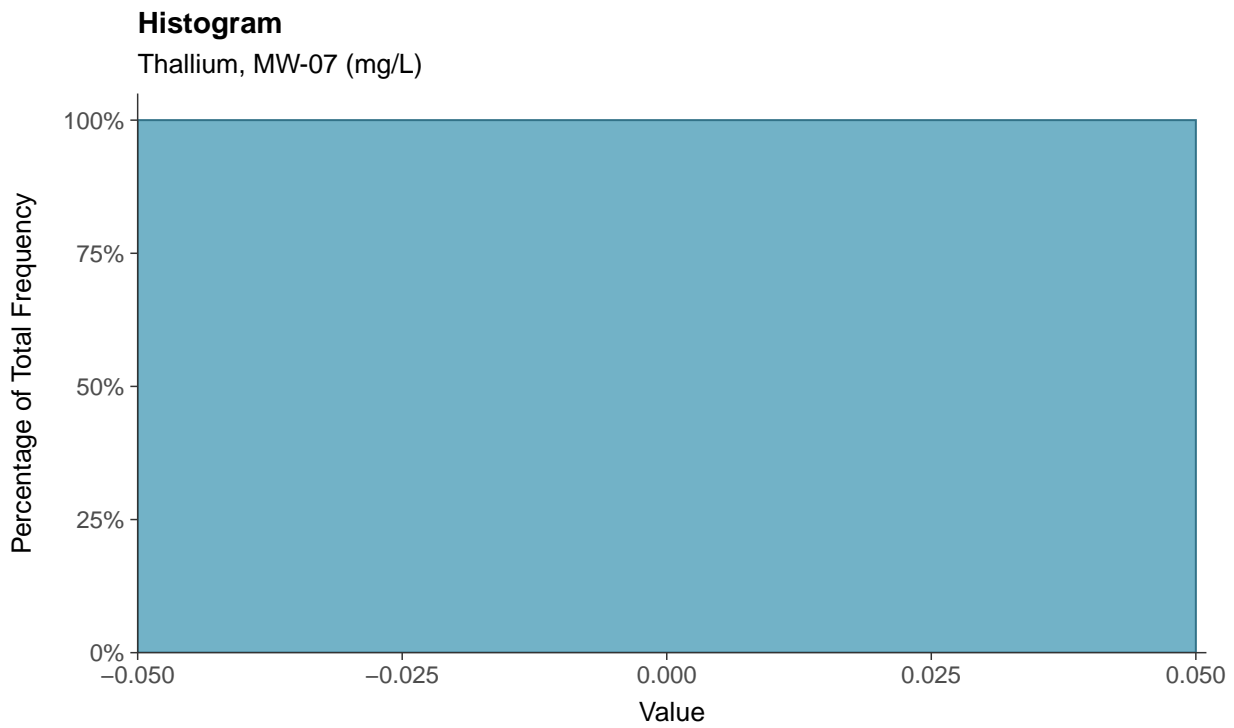
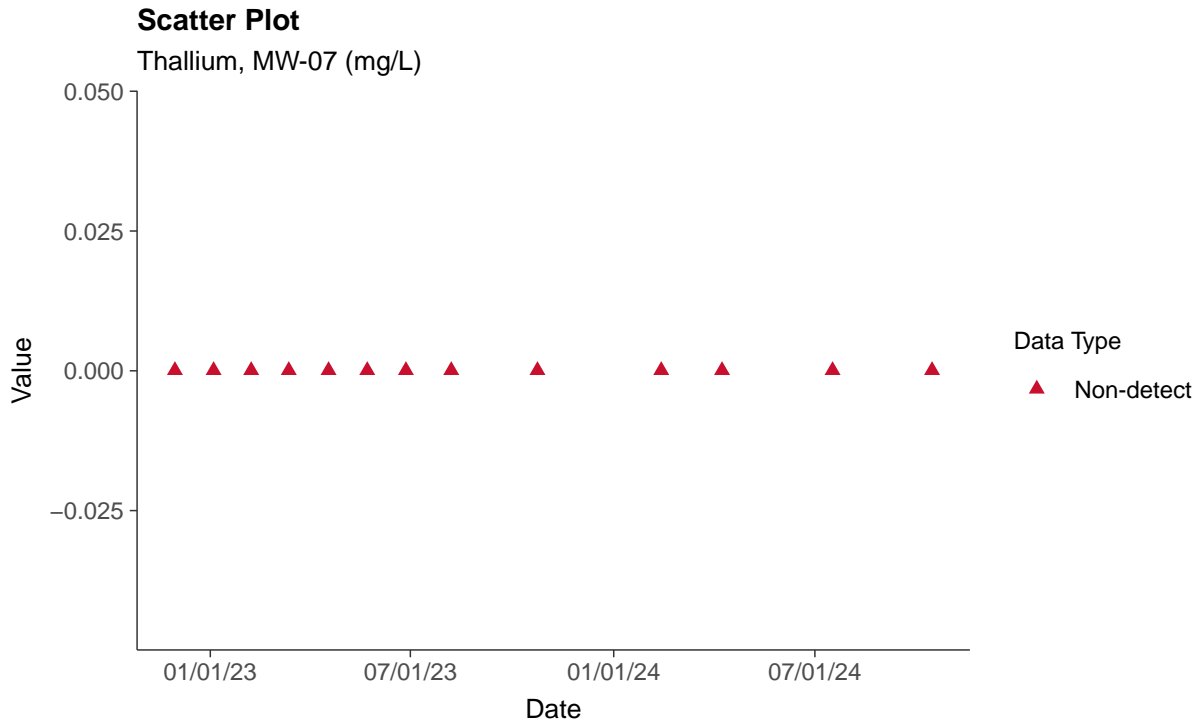
Trend Regression: Piecewise Linear-Linear-Linear
Selenium, MW-07 (mg/L)





Appendix IV: Thallium, MW-07

ID: 1_17_1_5_125





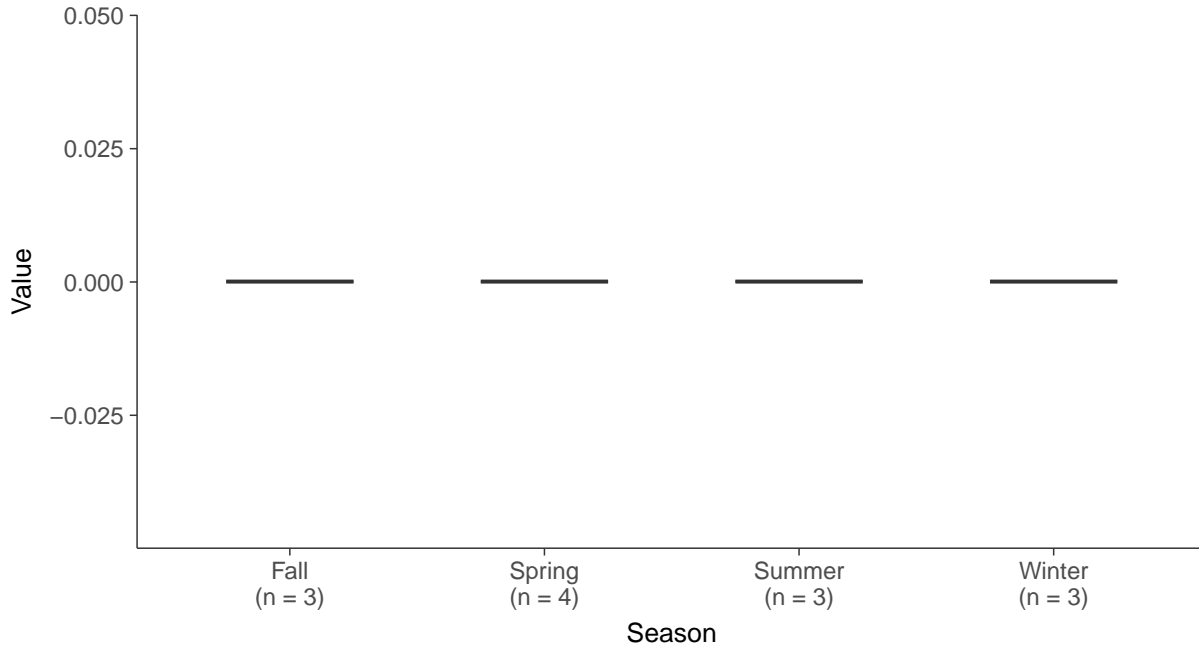
Boxplot

Thallium, MW-07 (mg/L)



Boxplot by Season

Thallium, MW-07 (mg/L)



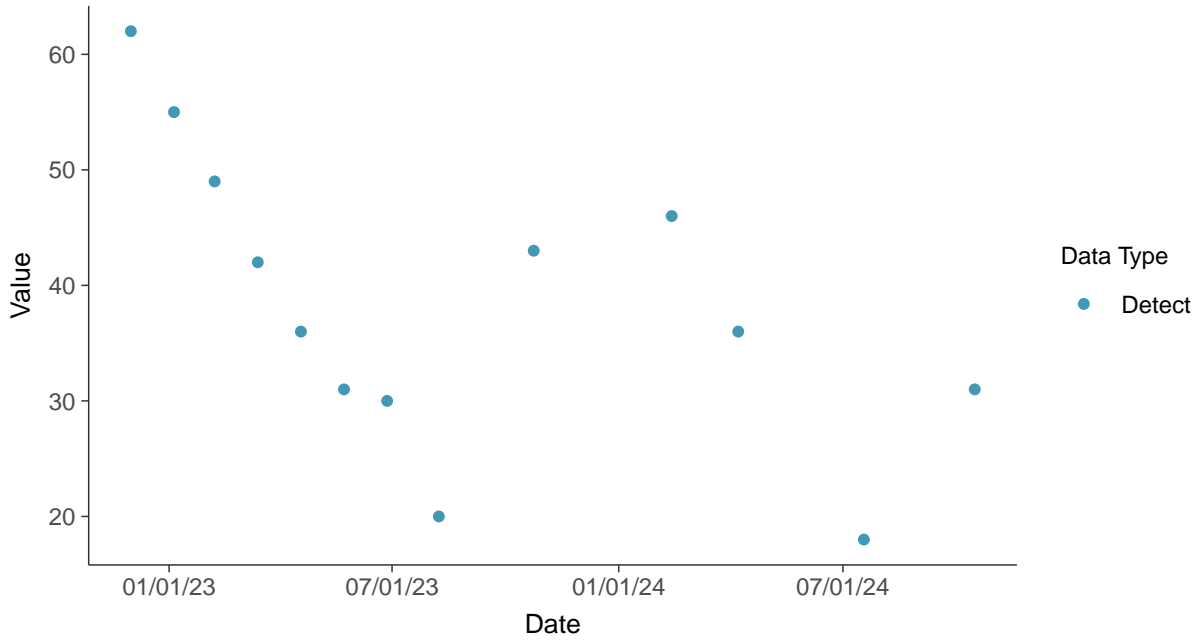


Additional Parameters: Total Suspended Solids, MW-08

ID: 1_18_1_3_127

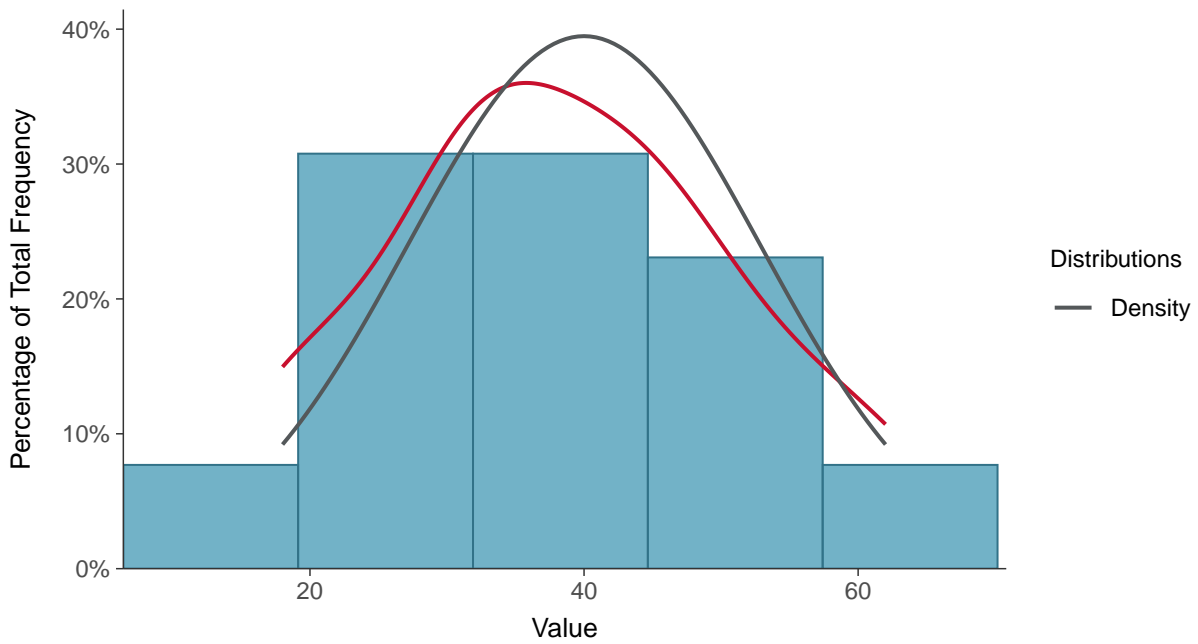
Scatter Plot

Total Suspended Solids, MW-08 (mg/L)



Histogram

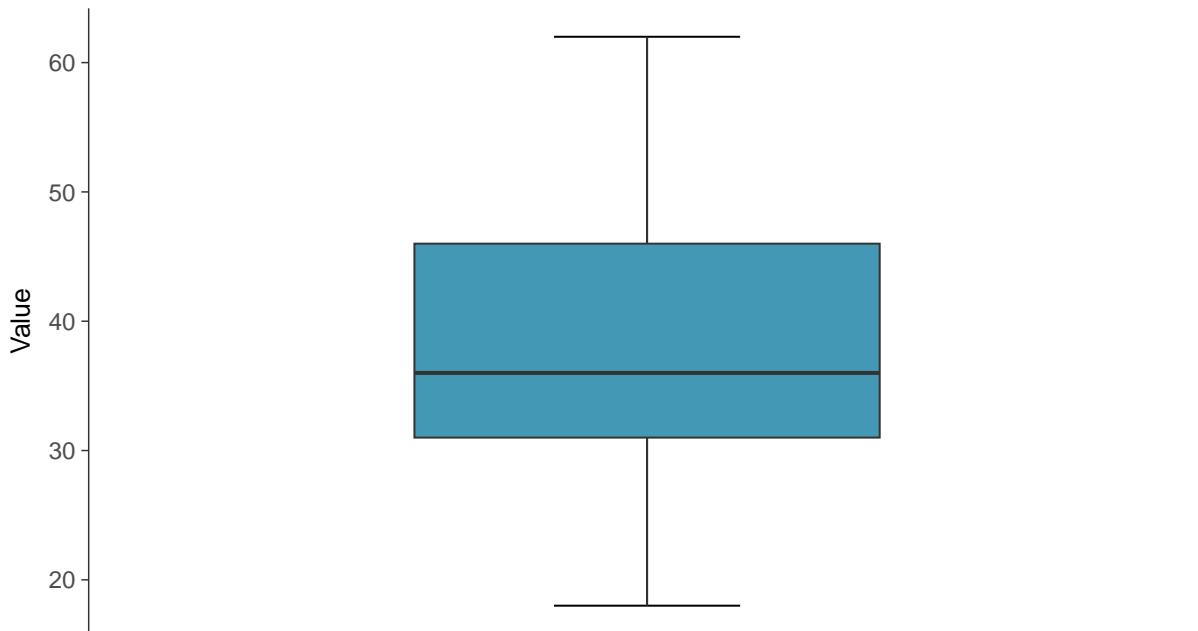
Total Suspended Solids, MW-08 (mg/L)





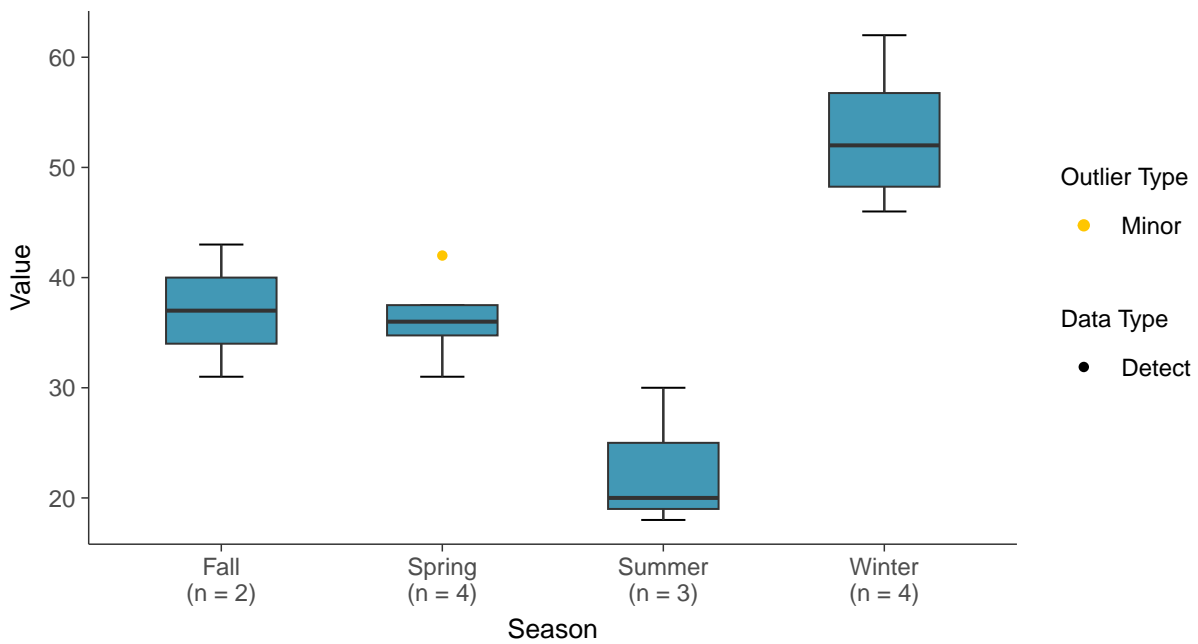
Boxplot

Total Suspended Solids, MW-08 (mg/L)



Boxplot by Season

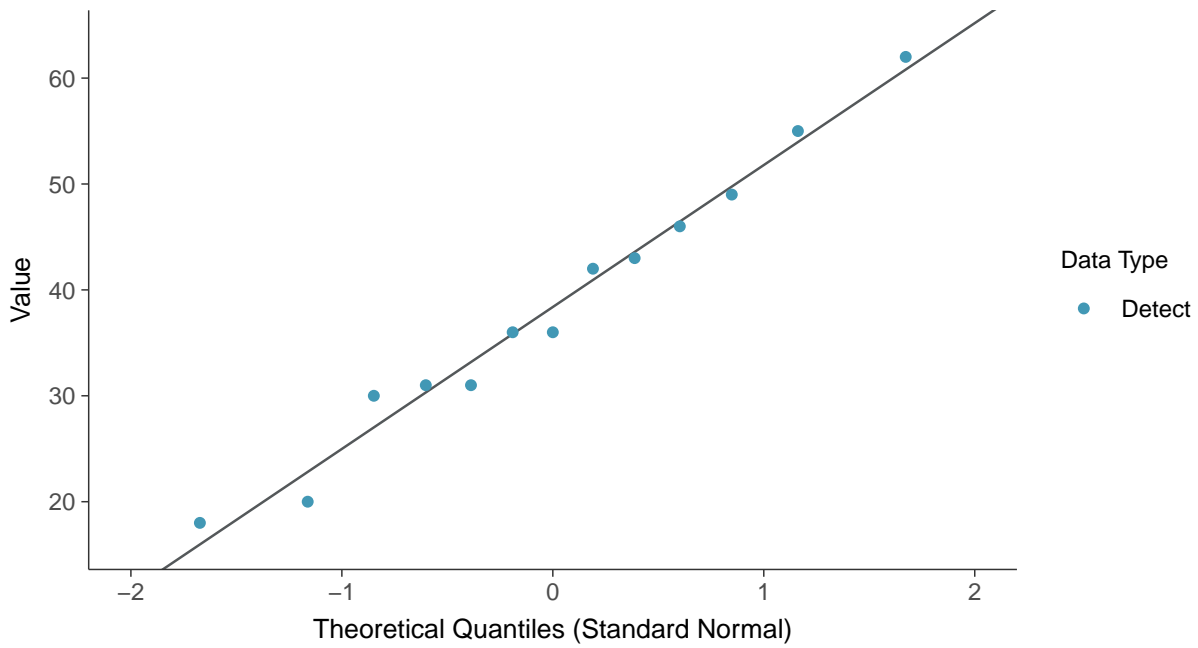
Total Suspended Solids, MW-08 (mg/L)





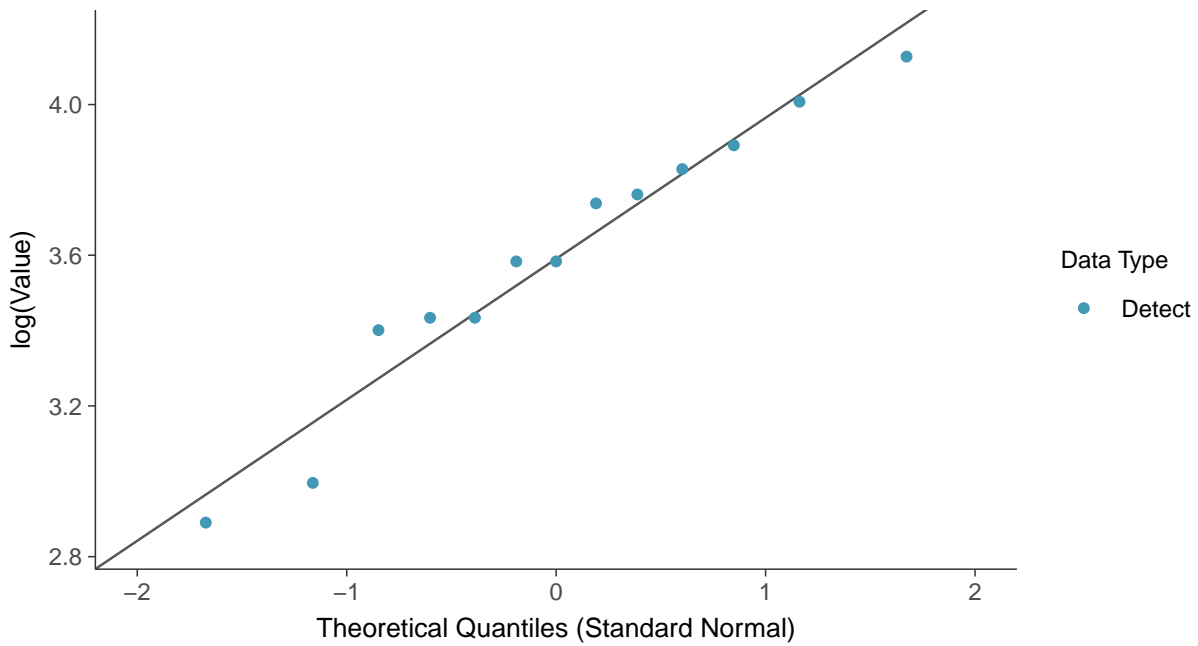
Normal Q-Q plot

Total Suspended Solids, MW-08 (mg/L)



Lognormal Q-Q plot

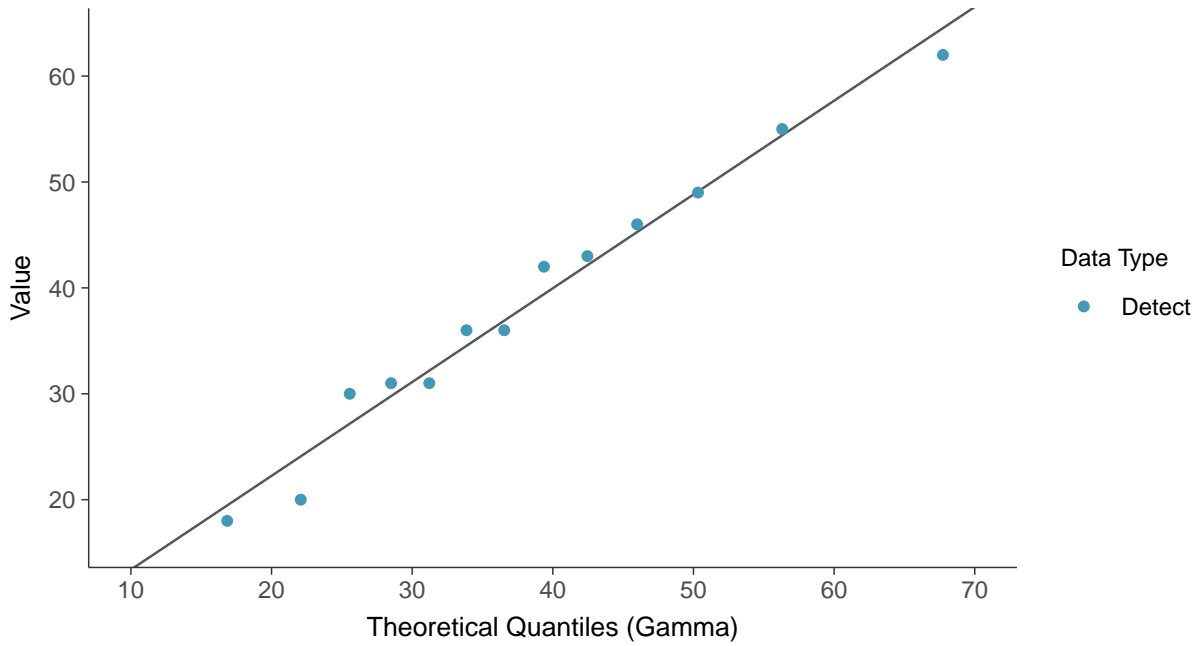
Total Suspended Solids, MW-08 (mg/L)





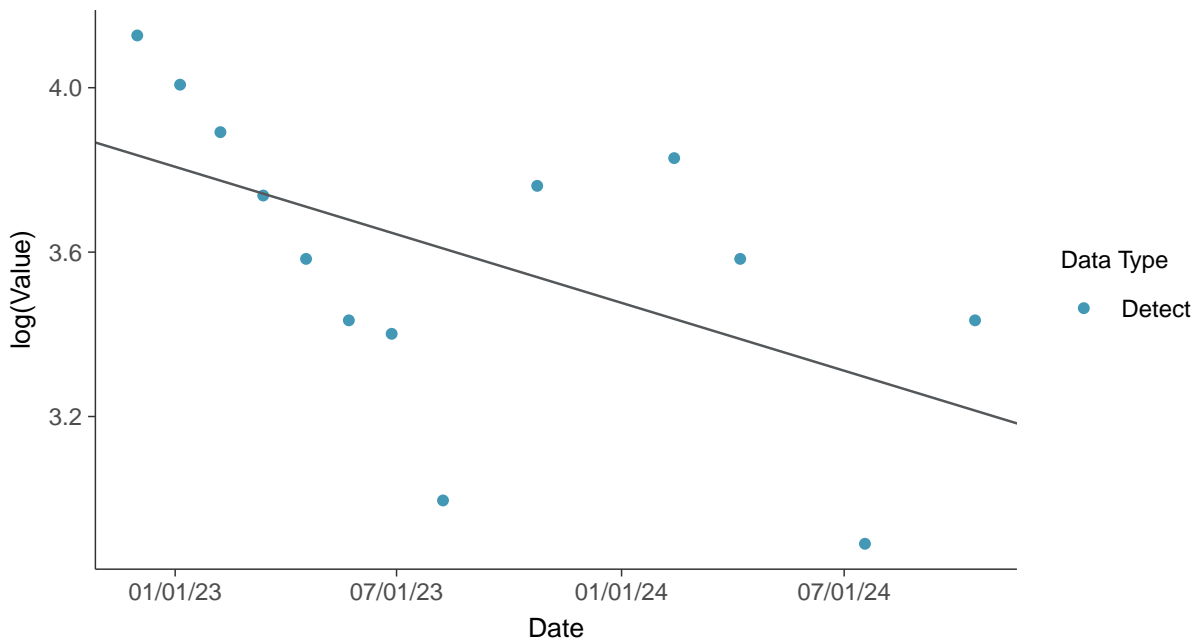
Gamma Q-Q plot

Total Suspended Solids, MW-08 (mg/L)



Trend Regression: Lognormal MLE

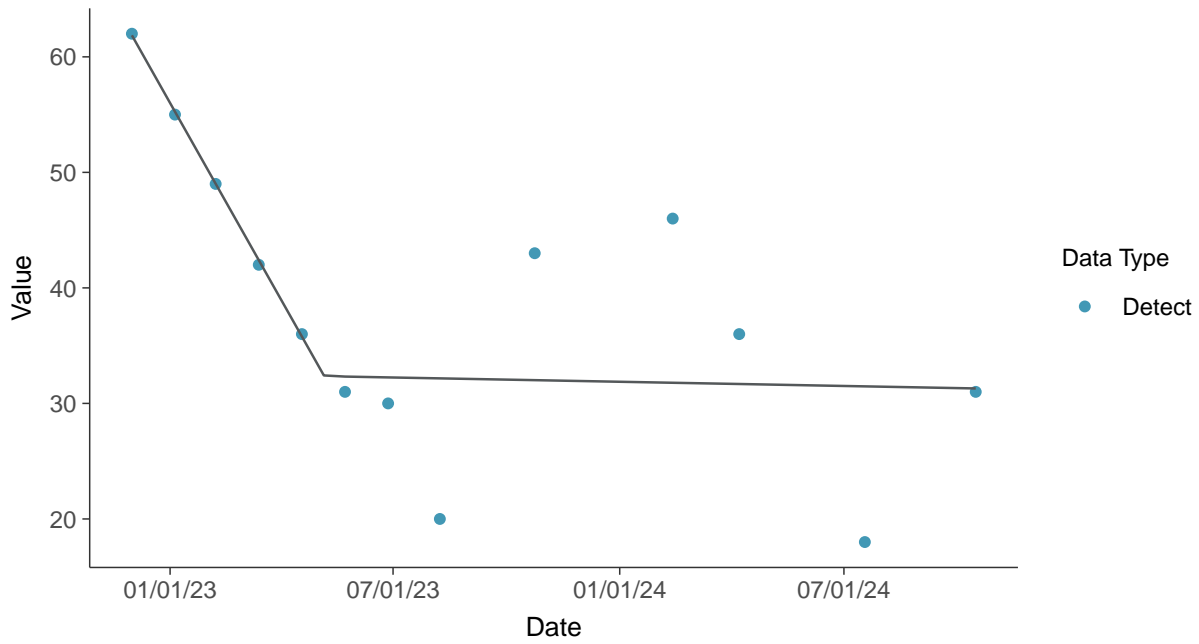
Total Suspended Solids, MW-08 (mg/L)





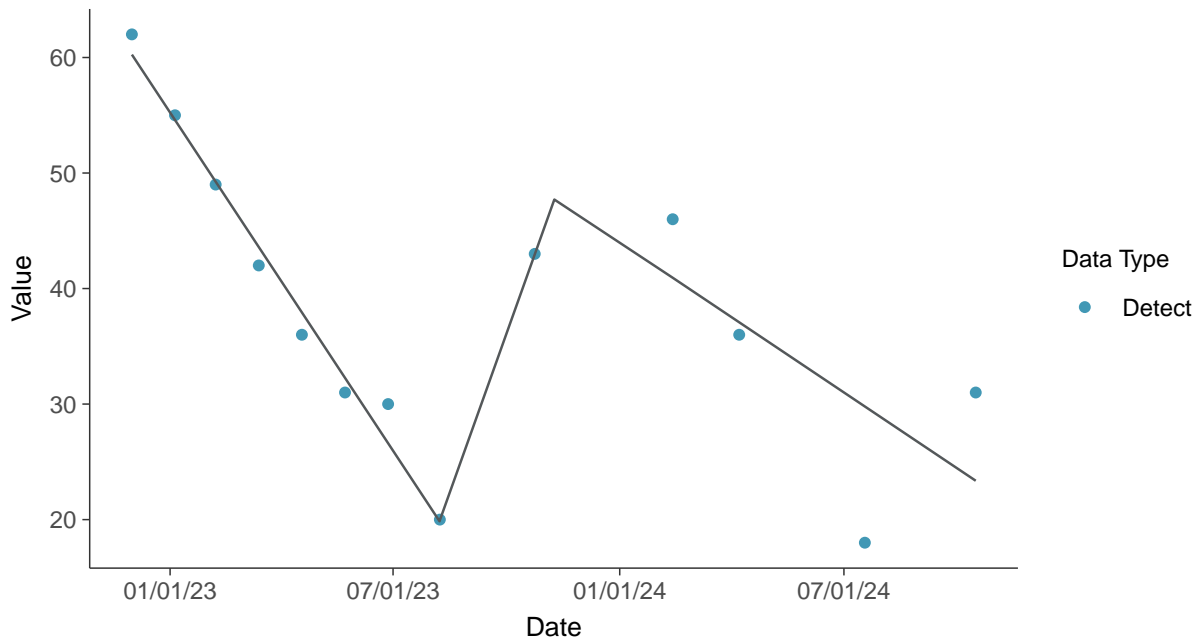
Trend Regression: Piecewise Linear-Linear

Total Suspended Solids, MW-08 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

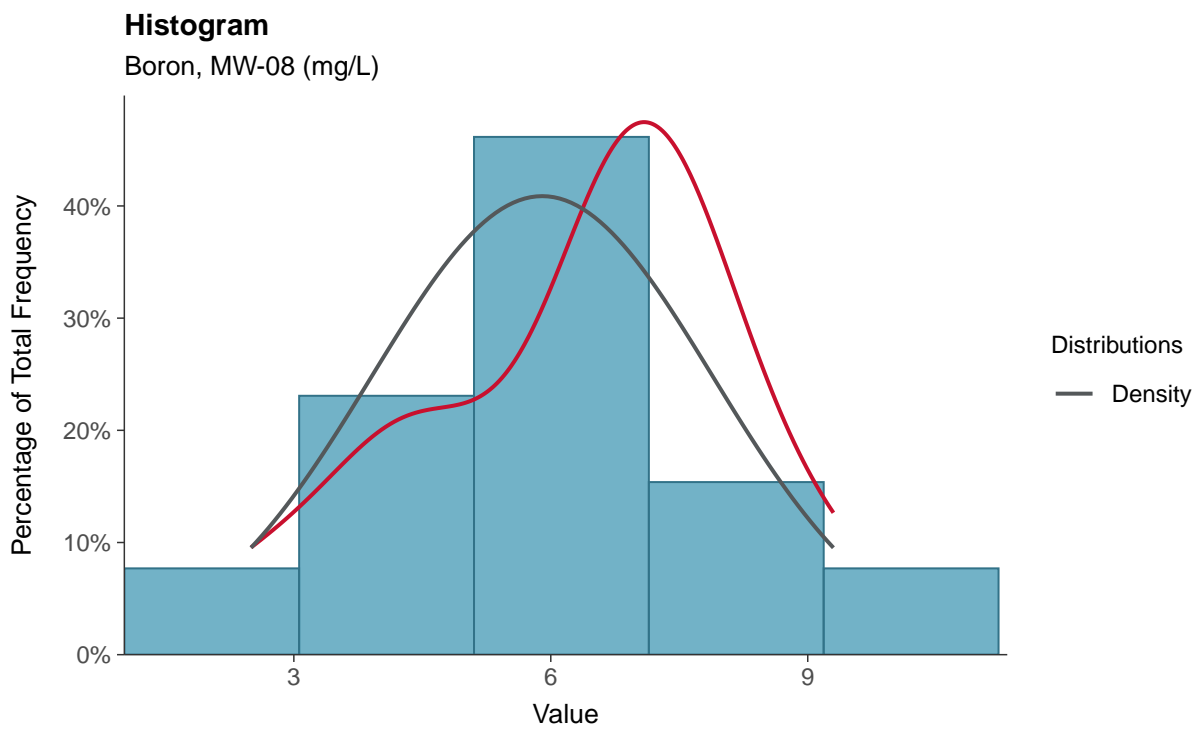
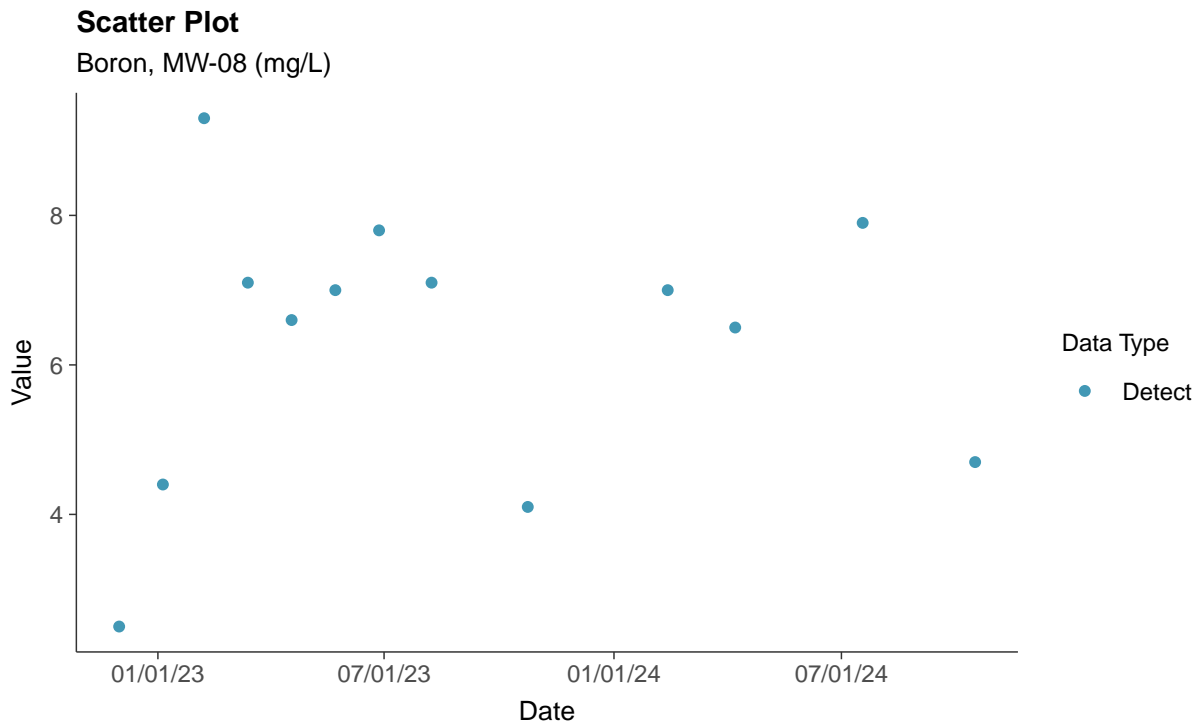
Total Suspended Solids, MW-08 (mg/L)





Appendix III: Boron, MW-08

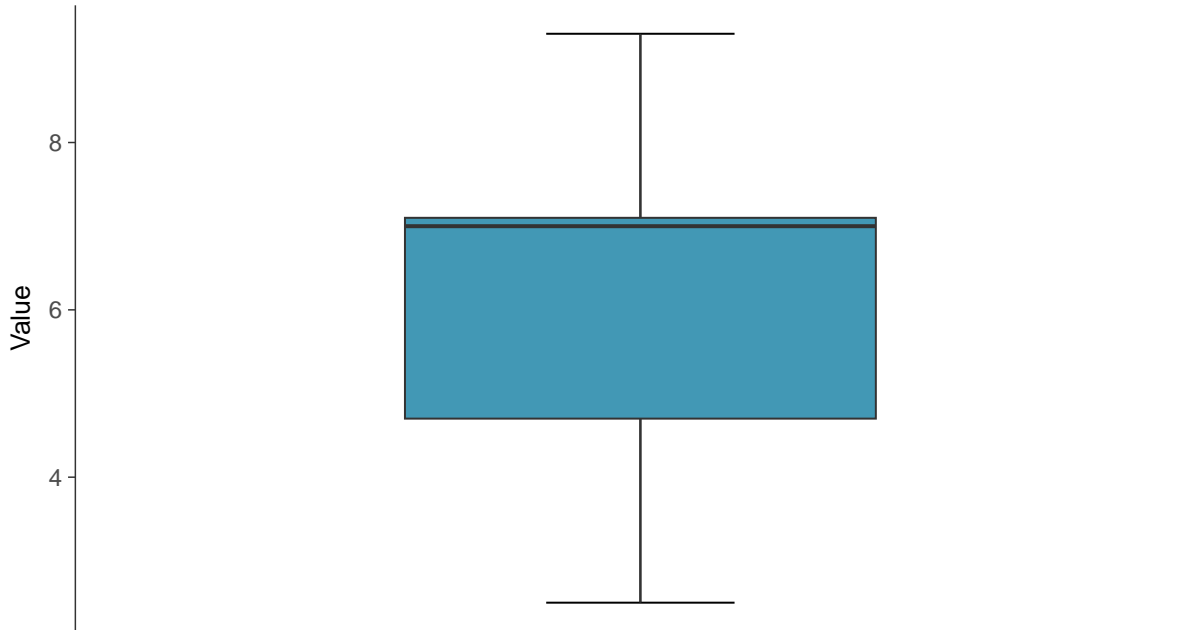
ID: 1_18_1_4_105





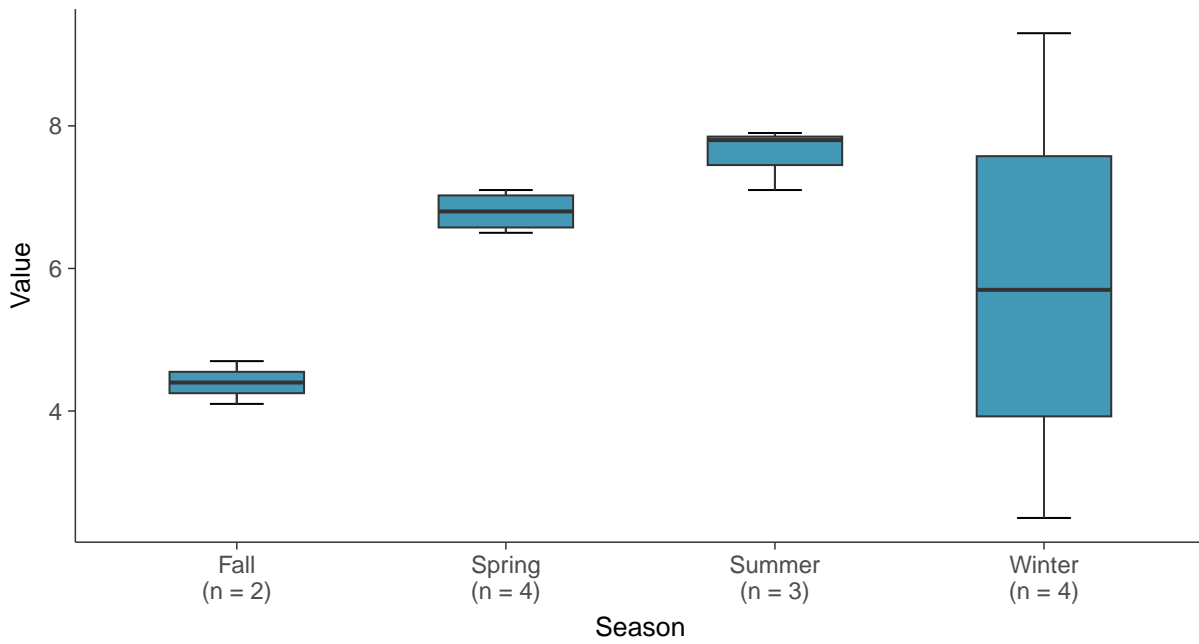
Boxplot

Boron, MW-08 (mg/L)



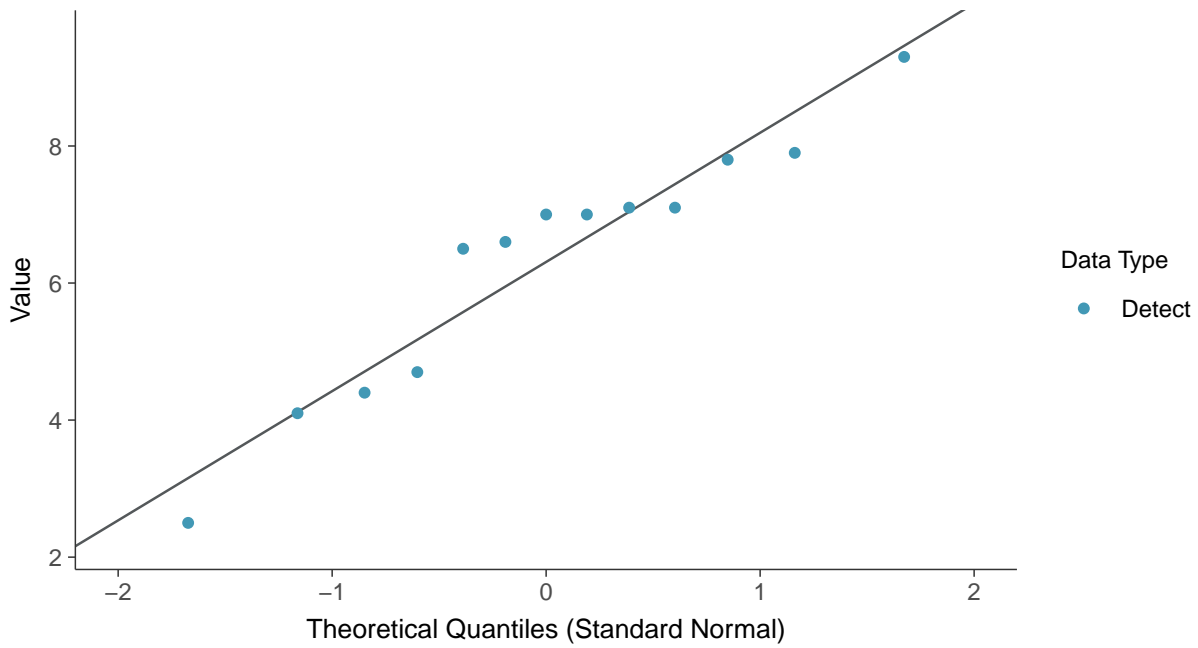
Boxplot by Season

Boron, MW-08 (mg/L)

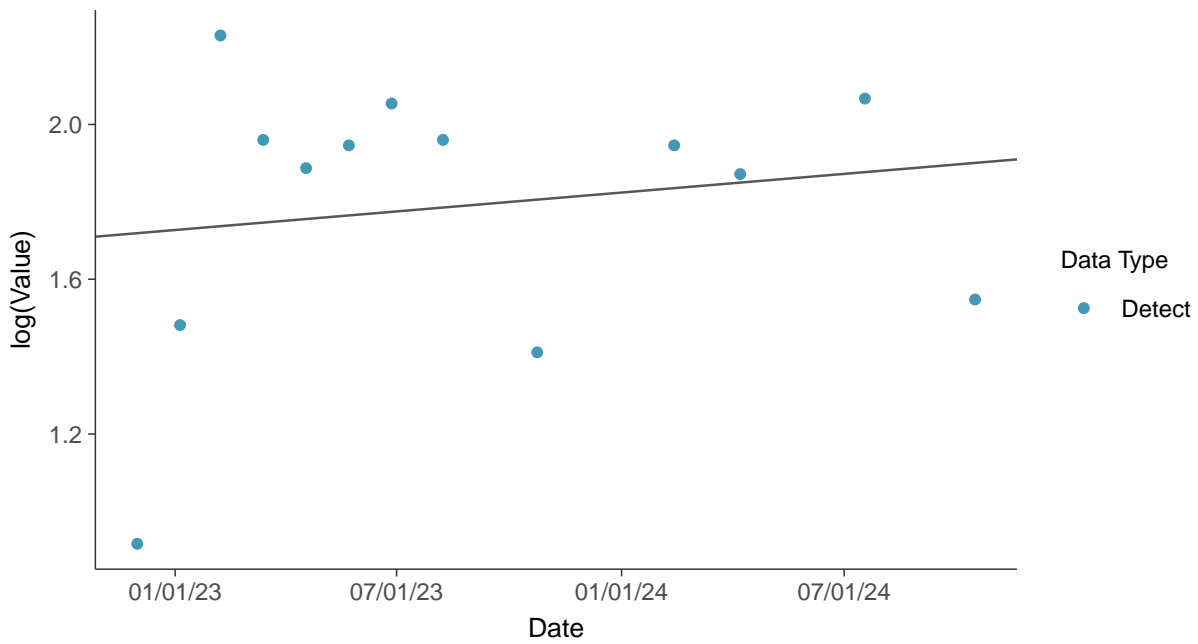




Normal Q-Q plot
Boron, MW-08 (mg/L)



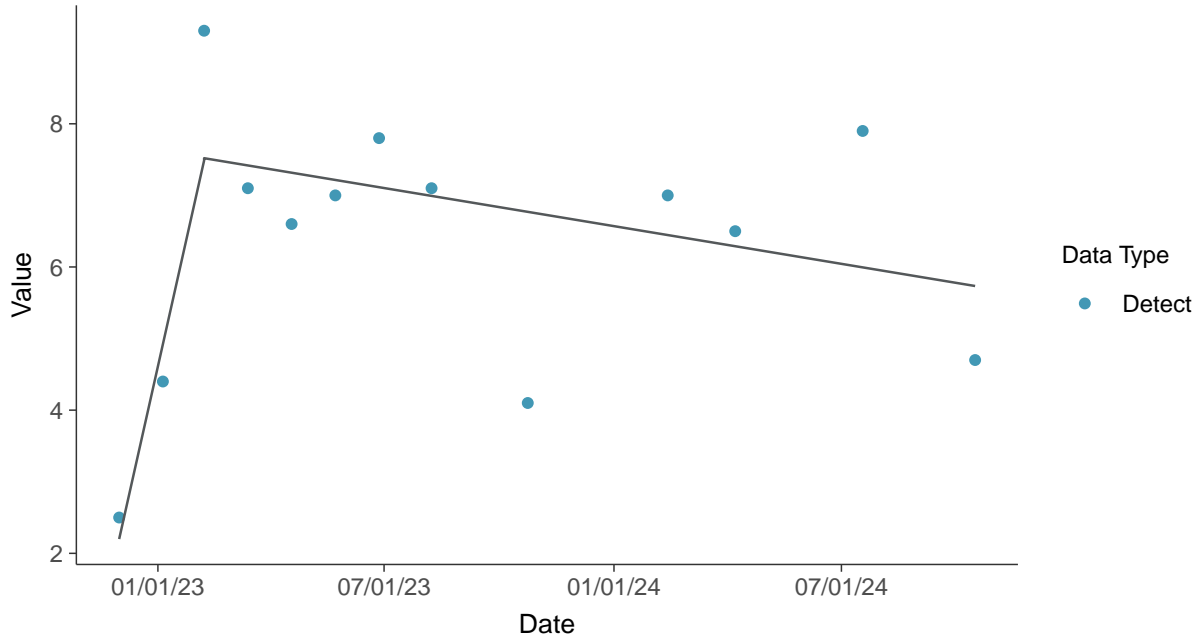
Trend Regression: Lognormal MLE
Boron, MW-08 (mg/L)





Trend Regression: Piecewise Linear-Linear

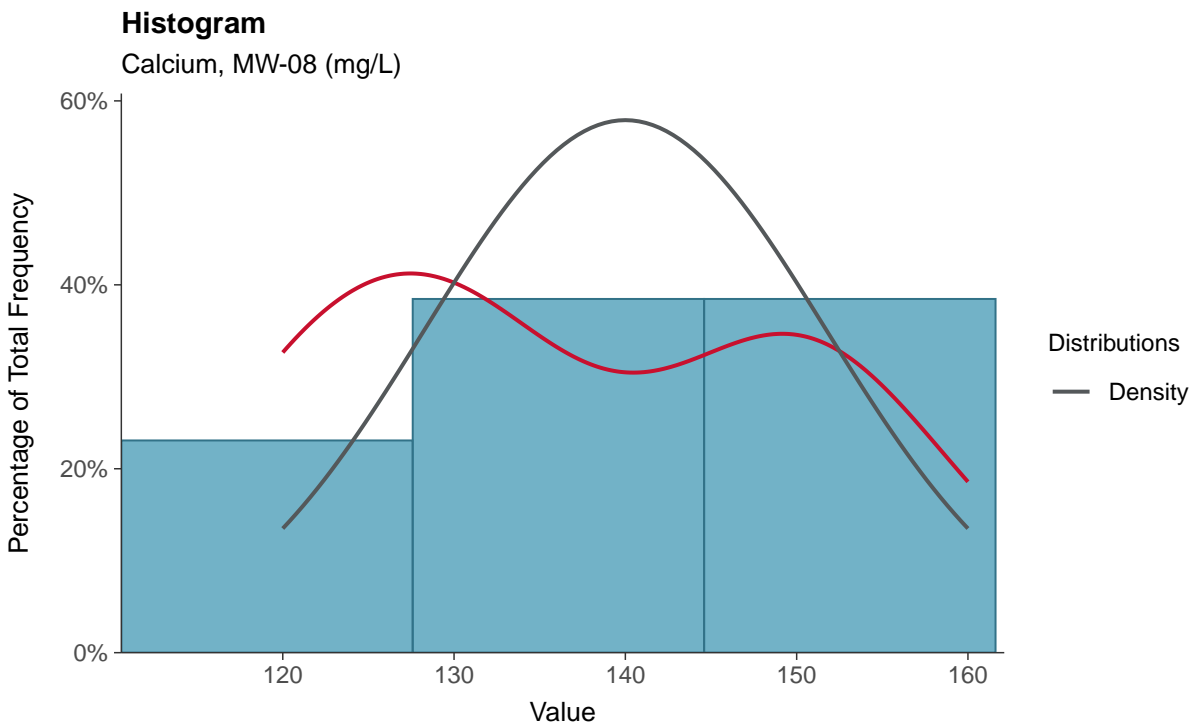
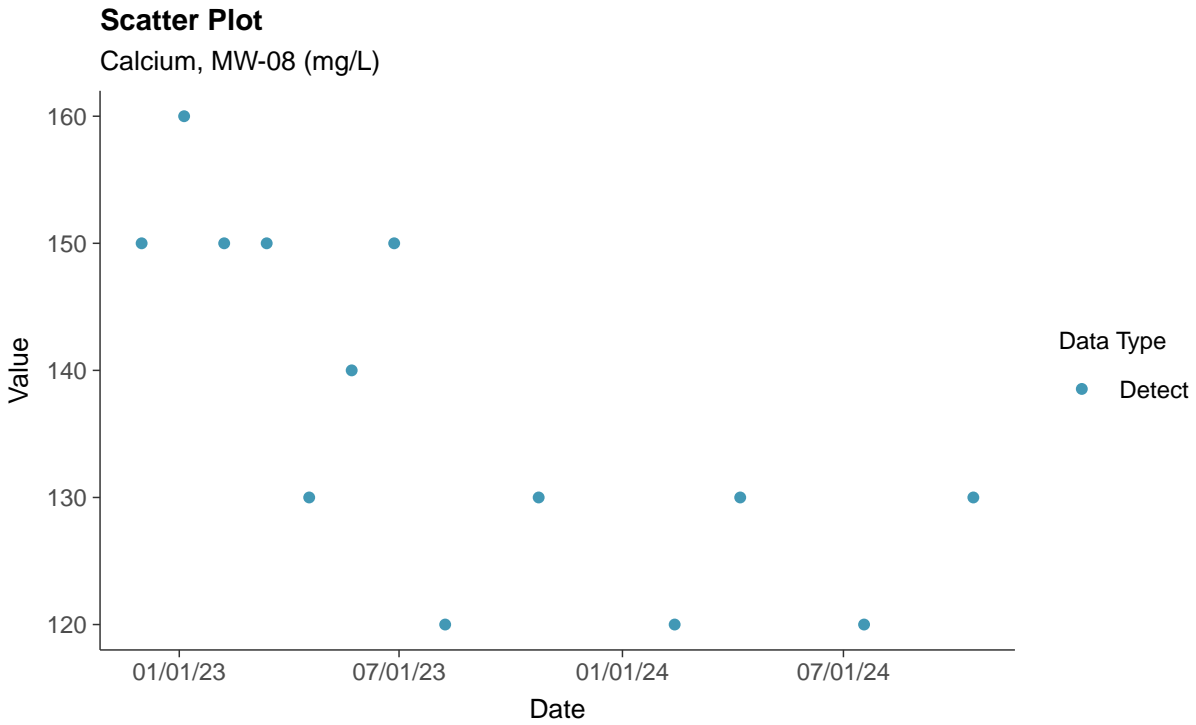
Boron, MW-08 (mg/L)





Appendix III: Calcium, MW-08

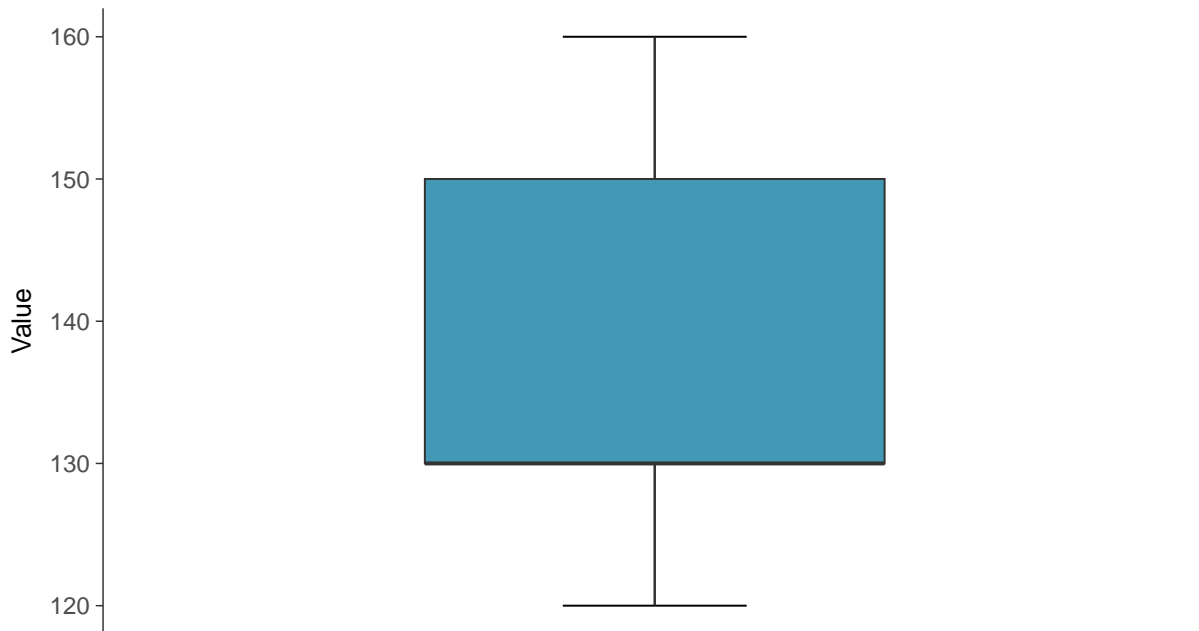
ID: 1_18_1_4_107





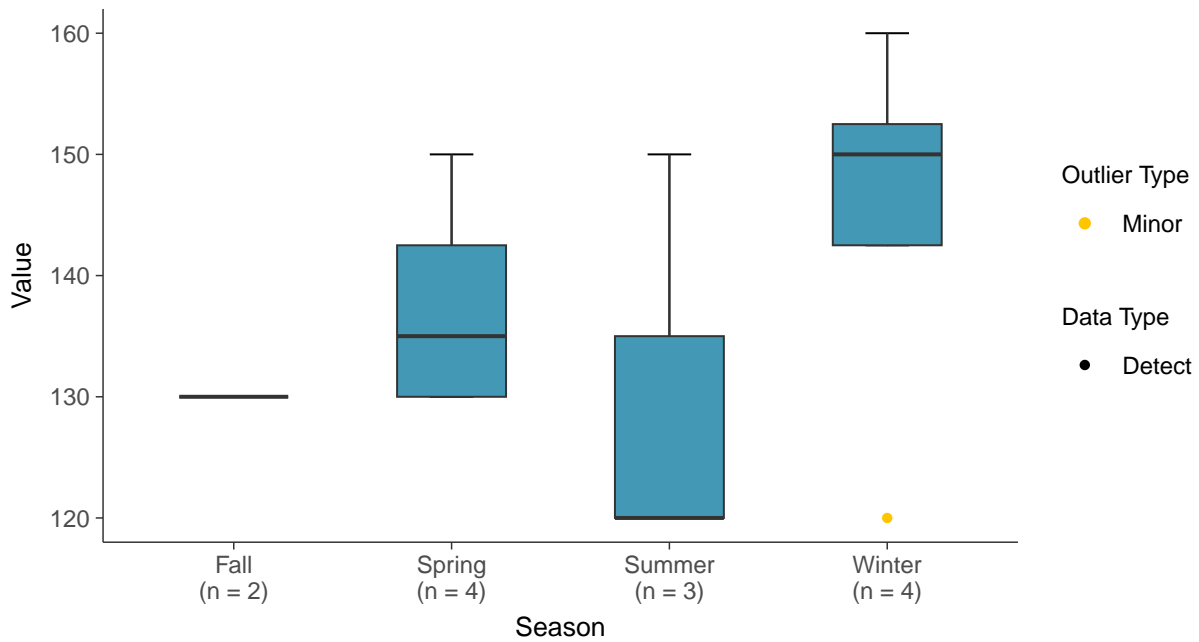
Boxplot

Calcium, MW-08 (mg/L)



Boxplot by Season

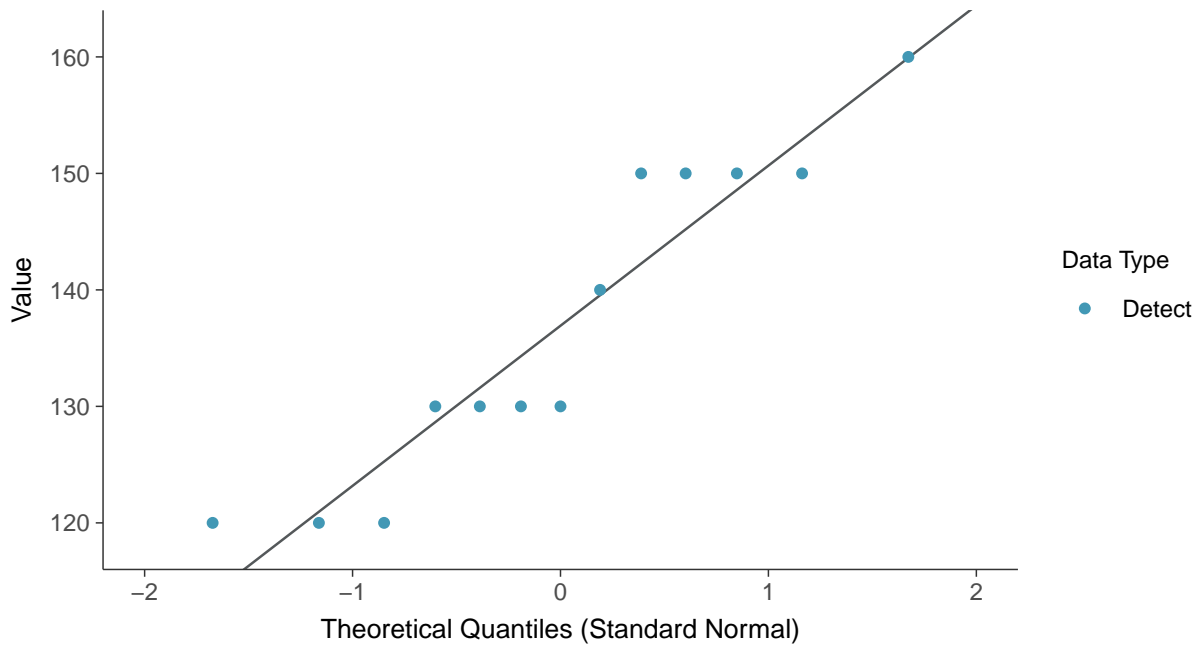
Calcium, MW-08 (mg/L)





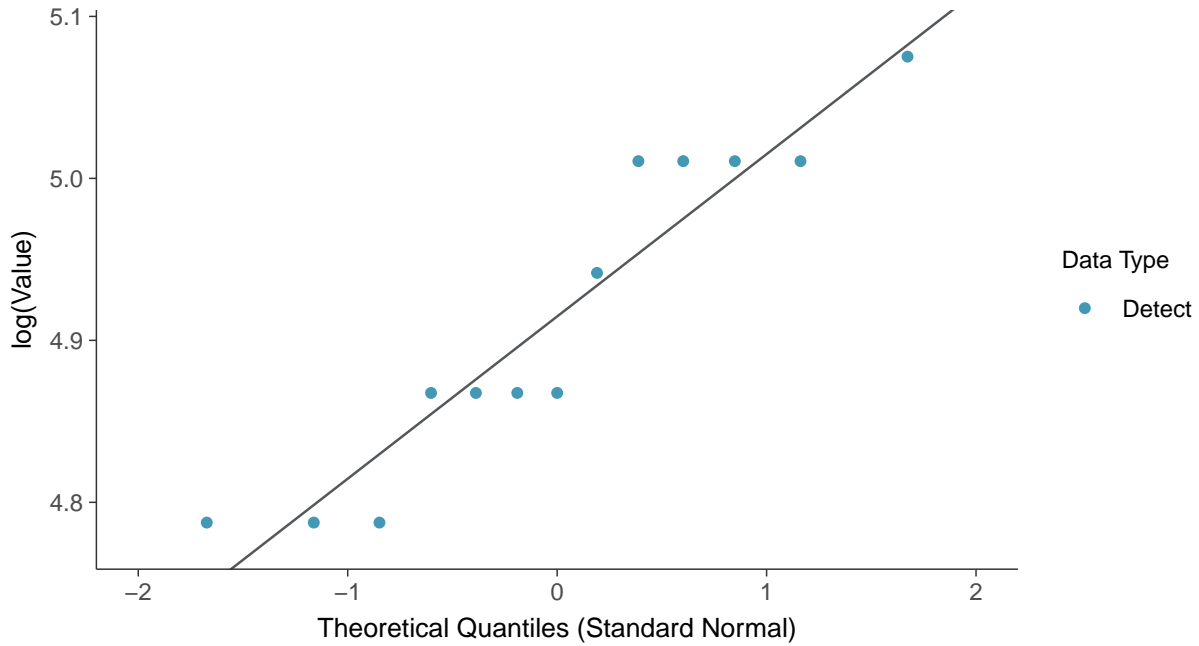
Normal Q-Q plot

Calcium, MW-08 (mg/L)



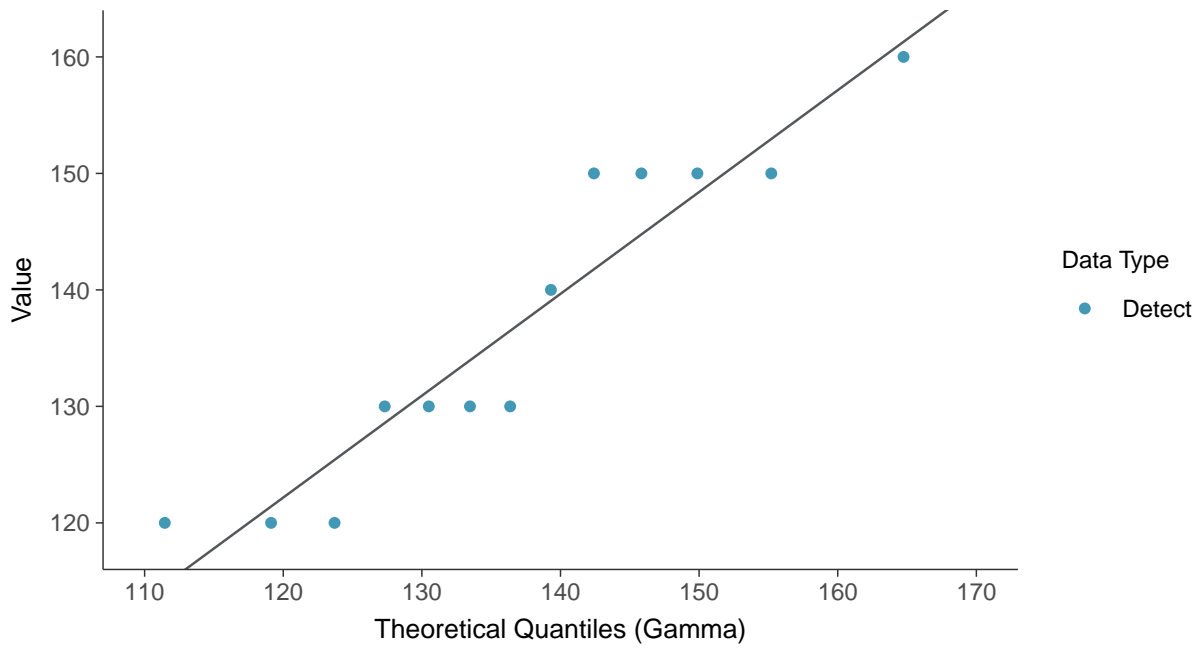
Lognormal Q-Q plot

Calcium, MW-08 (mg/L)

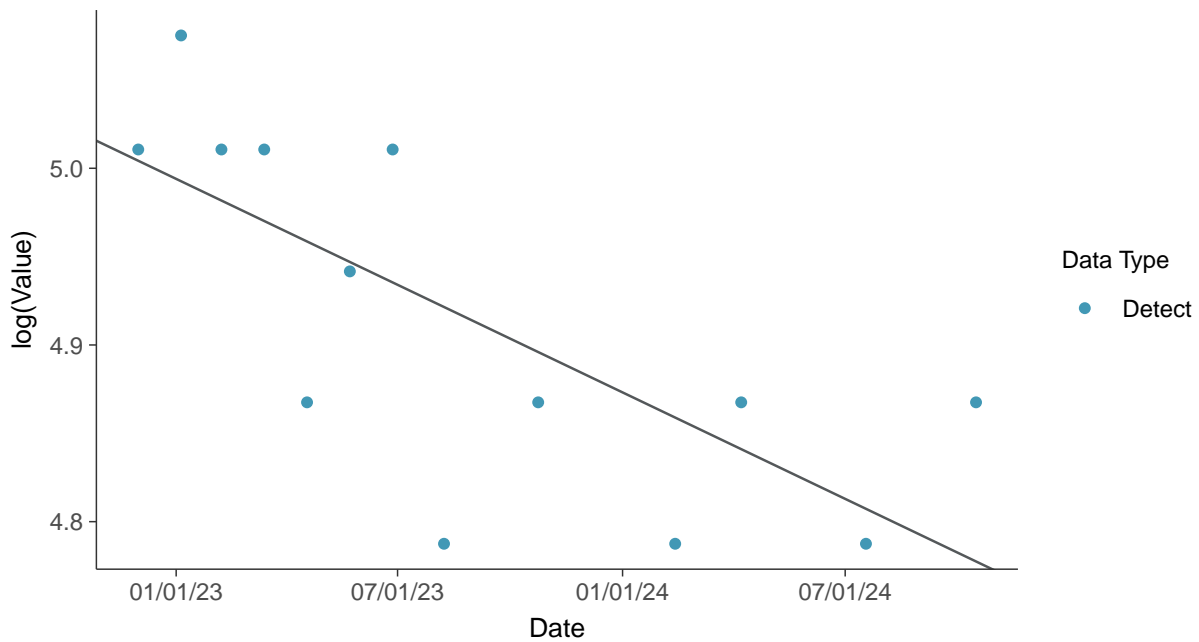




Gamma Q-Q plot
Calcium, MW-08 (mg/L)



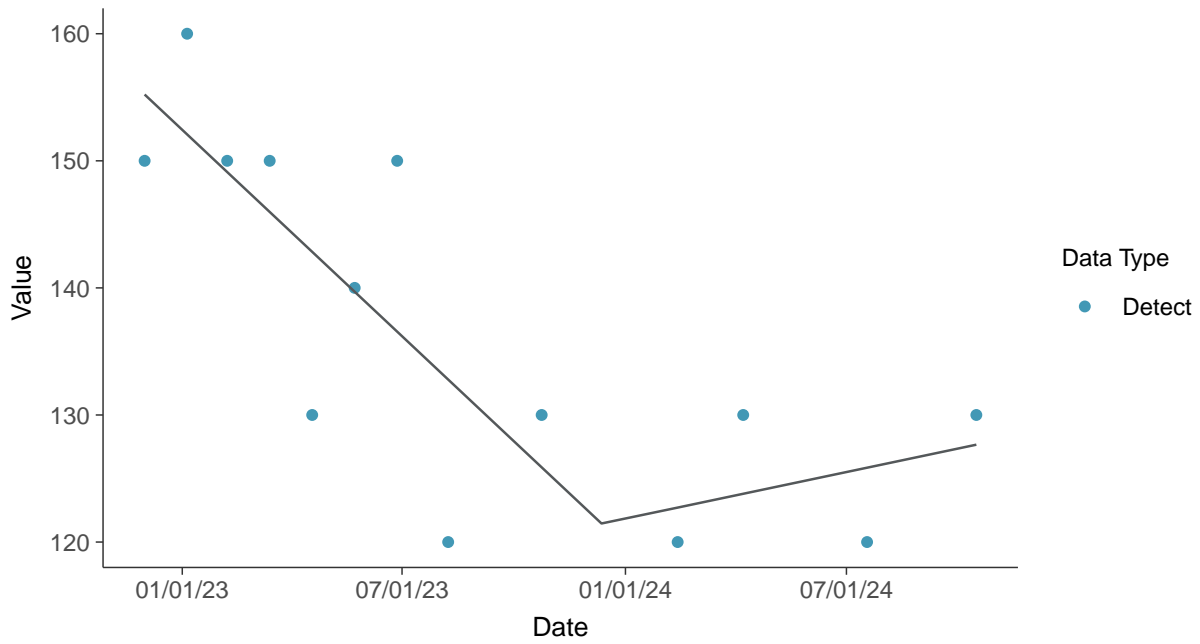
Trend Regression: Lognormal MLE
Calcium, MW-08 (mg/L)





Trend Regression: Piecewise Linear-Linear

Calcium, MW-08 (mg/L)



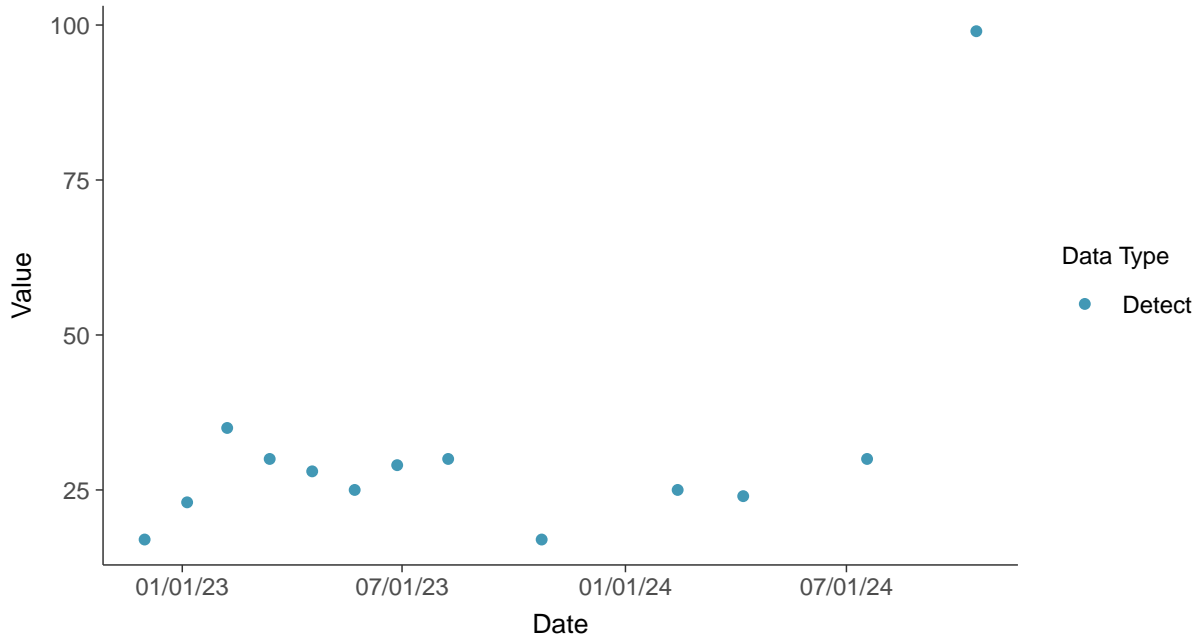


Appendix III: Chloride (as Cl), MW-08

ID: 1_18_1_4_108

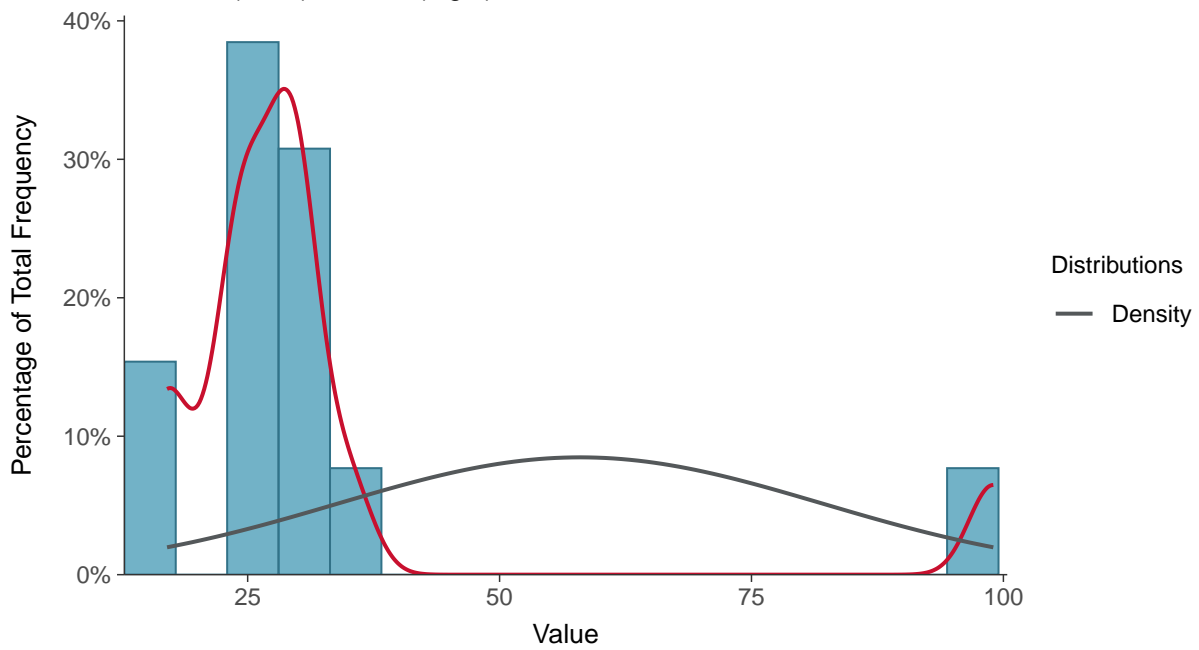
Scatter Plot

Chloride (as Cl), MW-08 (mg/L)



Histogram

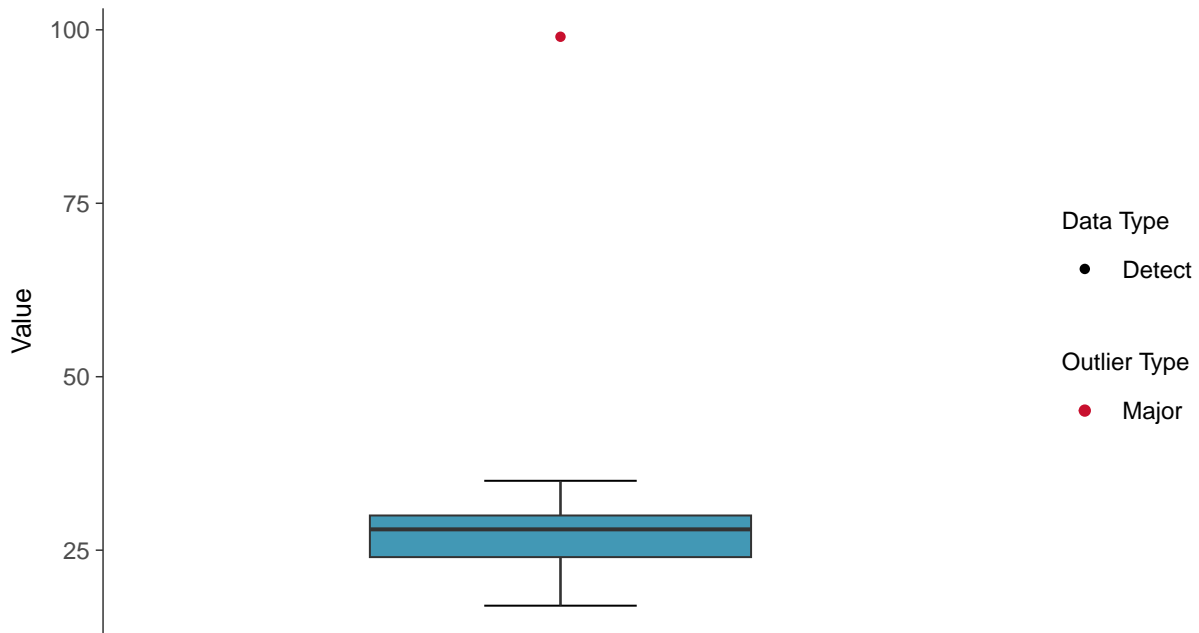
Chloride (as Cl), MW-08 (mg/L)





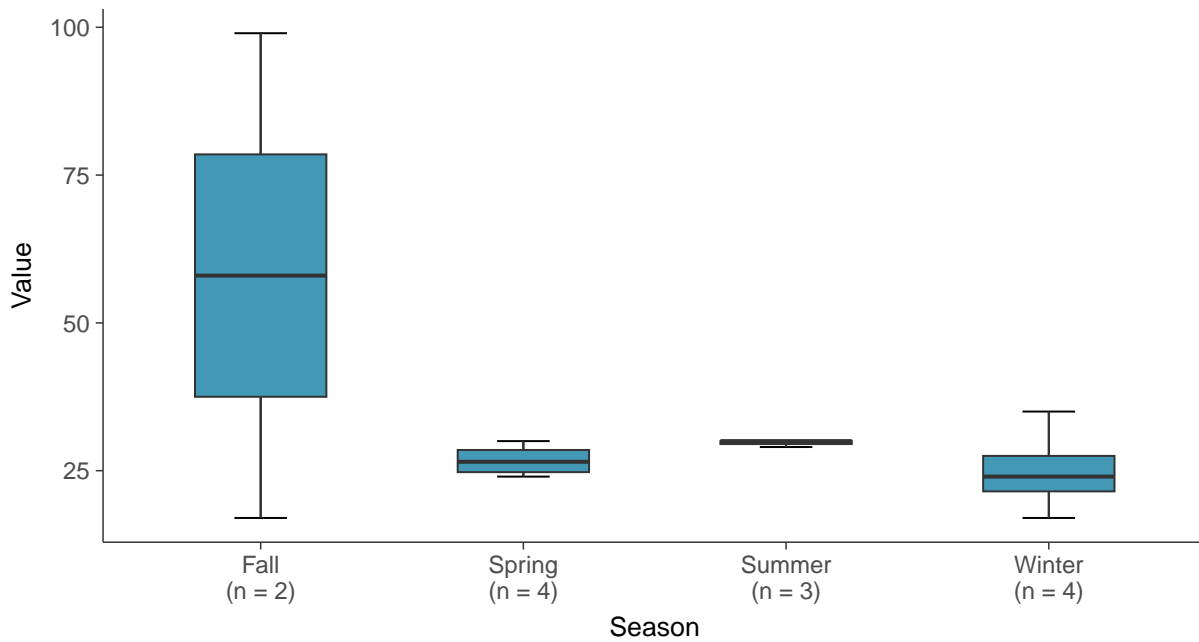
Boxplot

Chloride (as Cl), MW-08 (mg/L)



Boxplot by Season

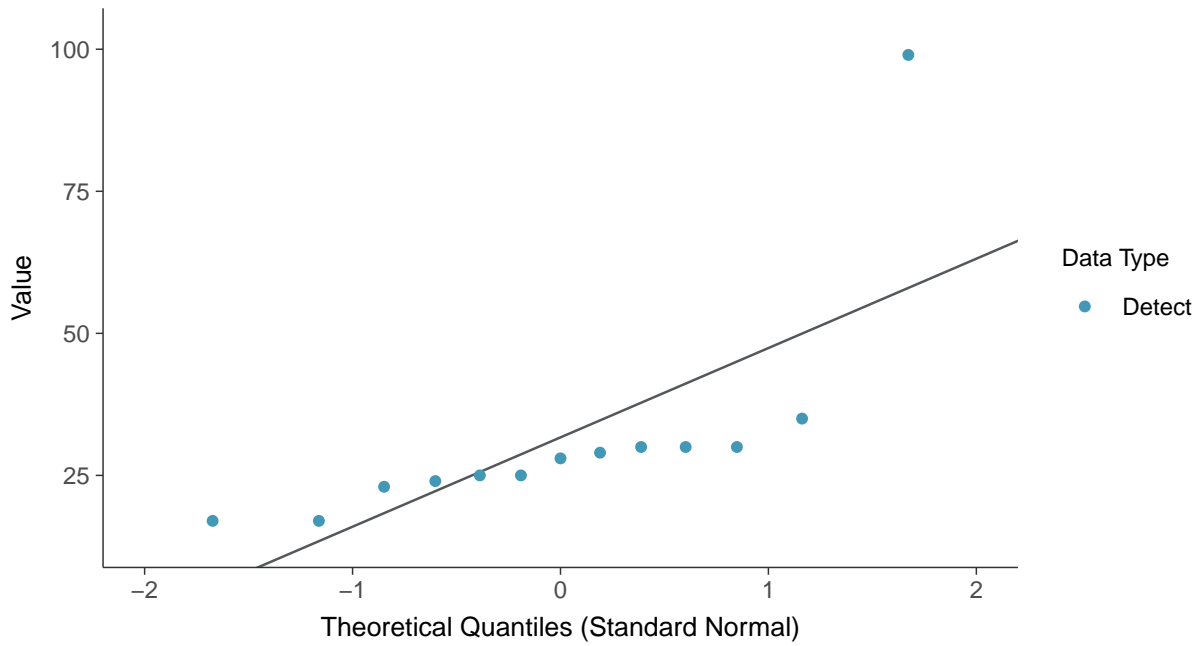
Chloride (as Cl), MW-08 (mg/L)





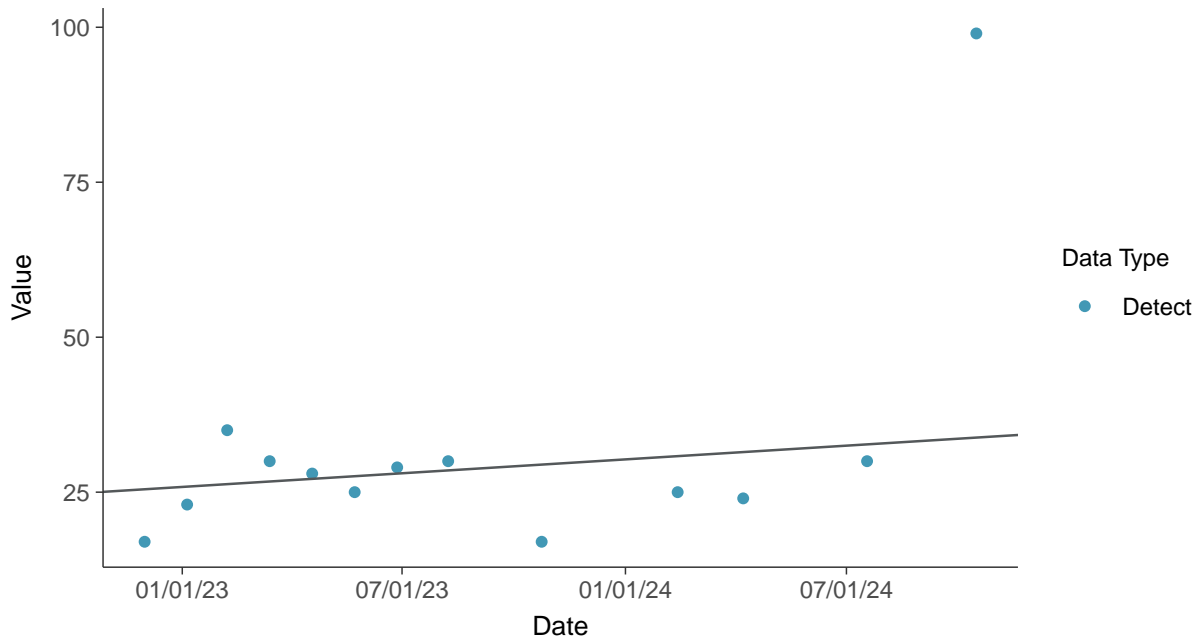
Normal Q-Q plot

Chloride (as Cl), MW-08 (mg/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

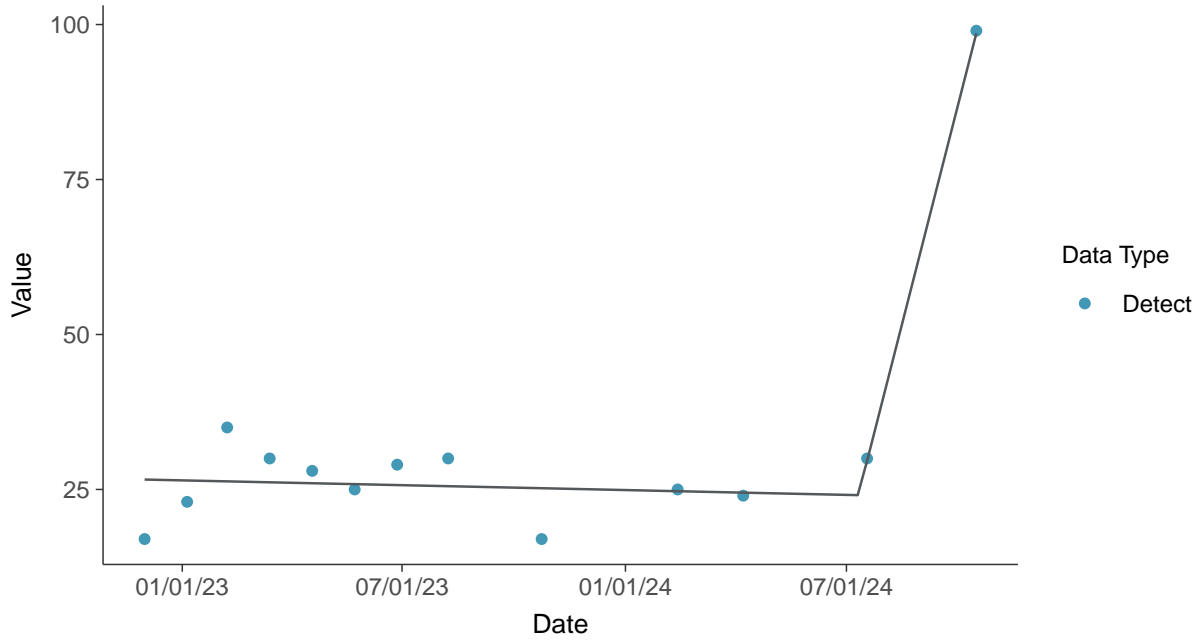
Chloride (as Cl), MW-08 (mg/L)





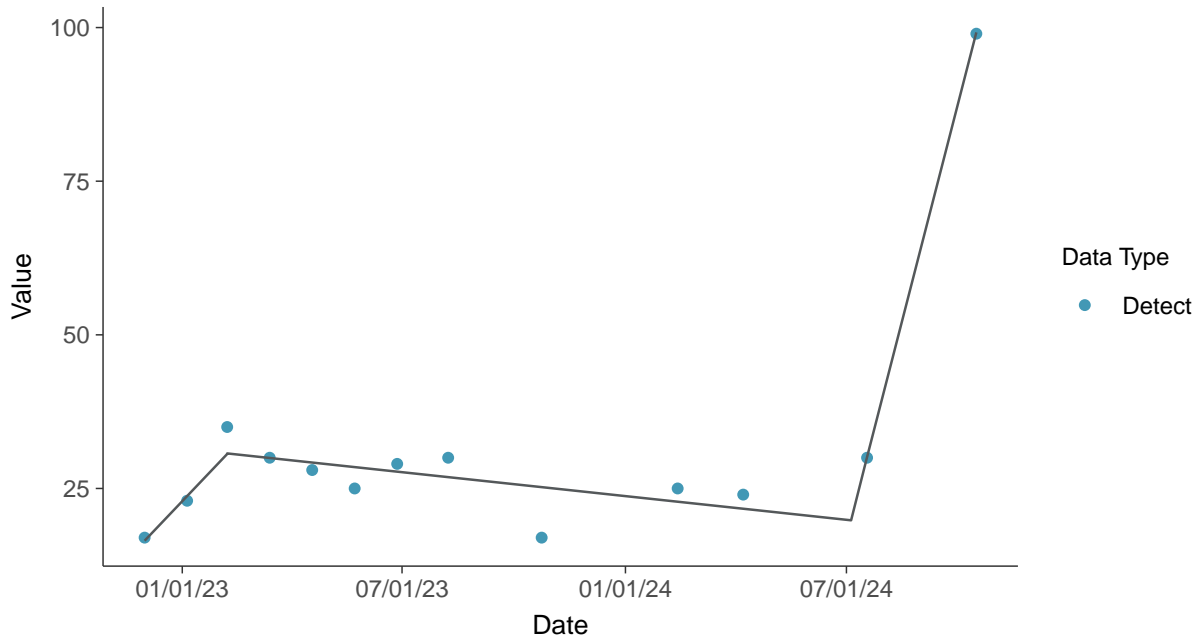
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-08 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Chloride (as Cl), MW-08 (mg/L)



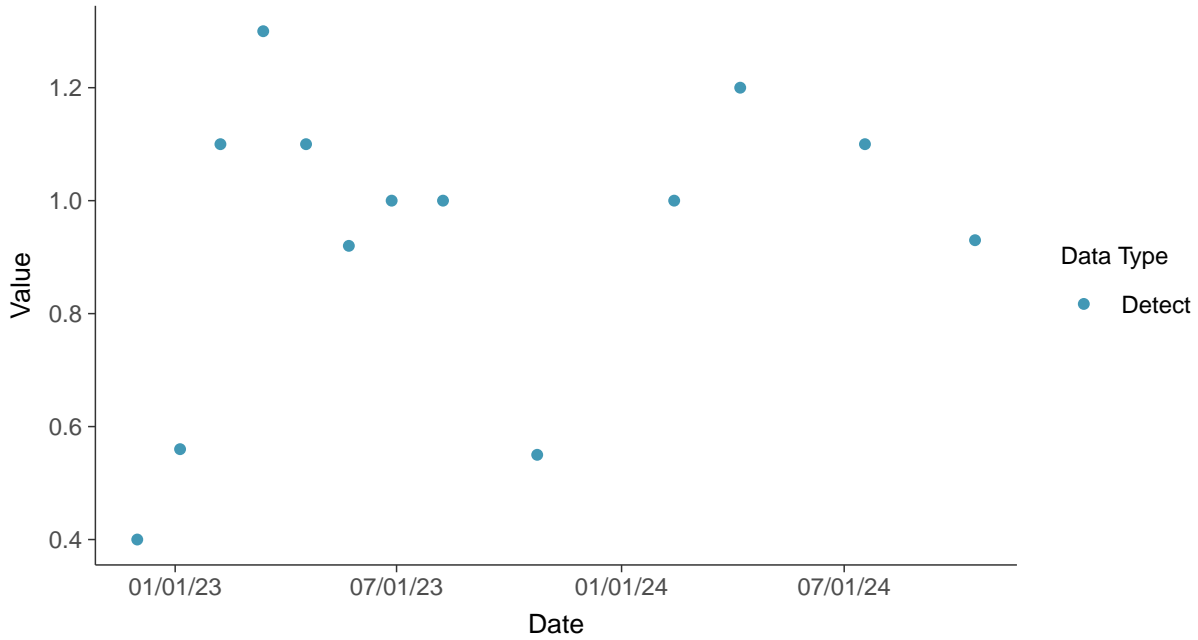


Appendix III: Fluoride, MW-08

ID: 1_18_1_4_112

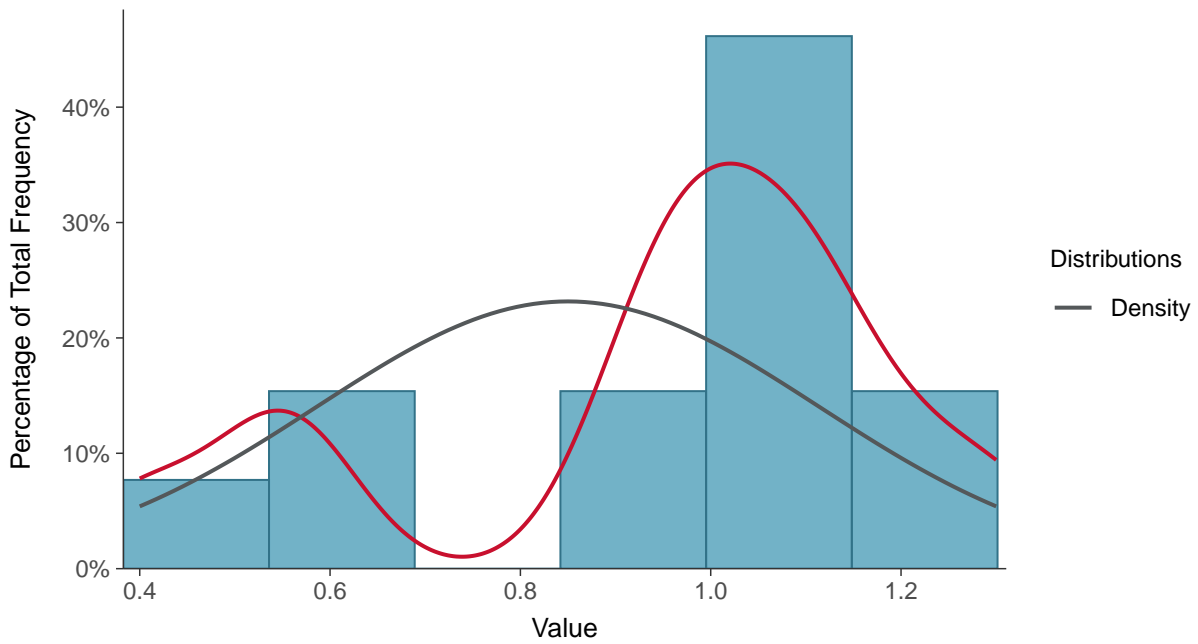
Scatter Plot

Fluoride, MW-08 (mg/L)



Histogram

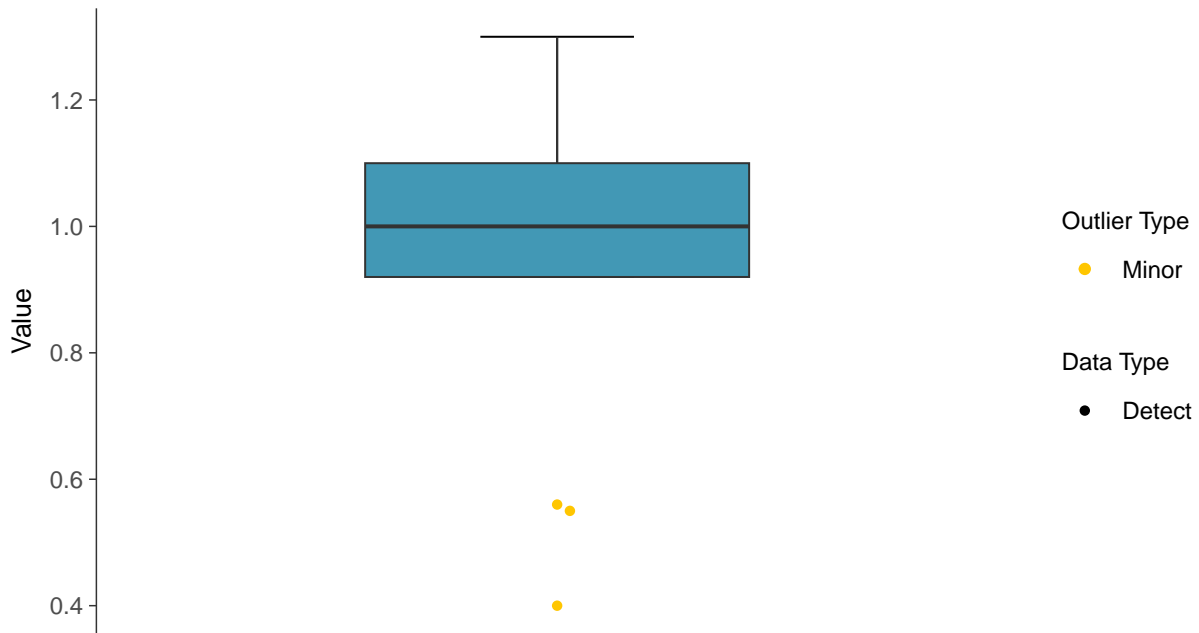
Fluoride, MW-08 (mg/L)





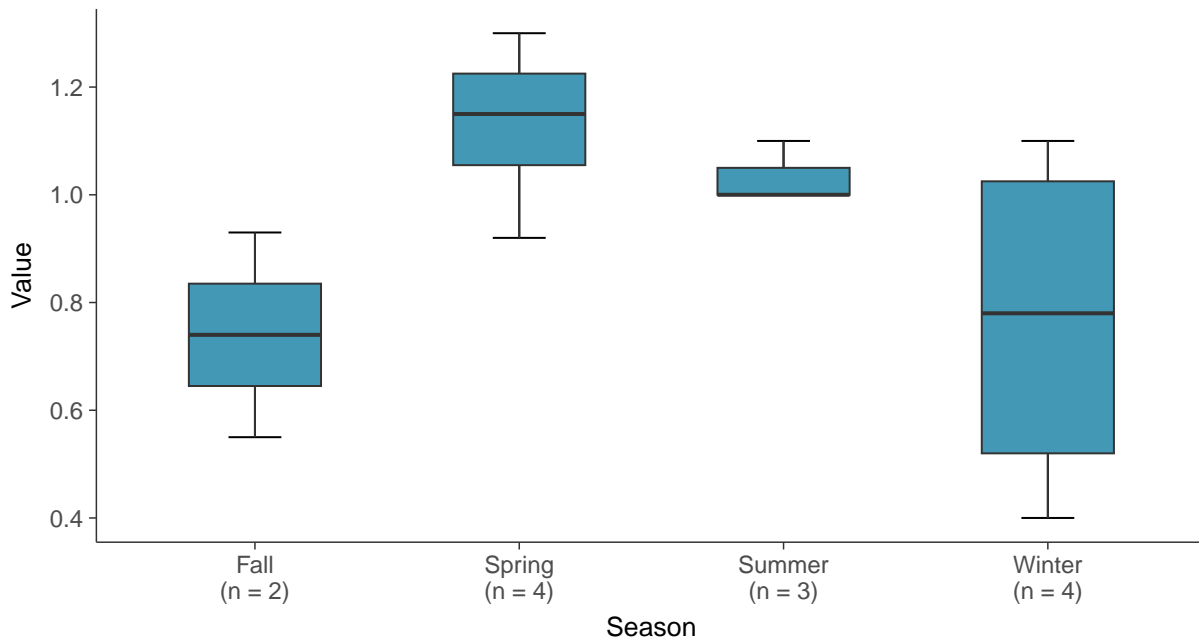
Boxplot

Fluoride, MW-08 (mg/L)



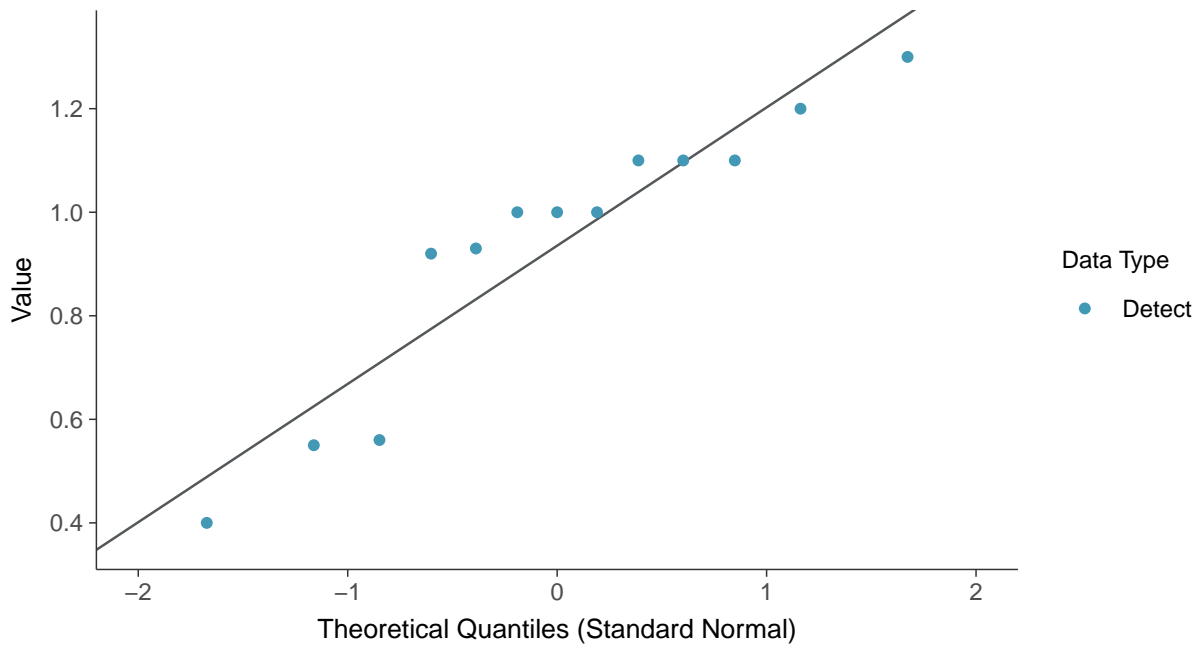
Boxplot by Season

Fluoride, MW-08 (mg/L)

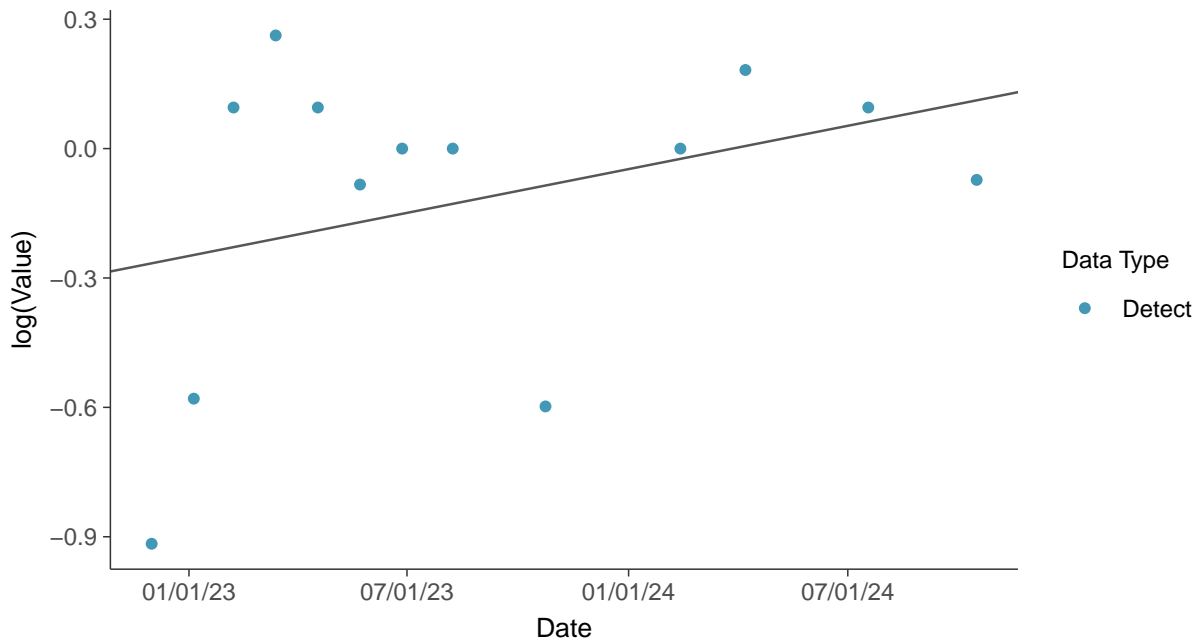




Normal Q-Q plot
Fluoride, MW-08 (mg/L)



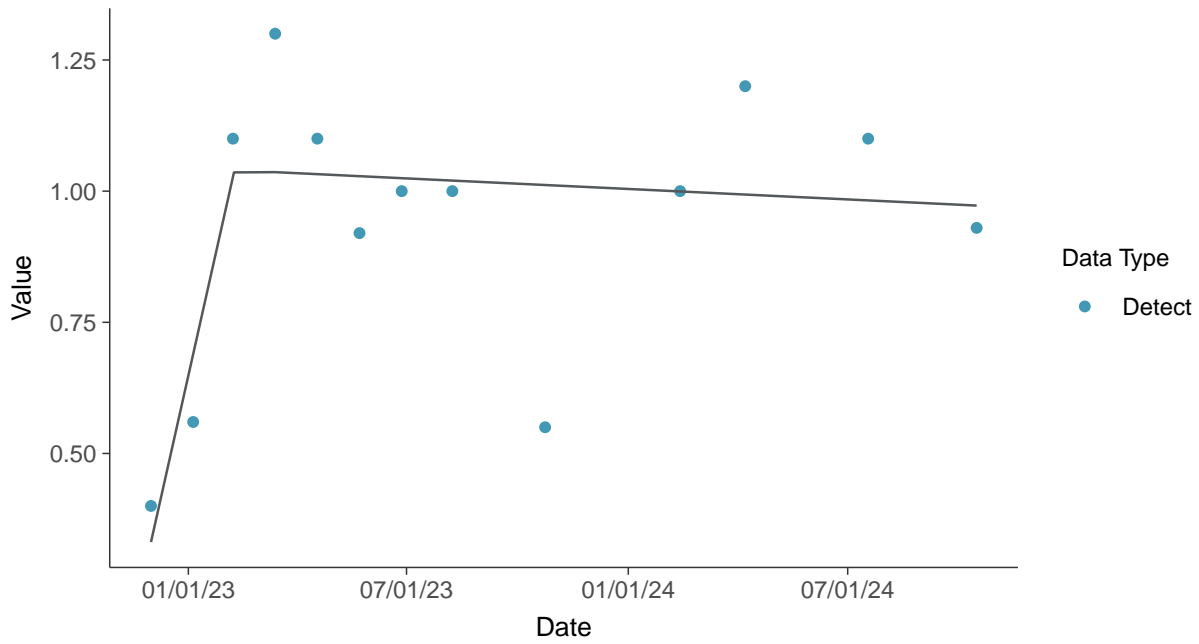
Trend Regression: Lognormal MLE
Fluoride, MW-08 (mg/L)





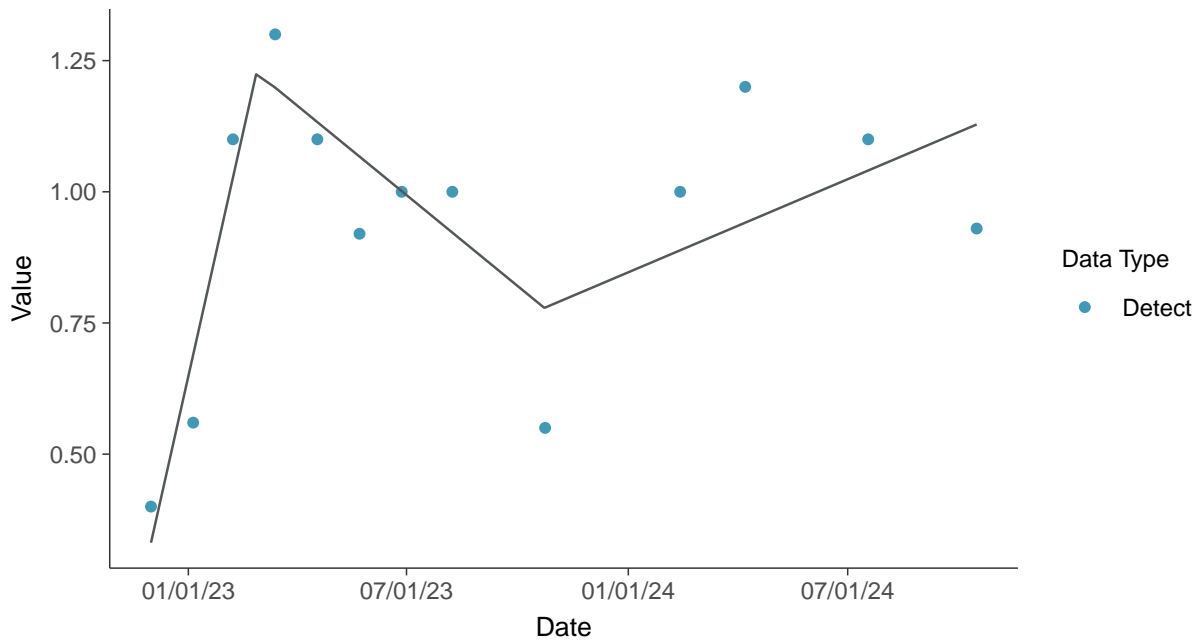
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-08 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

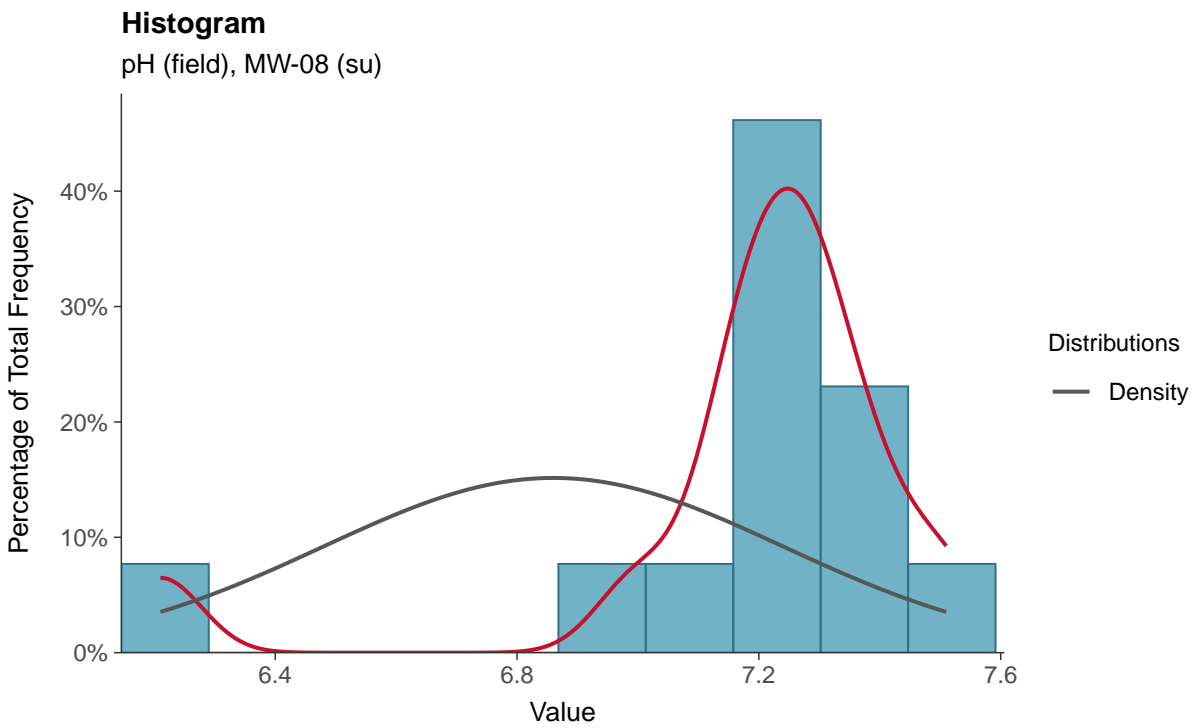
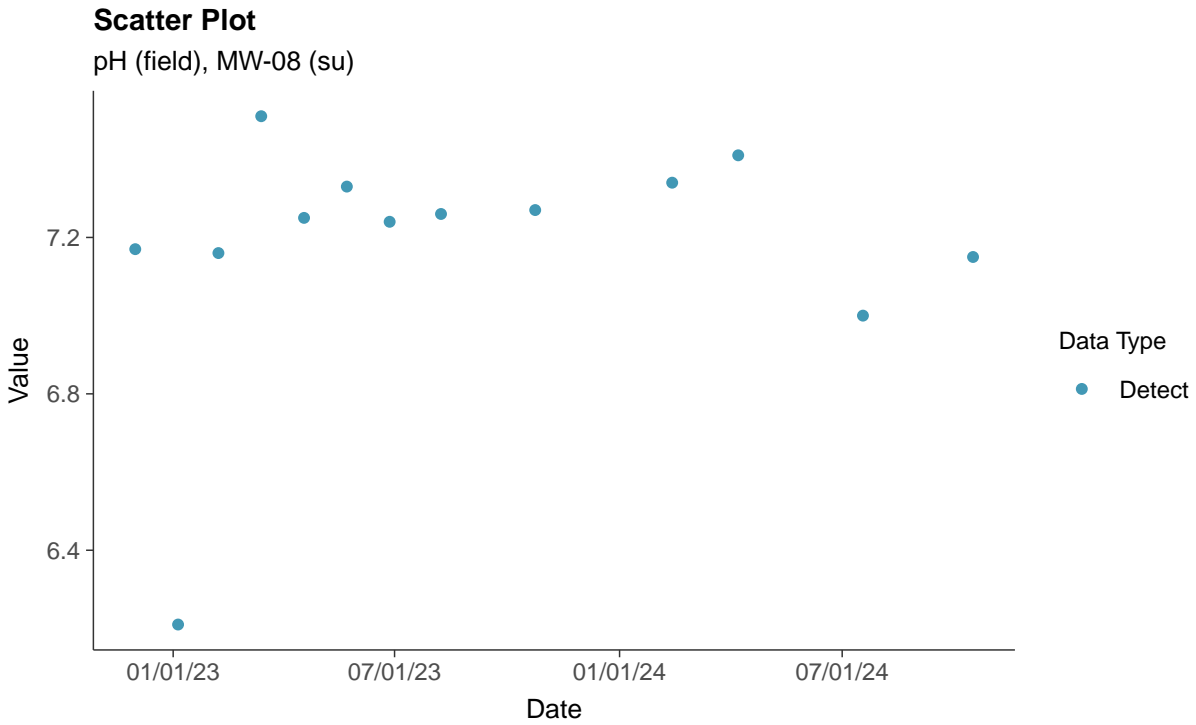
Fluoride, MW-08 (mg/L)





Appendix III: pH (field), MW-08

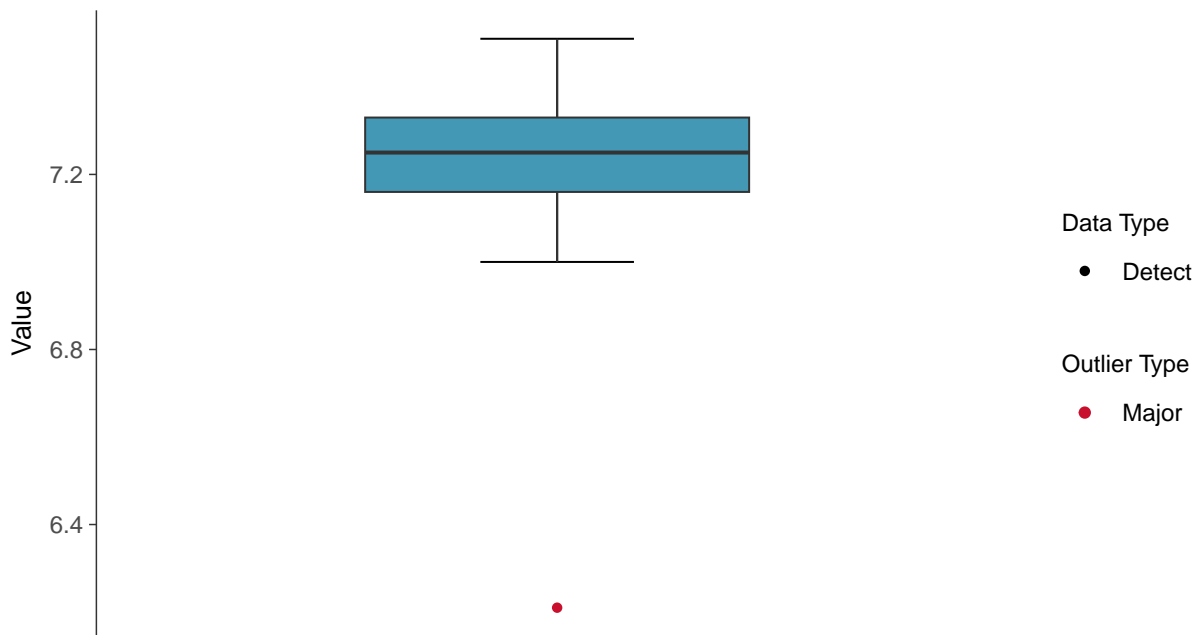
ID: 1_18_1_4_120





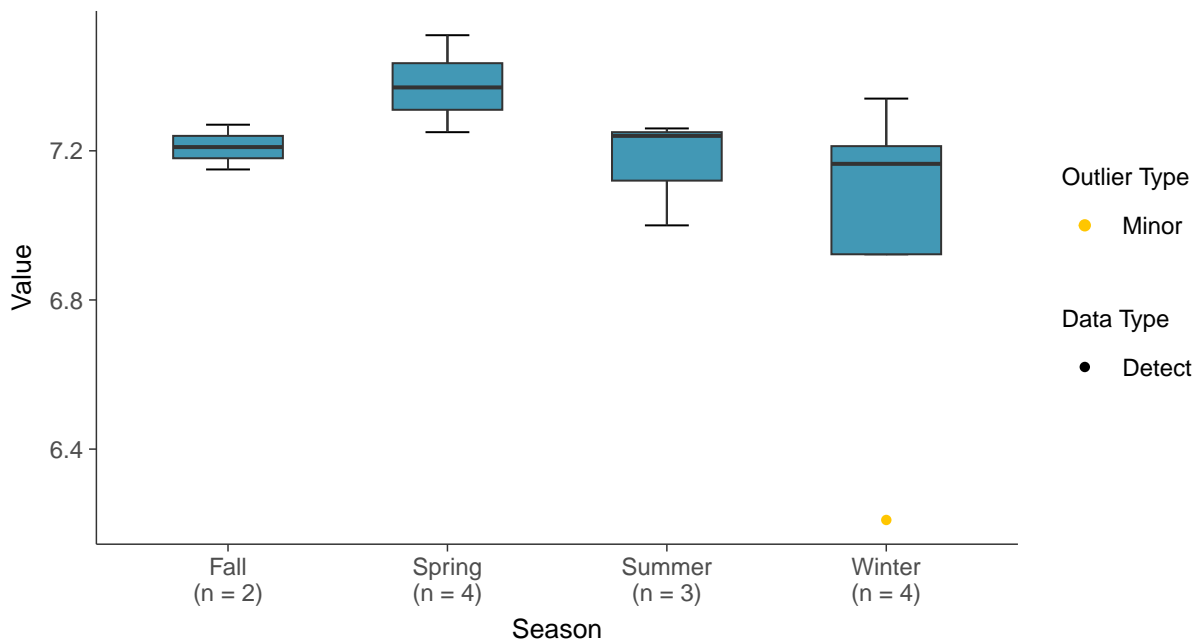
Boxplot

pH (field), MW-08 (su)



Boxplot by Season

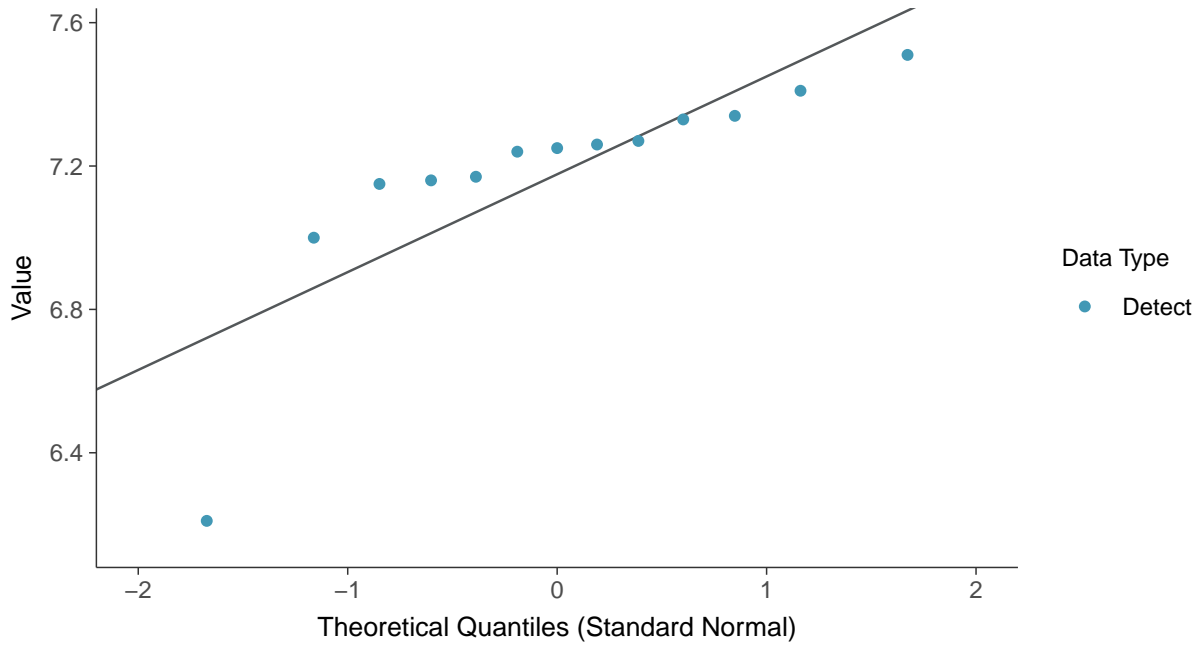
pH (field), MW-08 (su)





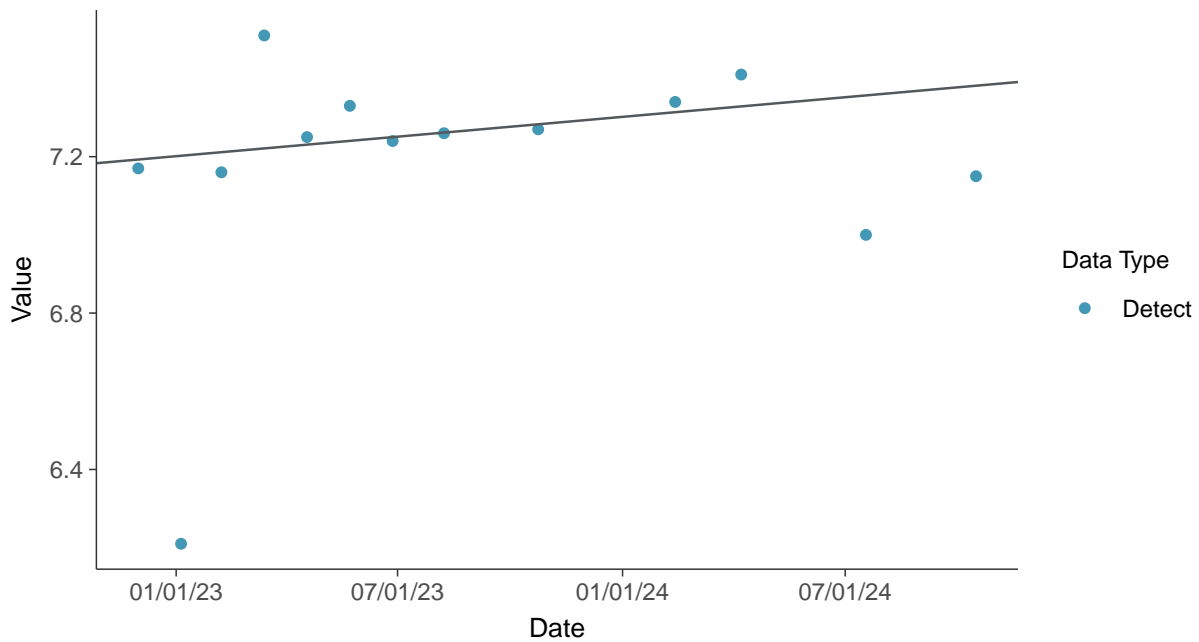
Normal Q-Q plot

pH (field), MW-08 (su)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

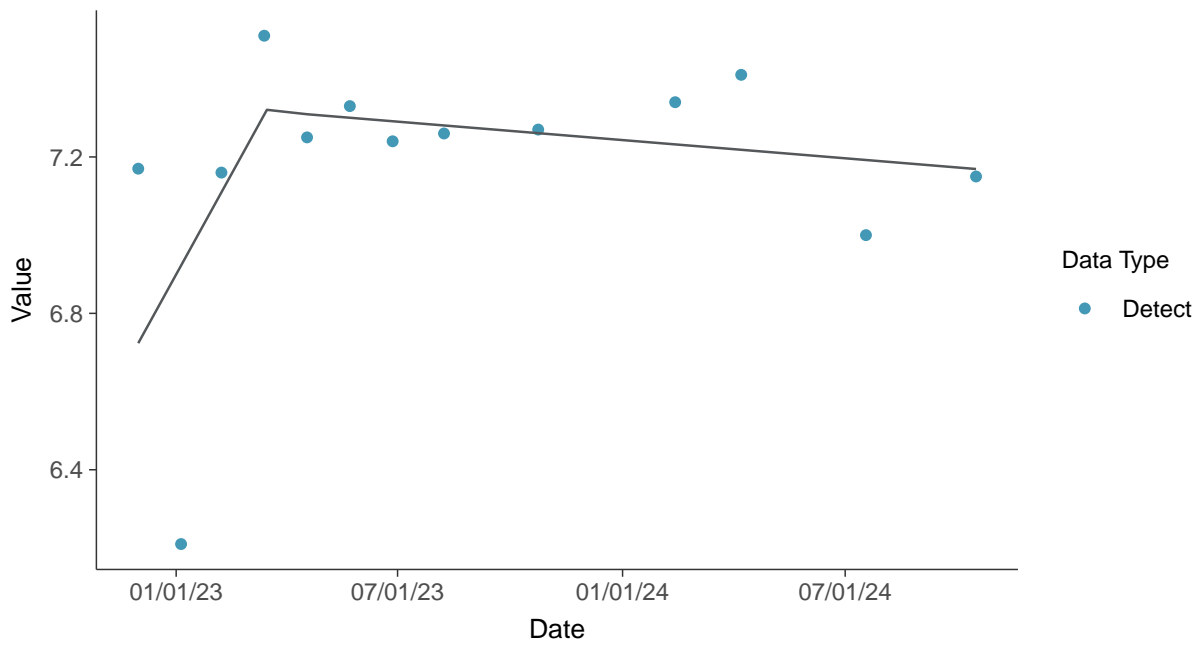
pH (field), MW-08 (su)





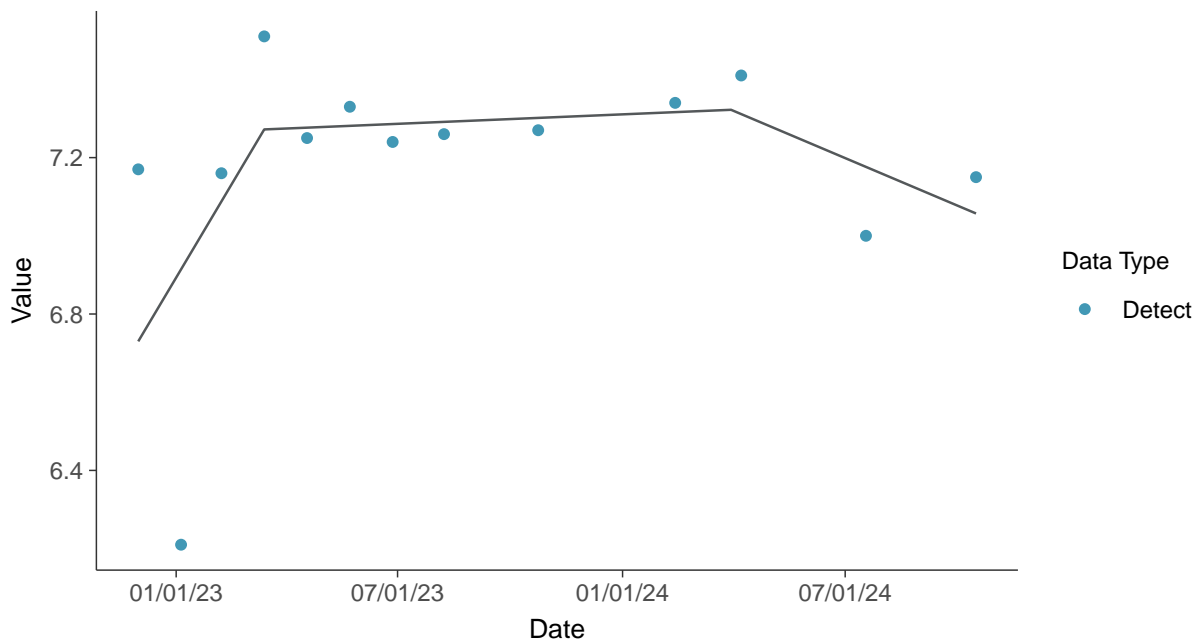
Trend Regression: Piecewise Linear-Linear

pH (field), MW-08 (su)



Trend Regression: Piecewise Linear-Linear-Linear

pH (field), MW-08 (su)



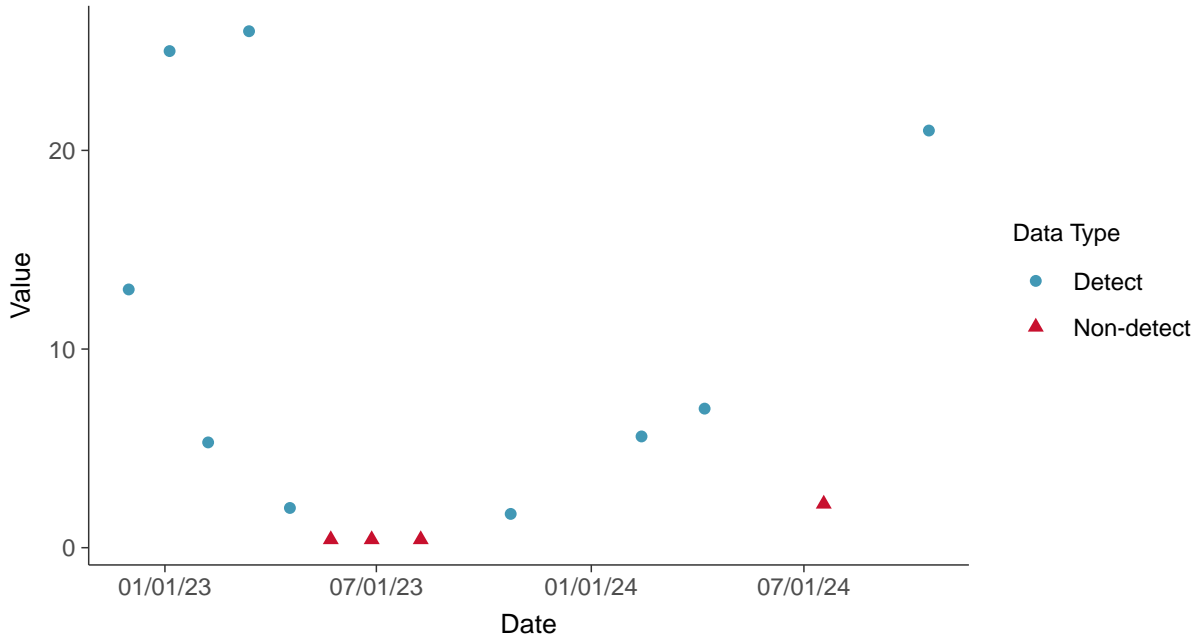


Appendix III: Sulfate (as SO₄), MW-08

ID: 1_18_1_4_124

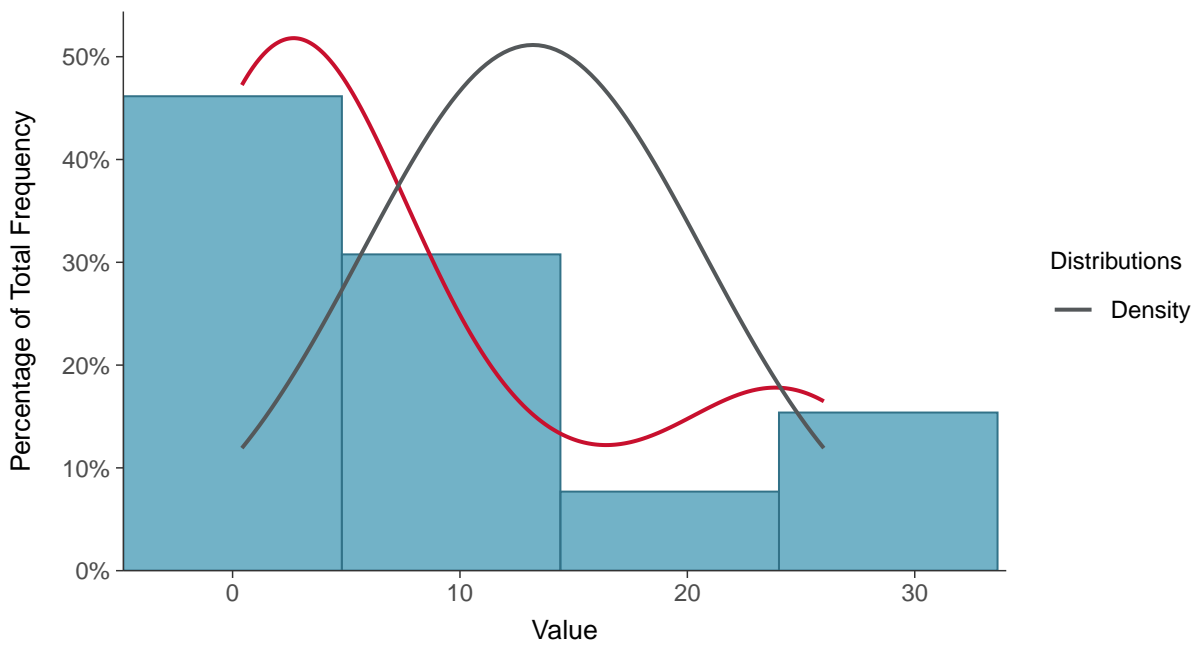
Scatter Plot

Sulfate (as SO₄), MW-08 (mg/L)



Histogram

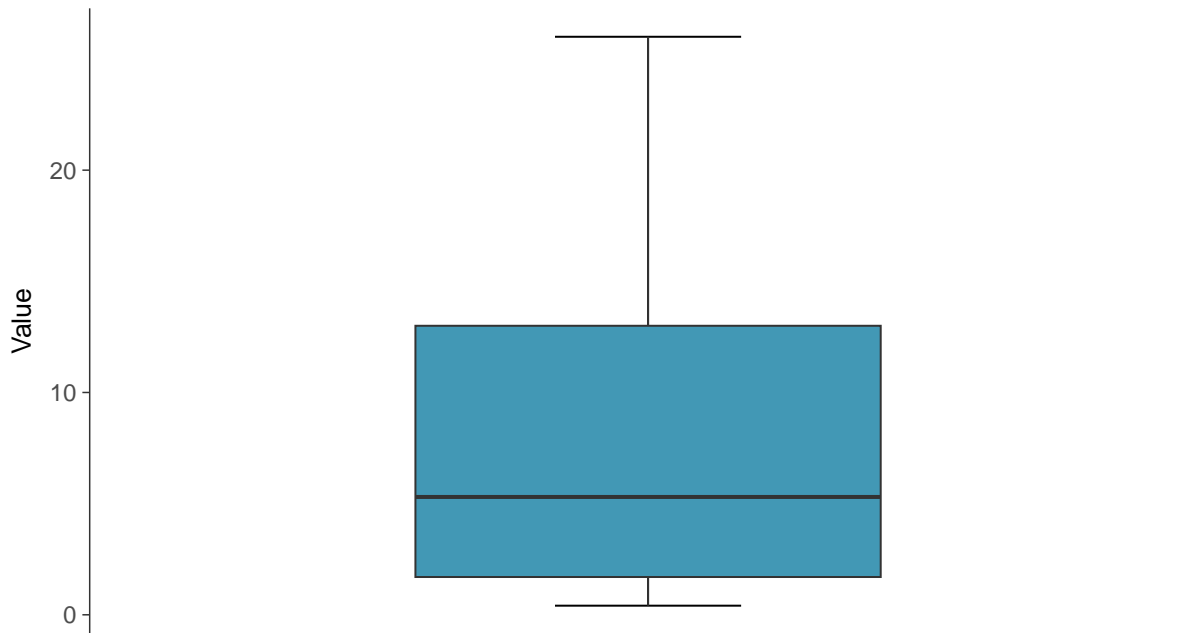
Sulfate (as SO₄), MW-08 (mg/L)





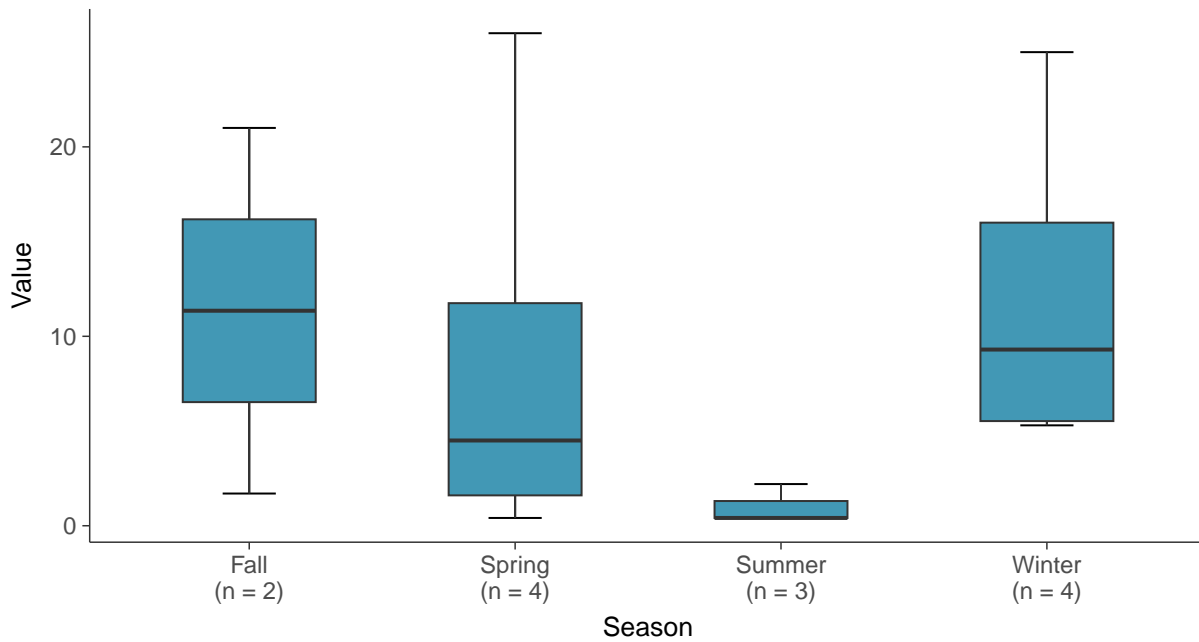
Boxplot

Sulfate (as SO₄), MW-08 (mg/L)



Boxplot by Season

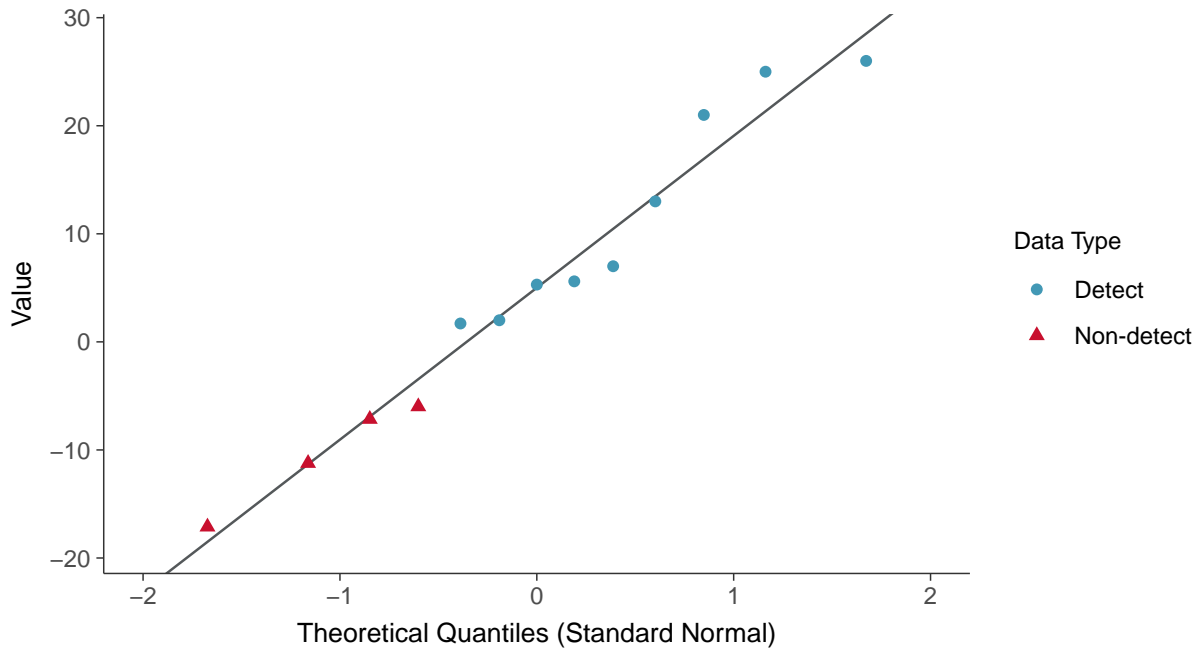
Sulfate (as SO₄), MW-08 (mg/L)





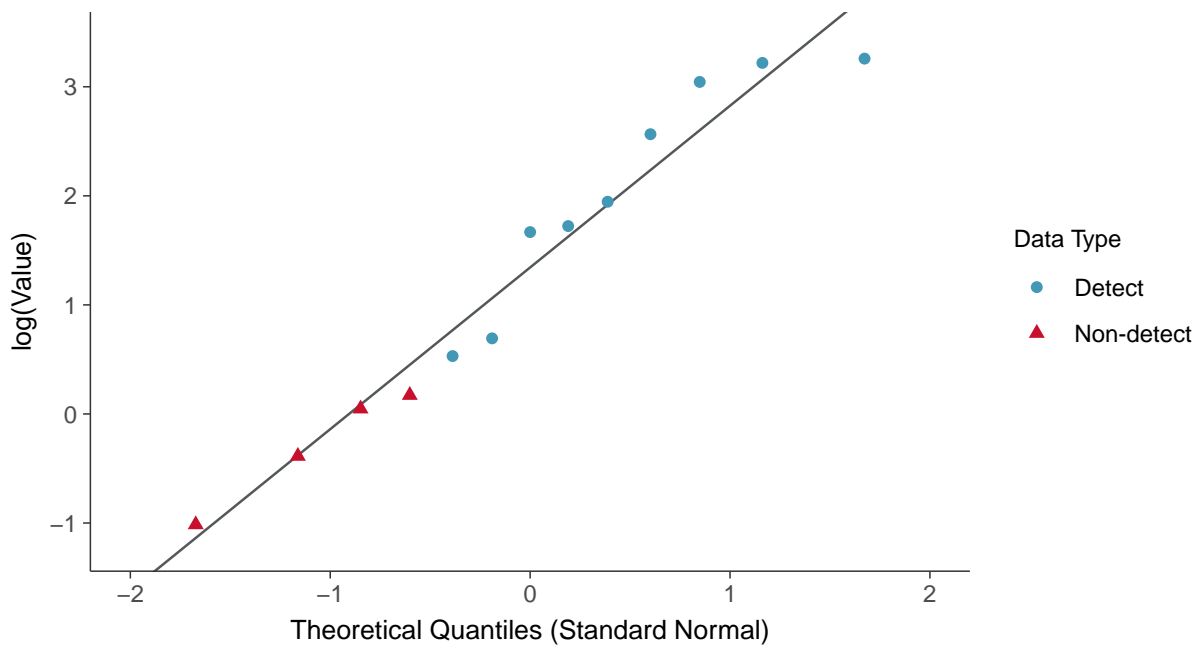
Normal Q-Q plot using ROS Imputed Estimates

Sulfate (as SO₄), MW-08 (mg/L)



Lognormal Q-Q plot using ROS Imputed Estimates

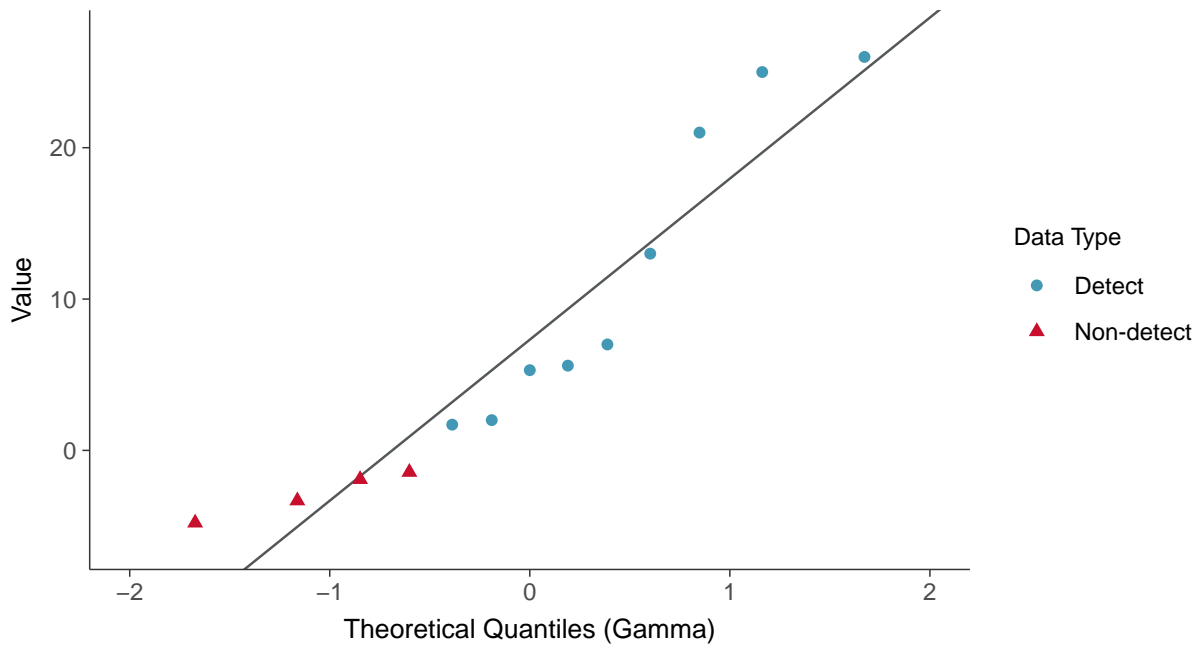
Sulfate (as SO₄), MW-08 (mg/L)





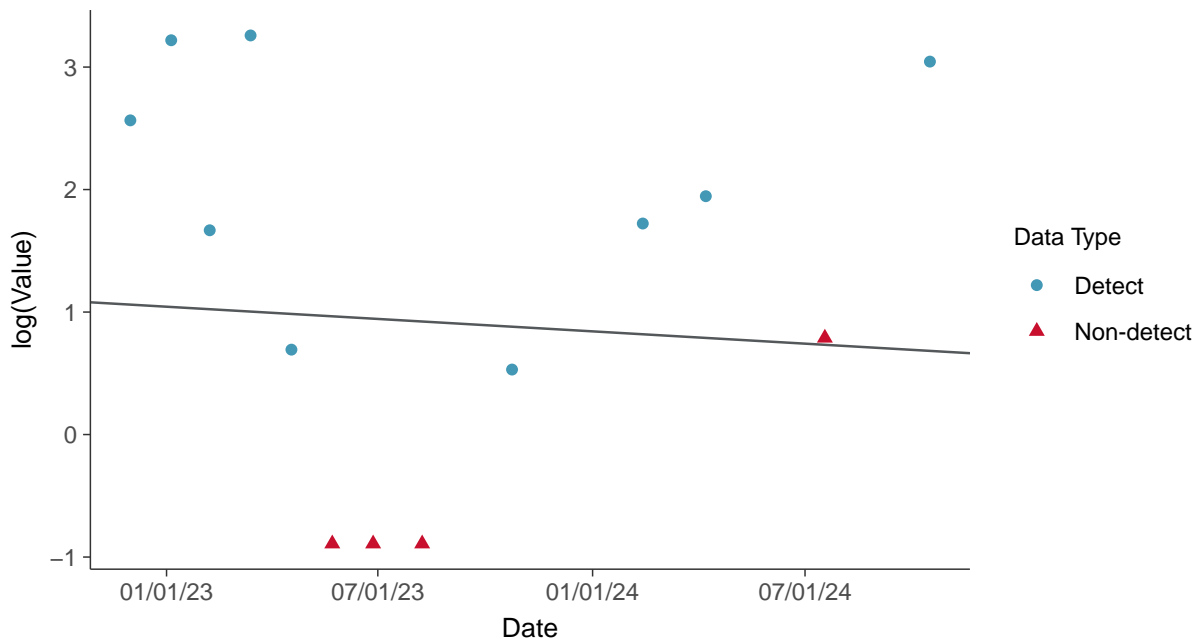
Gamma Q-Q plot using ROS Imputed Estimates

Sulfate (as SO₄), MW-08 (mg/L)



Trend Regression: Lognormal MLE

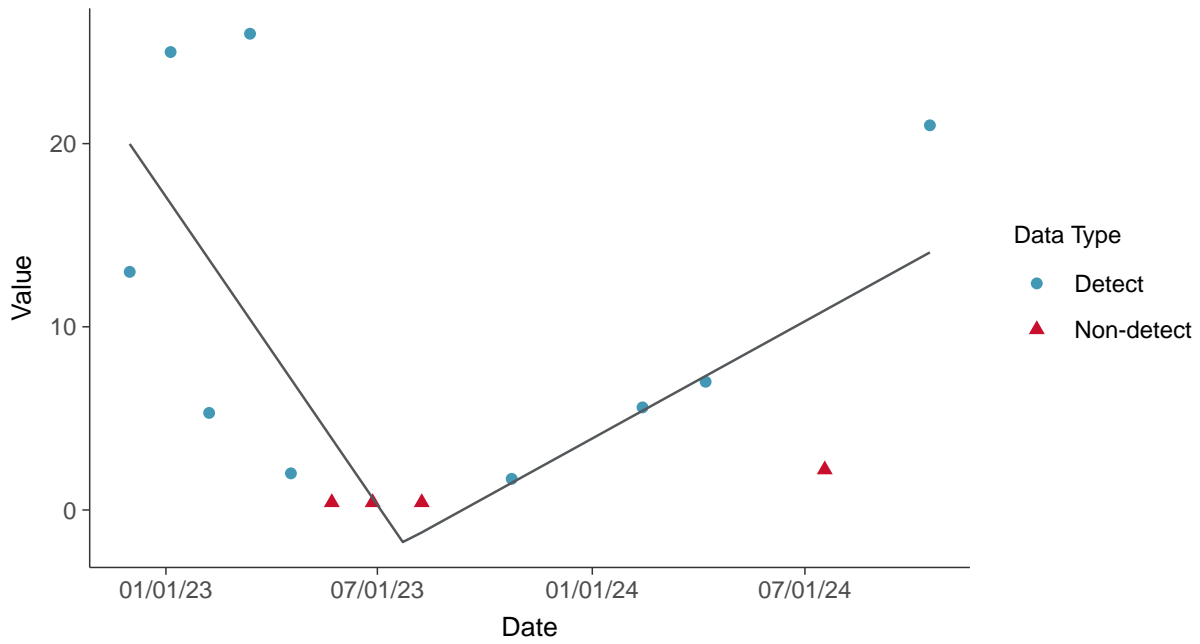
Sulfate (as SO₄), MW-08 (mg/L)





Trend Regression: Piecewise Linear-Linear

Sulfate (as SO₄), MW-08 (mg/L)



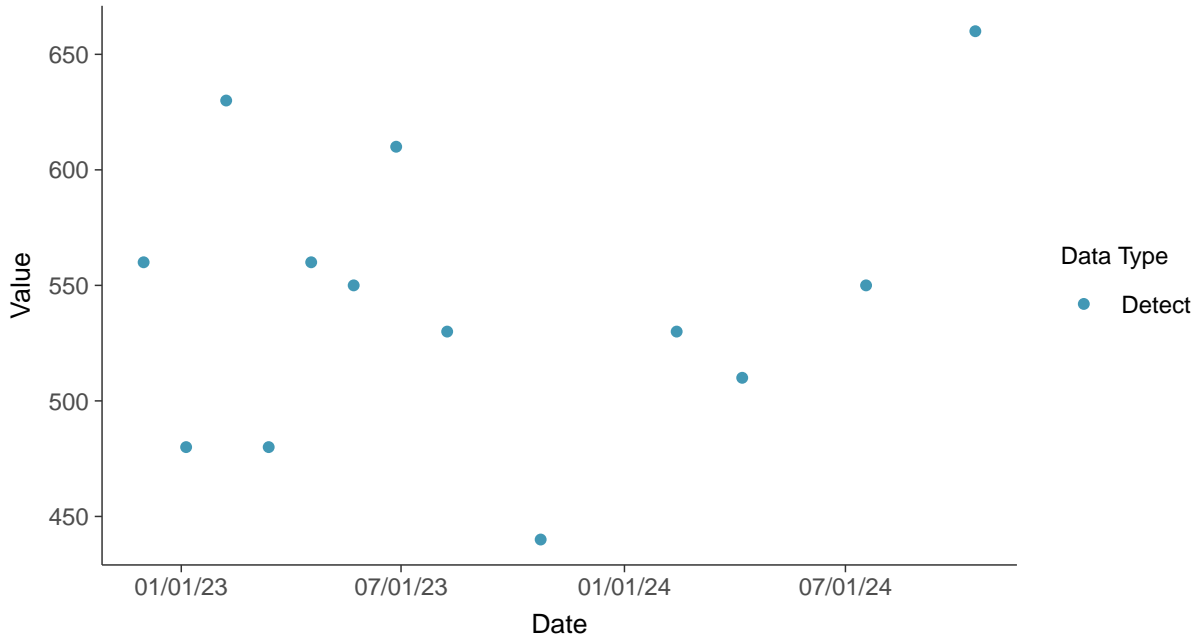


Appendix III: Total Dissolved Solids, MW-08

ID: 1_18_1_4_126

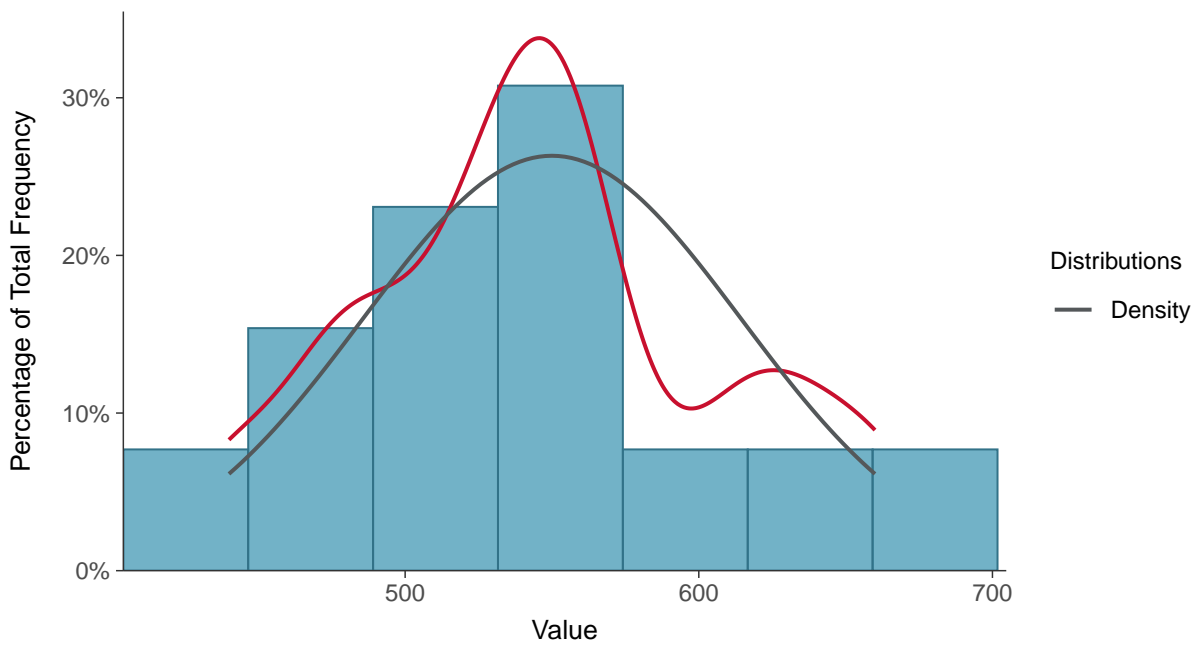
Scatter Plot

Total Dissolved Solids, MW-08 (mg/L)



Histogram

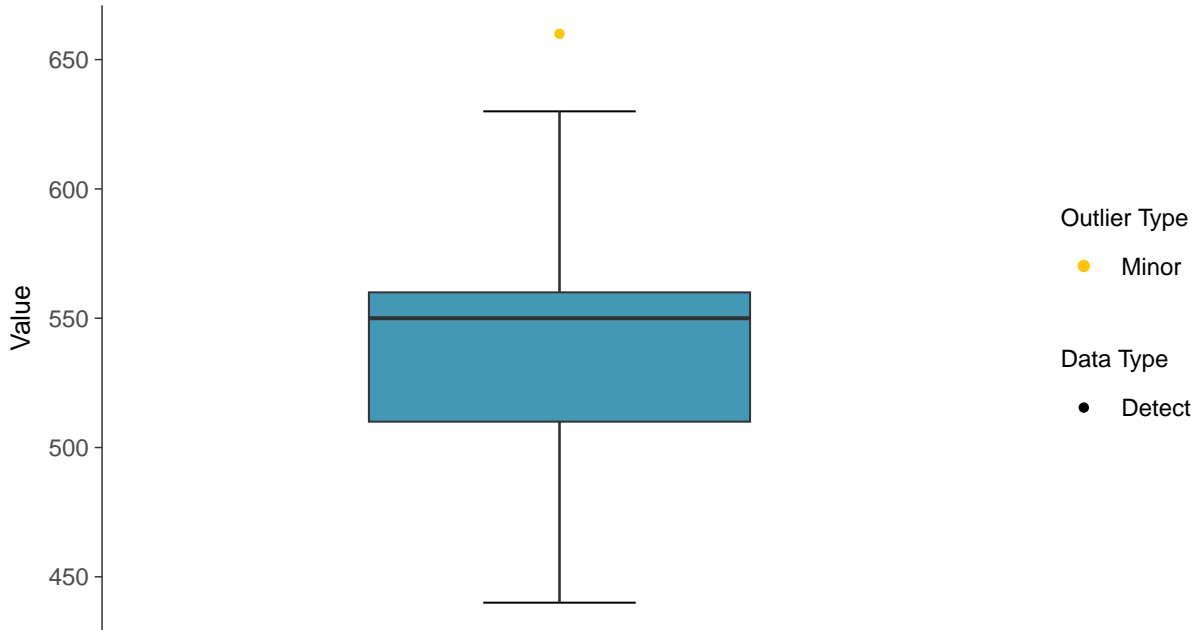
Total Dissolved Solids, MW-08 (mg/L)





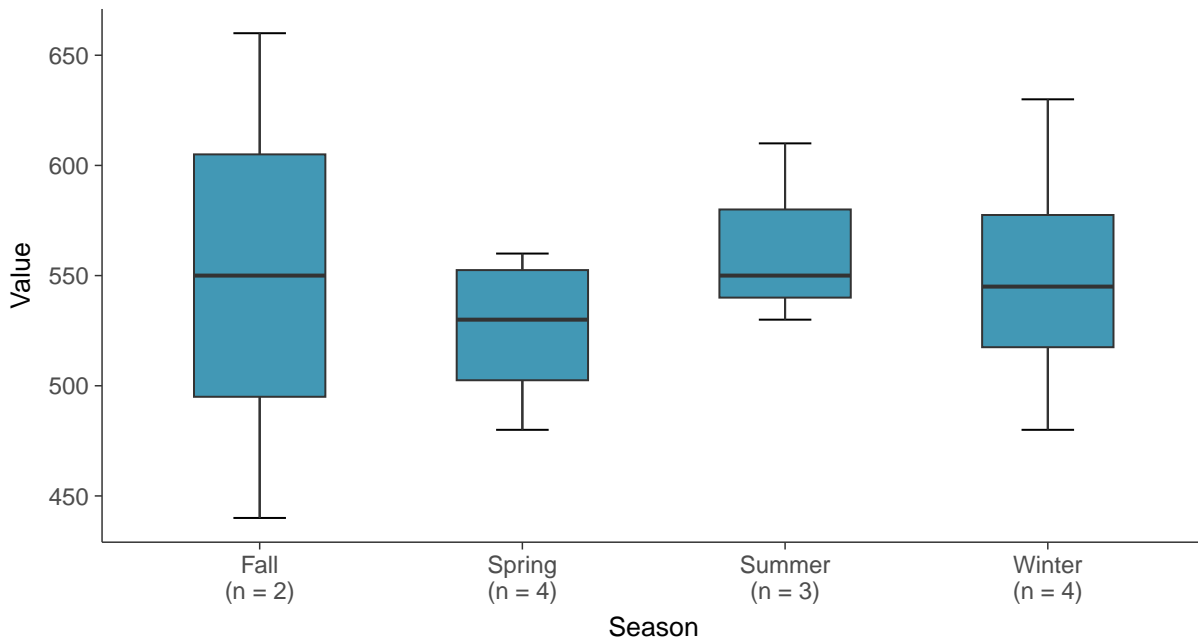
Boxplot

Total Dissolved Solids, MW-08 (mg/L)



Boxplot by Season

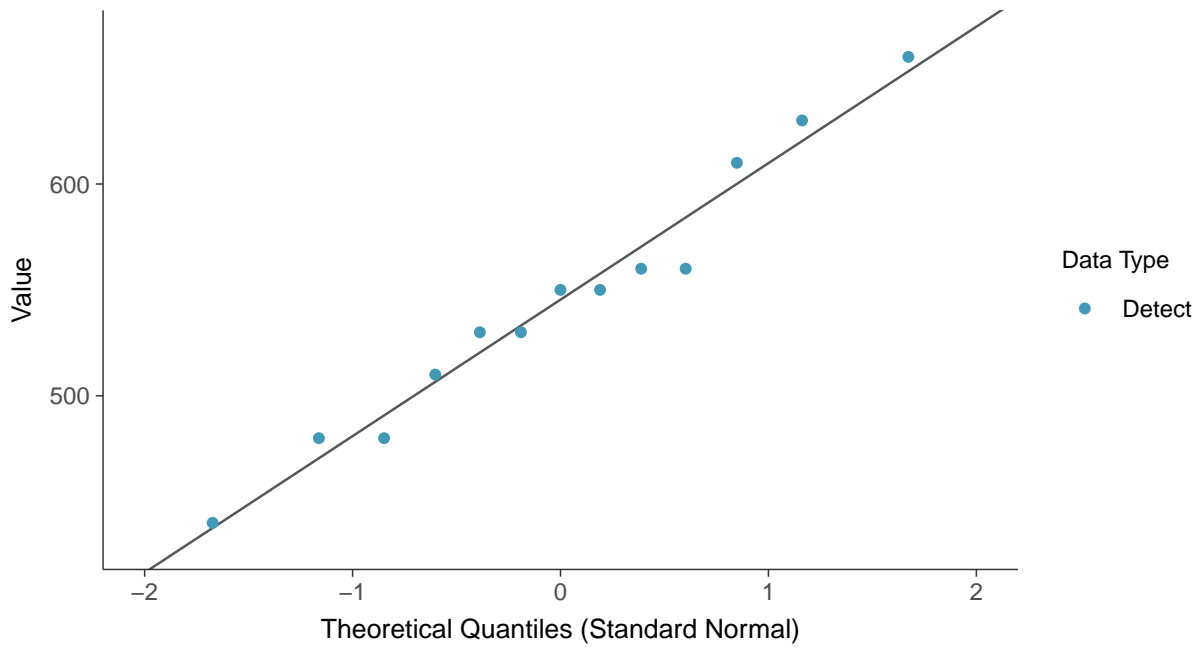
Total Dissolved Solids, MW-08 (mg/L)





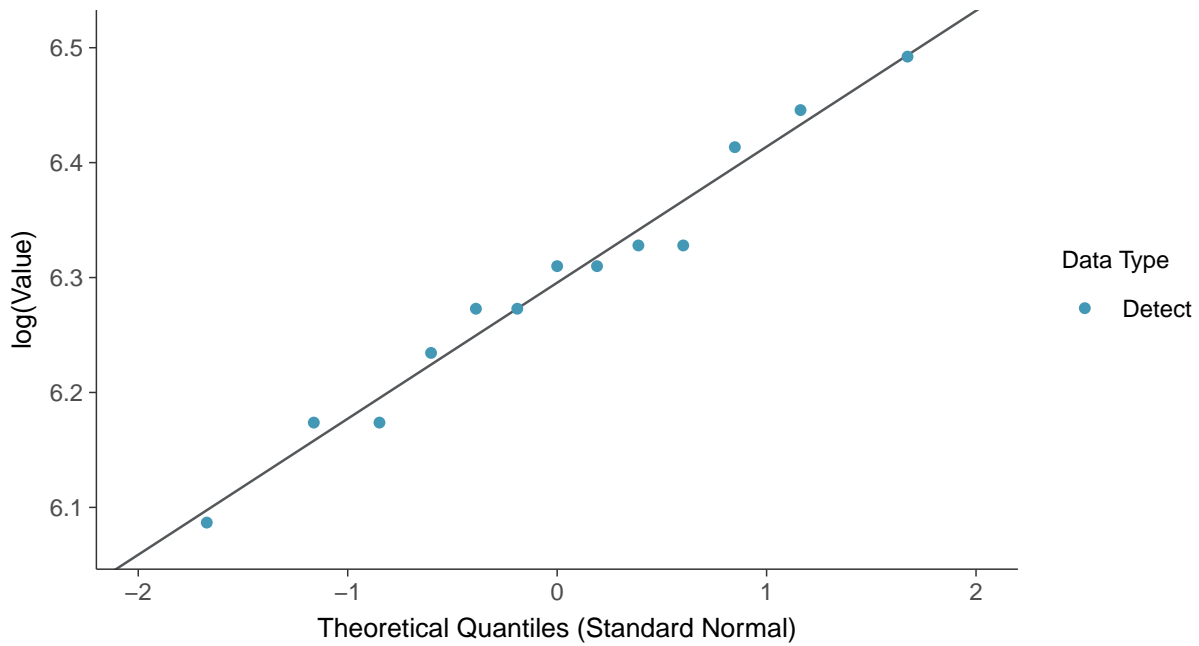
Normal Q-Q plot

Total Dissolved Solids, MW-08 (mg/L)



Lognormal Q-Q plot

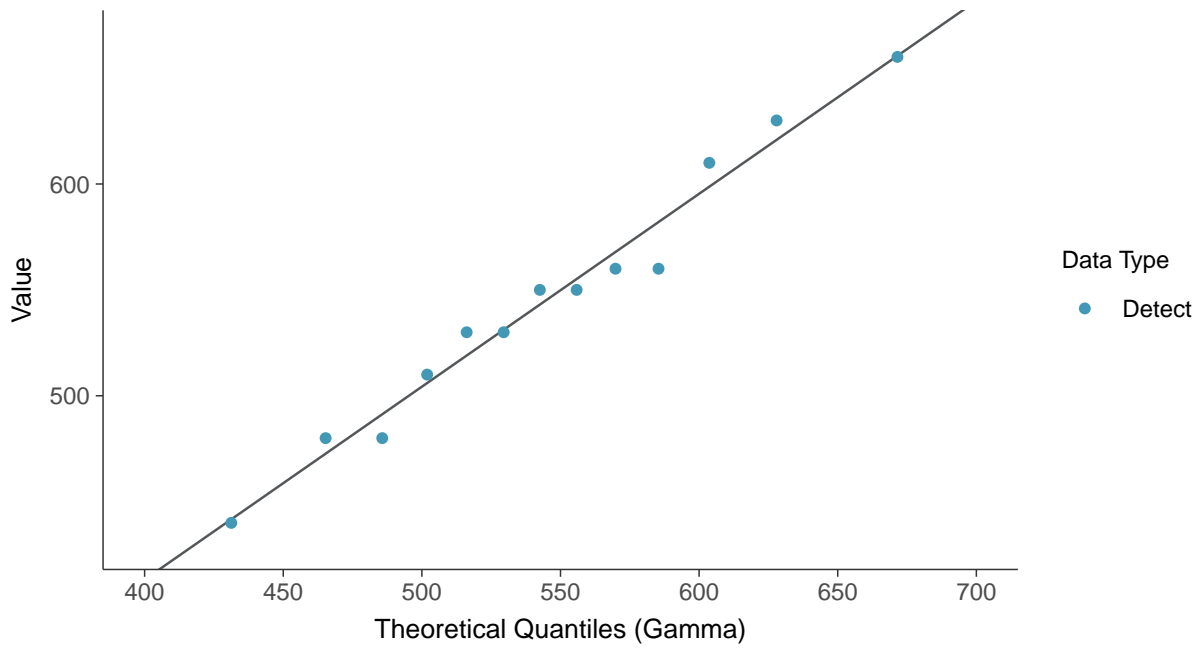
Total Dissolved Solids, MW-08 (mg/L)





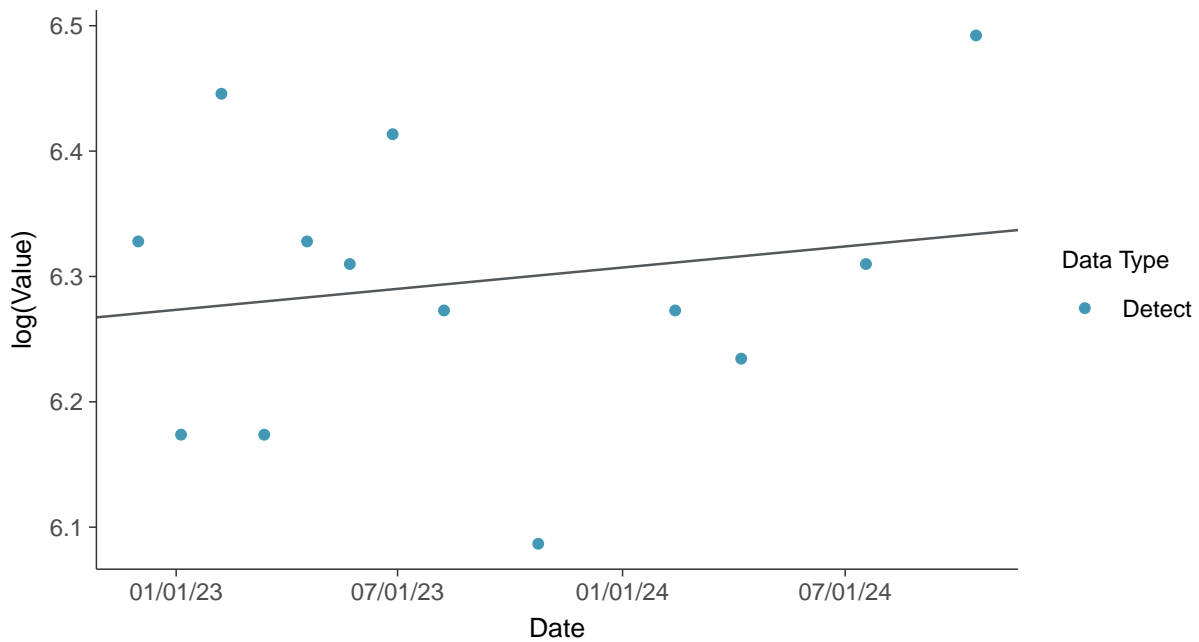
Gamma Q-Q plot

Total Dissolved Solids, MW-08 (mg/L)



Trend Regression: Lognormal MLE

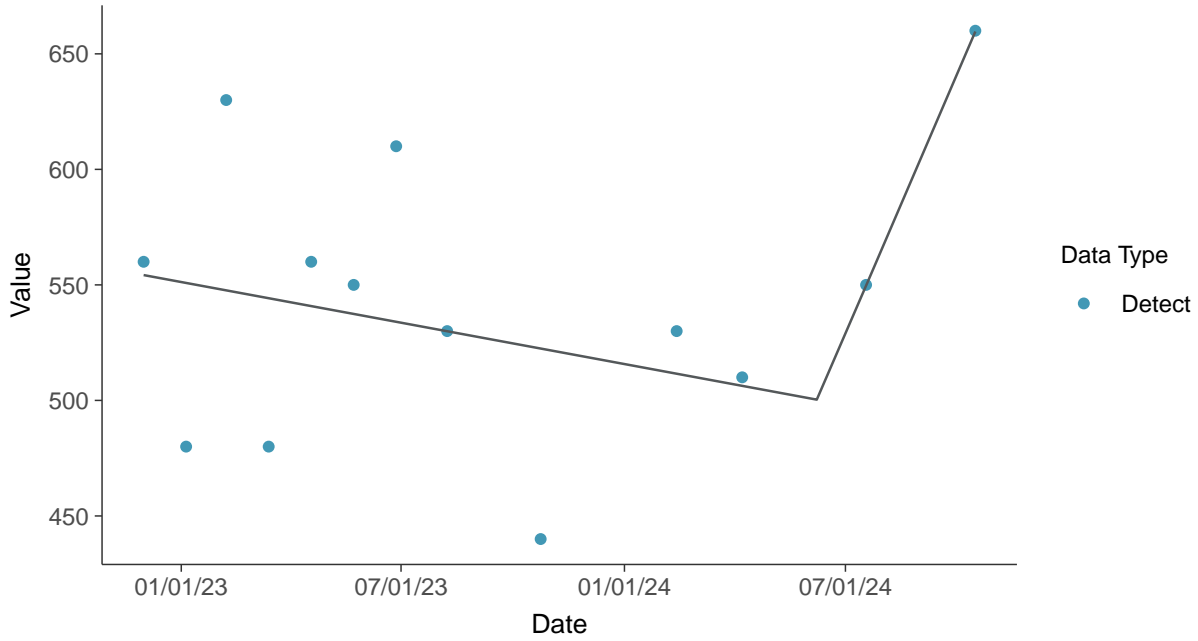
Total Dissolved Solids, MW-08 (mg/L)





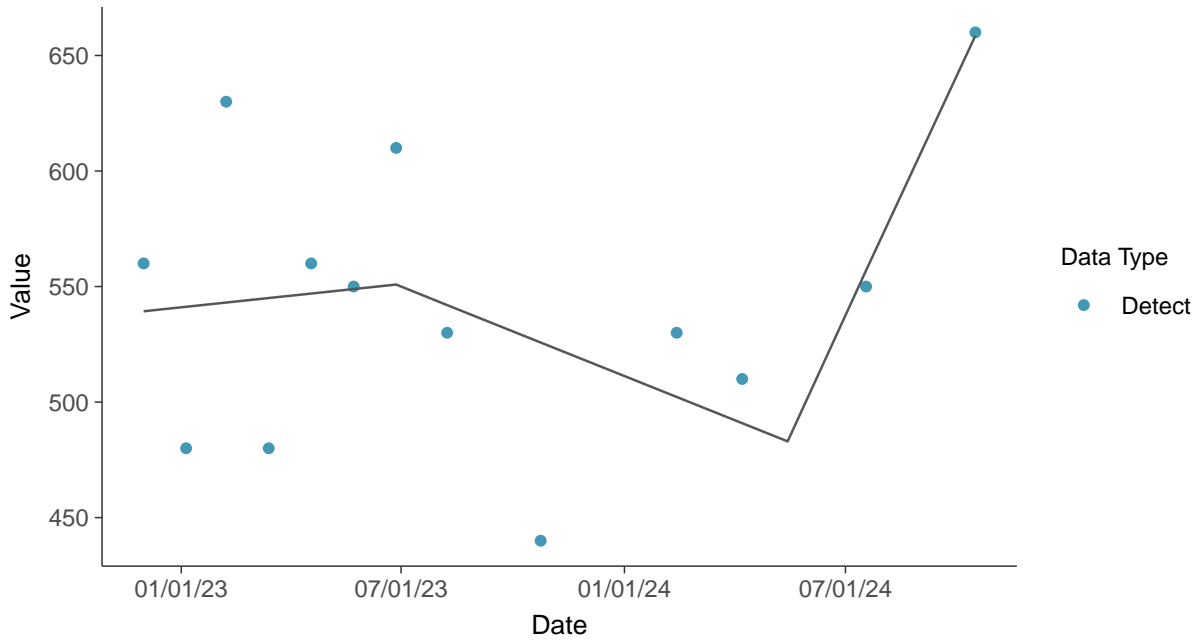
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-08 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Total Dissolved Solids, MW-08 (mg/L)



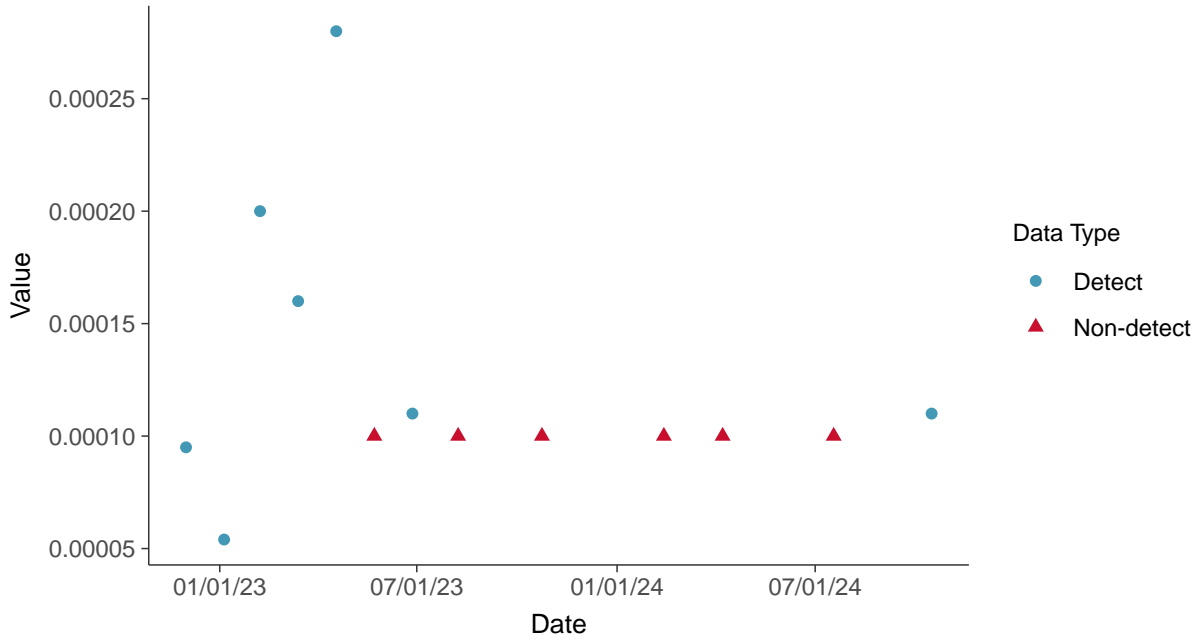


Appendix IV: Antimony, MW-08

ID: 1_18_1_5_101

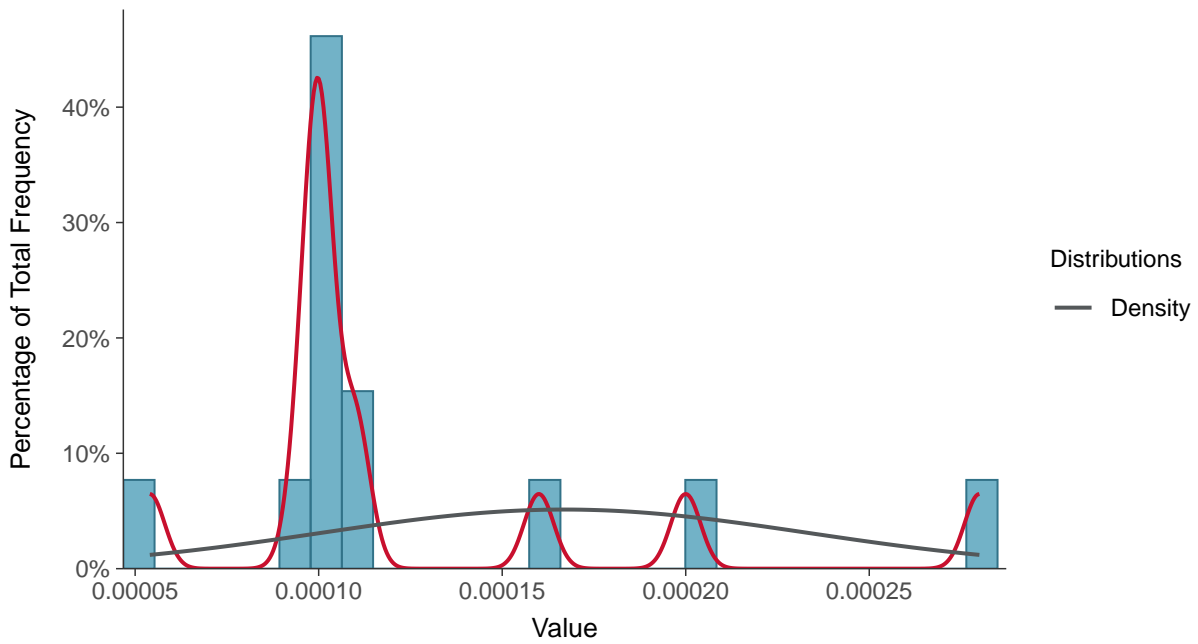
Scatter Plot

Antimony, MW-08 (mg/L)



Histogram

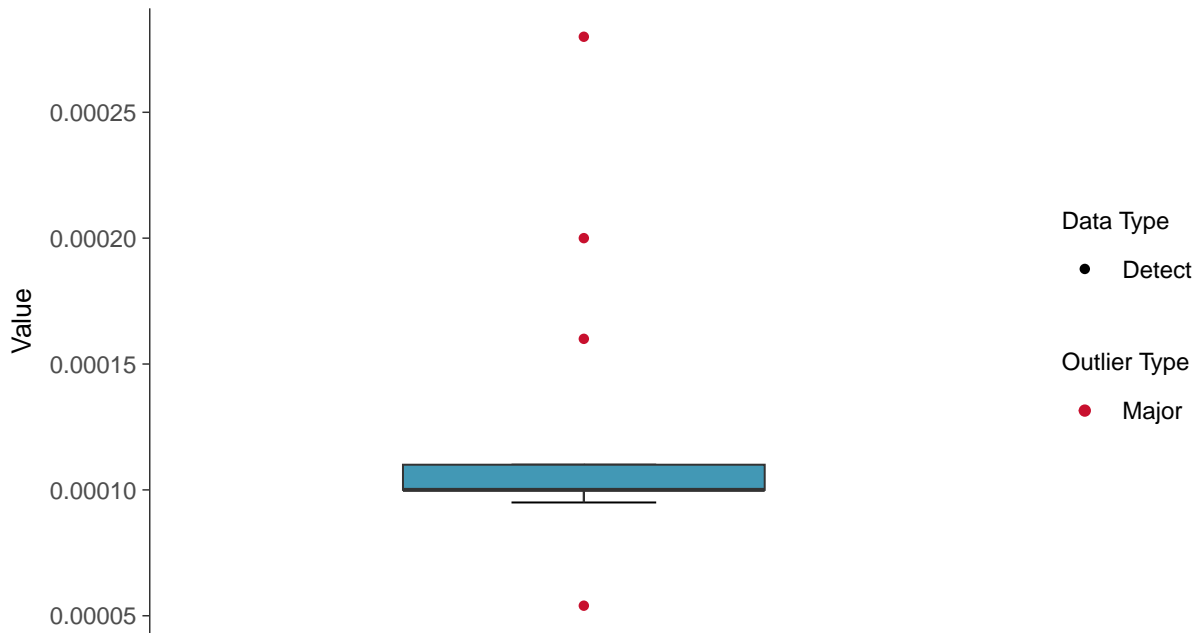
Antimony, MW-08 (mg/L)





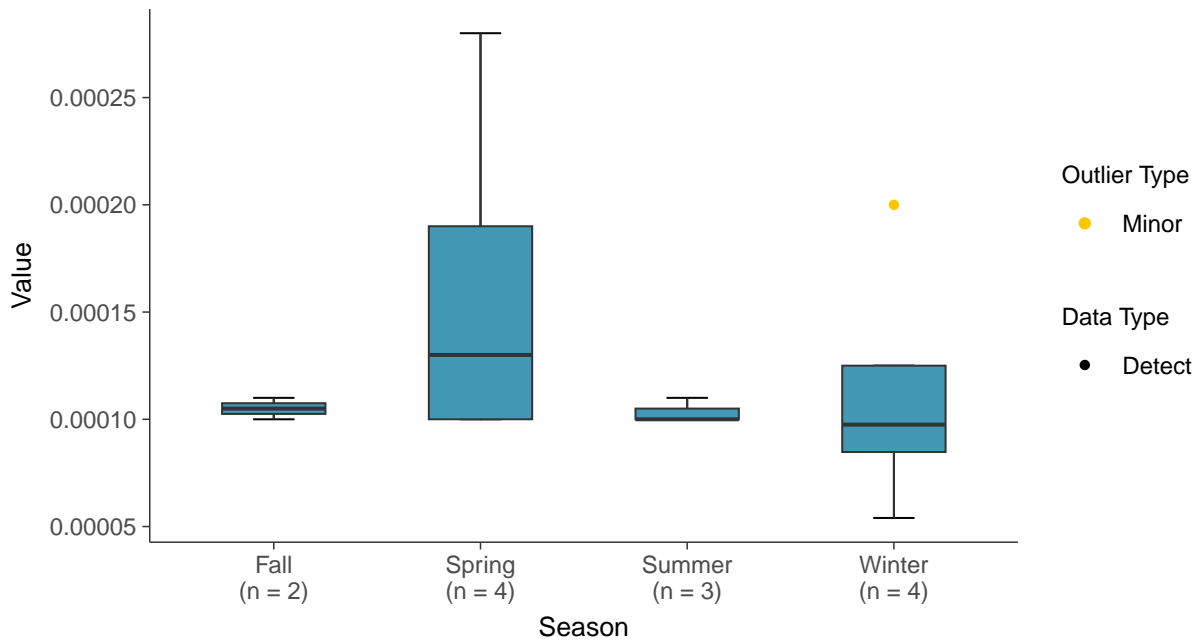
Boxplot

Antimony, MW-08 (mg/L)



Boxplot by Season

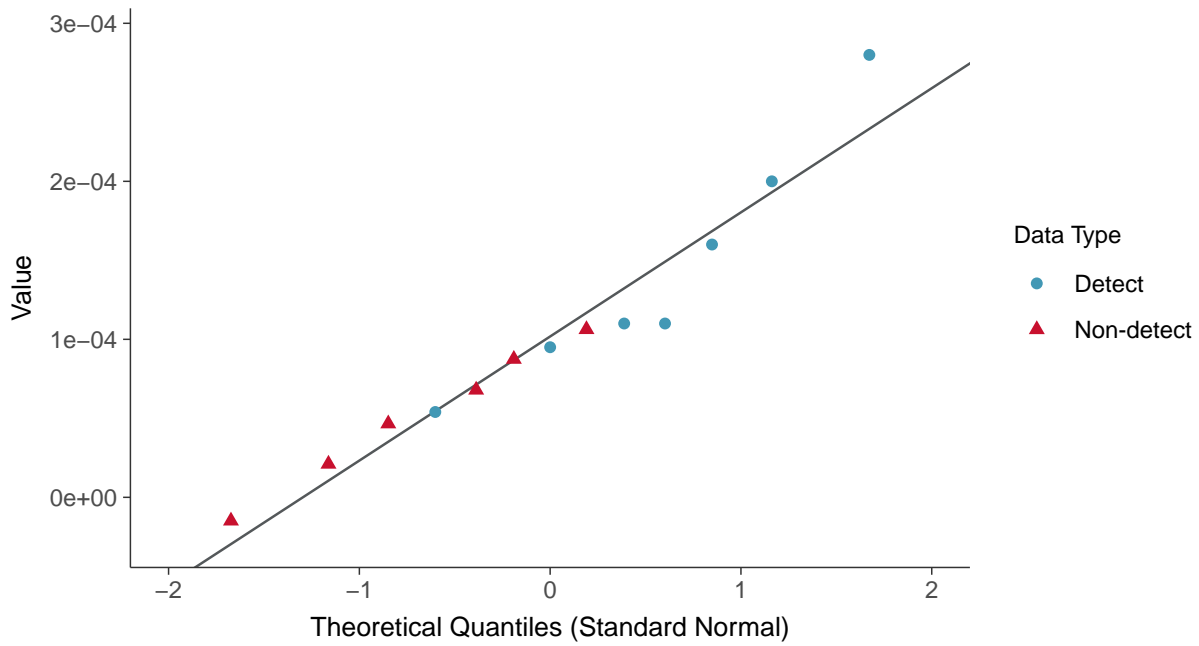
Antimony, MW-08 (mg/L)





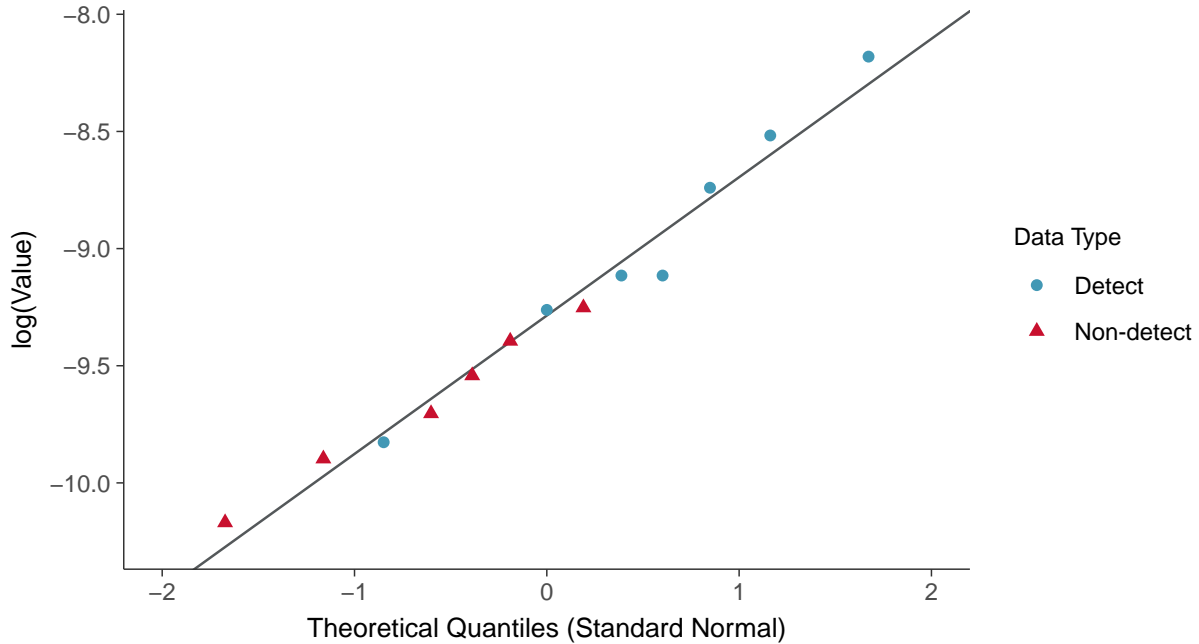
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-08 (mg/L)



Lognormal Q-Q plot using ROS Imputed Estimates

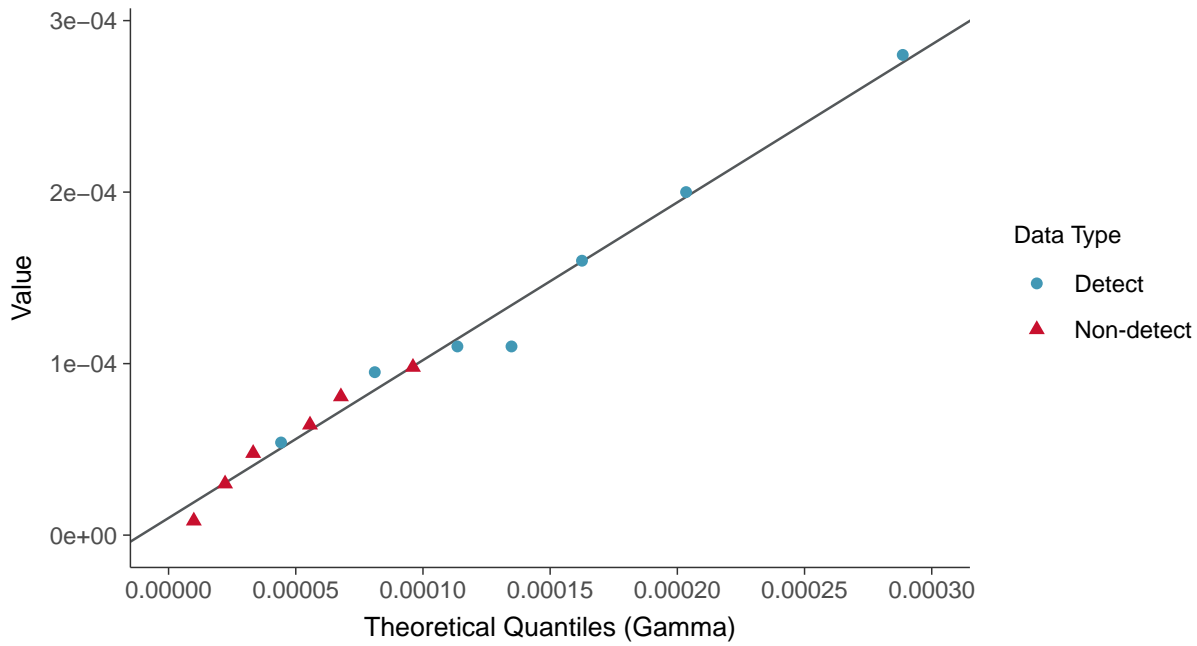
Antimony, MW-08 (mg/L)





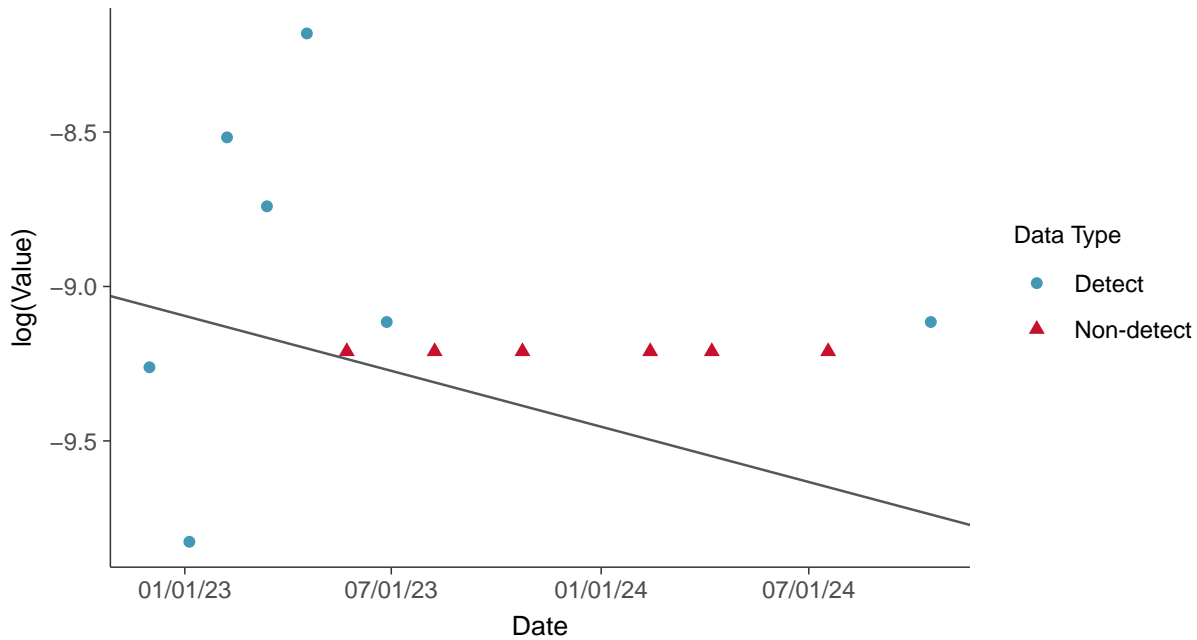
Gamma Q-Q plot using ROS Imputed Estimates

Antimony, MW-08 (mg/L)



Trend Regression: Lognormal MLE

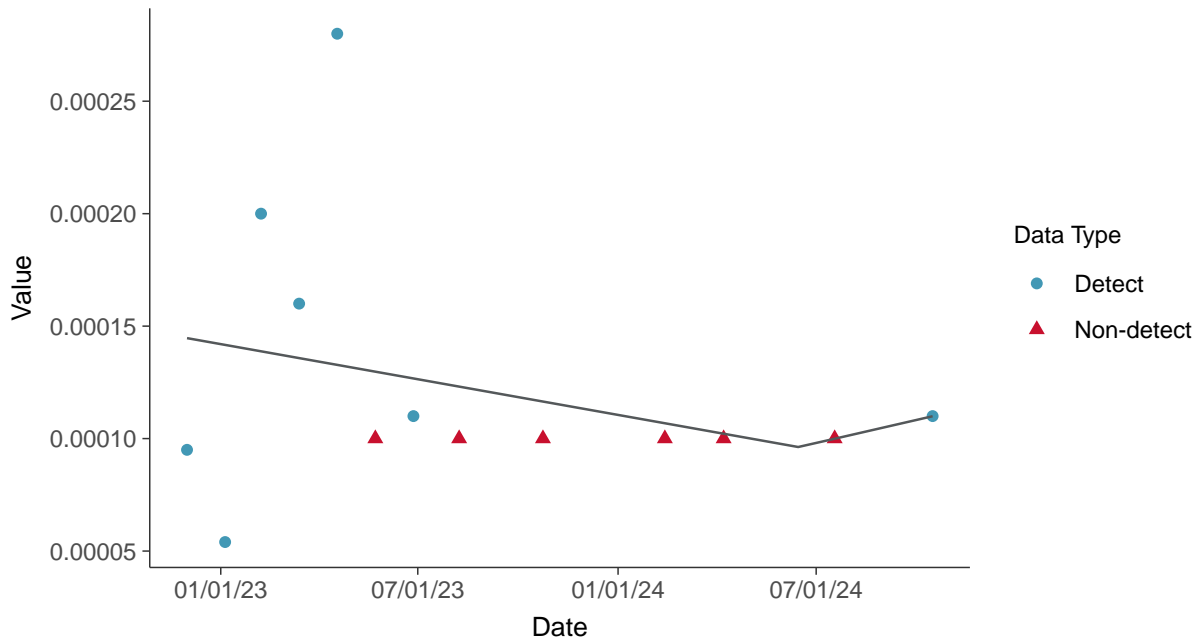
Antimony, MW-08 (mg/L)





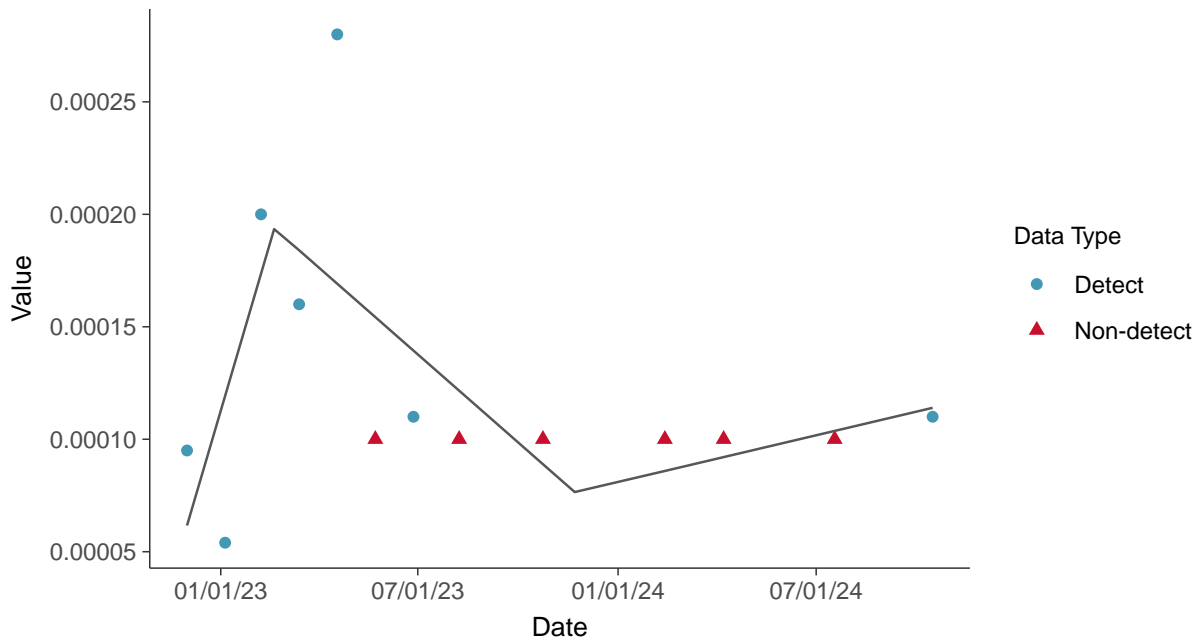
Trend Regression: Piecewise Linear-Linear

Antimony, MW-08 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

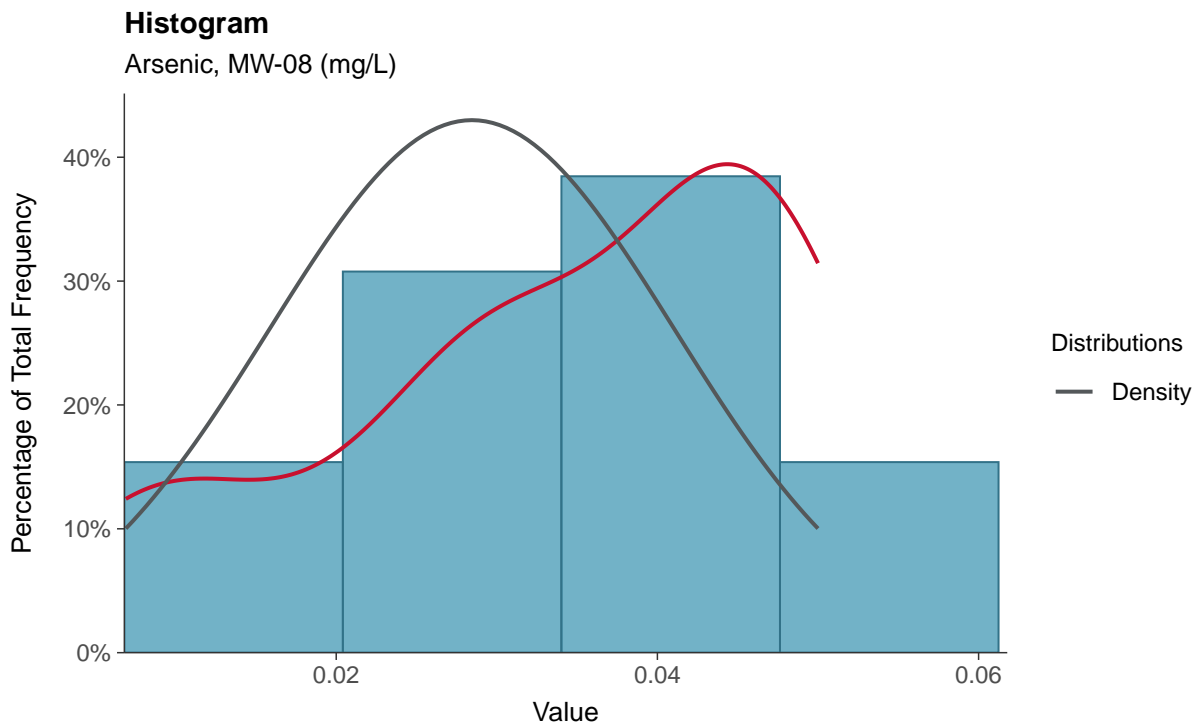
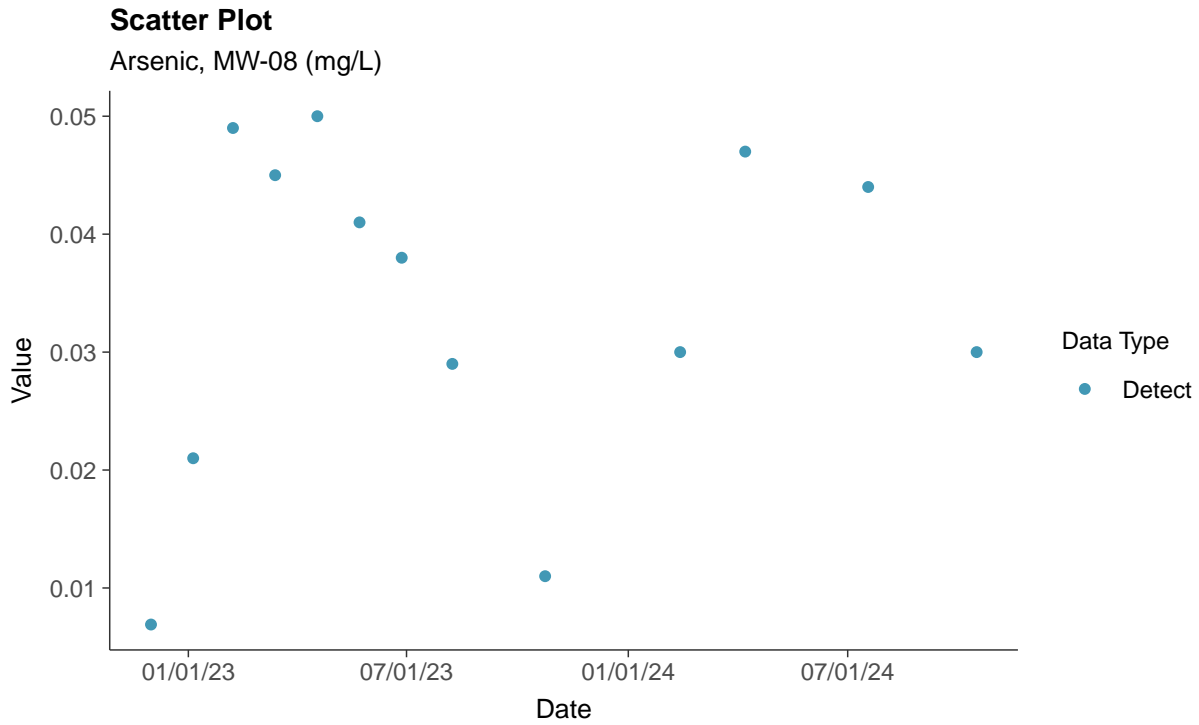
Antimony, MW-08 (mg/L)





Appendix IV: Arsenic, MW-08

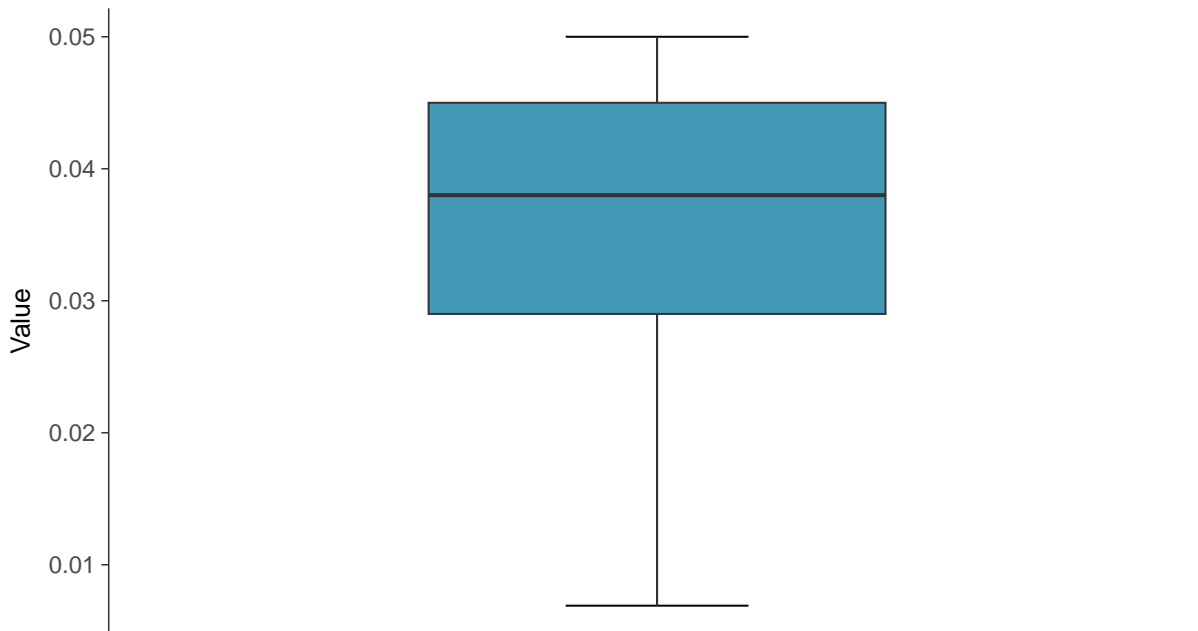
ID: 1_18_1_5_102





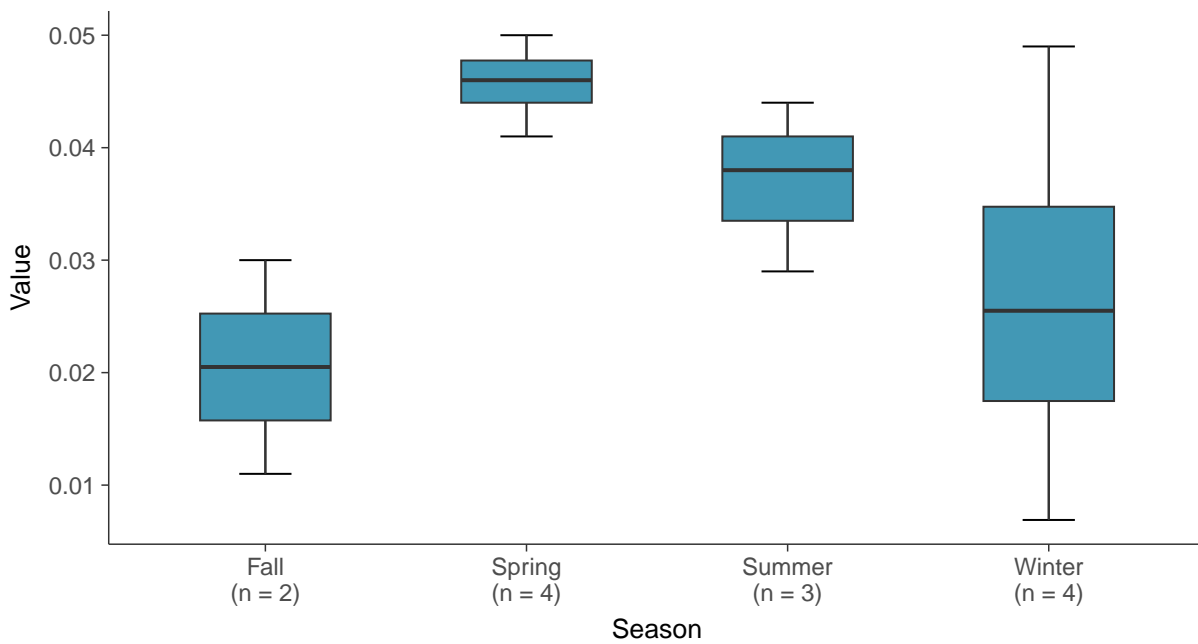
Boxplot

Arsenic, MW-08 (mg/L)



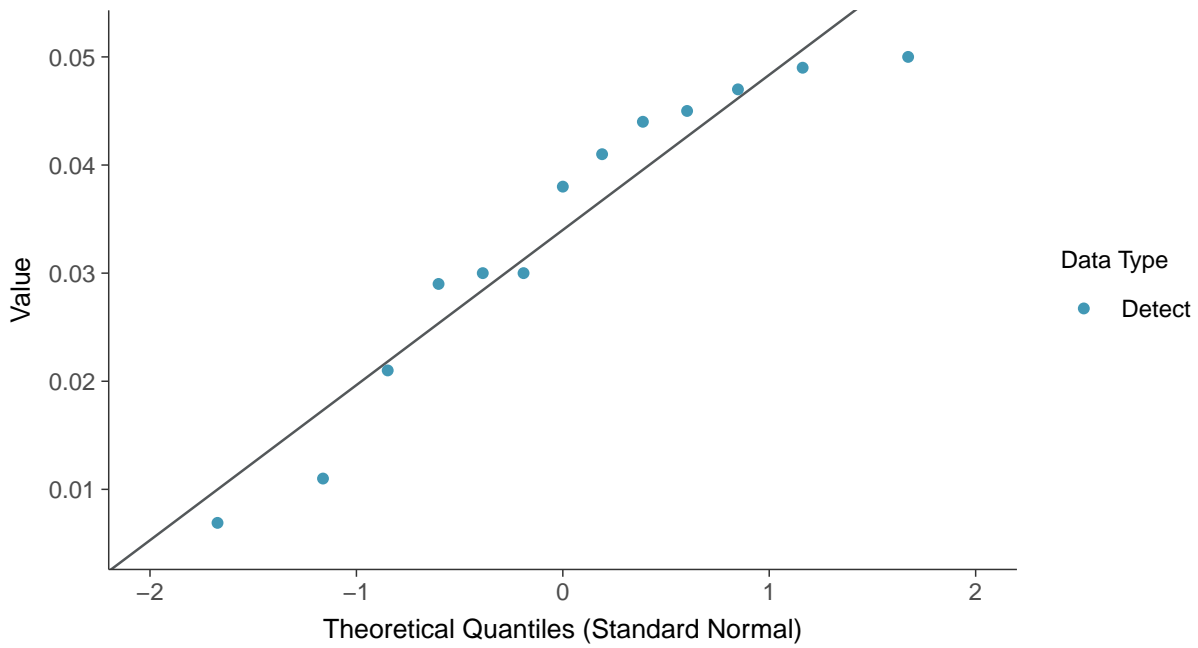
Boxplot by Season

Arsenic, MW-08 (mg/L)

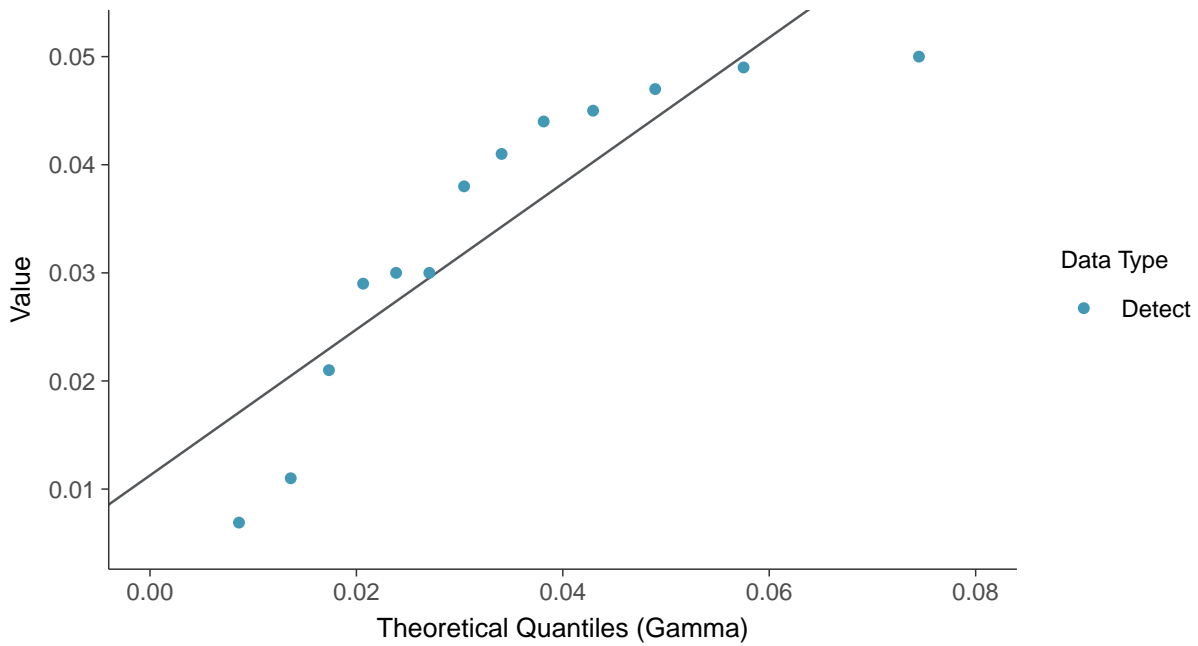




Normal Q-Q plot
Arsenic, MW-08 (mg/L)



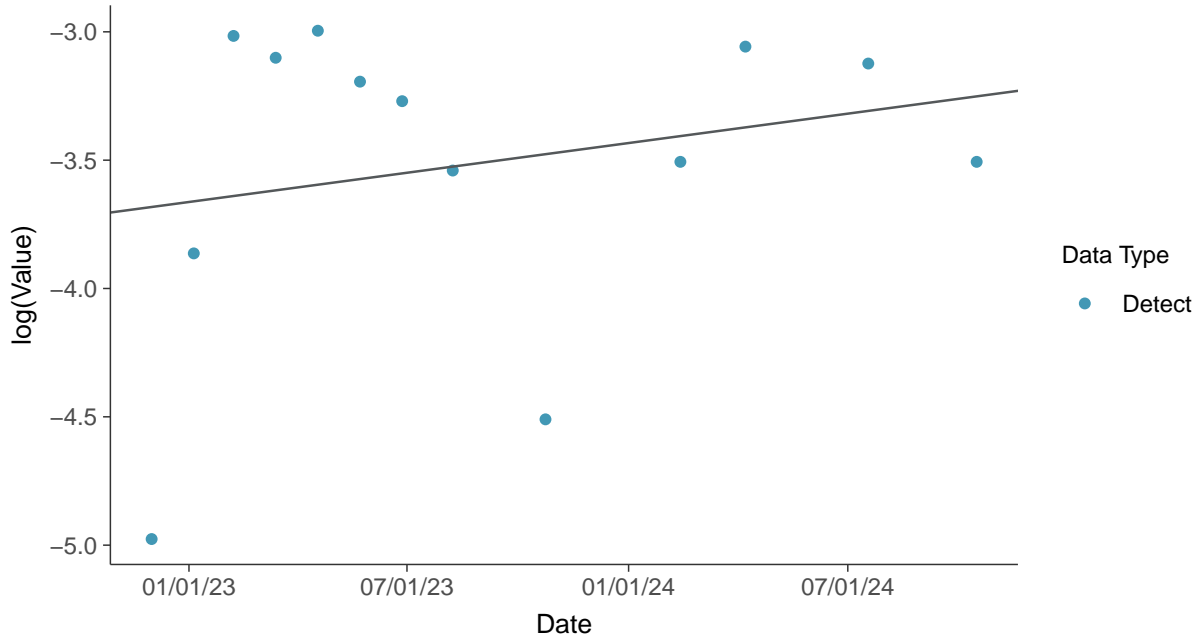
Gamma Q-Q plot
Arsenic, MW-08 (mg/L)





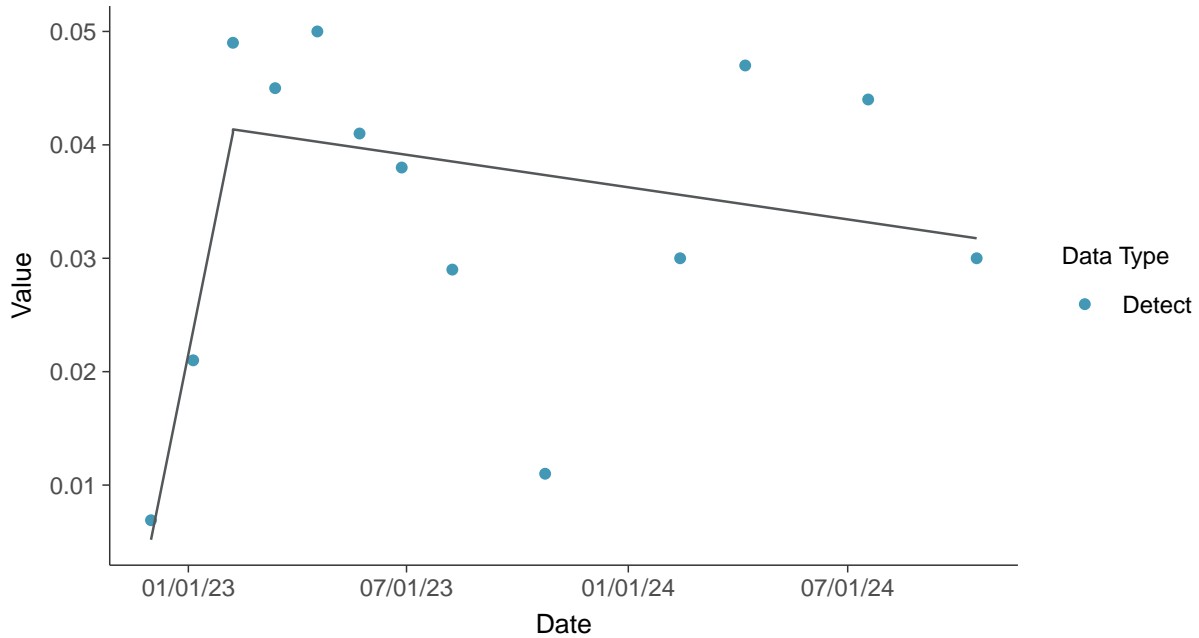
Trend Regression: Lognormal MLE

Arsenic, MW-08 (mg/L)



Trend Regression: Piecewise Linear-Linear

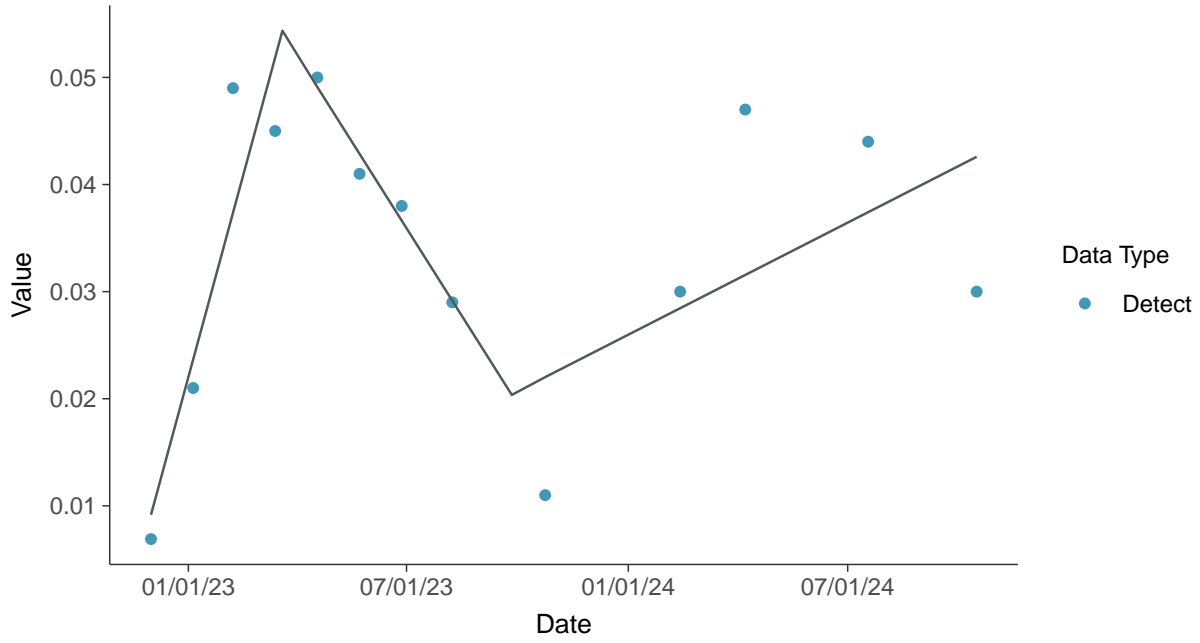
Arsenic, MW-08 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

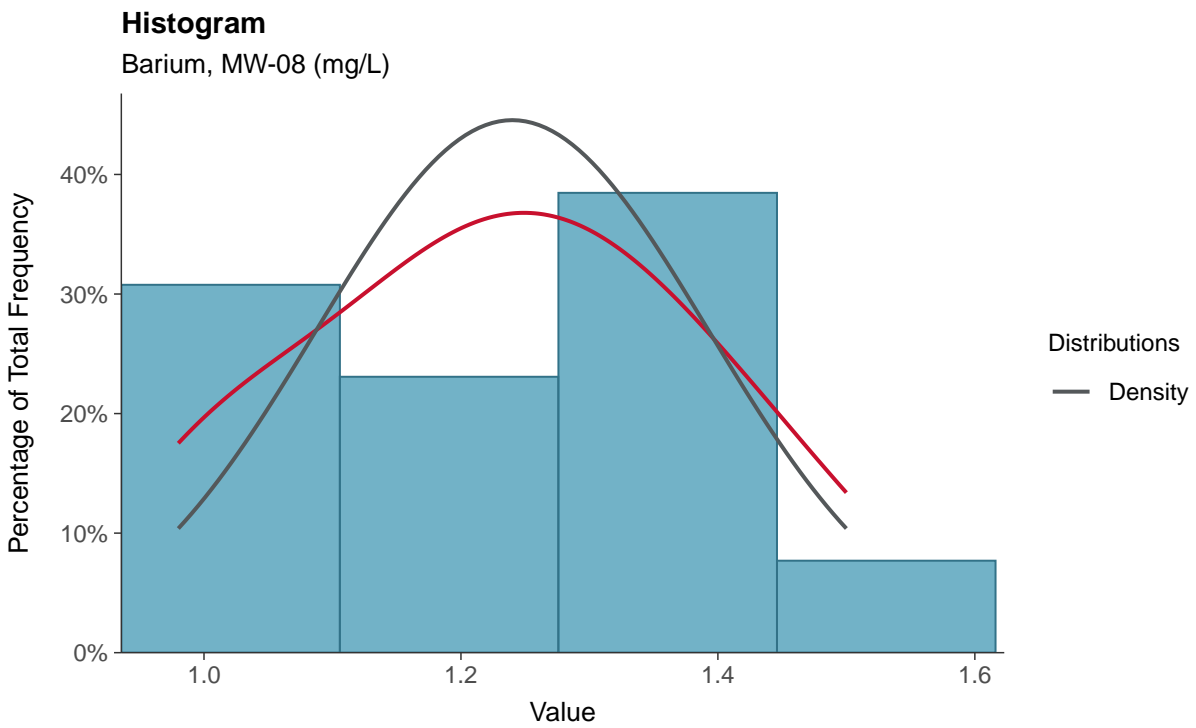
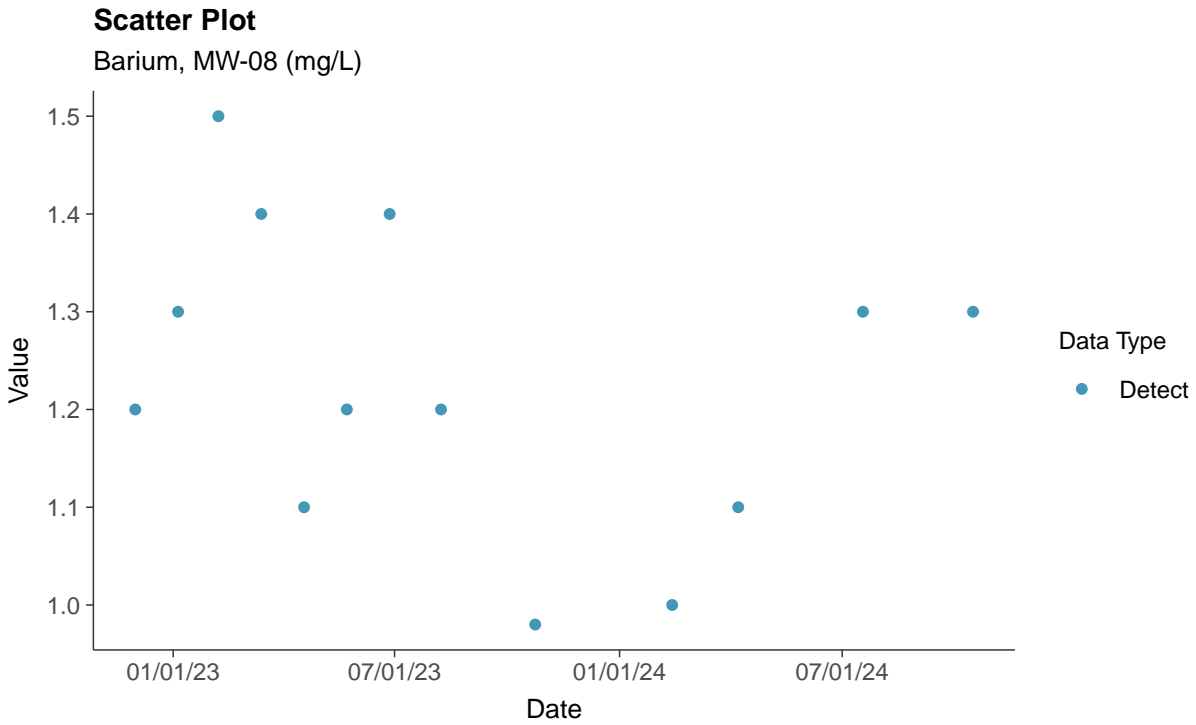
Arsenic, MW-08 (mg/L)





Appendix IV: Barium, MW-08

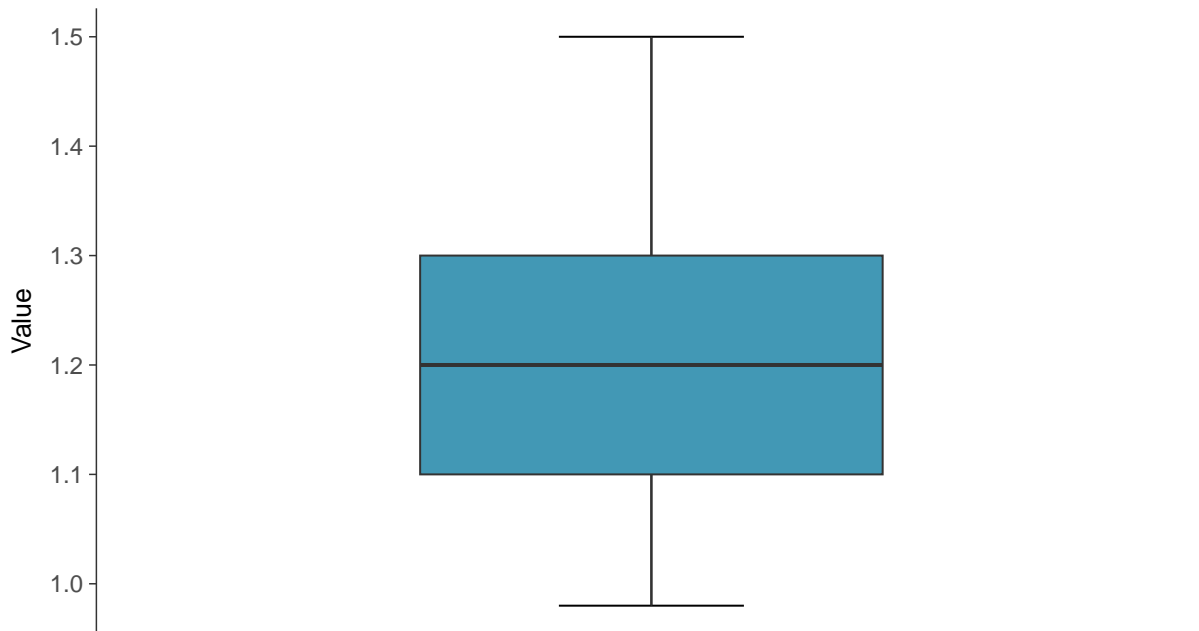
ID: 1_18_1_5_103





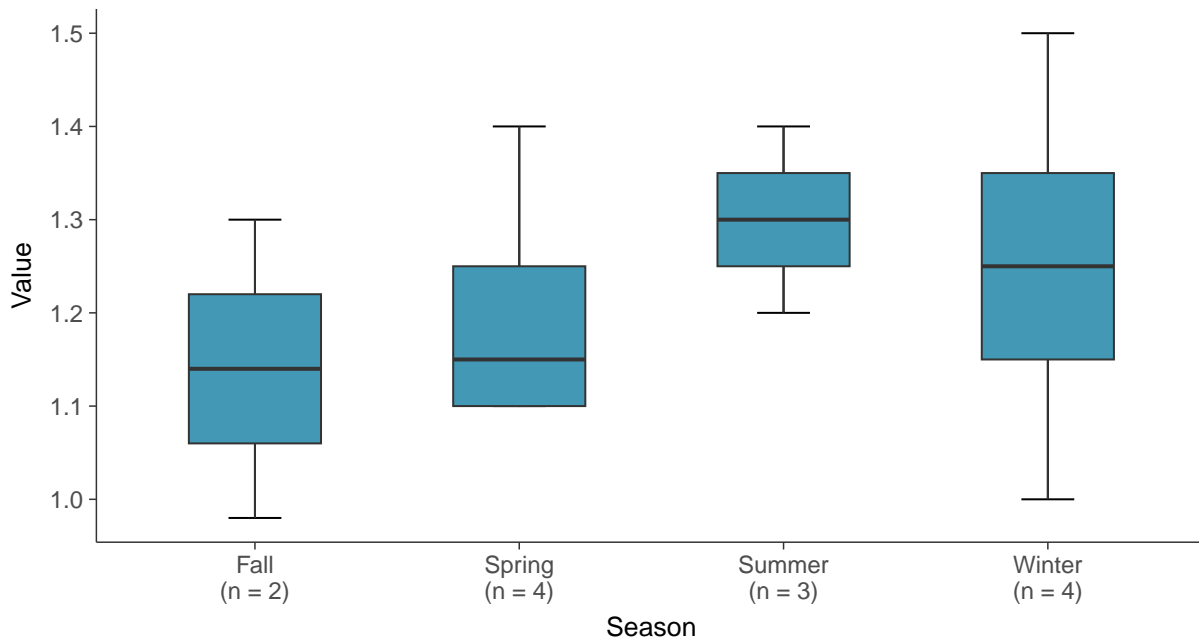
Boxplot

Barium, MW-08 (mg/L)



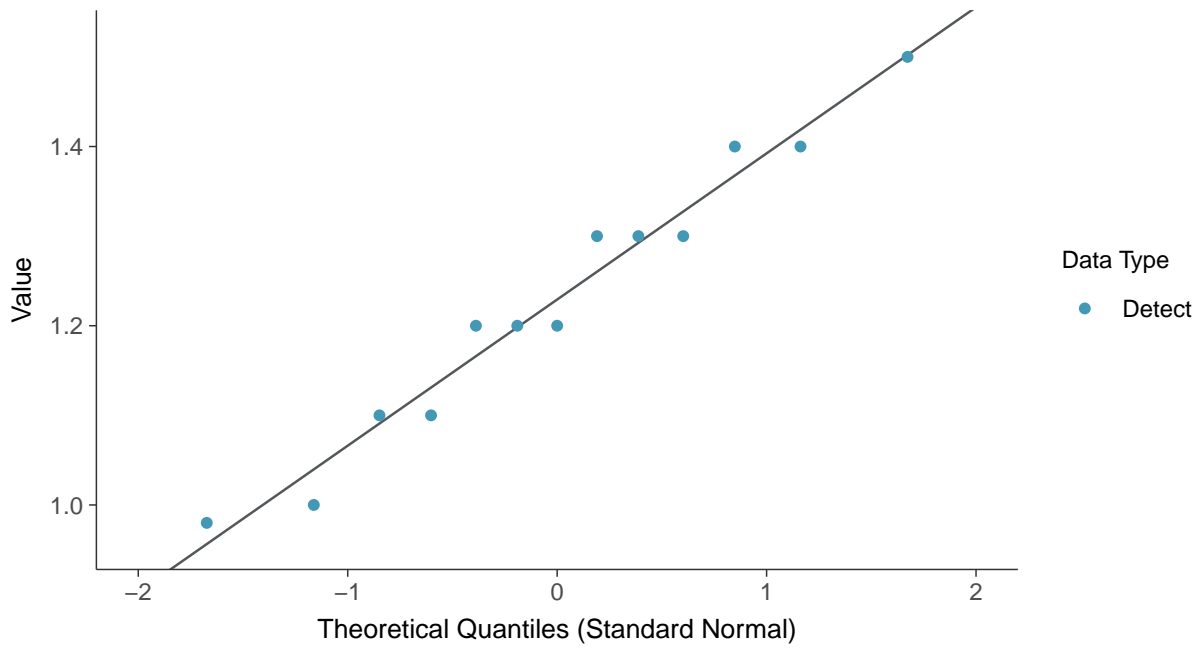
Boxplot by Season

Barium, MW-08 (mg/L)

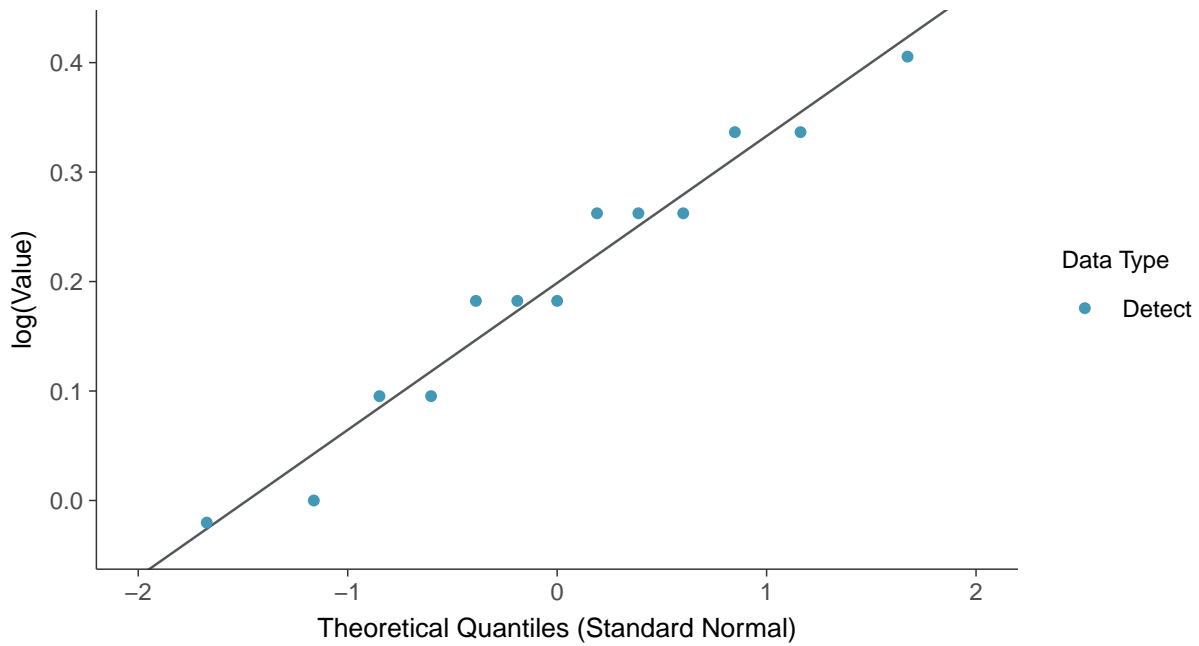




Normal Q-Q plot
Barium, MW-08 (mg/L)

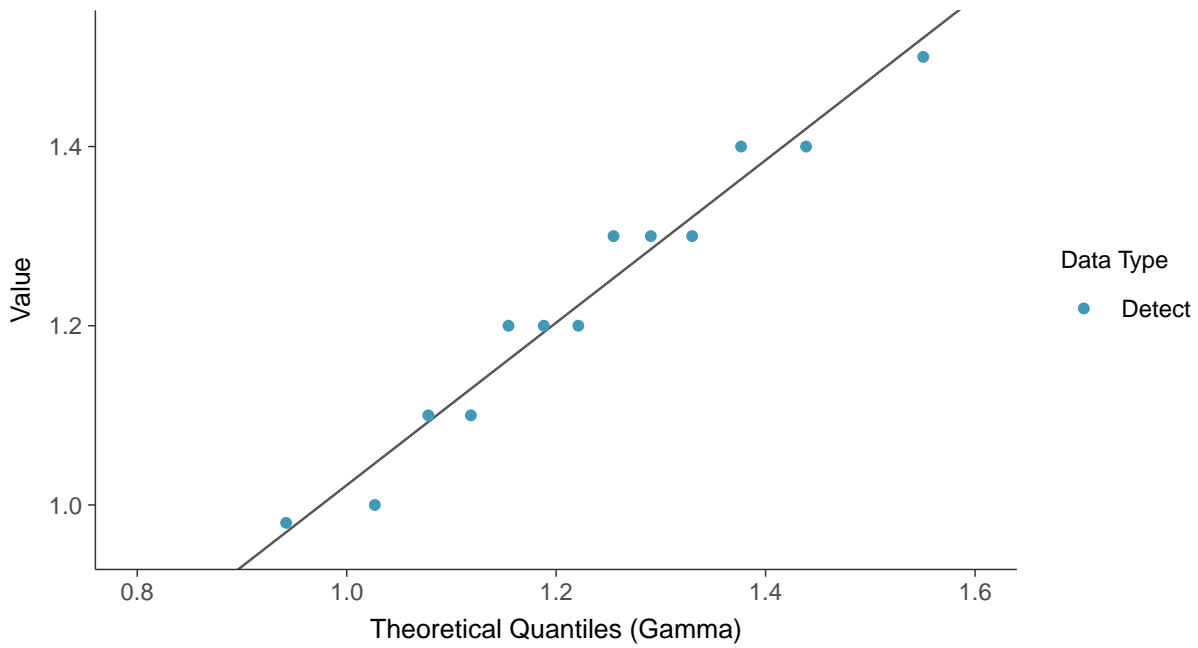


Lognormal Q-Q plot
Barium, MW-08 (mg/L)

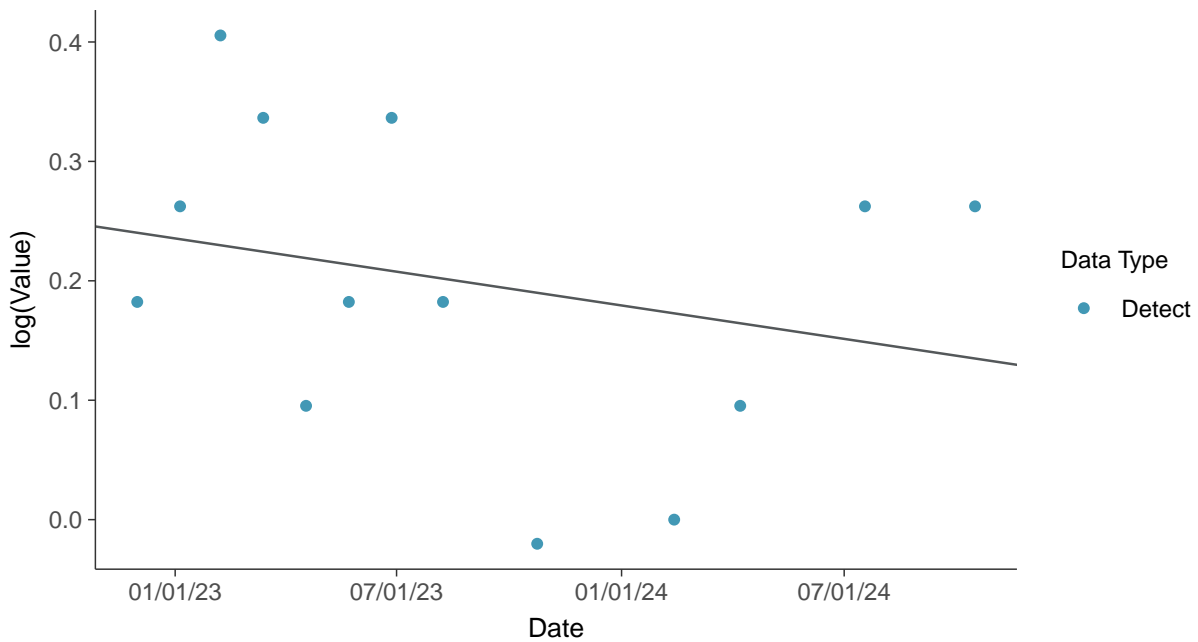




Gamma Q-Q plot
Barium, MW-08 (mg/L)

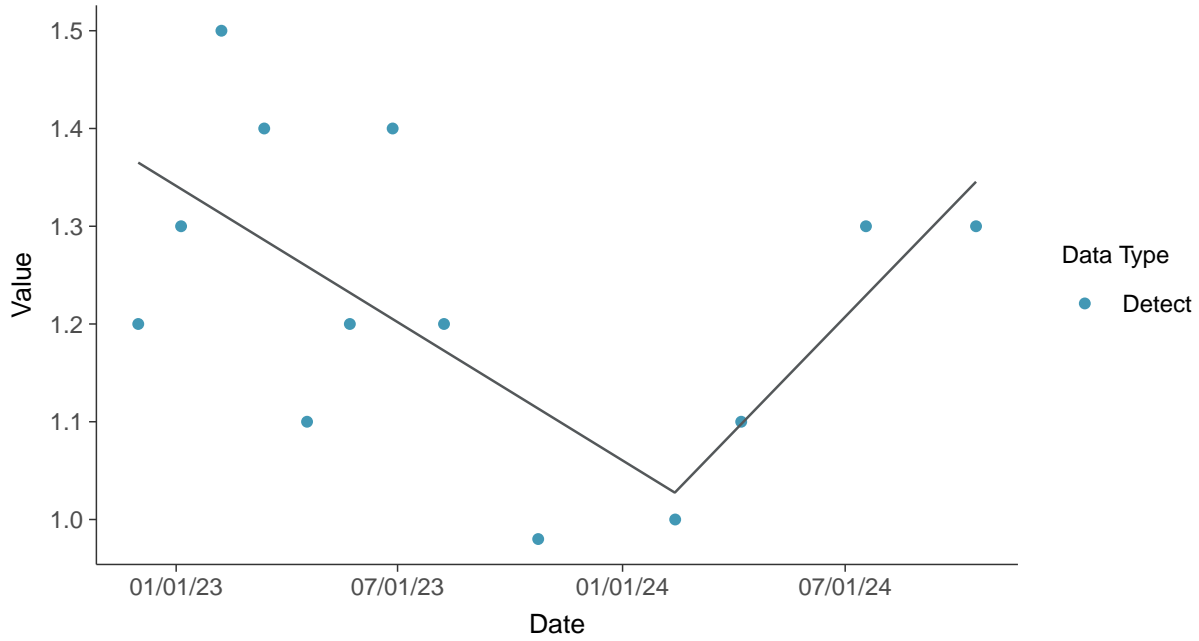


Trend Regression: Lognormal MLE
Barium, MW-08 (mg/L)

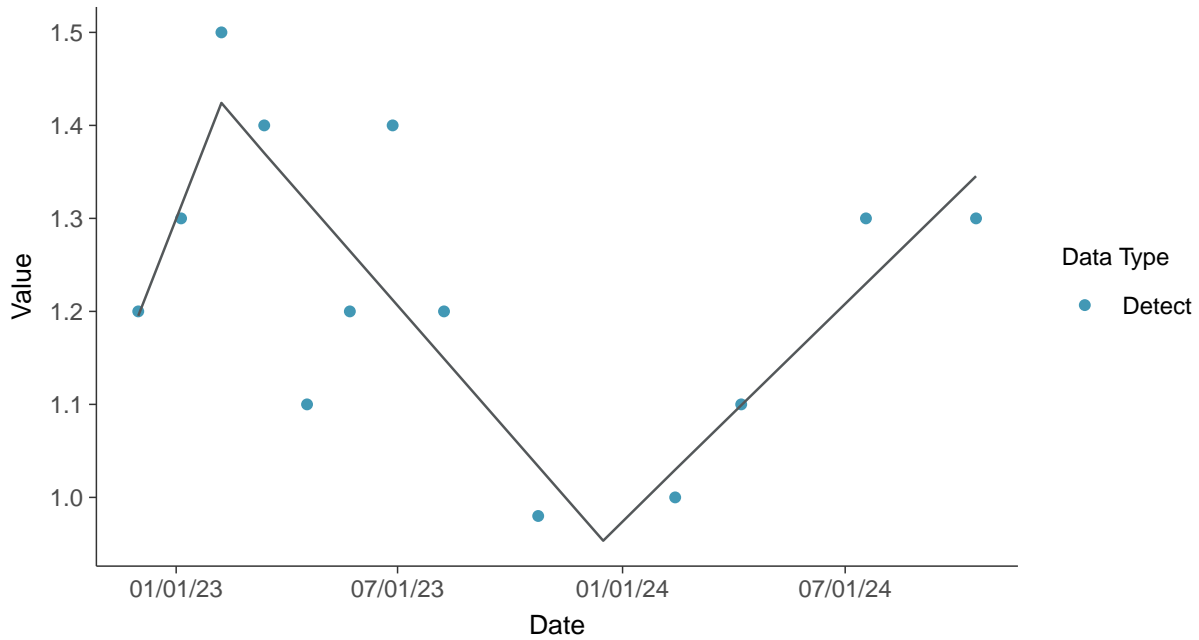




Trend Regression: Piecewise Linear-Linear
Barium, MW-08 (mg/L)



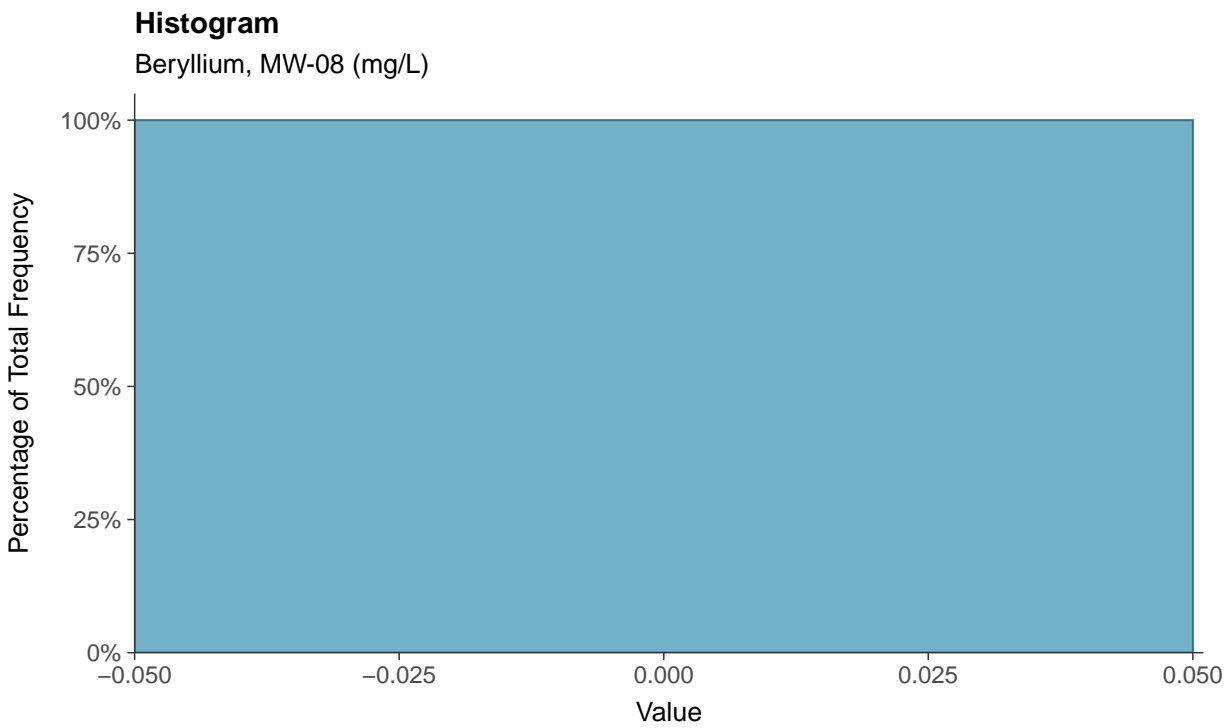
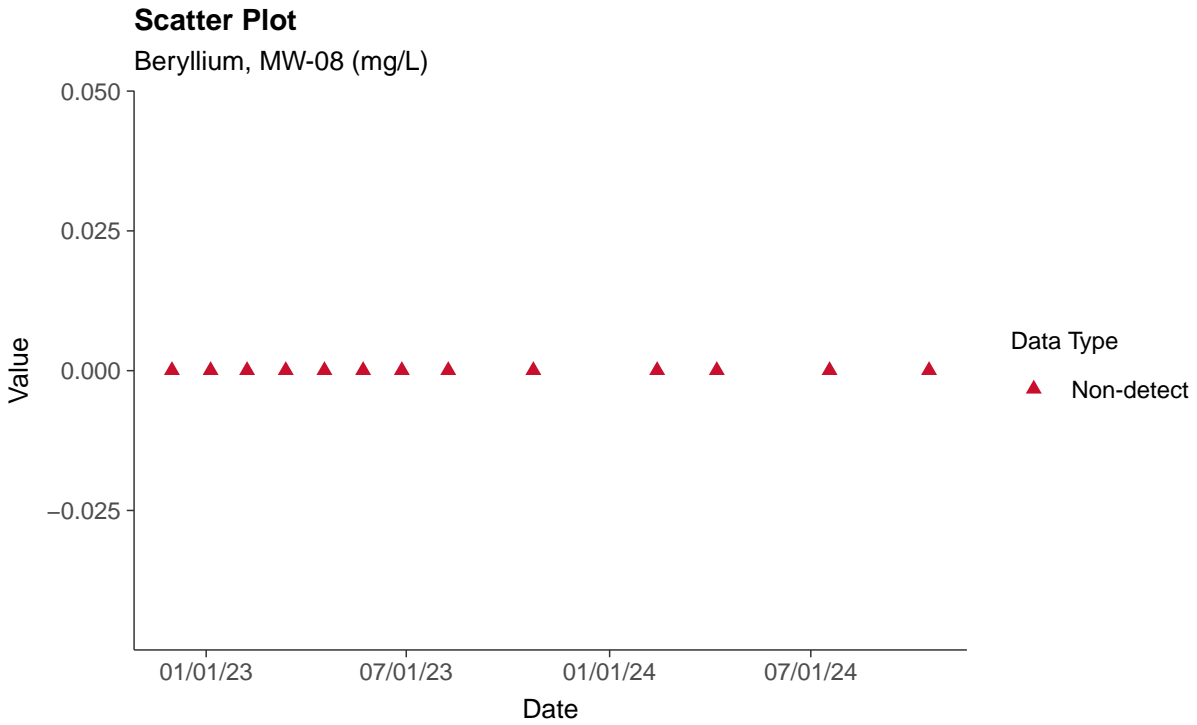
Trend Regression: Piecewise Linear-Linear-Linear
Barium, MW-08 (mg/L)





Appendix IV: Beryllium, MW-08

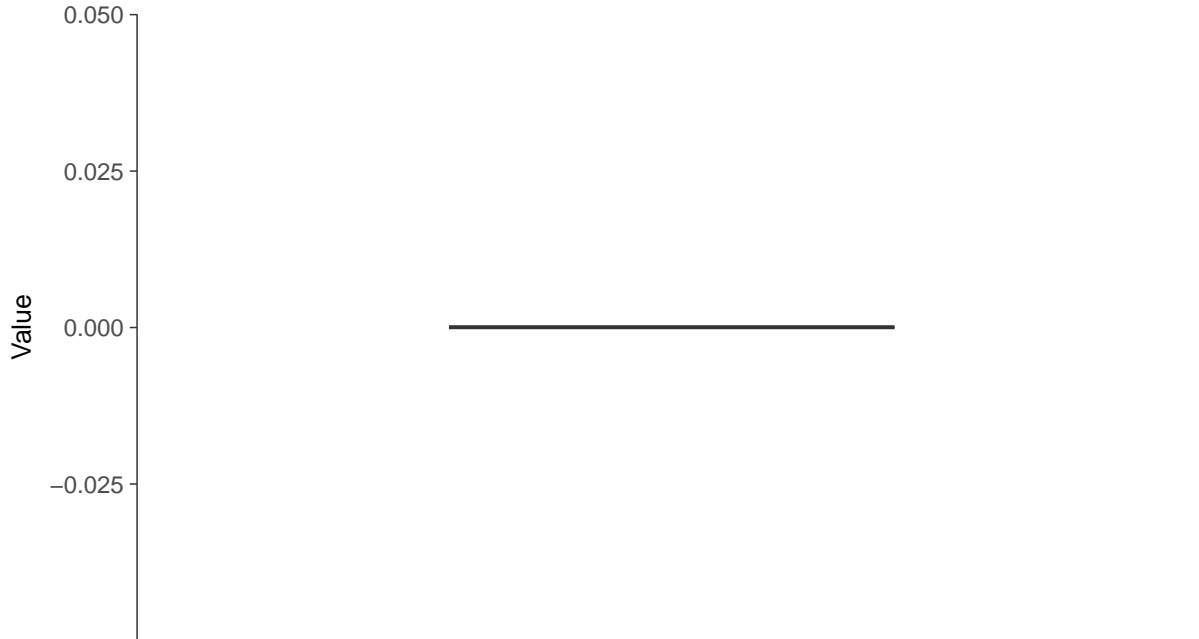
ID: 1_18_1_5_104





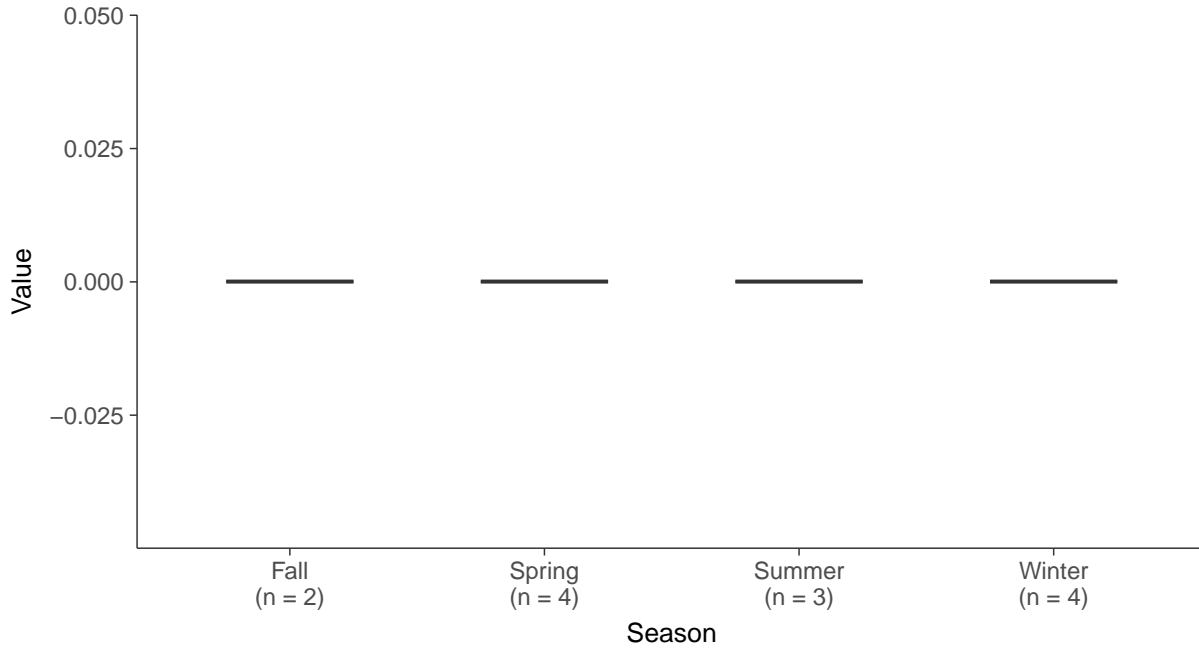
Boxplot

Beryllium, MW-08 (mg/L)



Boxplot by Season

Beryllium, MW-08 (mg/L)



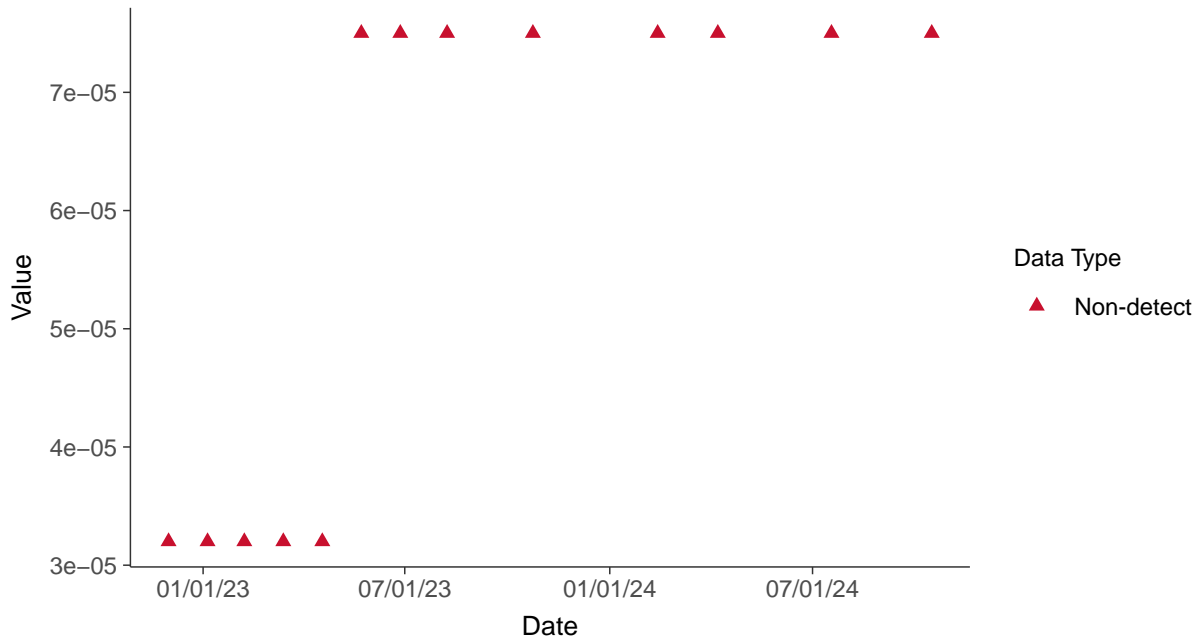


Appendix IV: Cadmium, MW-08

ID: 1_18_1_5_106

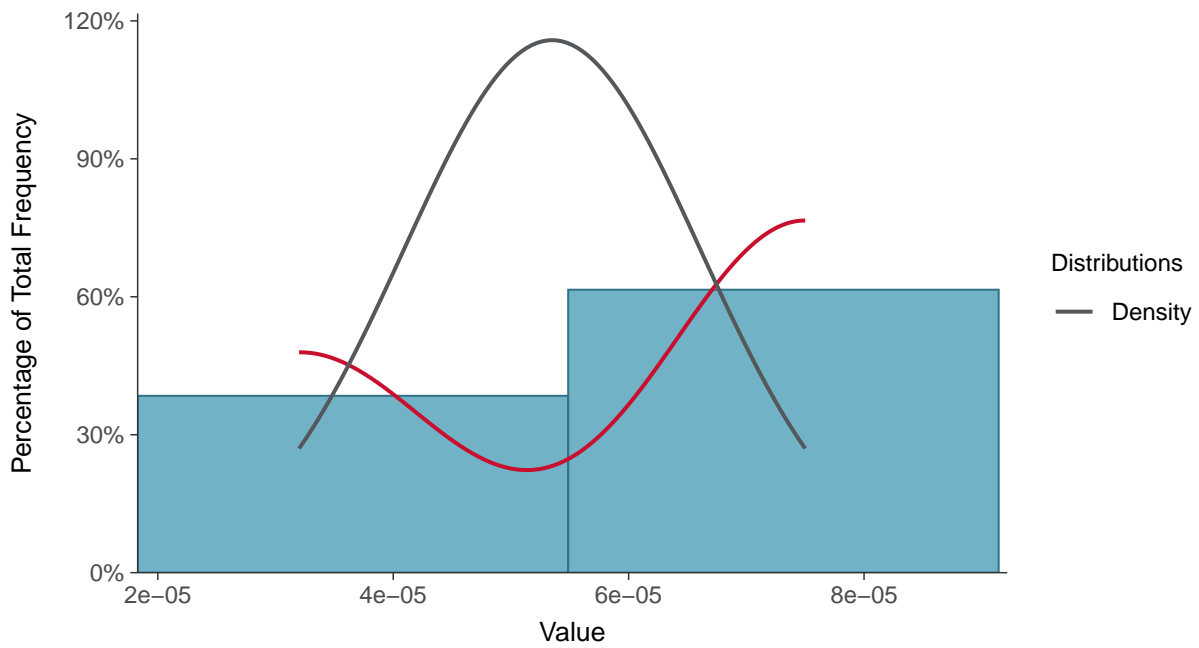
Scatter Plot

Cadmium, MW-08 (mg/L)



Histogram

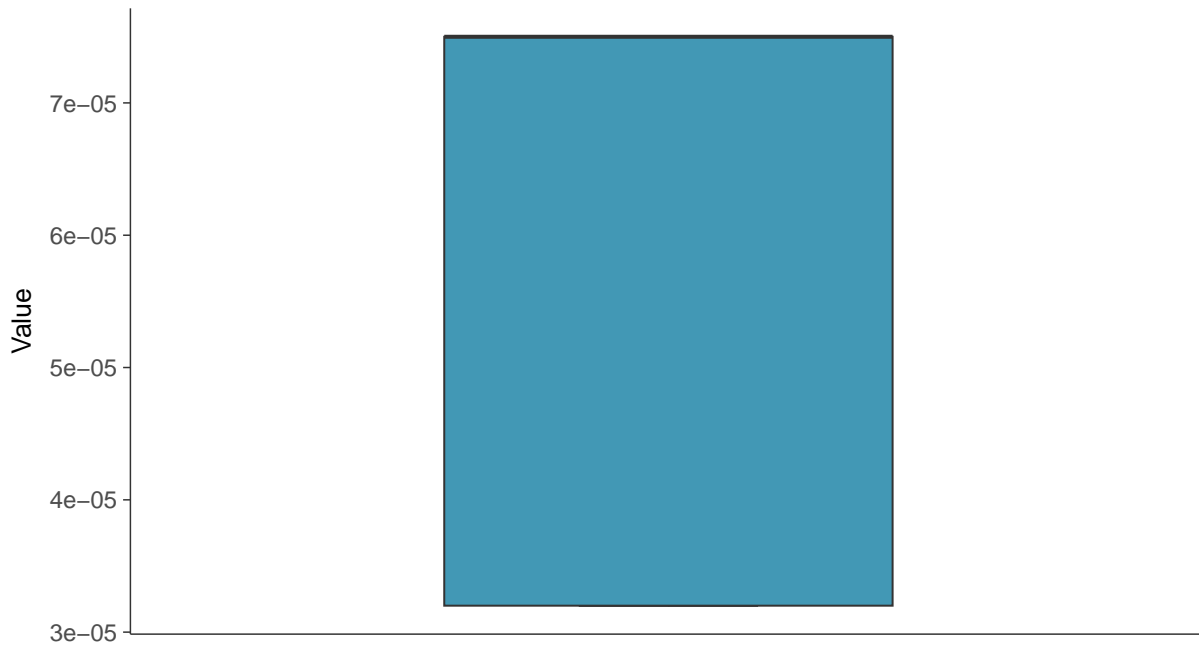
Cadmium, MW-08 (mg/L)





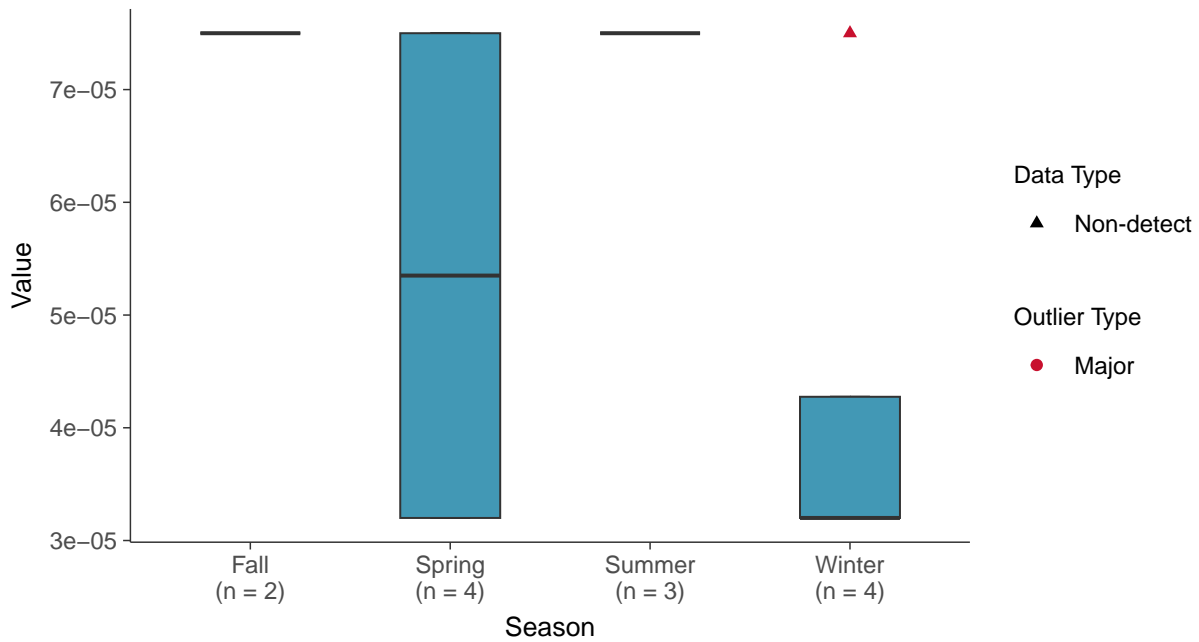
Boxplot

Cadmium, MW-08 (mg/L)



Boxplot by Season

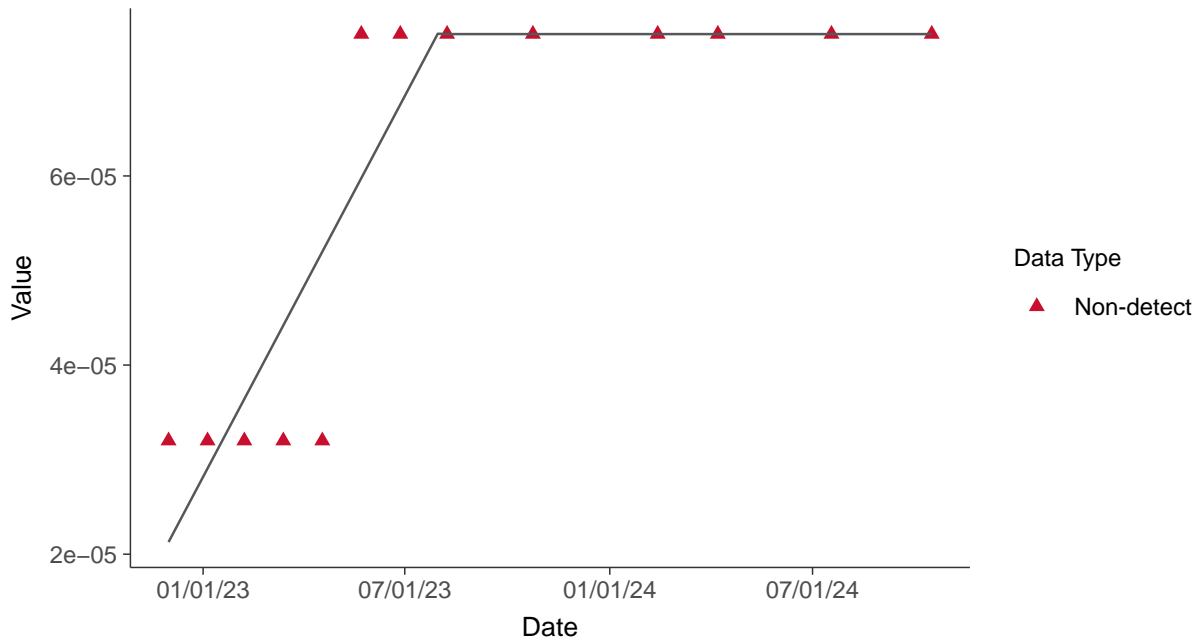
Cadmium, MW-08 (mg/L)





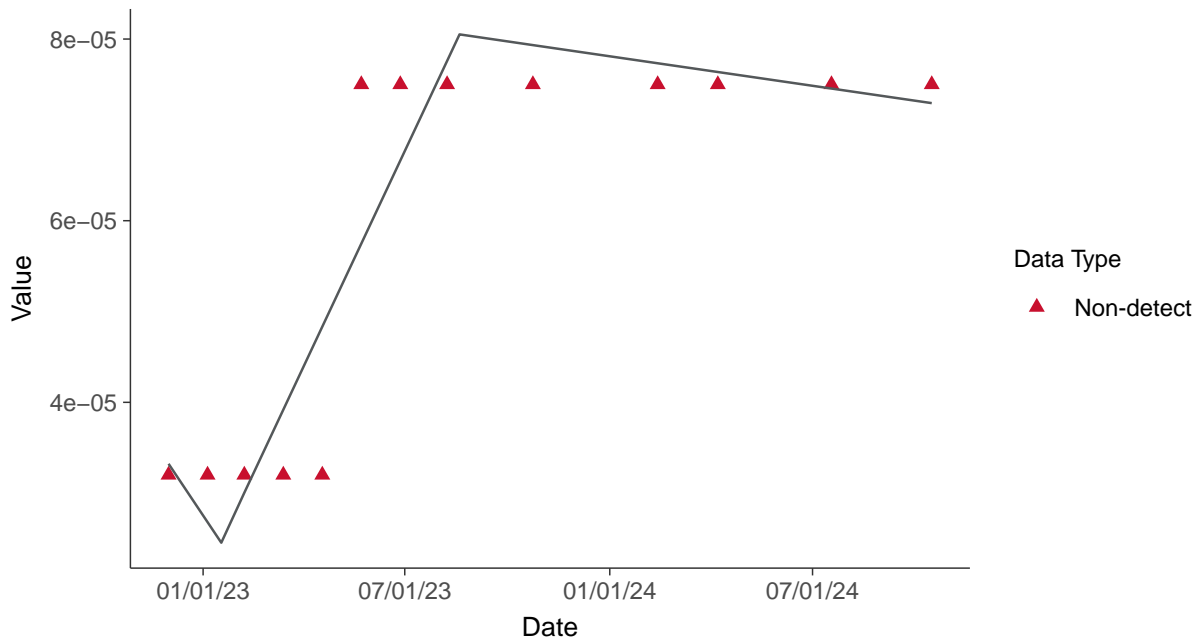
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-08 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cadmium, MW-08 (mg/L)



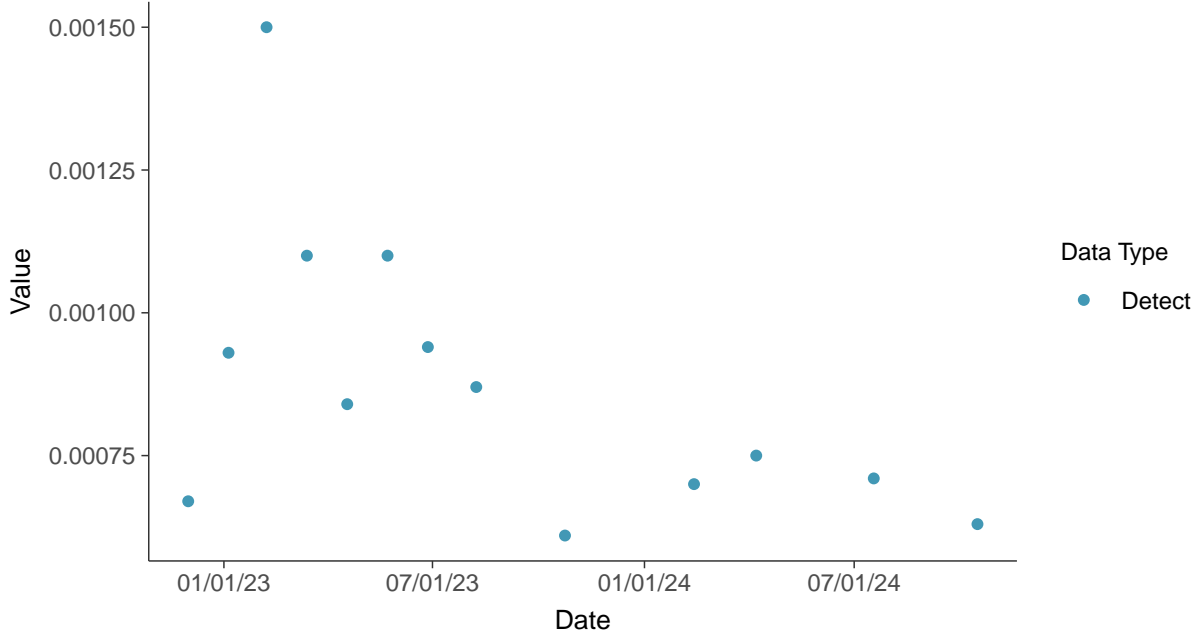


Appendix IV: Chromium, Total, MW-08

ID: 1_18_1_5_109

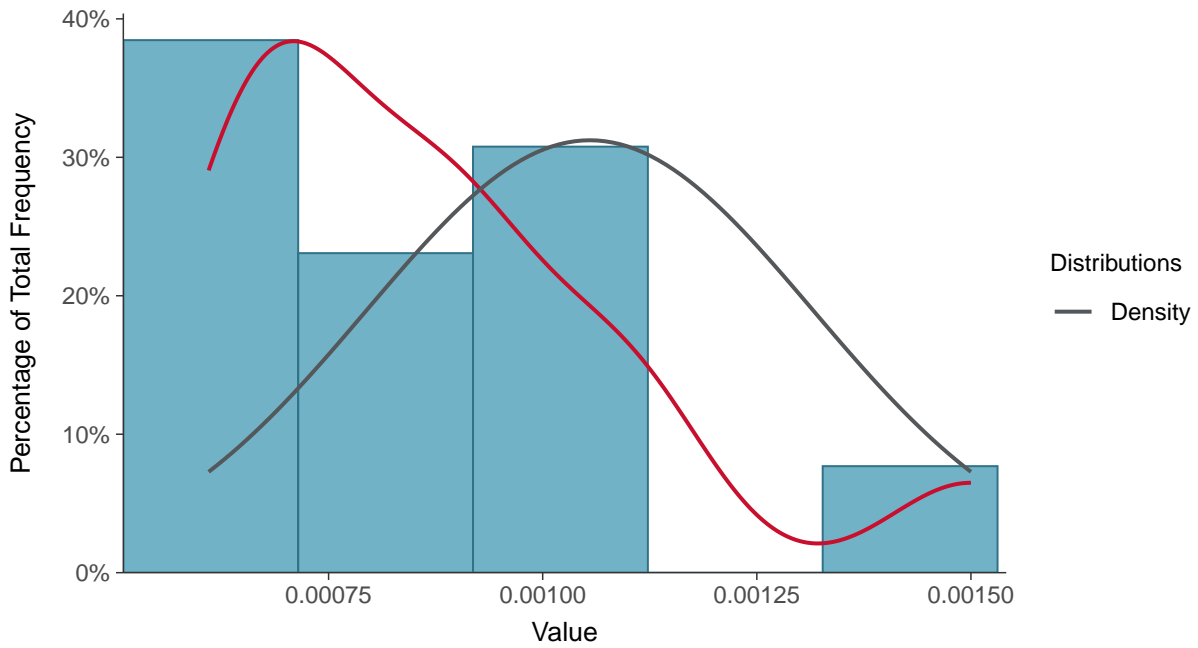
Scatter Plot

Chromium, Total, MW-08 (mg/L)



Histogram

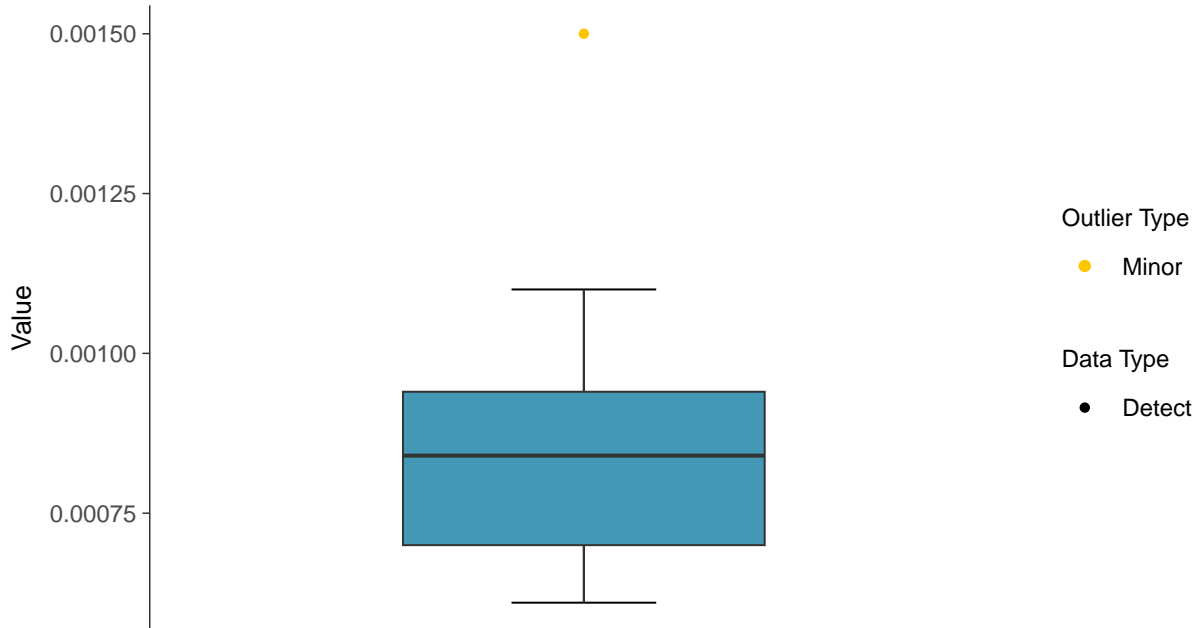
Chromium, Total, MW-08 (mg/L)





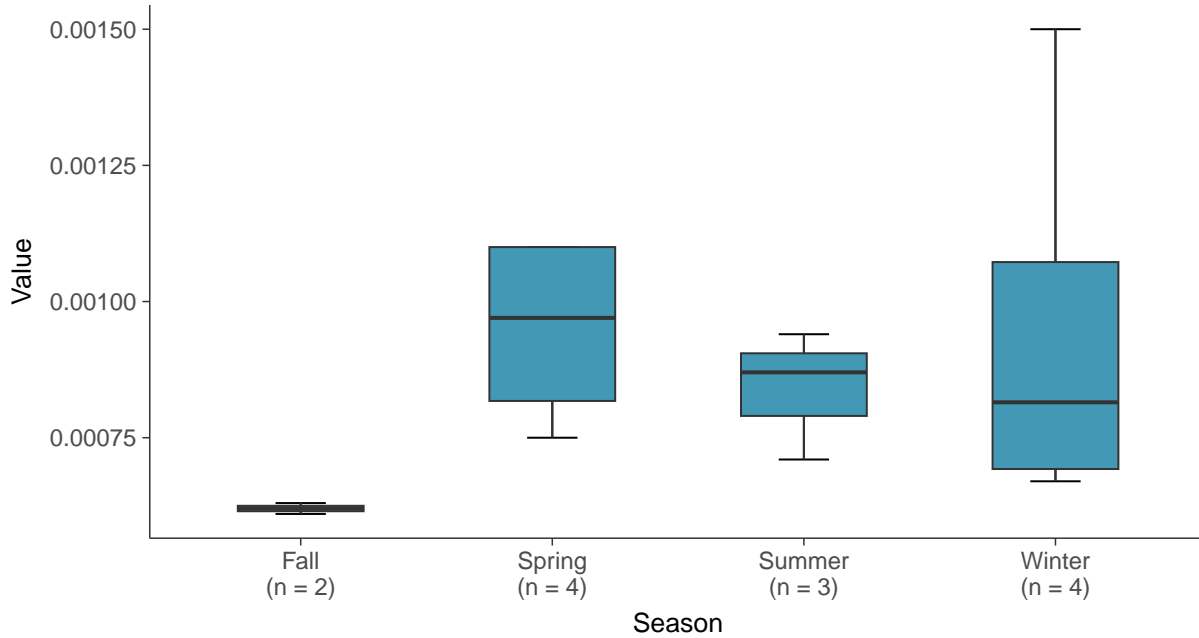
Boxplot

Chromium, Total, MW-08 (mg/L)



Boxplot by Season

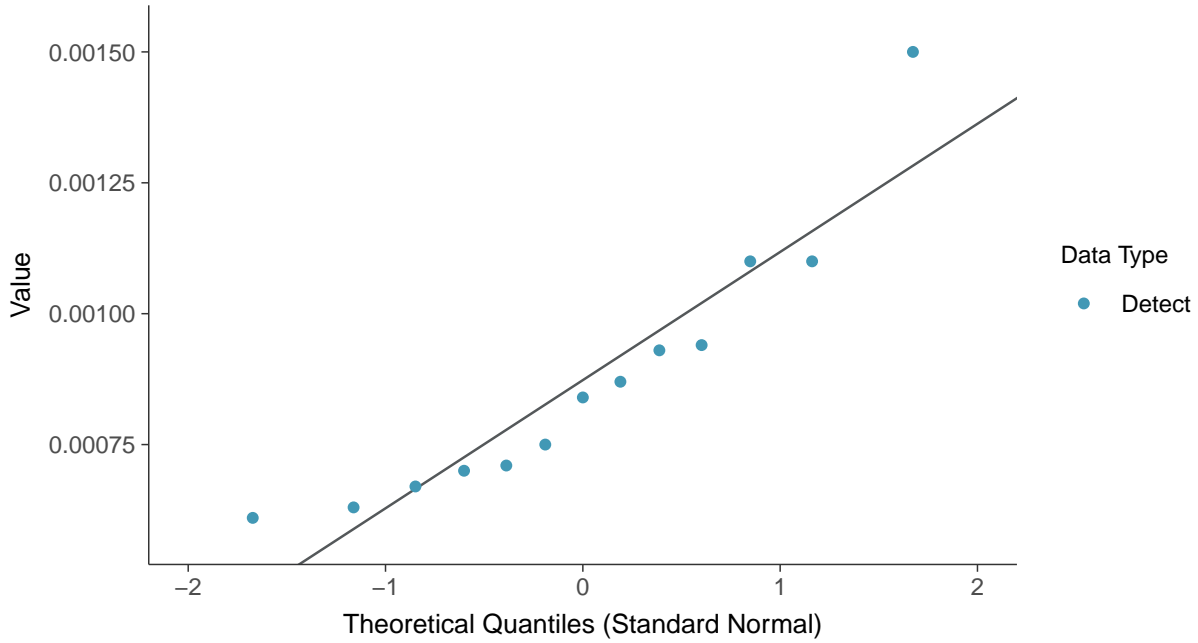
Chromium, Total, MW-08 (mg/L)





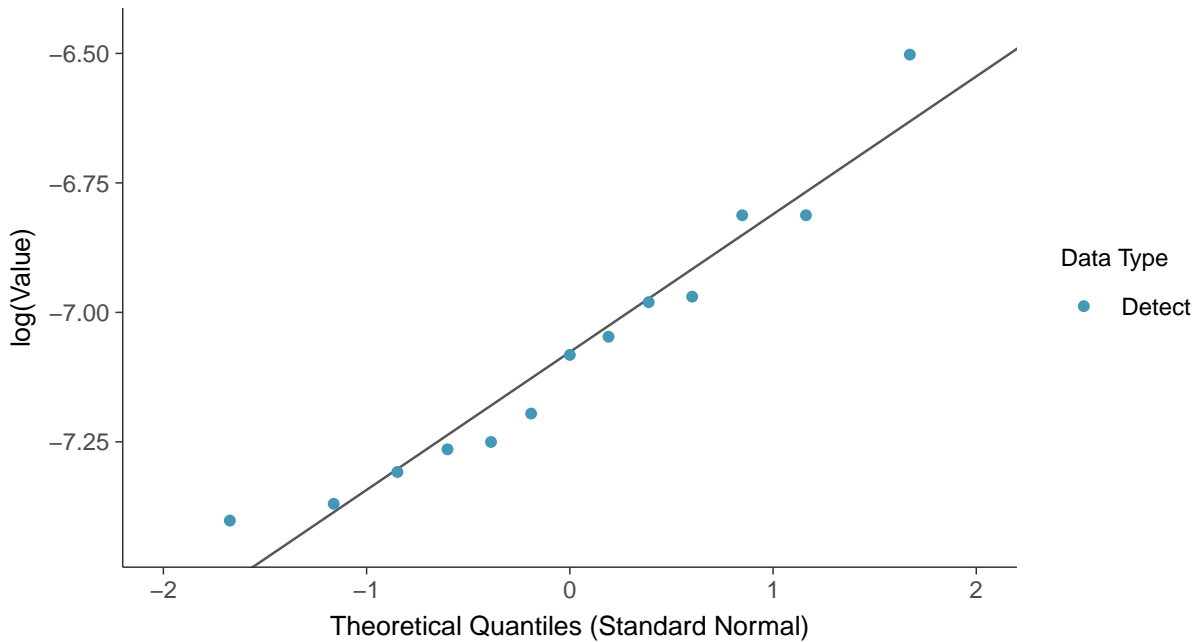
Normal Q-Q plot

Chromium, Total, MW-08 (mg/L)



Lognormal Q-Q plot

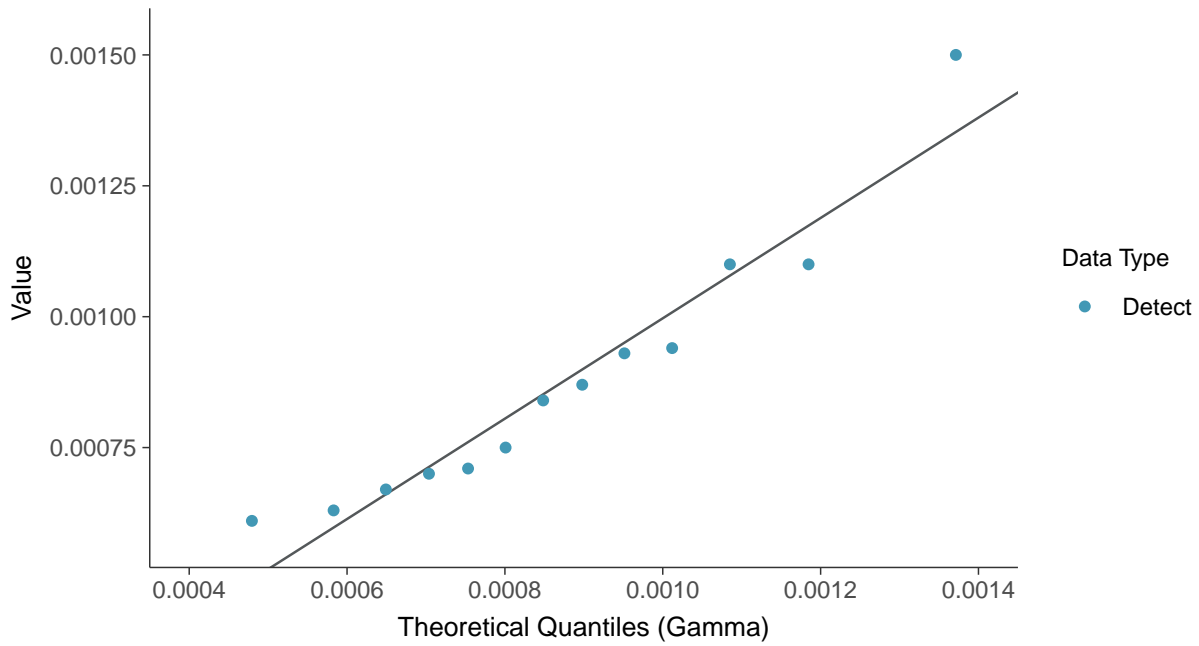
Chromium, Total, MW-08 (mg/L)





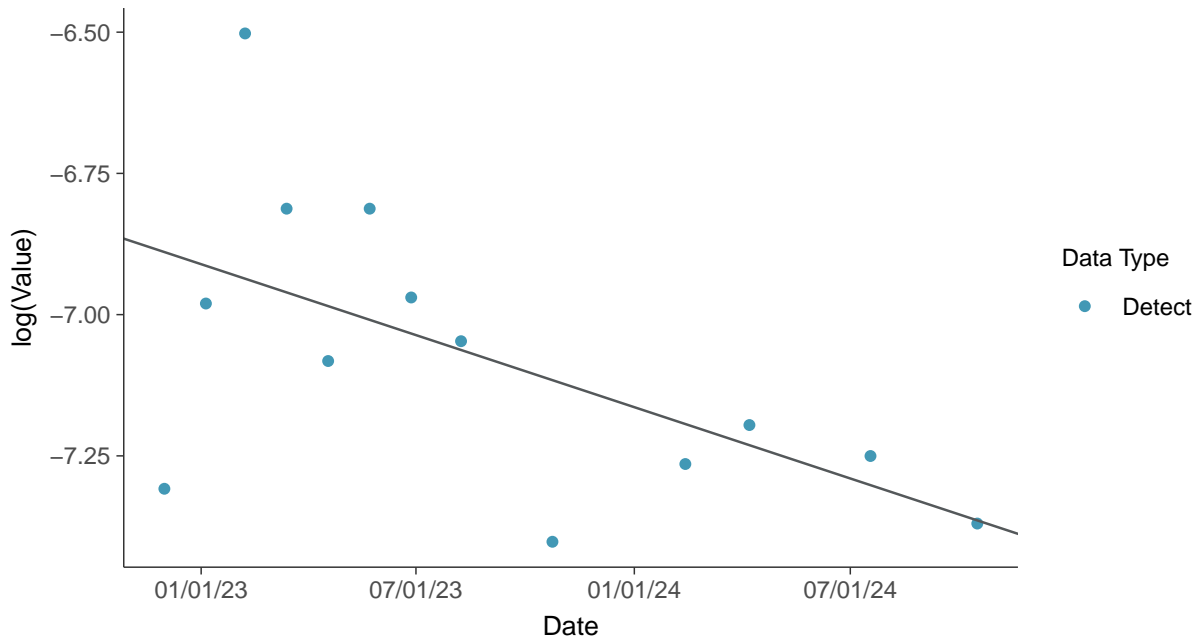
Gamma Q-Q plot

Chromium, Total, MW-08 (mg/L)



Trend Regression: Lognormal MLE

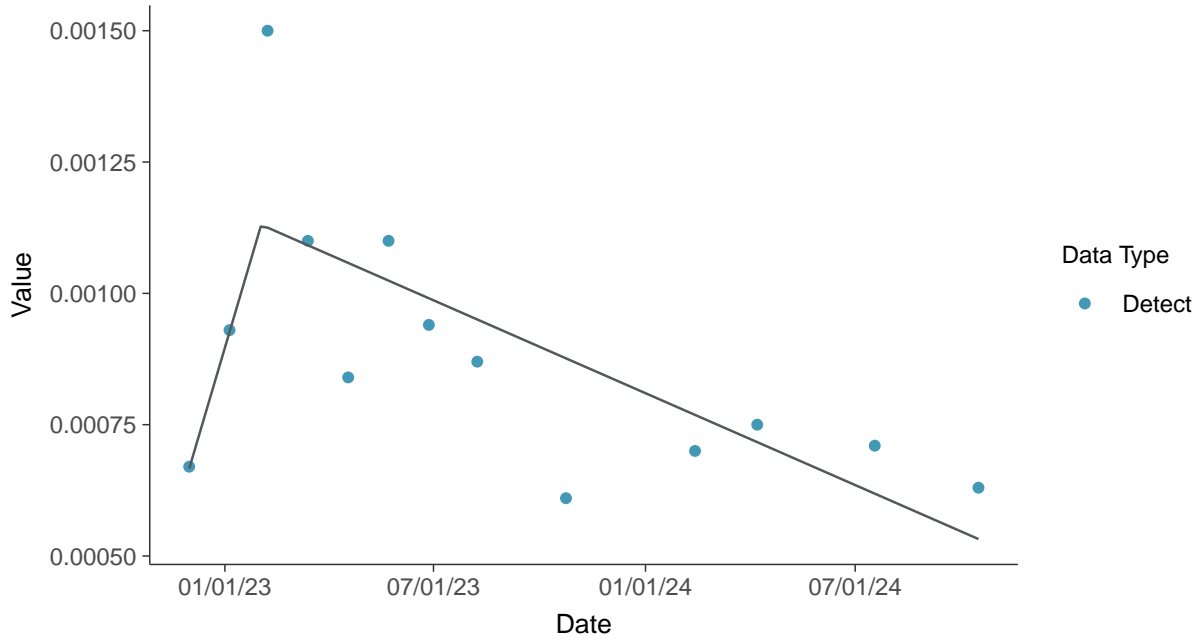
Chromium, Total, MW-08 (mg/L)





Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-08 (mg/L)



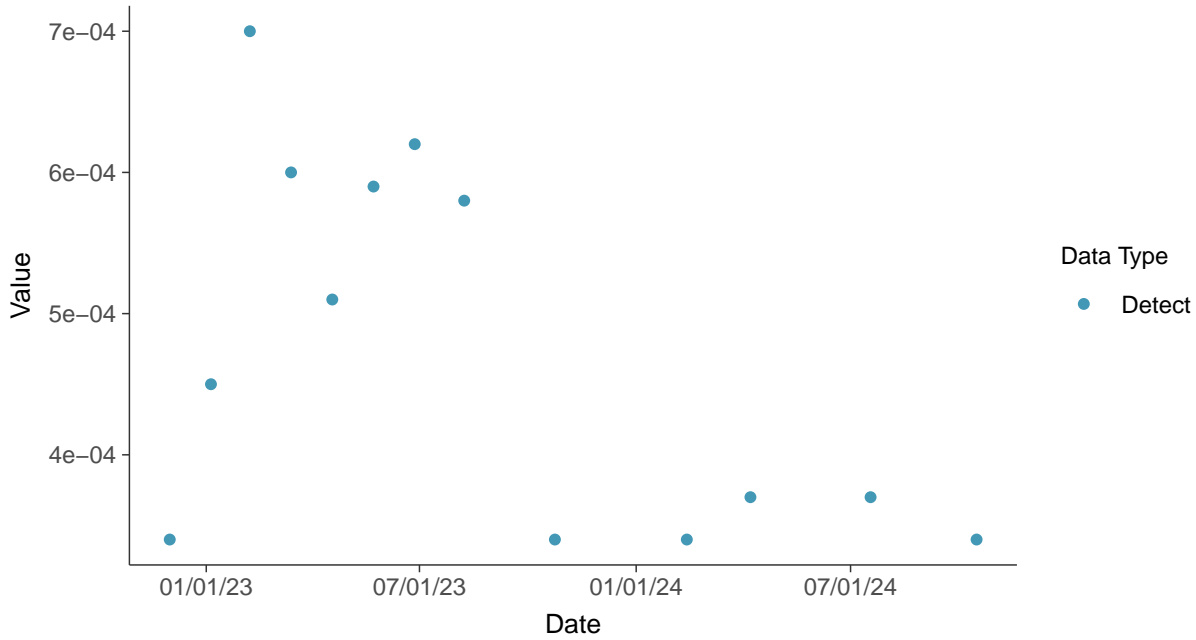


Appendix IV: Cobalt, MW-08

ID: 1_18_1_5_110

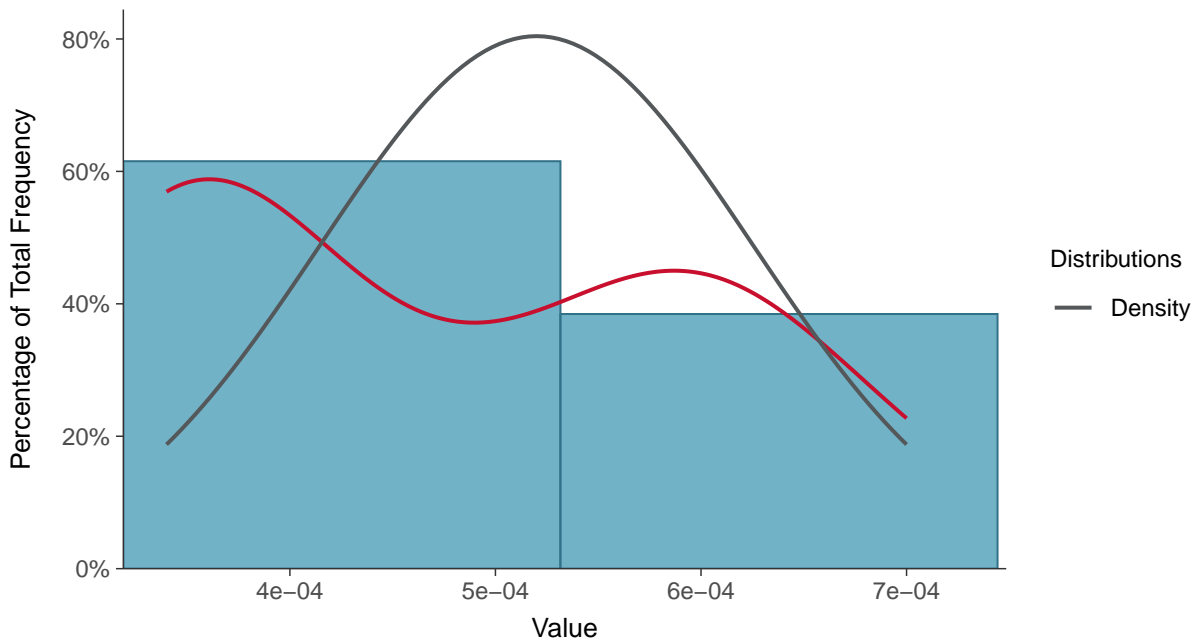
Scatter Plot

Cobalt, MW-08 (mg/L)



Histogram

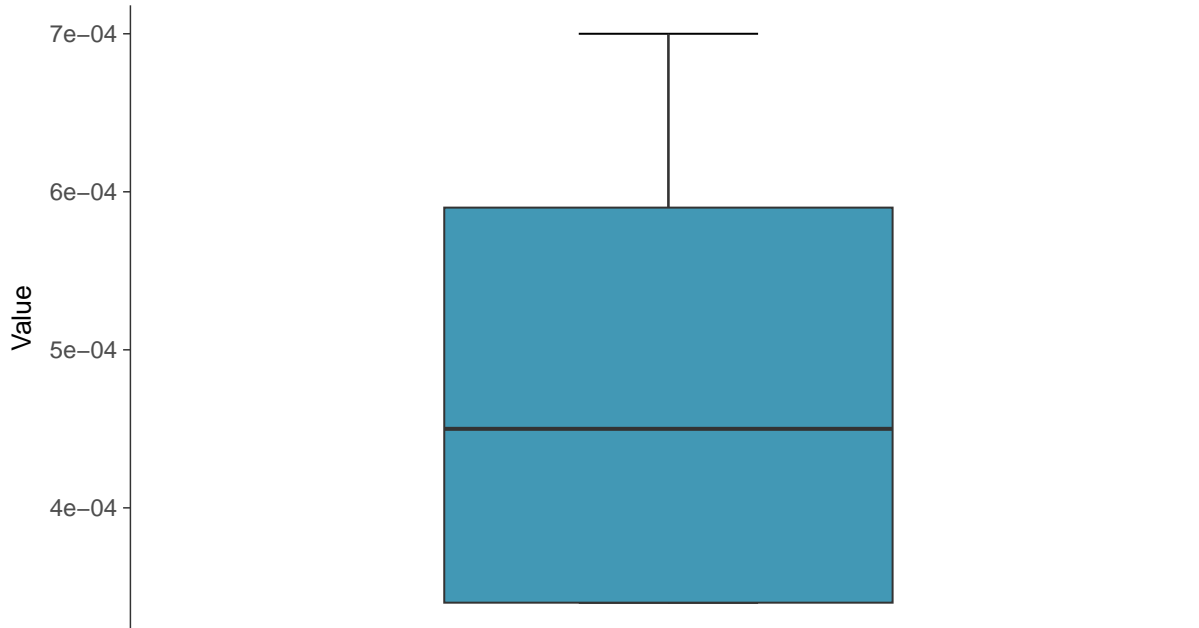
Cobalt, MW-08 (mg/L)





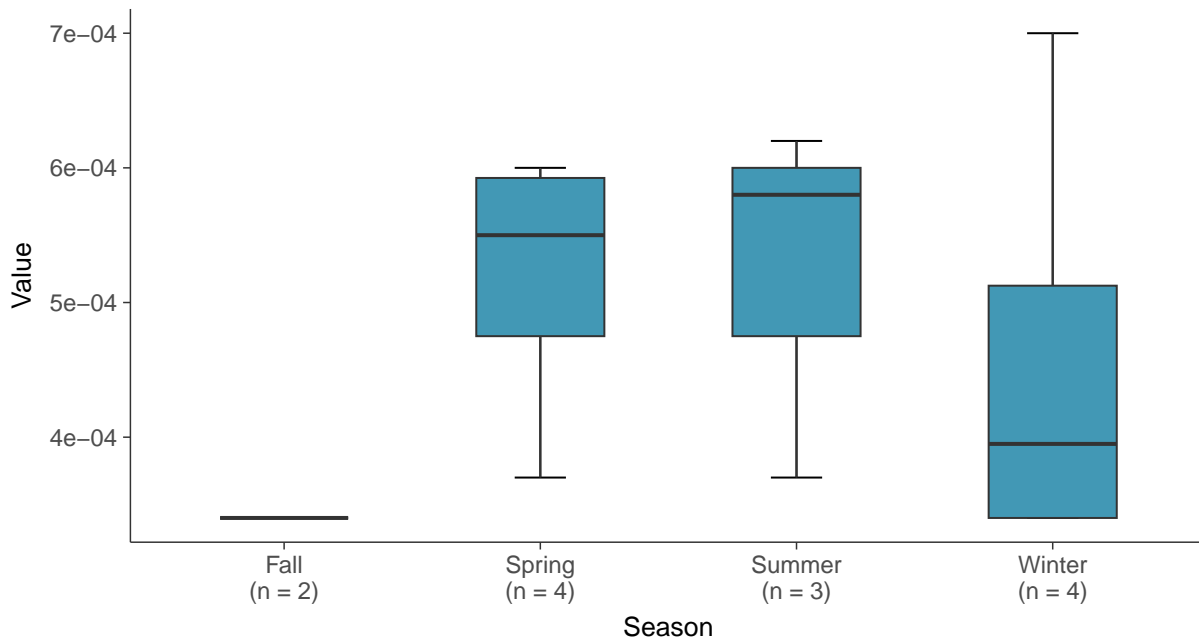
Boxplot

Cobalt, MW-08 (mg/L)



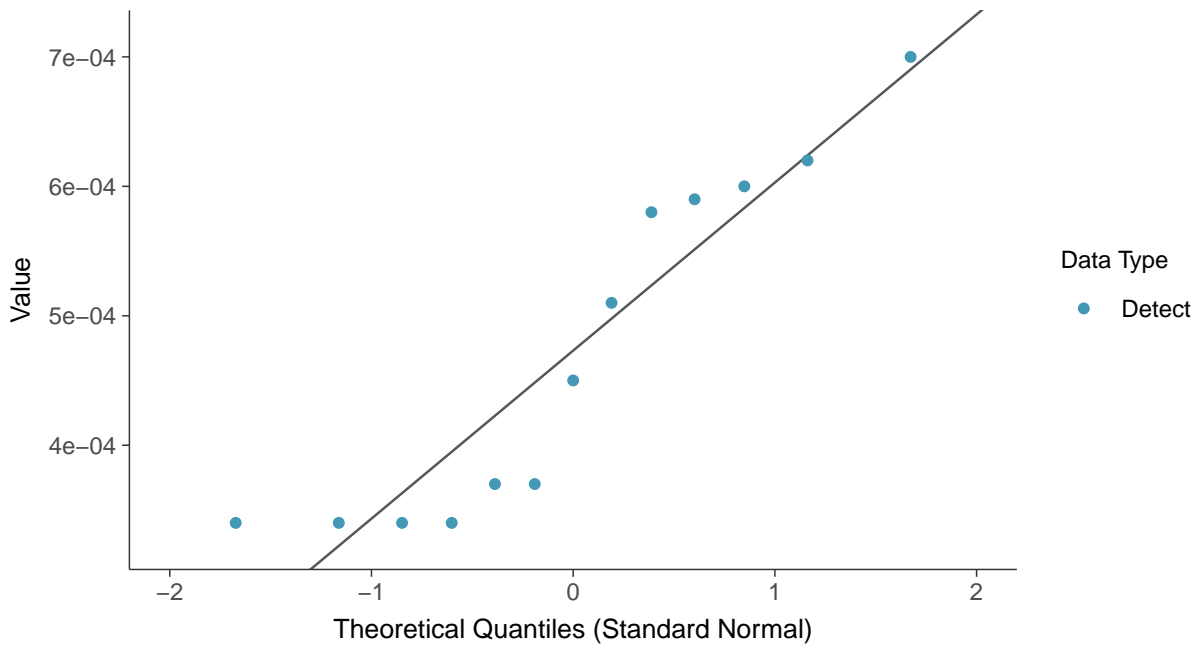
Boxplot by Season

Cobalt, MW-08 (mg/L)

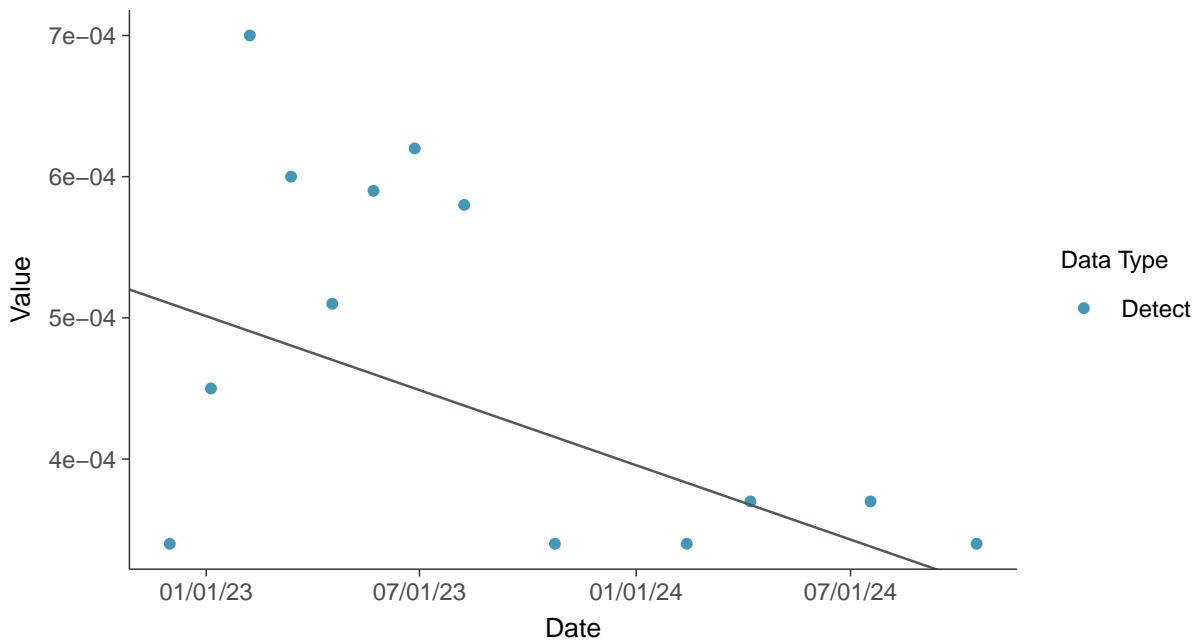




Normal Q-Q plot
Cobalt, MW-08 (mg/L)



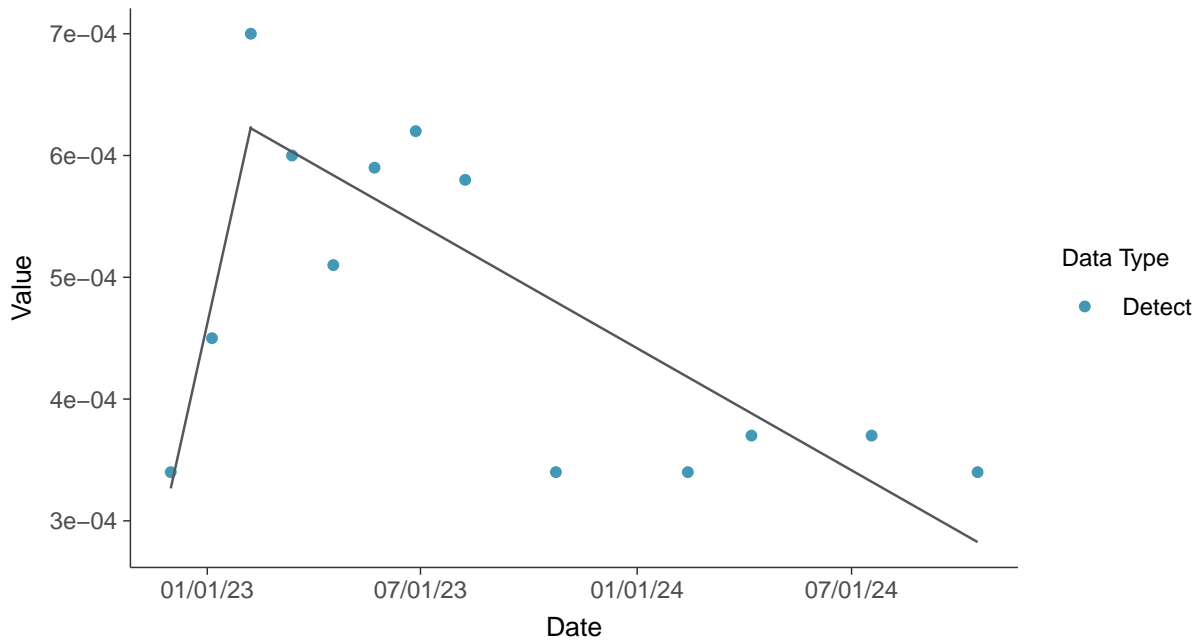
Trend Regression: Mann-Kendall/Theil-Sen Estimate
Cobalt, MW-08 (mg/L)





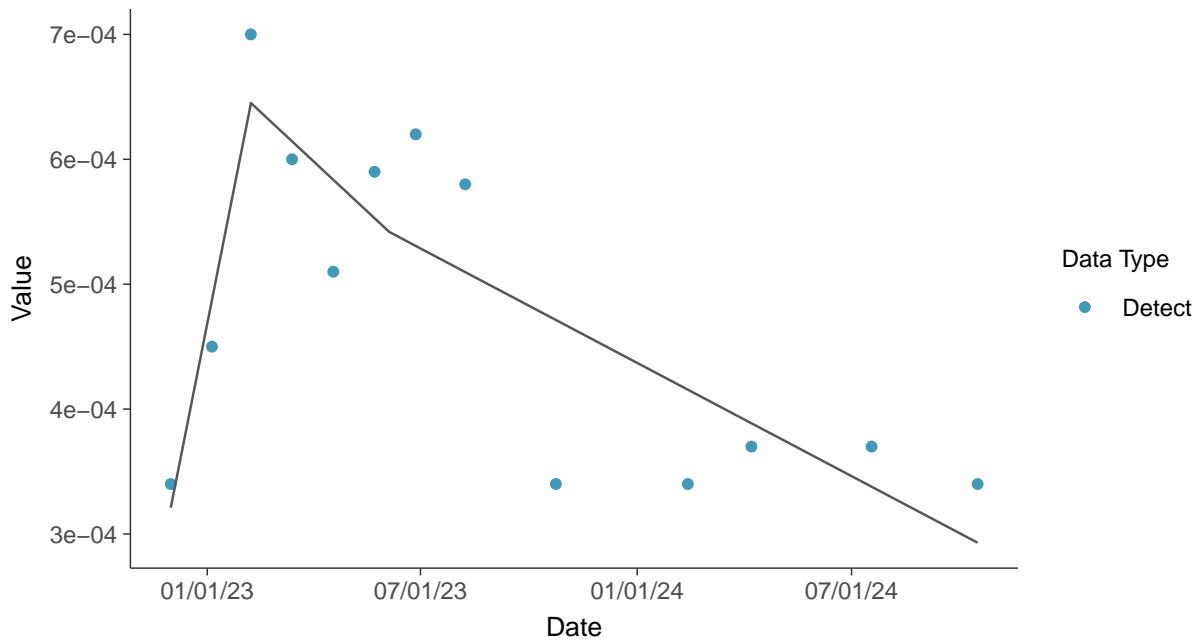
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-08 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cobalt, MW-08 (mg/L)



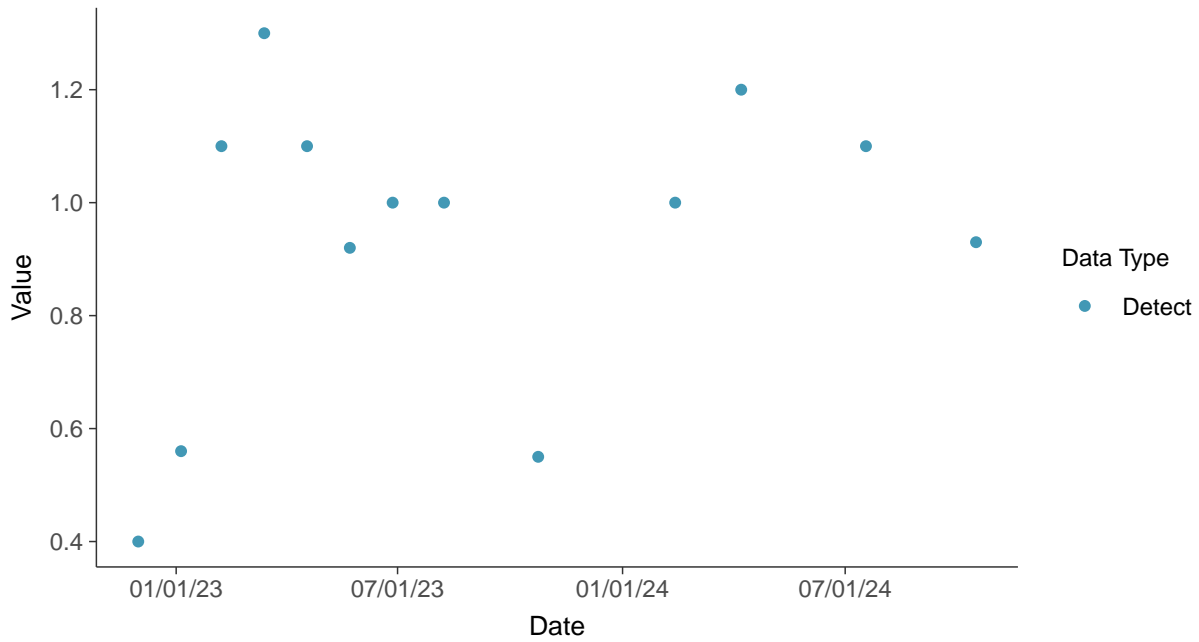


Appendix IV: Fluoride (App IV), MW-08

ID: 1_18_1_5_113

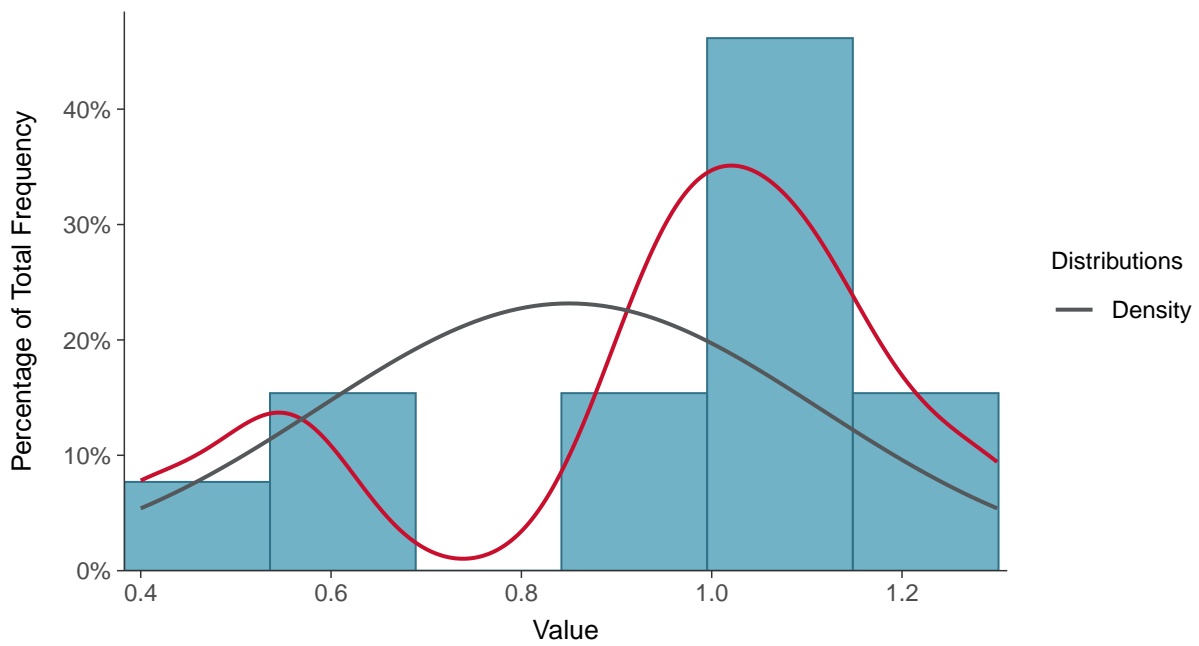
Scatter Plot

Fluoride (App IV), MW-08 (mg/L)



Histogram

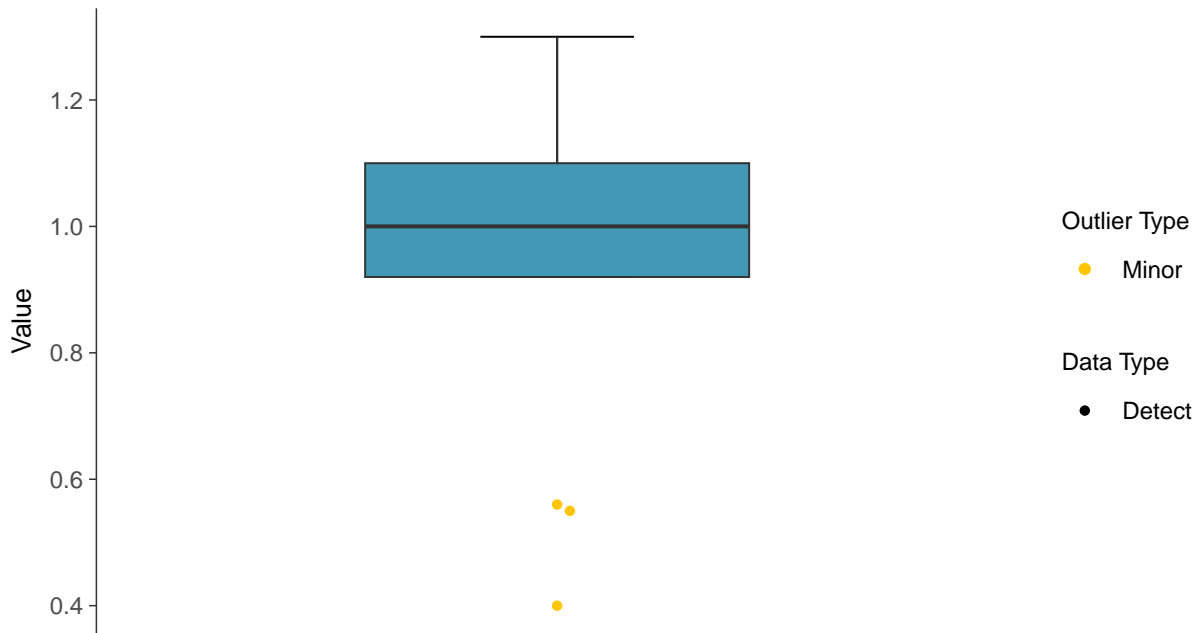
Fluoride (App IV), MW-08 (mg/L)





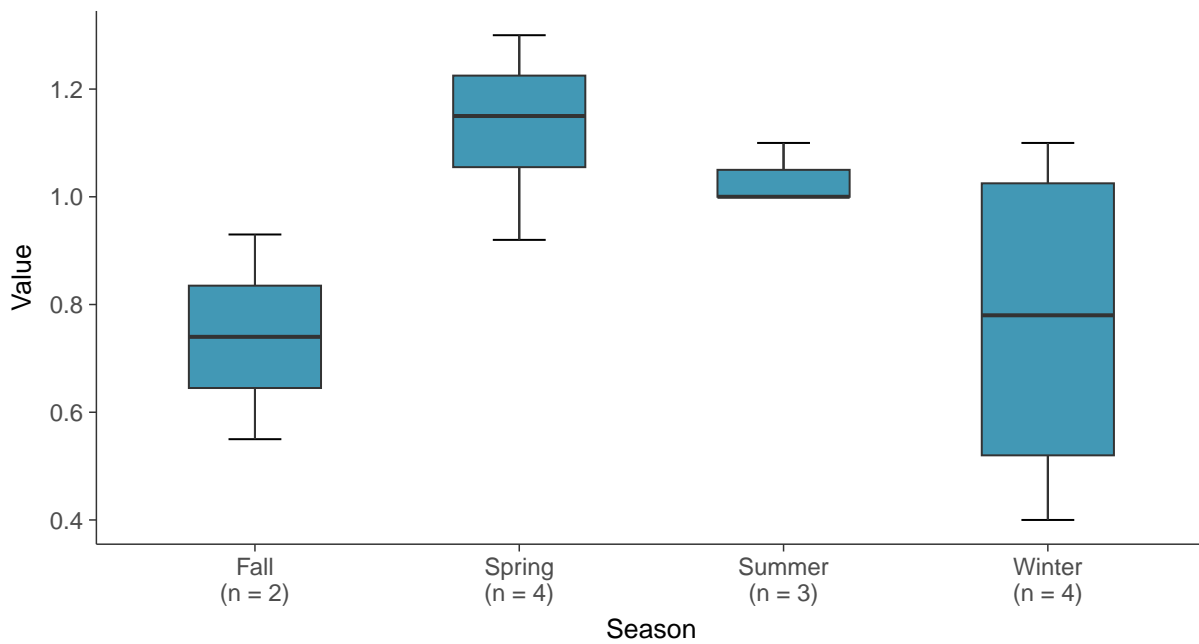
Boxplot

Fluoride (App IV), MW-08 (mg/L)



Boxplot by Season

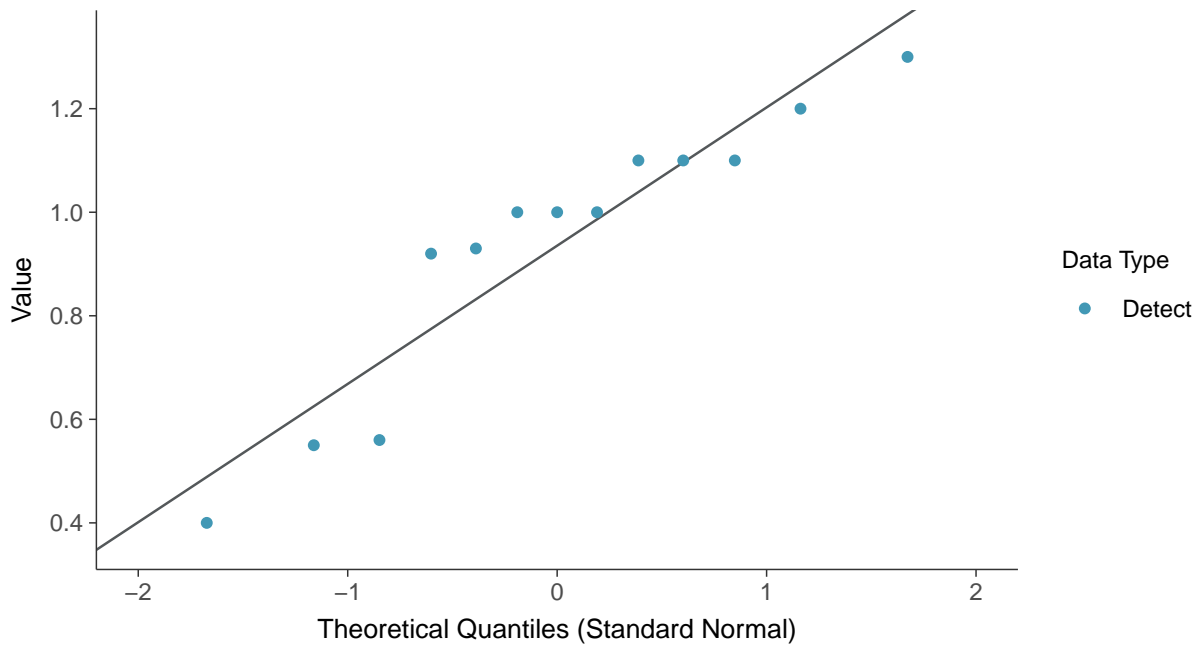
Fluoride (App IV), MW-08 (mg/L)





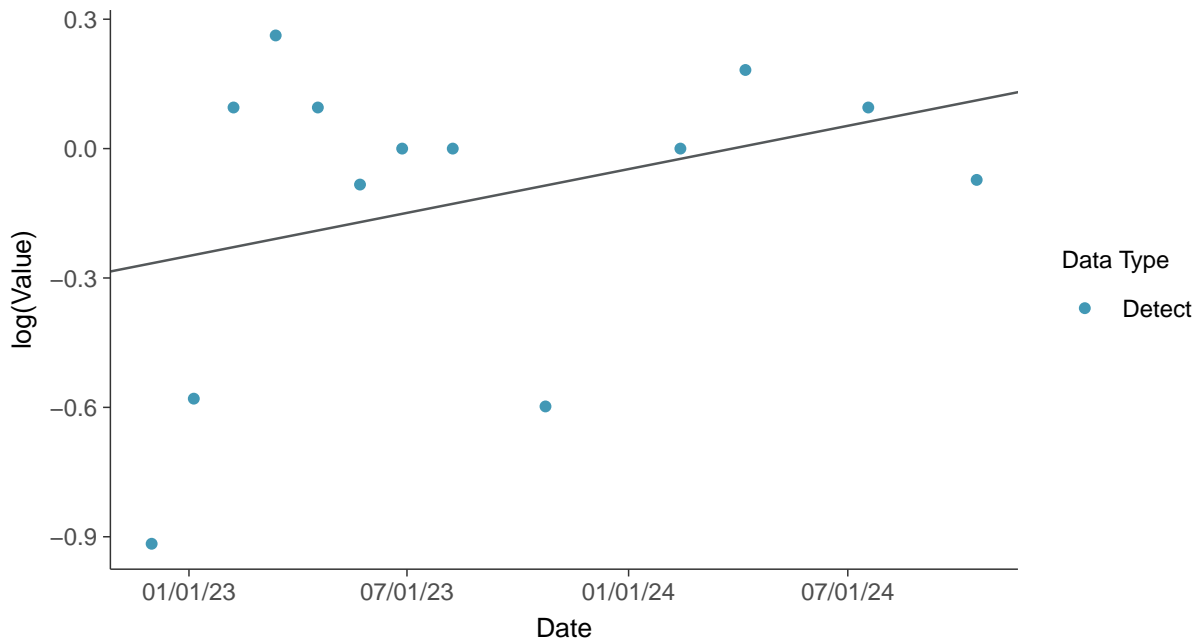
Normal Q-Q plot

Fluoride (App IV), MW-08 (mg/L)



Trend Regression: Lognormal MLE

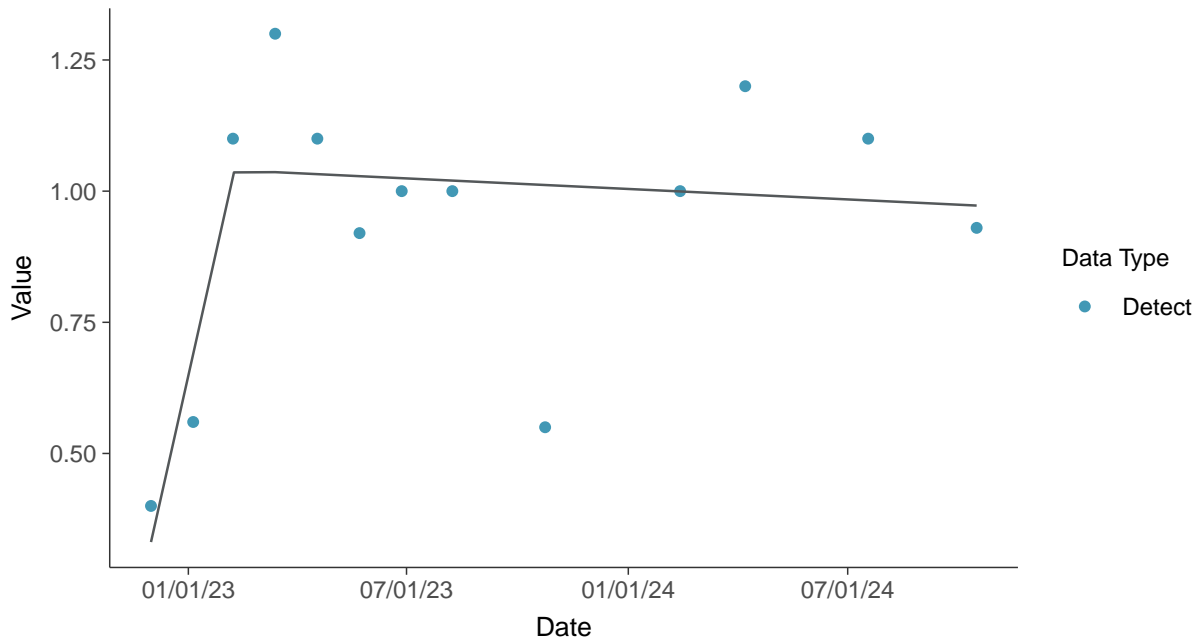
Fluoride (App IV), MW-08 (mg/L)





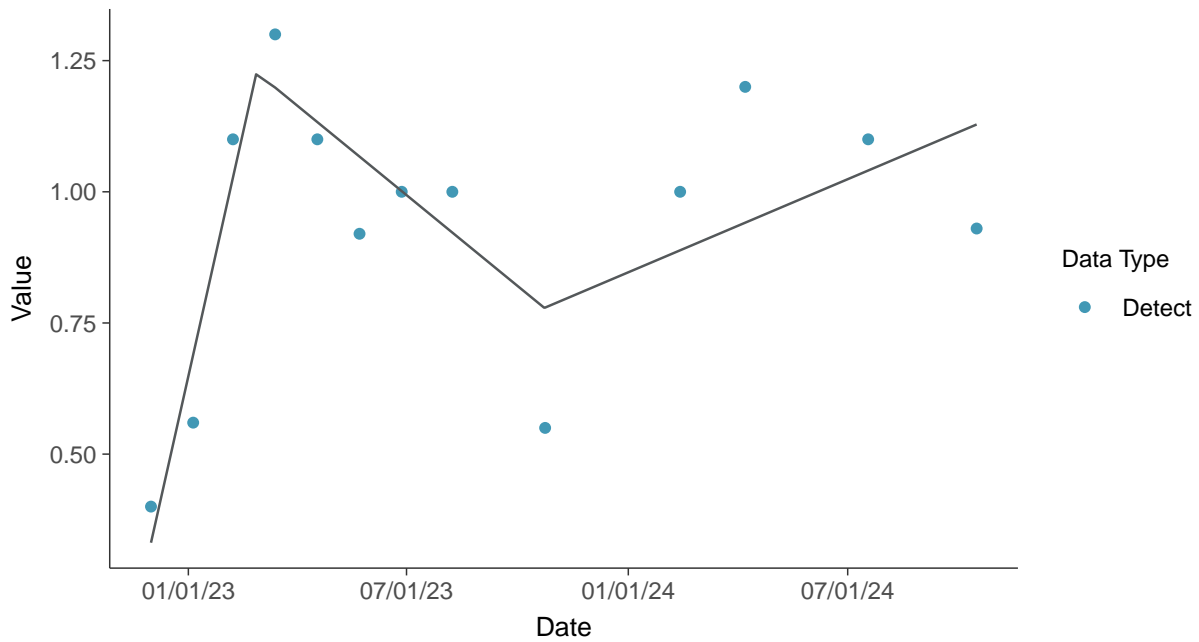
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-08 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Fluoride (App IV), MW-08 (mg/L)



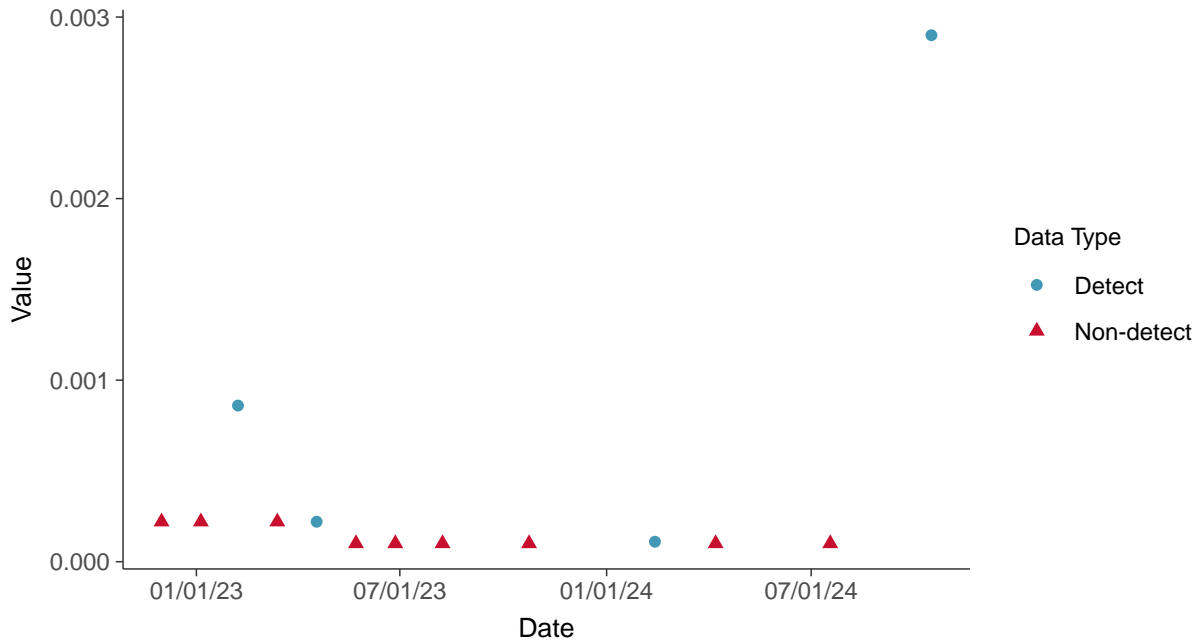


Appendix IV: Lead, MW-08

ID: 1_18_1_5_115

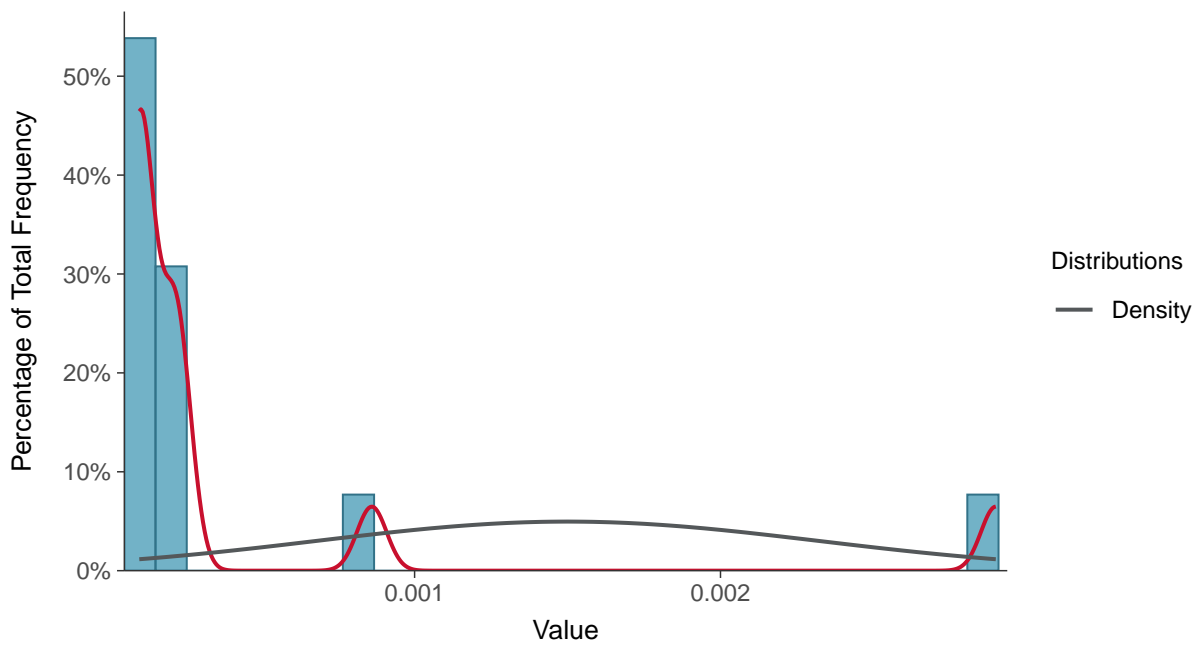
Scatter Plot

Lead, MW-08 (mg/L)



Histogram

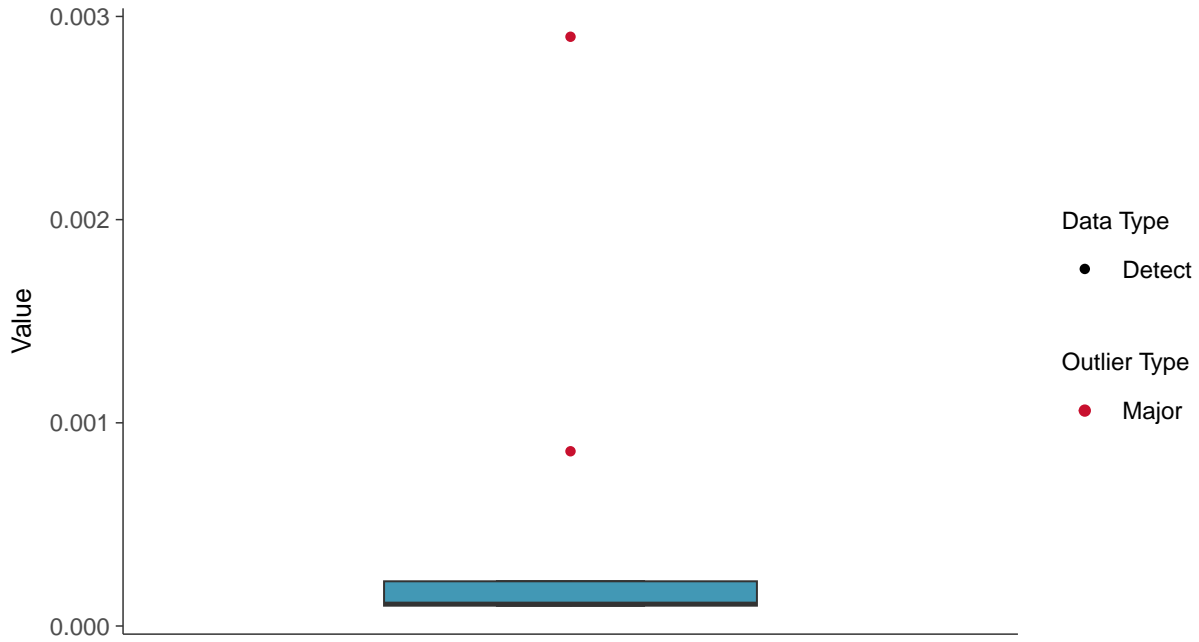
Lead, MW-08 (mg/L)





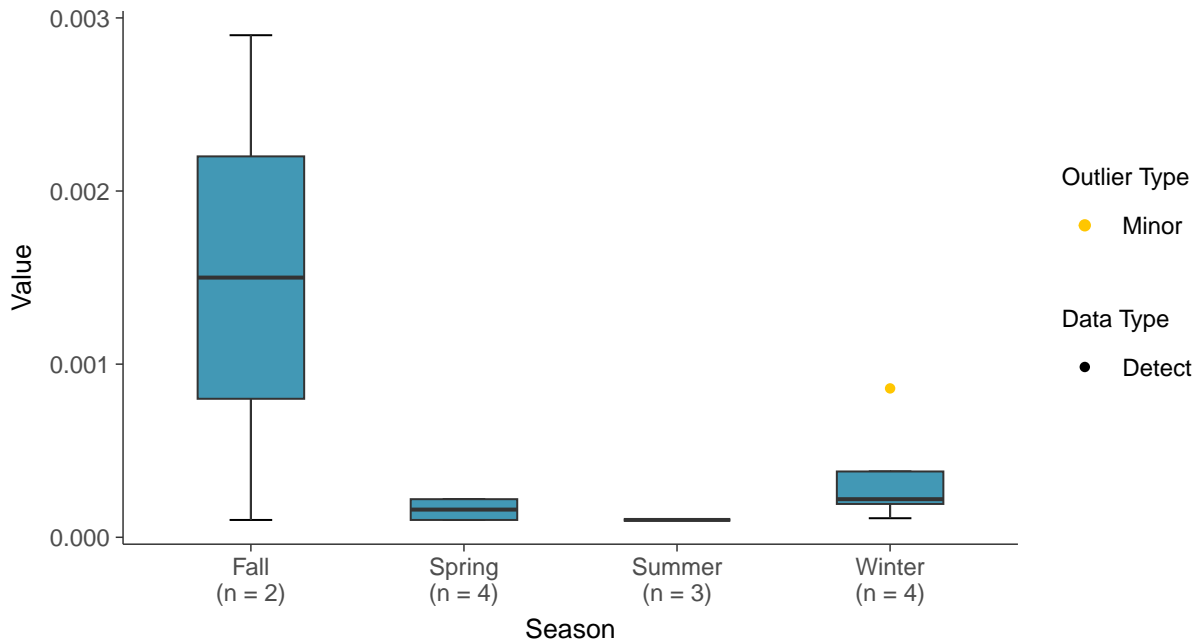
Boxplot

Lead, MW-08 (mg/L)



Boxplot by Season

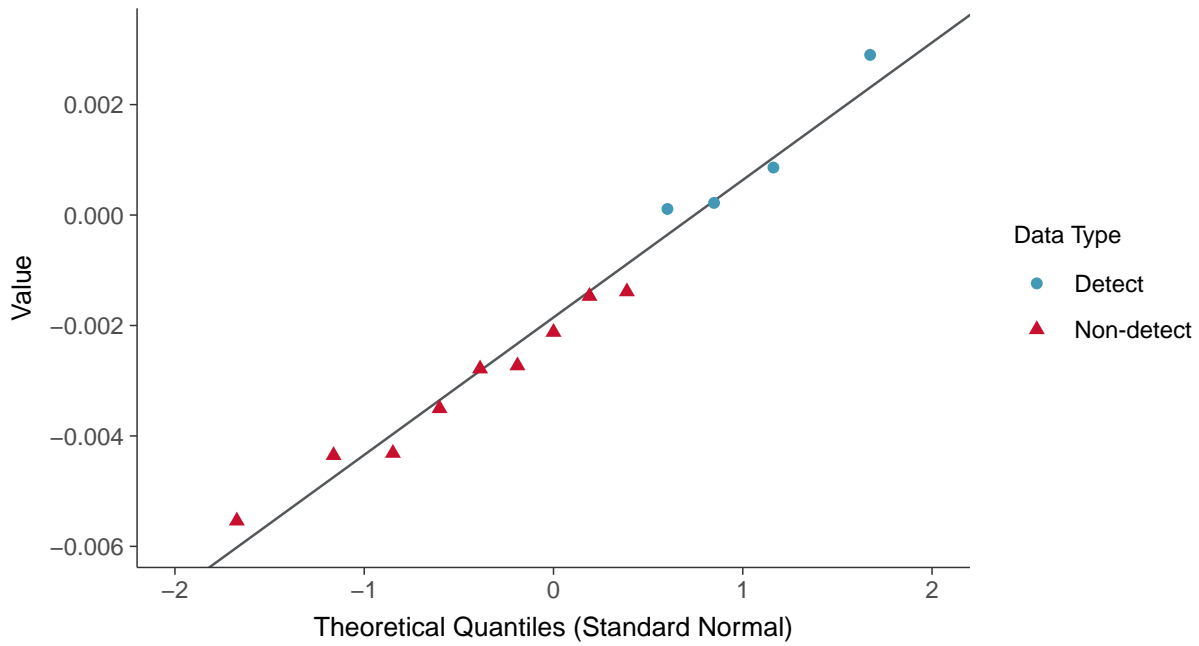
Lead, MW-08 (mg/L)





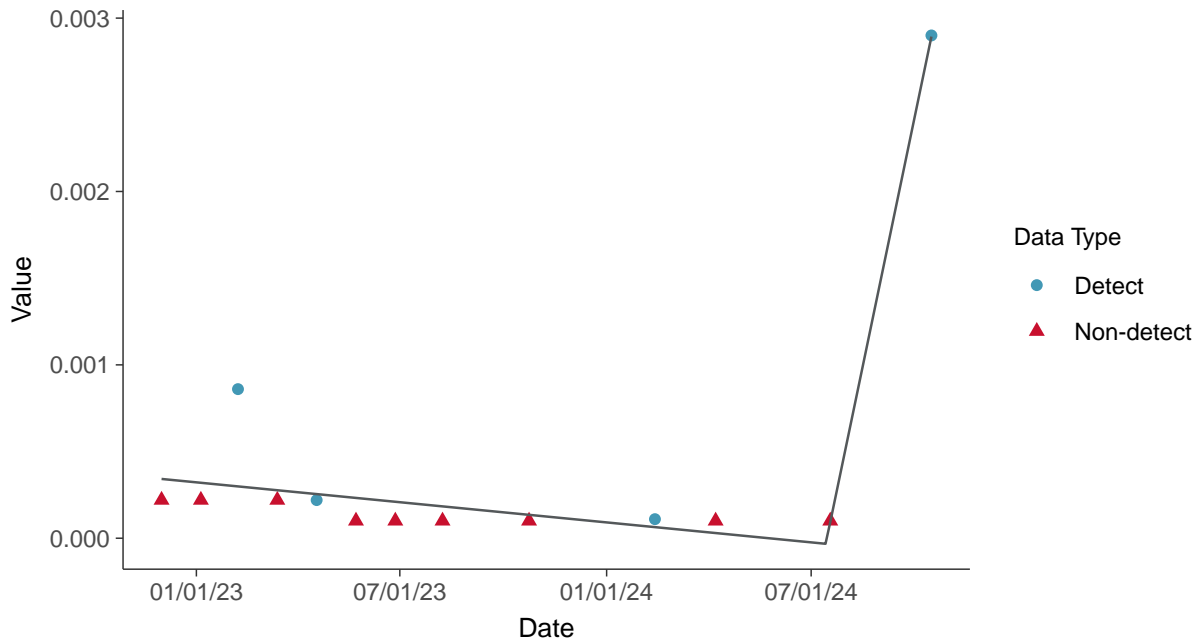
Normal Q-Q plot using ROS Imputed Estimates

Lead, MW-08 (mg/L)



Trend Regression: Piecewise Linear-Linear

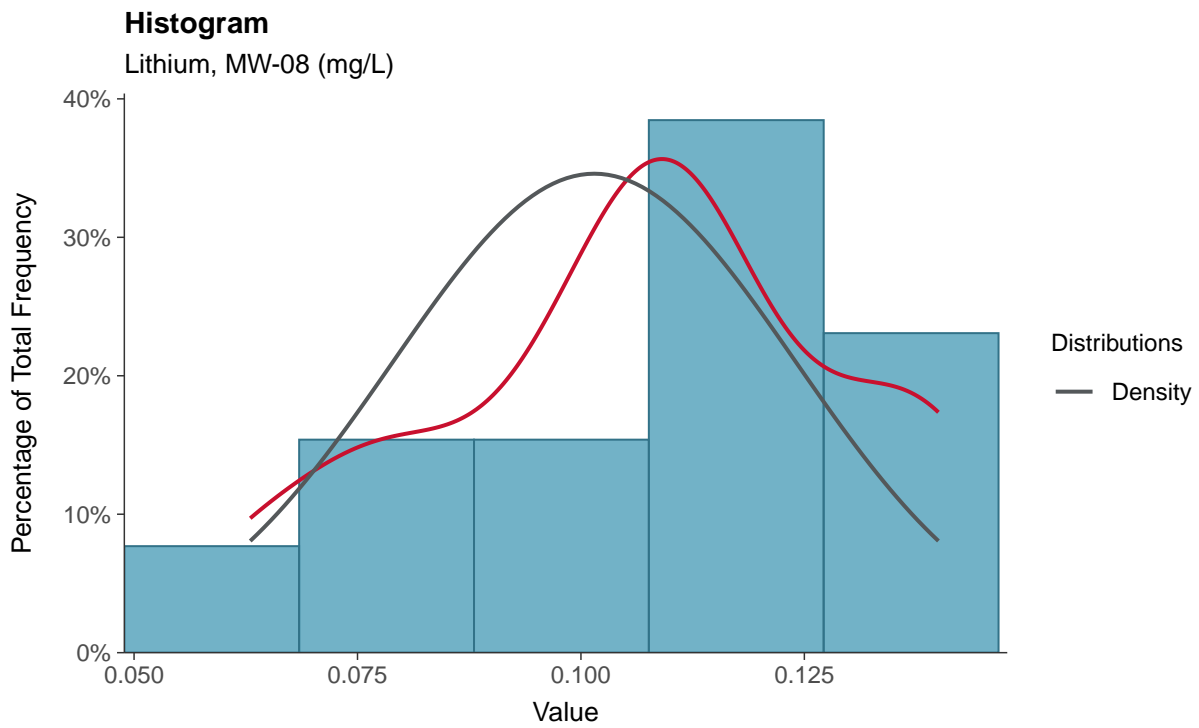
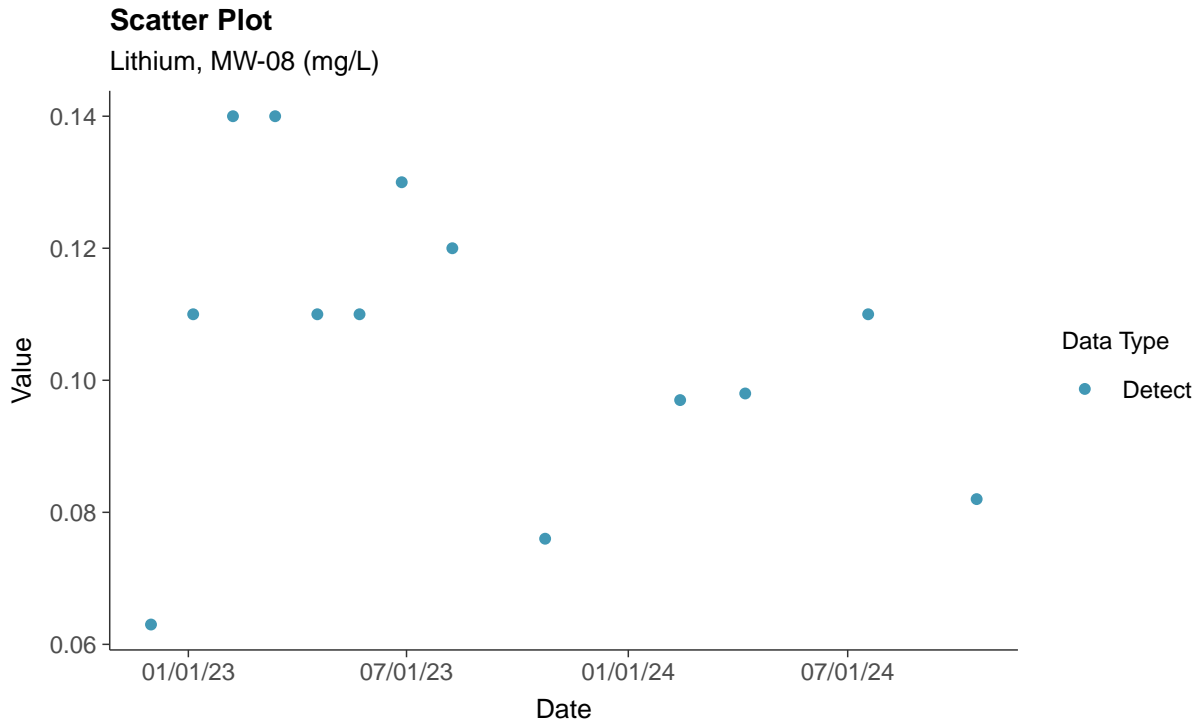
Lead, MW-08 (mg/L)





Appendix IV: Lithium, MW-08

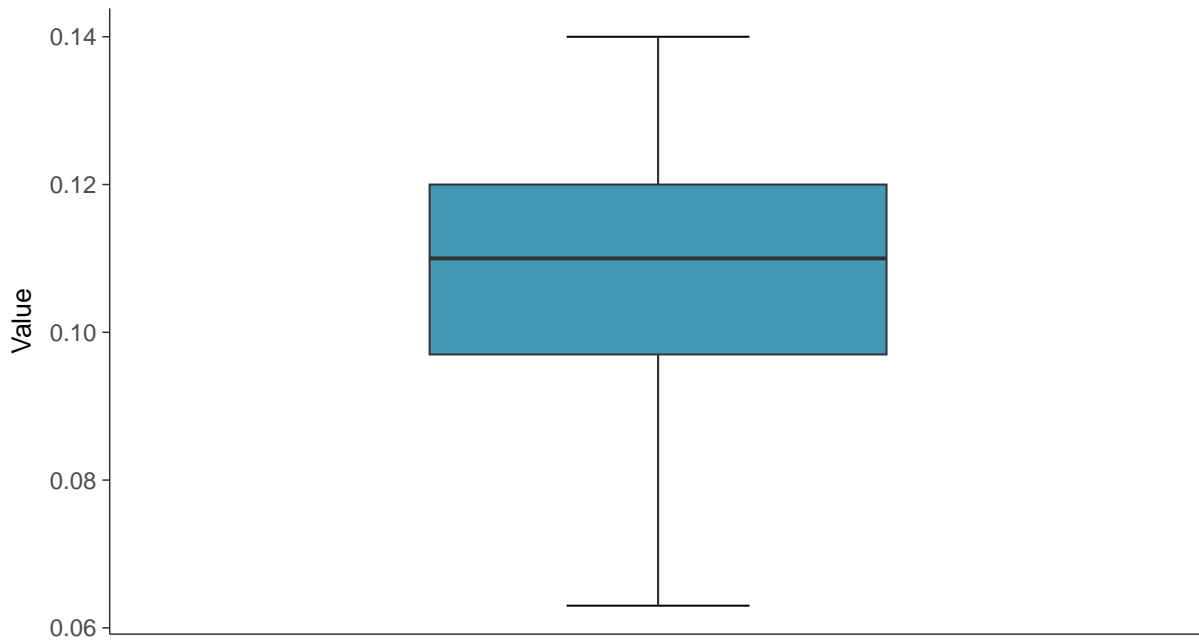
ID: 1_18_1_5_116





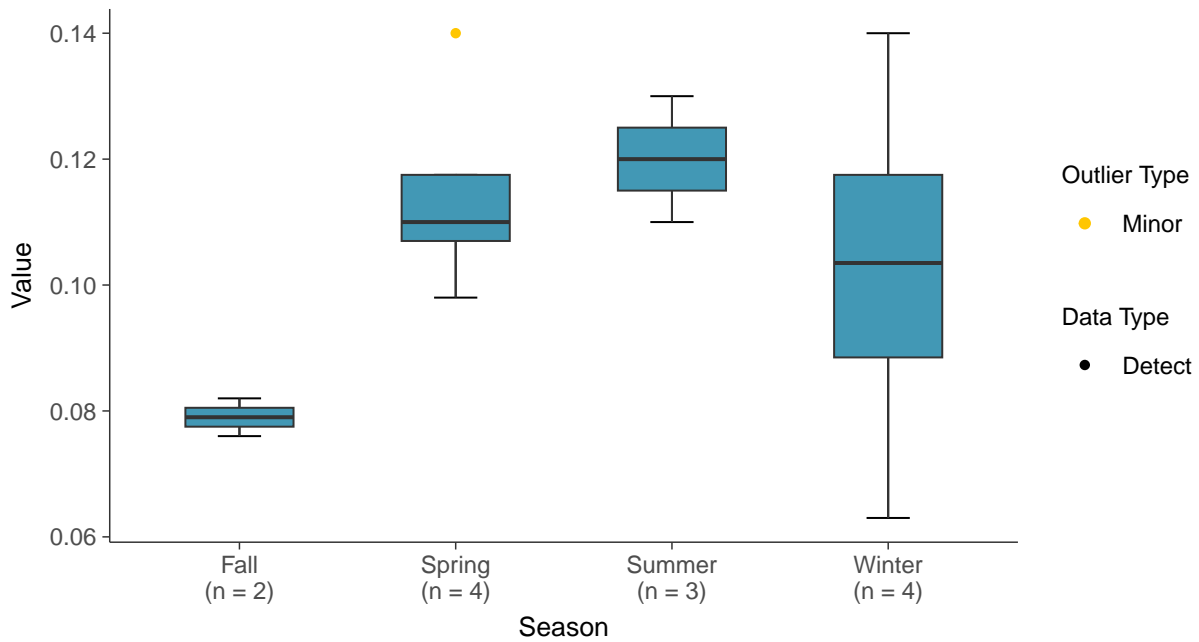
Boxplot

Lithium, MW-08 (mg/L)



Boxplot by Season

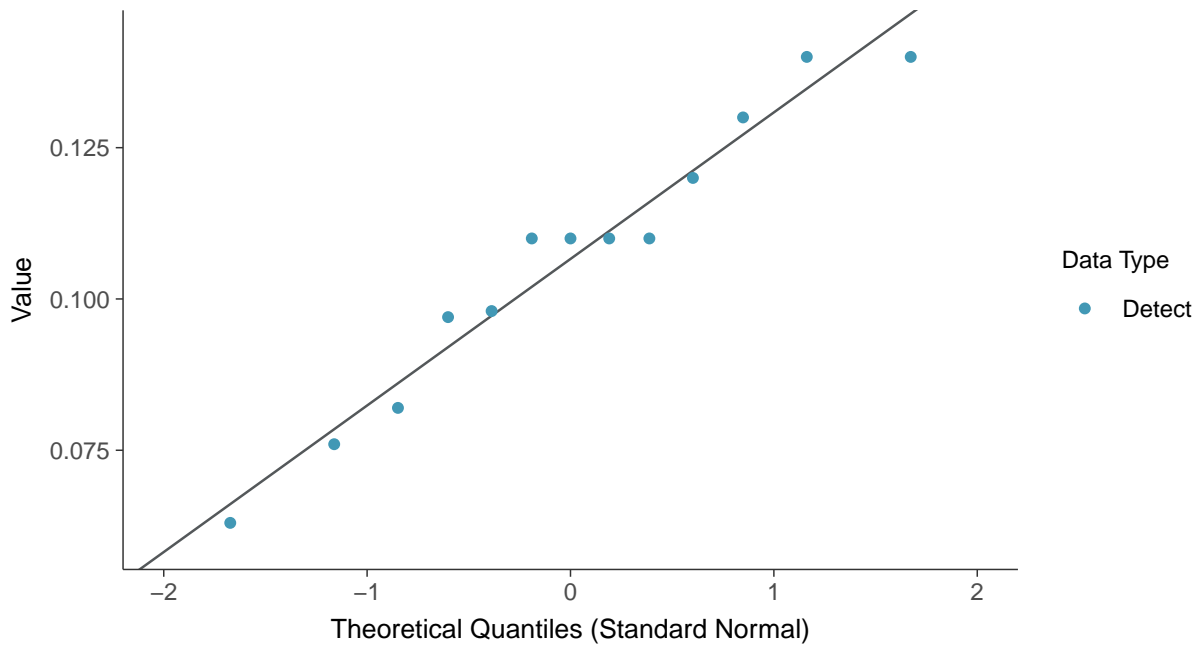
Lithium, MW-08 (mg/L)





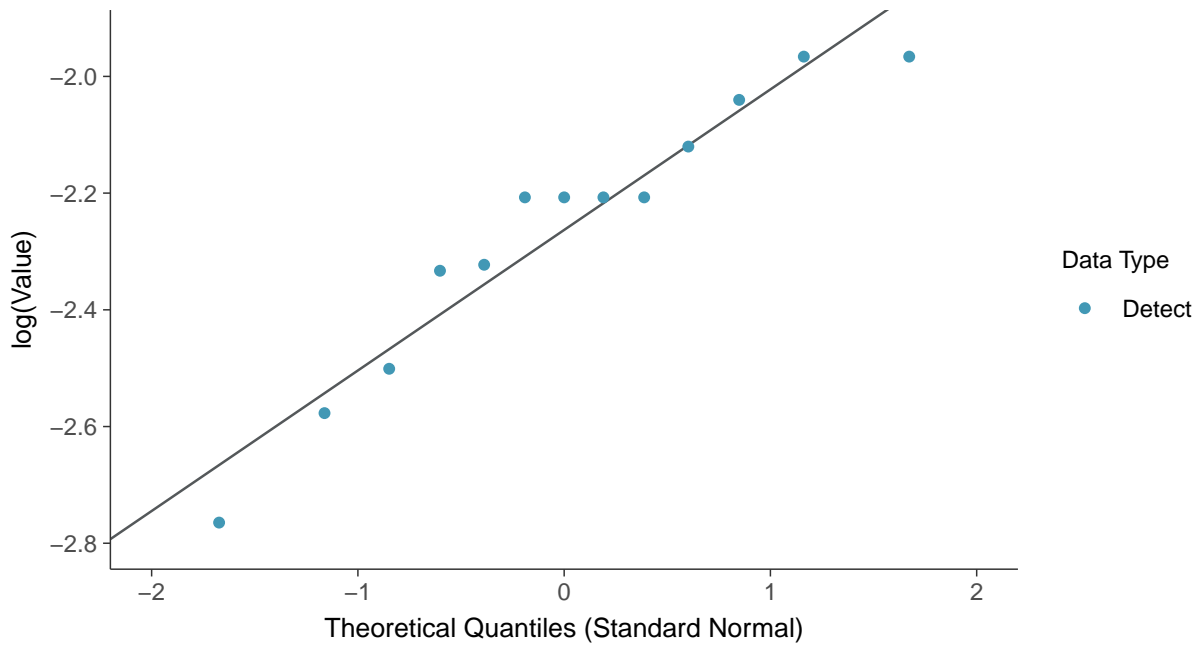
Normal Q-Q plot

Lithium, MW-08 (mg/L)



Lognormal Q-Q plot

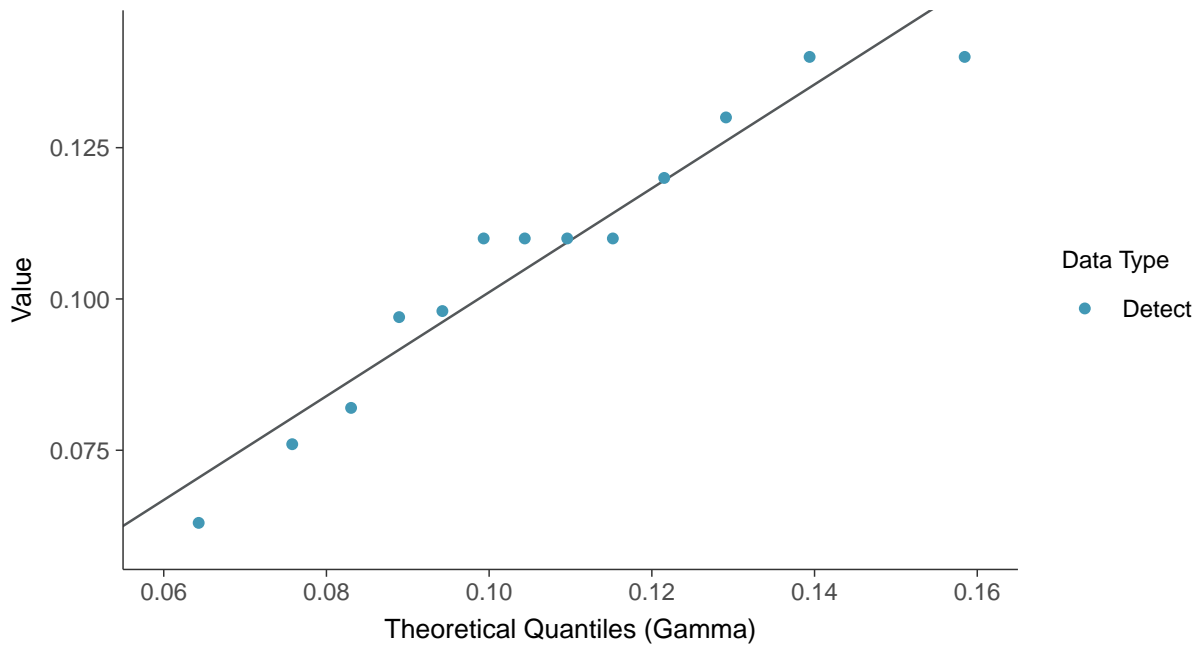
Lithium, MW-08 (mg/L)





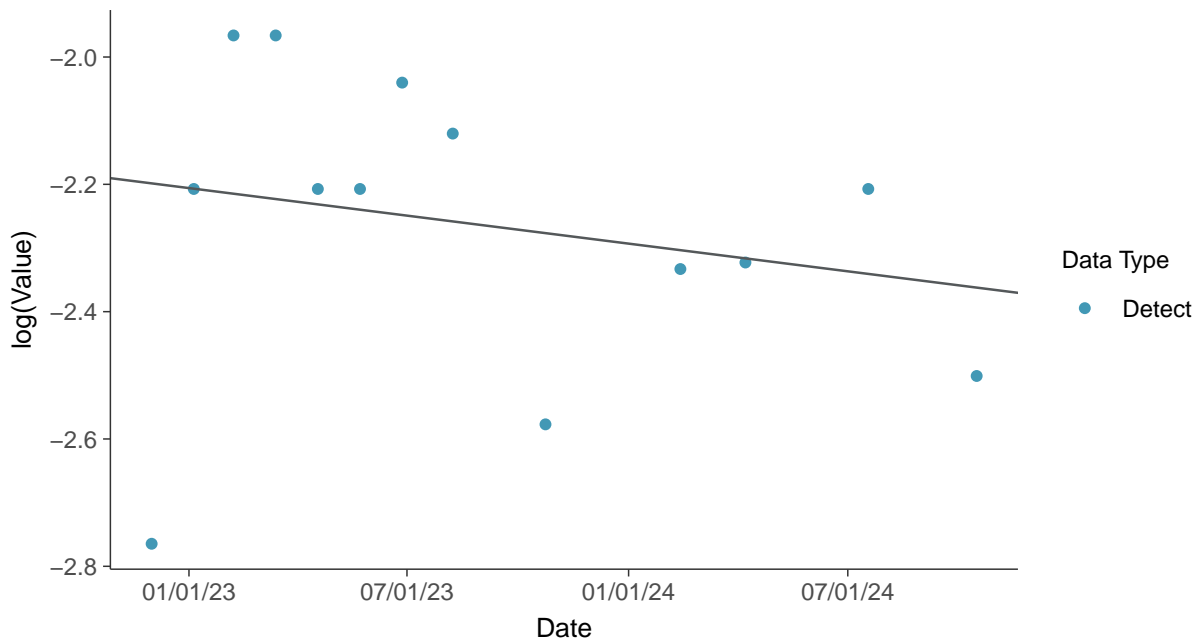
Gamma Q-Q plot

Lithium, MW-08 (mg/L)



Trend Regression: Lognormal MLE

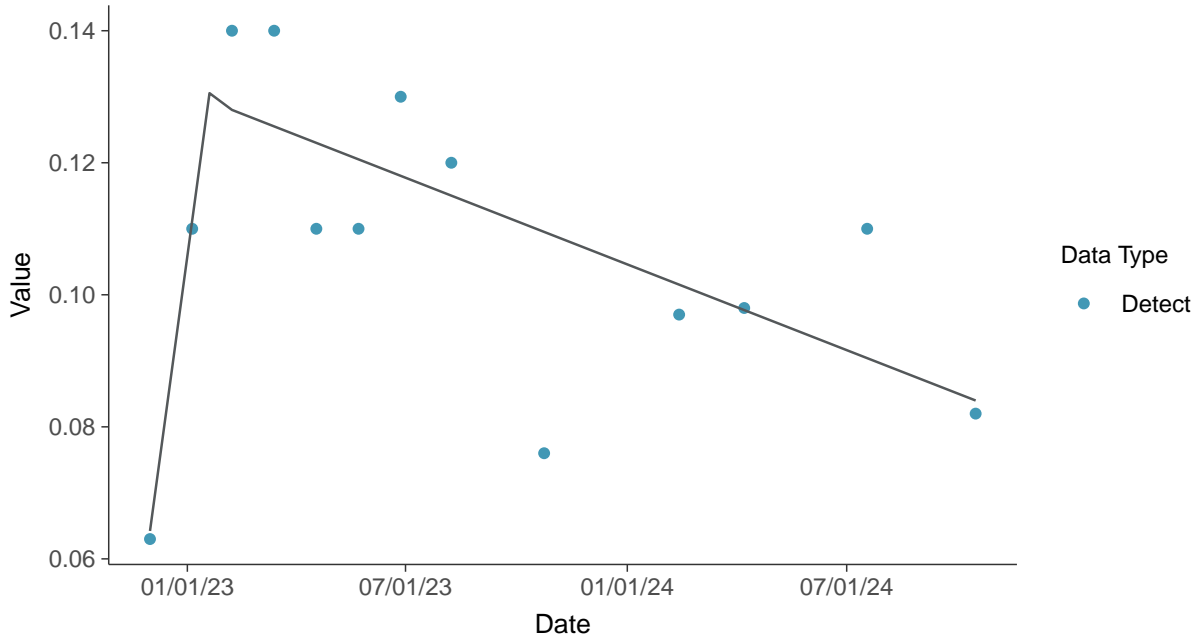
Lithium, MW-08 (mg/L)





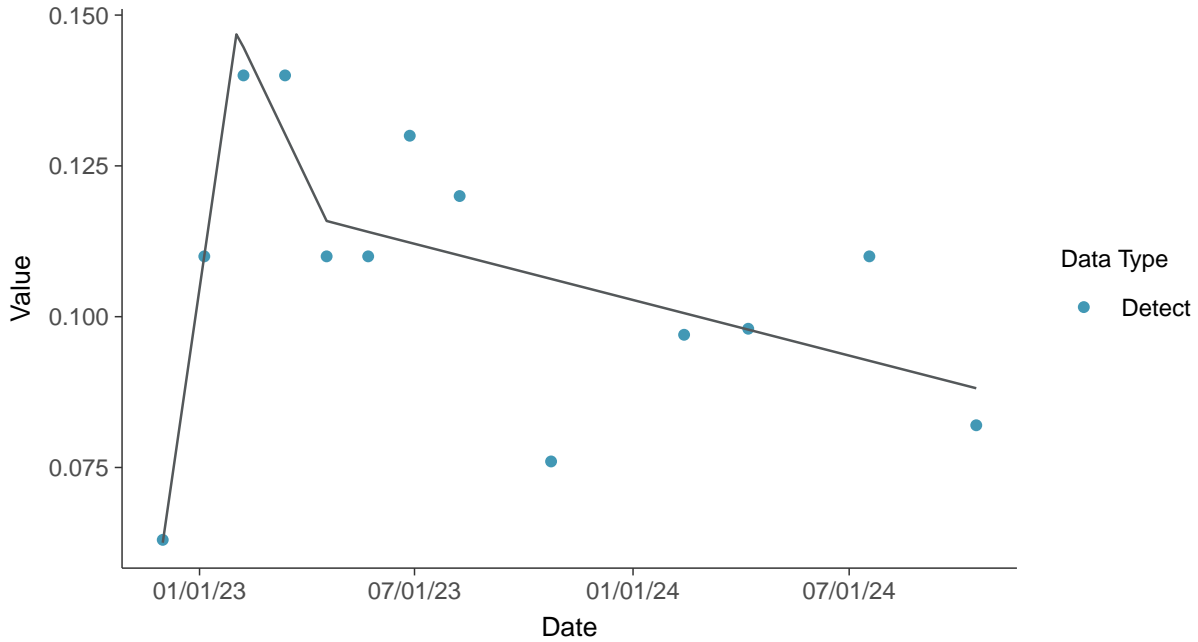
Trend Regression: Piecewise Linear-Linear

Lithium, MW-08 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

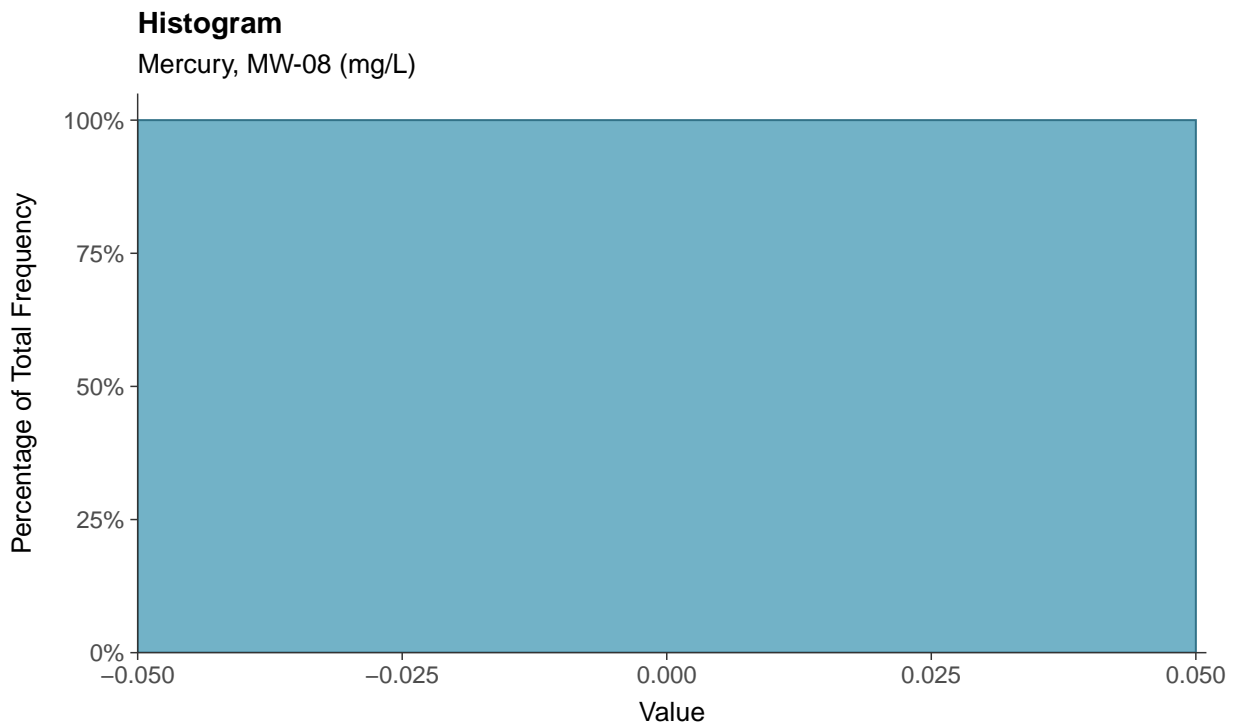
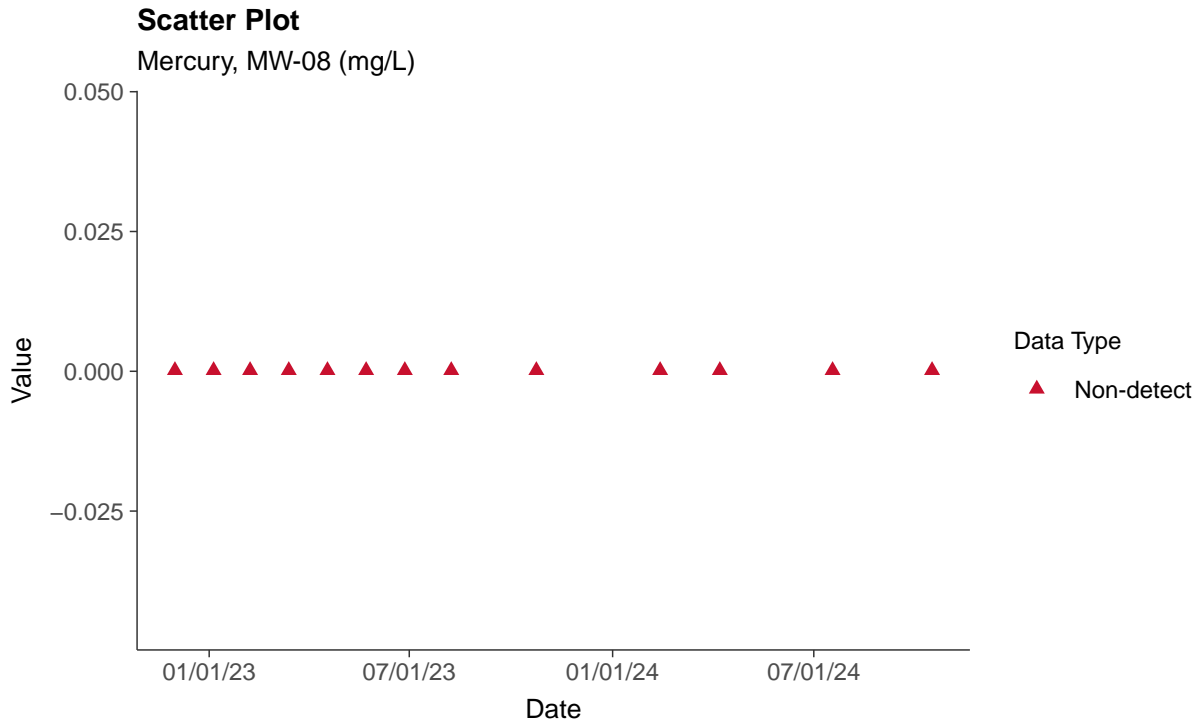
Lithium, MW-08 (mg/L)





Appendix IV: Mercury, MW-08

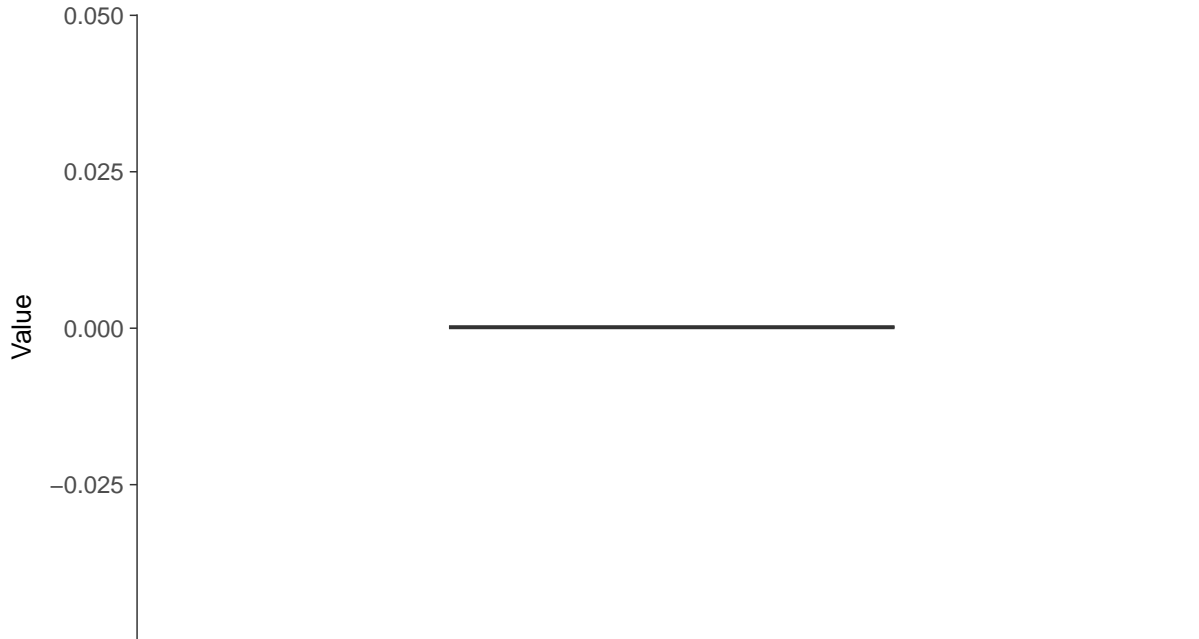
ID: 1_18_1_5_117





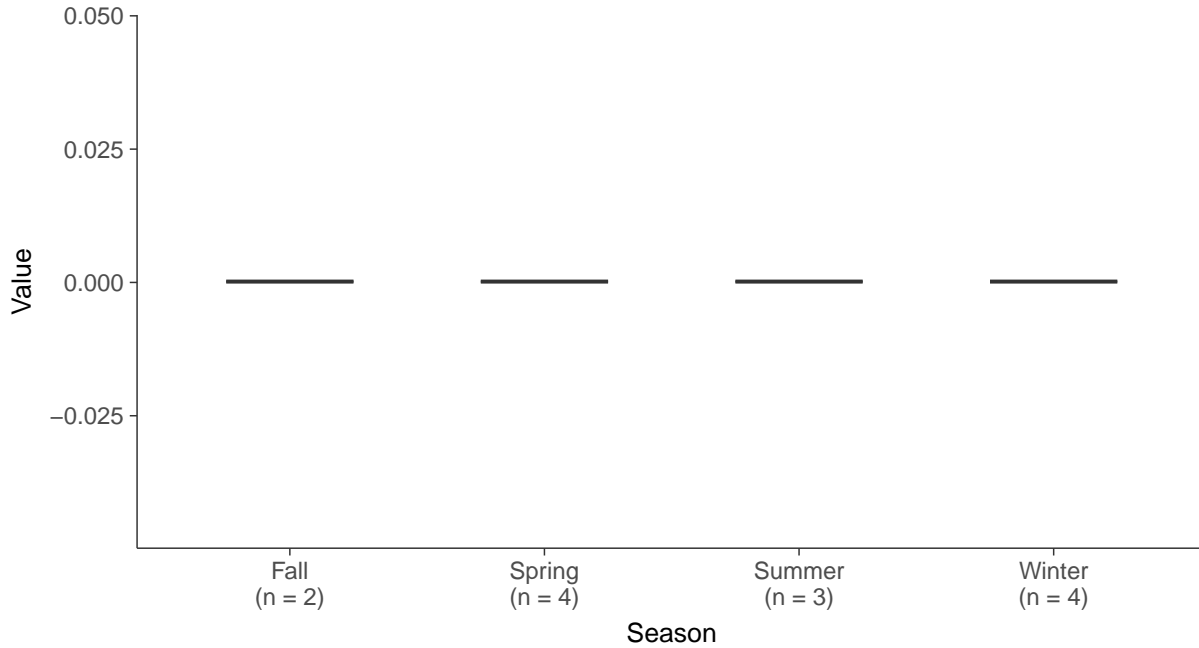
Boxplot

Mercury, MW-08 (mg/L)



Boxplot by Season

Mercury, MW-08 (mg/L)



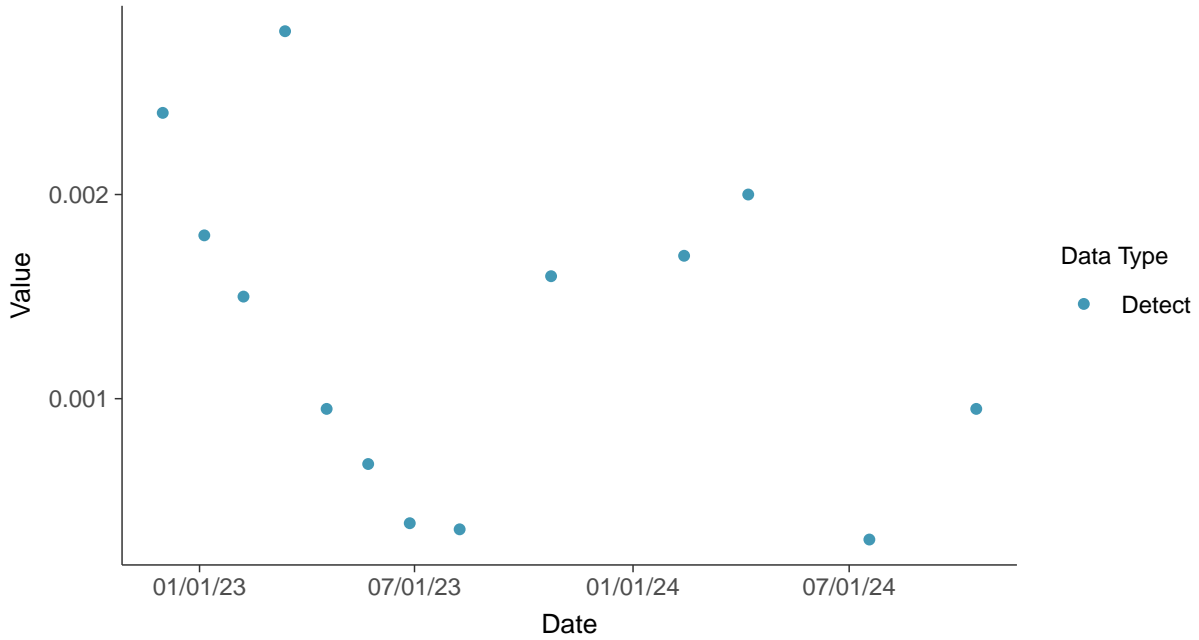


Appendix IV: Molybdenum, MW-08

ID: 1_18_1_5_118

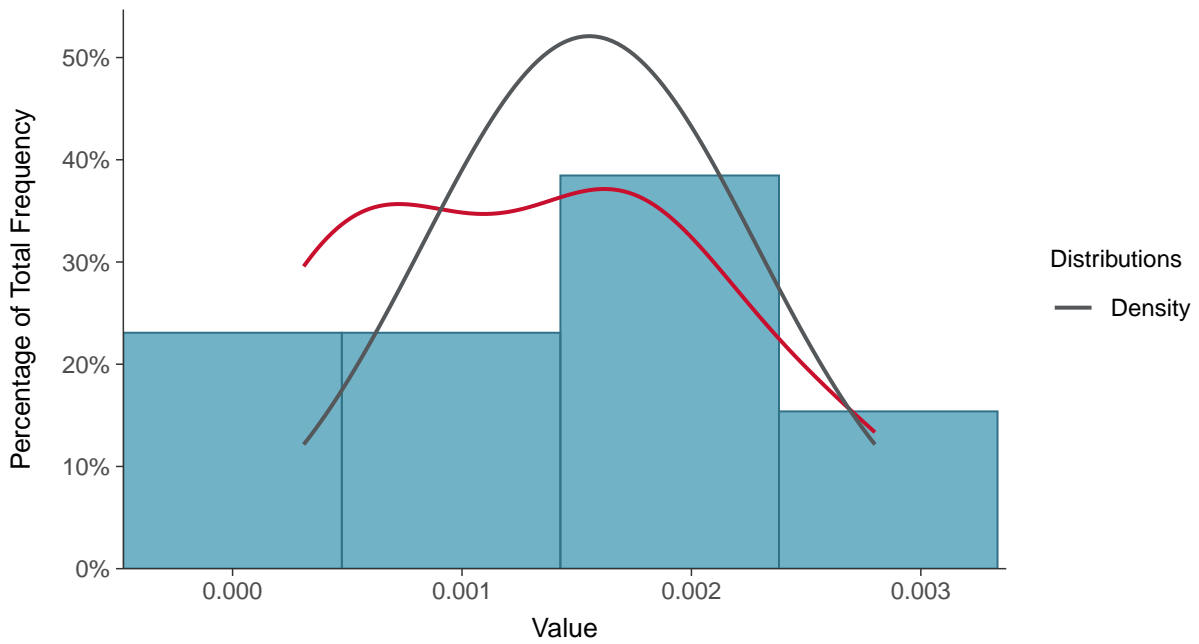
Scatter Plot

Molybdenum, MW-08 (mg/L)



Histogram

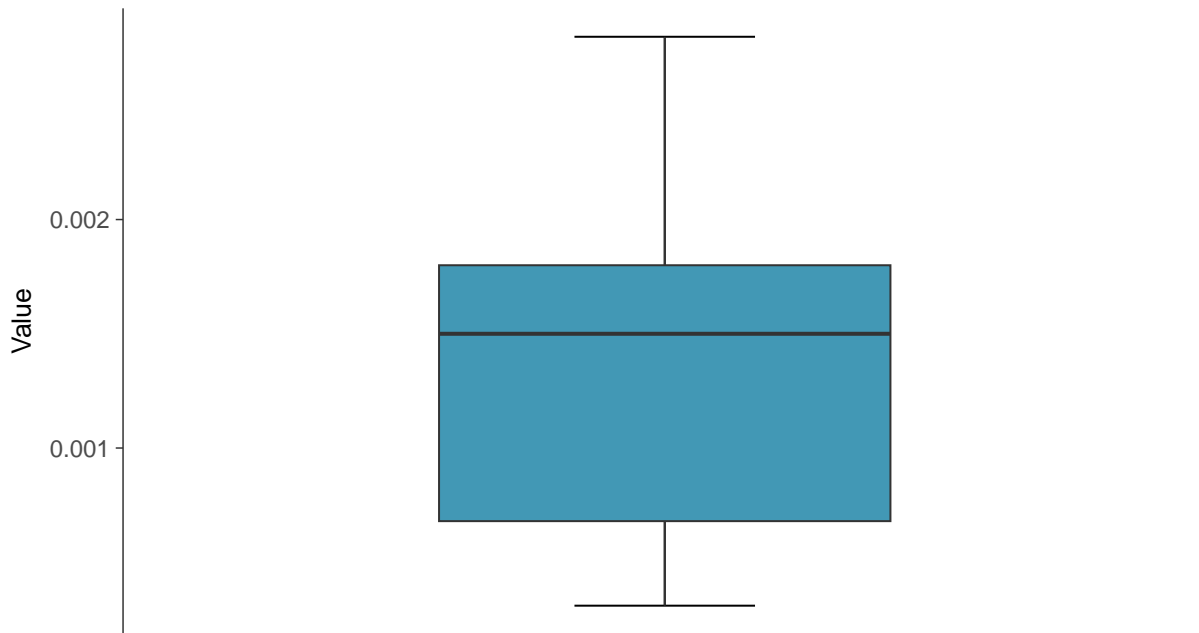
Molybdenum, MW-08 (mg/L)





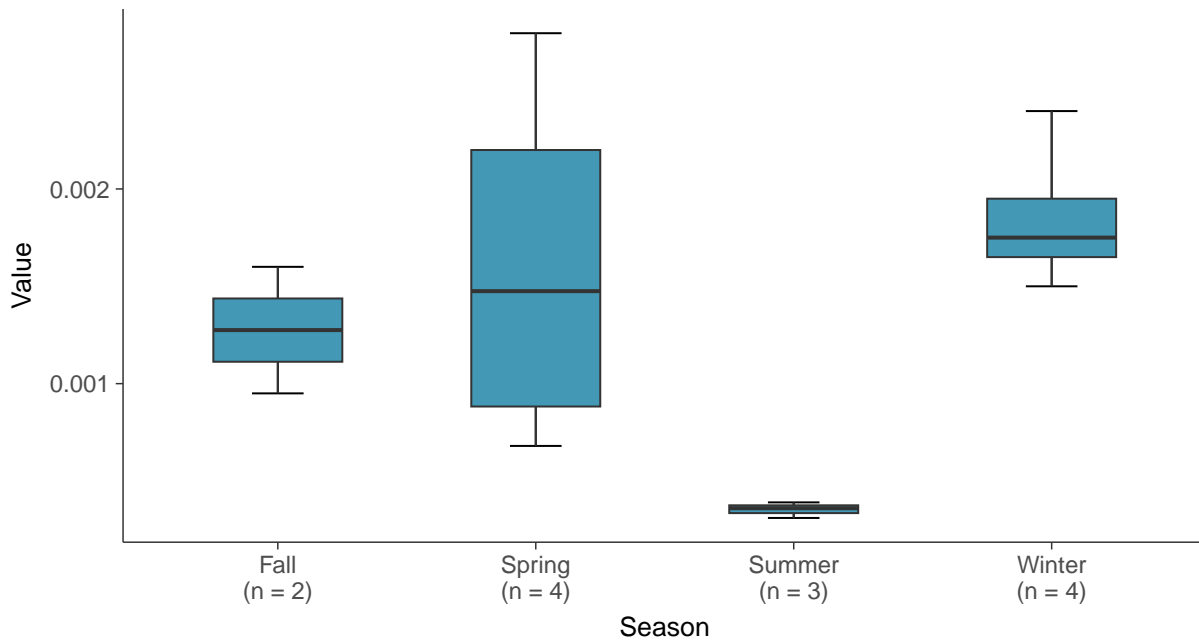
Boxplot

Molybdenum, MW-08 (mg/L)



Boxplot by Season

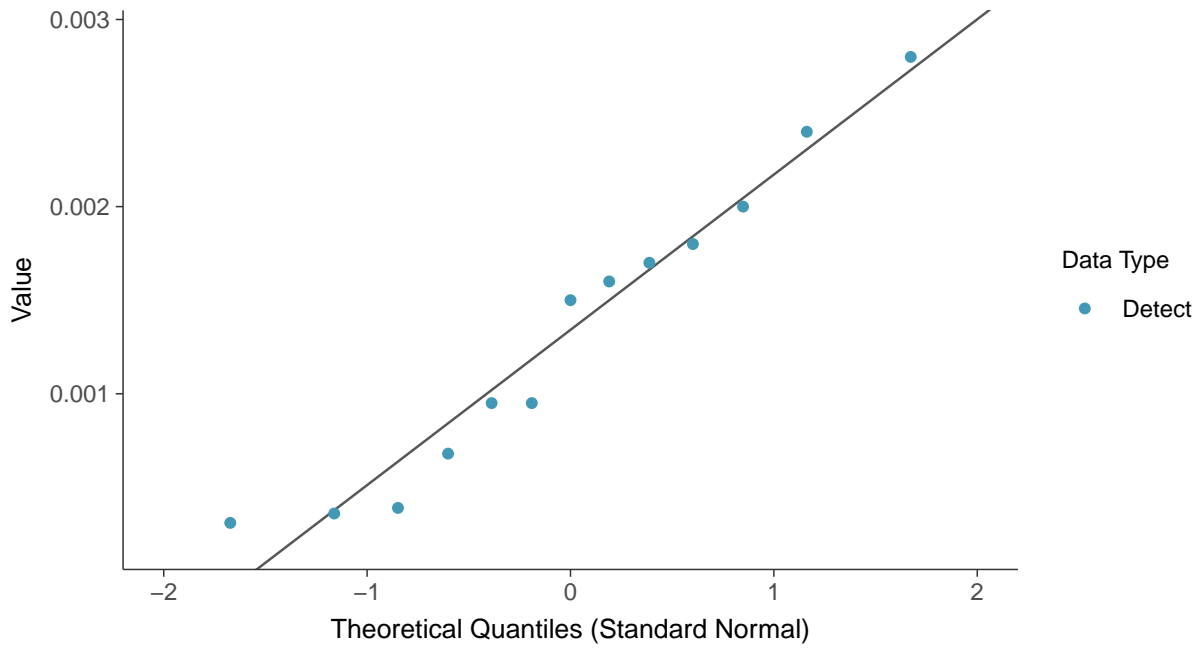
Molybdenum, MW-08 (mg/L)





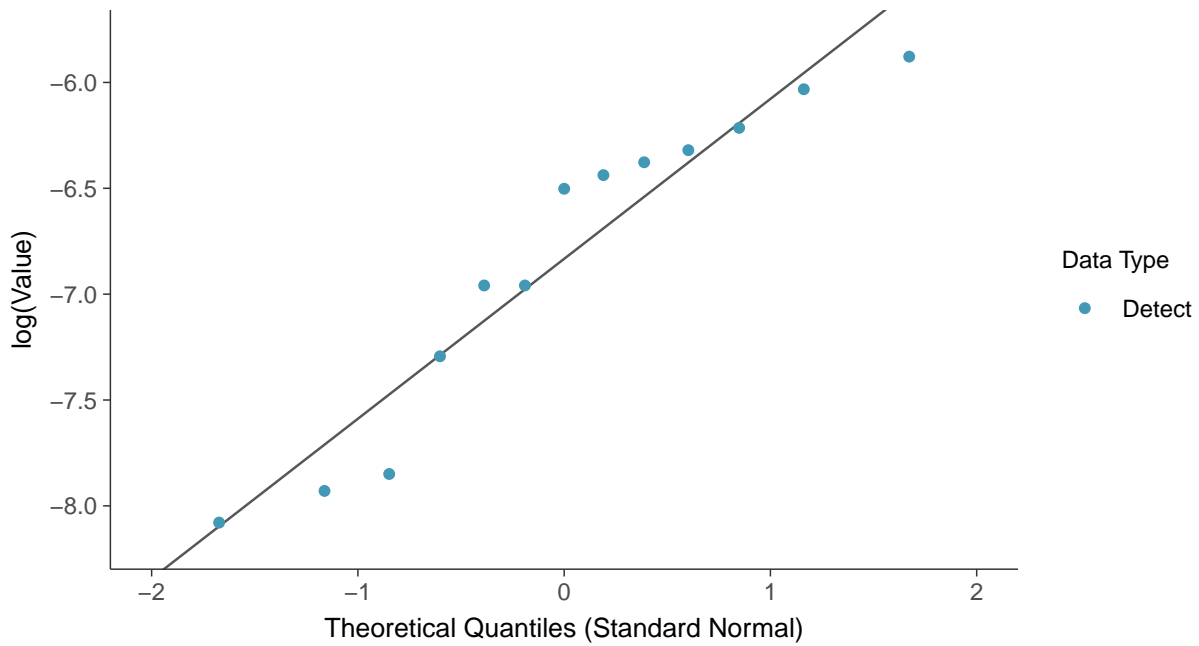
Normal Q-Q plot

Molybdenum, MW-08 (mg/L)



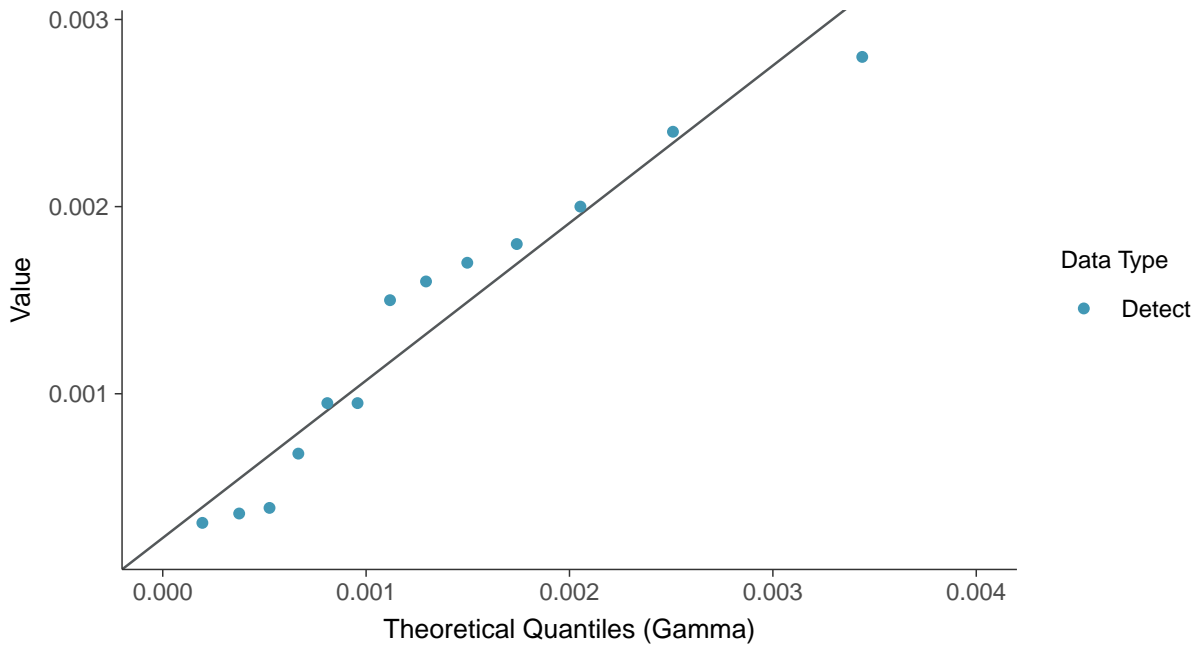
Lognormal Q-Q plot

Molybdenum, MW-08 (mg/L)

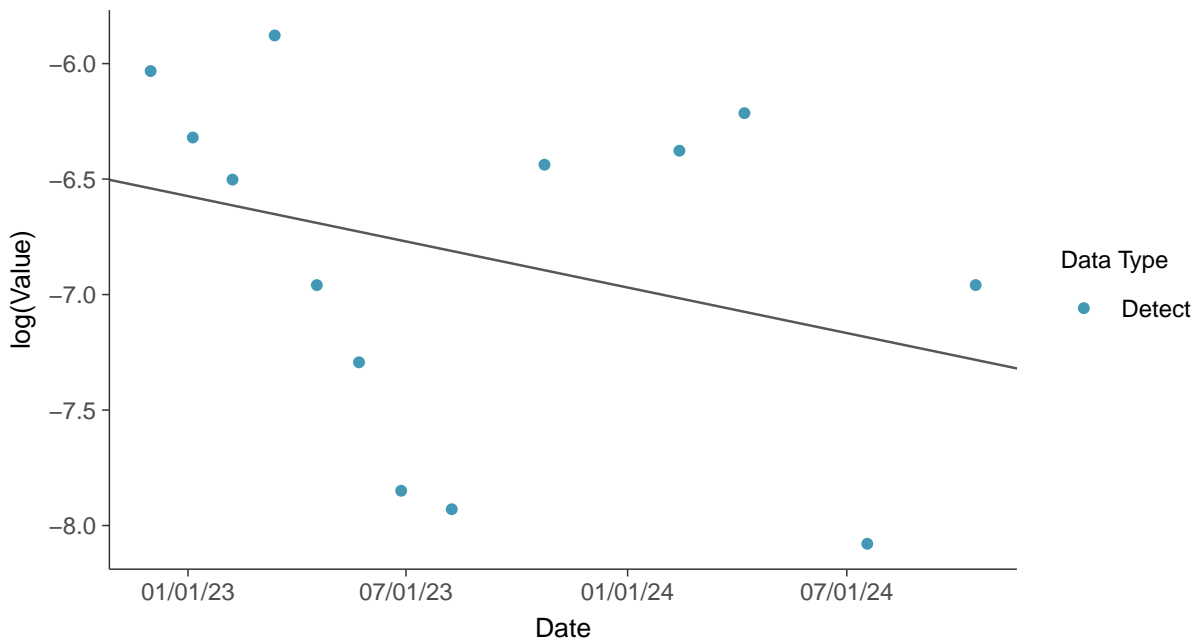




Gamma Q-Q plot
Molybdenum, MW-08 (mg/L)

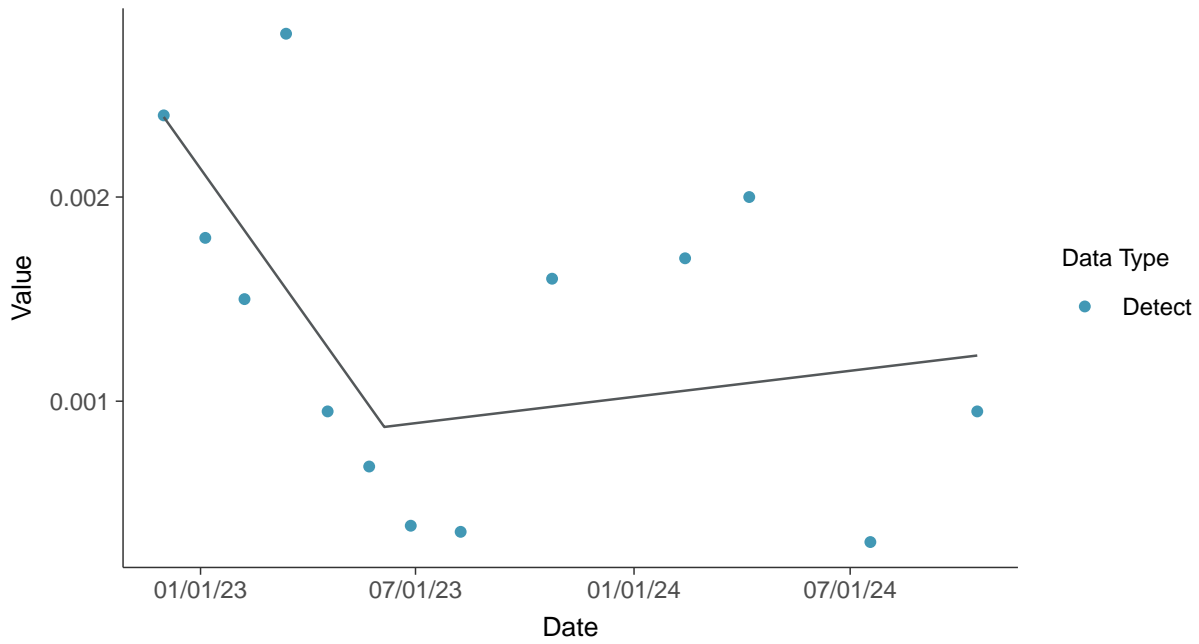


Trend Regression: Lognormal MLE
Molybdenum, MW-08 (mg/L)

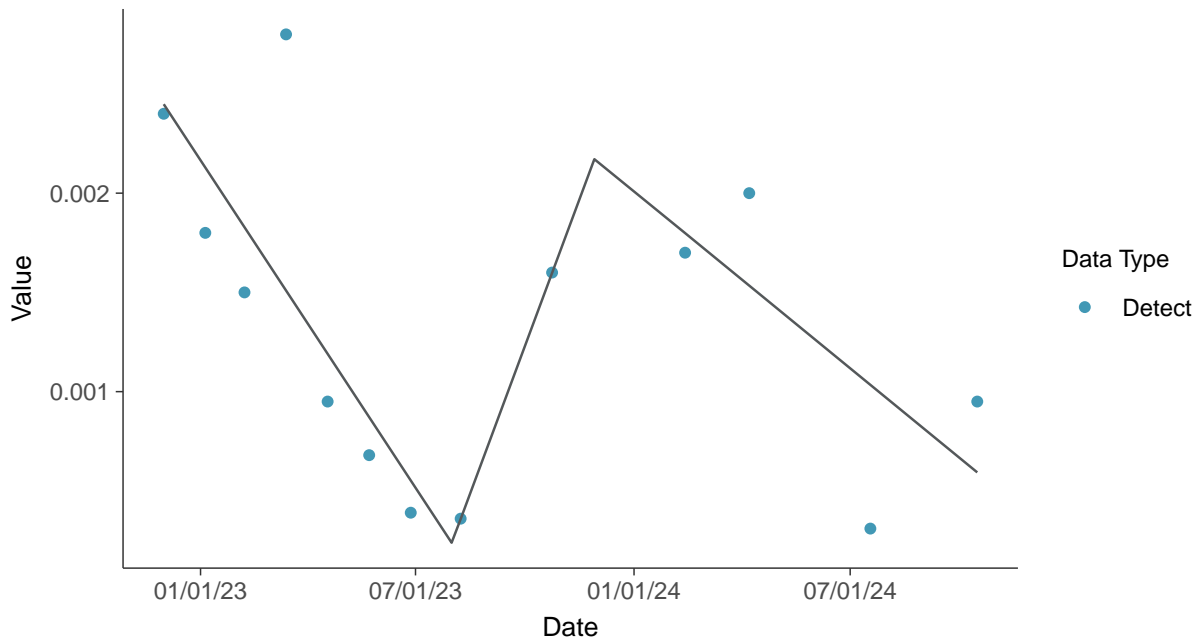




Trend Regression: Piecewise Linear-Linear
Molybdenum, MW-08 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Molybdenum, MW-08 (mg/L)



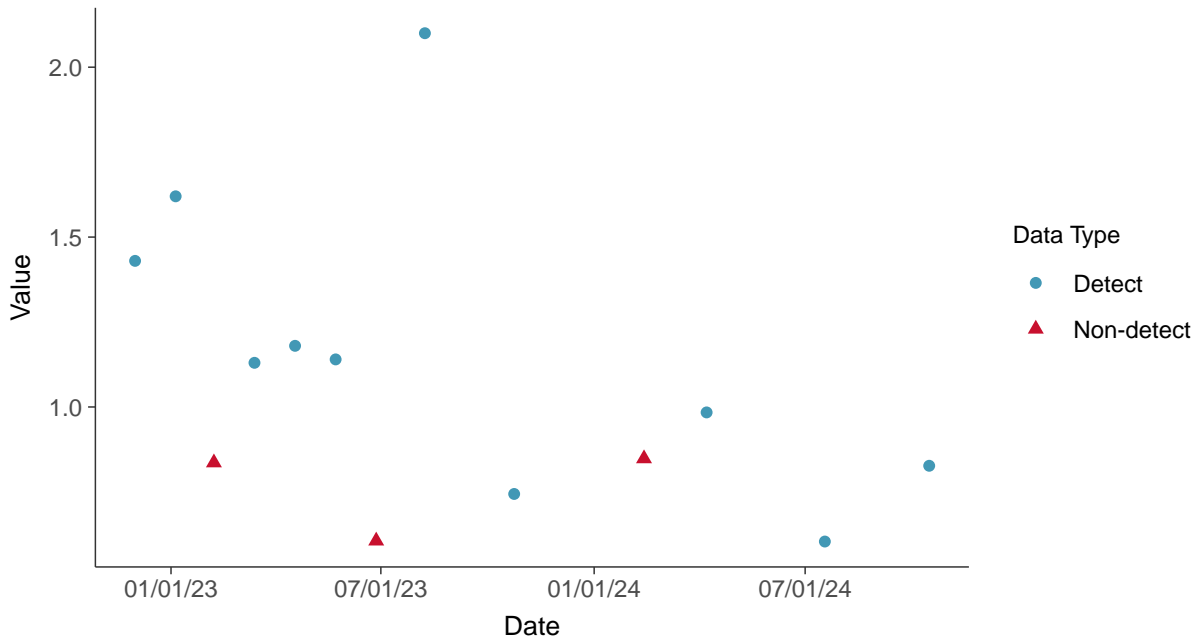


Appendix IV: Radium 226 and 228, MW-08

ID: 1_18_1_5_121

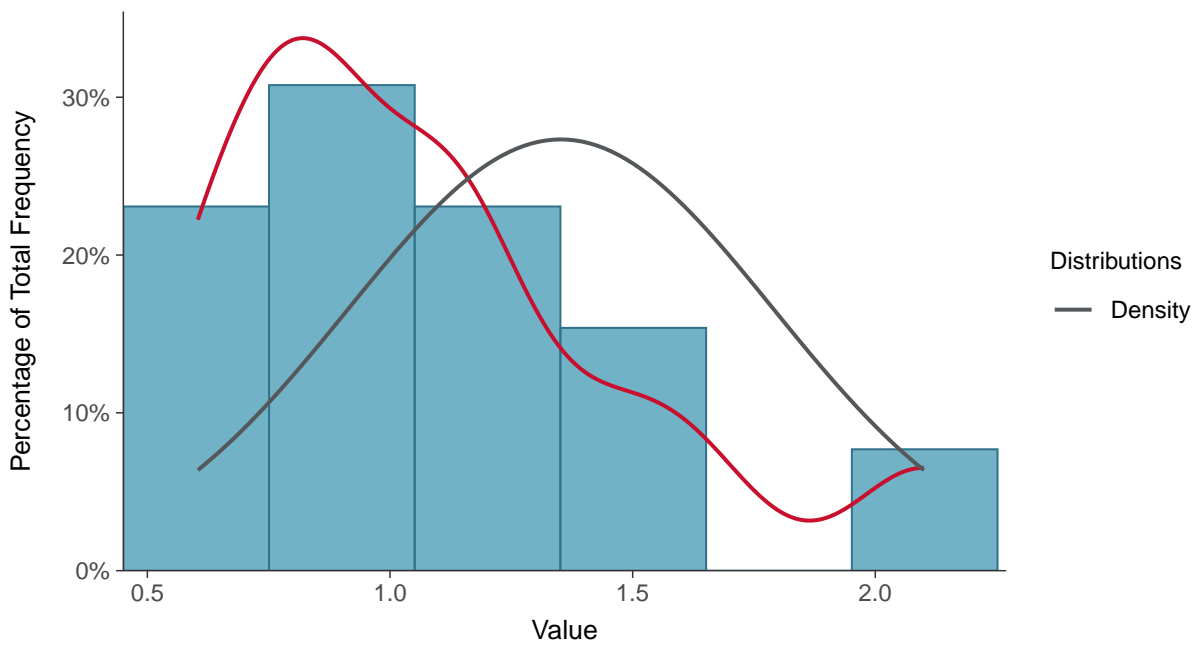
Scatter Plot

Radium 226 and 228, MW-08 (pCi/L)



Histogram

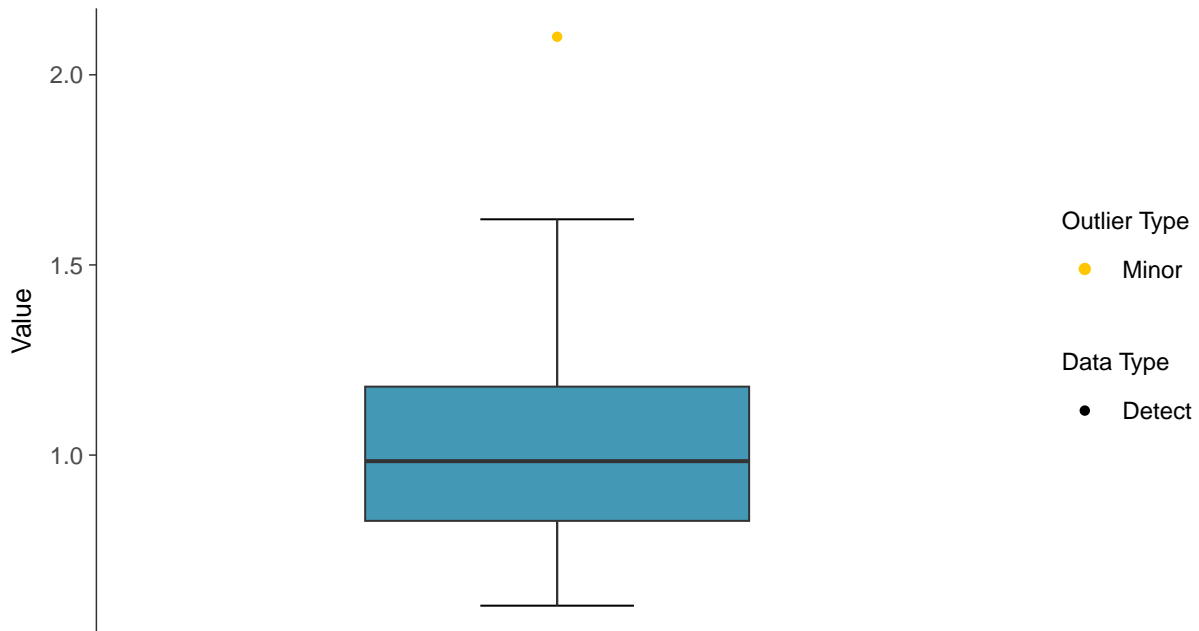
Radium 226 and 228, MW-08 (pCi/L)





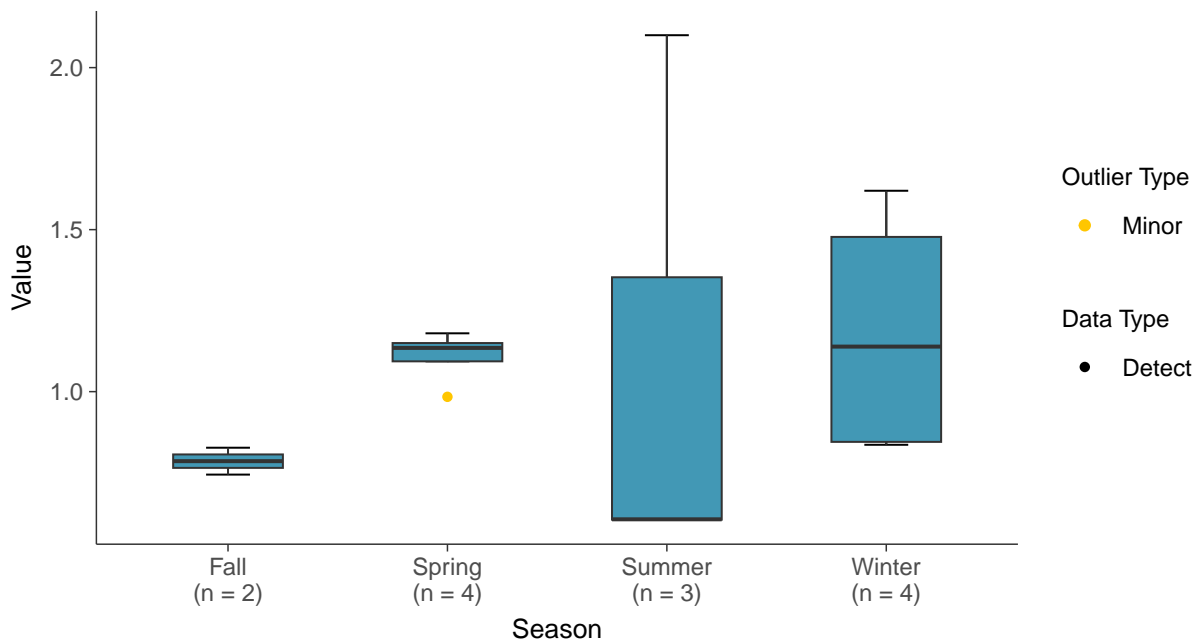
Boxplot

Radium 226 and 228, MW-08 (pCi/L)



Boxplot by Season

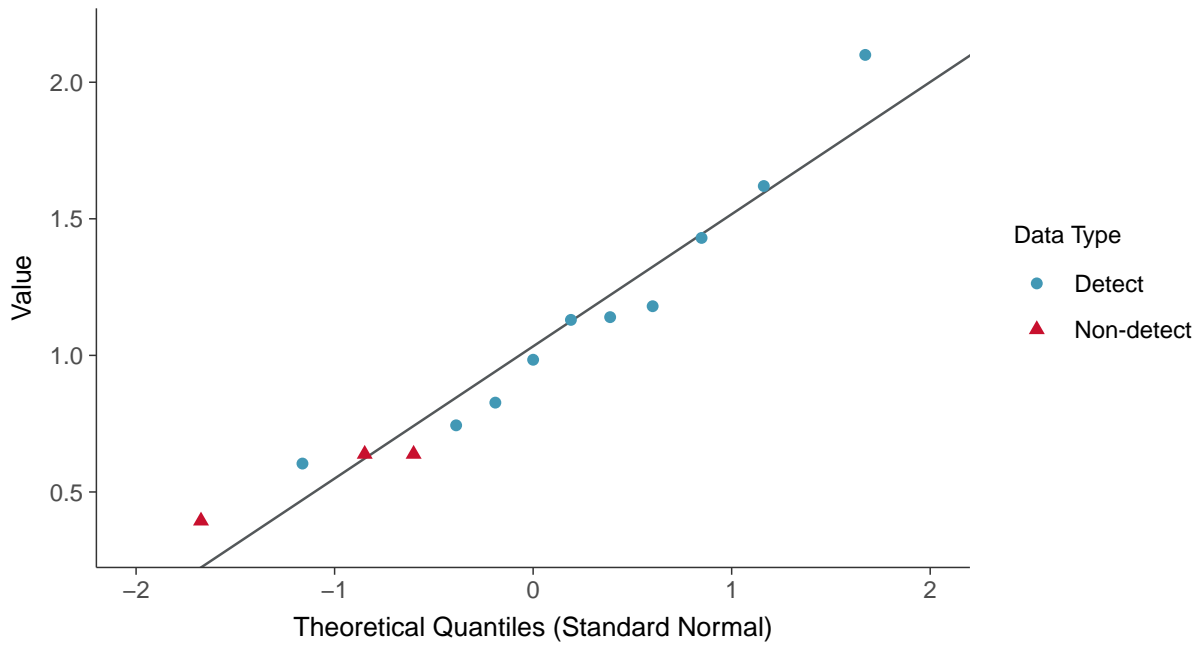
Radium 226 and 228, MW-08 (pCi/L)





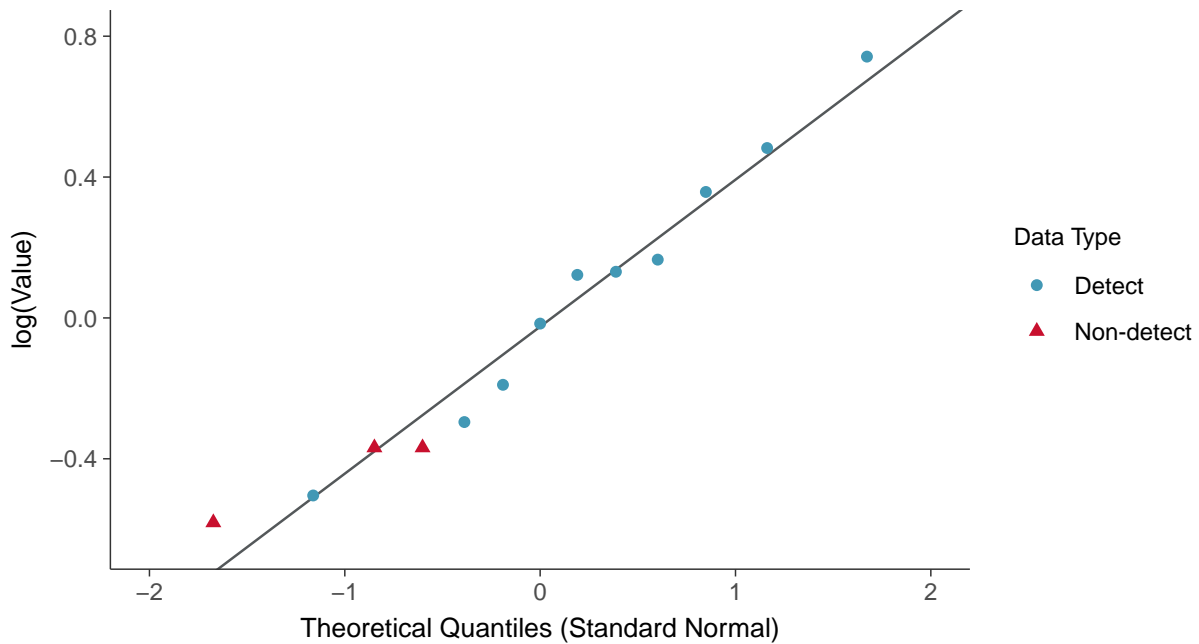
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-08 (pCi/L)



Lognormal Q-Q plot using ROS Imputed Estimates

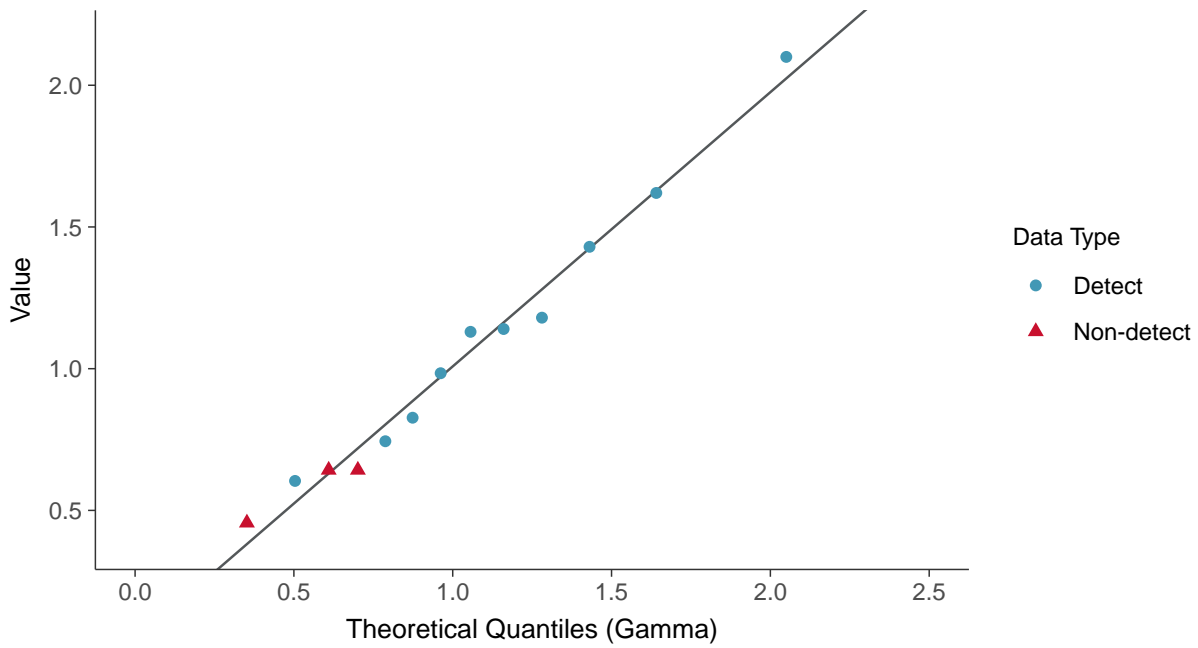
Radium 226 and 228, MW-08 (pCi/L)





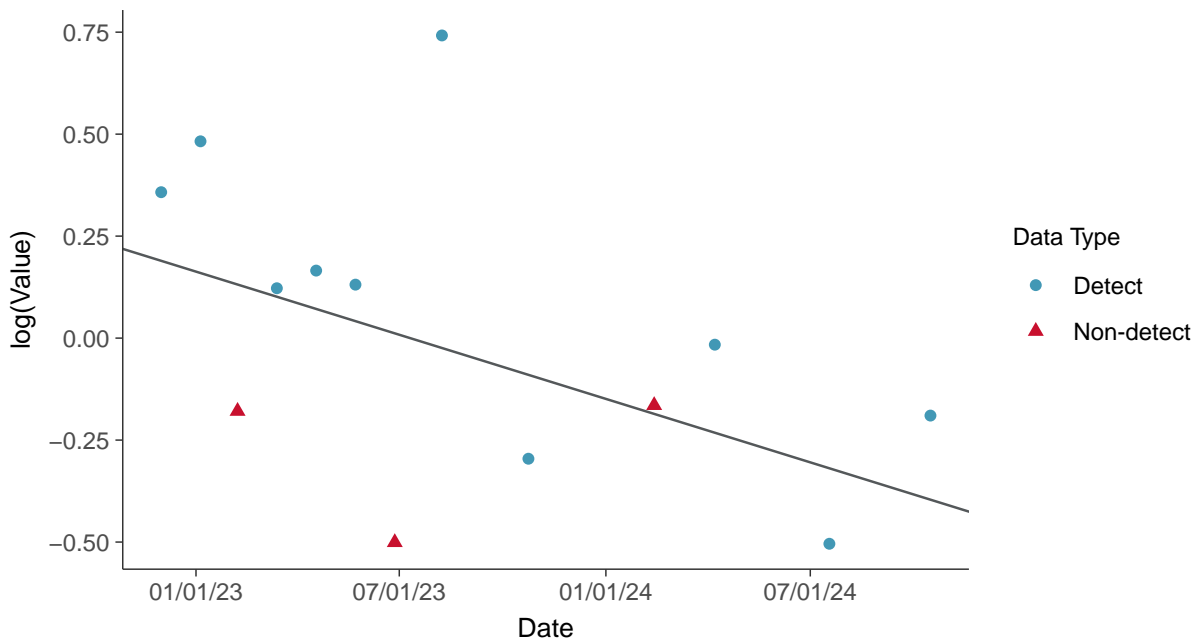
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-08 (pCi/L)



Trend Regression: Lognormal MLE

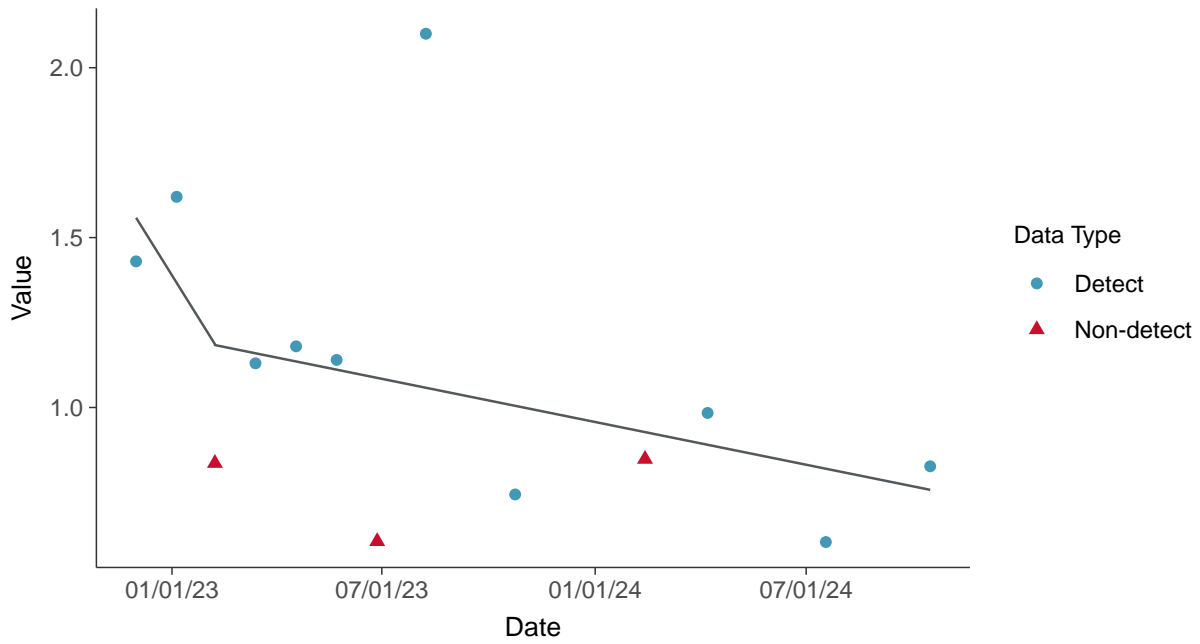
Radium 226 and 228, MW-08 (pCi/L)





Trend Regression: Piecewise Linear-Linear

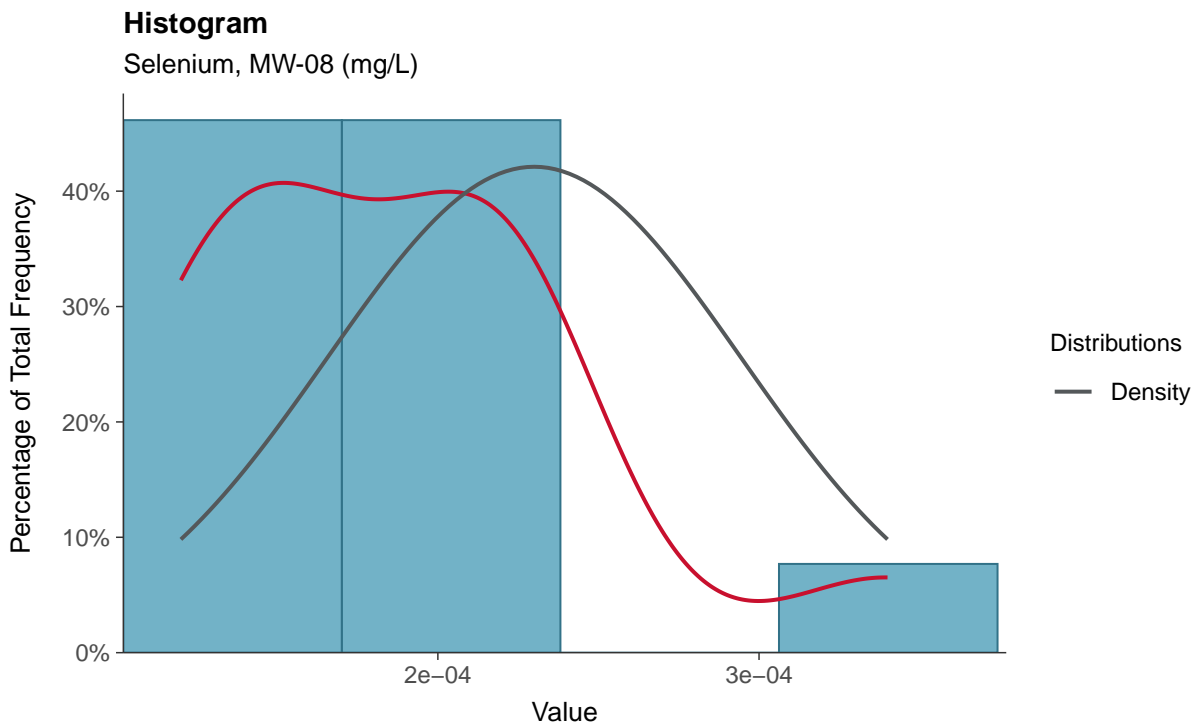
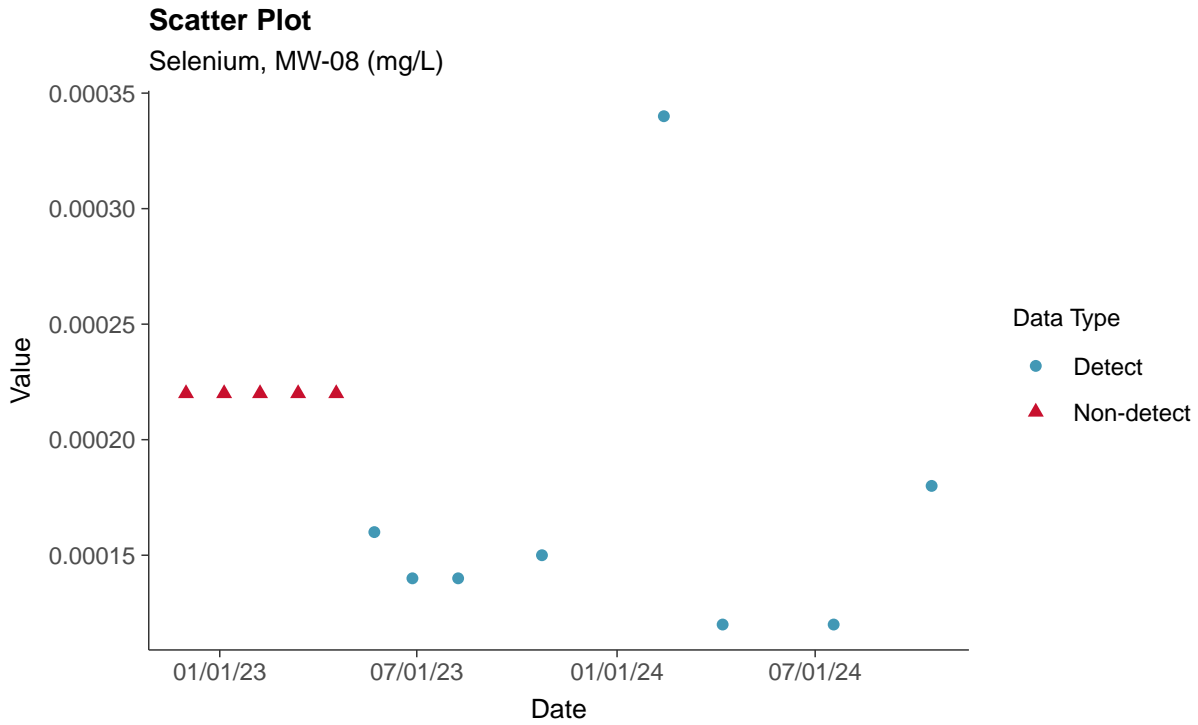
Radium 226 and 228, MW-08 (pCi/L)





Appendix IV: Selenium, MW-08

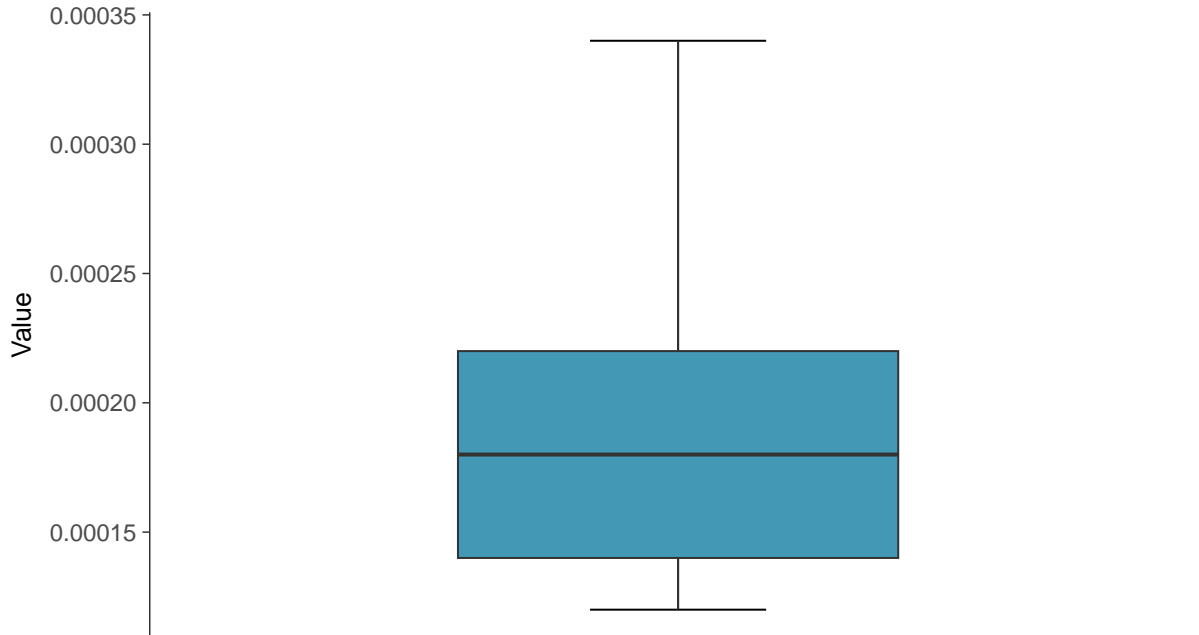
ID: 1_18_1_5_122





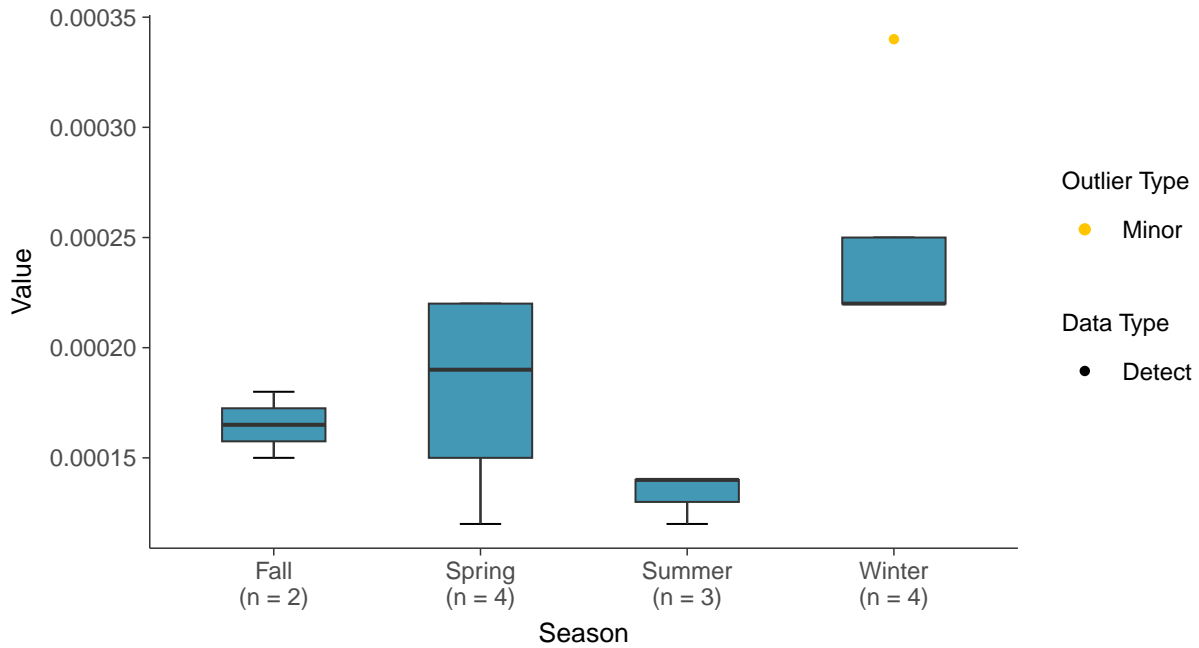
Boxplot

Selenium, MW-08 (mg/L)



Boxplot by Season

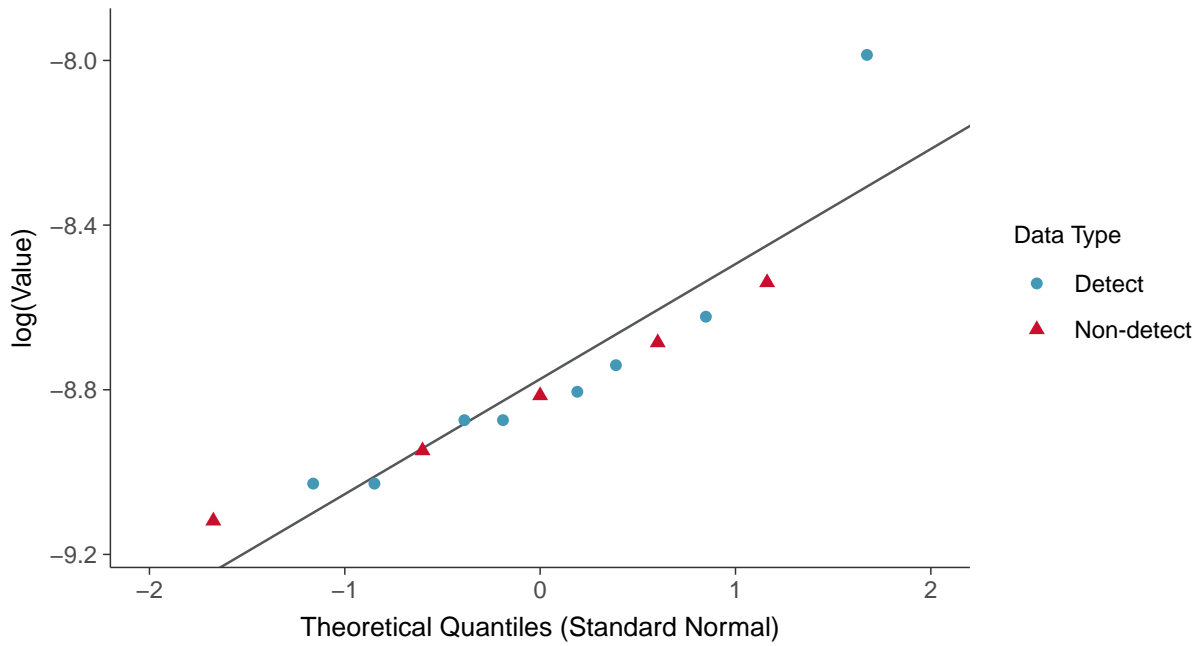
Selenium, MW-08 (mg/L)





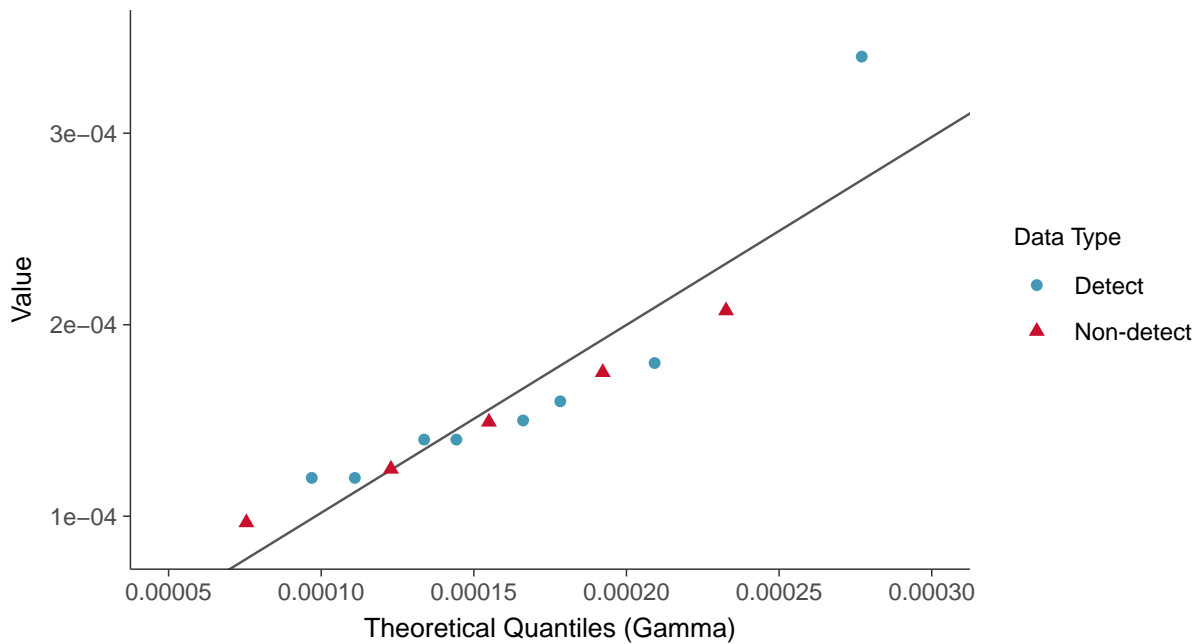
Lognormal Q-Q plot using ROS Imputed Estimates

Selenium, MW-08 (mg/L)



Gamma Q-Q plot using ROS Imputed Estimates

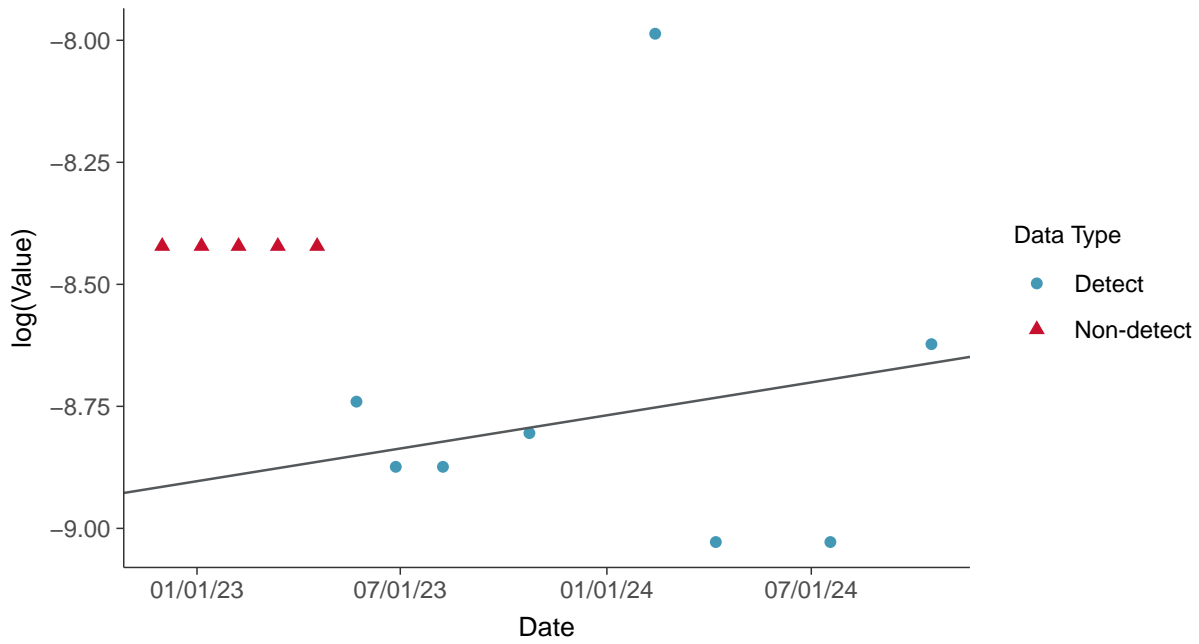
Selenium, MW-08 (mg/L)





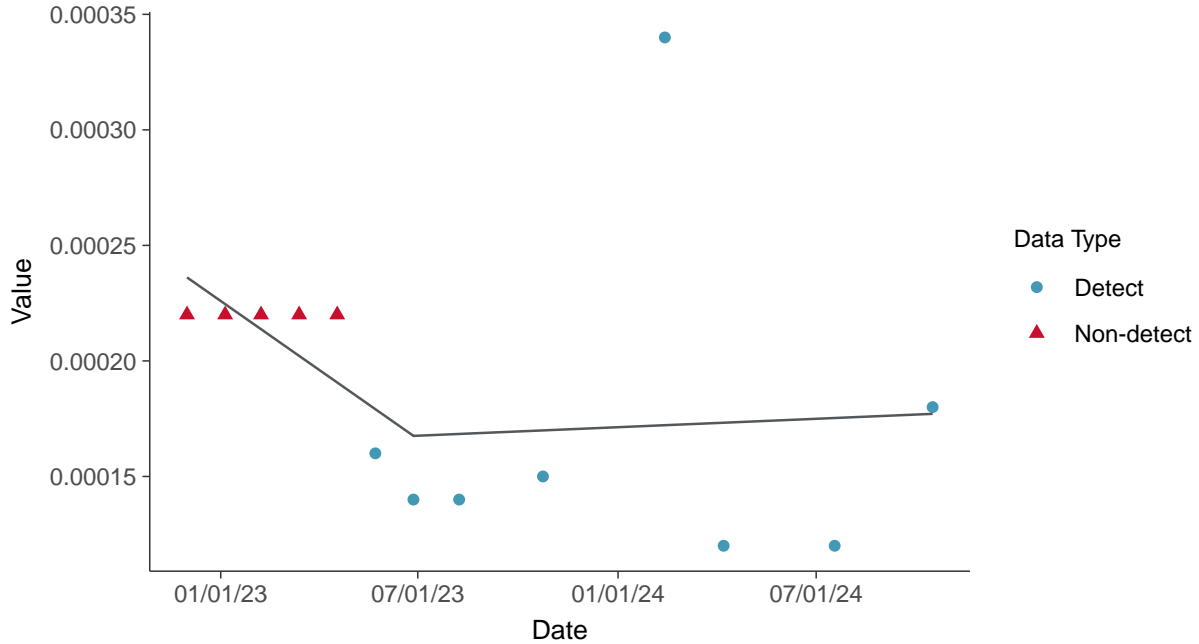
Trend Regression: Lognormal MLE

Selenium, MW-08 (mg/L)



Trend Regression: Piecewise Linear-Linear

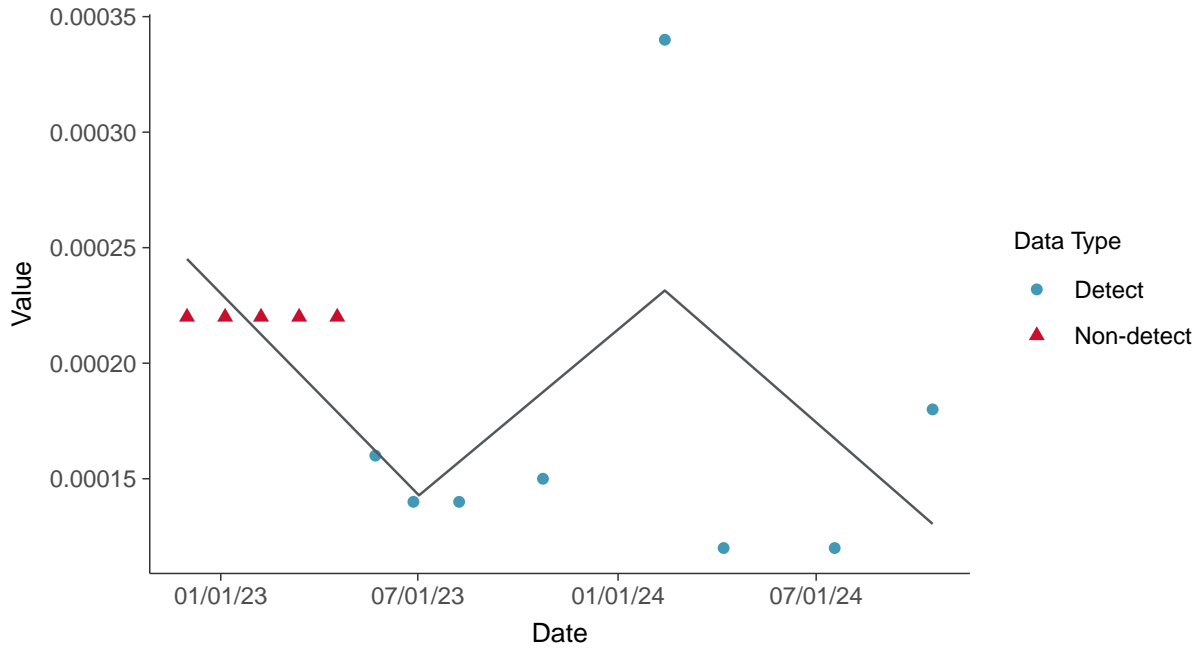
Selenium, MW-08 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

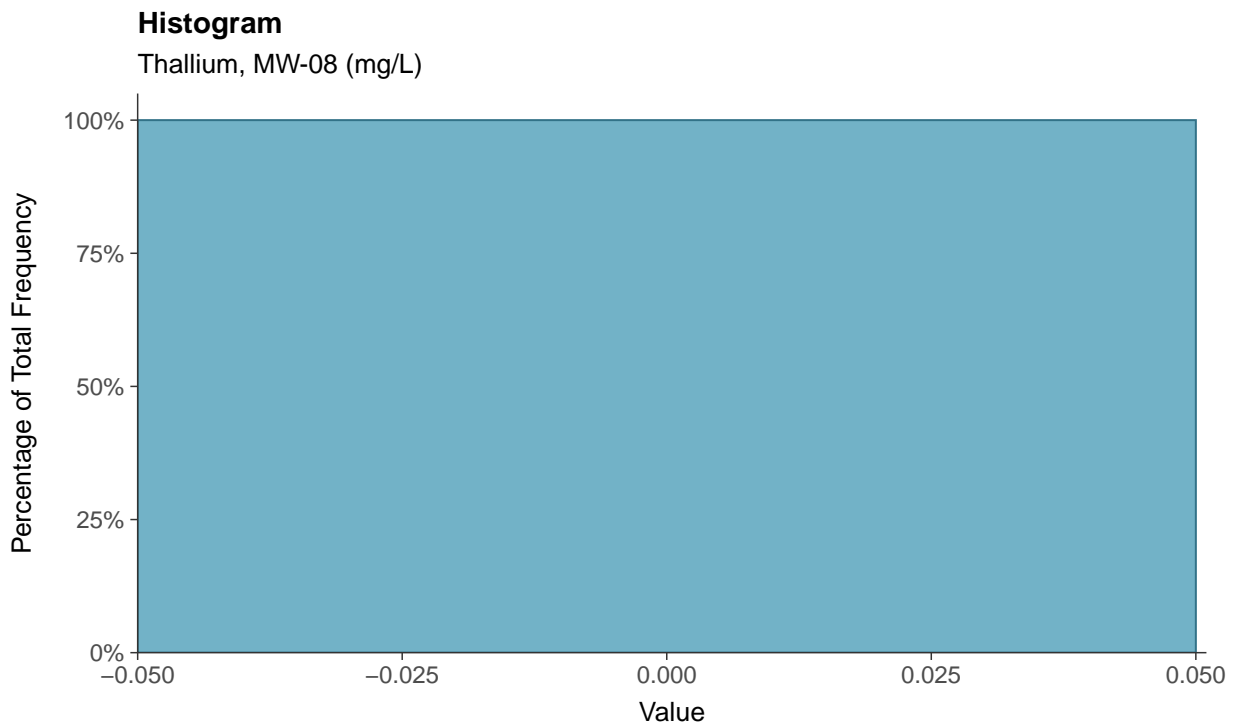
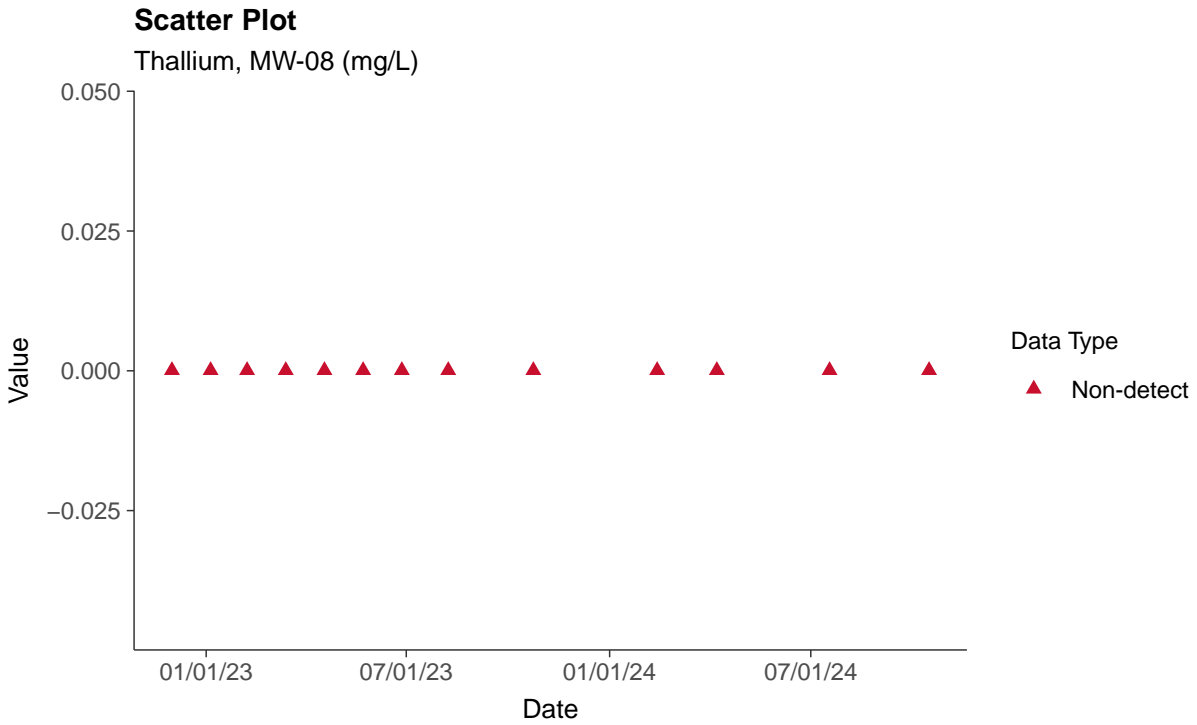
Selenium, MW-08 (mg/L)





Appendix IV: Thallium, MW-08

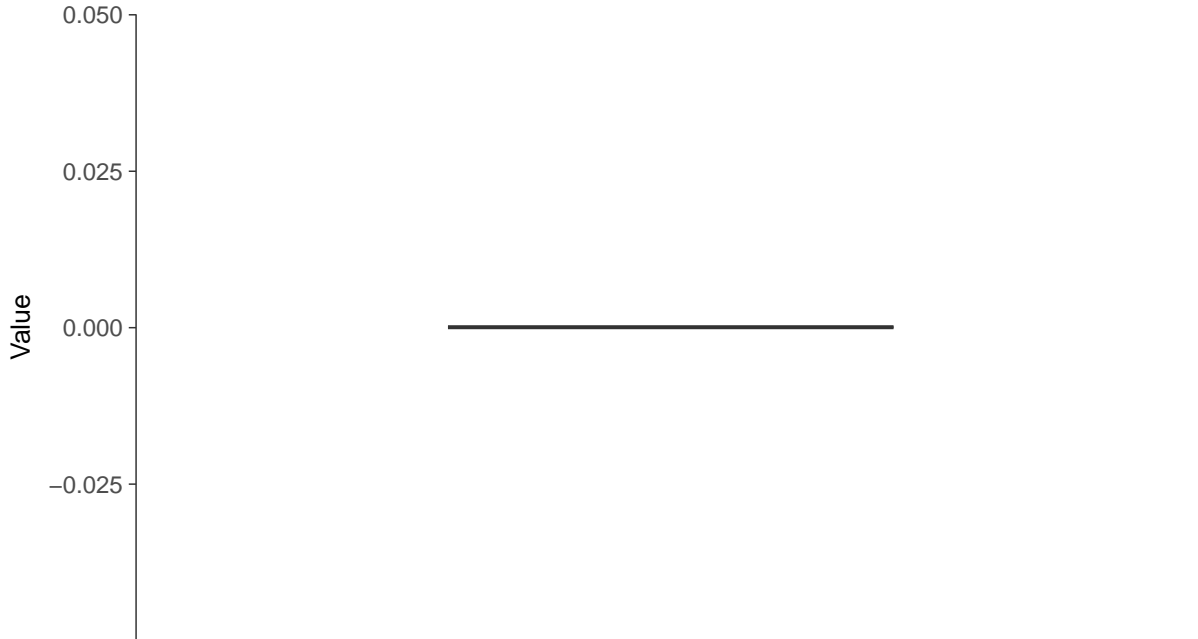
ID: 1_18_1_5_125





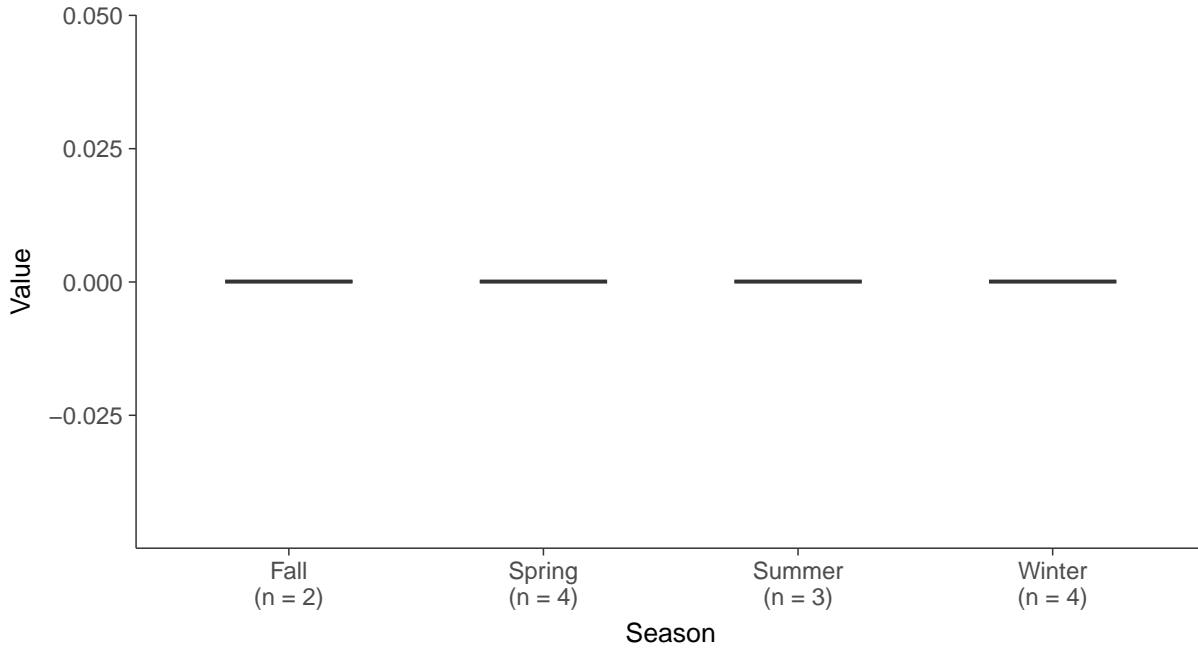
Boxplot

Thallium, MW-08 (mg/L)



Boxplot by Season

Thallium, MW-08 (mg/L)



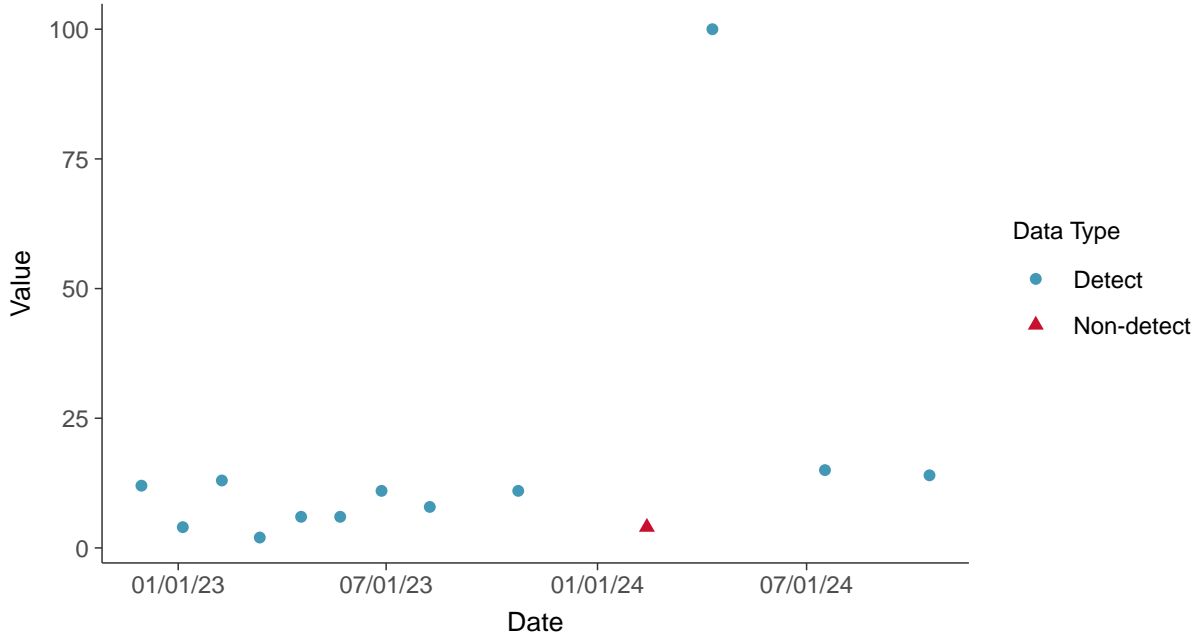


Additional Parameters: Total Suspended Solids, MW-18

ID: 1_28_1_3_127

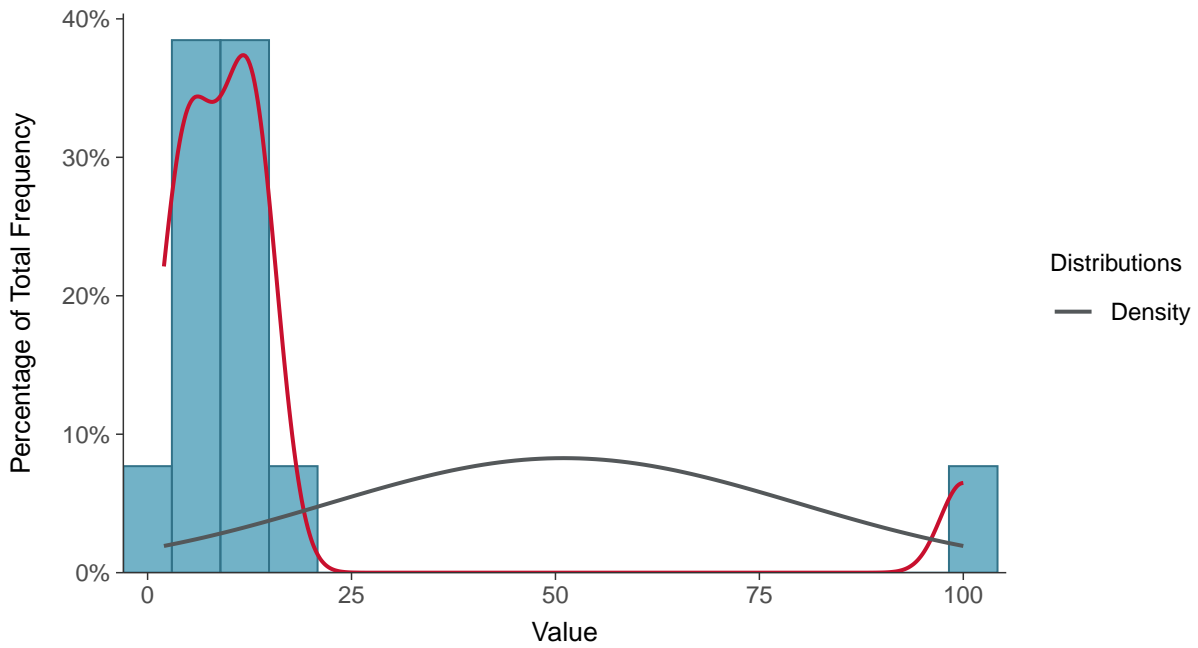
Scatter Plot

Total Suspended Solids, MW-18 (mg/L)



Histogram

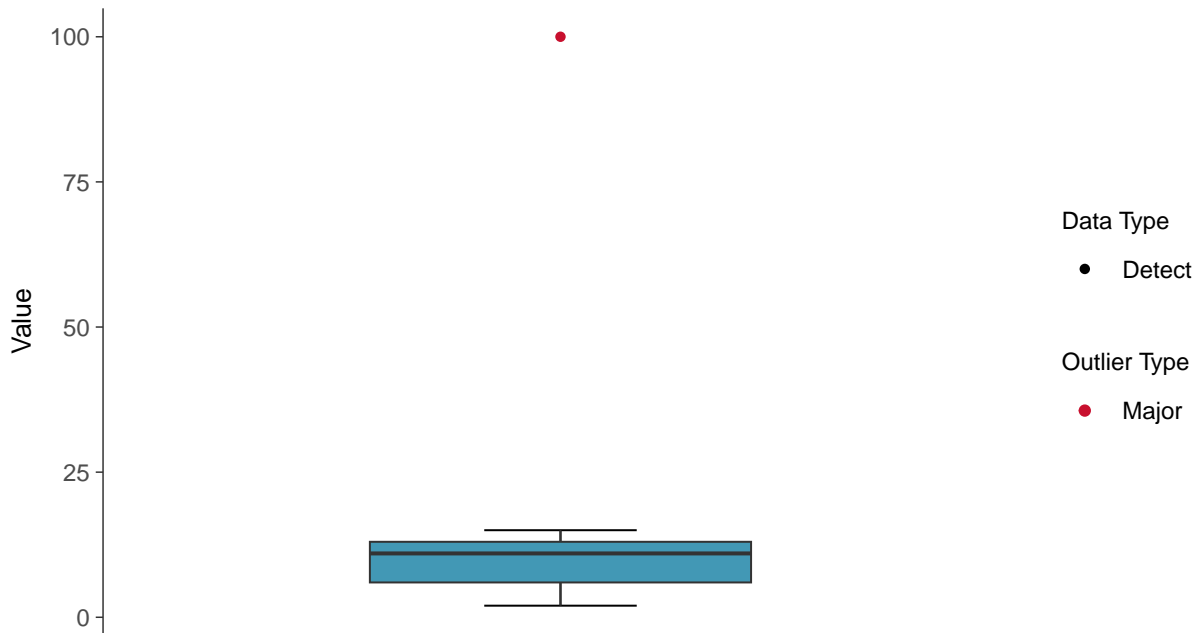
Total Suspended Solids, MW-18 (mg/L)





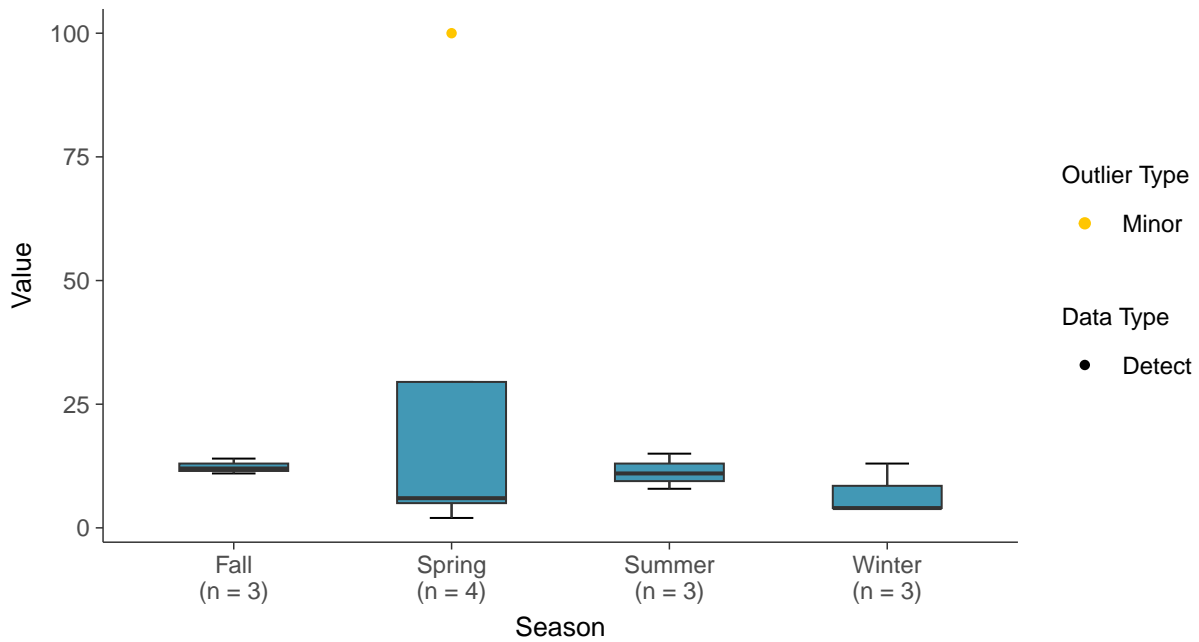
Boxplot

Total Suspended Solids, MW-18 (mg/L)



Boxplot by Season

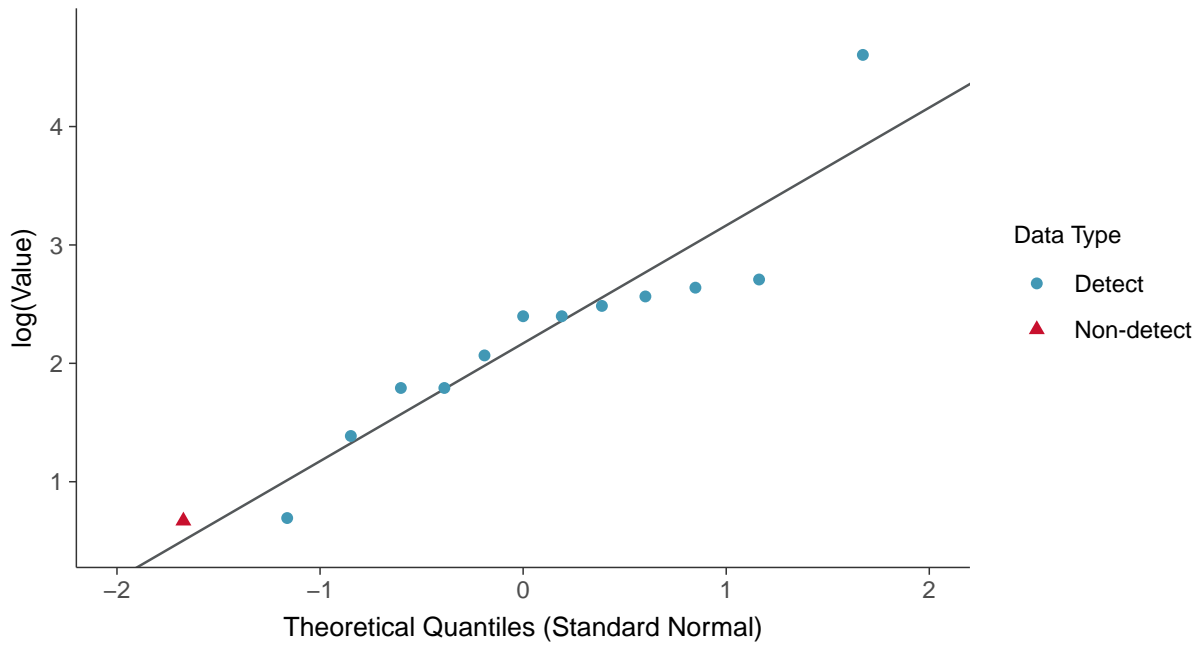
Total Suspended Solids, MW-18 (mg/L)





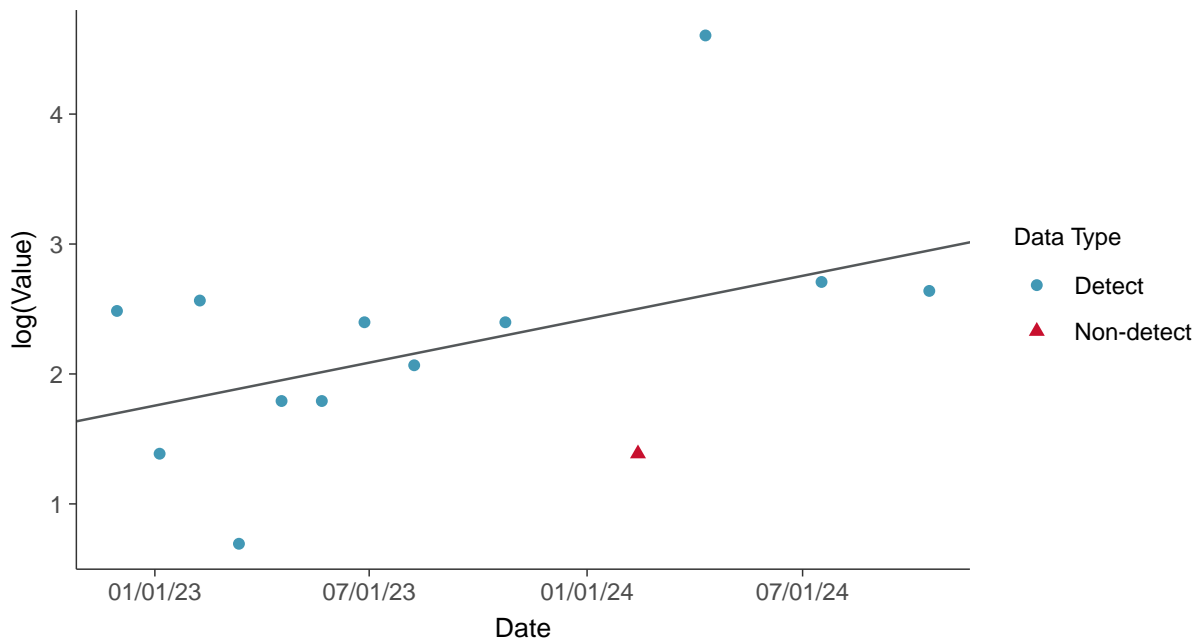
Lognormal Q-Q plot using ROS Imputed Estimates

Total Suspended Solids, MW-18 (mg/L)



Trend Regression: Lognormal MLE

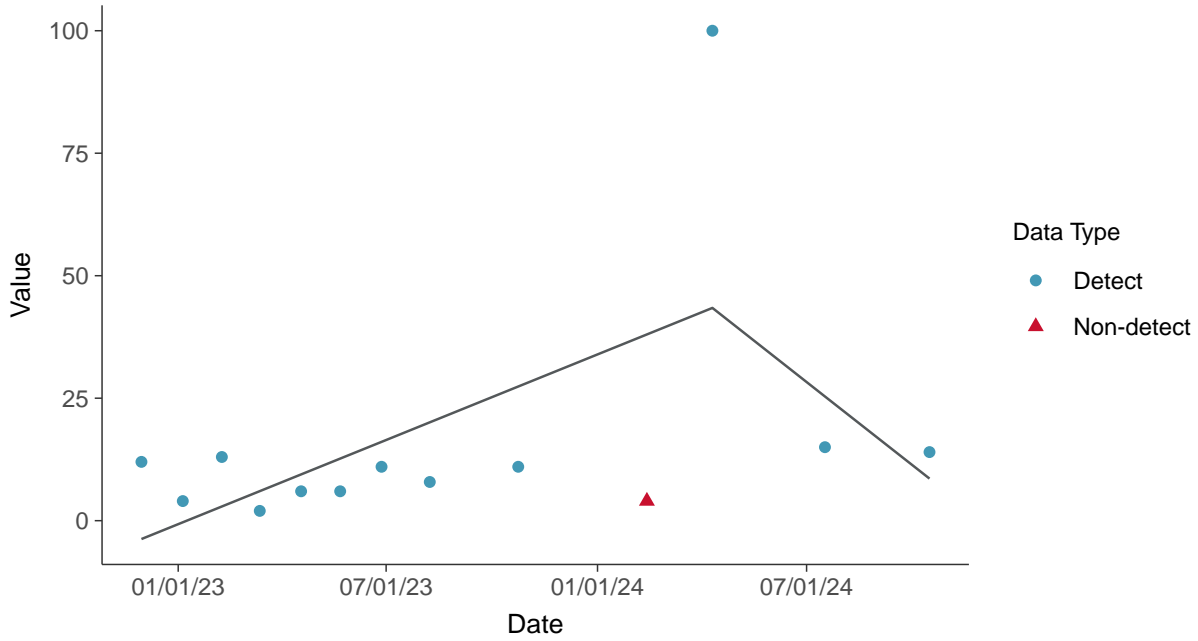
Total Suspended Solids, MW-18 (mg/L)





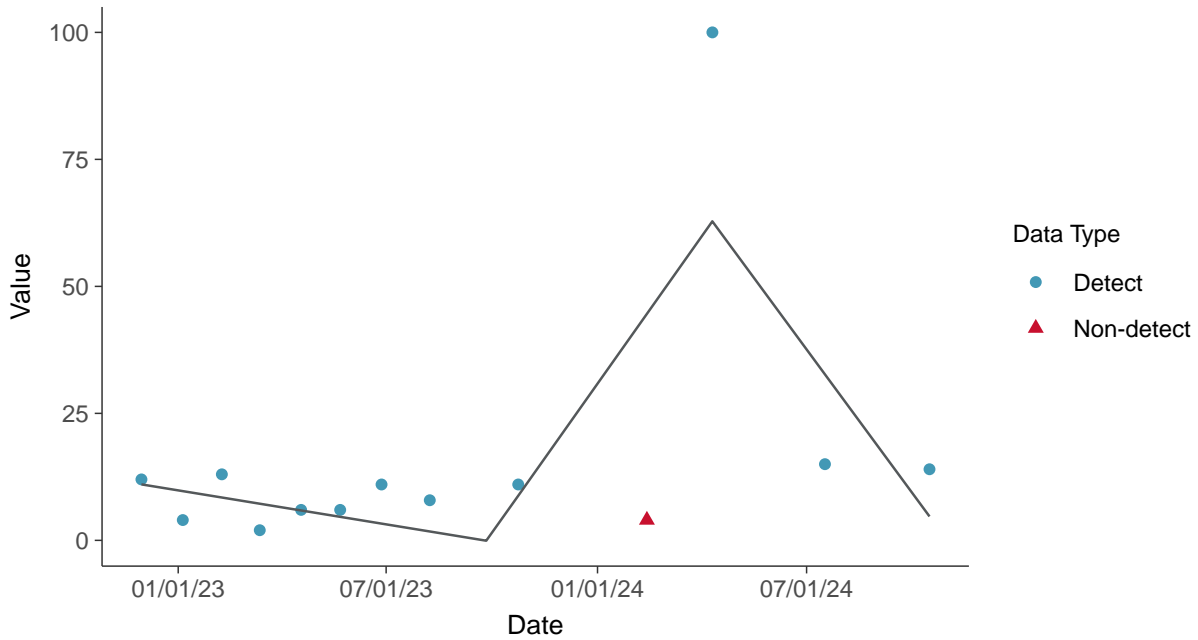
Trend Regression: Piecewise Linear-Linear

Total Suspended Solids, MW-18 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

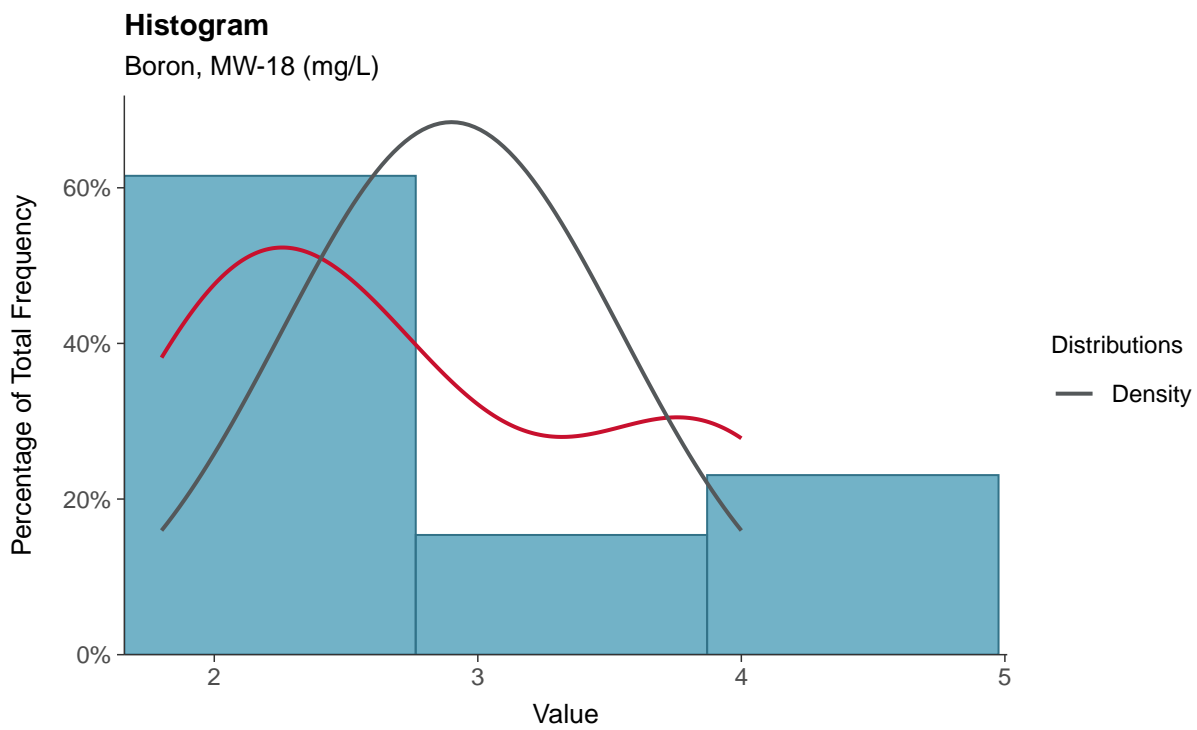
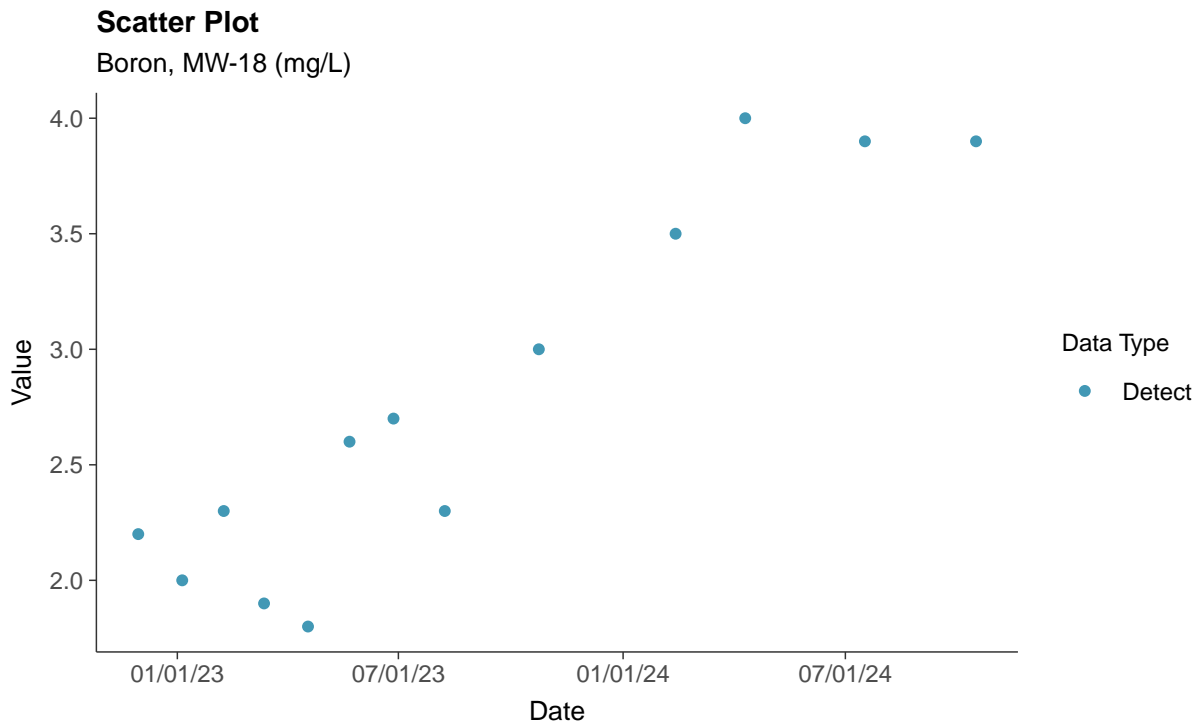
Total Suspended Solids, MW-18 (mg/L)





Appendix III: Boron, MW-18

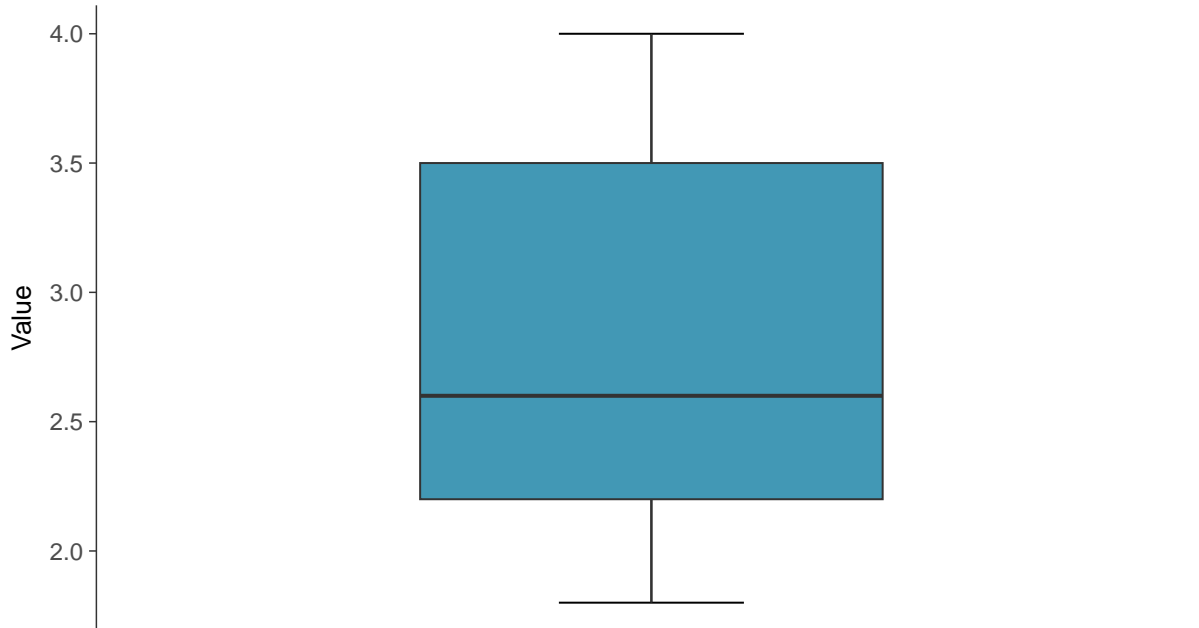
ID: 1_28_1_4_105





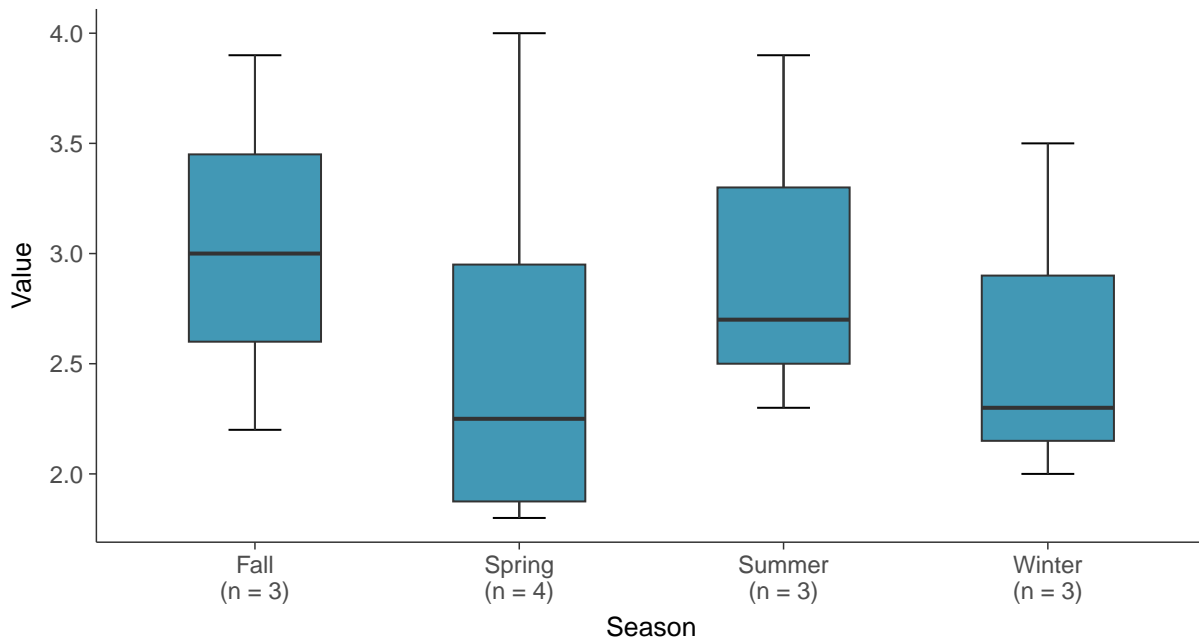
Boxplot

Boron, MW-18 (mg/L)



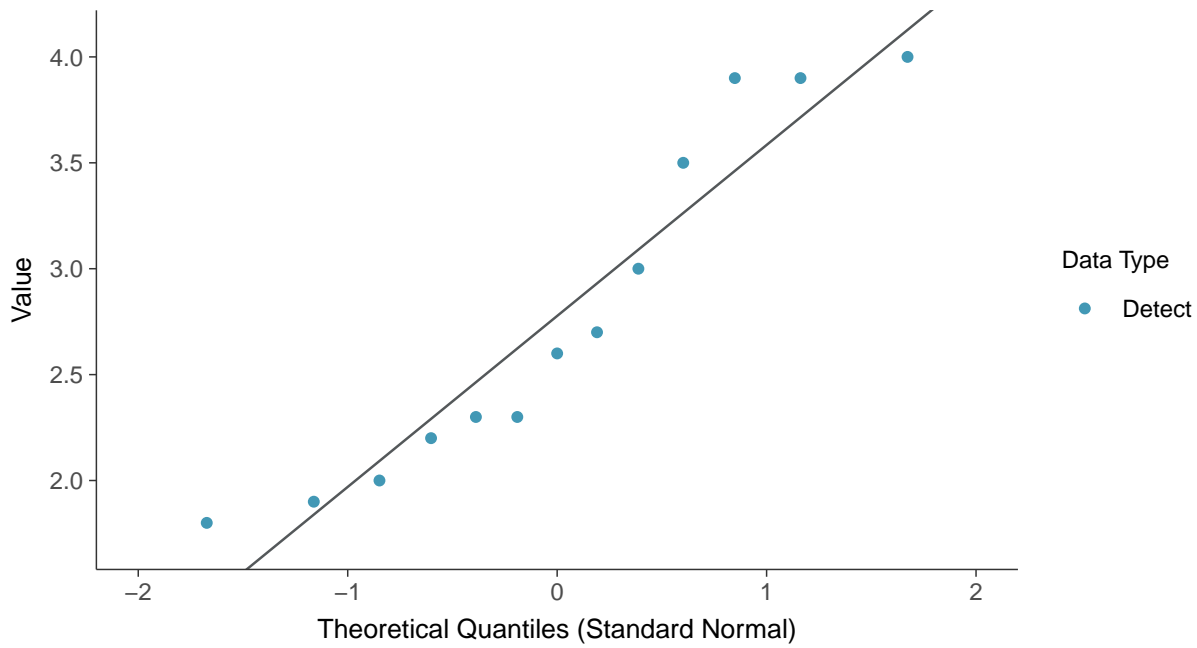
Boxplot by Season

Boron, MW-18 (mg/L)

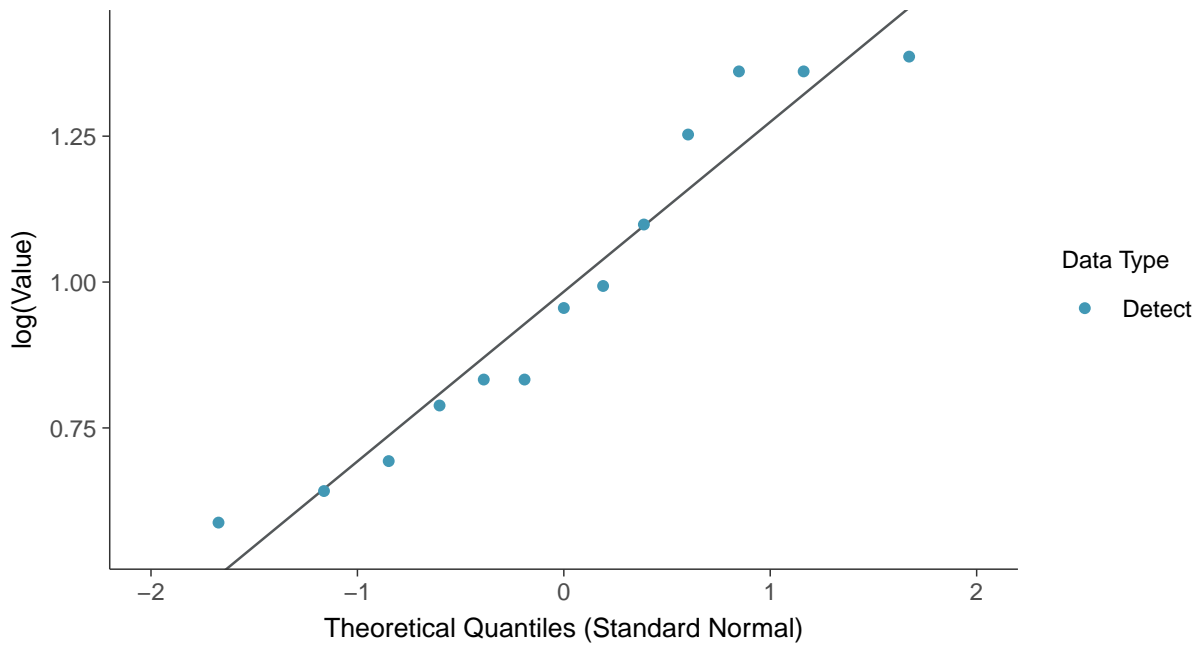




Normal Q-Q plot
Boron, MW-18 (mg/L)

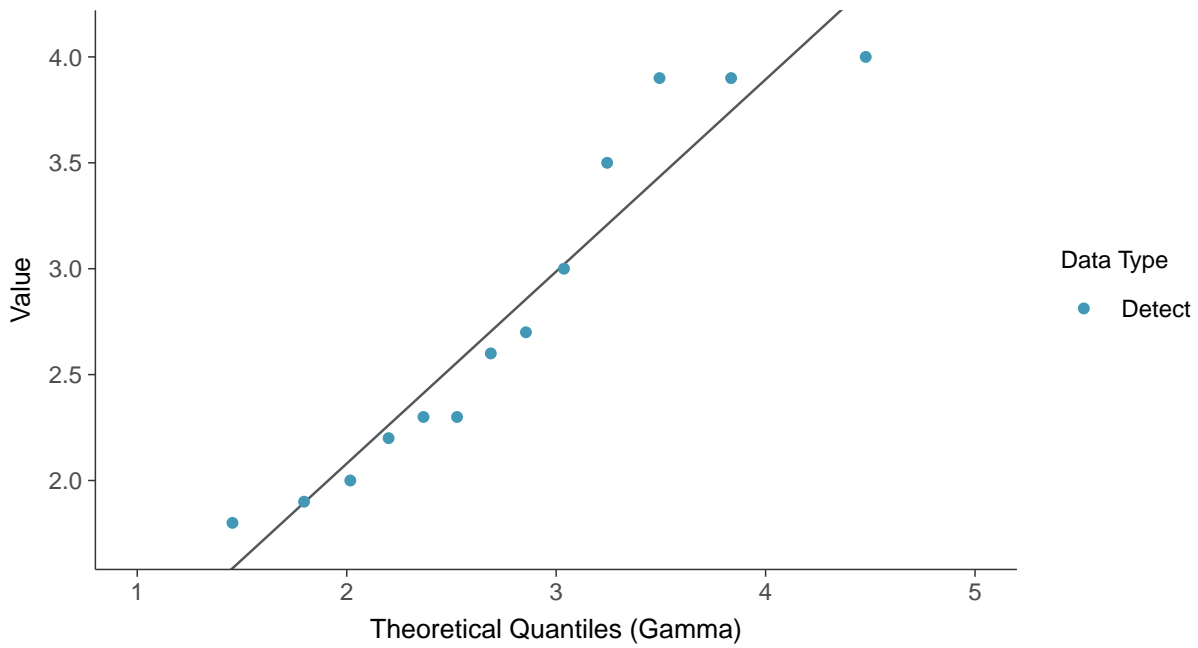


Lognormal Q-Q plot
Boron, MW-18 (mg/L)

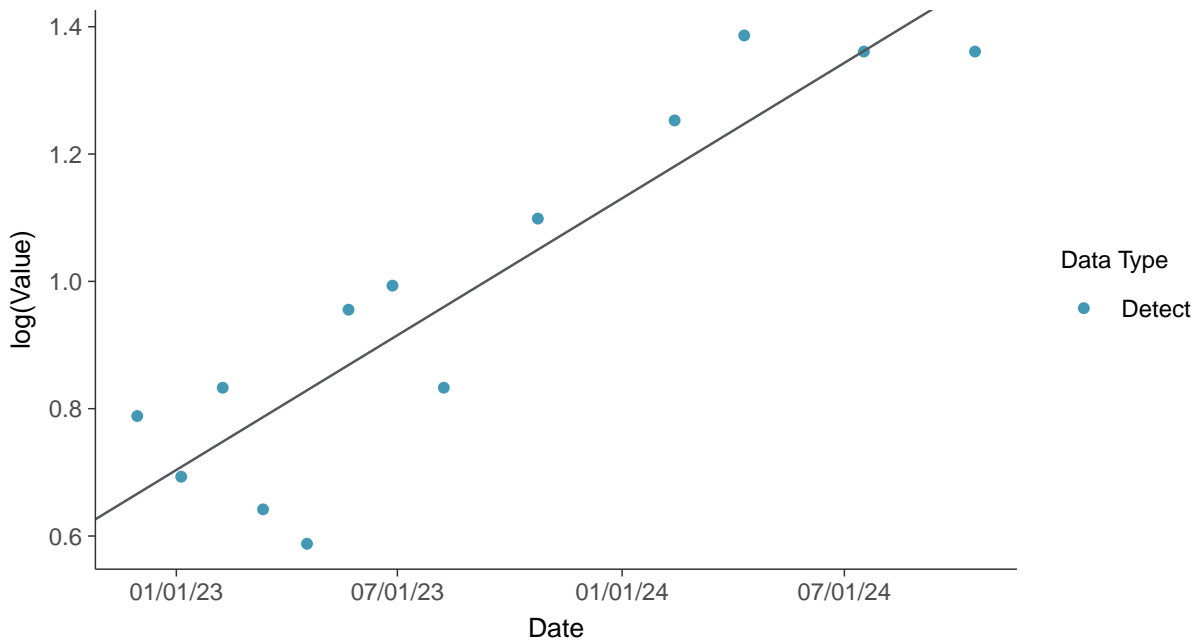




Gamma Q-Q plot
Boron, MW-18 (mg/L)



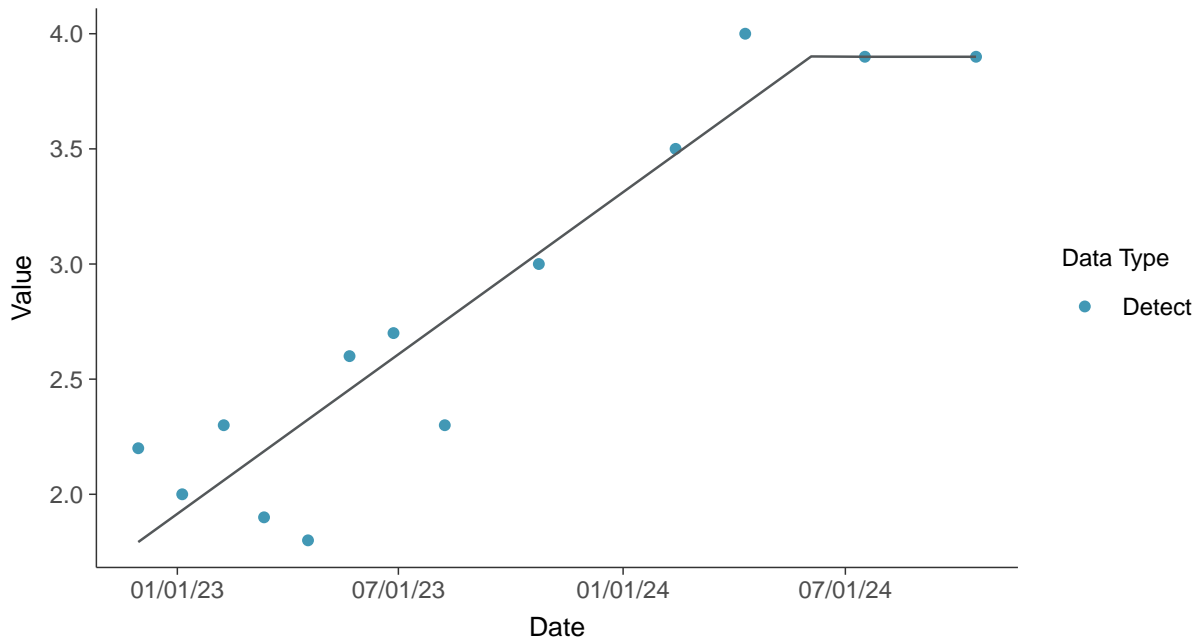
Trend Regression: Lognormal MLE
Boron, MW-18 (mg/L)





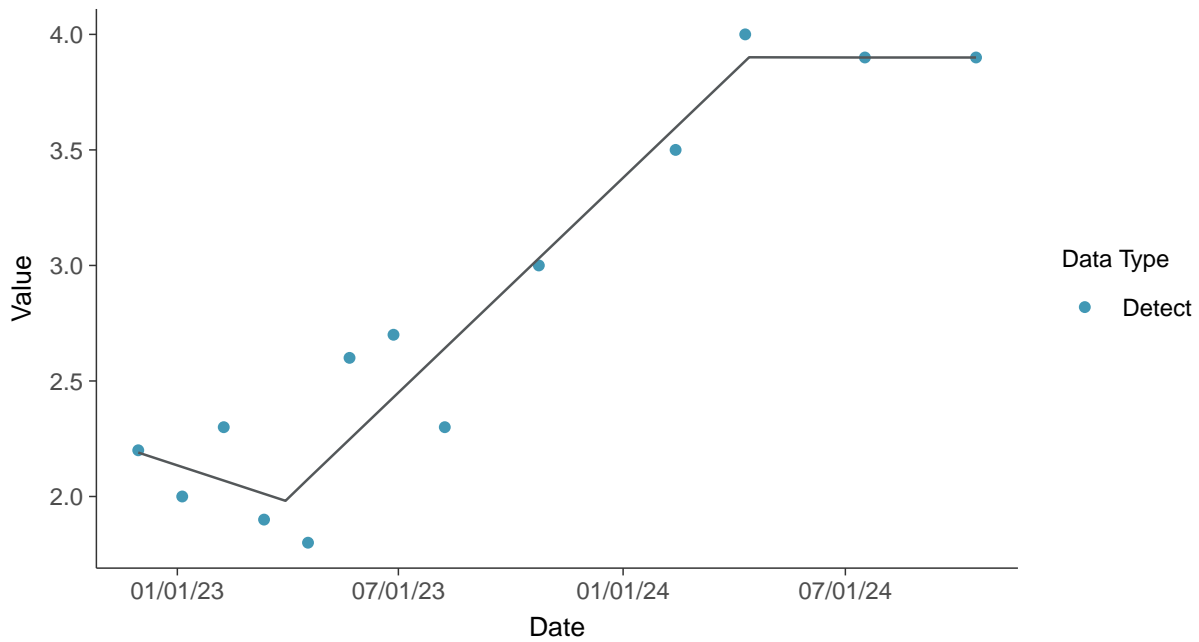
Trend Regression: Piecewise Linear-Linear

Boron, MW-18 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Boron, MW-18 (mg/L)



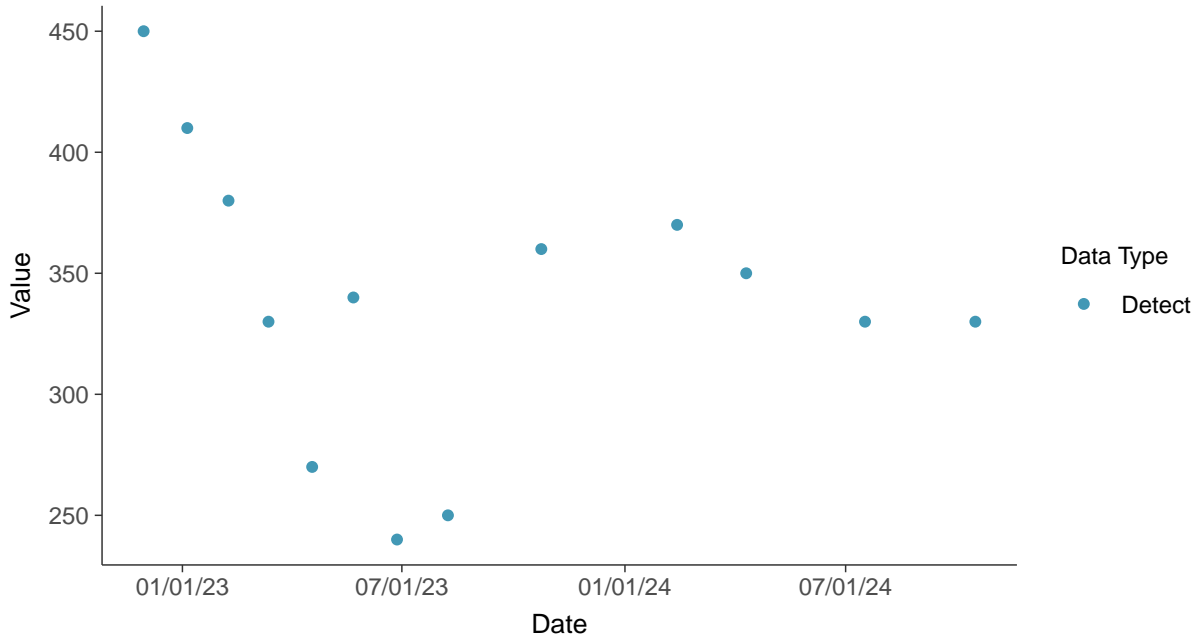


Appendix III: Calcium, MW-18

ID: 1_28_1_4_107

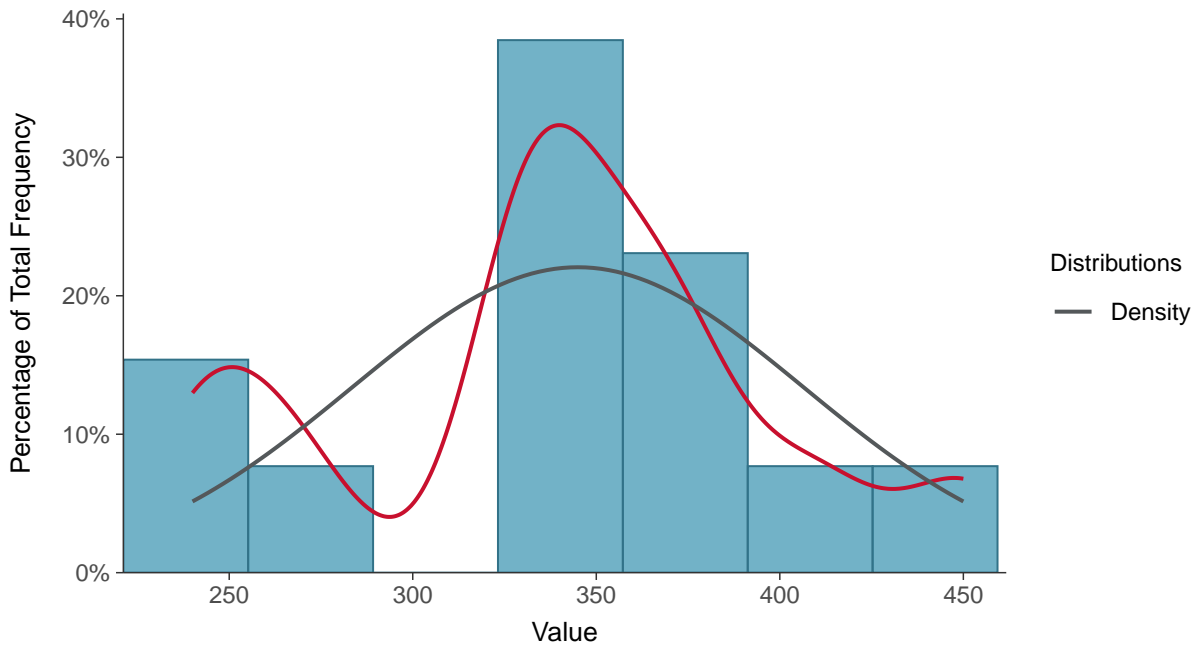
Scatter Plot

Calcium, MW-18 (mg/L)



Histogram

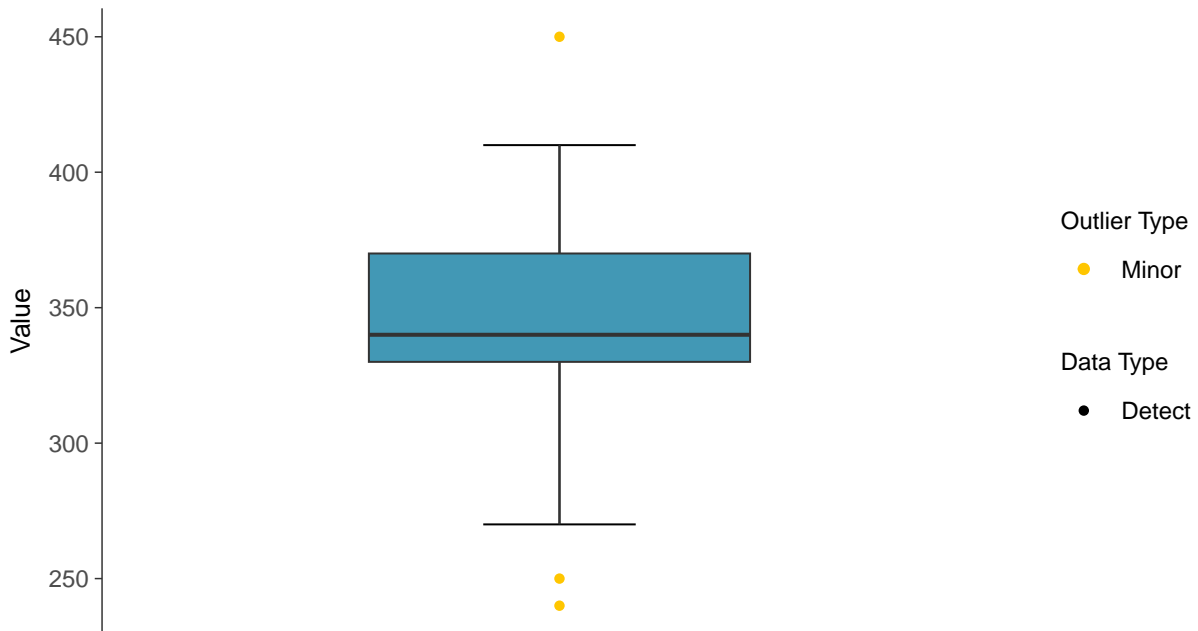
Calcium, MW-18 (mg/L)





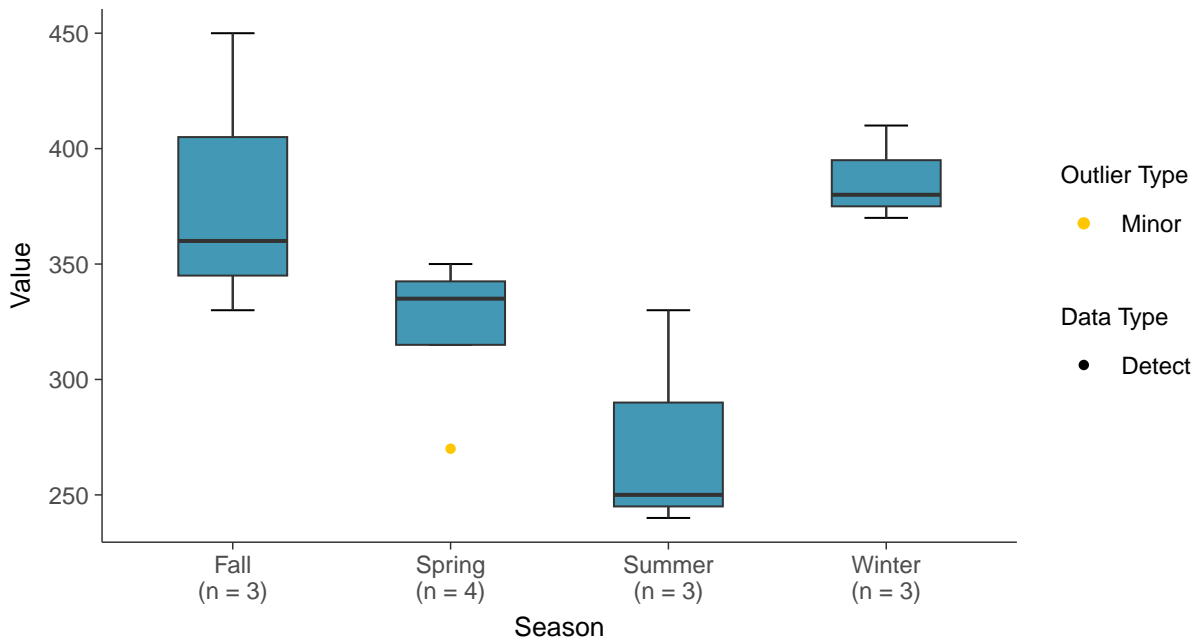
Boxplot

Calcium, MW-18 (mg/L)



Boxplot by Season

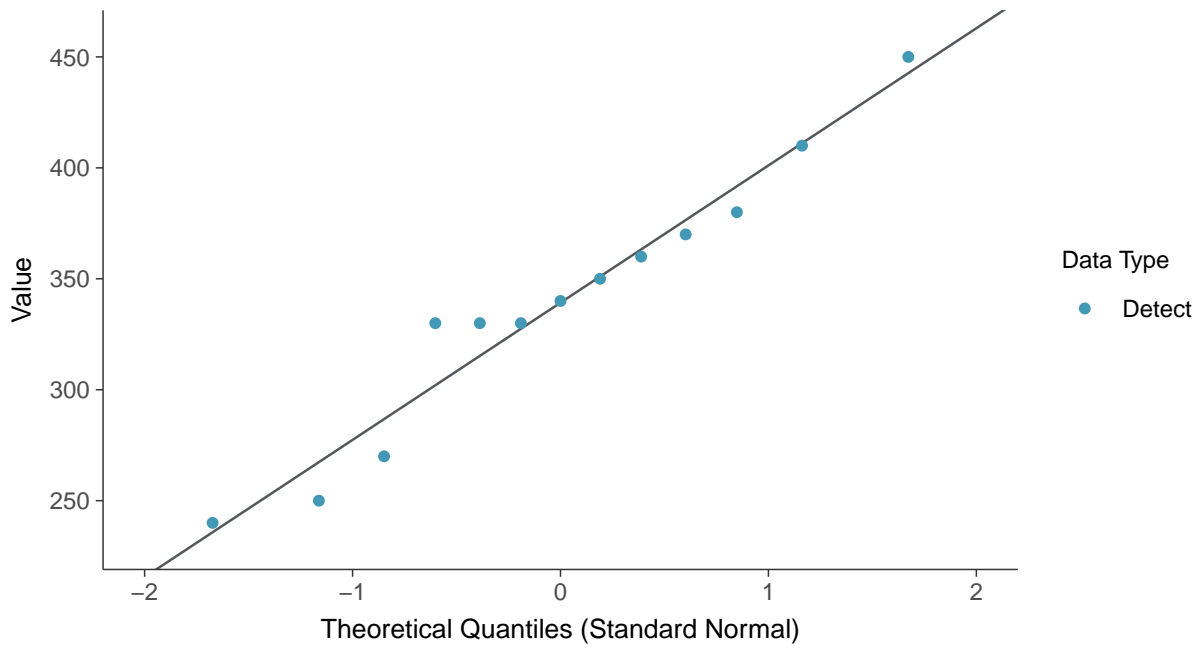
Calcium, MW-18 (mg/L)





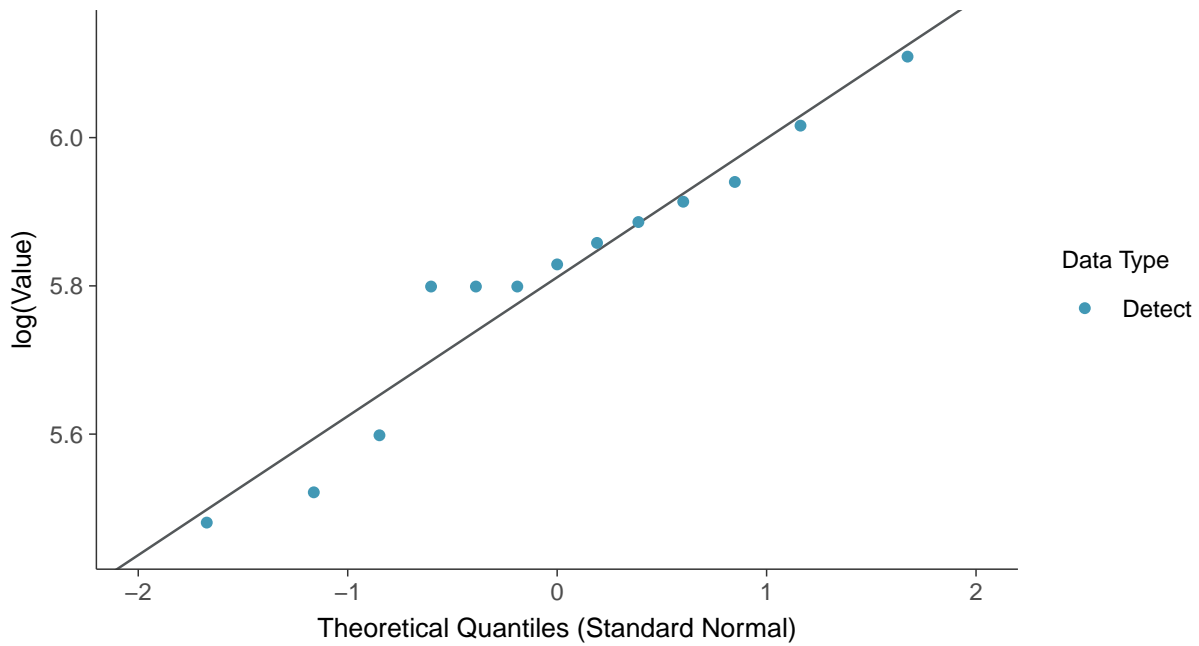
Normal Q-Q plot

Calcium, MW-18 (mg/L)



Lognormal Q-Q plot

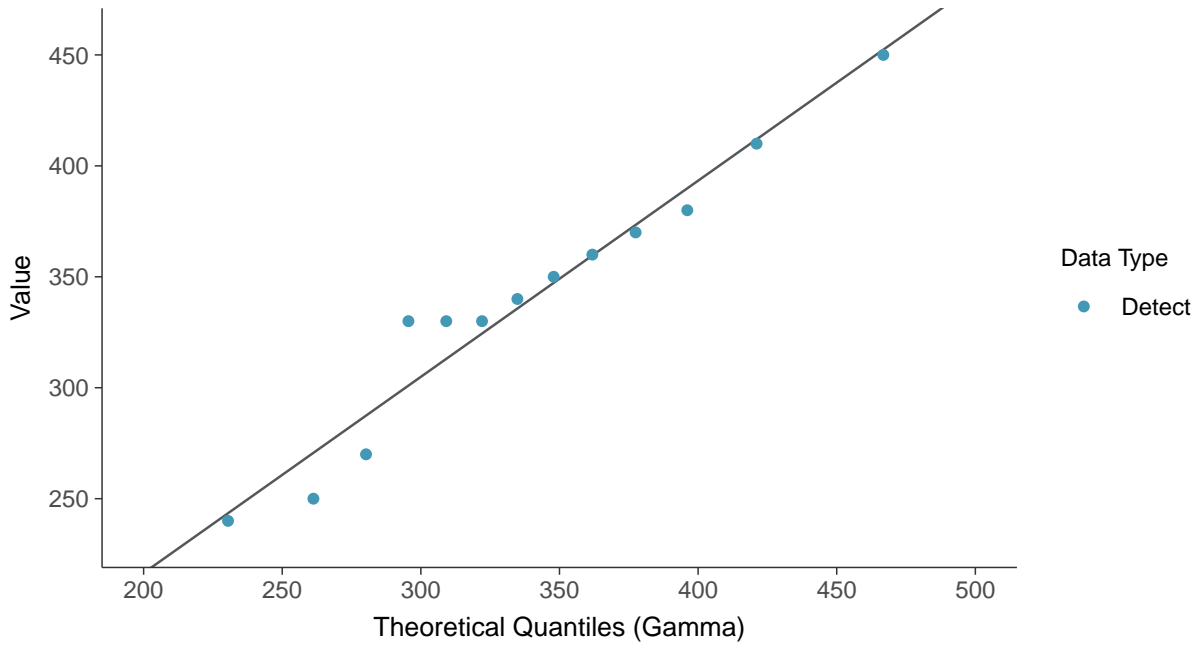
Calcium, MW-18 (mg/L)





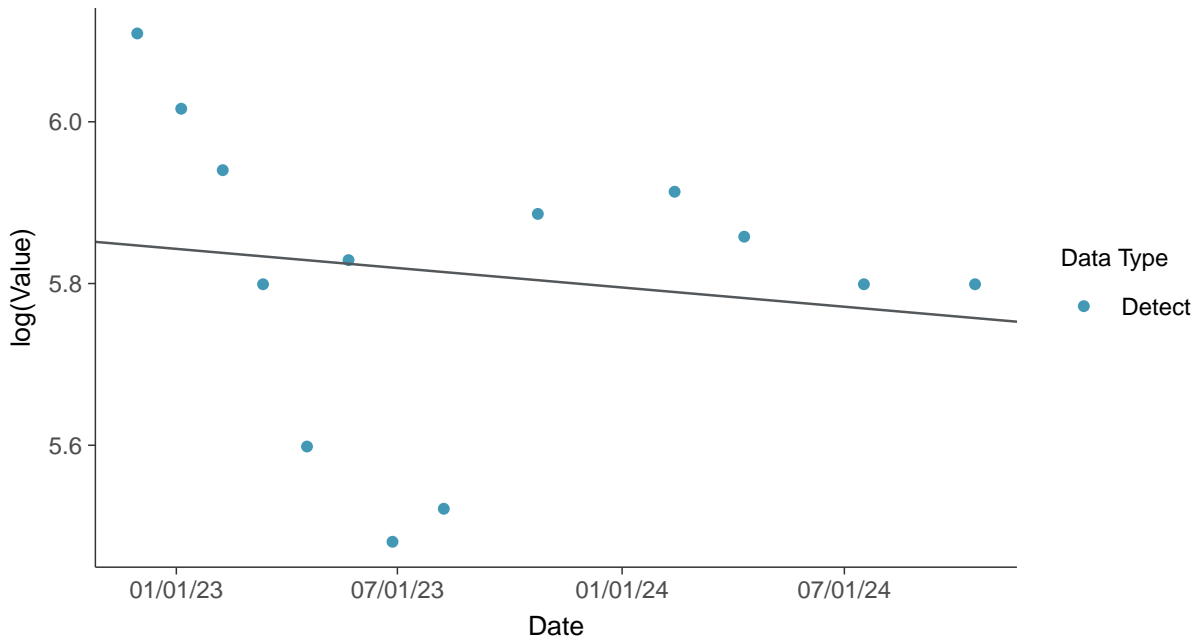
Gamma Q-Q plot

Calcium, MW-18 (mg/L)



Trend Regression: Lognormal MLE

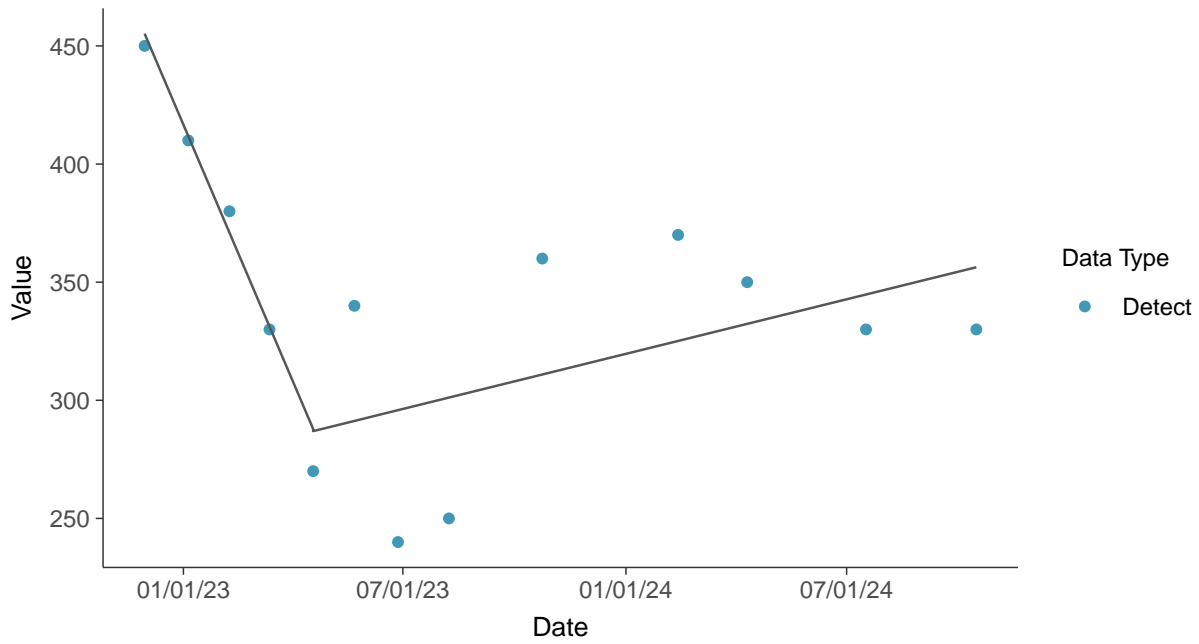
Calcium, MW-18 (mg/L)





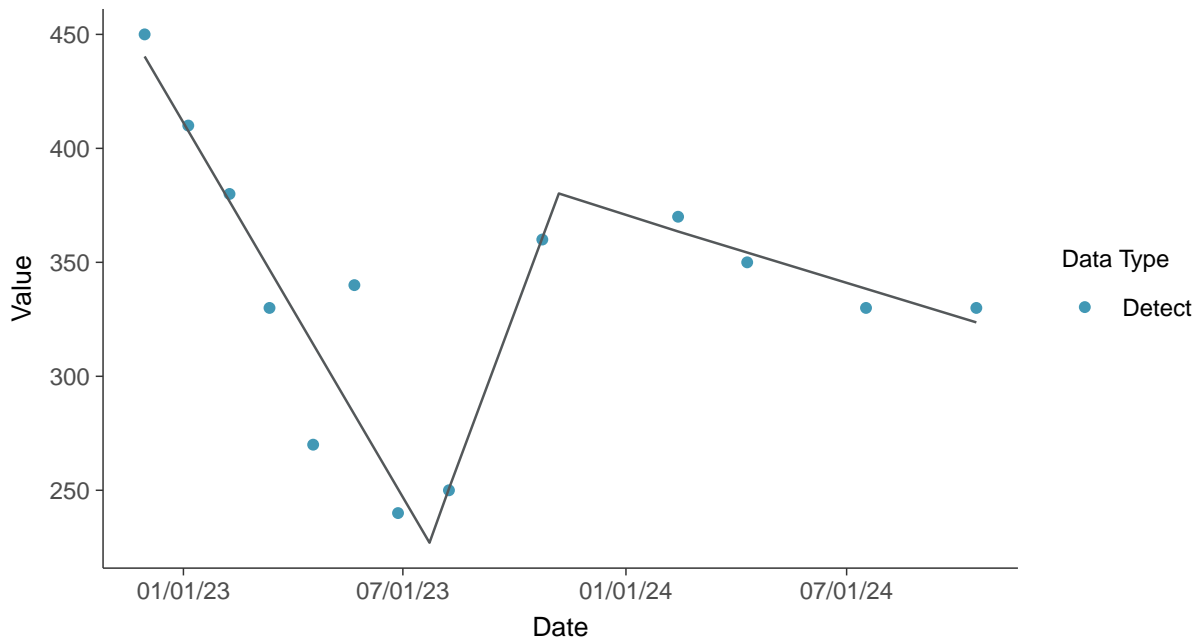
Trend Regression: Piecewise Linear-Linear

Calcium, MW-18 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Calcium, MW-18 (mg/L)



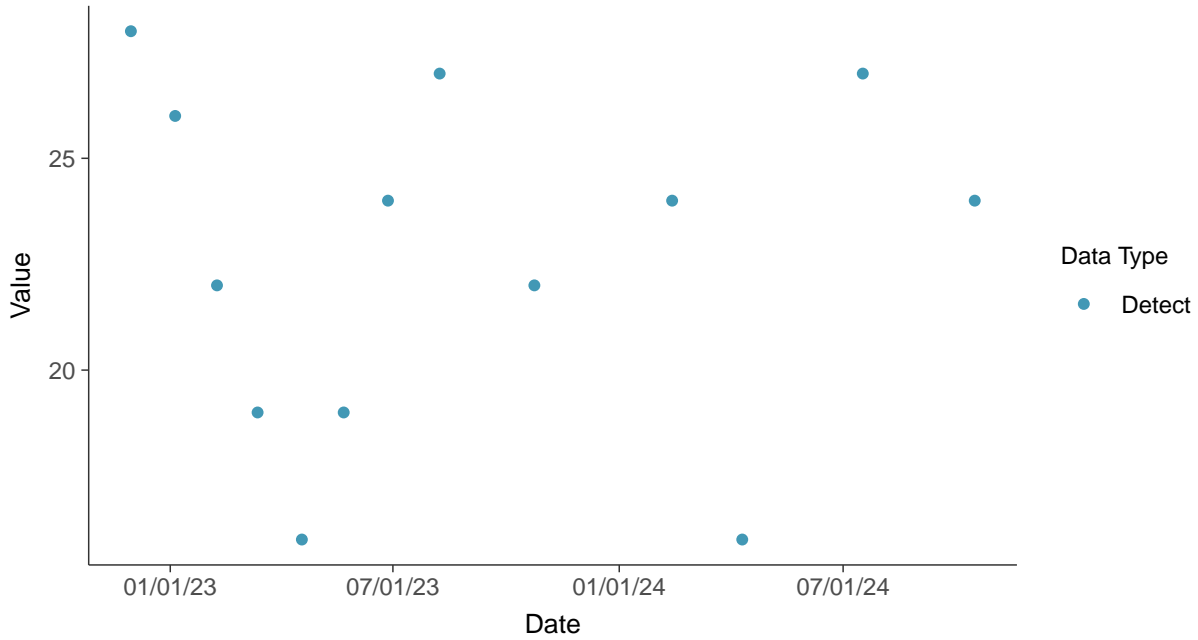


Appendix III: Chloride (as Cl), MW-18

ID: 1_28_1_4_108

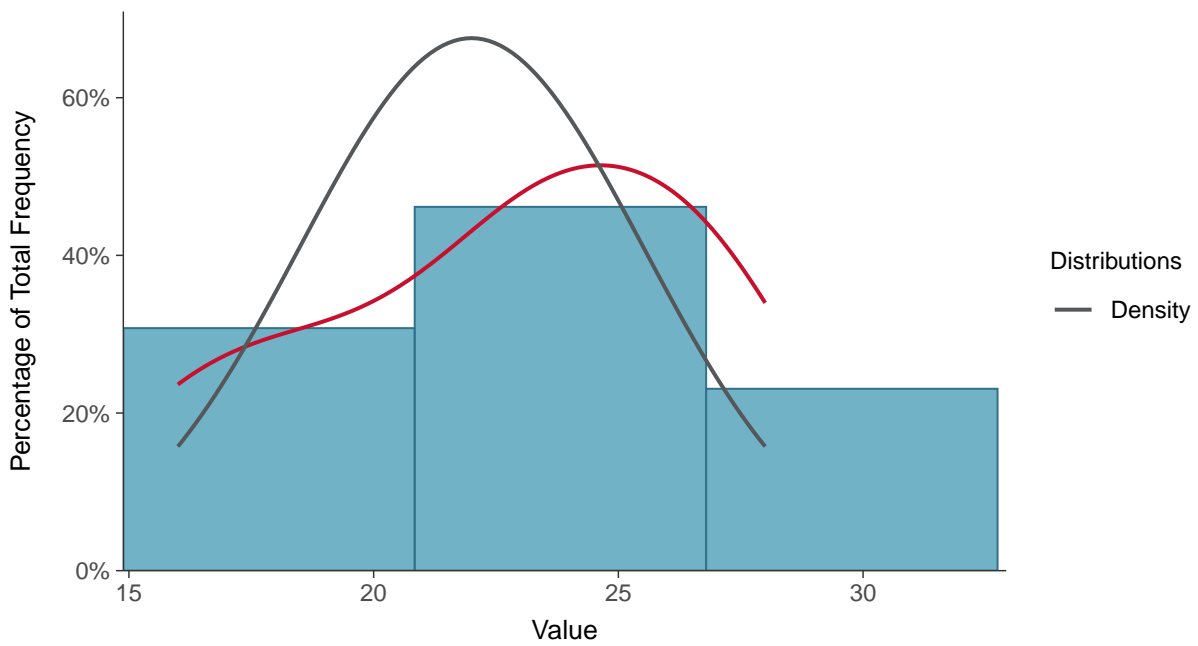
Scatter Plot

Chloride (as Cl), MW-18 (mg/L)



Histogram

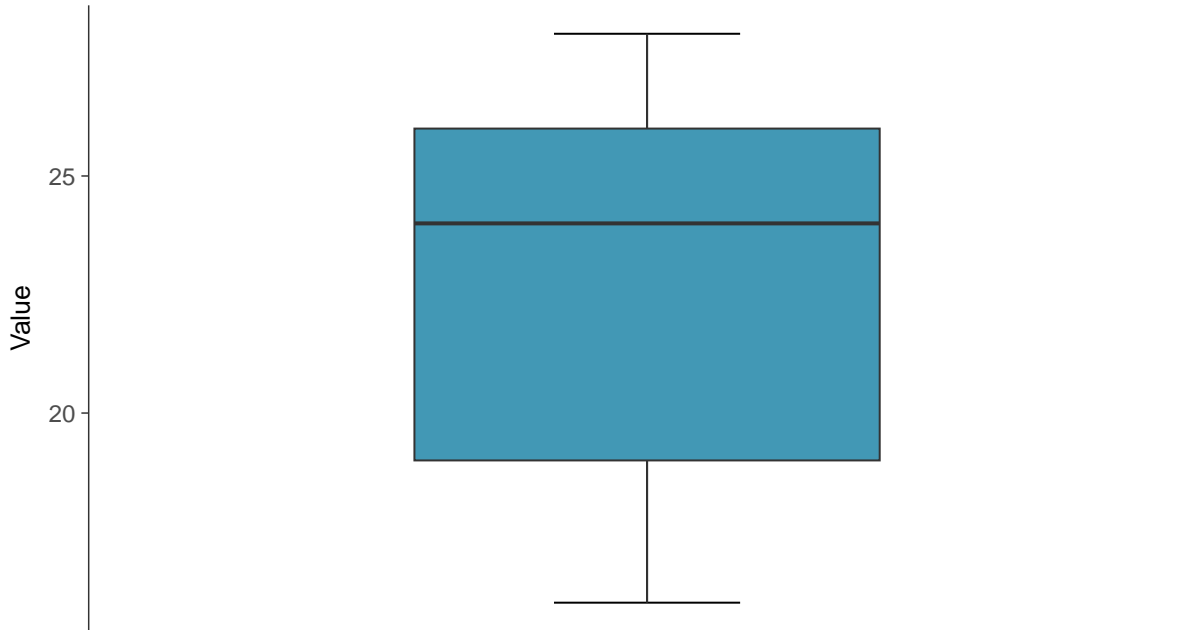
Chloride (as Cl), MW-18 (mg/L)





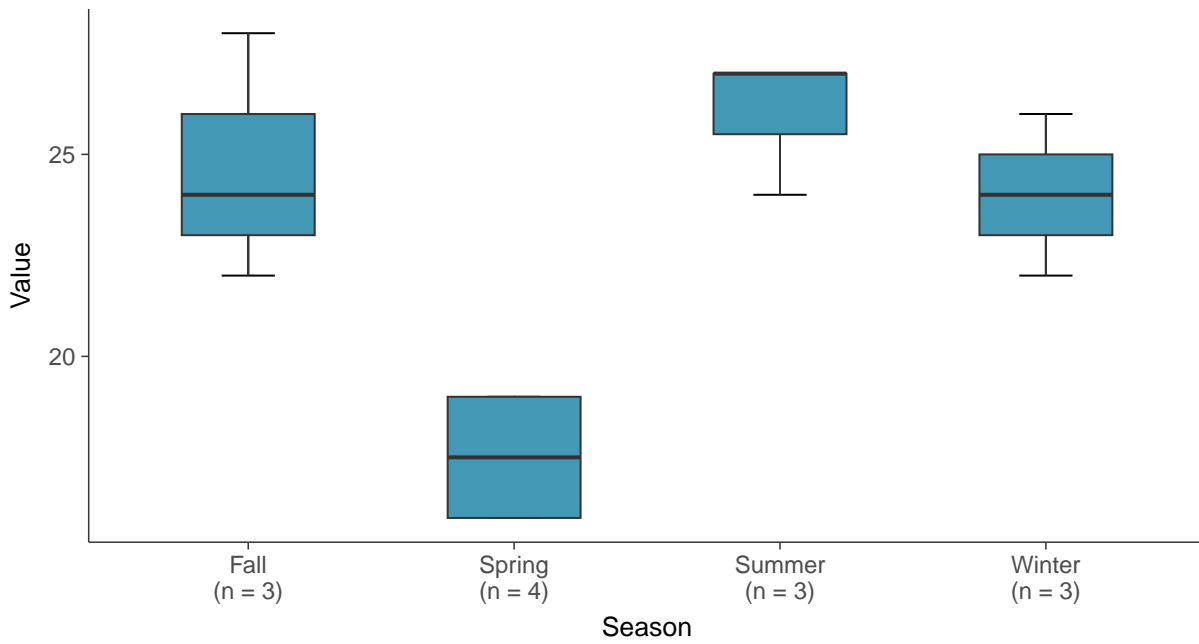
Boxplot

Chloride (as Cl), MW-18 (mg/L)



Boxplot by Season

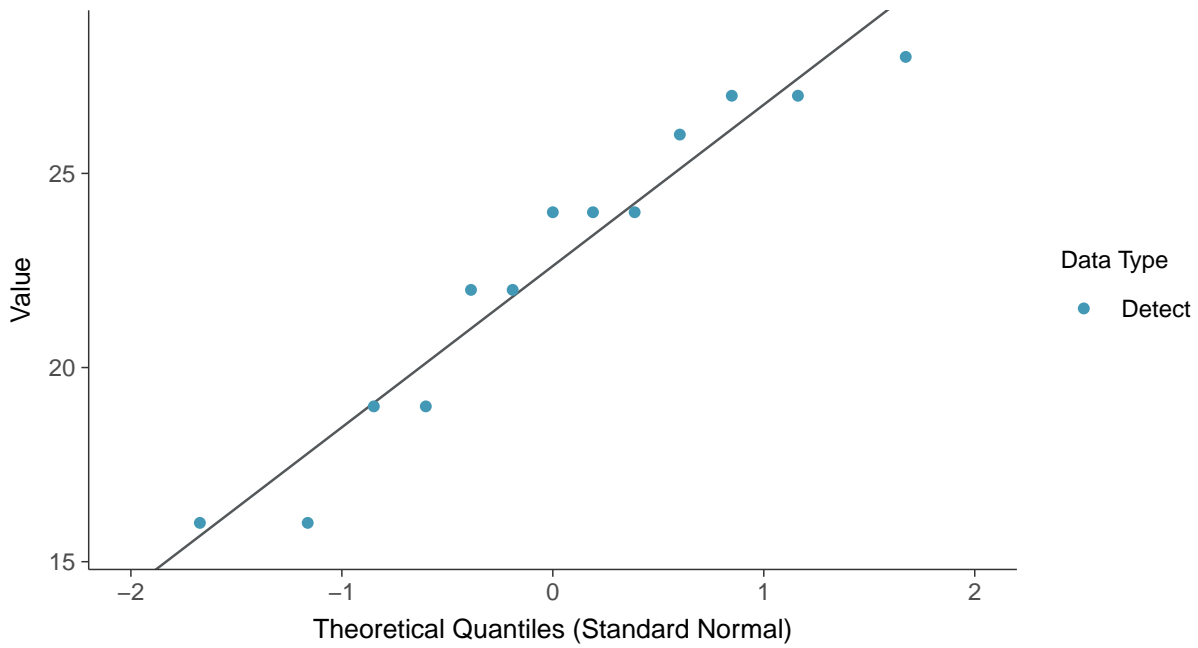
Chloride (as Cl), MW-18 (mg/L)





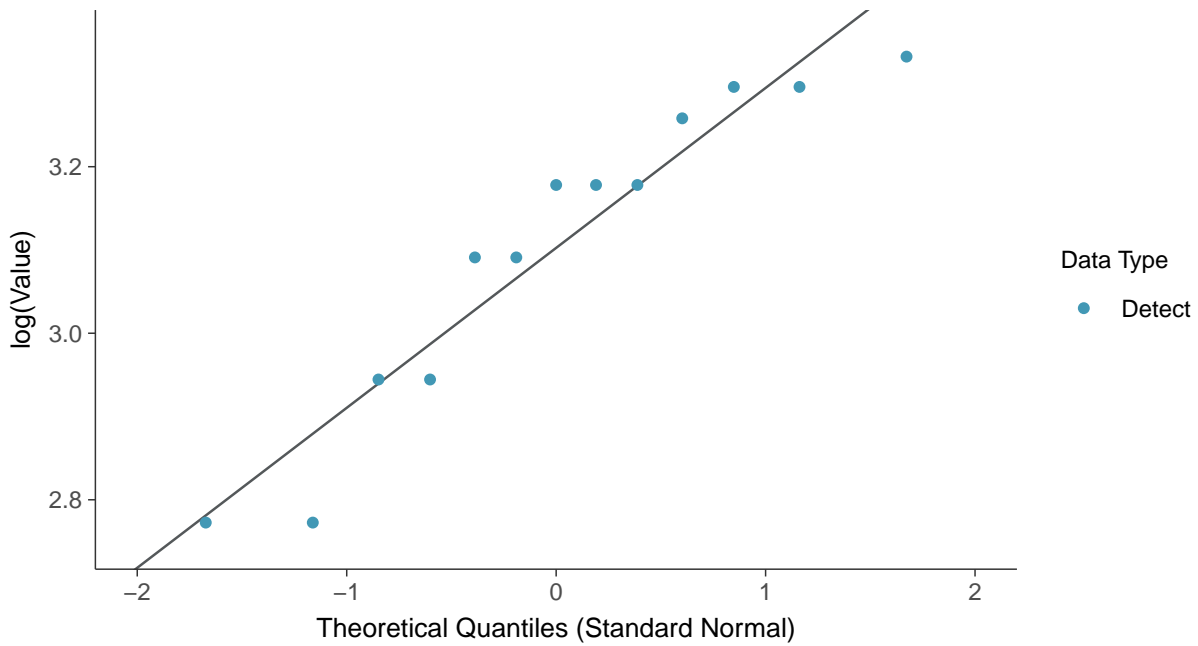
Normal Q-Q plot

Chloride (as Cl), MW-18 (mg/L)



Lognormal Q-Q plot

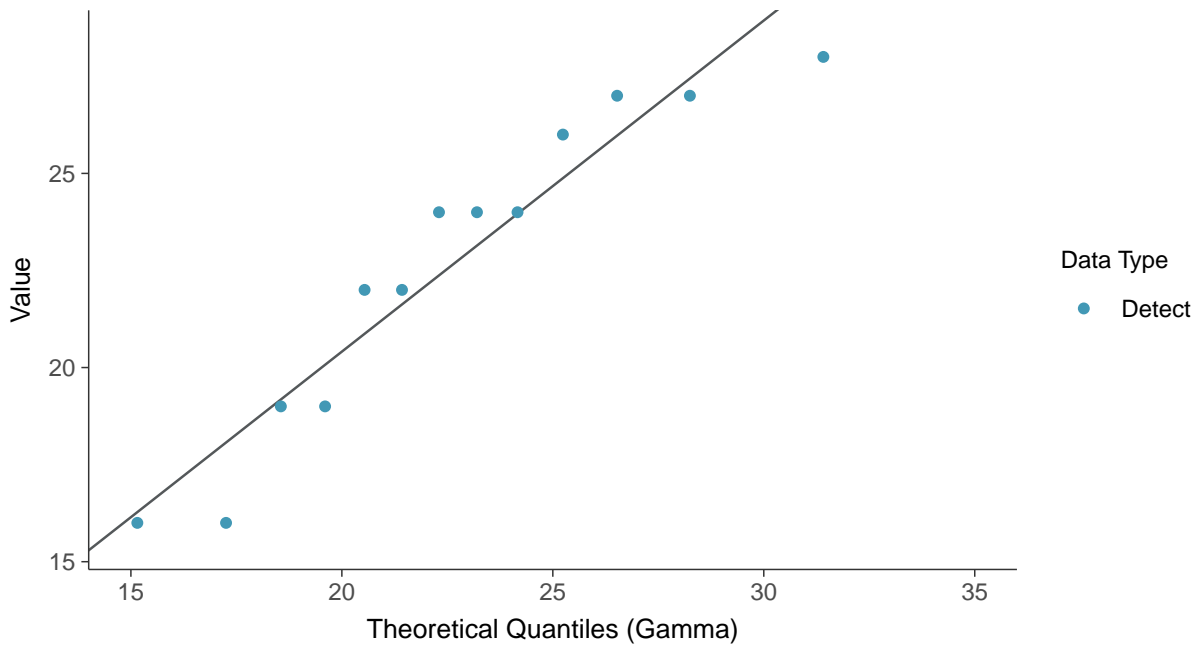
Chloride (as Cl), MW-18 (mg/L)





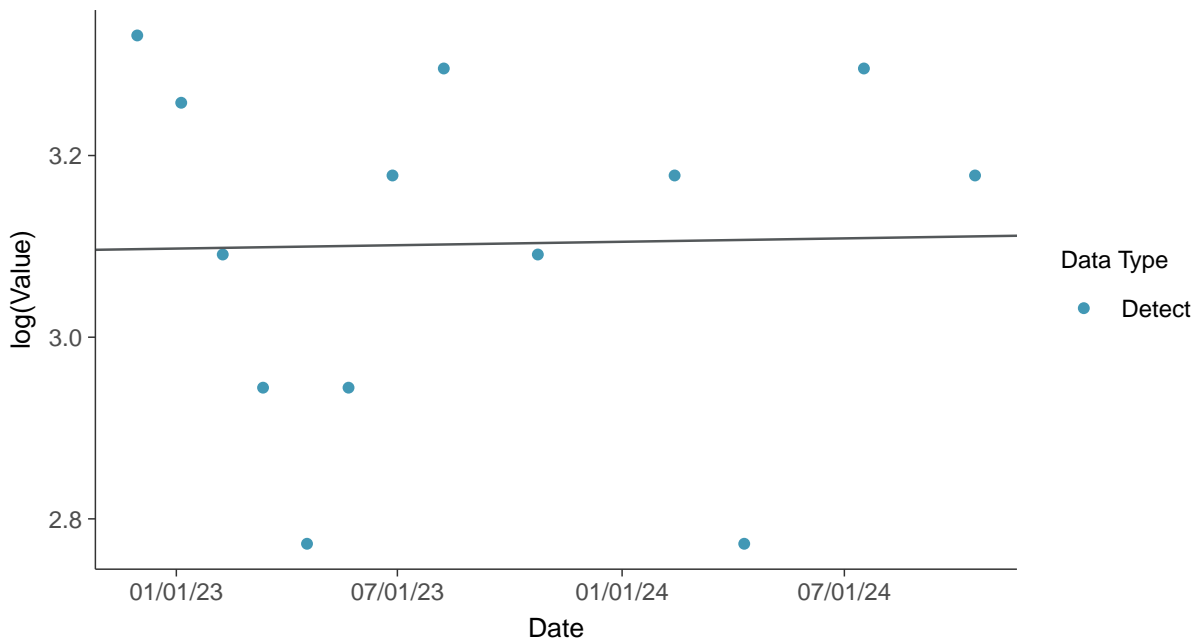
Gamma Q-Q plot

Chloride (as Cl), MW-18 (mg/L)



Trend Regression: Lognormal MLE

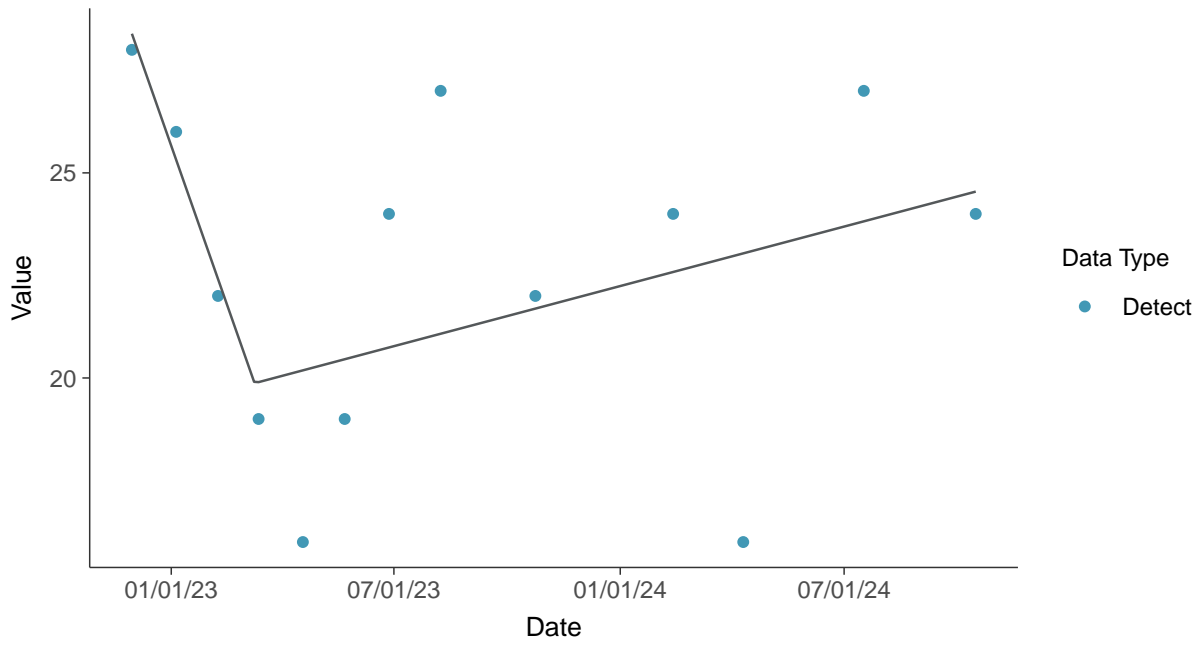
Chloride (as Cl), MW-18 (mg/L)





Trend Regression: Piecewise Linear-Linear

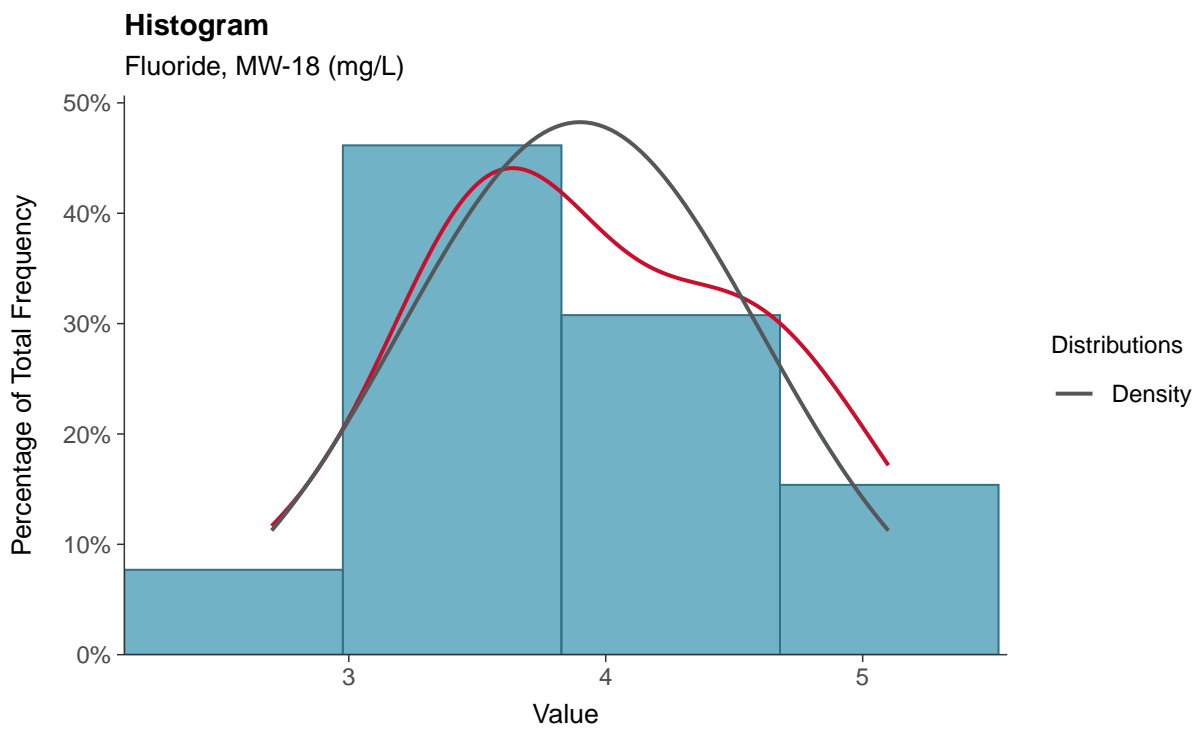
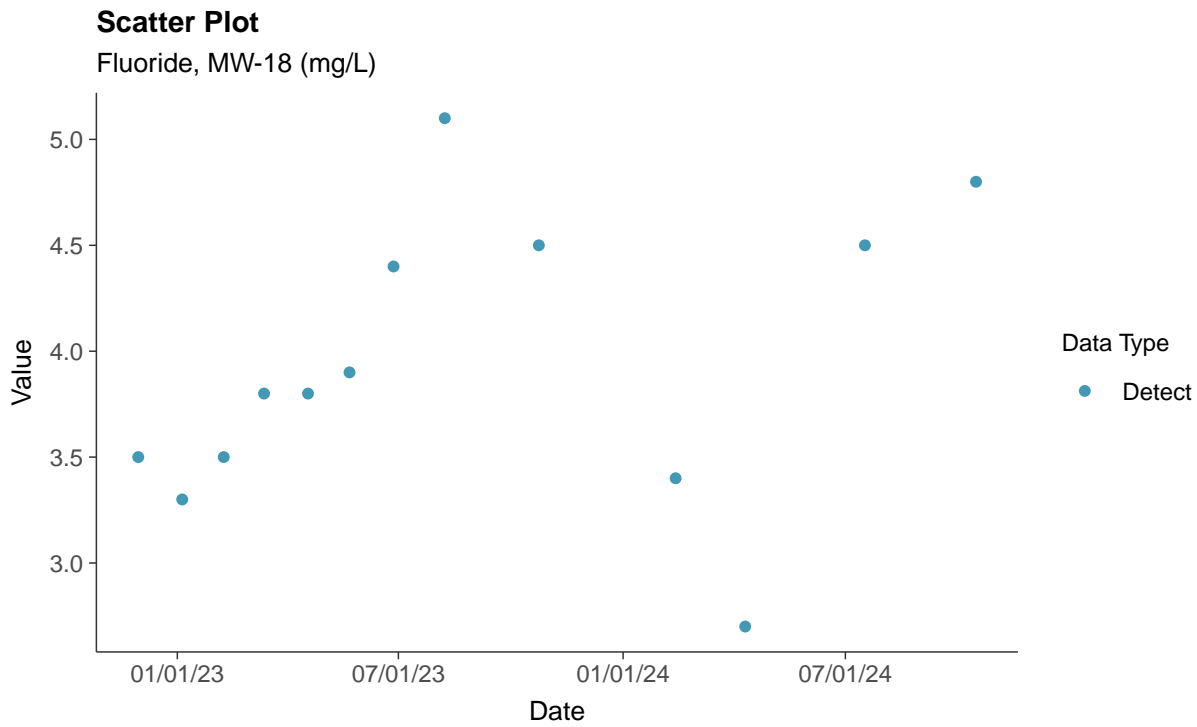
Chloride (as Cl), MW-18 (mg/L)





Appendix III: Fluoride, MW-18

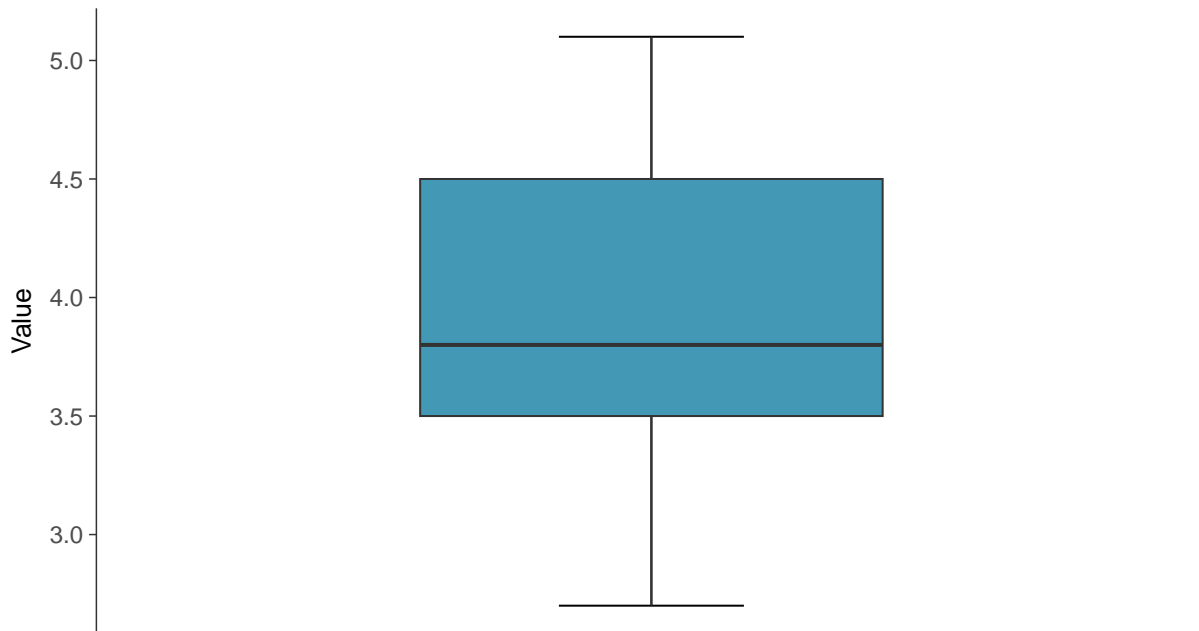
ID: 1_28_1_4_112





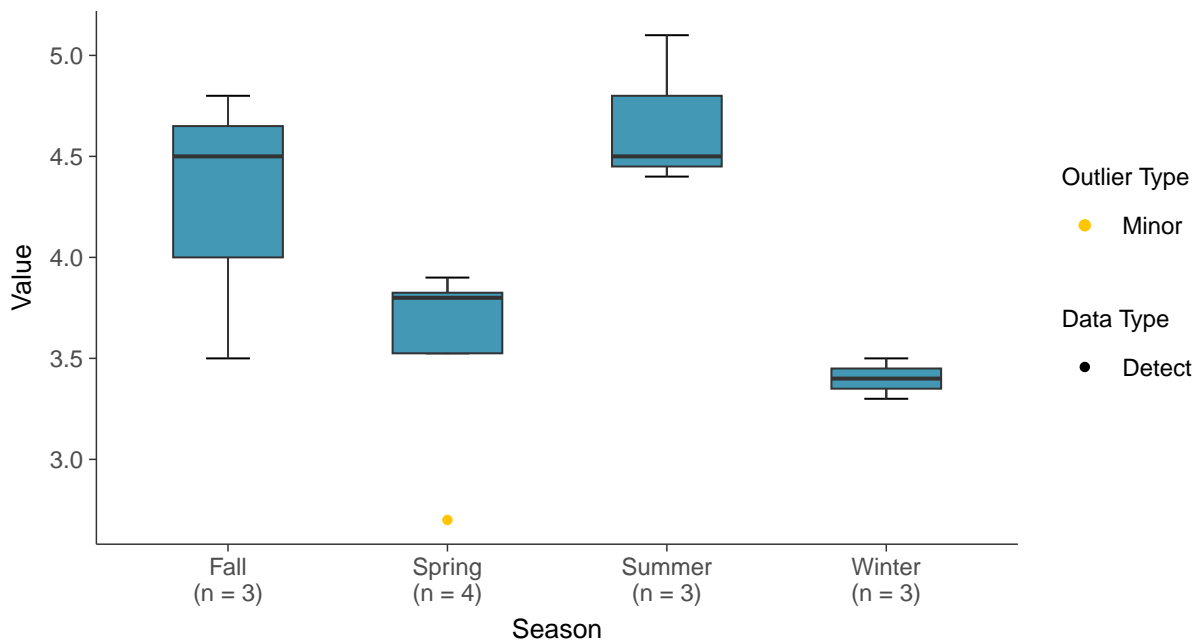
Boxplot

Fluoride, MW-18 (mg/L)



Boxplot by Season

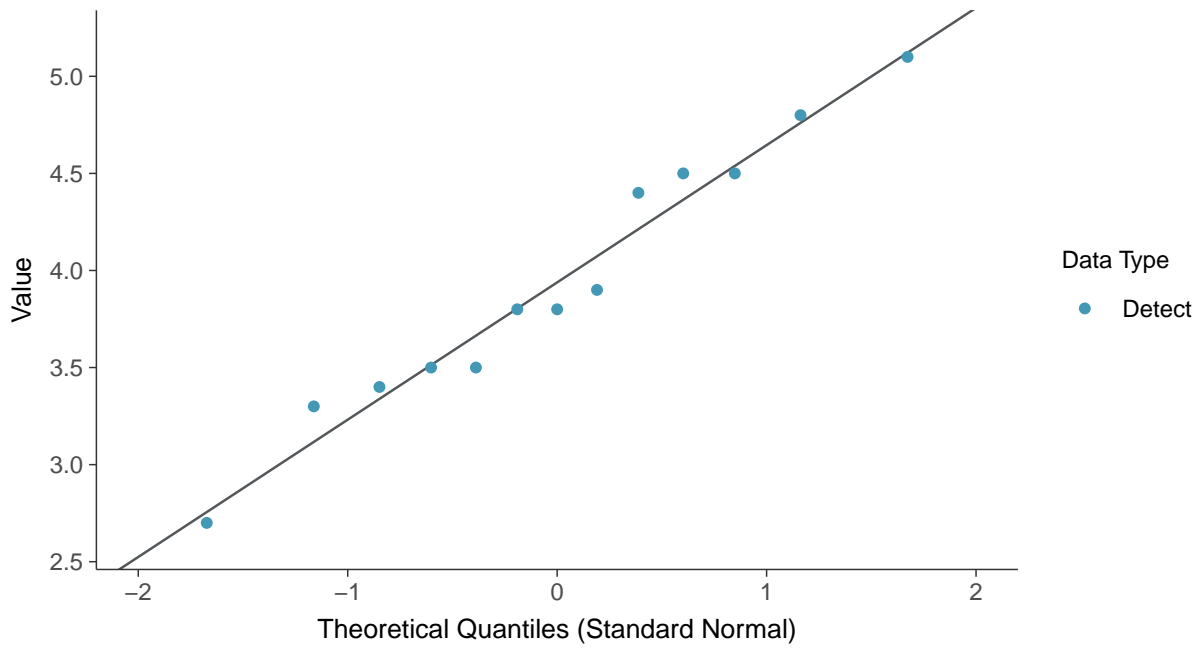
Fluoride, MW-18 (mg/L)





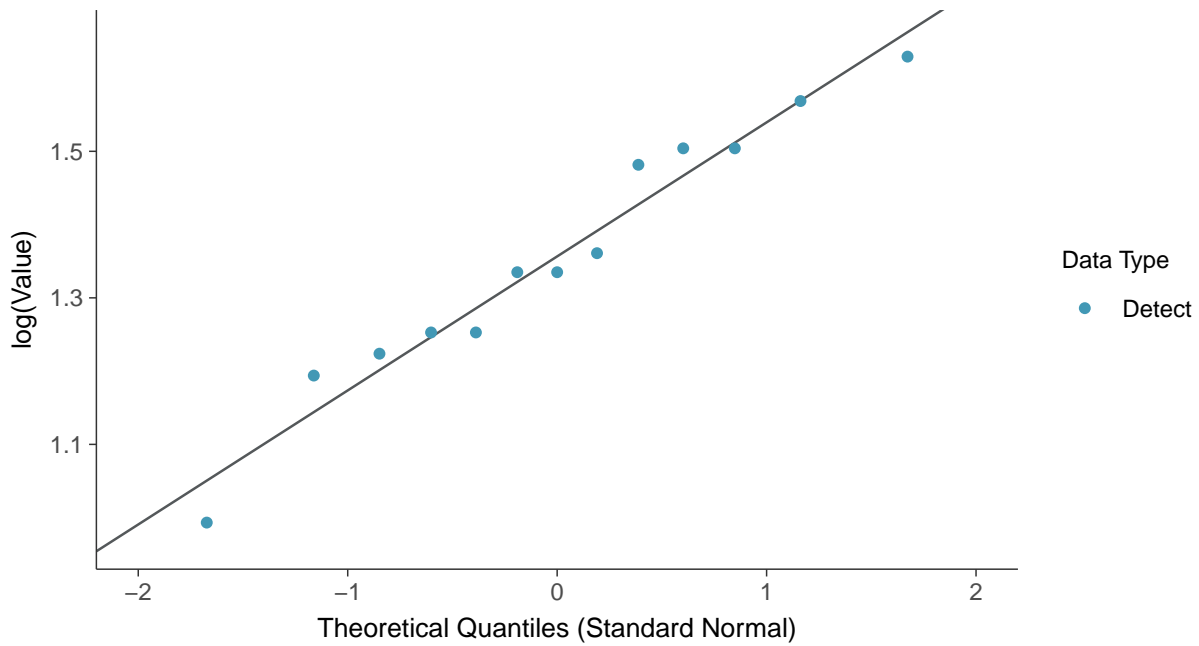
Normal Q-Q plot

Fluoride, MW-18 (mg/L)



Lognormal Q-Q plot

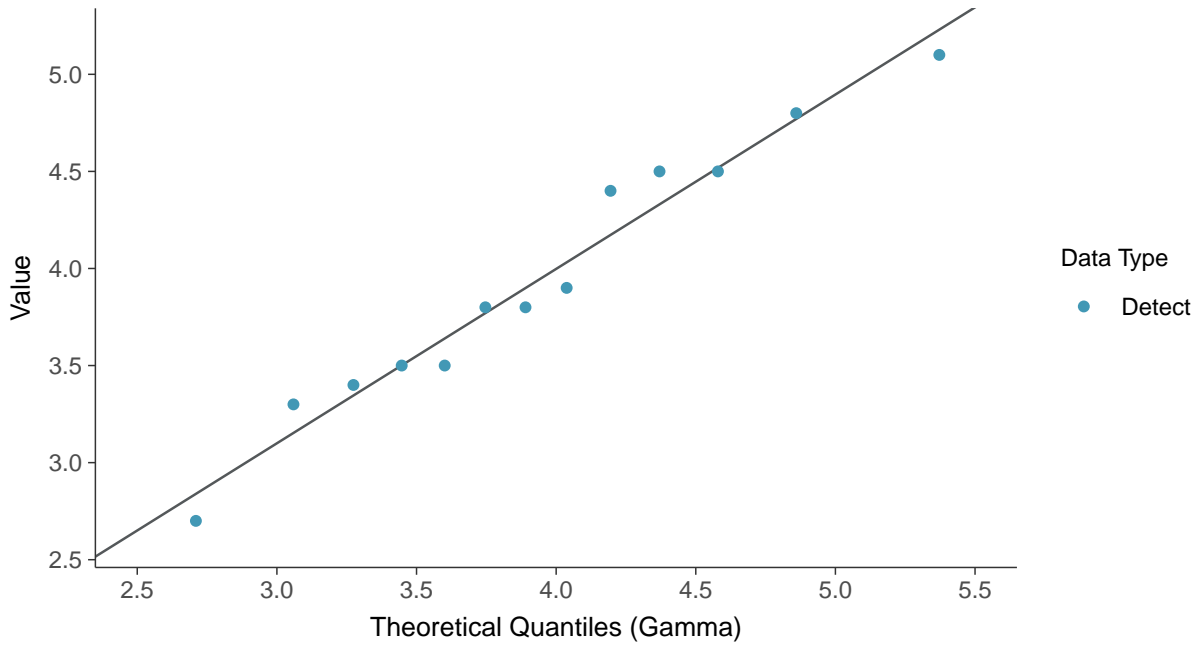
Fluoride, MW-18 (mg/L)





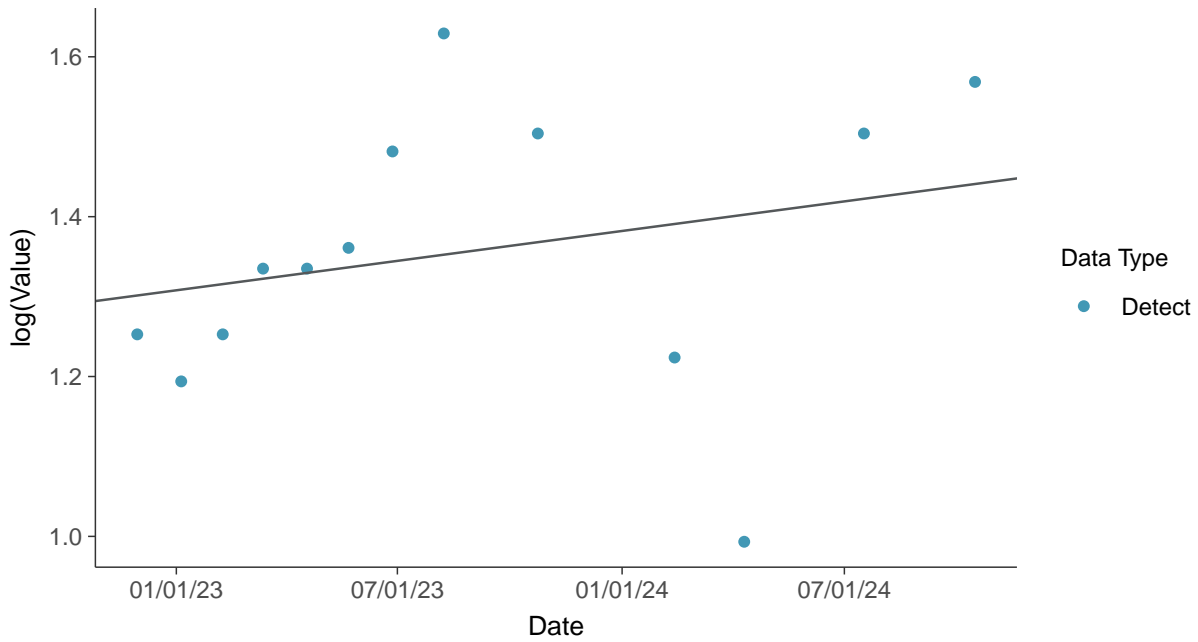
Gamma Q-Q plot

Fluoride, MW-18 (mg/L)



Trend Regression: Lognormal MLE

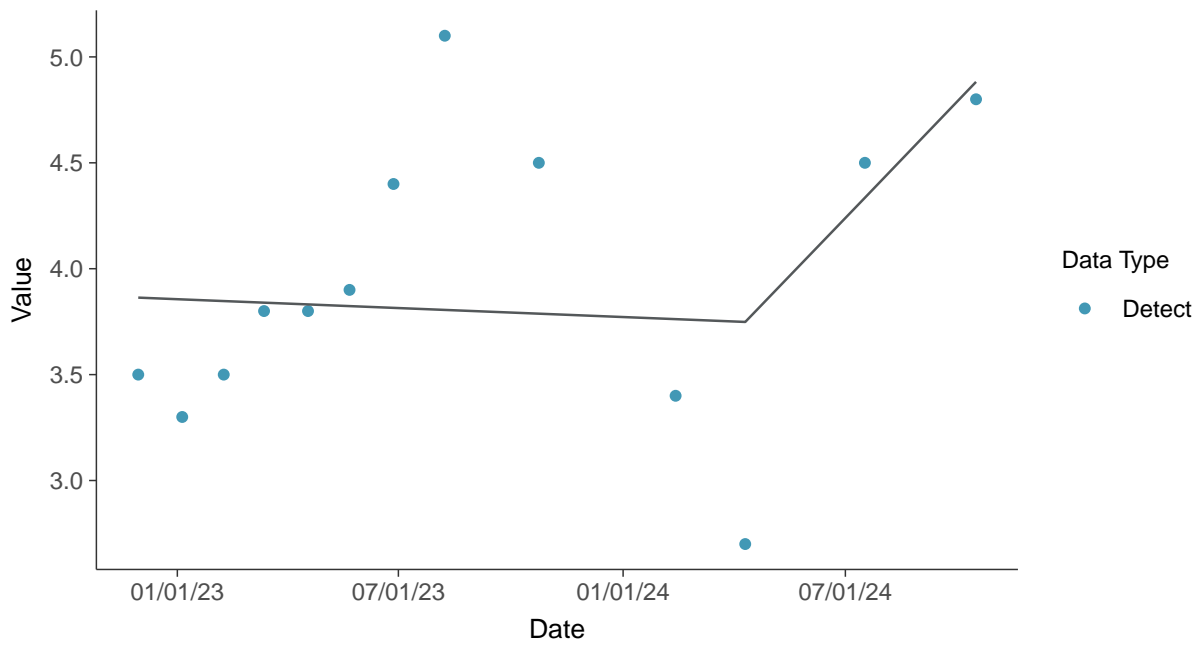
Fluoride, MW-18 (mg/L)





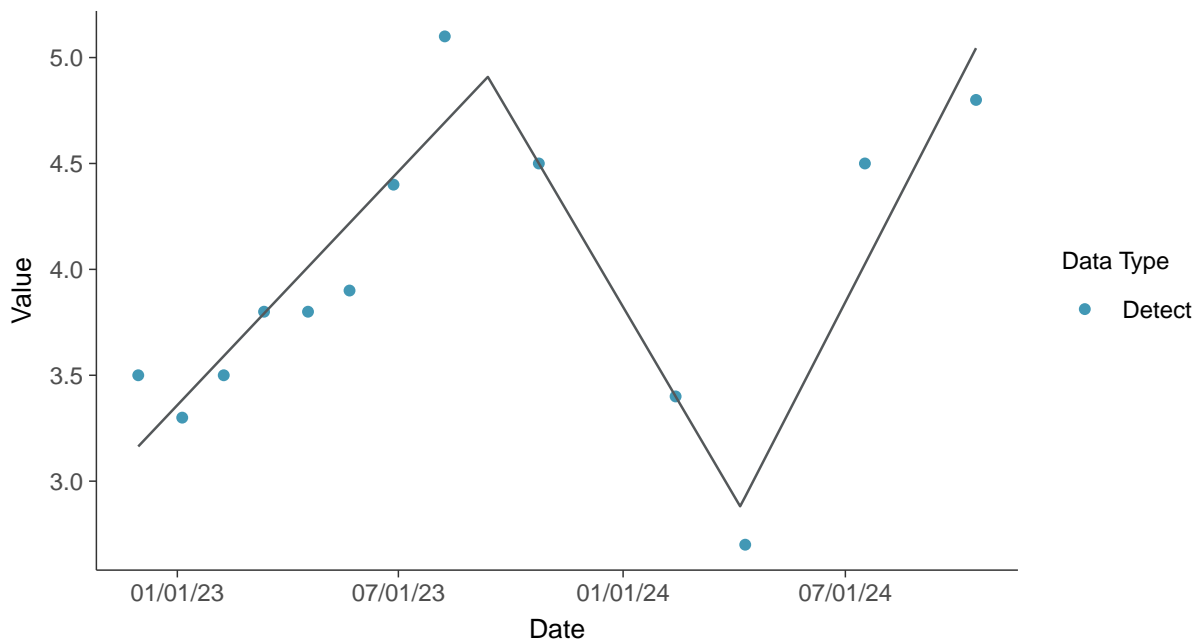
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-18 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Fluoride, MW-18 (mg/L)



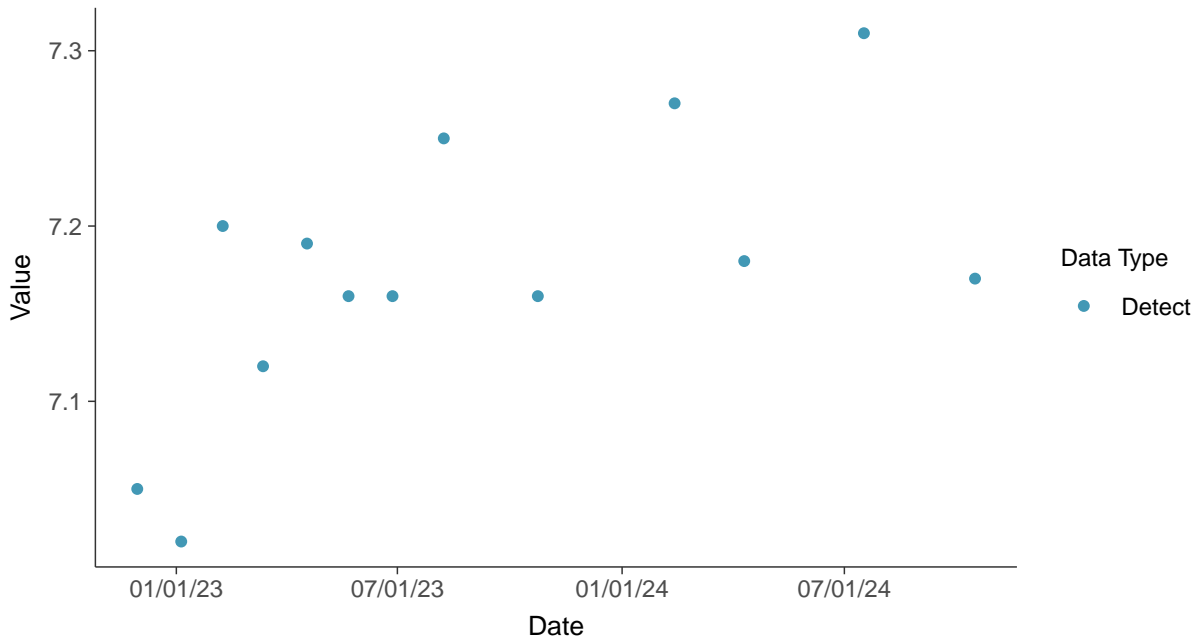


Appendix III: pH (field), MW-18

ID: 1_28_1_4_120

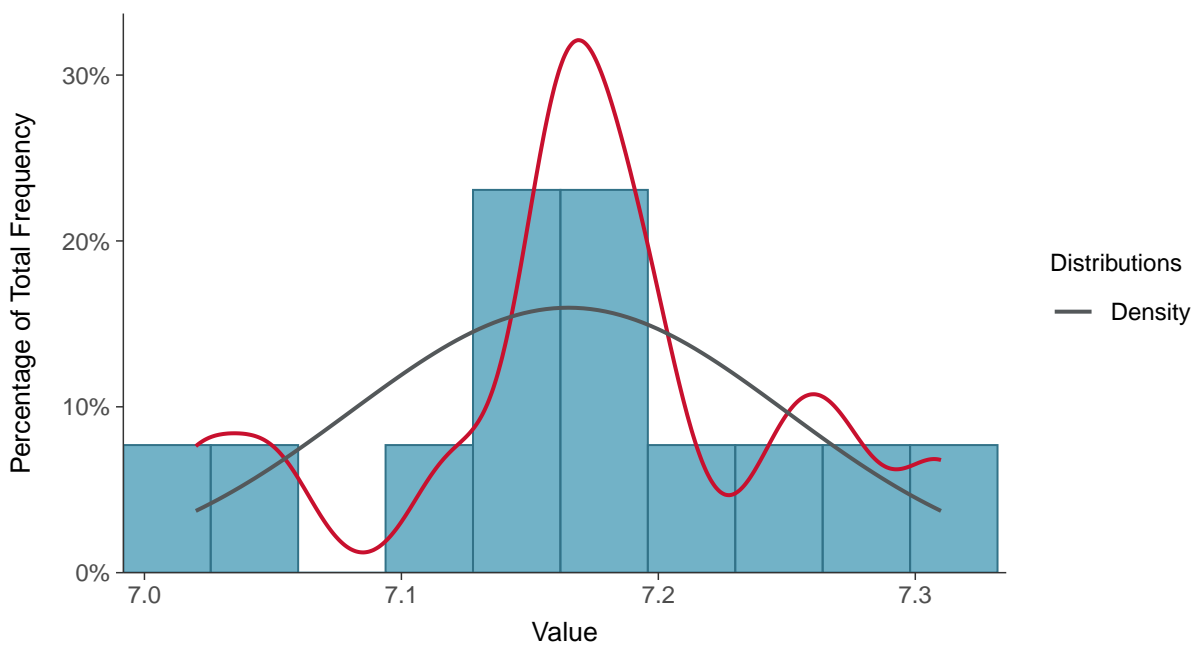
Scatter Plot

pH (field), MW-18 (su)



Histogram

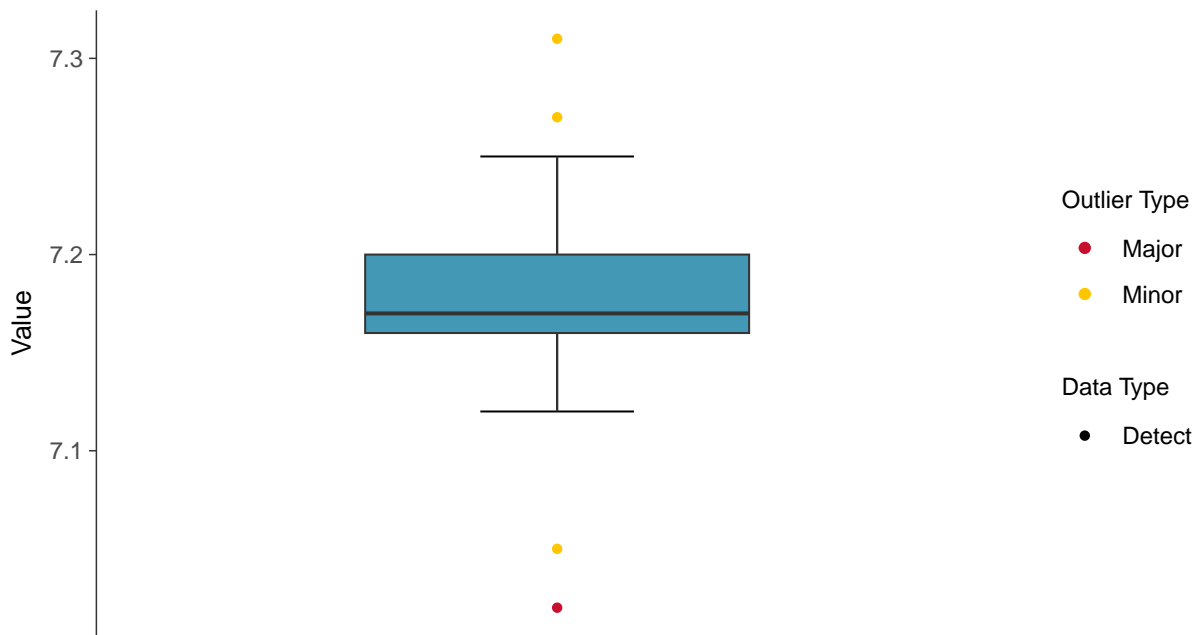
pH (field), MW-18 (su)





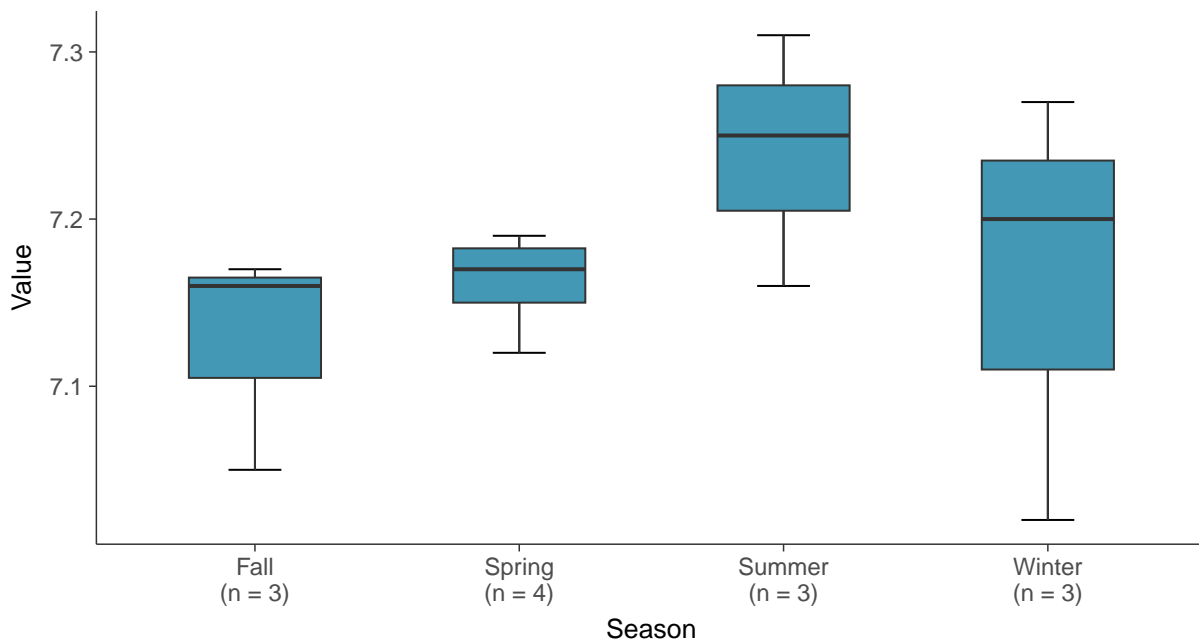
Boxplot

pH (field), MW-18 (su)



Boxplot by Season

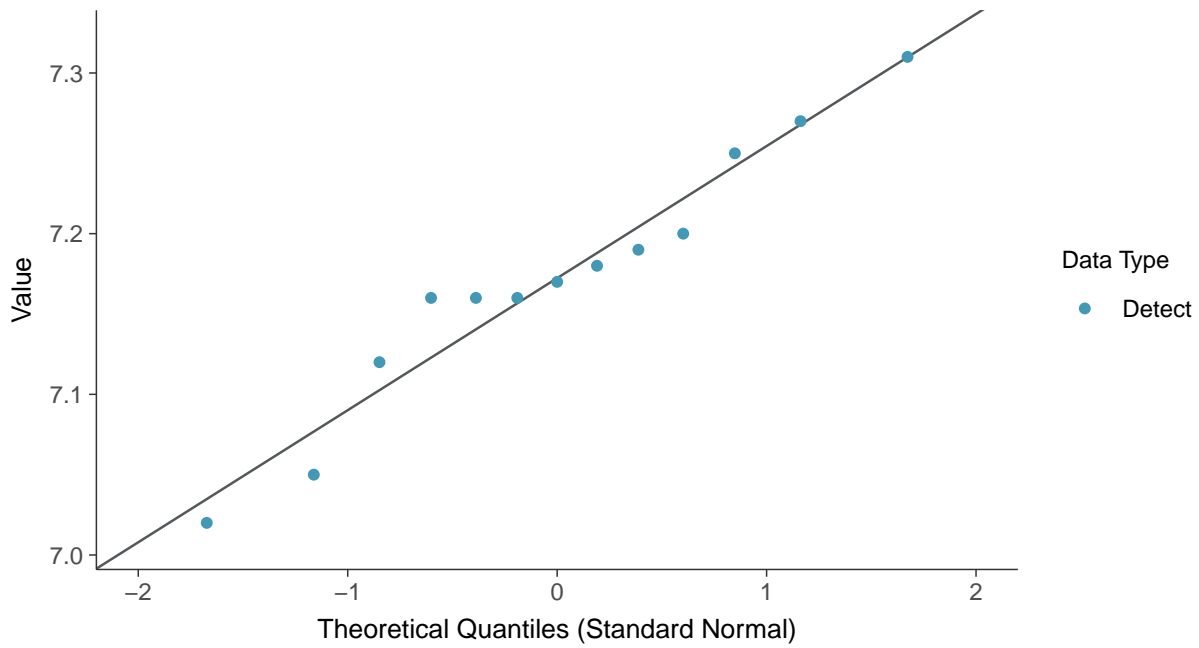
pH (field), MW-18 (su)





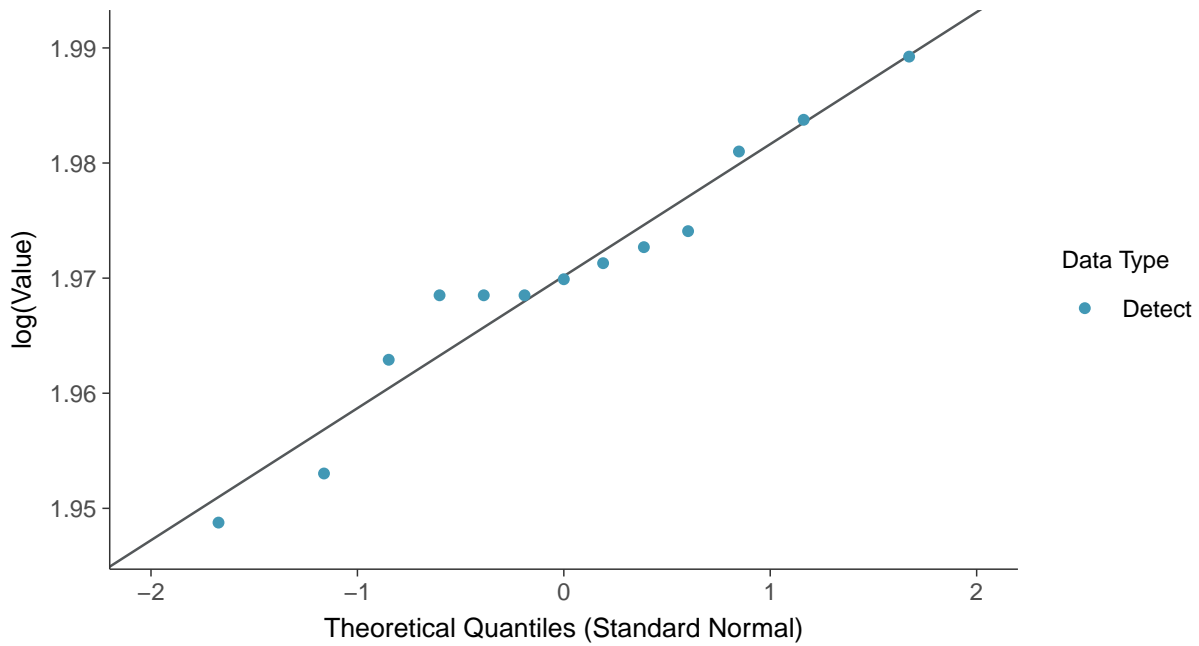
Normal Q-Q plot

pH (field), MW-18 (su)



Lognormal Q-Q plot

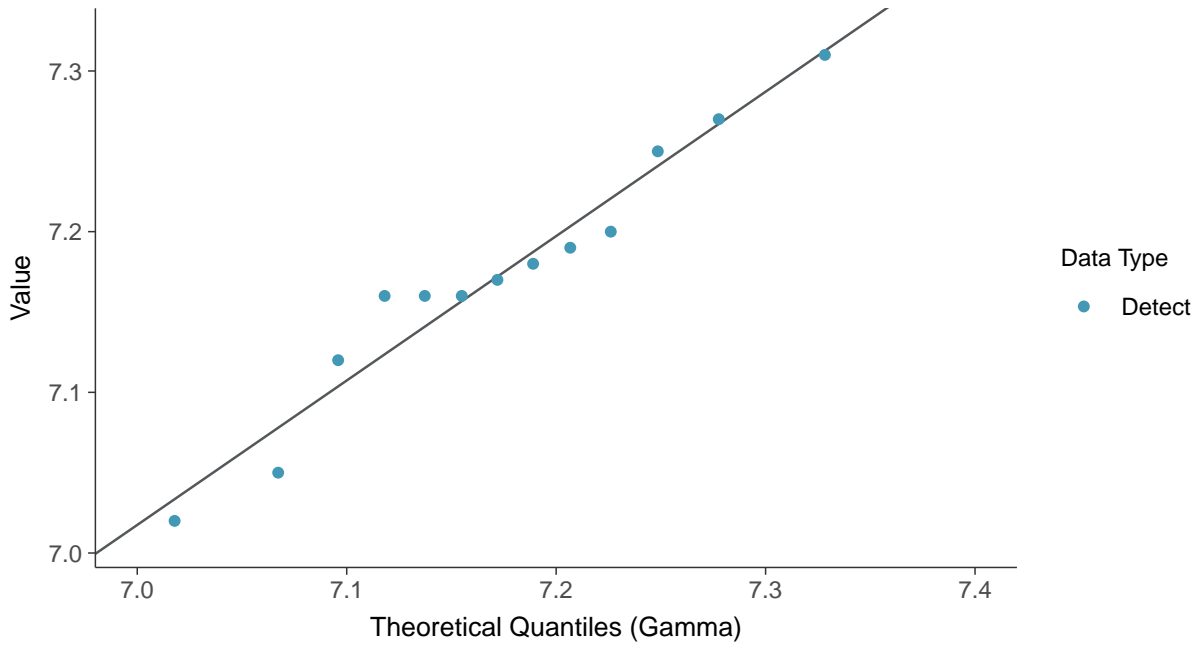
pH (field), MW-18 (su)





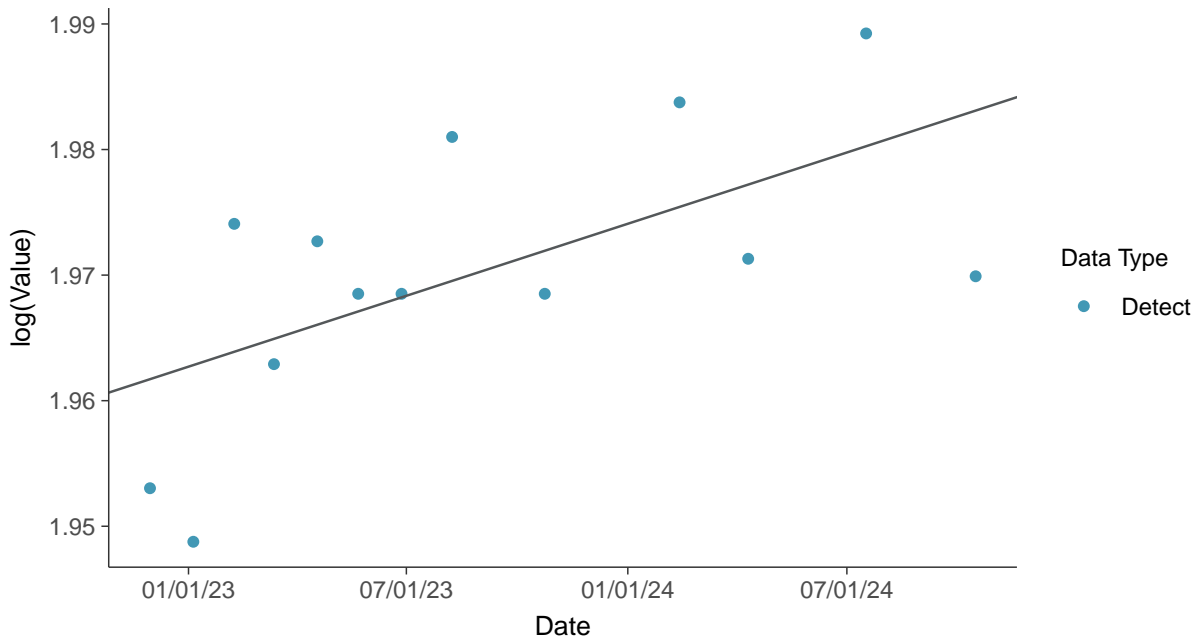
Gamma Q-Q plot

pH (field), MW-18 (su)



Trend Regression: Lognormal MLE

pH (field), MW-18 (su)



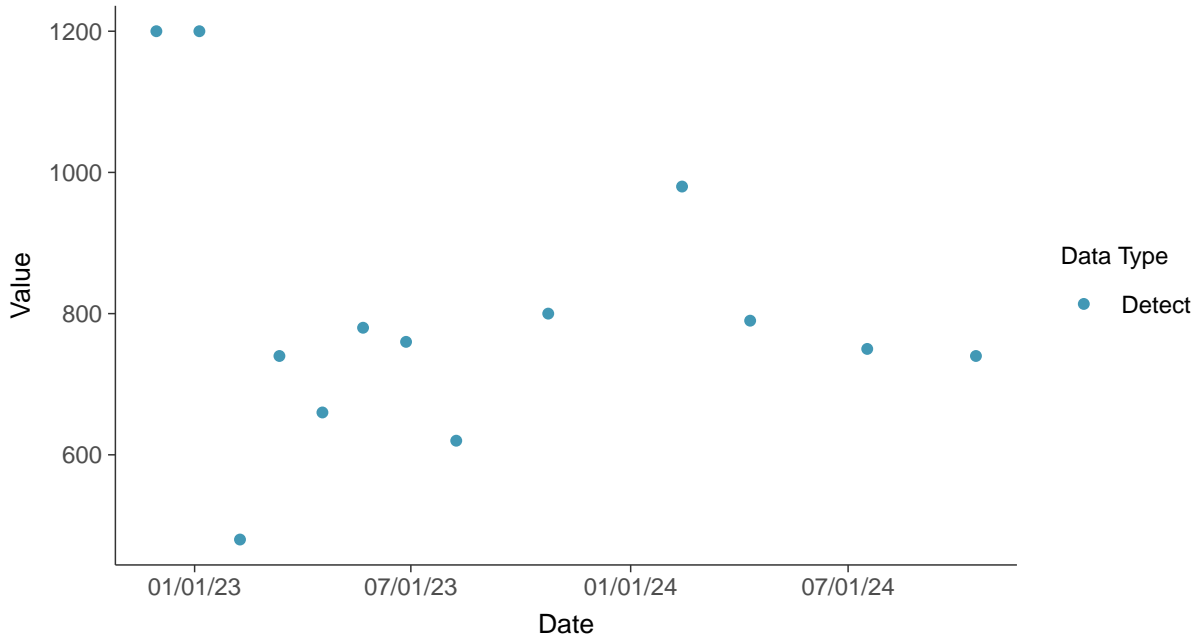


Appendix III: Sulfate (as SO₄), MW-18

ID: 1_28_1_4_124

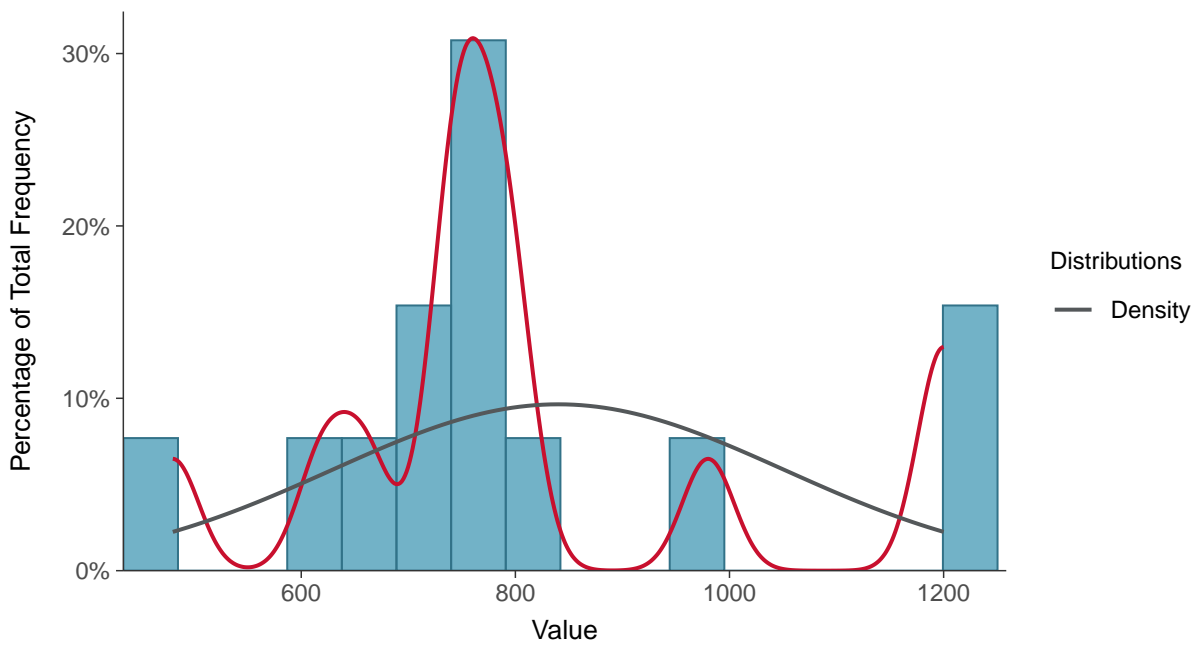
Scatter Plot

Sulfate (as SO₄), MW-18 (mg/L)



Histogram

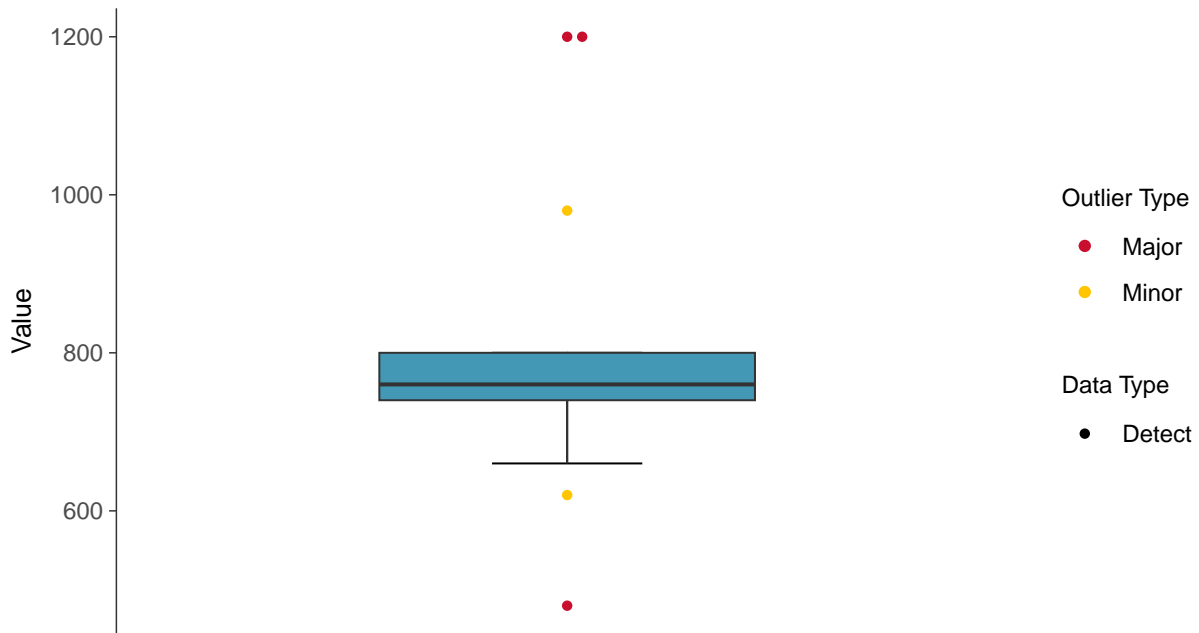
Sulfate (as SO₄), MW-18 (mg/L)





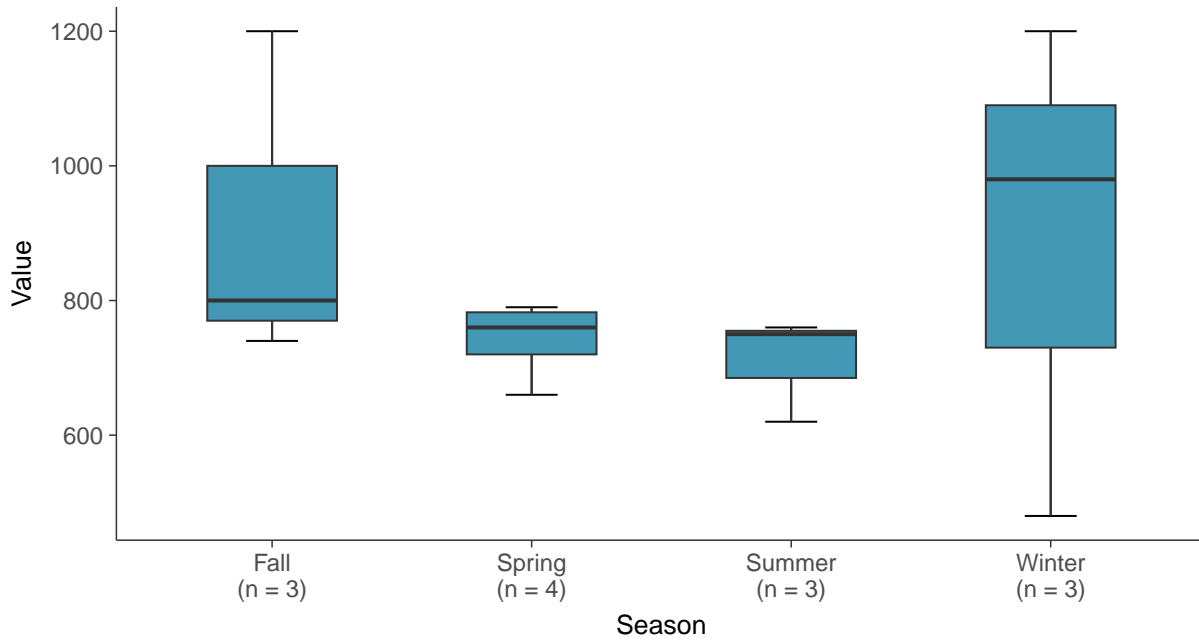
Boxplot

Sulfate (as SO₄), MW-18 (mg/L)



Boxplot by Season

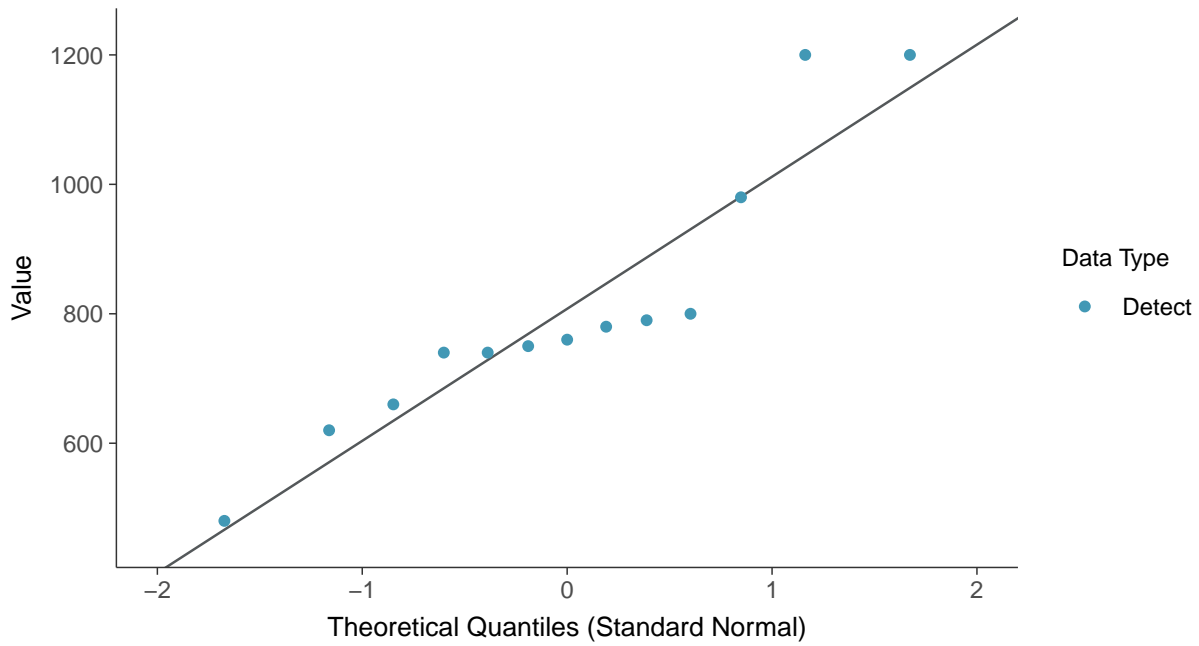
Sulfate (as SO₄), MW-18 (mg/L)





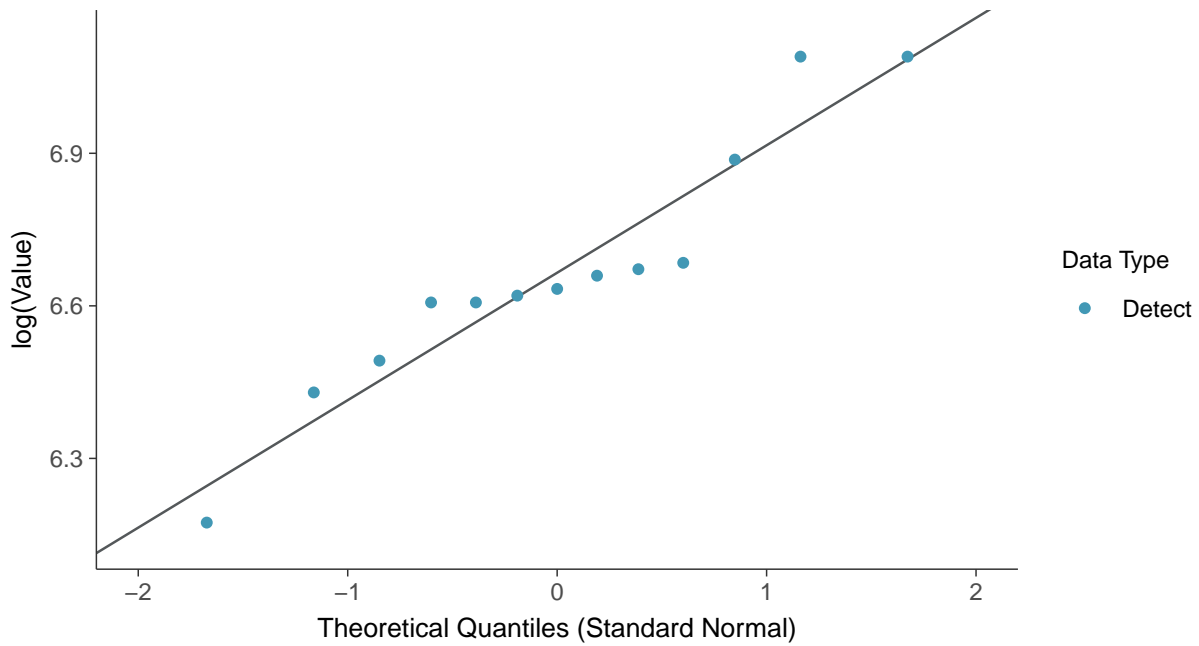
Normal Q-Q plot

Sulfate (as SO₄), MW-18 (mg/L)



Lognormal Q-Q plot

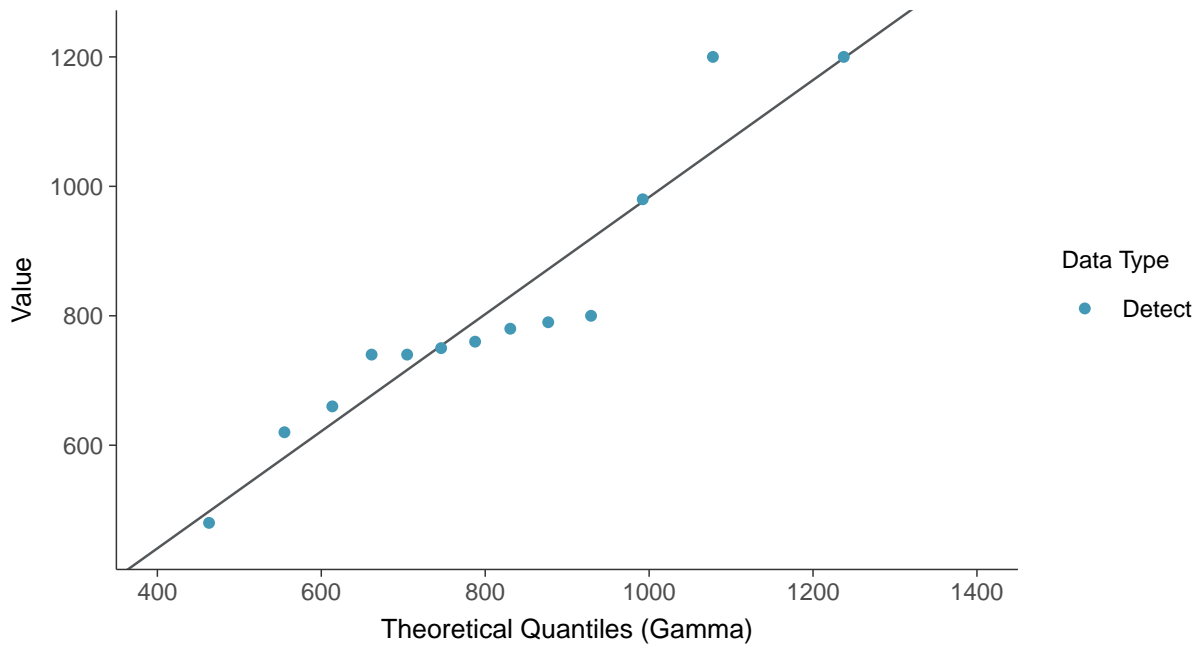
Sulfate (as SO₄), MW-18 (mg/L)





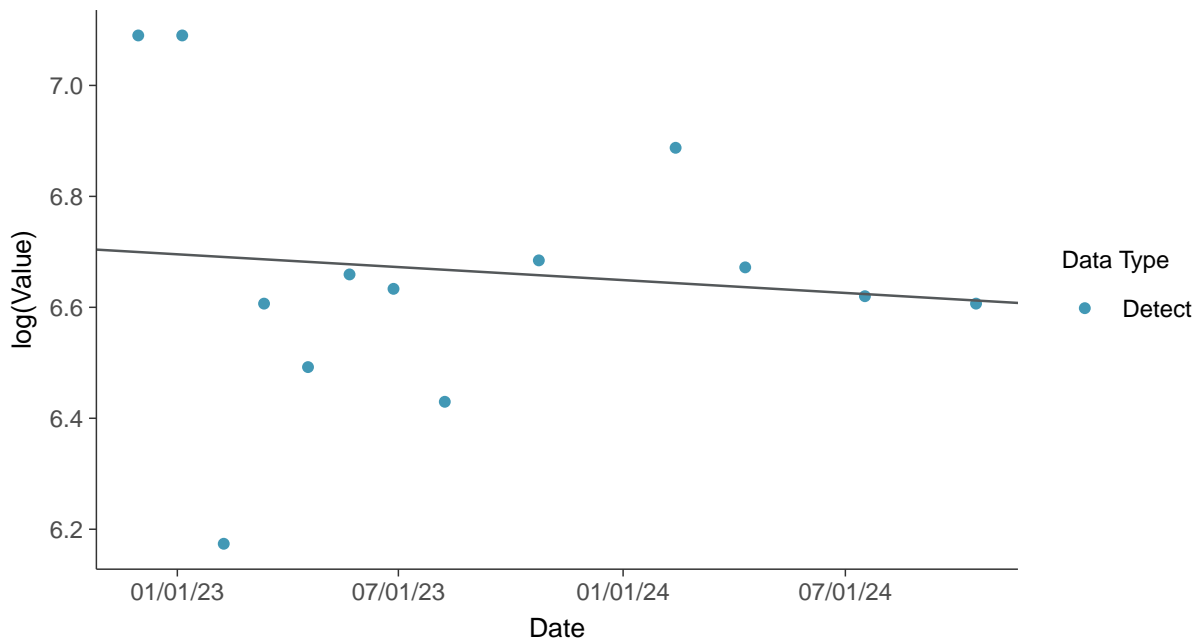
Gamma Q-Q plot

Sulfate (as SO₄), MW-18 (mg/L)



Trend Regression: Lognormal MLE

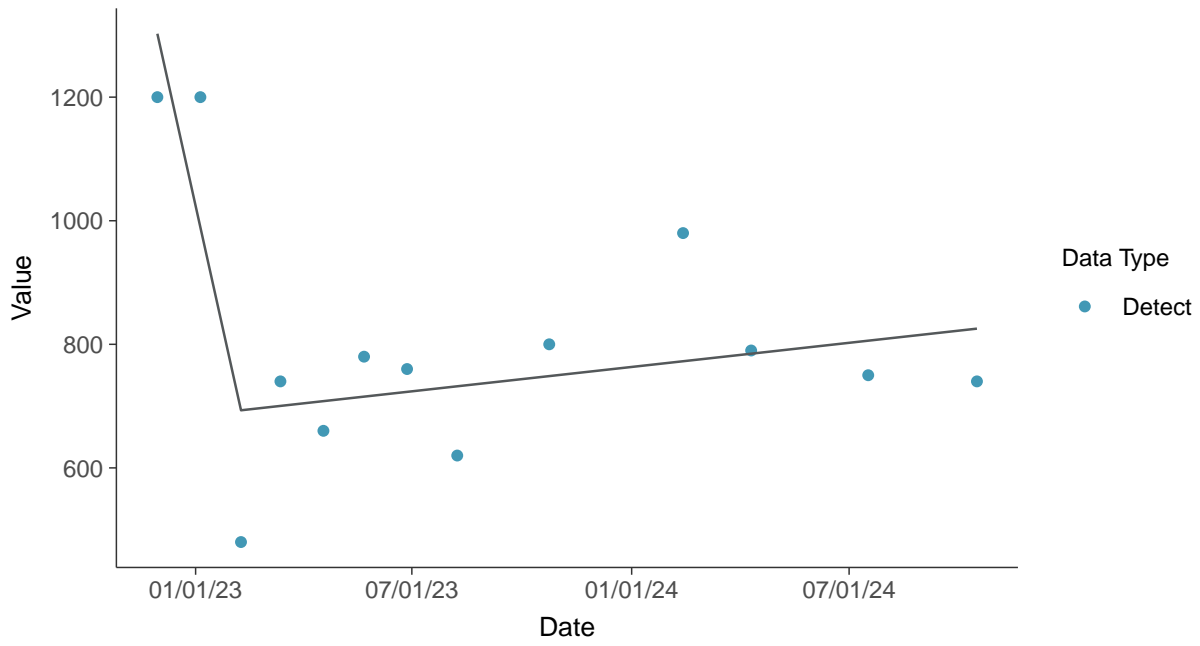
Sulfate (as SO₄), MW-18 (mg/L)





Trend Regression: Piecewise Linear-Linear

Sulfate (as SO₄), MW-18 (mg/L)



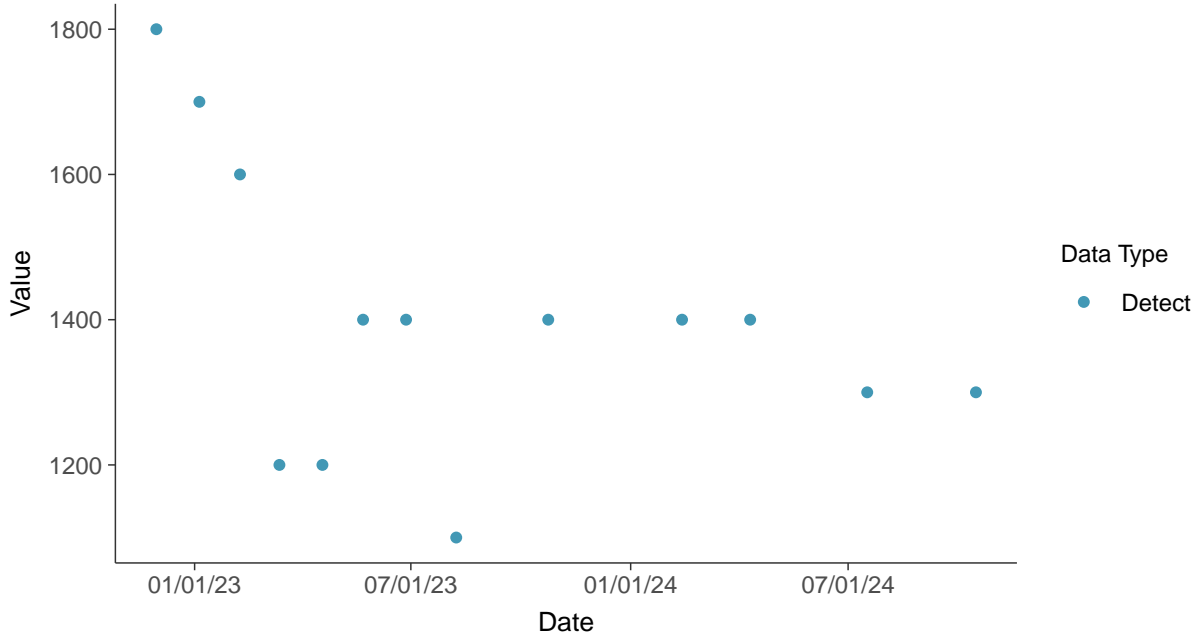


Appendix III: Total Dissolved Solids, MW-18

ID: 1_28_1_4_126

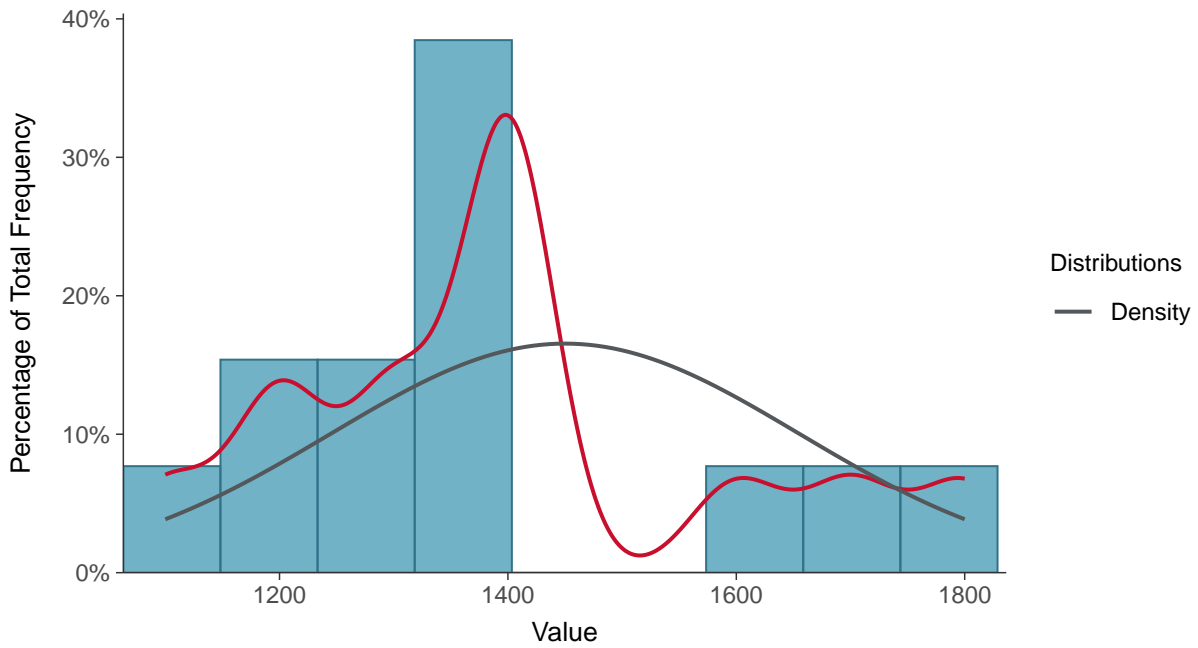
Scatter Plot

Total Dissolved Solids, MW-18 (mg/L)



Histogram

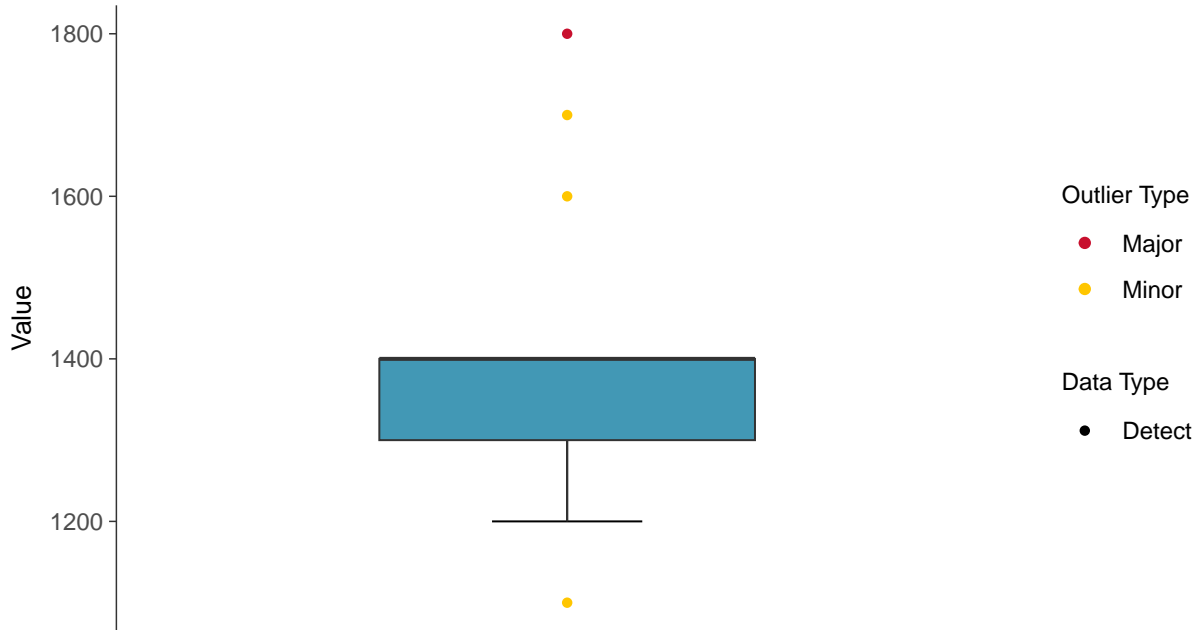
Total Dissolved Solids, MW-18 (mg/L)





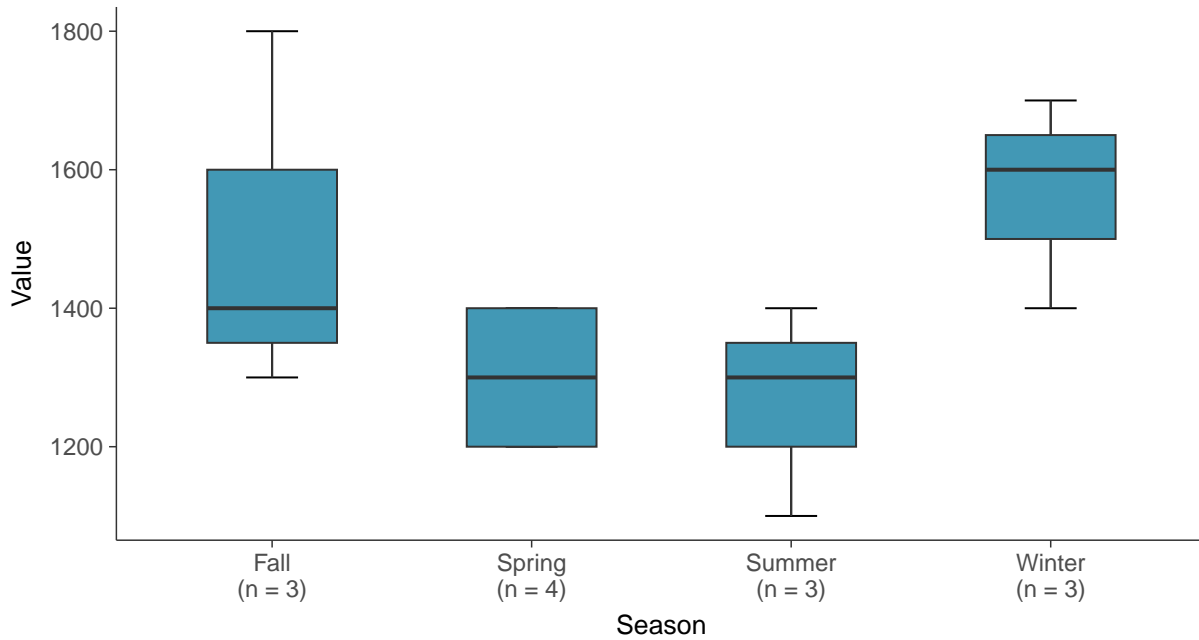
Boxplot

Total Dissolved Solids, MW-18 (mg/L)



Boxplot by Season

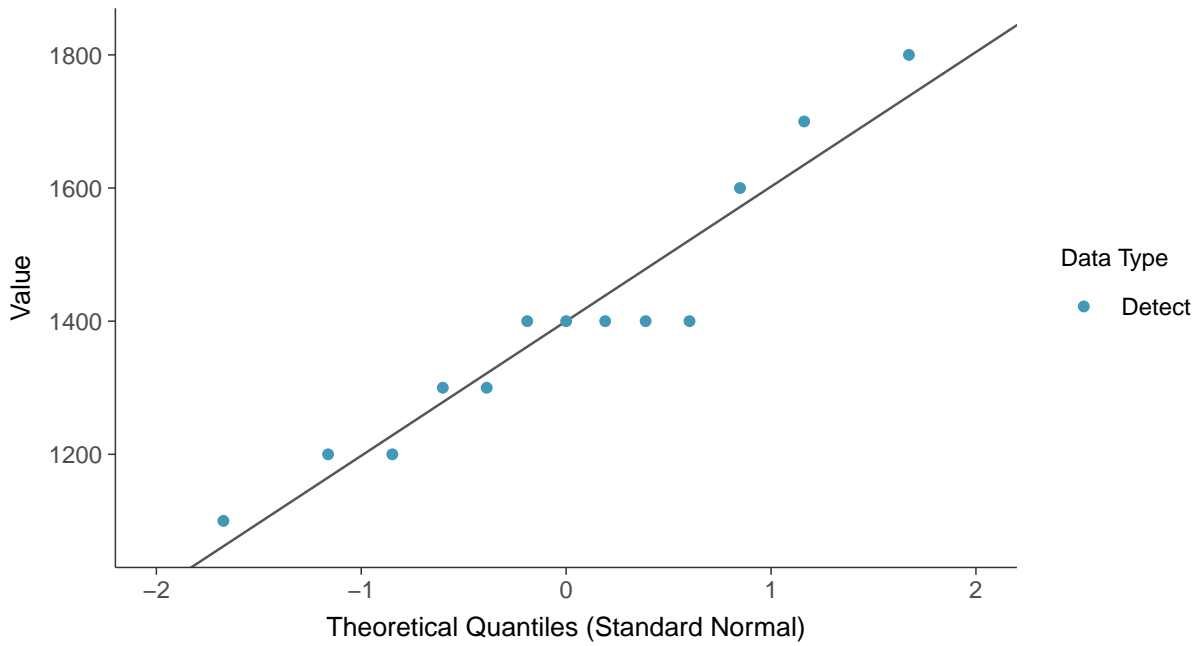
Total Dissolved Solids, MW-18 (mg/L)





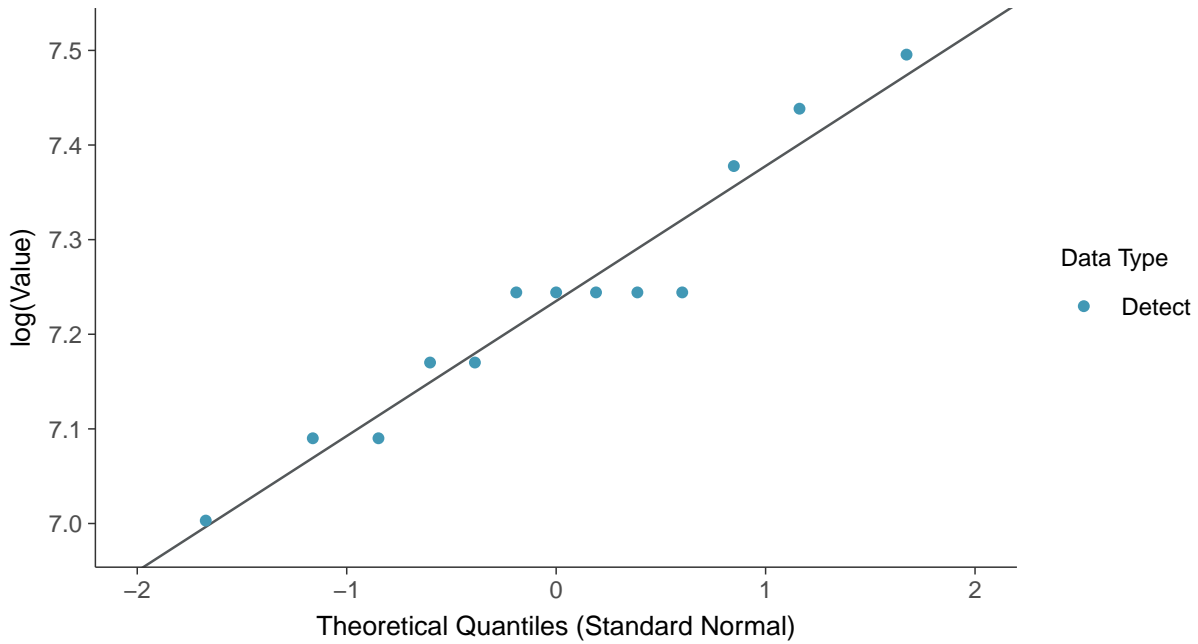
Normal Q-Q plot

Total Dissolved Solids, MW-18 (mg/L)



Lognormal Q-Q plot

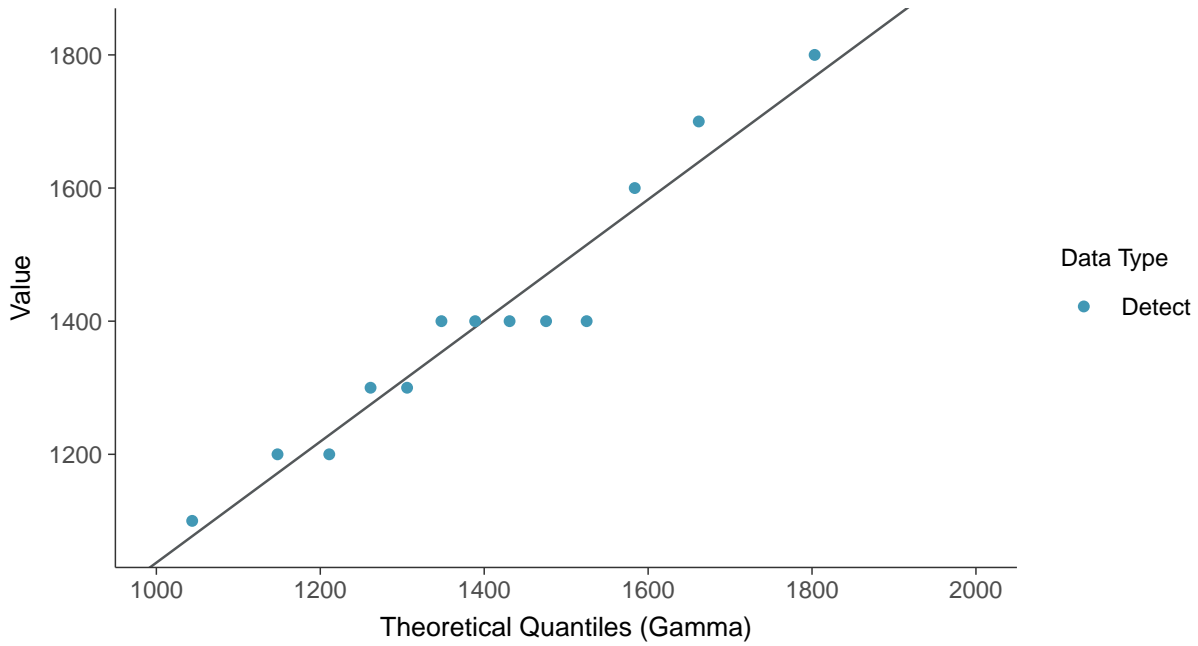
Total Dissolved Solids, MW-18 (mg/L)





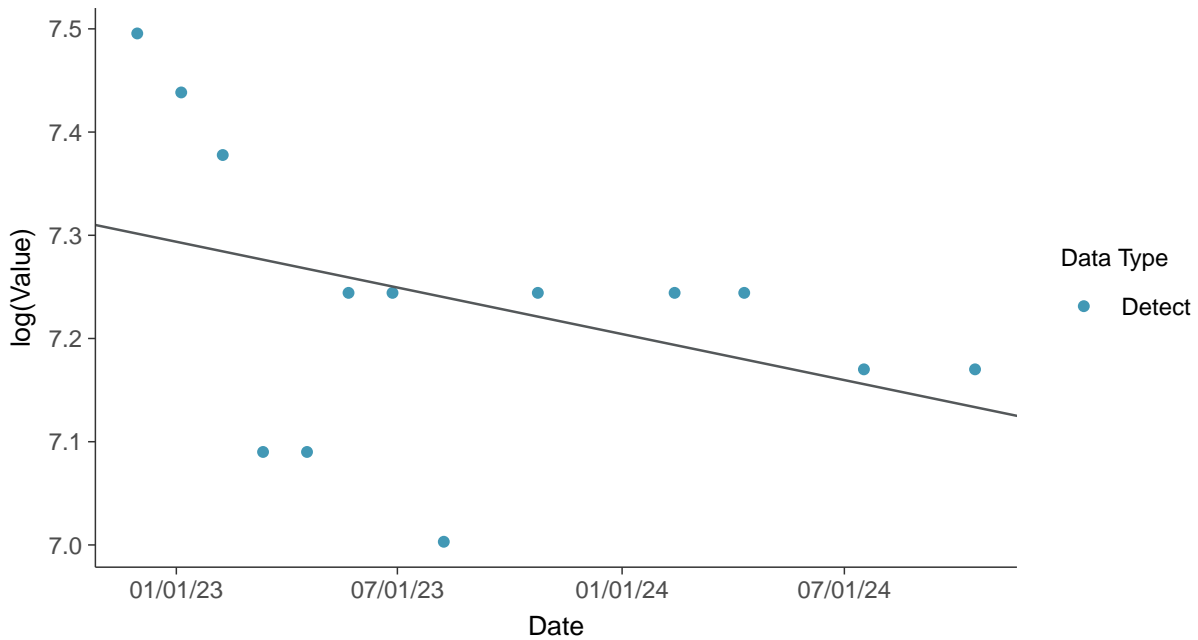
Gamma Q-Q plot

Total Dissolved Solids, MW-18 (mg/L)



Trend Regression: Lognormal MLE

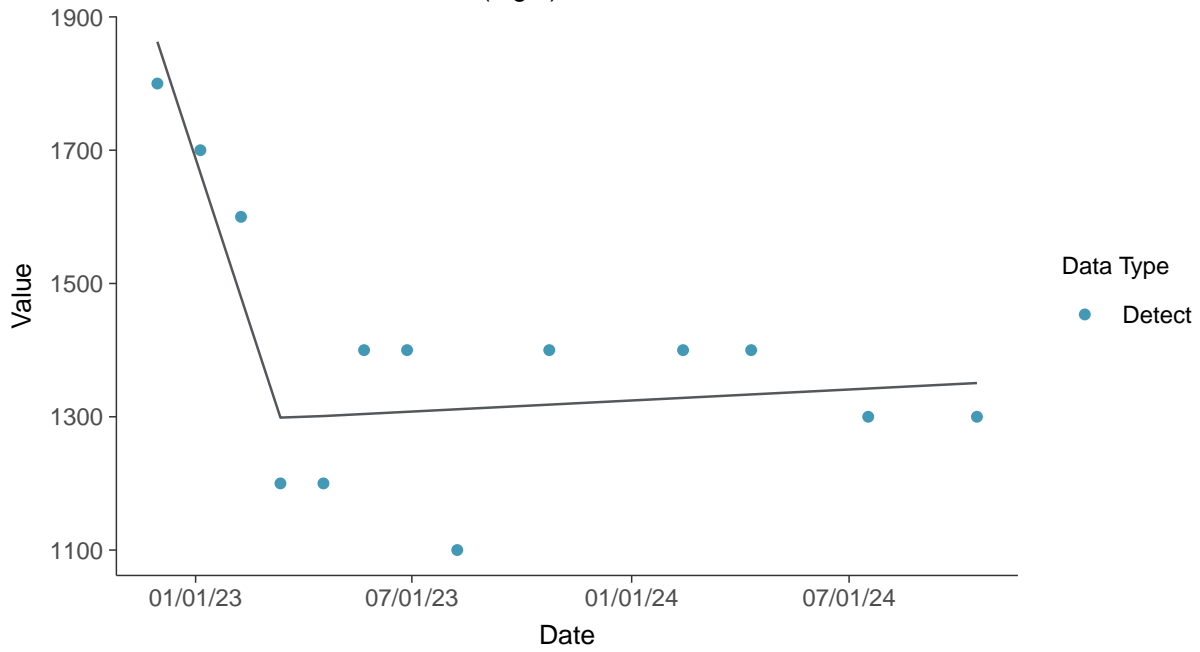
Total Dissolved Solids, MW-18 (mg/L)





Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-18 (mg/L)



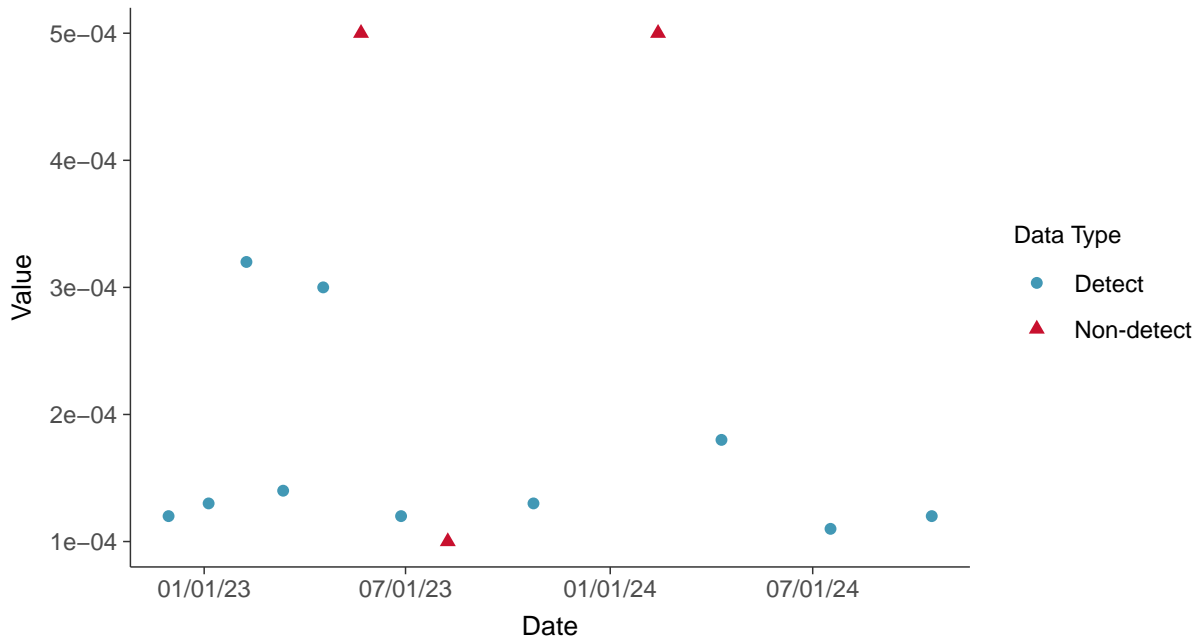


Appendix IV: Antimony, MW-18

ID: 1_28_1_5_101

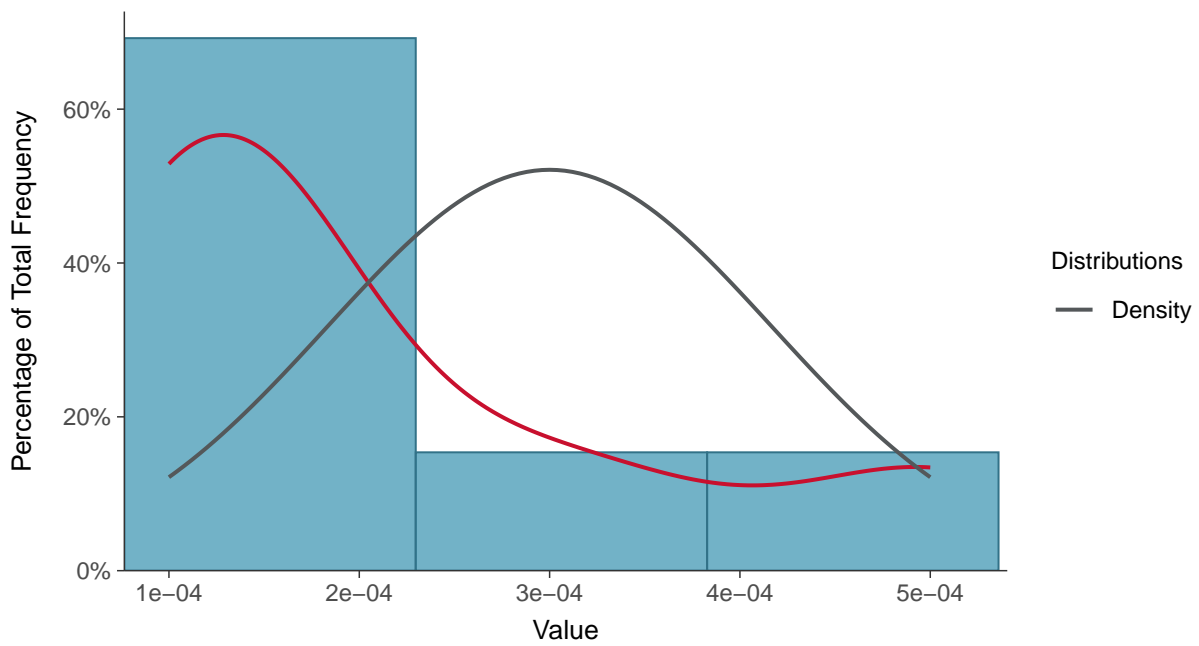
Scatter Plot

Antimony, MW-18 (mg/L)



Histogram

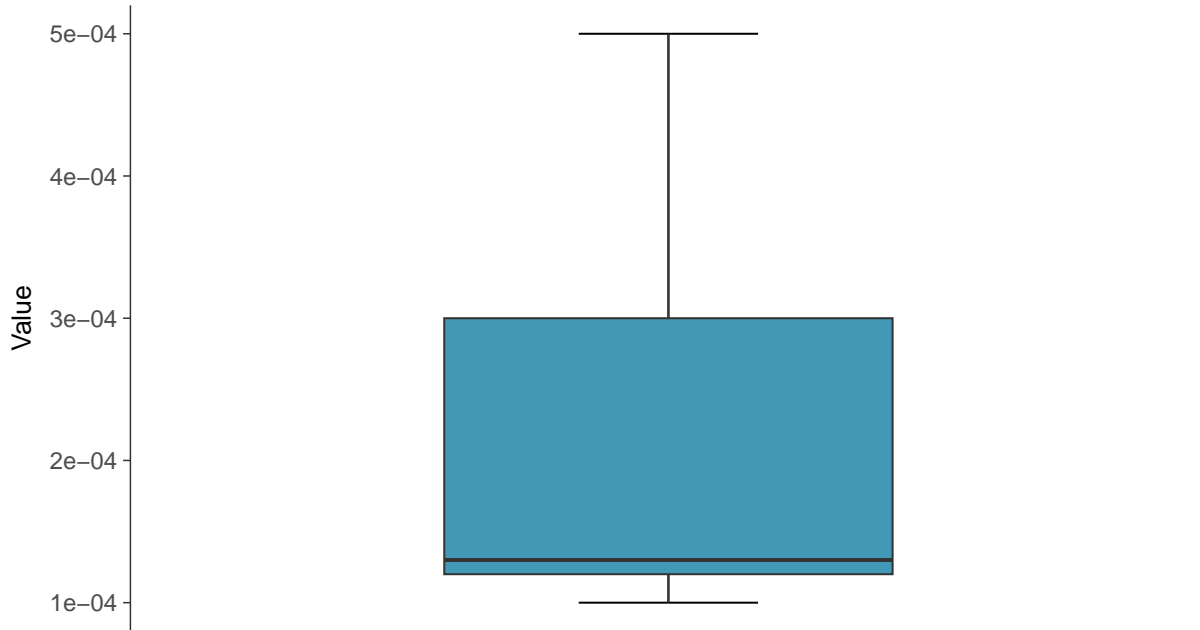
Antimony, MW-18 (mg/L)





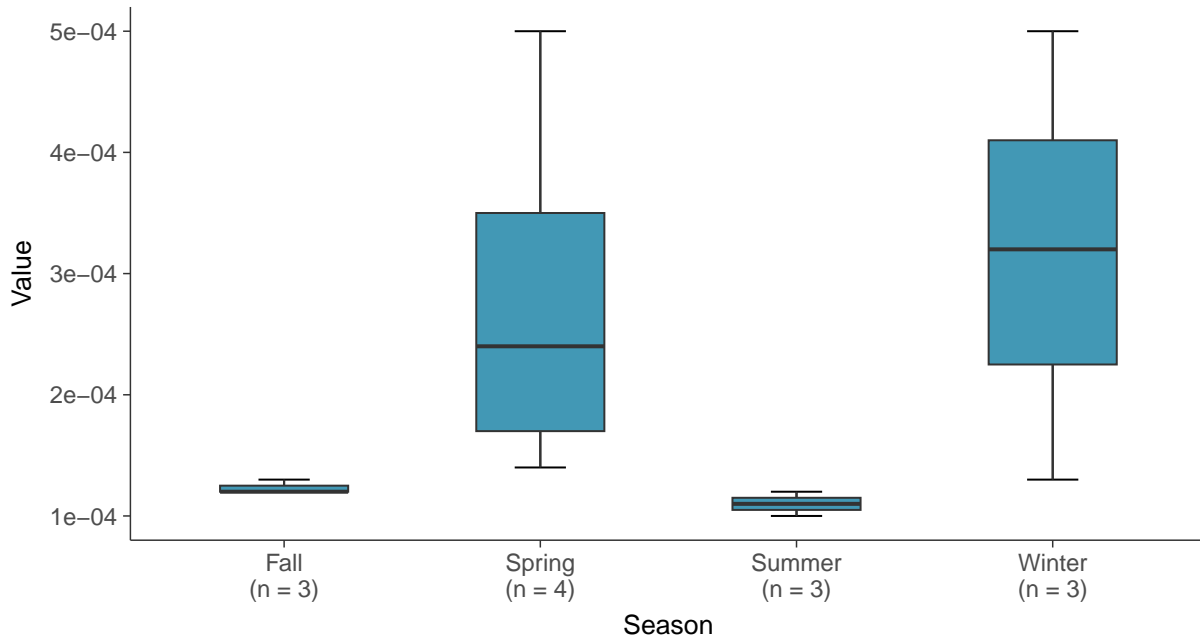
Boxplot

Antimony, MW-18 (mg/L)



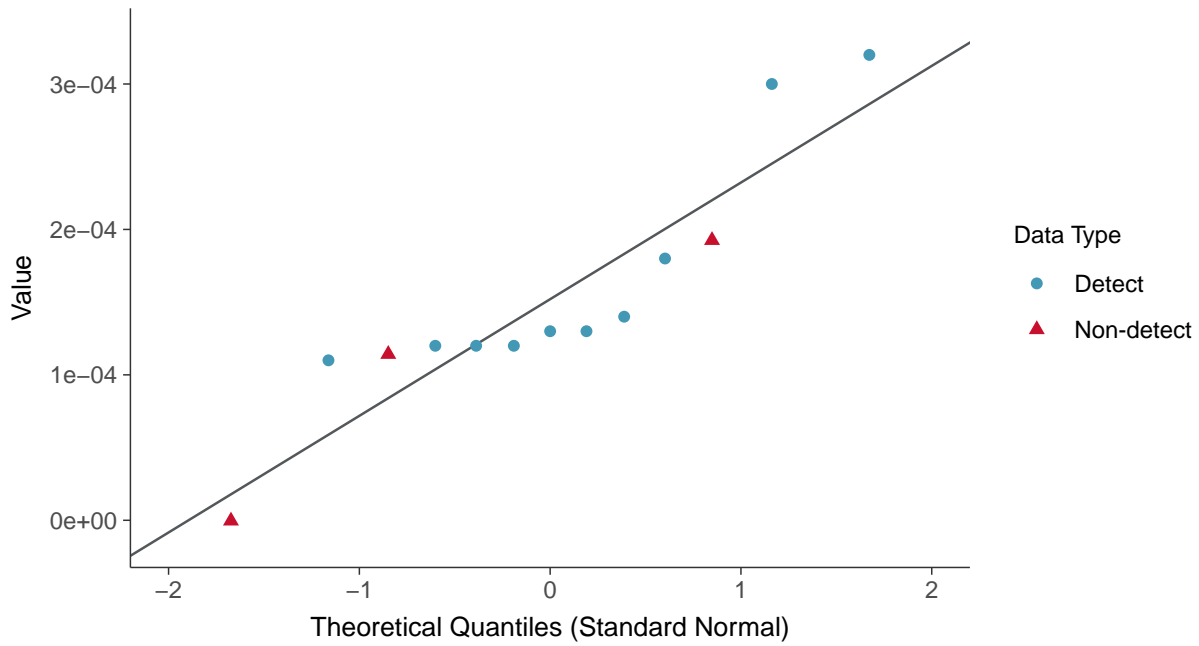
Boxplot by Season

Antimony, MW-18 (mg/L)

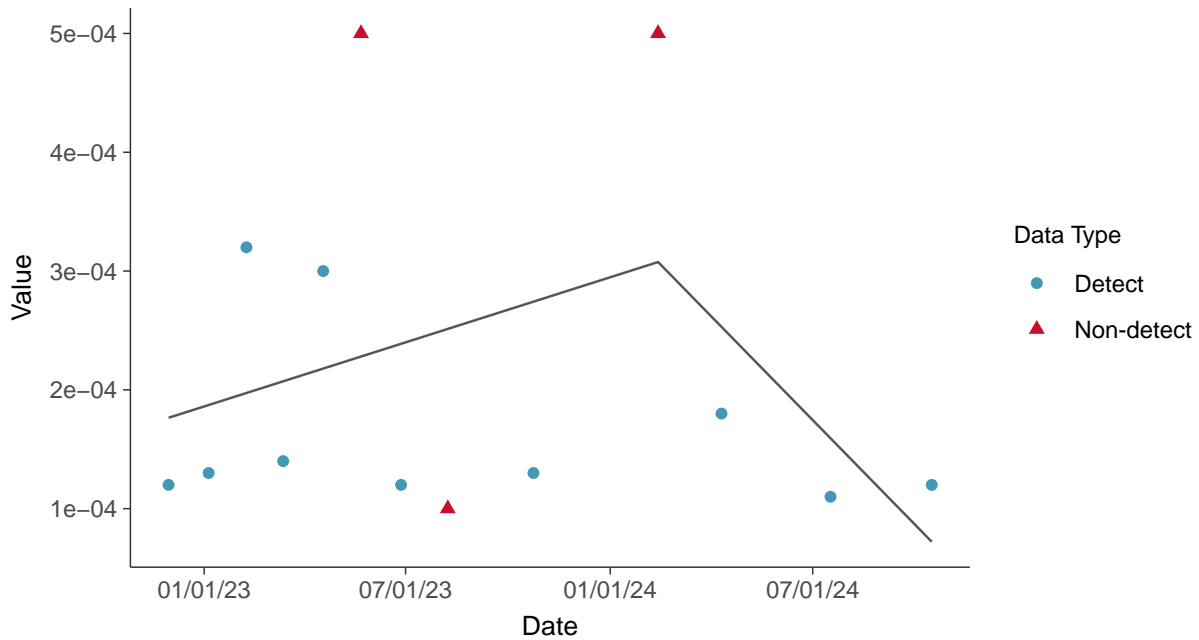




Normal Q-Q plot using ROS Imputed Estimates
Antimony, MW-18 (mg/L)



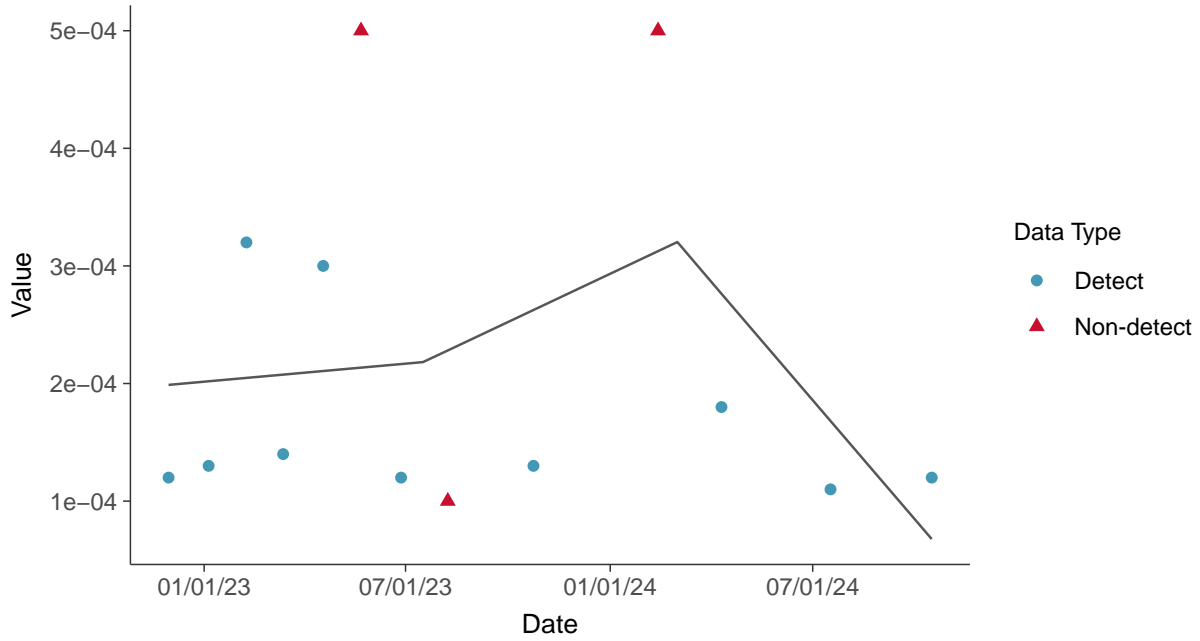
Trend Regression: Piecewise Linear-Linear
Antimony, MW-18 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

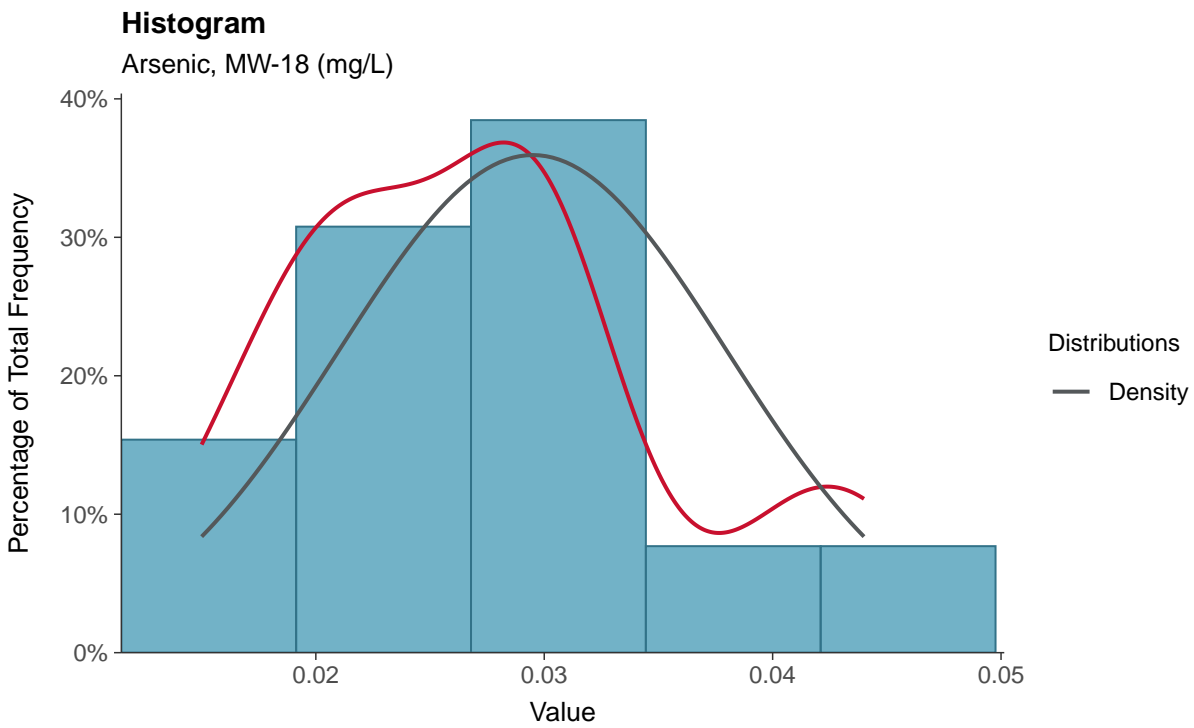
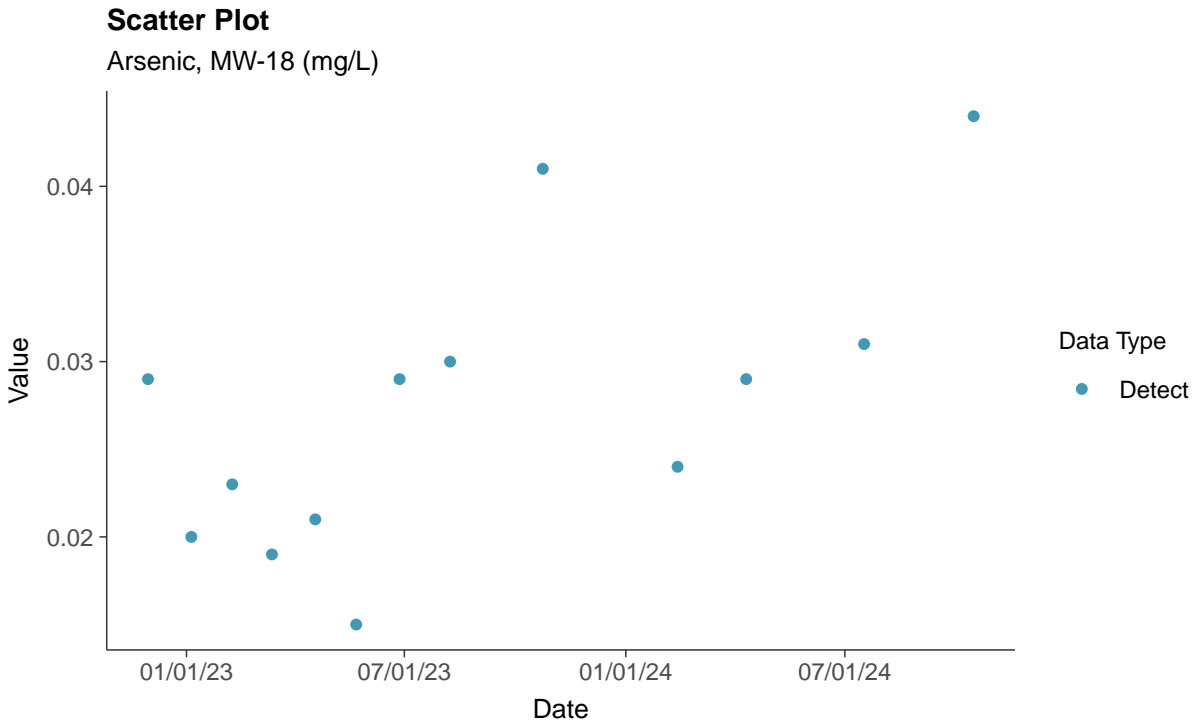
Antimony, MW-18 (mg/L)





Appendix IV: Arsenic, MW-18

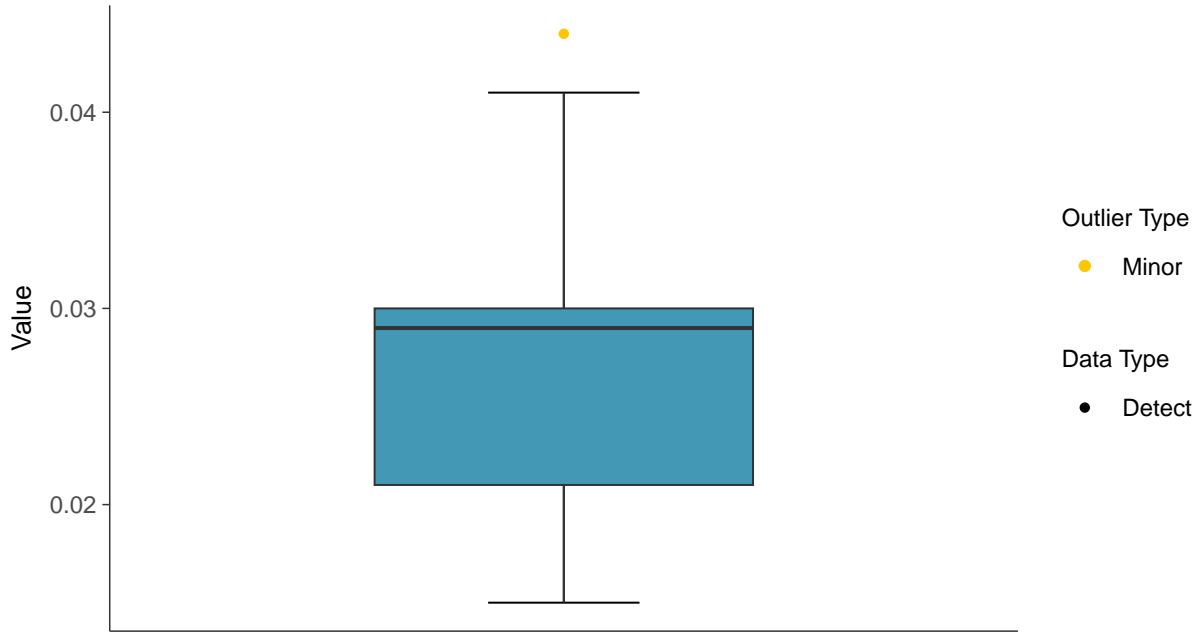
ID: 1_28_1_5_102





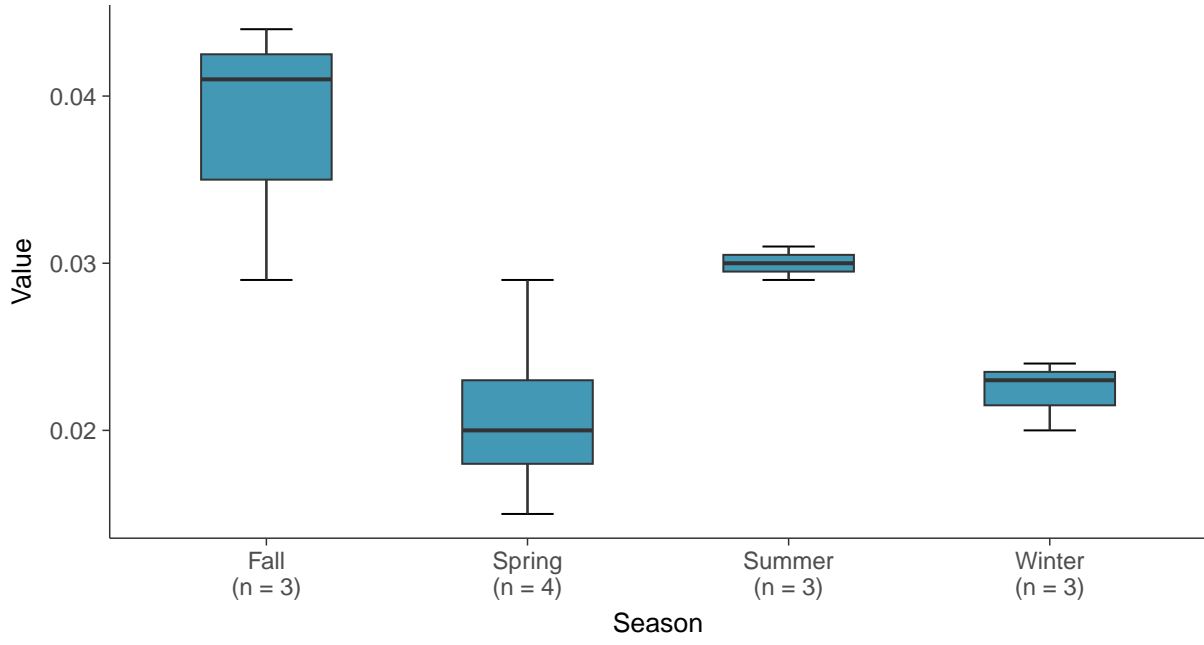
Boxplot

Arsenic, MW-18 (mg/L)



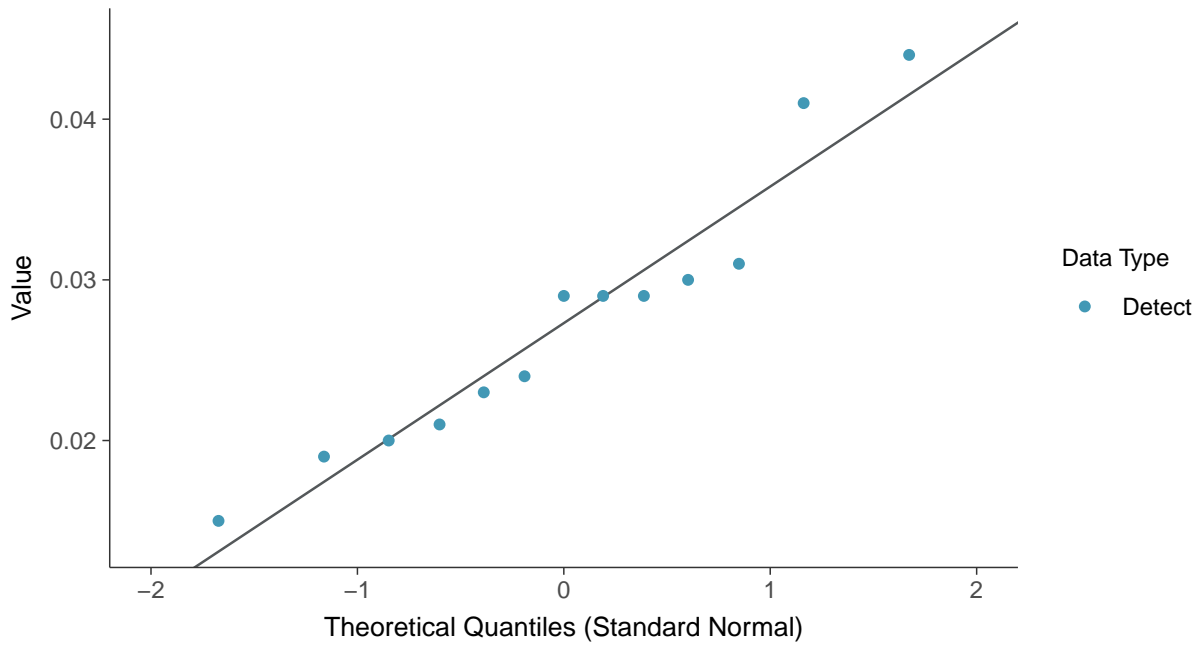
Boxplot by Season

Arsenic, MW-18 (mg/L)

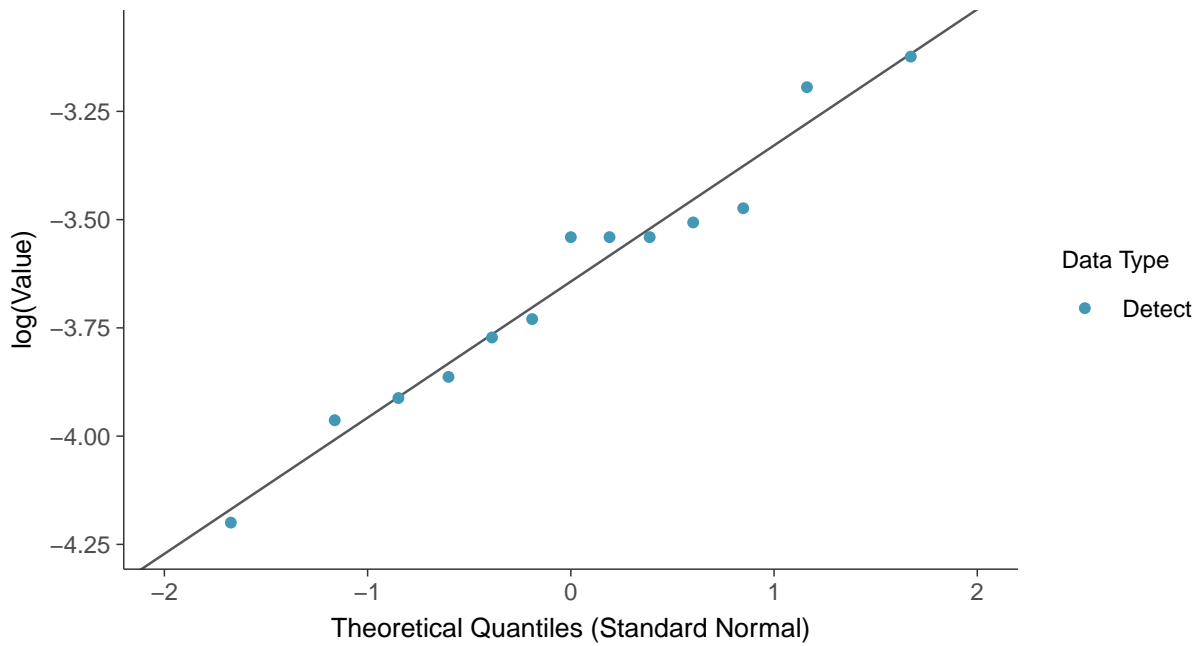




Normal Q-Q plot
Arsenic, MW-18 (mg/L)



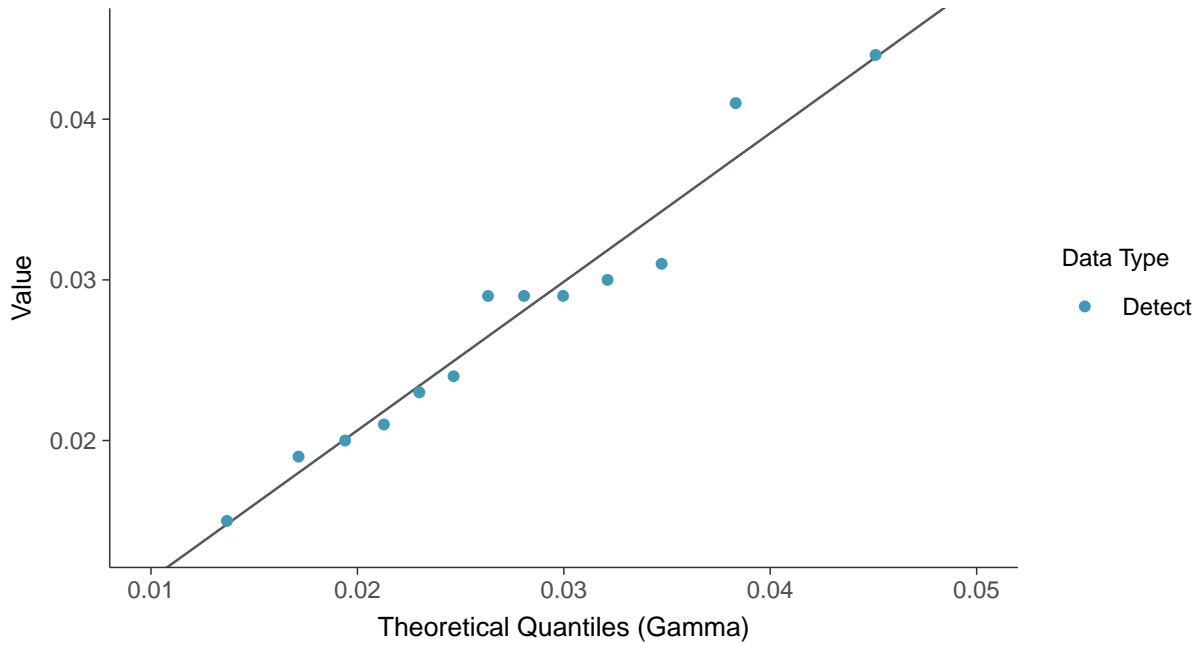
Lognormal Q-Q plot
Arsenic, MW-18 (mg/L)





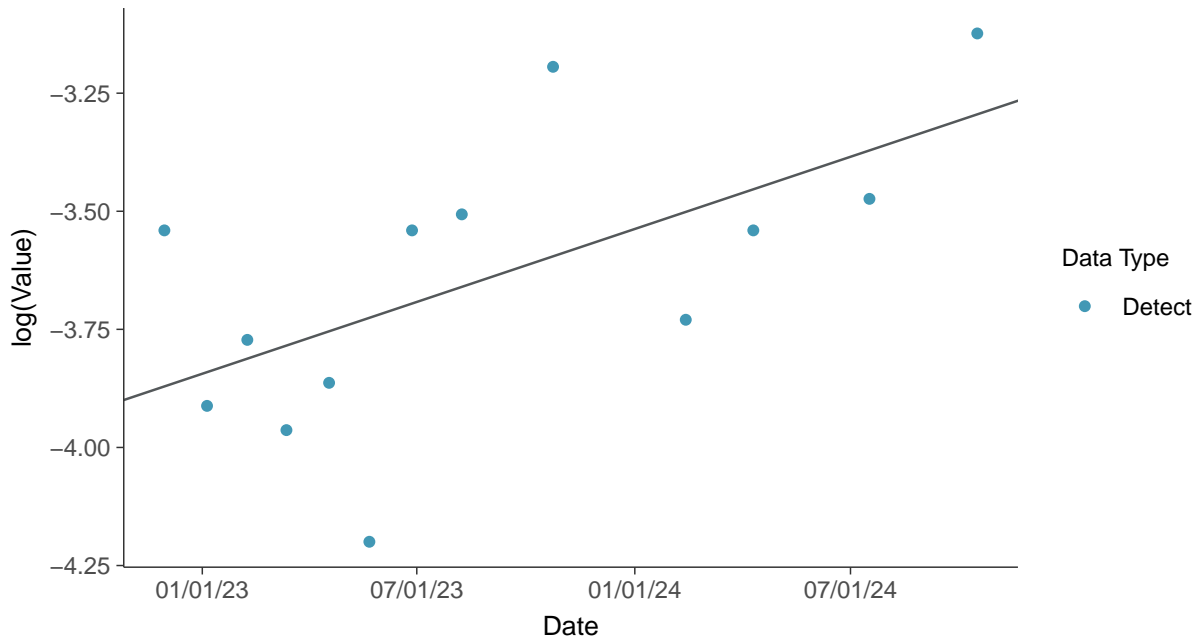
Gamma Q-Q plot

Arsenic, MW-18 (mg/L)



Trend Regression: Lognormal MLE

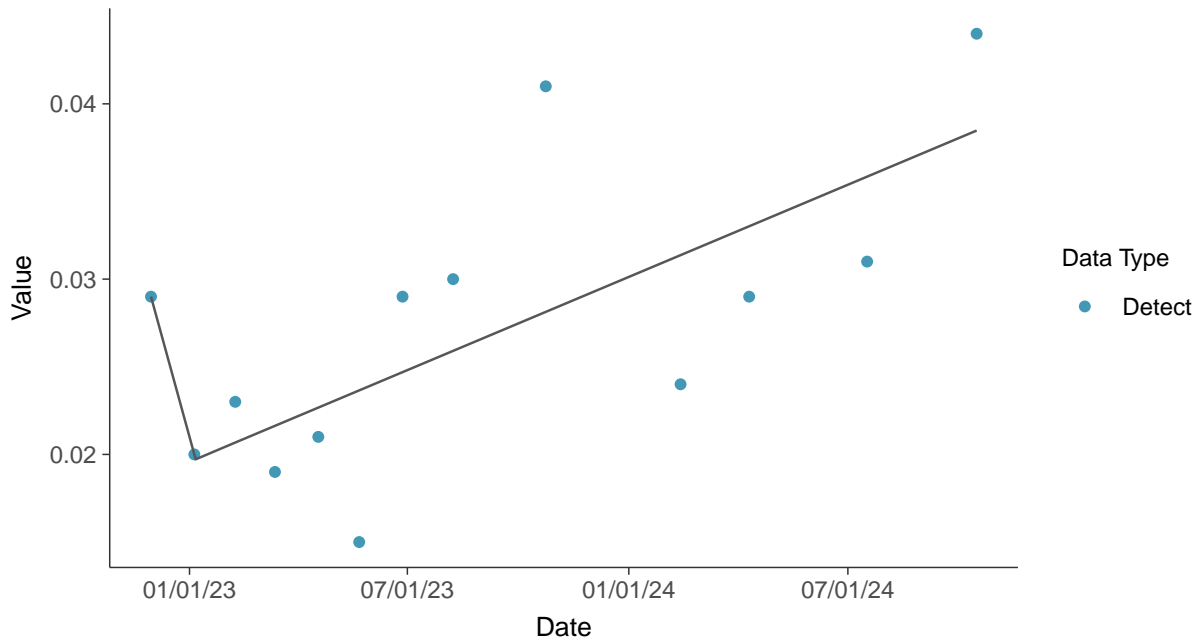
Arsenic, MW-18 (mg/L)





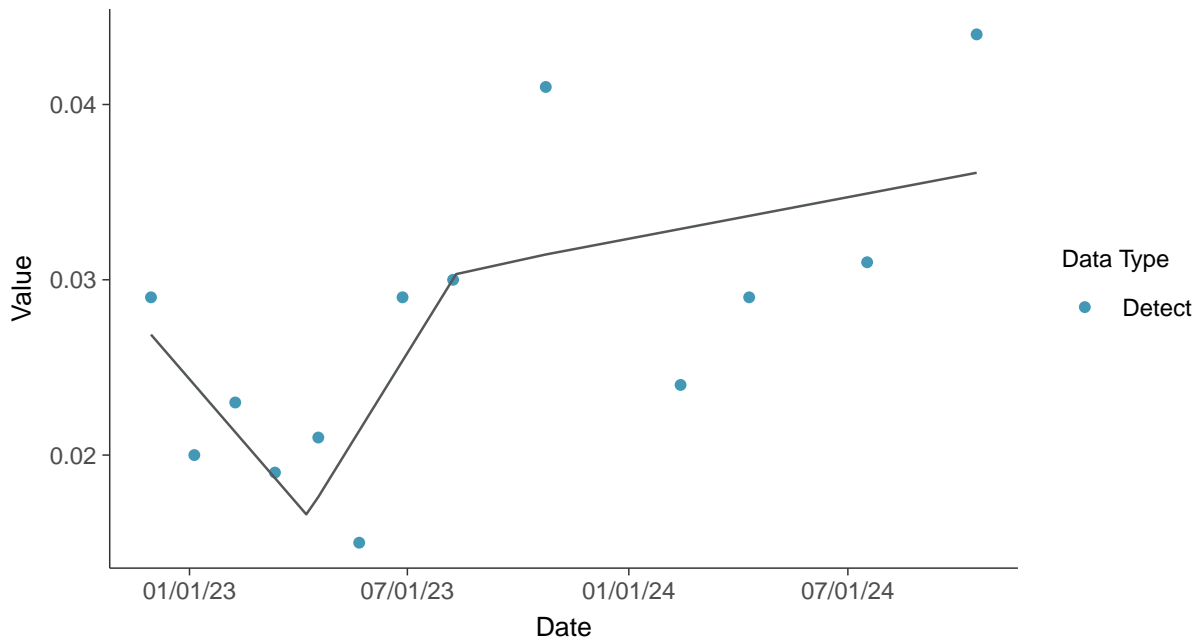
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-18 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

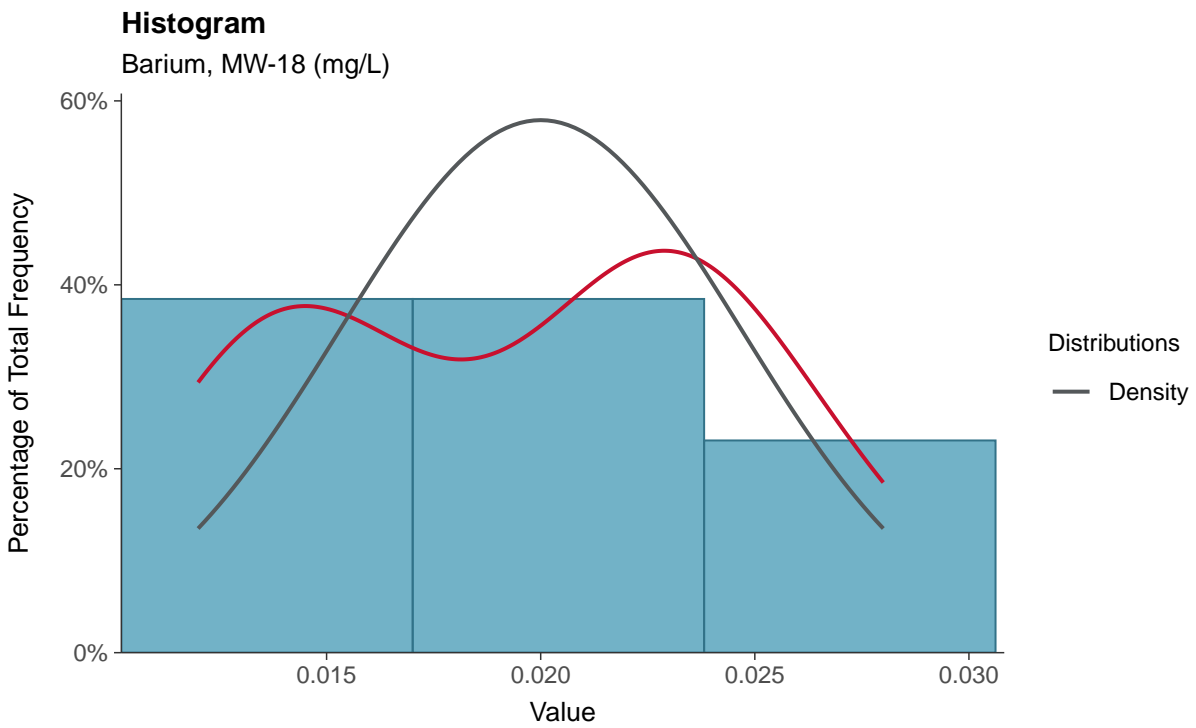
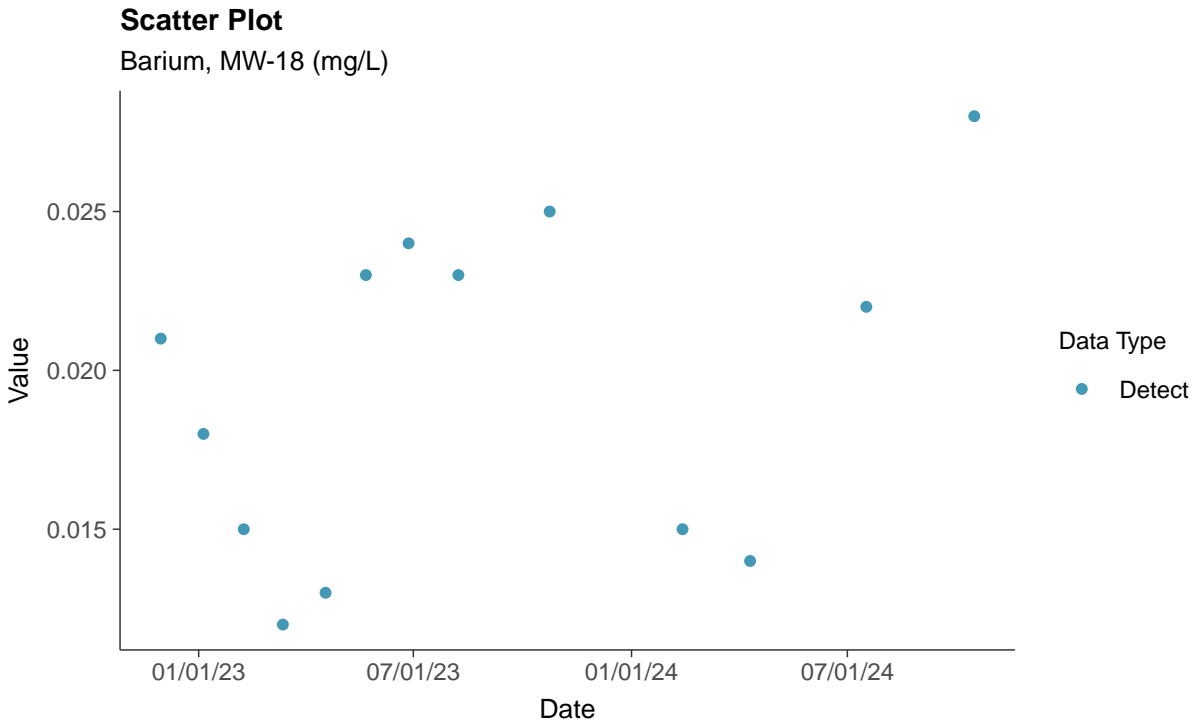
Arsenic, MW-18 (mg/L)





Appendix IV: Barium, MW-18

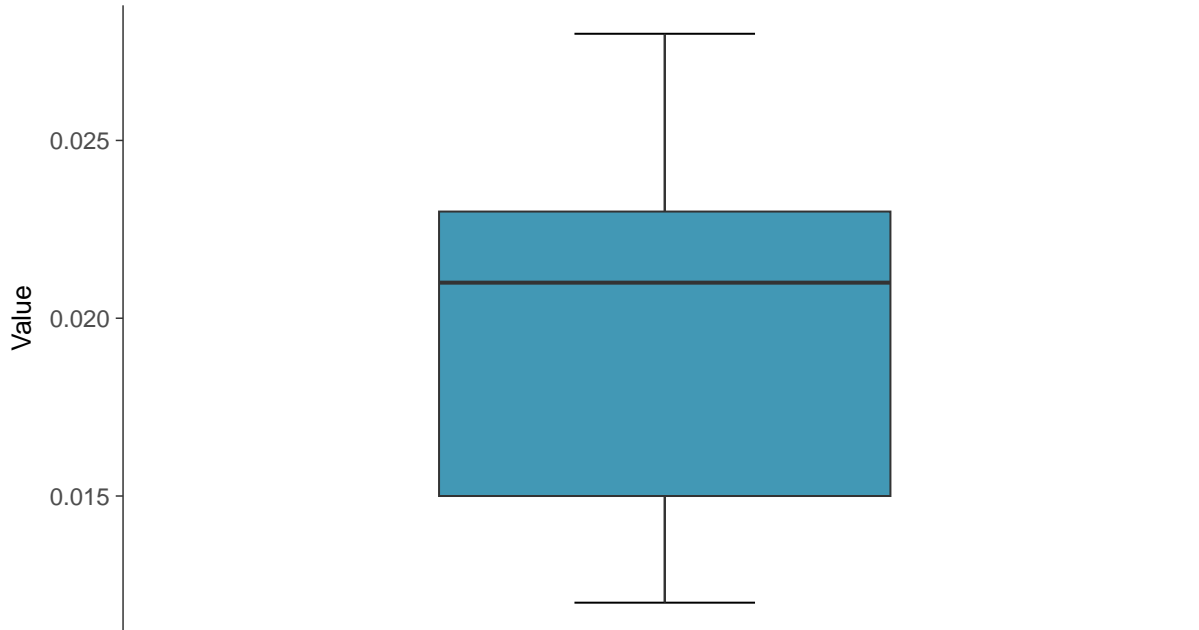
ID: 1_28_1_5_103





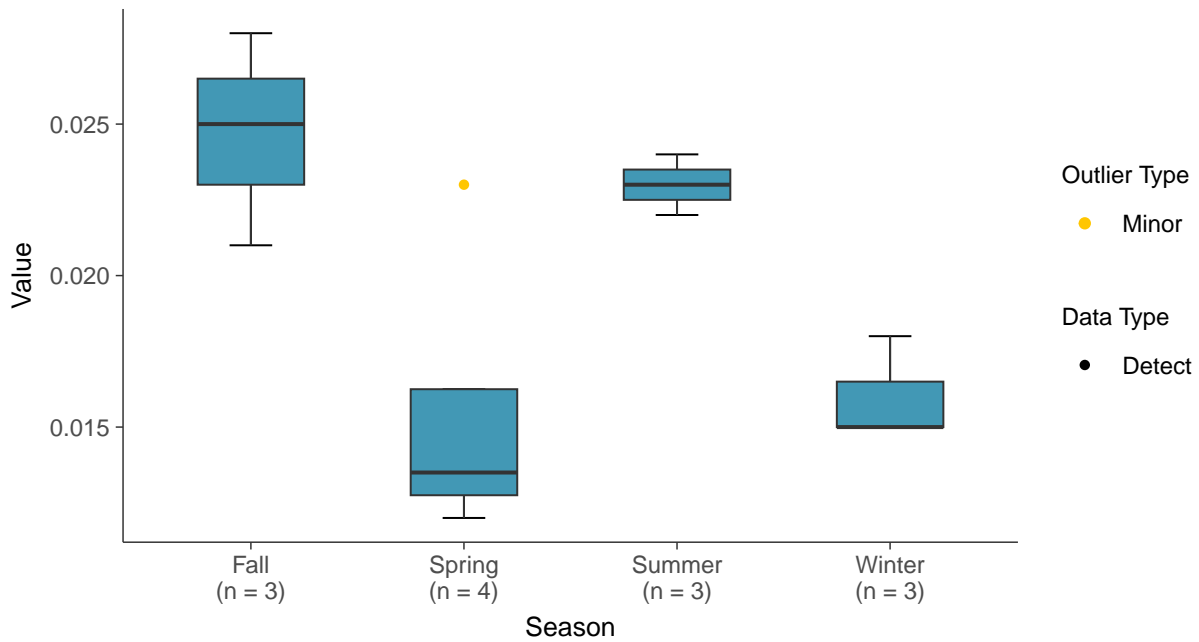
Boxplot

Barium, MW-18 (mg/L)



Boxplot by Season

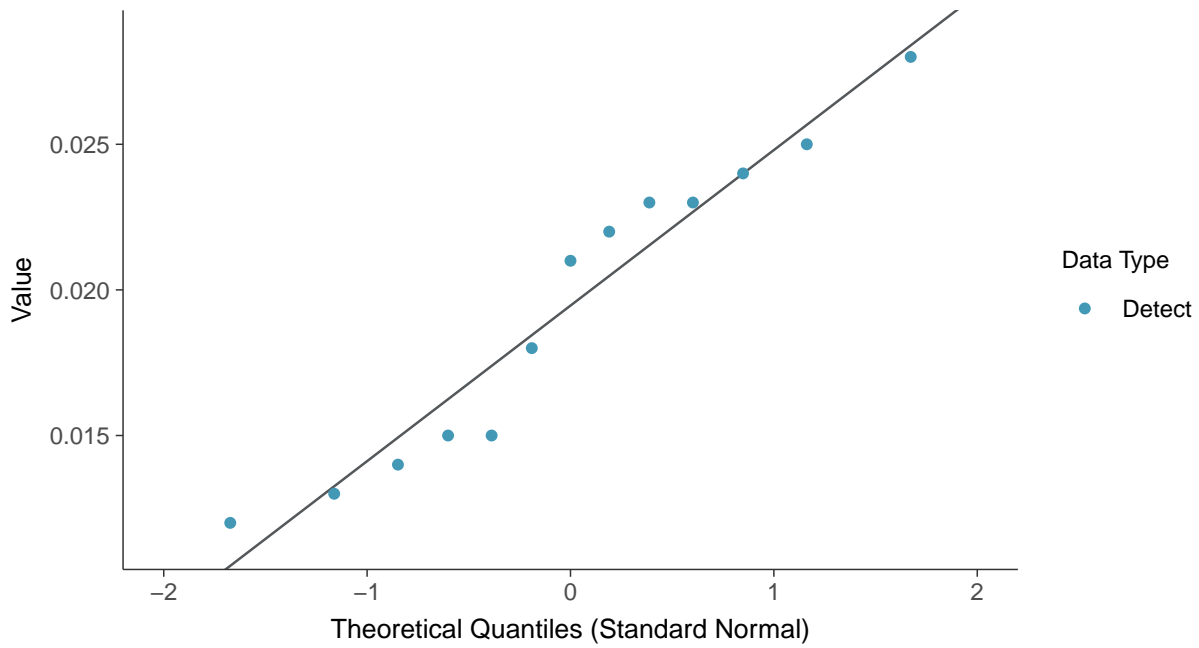
Barium, MW-18 (mg/L)





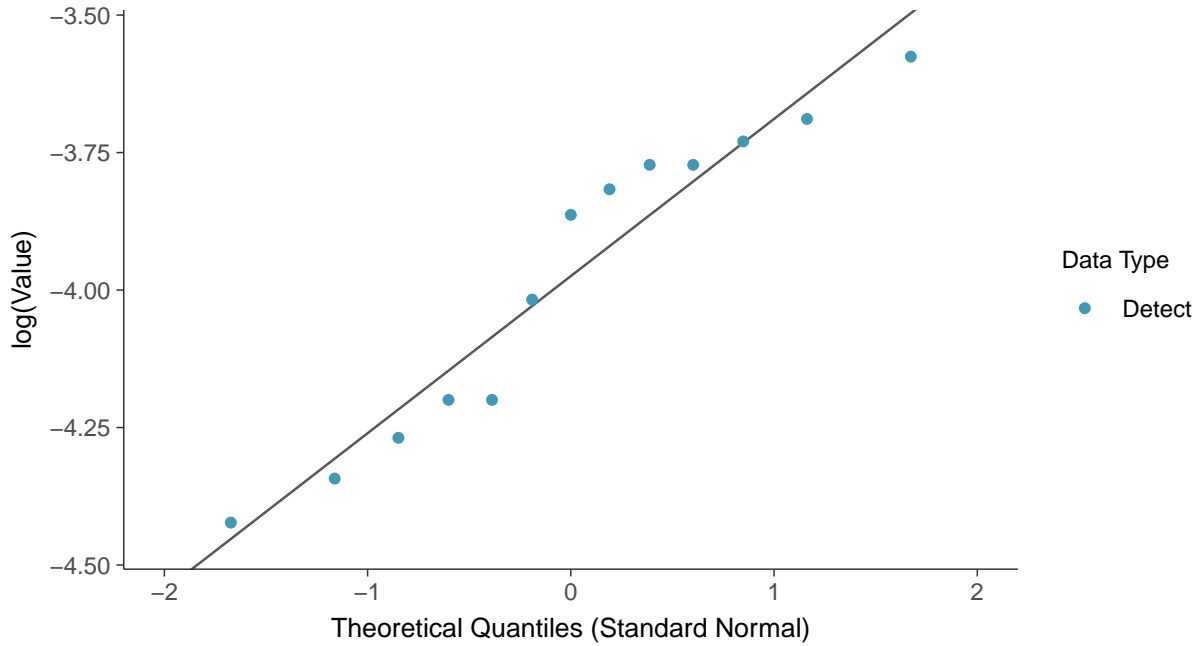
Normal Q-Q plot

Barium, MW-18 (mg/L)



Lognormal Q-Q plot

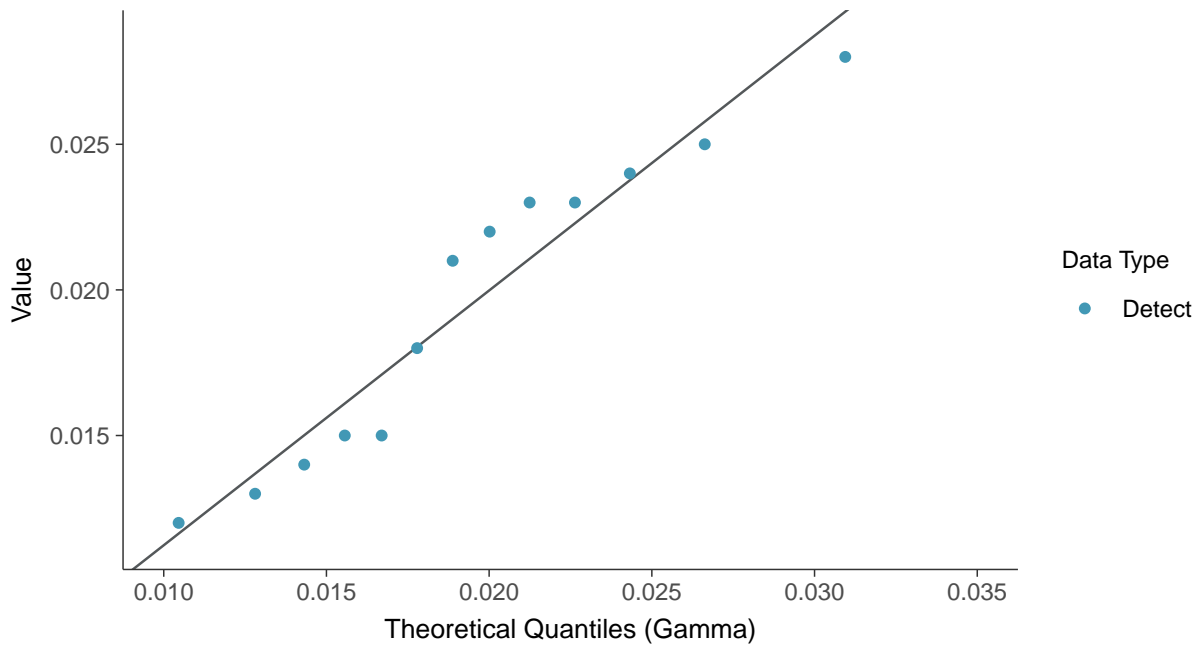
Barium, MW-18 (mg/L)





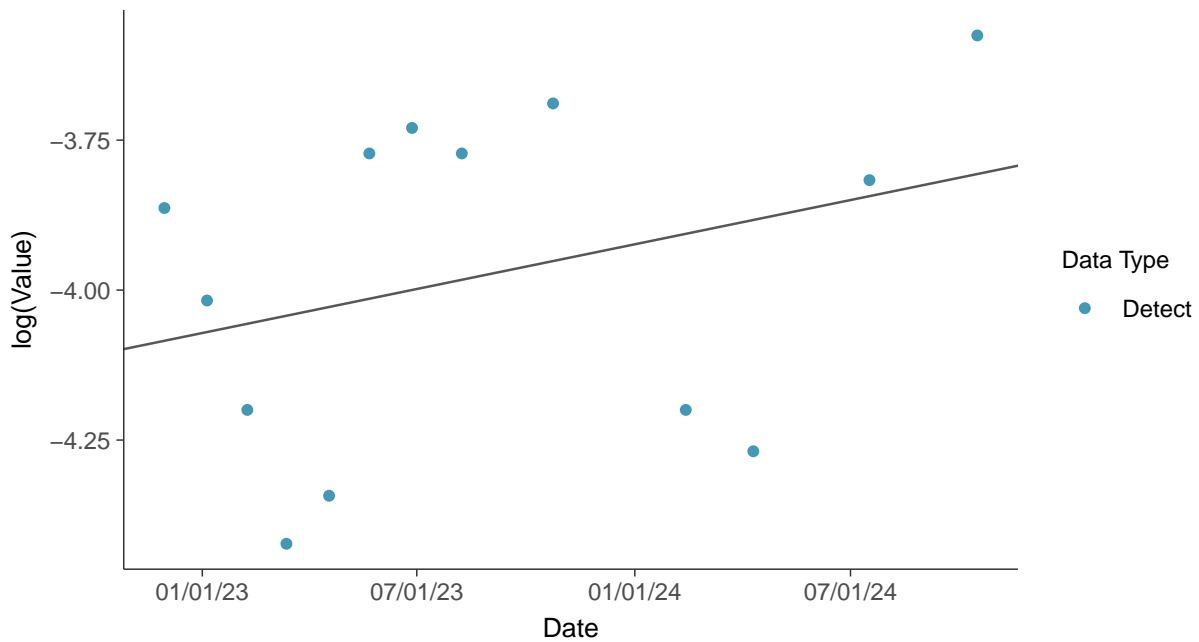
Gamma Q-Q plot

Barium, MW-18 (mg/L)



Trend Regression: Lognormal MLE

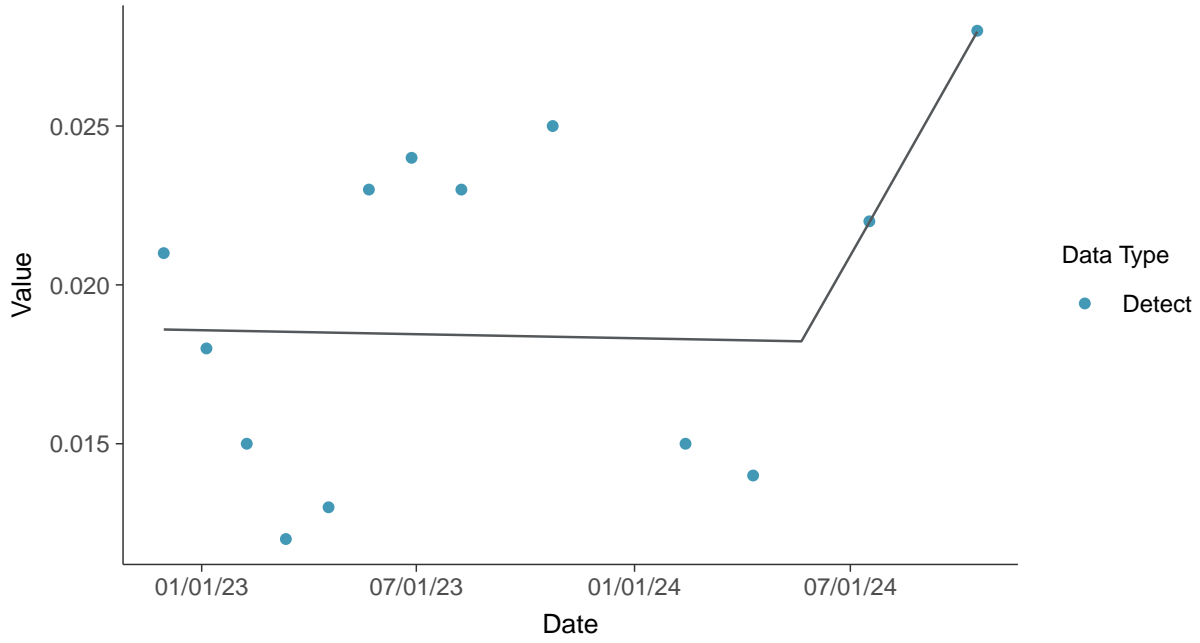
Barium, MW-18 (mg/L)





Trend Regression: Piecewise Linear-Linear

Barium, MW-18 (mg/L)



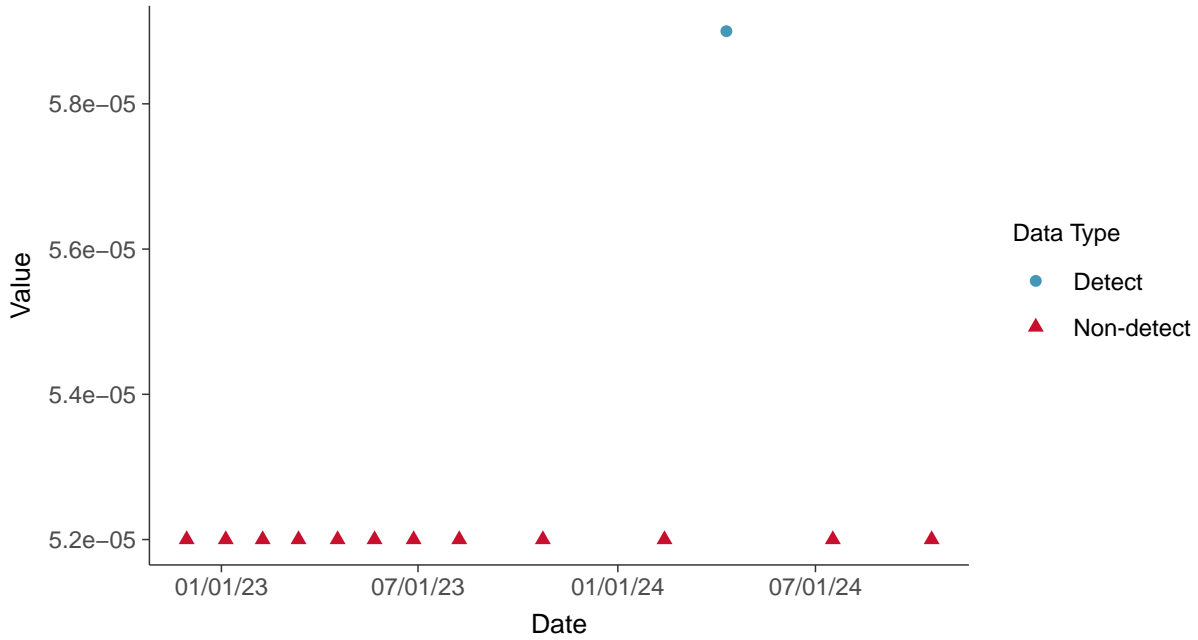


Appendix IV: Beryllium, MW-18

ID: 1_28_1_5_104

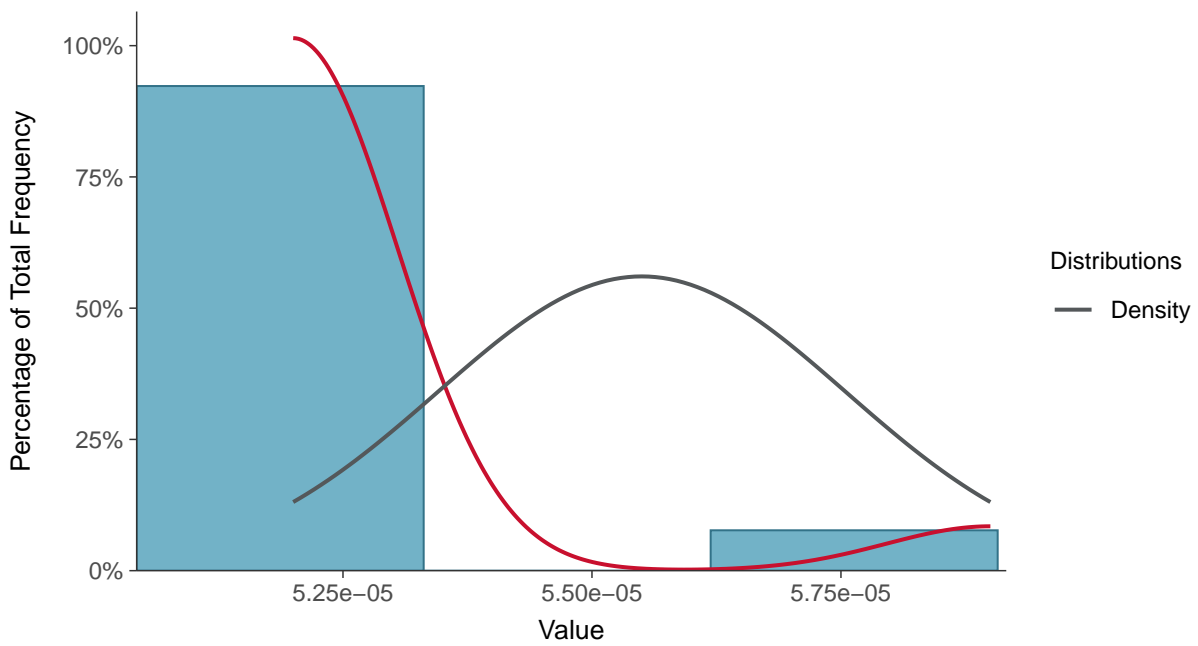
Scatter Plot

Beryllium, MW-18 (mg/L)



Histogram

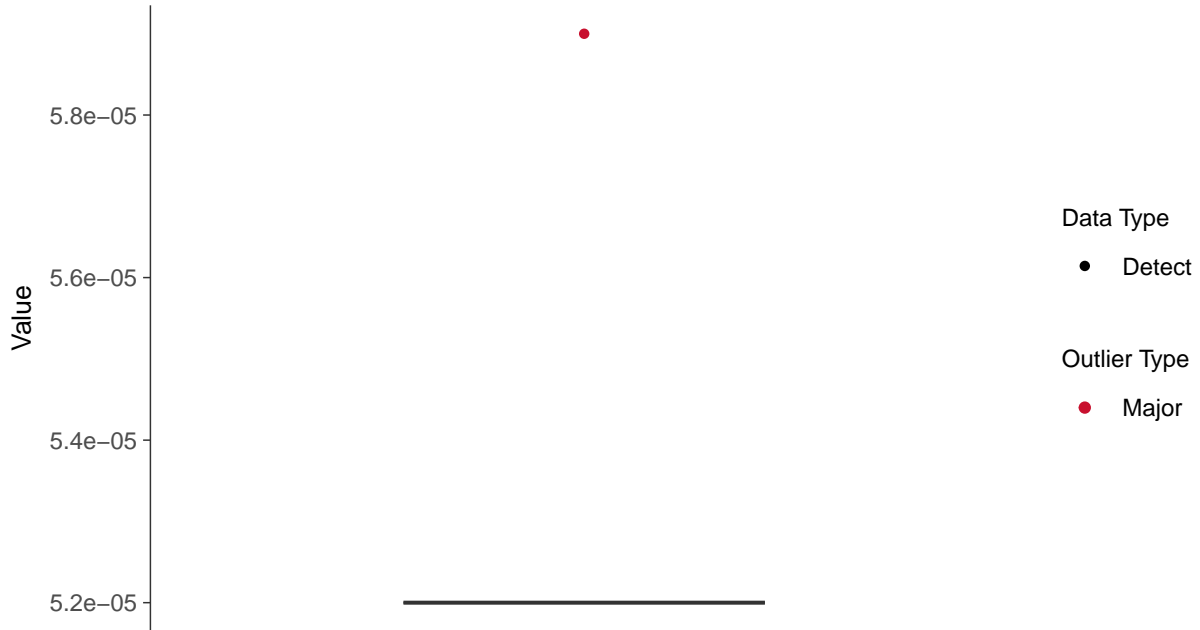
Beryllium, MW-18 (mg/L)





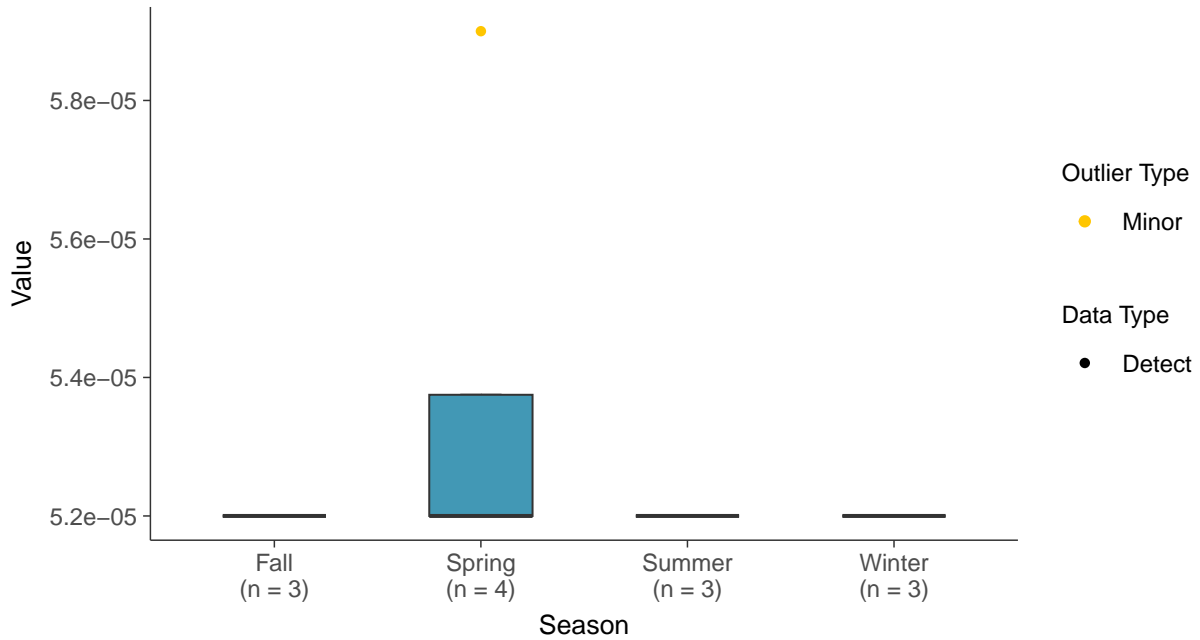
Boxplot

Beryllium, MW-18 (mg/L)



Boxplot by Season

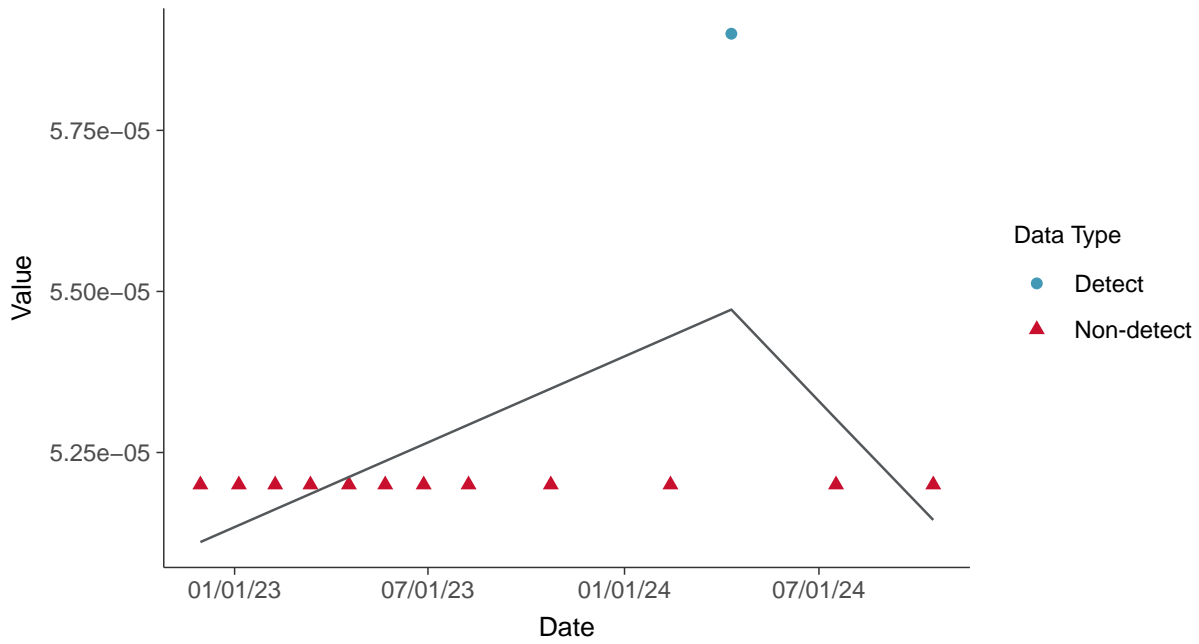
Beryllium, MW-18 (mg/L)





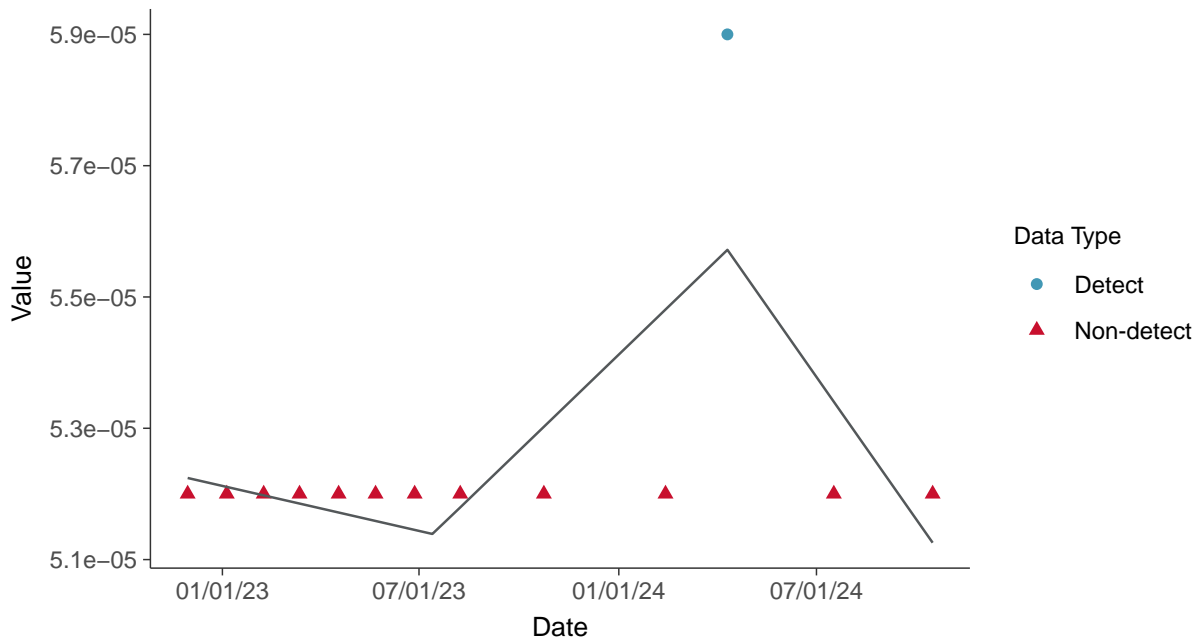
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-18 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

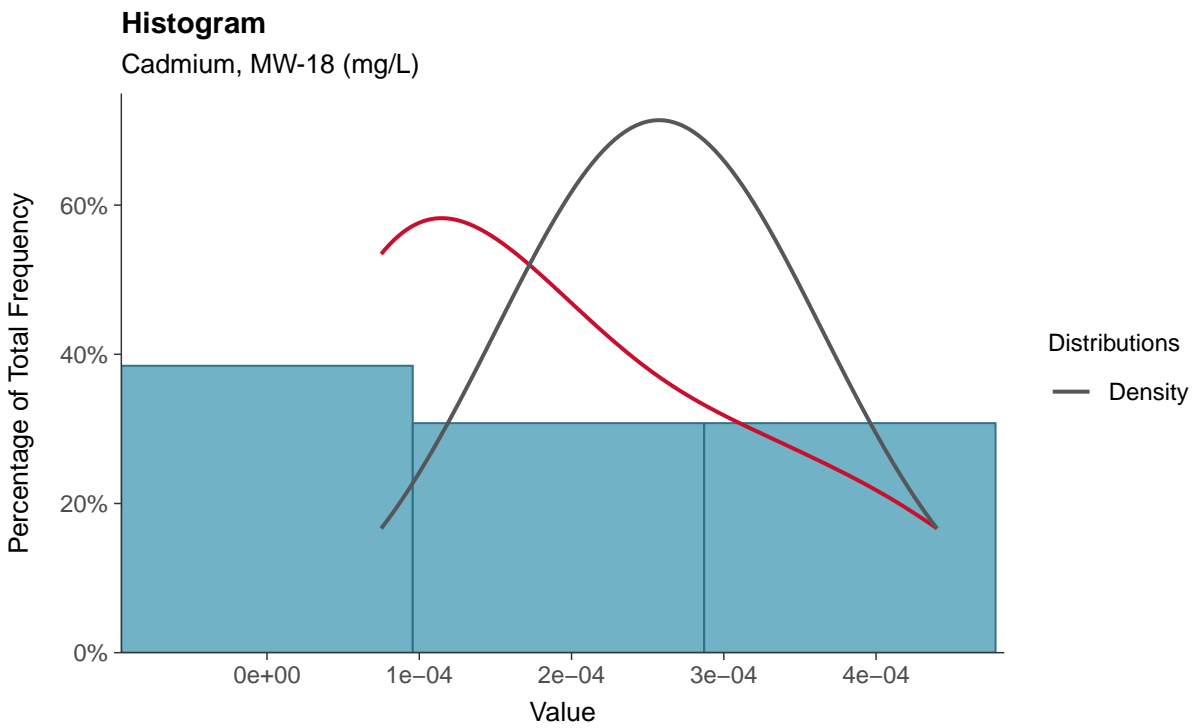
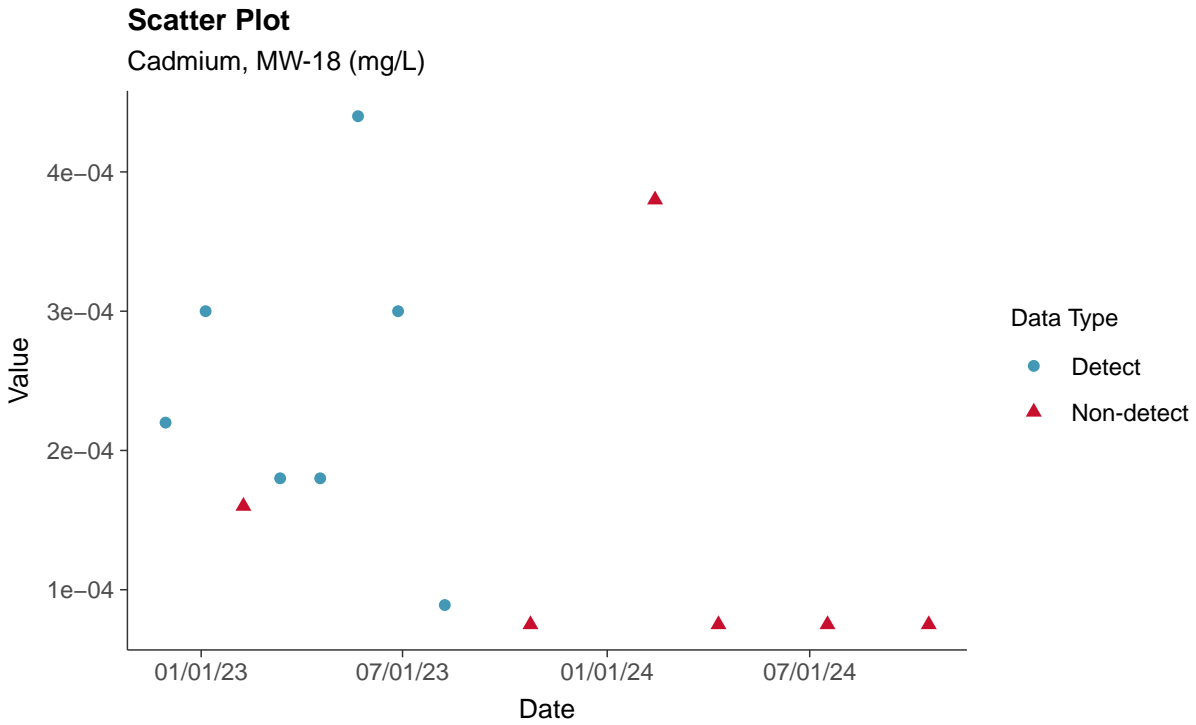
Beryllium, MW-18 (mg/L)





Appendix IV: Cadmium, MW-18

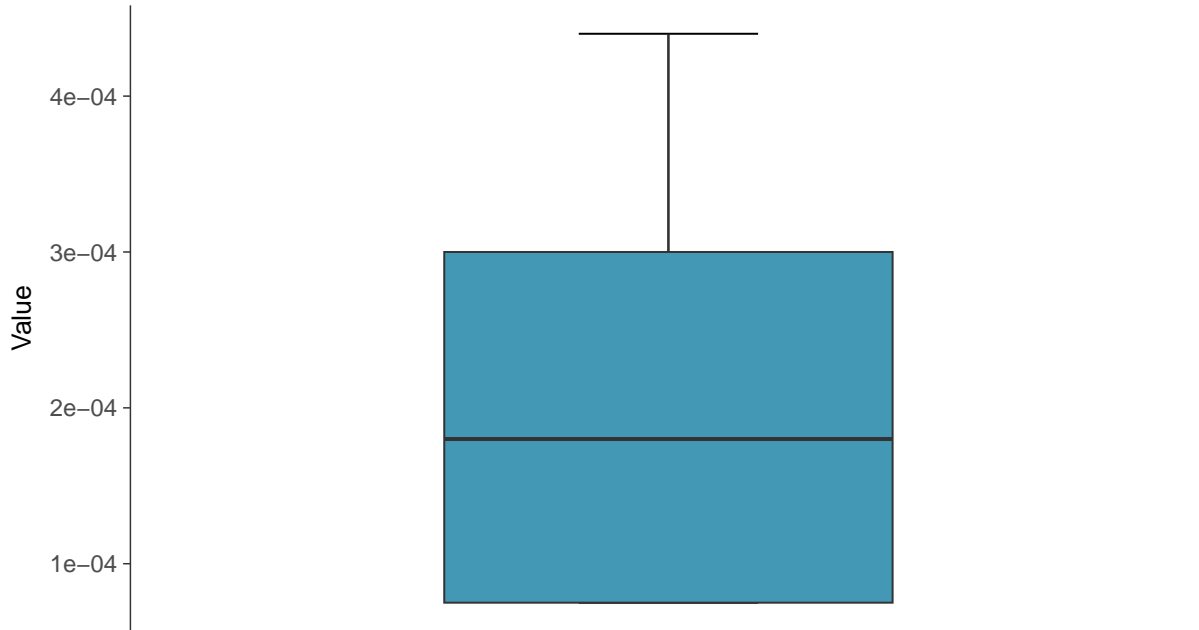
ID: 1_28_1_5_106





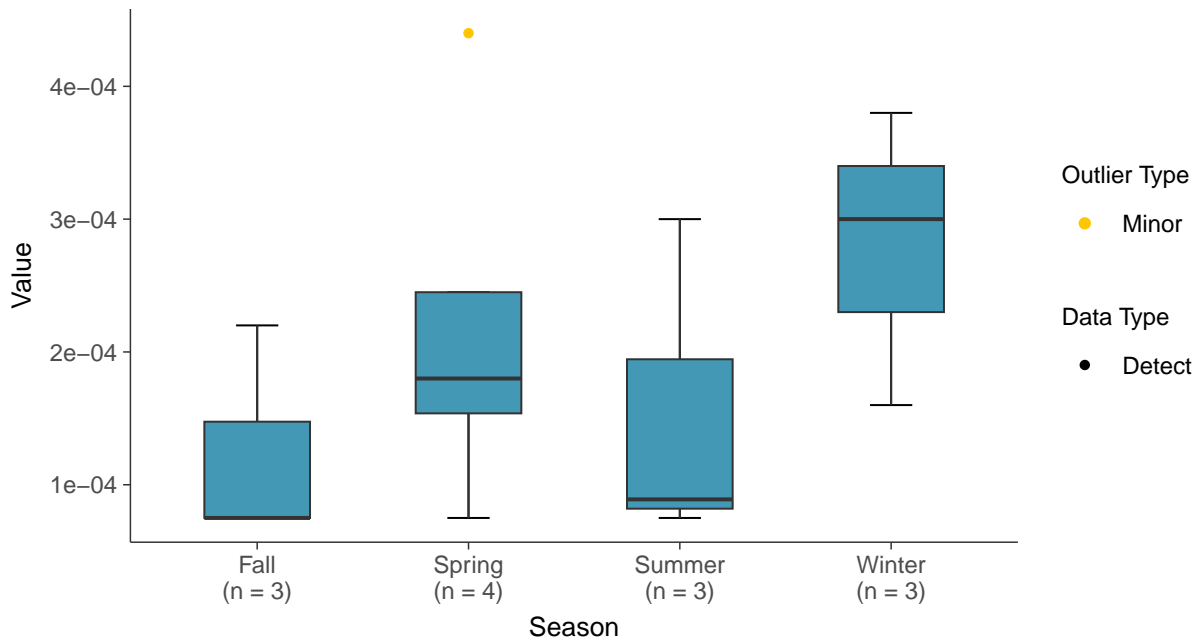
Boxplot

Cadmium, MW-18 (mg/L)



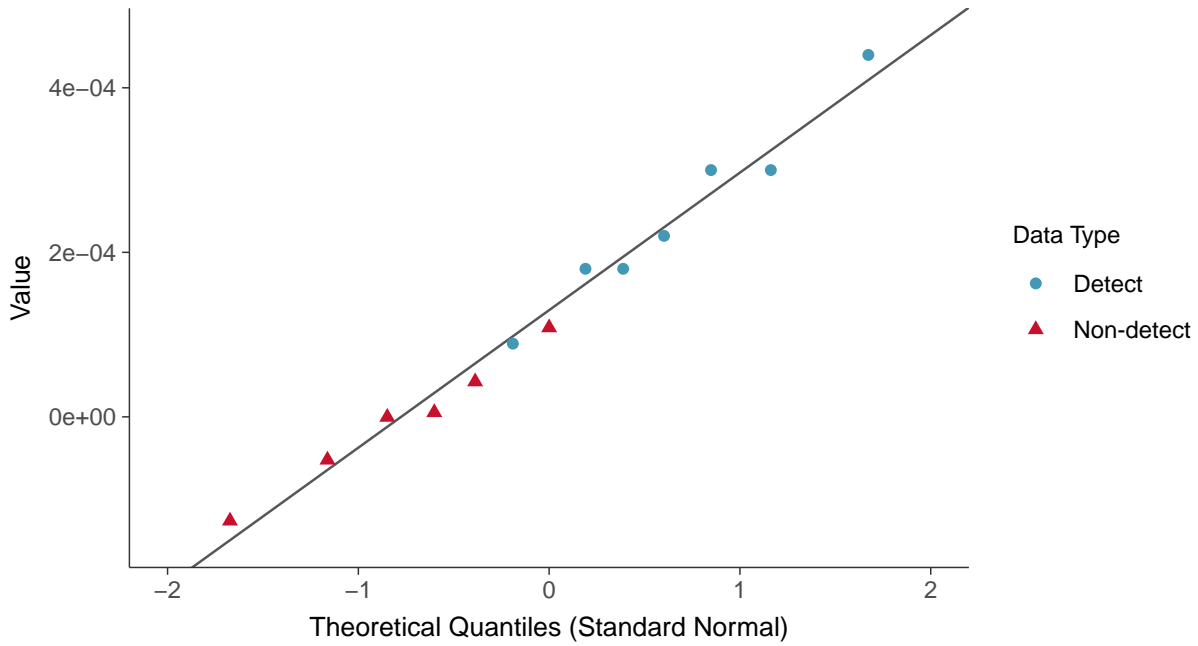
Boxplot by Season

Cadmium, MW-18 (mg/L)

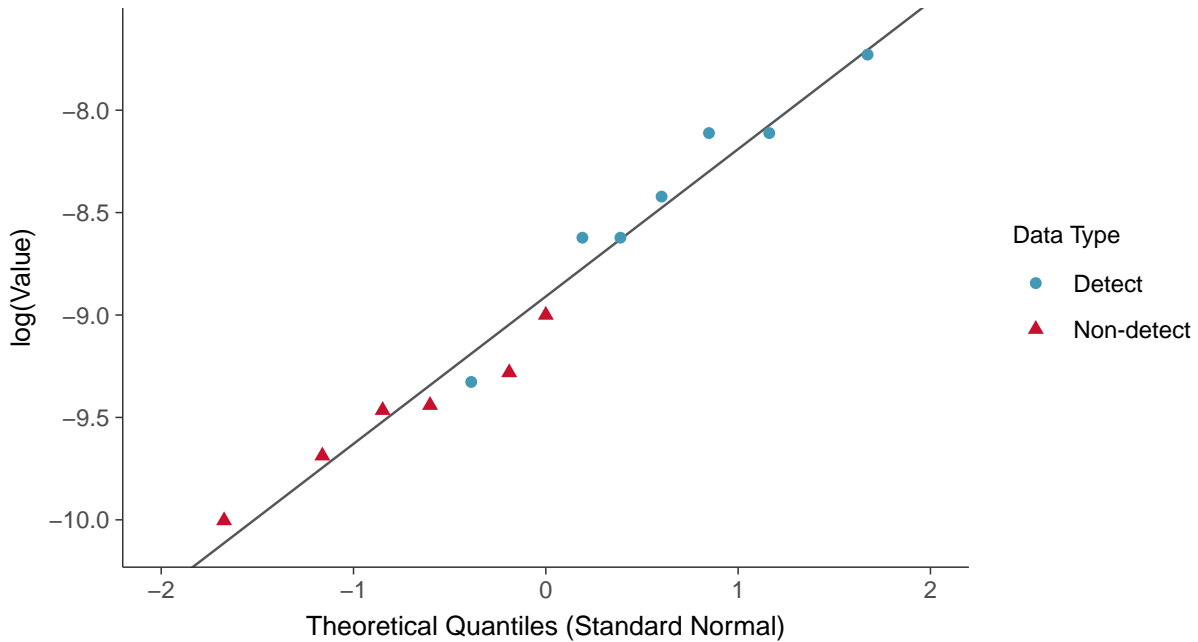




Normal Q-Q plot using ROS Imputed Estimates
Cadmium, MW-18 (mg/L)

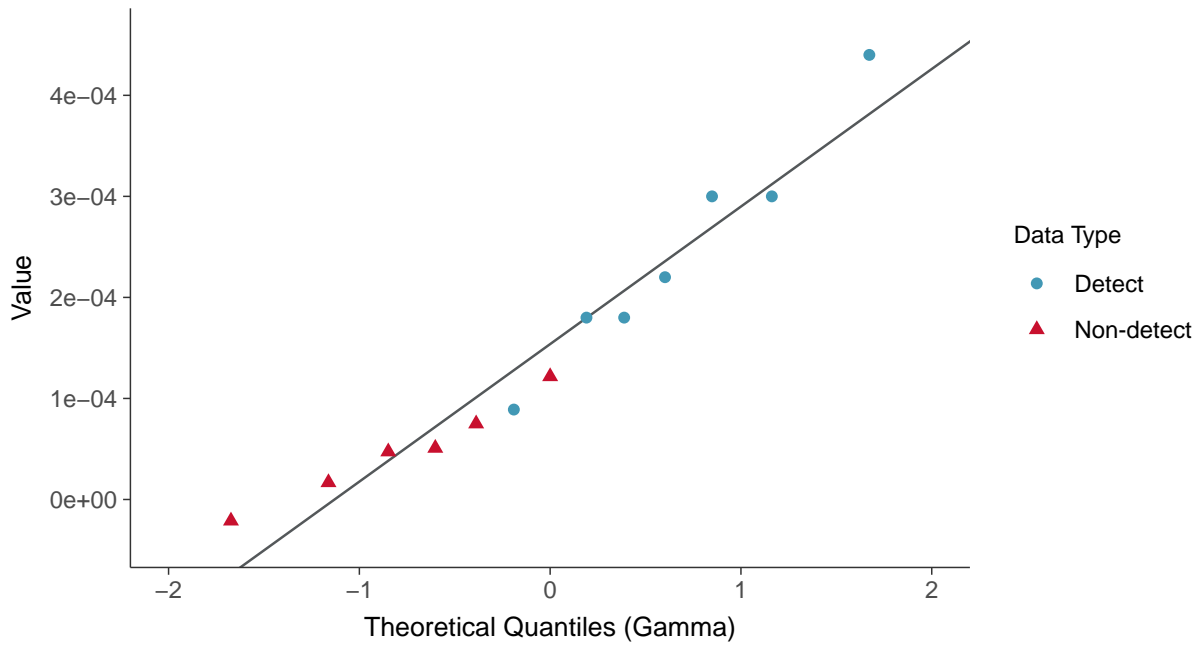


Lognormal Q-Q plot using ROS Imputed Estimates
Cadmium, MW-18 (mg/L)

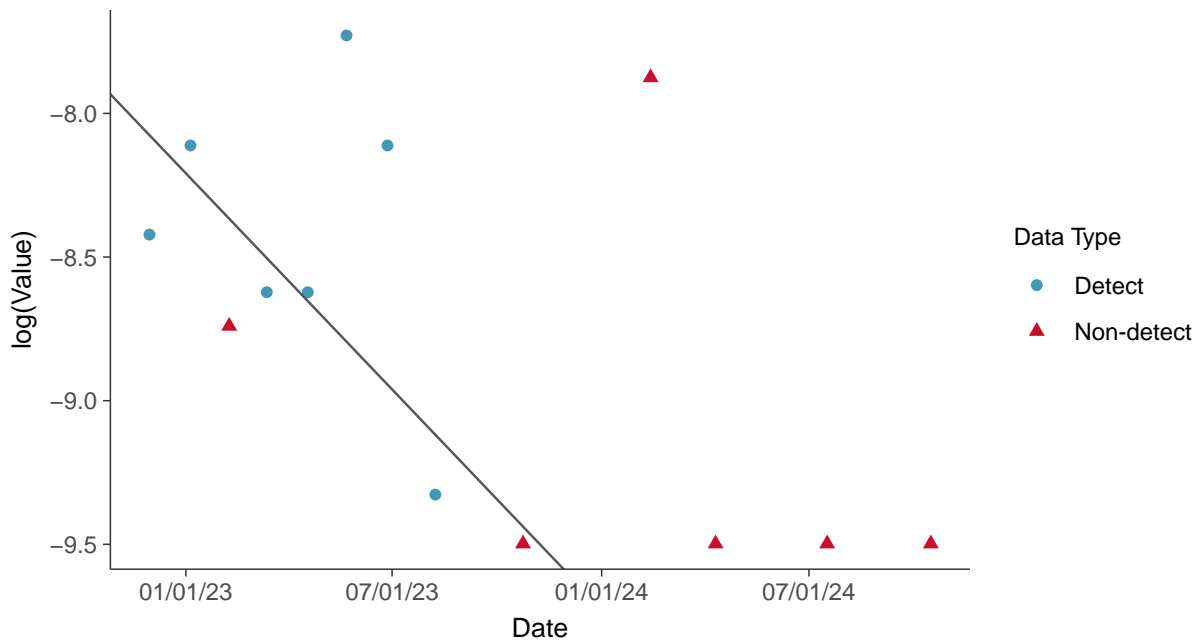




Gamma Q-Q plot using ROS Imputed Estimates
Cadmium, MW-18 (mg/L)

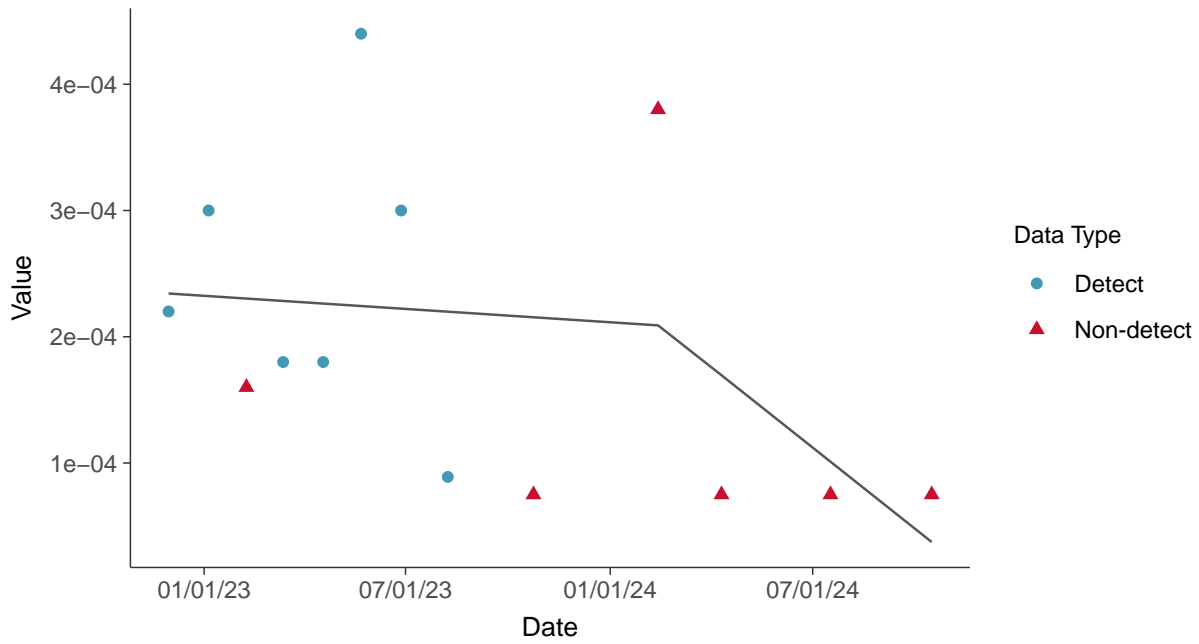


Trend Regression: Lognormal MLE
Cadmium, MW-18 (mg/L)

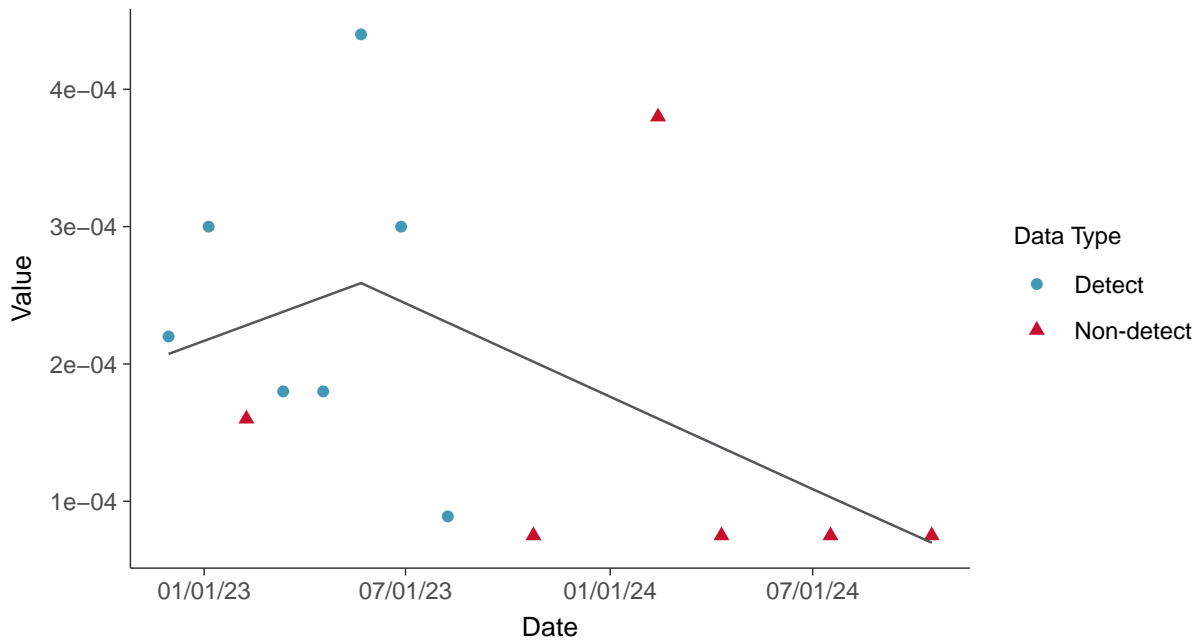




Trend Regression: Piecewise Linear-Linear
Cadmium, MW-18 (mg/L)



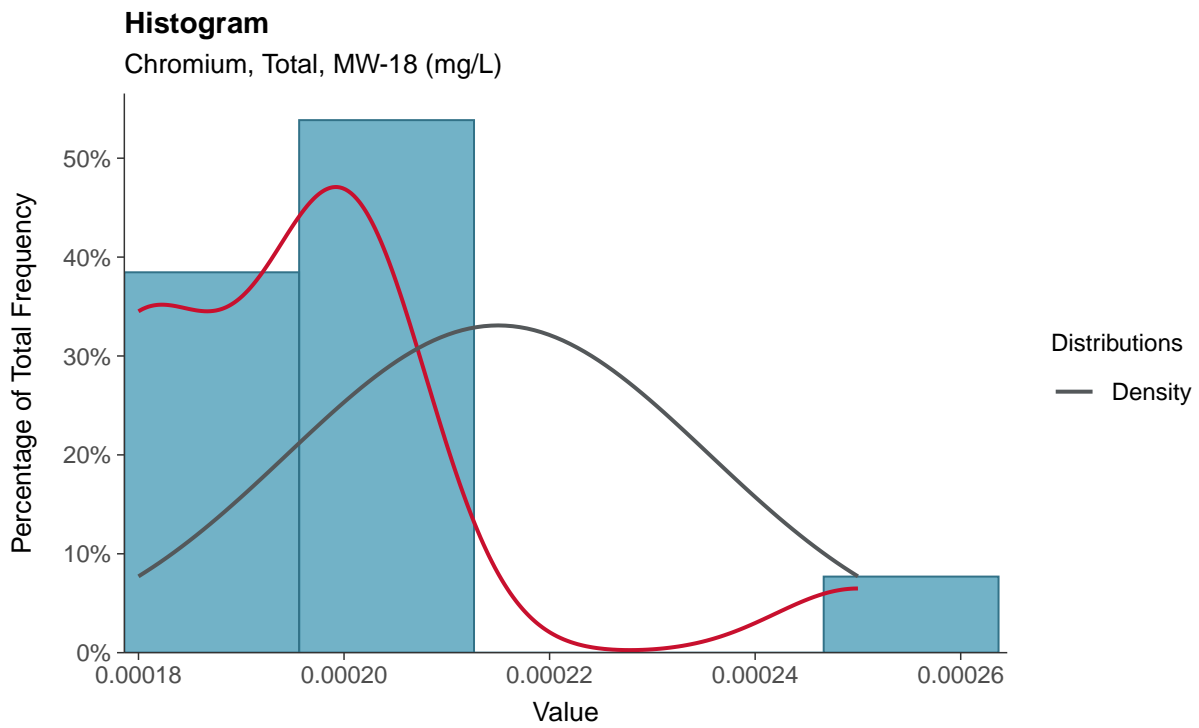
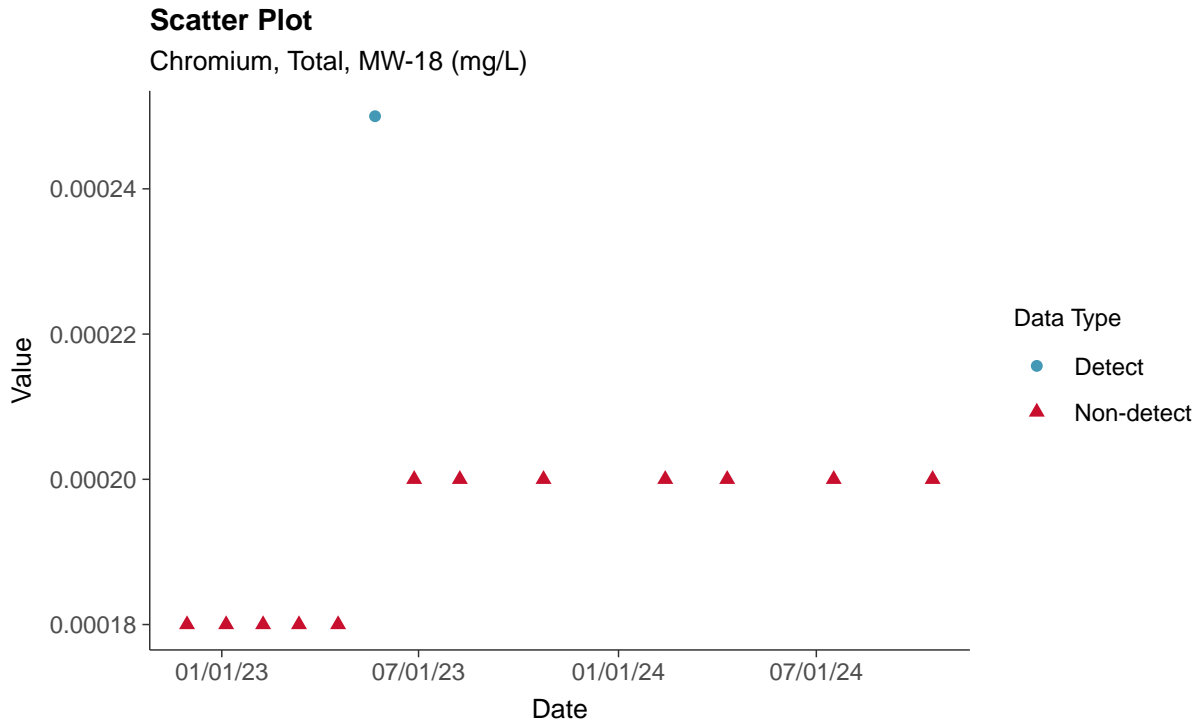
Trend Regression: Piecewise Linear-Linear-Linear
Cadmium, MW-18 (mg/L)





Appendix IV: Chromium, Total, MW-18

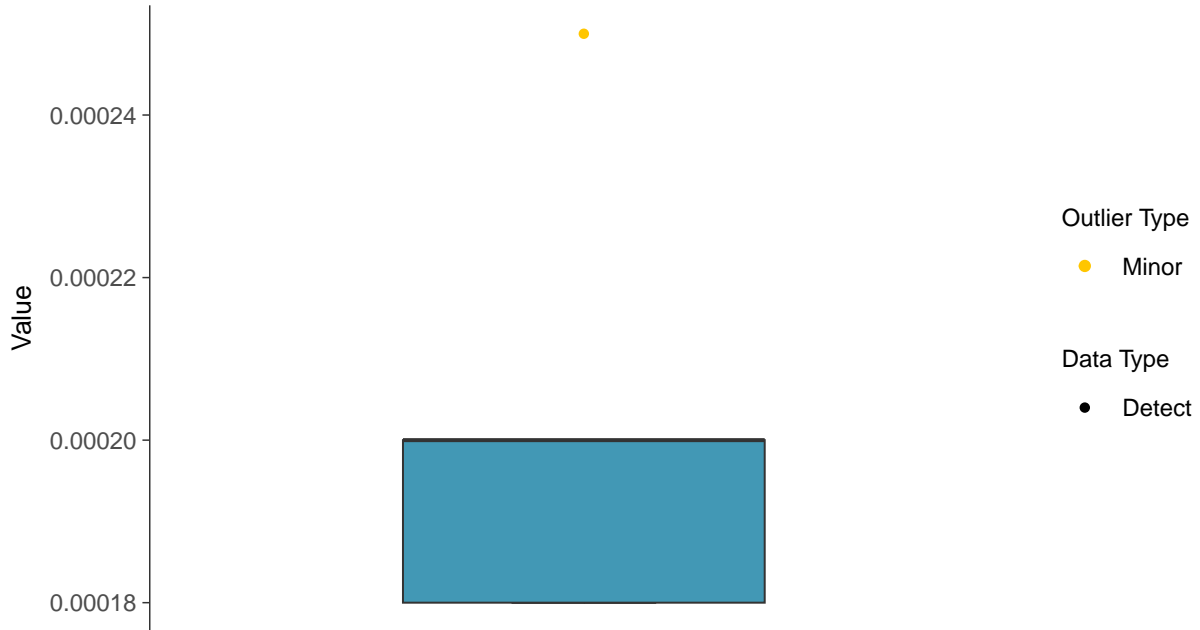
ID: 1_28_1_5_109





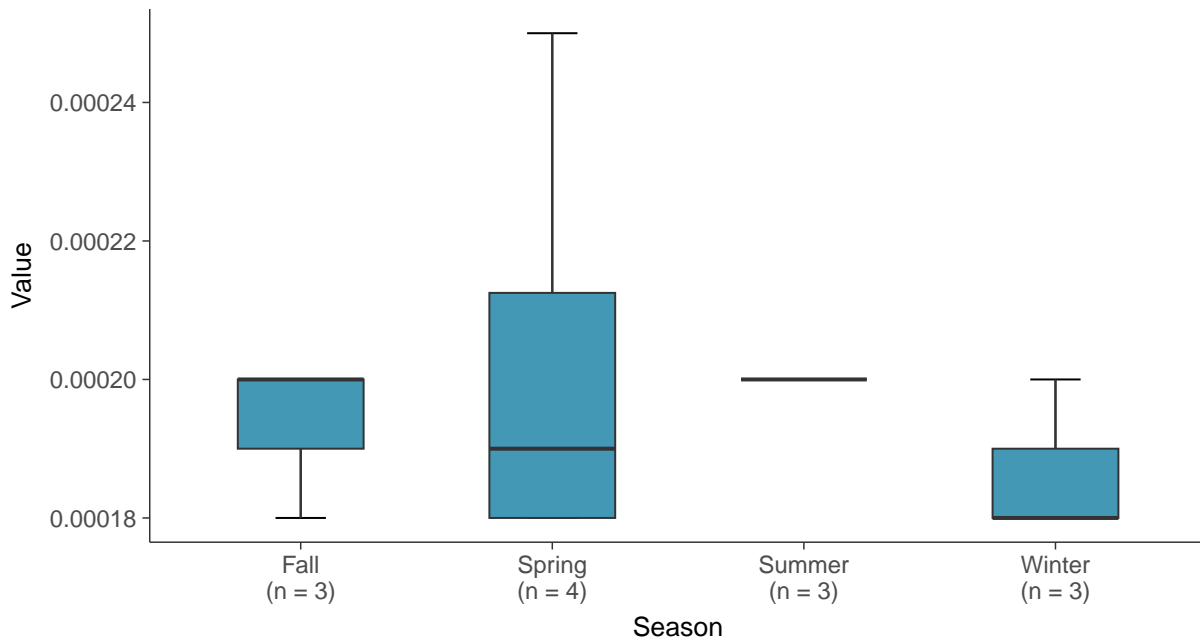
Boxplot

Chromium, Total, MW-18 (mg/L)



Boxplot by Season

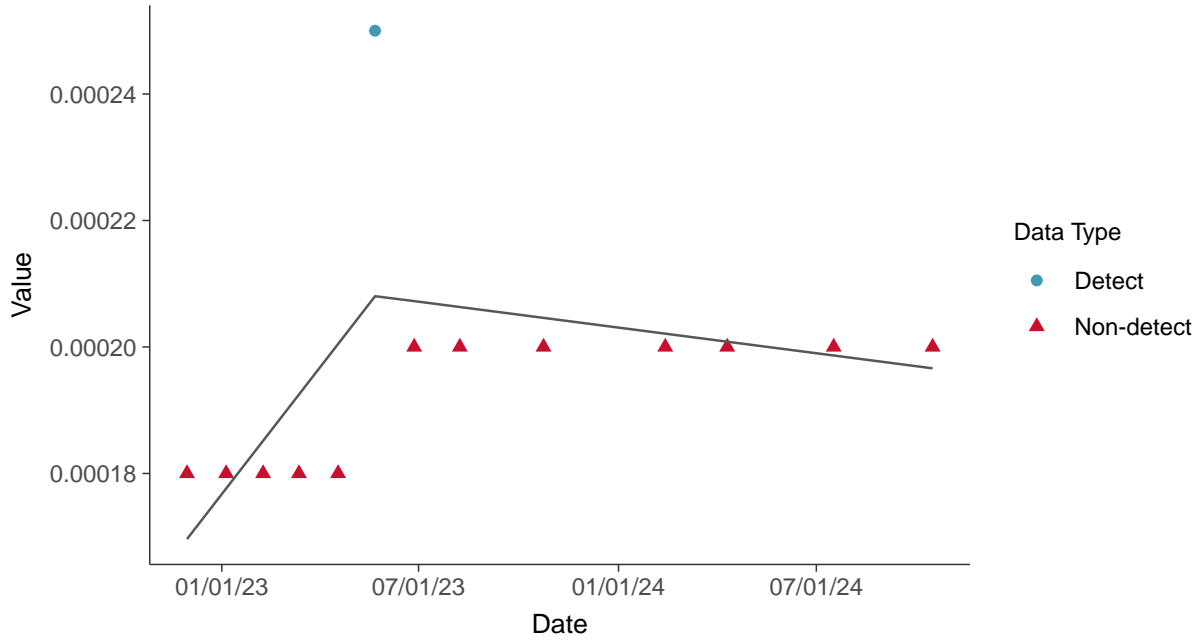
Chromium, Total, MW-18 (mg/L)





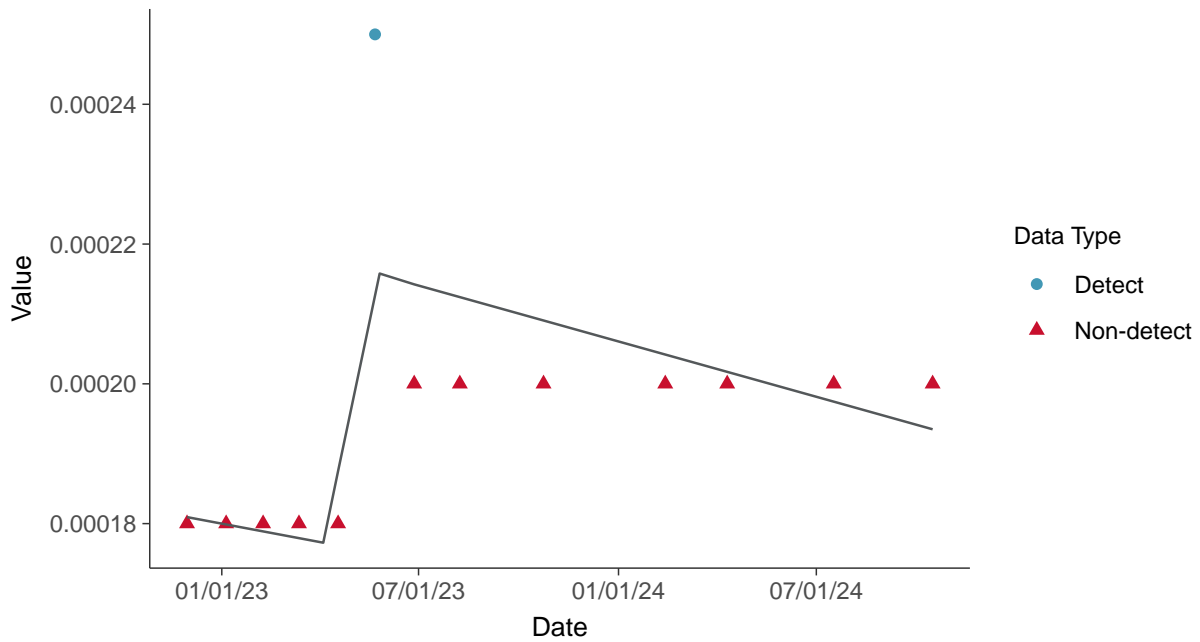
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-18 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

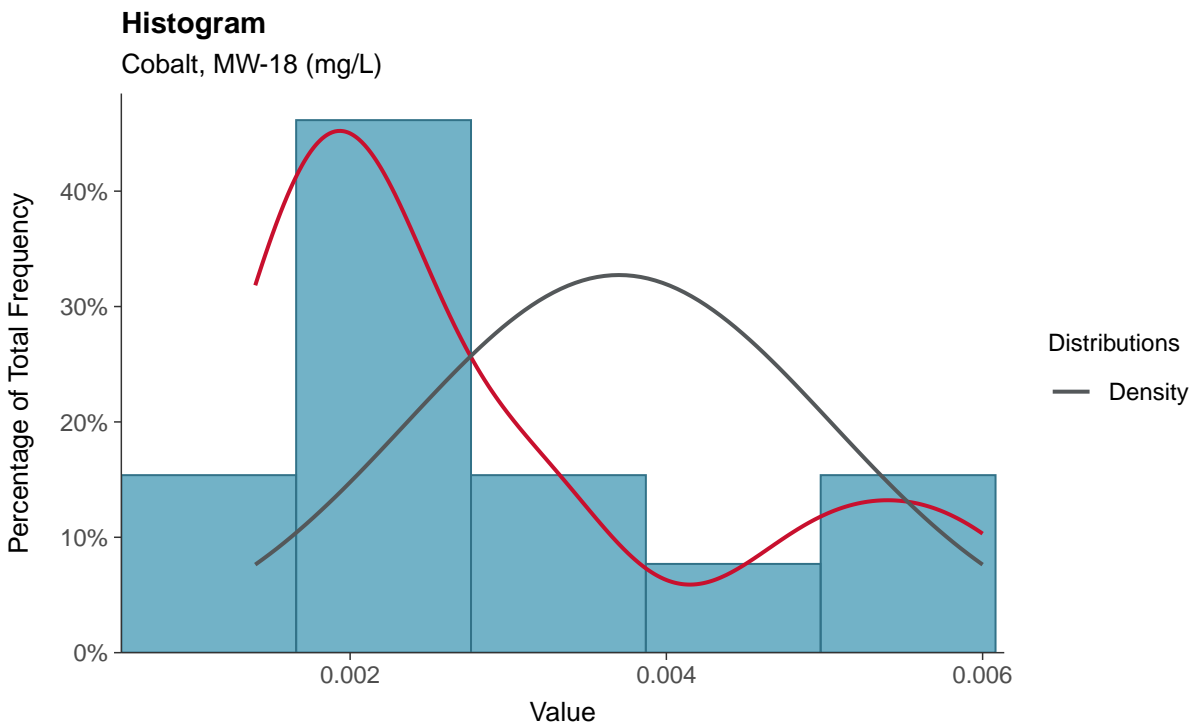
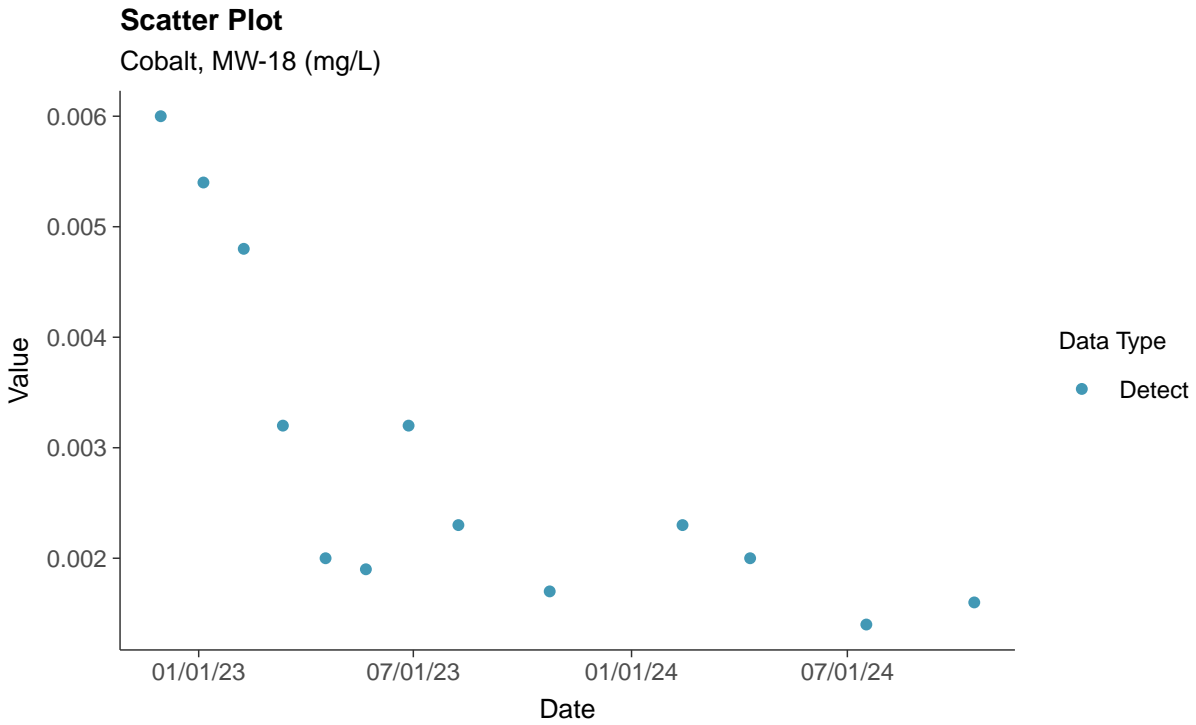
Chromium, Total, MW-18 (mg/L)





Appendix IV: Cobalt, MW-18

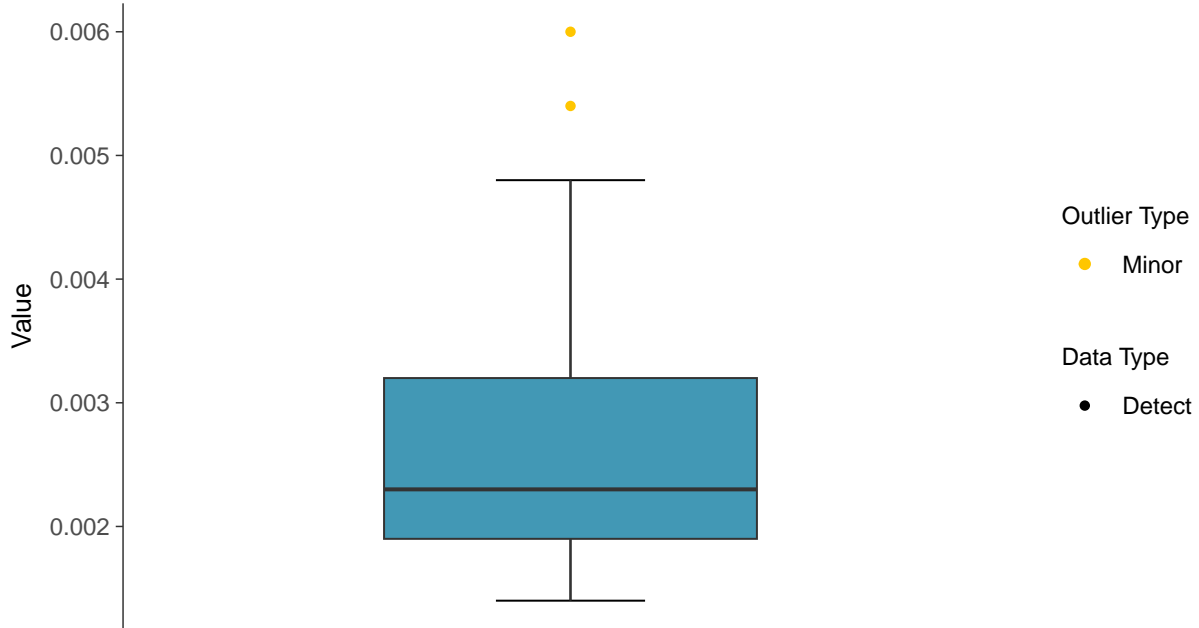
ID: 1_28_1_5_110





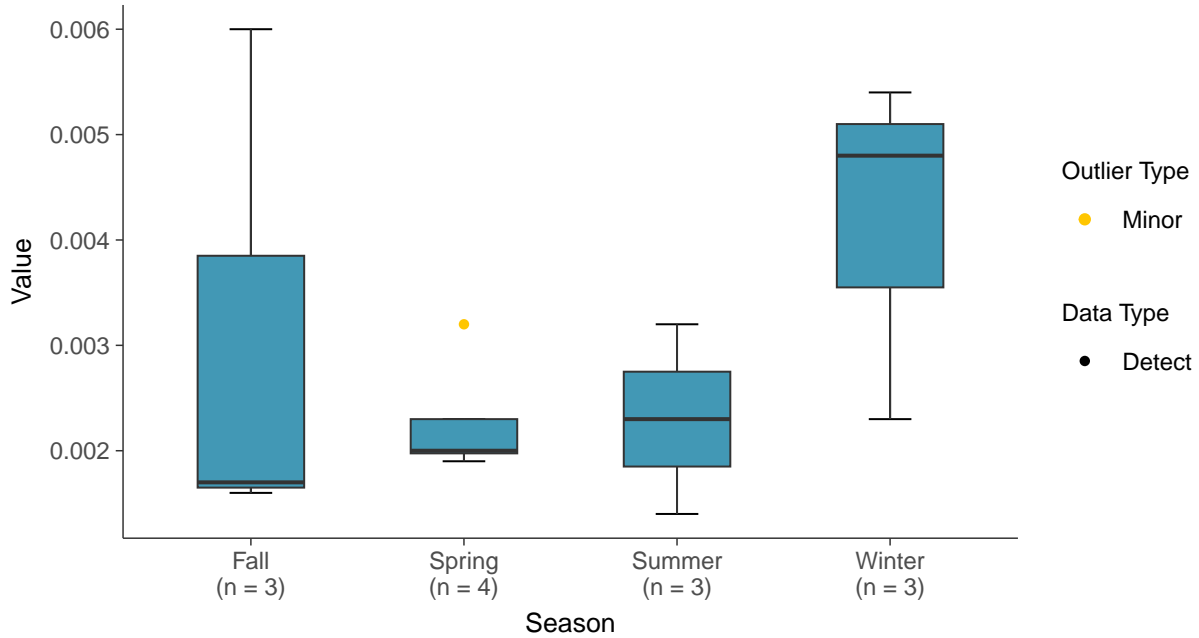
Boxplot

Cobalt, MW-18 (mg/L)



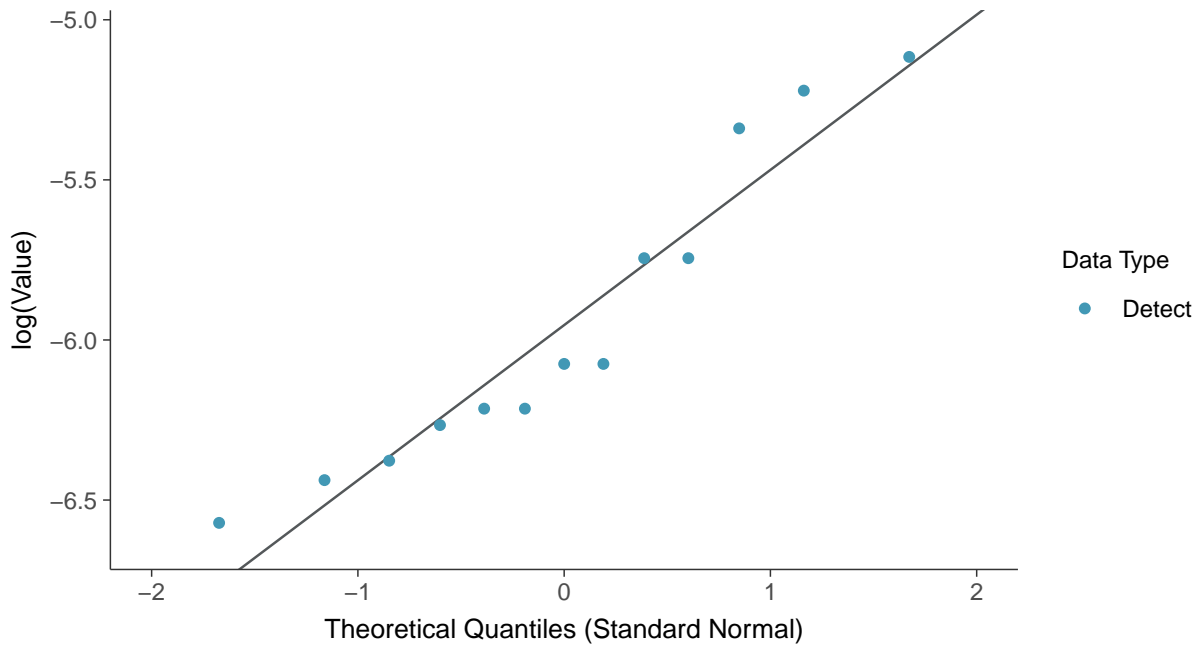
Boxplot by Season

Cobalt, MW-18 (mg/L)

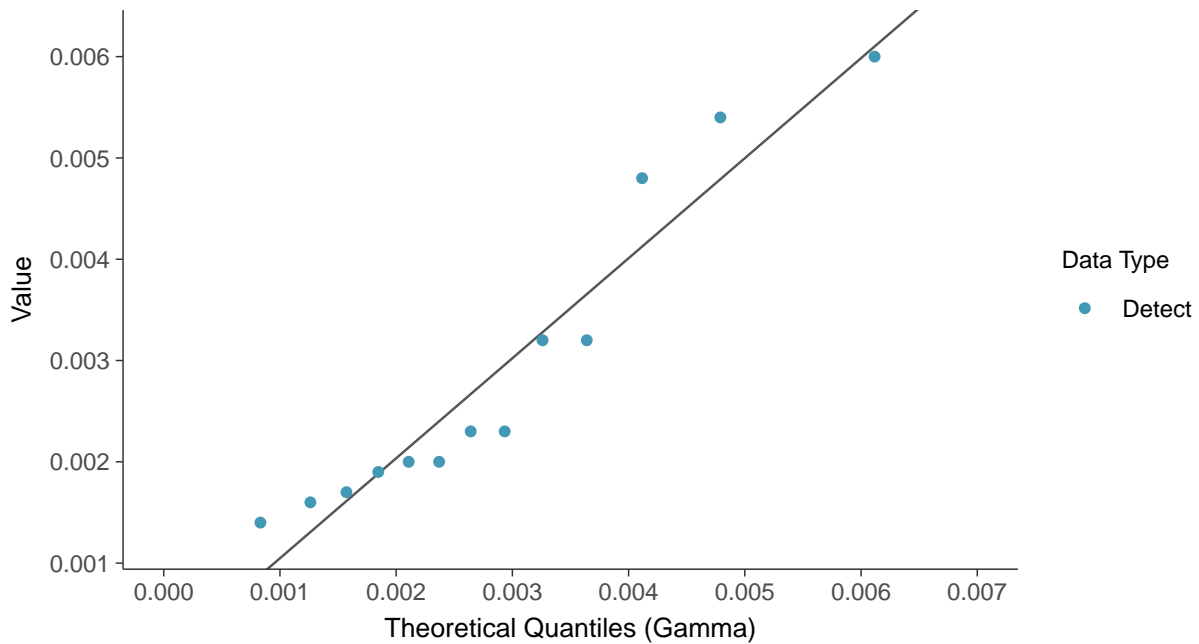




Lognormal Q-Q plot
Cobalt, MW-18 (mg/L)



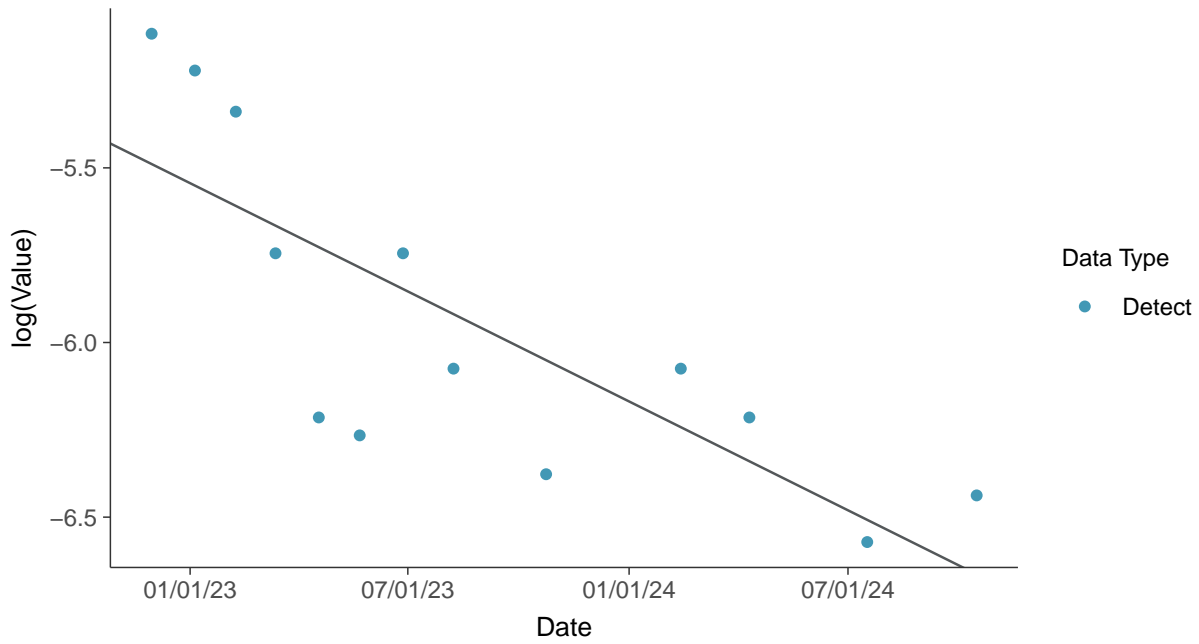
Gamma Q-Q plot
Cobalt, MW-18 (mg/L)





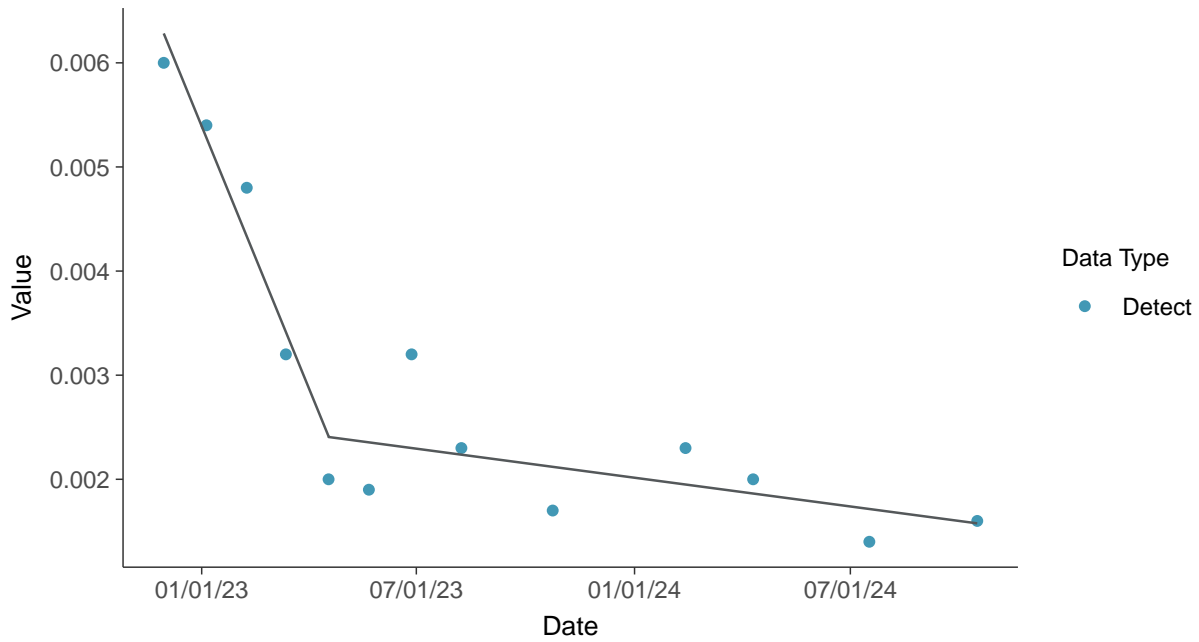
Trend Regression: Lognormal MLE

Cobalt, MW-18 (mg/L)



Trend Regression: Piecewise Linear-Linear

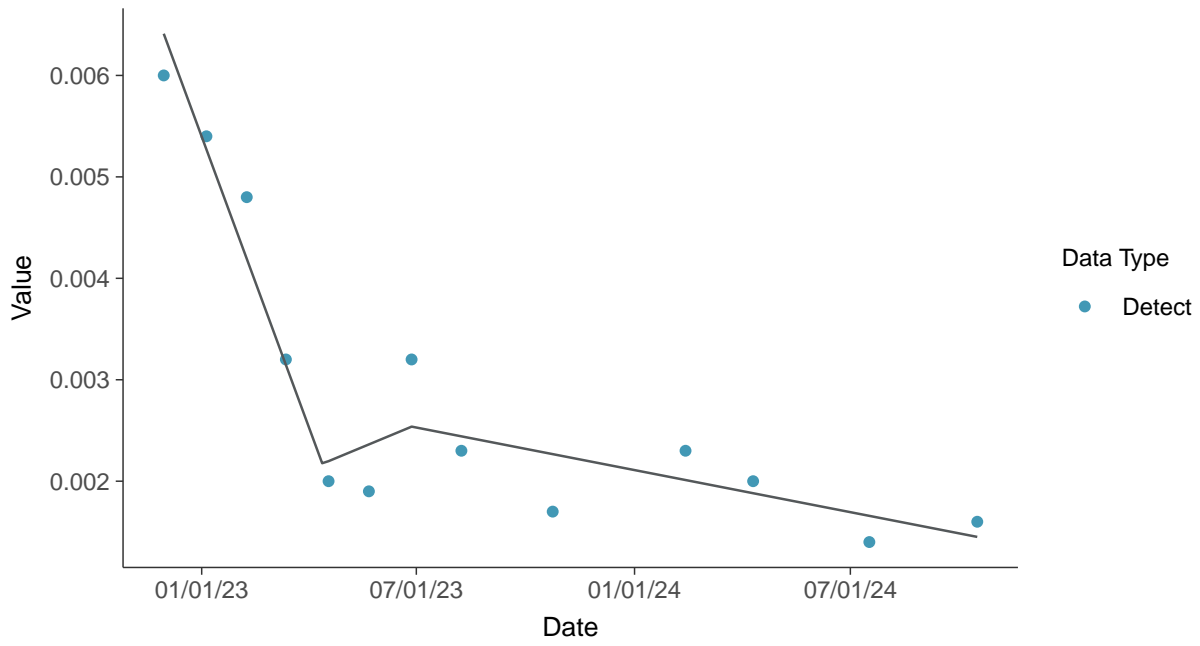
Cobalt, MW-18 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

Cobalt, MW-18 (mg/L)



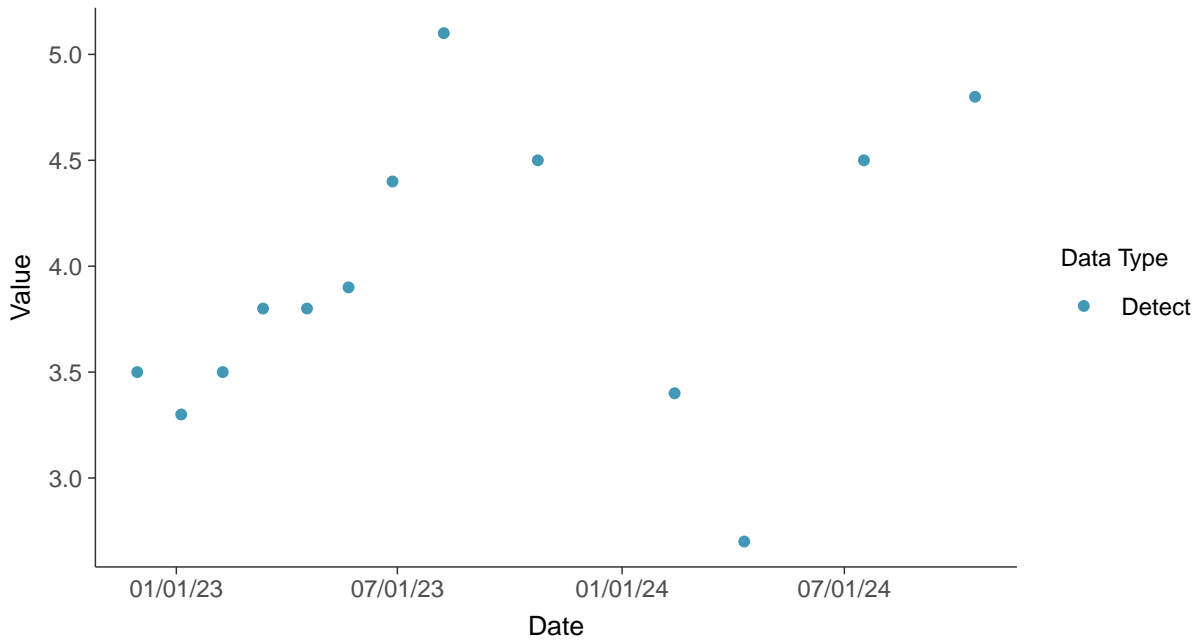


Appendix IV: Fluoride (App IV), MW-18

ID: 1_28_1_5_113

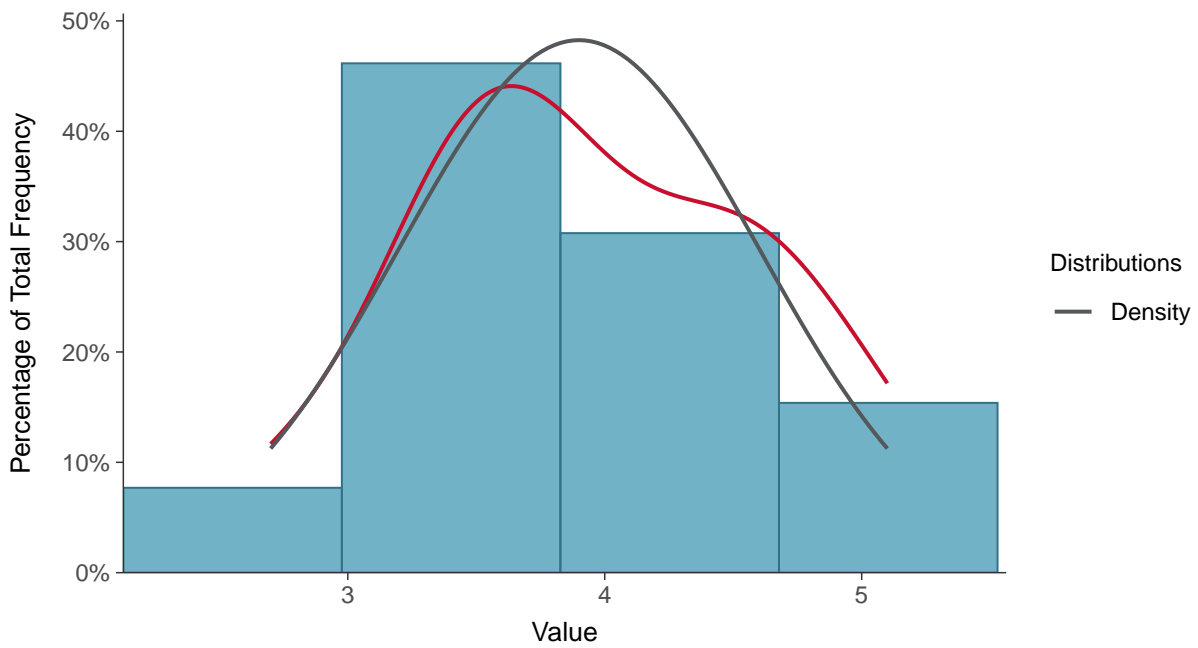
Scatter Plot

Fluoride (App IV), MW-18 (mg/L)



Histogram

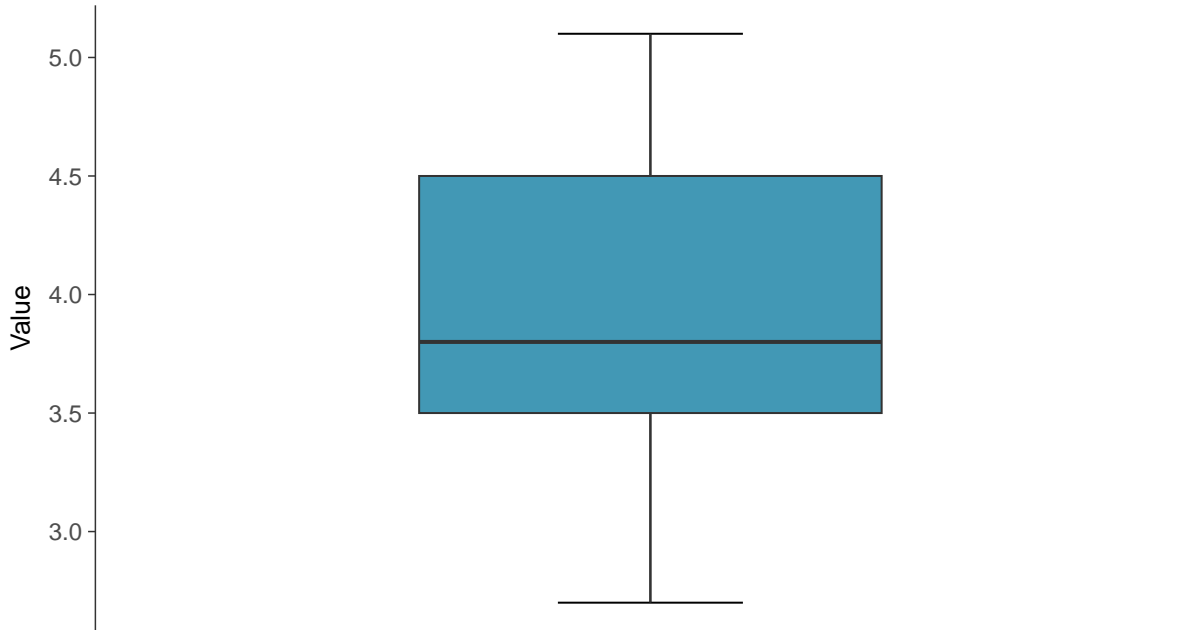
Fluoride (App IV), MW-18 (mg/L)





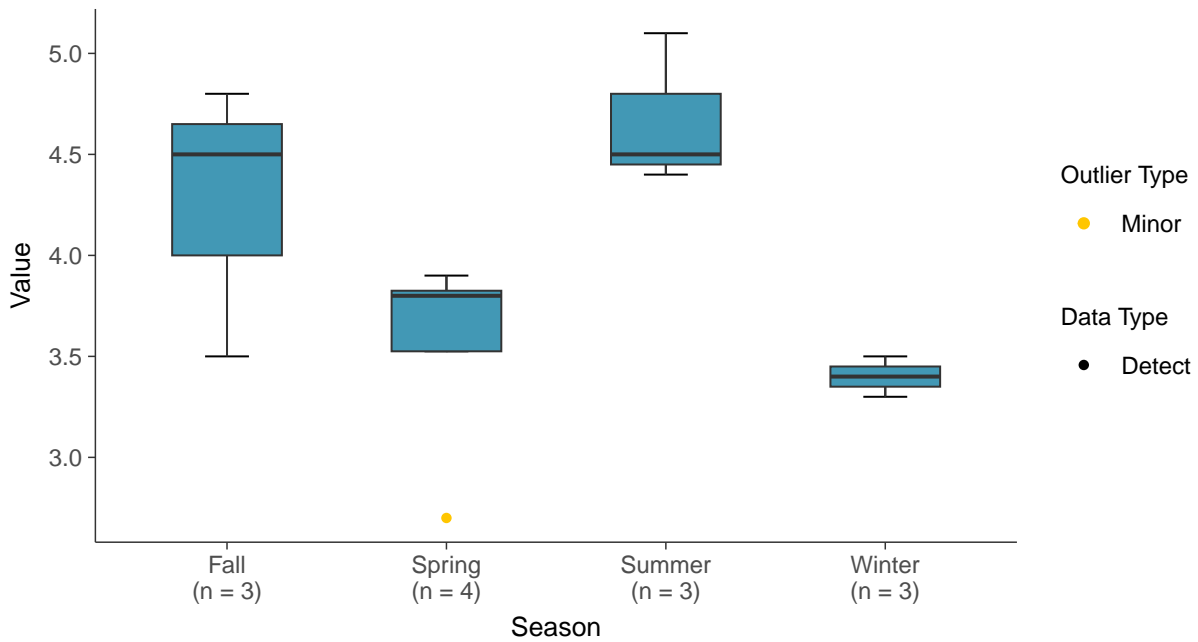
Boxplot

Fluoride (App IV), MW-18 (mg/L)



Boxplot by Season

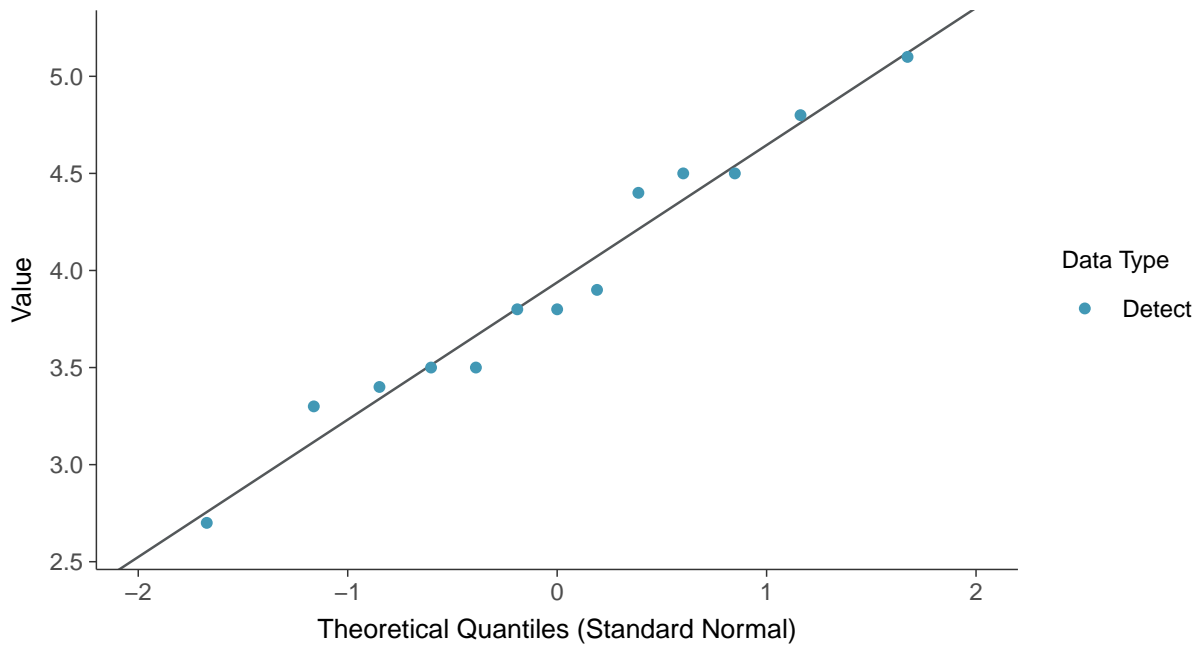
Fluoride (App IV), MW-18 (mg/L)





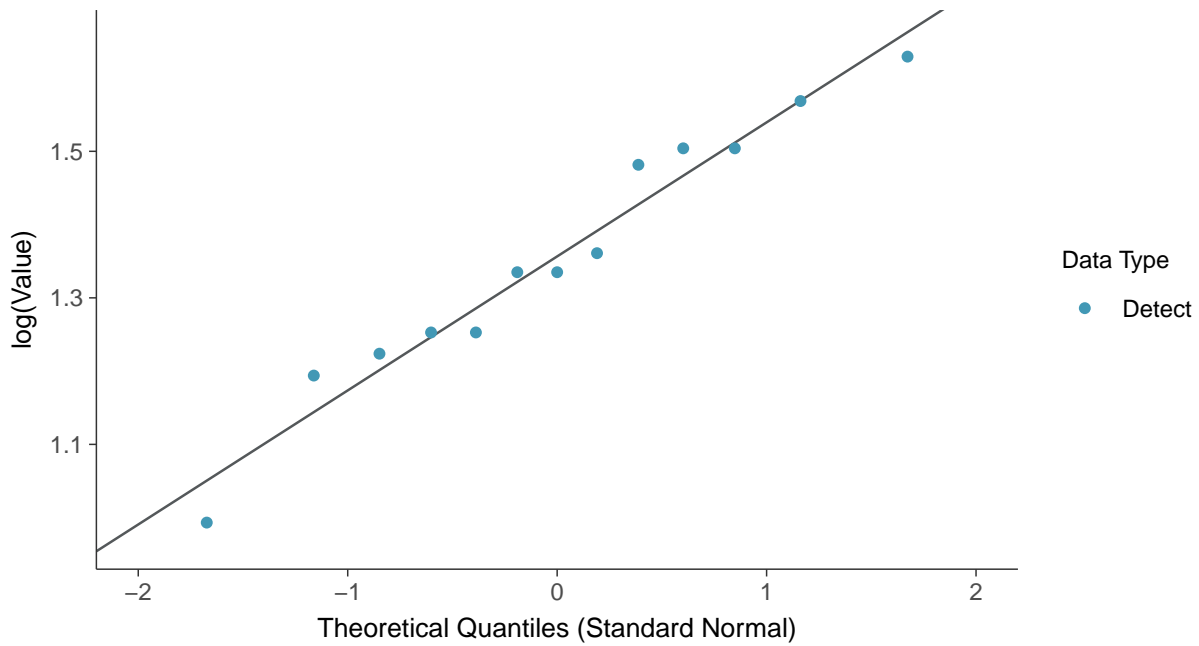
Normal Q-Q plot

Fluoride (App IV), MW-18 (mg/L)



Lognormal Q-Q plot

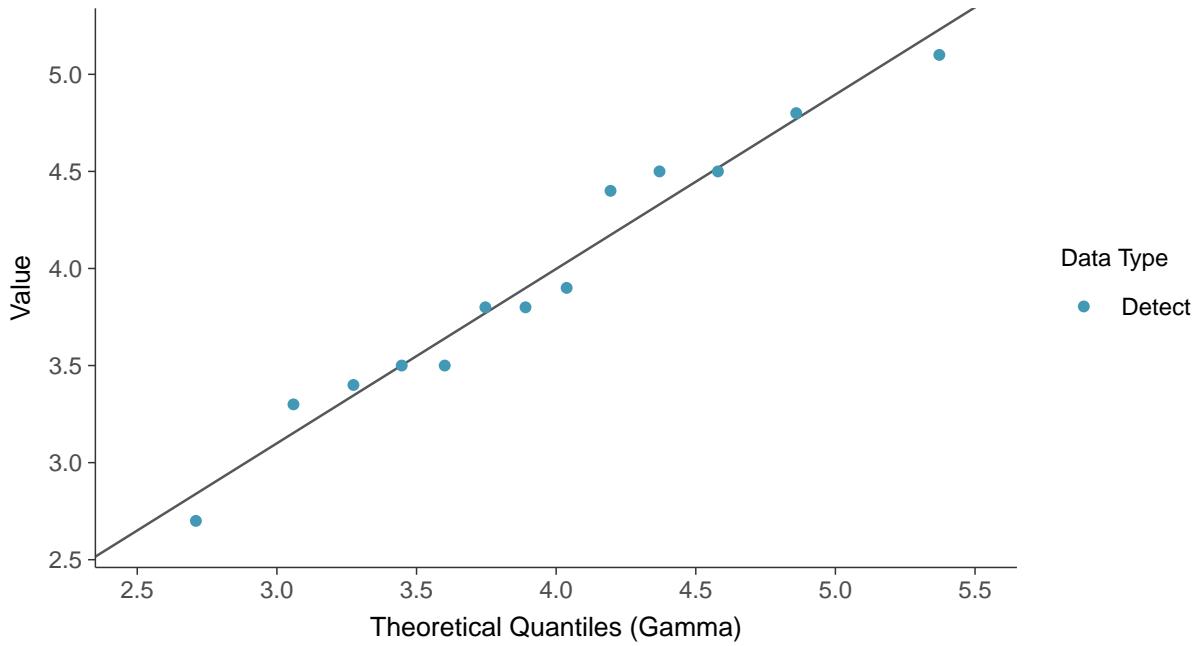
Fluoride (App IV), MW-18 (mg/L)





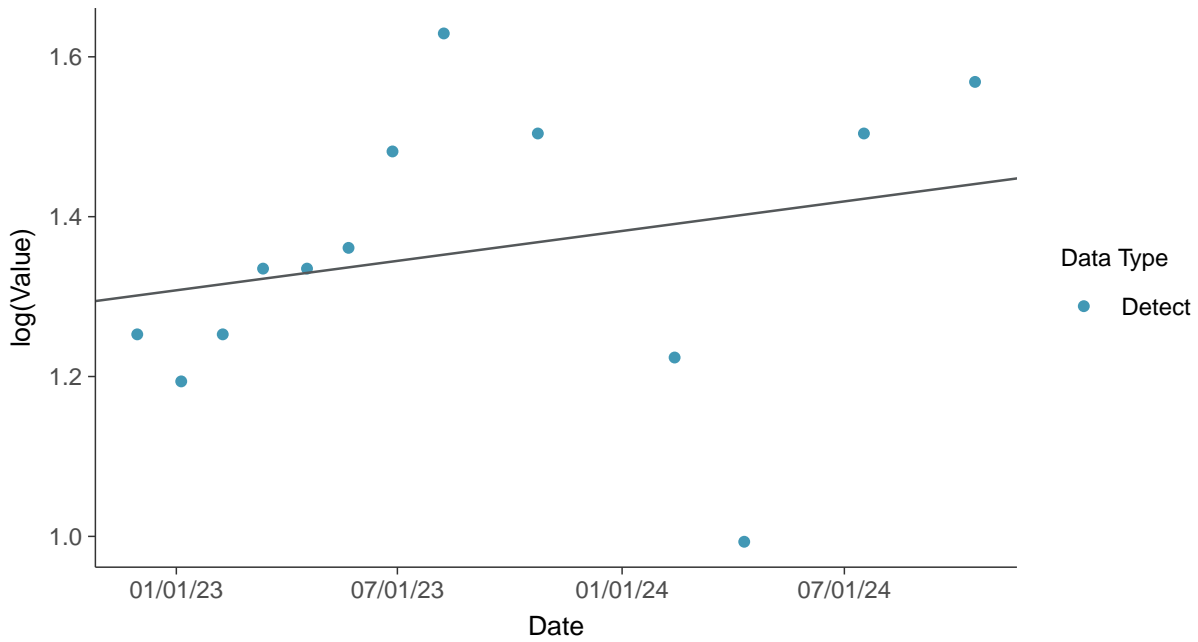
Gamma Q-Q plot

Fluoride (App IV), MW-18 (mg/L)



Trend Regression: Lognormal MLE

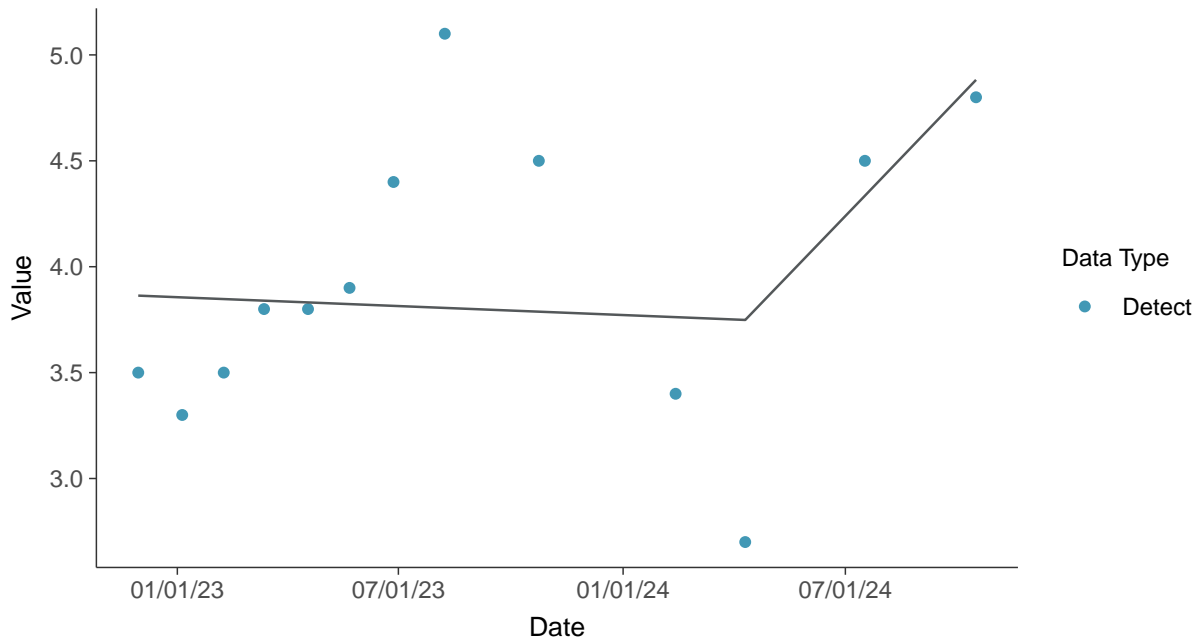
Fluoride (App IV), MW-18 (mg/L)





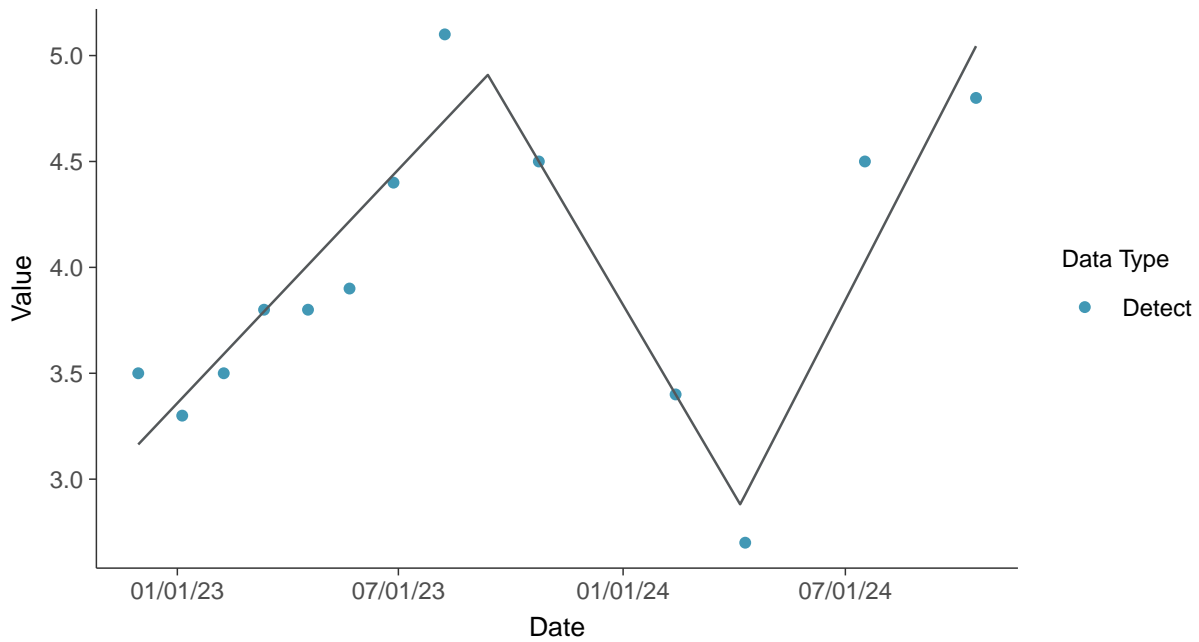
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-18 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

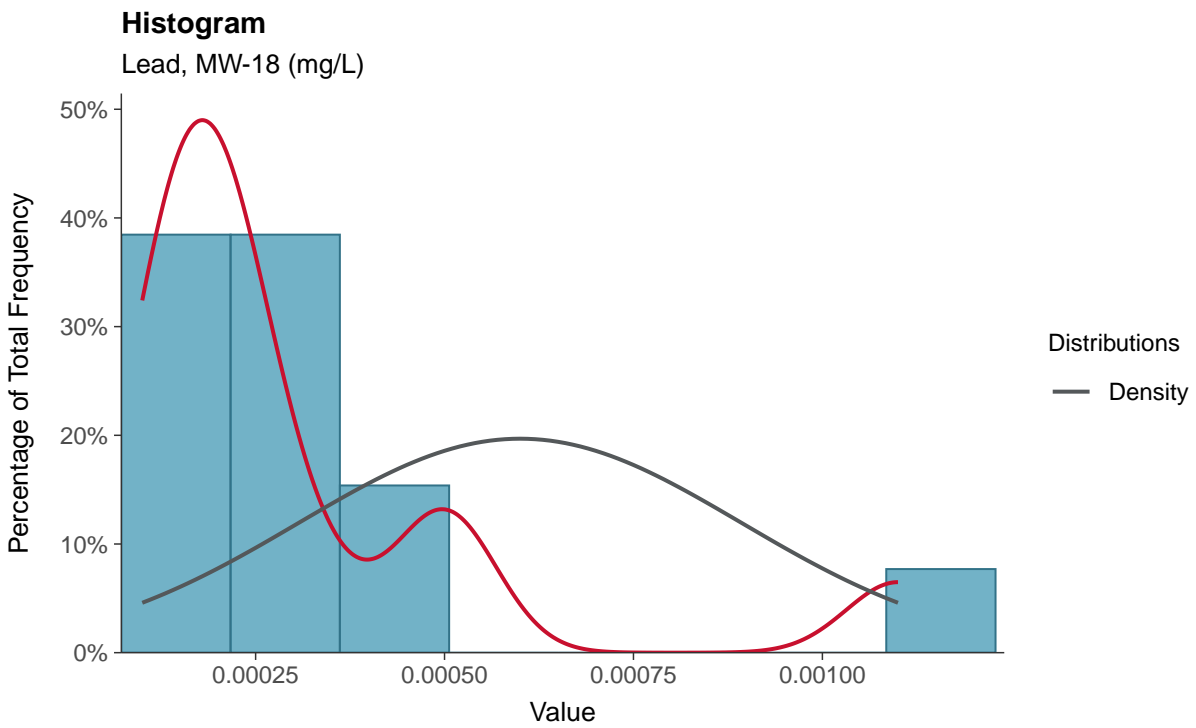
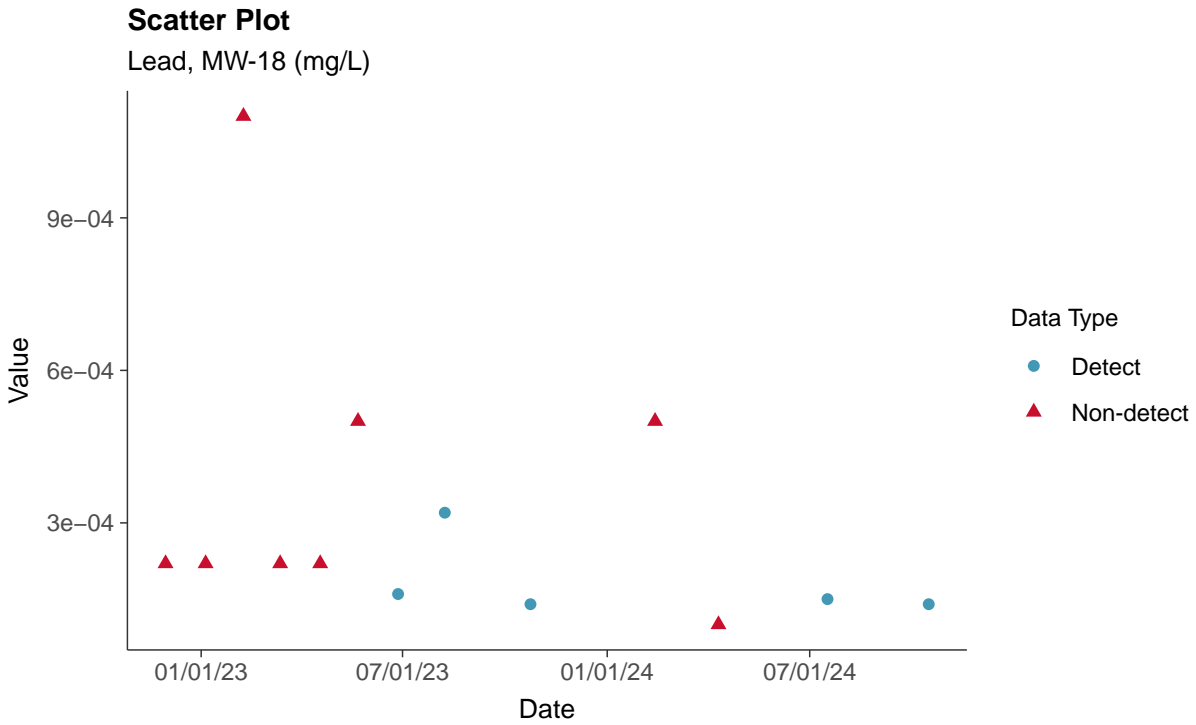
Fluoride (App IV), MW-18 (mg/L)





Appendix IV: Lead, MW-18

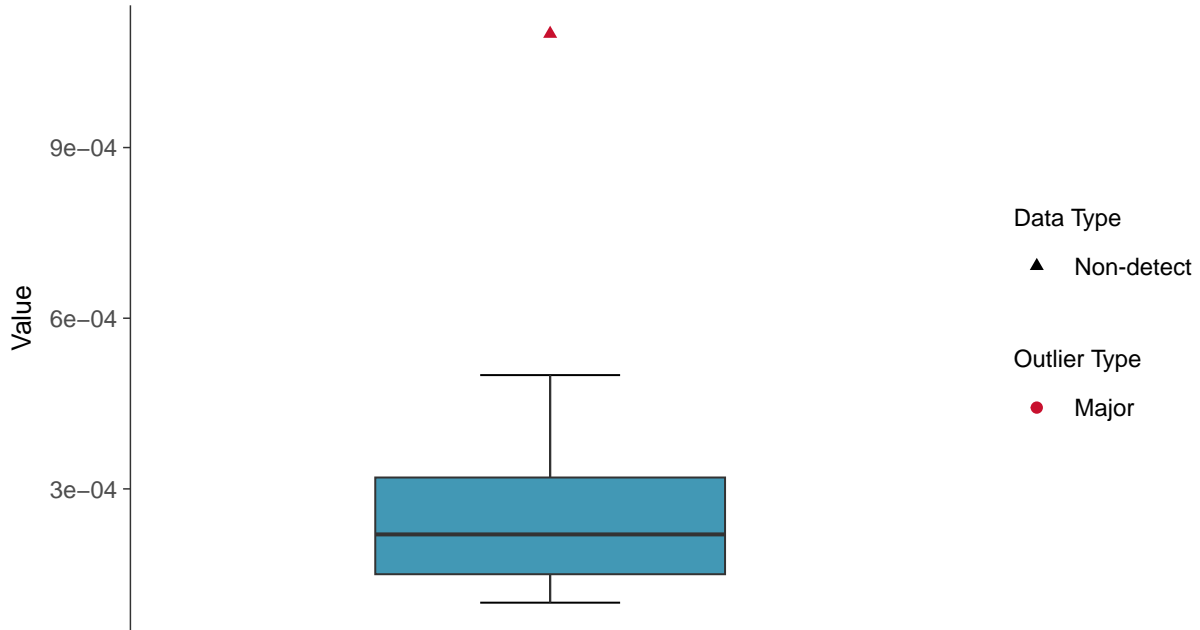
ID: 1_28_1_5_115





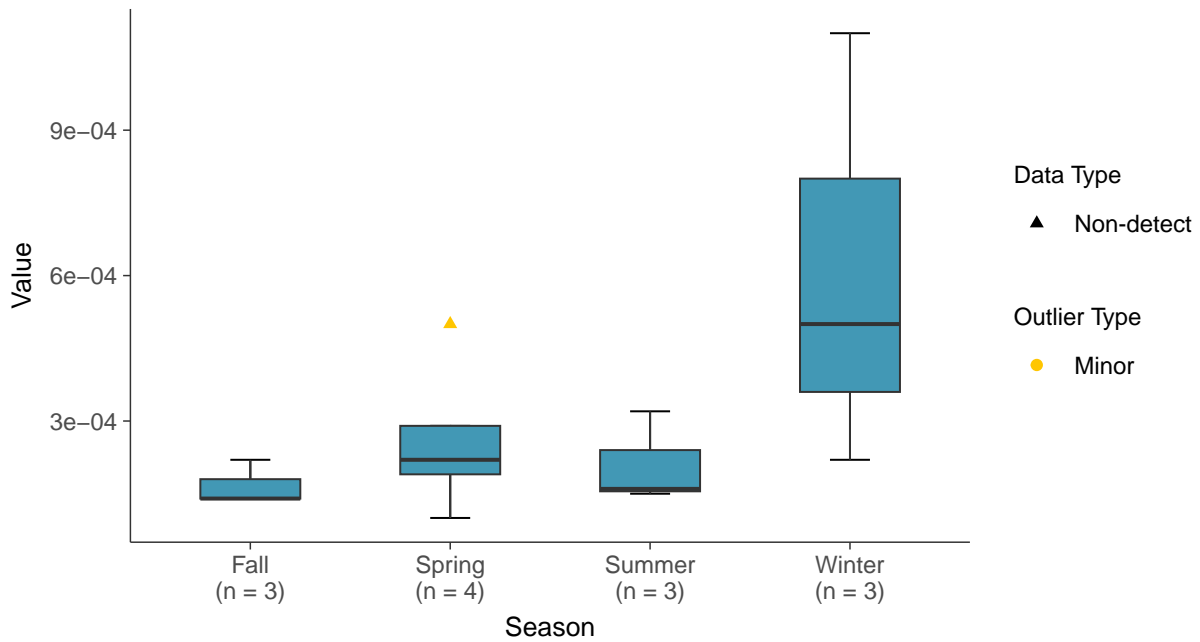
Boxplot

Lead, MW-18 (mg/L)



Boxplot by Season

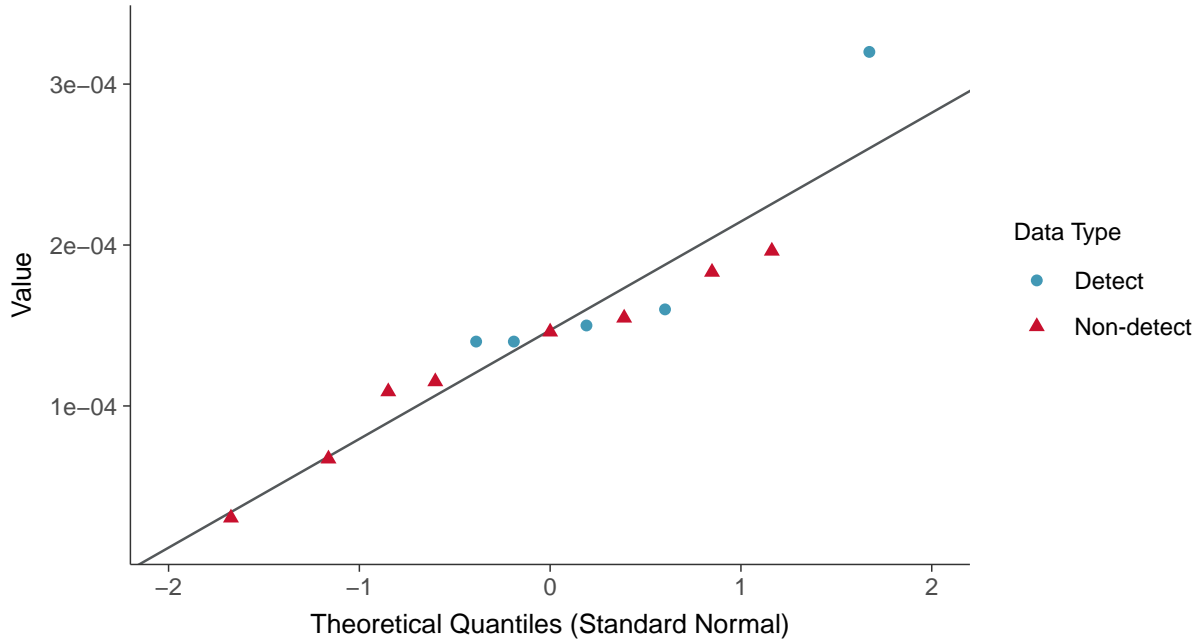
Lead, MW-18 (mg/L)





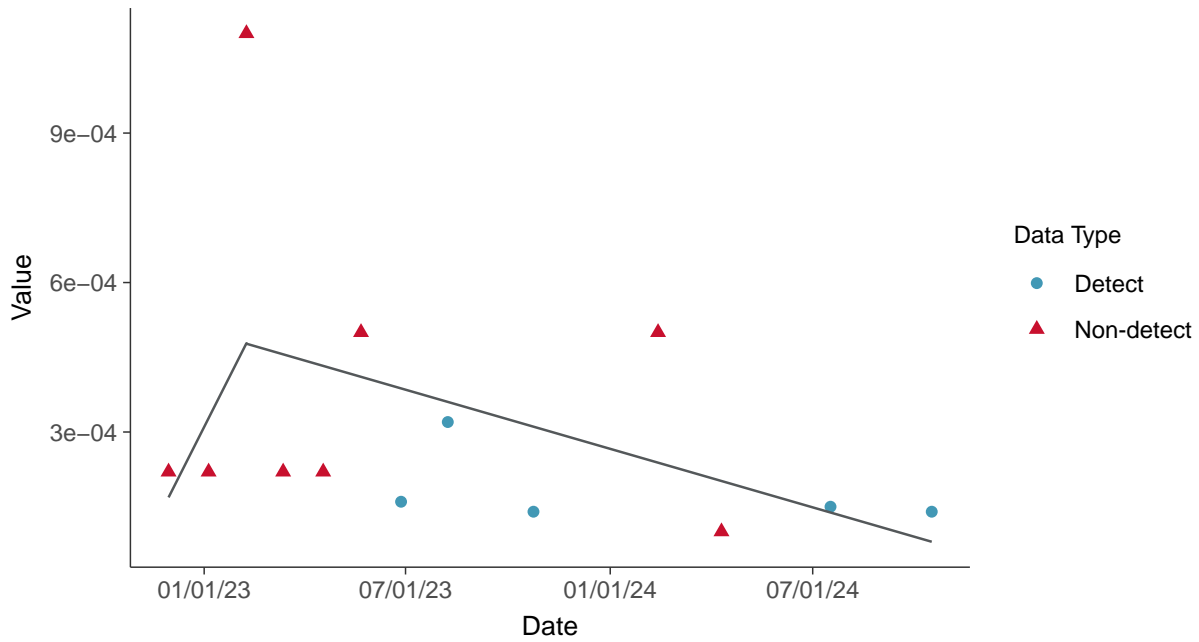
Normal Q-Q plot using ROS Imputed Estimates

Lead, MW-18 (mg/L)



Trend Regression: Piecewise Linear-Linear

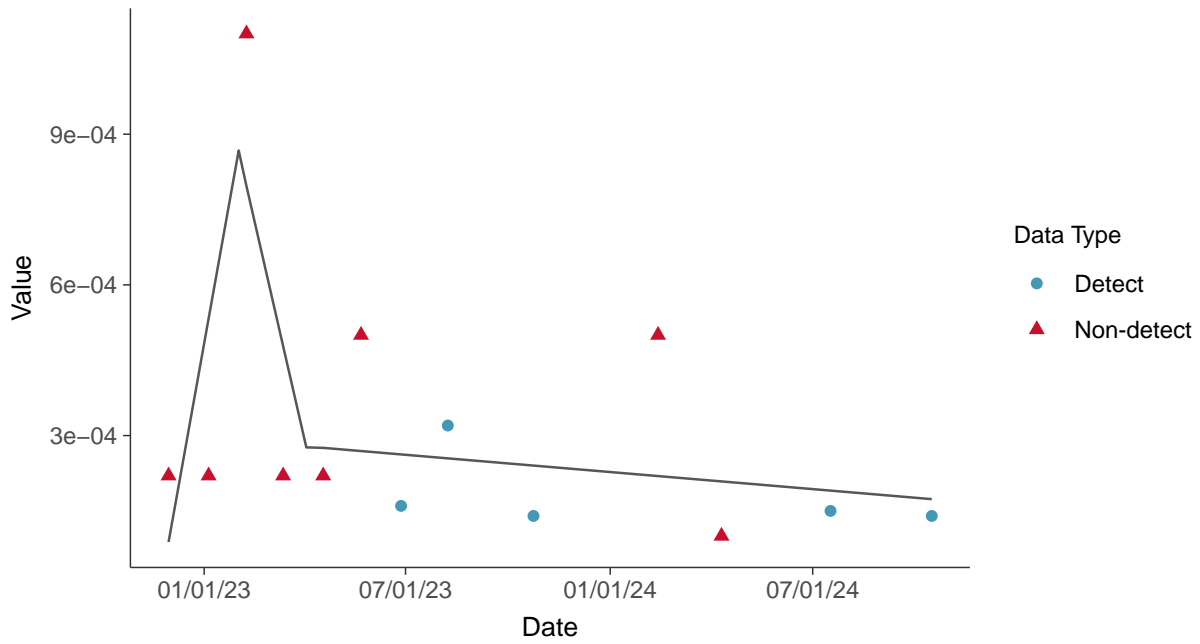
Lead, MW-18 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

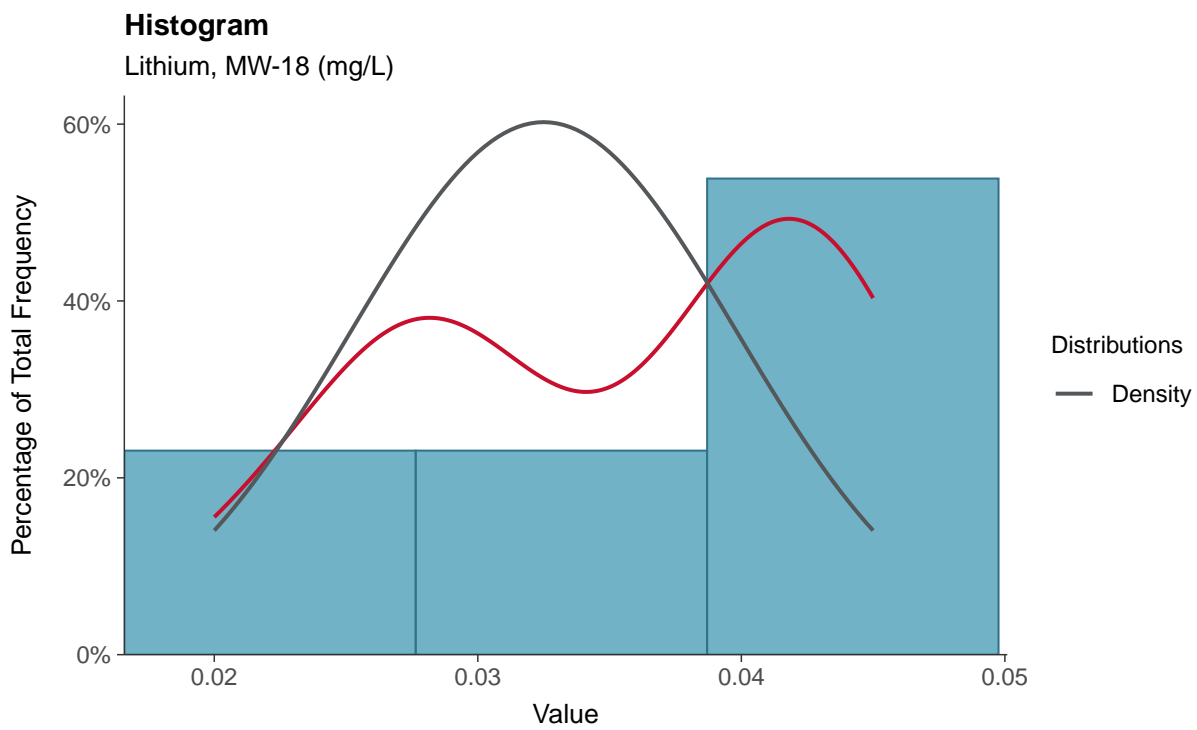
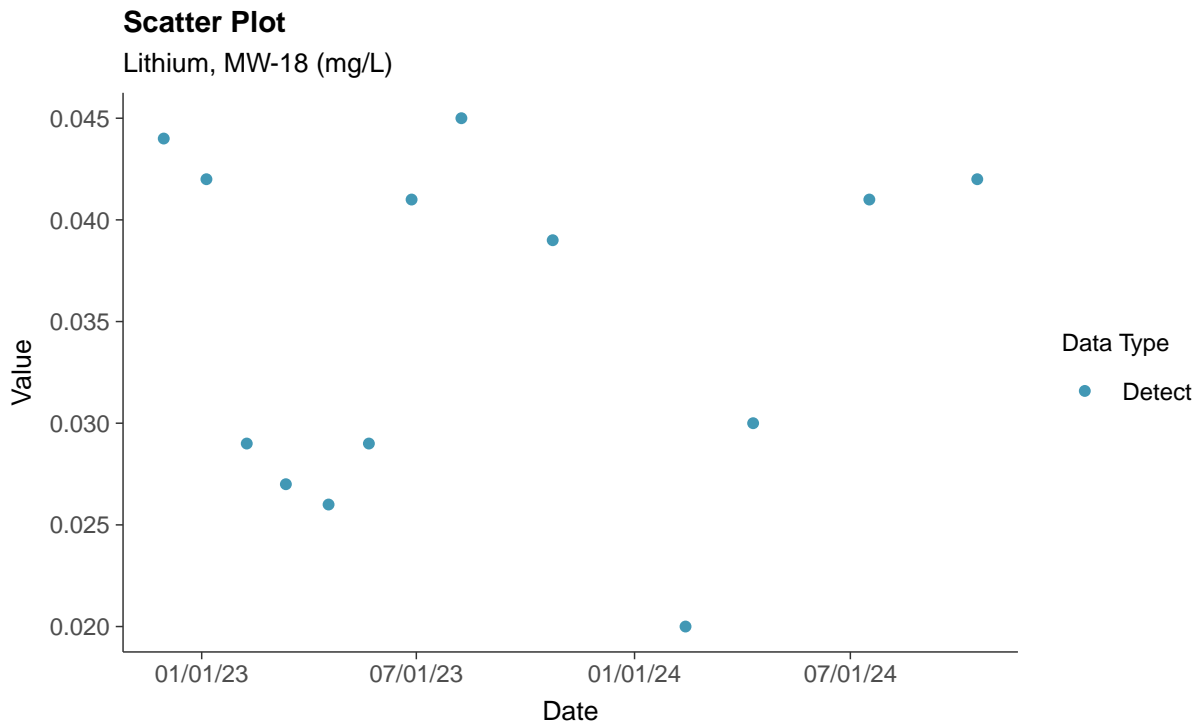
Lead, MW-18 (mg/L)





Appendix IV: Lithium, MW-18

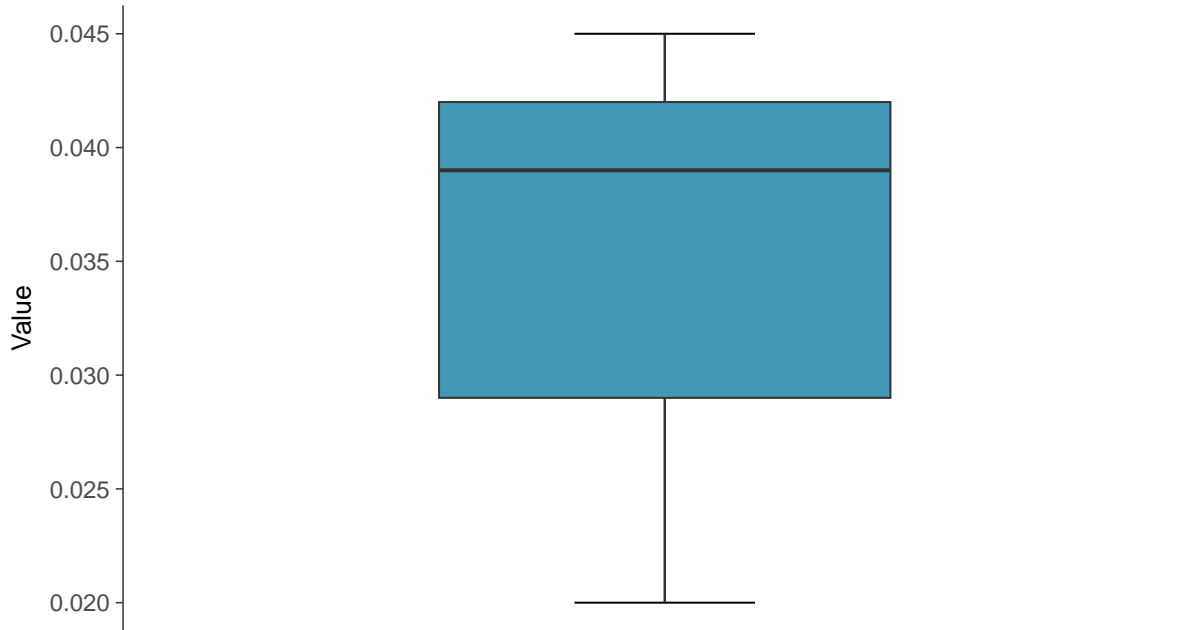
ID: 1_28_1_5_116





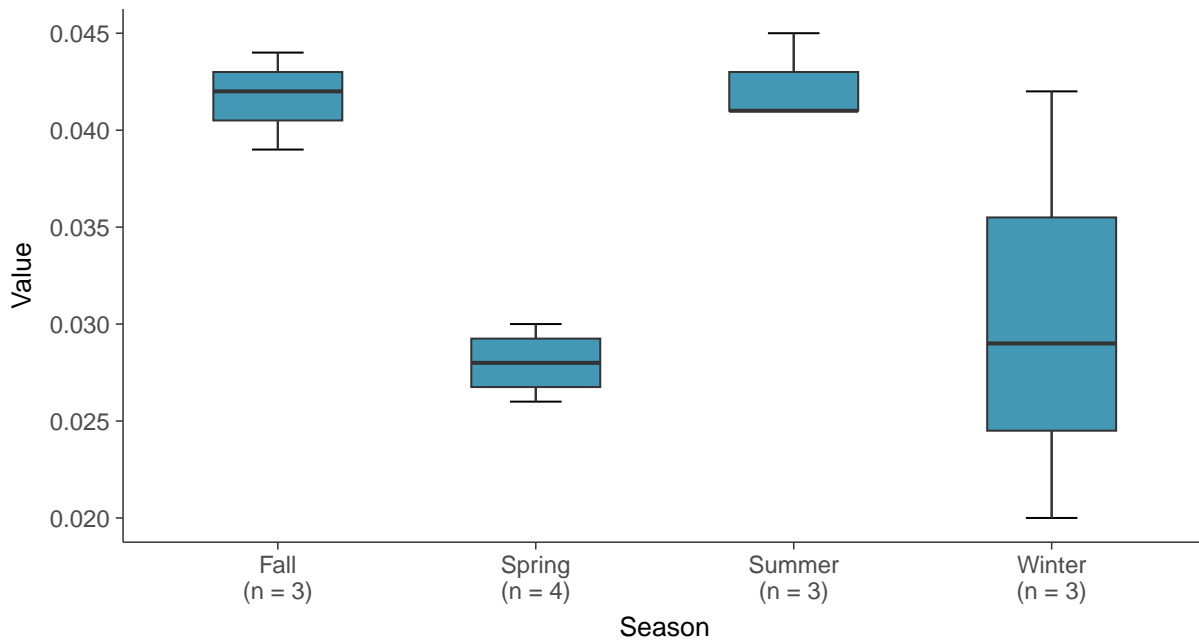
Boxplot

Lithium, MW-18 (mg/L)



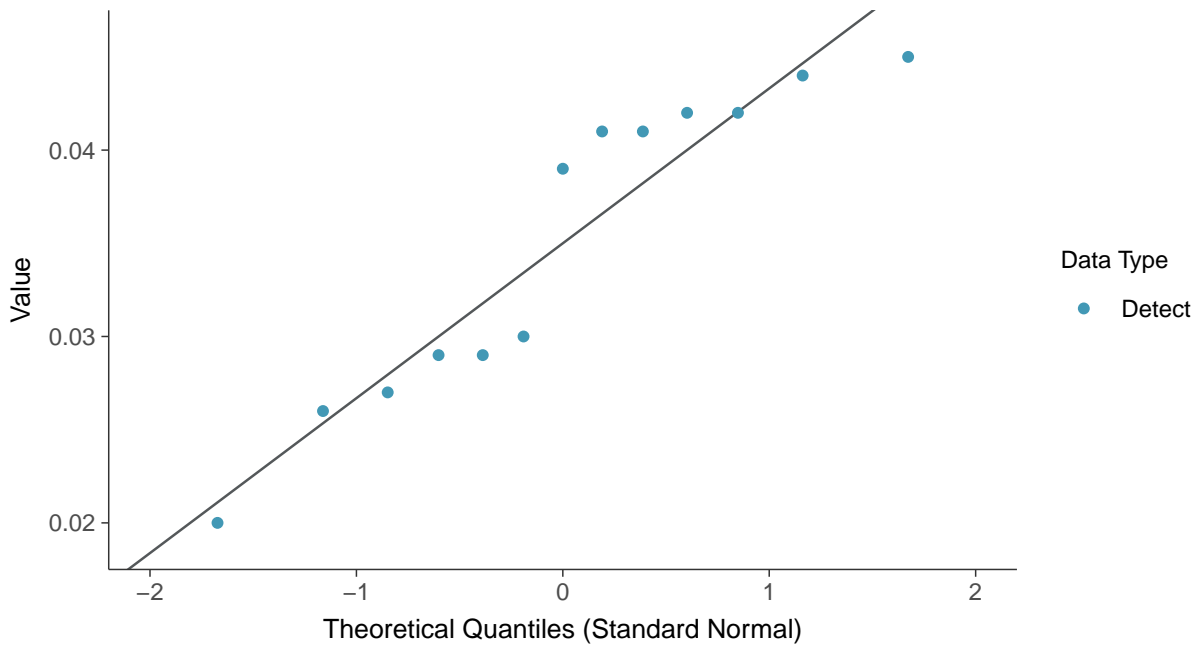
Boxplot by Season

Lithium, MW-18 (mg/L)

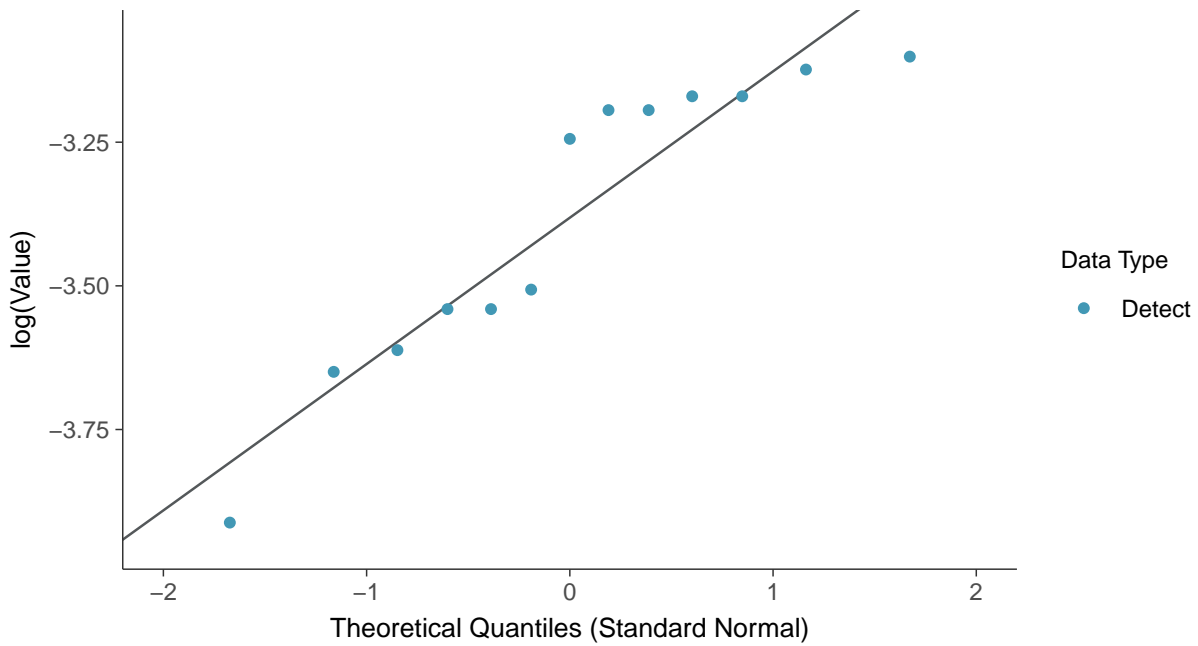




Normal Q-Q plot
Lithium, MW-18 (mg/L)



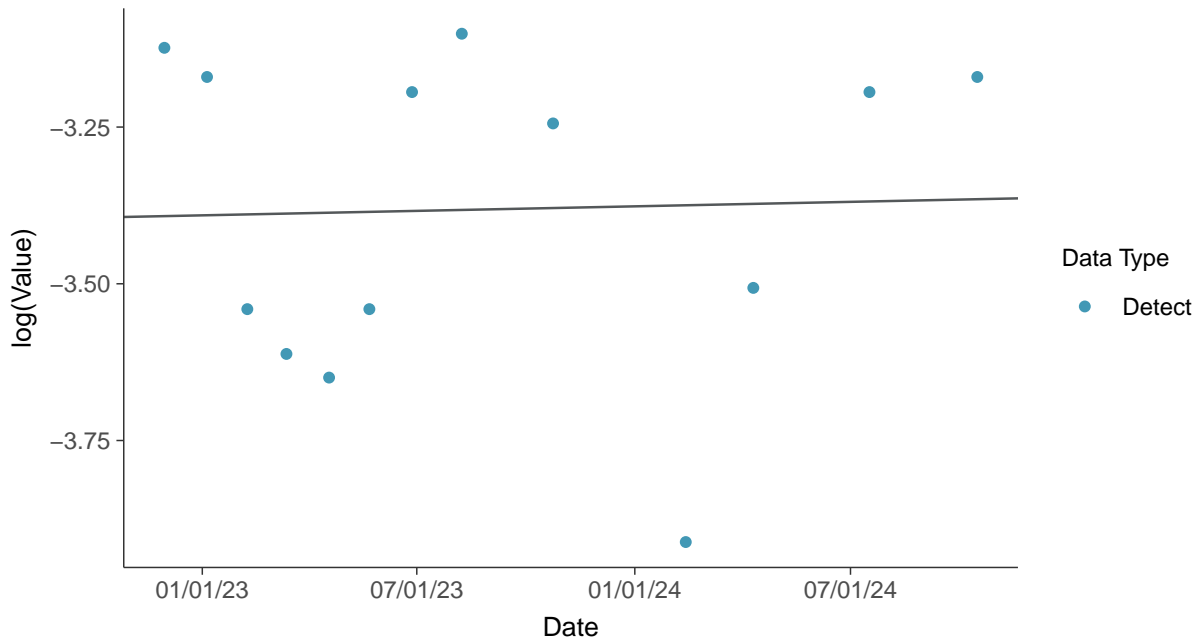
Lognormal Q-Q plot
Lithium, MW-18 (mg/L)





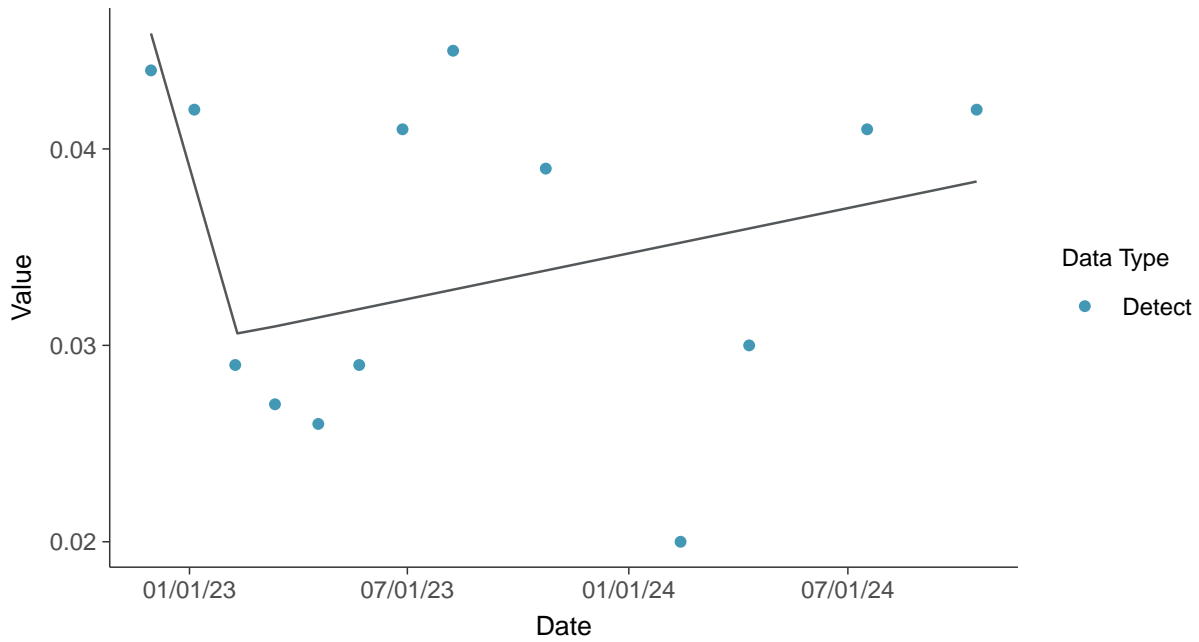
Trend Regression: Lognormal MLE

Lithium, MW-18 (mg/L)



Trend Regression: Piecewise Linear-Linear

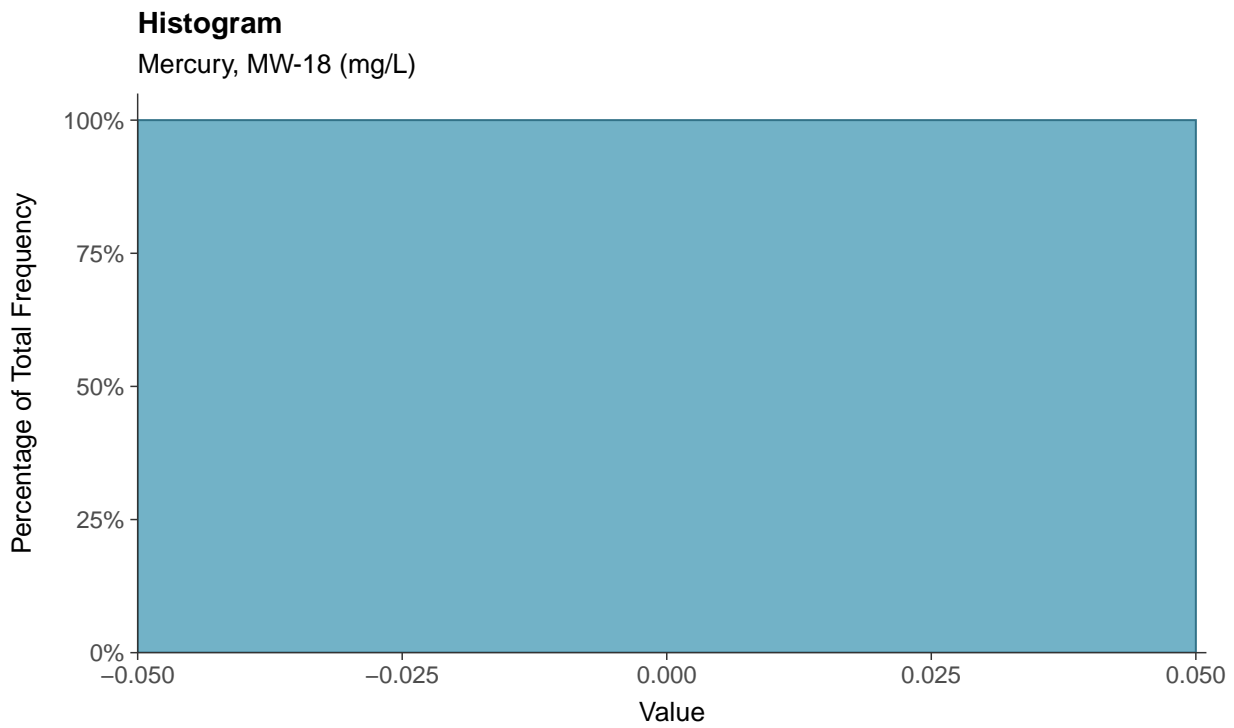
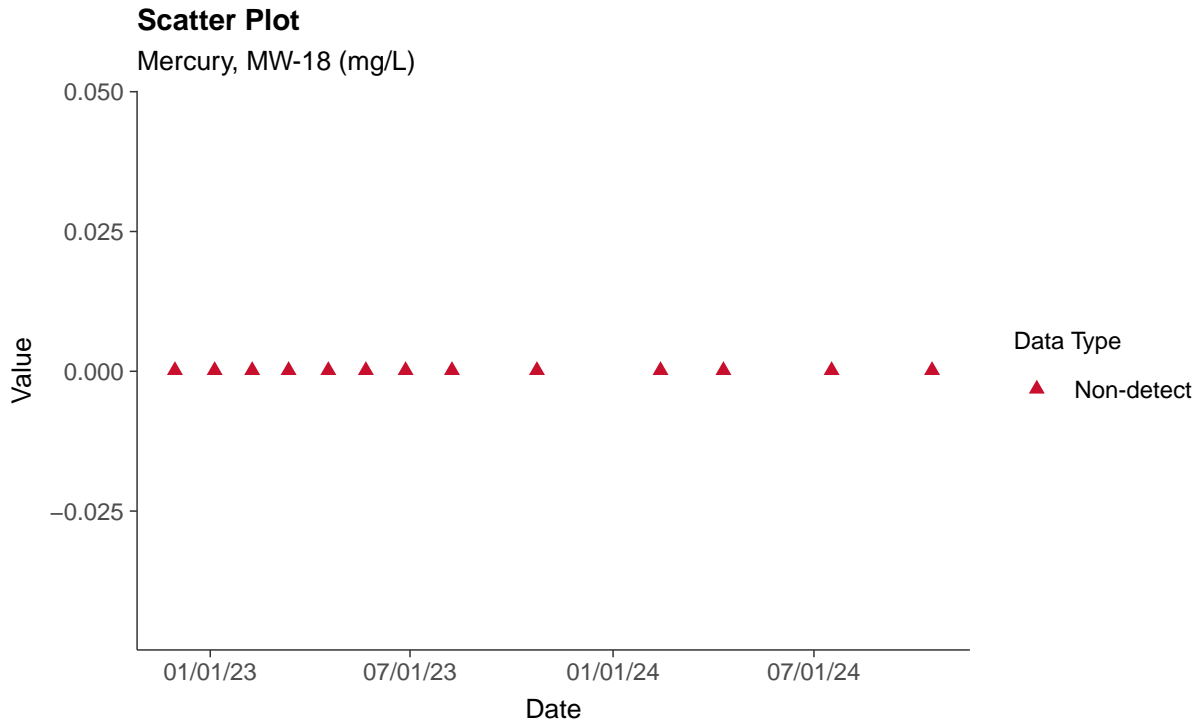
Lithium, MW-18 (mg/L)





Appendix IV: Mercury, MW-18

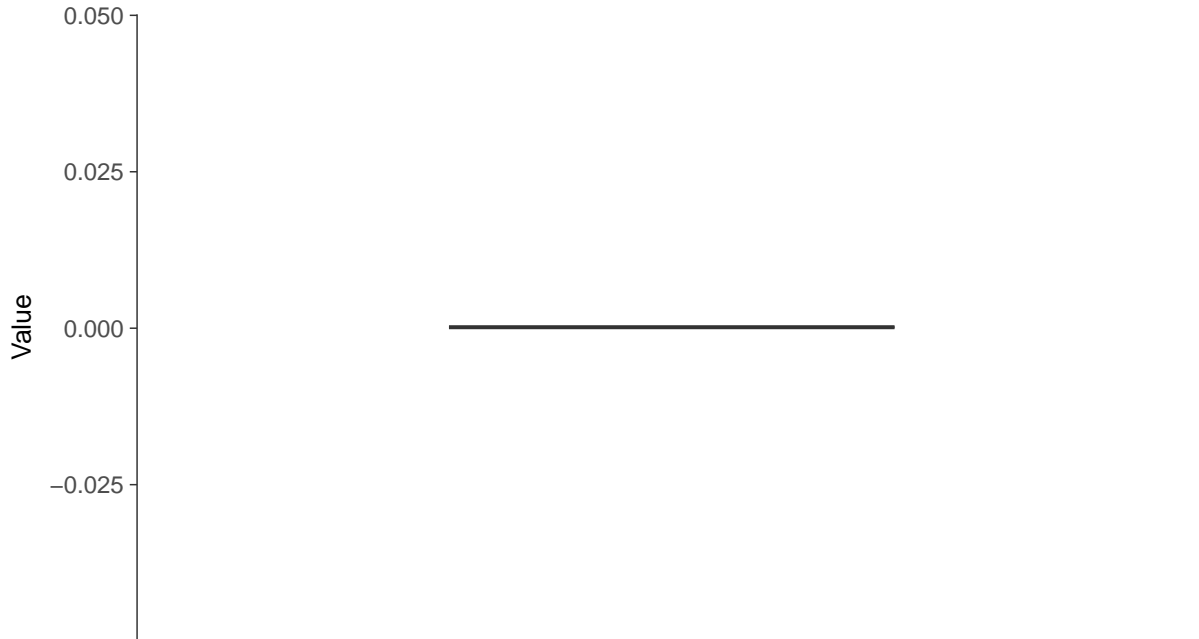
ID: 1_28_1_5_117





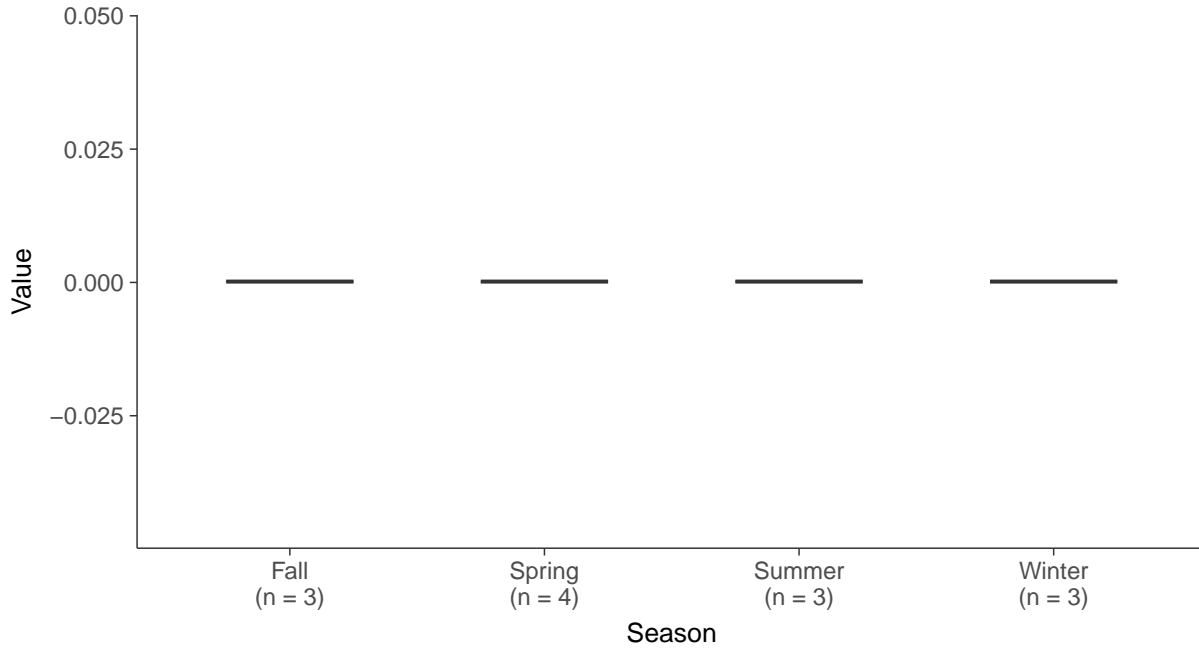
Boxplot

Mercury, MW-18 (mg/L)



Boxplot by Season

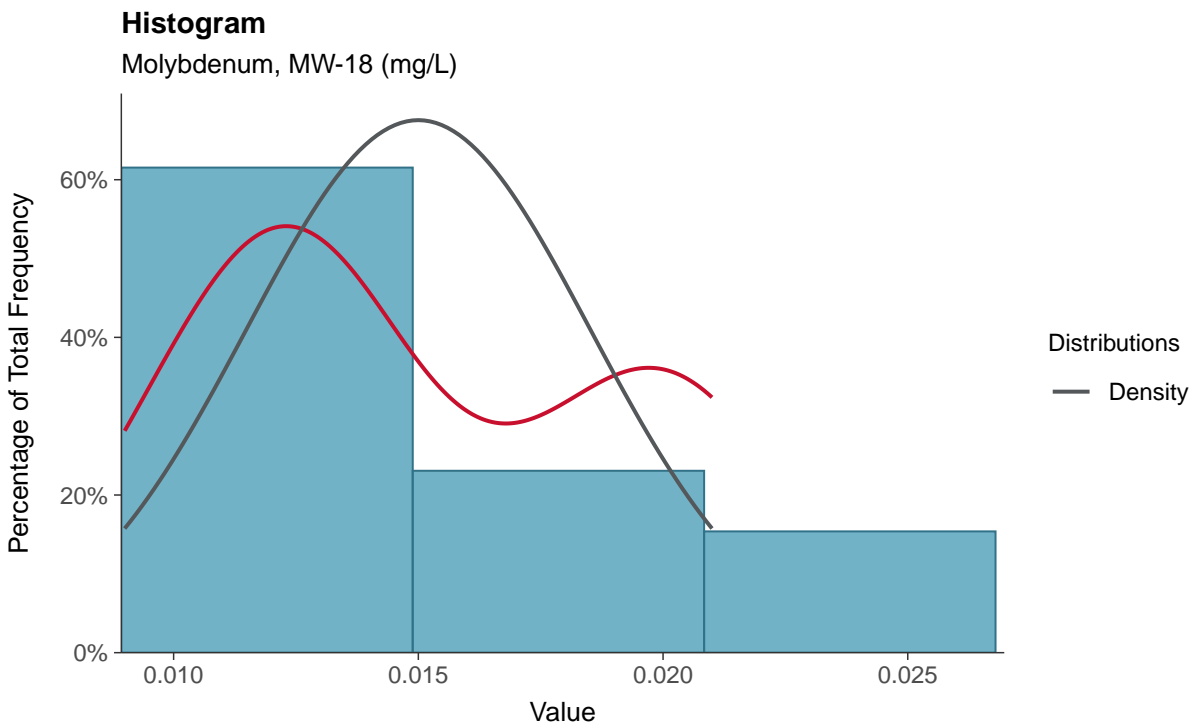
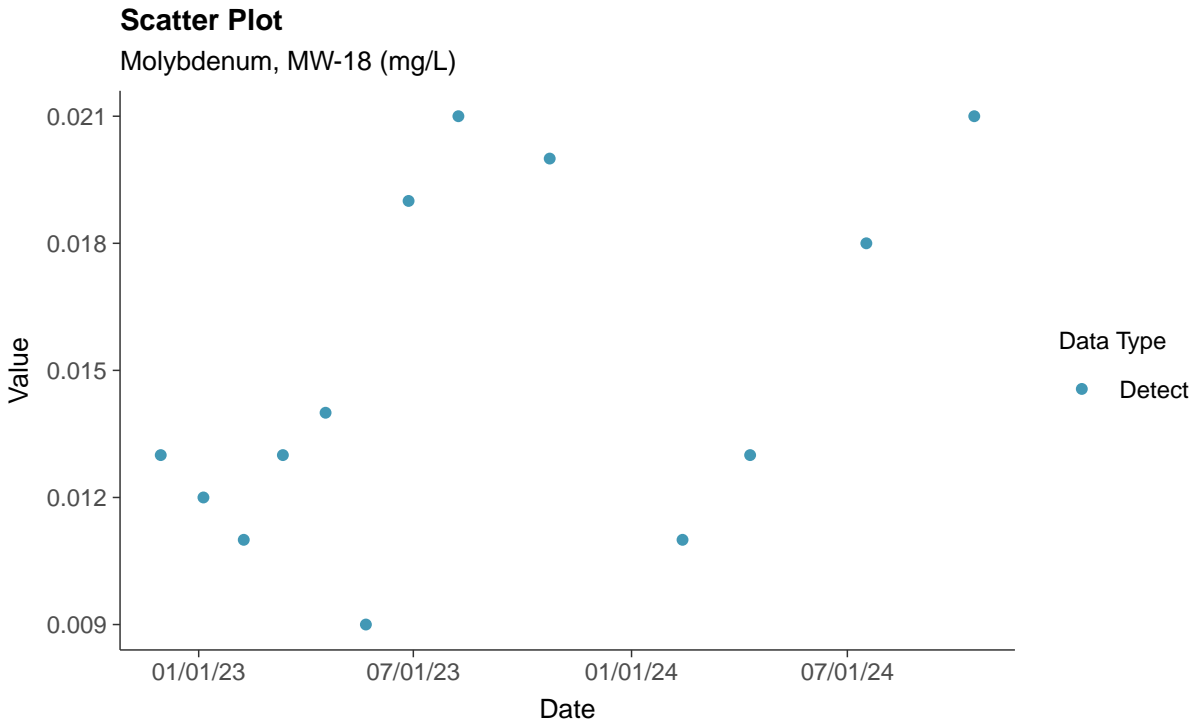
Mercury, MW-18 (mg/L)





Appendix IV: Molybdenum, MW-18

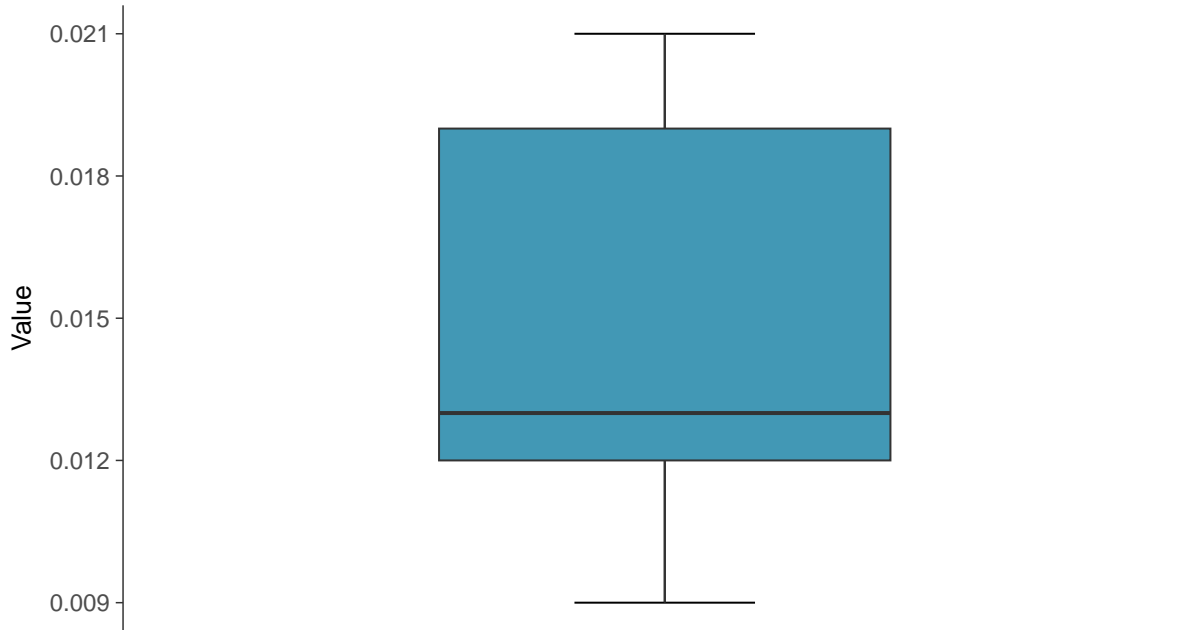
ID: 1_28_1_5_118





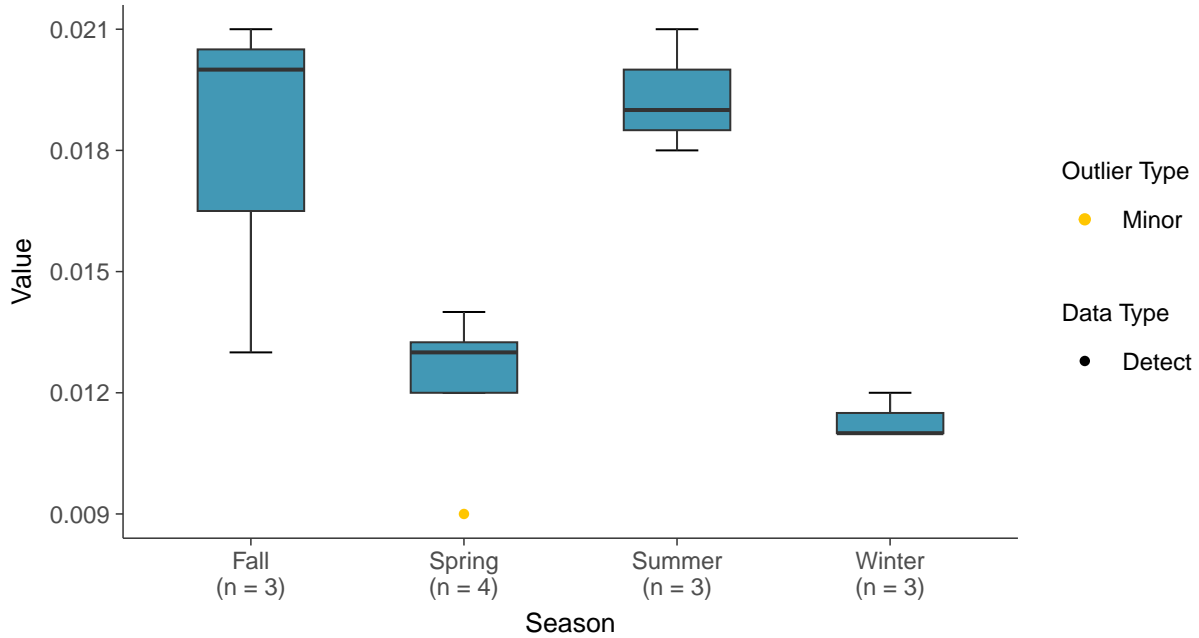
Boxplot

Molybdenum, MW-18 (mg/L)



Boxplot by Season

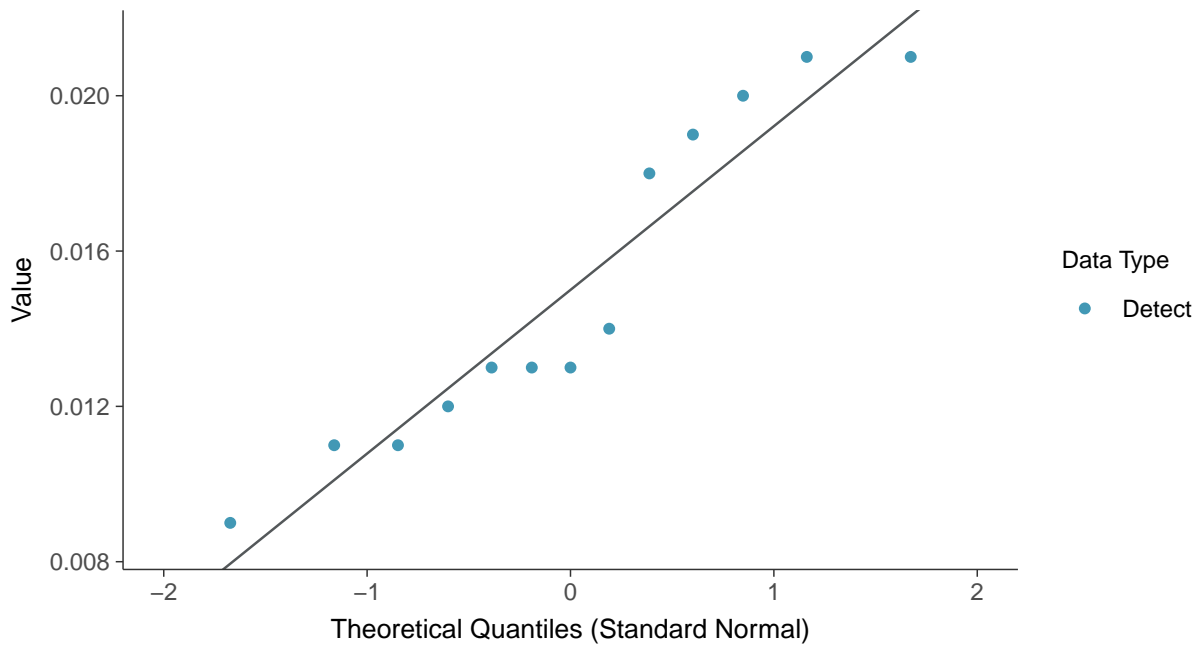
Molybdenum, MW-18 (mg/L)





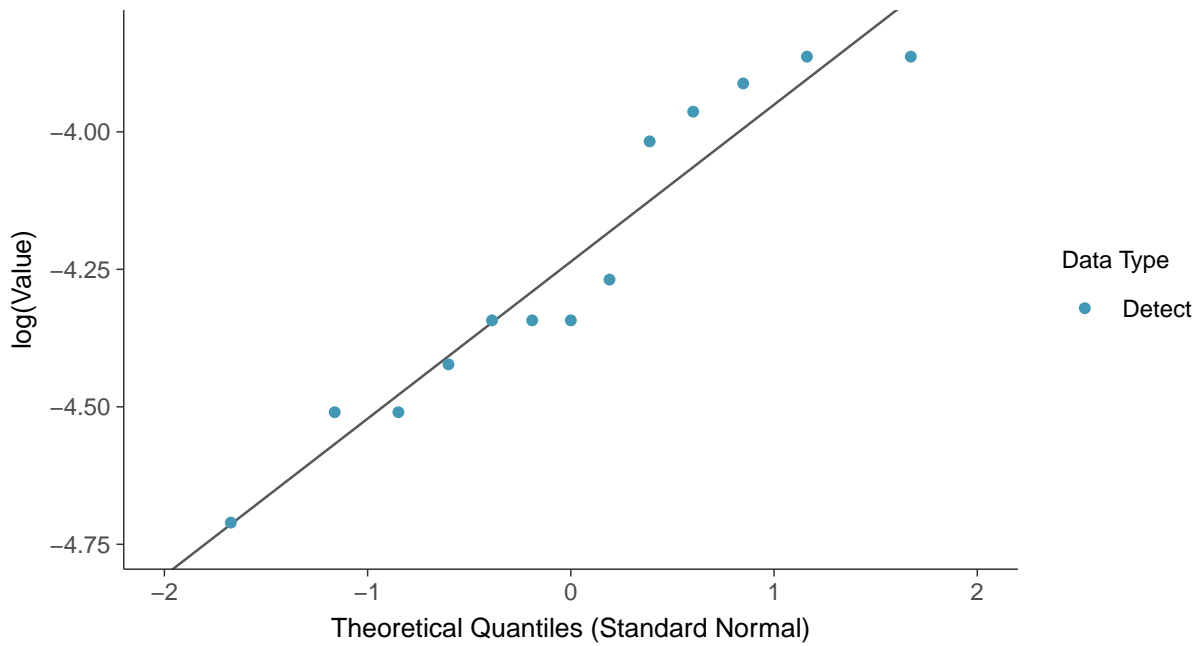
Normal Q-Q plot

Molybdenum, MW-18 (mg/L)



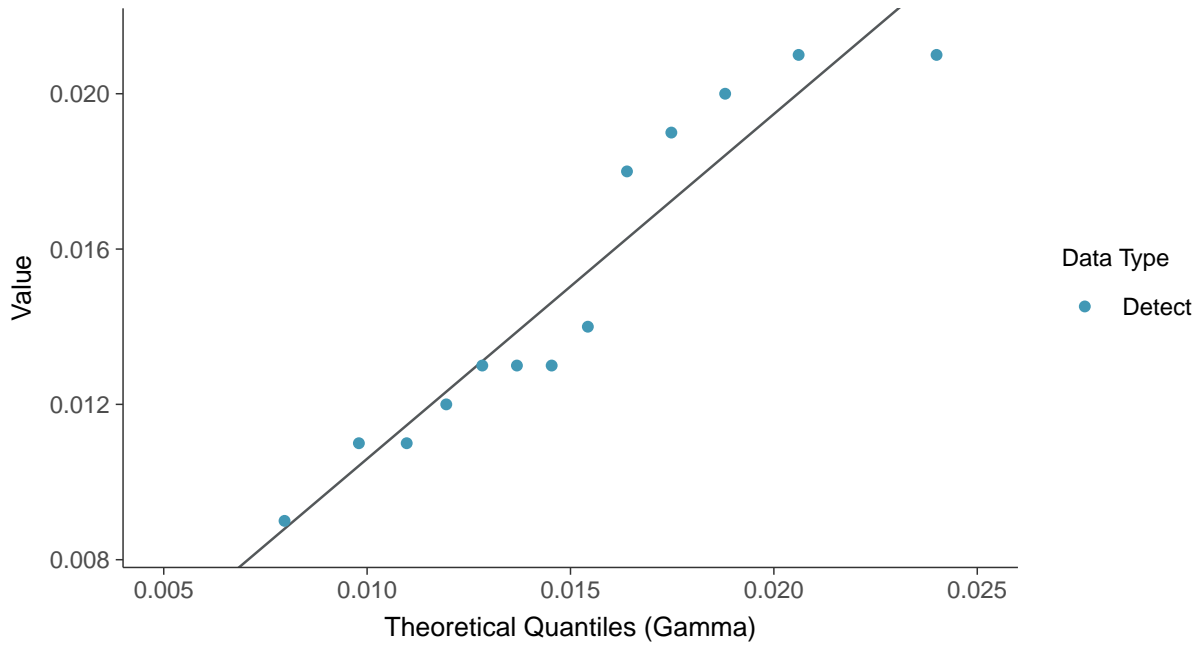
Lognormal Q-Q plot

Molybdenum, MW-18 (mg/L)

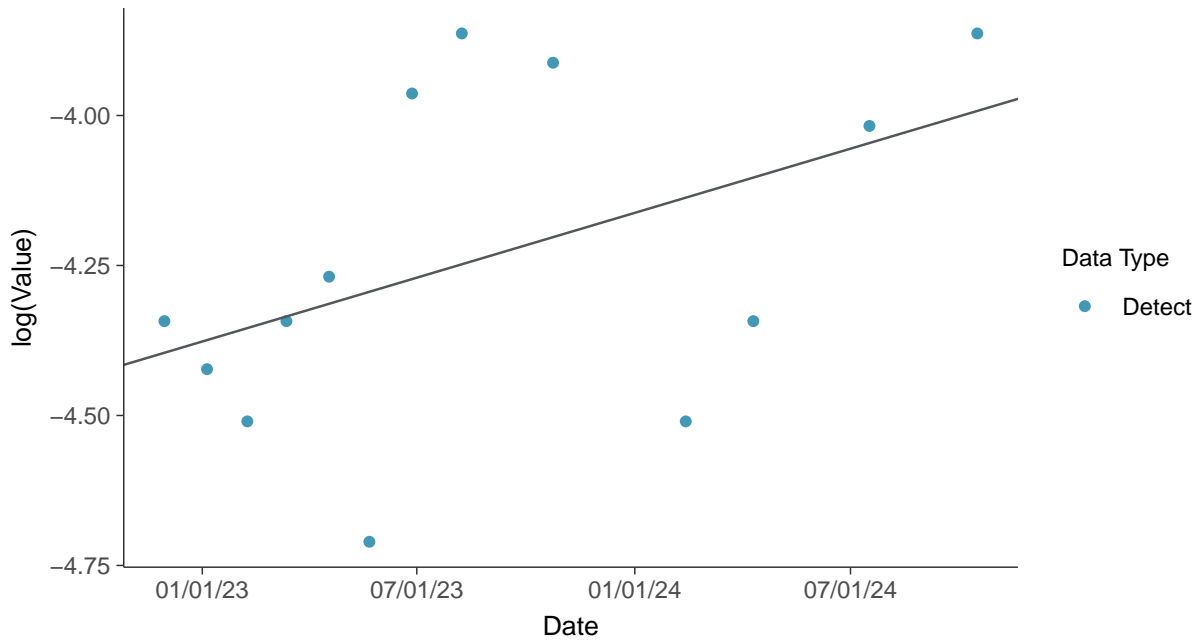




Gamma Q-Q plot
Molybdenum, MW-18 (mg/L)



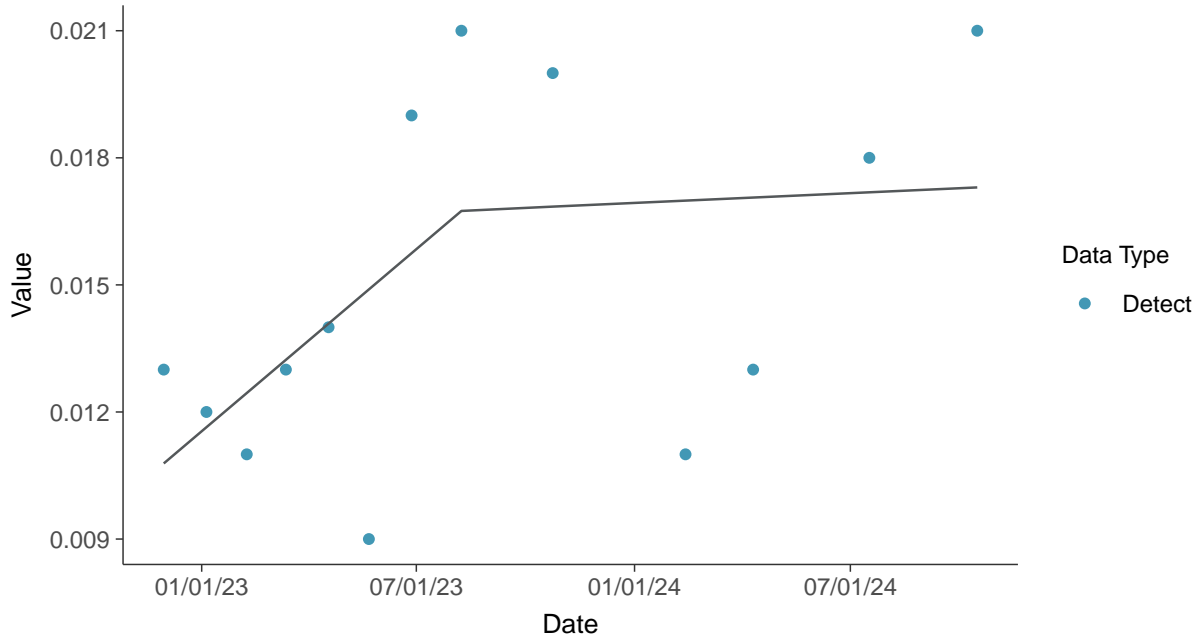
Trend Regression: Lognormal MLE
Molybdenum, MW-18 (mg/L)





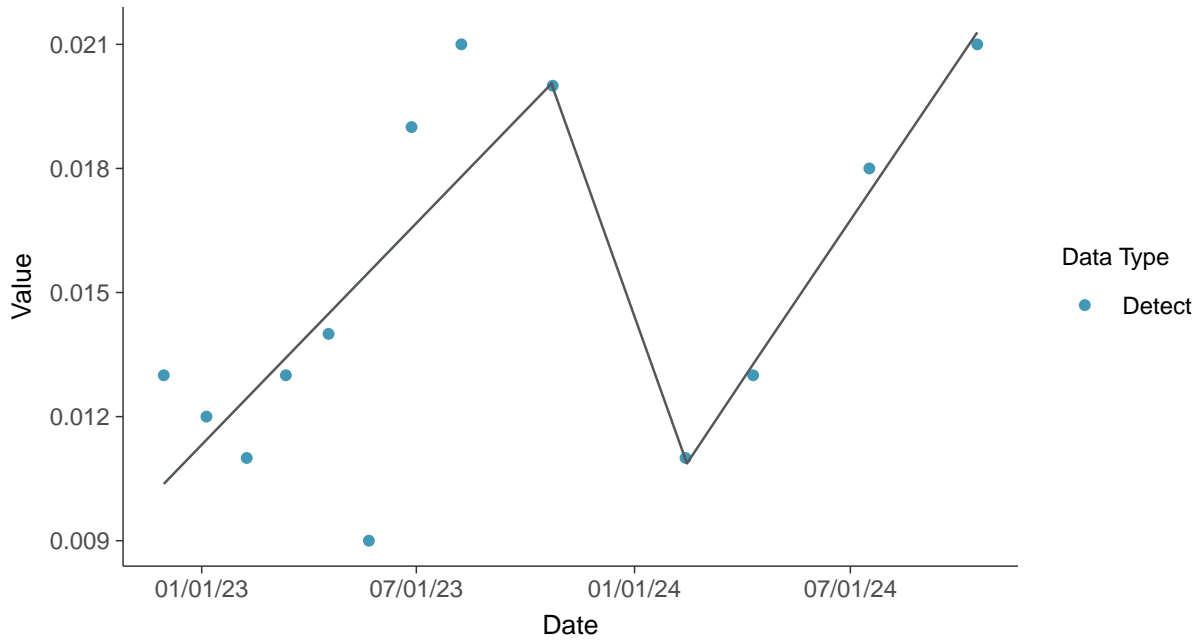
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-18 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-18 (mg/L)



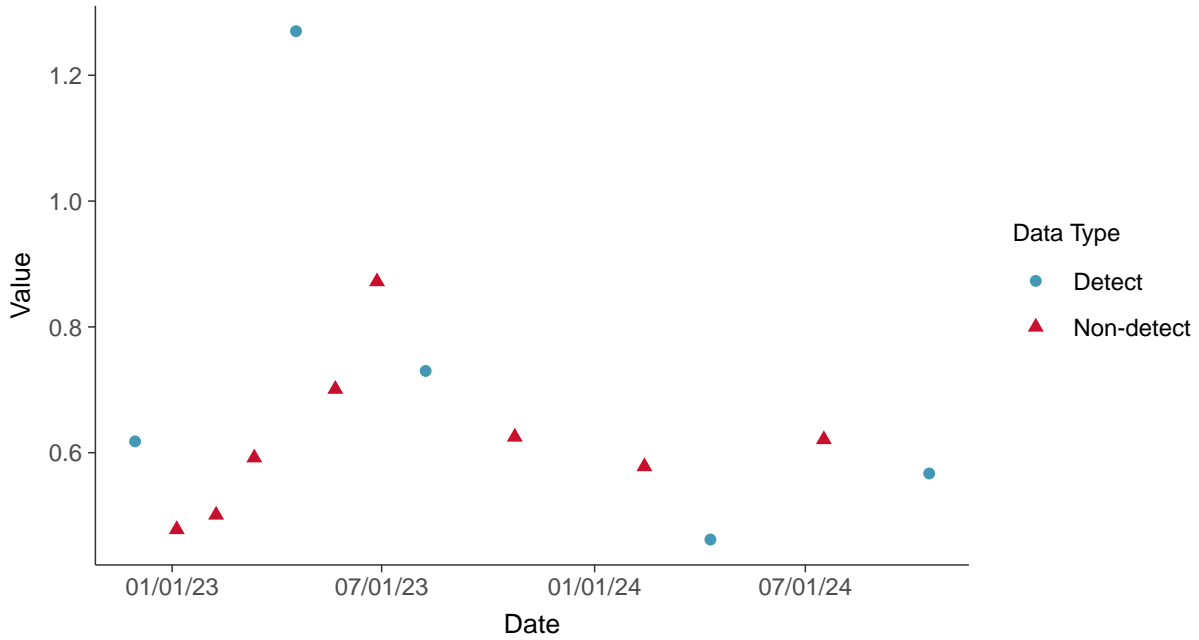


Appendix IV: Radium 226 and 228, MW-18

ID: 1_28_1_5_121

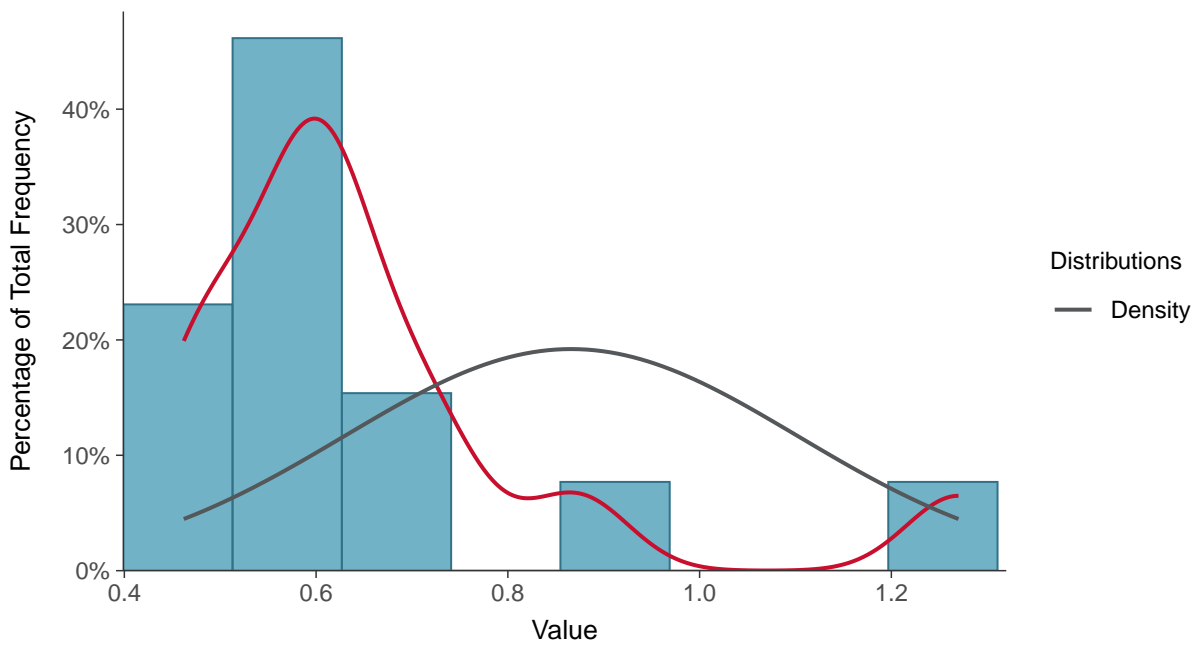
Scatter Plot

Radium 226 and 228, MW-18 (pCi/L)



Histogram

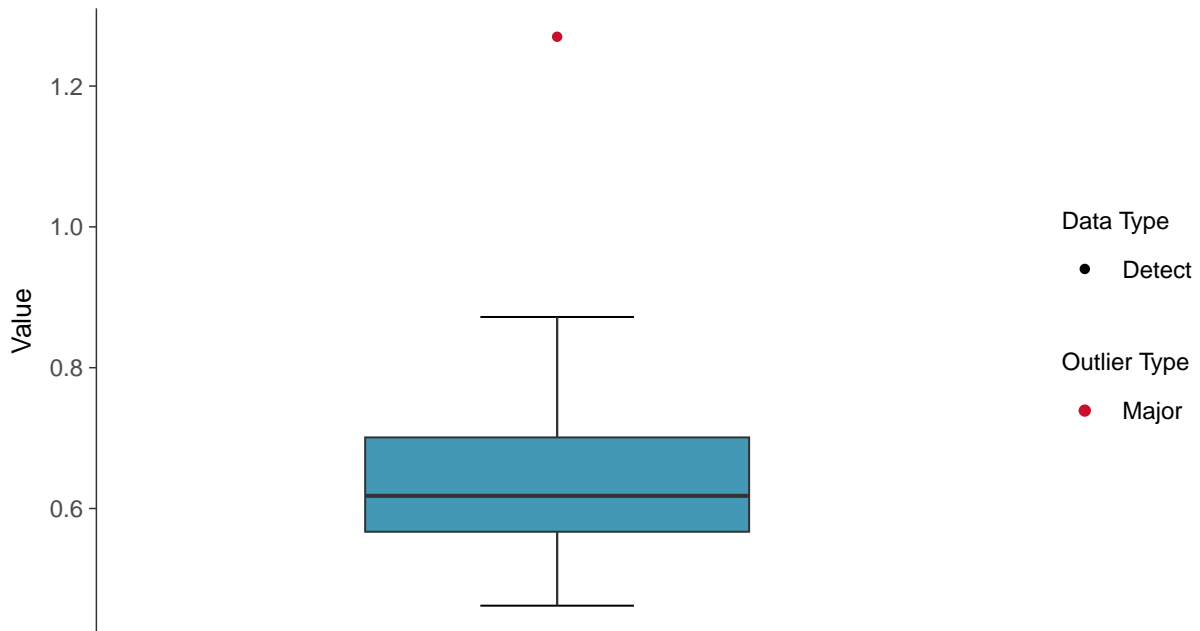
Radium 226 and 228, MW-18 (pCi/L)





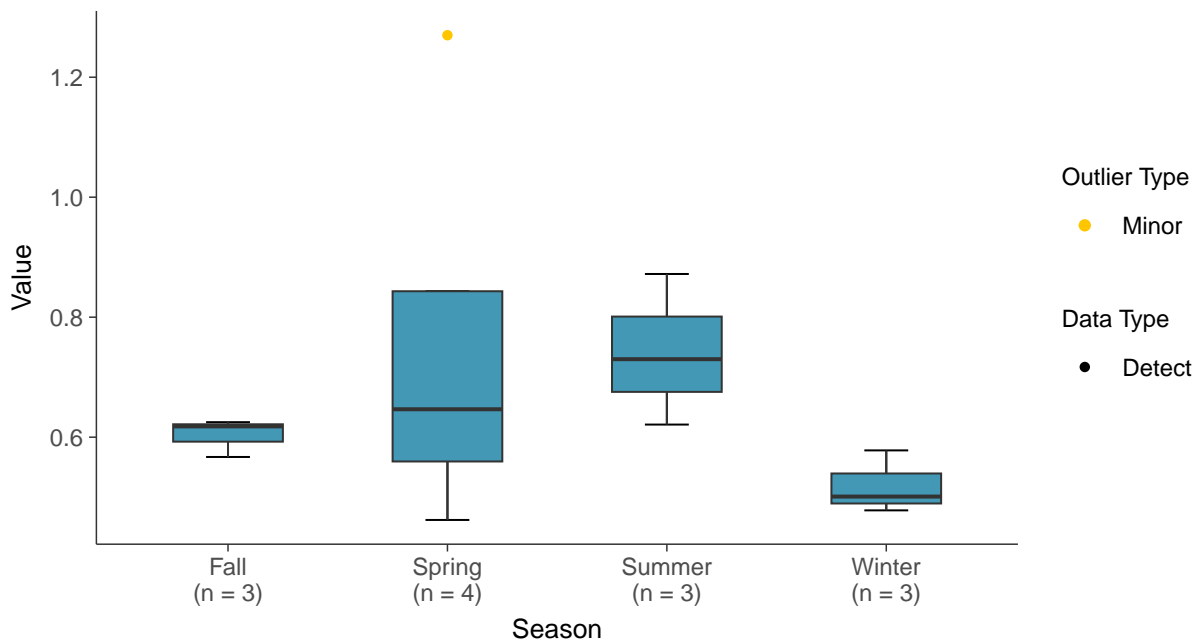
Boxplot

Radium 226 and 228, MW-18 (pCi/L)



Boxplot by Season

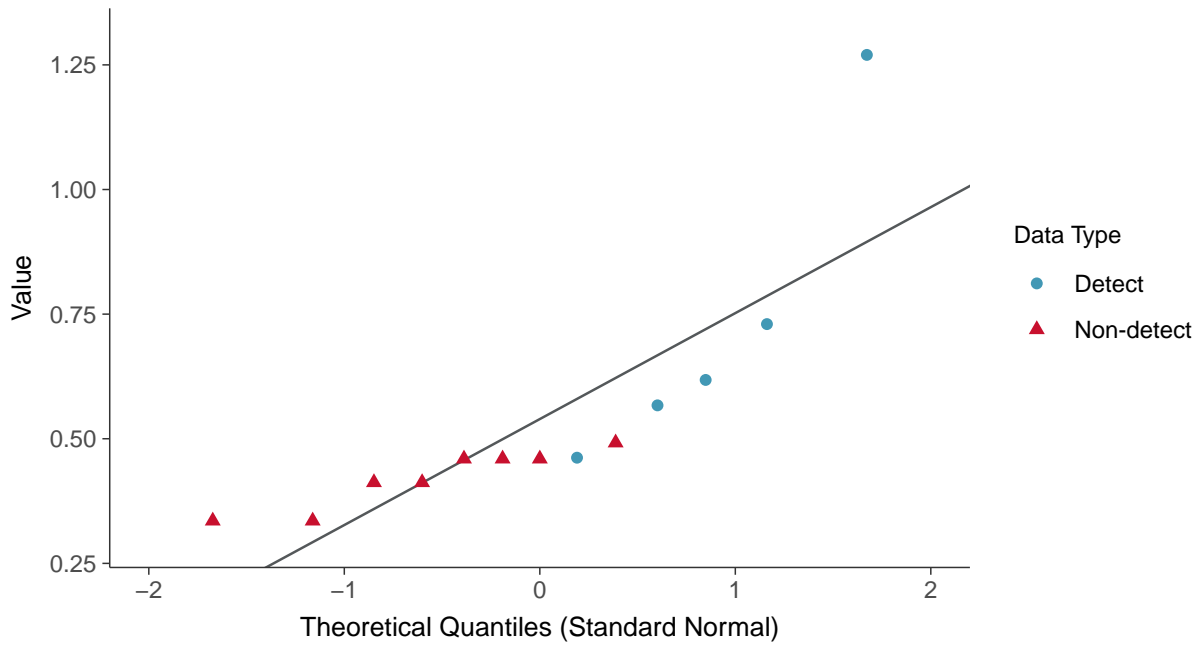
Radium 226 and 228, MW-18 (pCi/L)





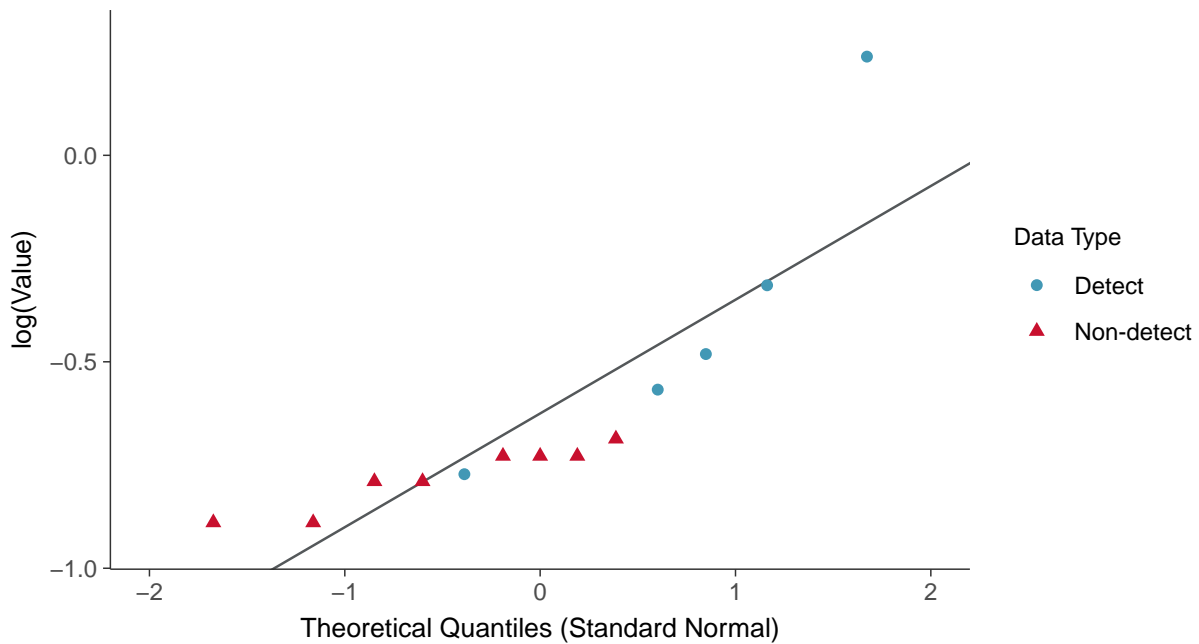
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-18 (pCi/L)



Lognormal Q-Q plot using ROS Imputed Estimates

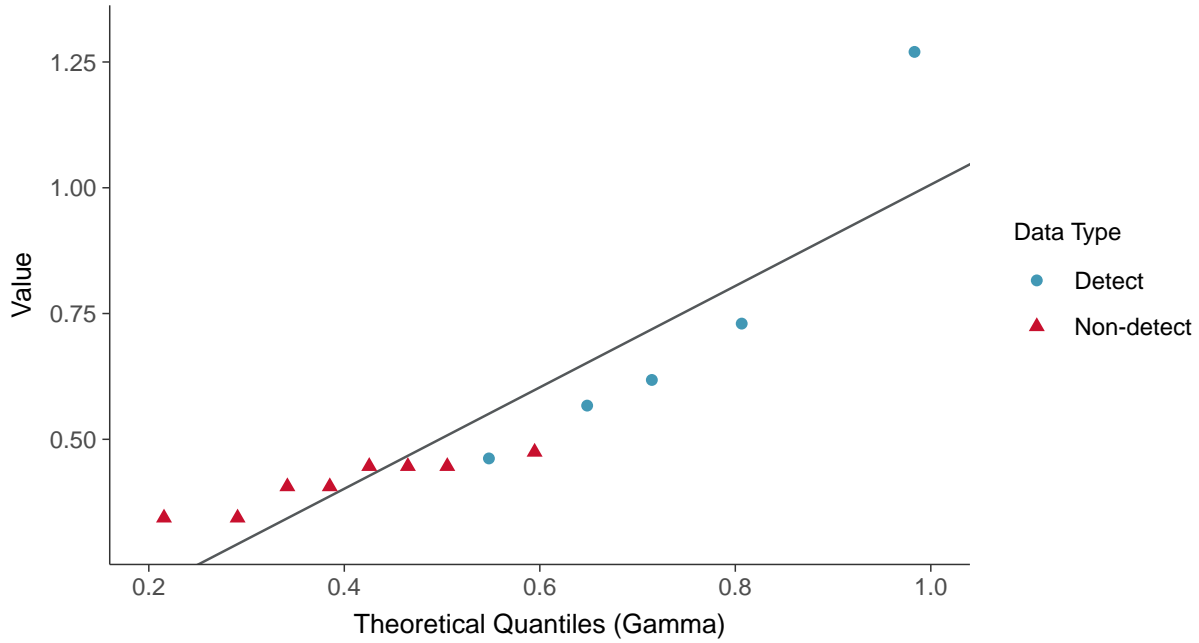
Radium 226 and 228, MW-18 (pCi/L)





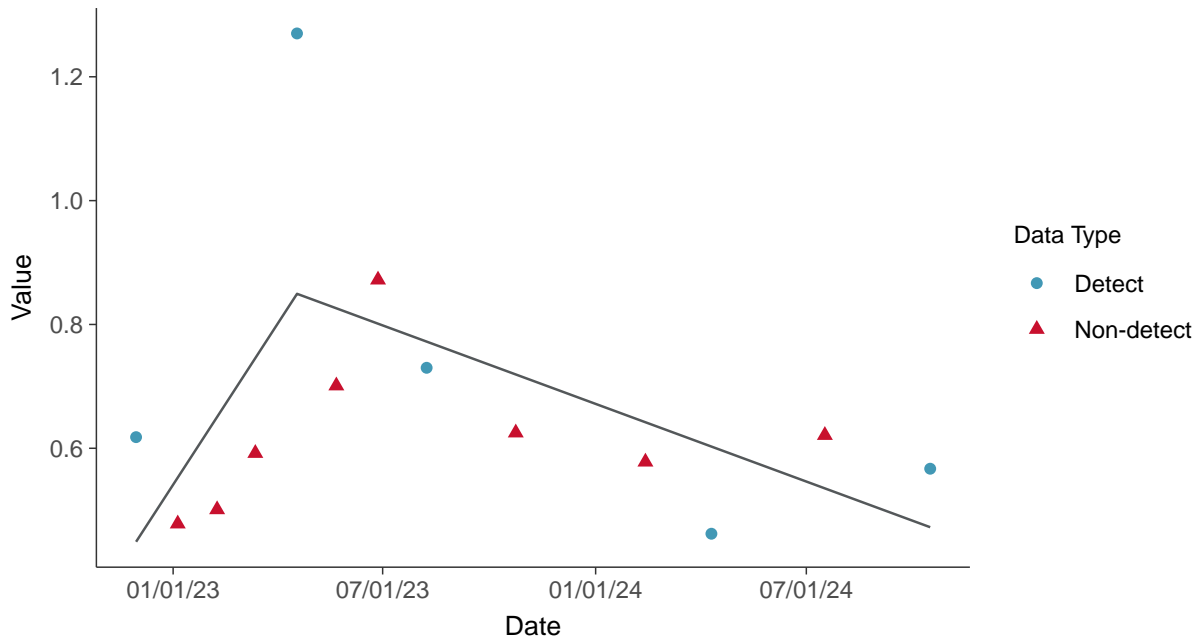
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-18 (pCi/L)



Trend Regression: Piecewise Linear-Linear

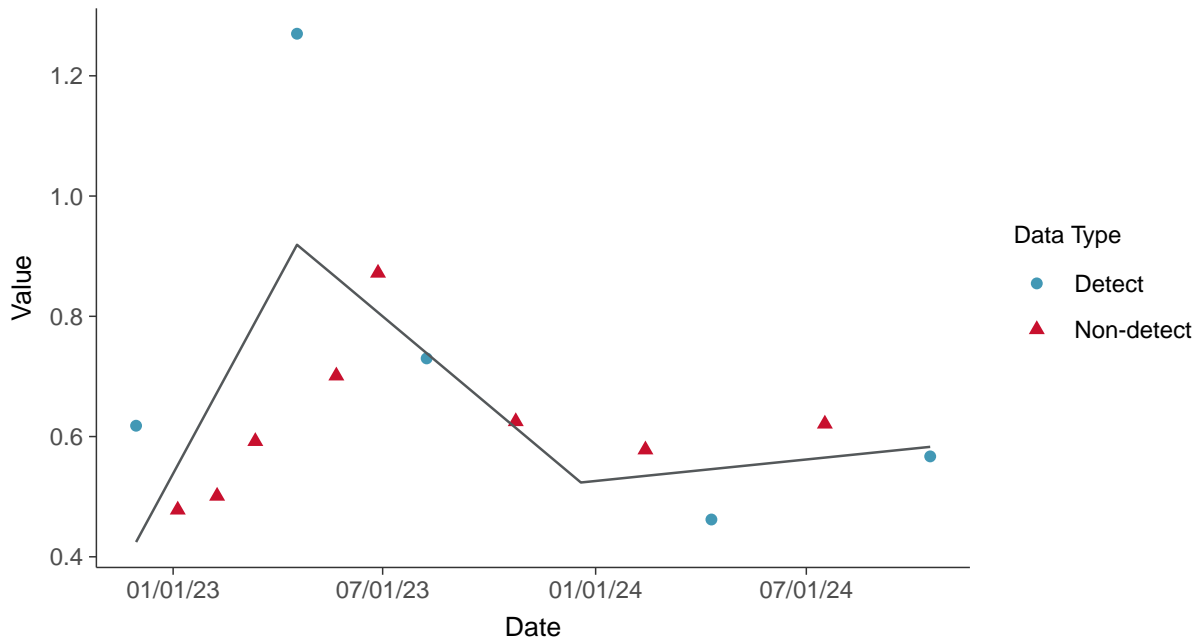
Radium 226 and 228, MW-18 (pCi/L)





Trend Regression: Piecewise Linear-Linear-Linear

Radium 226 and 228, MW-18 (pCi/L)



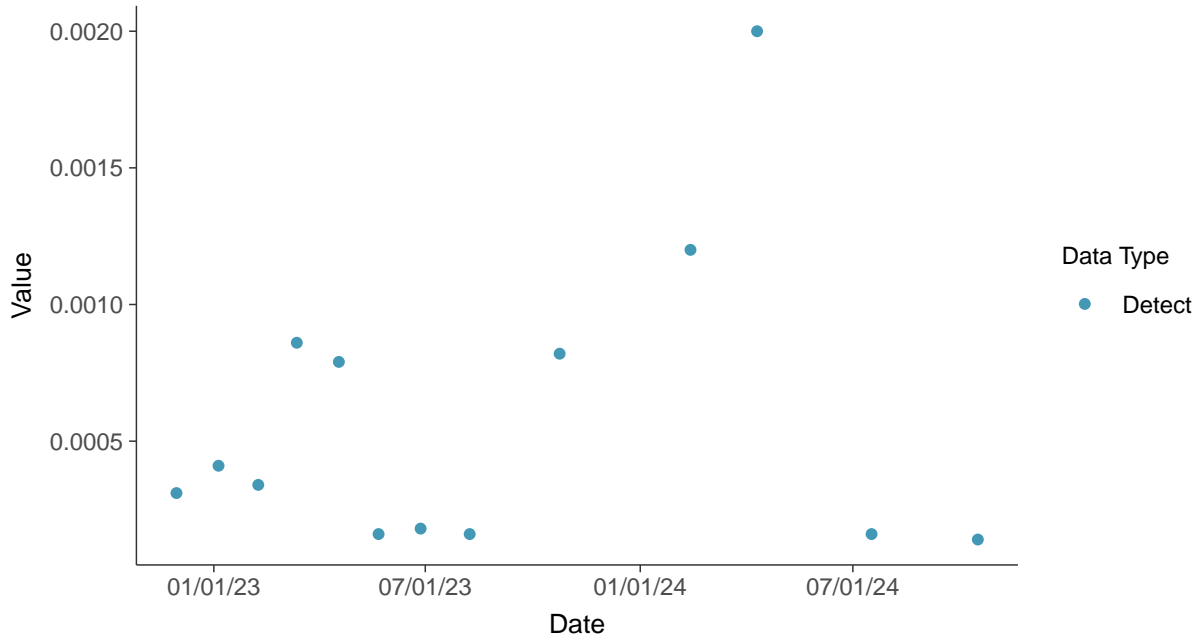


Appendix IV: Selenium, MW-18

ID: 1_28_1_5_122

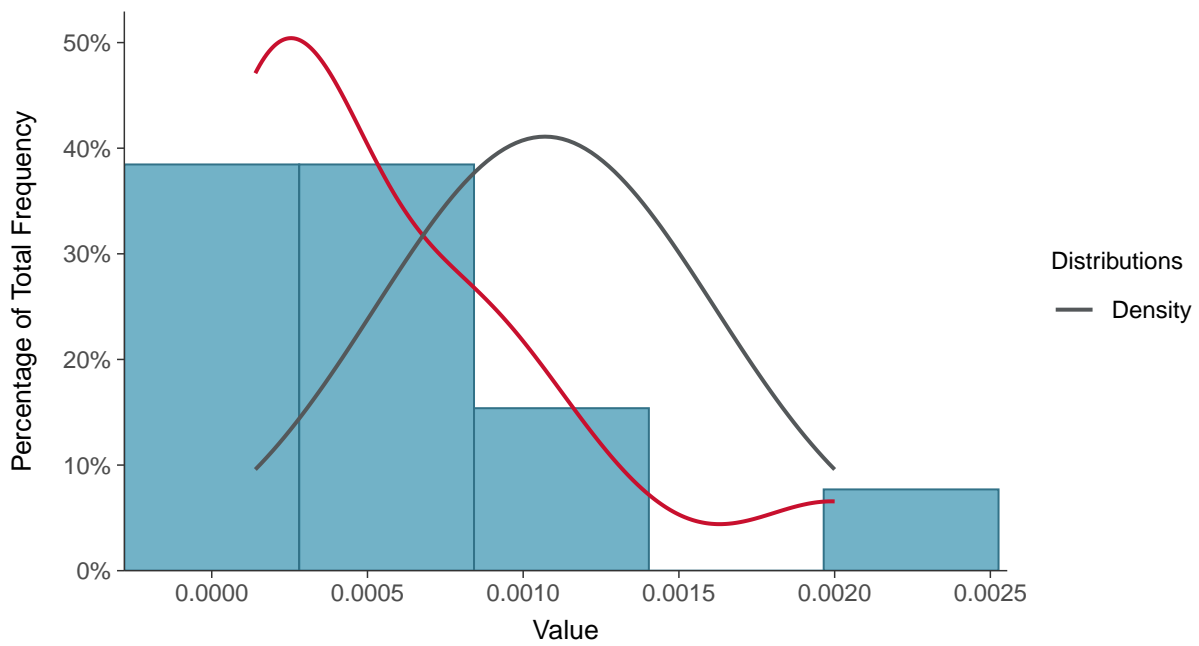
Scatter Plot

Selenium, MW-18 (mg/L)



Histogram

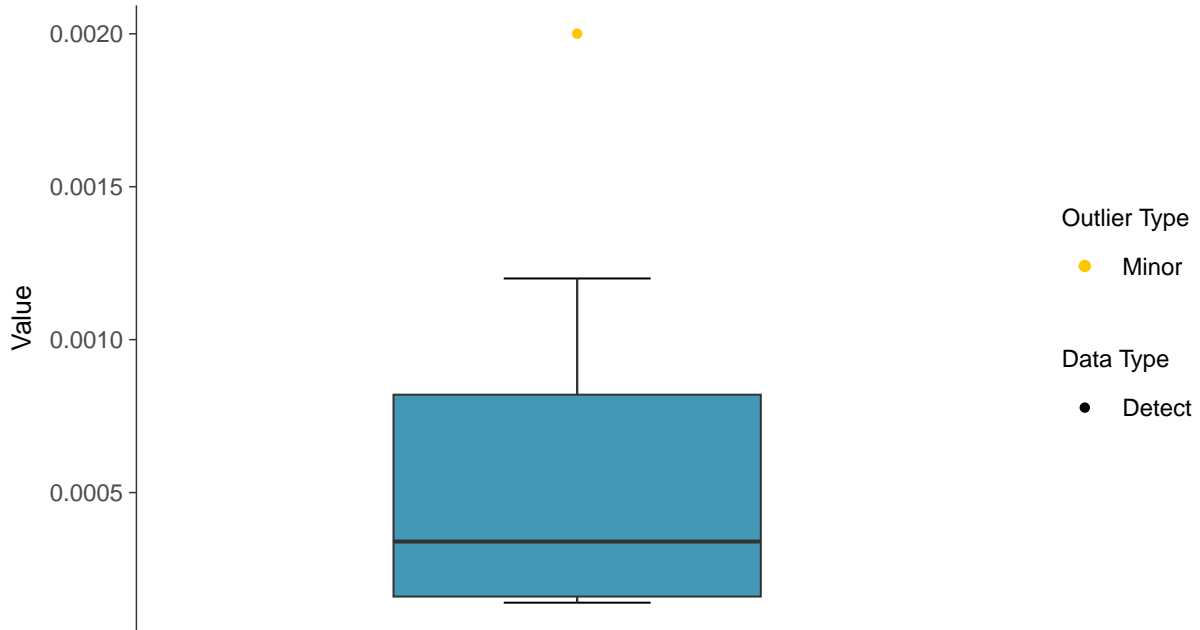
Selenium, MW-18 (mg/L)





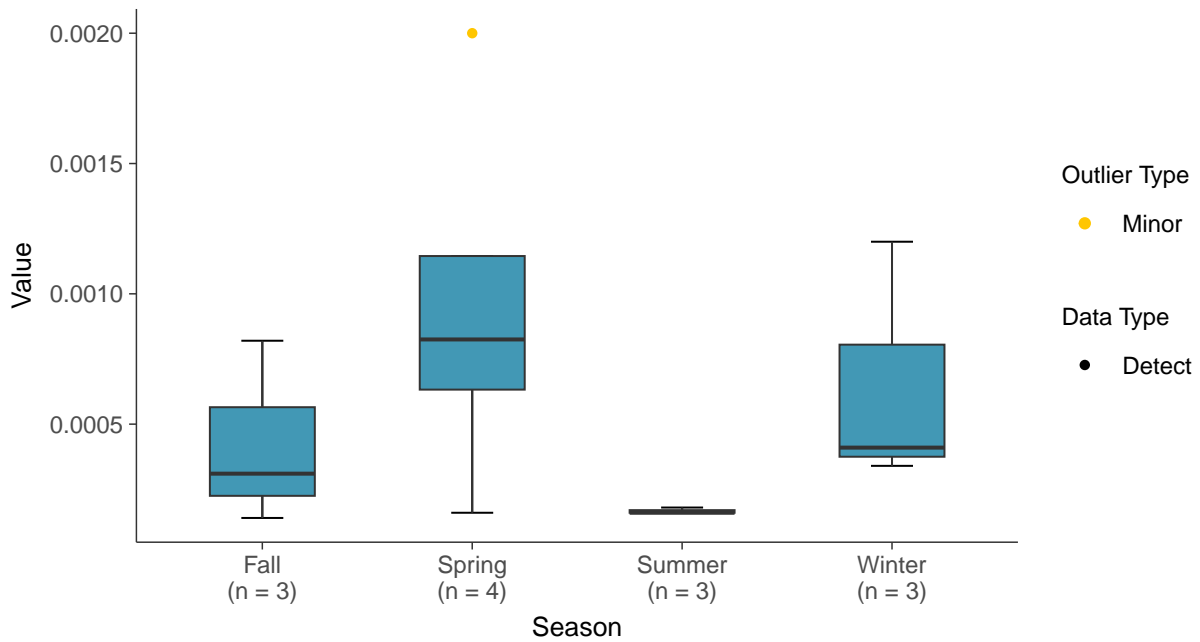
Boxplot

Selenium, MW-18 (mg/L)



Boxplot by Season

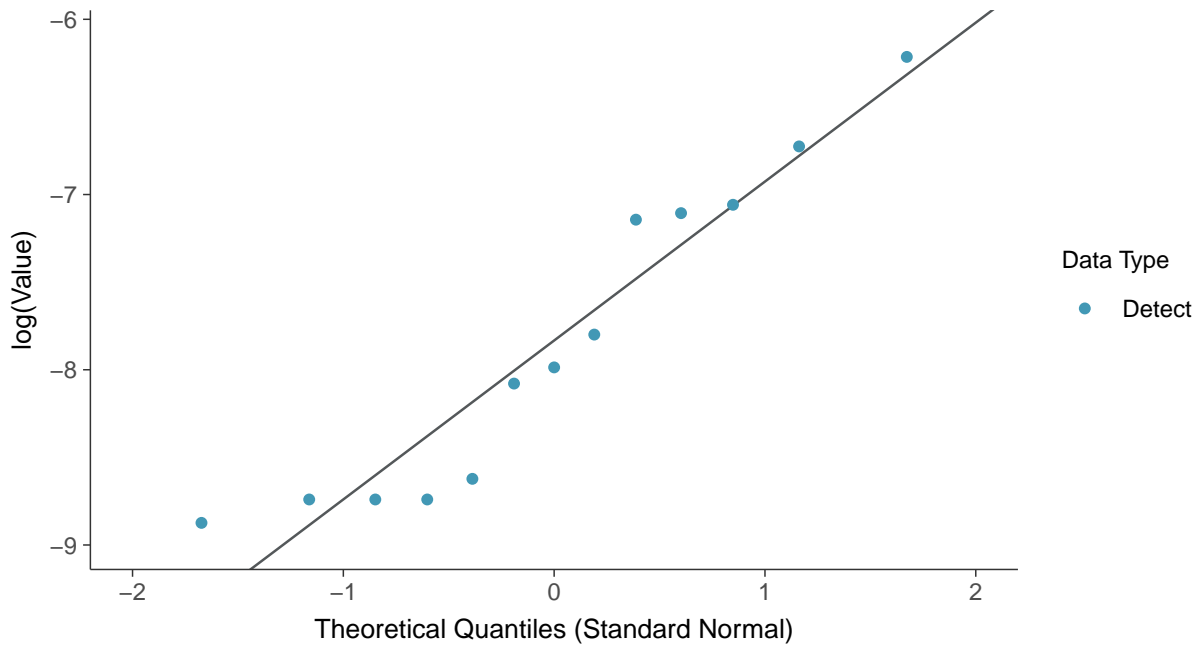
Selenium, MW-18 (mg/L)





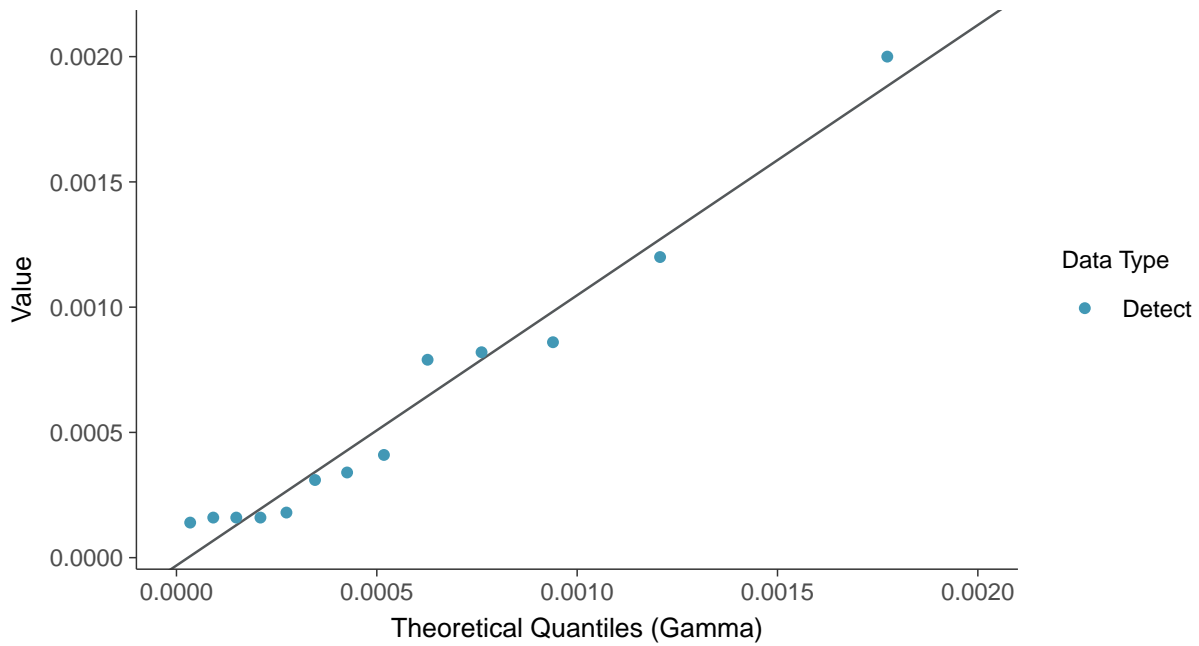
Lognormal Q-Q plot

Selenium, MW-18 (mg/L)



Gamma Q-Q plot

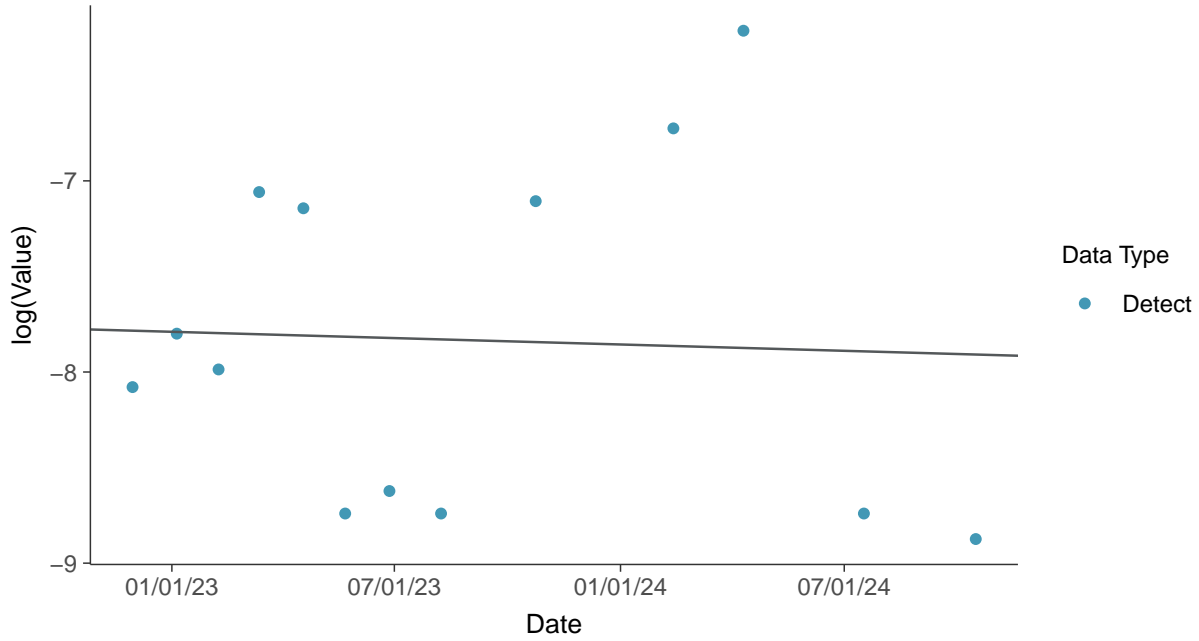
Selenium, MW-18 (mg/L)





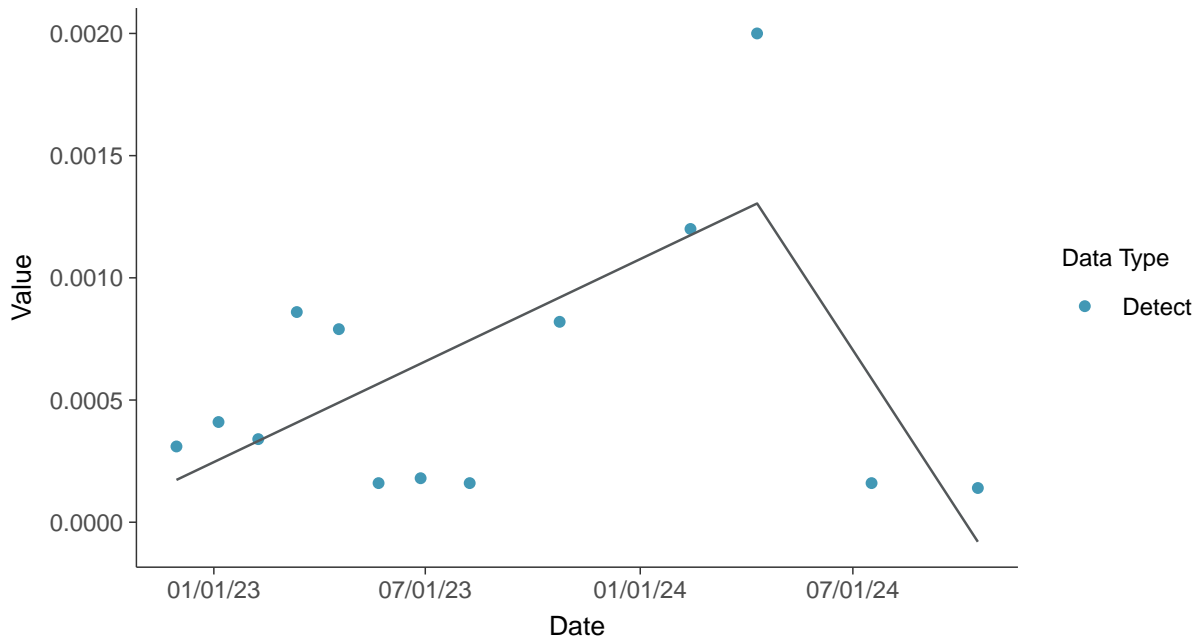
Trend Regression: Lognormal MLE

Selenium, MW-18 (mg/L)



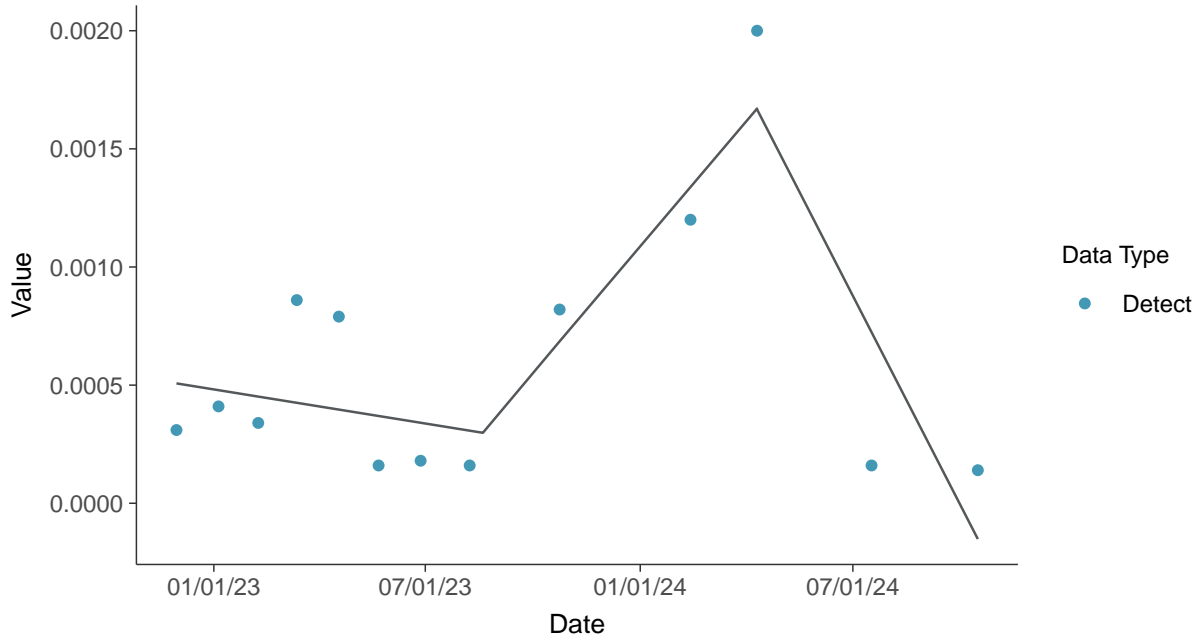
Trend Regression: Piecewise Linear-Linear

Selenium, MW-18 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear
Selenium, MW-18 (mg/L)



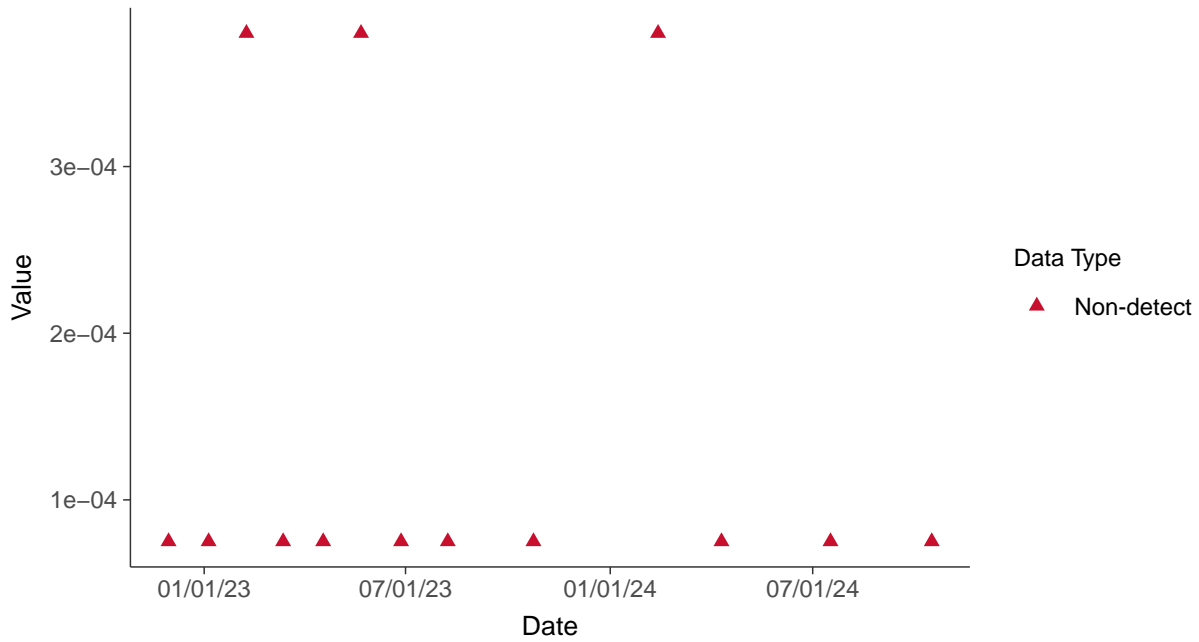


Appendix IV: Thallium, MW-18

ID: 1_28_1_5_125

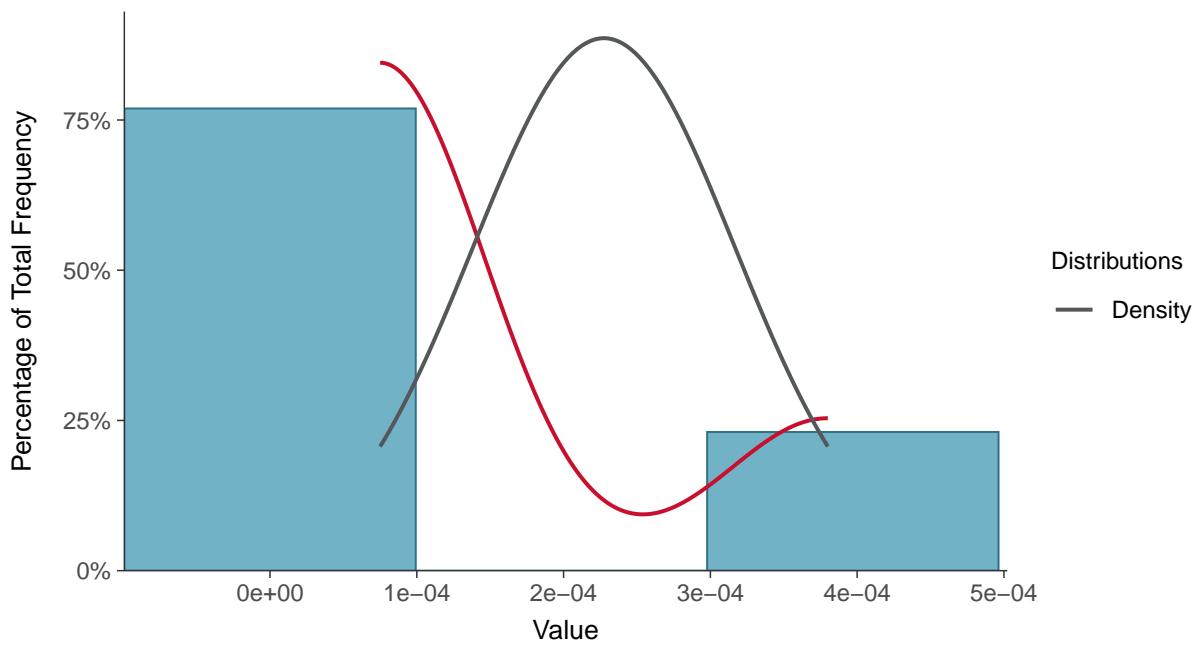
Scatter Plot

Thallium, MW-18 (mg/L)



Histogram

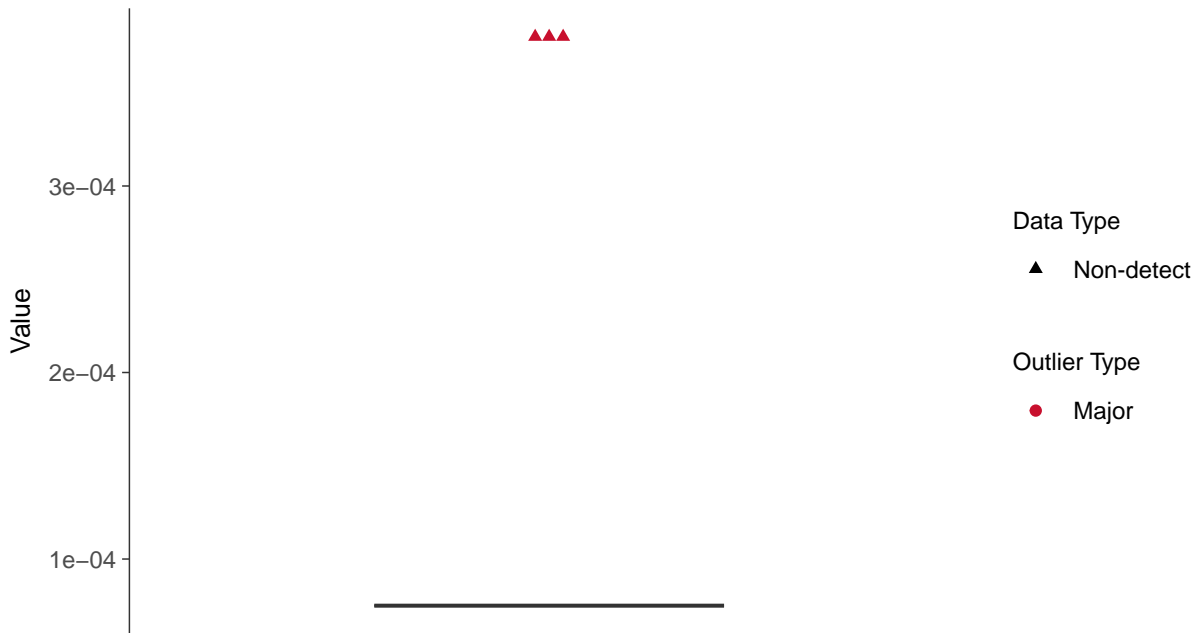
Thallium, MW-18 (mg/L)





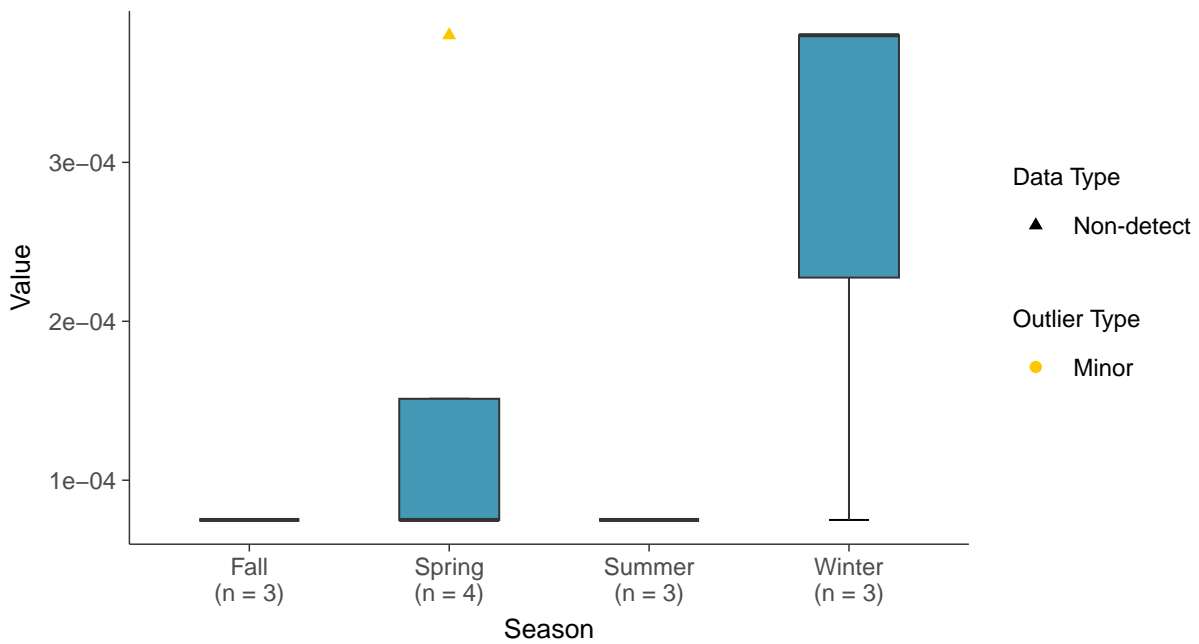
Boxplot

Thallium, MW-18 (mg/L)



Boxplot by Season

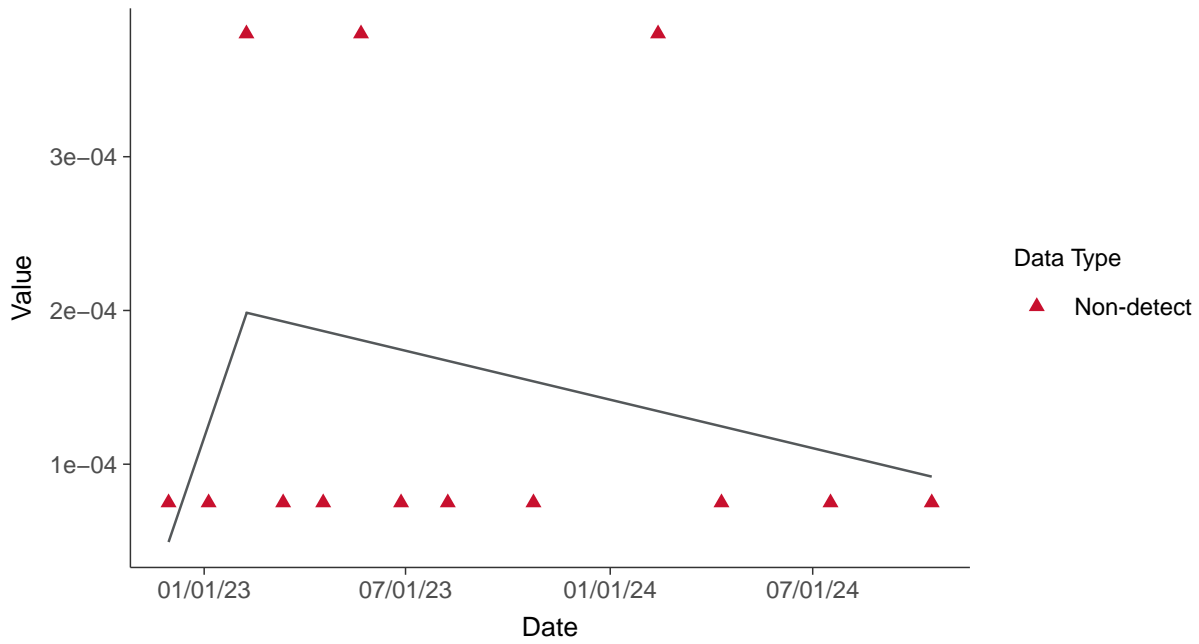
Thallium, MW-18 (mg/L)





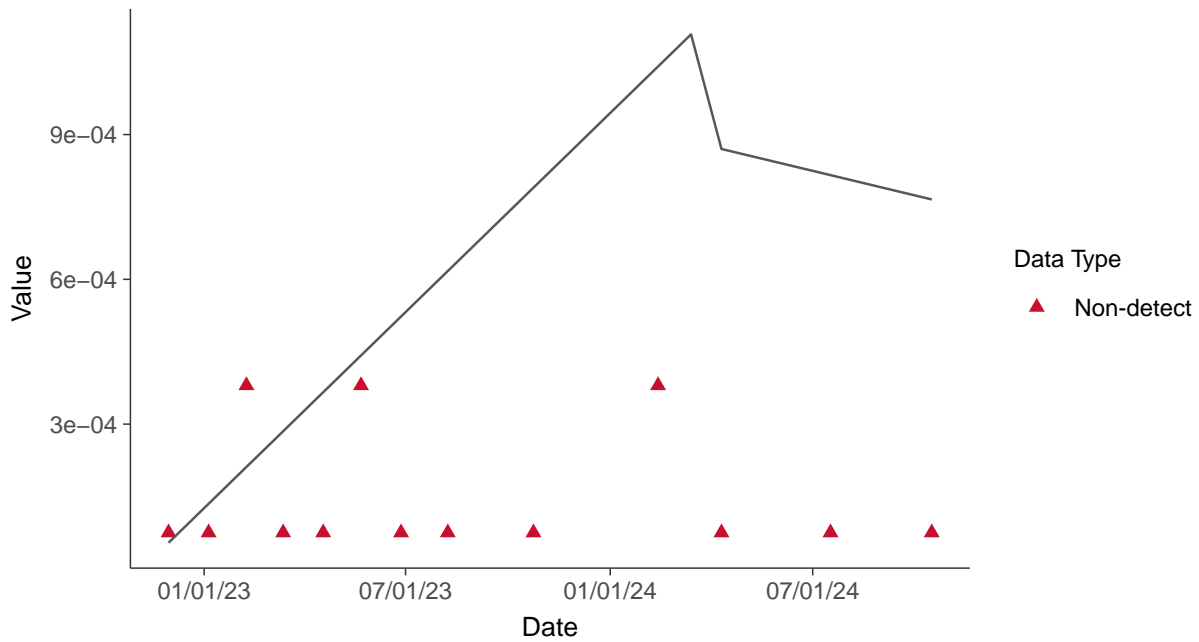
Trend Regression: Piecewise Linear-Linear

Thallium, MW-18 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Thallium, MW-18 (mg/L)



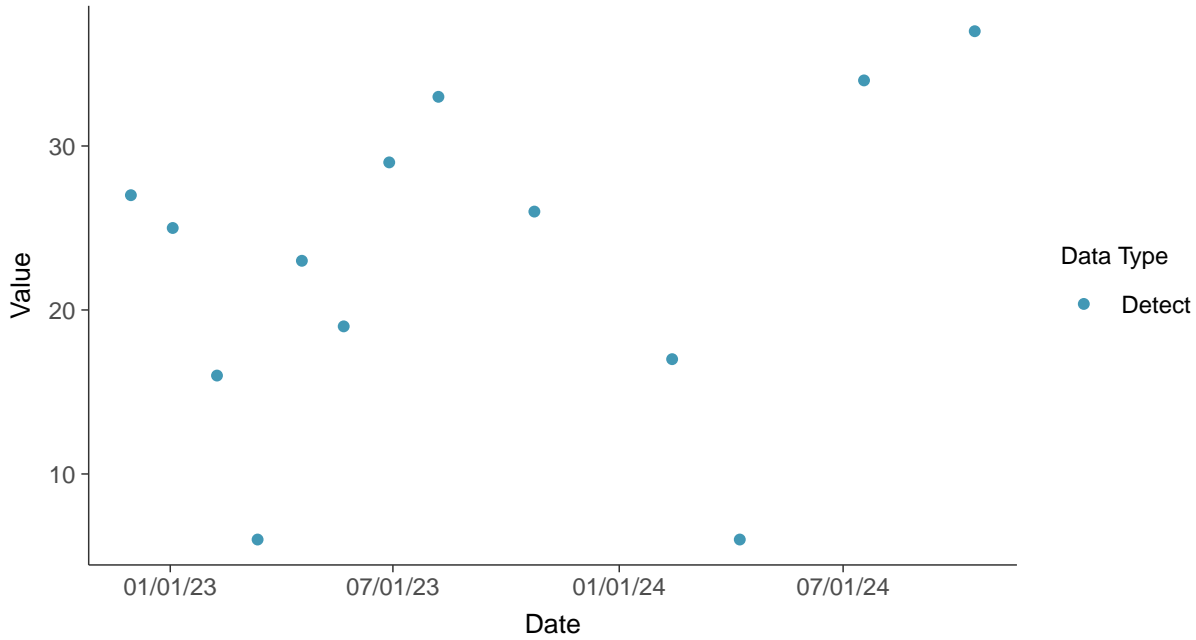


Additional Parameters: Total Suspended Solids, MW-19

ID: 1_29_1_3_127

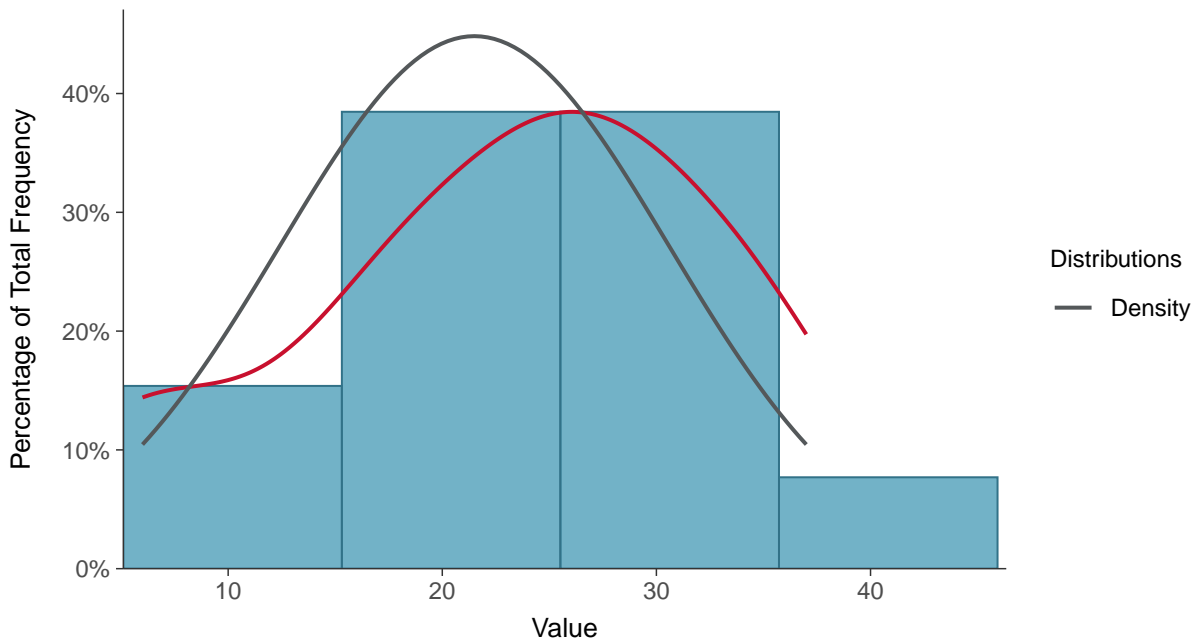
Scatter Plot

Total Suspended Solids, MW-19 (mg/L)



Histogram

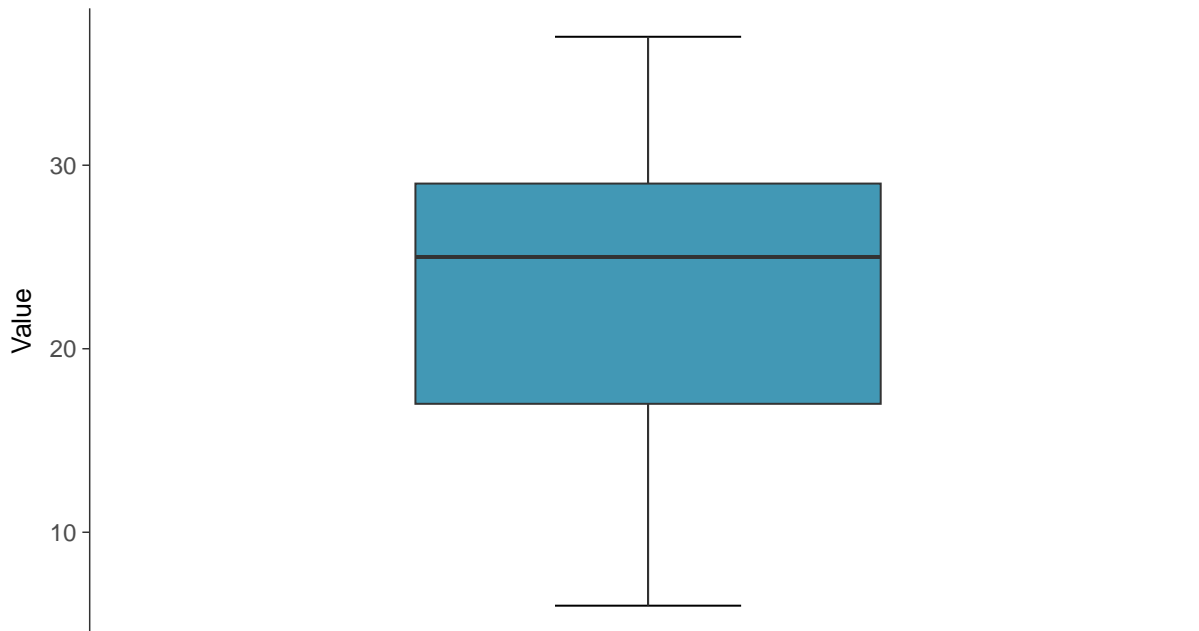
Total Suspended Solids, MW-19 (mg/L)





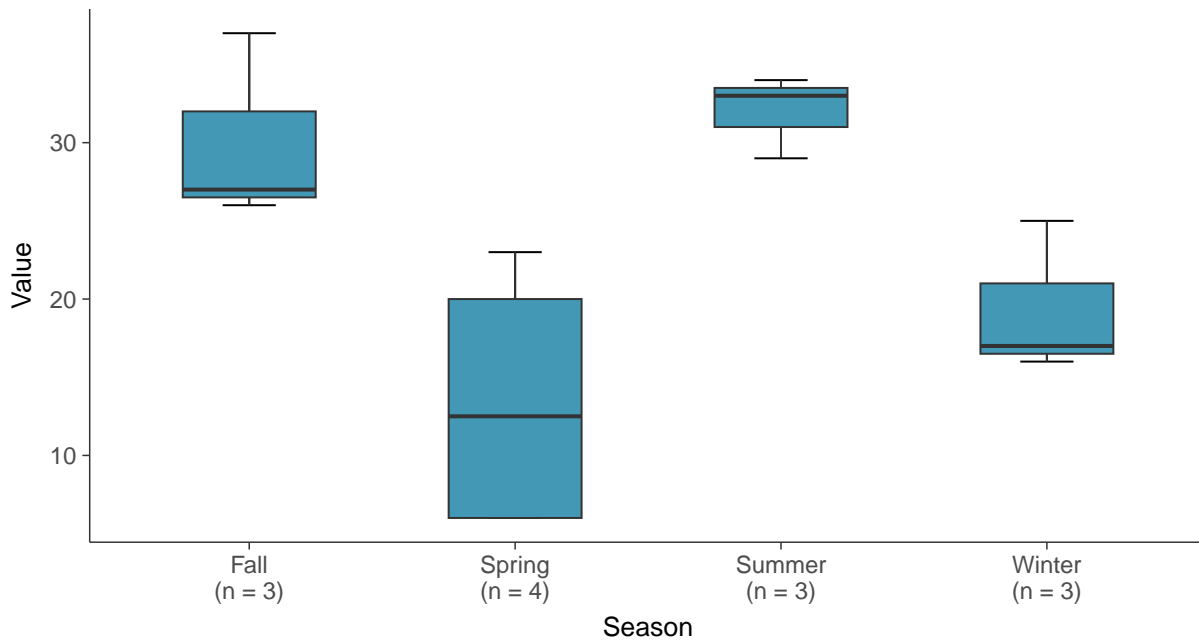
Boxplot

Total Suspended Solids, MW-19 (mg/L)



Boxplot by Season

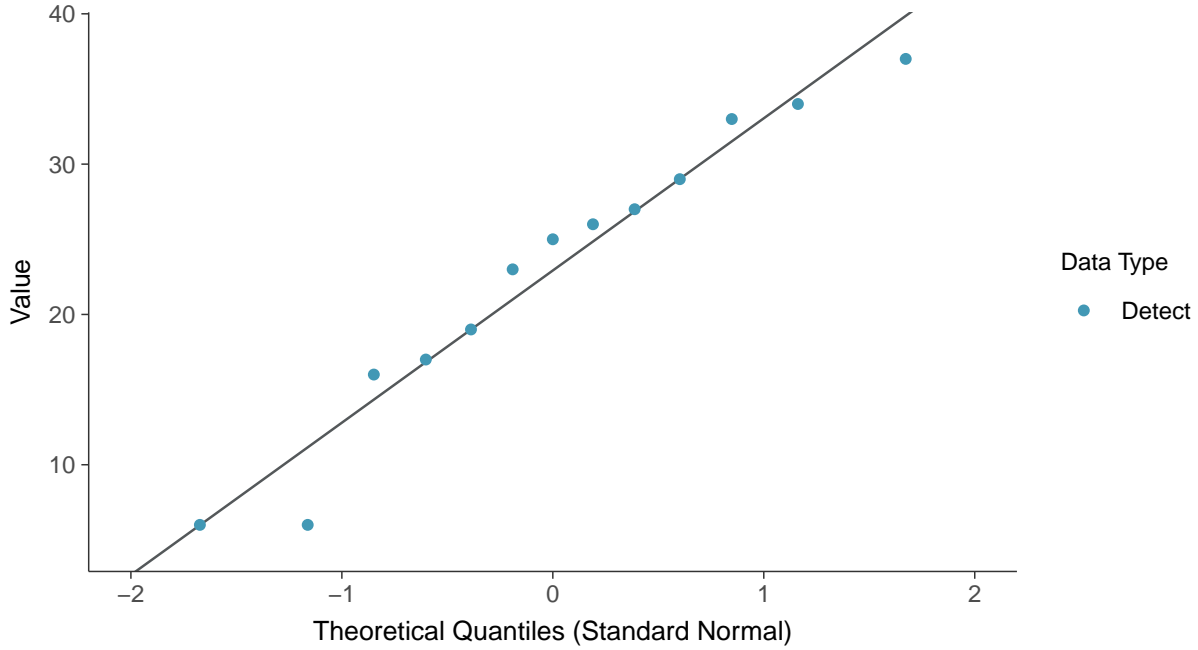
Total Suspended Solids, MW-19 (mg/L)





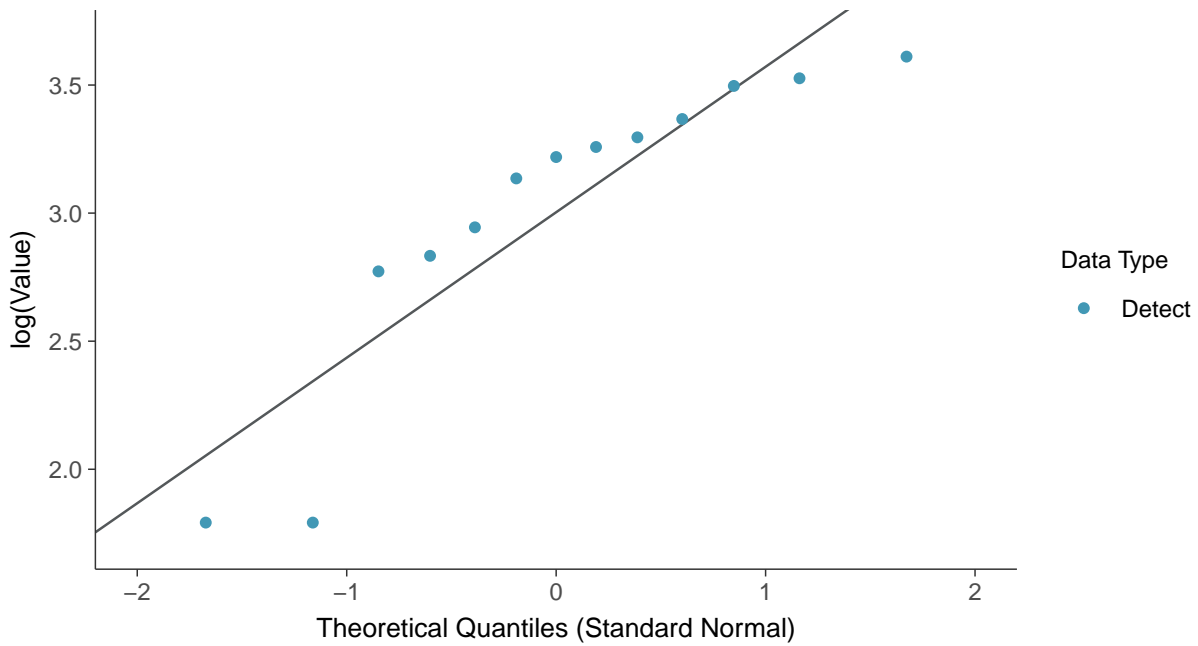
Normal Q-Q plot

Total Suspended Solids, MW-19 (mg/L)



Lognormal Q-Q plot

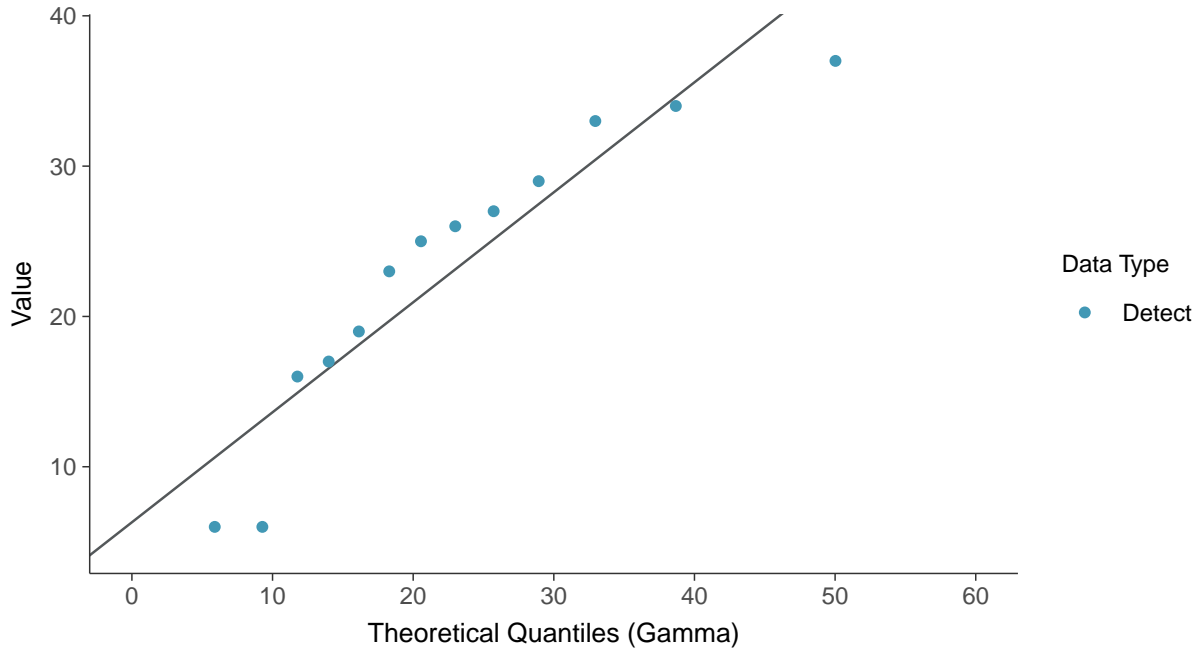
Total Suspended Solids, MW-19 (mg/L)





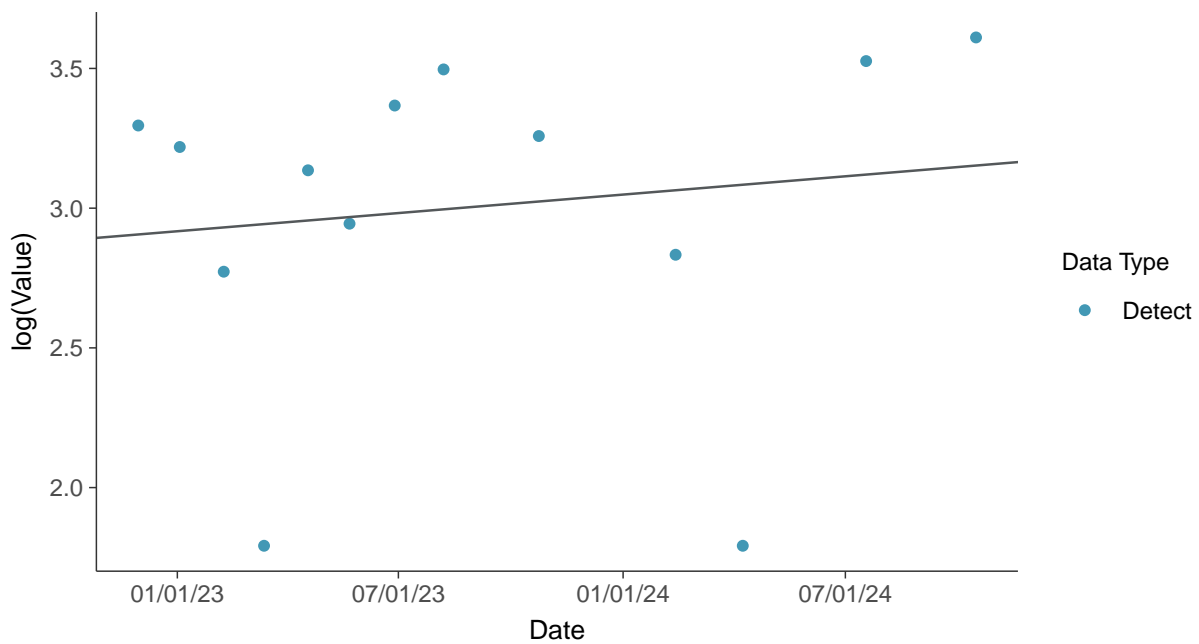
Gamma Q-Q plot

Total Suspended Solids, MW-19 (mg/L)



Trend Regression: Lognormal MLE

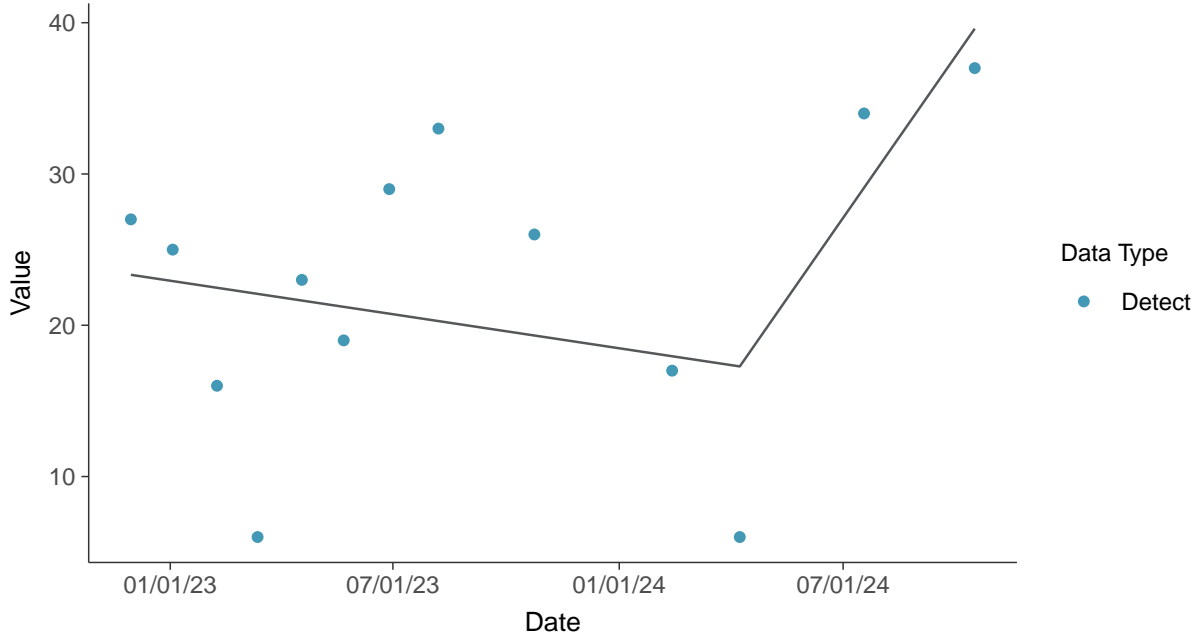
Total Suspended Solids, MW-19 (mg/L)





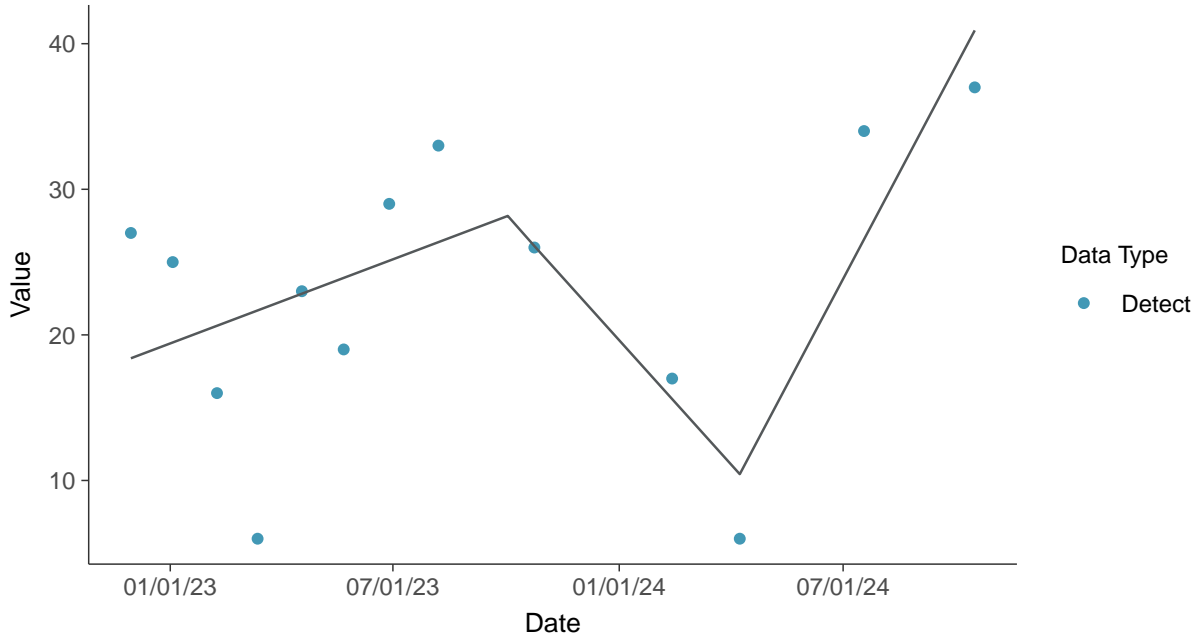
Trend Regression: Piecewise Linear-Linear

Total Suspended Solids, MW-19 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

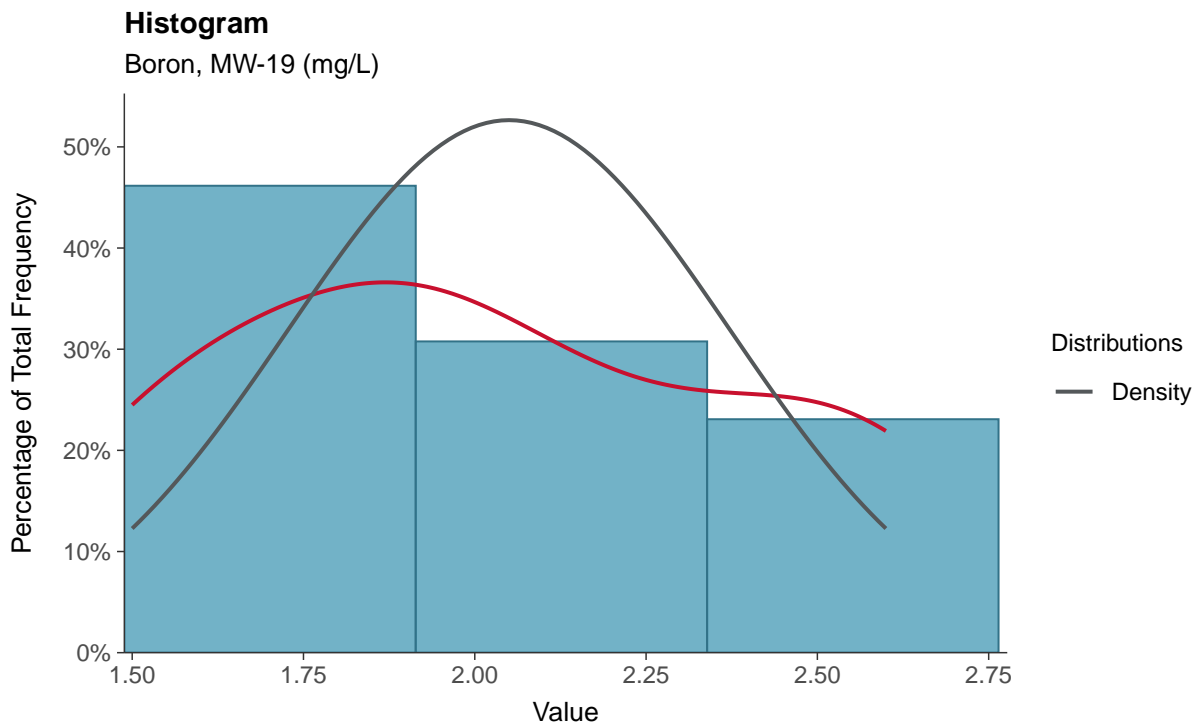
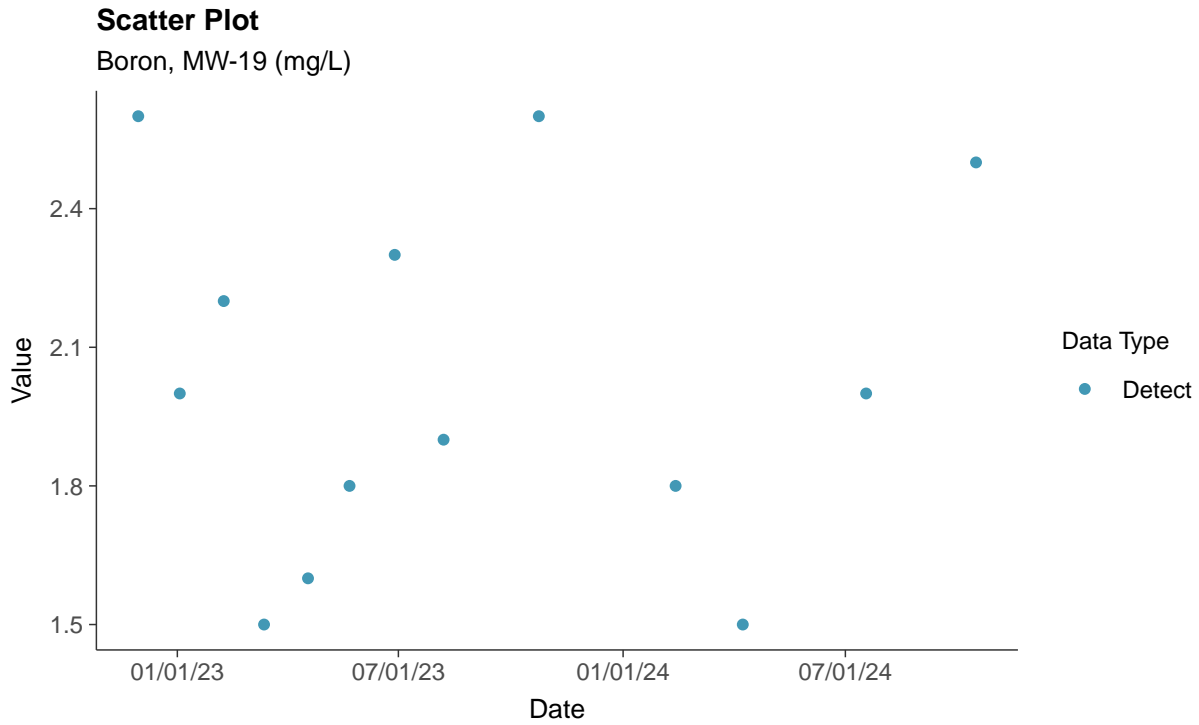
Total Suspended Solids, MW-19 (mg/L)





Appendix III: Boron, MW-19

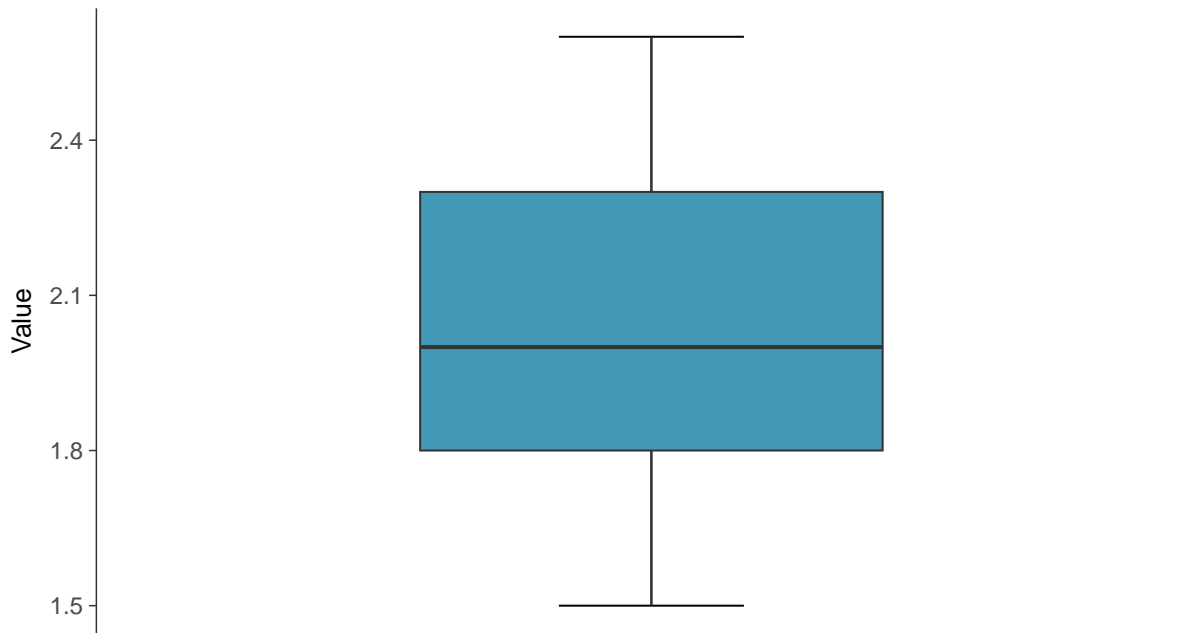
ID: 1_29_1_4_105





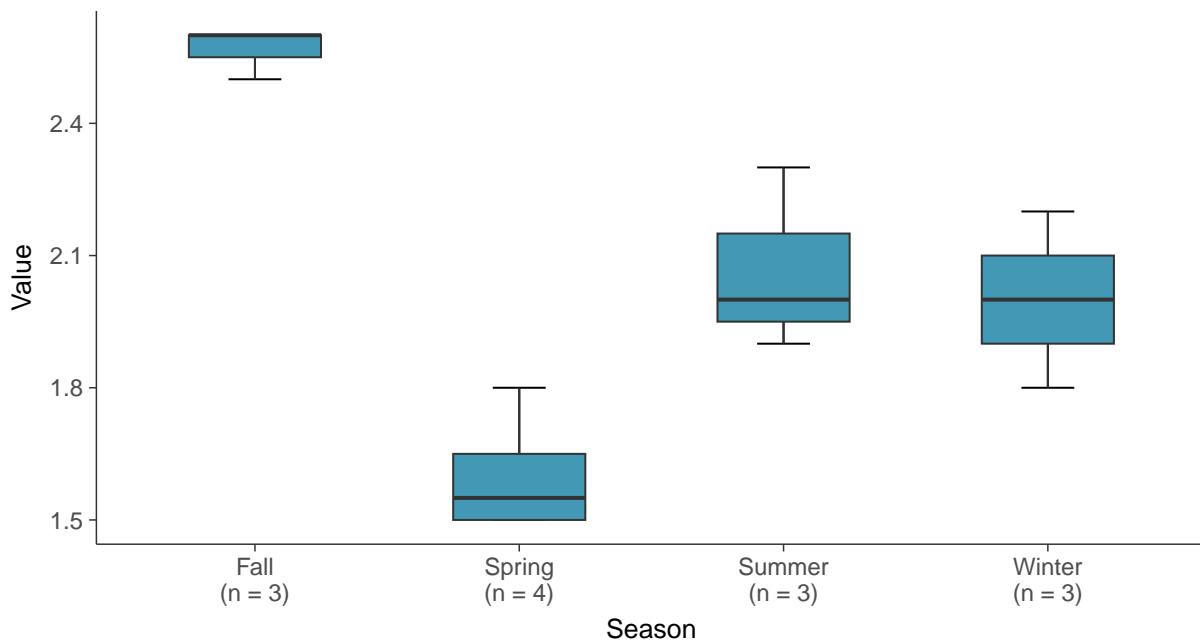
Boxplot

Boron, MW-19 (mg/L)



Boxplot by Season

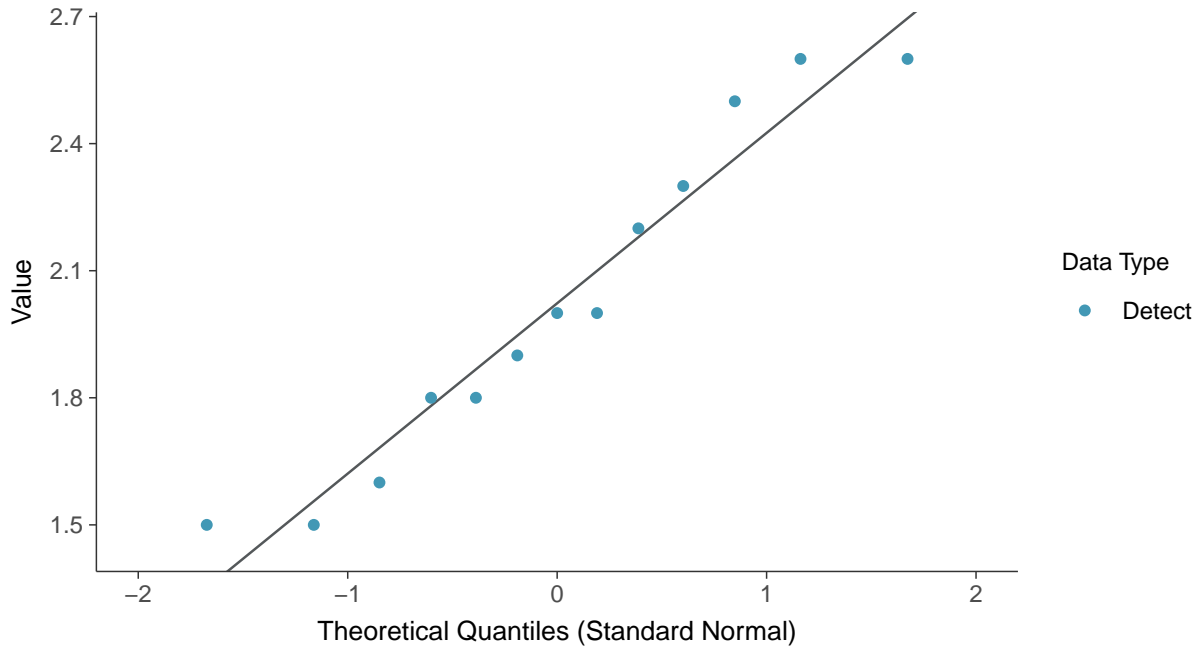
Boron, MW-19 (mg/L)





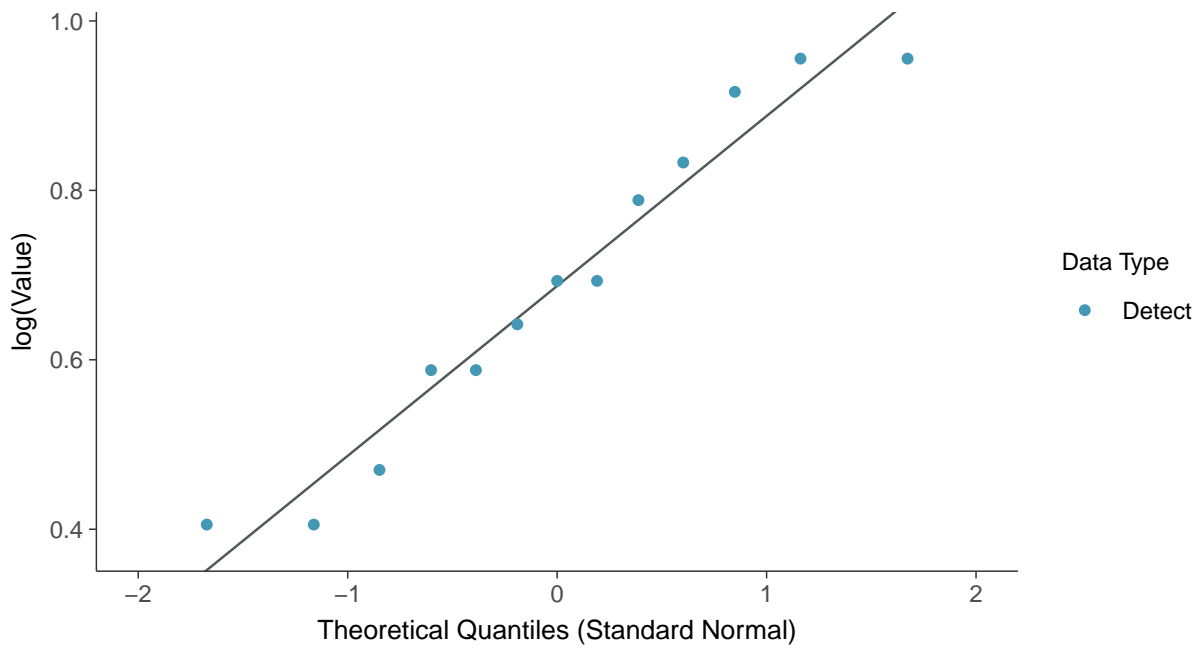
Normal Q-Q plot

Boron, MW-19 (mg/L)



Lognormal Q-Q plot

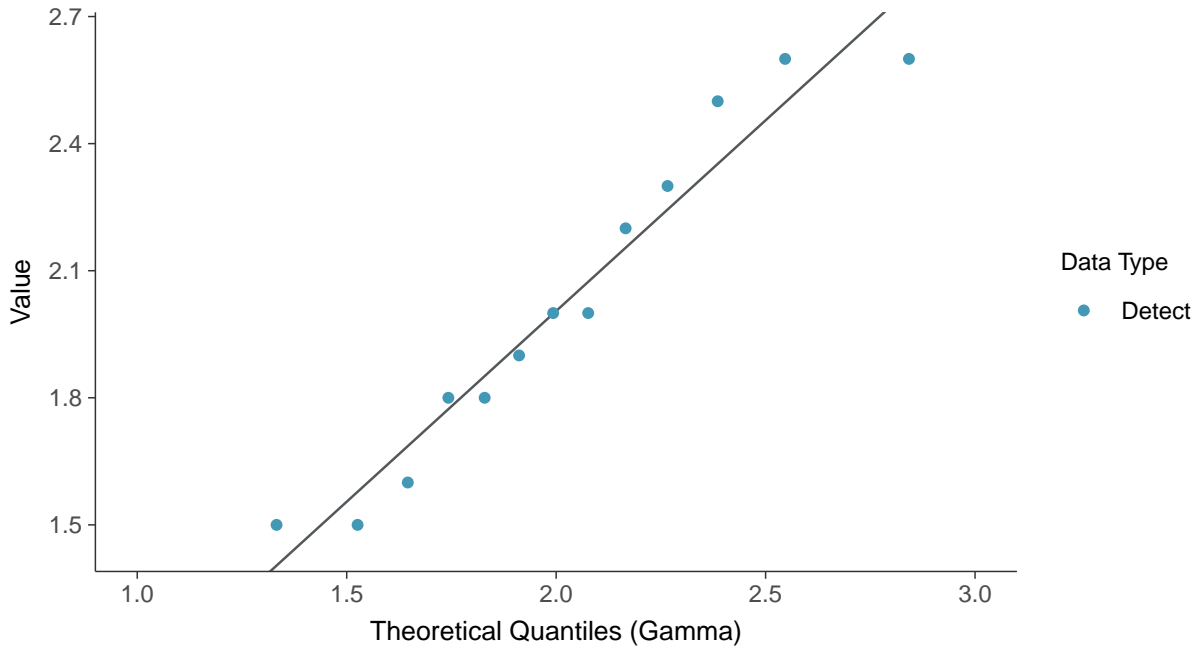
Boron, MW-19 (mg/L)





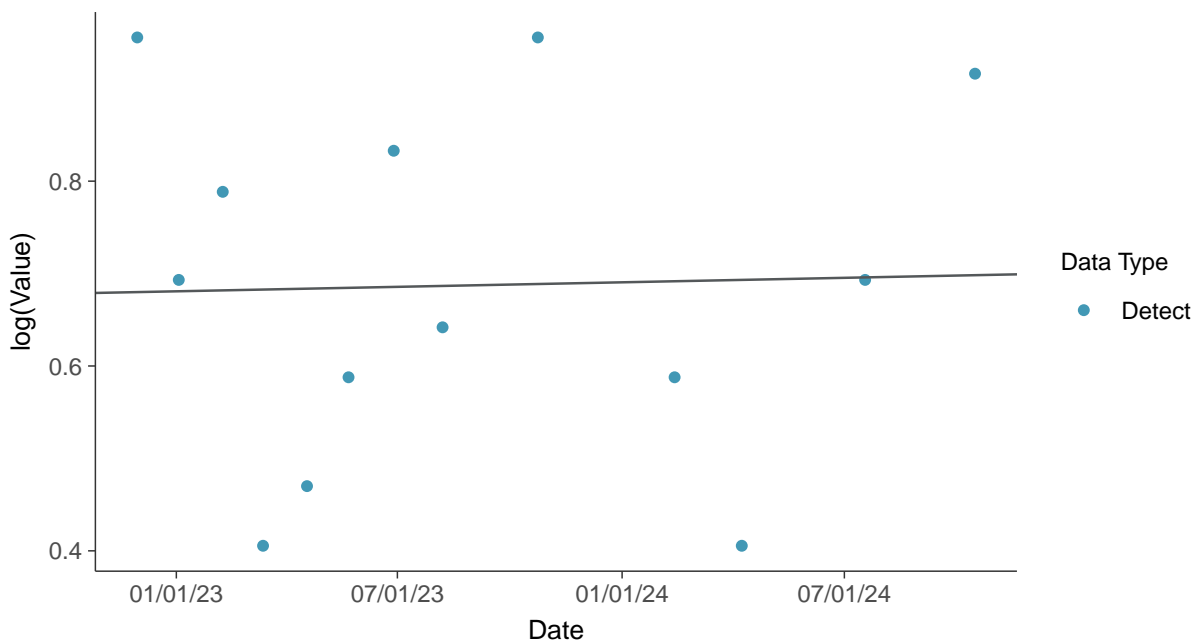
Gamma Q-Q plot

Boron, MW-19 (mg/L)



Trend Regression: Lognormal MLE

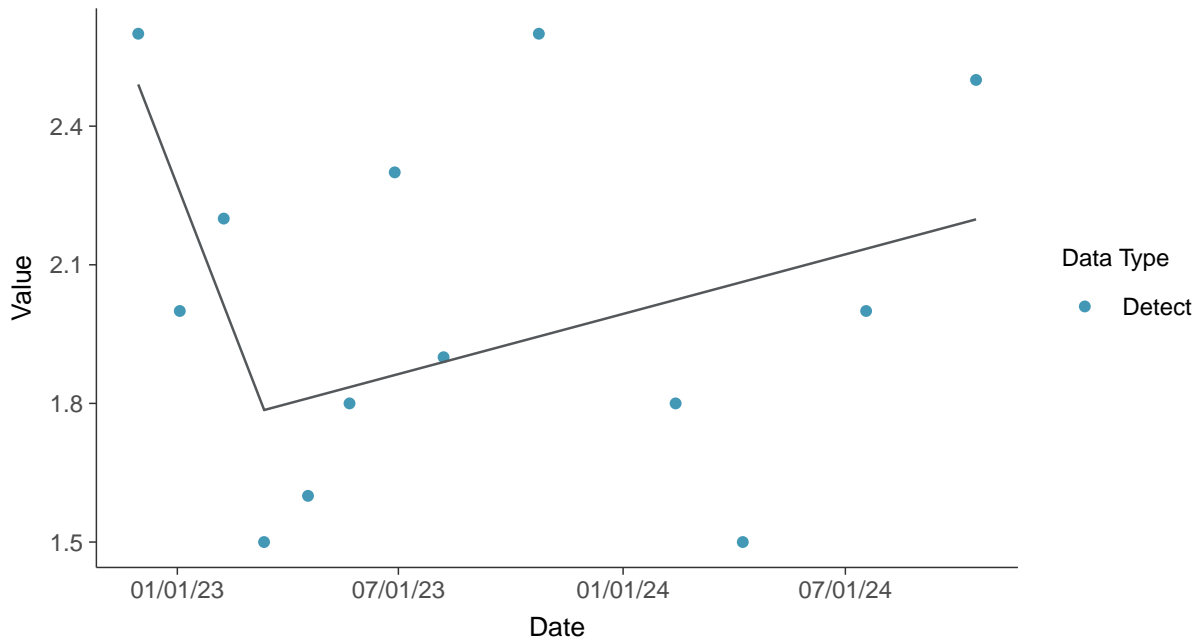
Boron, MW-19 (mg/L)





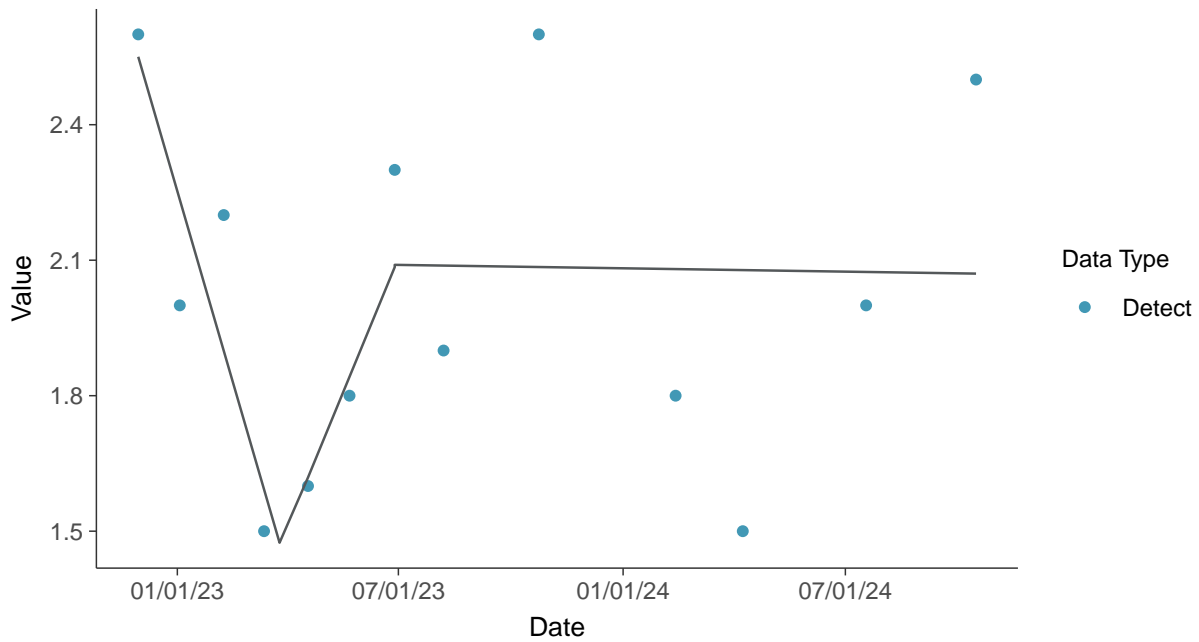
Trend Regression: Piecewise Linear-Linear

Boron, MW-19 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

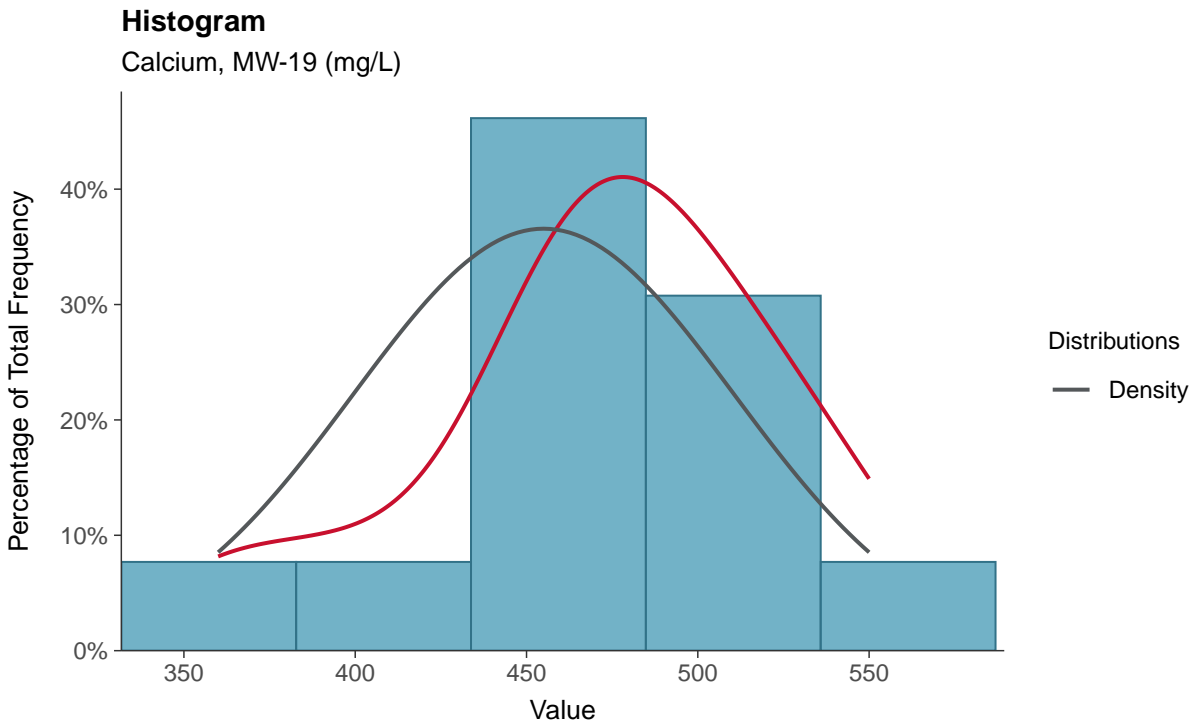
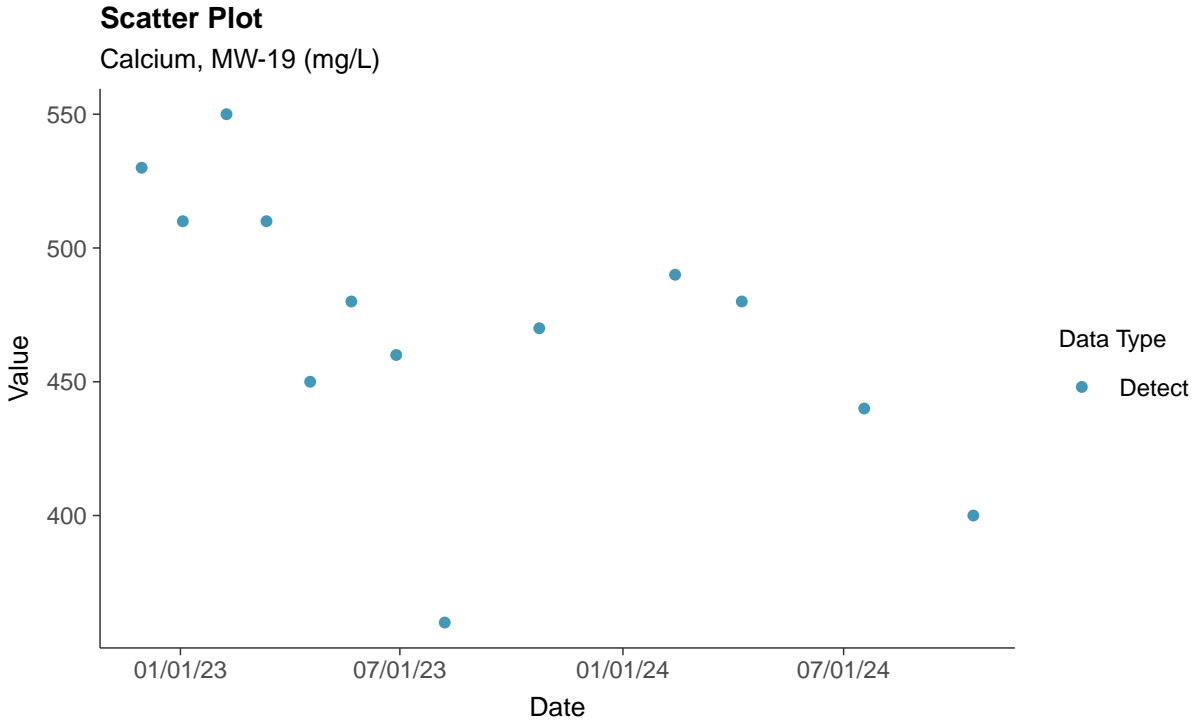
Boron, MW-19 (mg/L)





Appendix III: Calcium, MW-19

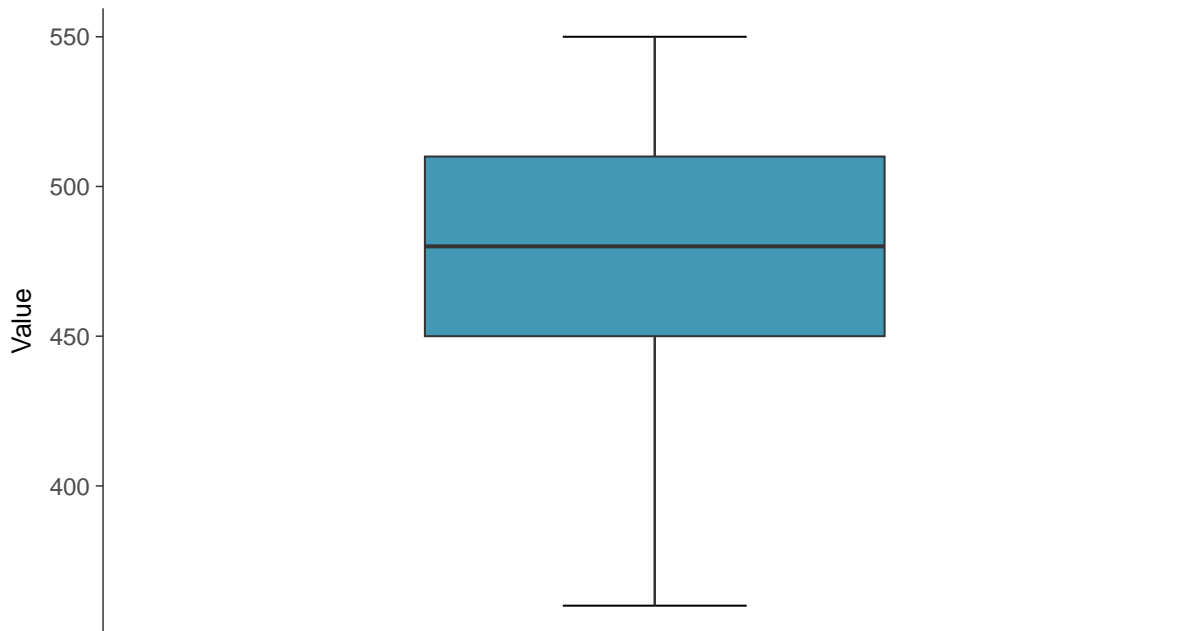
ID: 1_29_1_4_107





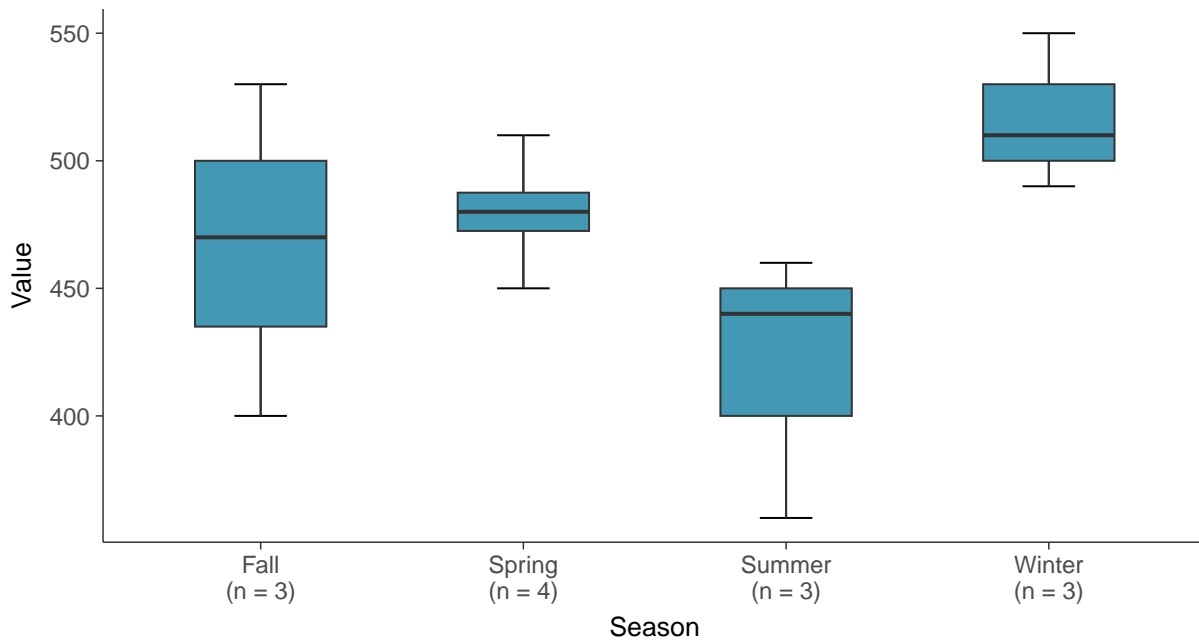
Boxplot

Calcium, MW-19 (mg/L)



Boxplot by Season

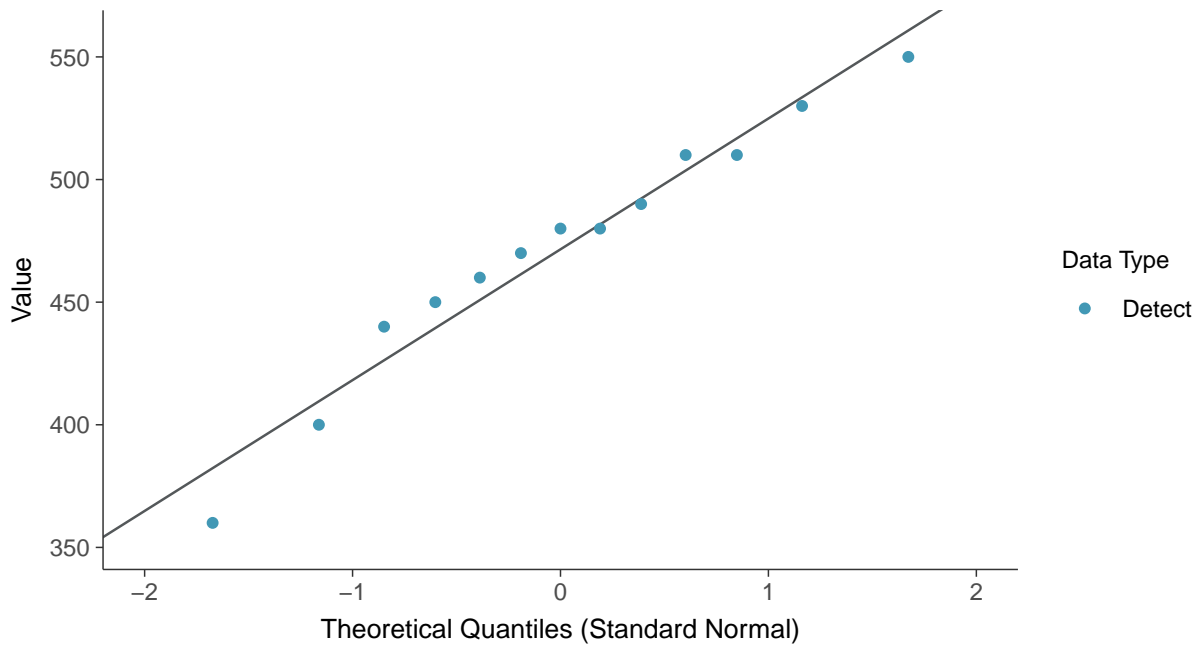
Calcium, MW-19 (mg/L)





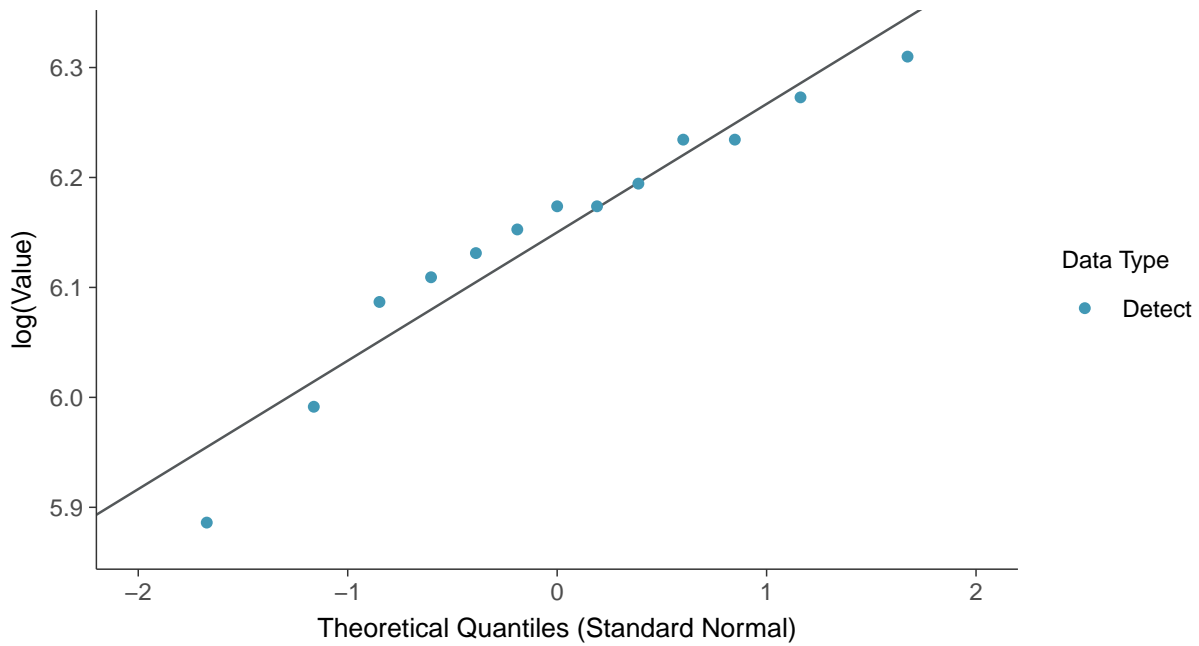
Normal Q-Q plot

Calcium, MW-19 (mg/L)



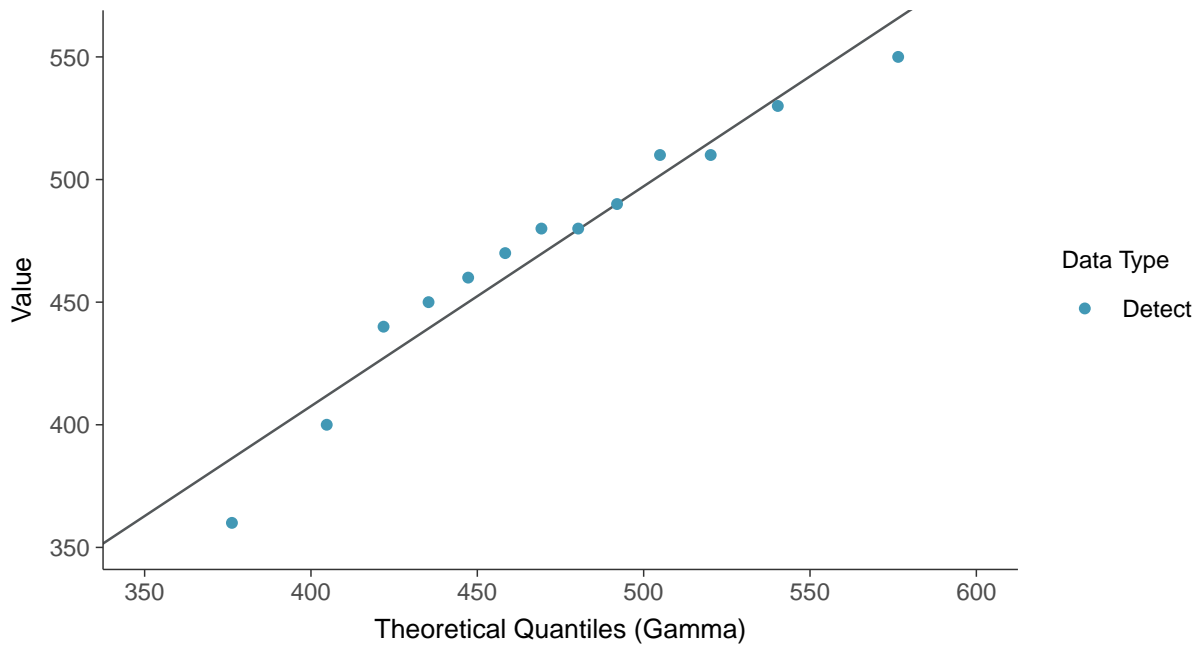
Lognormal Q-Q plot

Calcium, MW-19 (mg/L)

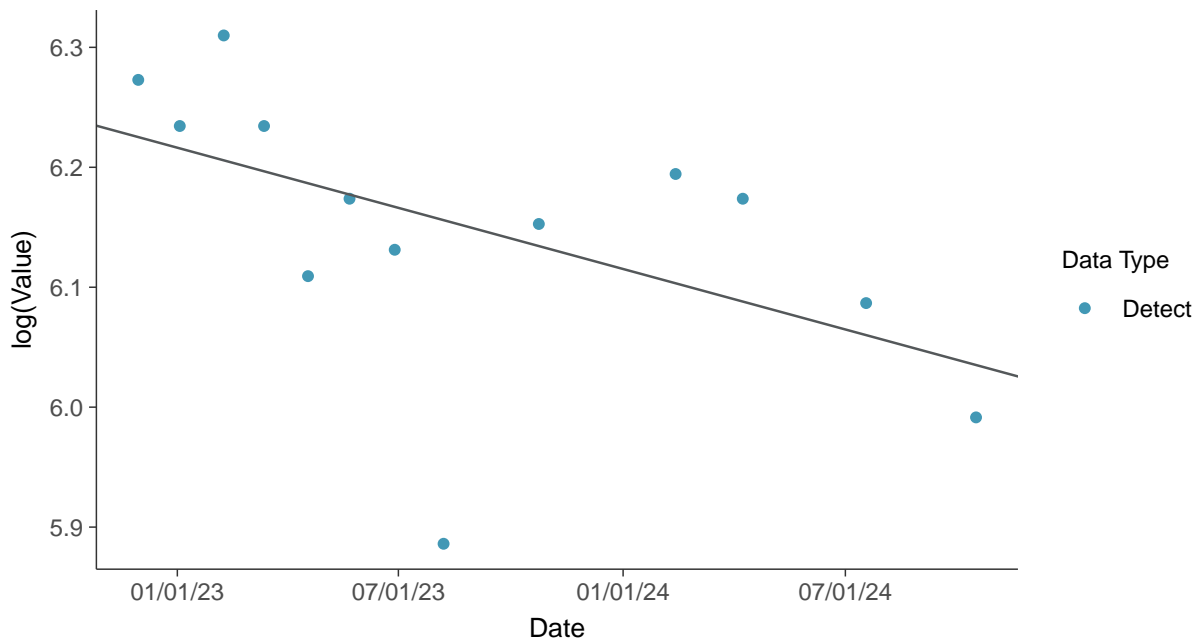




Gamma Q-Q plot
Calcium, MW-19 (mg/L)



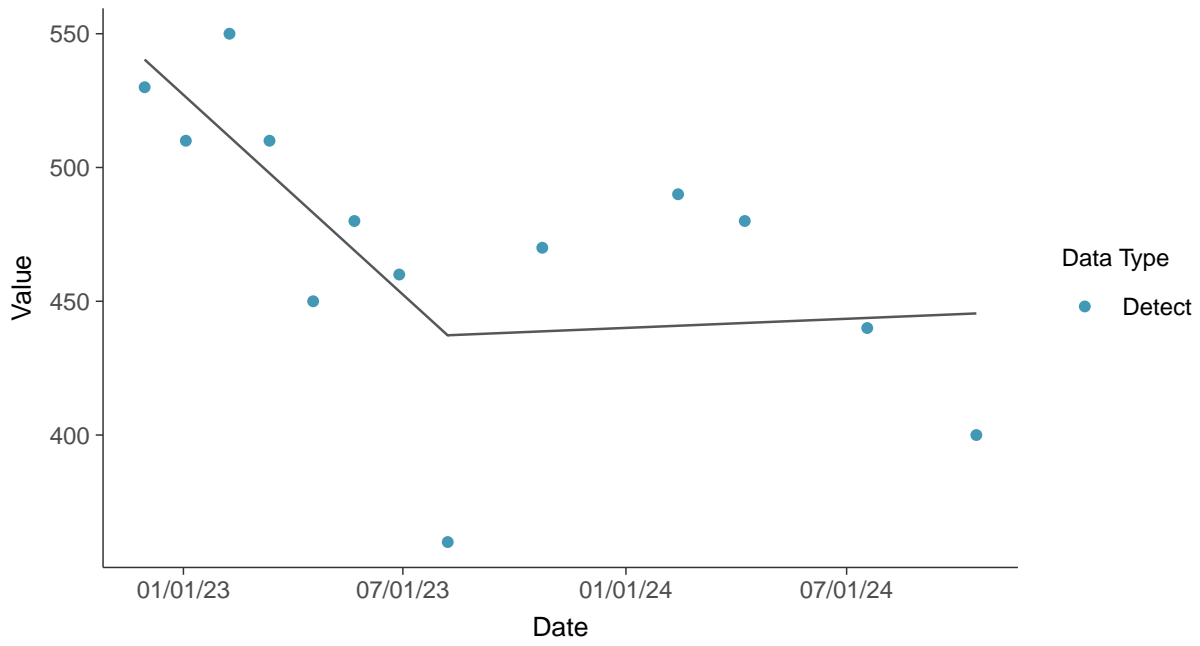
Trend Regression: Lognormal MLE
Calcium, MW-19 (mg/L)





Trend Regression: Piecewise Linear-Linear

Calcium, MW-19 (mg/L)



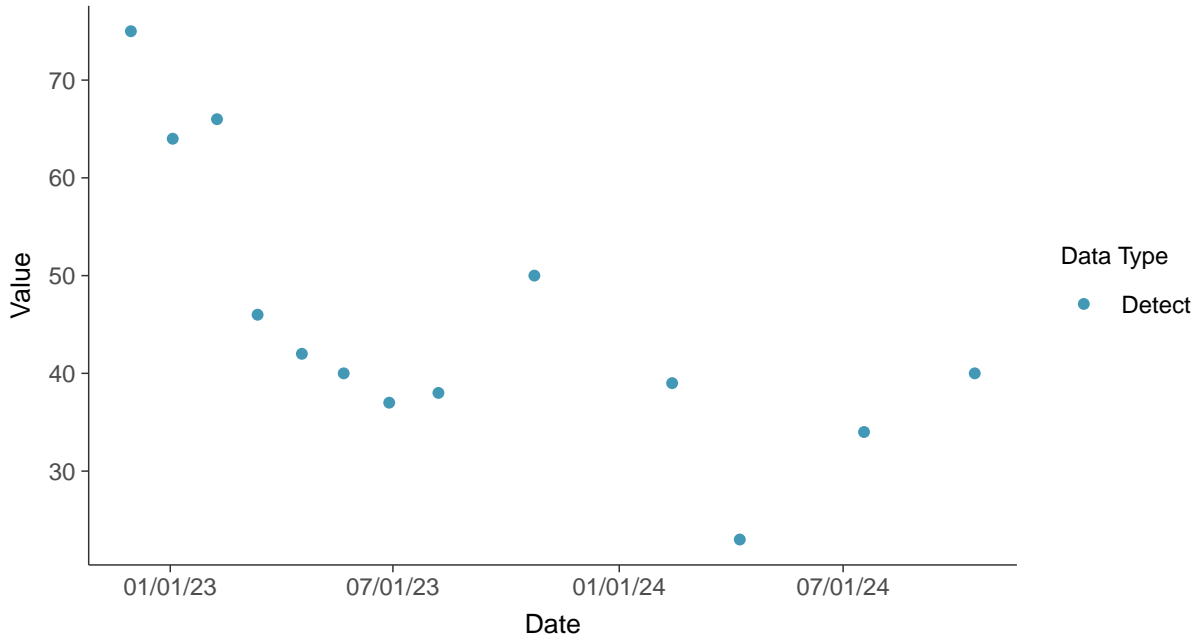


Appendix III: Chloride (as Cl), MW-19

ID: 1_29_1_4_108

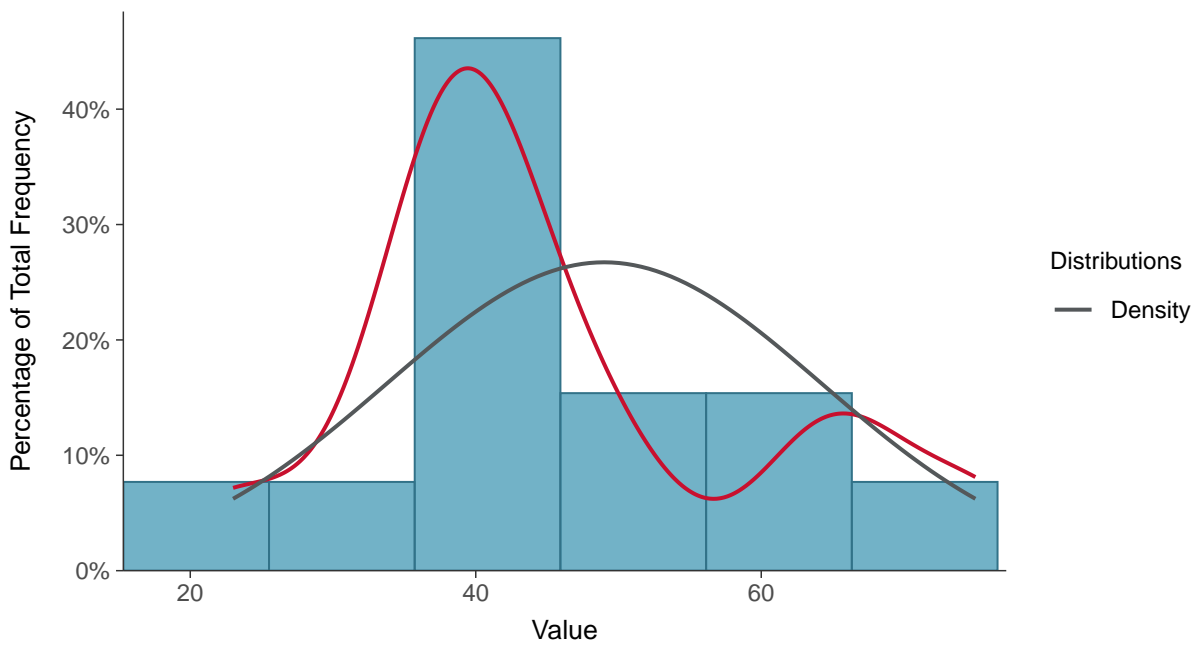
Scatter Plot

Chloride (as Cl), MW-19 (mg/L)



Histogram

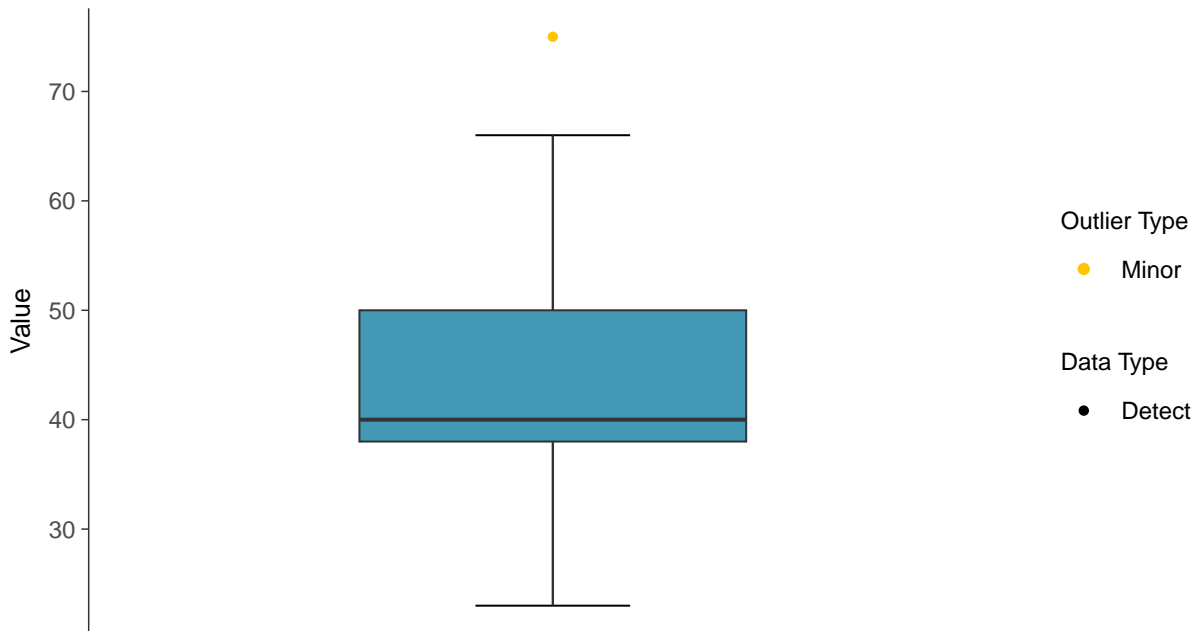
Chloride (as Cl), MW-19 (mg/L)





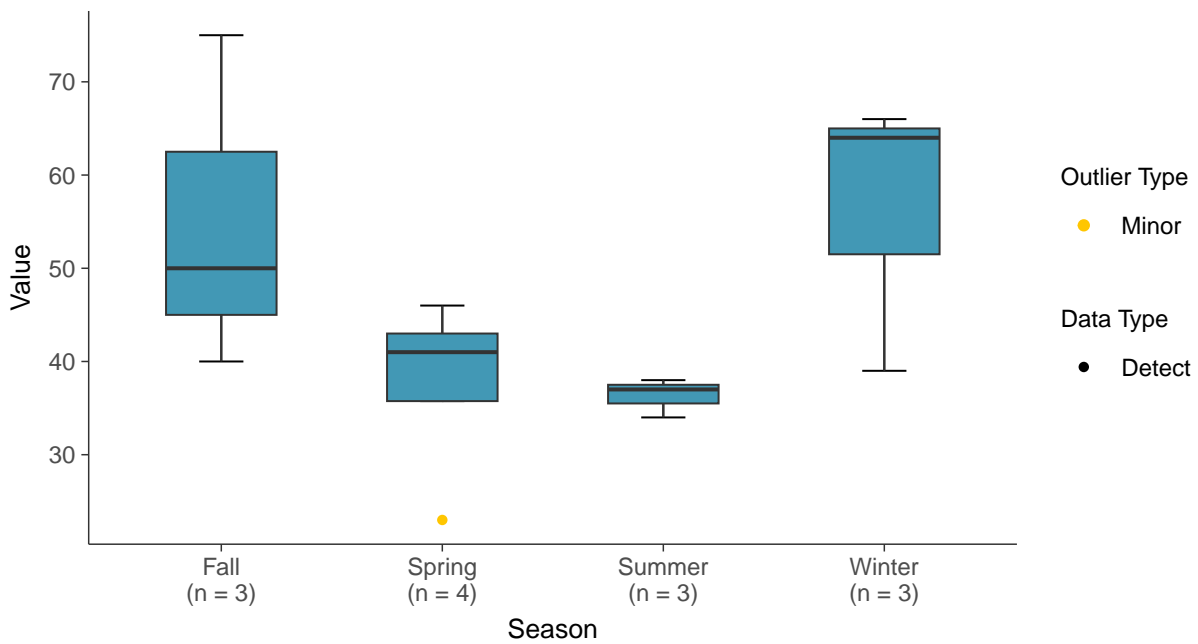
Boxplot

Chloride (as Cl), MW-19 (mg/L)



Boxplot by Season

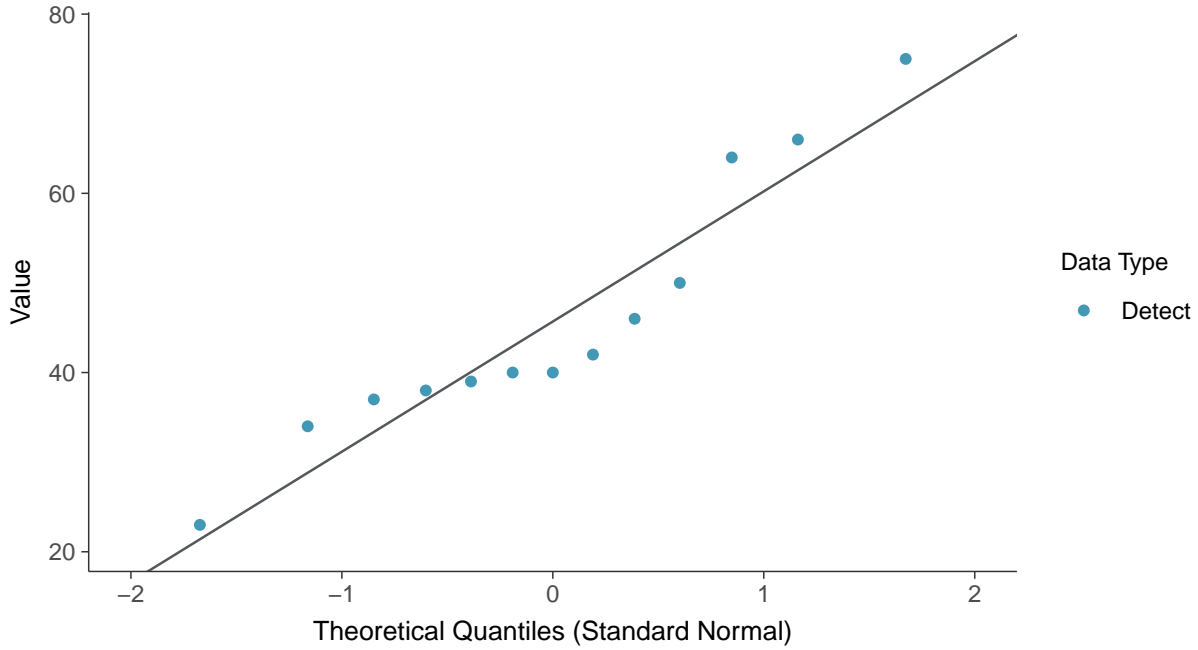
Chloride (as Cl), MW-19 (mg/L)





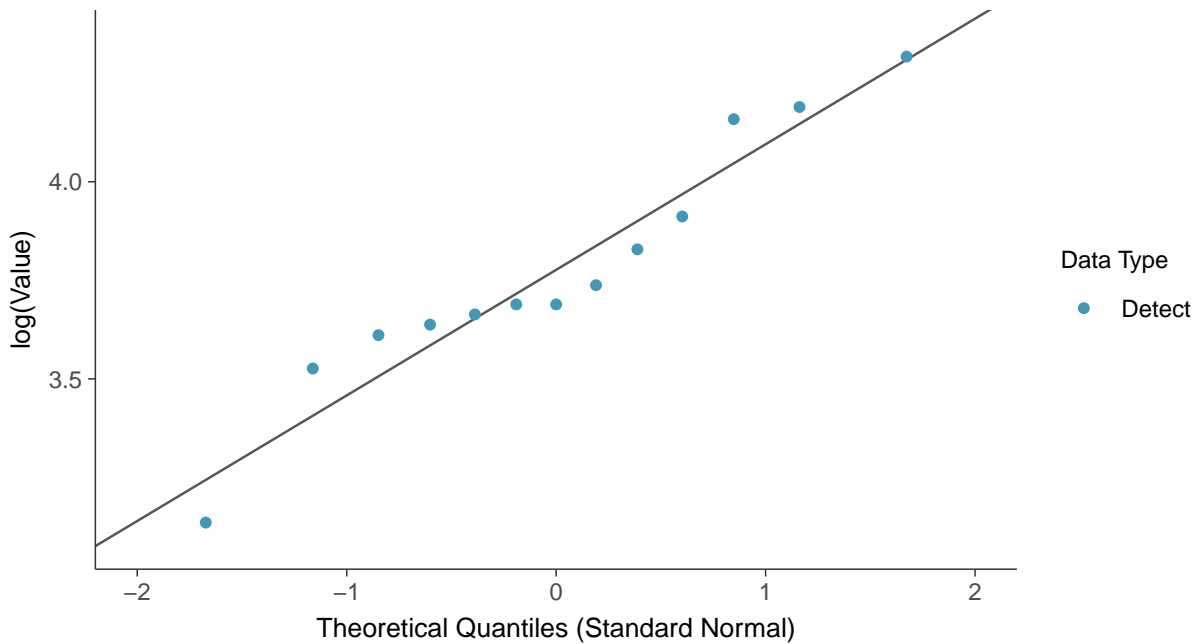
Normal Q-Q plot

Chloride (as Cl), MW-19 (mg/L)



Lognormal Q-Q plot

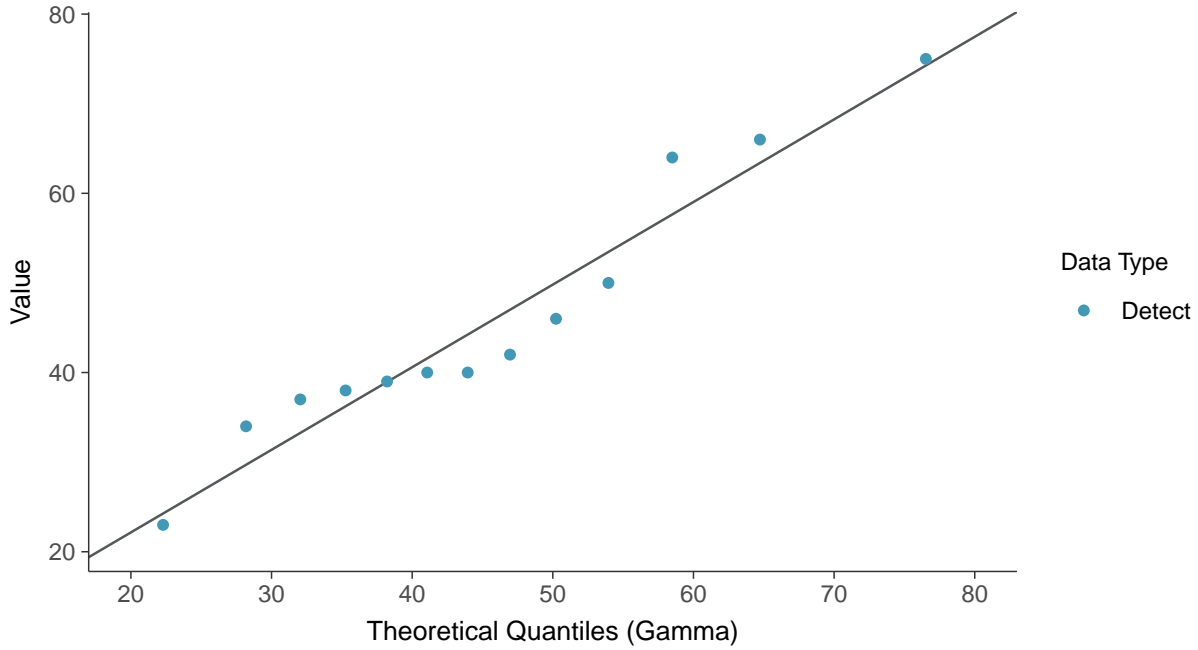
Chloride (as Cl), MW-19 (mg/L)





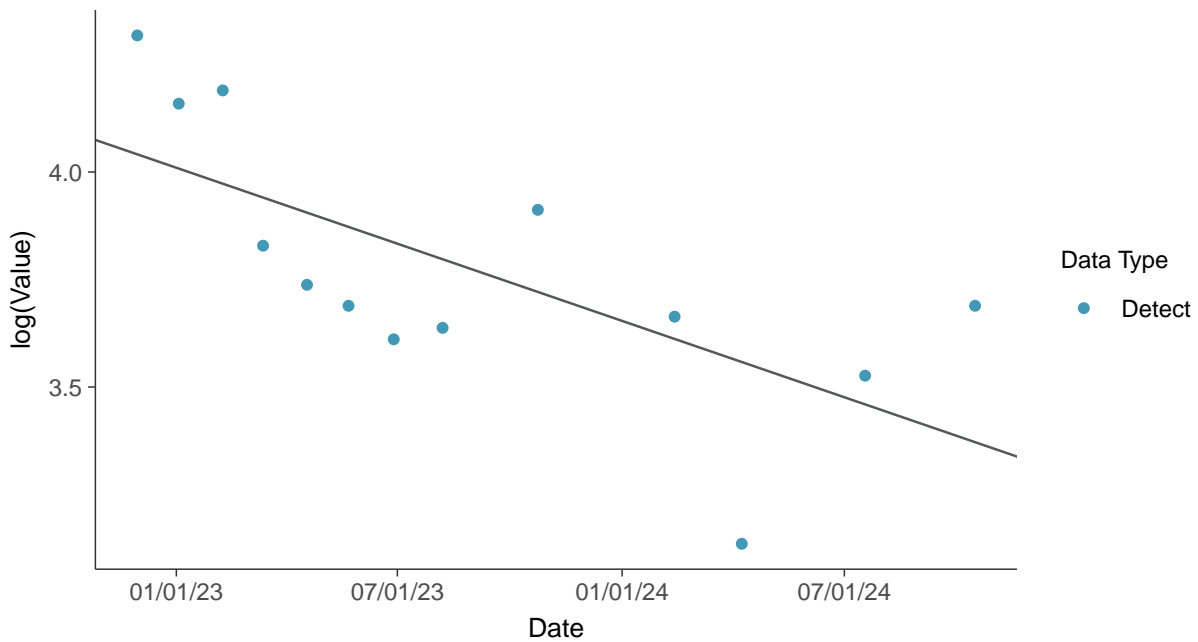
Gamma Q-Q plot

Chloride (as Cl), MW-19 (mg/L)



Trend Regression: Lognormal MLE

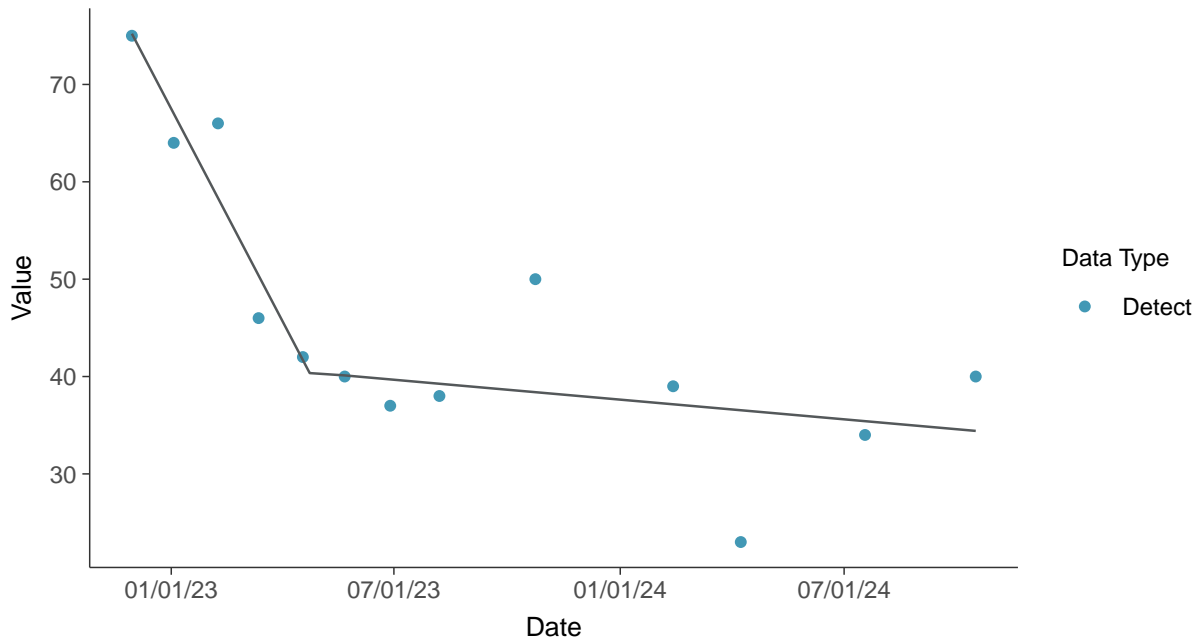
Chloride (as Cl), MW-19 (mg/L)





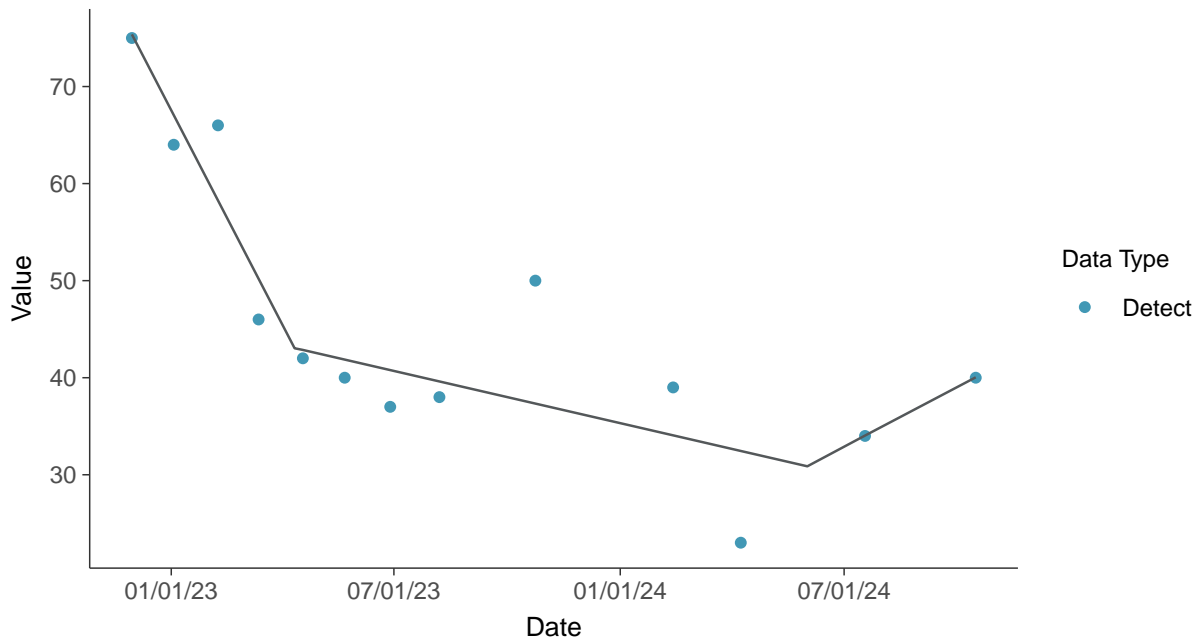
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-19 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

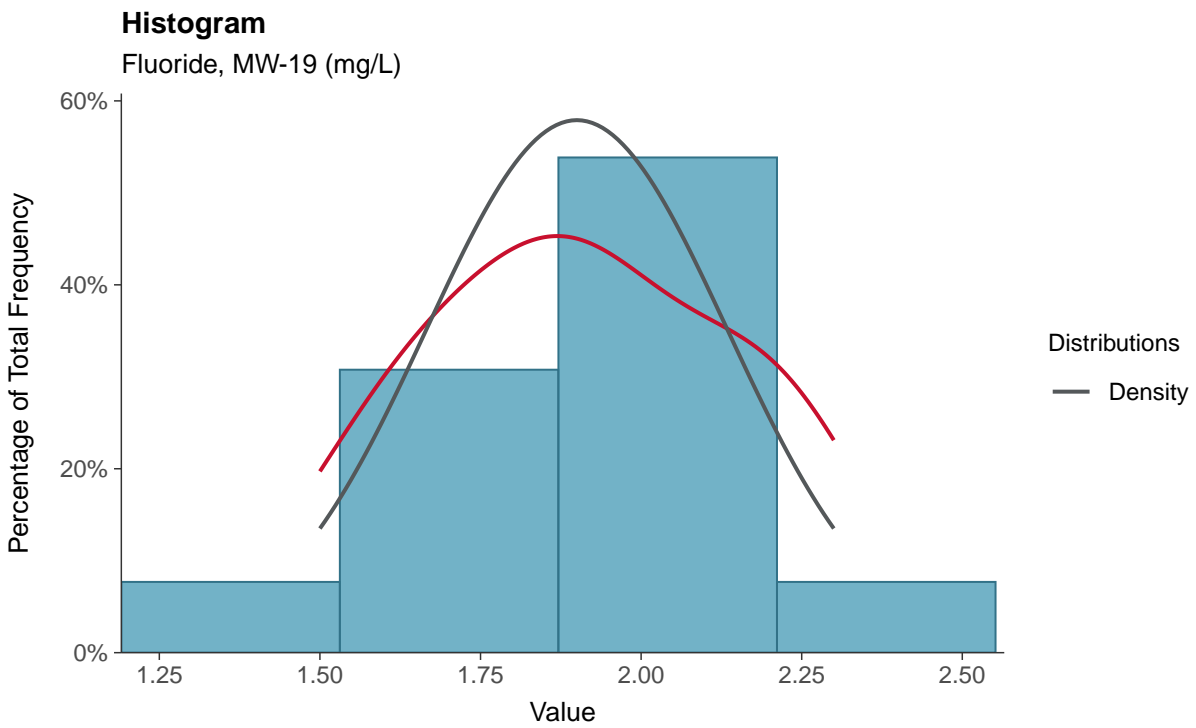
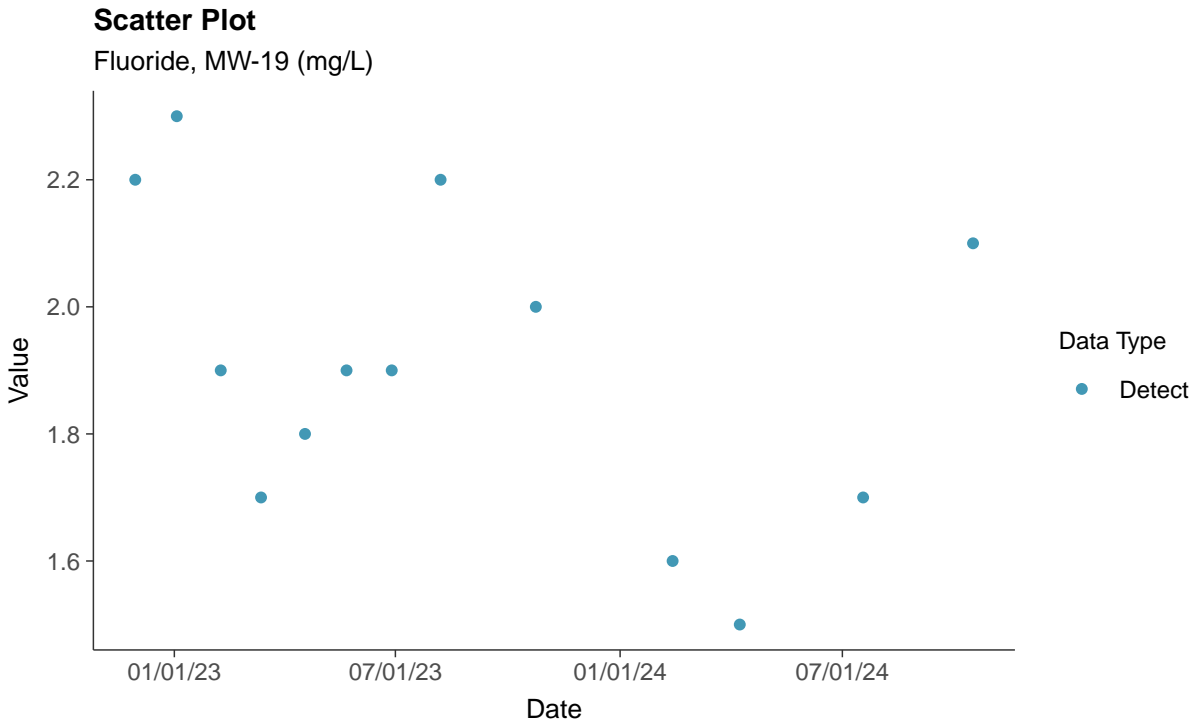
Chloride (as Cl), MW-19 (mg/L)





Appendix III: Fluoride, MW-19

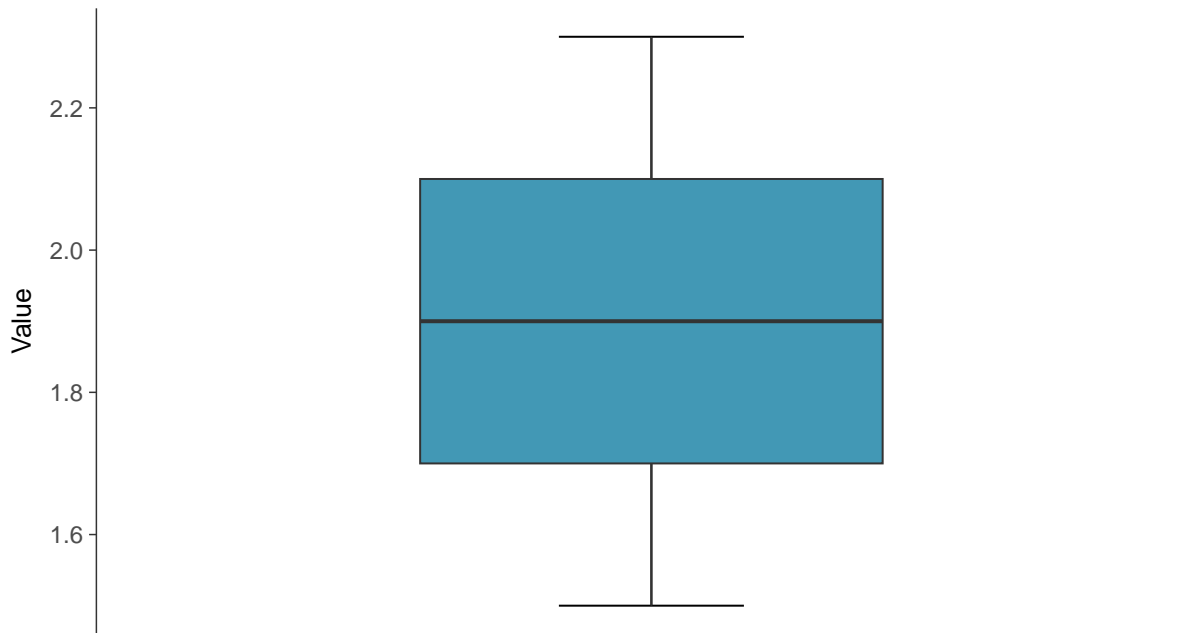
ID: 1_29_1_4_112





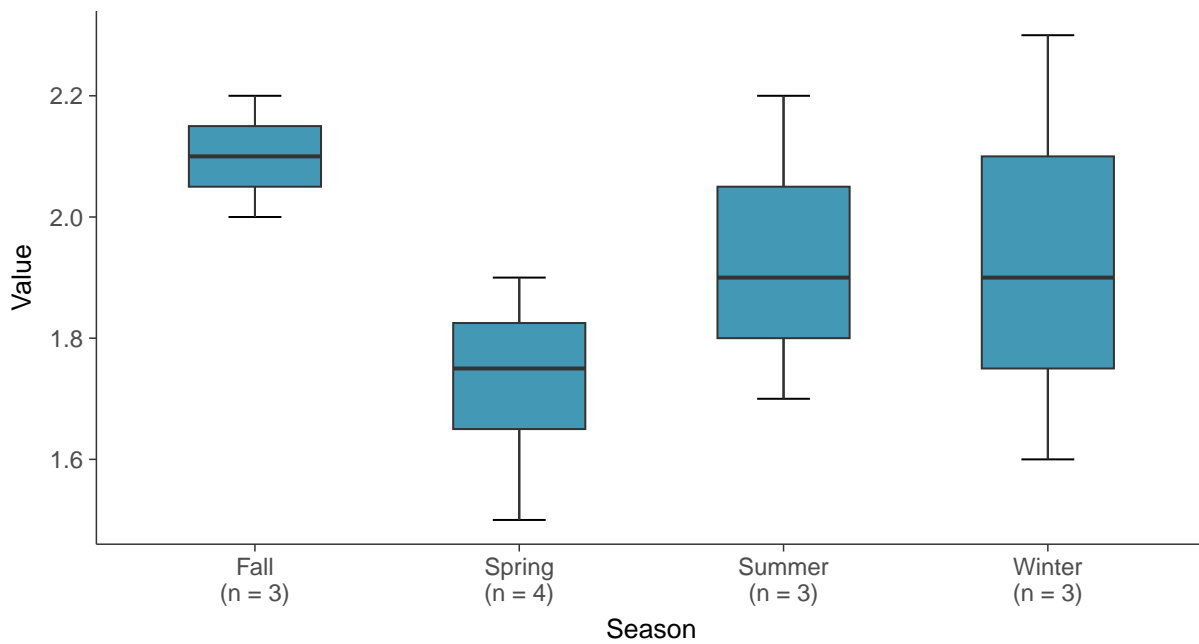
Boxplot

Fluoride, MW-19 (mg/L)



Boxplot by Season

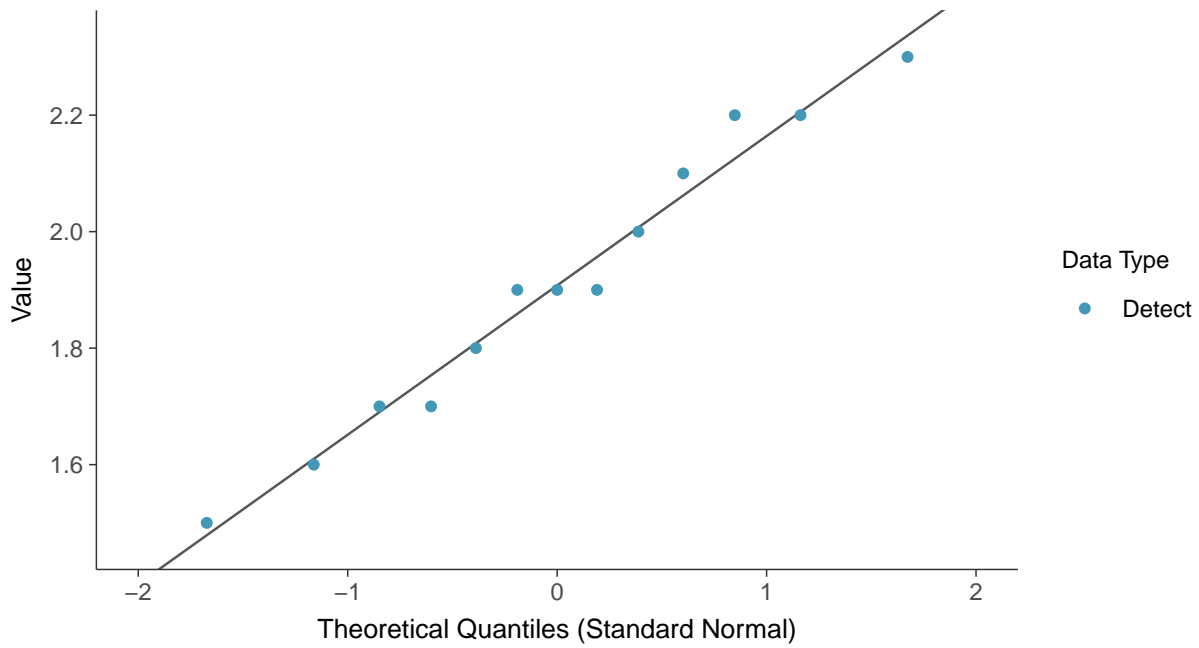
Fluoride, MW-19 (mg/L)





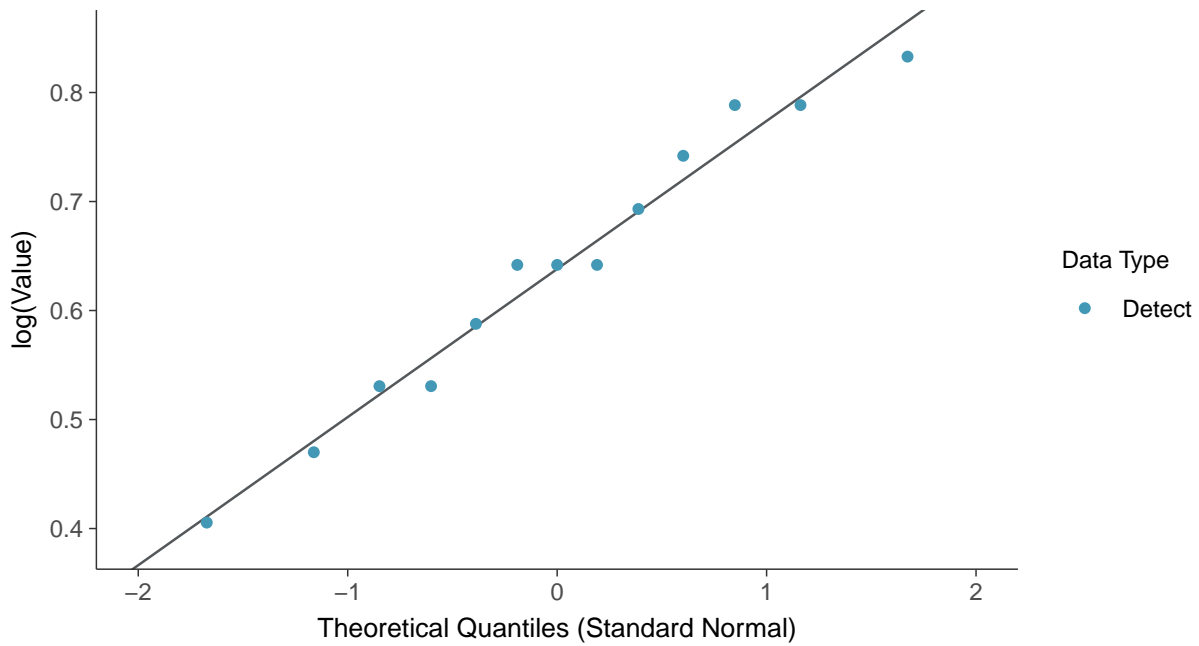
Normal Q-Q plot

Fluoride, MW-19 (mg/L)



Lognormal Q-Q plot

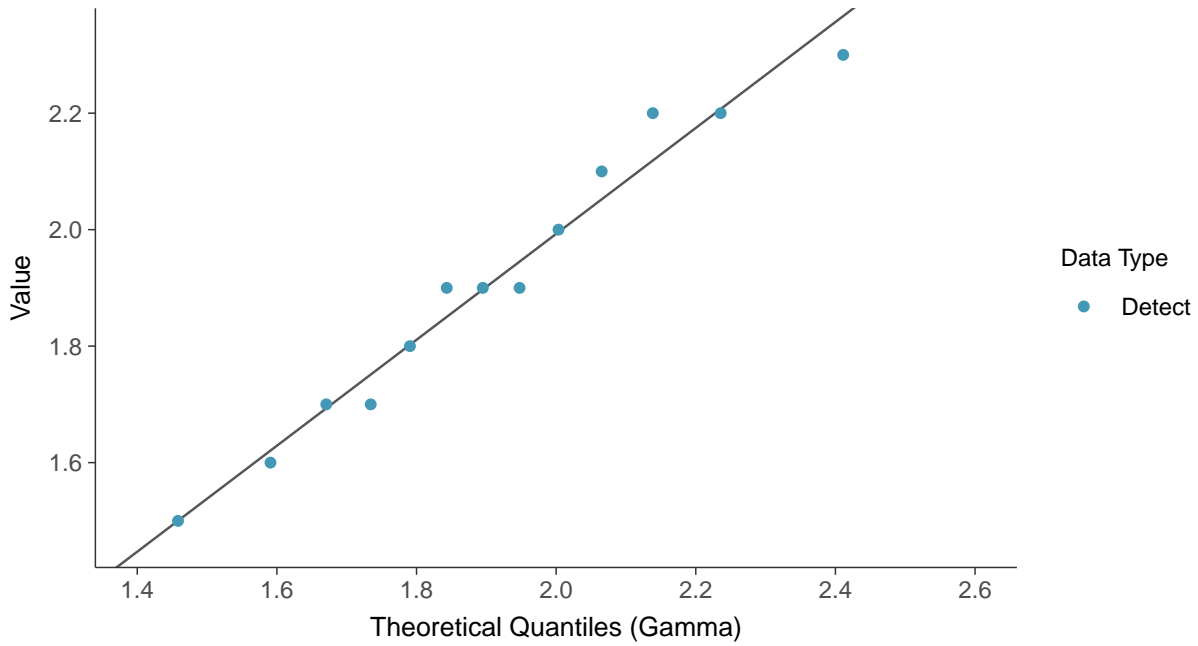
Fluoride, MW-19 (mg/L)





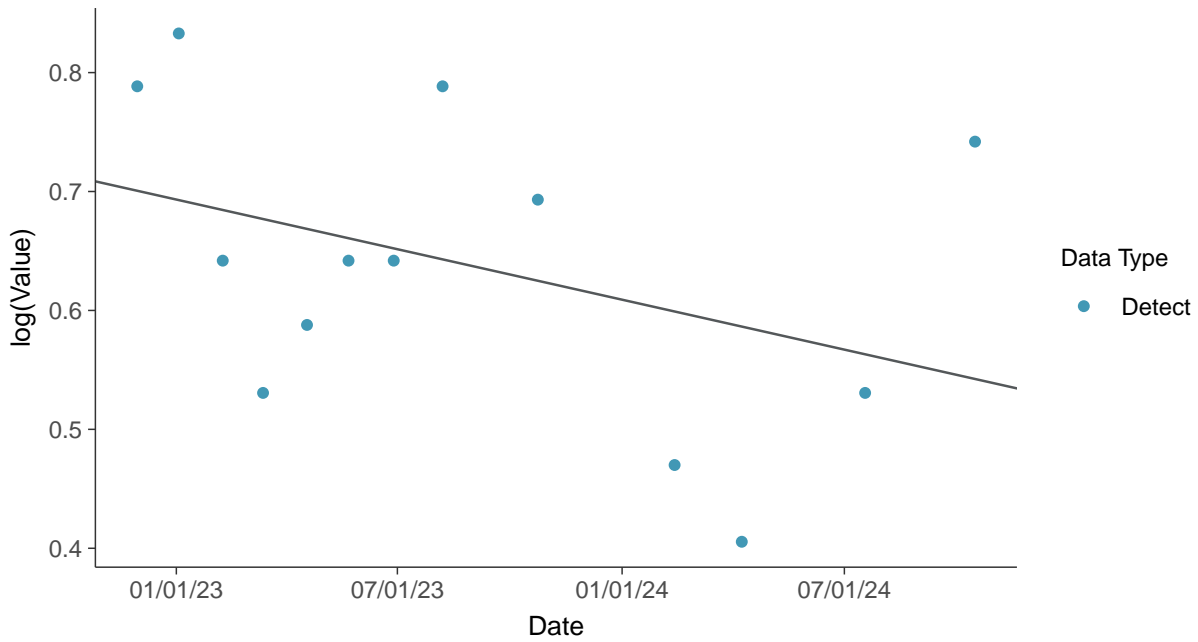
Gamma Q-Q plot

Fluoride, MW-19 (mg/L)



Trend Regression: Lognormal MLE

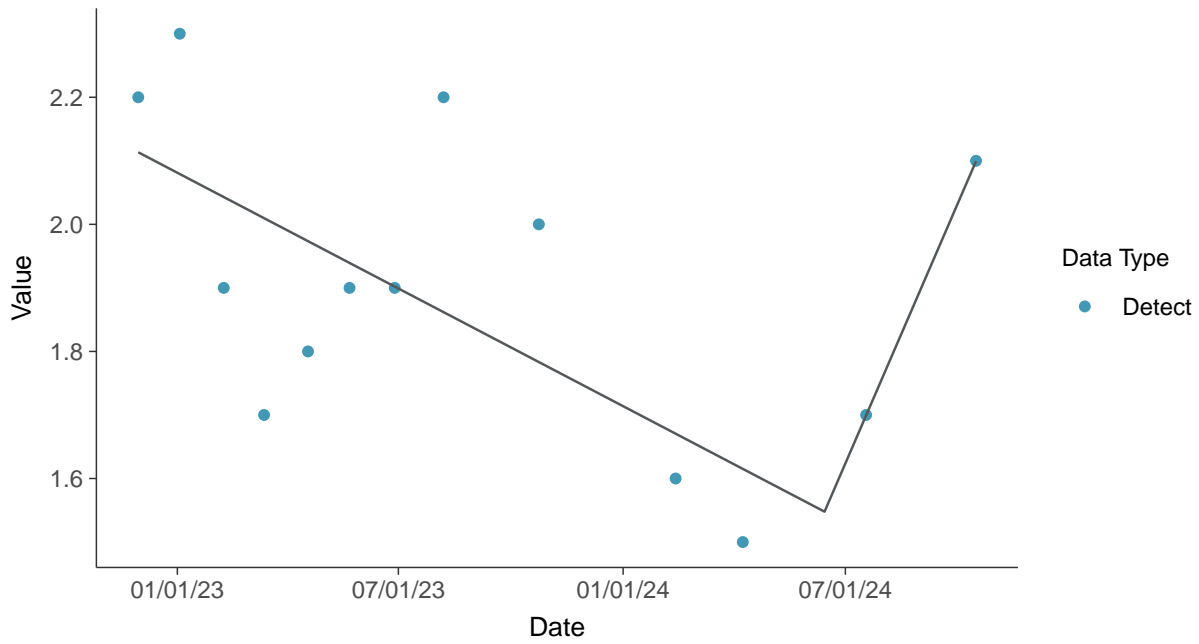
Fluoride, MW-19 (mg/L)





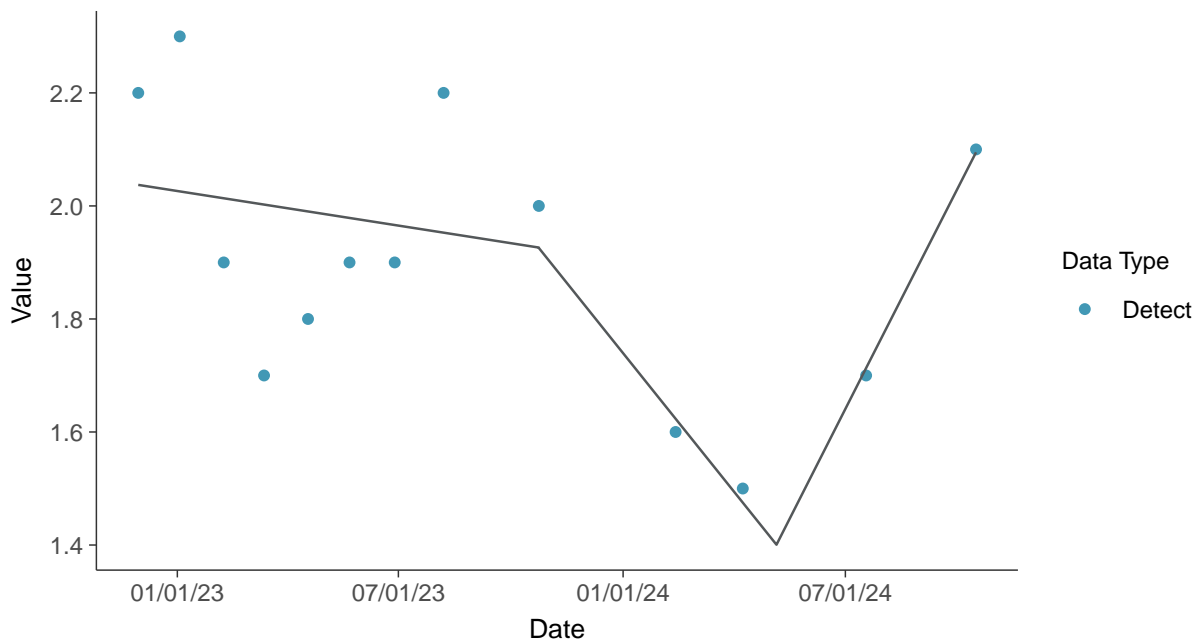
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-19 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

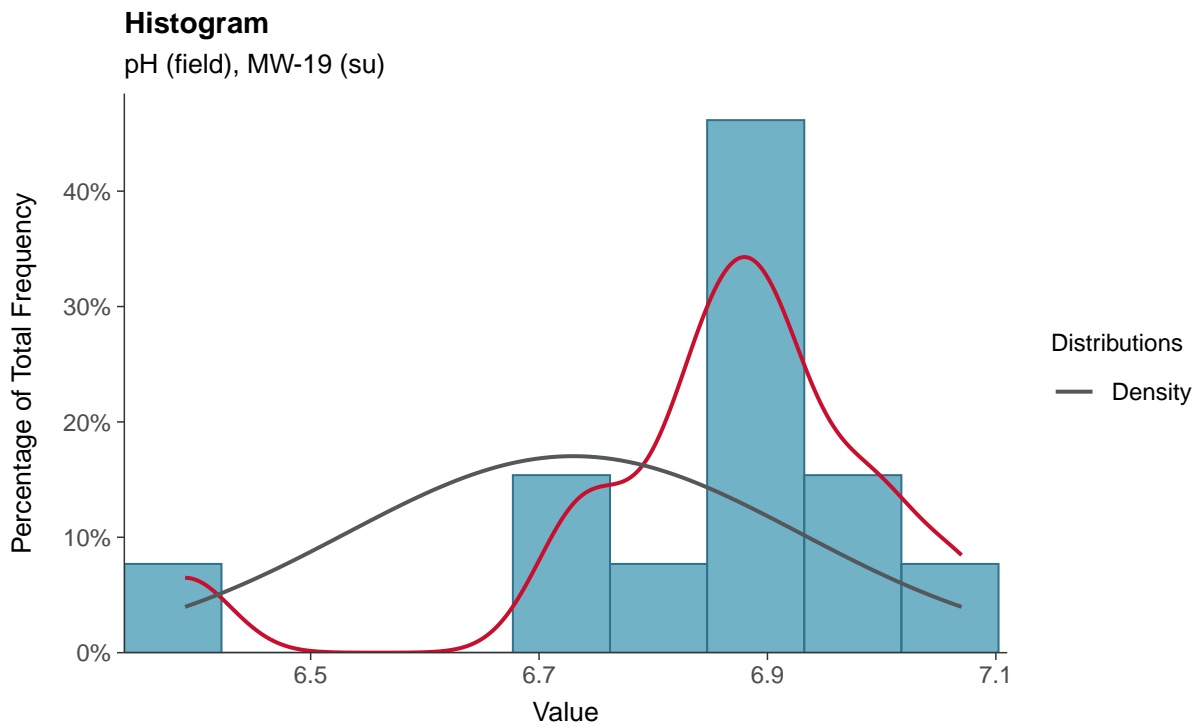
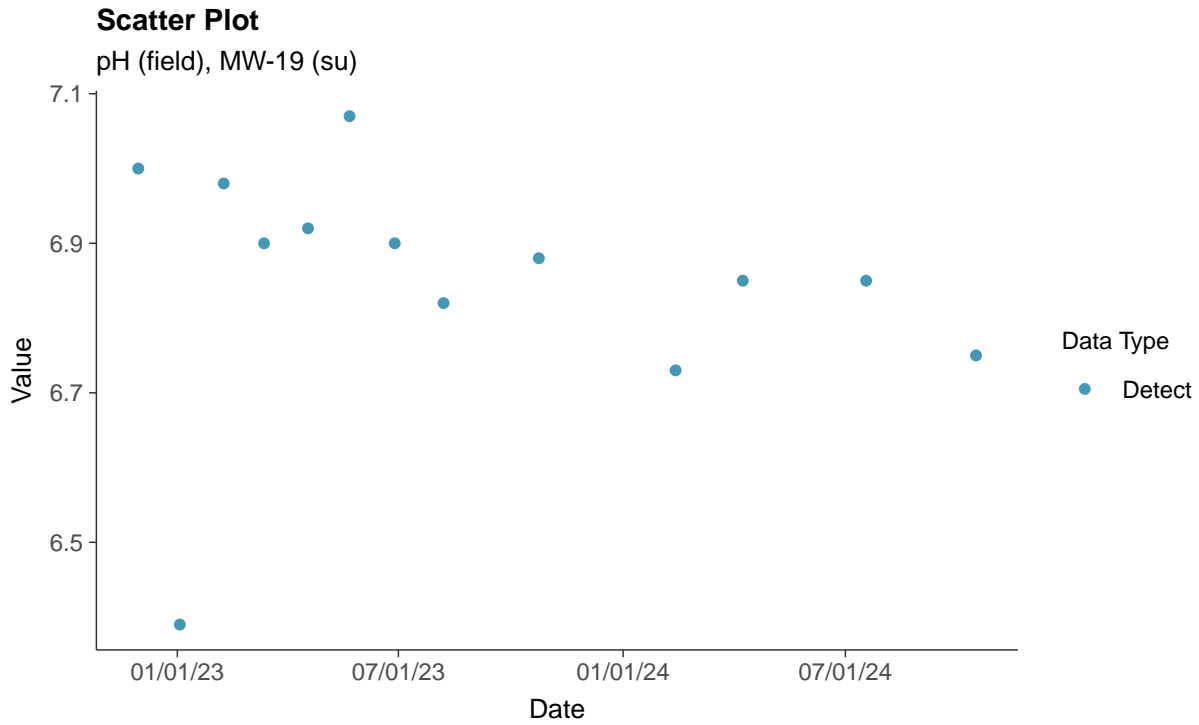
Fluoride, MW-19 (mg/L)





Appendix III: pH (field), MW-19

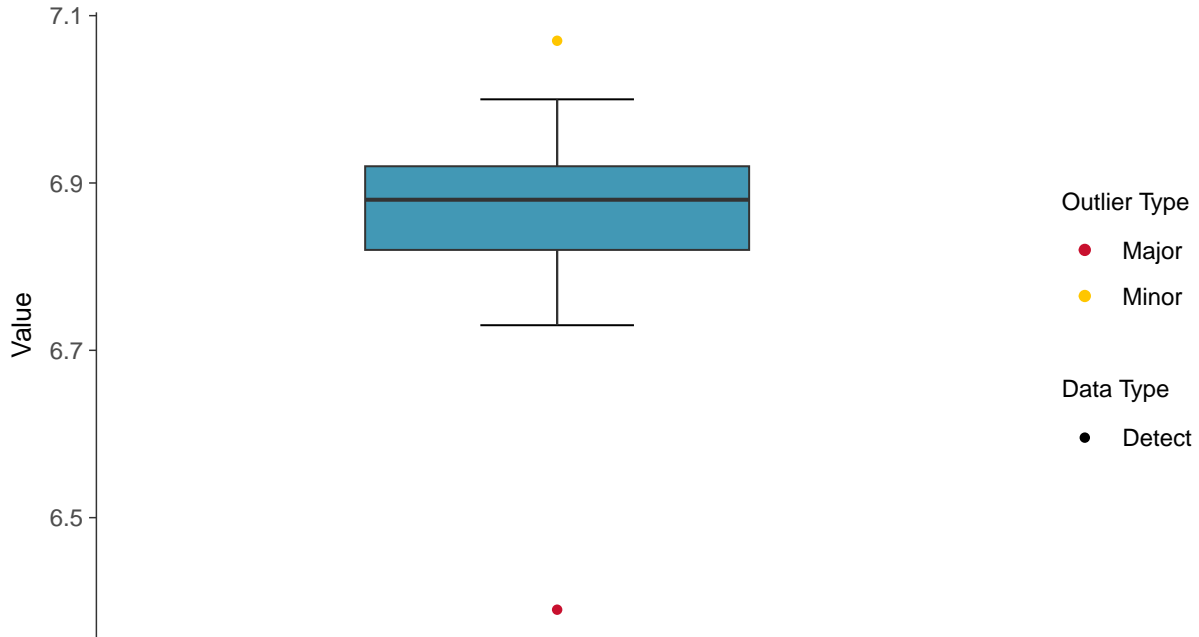
ID: 1_29_1_4_120





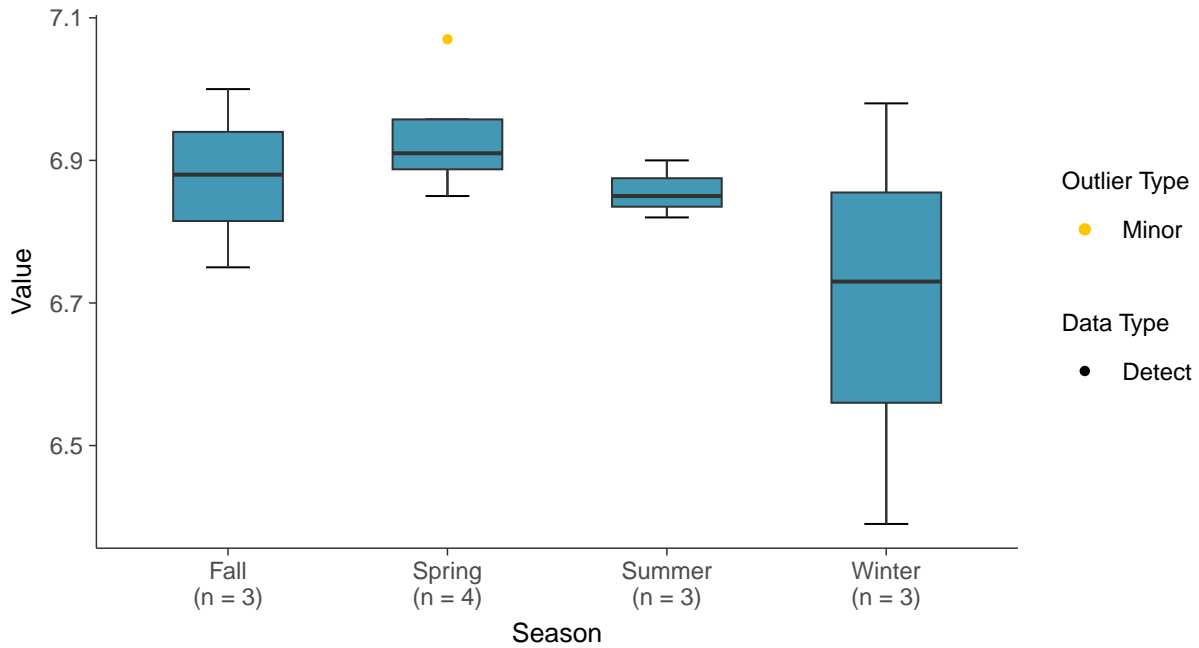
Boxplot

pH (field), MW-19 (su)



Boxplot by Season

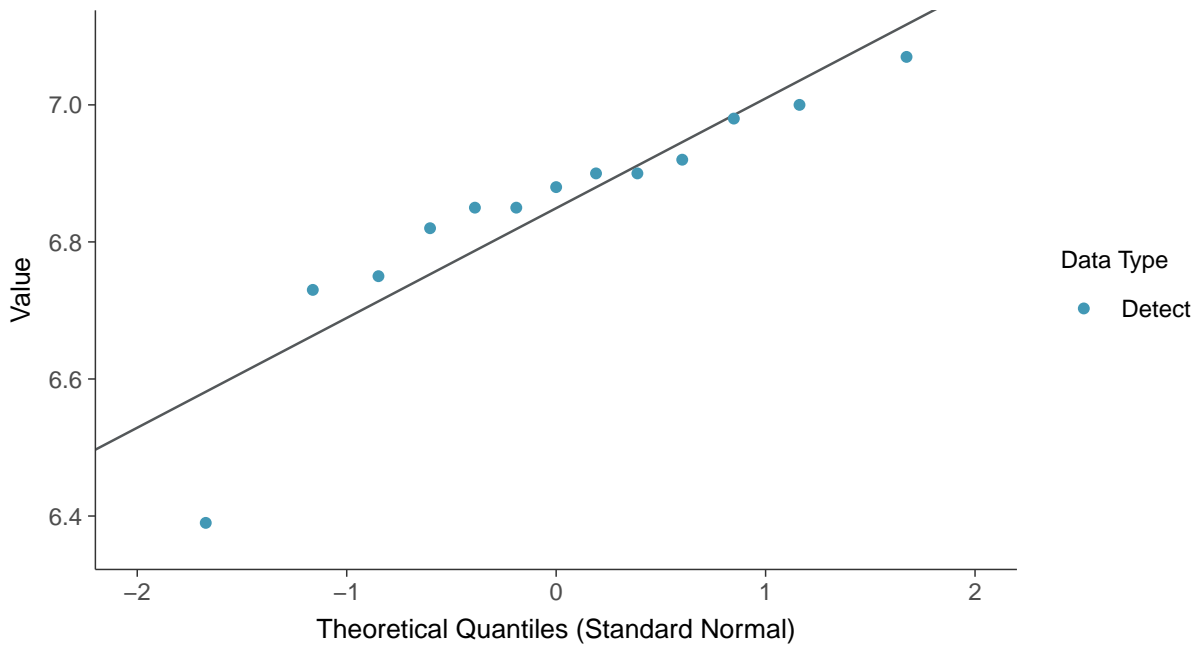
pH (field), MW-19 (su)





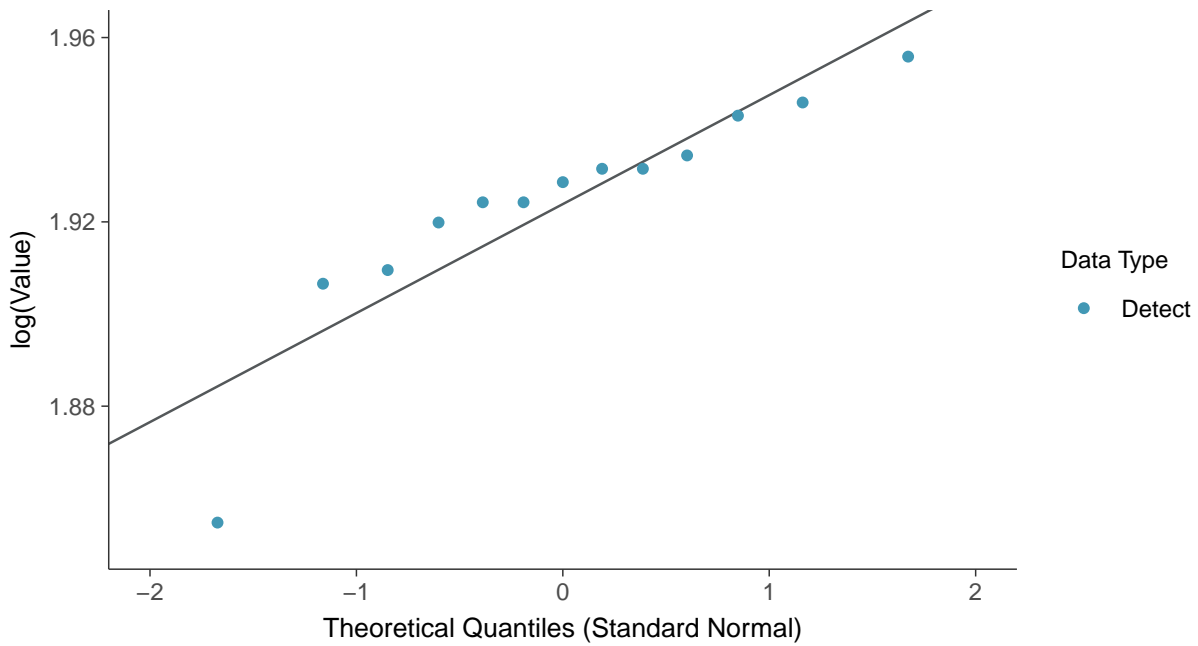
Normal Q-Q plot

pH (field), MW-19 (su)



Lognormal Q-Q plot

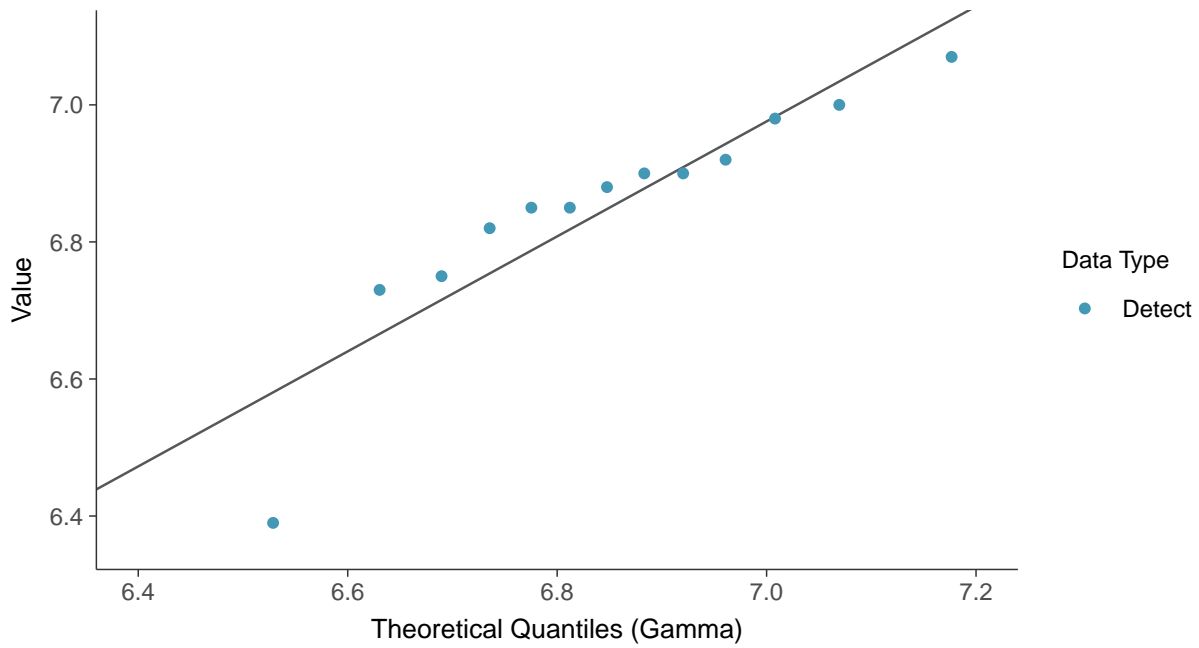
pH (field), MW-19 (su)





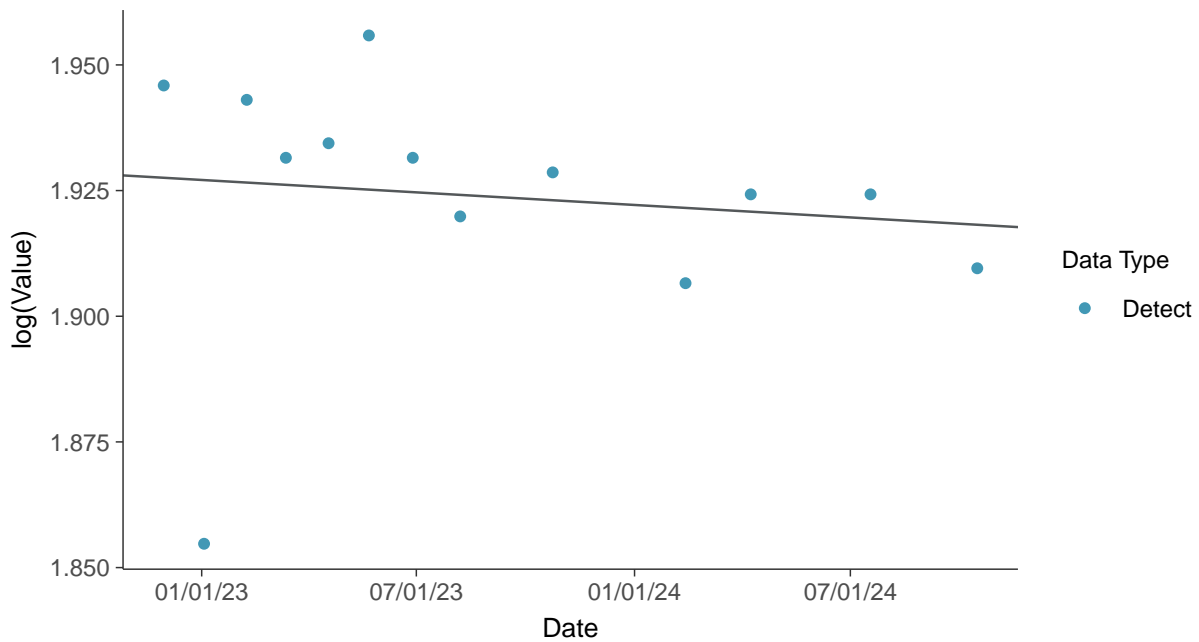
Gamma Q-Q plot

pH (field), MW-19 (su)



Trend Regression: Lognormal MLE

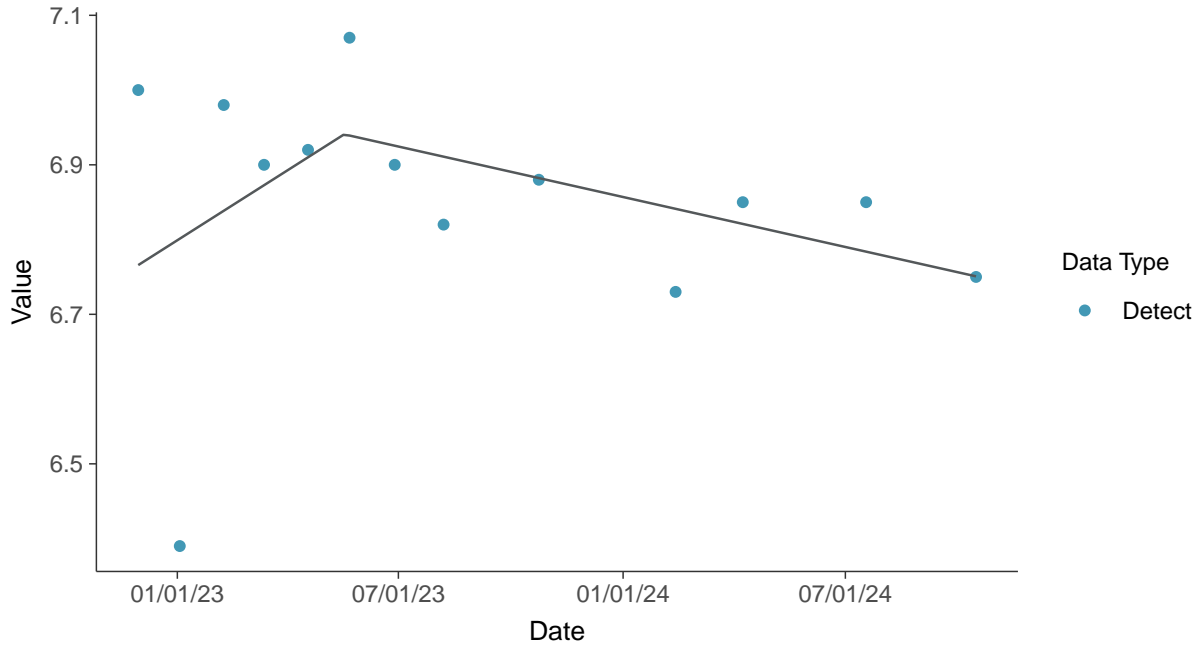
pH (field), MW-19 (su)





Trend Regression: Piecewise Linear-Linear

pH (field), MW-19 (su)



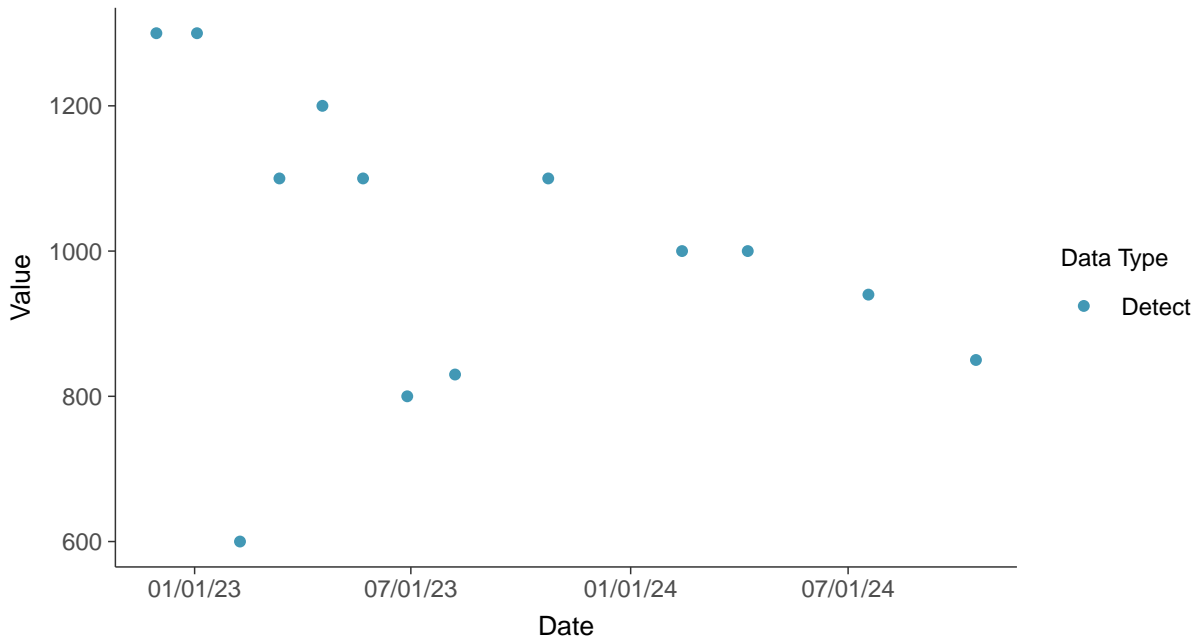


Appendix III: Sulfate (as SO₄), MW-19

ID: 1_29_1_4_124

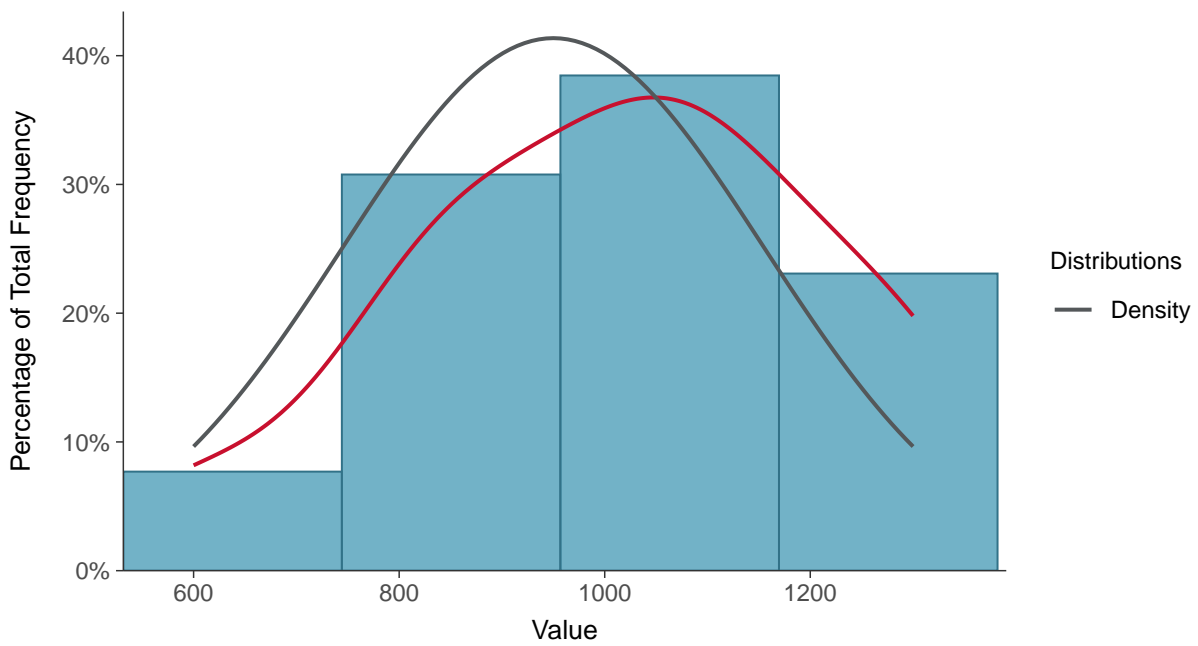
Scatter Plot

Sulfate (as SO₄), MW-19 (mg/L)



Histogram

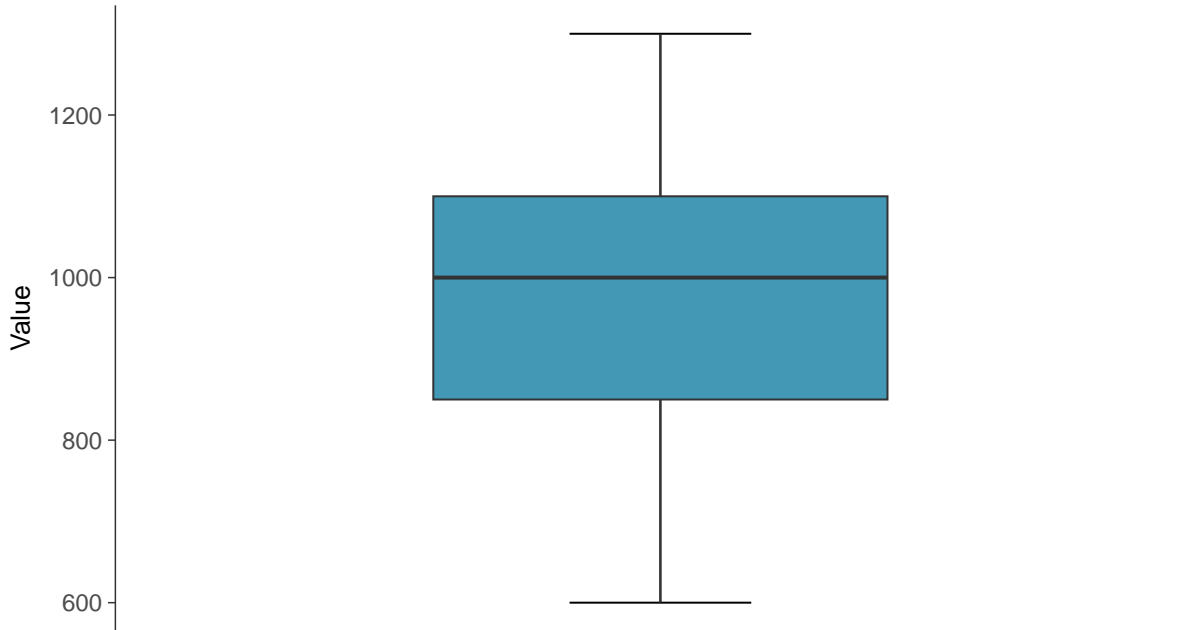
Sulfate (as SO₄), MW-19 (mg/L)





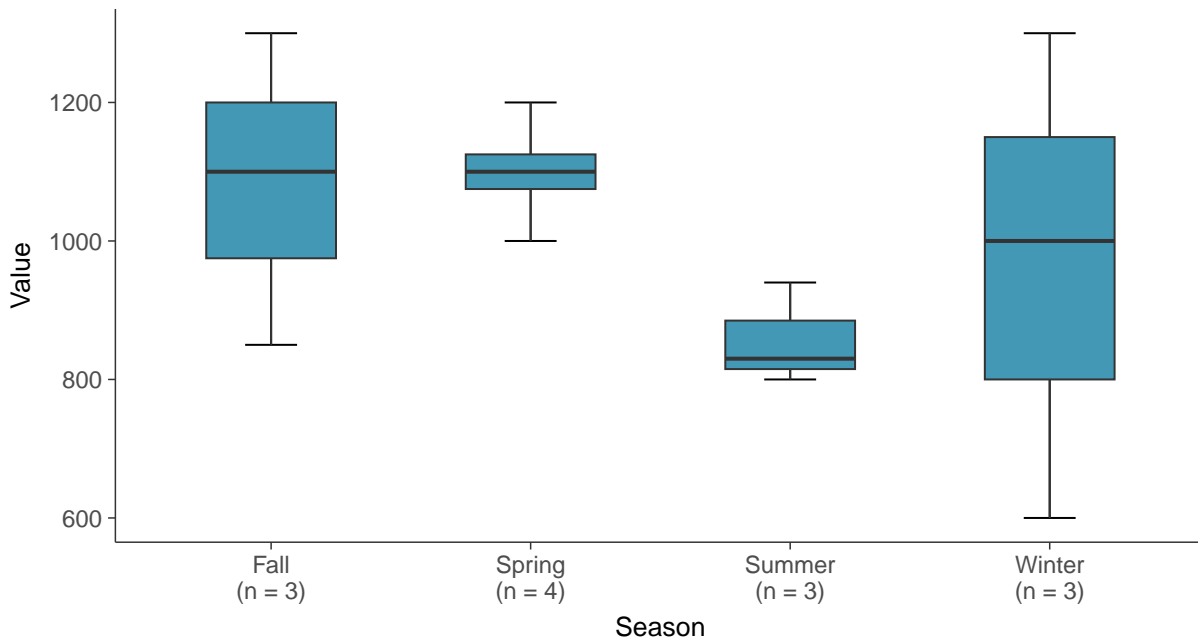
Boxplot

Sulfate (as SO₄), MW-19 (mg/L)



Boxplot by Season

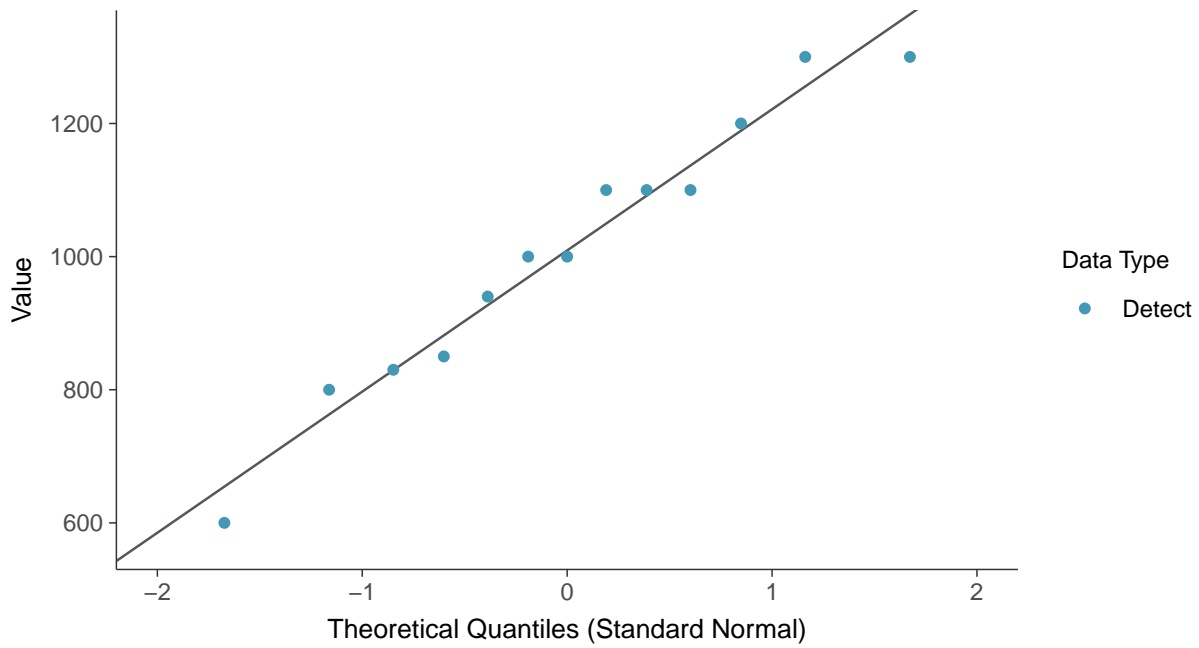
Sulfate (as SO₄), MW-19 (mg/L)





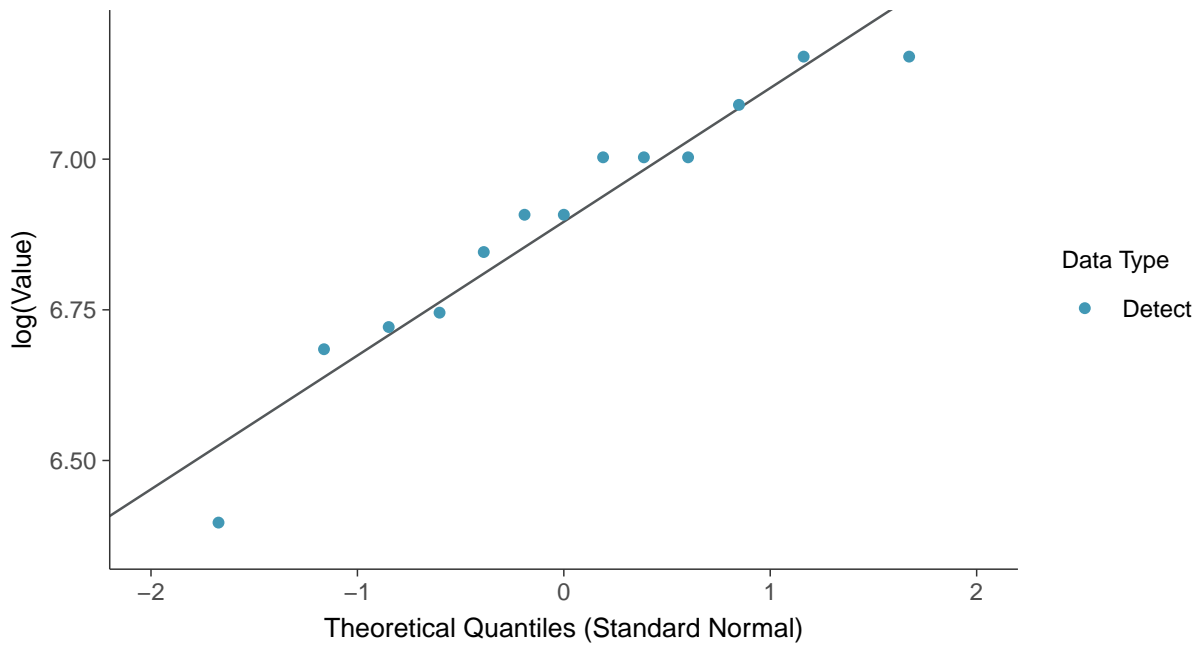
Normal Q-Q plot

Sulfate (as SO₄), MW-19 (mg/L)



Lognormal Q-Q plot

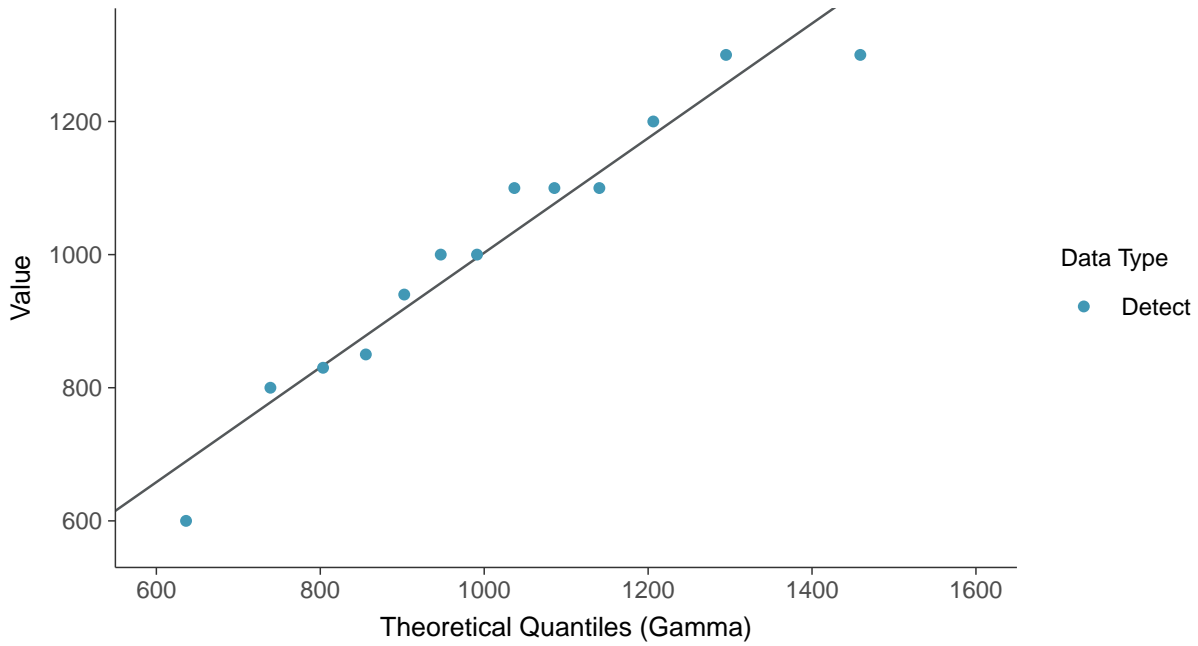
Sulfate (as SO₄), MW-19 (mg/L)





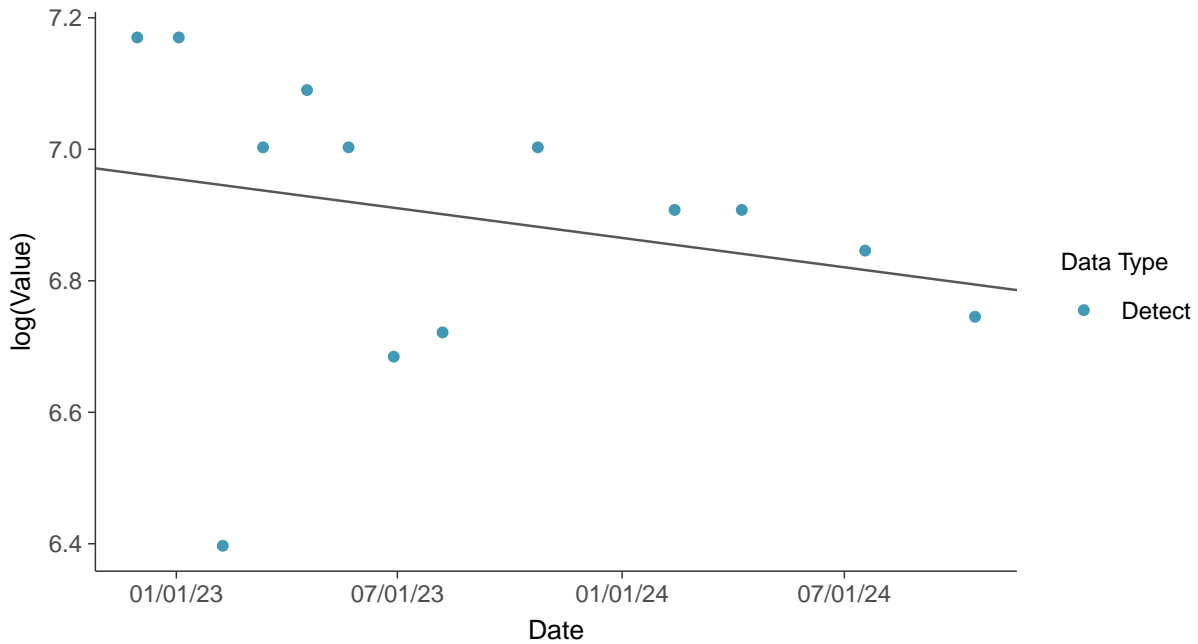
Gamma Q-Q plot

Sulfate (as SO₄), MW-19 (mg/L)



Trend Regression: Lognormal MLE

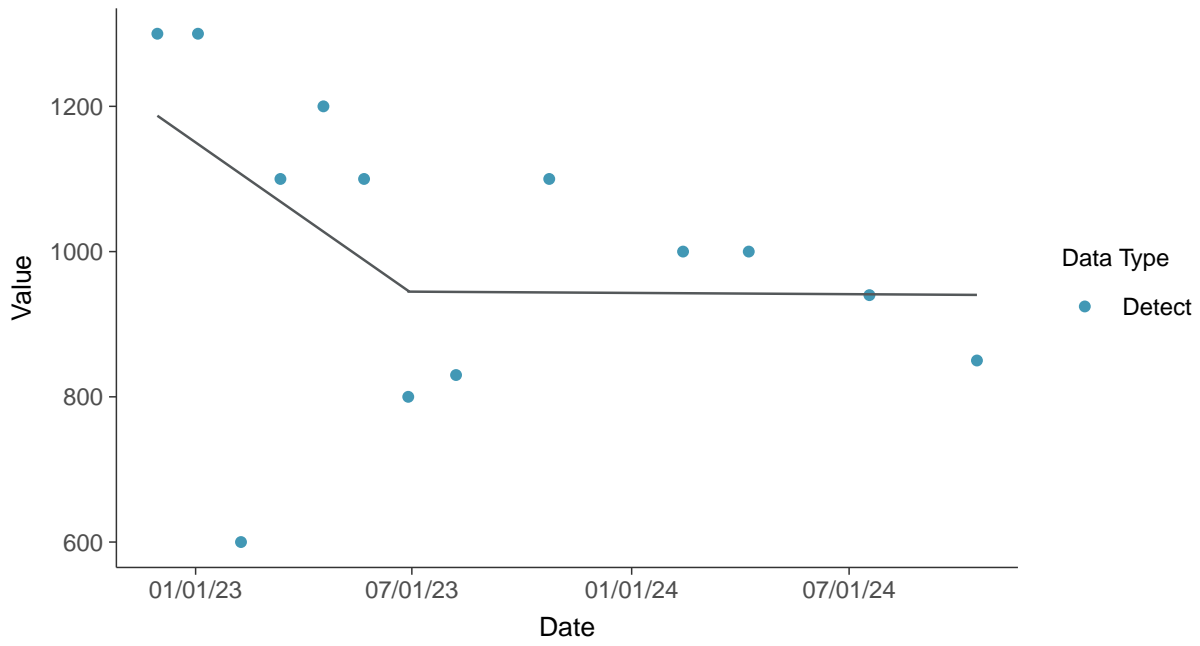
Sulfate (as SO₄), MW-19 (mg/L)





Trend Regression: Piecewise Linear-Linear

Sulfate (as SO₄), MW-19 (mg/L)



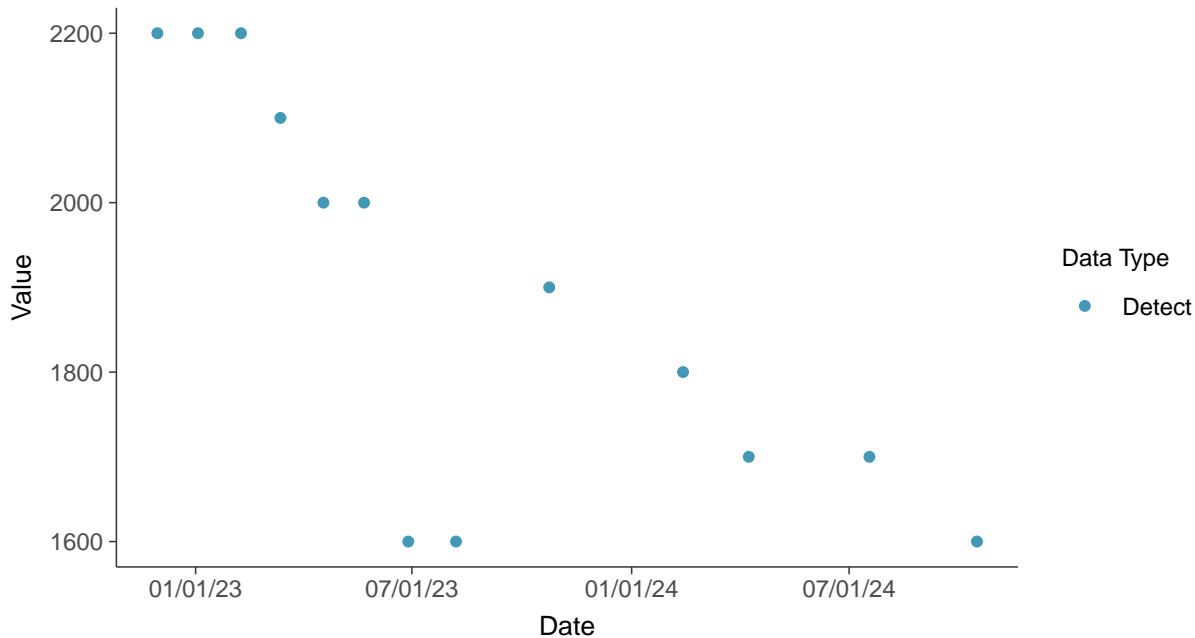


Appendix III: Total Dissolved Solids, MW-19

ID: 1_29_1_4_126

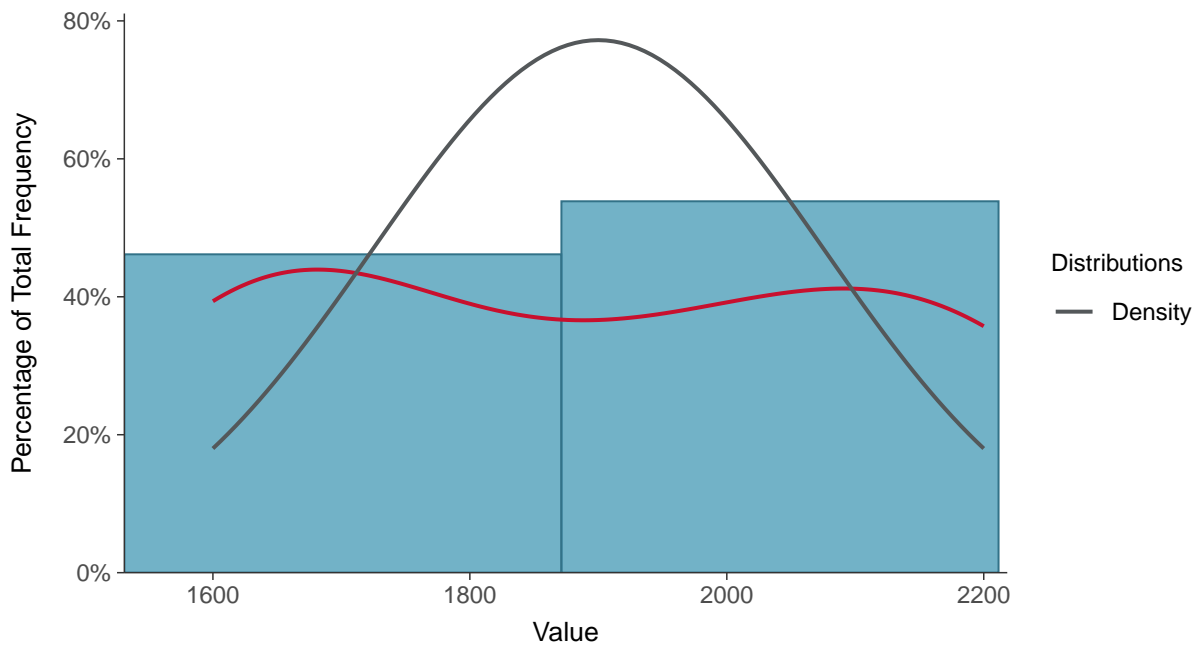
Scatter Plot

Total Dissolved Solids, MW-19 (mg/L)



Histogram

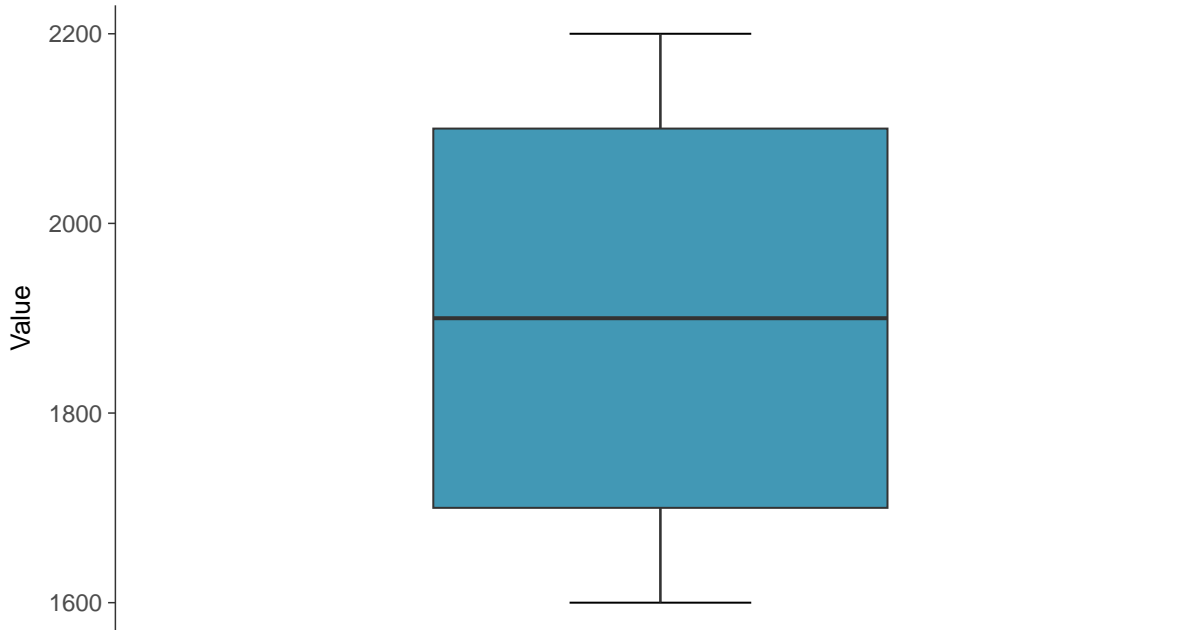
Total Dissolved Solids, MW-19 (mg/L)





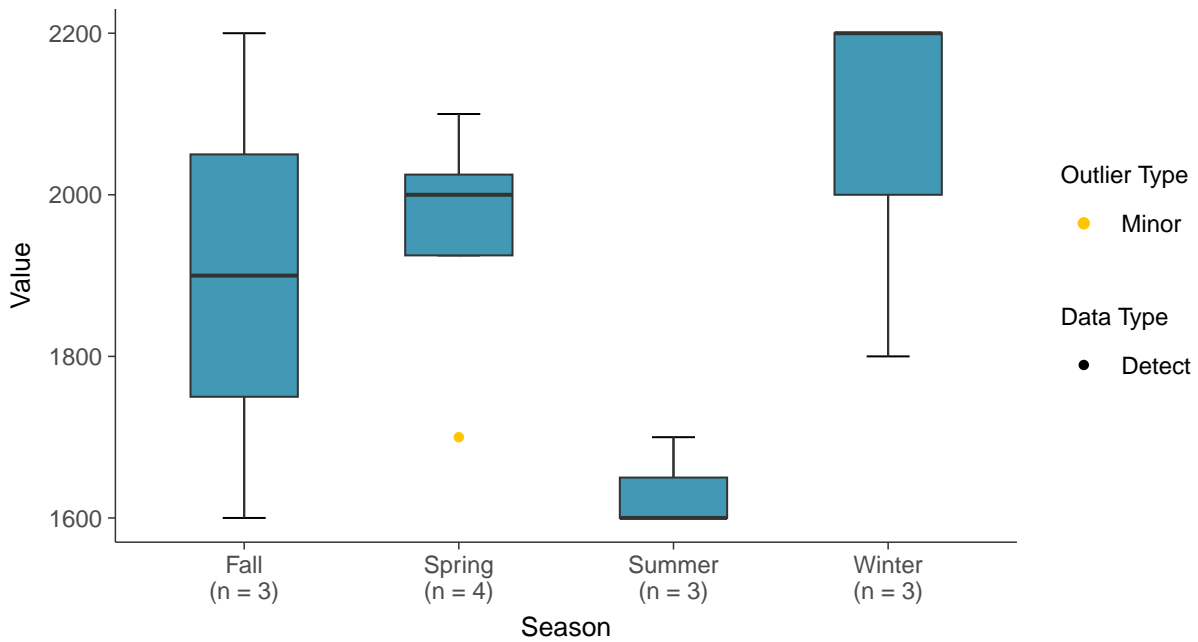
Boxplot

Total Dissolved Solids, MW-19 (mg/L)



Boxplot by Season

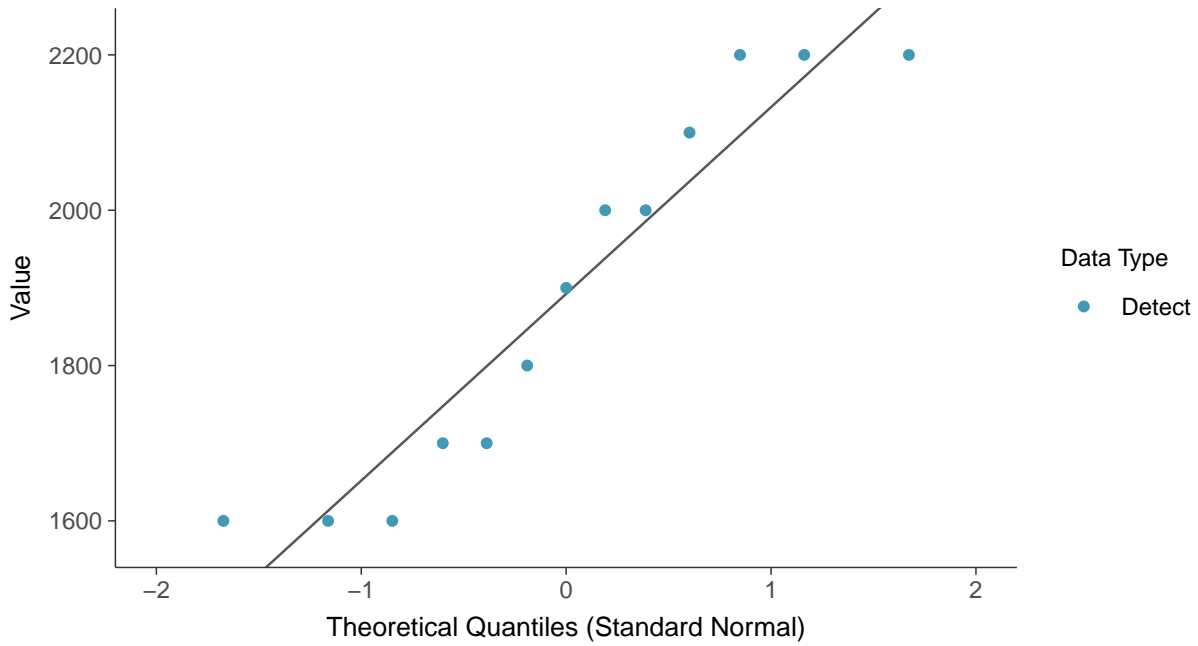
Total Dissolved Solids, MW-19 (mg/L)





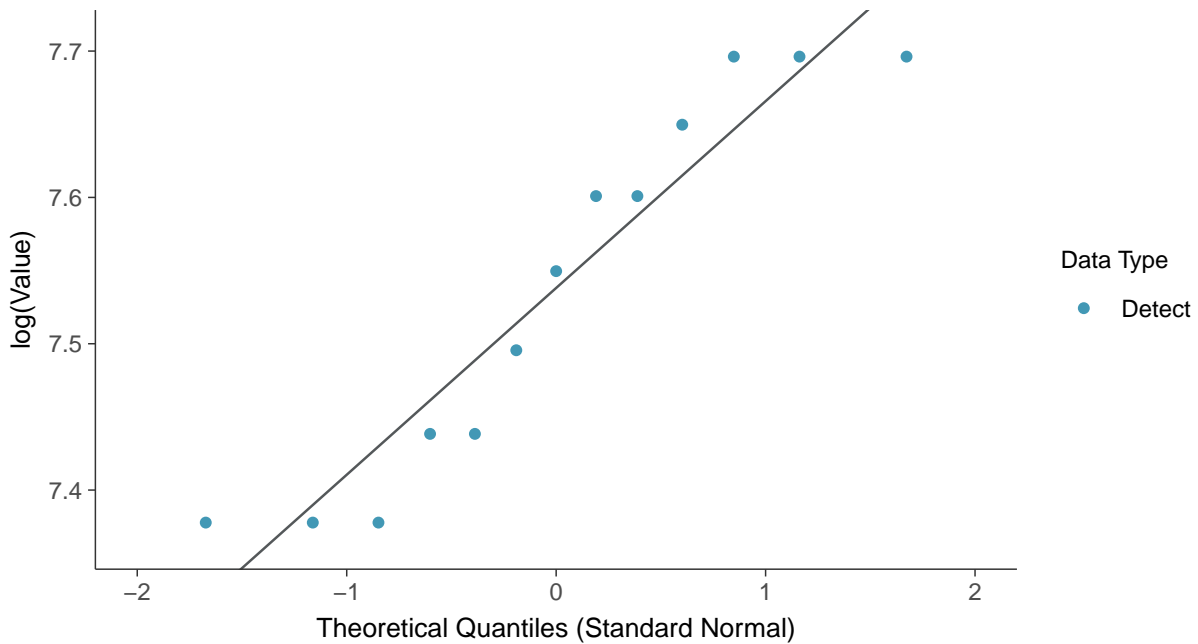
Normal Q-Q plot

Total Dissolved Solids, MW-19 (mg/L)



Lognormal Q-Q plot

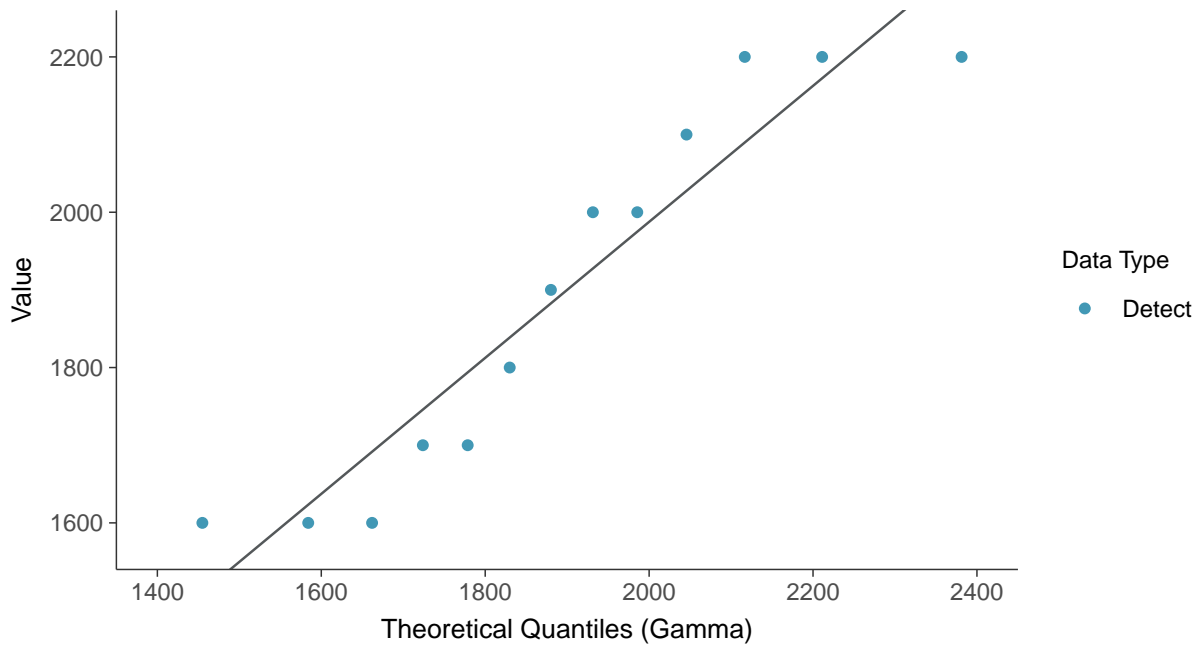
Total Dissolved Solids, MW-19 (mg/L)





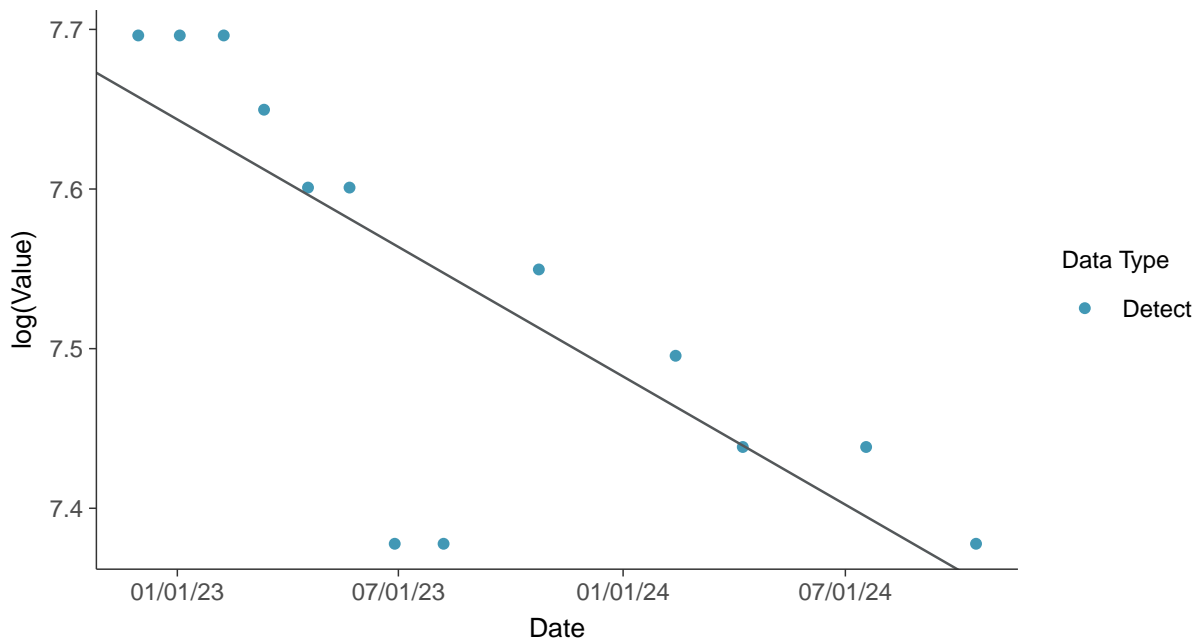
Gamma Q-Q plot

Total Dissolved Solids, MW-19 (mg/L)



Trend Regression: Lognormal MLE

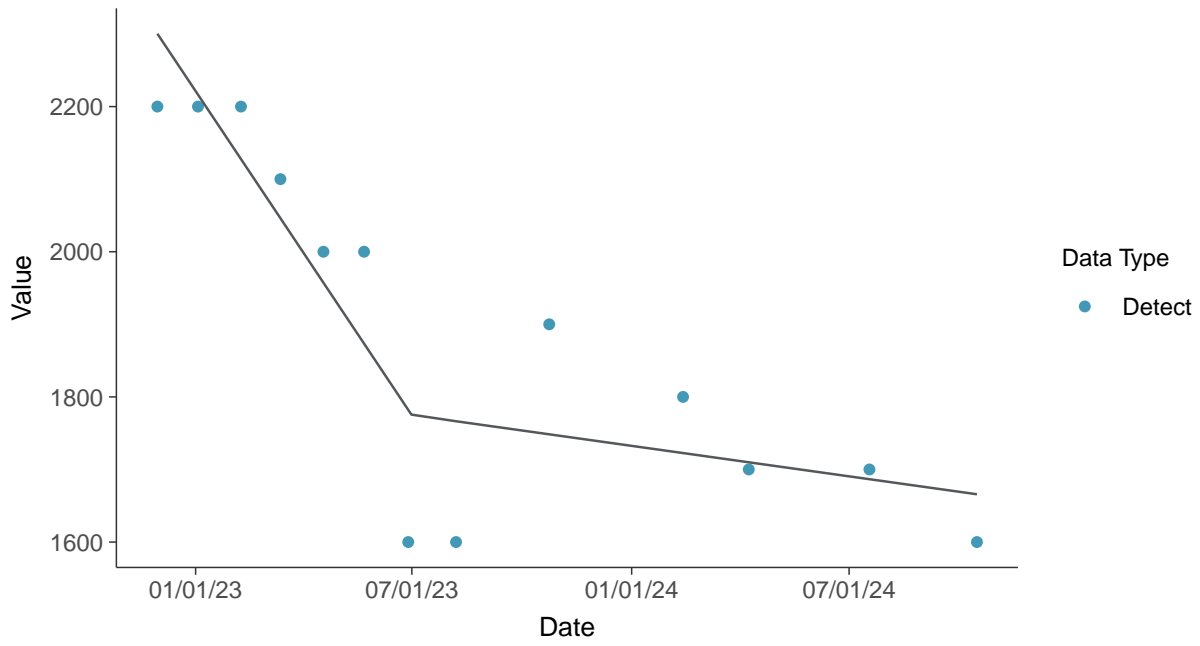
Total Dissolved Solids, MW-19 (mg/L)





Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-19 (mg/L)



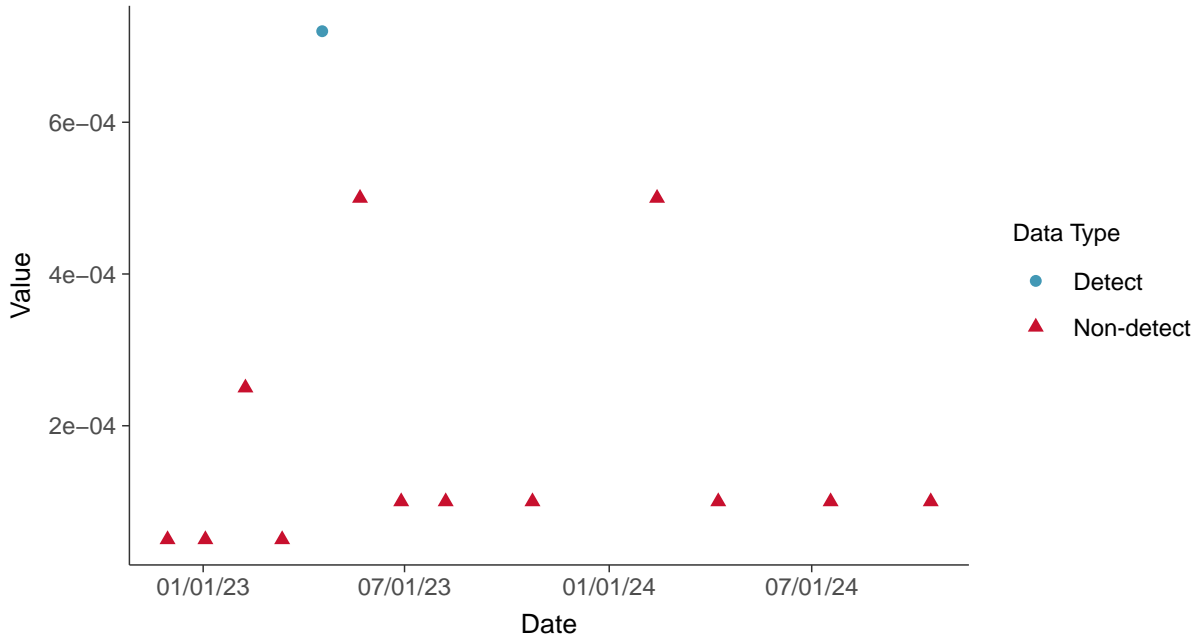


Appendix IV: Antimony, MW-19

ID: 1_29_1_5_101

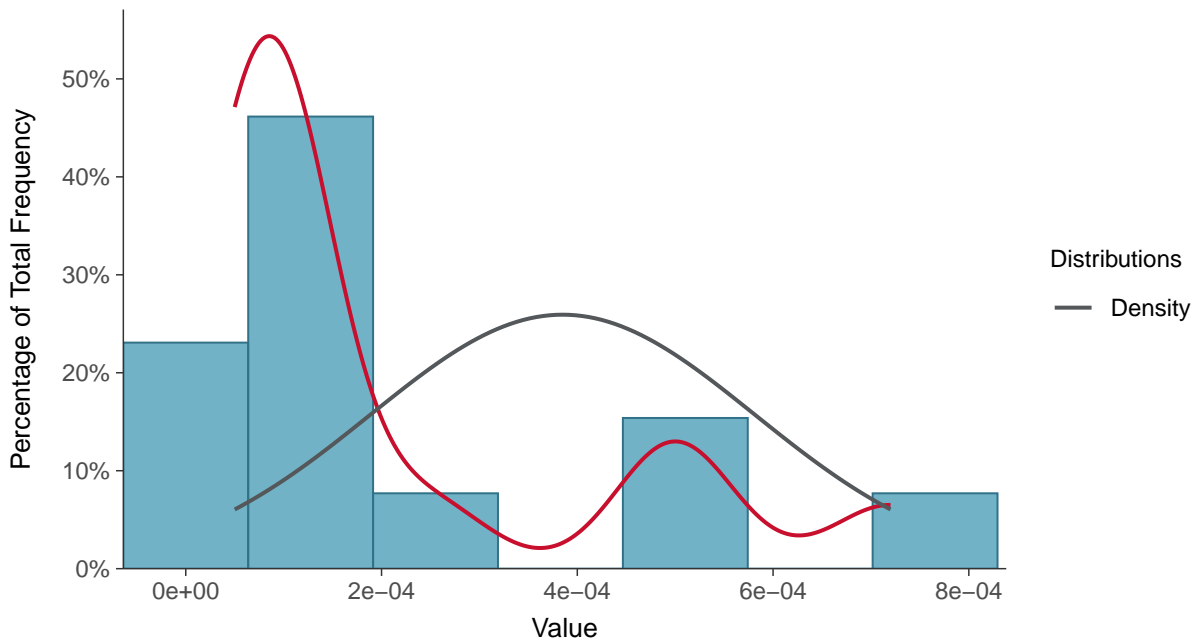
Scatter Plot

Antimony, MW-19 (mg/L)



Histogram

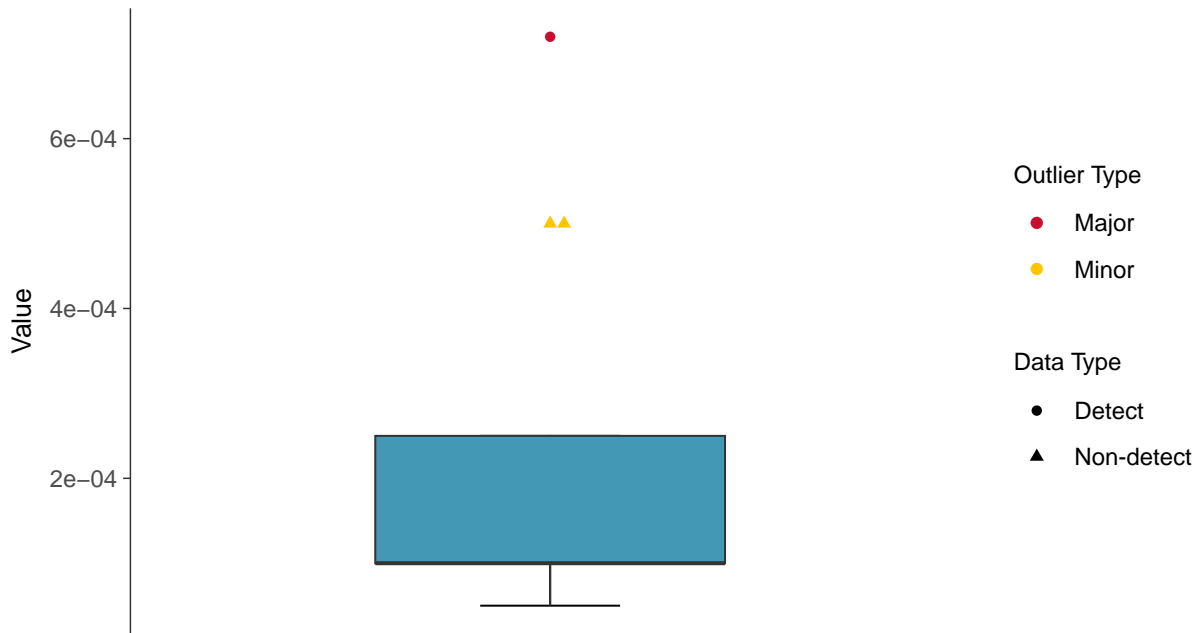
Antimony, MW-19 (mg/L)





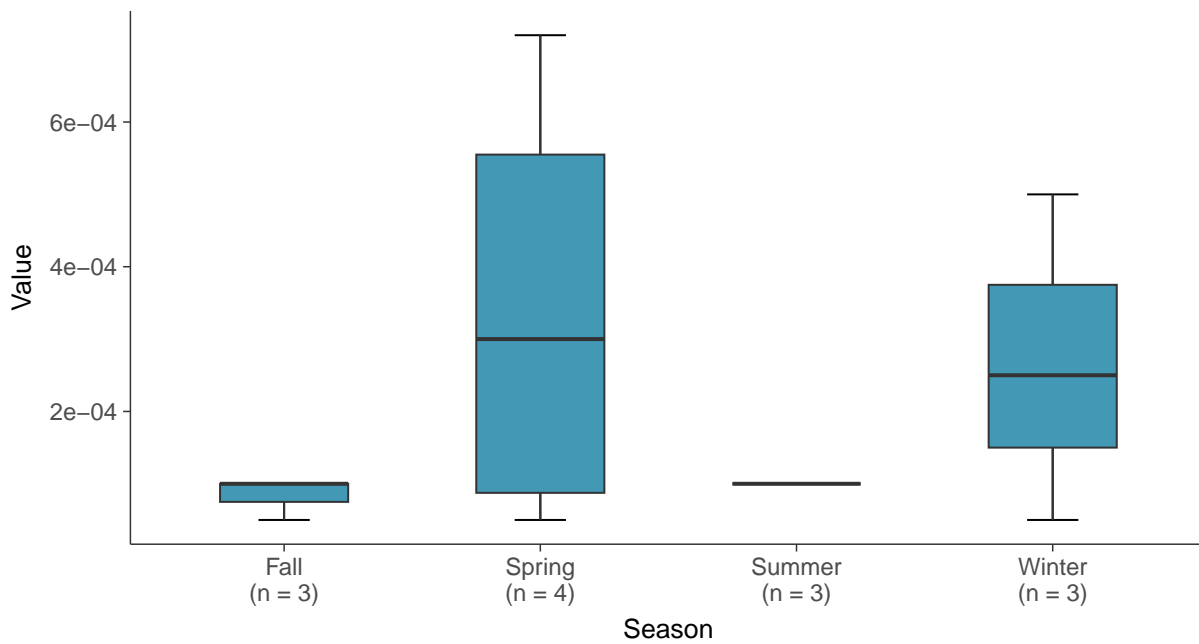
Boxplot

Antimony, MW-19 (mg/L)



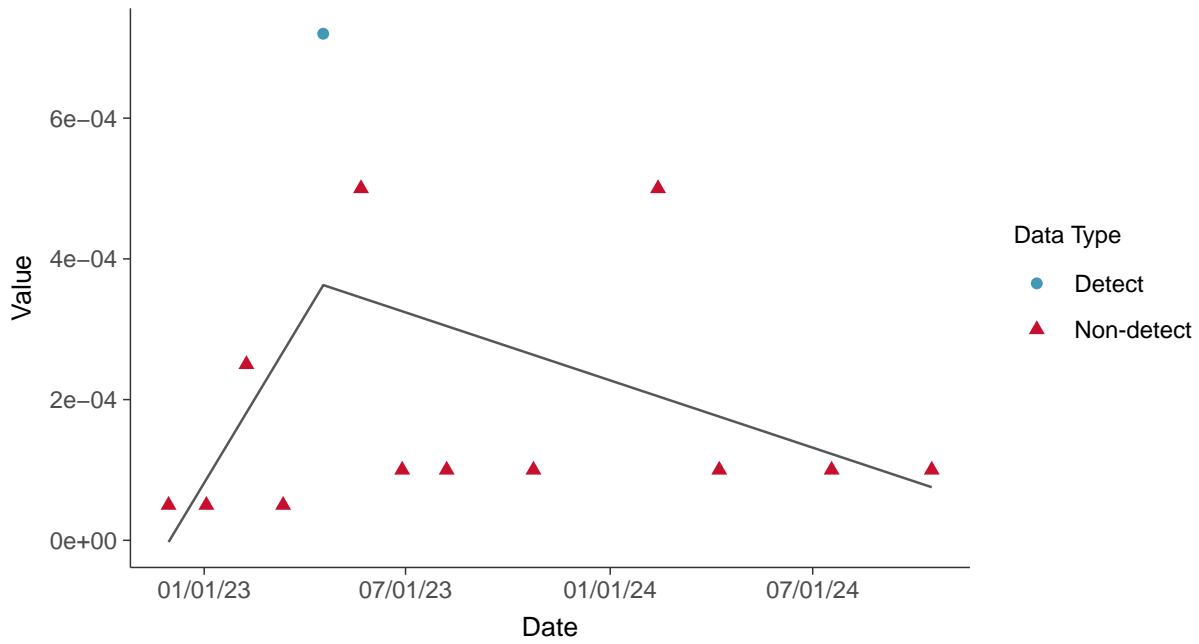
Boxplot by Season

Antimony, MW-19 (mg/L)

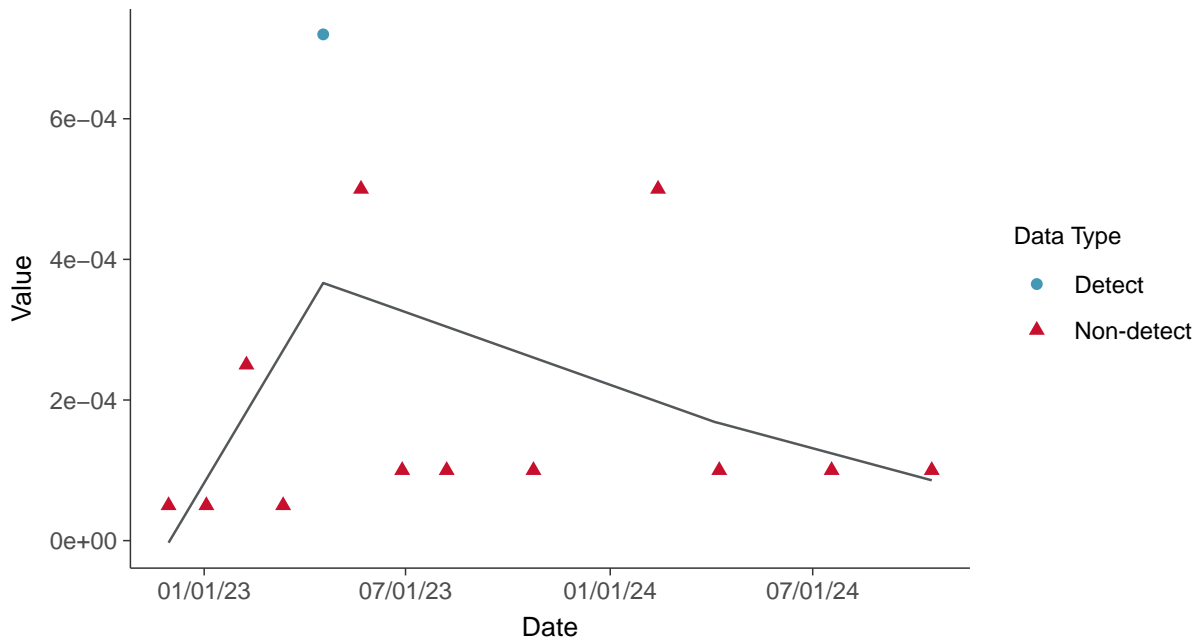




Trend Regression: Piecewise Linear-Linear
Antimony, MW-19 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Antimony, MW-19 (mg/L)



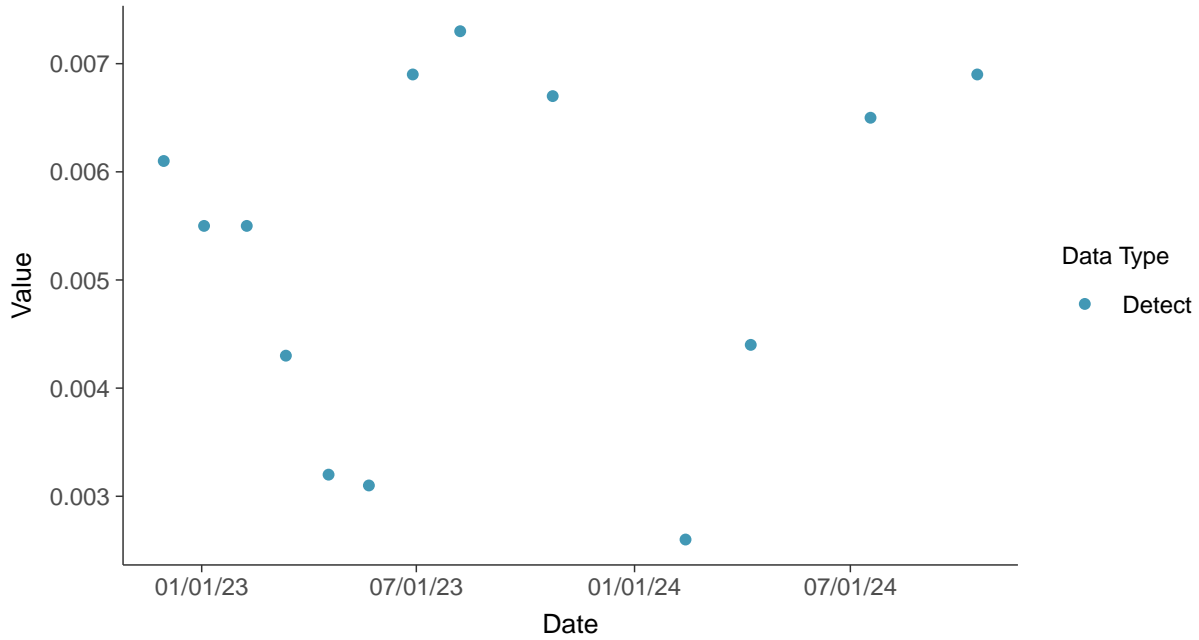


Appendix IV: Arsenic, MW-19

ID: 1_29_1_5_102

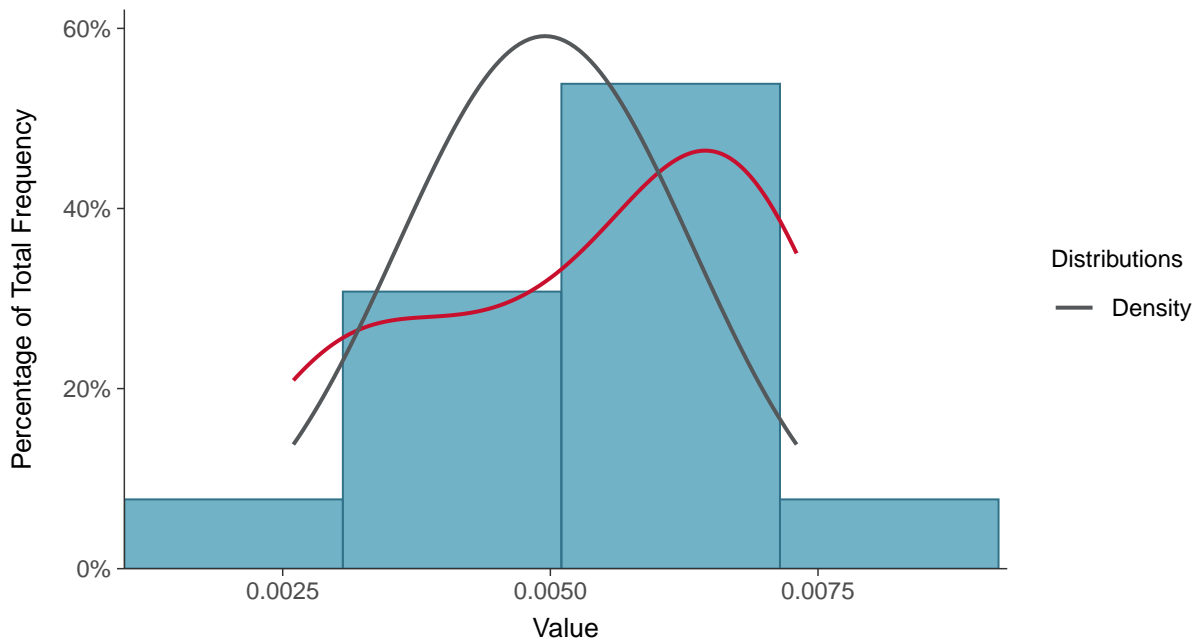
Scatter Plot

Arsenic, MW-19 (mg/L)



Histogram

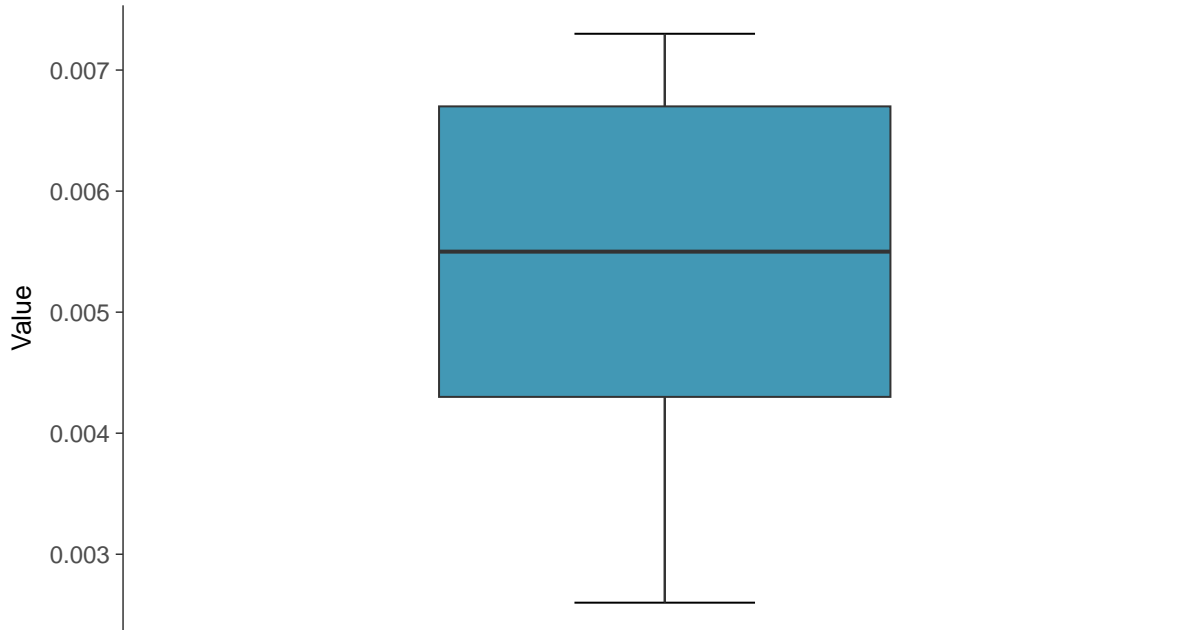
Arsenic, MW-19 (mg/L)





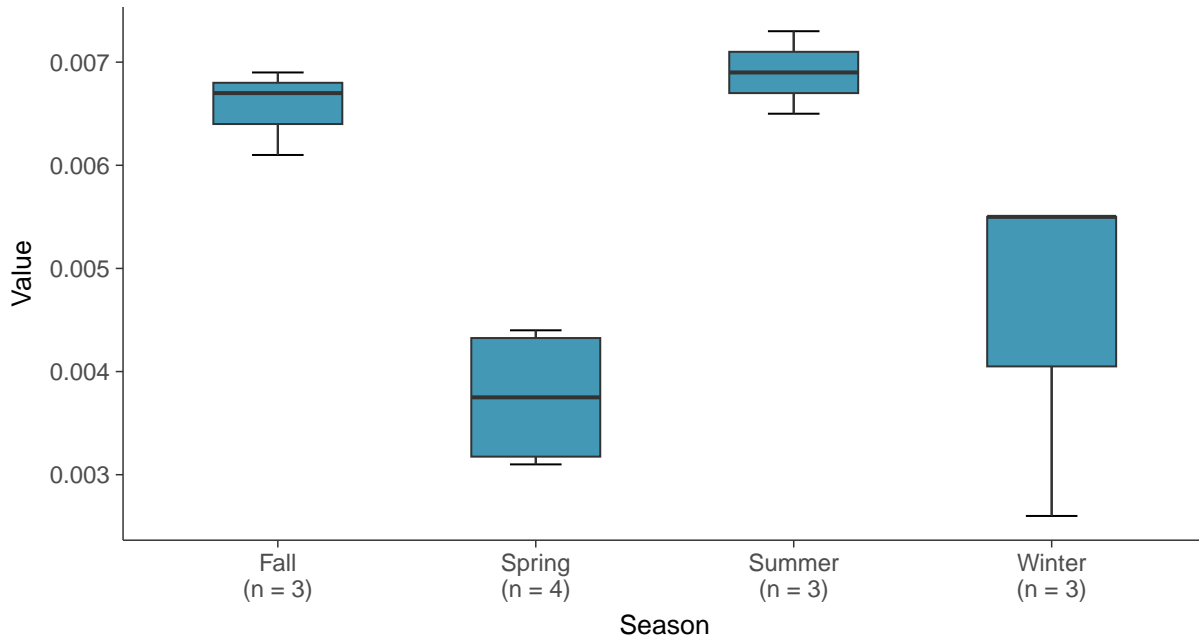
Boxplot

Arsenic, MW-19 (mg/L)



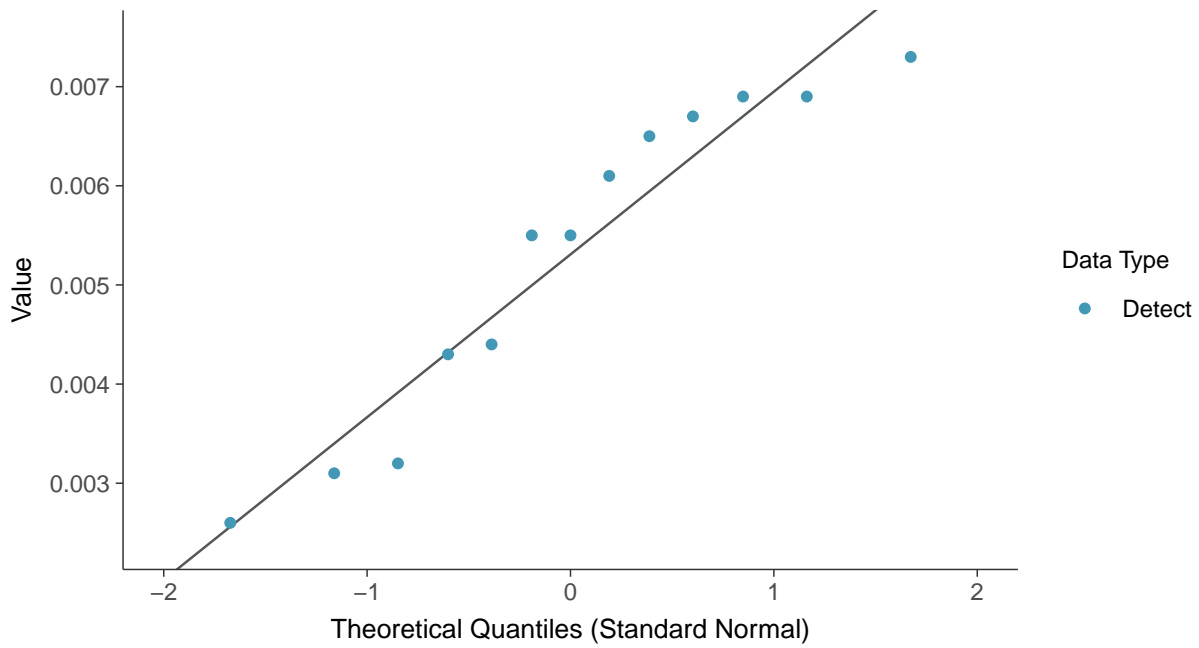
Boxplot by Season

Arsenic, MW-19 (mg/L)

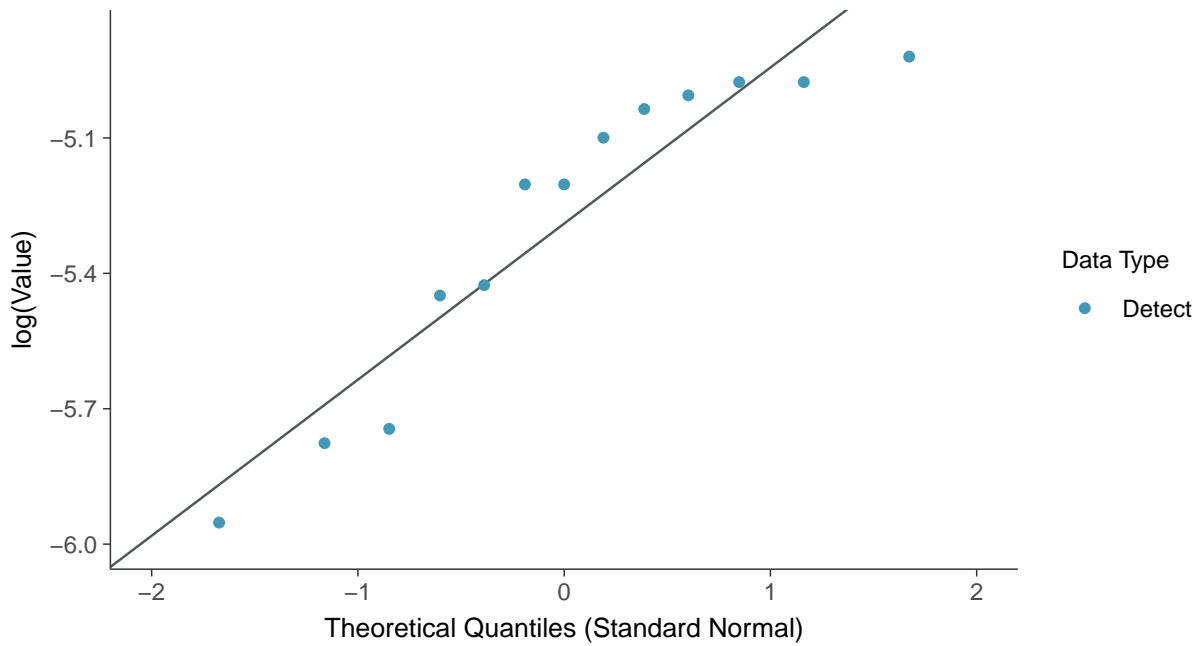




Normal Q-Q plot
Arsenic, MW-19 (mg/L)

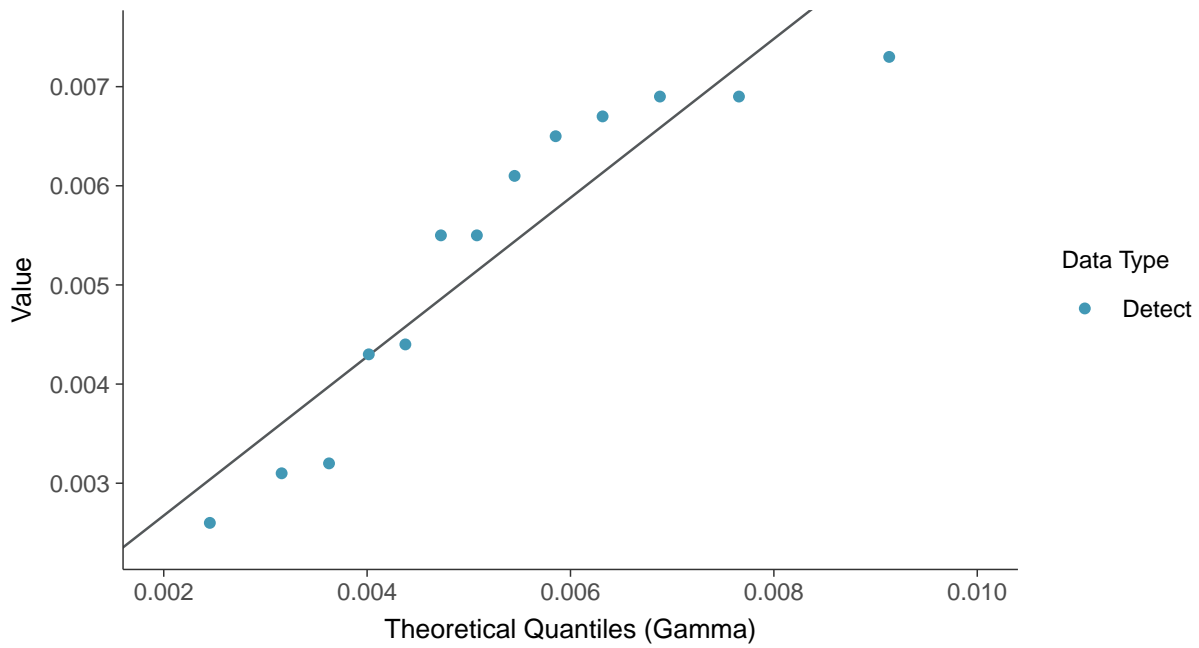


Lognormal Q-Q plot
Arsenic, MW-19 (mg/L)

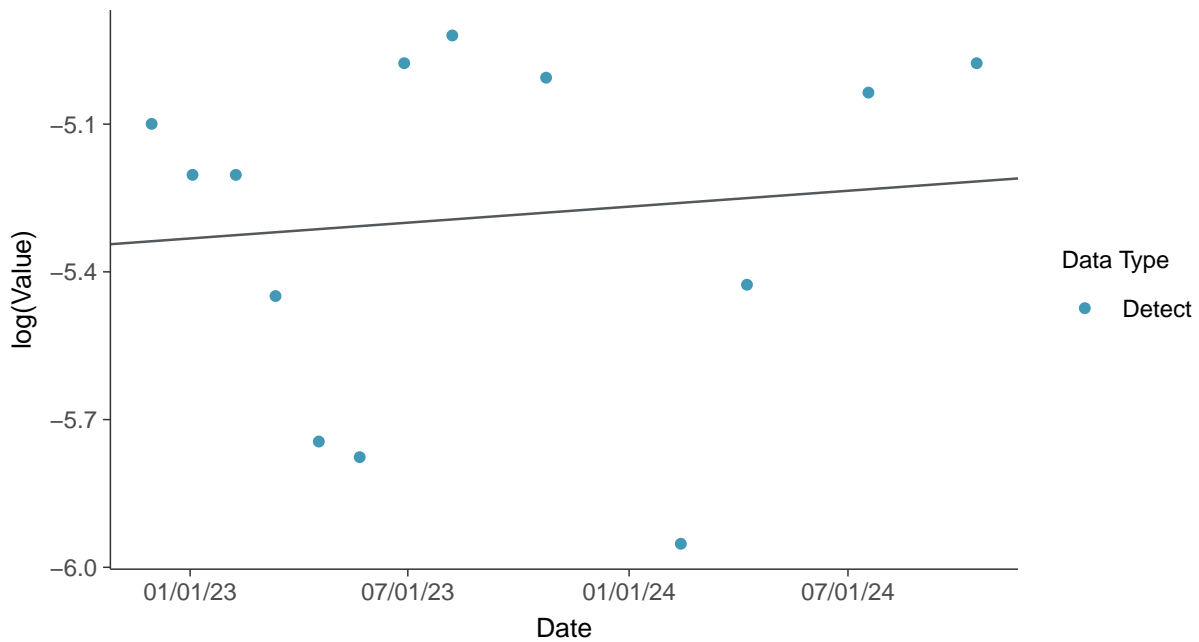




Gamma Q-Q plot
Arsenic, MW-19 (mg/L)



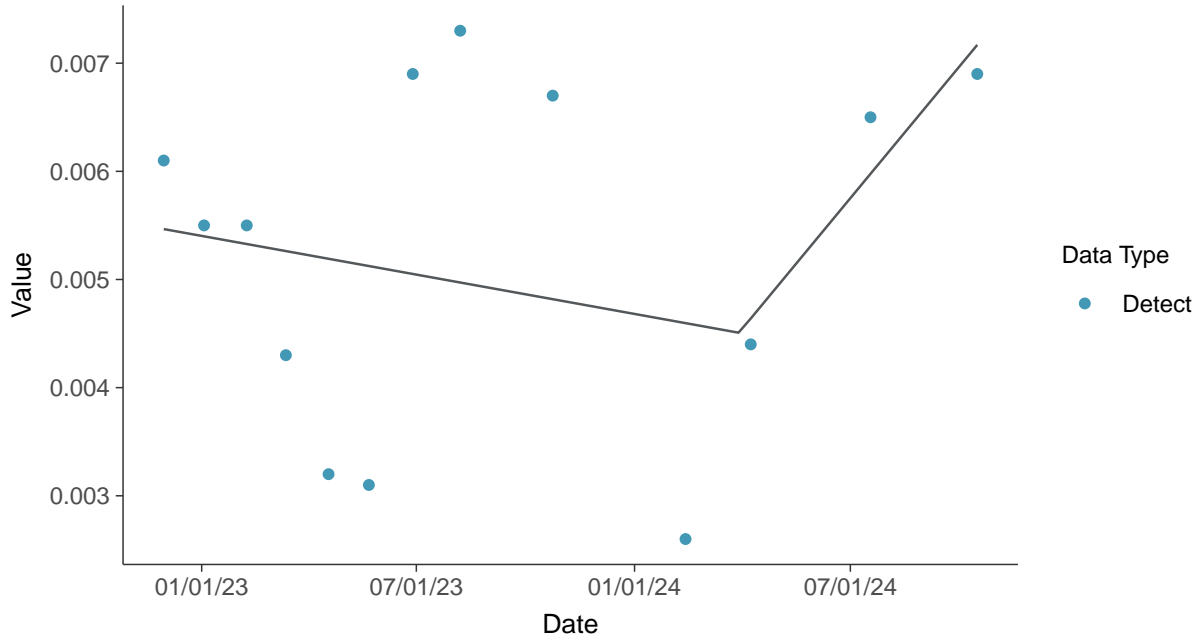
Trend Regression: Lognormal MLE
Arsenic, MW-19 (mg/L)





Trend Regression: Piecewise Linear-Linear

Arsenic, MW-19 (mg/L)



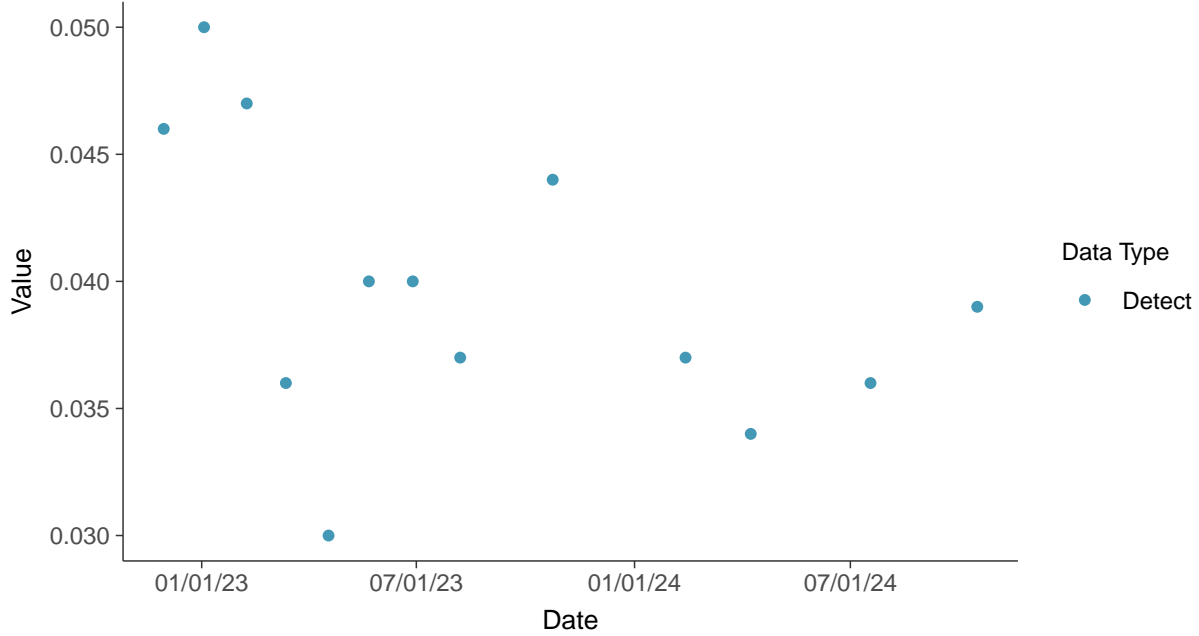


Appendix IV: Barium, MW-19

ID: 1_29_1_5_103

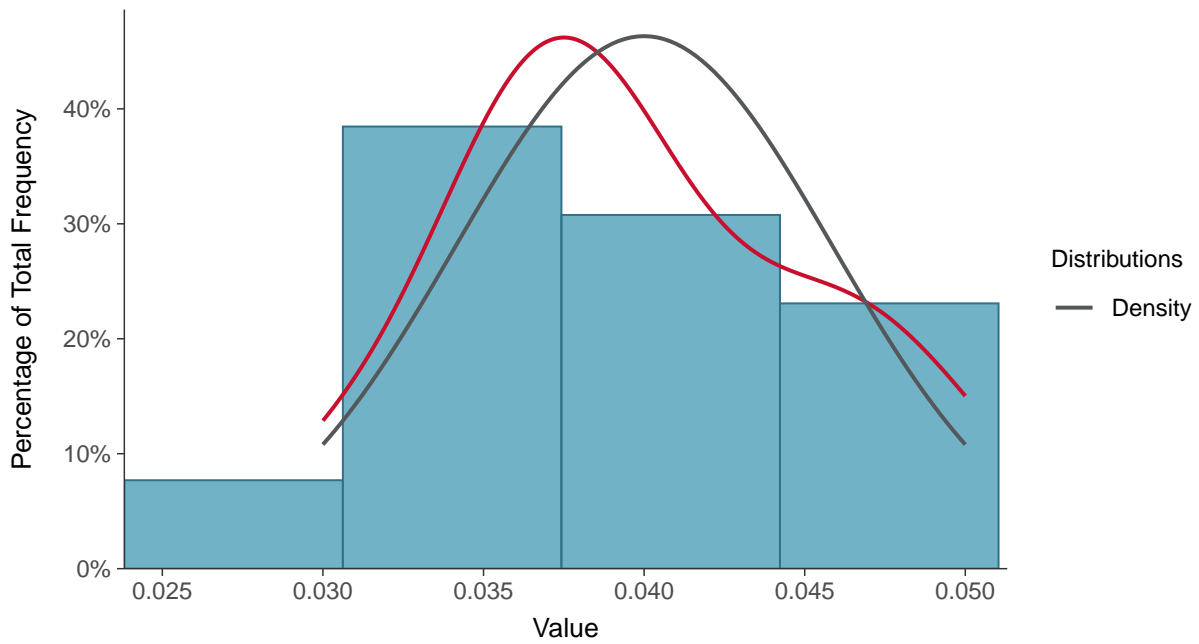
Scatter Plot

Barium, MW-19 (mg/L)



Histogram

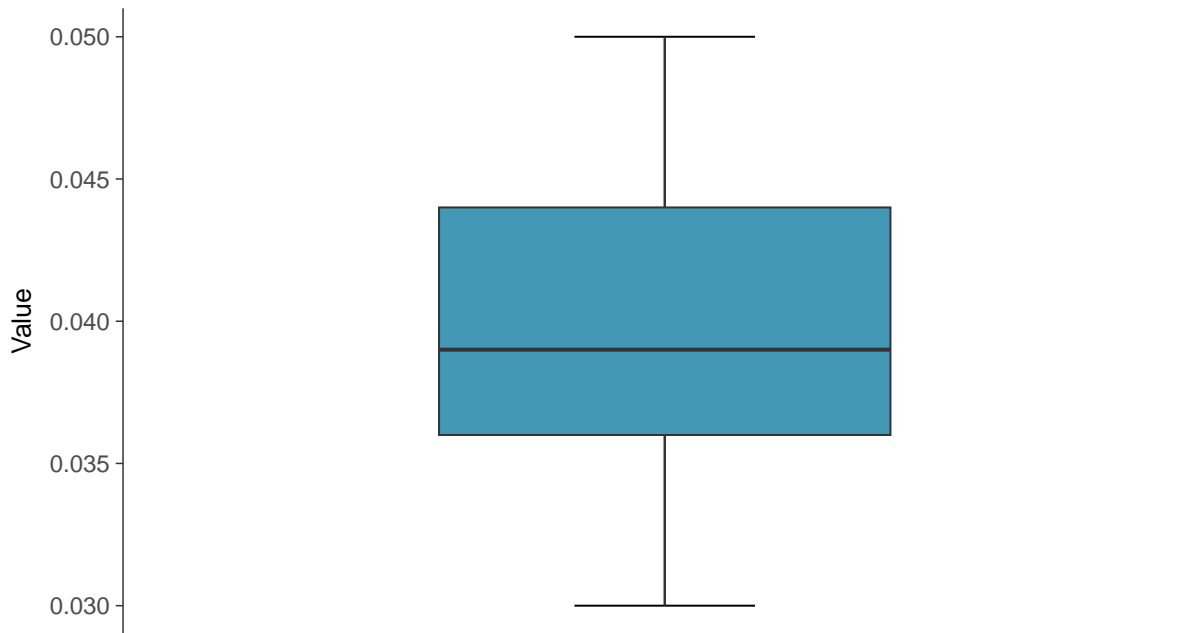
Barium, MW-19 (mg/L)





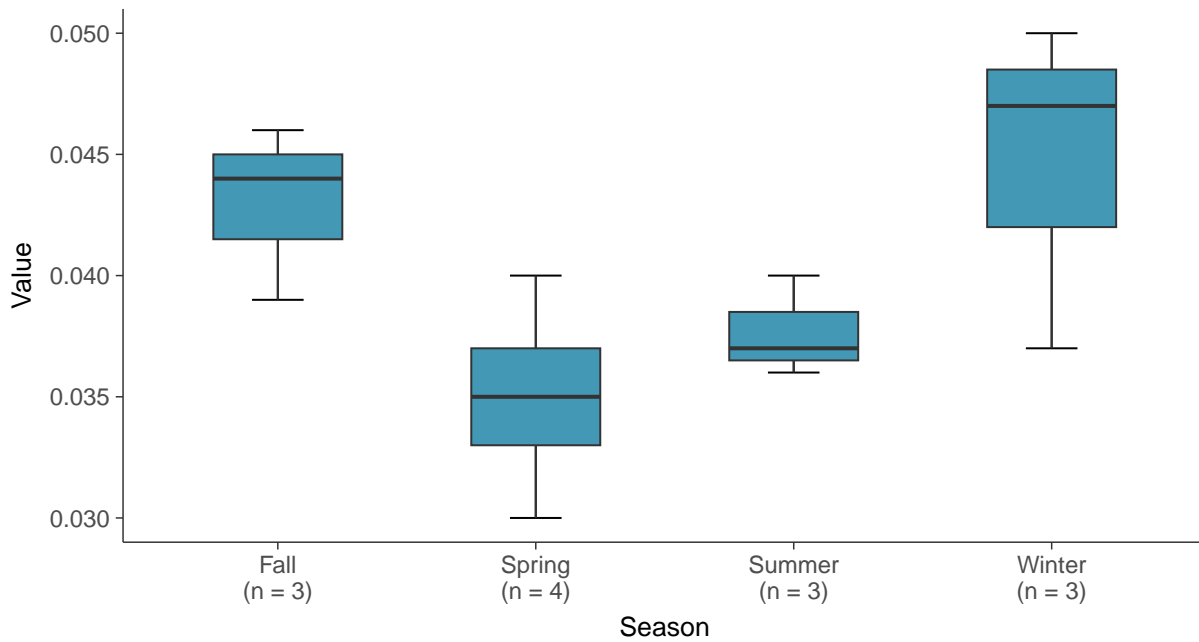
Boxplot

Barium, MW-19 (mg/L)



Boxplot by Season

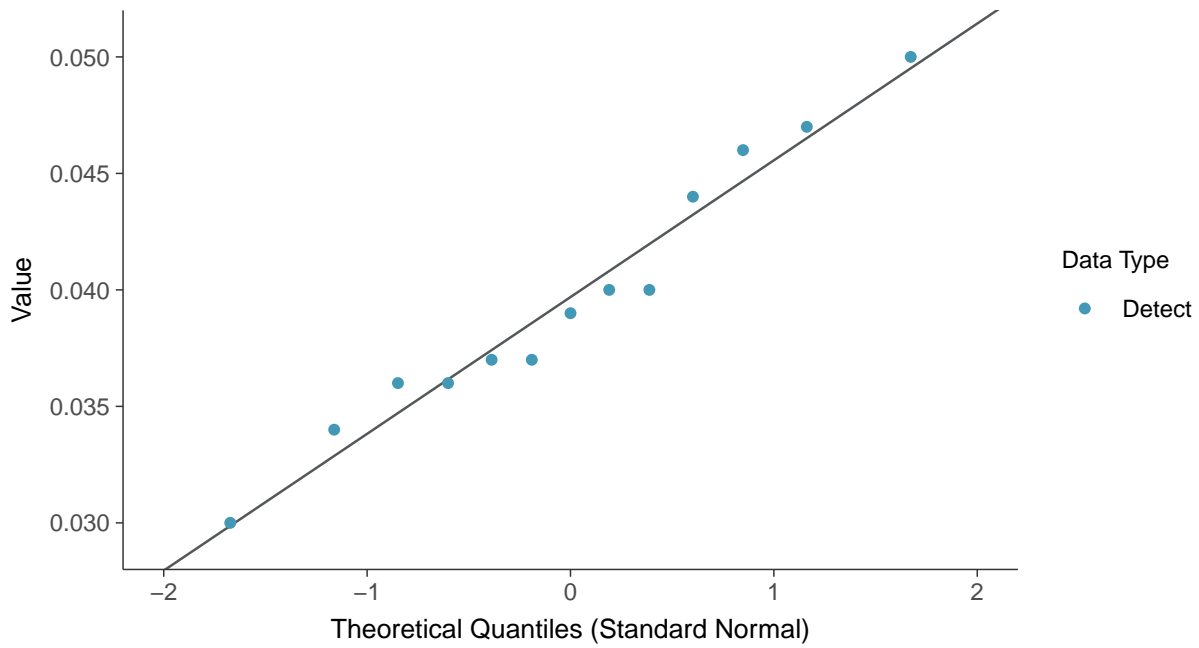
Barium, MW-19 (mg/L)





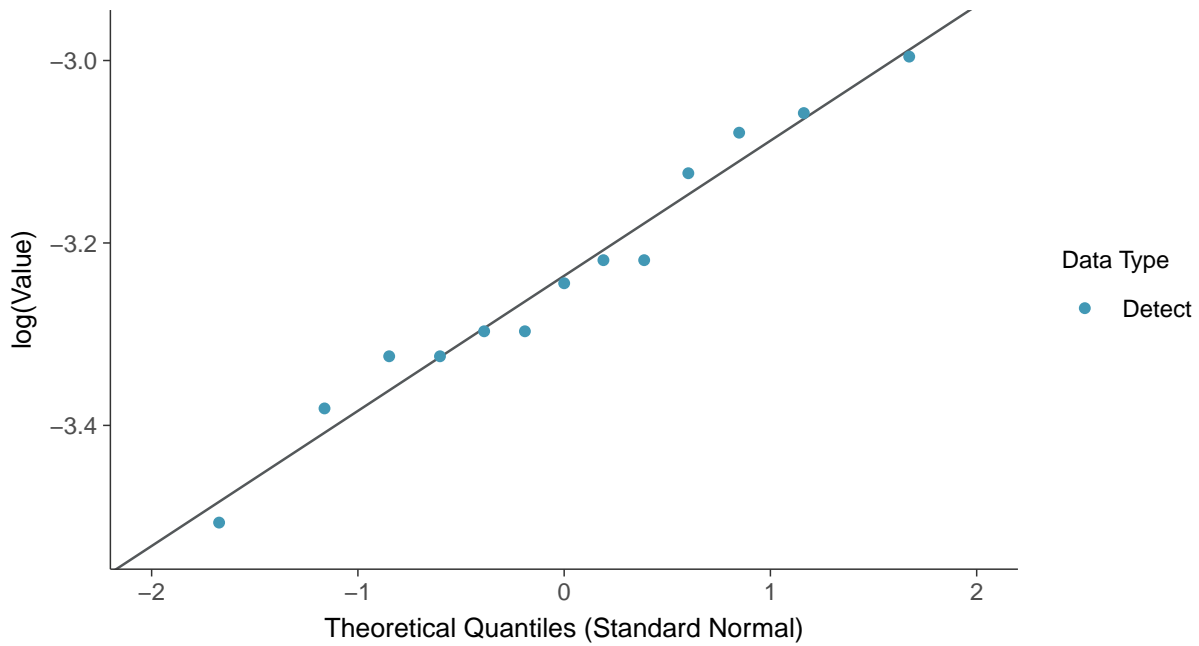
Normal Q-Q plot

Barium, MW-19 (mg/L)



Lognormal Q-Q plot

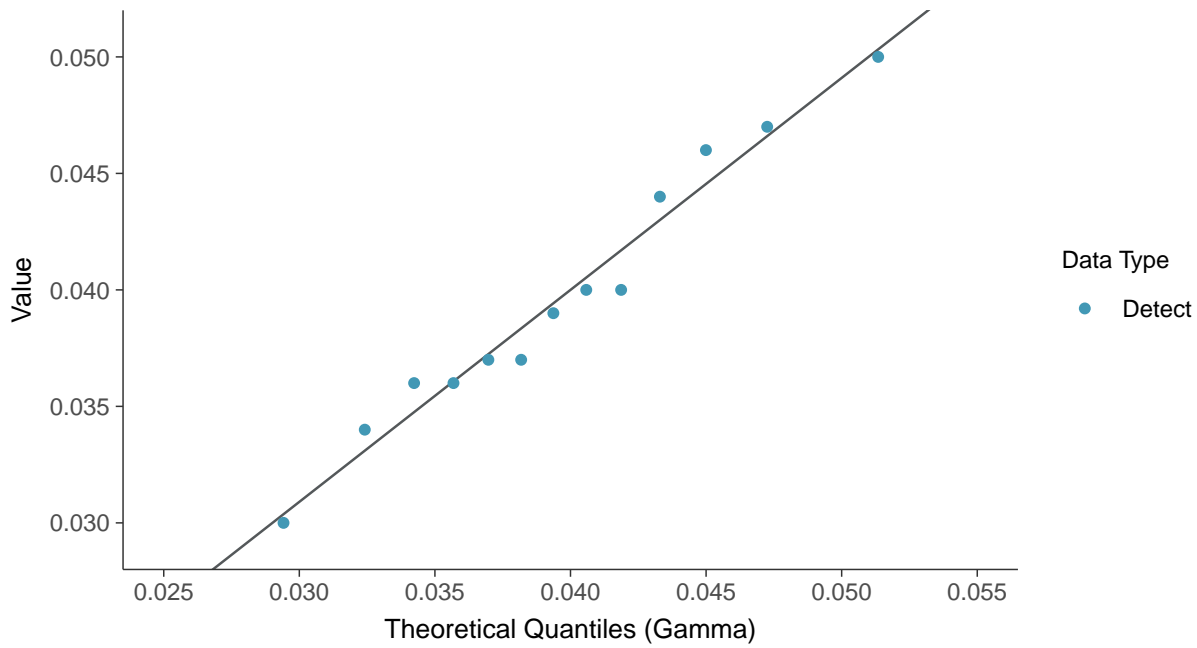
Barium, MW-19 (mg/L)





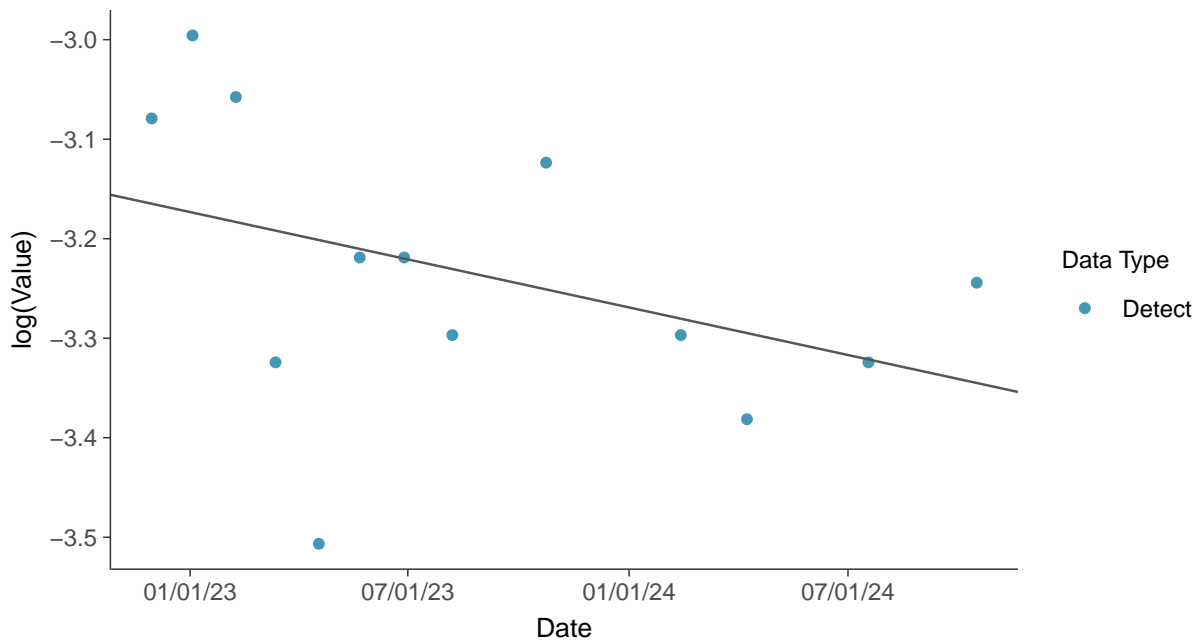
Gamma Q-Q plot

Barium, MW-19 (mg/L)



Trend Regression: Lognormal MLE

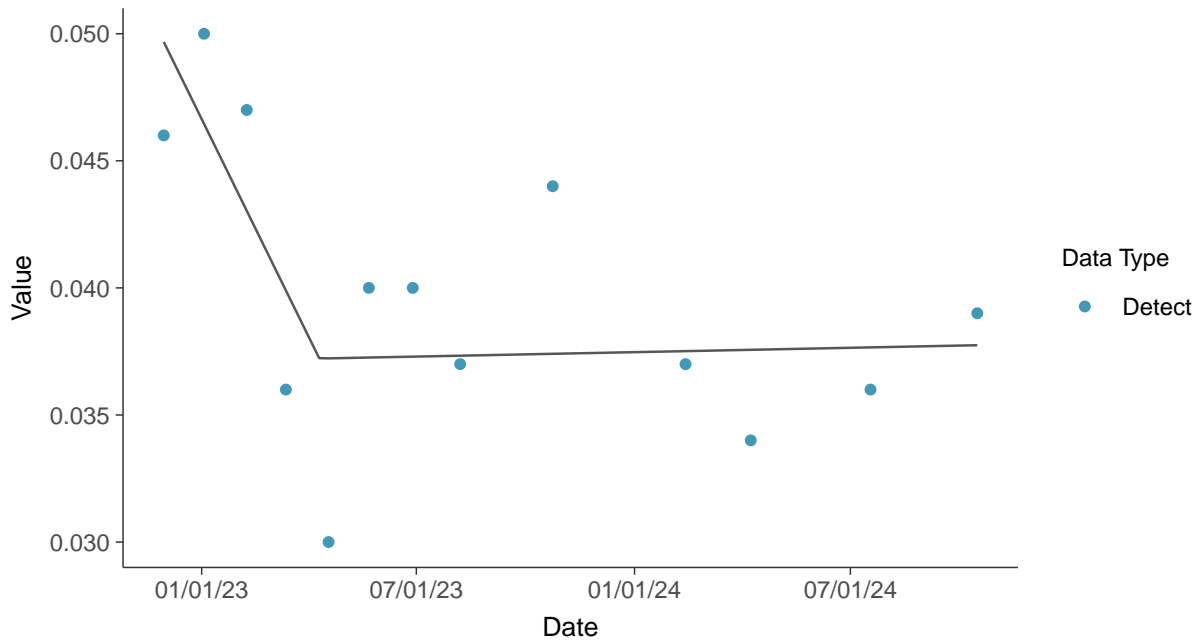
Barium, MW-19 (mg/L)





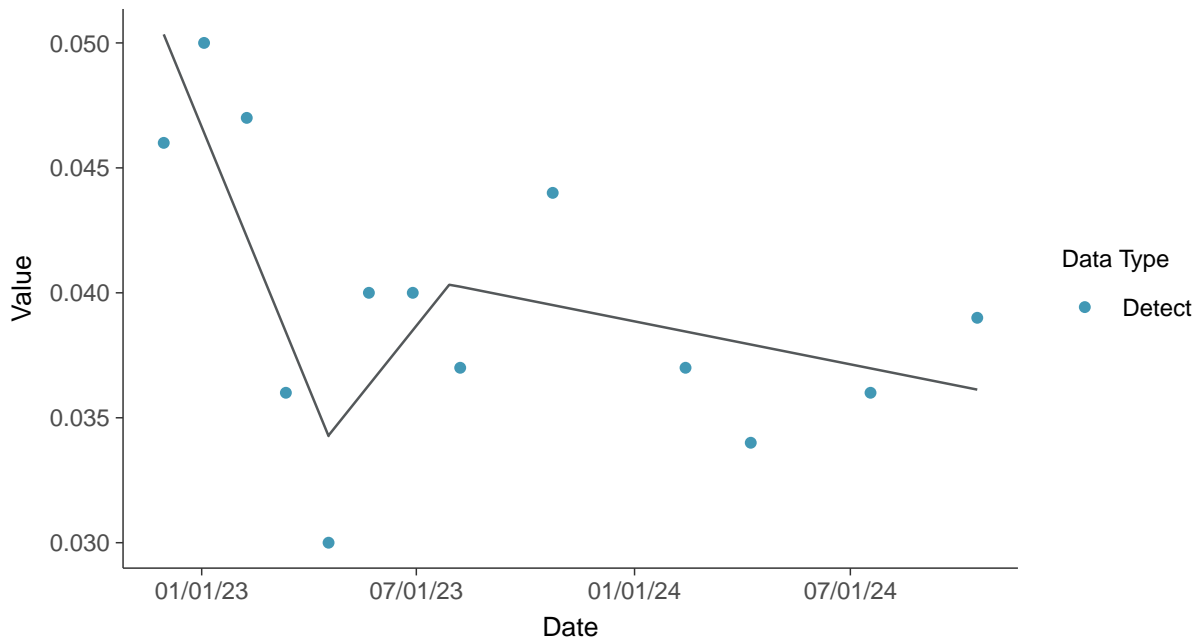
Trend Regression: Piecewise Linear-Linear

Barium, MW-19 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

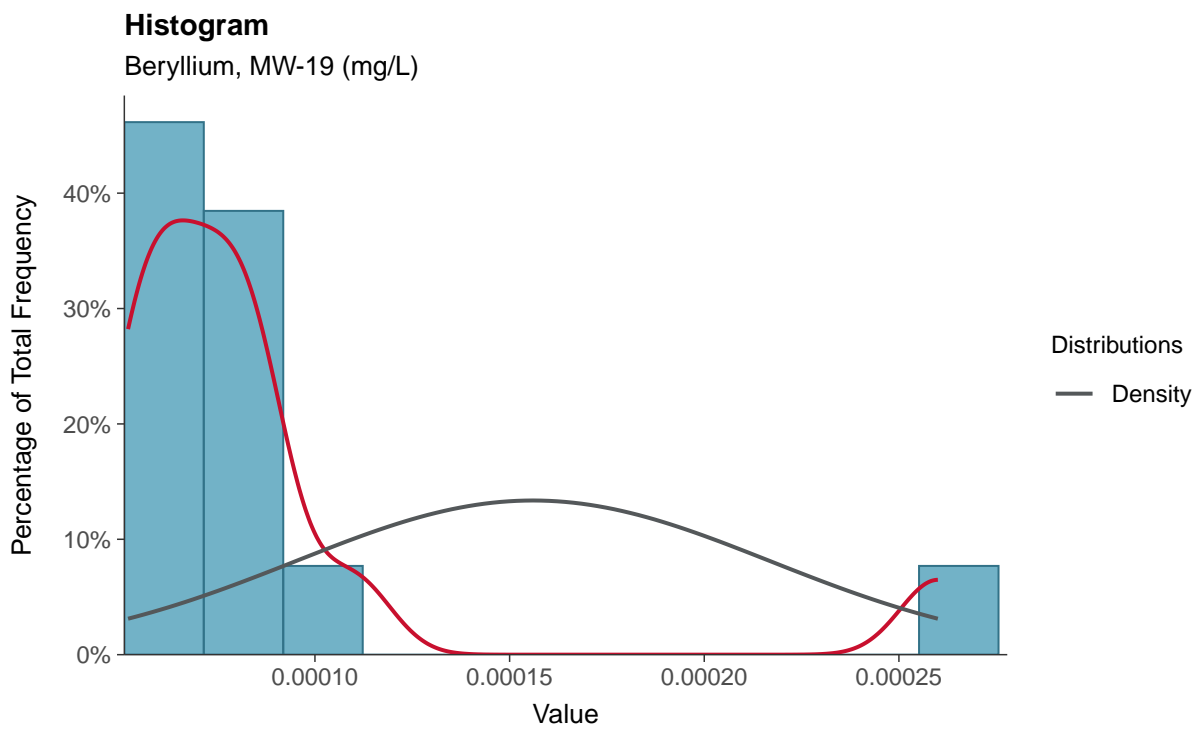
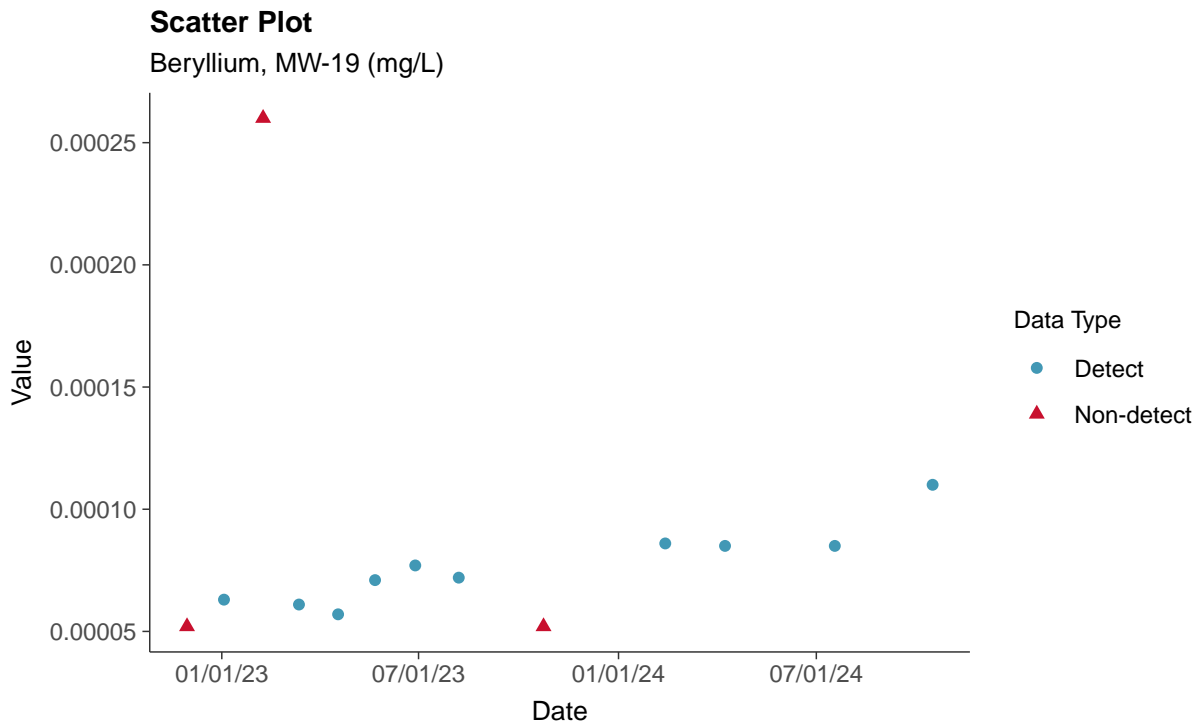
Barium, MW-19 (mg/L)





Appendix IV: Beryllium, MW-19

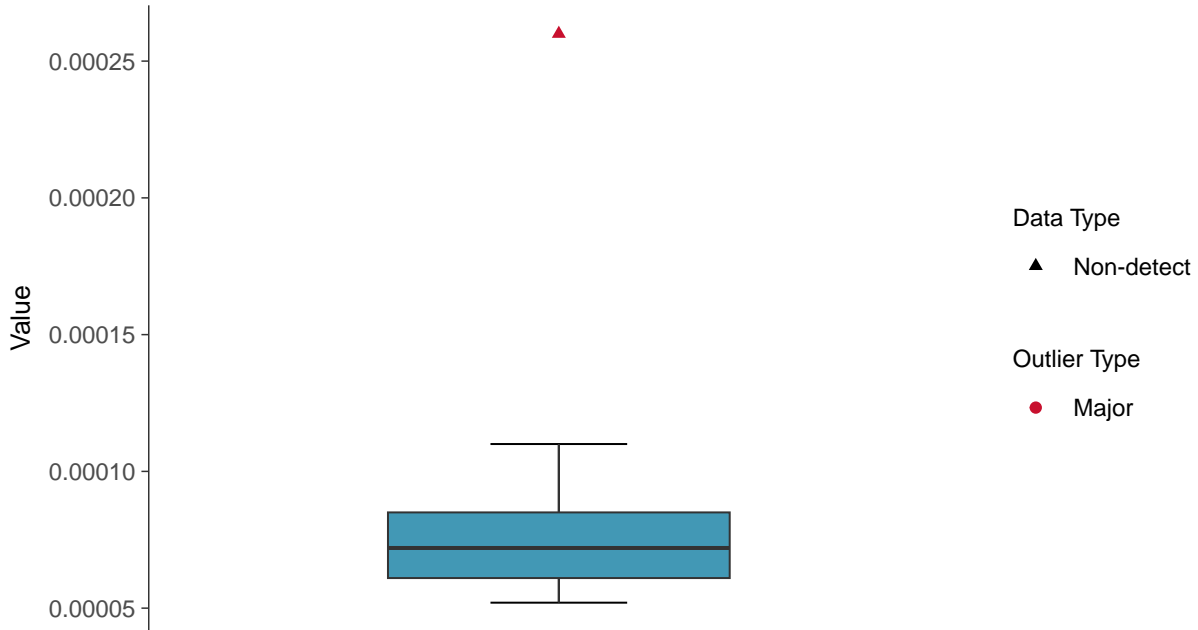
ID: 1_29_1_5_104





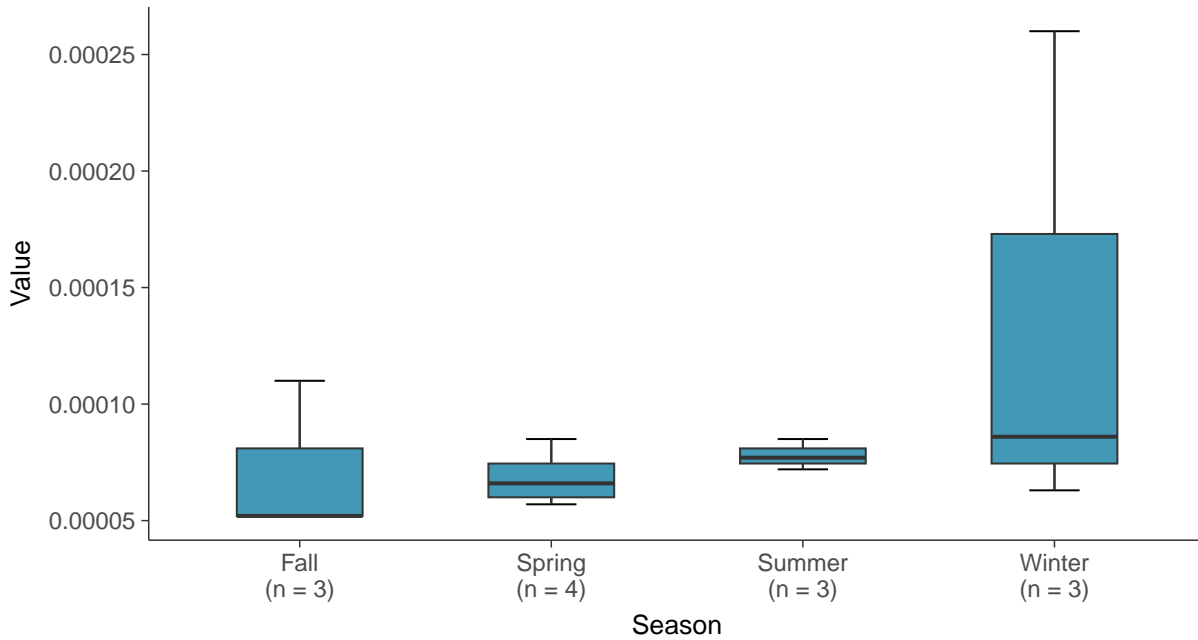
Boxplot

Beryllium, MW-19 (mg/L)



Boxplot by Season

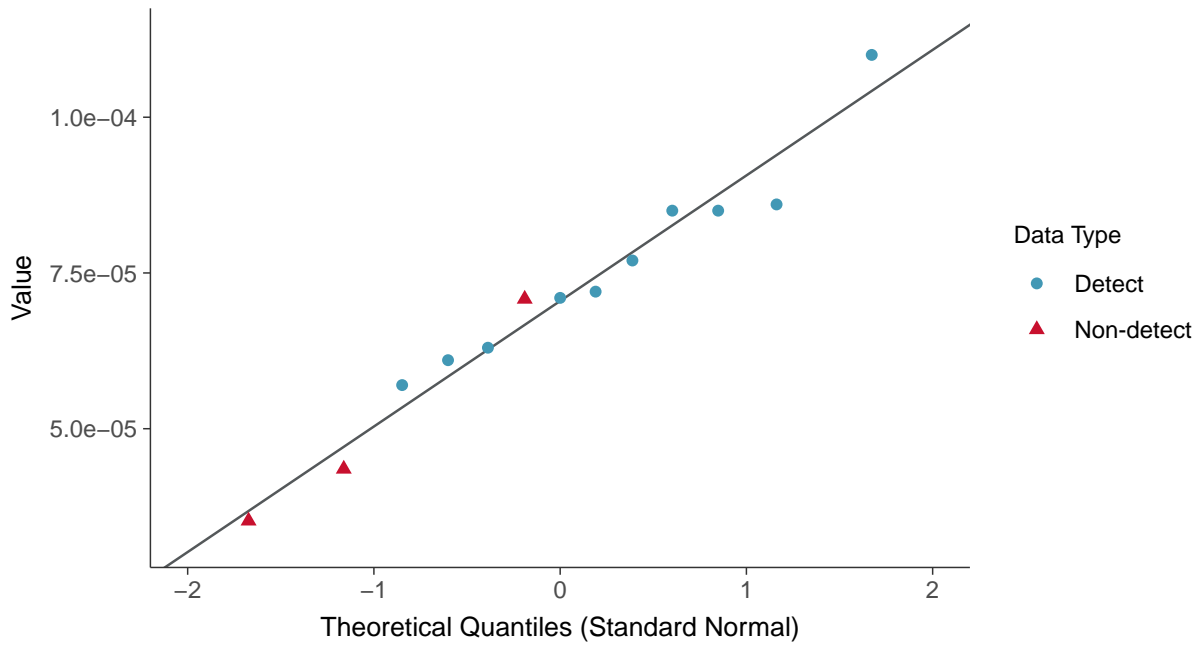
Beryllium, MW-19 (mg/L)





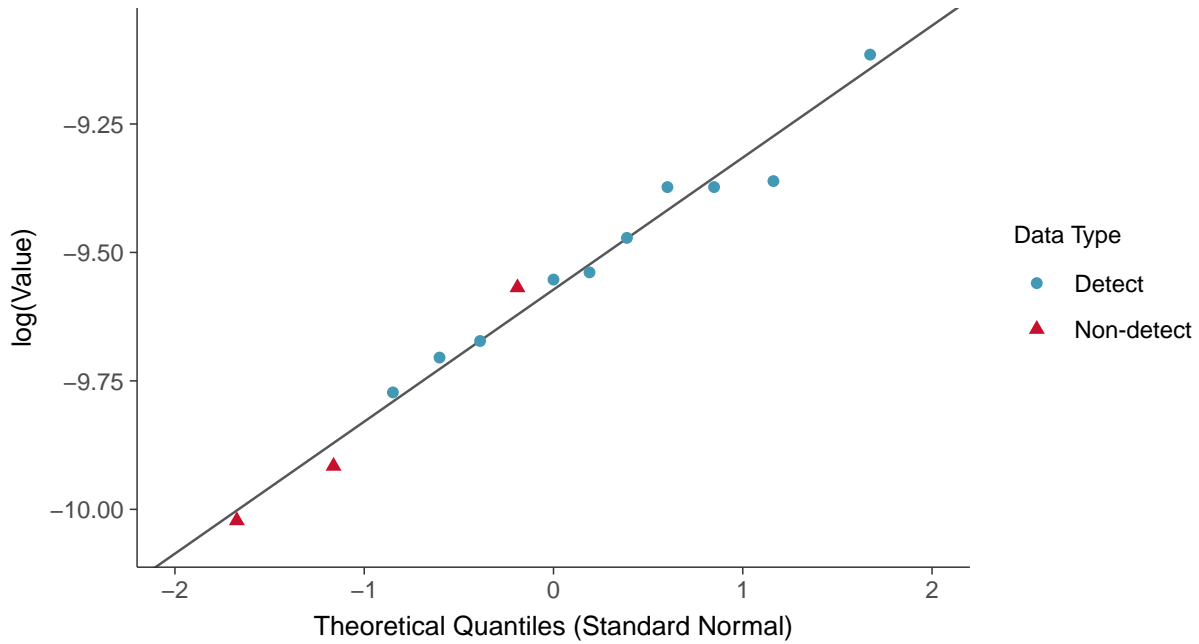
Normal Q-Q plot using ROS Imputed Estimates

Beryllium, MW-19 (mg/L)



Lognormal Q-Q plot using ROS Imputed Estimates

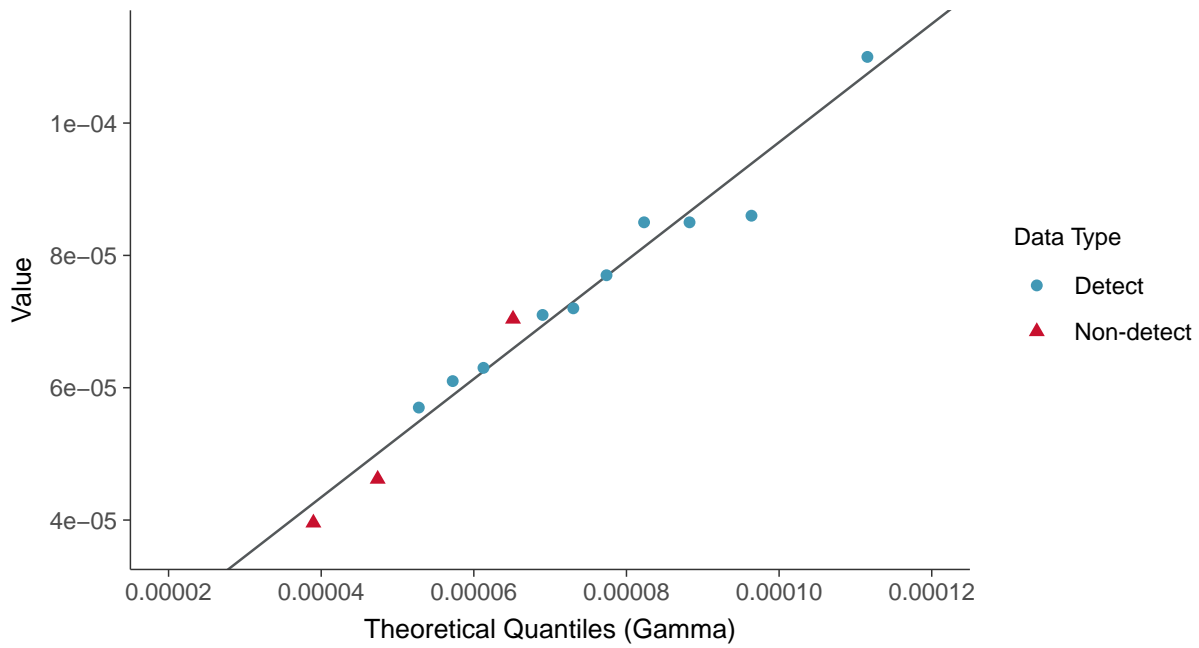
Beryllium, MW-19 (mg/L)





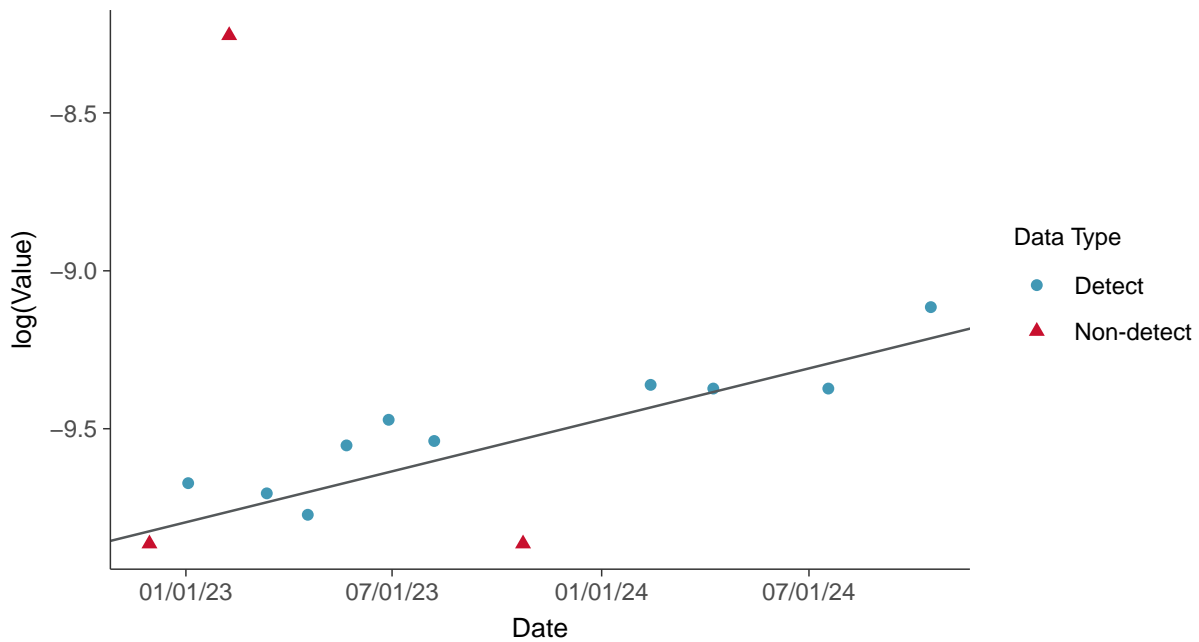
Gamma Q-Q plot using ROS Imputed Estimates

Beryllium, MW-19 (mg/L)



Trend Regression: Lognormal MLE

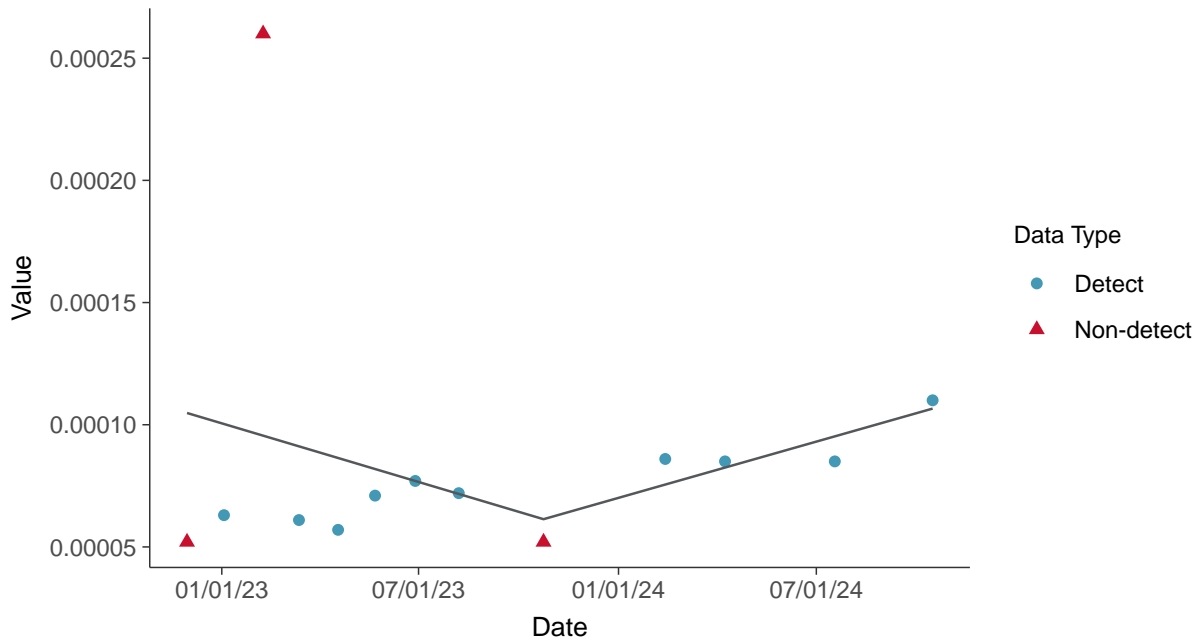
Beryllium, MW-19 (mg/L)





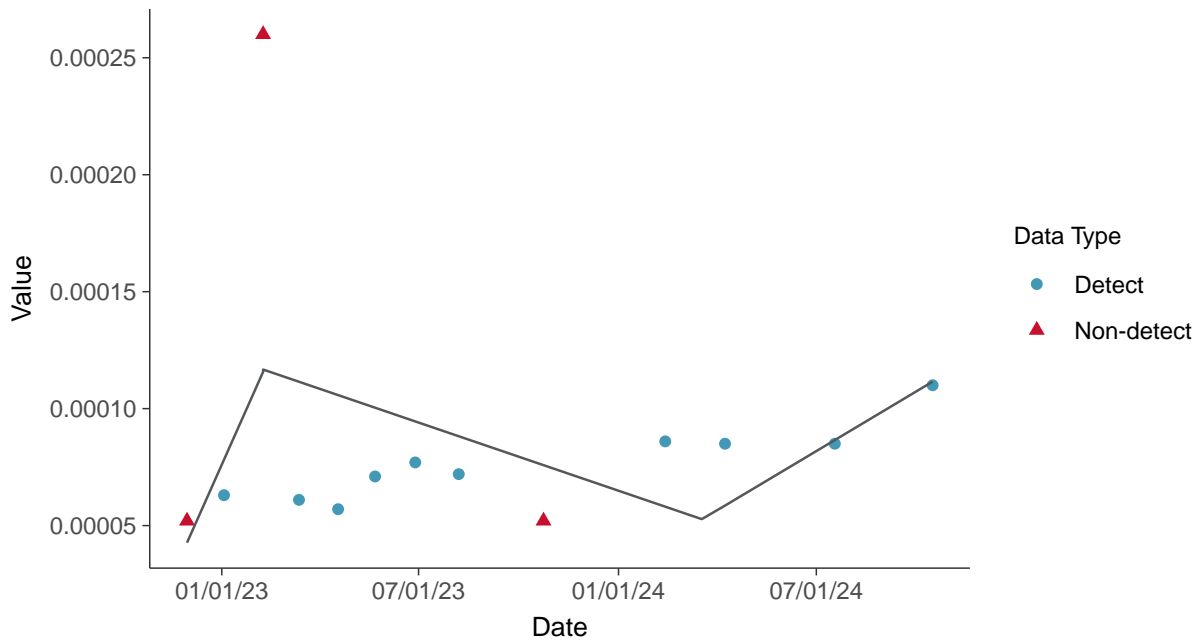
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-19 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Beryllium, MW-19 (mg/L)



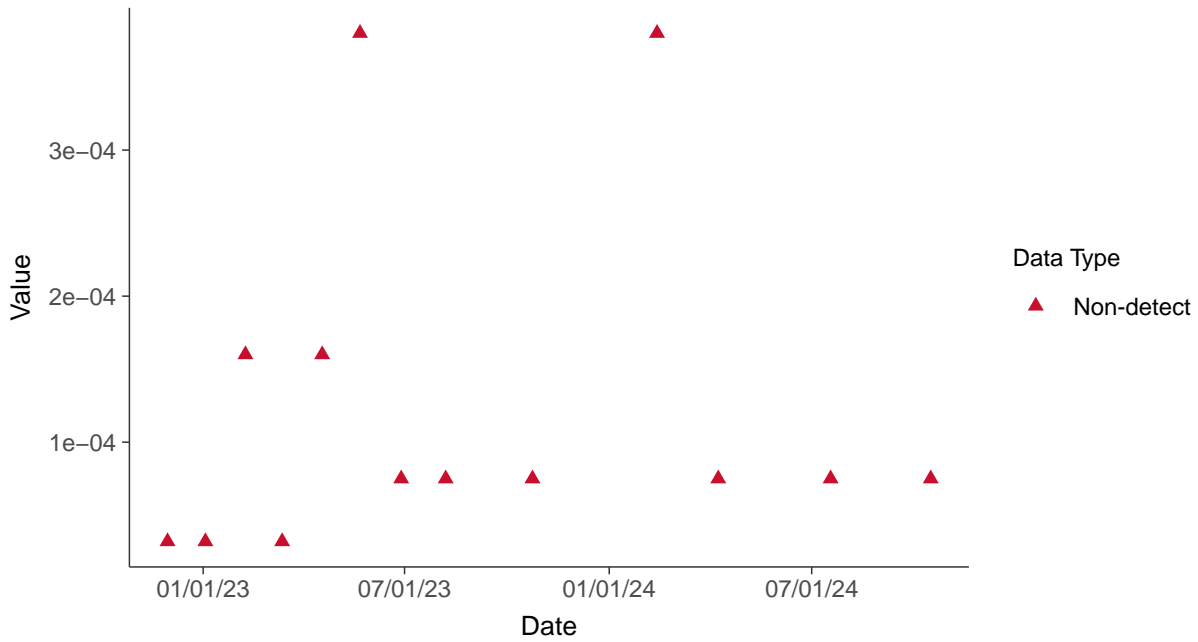


Appendix IV: Cadmium, MW-19

ID: 1_29_1_5_106

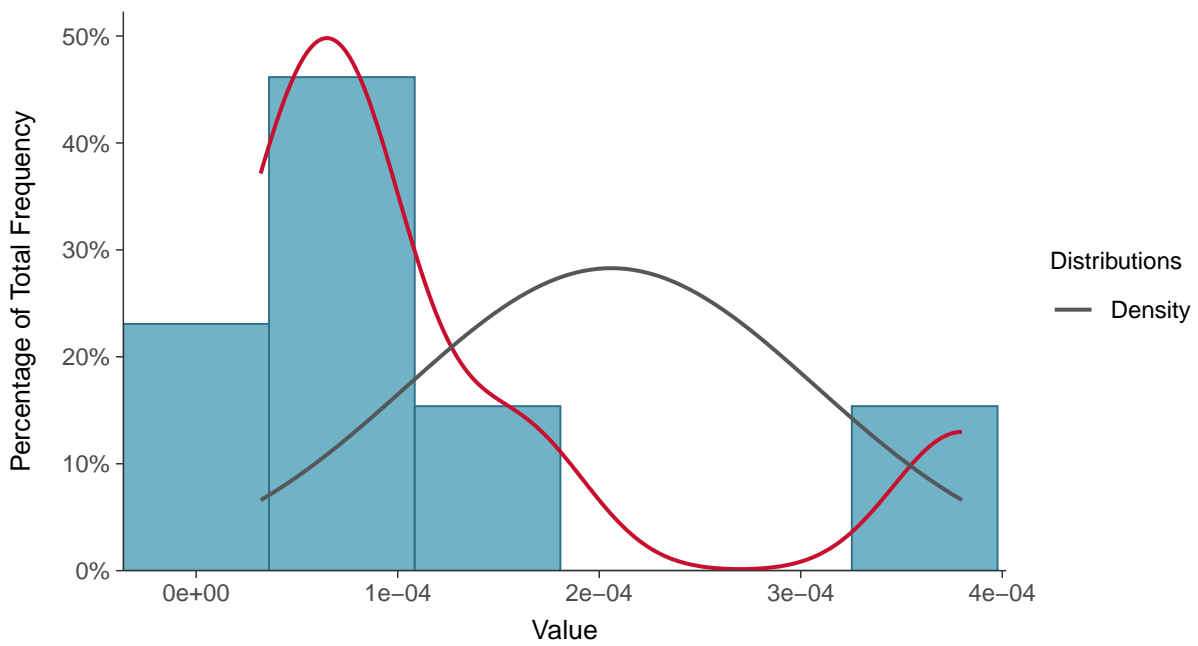
Scatter Plot

Cadmium, MW-19 (mg/L)



Histogram

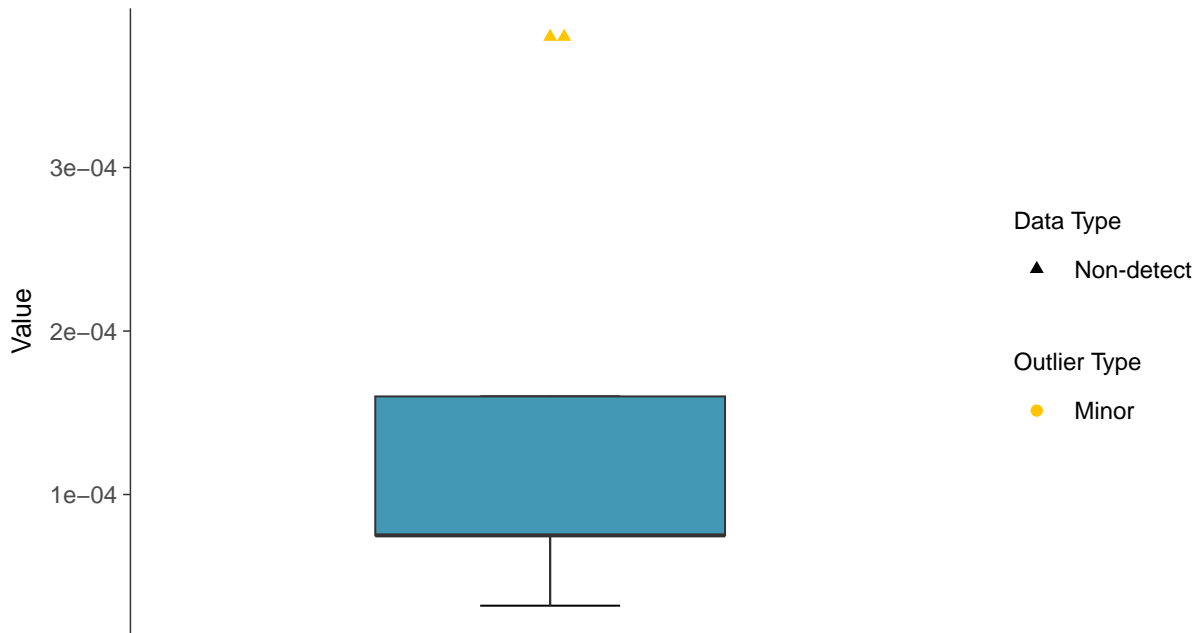
Cadmium, MW-19 (mg/L)





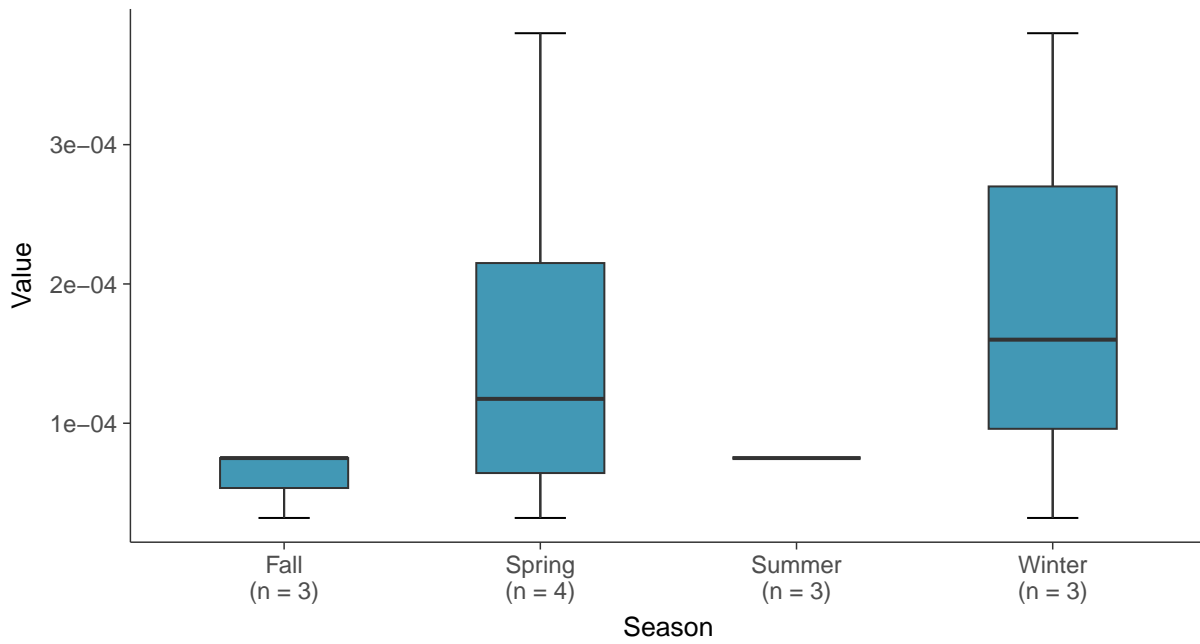
Boxplot

Cadmium, MW-19 (mg/L)



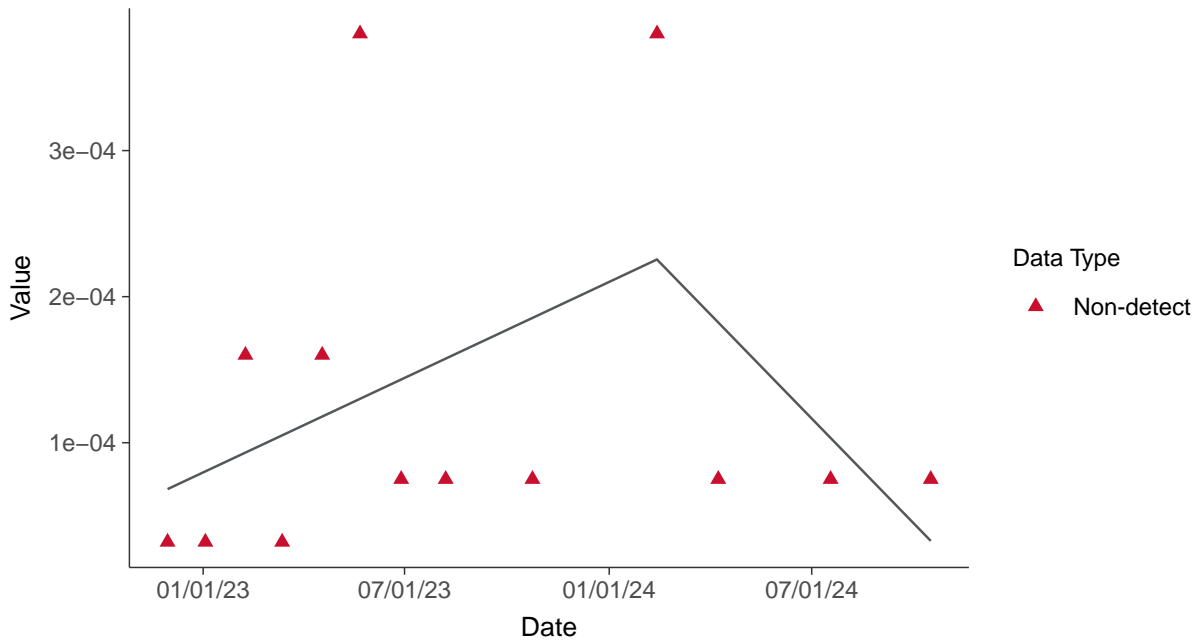
Boxplot by Season

Cadmium, MW-19 (mg/L)

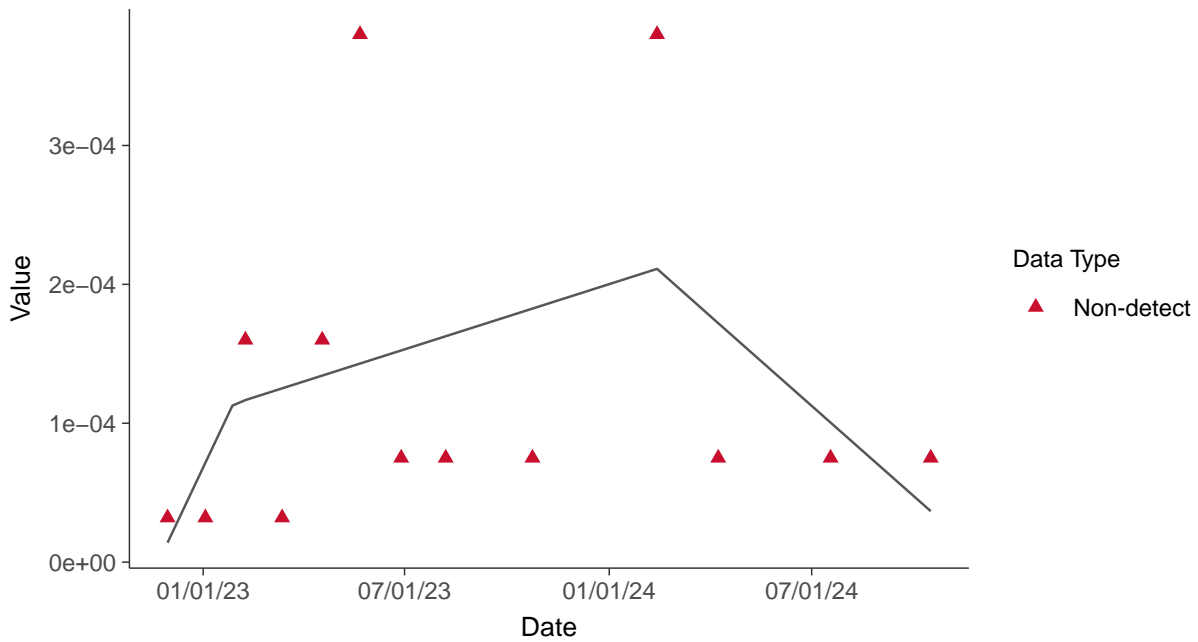




Trend Regression: Piecewise Linear-Linear
Cadmium, MW-19 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Cadmium, MW-19 (mg/L)



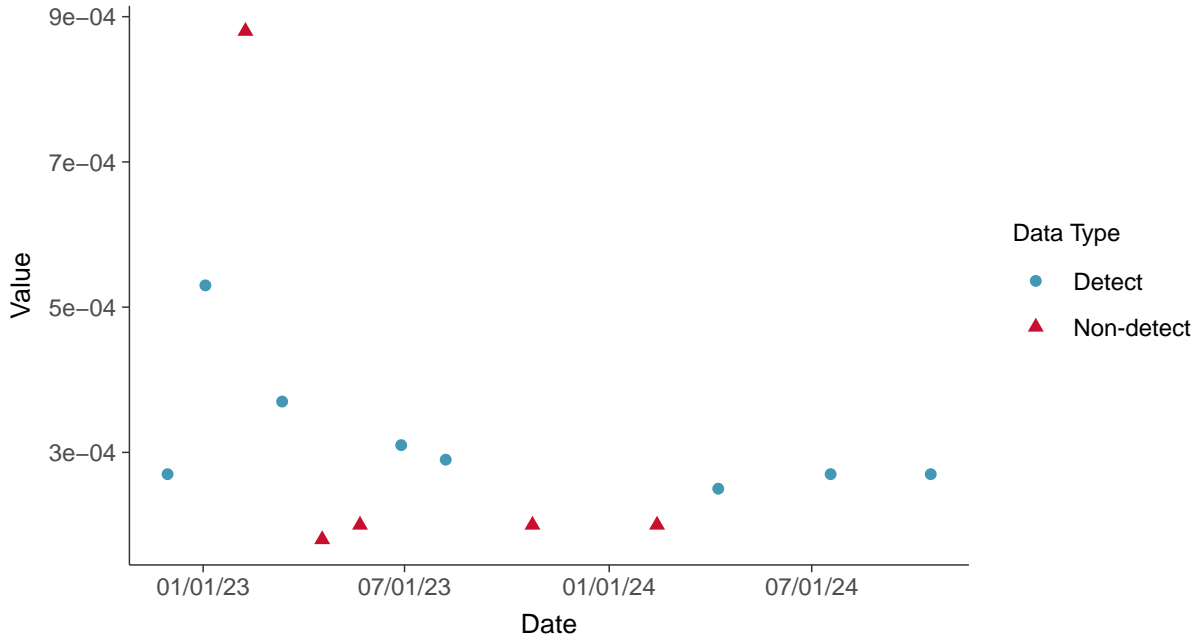


Appendix IV: Chromium, Total, MW-19

ID: 1_29_1_5_109

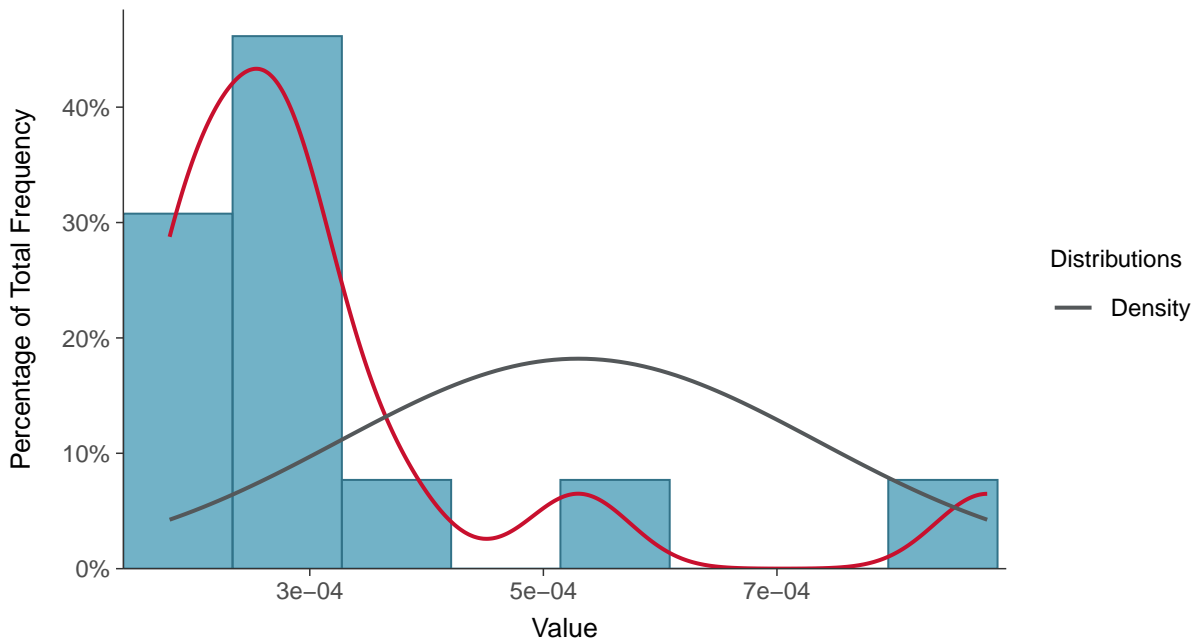
Scatter Plot

Chromium, Total, MW-19 (mg/L)



Histogram

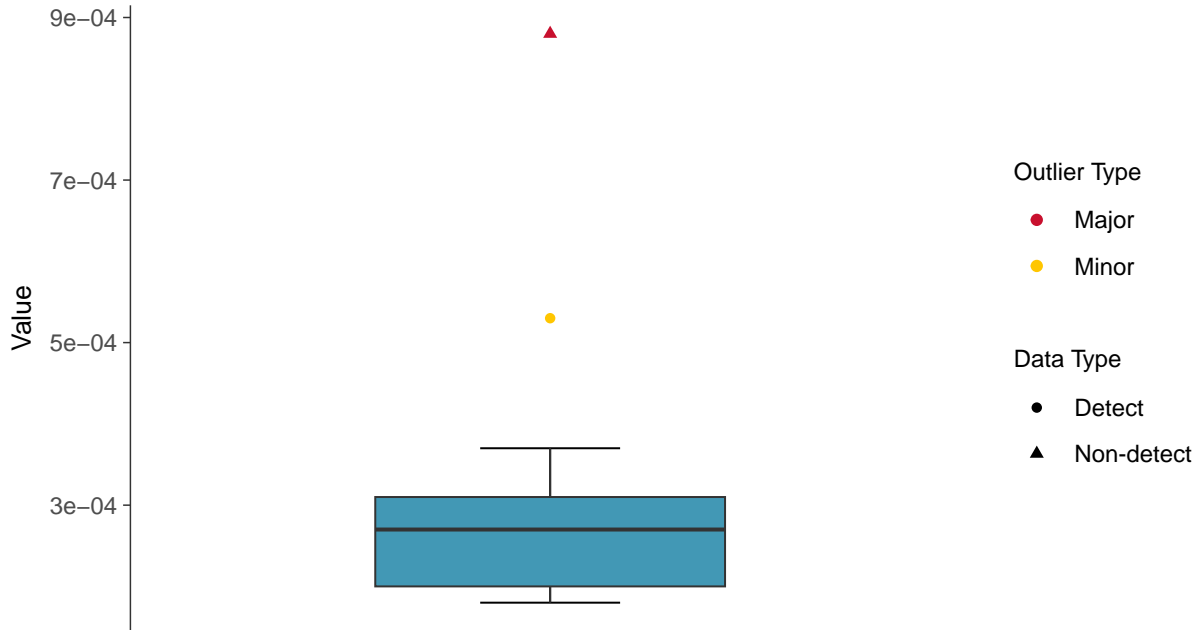
Chromium, Total, MW-19 (mg/L)





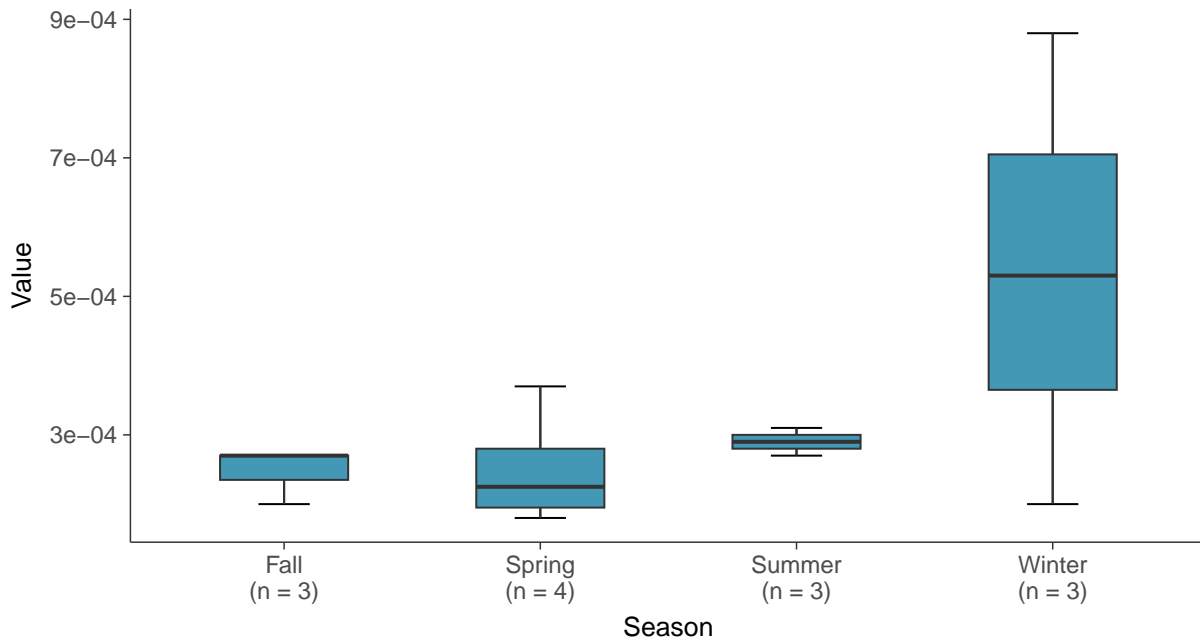
Boxplot

Chromium, Total, MW-19 (mg/L)



Boxplot by Season

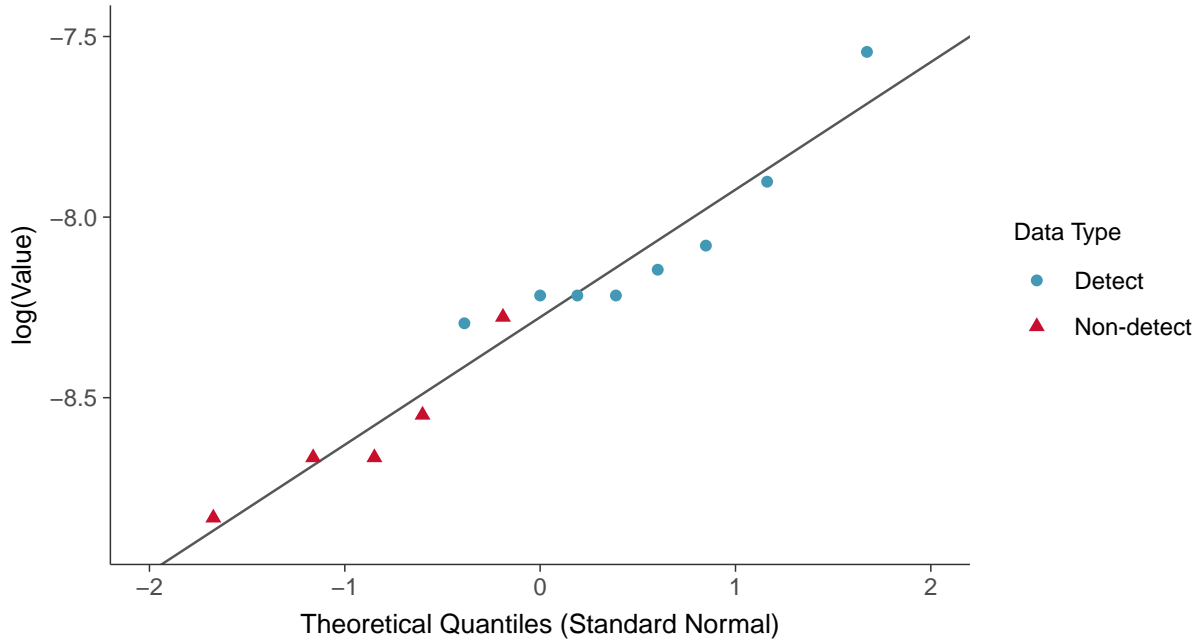
Chromium, Total, MW-19 (mg/L)





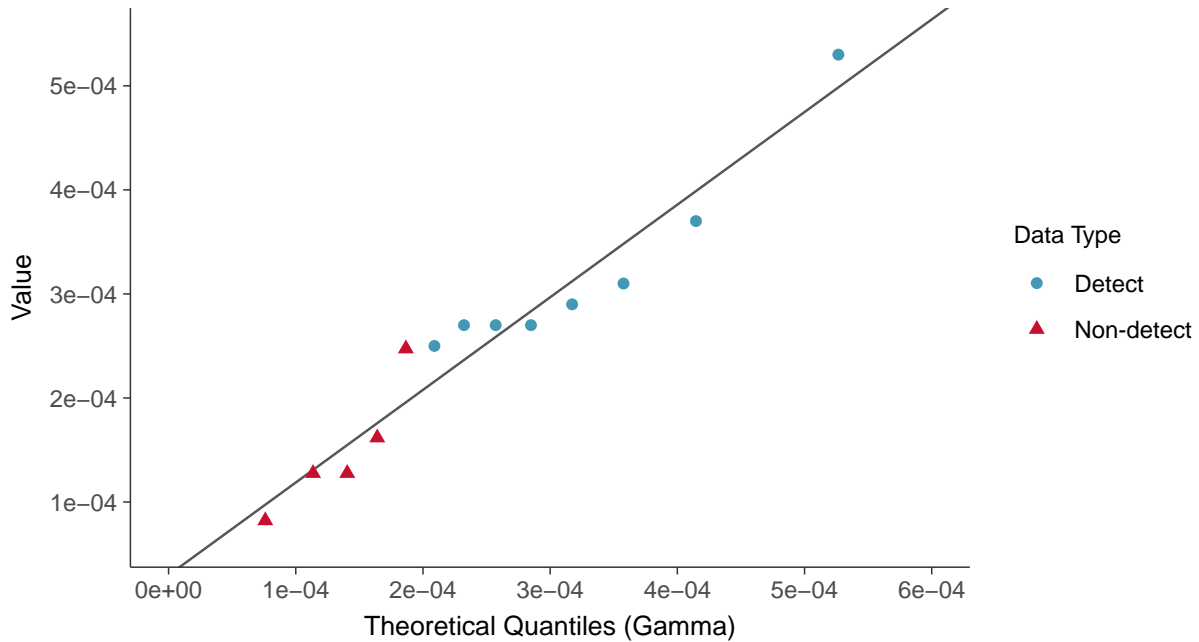
Lognormal Q-Q plot using ROS Imputed Estimates

Chromium, Total, MW-19 (mg/L)



Gamma Q-Q plot using ROS Imputed Estimates

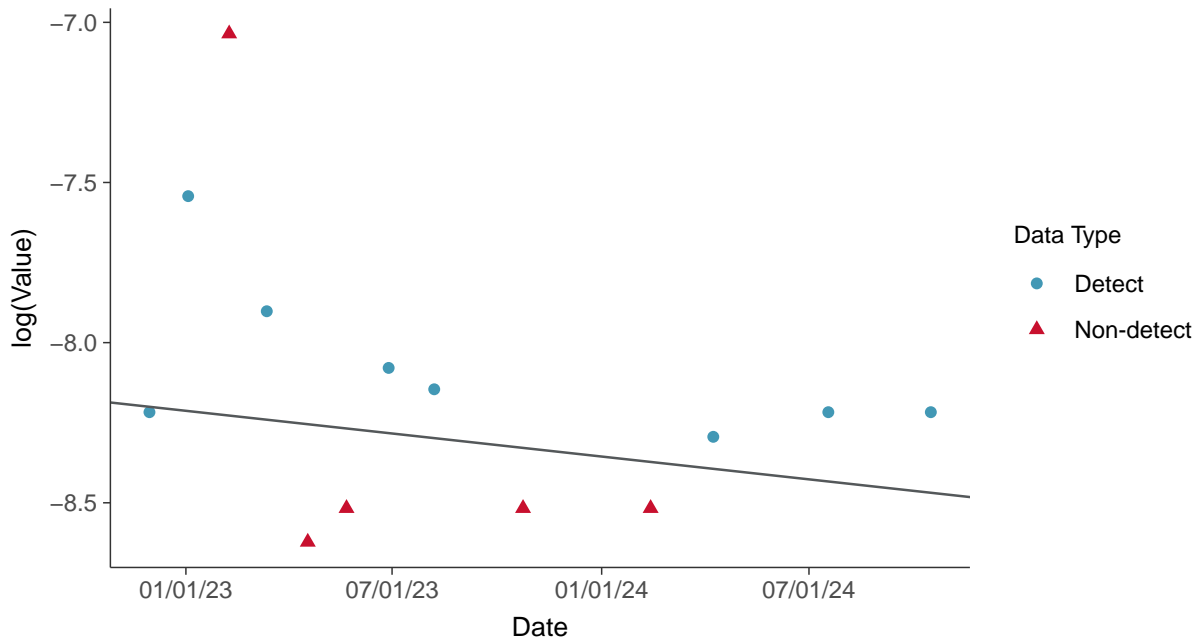
Chromium, Total, MW-19 (mg/L)





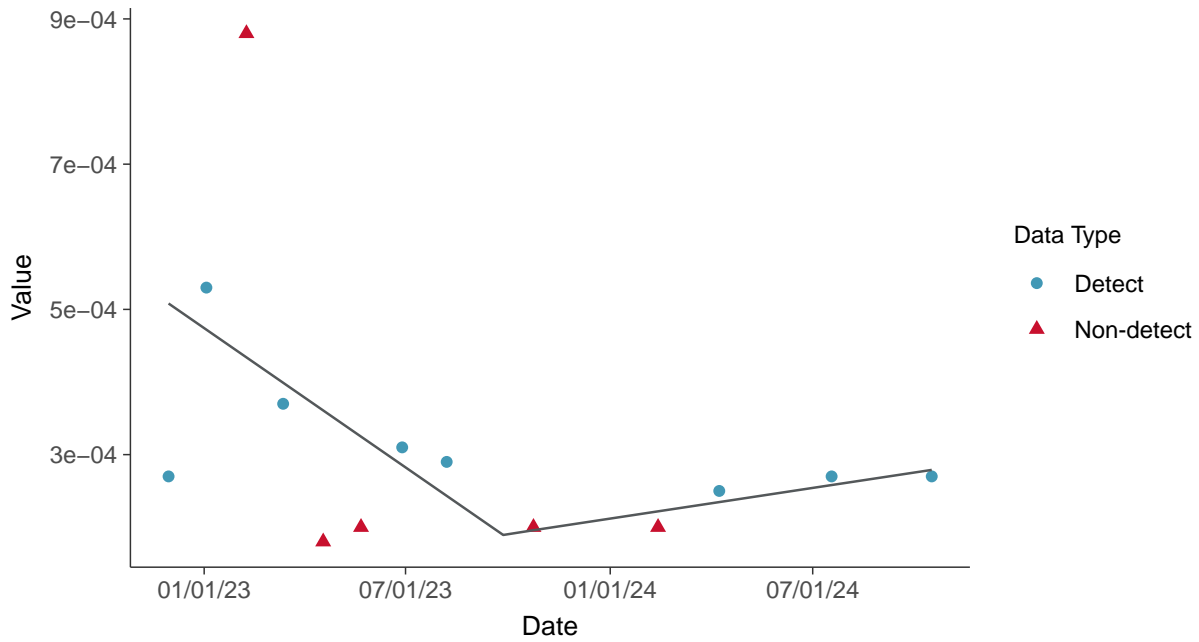
Trend Regression: Lognormal MLE

Chromium, Total, MW-19 (mg/L)



Trend Regression: Piecewise Linear-Linear

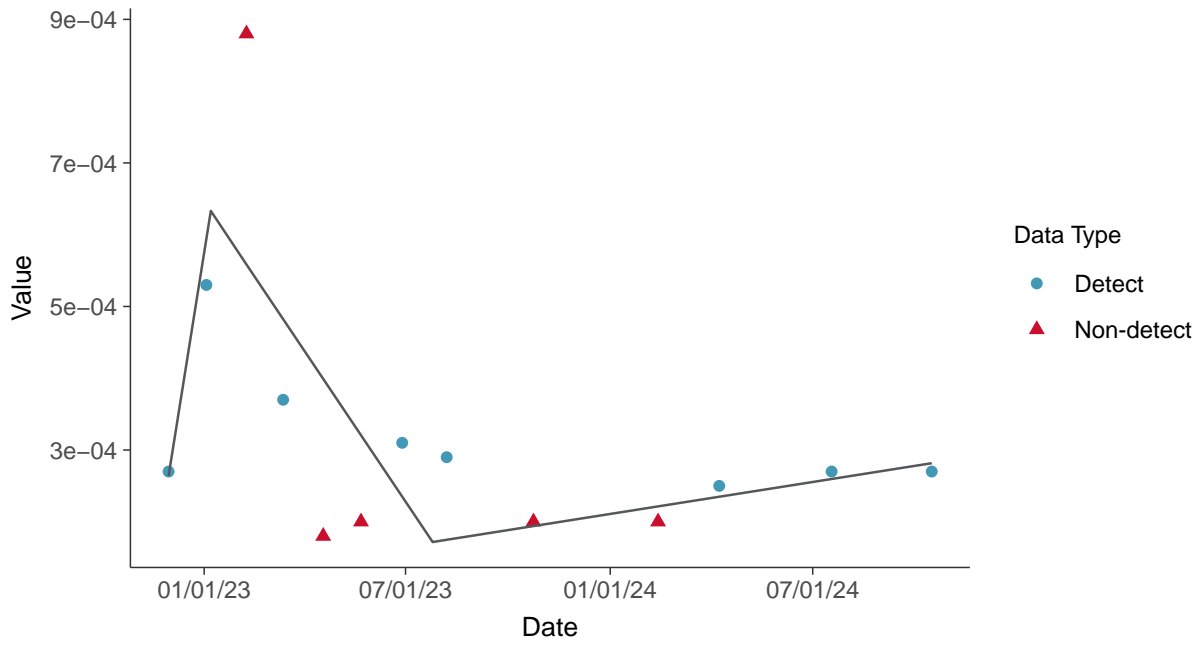
Chromium, Total, MW-19 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

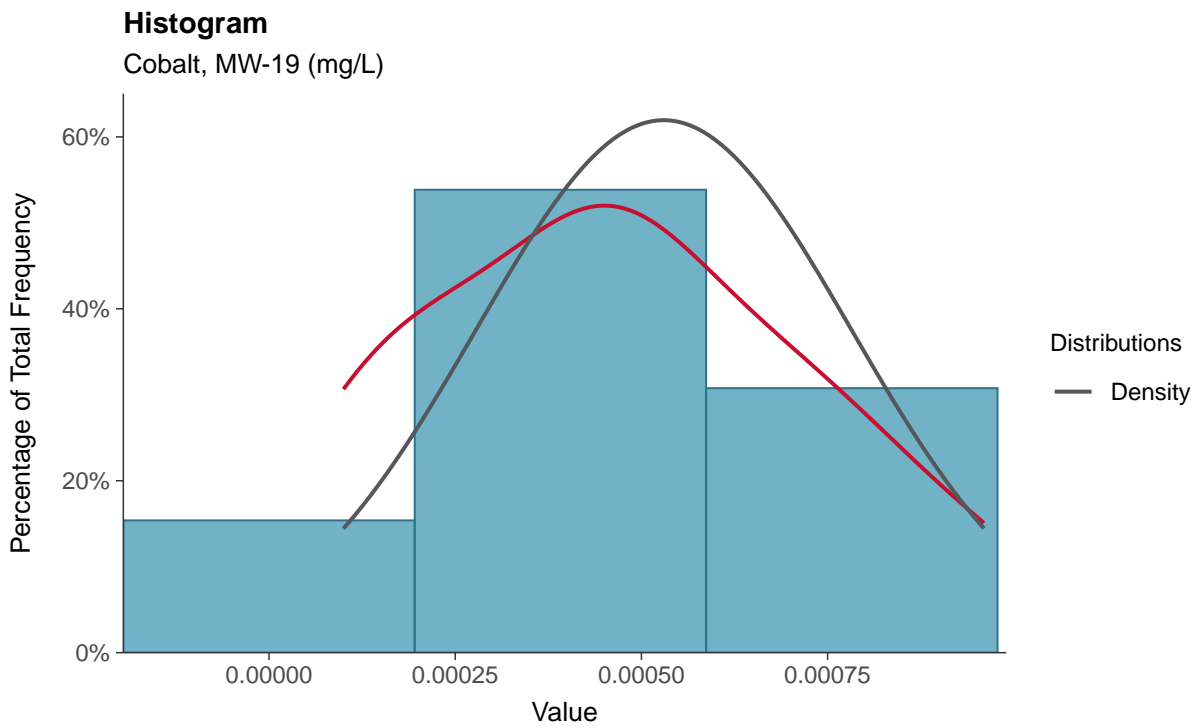
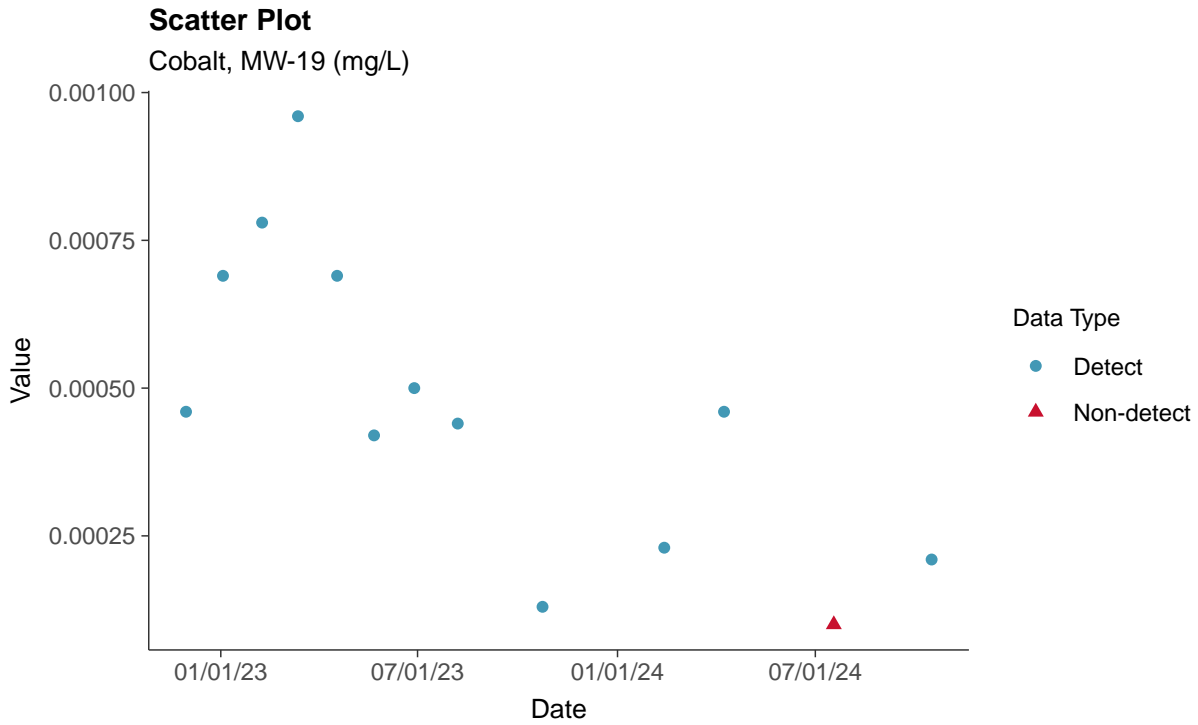
Chromium, Total, MW-19 (mg/L)





Appendix IV: Cobalt, MW-19

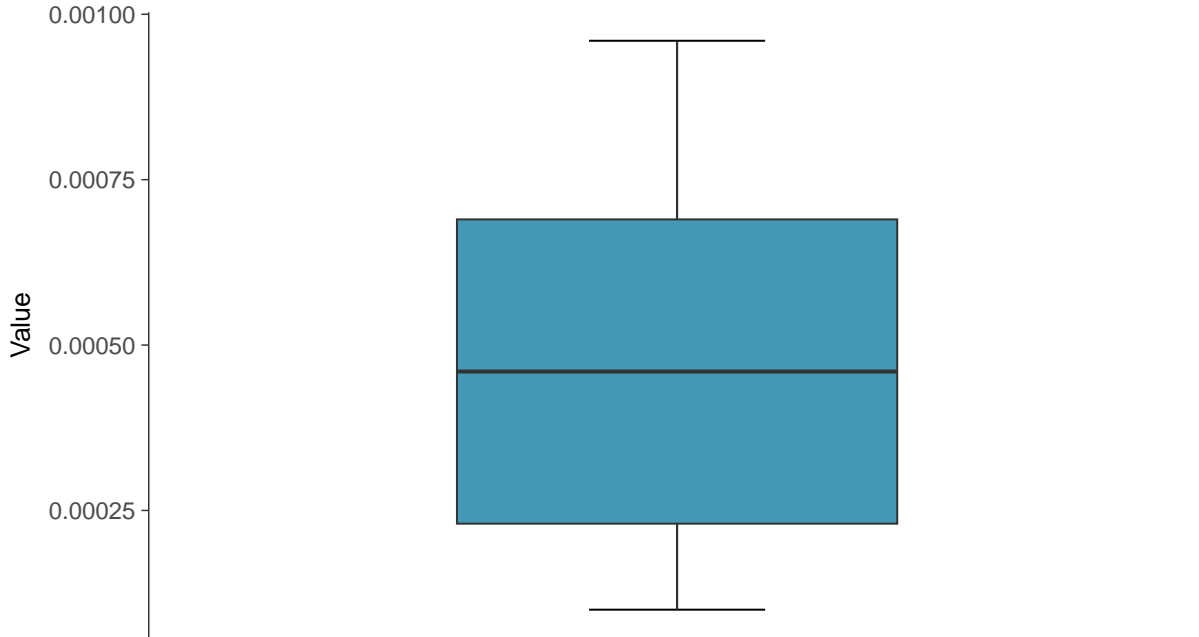
ID: 1_29_1_5_110





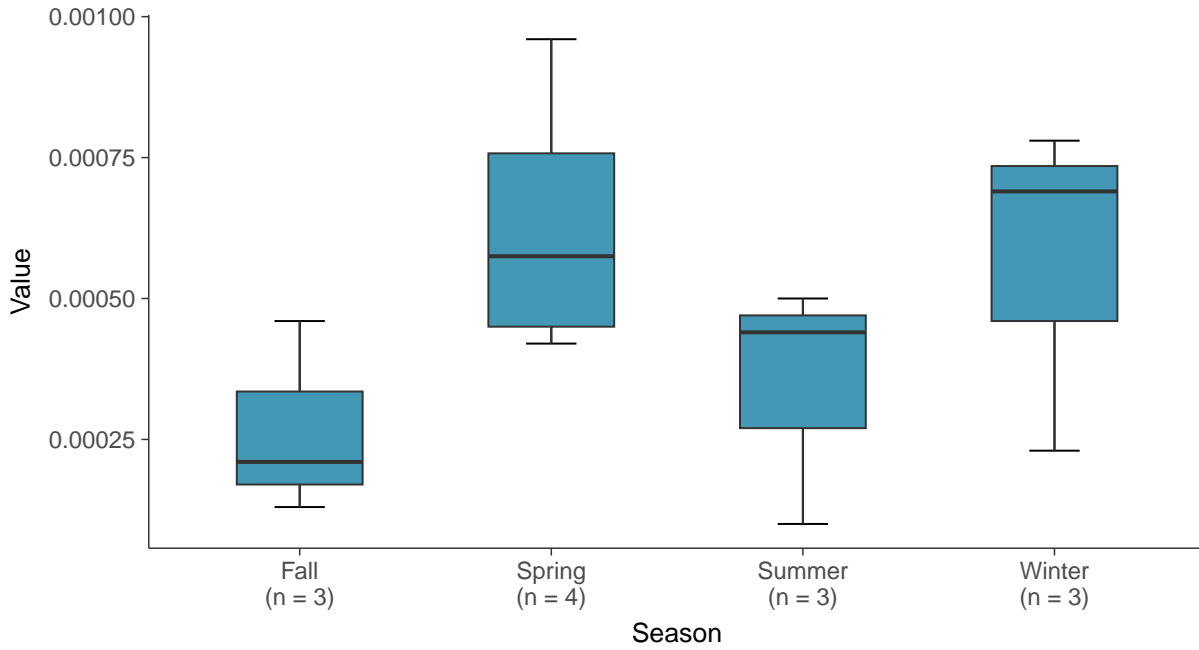
Boxplot

Cobalt, MW-19 (mg/L)



Boxplot by Season

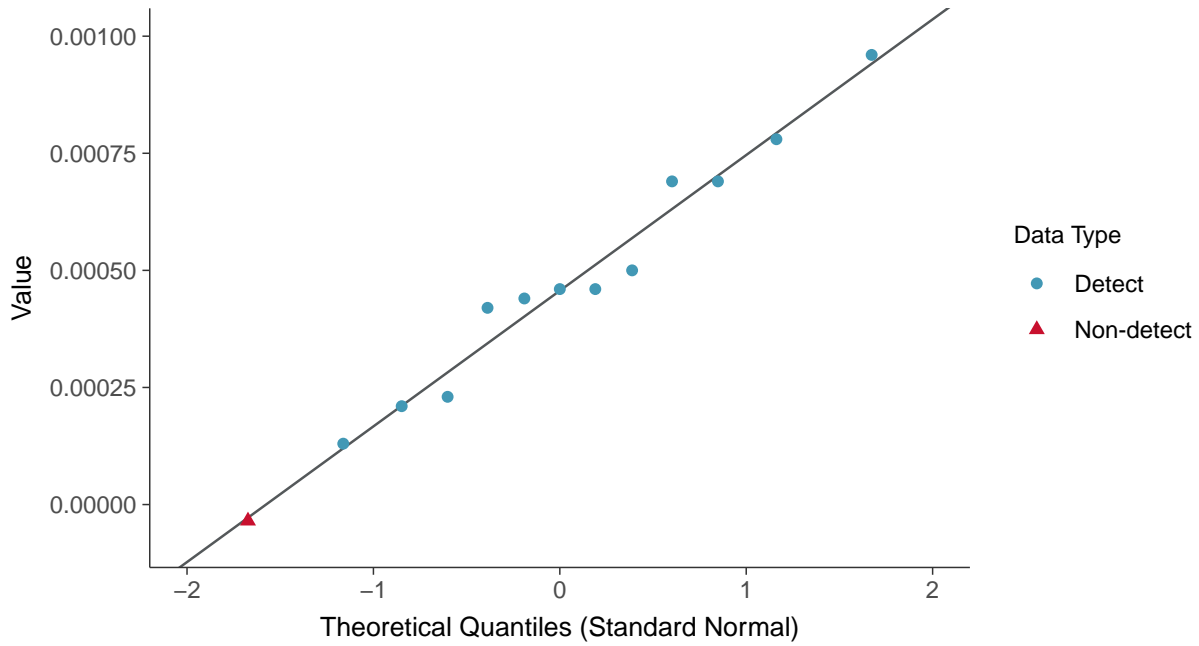
Cobalt, MW-19 (mg/L)





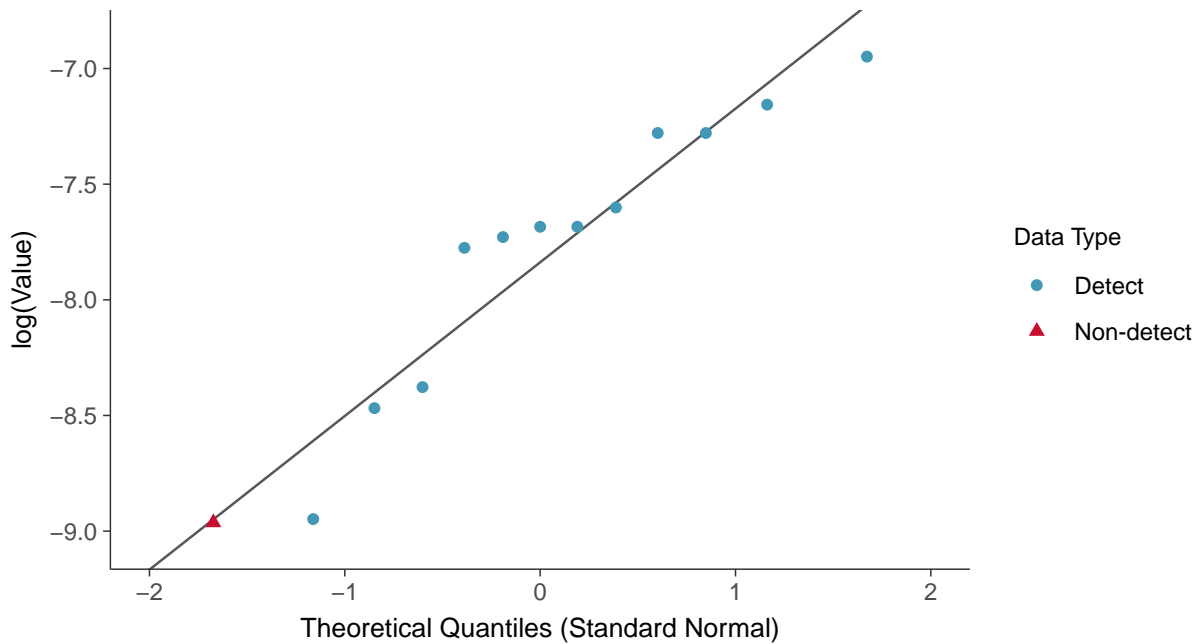
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-19 (mg/L)



Lognormal Q-Q plot using ROS Imputed Estimates

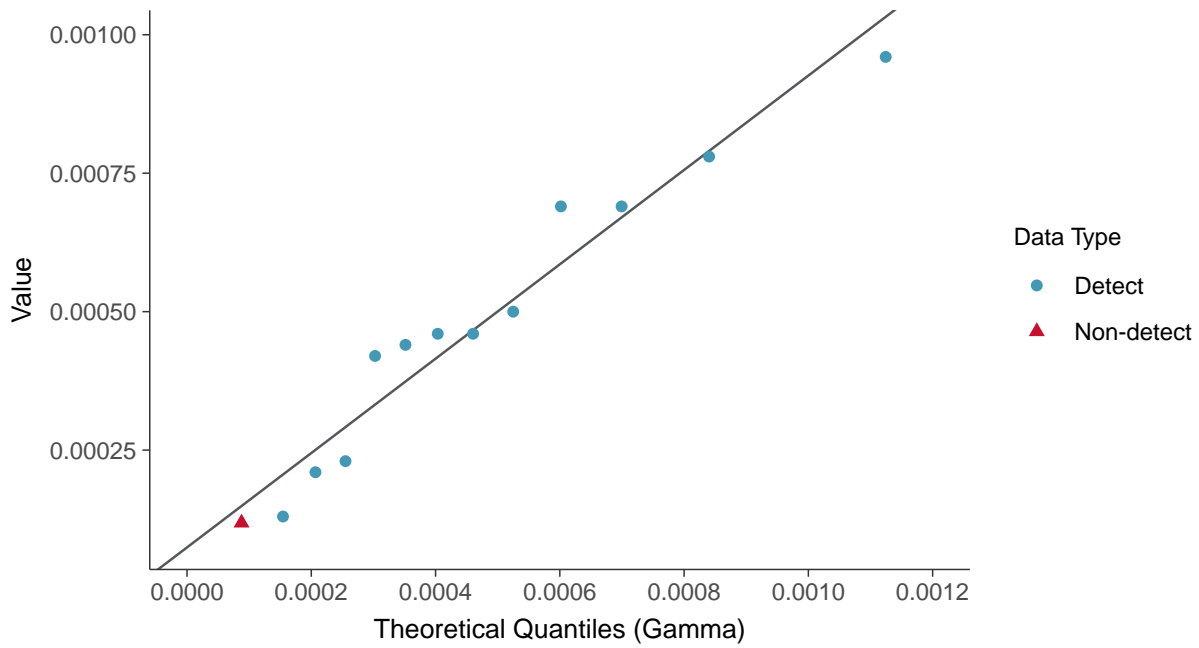
Cobalt, MW-19 (mg/L)





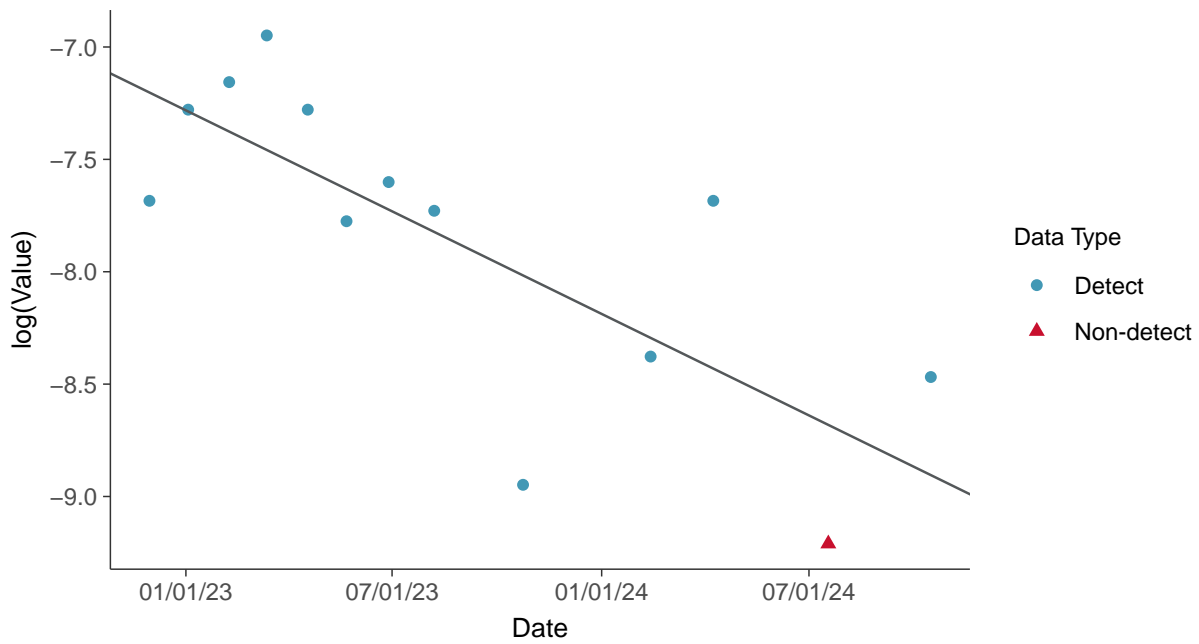
Gamma Q-Q plot using ROS Imputed Estimates

Cobalt, MW-19 (mg/L)



Trend Regression: Lognormal MLE

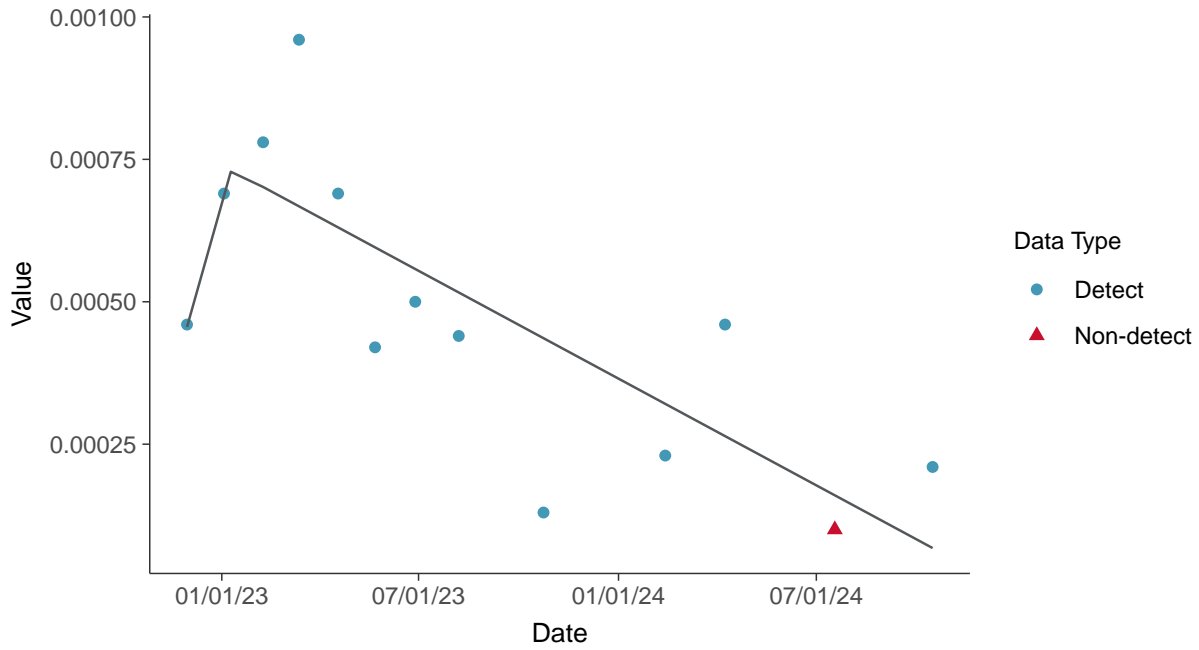
Cobalt, MW-19 (mg/L)





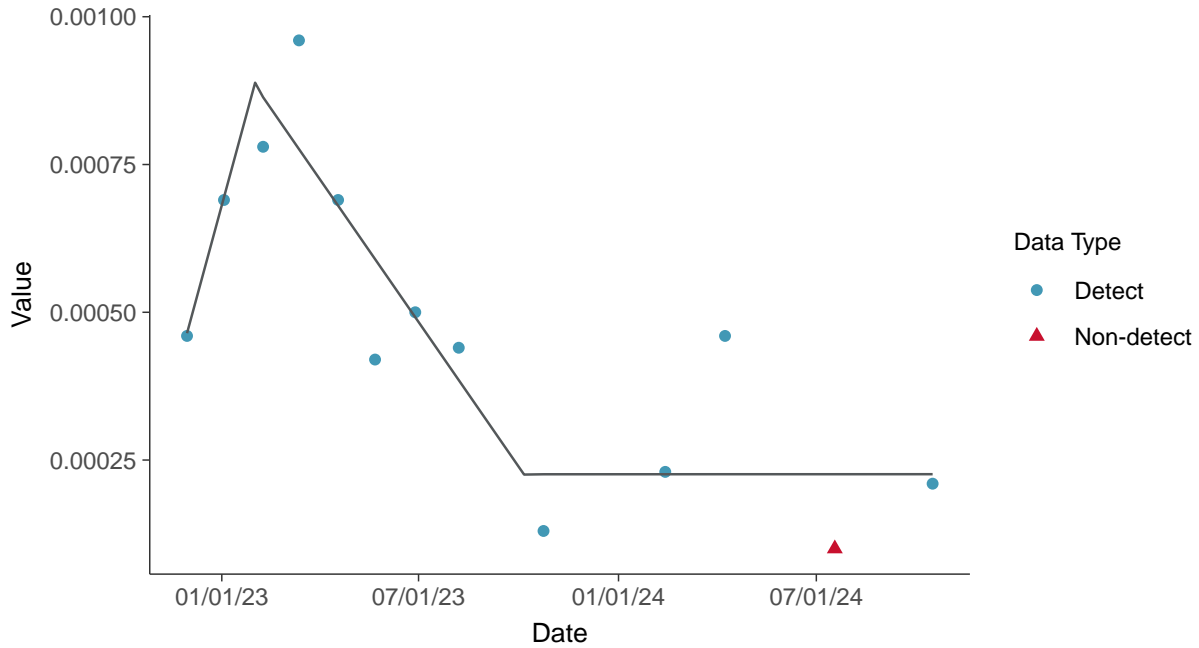
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-19 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

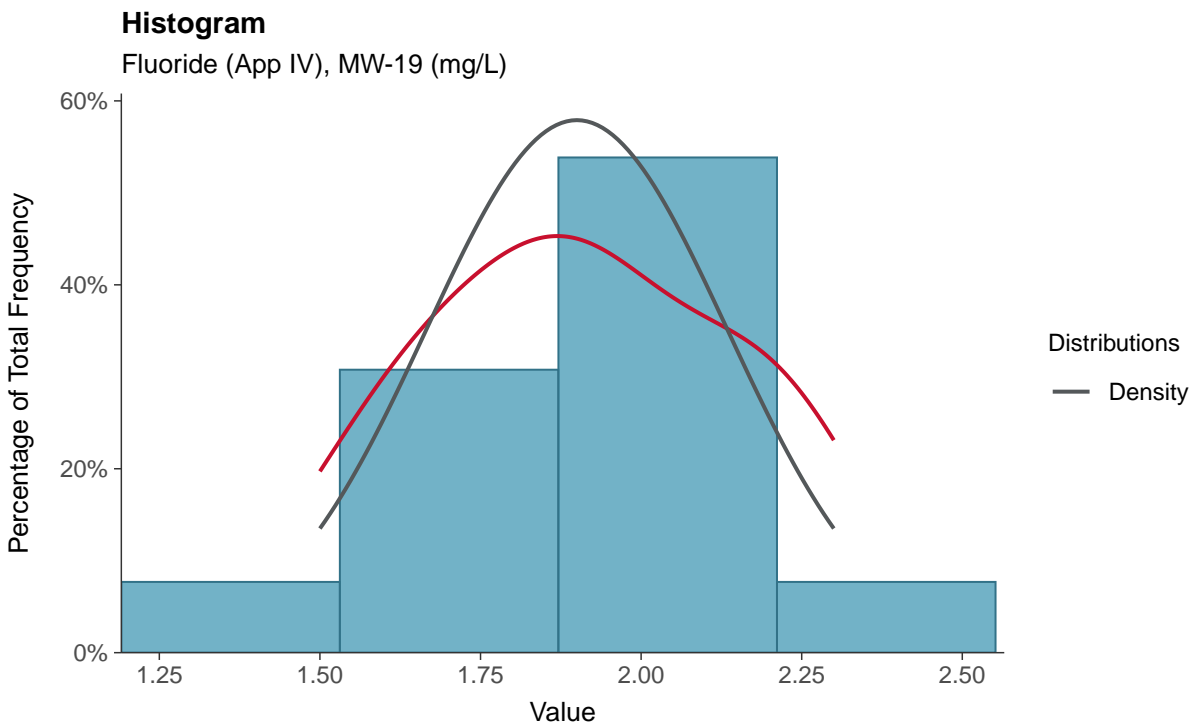
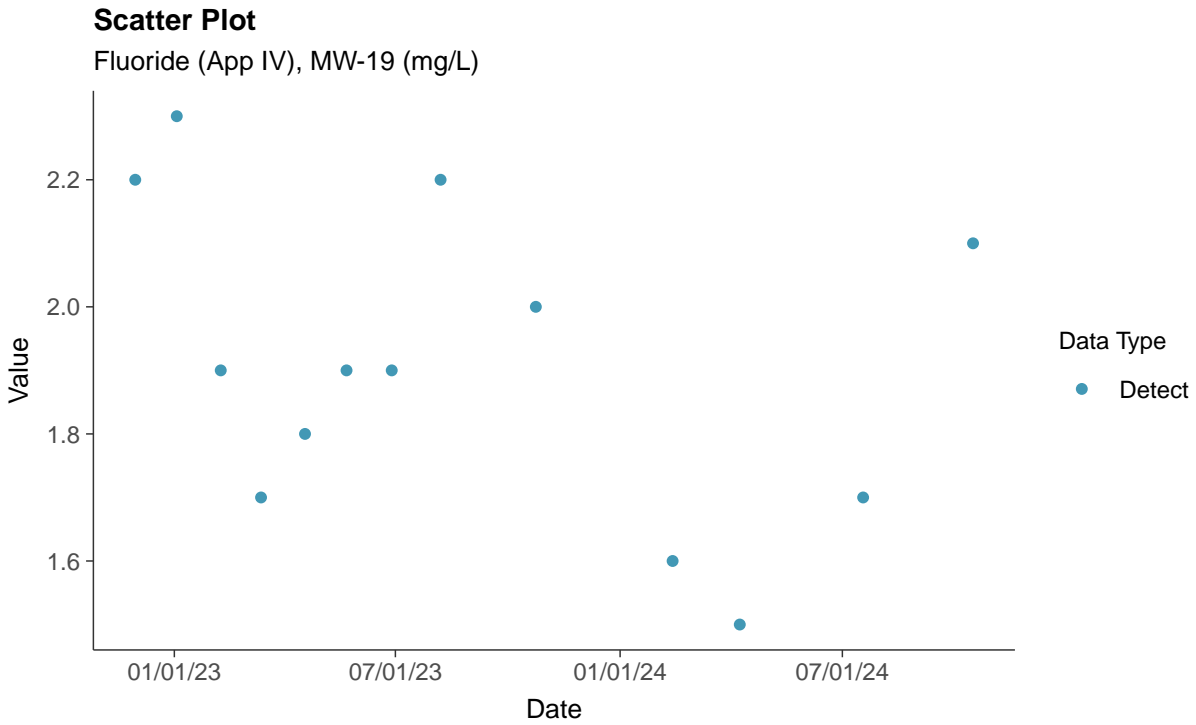
Cobalt, MW-19 (mg/L)





Appendix IV: Fluoride (App IV), MW-19

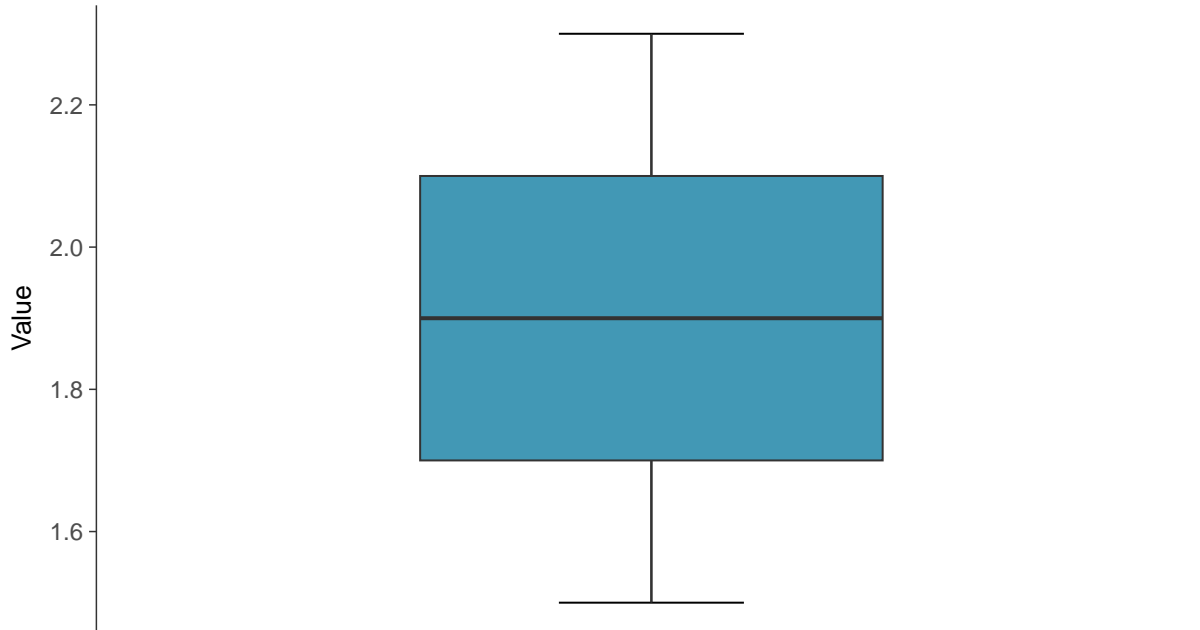
ID: 1_29_1_5_113





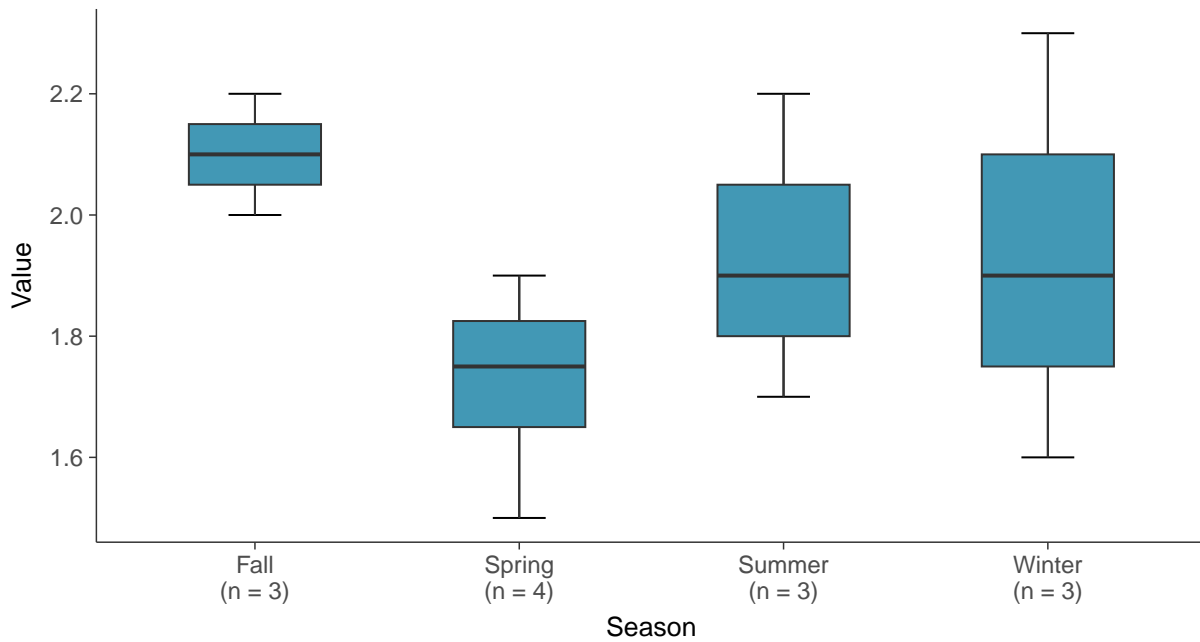
Boxplot

Fluoride (App IV), MW-19 (mg/L)



Boxplot by Season

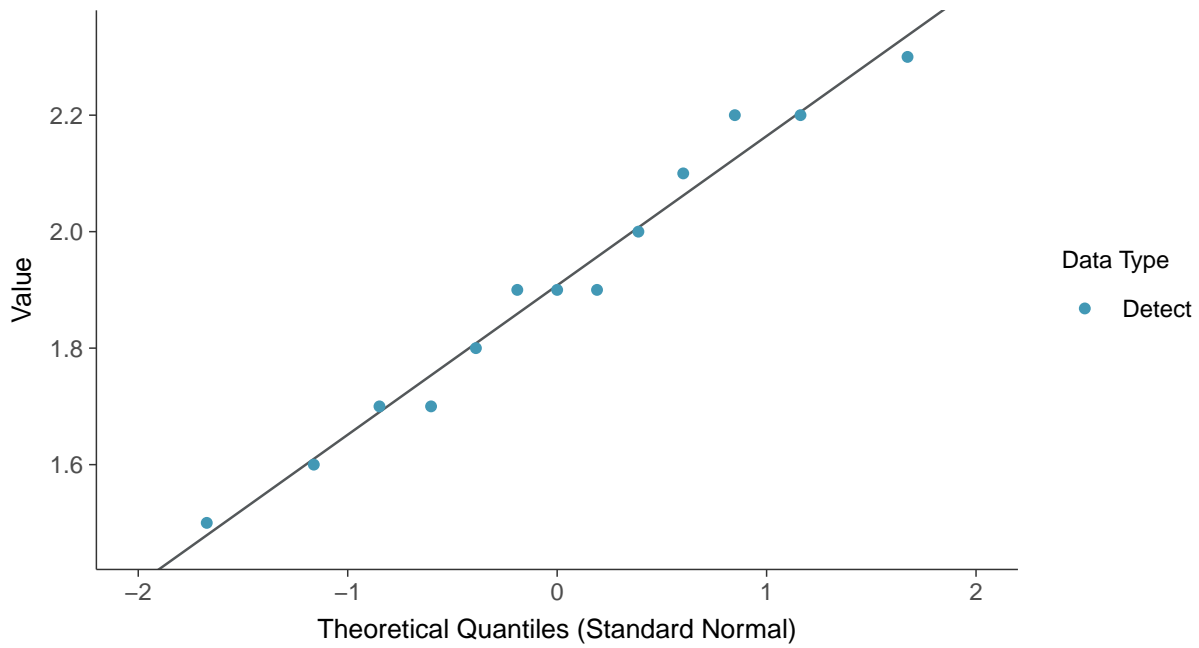
Fluoride (App IV), MW-19 (mg/L)





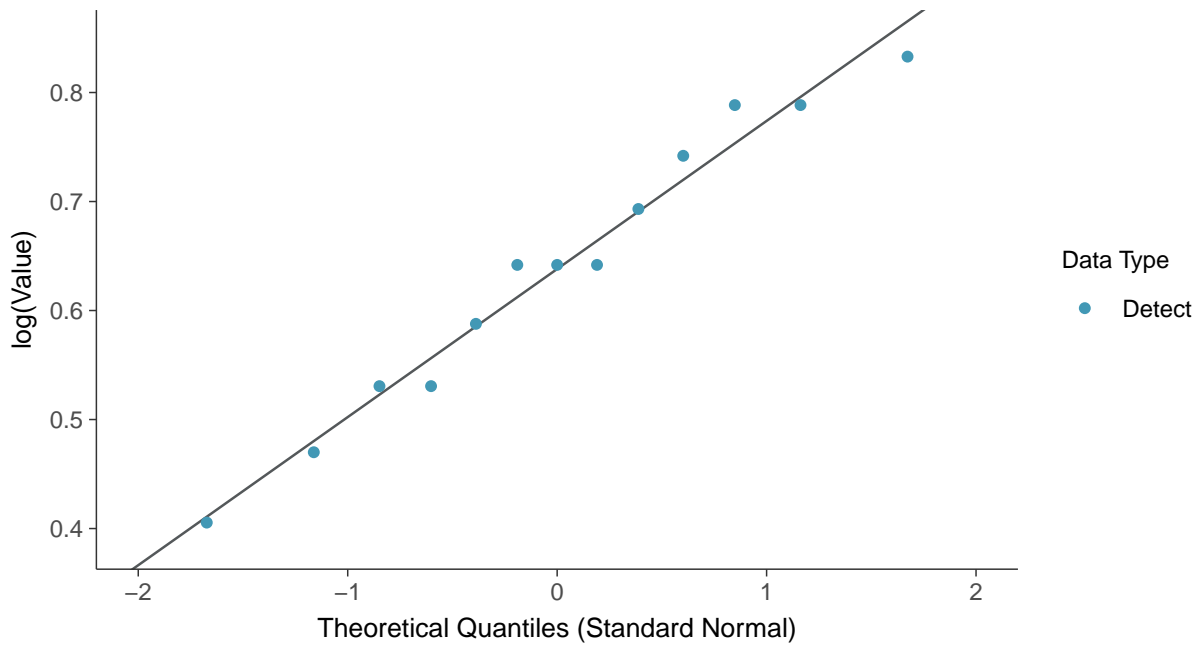
Normal Q-Q plot

Fluoride (App IV), MW-19 (mg/L)



Lognormal Q-Q plot

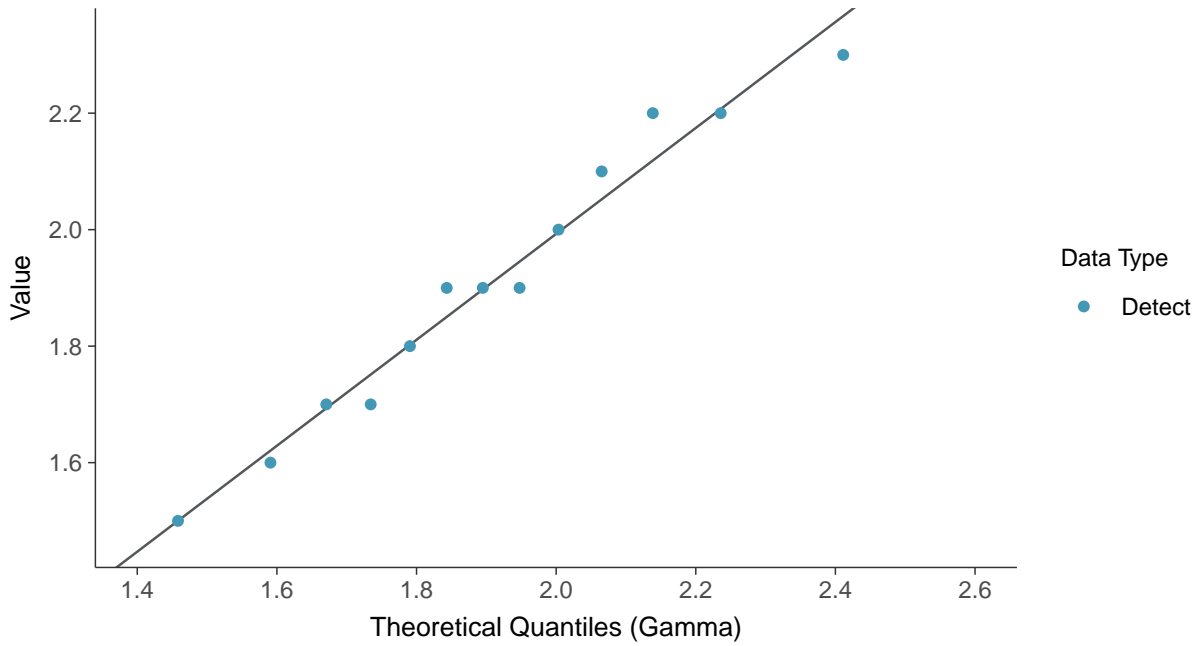
Fluoride (App IV), MW-19 (mg/L)





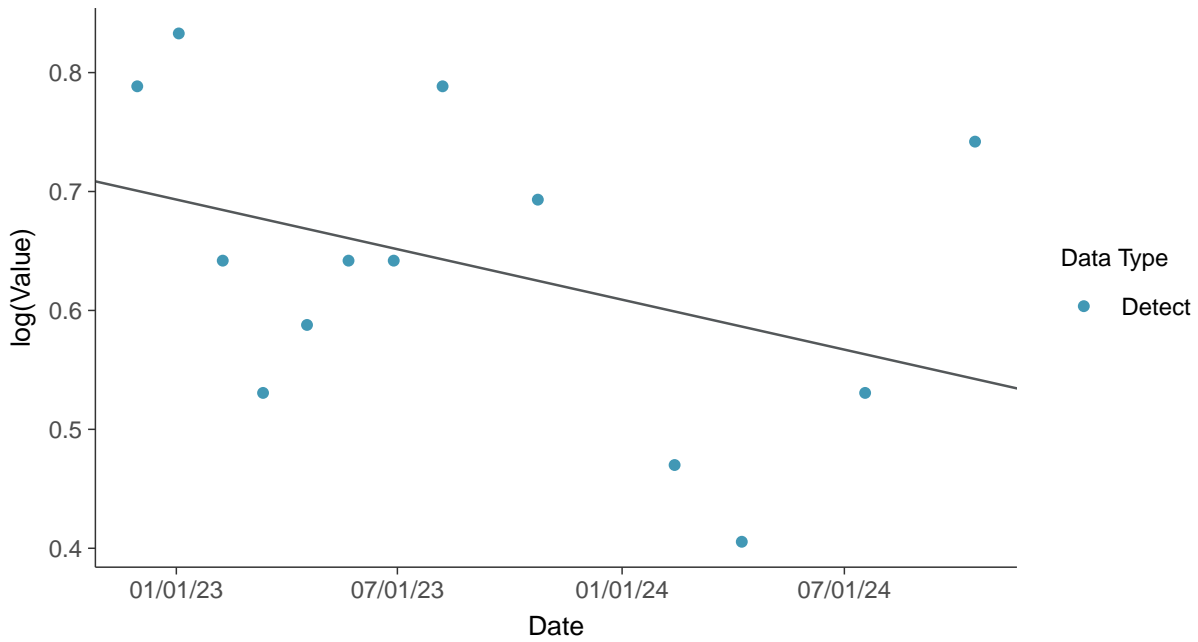
Gamma Q-Q plot

Fluoride (App IV), MW-19 (mg/L)



Trend Regression: Lognormal MLE

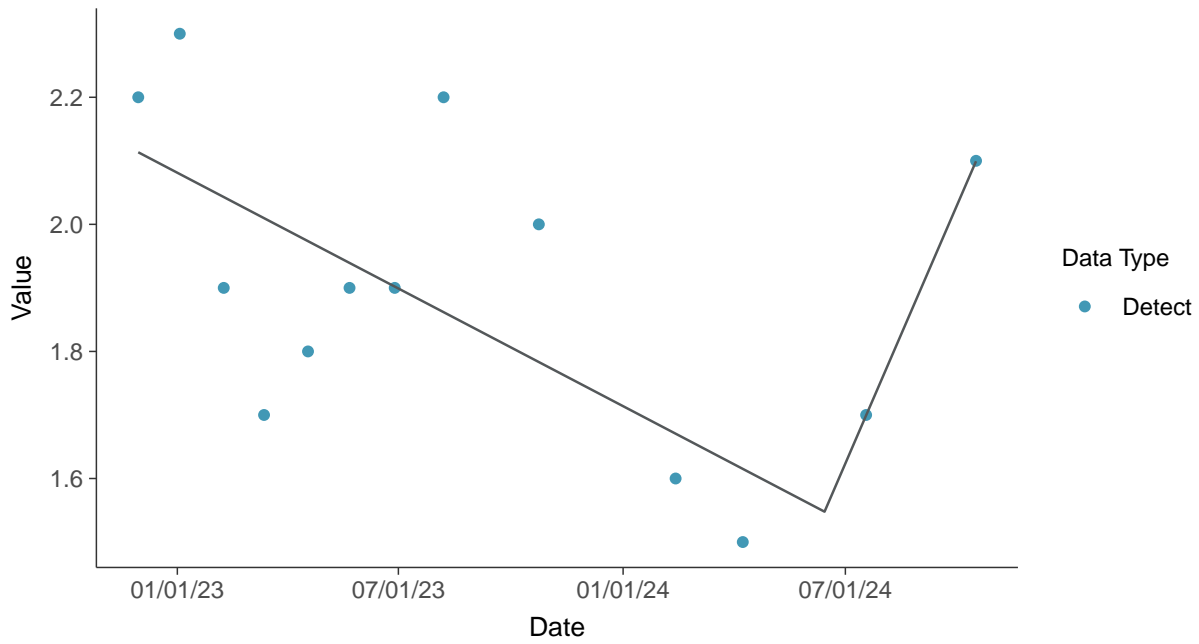
Fluoride (App IV), MW-19 (mg/L)





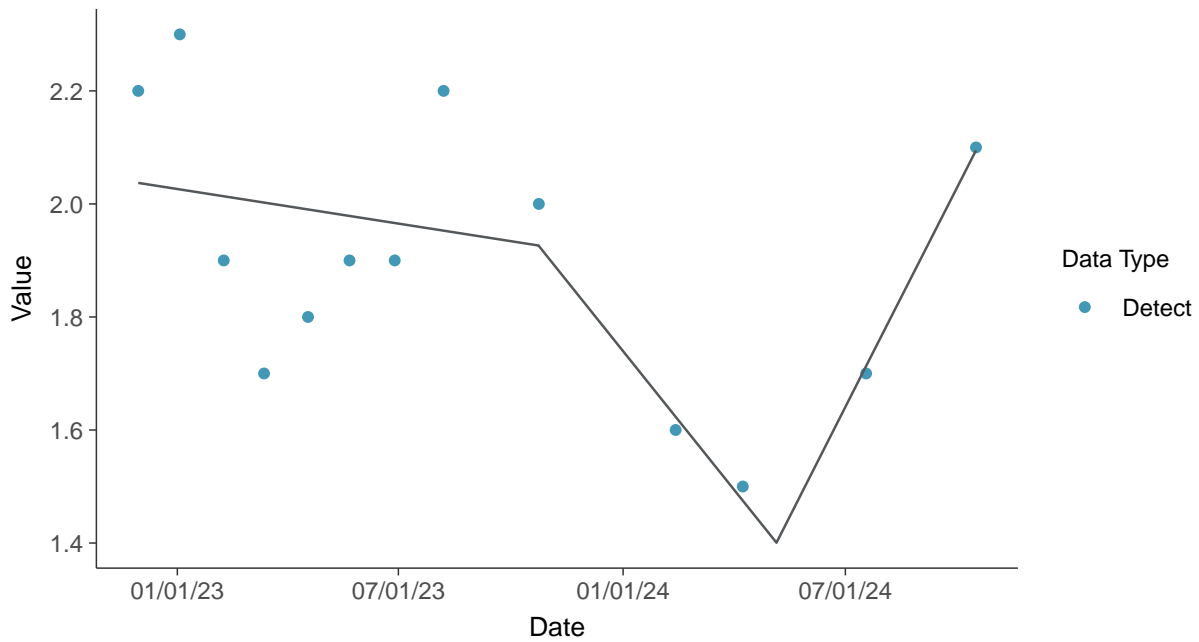
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-19 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Fluoride (App IV), MW-19 (mg/L)



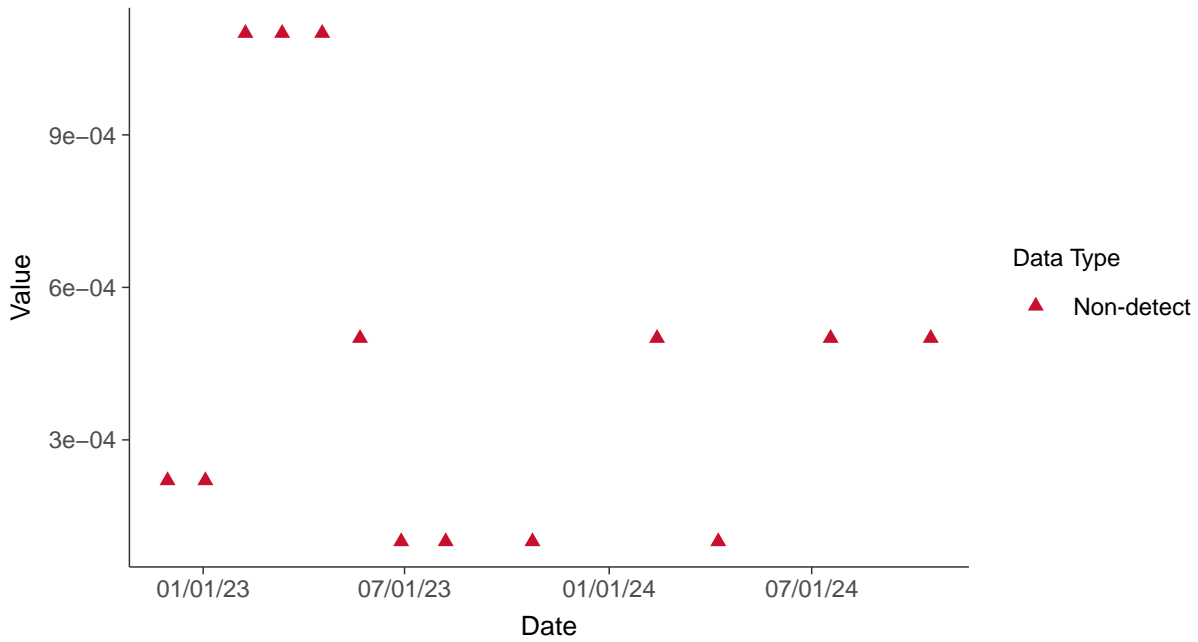


Appendix IV: Lead, MW-19

ID: 1_29_1_5_115

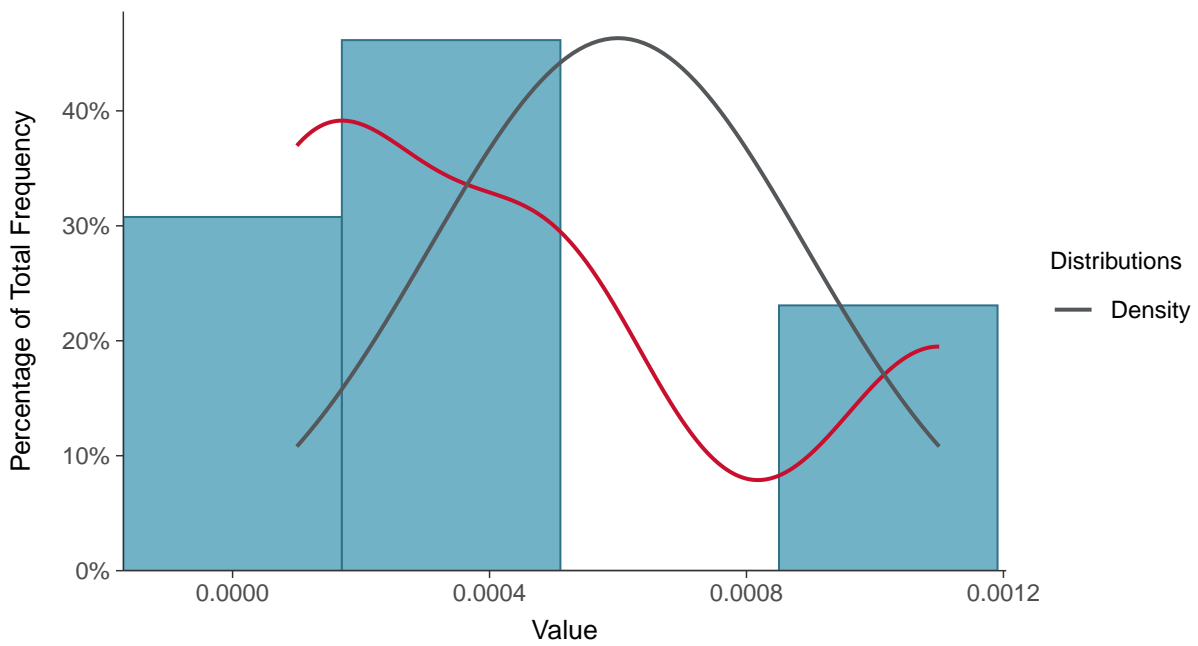
Scatter Plot

Lead, MW-19 (mg/L)



Histogram

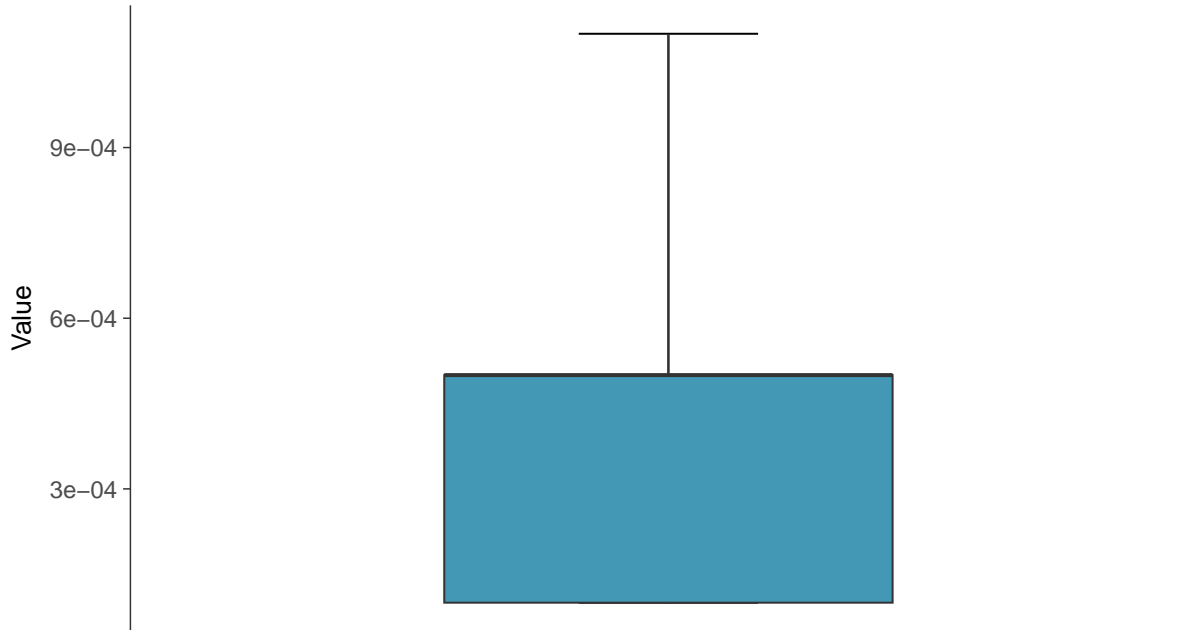
Lead, MW-19 (mg/L)





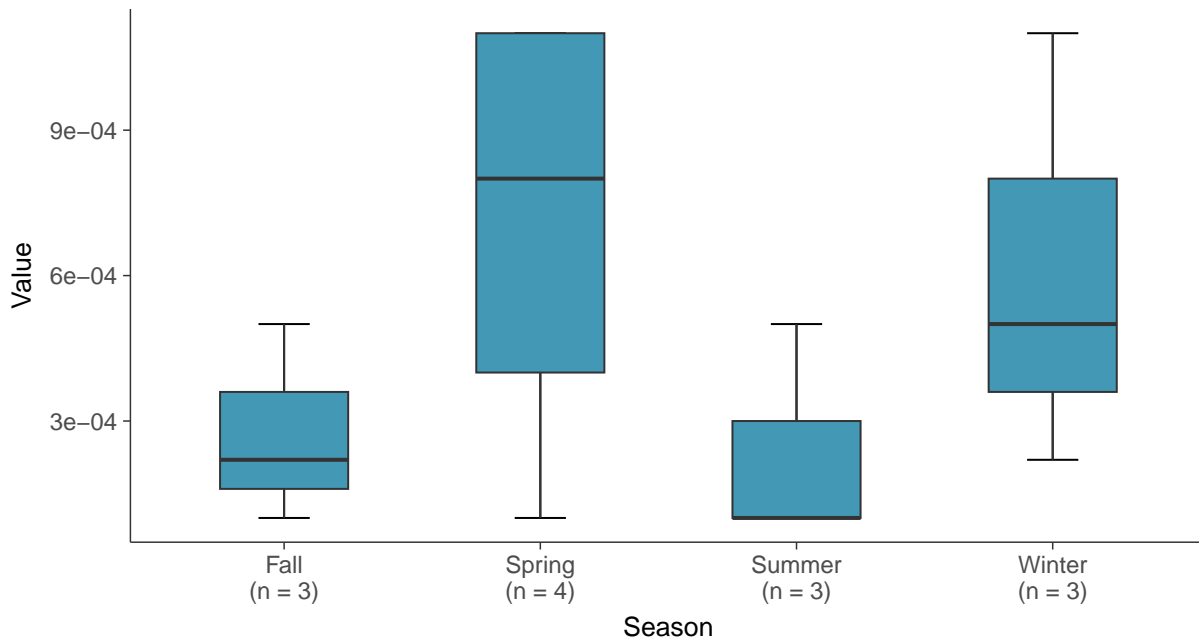
Boxplot

Lead, MW-19 (mg/L)



Boxplot by Season

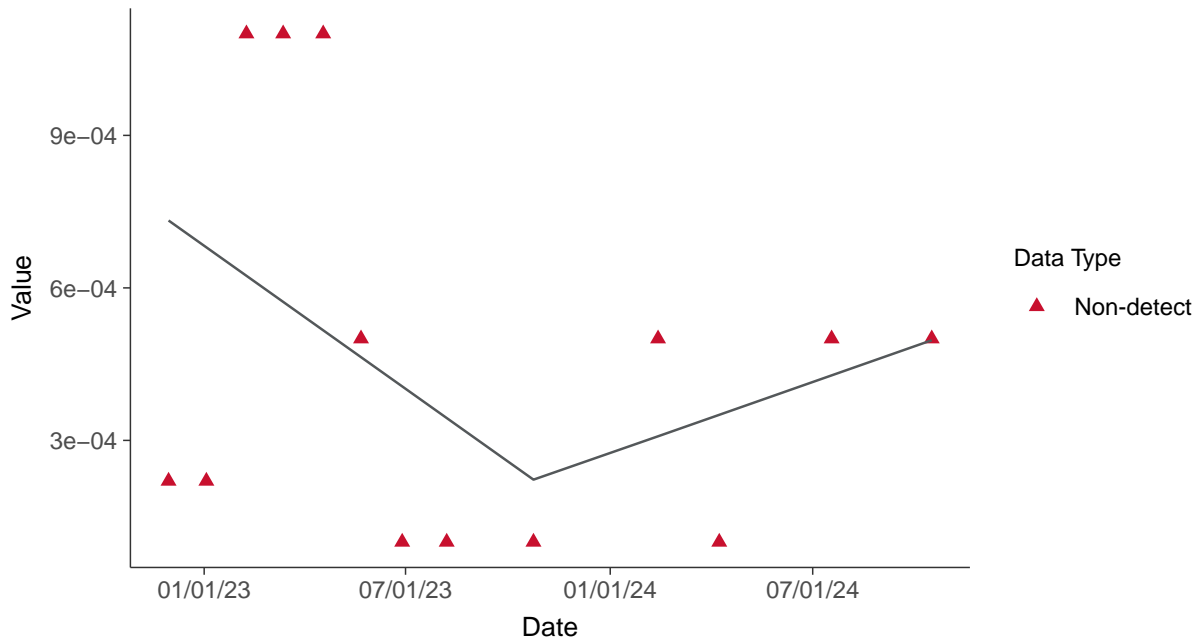
Lead, MW-19 (mg/L)





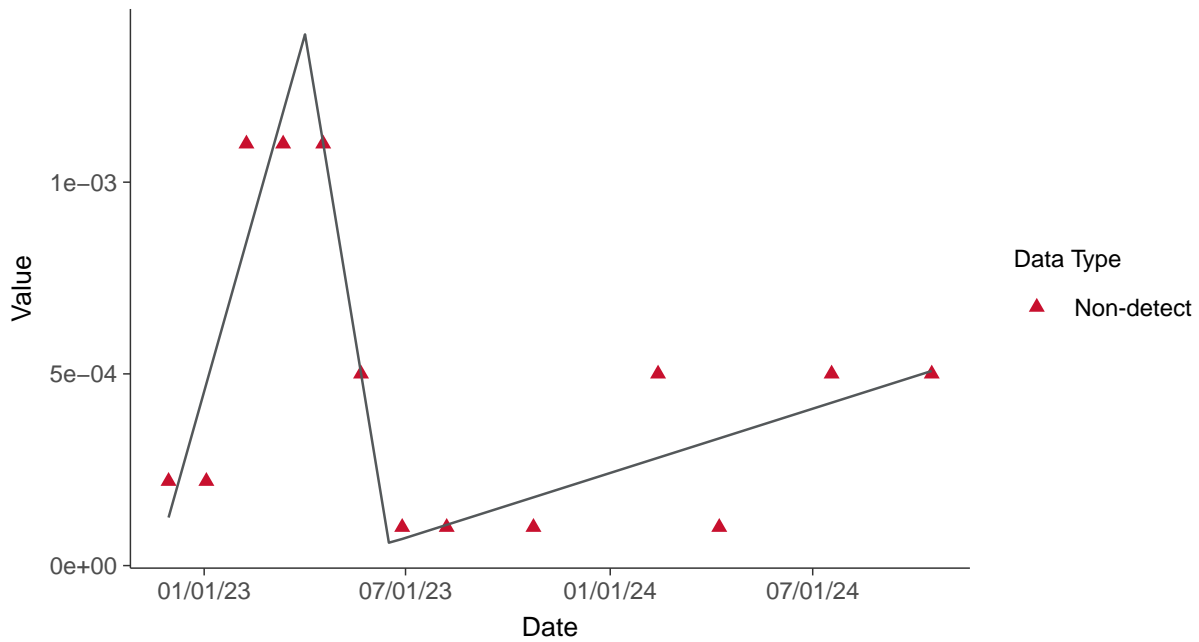
Trend Regression: Piecewise Linear-Linear

Lead, MW-19 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

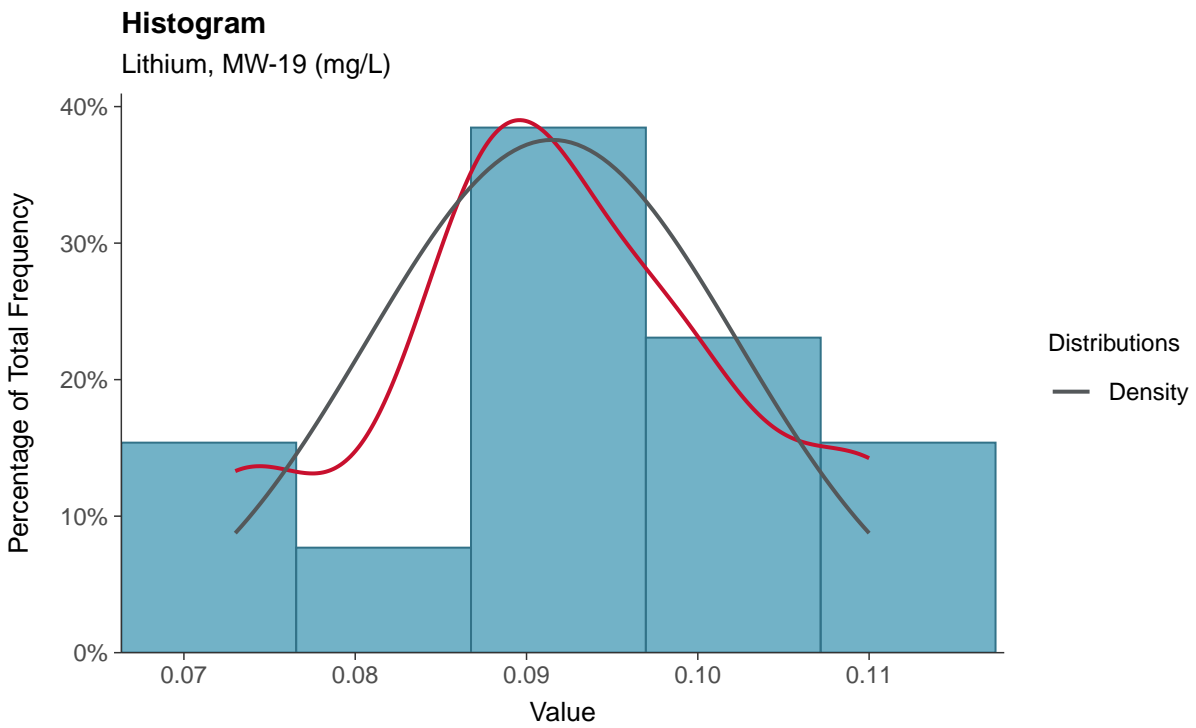
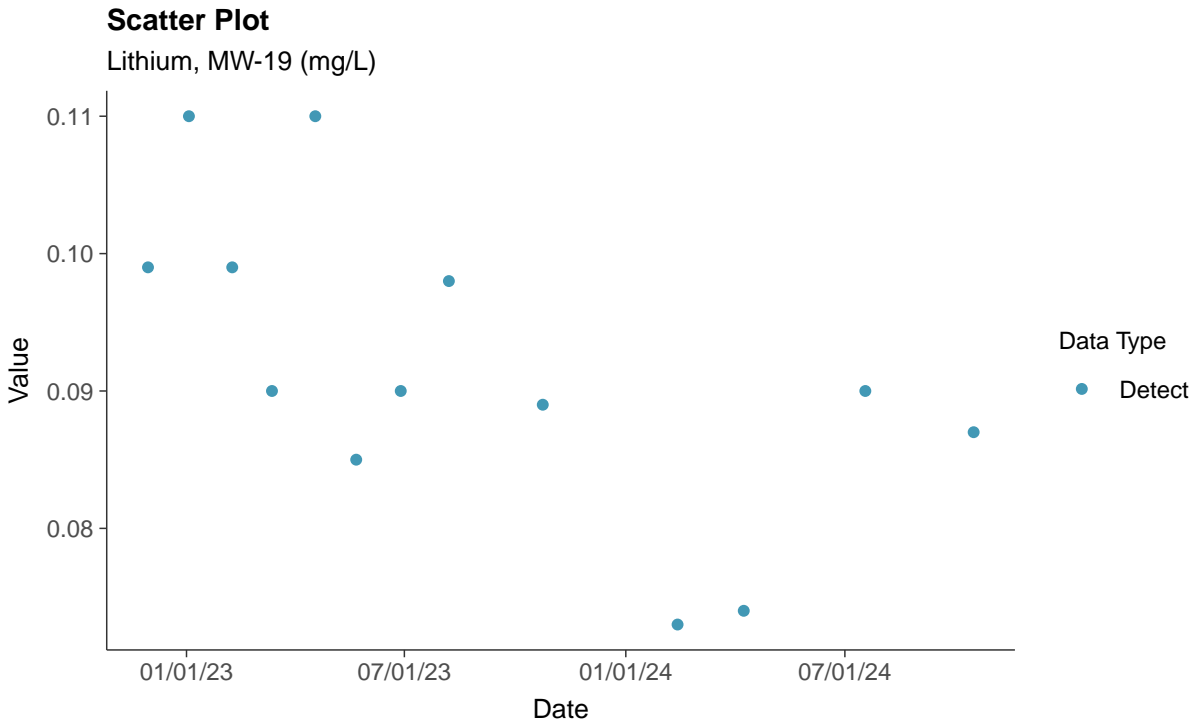
Lead, MW-19 (mg/L)





Appendix IV: Lithium, MW-19

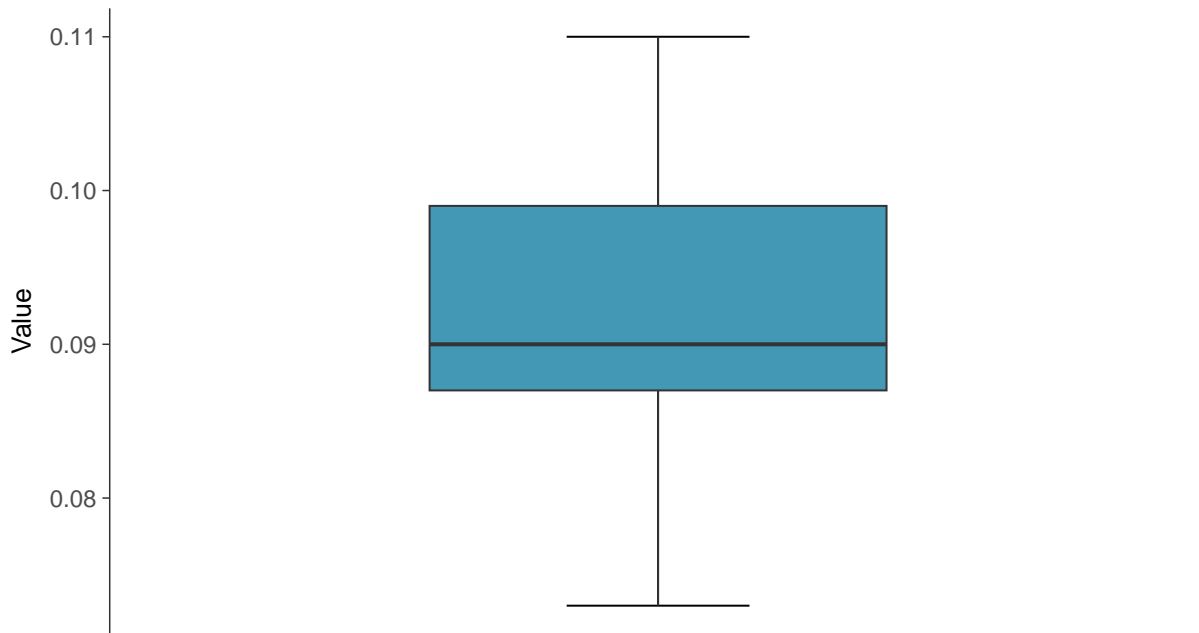
ID: 1_29_1_5_116





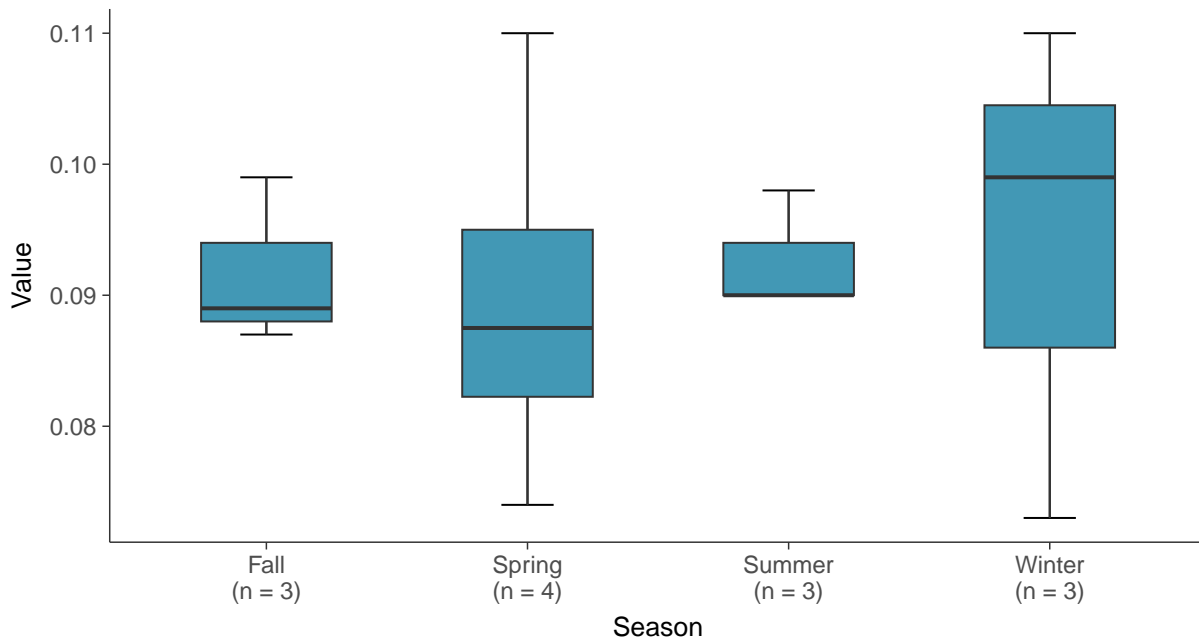
Boxplot

Lithium, MW-19 (mg/L)



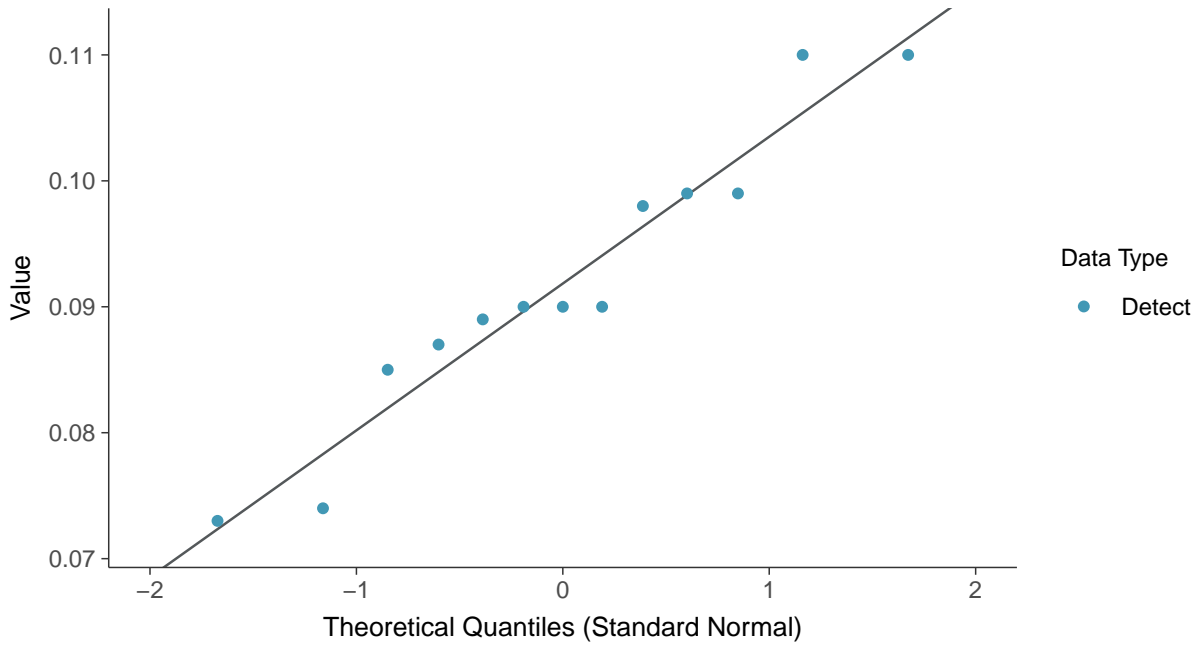
Boxplot by Season

Lithium, MW-19 (mg/L)

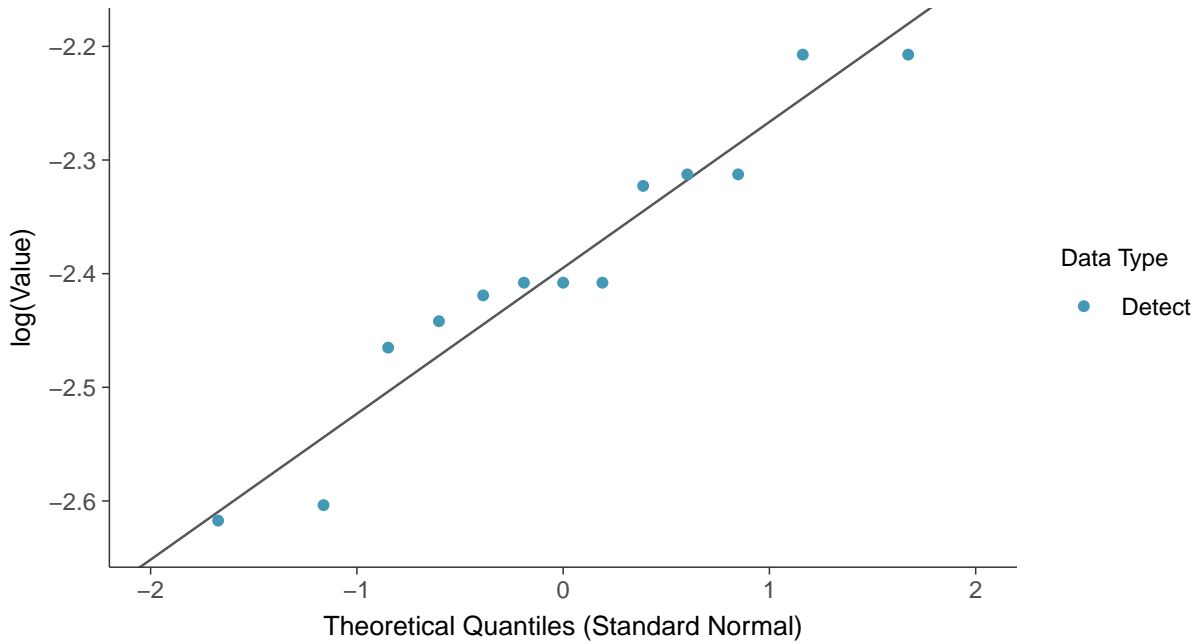




Normal Q-Q plot
Lithium, MW-19 (mg/L)

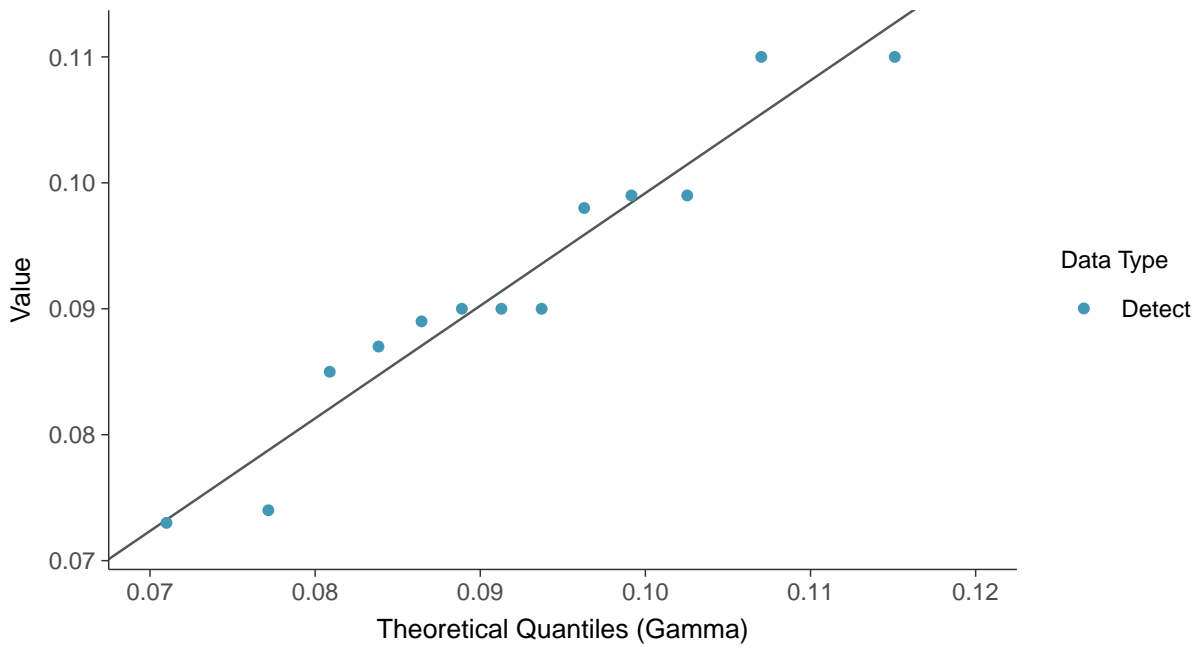


Lognormal Q-Q plot
Lithium, MW-19 (mg/L)

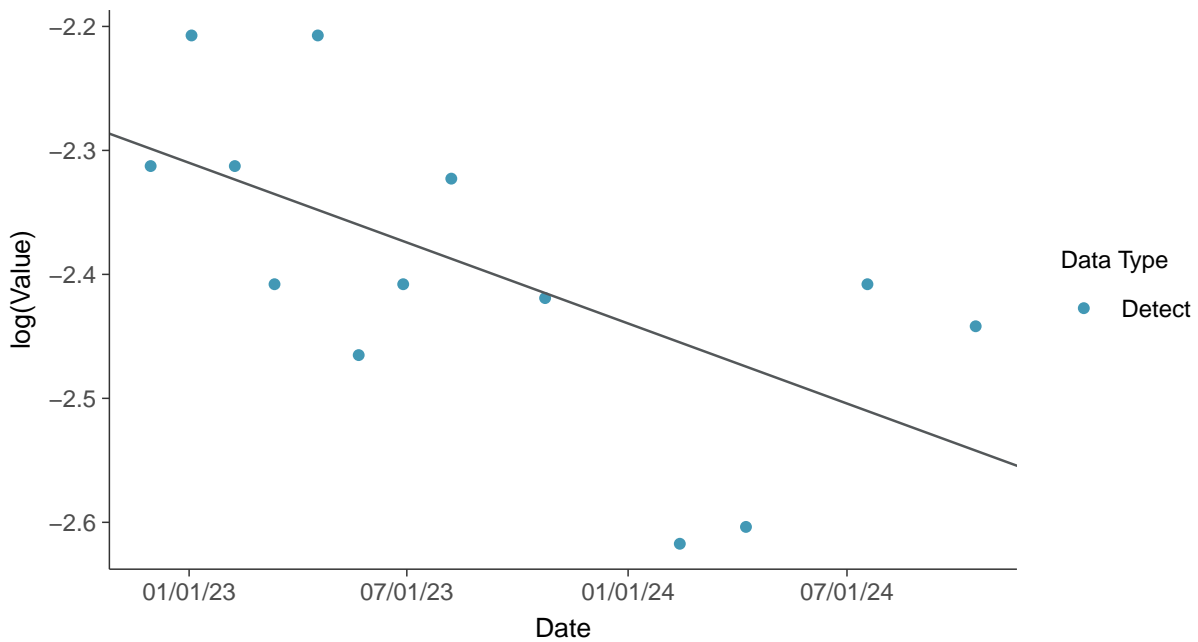




Gamma Q-Q plot
Lithium, MW-19 (mg/L)



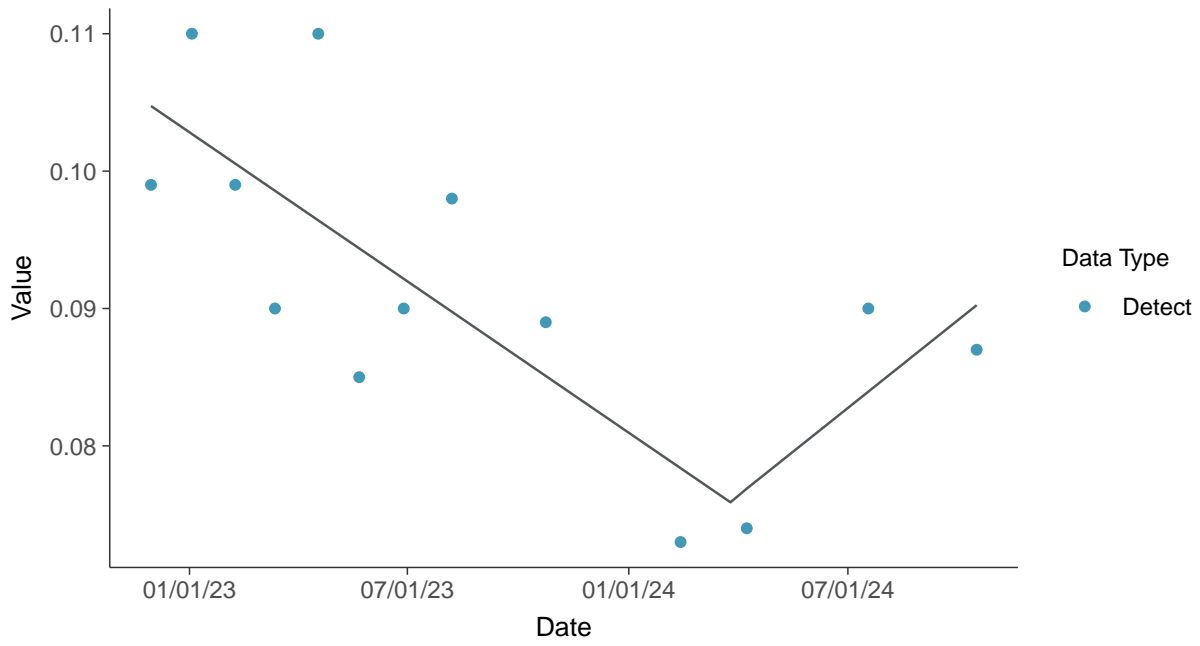
Trend Regression: Lognormal MLE
Lithium, MW-19 (mg/L)





Trend Regression: Piecewise Linear-Linear

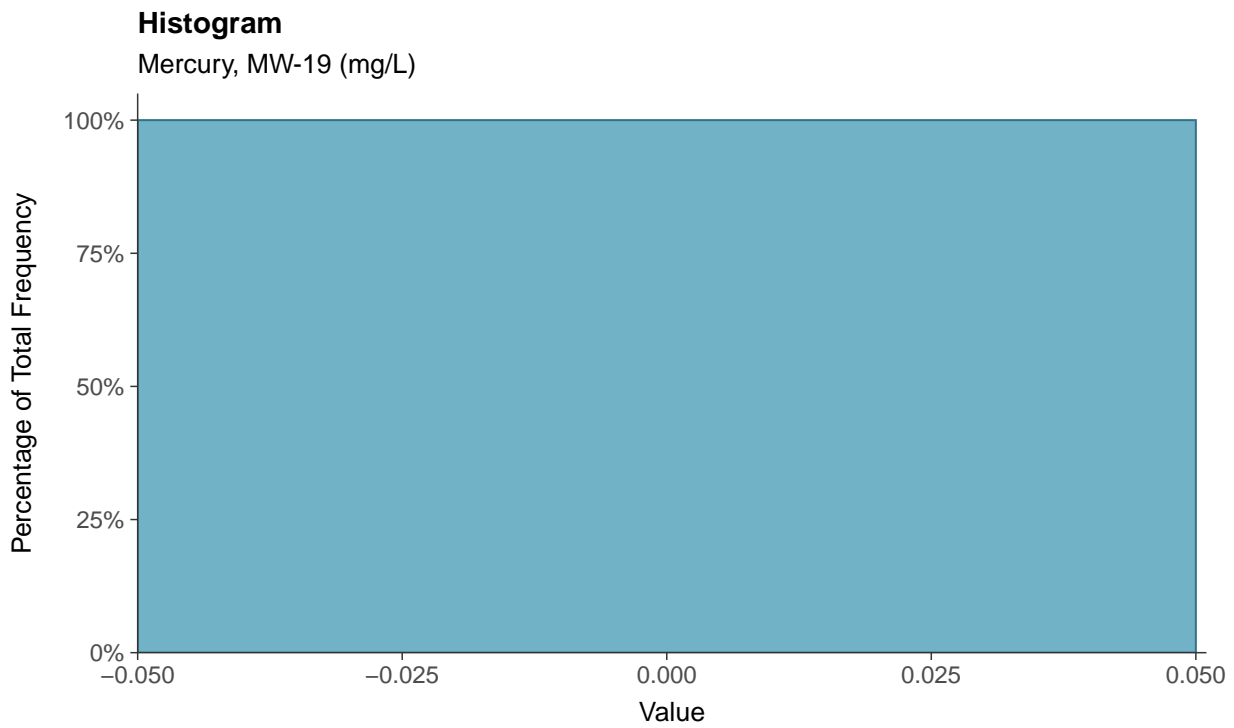
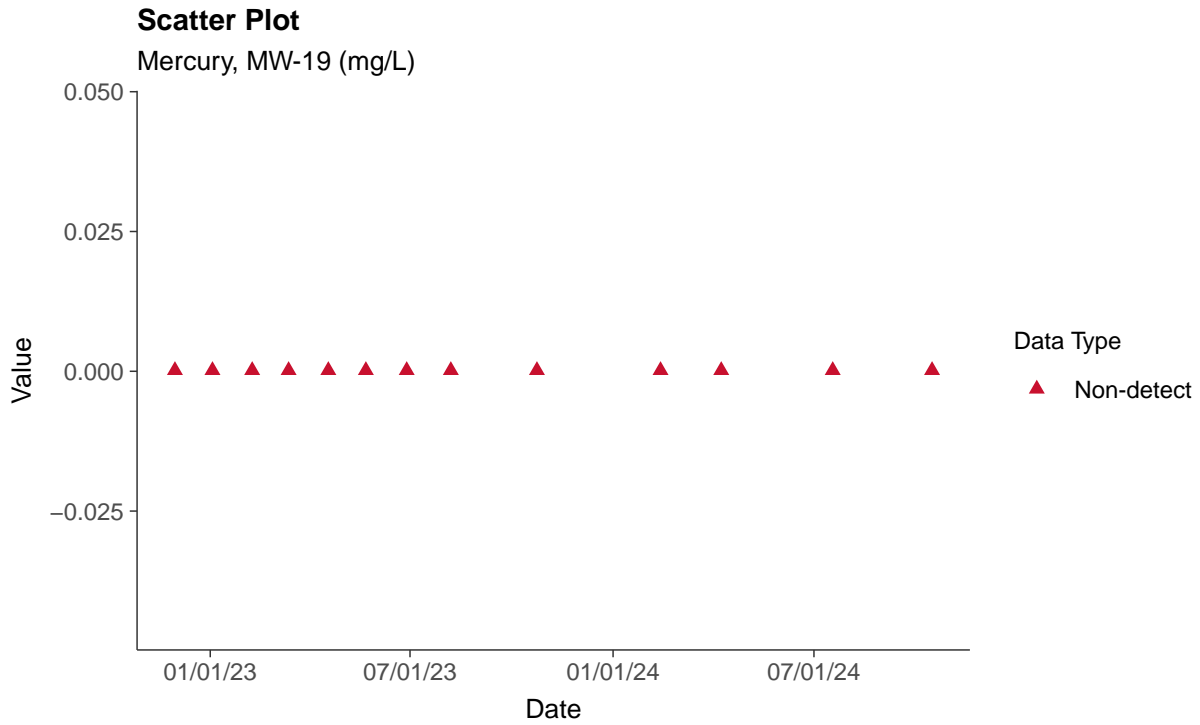
Lithium, MW-19 (mg/L)





Appendix IV: Mercury, MW-19

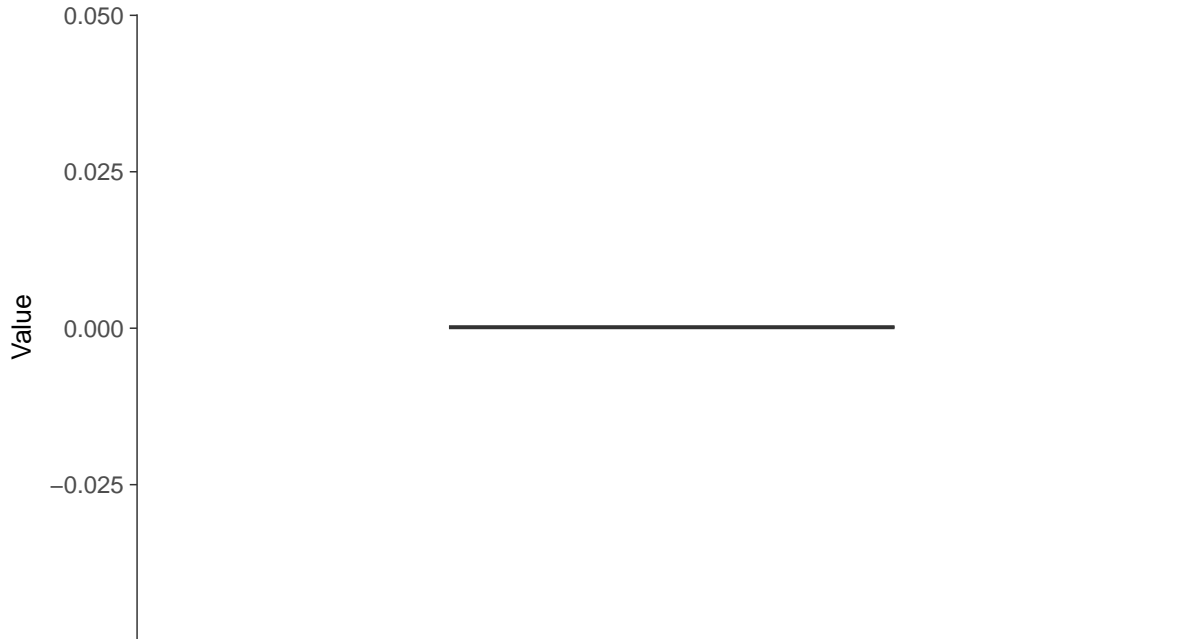
ID: 1_29_1_5_117





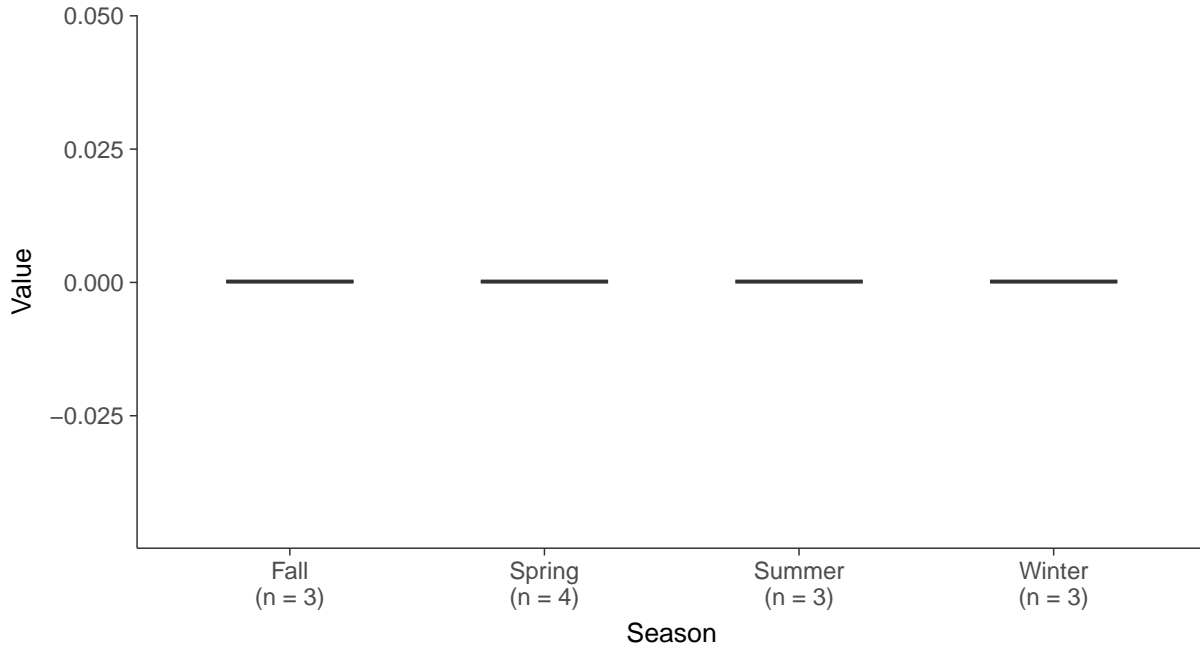
Boxplot

Mercury, MW-19 (mg/L)



Boxplot by Season

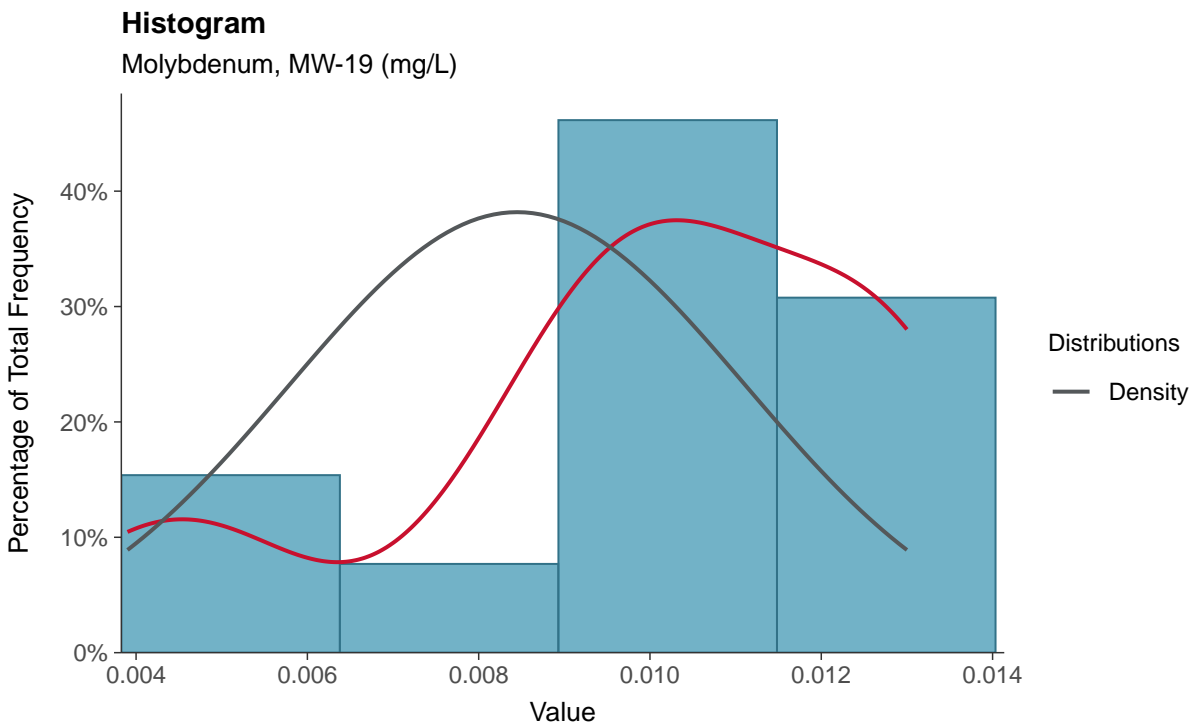
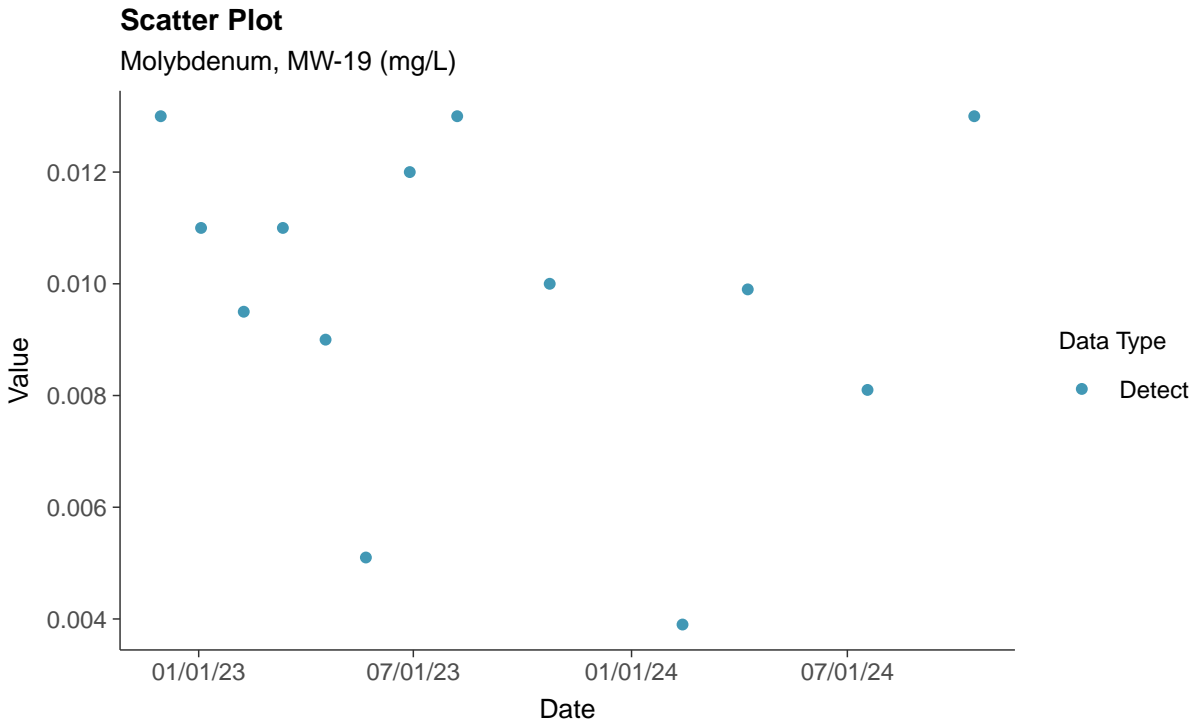
Mercury, MW-19 (mg/L)





Appendix IV: Molybdenum, MW-19

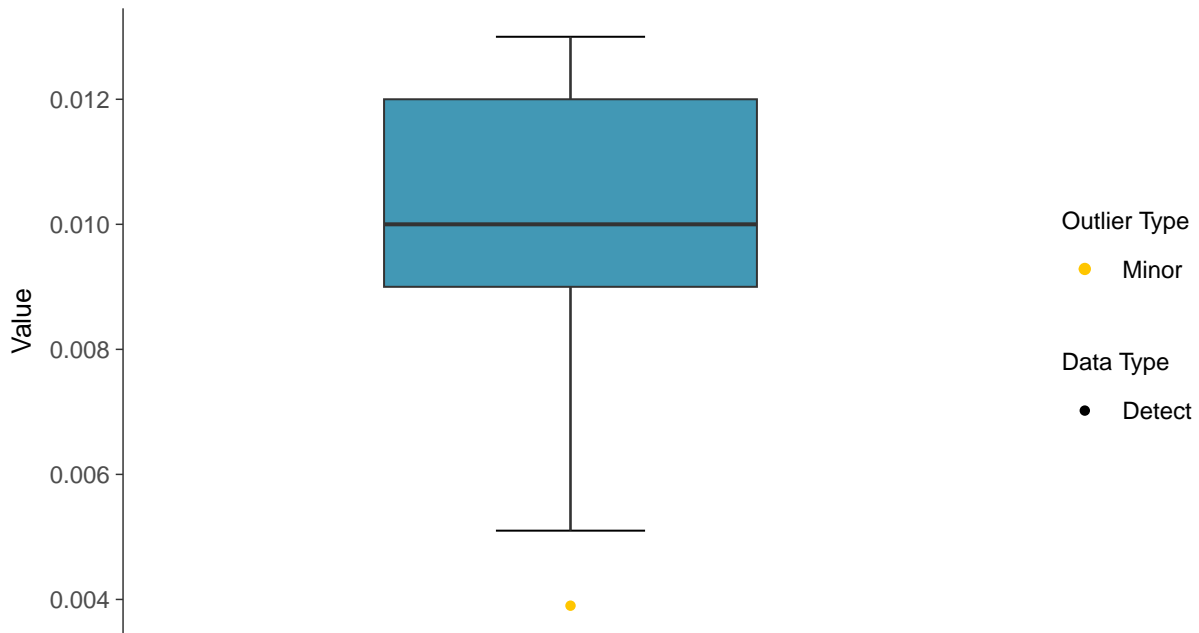
ID: 1_29_1_5_118





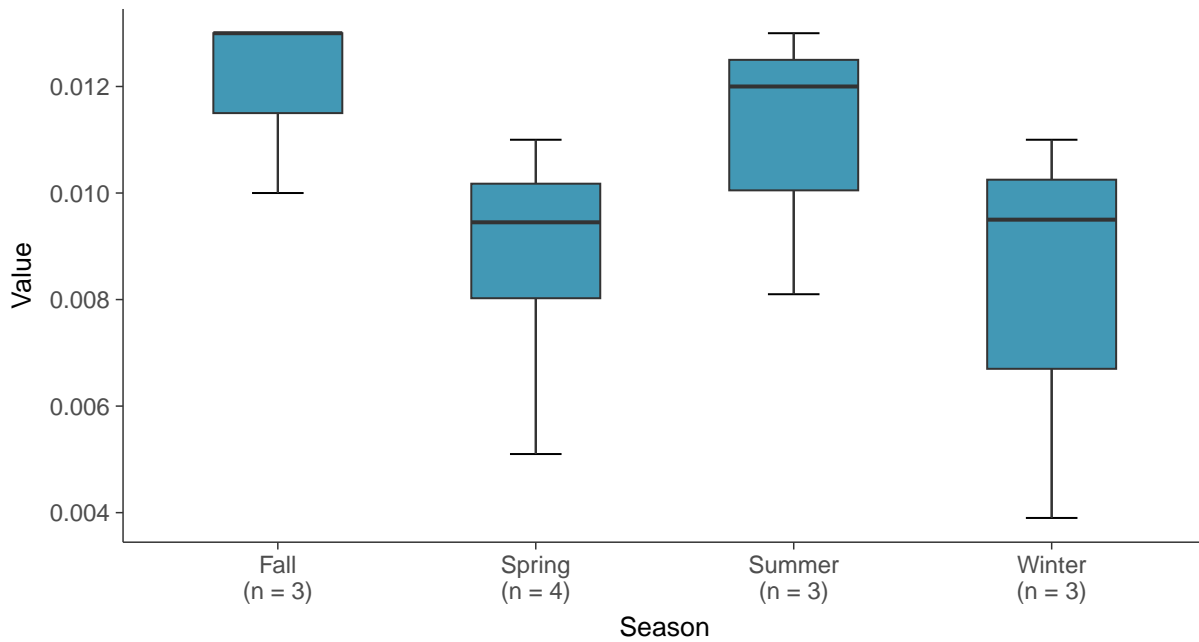
Boxplot

Molybdenum, MW-19 (mg/L)



Boxplot by Season

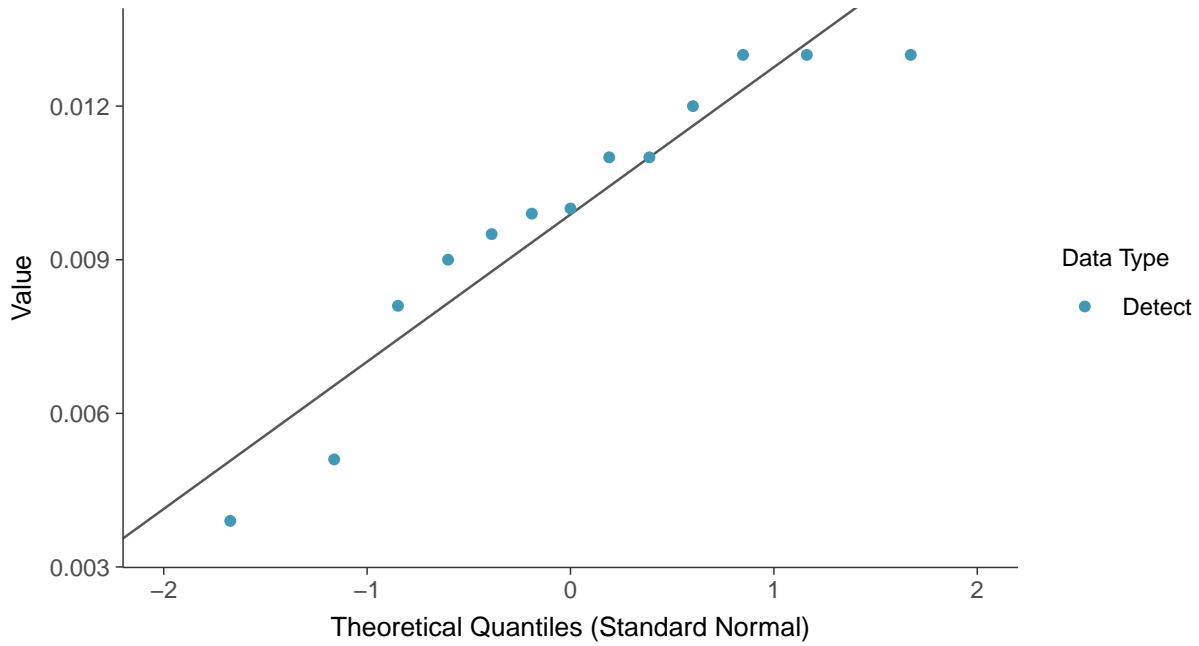
Molybdenum, MW-19 (mg/L)





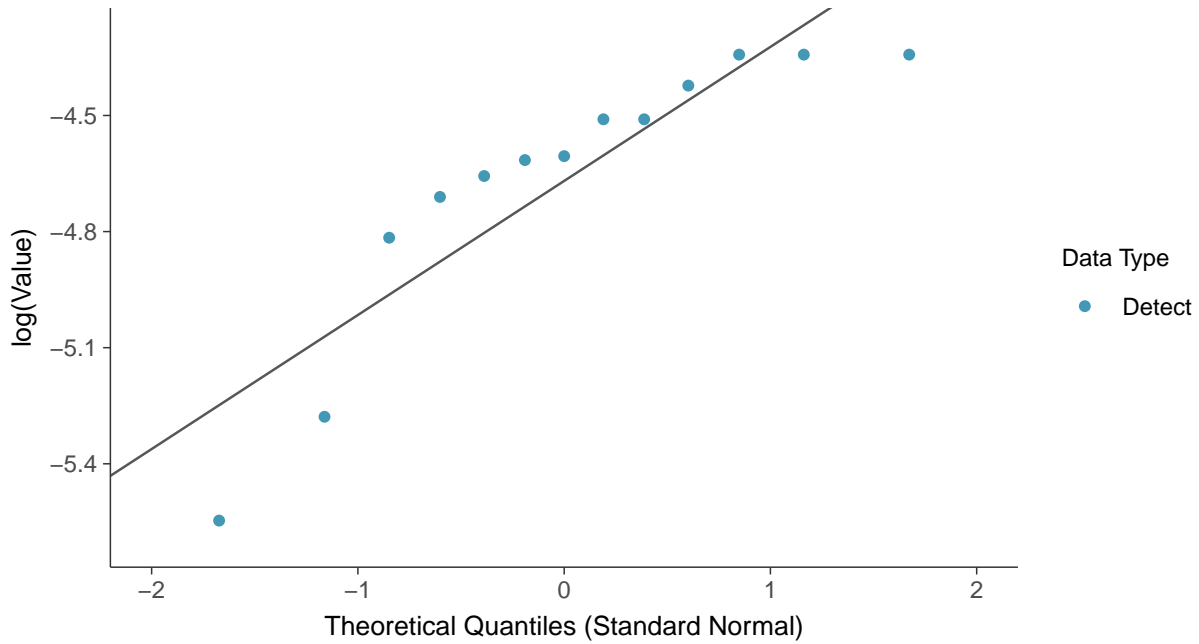
Normal Q-Q plot

Molybdenum, MW-19 (mg/L)



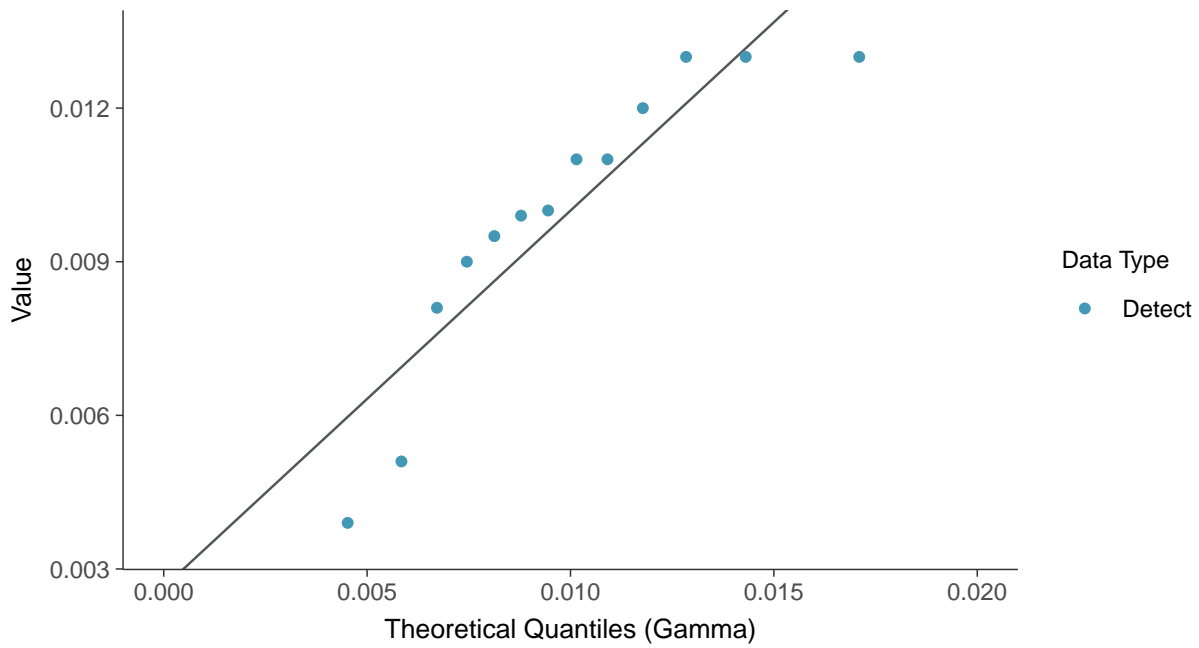
Lognormal Q-Q plot

Molybdenum, MW-19 (mg/L)

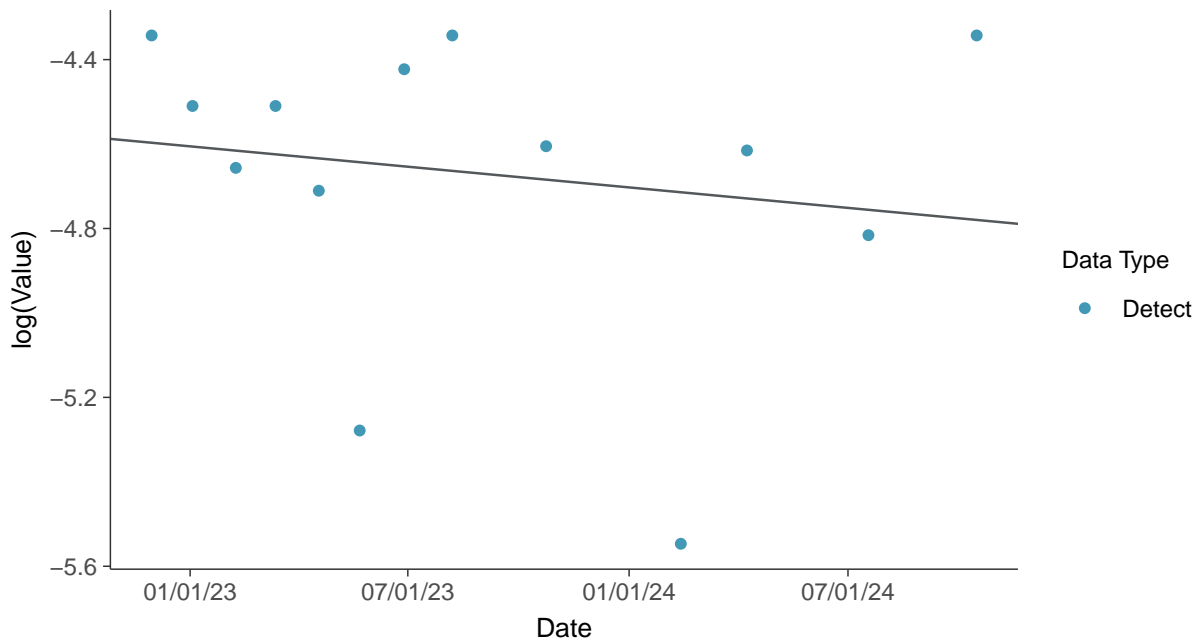




Gamma Q-Q plot
Molybdenum, MW-19 (mg/L)



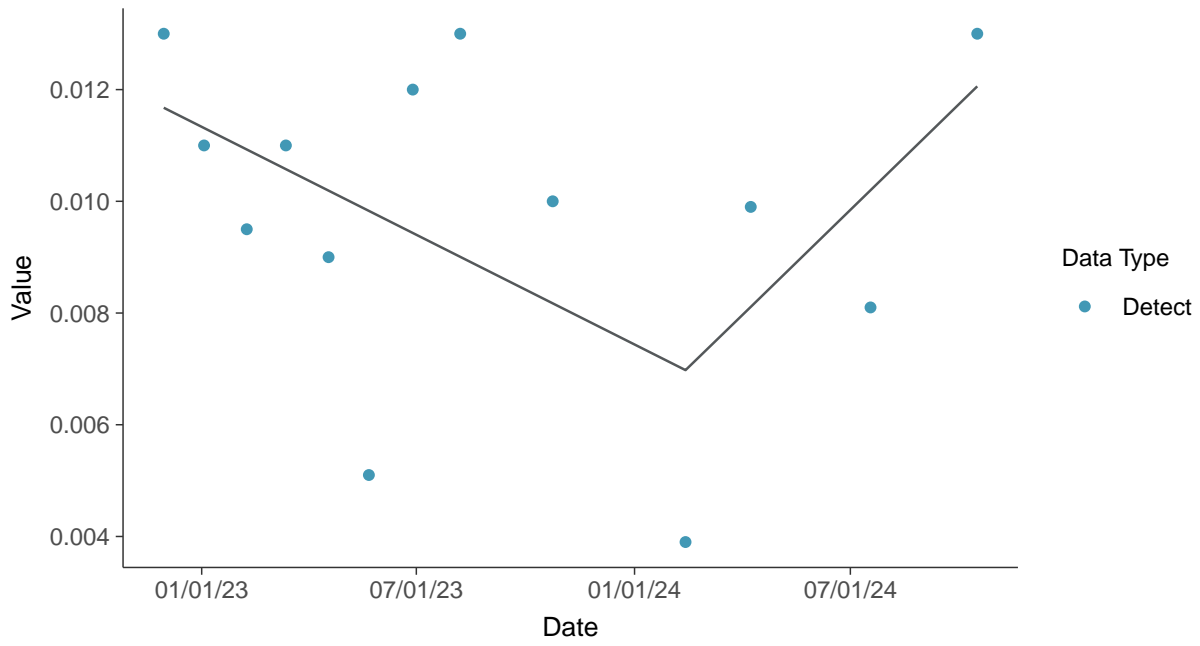
Trend Regression: Lognormal MLE
Molybdenum, MW-19 (mg/L)





Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-19 (mg/L)



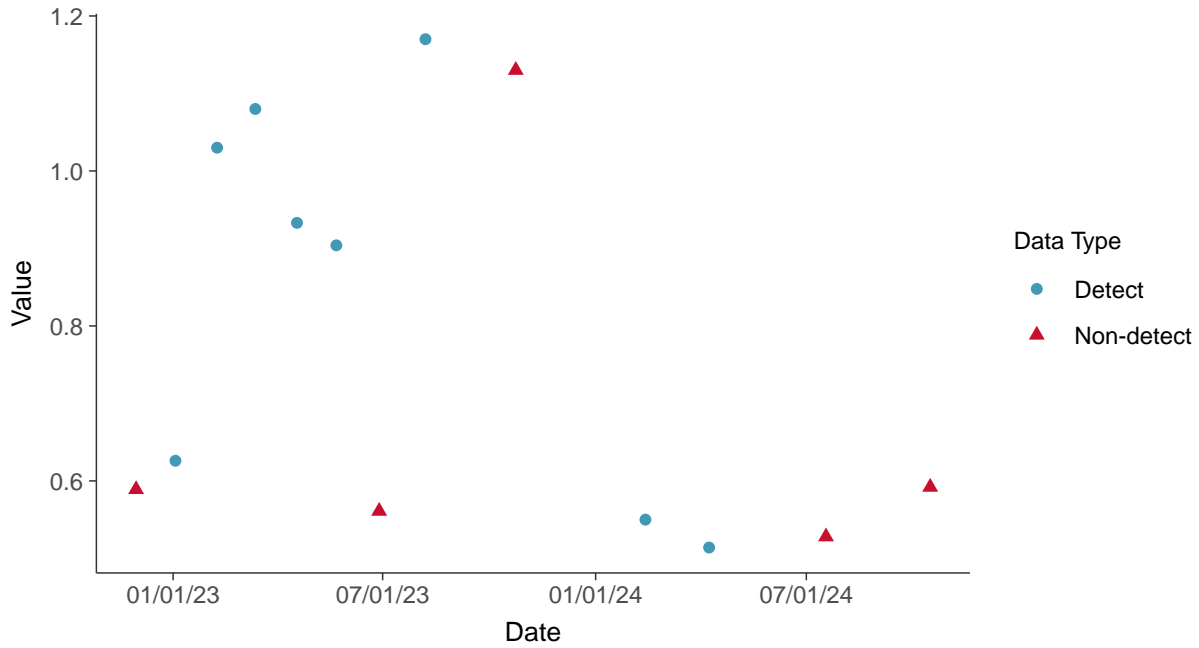


Appendix IV: Radium 226 and 228, MW-19

ID: 1_29_1_5_121

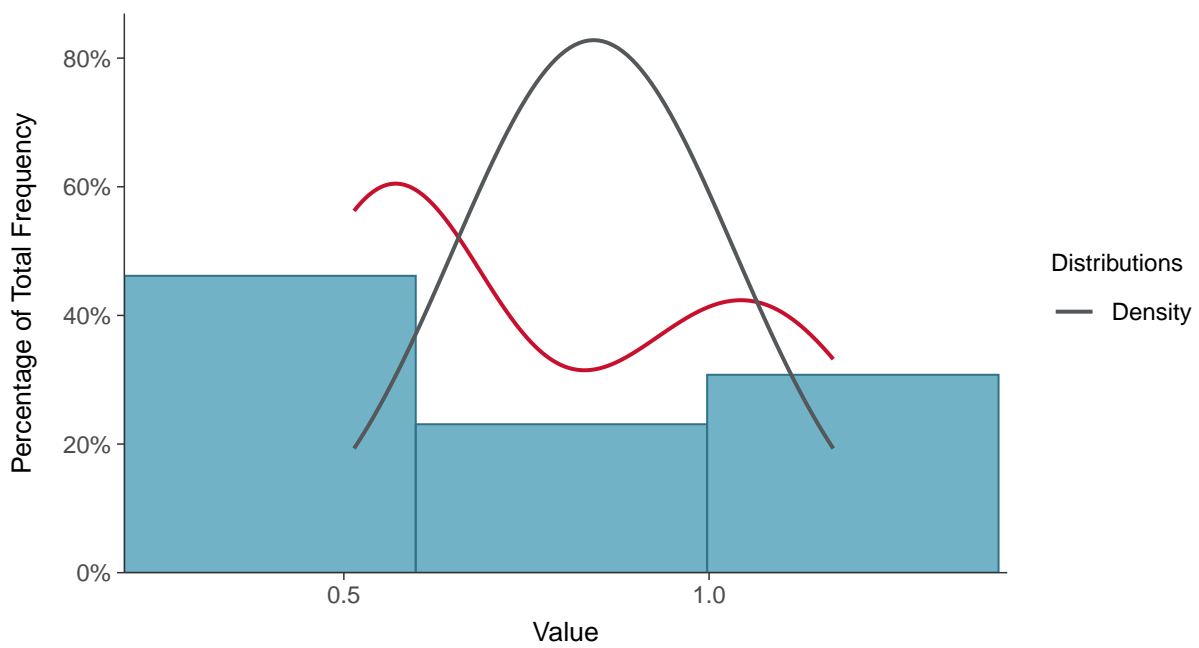
Scatter Plot

Radium 226 and 228, MW-19 (pCi/L)



Histogram

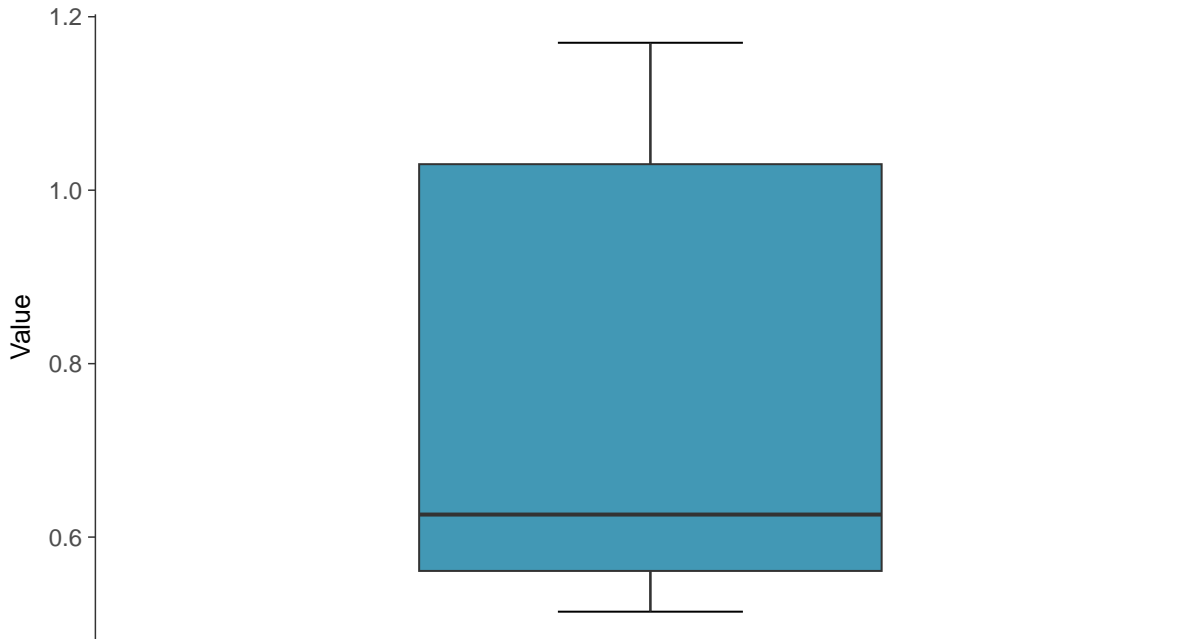
Radium 226 and 228, MW-19 (pCi/L)





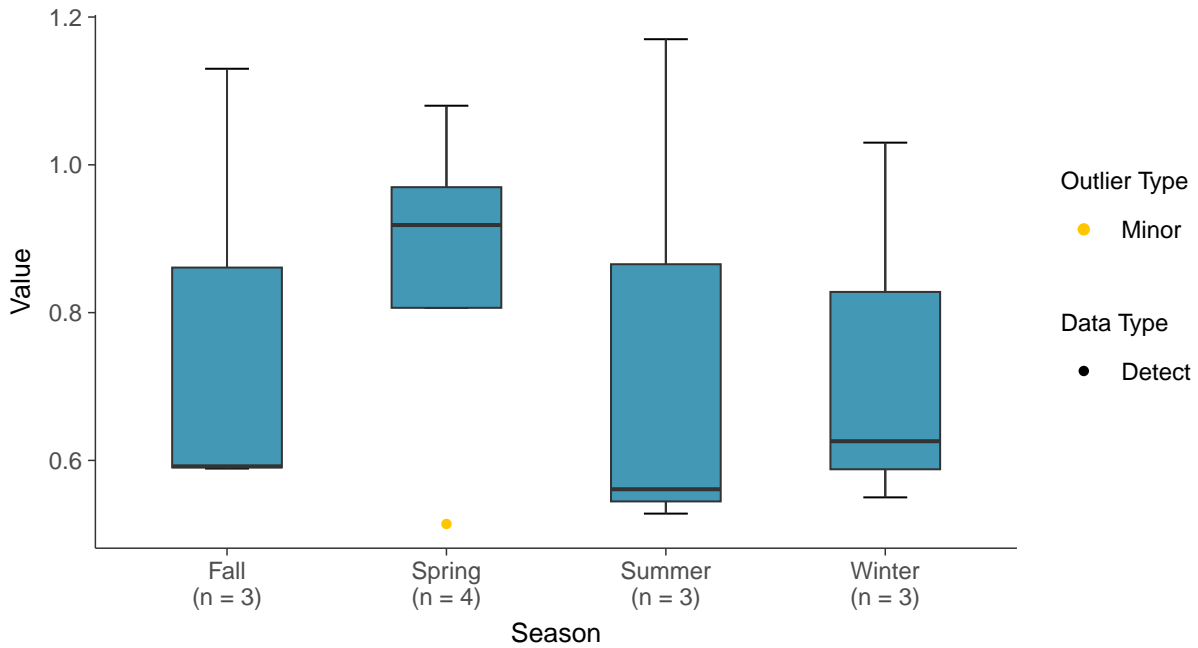
Boxplot

Radium 226 and 228, MW-19 (pCi/L)



Boxplot by Season

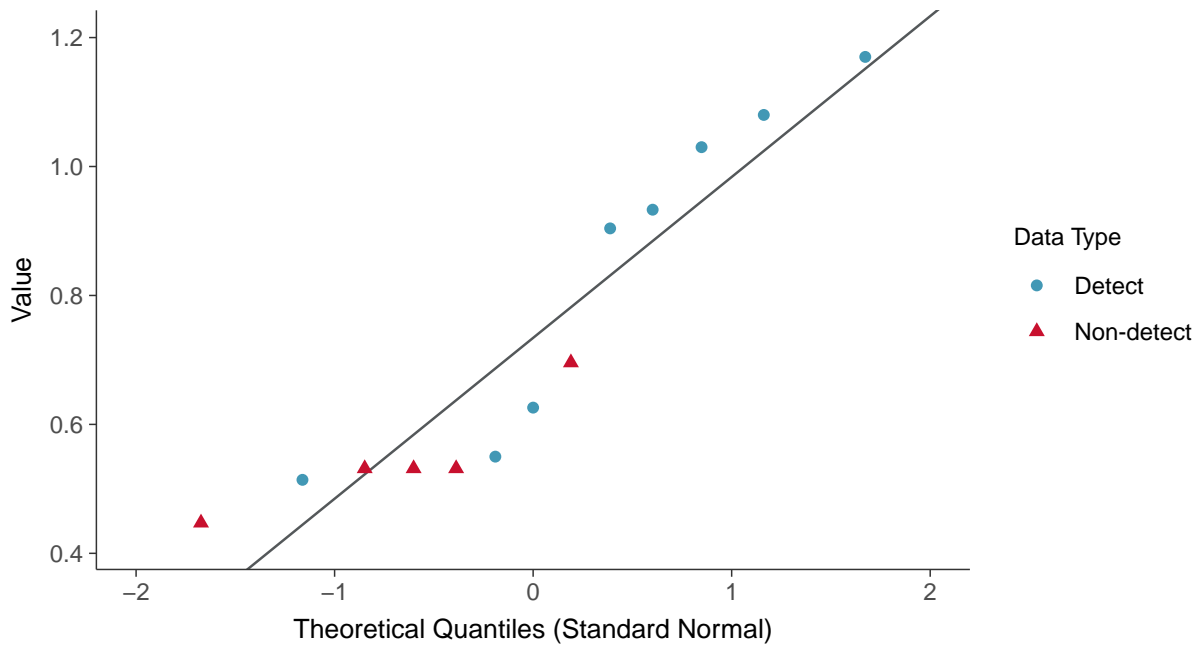
Radium 226 and 228, MW-19 (pCi/L)





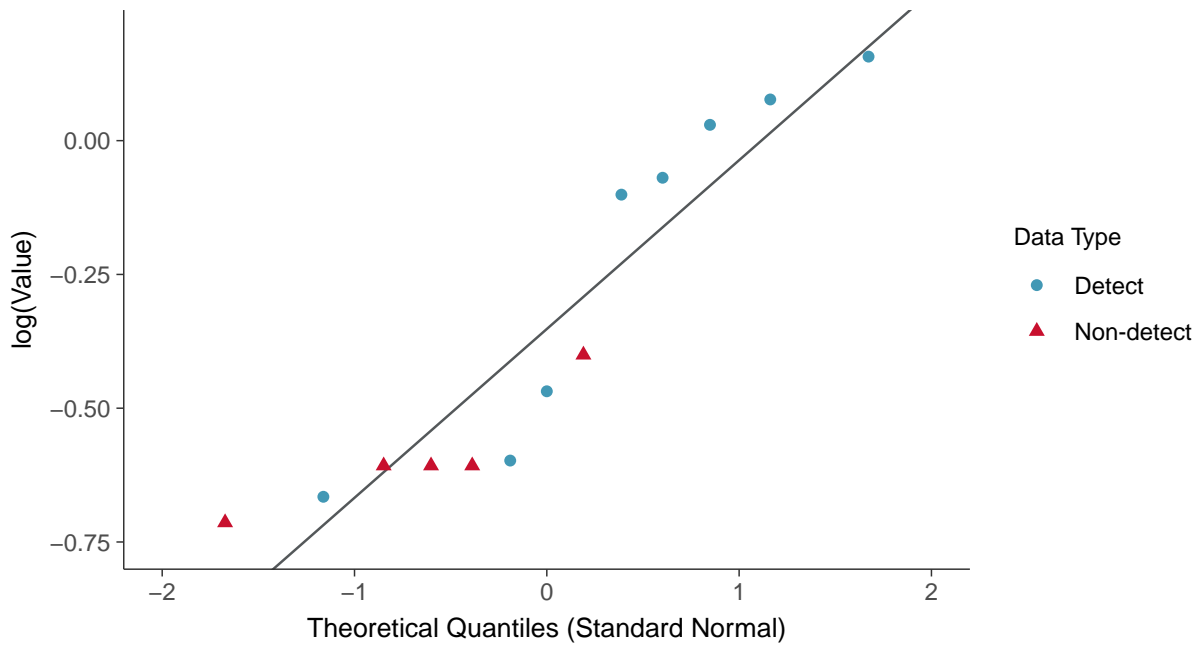
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-19 (pCi/L)



Lognormal Q-Q plot using ROS Imputed Estimates

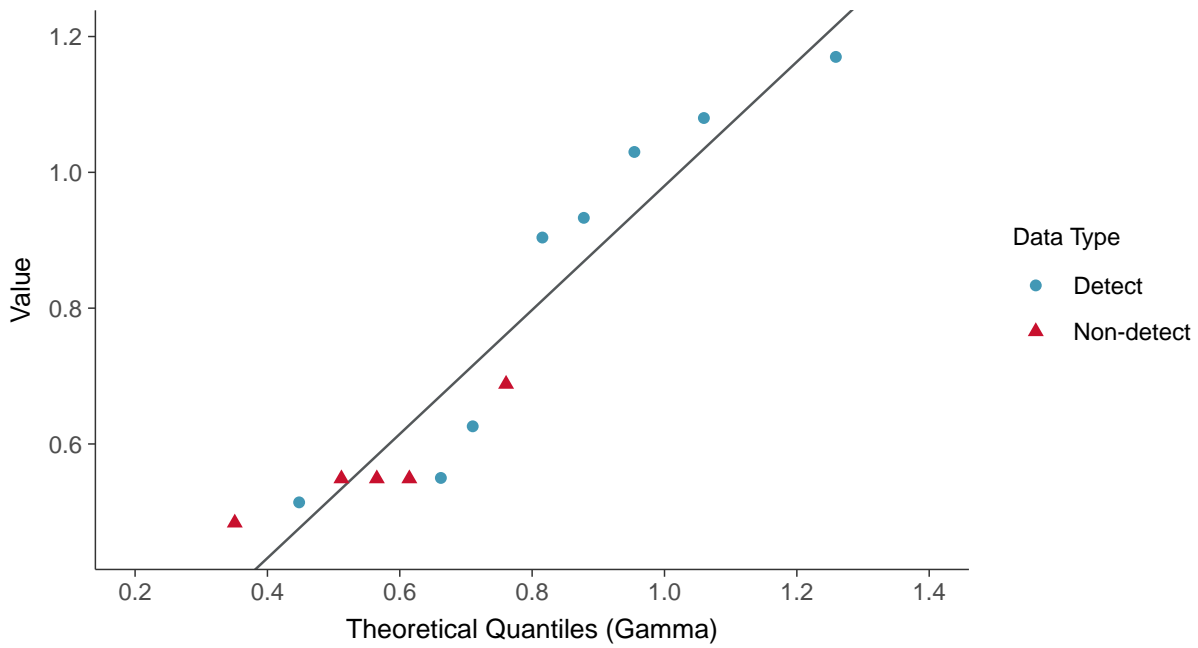
Radium 226 and 228, MW-19 (pCi/L)





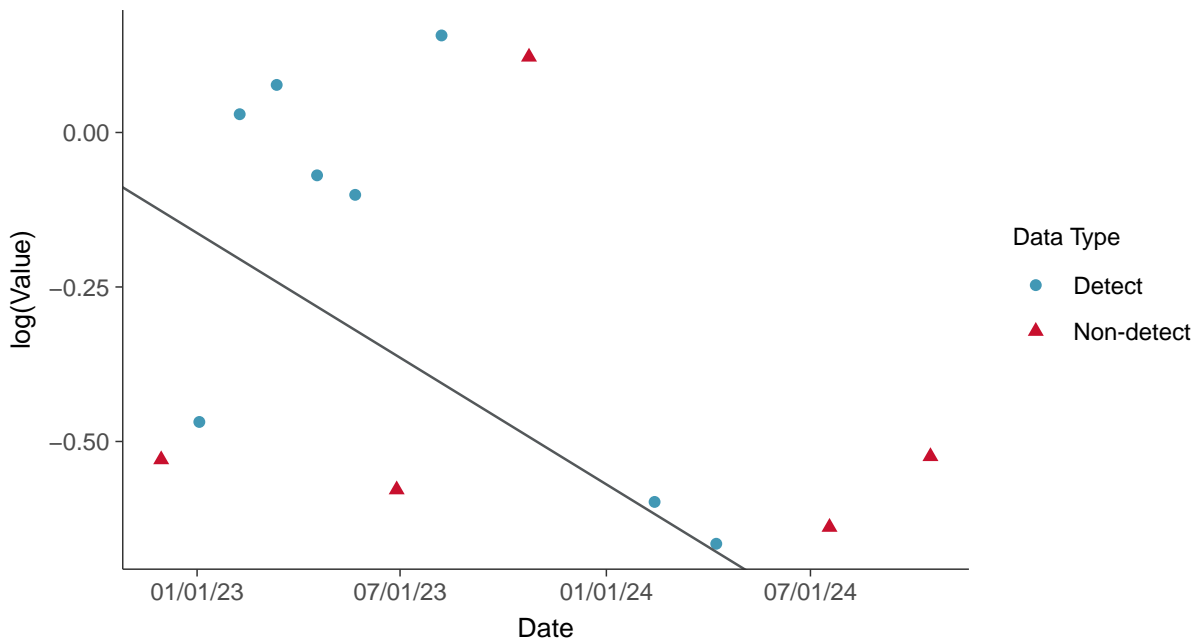
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-19 (pCi/L)



Trend Regression: Lognormal MLE

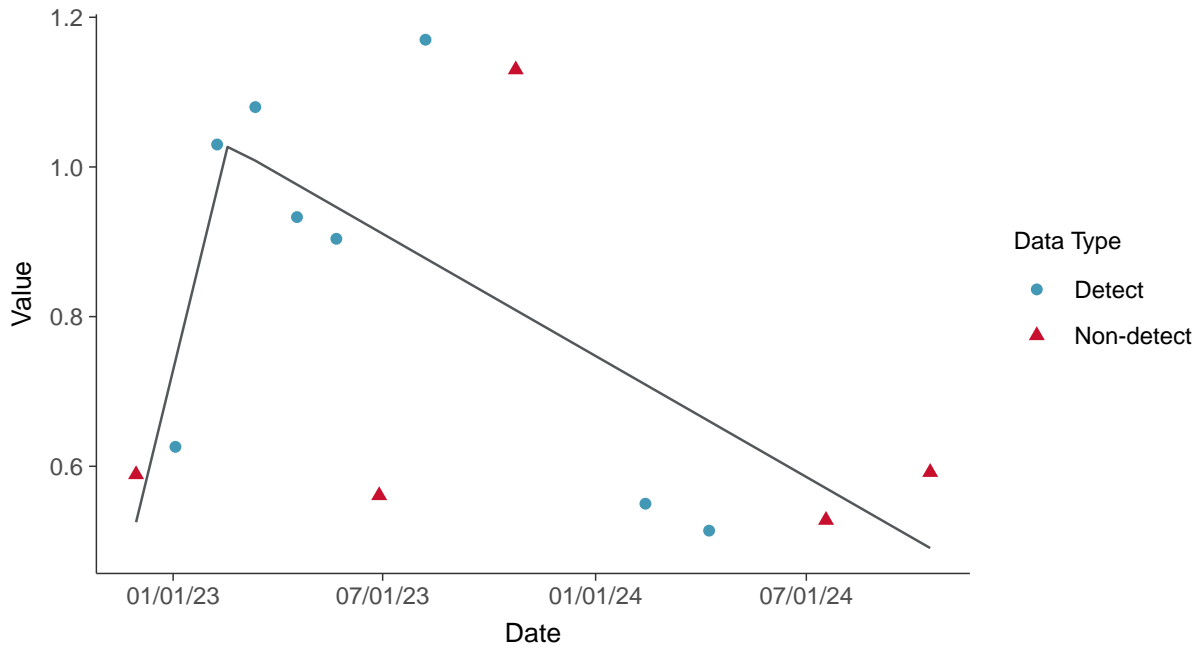
Radium 226 and 228, MW-19 (pCi/L)





Trend Regression: Piecewise Linear-Linear

Radium 226 and 228, MW-19 (pCi/L)



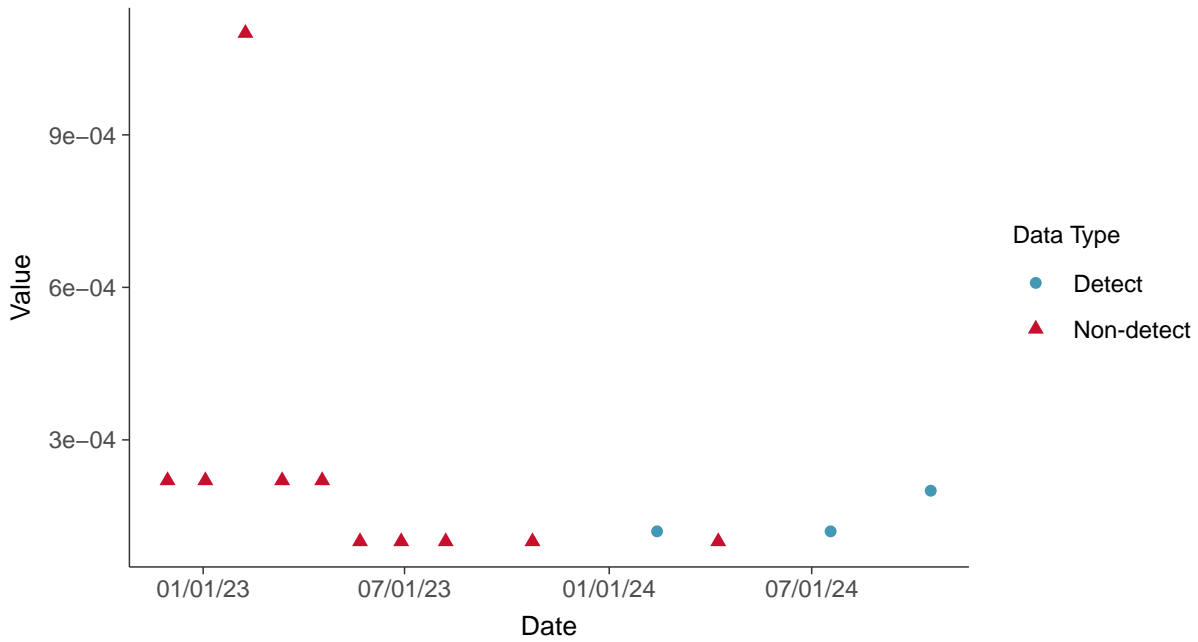


Appendix IV: Selenium, MW-19

ID: 1_29_1_5_122

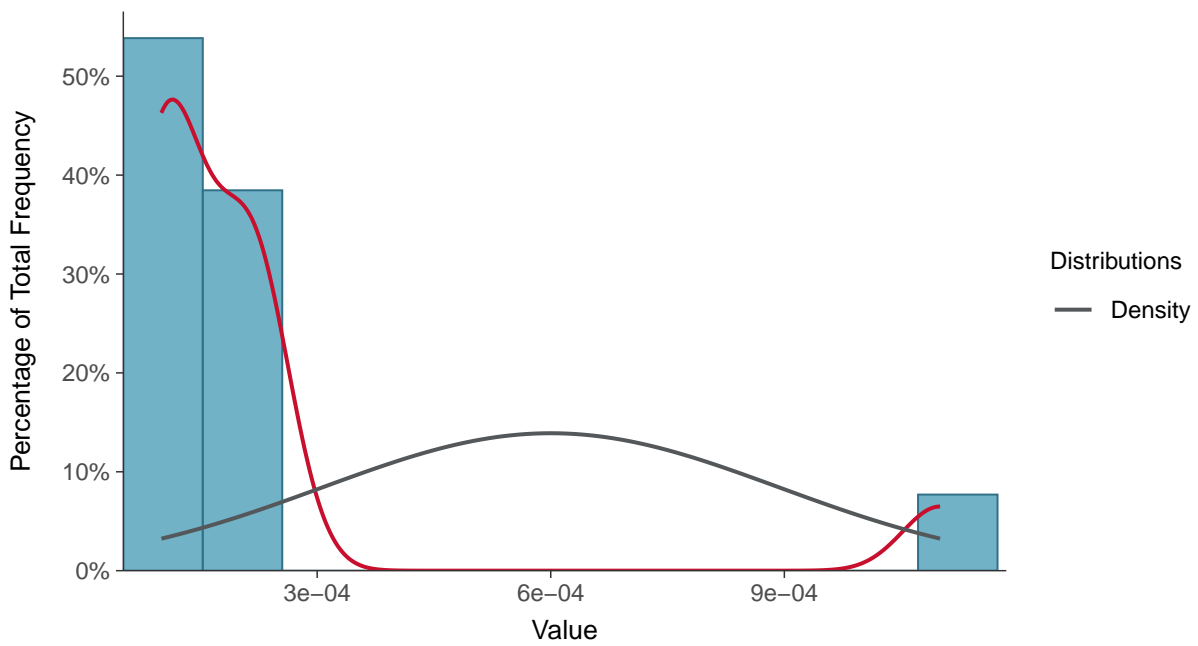
Scatter Plot

Selenium, MW-19 (mg/L)



Histogram

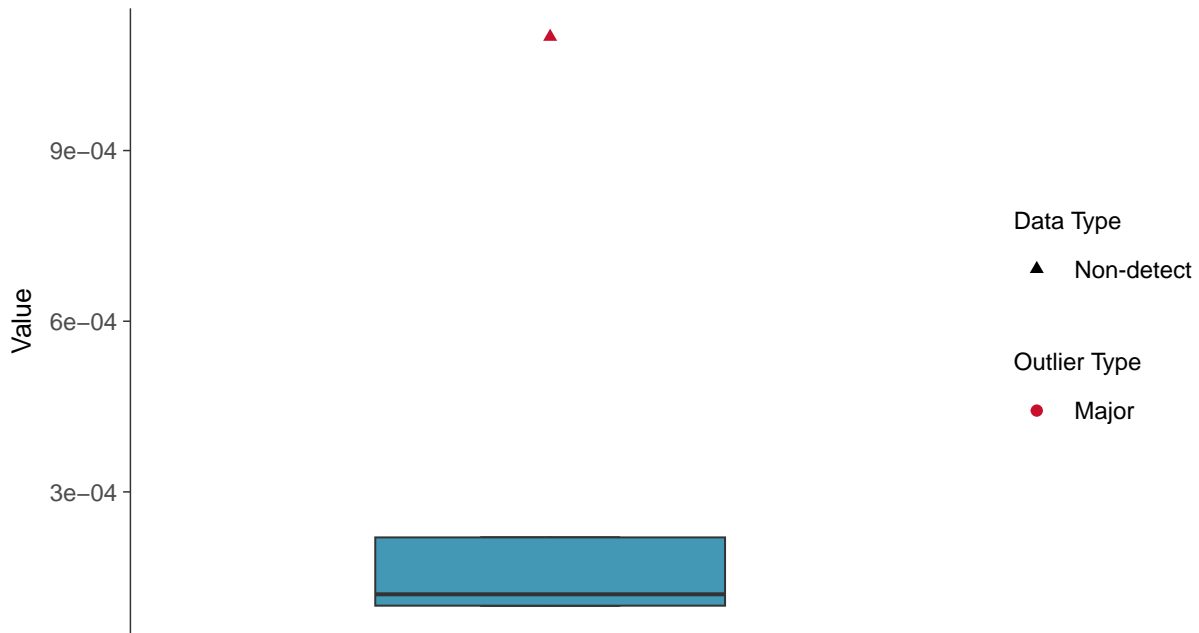
Selenium, MW-19 (mg/L)





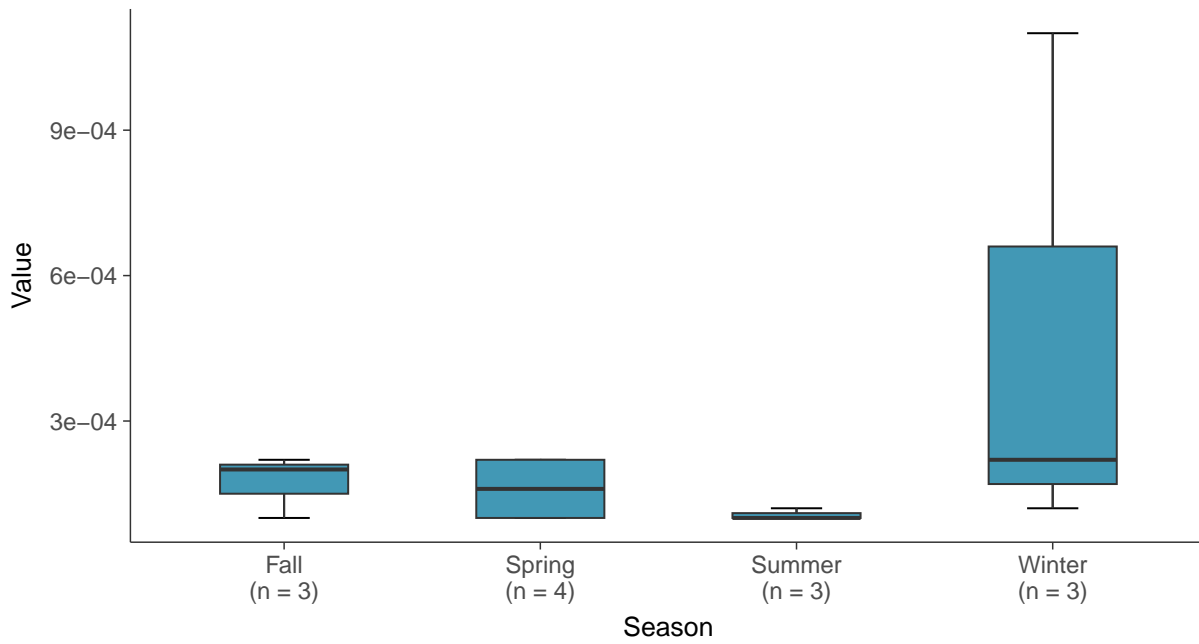
Boxplot

Selenium, MW-19 (mg/L)



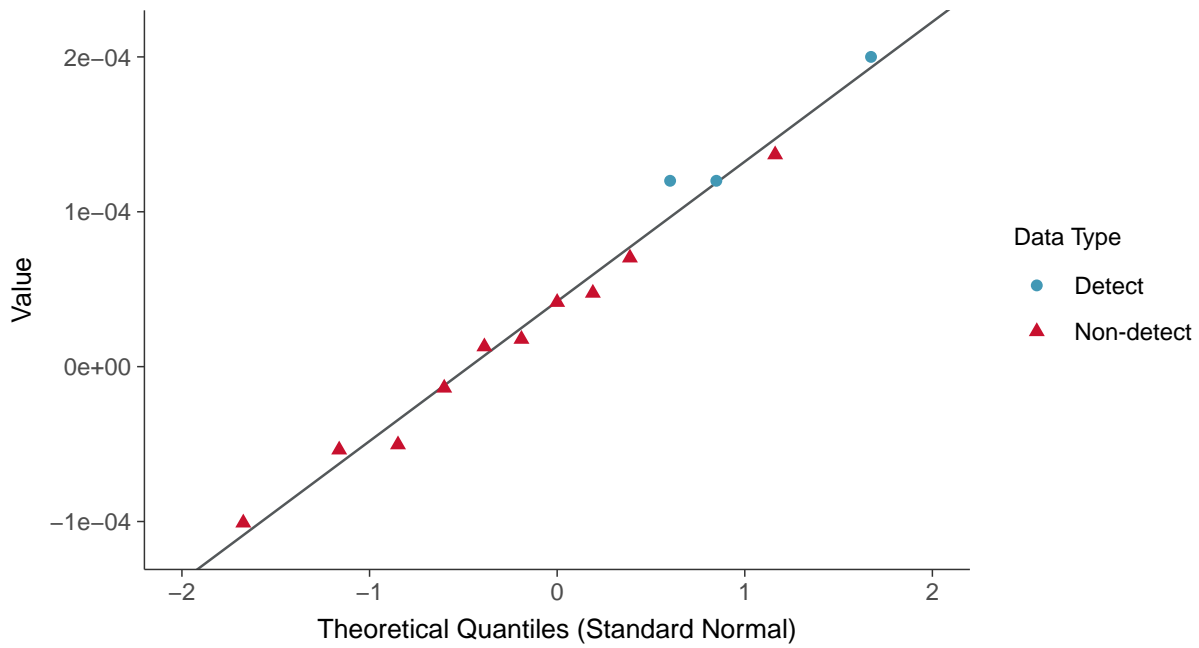
Boxplot by Season

Selenium, MW-19 (mg/L)

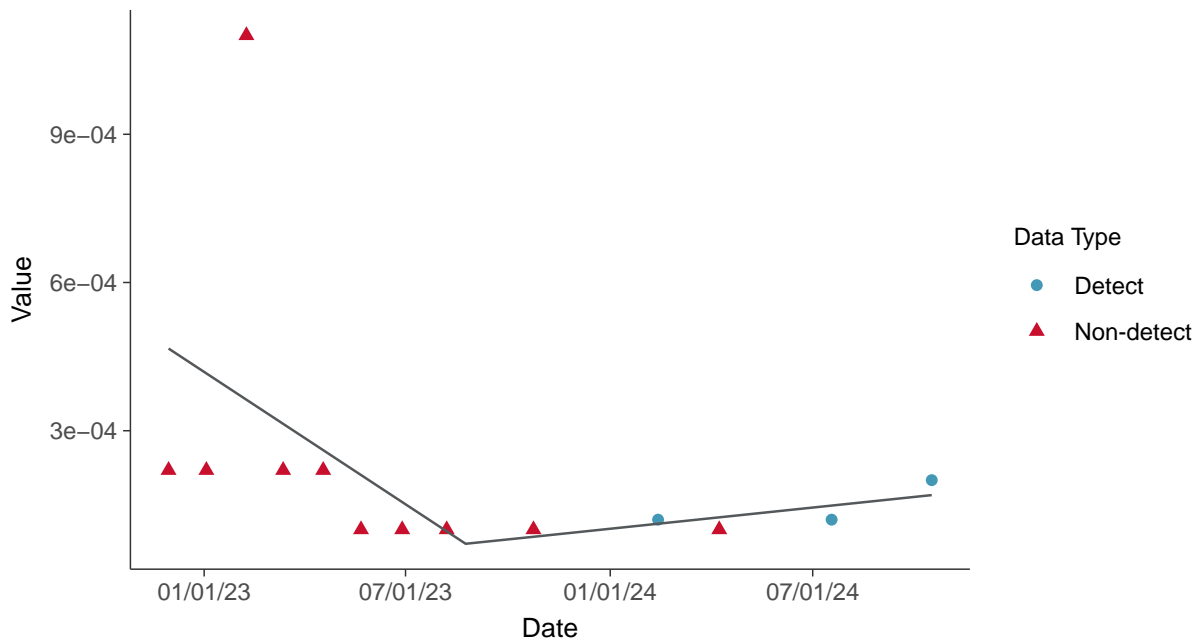




Normal Q-Q plot using ROS Imputed Estimates
Selenium, MW-19 (mg/L)



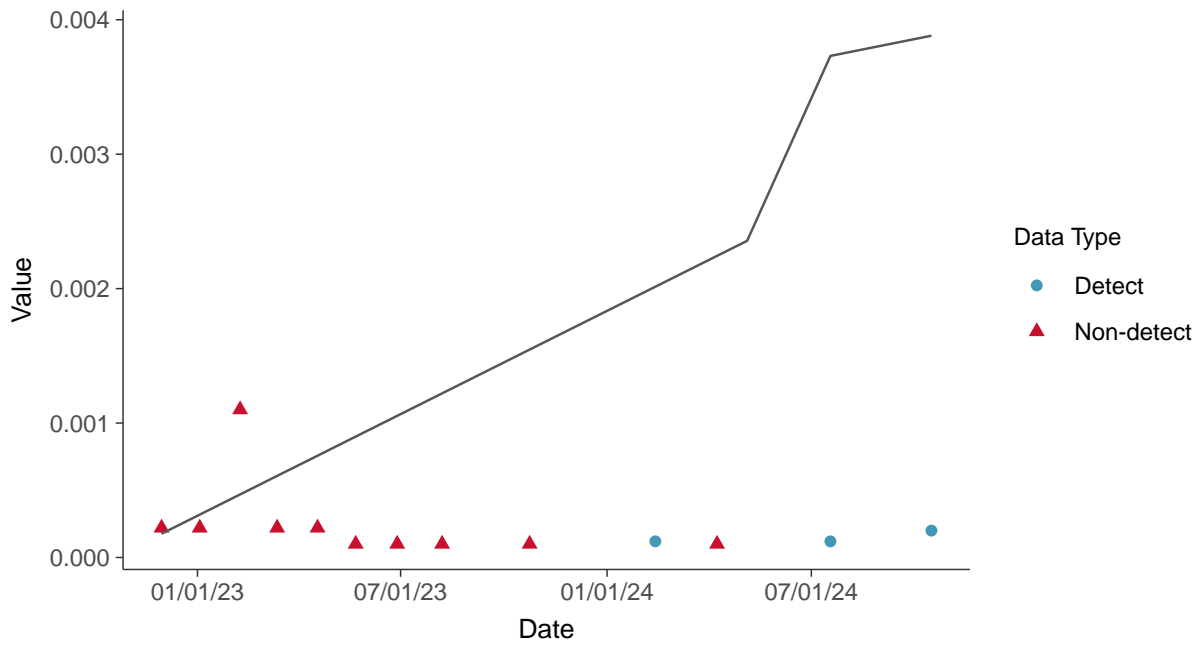
Trend Regression: Piecewise Linear-Linear
Selenium, MW-19 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

Selenium, MW-19 (mg/L)



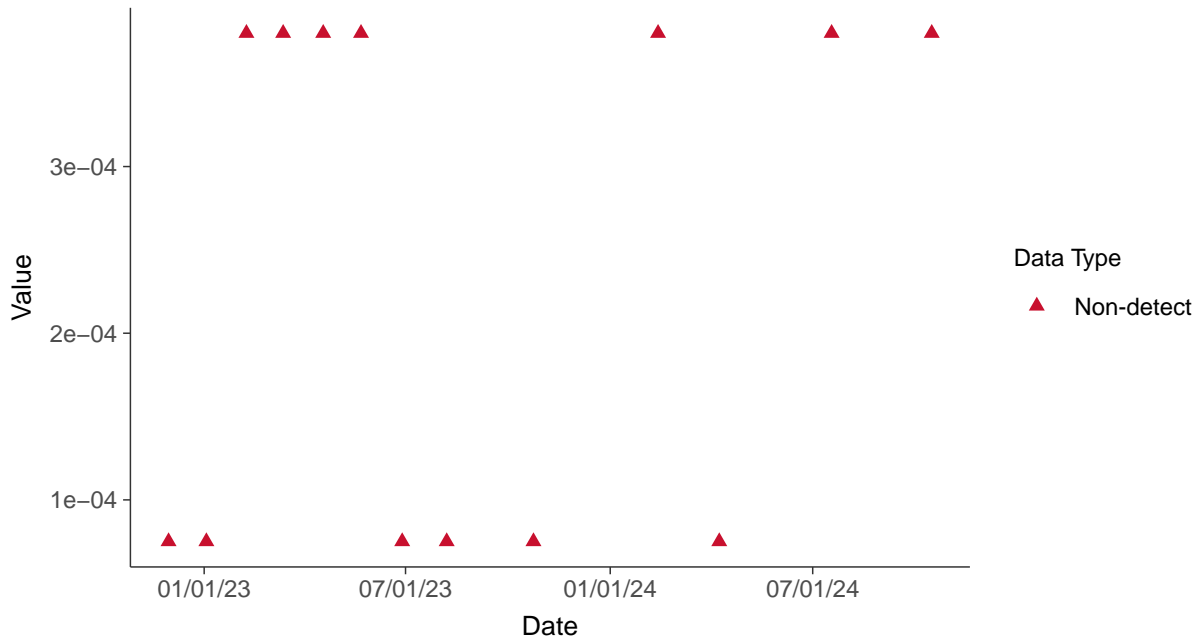


Appendix IV: Thallium, MW-19

ID: 1_29_1_5_125

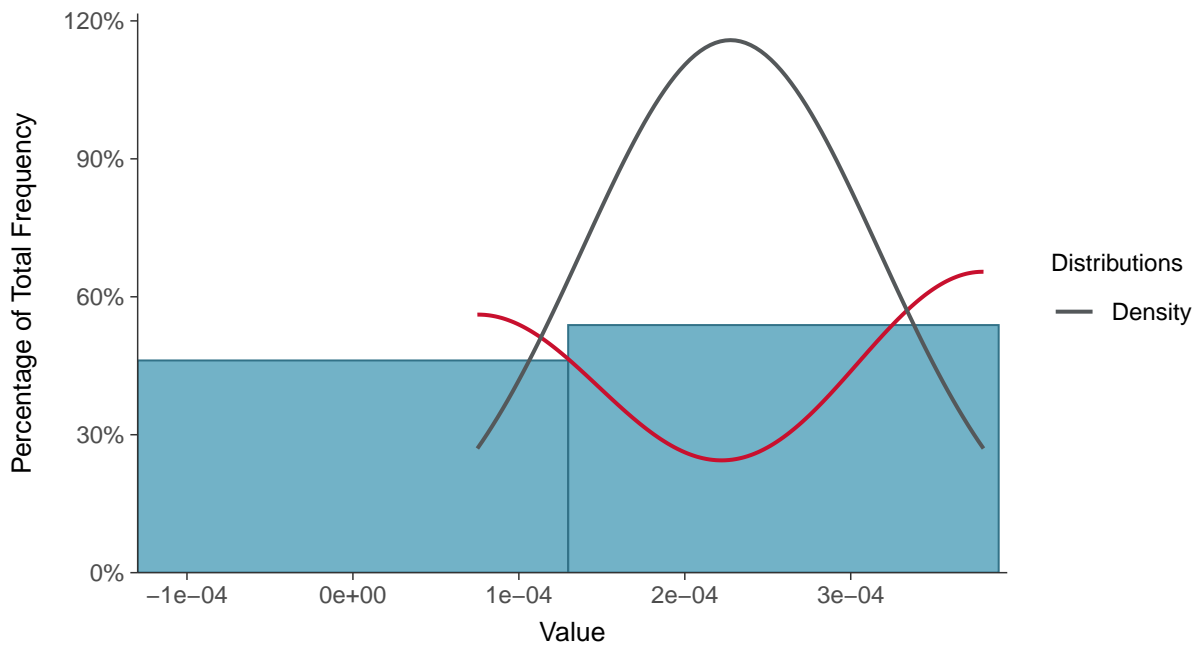
Scatter Plot

Thallium, MW-19 (mg/L)



Histogram

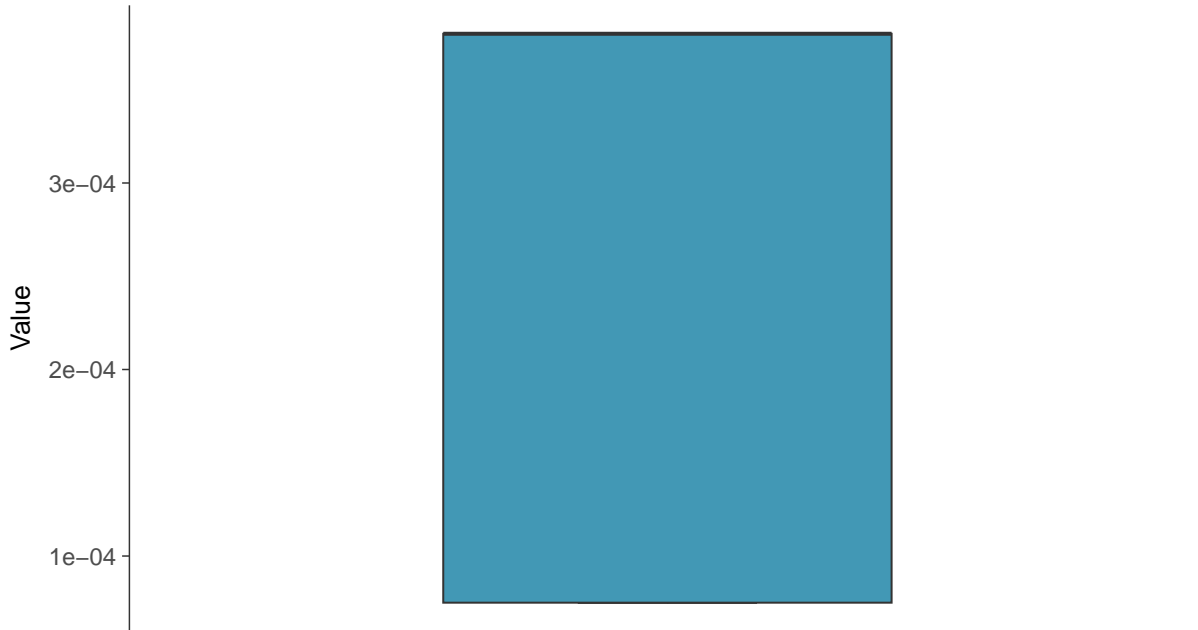
Thallium, MW-19 (mg/L)





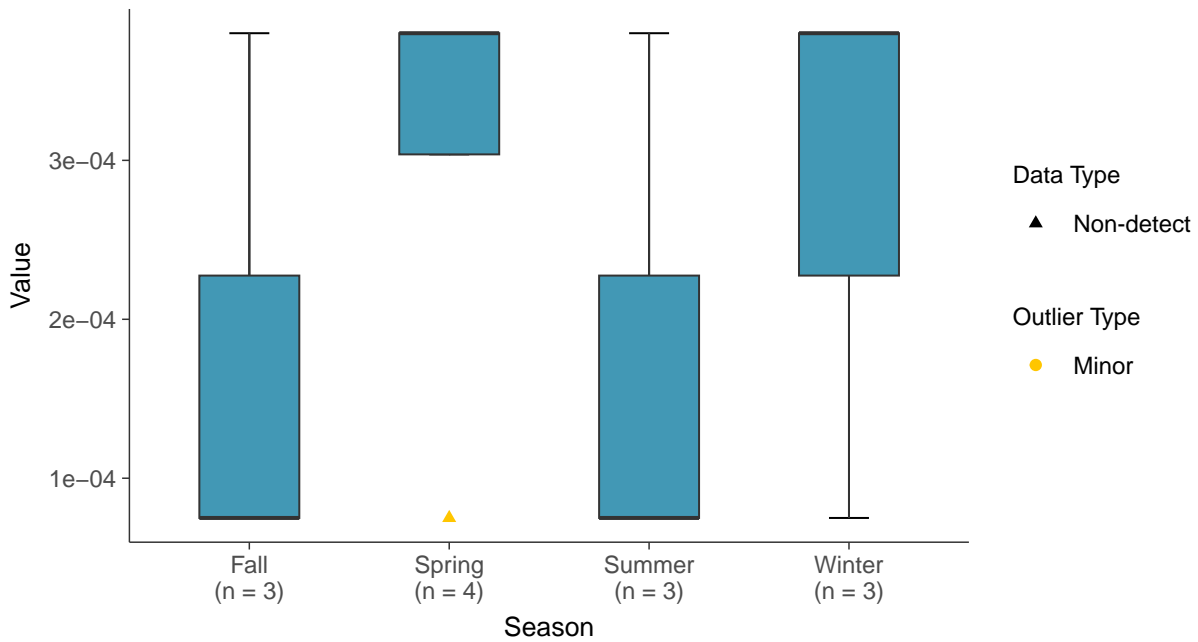
Boxplot

Thallium, MW-19 (mg/L)



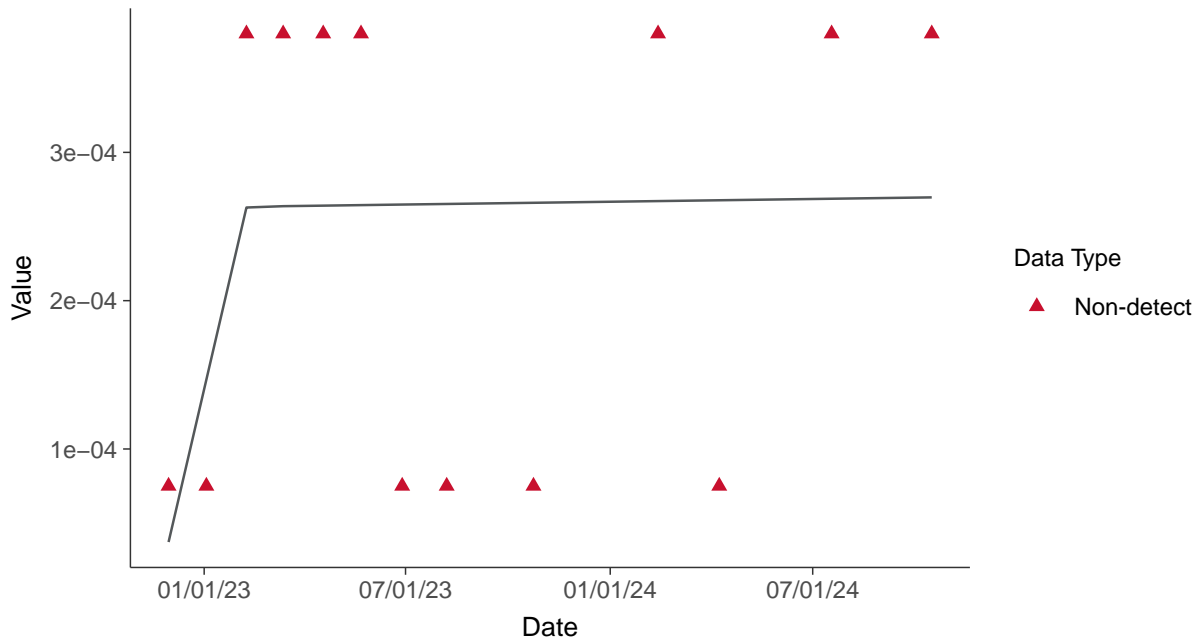
Boxplot by Season

Thallium, MW-19 (mg/L)

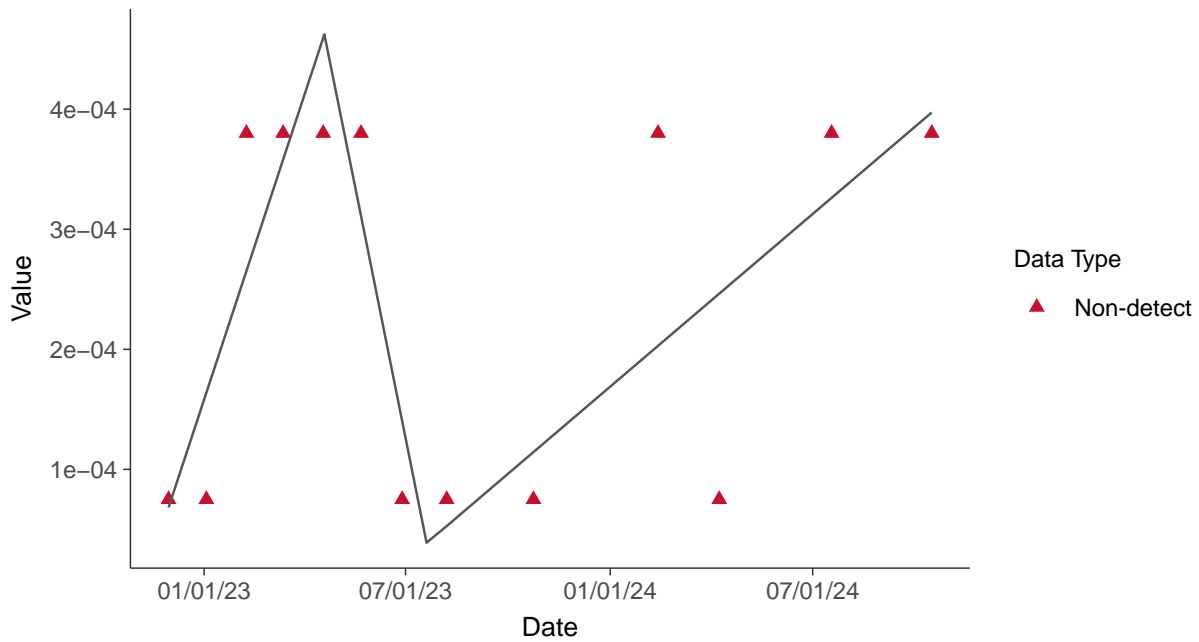




Trend Regression: Piecewise Linear-Linear
Thallium, MW-19 (mg/L)



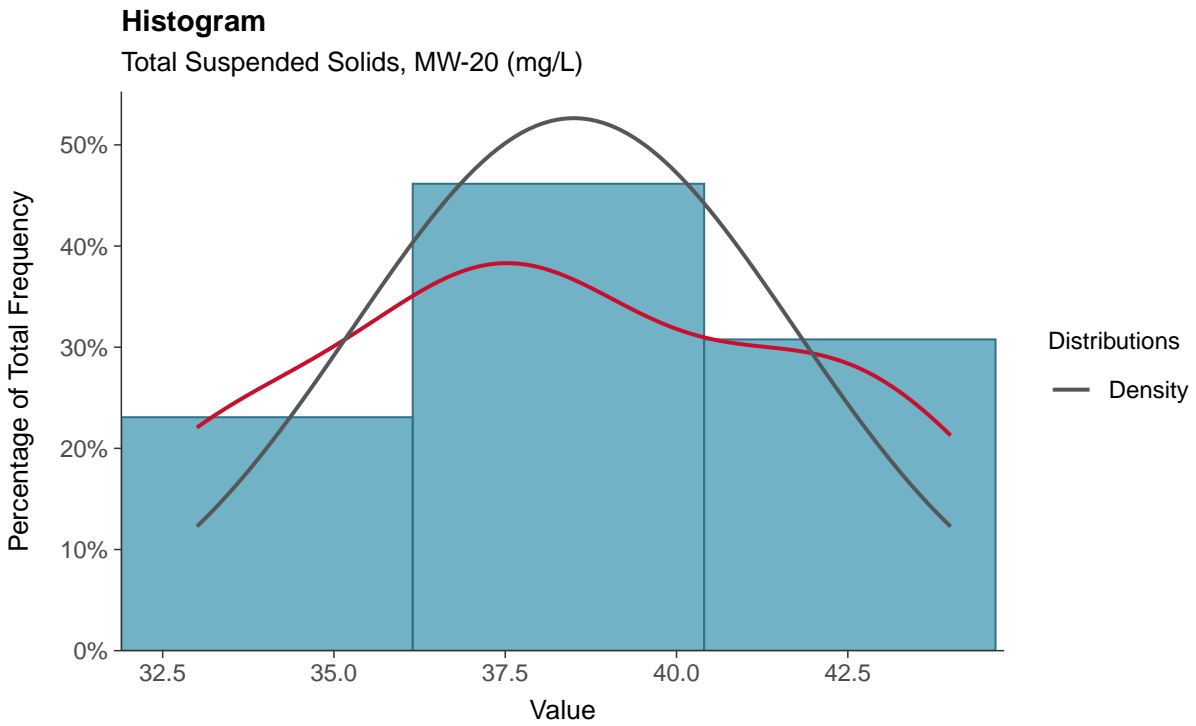
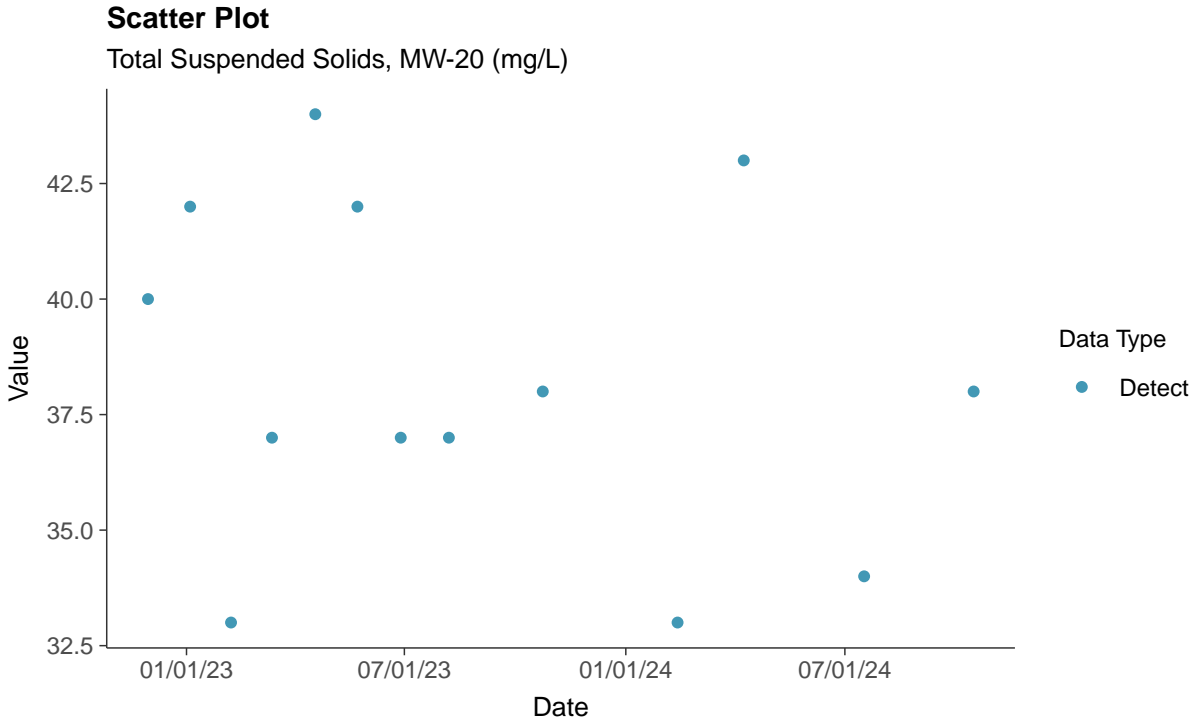
Trend Regression: Piecewise Linear-Linear-Linear
Thallium, MW-19 (mg/L)





Additional Parameters: Total Suspended Solids, MW-20

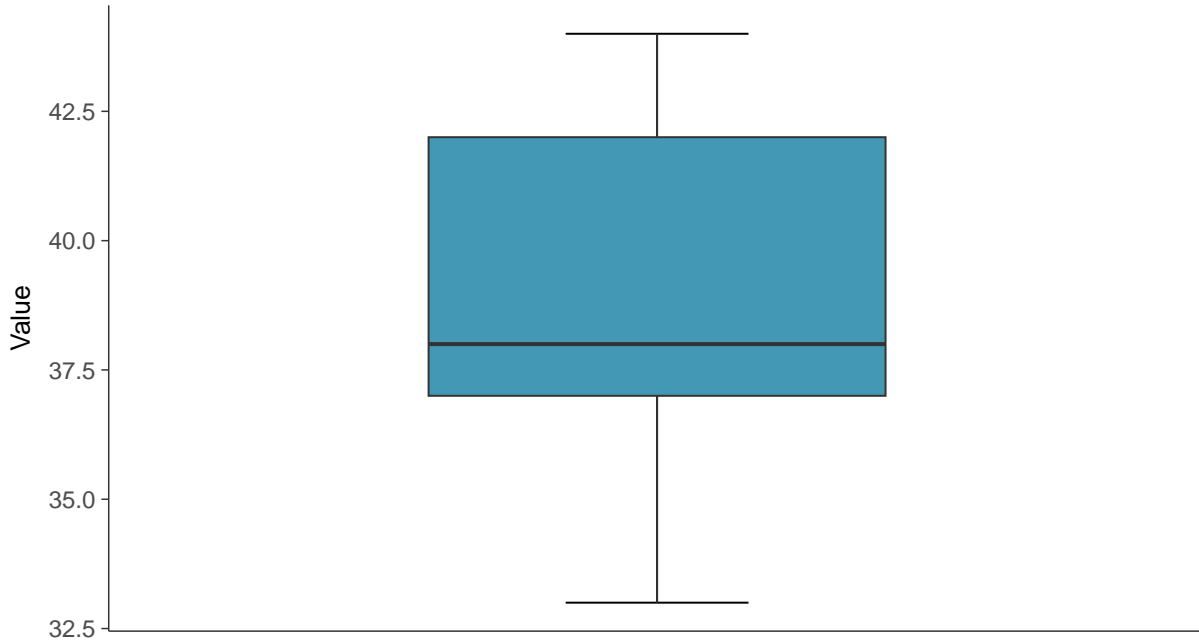
ID: 1_30_1_3_127





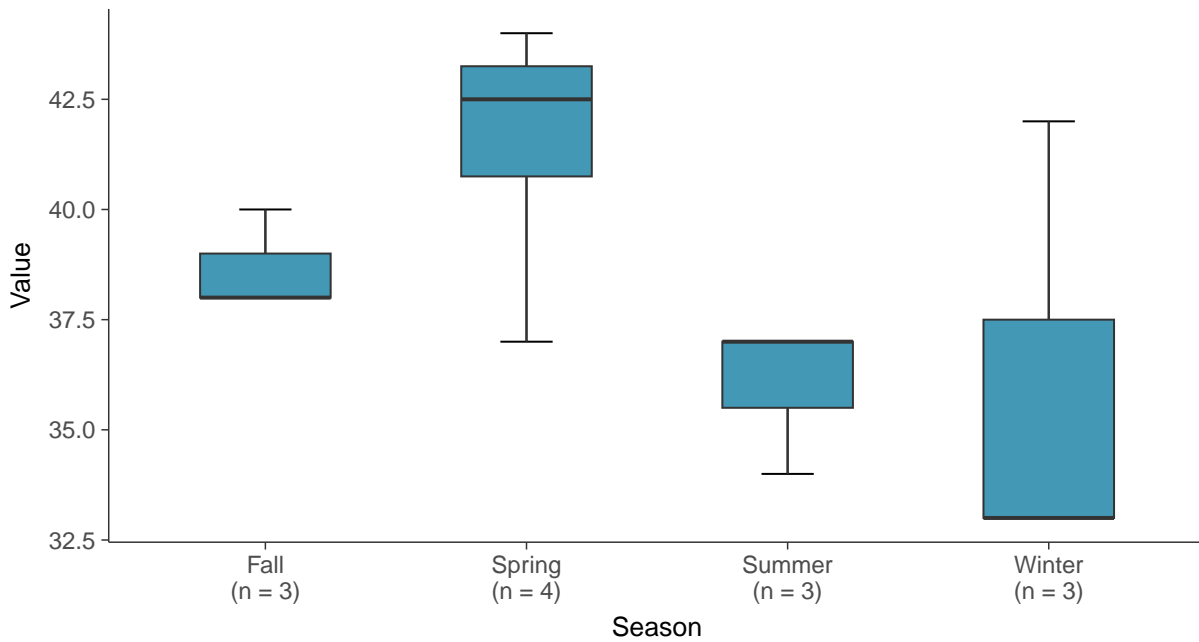
Boxplot

Total Suspended Solids, MW-20 (mg/L)



Boxplot by Season

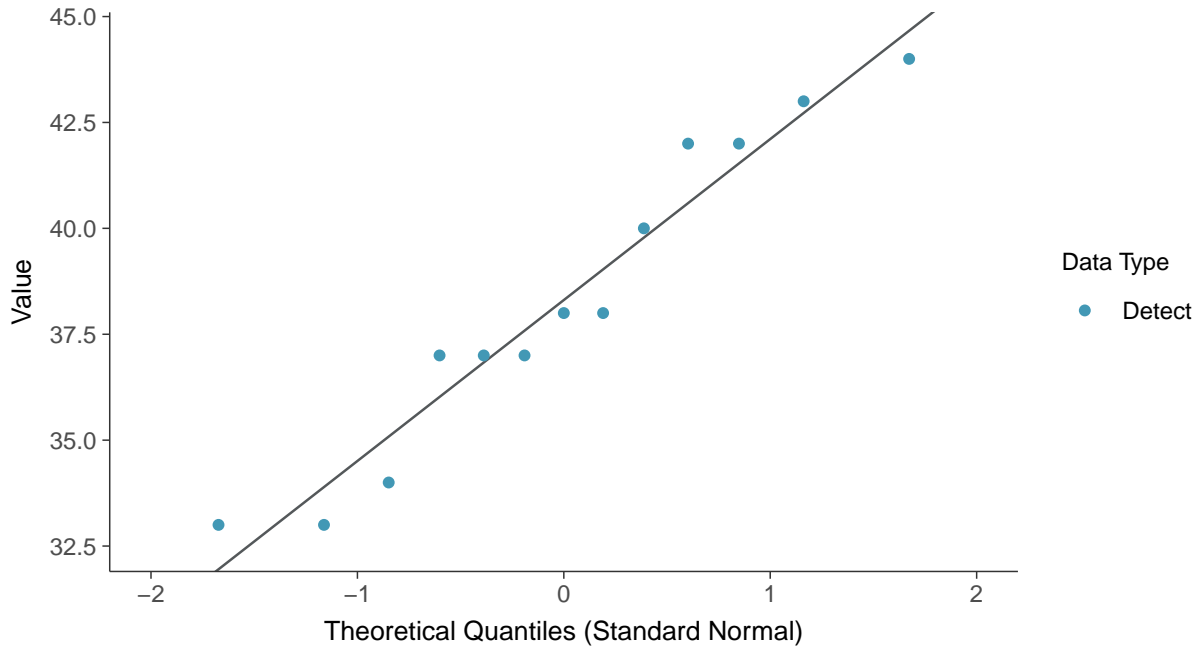
Total Suspended Solids, MW-20 (mg/L)





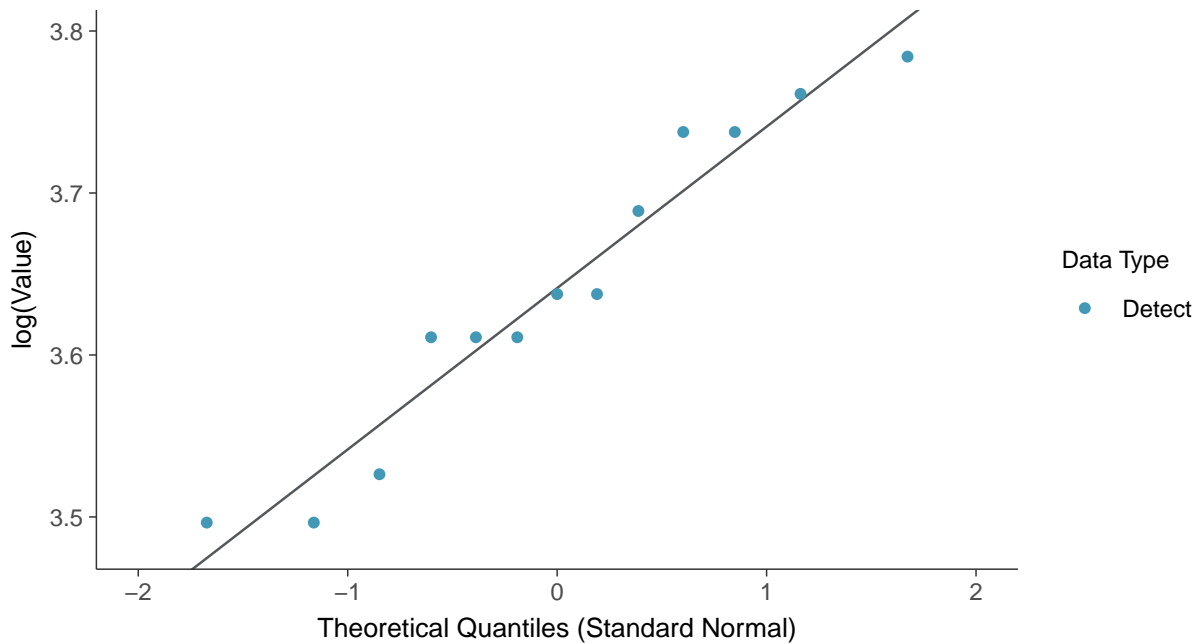
Normal Q-Q plot

Total Suspended Solids, MW-20 (mg/L)



Lognormal Q-Q plot

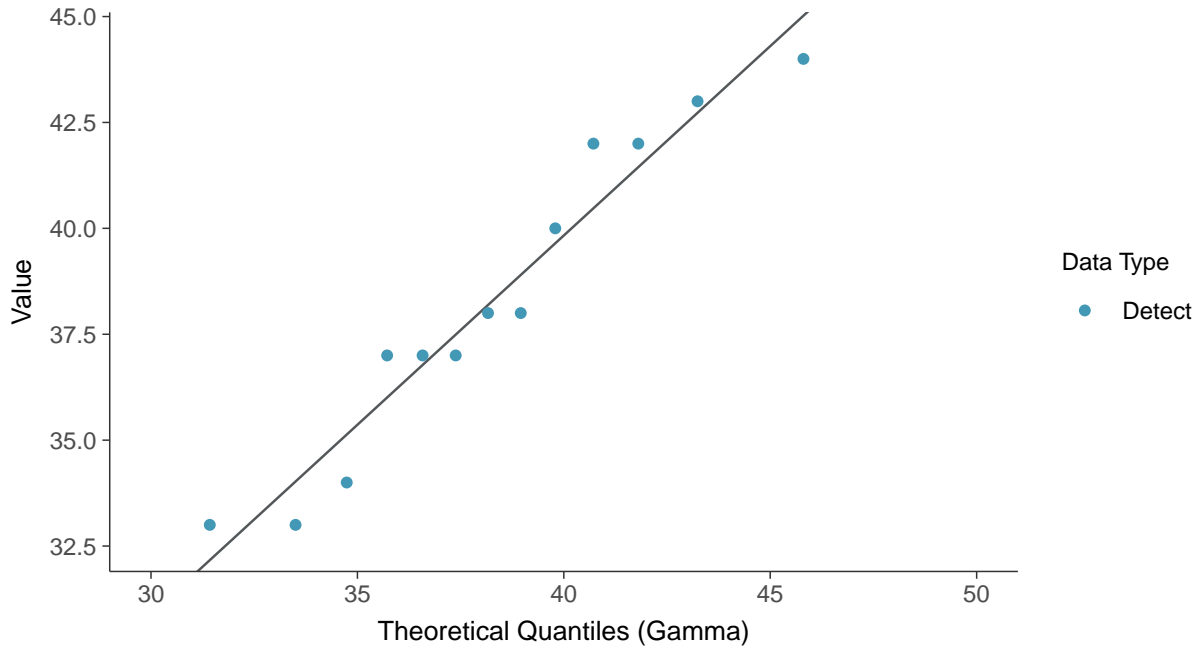
Total Suspended Solids, MW-20 (mg/L)





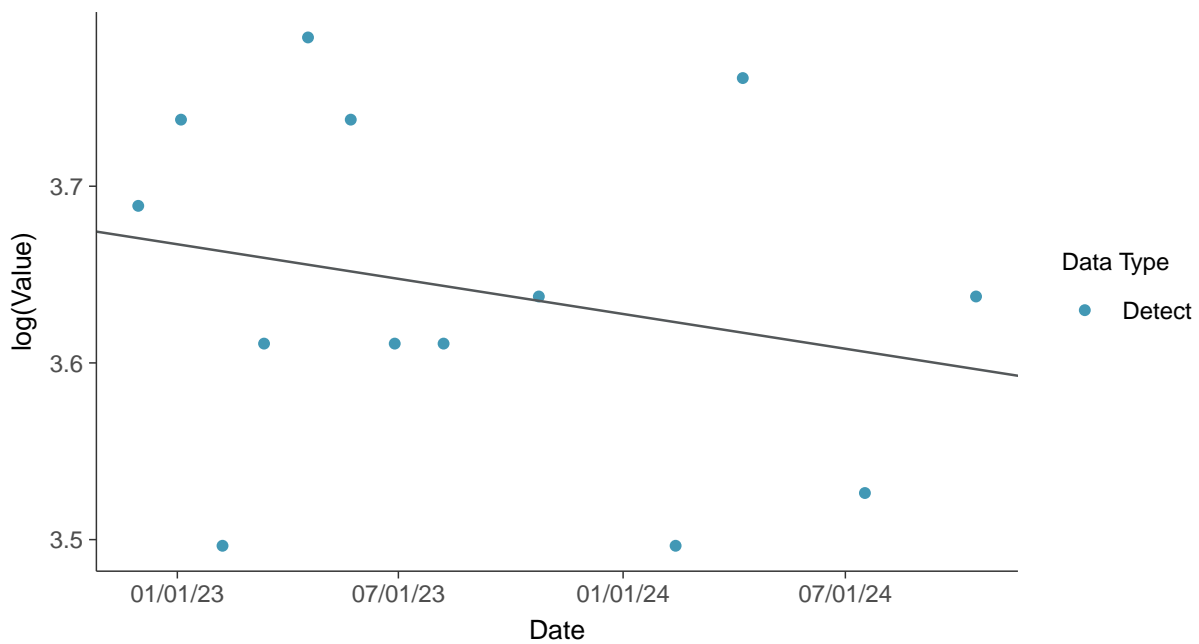
Gamma Q-Q plot

Total Suspended Solids, MW-20 (mg/L)



Trend Regression: Lognormal MLE

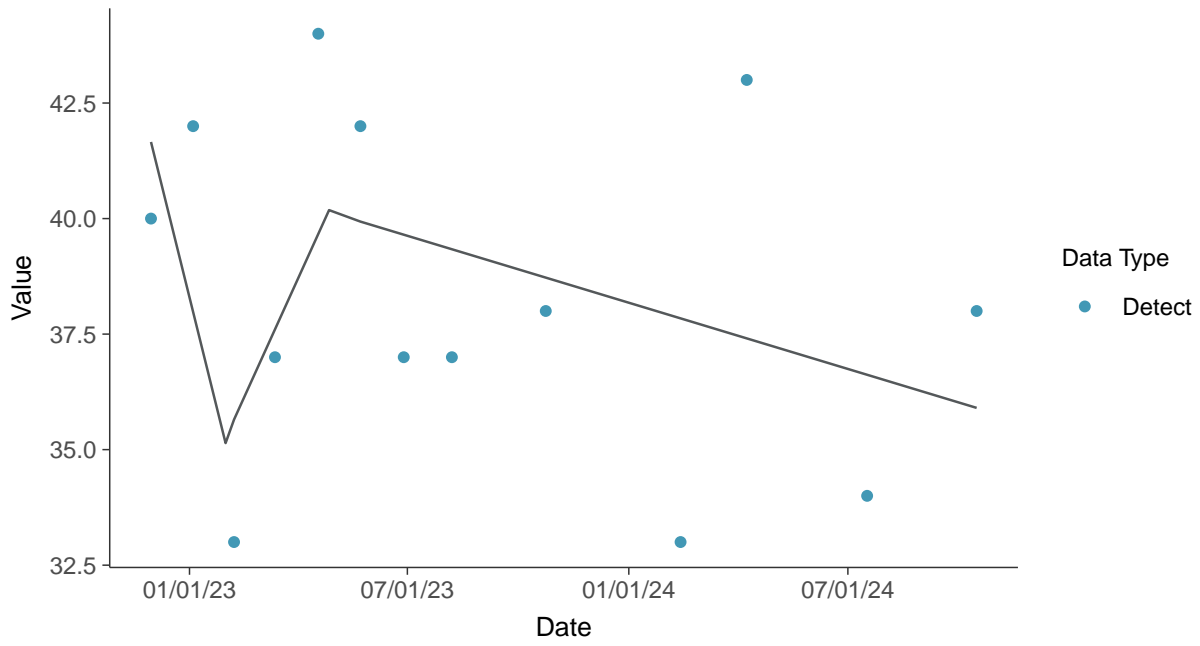
Total Suspended Solids, MW-20 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

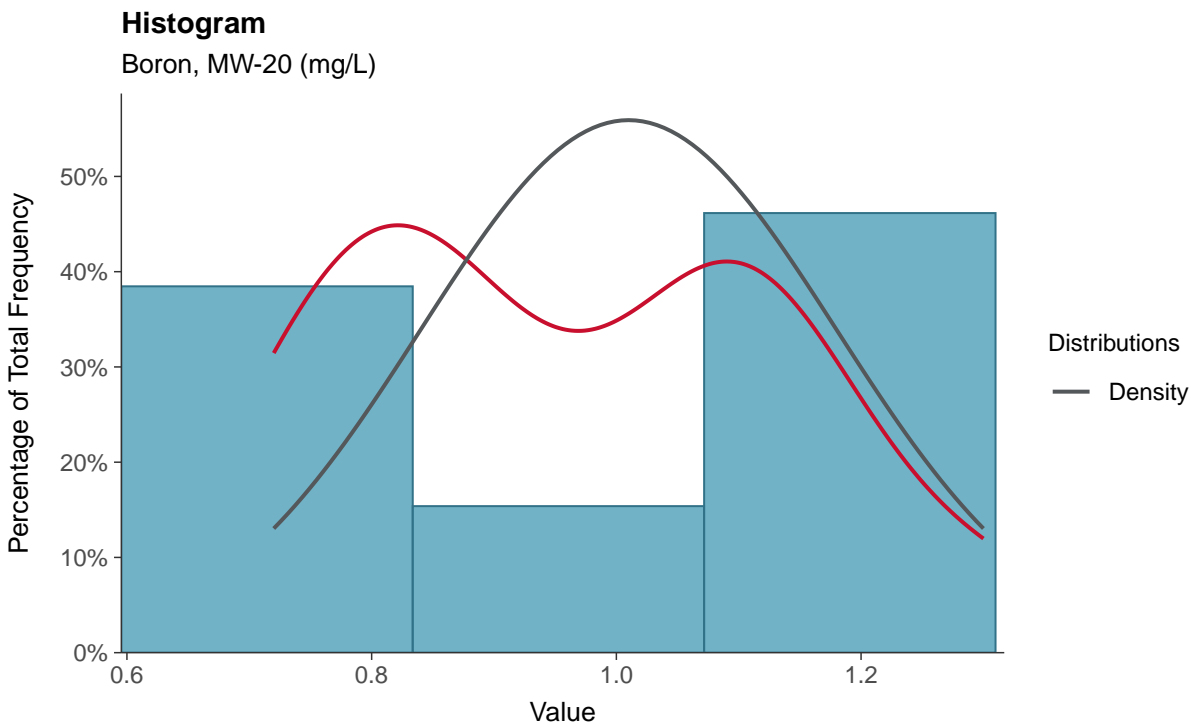
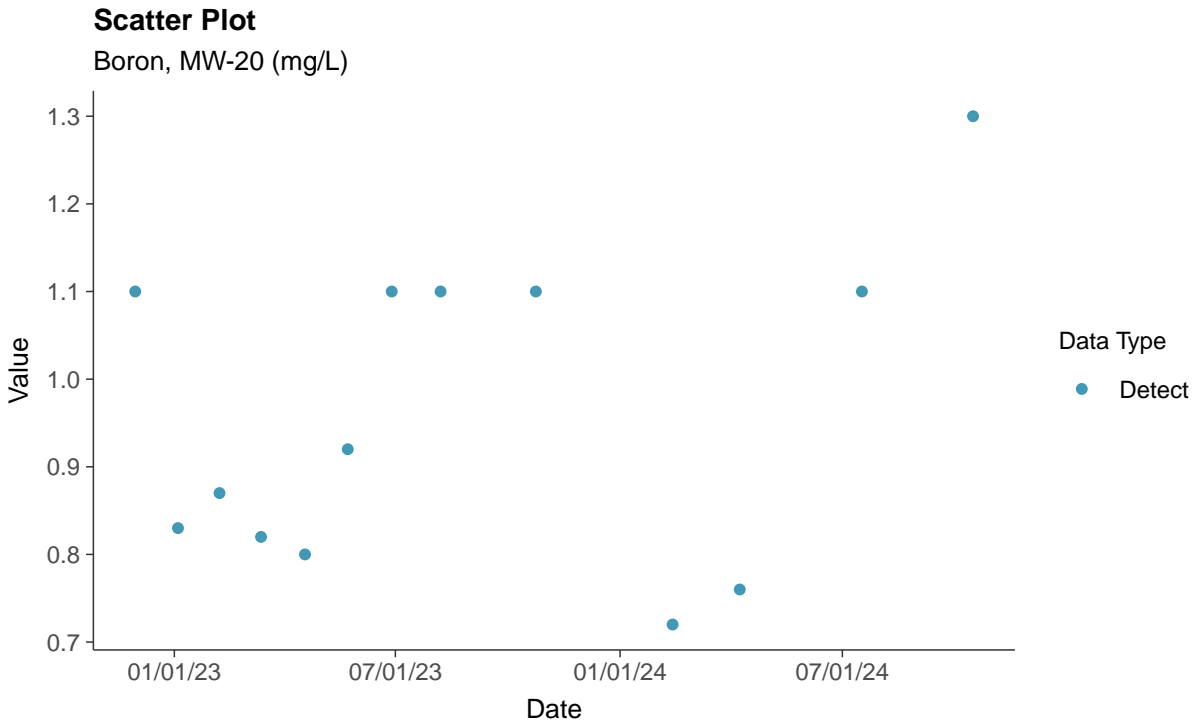
Total Suspended Solids, MW-20 (mg/L)





Appendix III: Boron, MW-20

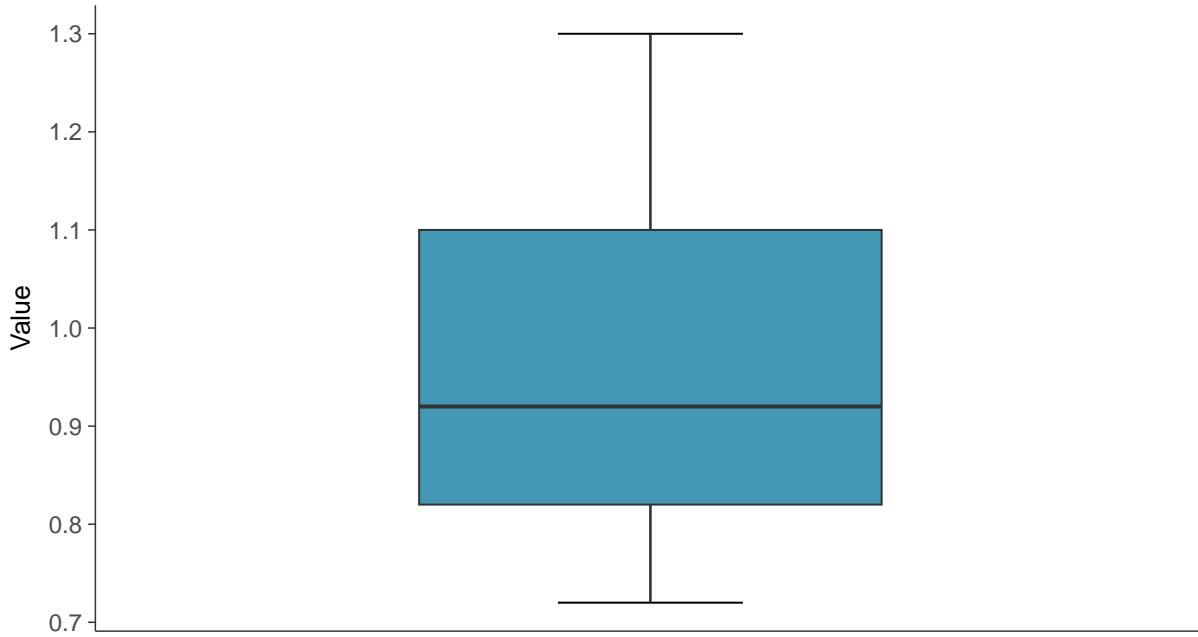
ID: 1_30_1_4_105





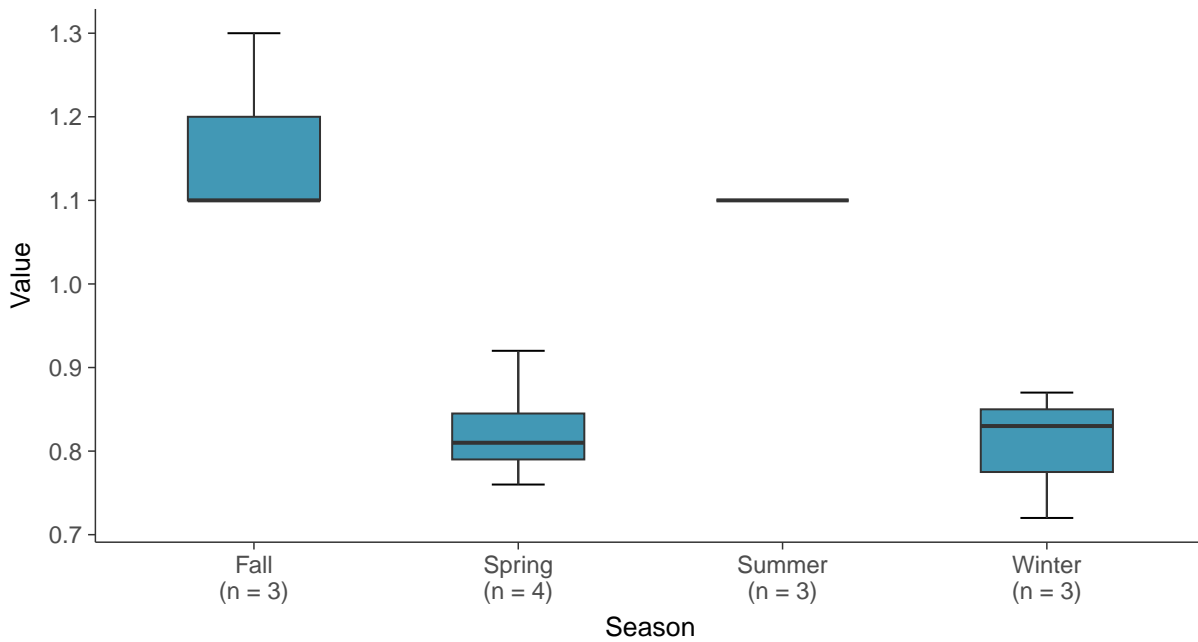
Boxplot

Boron, MW-20 (mg/L)



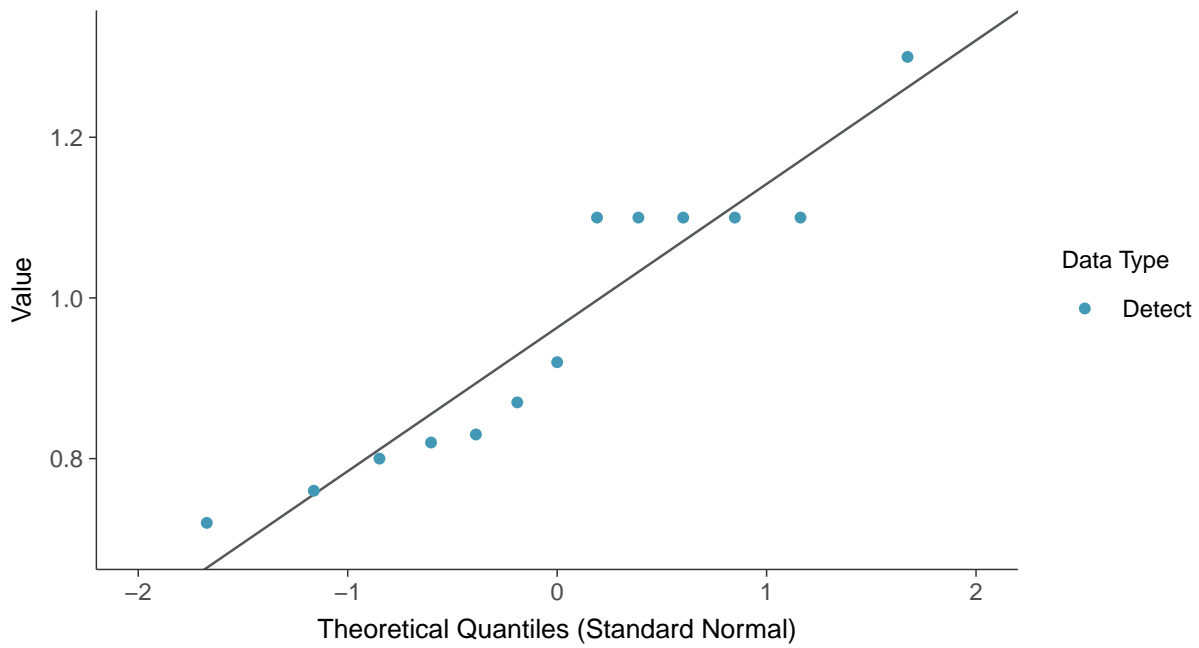
Boxplot by Season

Boron, MW-20 (mg/L)

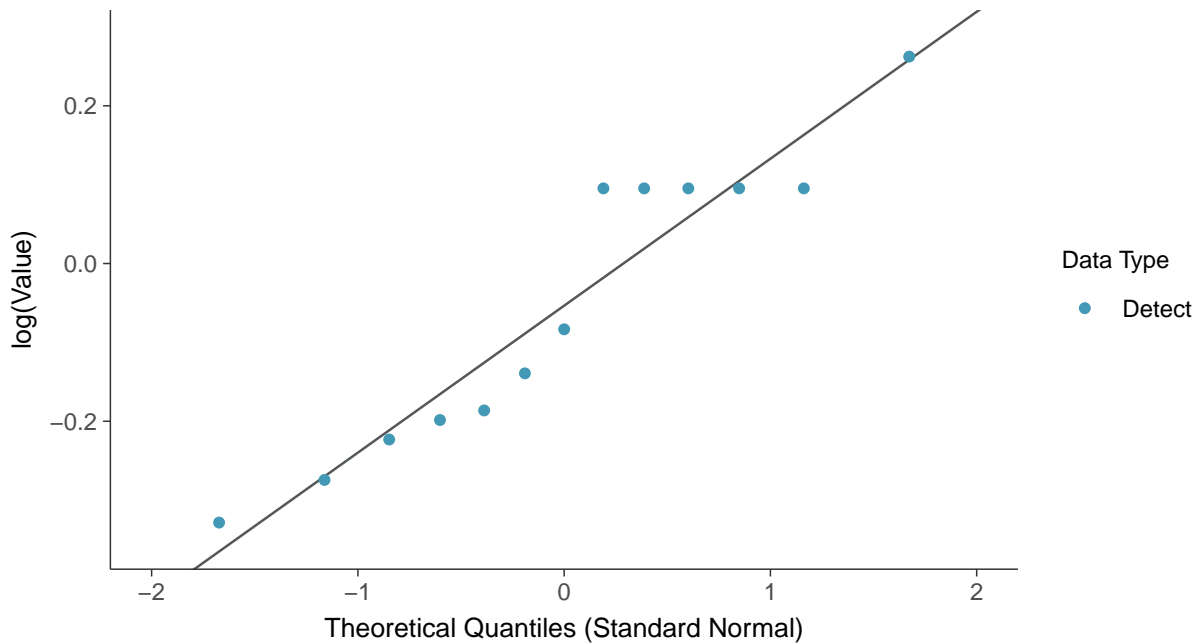




Normal Q-Q plot
Boron, MW-20 (mg/L)

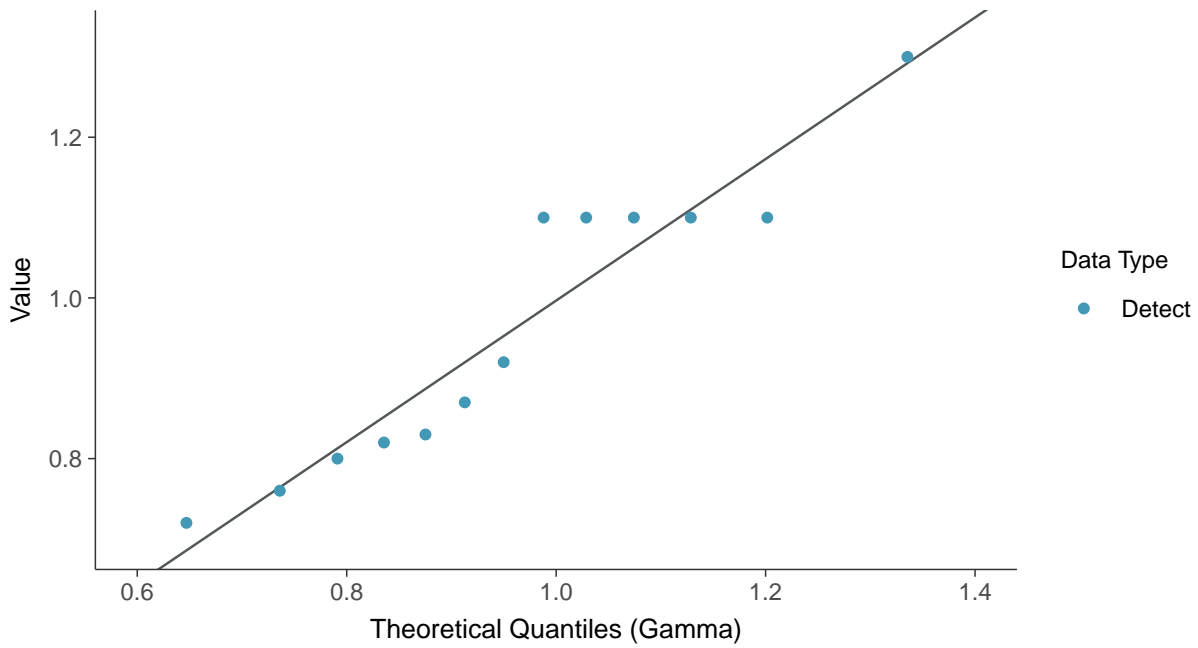


Lognormal Q-Q plot
Boron, MW-20 (mg/L)

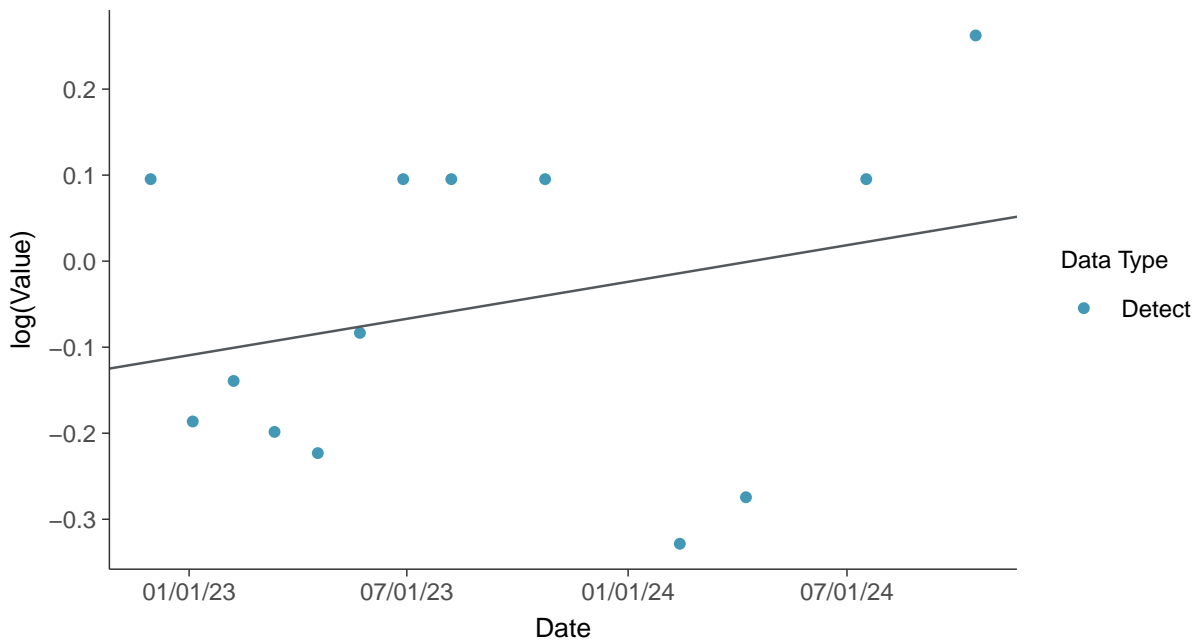




Gamma Q-Q plot
Boron, MW-20 (mg/L)



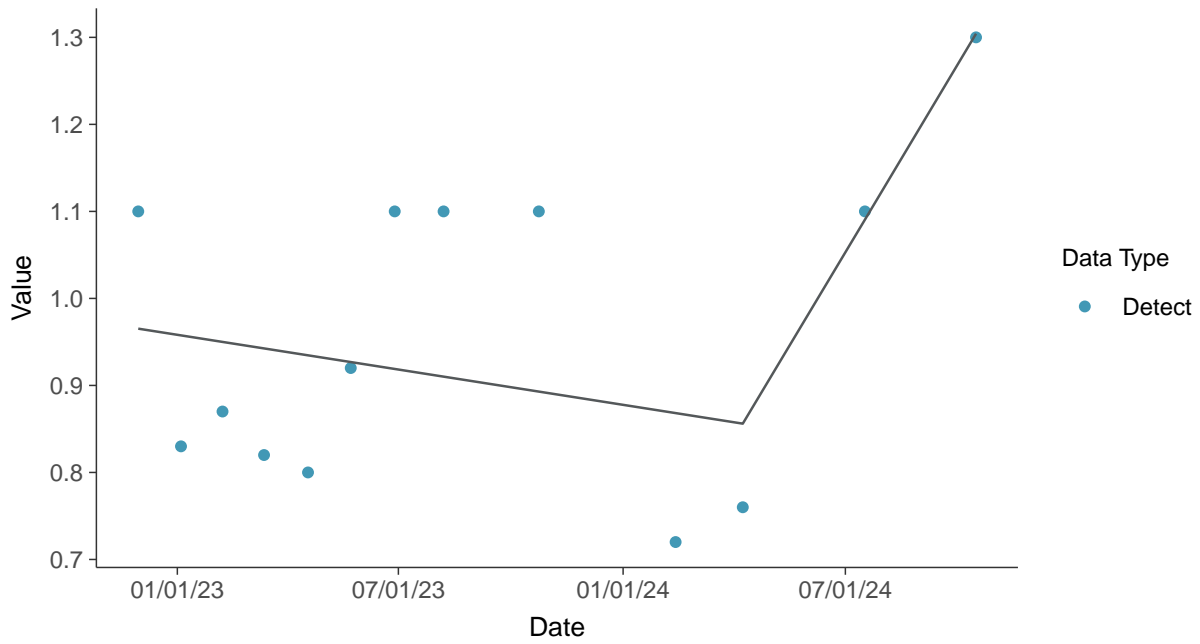
Trend Regression: Lognormal MLE
Boron, MW-20 (mg/L)





Trend Regression: Piecewise Linear-Linear

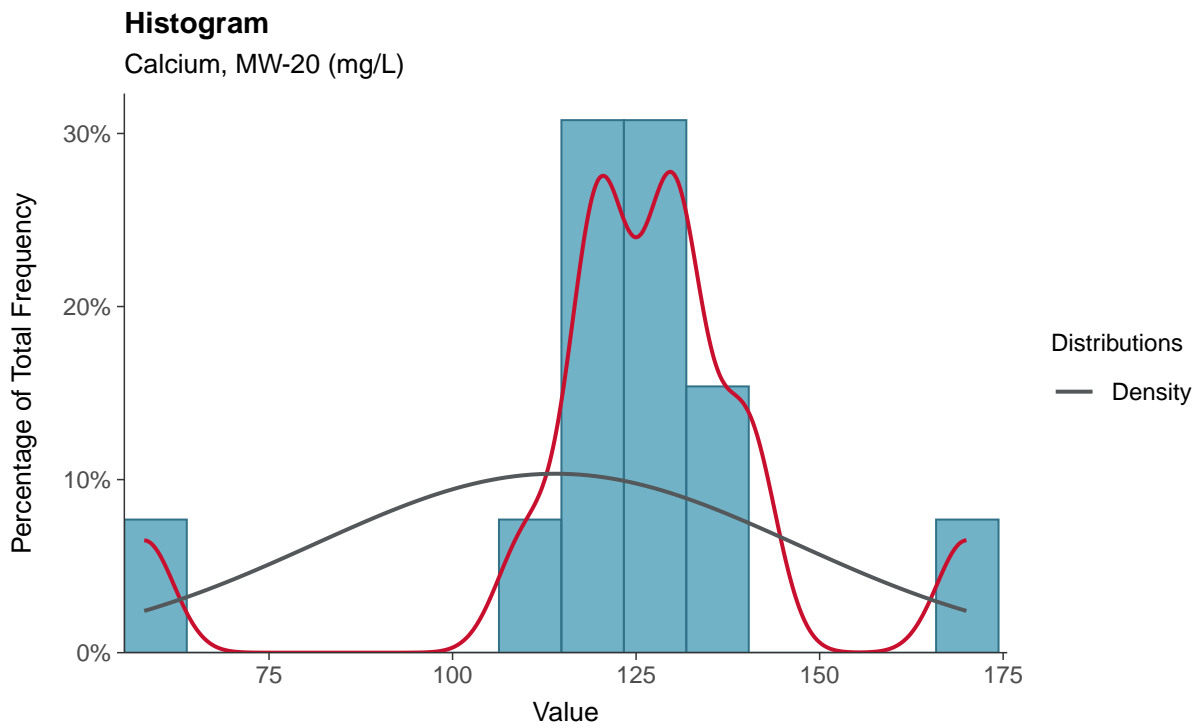
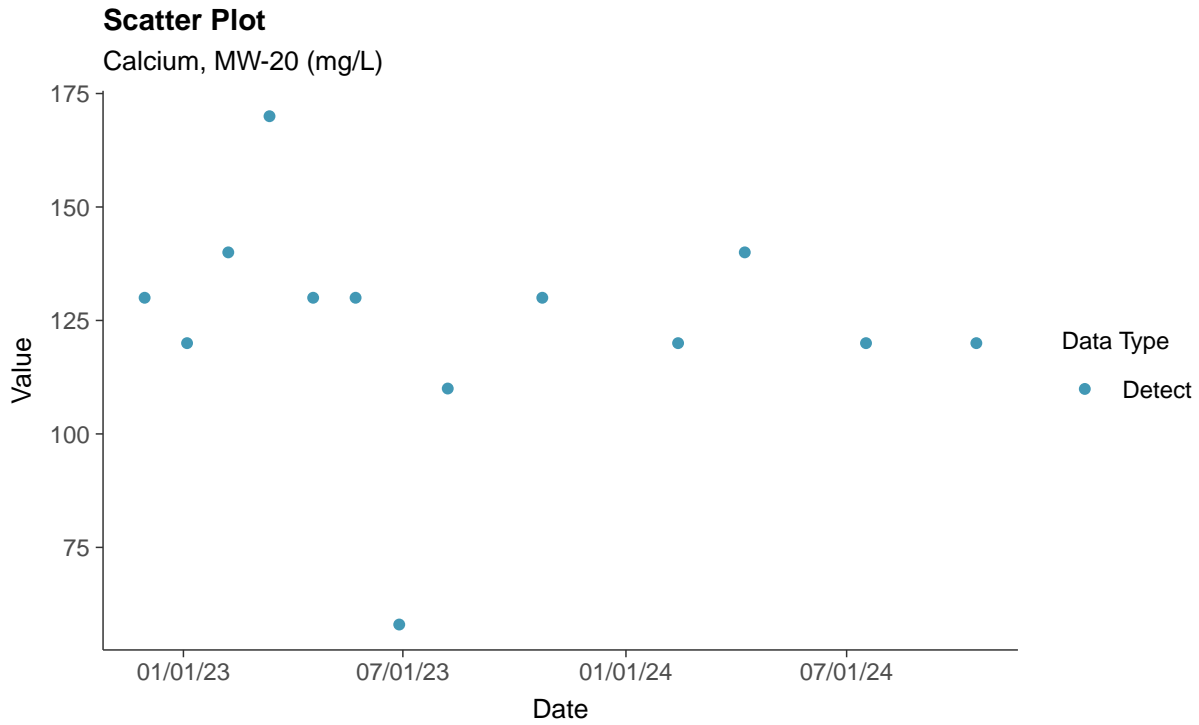
Boron, MW-20 (mg/L)





Appendix III: Calcium, MW-20

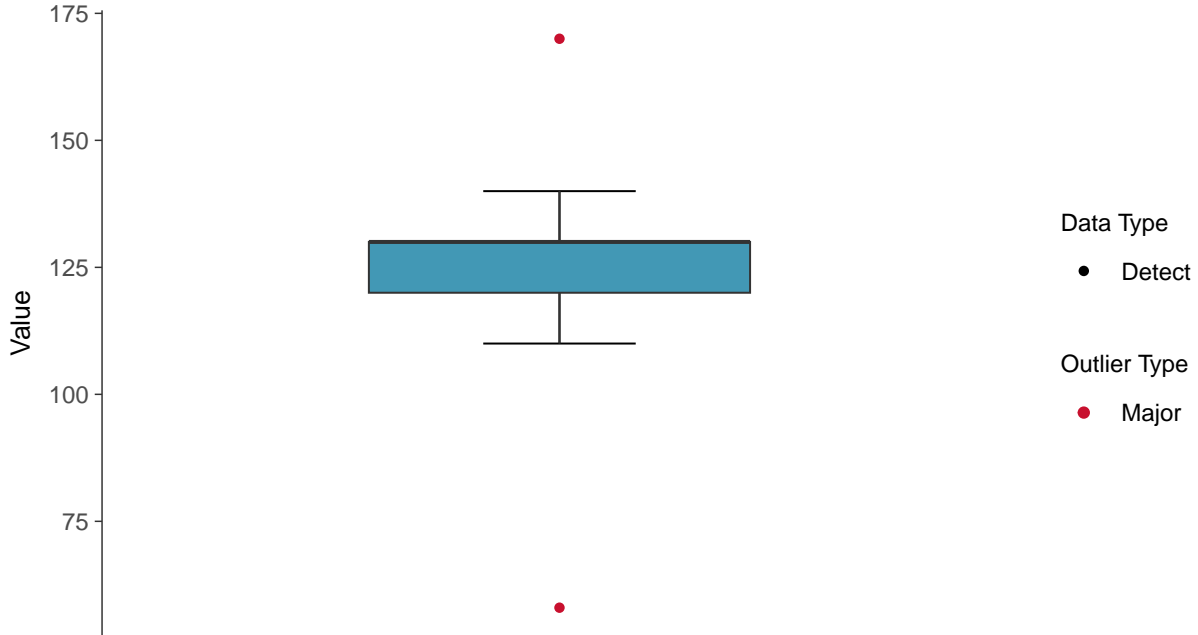
ID: 1_30_1_4_107





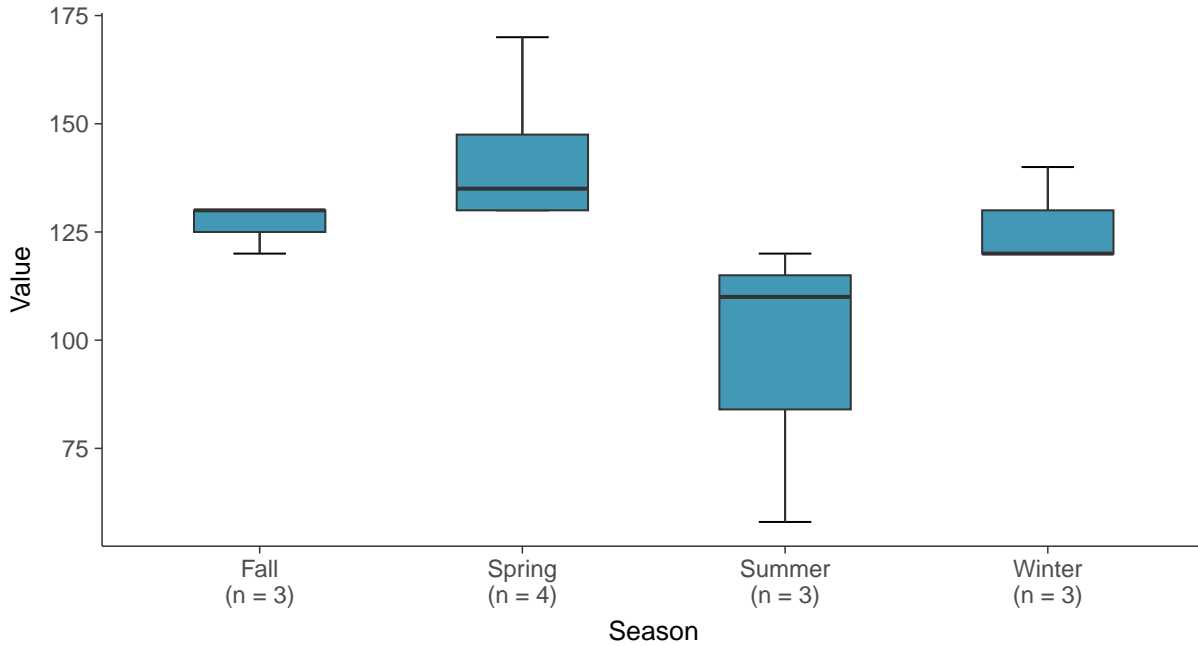
Boxplot

Calcium, MW-20 (mg/L)



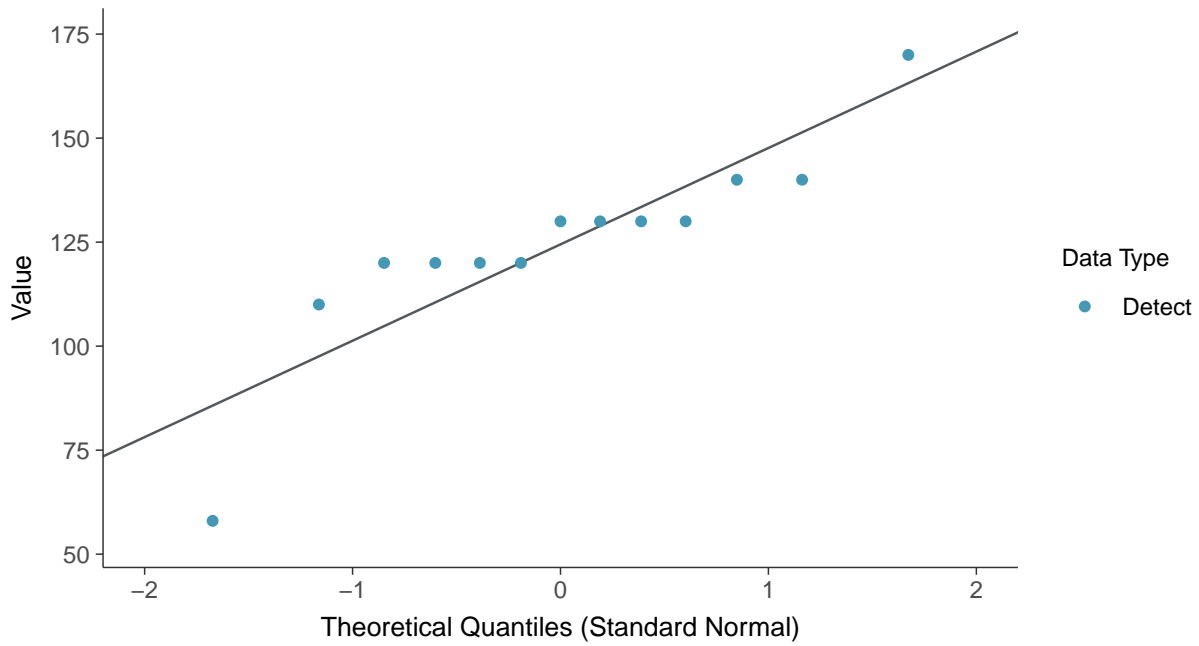
Boxplot by Season

Calcium, MW-20 (mg/L)

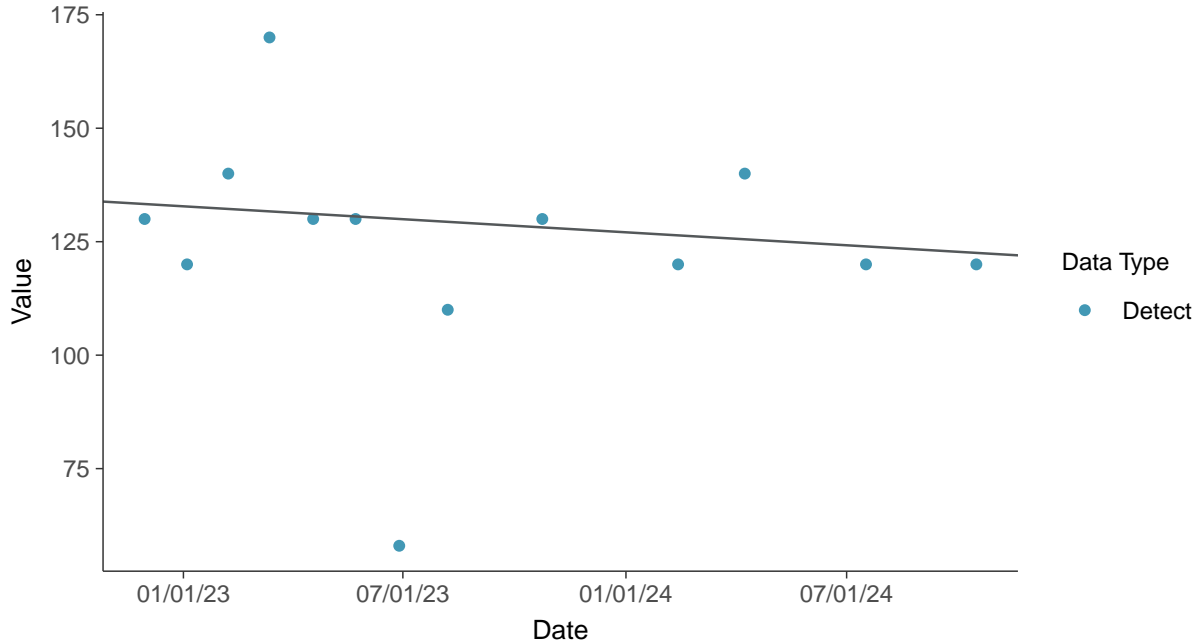




Normal Q-Q plot
Calcium, MW-20 (mg/L)



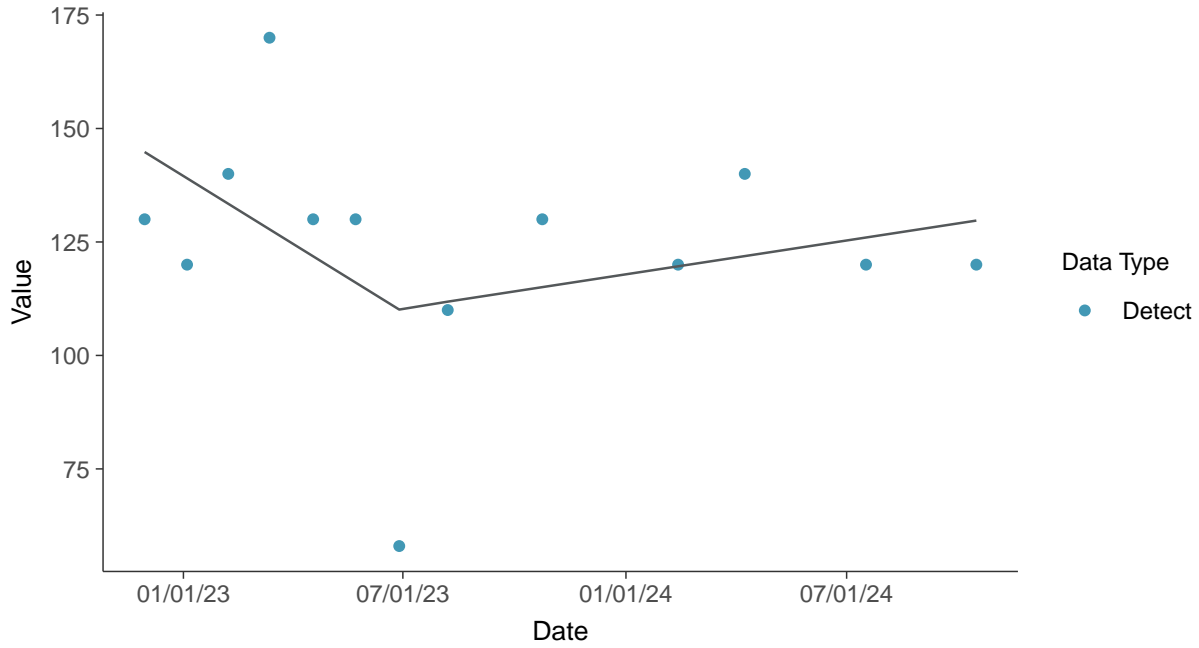
Trend Regression: Mann-Kendall/Theil-Sen Estimate
Calcium, MW-20 (mg/L)





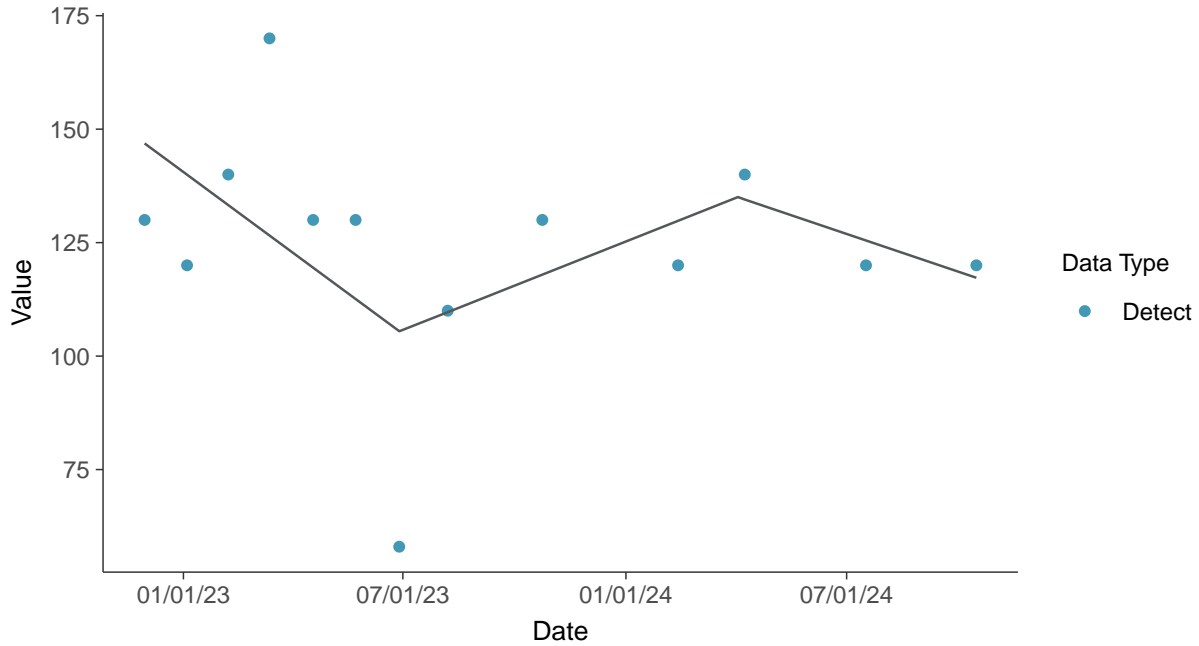
Trend Regression: Piecewise Linear-Linear

Calcium, MW-20 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Calcium, MW-20 (mg/L)



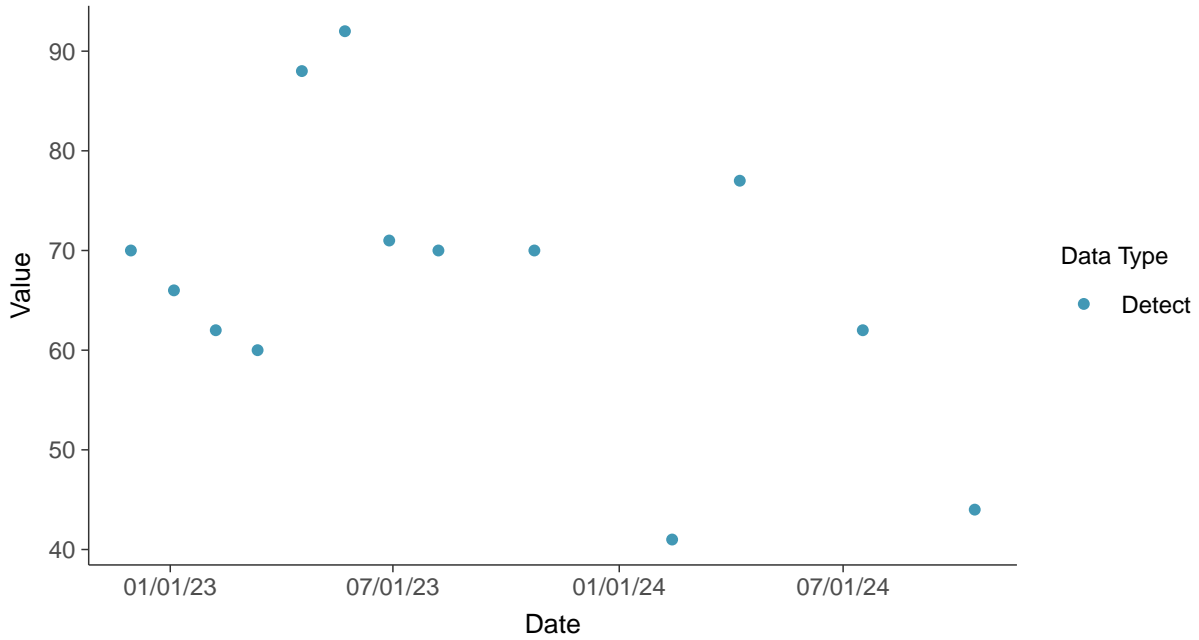


Appendix III: Chloride (as Cl), MW-20

ID: 1_30_1_4_108

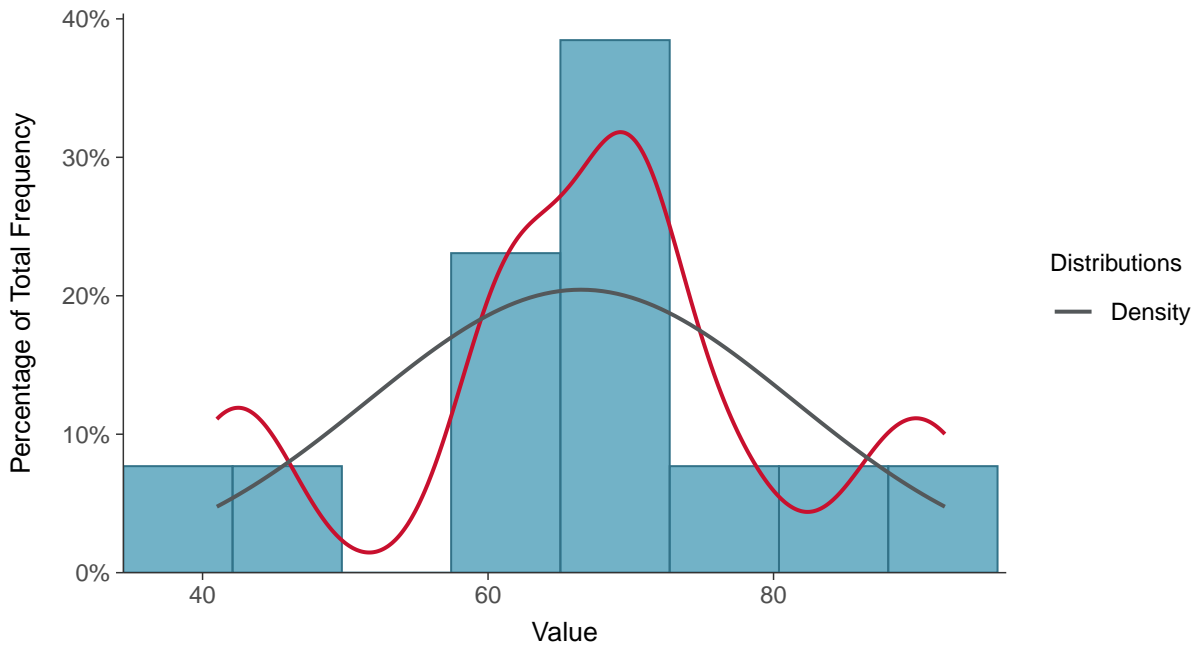
Scatter Plot

Chloride (as Cl), MW-20 (mg/L)



Histogram

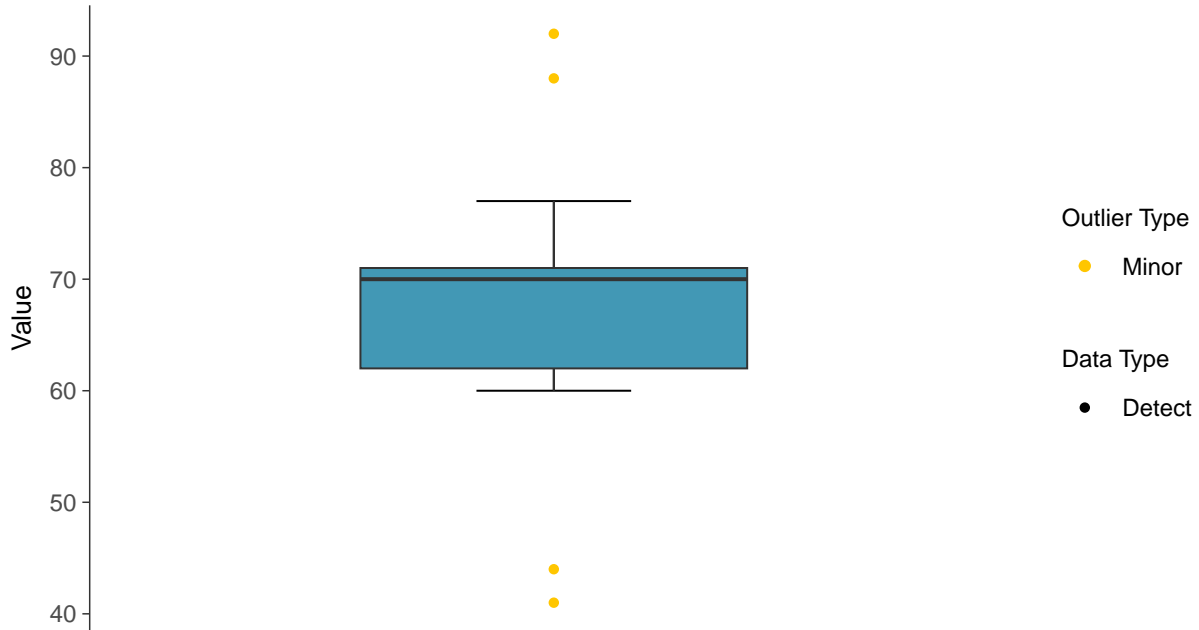
Chloride (as Cl), MW-20 (mg/L)





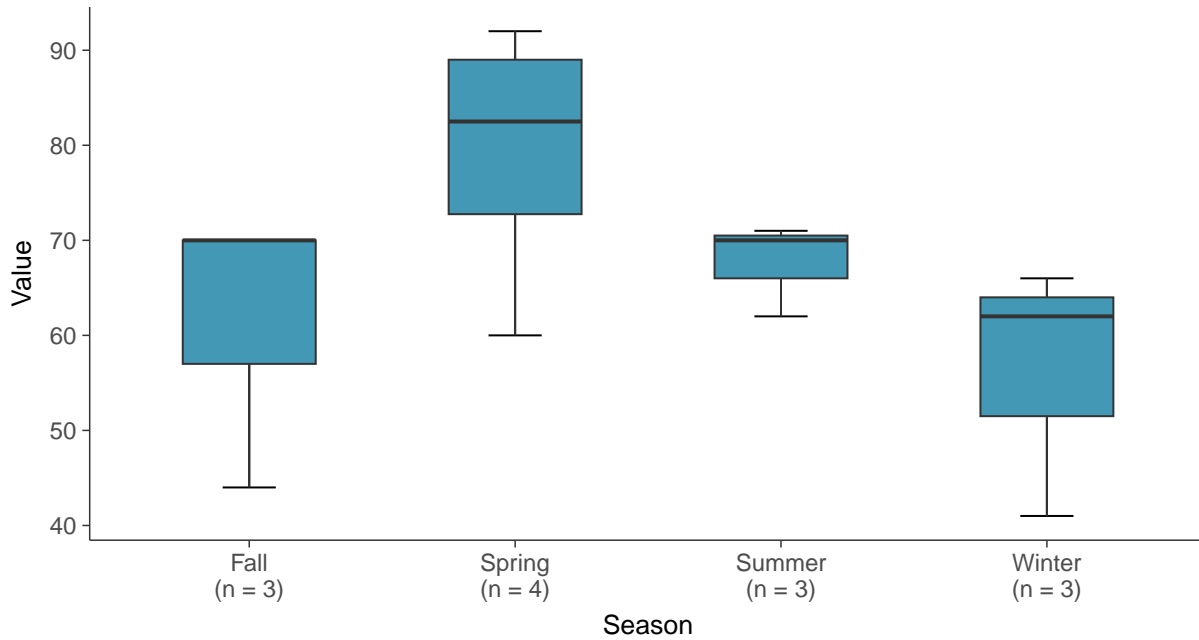
Boxplot

Chloride (as Cl), MW-20 (mg/L)



Boxplot by Season

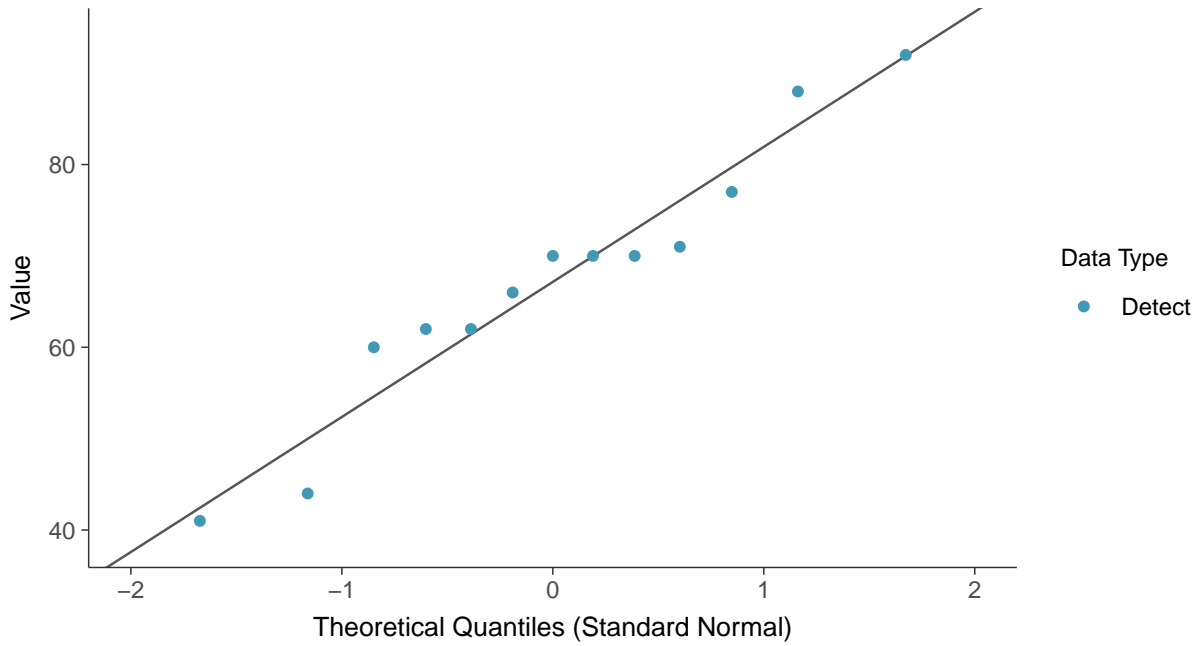
Chloride (as Cl), MW-20 (mg/L)





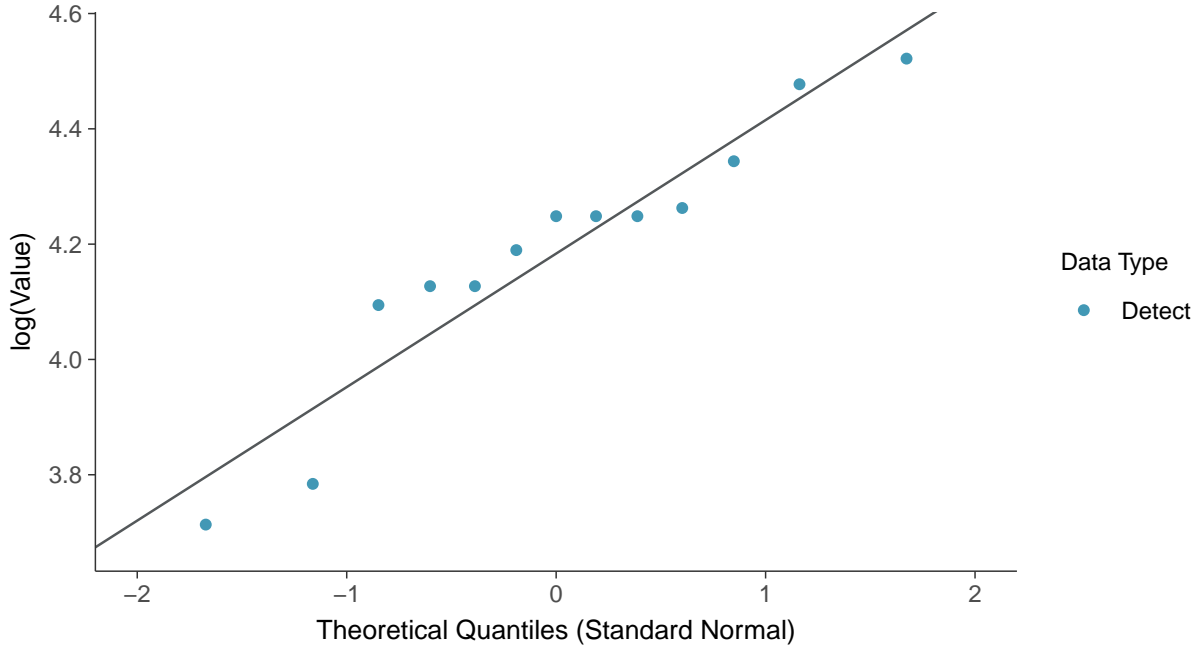
Normal Q-Q plot

Chloride (as Cl), MW-20 (mg/L)



Lognormal Q-Q plot

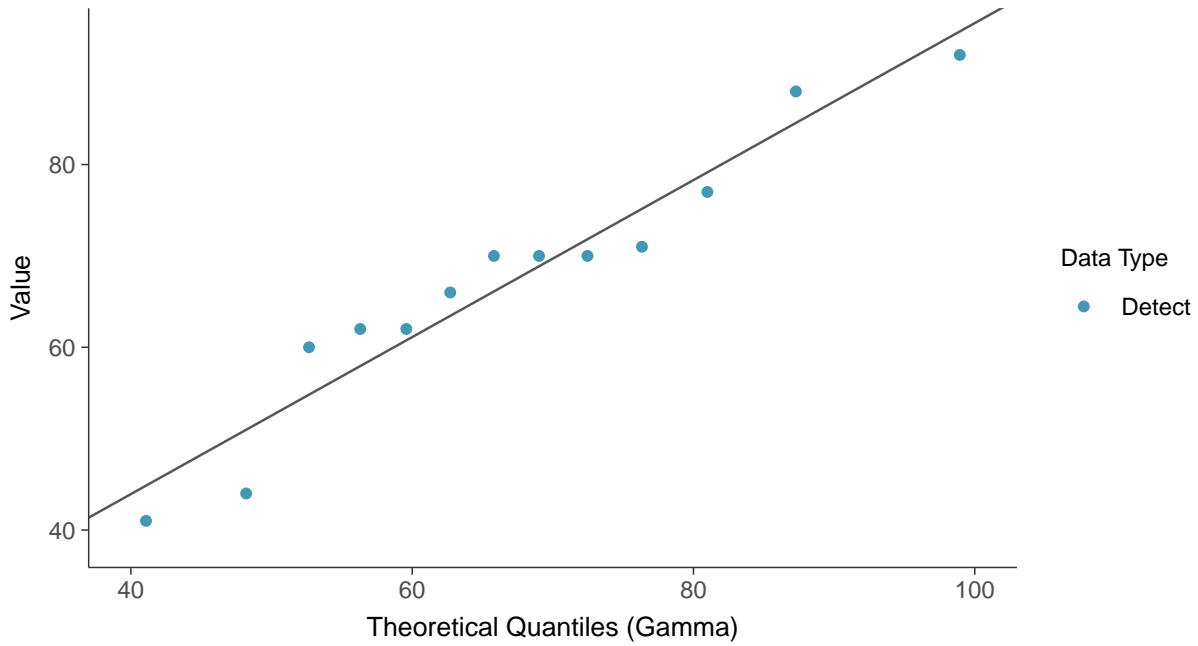
Chloride (as Cl), MW-20 (mg/L)





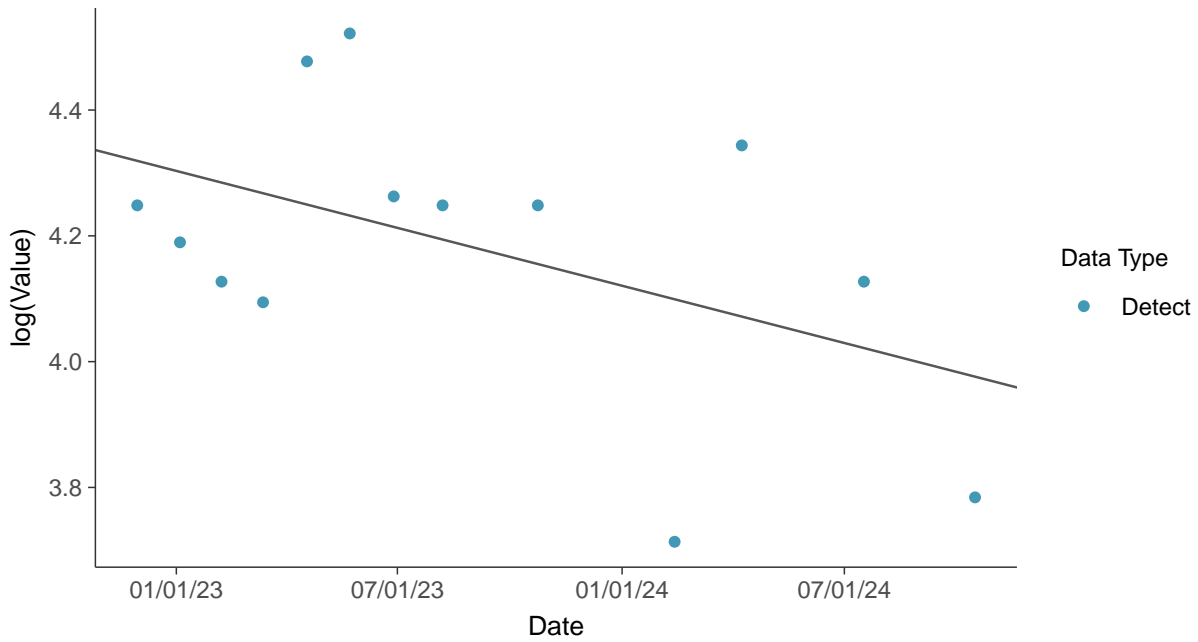
Gamma Q-Q plot

Chloride (as Cl), MW-20 (mg/L)



Trend Regression: Lognormal MLE

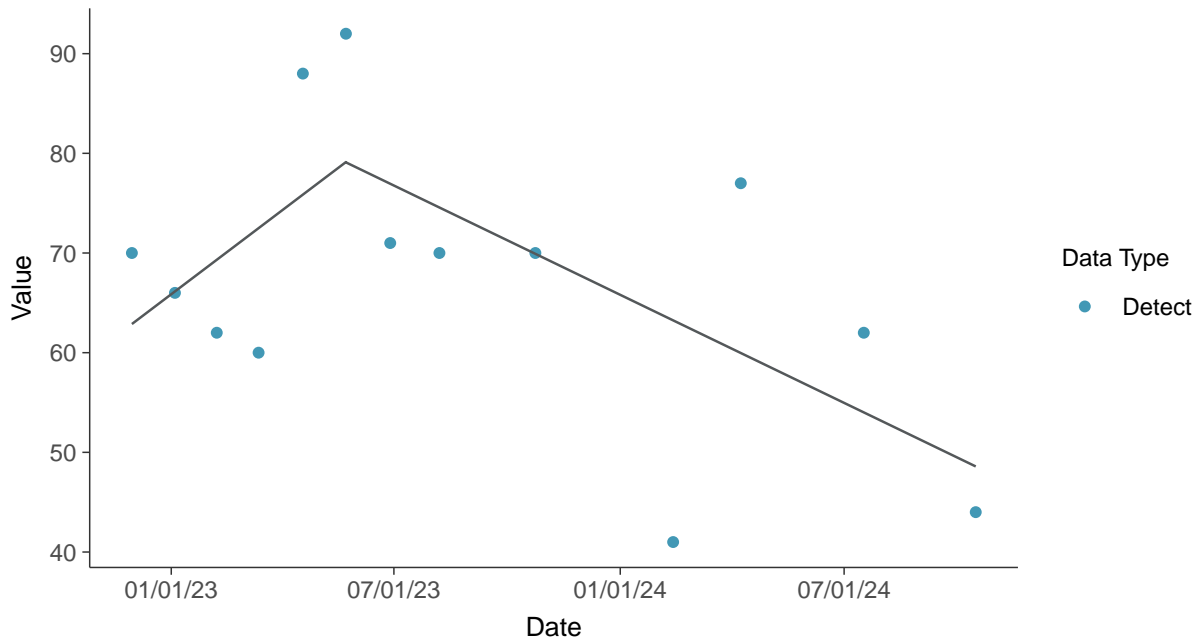
Chloride (as Cl), MW-20 (mg/L)





Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-20 (mg/L)



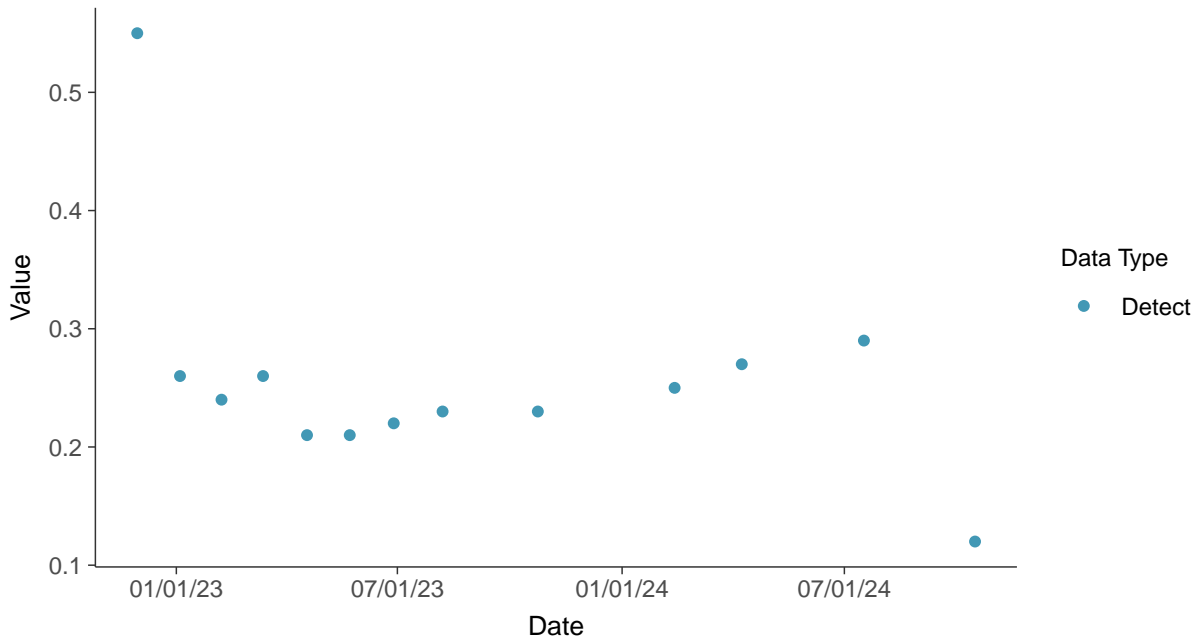


Appendix III: Fluoride, MW-20

ID: 1_30_1_4_112

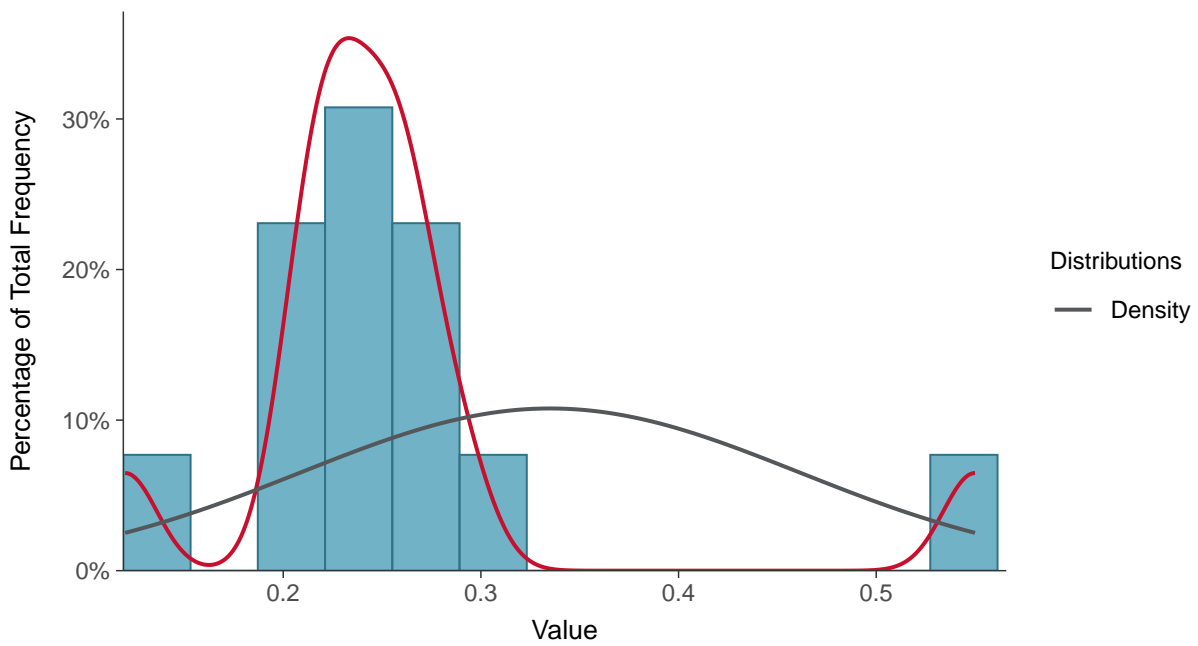
Scatter Plot

Fluoride, MW-20 (mg/L)



Histogram

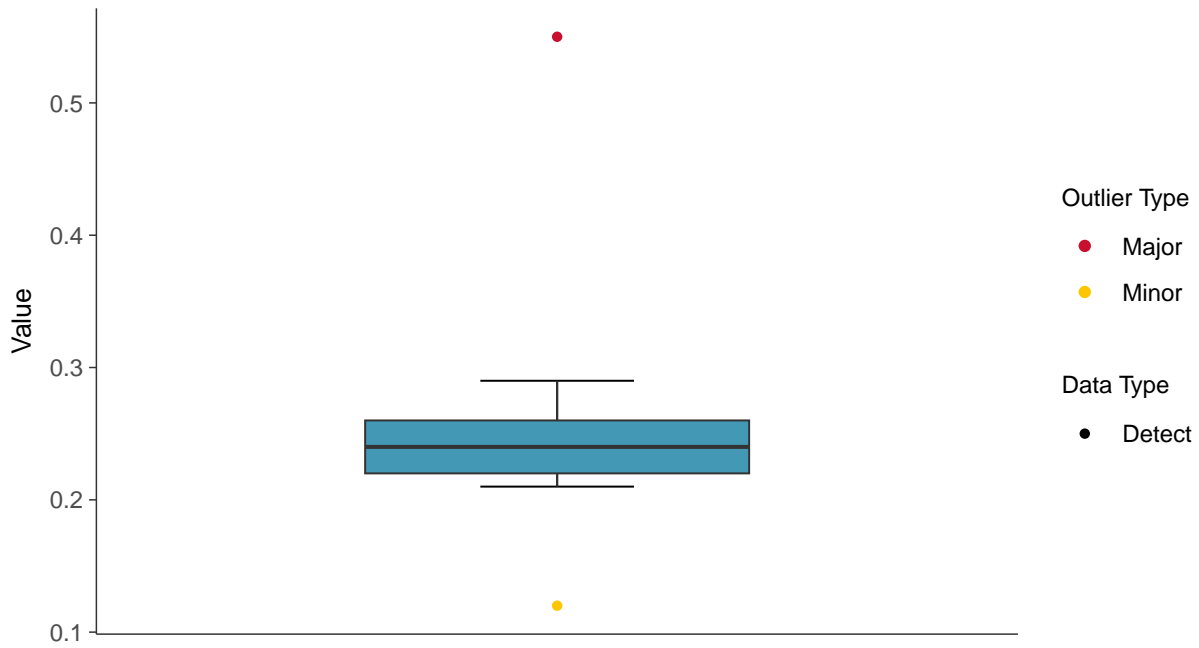
Fluoride, MW-20 (mg/L)





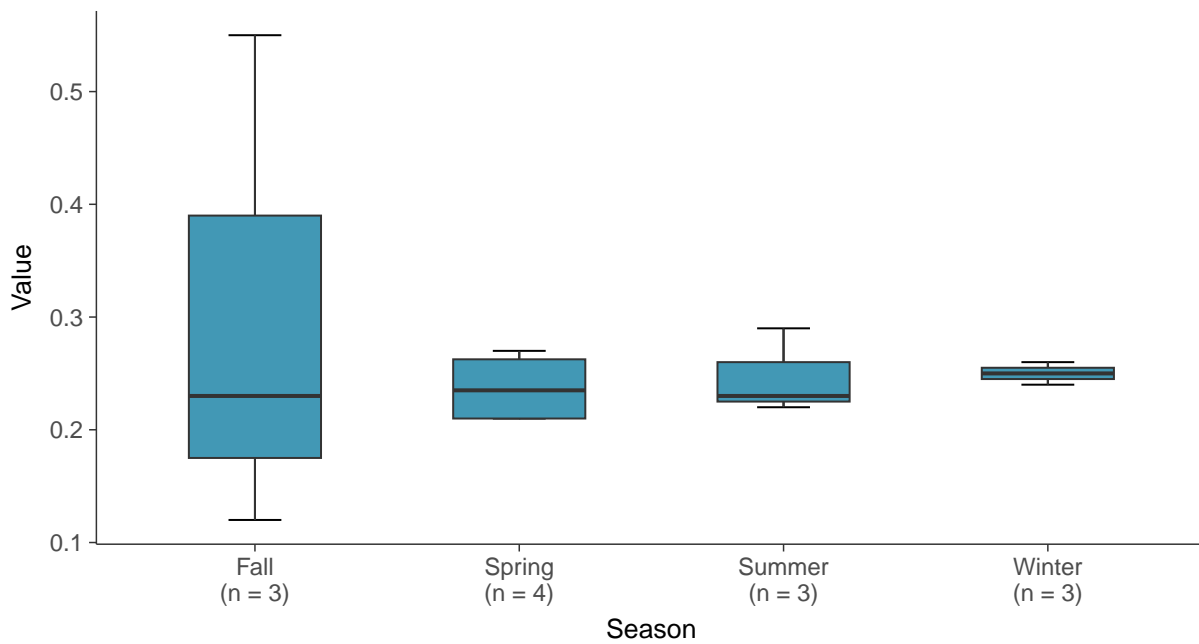
Boxplot

Fluoride, MW-20 (mg/L)



Boxplot by Season

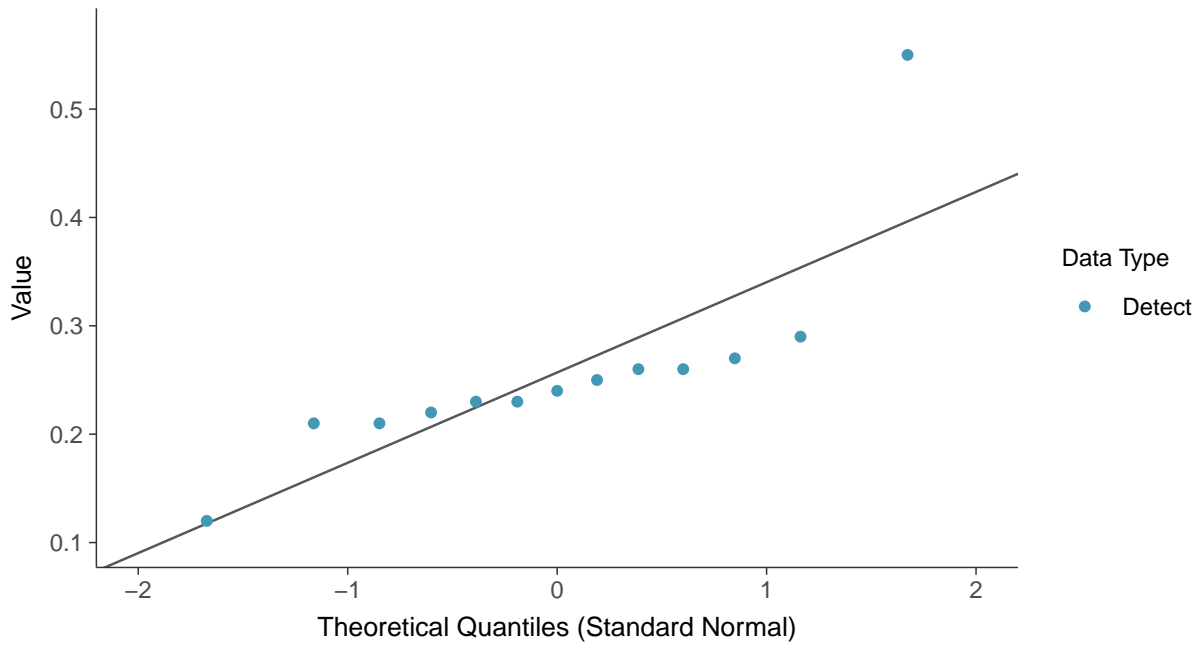
Fluoride, MW-20 (mg/L)





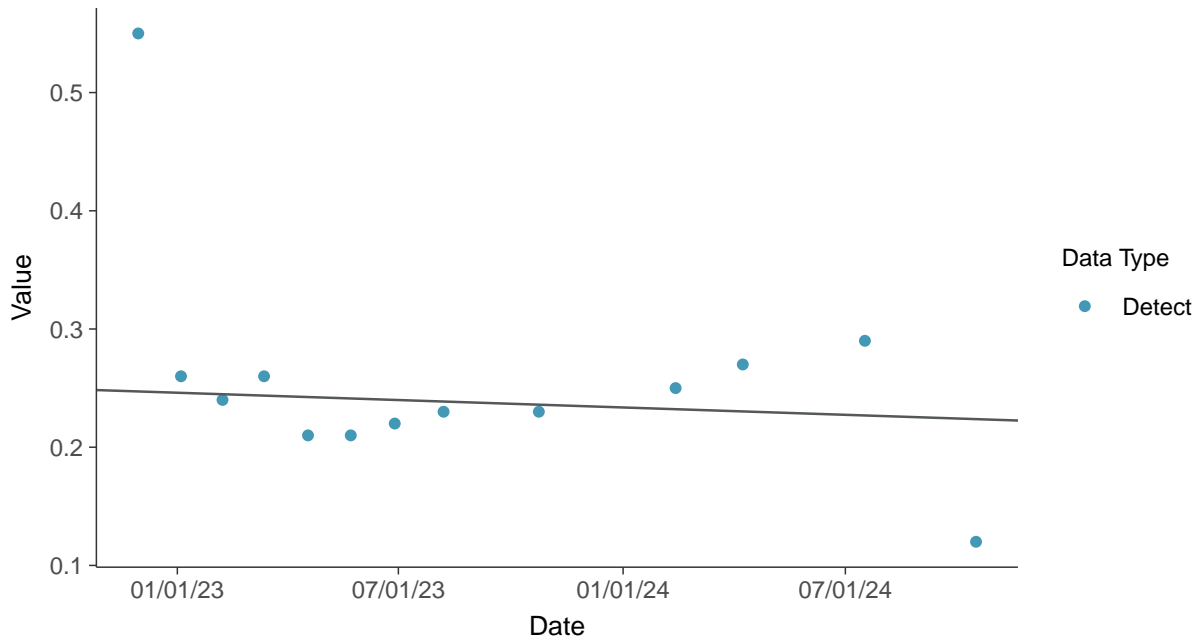
Normal Q-Q plot

Fluoride, MW-20 (mg/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

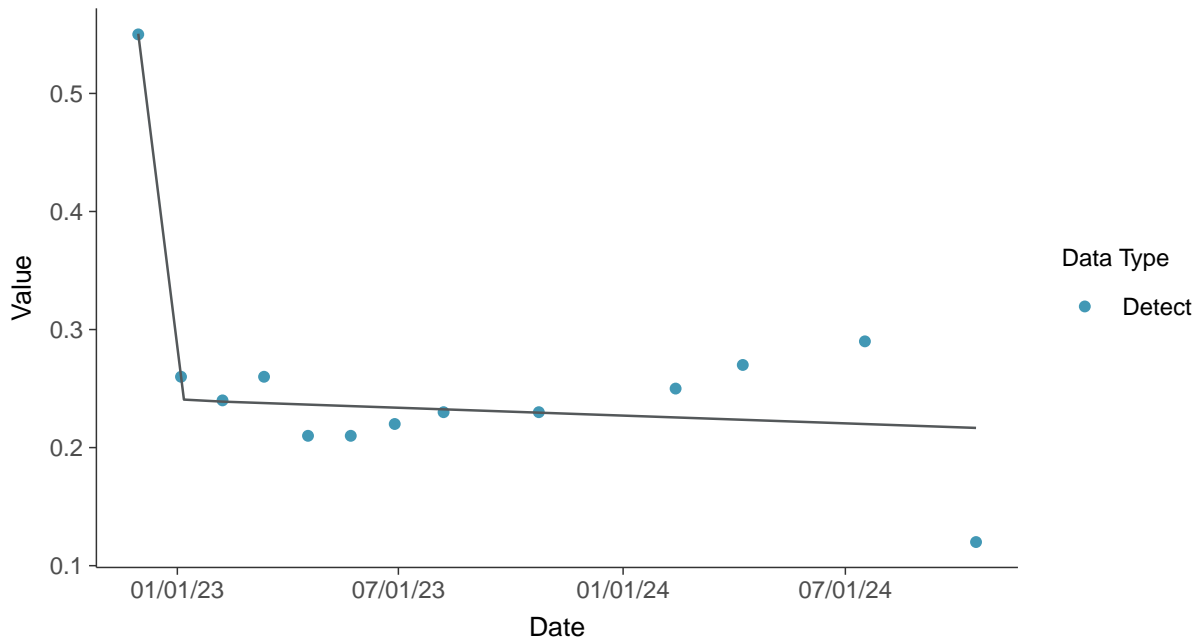
Fluoride, MW-20 (mg/L)





Trend Regression: Piecewise Linear-Linear

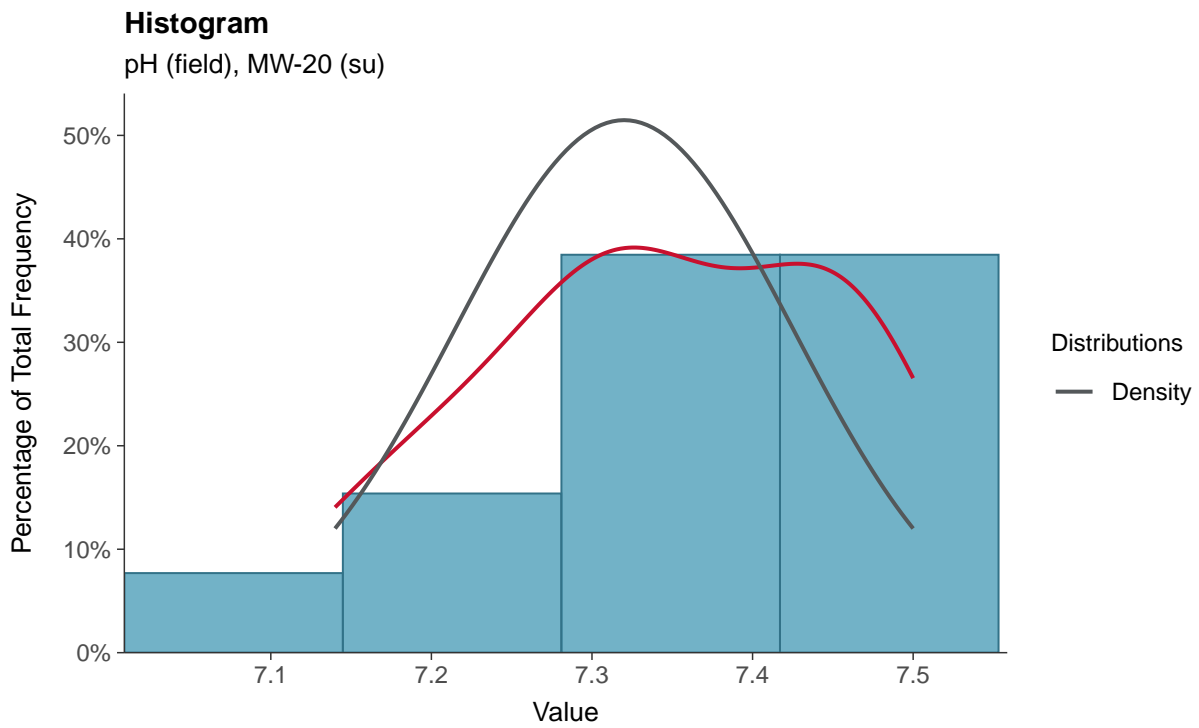
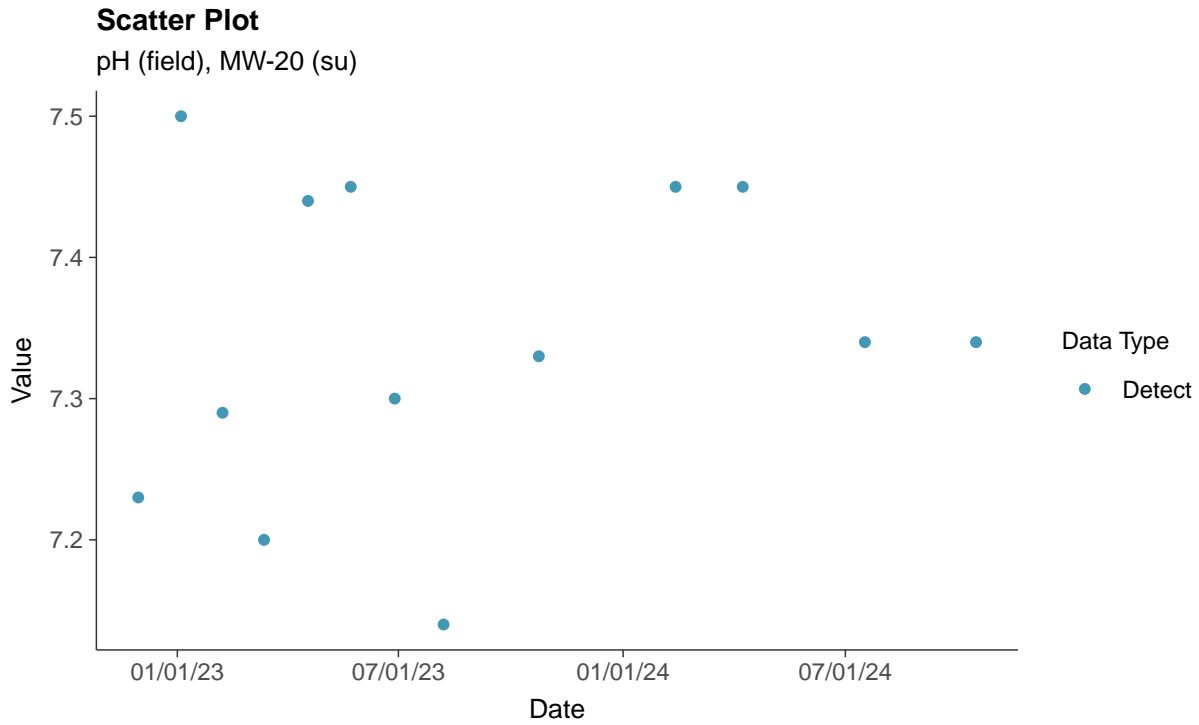
Fluoride, MW-20 (mg/L)





Appendix III: pH (field), MW-20

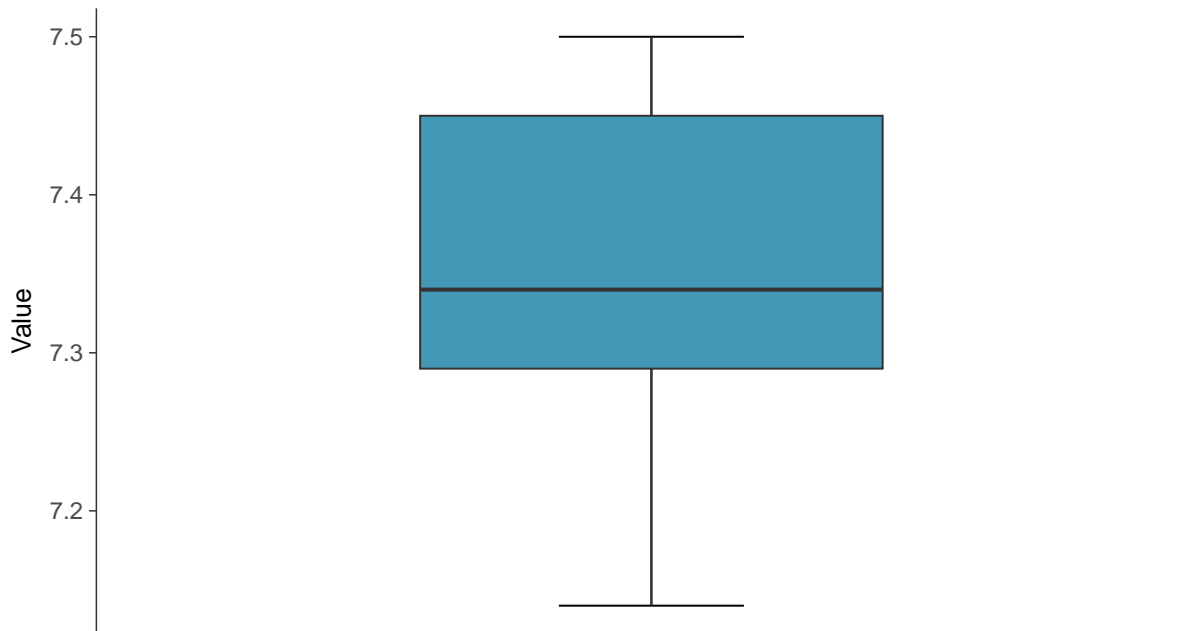
ID: 1_30_1_4_120





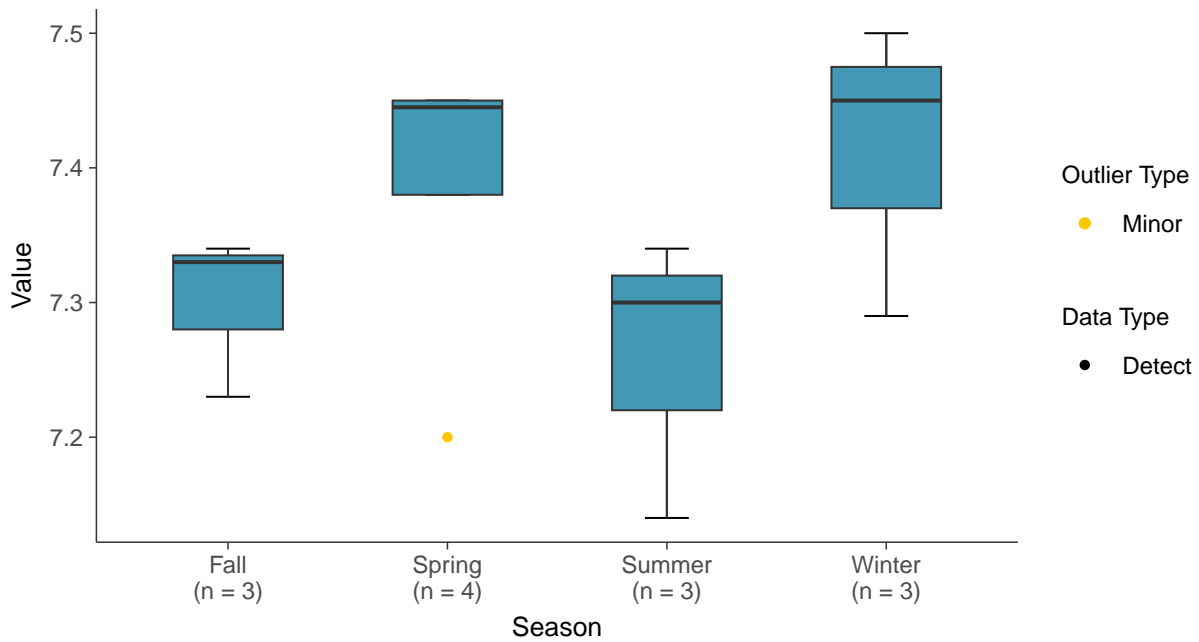
Boxplot

pH (field), MW-20 (su)



Boxplot by Season

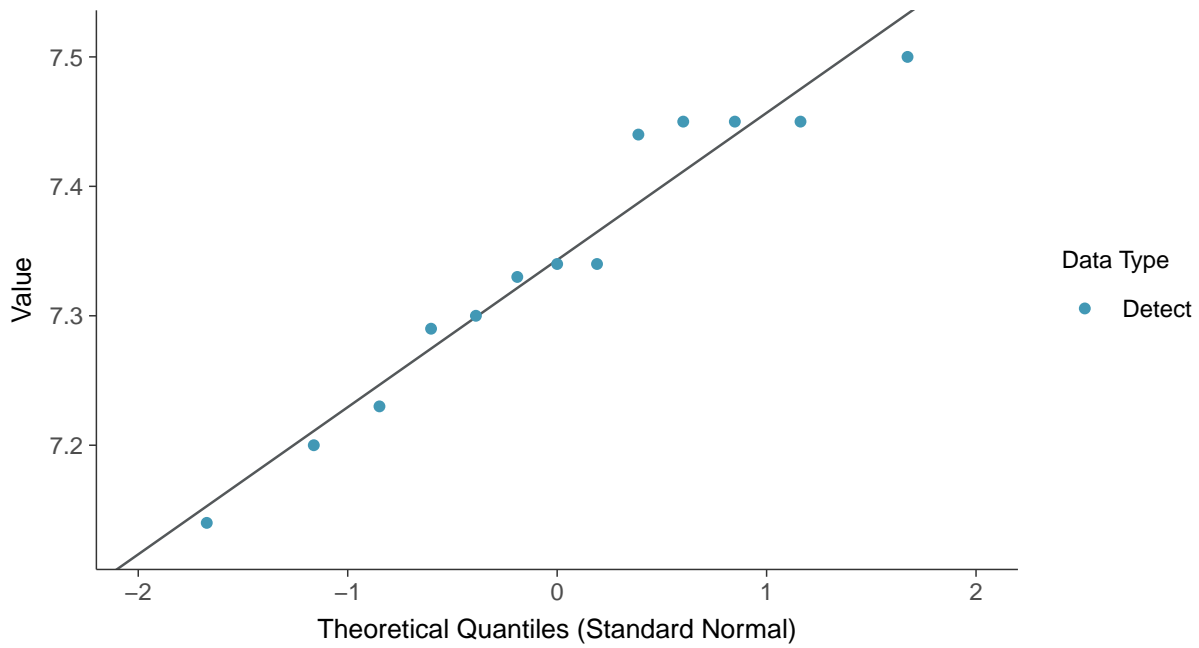
pH (field), MW-20 (su)





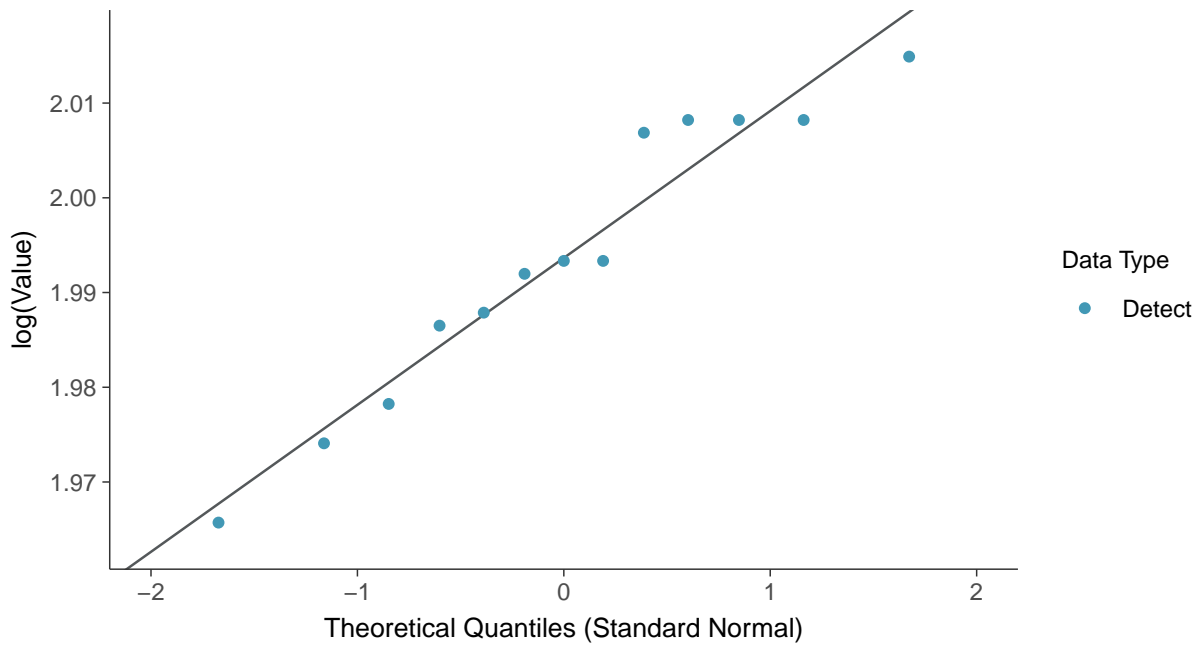
Normal Q-Q plot

pH (field), MW-20 (su)



Lognormal Q-Q plot

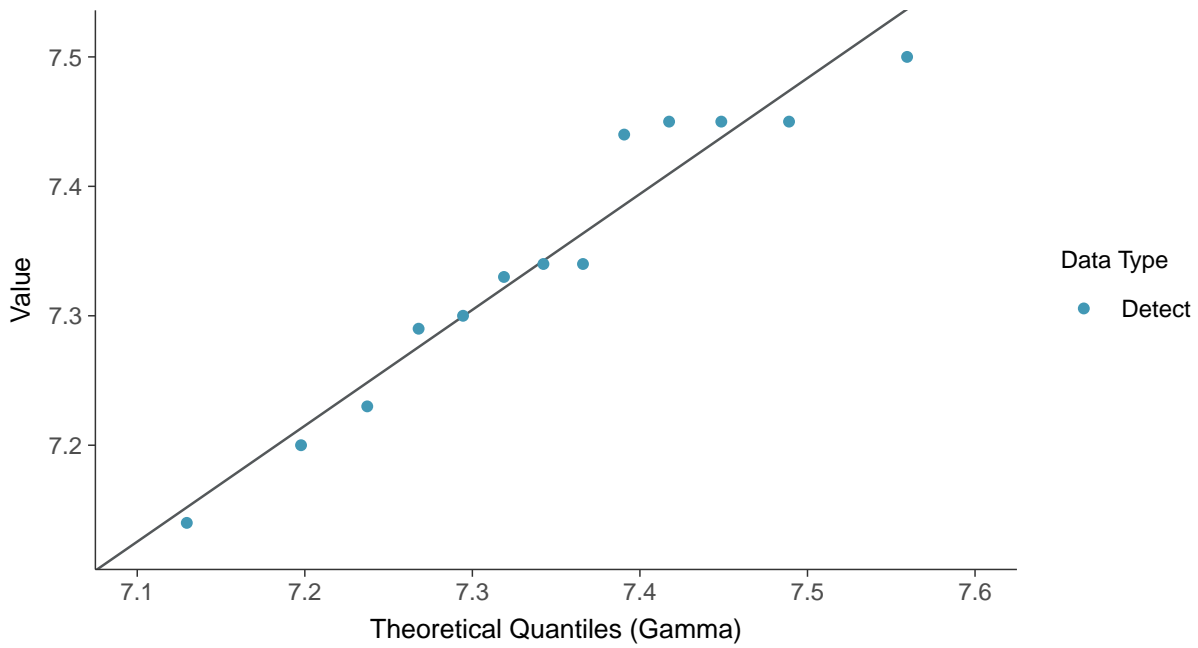
pH (field), MW-20 (su)





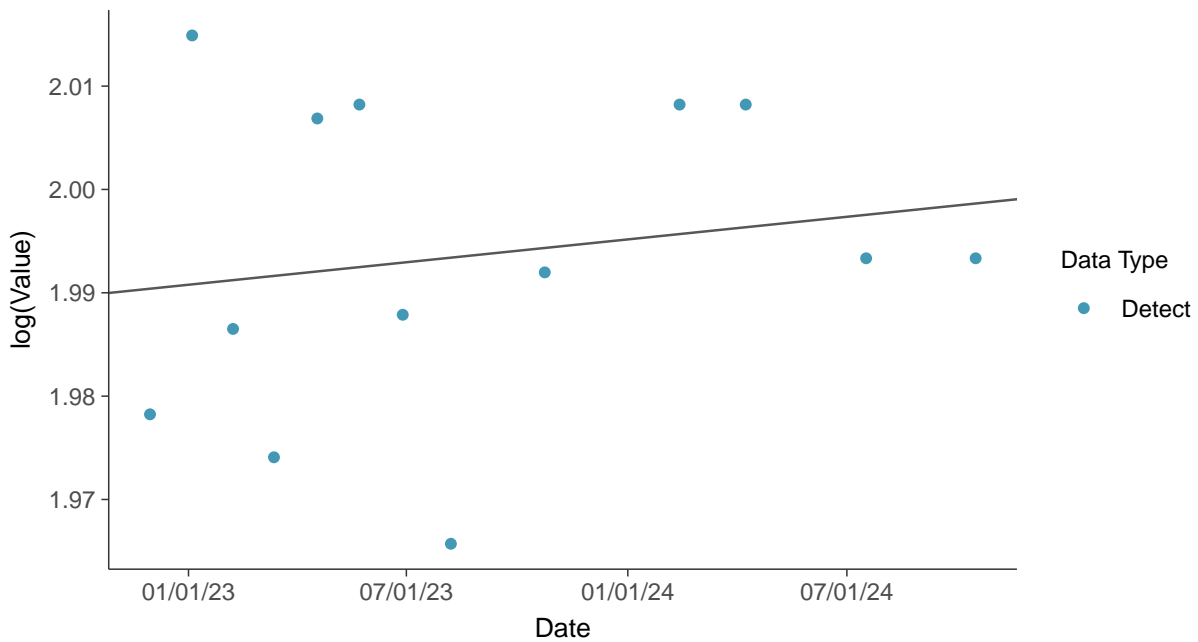
Gamma Q-Q plot

pH (field), MW-20 (su)



Trend Regression: Lognormal MLE

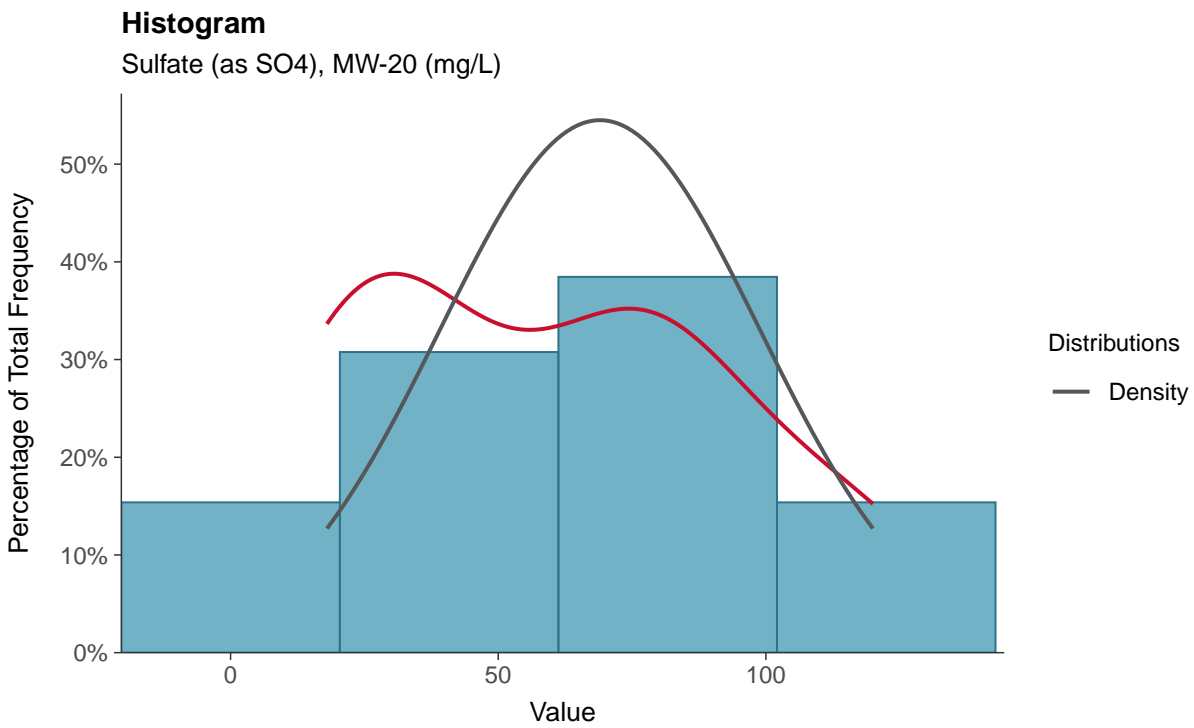
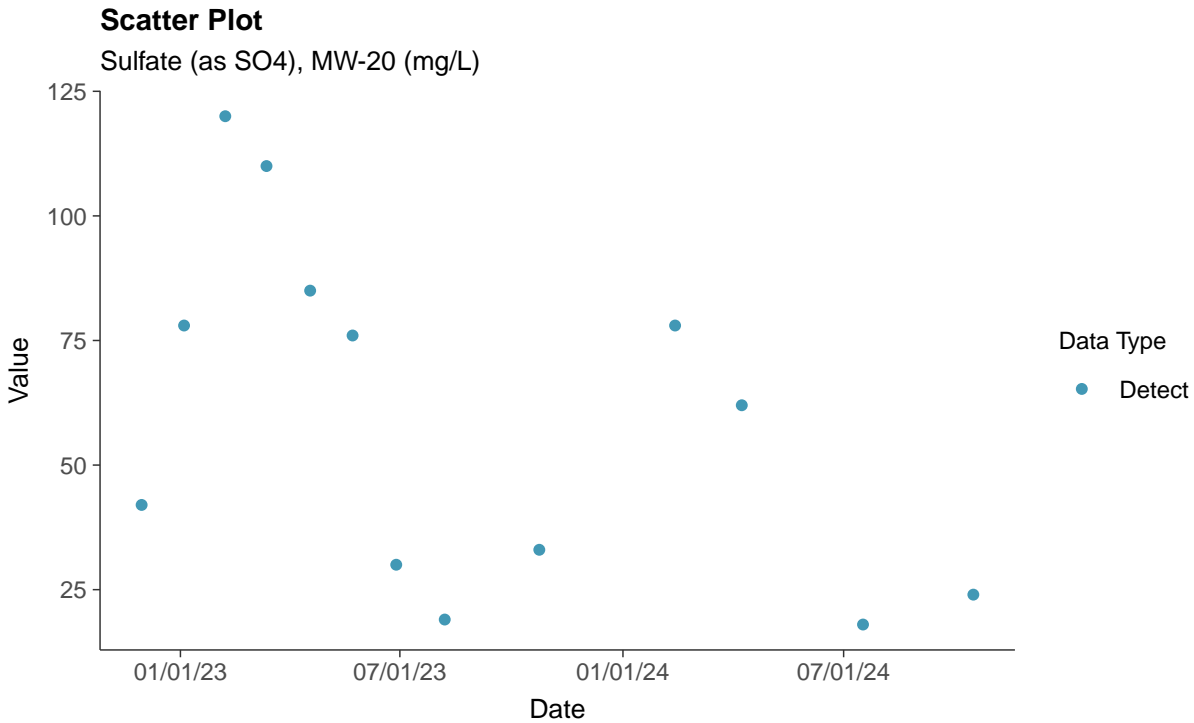
pH (field), MW-20 (su)





Appendix III: Sulfate (as SO₄), MW-20

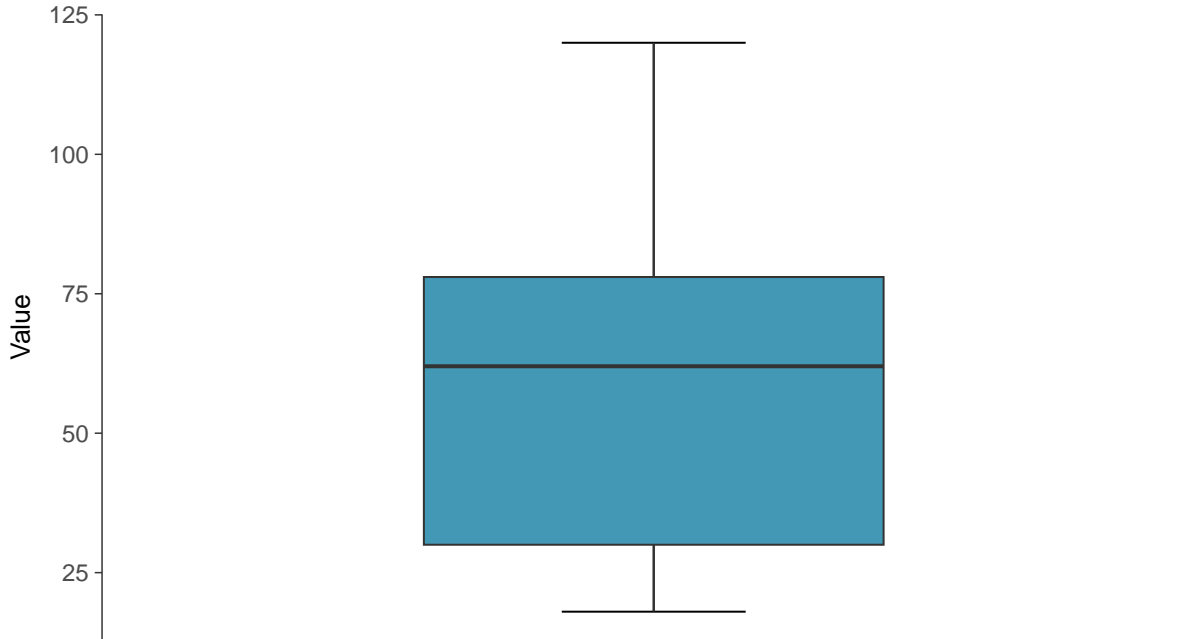
ID: 1_30_1_4_124





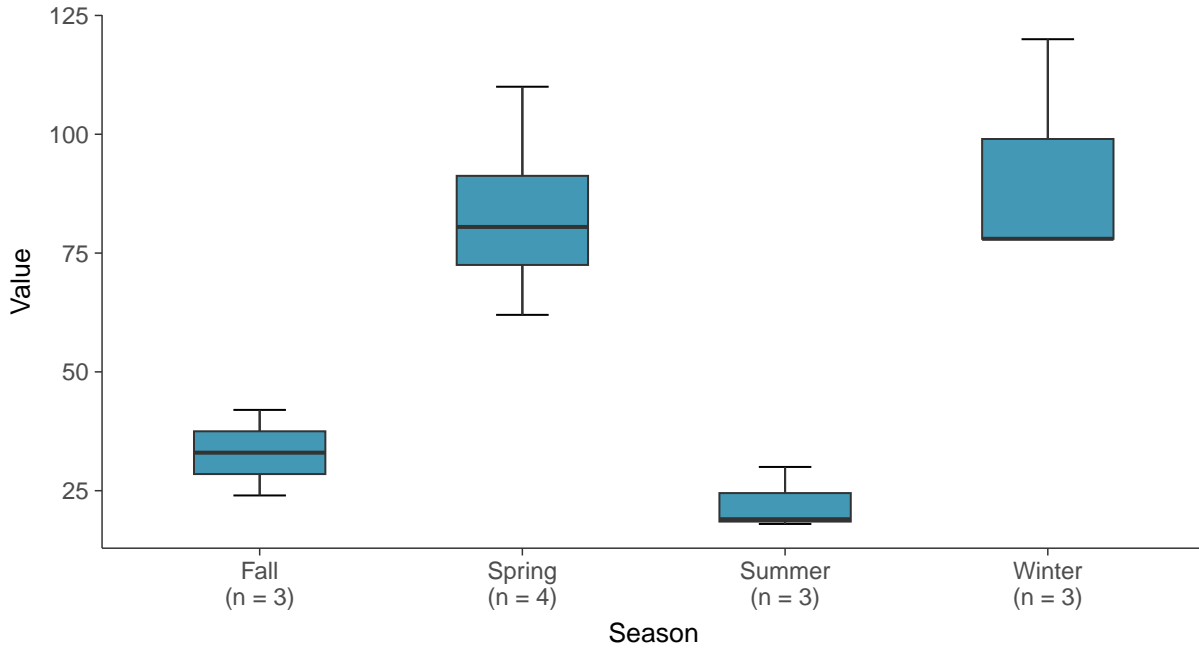
Boxplot

Sulfate (as SO₄), MW-20 (mg/L)



Boxplot by Season

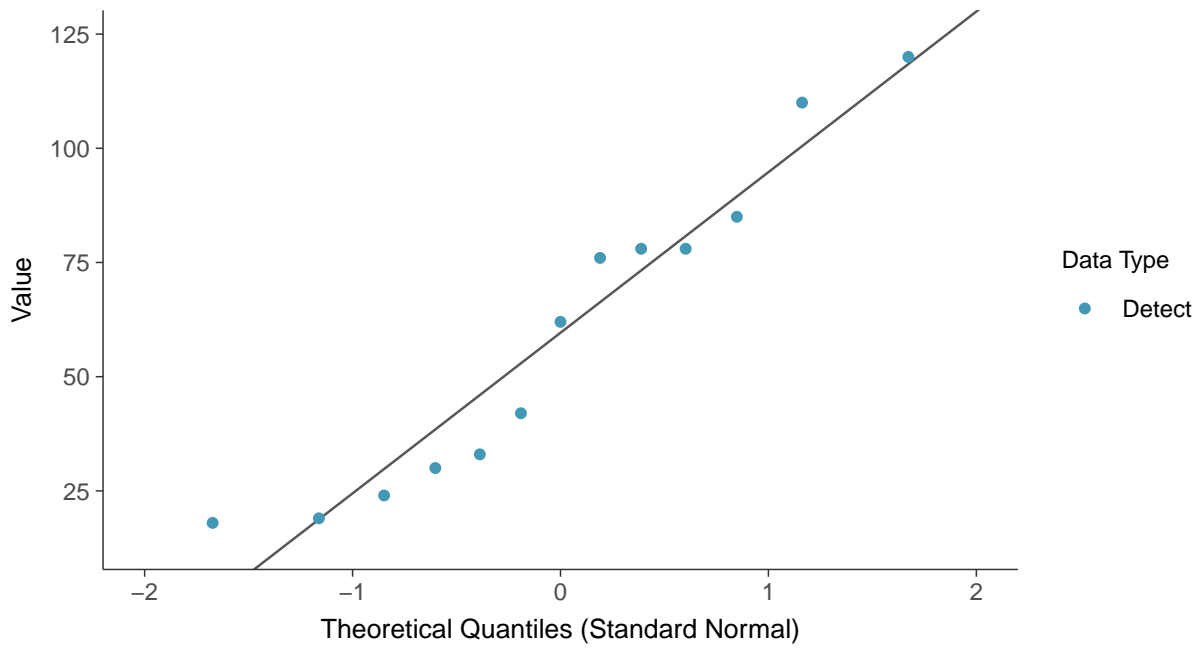
Sulfate (as SO₄), MW-20 (mg/L)





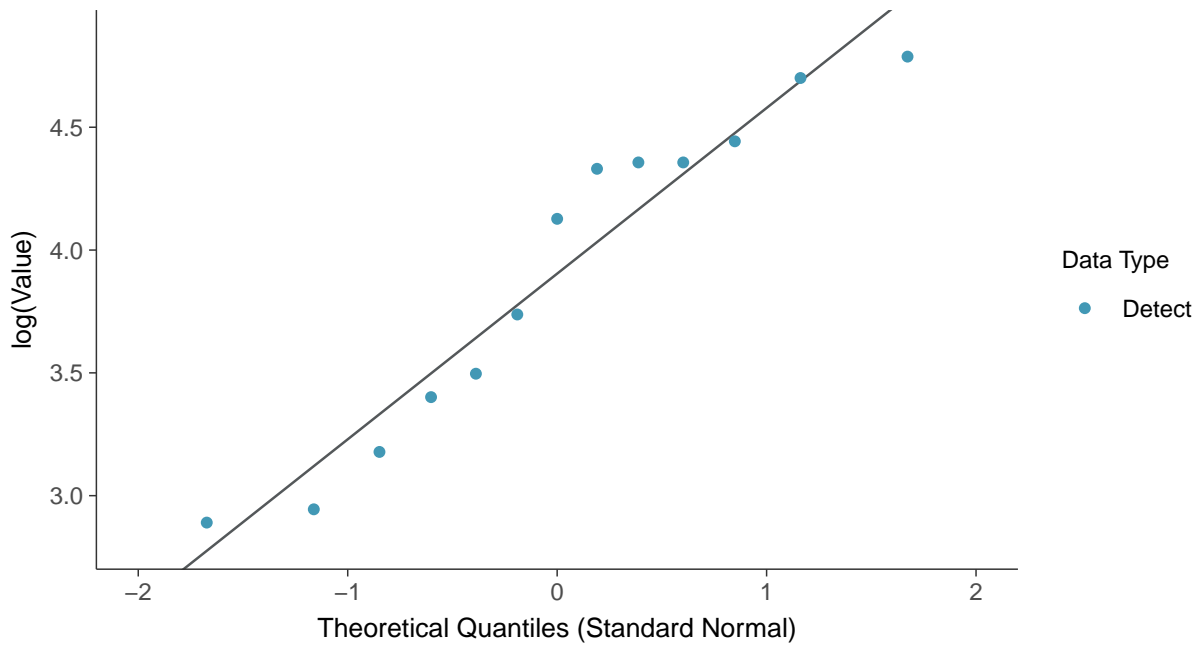
Normal Q-Q plot

Sulfate (as SO₄), MW-20 (mg/L)



Lognormal Q-Q plot

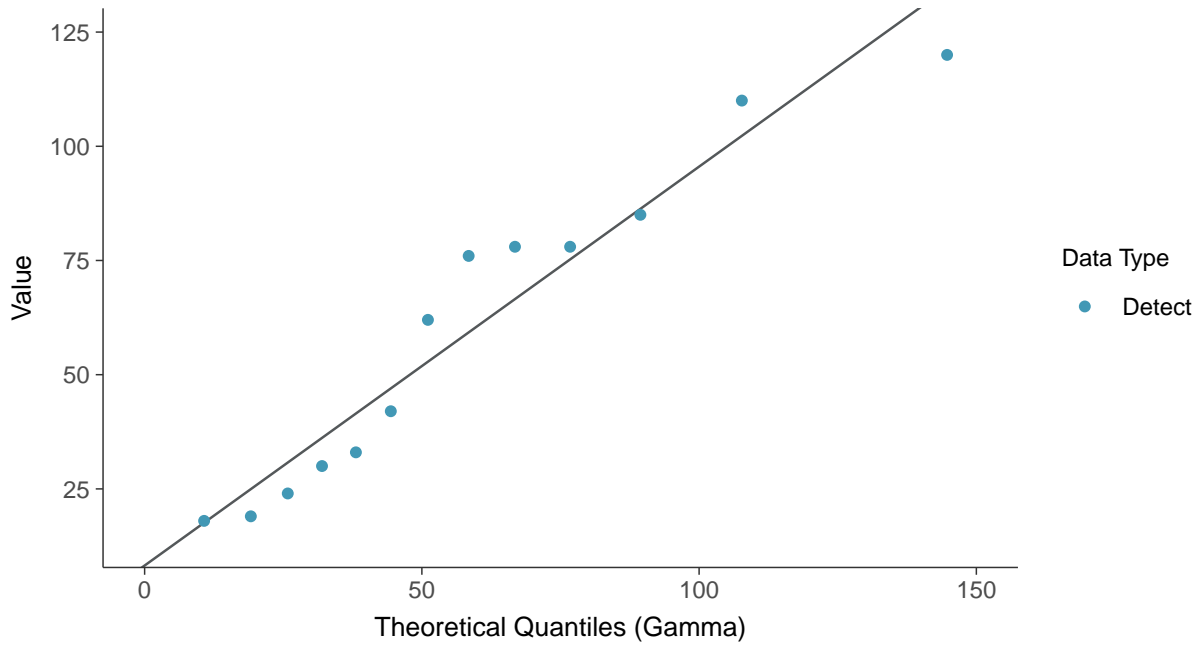
Sulfate (as SO₄), MW-20 (mg/L)





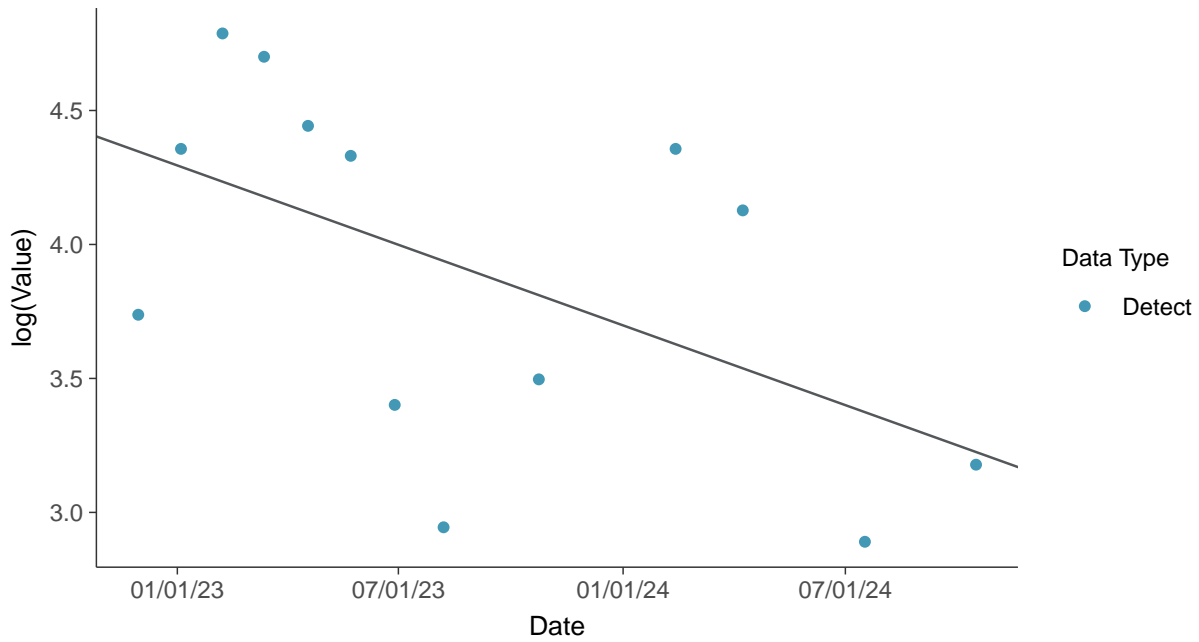
Gamma Q-Q plot

Sulfate (as SO₄), MW-20 (mg/L)



Trend Regression: Lognormal MLE

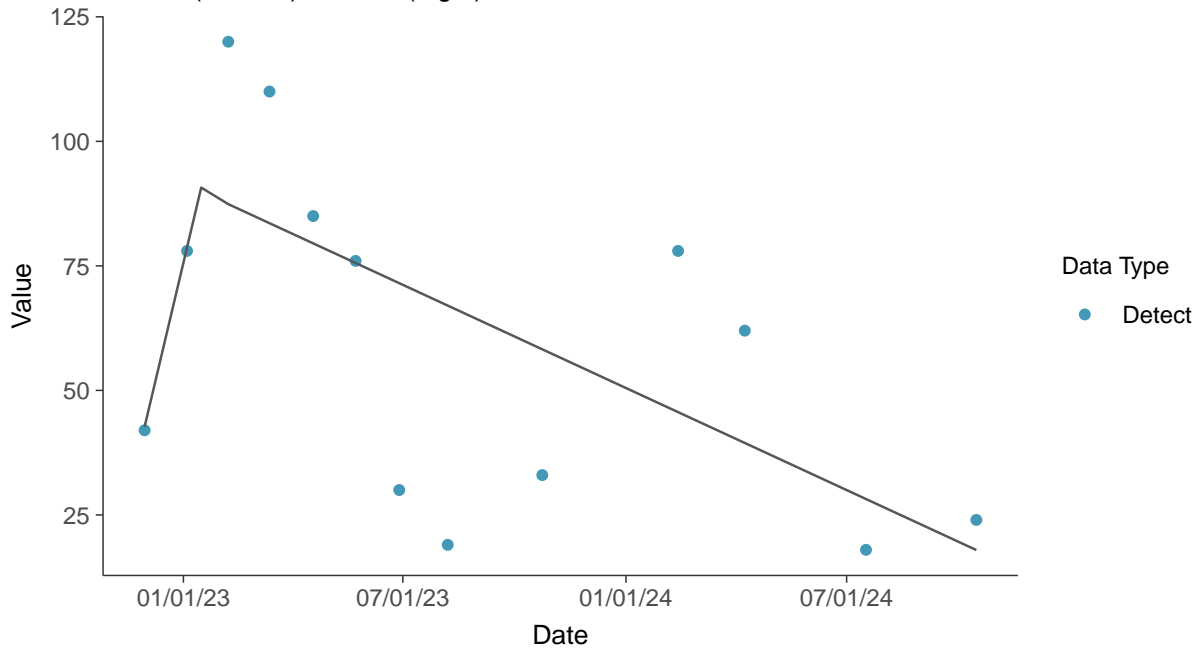
Sulfate (as SO₄), MW-20 (mg/L)





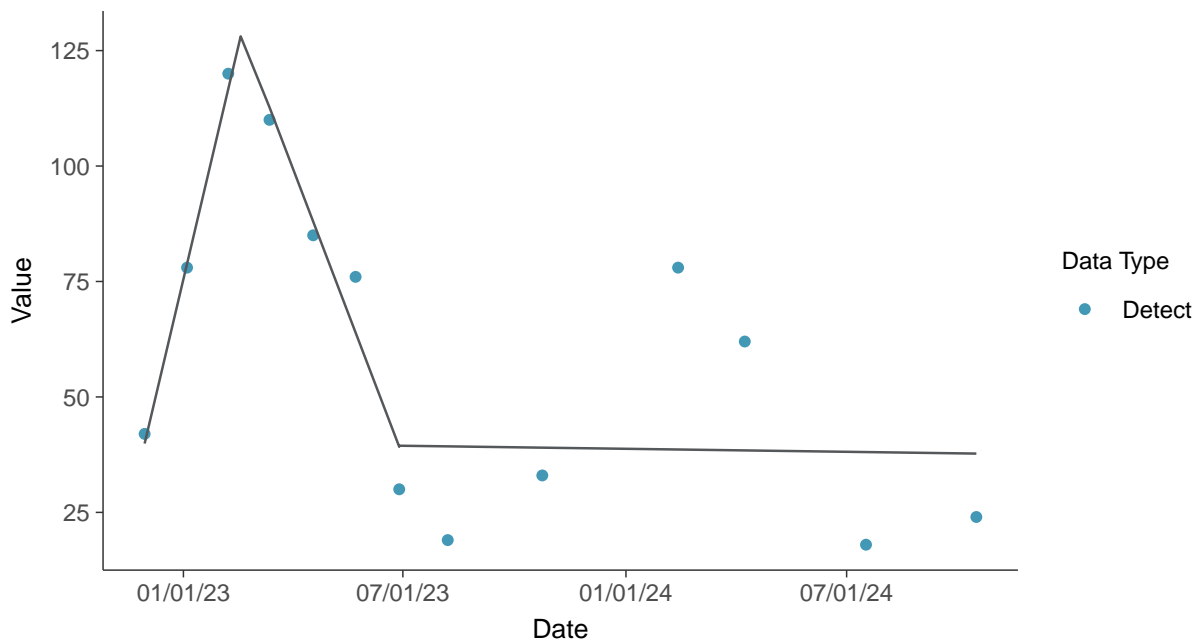
Trend Regression: Piecewise Linear-Linear

Sulfate (as SO₄), MW-20 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Sulfate (as SO₄), MW-20 (mg/L)



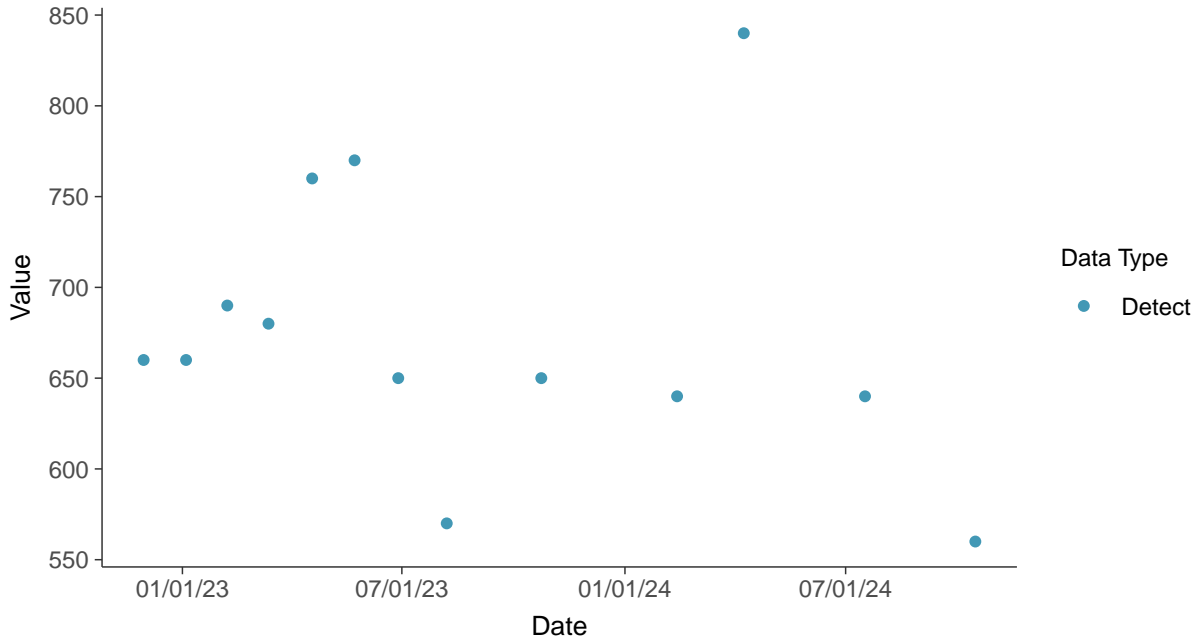


Appendix III: Total Dissolved Solids, MW-20

ID: 1_30_1_4_126

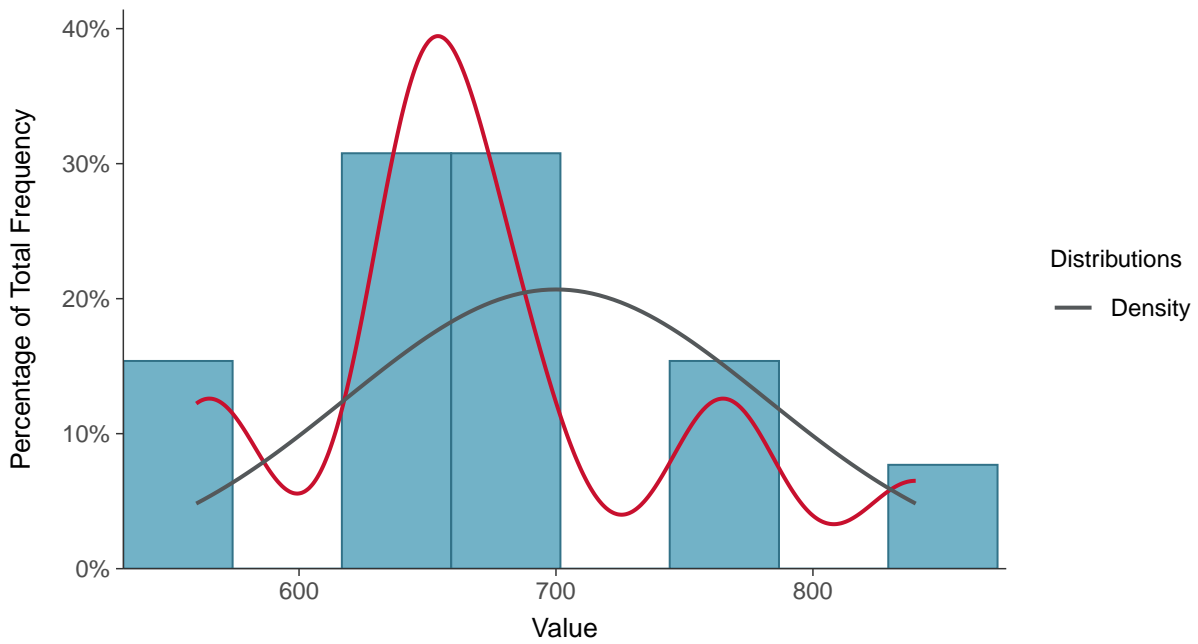
Scatter Plot

Total Dissolved Solids, MW-20 (mg/L)



Histogram

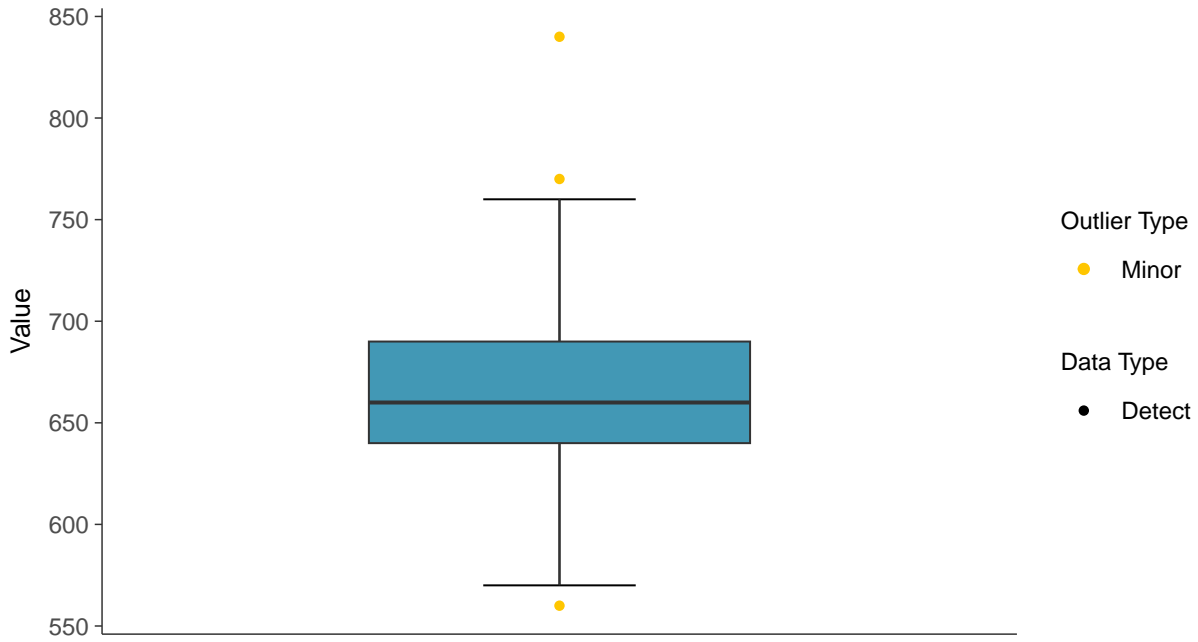
Total Dissolved Solids, MW-20 (mg/L)





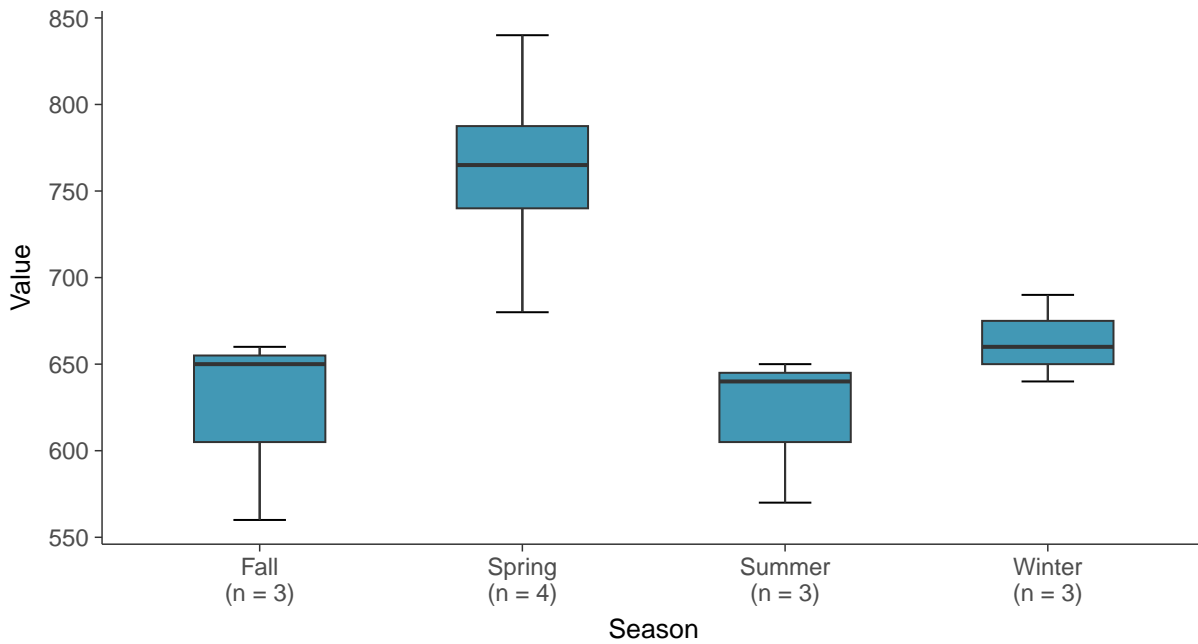
Boxplot

Total Dissolved Solids, MW-20 (mg/L)



Boxplot by Season

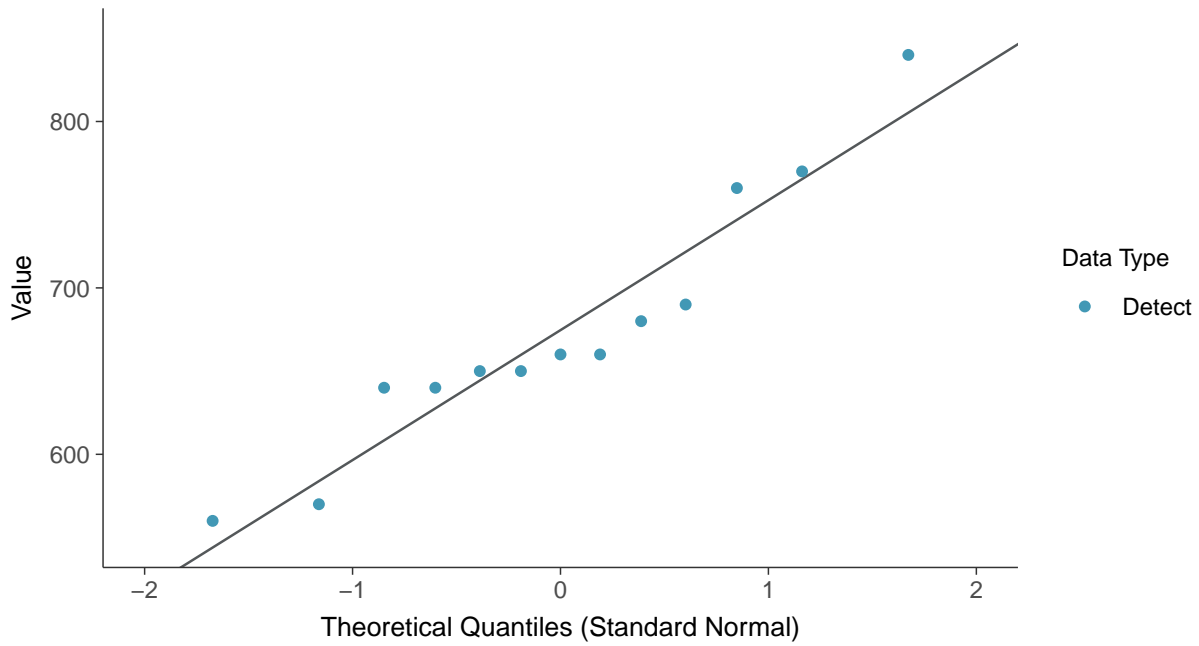
Total Dissolved Solids, MW-20 (mg/L)





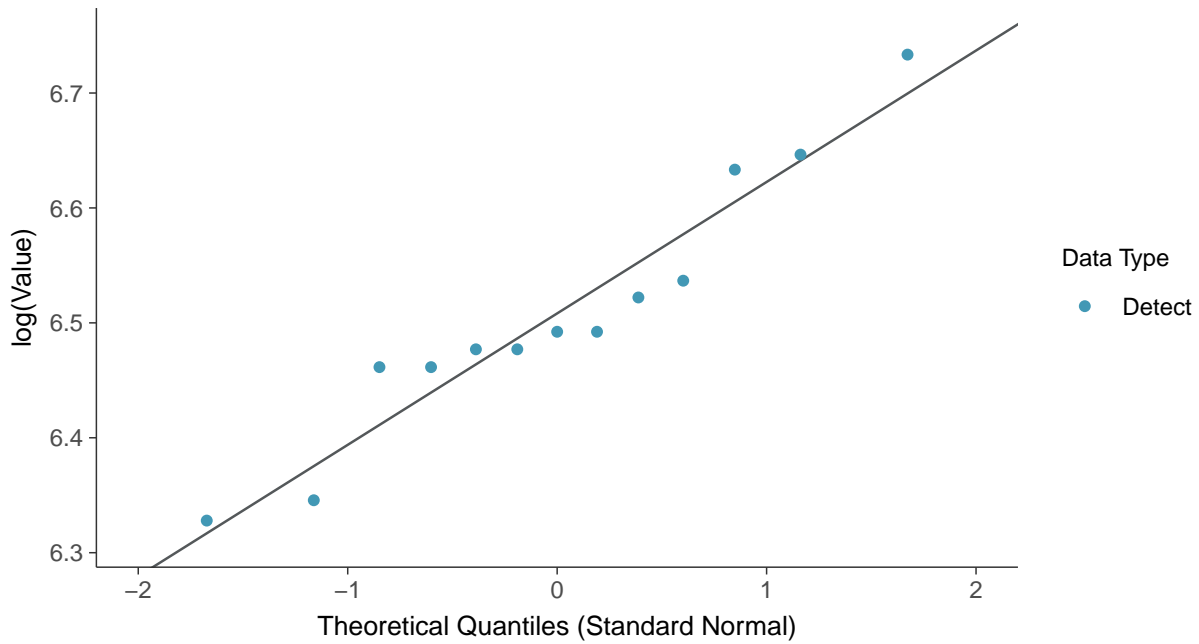
Normal Q-Q plot

Total Dissolved Solids, MW-20 (mg/L)



Lognormal Q-Q plot

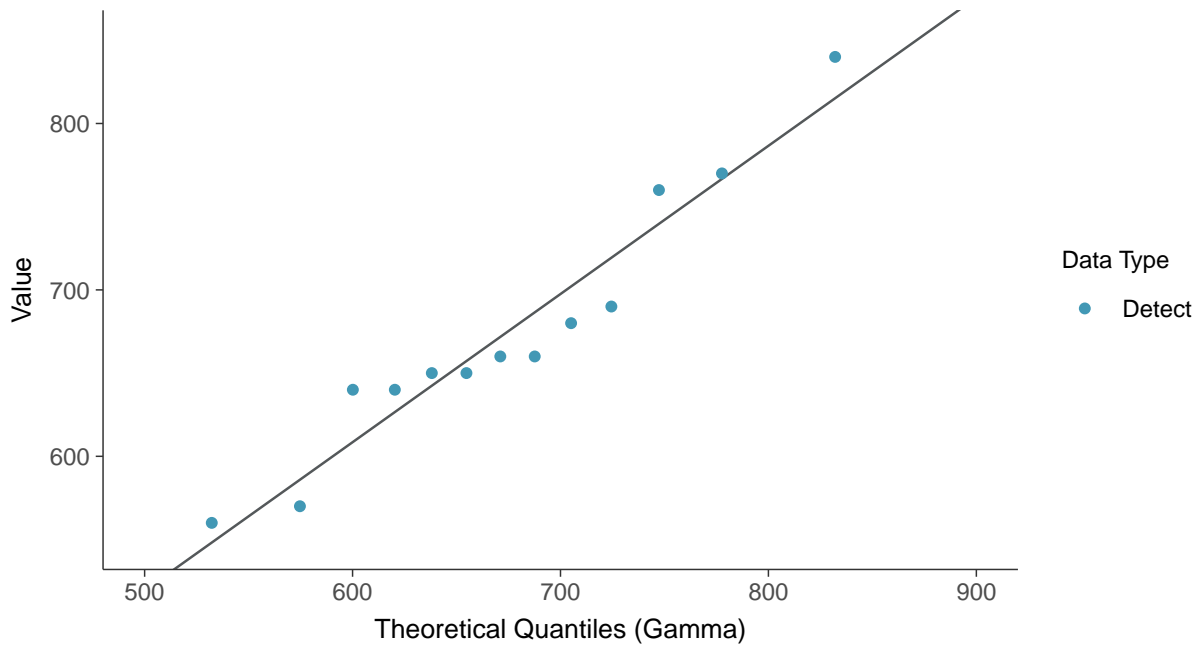
Total Dissolved Solids, MW-20 (mg/L)





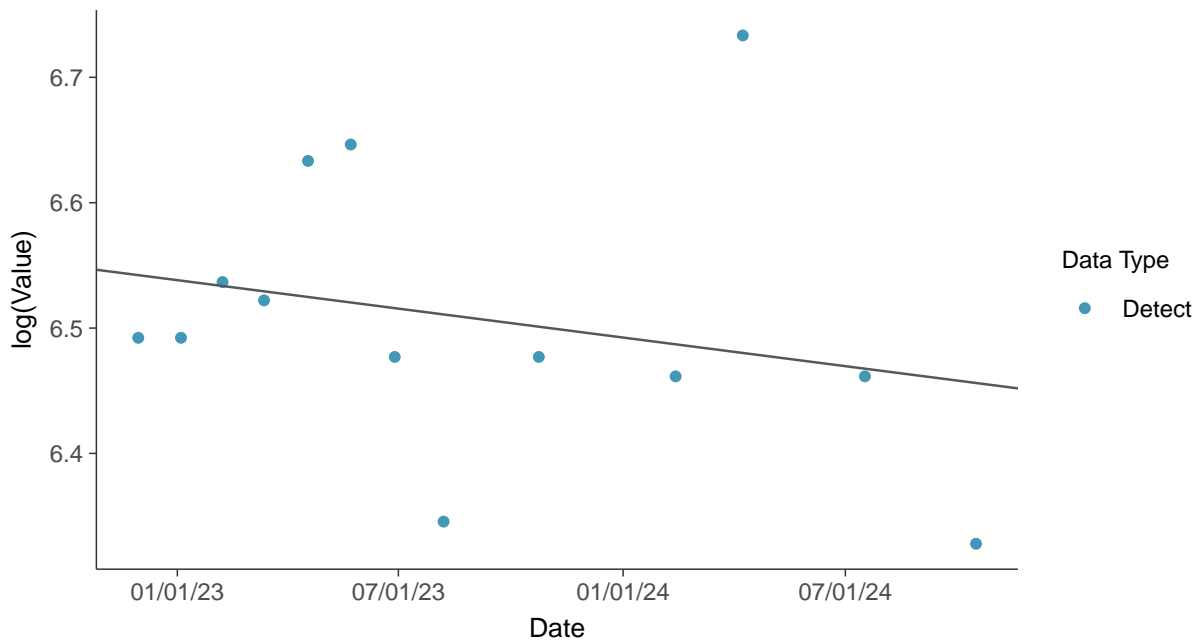
Gamma Q-Q plot

Total Dissolved Solids, MW-20 (mg/L)



Trend Regression: Lognormal MLE

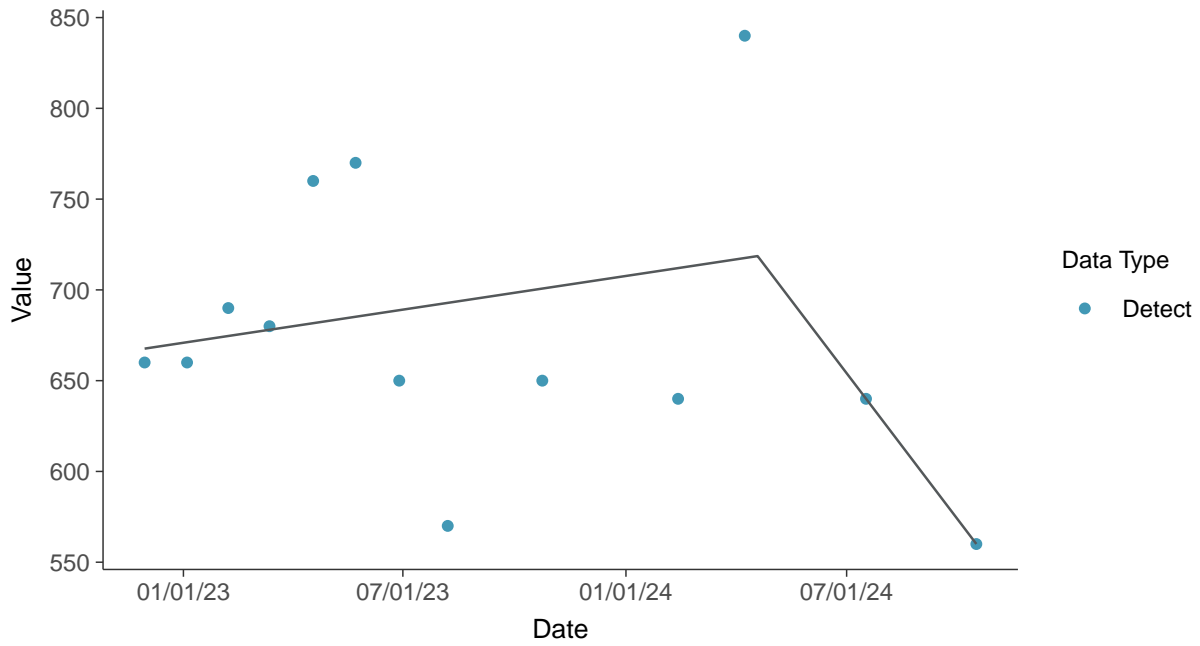
Total Dissolved Solids, MW-20 (mg/L)





Trend Regression: Piecewise Linear-Linear

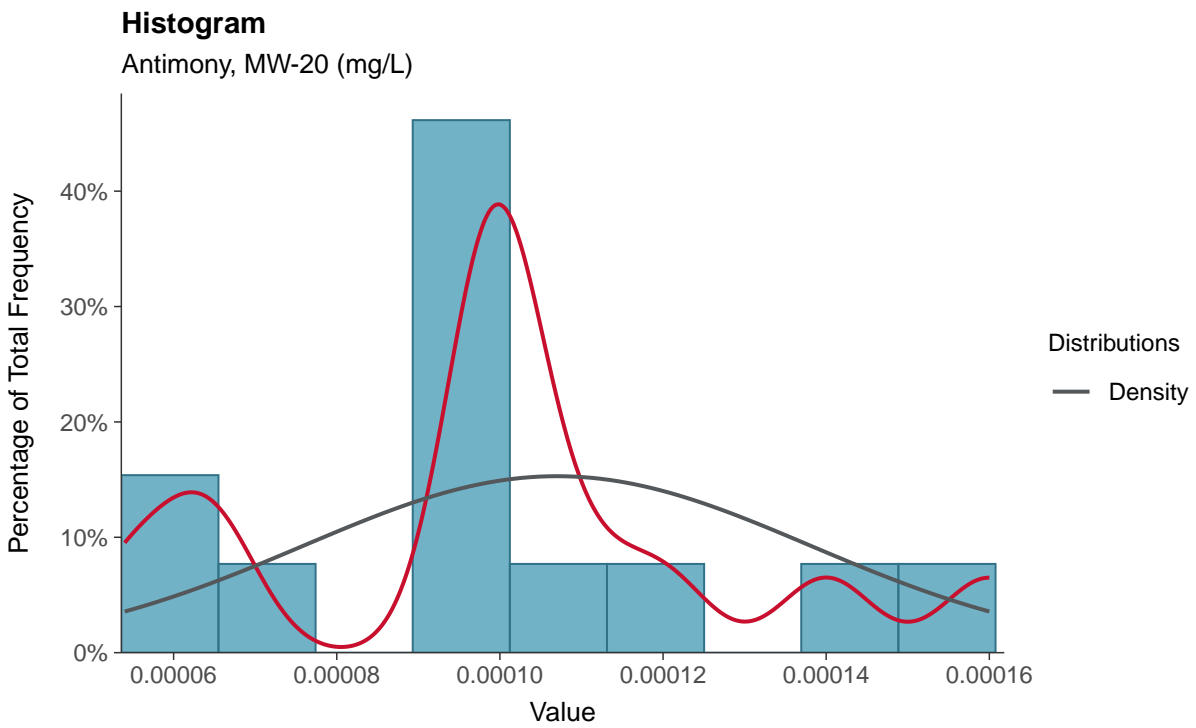
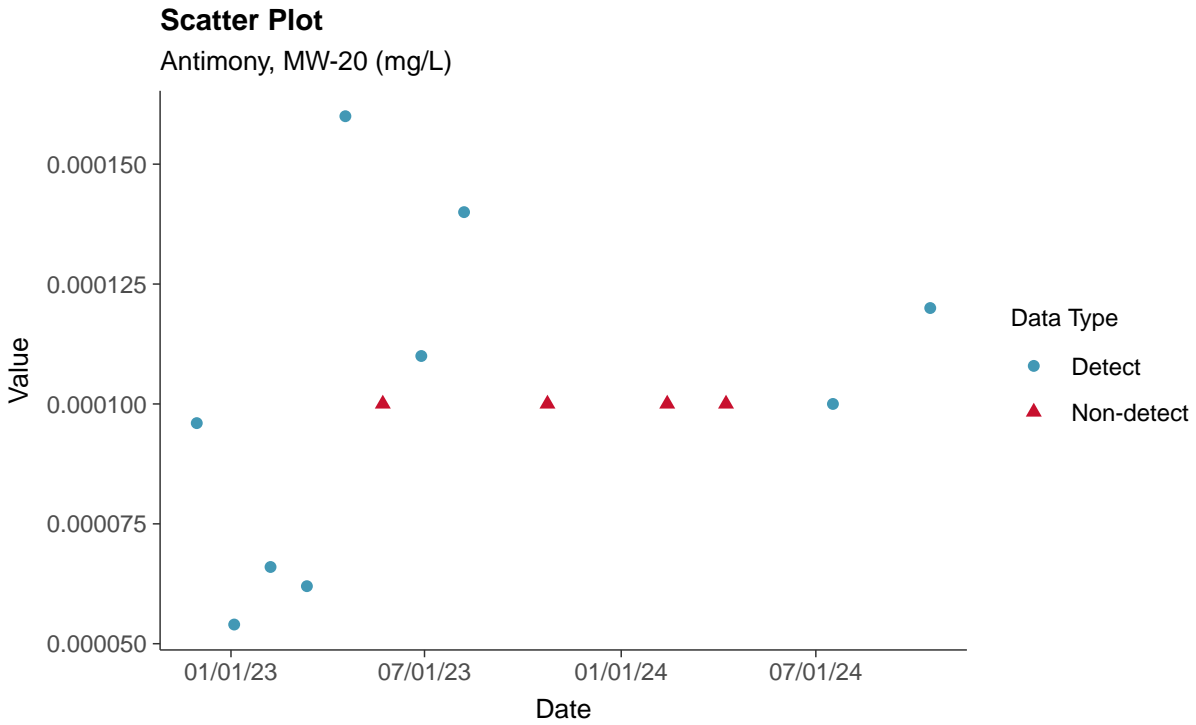
Total Dissolved Solids, MW-20 (mg/L)





Appendix IV: Antimony, MW-20

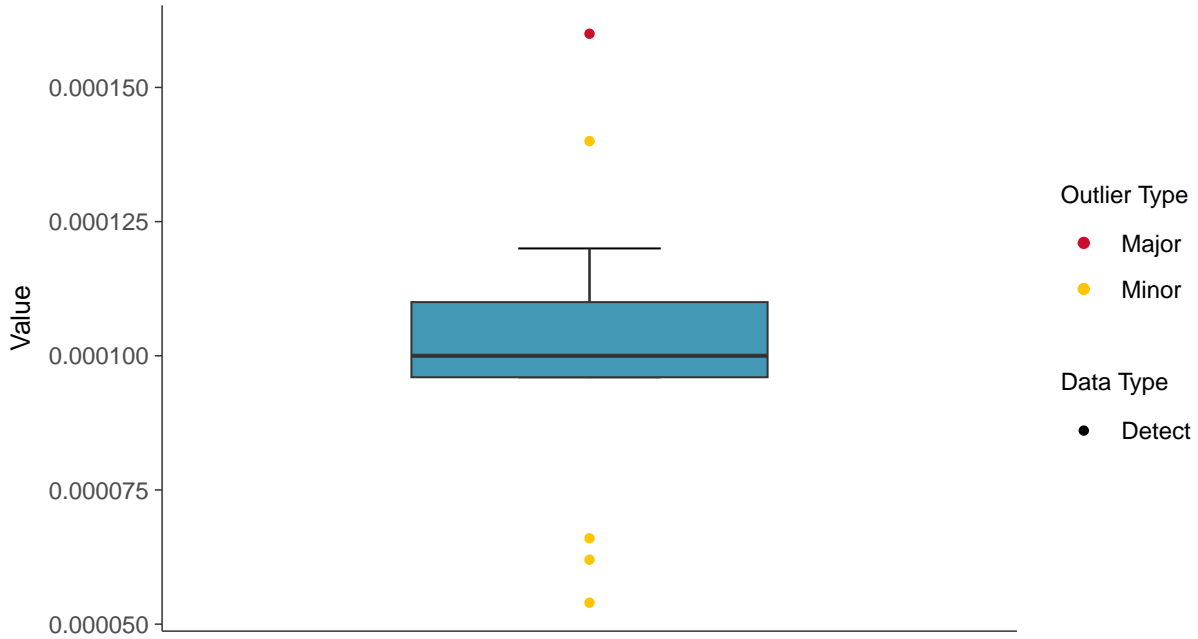
ID: 1_30_1_5_101





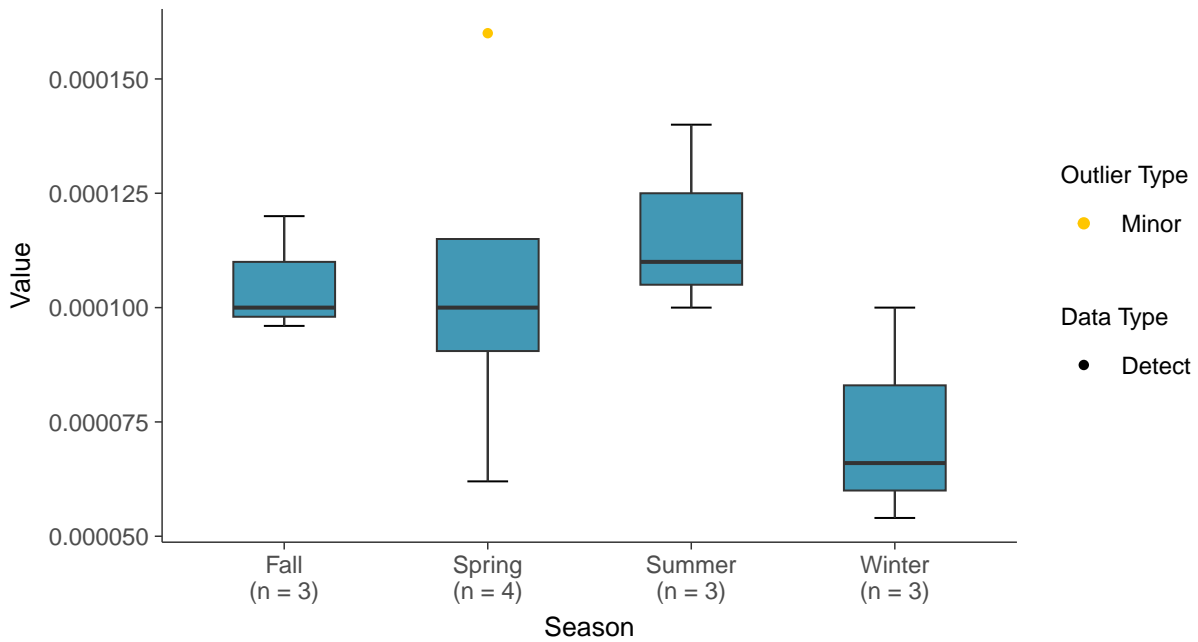
Boxplot

Antimony, MW-20 (mg/L)



Boxplot by Season

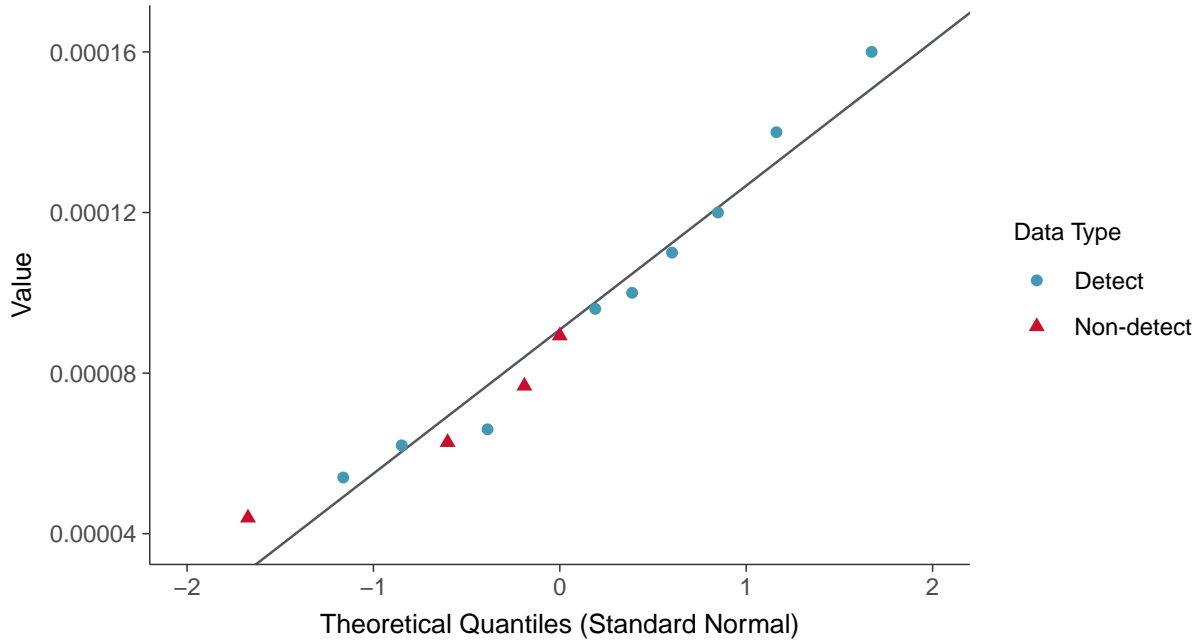
Antimony, MW-20 (mg/L)





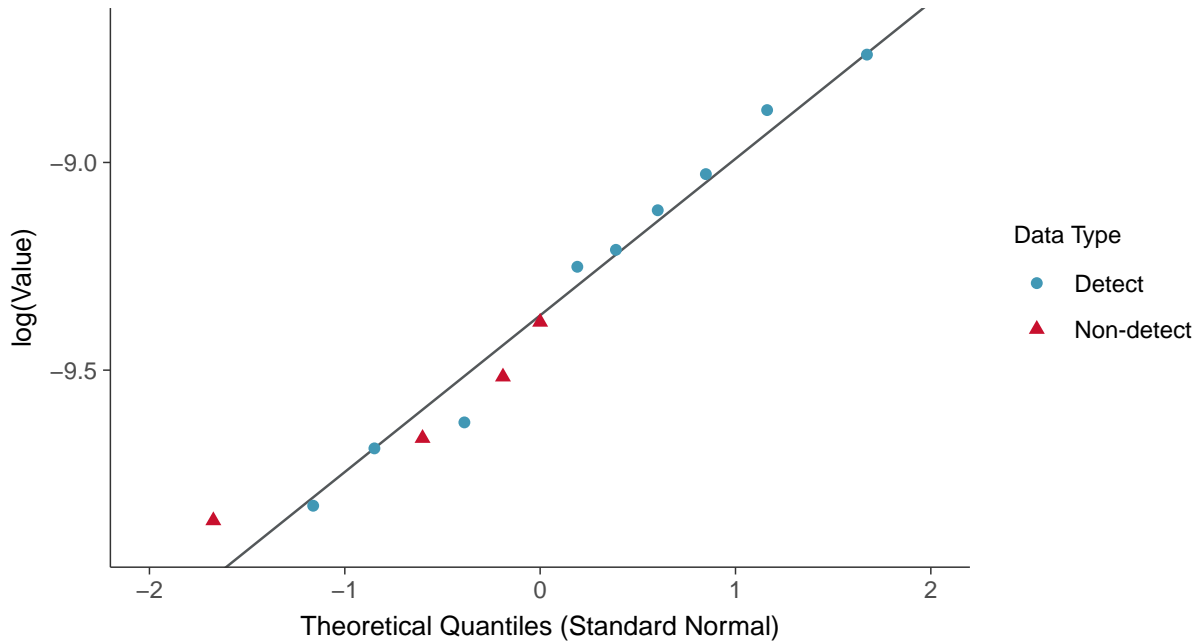
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-20 (mg/L)



Lognormal Q-Q plot using ROS Imputed Estimates

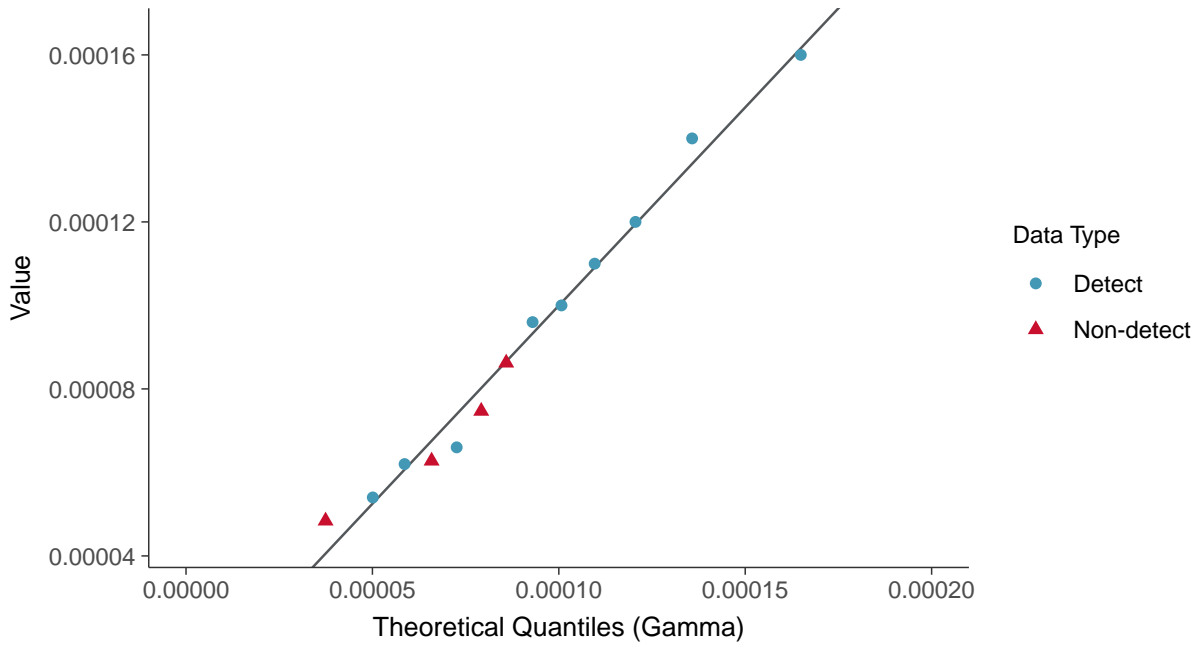
Antimony, MW-20 (mg/L)





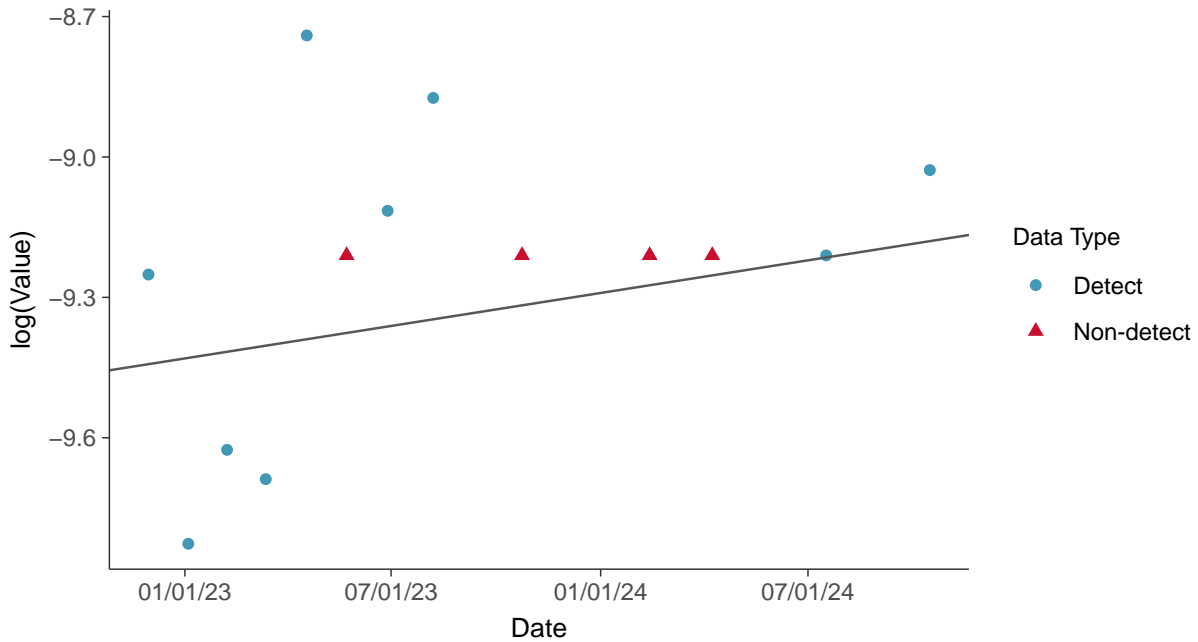
Gamma Q-Q plot using ROS Imputed Estimates

Antimony, MW-20 (mg/L)



Trend Regression: Lognormal MLE

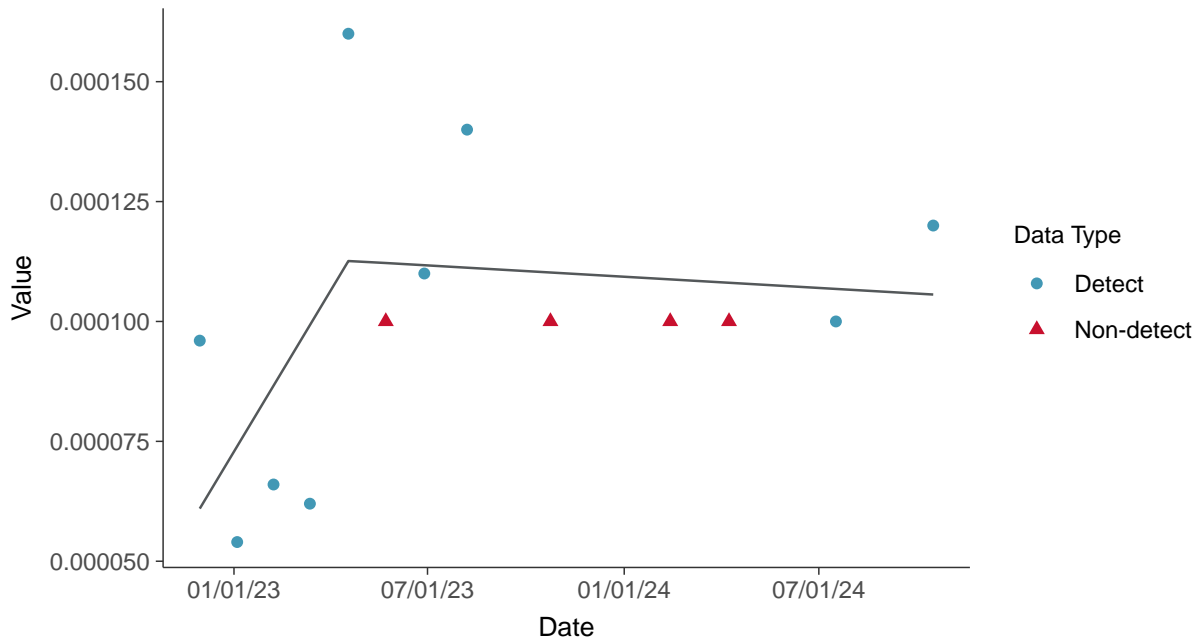
Antimony, MW-20 (mg/L)





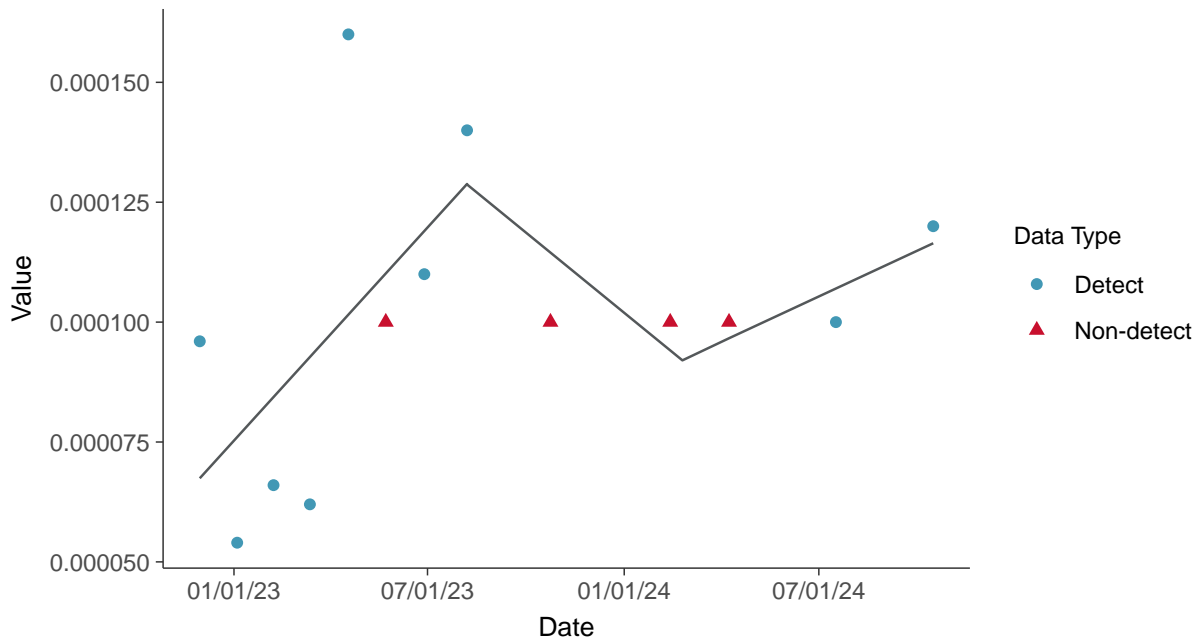
Trend Regression: Piecewise Linear-Linear

Antimony, MW-20 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

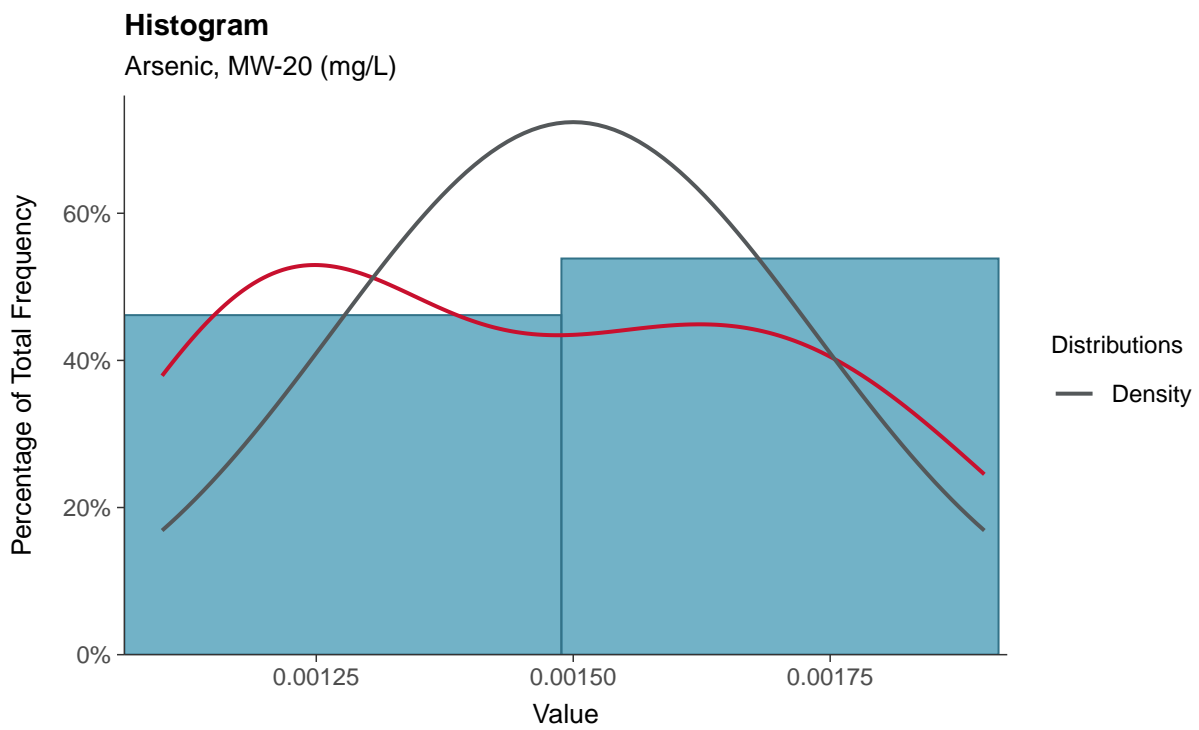
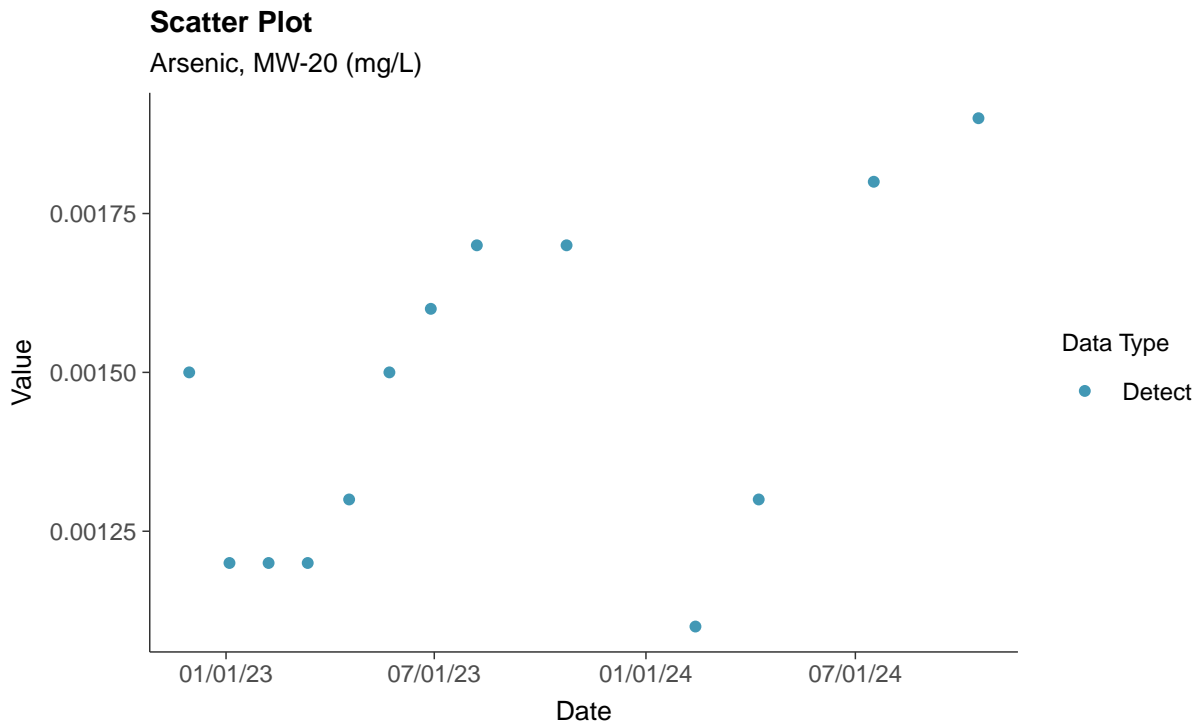
Antimony, MW-20 (mg/L)





Appendix IV: Arsenic, MW-20

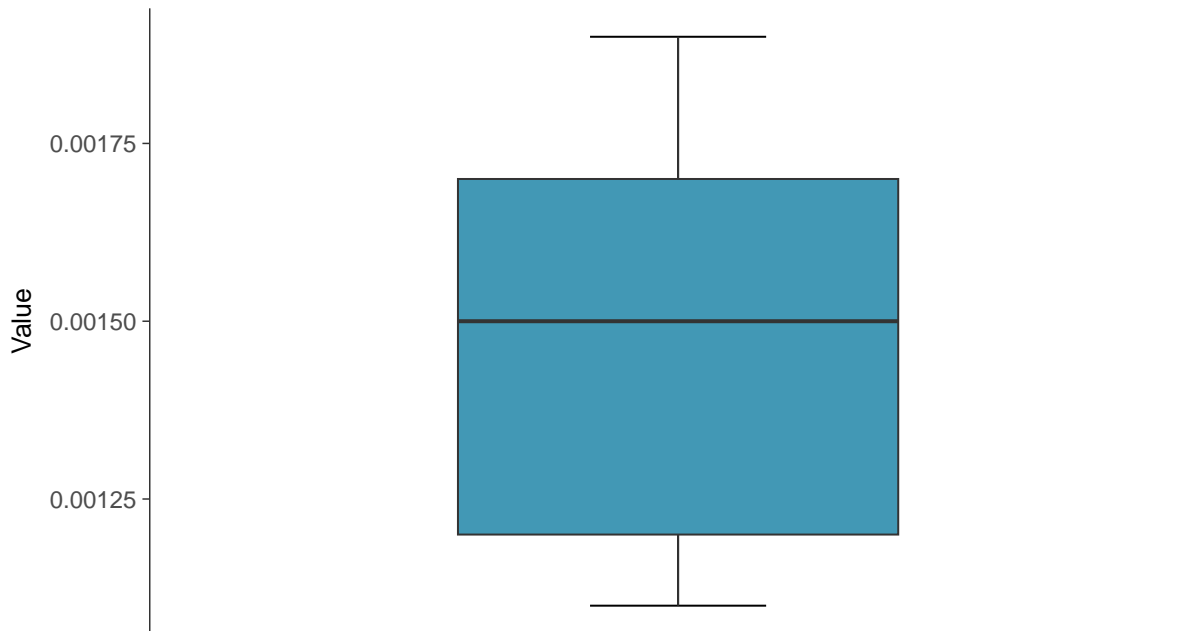
ID: 1_30_1_5_102





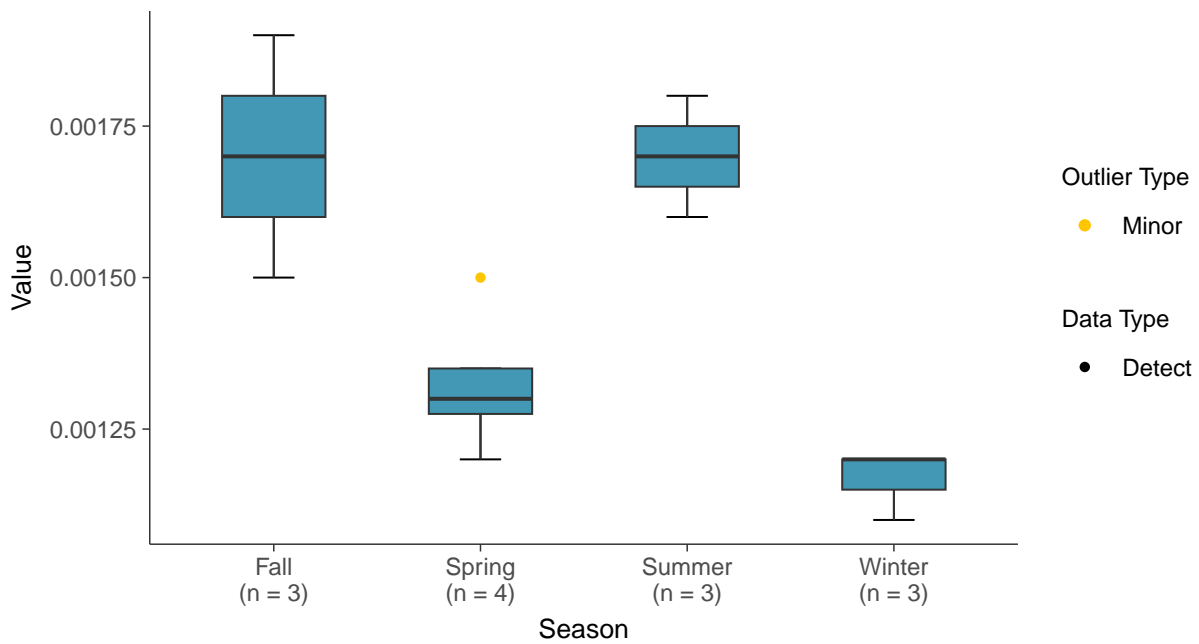
Boxplot

Arsenic, MW-20 (mg/L)



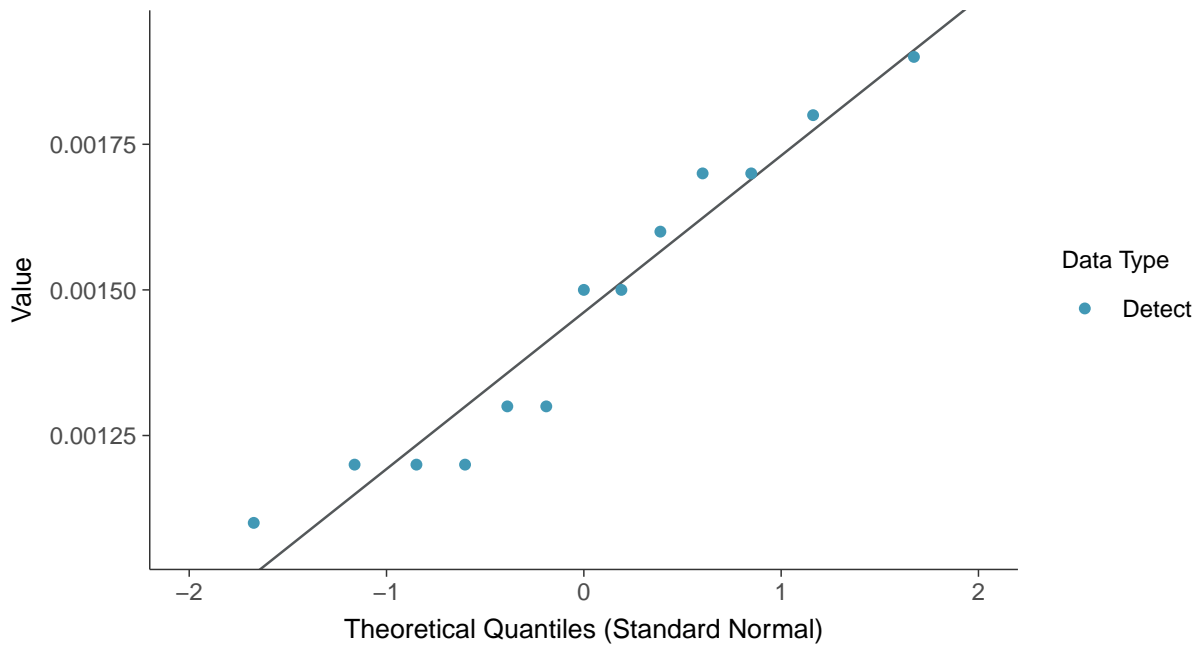
Boxplot by Season

Arsenic, MW-20 (mg/L)

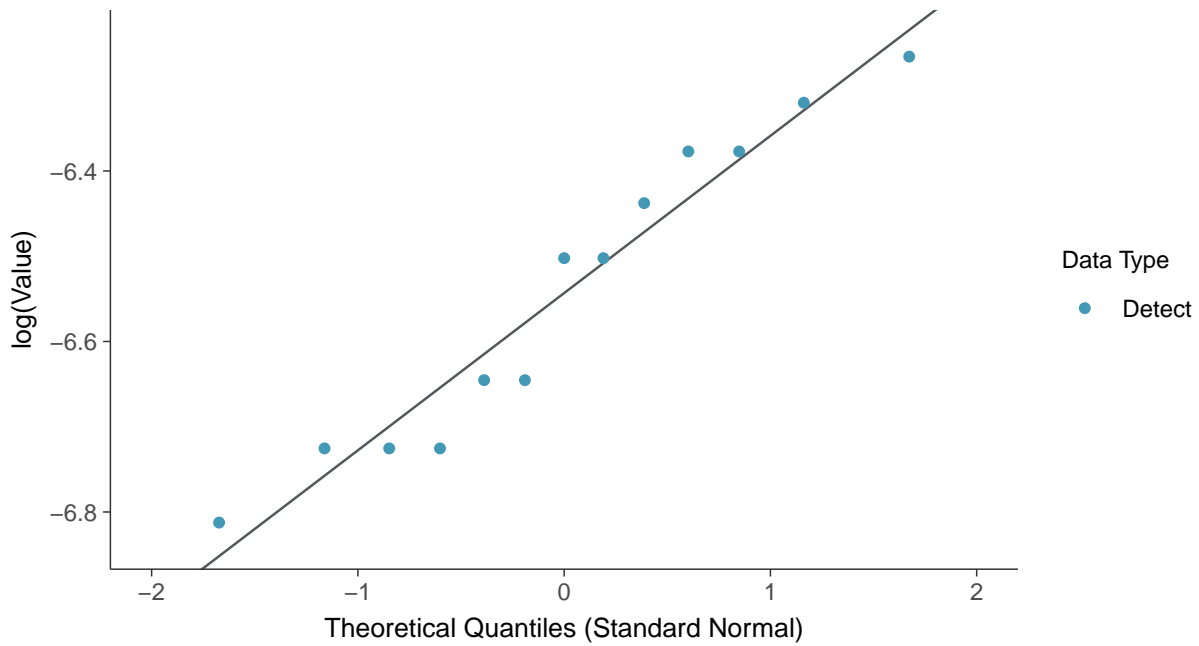




Normal Q-Q plot
Arsenic, MW-20 (mg/L)

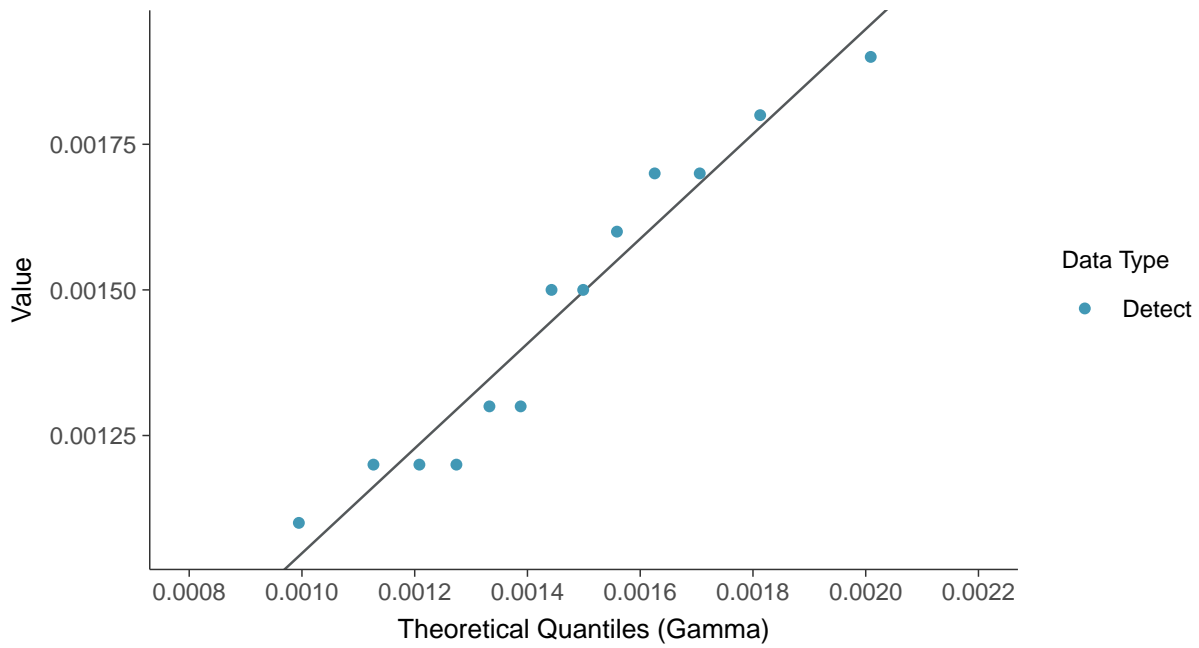


Lognormal Q-Q plot
Arsenic, MW-20 (mg/L)

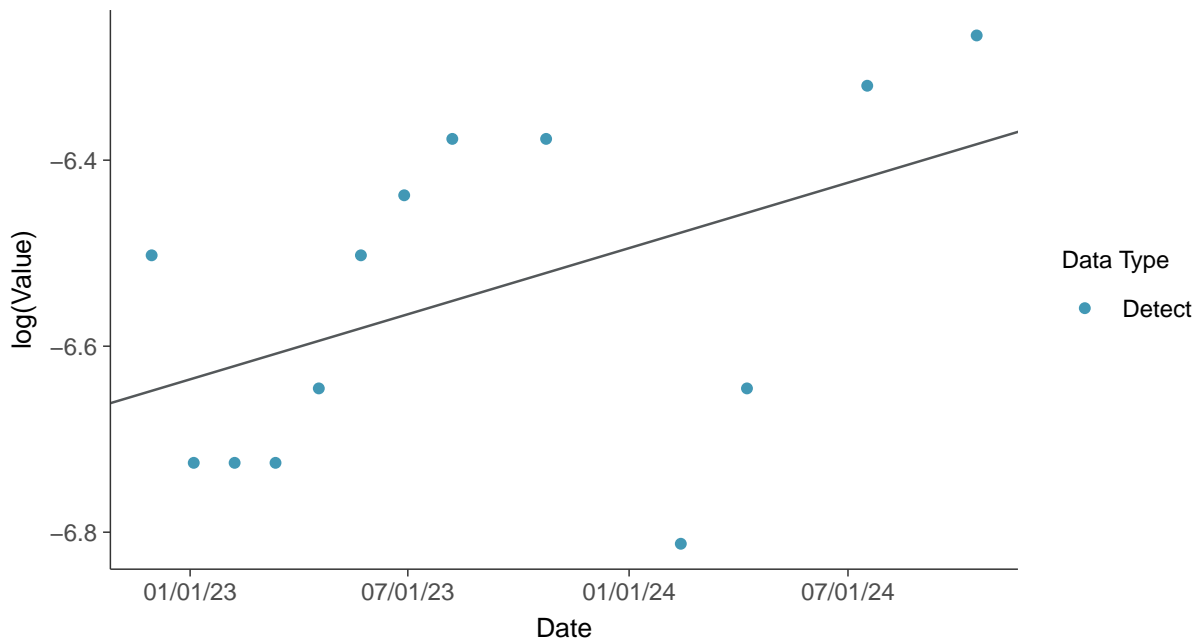




Gamma Q-Q plot
Arsenic, MW-20 (mg/L)

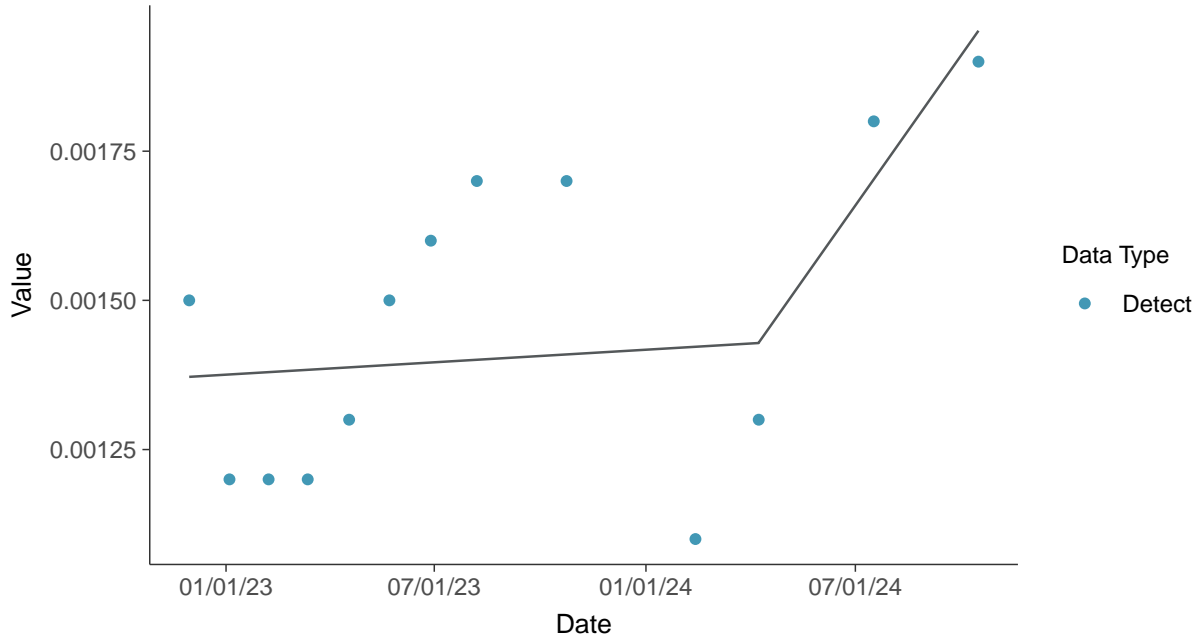


Trend Regression: Lognormal MLE
Arsenic, MW-20 (mg/L)





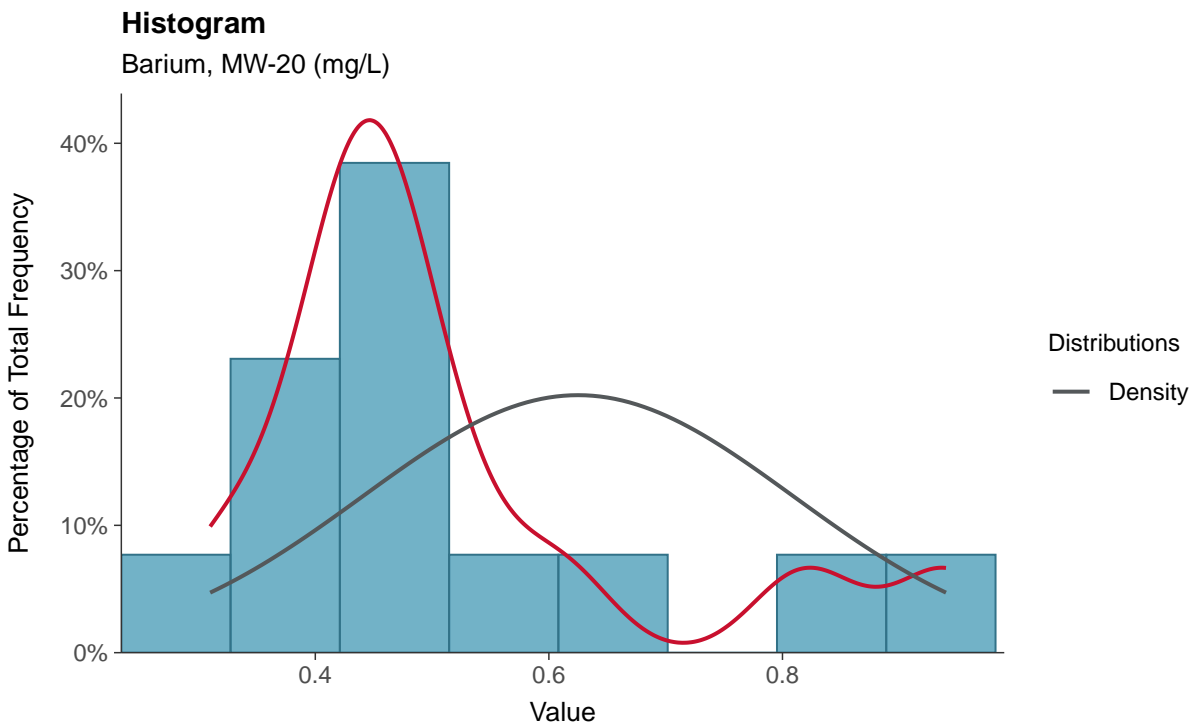
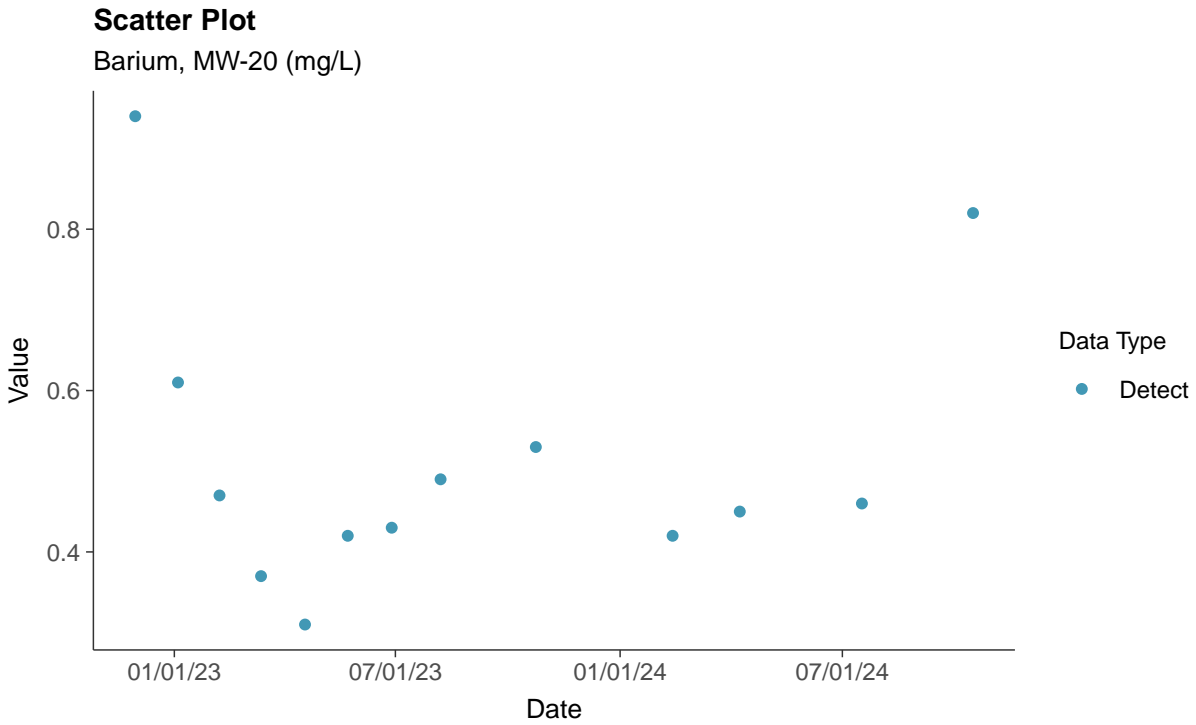
Trend Regression: Piecewise Linear-Linear
Arsenic, MW-20 (mg/L)





Appendix IV: Barium, MW-20

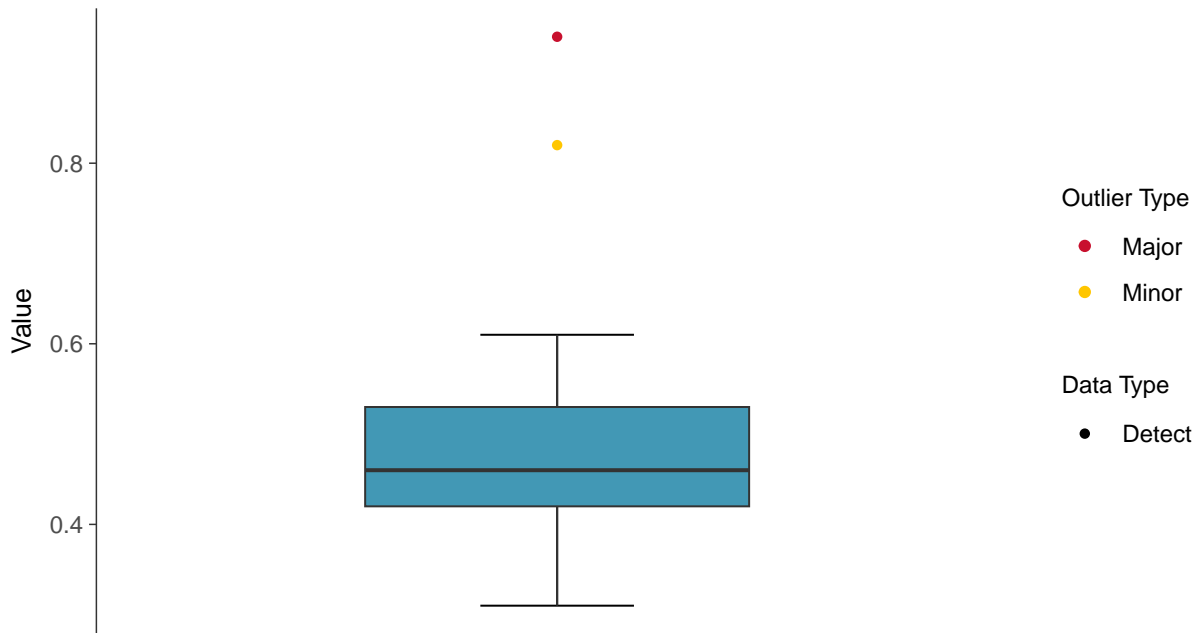
ID: 1_30_1_5_103





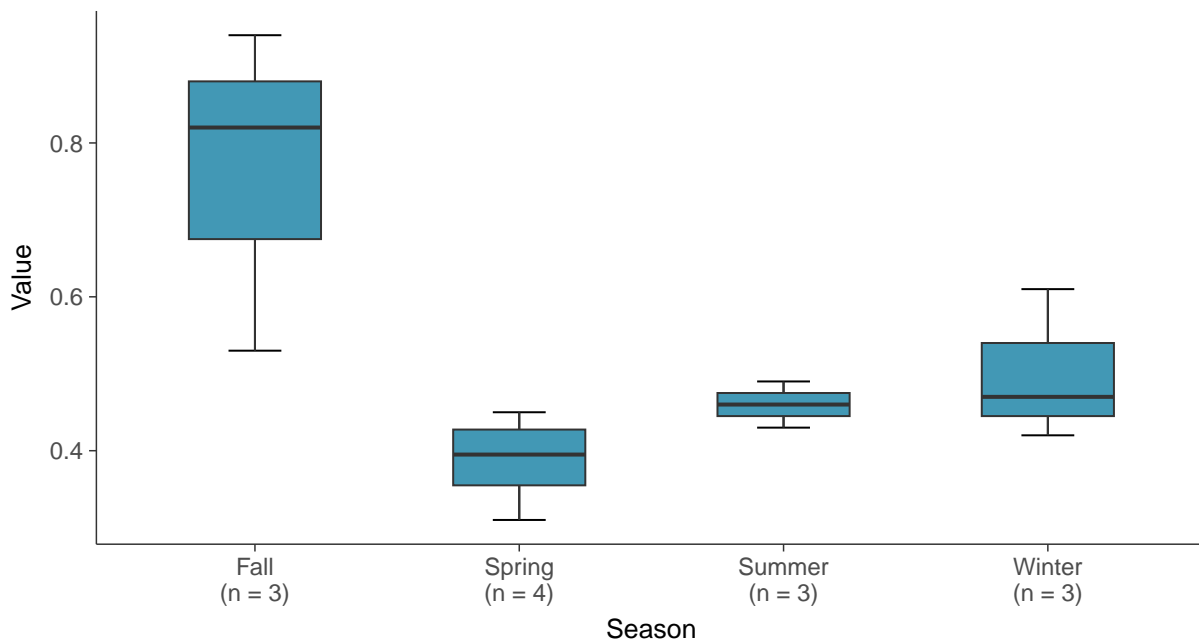
Boxplot

Barium, MW-20 (mg/L)



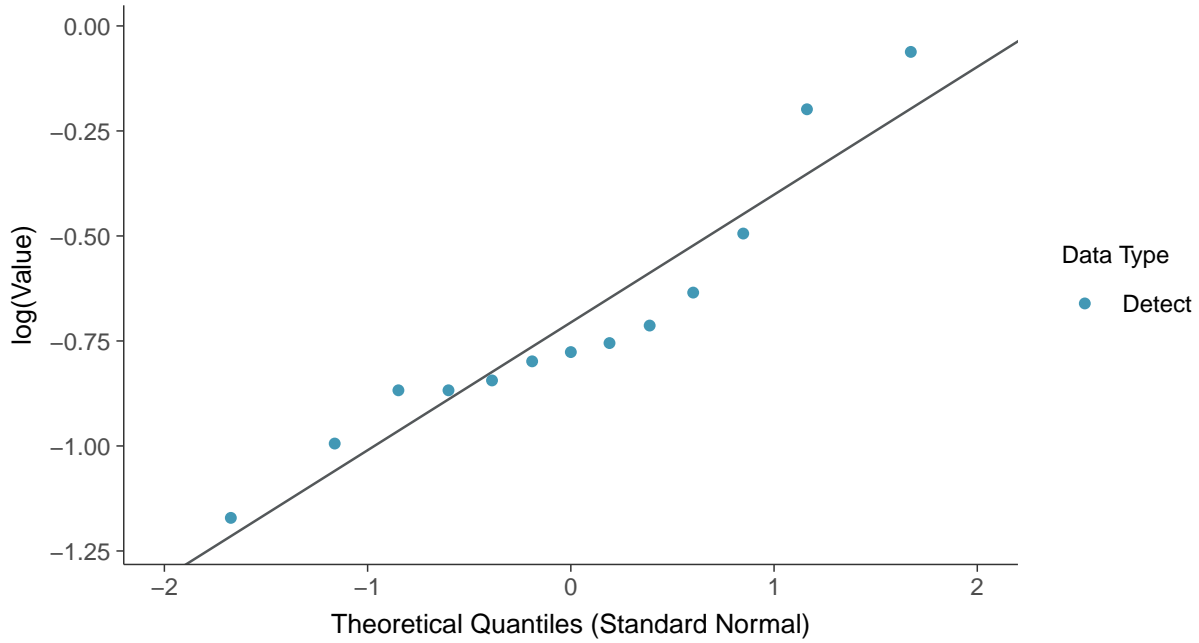
Boxplot by Season

Barium, MW-20 (mg/L)

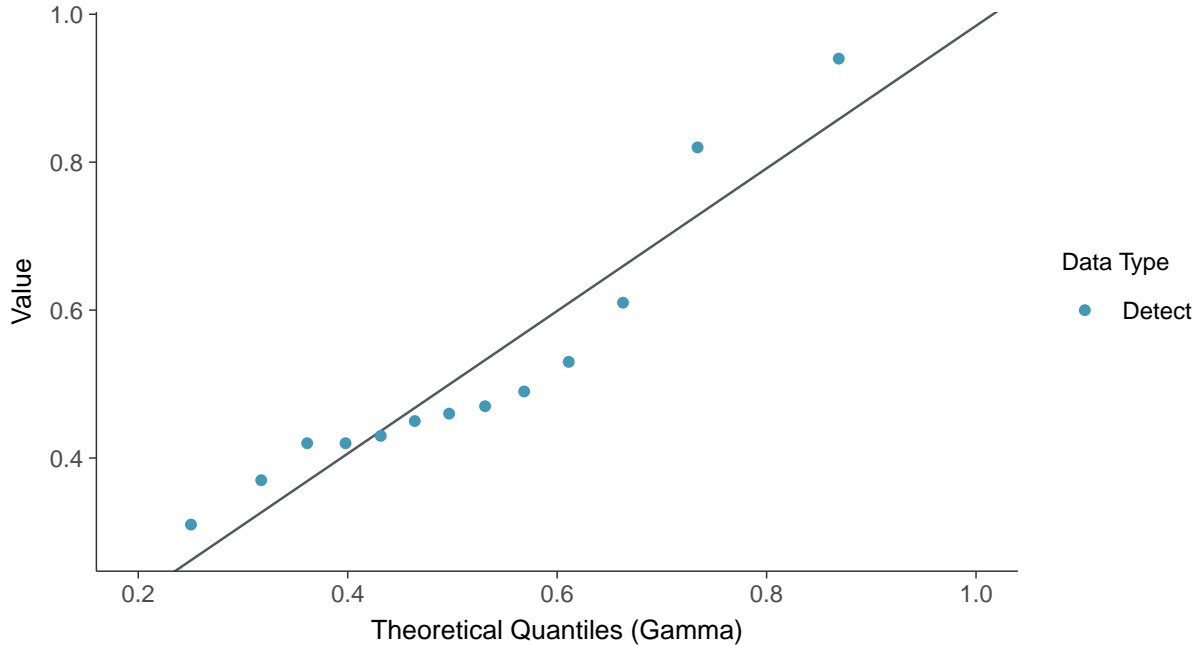




Lognormal Q-Q plot
Barium, MW-20 (mg/L)



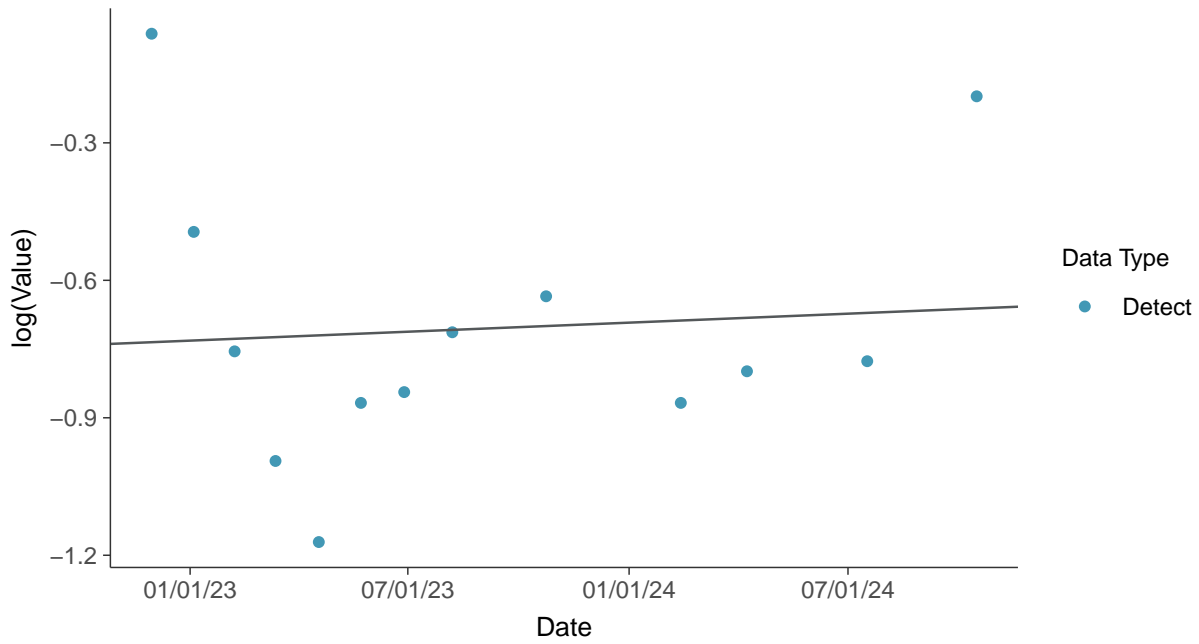
Gamma Q-Q plot
Barium, MW-20 (mg/L)





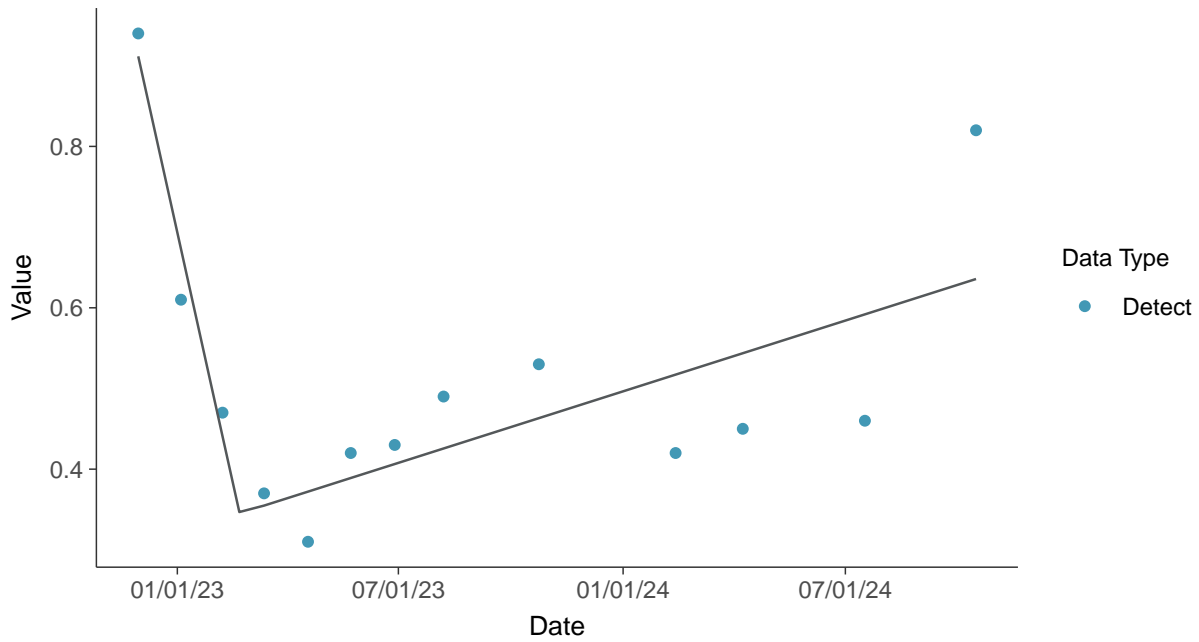
Trend Regression: Lognormal MLE

Barium, MW-20 (mg/L)



Trend Regression: Piecewise Linear-Linear

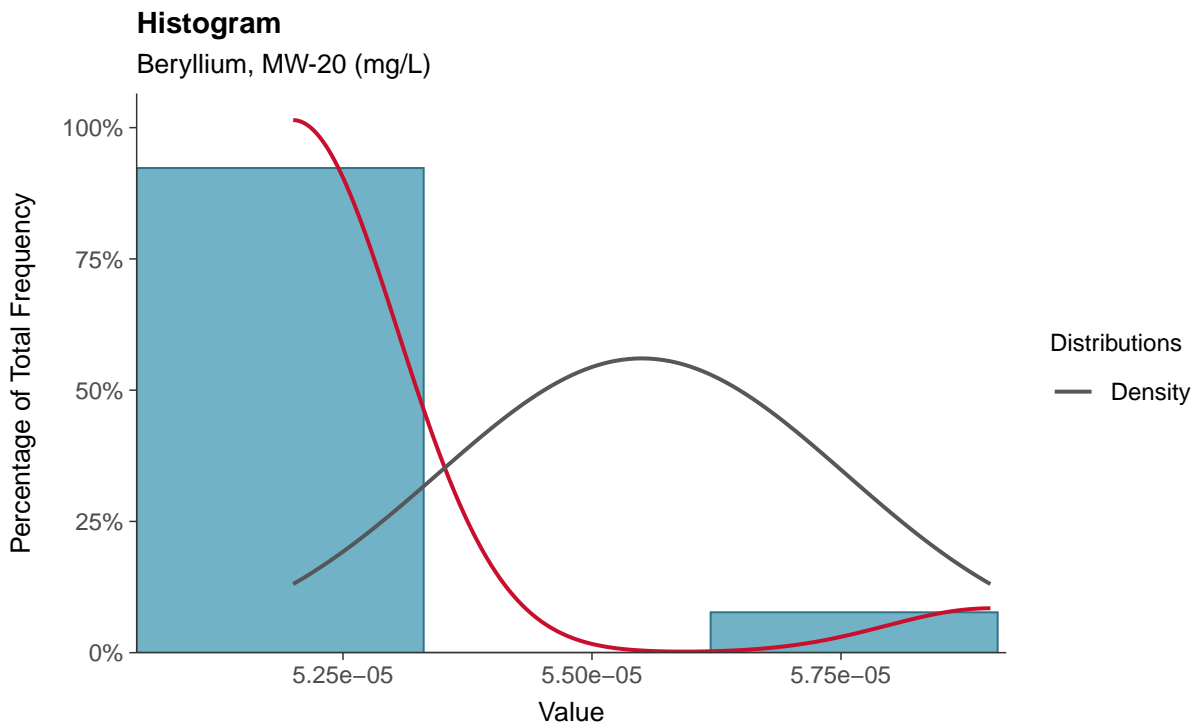
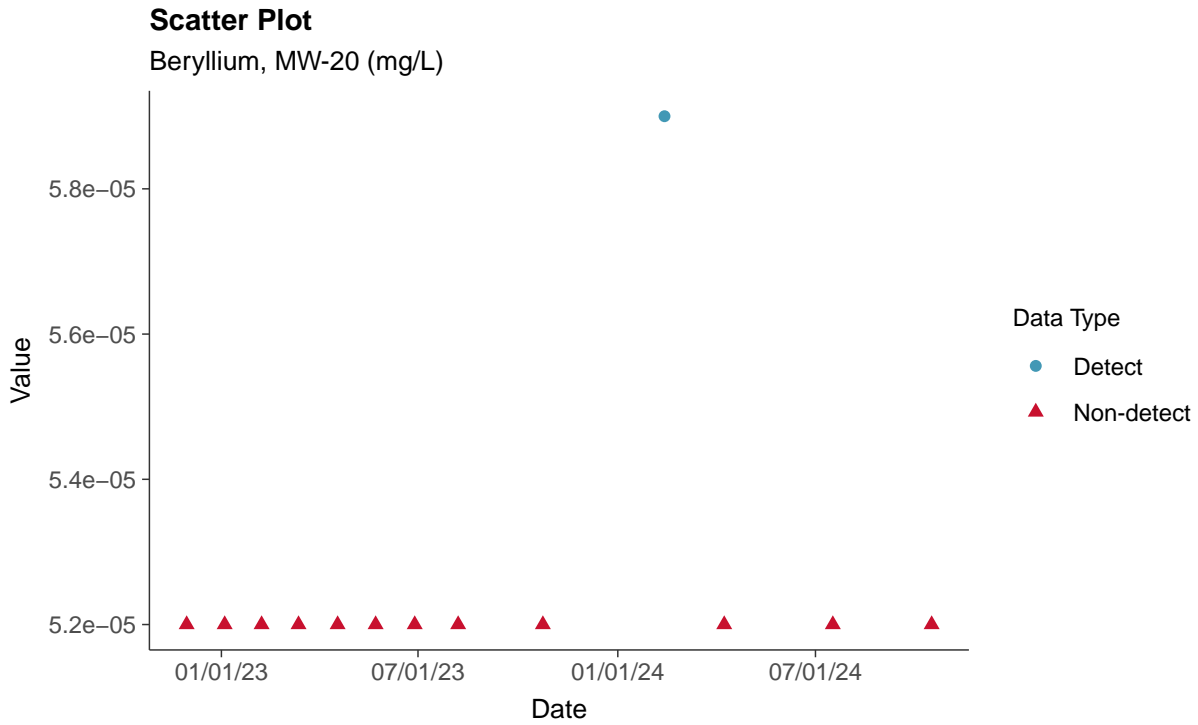
Barium, MW-20 (mg/L)





Appendix IV: Beryllium, MW-20

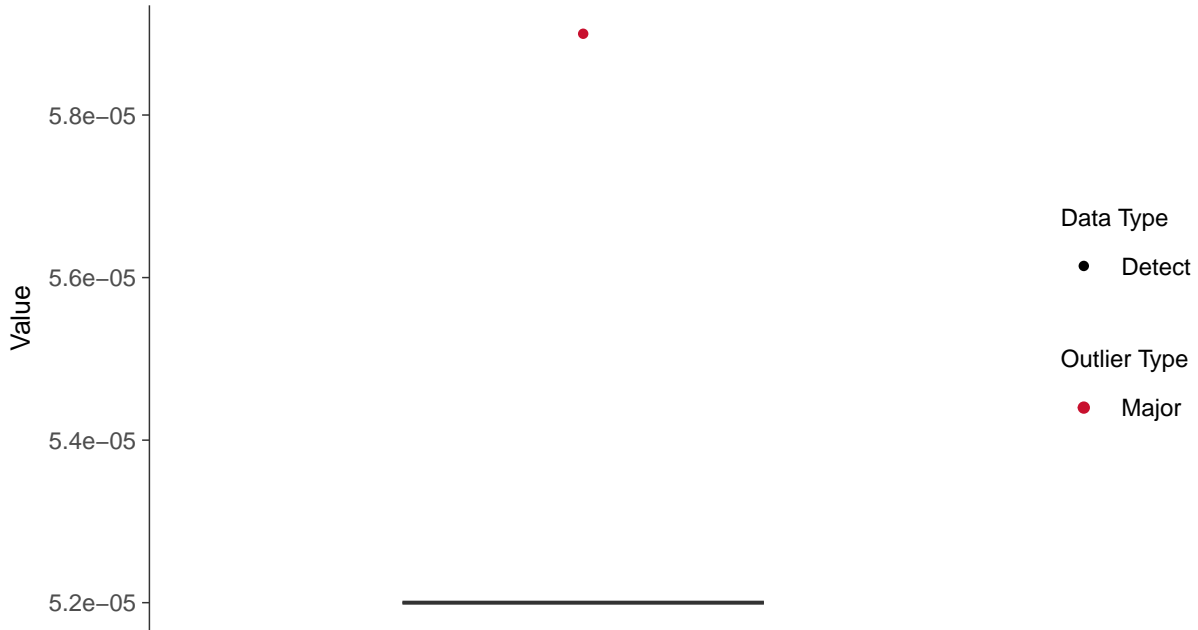
ID: 1_30_1_5_104





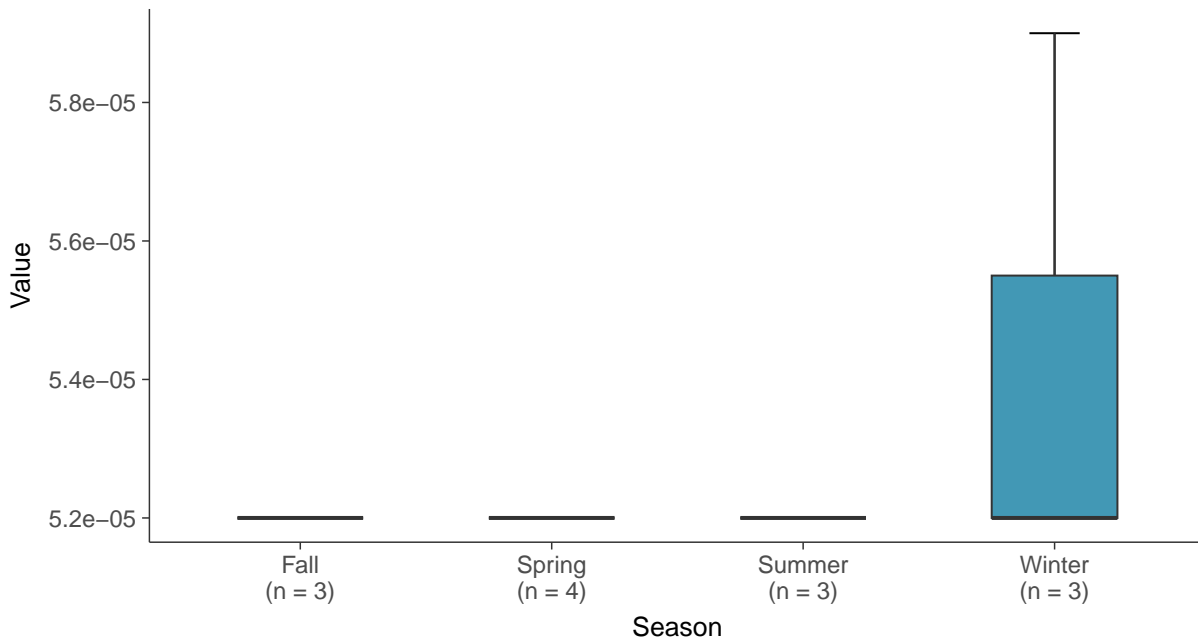
Boxplot

Beryllium, MW-20 (mg/L)



Boxplot by Season

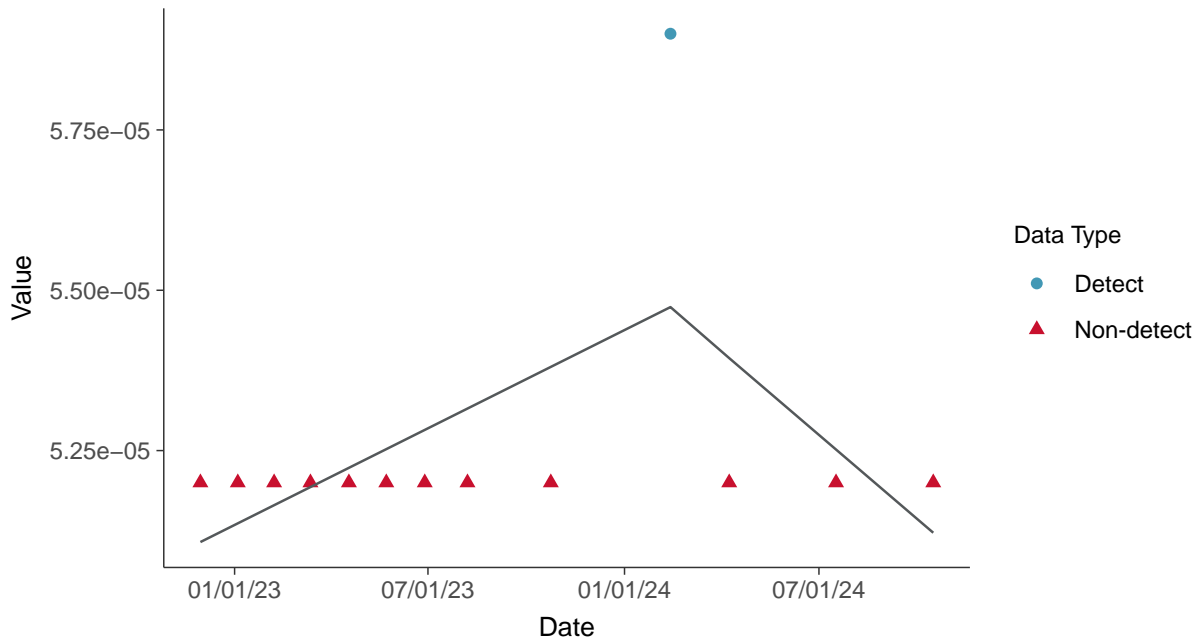
Beryllium, MW-20 (mg/L)





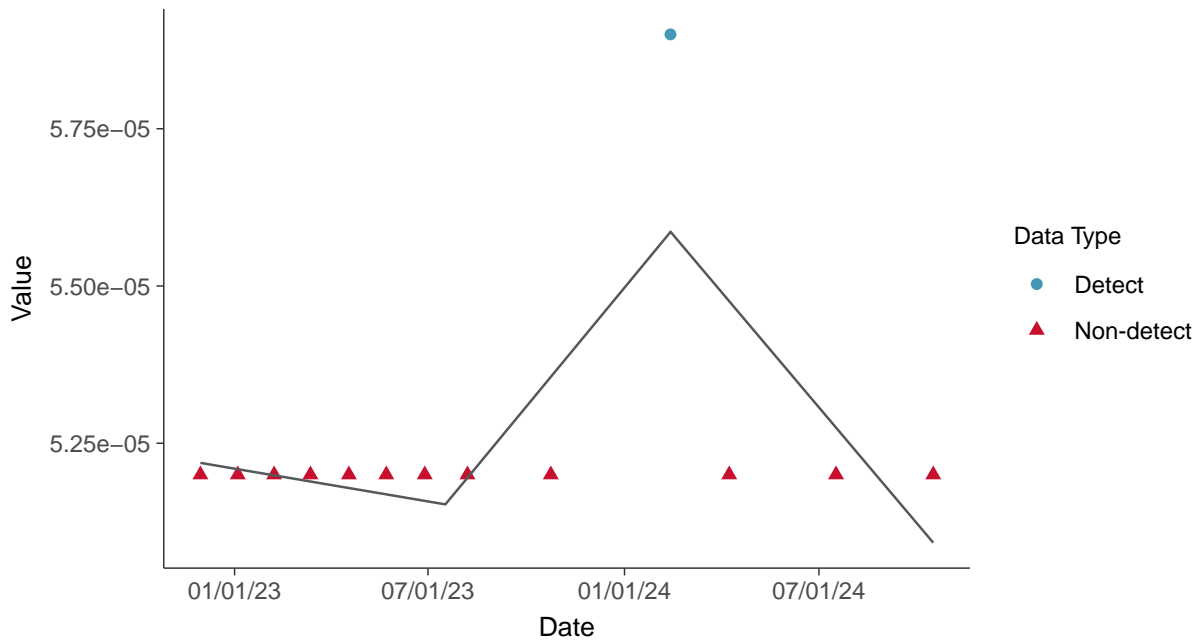
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-20 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Beryllium, MW-20 (mg/L)



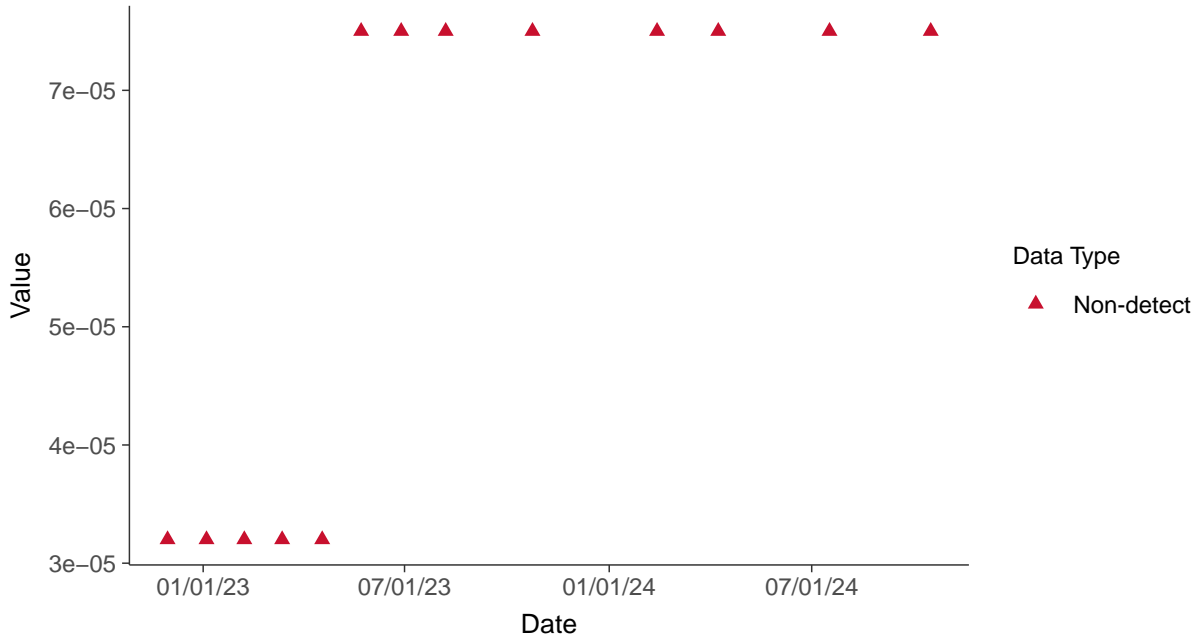


Appendix IV: Cadmium, MW-20

ID: 1_30_1_5_106

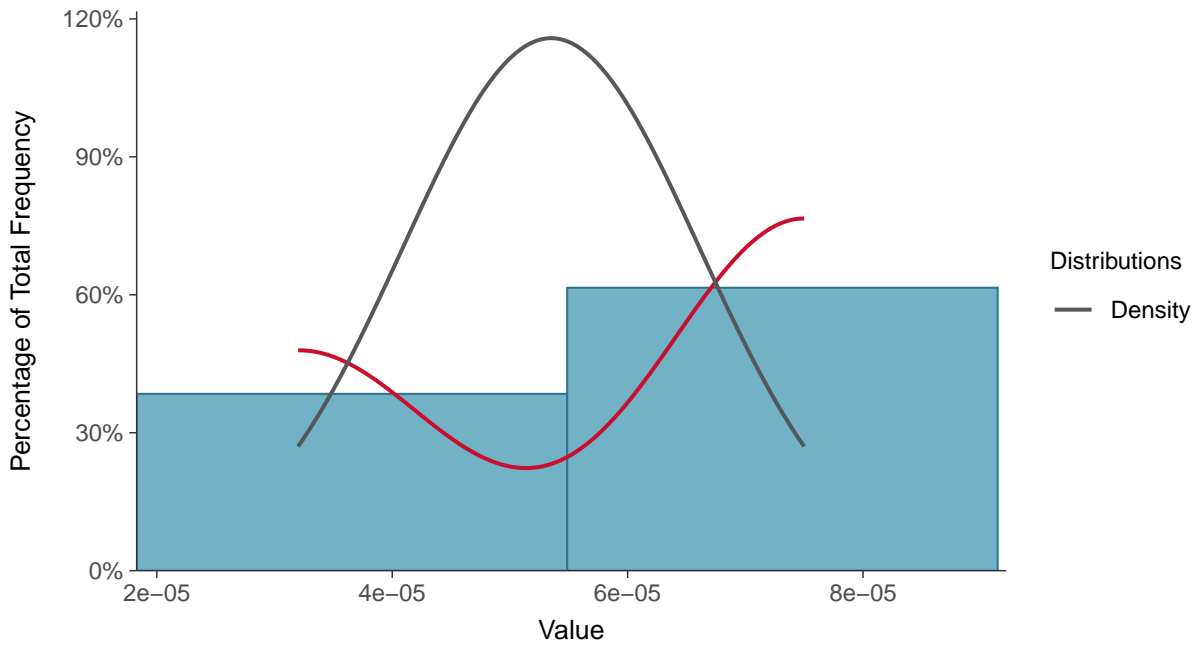
Scatter Plot

Cadmium, MW-20 (mg/L)



Histogram

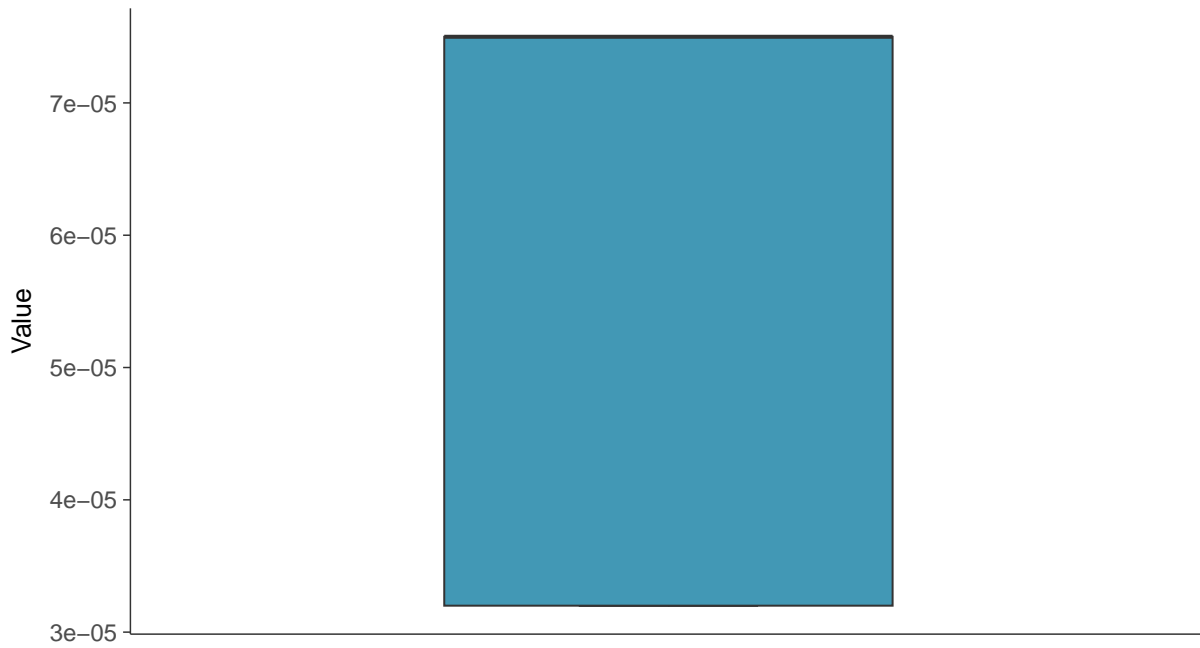
Cadmium, MW-20 (mg/L)





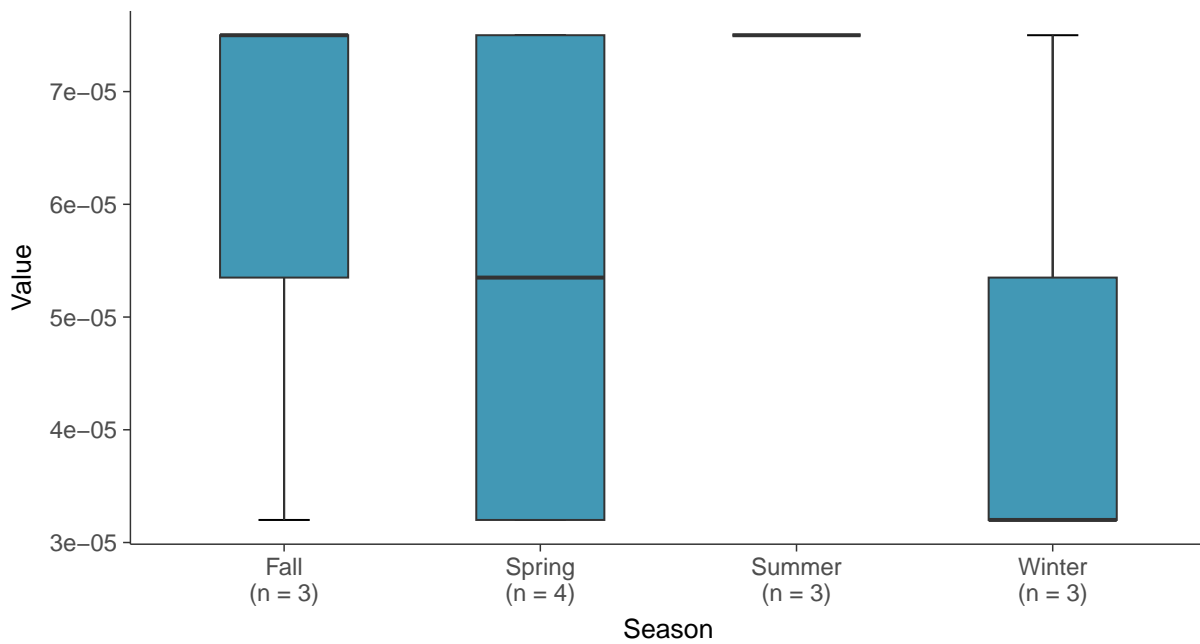
Boxplot

Cadmium, MW-20 (mg/L)



Boxplot by Season

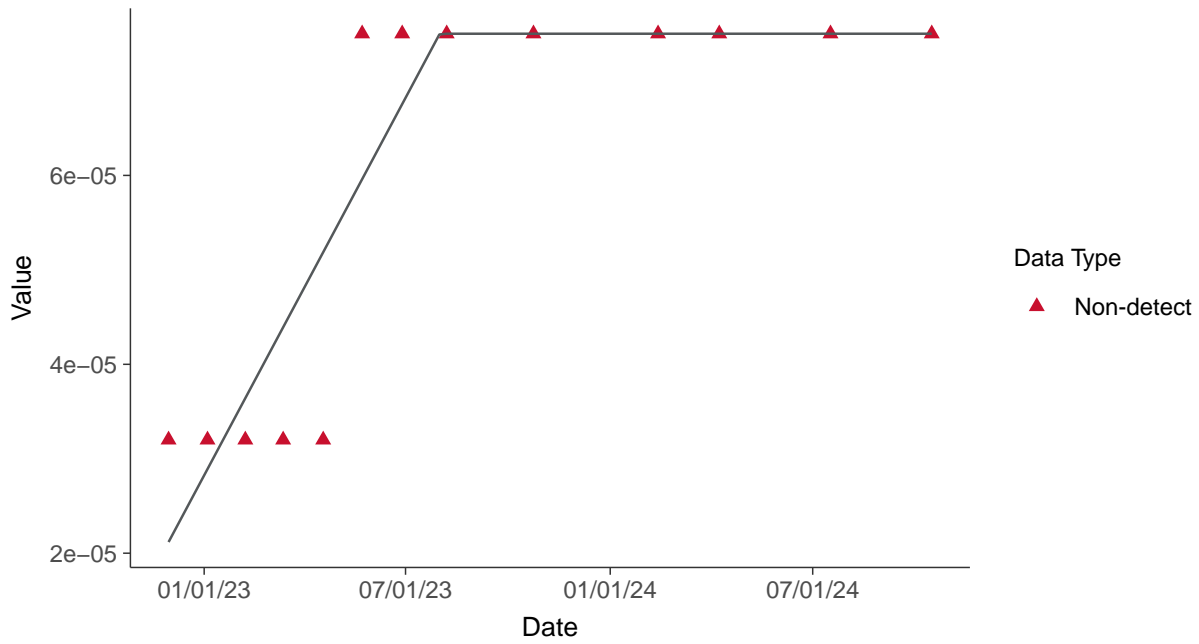
Cadmium, MW-20 (mg/L)





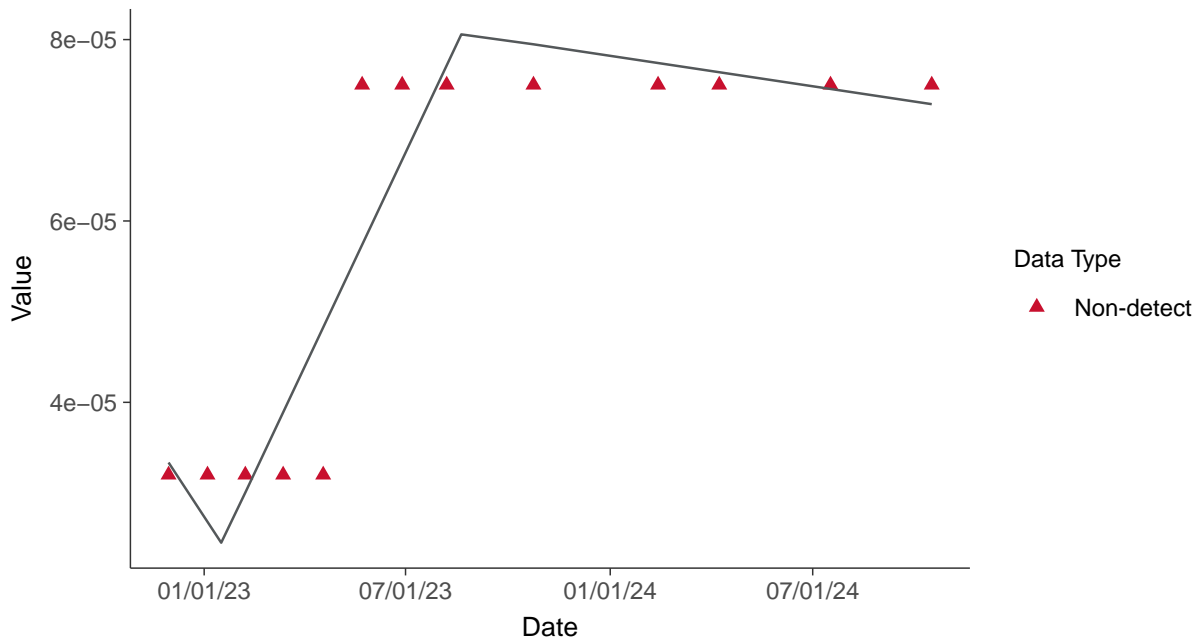
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-20 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cadmium, MW-20 (mg/L)



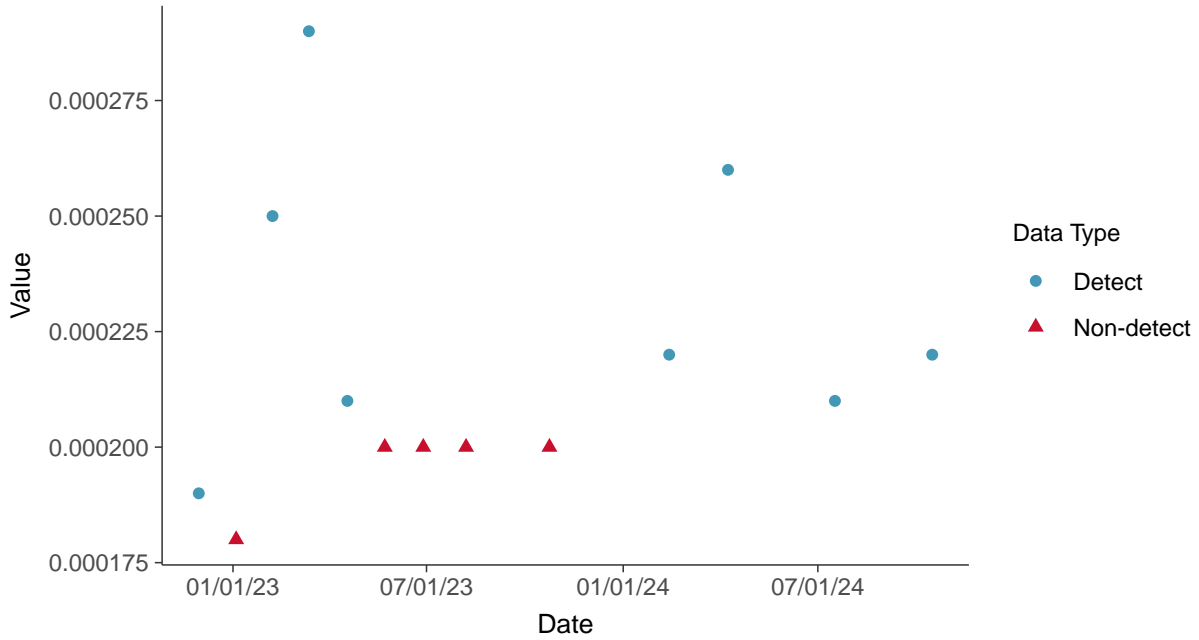


Appendix IV: Chromium, Total, MW-20

ID: 1_30_1_5_109

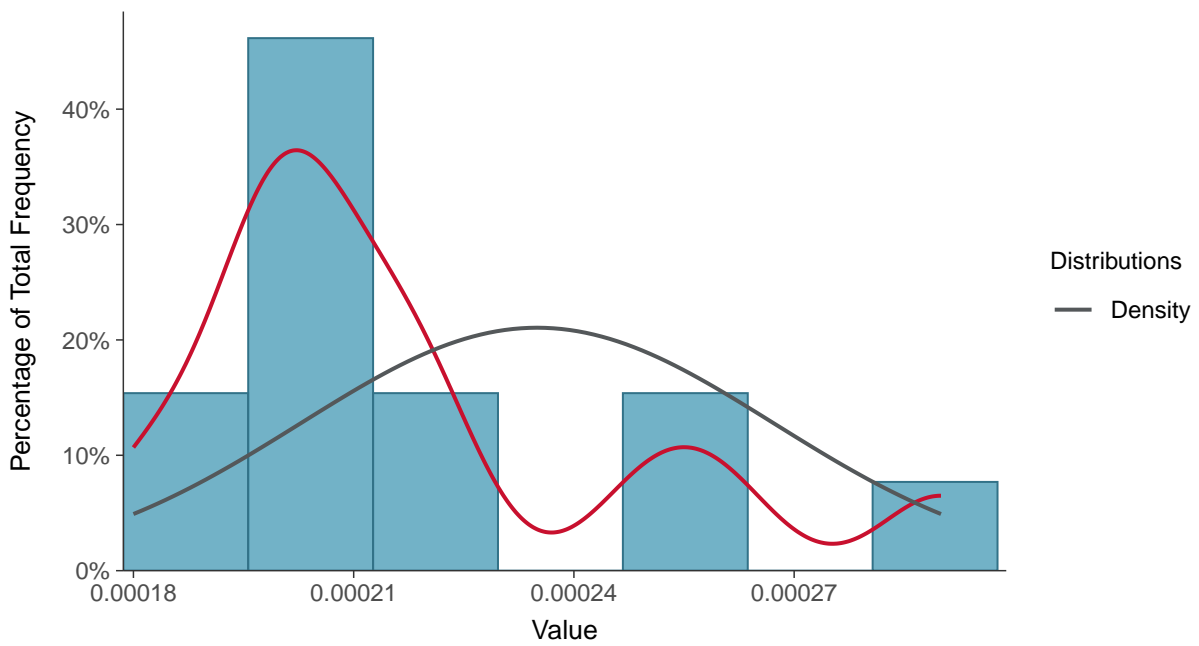
Scatter Plot

Chromium, Total, MW-20 (mg/L)



Histogram

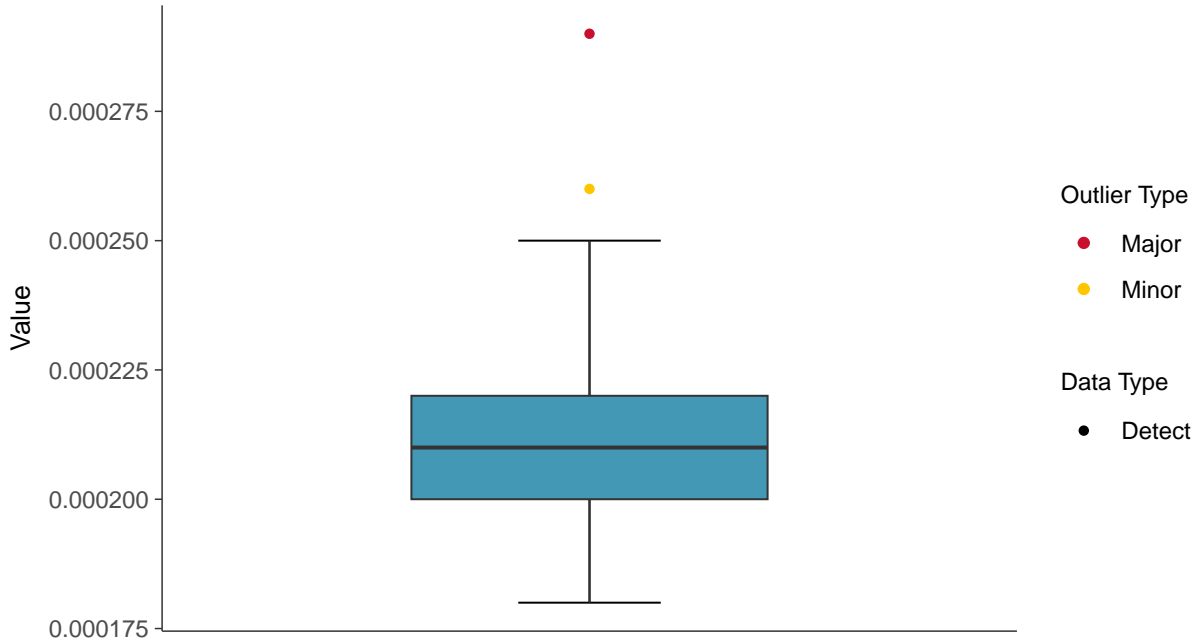
Chromium, Total, MW-20 (mg/L)





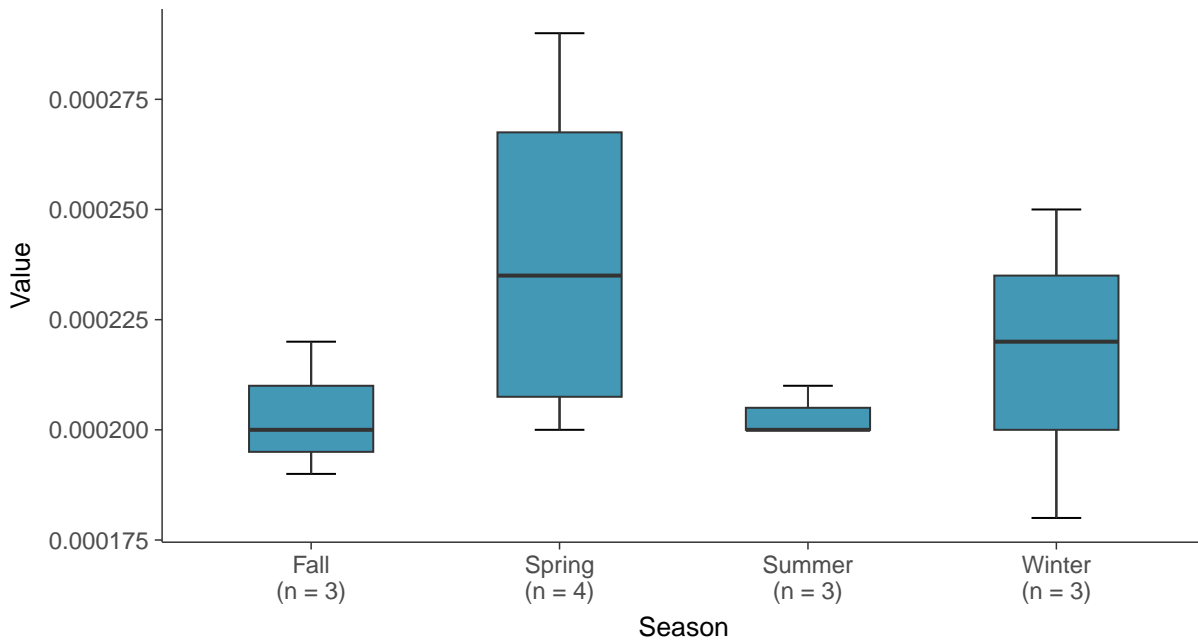
Boxplot

Chromium, Total, MW-20 (mg/L)



Boxplot by Season

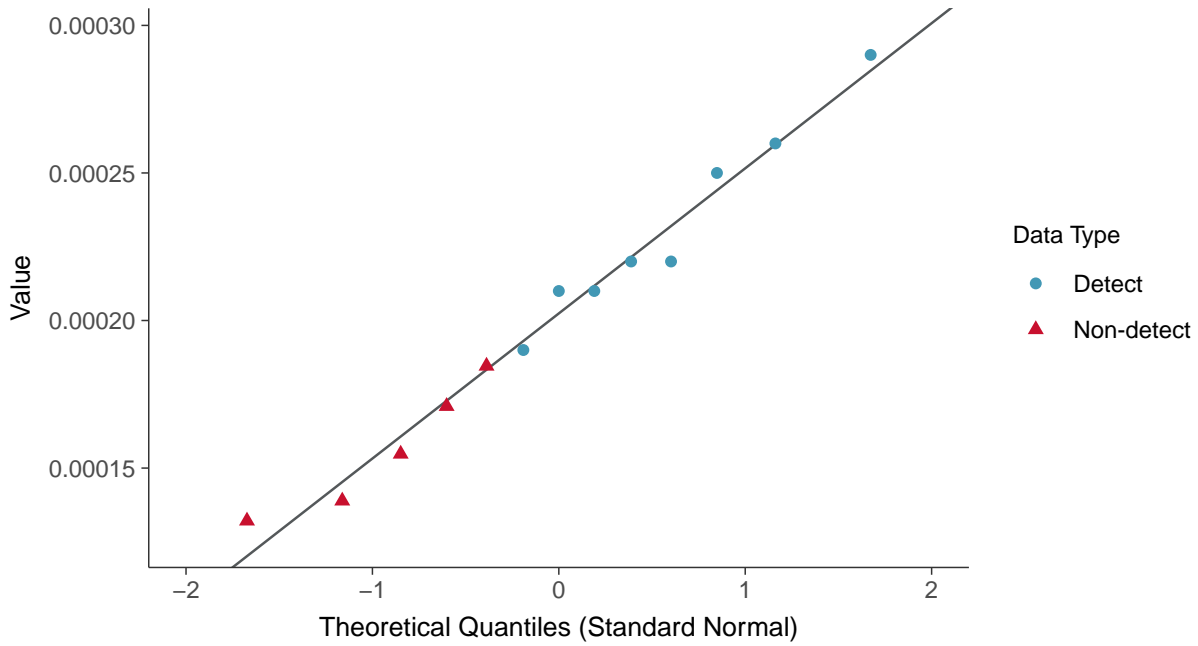
Chromium, Total, MW-20 (mg/L)





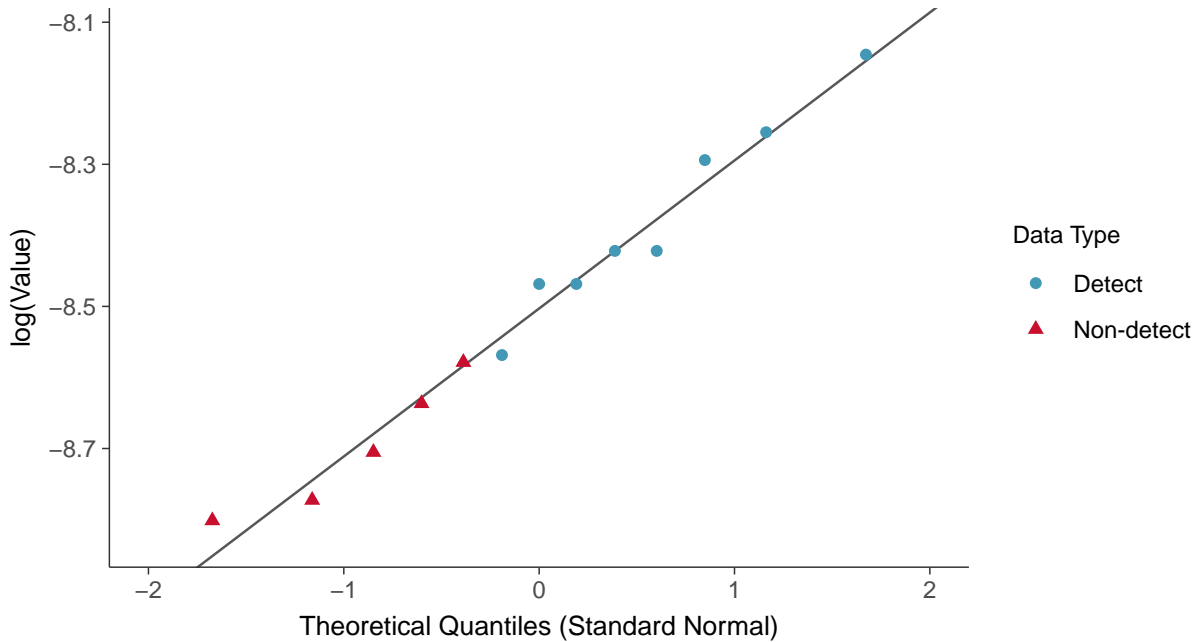
Normal Q-Q plot using ROS Imputed Estimates

Chromium, Total, MW-20 (mg/L)



Lognormal Q-Q plot using ROS Imputed Estimates

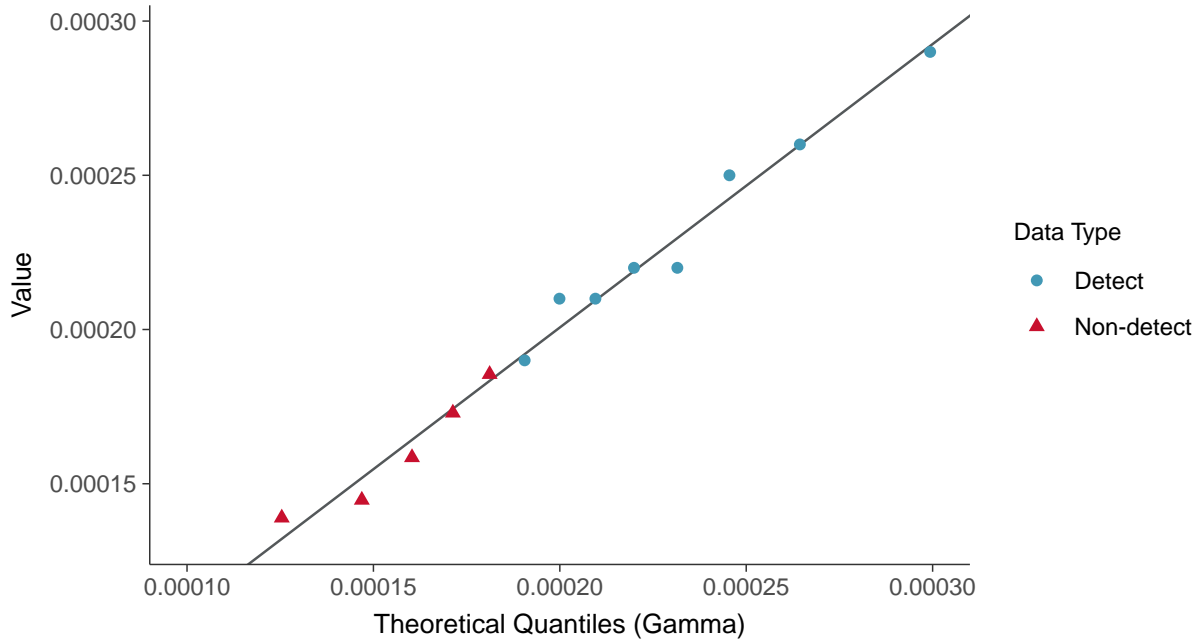
Chromium, Total, MW-20 (mg/L)





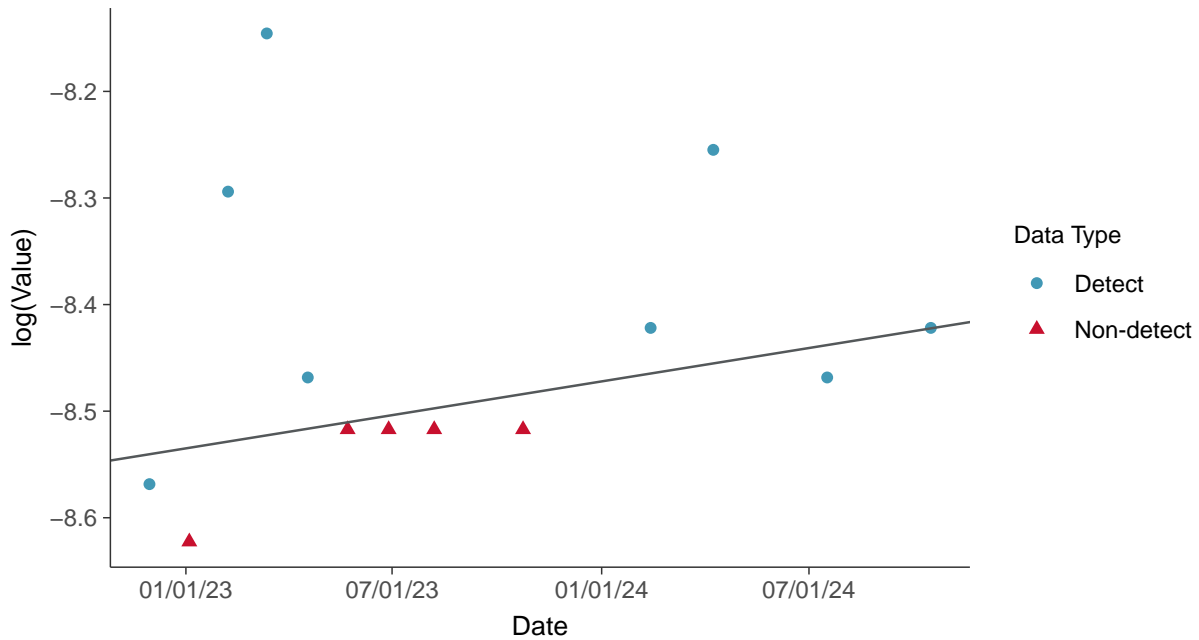
Gamma Q-Q plot using ROS Imputed Estimates

Chromium, Total, MW-20 (mg/L)



Trend Regression: Lognormal MLE

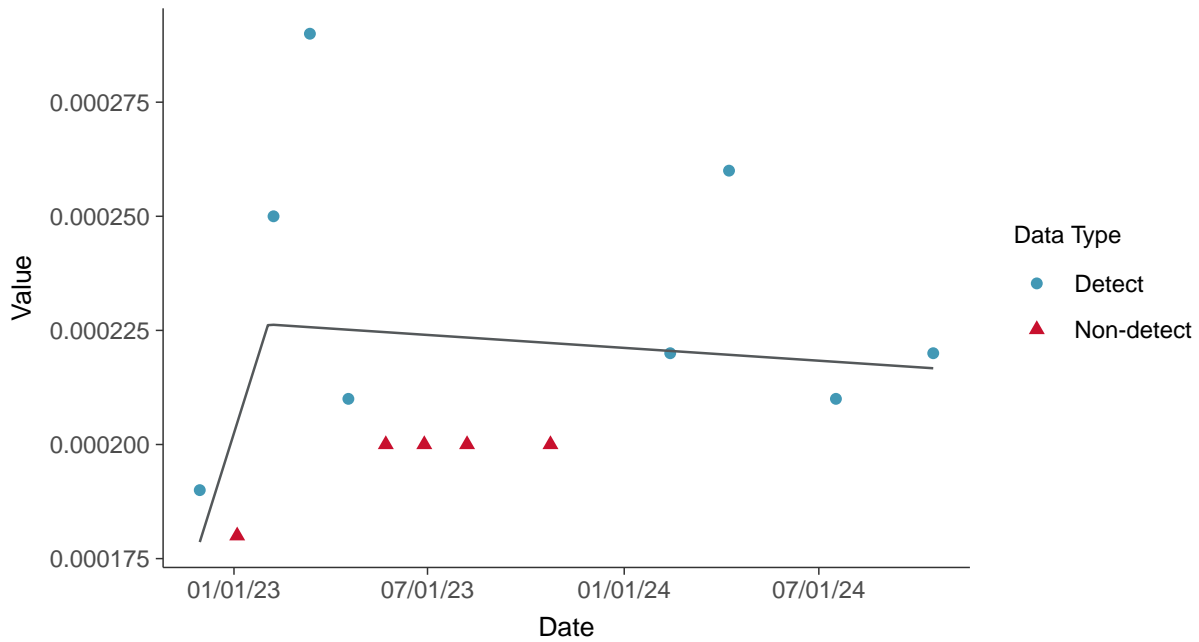
Chromium, Total, MW-20 (mg/L)





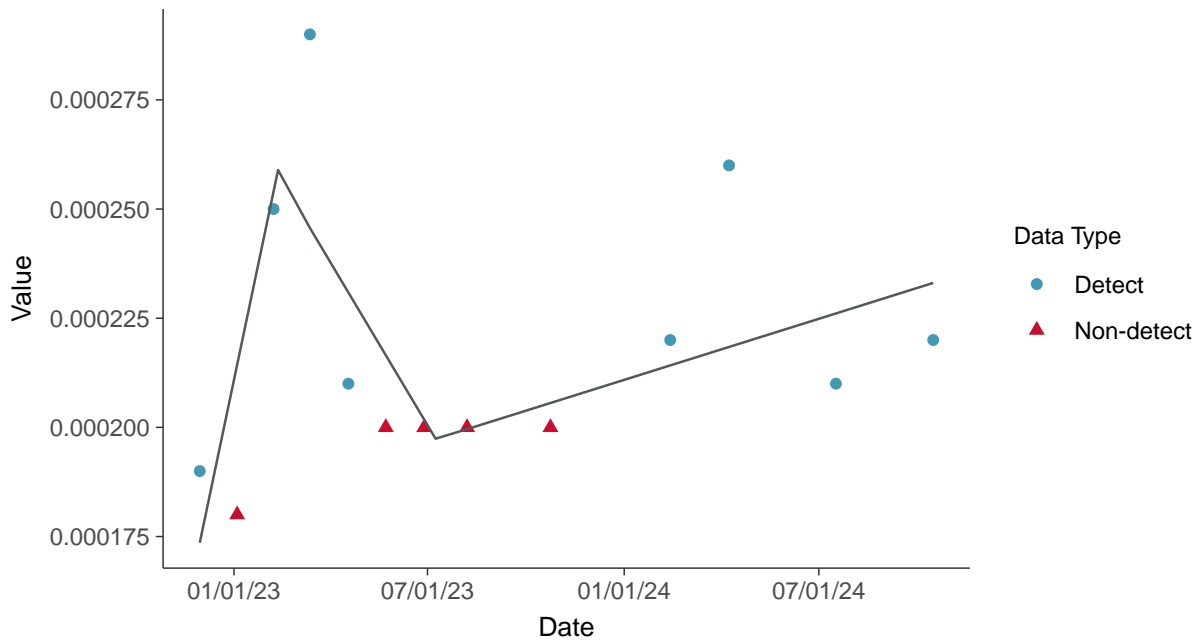
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-20 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

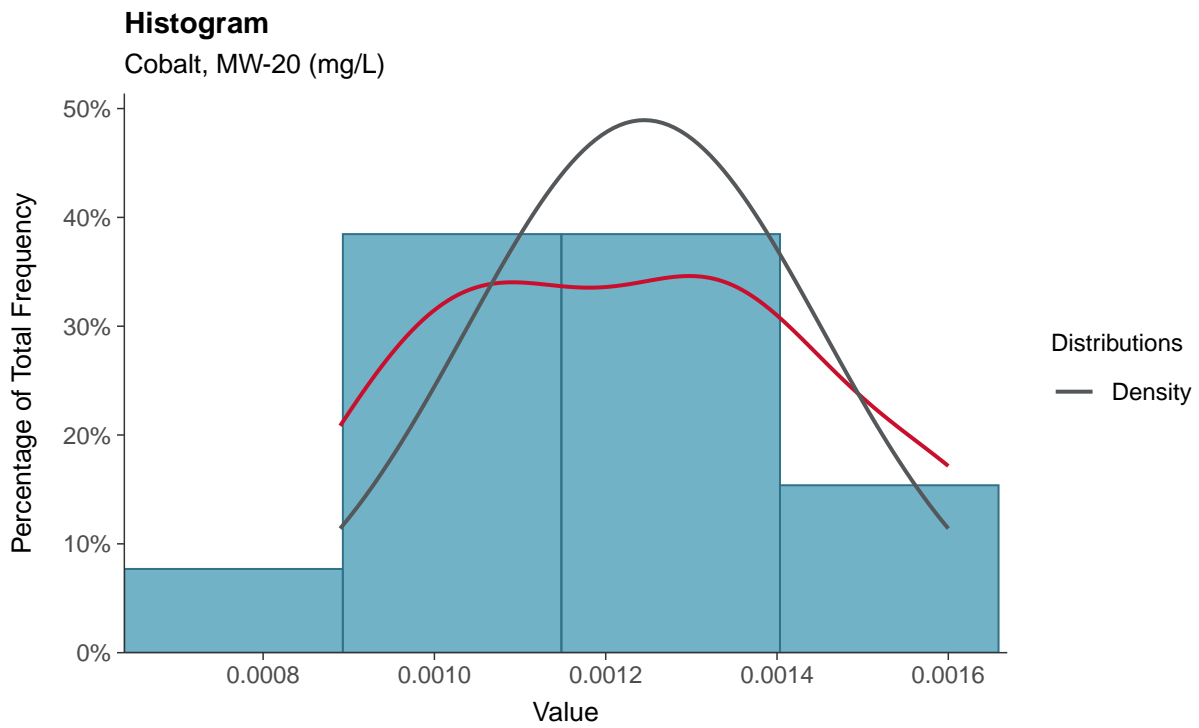
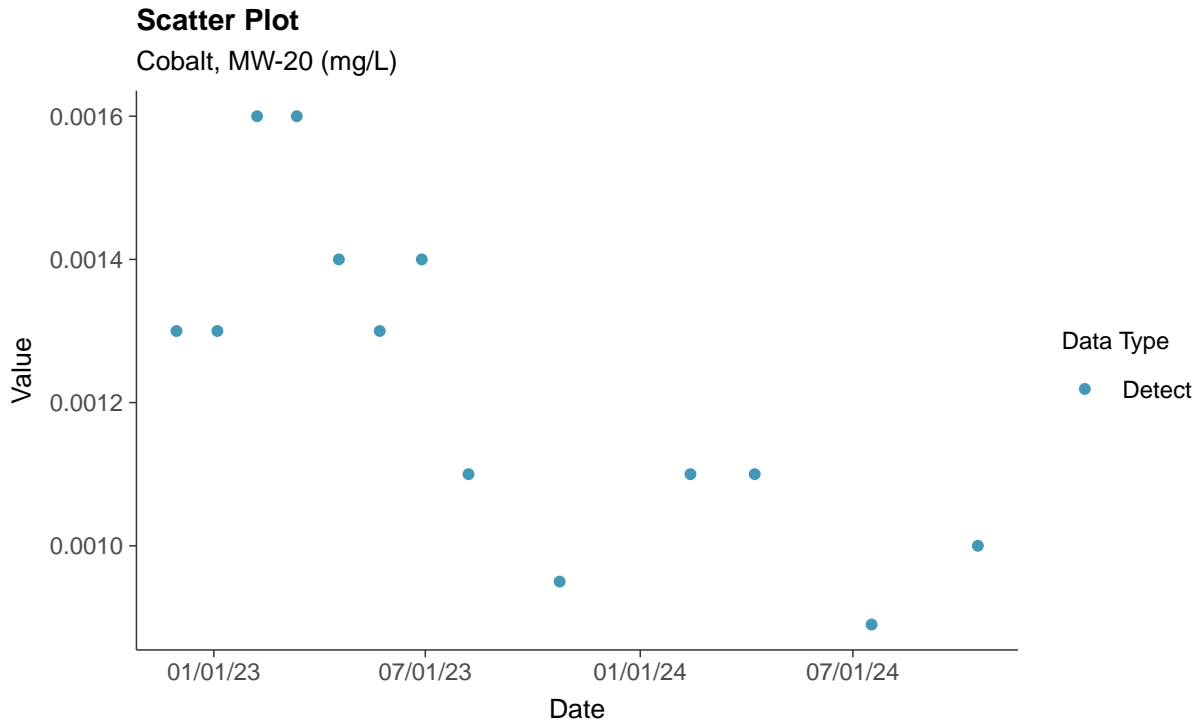
Chromium, Total, MW-20 (mg/L)





Appendix IV: Cobalt, MW-20

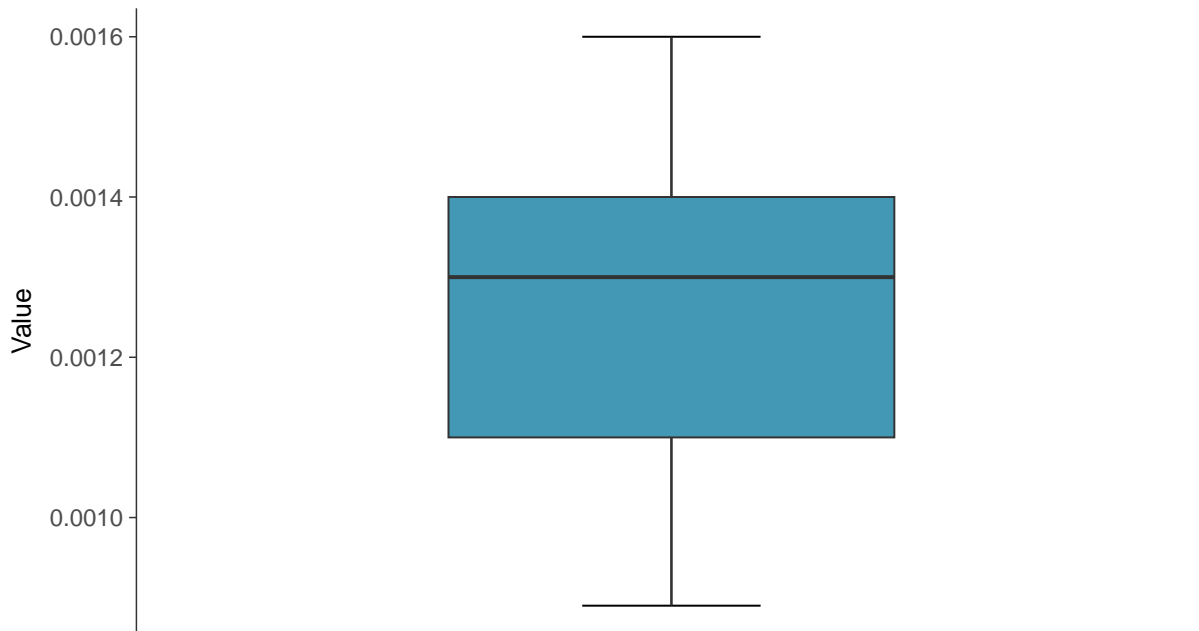
ID: 1_30_1_5_110





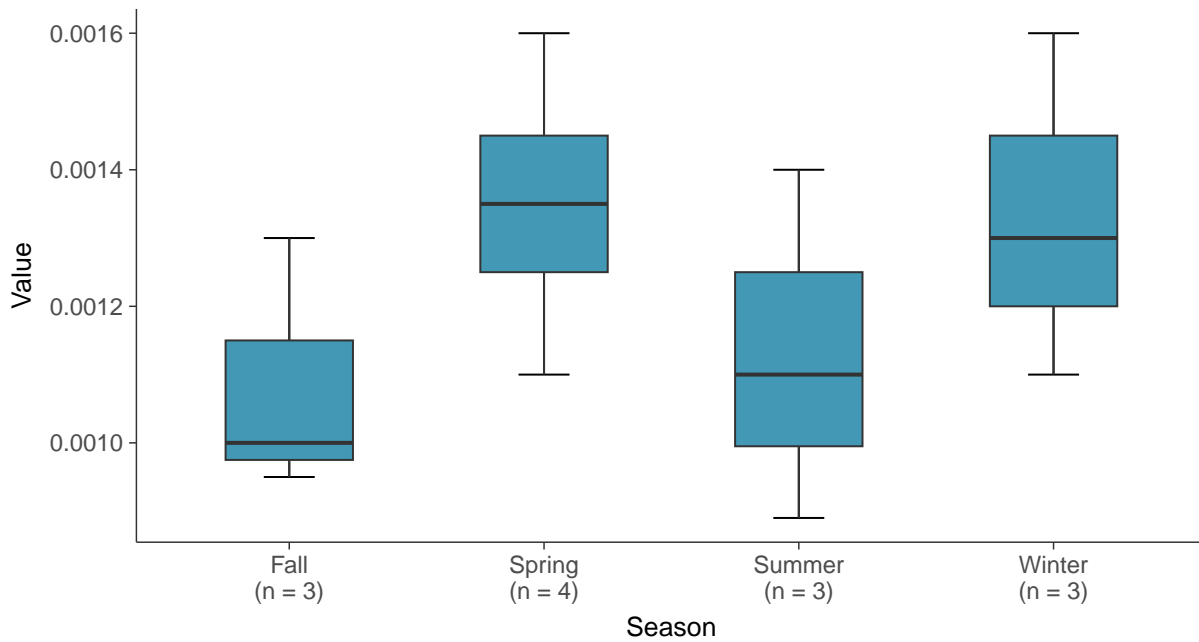
Boxplot

Cobalt, MW-20 (mg/L)



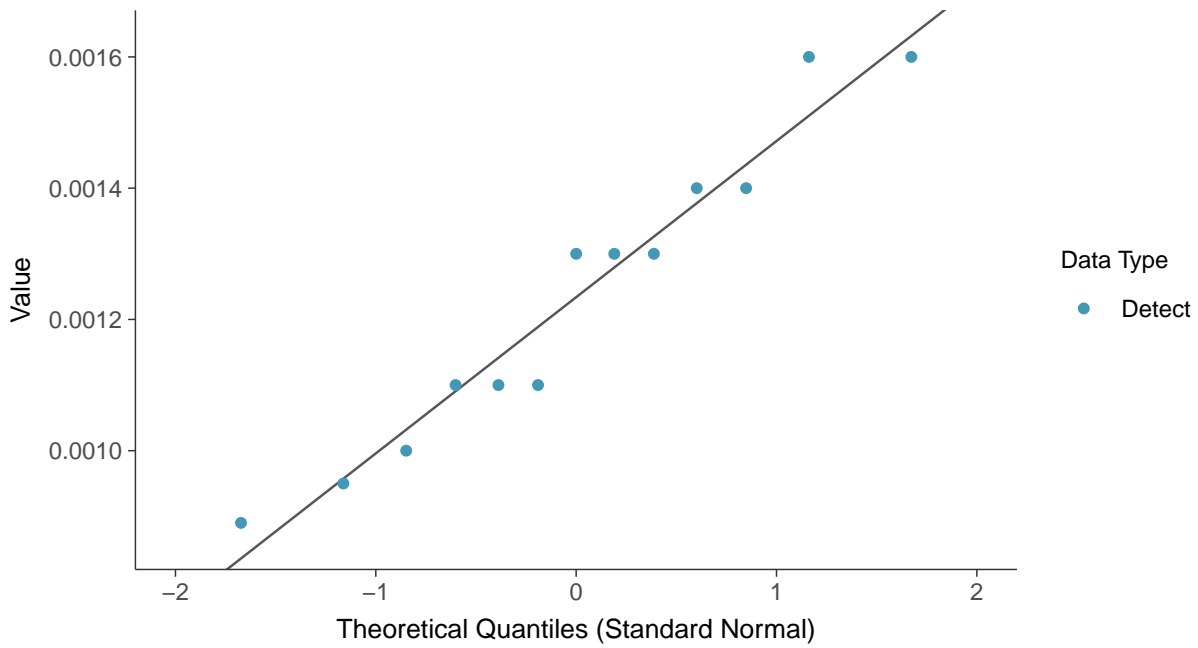
Boxplot by Season

Cobalt, MW-20 (mg/L)

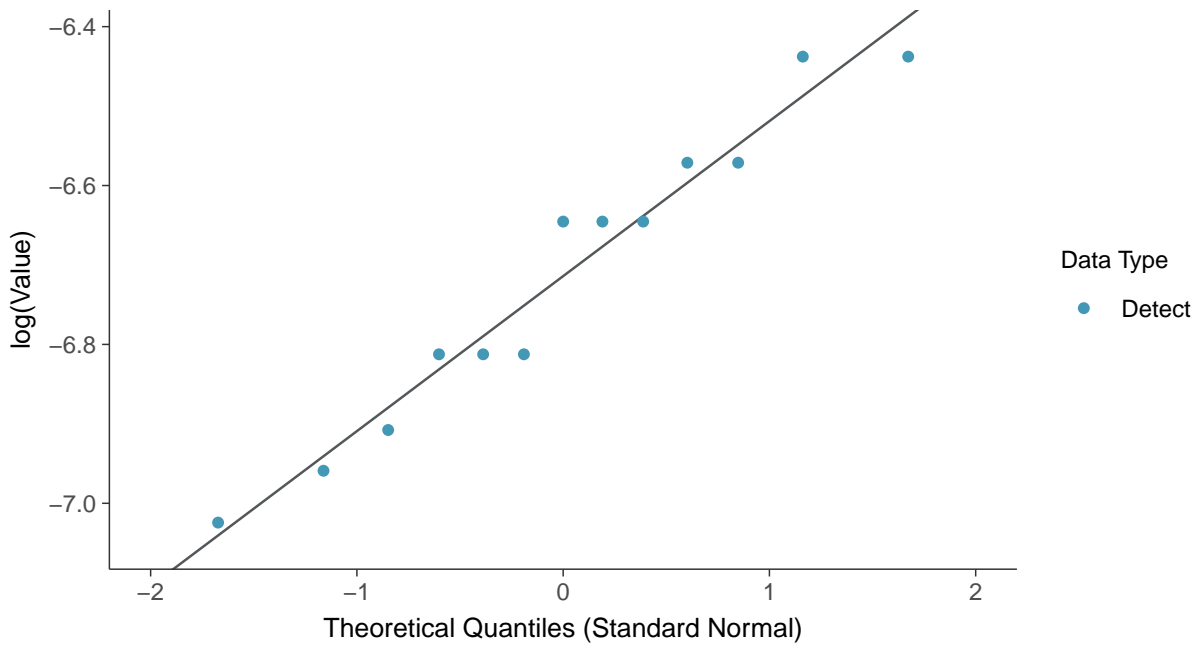




Normal Q-Q plot
Cobalt, MW-20 (mg/L)

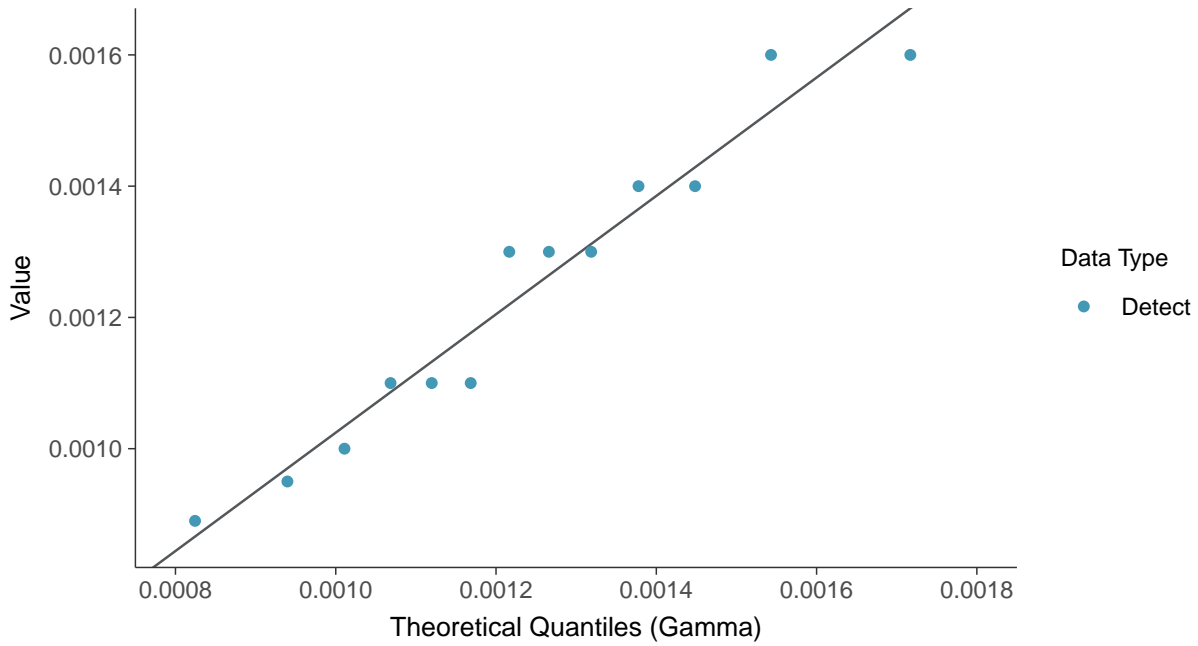


Lognormal Q-Q plot
Cobalt, MW-20 (mg/L)

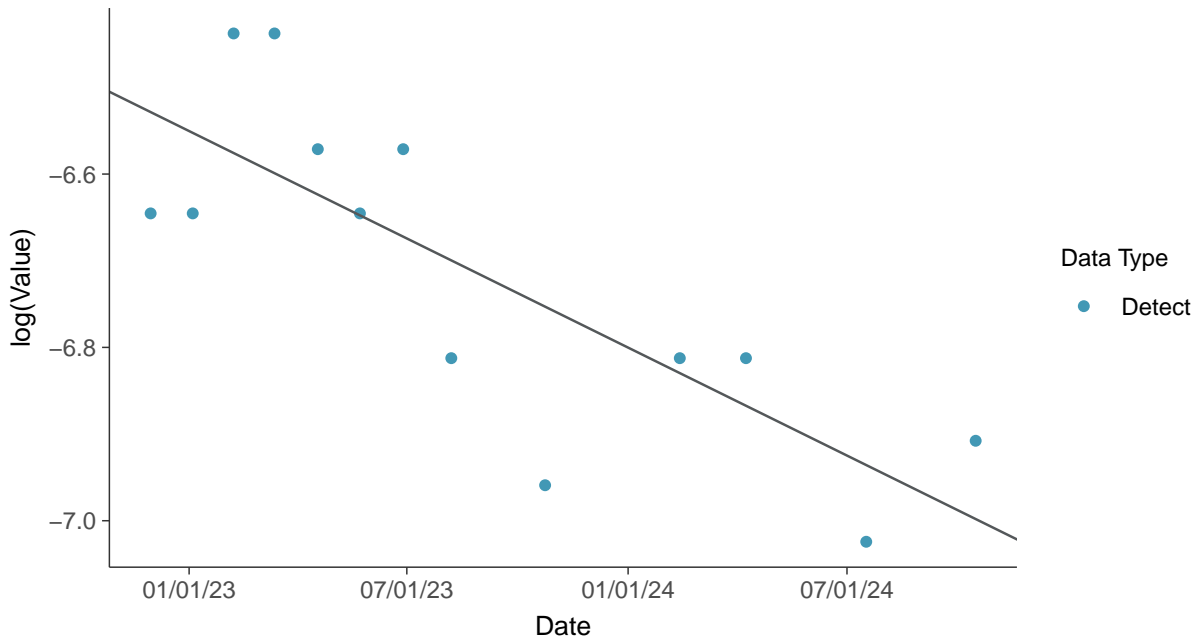




Gamma Q-Q plot
Cobalt, MW-20 (mg/L)

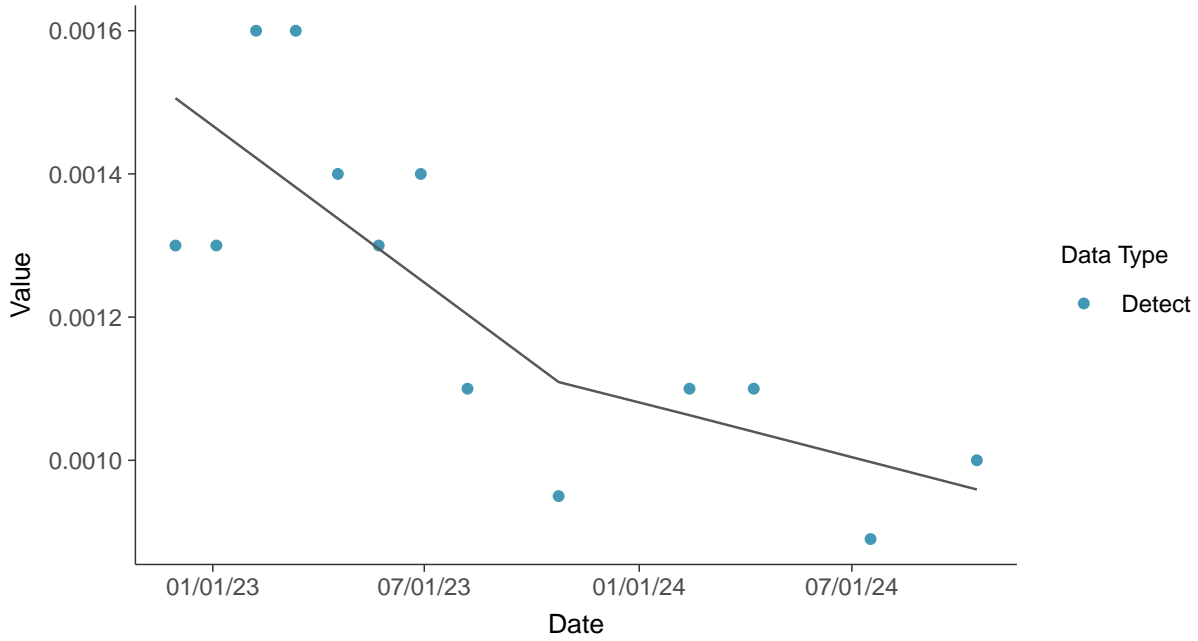


Trend Regression: Lognormal MLE
Cobalt, MW-20 (mg/L)

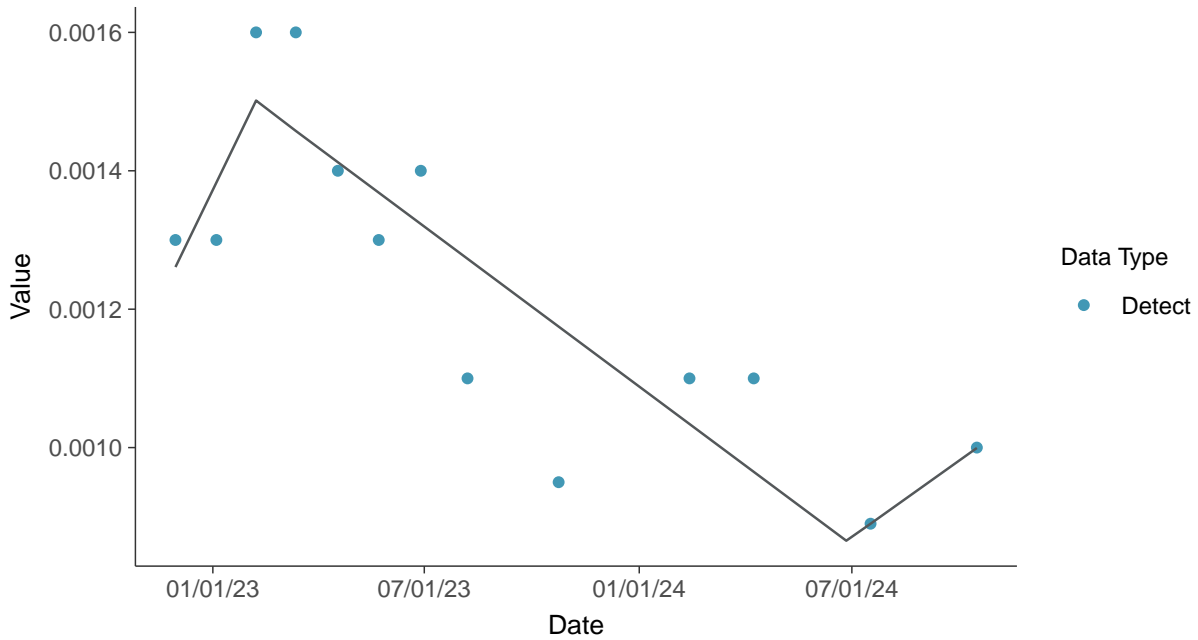




Trend Regression: Piecewise Linear-Linear
Cobalt, MW-20 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Cobalt, MW-20 (mg/L)



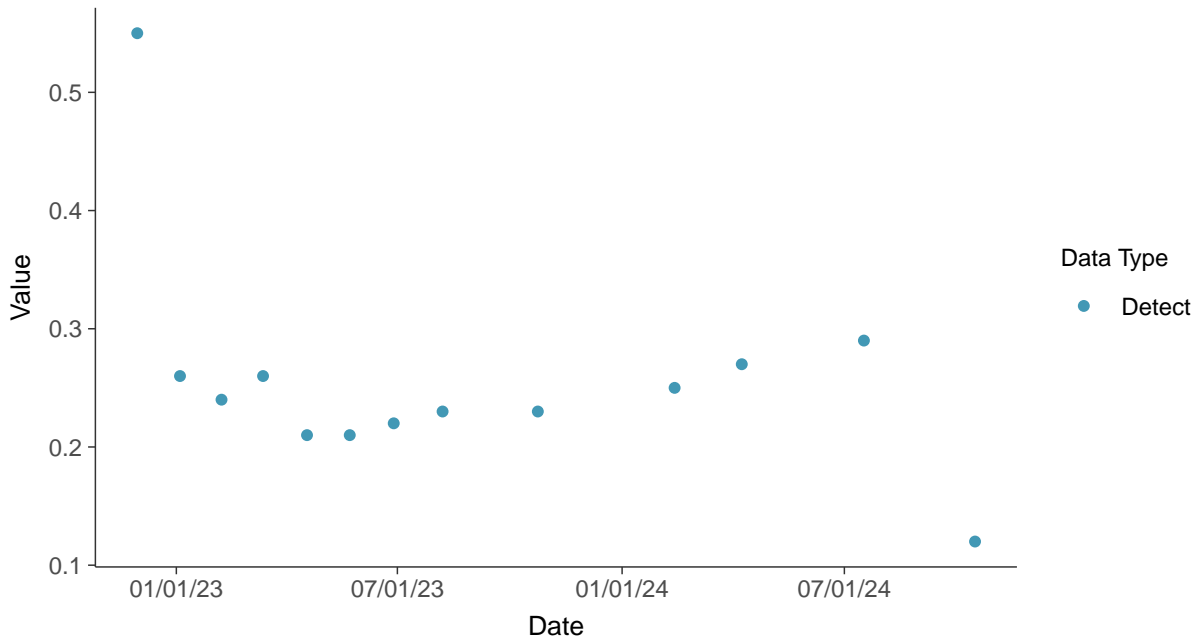


Appendix IV: Fluoride (App IV), MW-20

ID: 1_30_1_5_113

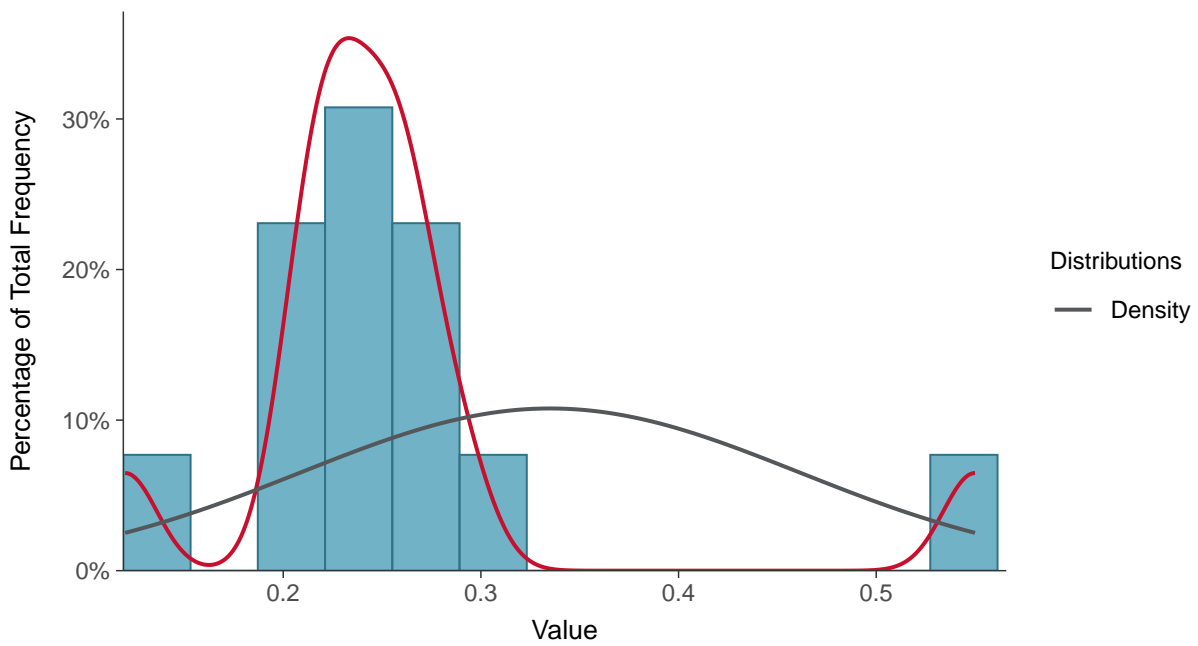
Scatter Plot

Fluoride (App IV), MW-20 (mg/L)



Histogram

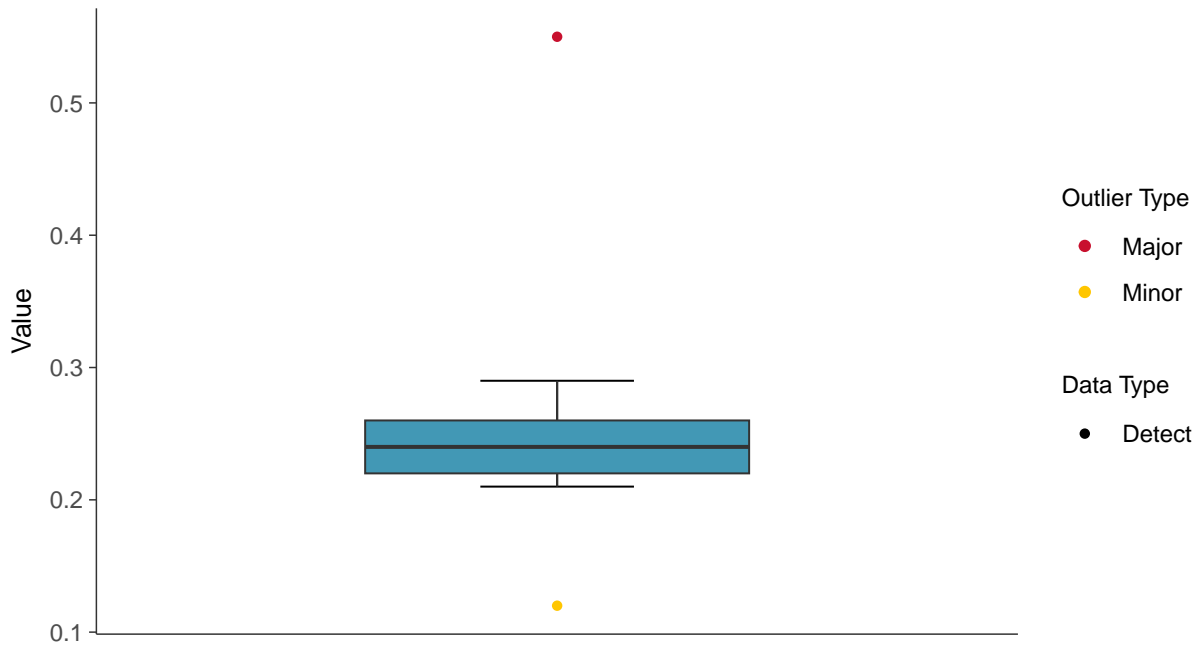
Fluoride (App IV), MW-20 (mg/L)





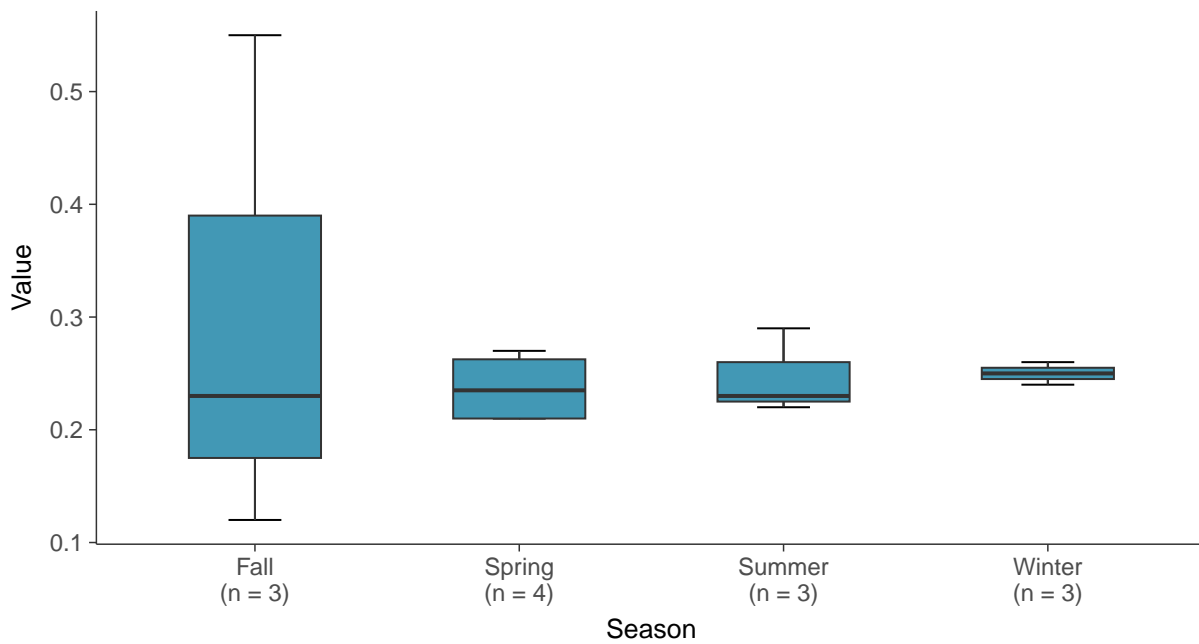
Boxplot

Fluoride (App IV), MW-20 (mg/L)



Boxplot by Season

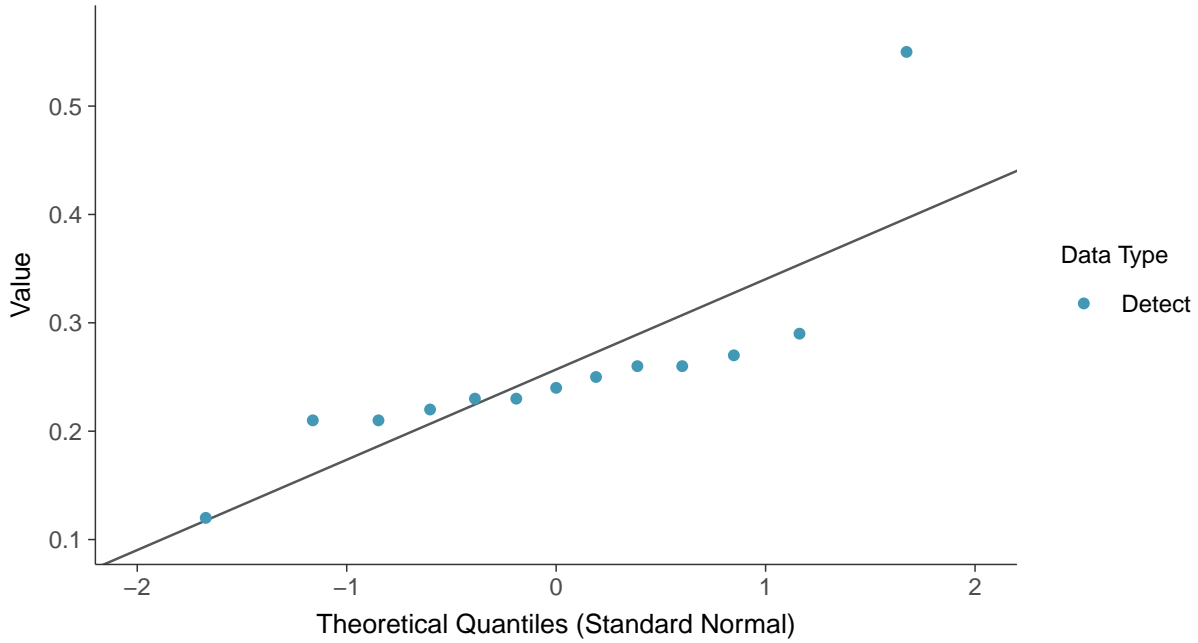
Fluoride (App IV), MW-20 (mg/L)





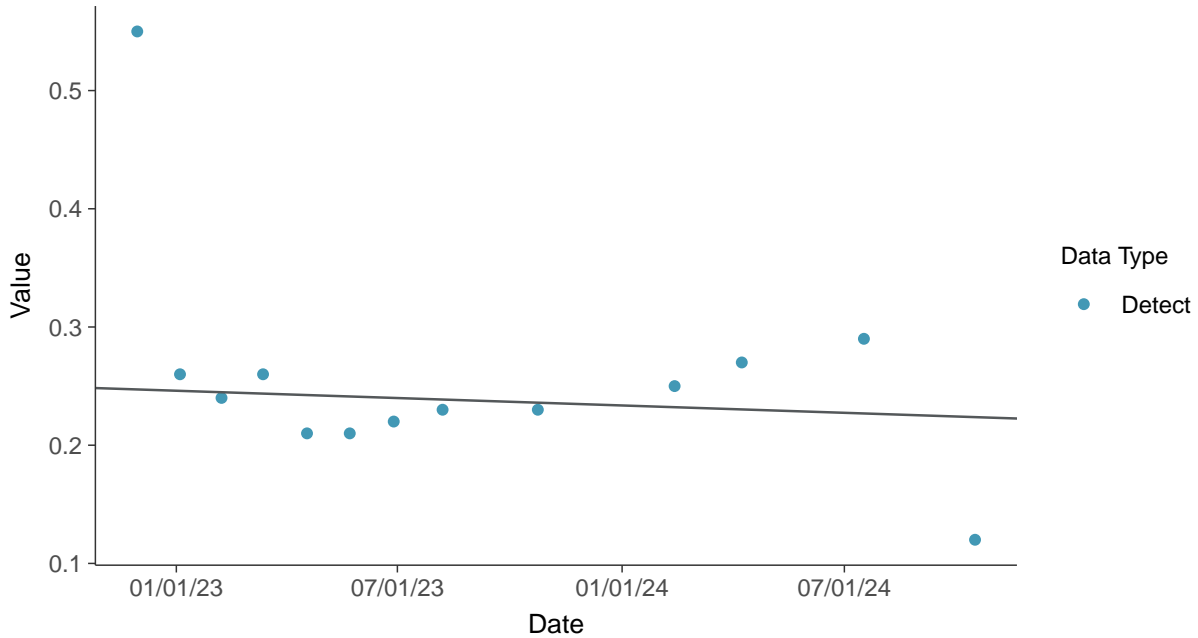
Normal Q-Q plot

Fluoride (App IV), MW-20 (mg/L)



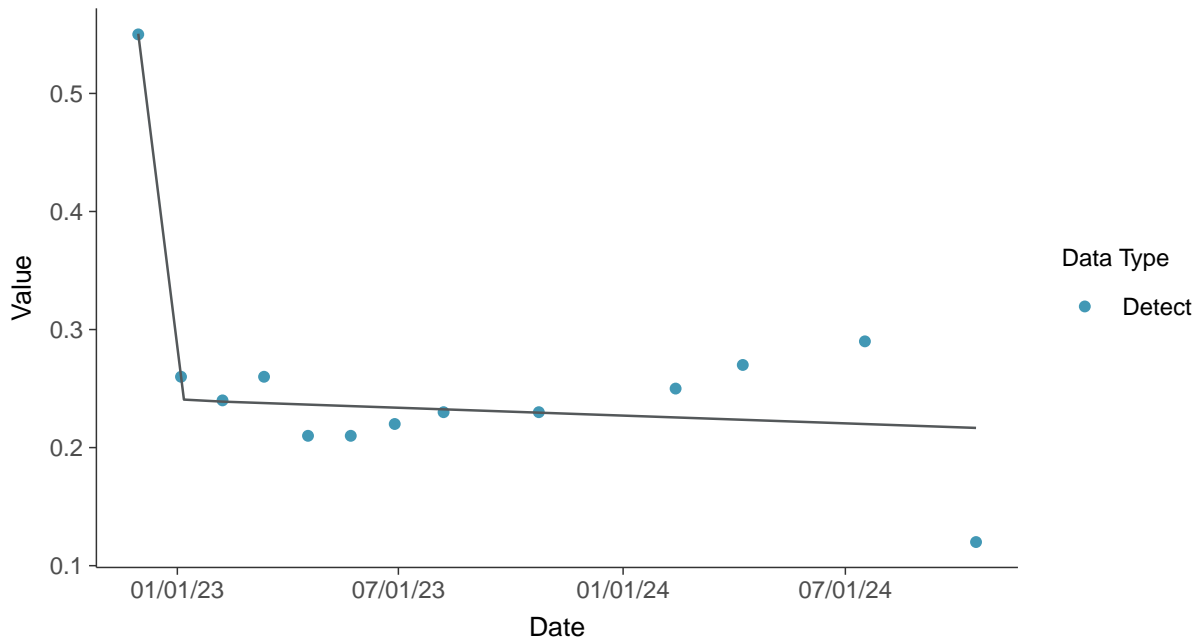
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Fluoride (App IV), MW-20 (mg/L)





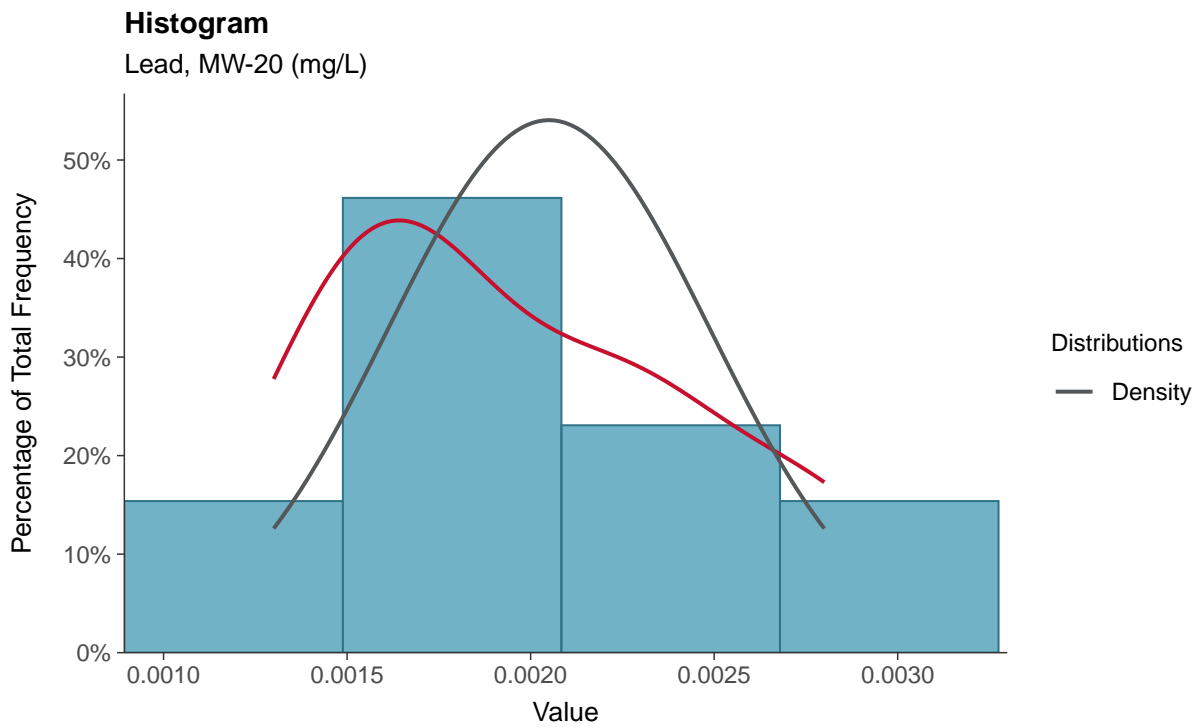
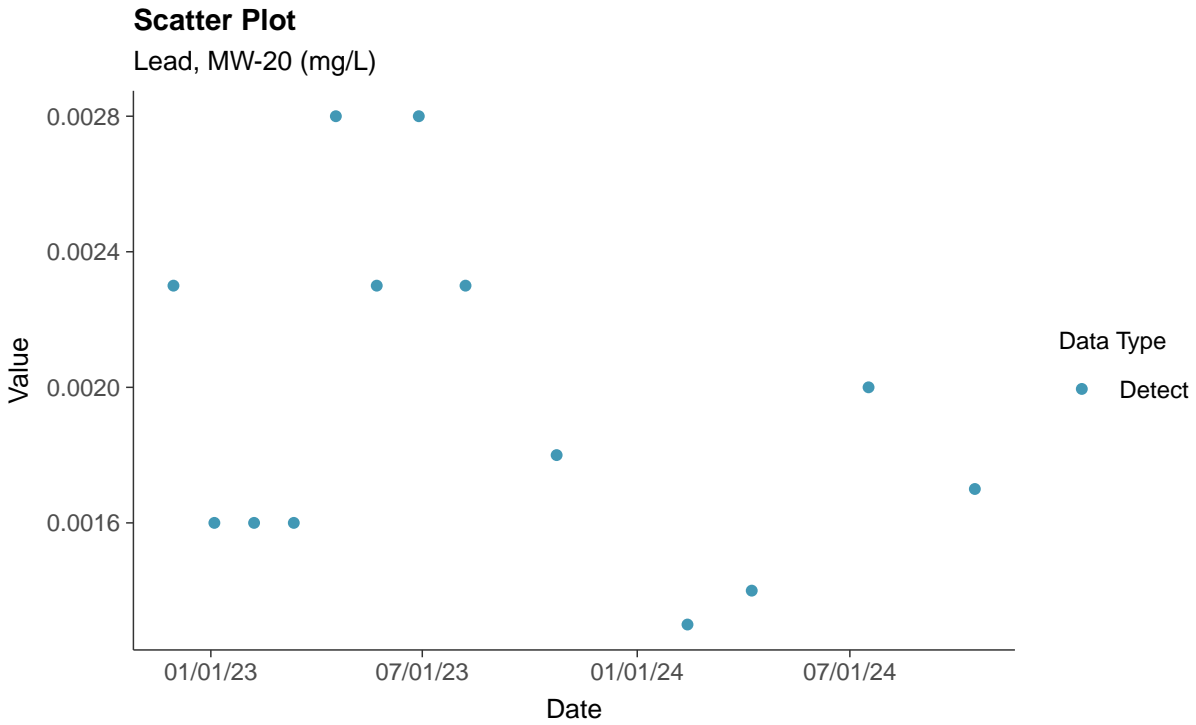
Trend Regression: Piecewise Linear-Linear
Fluoride (App IV), MW-20 (mg/L)





Appendix IV: Lead, MW-20

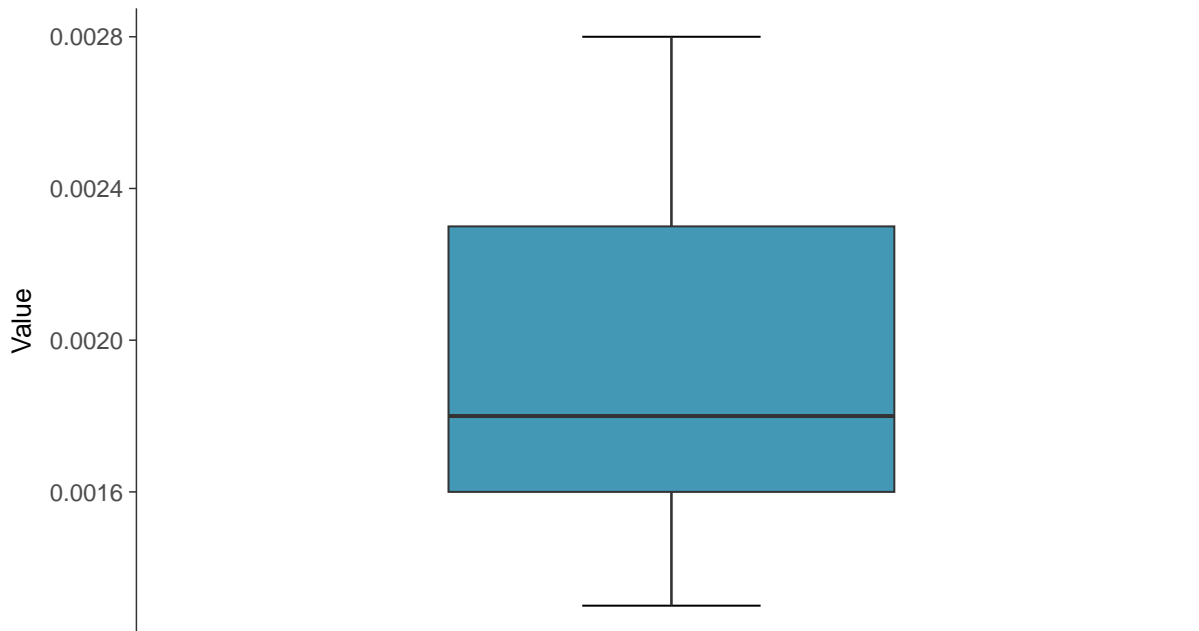
ID: 1_30_1_5_115





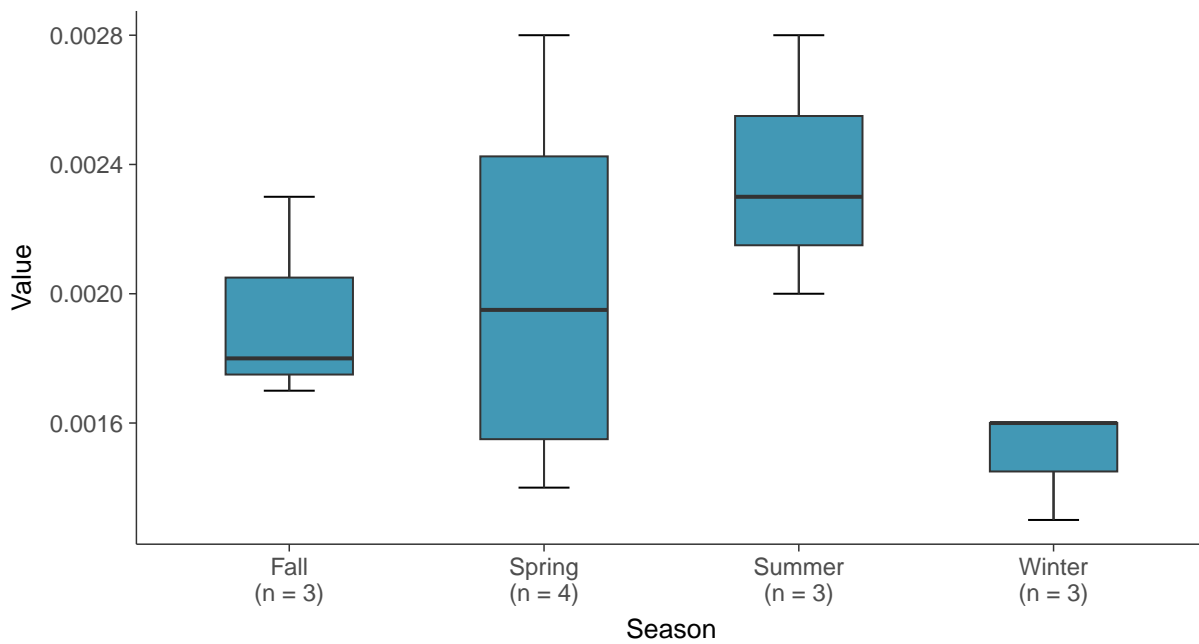
Boxplot

Lead, MW-20 (mg/L)



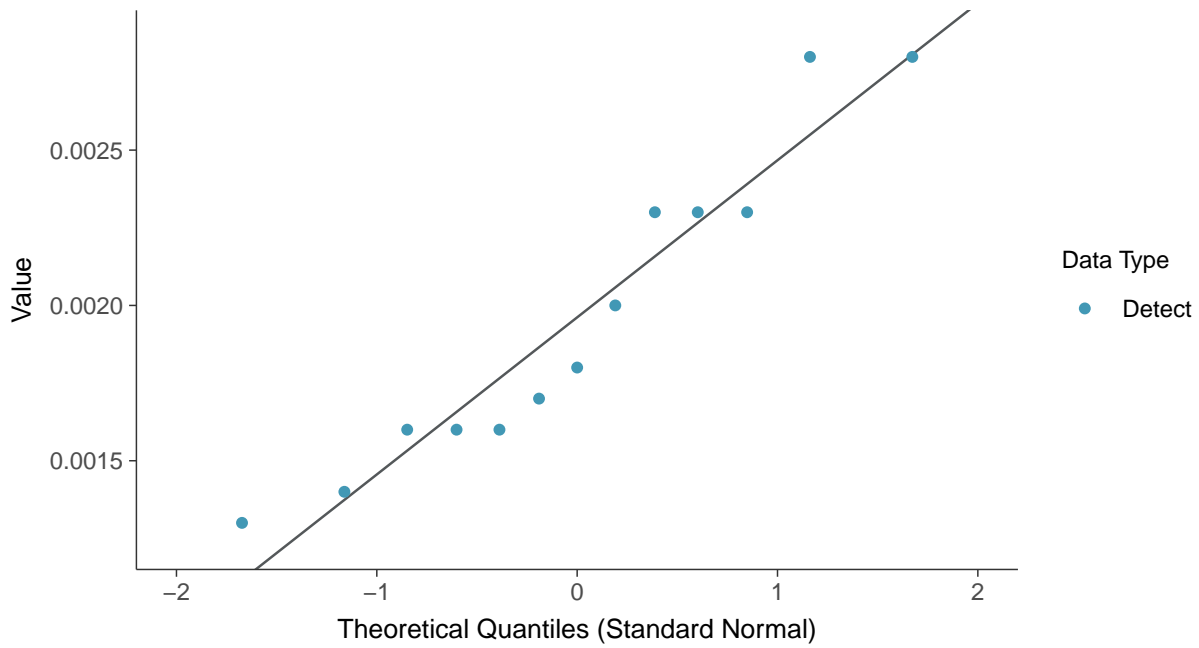
Boxplot by Season

Lead, MW-20 (mg/L)

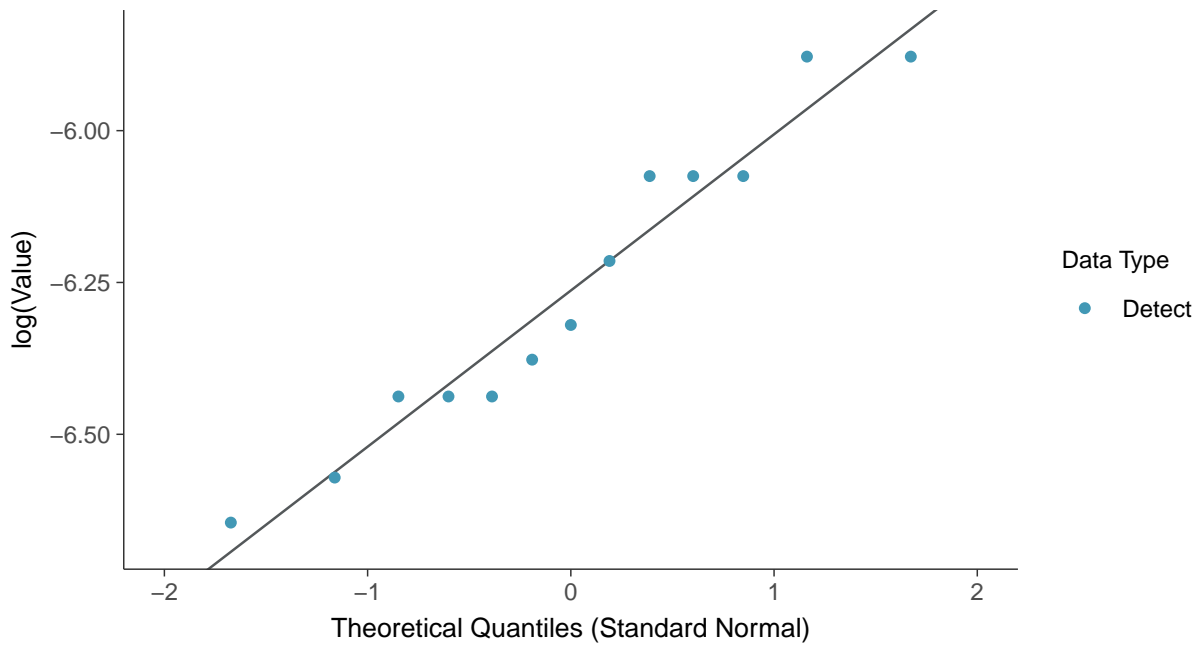




Normal Q-Q plot
Lead, MW-20 (mg/L)

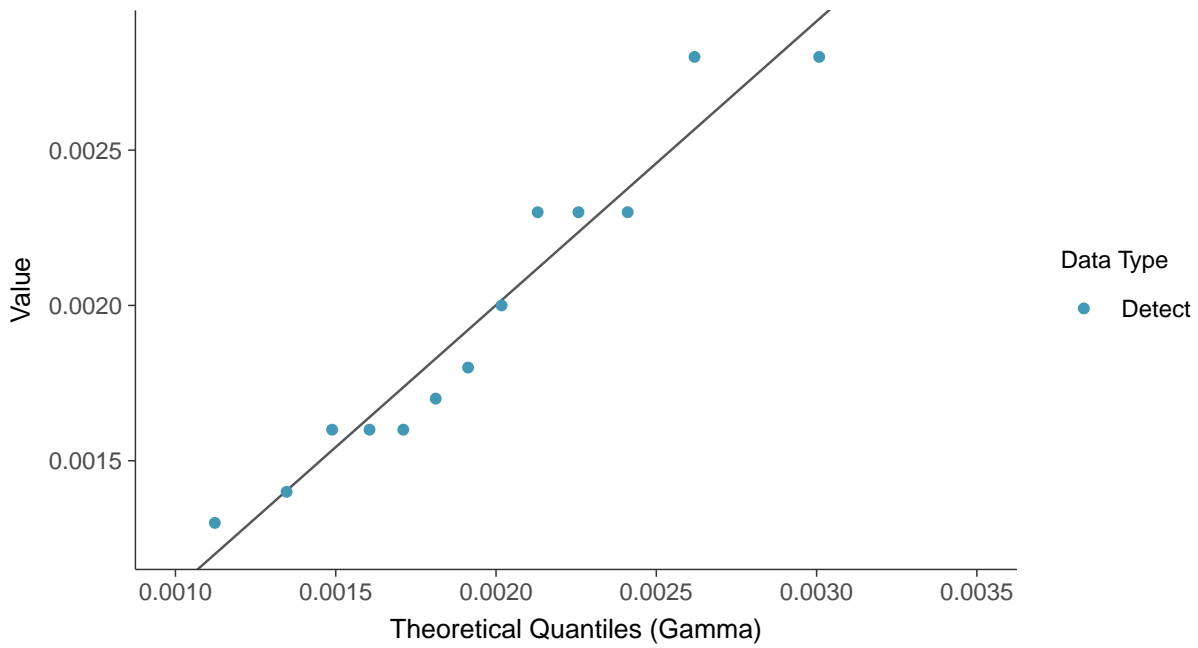


Lognormal Q-Q plot
Lead, MW-20 (mg/L)

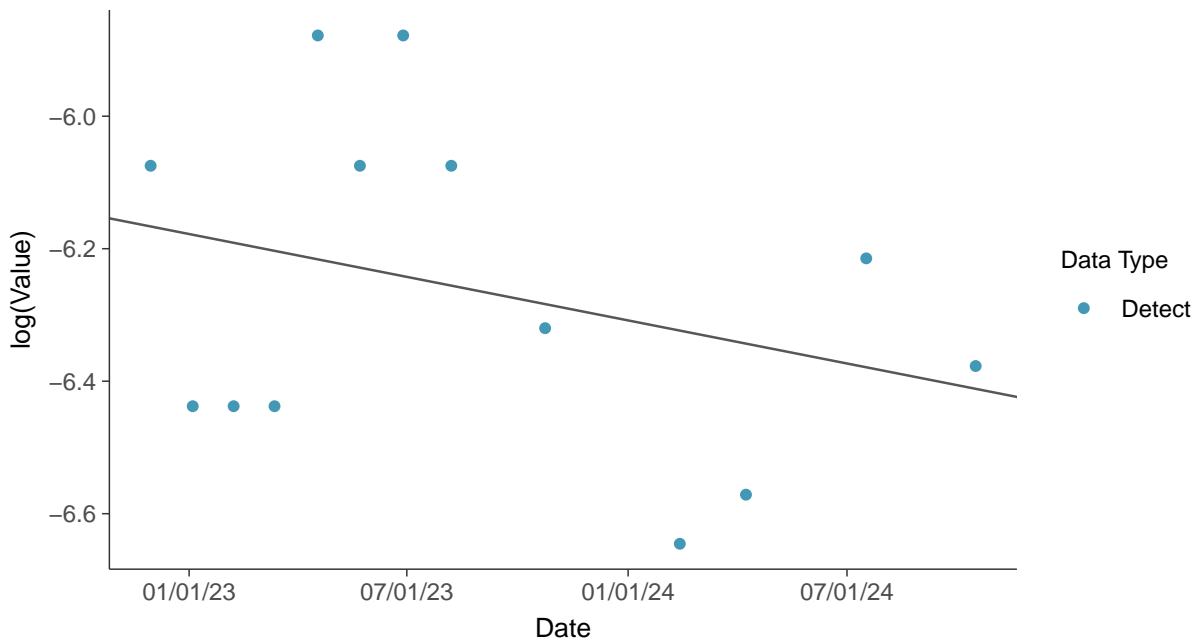




Gamma Q-Q plot
Lead, MW-20 (mg/L)



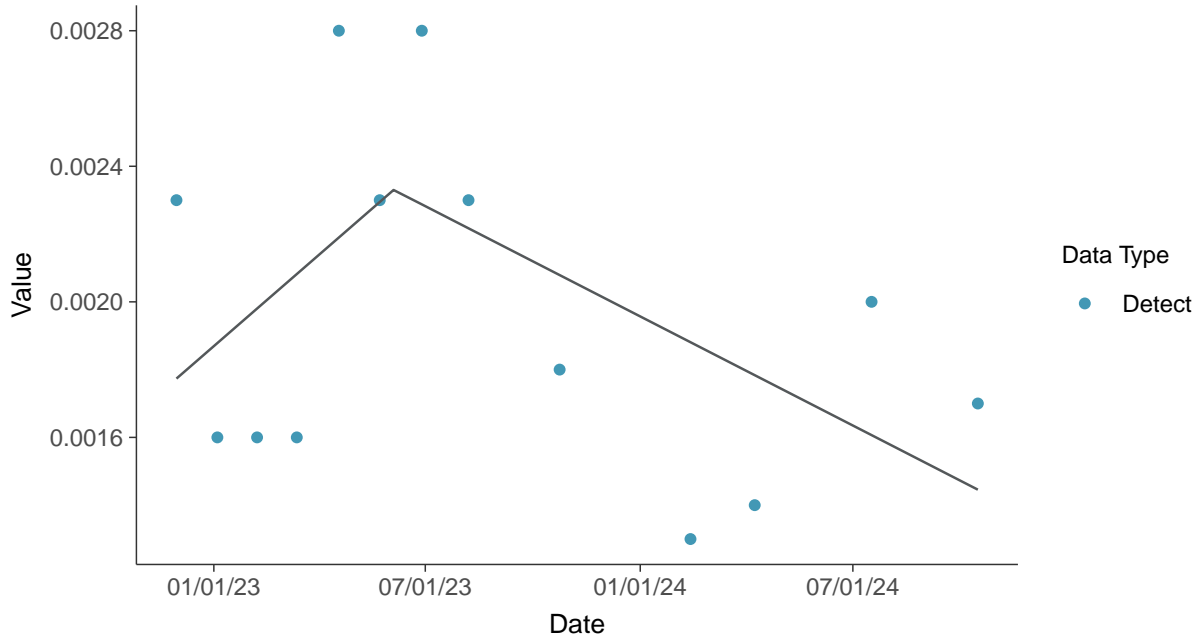
Trend Regression: Lognormal MLE
Lead, MW-20 (mg/L)





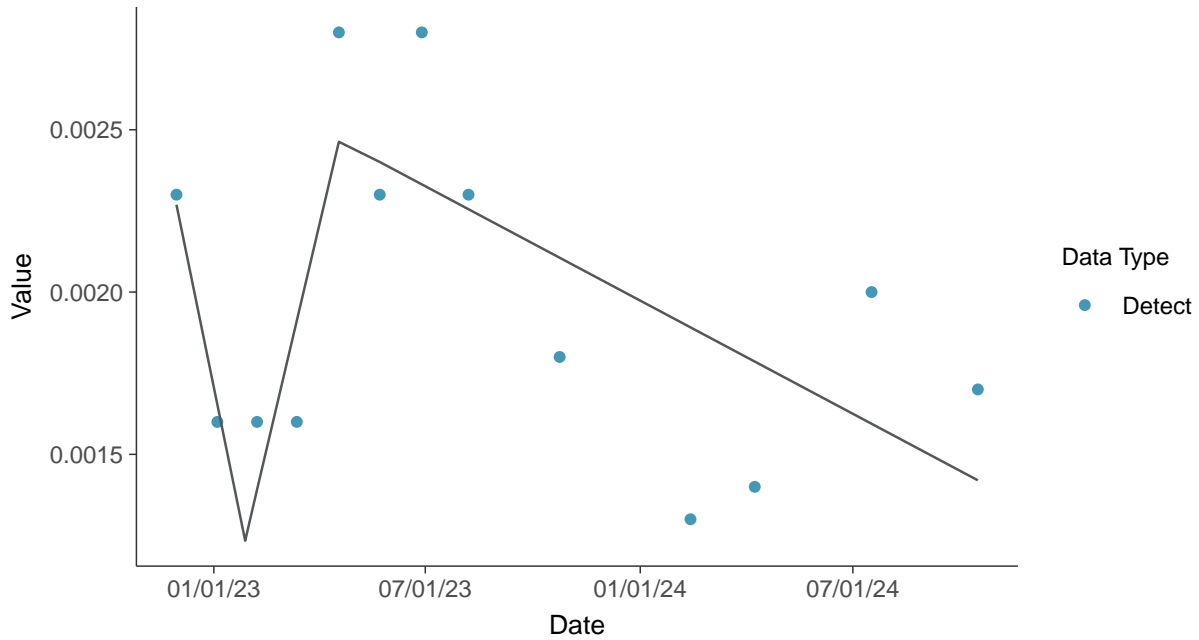
Trend Regression: Piecewise Linear-Linear

Lead, MW-20 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

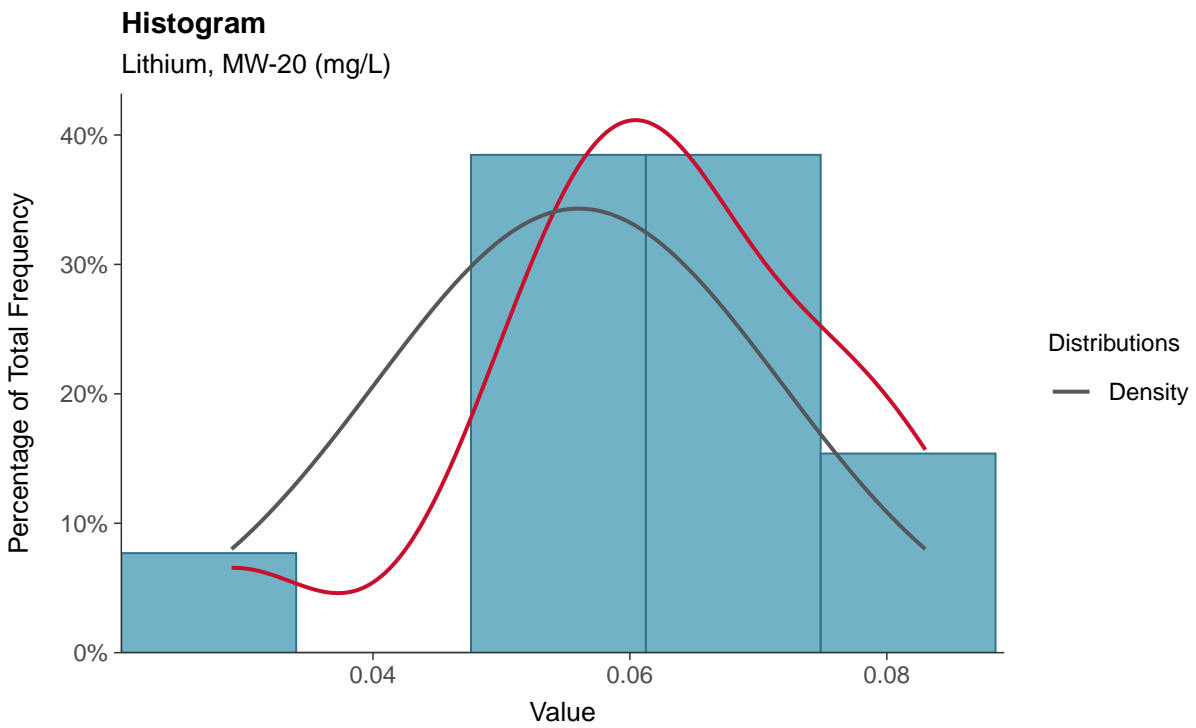
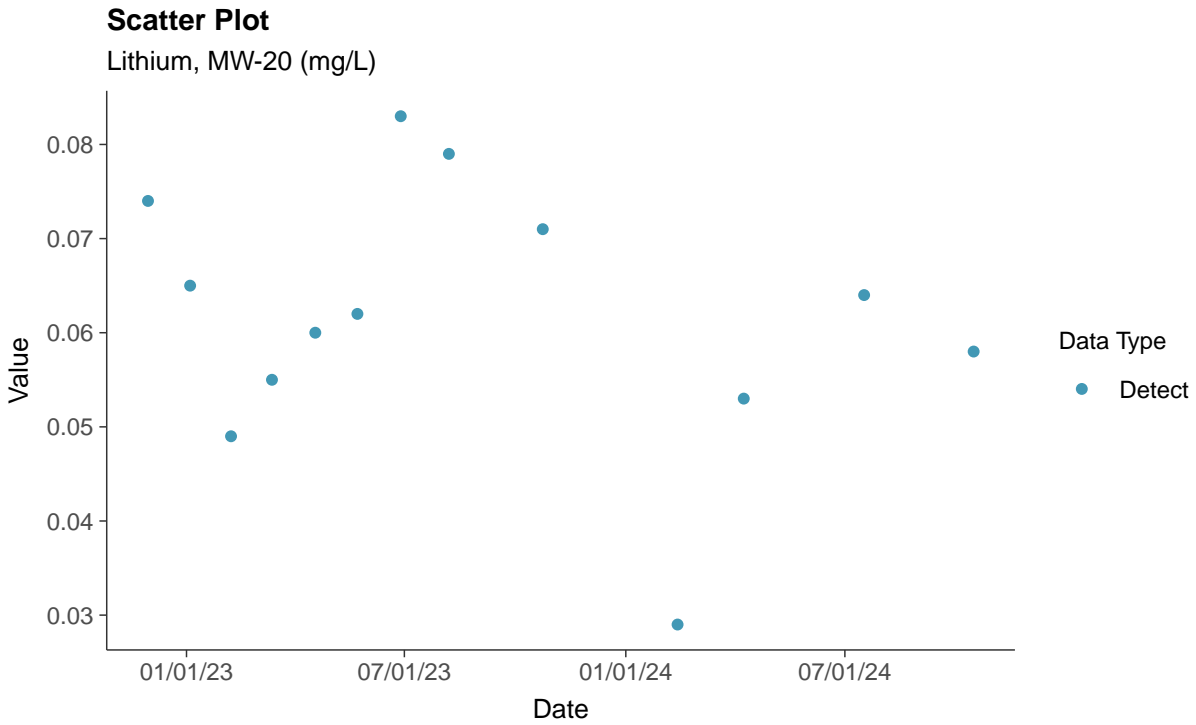
Lead, MW-20 (mg/L)





Appendix IV: Lithium, MW-20

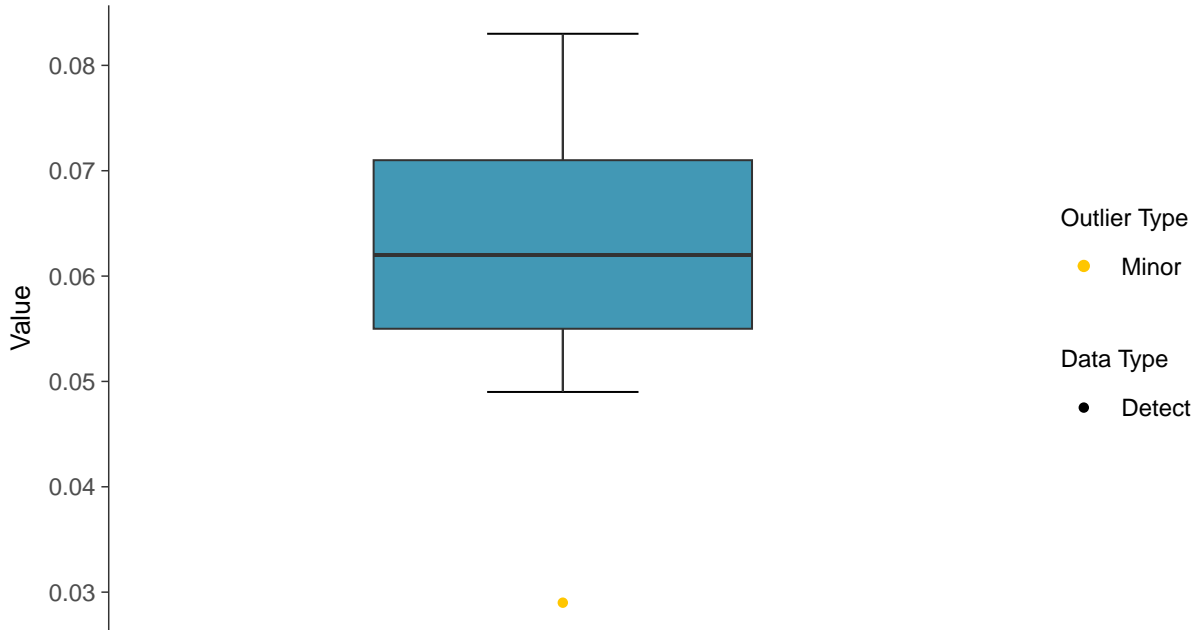
ID: 1_30_1_5_116





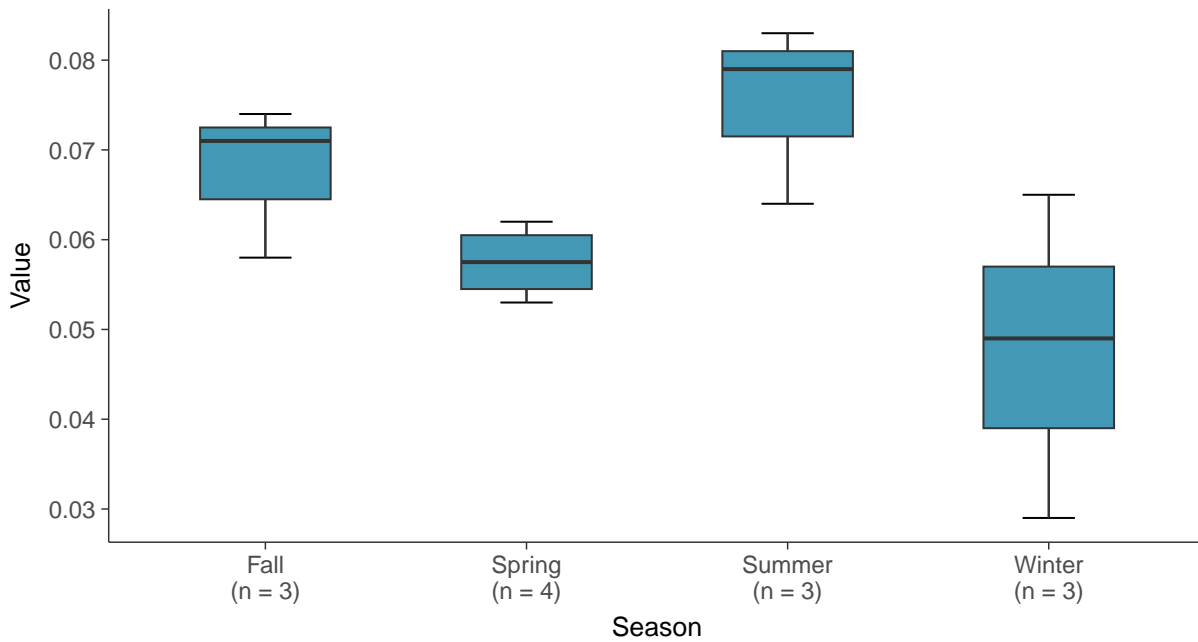
Boxplot

Lithium, MW-20 (mg/L)



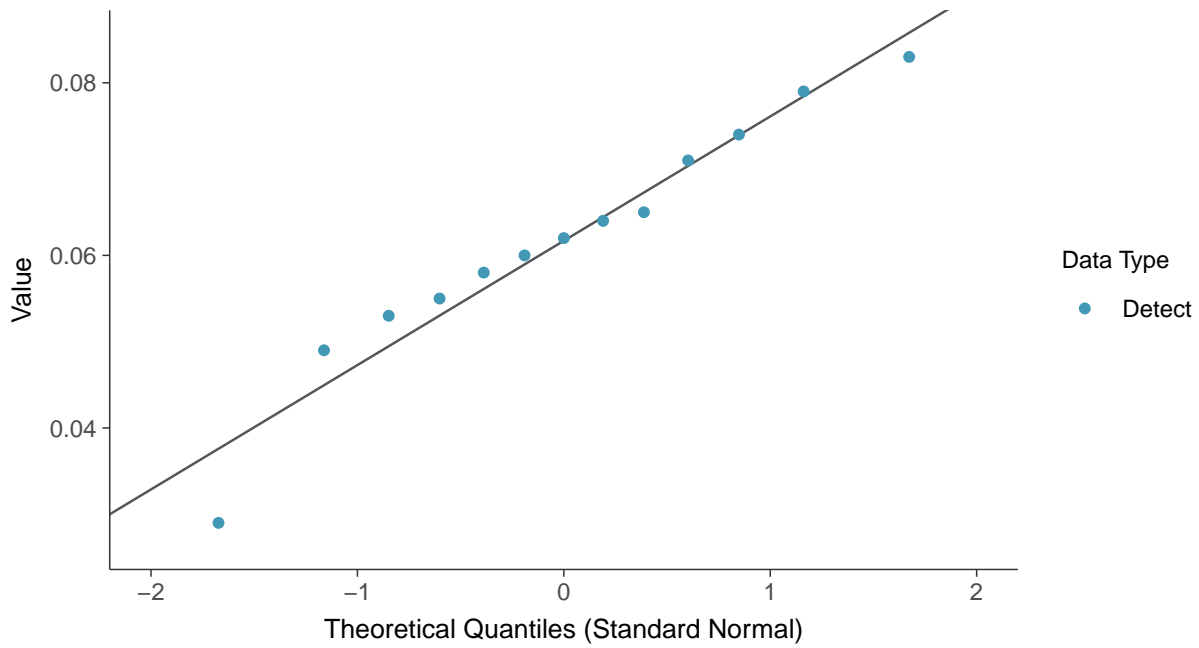
Boxplot by Season

Lithium, MW-20 (mg/L)

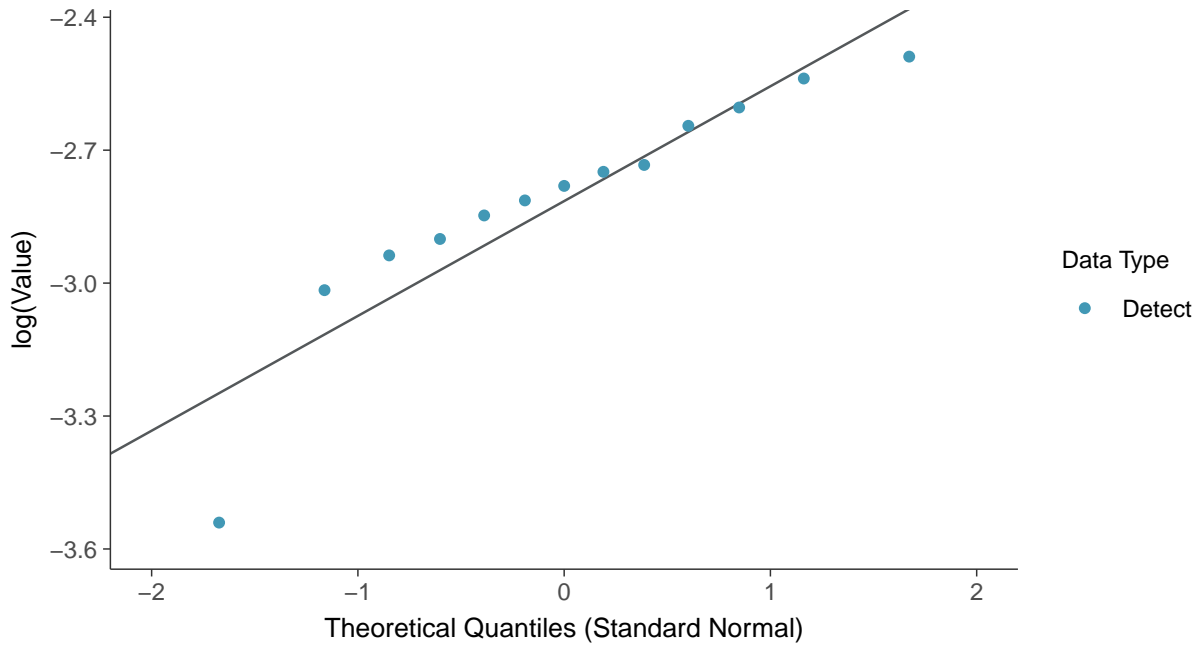




Normal Q-Q plot
Lithium, MW-20 (mg/L)

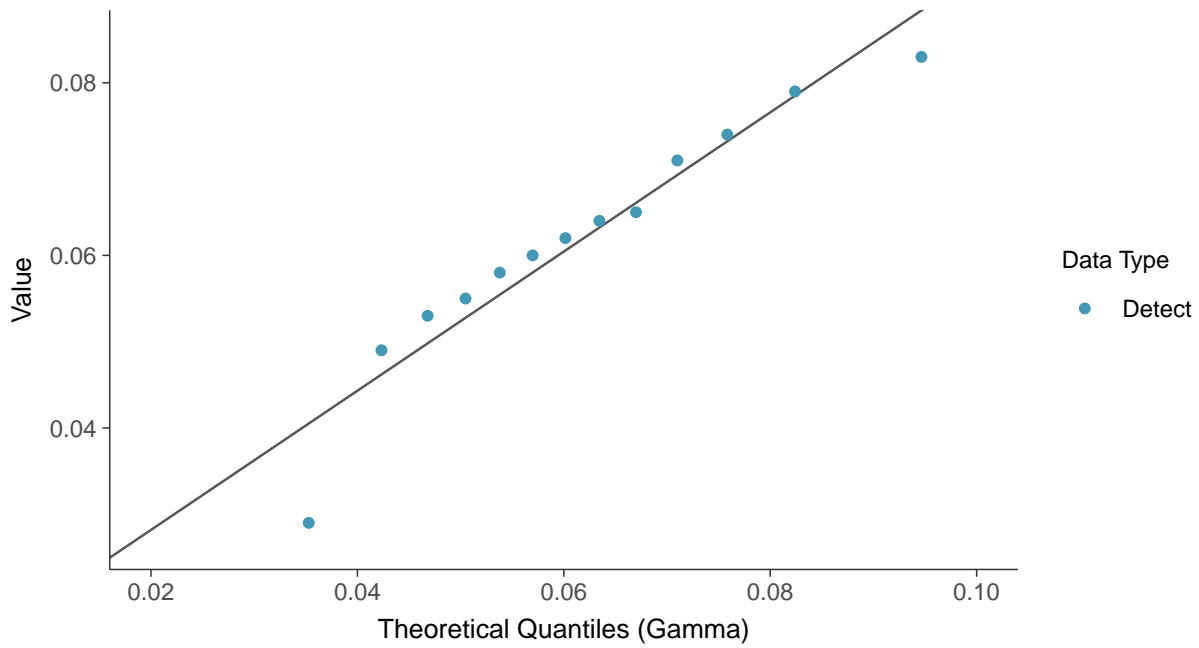


Lognormal Q-Q plot
Lithium, MW-20 (mg/L)

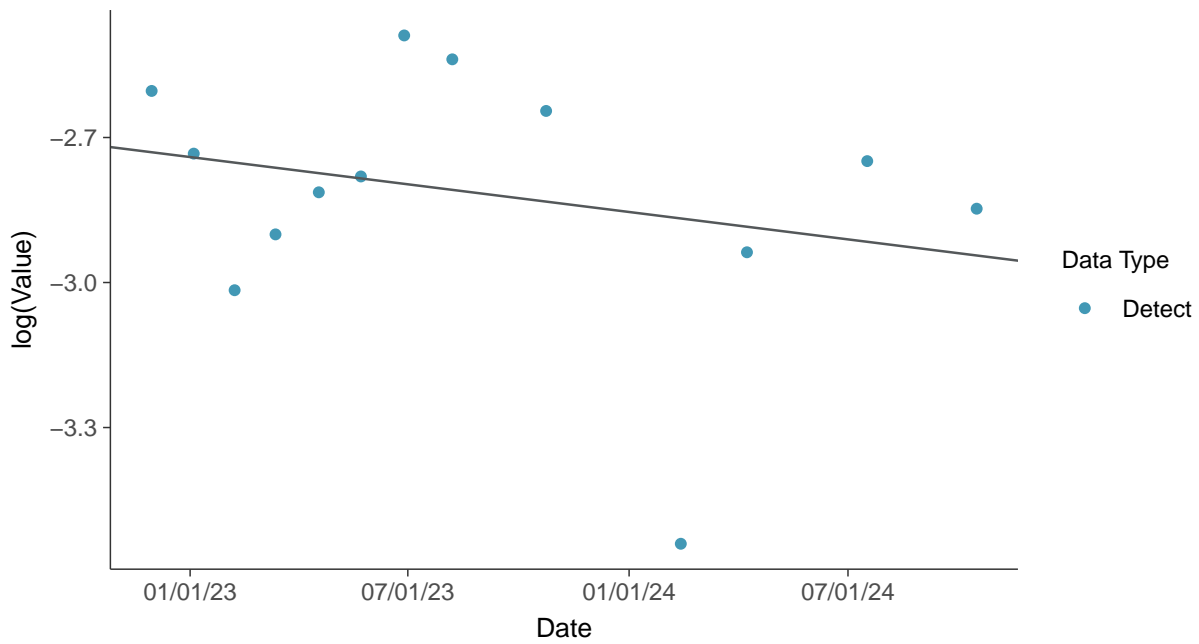




Gamma Q-Q plot
Lithium, MW-20 (mg/L)



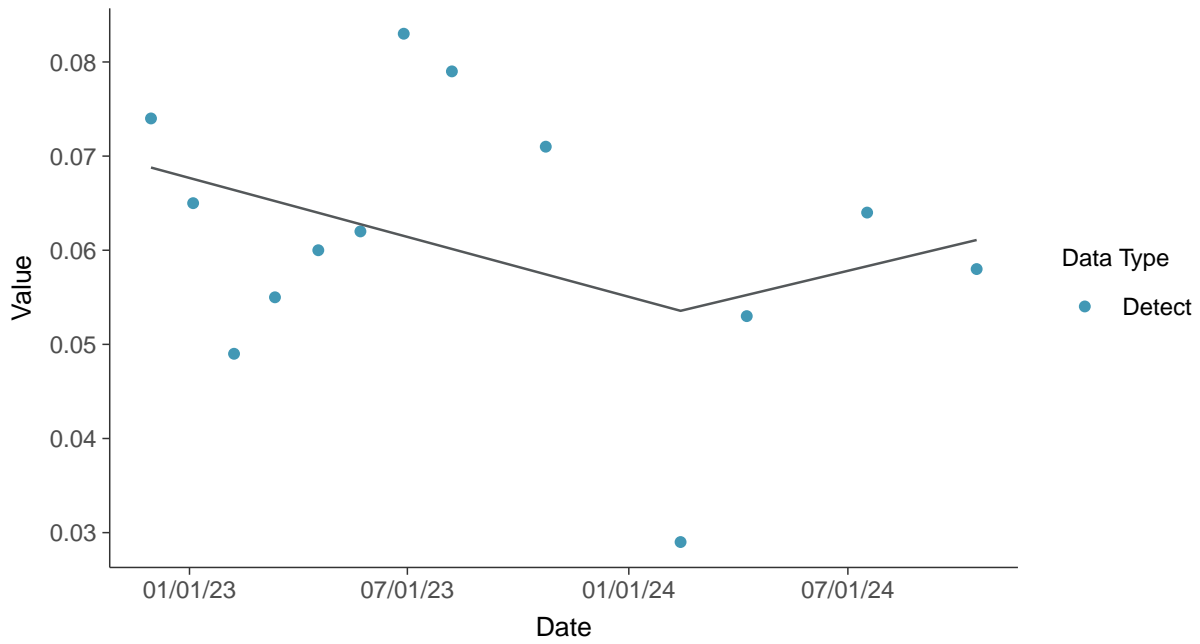
Trend Regression: Lognormal MLE
Lithium, MW-20 (mg/L)





Trend Regression: Piecewise Linear-Linear

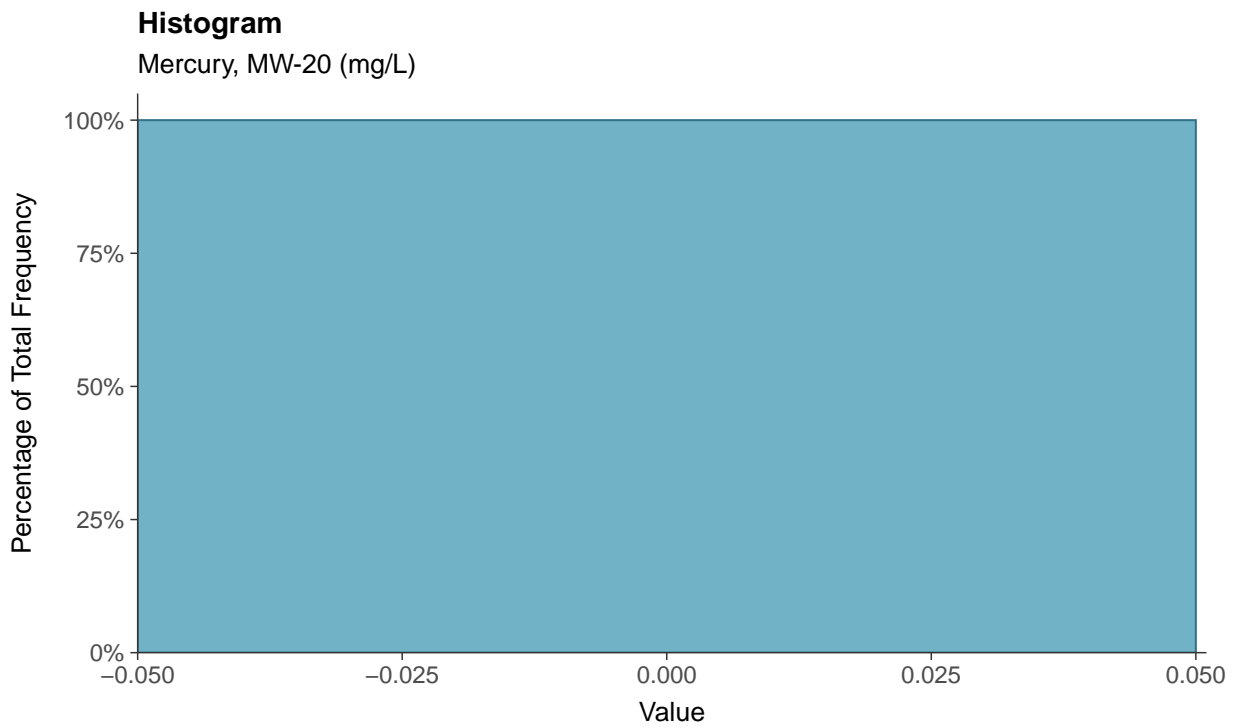
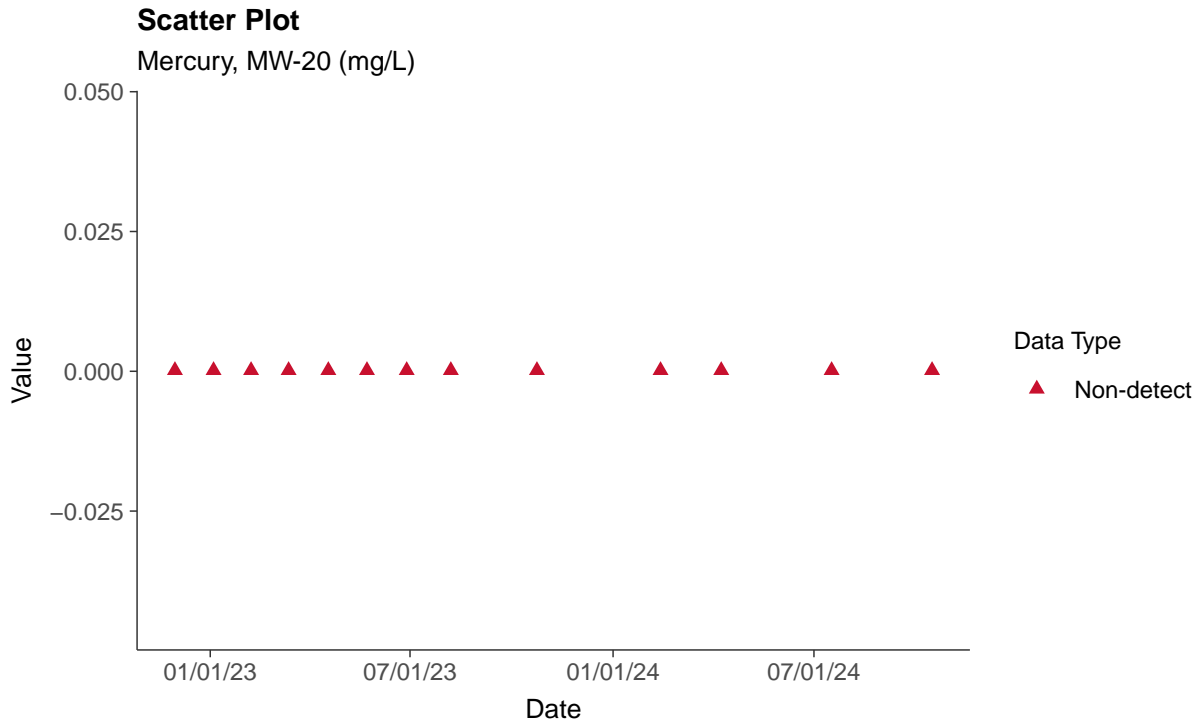
Lithium, MW-20 (mg/L)





Appendix IV: Mercury, MW-20

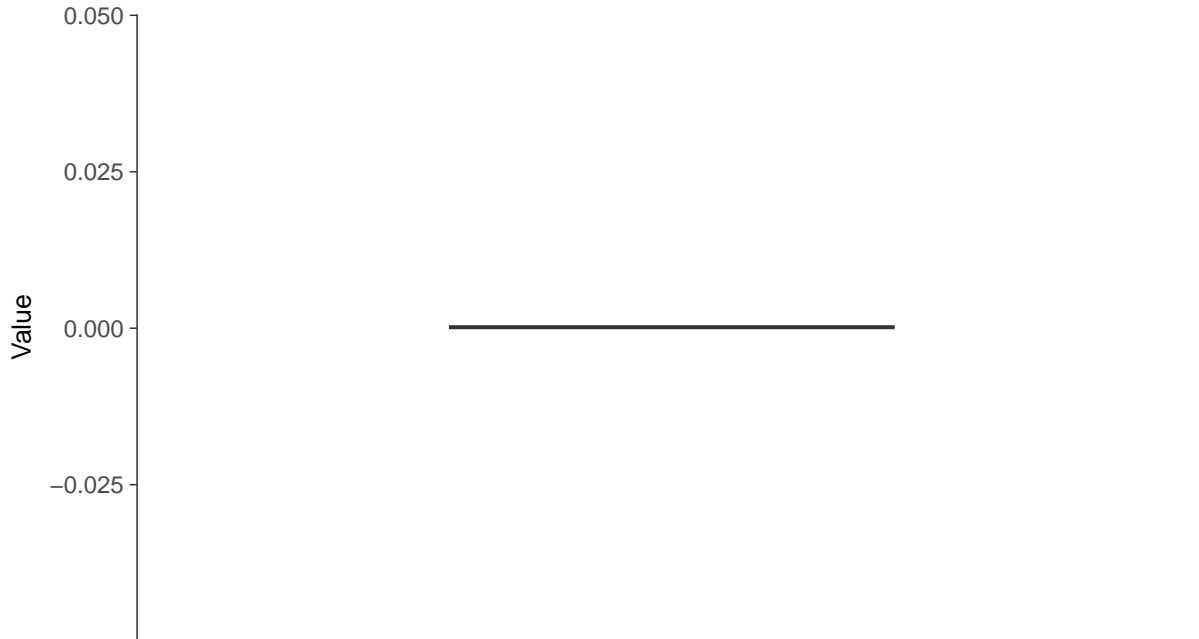
ID: 1_30_1_5_117





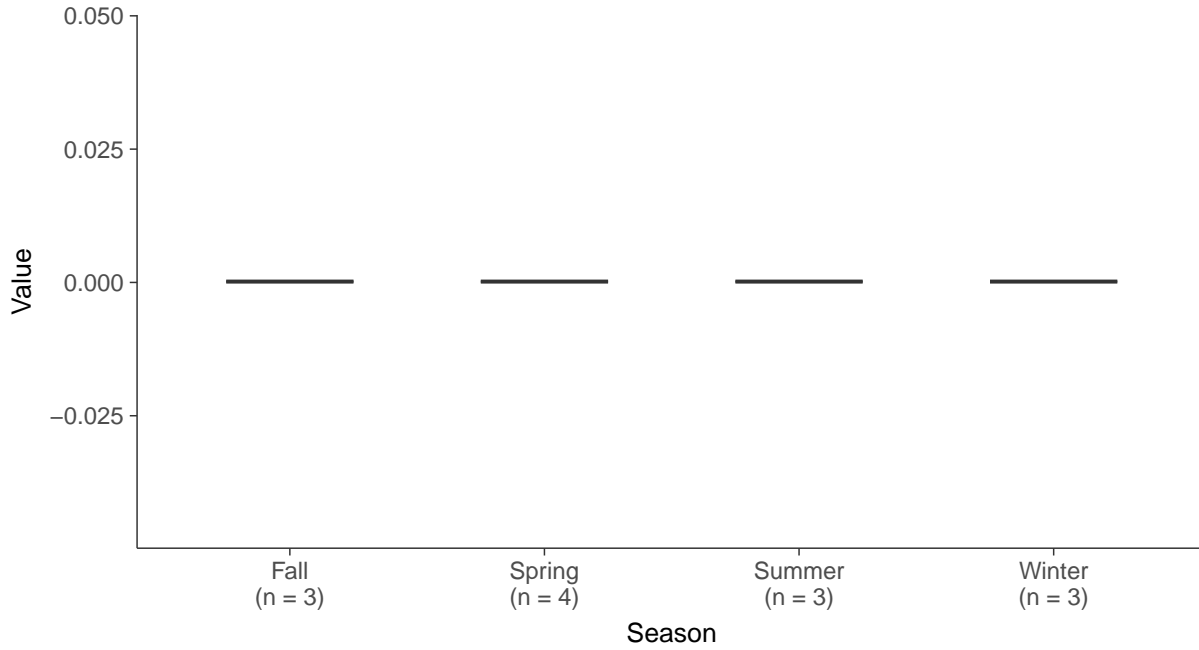
Boxplot

Mercury, MW-20 (mg/L)



Boxplot by Season

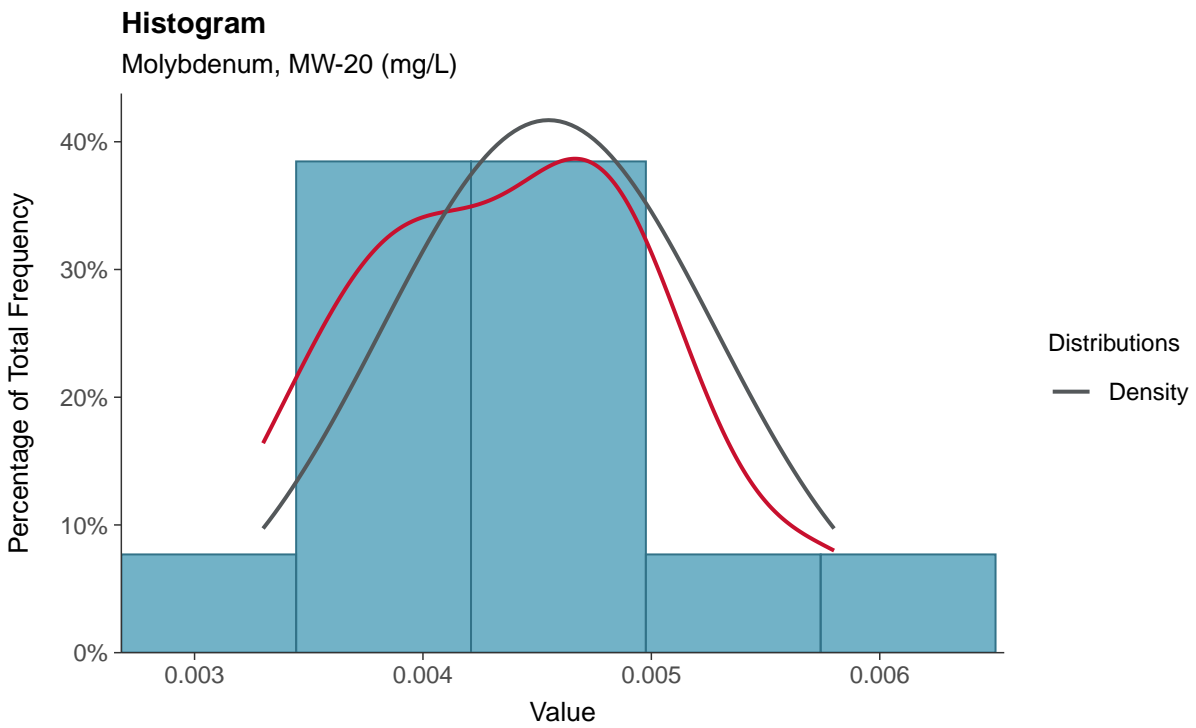
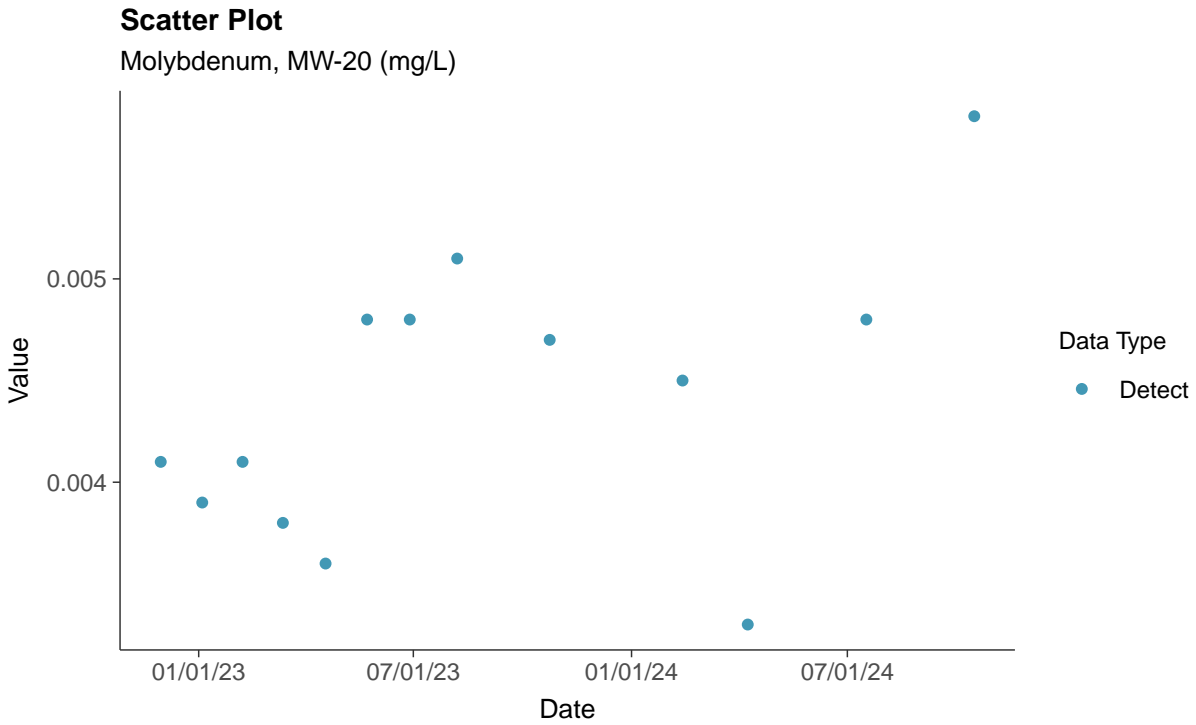
Mercury, MW-20 (mg/L)





Appendix IV: Molybdenum, MW-20

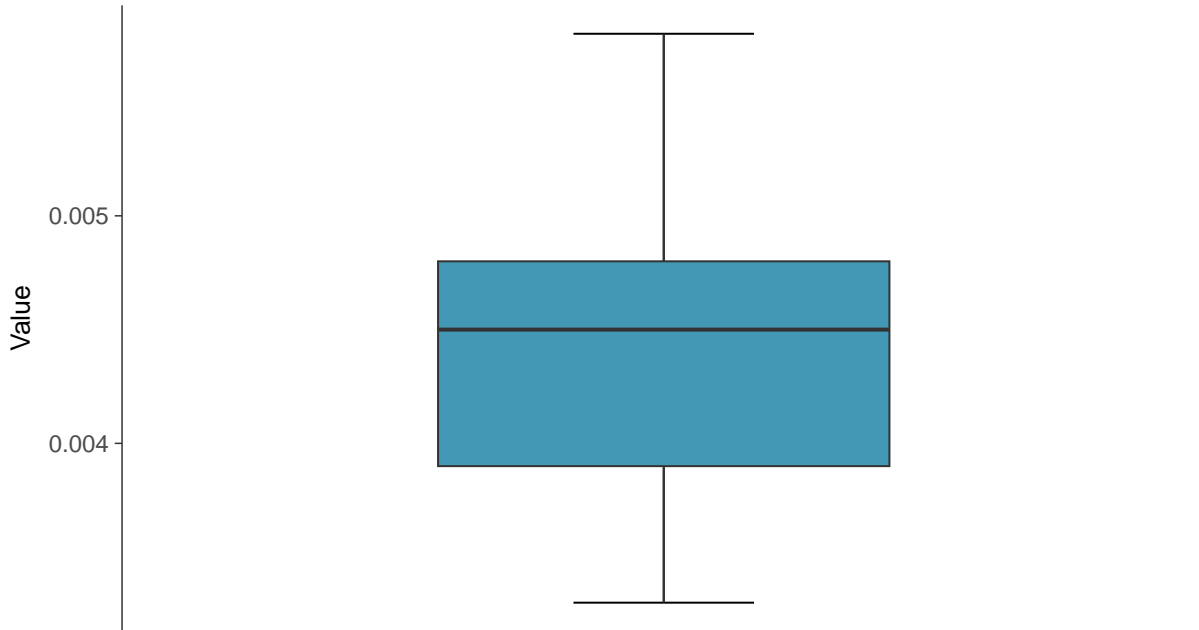
ID: 1_30_1_5_118





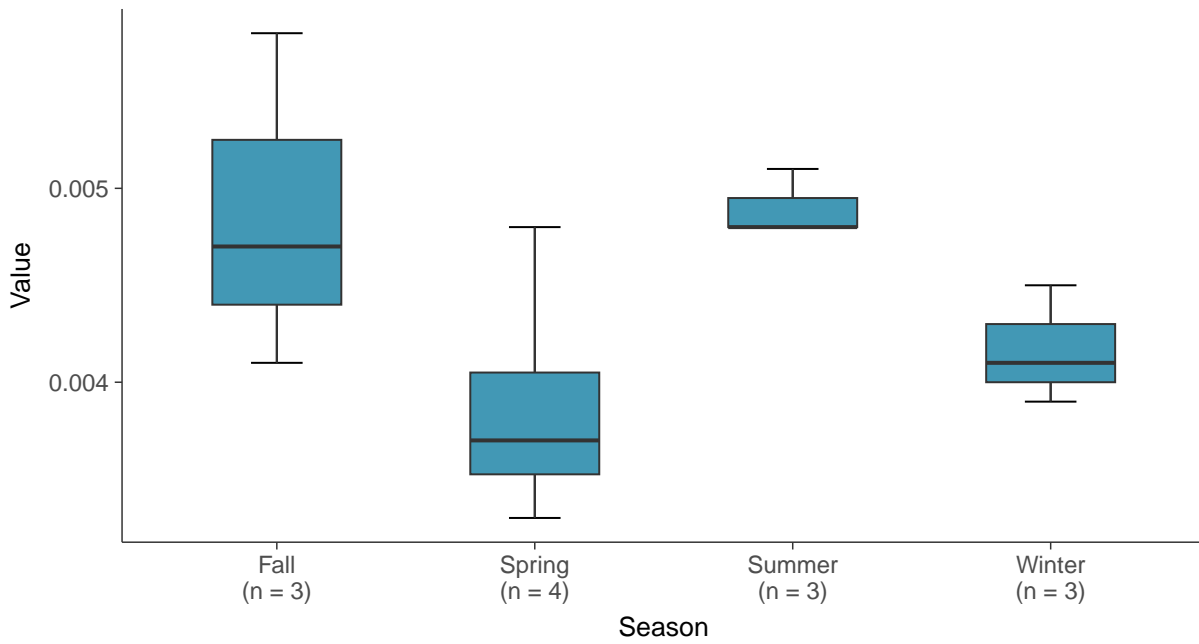
Boxplot

Molybdenum, MW-20 (mg/L)



Boxplot by Season

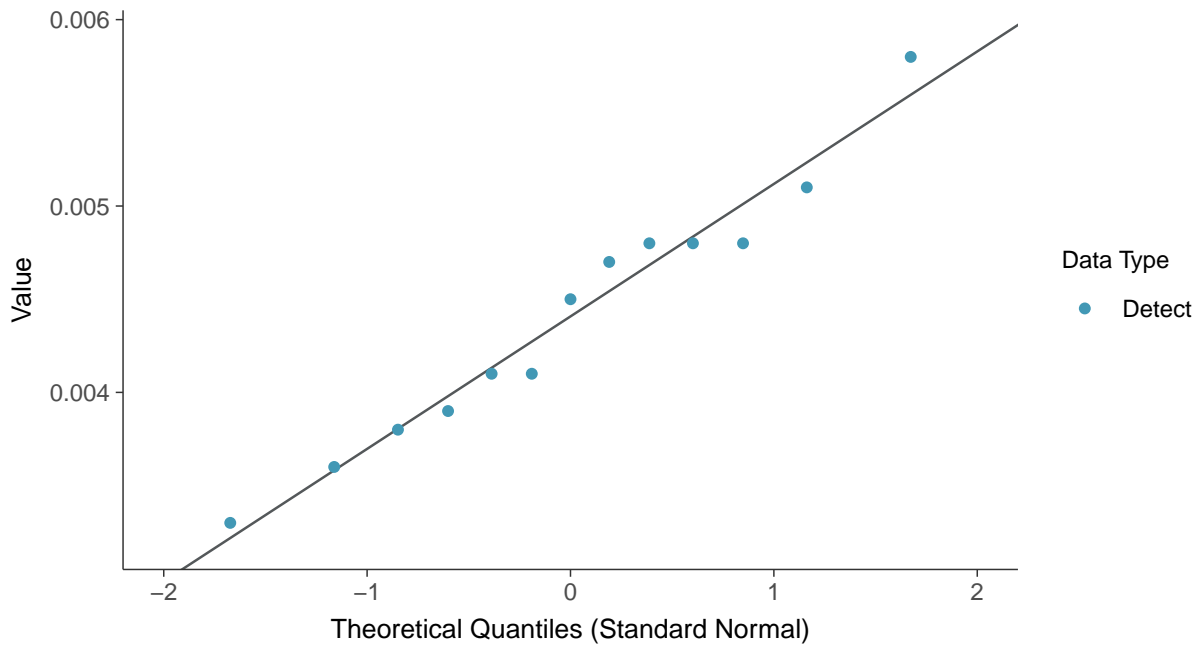
Molybdenum, MW-20 (mg/L)





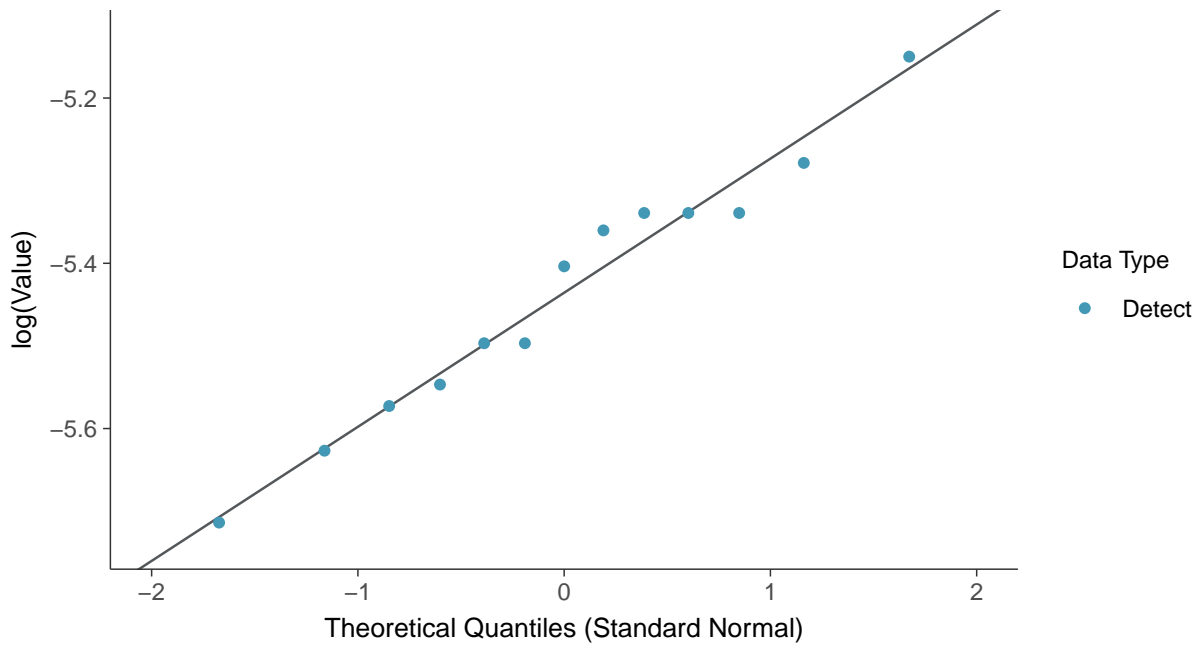
Normal Q-Q plot

Molybdenum, MW-20 (mg/L)



Lognormal Q-Q plot

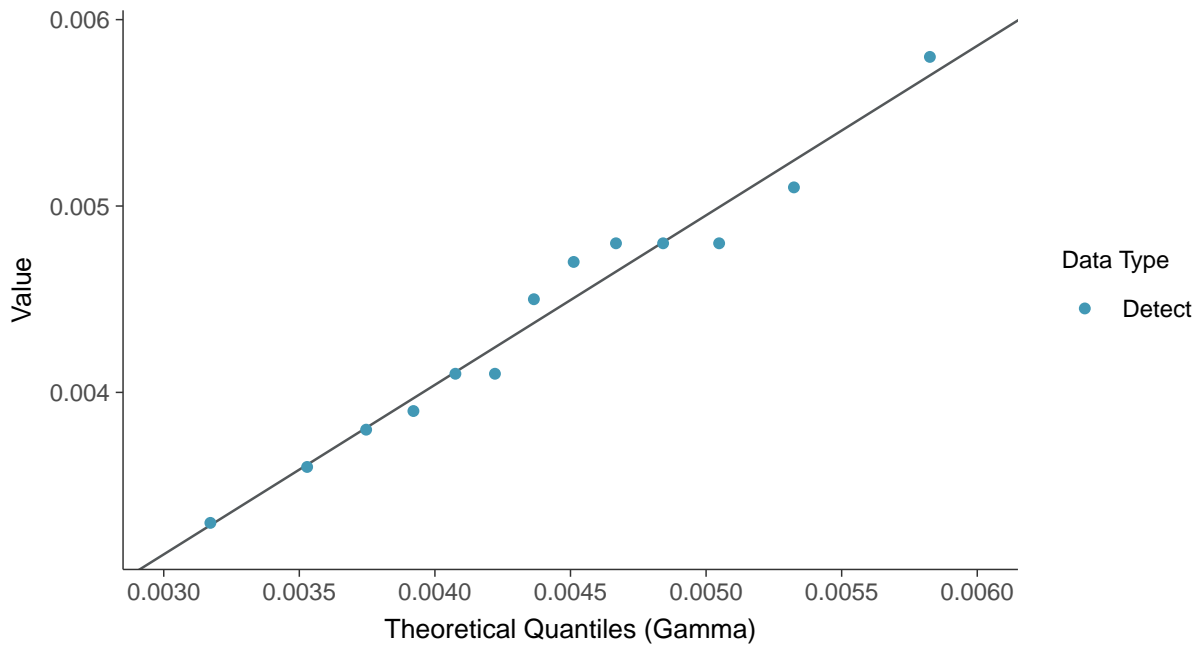
Molybdenum, MW-20 (mg/L)





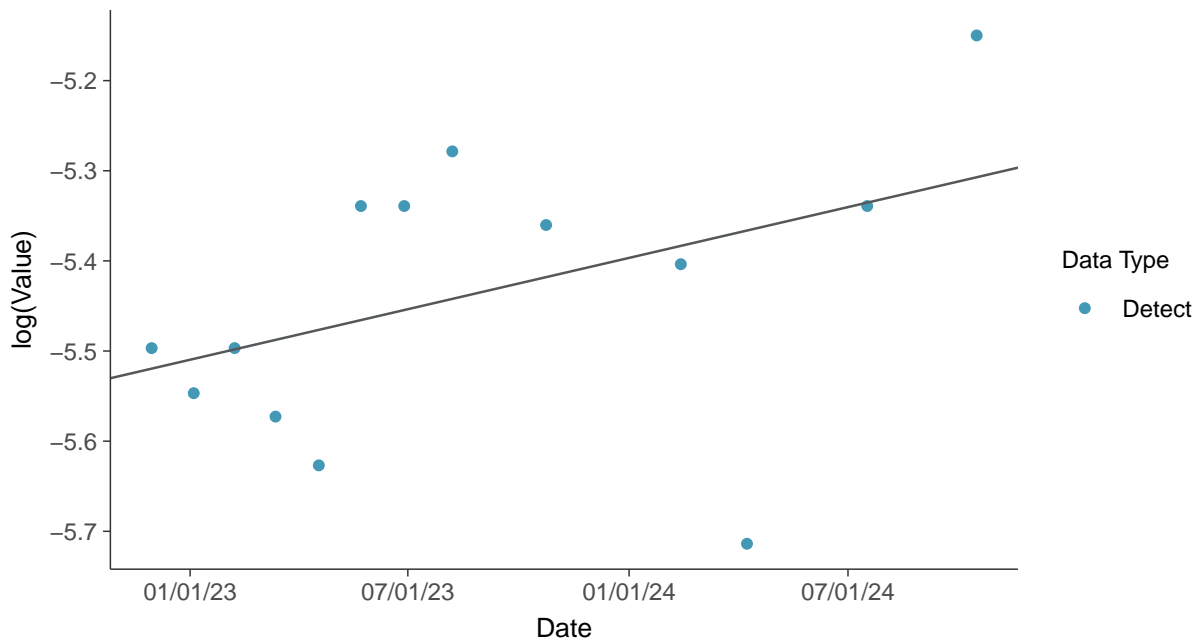
Gamma Q-Q plot

Molybdenum, MW-20 (mg/L)



Trend Regression: Lognormal MLE

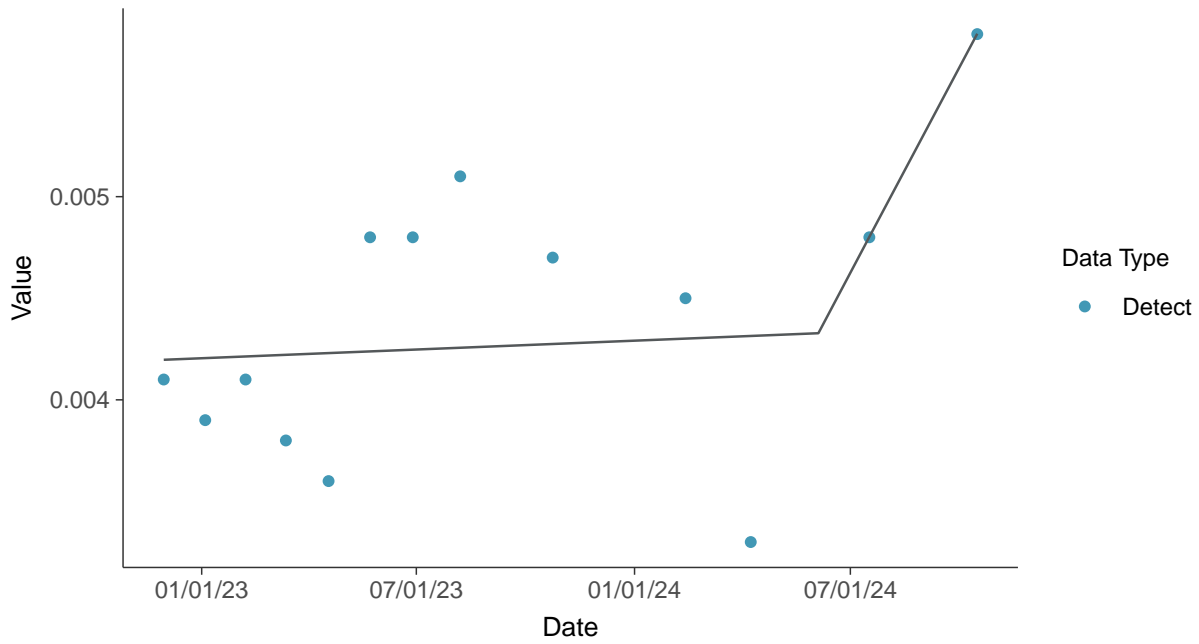
Molybdenum, MW-20 (mg/L)





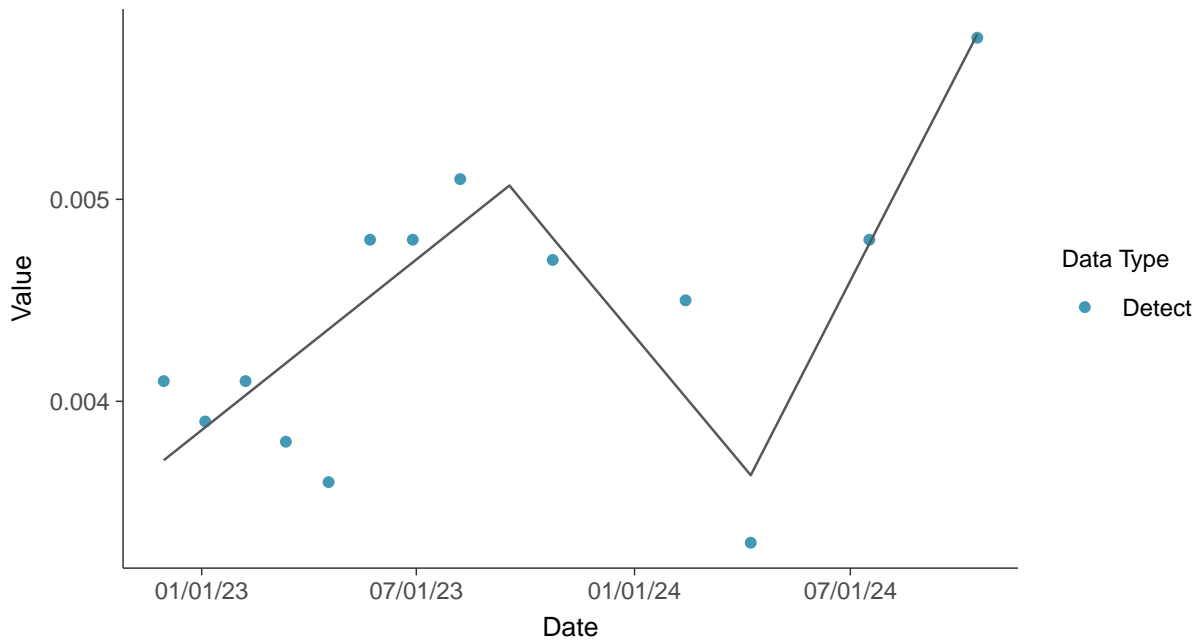
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-20 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

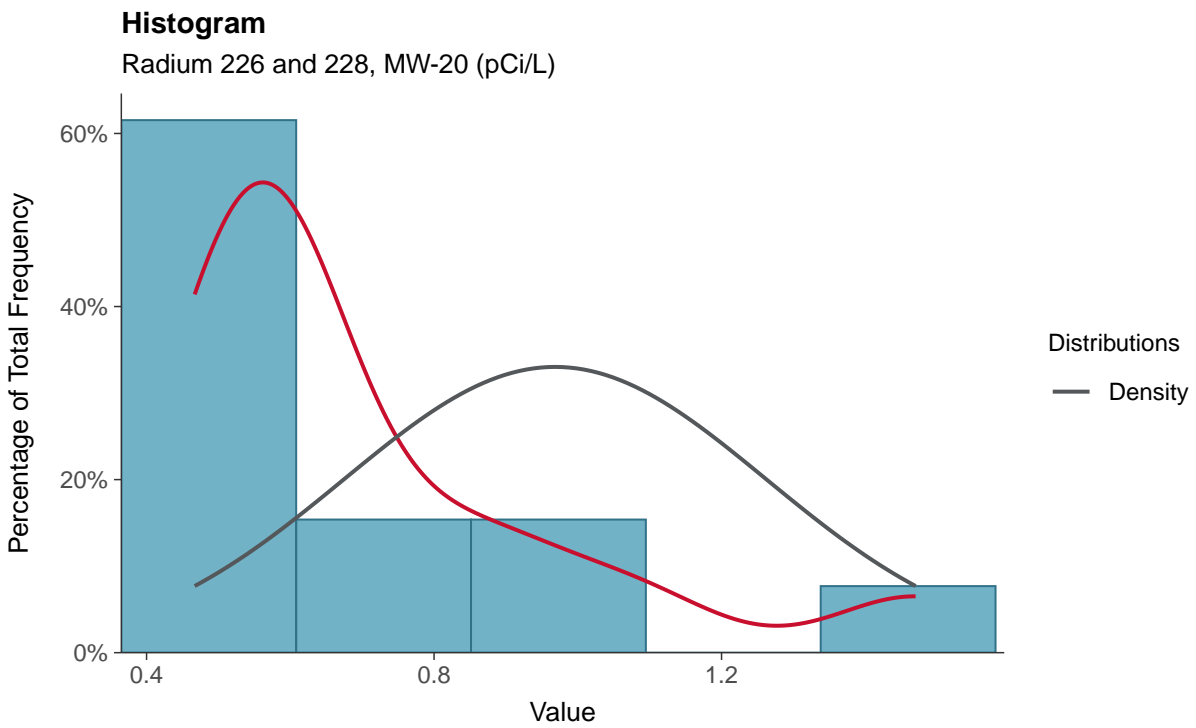
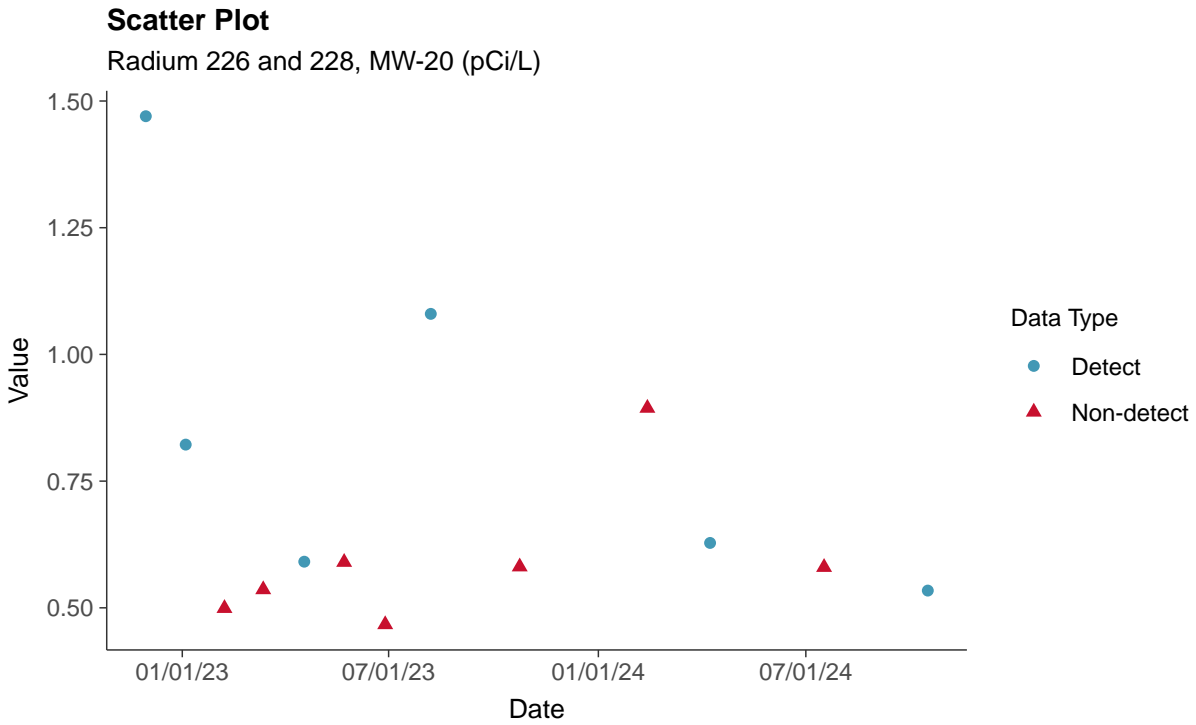
Molybdenum, MW-20 (mg/L)





Appendix IV: Radium 226 and 228, MW-20

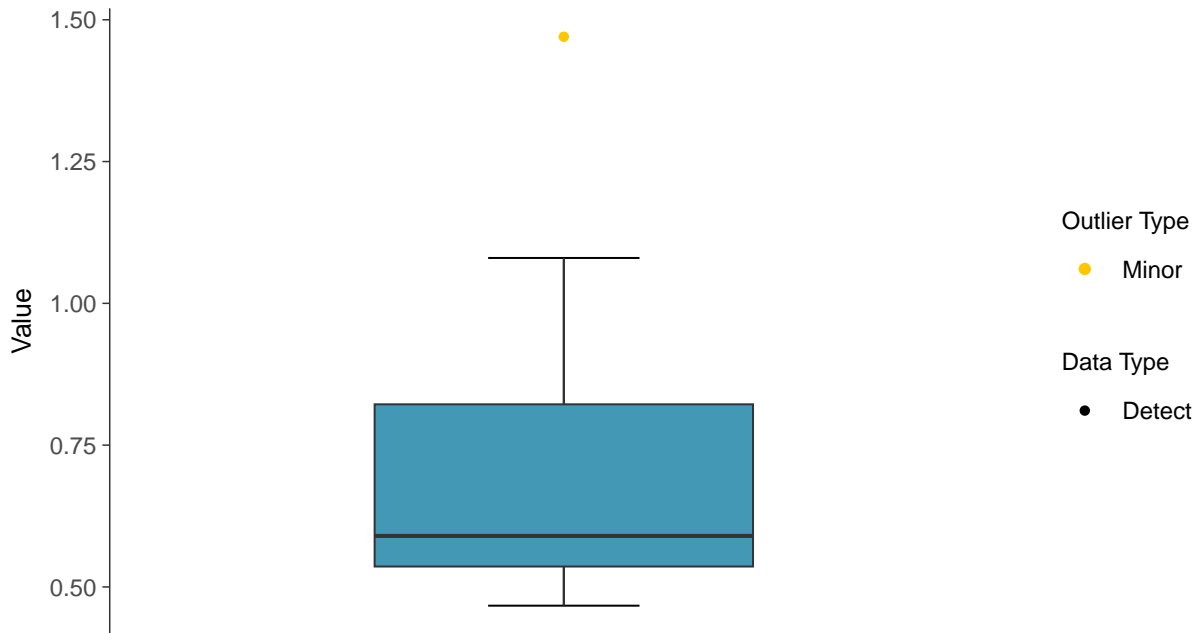
ID: 1_30_1_5_121





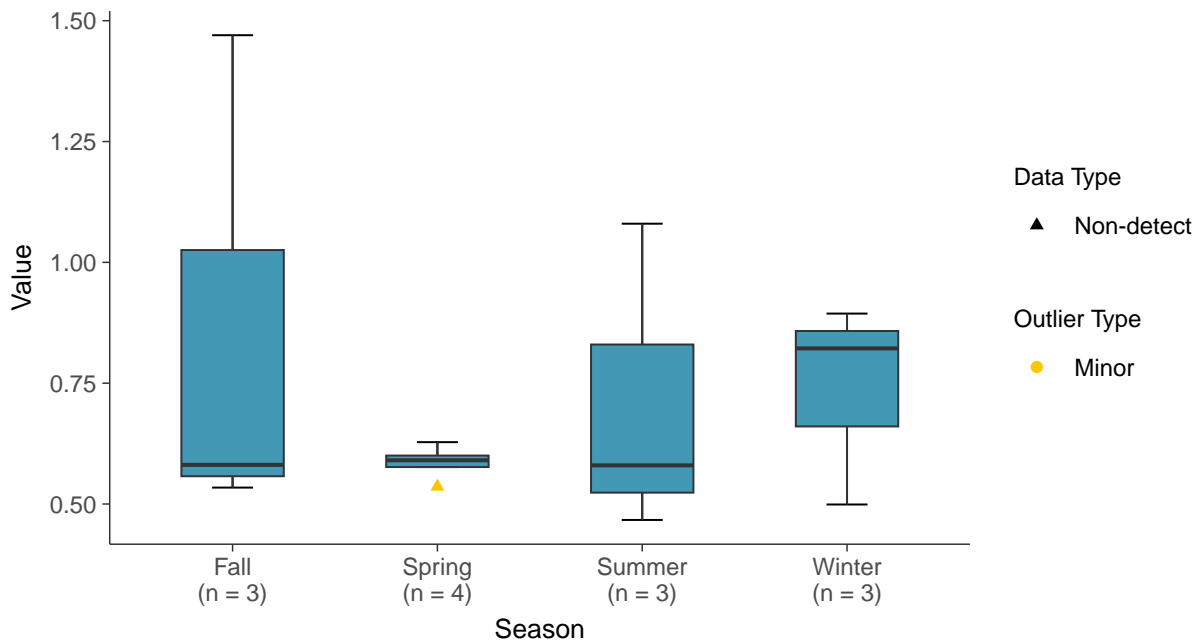
Boxplot

Radium 226 and 228, MW-20 (pCi/L)



Boxplot by Season

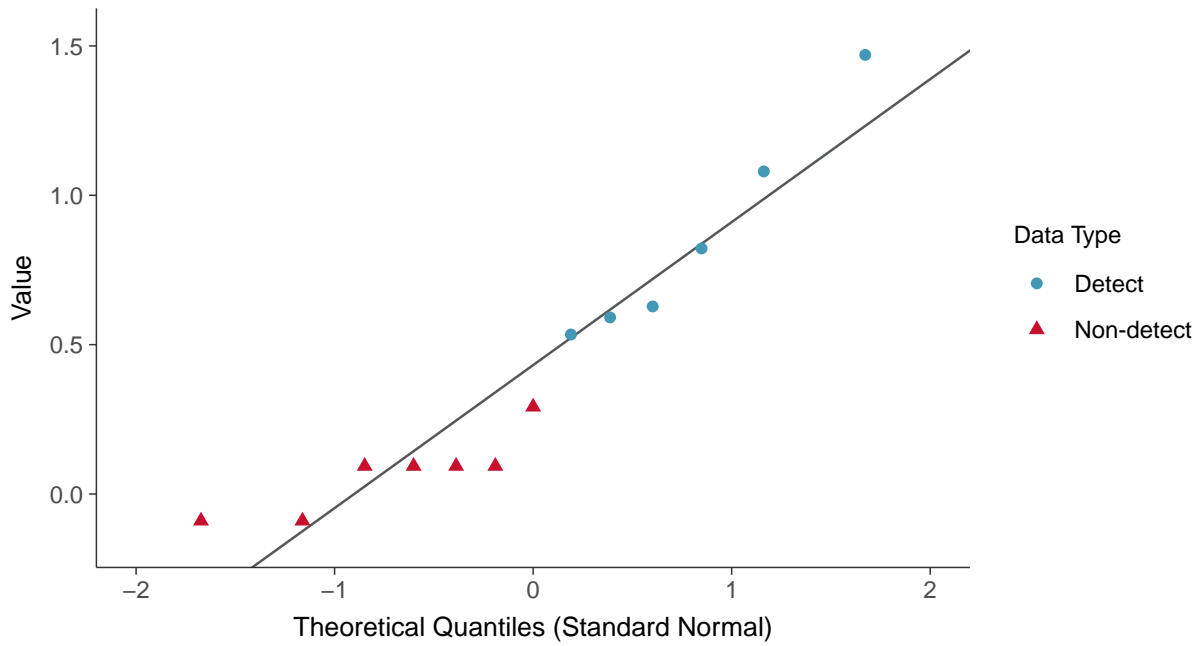
Radium 226 and 228, MW-20 (pCi/L)





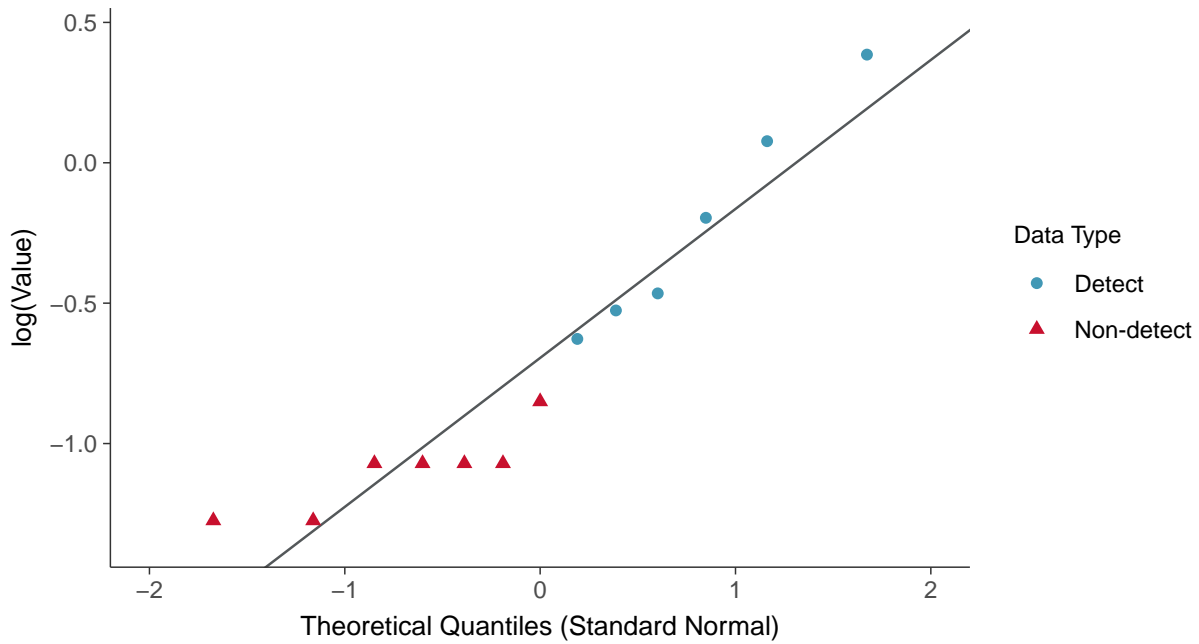
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-20 (pCi/L)



Lognormal Q-Q plot using ROS Imputed Estimates

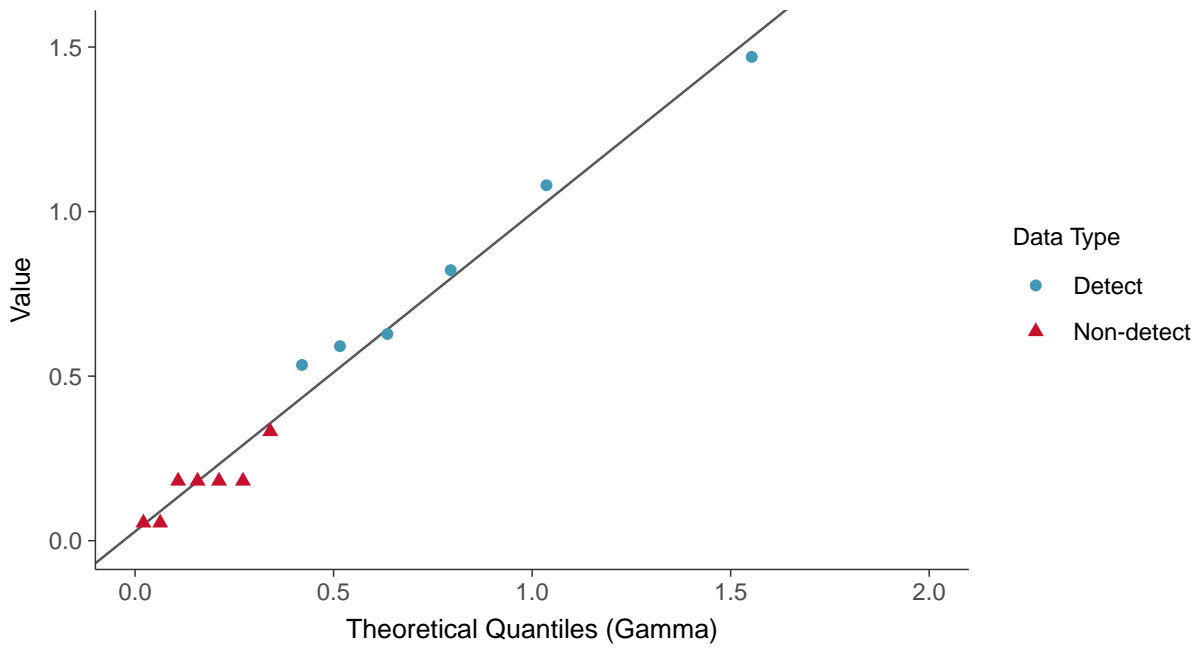
Radium 226 and 228, MW-20 (pCi/L)





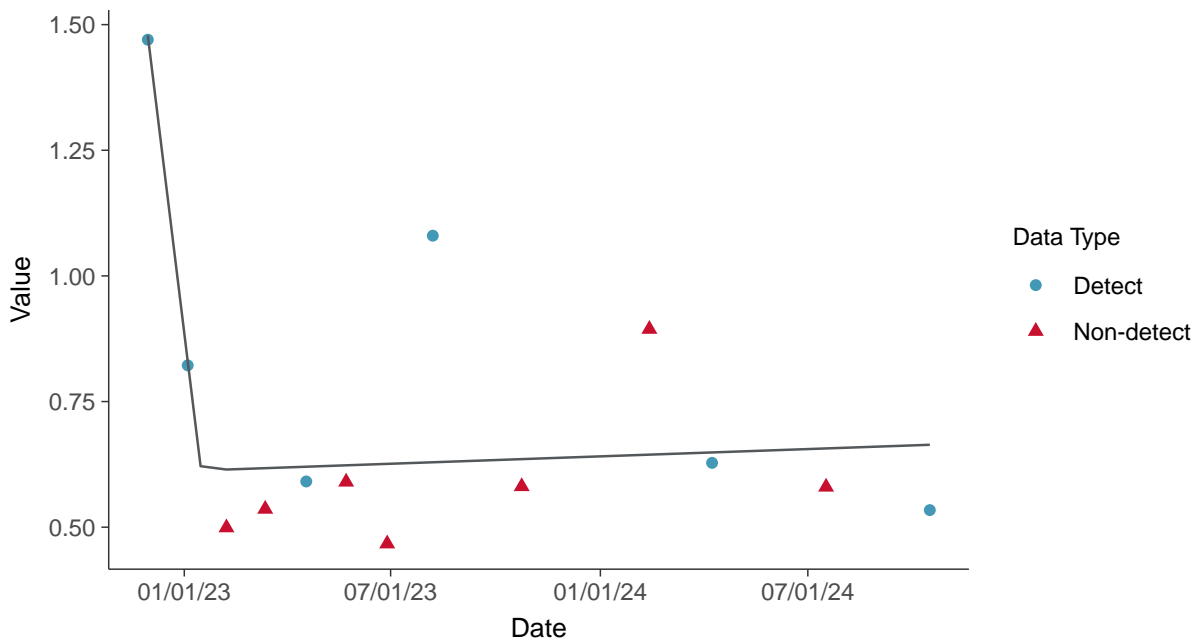
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-20 (pCi/L)



Trend Regression: Piecewise Linear-Linear

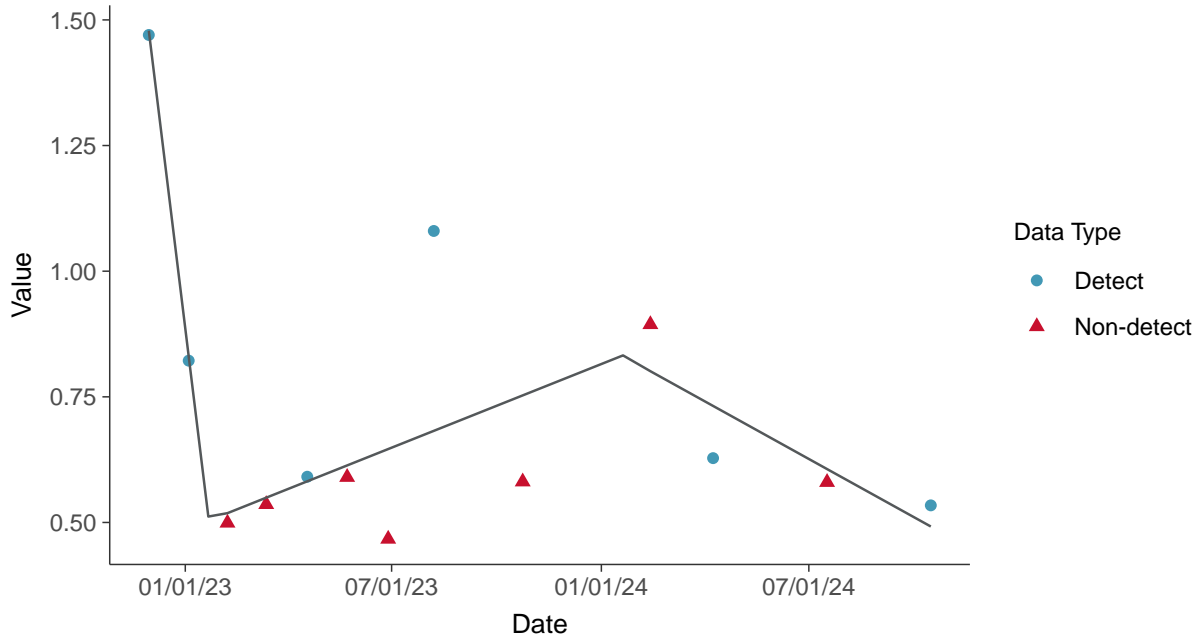
Radium 226 and 228, MW-20 (pCi/L)





Trend Regression: Piecewise Linear-Linear-Linear

Radium 226 and 228, MW-20 (pCi/L)



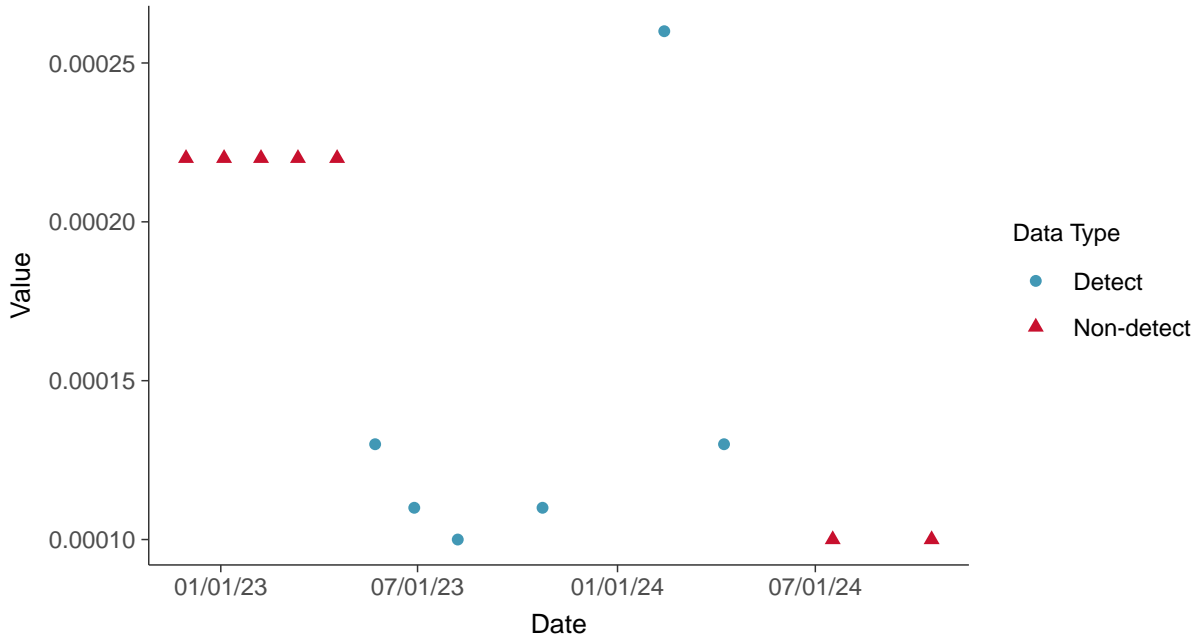


Appendix IV: Selenium, MW-20

ID: 1_30_1_5_122

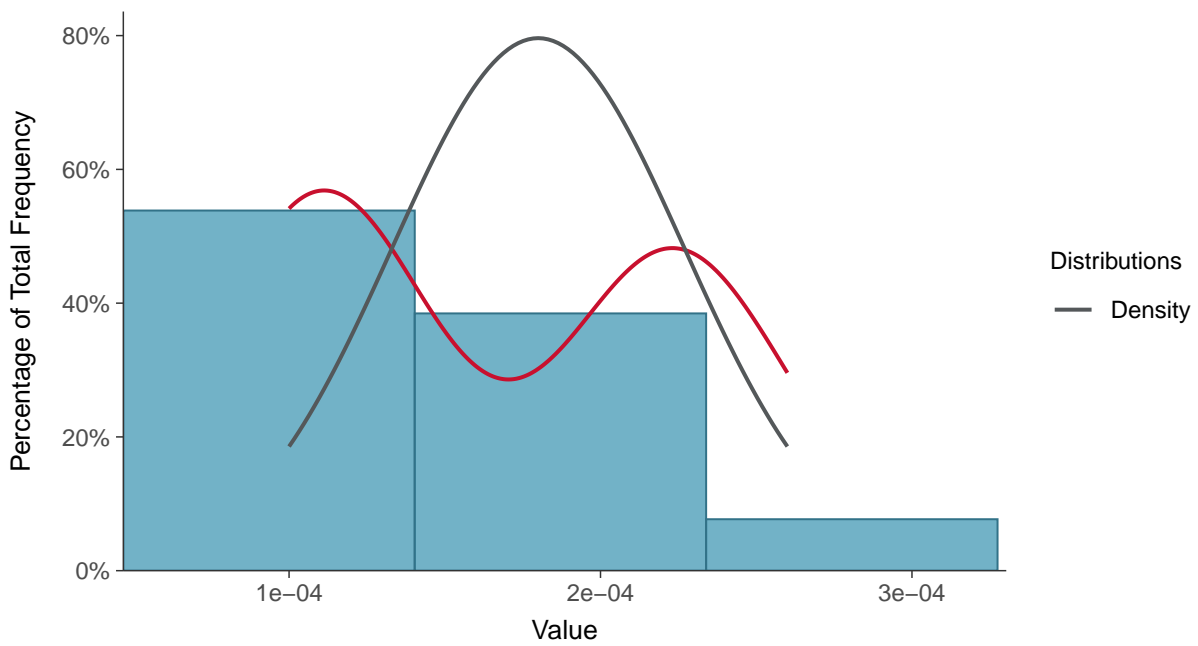
Scatter Plot

Selenium, MW-20 (mg/L)



Histogram

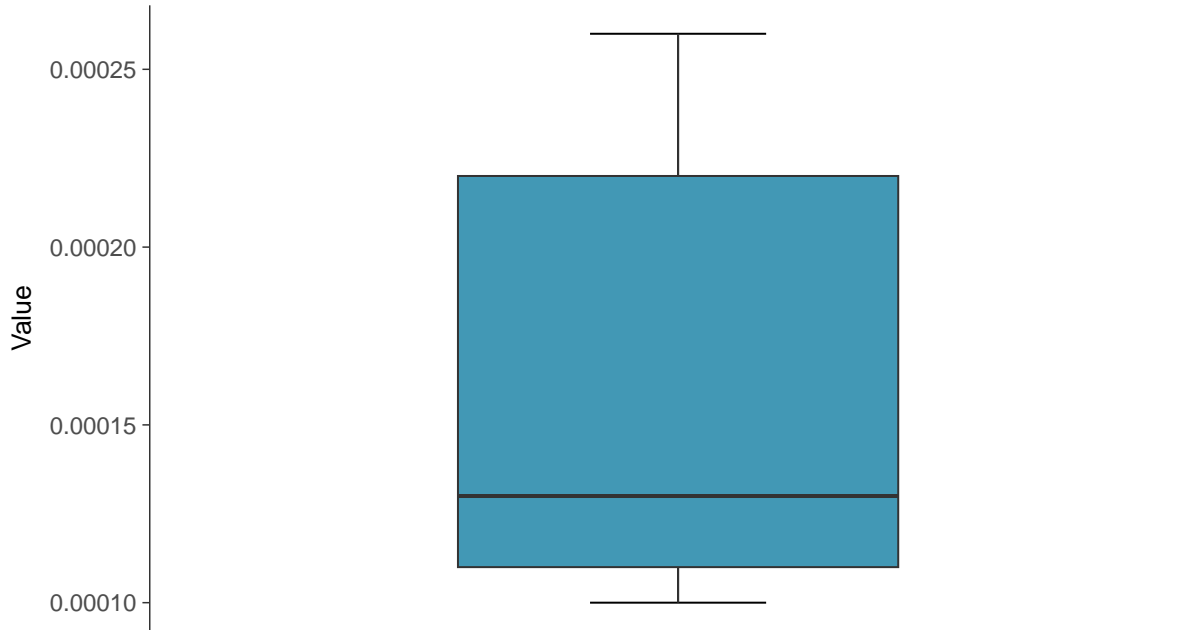
Selenium, MW-20 (mg/L)





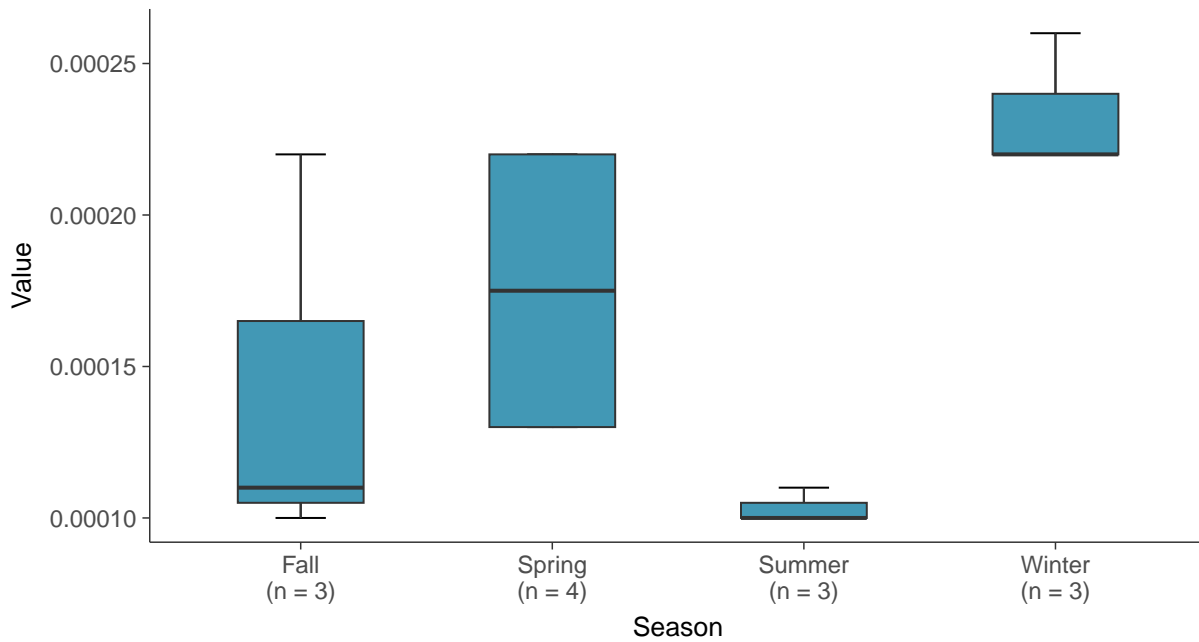
Boxplot

Selenium, MW-20 (mg/L)



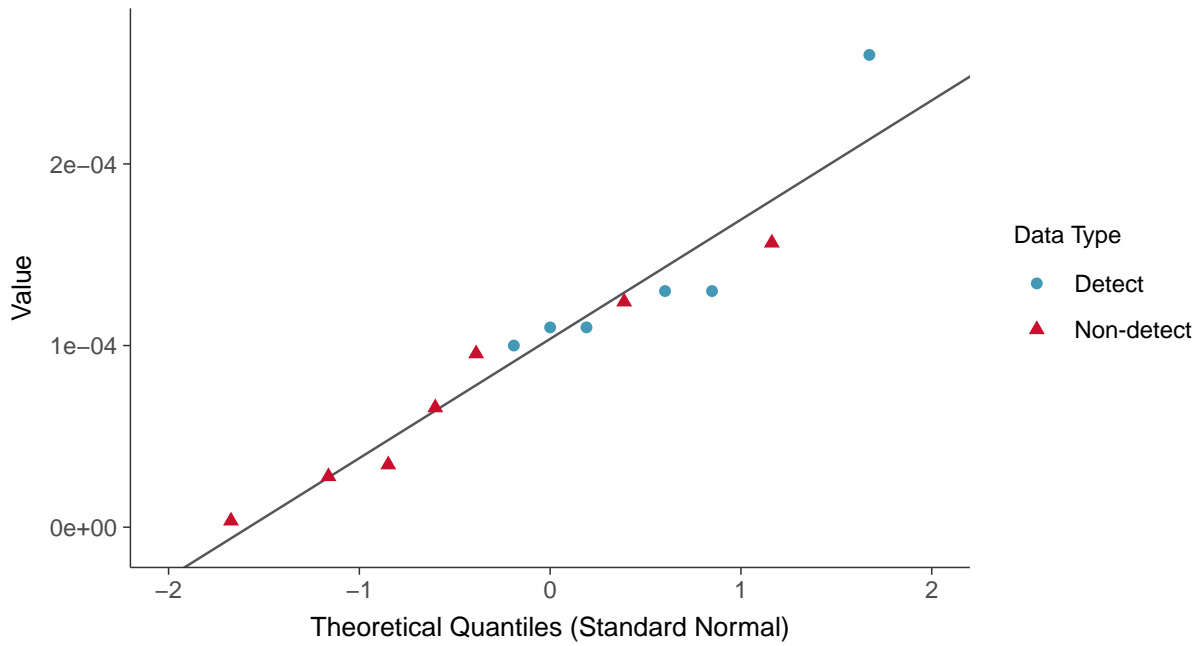
Boxplot by Season

Selenium, MW-20 (mg/L)

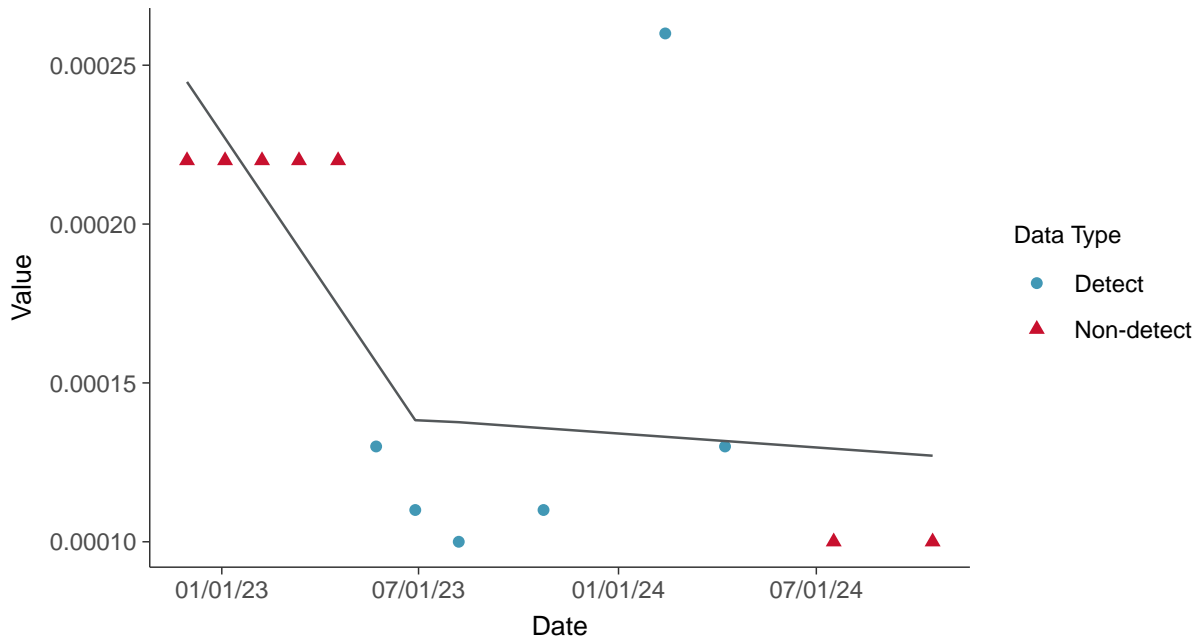




Normal Q-Q plot using ROS Imputed Estimates
Selenium, MW-20 (mg/L)



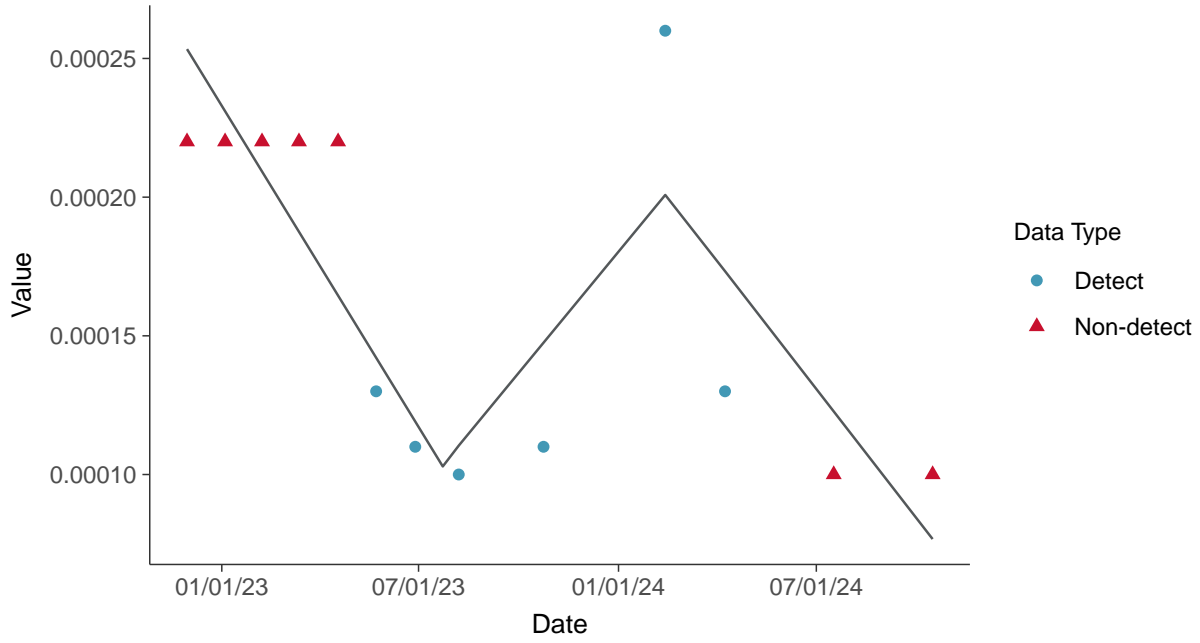
Trend Regression: Piecewise Linear-Linear
Selenium, MW-20 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

Selenium, MW-20 (mg/L)



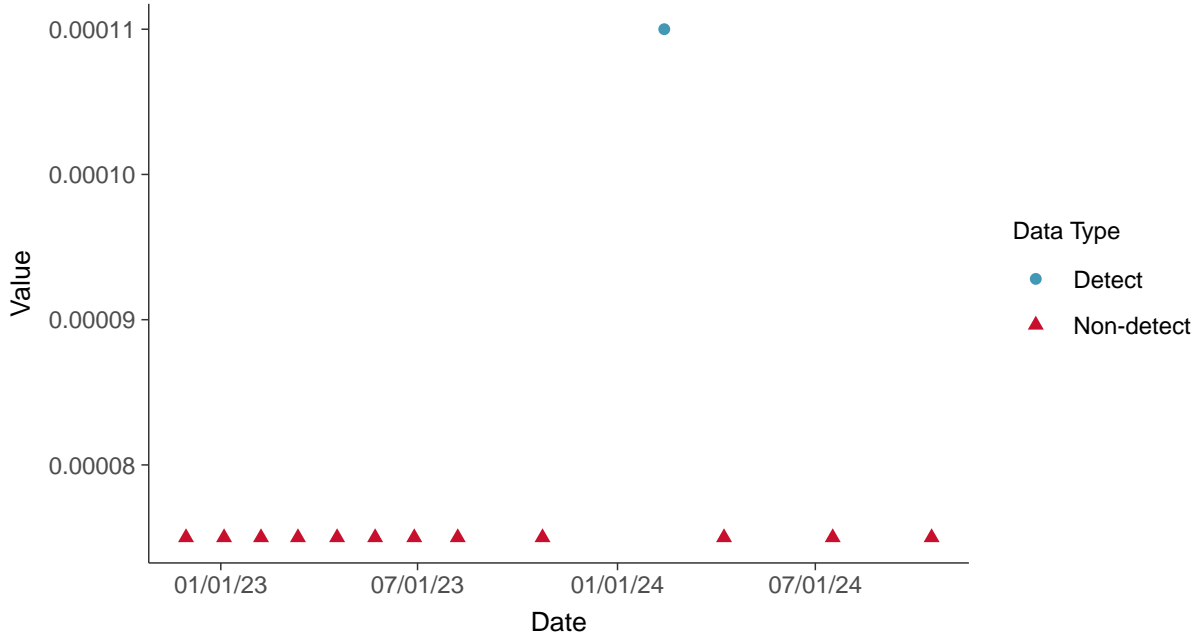


Appendix IV: Thallium, MW-20

ID: 1_30_1_5_125

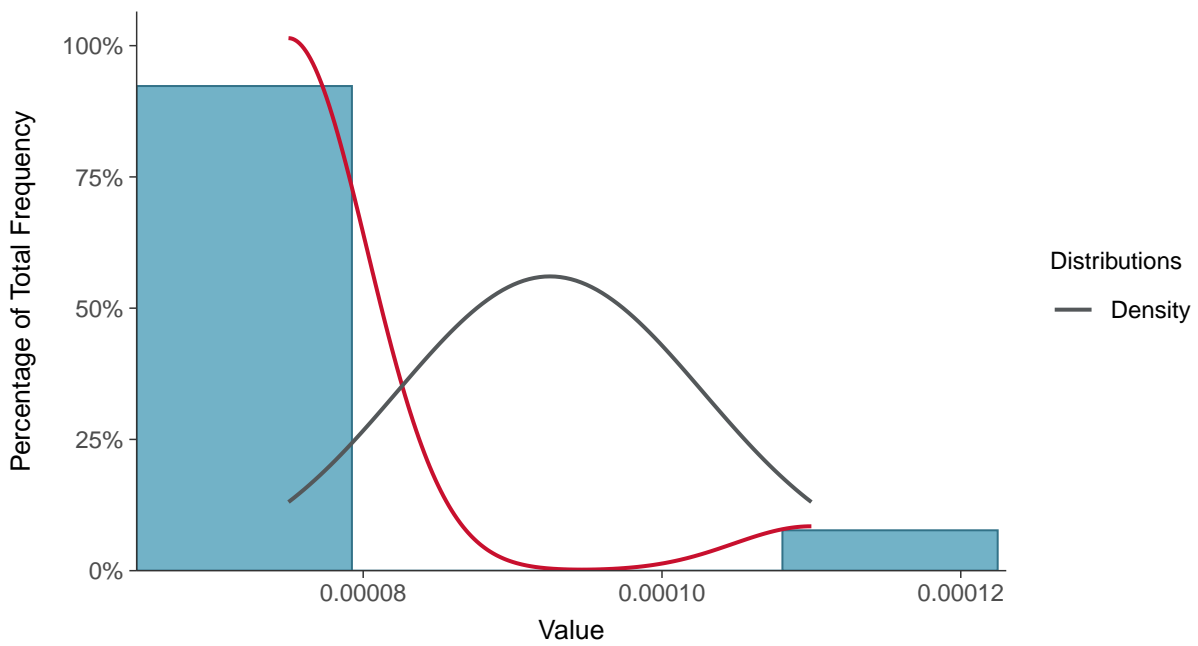
Scatter Plot

Thallium, MW-20 (mg/L)



Histogram

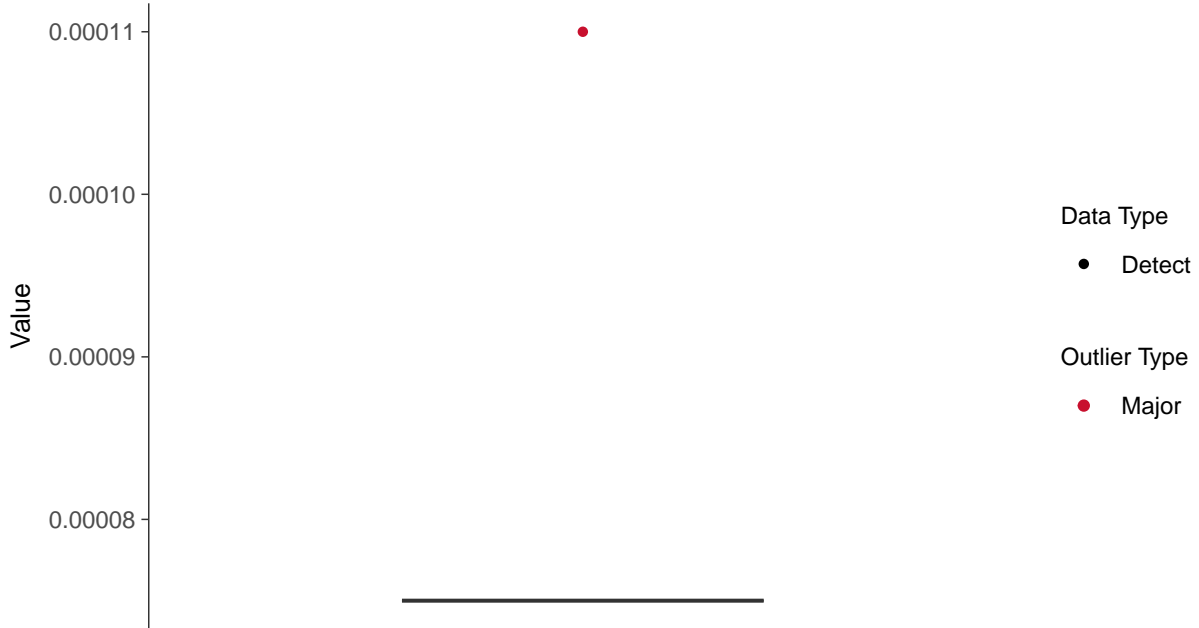
Thallium, MW-20 (mg/L)





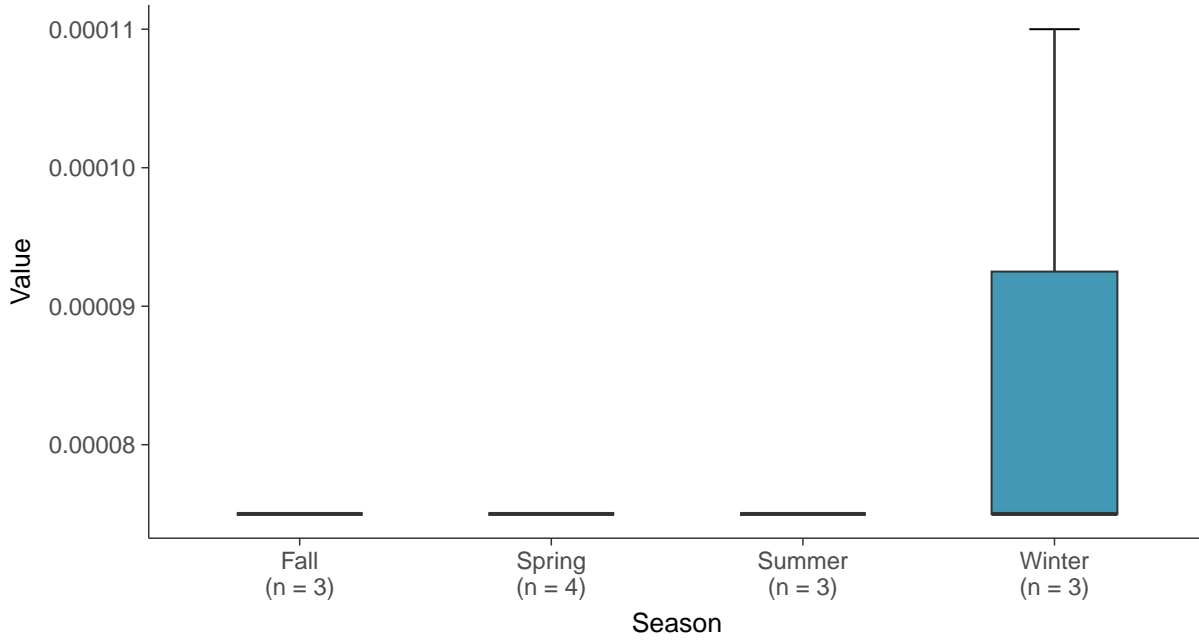
Boxplot

Thallium, MW-20 (mg/L)



Boxplot by Season

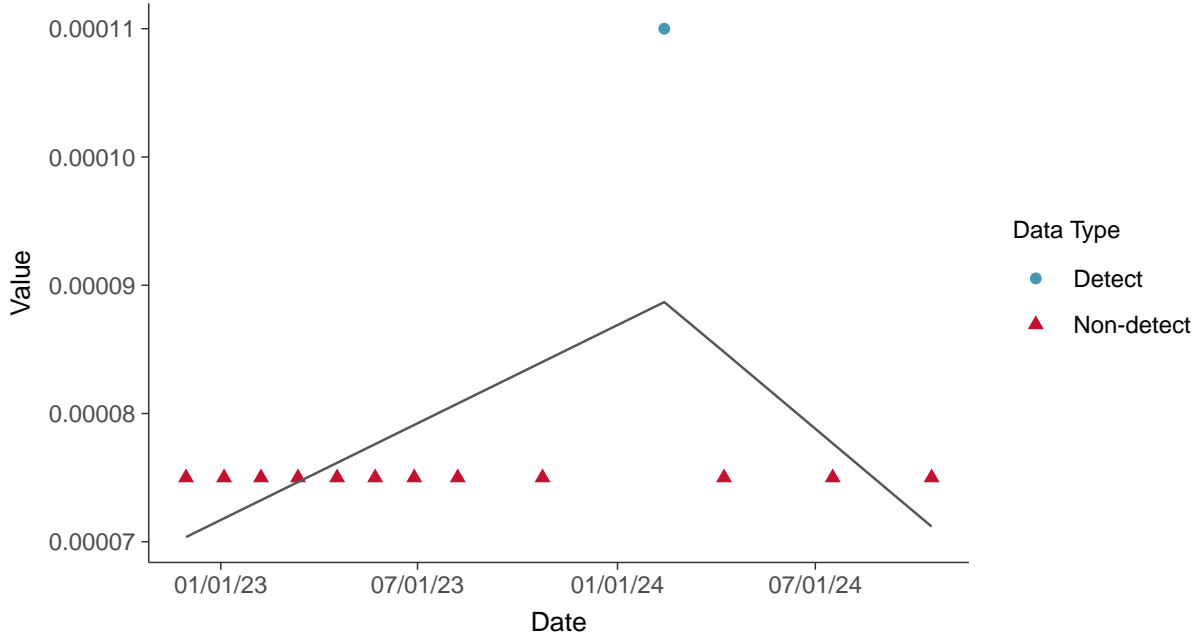
Thallium, MW-20 (mg/L)





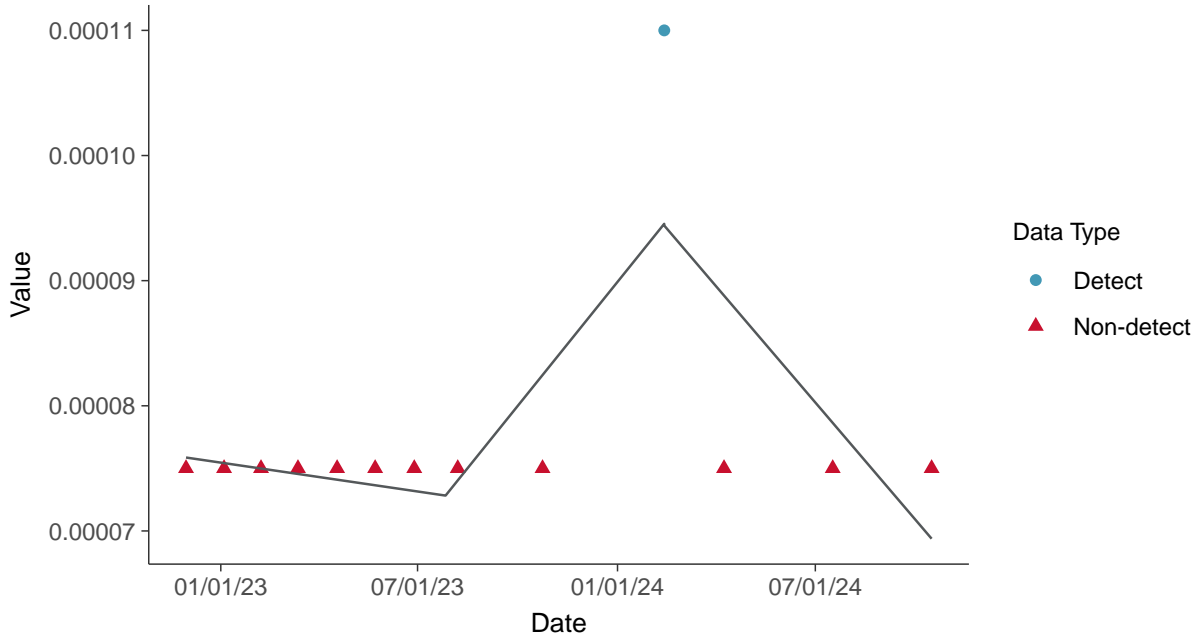
Trend Regression: Piecewise Linear-Linear

Thallium, MW-20 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Thallium, MW-20 (mg/L)



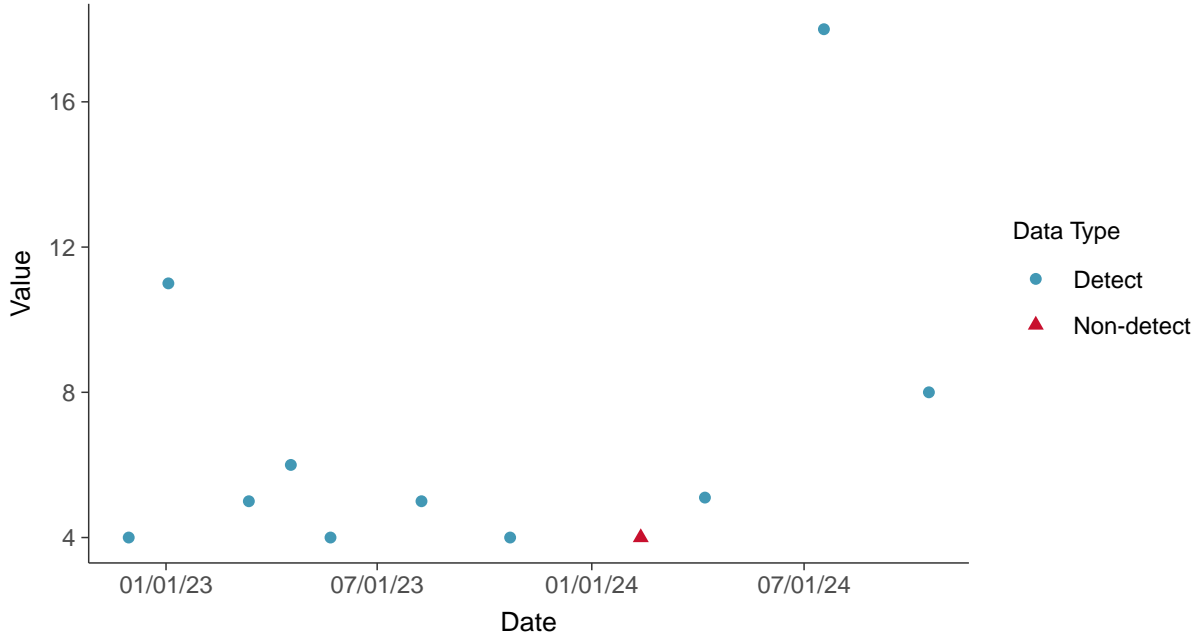


Additional Parameters: Total Suspended Solids, MW-30

ID: 1_40_1_3_127

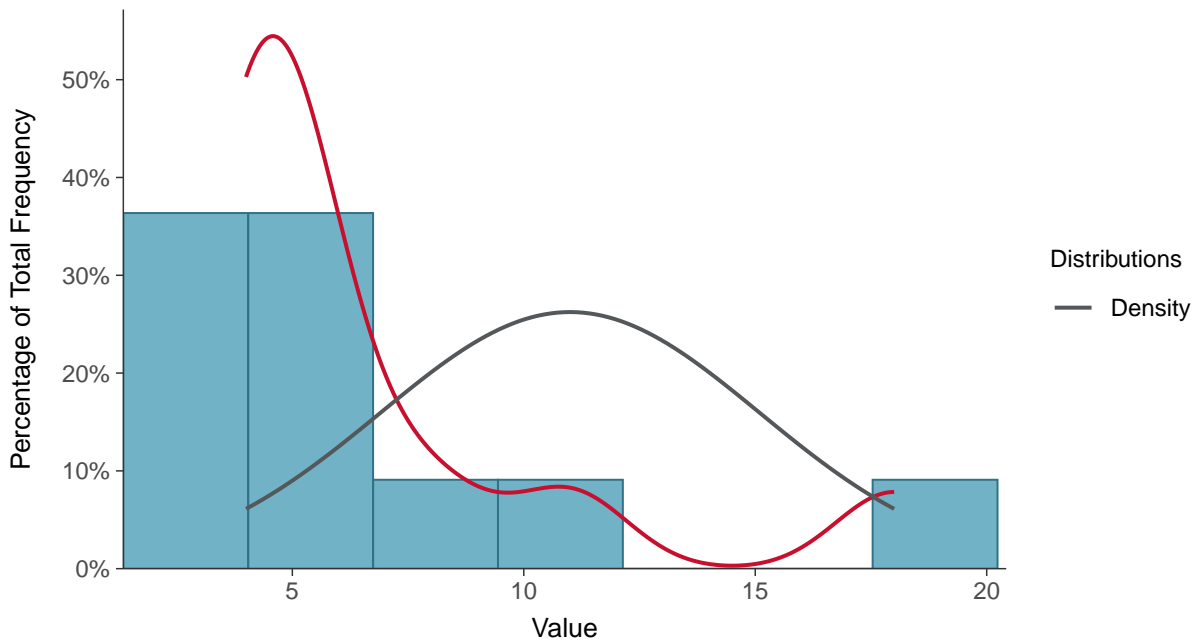
Scatter Plot

Total Suspended Solids, MW-30 (mg/L)



Histogram

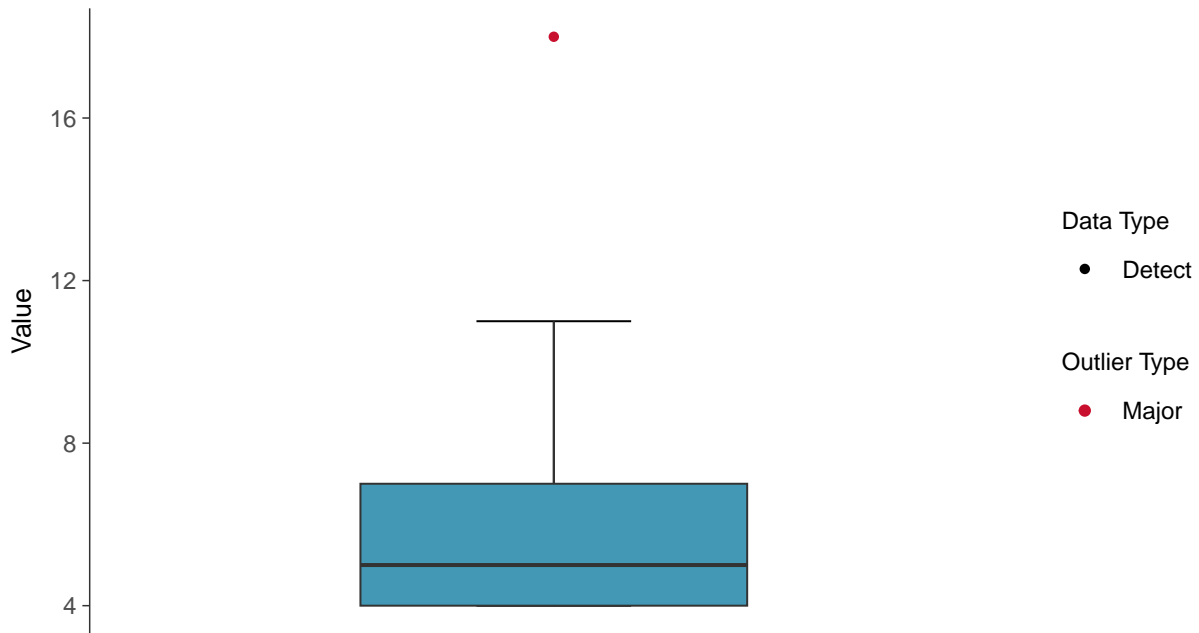
Total Suspended Solids, MW-30 (mg/L)





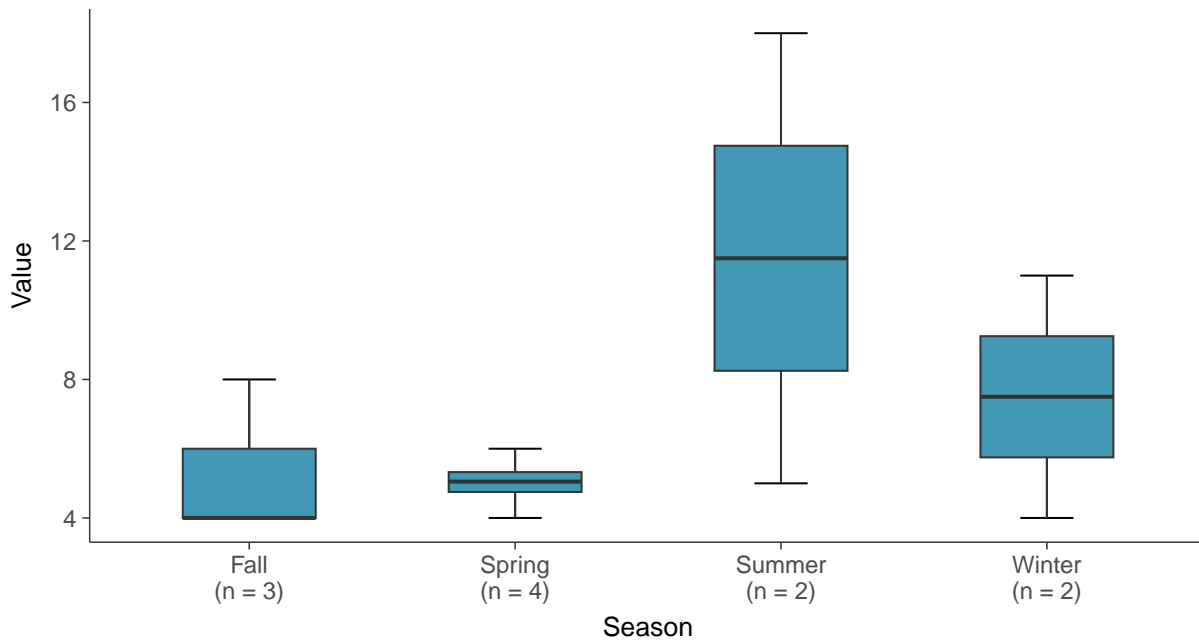
Boxplot

Total Suspended Solids, MW-30 (mg/L)



Boxplot by Season

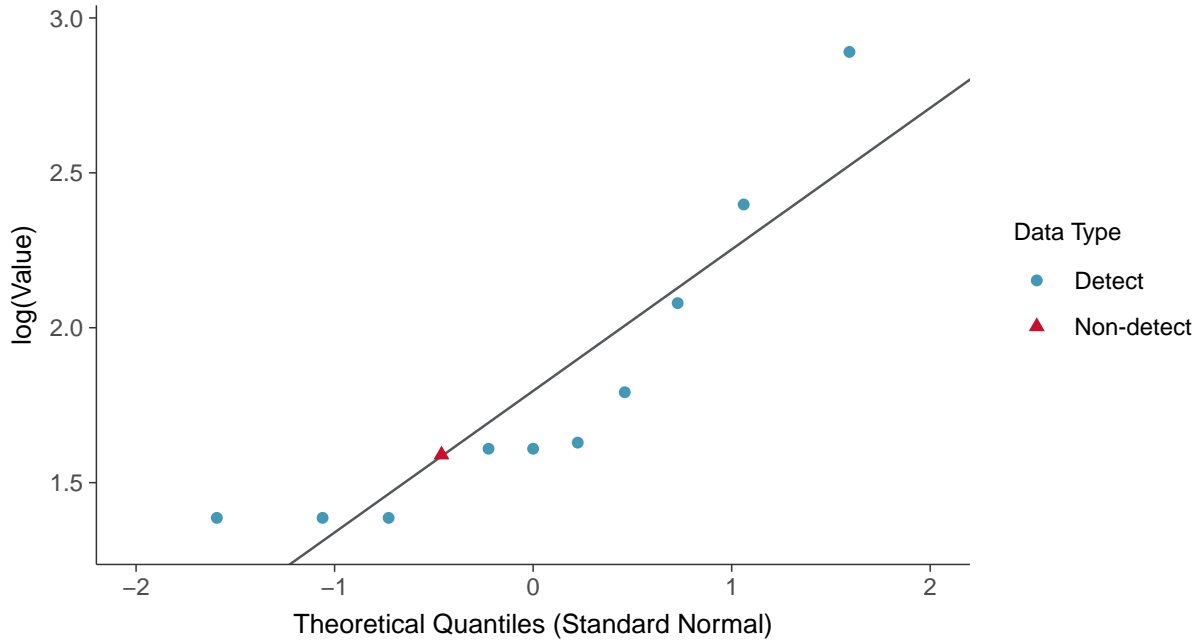
Total Suspended Solids, MW-30 (mg/L)





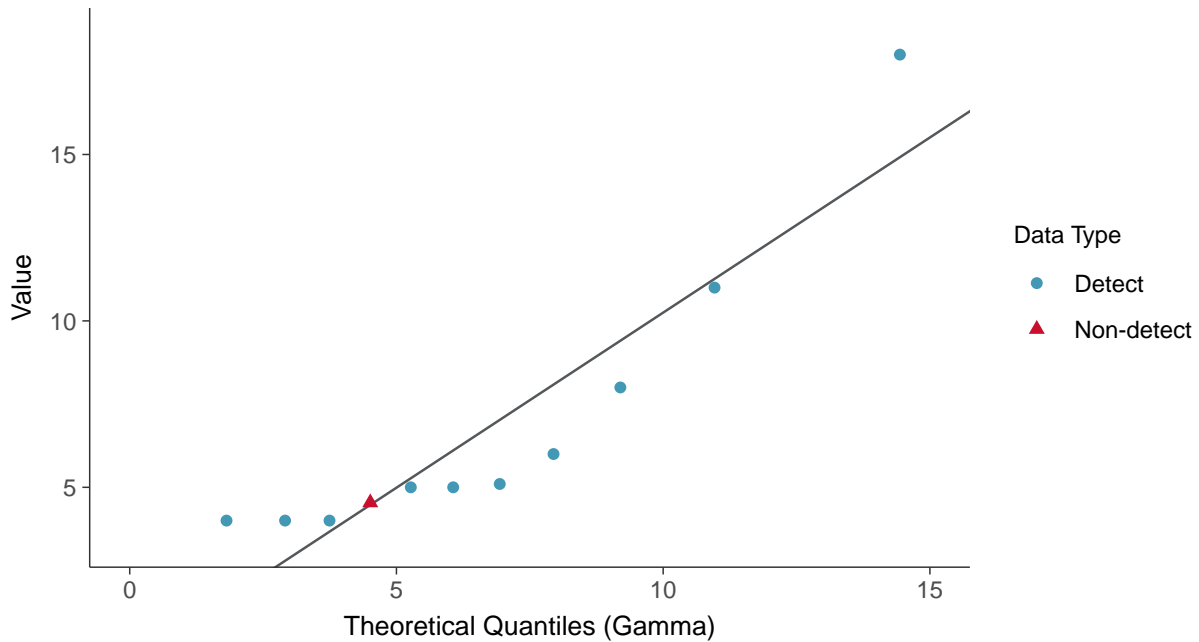
Lognormal Q-Q plot using ROS Imputed Estimates

Total Suspended Solids, MW-30 (mg/L)



Gamma Q-Q plot using ROS Imputed Estimates

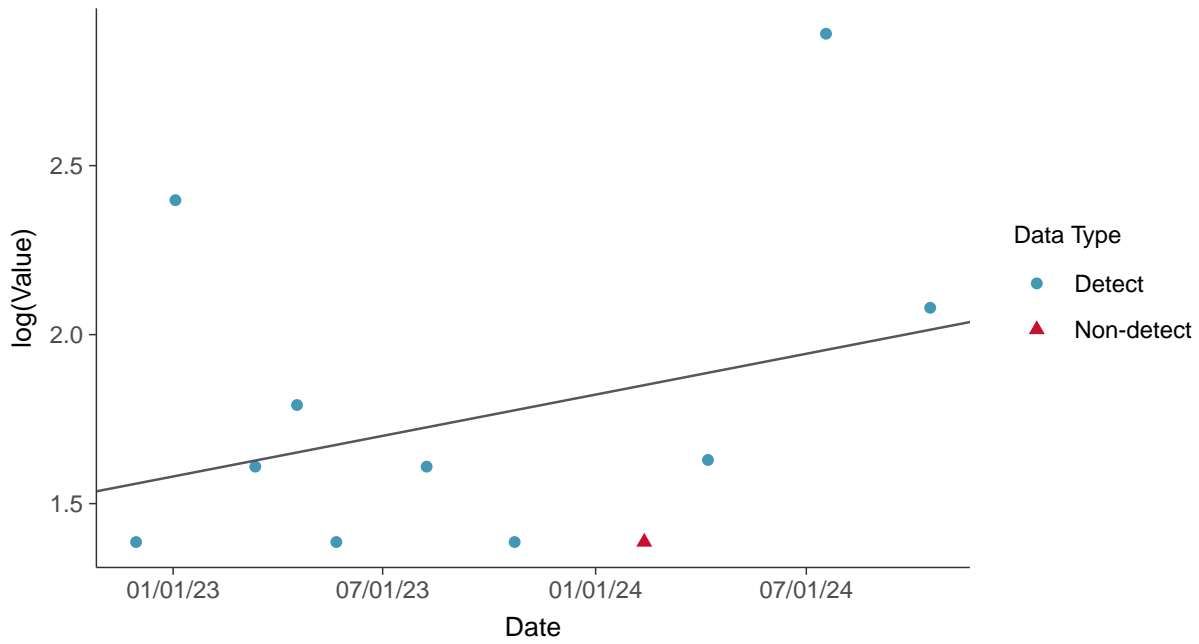
Total Suspended Solids, MW-30 (mg/L)





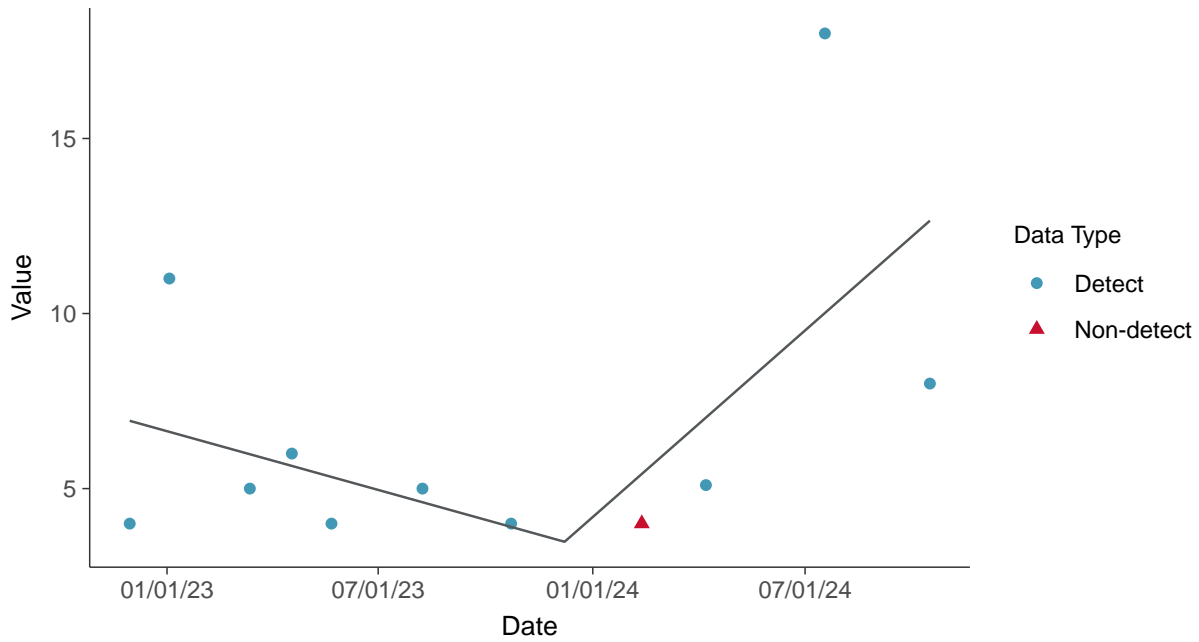
Trend Regression: Lognormal MLE

Total Suspended Solids, MW-30 (mg/L)



Trend Regression: Piecewise Linear-Linear

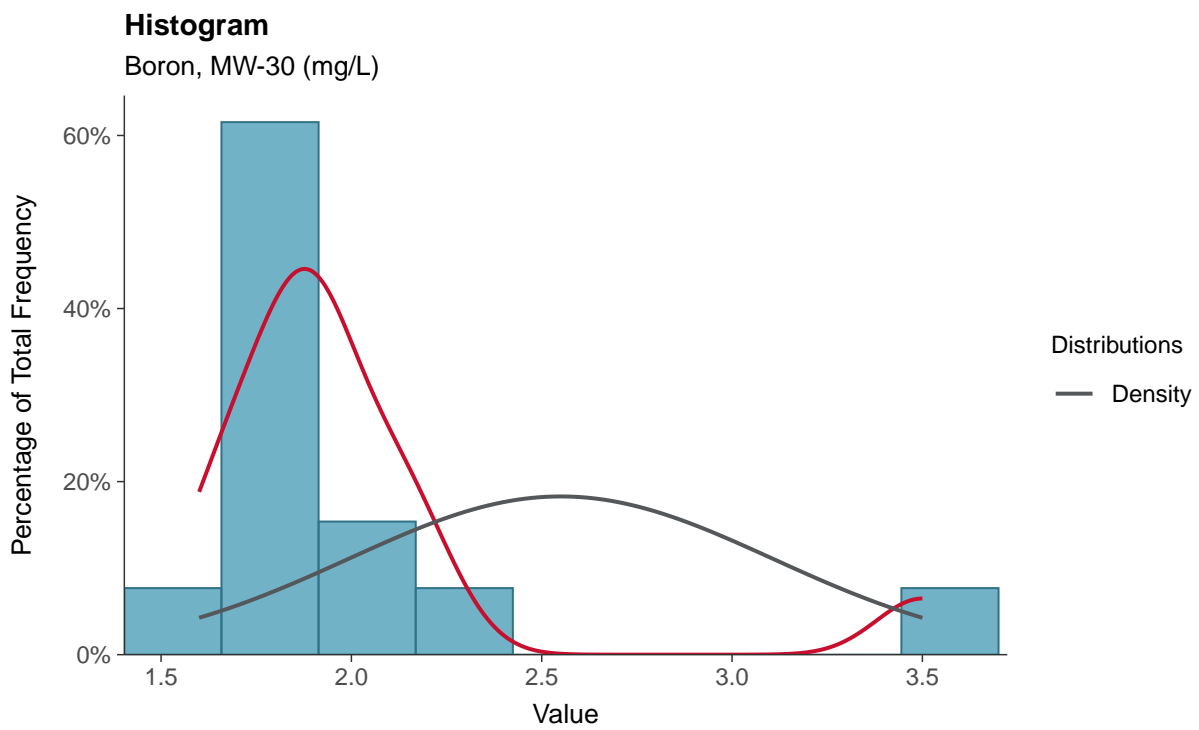
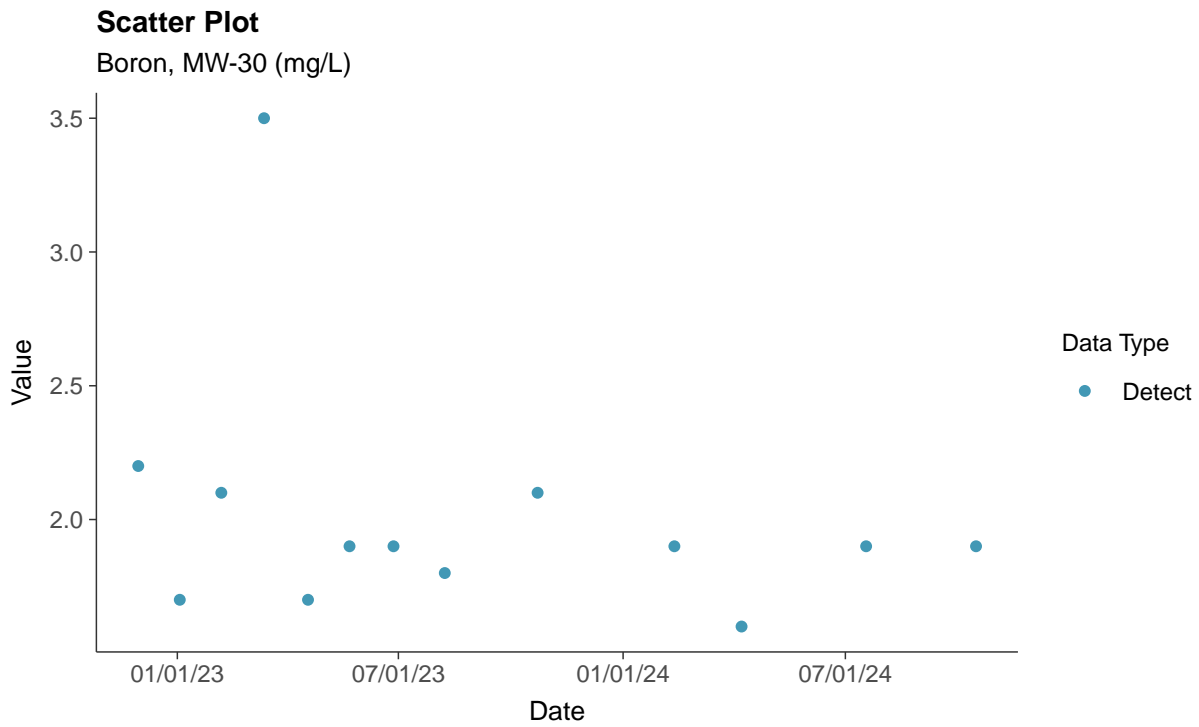
Total Suspended Solids, MW-30 (mg/L)





Appendix III: Boron, MW-30

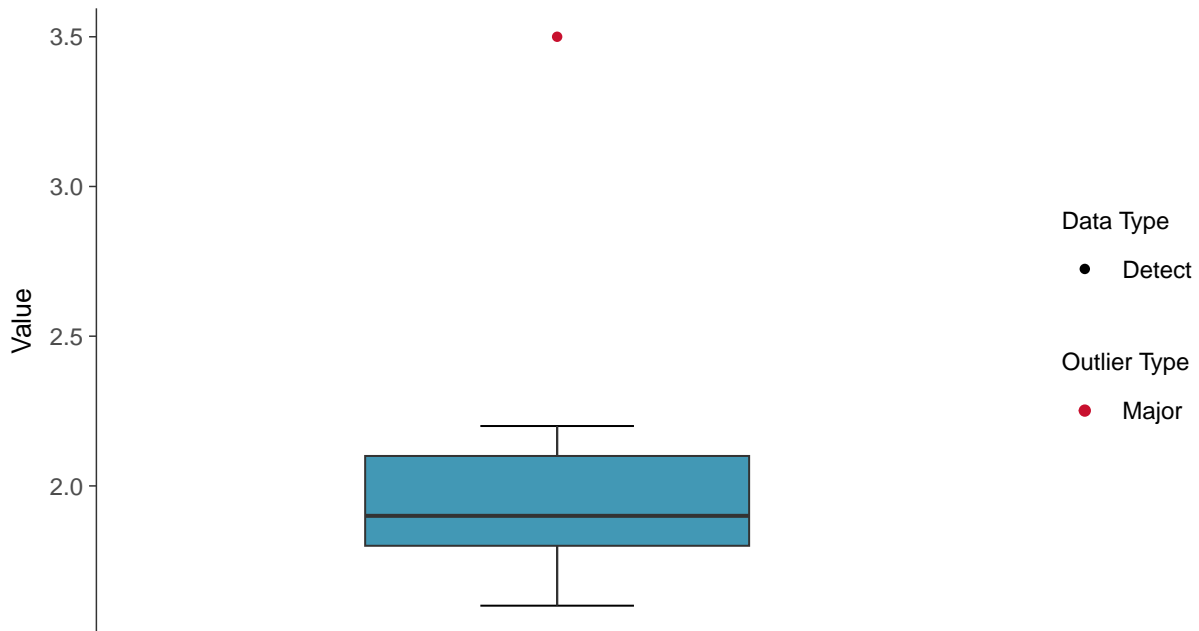
ID: 1_40_1_4_105





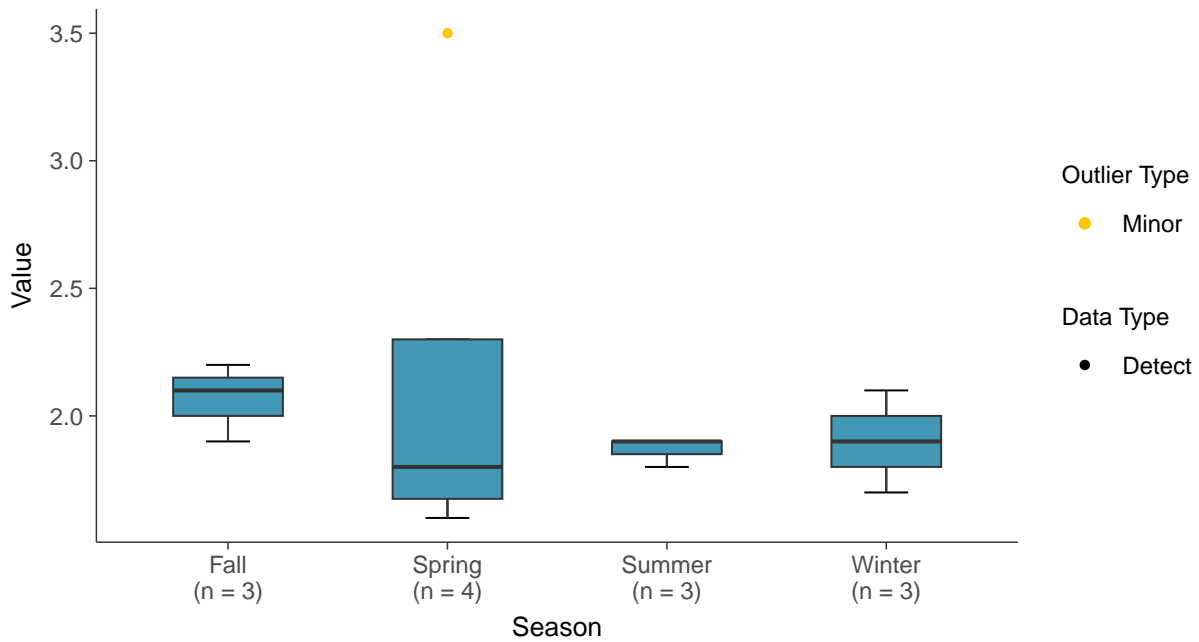
Boxplot

Boron, MW-30 (mg/L)



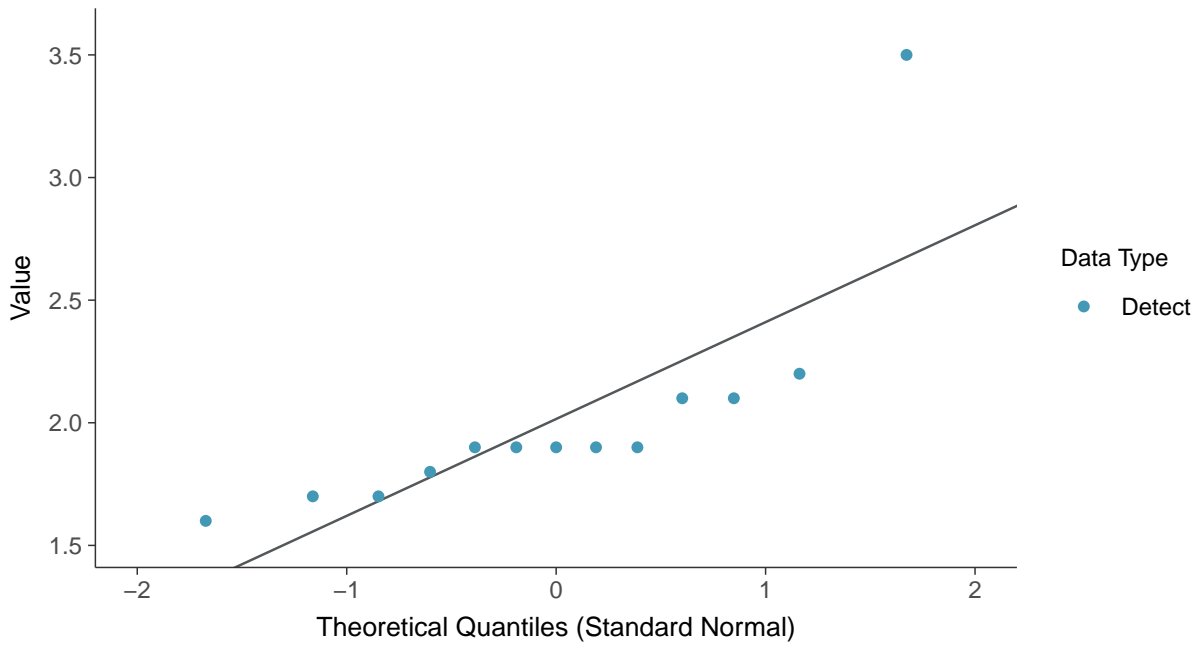
Boxplot by Season

Boron, MW-30 (mg/L)

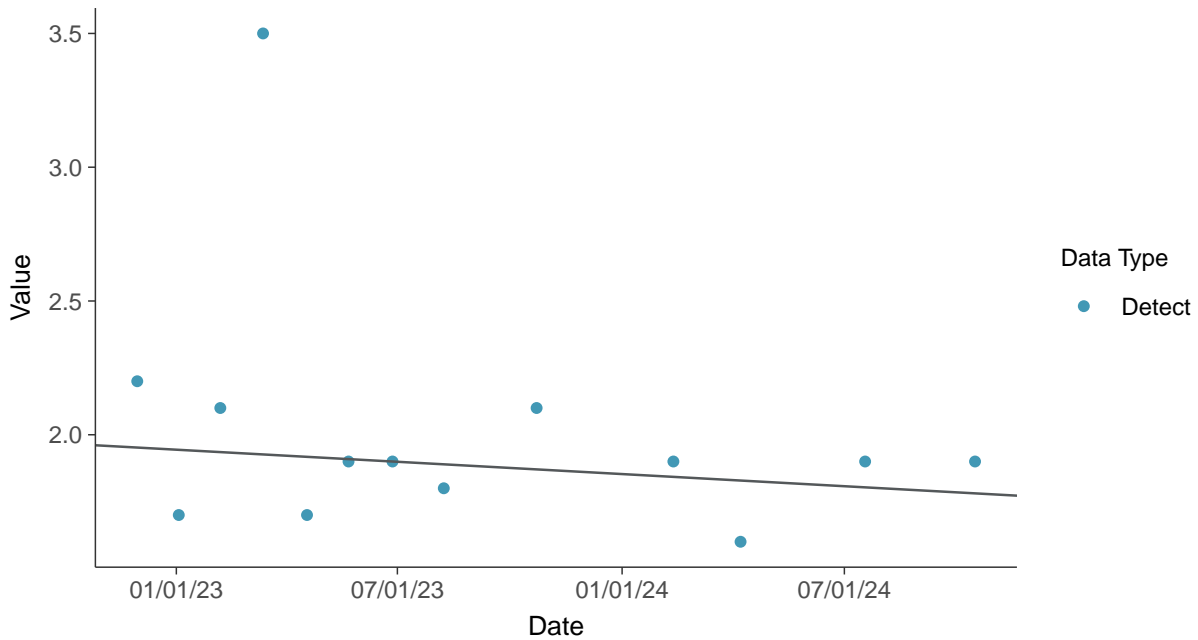




Normal Q-Q plot
Boron, MW-30 (mg/L)



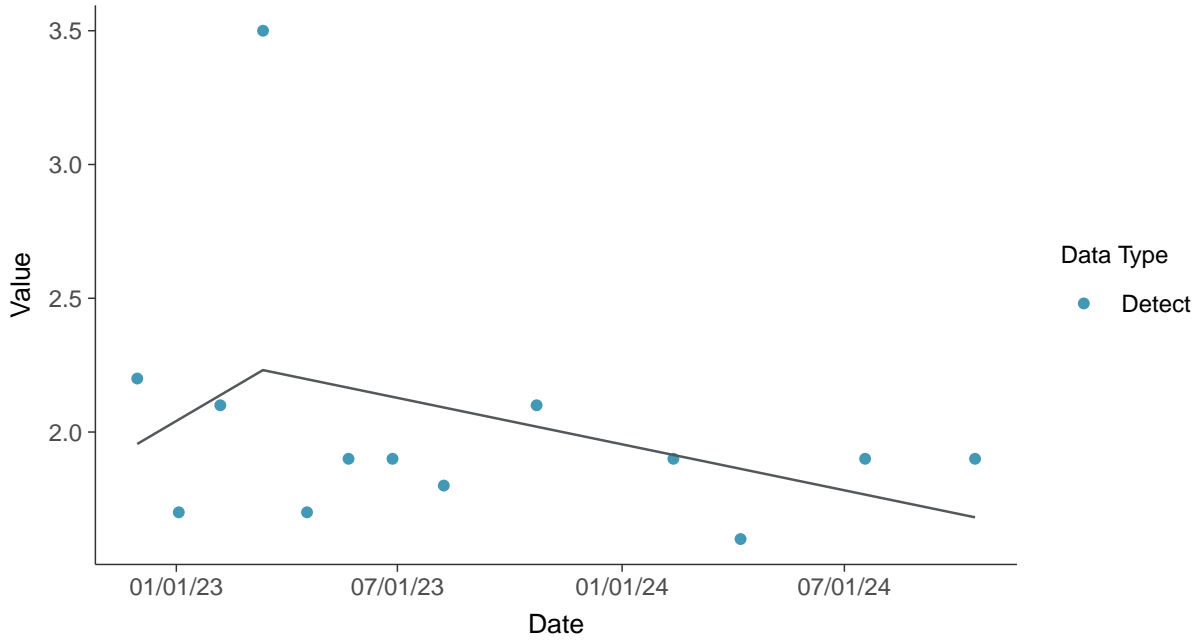
Trend Regression: Mann-Kendall/Theil-Sen Estimate
Boron, MW-30 (mg/L)





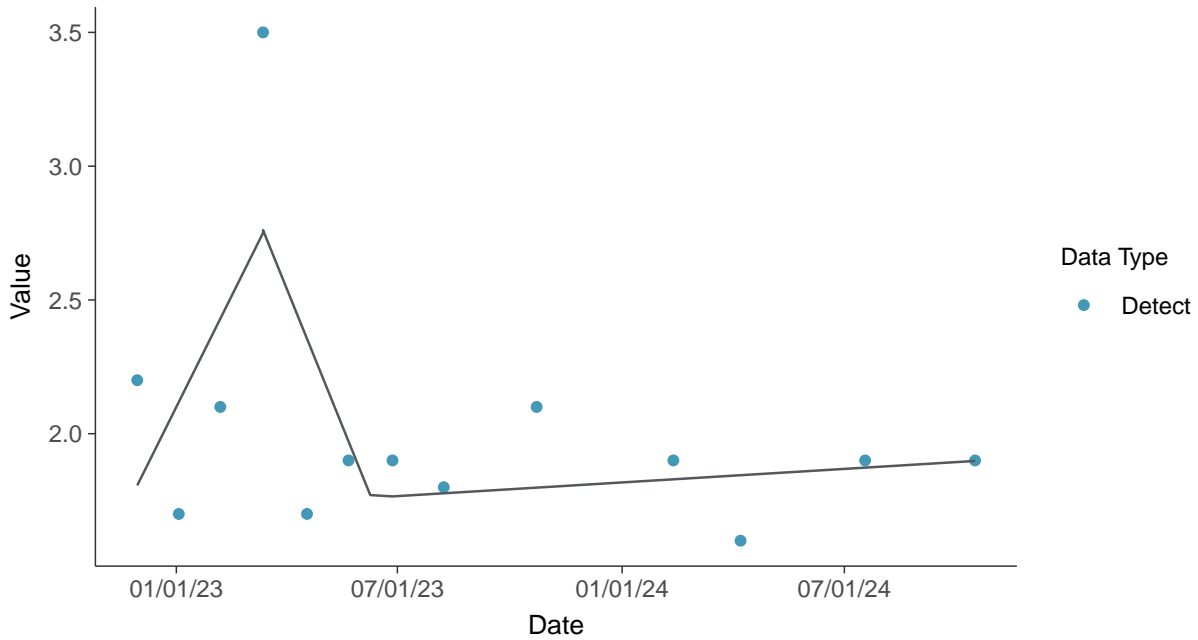
Trend Regression: Piecewise Linear-Linear

Boron, MW-30 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Boron, MW-30 (mg/L)



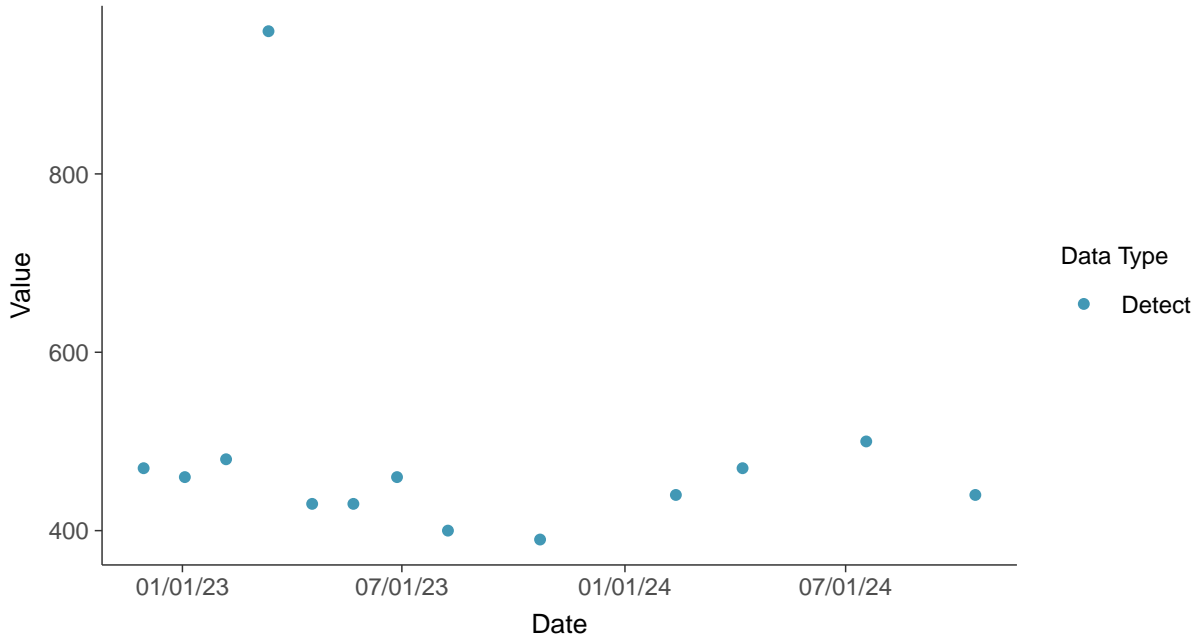


Appendix III: Calcium, MW-30

ID: 1_40_1_4_107

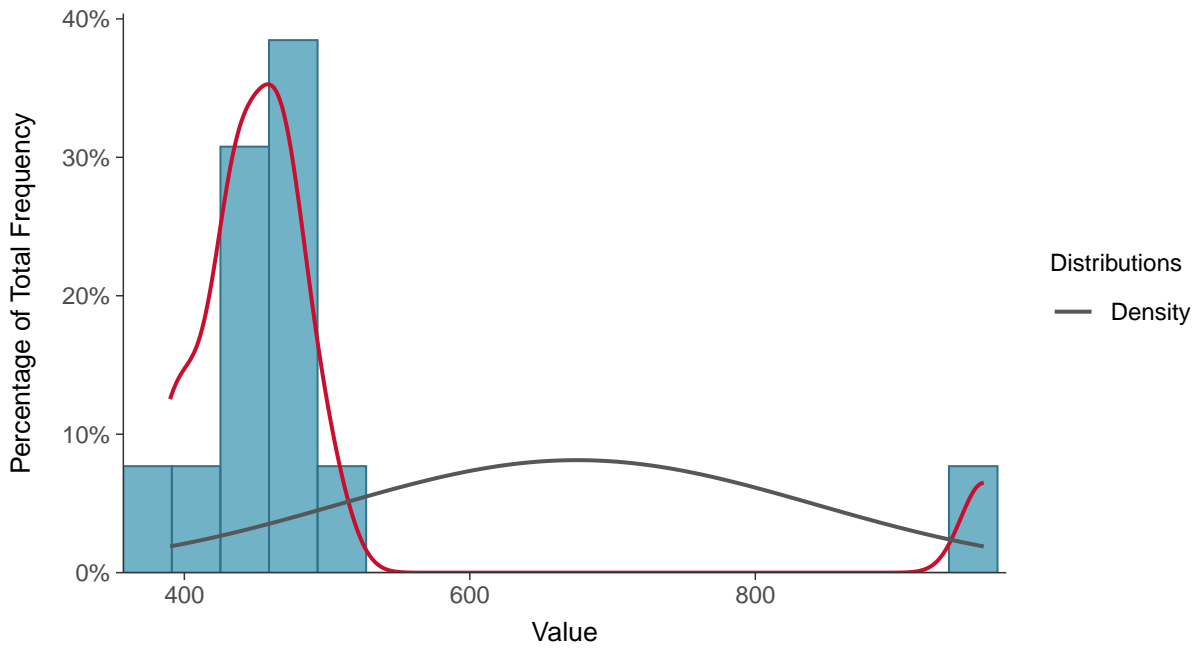
Scatter Plot

Calcium, MW-30 (mg/L)



Histogram

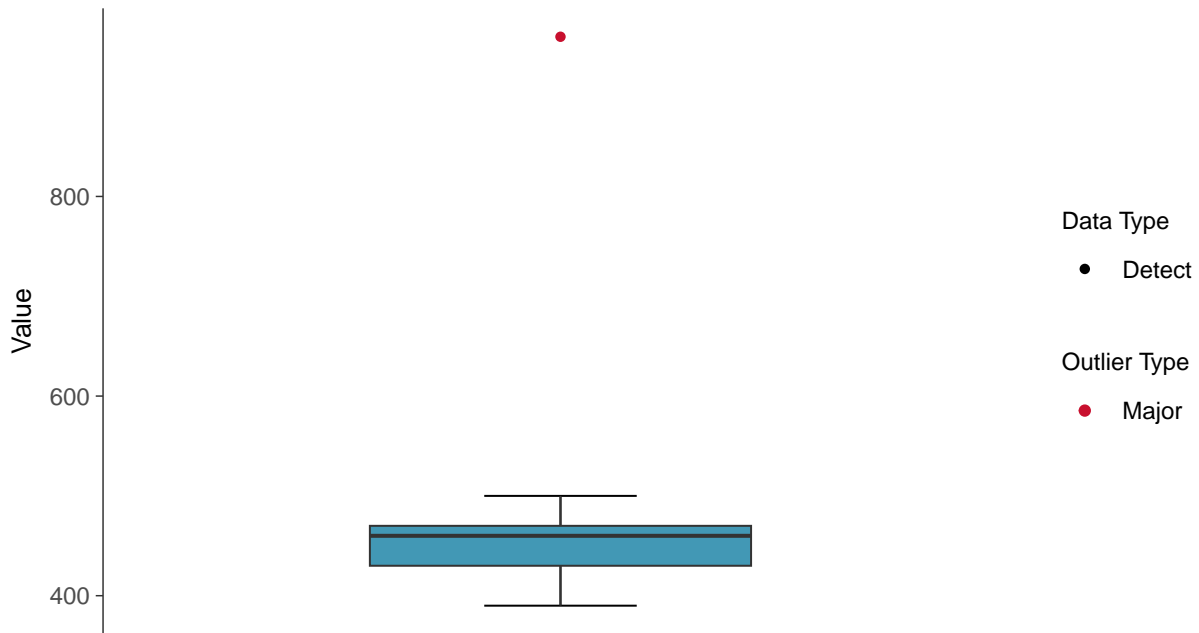
Calcium, MW-30 (mg/L)





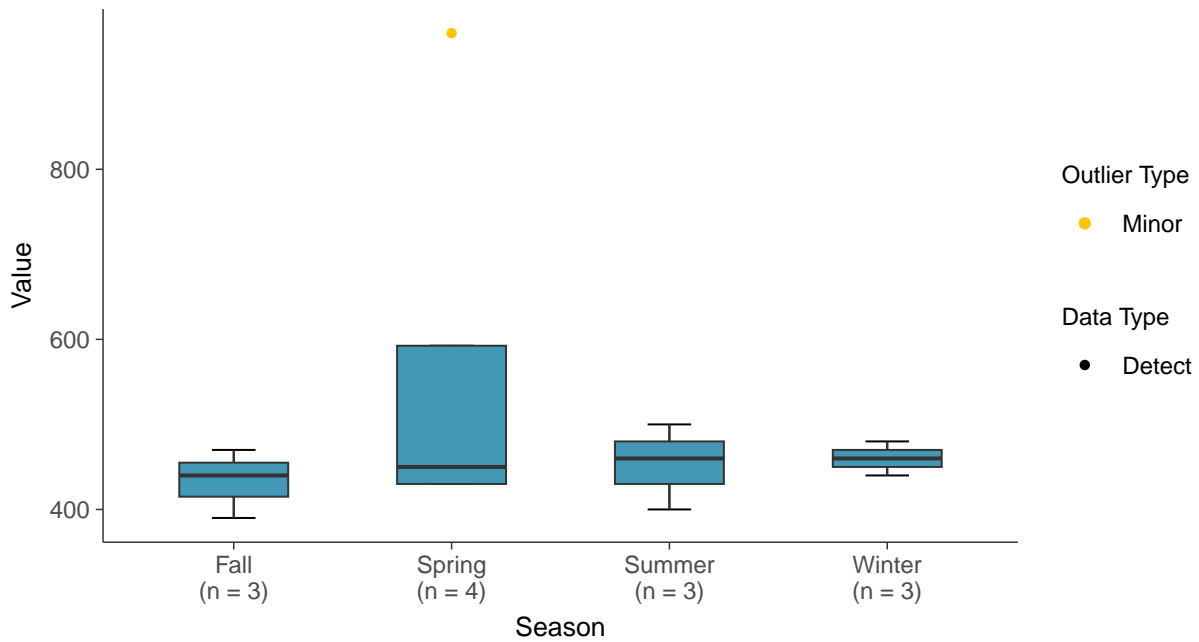
Boxplot

Calcium, MW-30 (mg/L)



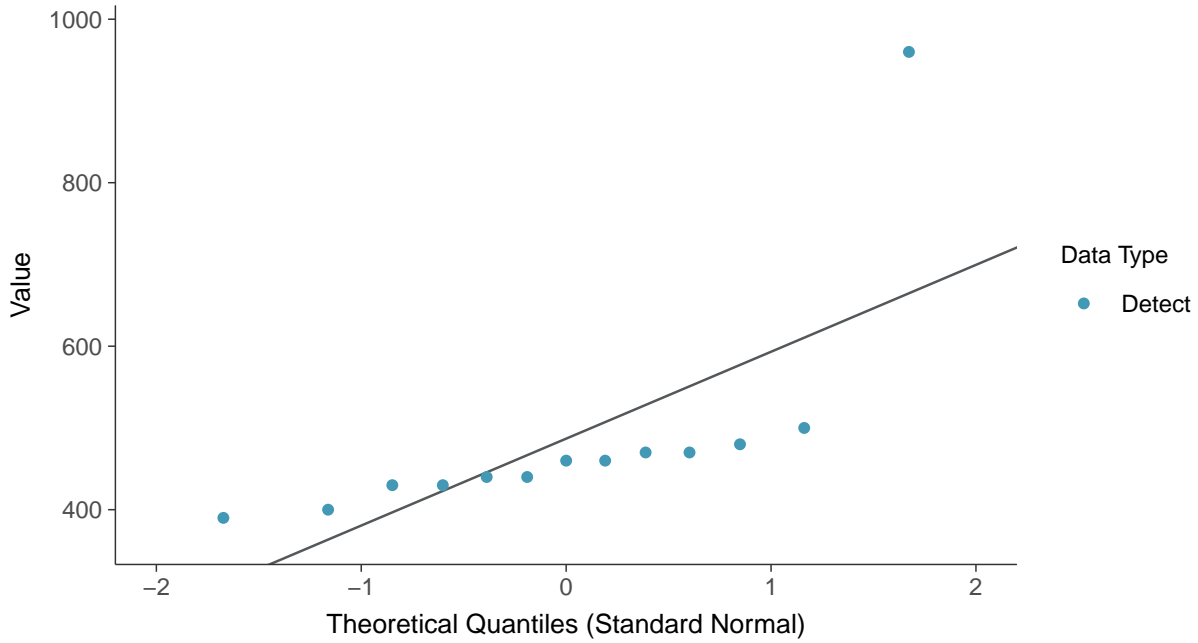
Boxplot by Season

Calcium, MW-30 (mg/L)

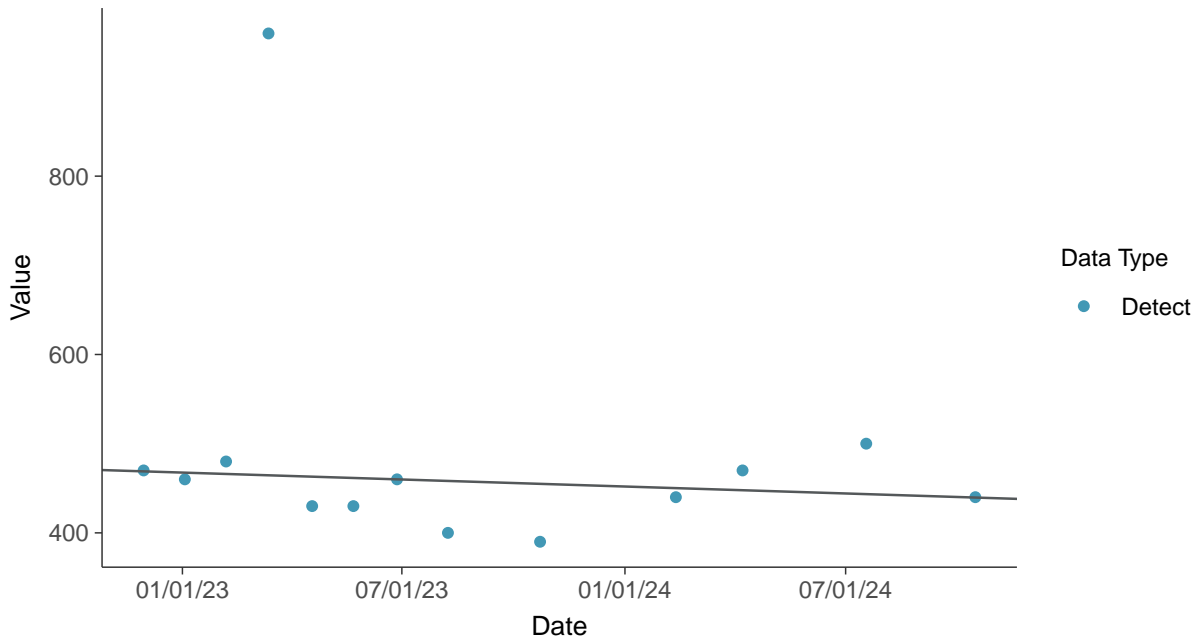




Normal Q-Q plot
Calcium, MW-30 (mg/L)



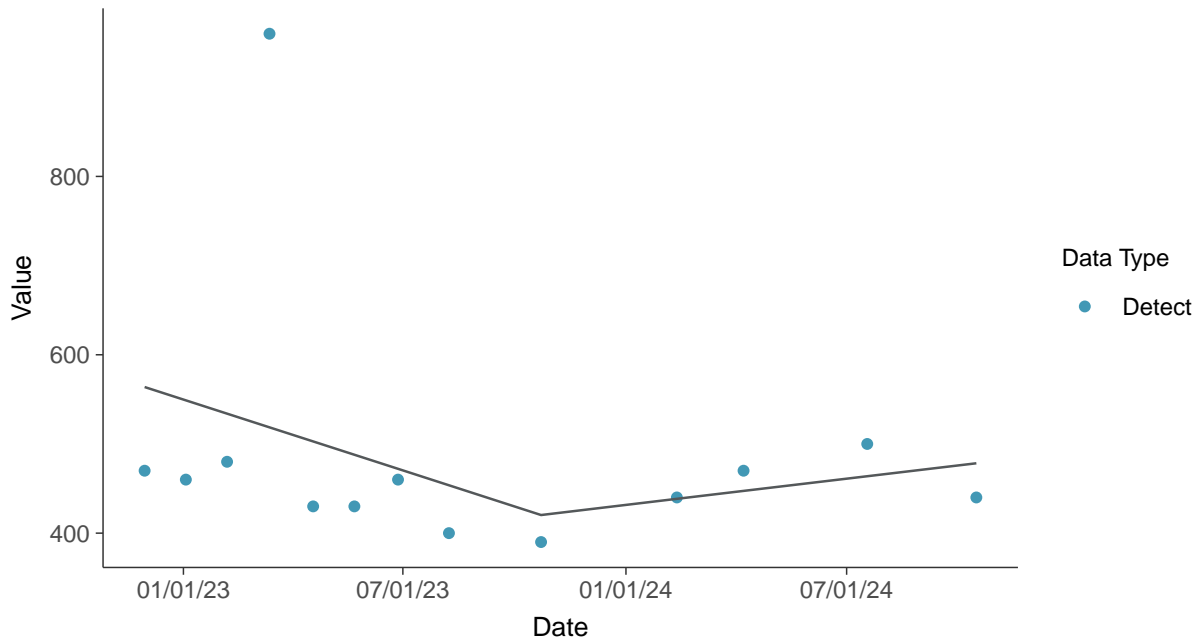
Trend Regression: Mann-Kendall/Theil-Sen Estimate
Calcium, MW-30 (mg/L)





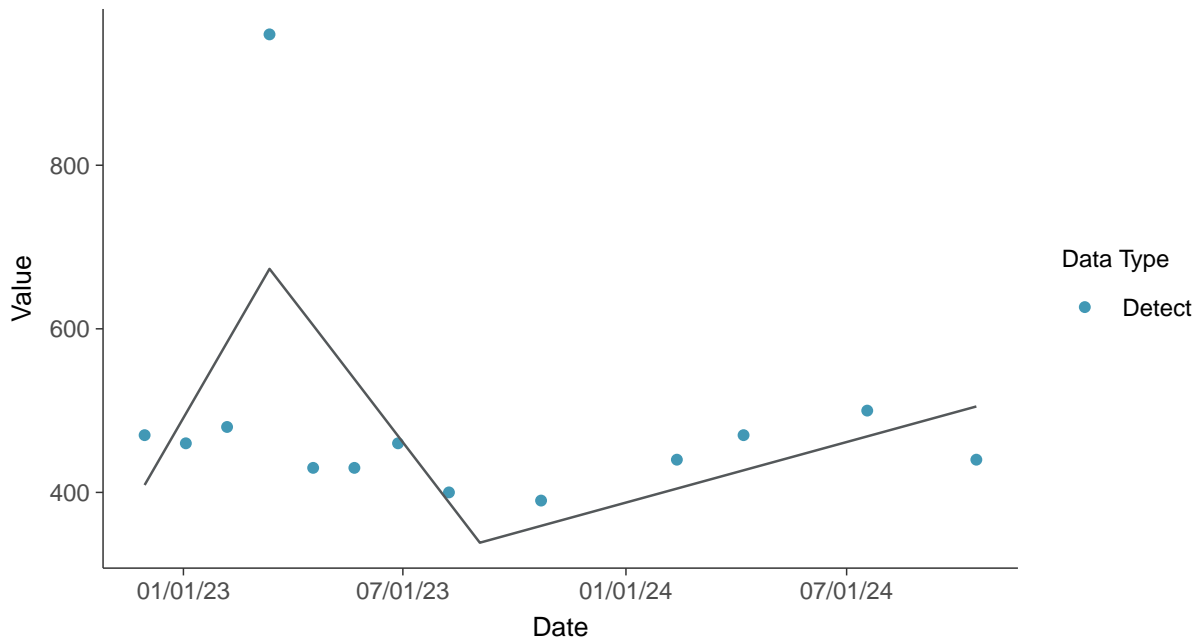
Trend Regression: Piecewise Linear-Linear

Calcium, MW-30 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Calcium, MW-30 (mg/L)



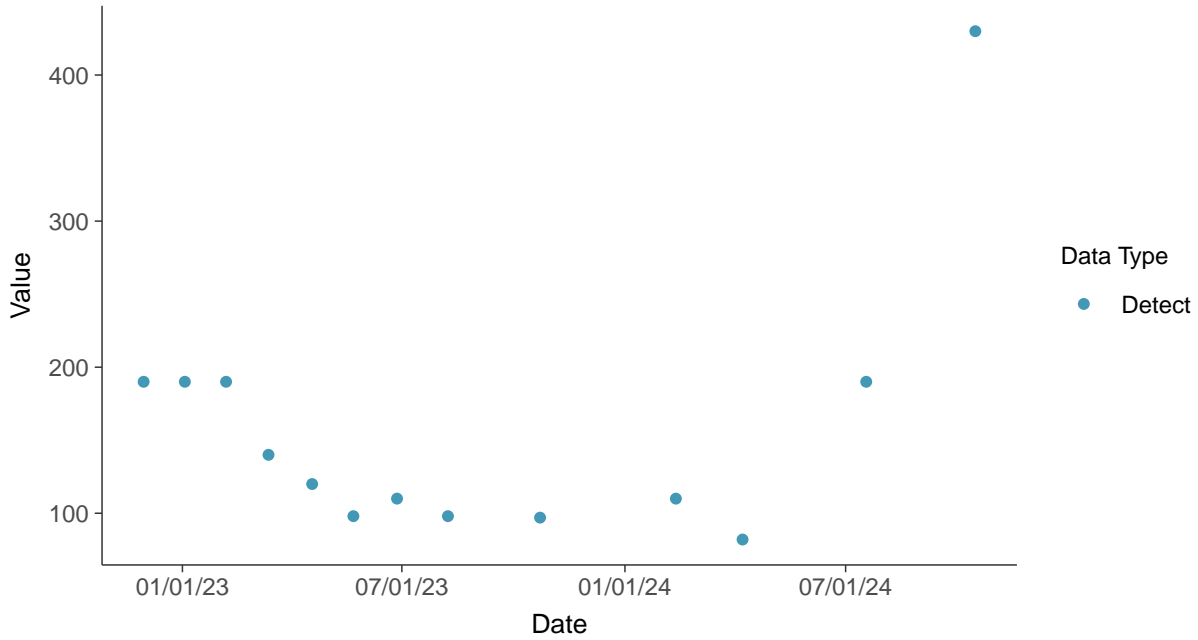


Appendix III: Chloride (as Cl), MW-30

ID: 1_40_1_4_108

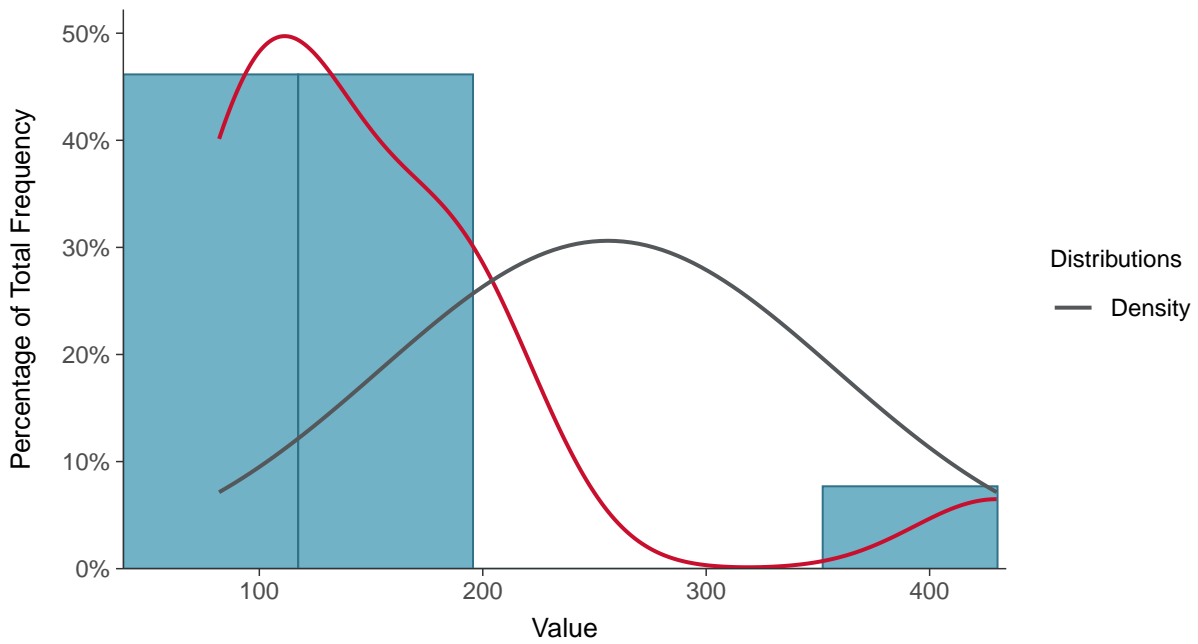
Scatter Plot

Chloride (as Cl), MW-30 (mg/L)



Histogram

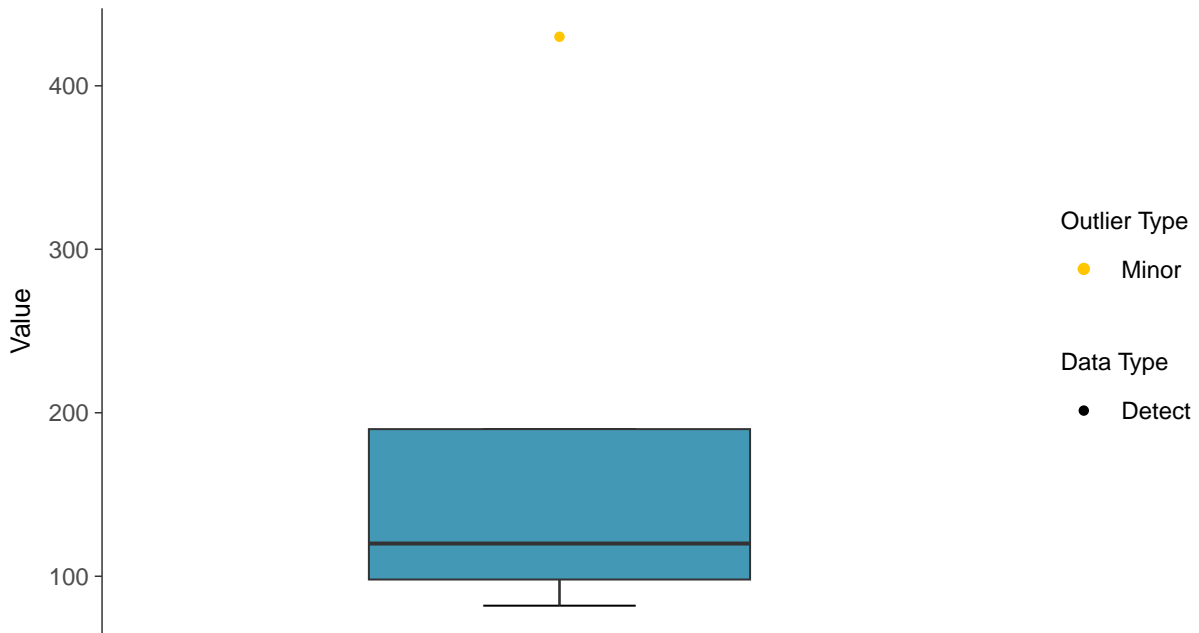
Chloride (as Cl), MW-30 (mg/L)





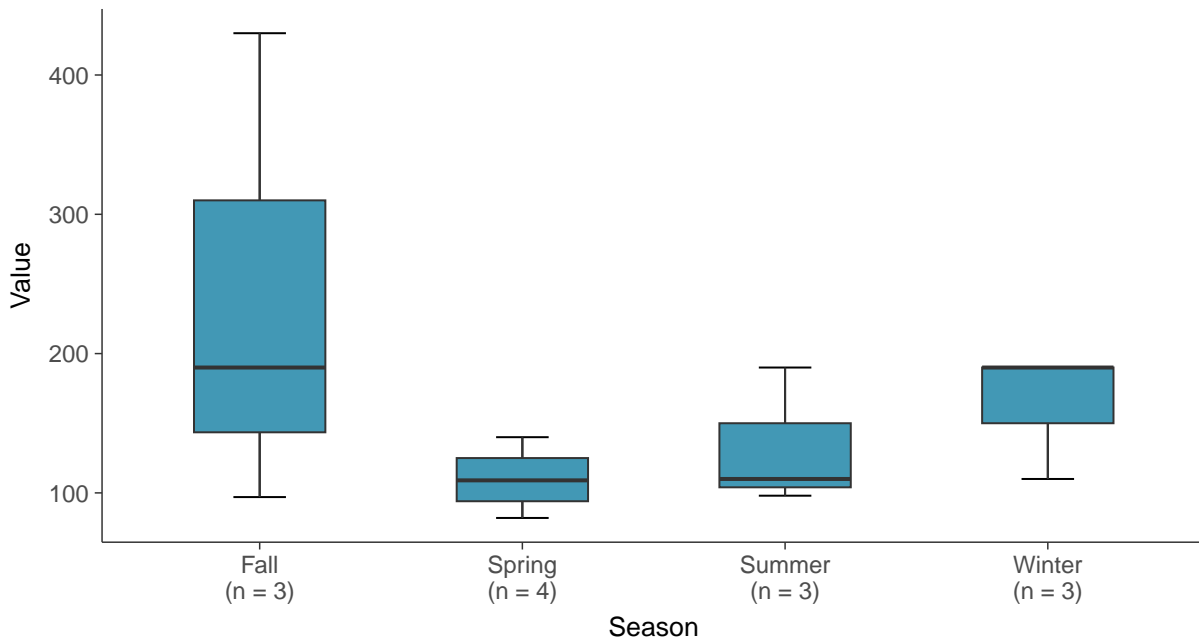
Boxplot

Chloride (as Cl), MW-30 (mg/L)



Boxplot by Season

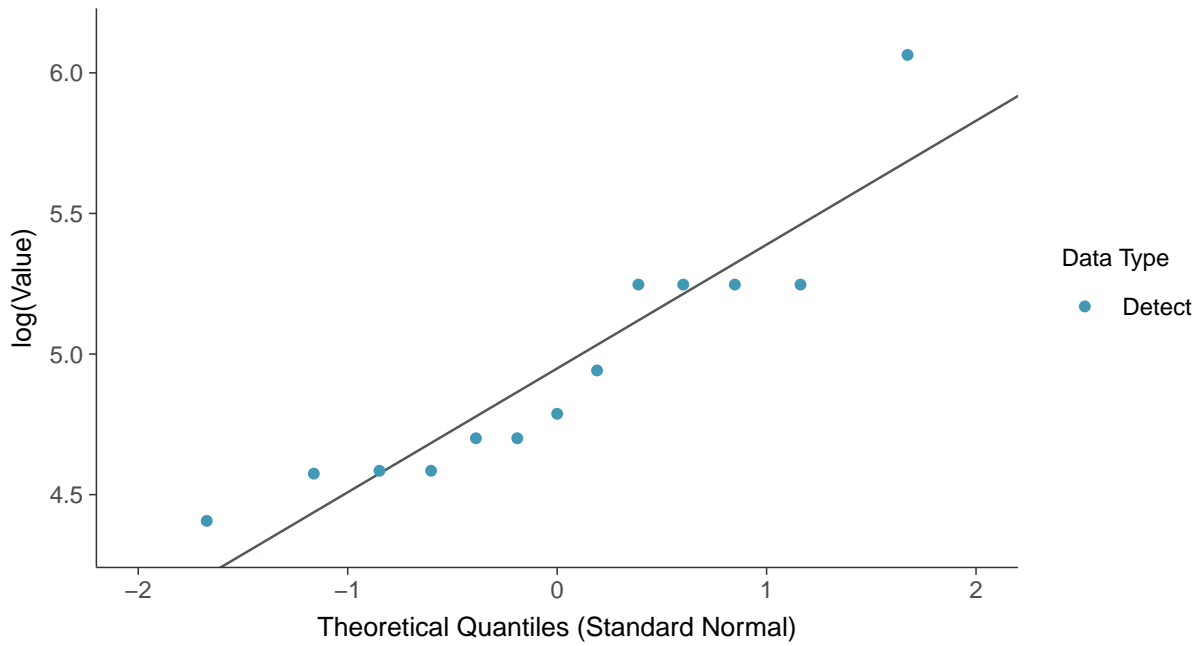
Chloride (as Cl), MW-30 (mg/L)





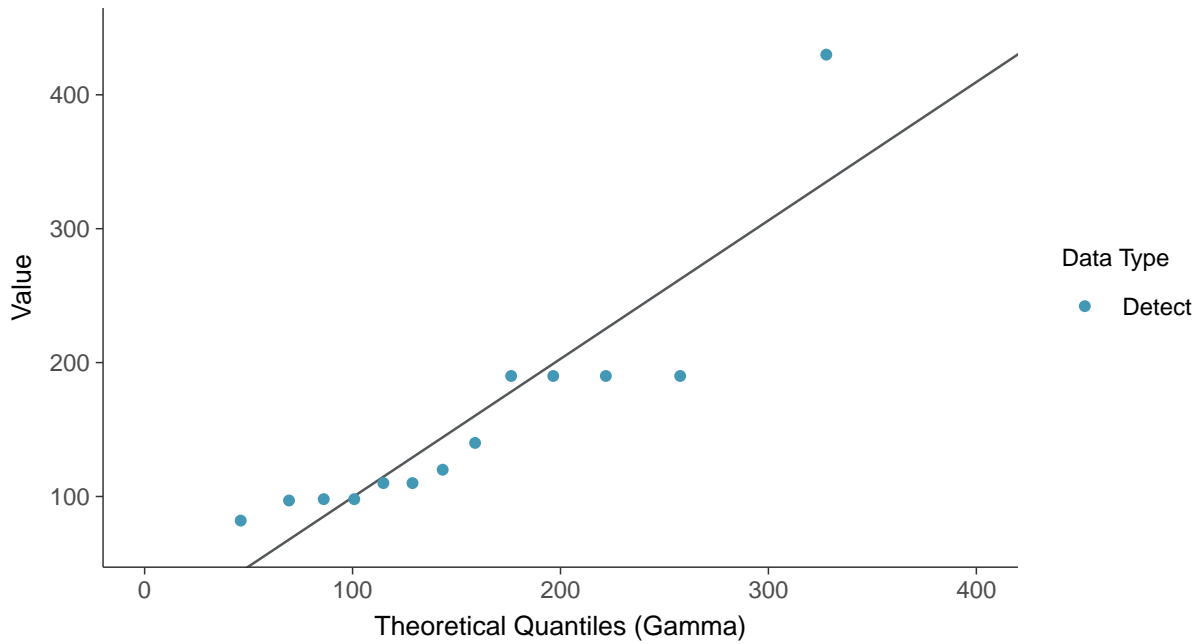
Lognormal Q-Q plot

Chloride (as Cl), MW-30 (mg/L)



Gamma Q-Q plot

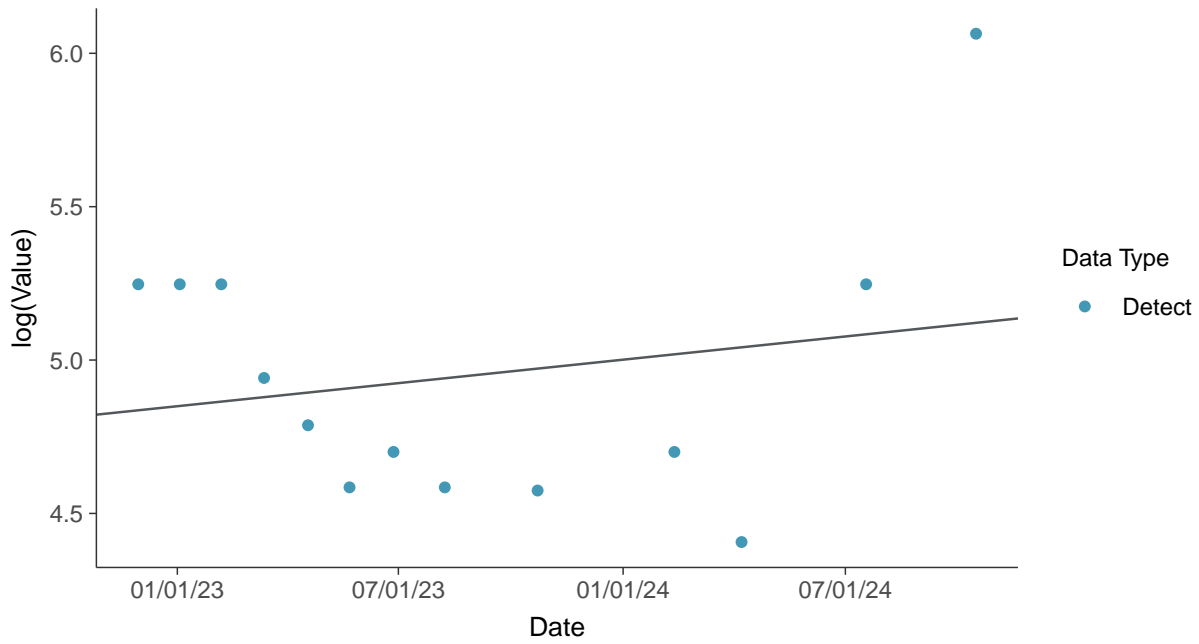
Chloride (as Cl), MW-30 (mg/L)





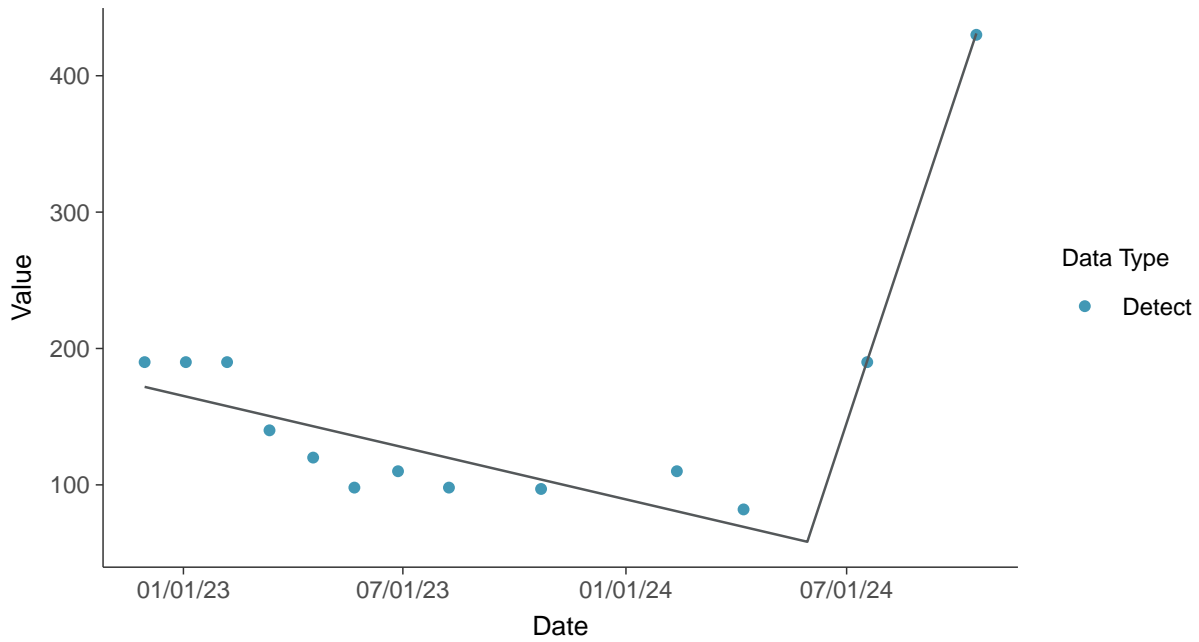
Trend Regression: Lognormal MLE

Chloride (as Cl), MW-30 (mg/L)



Trend Regression: Piecewise Linear-Linear

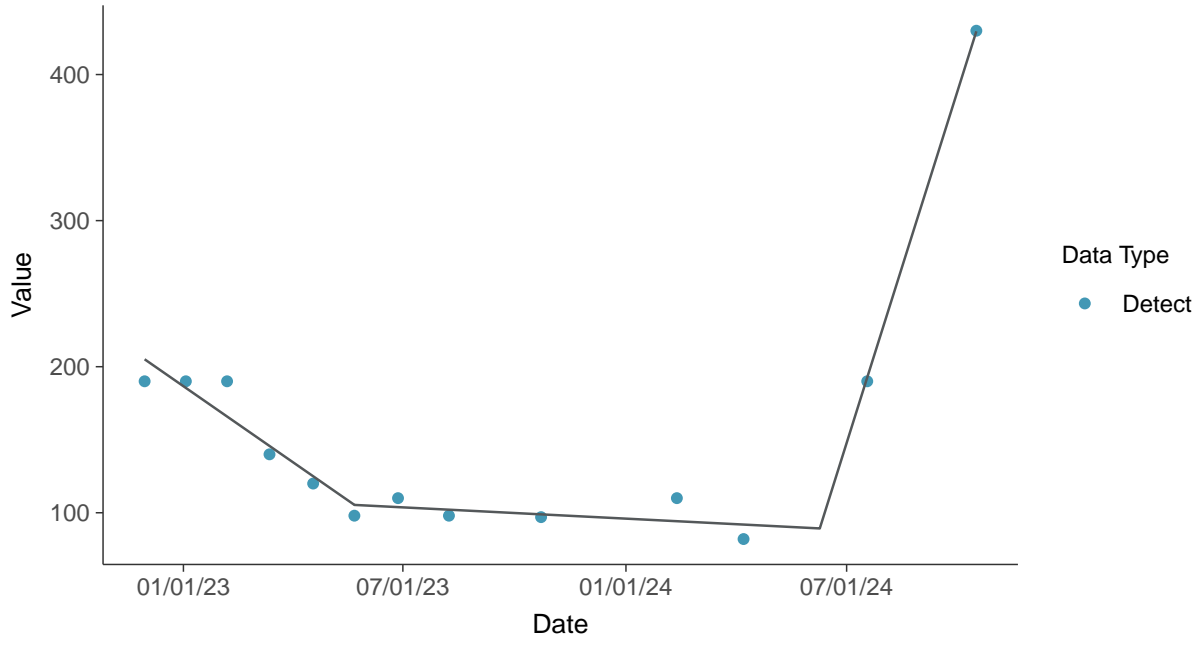
Chloride (as Cl), MW-30 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

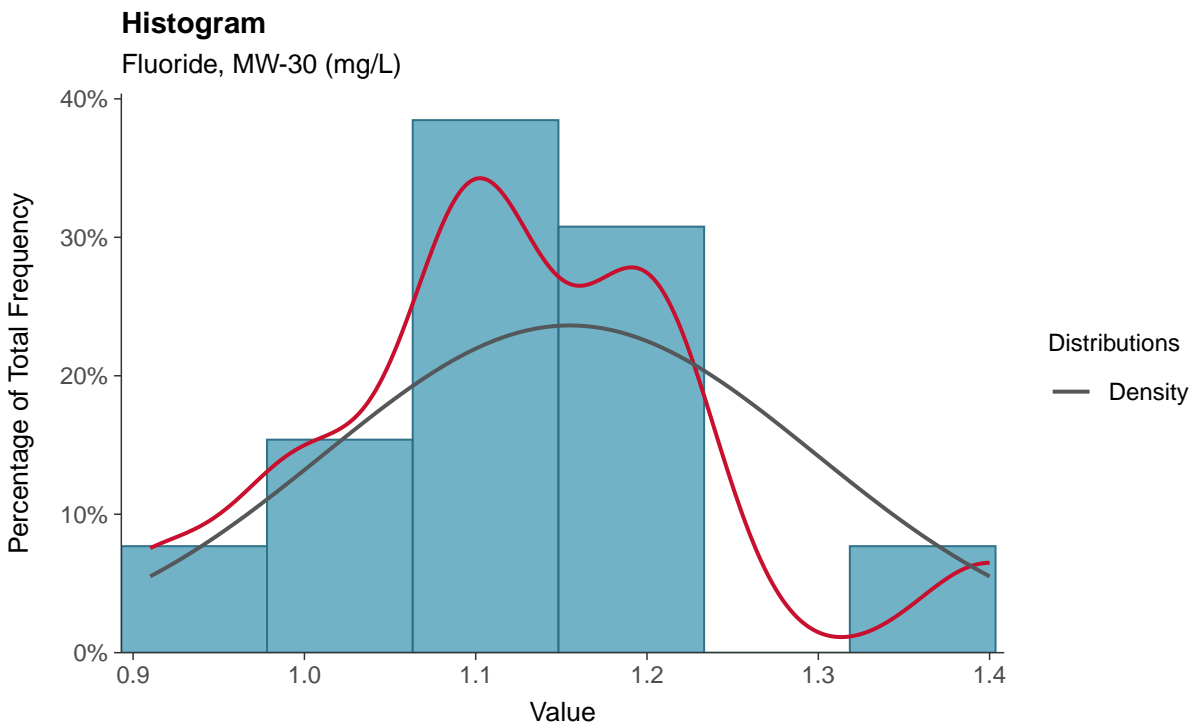
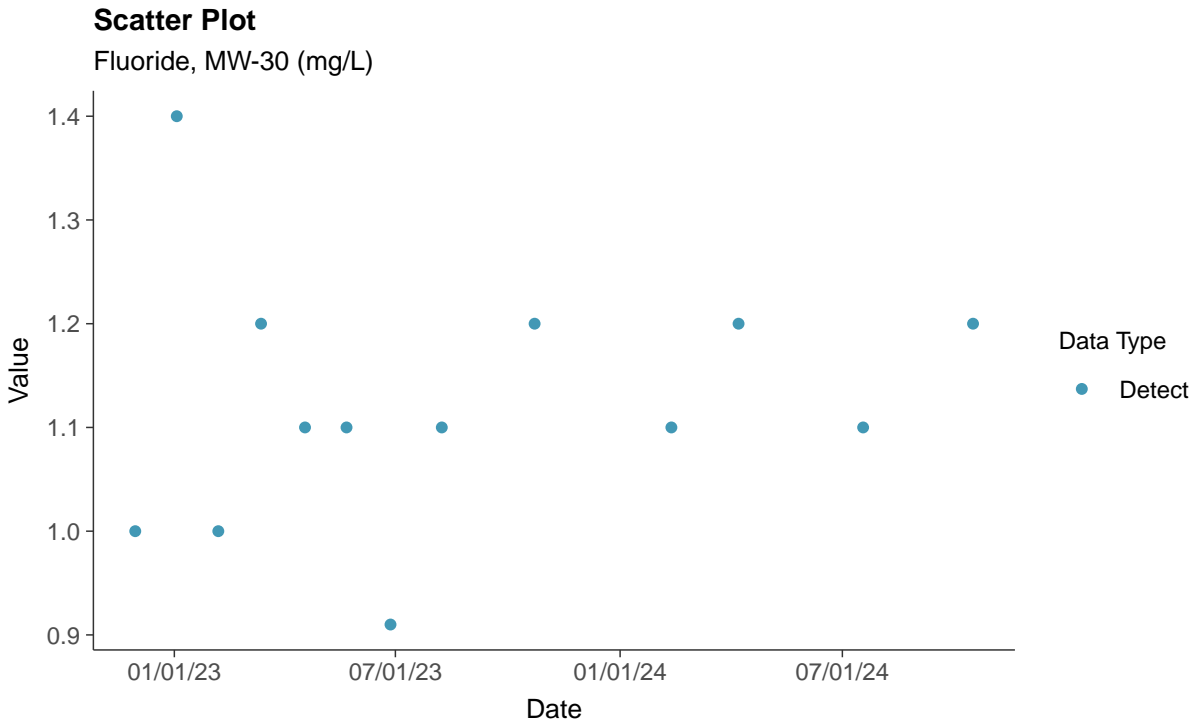
Chloride (as Cl), MW-30 (mg/L)





Appendix III: Fluoride, MW-30

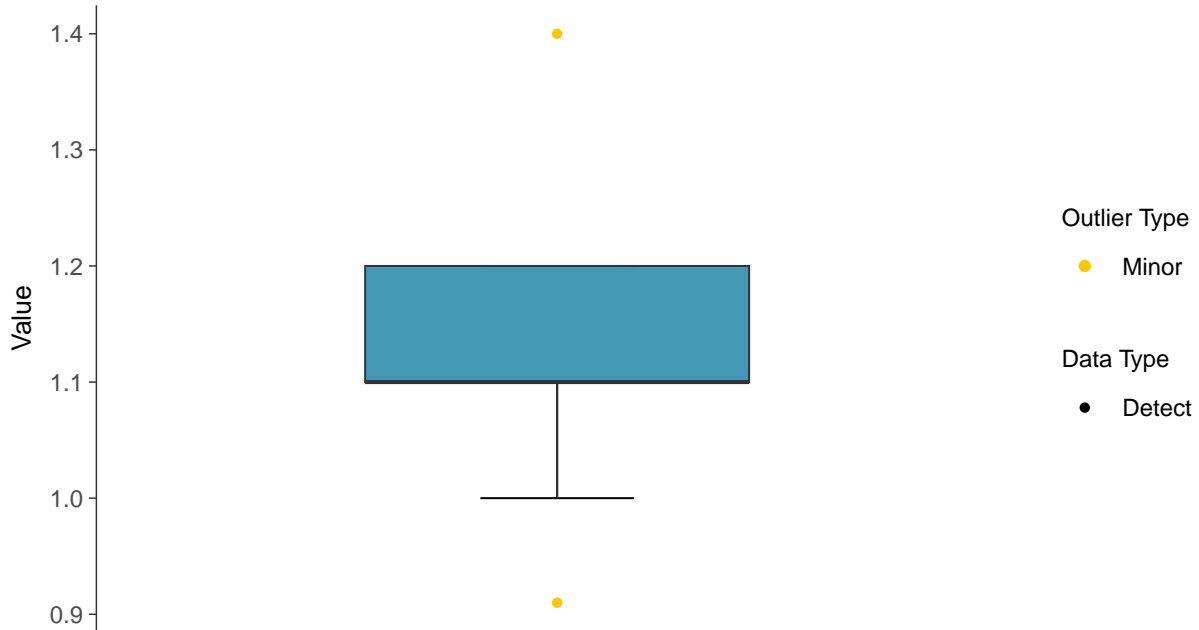
ID: 1_40_1_4_112





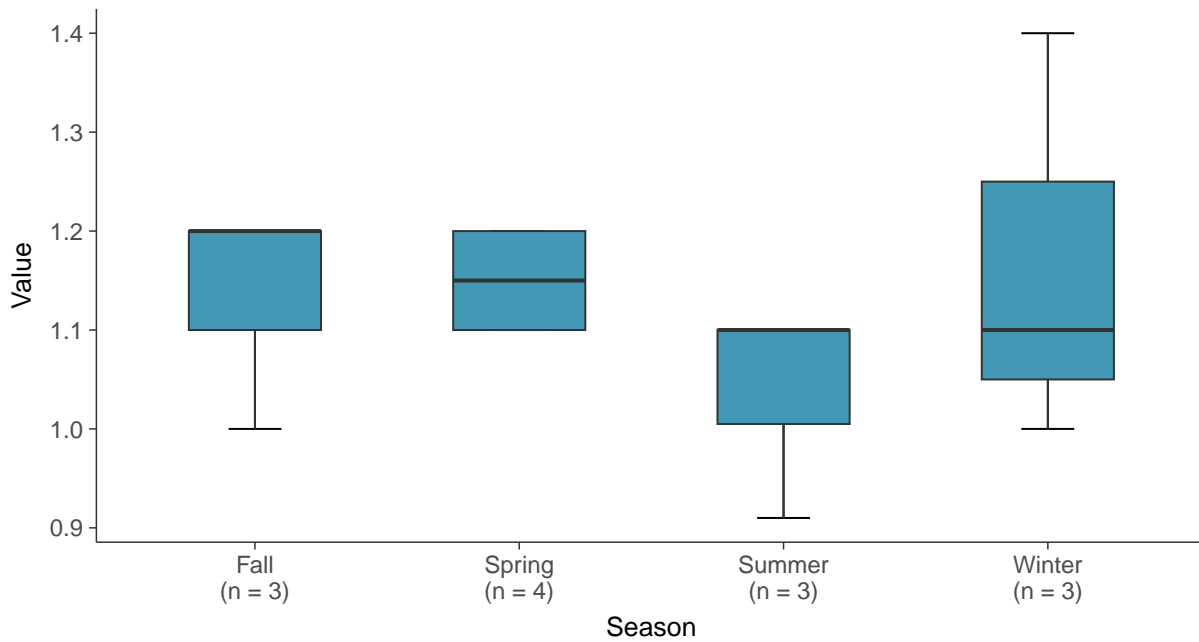
Boxplot

Fluoride, MW-30 (mg/L)



Boxplot by Season

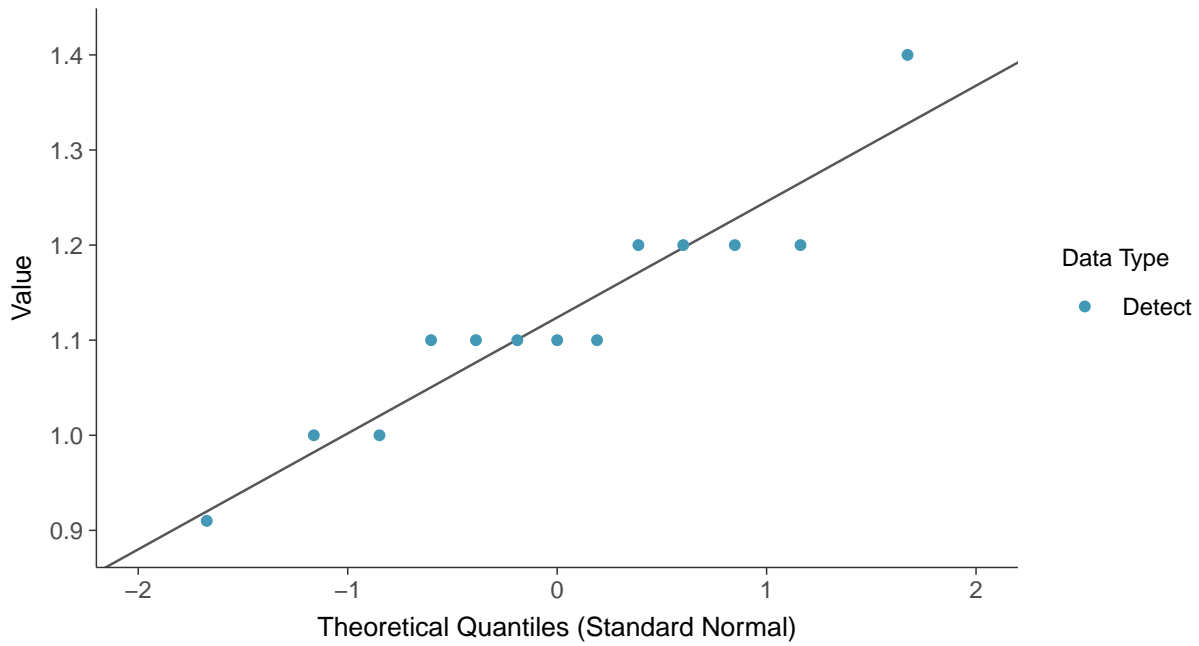
Fluoride, MW-30 (mg/L)





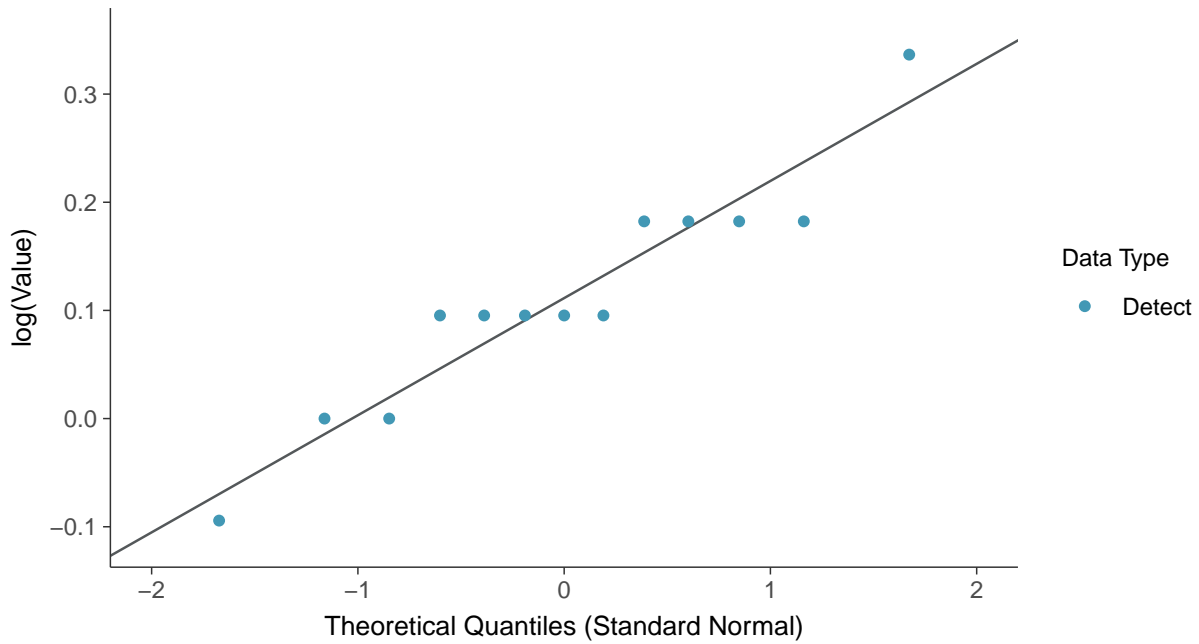
Normal Q-Q plot

Fluoride, MW-30 (mg/L)



Lognormal Q-Q plot

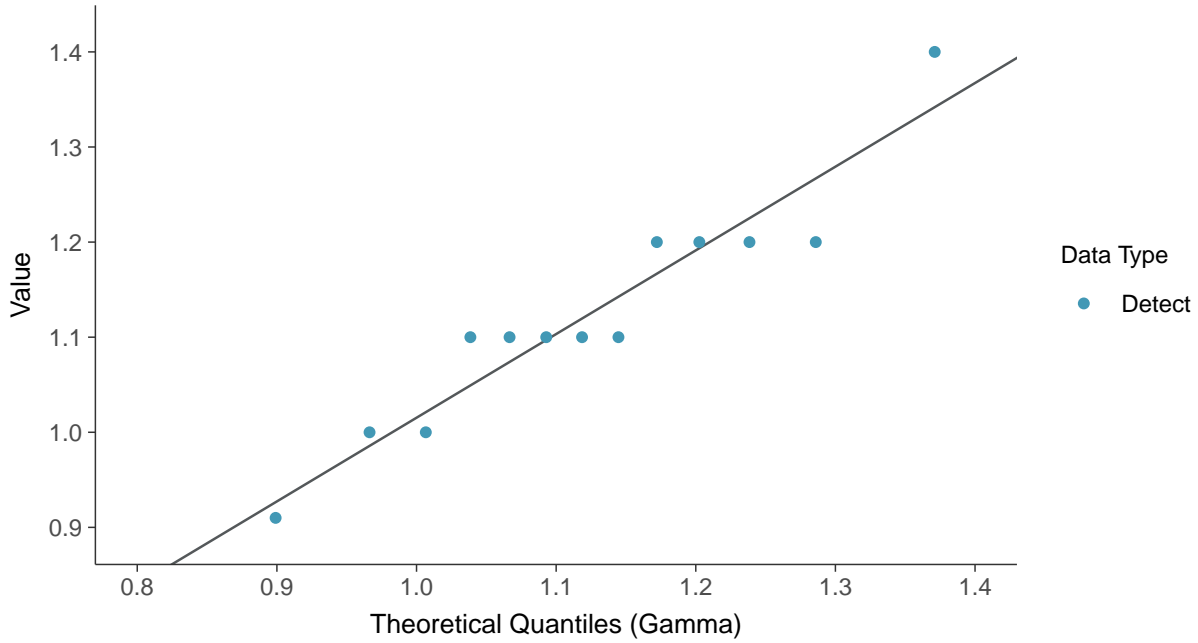
Fluoride, MW-30 (mg/L)





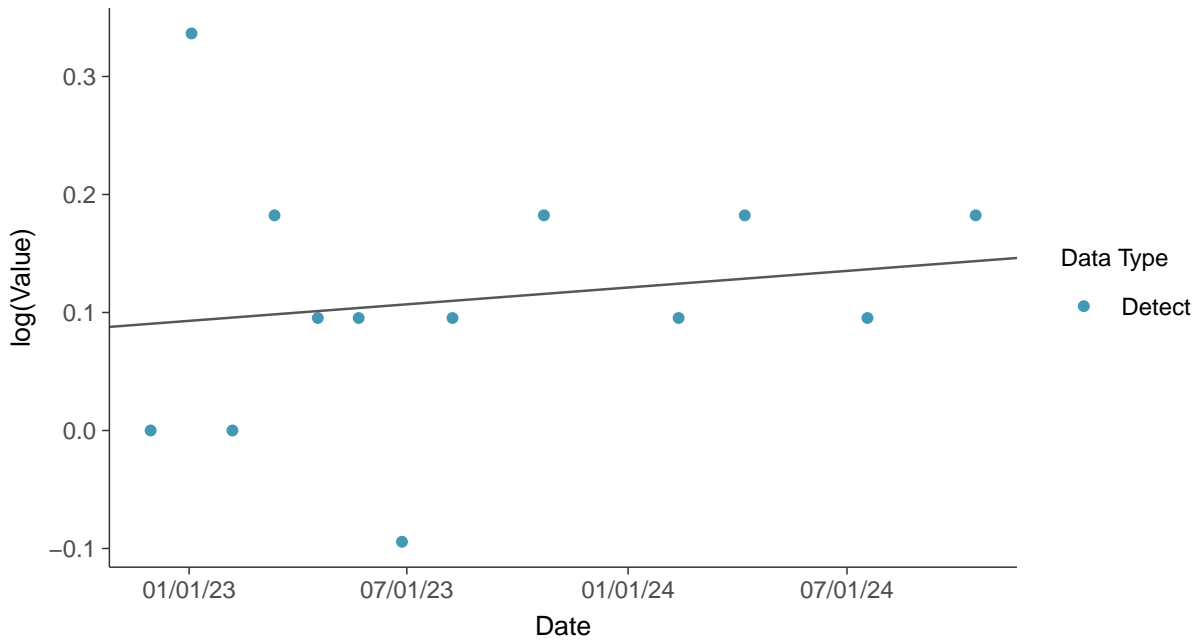
Gamma Q-Q plot

Fluoride, MW-30 (mg/L)



Trend Regression: Lognormal MLE

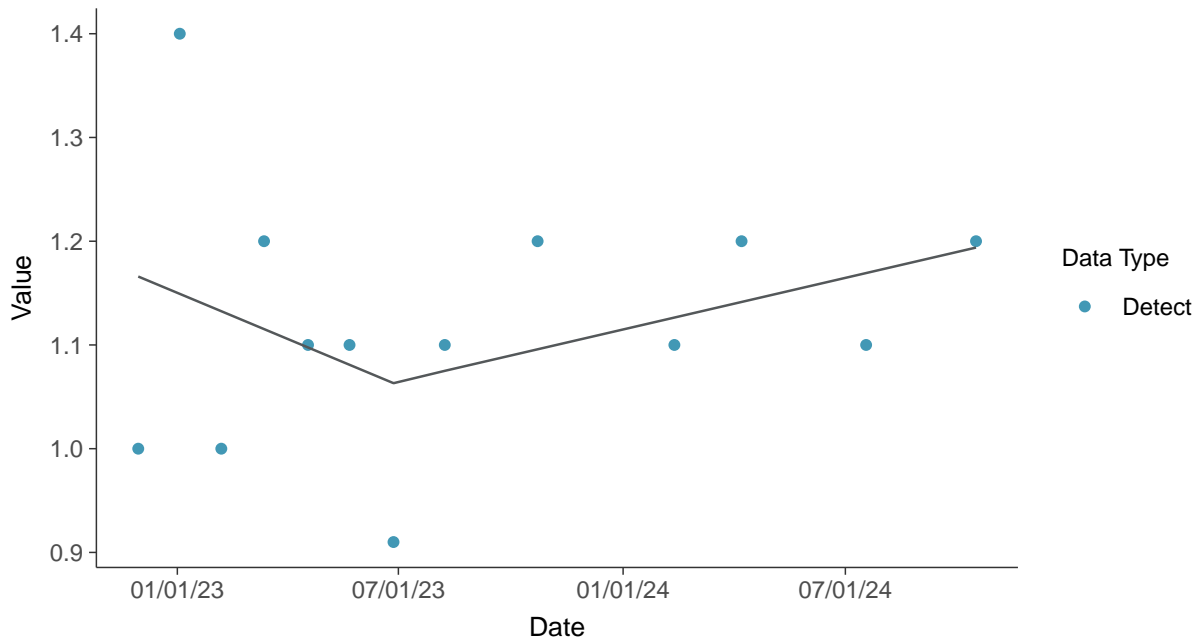
Fluoride, MW-30 (mg/L)





Trend Regression: Piecewise Linear-Linear

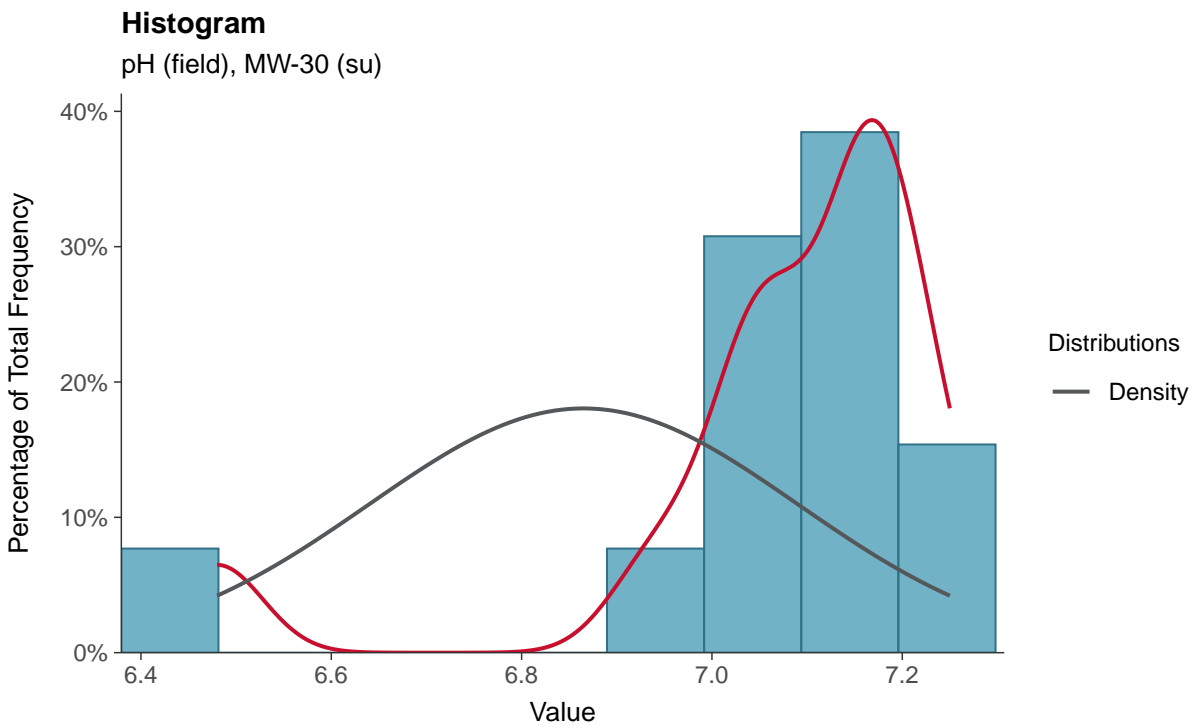
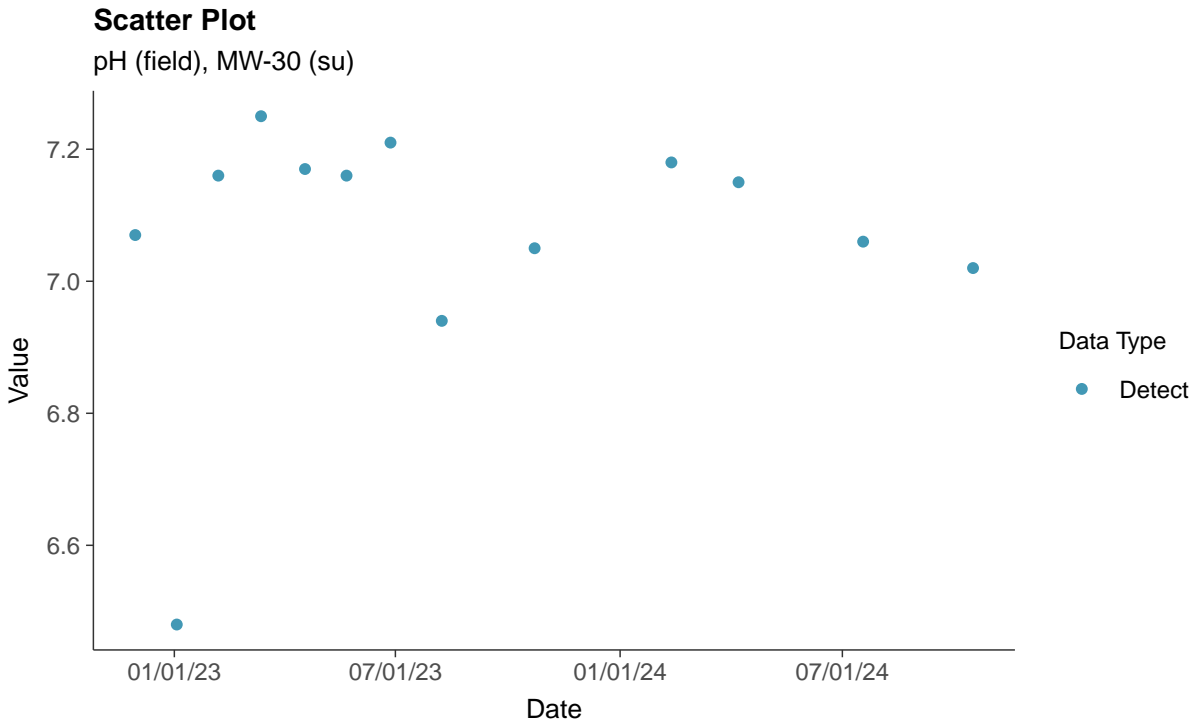
Fluoride, MW-30 (mg/L)





Appendix III: pH (field), MW-30

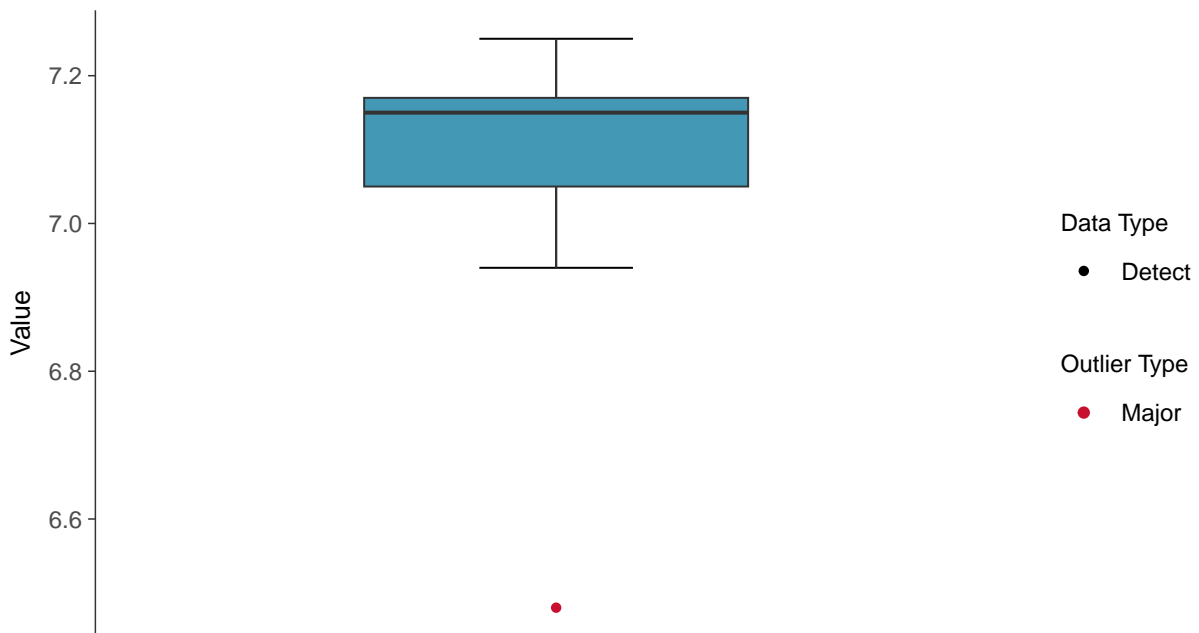
ID: 1_40_1_4_120





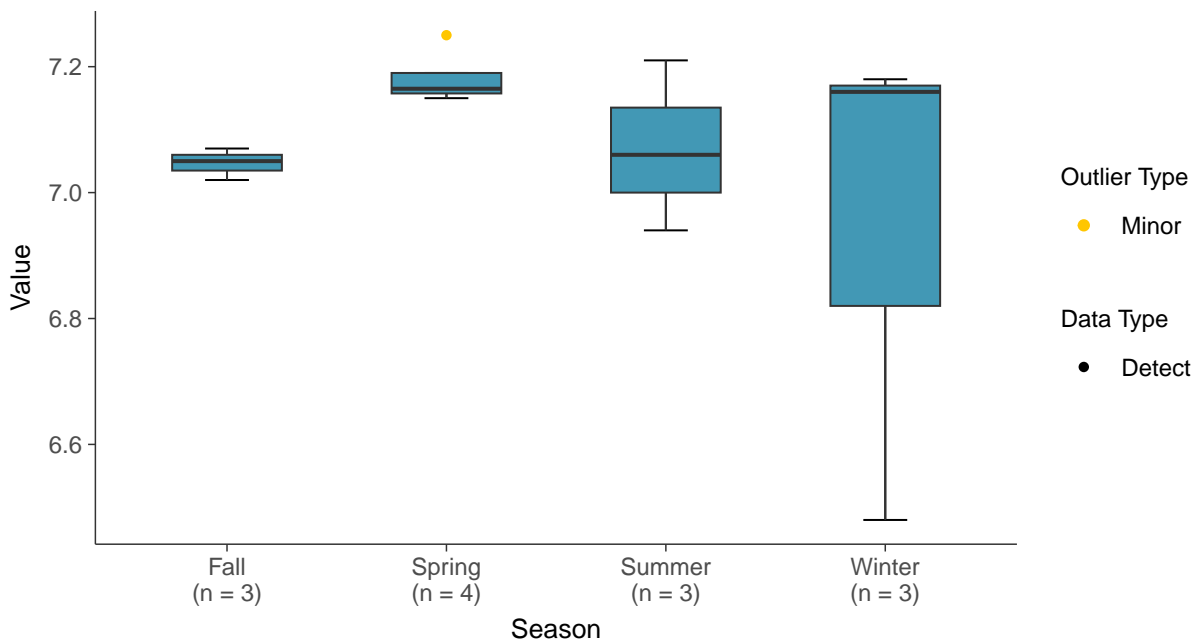
Boxplot

pH (field), MW-30 (su)



Boxplot by Season

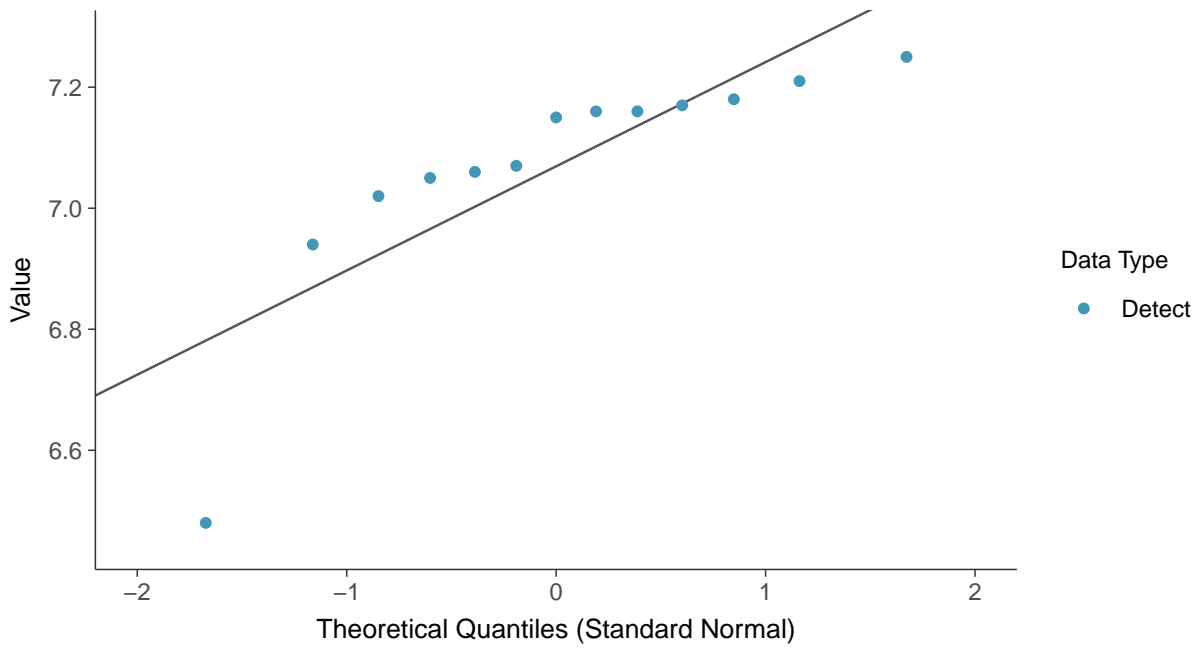
pH (field), MW-30 (su)





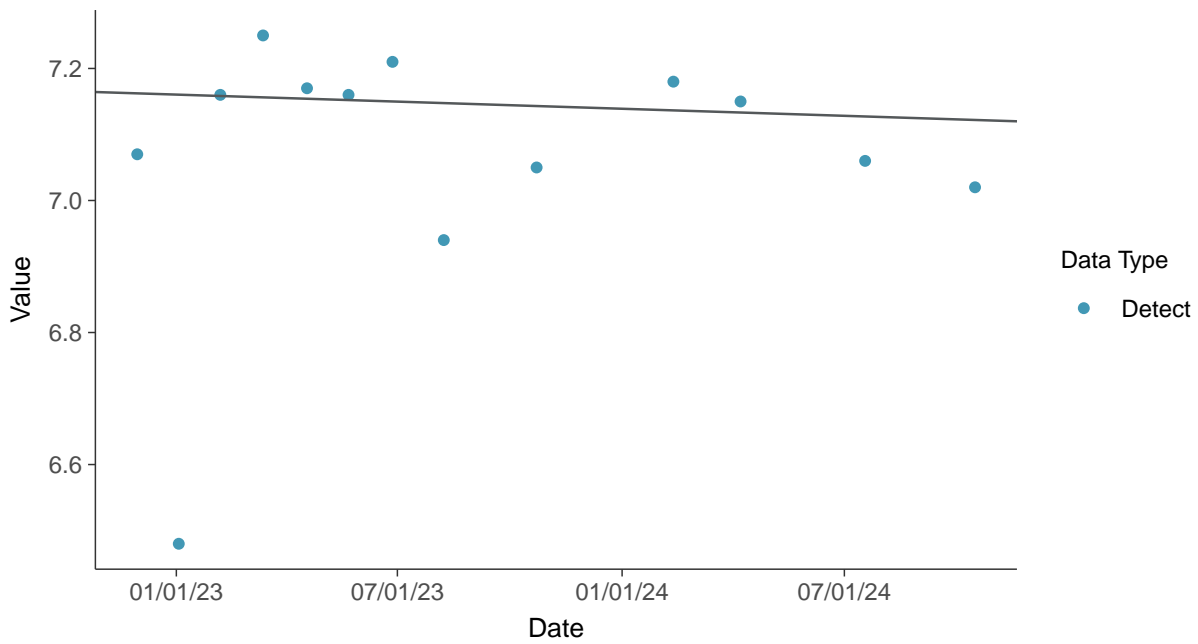
Normal Q-Q plot

pH (field), MW-30 (su)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

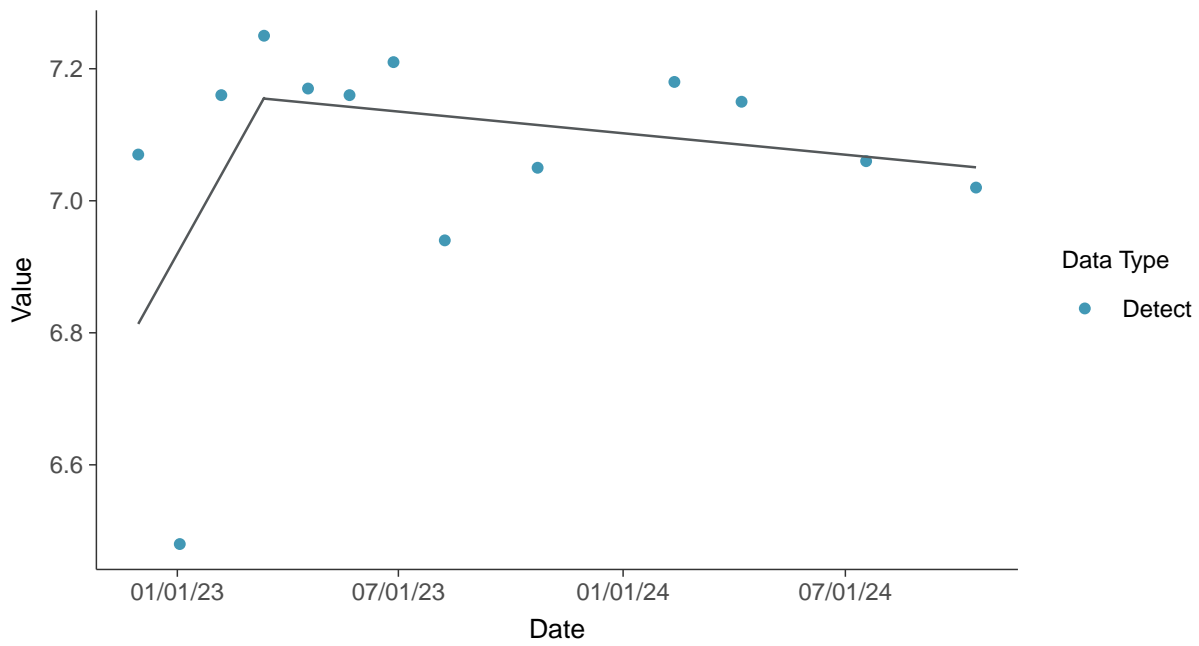
pH (field), MW-30 (su)





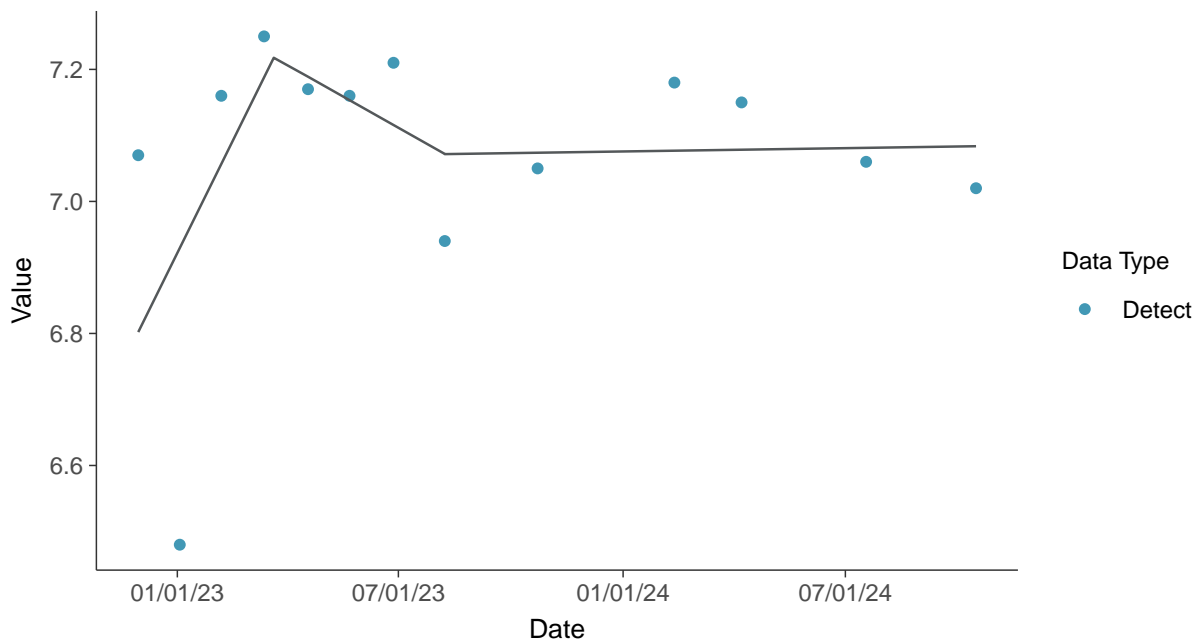
Trend Regression: Piecewise Linear-Linear

pH (field), MW-30 (su)



Trend Regression: Piecewise Linear-Linear-Linear

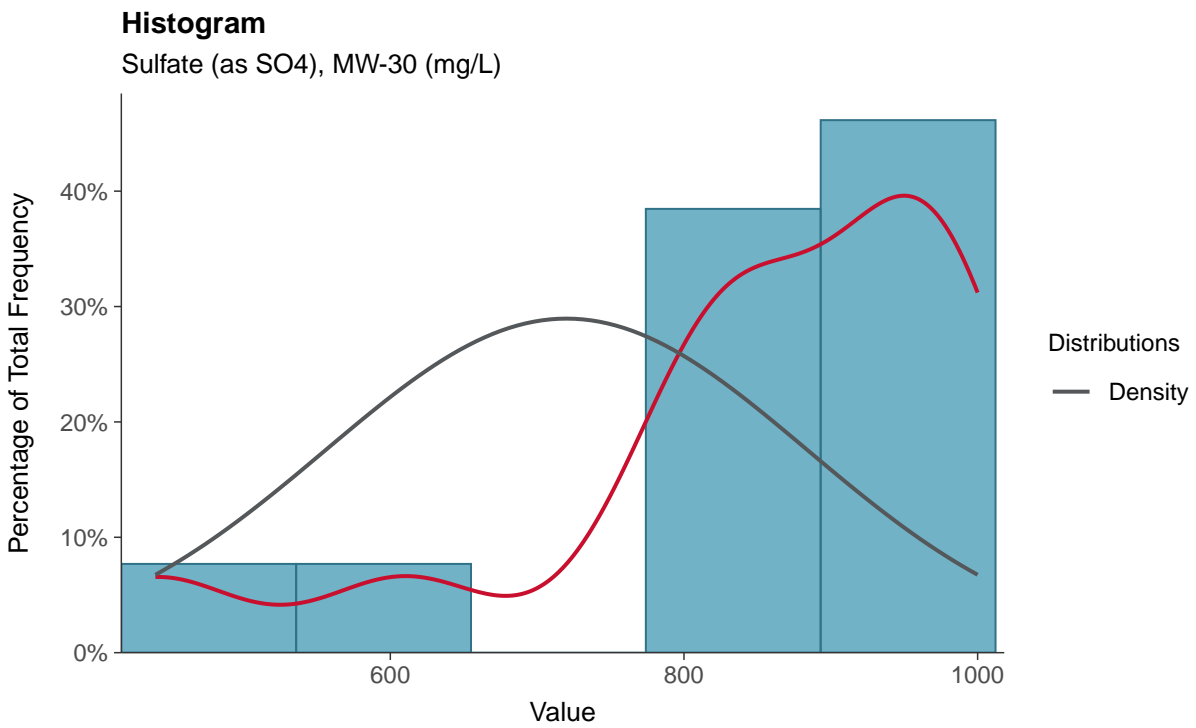
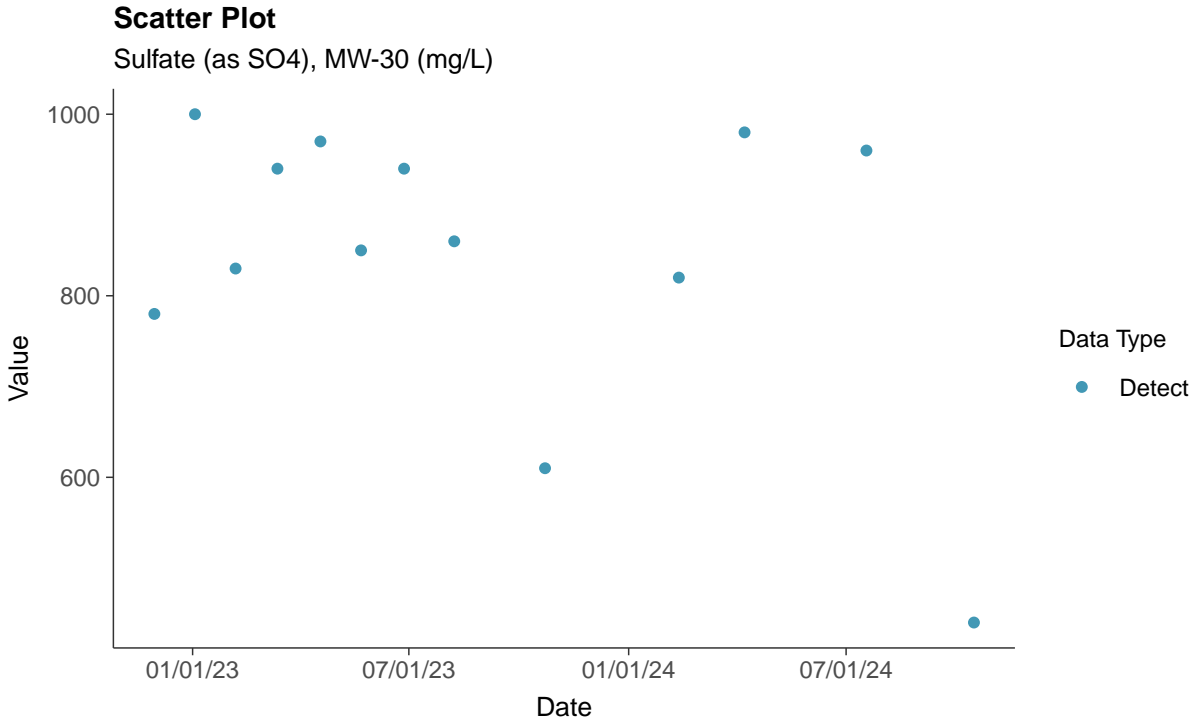
pH (field), MW-30 (su)





Appendix III: Sulfate (as SO₄), MW-30

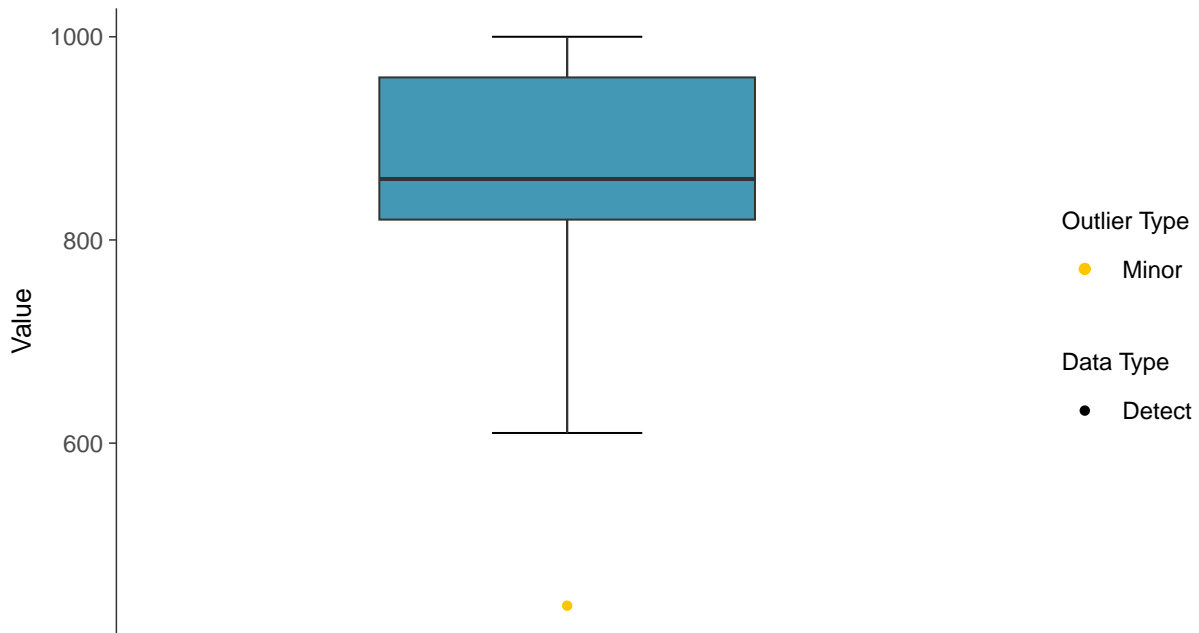
ID: 1_40_1_4_124





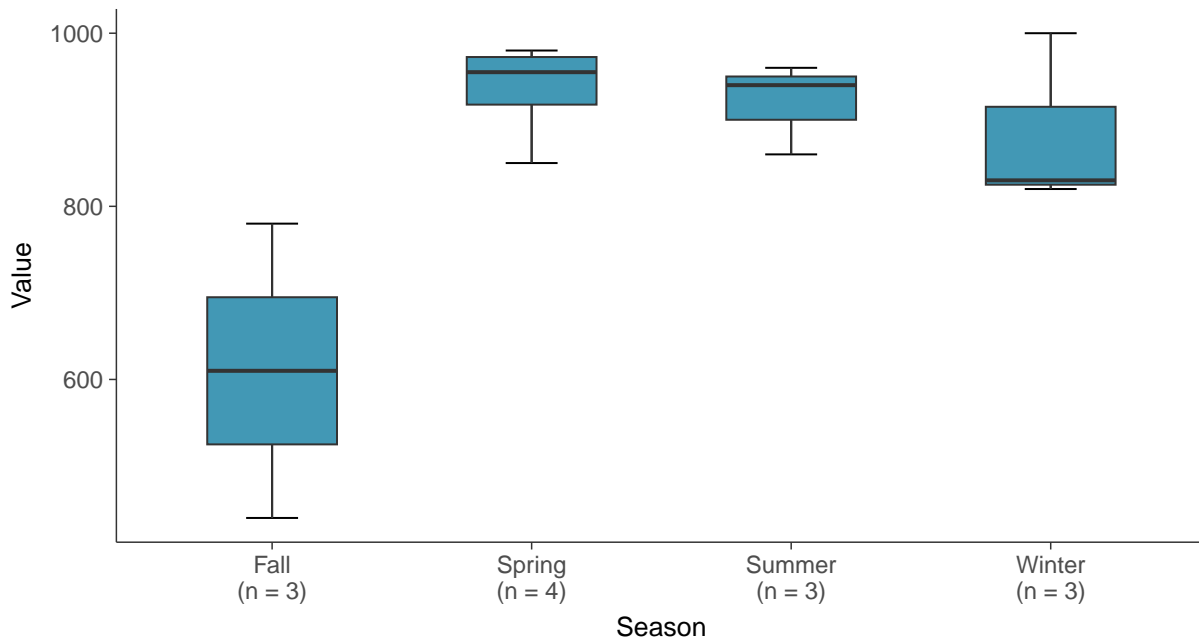
Boxplot

Sulfate (as SO₄), MW-30 (mg/L)



Boxplot by Season

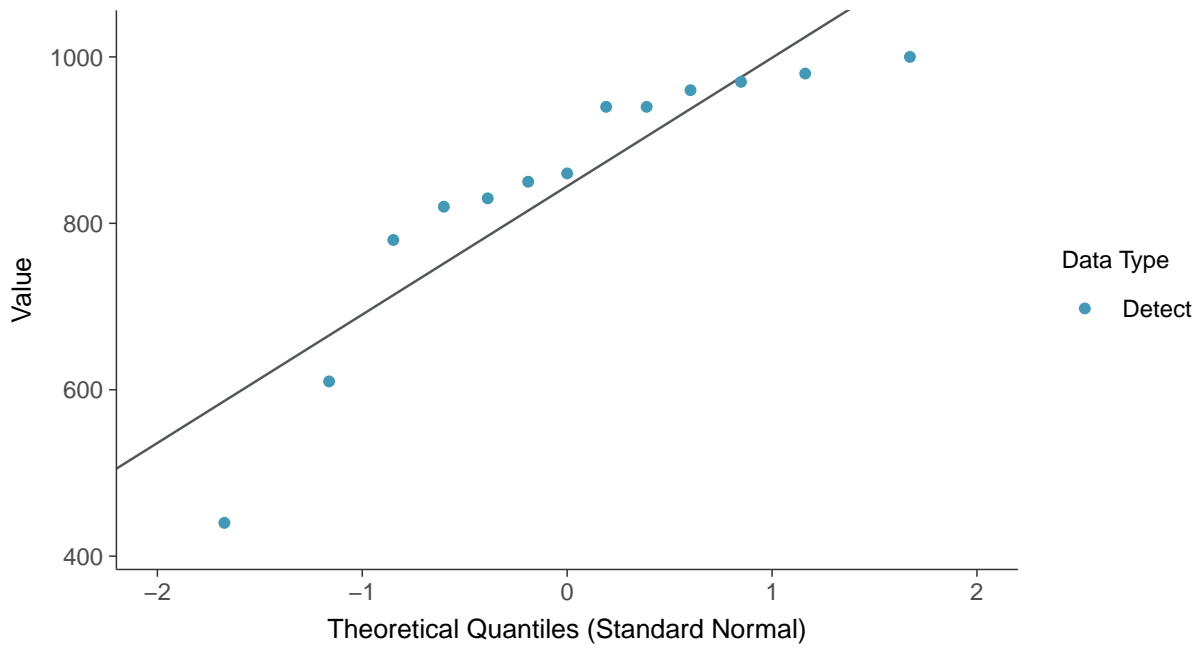
Sulfate (as SO₄), MW-30 (mg/L)





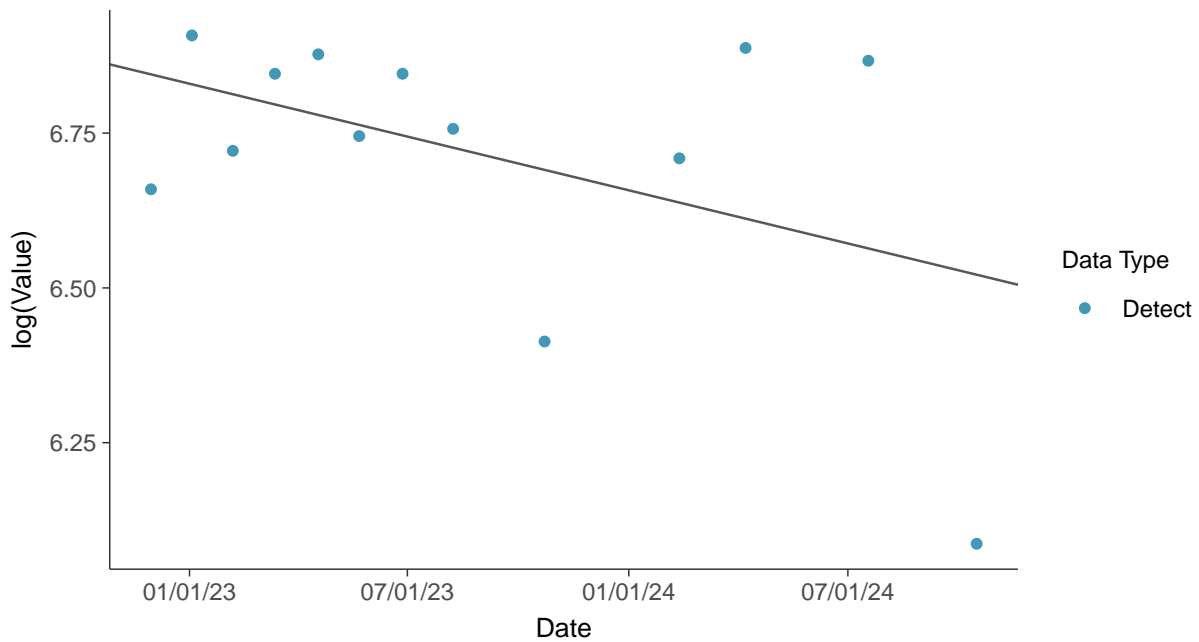
Normal Q-Q plot

Sulfate (as SO₄), MW-30 (mg/L)



Trend Regression: Lognormal MLE

Sulfate (as SO₄), MW-30 (mg/L)



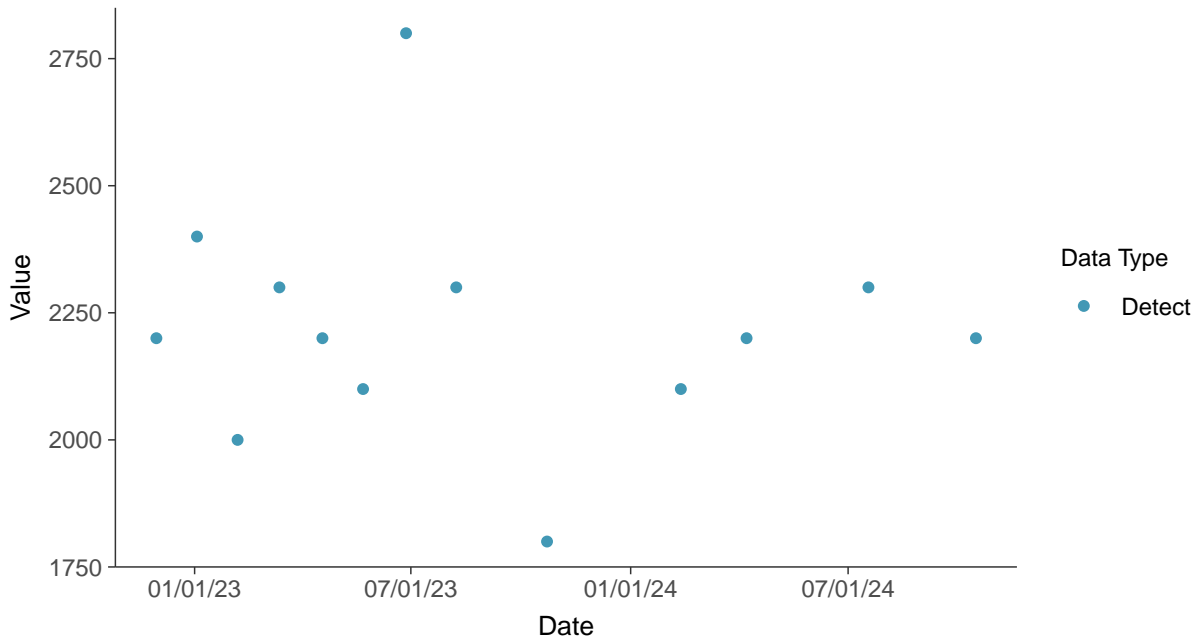


Appendix III: Total Dissolved Solids, MW-30

ID: 1_40_1_4_126

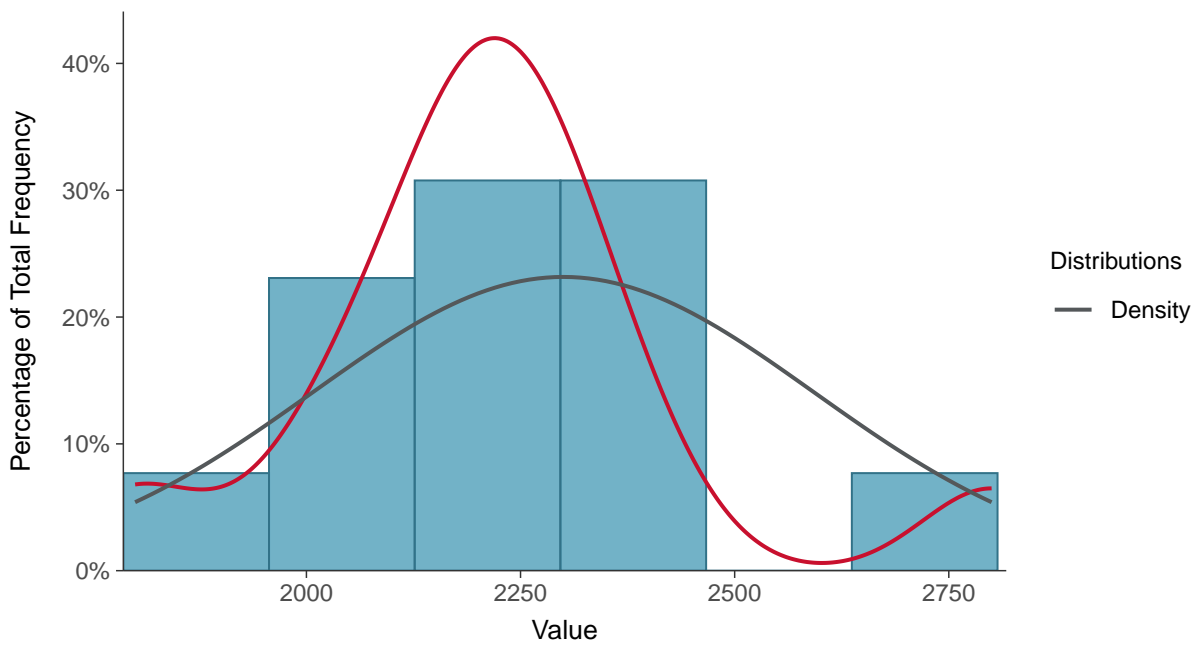
Scatter Plot

Total Dissolved Solids, MW-30 (mg/L)



Histogram

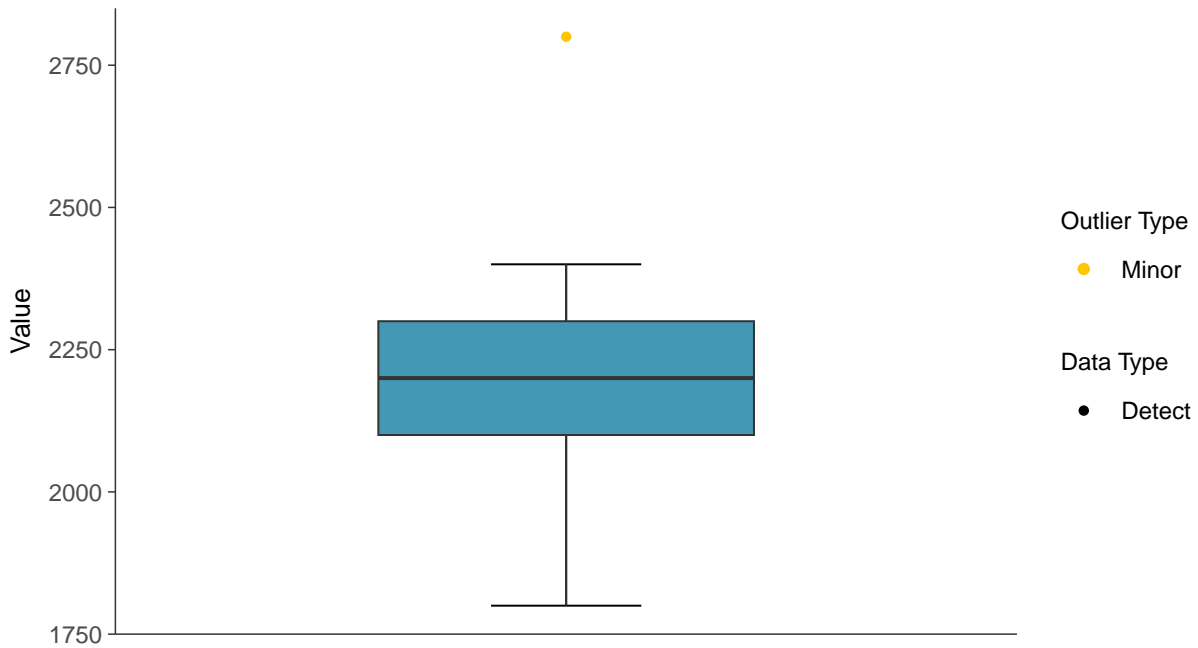
Total Dissolved Solids, MW-30 (mg/L)





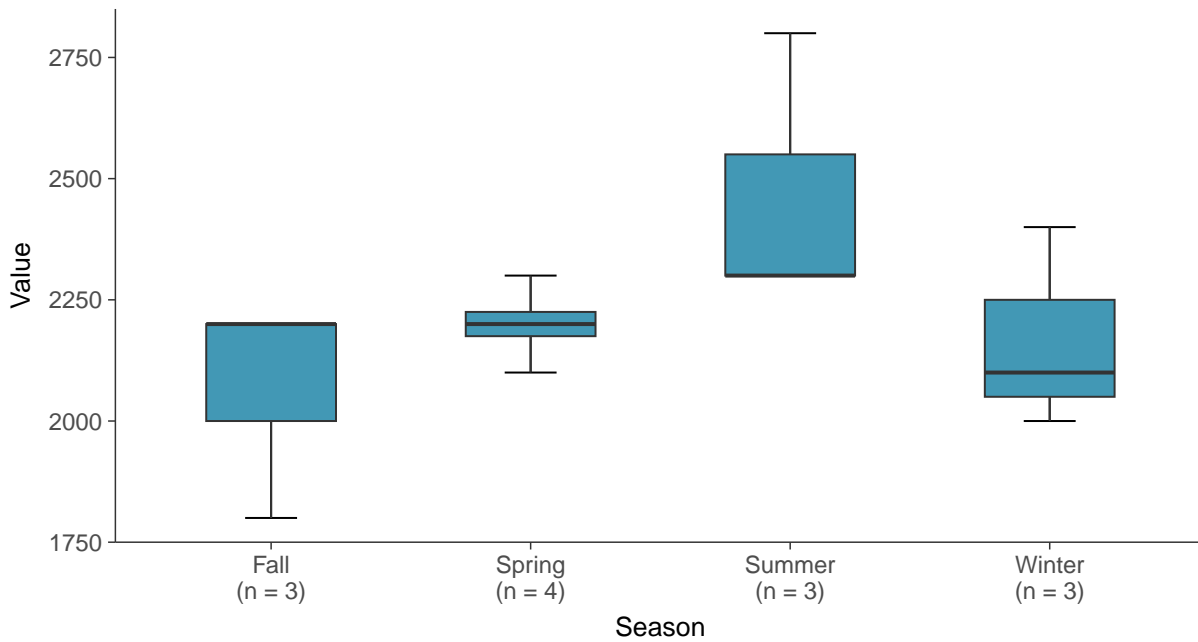
Boxplot

Total Dissolved Solids, MW-30 (mg/L)



Boxplot by Season

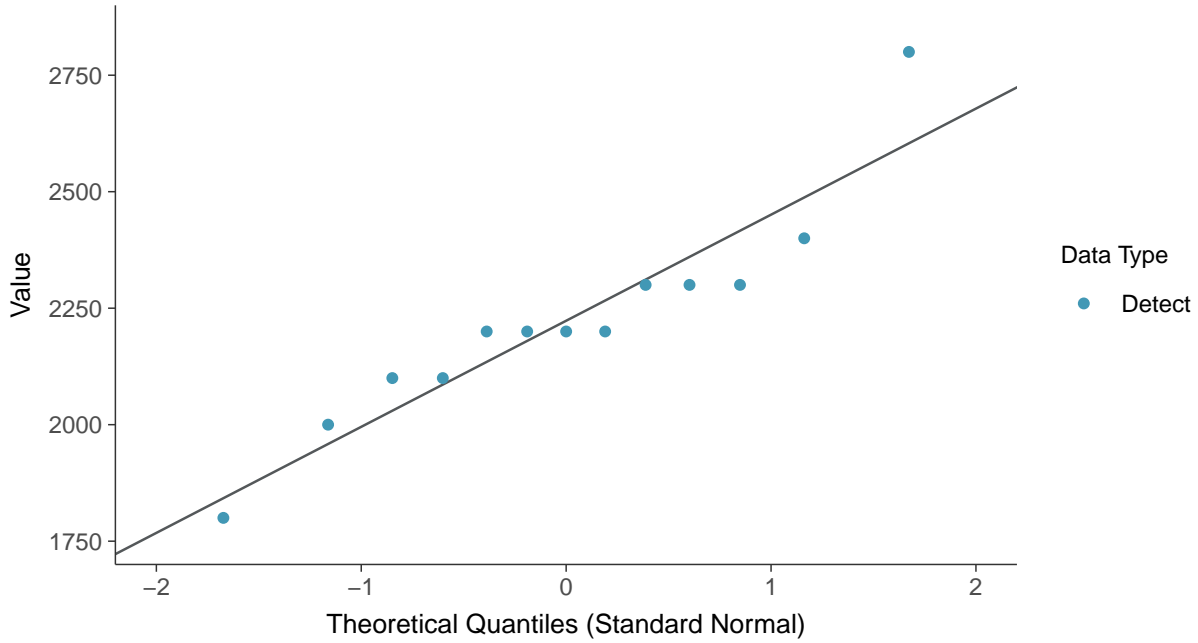
Total Dissolved Solids, MW-30 (mg/L)





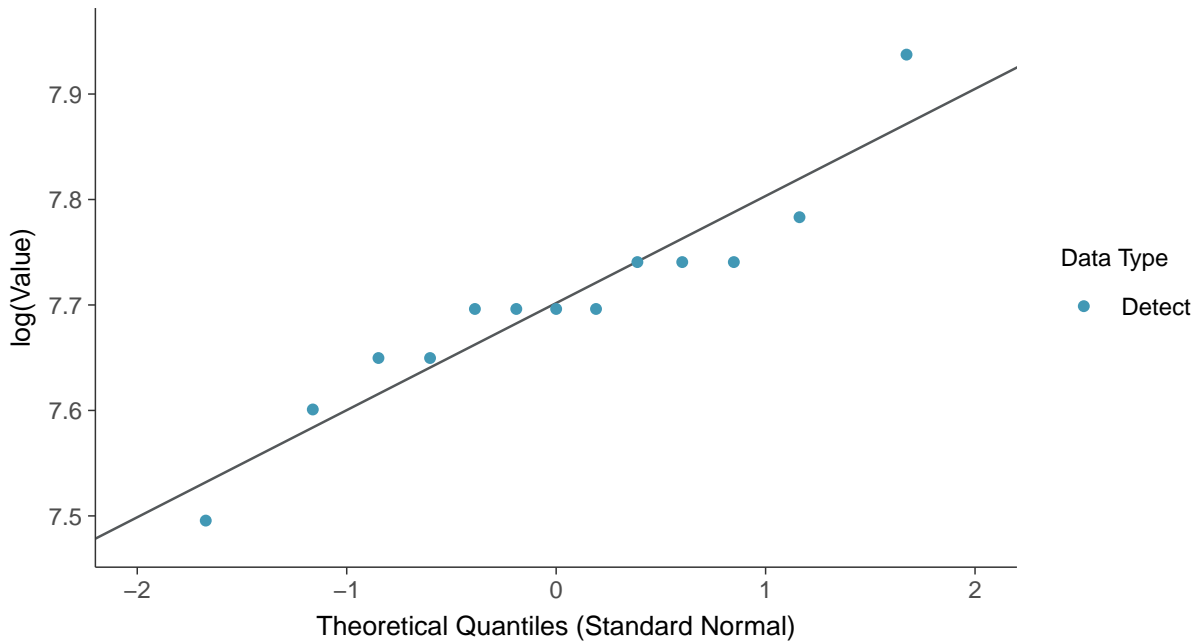
Normal Q-Q plot

Total Dissolved Solids, MW-30 (mg/L)



Lognormal Q-Q plot

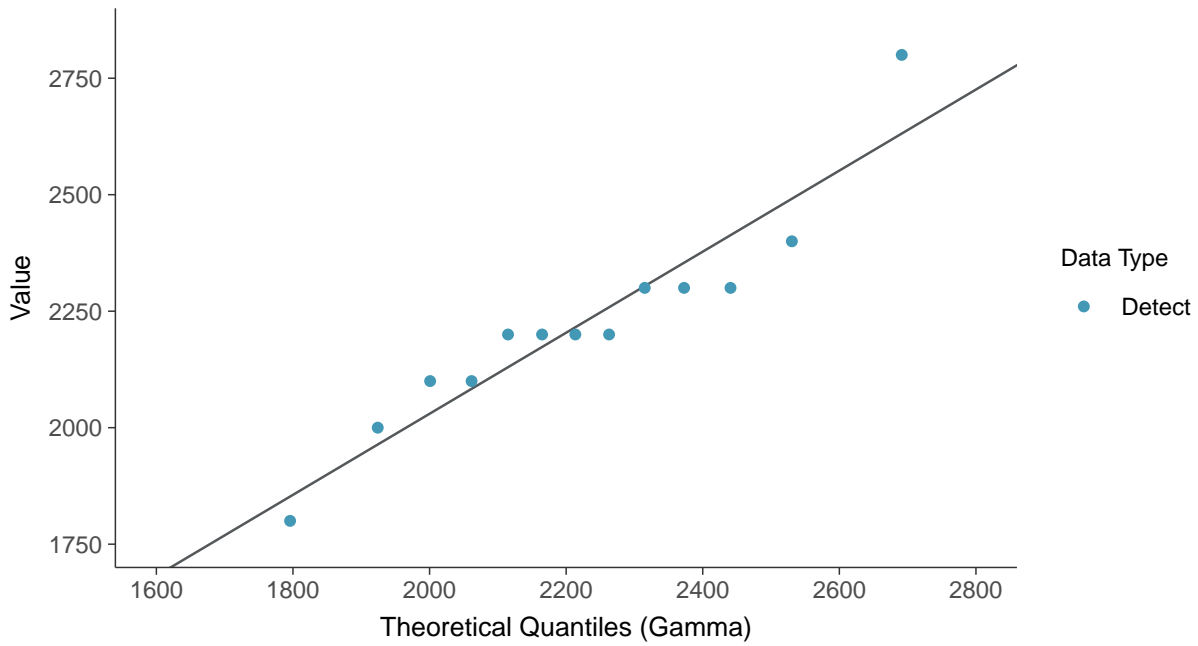
Total Dissolved Solids, MW-30 (mg/L)





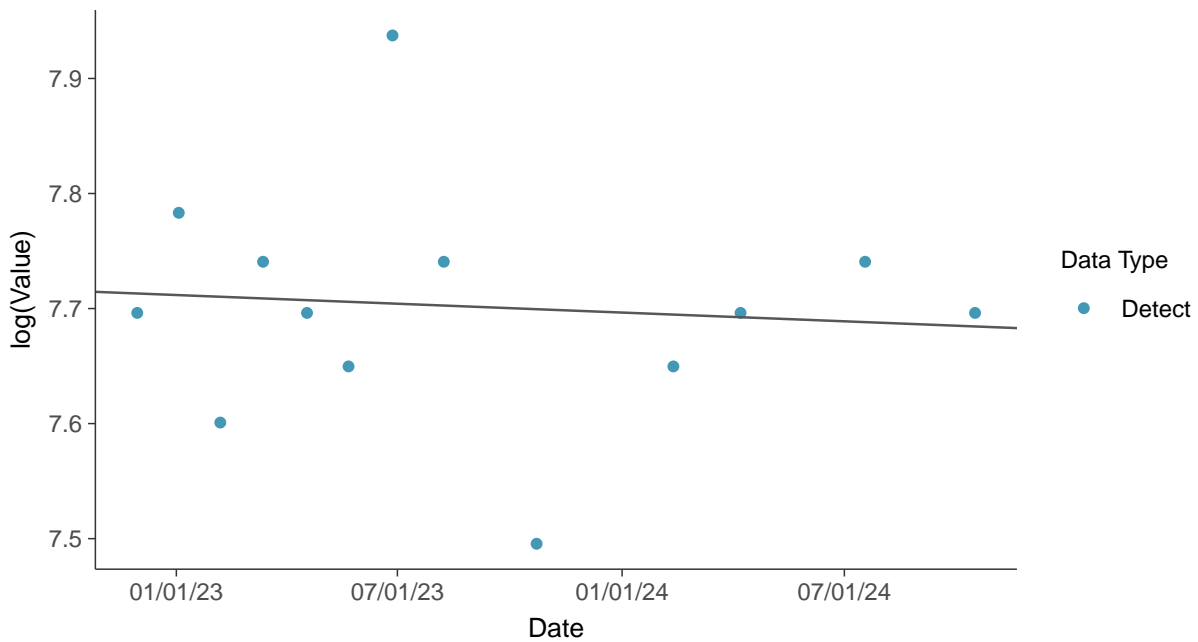
Gamma Q-Q plot

Total Dissolved Solids, MW-30 (mg/L)



Trend Regression: Lognormal MLE

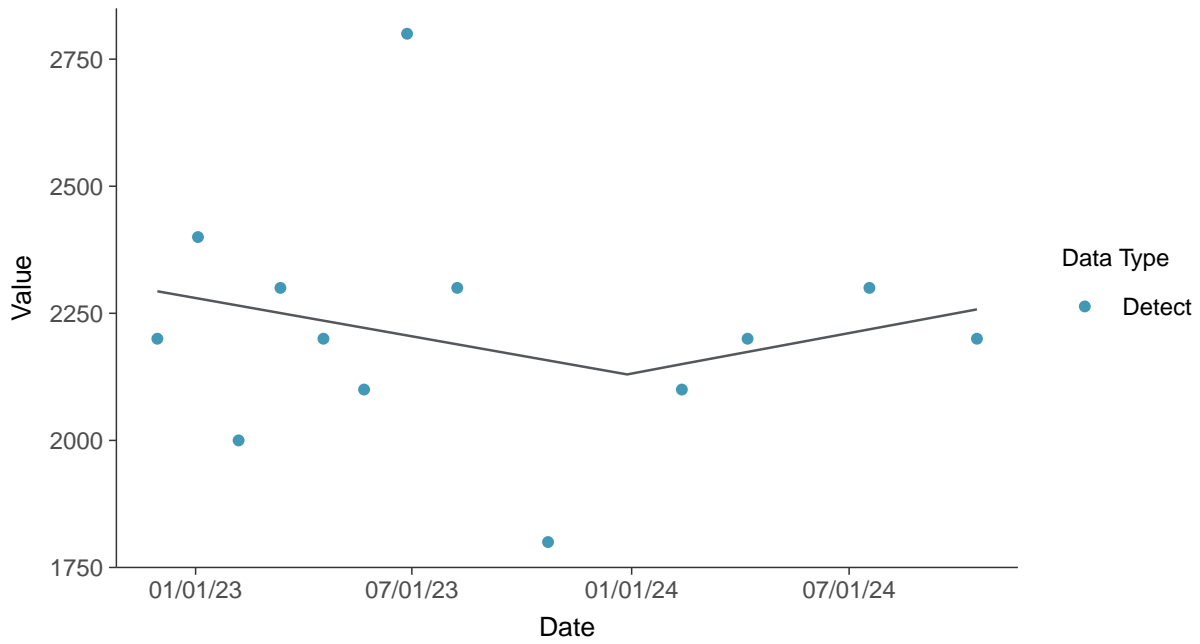
Total Dissolved Solids, MW-30 (mg/L)





Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-30 (mg/L)



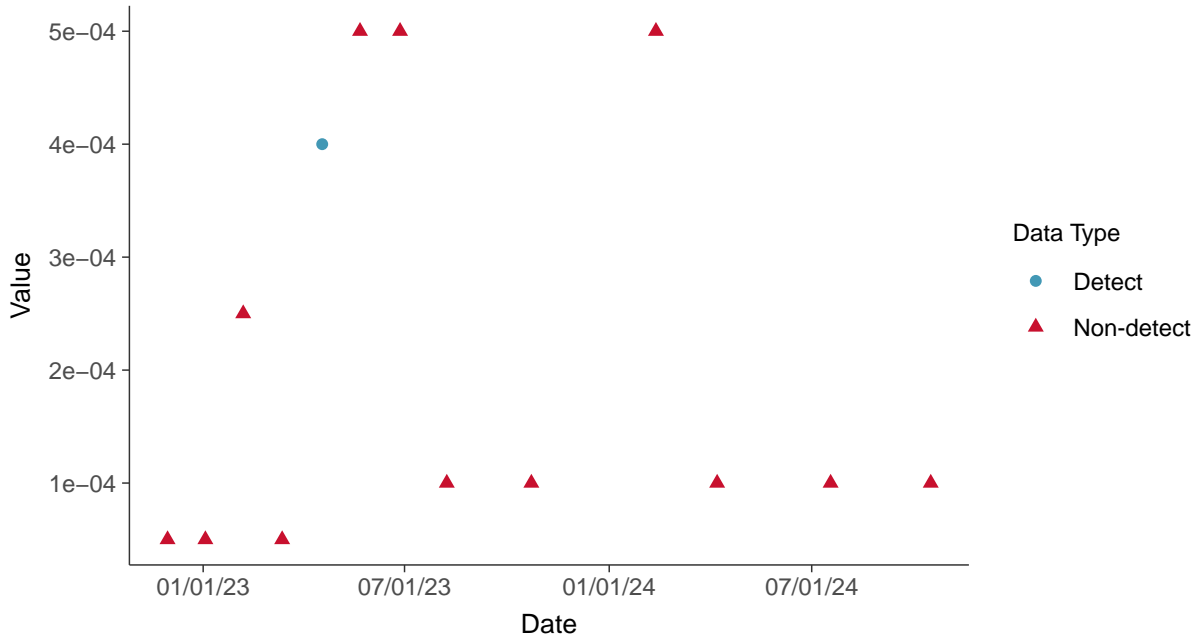


Appendix IV: Antimony, MW-30

ID: 1_40_1_5_101

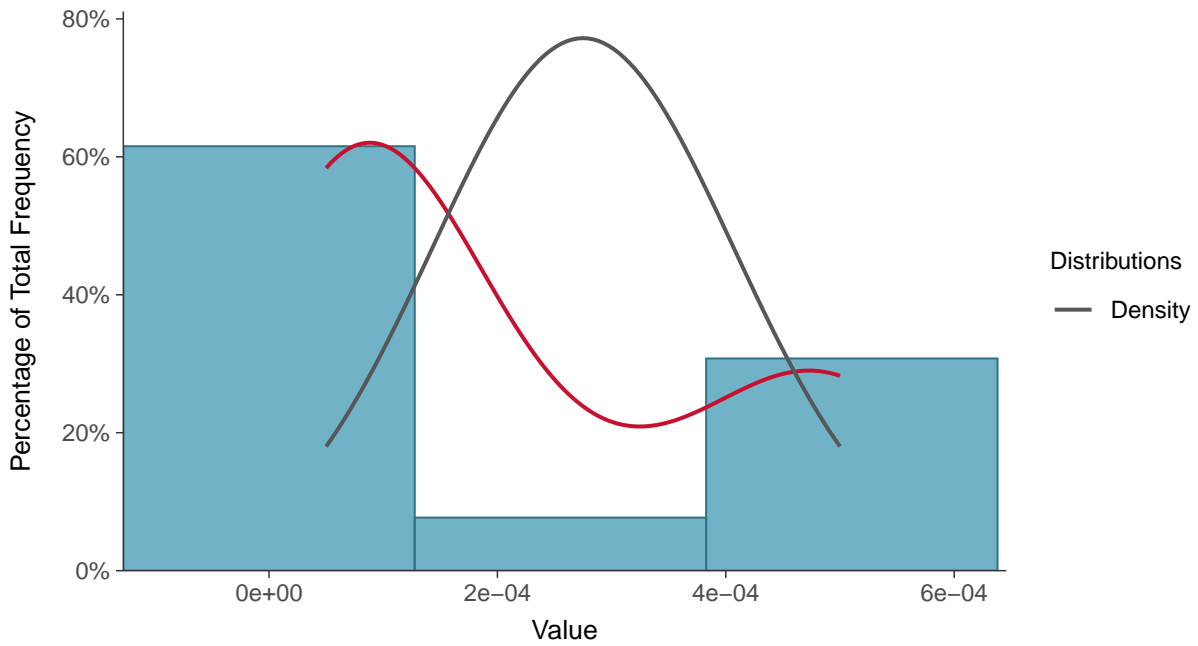
Scatter Plot

Antimony, MW-30 (mg/L)



Histogram

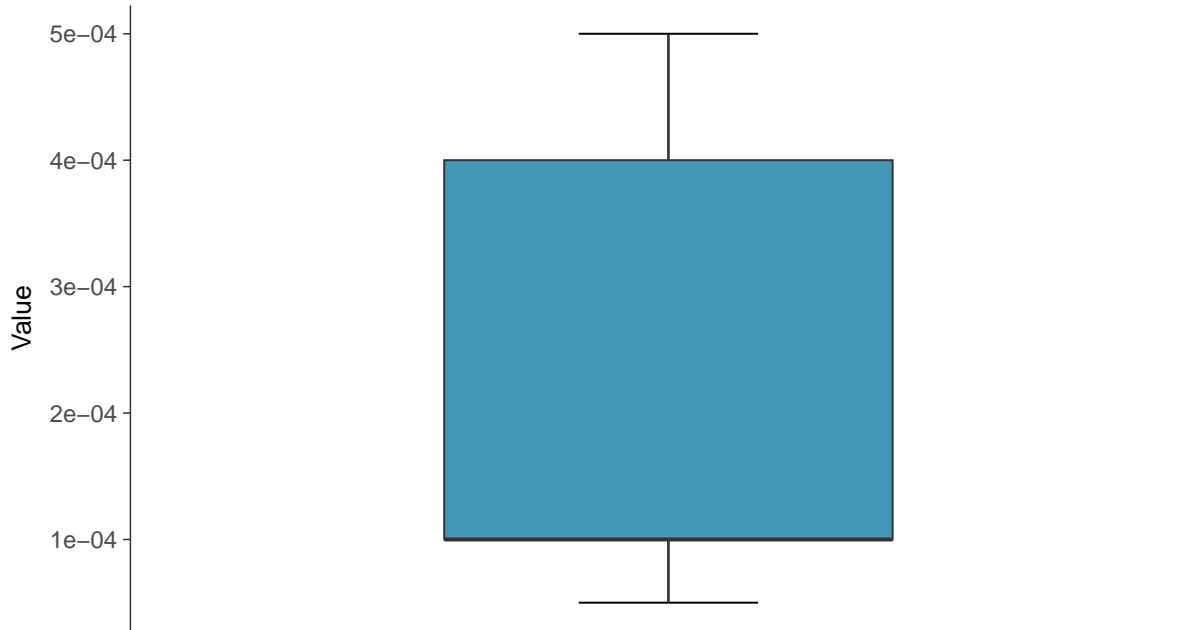
Antimony, MW-30 (mg/L)





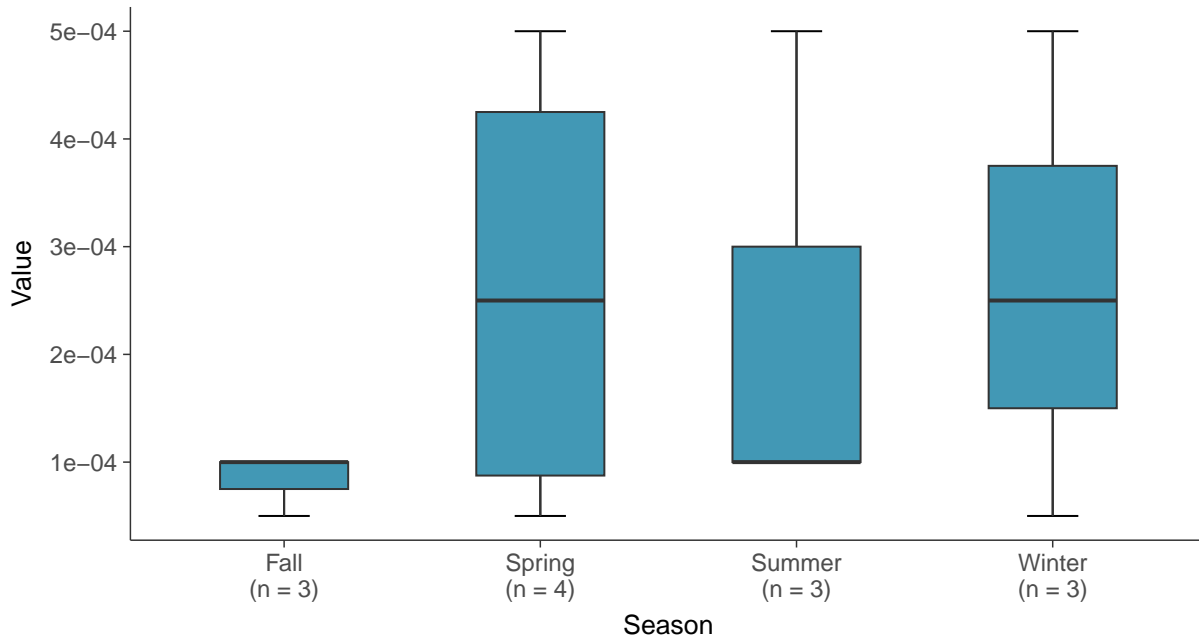
Boxplot

Antimony, MW-30 (mg/L)



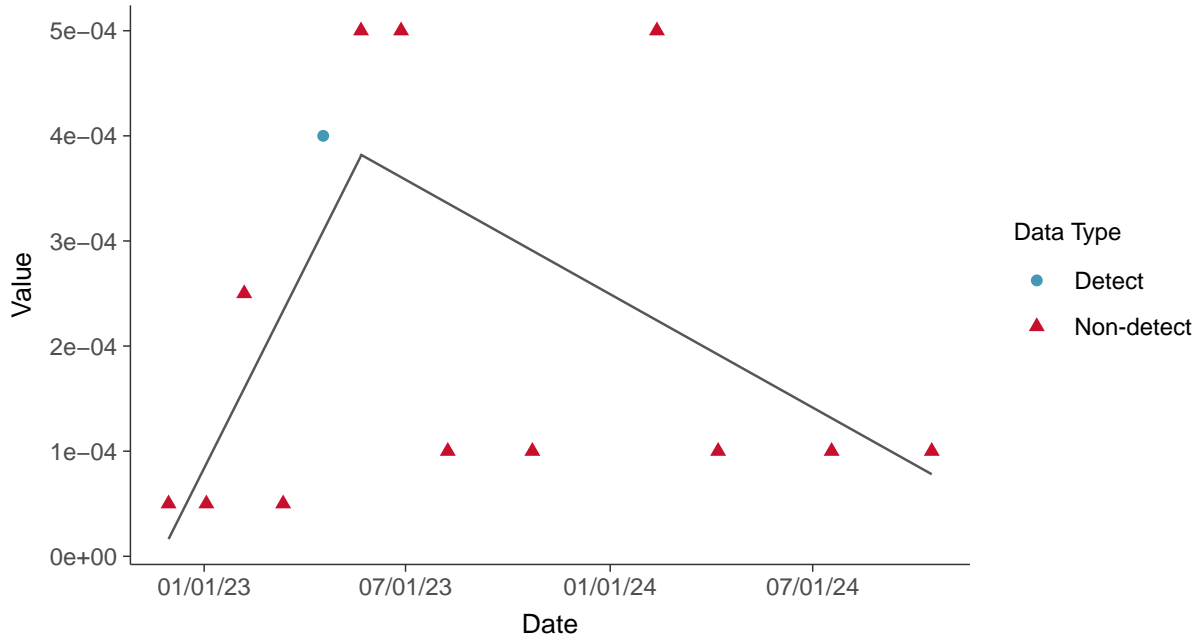
Boxplot by Season

Antimony, MW-30 (mg/L)

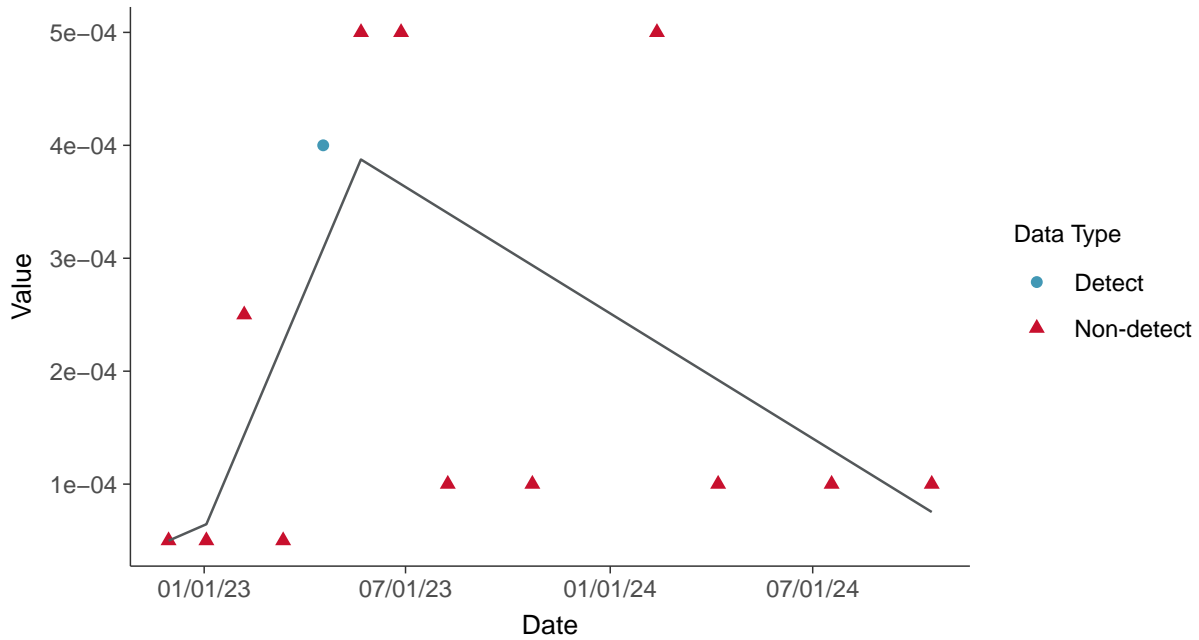




Trend Regression: Piecewise Linear-Linear
Antimony, MW-30 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Antimony, MW-30 (mg/L)



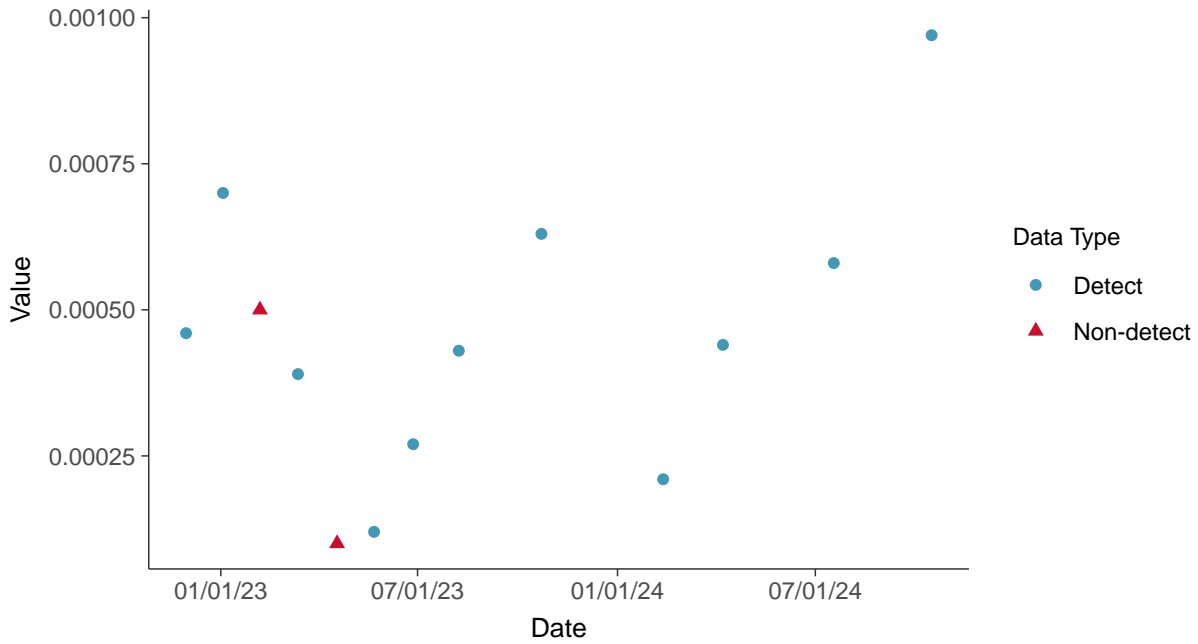


Appendix IV: Arsenic, MW-30

ID: 1_40_1_5_102

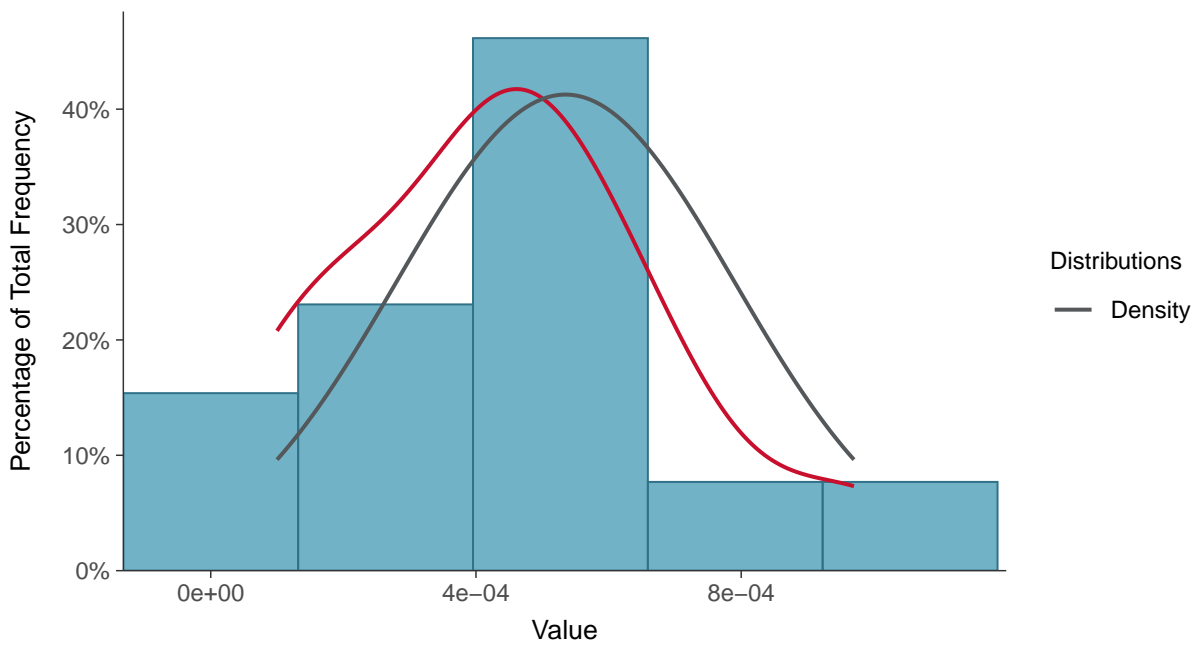
Scatter Plot

Arsenic, MW-30 (mg/L)



Histogram

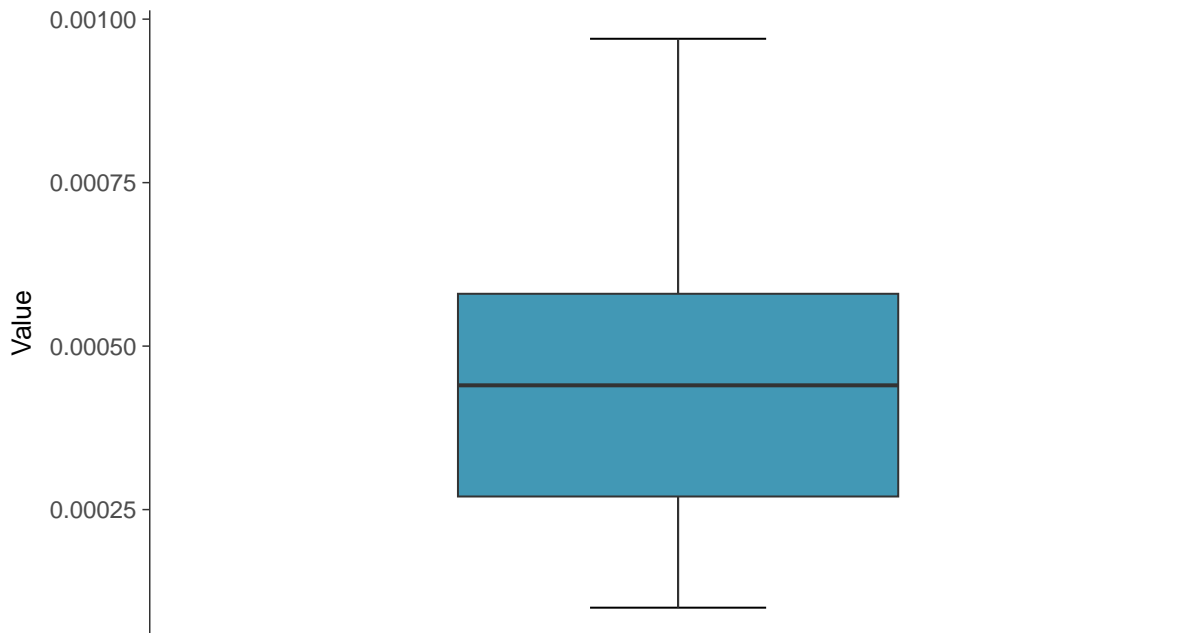
Arsenic, MW-30 (mg/L)





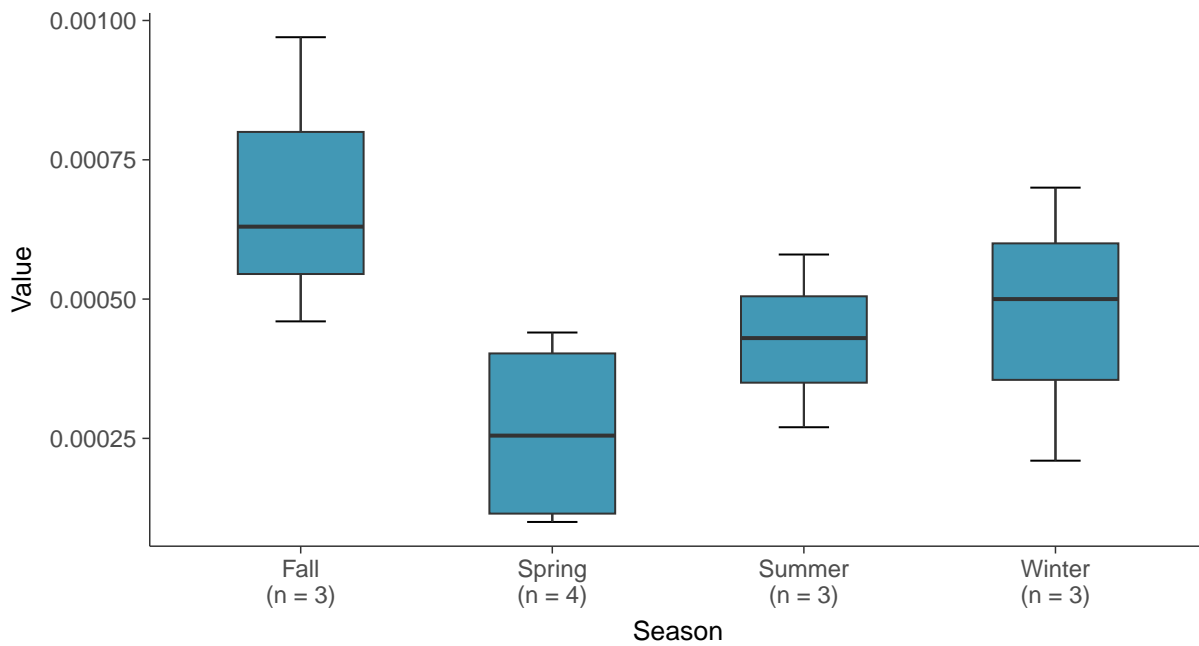
Boxplot

Arsenic, MW-30 (mg/L)



Boxplot by Season

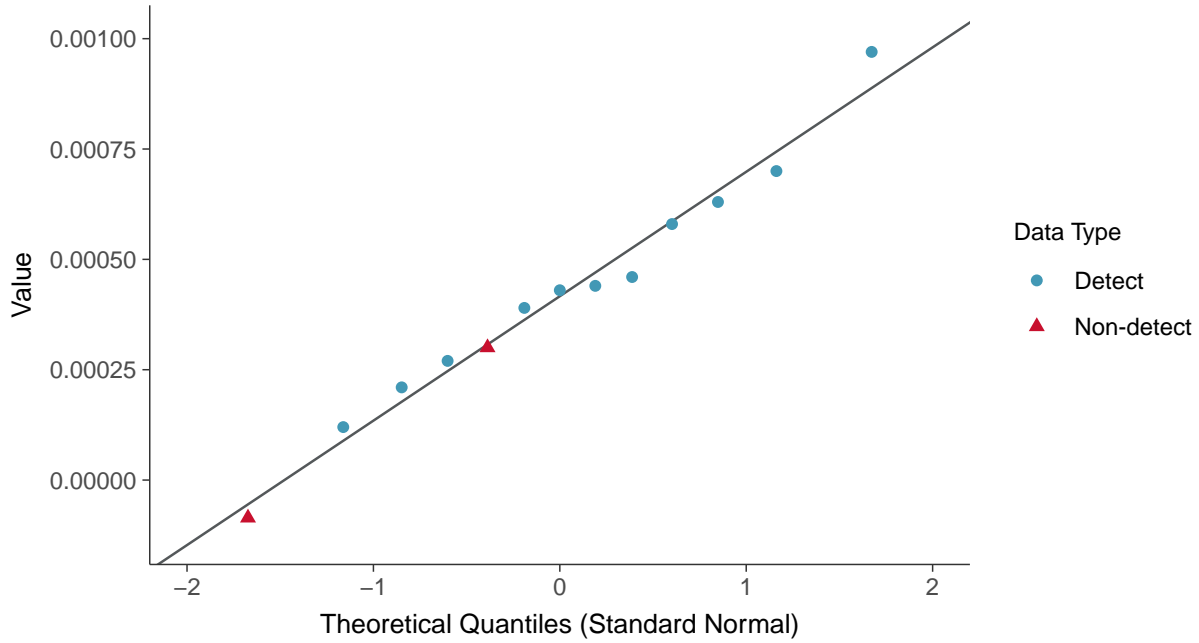
Arsenic, MW-30 (mg/L)





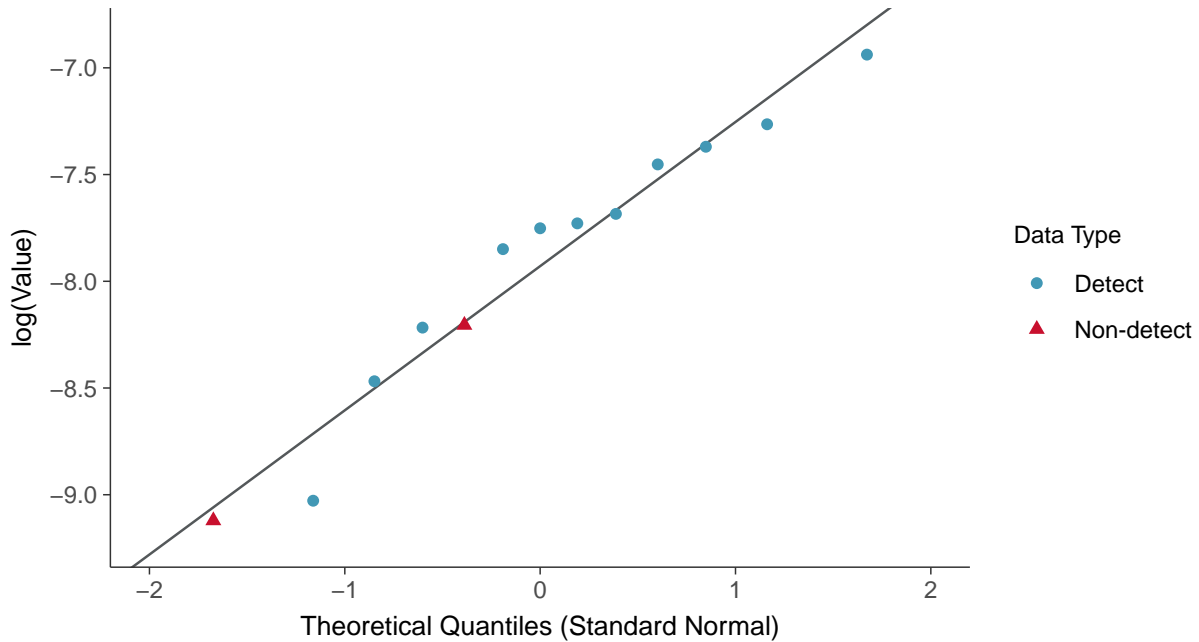
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-30 (mg/L)



Lognormal Q-Q plot using ROS Imputed Estimates

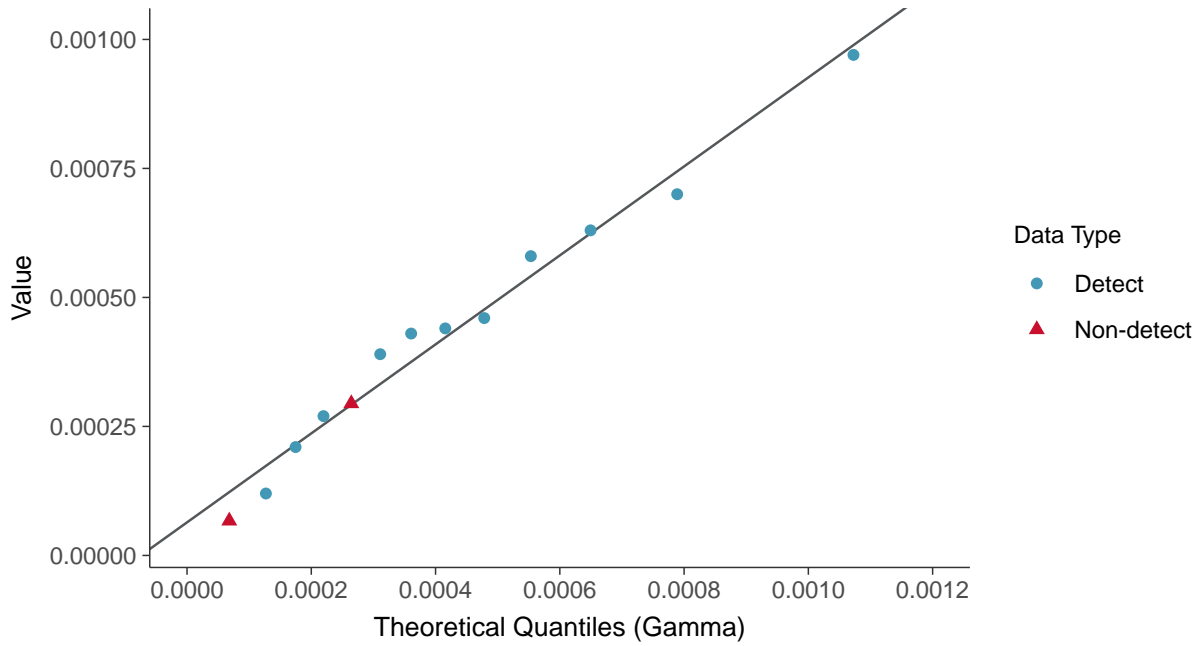
Arsenic, MW-30 (mg/L)





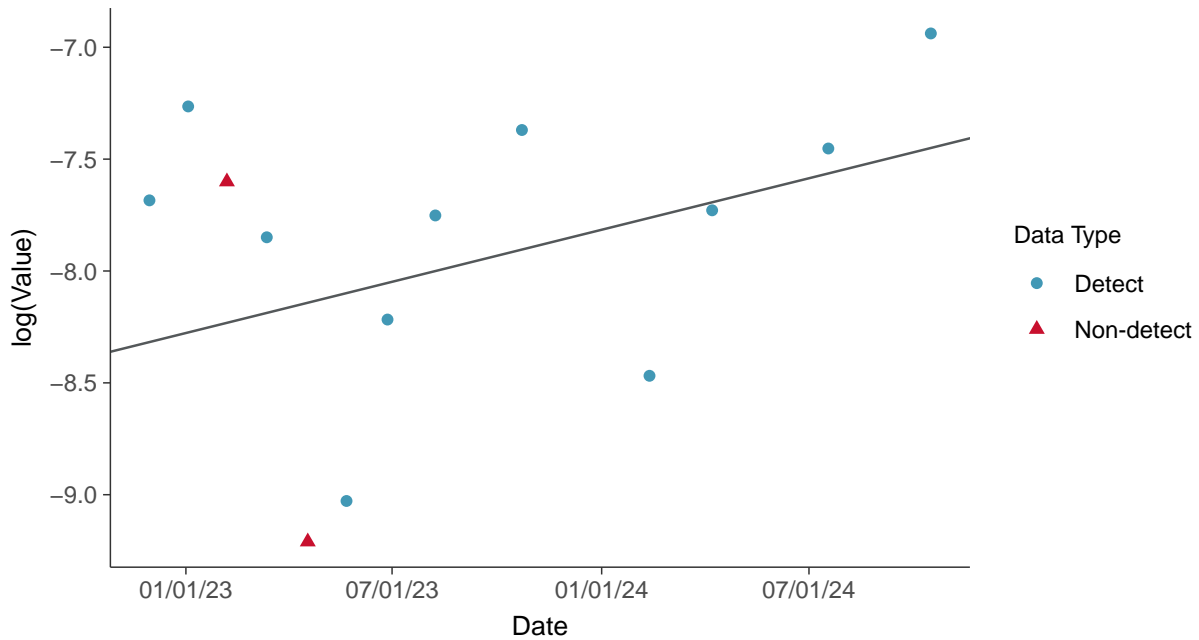
Gamma Q-Q plot using ROS Imputed Estimates

Arsenic, MW-30 (mg/L)



Trend Regression: Lognormal MLE

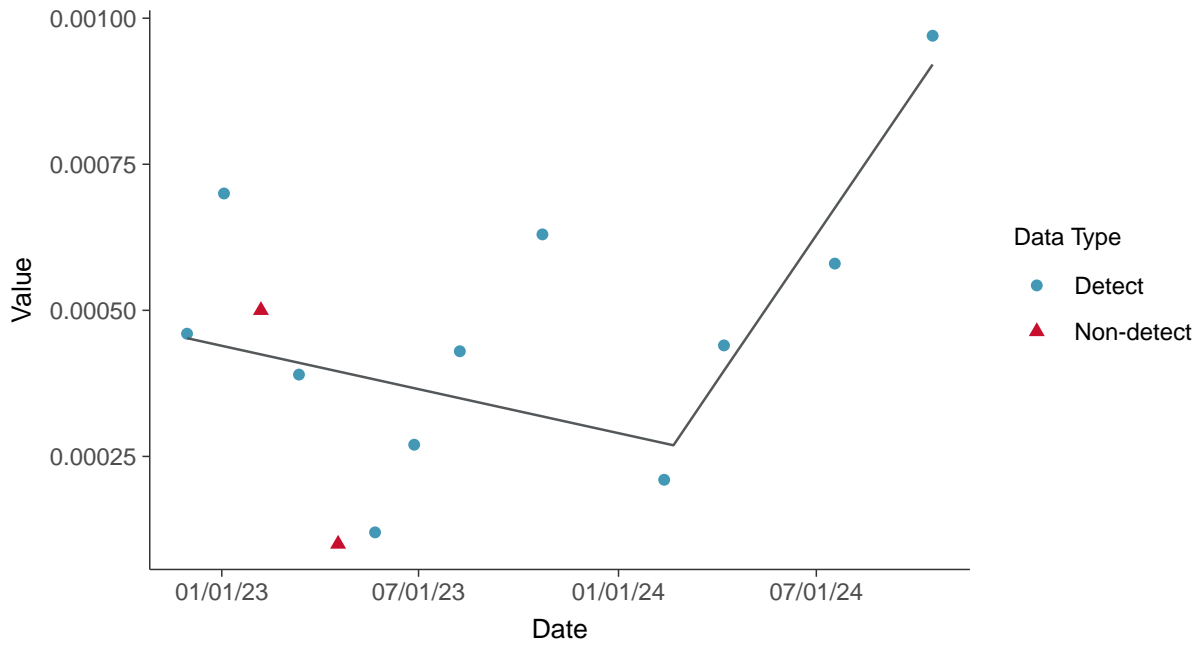
Arsenic, MW-30 (mg/L)





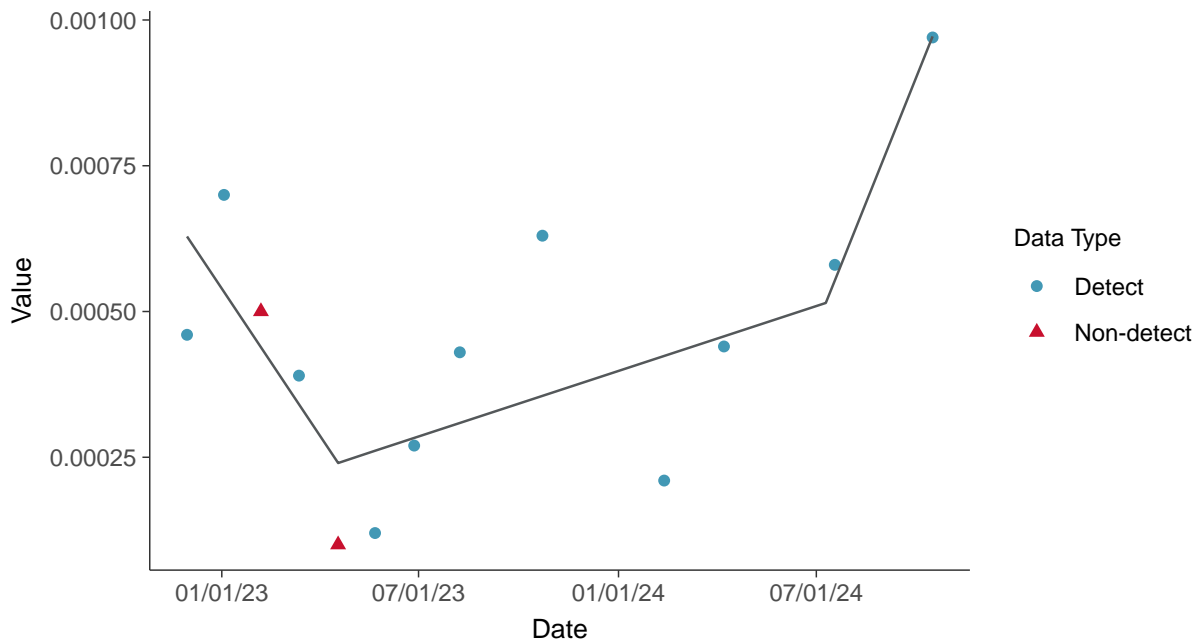
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-30 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

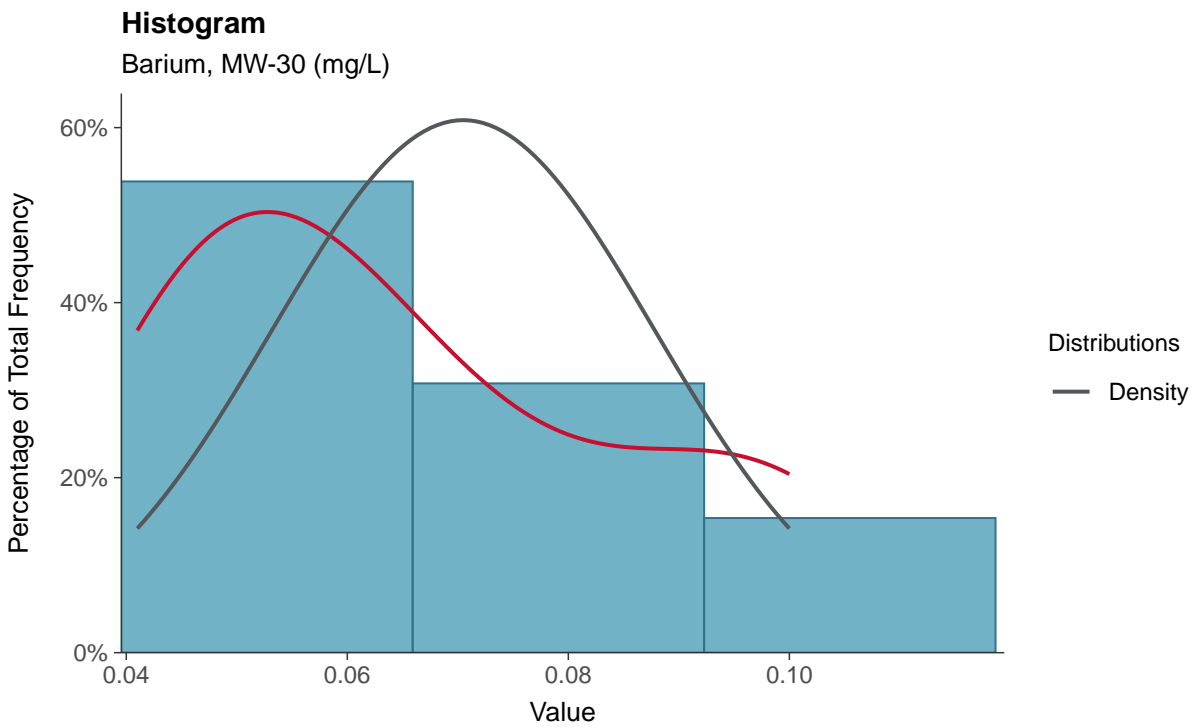
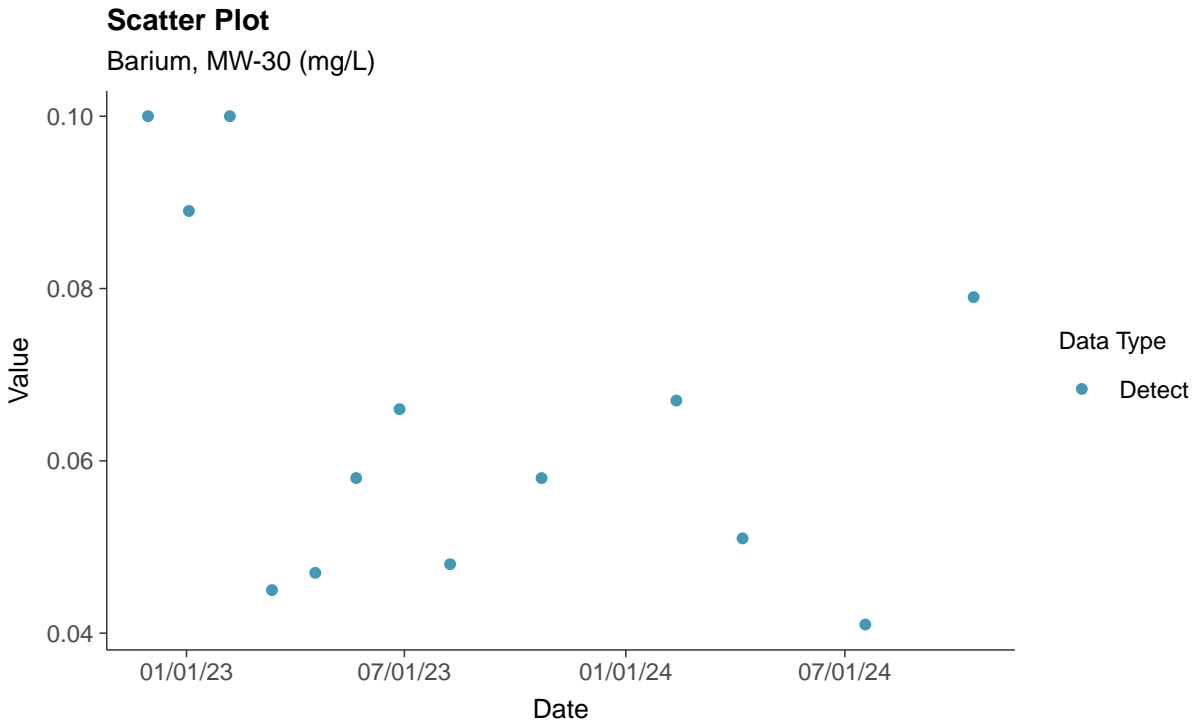
Arsenic, MW-30 (mg/L)





Appendix IV: Barium, MW-30

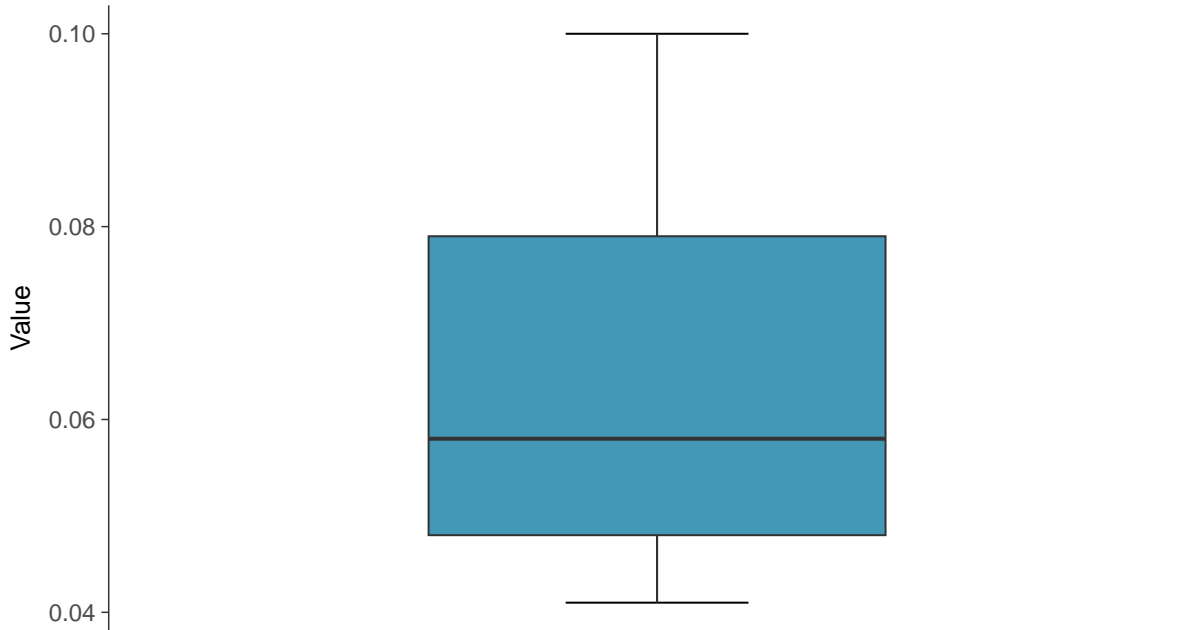
ID: 1_40_1_5_103





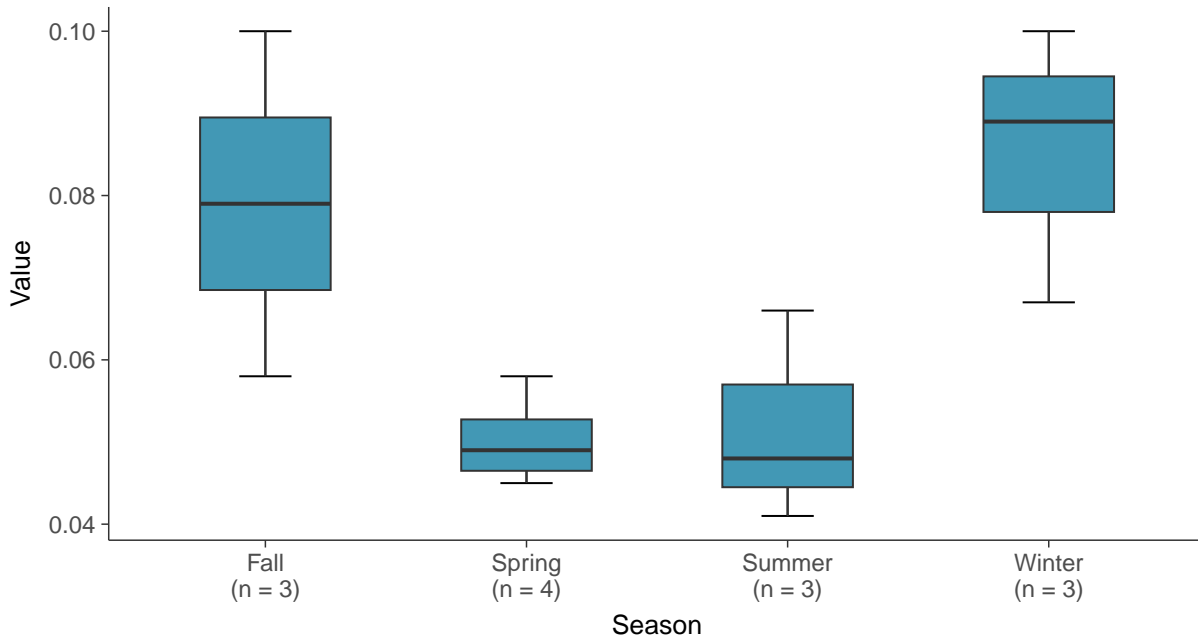
Boxplot

Barium, MW-30 (mg/L)



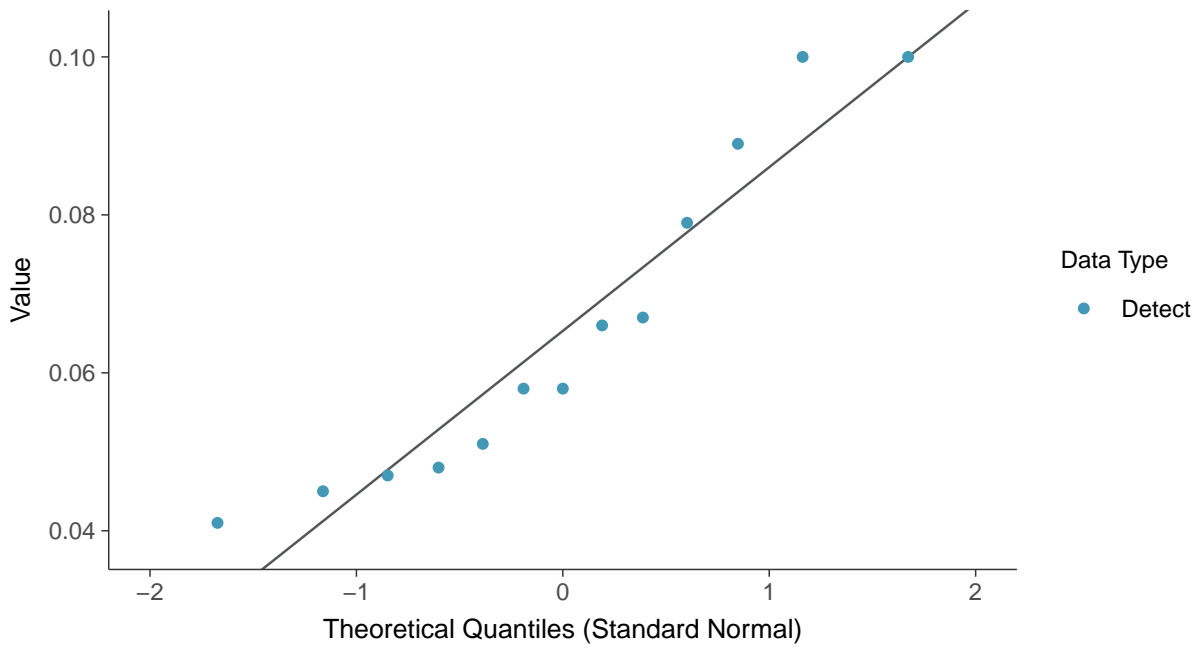
Boxplot by Season

Barium, MW-30 (mg/L)

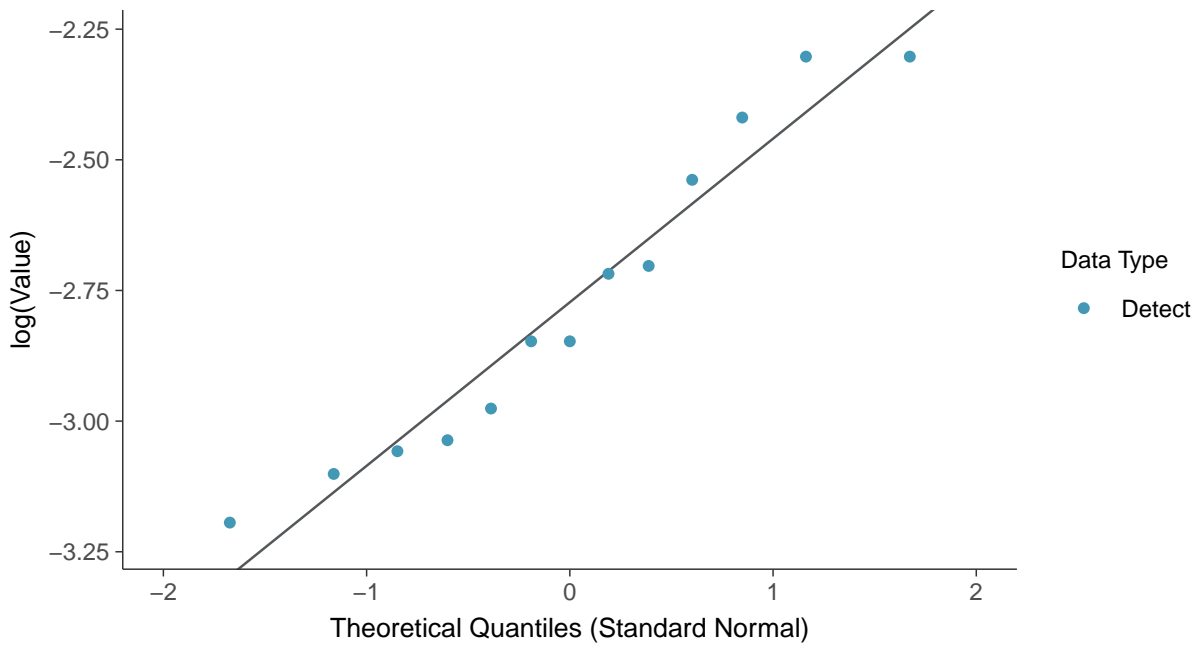




Normal Q-Q plot
Barium, MW-30 (mg/L)

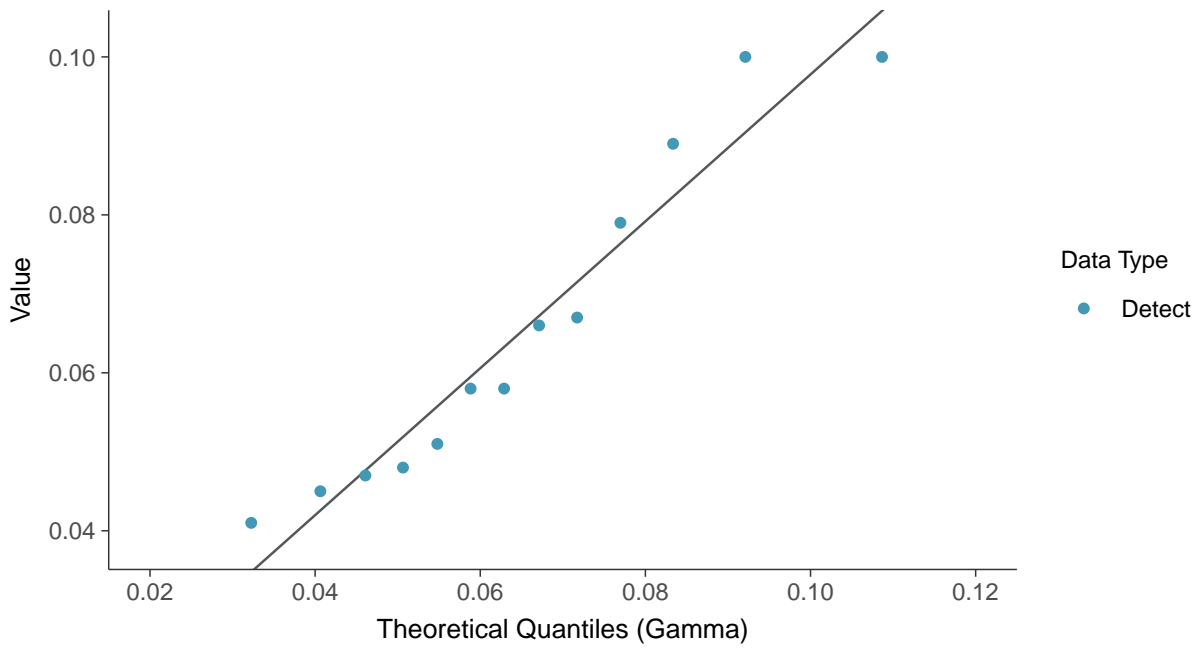


Lognormal Q-Q plot
Barium, MW-30 (mg/L)

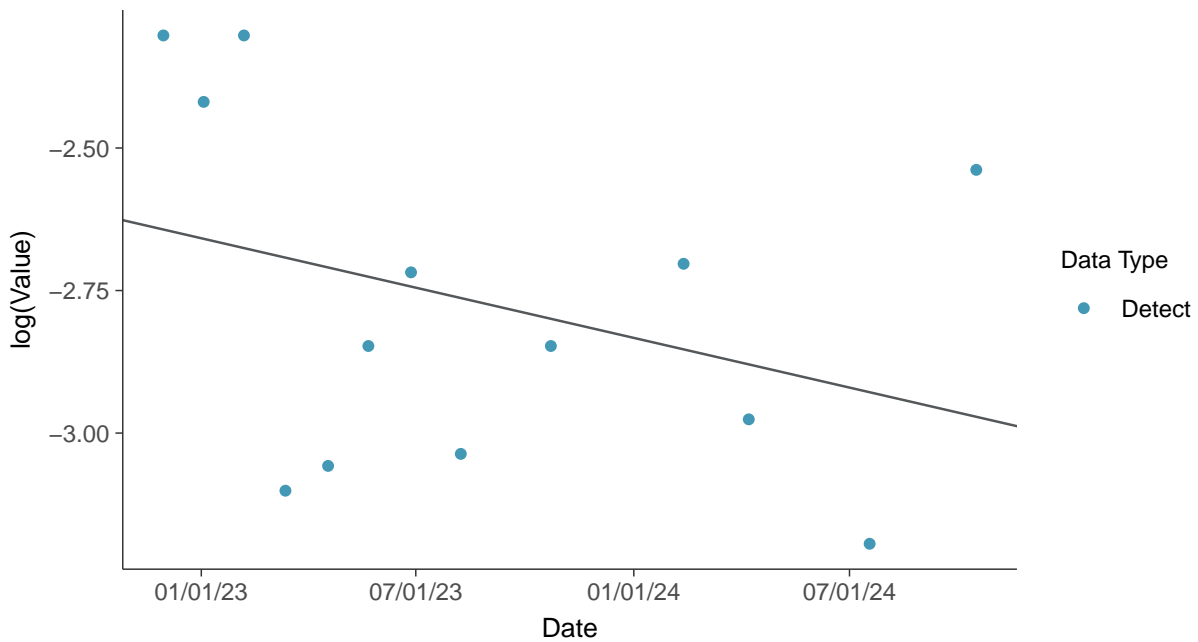




Gamma Q-Q plot
Barium, MW-30 (mg/L)



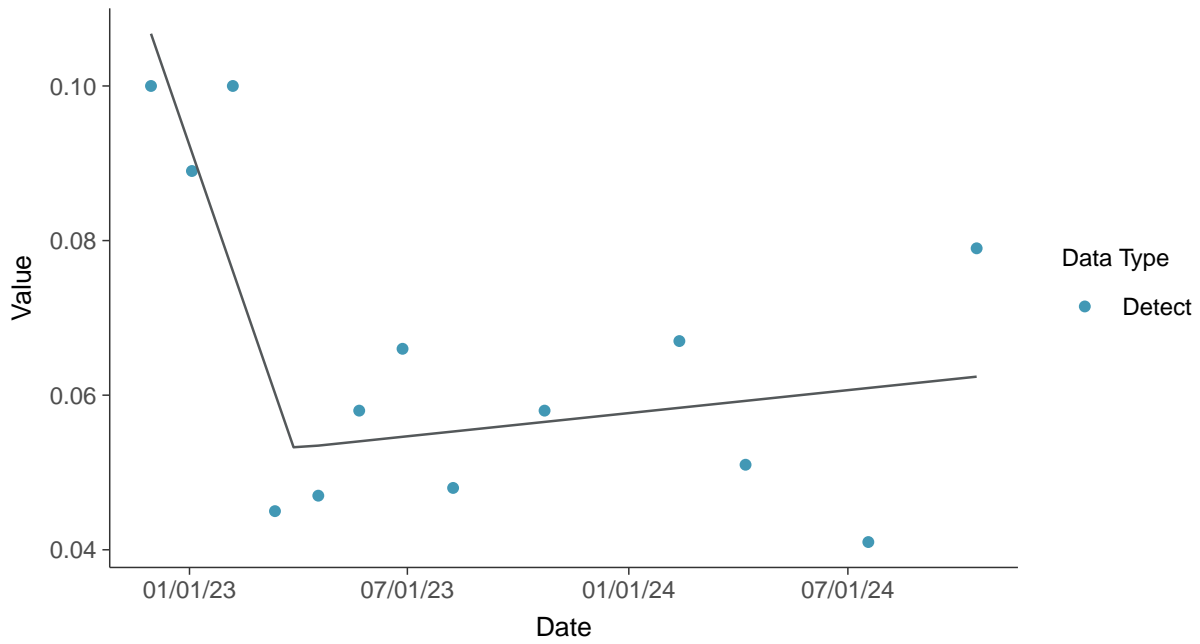
Trend Regression: Lognormal MLE
Barium, MW-30 (mg/L)





Trend Regression: Piecewise Linear-Linear

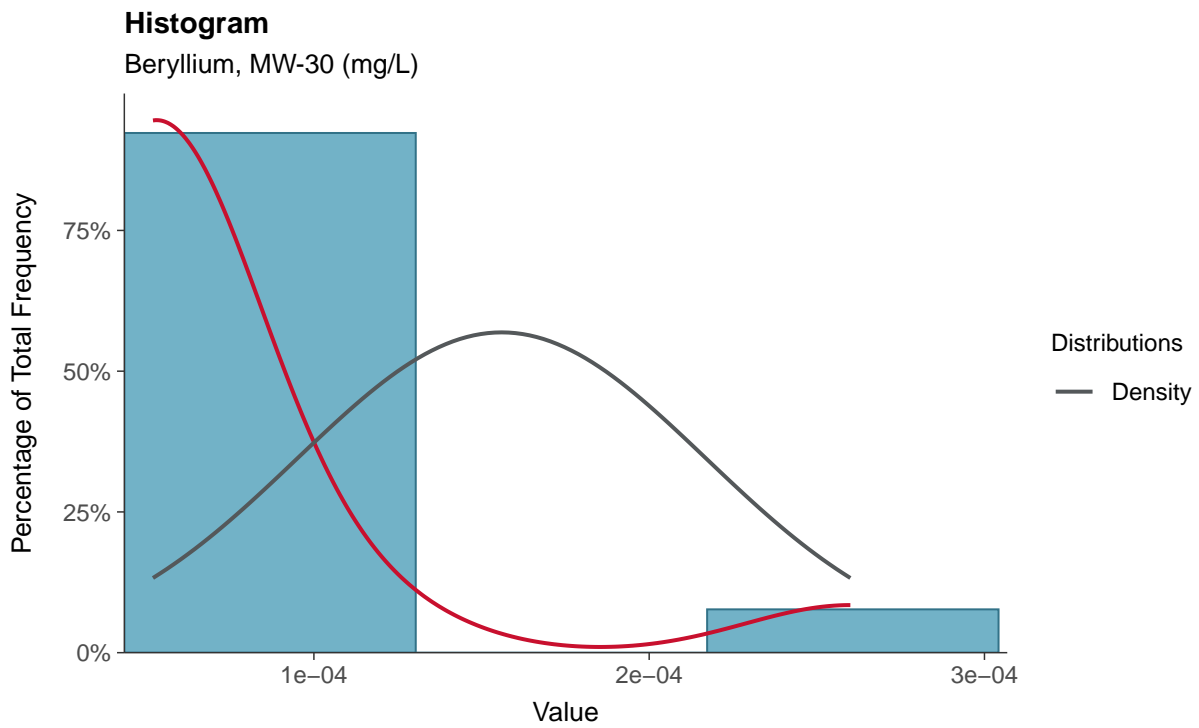
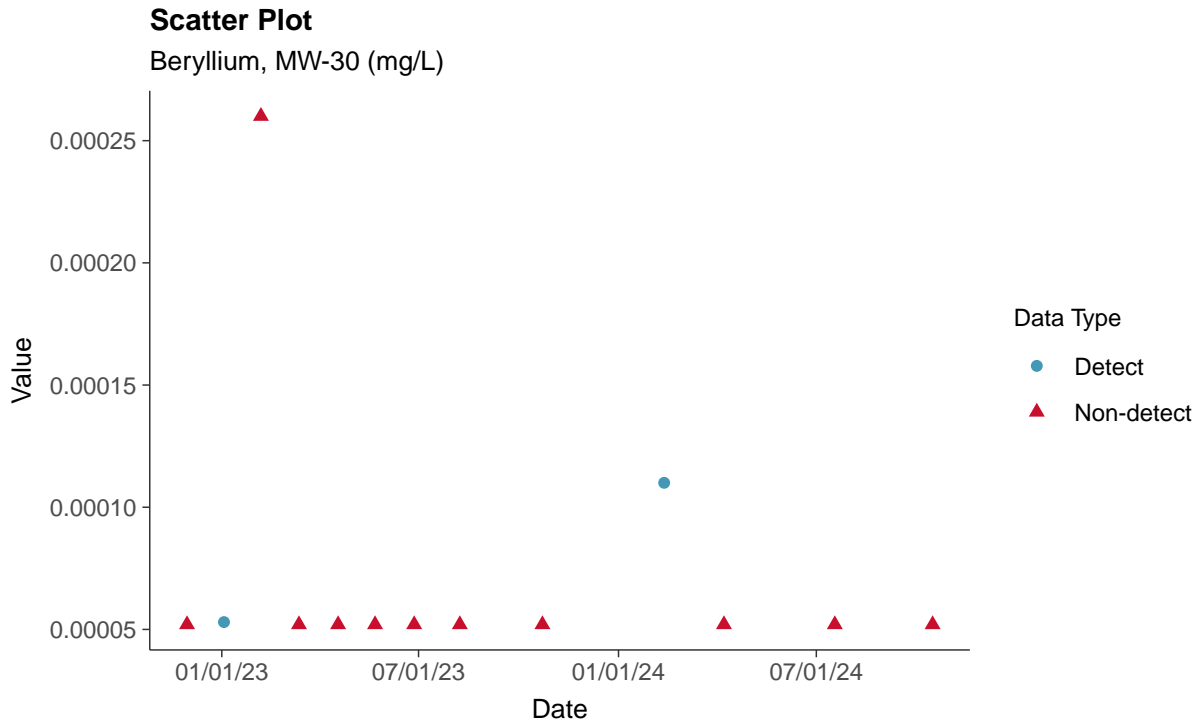
Barium, MW-30 (mg/L)





Appendix IV: Beryllium, MW-30

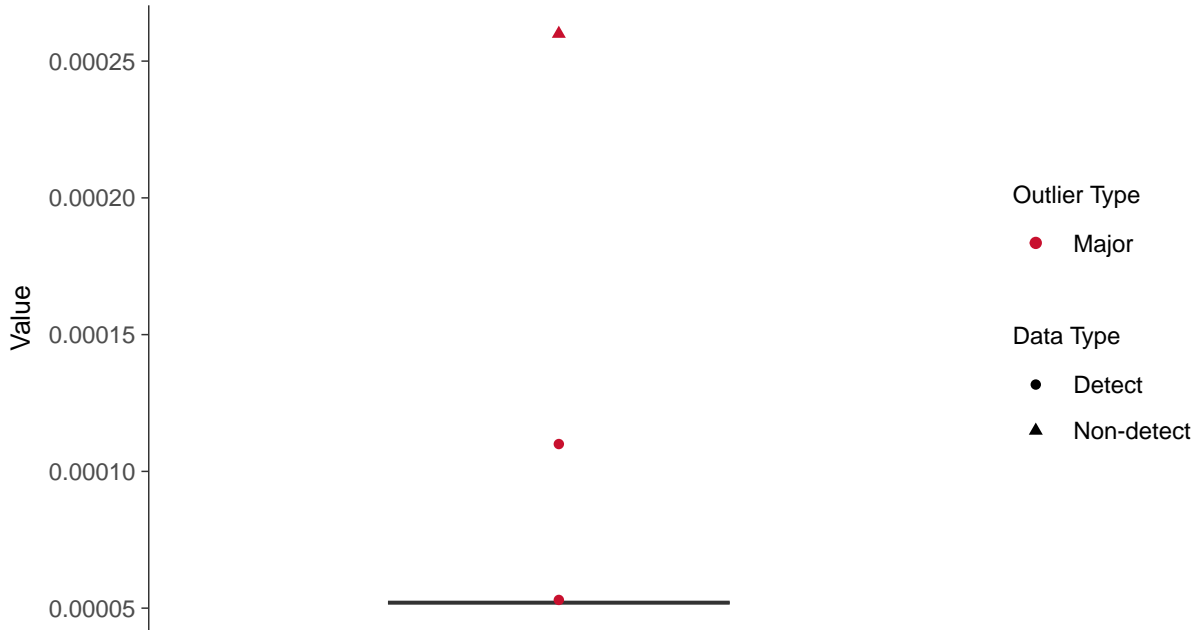
ID: 1_40_1_5_104





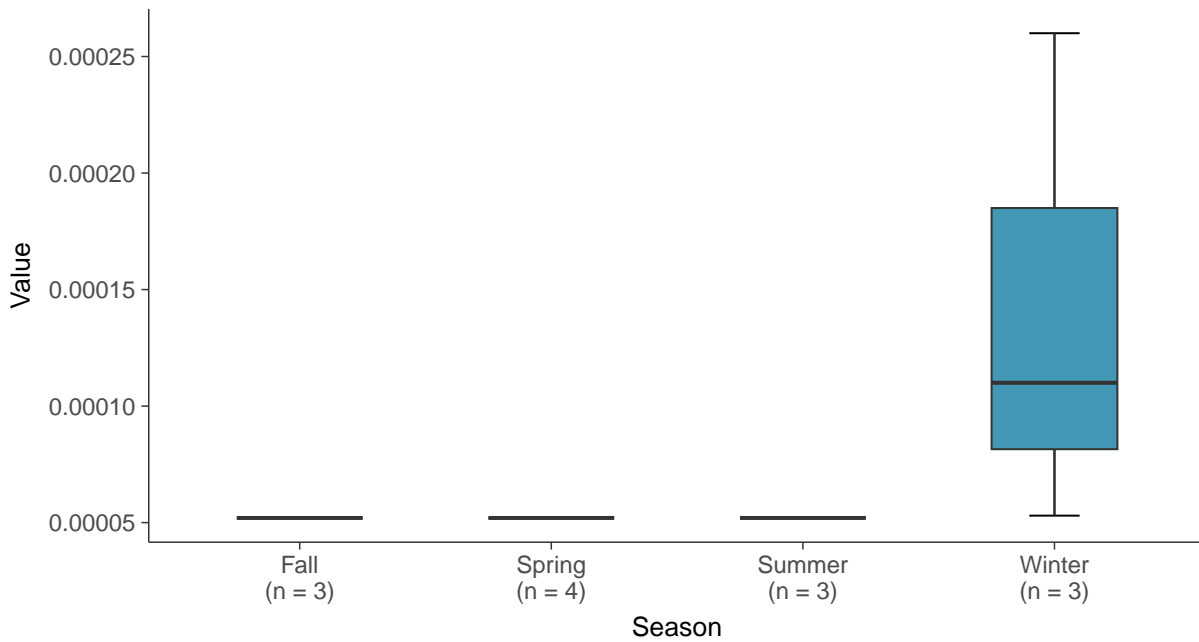
Boxplot

Beryllium, MW-30 (mg/L)



Boxplot by Season

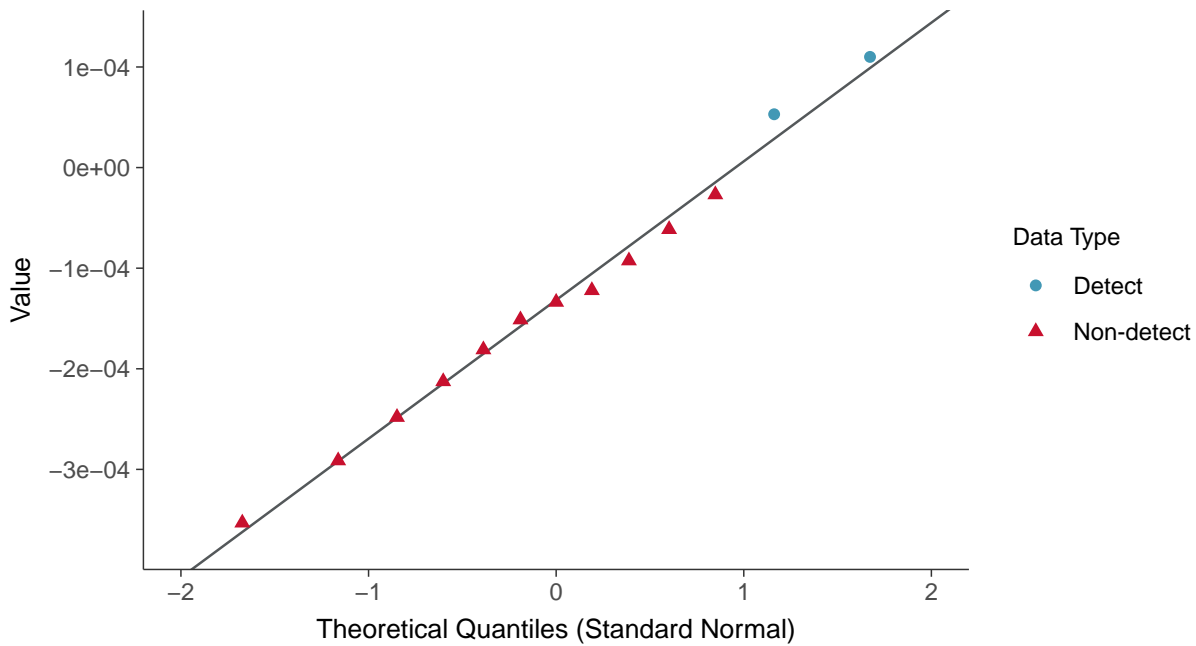
Beryllium, MW-30 (mg/L)





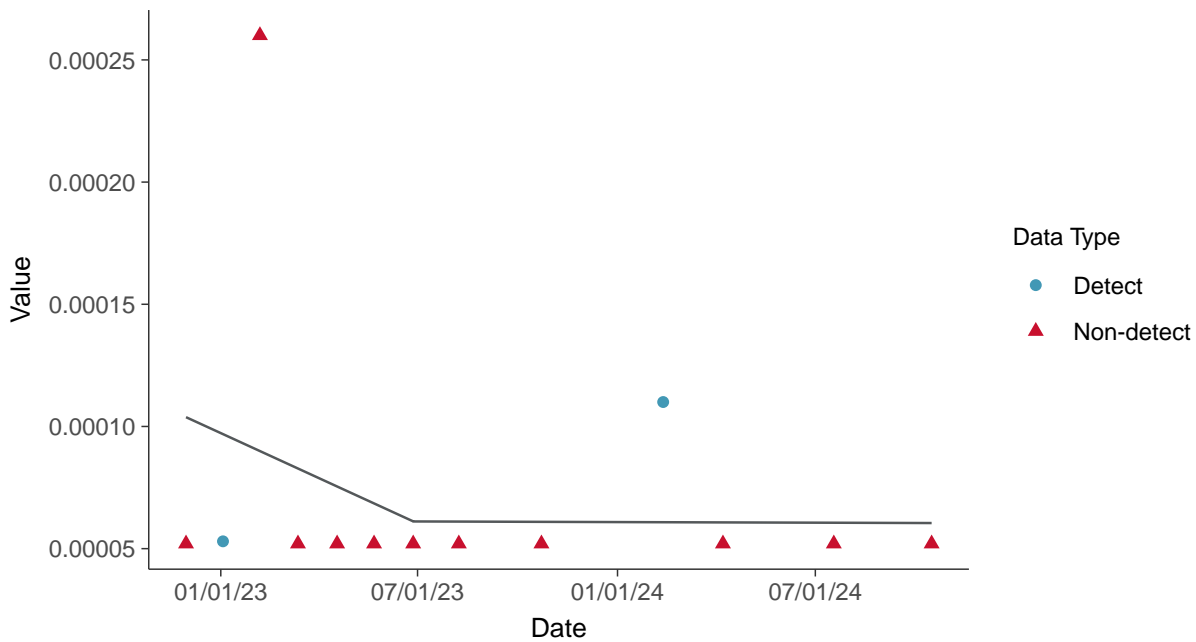
Normal Q-Q plot using ROS Imputed Estimates

Beryllium, MW-30 (mg/L)



Trend Regression: Piecewise Linear-Linear

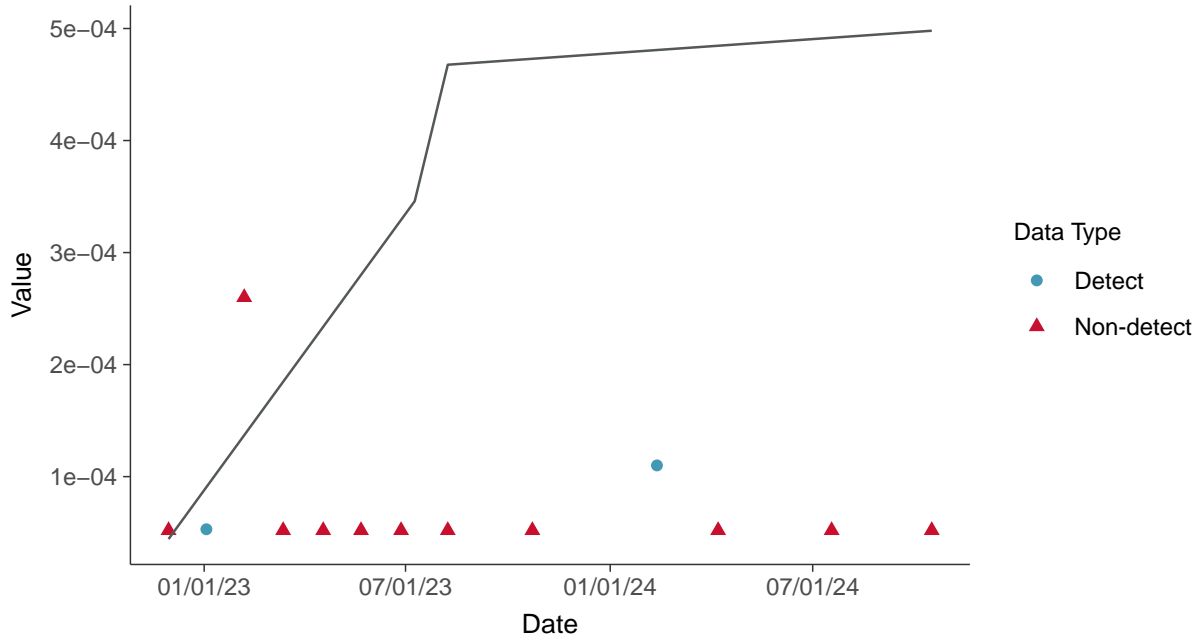
Beryllium, MW-30 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

Beryllium, MW-30 (mg/L)



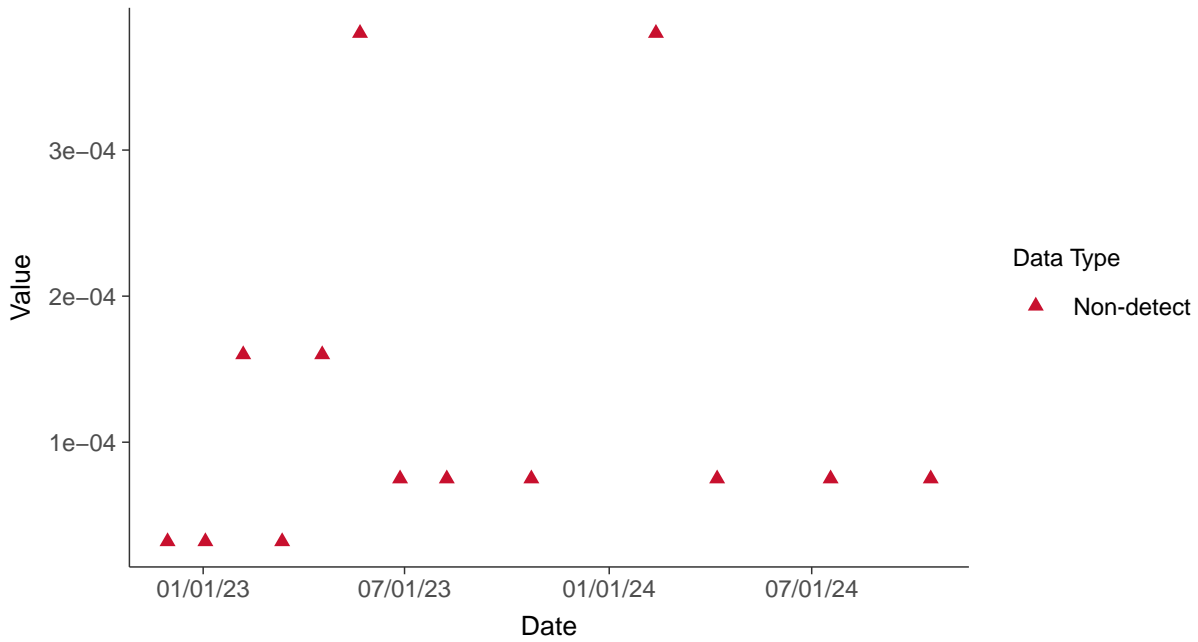


Appendix IV: Cadmium, MW-30

ID: 1_40_1_5_106

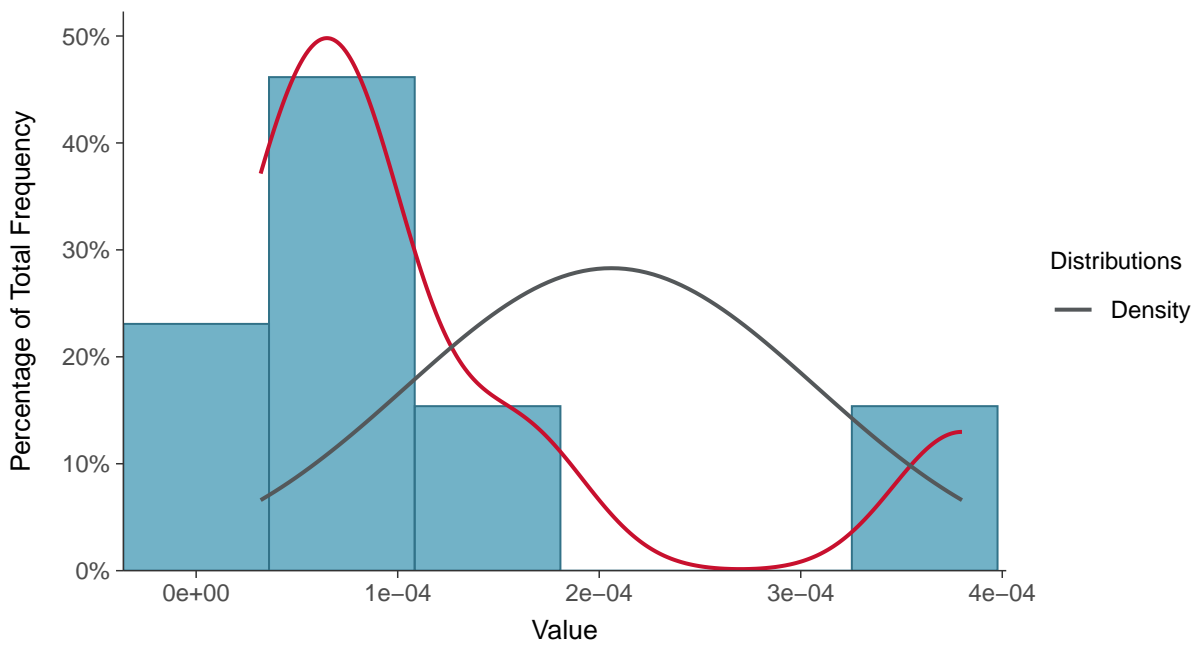
Scatter Plot

Cadmium, MW-30 (mg/L)



Histogram

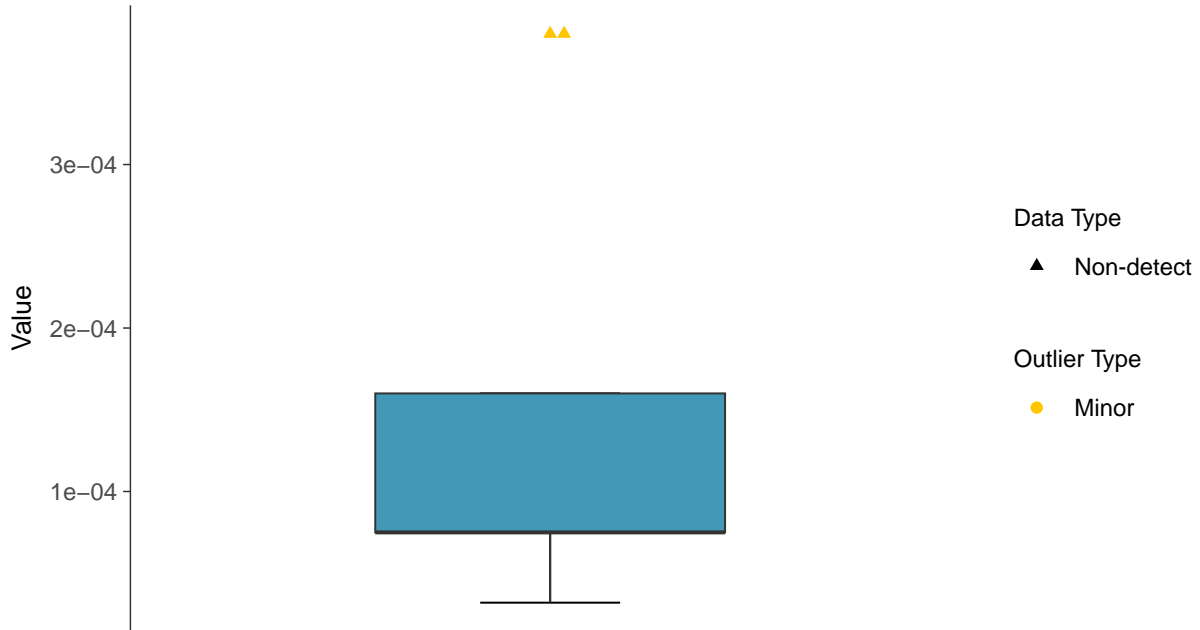
Cadmium, MW-30 (mg/L)





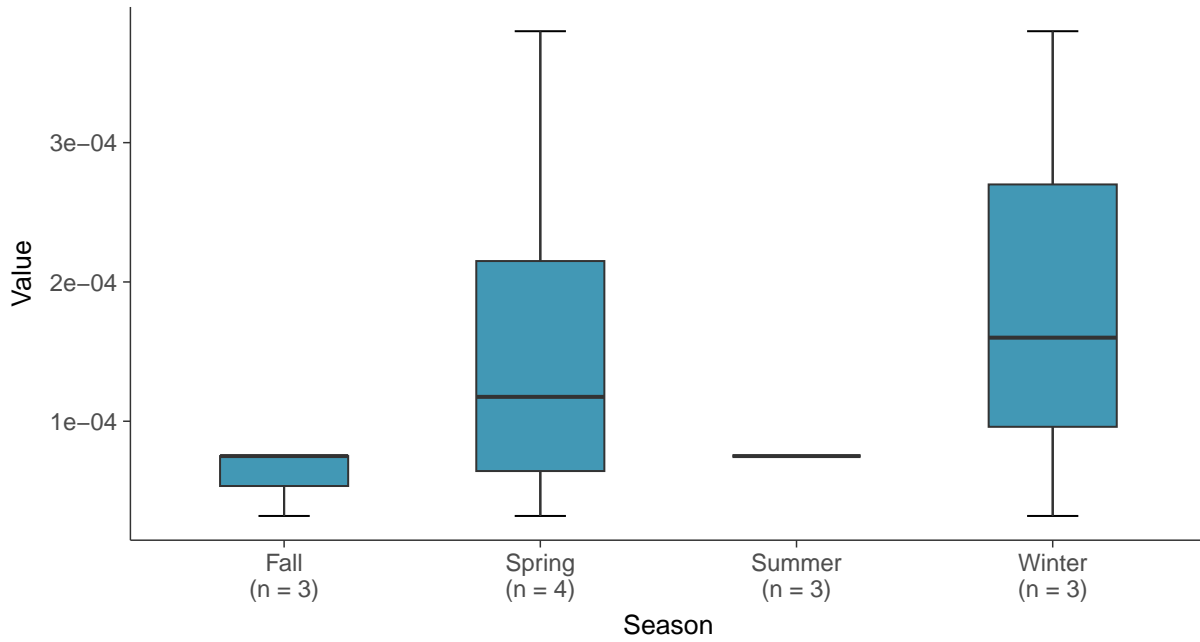
Boxplot

Cadmium, MW-30 (mg/L)



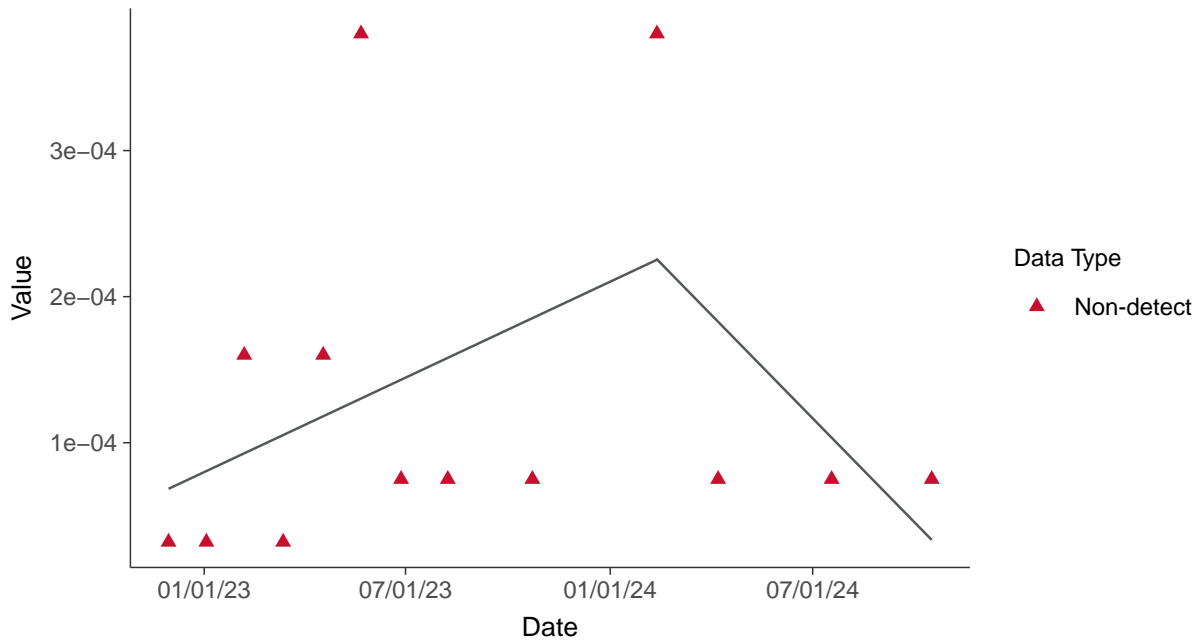
Boxplot by Season

Cadmium, MW-30 (mg/L)

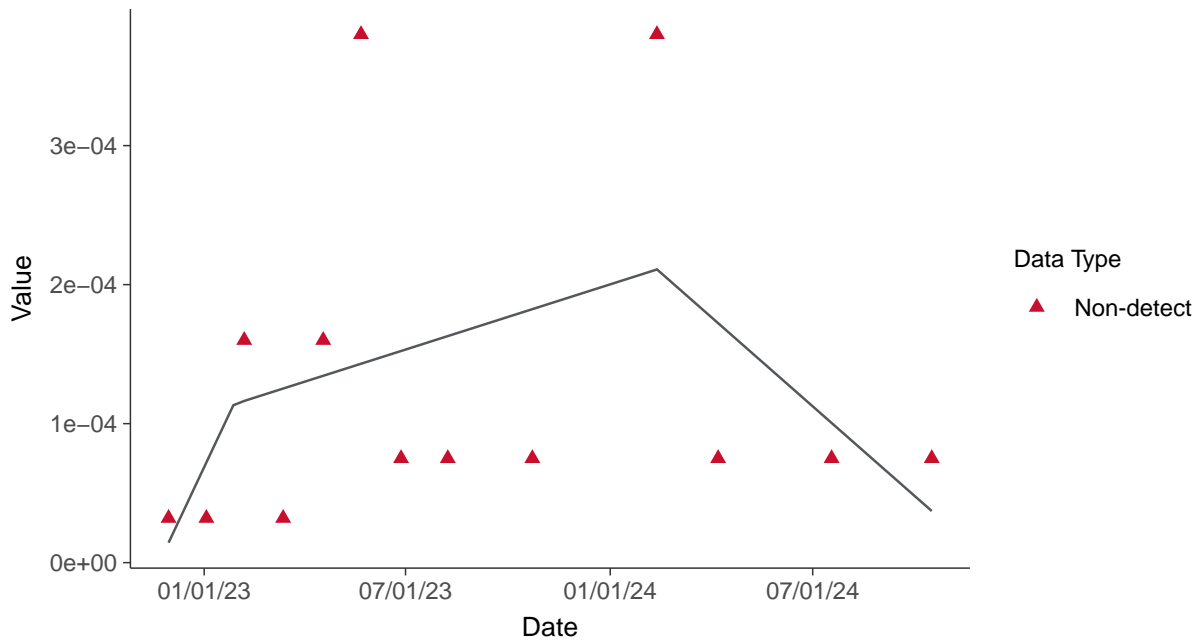




Trend Regression: Piecewise Linear-Linear
Cadmium, MW-30 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Cadmium, MW-30 (mg/L)



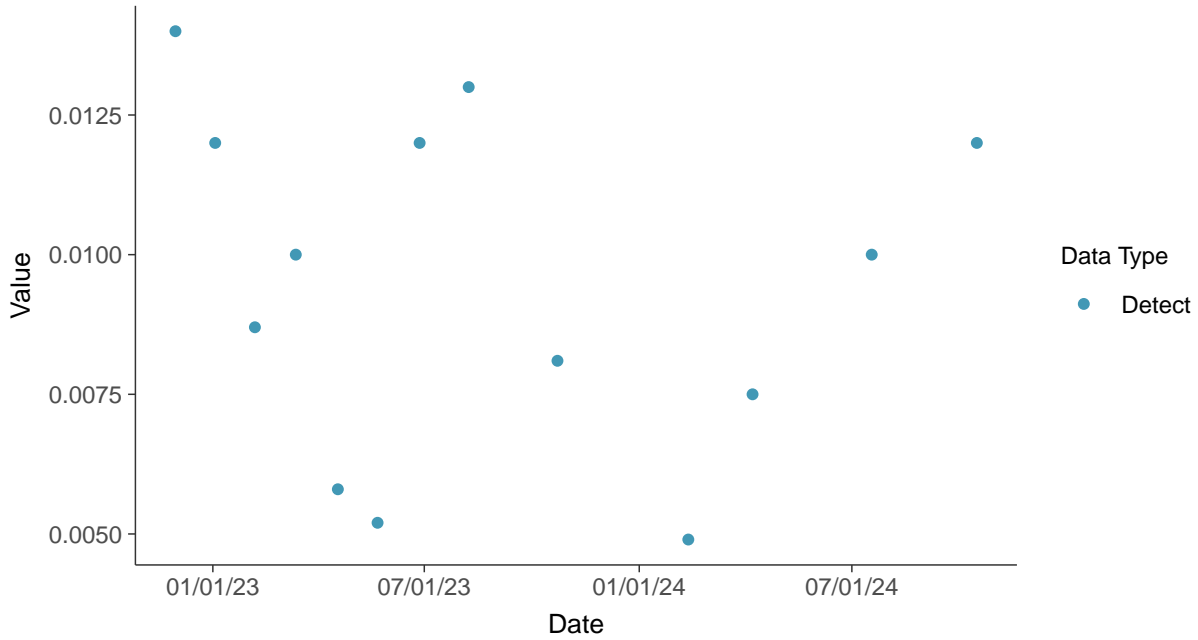


Appendix IV: Chromium, Total, MW-30

ID: 1_40_1_5_109

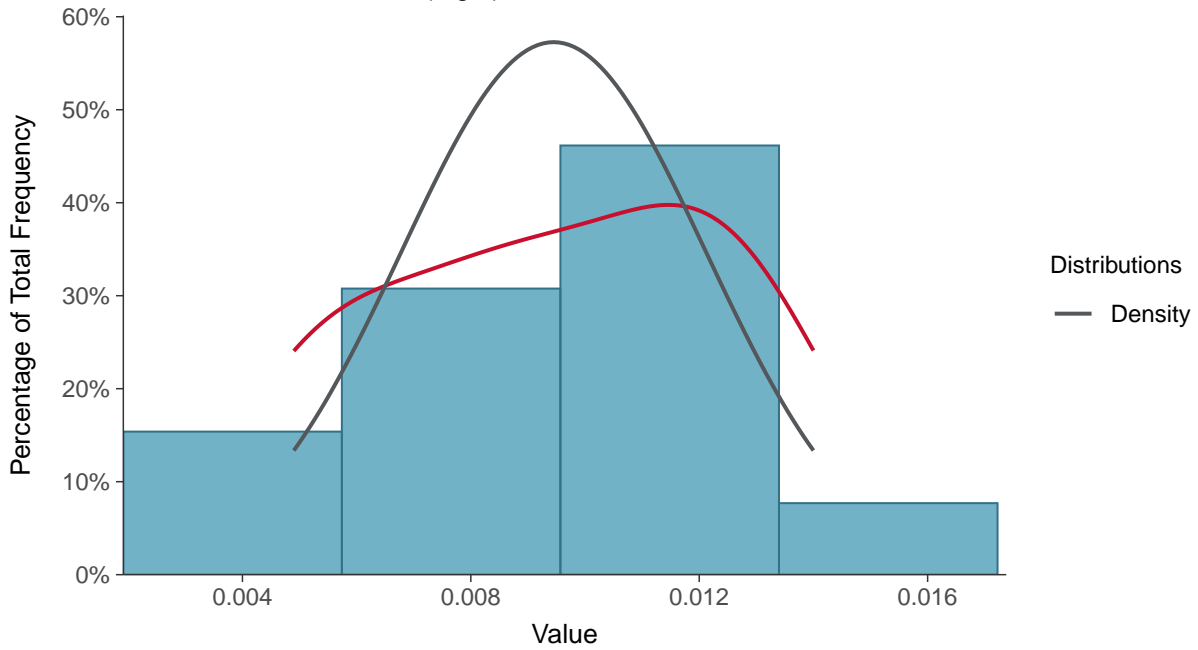
Scatter Plot

Chromium, Total, MW-30 (mg/L)



Histogram

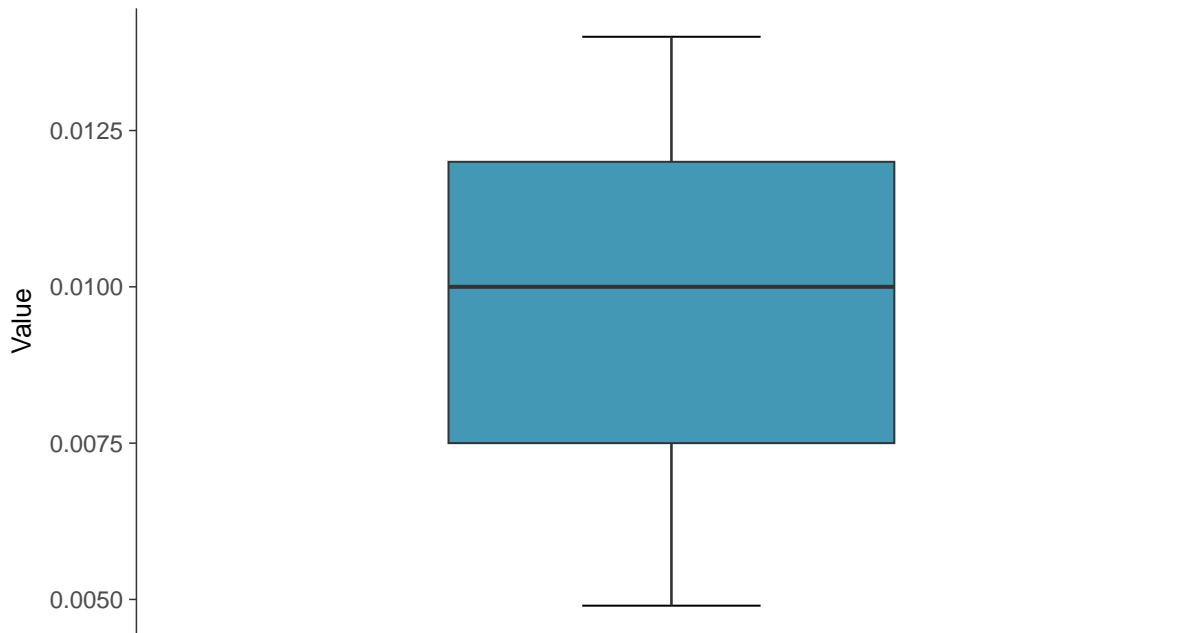
Chromium, Total, MW-30 (mg/L)





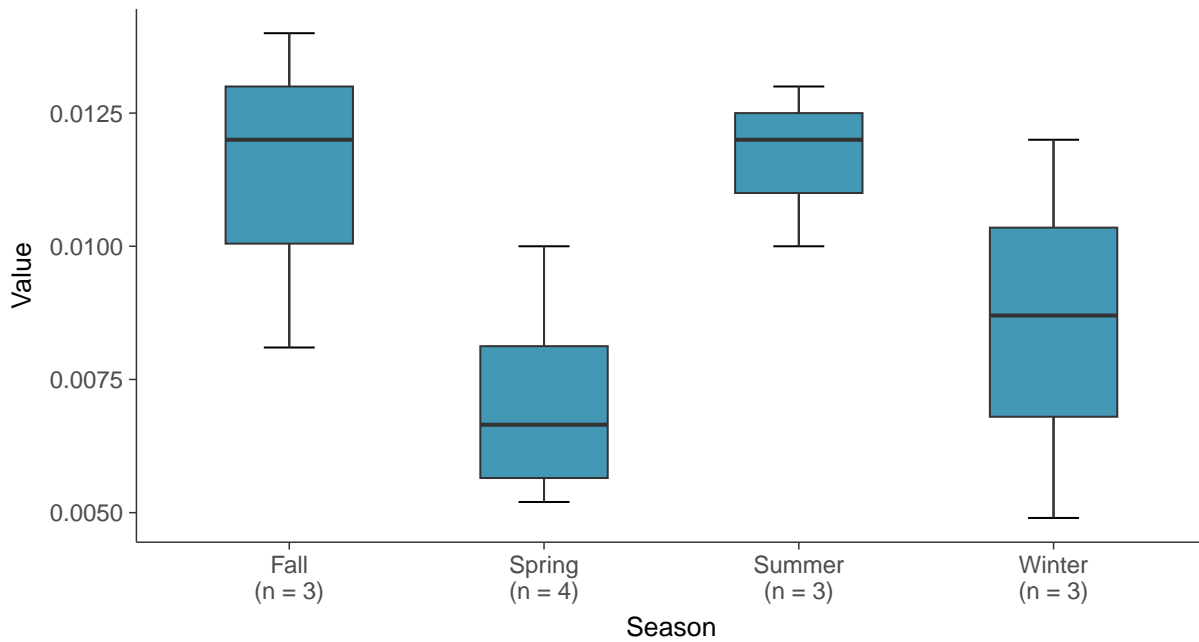
Boxplot

Chromium, Total, MW-30 (mg/L)



Boxplot by Season

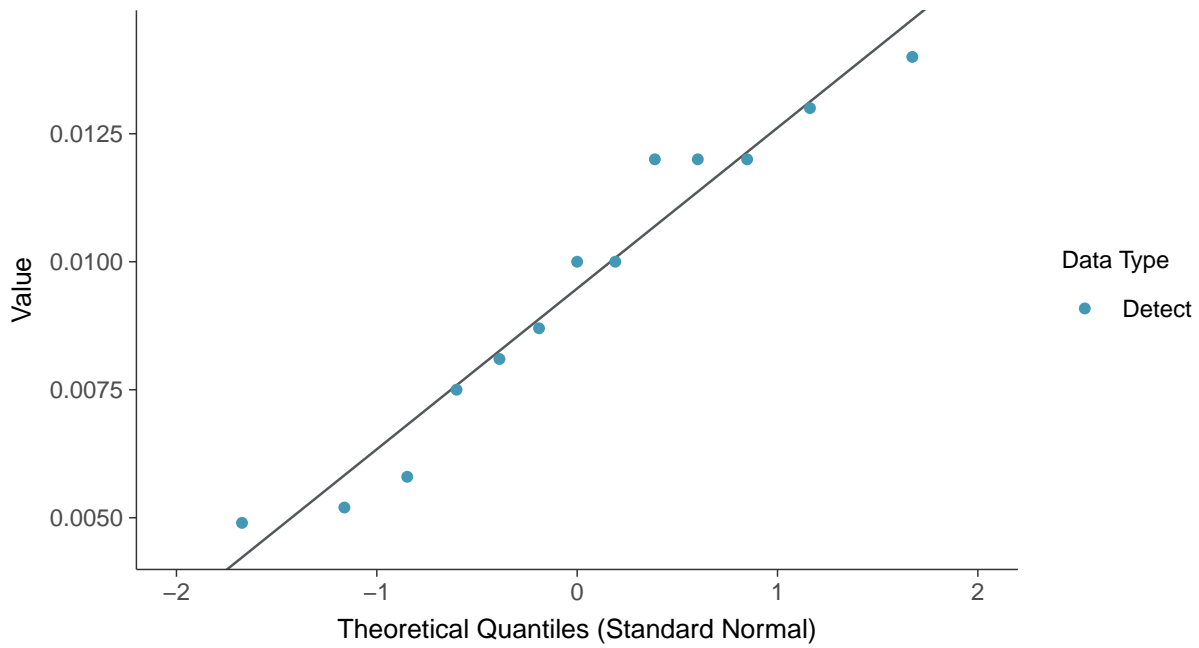
Chromium, Total, MW-30 (mg/L)





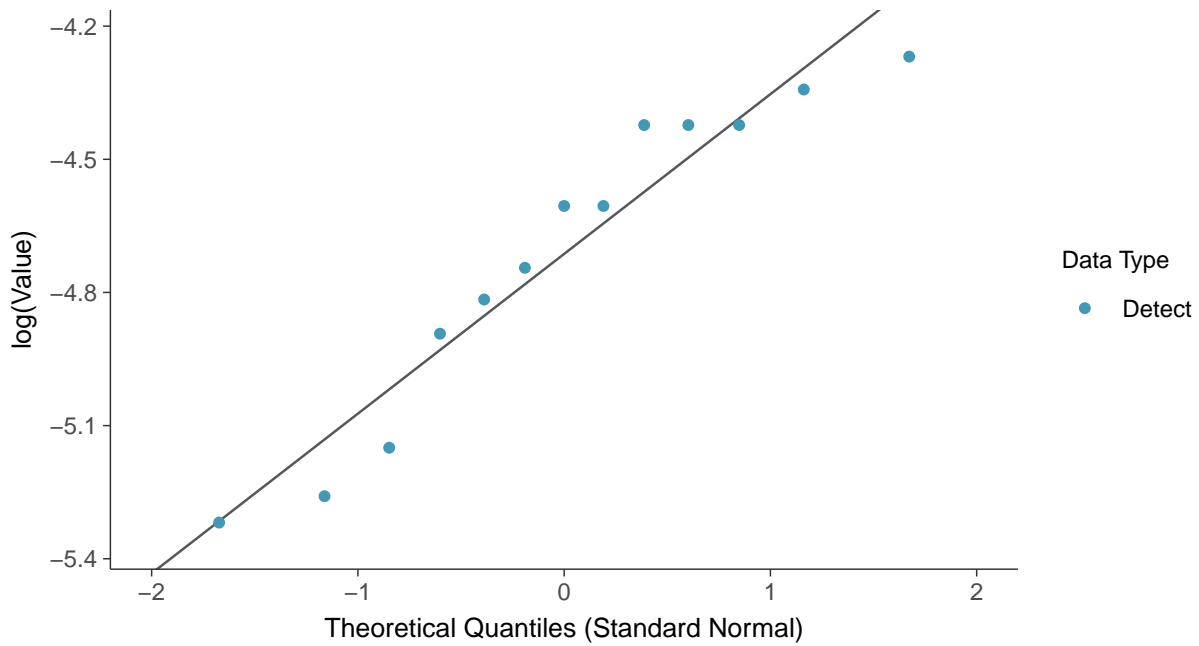
Normal Q-Q plot

Chromium, Total, MW-30 (mg/L)



Lognormal Q-Q plot

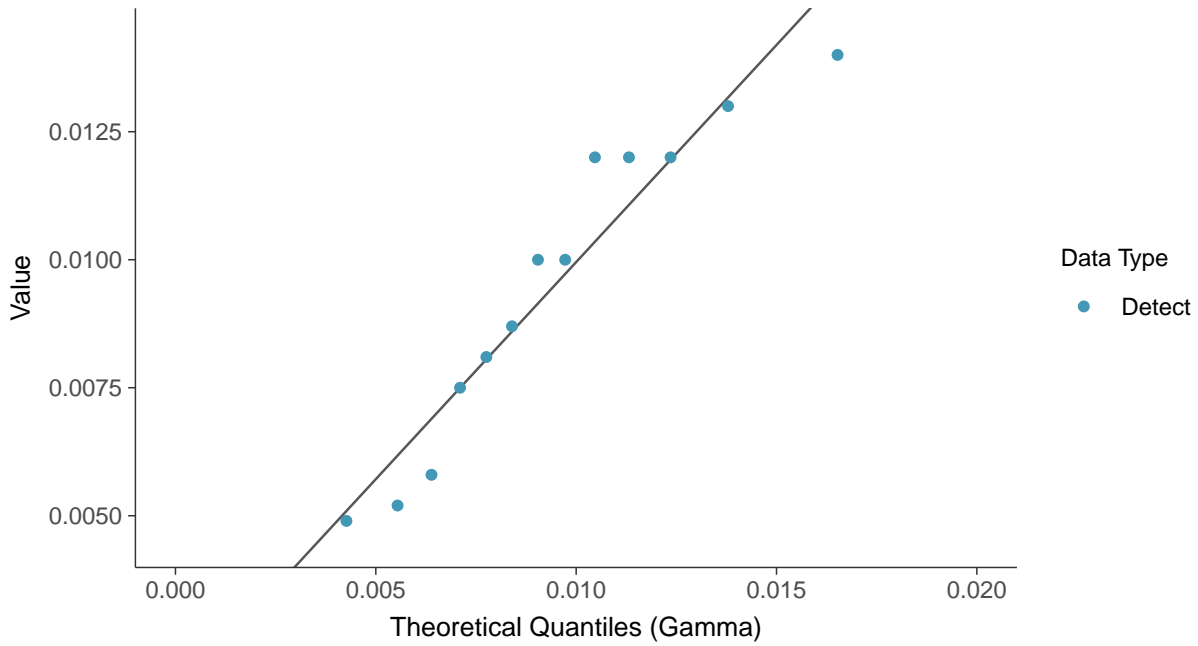
Chromium, Total, MW-30 (mg/L)





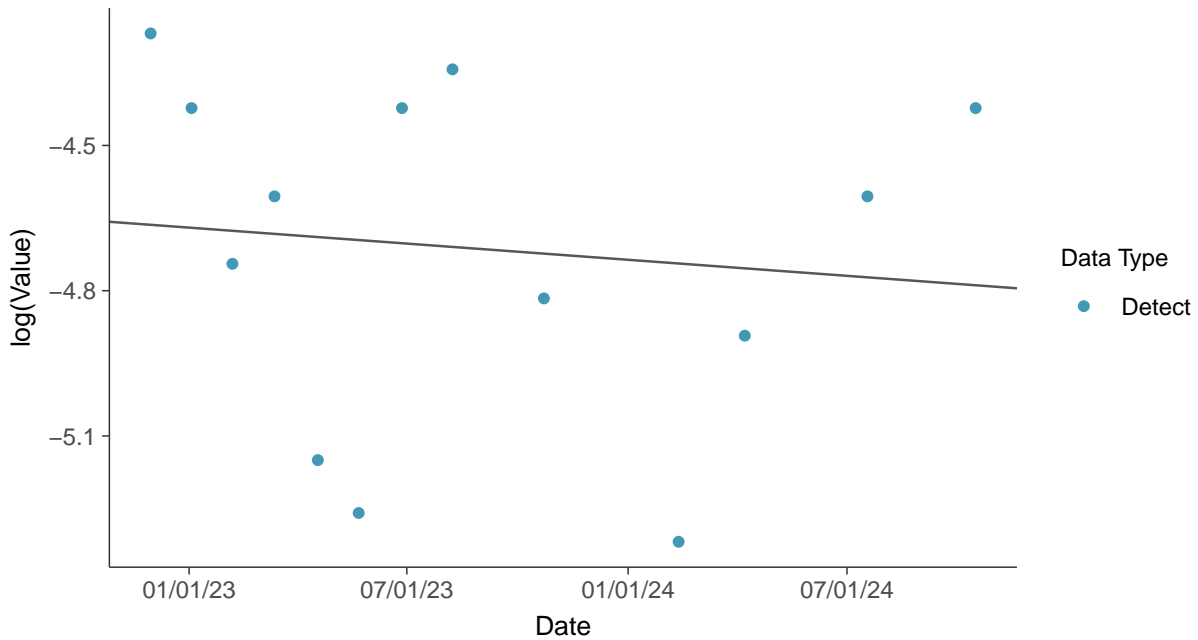
Gamma Q-Q plot

Chromium, Total, MW-30 (mg/L)



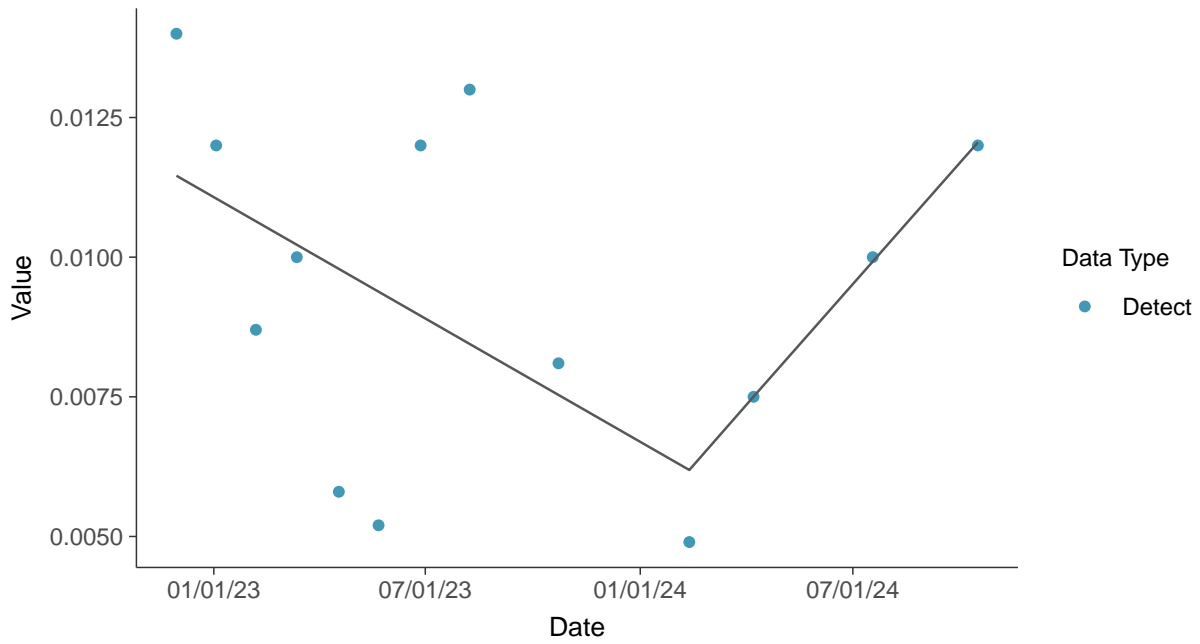
Trend Regression: Lognormal MLE

Chromium, Total, MW-30 (mg/L)





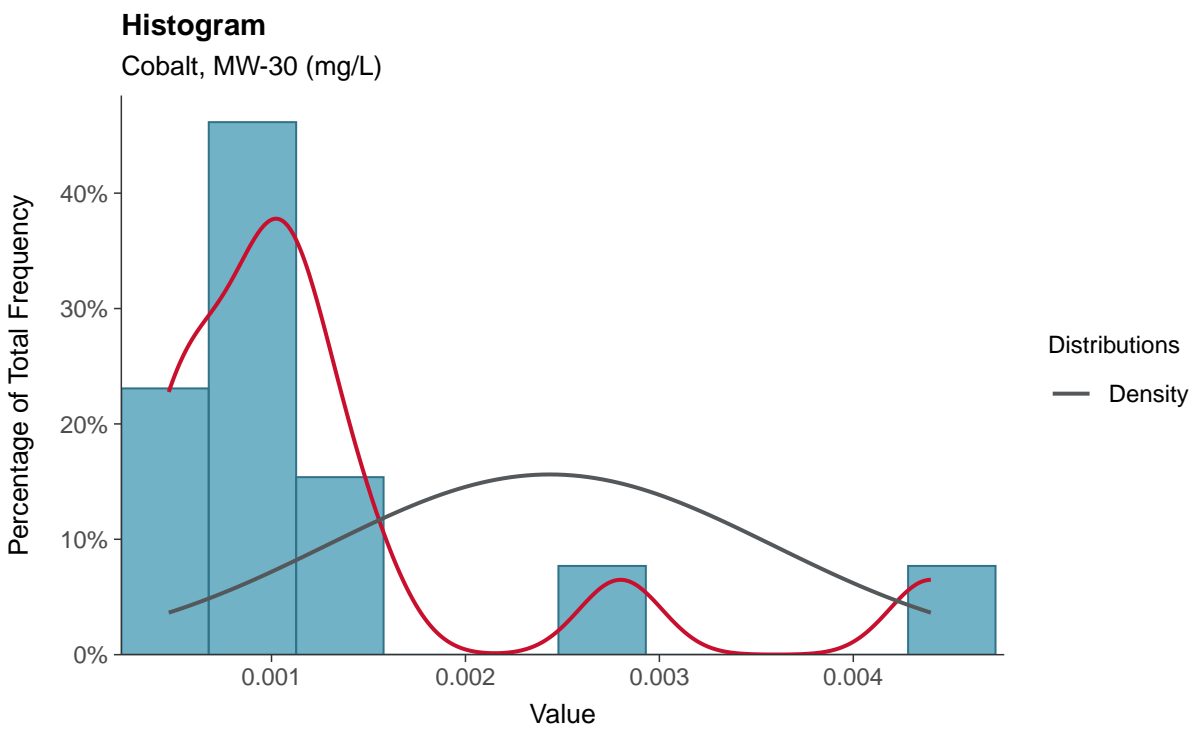
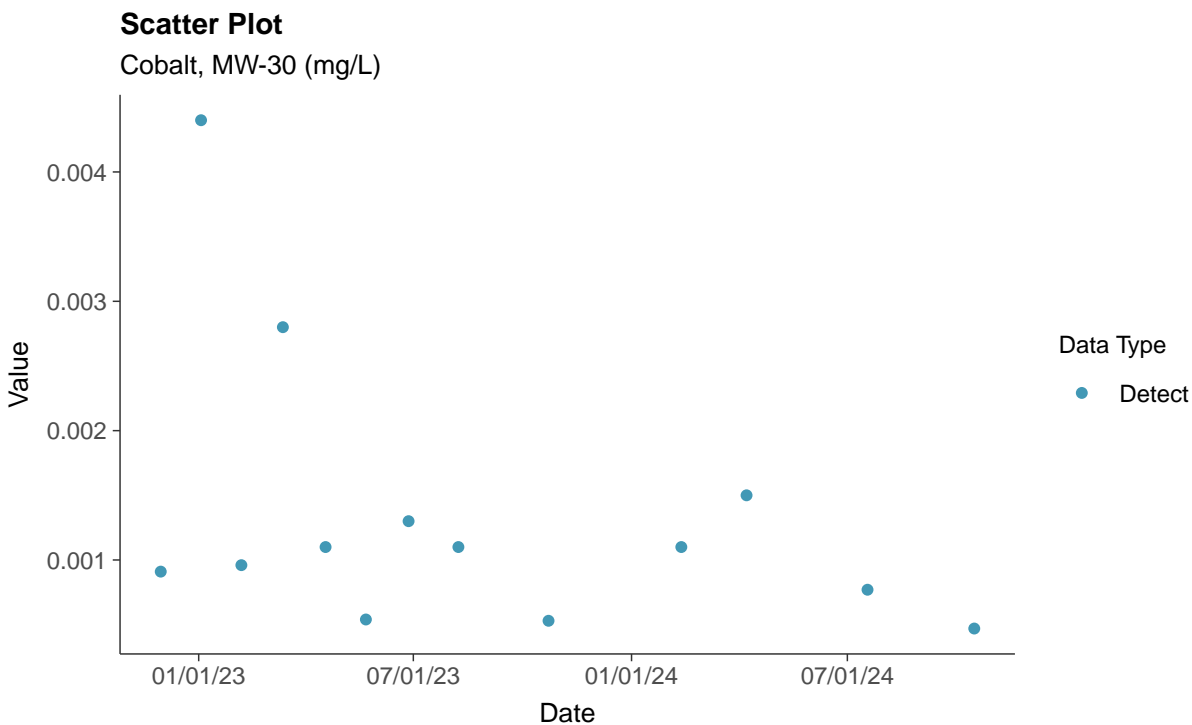
Trend Regression: Piecewise Linear-Linear
Chromium, Total, MW-30 (mg/L)





Appendix IV: Cobalt, MW-30

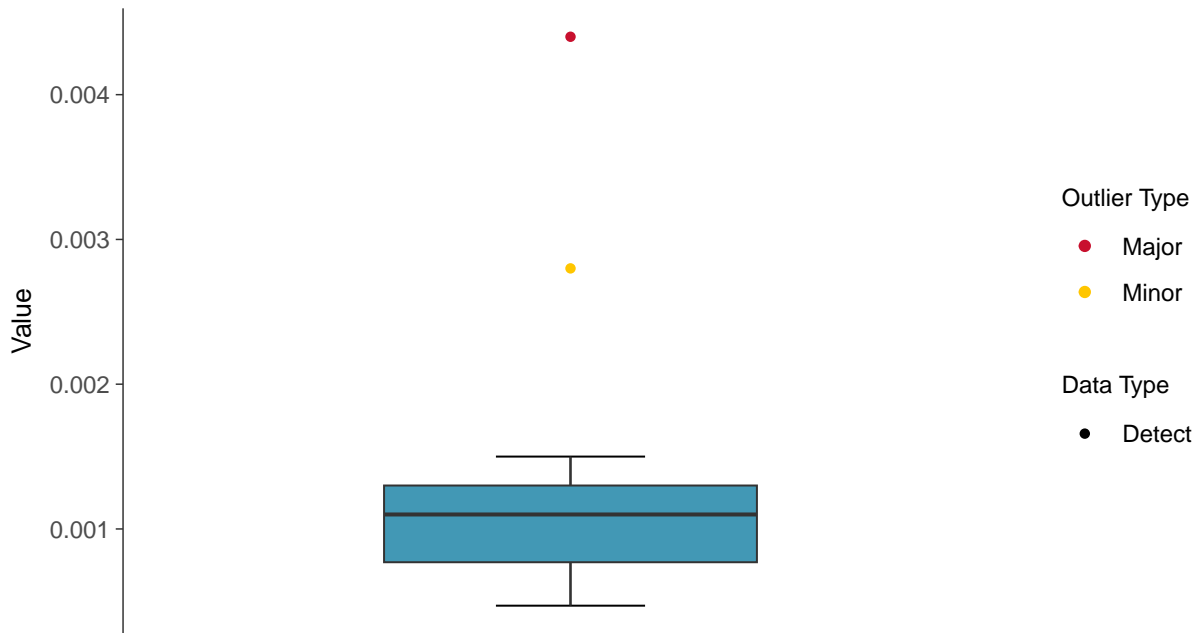
ID: 1_40_1_5_110





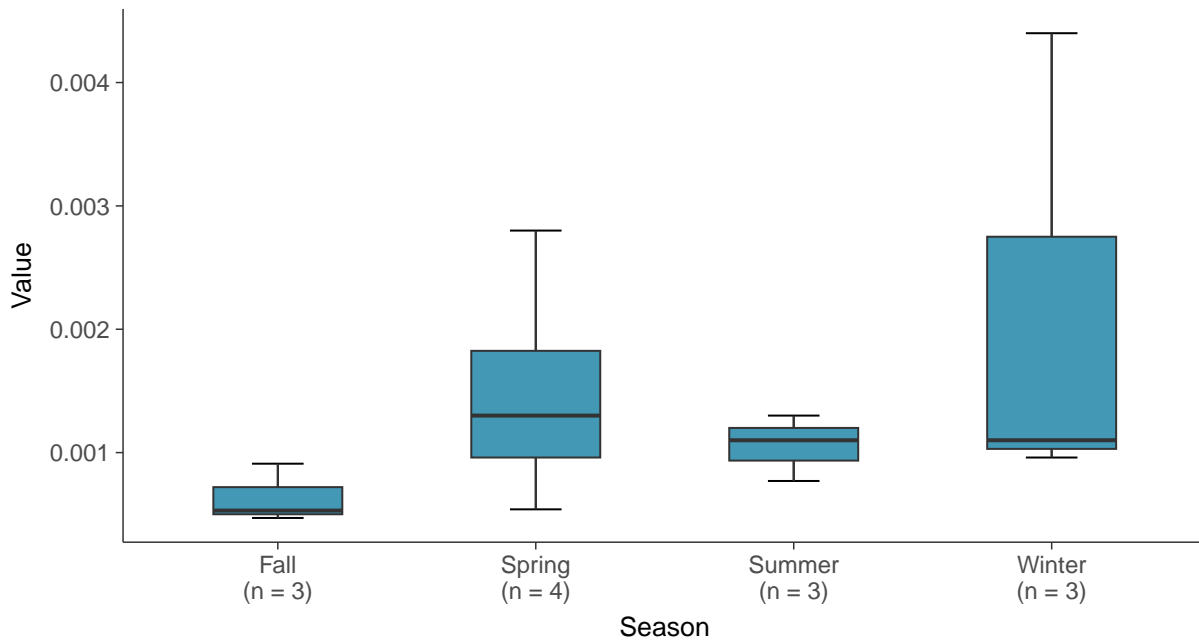
Boxplot

Cobalt, MW-30 (mg/L)



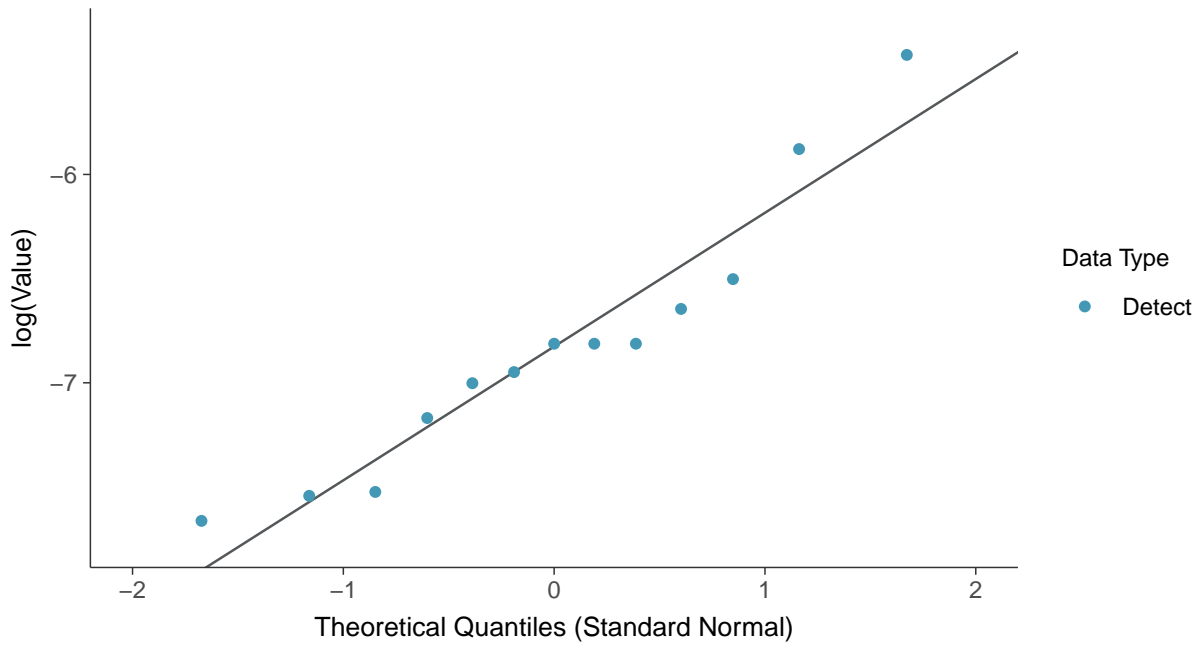
Boxplot by Season

Cobalt, MW-30 (mg/L)

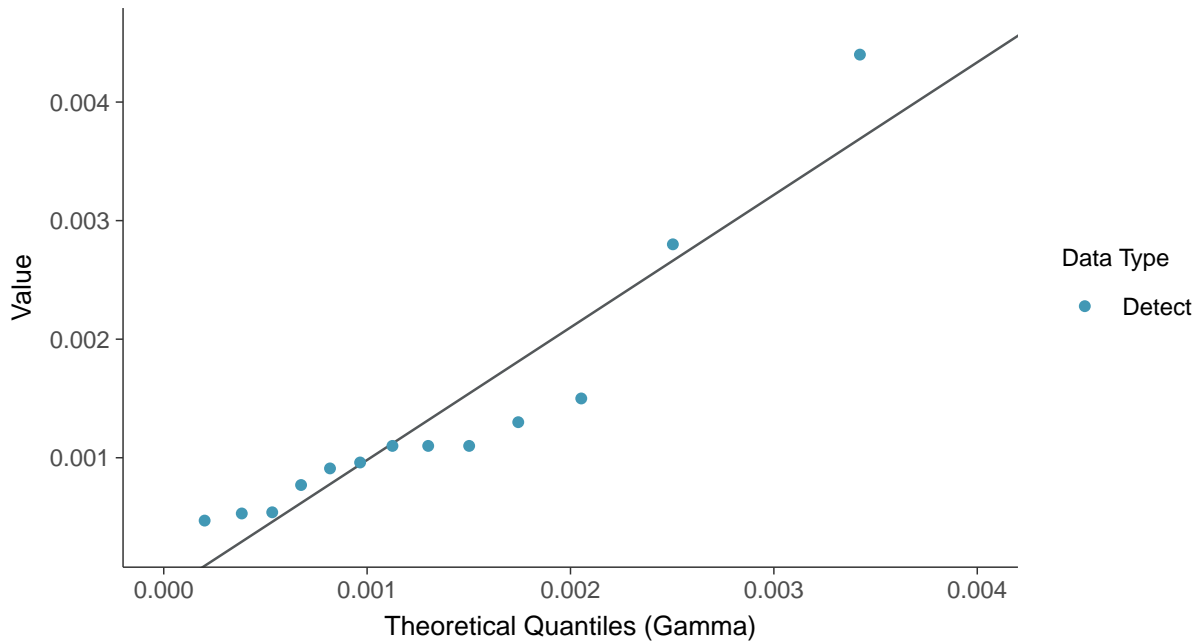




Lognormal Q-Q plot
Cobalt, MW-30 (mg/L)



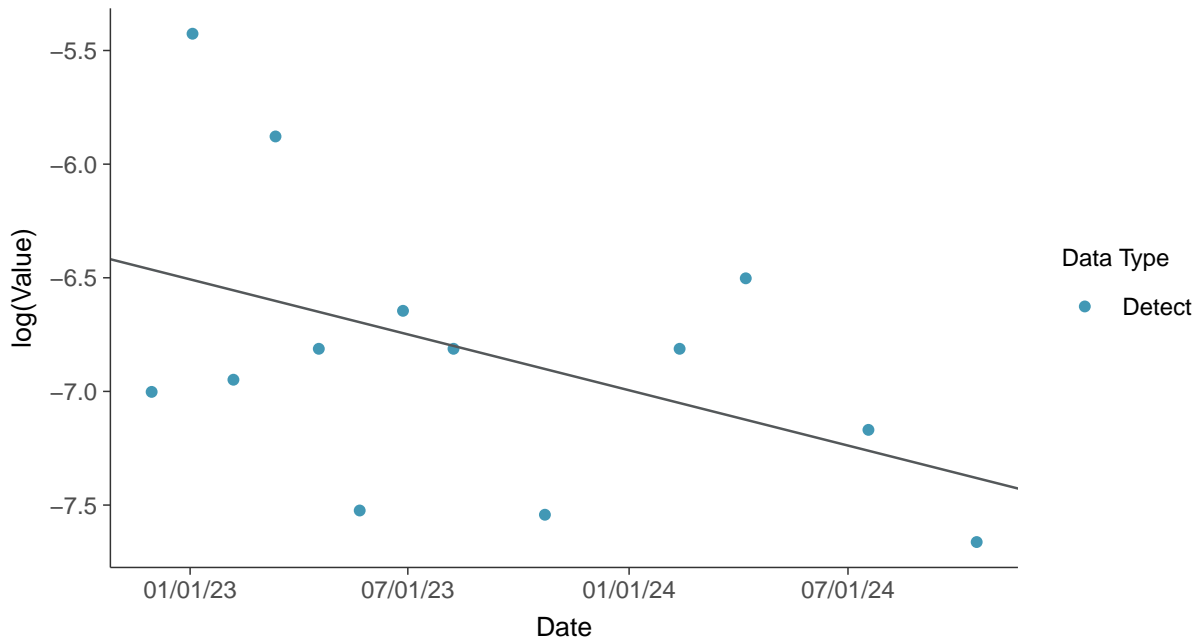
Gamma Q-Q plot
Cobalt, MW-30 (mg/L)





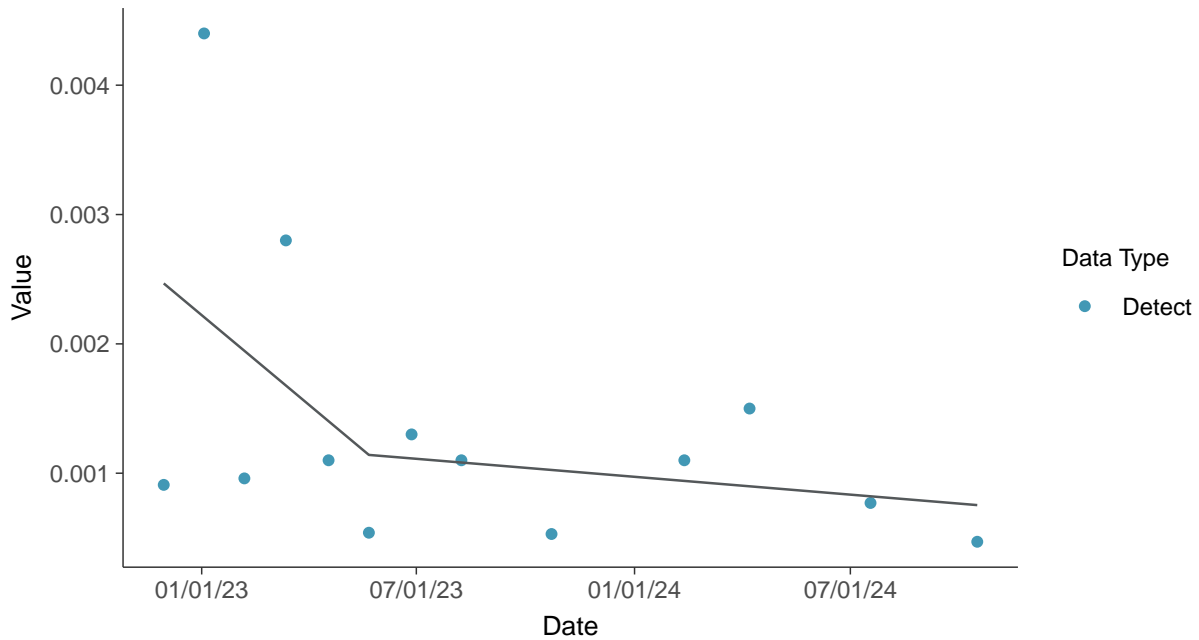
Trend Regression: Lognormal MLE

Cobalt, MW-30 (mg/L)



Trend Regression: Piecewise Linear-Linear

Cobalt, MW-30 (mg/L)



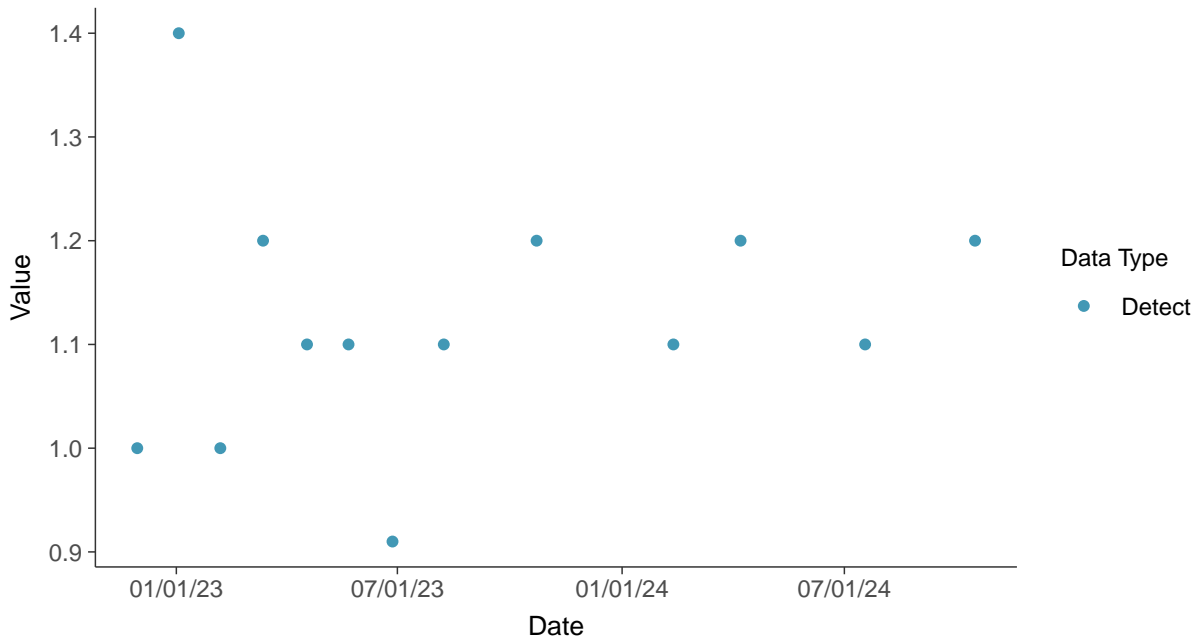


Appendix IV: Fluoride (App IV), MW-30

ID: 1_40_1_5_113

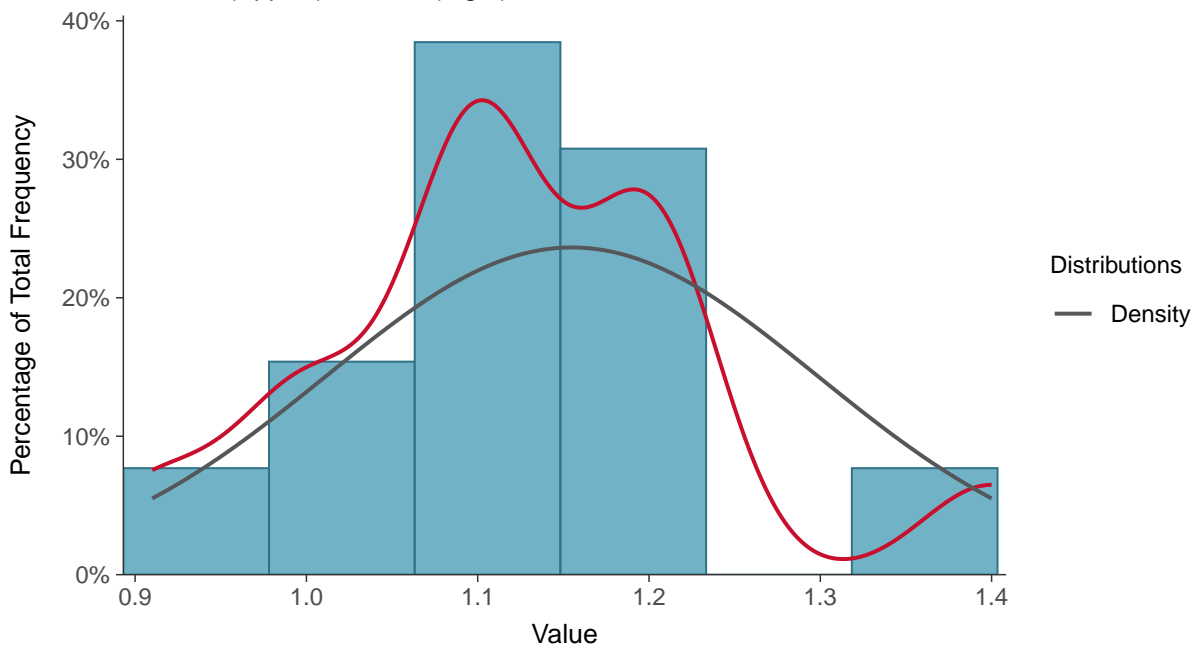
Scatter Plot

Fluoride (App IV), MW-30 (mg/L)



Histogram

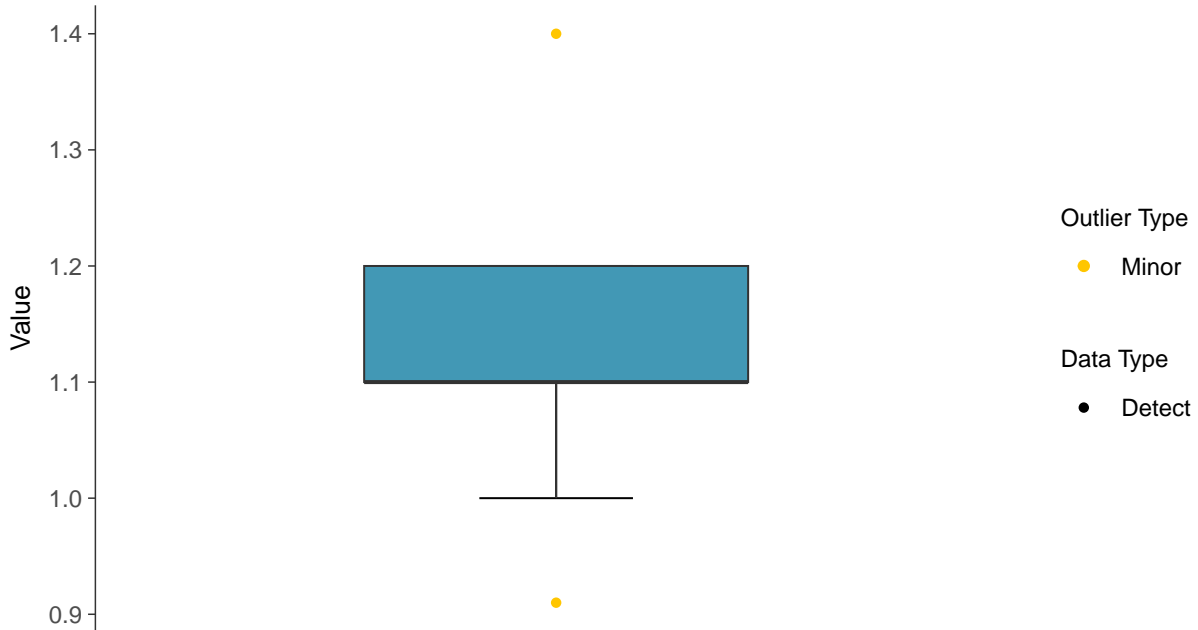
Fluoride (App IV), MW-30 (mg/L)





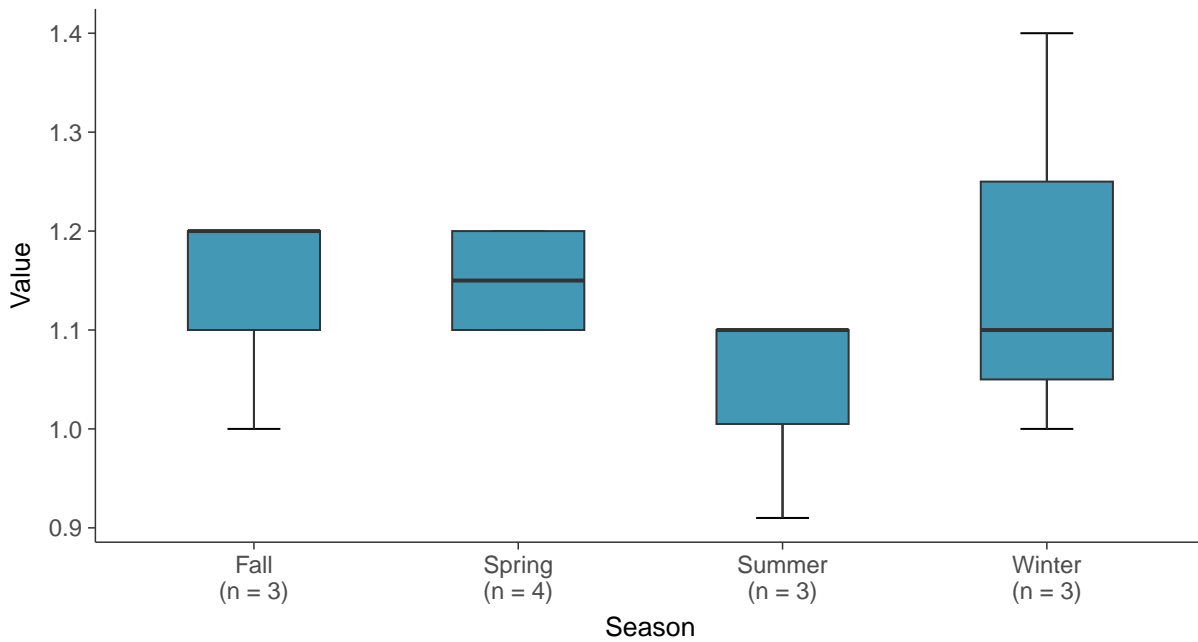
Boxplot

Fluoride (App IV), MW-30 (mg/L)



Boxplot by Season

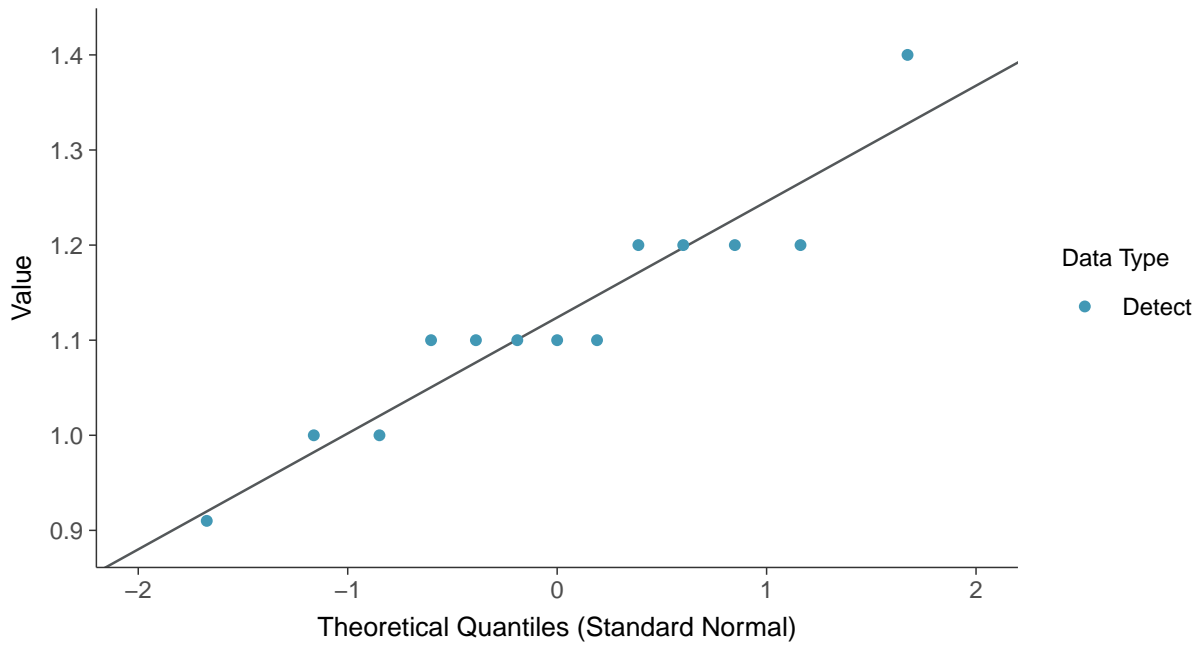
Fluoride (App IV), MW-30 (mg/L)





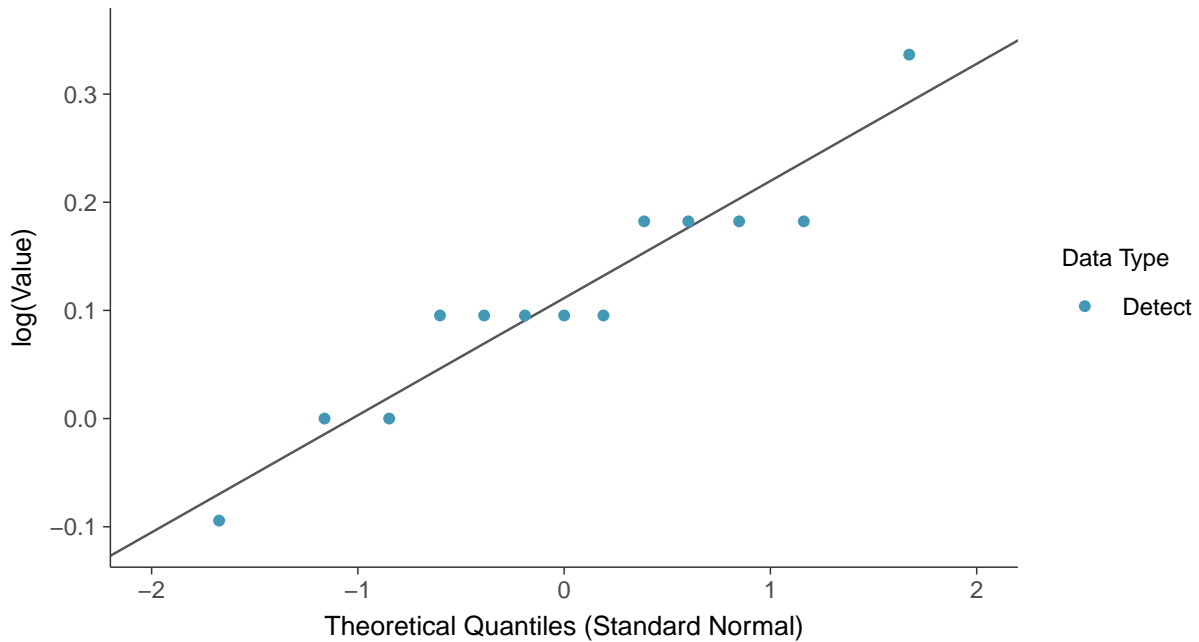
Normal Q-Q plot

Fluoride (App IV), MW-30 (mg/L)



Lognormal Q-Q plot

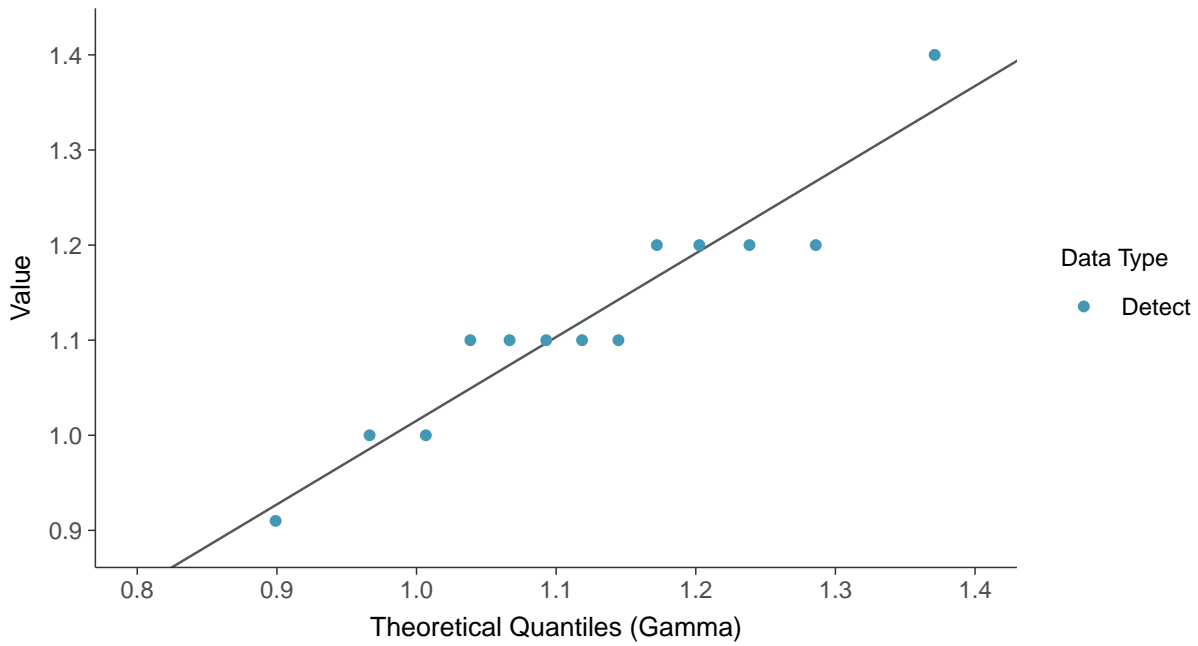
Fluoride (App IV), MW-30 (mg/L)





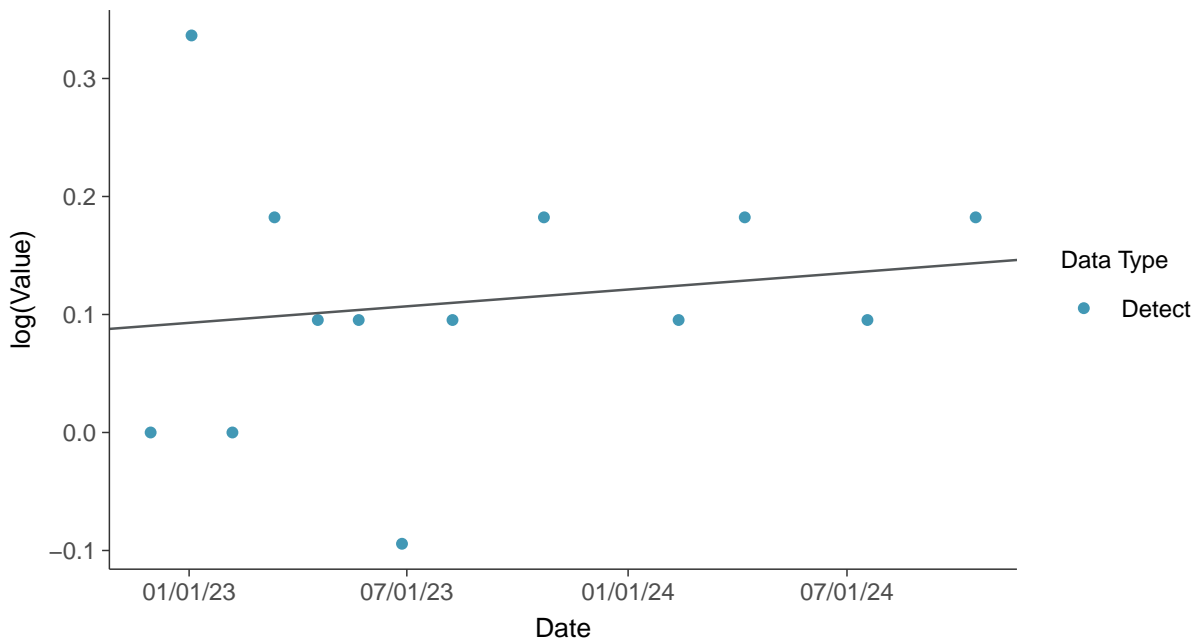
Gamma Q-Q plot

Fluoride (App IV), MW-30 (mg/L)



Trend Regression: Lognormal MLE

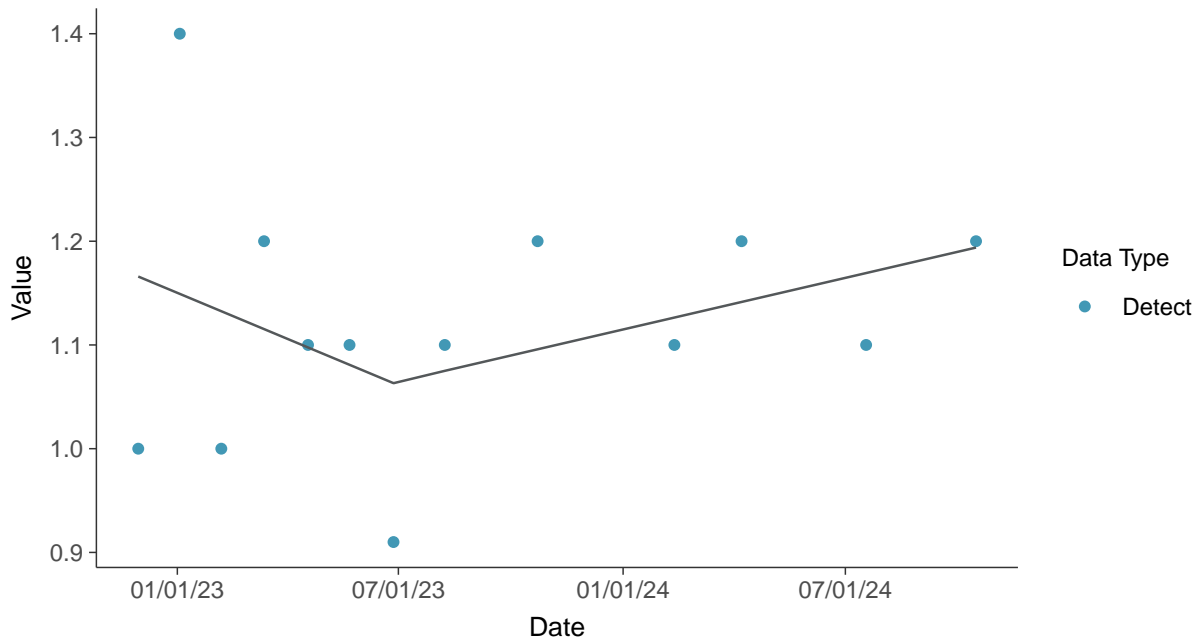
Fluoride (App IV), MW-30 (mg/L)





Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-30 (mg/L)



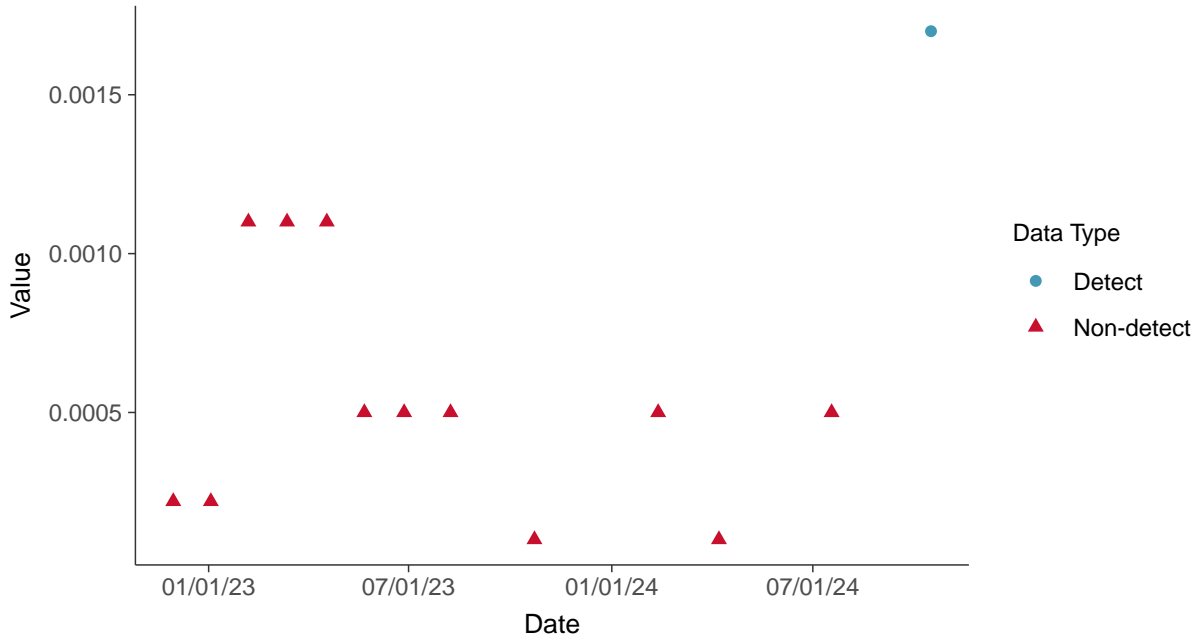


Appendix IV: Lead, MW-30

ID: 1_40_1_5_115

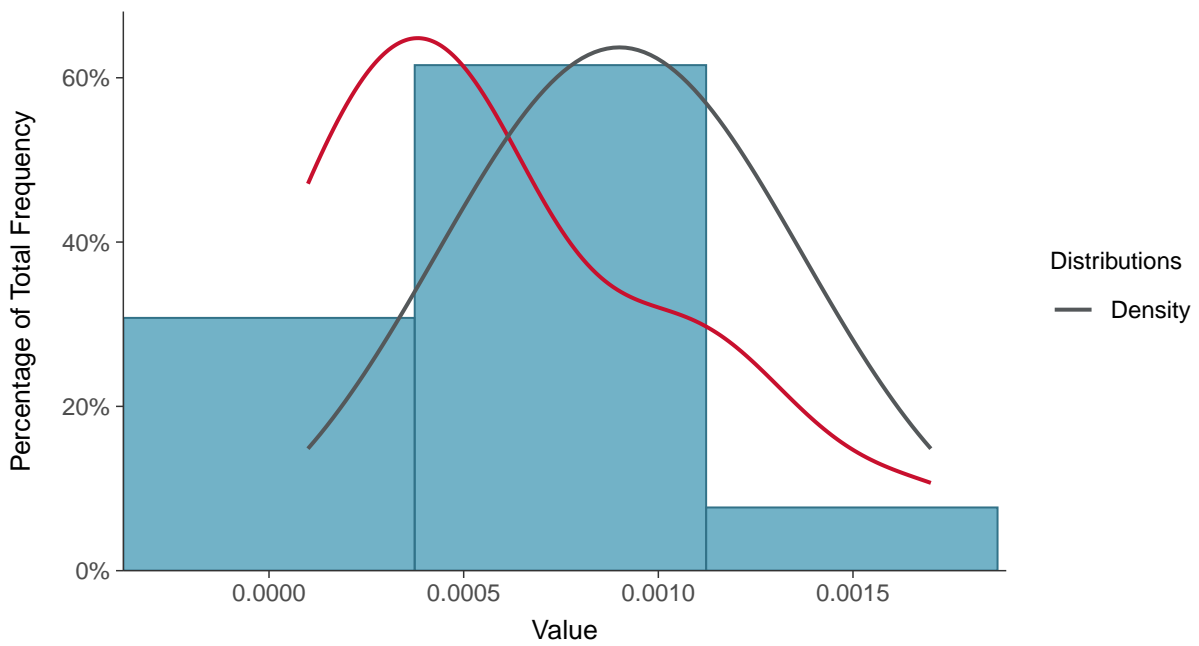
Scatter Plot

Lead, MW-30 (mg/L)



Histogram

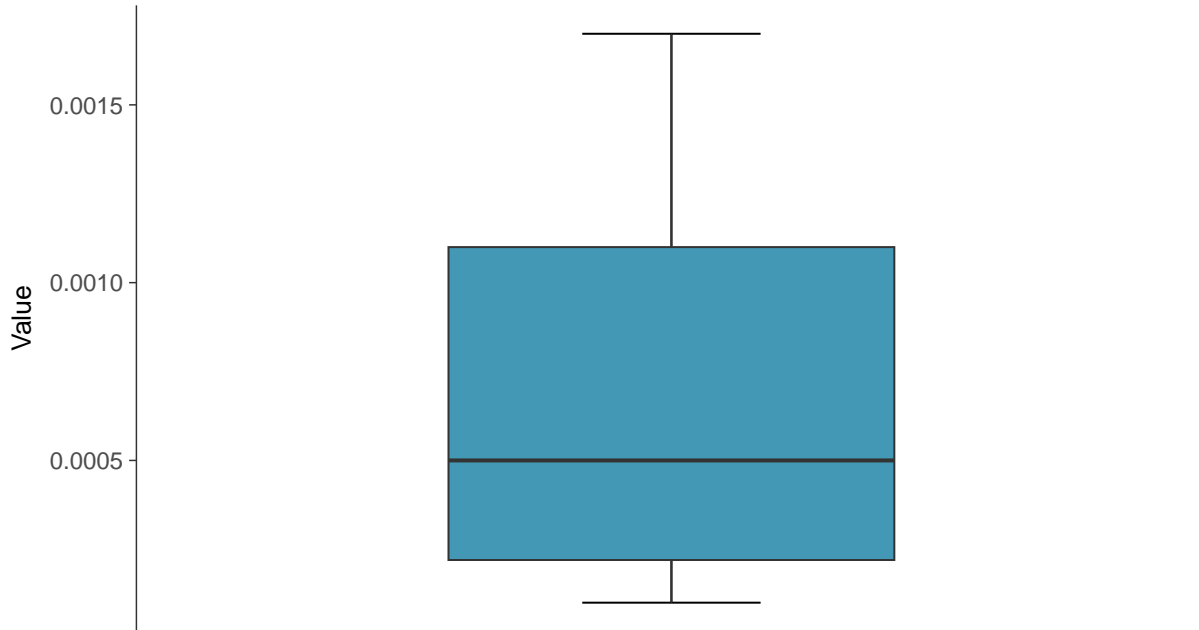
Lead, MW-30 (mg/L)





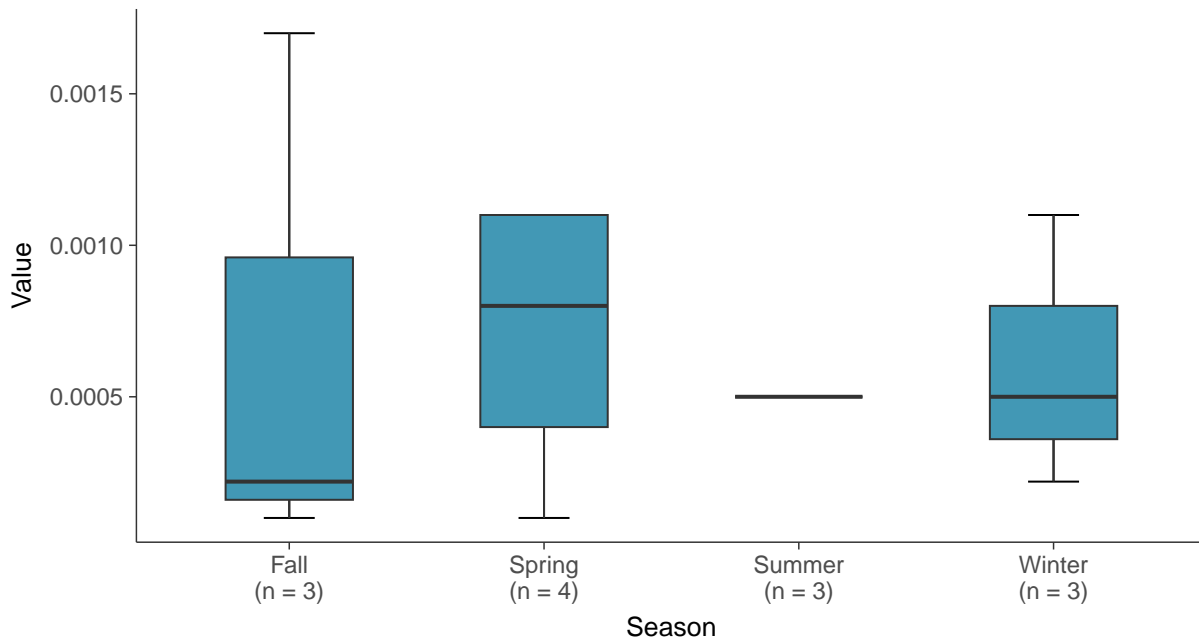
Boxplot

Lead, MW-30 (mg/L)



Boxplot by Season

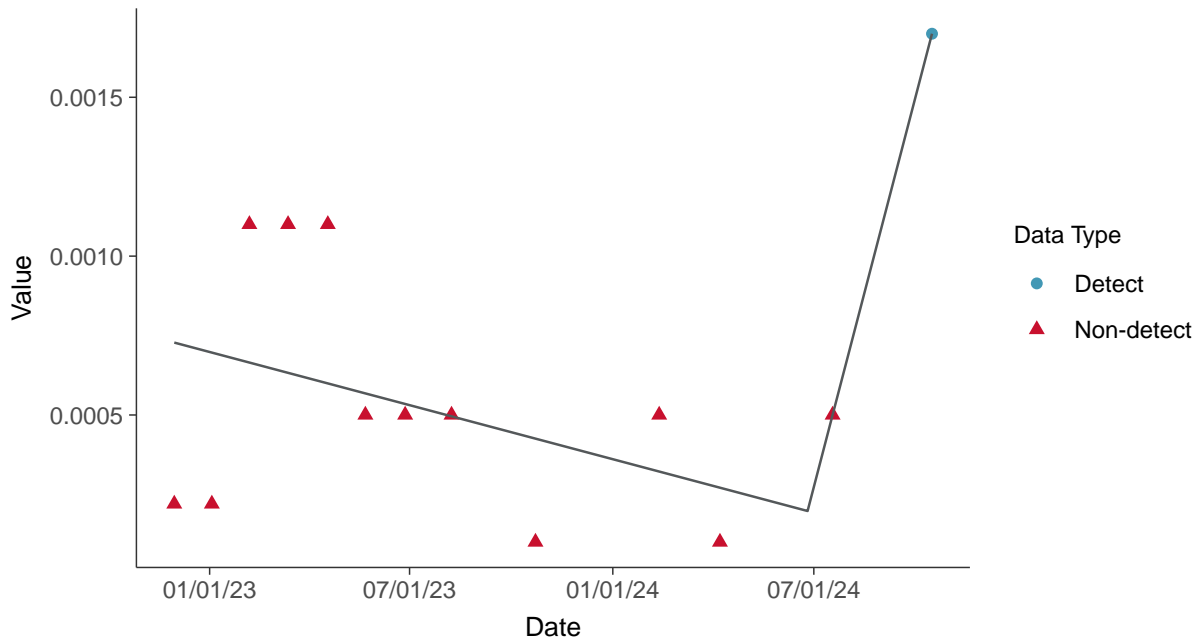
Lead, MW-30 (mg/L)





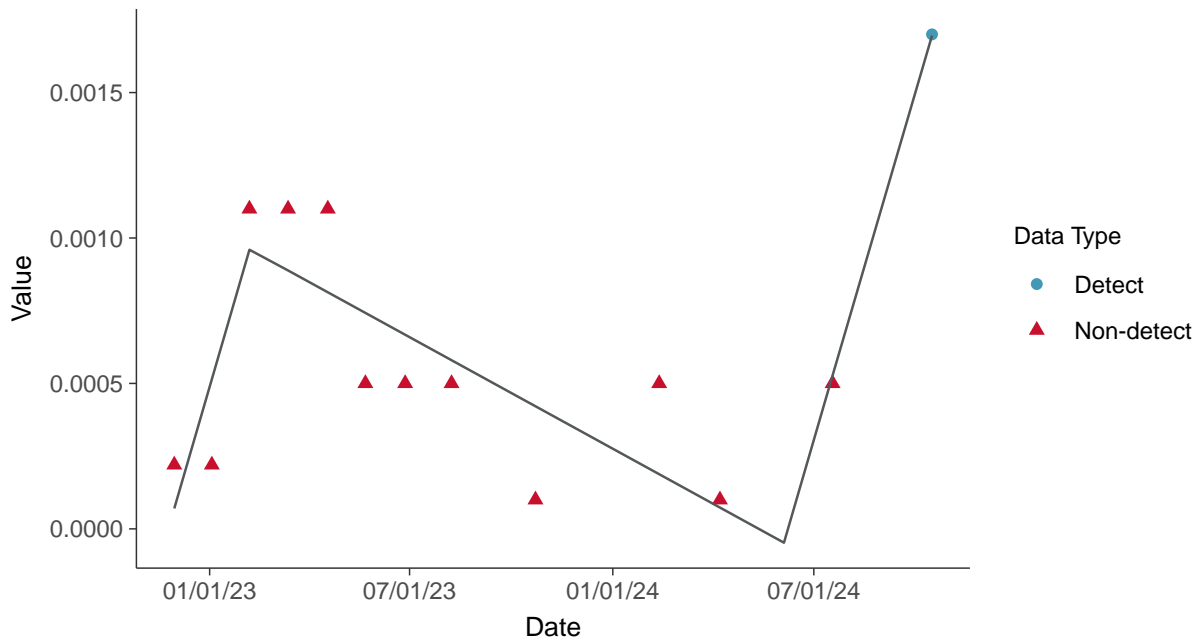
Trend Regression: Piecewise Linear-Linear

Lead, MW-30 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

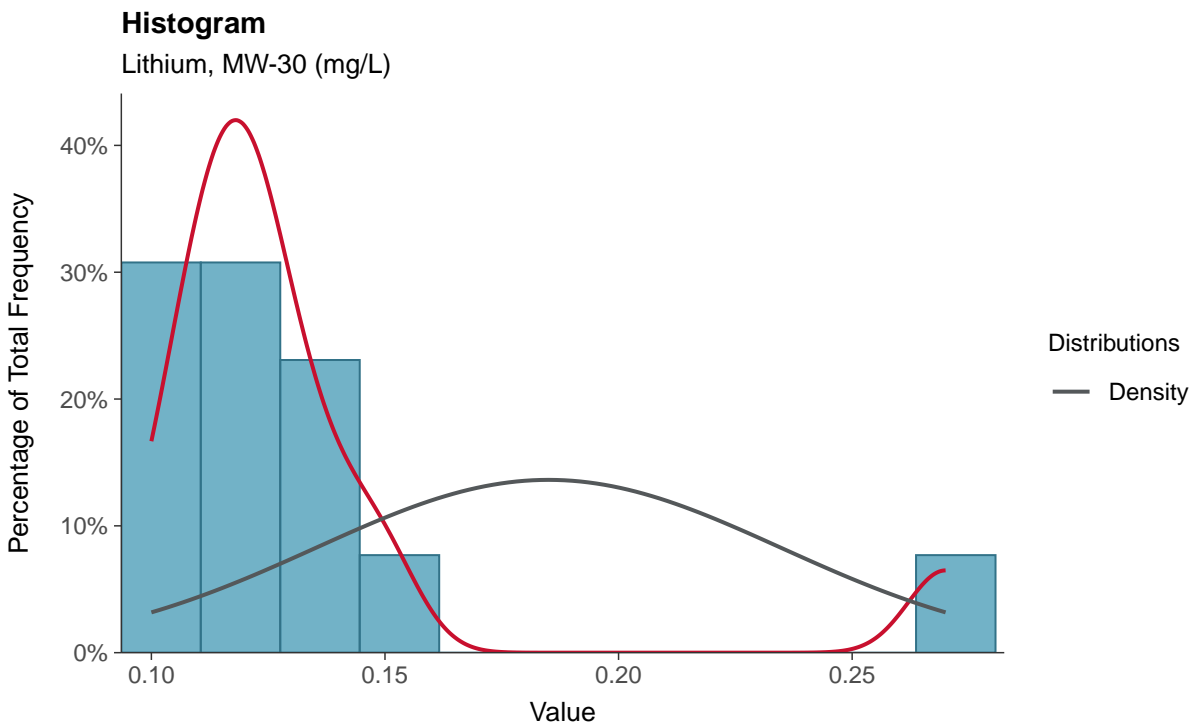
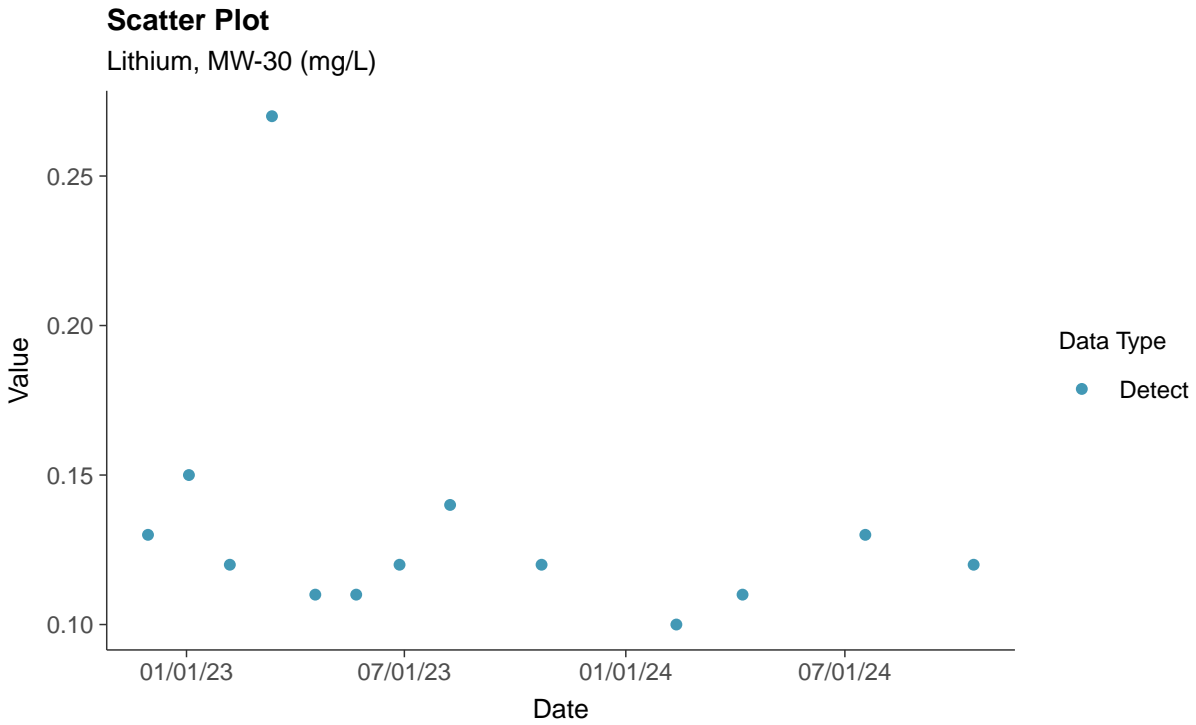
Lead, MW-30 (mg/L)





Appendix IV: Lithium, MW-30

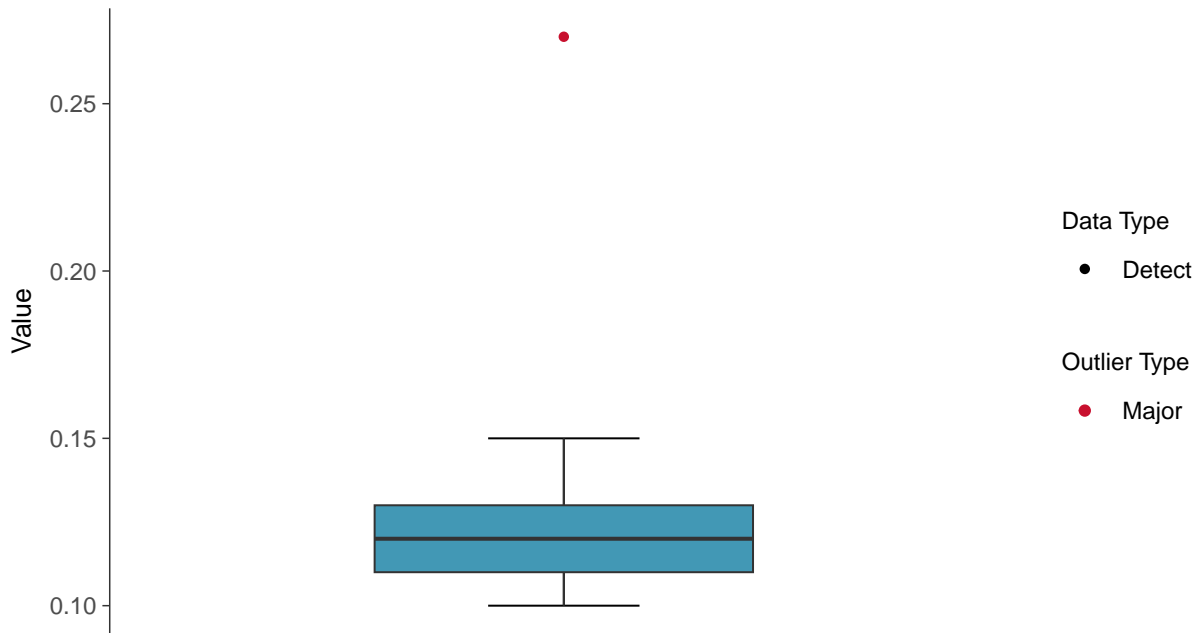
ID: 1_40_1_5_116





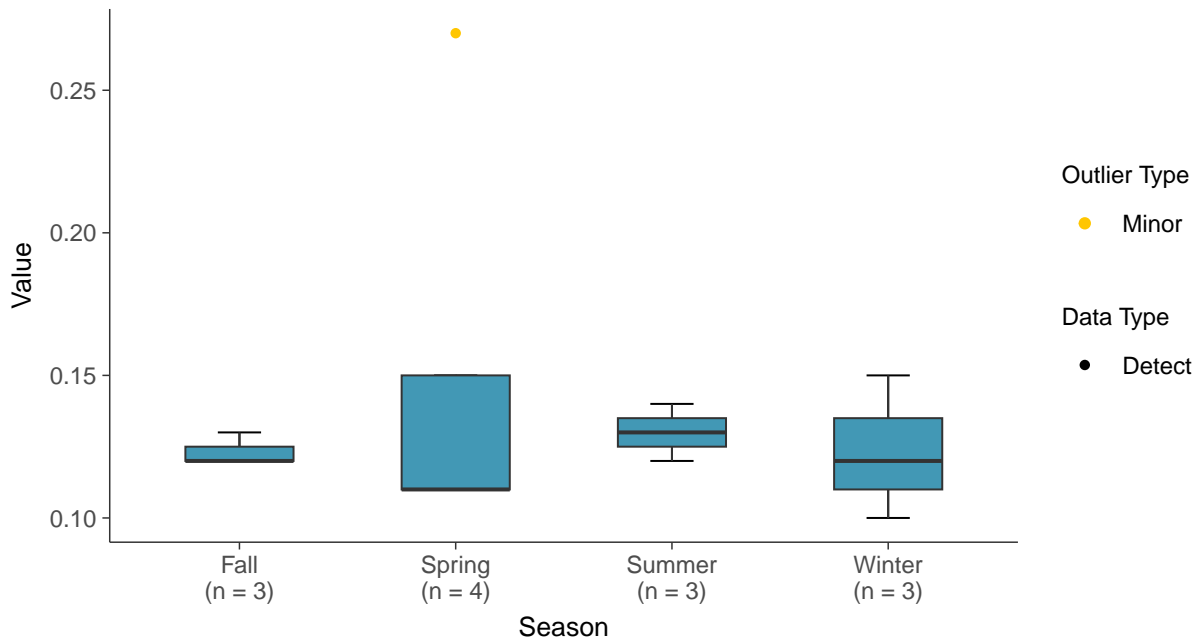
Boxplot

Lithium, MW-30 (mg/L)



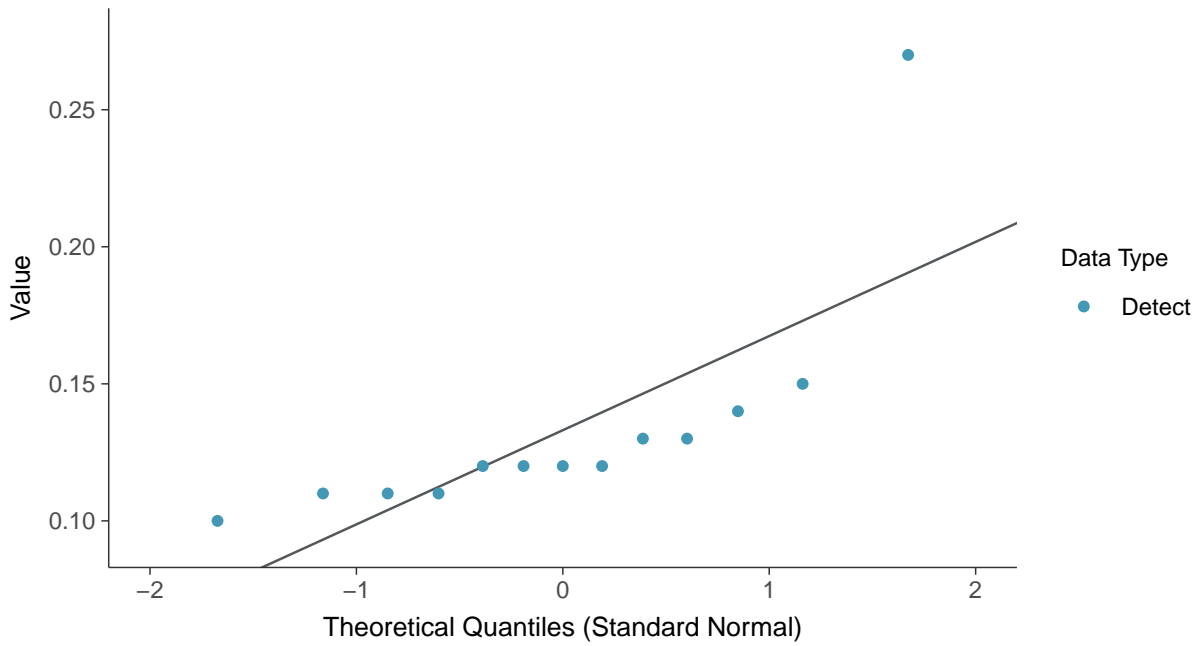
Boxplot by Season

Lithium, MW-30 (mg/L)

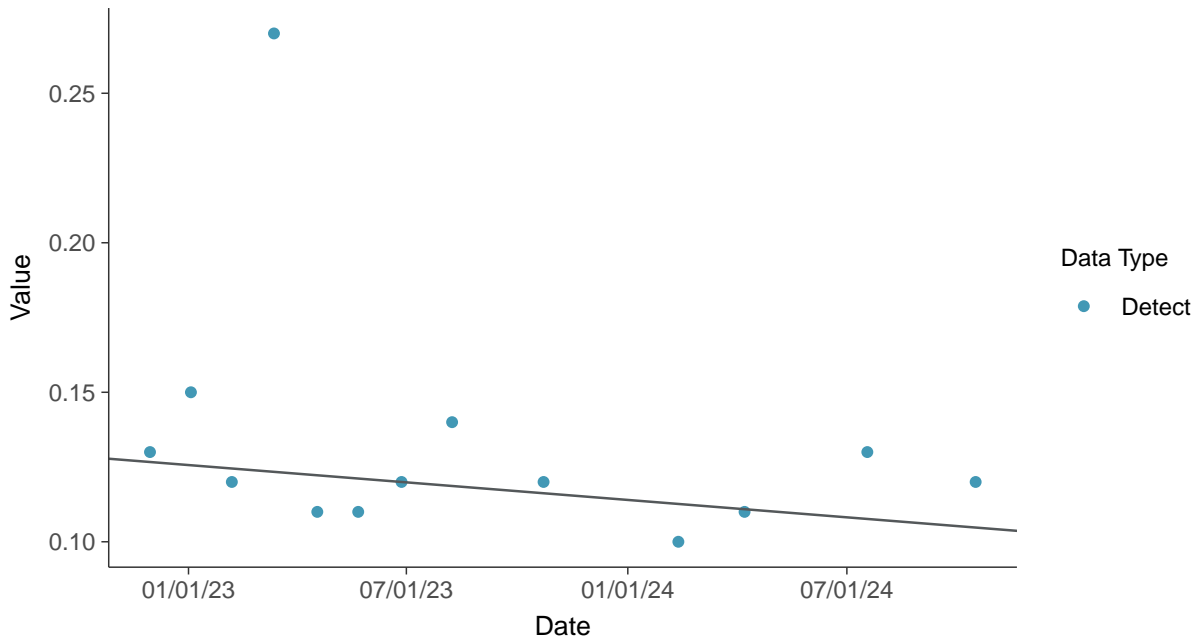




Normal Q-Q plot
Lithium, MW-30 (mg/L)



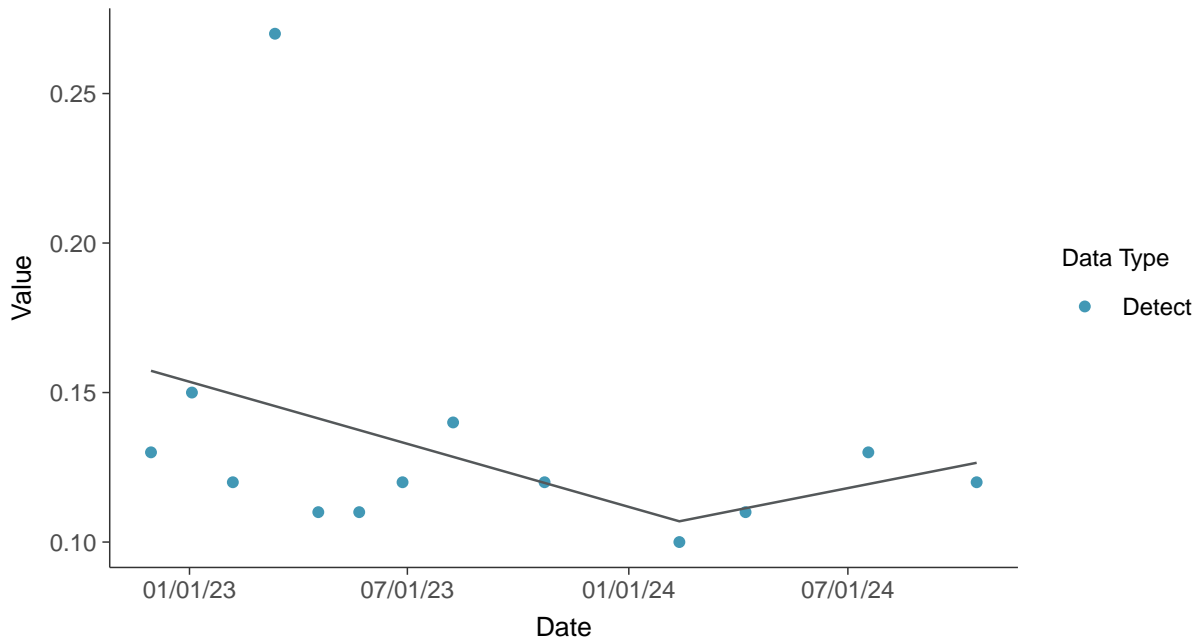
Trend Regression: Mann-Kendall/Theil-Sen Estimate
Lithium, MW-30 (mg/L)





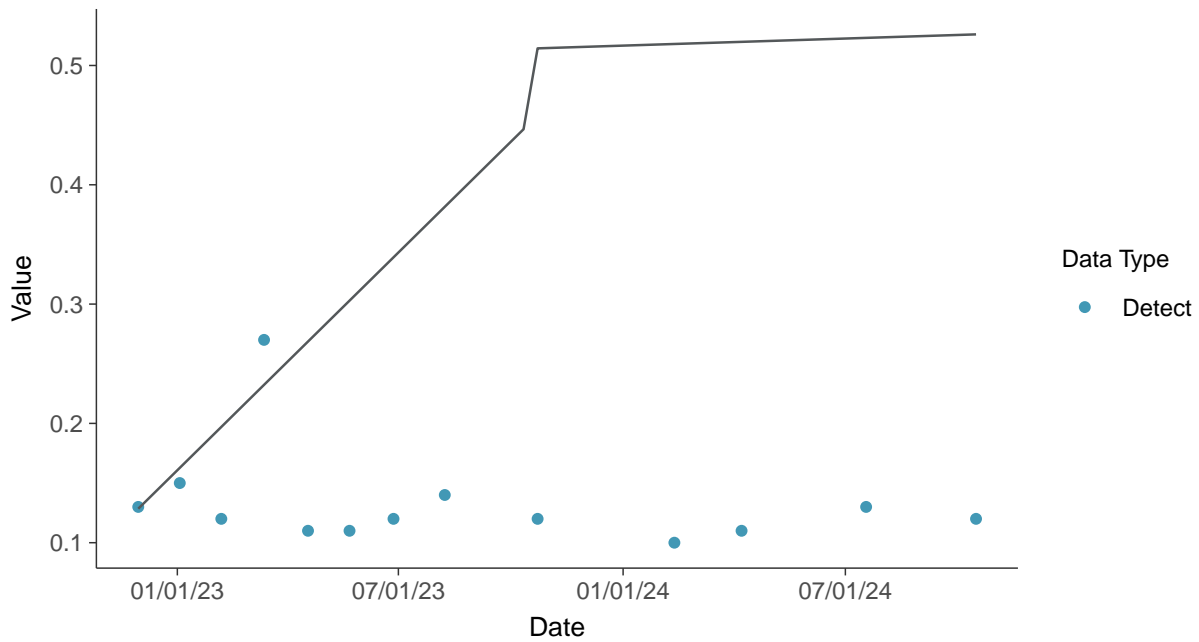
Trend Regression: Piecewise Linear-Linear

Lithium, MW-30 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

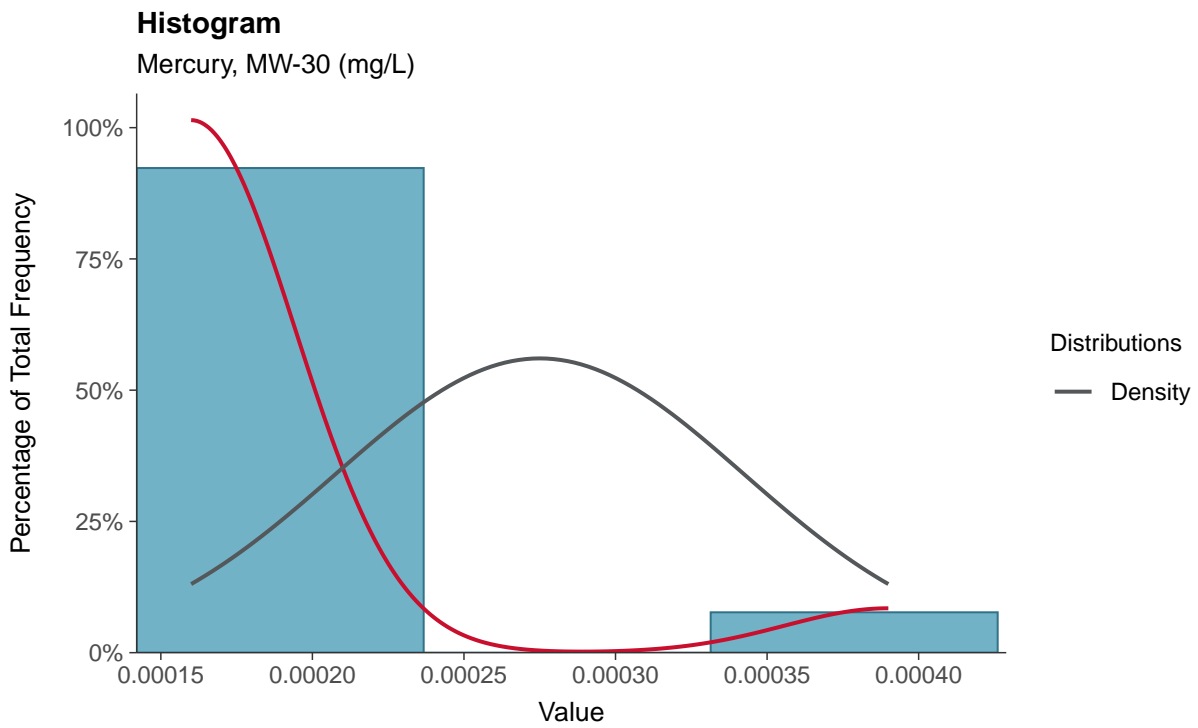
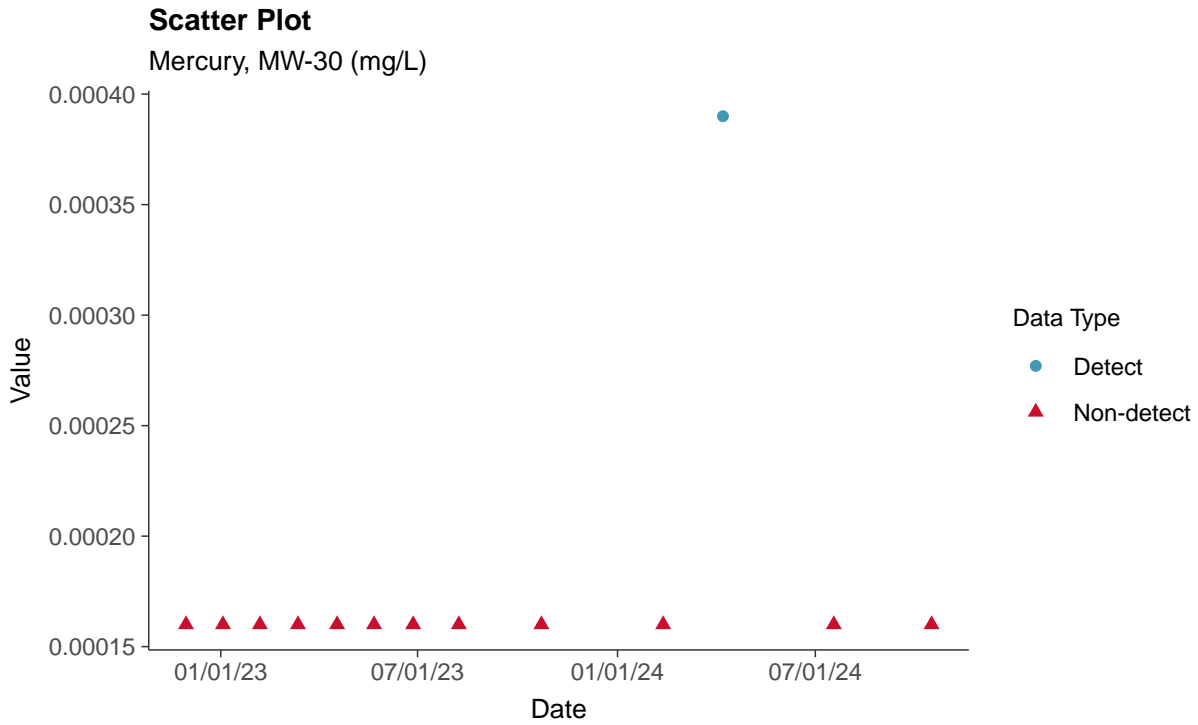
Lithium, MW-30 (mg/L)





Appendix IV: Mercury, MW-30

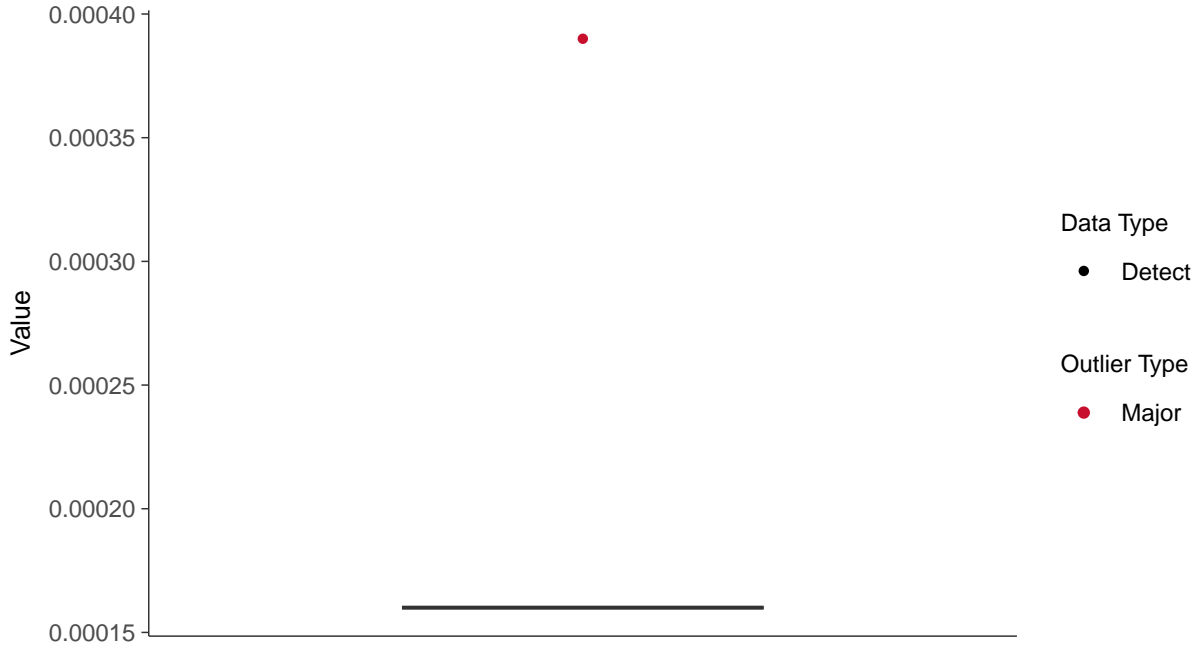
ID: 1_40_1_5_117





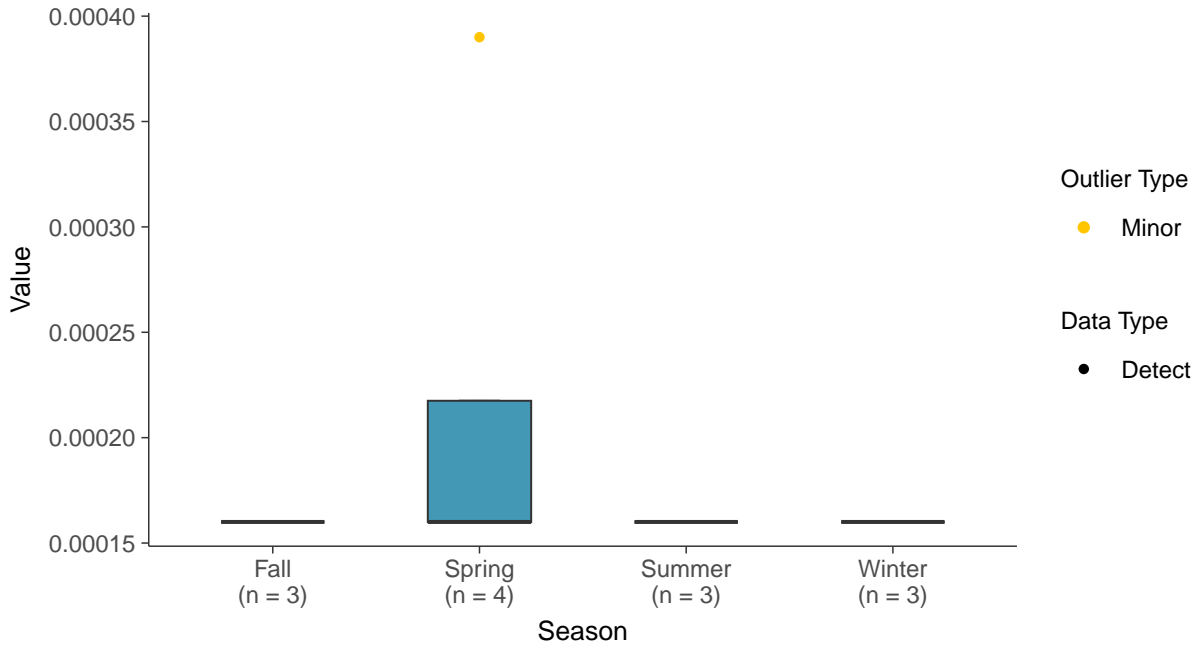
Boxplot

Mercury, MW-30 (mg/L)



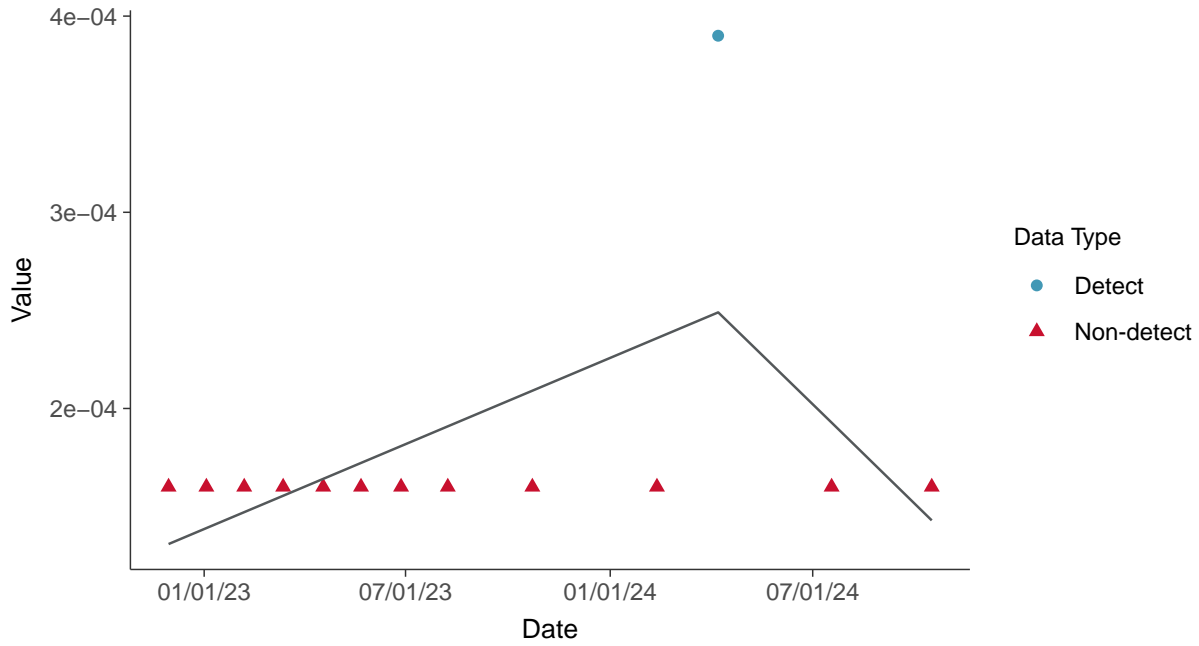
Boxplot by Season

Mercury, MW-30 (mg/L)

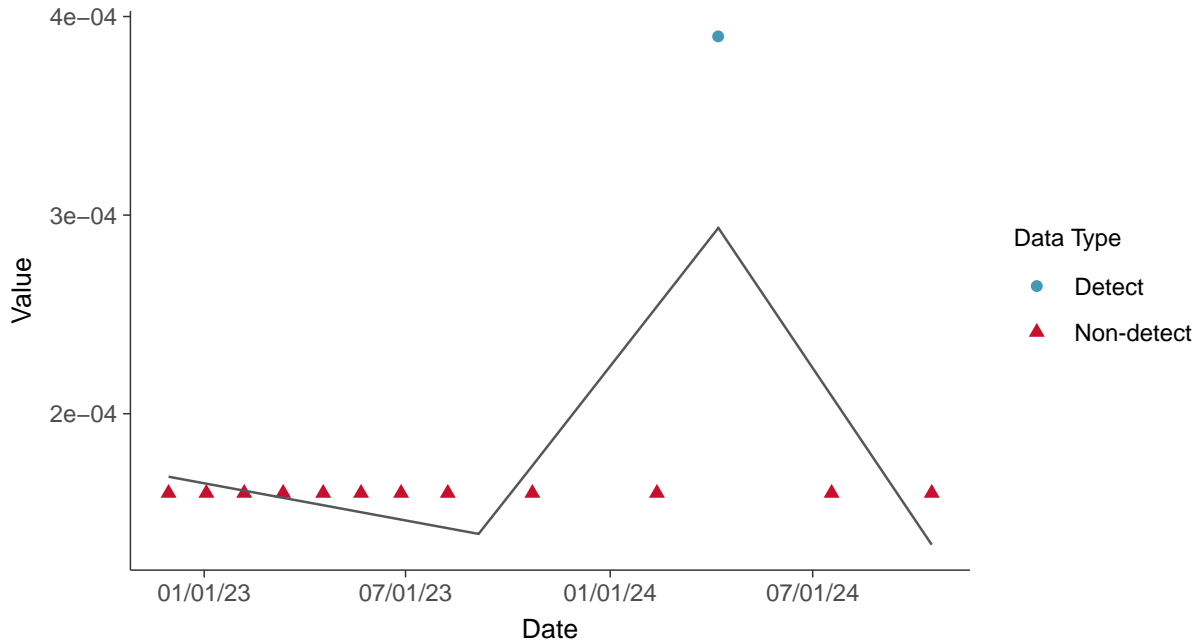




Trend Regression: Piecewise Linear-Linear
Mercury, MW-30 (mg/L)



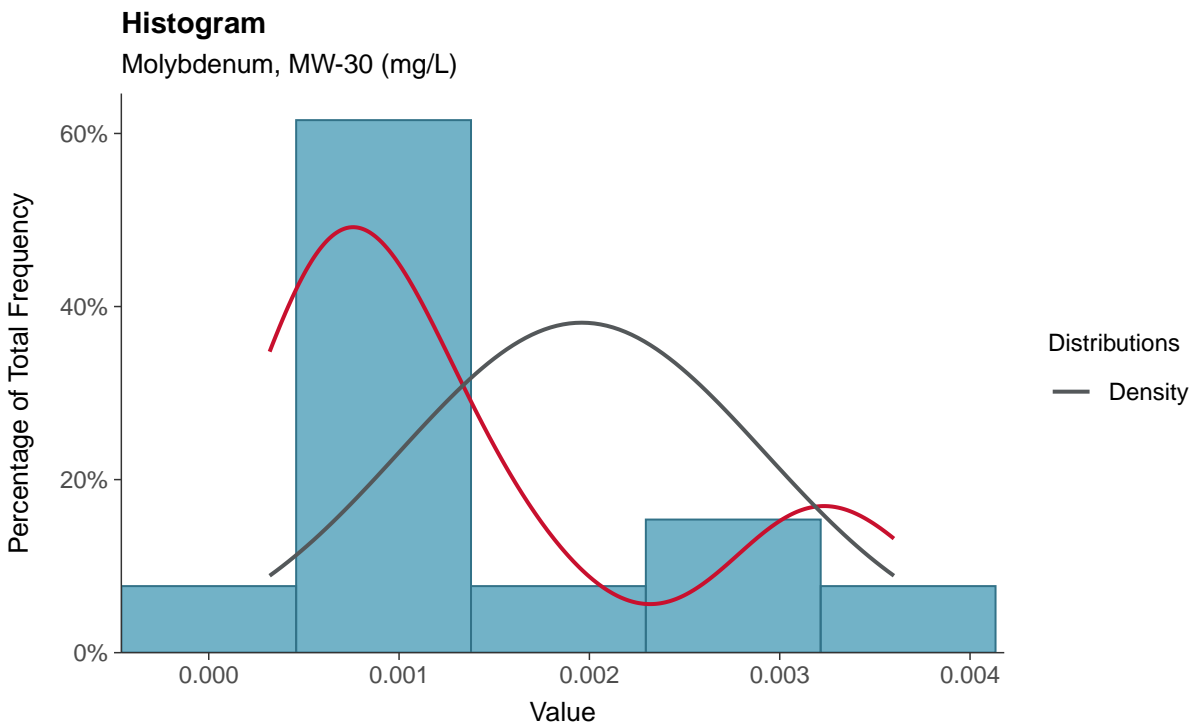
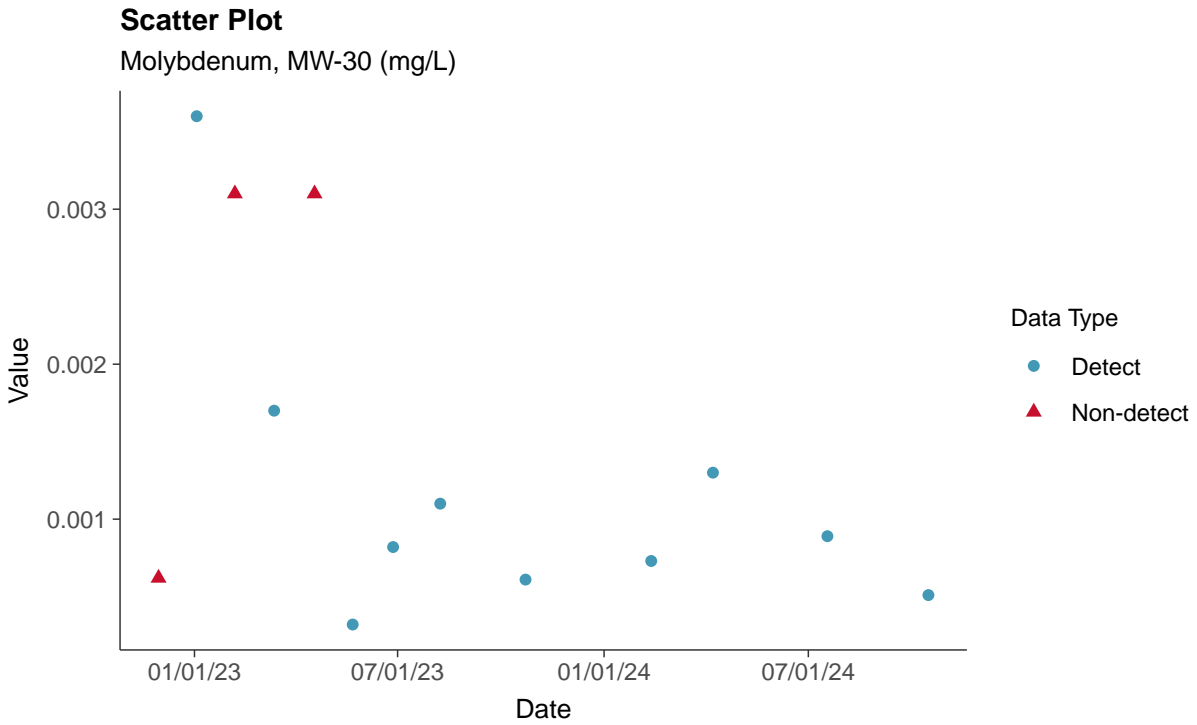
Trend Regression: Piecewise Linear-Linear-Linear
Mercury, MW-30 (mg/L)





Appendix IV: Molybdenum, MW-30

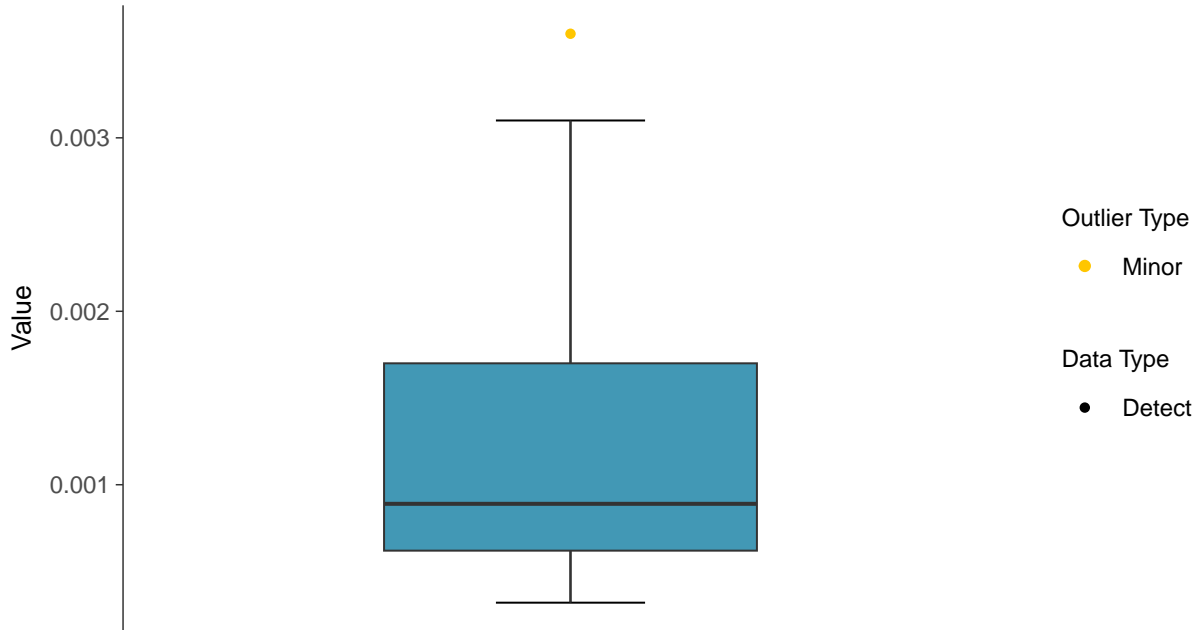
ID: 1_40_1_5_118





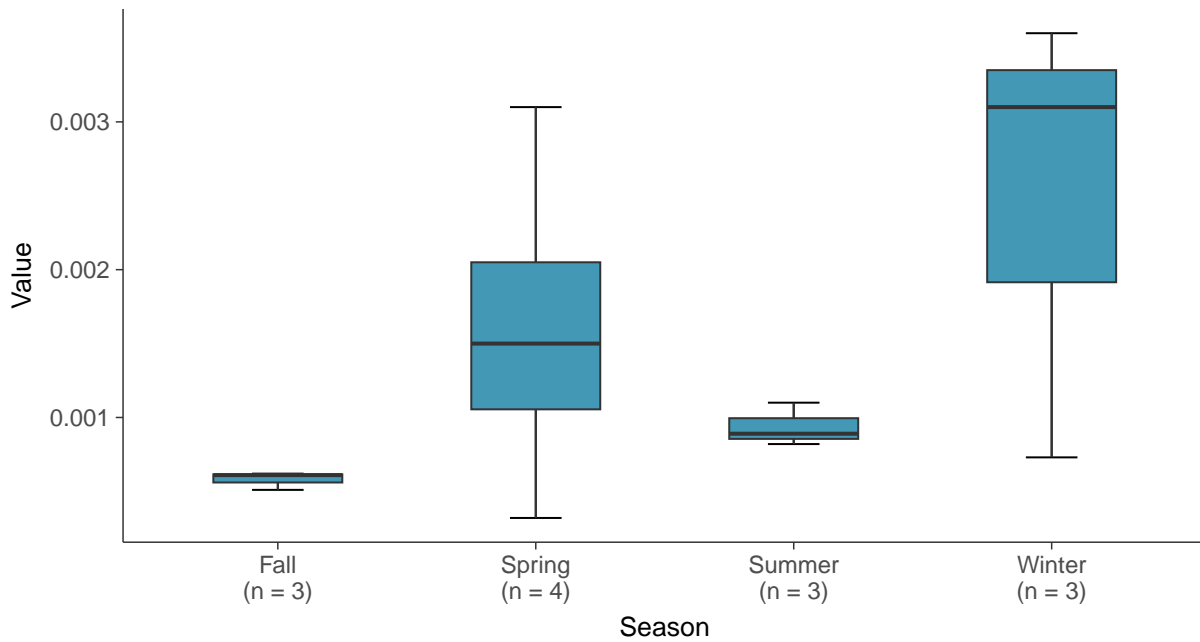
Boxplot

Molybdenum, MW-30 (mg/L)



Boxplot by Season

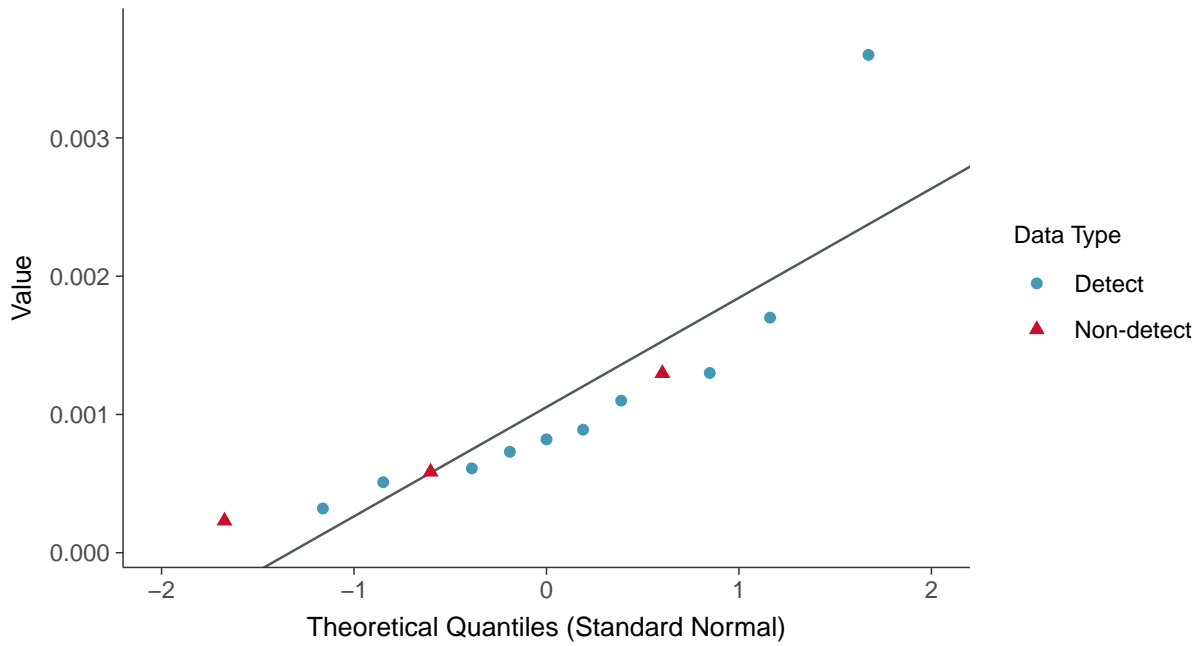
Molybdenum, MW-30 (mg/L)





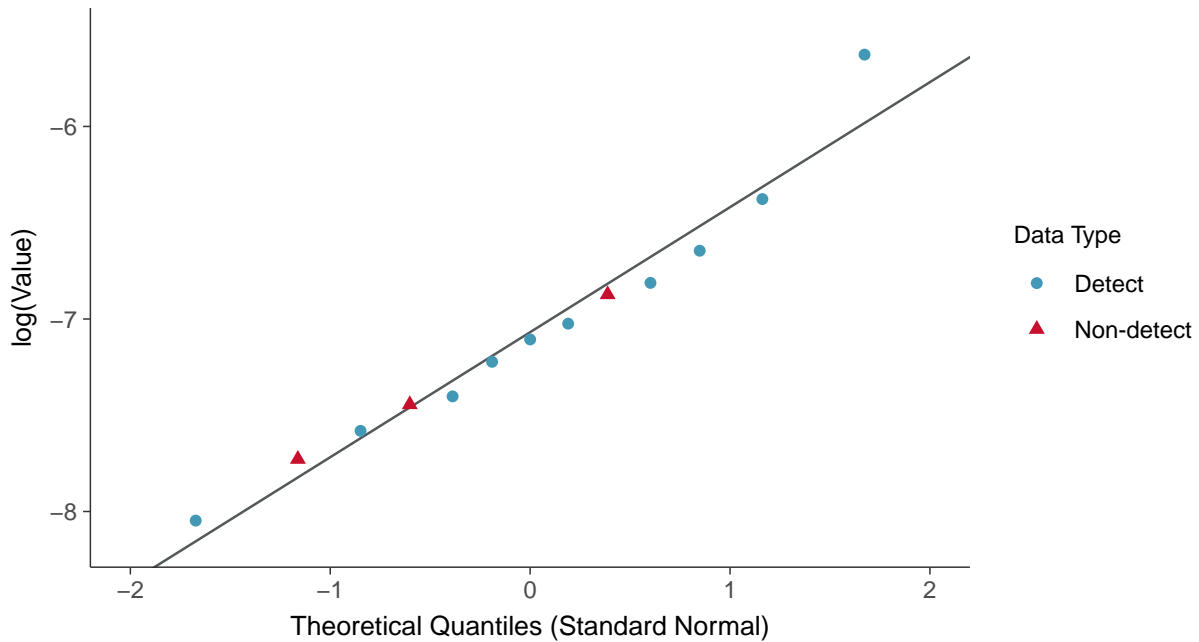
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-30 (mg/L)



Lognormal Q-Q plot using ROS Imputed Estimates

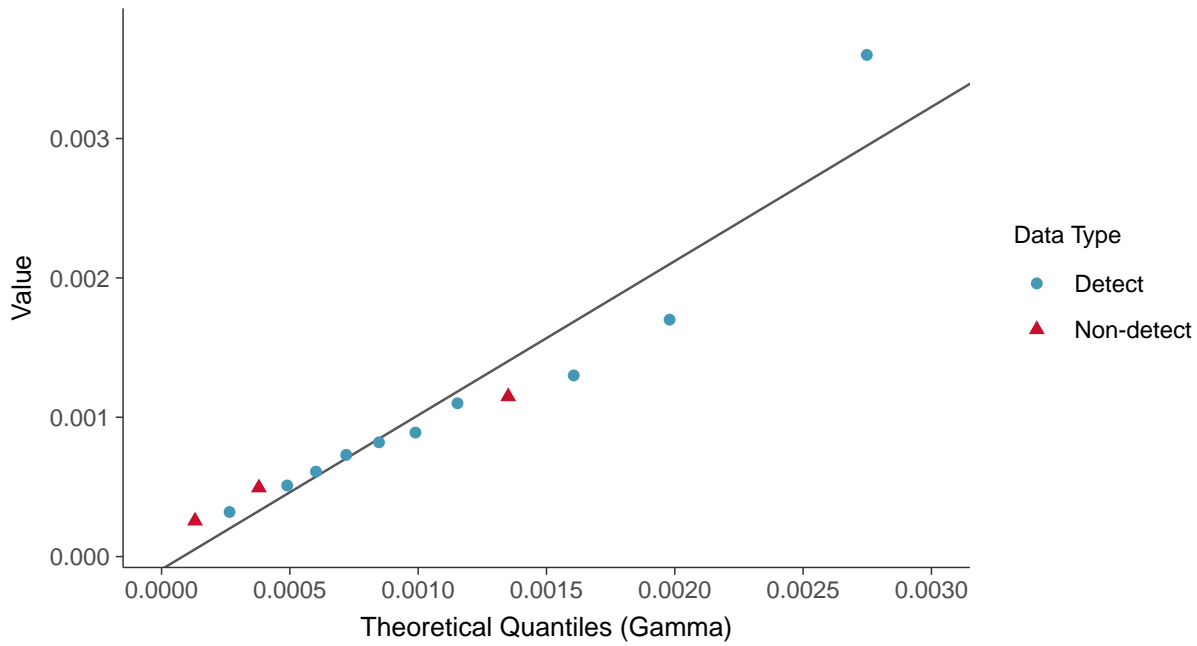
Molybdenum, MW-30 (mg/L)





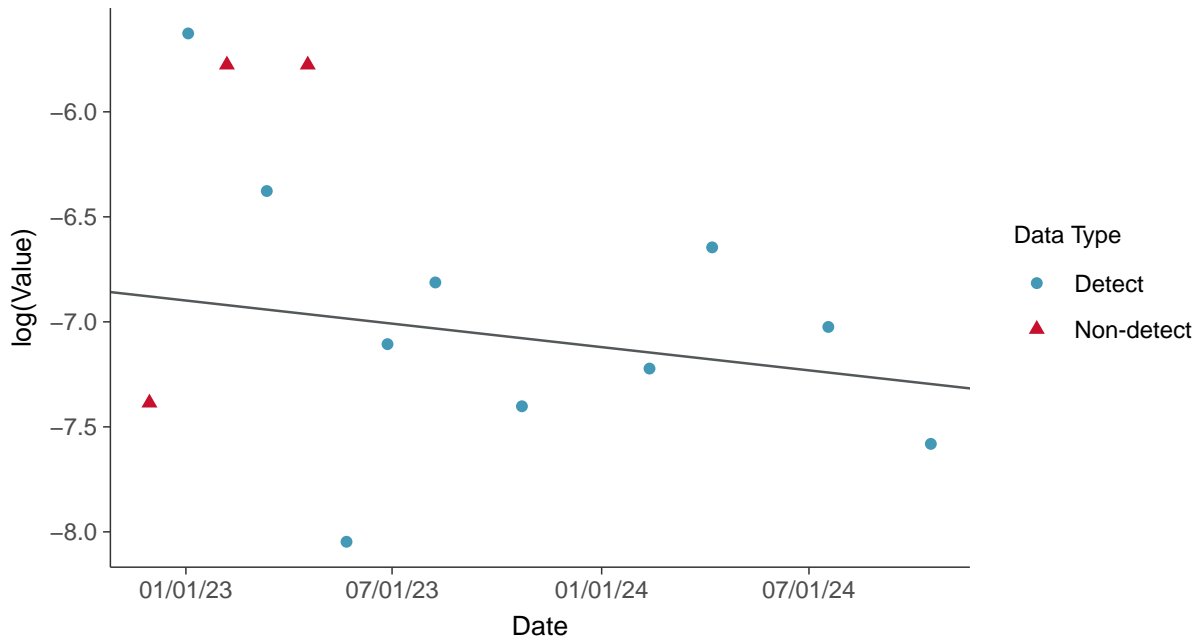
Gamma Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-30 (mg/L)



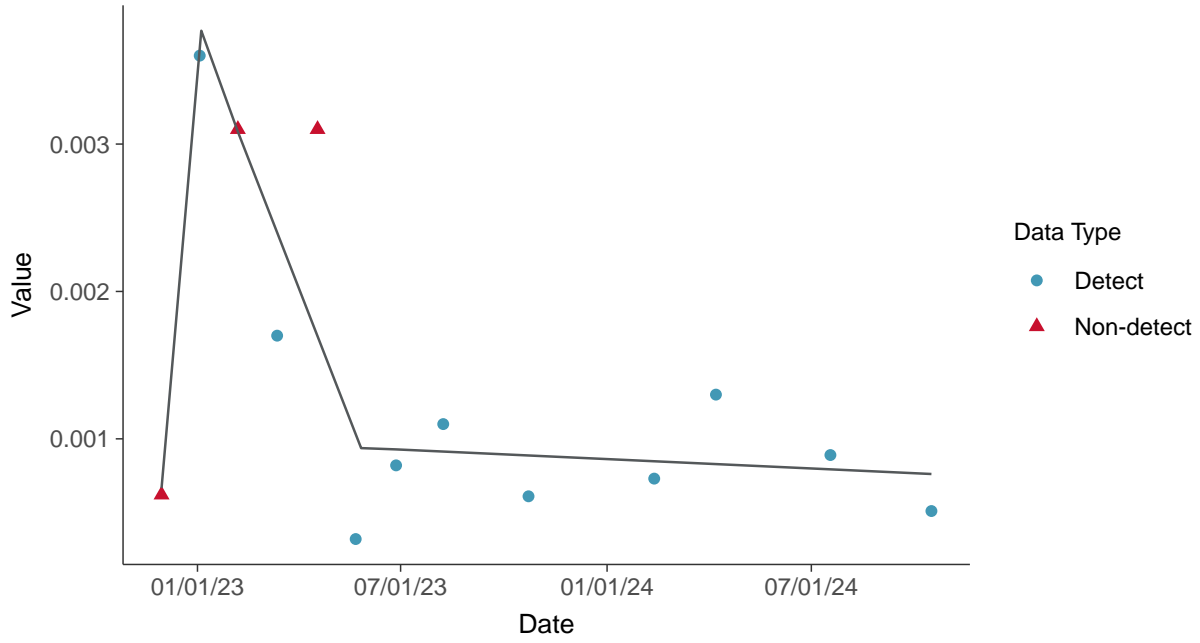
Trend Regression: Lognormal MLE

Molybdenum, MW-30 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear
Molybdenum, MW-30 (mg/L)



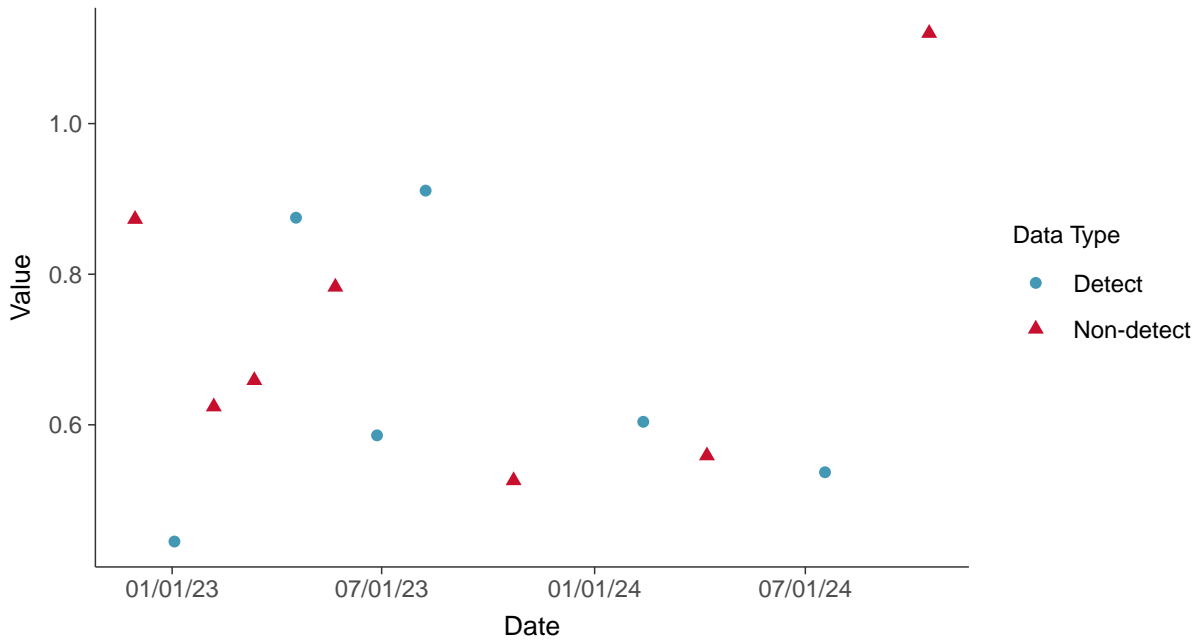


Appendix IV: Radium 226 and 228, MW-30

ID: 1_40_1_5_121

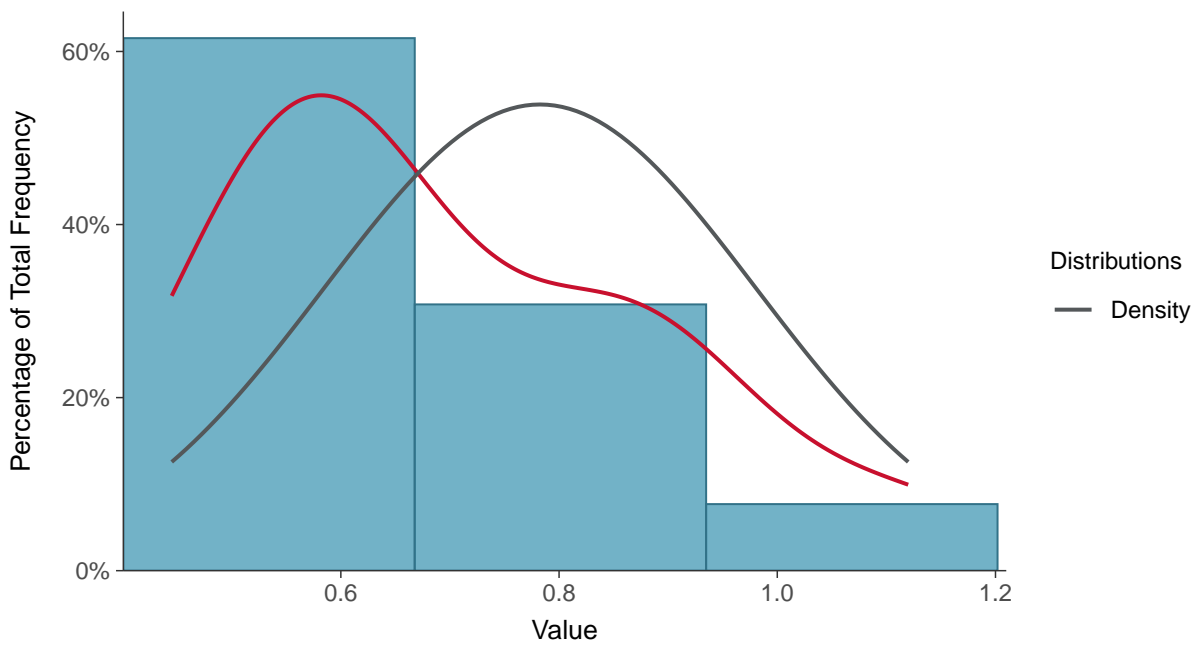
Scatter Plot

Radium 226 and 228, MW-30 (pCi/L)



Histogram

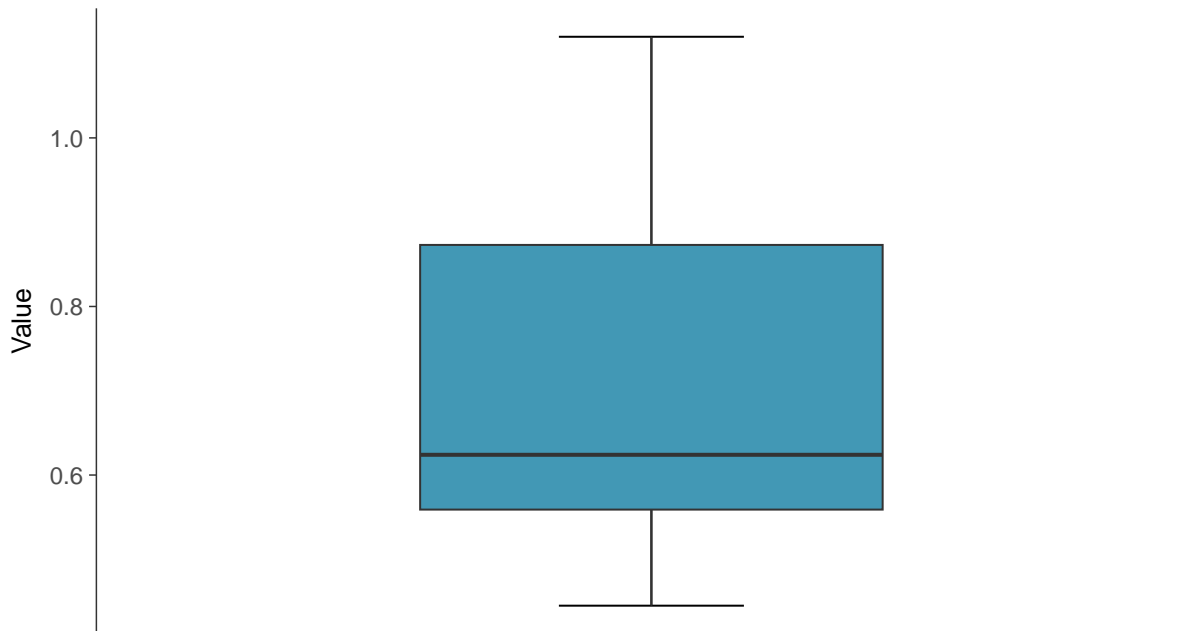
Radium 226 and 228, MW-30 (pCi/L)





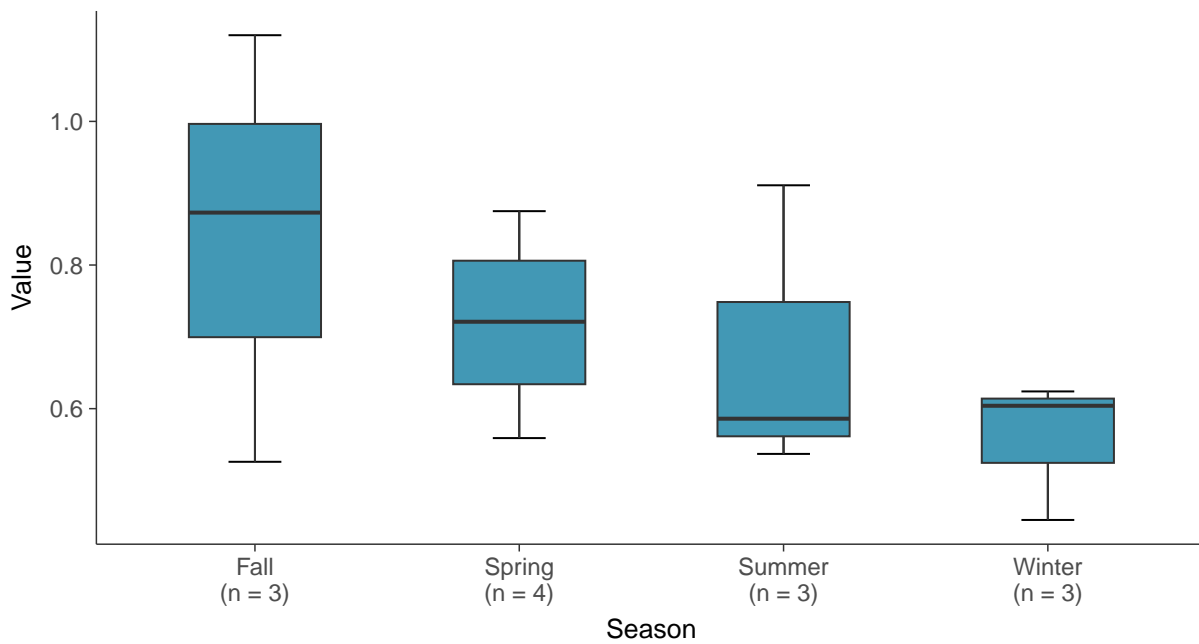
Boxplot

Radium 226 and 228, MW-30 (pCi/L)



Boxplot by Season

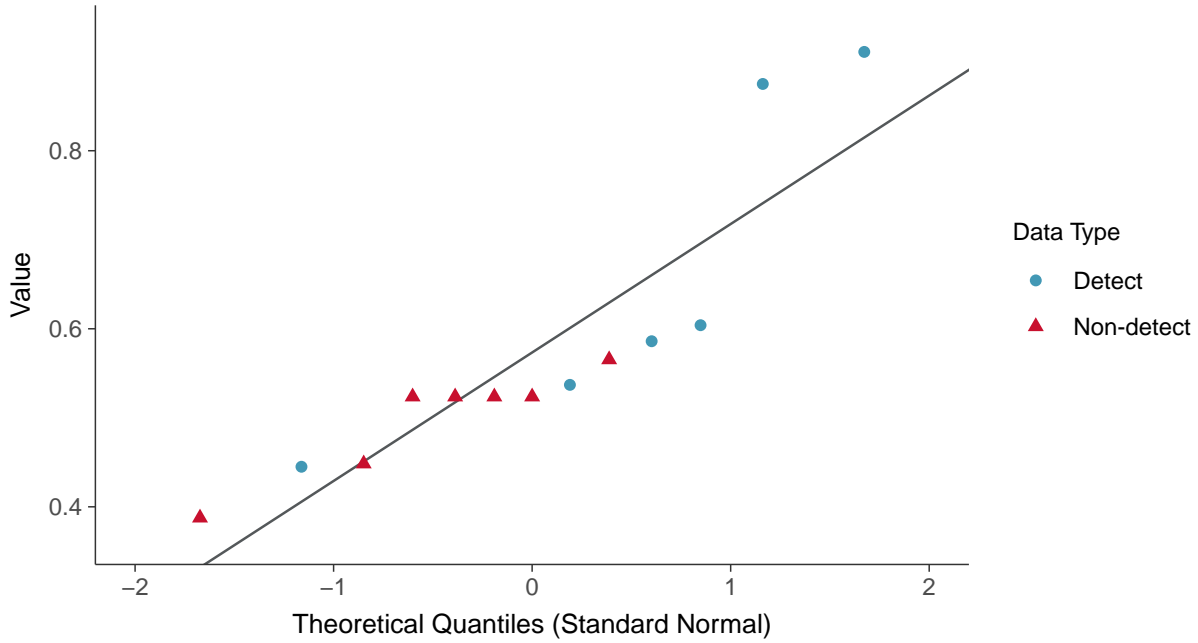
Radium 226 and 228, MW-30 (pCi/L)





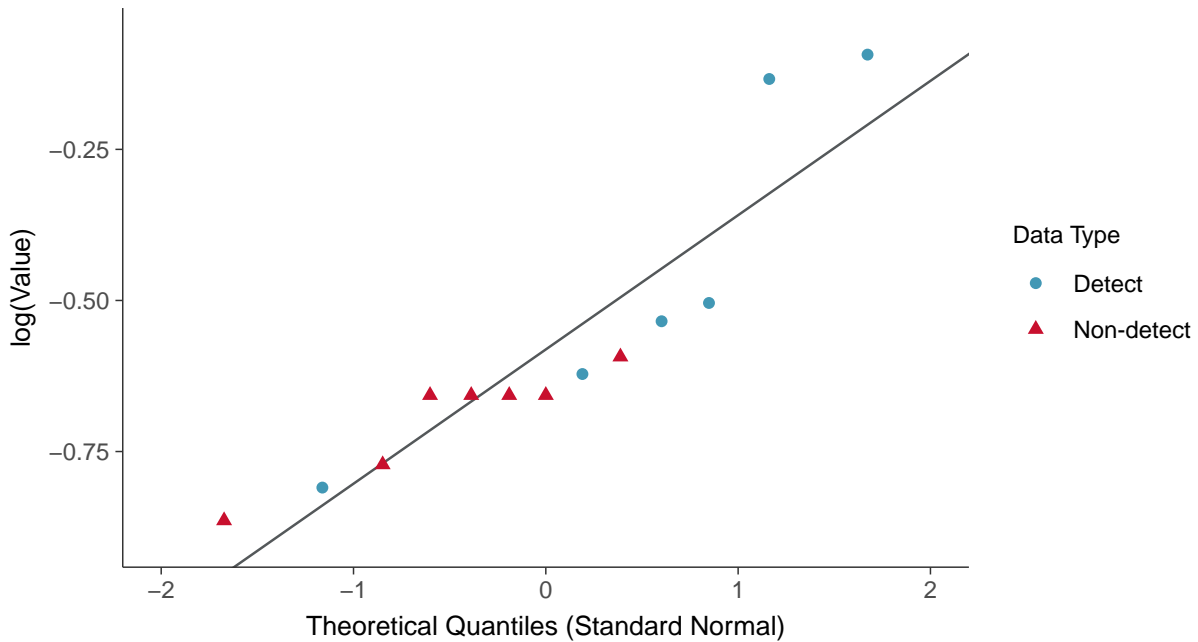
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-30 (pCi/L)



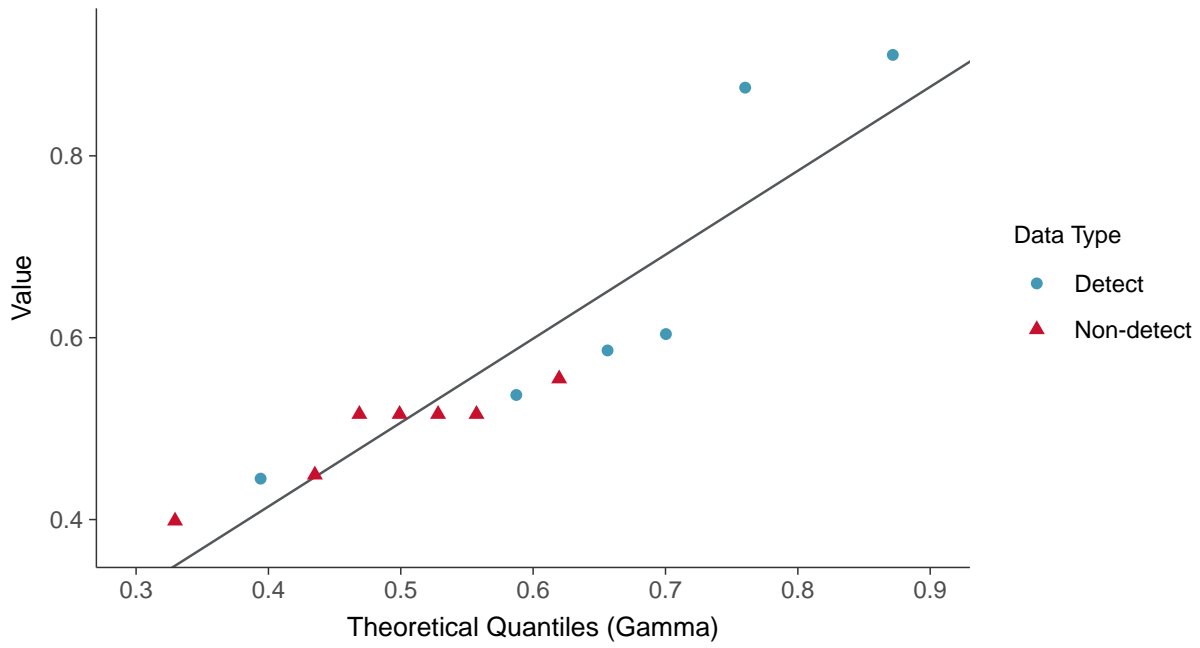
Lognormal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-30 (pCi/L)





Gamma Q-Q plot using ROS Imputed Estimates Radium 226 and 228, MW-30 (pCi/L)



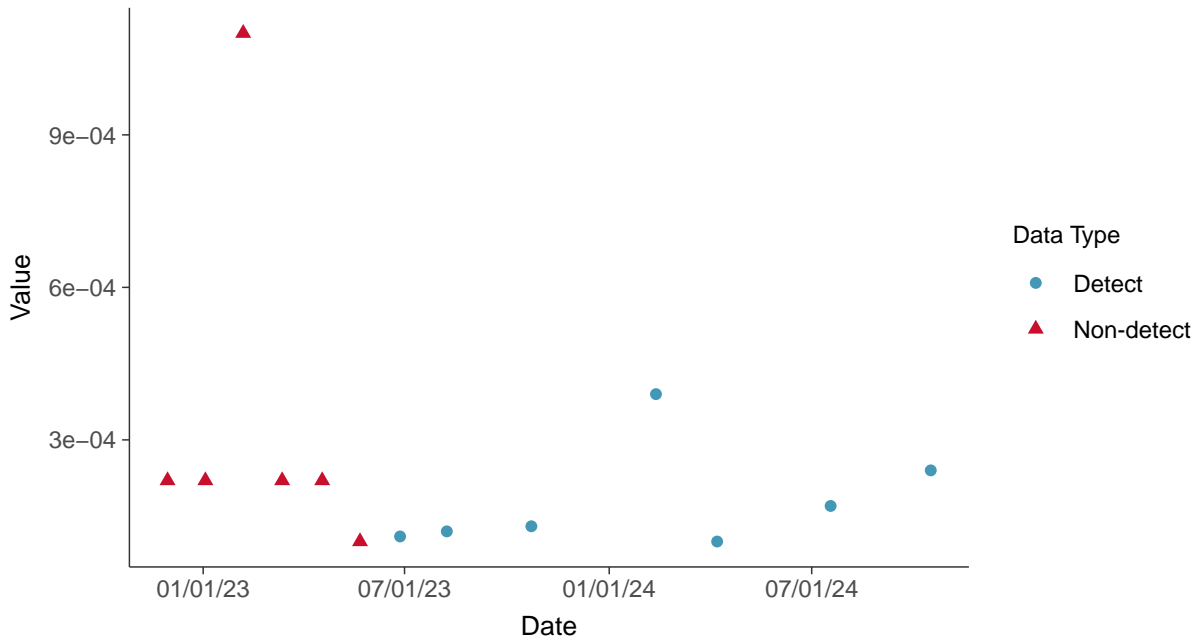


Appendix IV: Selenium, MW-30

ID: 1_40_1_5_122

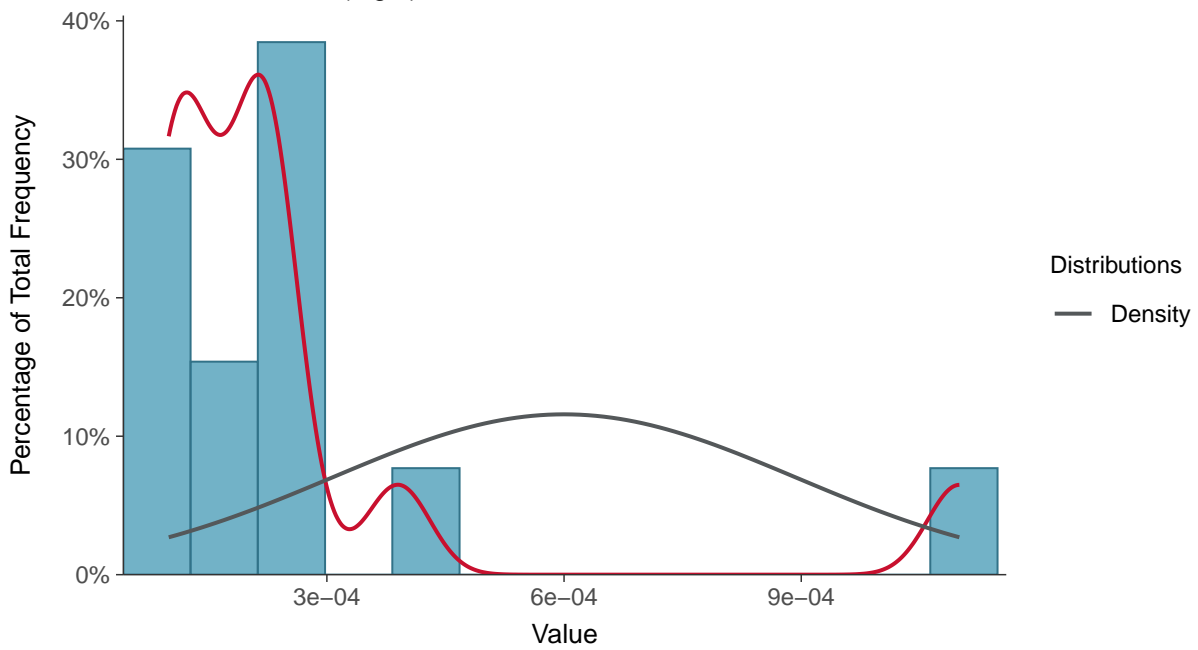
Scatter Plot

Selenium, MW-30 (mg/L)



Histogram

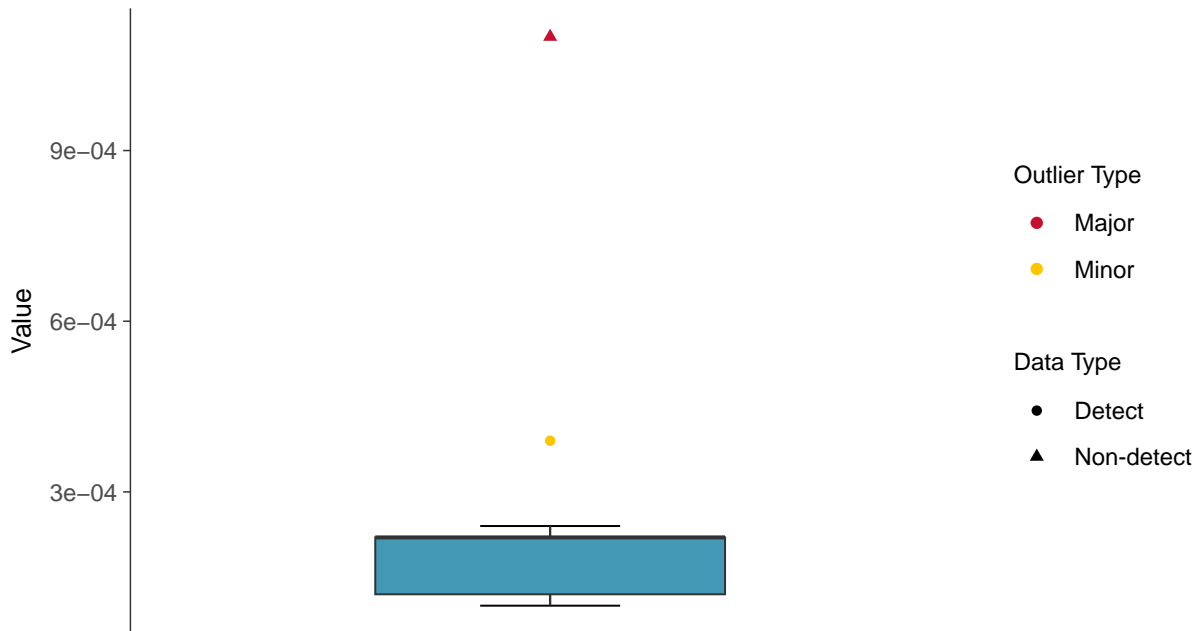
Selenium, MW-30 (mg/L)





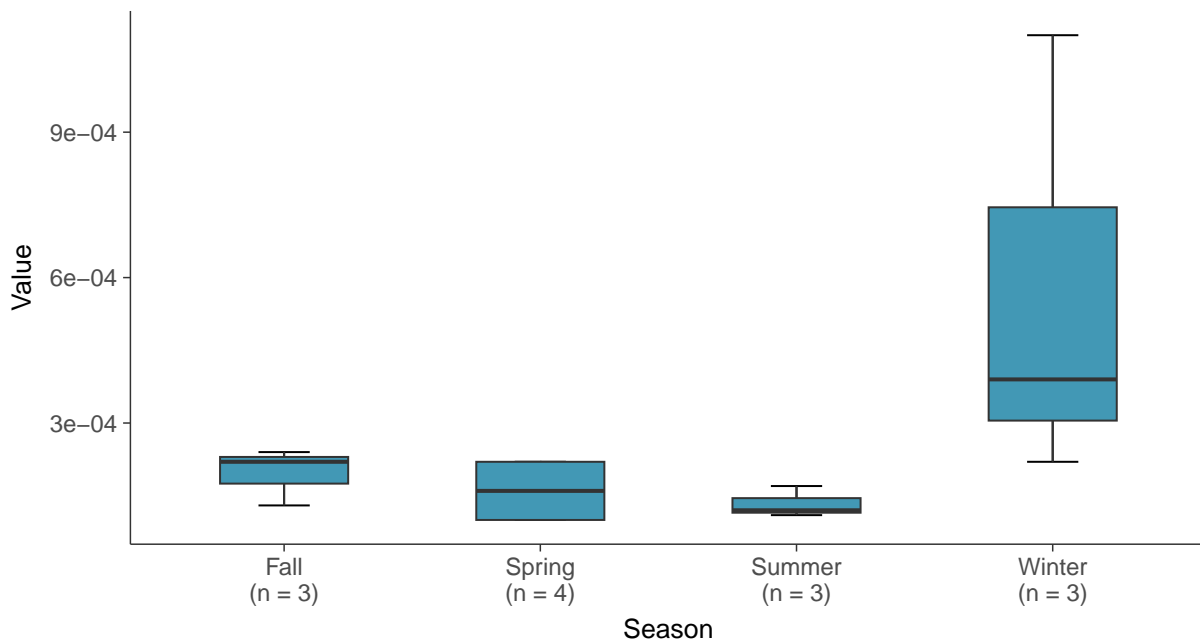
Boxplot

Selenium, MW-30 (mg/L)



Boxplot by Season

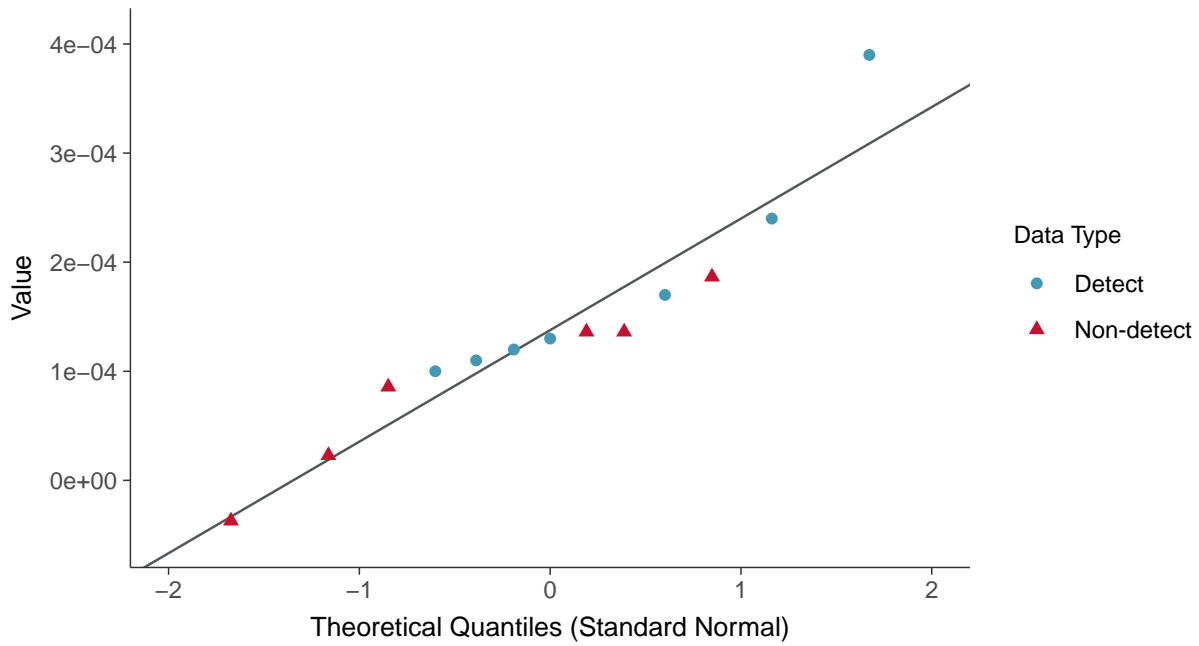
Selenium, MW-30 (mg/L)





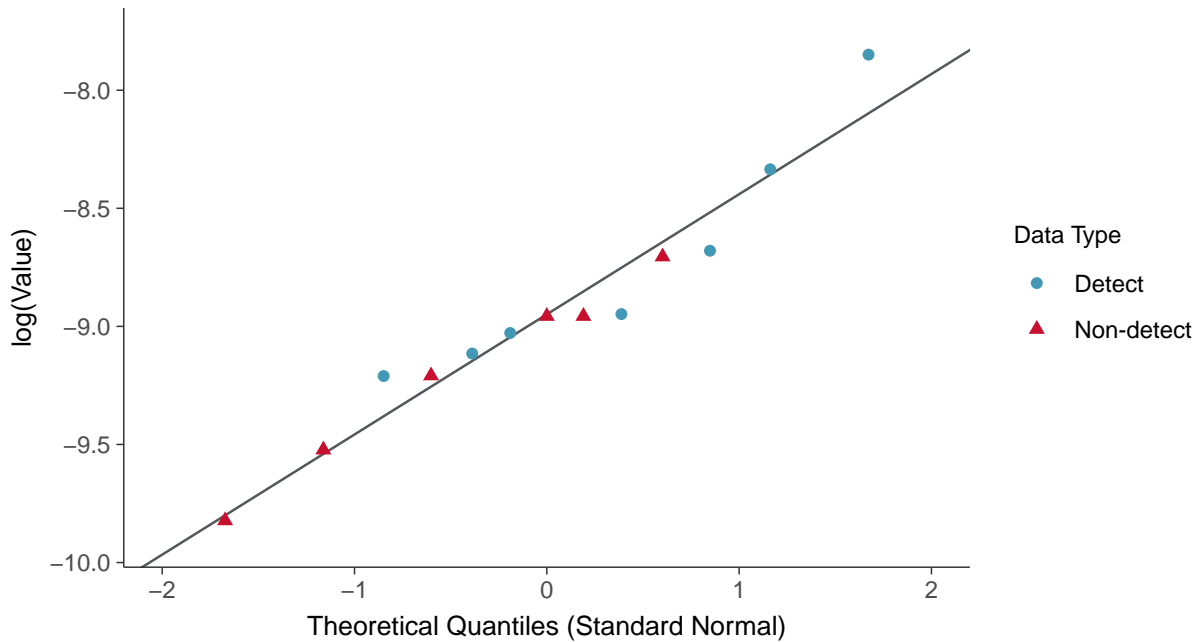
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-30 (mg/L)



Lognormal Q-Q plot using ROS Imputed Estimates

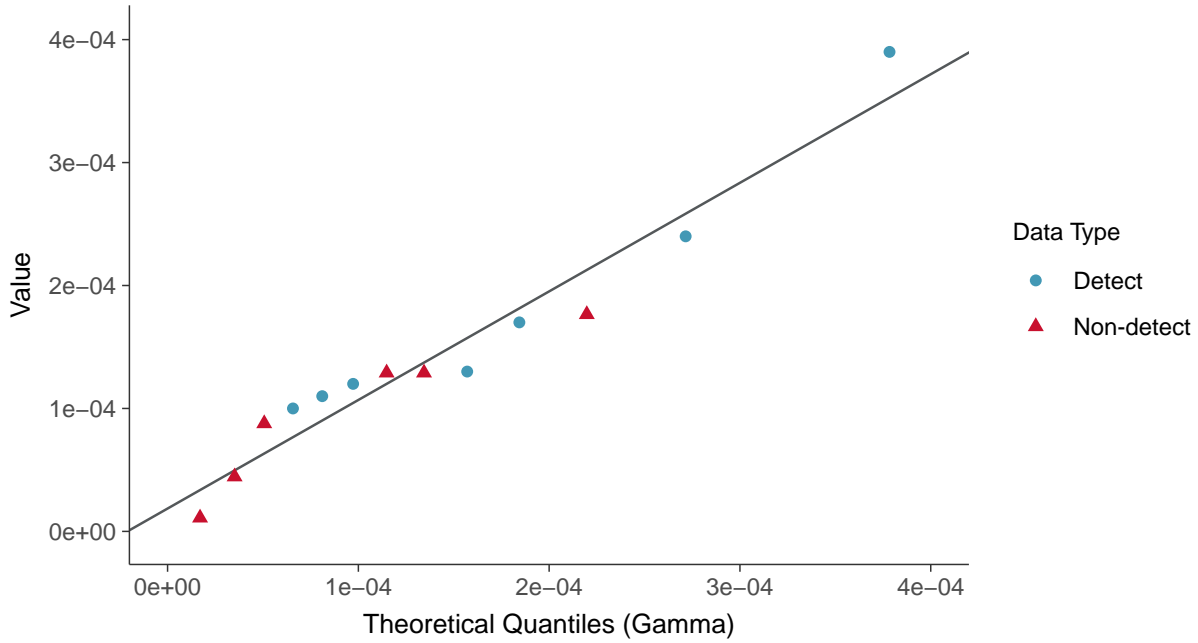
Selenium, MW-30 (mg/L)





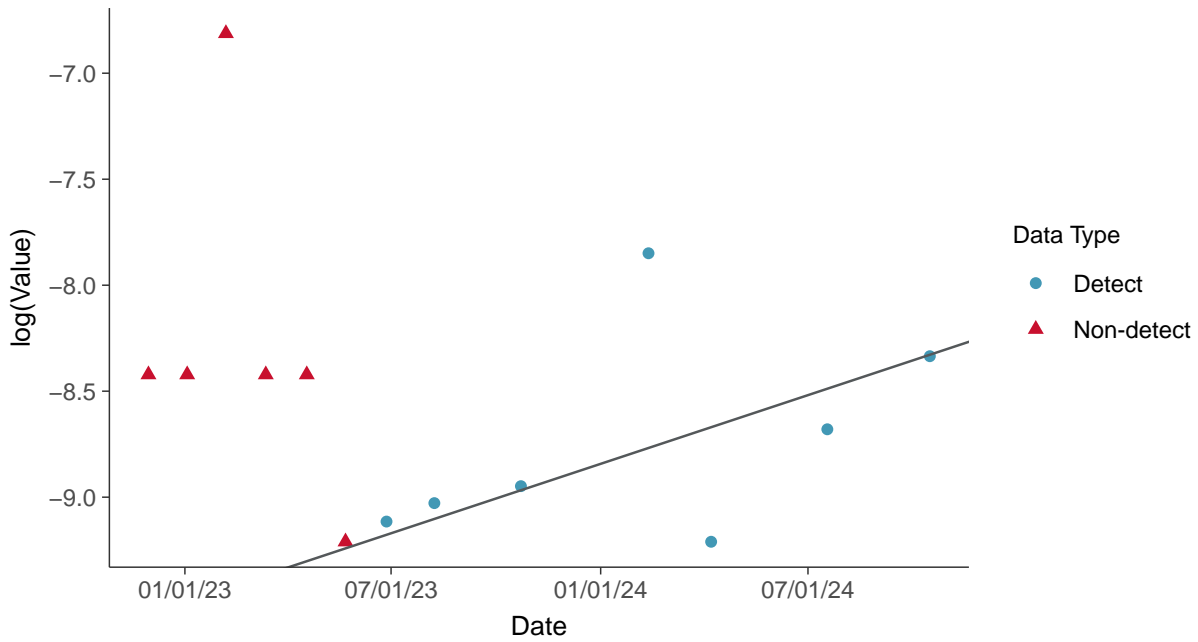
Gamma Q-Q plot using ROS Imputed Estimates

Selenium, MW-30 (mg/L)



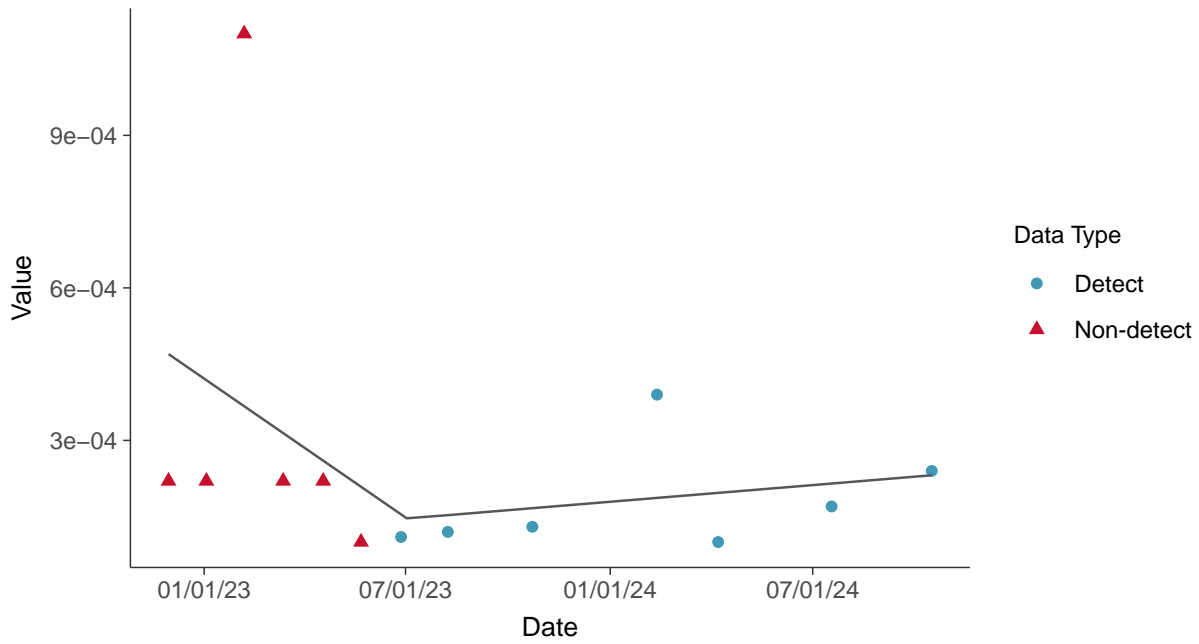
Trend Regression: Lognormal MLE

Selenium, MW-30 (mg/L)

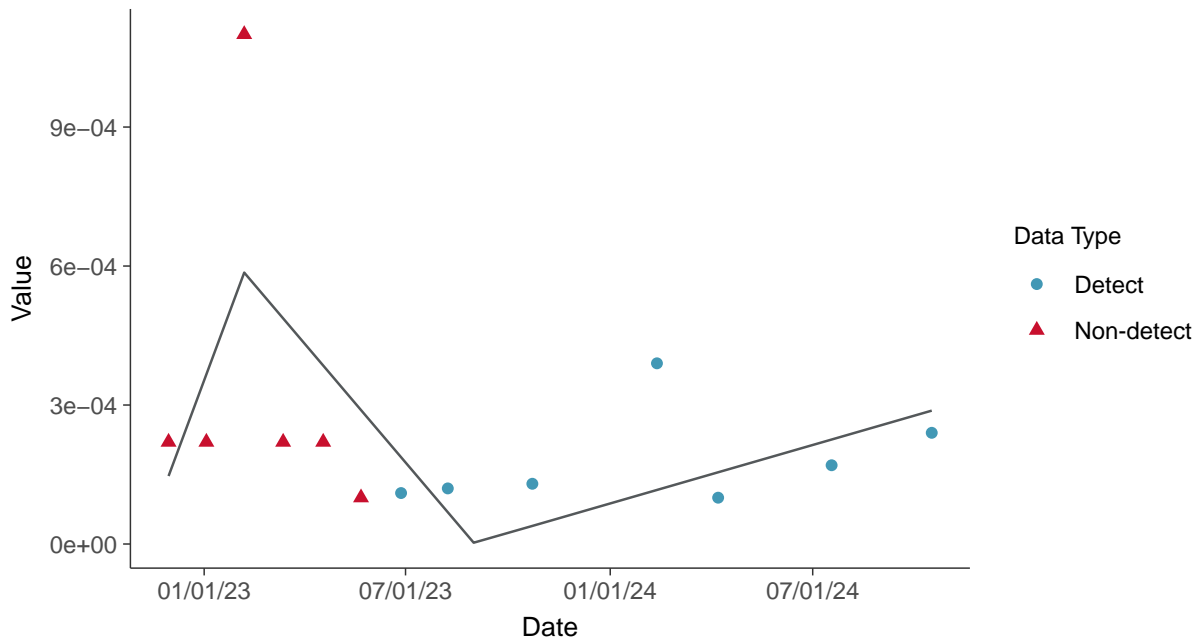




Trend Regression: Piecewise Linear-Linear
Selenium, MW-30 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Selenium, MW-30 (mg/L)



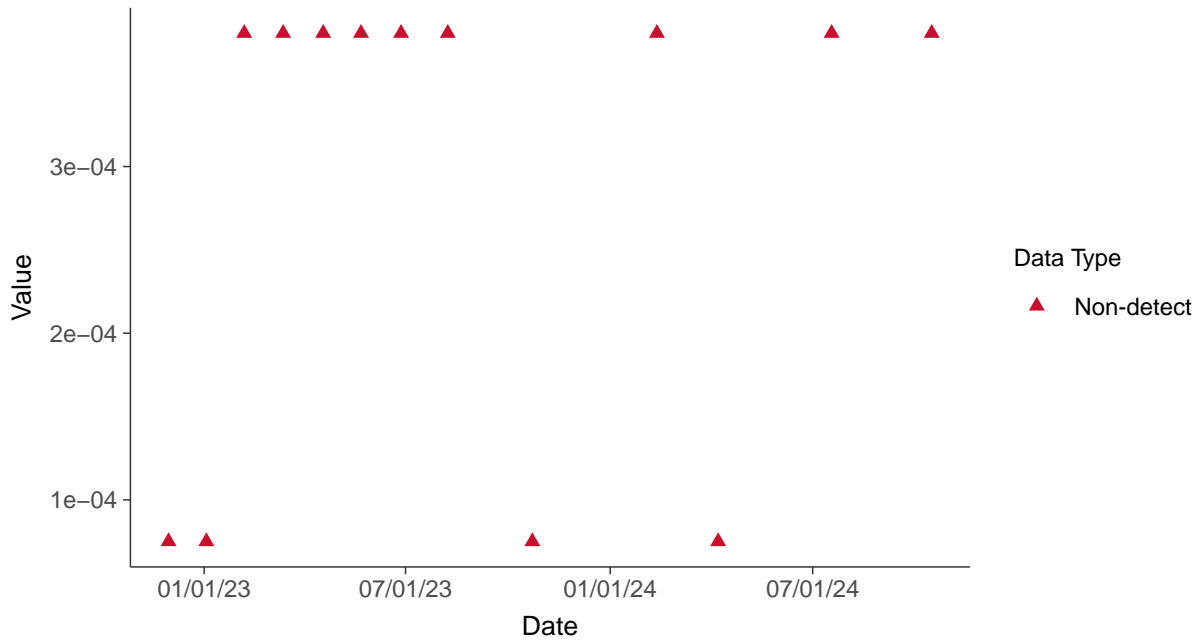


Appendix IV: Thallium, MW-30

ID: 1_40_1_5_125

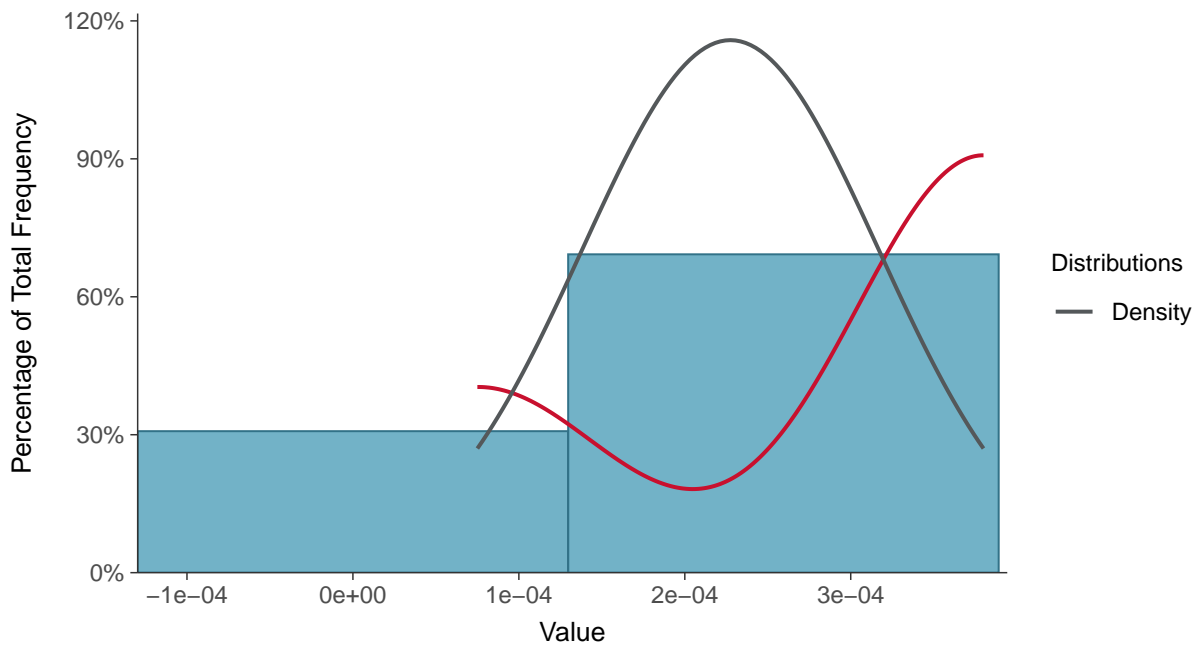
Scatter Plot

Thallium, MW-30 (mg/L)



Histogram

Thallium, MW-30 (mg/L)





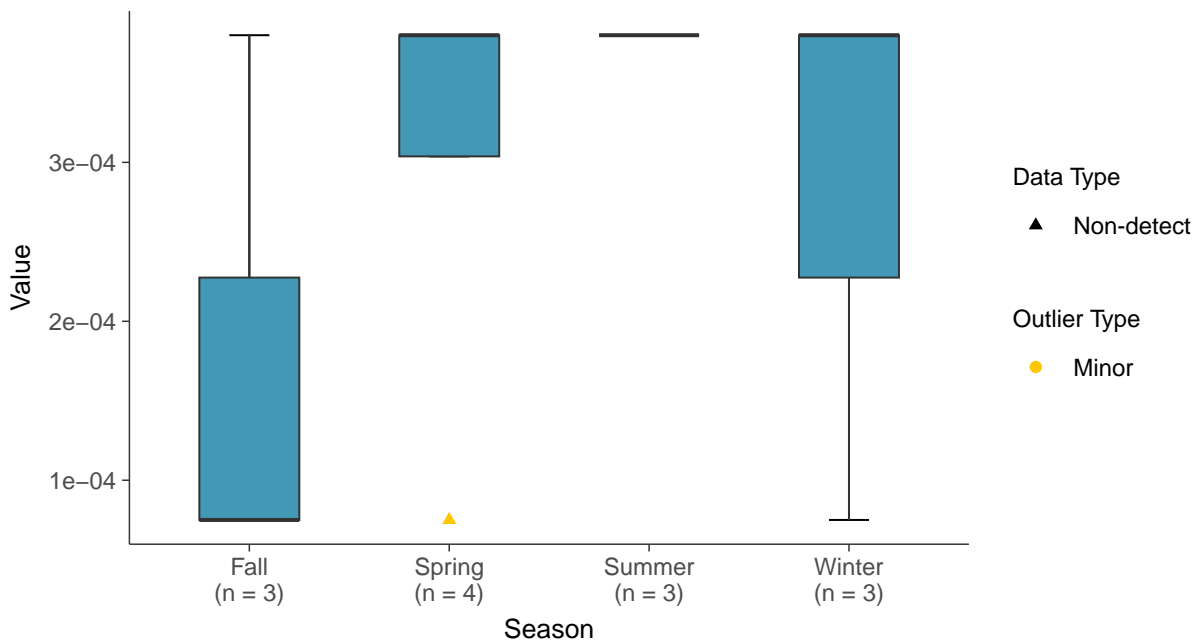
Boxplot

Thallium, MW-30 (mg/L)



Boxplot by Season

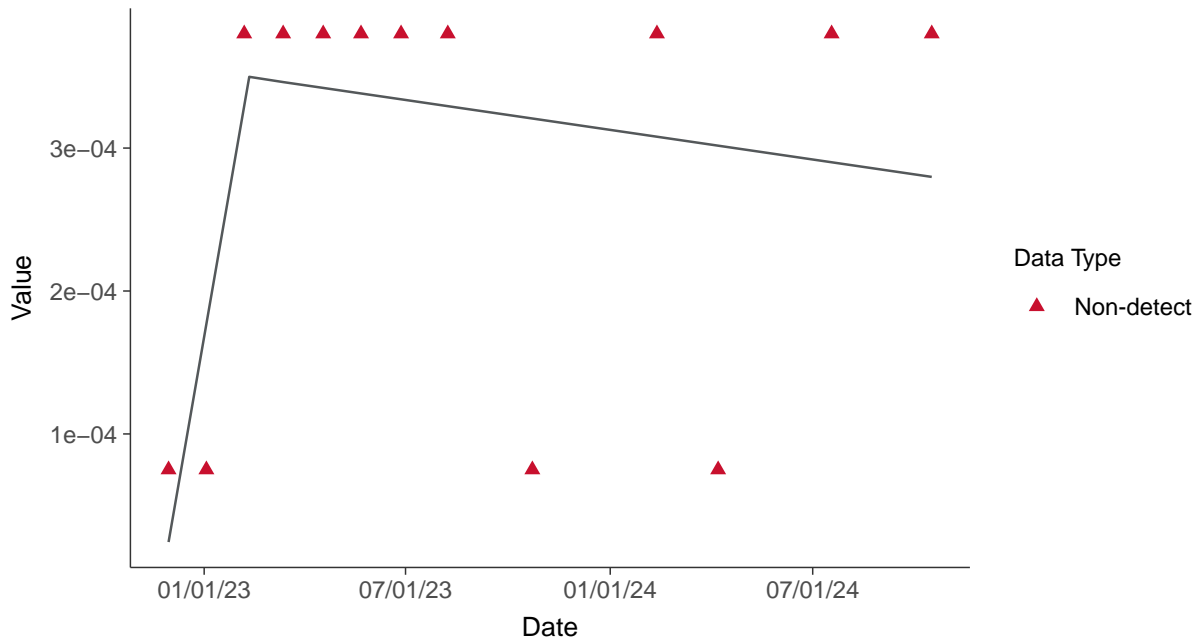
Thallium, MW-30 (mg/L)





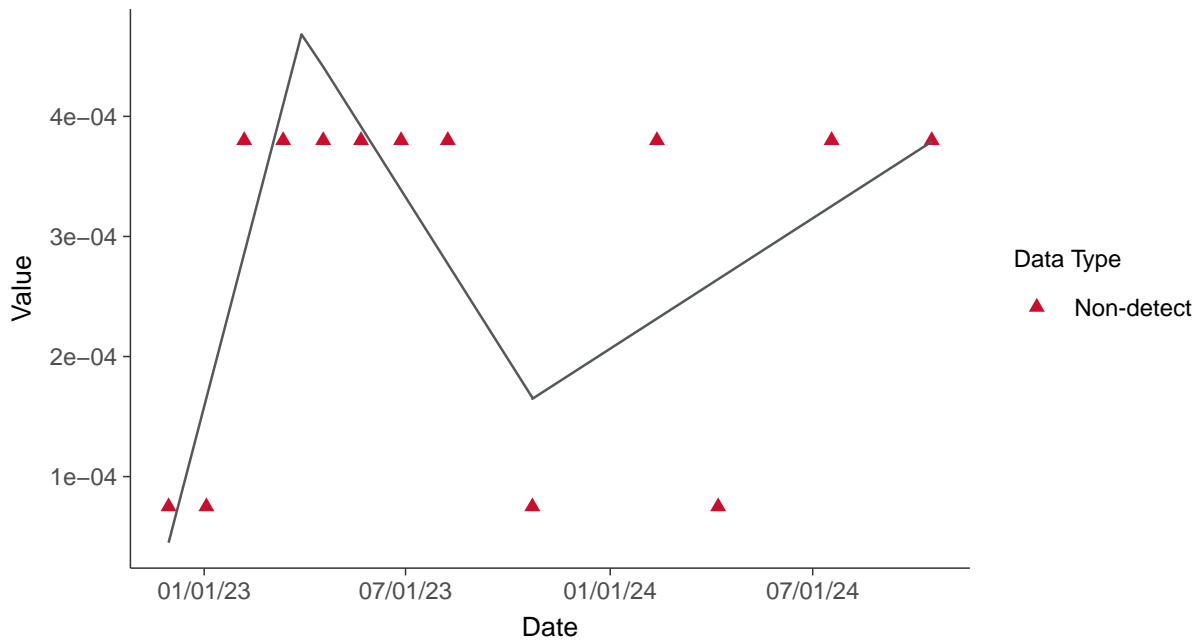
Trend Regression: Piecewise Linear-Linear

Thallium, MW-30 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

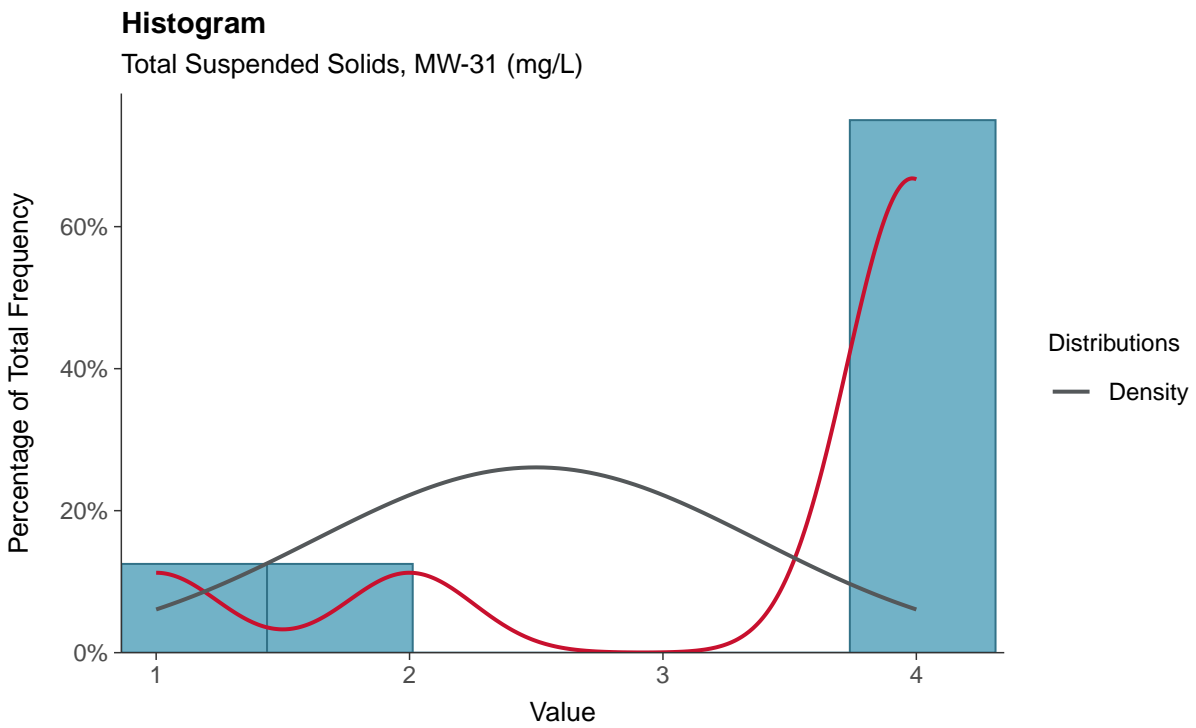
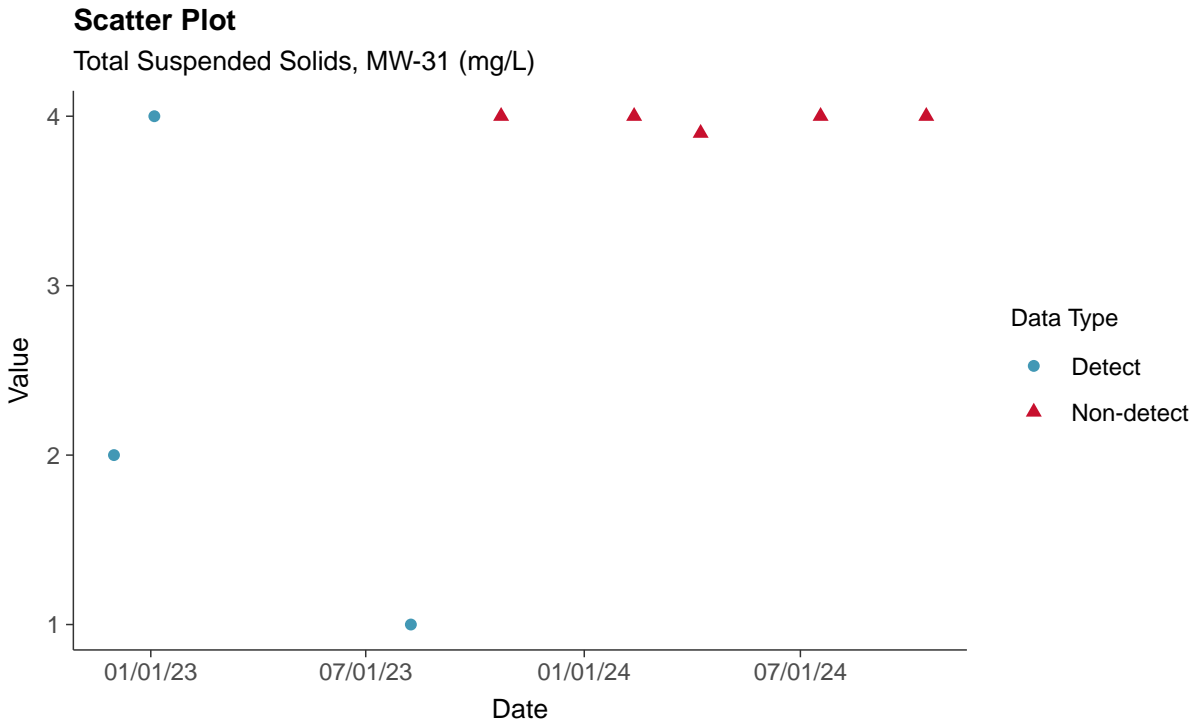
Thallium, MW-30 (mg/L)





Additional Parameters: Total Suspended Solids, MW-31

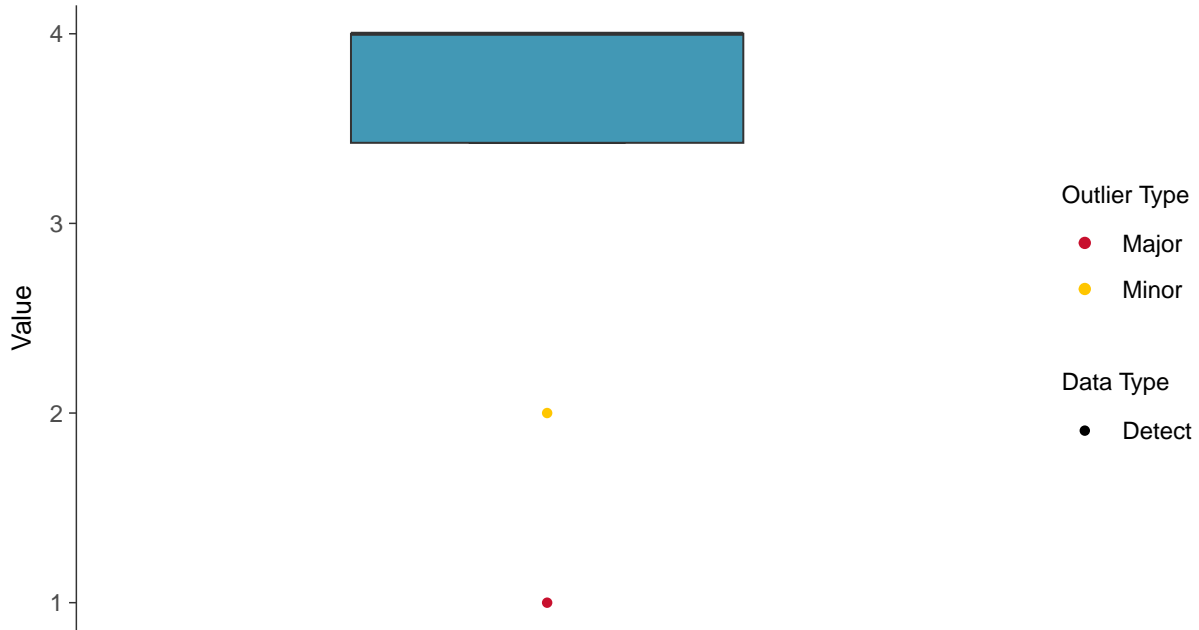
ID: 1_41_1_3_127





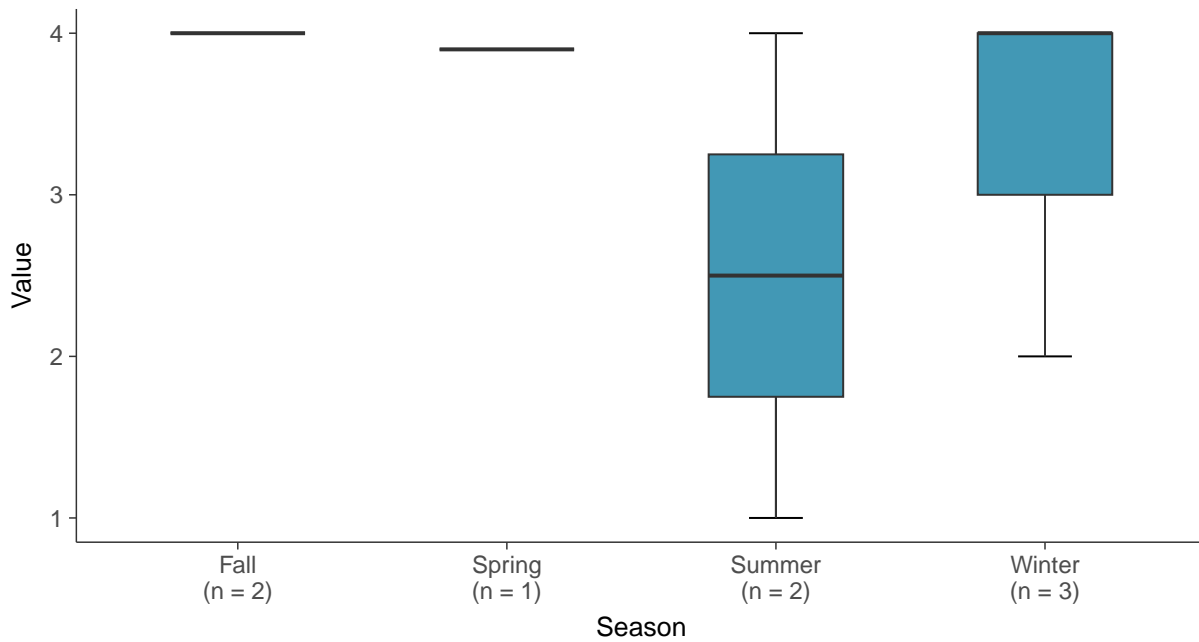
Boxplot

Total Suspended Solids, MW-31 (mg/L)



Boxplot by Season

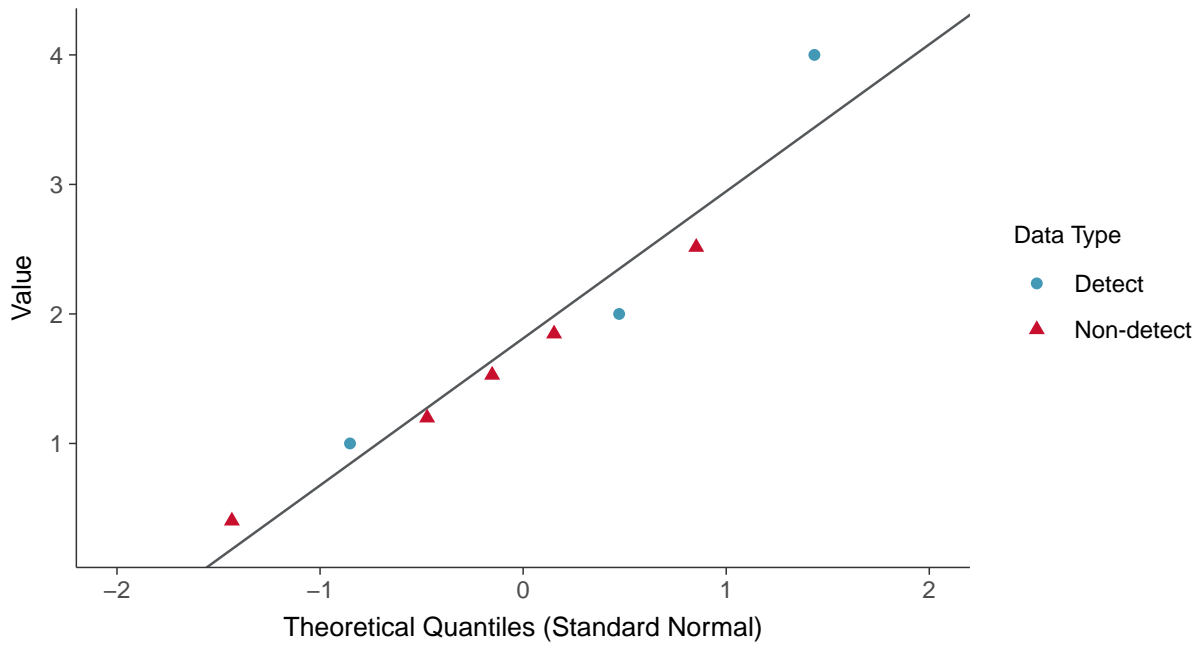
Total Suspended Solids, MW-31 (mg/L)





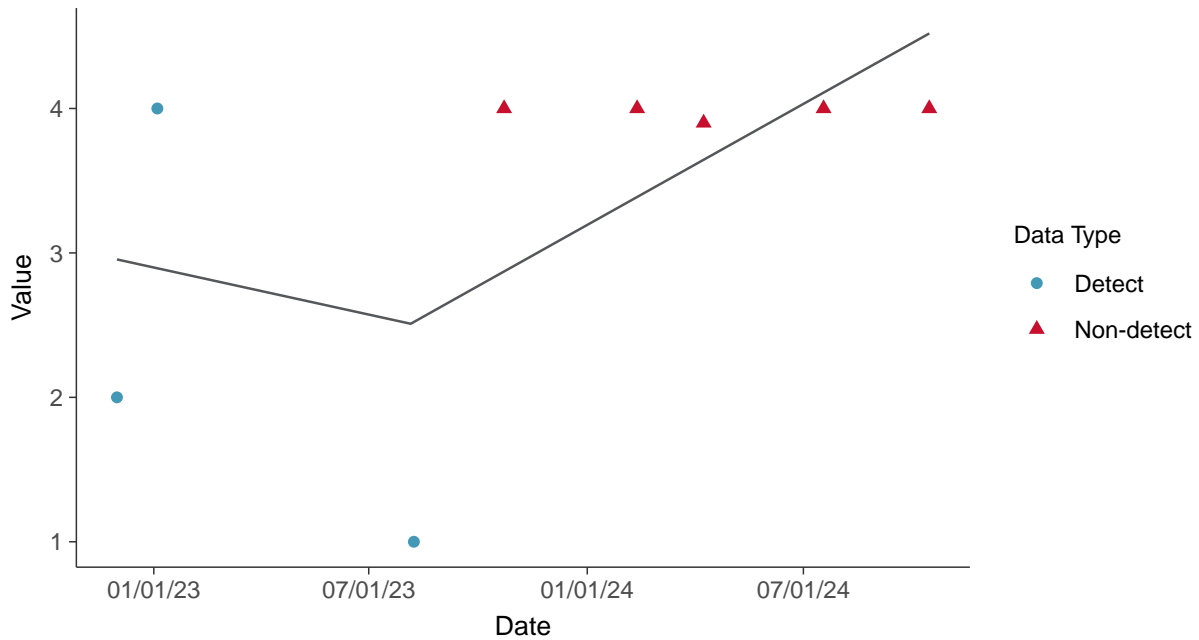
Normal Q-Q plot using ROS Imputed Estimates

Total Suspended Solids, MW-31 (mg/L)



Trend Regression: Piecewise Linear-Linear

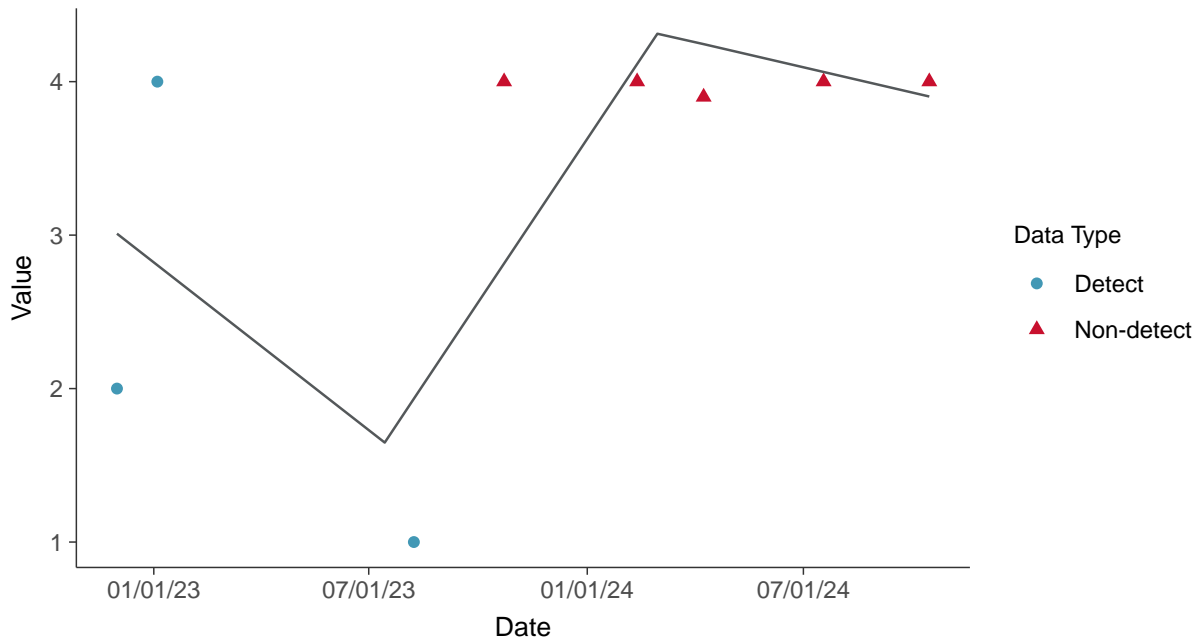
Total Suspended Solids, MW-31 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

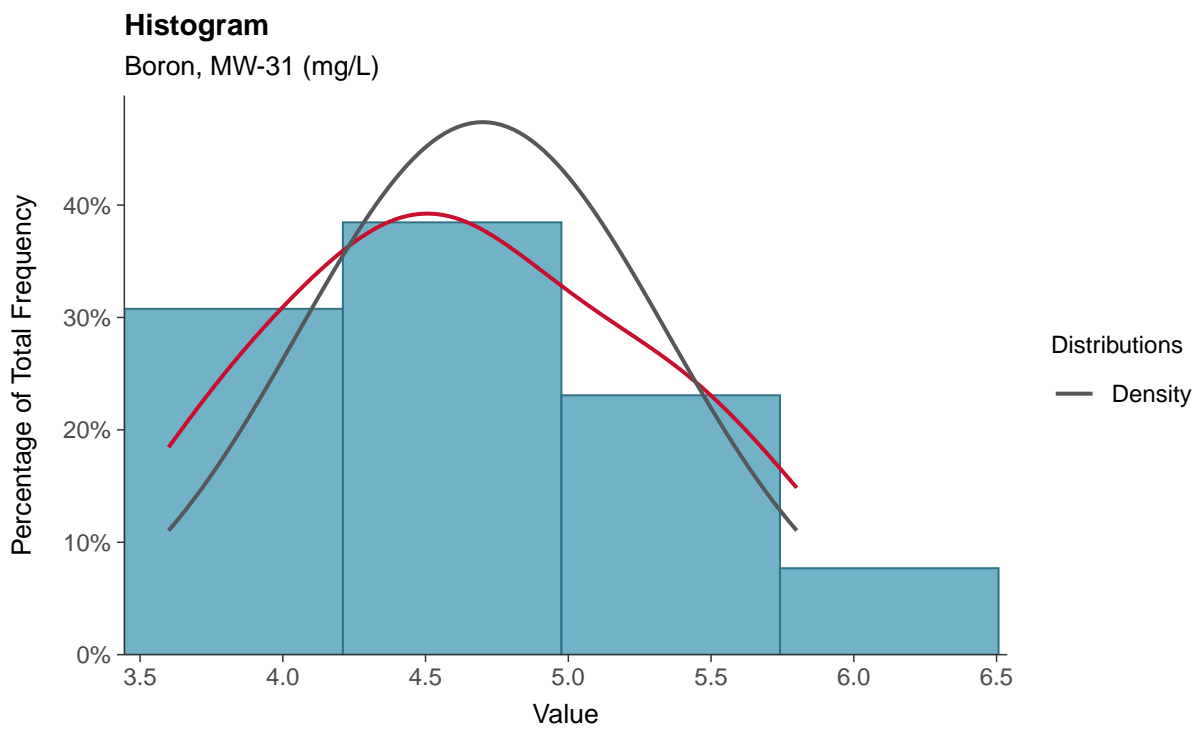
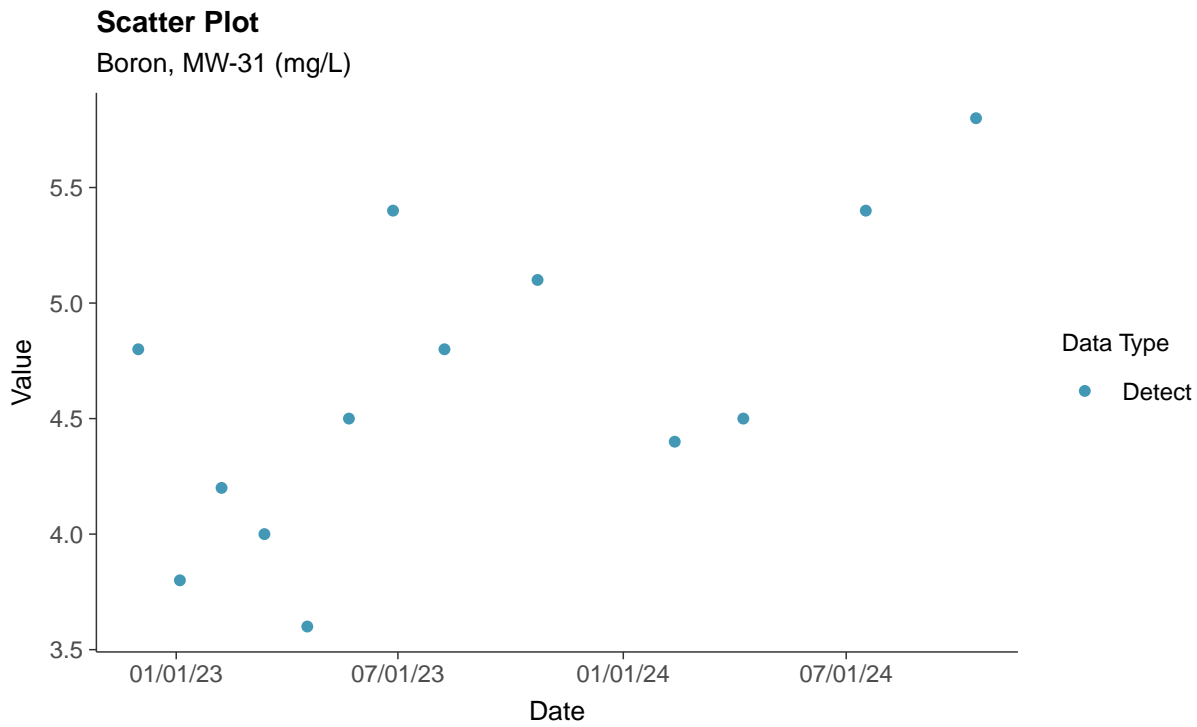
Total Suspended Solids, MW-31 (mg/L)





Appendix III: Boron, MW-31

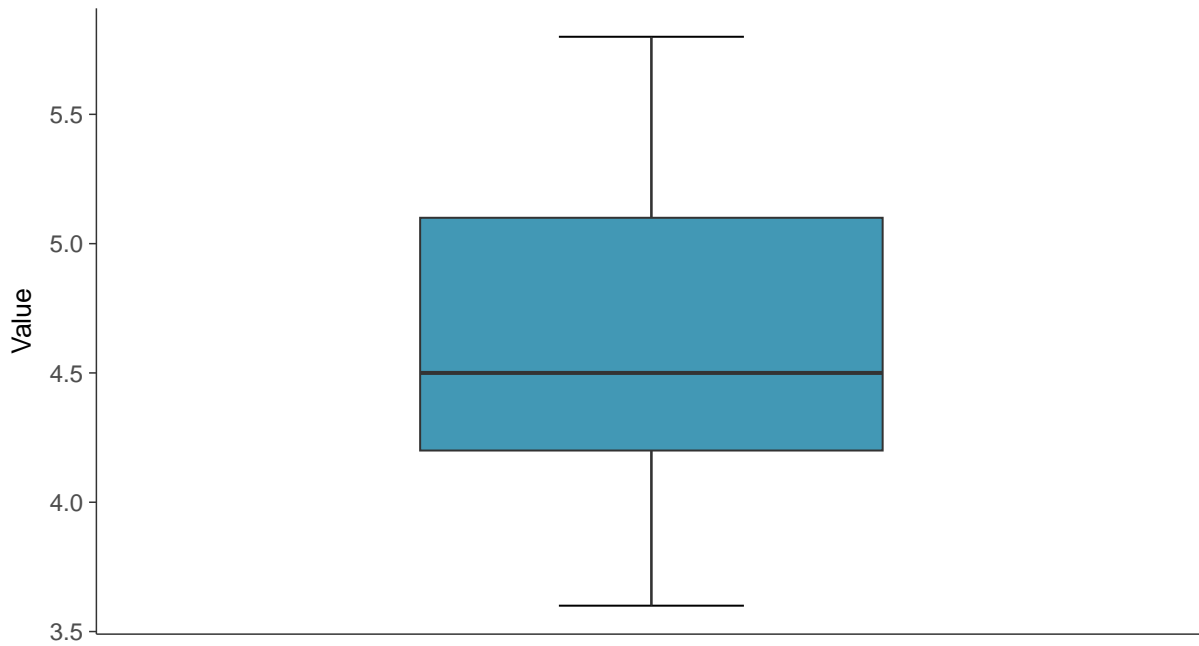
ID: 1_41_1_4_105





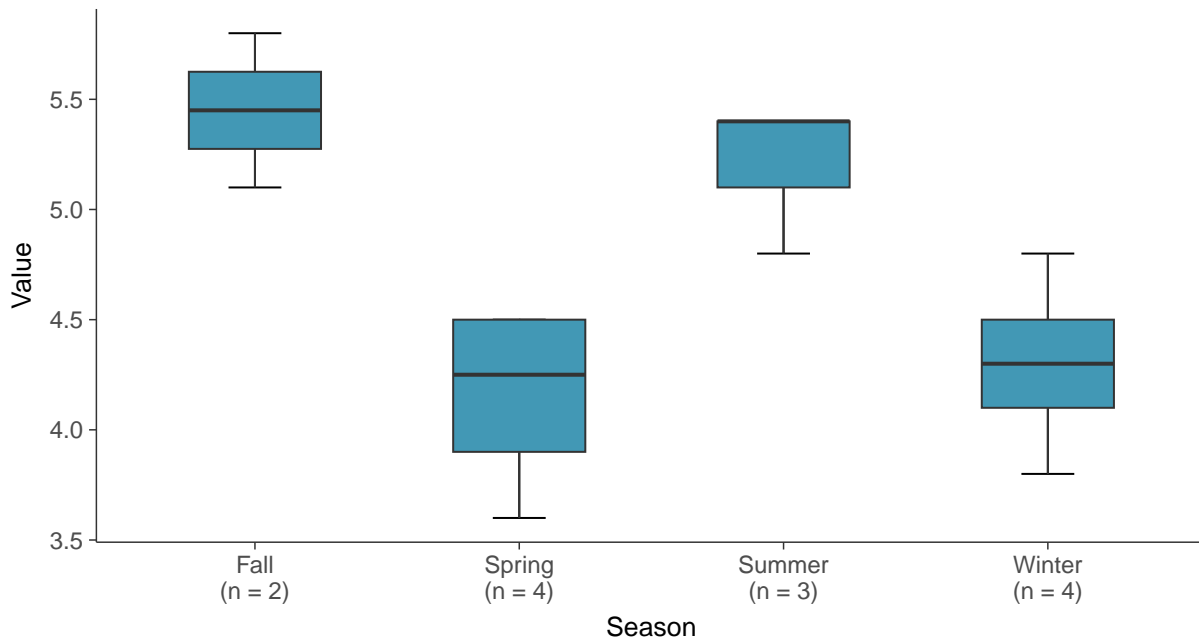
Boxplot

Boron, MW-31 (mg/L)



Boxplot by Season

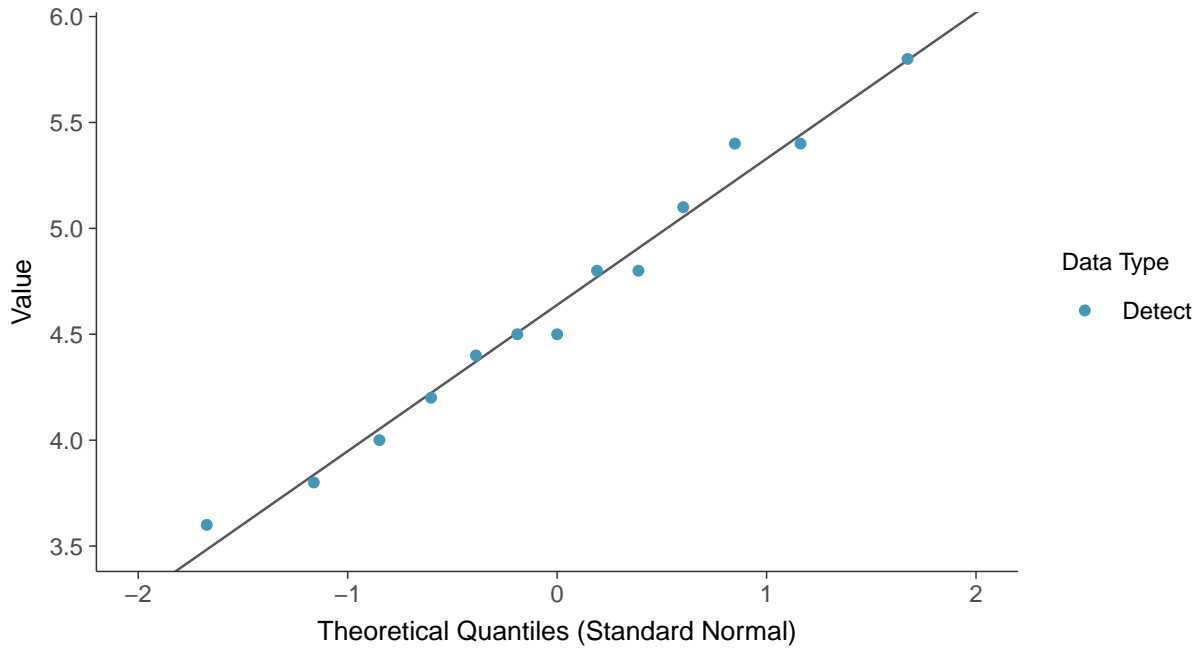
Boron, MW-31 (mg/L)





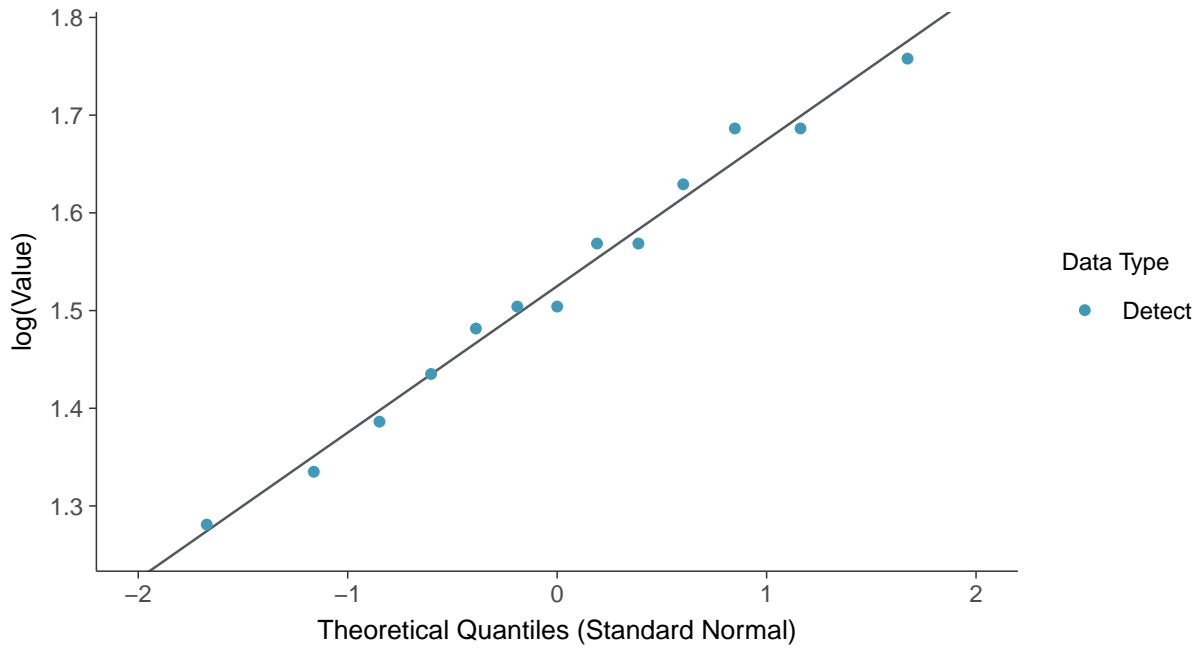
Normal Q-Q plot

Boron, MW-31 (mg/L)



Lognormal Q-Q plot

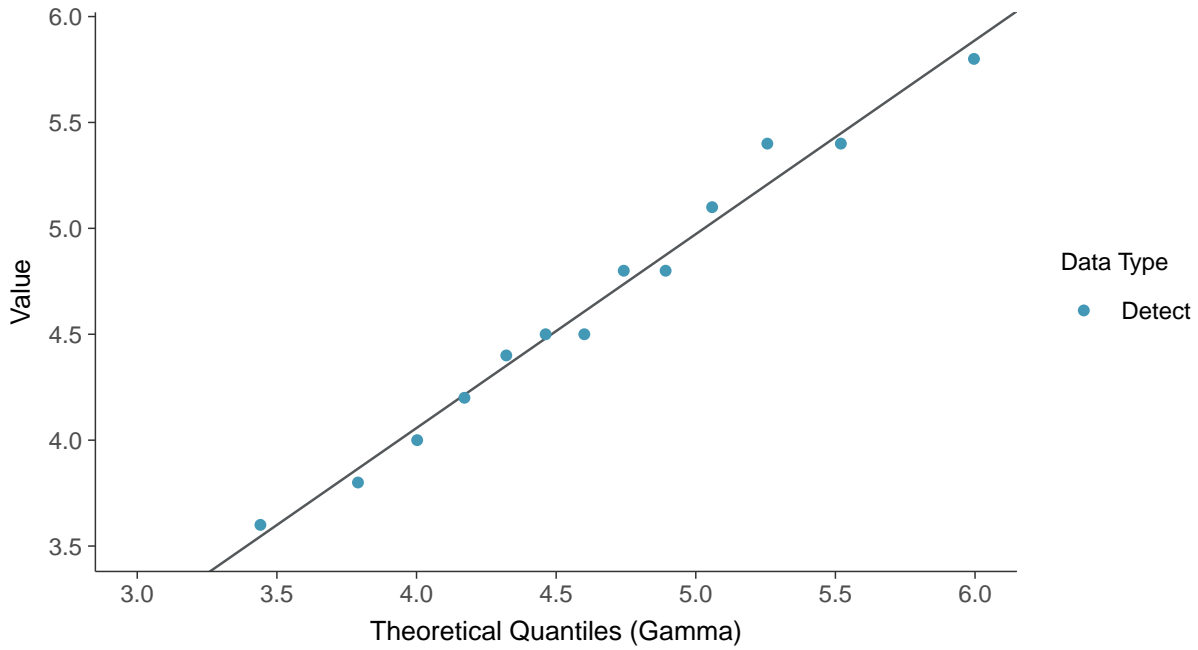
Boron, MW-31 (mg/L)





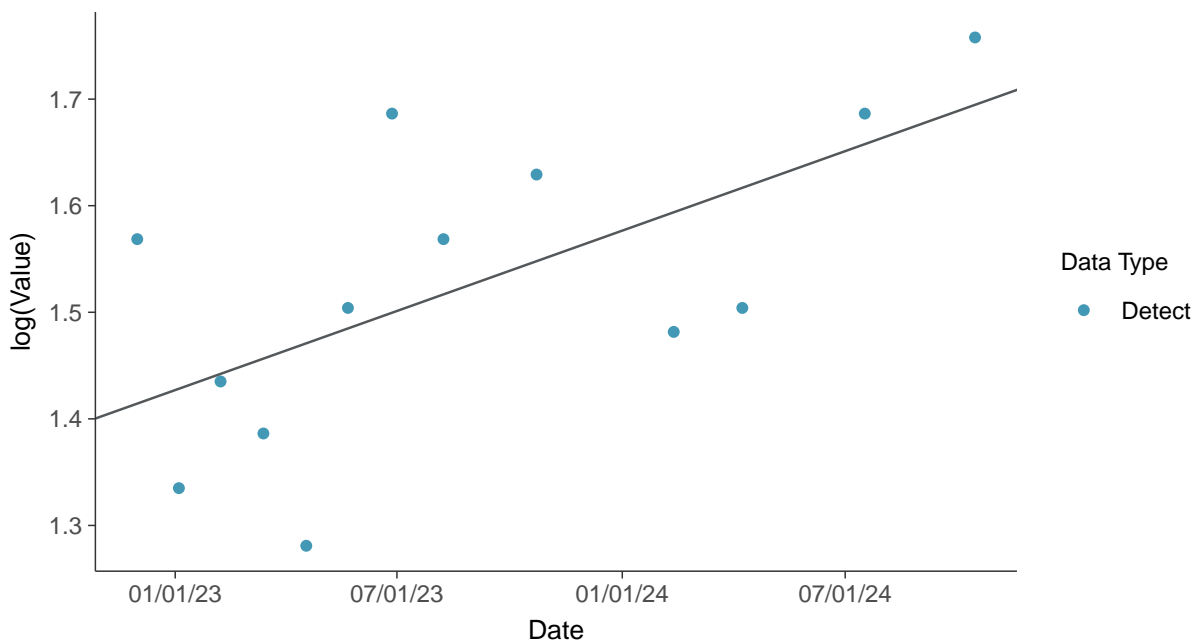
Gamma Q-Q plot

Boron, MW-31 (mg/L)



Trend Regression: Lognormal MLE

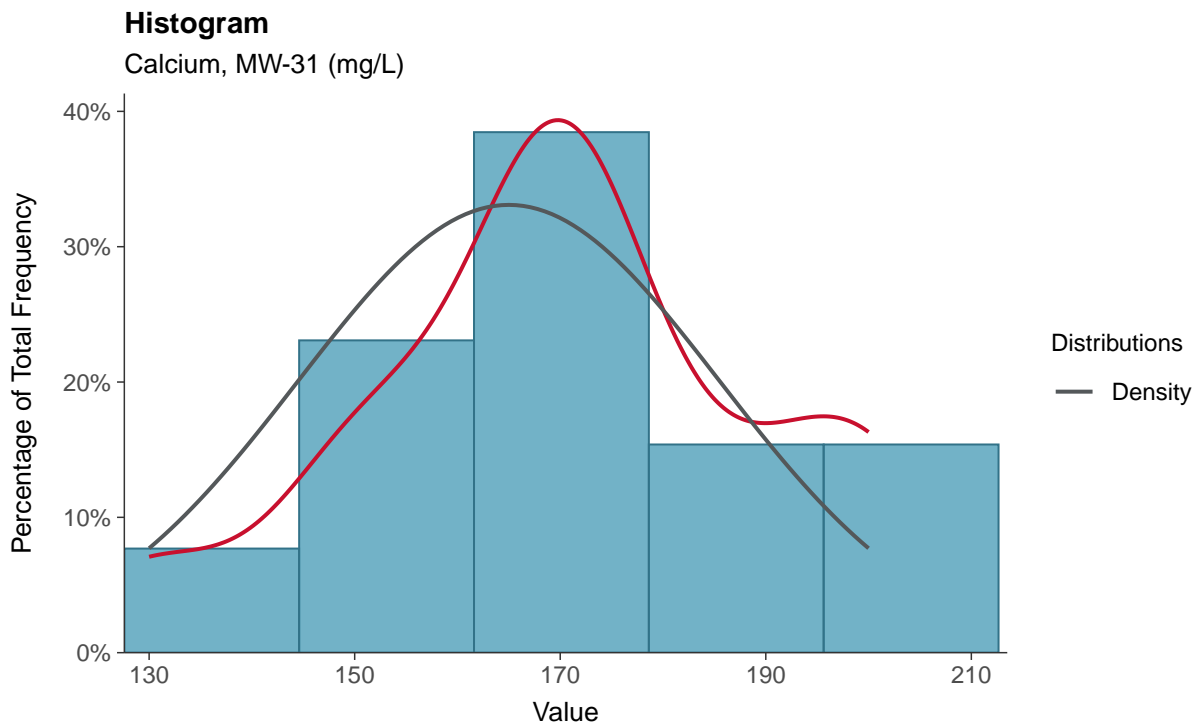
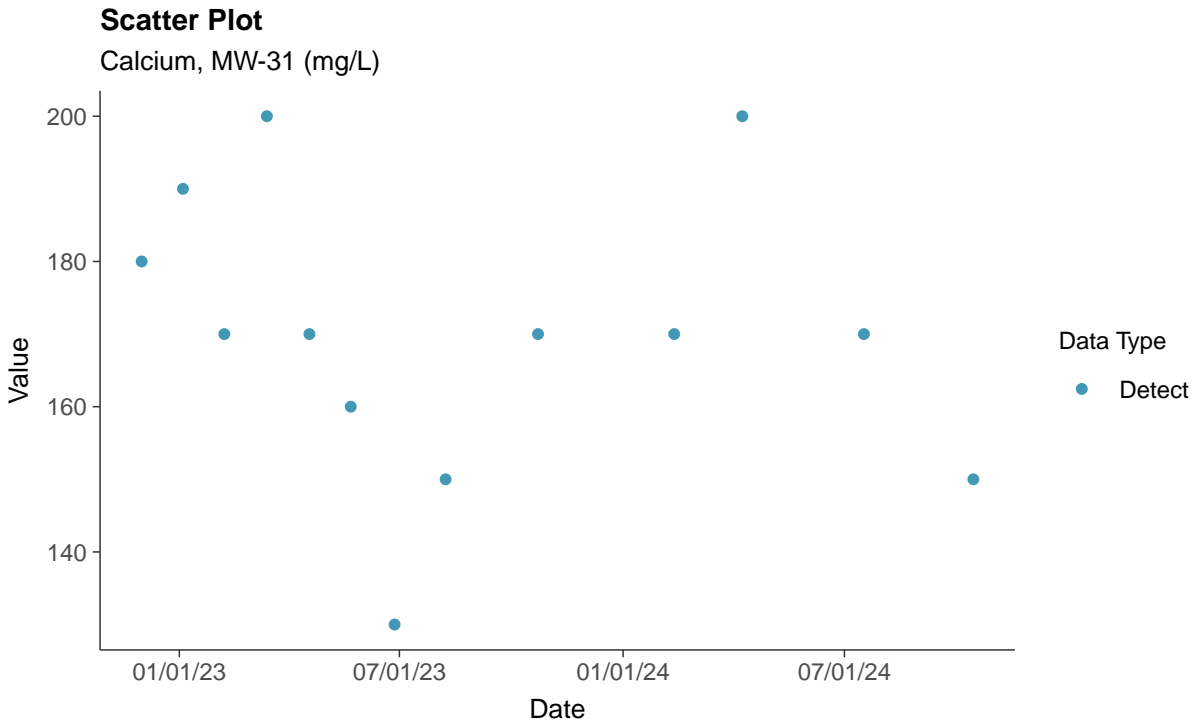
Boron, MW-31 (mg/L)





Appendix III: Calcium, MW-31

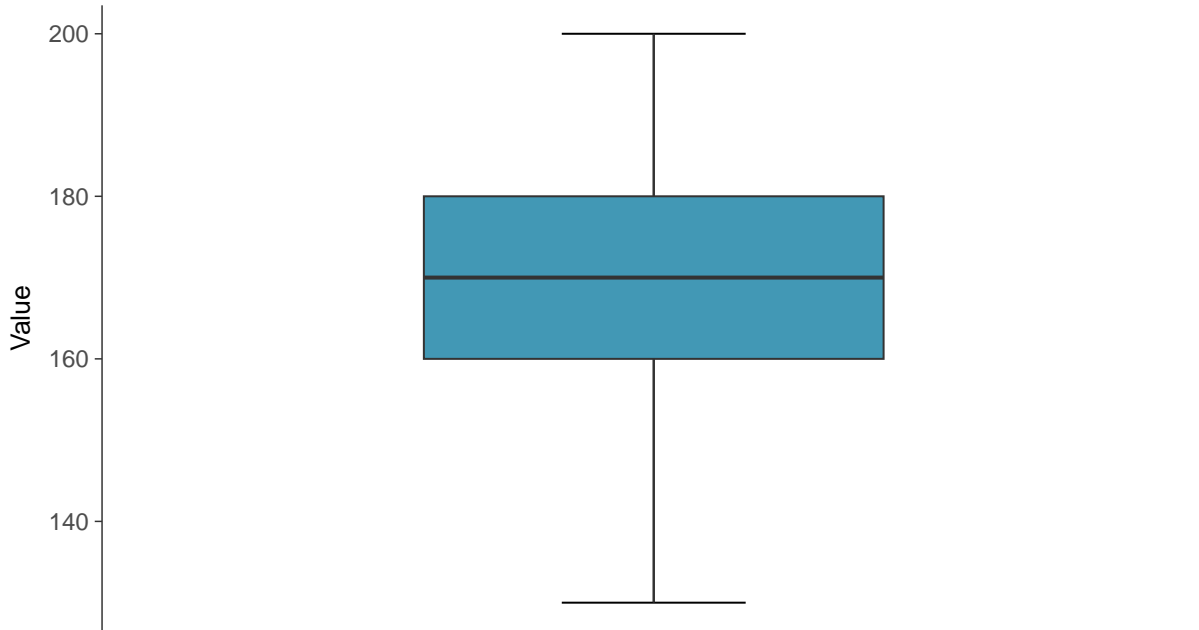
ID: 1_41_1_4_107





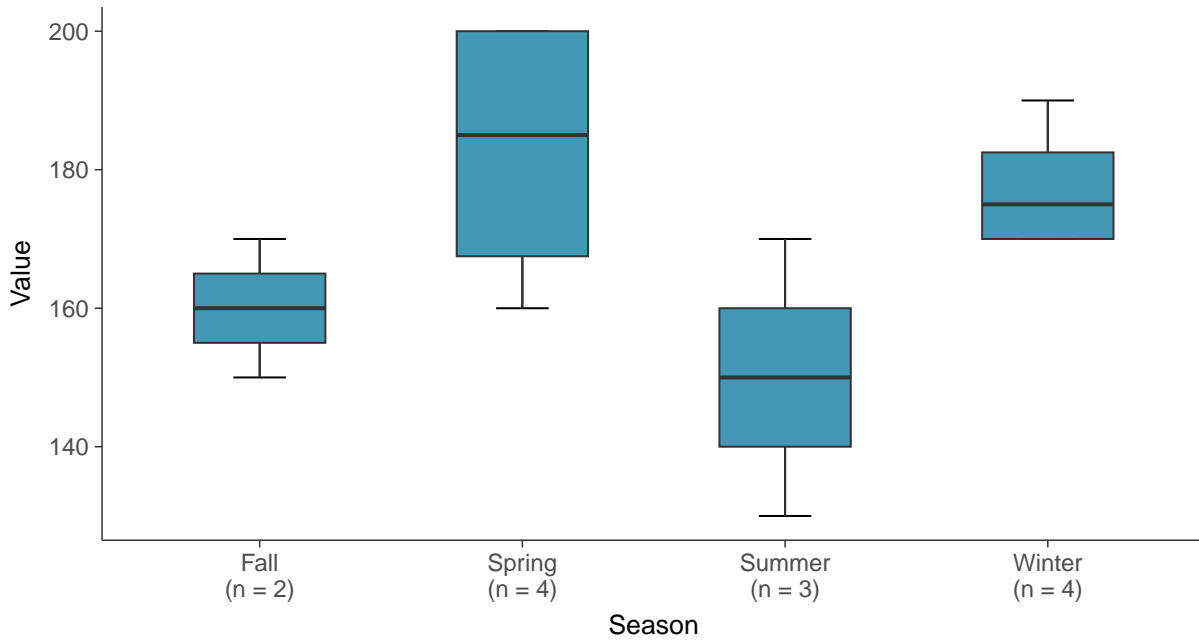
Boxplot

Calcium, MW-31 (mg/L)



Boxplot by Season

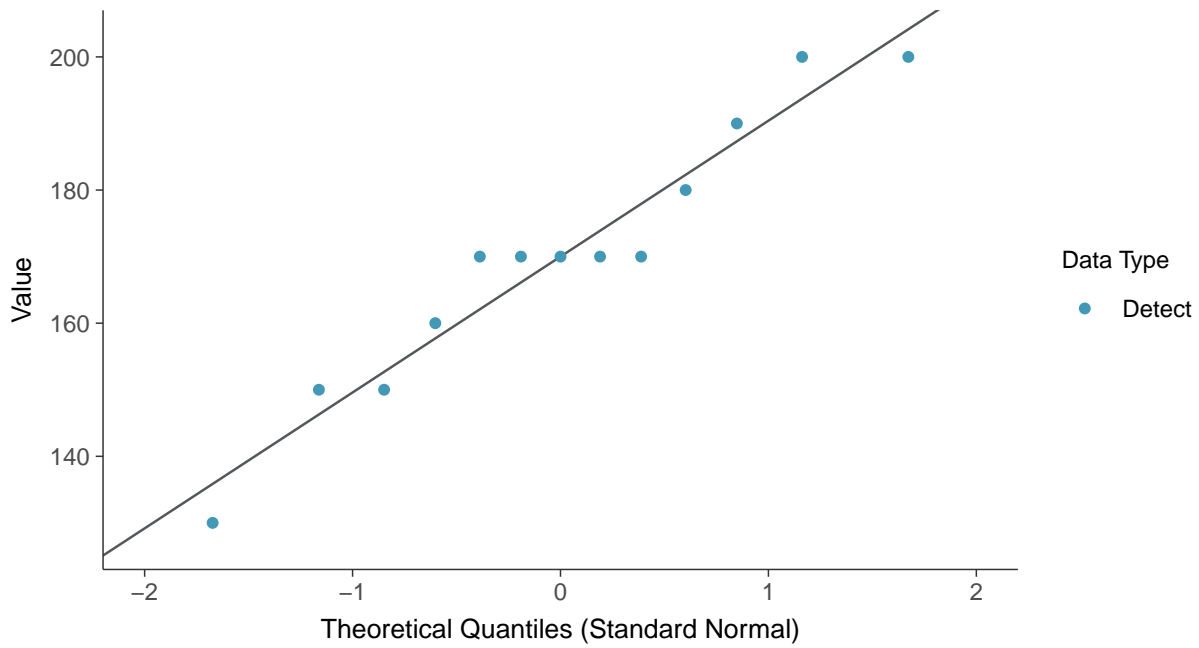
Calcium, MW-31 (mg/L)





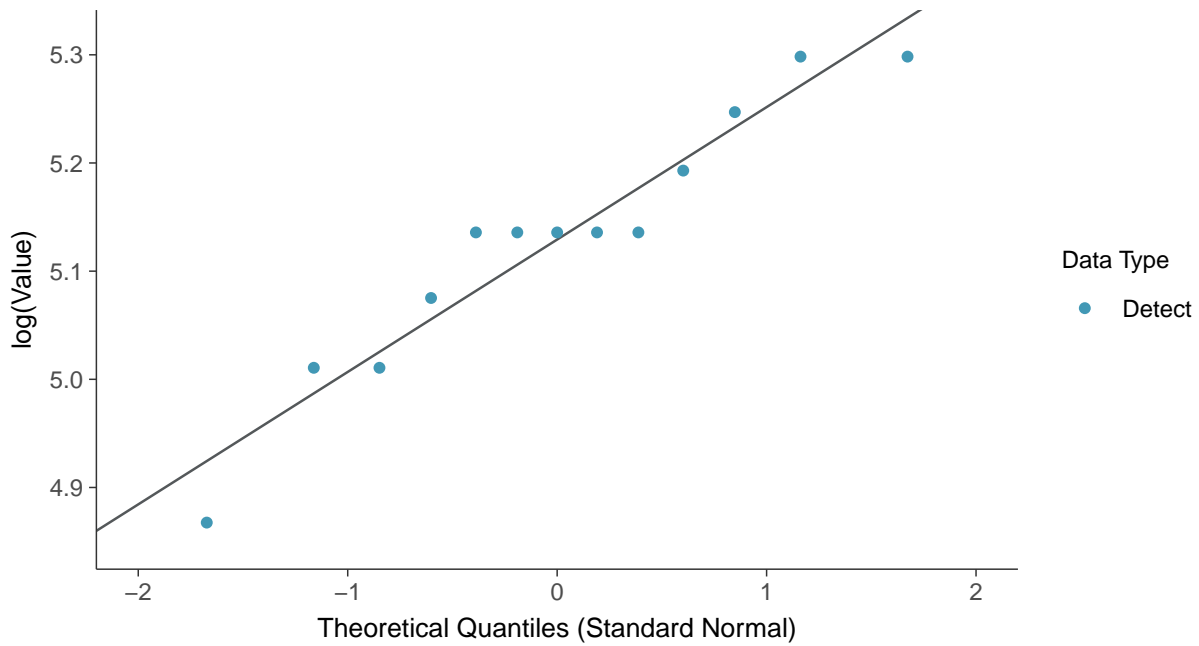
Normal Q-Q plot

Calcium, MW-31 (mg/L)



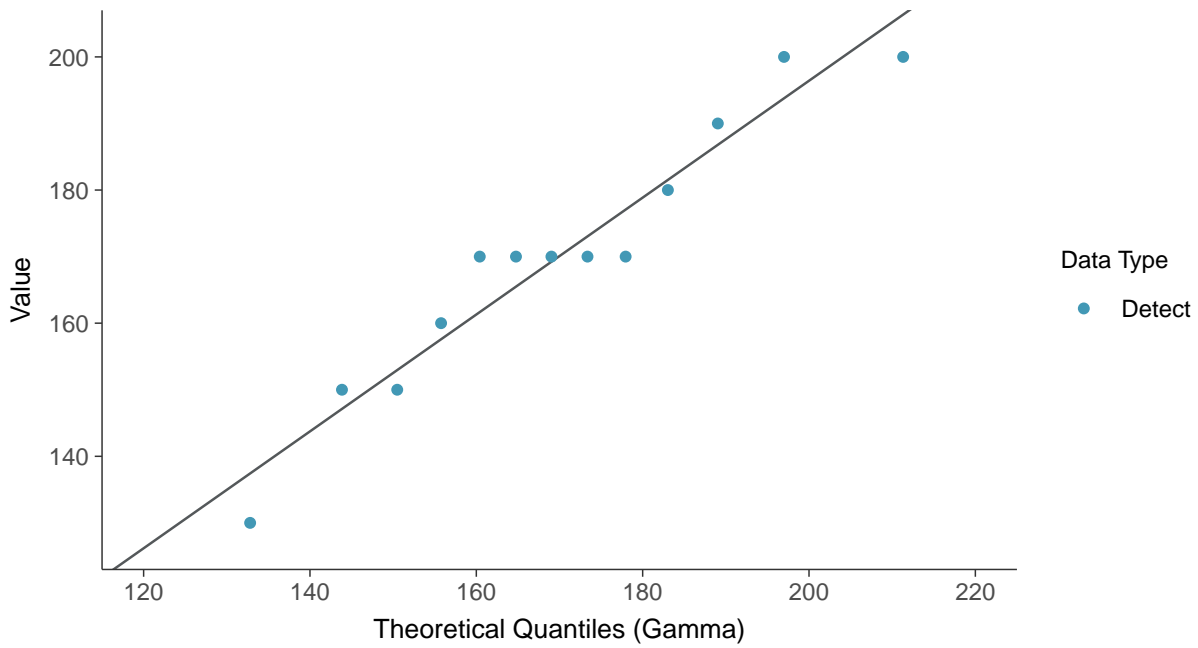
Lognormal Q-Q plot

Calcium, MW-31 (mg/L)

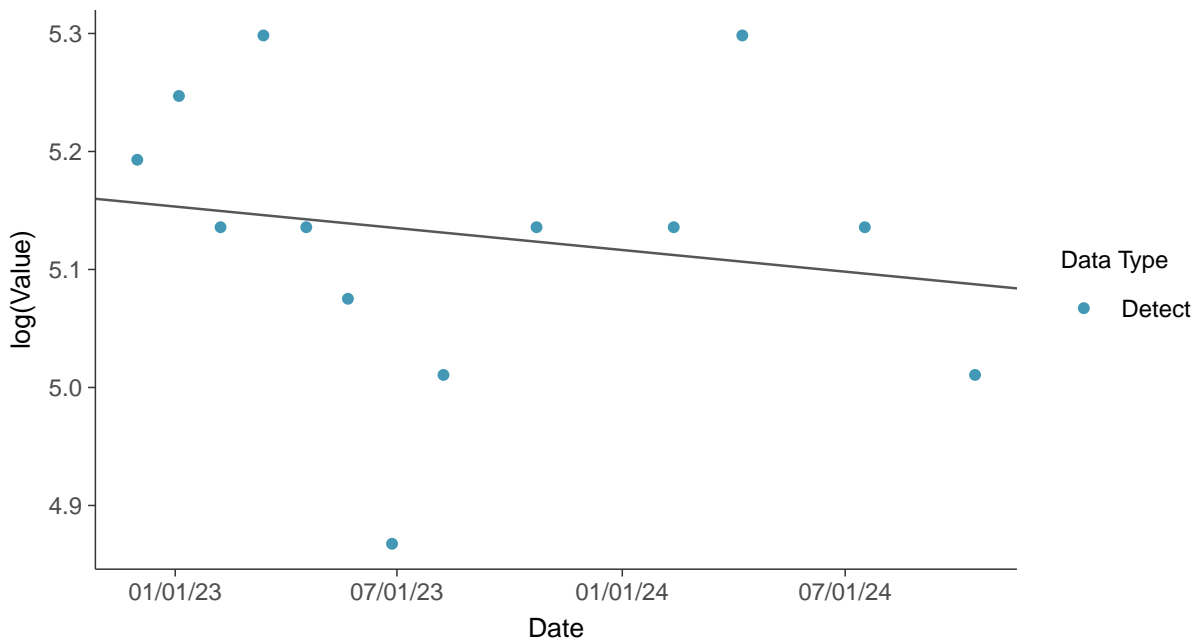




Gamma Q-Q plot
Calcium, MW-31 (mg/L)



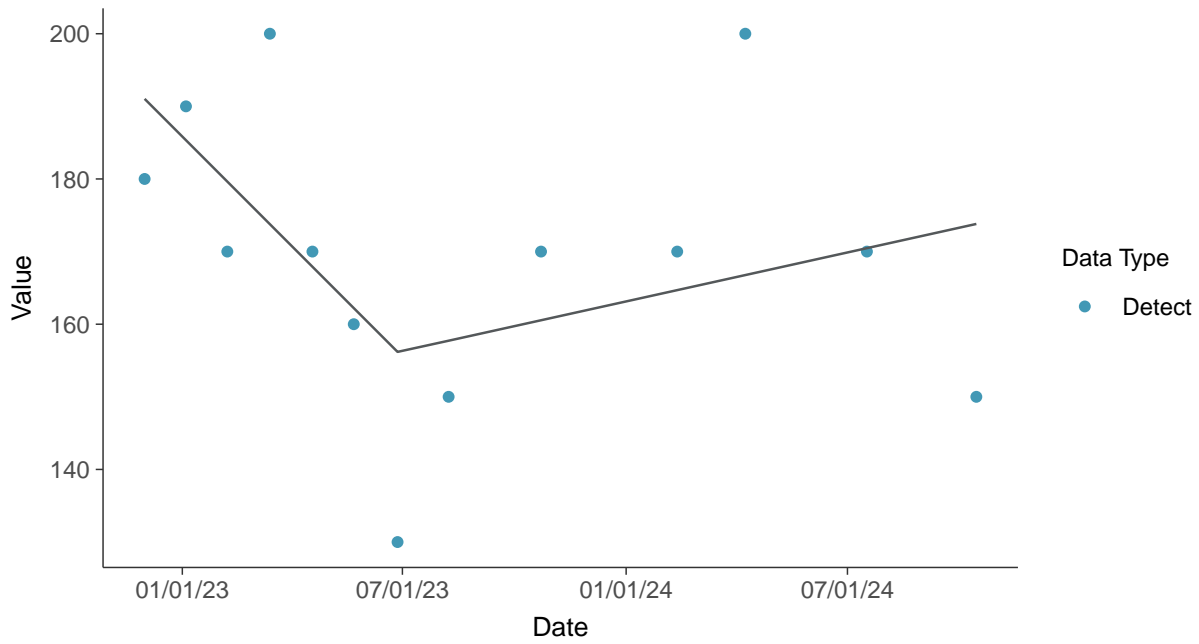
Trend Regression: Lognormal MLE
Calcium, MW-31 (mg/L)





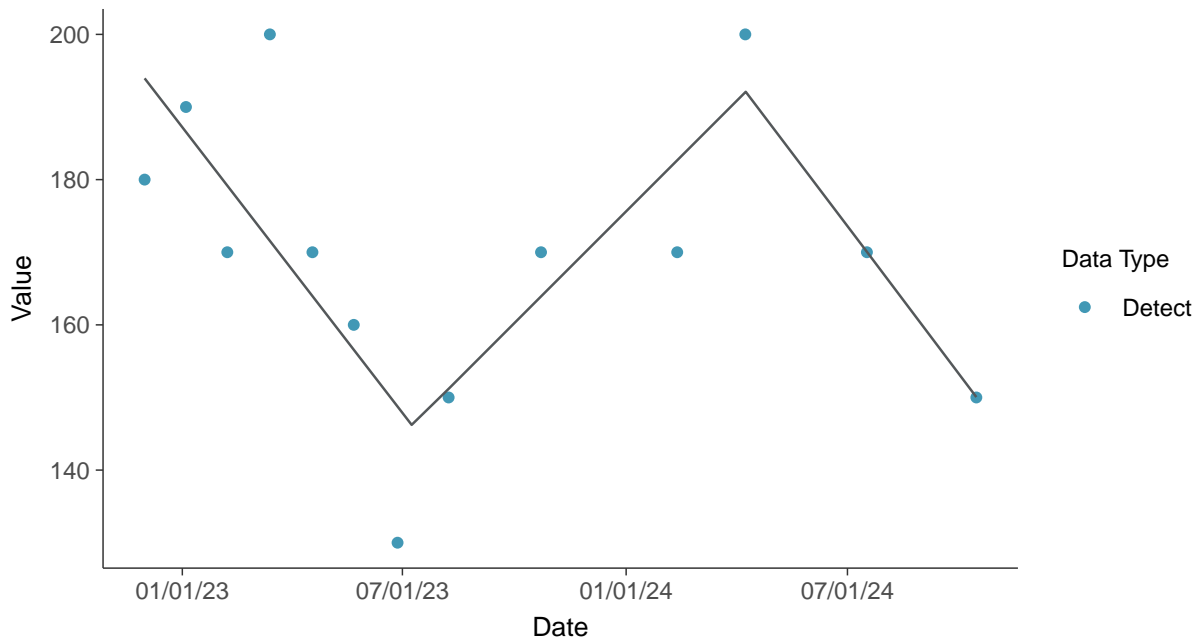
Trend Regression: Piecewise Linear-Linear

Calcium, MW-31 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Calcium, MW-31 (mg/L)



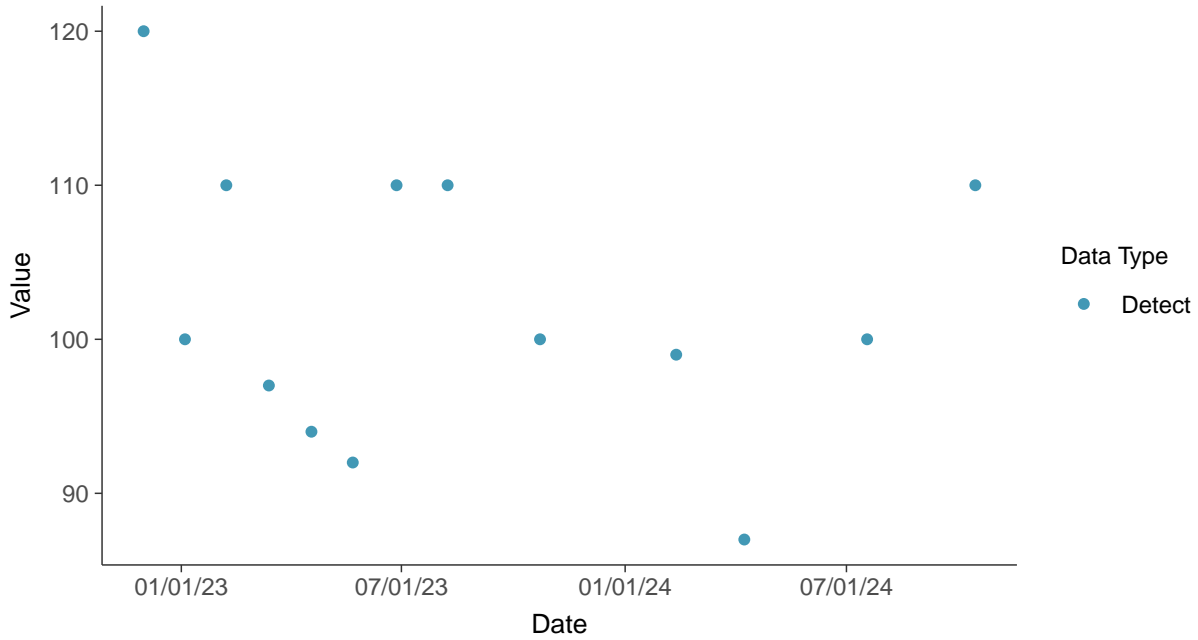


Appendix III: Chloride (as Cl), MW-31

ID: 1_41_1_4_108

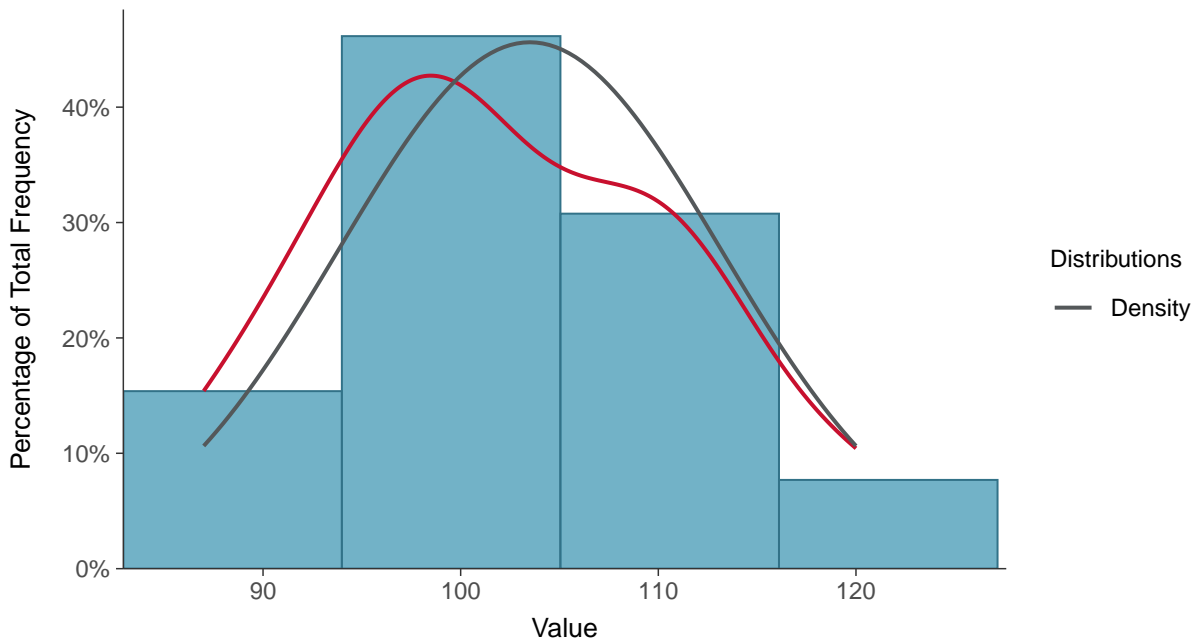
Scatter Plot

Chloride (as Cl), MW-31 (mg/L)



Histogram

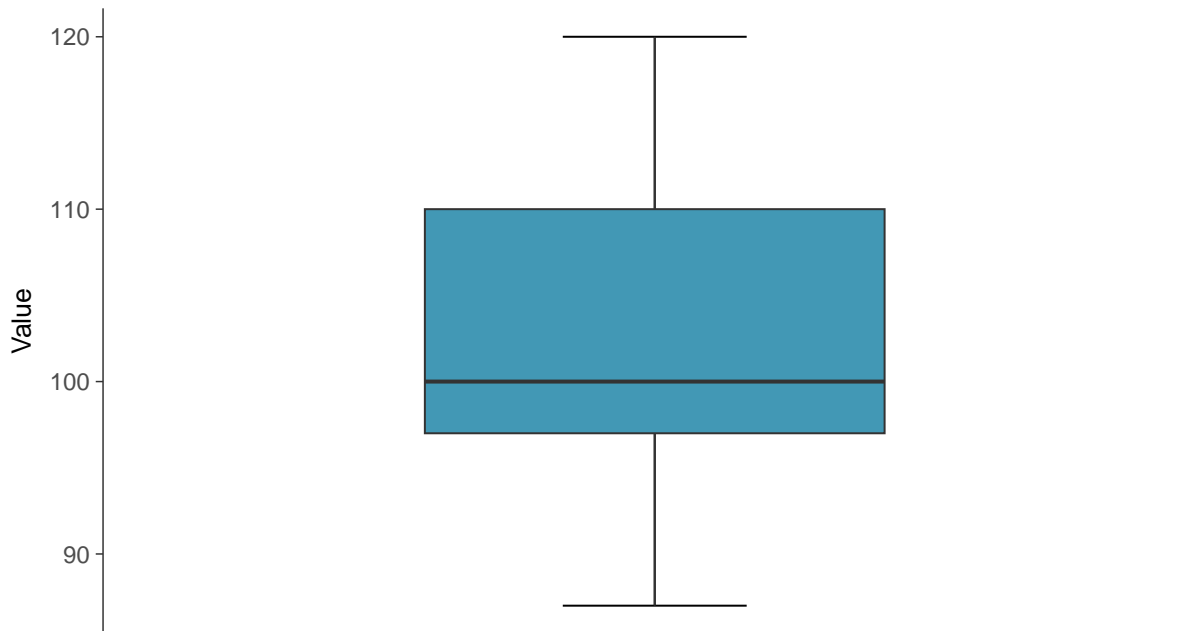
Chloride (as Cl), MW-31 (mg/L)





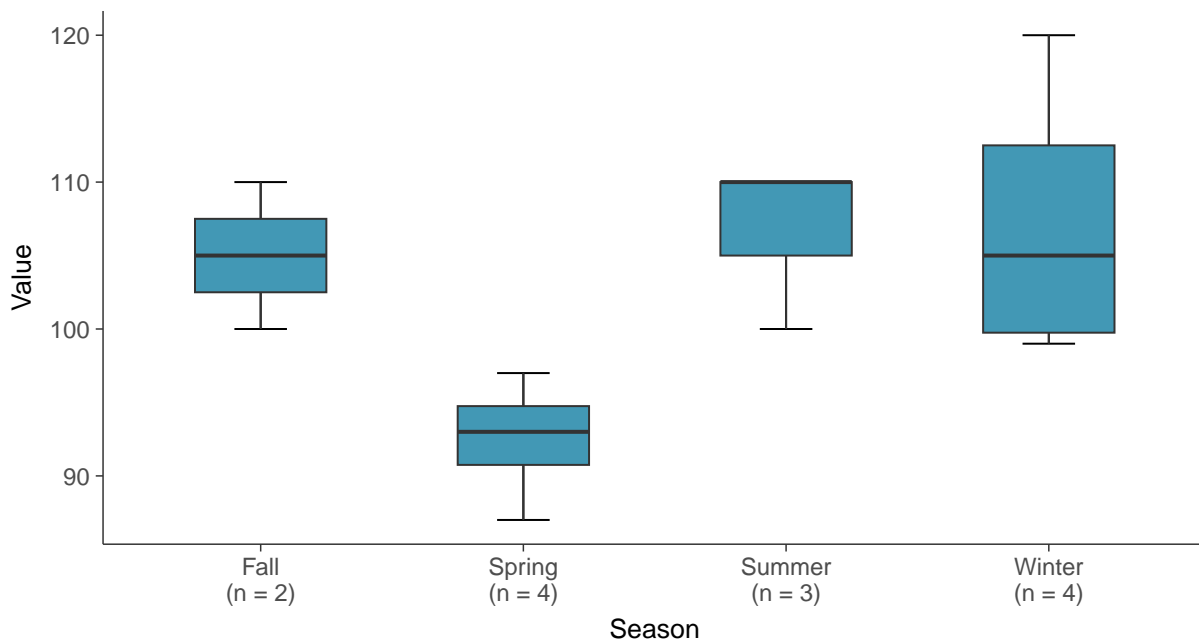
Boxplot

Chloride (as Cl), MW-31 (mg/L)



Boxplot by Season

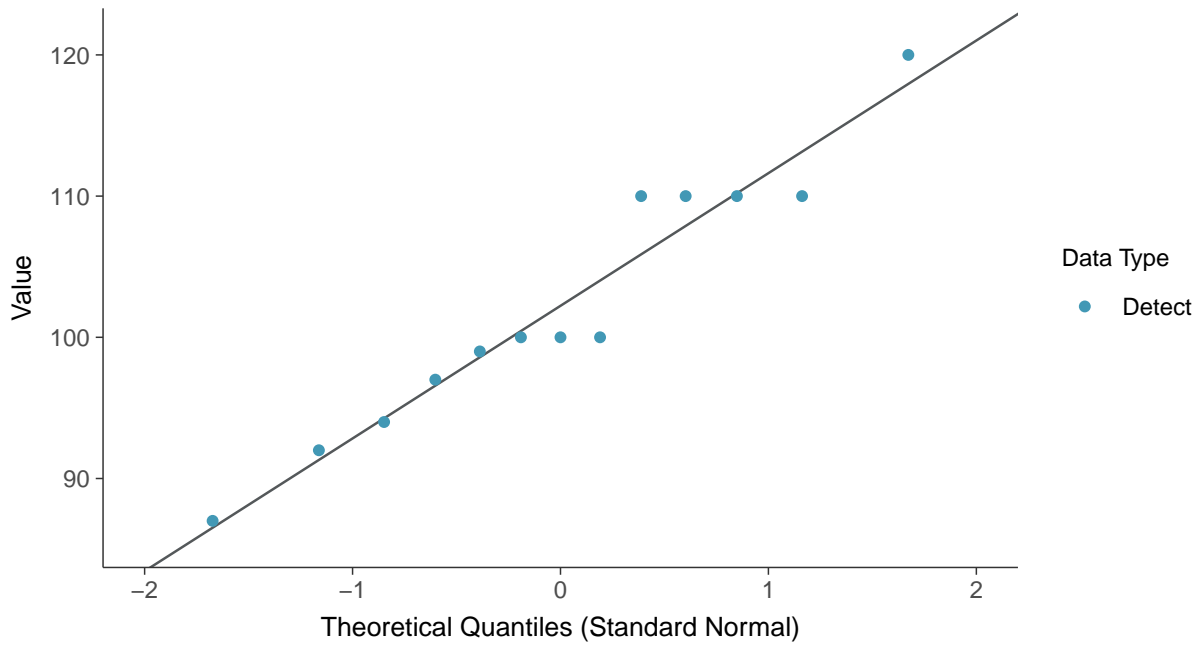
Chloride (as Cl), MW-31 (mg/L)





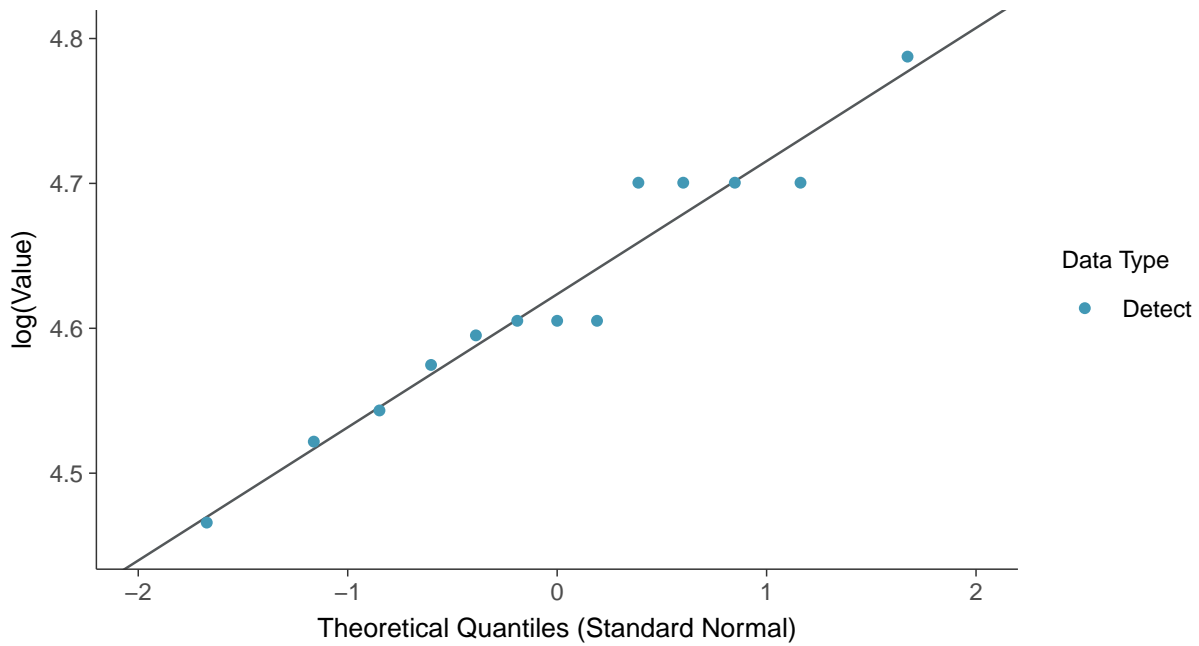
Normal Q-Q plot

Chloride (as Cl), MW-31 (mg/L)



Lognormal Q-Q plot

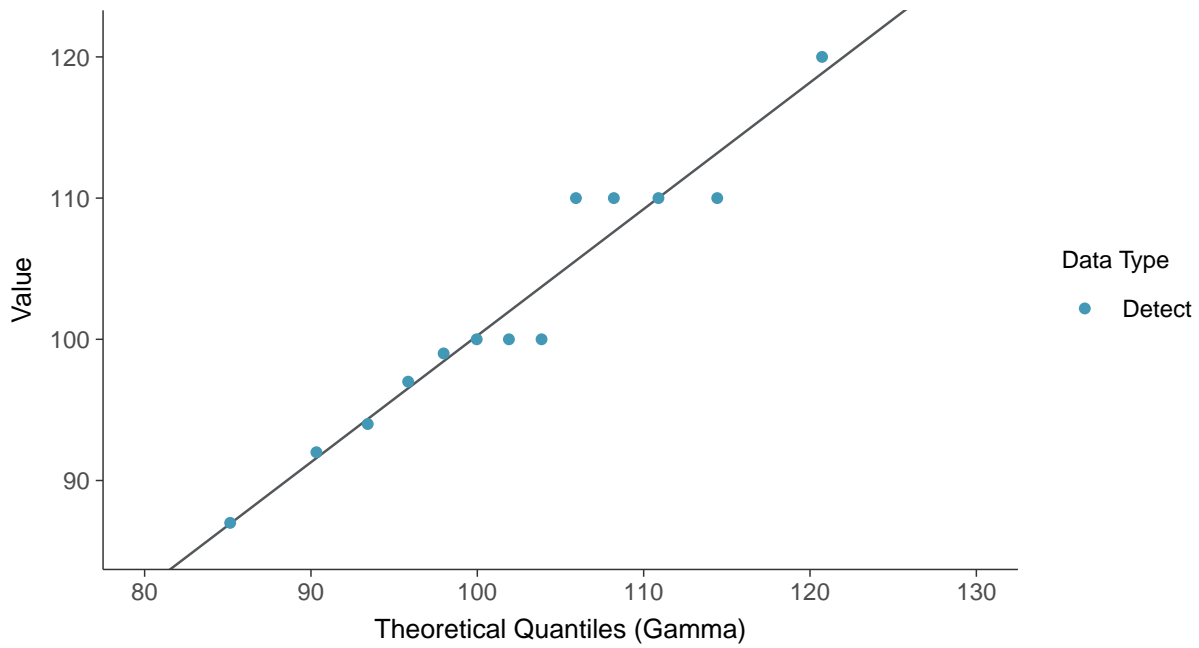
Chloride (as Cl), MW-31 (mg/L)





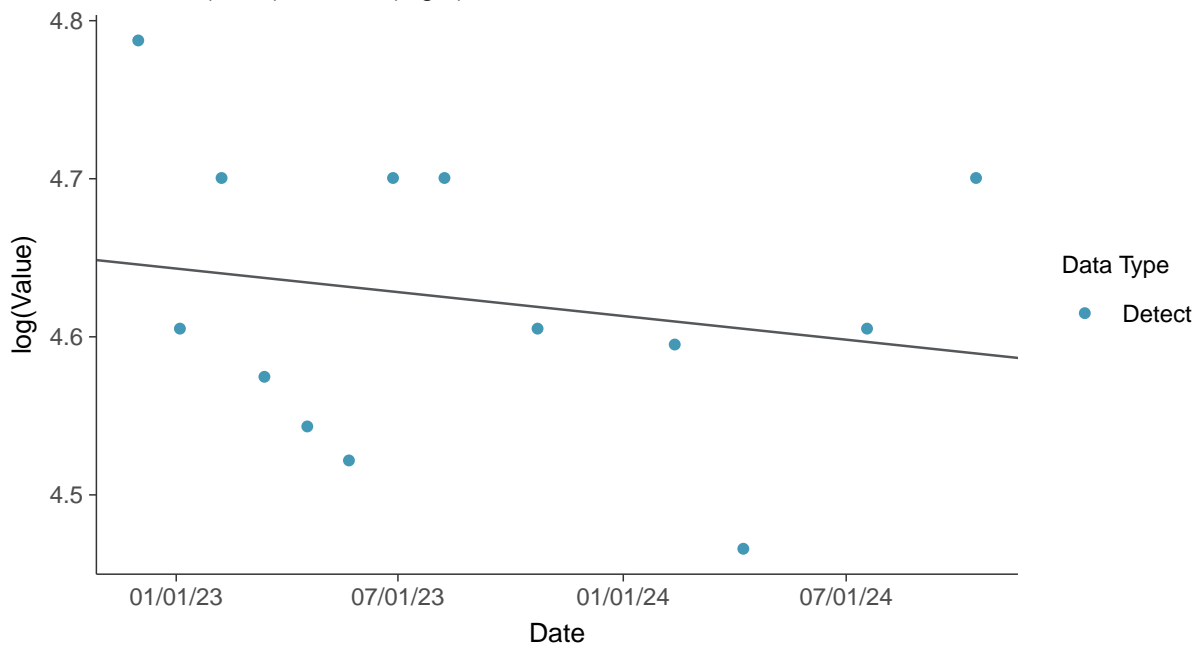
Gamma Q-Q plot

Chloride (as Cl), MW-31 (mg/L)



Trend Regression: Lognormal MLE

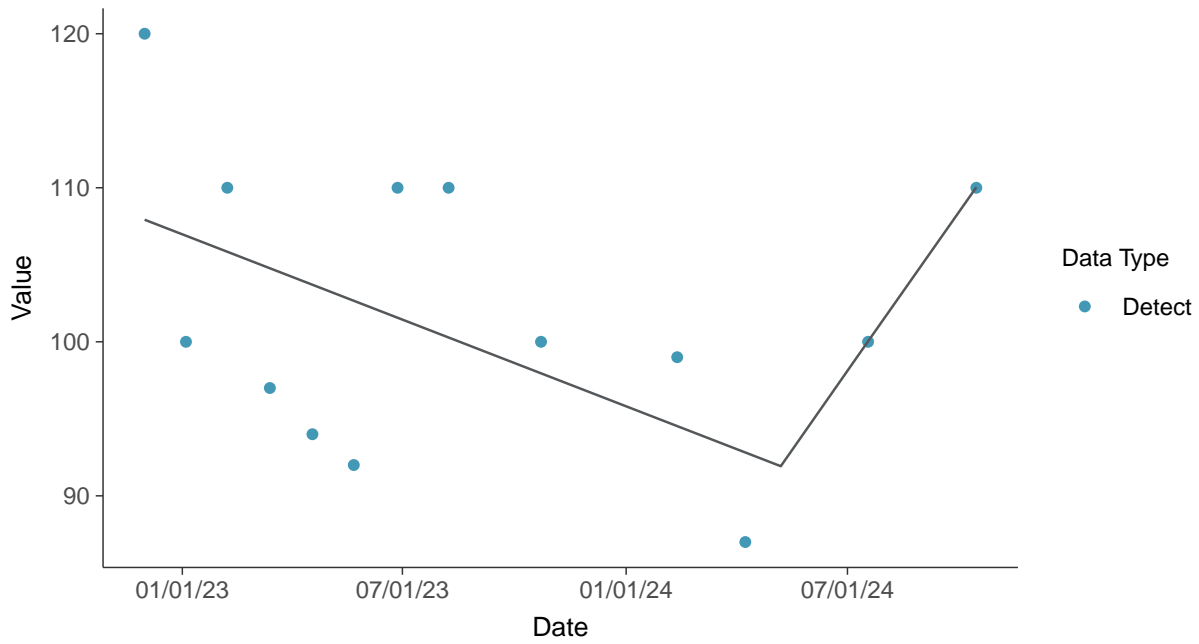
Chloride (as Cl), MW-31 (mg/L)





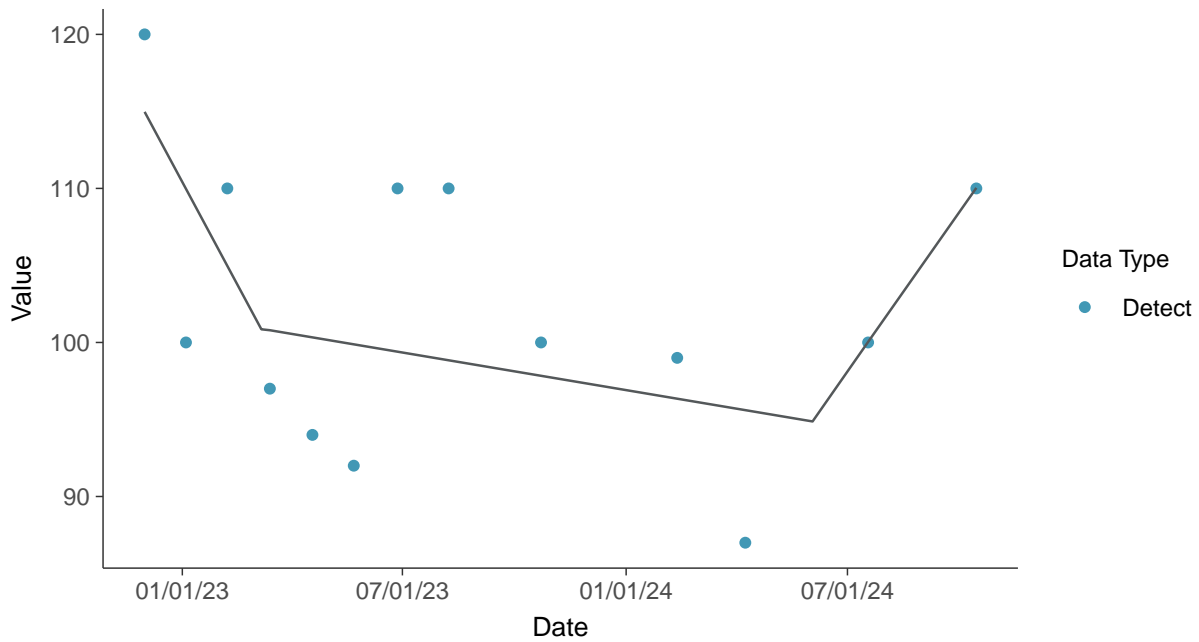
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-31 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Chloride (as Cl), MW-31 (mg/L)



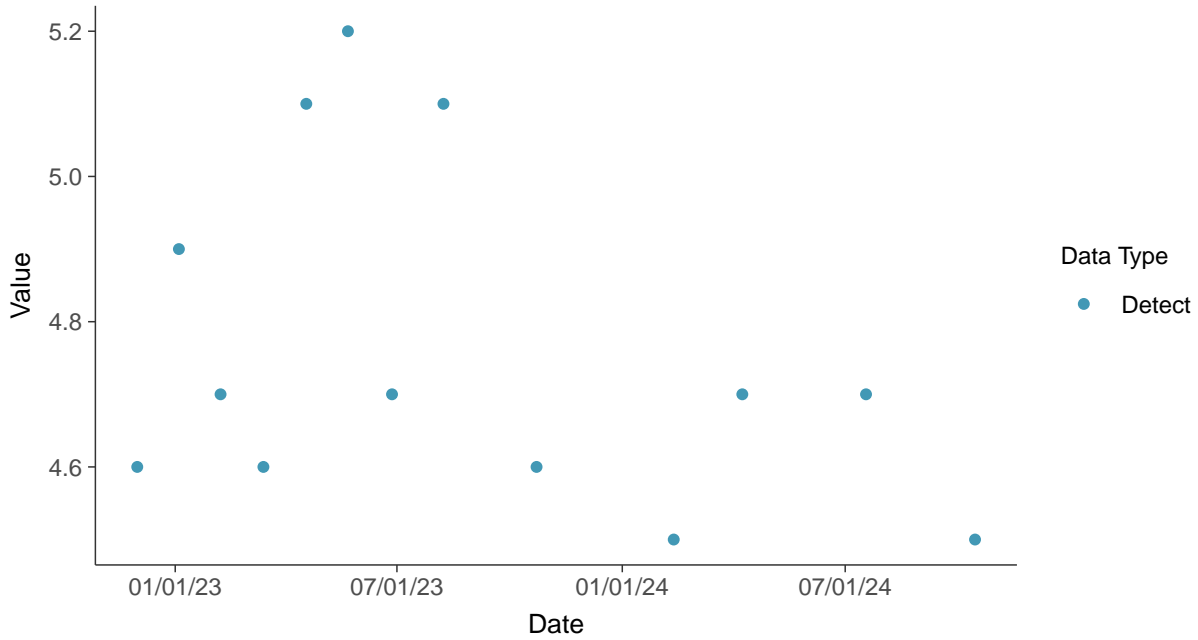


Appendix III: Fluoride, MW-31

ID: 1_41_1_4_112

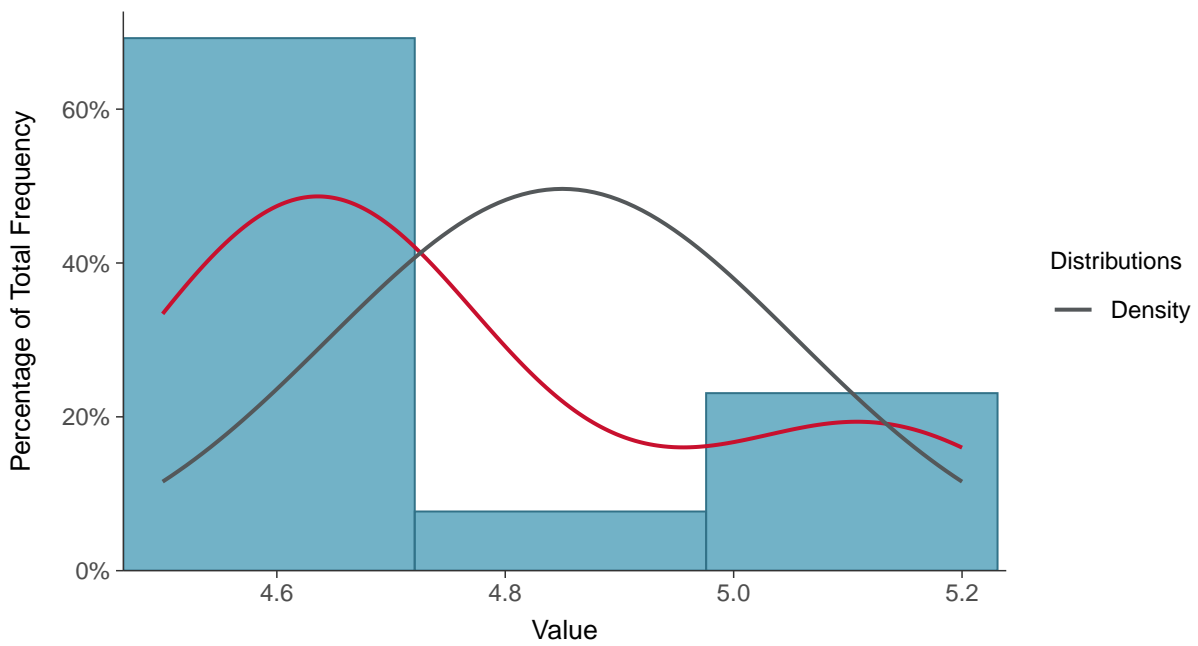
Scatter Plot

Fluoride, MW-31 (mg/L)



Histogram

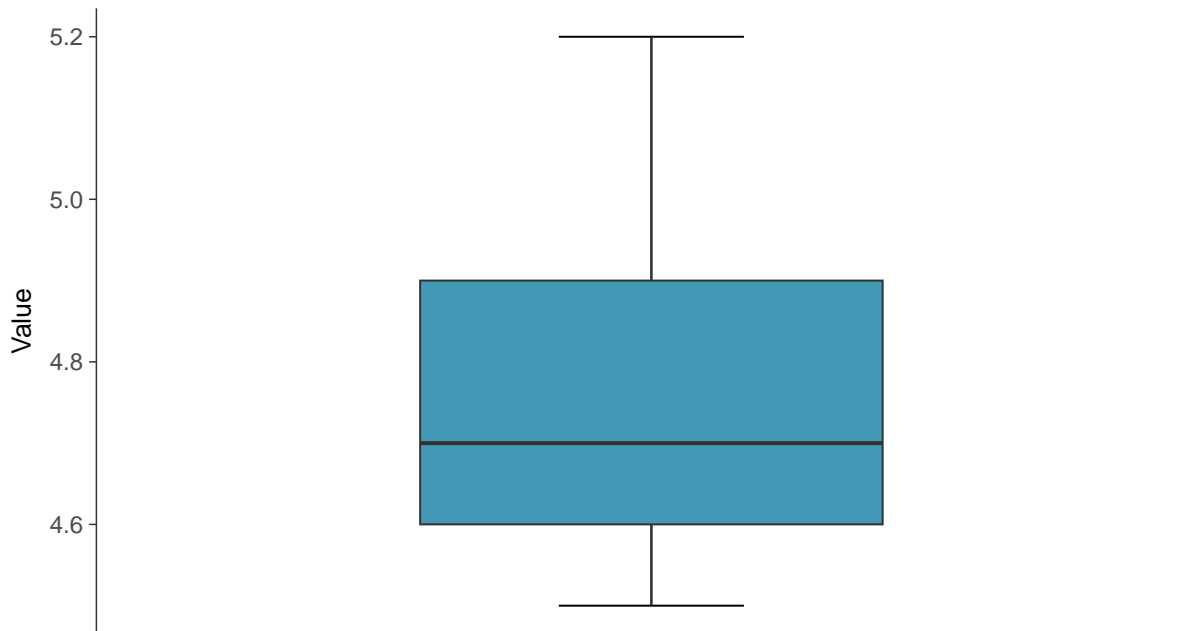
Fluoride, MW-31 (mg/L)





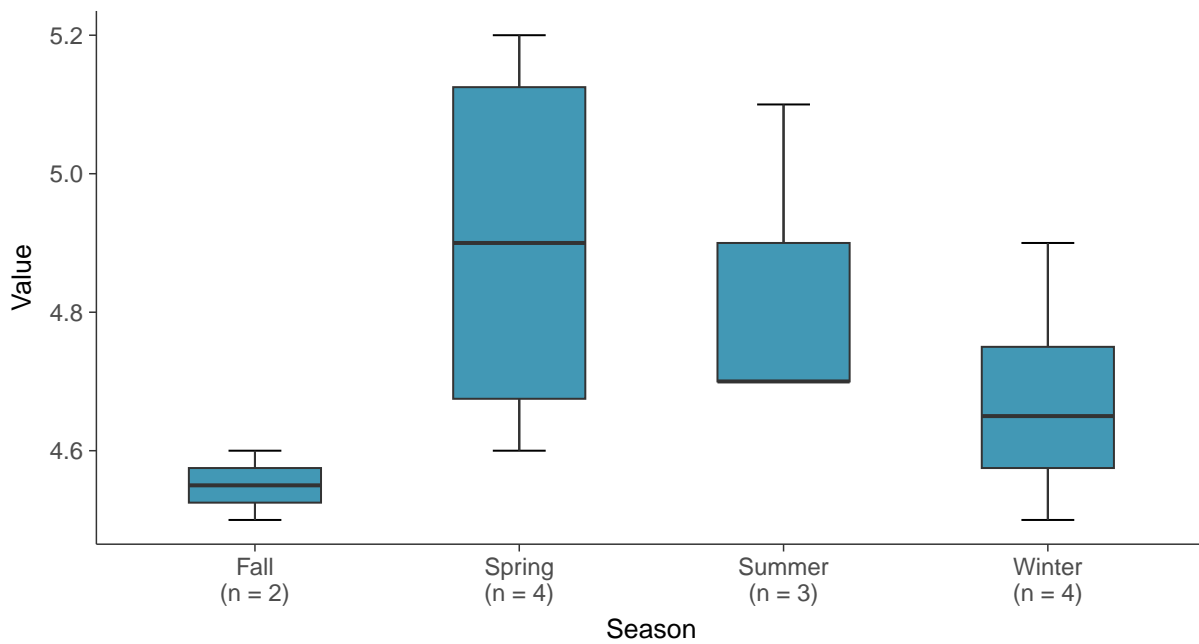
Boxplot

Fluoride, MW-31 (mg/L)



Boxplot by Season

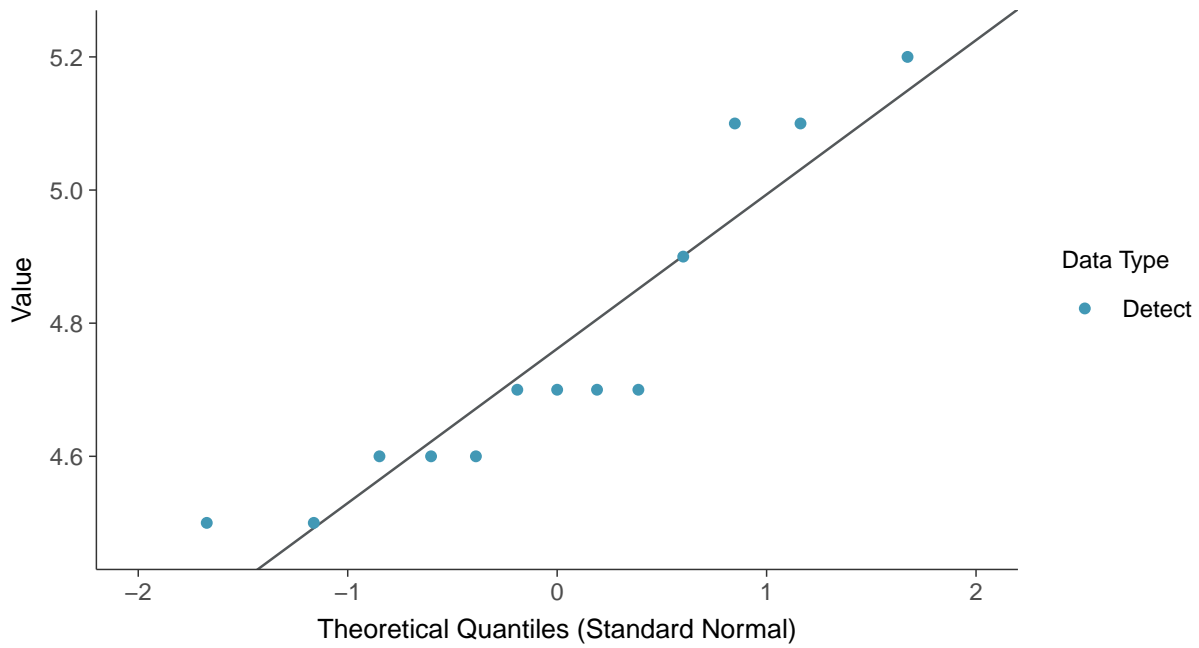
Fluoride, MW-31 (mg/L)





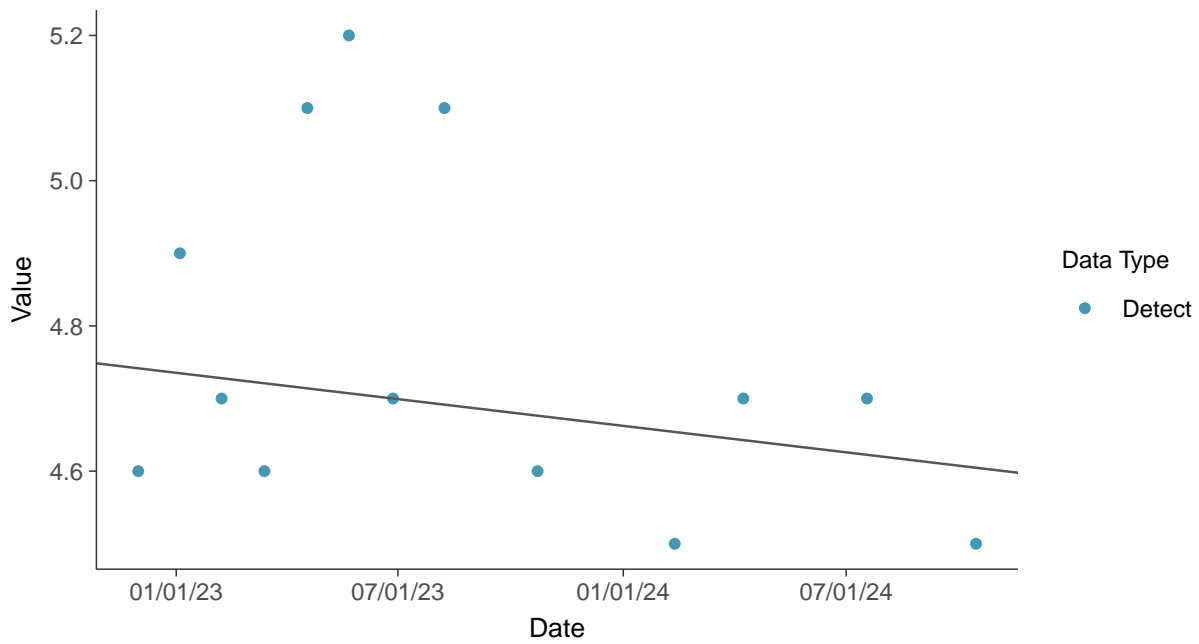
Normal Q-Q plot

Fluoride, MW-31 (mg/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

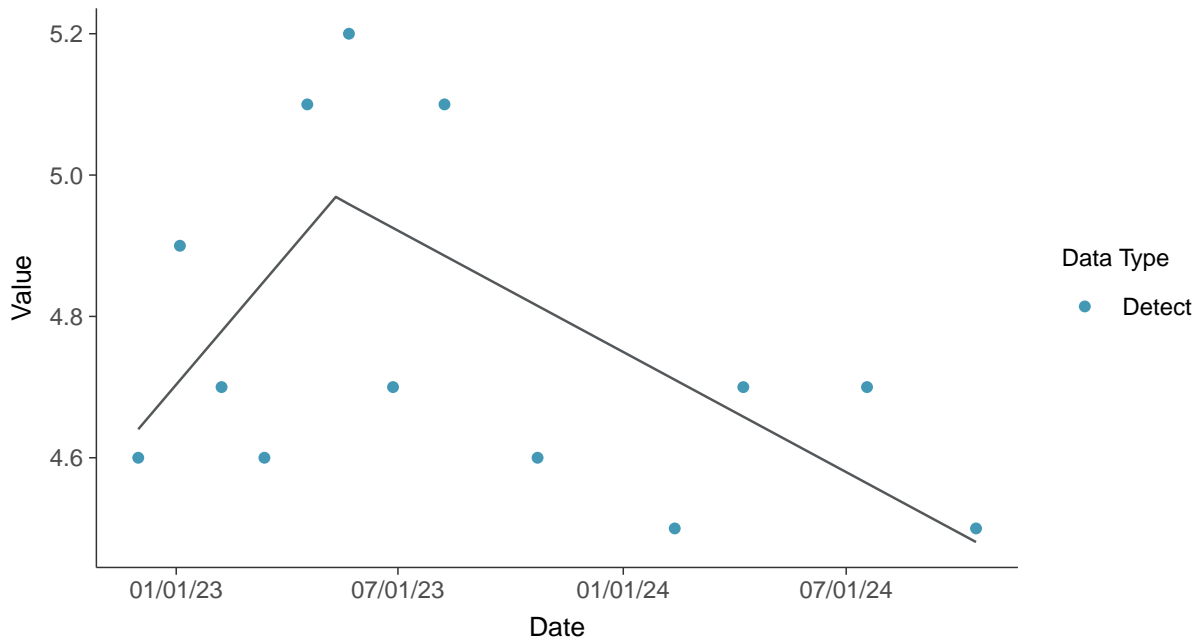
Fluoride, MW-31 (mg/L)





Trend Regression: Piecewise Linear-Linear

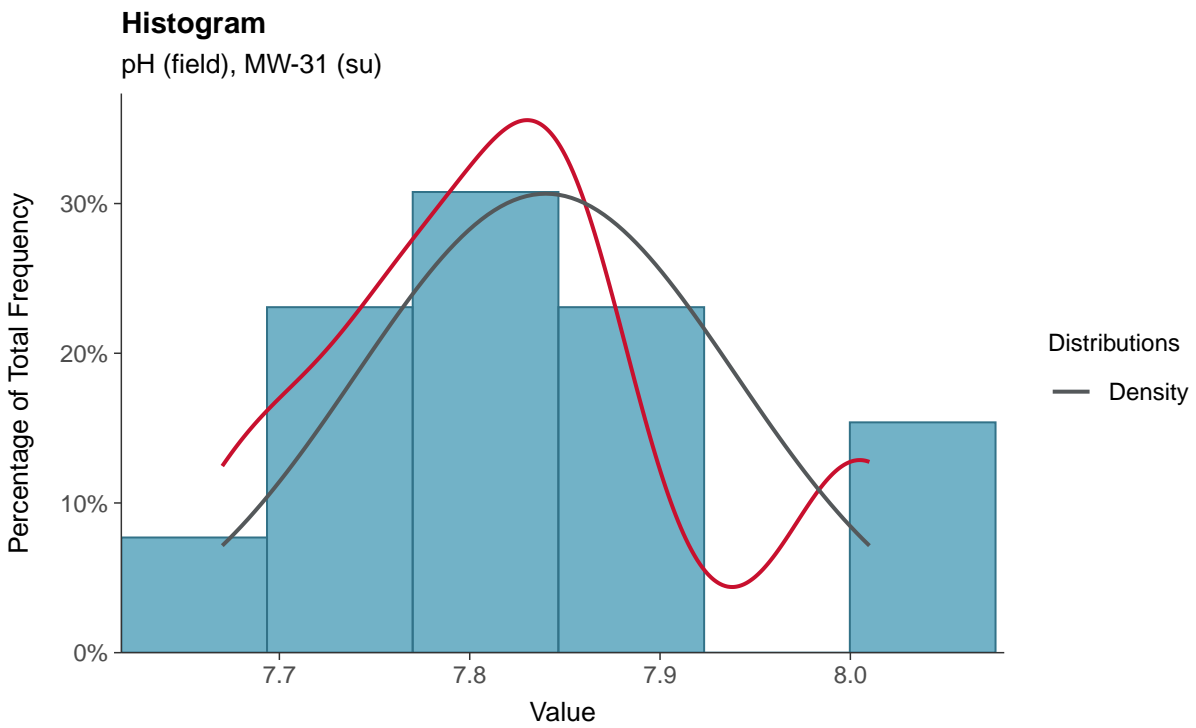
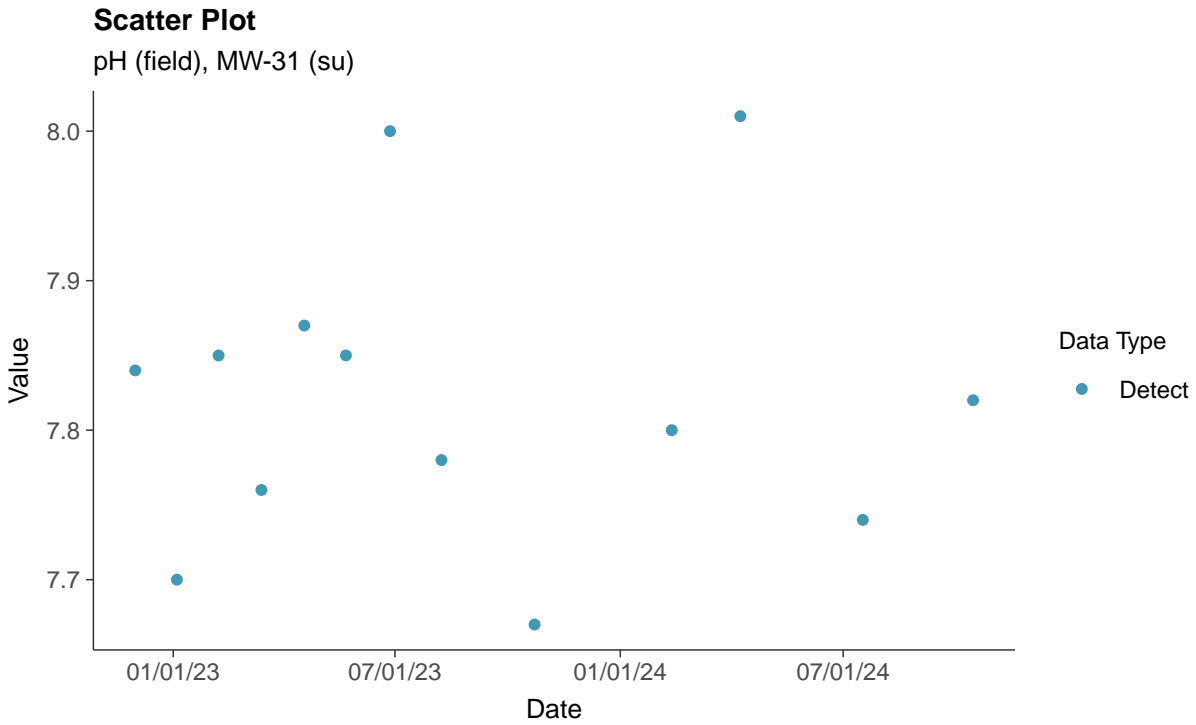
Fluoride, MW-31 (mg/L)





Appendix III: pH (field), MW-31

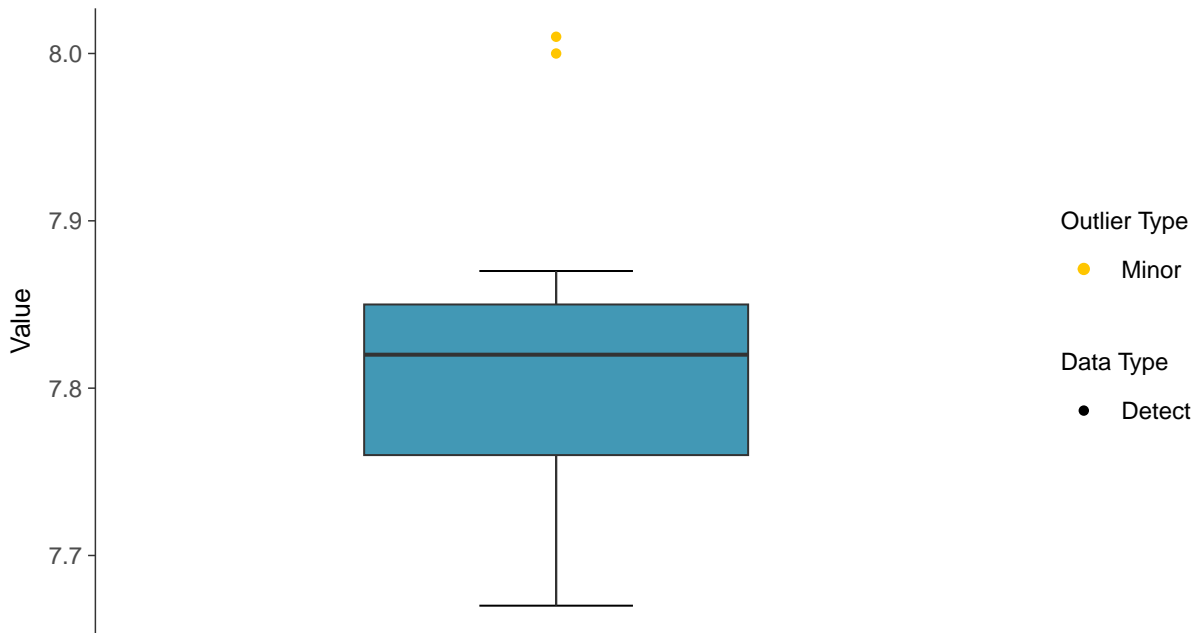
ID: 1_41_1_4_120





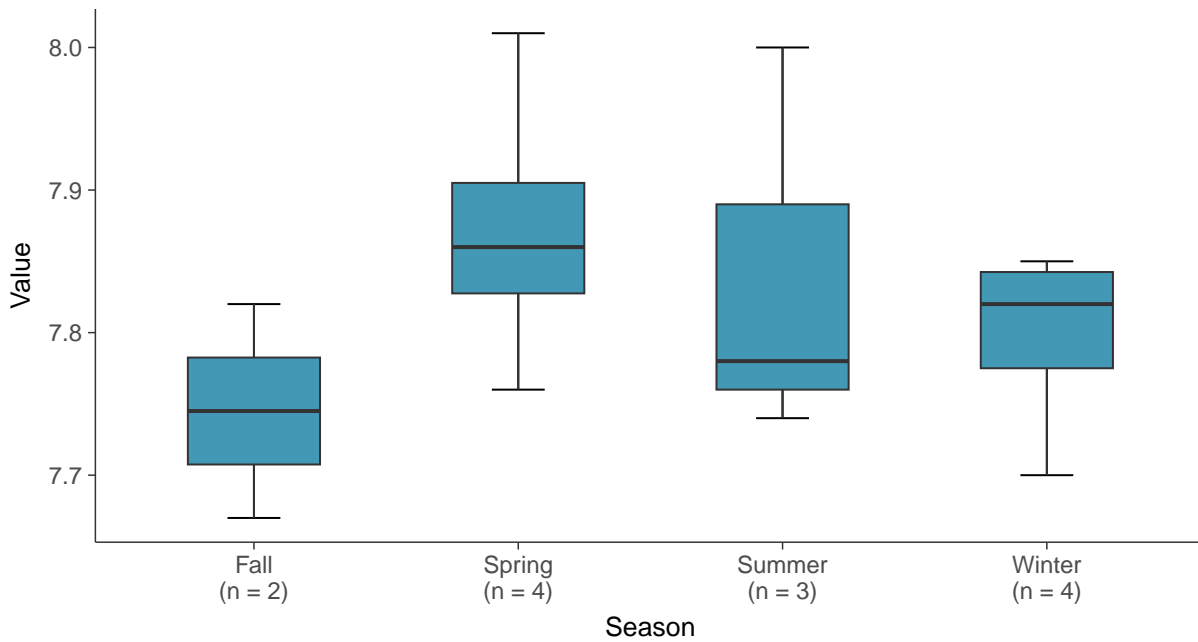
Boxplot

pH (field), MW-31 (su)



Boxplot by Season

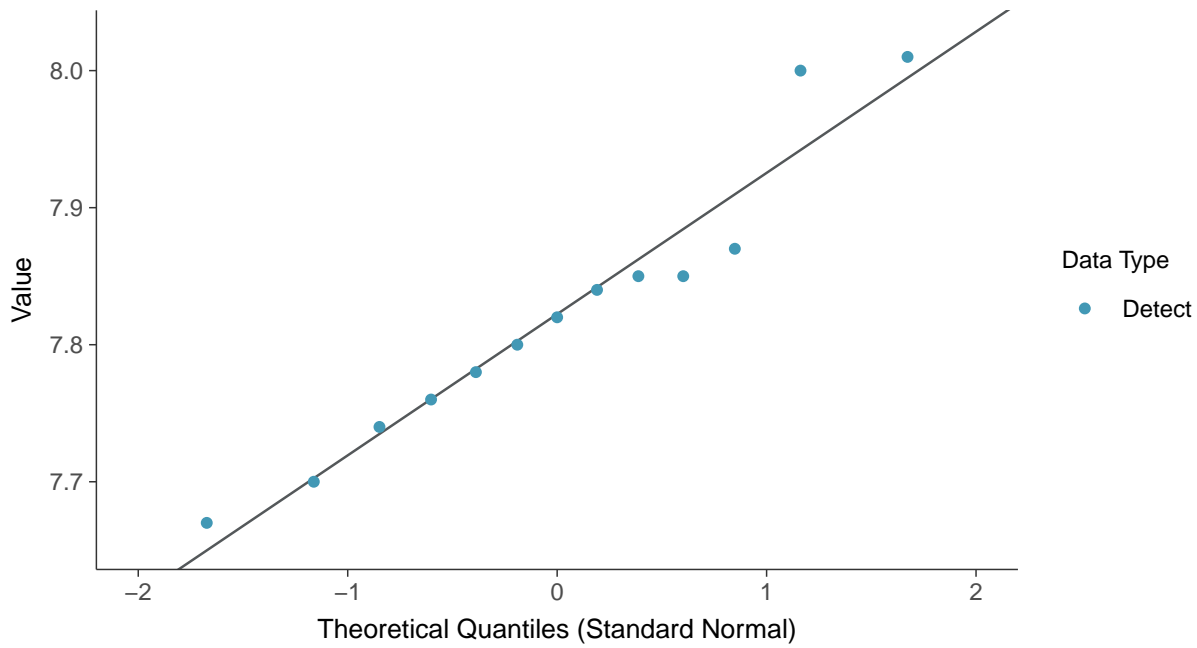
pH (field), MW-31 (su)





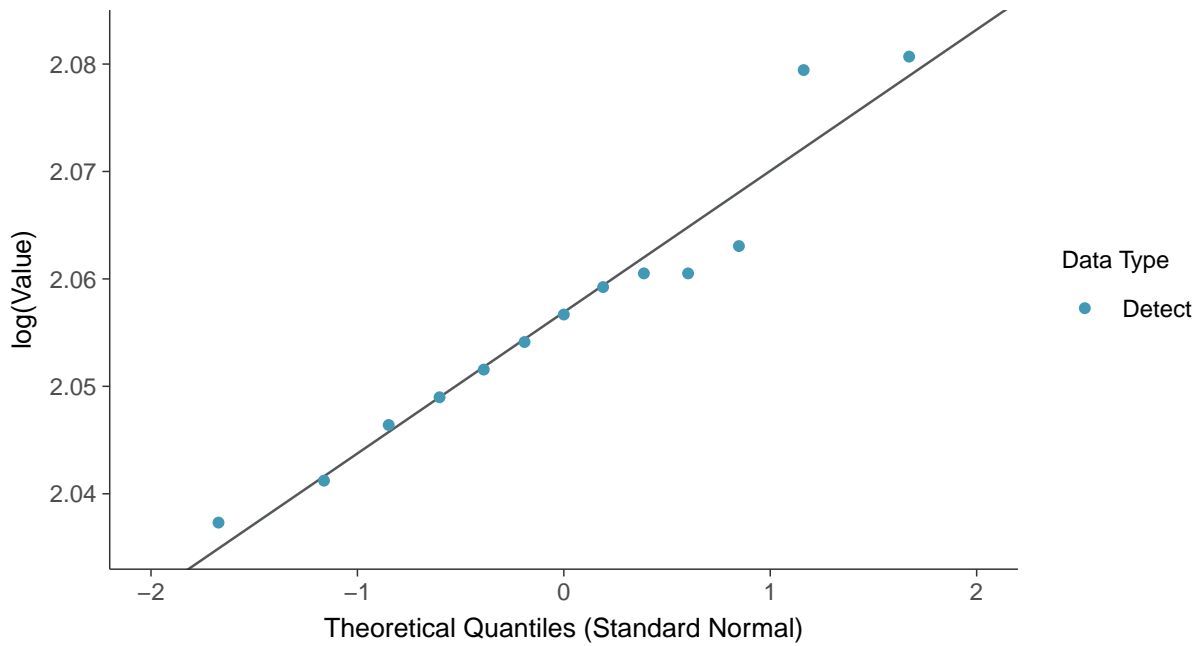
Normal Q-Q plot

pH (field), MW-31 (su)



Lognormal Q-Q plot

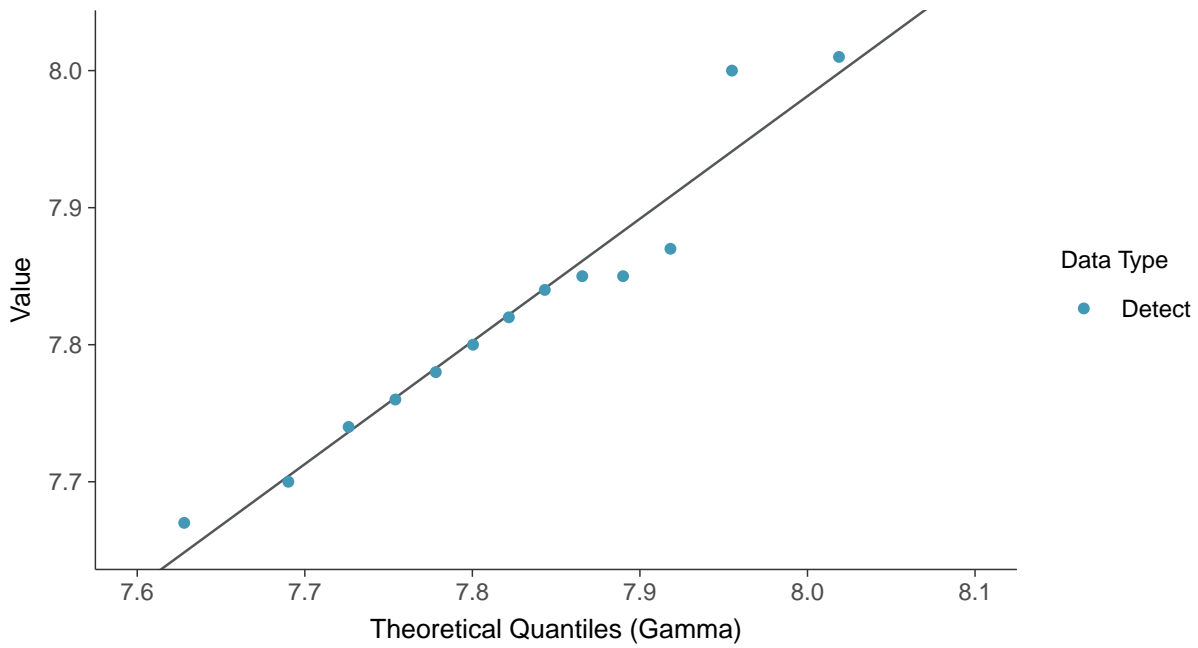
pH (field), MW-31 (su)





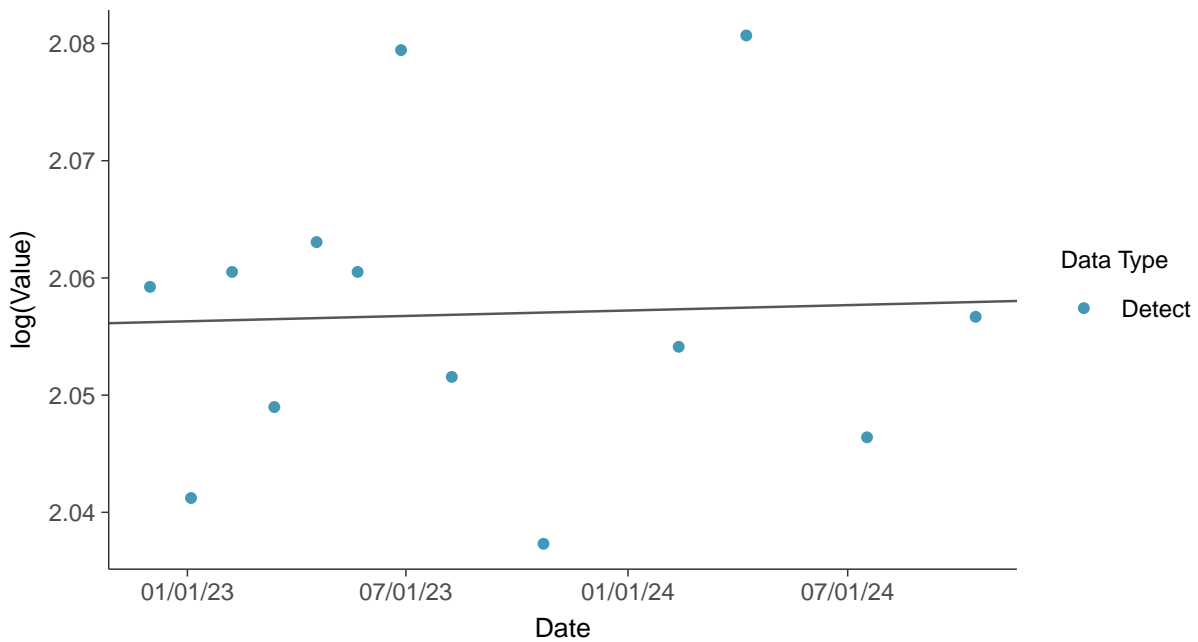
Gamma Q-Q plot

pH (field), MW-31 (su)



Trend Regression: Lognormal MLE

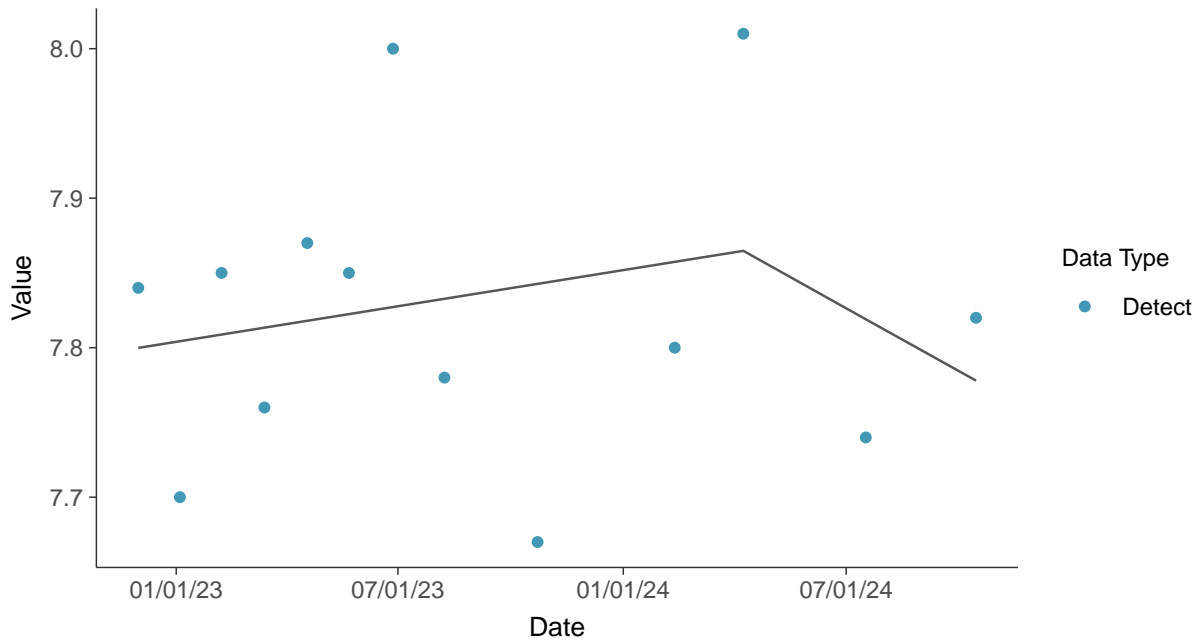
pH (field), MW-31 (su)





Trend Regression: Piecewise Linear-Linear

pH (field), MW-31 (su)



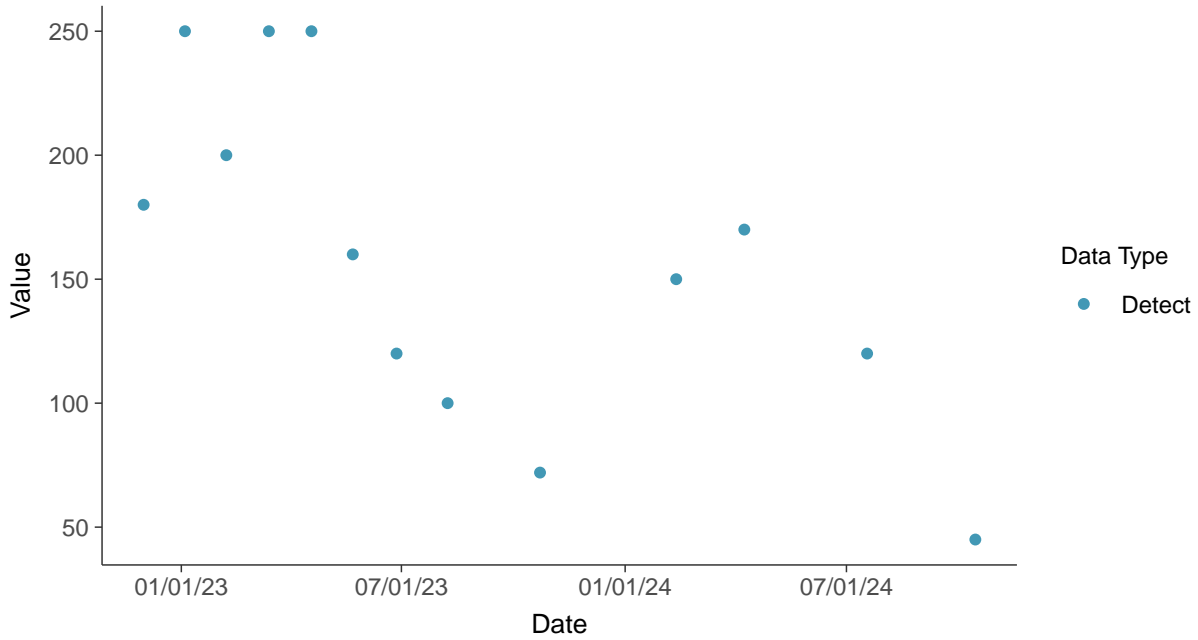


Appendix III: Sulfate (as SO₄), MW-31

ID: 1_41_1_4_124

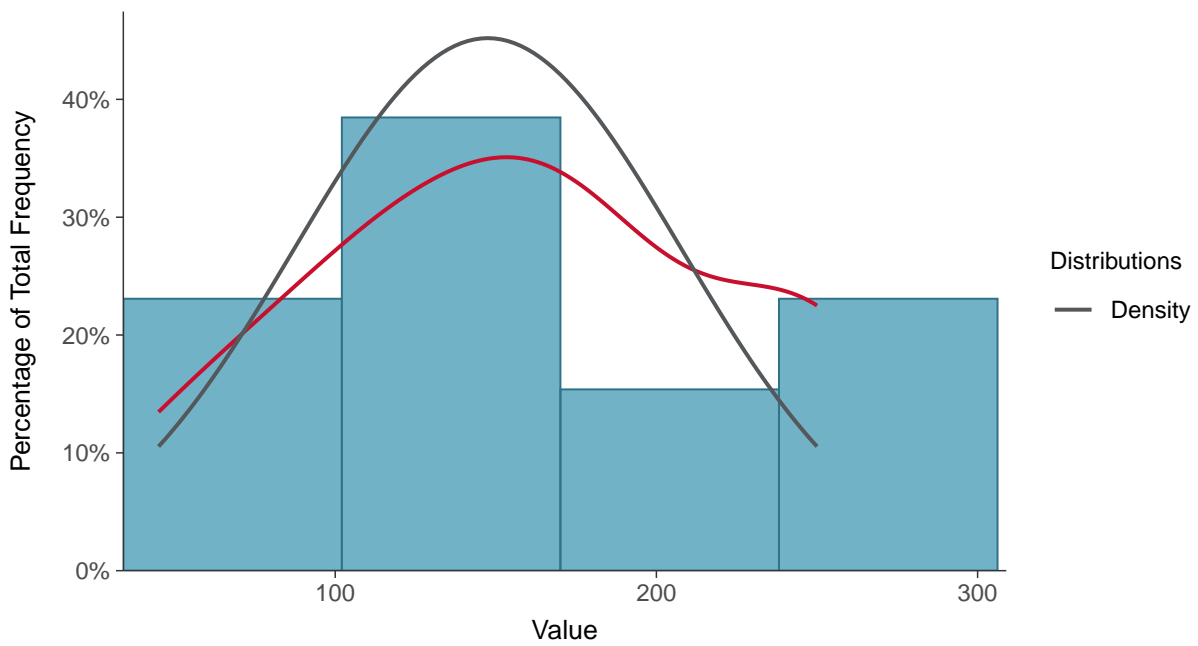
Scatter Plot

Sulfate (as SO₄), MW-31 (mg/L)



Histogram

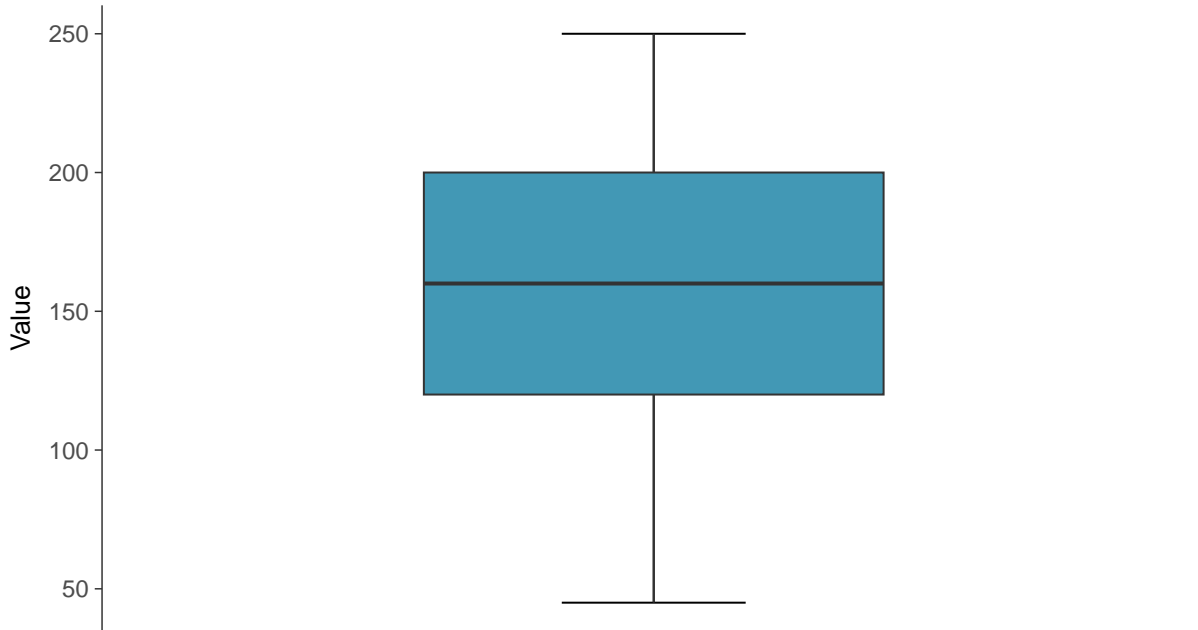
Sulfate (as SO₄), MW-31 (mg/L)





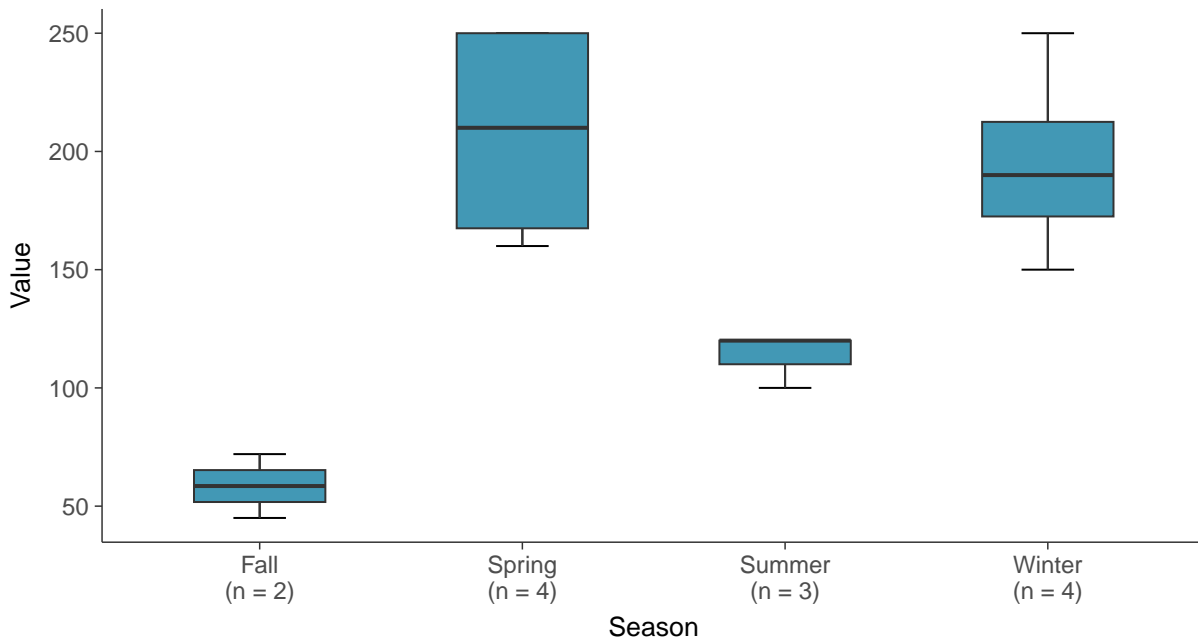
Boxplot

Sulfate (as SO₄), MW-31 (mg/L)



Boxplot by Season

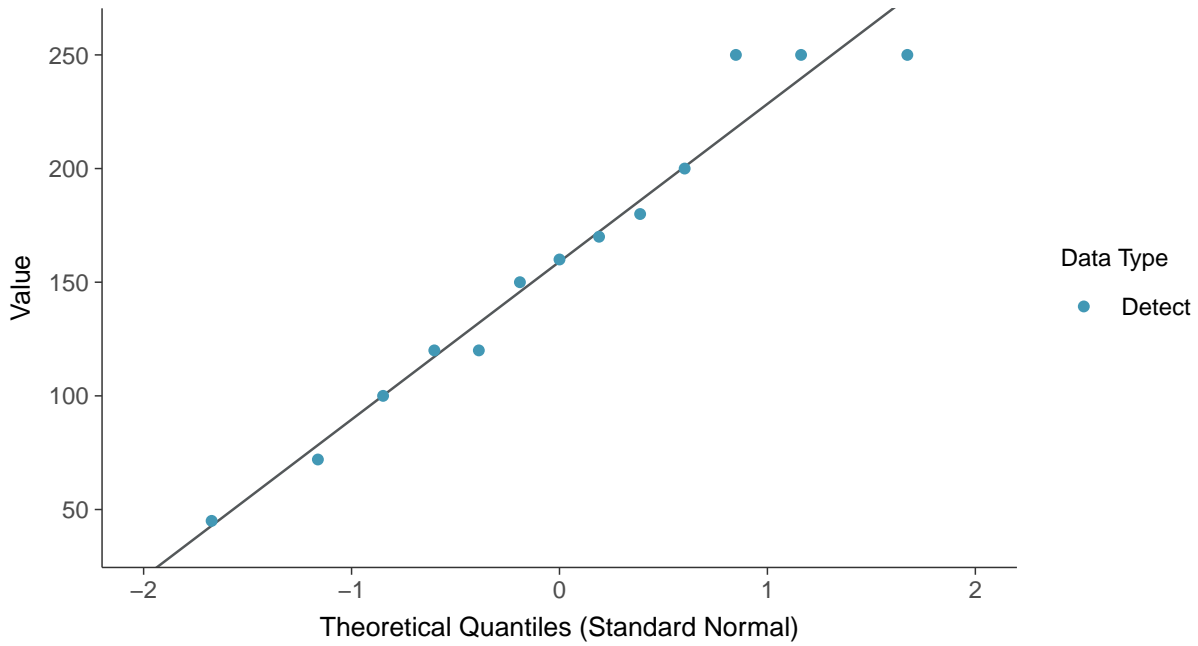
Sulfate (as SO₄), MW-31 (mg/L)





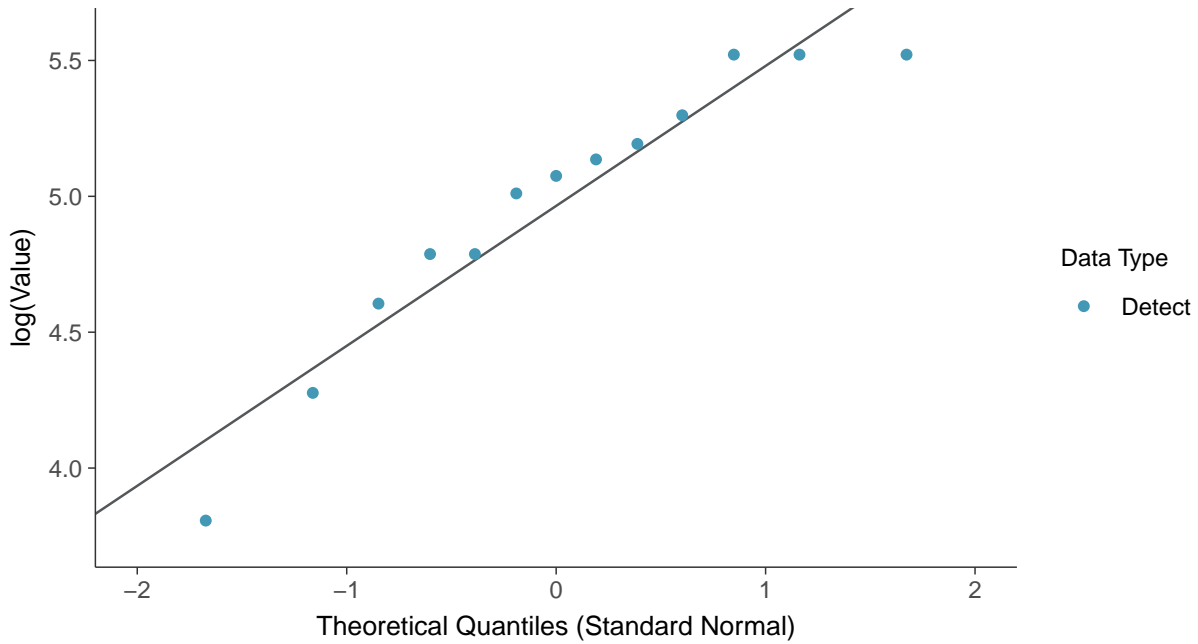
Normal Q-Q plot

Sulfate (as SO₄), MW-31 (mg/L)



Lognormal Q-Q plot

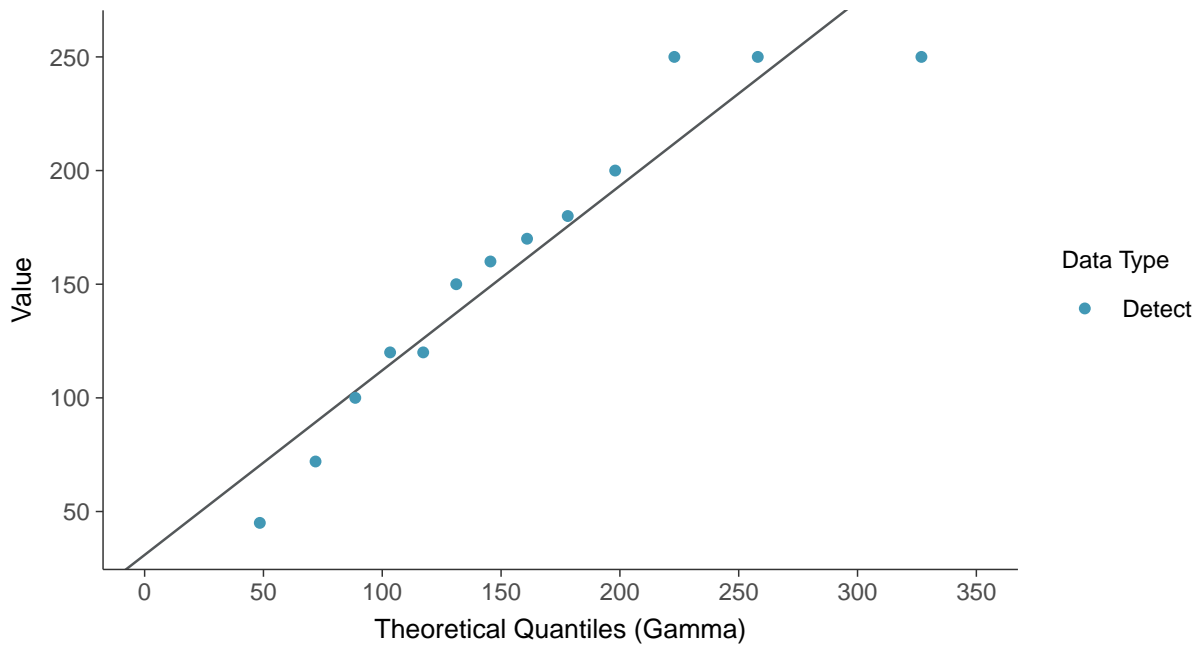
Sulfate (as SO₄), MW-31 (mg/L)





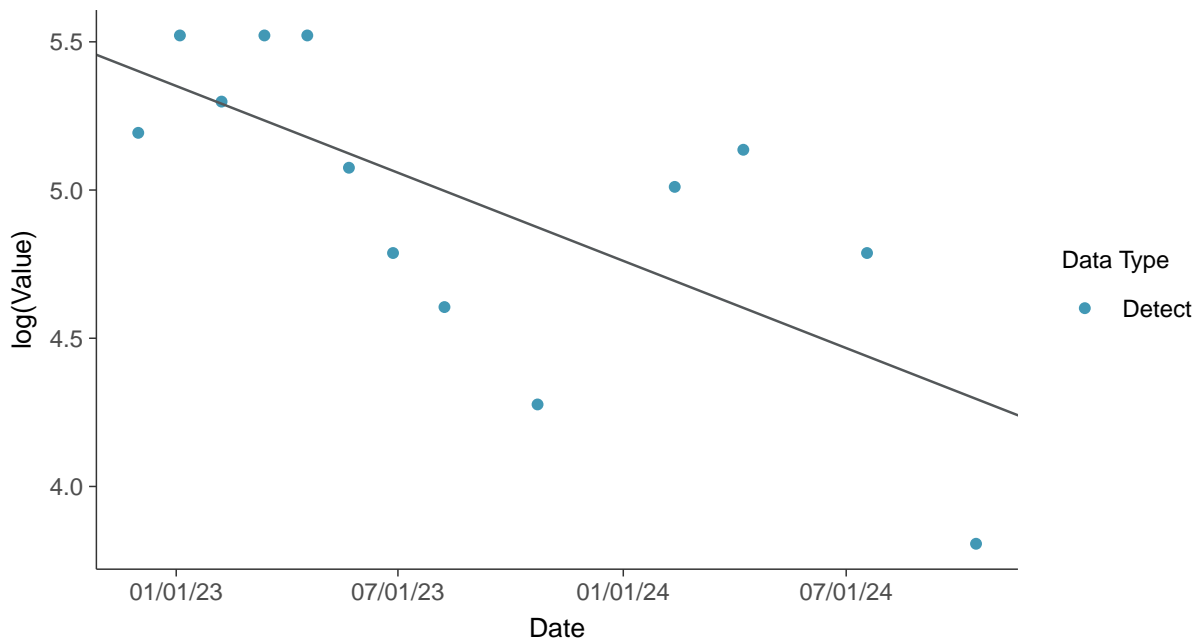
Gamma Q-Q plot

Sulfate (as SO₄), MW-31 (mg/L)



Trend Regression: Lognormal MLE

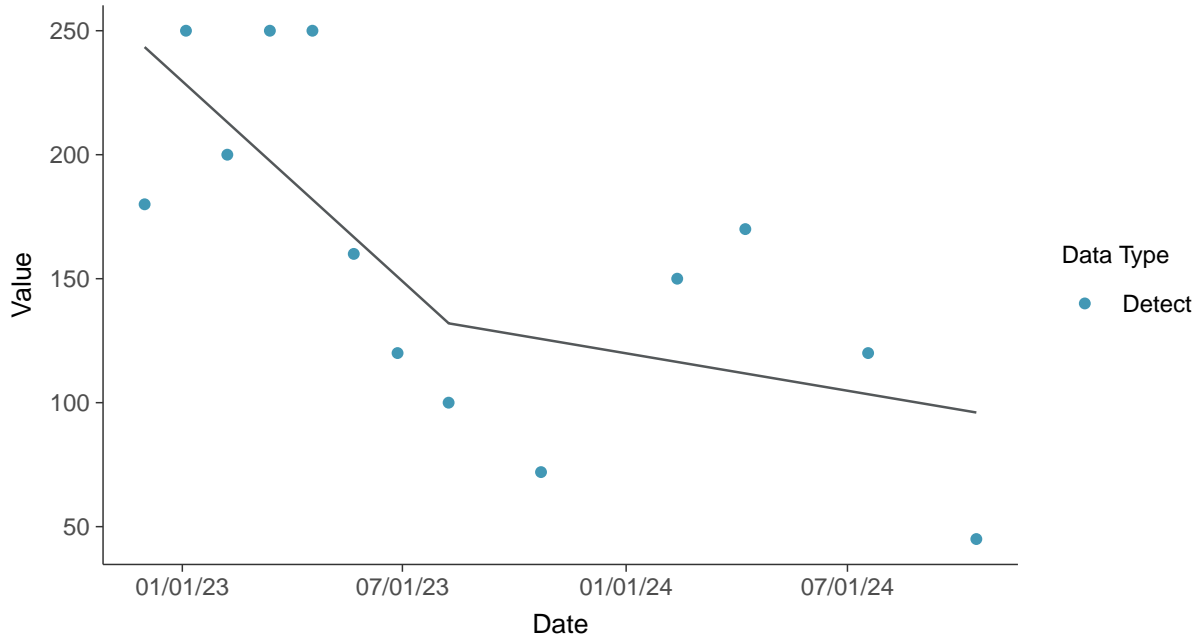
Sulfate (as SO₄), MW-31 (mg/L)





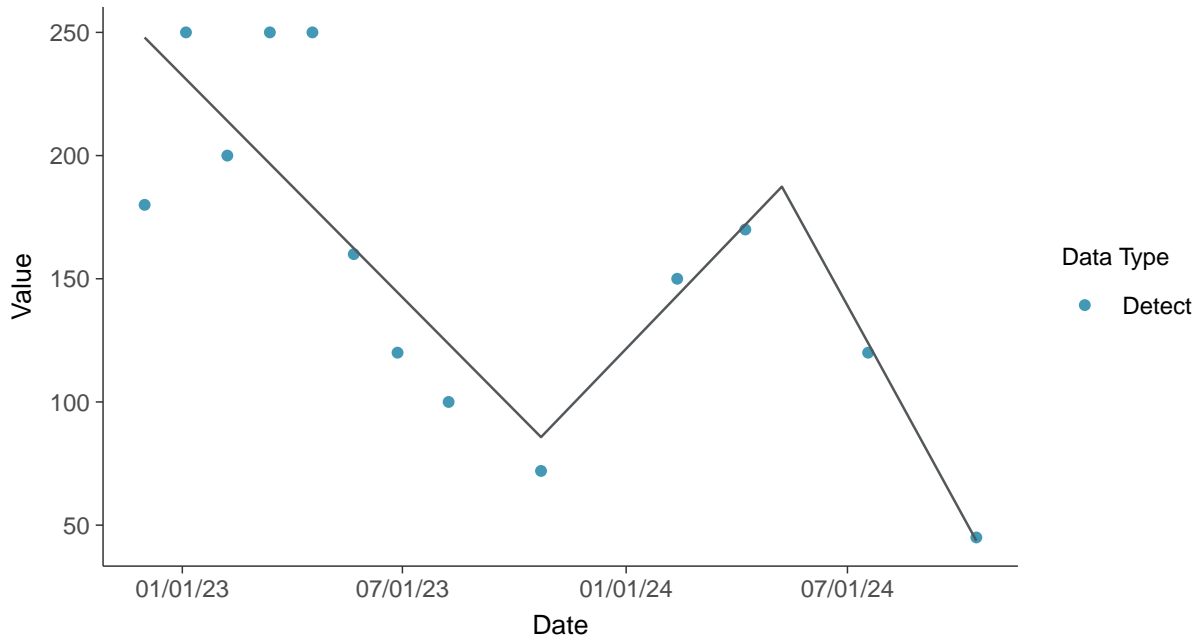
Trend Regression: Piecewise Linear-Linear

Sulfate (as SO4), MW-31 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

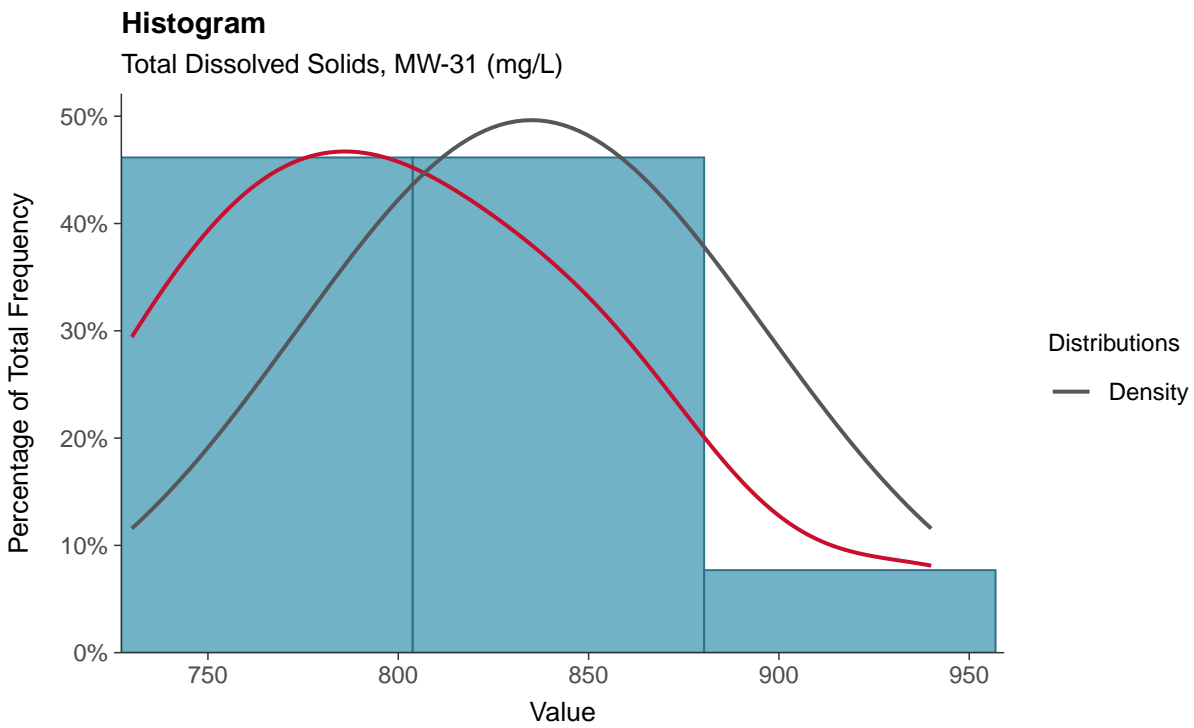
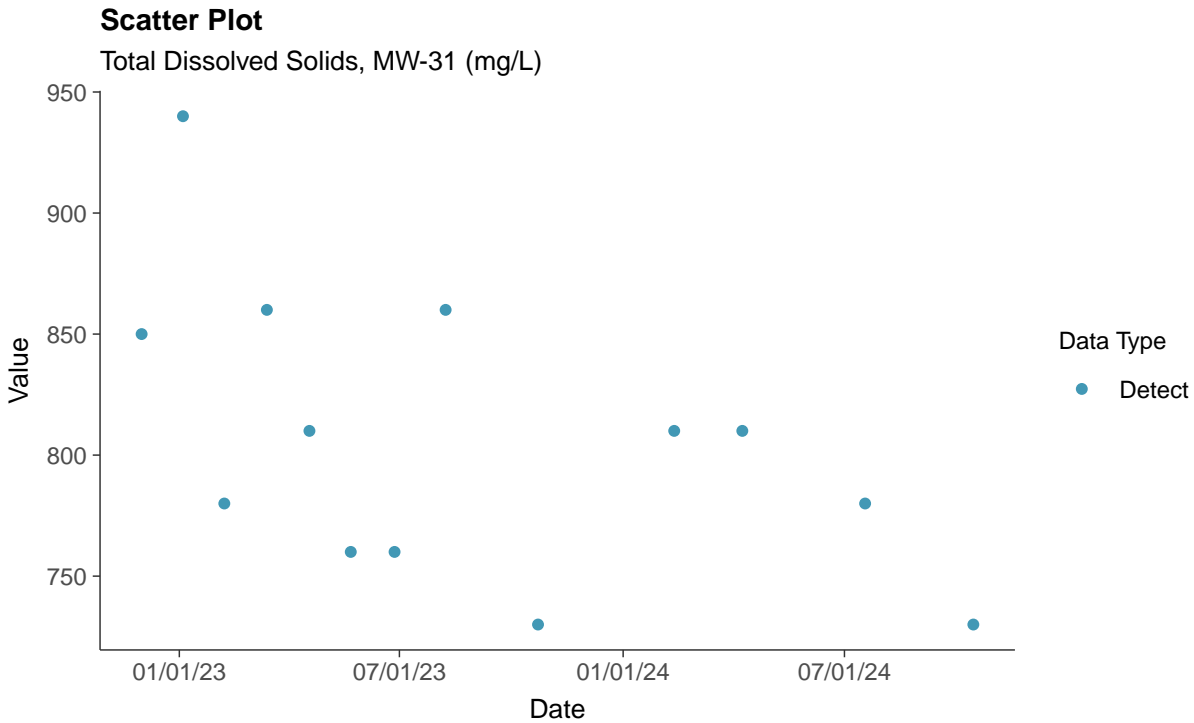
Sulfate (as SO4), MW-31 (mg/L)





Appendix III: Total Dissolved Solids, MW-31

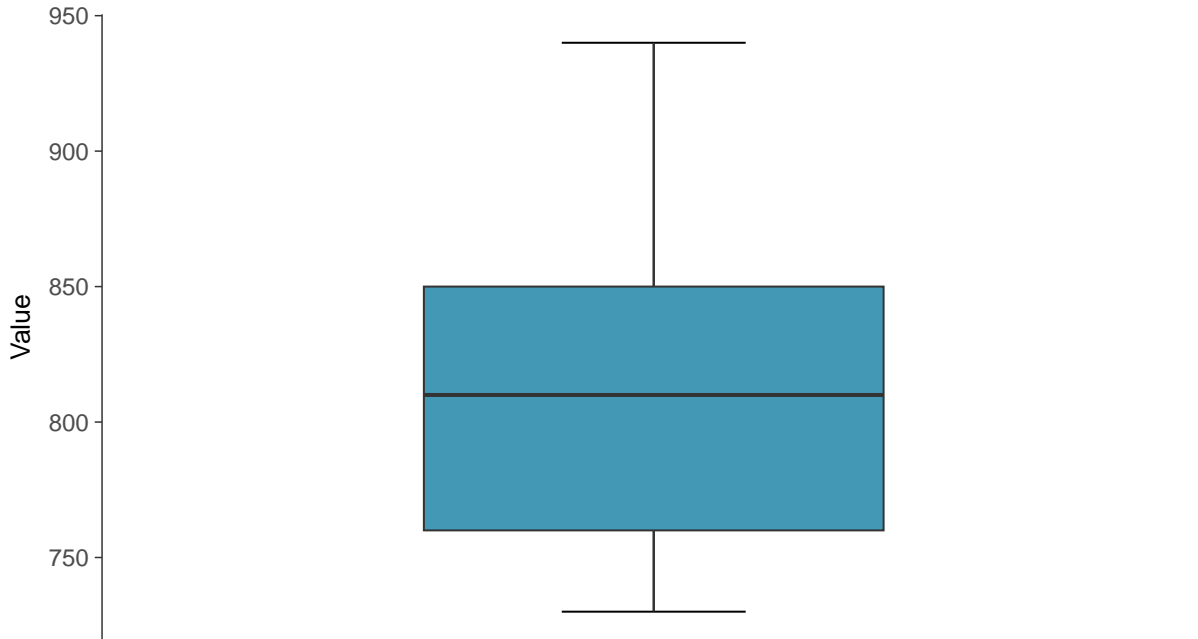
ID: 1_41_1_4_126





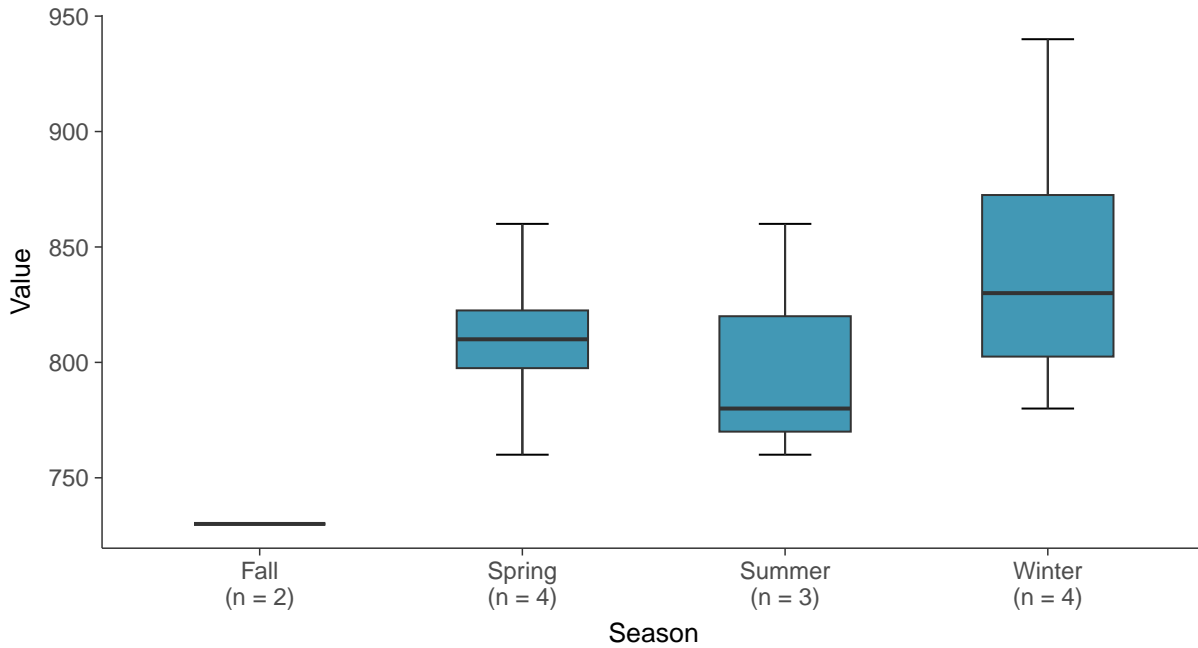
Boxplot

Total Dissolved Solids, MW-31 (mg/L)



Boxplot by Season

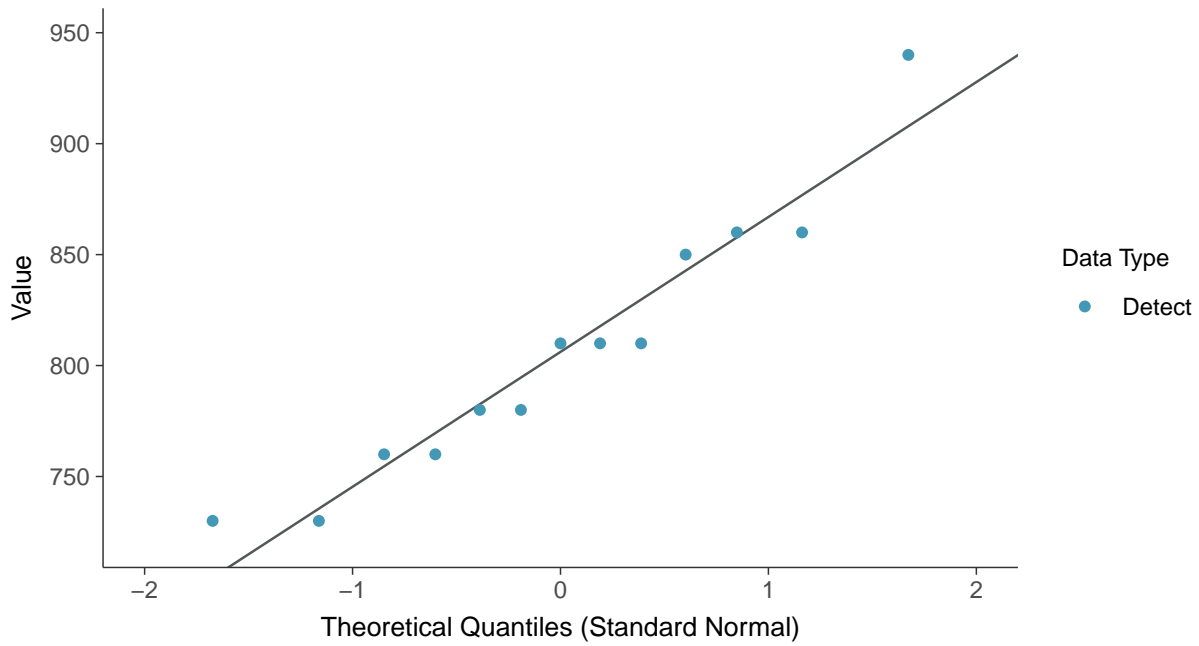
Total Dissolved Solids, MW-31 (mg/L)





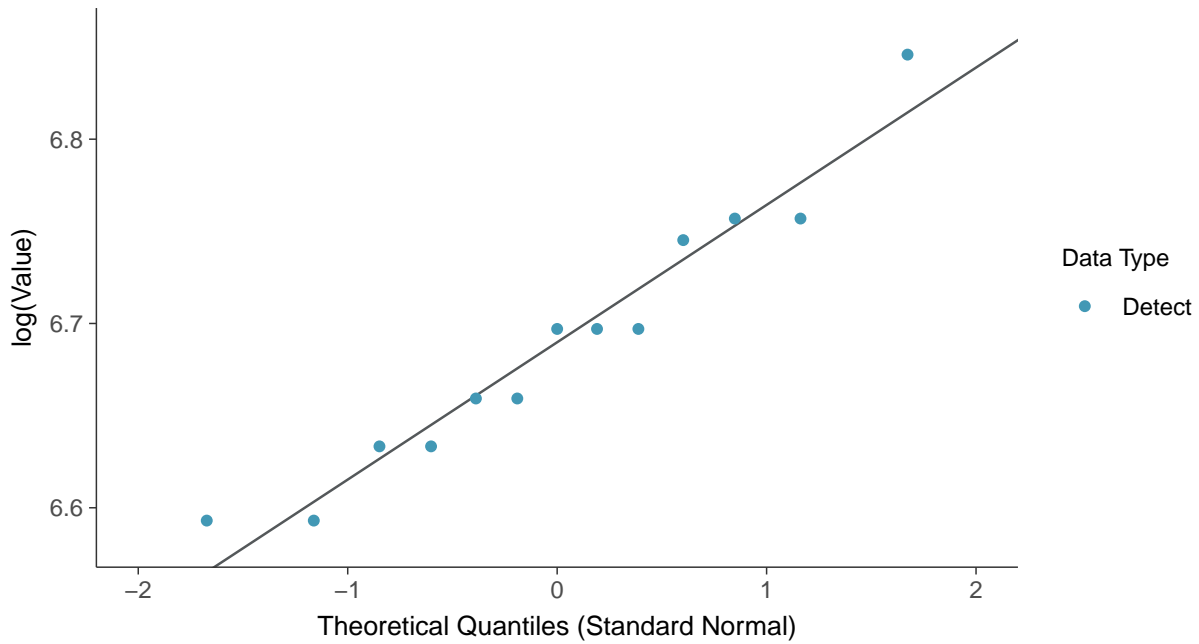
Normal Q-Q plot

Total Dissolved Solids, MW-31 (mg/L)



Lognormal Q-Q plot

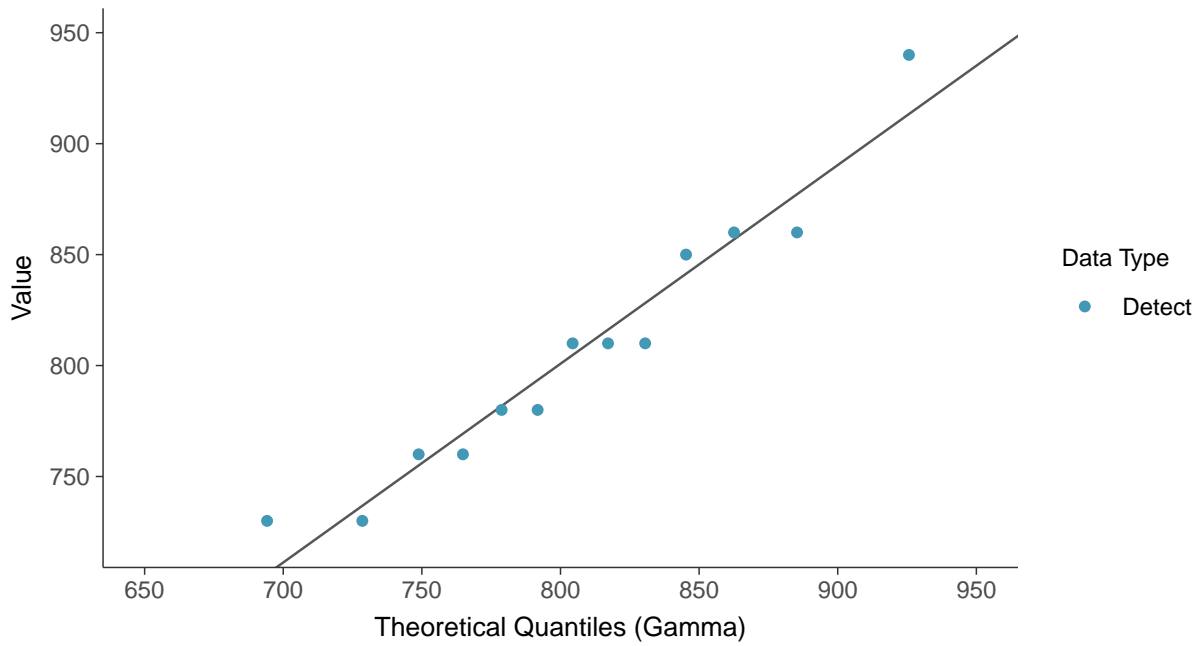
Total Dissolved Solids, MW-31 (mg/L)





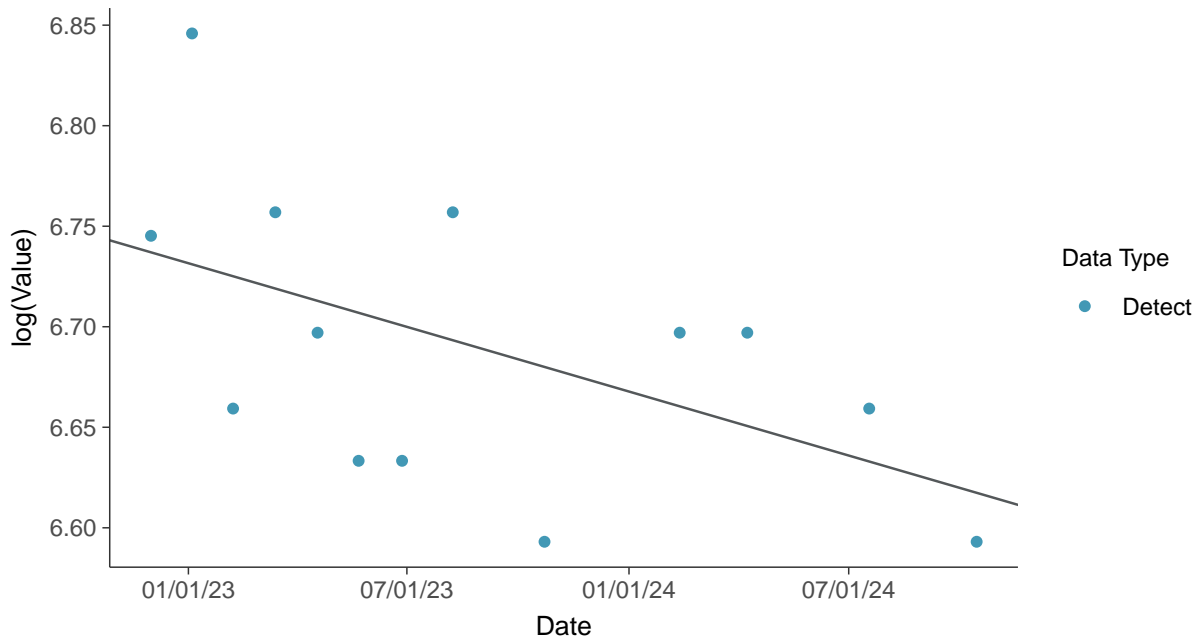
Gamma Q-Q plot

Total Dissolved Solids, MW-31 (mg/L)



Trend Regression: Lognormal MLE

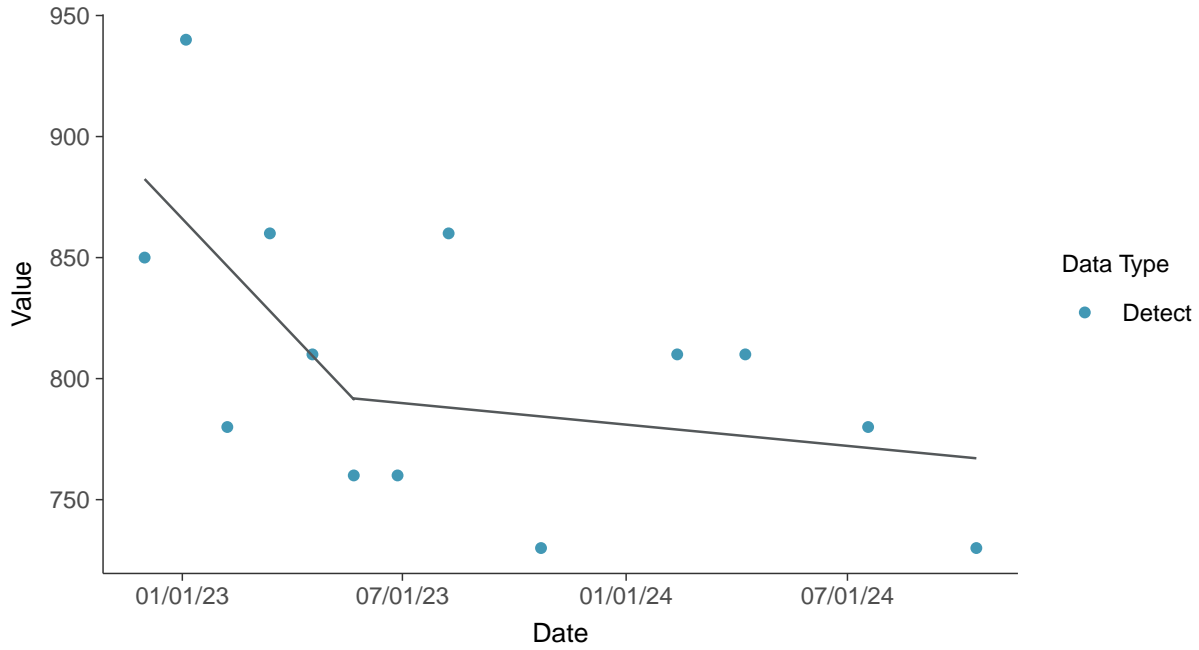
Total Dissolved Solids, MW-31 (mg/L)





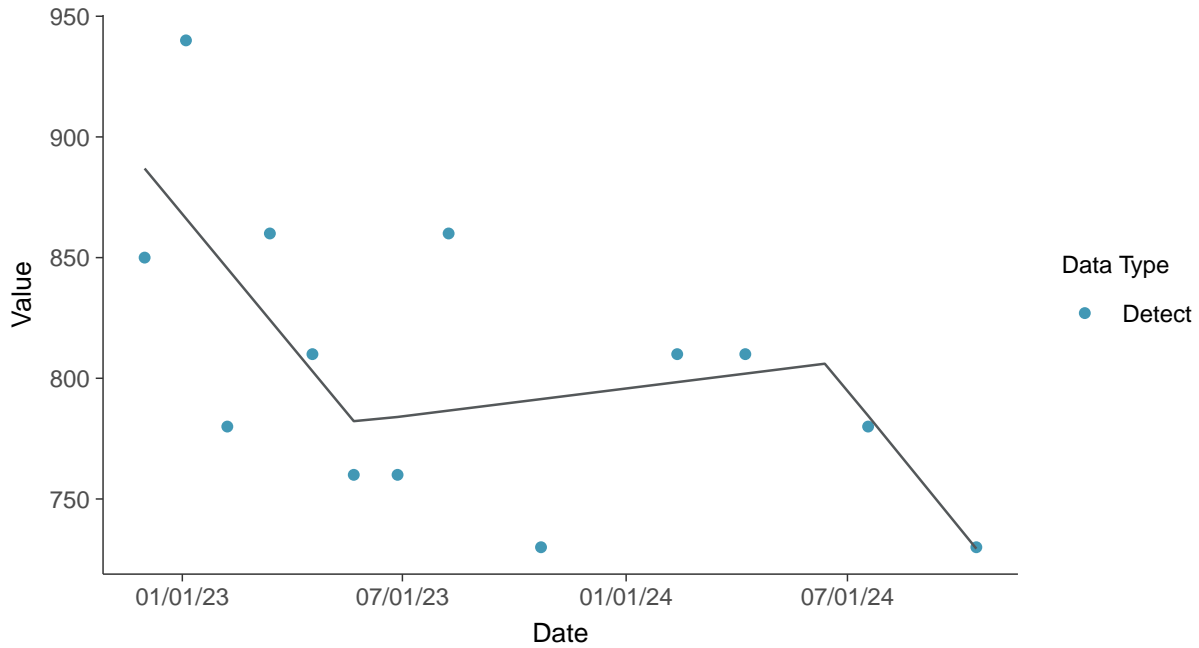
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-31 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Total Dissolved Solids, MW-31 (mg/L)



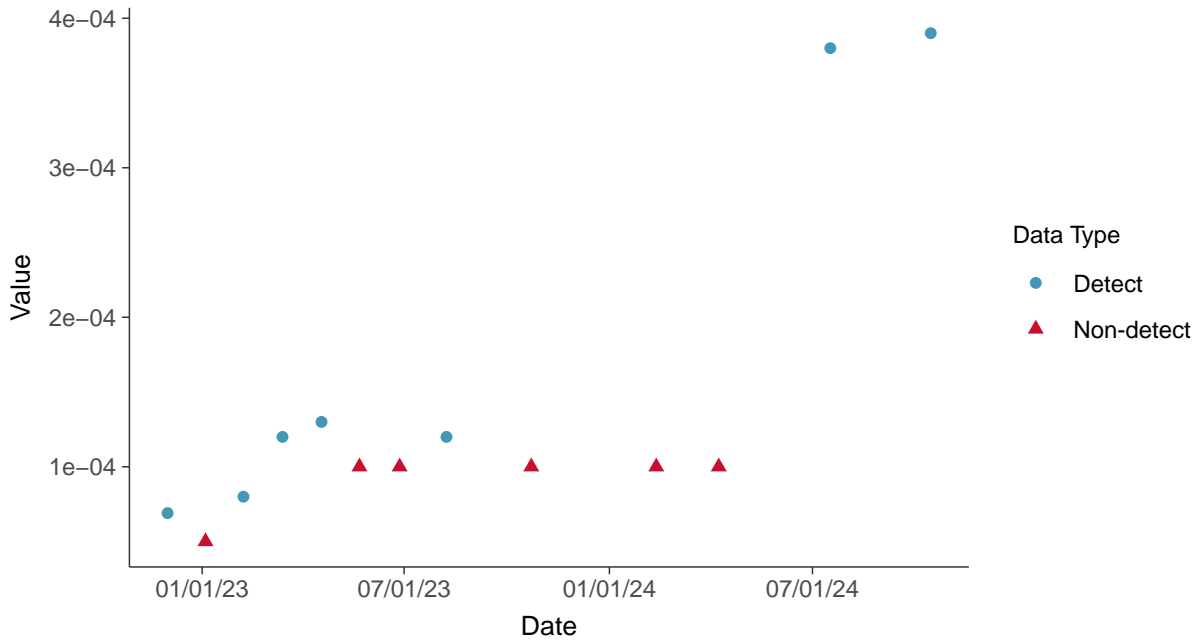


Appendix IV: Antimony, MW-31

ID: 1_41_1_5_101

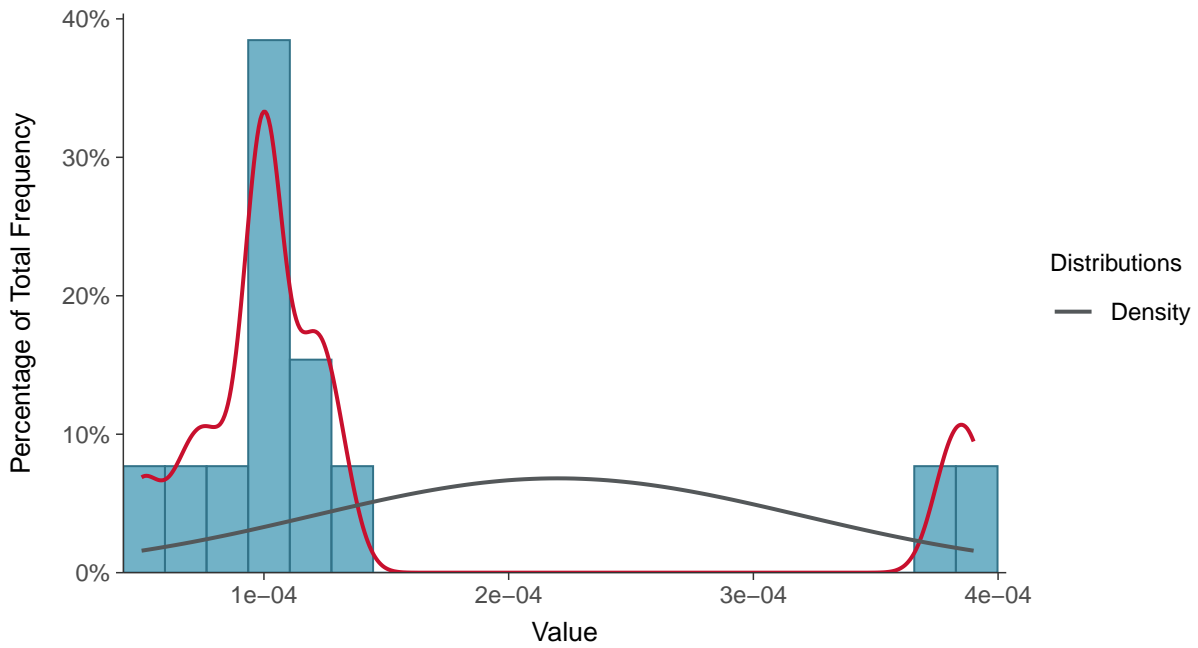
Scatter Plot

Antimony, MW-31 (mg/L)



Histogram

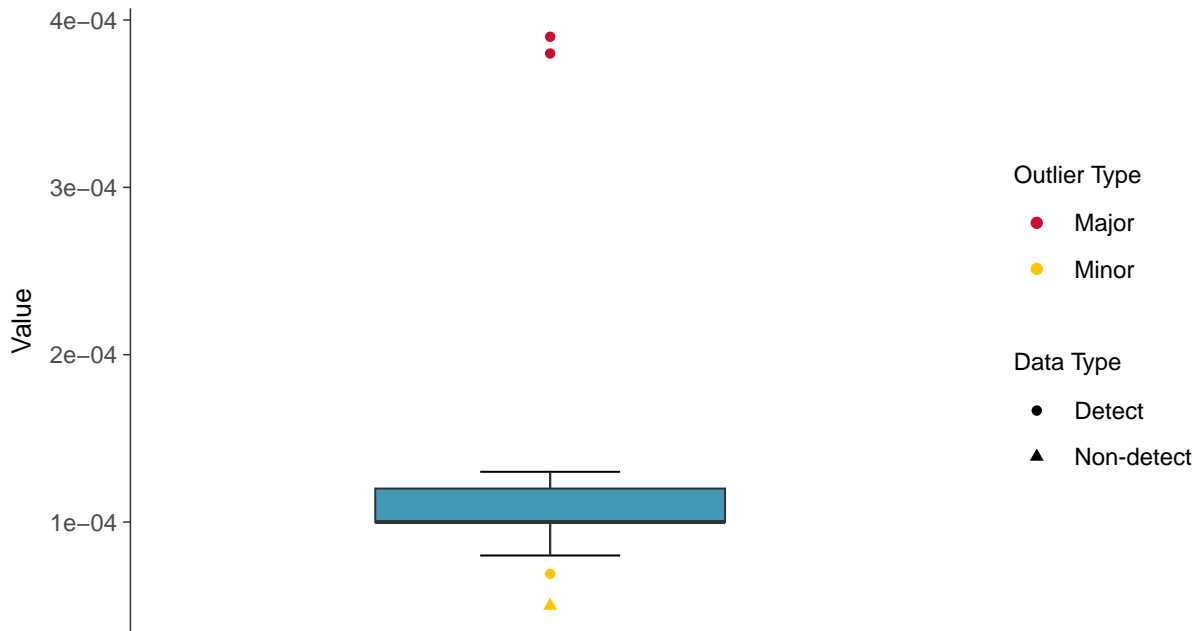
Antimony, MW-31 (mg/L)





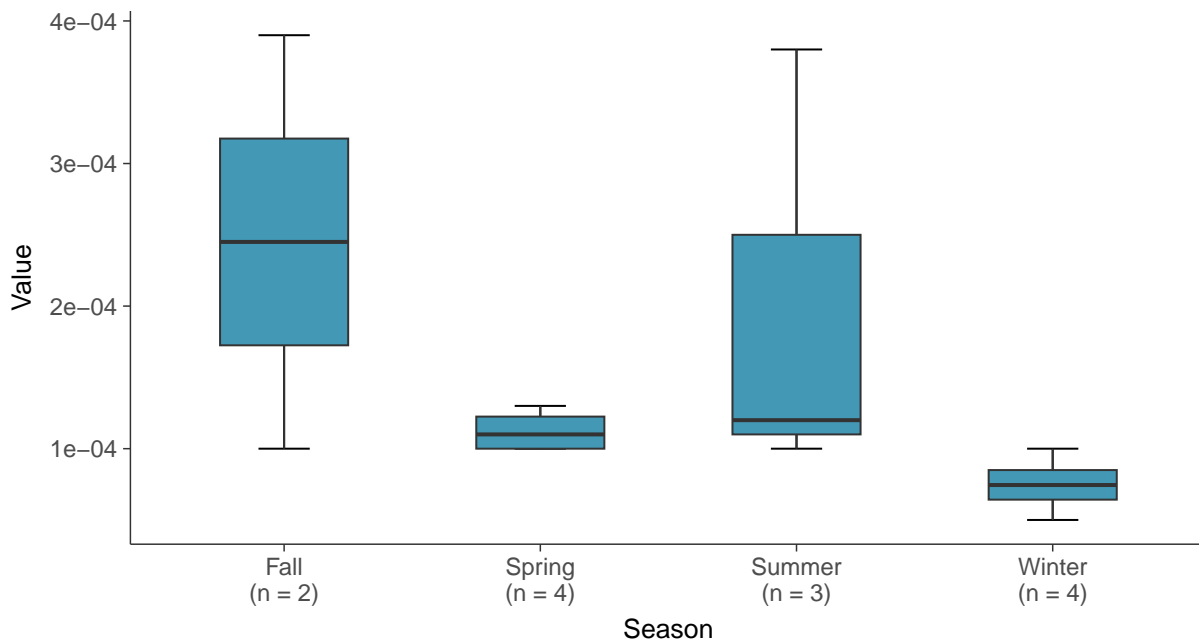
Boxplot

Antimony, MW-31 (mg/L)



Boxplot by Season

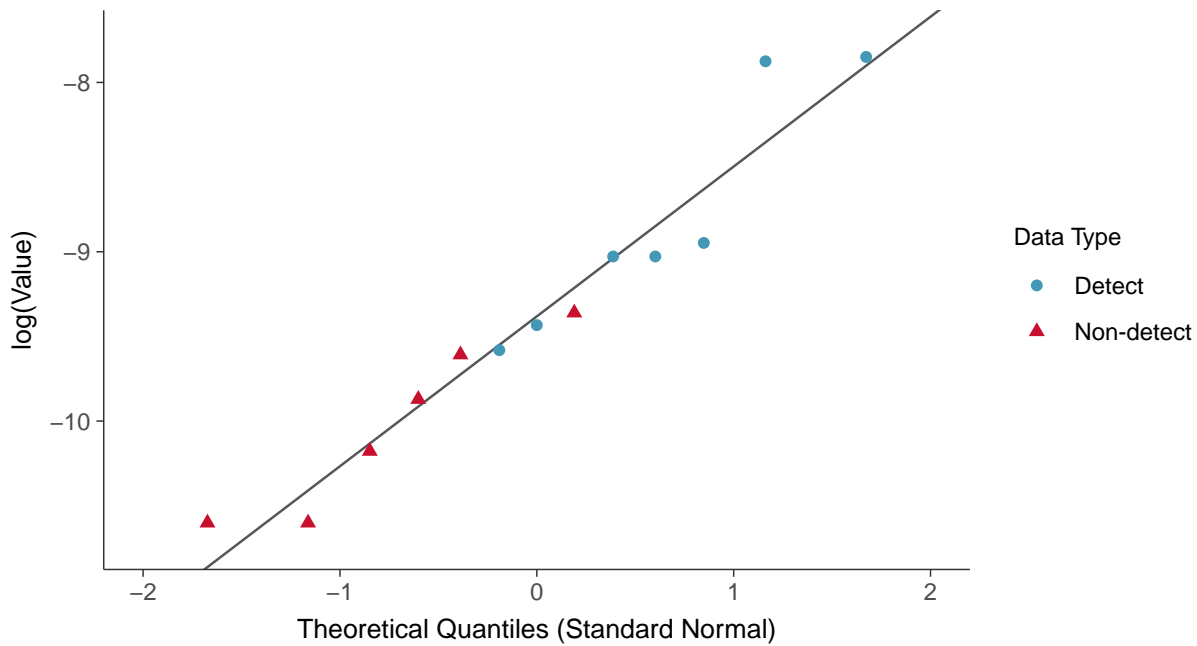
Antimony, MW-31 (mg/L)





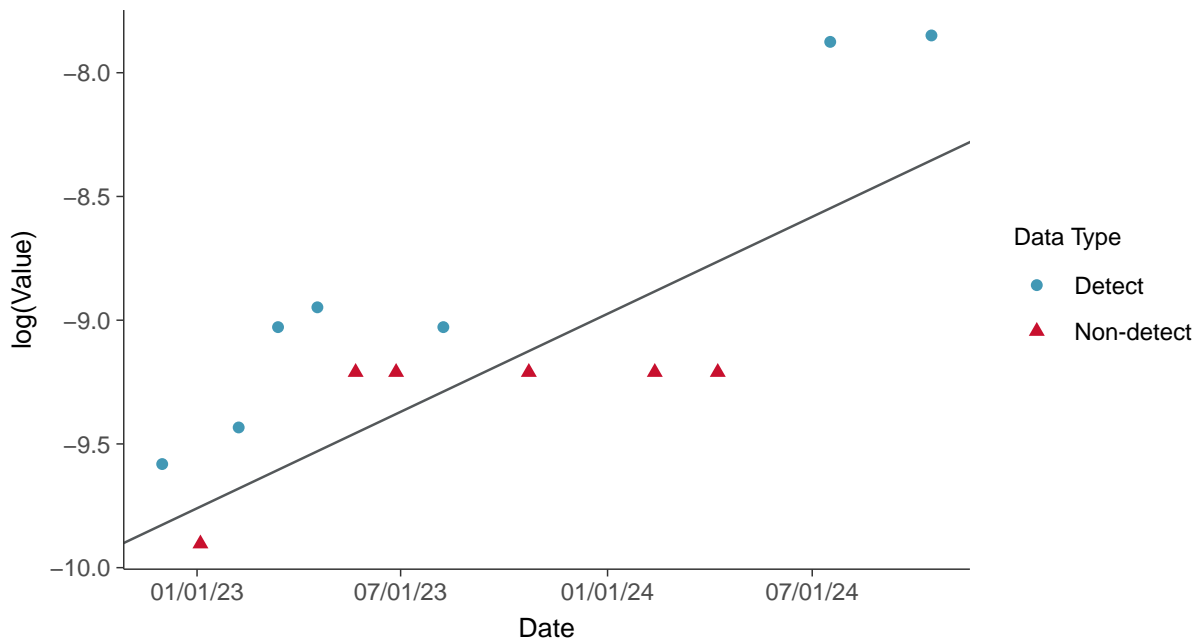
Lognormal Q-Q plot using ROS Imputed Estimates

Antimony, MW-31 (mg/L)



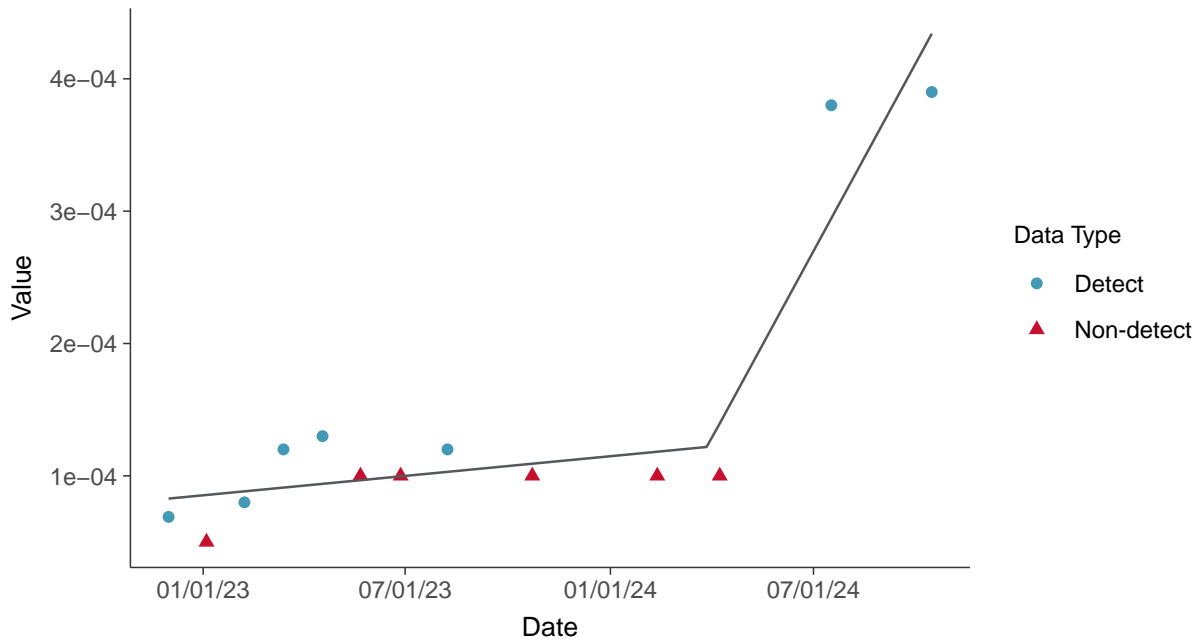
Trend Regression: Lognormal MLE

Antimony, MW-31 (mg/L)

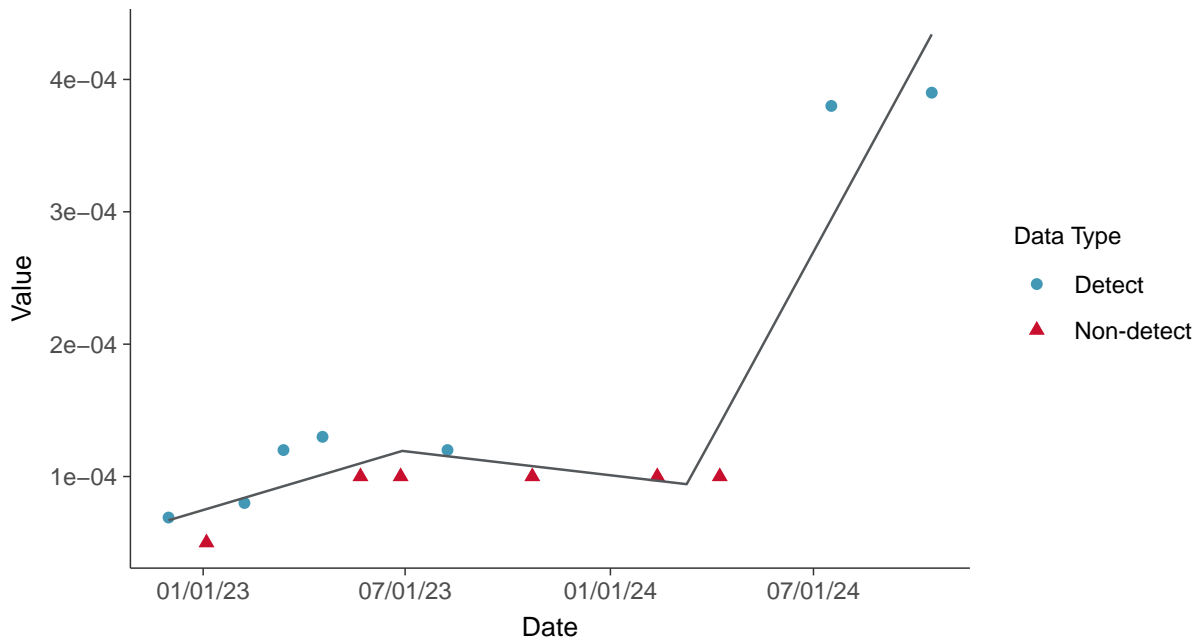




Trend Regression: Piecewise Linear-Linear
Antimony, MW-31 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Antimony, MW-31 (mg/L)



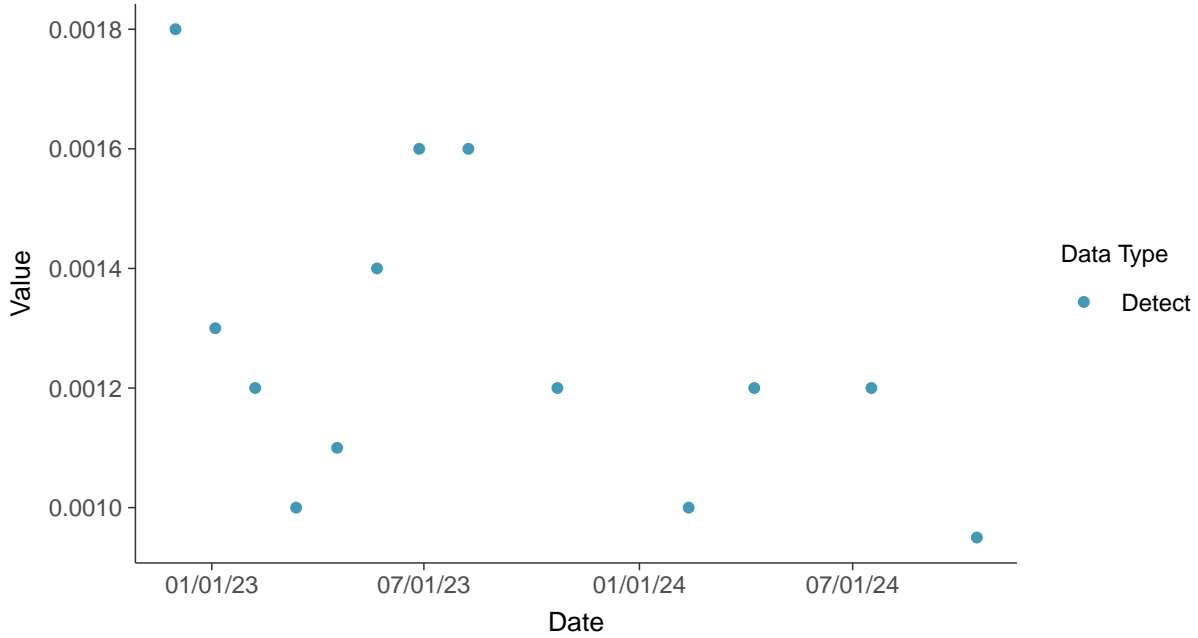


Appendix IV: Arsenic, MW-31

ID: 1_41_1_5_102

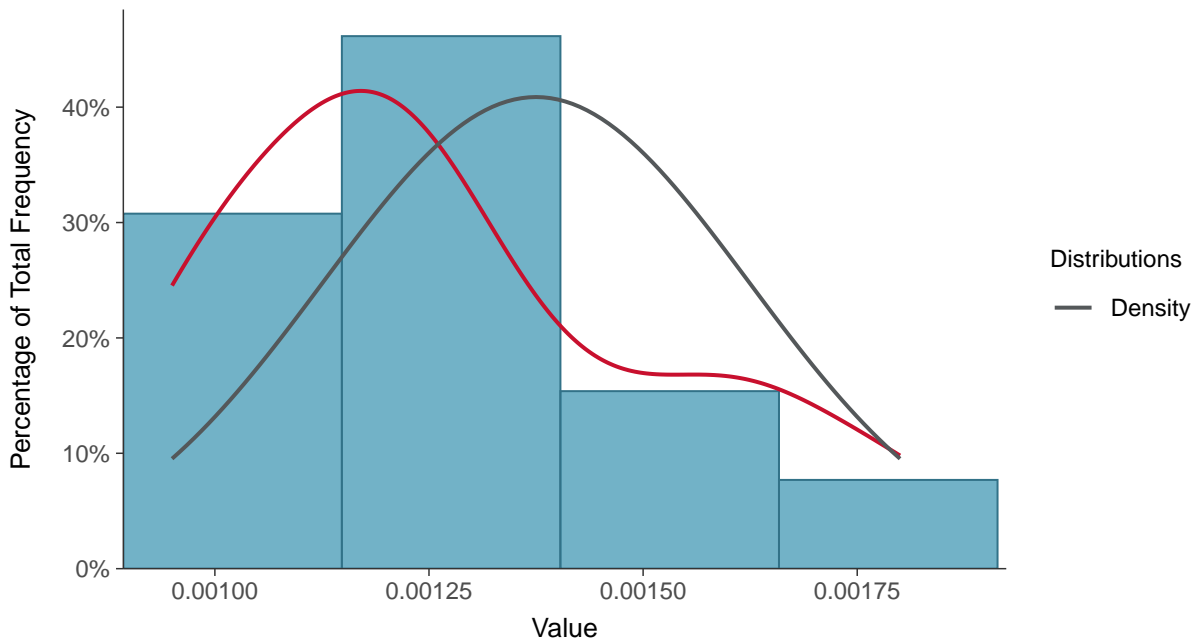
Scatter Plot

Arsenic, MW-31 (mg/L)



Histogram

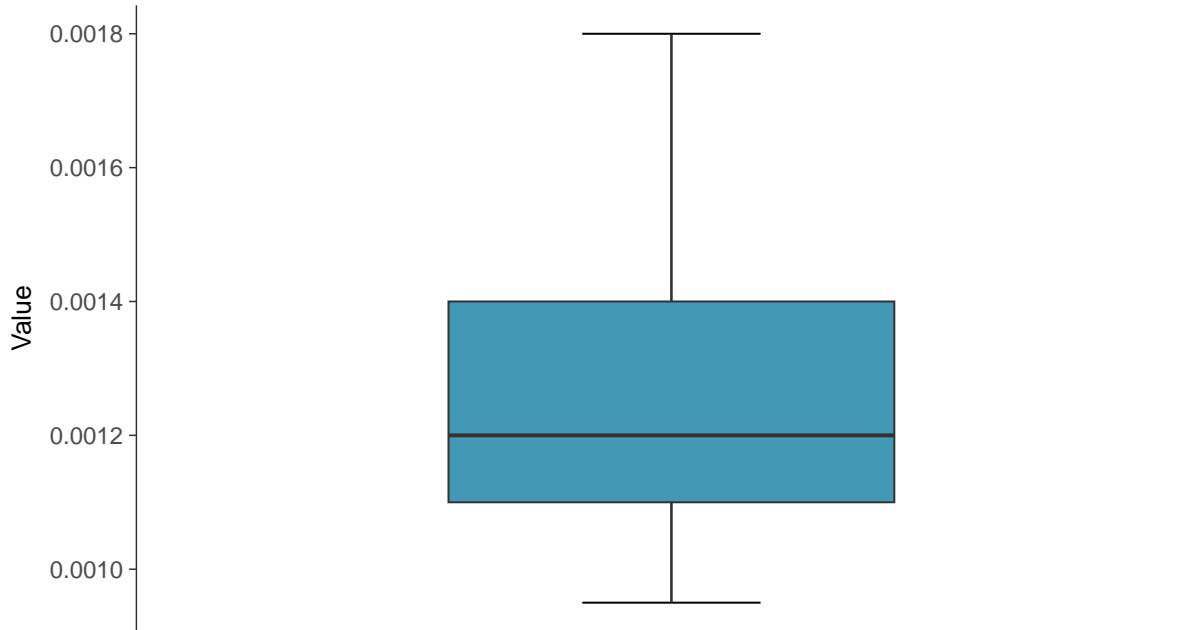
Arsenic, MW-31 (mg/L)





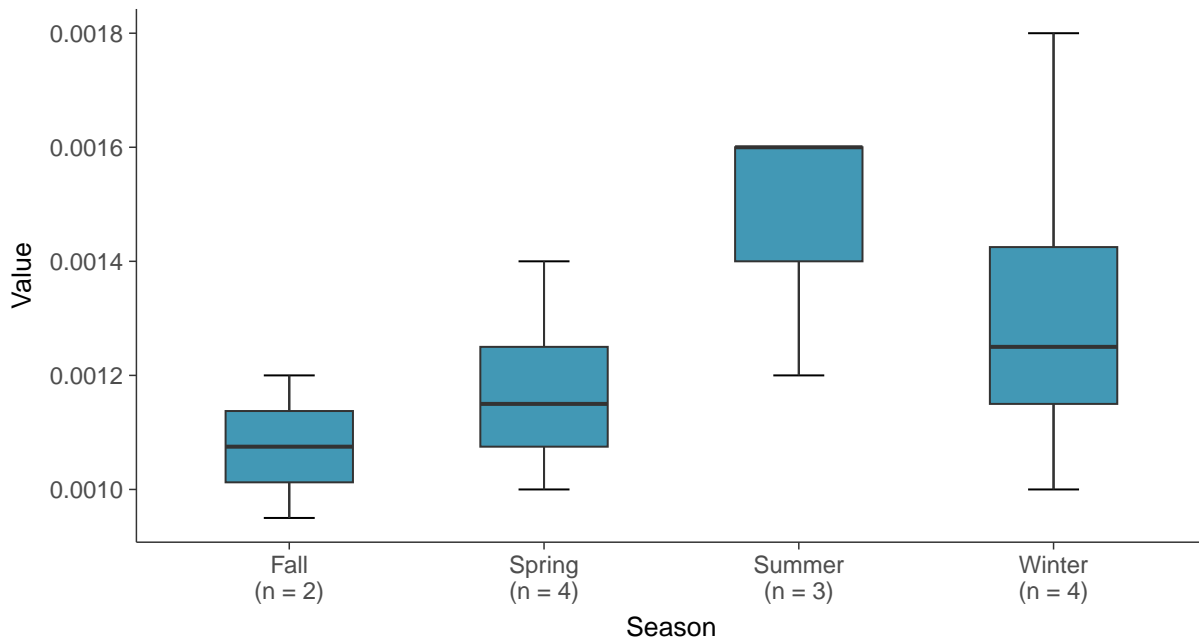
Boxplot

Arsenic, MW-31 (mg/L)



Boxplot by Season

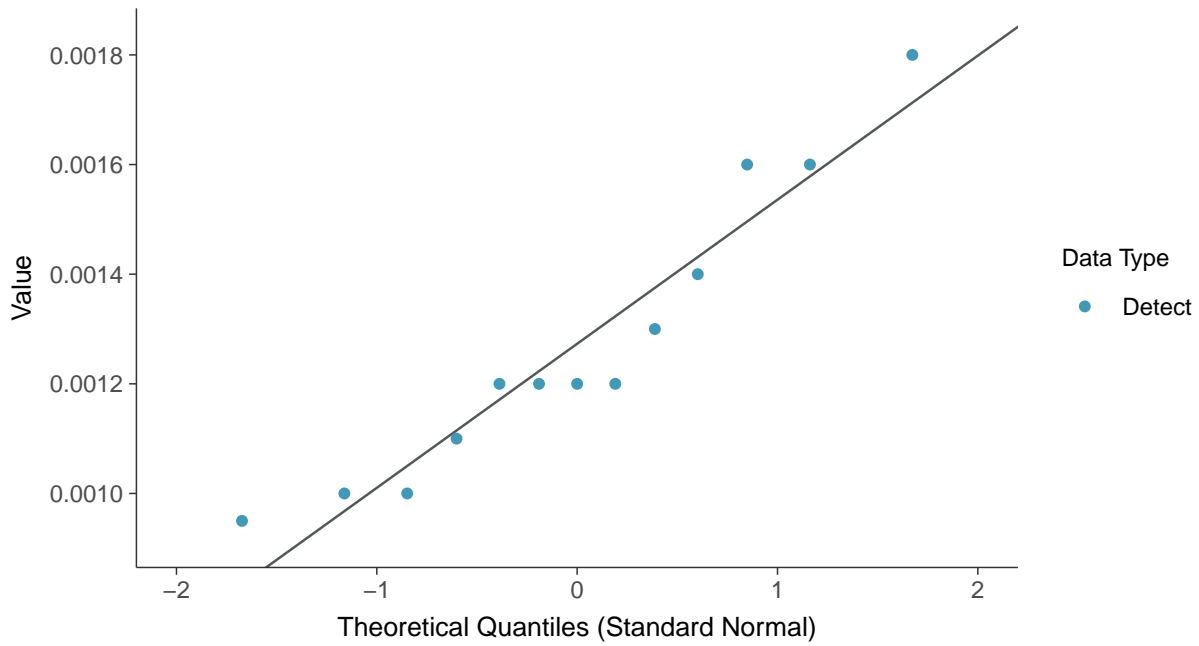
Arsenic, MW-31 (mg/L)





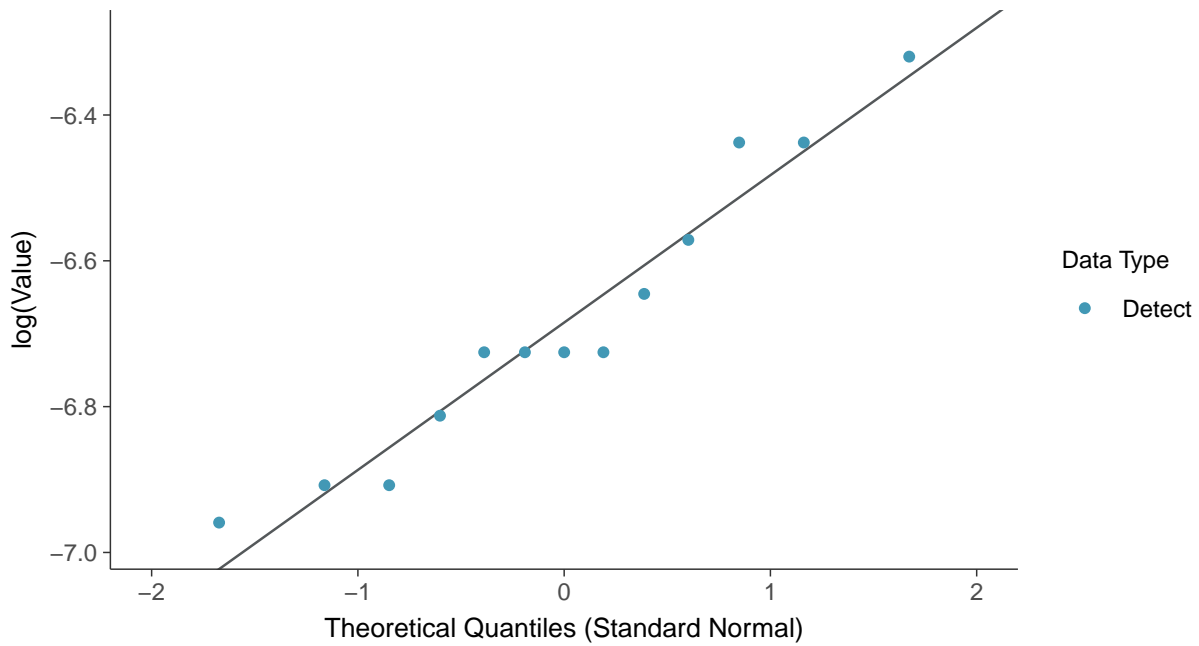
Normal Q-Q plot

Arsenic, MW-31 (mg/L)



Lognormal Q-Q plot

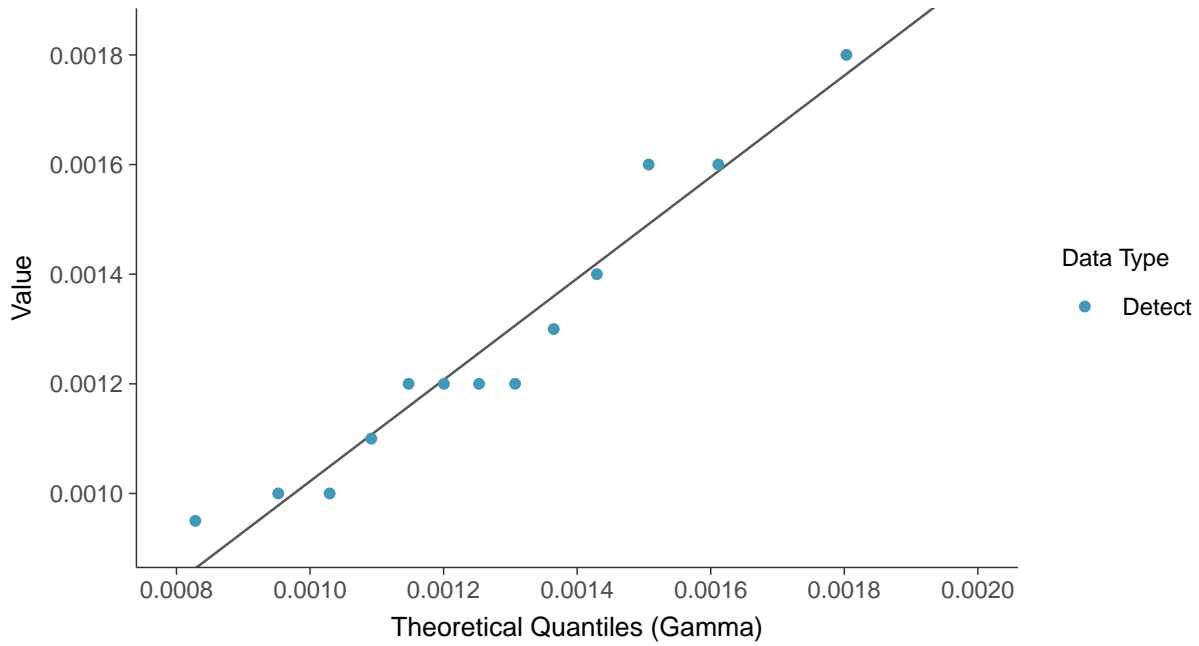
Arsenic, MW-31 (mg/L)





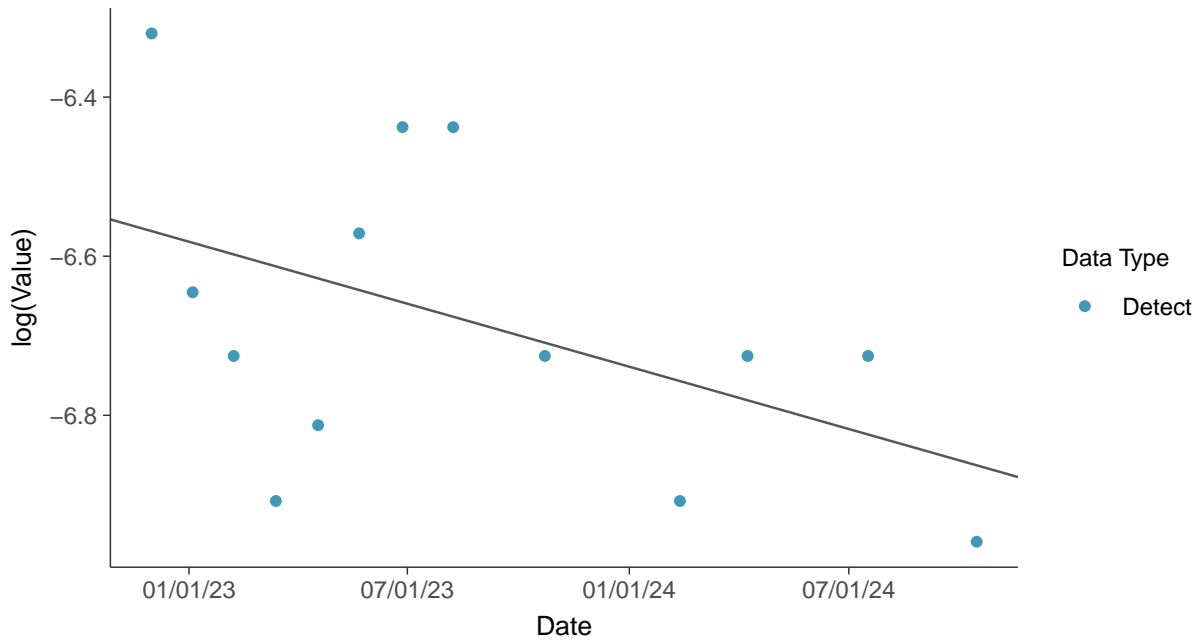
Gamma Q-Q plot

Arsenic, MW-31 (mg/L)



Trend Regression: Lognormal MLE

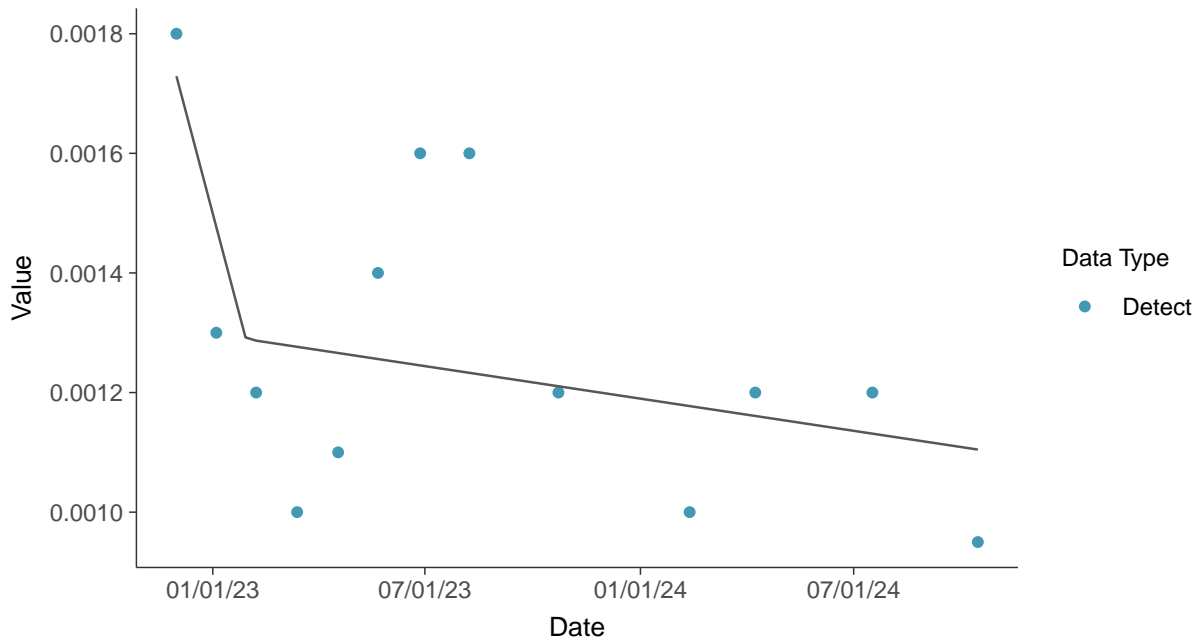
Arsenic, MW-31 (mg/L)





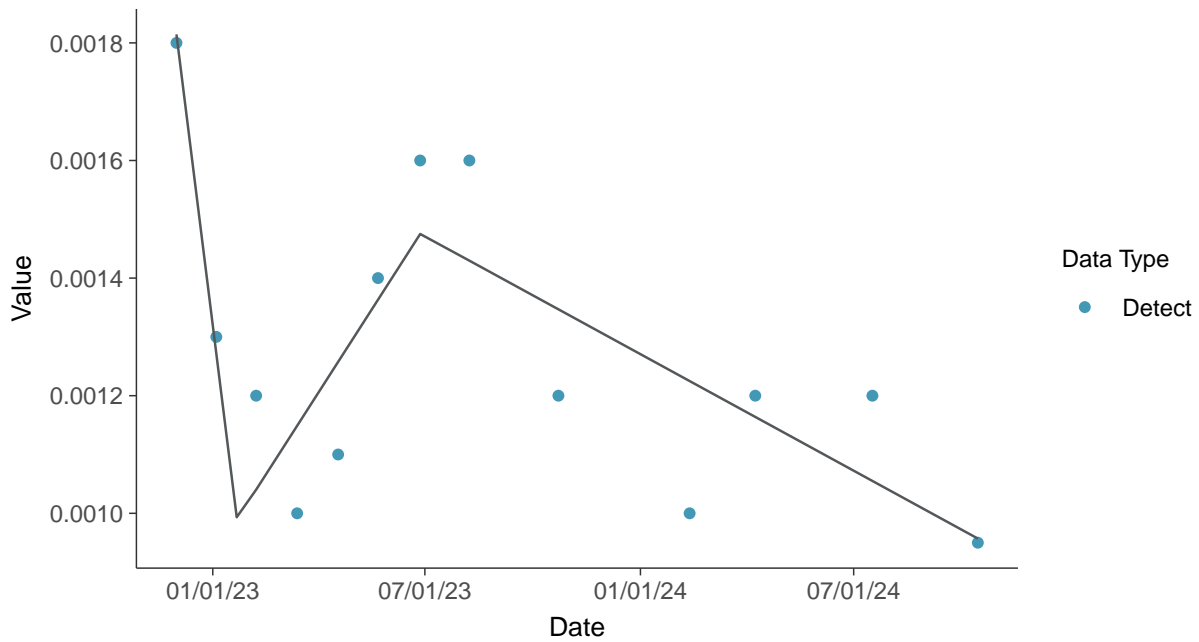
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-31 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

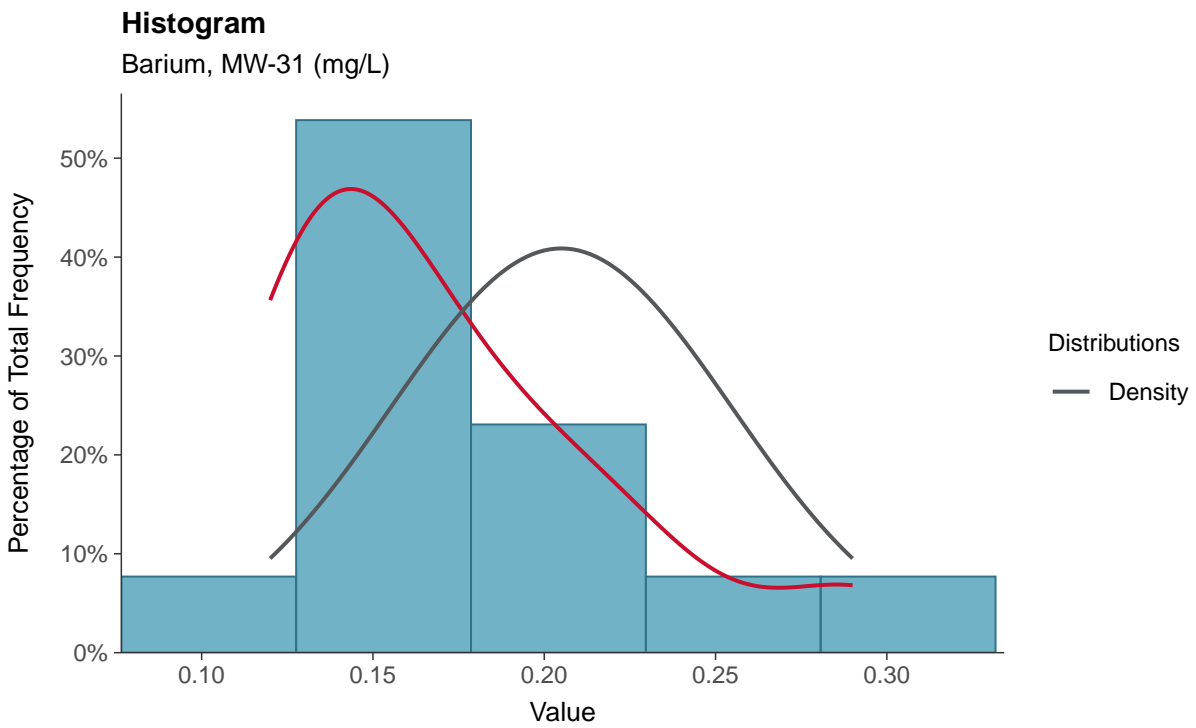
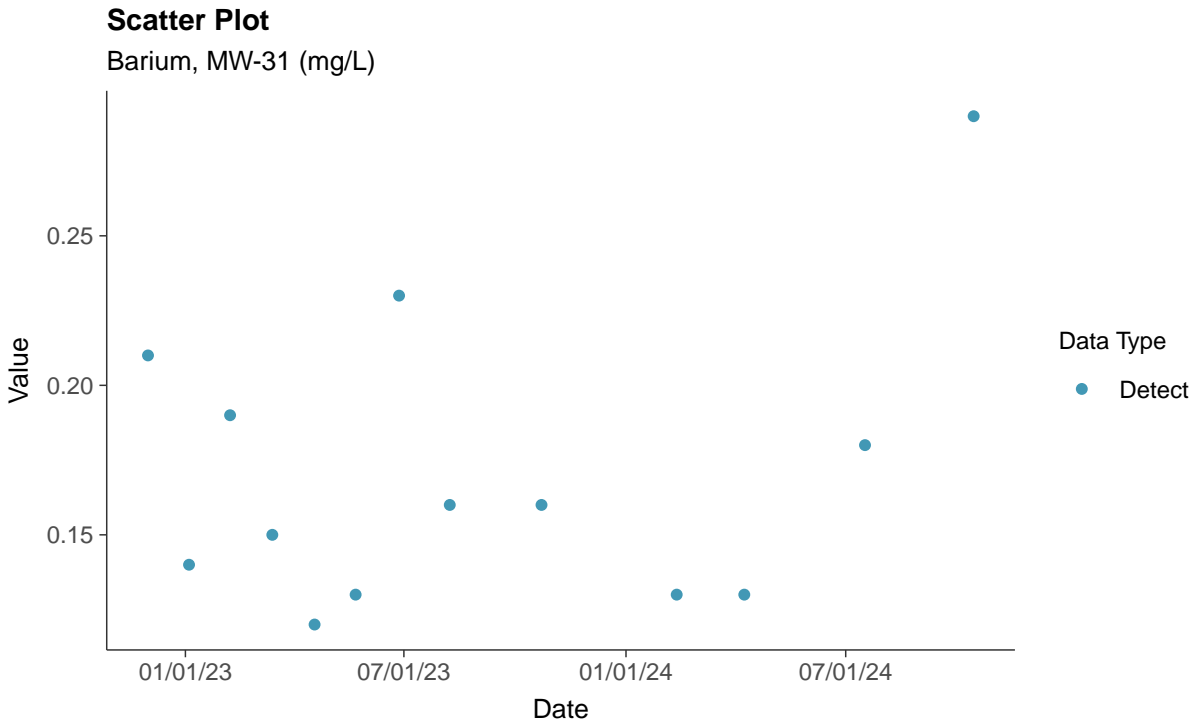
Arsenic, MW-31 (mg/L)





Appendix IV: Barium, MW-31

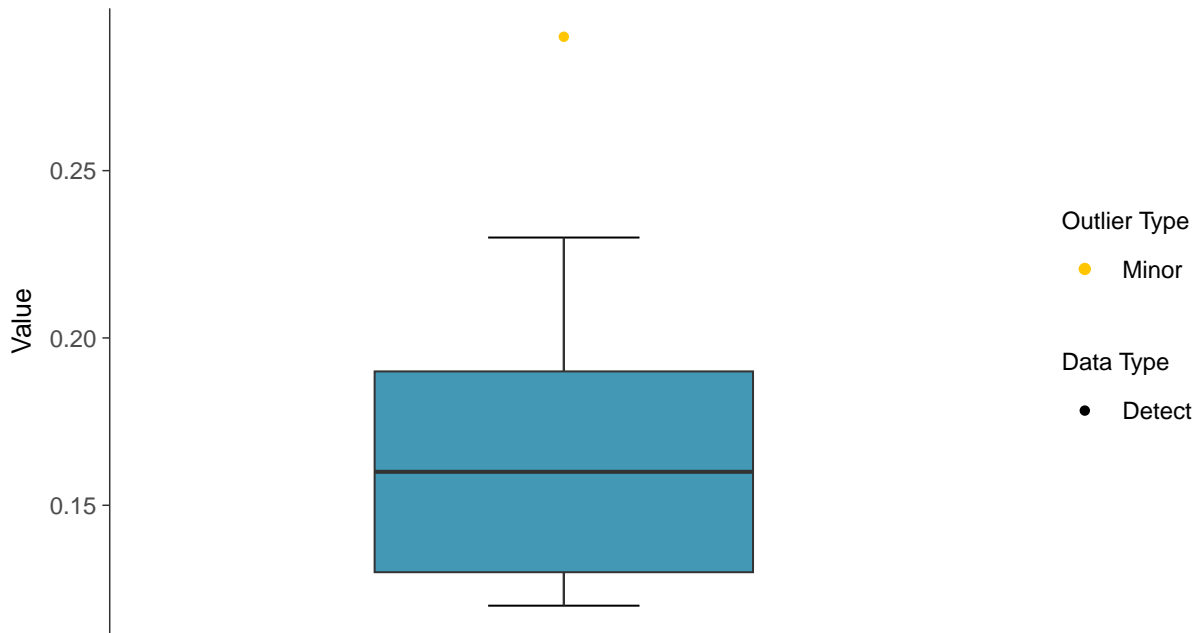
ID: 1_41_1_5_103





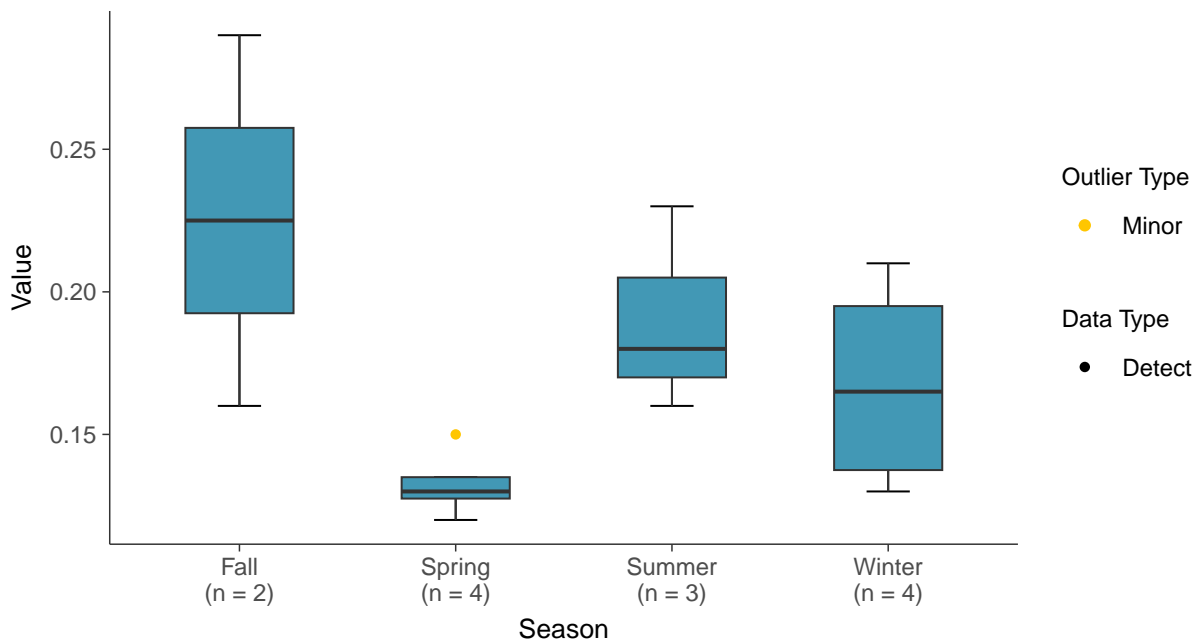
Boxplot

Barium, MW-31 (mg/L)



Boxplot by Season

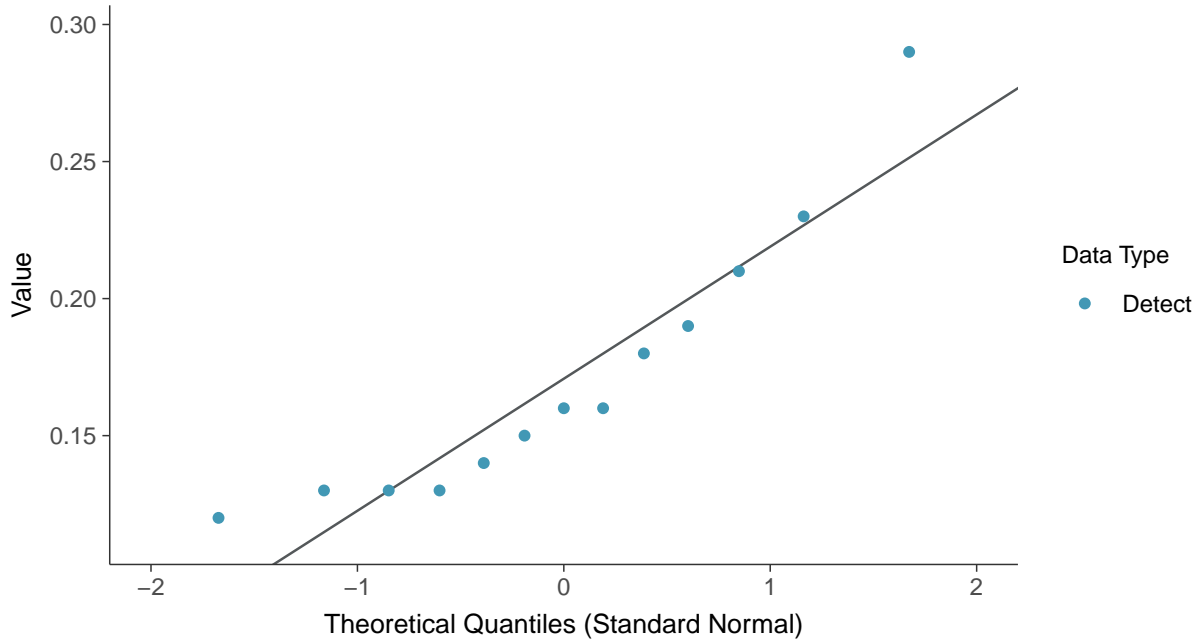
Barium, MW-31 (mg/L)





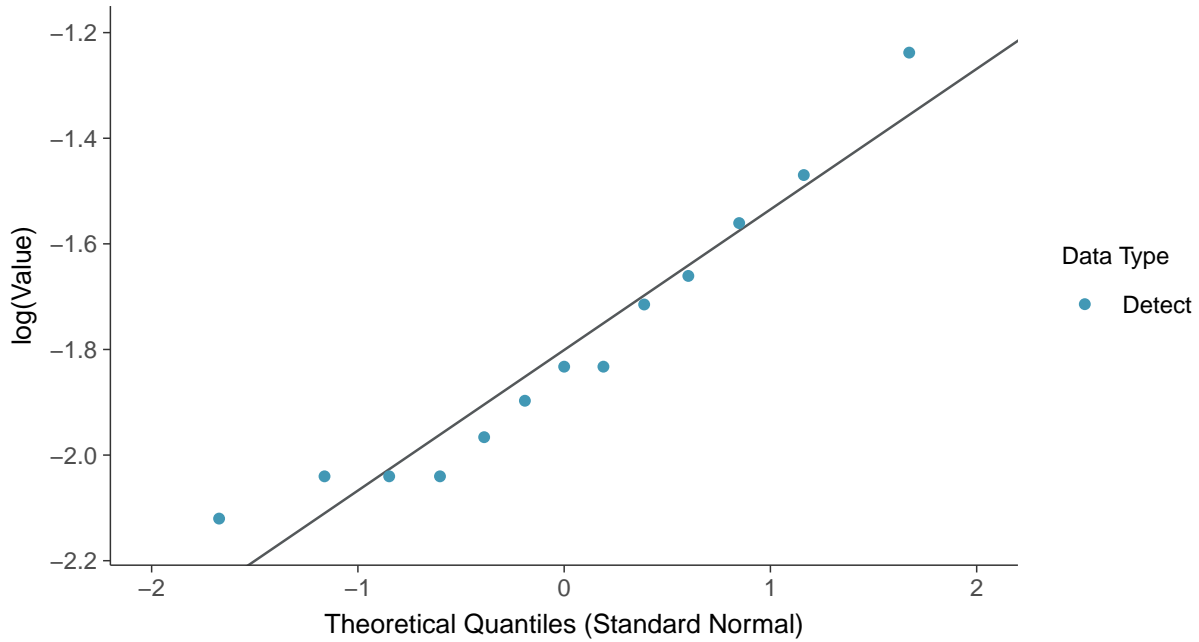
Normal Q-Q plot

Barium, MW-31 (mg/L)



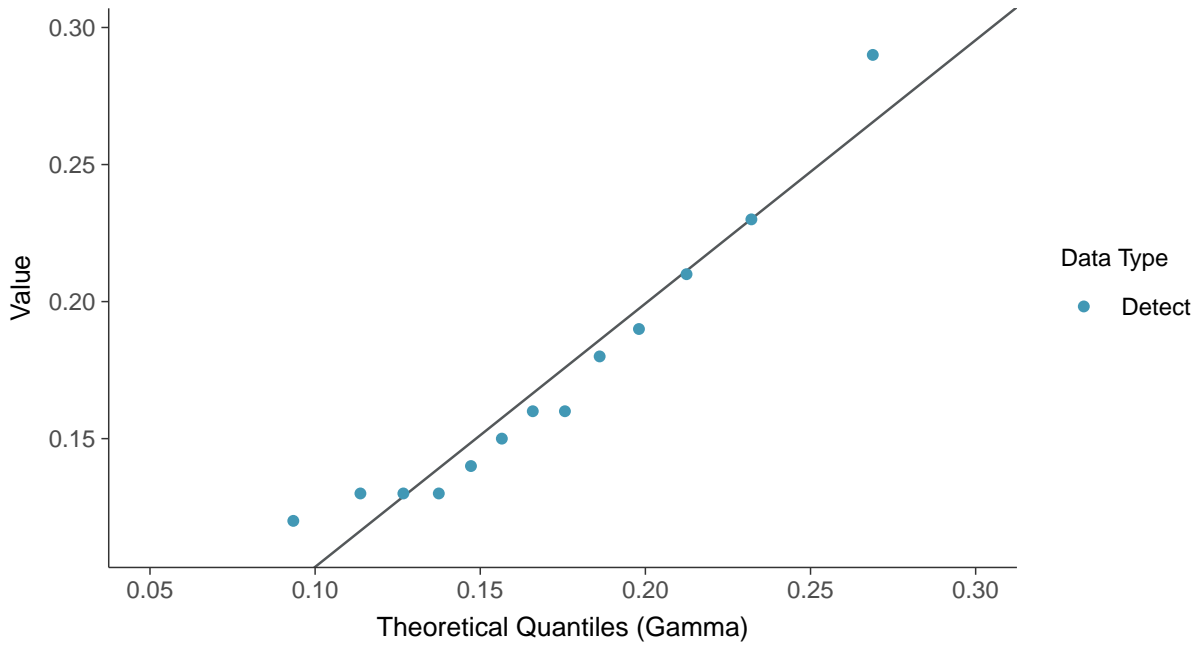
Lognormal Q-Q plot

Barium, MW-31 (mg/L)

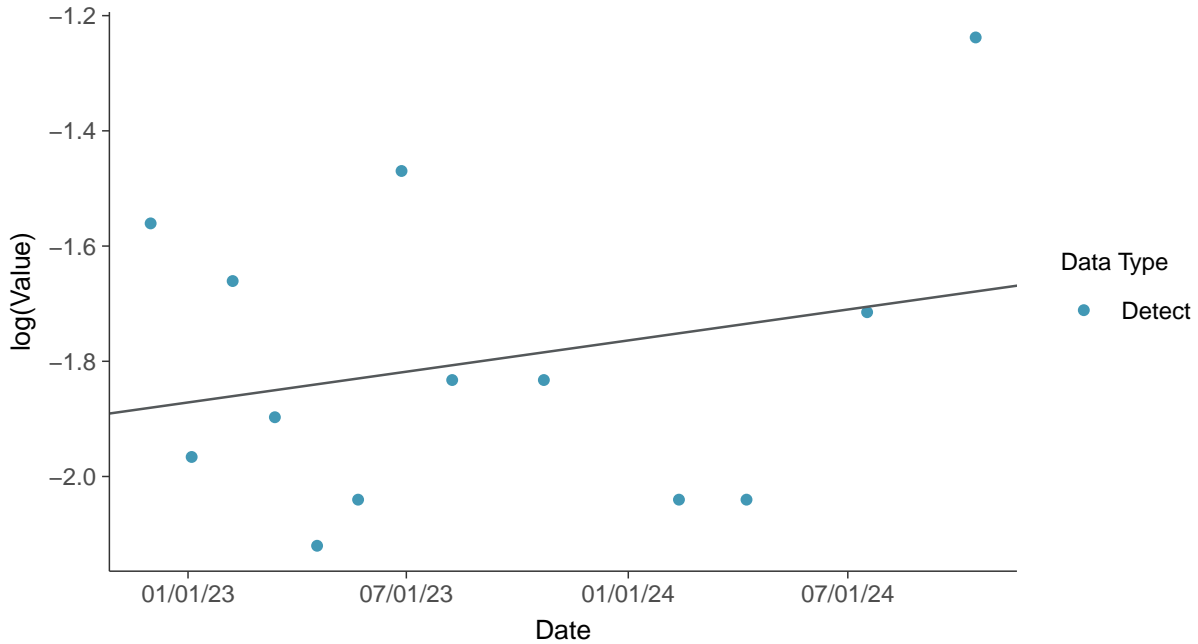




Gamma Q-Q plot
Barium, MW-31 (mg/L)



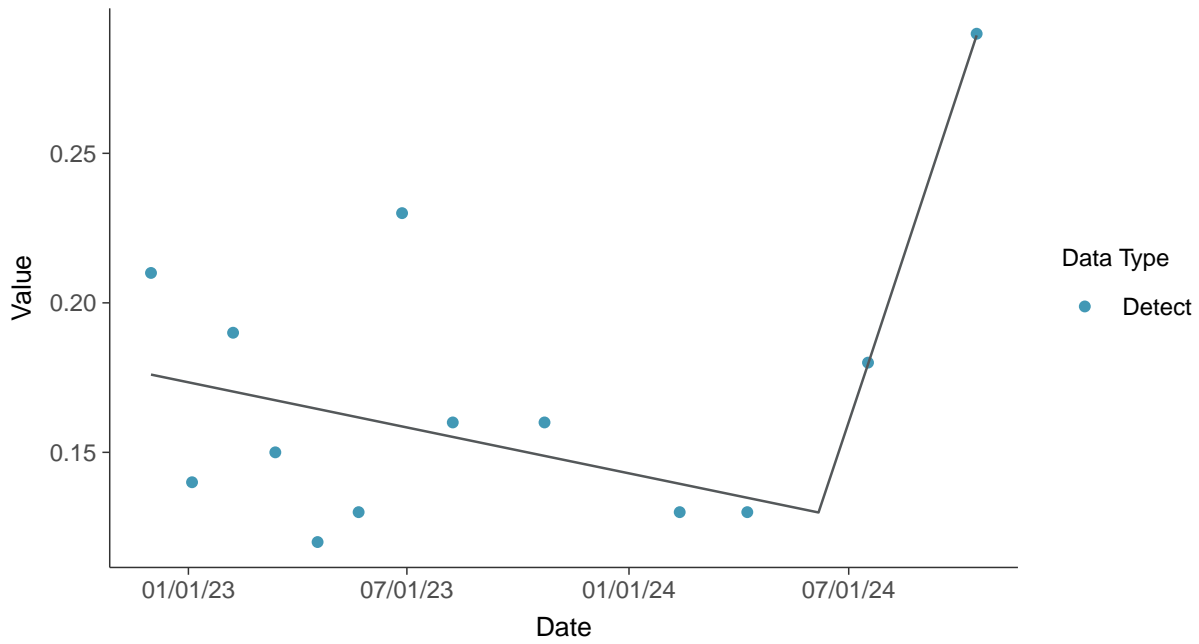
Trend Regression: Lognormal MLE
Barium, MW-31 (mg/L)





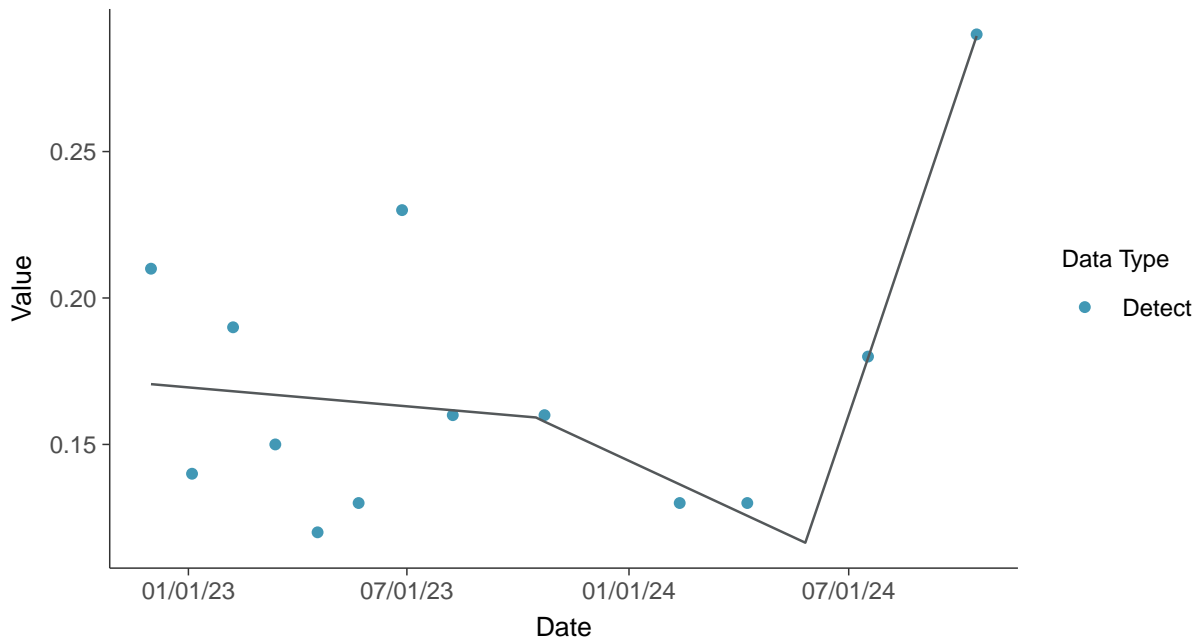
Trend Regression: Piecewise Linear-Linear

Barium, MW-31 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Barium, MW-31 (mg/L)



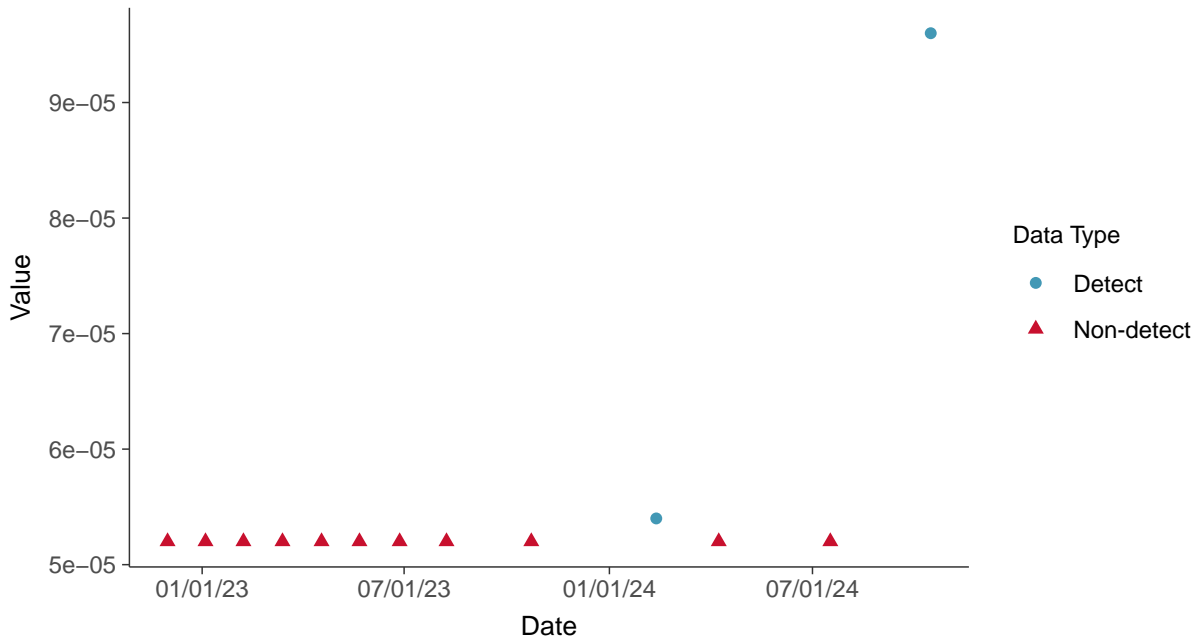


Appendix IV: Beryllium, MW-31

ID: 1_41_1_5_104

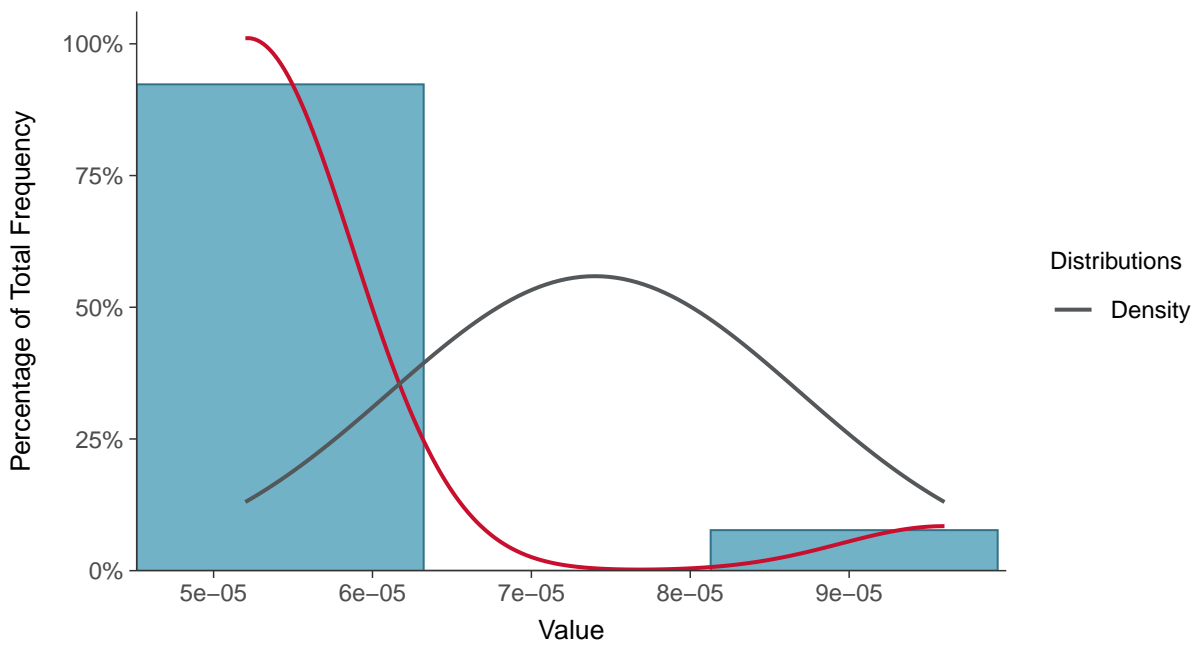
Scatter Plot

Beryllium, MW-31 (mg/L)



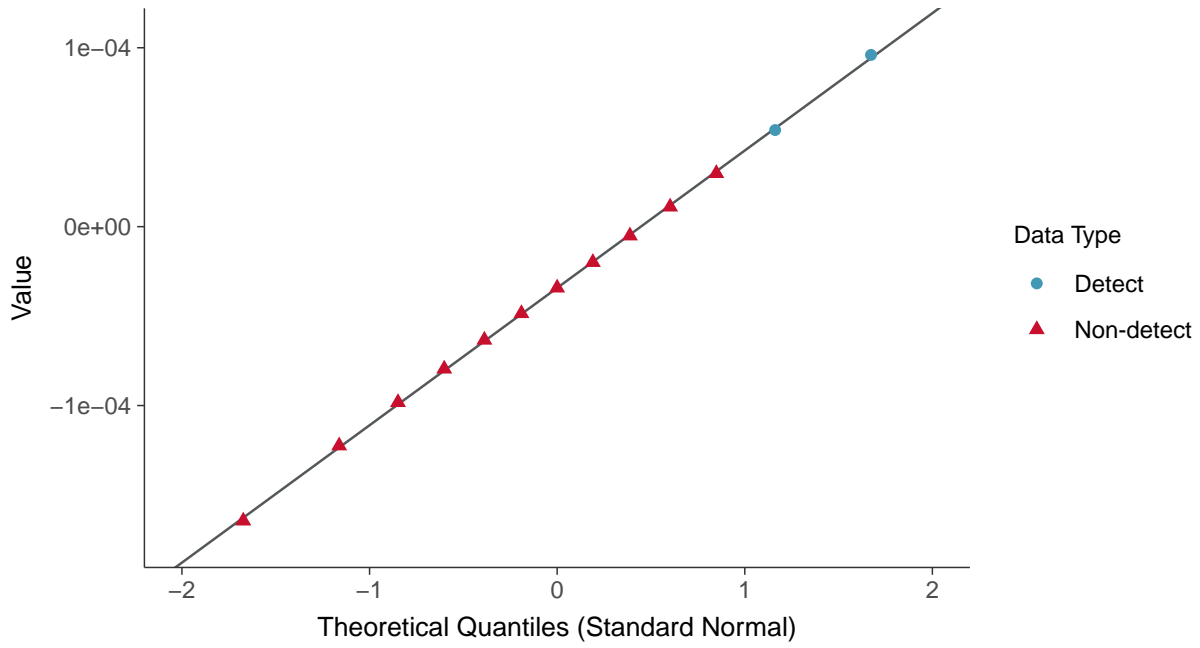
Histogram

Beryllium, MW-31 (mg/L)





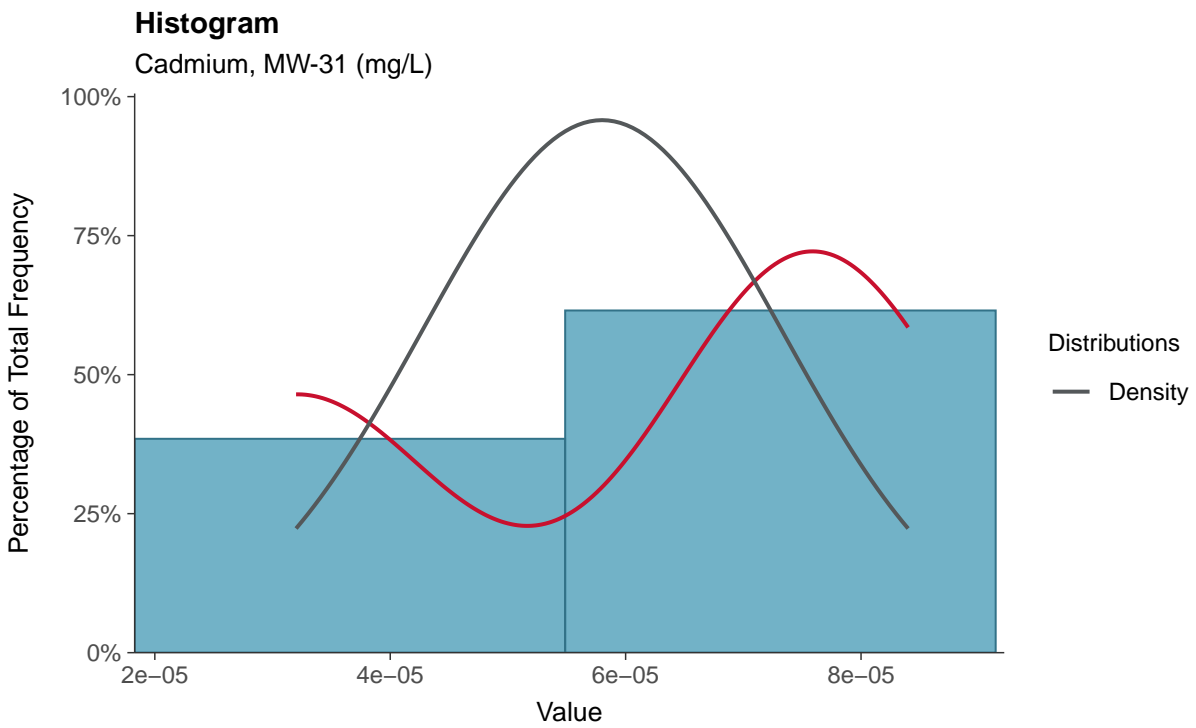
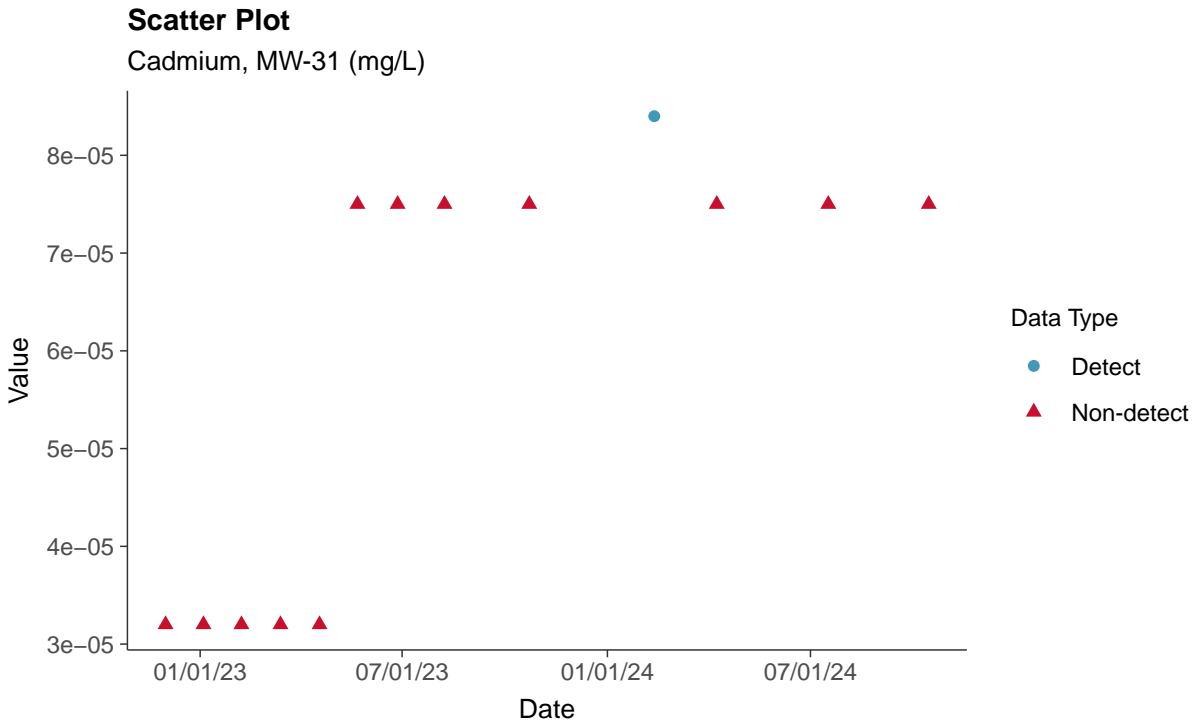
Normal Q-Q plot using ROS Imputed Estimates
Beryllium, MW-31 (mg/L)





Appendix IV: Cadmium, MW-31

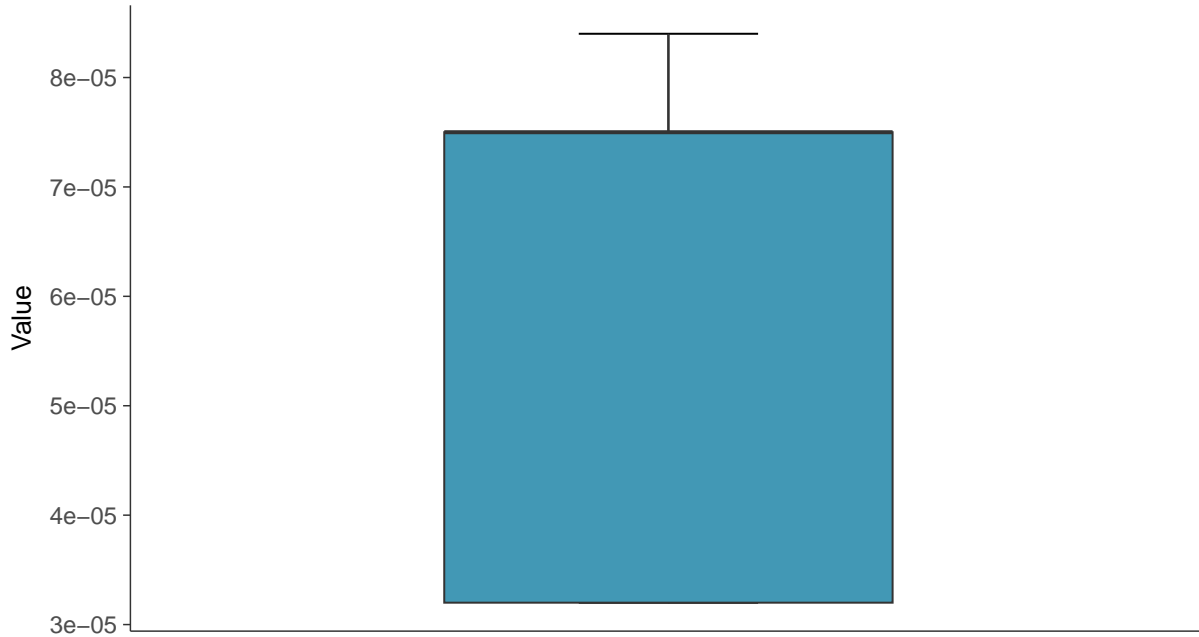
ID: 1_41_1_5_106





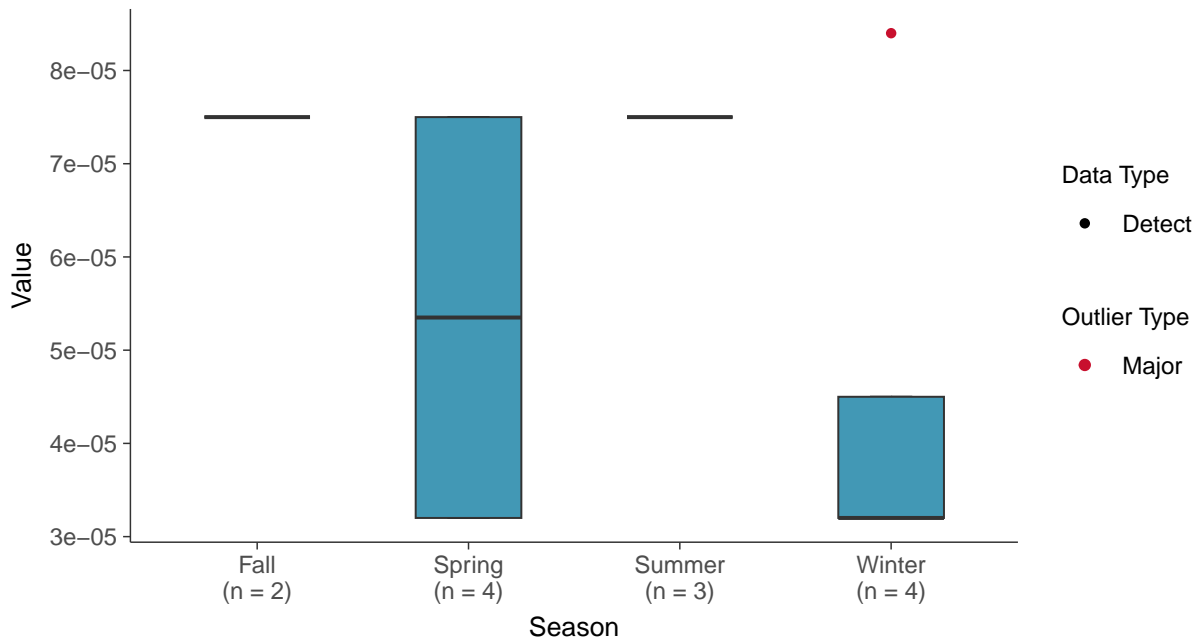
Boxplot

Cadmium, MW-31 (mg/L)



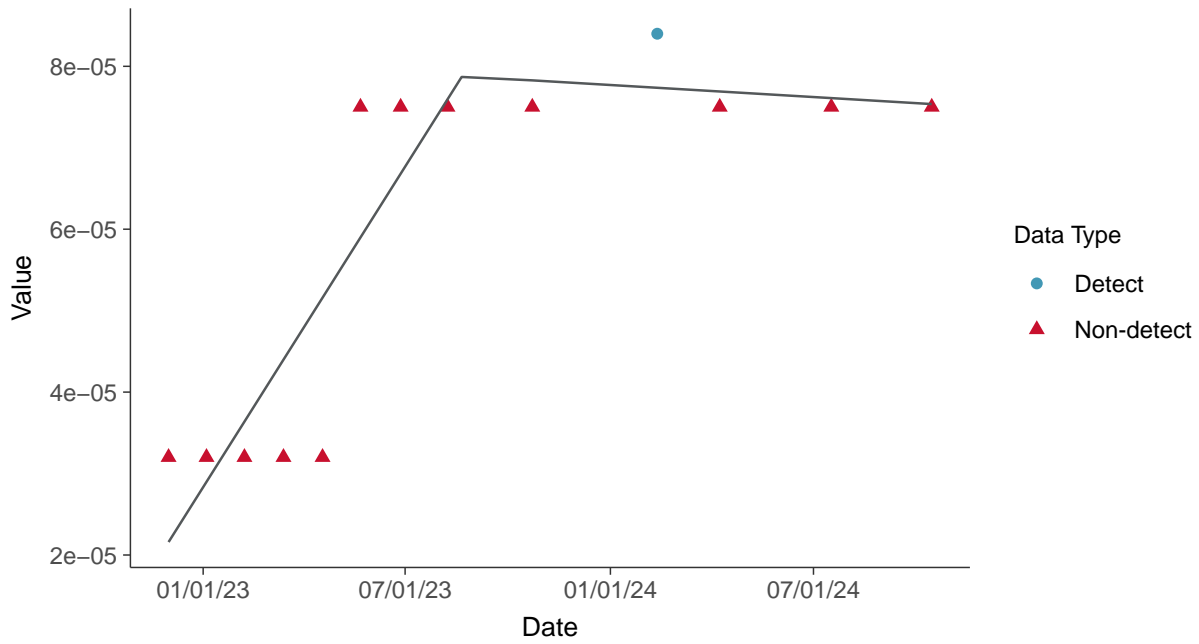
Boxplot by Season

Cadmium, MW-31 (mg/L)

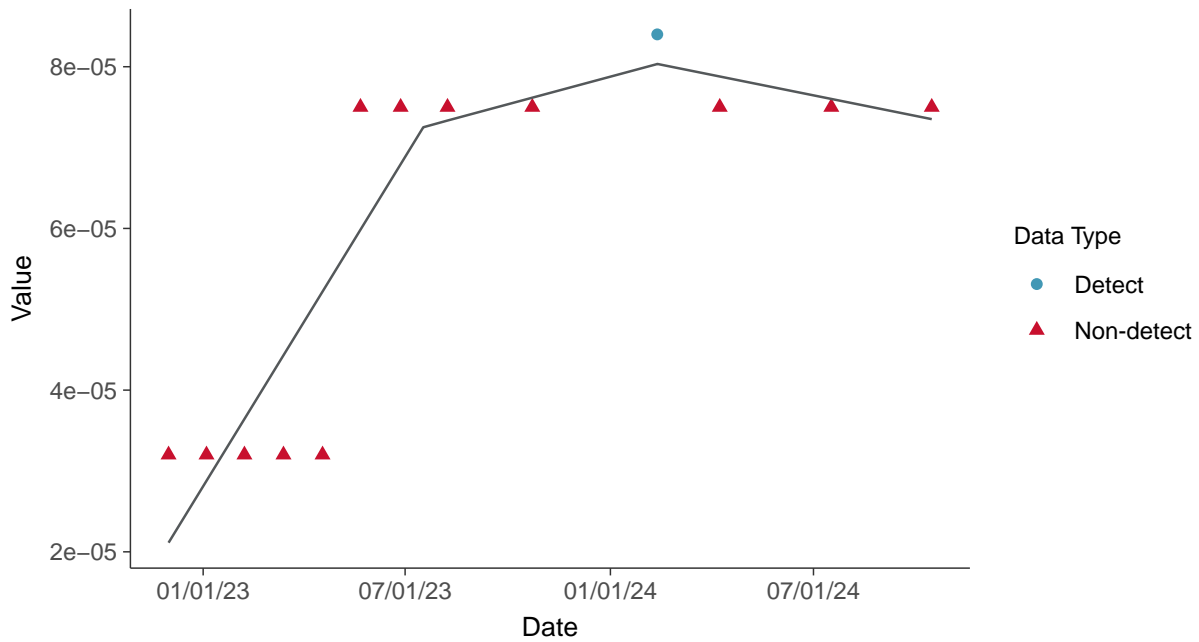




Trend Regression: Piecewise Linear-Linear
Cadmium, MW-31 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Cadmium, MW-31 (mg/L)



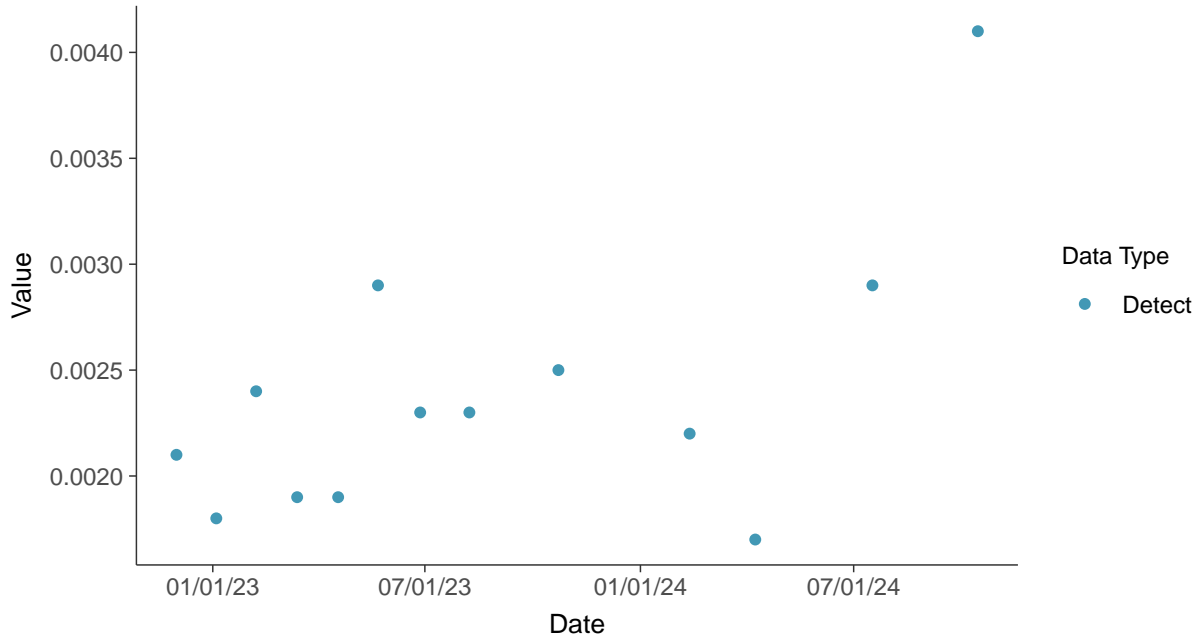


Appendix IV: Chromium, Total, MW-31

ID: 1_41_1_5_109

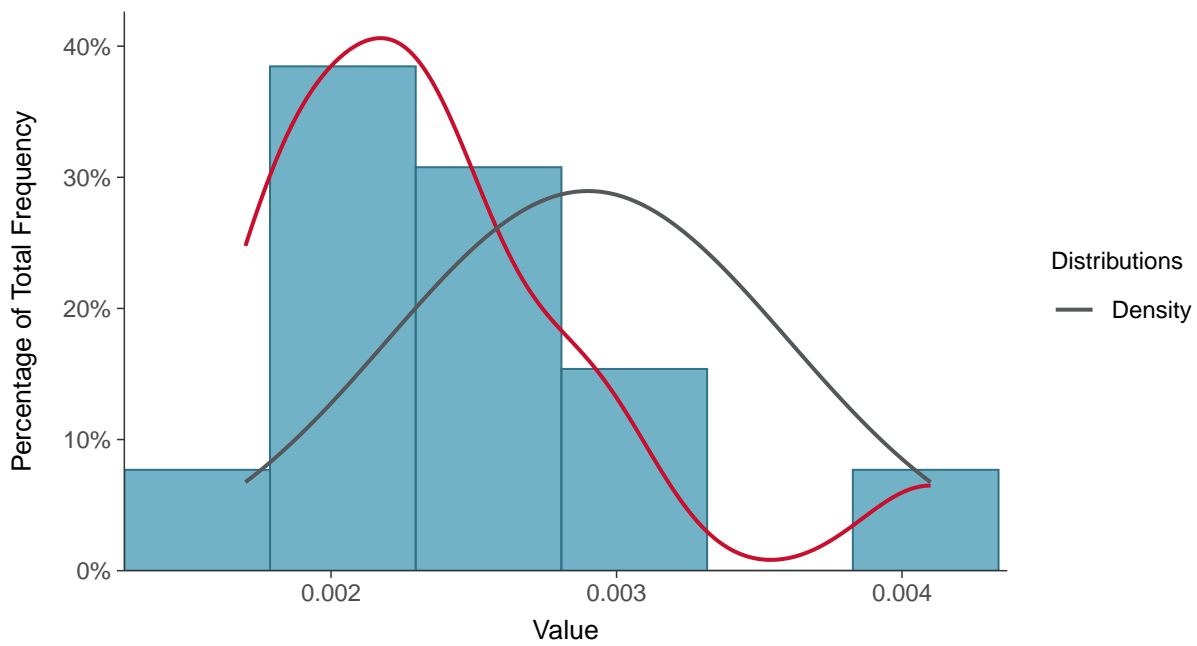
Scatter Plot

Chromium, Total, MW-31 (mg/L)



Histogram

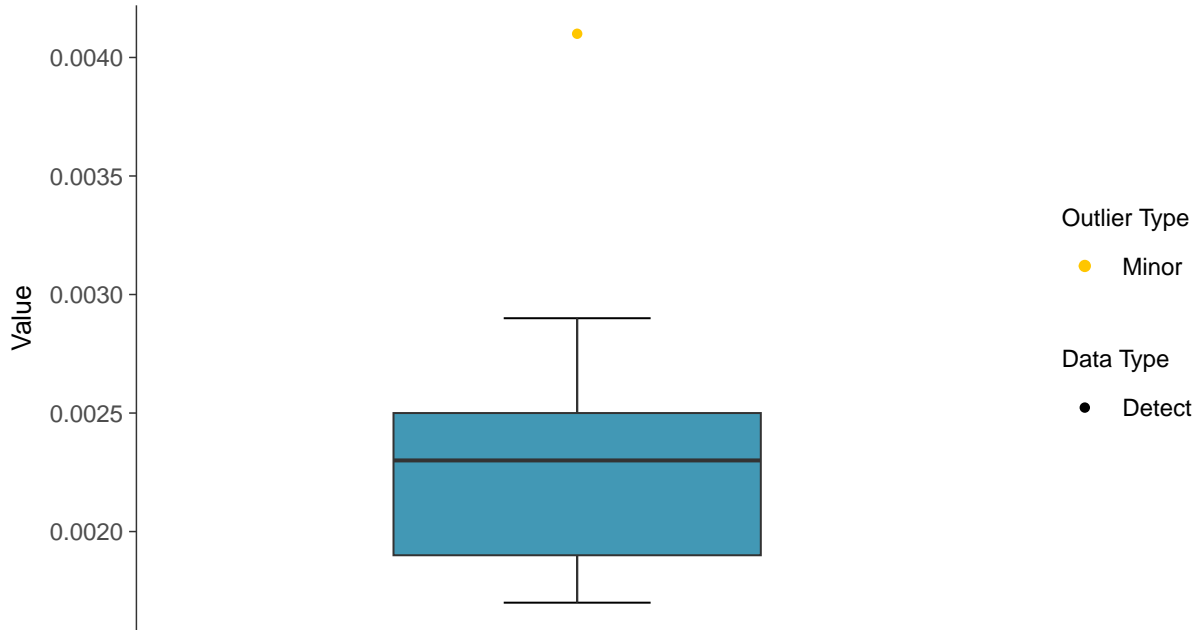
Chromium, Total, MW-31 (mg/L)





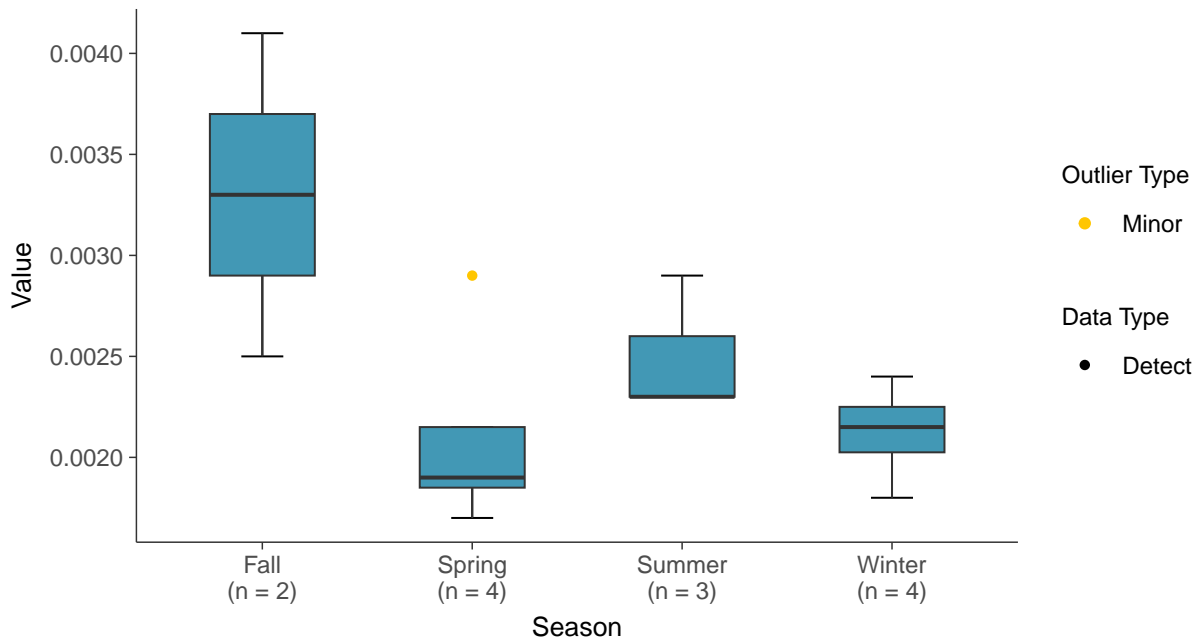
Boxplot

Chromium, Total, MW-31 (mg/L)



Boxplot by Season

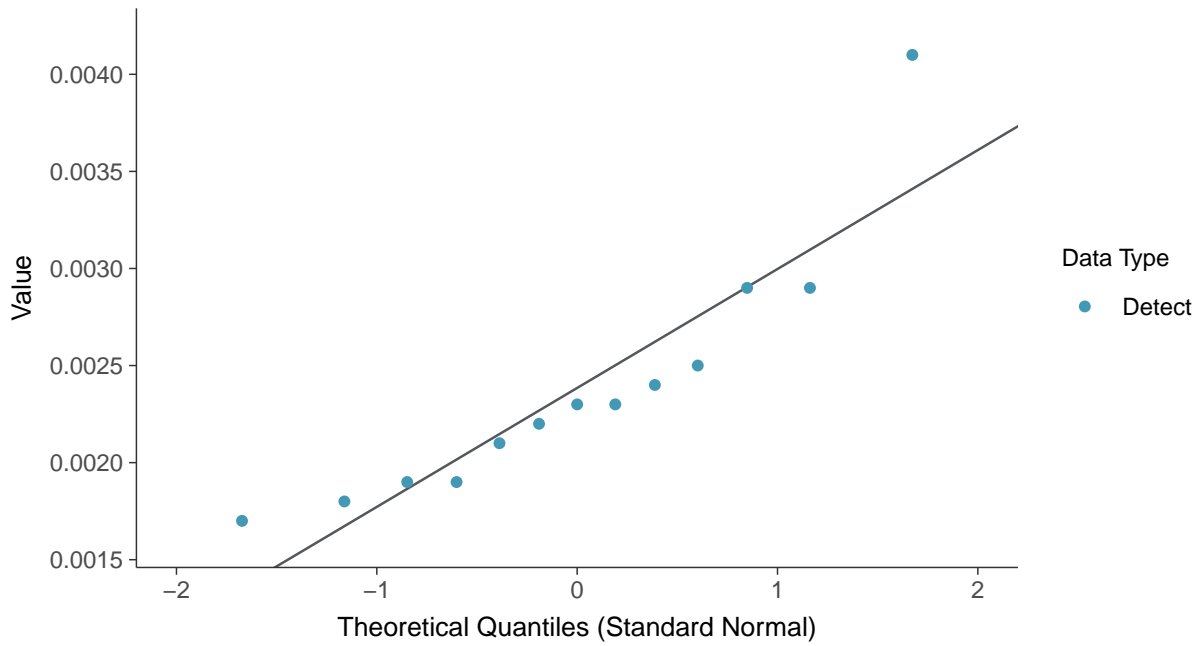
Chromium, Total, MW-31 (mg/L)





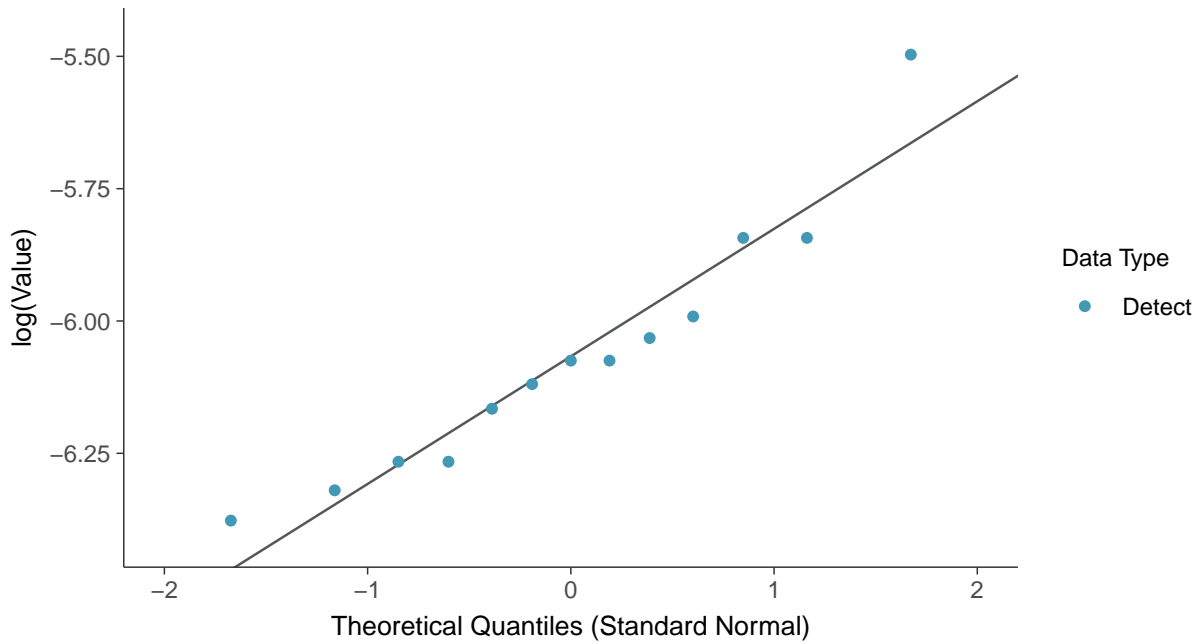
Normal Q-Q plot

Chromium, Total, MW-31 (mg/L)



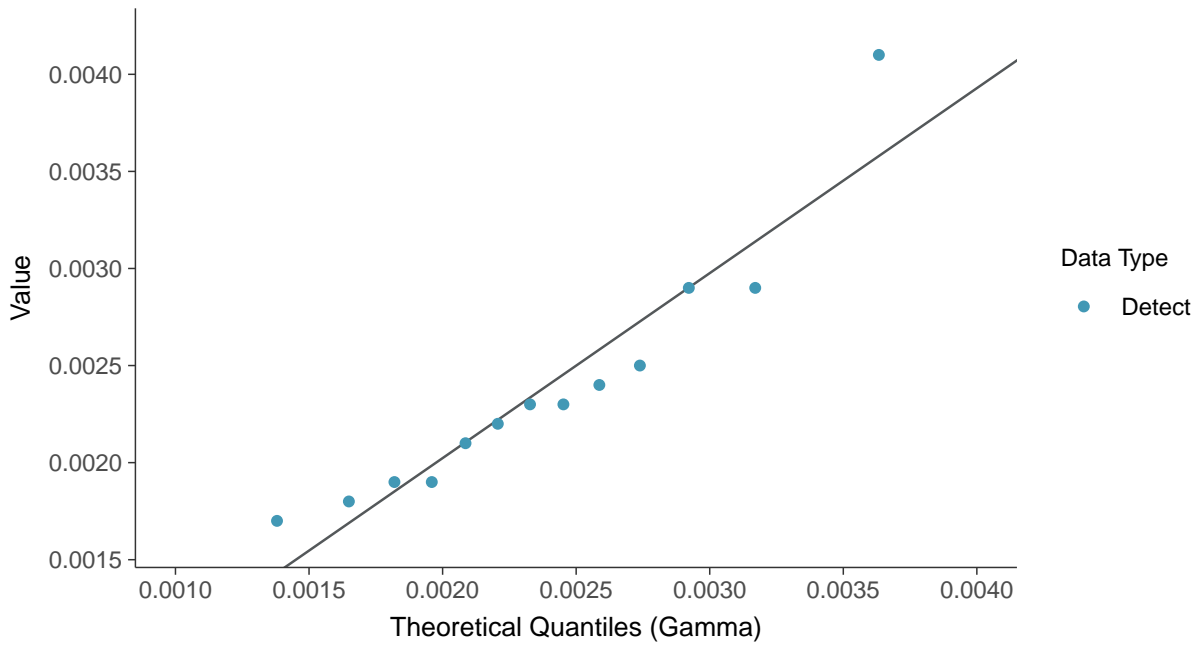
Lognormal Q-Q plot

Chromium, Total, MW-31 (mg/L)

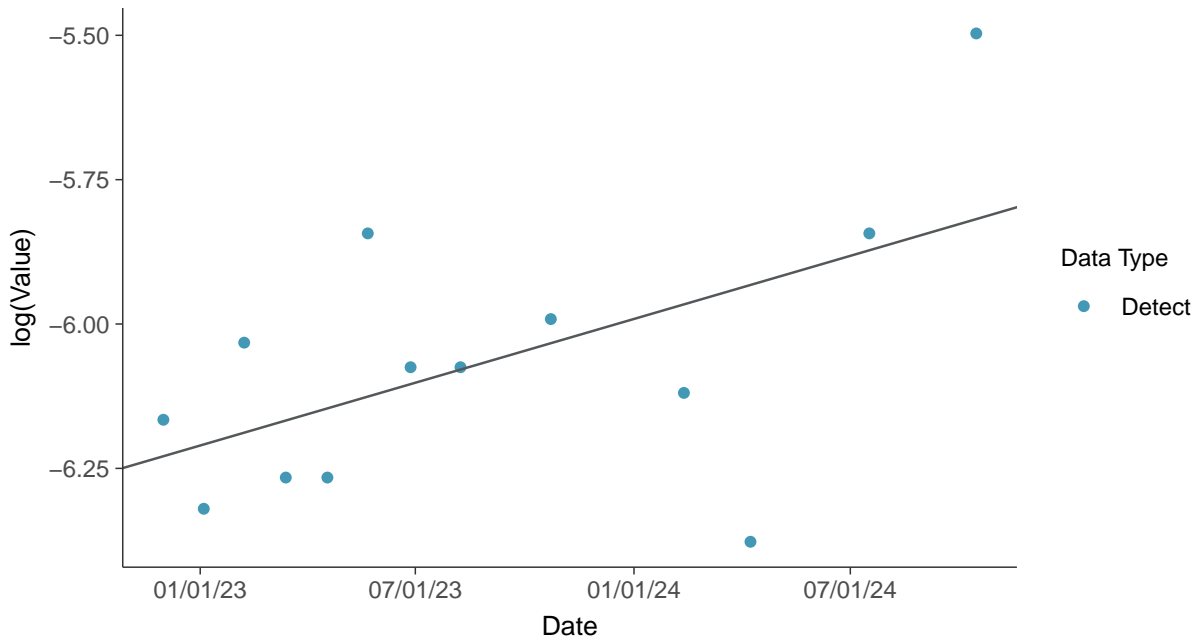




Gamma Q-Q plot
Chromium, Total, MW-31 (mg/L)

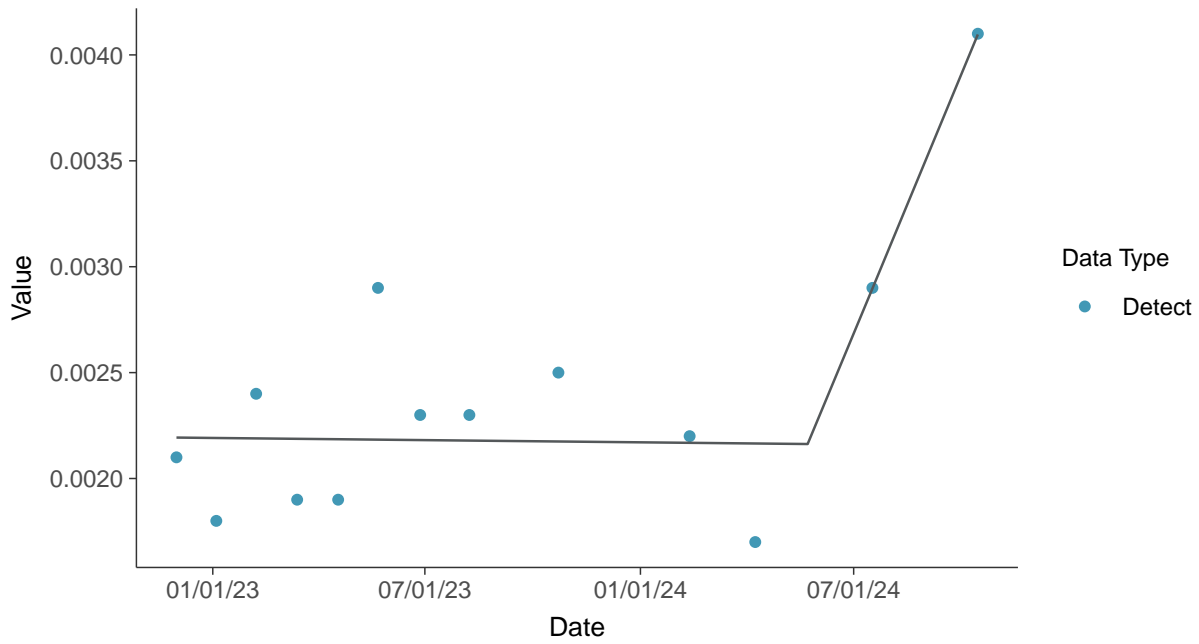


Trend Regression: Lognormal MLE
Chromium, Total, MW-31 (mg/L)

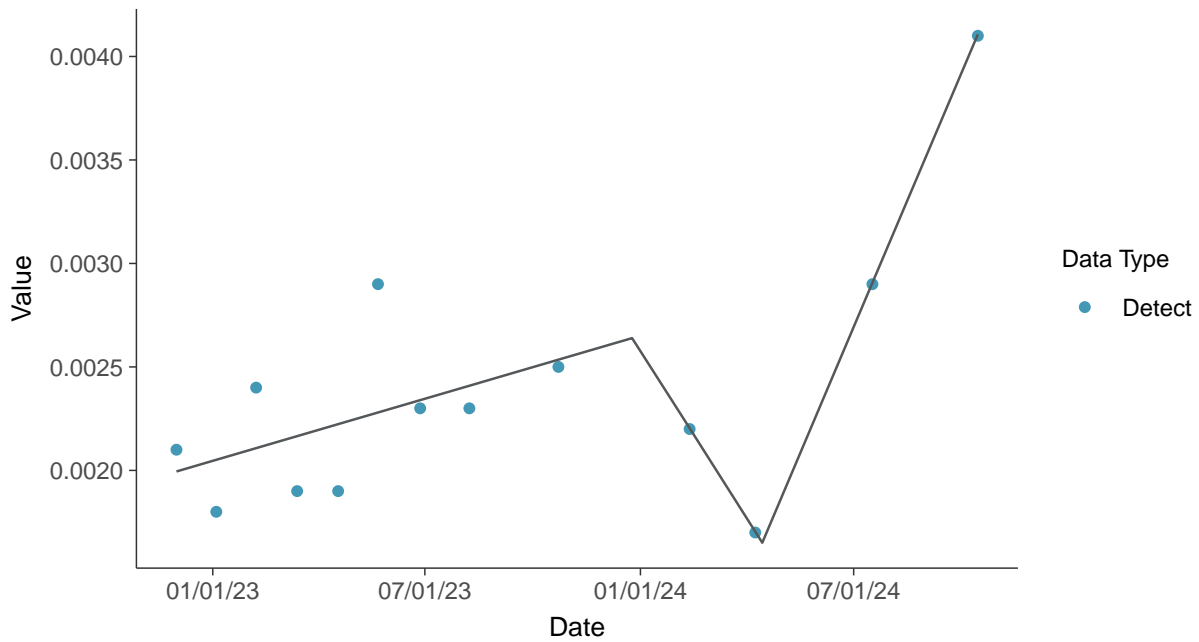




Trend Regression: Piecewise Linear-Linear
Chromium, Total, MW-31 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Chromium, Total, MW-31 (mg/L)



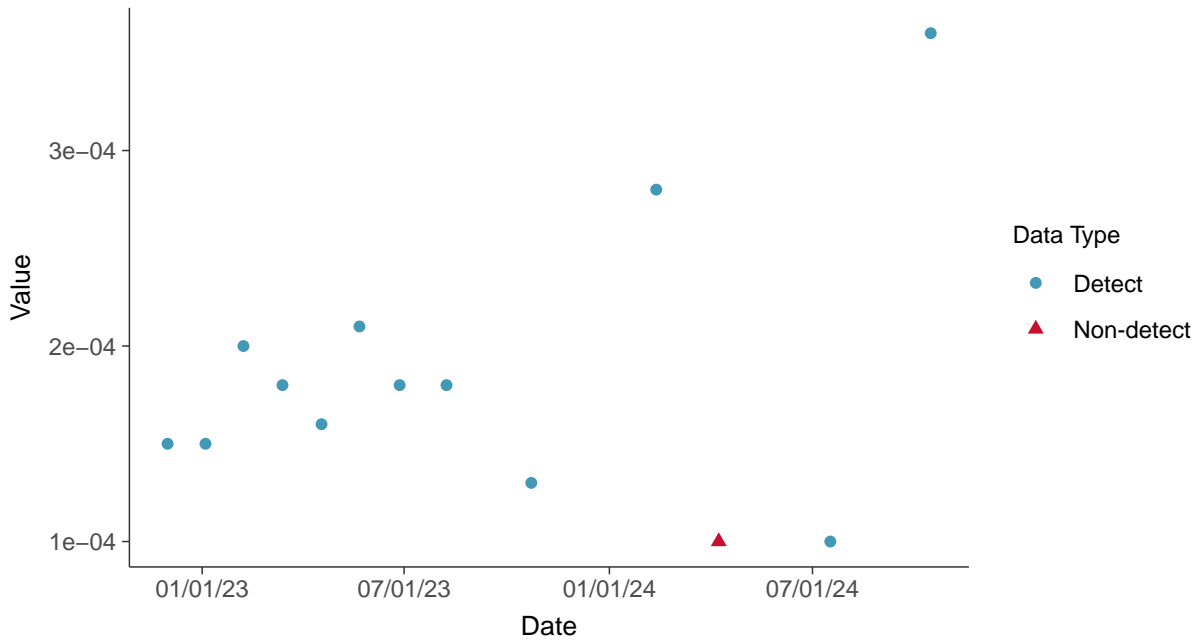


Appendix IV: Cobalt, MW-31

ID: 1_41_1_5_110

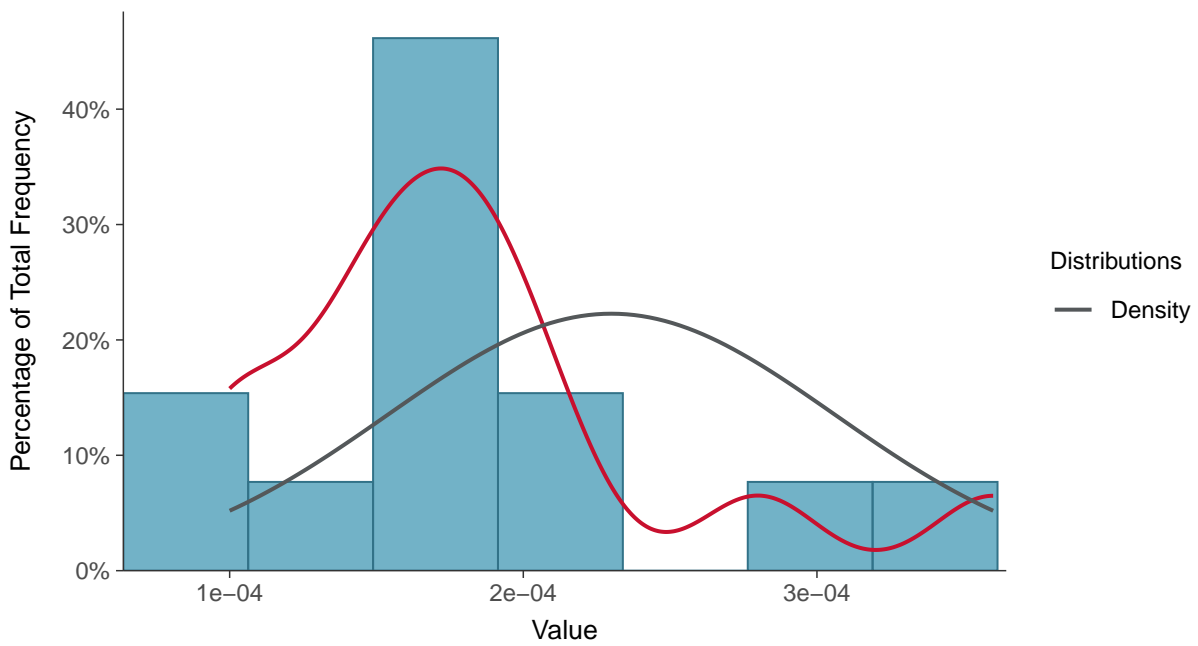
Scatter Plot

Cobalt, MW-31 (mg/L)



Histogram

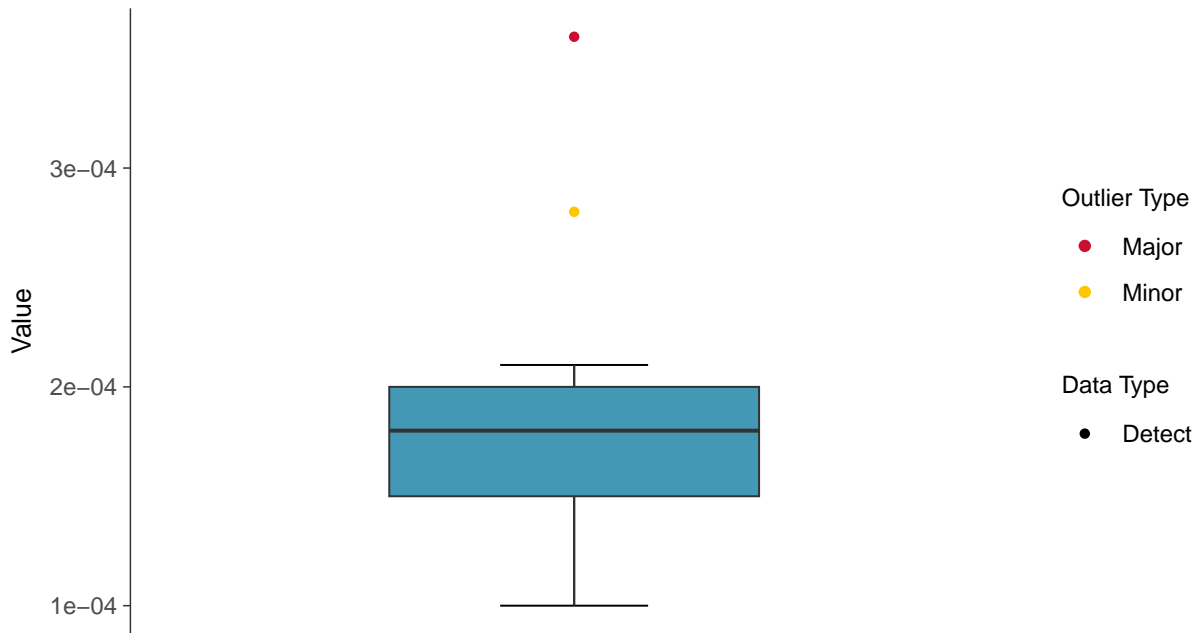
Cobalt, MW-31 (mg/L)





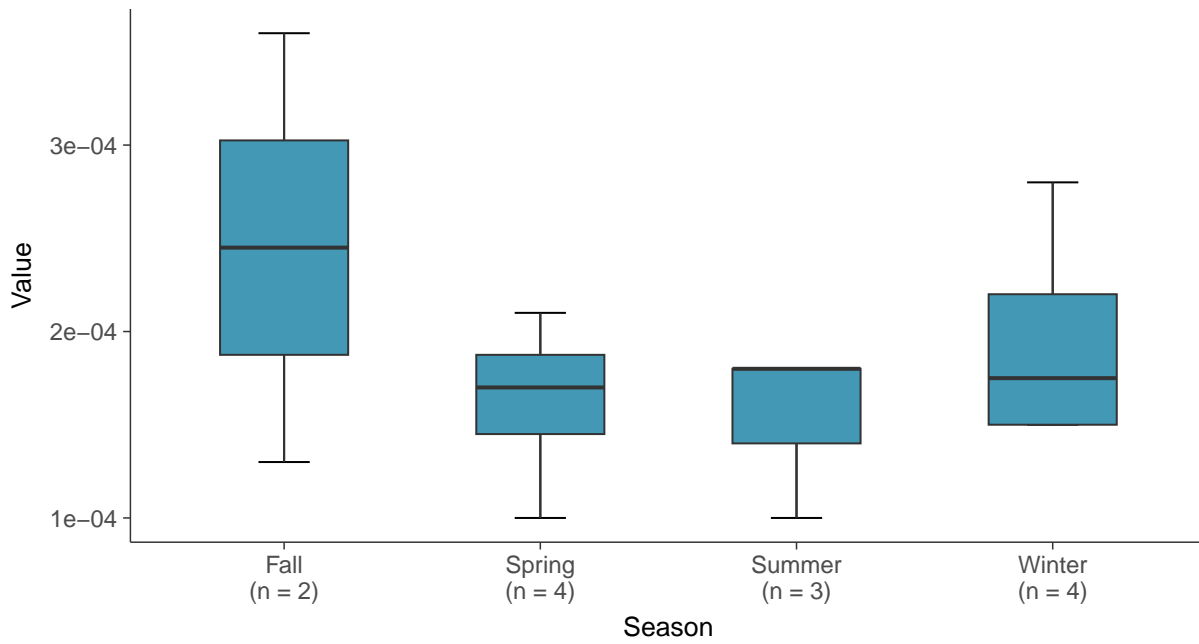
Boxplot

Cobalt, MW-31 (mg/L)



Boxplot by Season

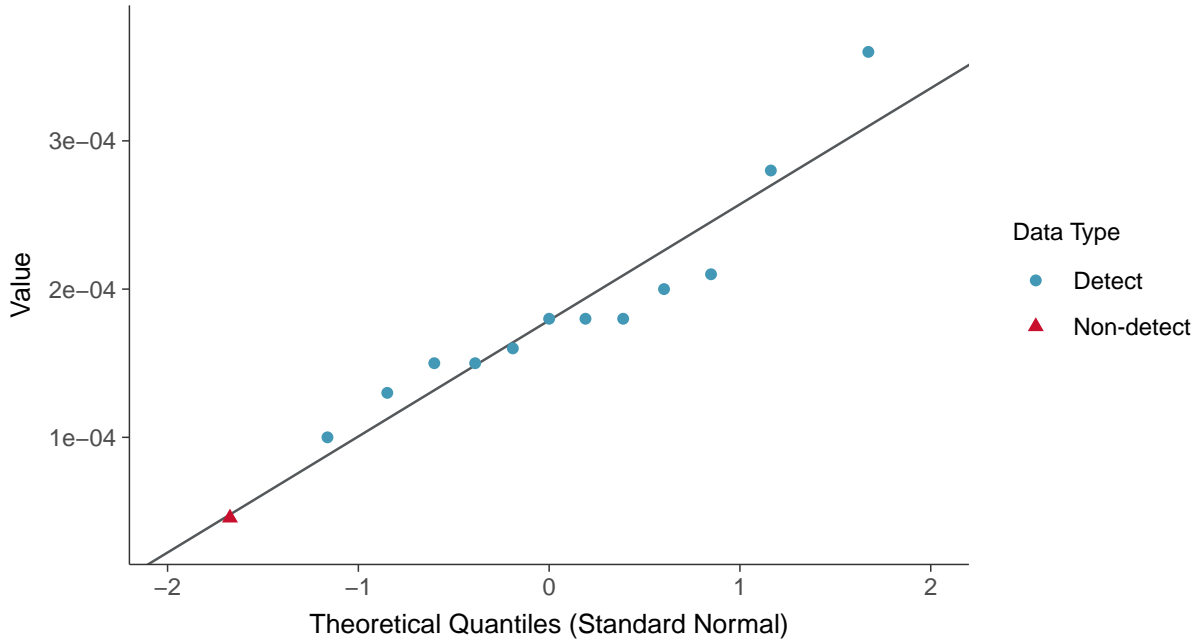
Cobalt, MW-31 (mg/L)





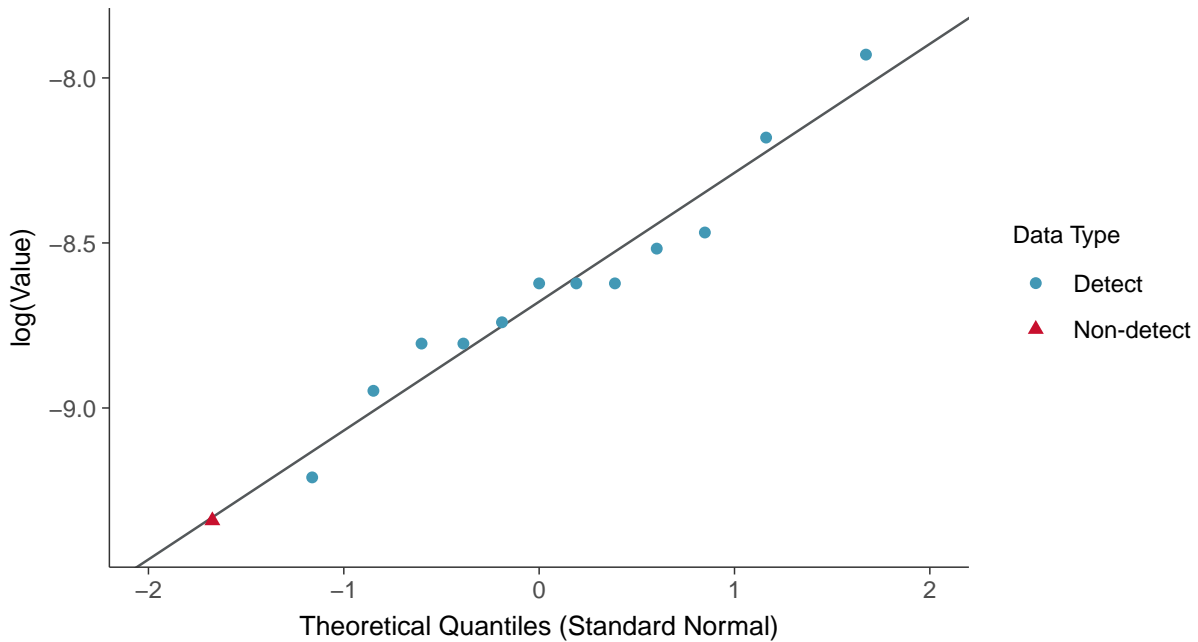
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-31 (mg/L)



Lognormal Q-Q plot using ROS Imputed Estimates

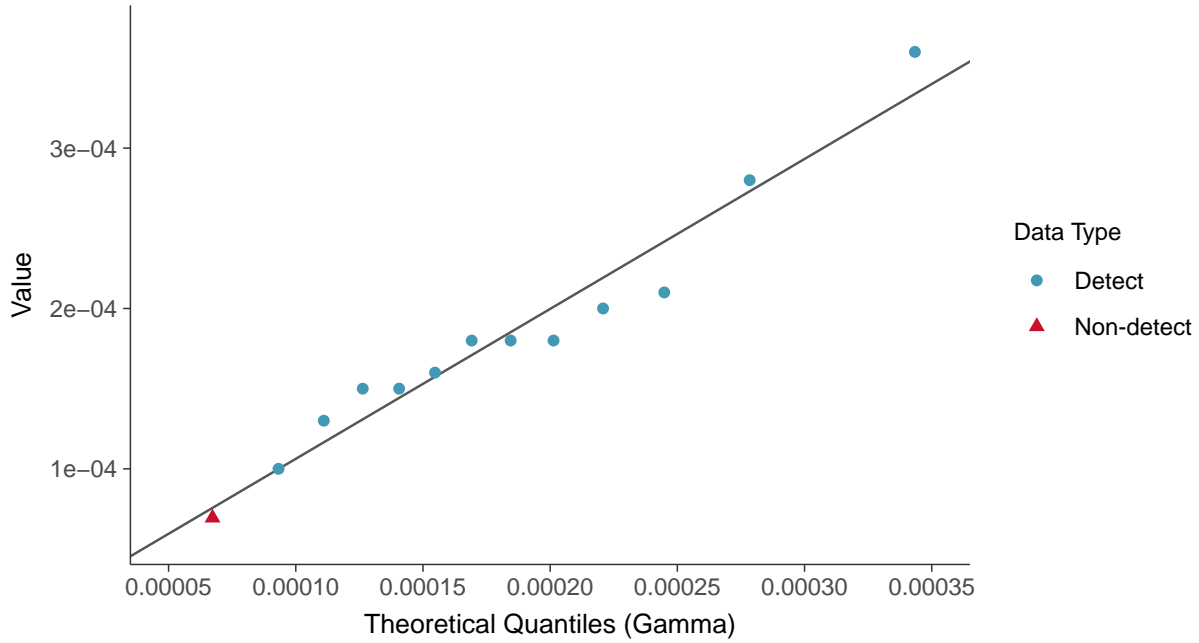
Cobalt, MW-31 (mg/L)





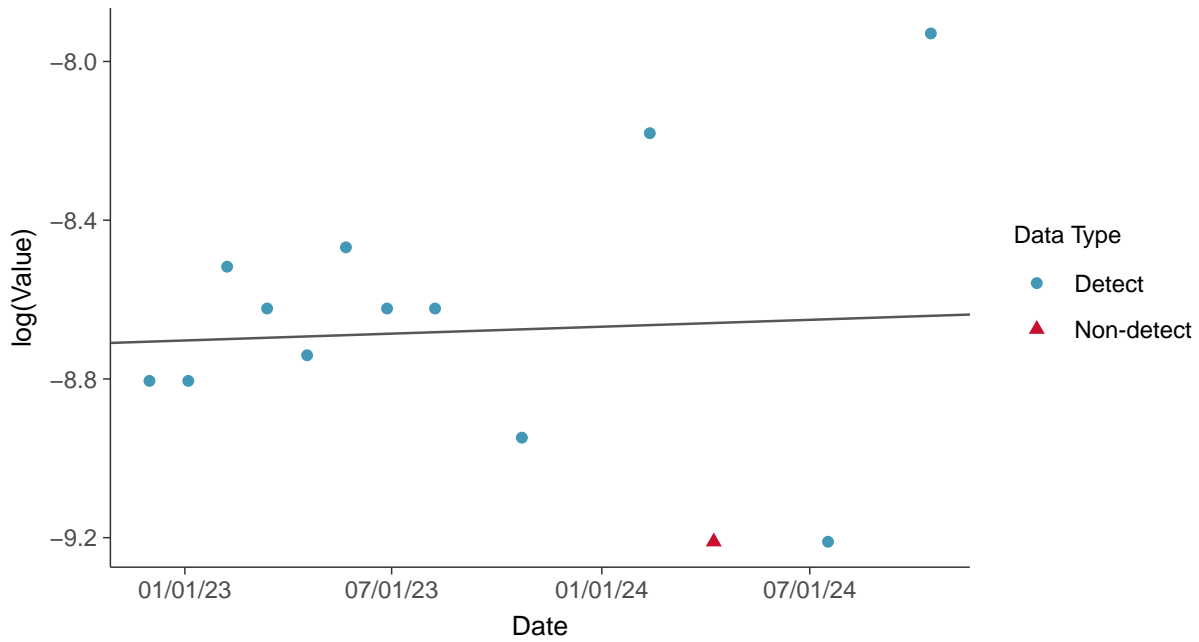
Gamma Q-Q plot using ROS Imputed Estimates

Cobalt, MW-31 (mg/L)



Trend Regression: Lognormal MLE

Cobalt, MW-31 (mg/L)



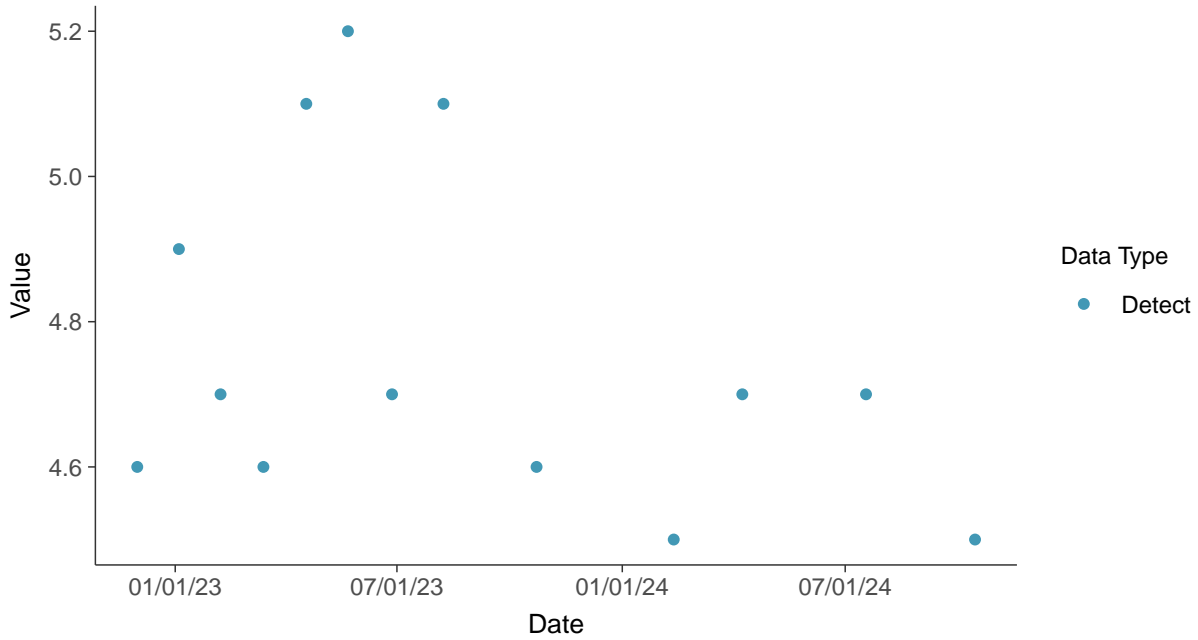


Appendix IV: Fluoride (App IV), MW-31

ID: 1_41_1_5_113

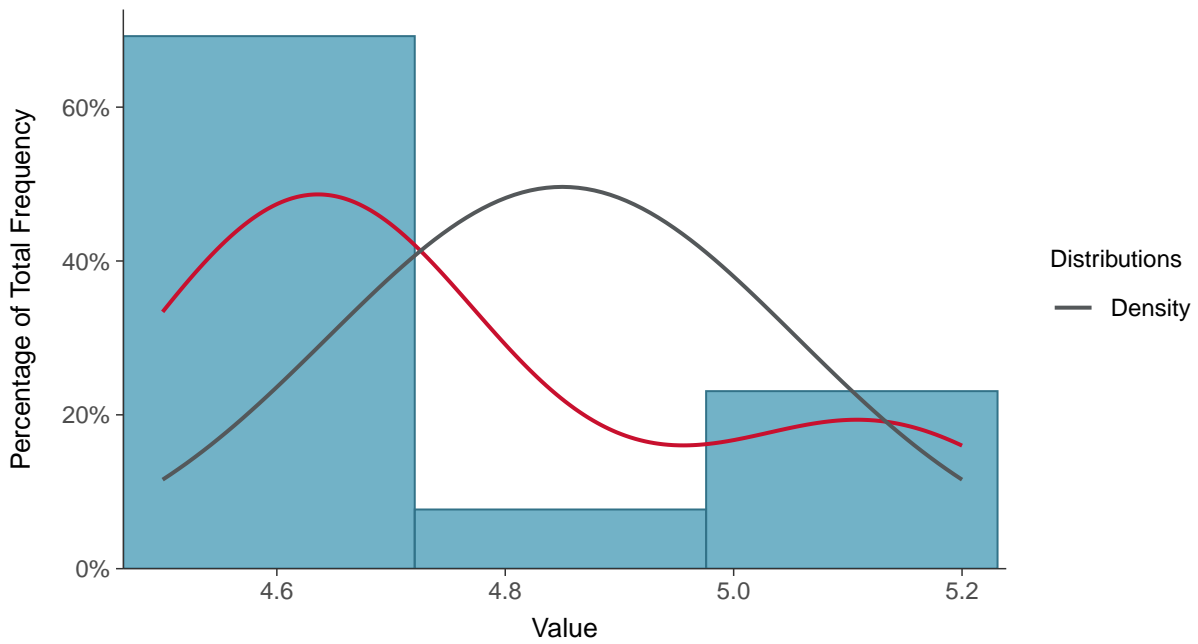
Scatter Plot

Fluoride (App IV), MW-31 (mg/L)



Histogram

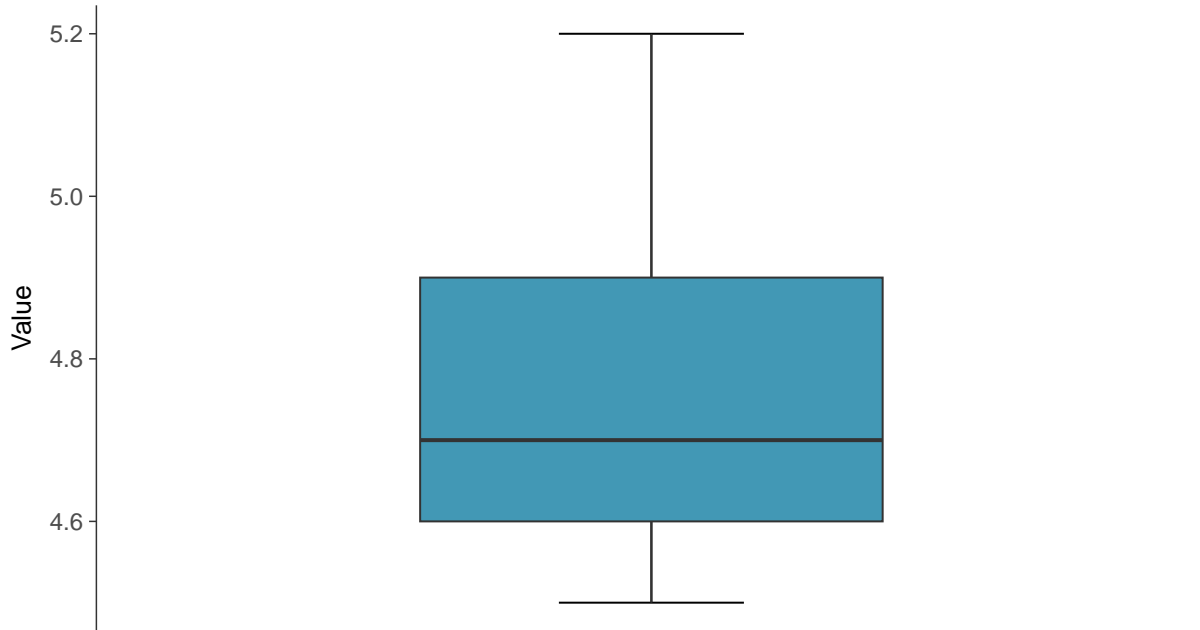
Fluoride (App IV), MW-31 (mg/L)





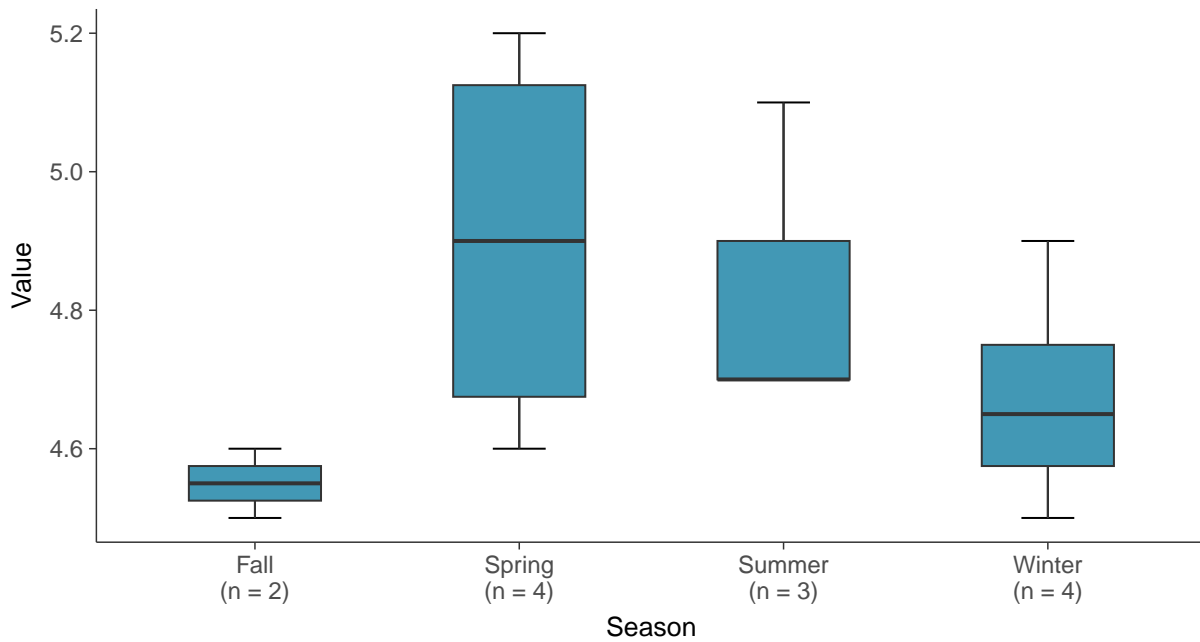
Boxplot

Fluoride (App IV), MW-31 (mg/L)



Boxplot by Season

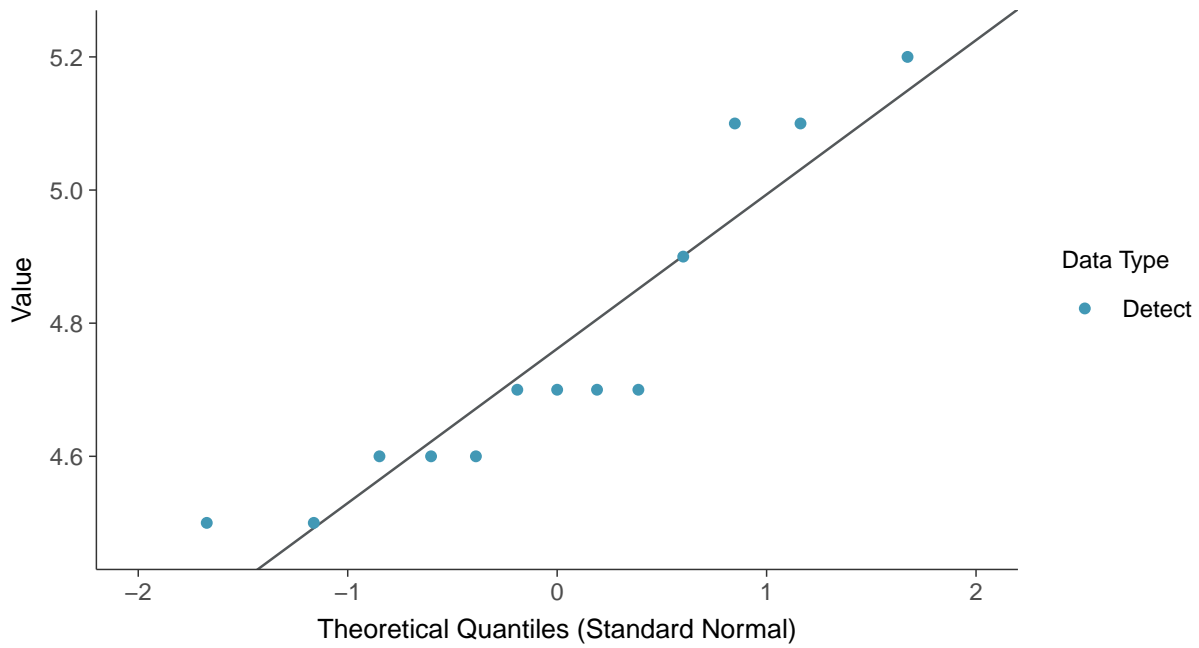
Fluoride (App IV), MW-31 (mg/L)





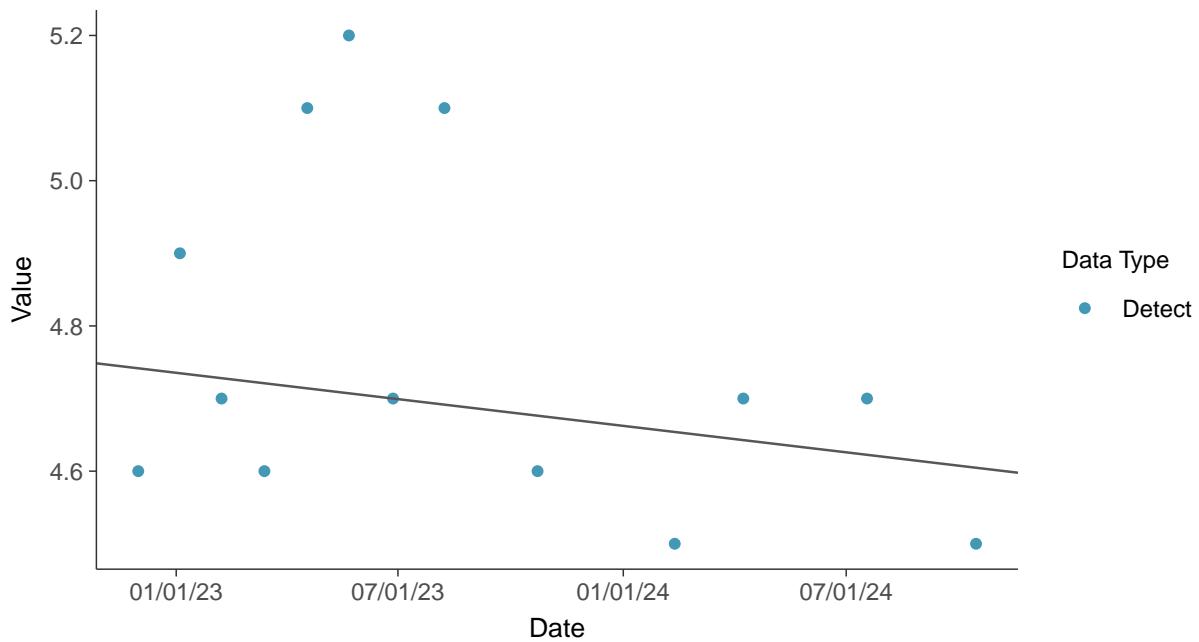
Normal Q-Q plot

Fluoride (App IV), MW-31 (mg/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

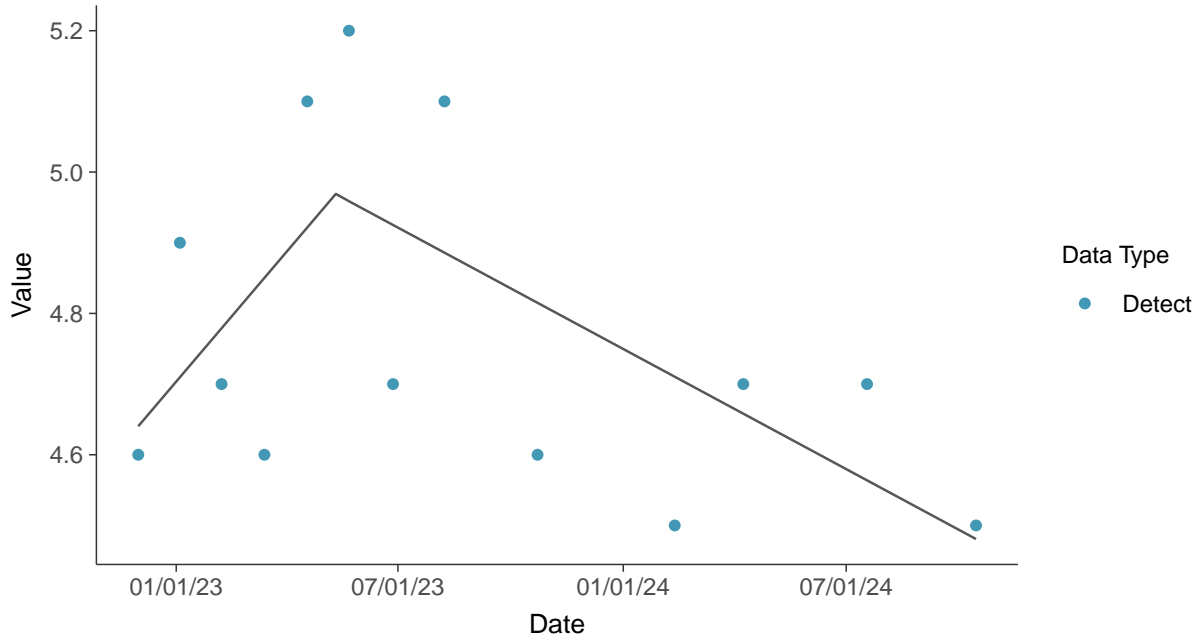
Fluoride (App IV), MW-31 (mg/L)





Trend Regression: Piecewise Linear-Linear

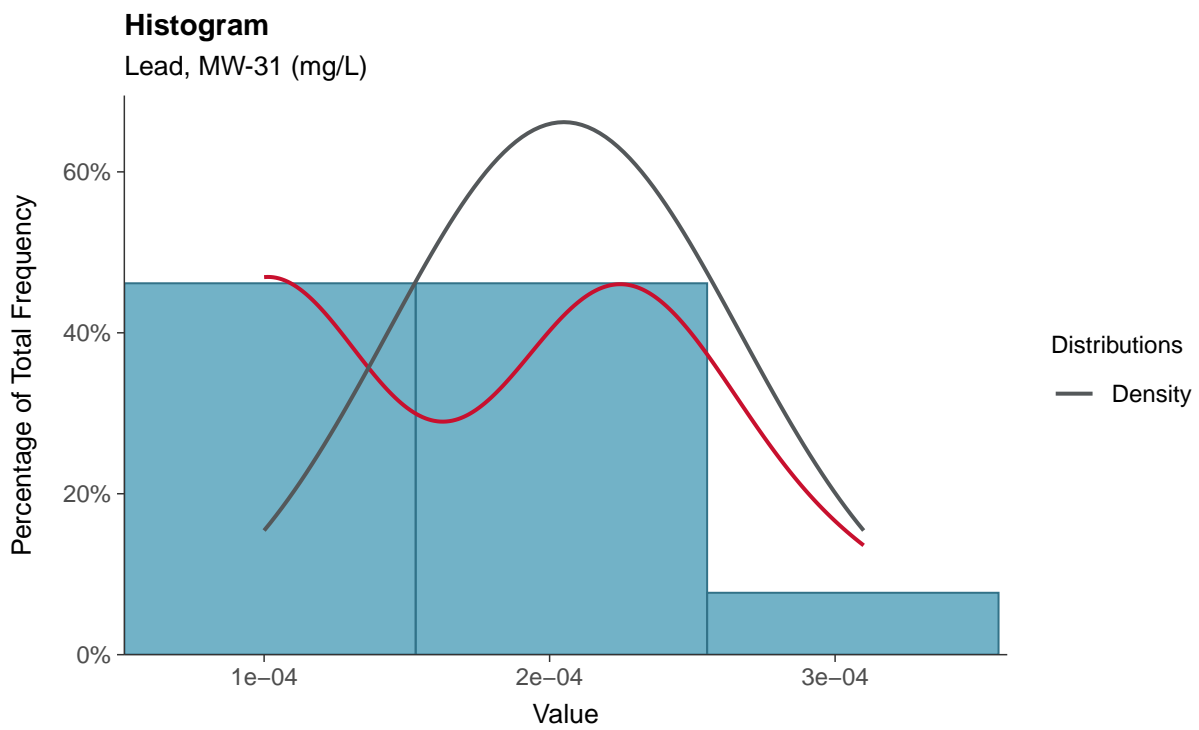
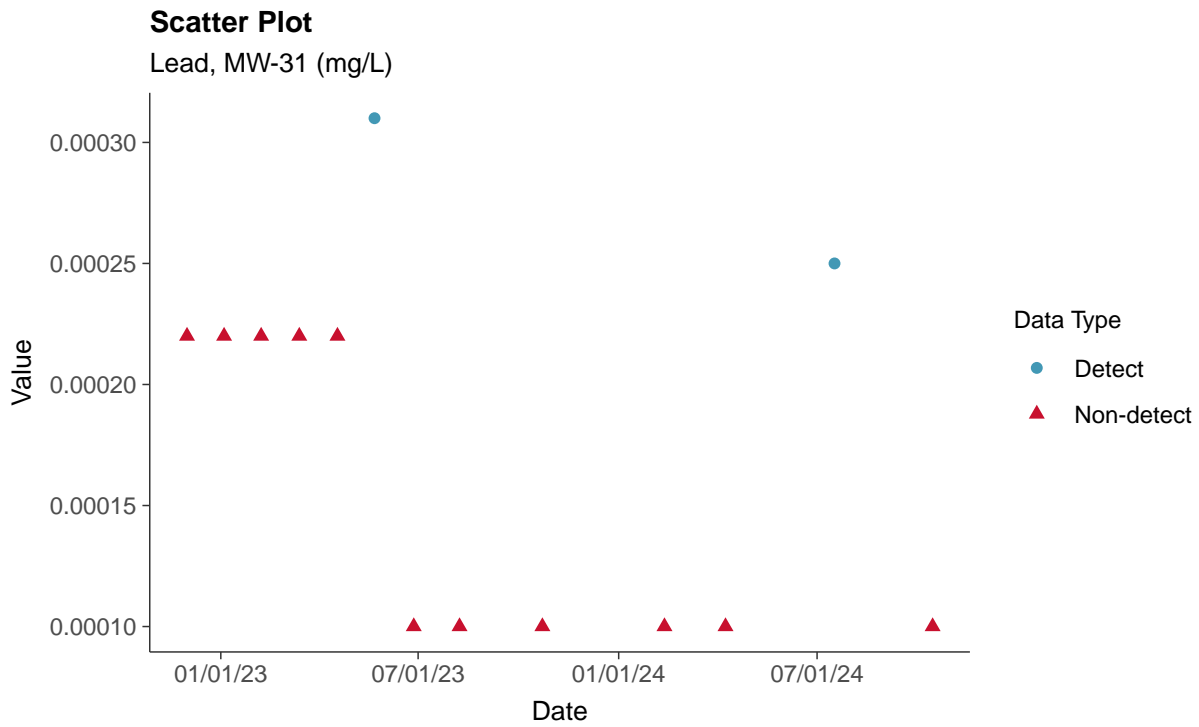
Fluoride (App IV), MW-31 (mg/L)





Appendix IV: Lead, MW-31

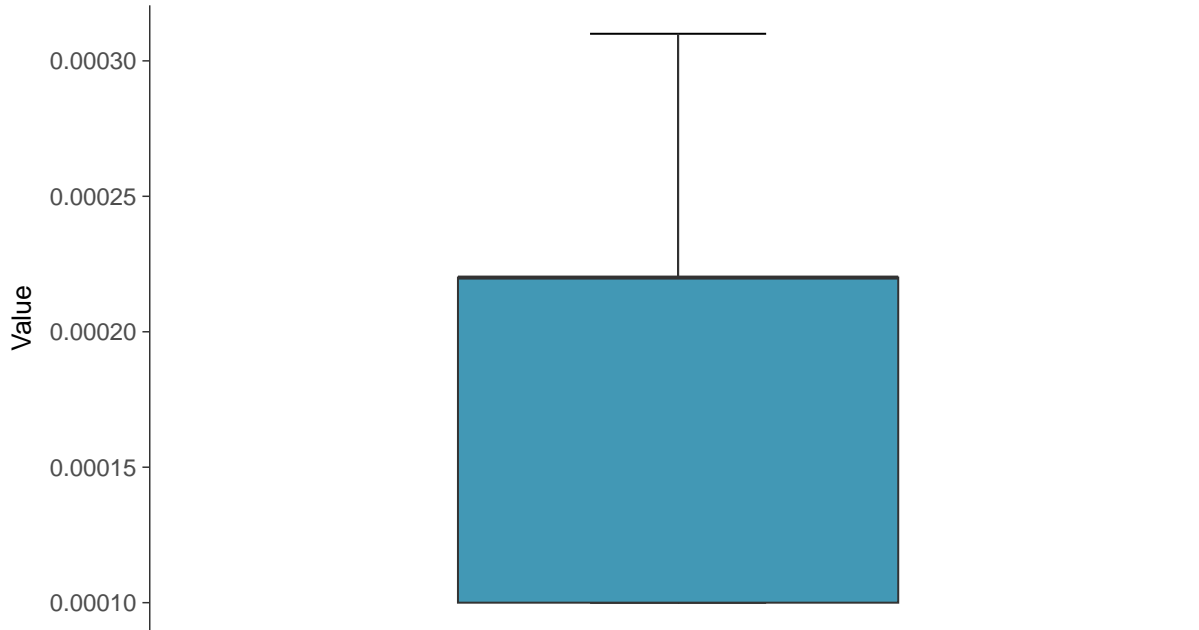
ID: 1_41_1_5_115





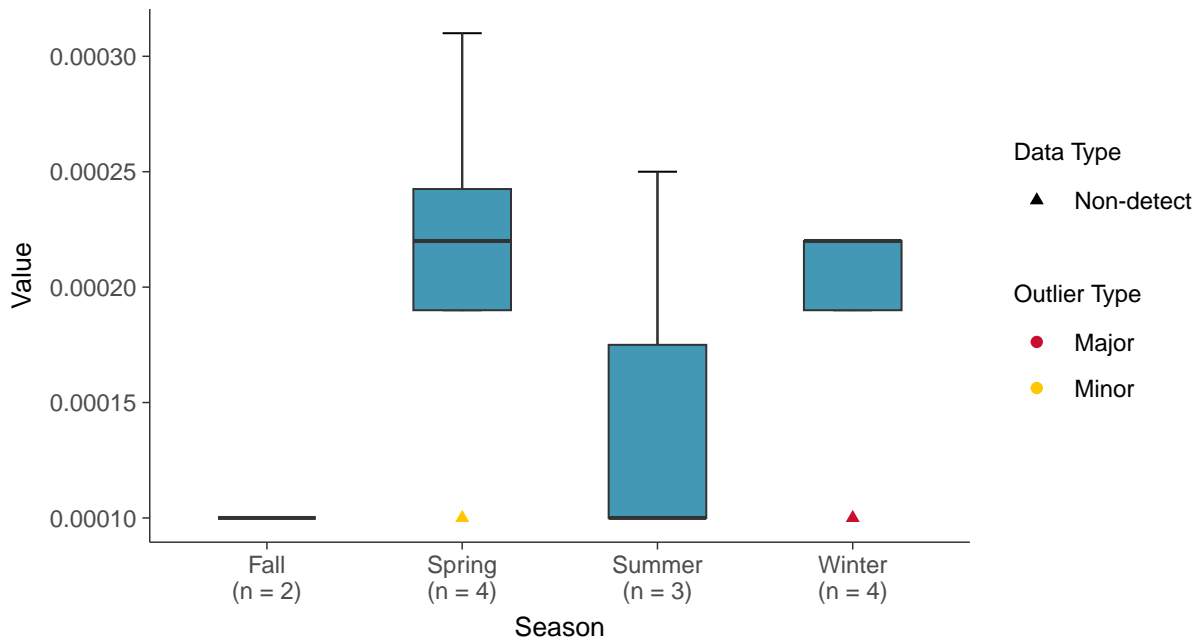
Boxplot

Lead, MW-31 (mg/L)



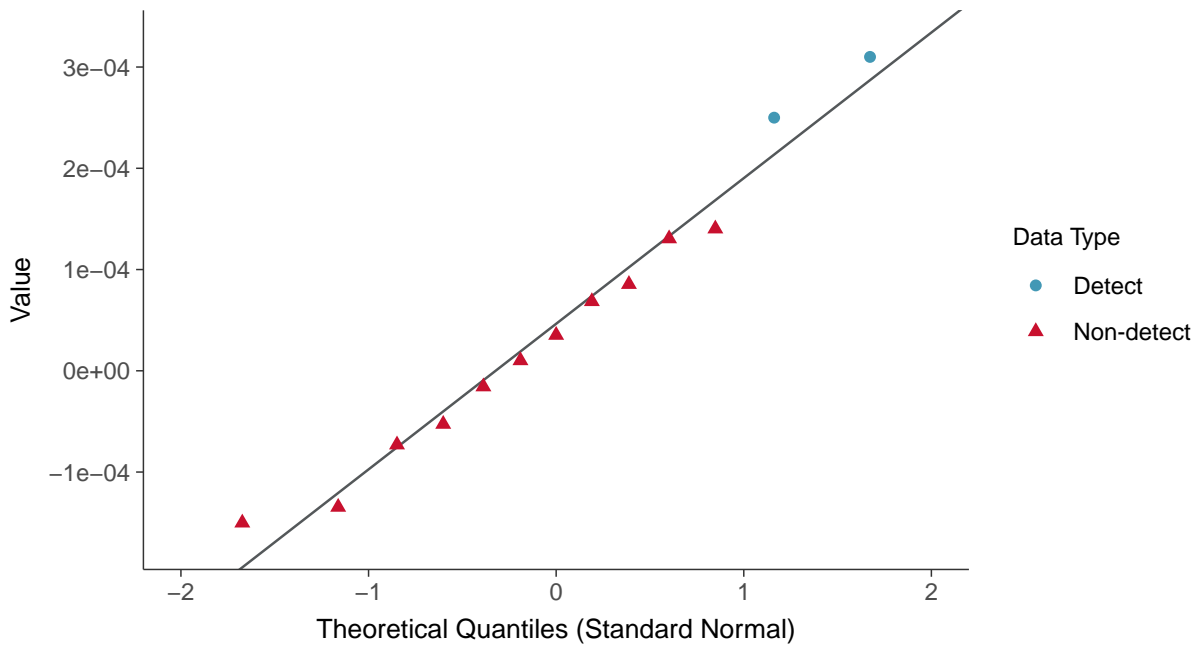
Boxplot by Season

Lead, MW-31 (mg/L)

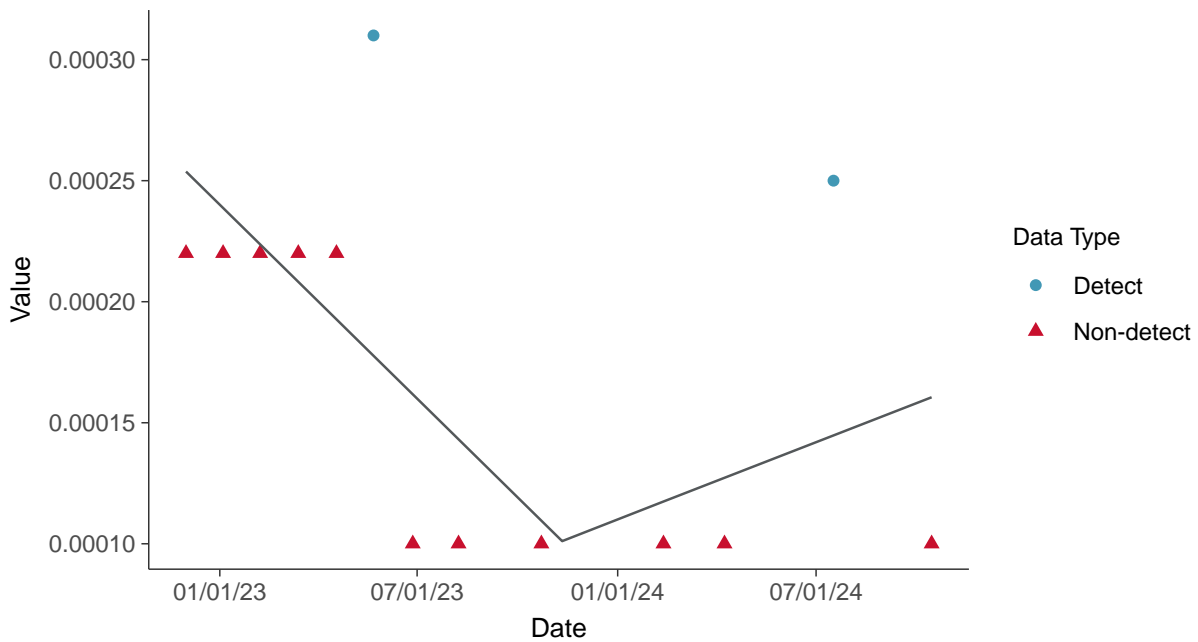




Normal Q-Q plot using ROS Imputed Estimates
Lead, MW-31 (mg/L)



Trend Regression: Piecewise Linear-Linear
Lead, MW-31 (mg/L)



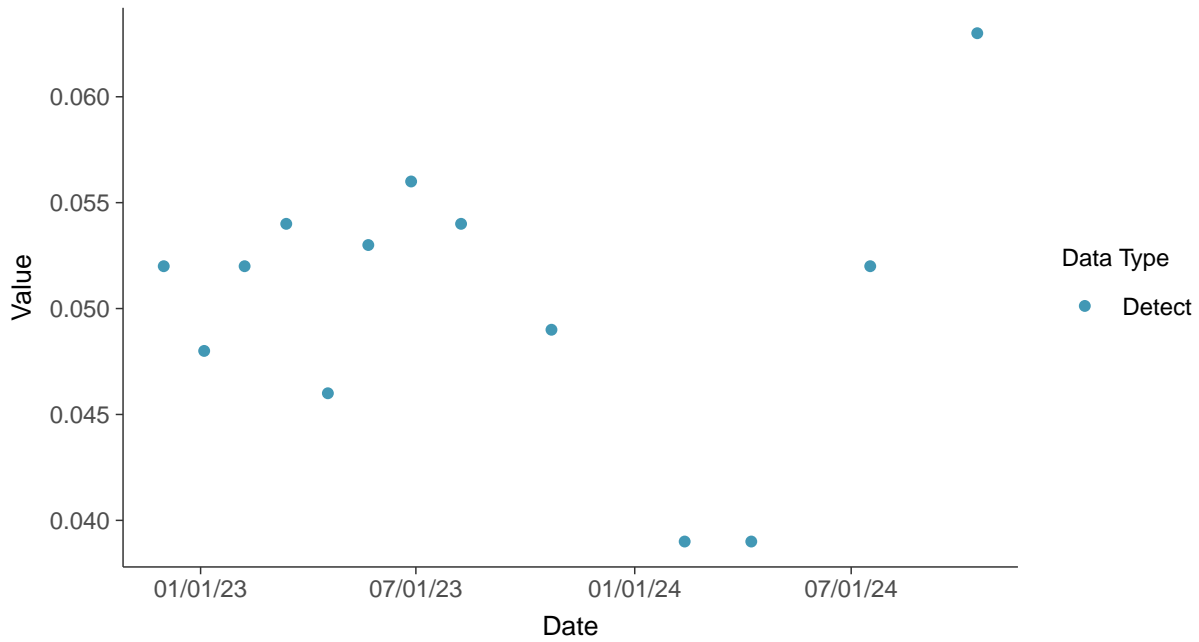


Appendix IV: Lithium, MW-31

ID: 1_41_1_5_116

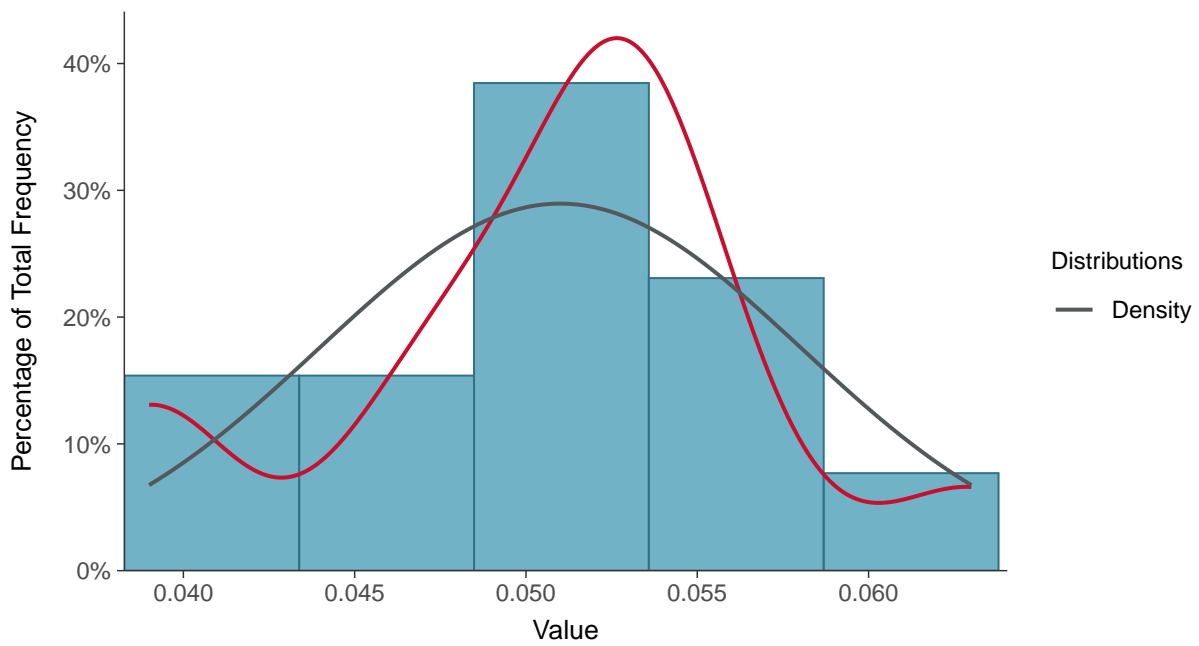
Scatter Plot

Lithium, MW-31 (mg/L)



Histogram

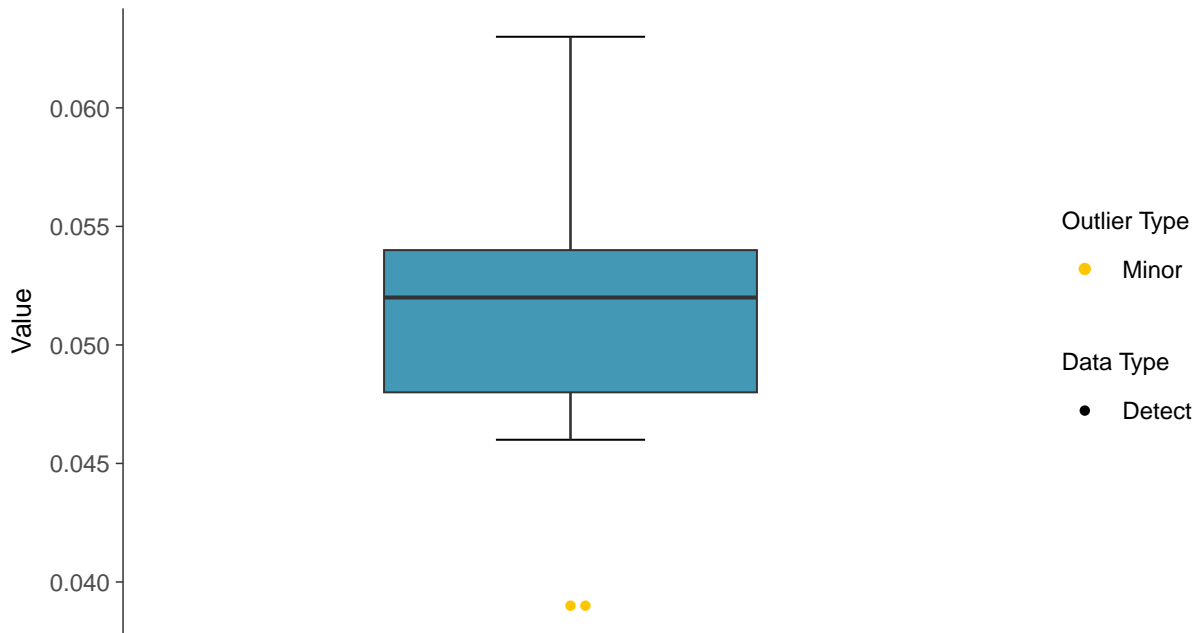
Lithium, MW-31 (mg/L)





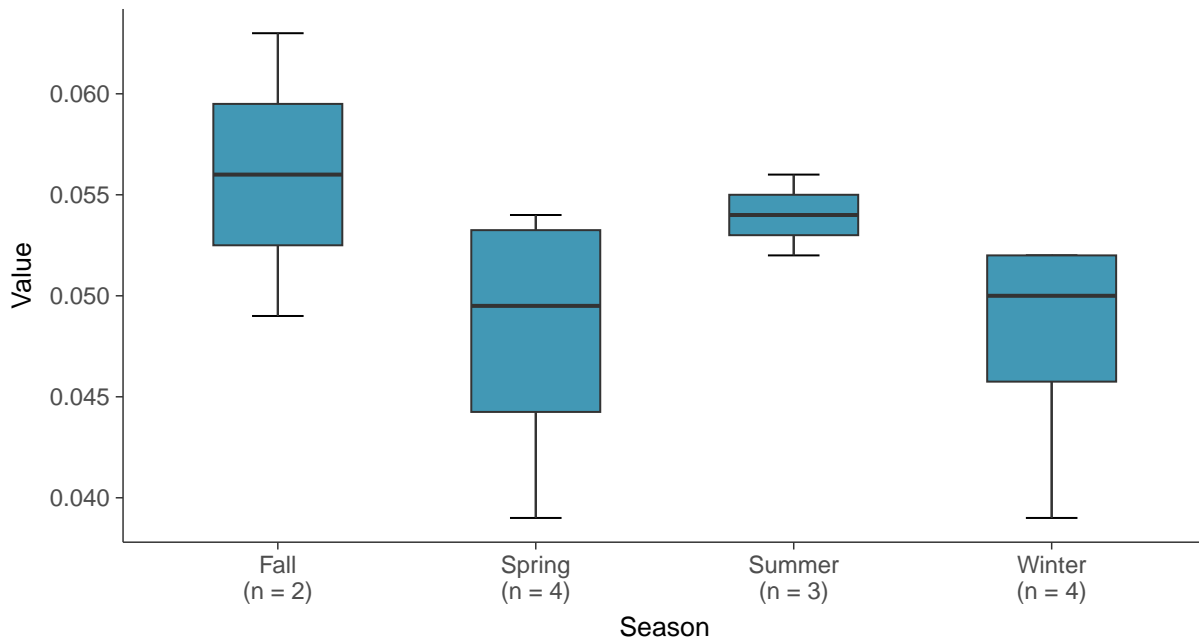
Boxplot

Lithium, MW-31 (mg/L)



Boxplot by Season

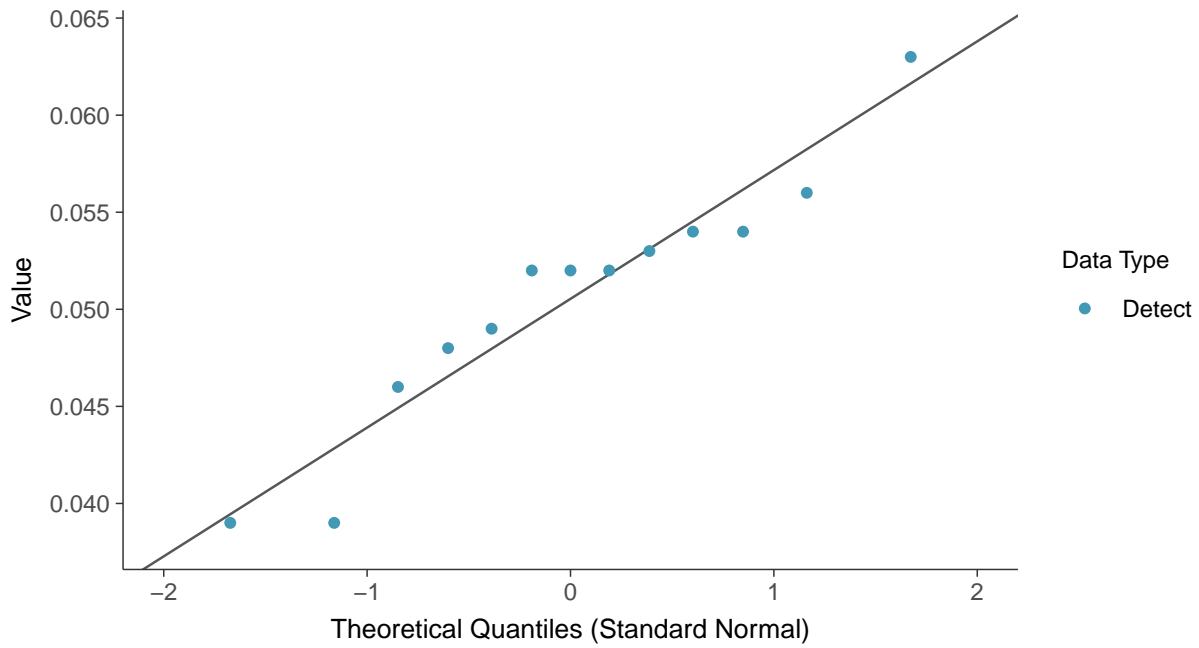
Lithium, MW-31 (mg/L)





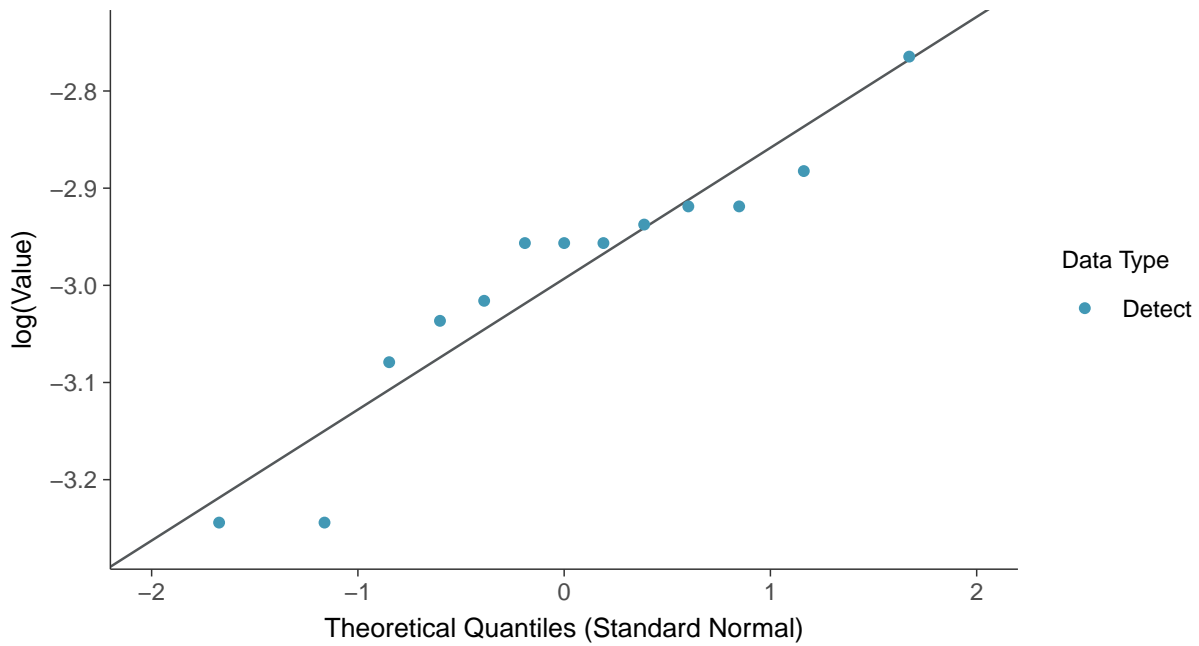
Normal Q-Q plot

Lithium, MW-31 (mg/L)



Lognormal Q-Q plot

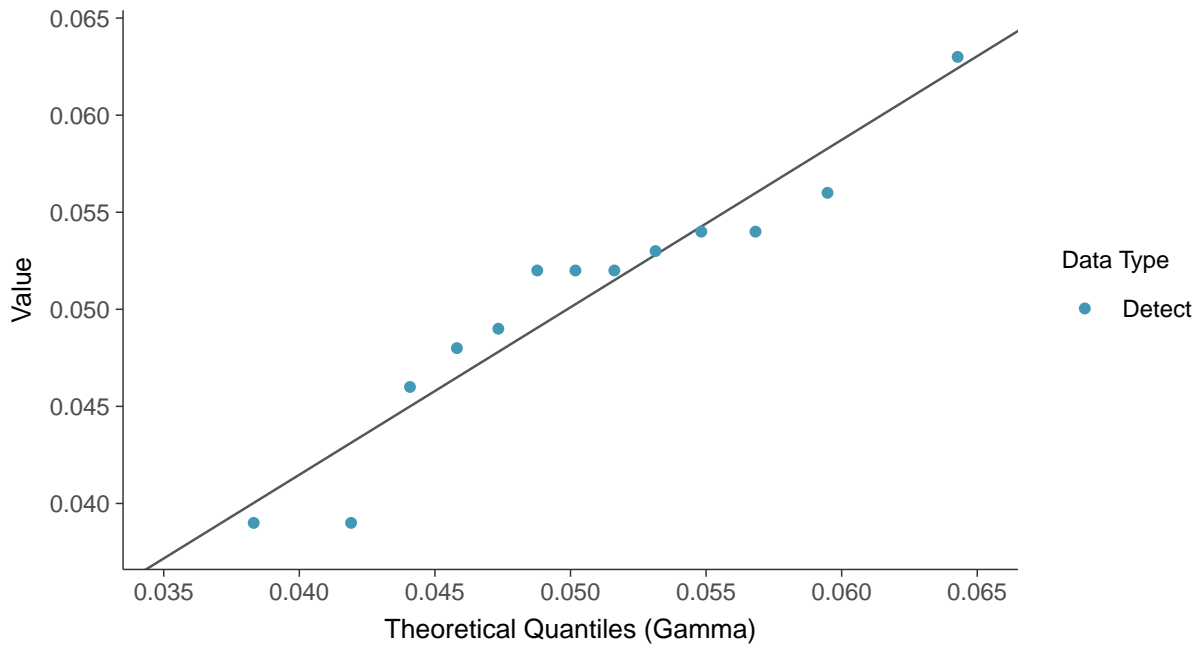
Lithium, MW-31 (mg/L)





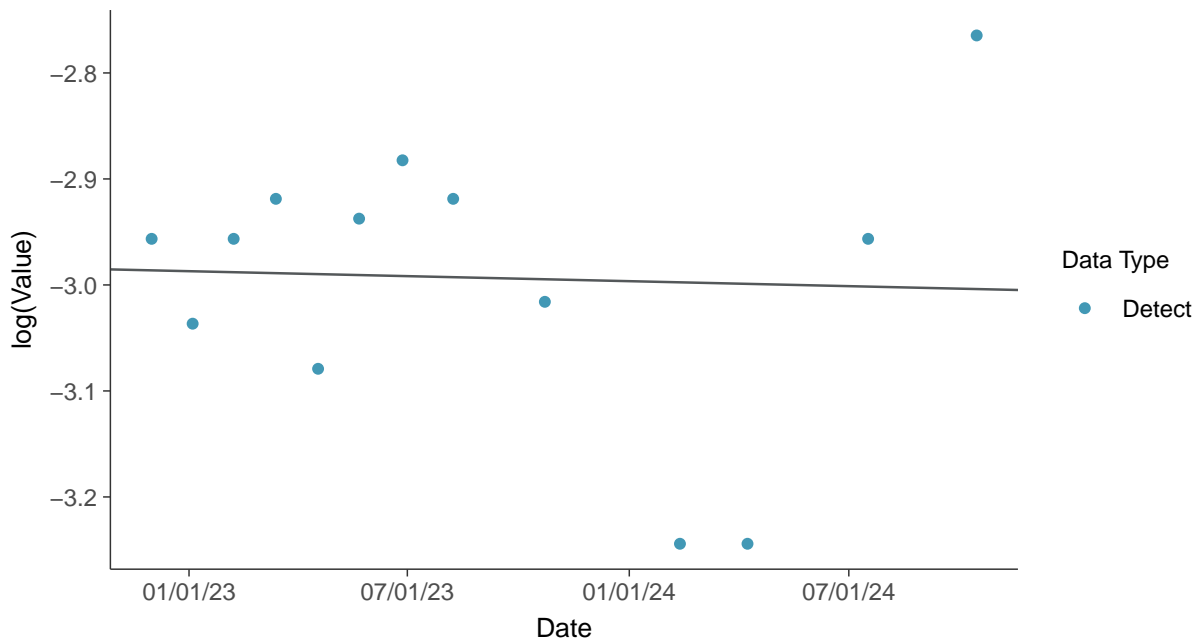
Gamma Q-Q plot

Lithium, MW-31 (mg/L)



Trend Regression: Lognormal MLE

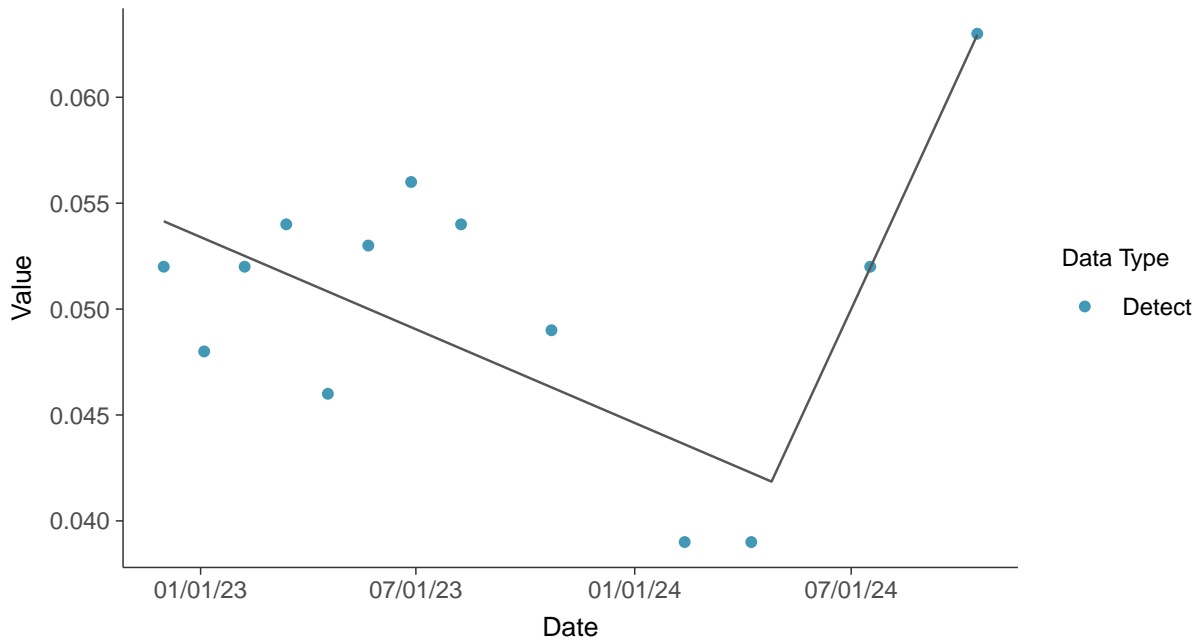
Lithium, MW-31 (mg/L)





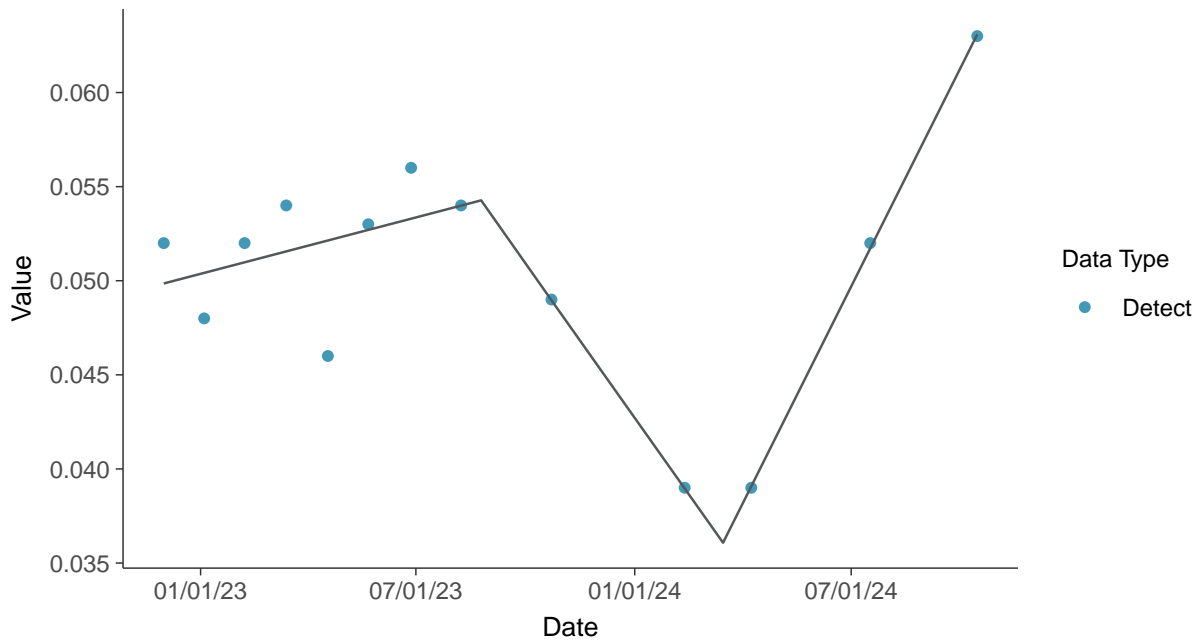
Trend Regression: Piecewise Linear-Linear

Lithium, MW-31 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

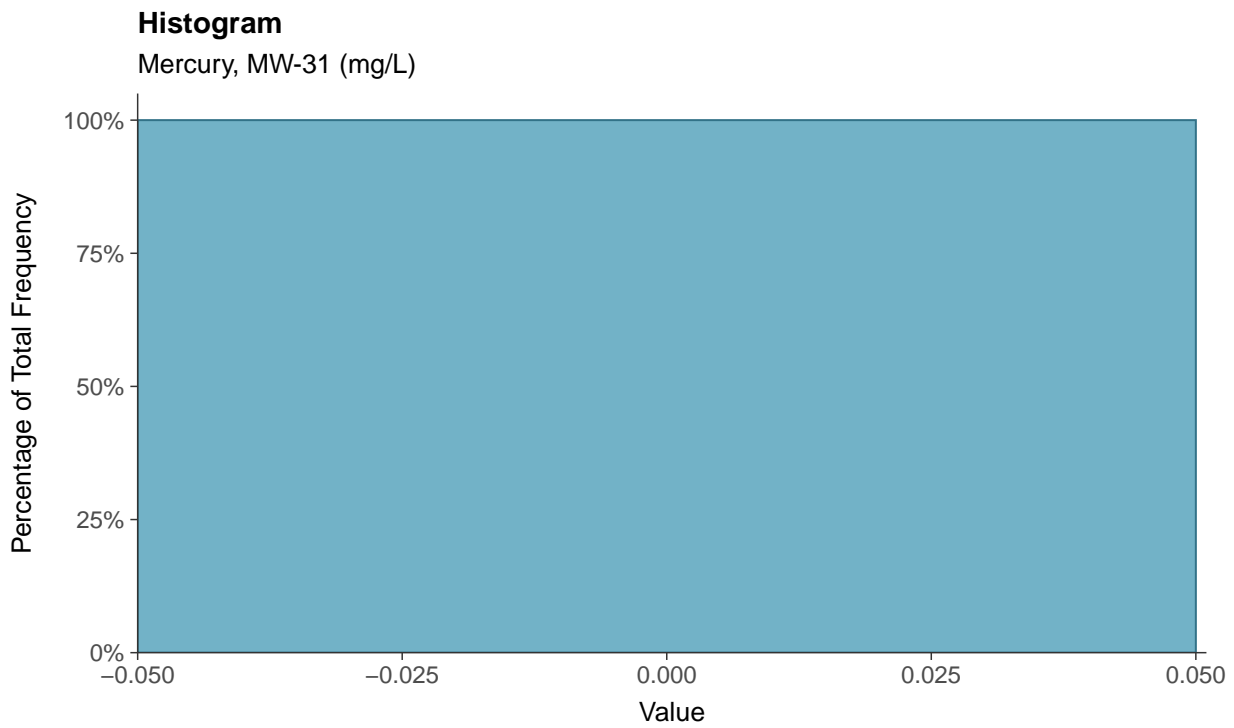
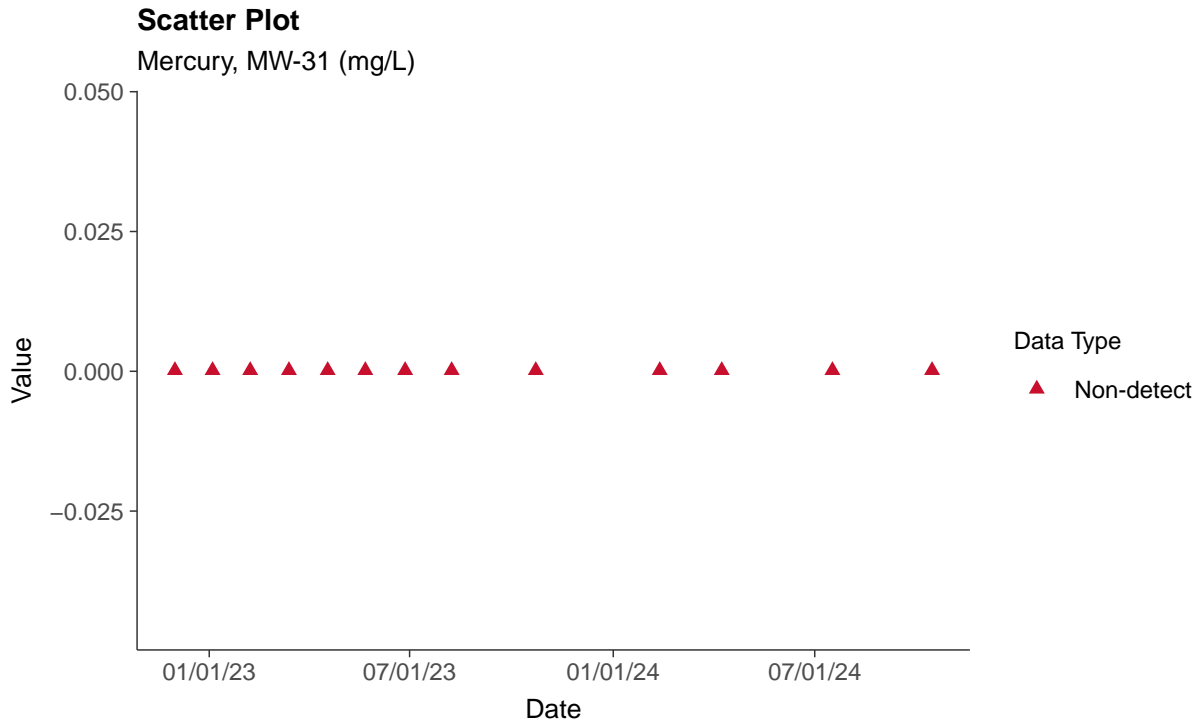
Lithium, MW-31 (mg/L)





Appendix IV: Mercury, MW-31

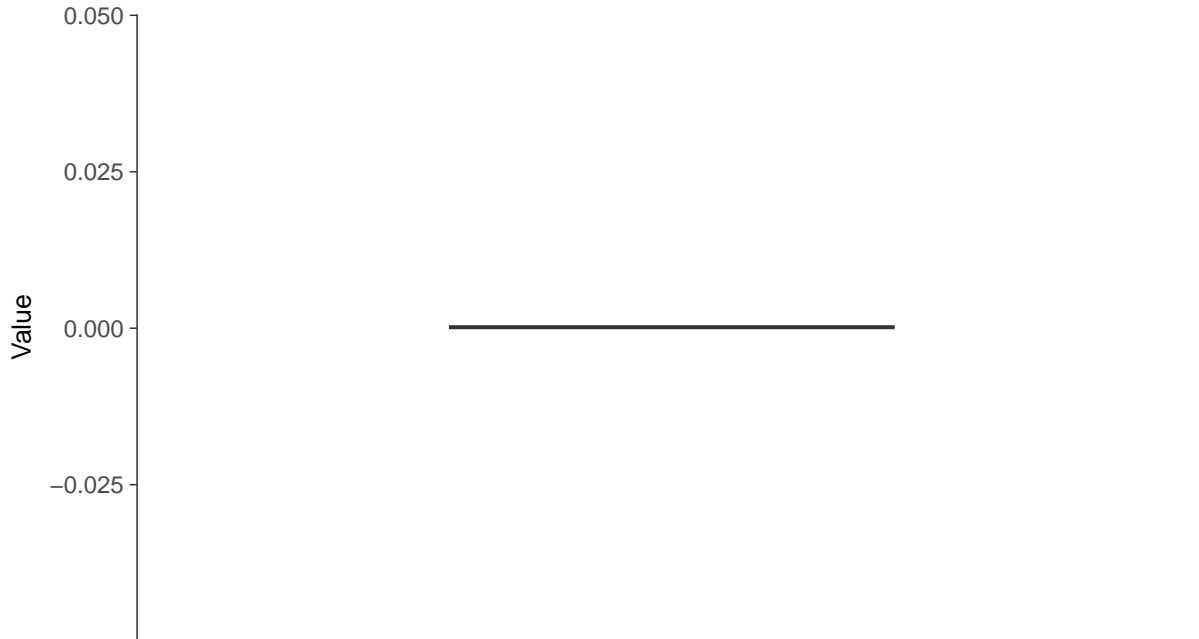
ID: 1_41_1_5_117





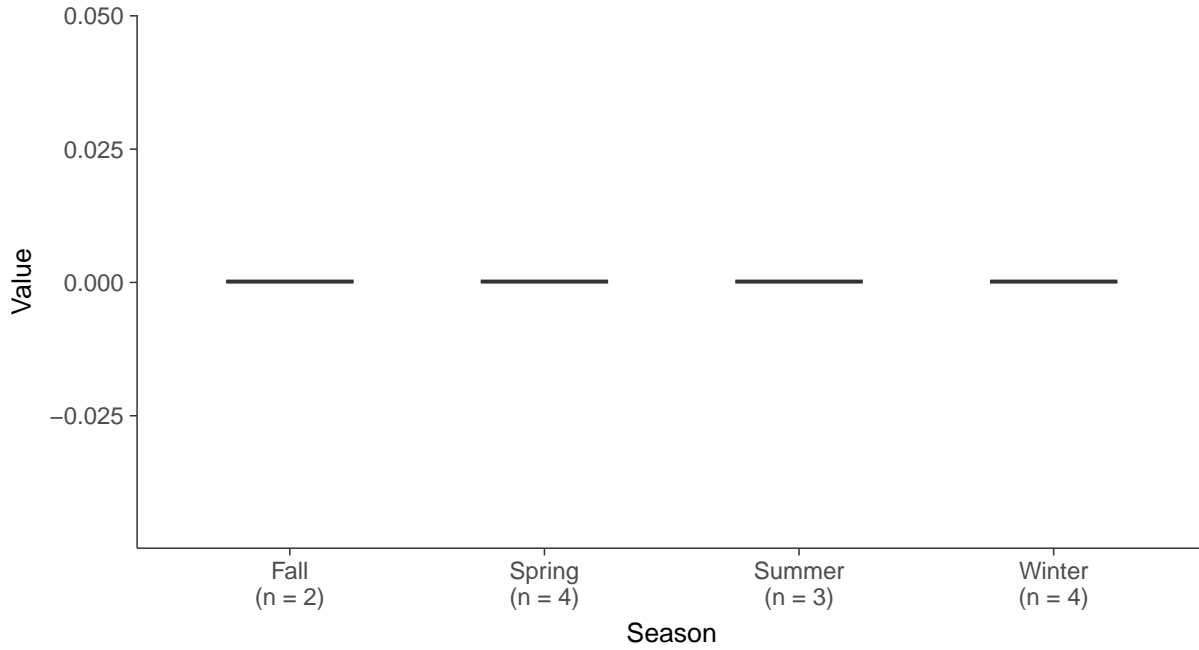
Boxplot

Mercury, MW-31 (mg/L)



Boxplot by Season

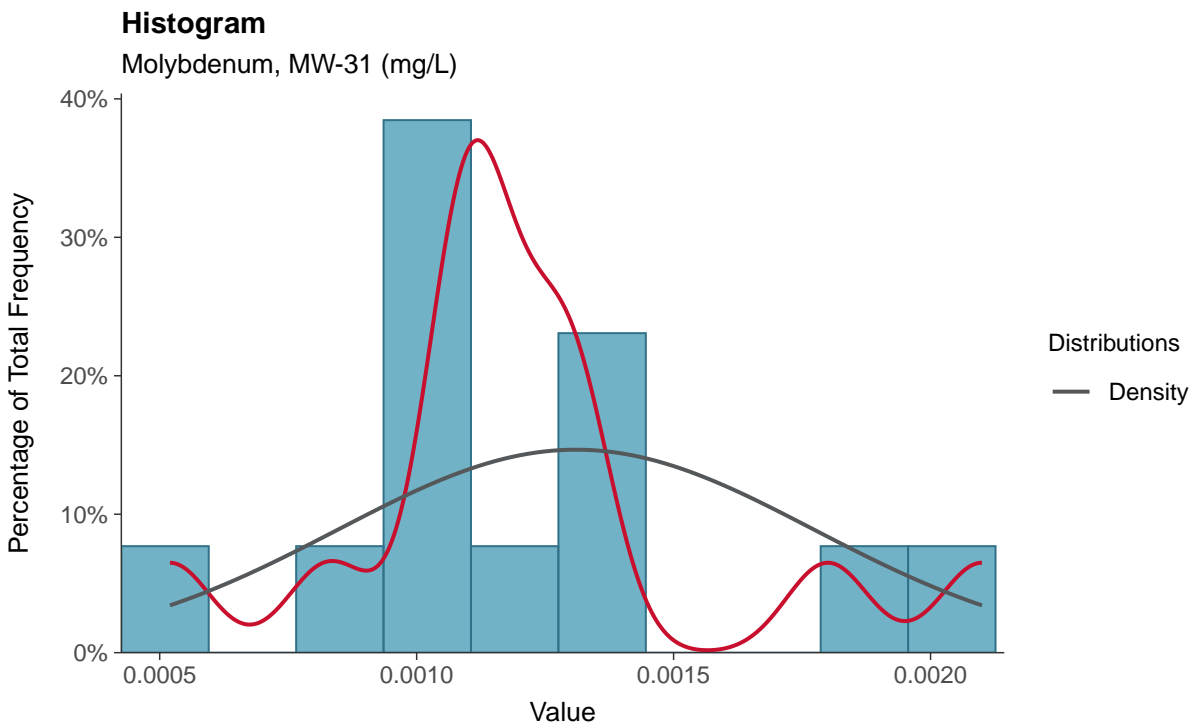
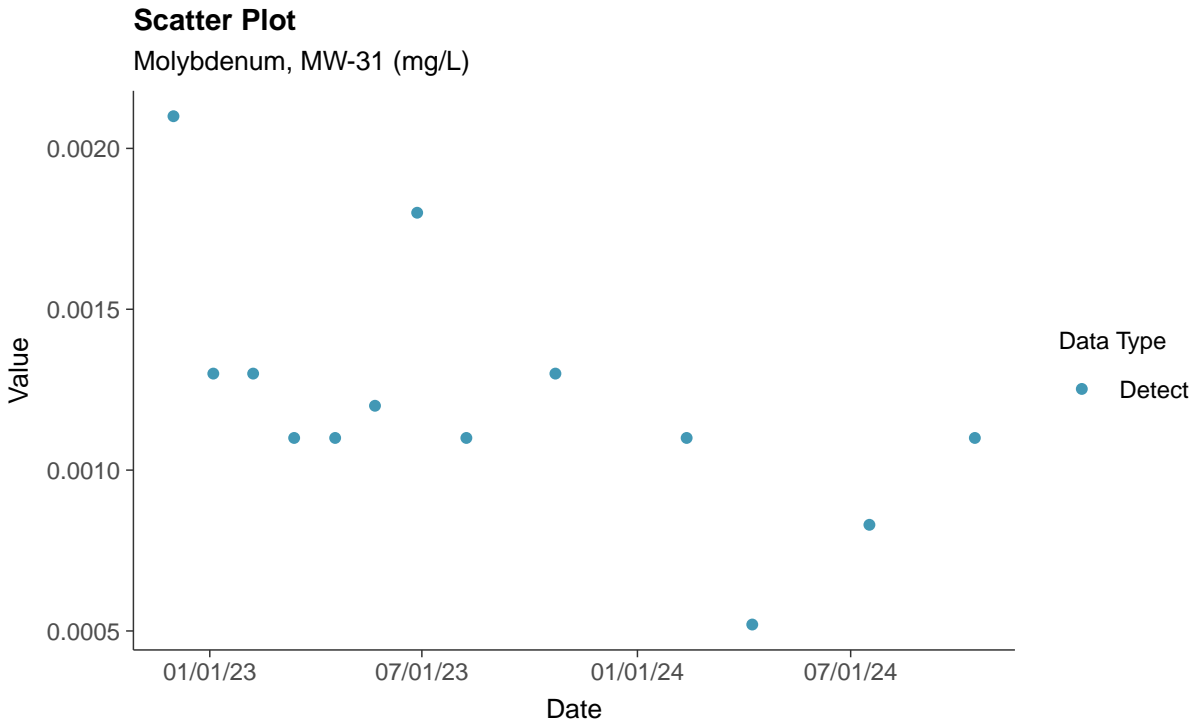
Mercury, MW-31 (mg/L)





Appendix IV: Molybdenum, MW-31

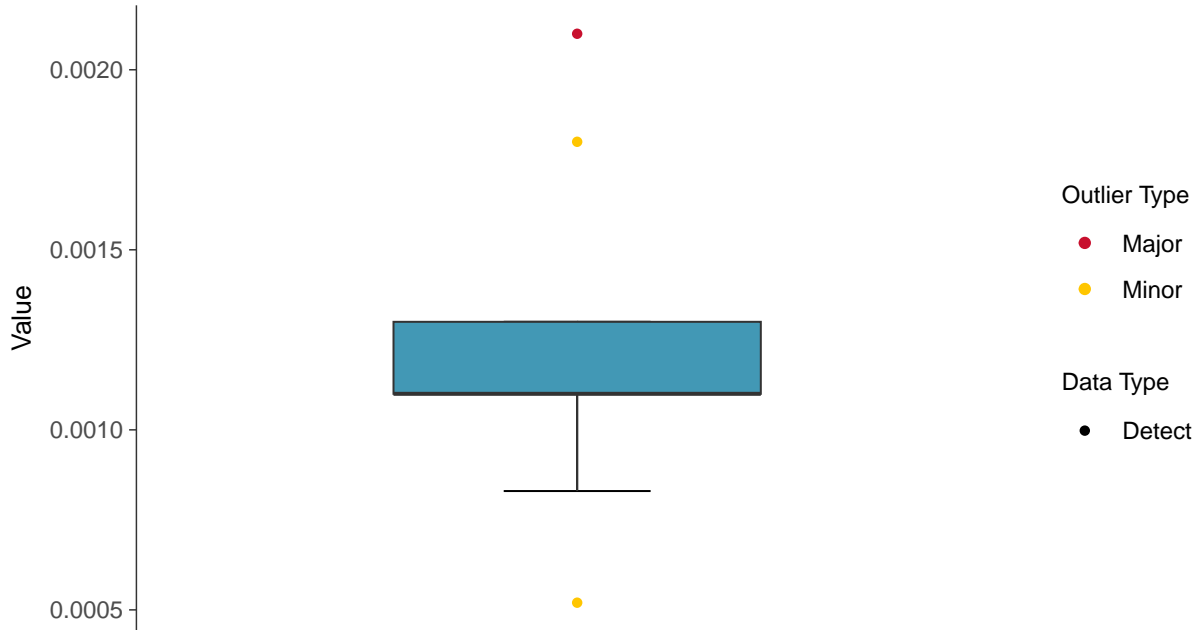
ID: 1_41_1_5_118





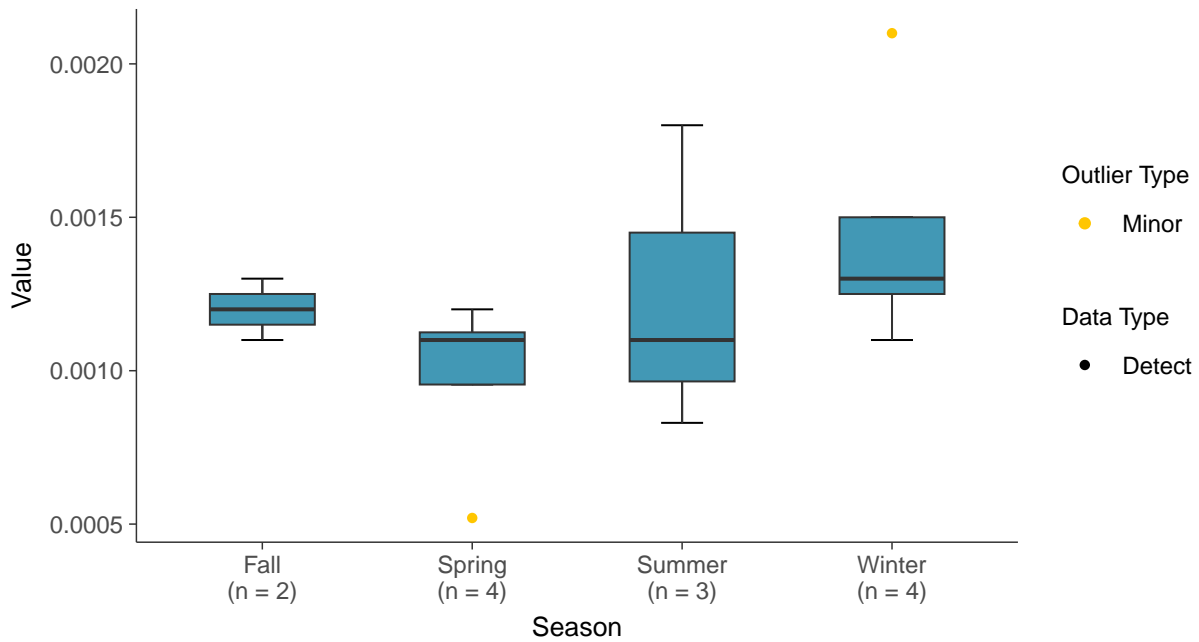
Boxplot

Molybdenum, MW-31 (mg/L)



Boxplot by Season

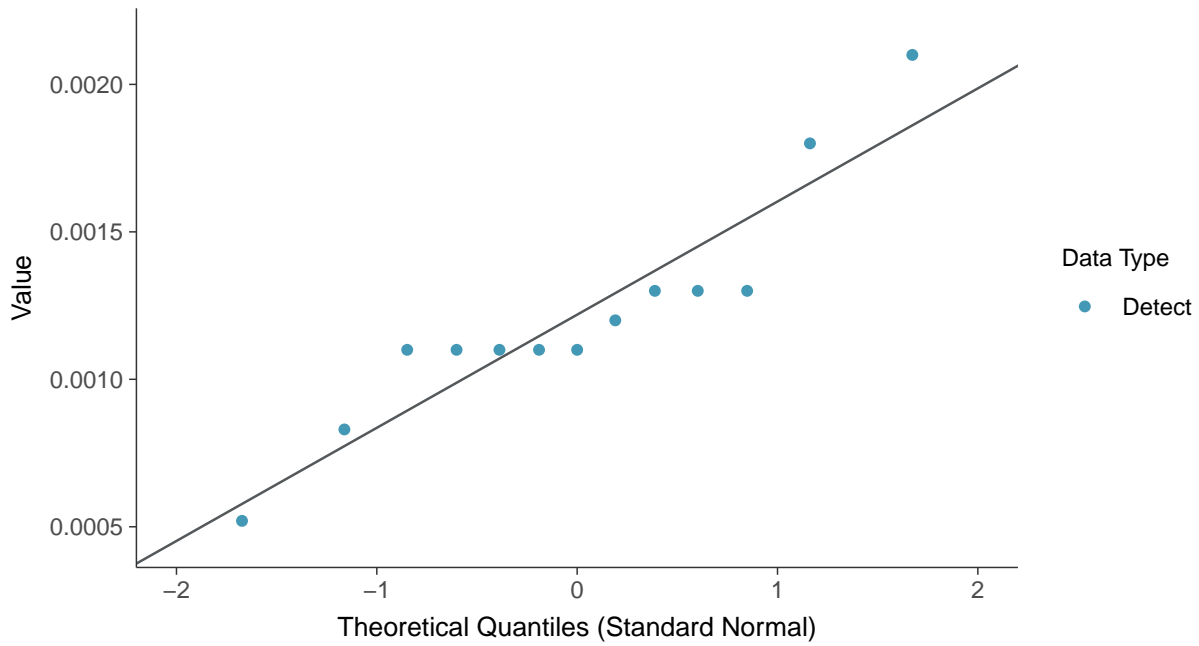
Molybdenum, MW-31 (mg/L)





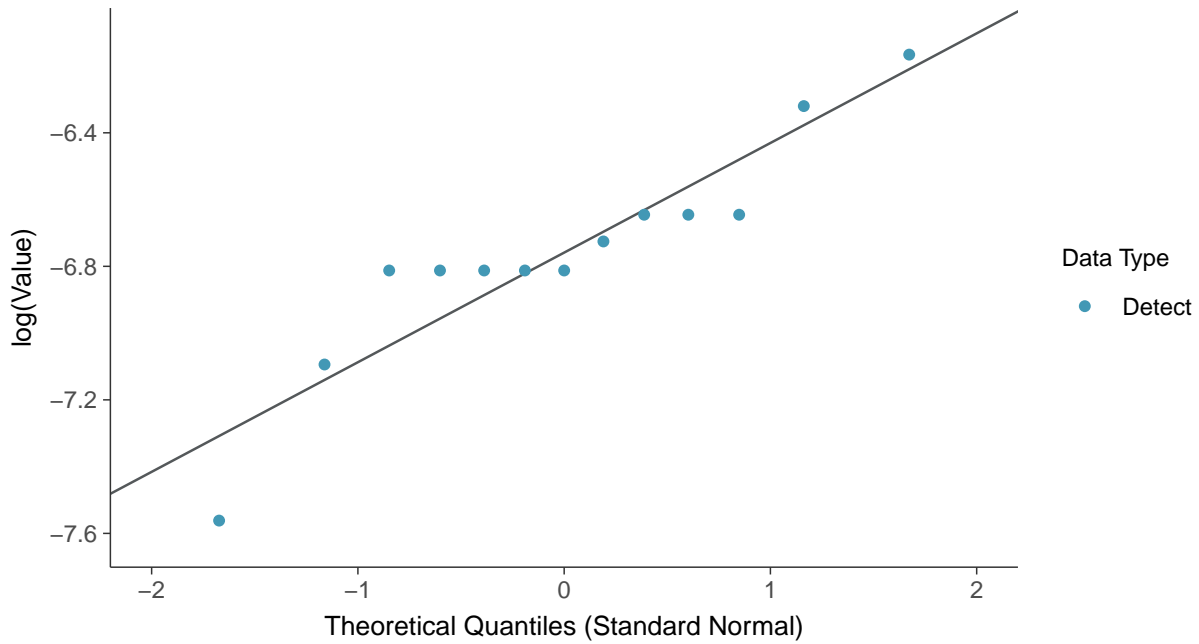
Normal Q-Q plot

Molybdenum, MW-31 (mg/L)



Lognormal Q-Q plot

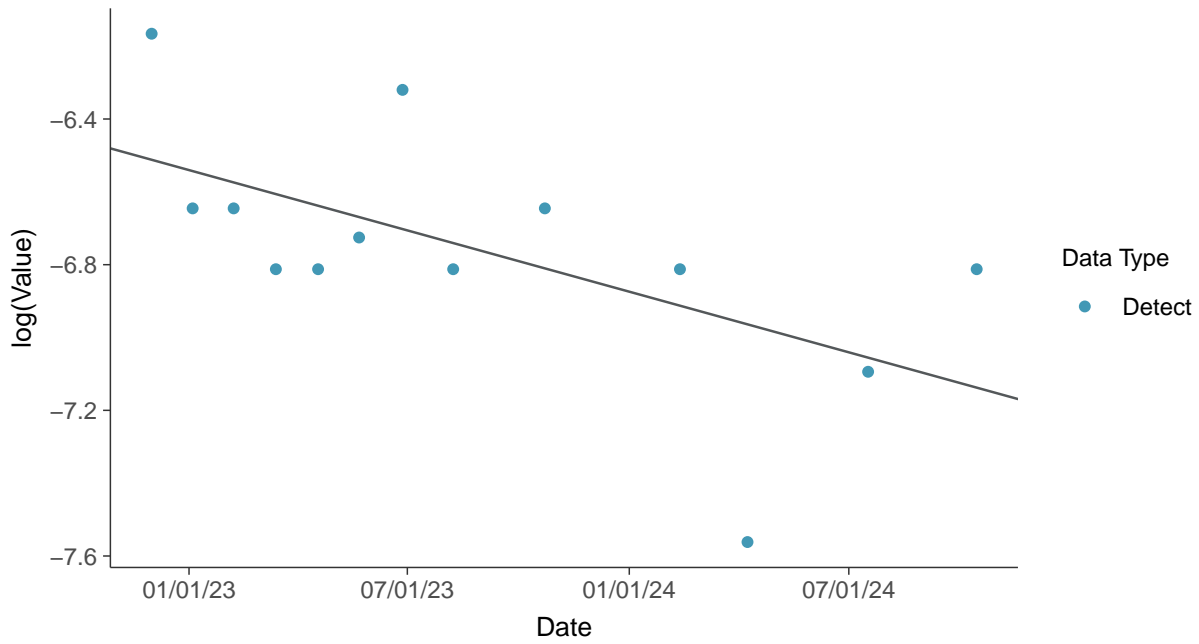
Molybdenum, MW-31 (mg/L)





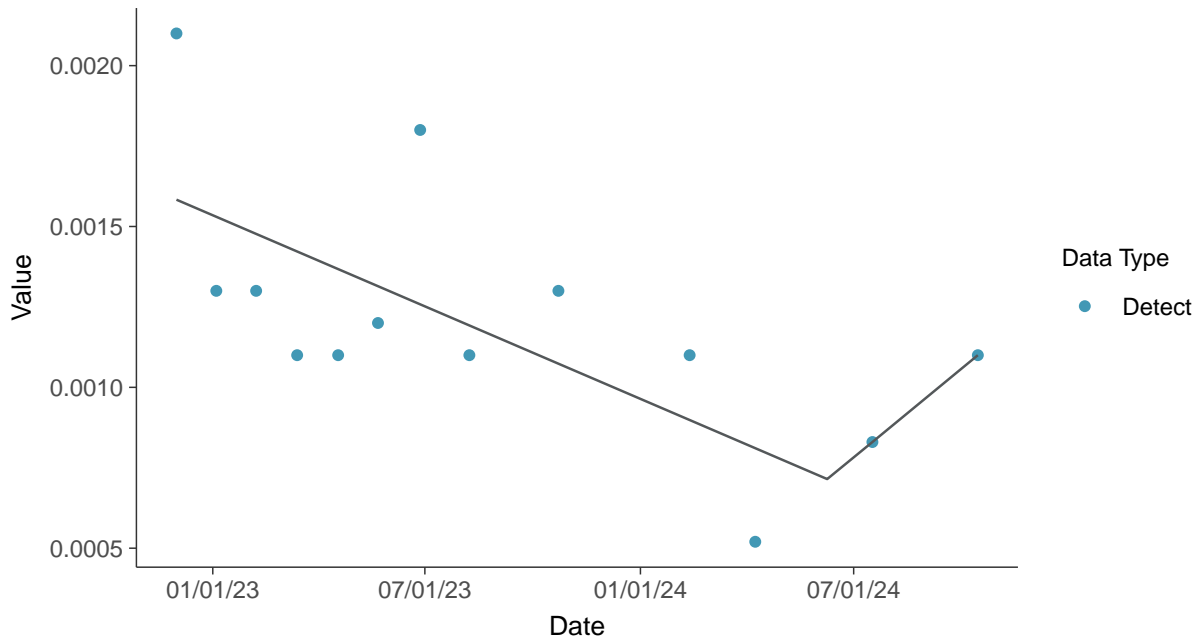
Trend Regression: Lognormal MLE

Molybdenum, MW-31 (mg/L)



Trend Regression: Piecewise Linear-Linear

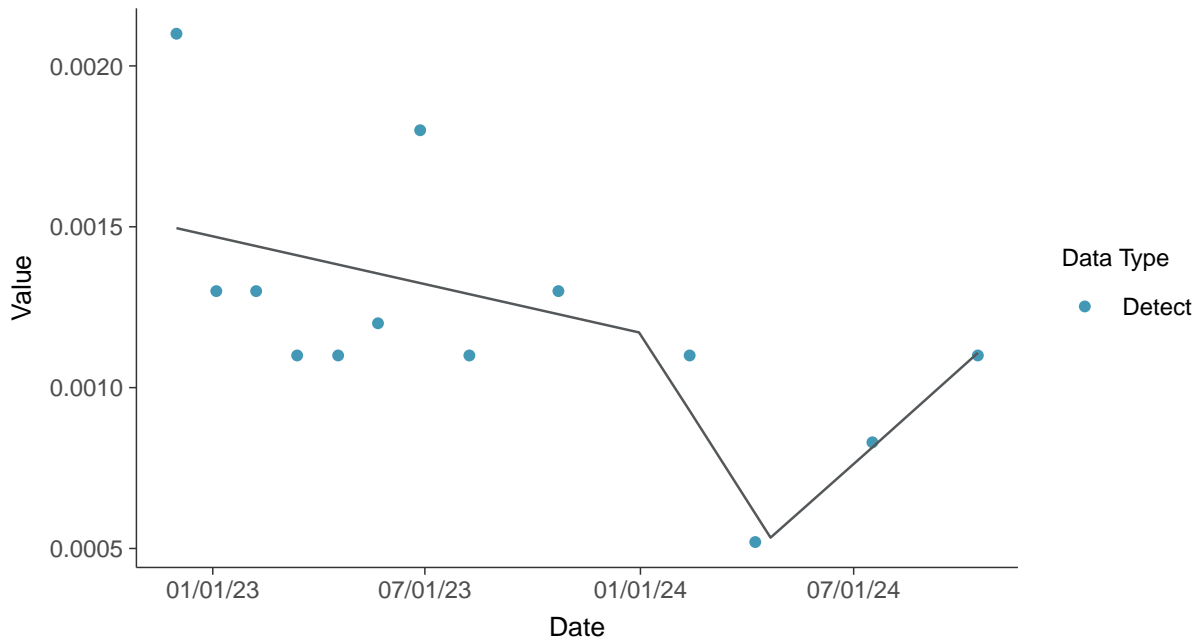
Molybdenum, MW-31 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-31 (mg/L)



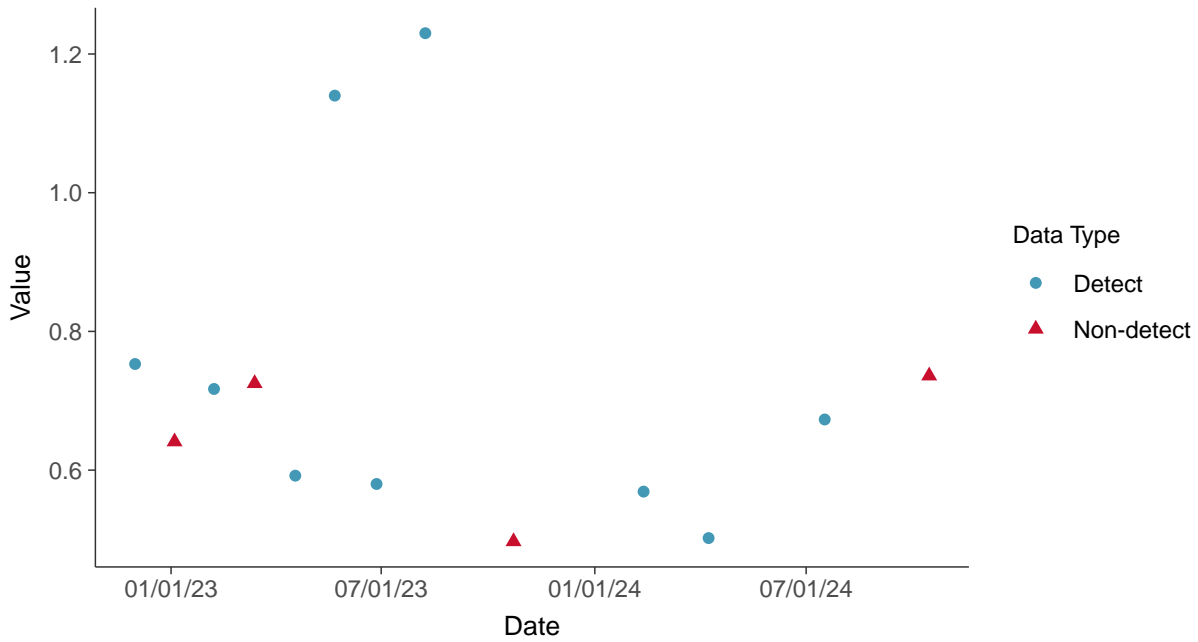


Appendix IV: Radium 226 and 228, MW-31

ID: 1_41_1_5_121

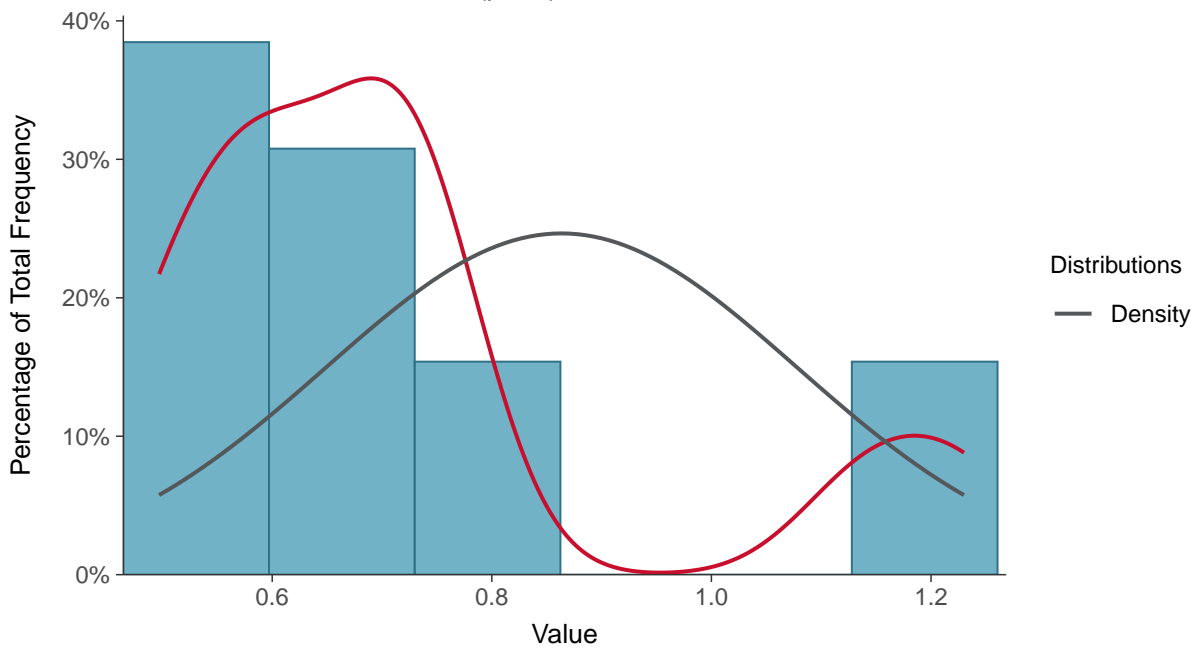
Scatter Plot

Radium 226 and 228, MW-31 (pCi/L)



Histogram

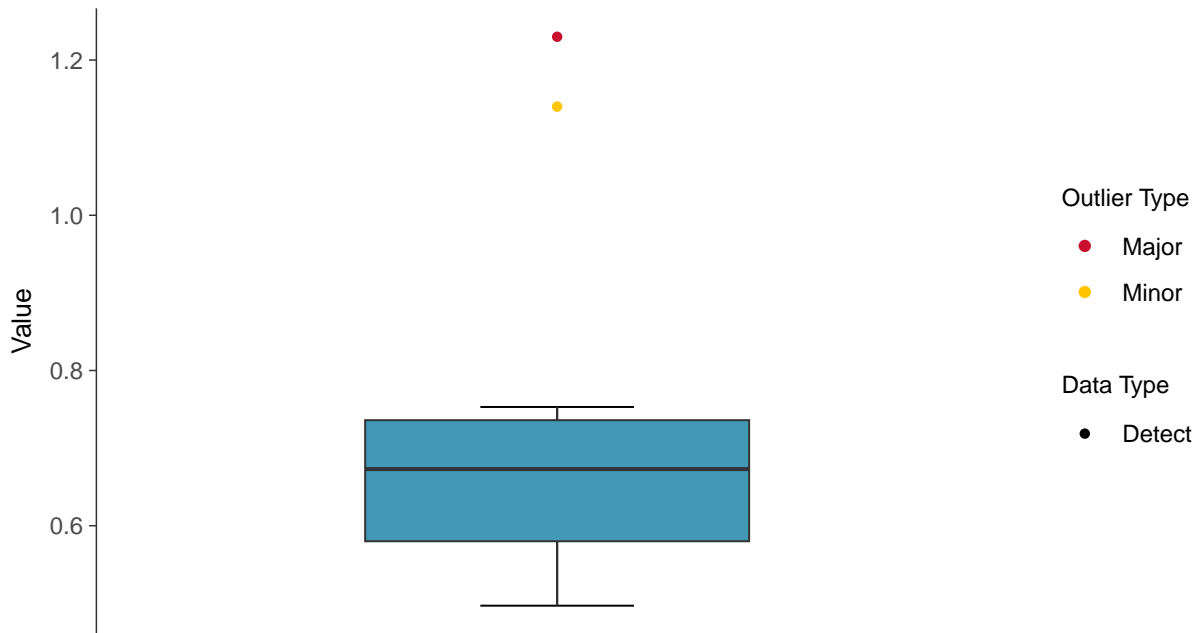
Radium 226 and 228, MW-31 (pCi/L)





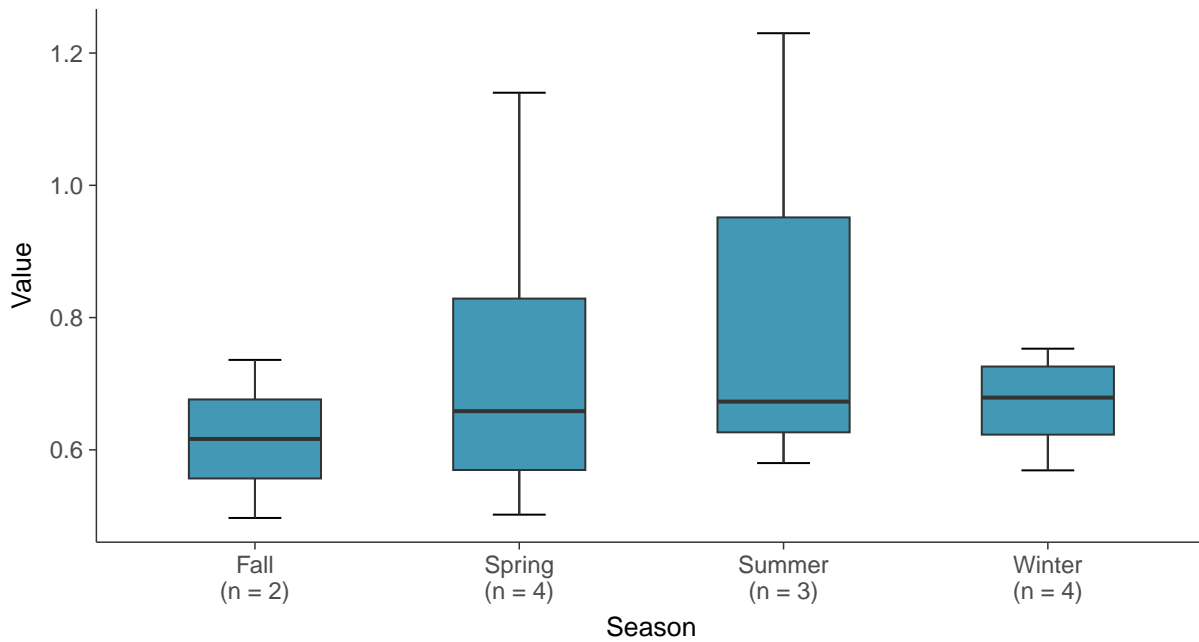
Boxplot

Radium 226 and 228, MW-31 (pCi/L)



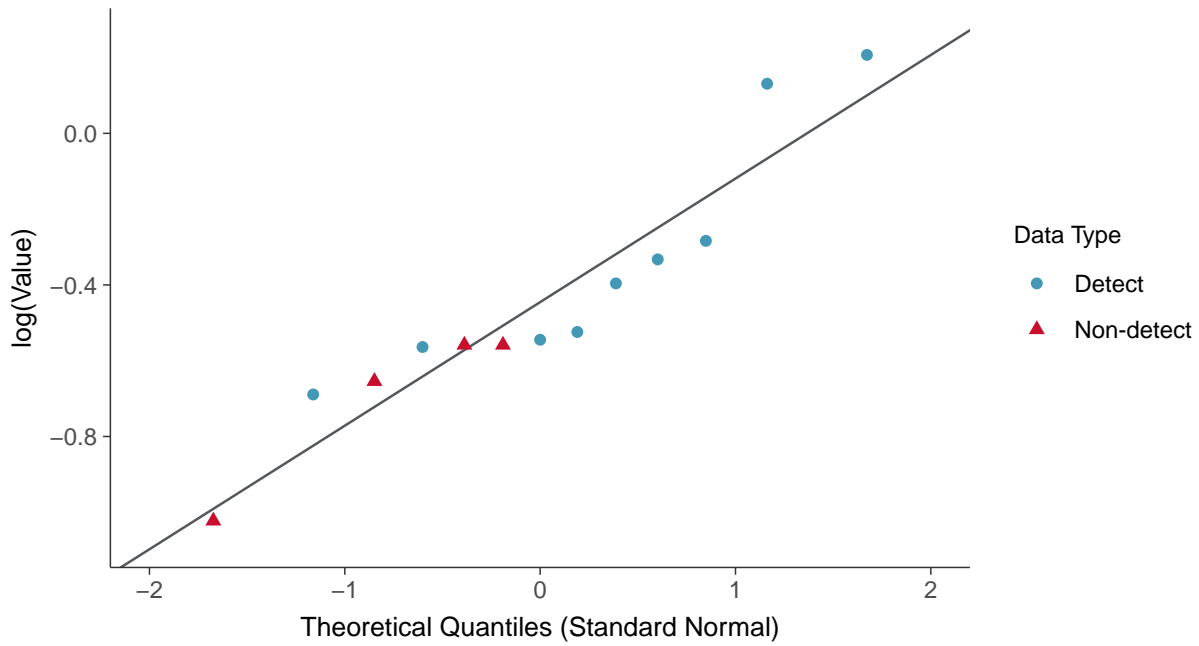
Boxplot by Season

Radium 226 and 228, MW-31 (pCi/L)

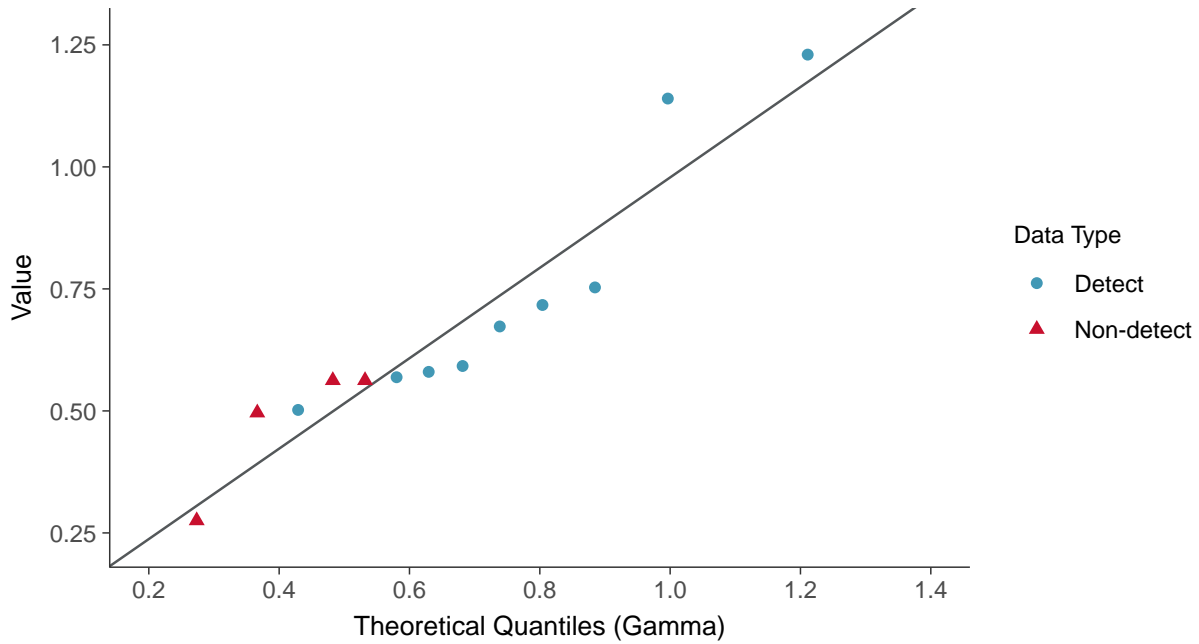




Lognormal Q-Q plot using ROS Imputed Estimates
Radium 226 and 228, MW-31 (pCi/L)



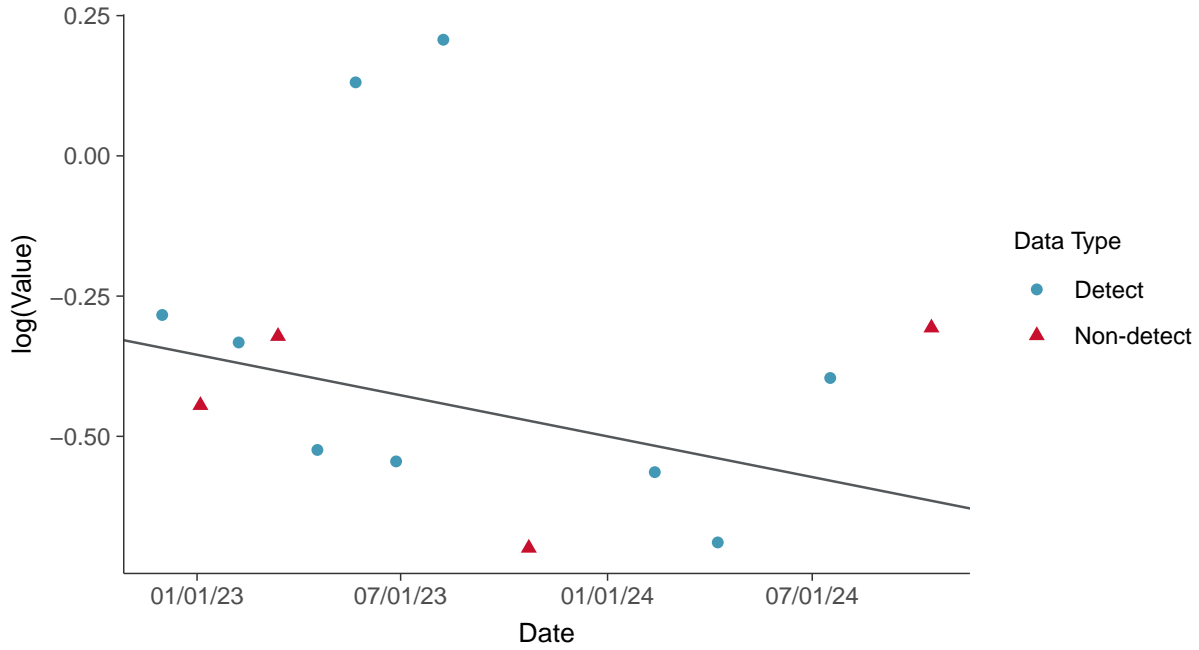
Gamma Q-Q plot using ROS Imputed Estimates
Radium 226 and 228, MW-31 (pCi/L)





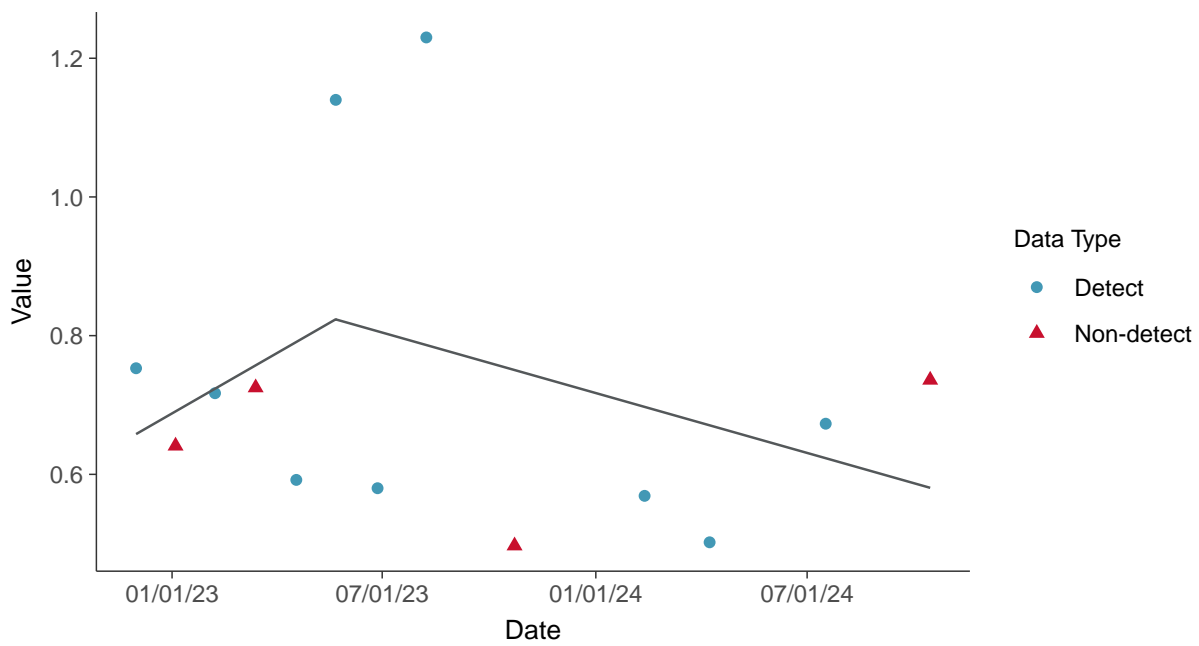
Trend Regression: Lognormal MLE

Radium 226 and 228, MW-31 (pCi/L)



Trend Regression: Piecewise Linear-Linear

Radium 226 and 228, MW-31 (pCi/L)



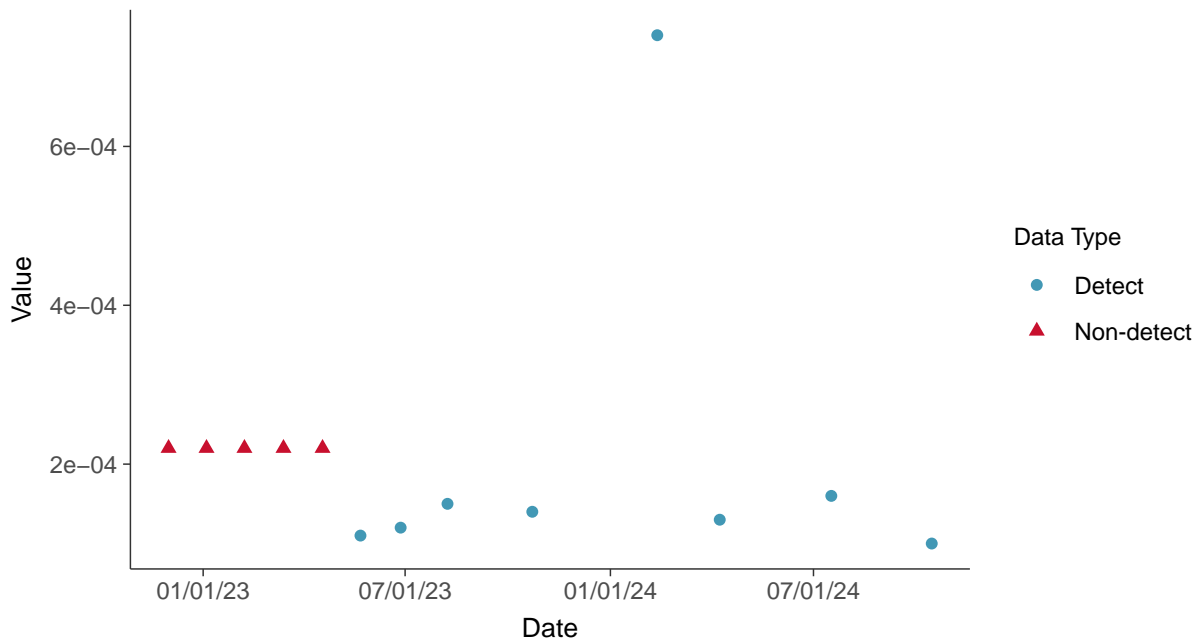


Appendix IV: Selenium, MW-31

ID: 1_41_1_5_122

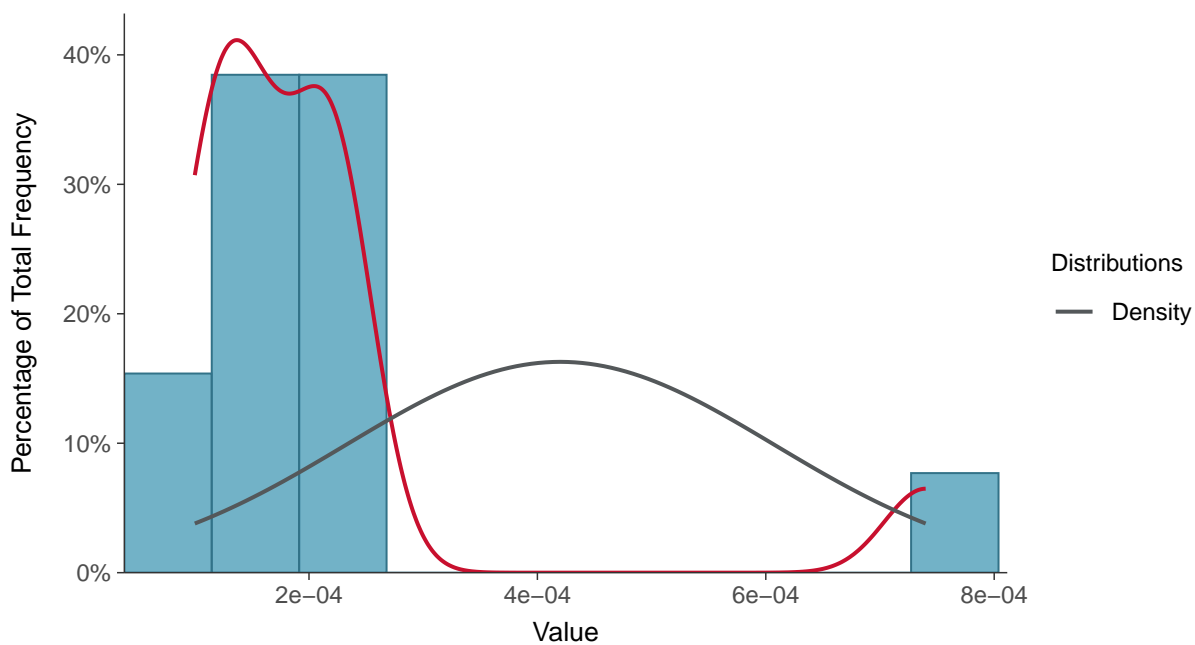
Scatter Plot

Selenium, MW-31 (mg/L)



Histogram

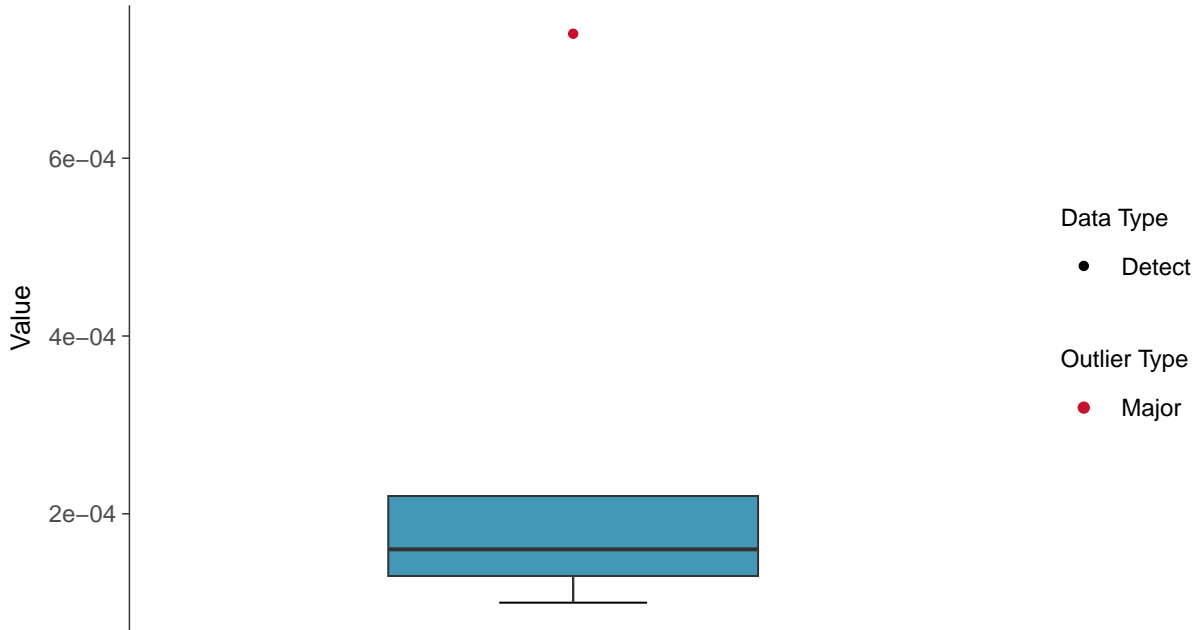
Selenium, MW-31 (mg/L)





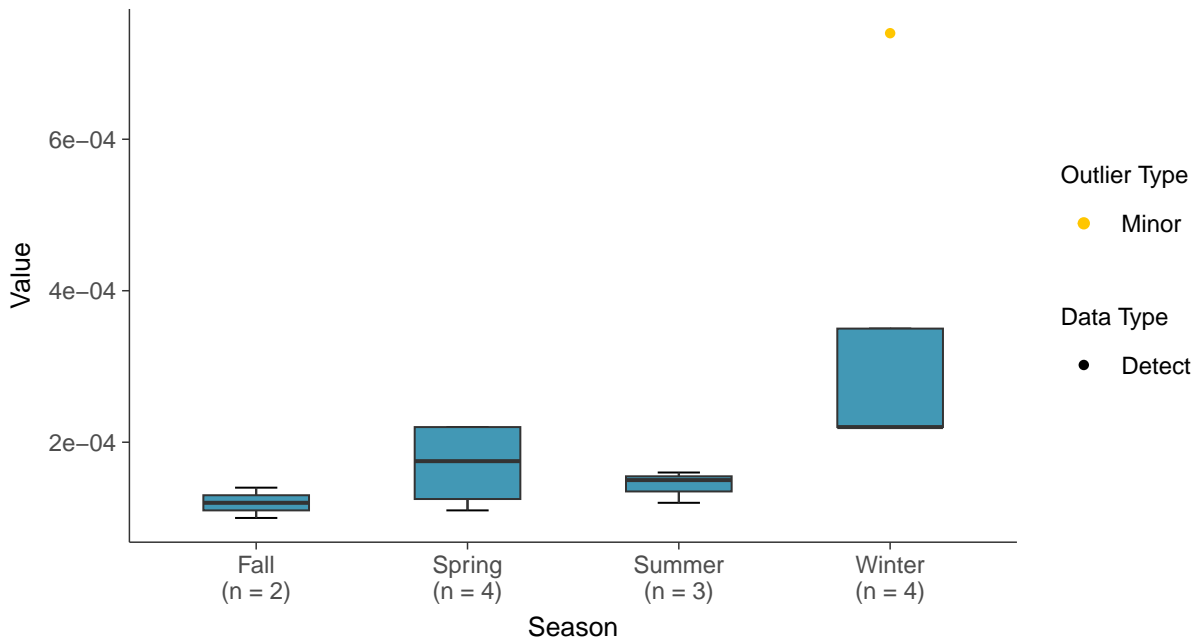
Boxplot

Selenium, MW-31 (mg/L)



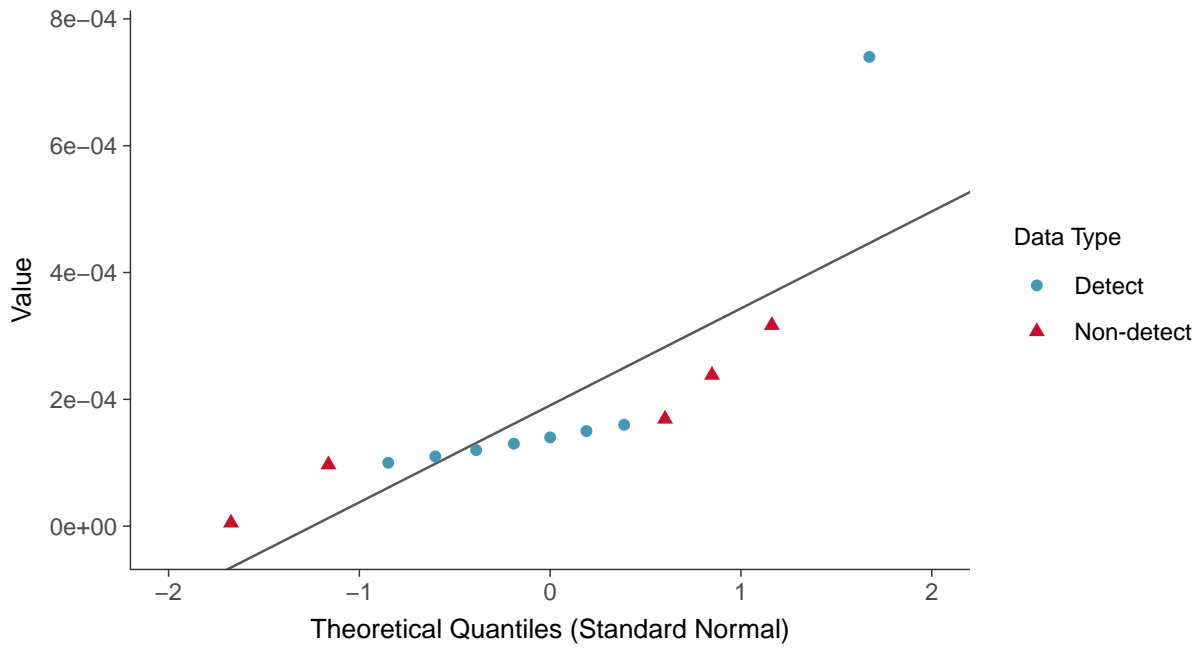
Boxplot by Season

Selenium, MW-31 (mg/L)



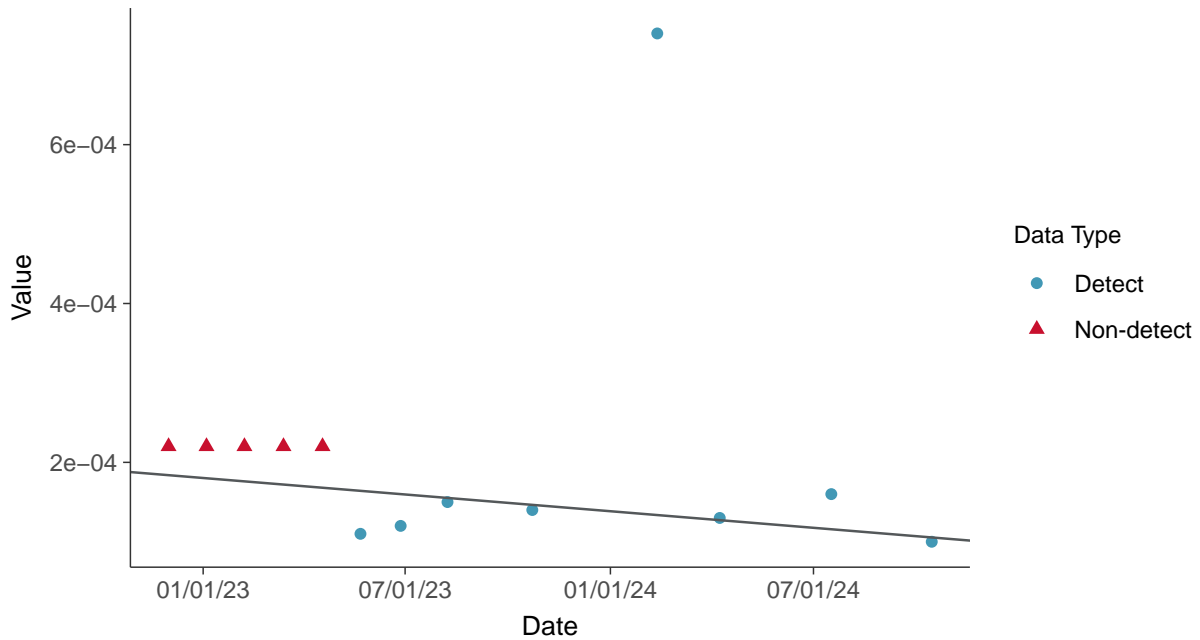
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-31 (mg/L)



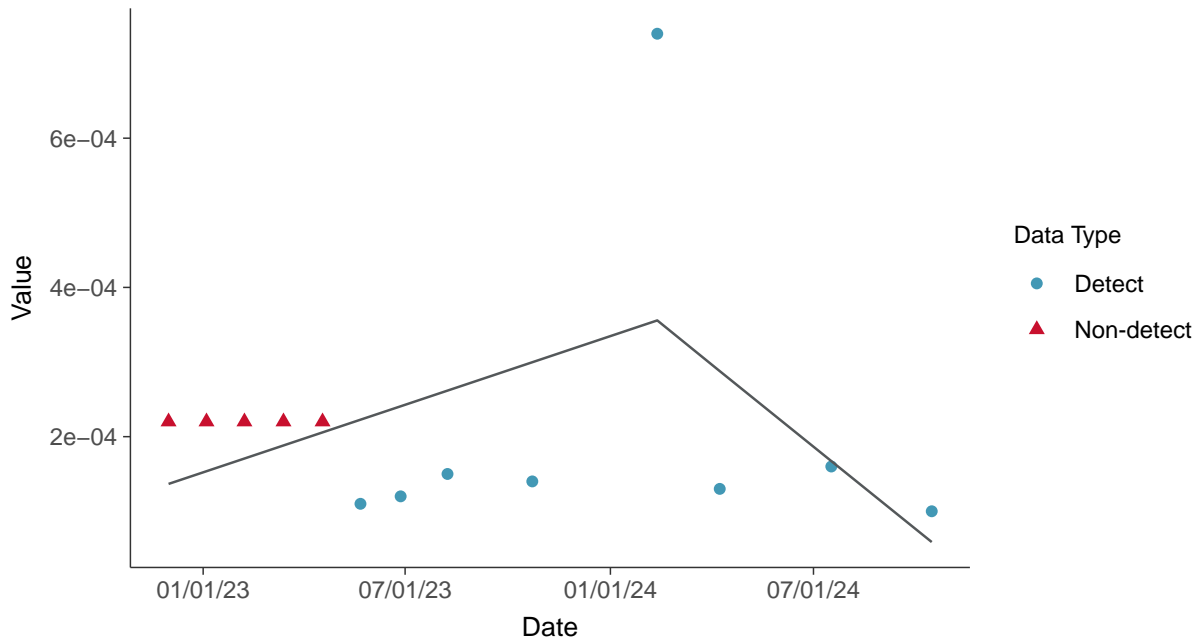
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Selenium, MW-31 (mg/L)

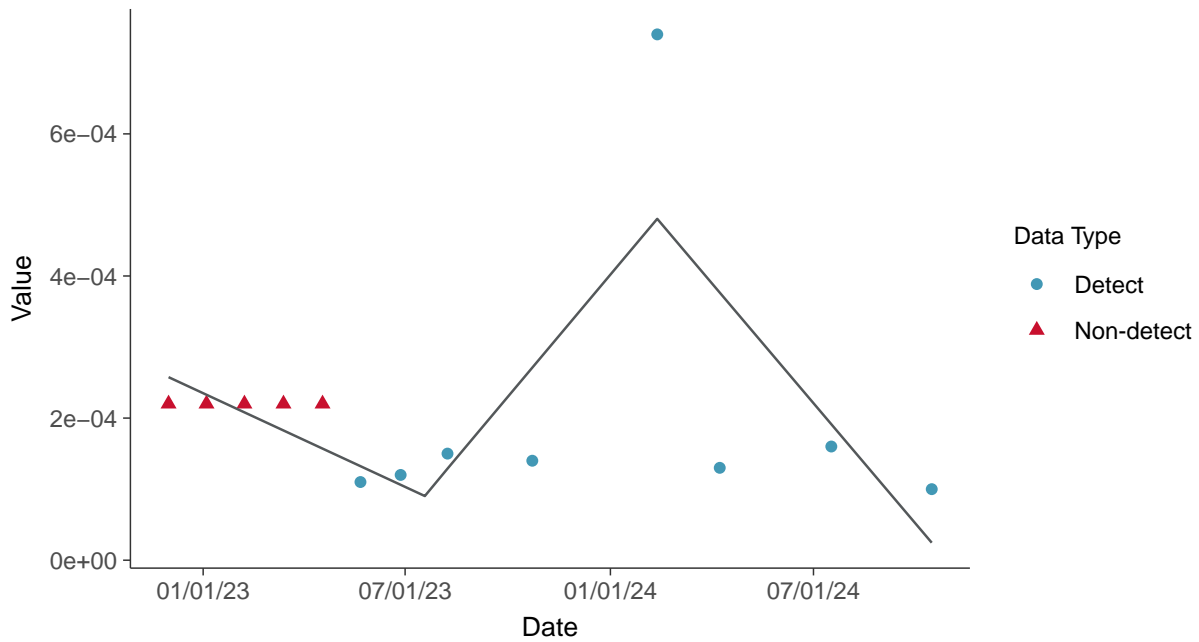




Trend Regression: Piecewise Linear-Linear
Selenium, MW-31 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Selenium, MW-31 (mg/L)



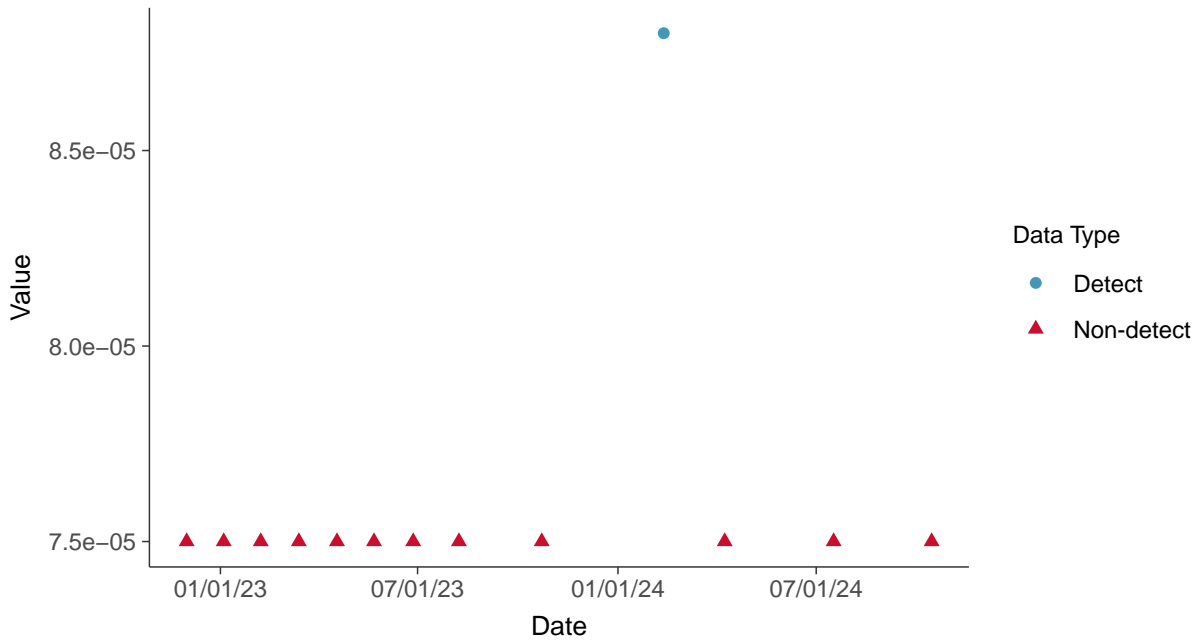


Appendix IV: Thallium, MW-31

ID: 1_41_1_5_125

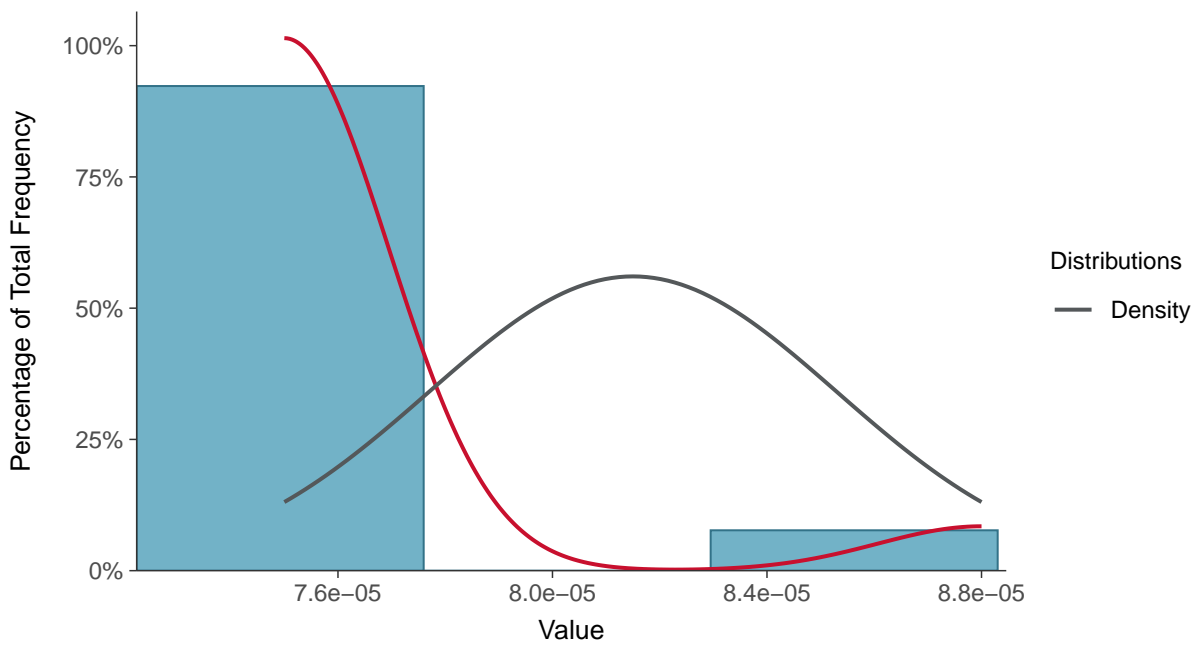
Scatter Plot

Thallium, MW-31 (mg/L)



Histogram

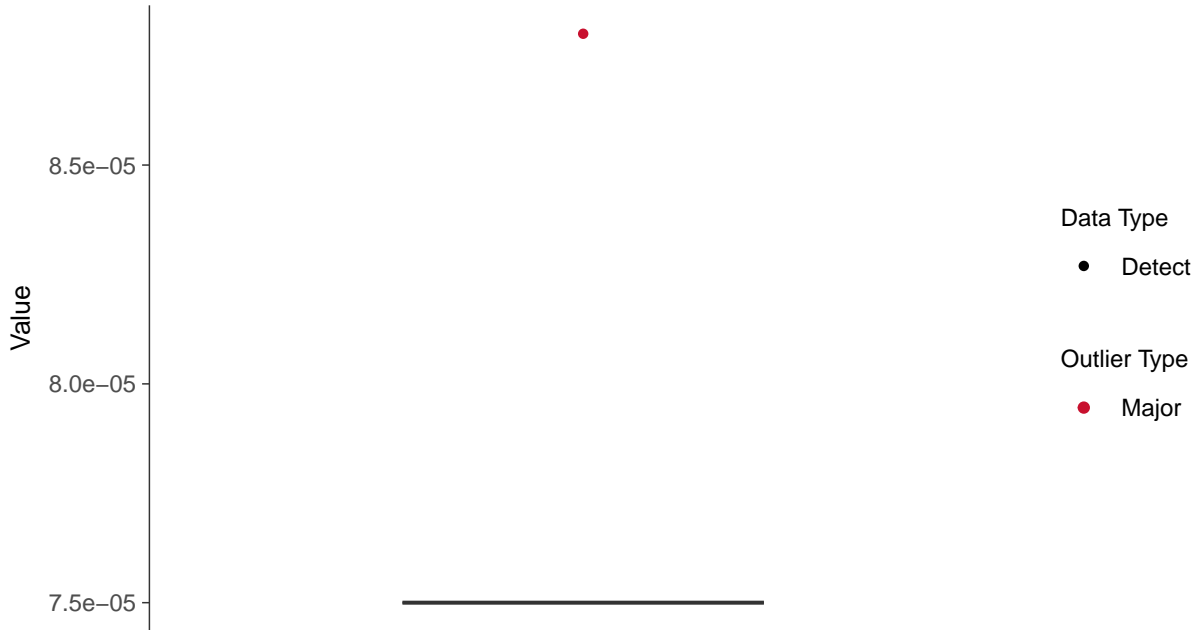
Thallium, MW-31 (mg/L)





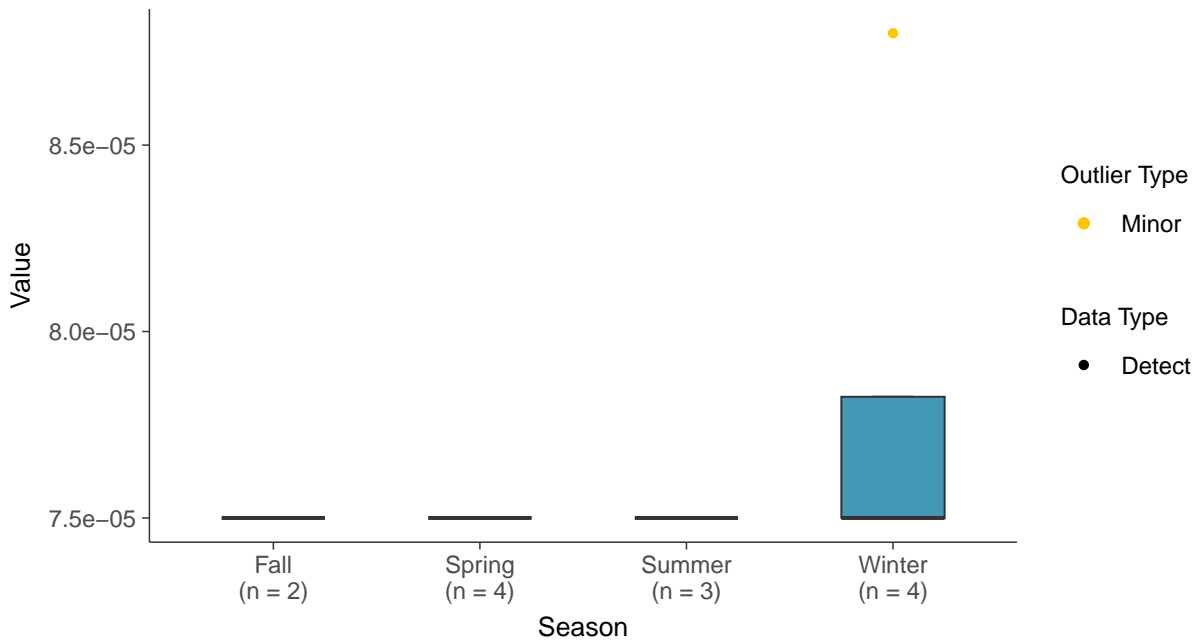
Boxplot

Thallium, MW-31 (mg/L)



Boxplot by Season

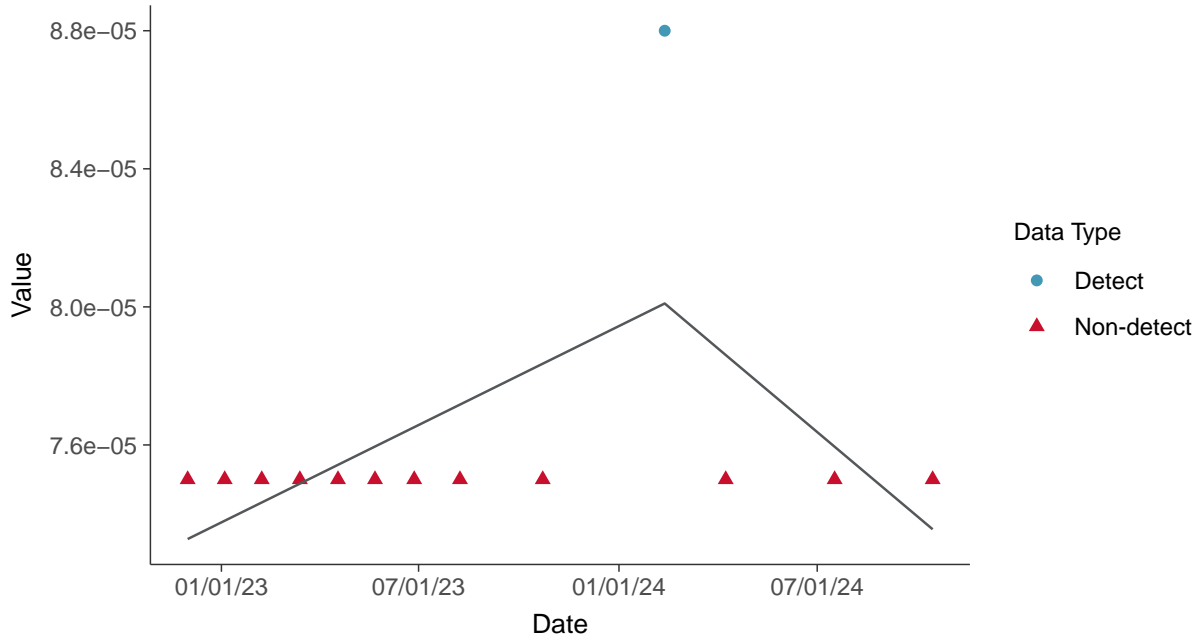
Thallium, MW-31 (mg/L)





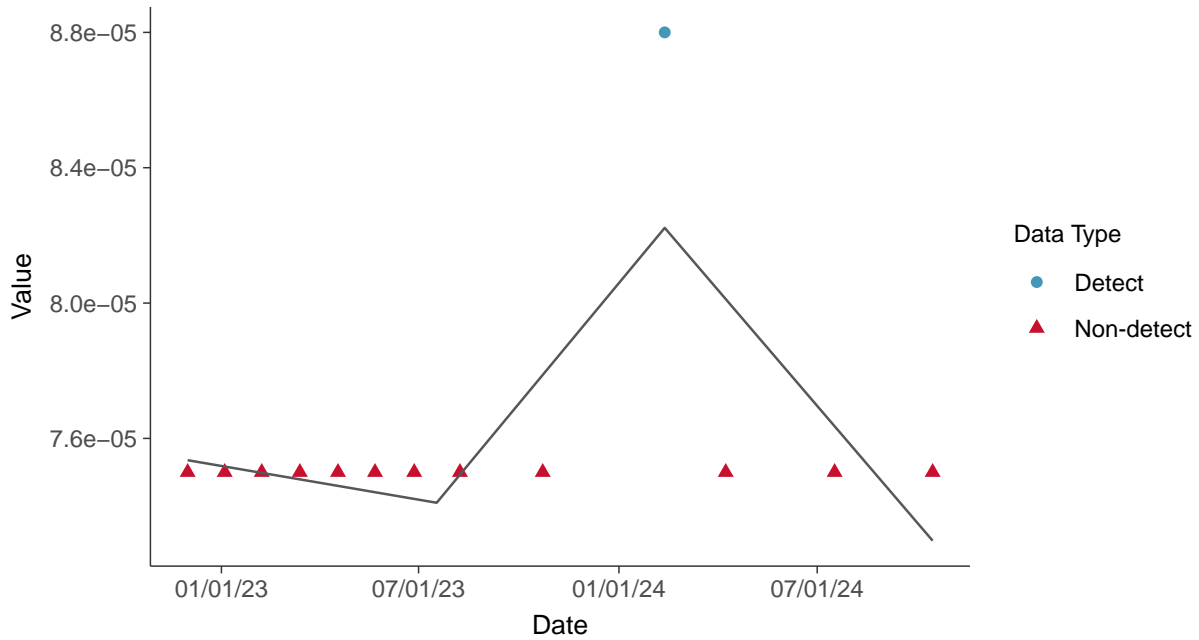
Trend Regression: Piecewise Linear-Linear

Thallium, MW-31 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Thallium, MW-31 (mg/L)



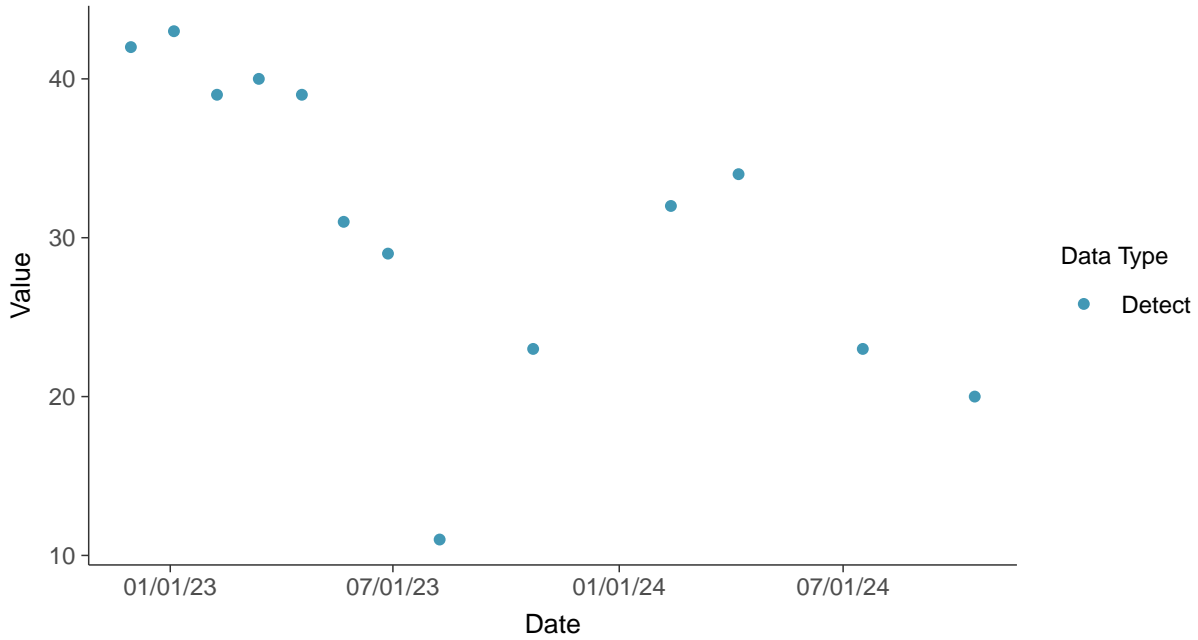


Additional Parameters: Total Suspended Solids, MW-32

ID: 1_42_1_3_127

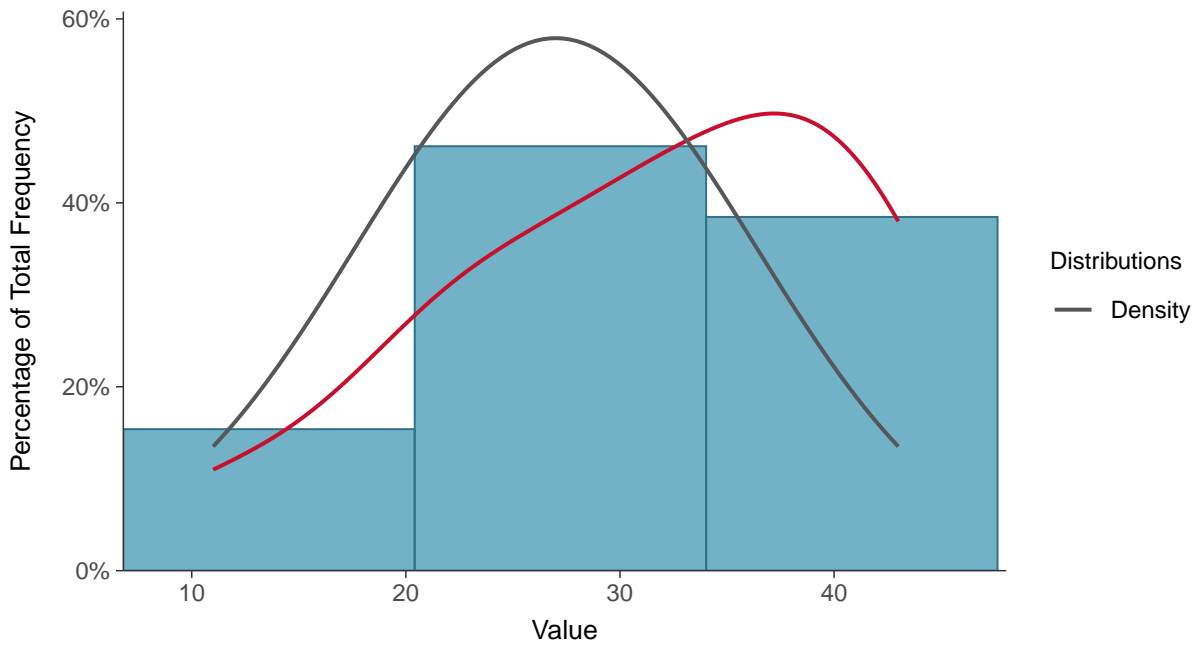
Scatter Plot

Total Suspended Solids, MW-32 (mg/L)



Histogram

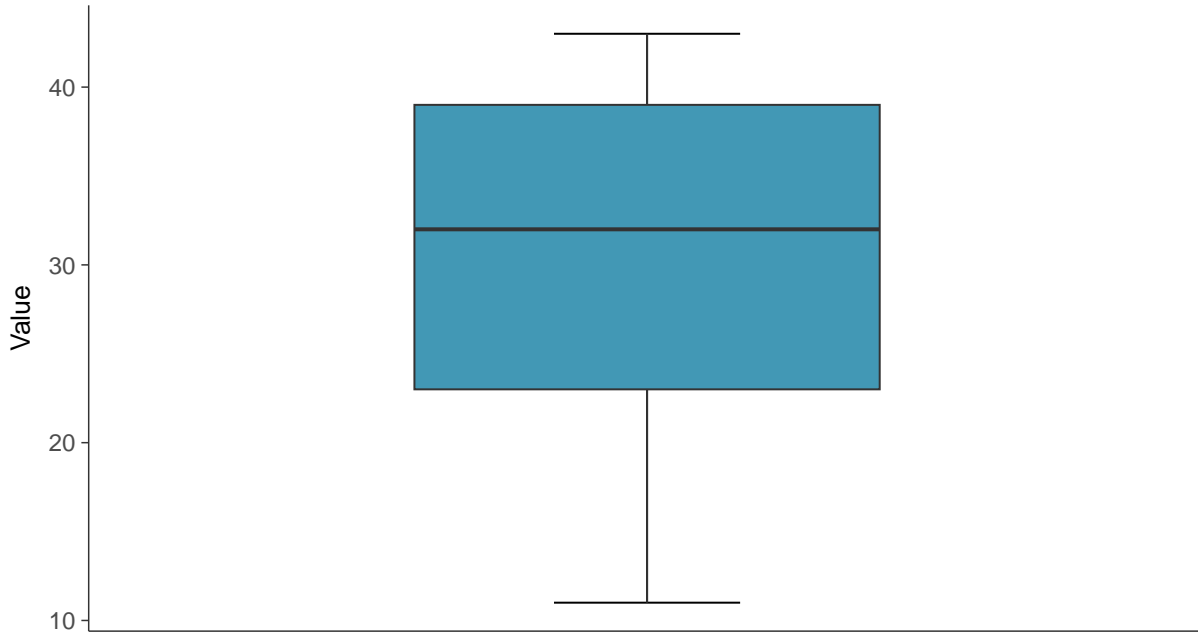
Total Suspended Solids, MW-32 (mg/L)





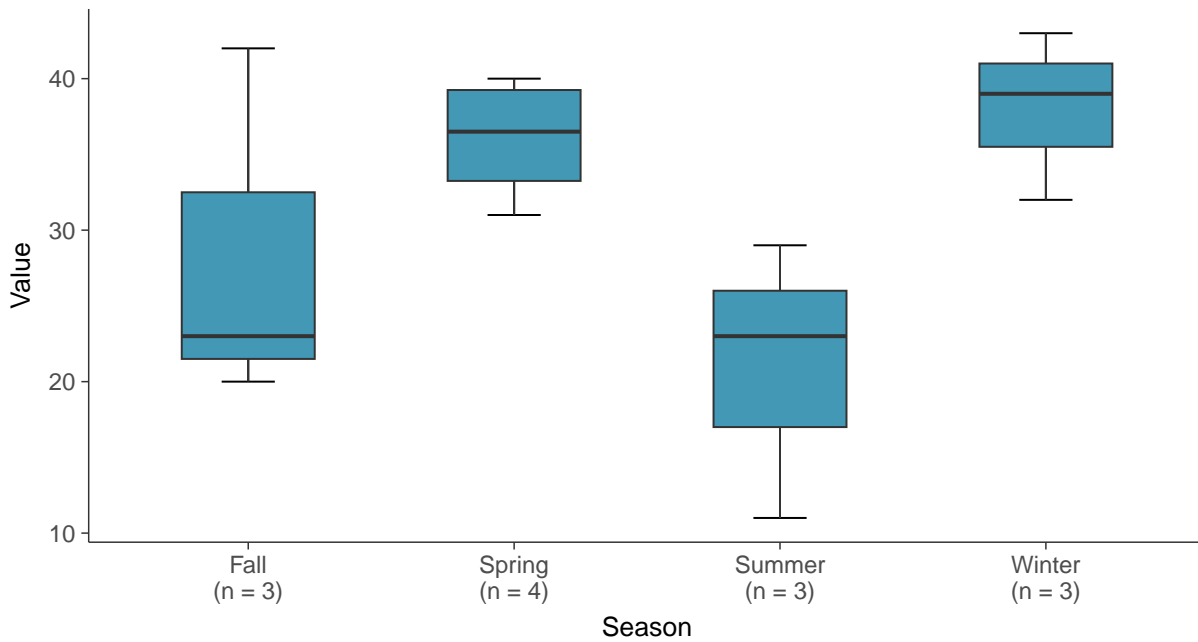
Boxplot

Total Suspended Solids, MW-32 (mg/L)



Boxplot by Season

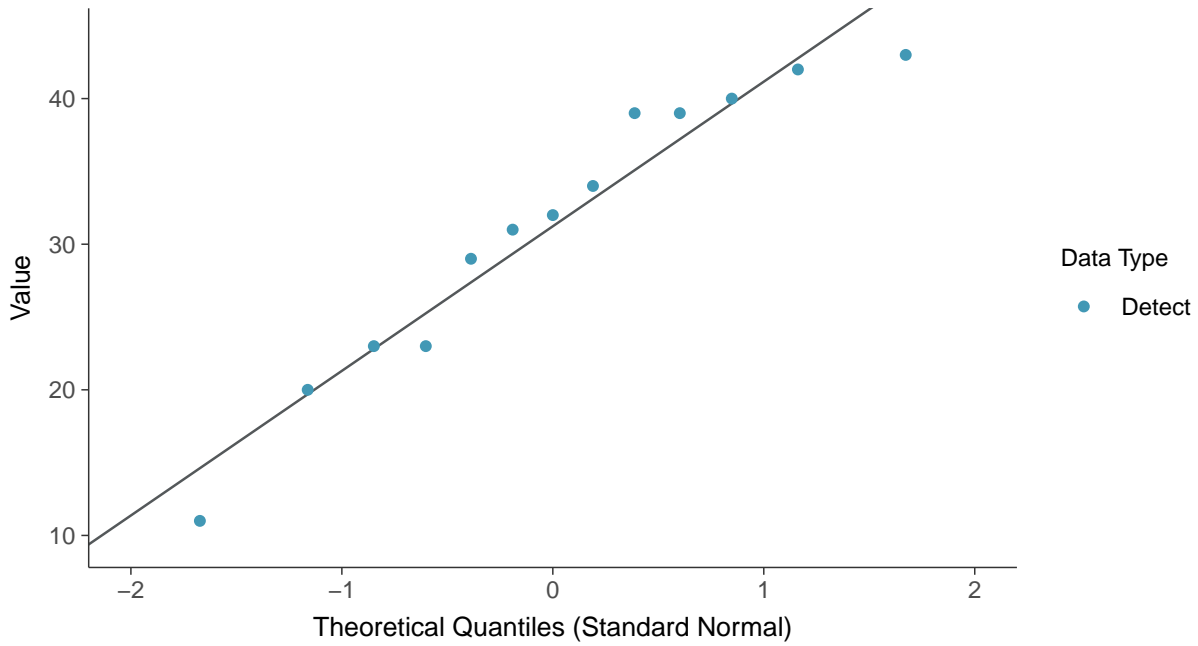
Total Suspended Solids, MW-32 (mg/L)





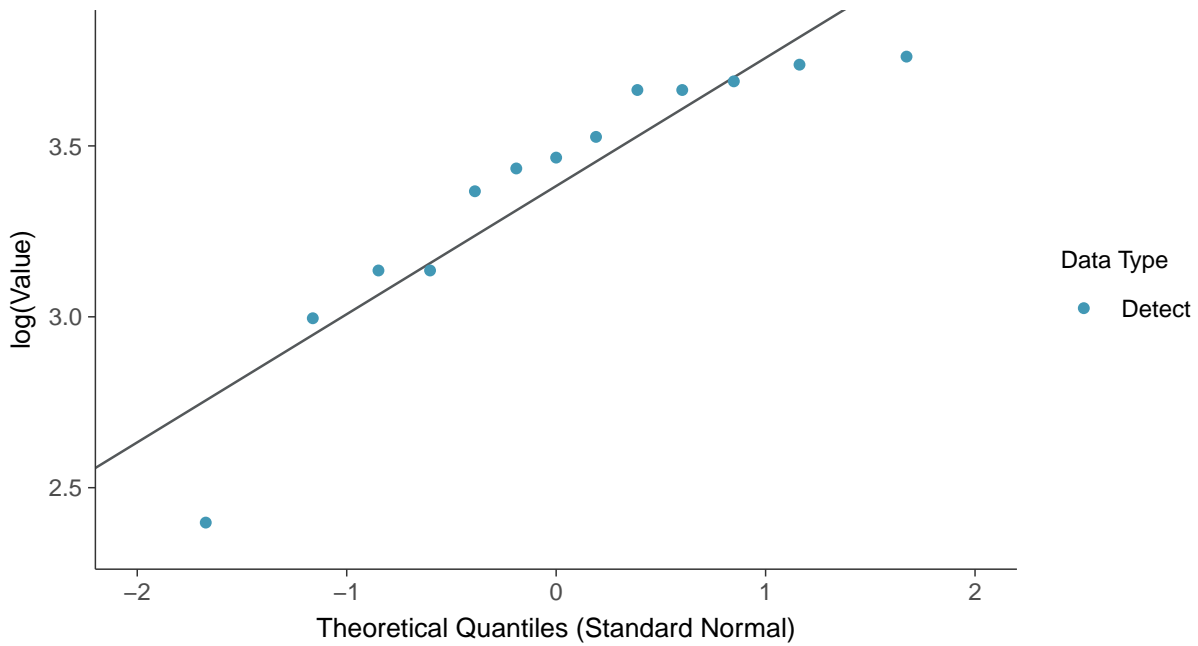
Normal Q-Q plot

Total Suspended Solids, MW-32 (mg/L)



Lognormal Q-Q plot

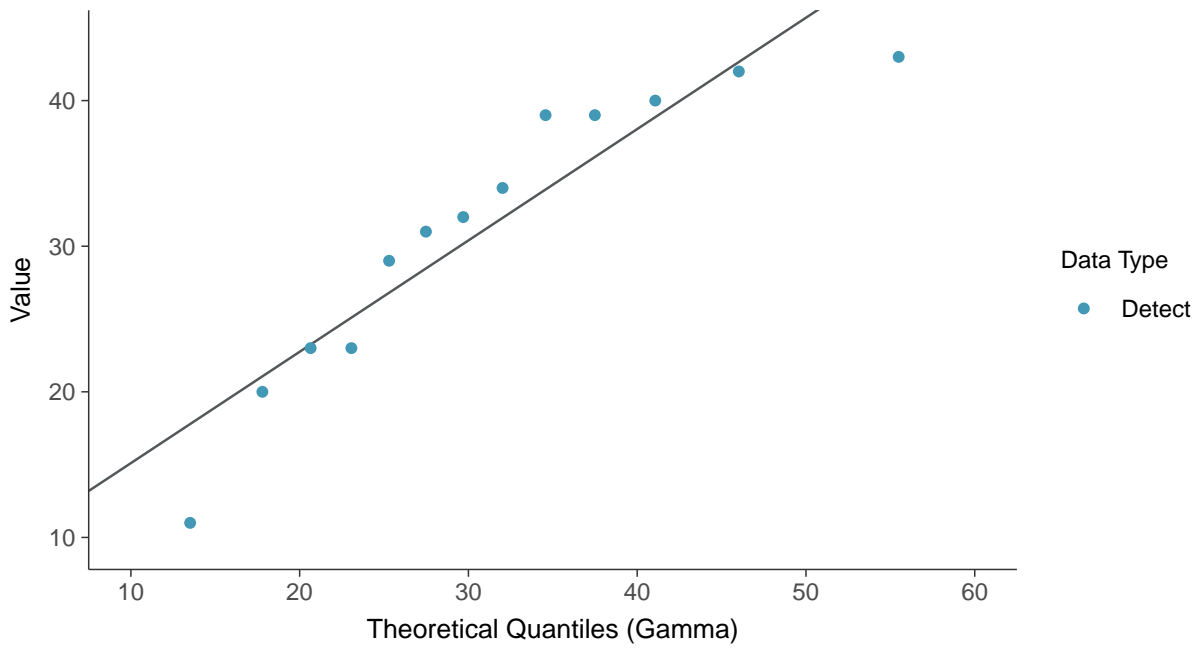
Total Suspended Solids, MW-32 (mg/L)





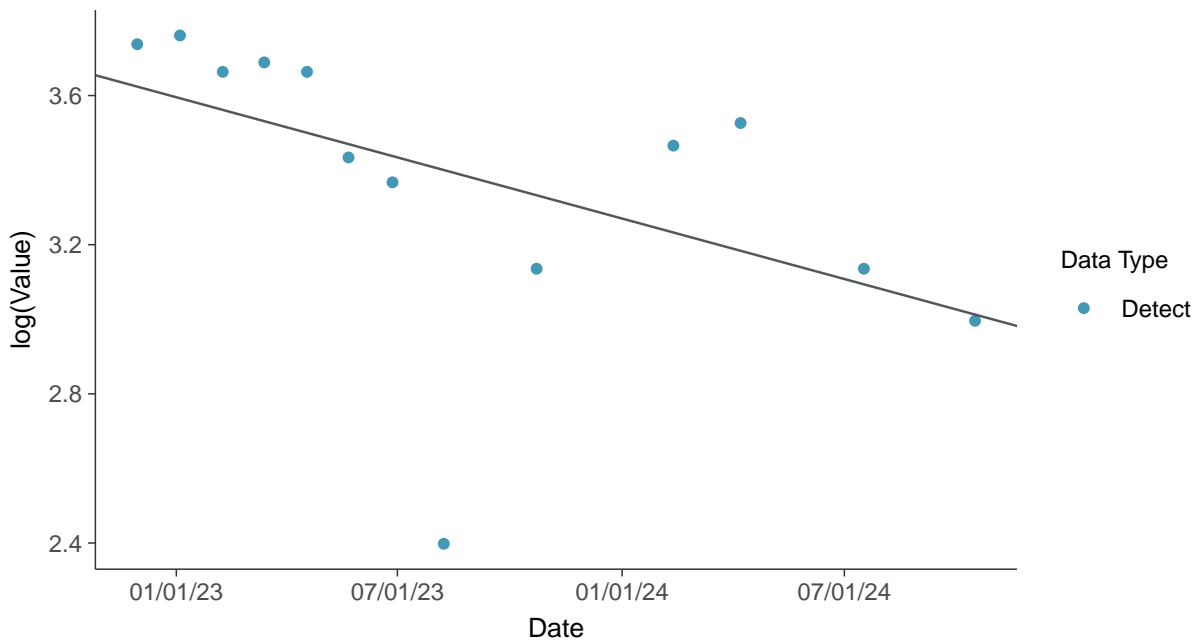
Gamma Q-Q plot

Total Suspended Solids, MW-32 (mg/L)



Trend Regression: Lognormal MLE

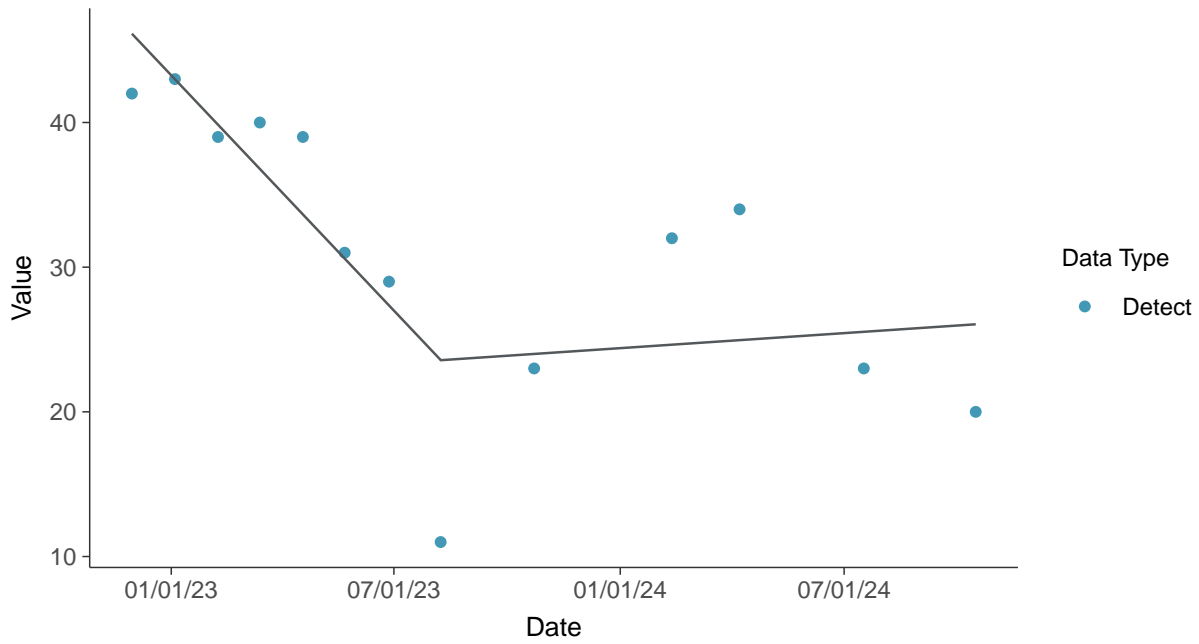
Total Suspended Solids, MW-32 (mg/L)





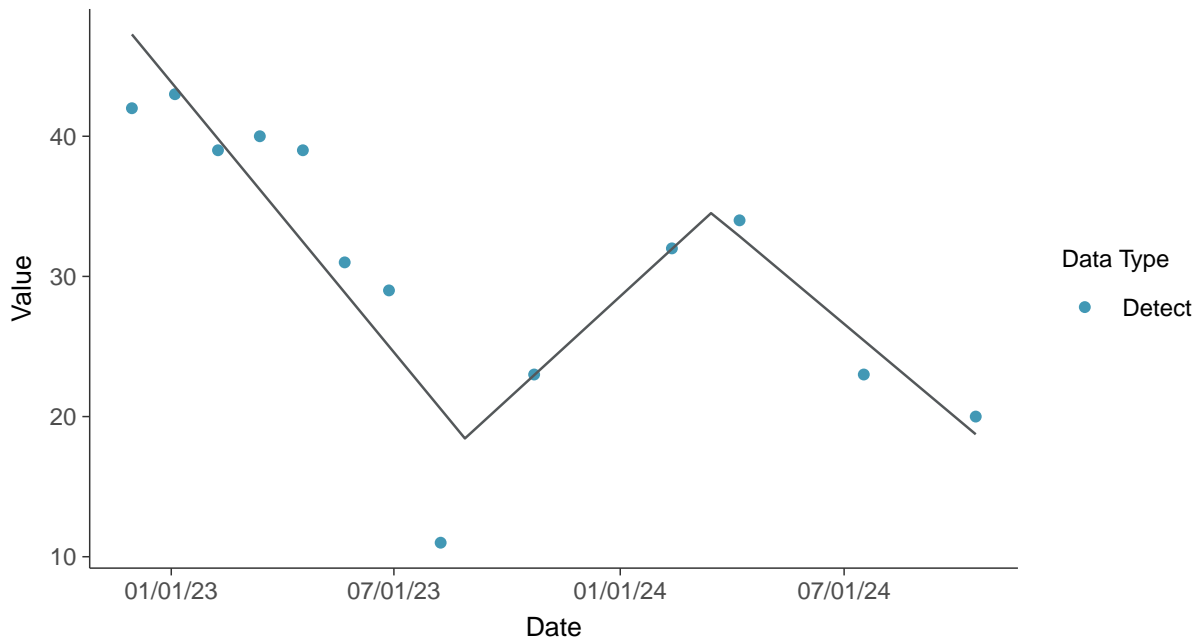
Trend Regression: Piecewise Linear-Linear

Total Suspended Solids, MW-32 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

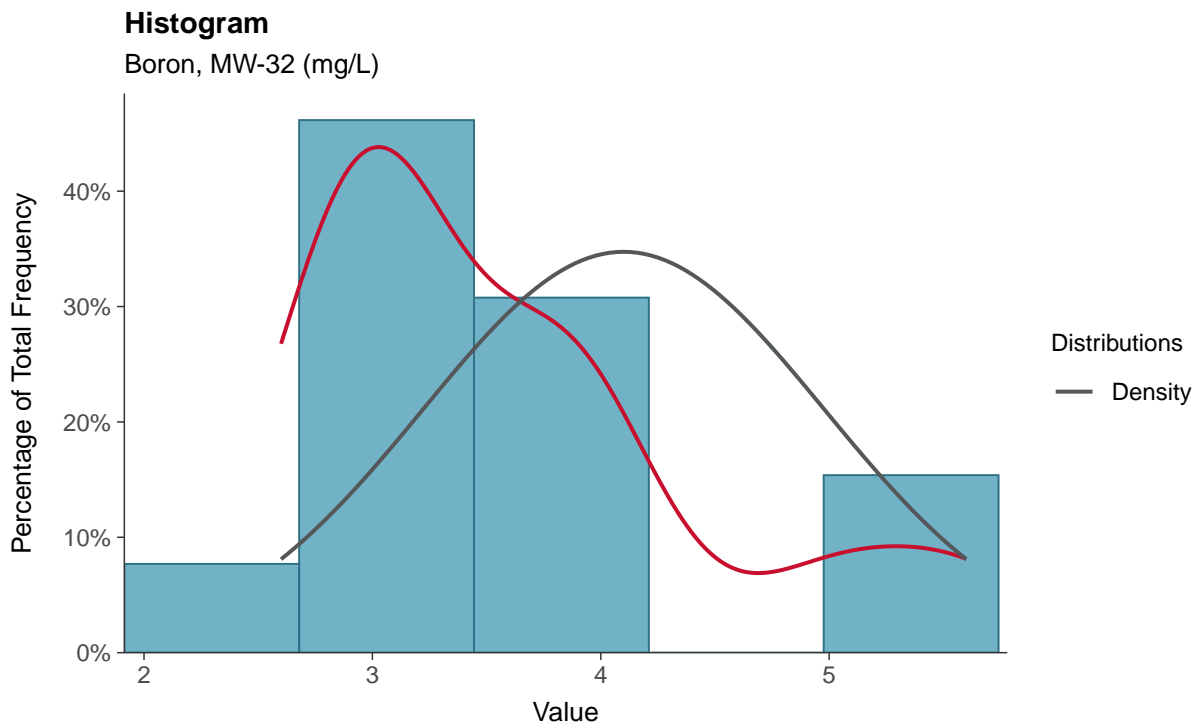
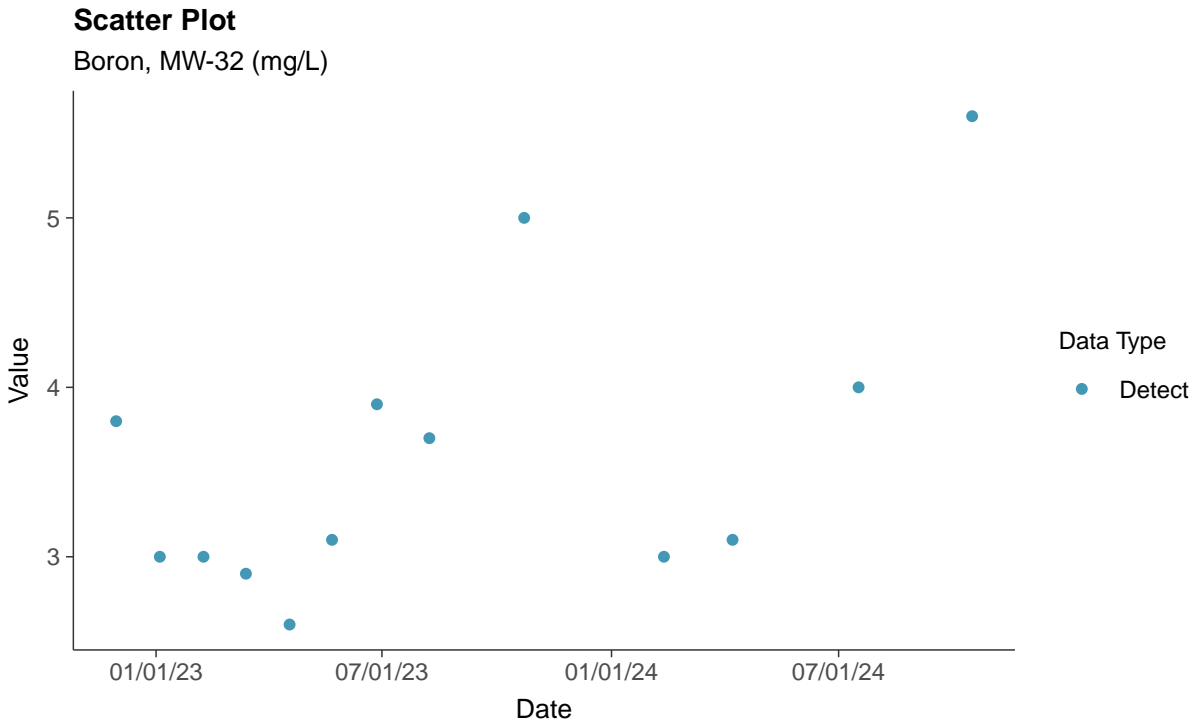
Total Suspended Solids, MW-32 (mg/L)





Appendix III: Boron, MW-32

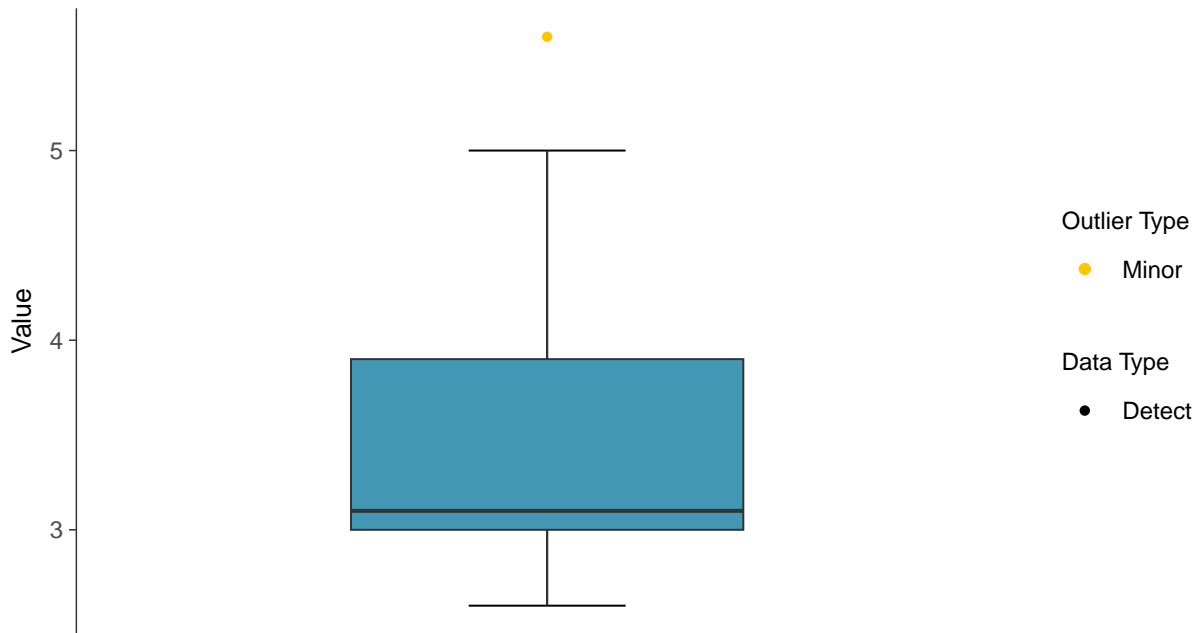
ID: 1_42_1_4_105





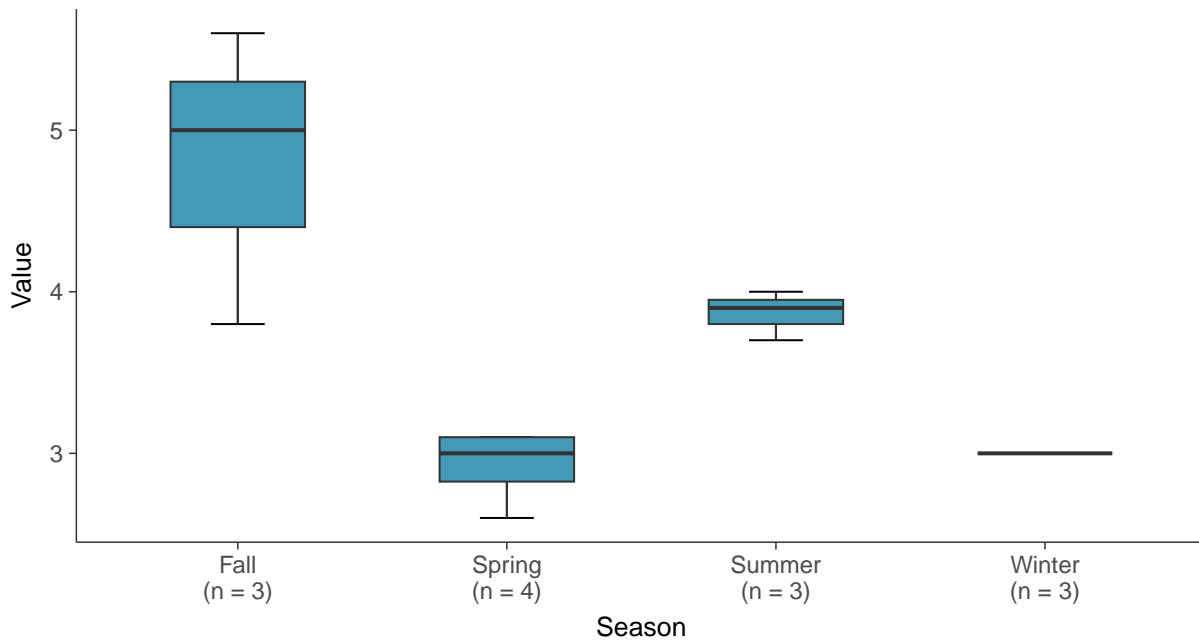
Boxplot

Boron, MW-32 (mg/L)



Boxplot by Season

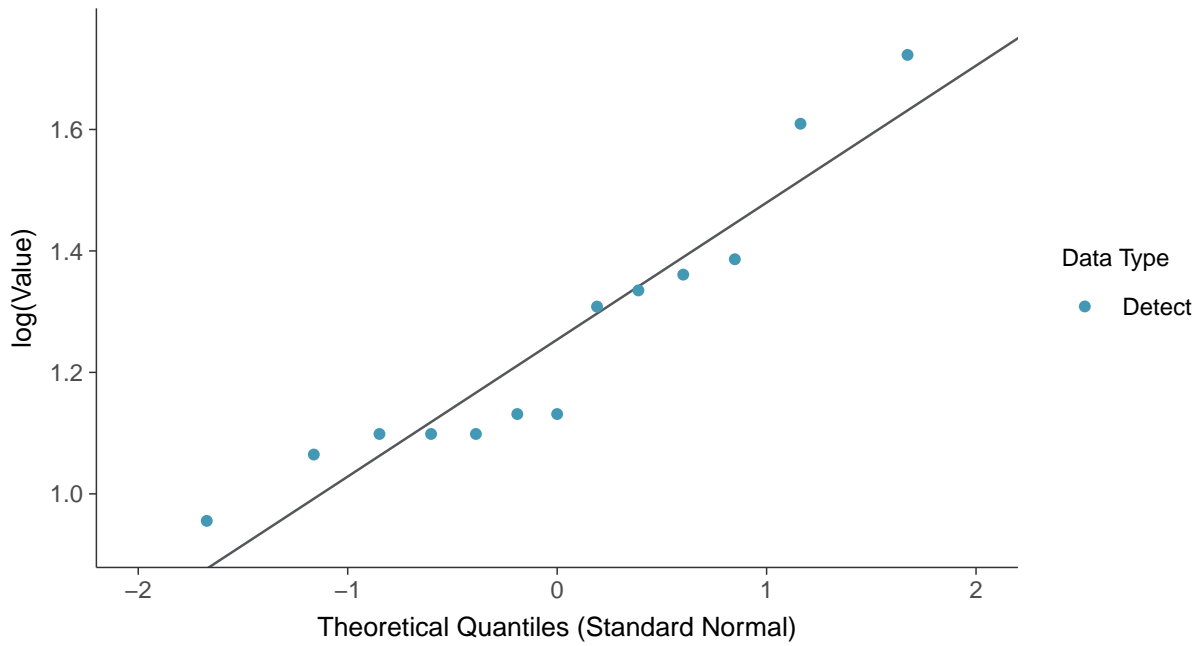
Boron, MW-32 (mg/L)





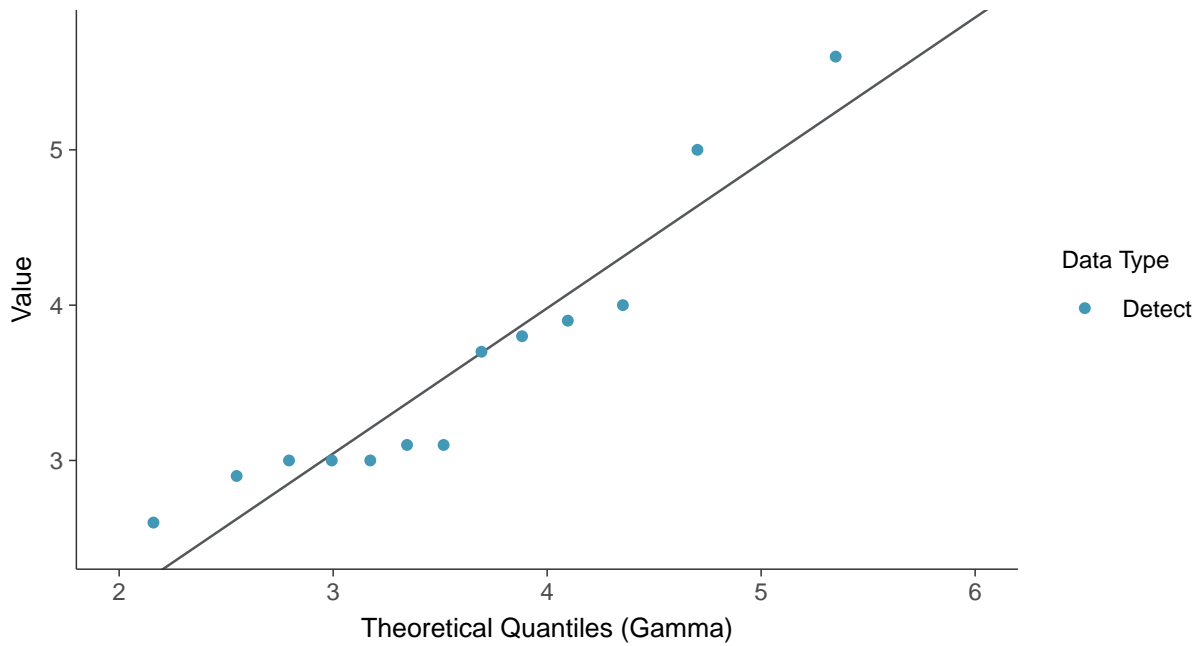
Lognormal Q-Q plot

Boron, MW-32 (mg/L)



Gamma Q-Q plot

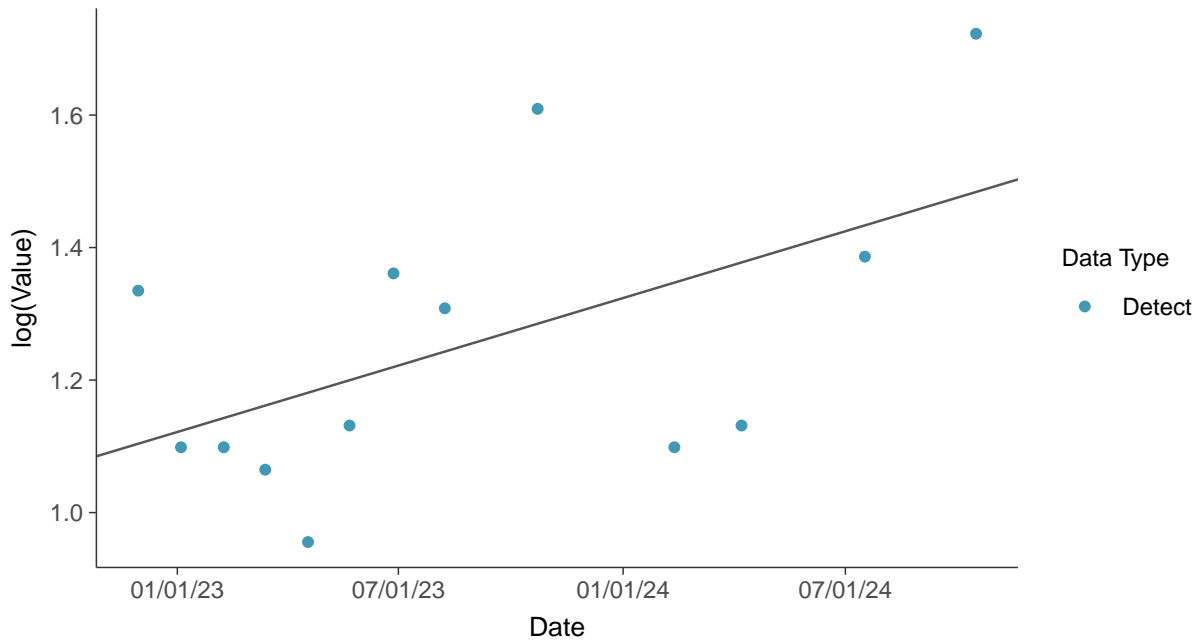
Boron, MW-32 (mg/L)





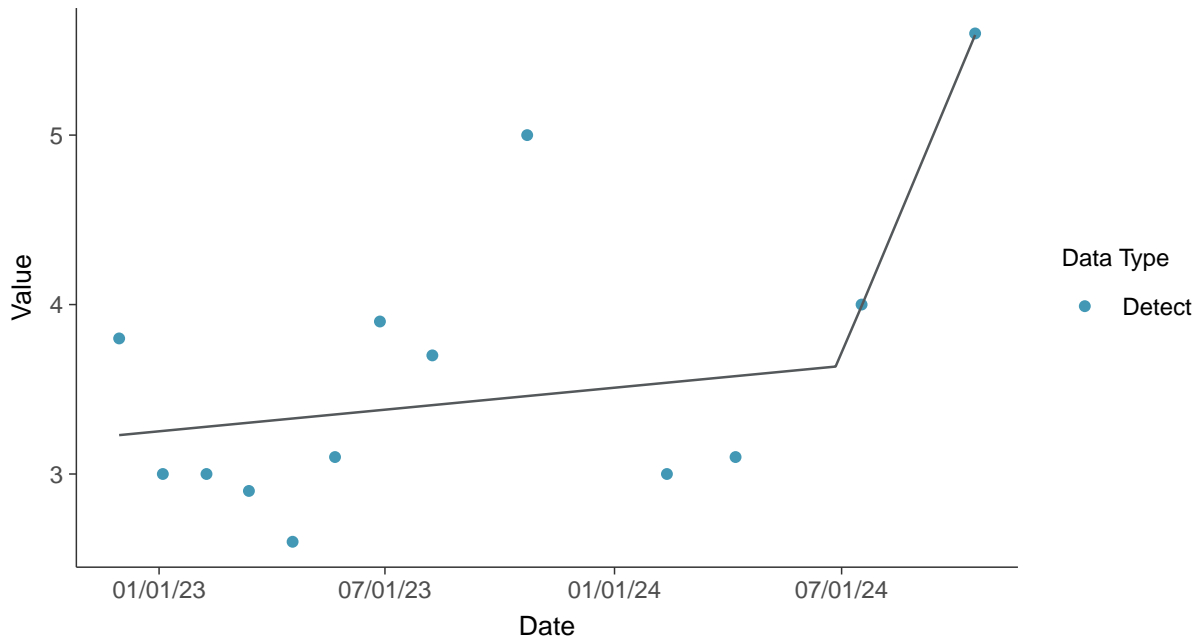
Trend Regression: Lognormal MLE

Boron, MW-32 (mg/L)



Trend Regression: Piecewise Linear-Linear

Boron, MW-32 (mg/L)



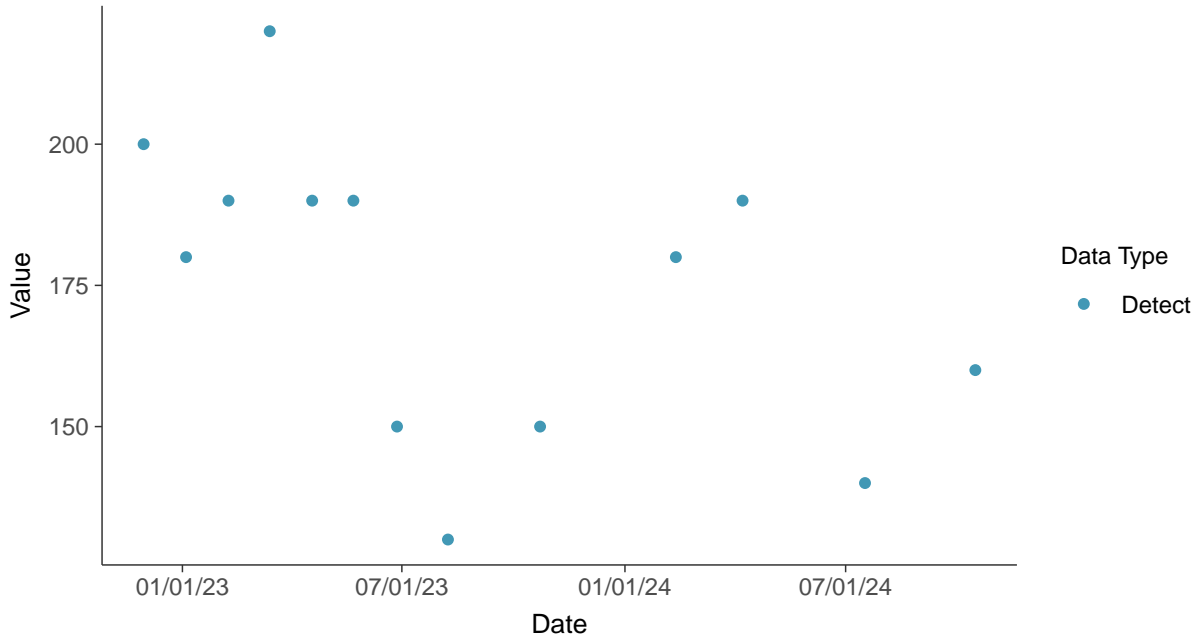


Appendix III: Calcium, MW-32

ID: 1_42_1_4_107

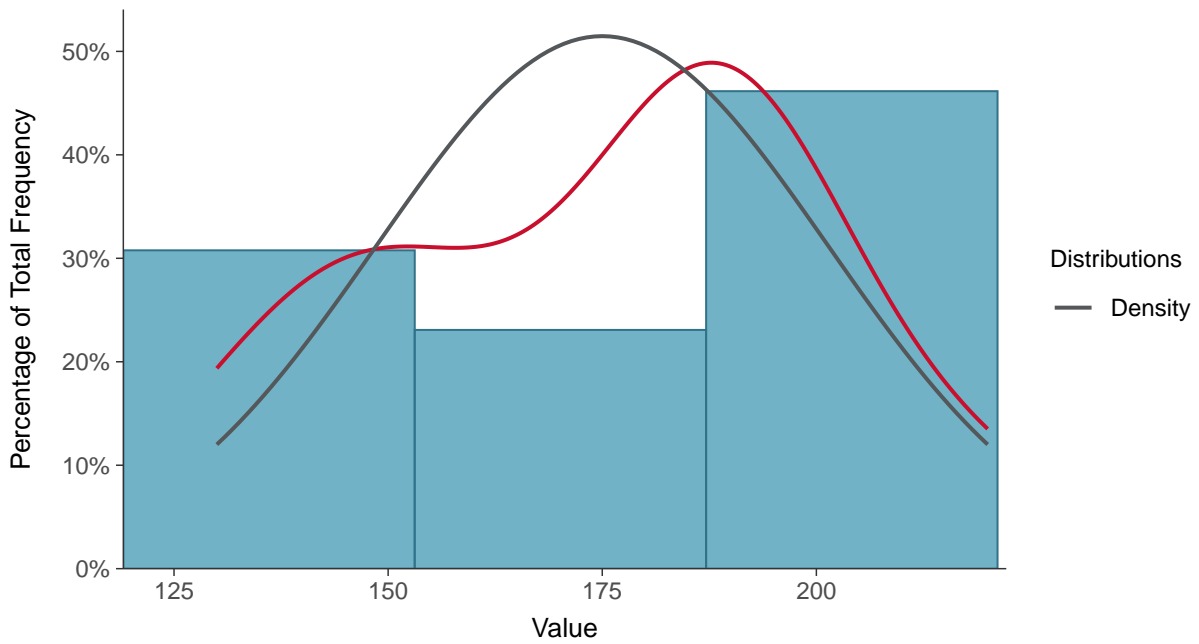
Scatter Plot

Calcium, MW-32 (mg/L)



Histogram

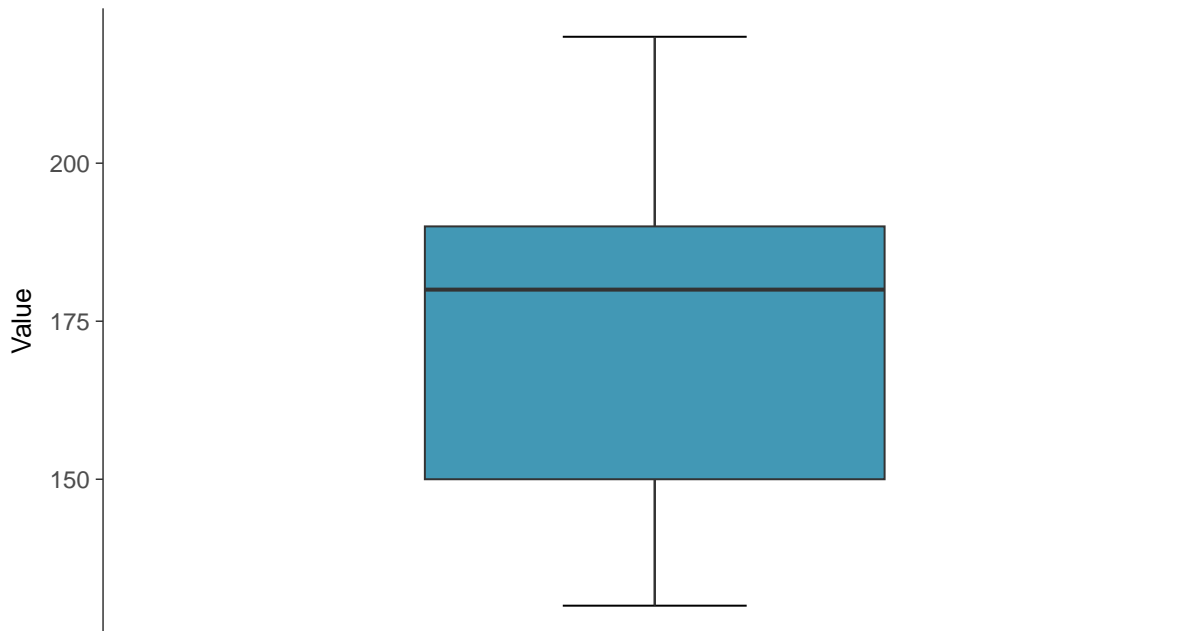
Calcium, MW-32 (mg/L)





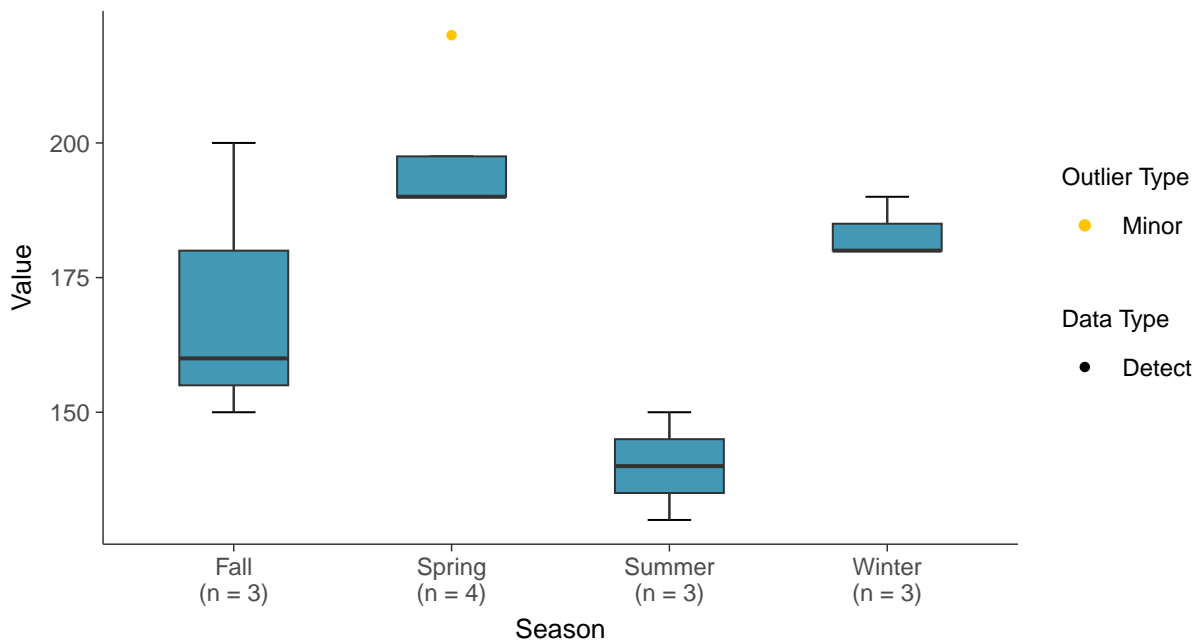
Boxplot

Calcium, MW-32 (mg/L)



Boxplot by Season

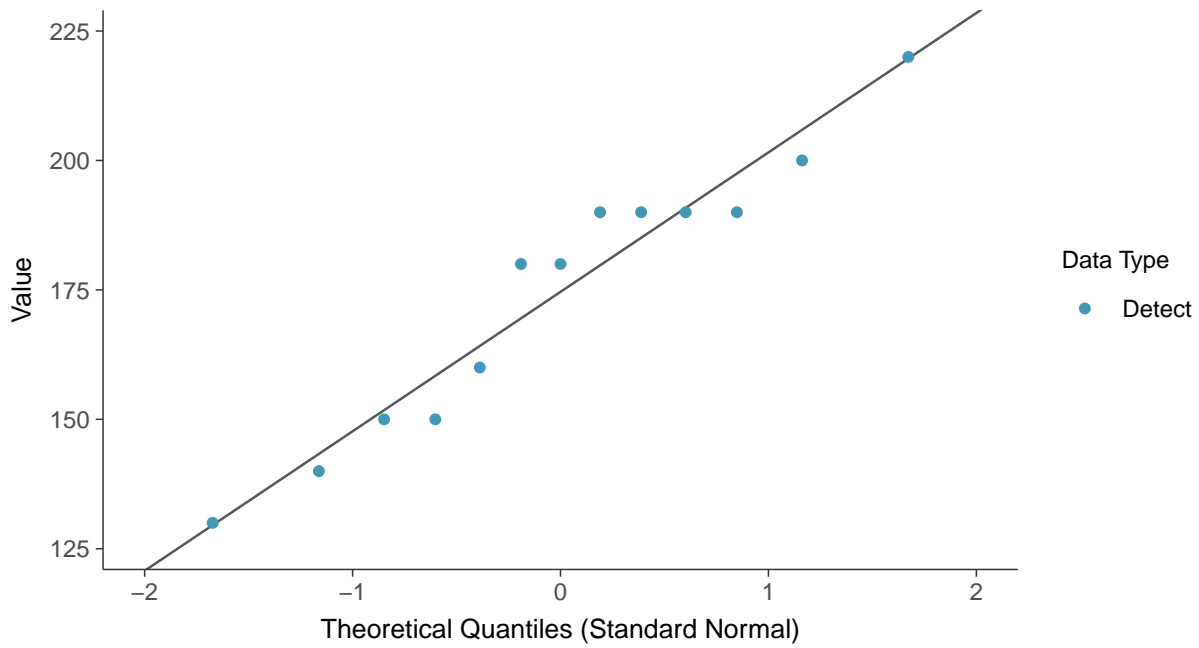
Calcium, MW-32 (mg/L)





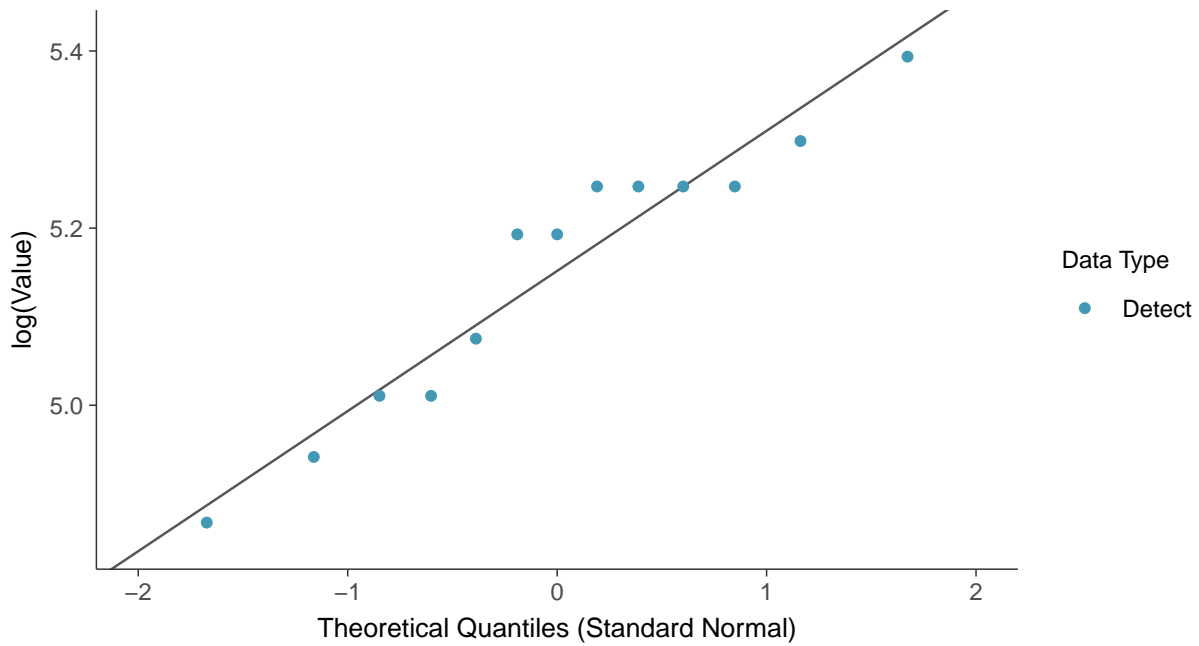
Normal Q-Q plot

Calcium, MW-32 (mg/L)



Lognormal Q-Q plot

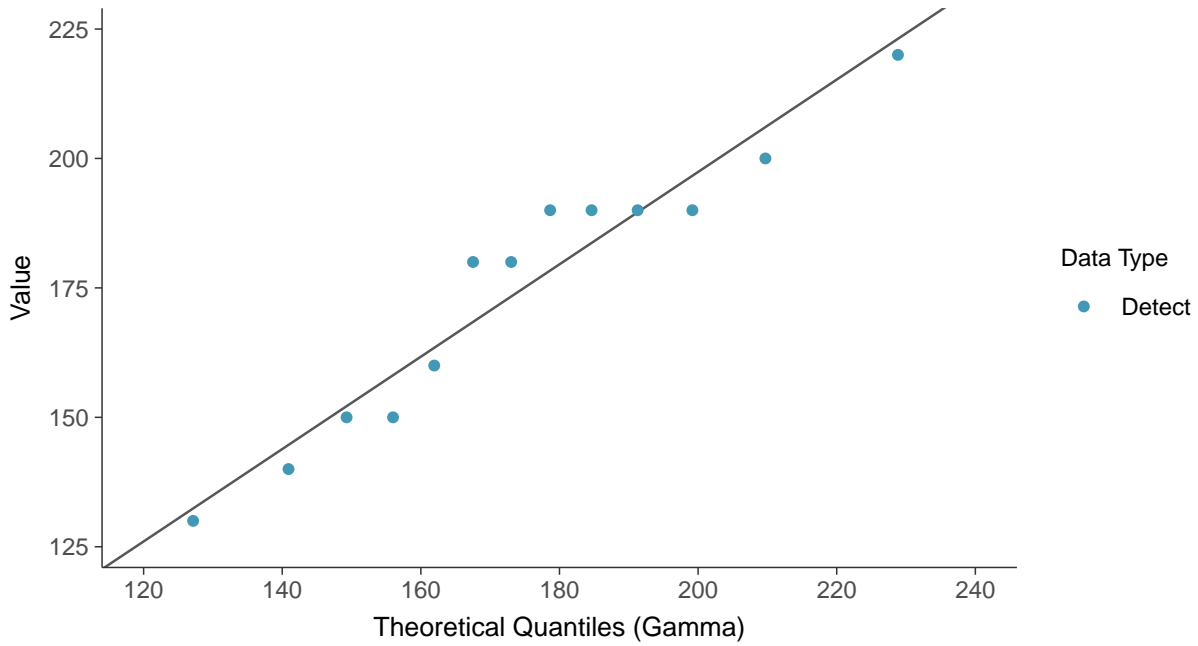
Calcium, MW-32 (mg/L)





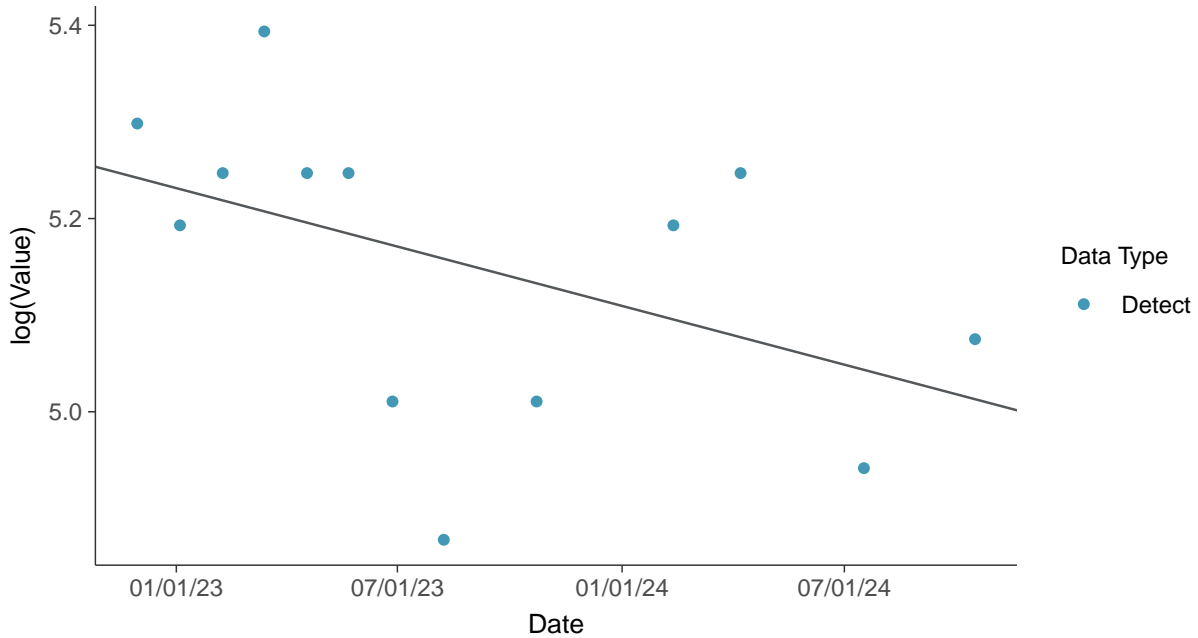
Gamma Q-Q plot

Calcium, MW-32 (mg/L)



Trend Regression: Lognormal MLE

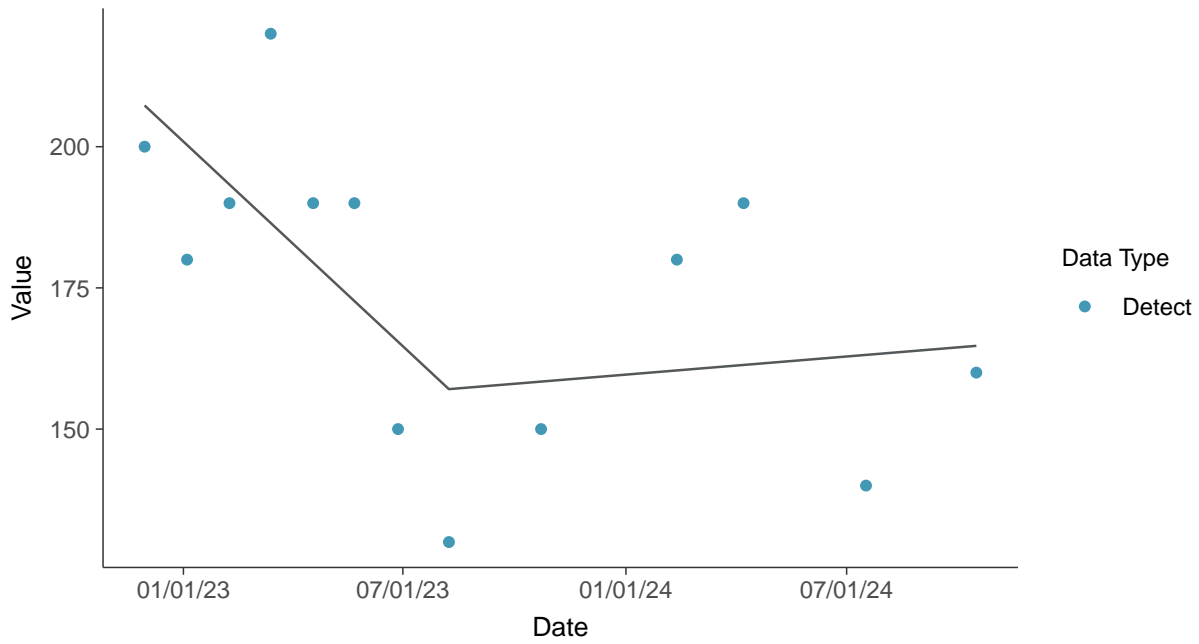
Calcium, MW-32 (mg/L)





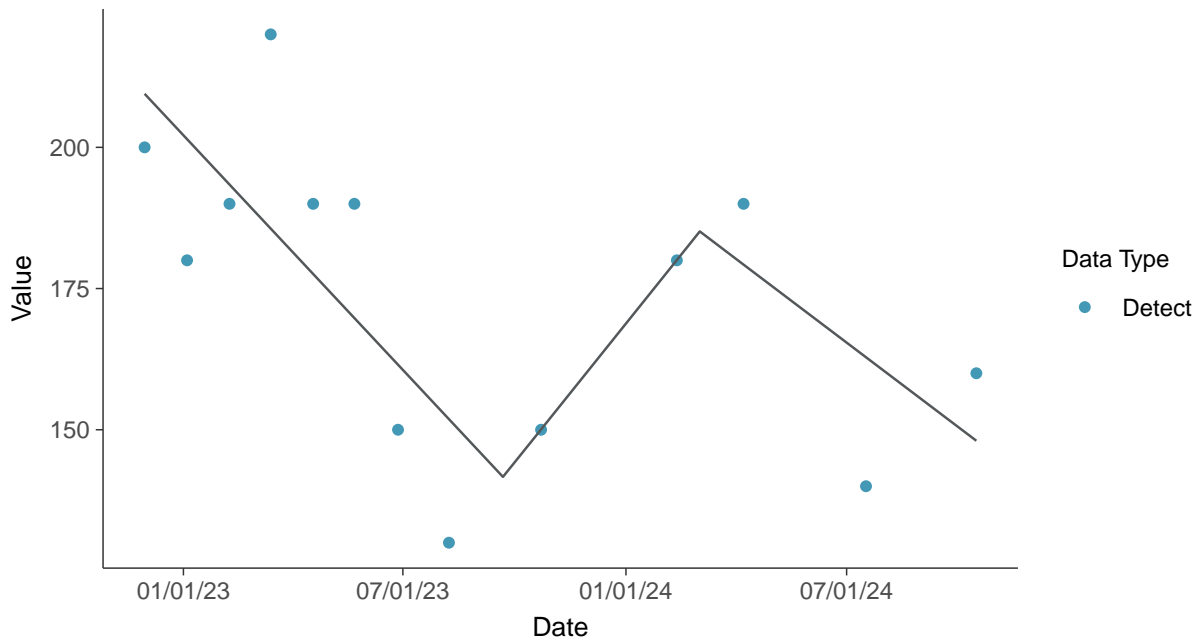
Trend Regression: Piecewise Linear-Linear

Calcium, MW-32 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

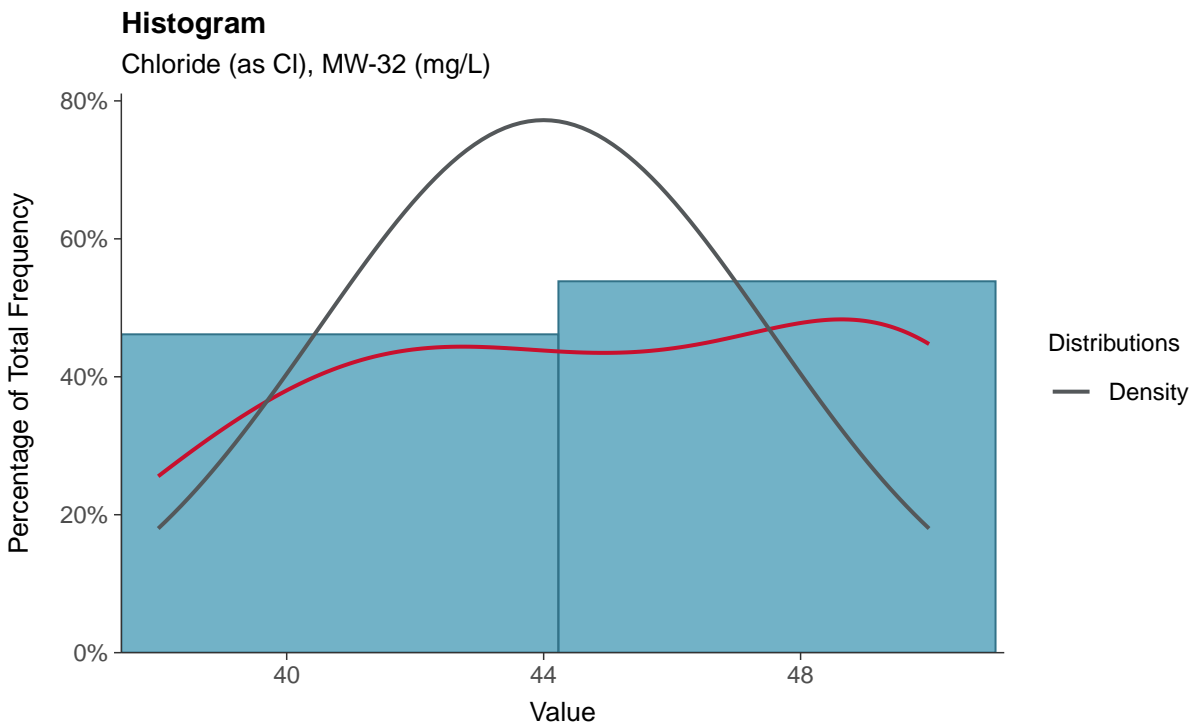
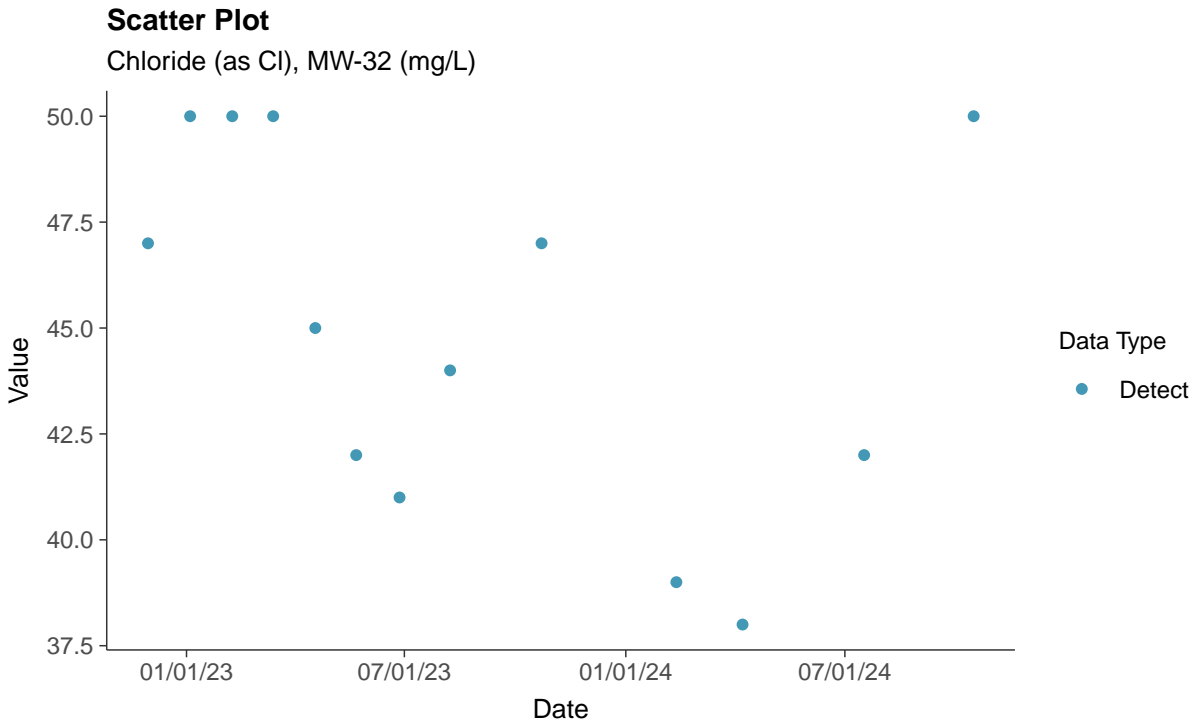
Calcium, MW-32 (mg/L)





Appendix III: Chloride (as Cl), MW-32

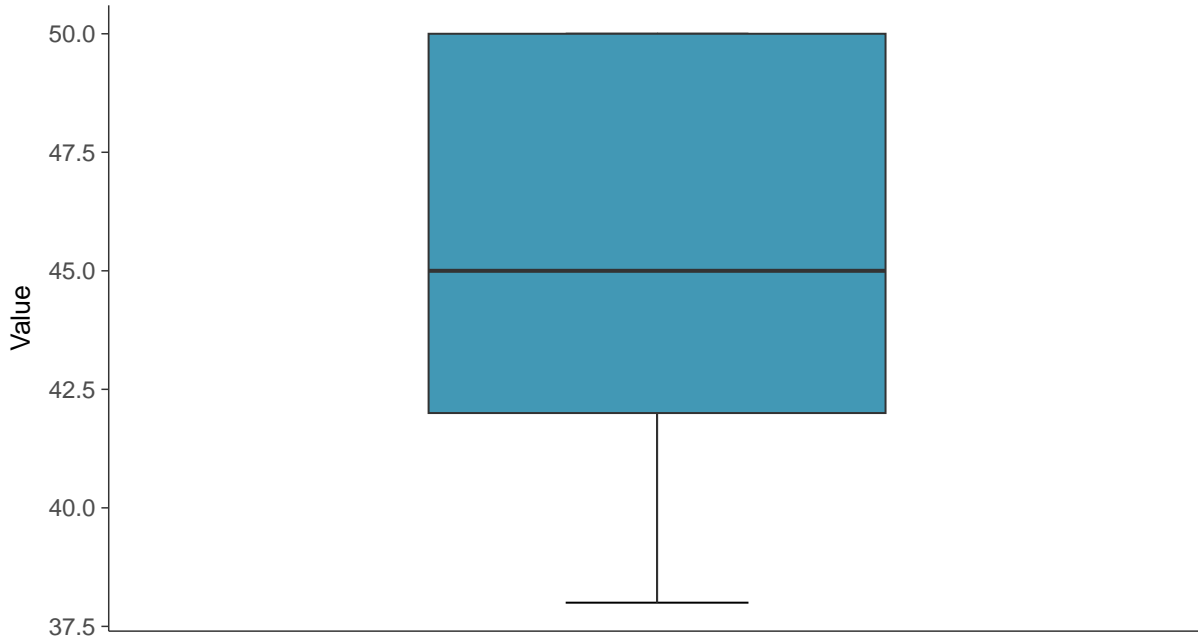
ID: 1_42_1_4_108





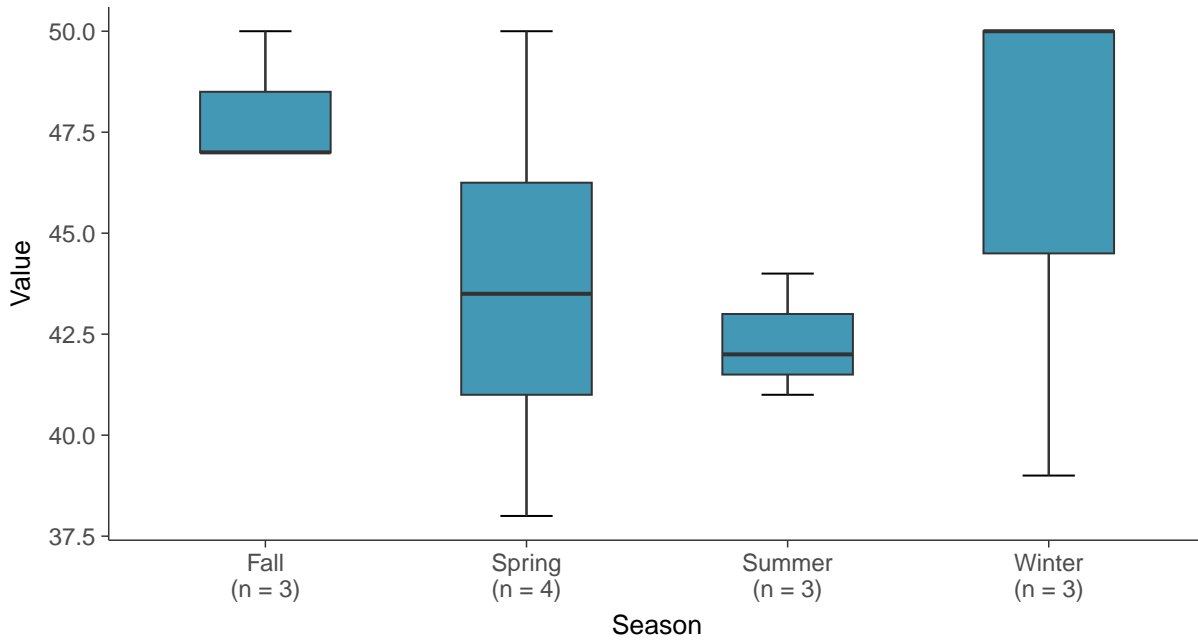
Boxplot

Chloride (as Cl), MW-32 (mg/L)



Boxplot by Season

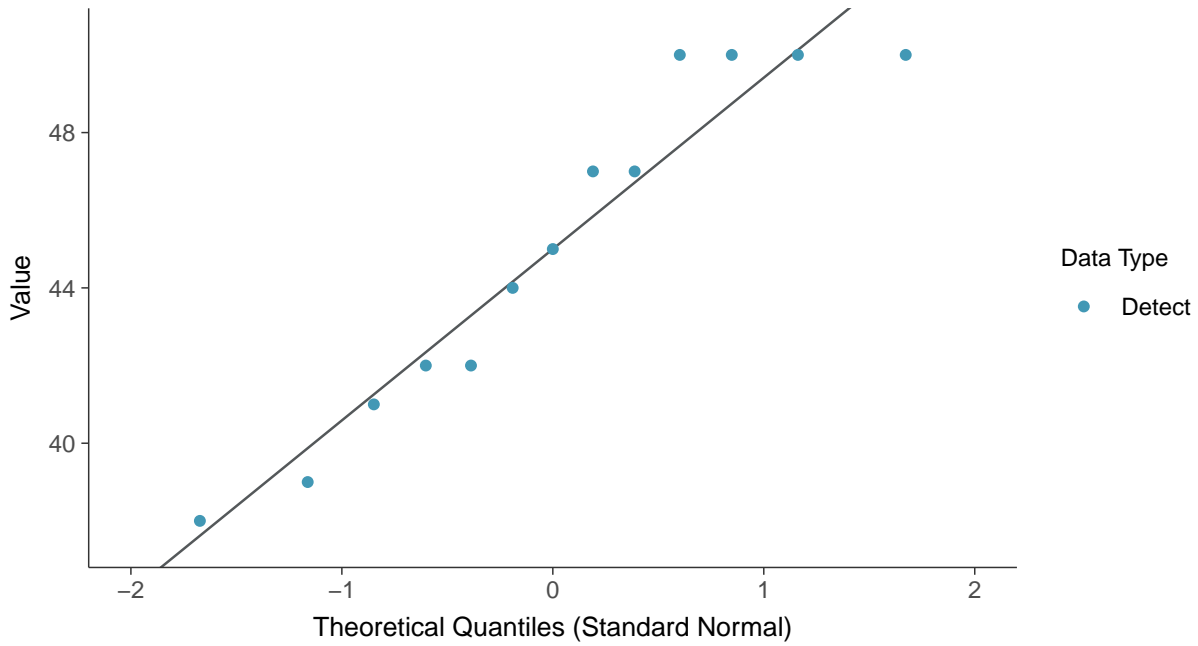
Chloride (as Cl), MW-32 (mg/L)





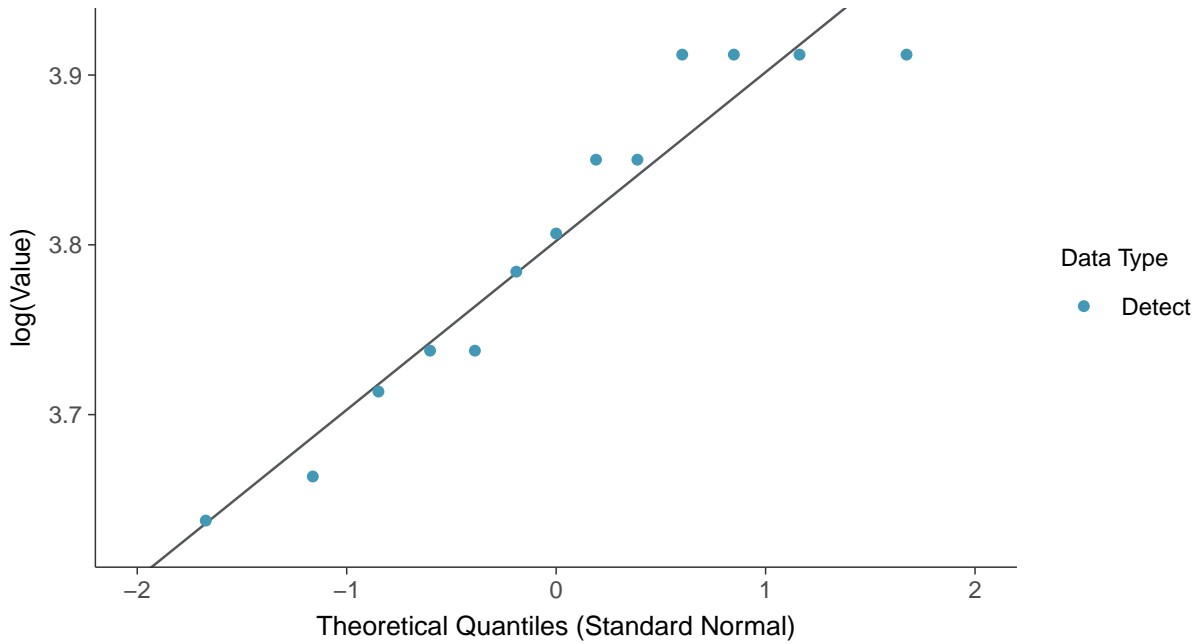
Normal Q-Q plot

Chloride (as Cl), MW-32 (mg/L)



Lognormal Q-Q plot

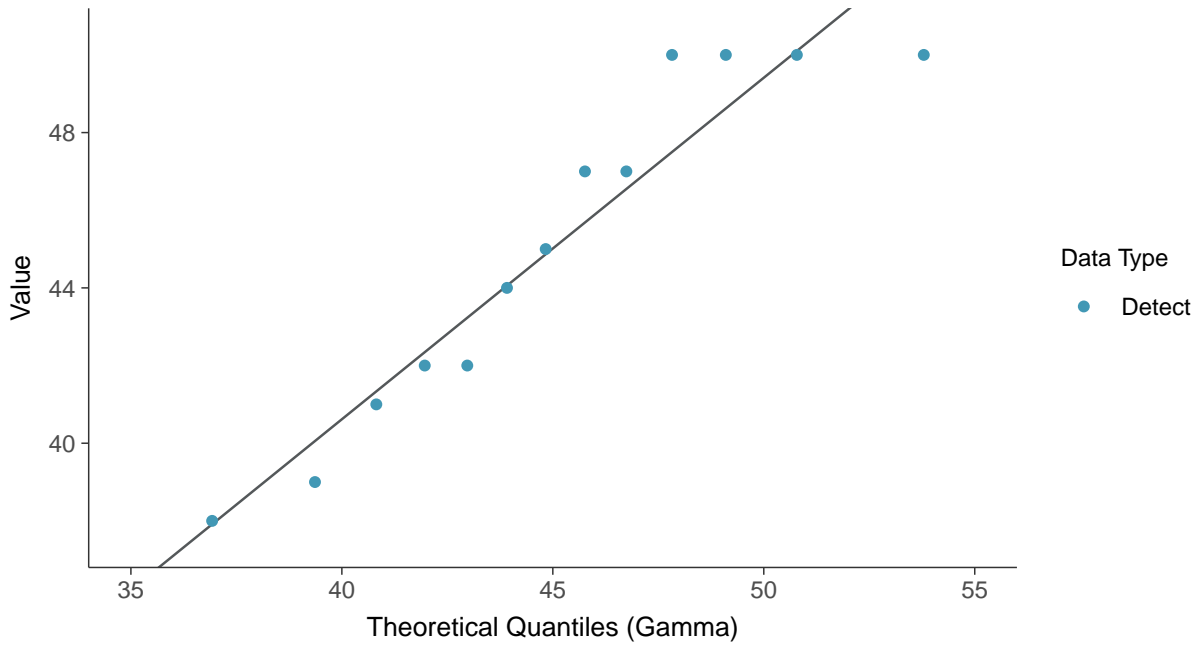
Chloride (as Cl), MW-32 (mg/L)





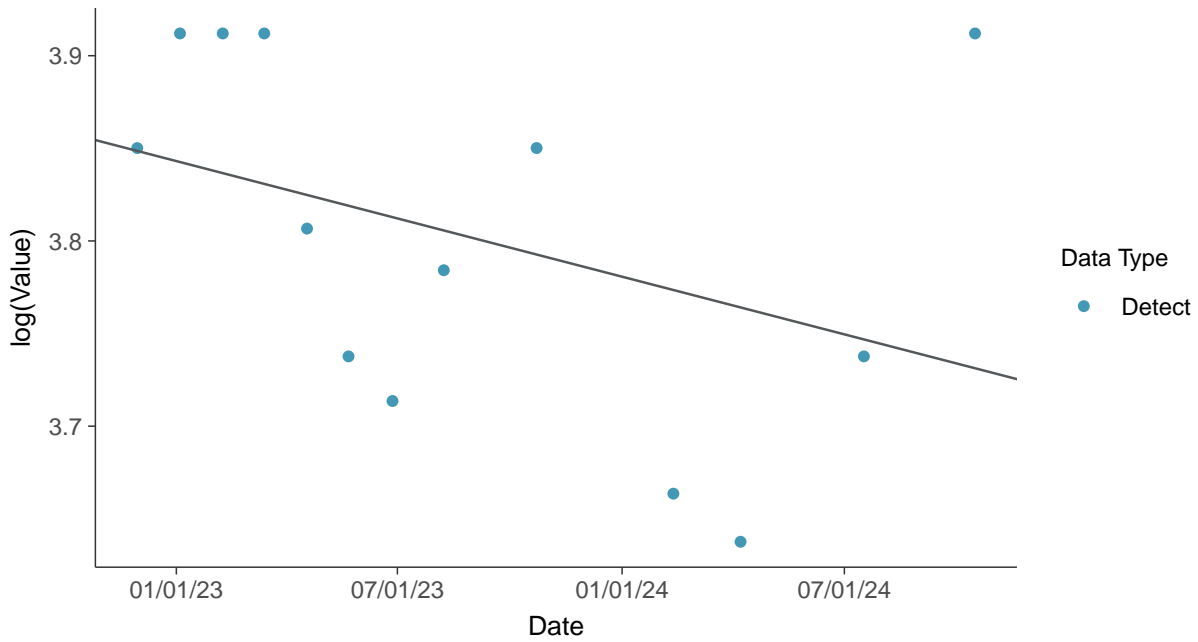
Gamma Q-Q plot

Chloride (as Cl), MW-32 (mg/L)



Trend Regression: Lognormal MLE

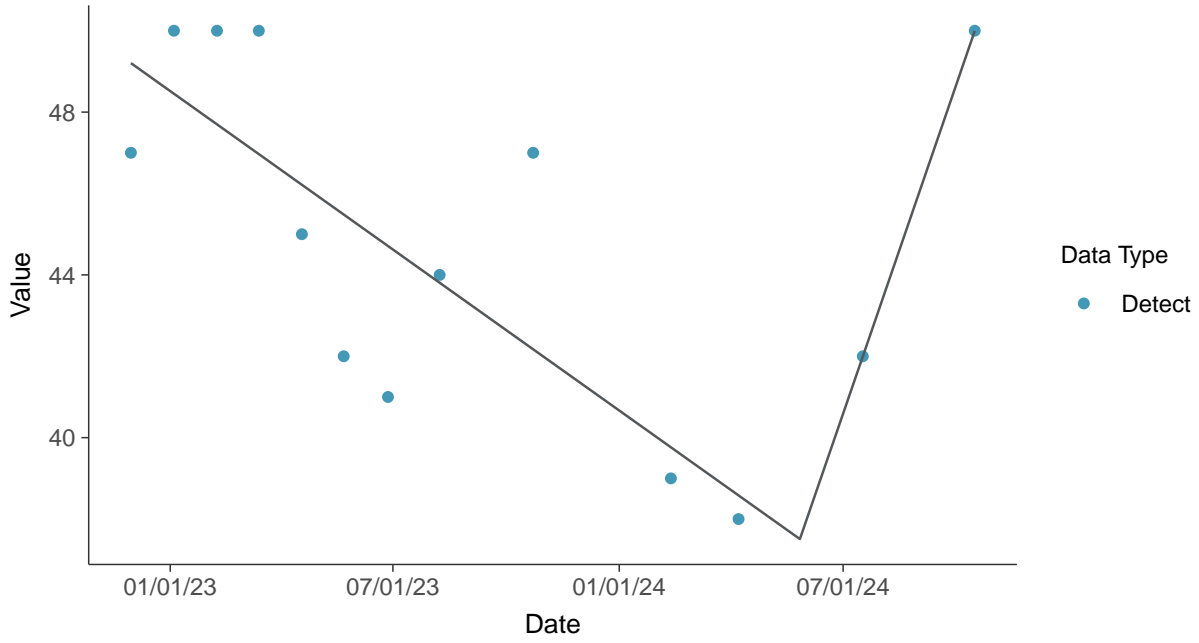
Chloride (as Cl), MW-32 (mg/L)





Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-32 (mg/L)



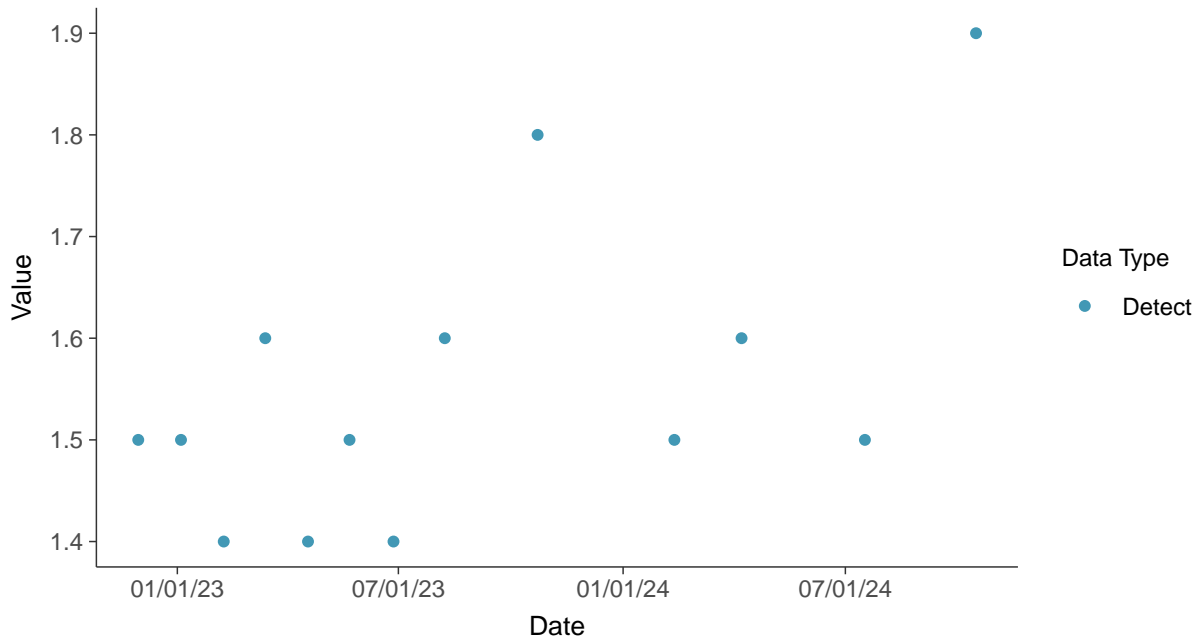


Appendix III: Fluoride, MW-32

ID: 1_42_1_4_112

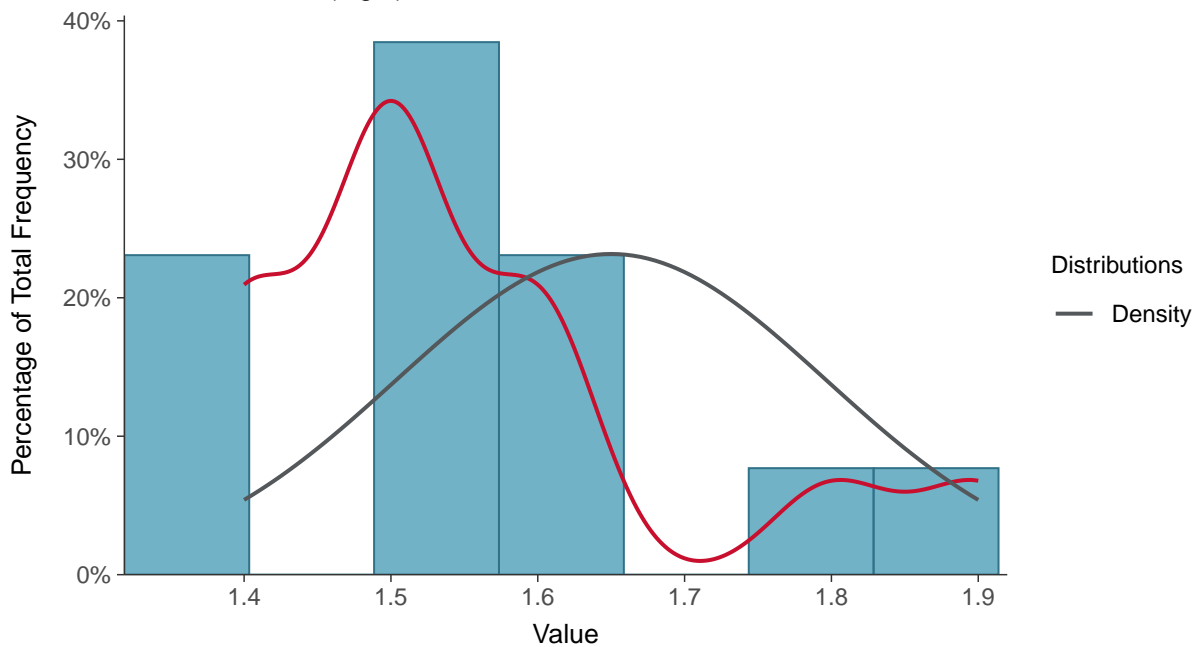
Scatter Plot

Fluoride, MW-32 (mg/L)



Histogram

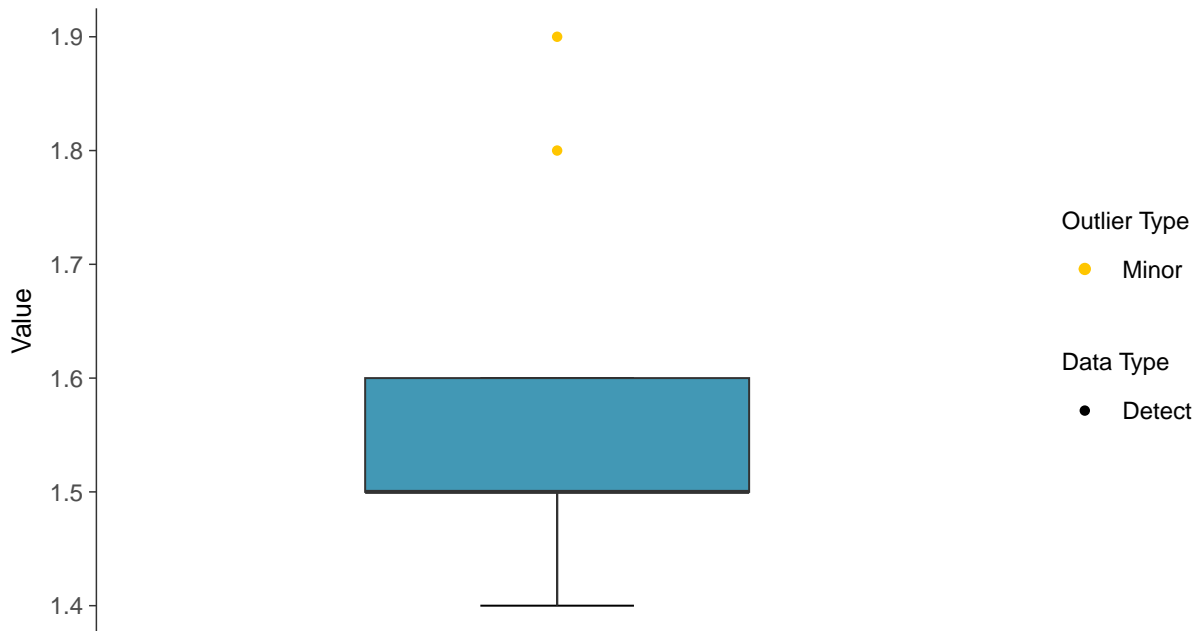
Fluoride, MW-32 (mg/L)





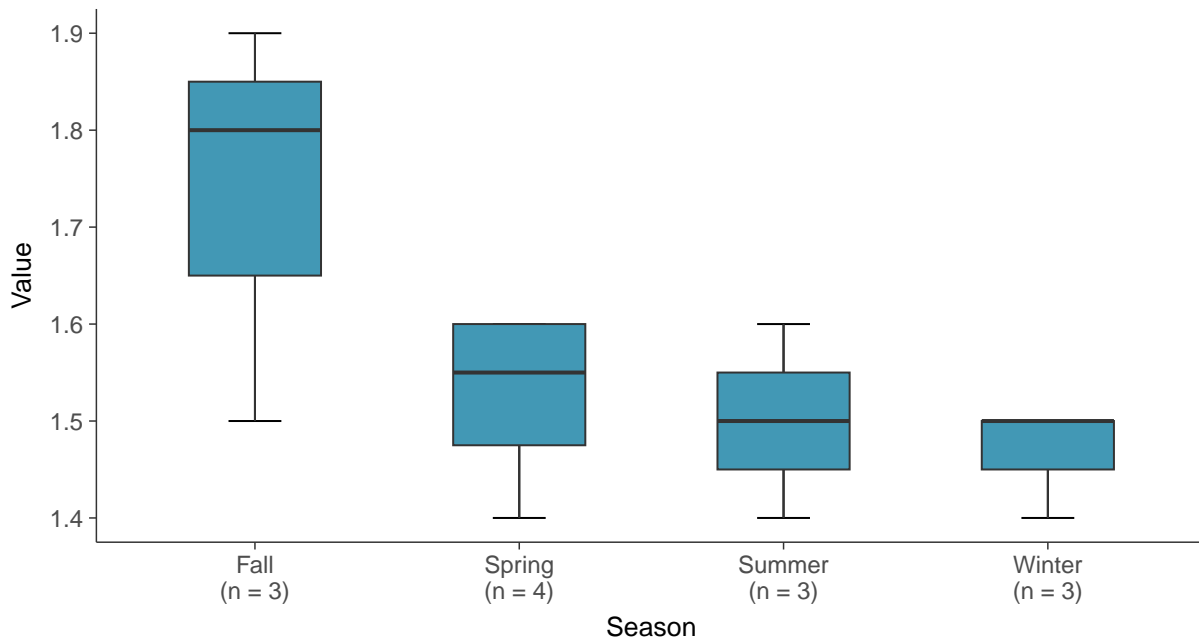
Boxplot

Fluoride, MW-32 (mg/L)



Boxplot by Season

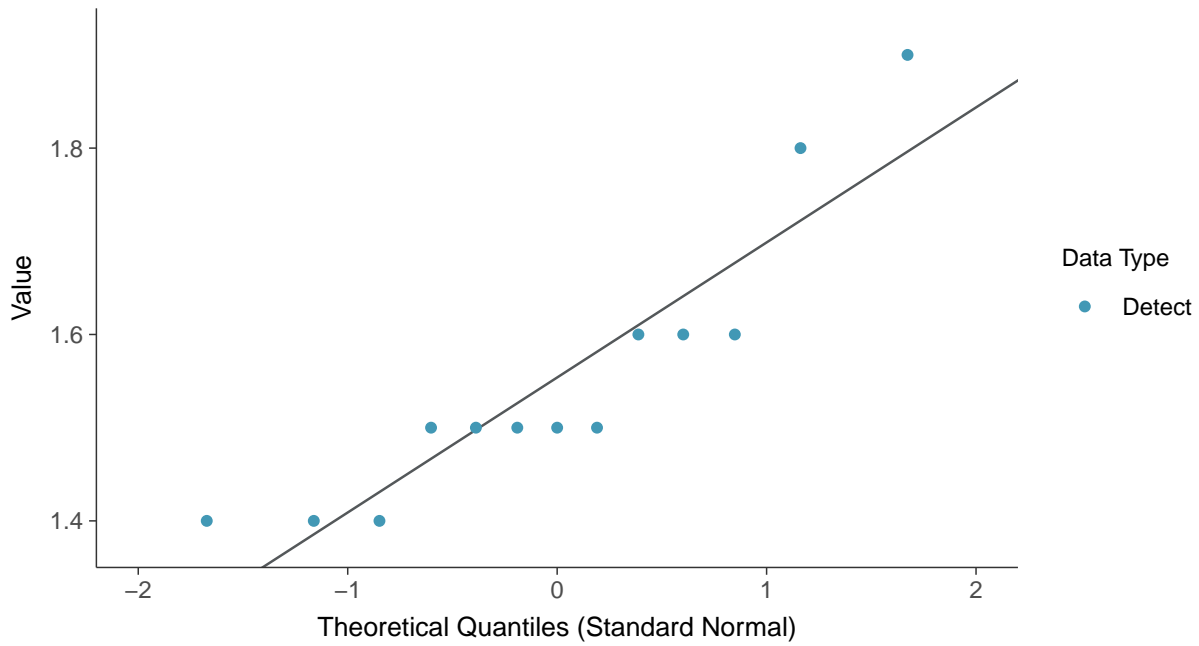
Fluoride, MW-32 (mg/L)





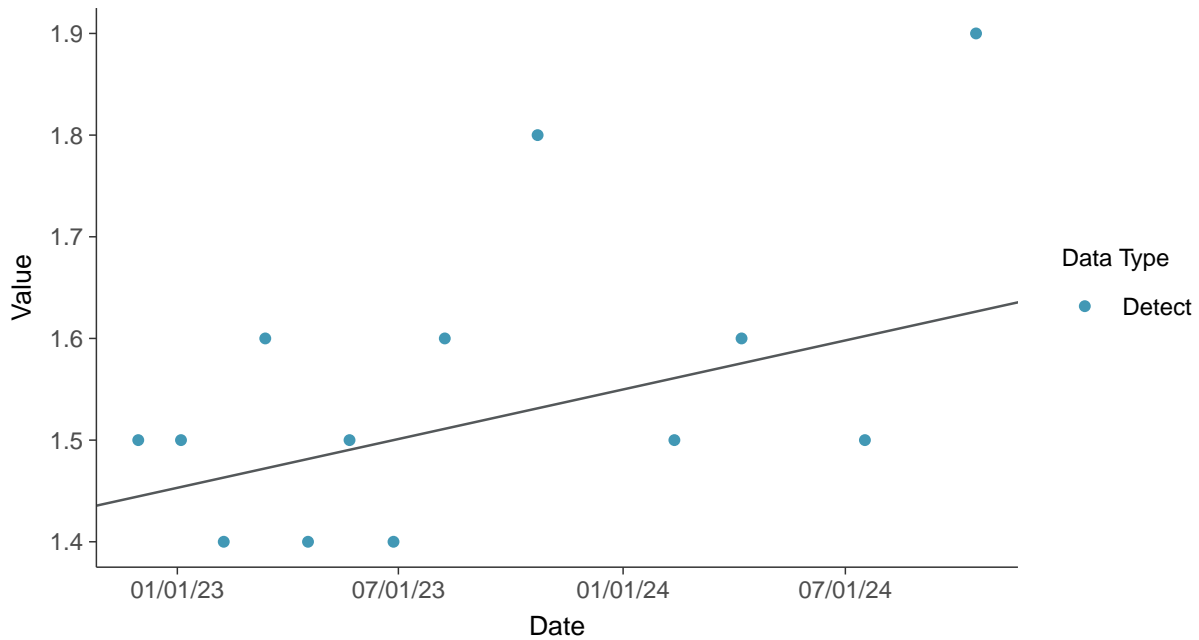
Normal Q-Q plot

Fluoride, MW-32 (mg/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

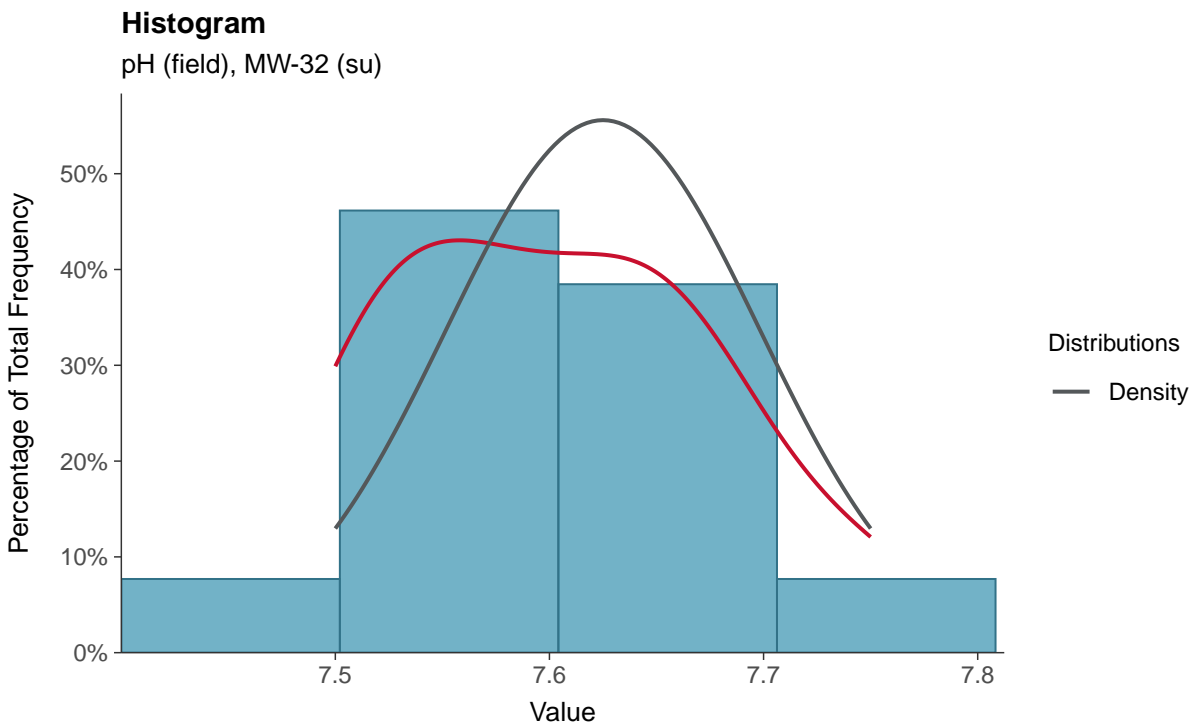
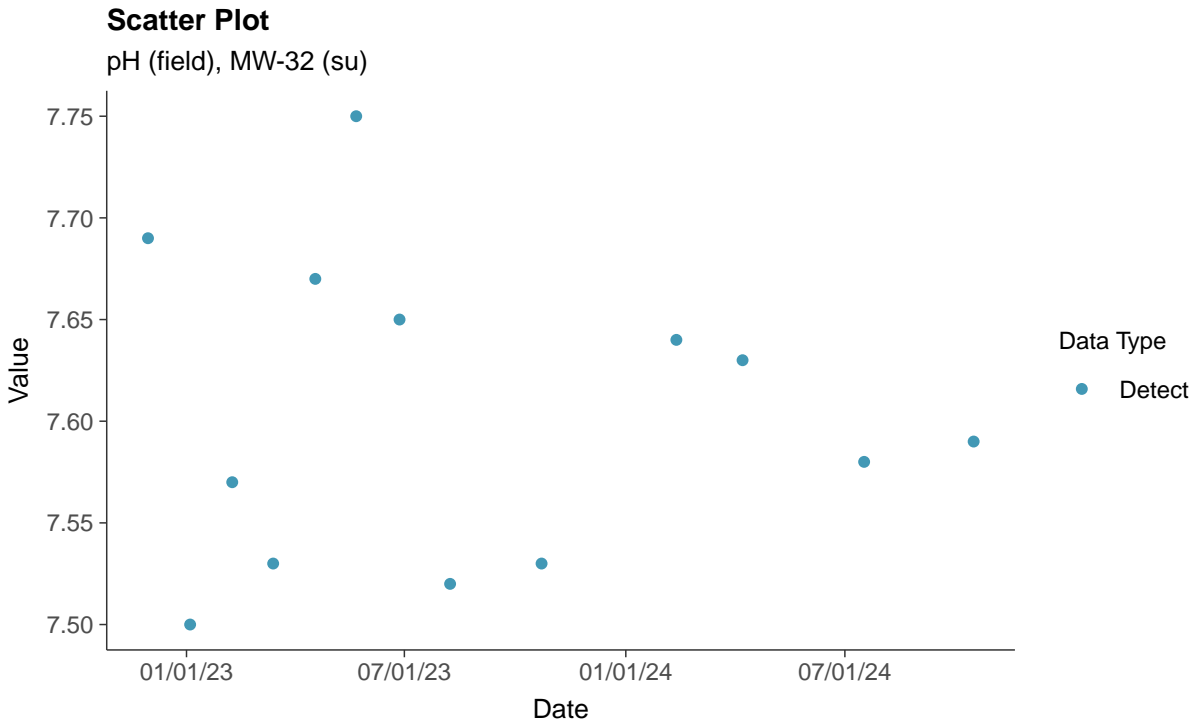
Fluoride, MW-32 (mg/L)





Appendix III: pH (field), MW-32

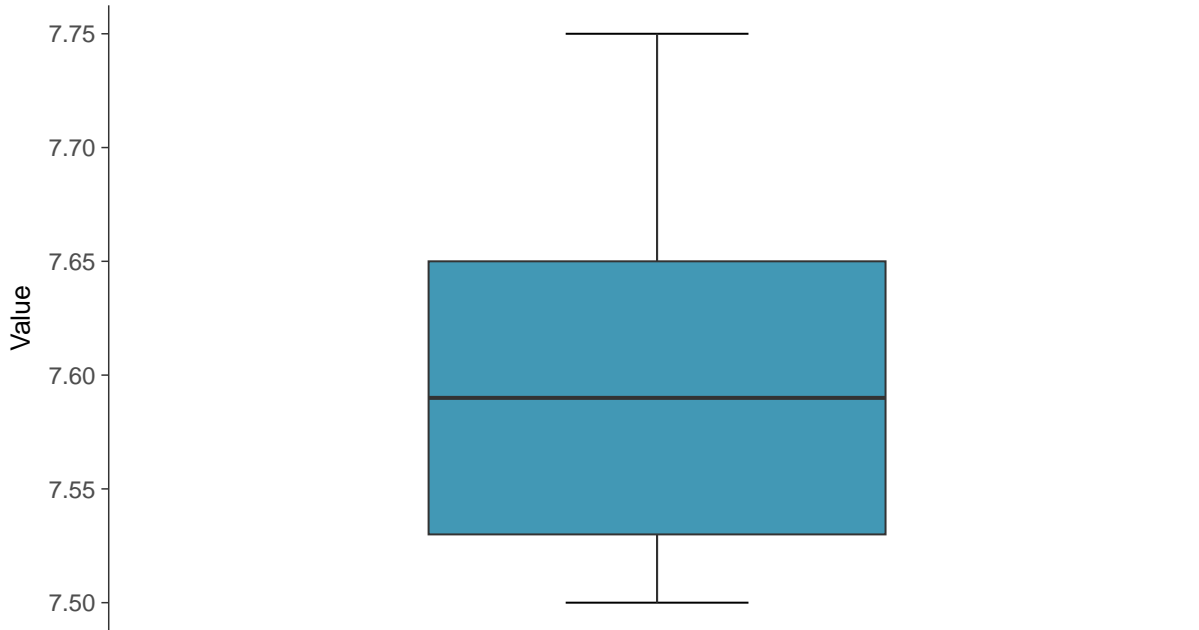
ID: 1_42_1_4_120





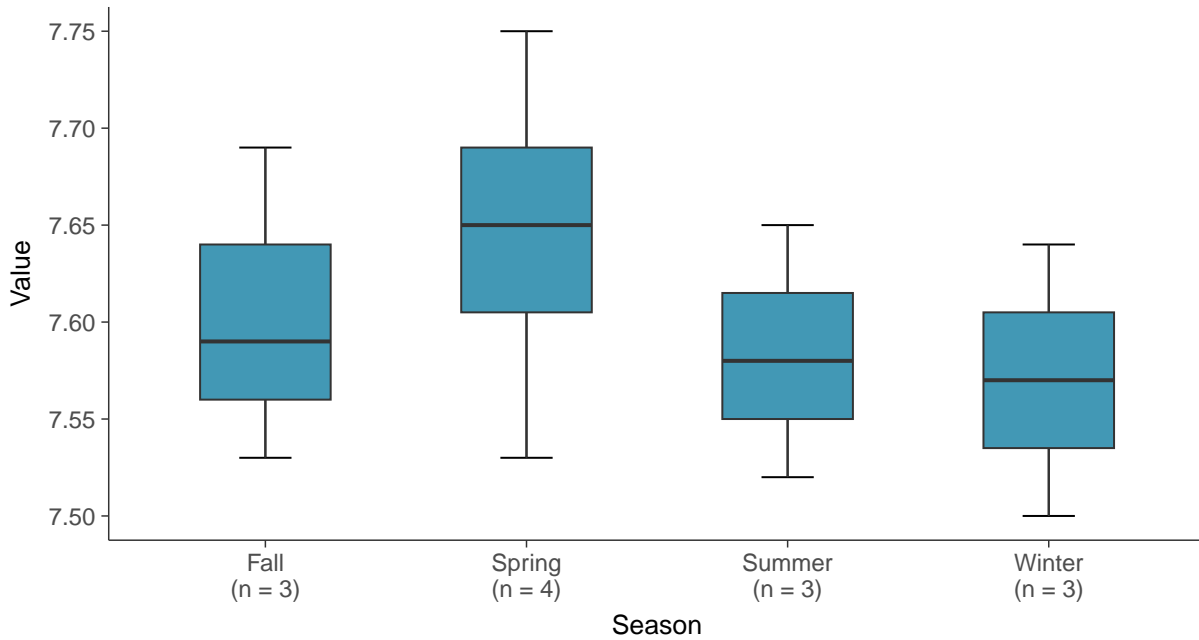
Boxplot

pH (field), MW-32 (su)



Boxplot by Season

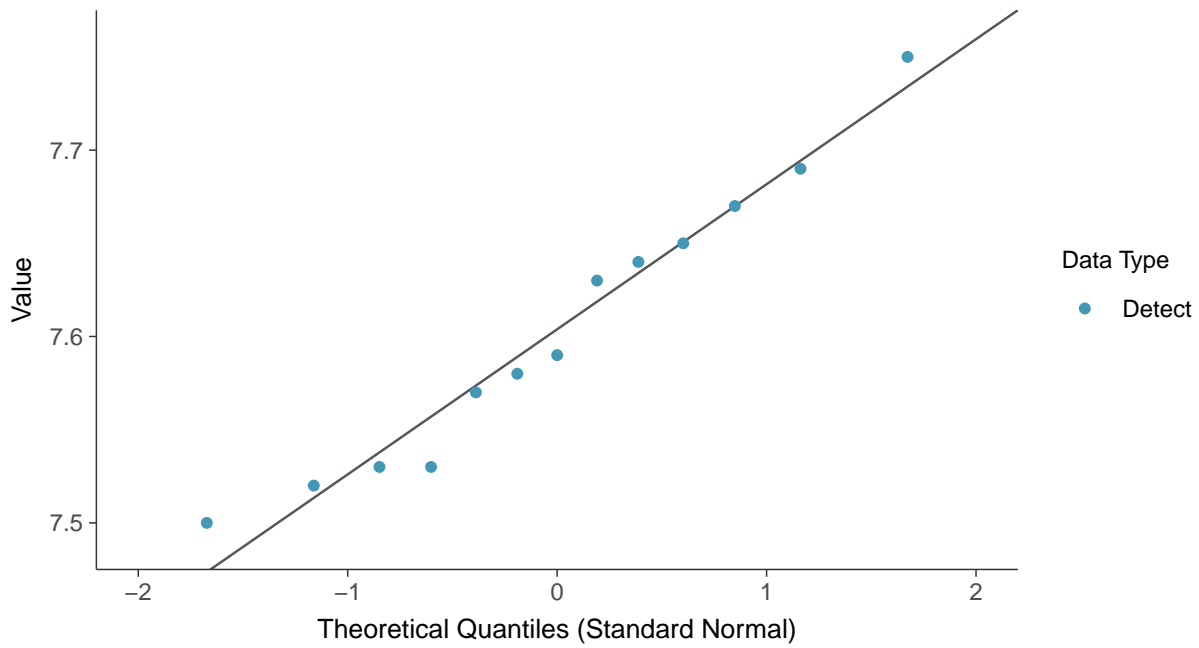
pH (field), MW-32 (su)





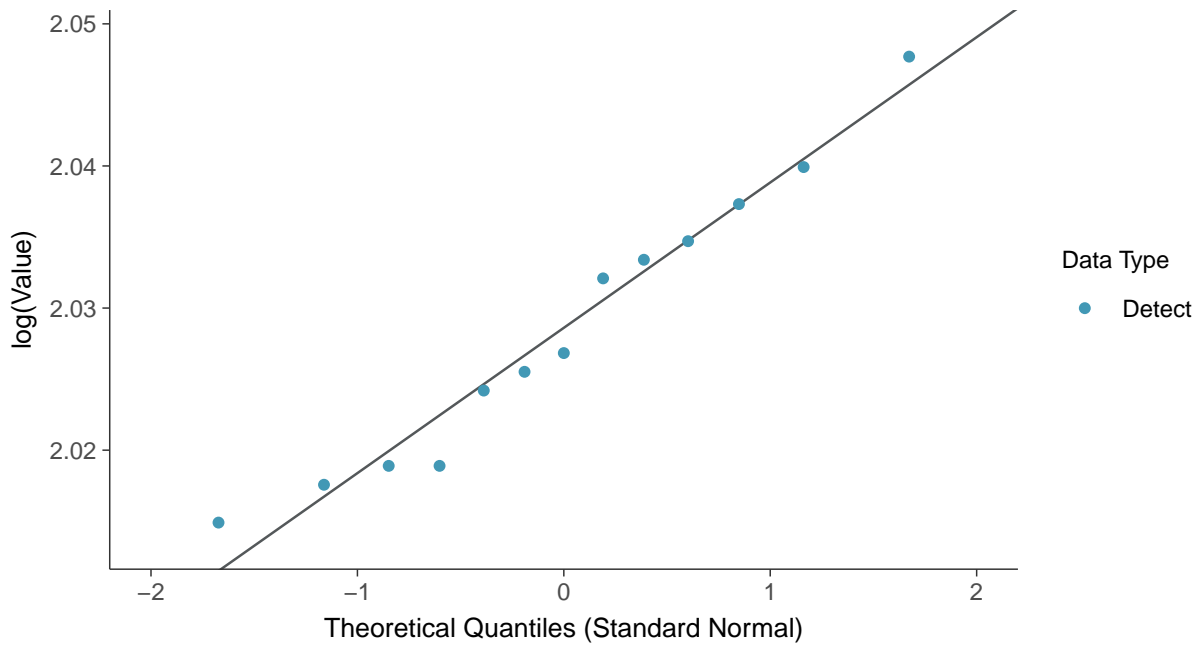
Normal Q-Q plot

pH (field), MW-32 (su)



Lognormal Q-Q plot

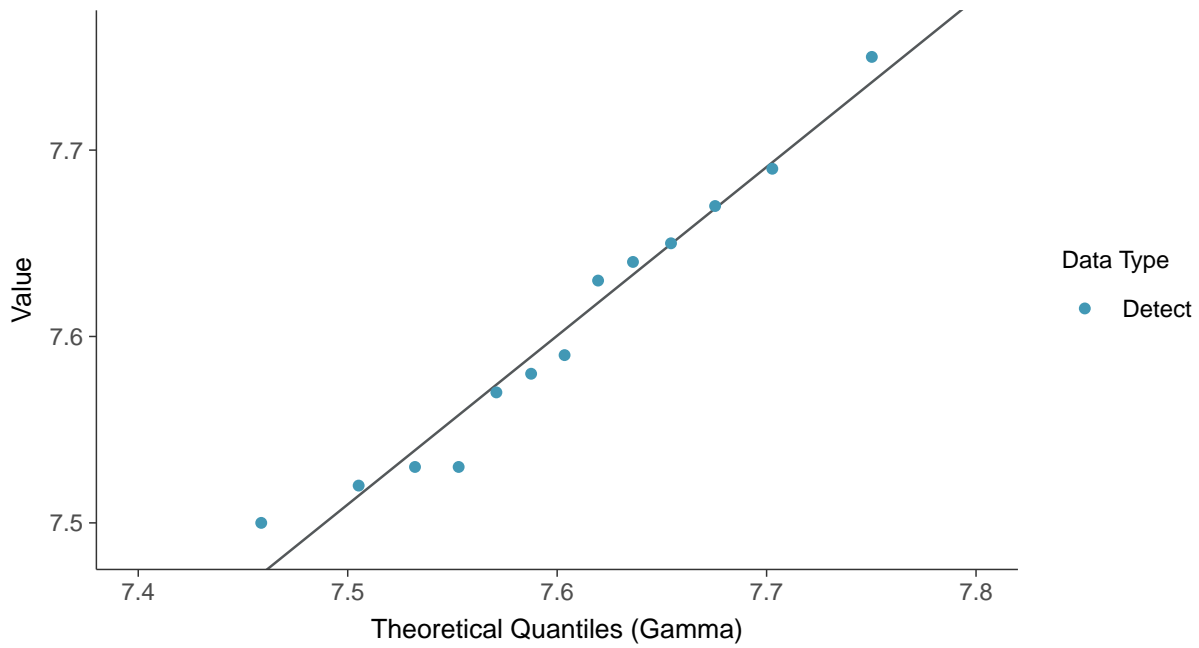
pH (field), MW-32 (su)





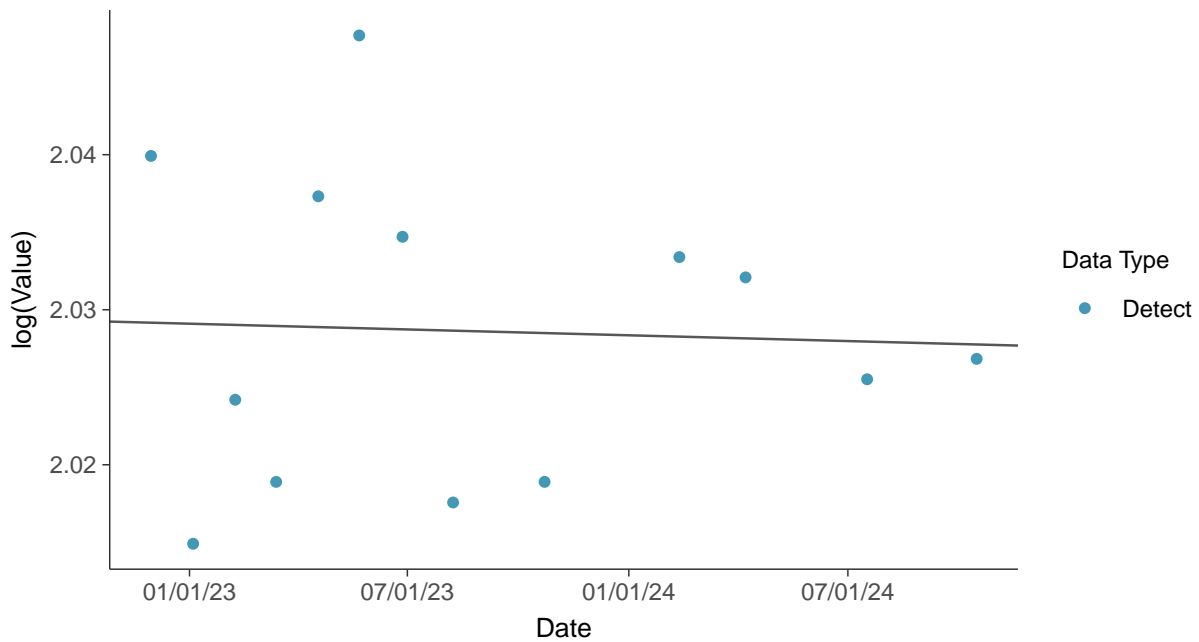
Gamma Q-Q plot

pH (field), MW-32 (su)



Trend Regression: Lognormal MLE

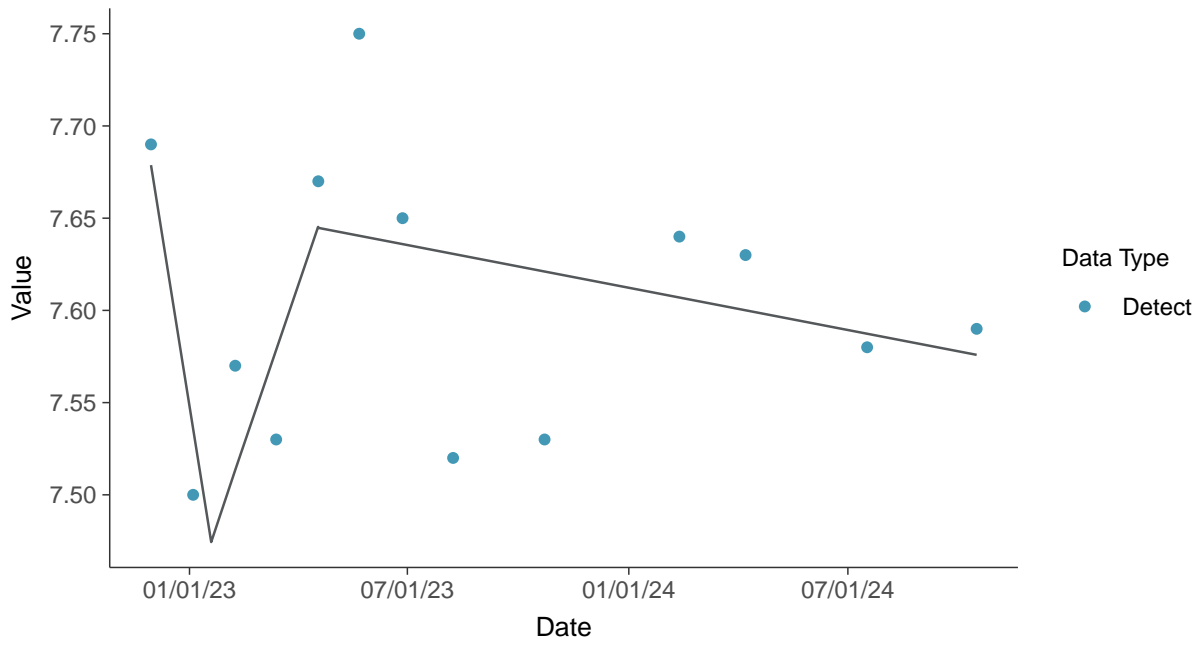
pH (field), MW-32 (su)





Trend Regression: Piecewise Linear-Linear-Linear

pH (field), MW-32 (su)



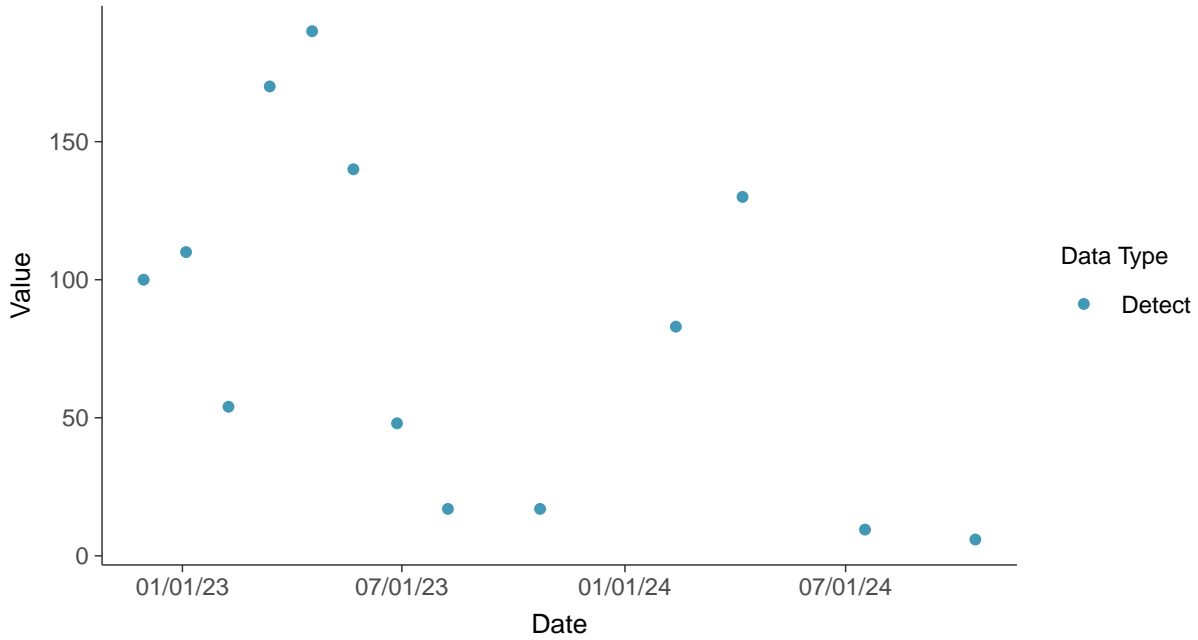


Appendix III: Sulfate (as SO4), MW-32

ID: 1_42_1_4_124

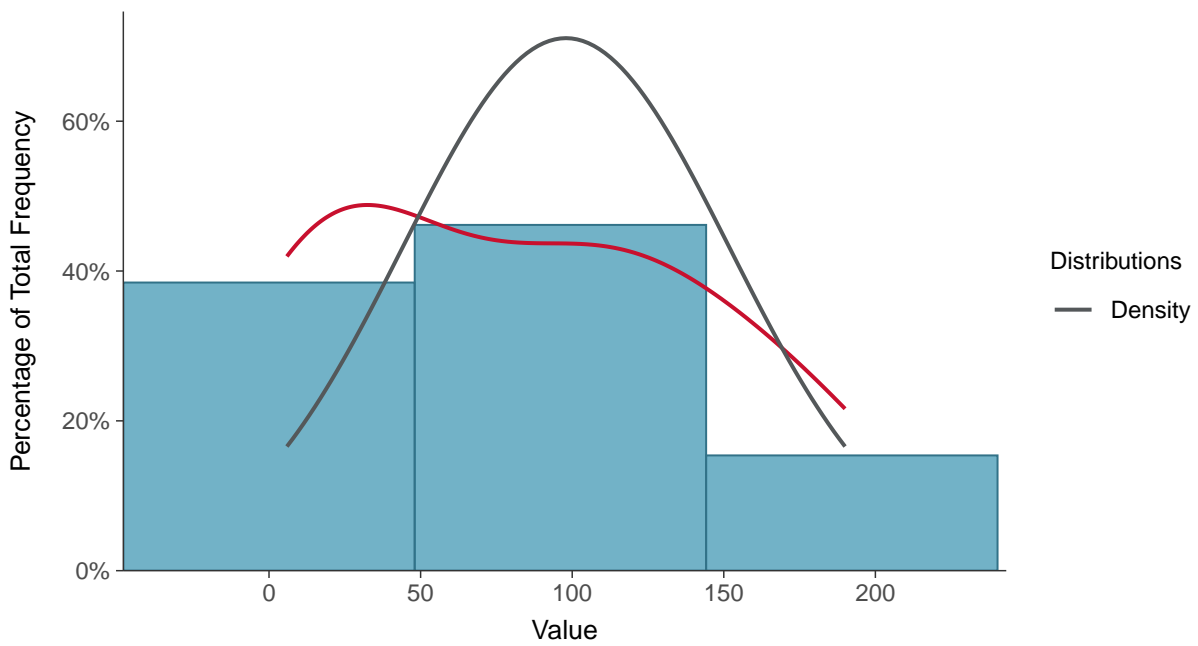
Scatter Plot

Sulfate (as SO4), MW-32 (mg/L)



Histogram

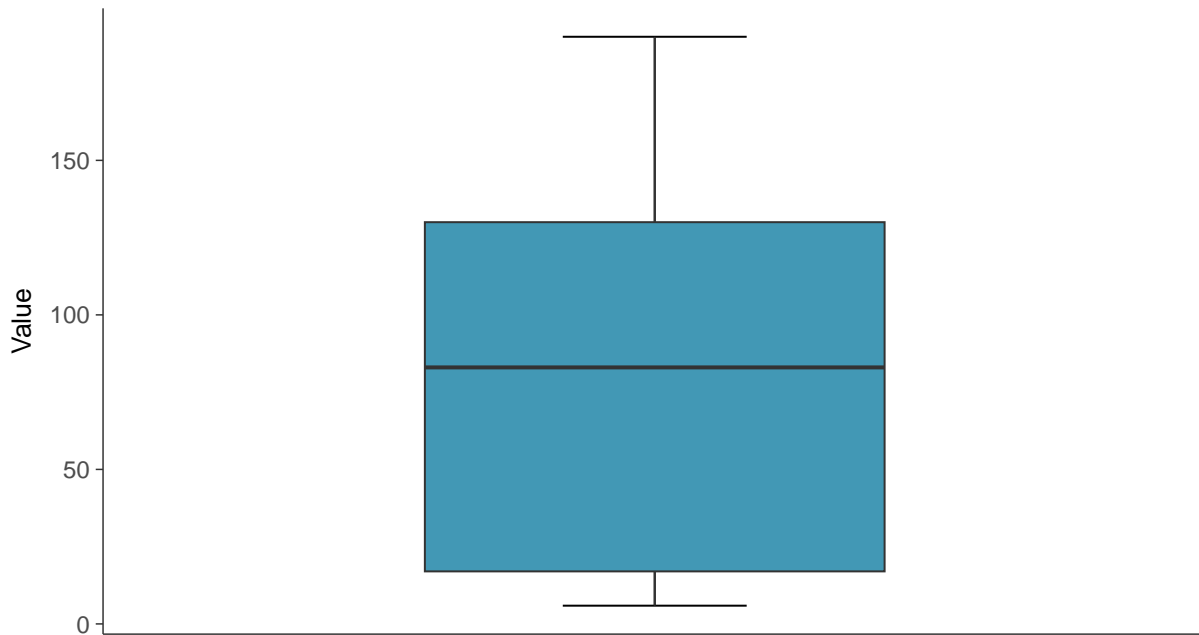
Sulfate (as SO4), MW-32 (mg/L)





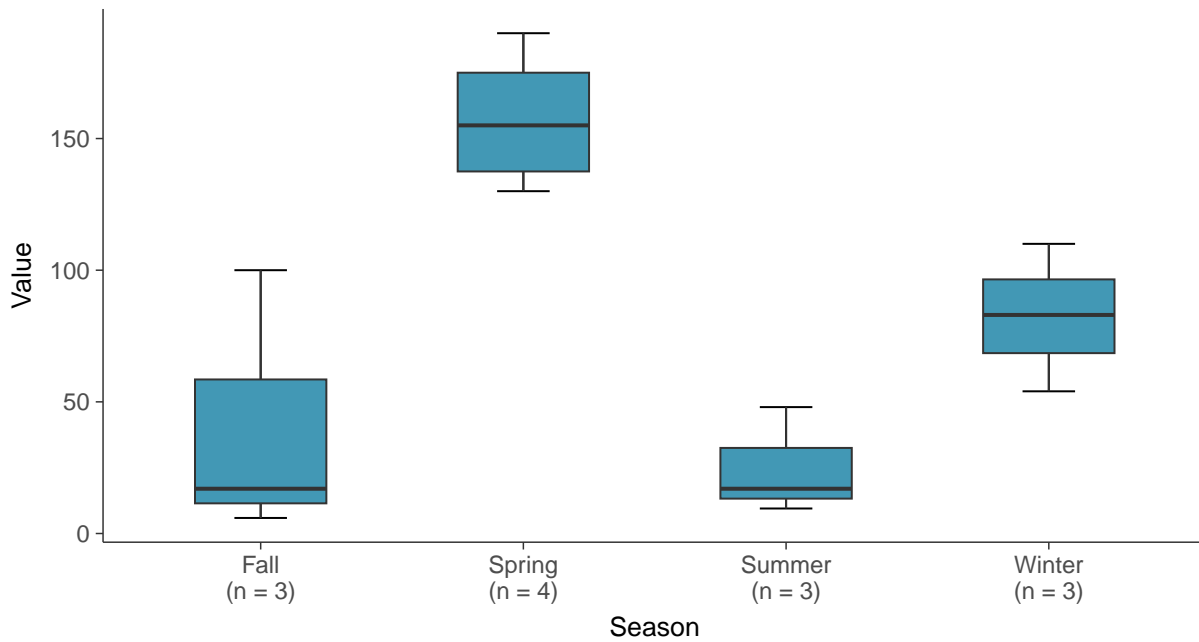
Boxplot

Sulfate (as SO₄), MW-32 (mg/L)



Boxplot by Season

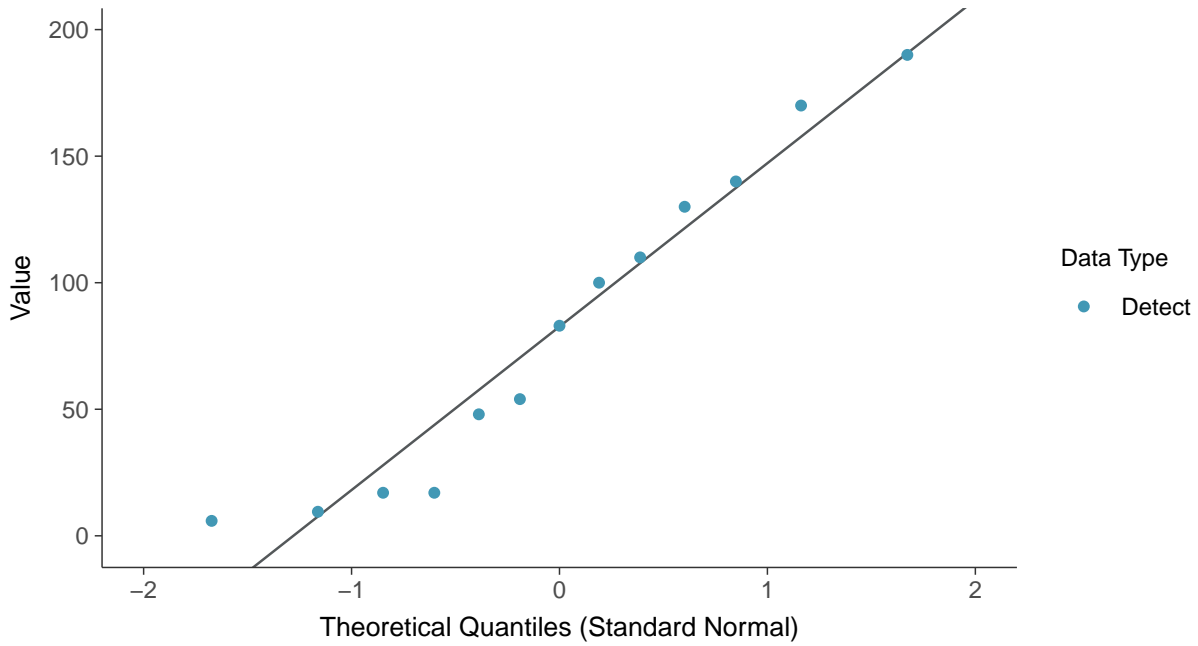
Sulfate (as SO₄), MW-32 (mg/L)





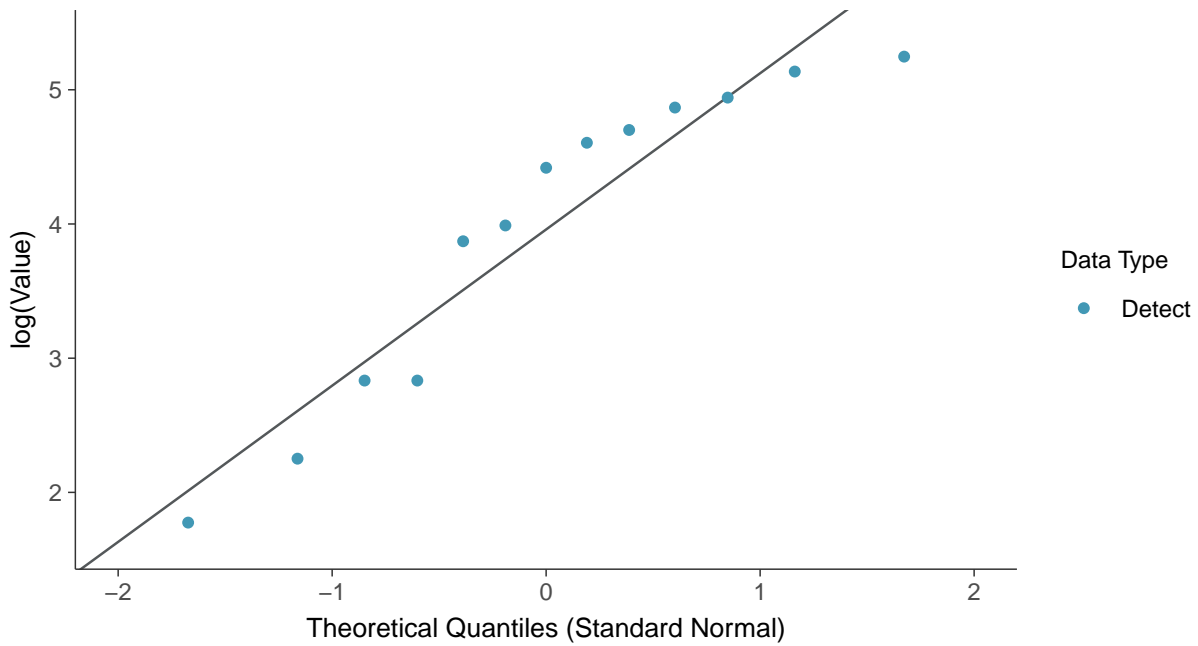
Normal Q-Q plot

Sulfate (as SO₄), MW-32 (mg/L)



Lognormal Q-Q plot

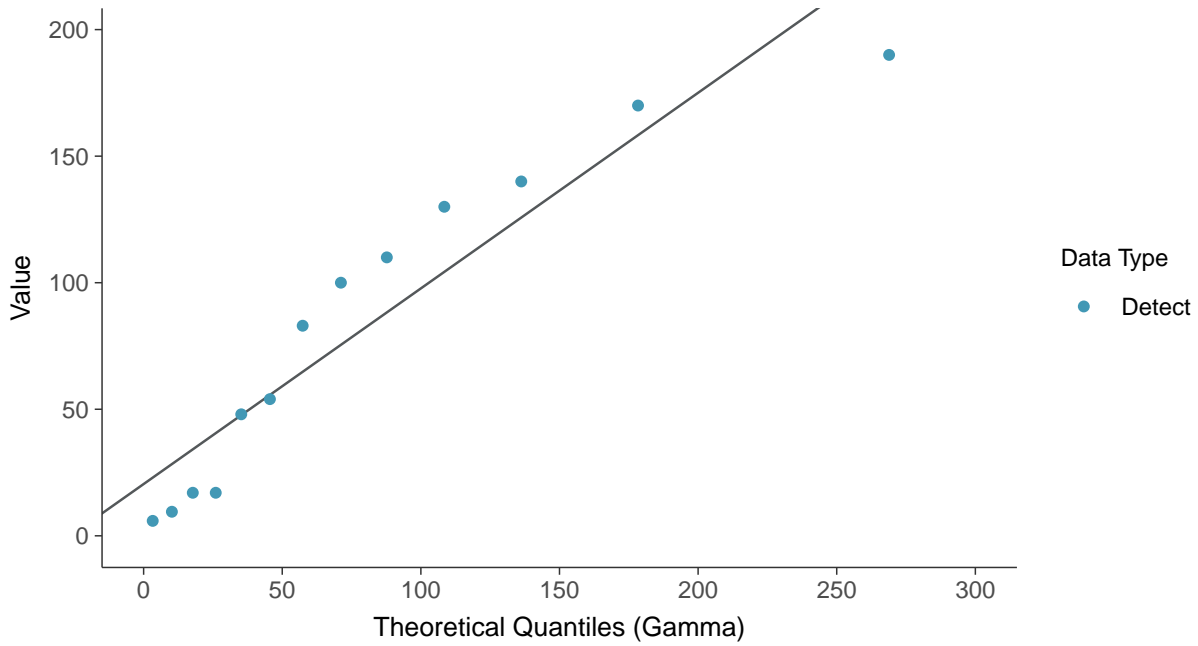
Sulfate (as SO₄), MW-32 (mg/L)





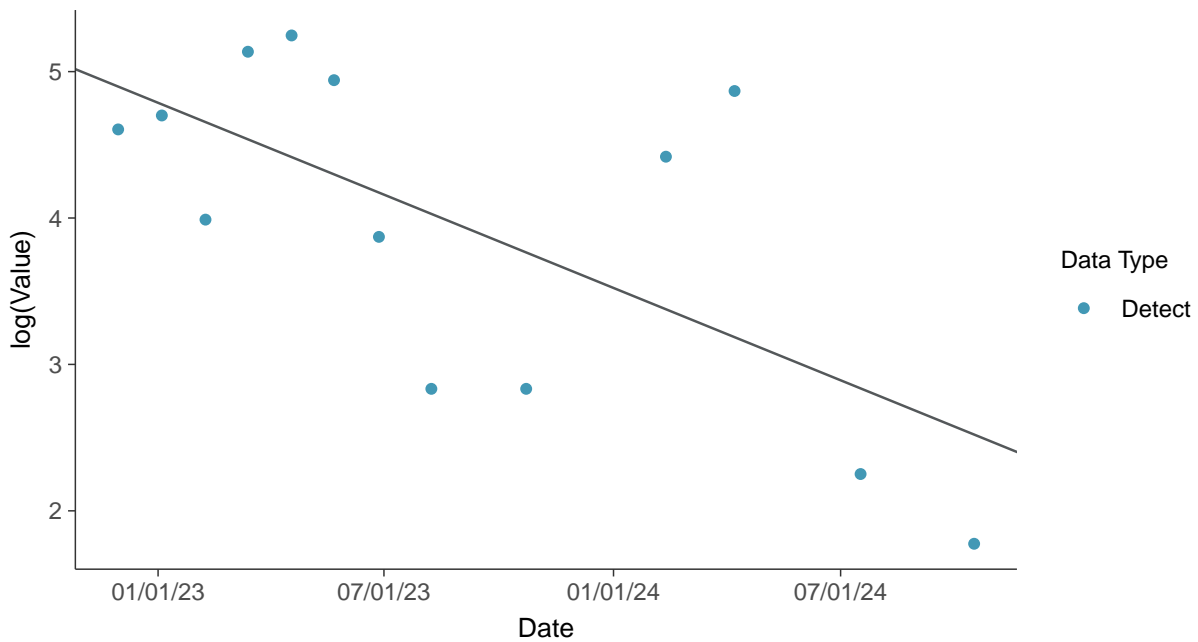
Gamma Q-Q plot

Sulfate (as SO₄), MW-32 (mg/L)



Trend Regression: Lognormal MLE

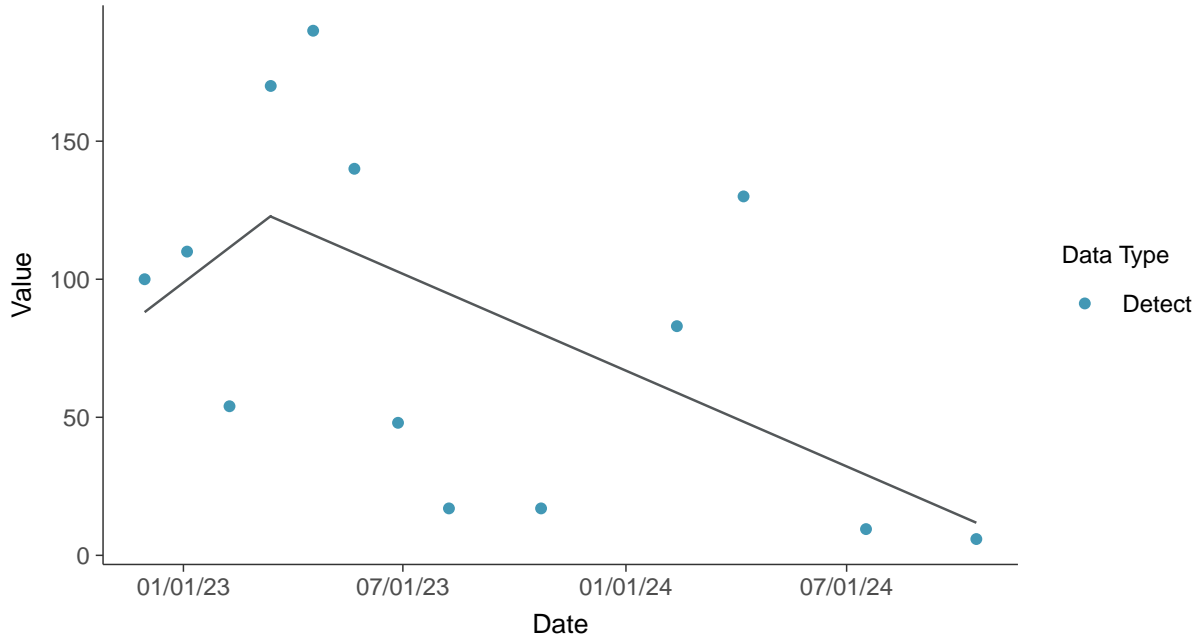
Sulfate (as SO₄), MW-32 (mg/L)





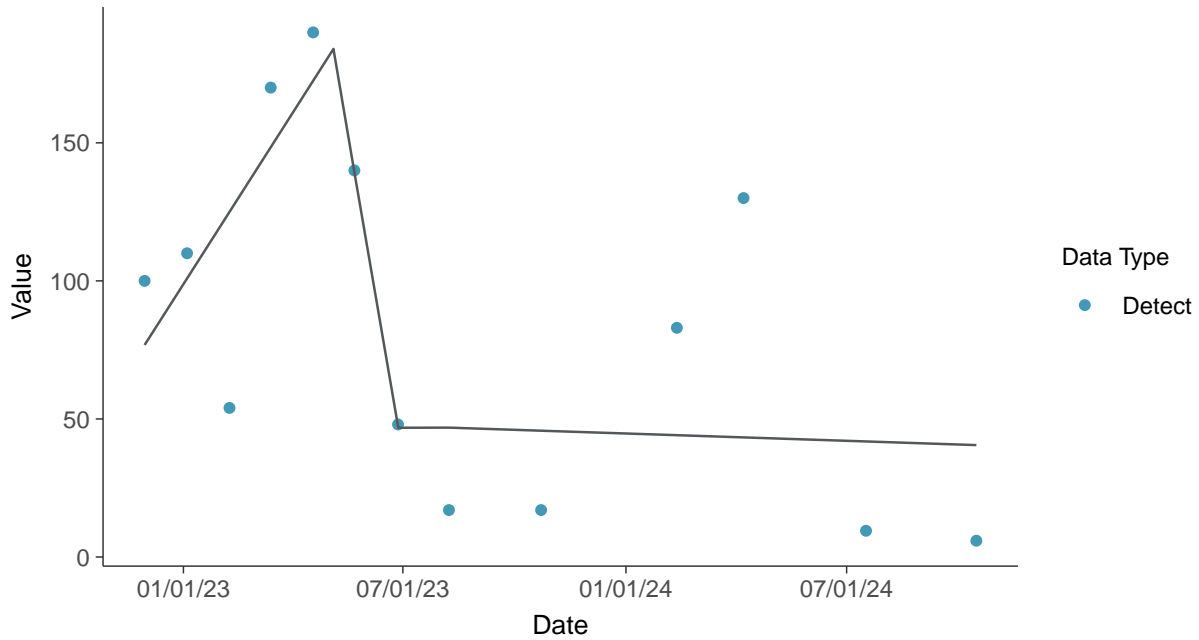
Trend Regression: Piecewise Linear-Linear

Sulfate (as SO4), MW-32 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Sulfate (as SO4), MW-32 (mg/L)



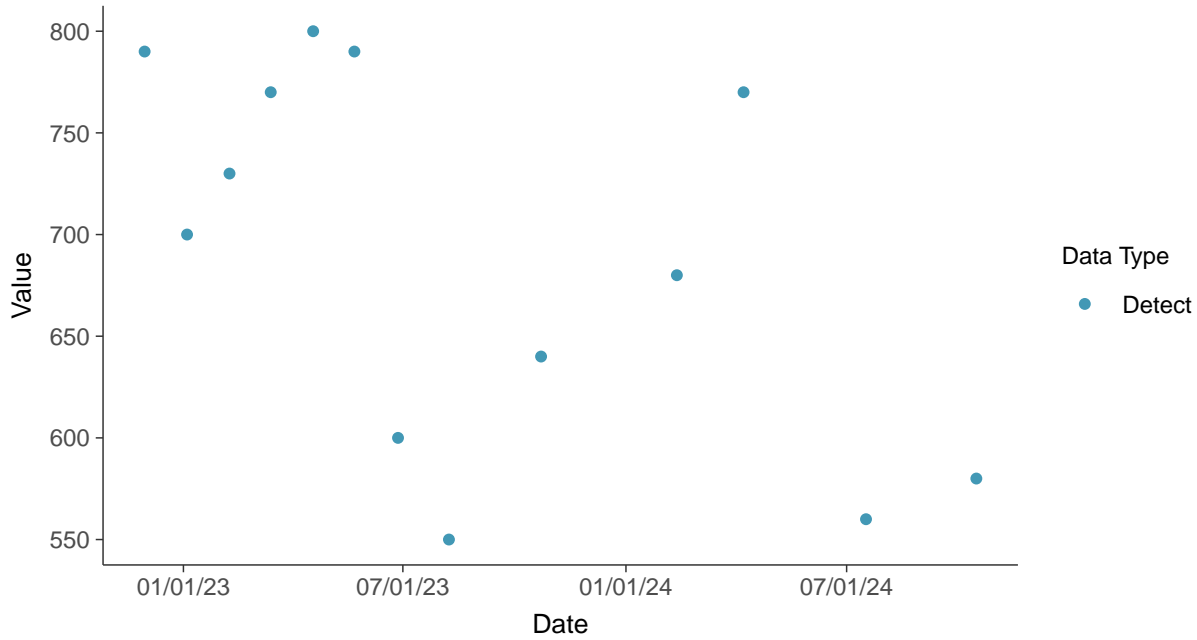


Appendix III: Total Dissolved Solids, MW-32

ID: 1_42_1_4_126

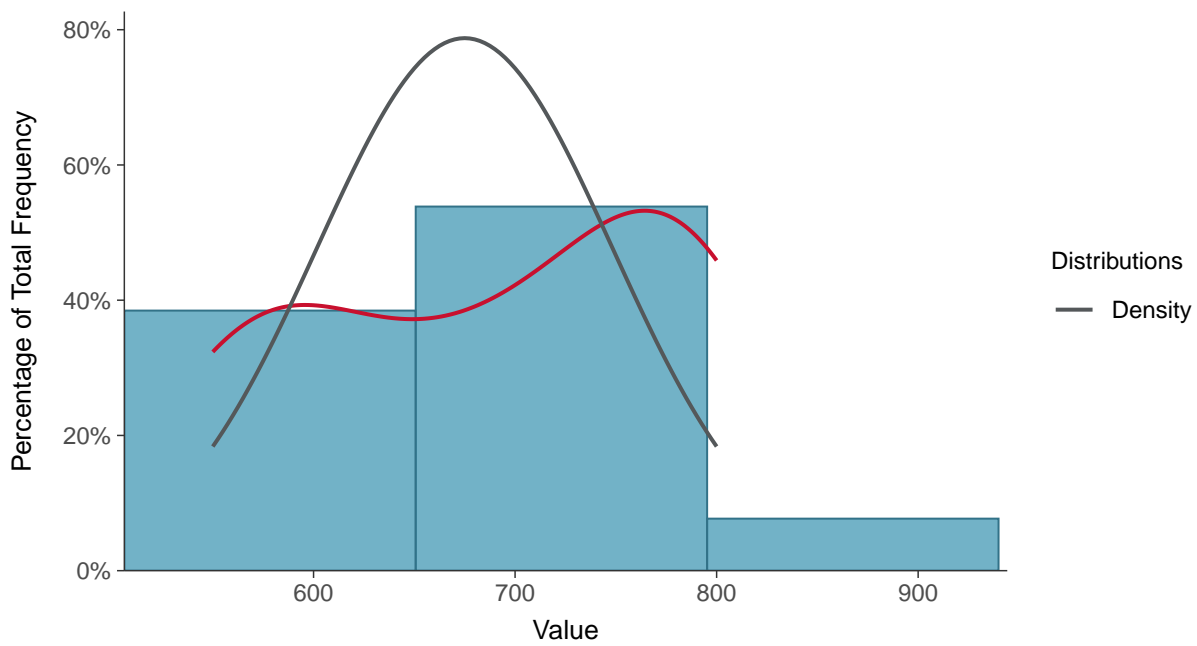
Scatter Plot

Total Dissolved Solids, MW-32 (mg/L)



Histogram

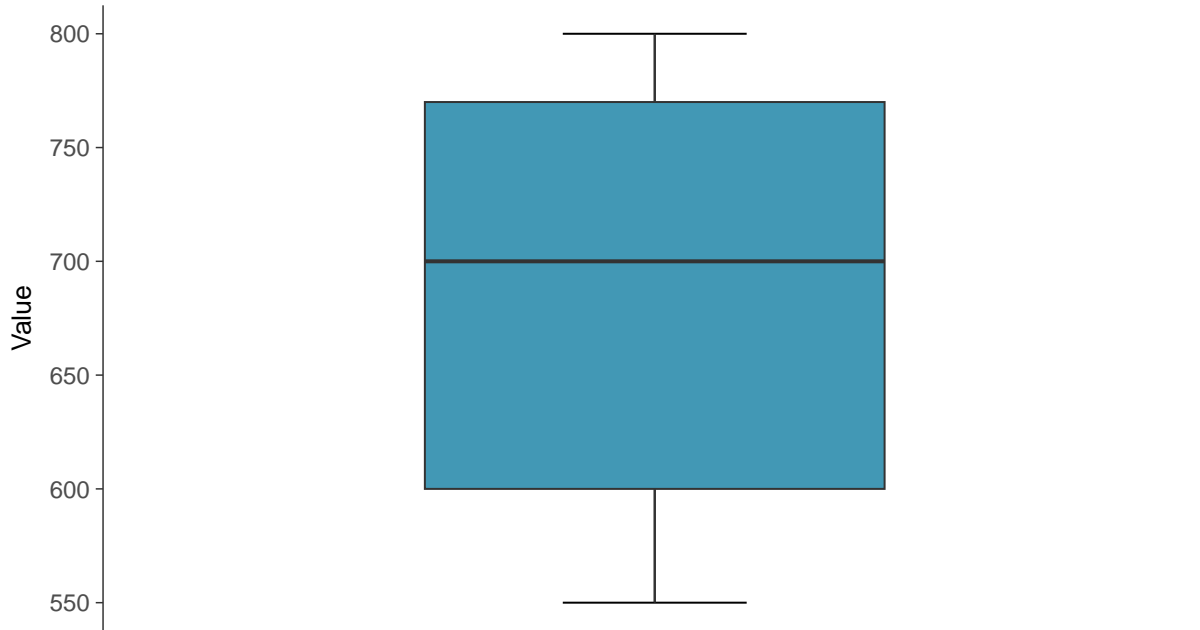
Total Dissolved Solids, MW-32 (mg/L)





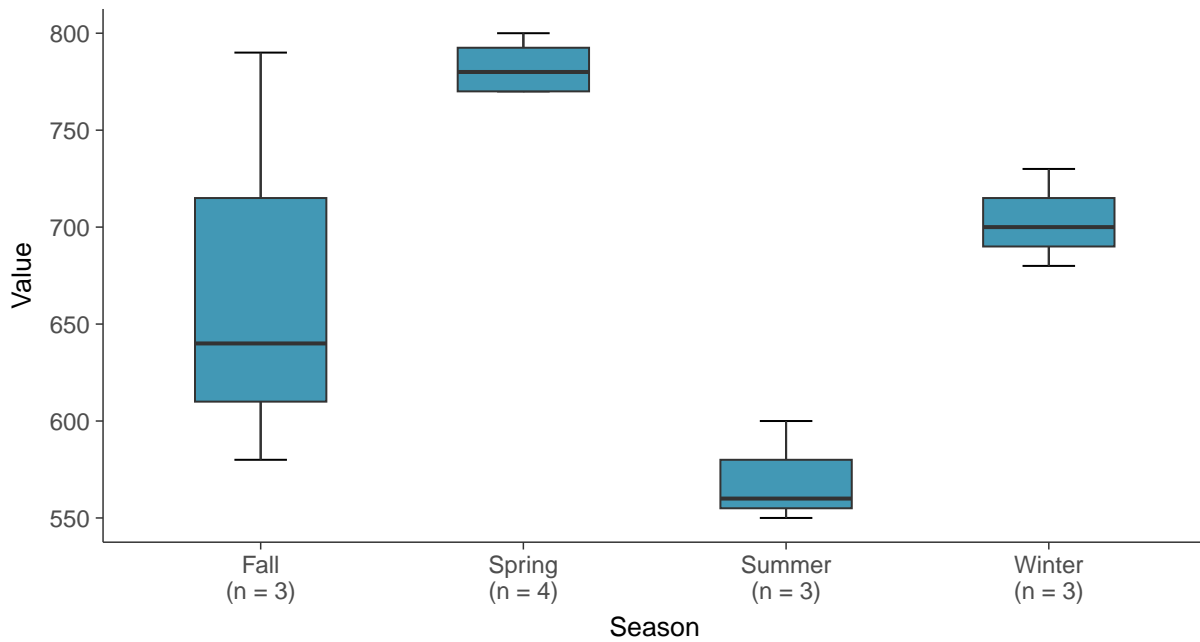
Boxplot

Total Dissolved Solids, MW-32 (mg/L)



Boxplot by Season

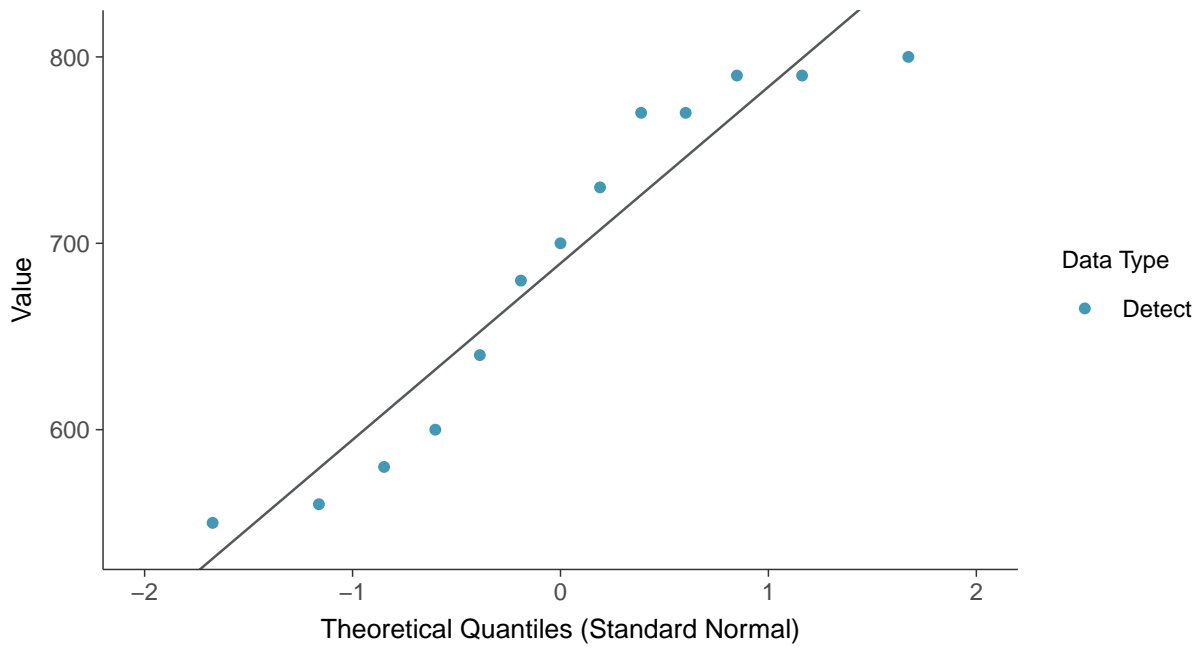
Total Dissolved Solids, MW-32 (mg/L)





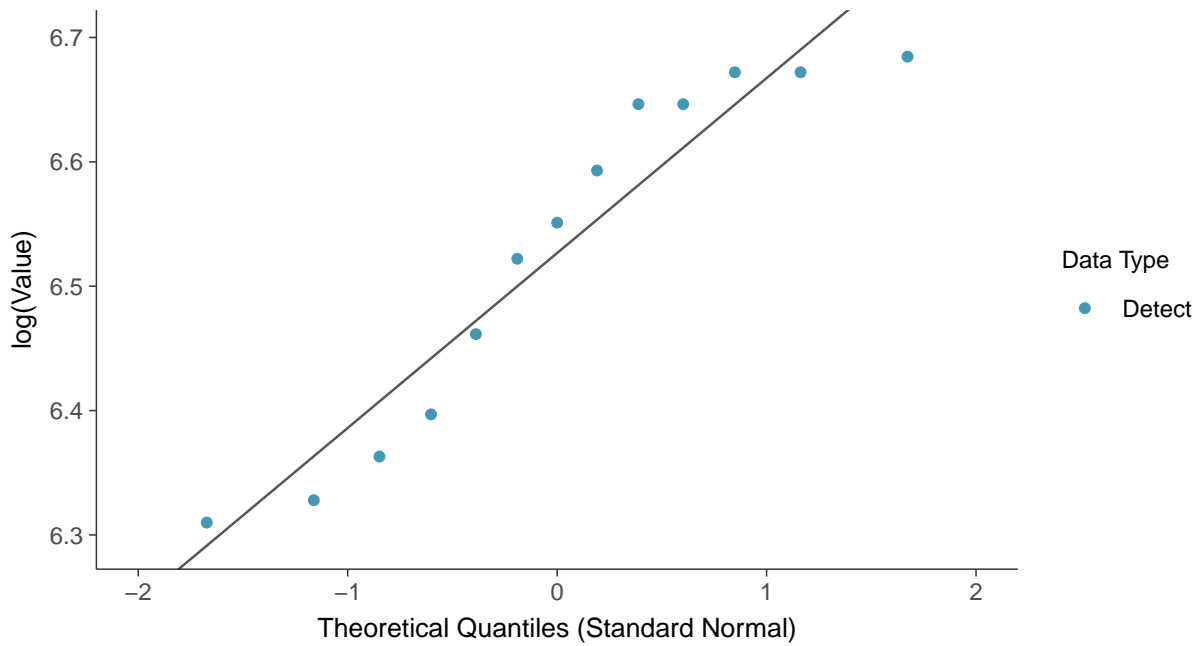
Normal Q-Q plot

Total Dissolved Solids, MW-32 (mg/L)



Lognormal Q-Q plot

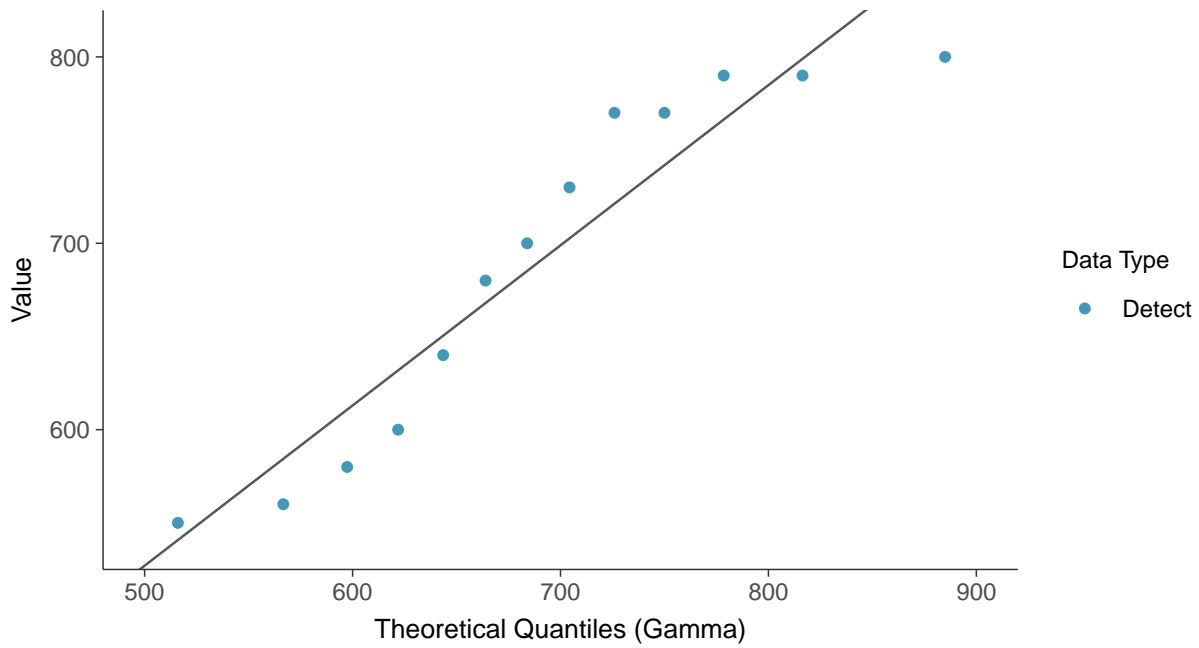
Total Dissolved Solids, MW-32 (mg/L)





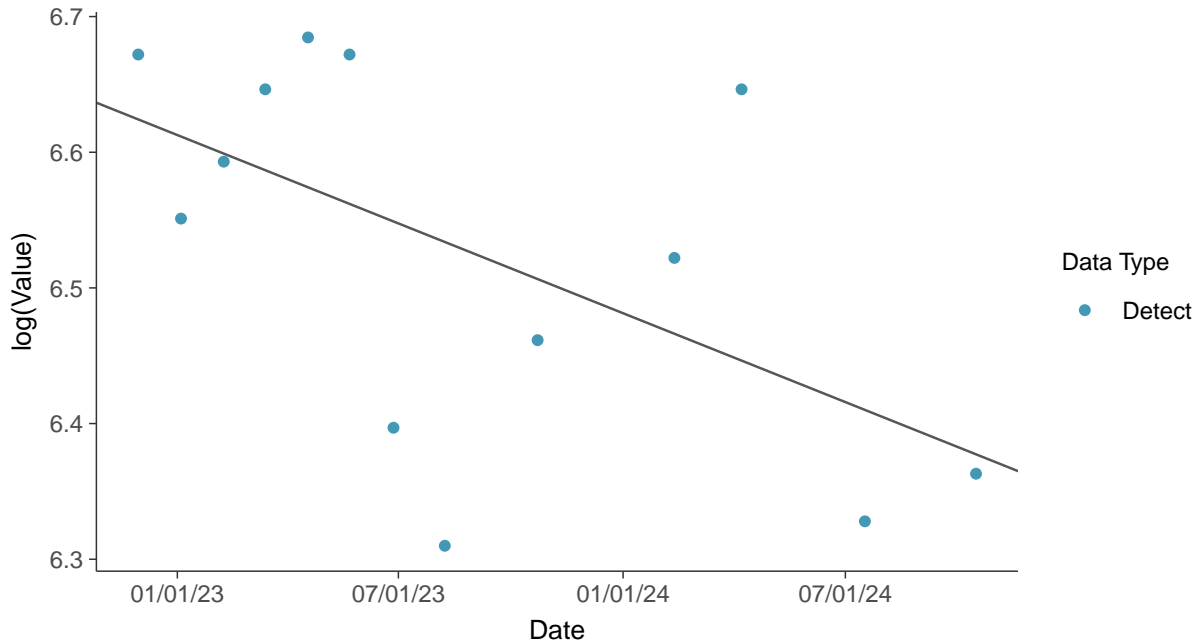
Gamma Q-Q plot

Total Dissolved Solids, MW-32 (mg/L)



Trend Regression: Lognormal MLE

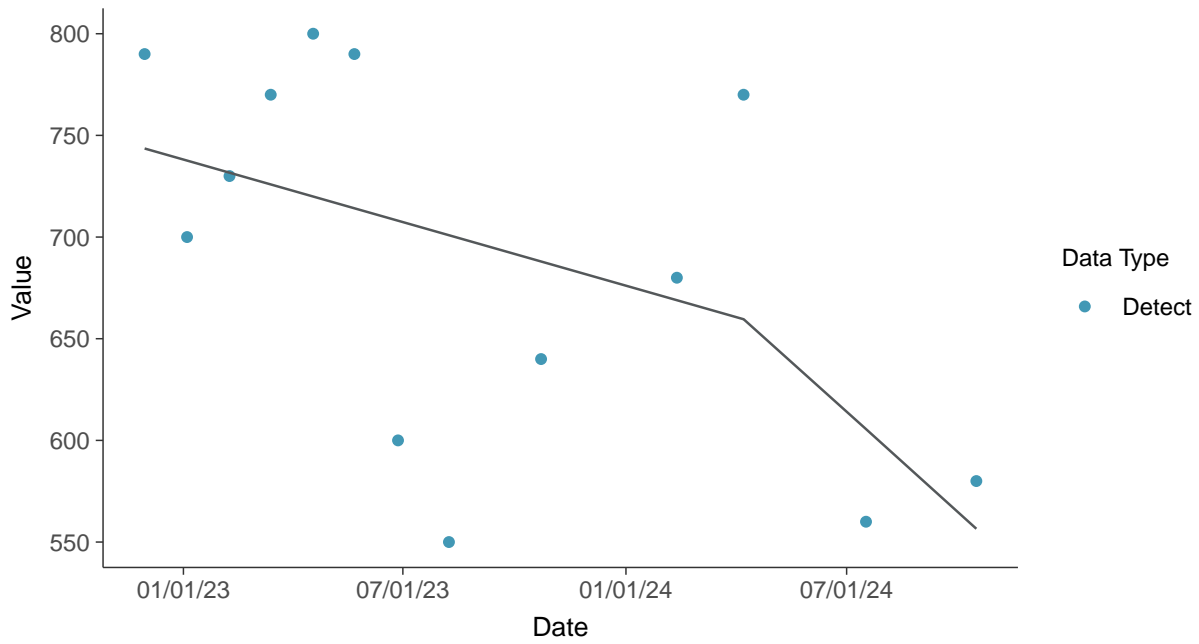
Total Dissolved Solids, MW-32 (mg/L)





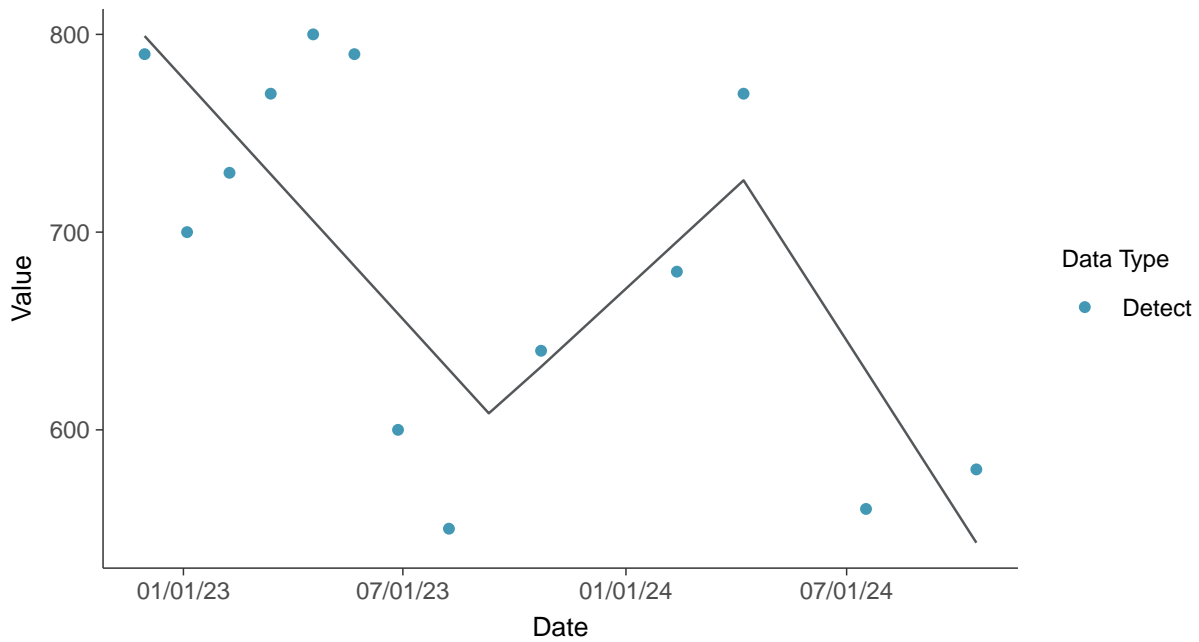
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-32 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Total Dissolved Solids, MW-32 (mg/L)



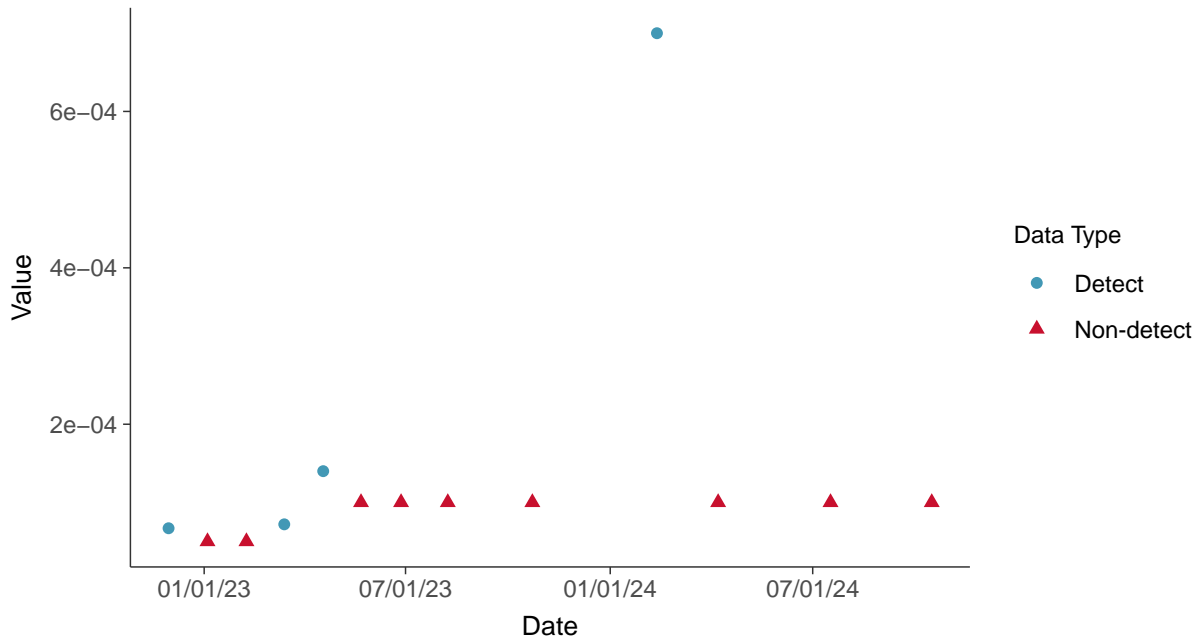


Appendix IV: Antimony, MW-32

ID: 1_42_1_5_101

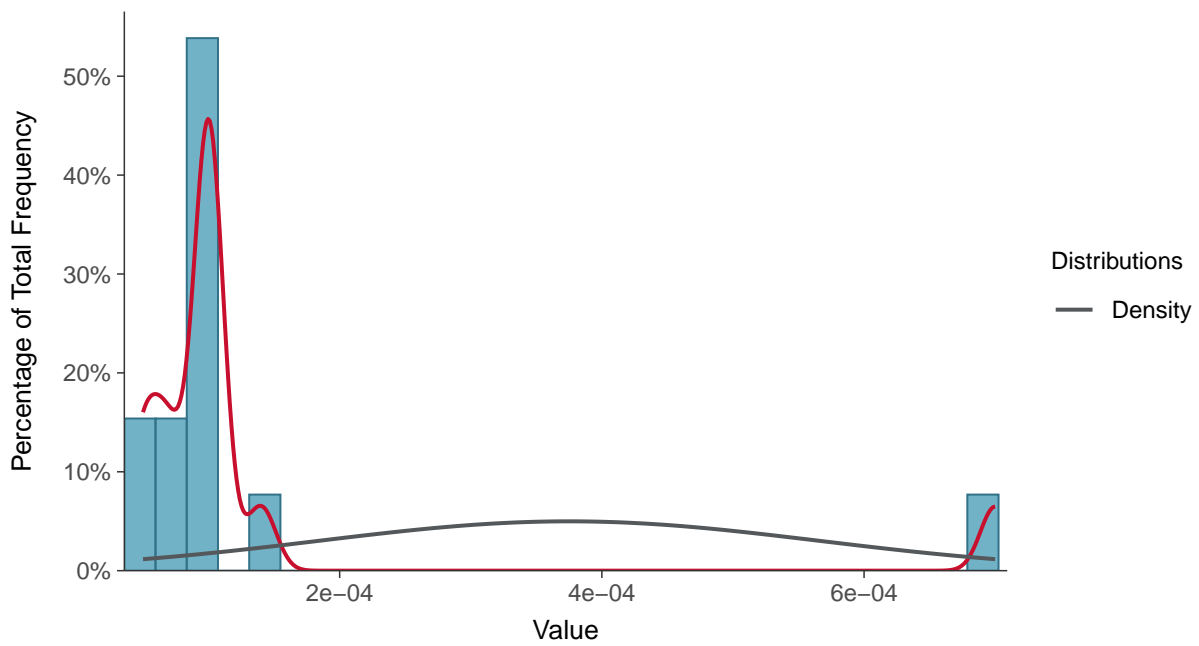
Scatter Plot

Antimony, MW-32 (mg/L)



Histogram

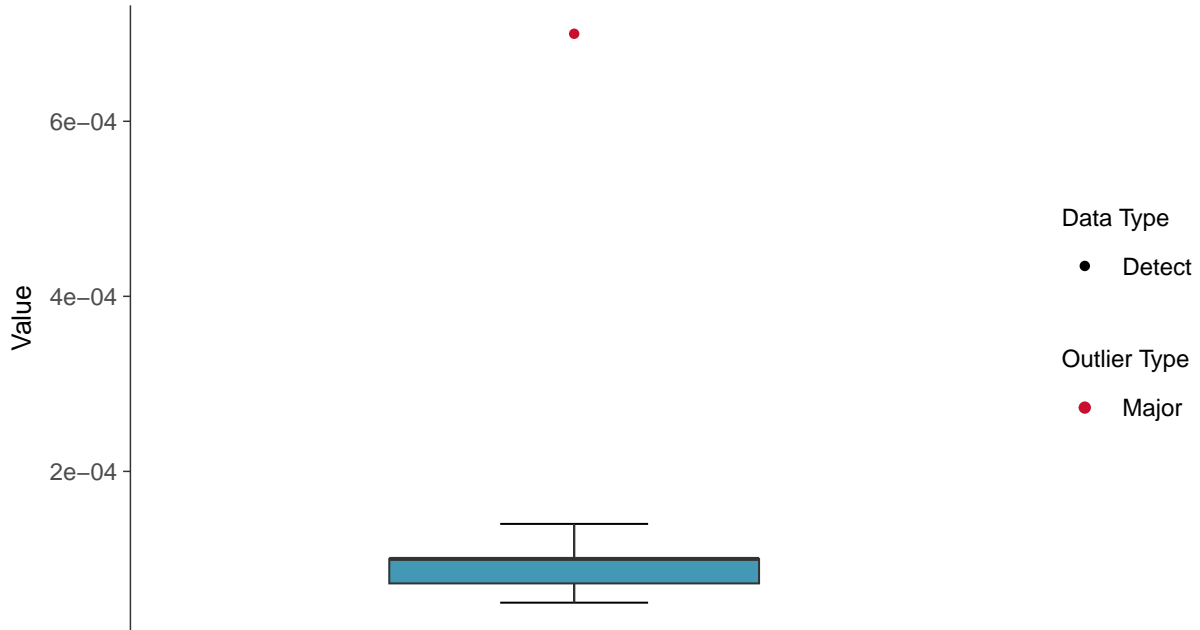
Antimony, MW-32 (mg/L)





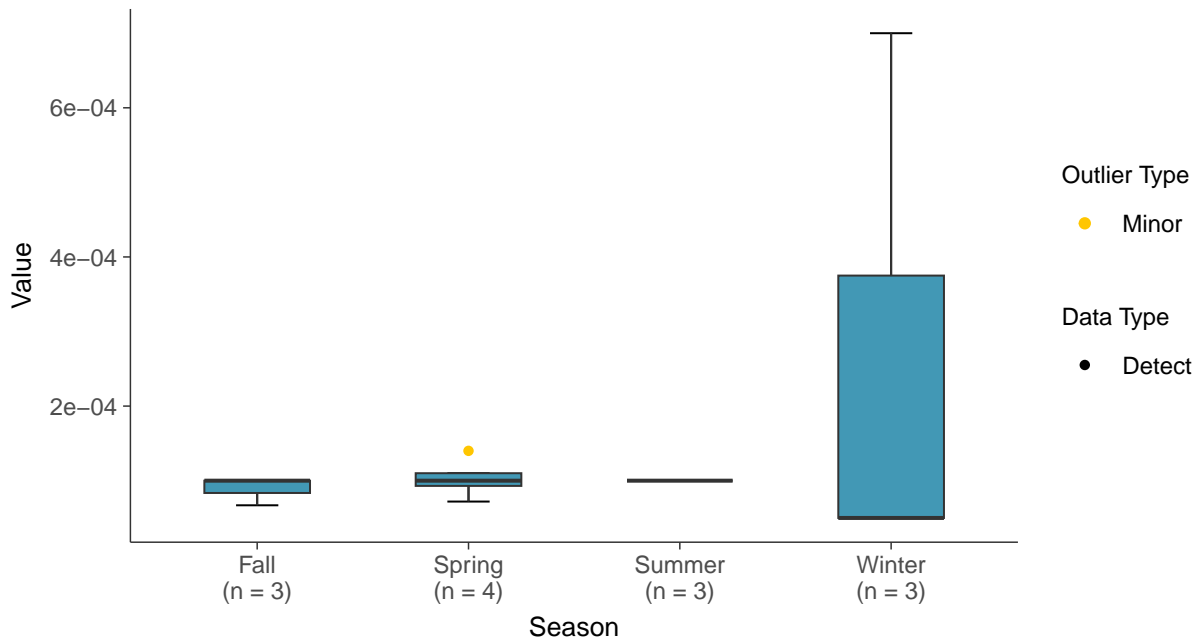
Boxplot

Antimony, MW-32 (mg/L)



Boxplot by Season

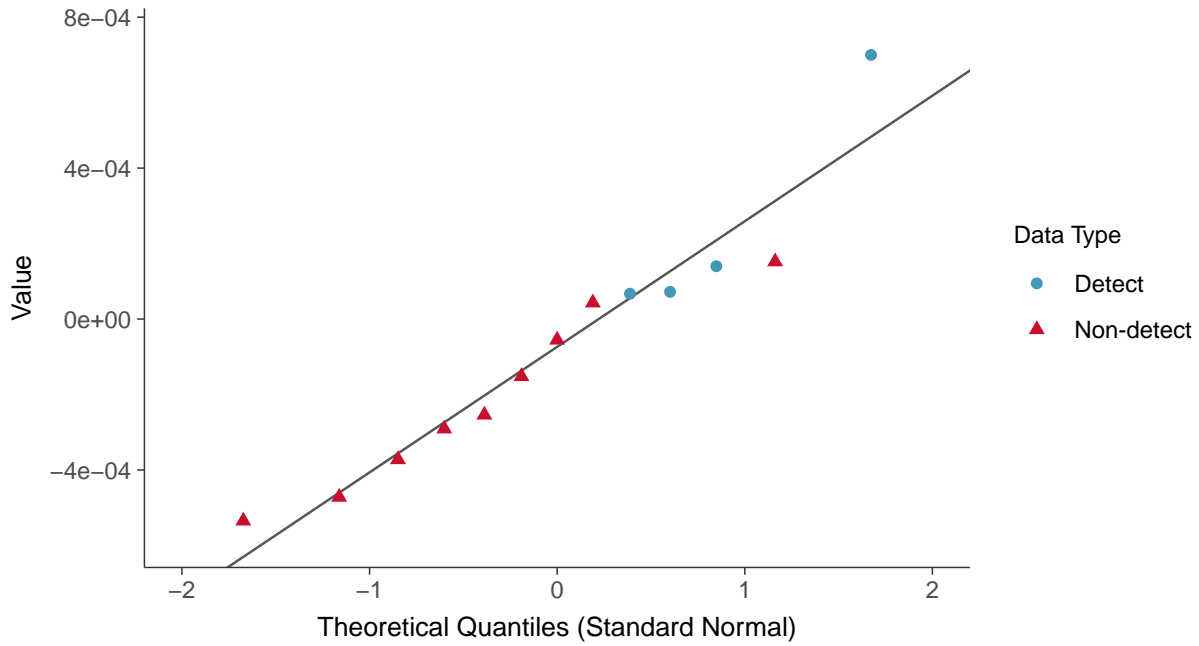
Antimony, MW-32 (mg/L)





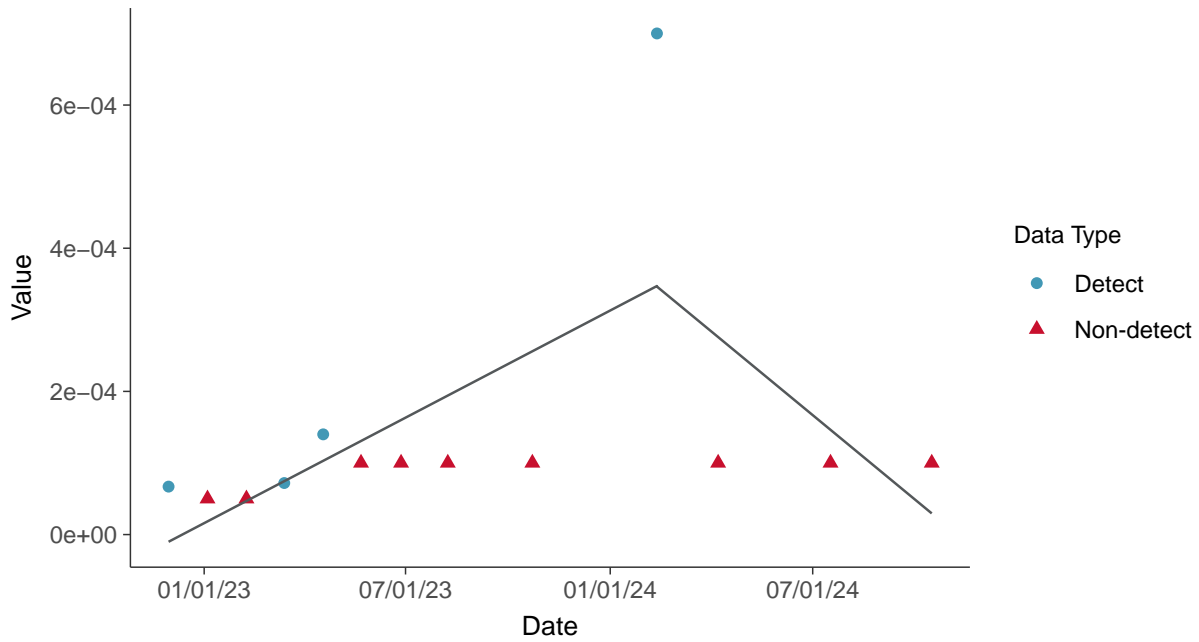
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-32 (mg/L)



Trend Regression: Piecewise Linear-Linear

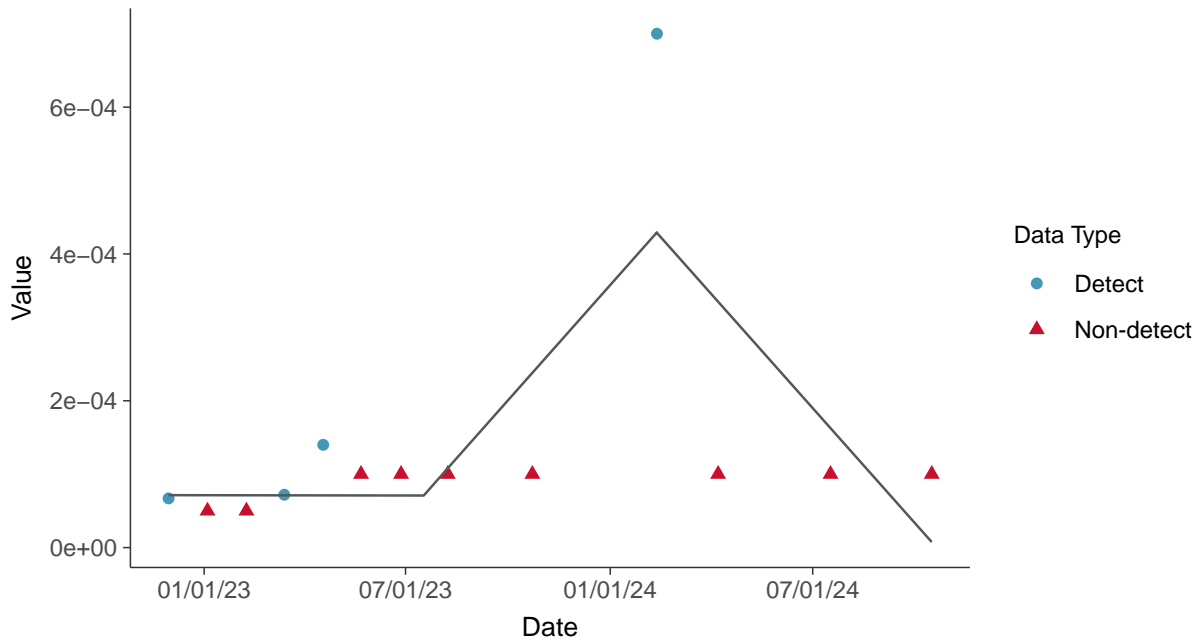
Antimony, MW-32 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

Antimony, MW-32 (mg/L)



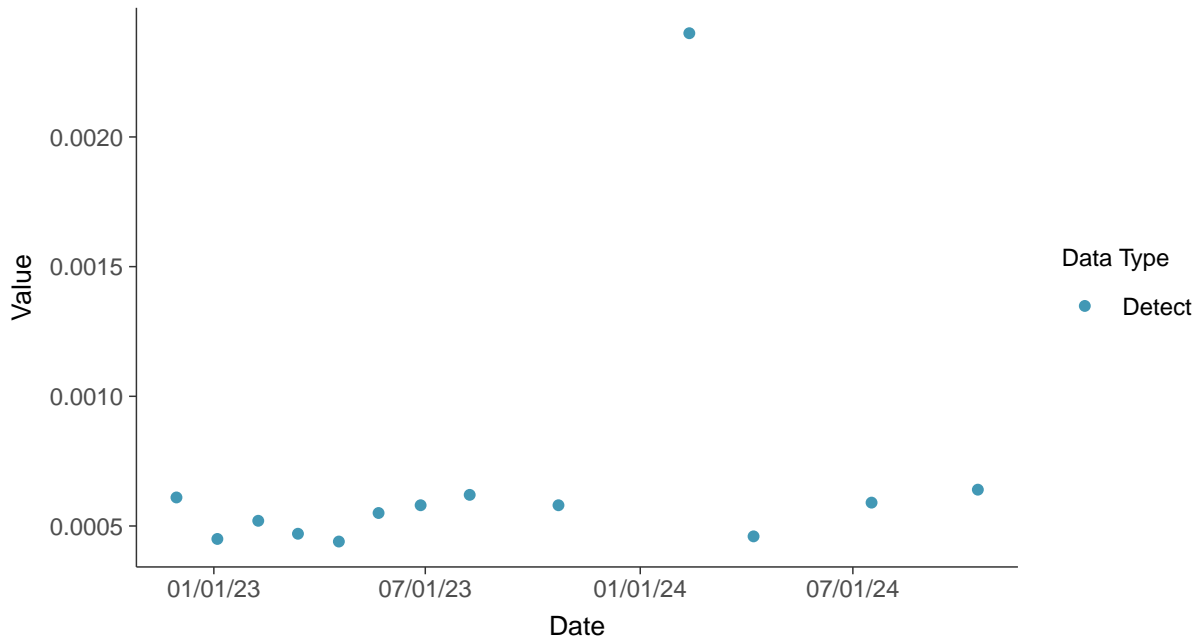


Appendix IV: Arsenic, MW-32

ID: 1_42_1_5_102

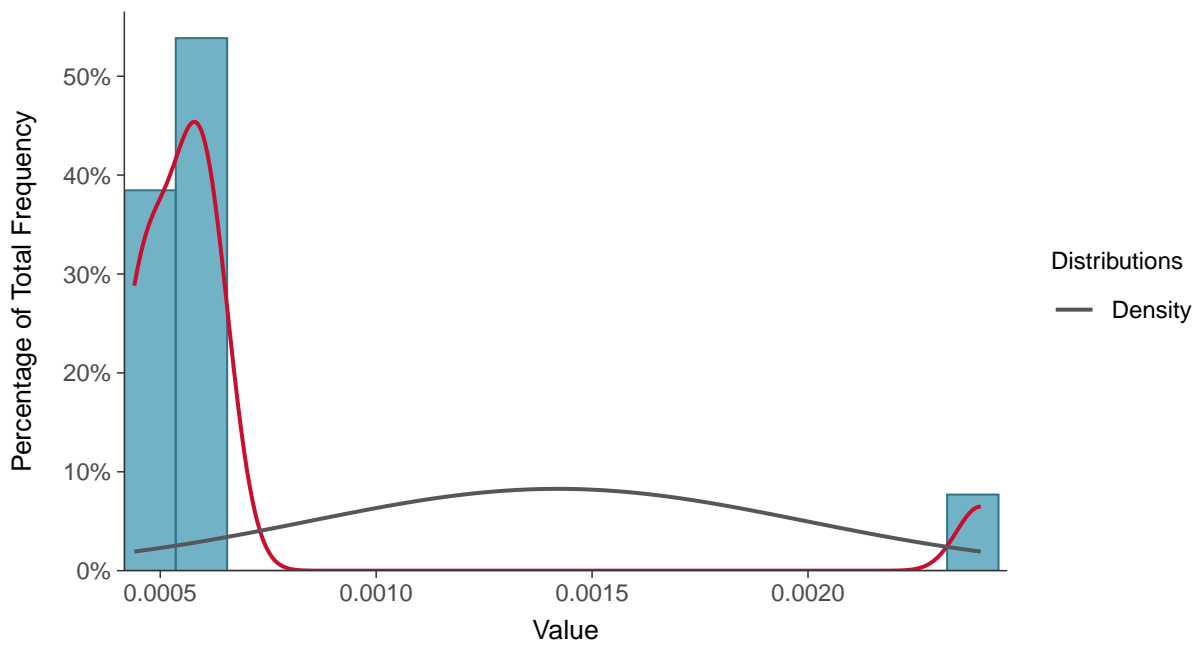
Scatter Plot

Arsenic, MW-32 (mg/L)



Histogram

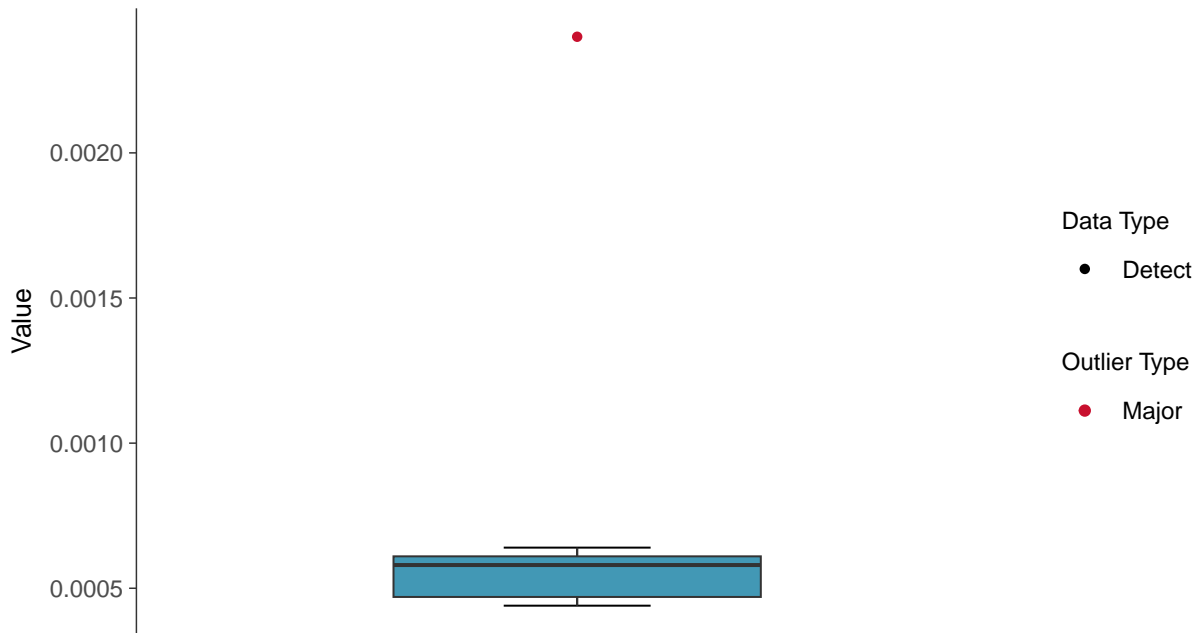
Arsenic, MW-32 (mg/L)





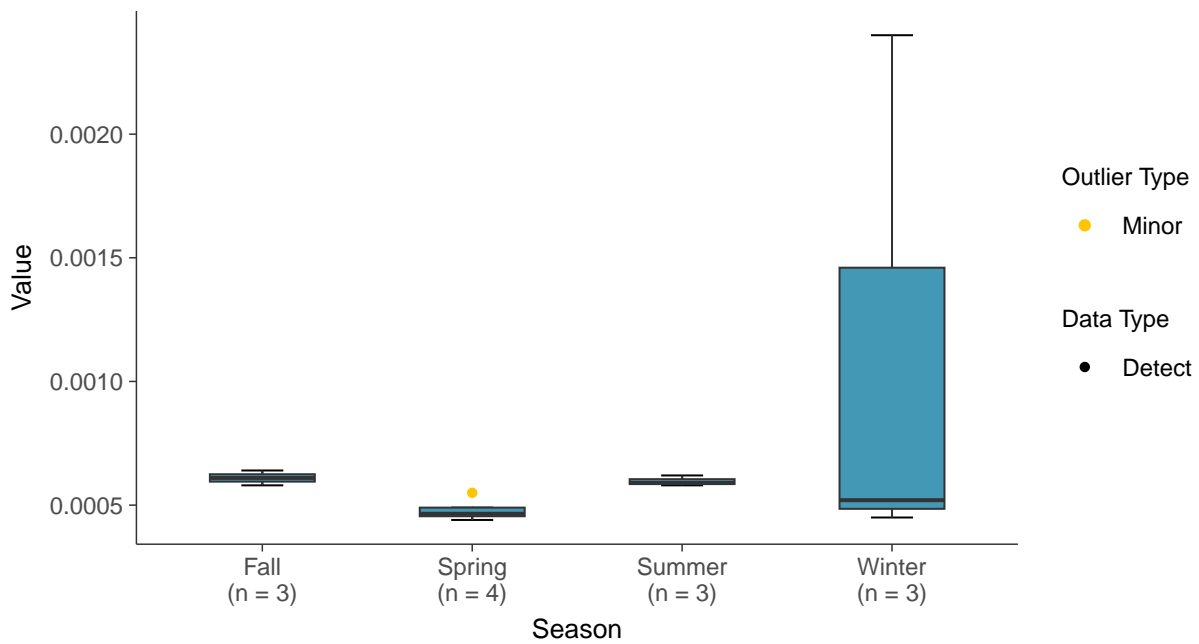
Boxplot

Arsenic, MW-32 (mg/L)



Boxplot by Season

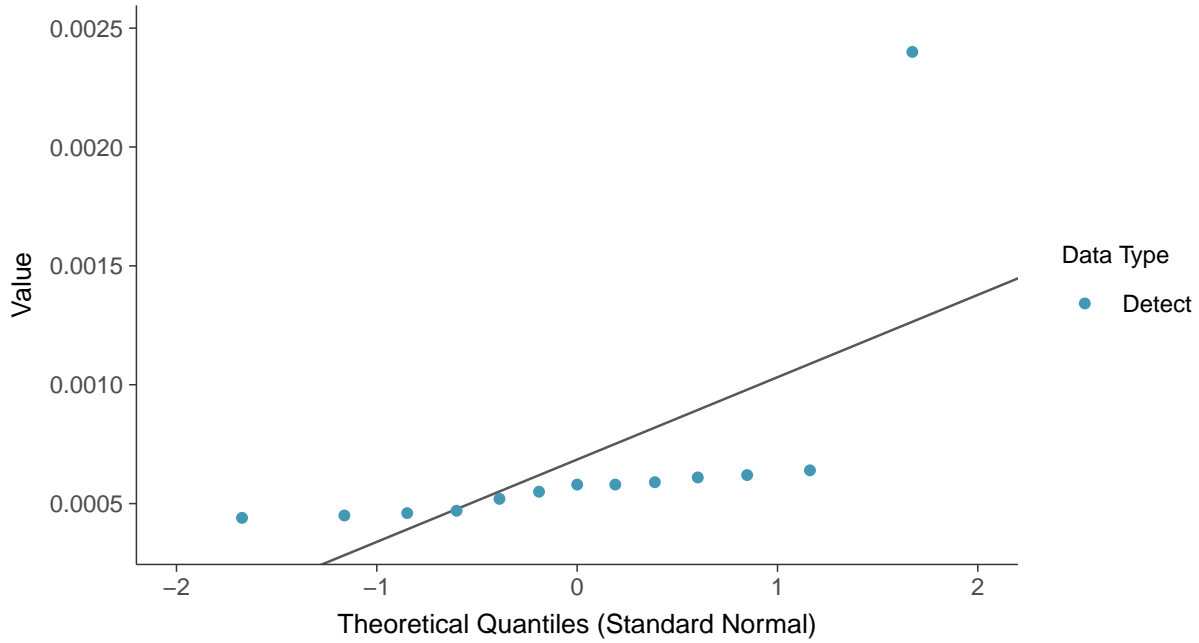
Arsenic, MW-32 (mg/L)





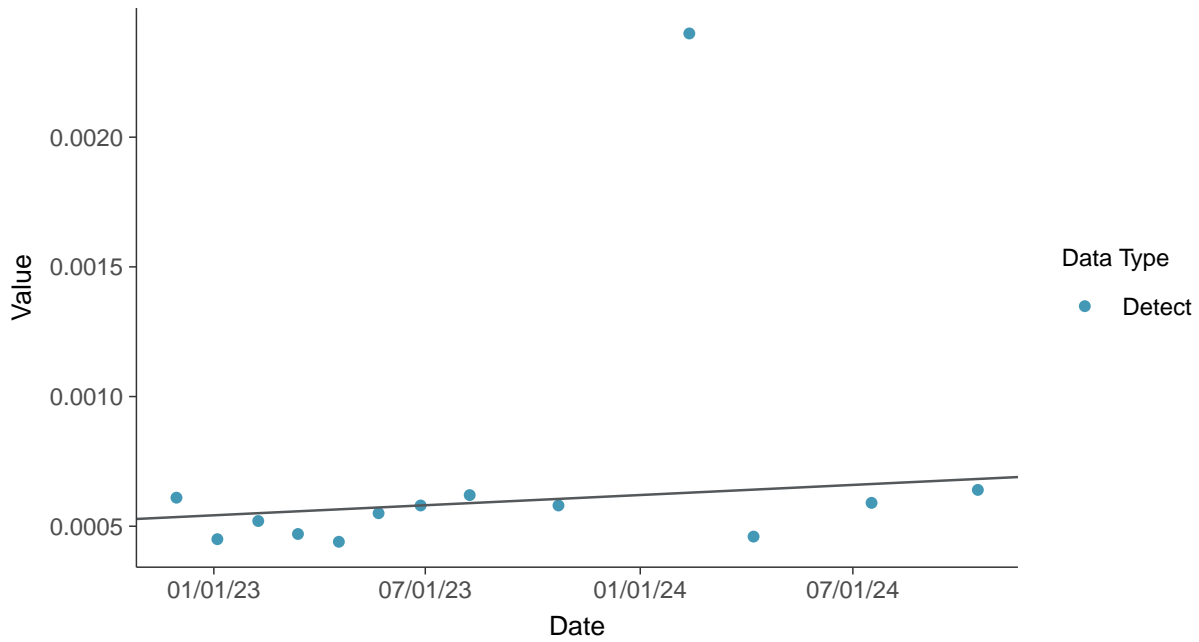
Normal Q-Q plot

Arsenic, MW-32 (mg/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

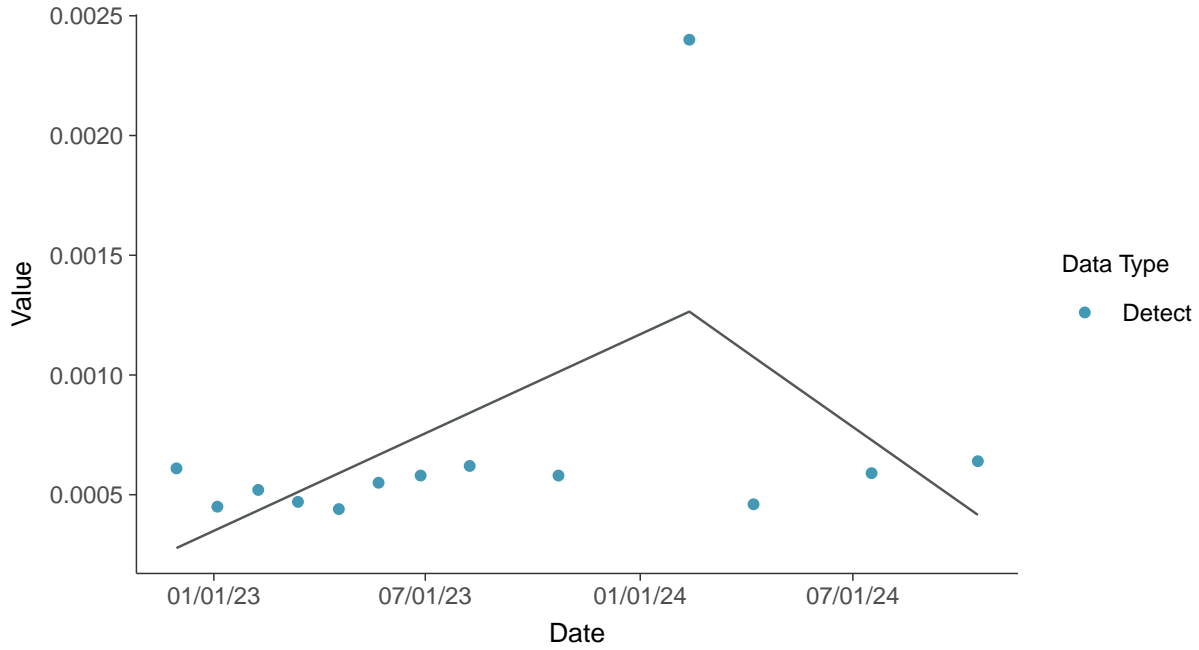
Arsenic, MW-32 (mg/L)





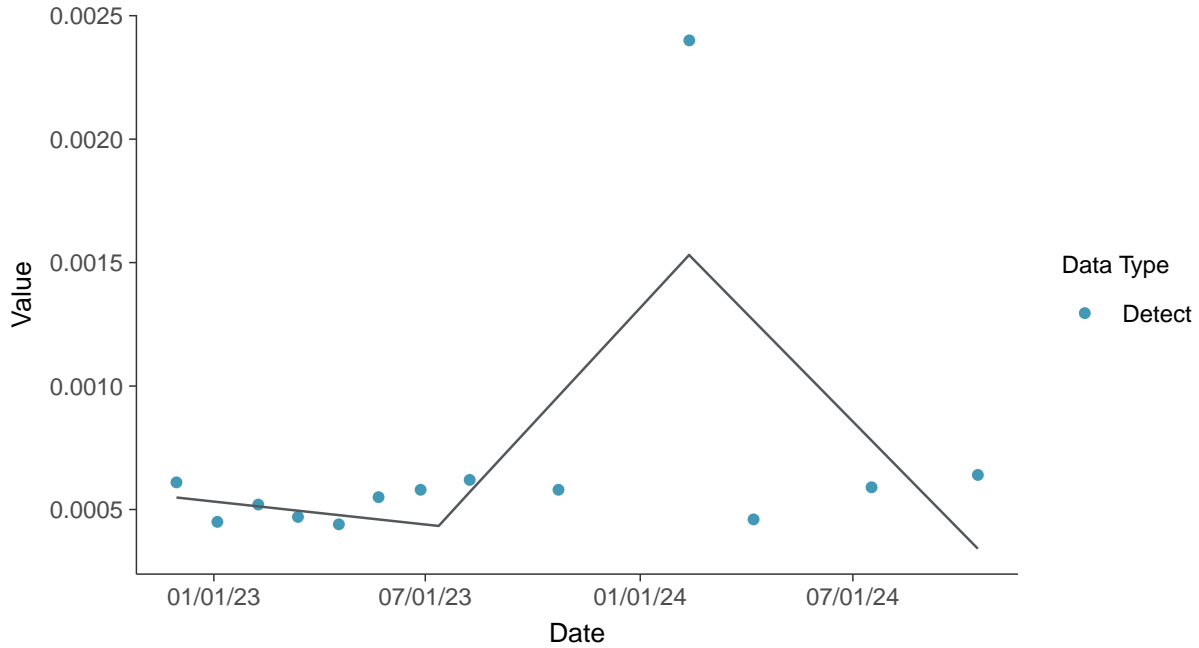
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-32 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-32 (mg/L)



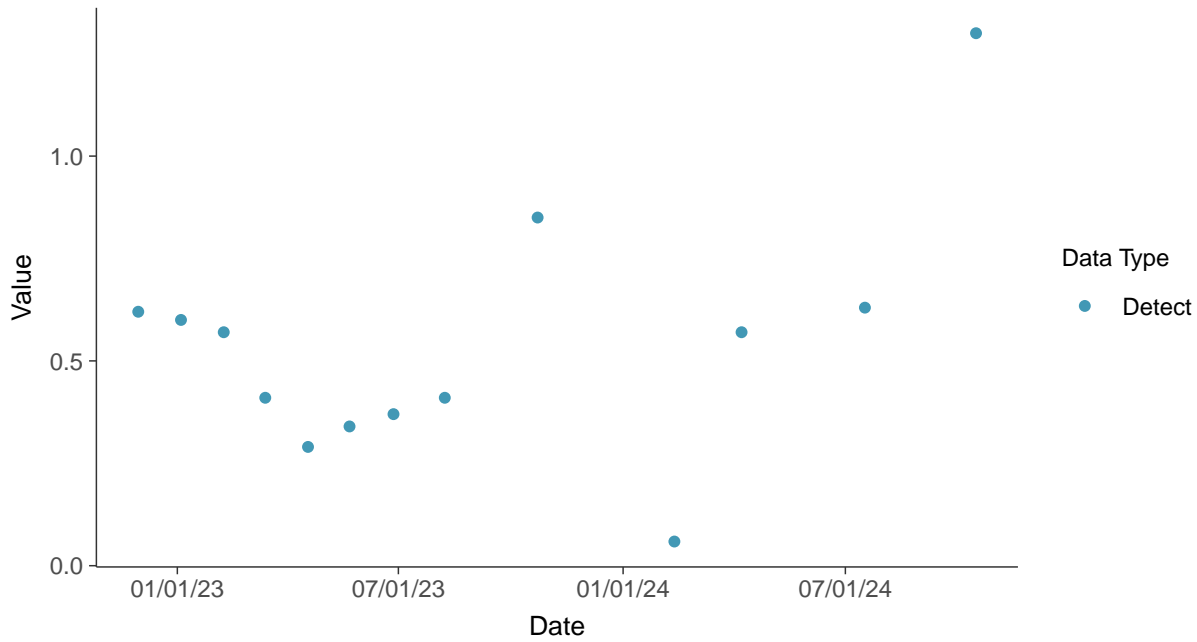


Appendix IV: Barium, MW-32

ID: 1_42_1_5_103

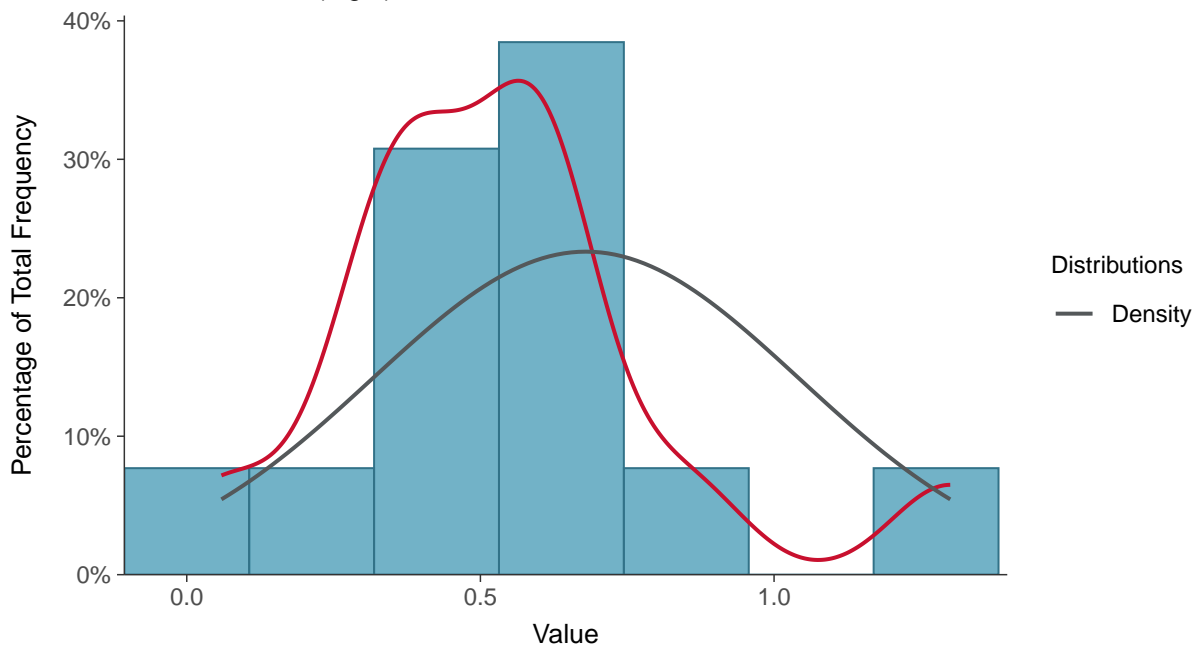
Scatter Plot

Barium, MW-32 (mg/L)



Histogram

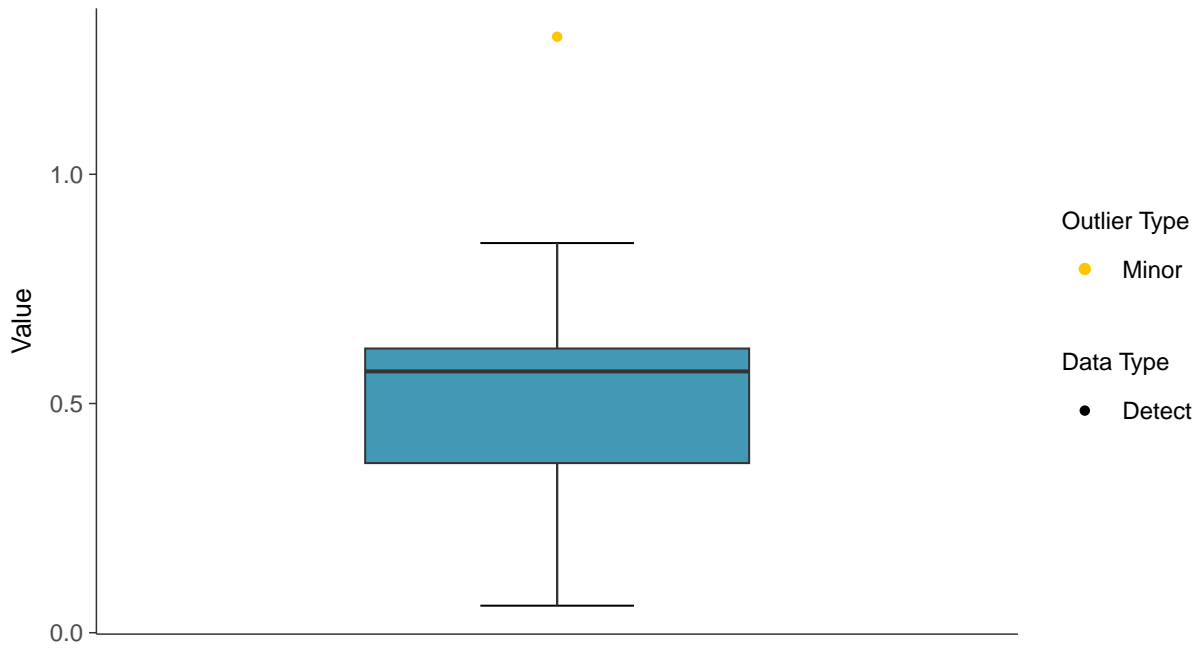
Barium, MW-32 (mg/L)





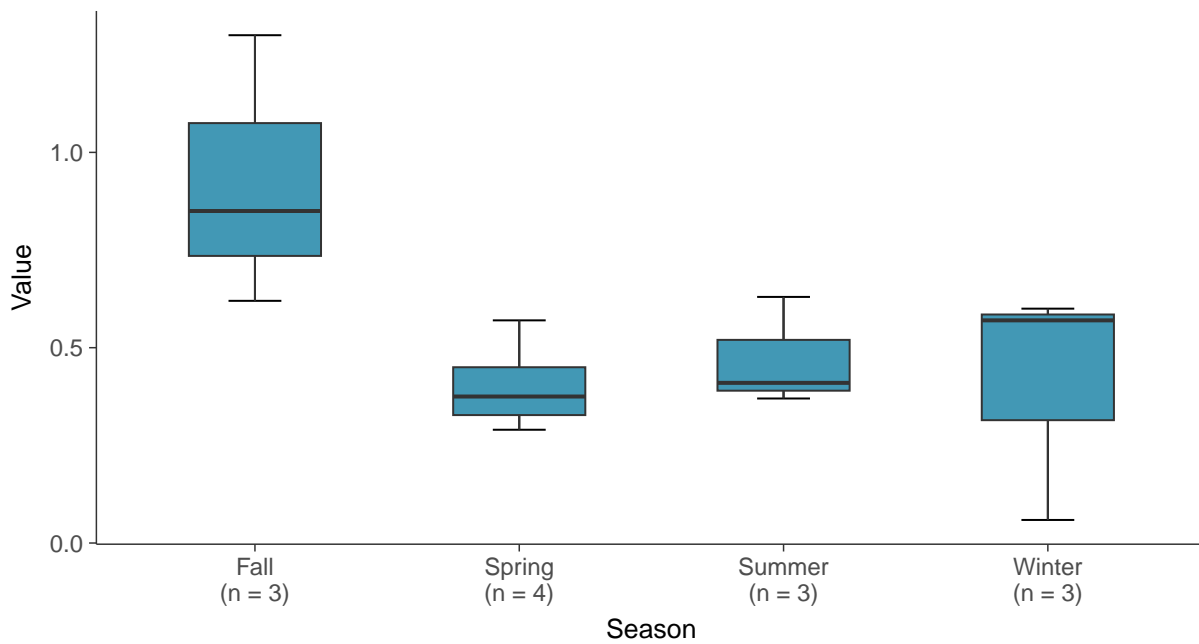
Boxplot

Barium, MW-32 (mg/L)



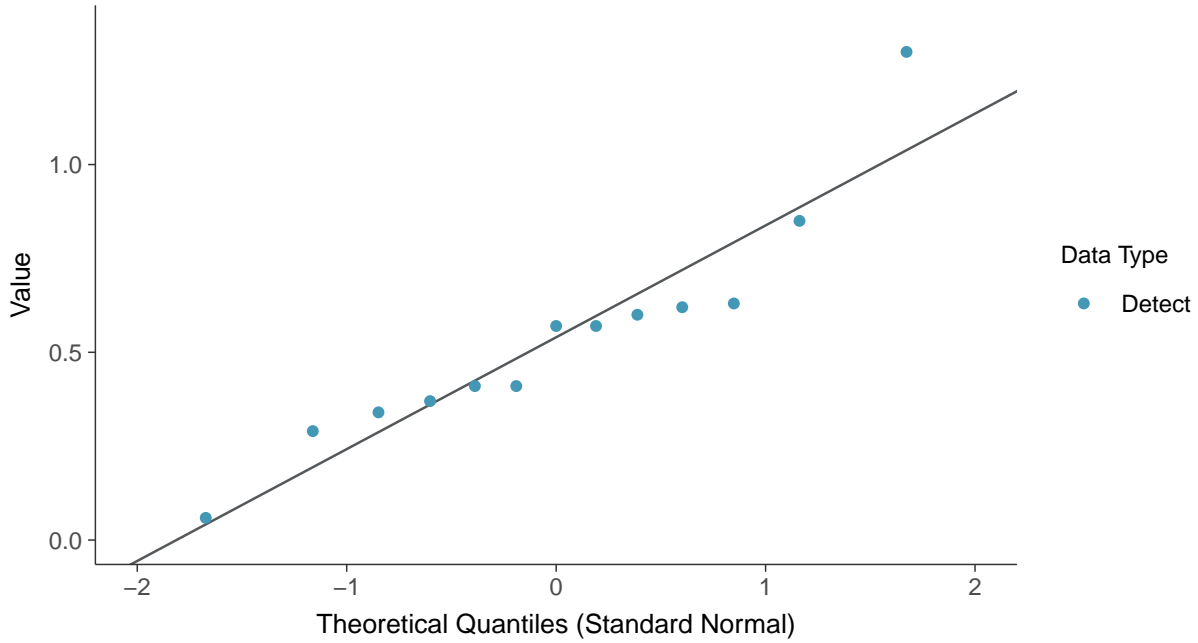
Boxplot by Season

Barium, MW-32 (mg/L)

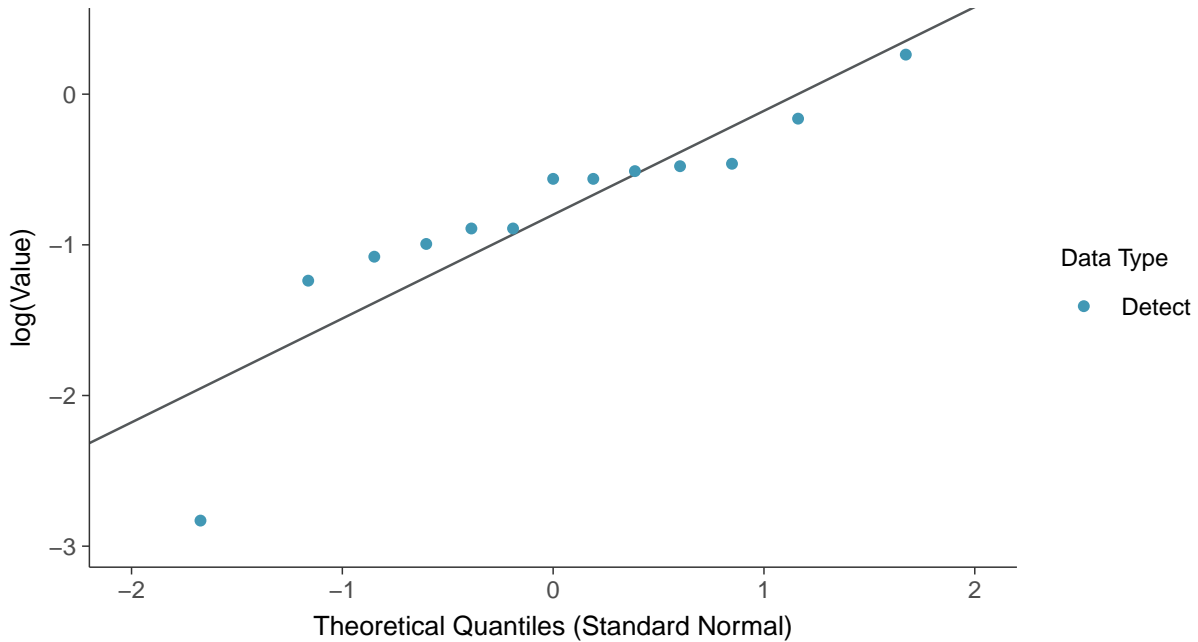




Normal Q-Q plot
Barium, MW-32 (mg/L)

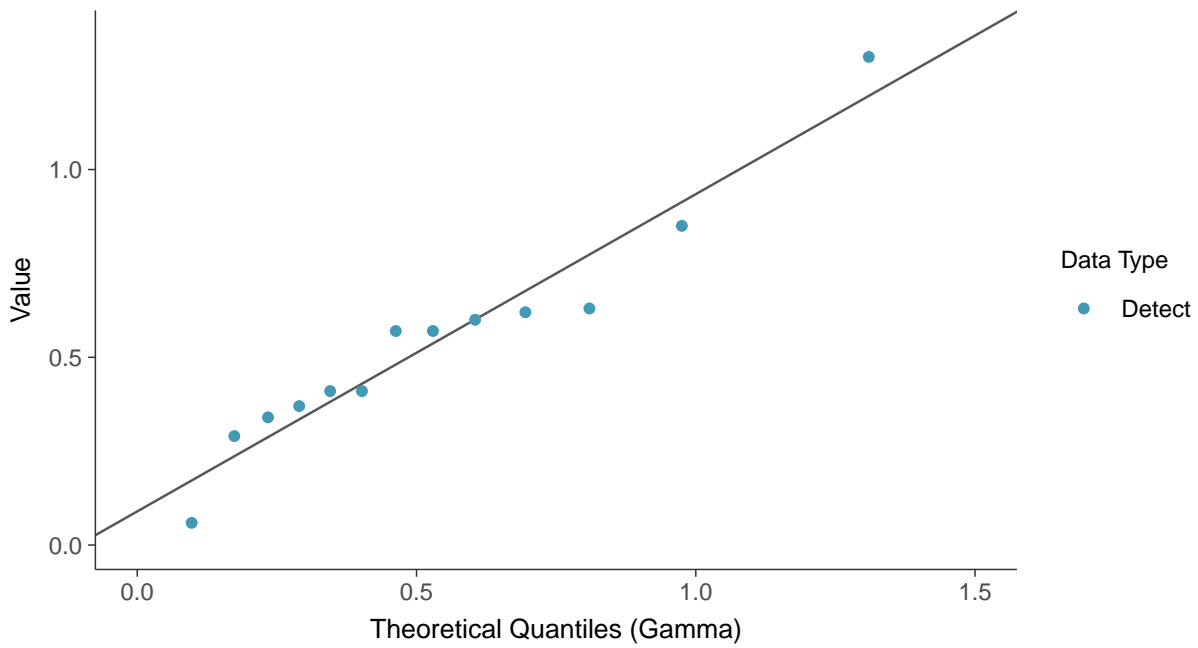


Lognormal Q-Q plot
Barium, MW-32 (mg/L)

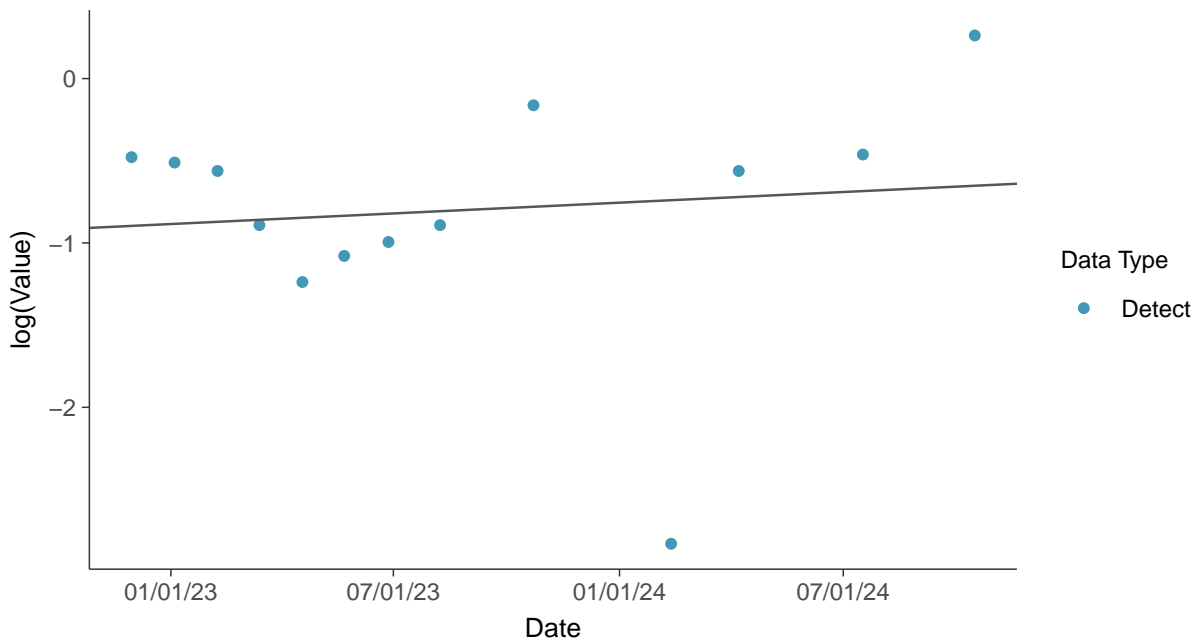




Gamma Q-Q plot
Barium, MW-32 (mg/L)

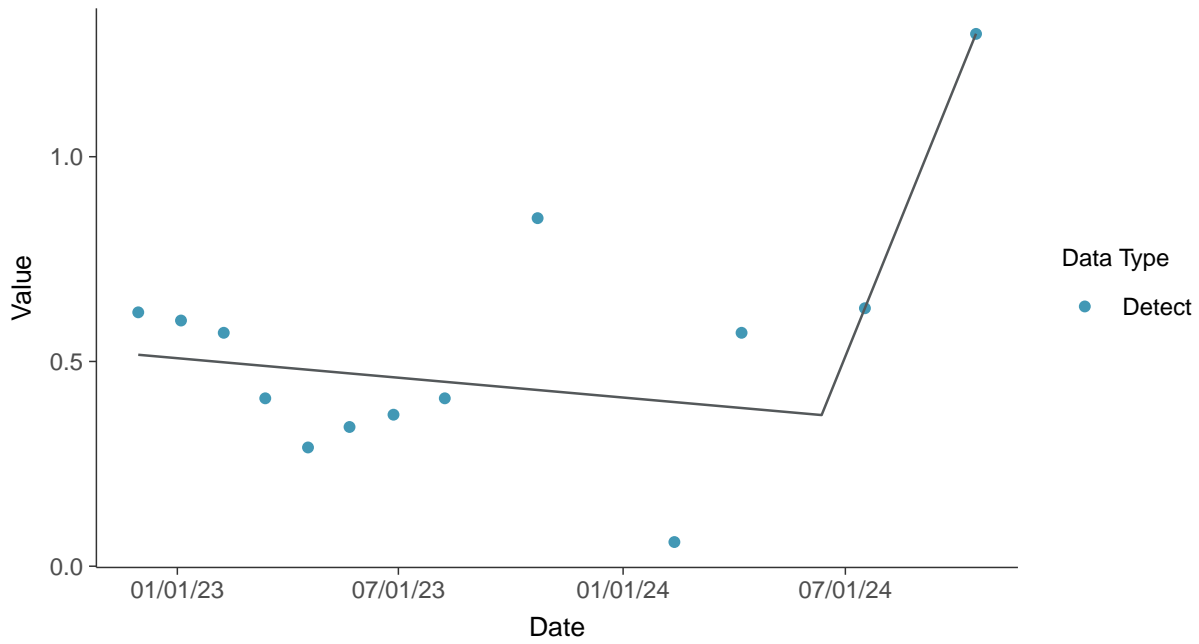


Trend Regression: Lognormal MLE
Barium, MW-32 (mg/L)

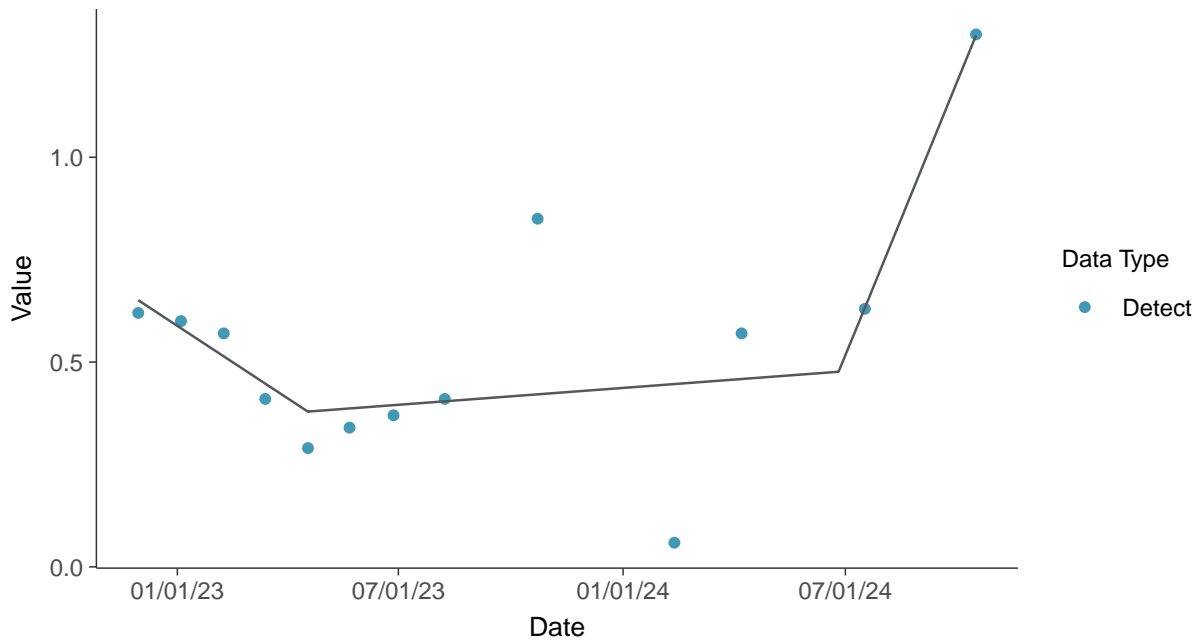




Trend Regression: Piecewise Linear-Linear
Barium, MW-32 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Barium, MW-32 (mg/L)



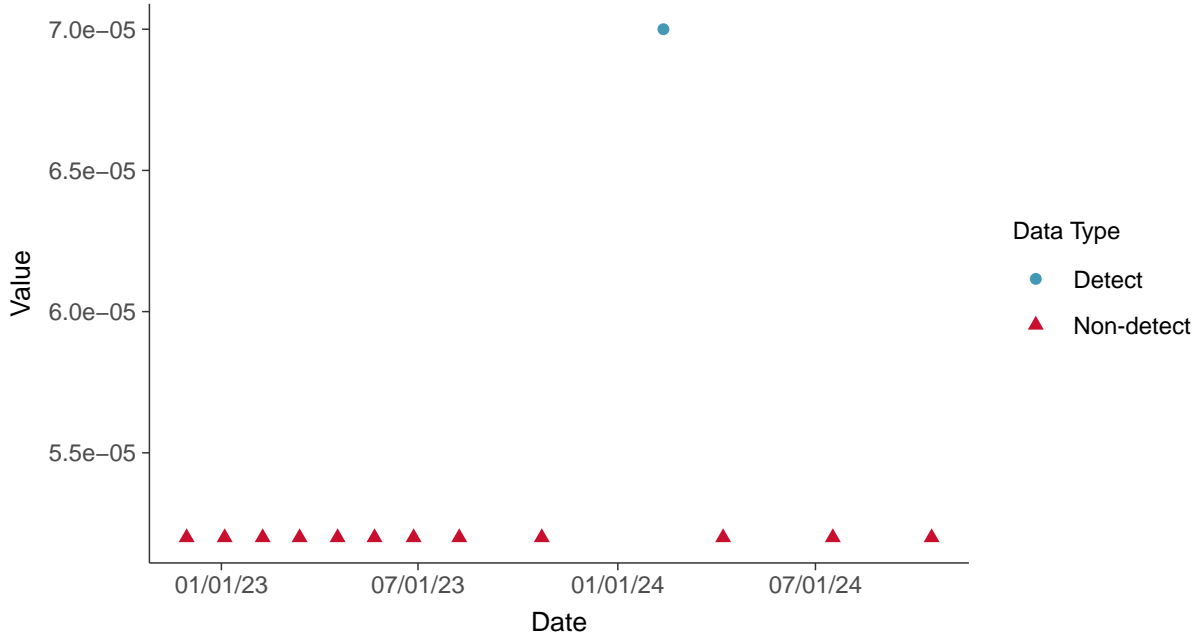


Appendix IV: Beryllium, MW-32

ID: 1_42_1_5_104

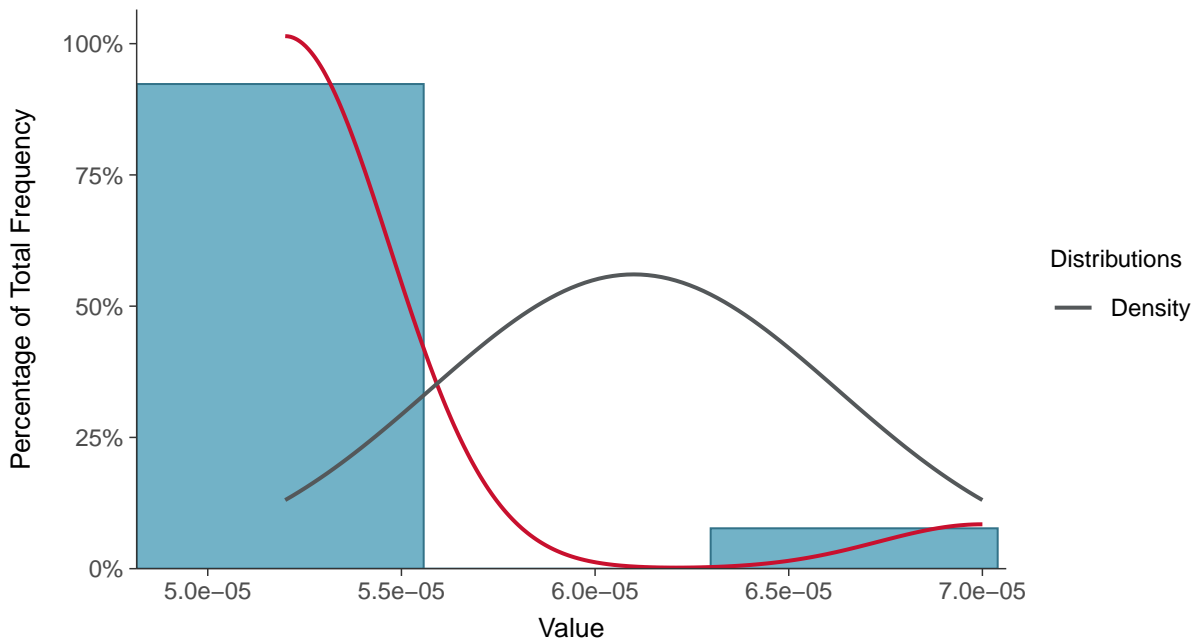
Scatter Plot

Beryllium, MW-32 (mg/L)



Histogram

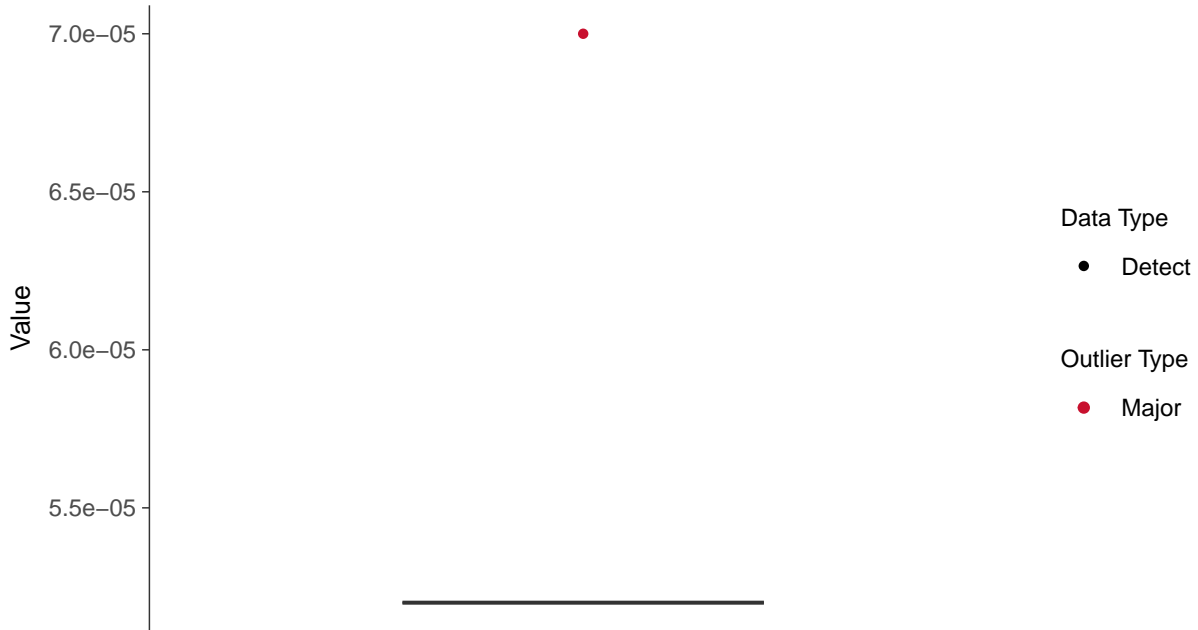
Beryllium, MW-32 (mg/L)





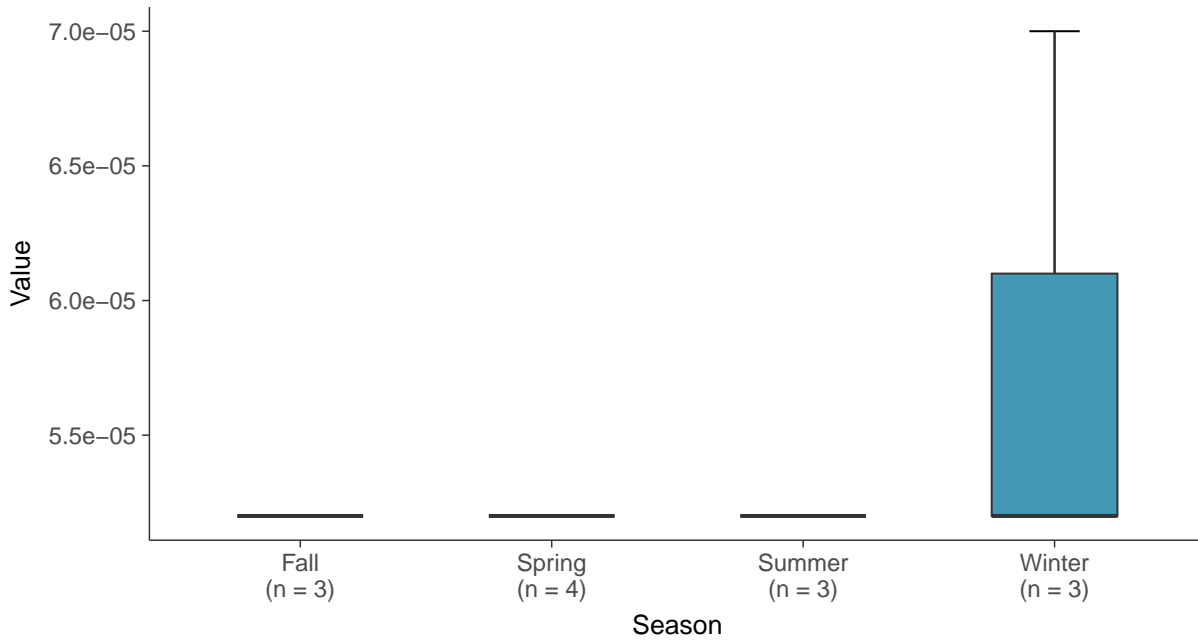
Boxplot

Beryllium, MW-32 (mg/L)



Boxplot by Season

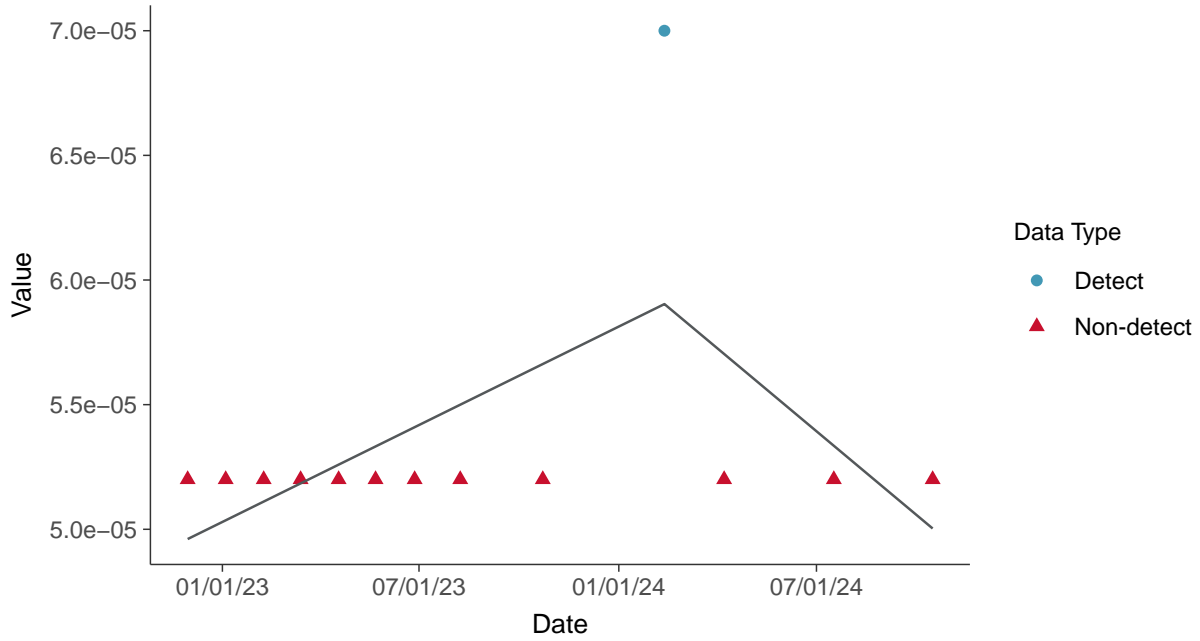
Beryllium, MW-32 (mg/L)





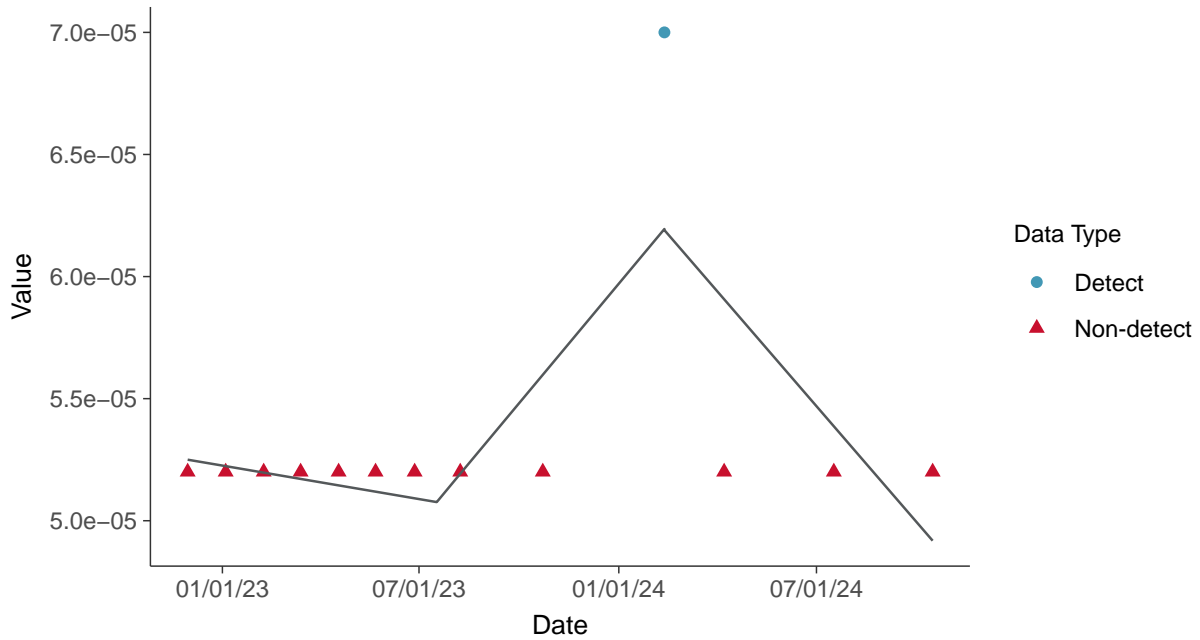
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-32 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

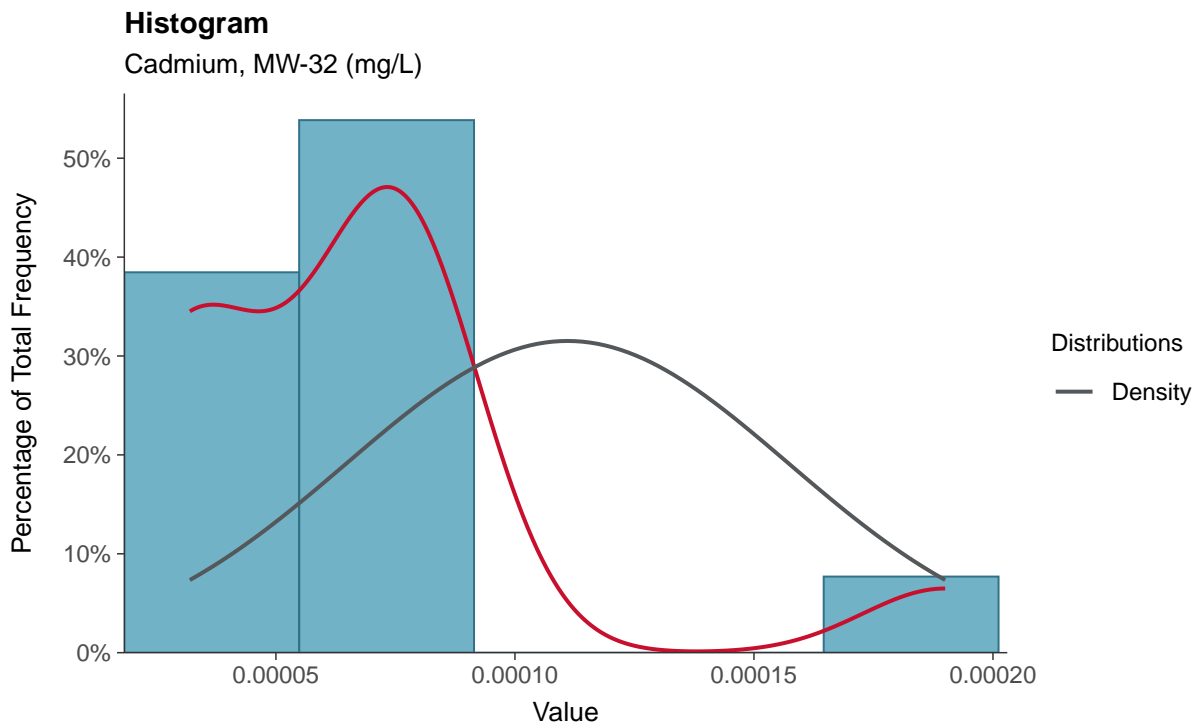
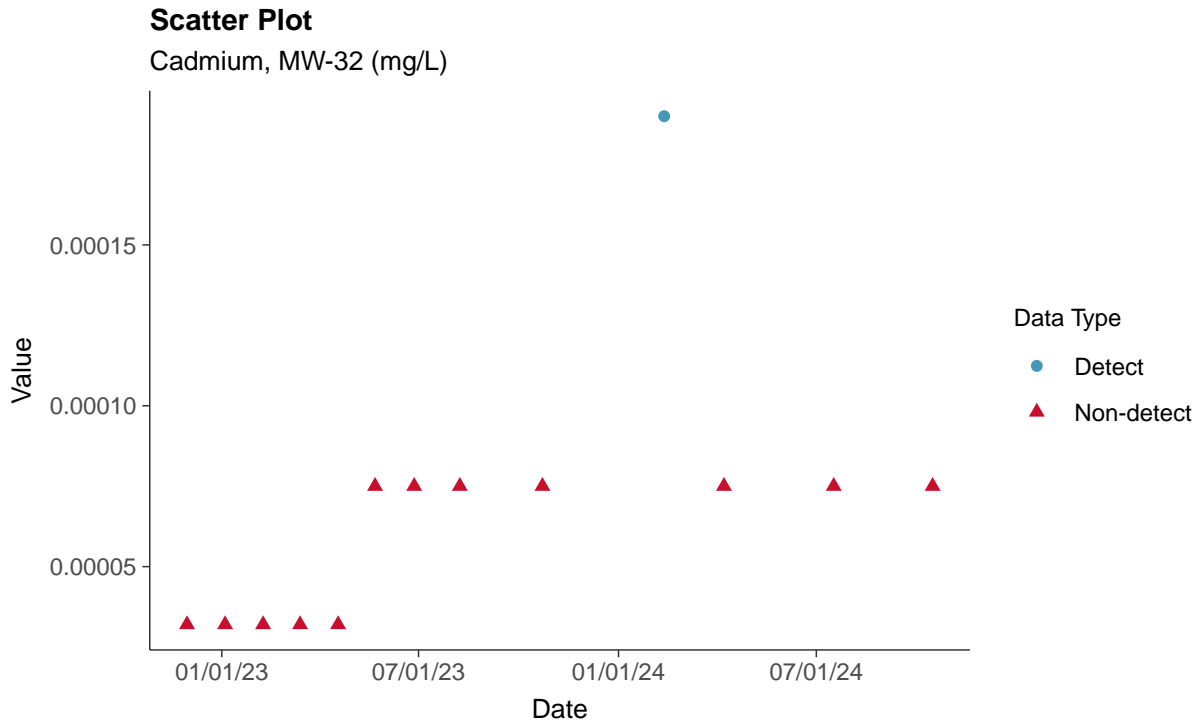
Beryllium, MW-32 (mg/L)





Appendix IV: Cadmium, MW-32

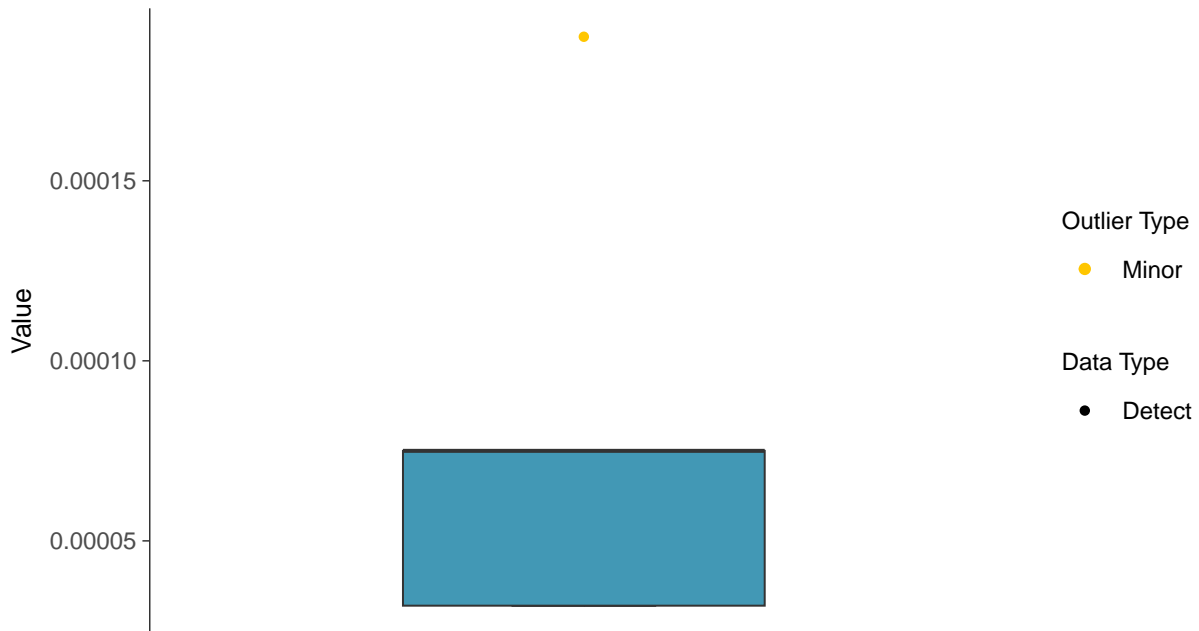
ID: 1_42_1_5_106





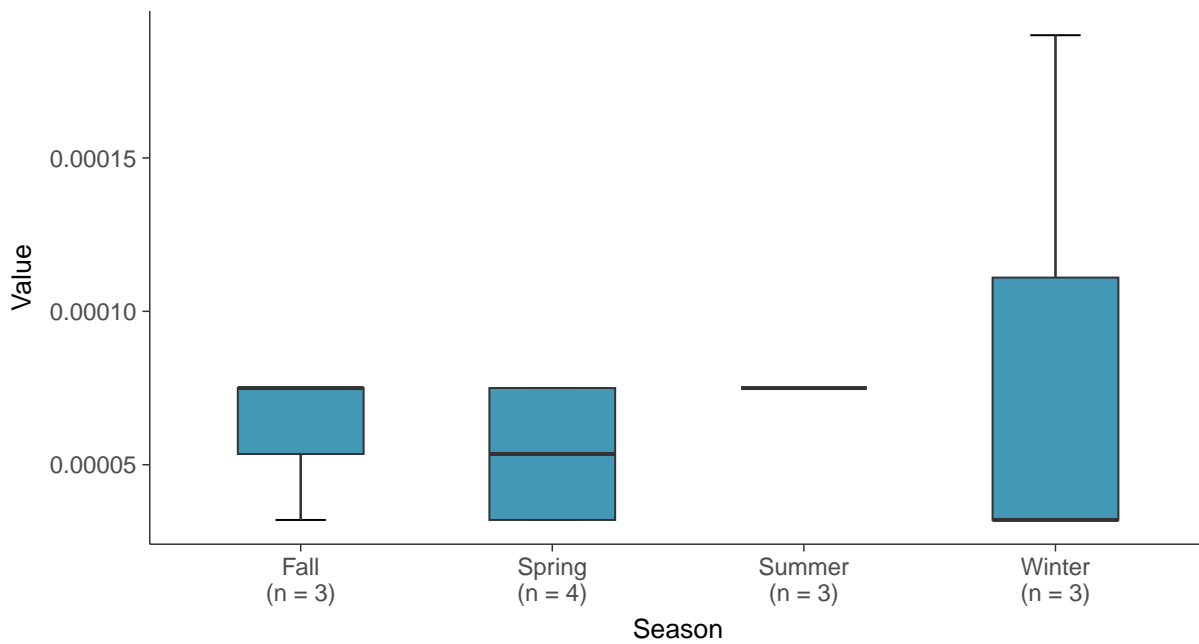
Boxplot

Cadmium, MW-32 (mg/L)



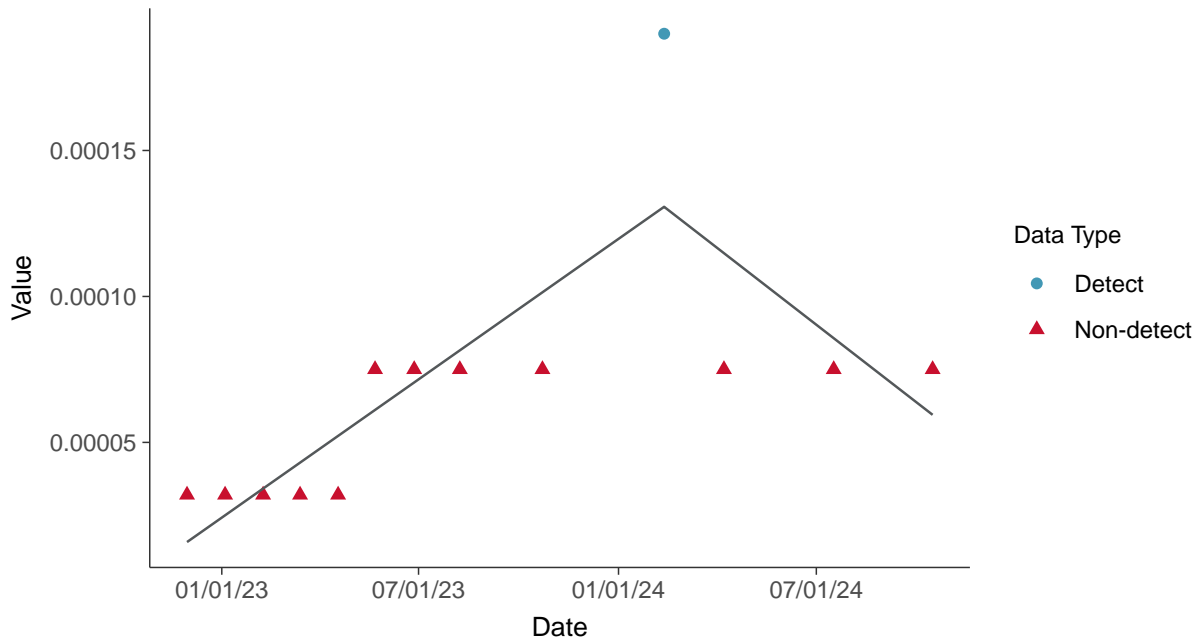
Boxplot by Season

Cadmium, MW-32 (mg/L)

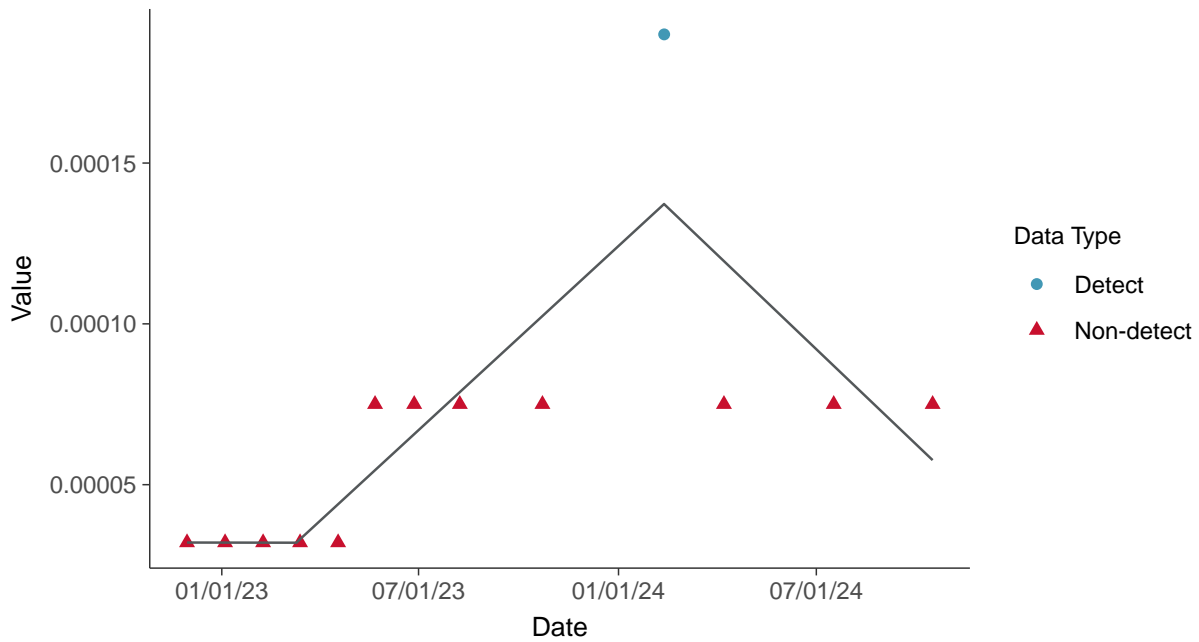




Trend Regression: Piecewise Linear-Linear
Cadmium, MW-32 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Cadmium, MW-32 (mg/L)



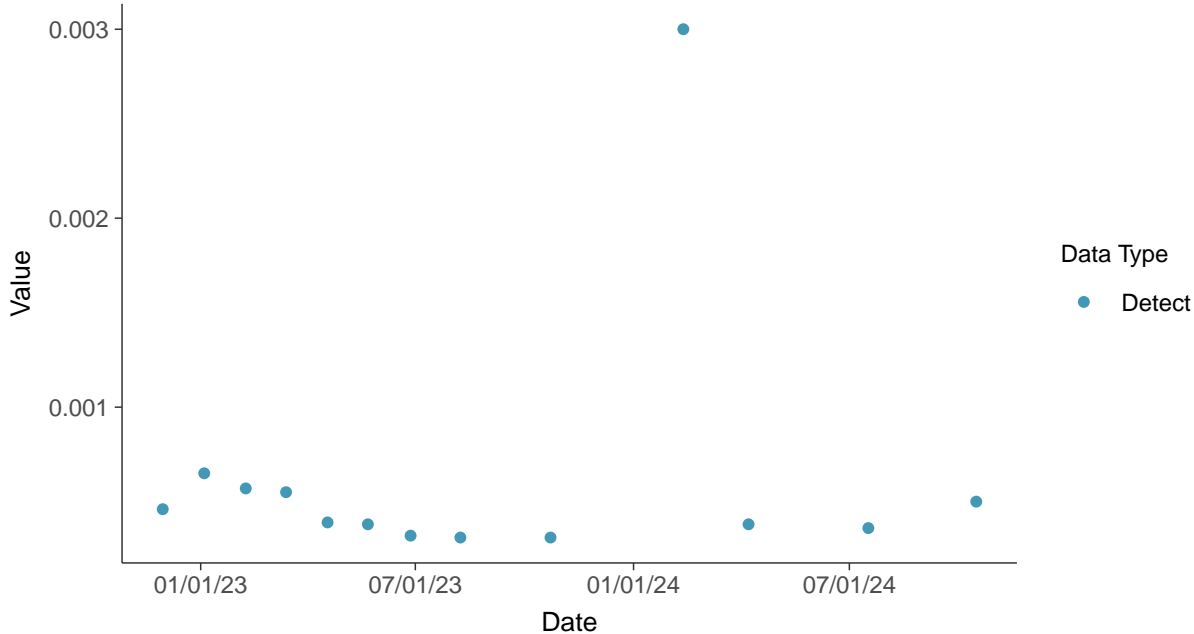


Appendix IV: Chromium, Total, MW-32

ID: 1_42_1_5_109

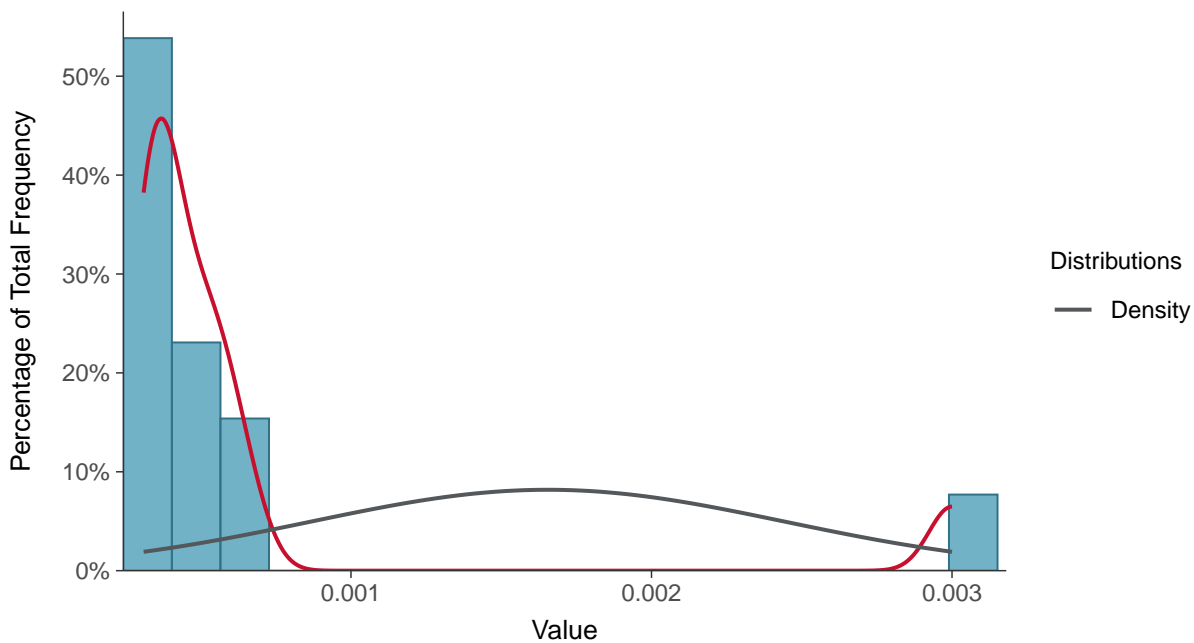
Scatter Plot

Chromium, Total, MW-32 (mg/L)



Histogram

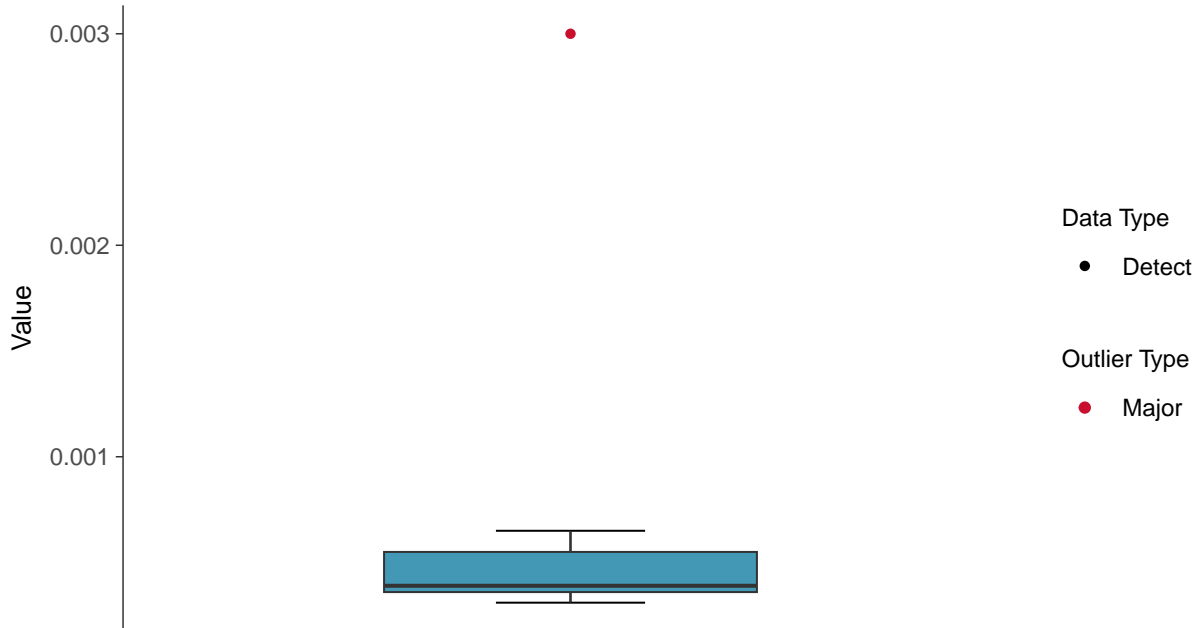
Chromium, Total, MW-32 (mg/L)





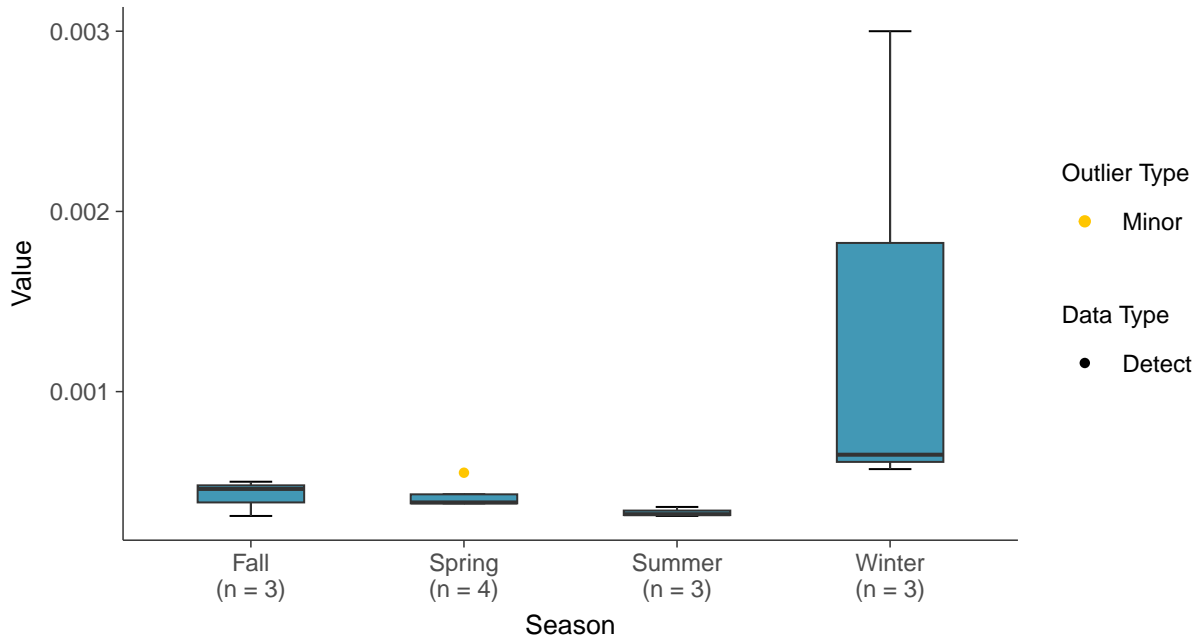
Boxplot

Chromium, Total, MW-32 (mg/L)



Boxplot by Season

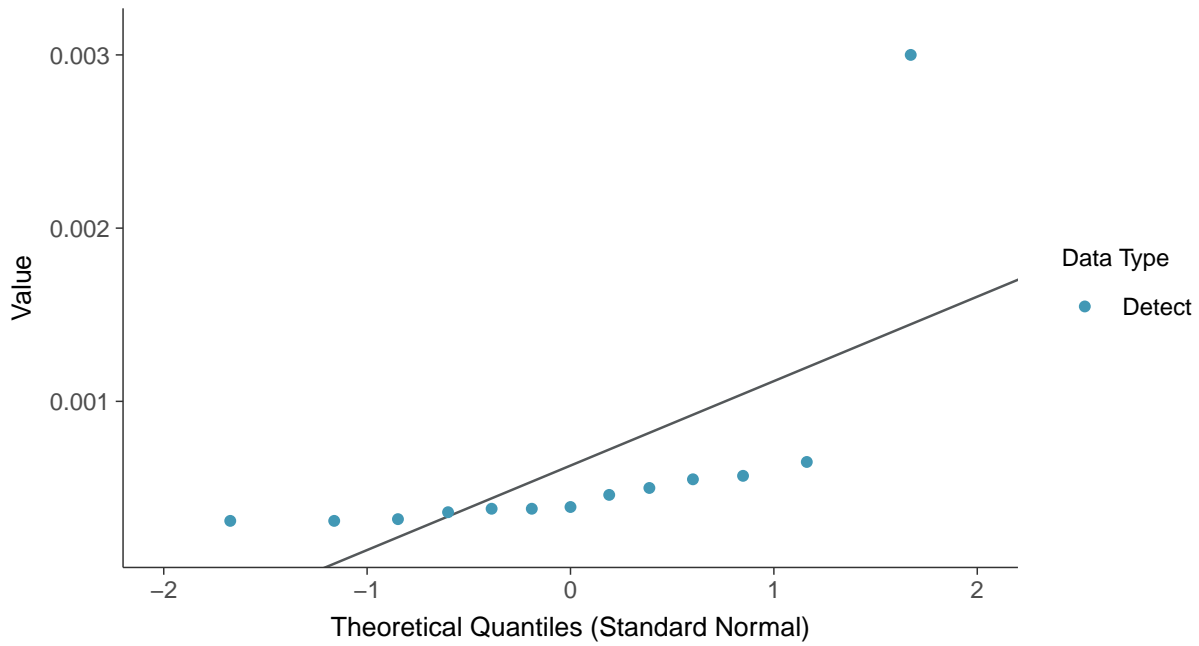
Chromium, Total, MW-32 (mg/L)





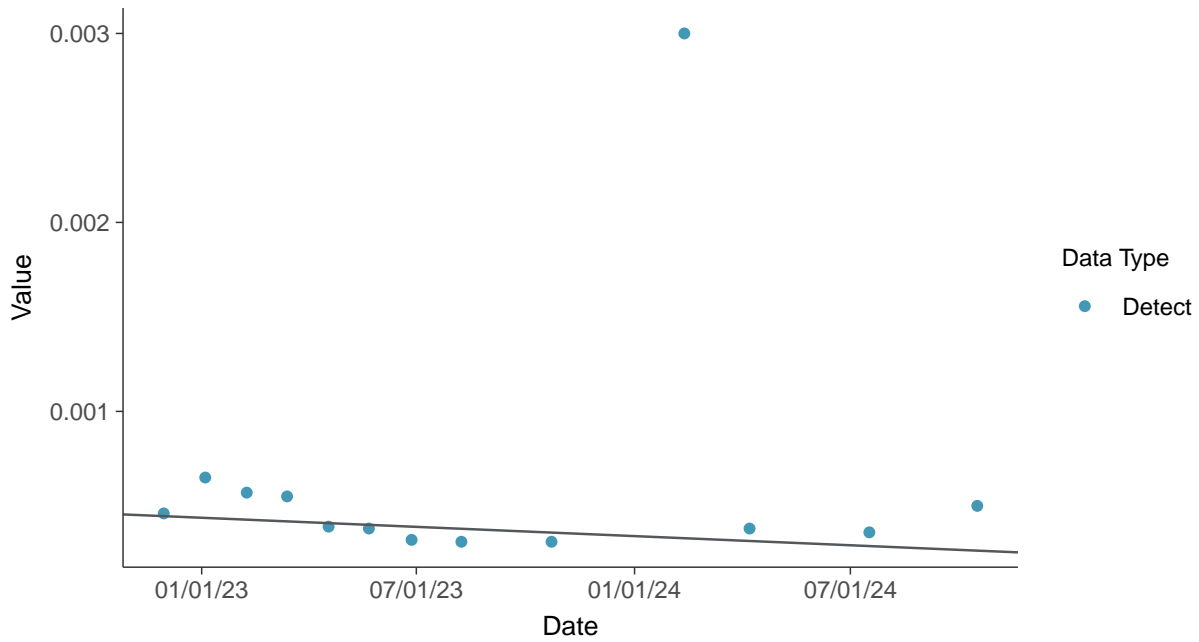
Normal Q-Q plot

Chromium, Total, MW-32 (mg/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

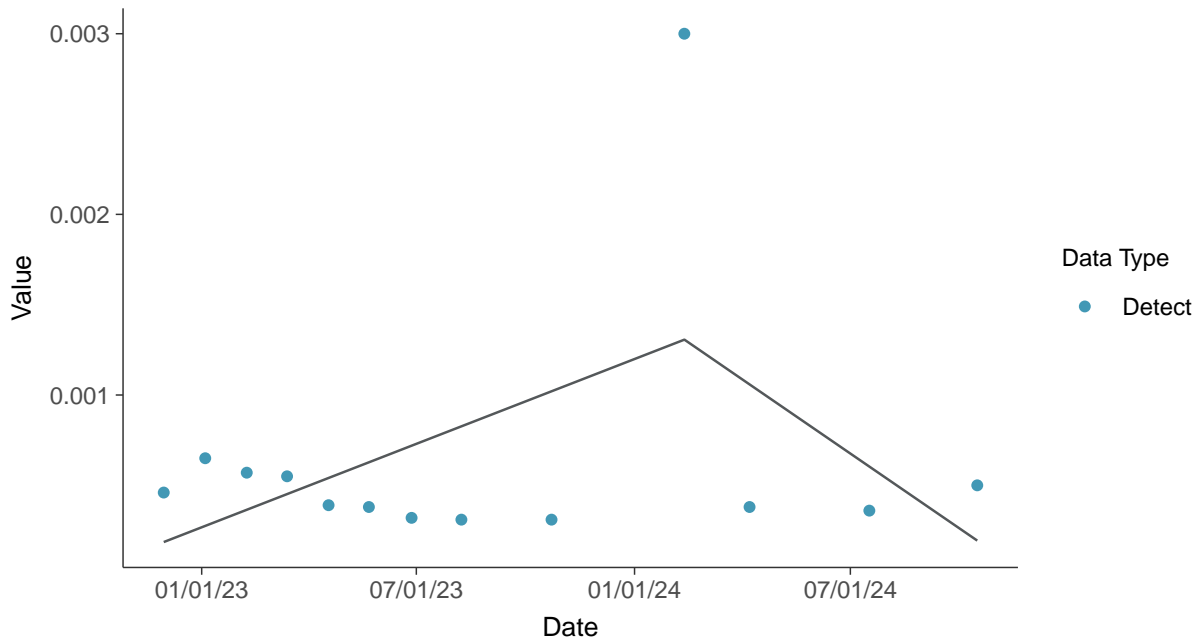
Chromium, Total, MW-32 (mg/L)





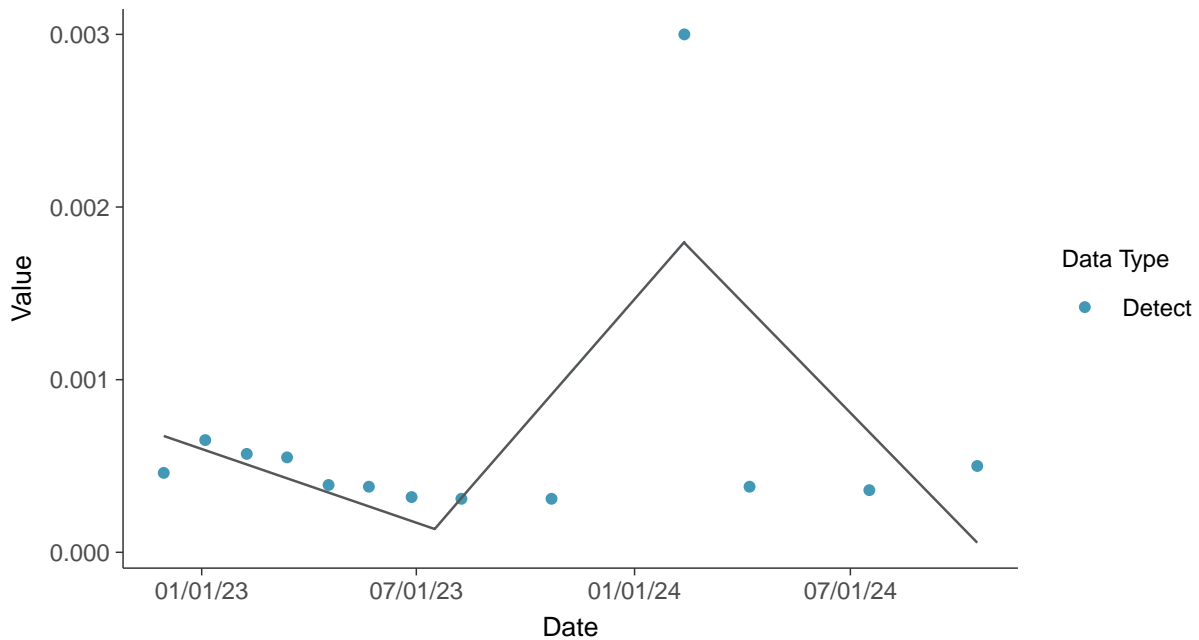
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-32 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Chromium, Total, MW-32 (mg/L)



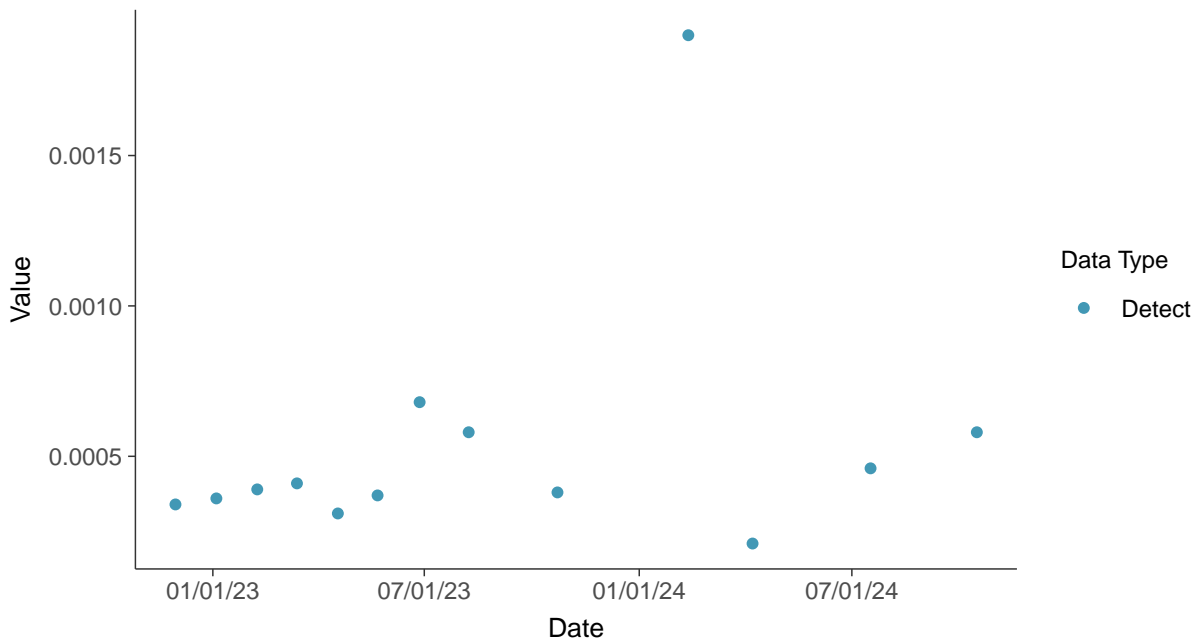


Appendix IV: Cobalt, MW-32

ID: 1_42_1_5_110

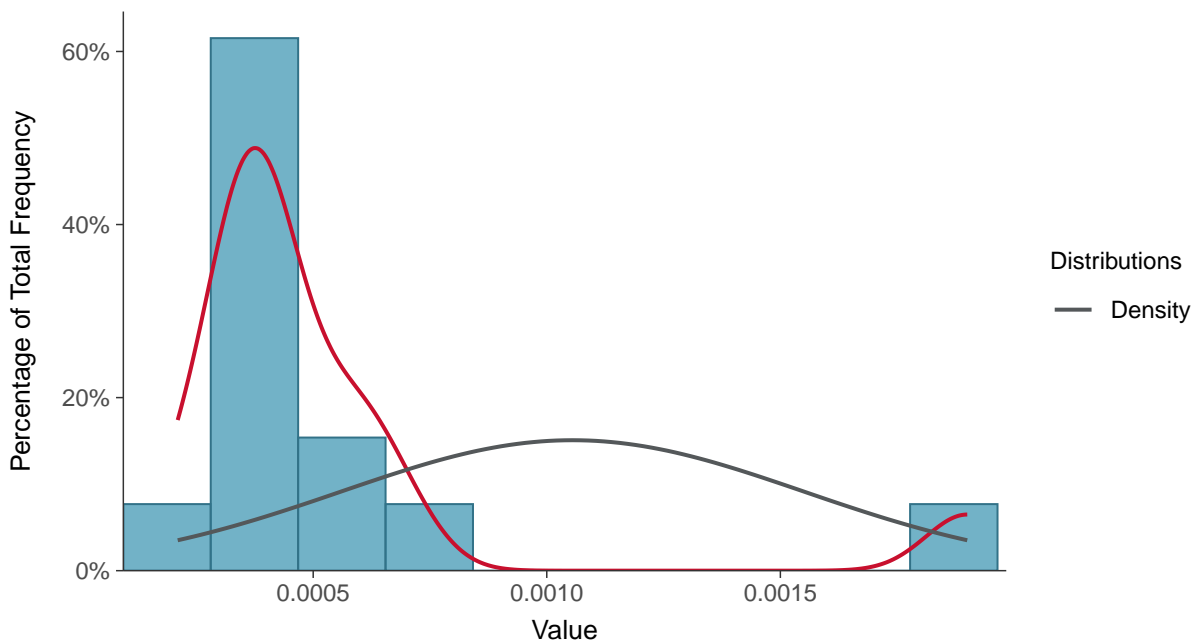
Scatter Plot

Cobalt, MW-32 (mg/L)



Histogram

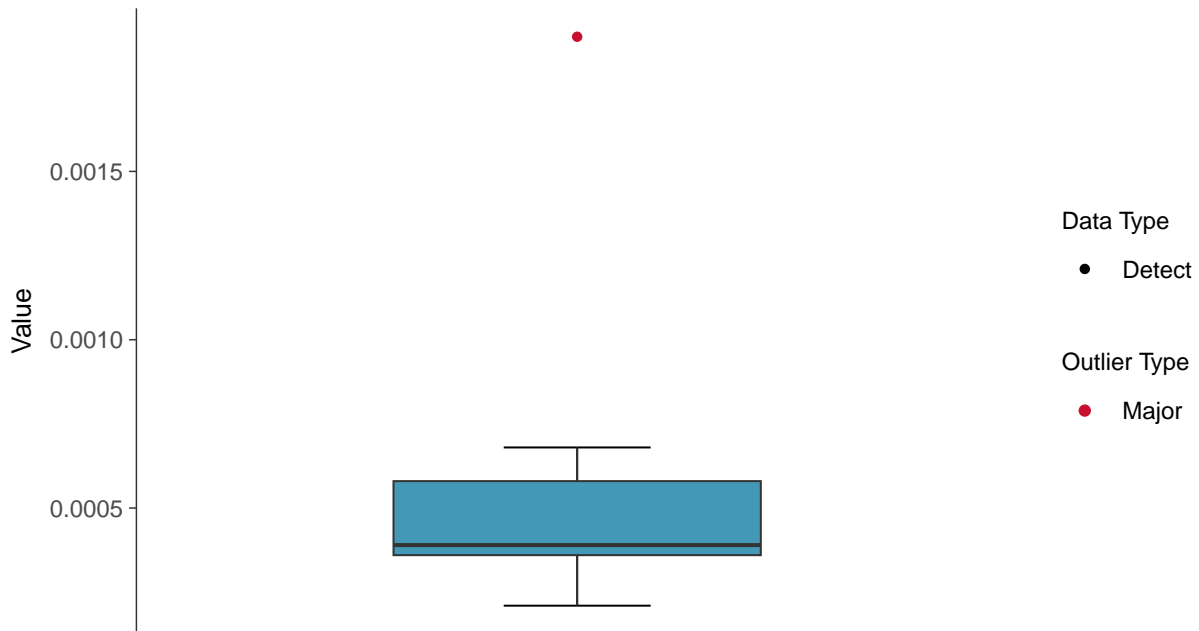
Cobalt, MW-32 (mg/L)





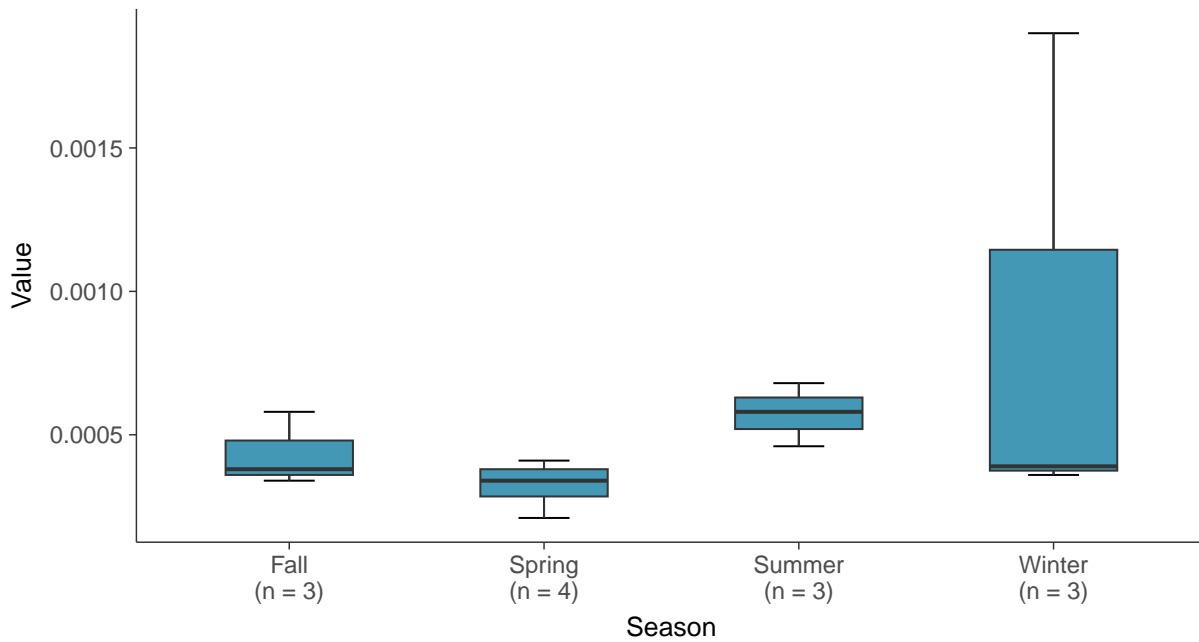
Boxplot

Cobalt, MW-32 (mg/L)



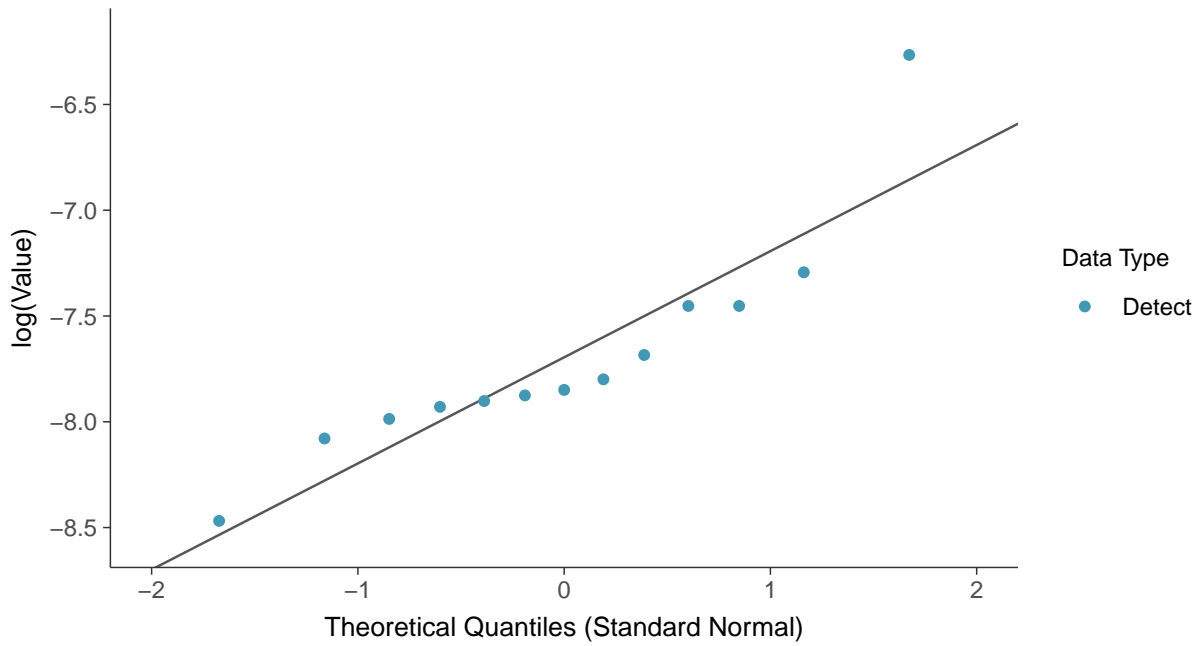
Boxplot by Season

Cobalt, MW-32 (mg/L)

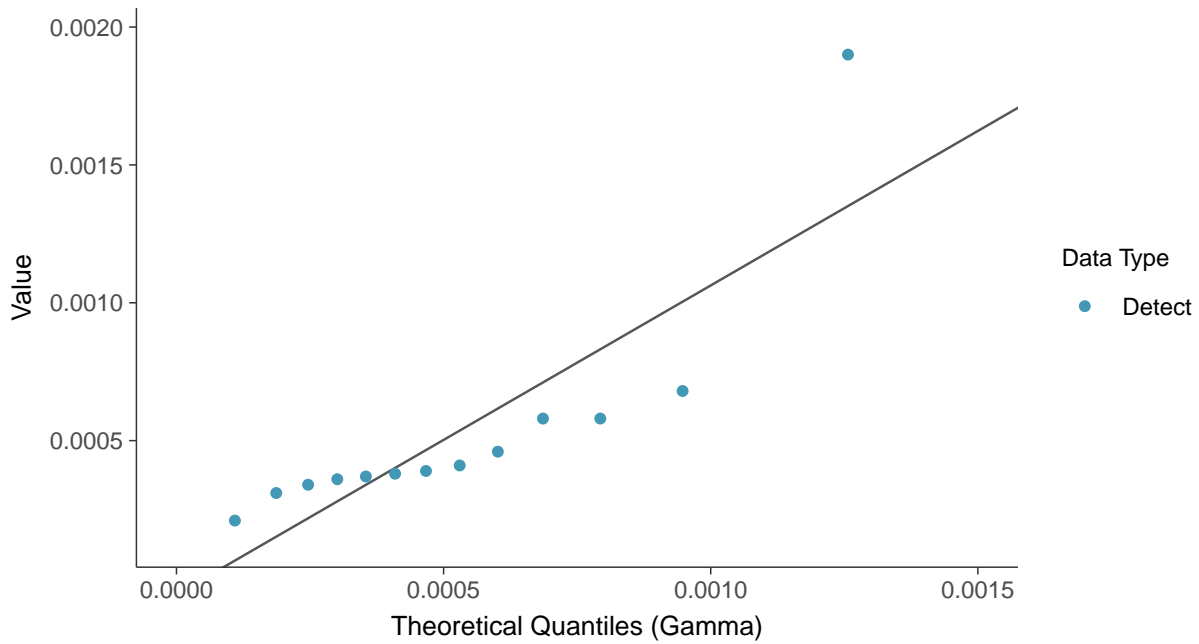




Lognormal Q-Q plot
Cobalt, MW-32 (mg/L)



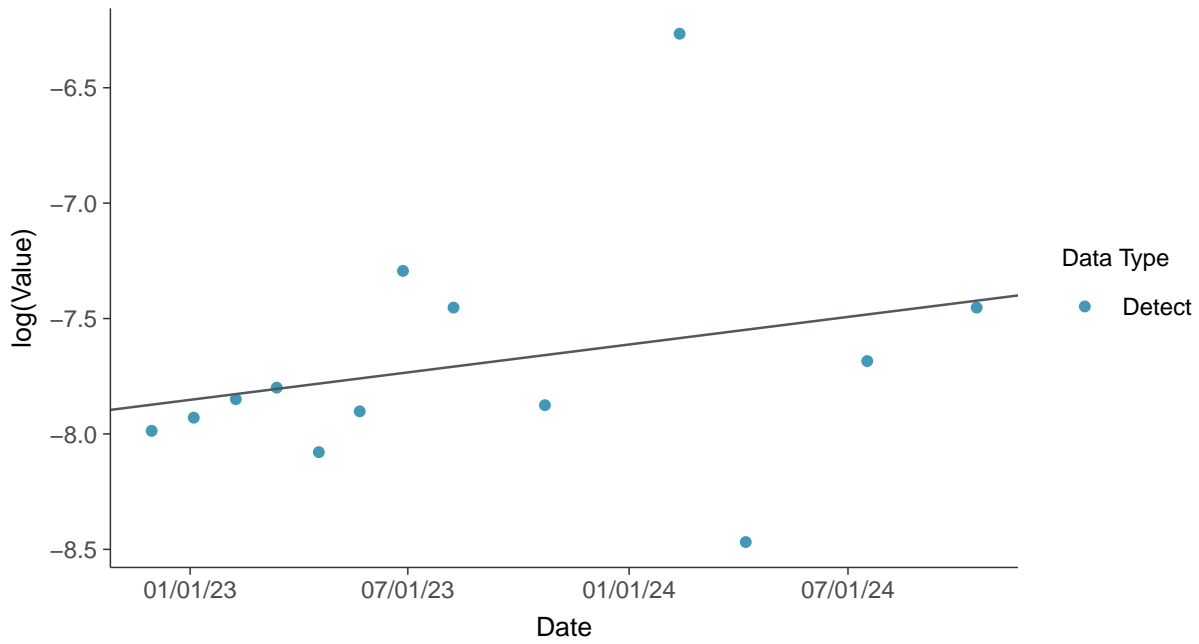
Gamma Q-Q plot
Cobalt, MW-32 (mg/L)





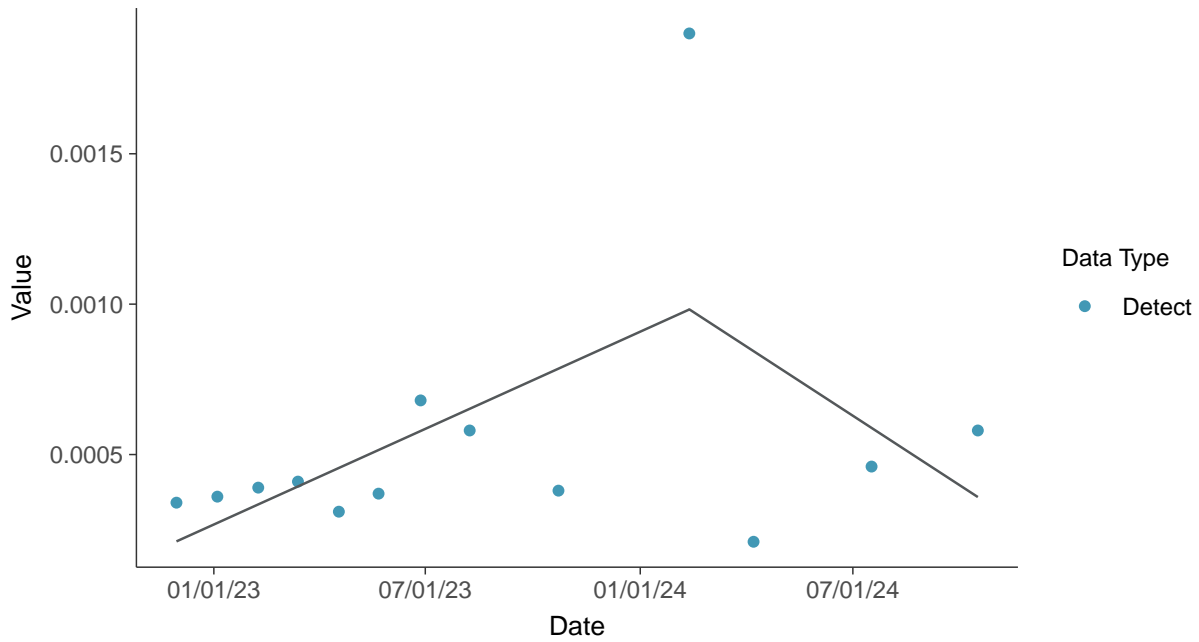
Trend Regression: Lognormal MLE

Cobalt, MW-32 (mg/L)



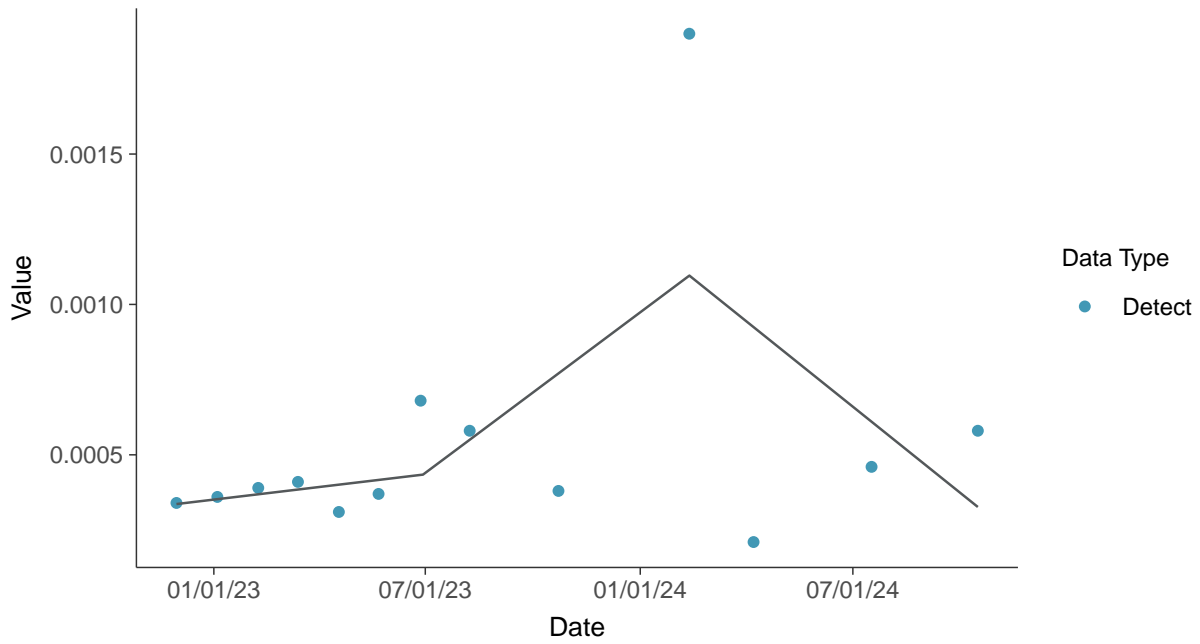
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-32 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear
Cobalt, MW-32 (mg/L)



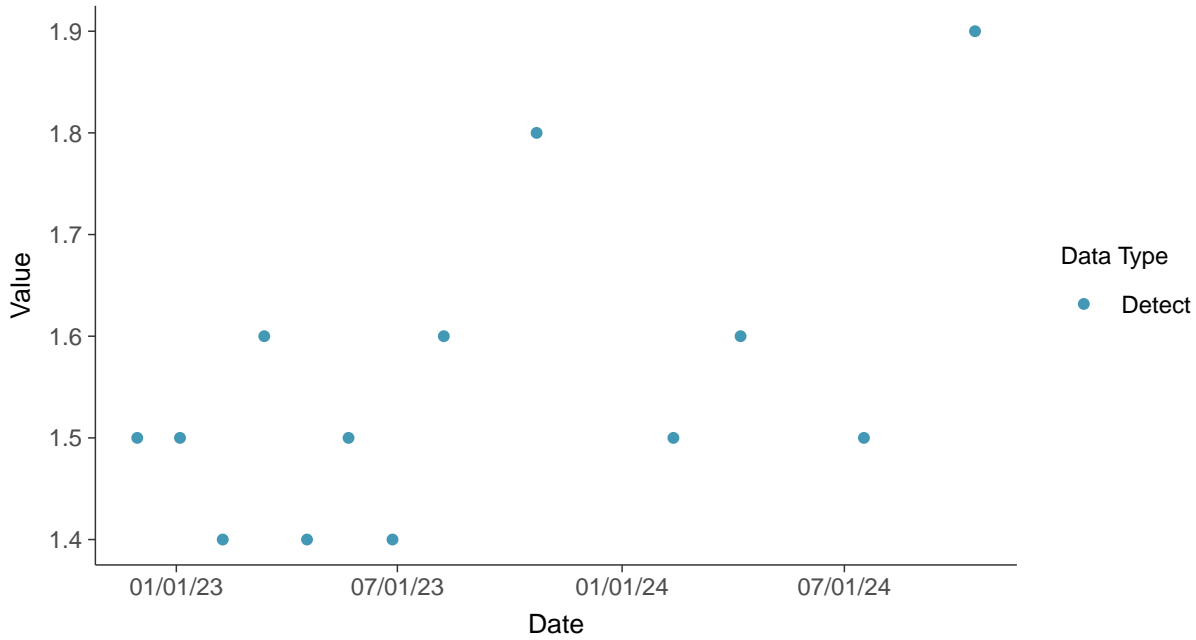


Appendix IV: Fluoride (App IV), MW-32

ID: 1_42_1_5_113

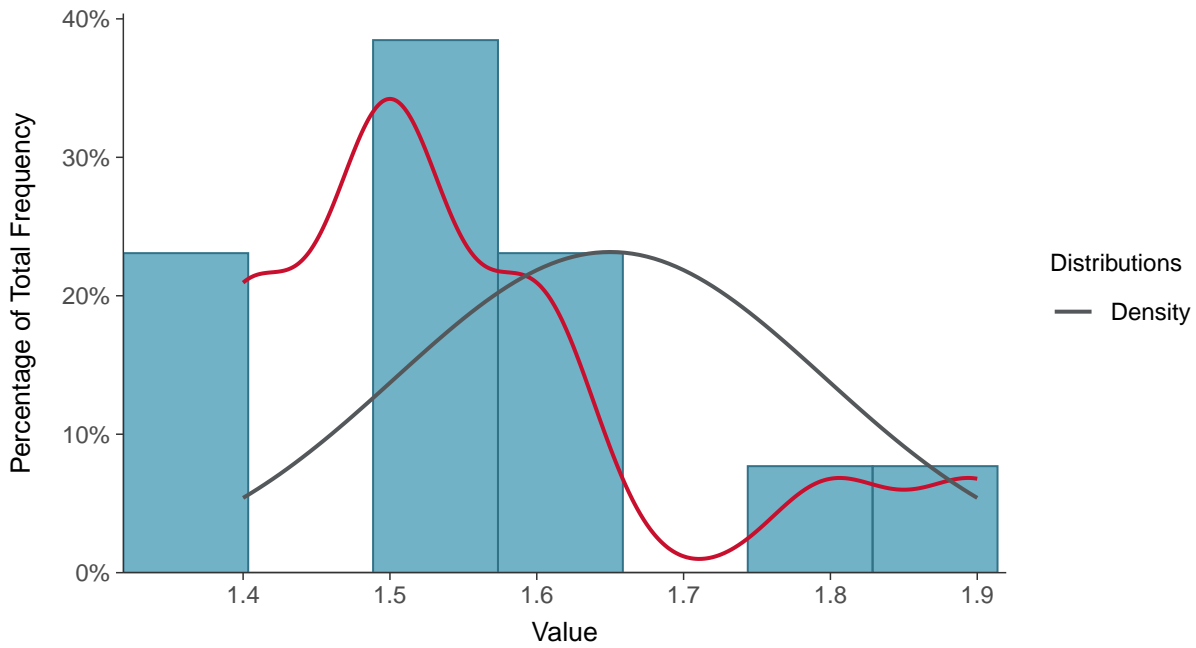
Scatter Plot

Fluoride (App IV), MW-32 (mg/L)



Histogram

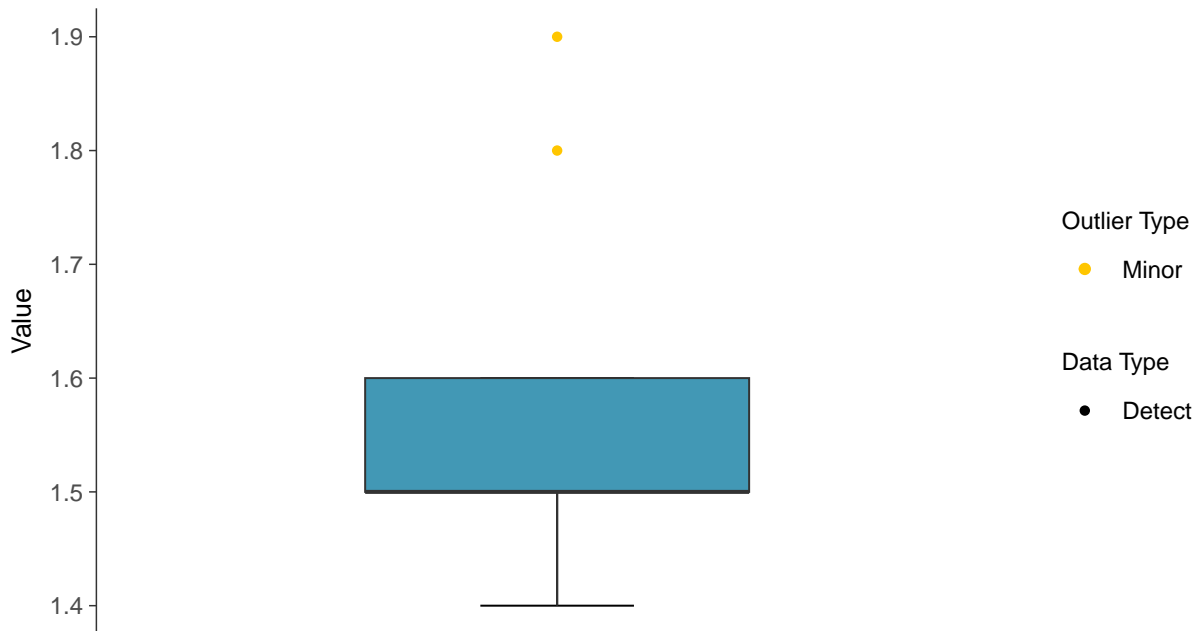
Fluoride (App IV), MW-32 (mg/L)





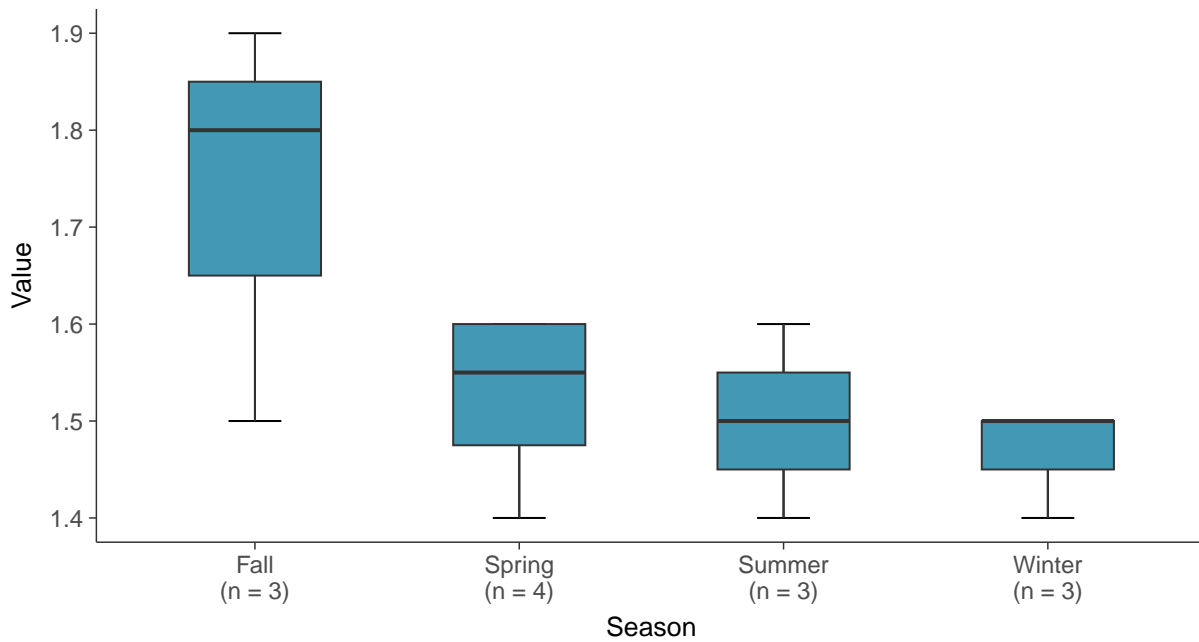
Boxplot

Fluoride (App IV), MW-32 (mg/L)



Boxplot by Season

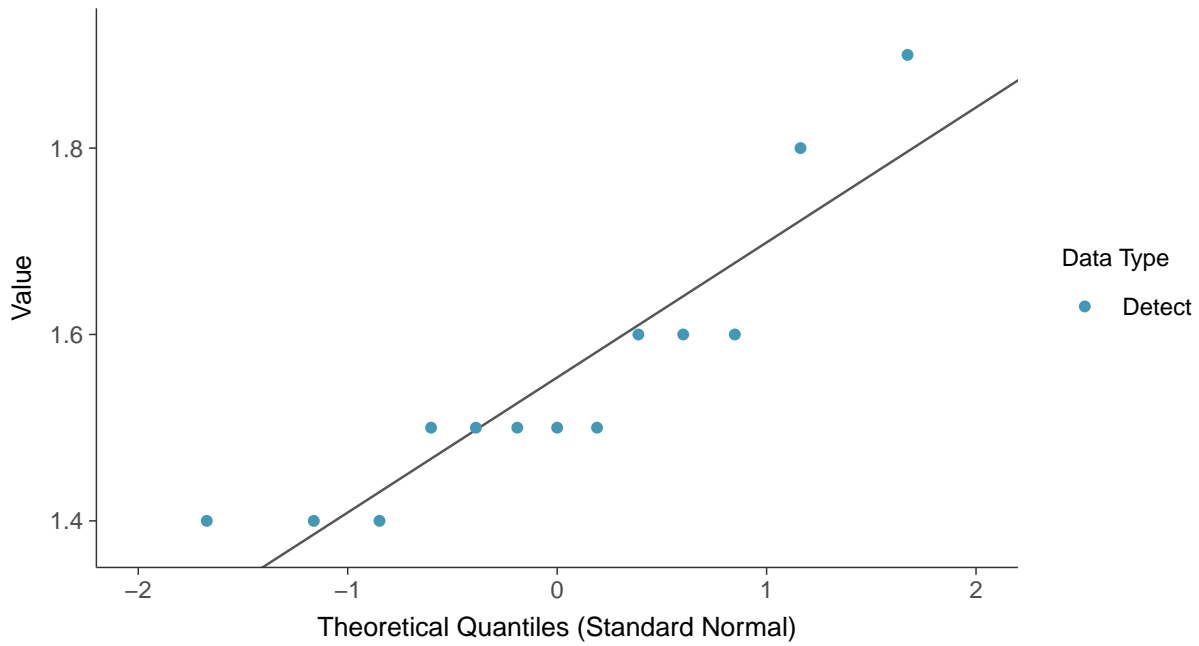
Fluoride (App IV), MW-32 (mg/L)





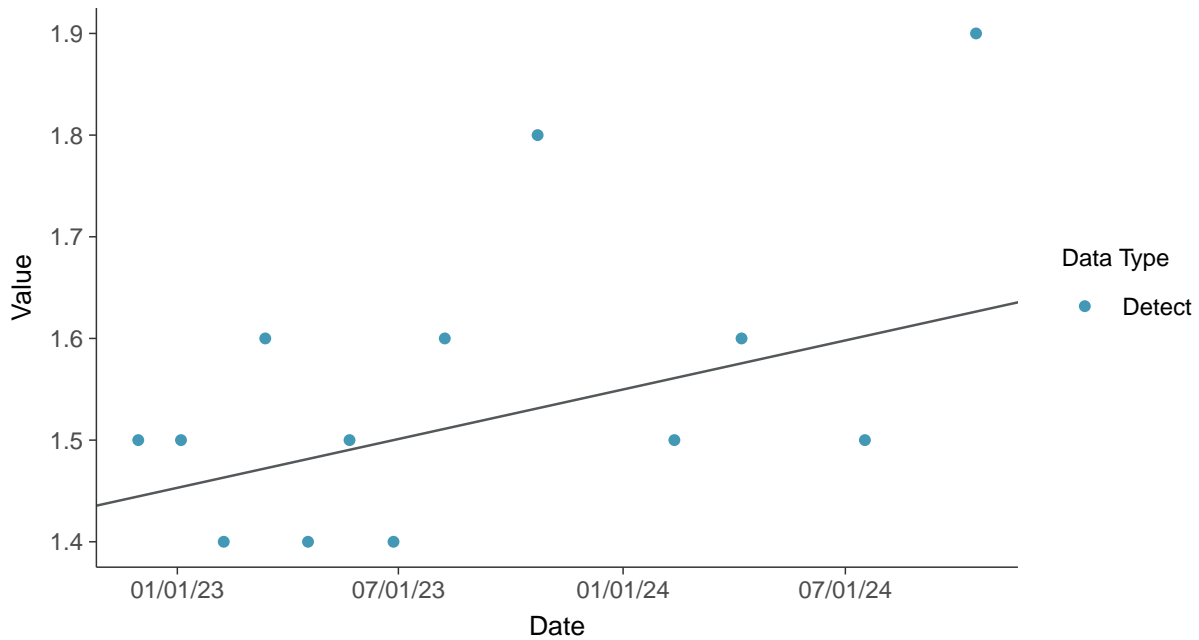
Normal Q-Q plot

Fluoride (App IV), MW-32 (mg/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

Fluoride (App IV), MW-32 (mg/L)



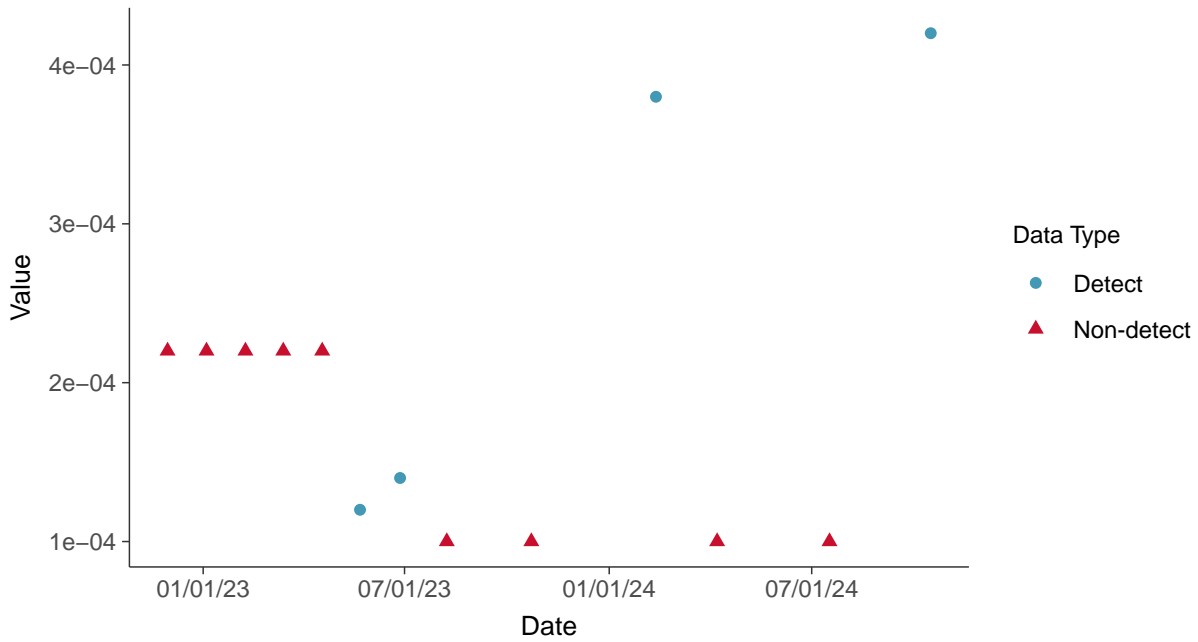


Appendix IV: Lead, MW-32

ID: 1_42_1_5_115

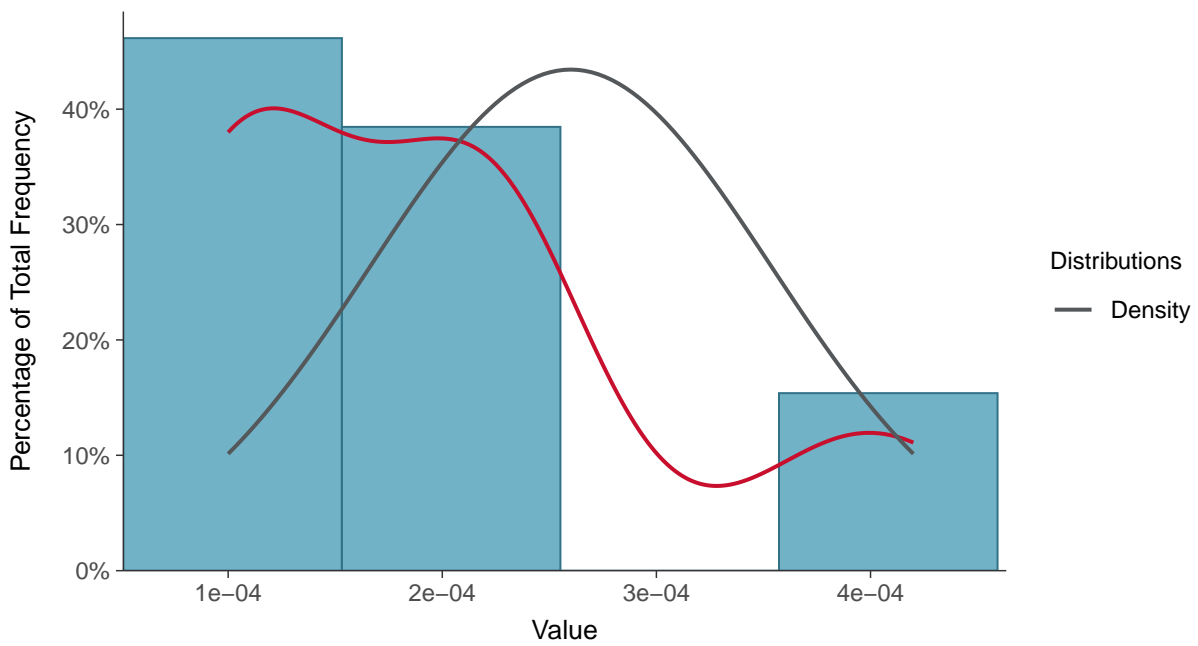
Scatter Plot

Lead, MW-32 (mg/L)



Histogram

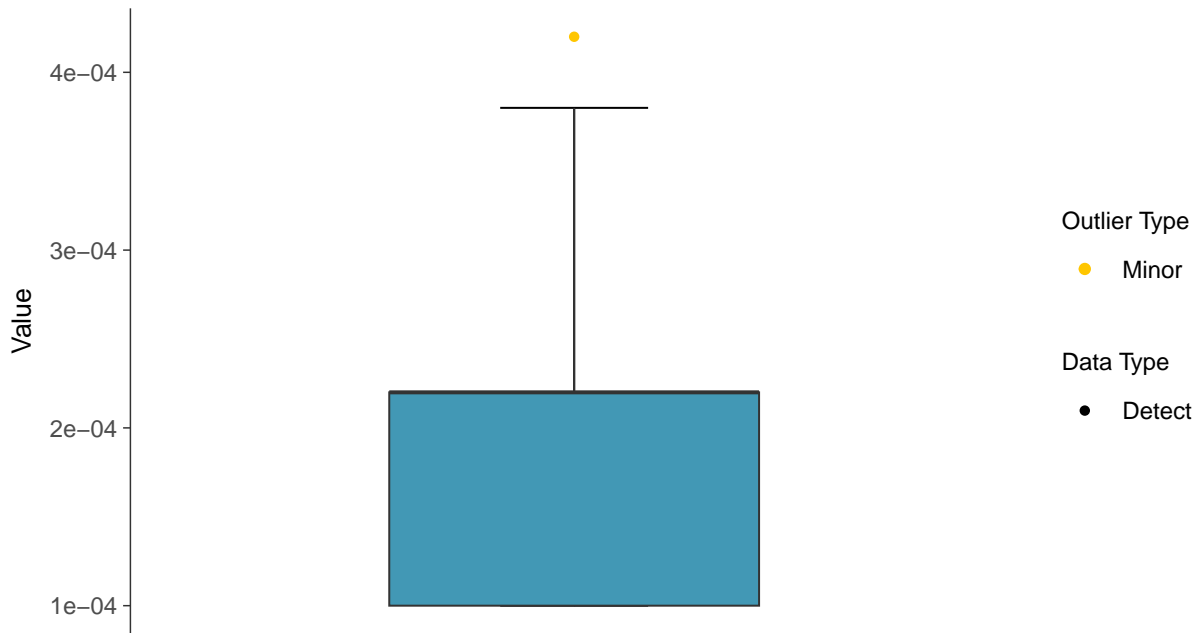
Lead, MW-32 (mg/L)





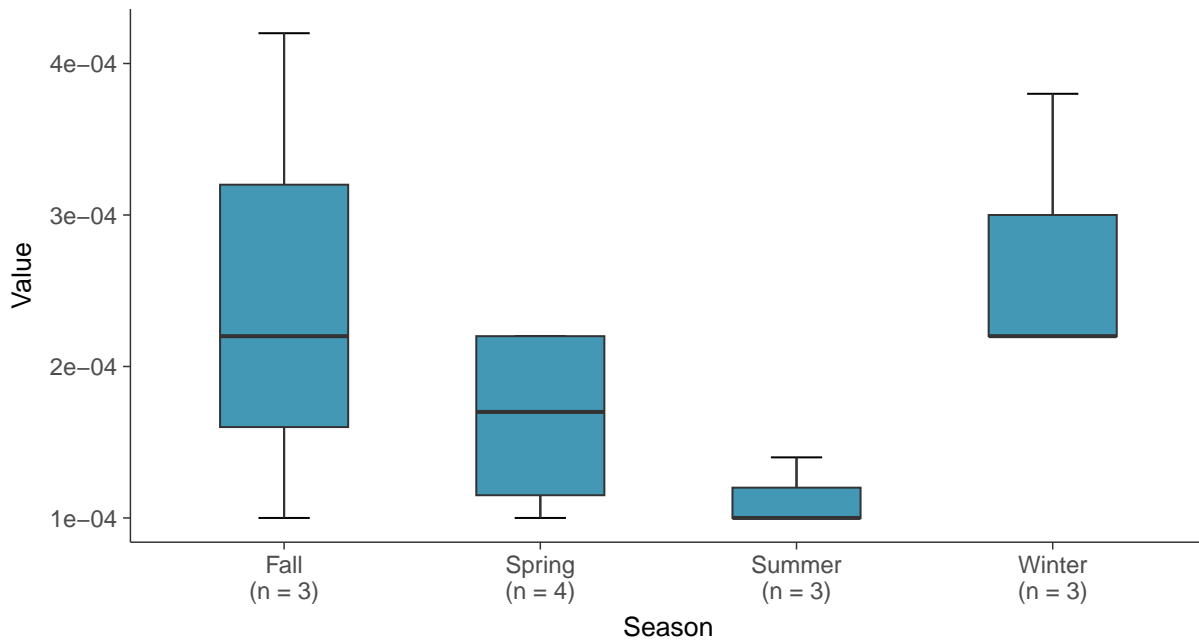
Boxplot

Lead, MW-32 (mg/L)



Boxplot by Season

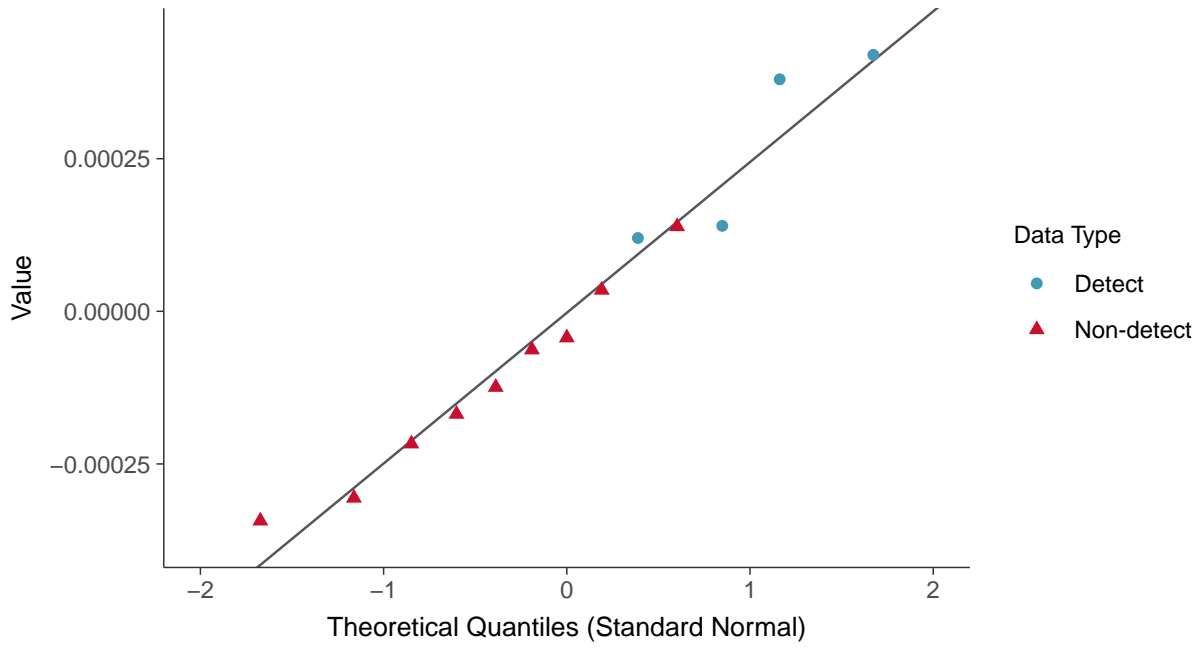
Lead, MW-32 (mg/L)





Normal Q-Q plot using ROS Imputed Estimates

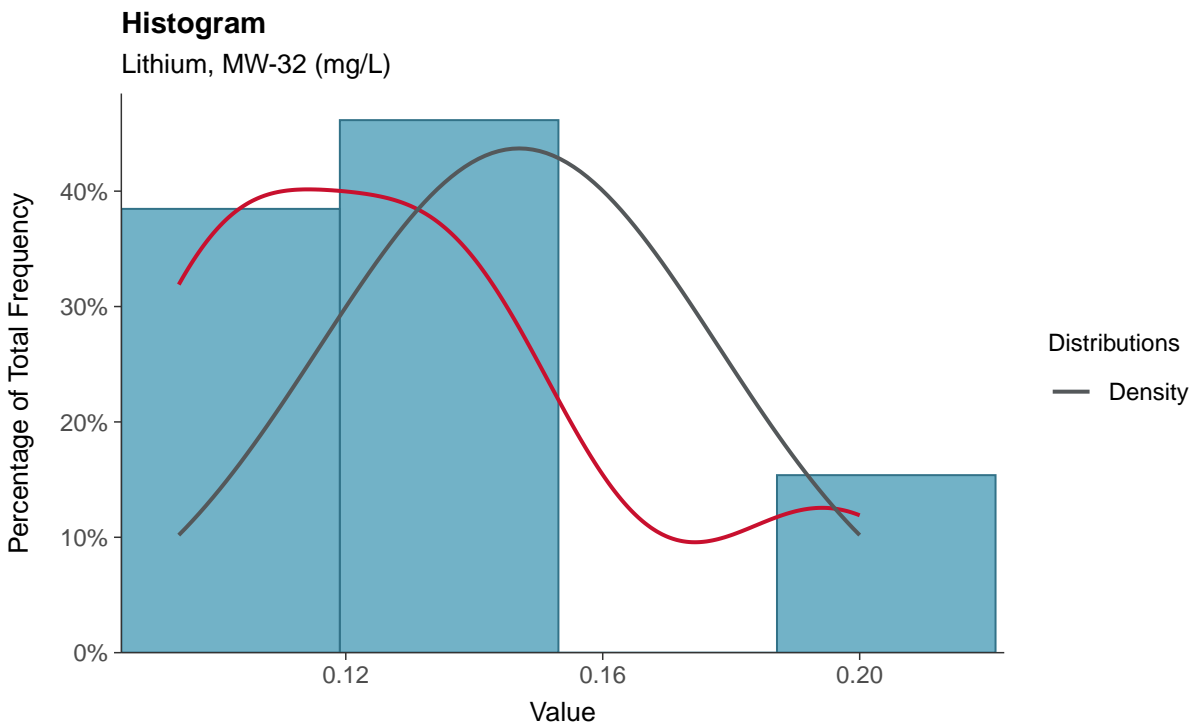
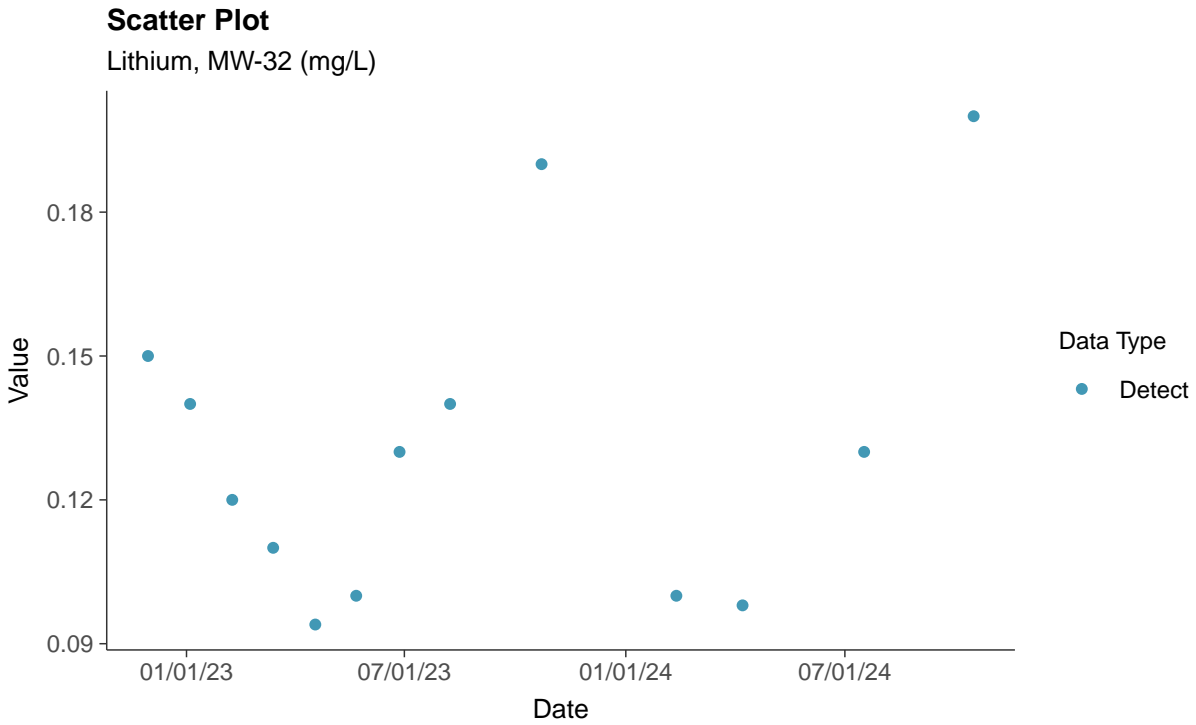
Lead, MW-32 (mg/L)





Appendix IV: Lithium, MW-32

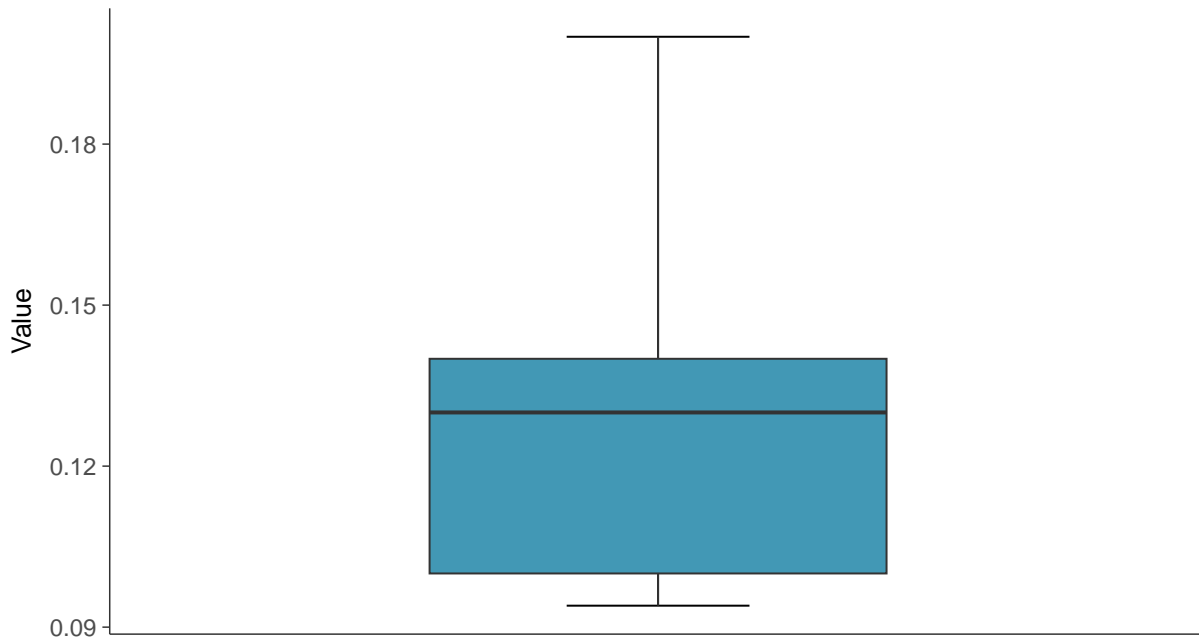
ID: 1_42_1_5_116





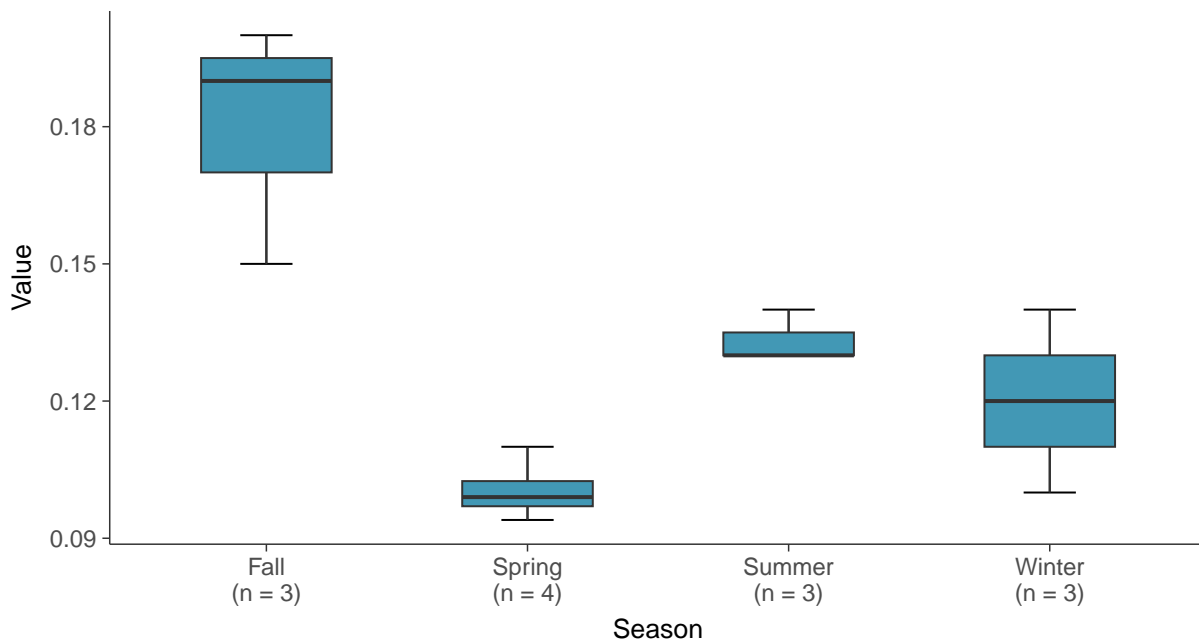
Boxplot

Lithium, MW-32 (mg/L)



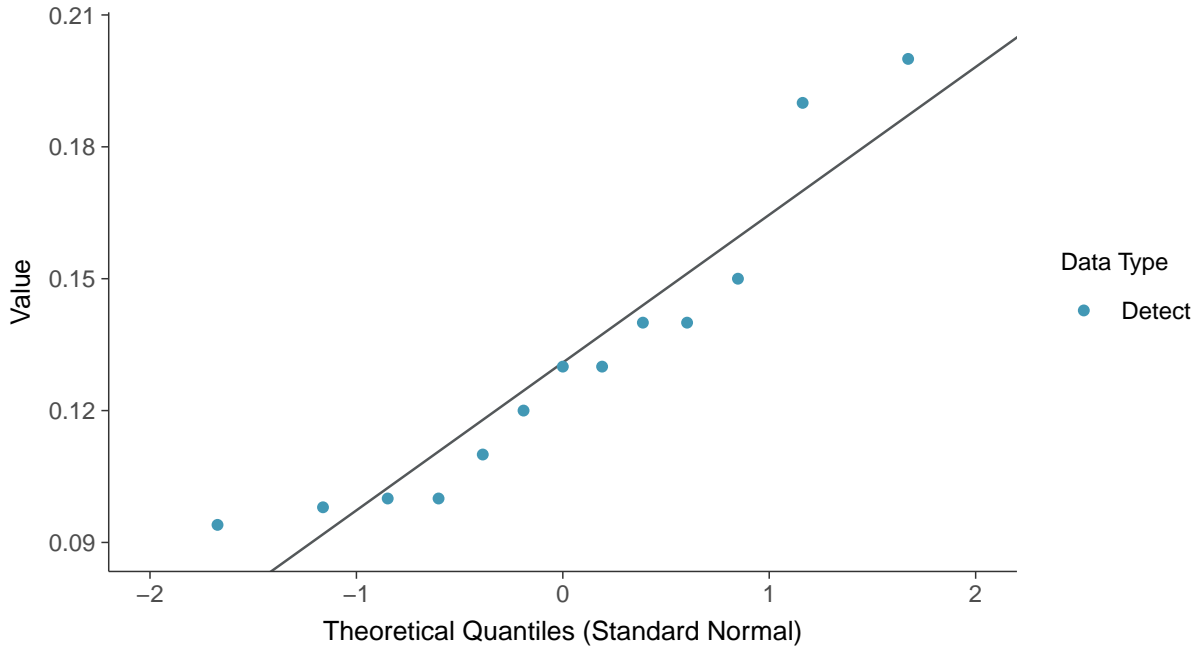
Boxplot by Season

Lithium, MW-32 (mg/L)

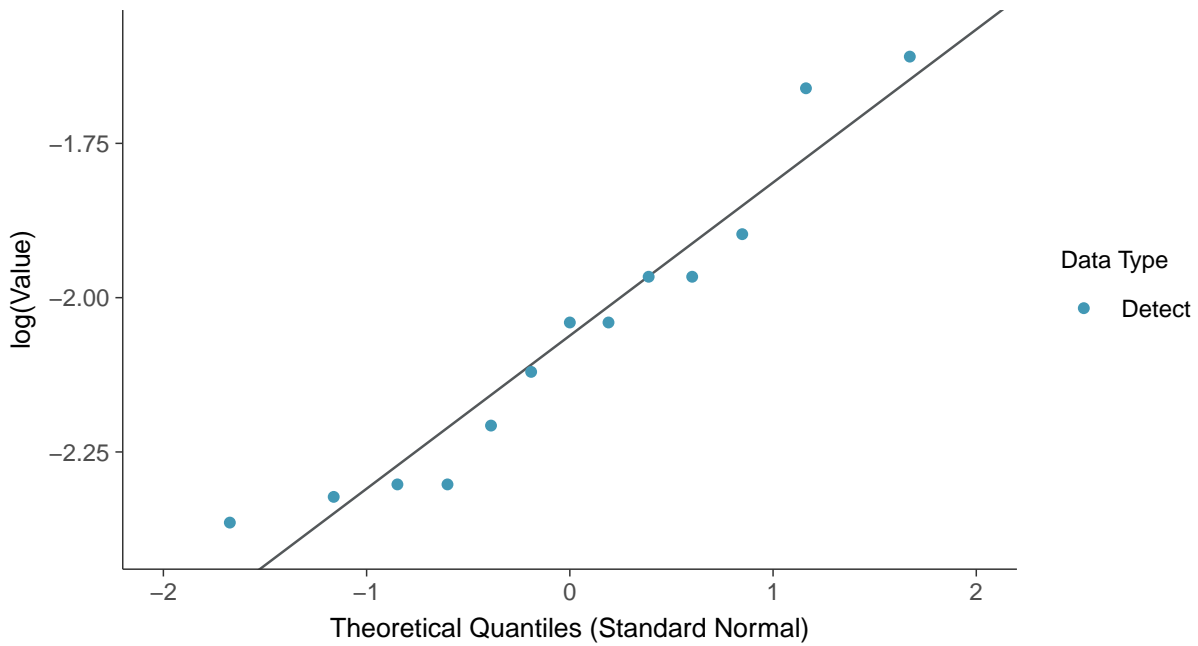




Normal Q-Q plot
Lithium, MW-32 (mg/L)



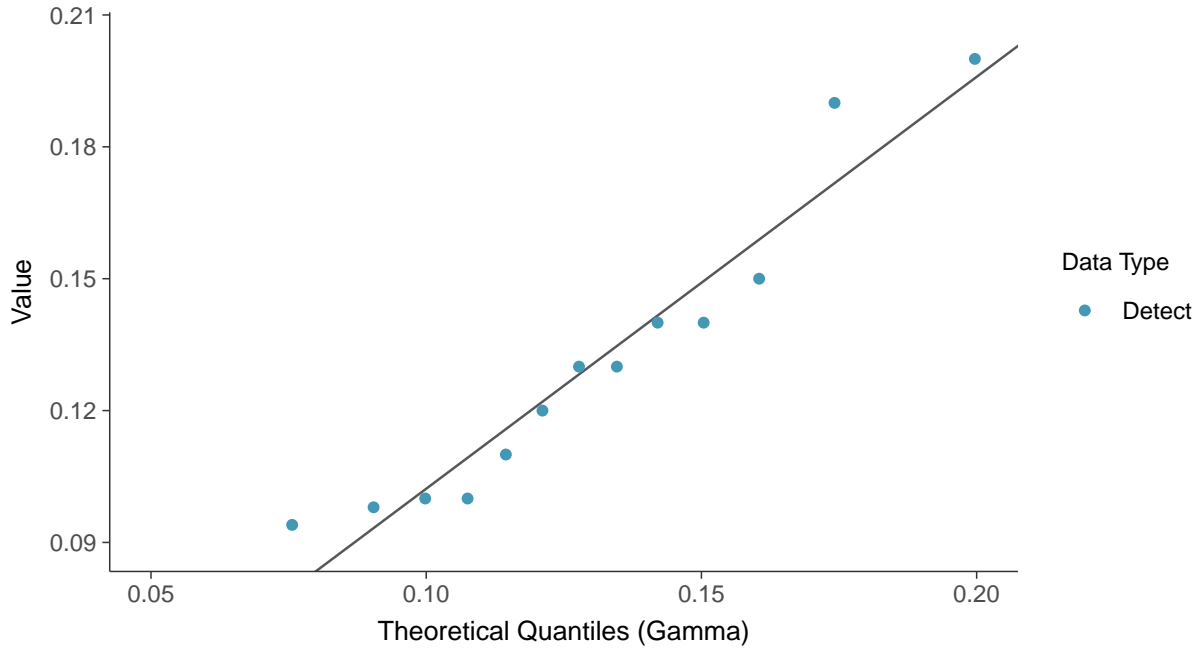
Lognormal Q-Q plot
Lithium, MW-32 (mg/L)





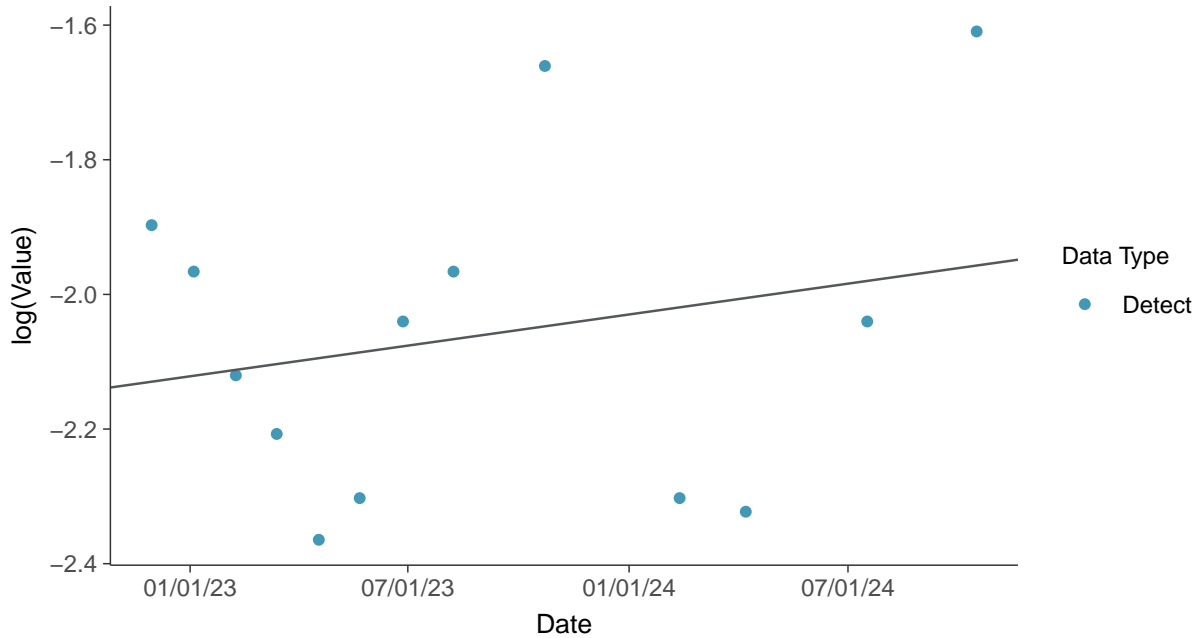
Gamma Q-Q plot

Lithium, MW-32 (mg/L)



Trend Regression: Lognormal MLE

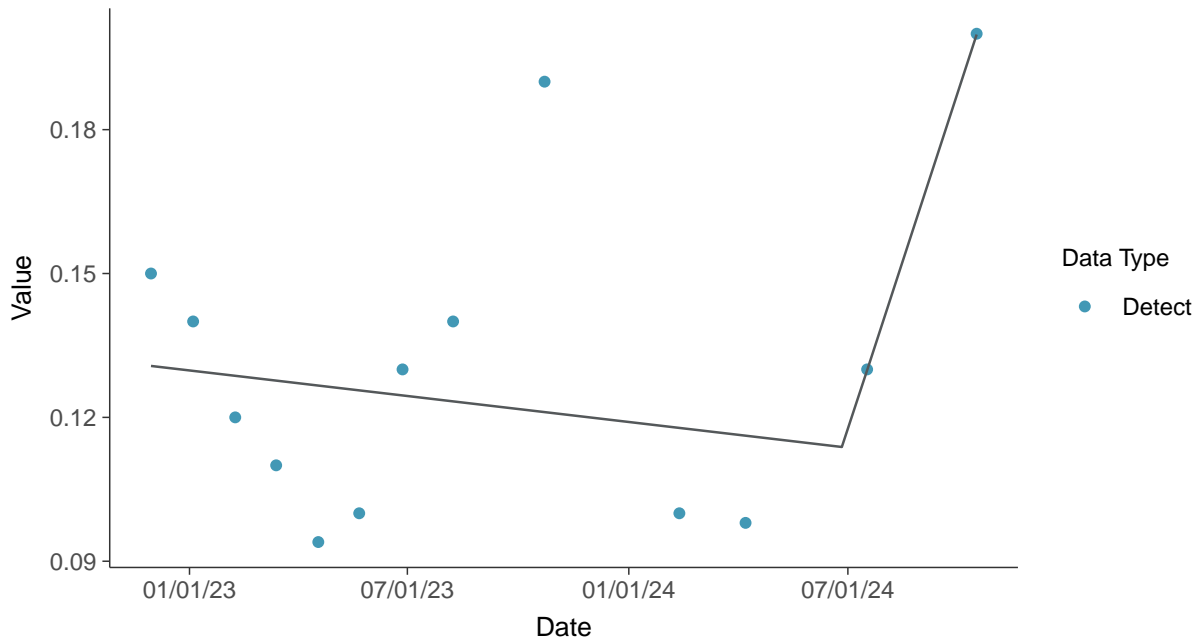
Lithium, MW-32 (mg/L)





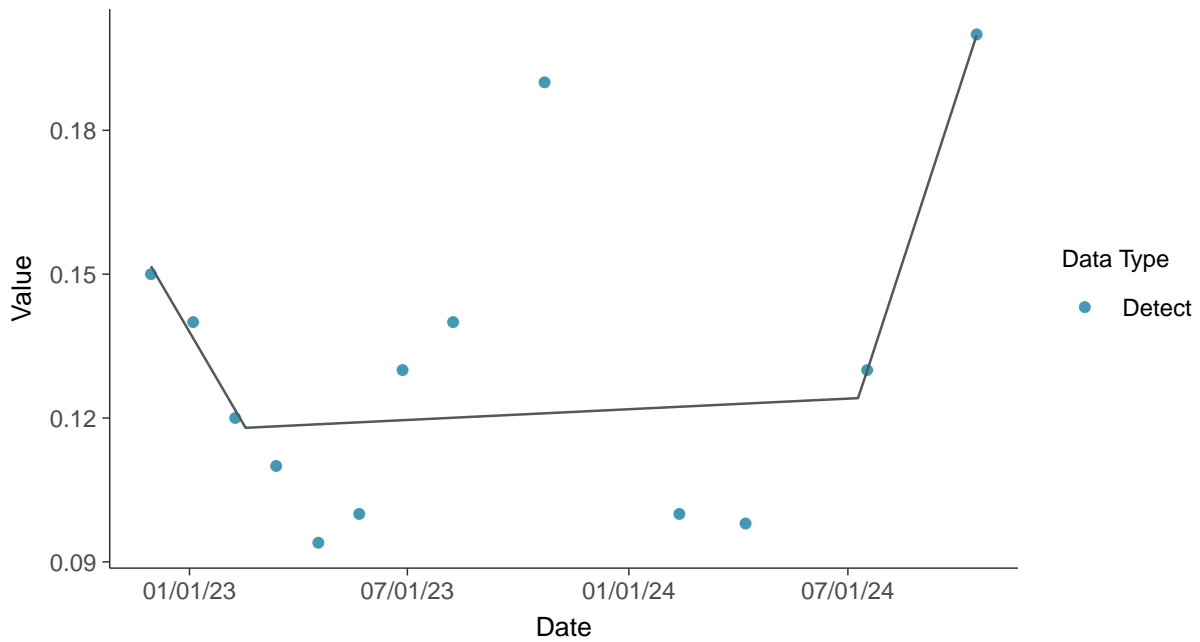
Trend Regression: Piecewise Linear-Linear

Lithium, MW-32 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

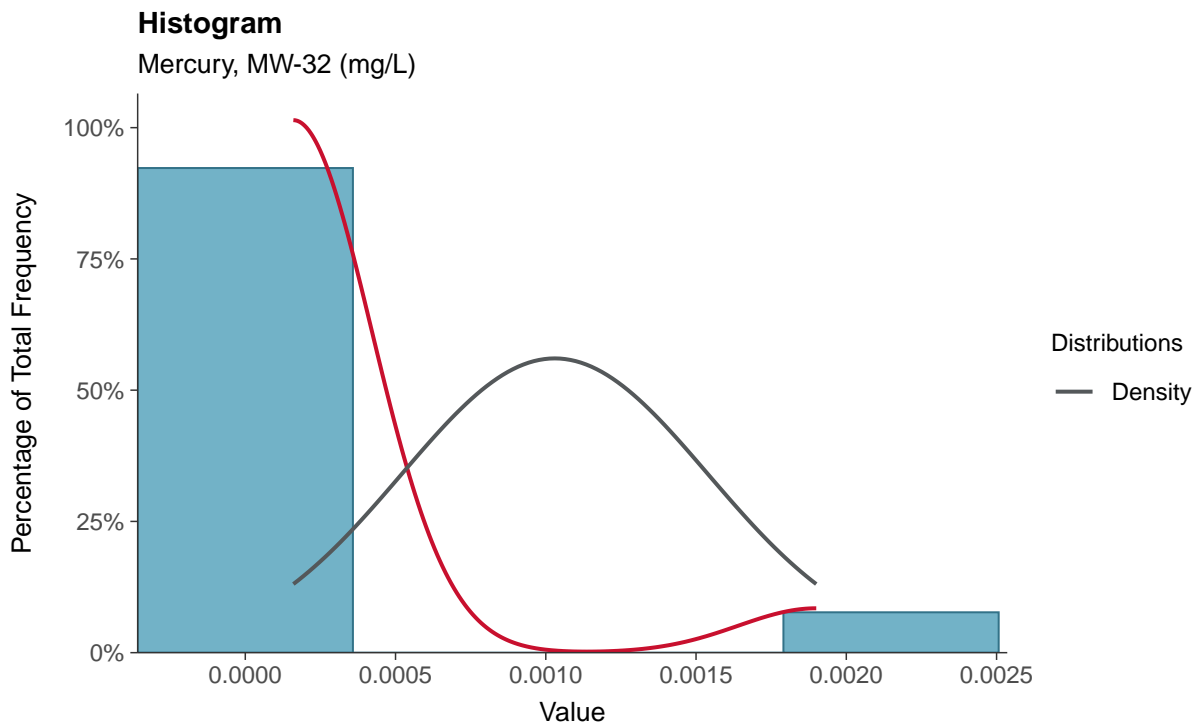
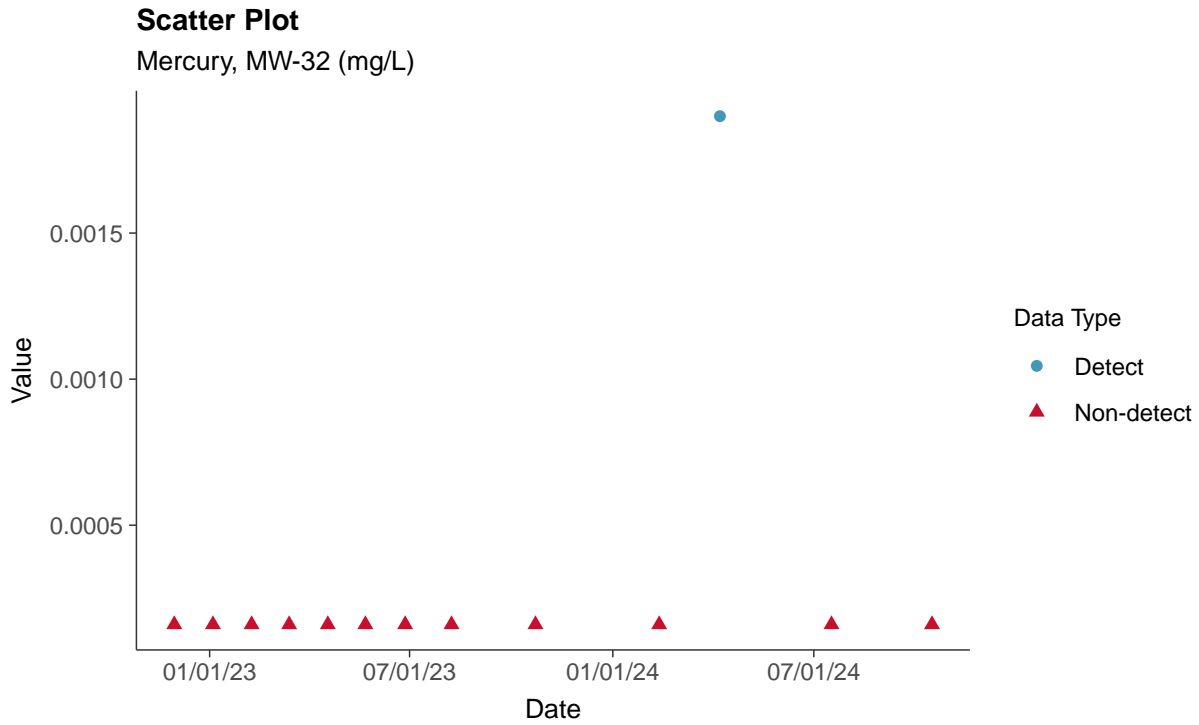
Lithium, MW-32 (mg/L)





Appendix IV: Mercury, MW-32

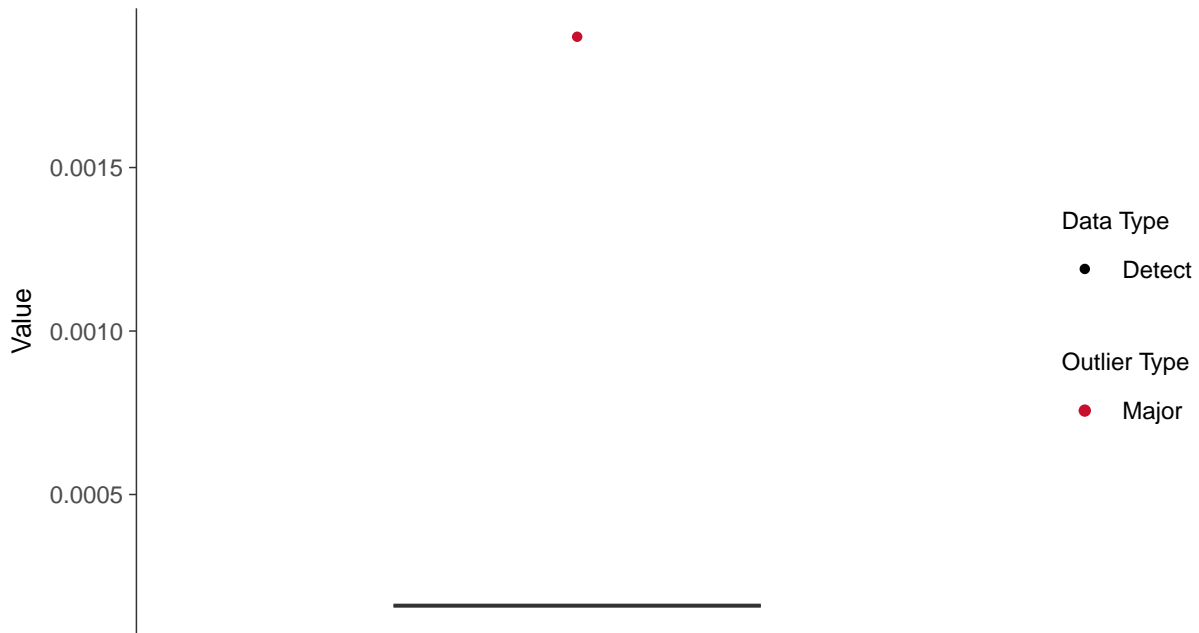
ID: 1_42_1_5_117





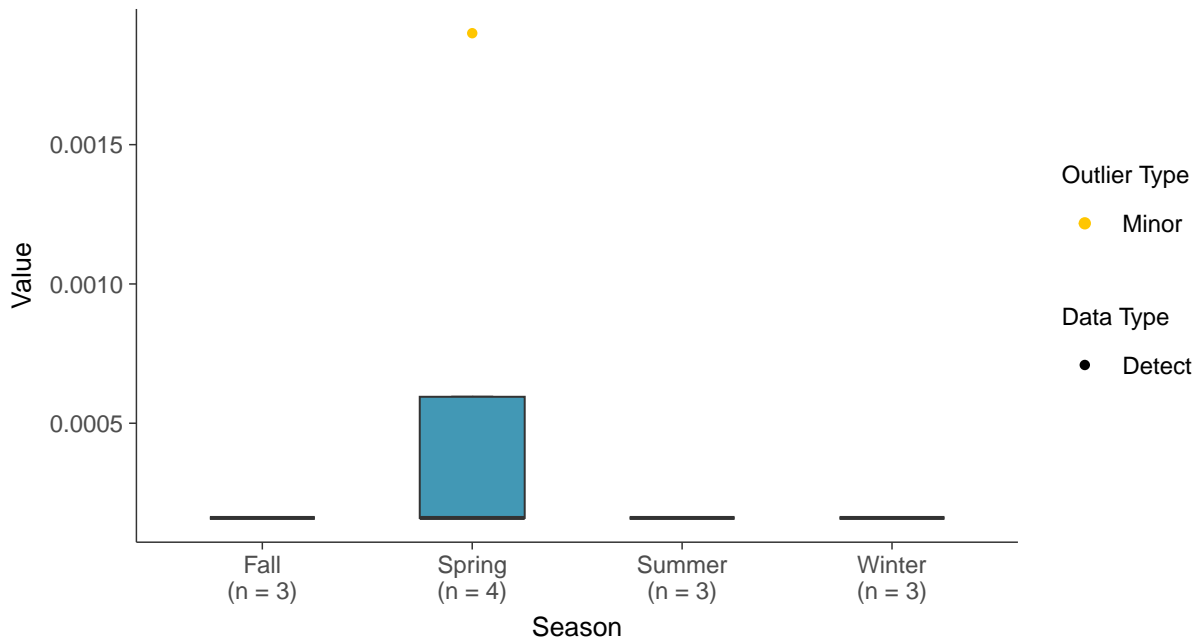
Boxplot

Mercury, MW-32 (mg/L)



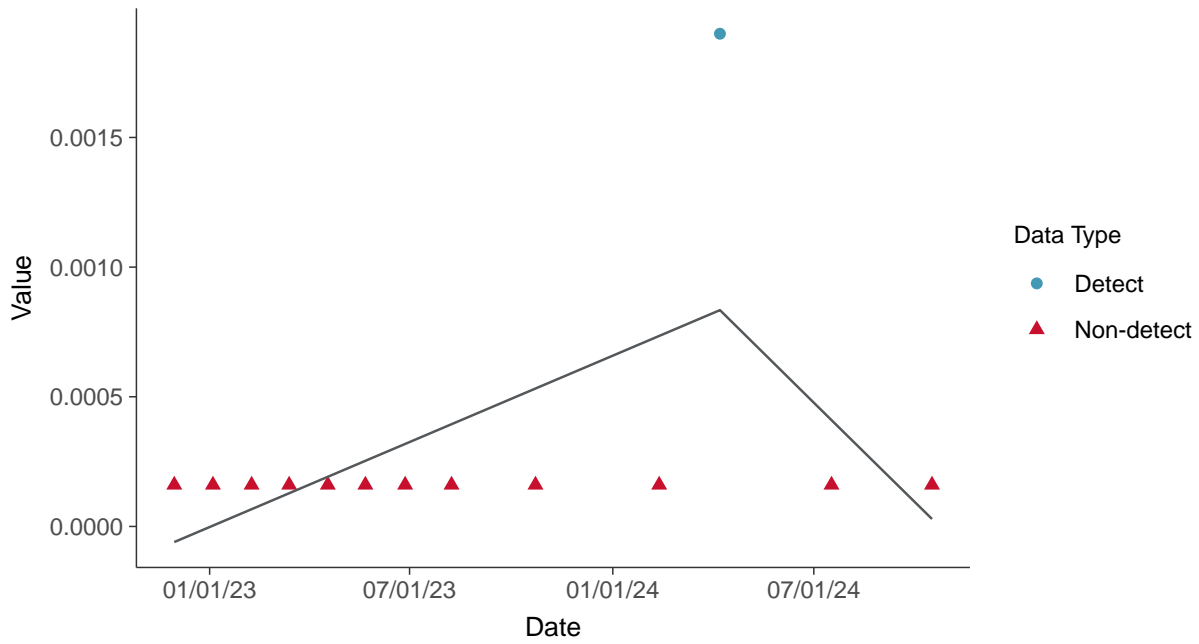
Boxplot by Season

Mercury, MW-32 (mg/L)

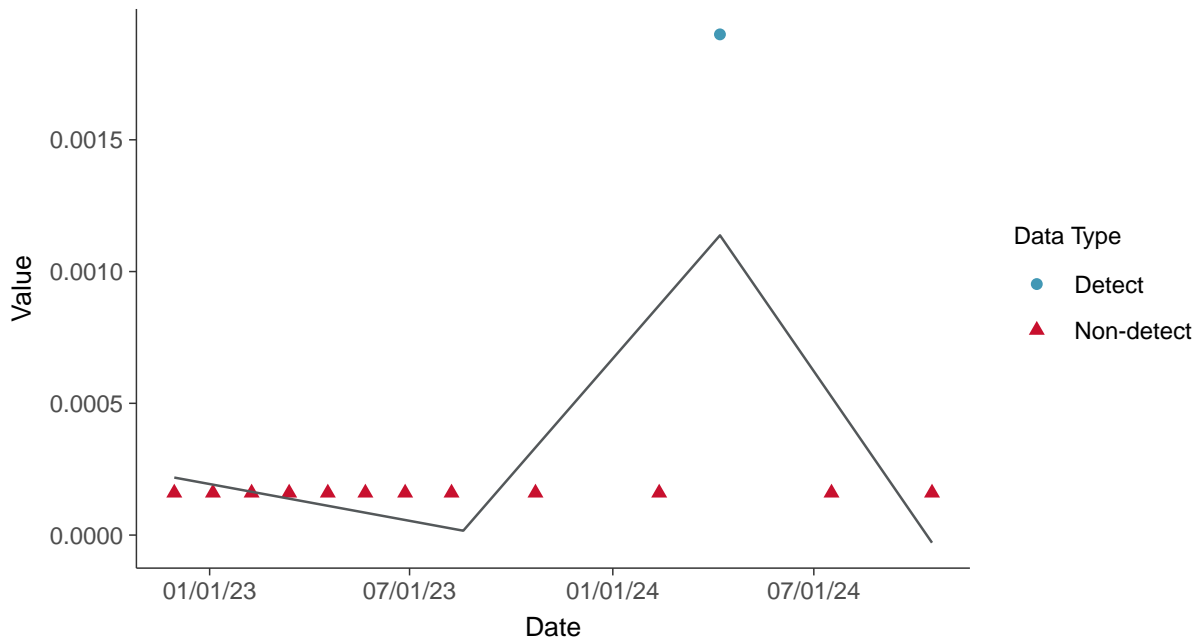




Trend Regression: Piecewise Linear-Linear
Mercury, MW-32 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Mercury, MW-32 (mg/L)



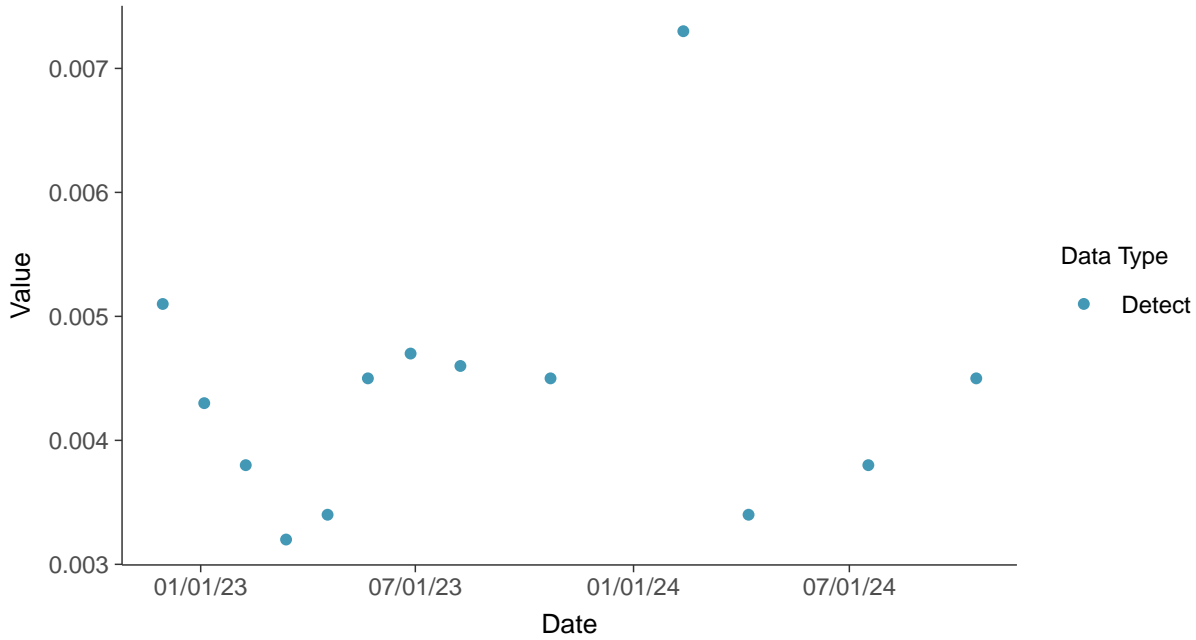


Appendix IV: Molybdenum, MW-32

ID: 1_42_1_5_118

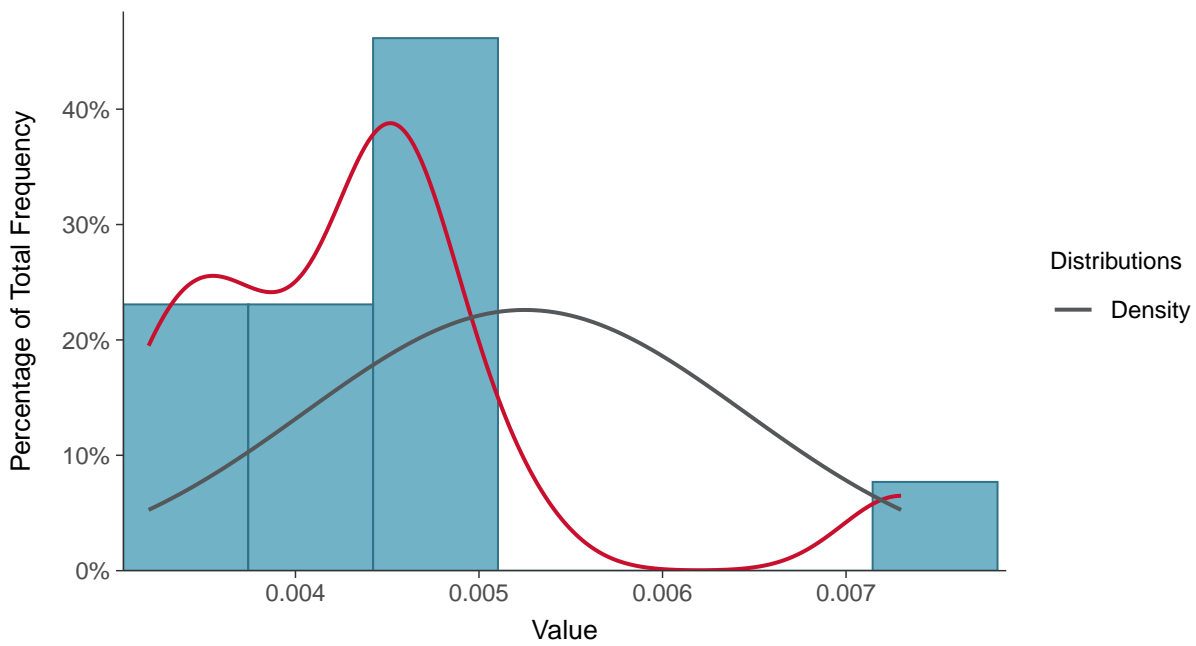
Scatter Plot

Molybdenum, MW-32 (mg/L)



Histogram

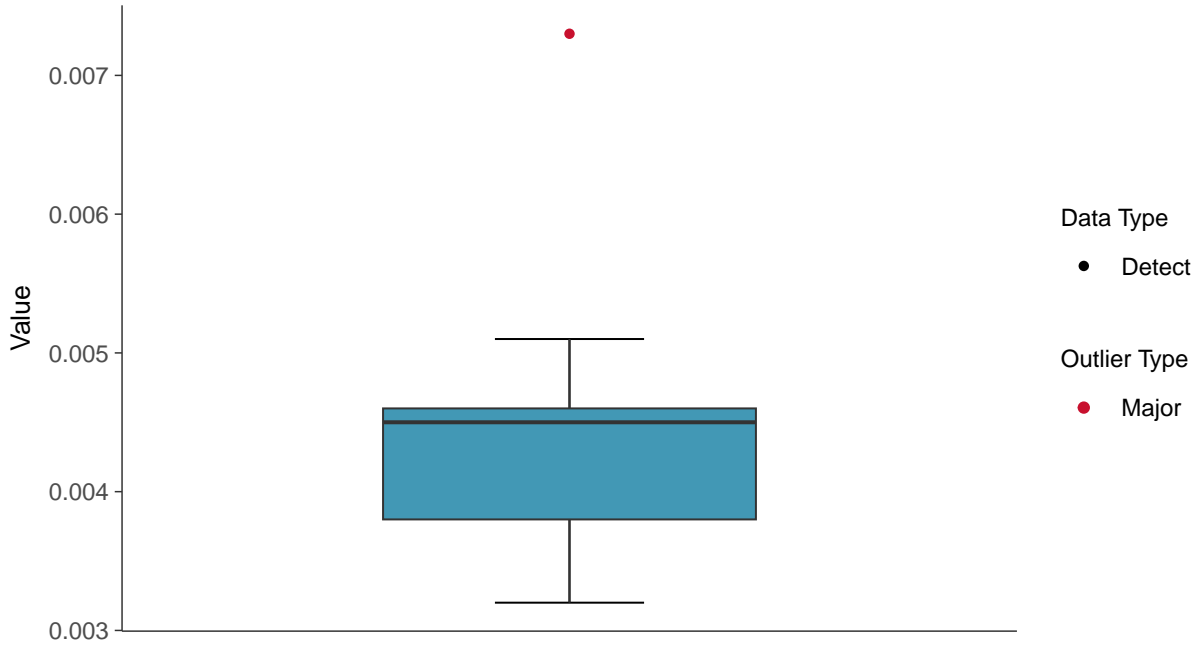
Molybdenum, MW-32 (mg/L)





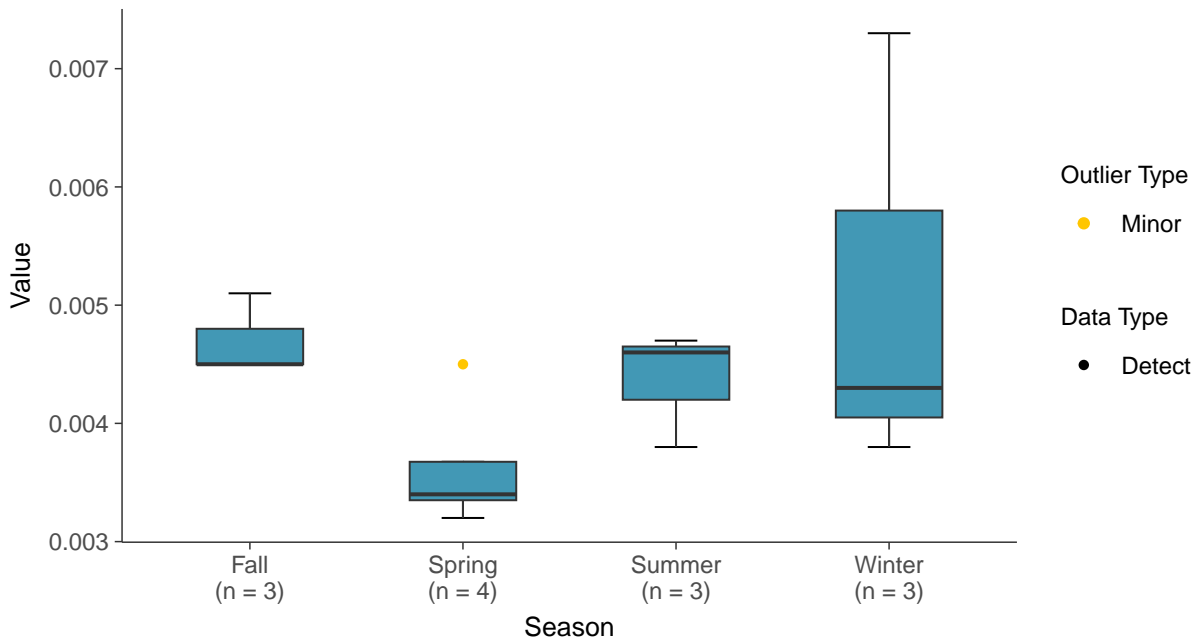
Boxplot

Molybdenum, MW-32 (mg/L)



Boxplot by Season

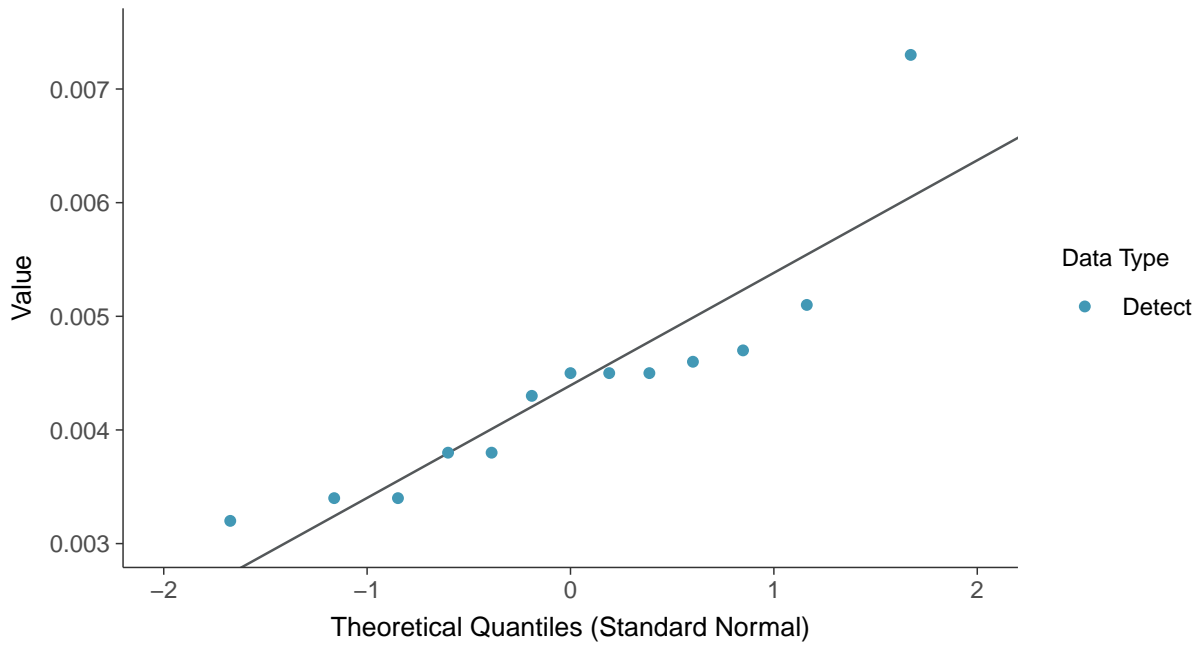
Molybdenum, MW-32 (mg/L)





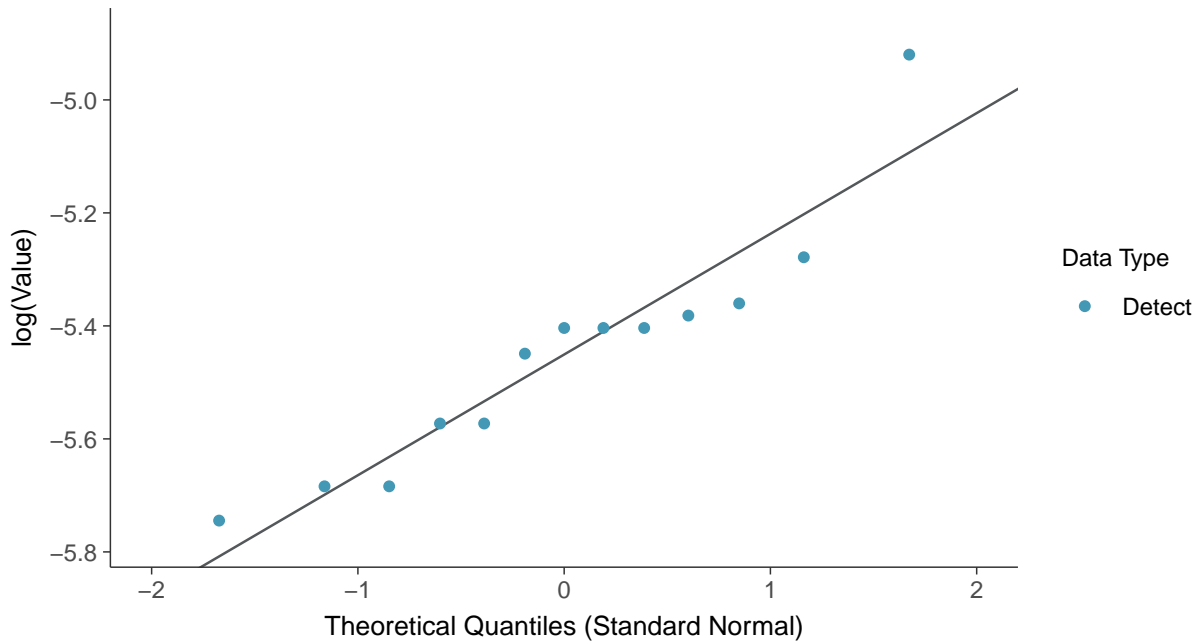
Normal Q-Q plot

Molybdenum, MW-32 (mg/L)



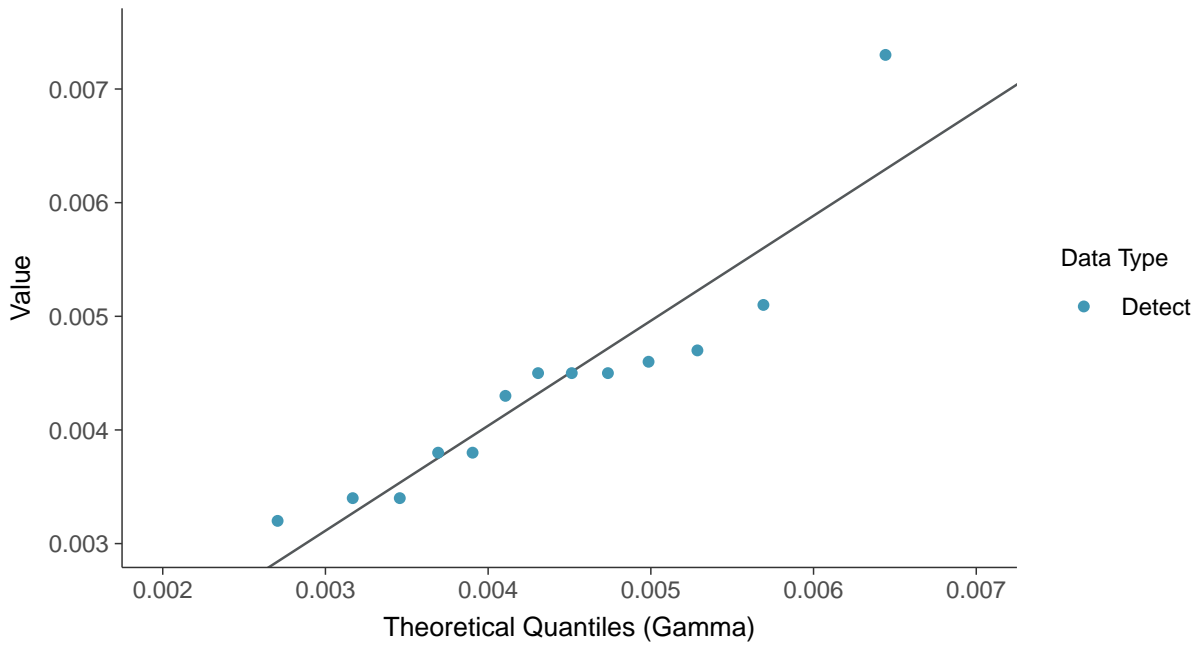
Lognormal Q-Q plot

Molybdenum, MW-32 (mg/L)

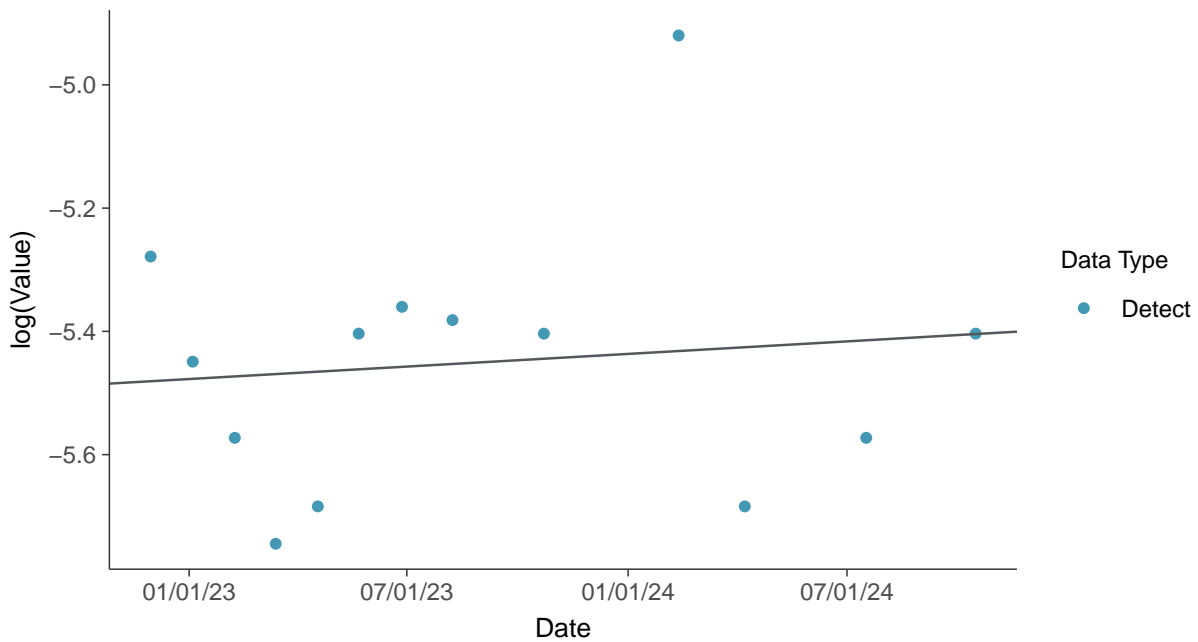




Gamma Q-Q plot
Molybdenum, MW-32 (mg/L)

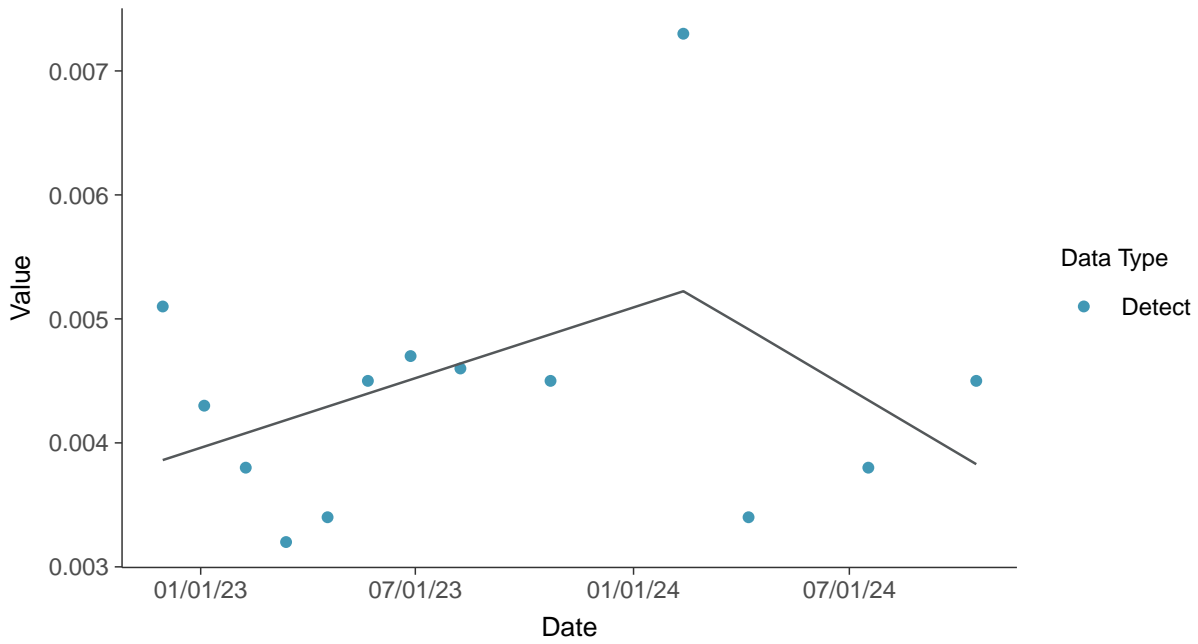


Trend Regression: Lognormal MLE
Molybdenum, MW-32 (mg/L)

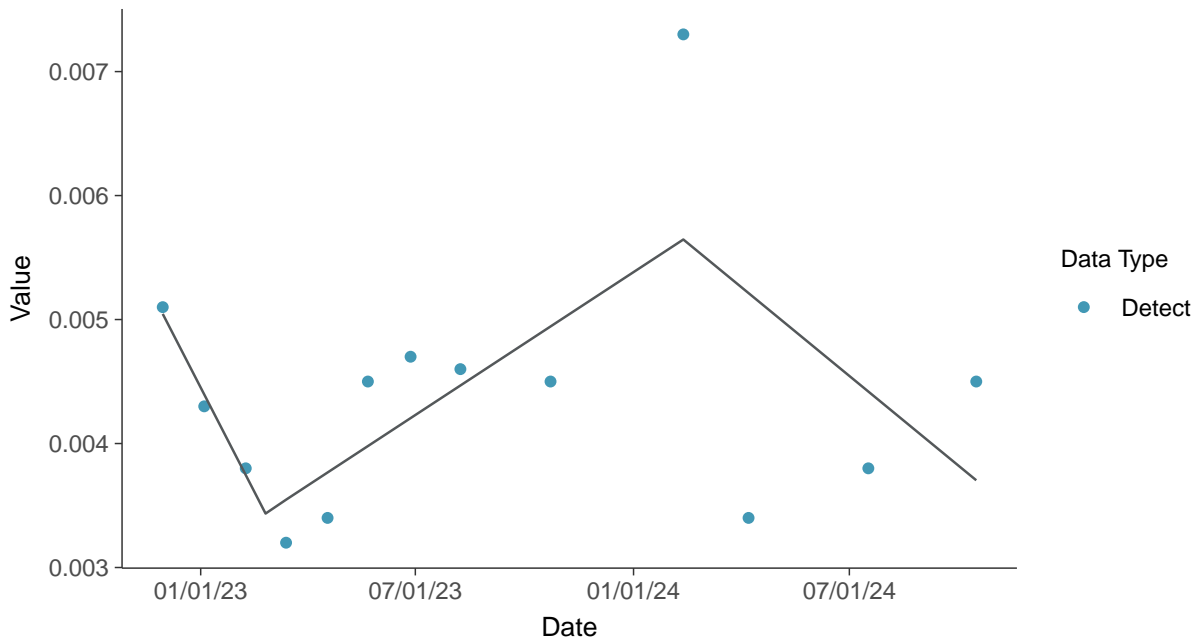




Trend Regression: Piecewise Linear-Linear
Molybdenum, MW-32 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Molybdenum, MW-32 (mg/L)



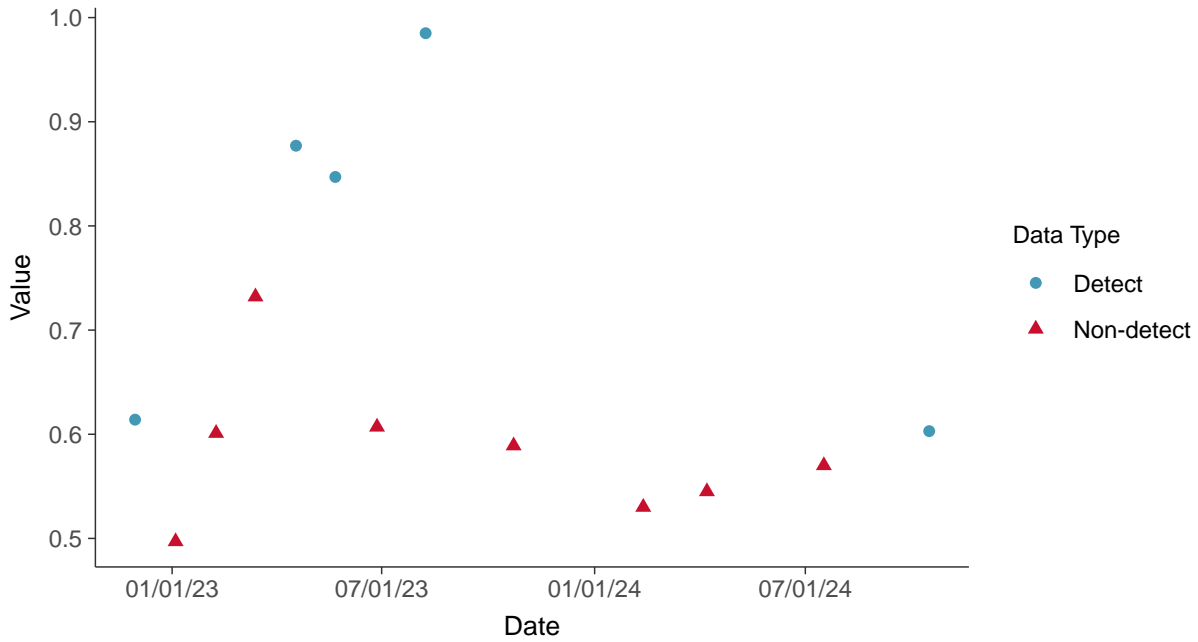


Appendix IV: Radium 226 and 228, MW-32

ID: 1_42_1_5_121

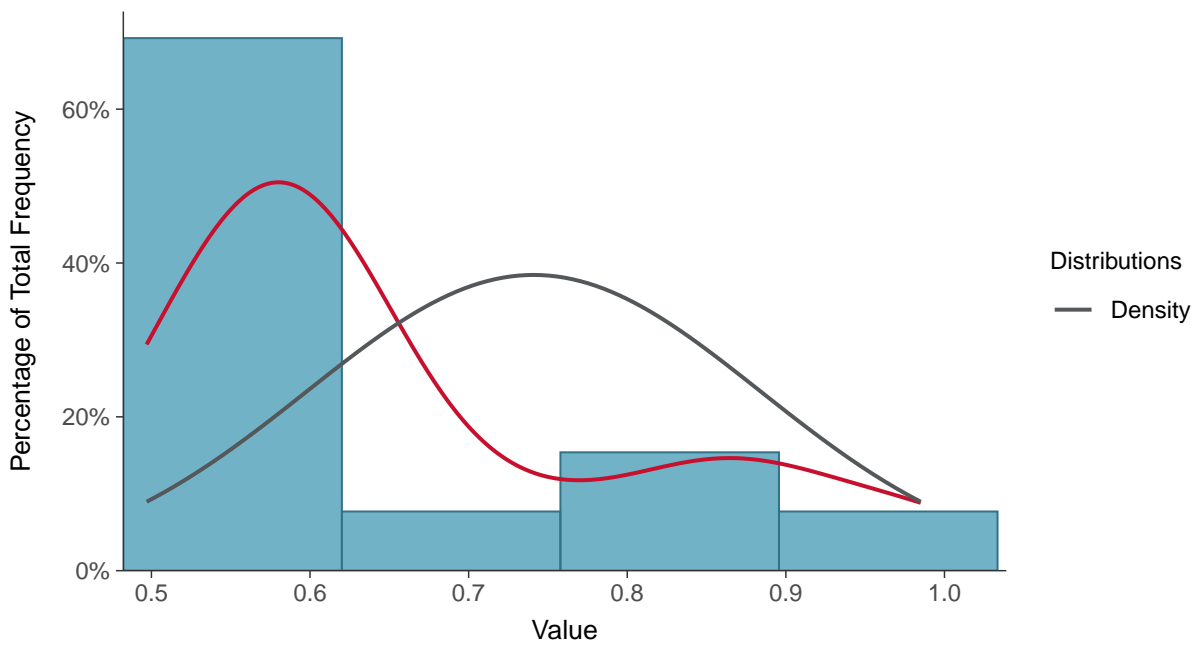
Scatter Plot

Radium 226 and 228, MW-32 (pCi/L)



Histogram

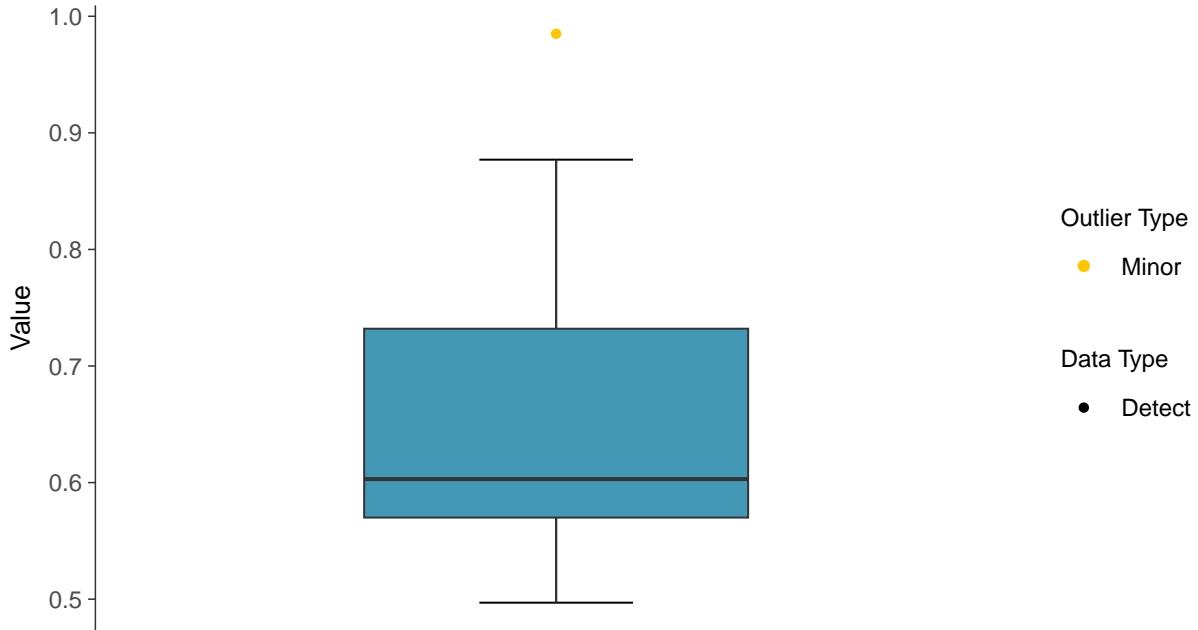
Radium 226 and 228, MW-32 (pCi/L)





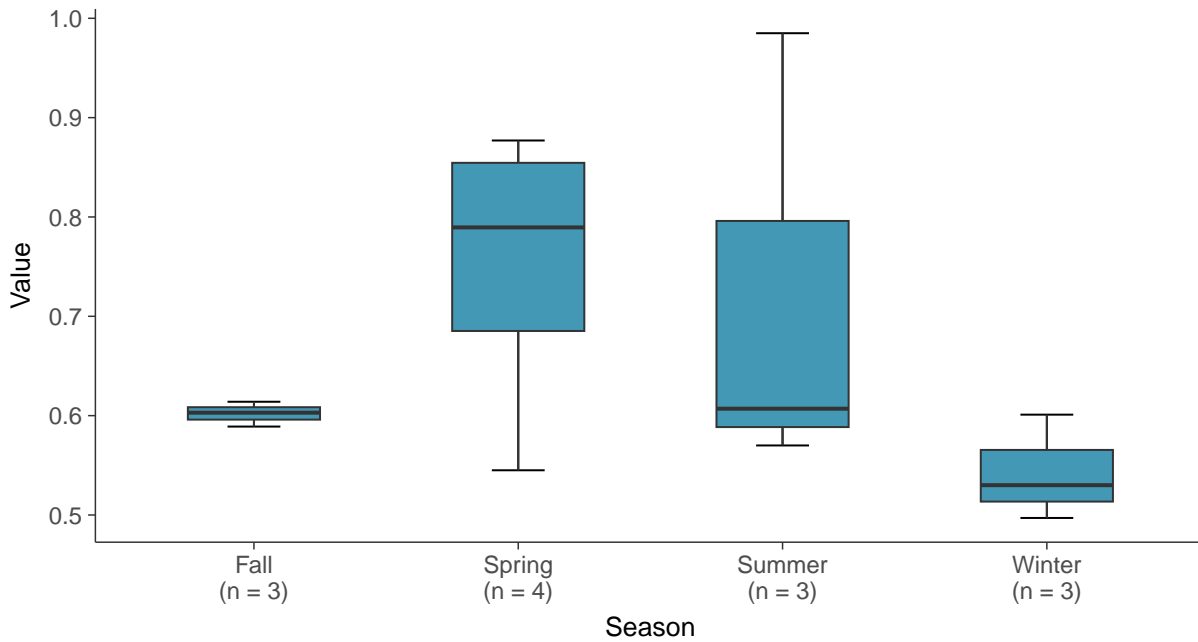
Boxplot

Radium 226 and 228, MW-32 (pCi/L)



Boxplot by Season

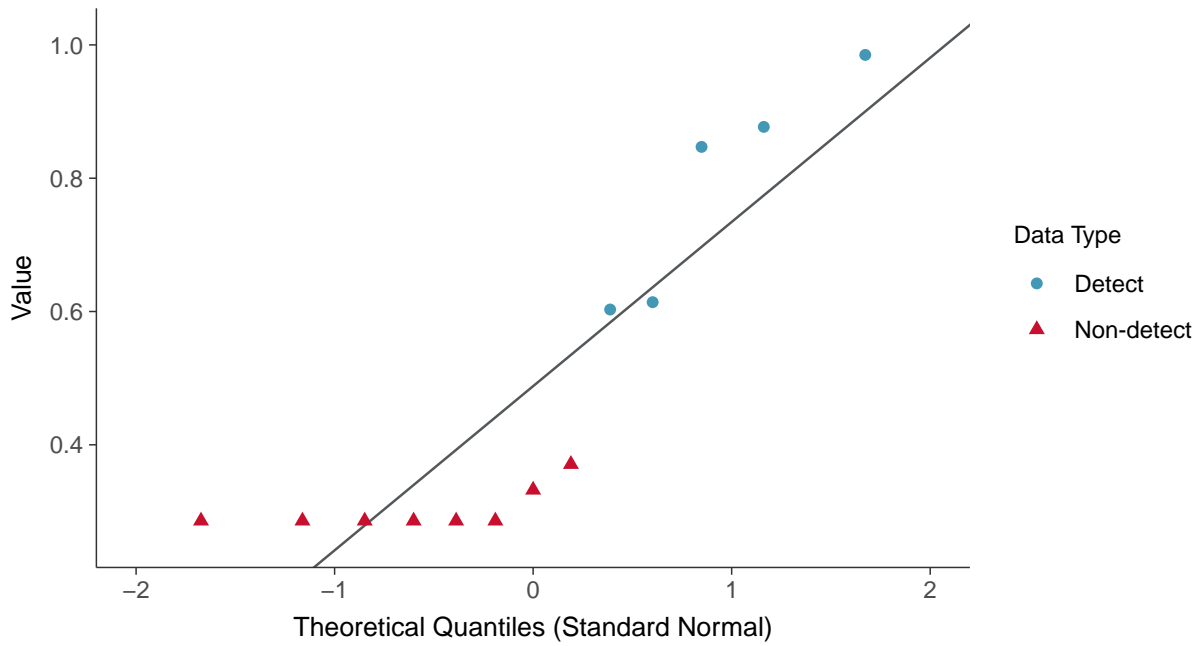
Radium 226 and 228, MW-32 (pCi/L)





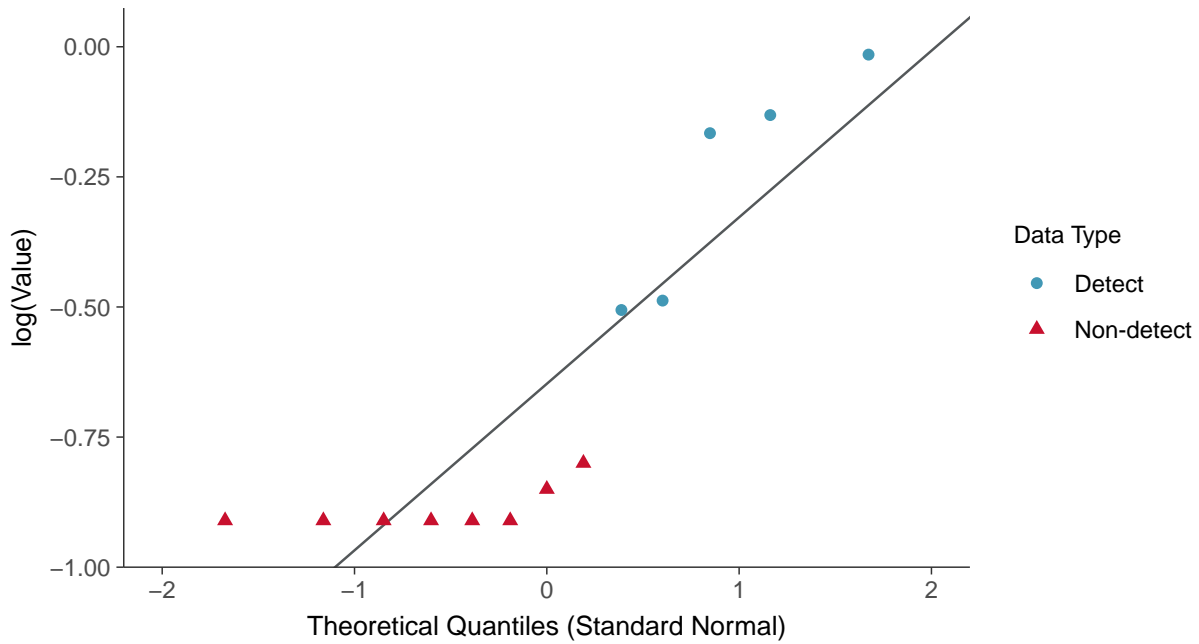
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-32 (pCi/L)



Lognormal Q-Q plot using ROS Imputed Estimates

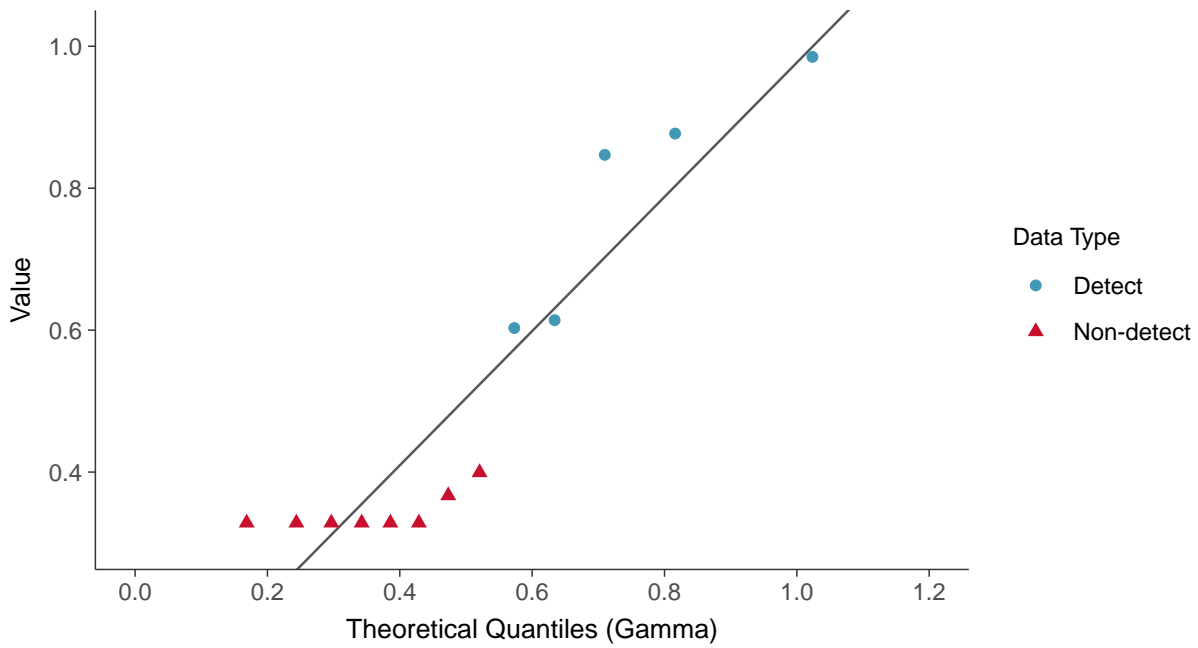
Radium 226 and 228, MW-32 (pCi/L)





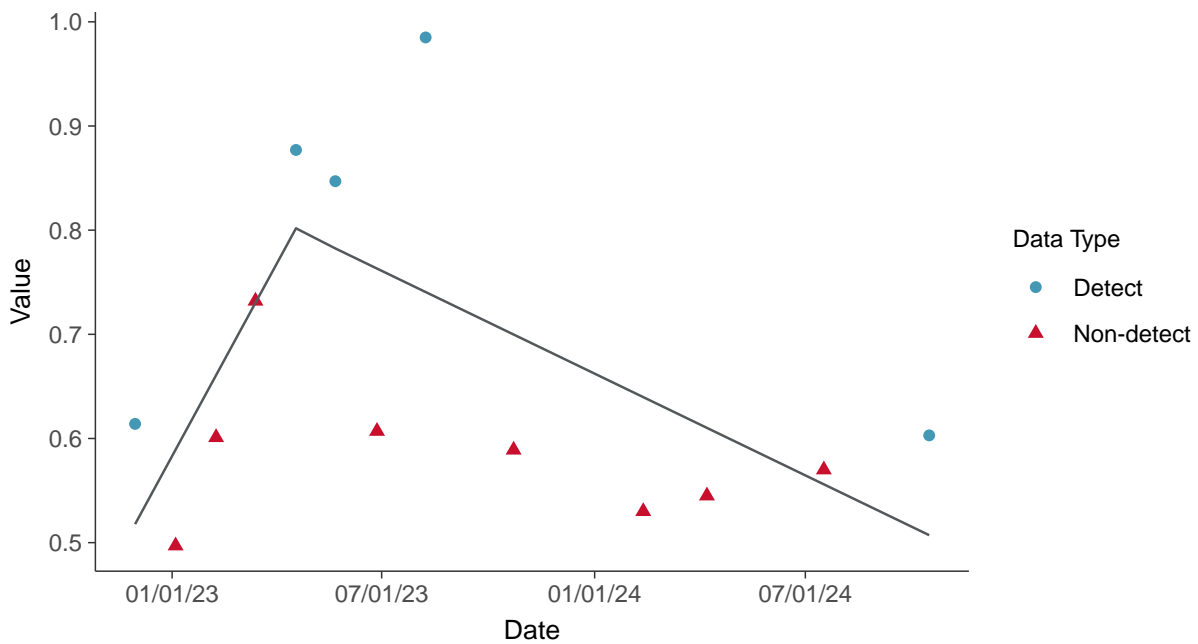
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-32 (pCi/L)



Trend Regression: Piecewise Linear-Linear

Radium 226 and 228, MW-32 (pCi/L)



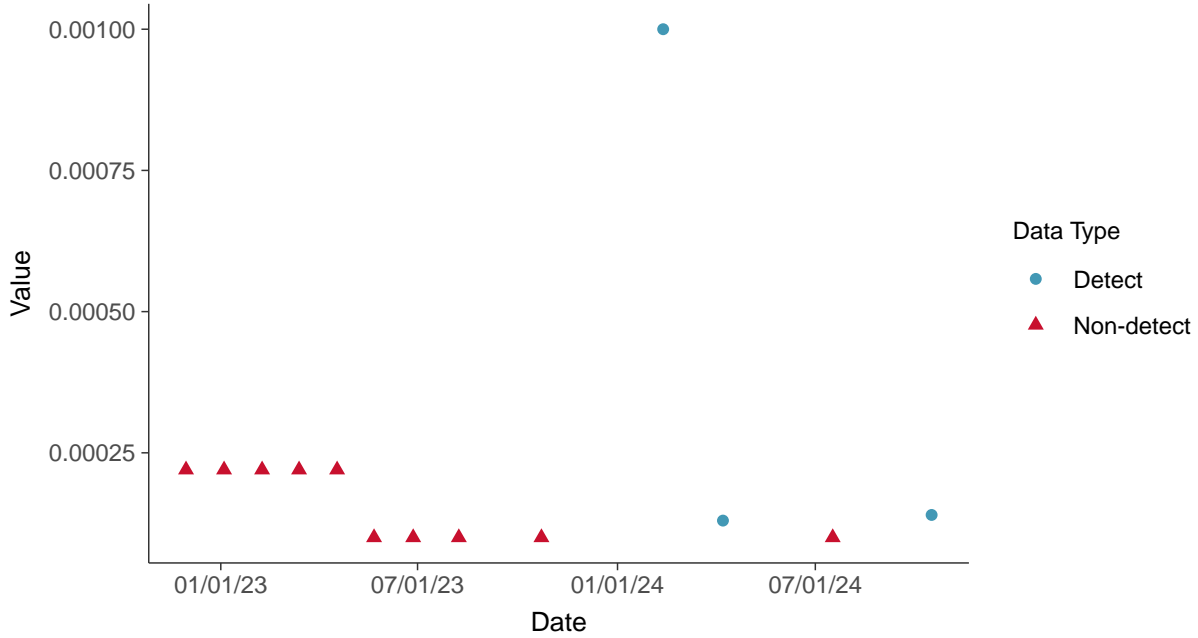


Appendix IV: Selenium, MW-32

ID: 1_42_1_5_122

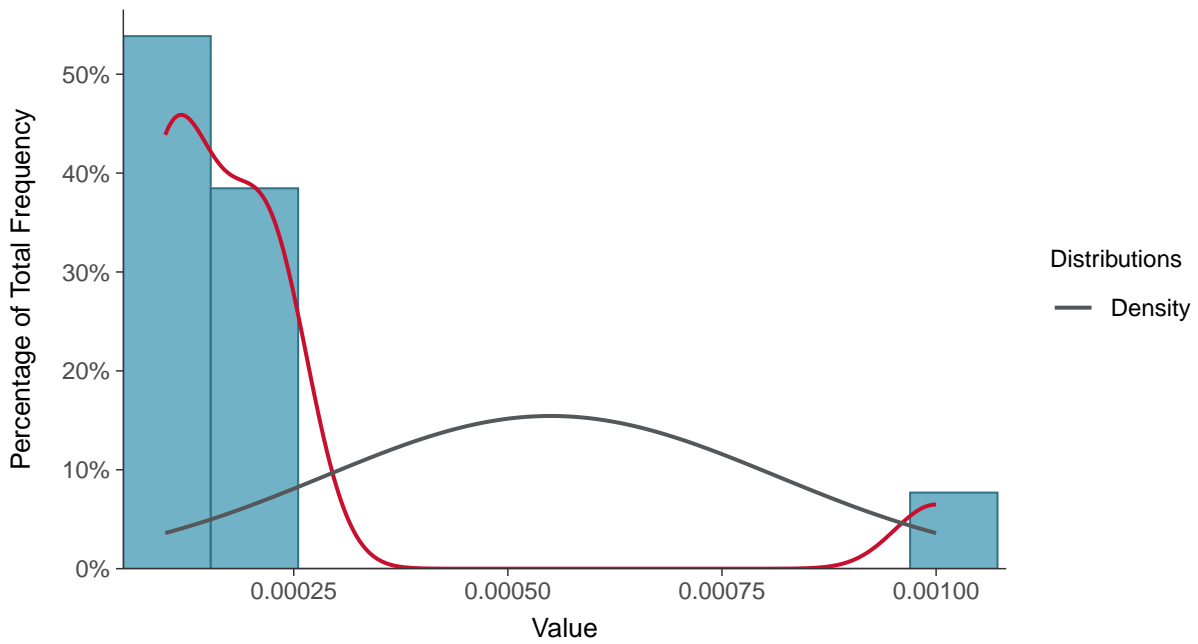
Scatter Plot

Selenium, MW-32 (mg/L)



Histogram

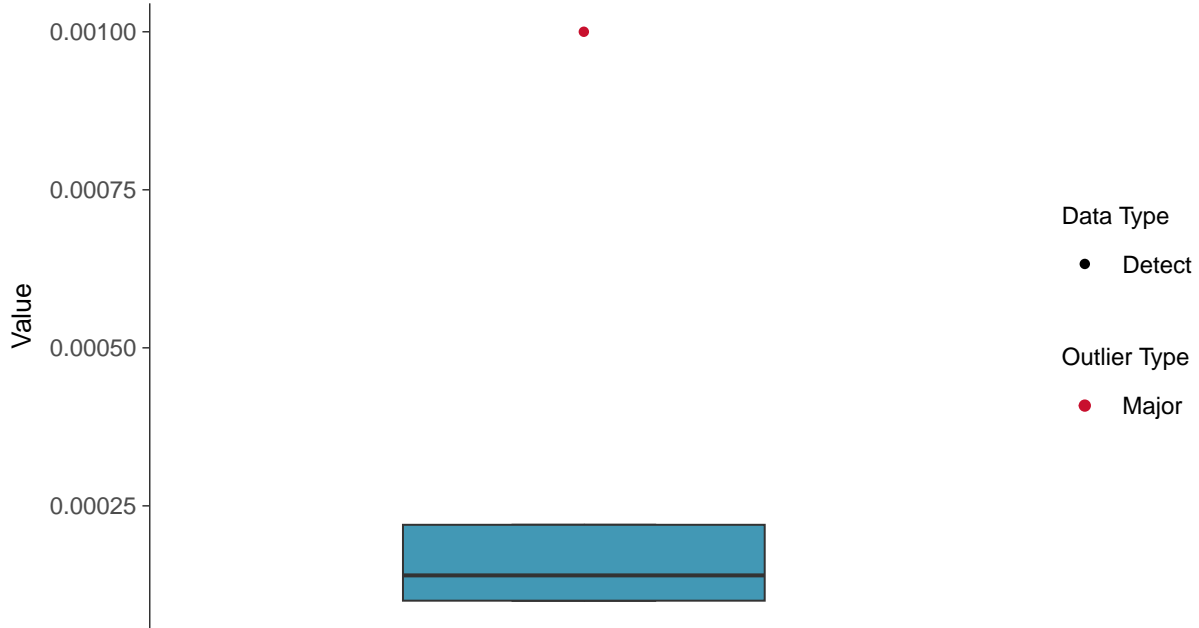
Selenium, MW-32 (mg/L)





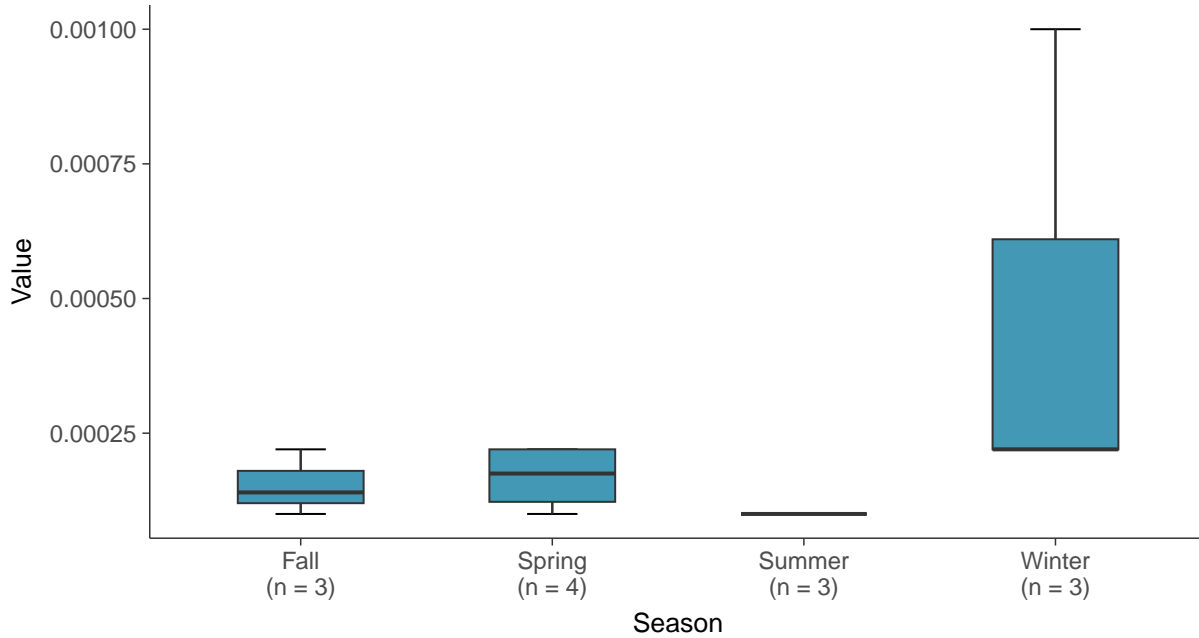
Boxplot

Selenium, MW-32 (mg/L)



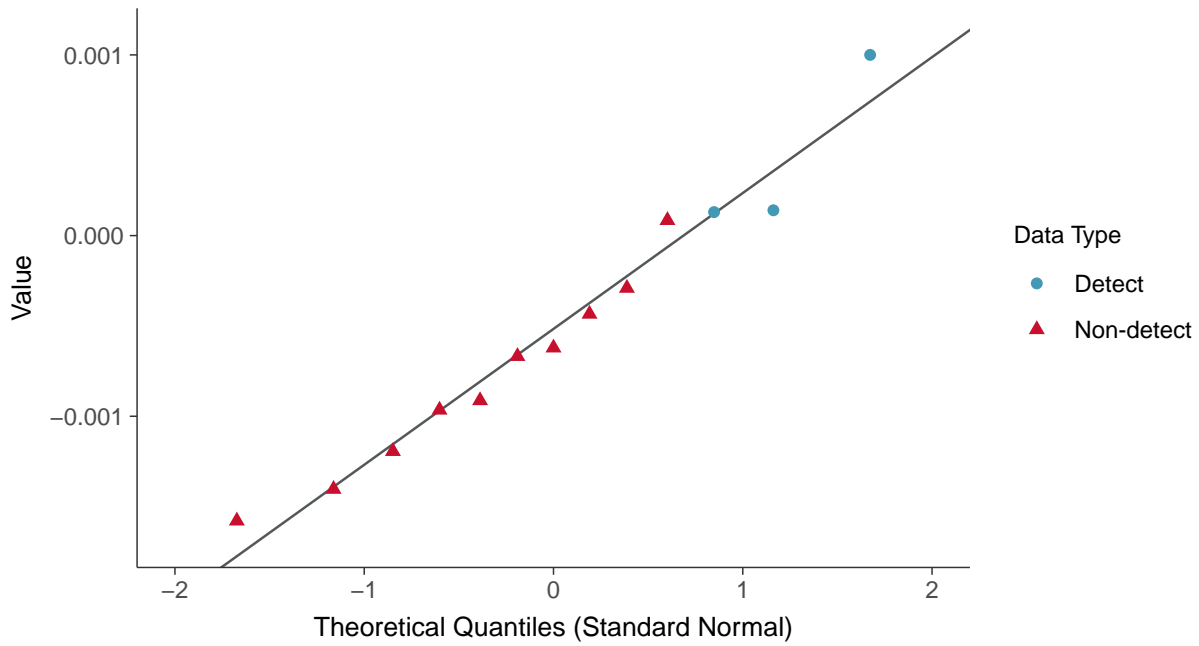
Boxplot by Season

Selenium, MW-32 (mg/L)

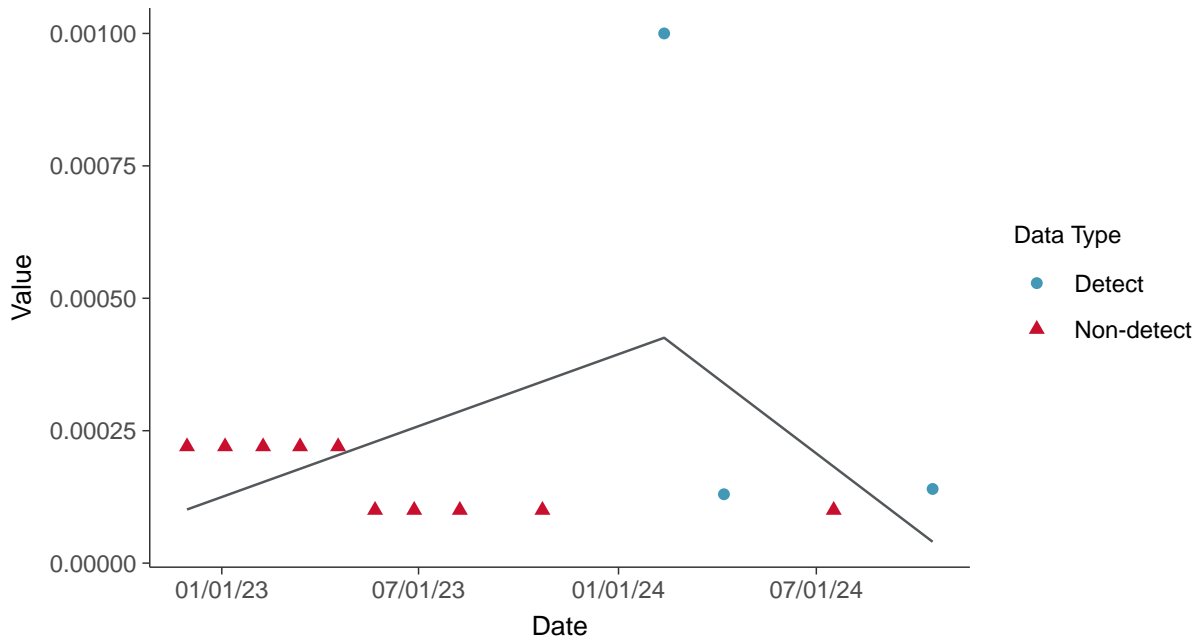




Normal Q-Q plot using ROS Imputed Estimates
Selenium, MW-32 (mg/L)

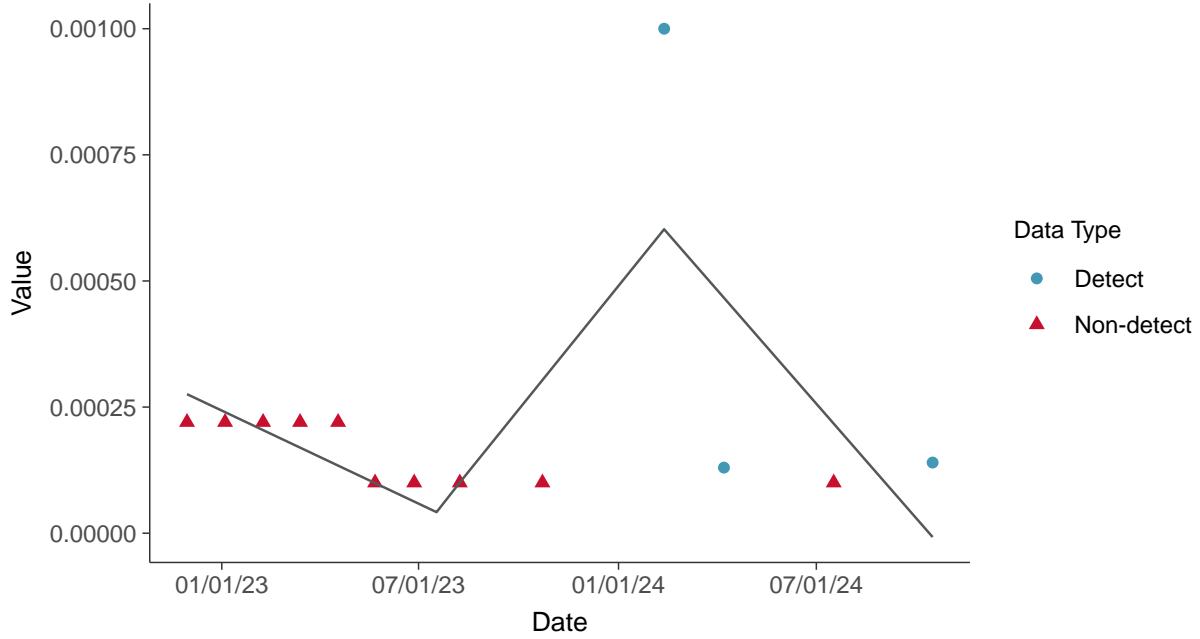


Trend Regression: Piecewise Linear-Linear
Selenium, MW-32 (mg/L)





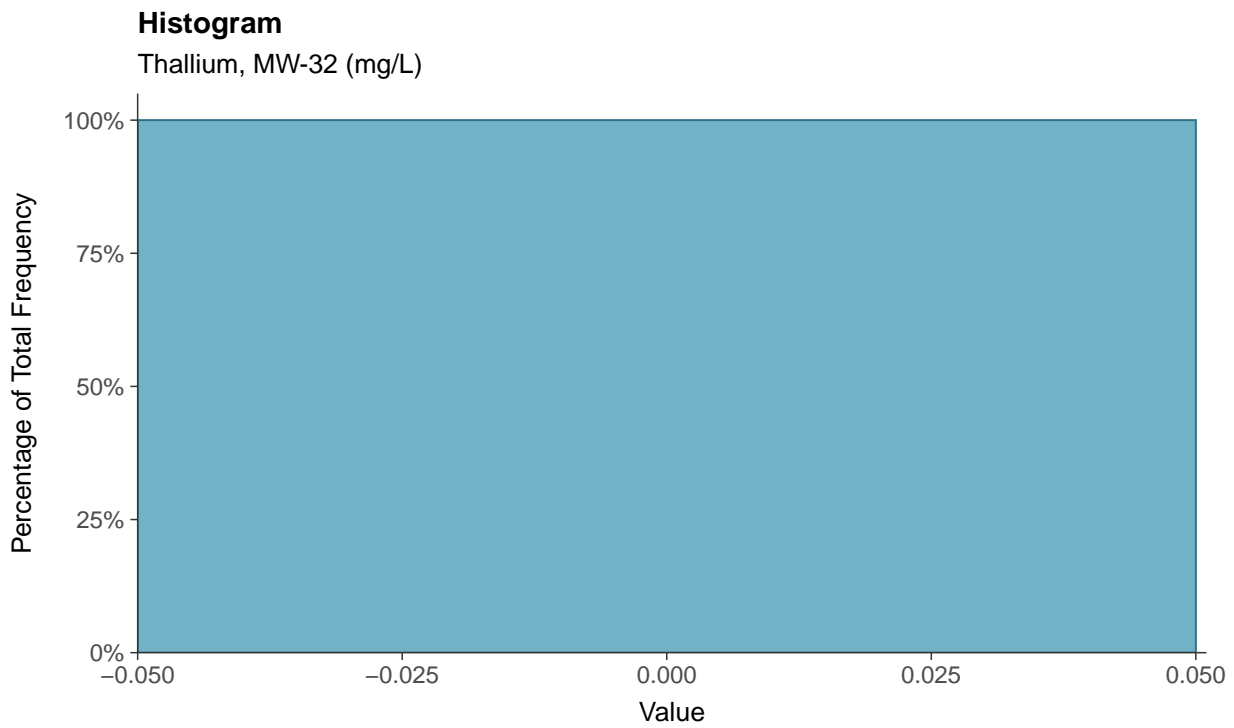
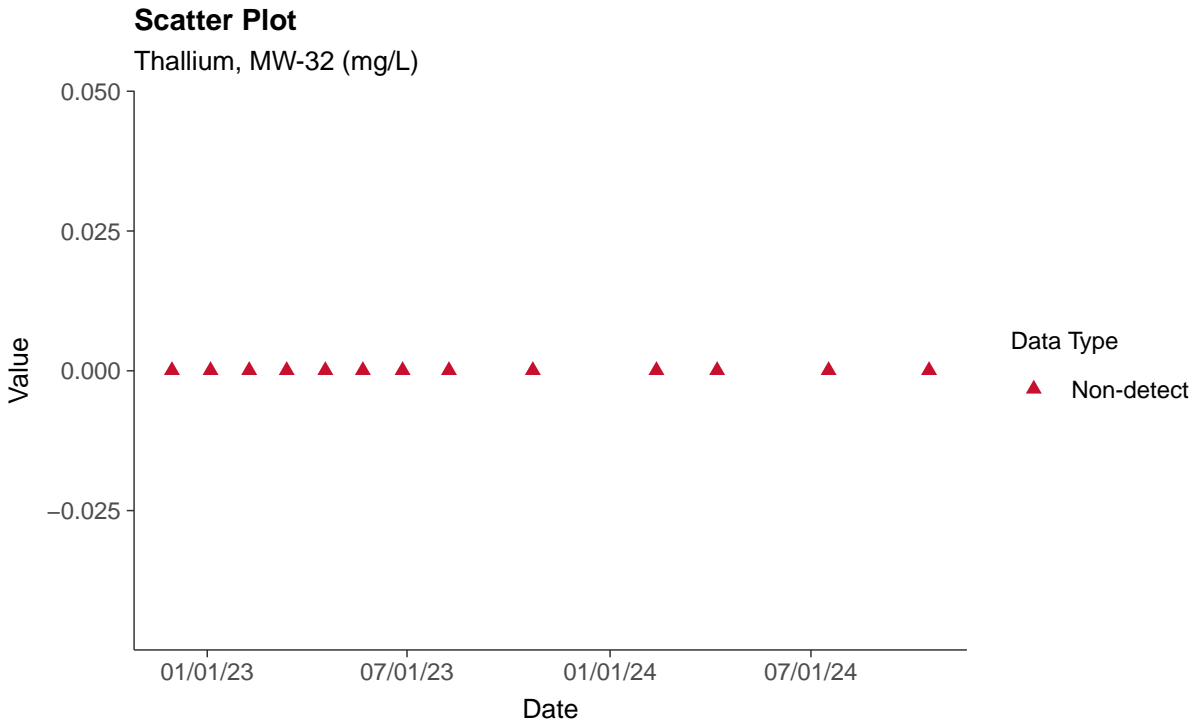
Trend Regression: Piecewise Linear-Linear-Linear
Selenium, MW-32 (mg/L)





Appendix IV: Thallium, MW-32

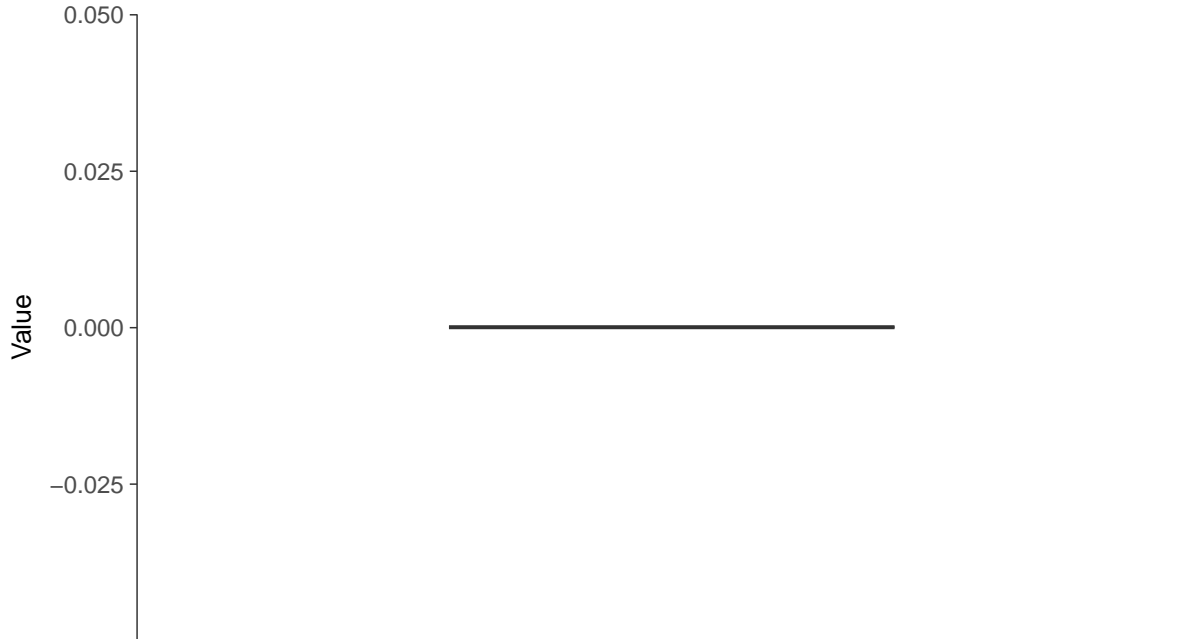
ID: 1_42_1_5_125





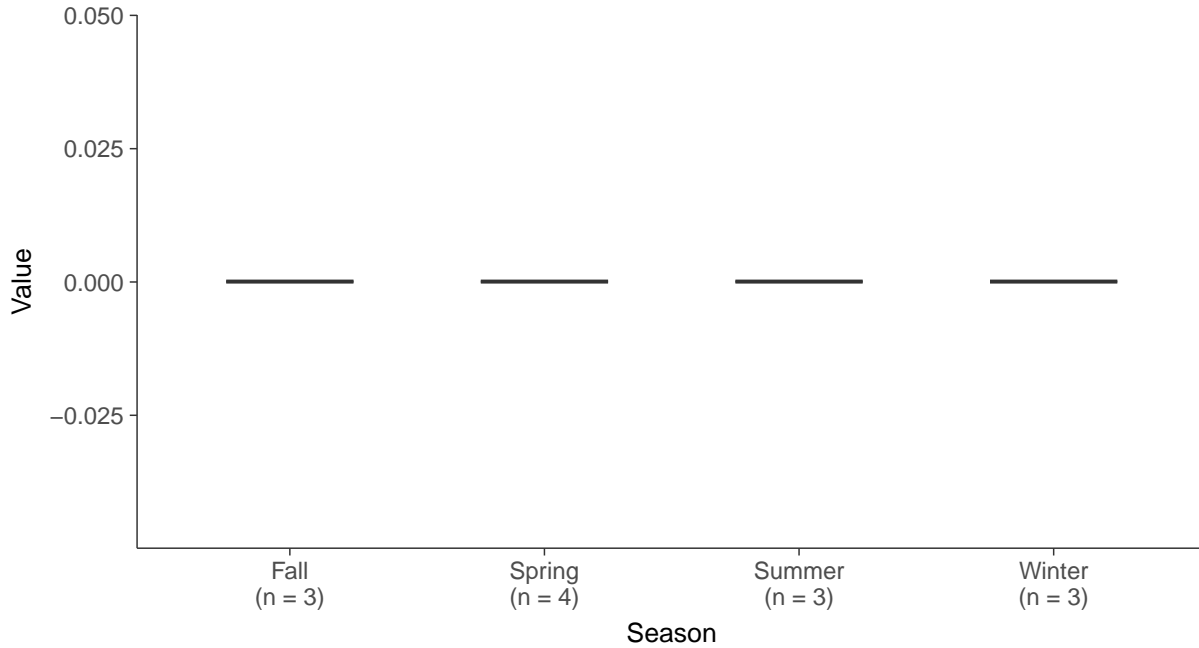
Boxplot

Thallium, MW-32 (mg/L)



Boxplot by Season

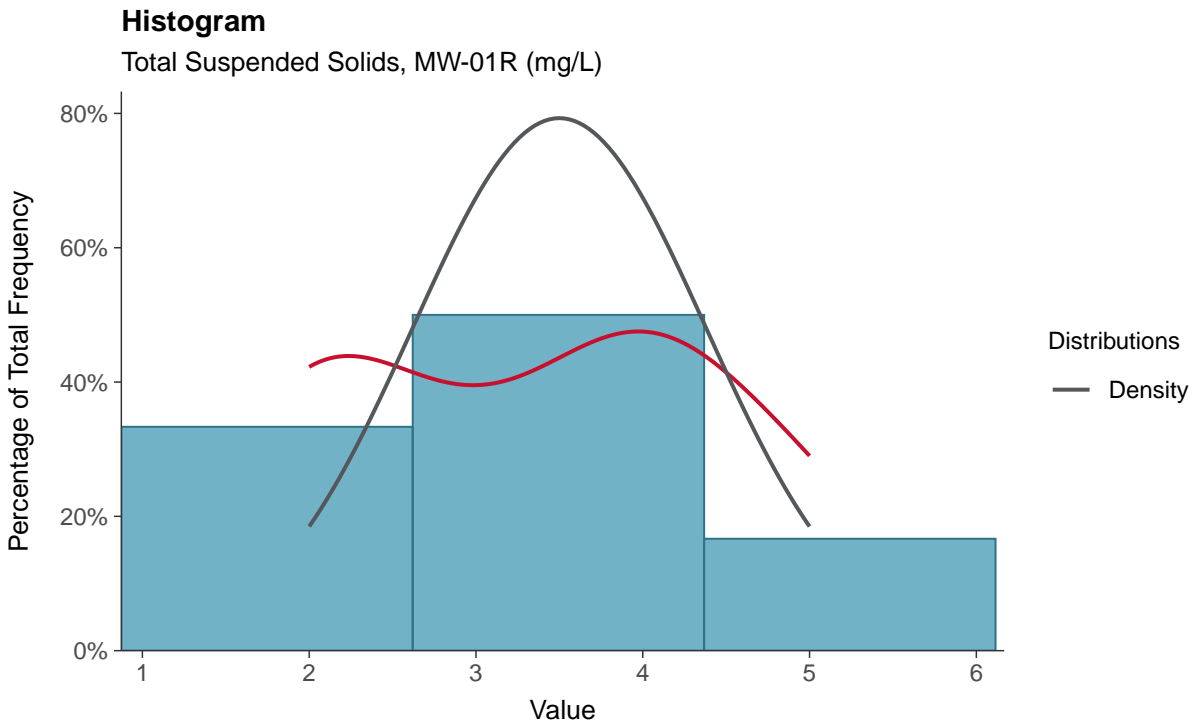
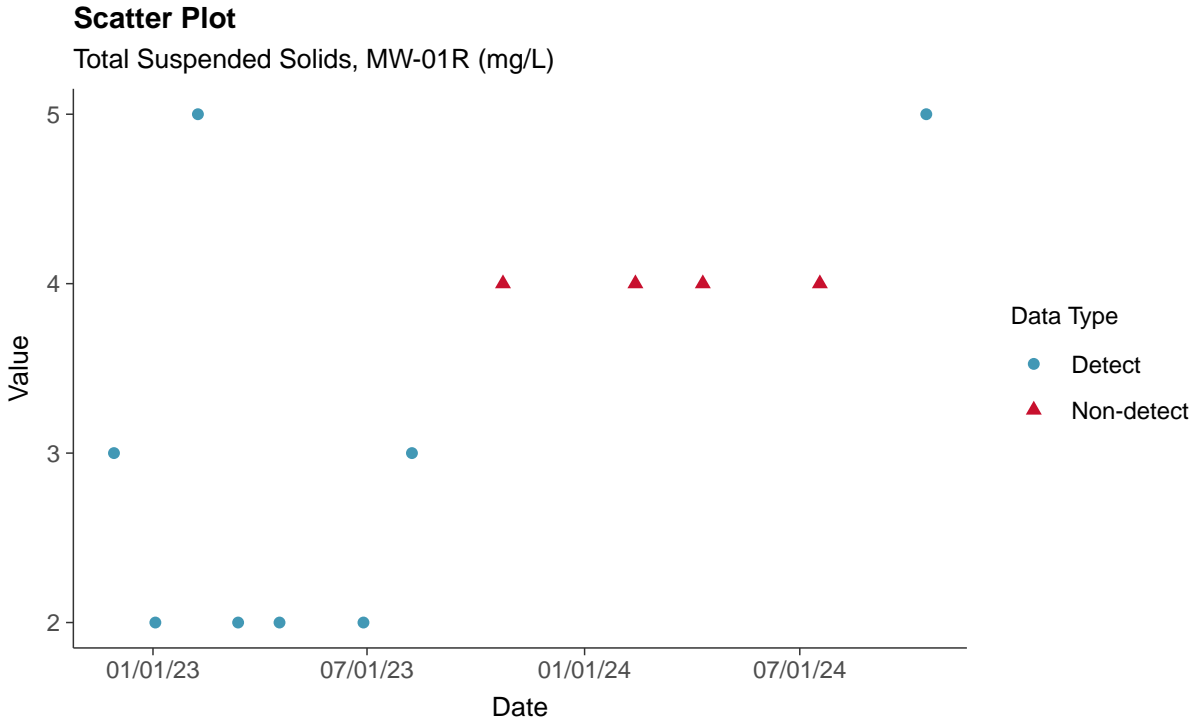
Thallium, MW-32 (mg/L)





Additional Parameters: Total Suspended Solids, MW-01R

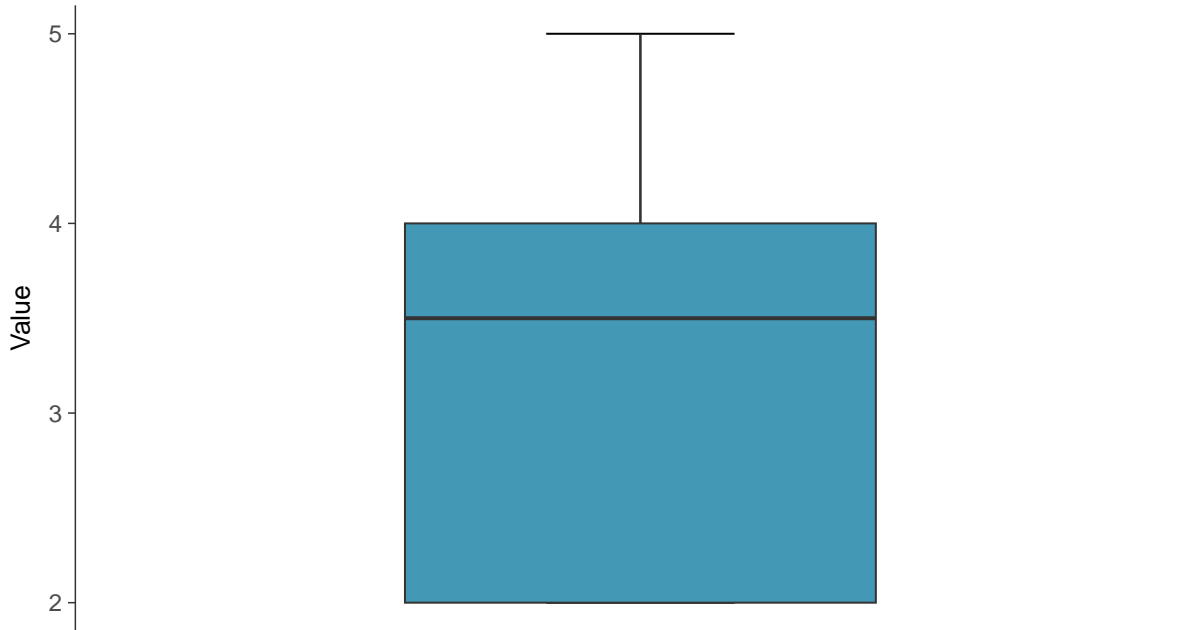
ID: 2_11_2_3_127





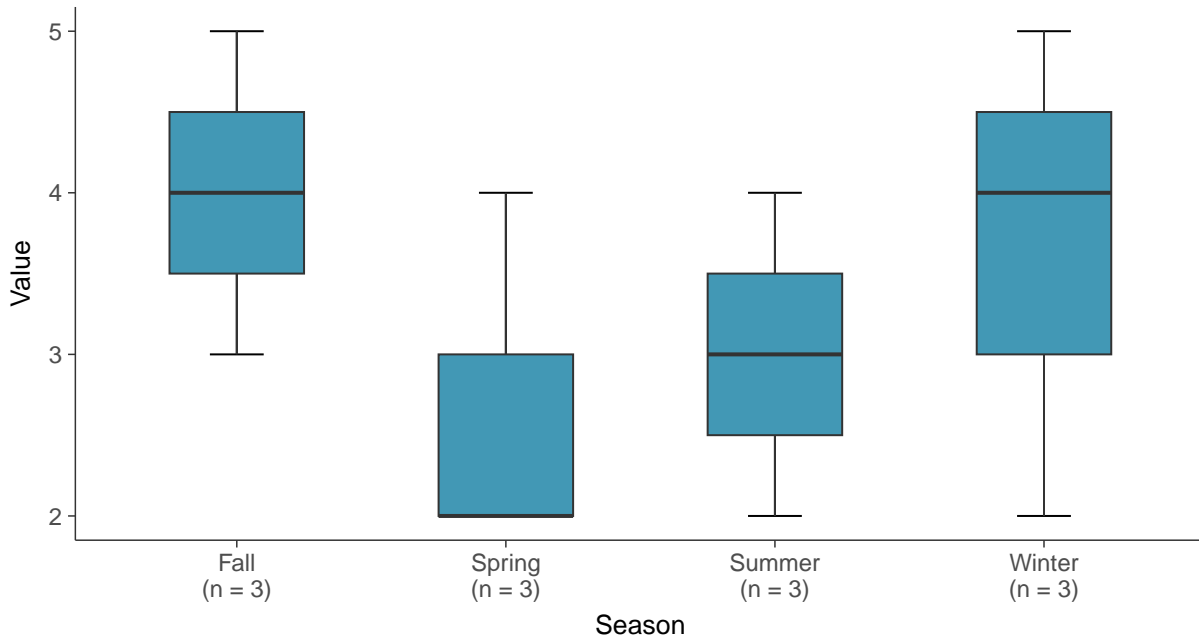
Boxplot

Total Suspended Solids, MW-01R (mg/L)



Boxplot by Season

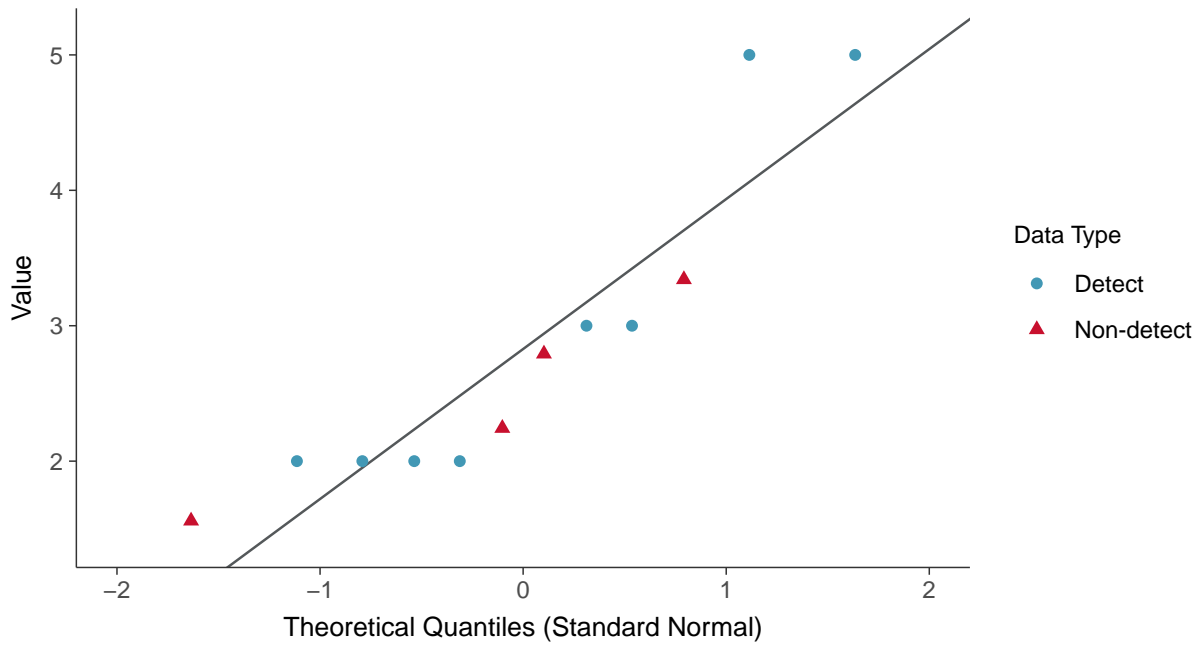
Total Suspended Solids, MW-01R (mg/L)





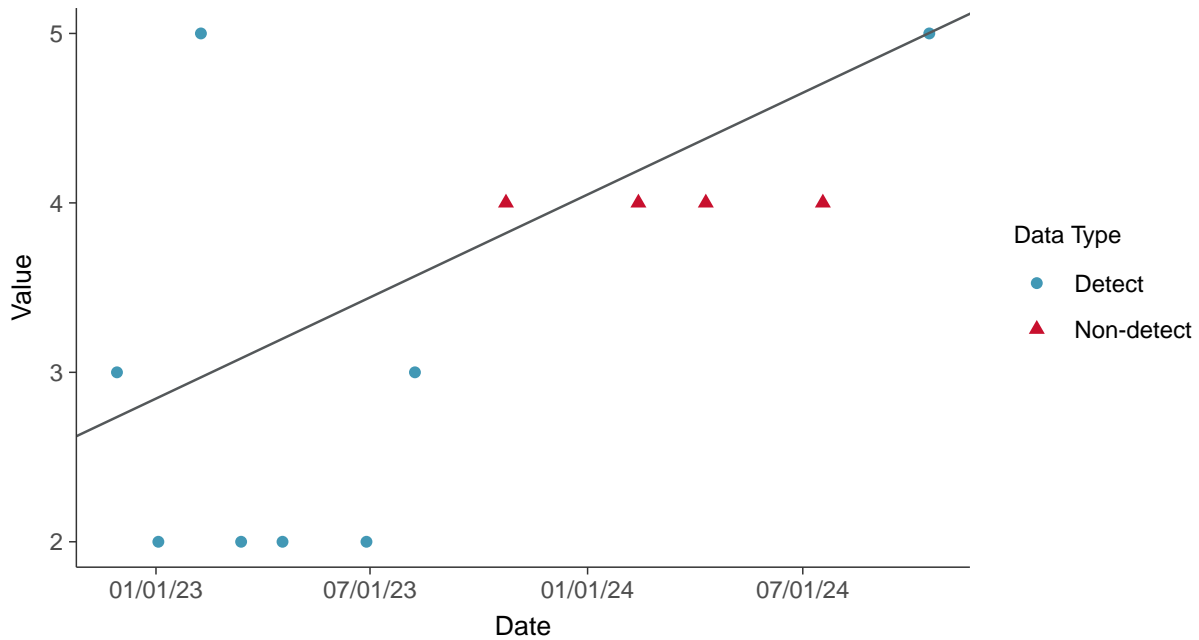
Normal Q-Q plot using ROS Imputed Estimates

Total Suspended Solids, MW-01R (mg/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

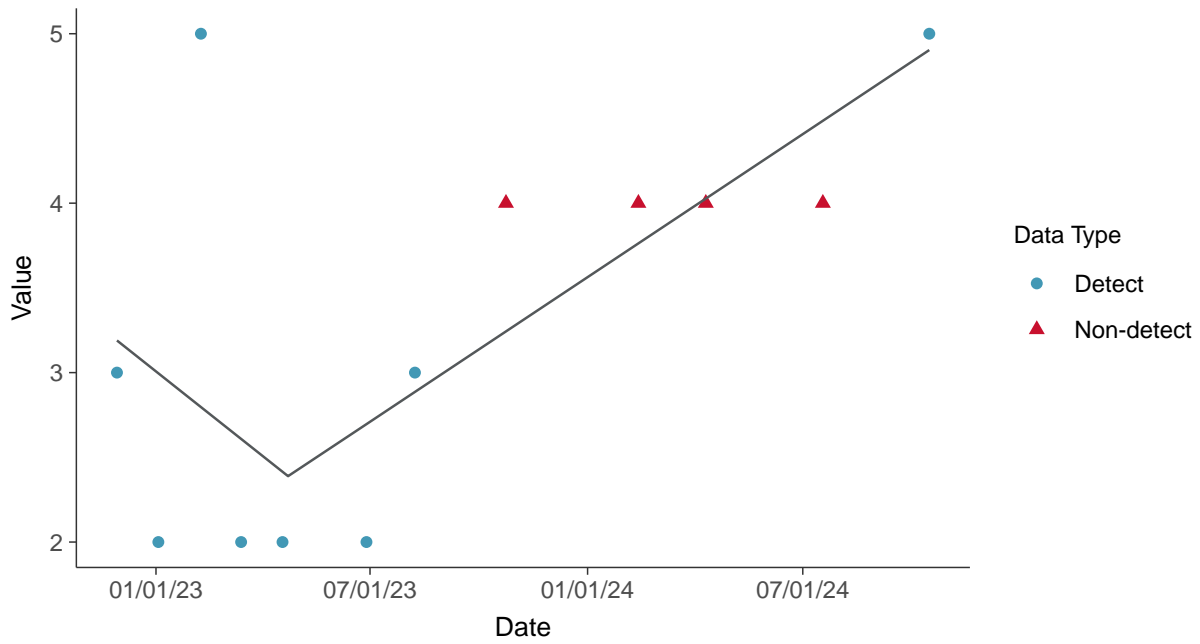
Total Suspended Solids, MW-01R (mg/L)





Trend Regression: Piecewise Linear-Linear

Total Suspended Solids, MW-01R (mg/L)



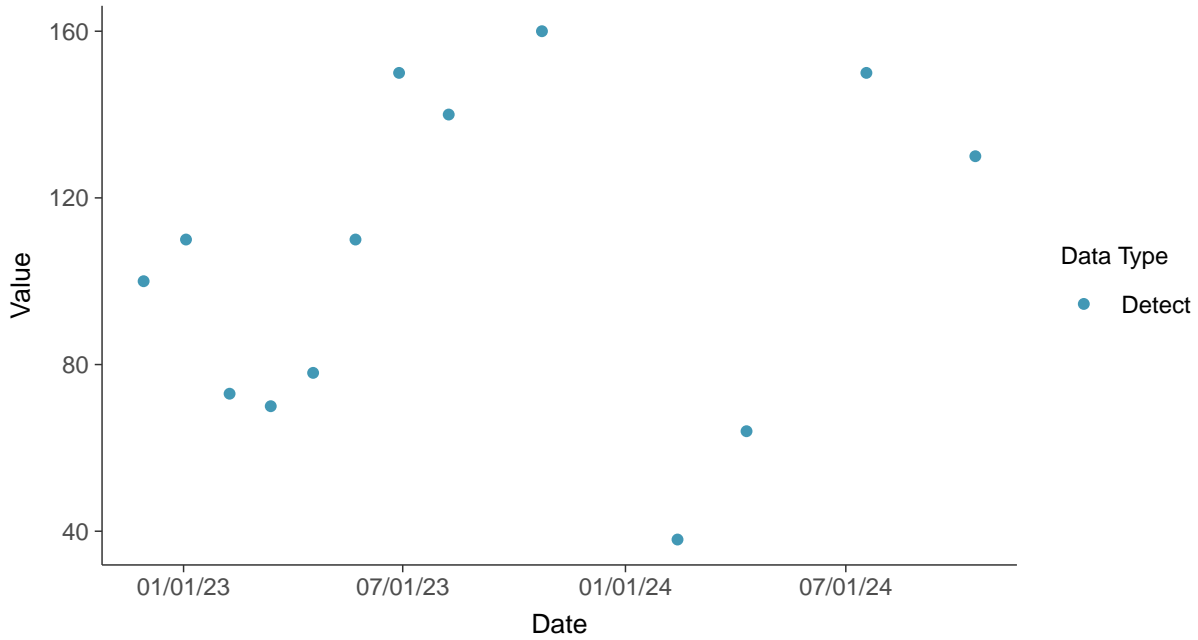


Appendix III: Boron, MW-01R

ID: 2_11_2_4_105

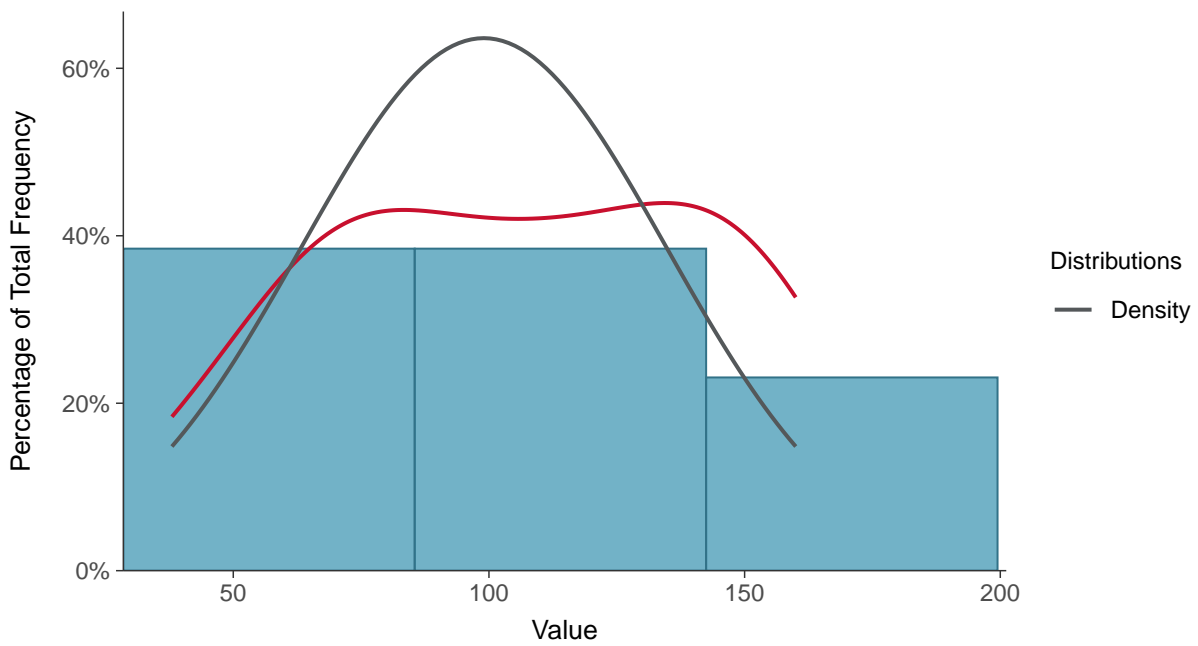
Scatter Plot

Boron, MW-01R (mg/L)



Histogram

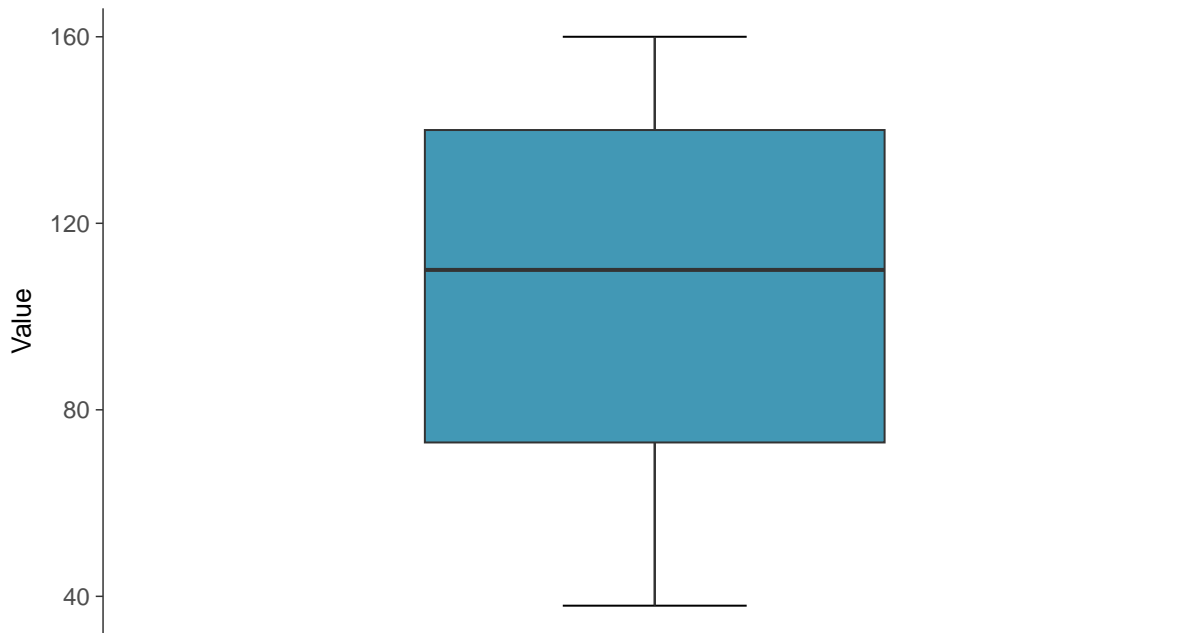
Boron, MW-01R (mg/L)





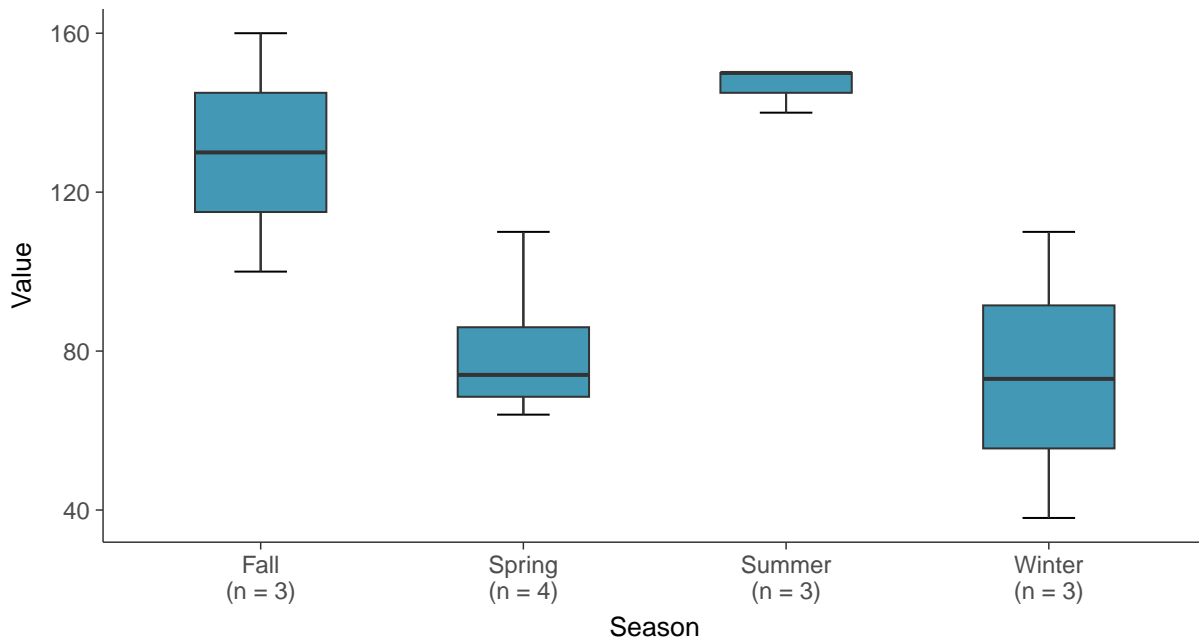
Boxplot

Boron, MW-01R (mg/L)



Boxplot by Season

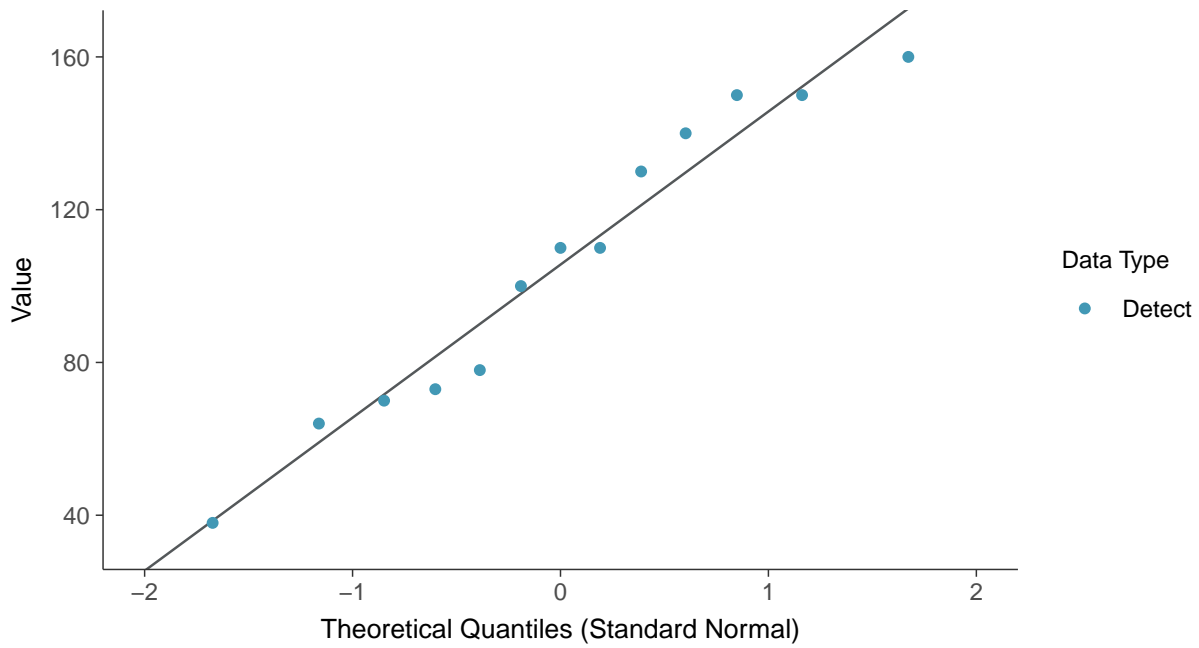
Boron, MW-01R (mg/L)





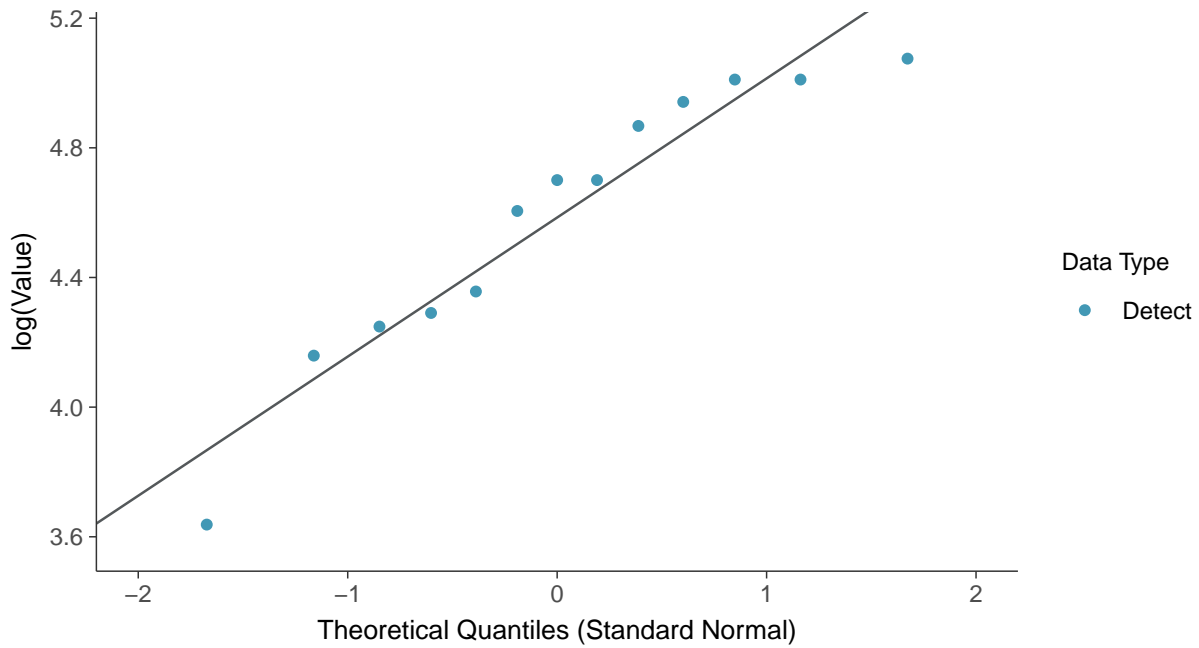
Normal Q-Q plot

Boron, MW-01R (mg/L)



Lognormal Q-Q plot

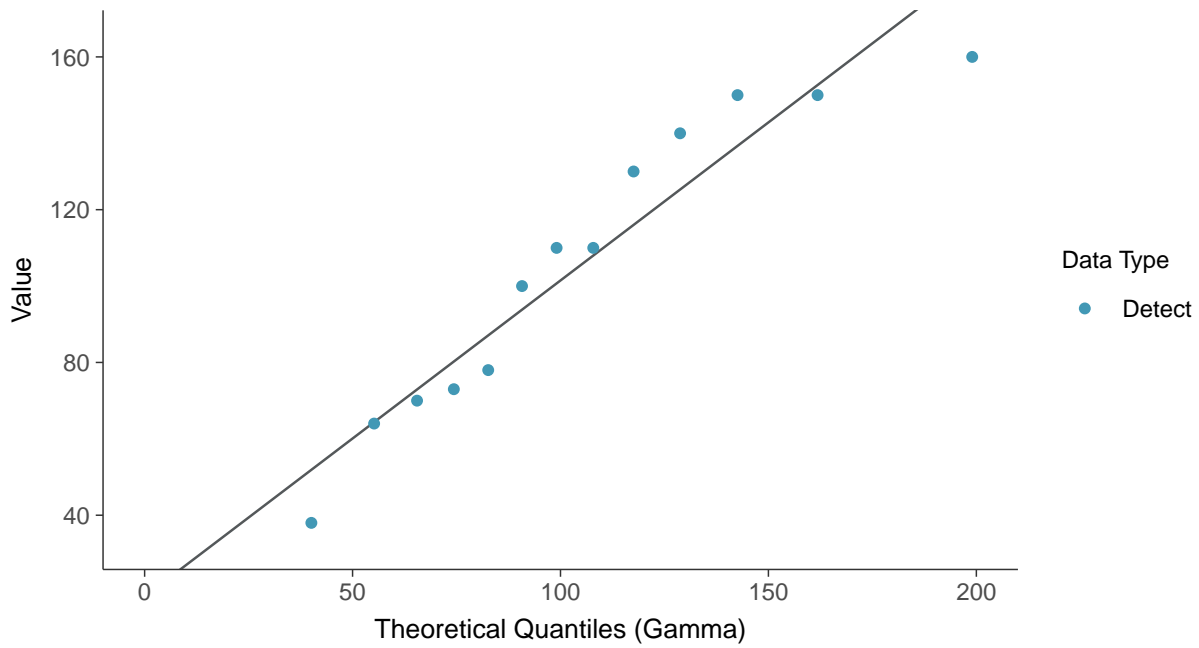
Boron, MW-01R (mg/L)





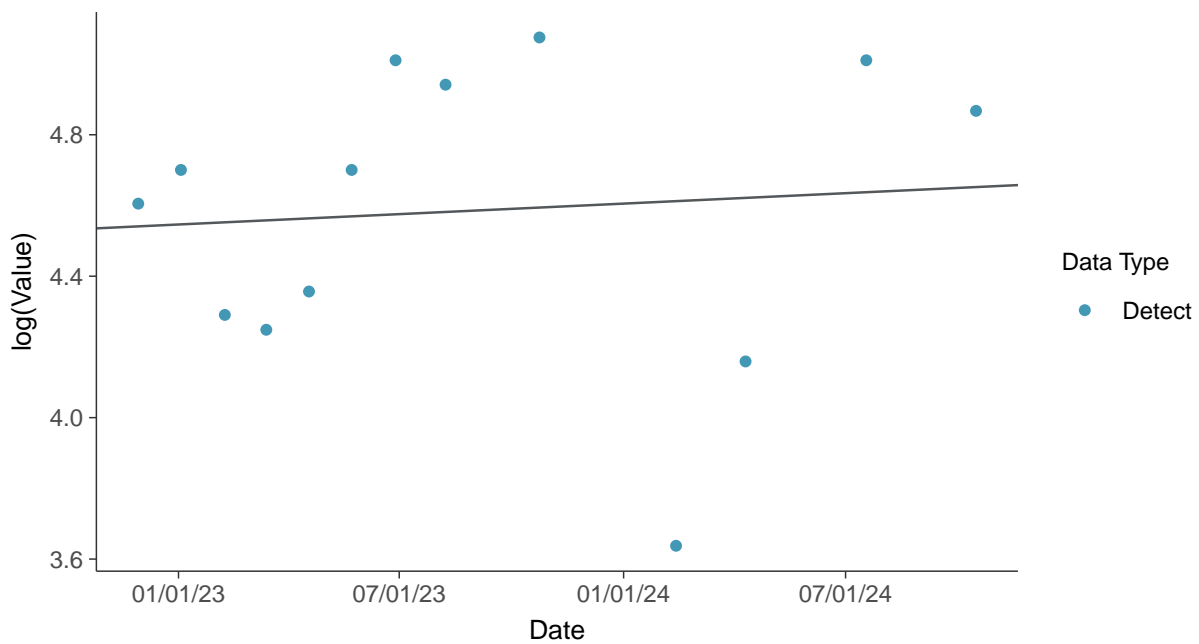
Gamma Q-Q plot

Boron, MW-01R (mg/L)



Trend Regression: Lognormal MLE

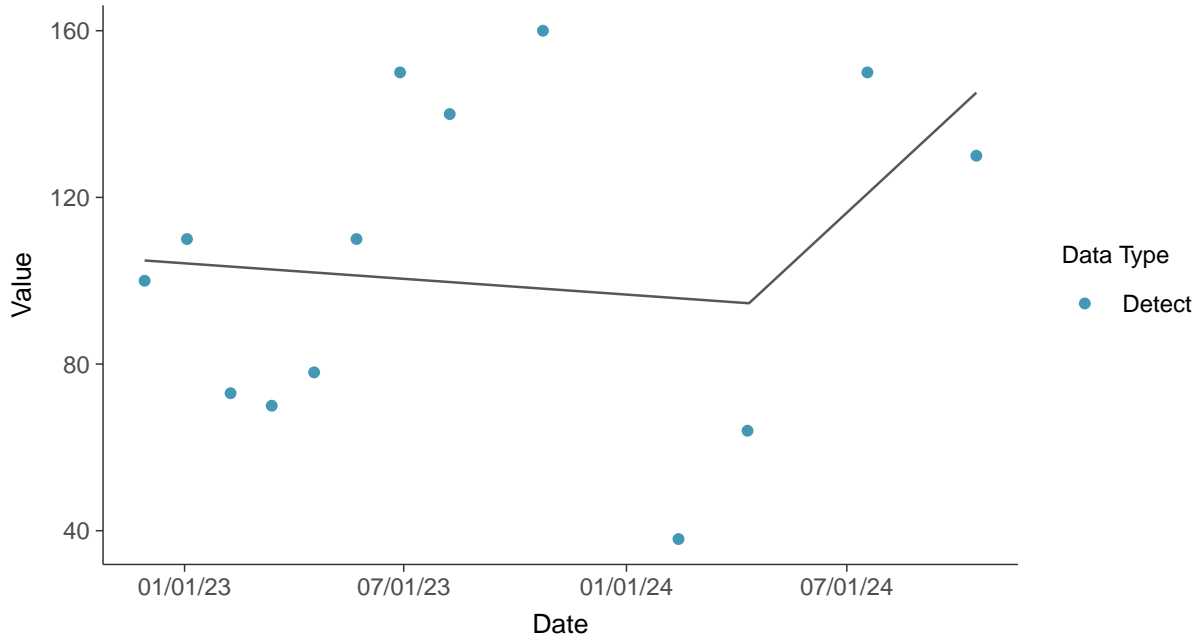
Boron, MW-01R (mg/L)





Trend Regression: Piecewise Linear-Linear

Boron, MW-01R (mg/L)



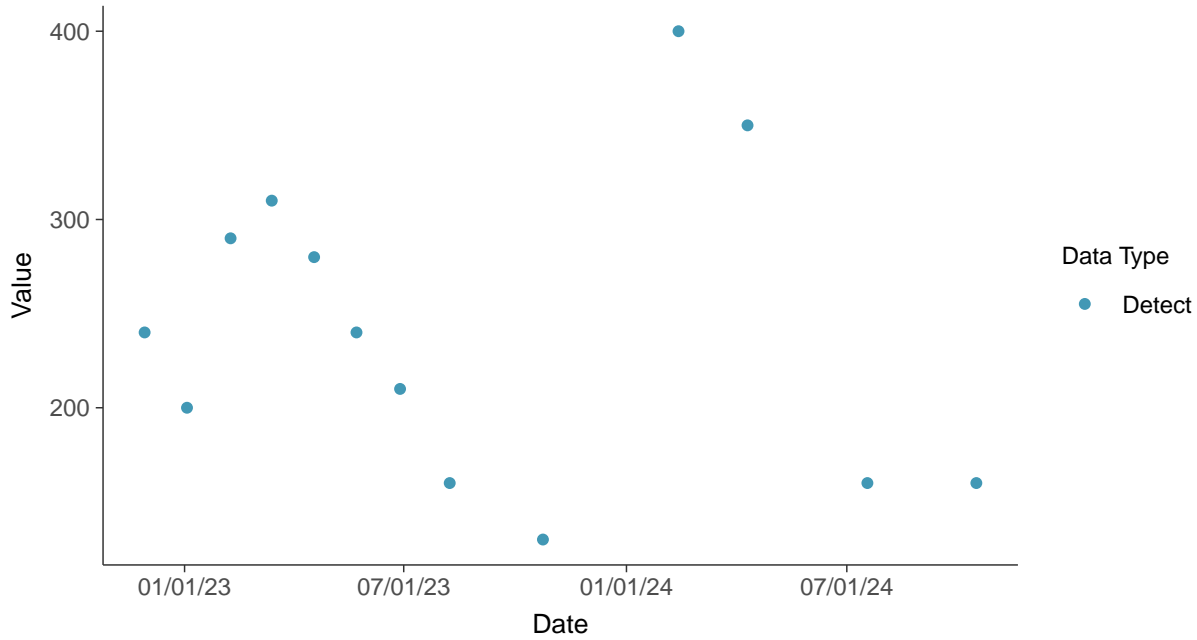


Appendix III: Calcium, MW-01R

ID: 2_11_2_4_107

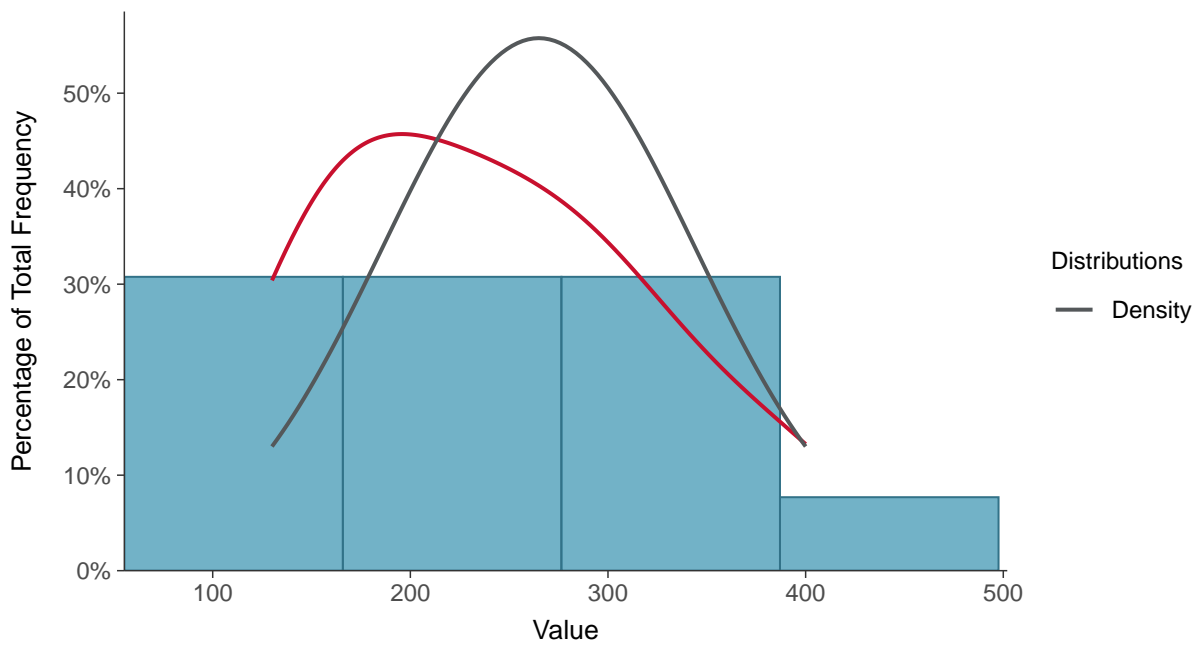
Scatter Plot

Calcium, MW-01R (mg/L)



Histogram

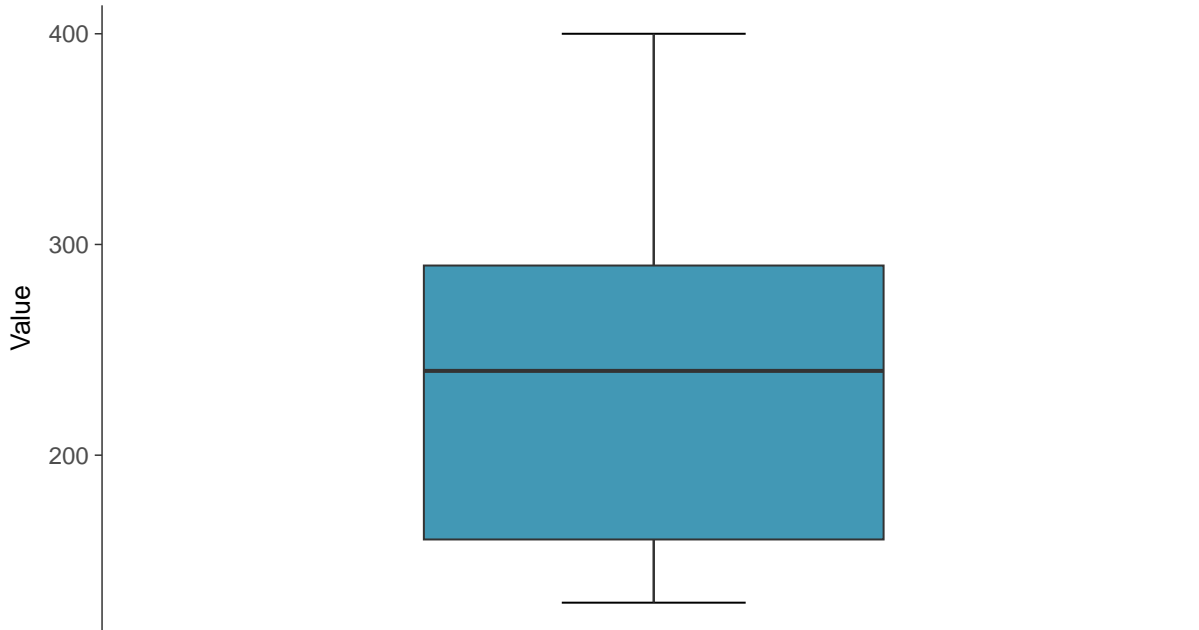
Calcium, MW-01R (mg/L)





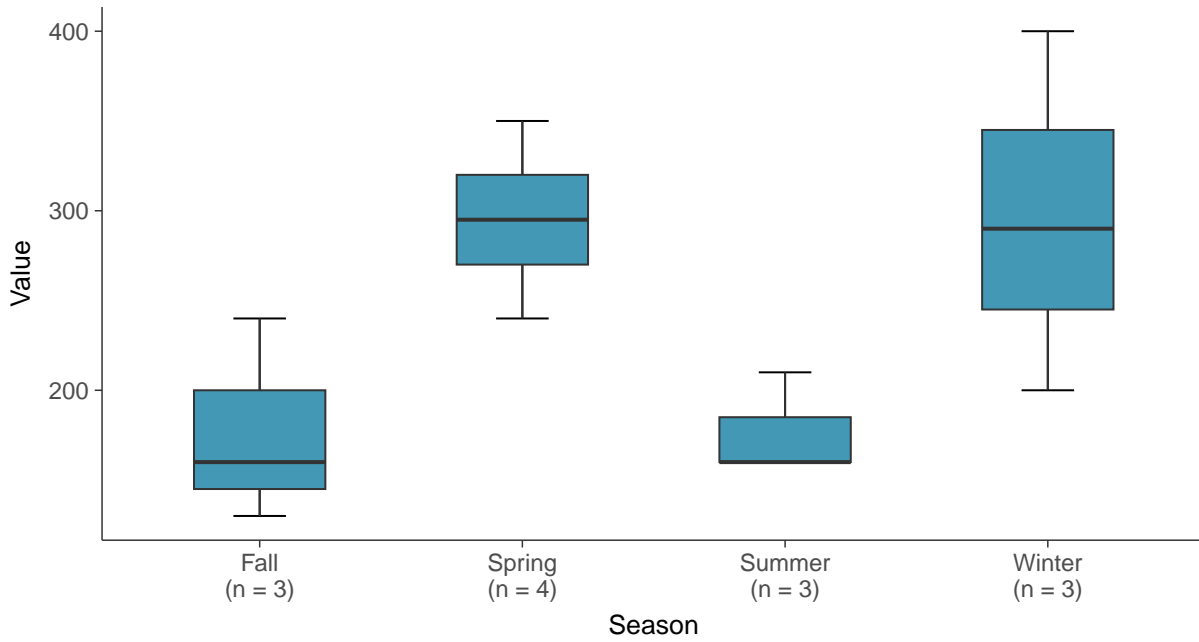
Boxplot

Calcium, MW-01R (mg/L)



Boxplot by Season

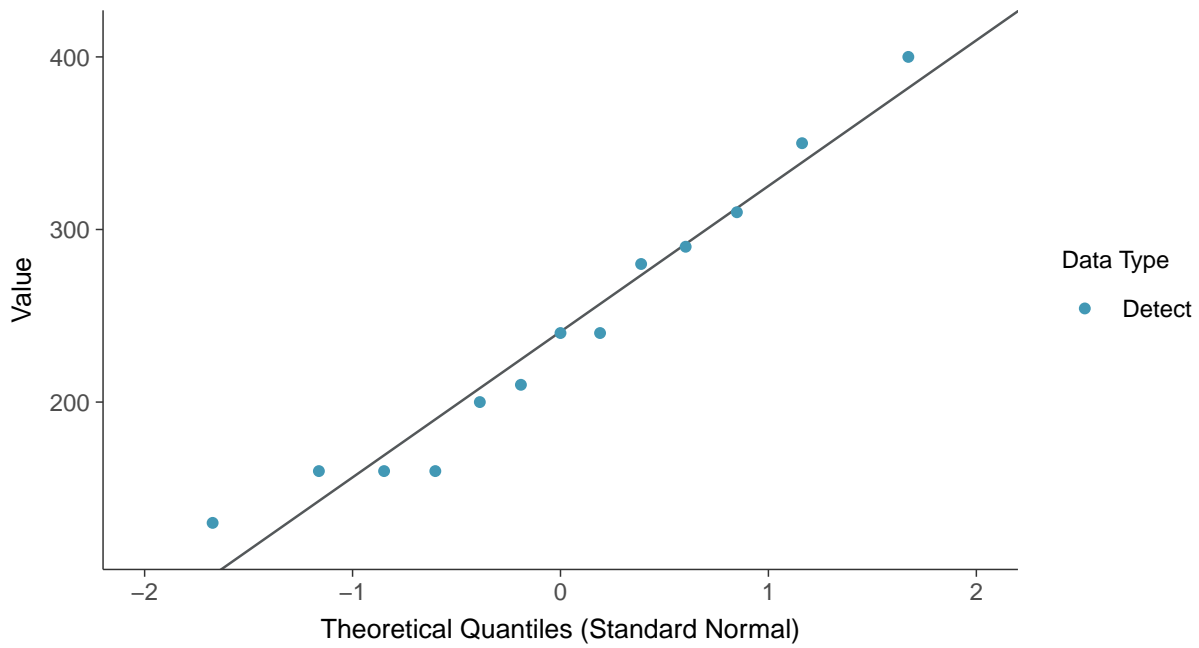
Calcium, MW-01R (mg/L)





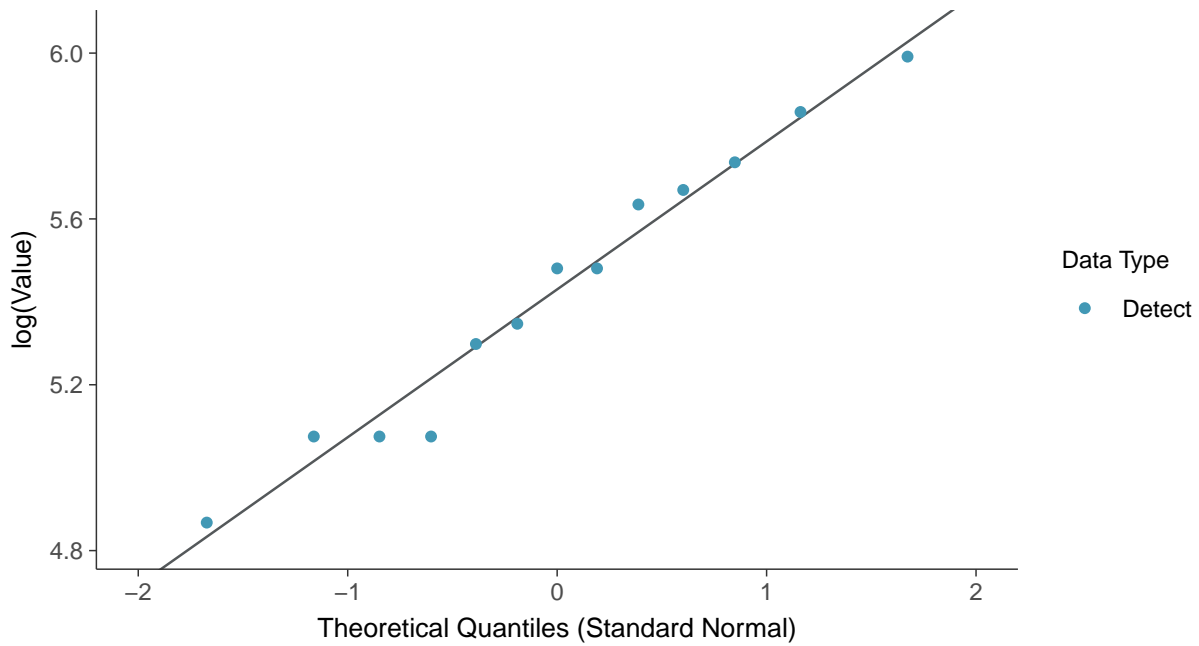
Normal Q-Q plot

Calcium, MW-01R (mg/L)



Lognormal Q-Q plot

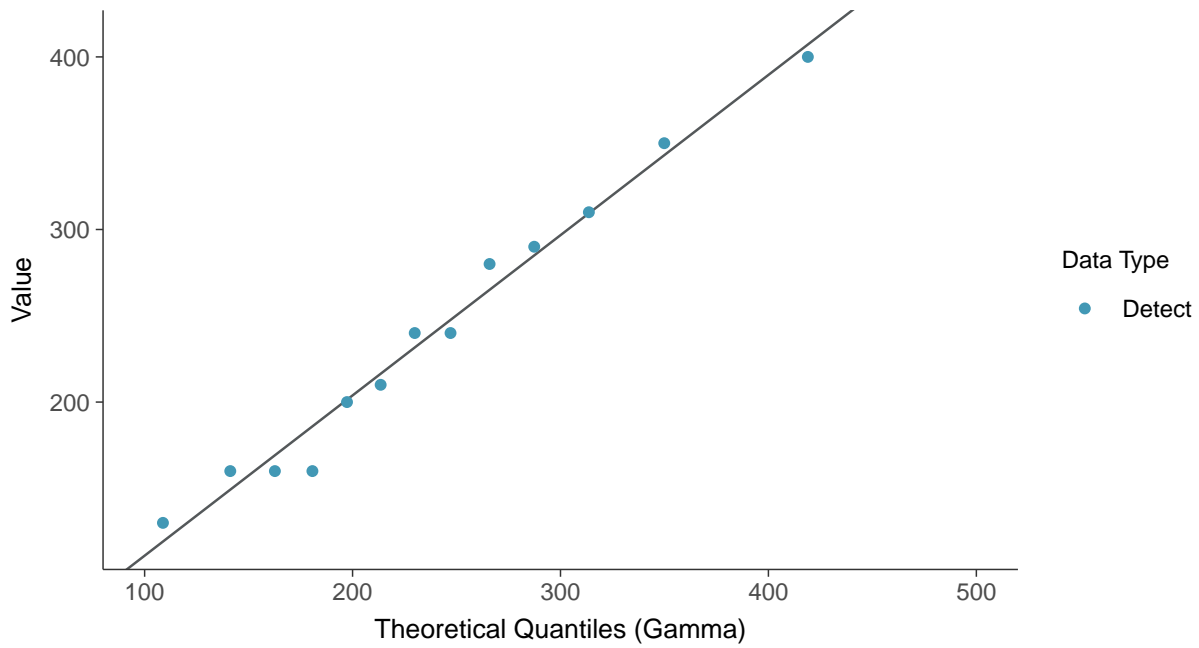
Calcium, MW-01R (mg/L)





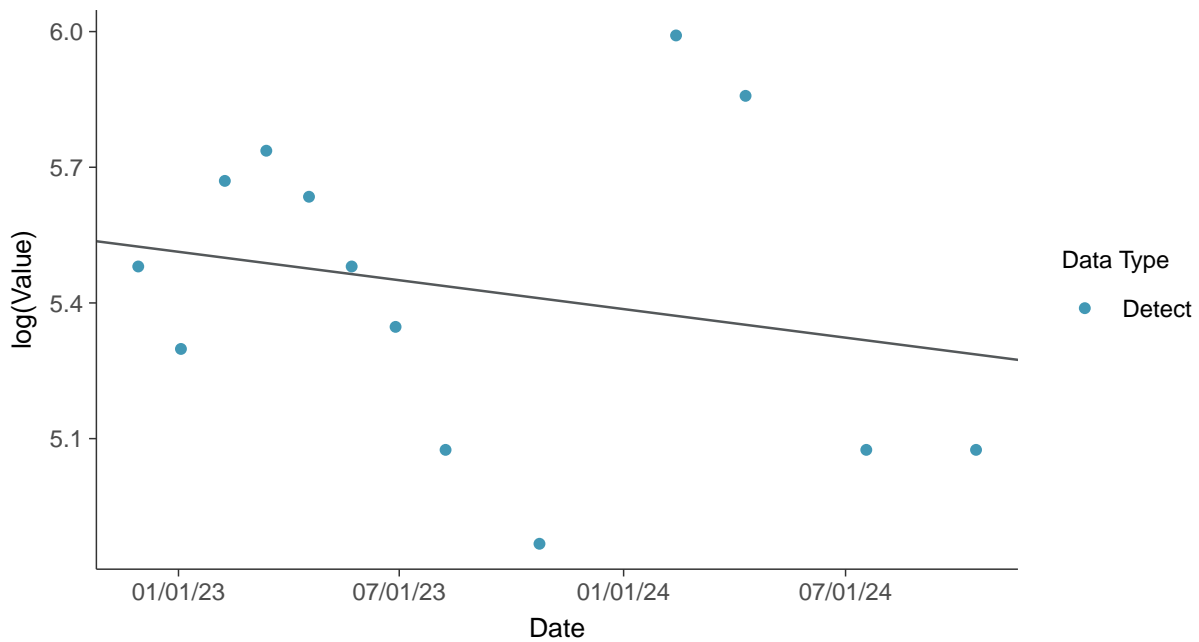
Gamma Q-Q plot

Calcium, MW-01R (mg/L)



Trend Regression: Lognormal MLE

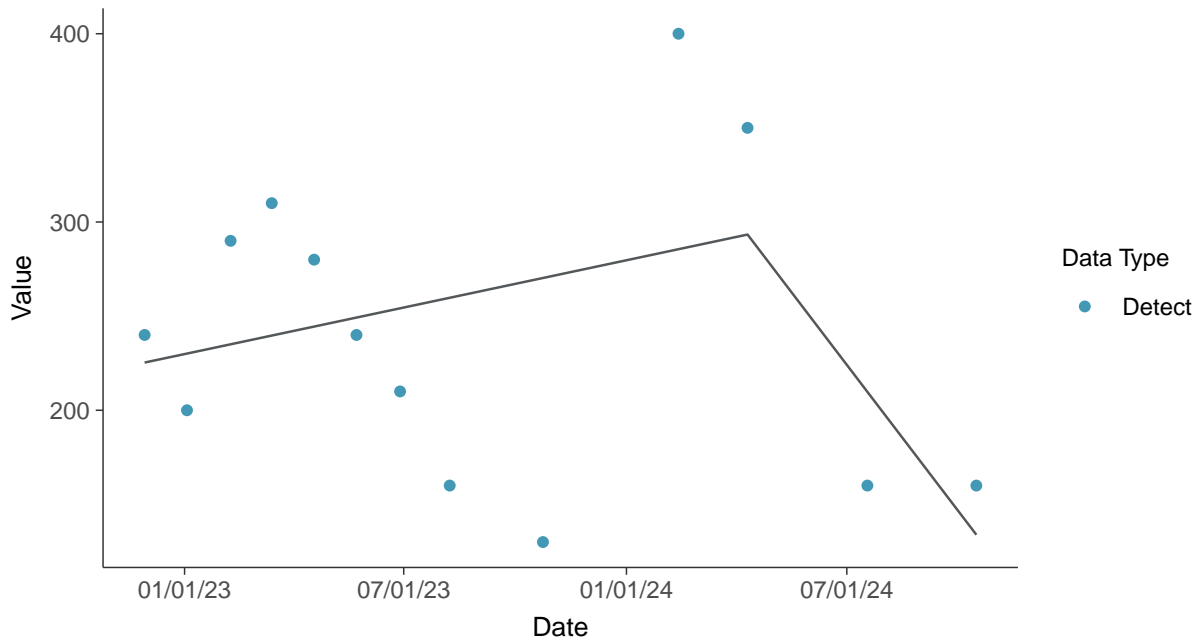
Calcium, MW-01R (mg/L)





Trend Regression: Piecewise Linear-Linear

Calcium, MW-01R (mg/L)



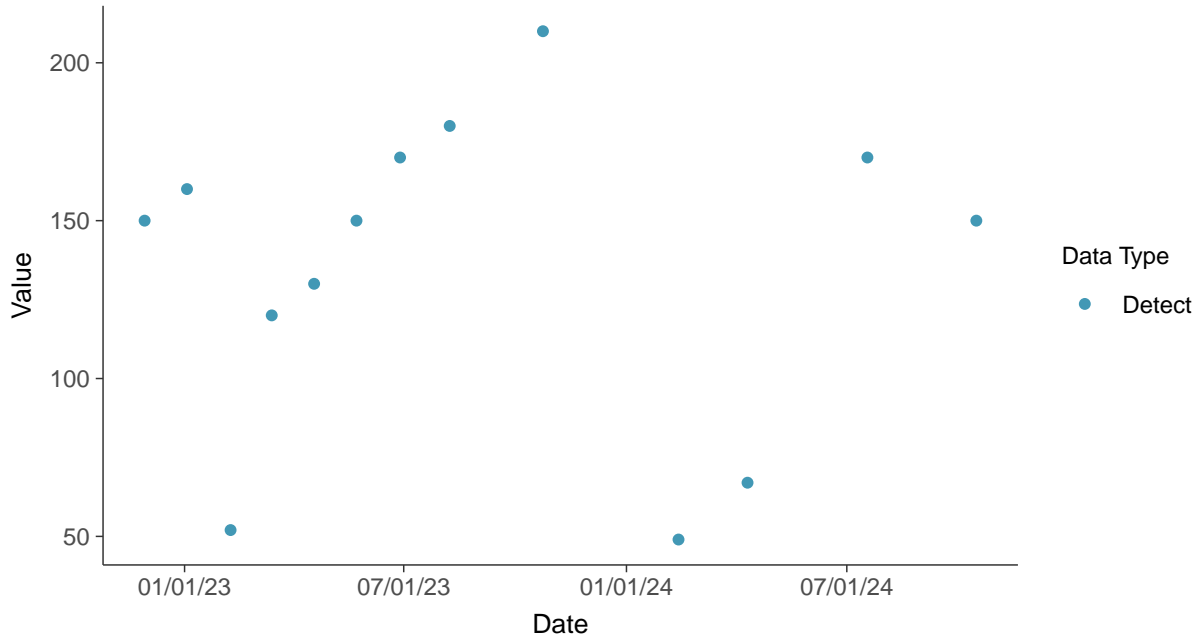


Appendix III: Chloride (as Cl), MW-01R

ID: 2_11_2_4_108

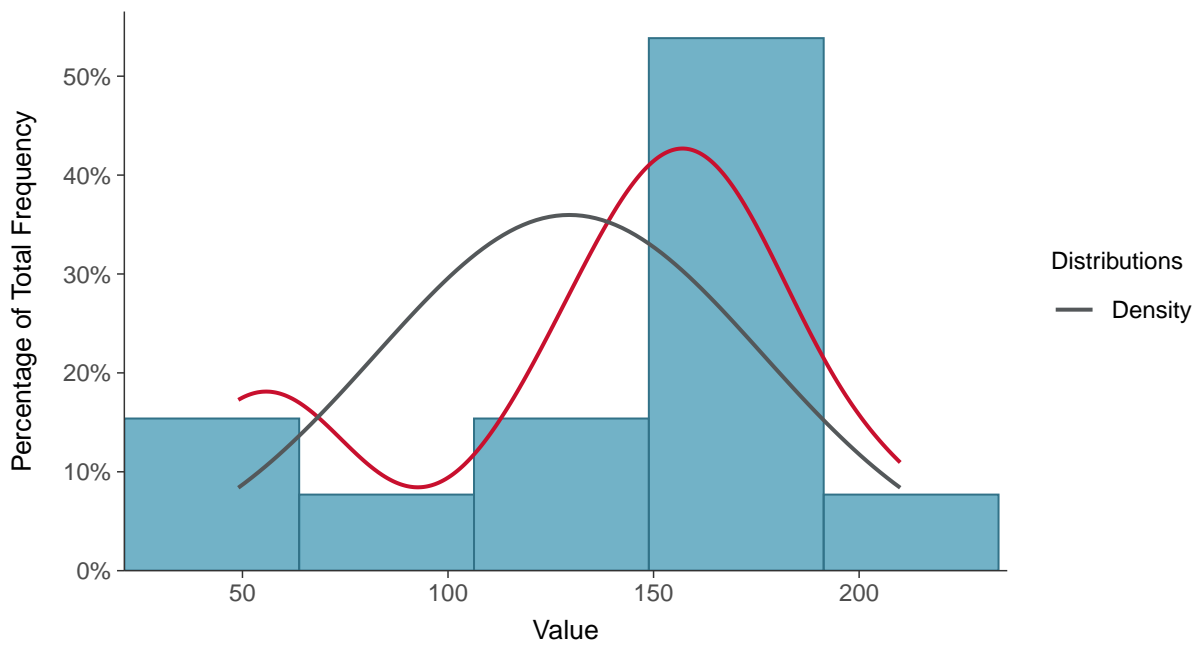
Scatter Plot

Chloride (as Cl), MW-01R (mg/L)



Histogram

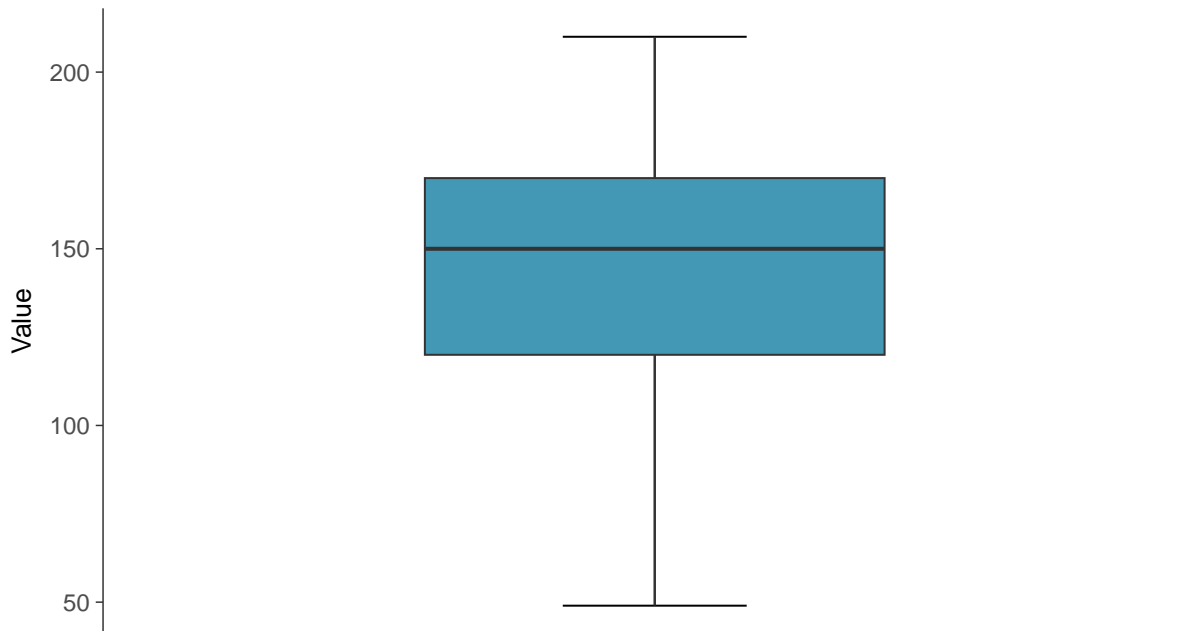
Chloride (as Cl), MW-01R (mg/L)





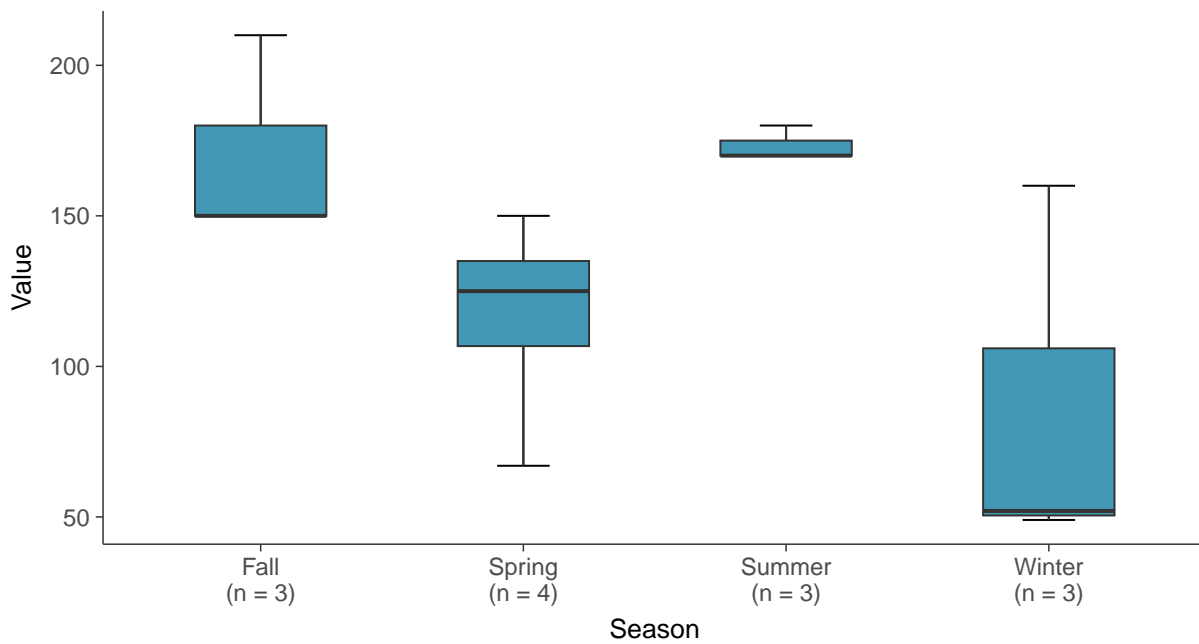
Boxplot

Chloride (as Cl), MW-01R (mg/L)



Boxplot by Season

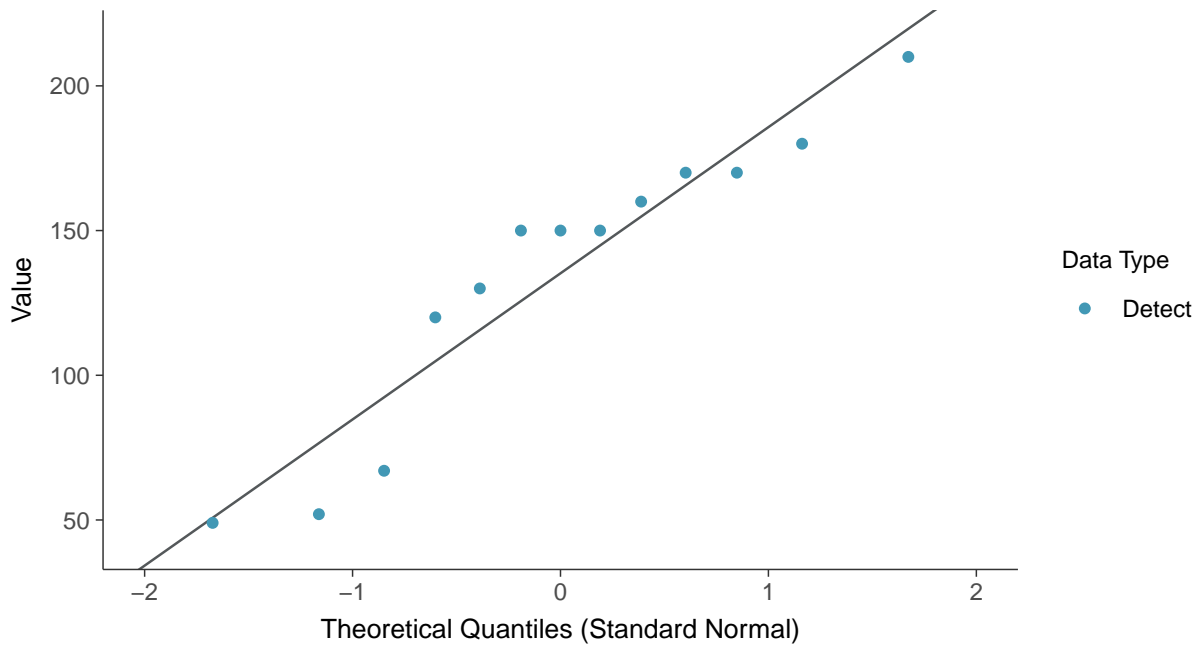
Chloride (as Cl), MW-01R (mg/L)





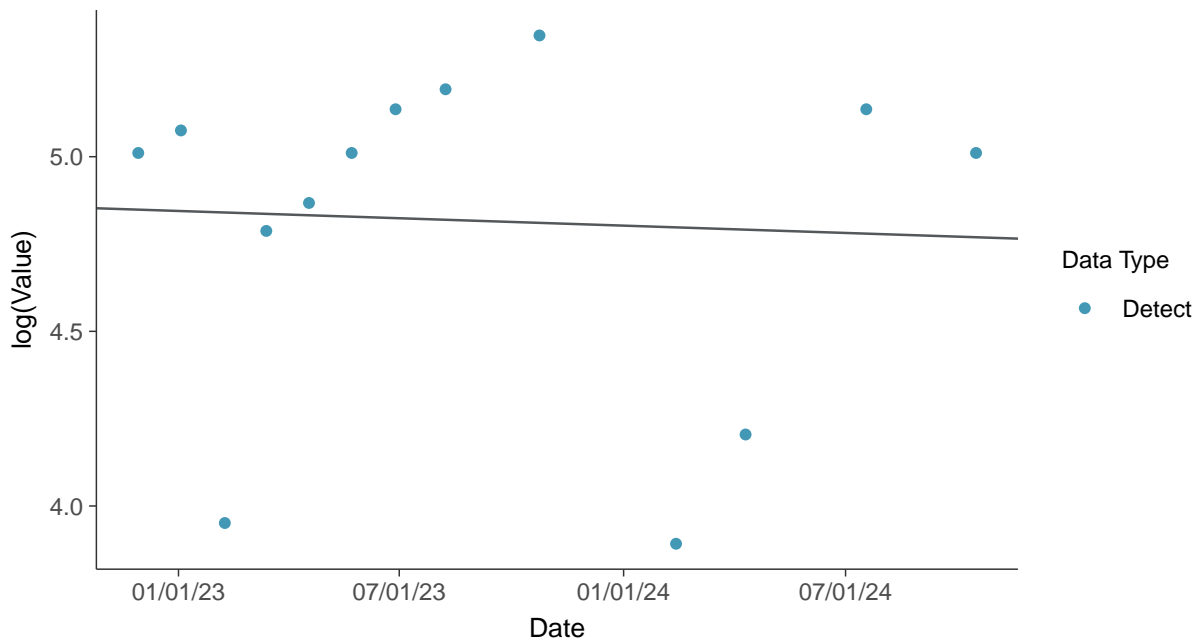
Normal Q-Q plot

Chloride (as Cl), MW-01R (mg/L)



Trend Regression: Lognormal MLE

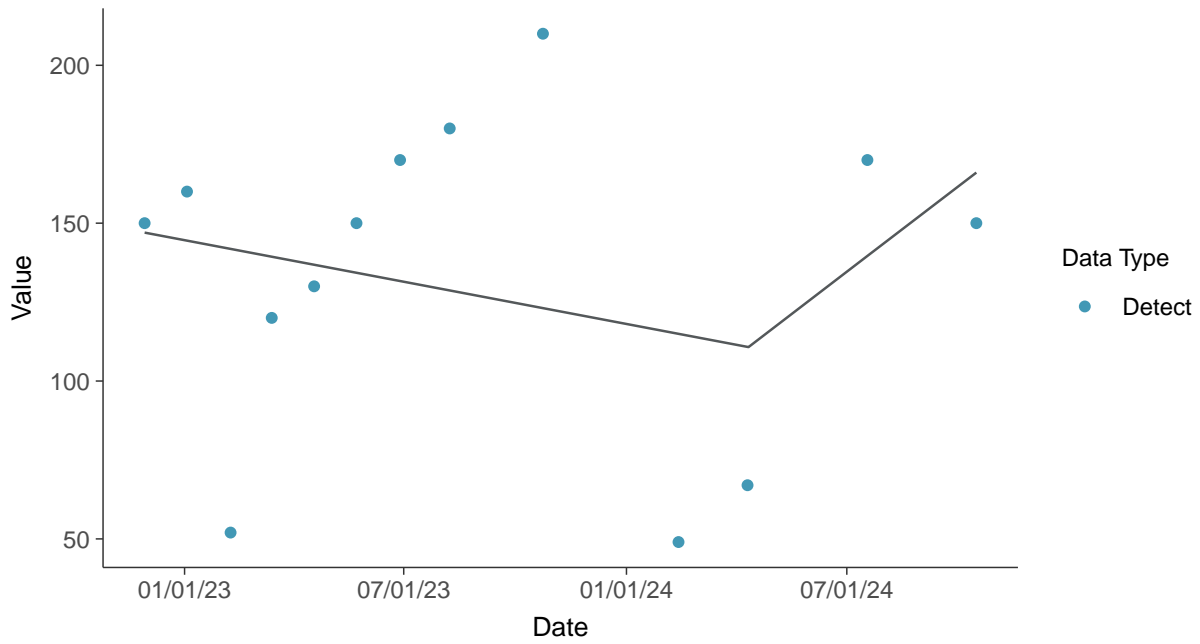
Chloride (as Cl), MW-01R (mg/L)





Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-01R (mg/L)



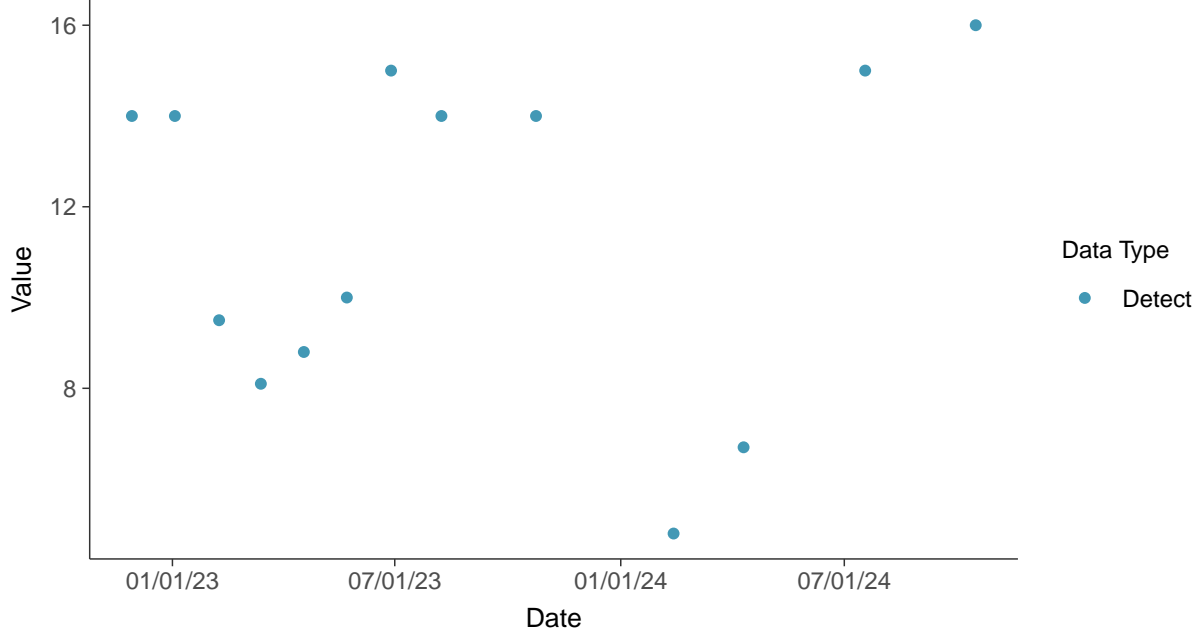


Appendix III: Fluoride, MW-01R

ID: 2_11_2_4_112

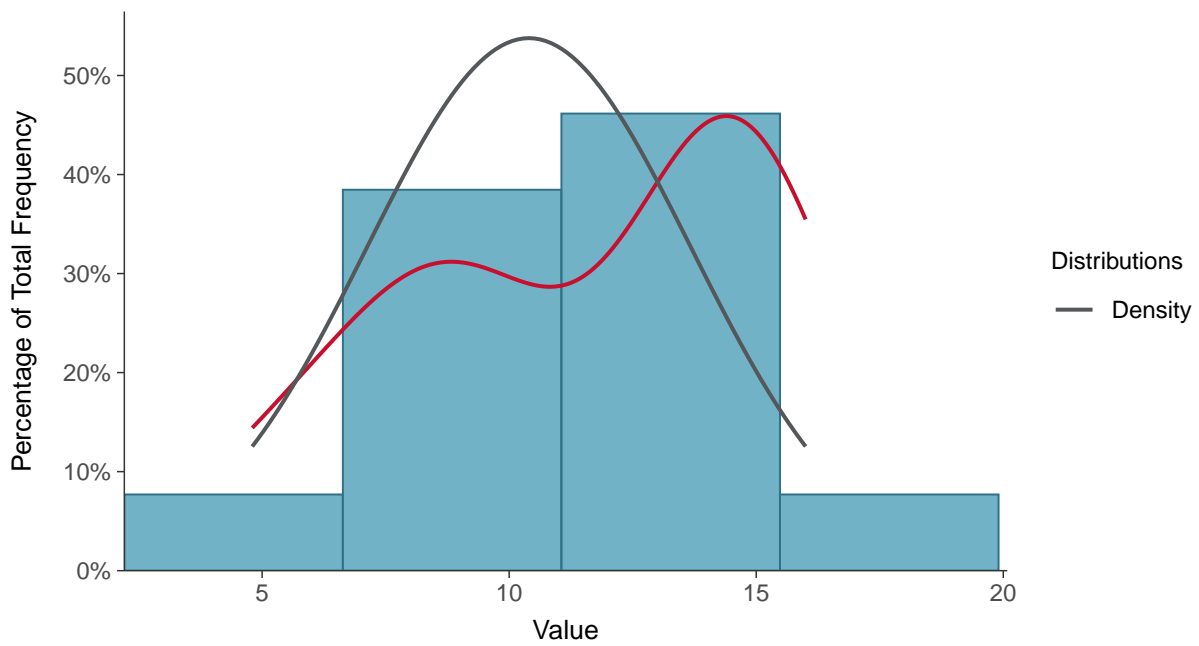
Scatter Plot

Fluoride, MW-01R (mg/L)



Histogram

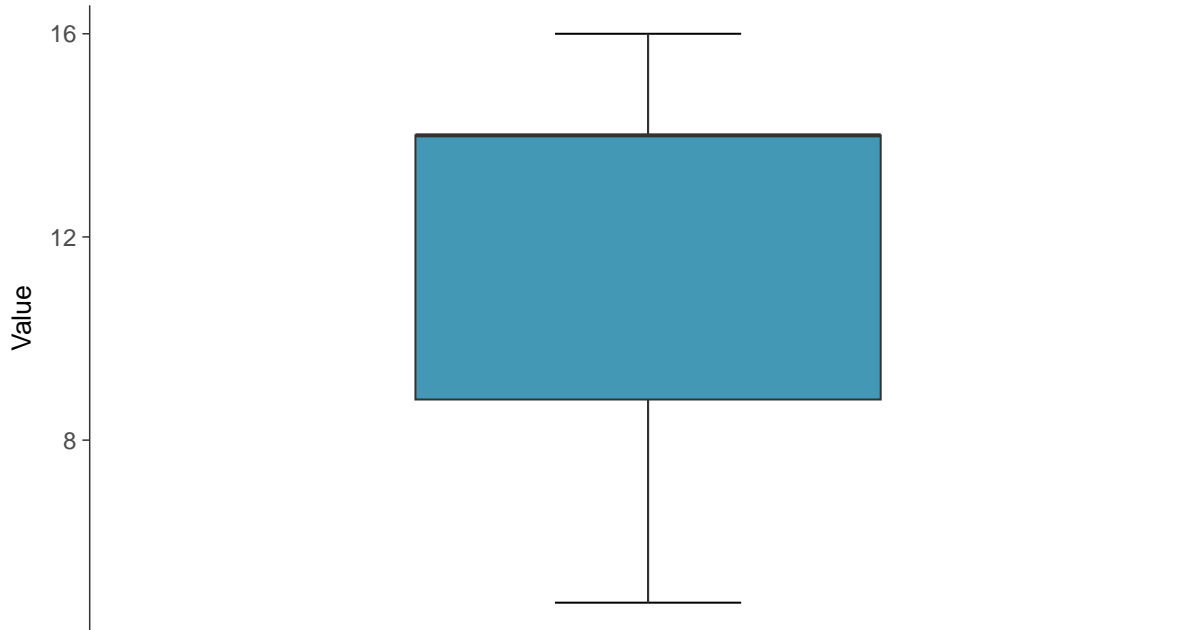
Fluoride, MW-01R (mg/L)





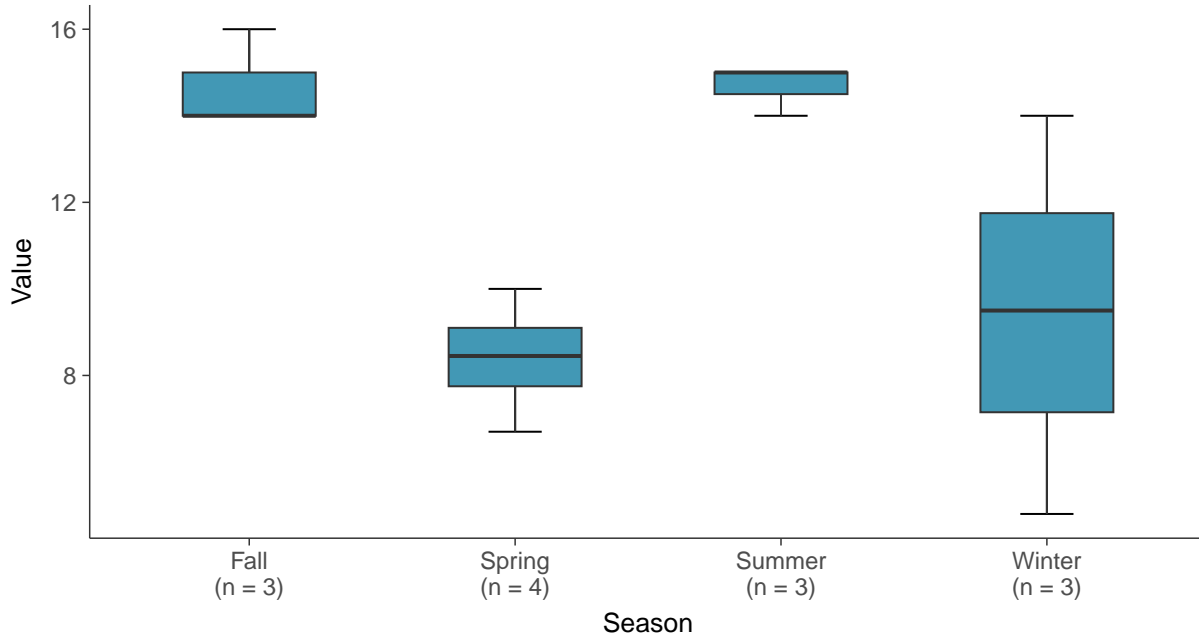
Boxplot

Fluoride, MW-01R (mg/L)



Boxplot by Season

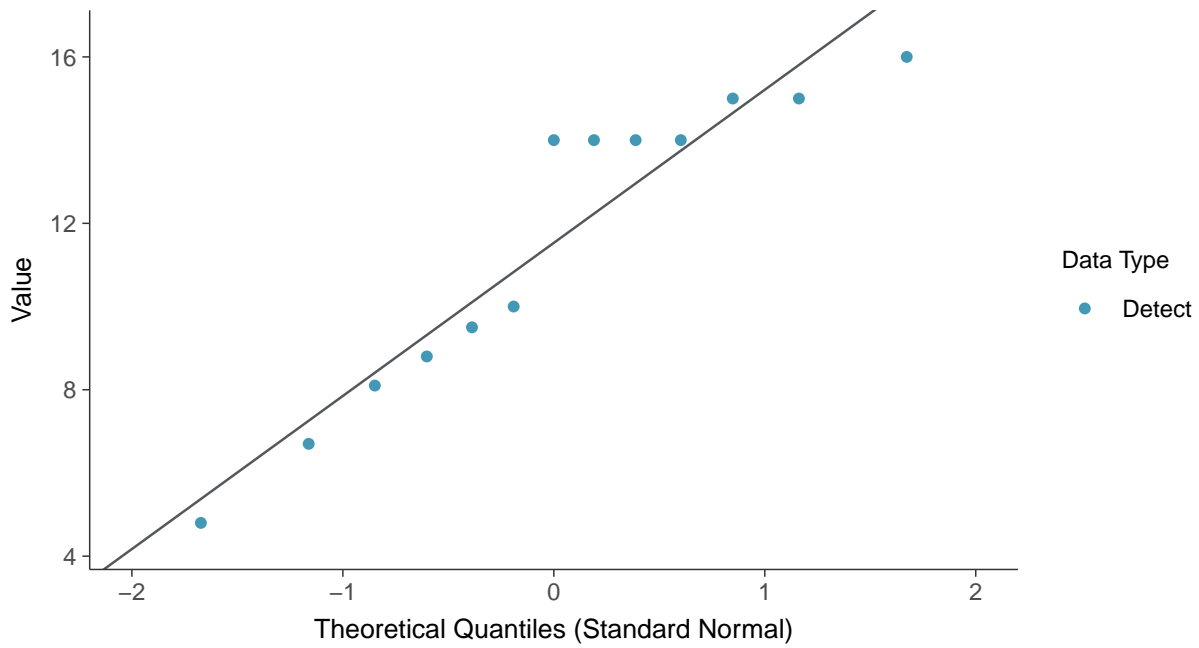
Fluoride, MW-01R (mg/L)





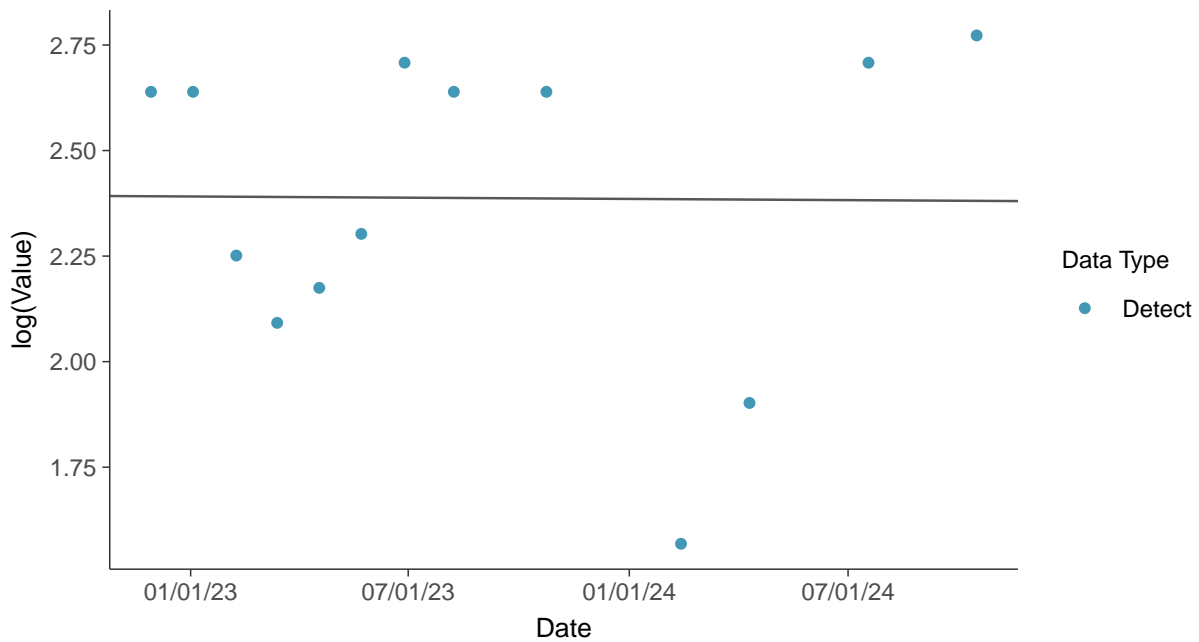
Normal Q-Q plot

Fluoride, MW-01R (mg/L)



Trend Regression: Lognormal MLE

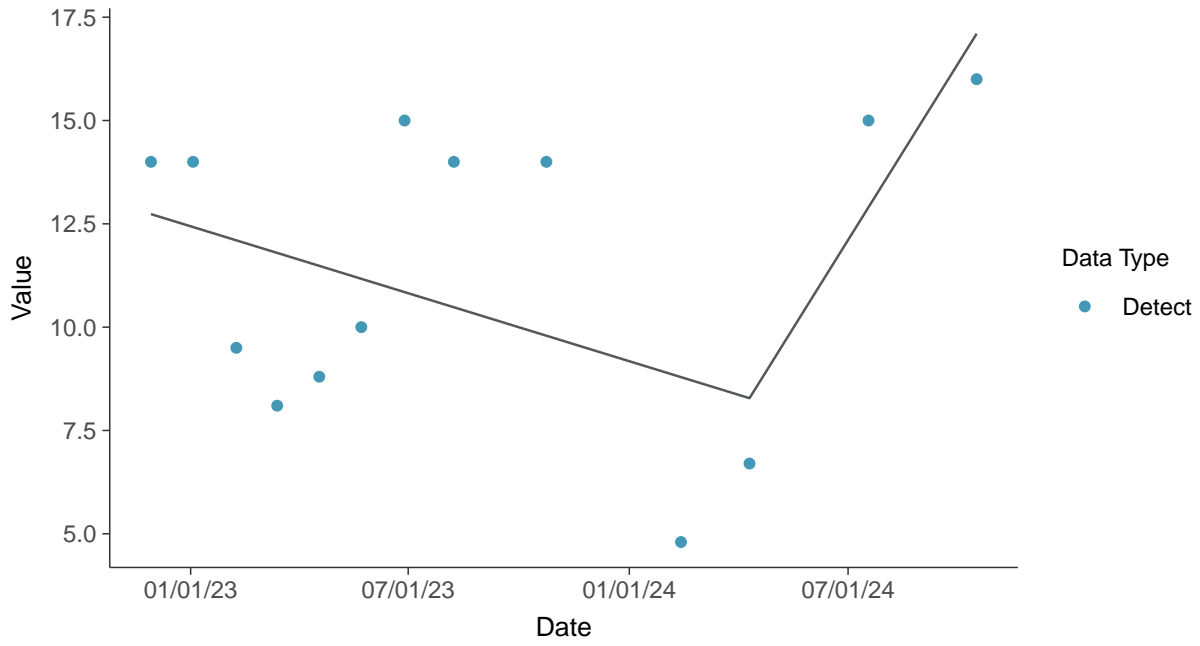
Fluoride, MW-01R (mg/L)





Trend Regression: Piecewise Linear-Linear

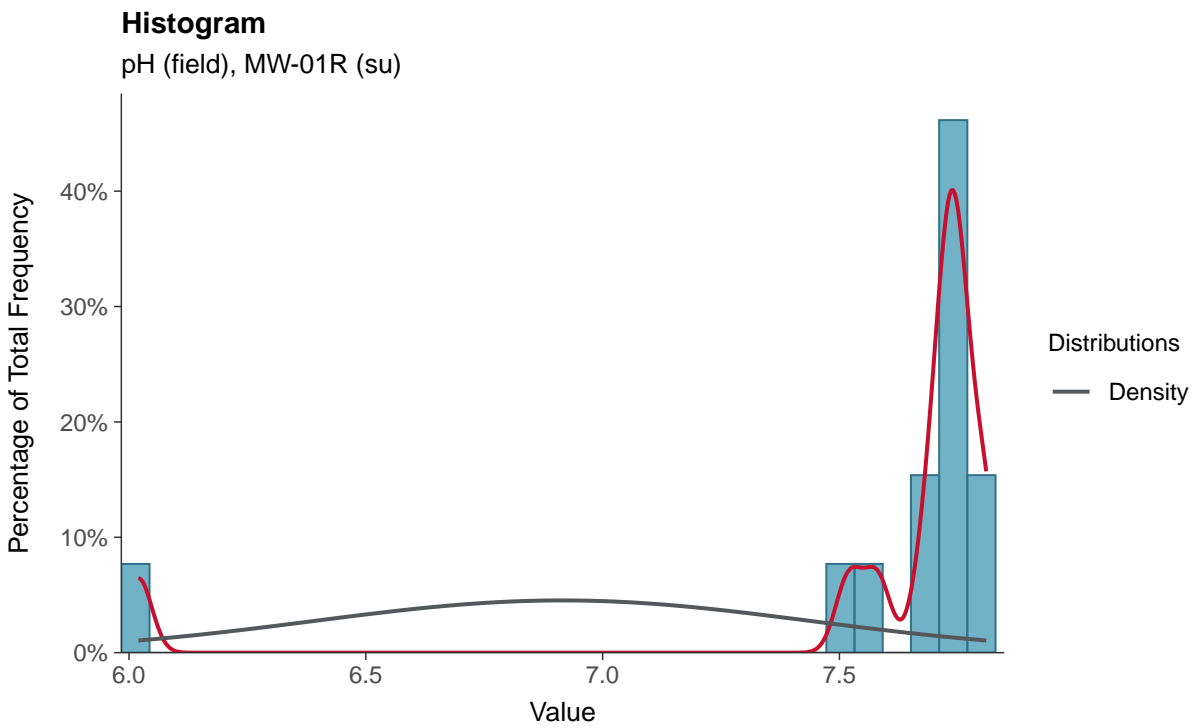
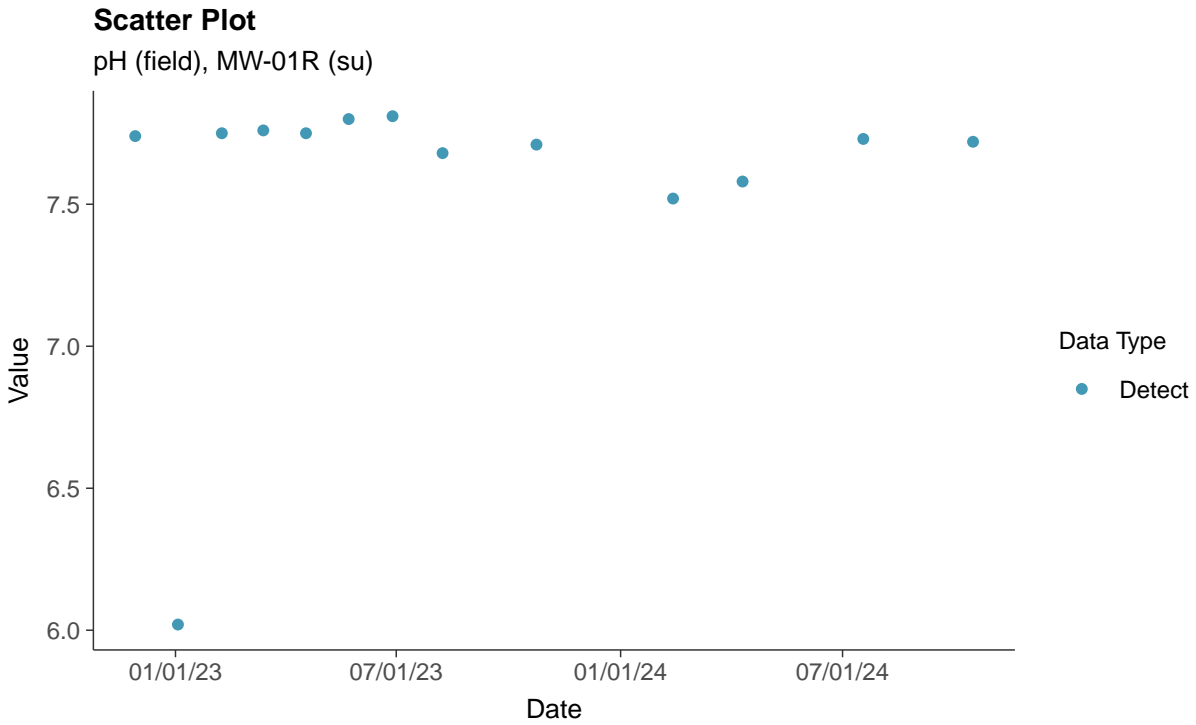
Fluoride, MW-01R (mg/L)





Appendix III: pH (field), MW-01R

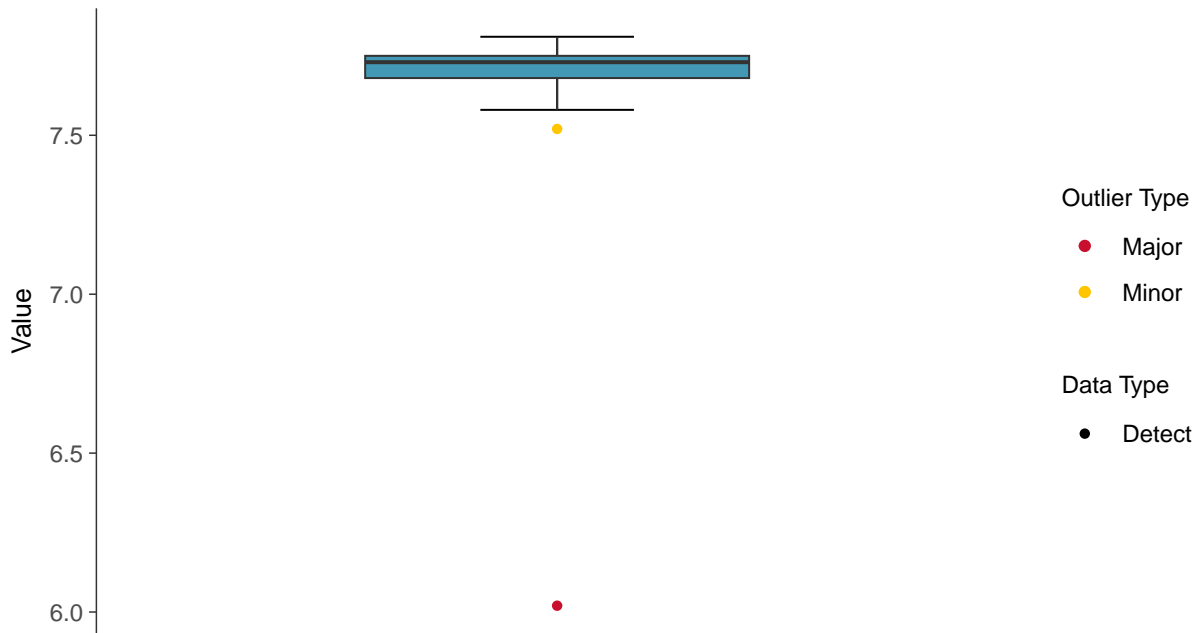
ID: 2_11_2_4_120





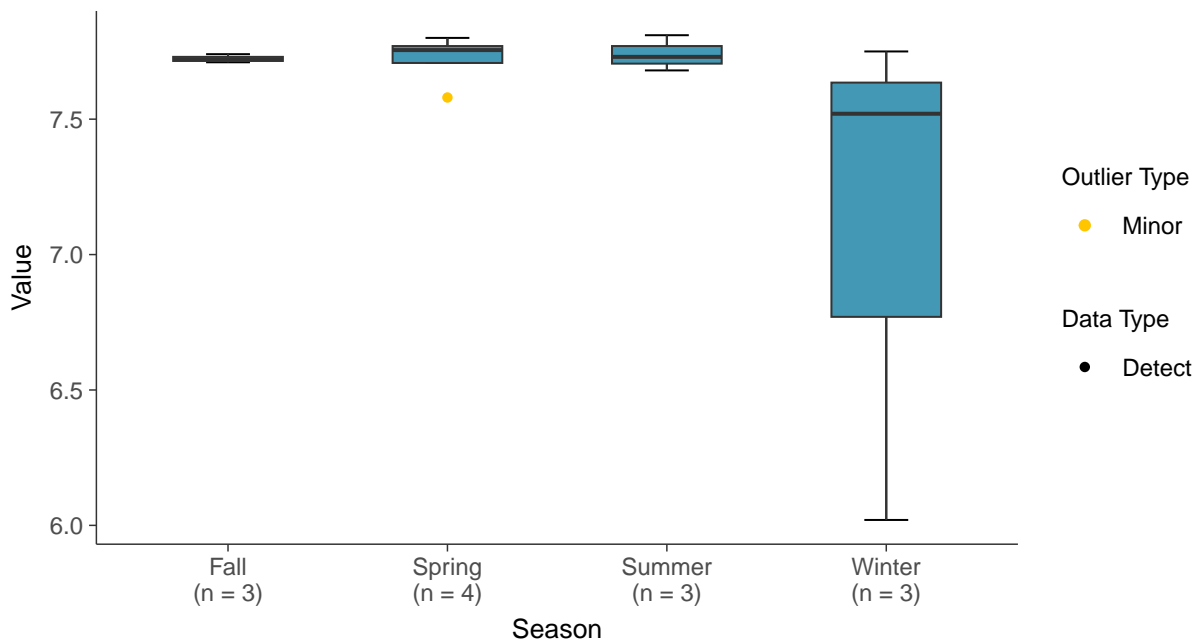
Boxplot

pH (field), MW-01R (su)



Boxplot by Season

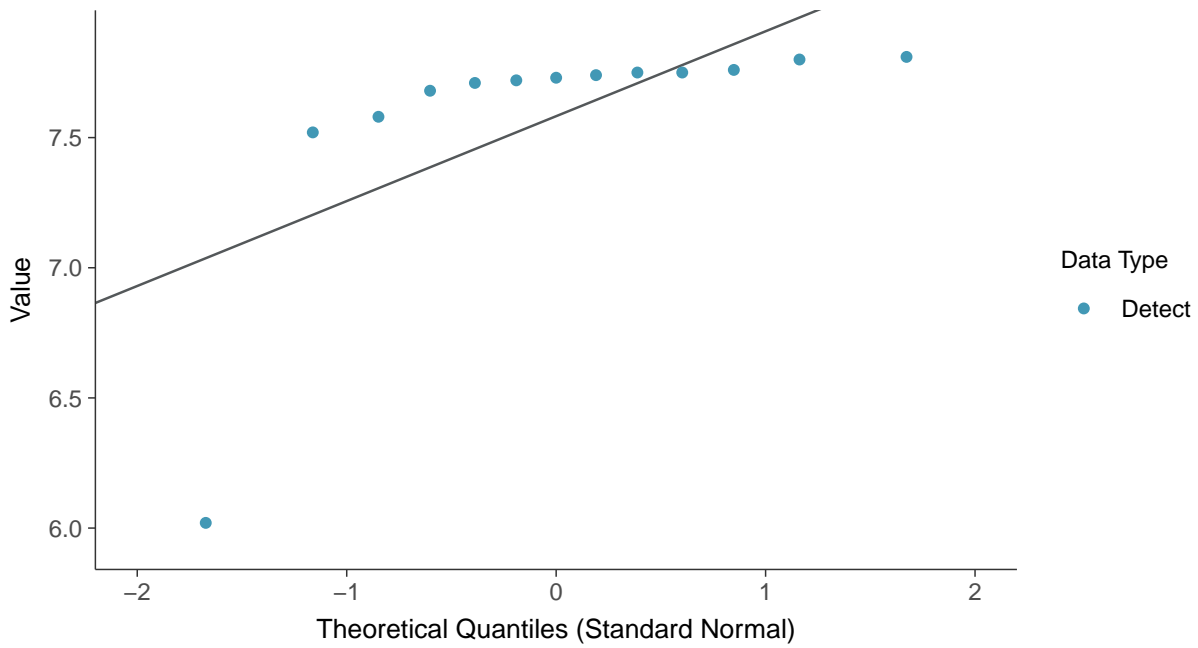
pH (field), MW-01R (su)





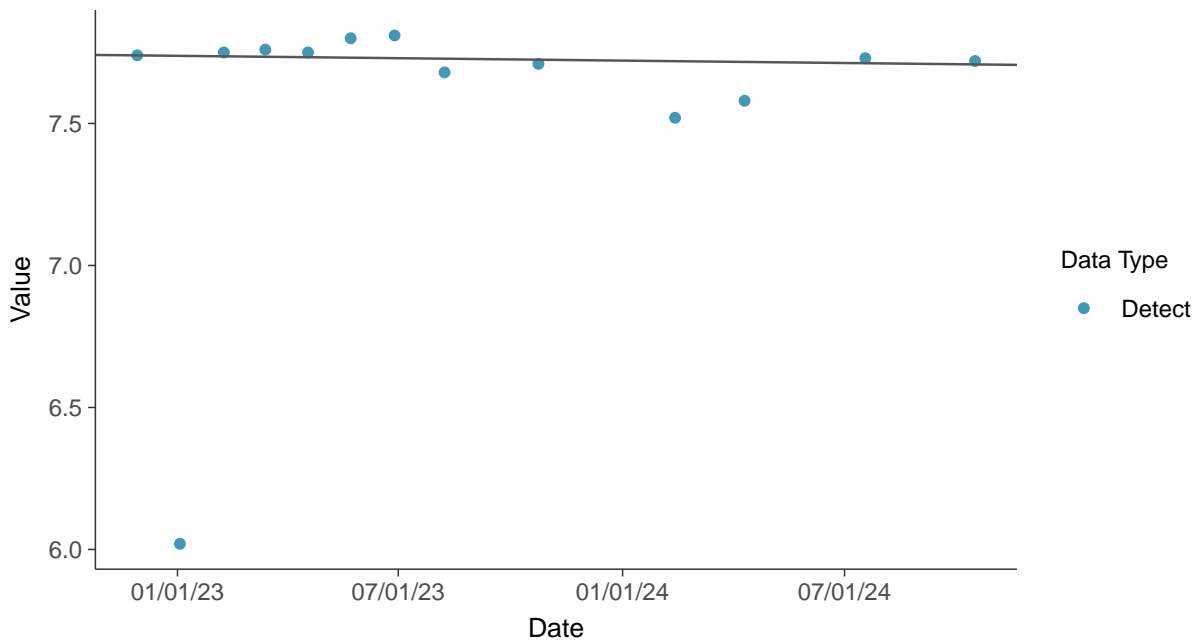
Normal Q-Q plot

pH (field), MW-01R (su)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

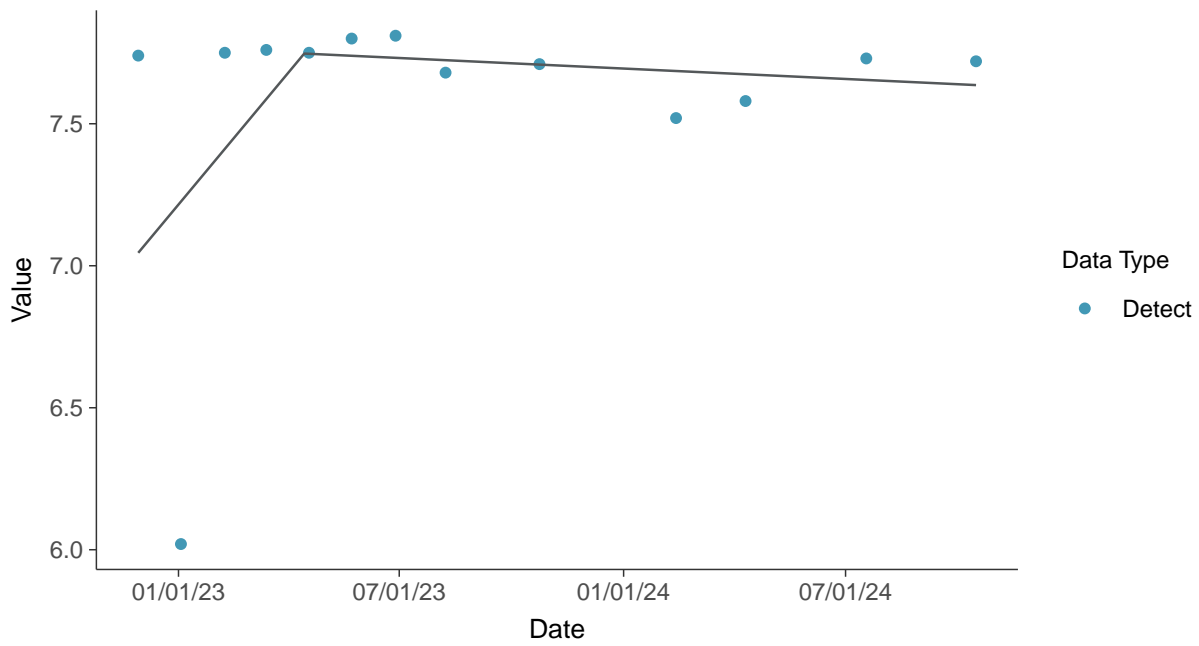
pH (field), MW-01R (su)





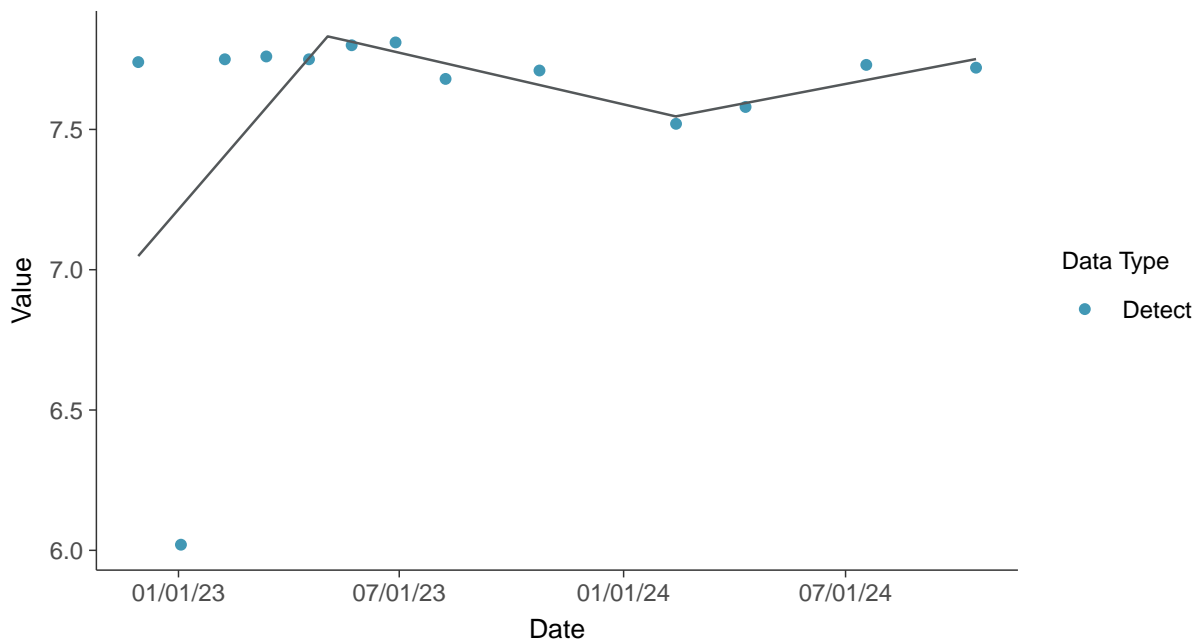
Trend Regression: Piecewise Linear-Linear

pH (field), MW-01R (su)



Trend Regression: Piecewise Linear-Linear-Linear

pH (field), MW-01R (su)



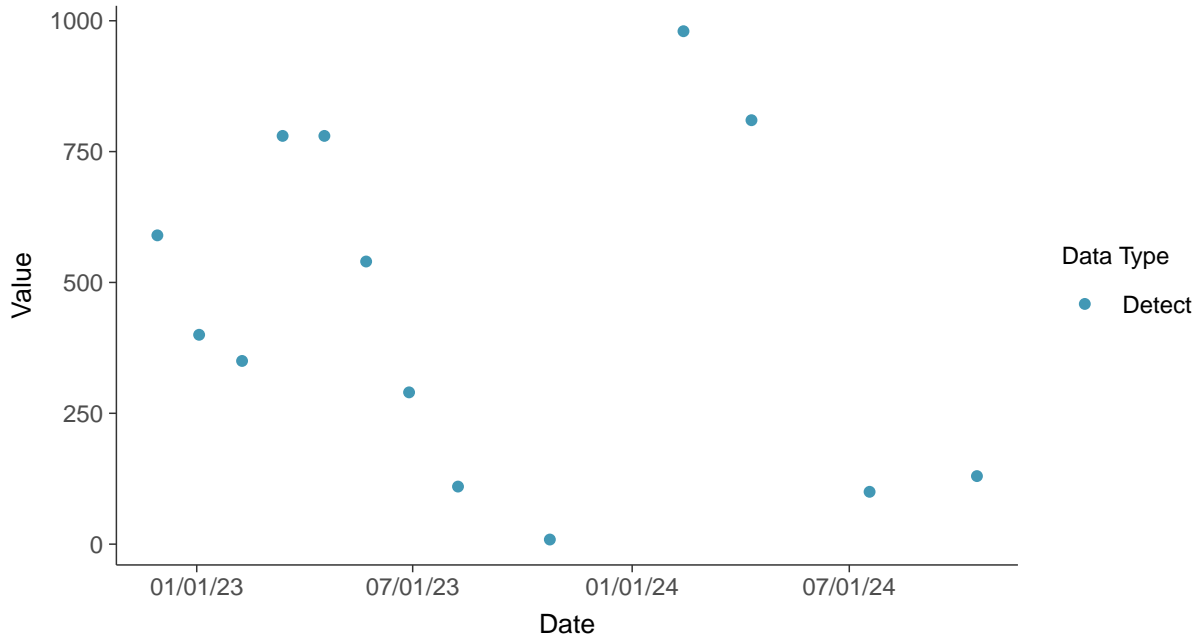


Appendix III: Sulfate (as SO₄), MW-01R

ID: 2_11_2_4_124

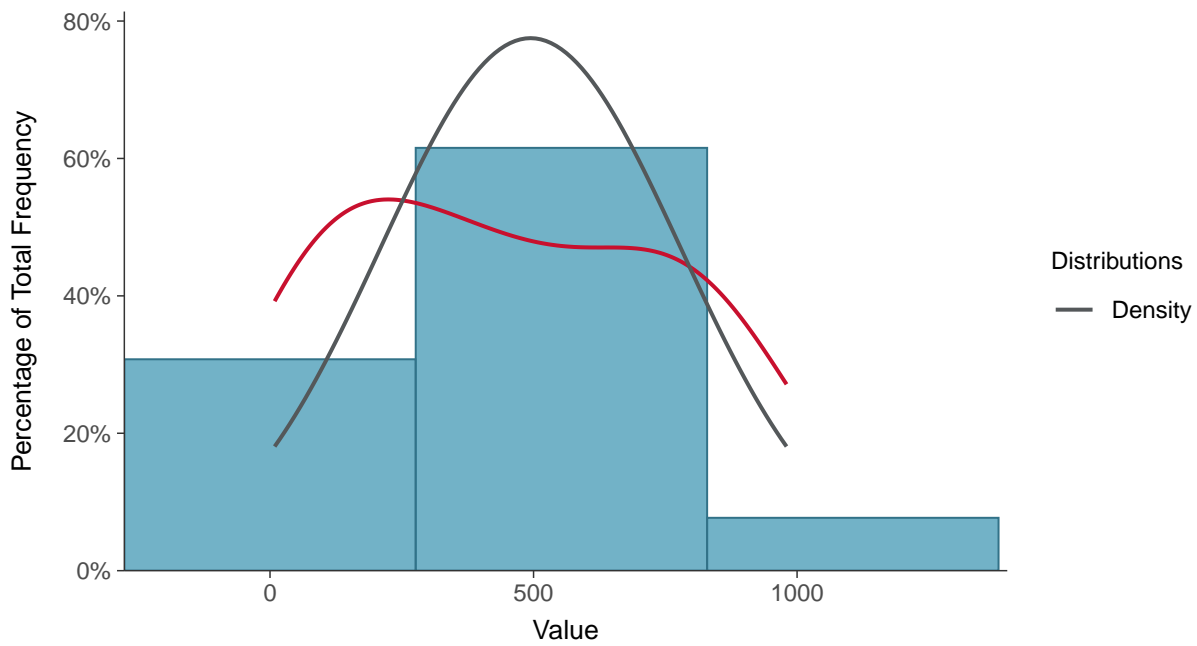
Scatter Plot

Sulfate (as SO₄), MW-01R (mg/L)



Histogram

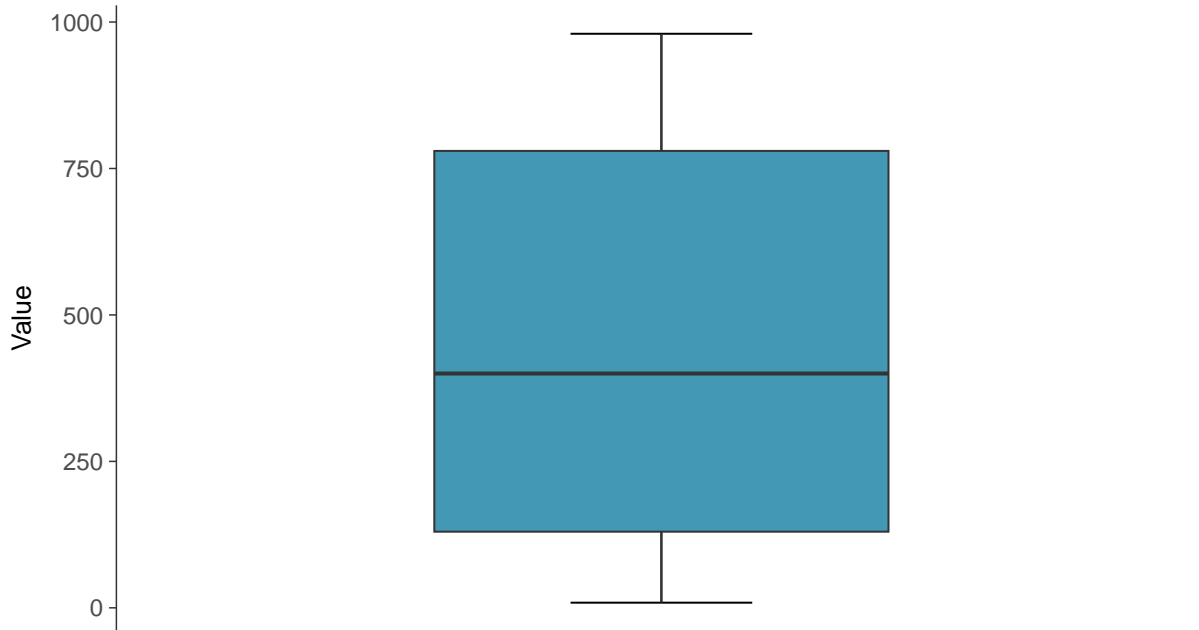
Sulfate (as SO₄), MW-01R (mg/L)





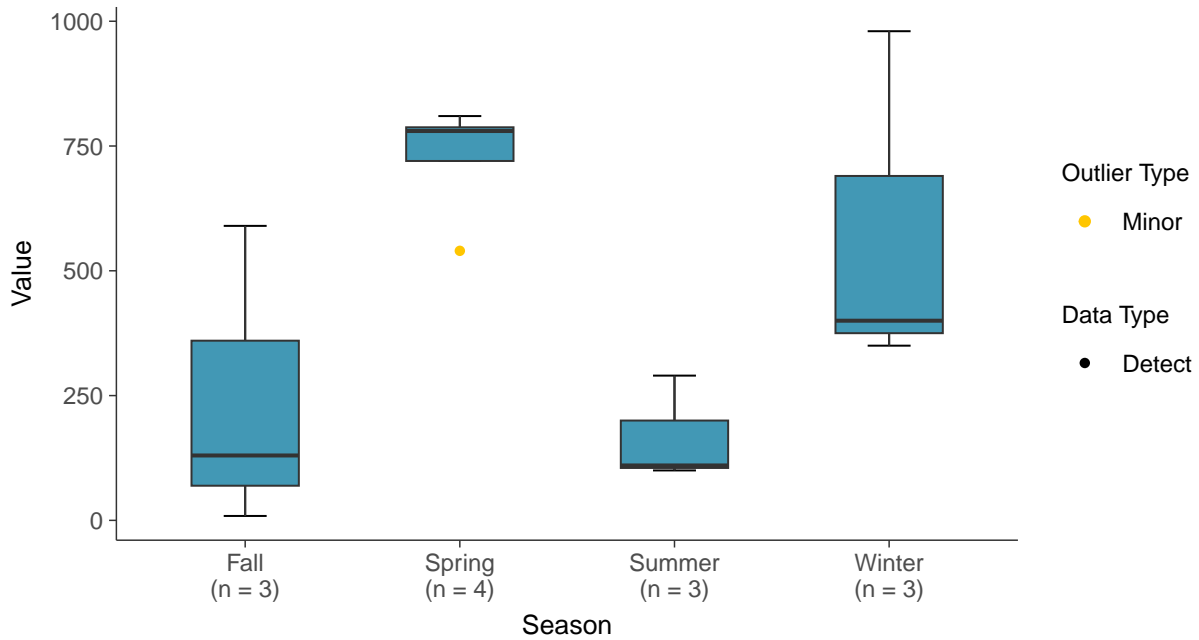
Boxplot

Sulfate (as SO₄), MW-01R (mg/L)



Boxplot by Season

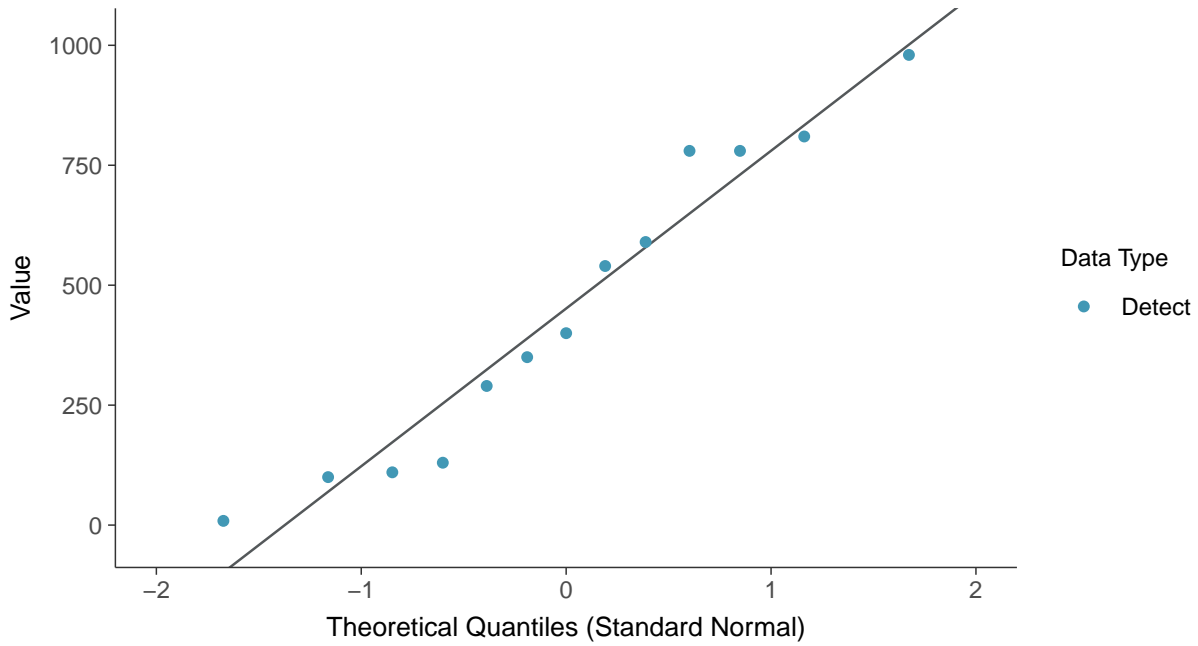
Sulfate (as SO₄), MW-01R (mg/L)





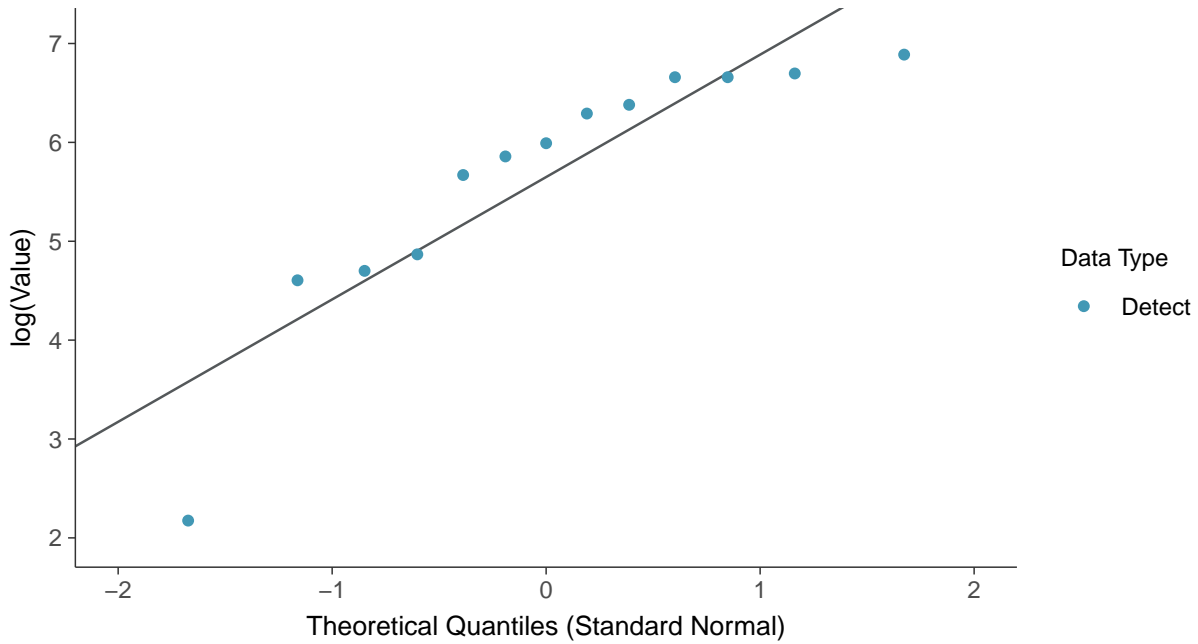
Normal Q-Q plot

Sulfate (as SO₄), MW-01R (mg/L)



Lognormal Q-Q plot

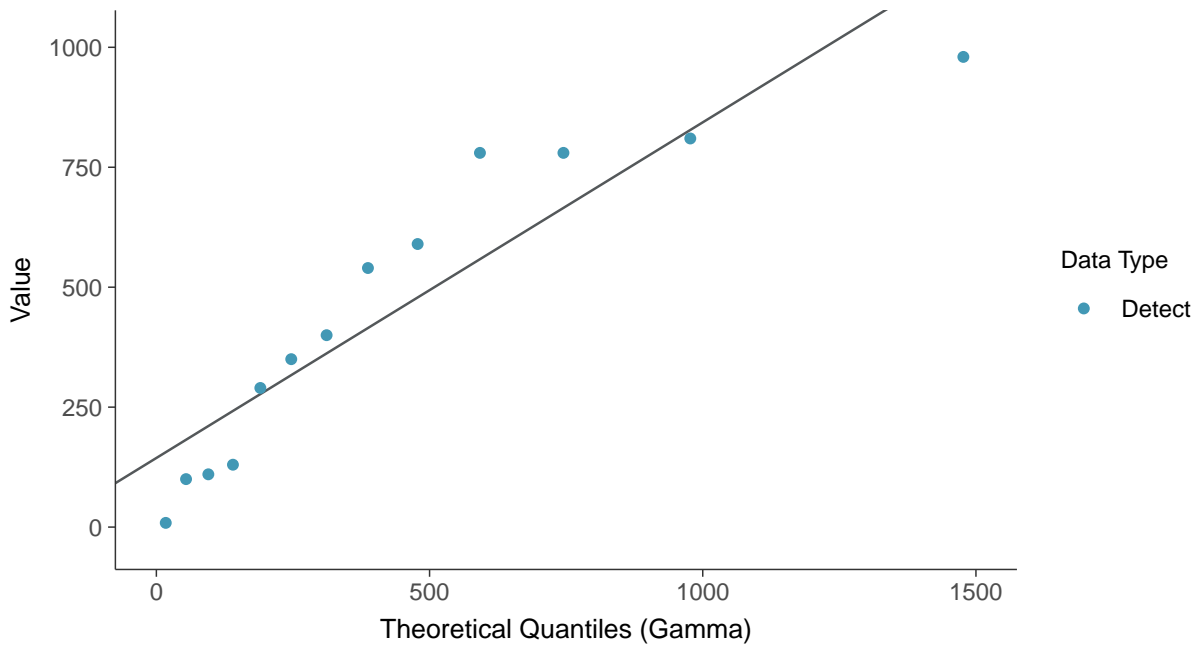
Sulfate (as SO₄), MW-01R (mg/L)





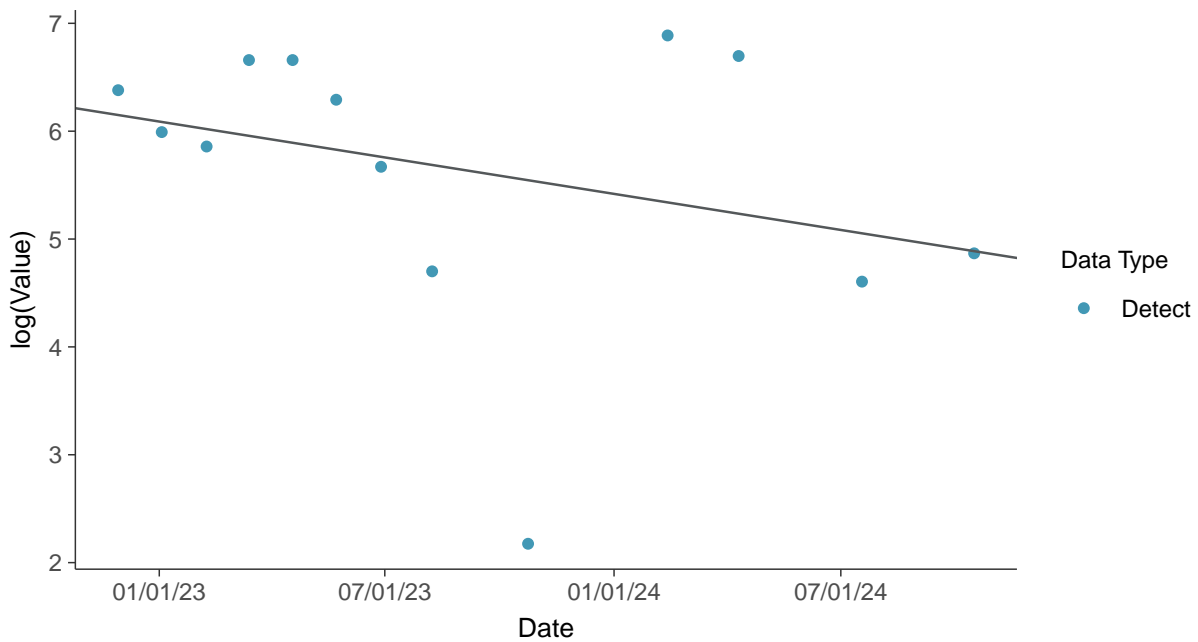
Gamma Q-Q plot

Sulfate (as SO₄), MW-01R (mg/L)



Trend Regression: Lognormal MLE

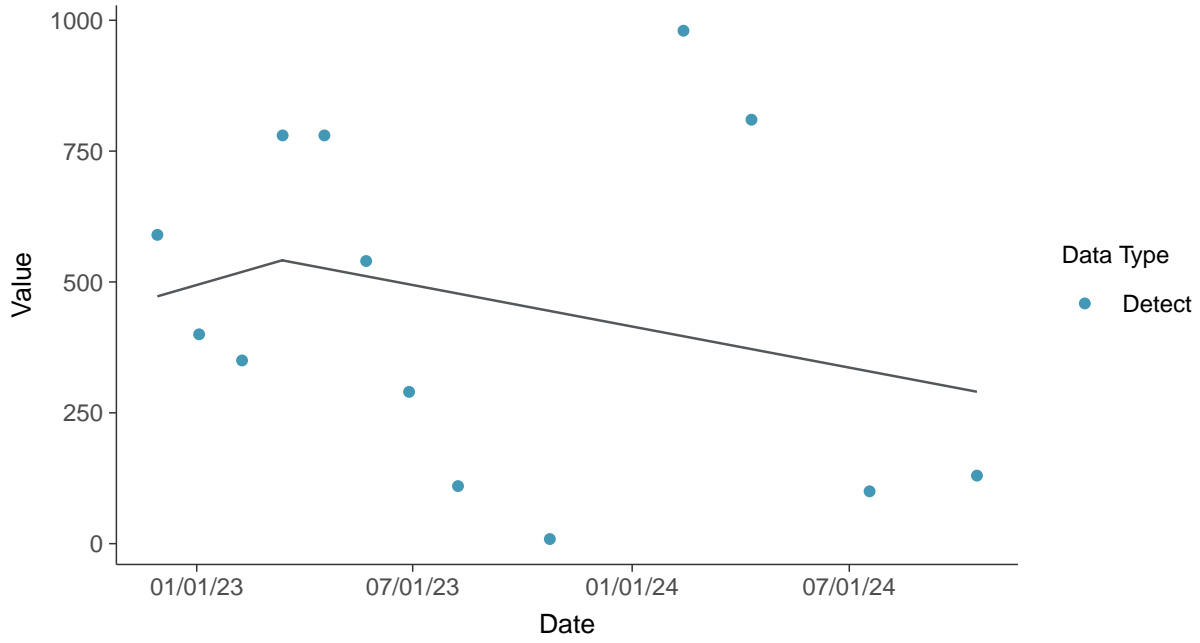
Sulfate (as SO₄), MW-01R (mg/L)





Trend Regression: Piecewise Linear-Linear

Sulfate (as SO₄), MW-01R (mg/L)



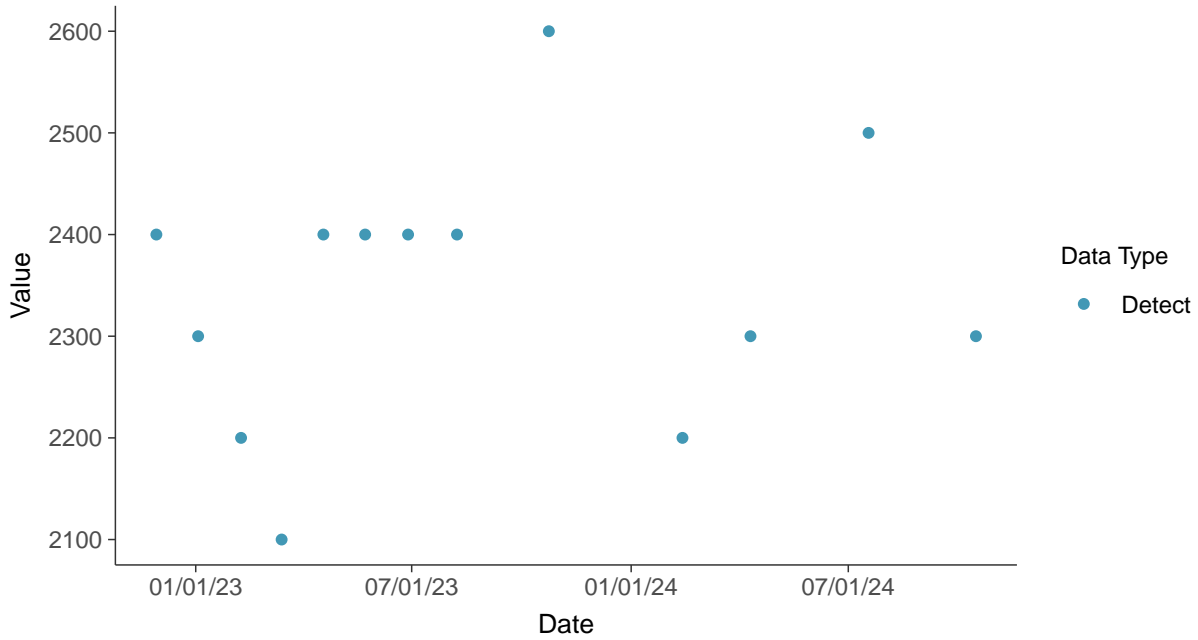


Appendix III: Total Dissolved Solids, MW-01R

ID: 2_11_2_4_126

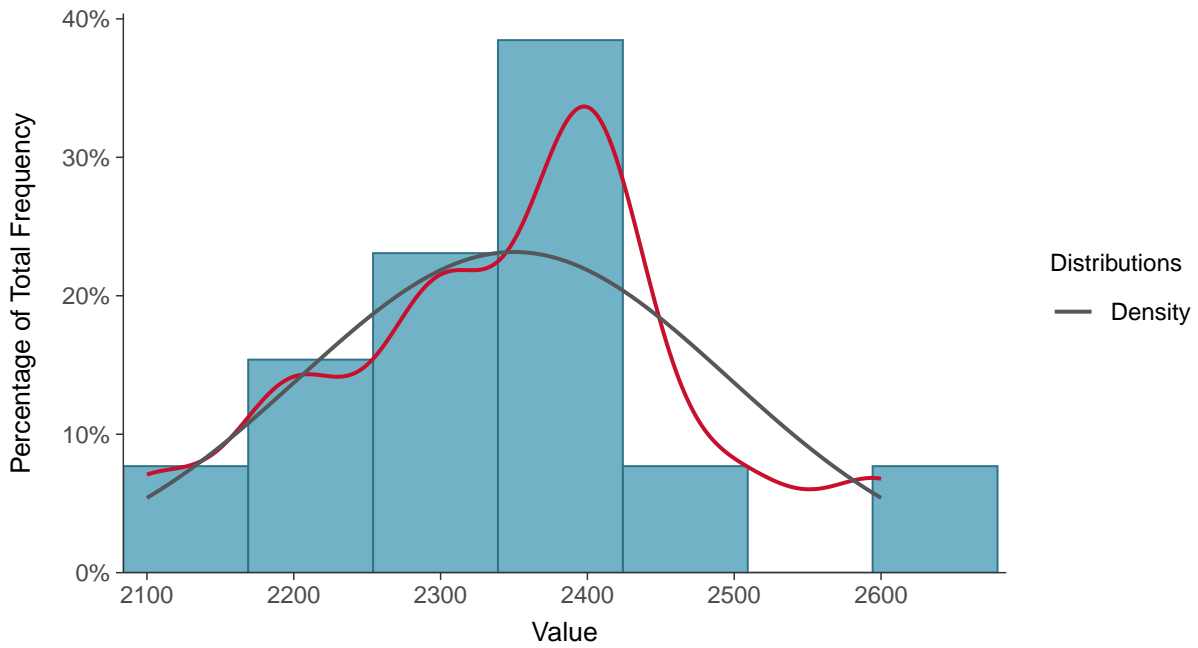
Scatter Plot

Total Dissolved Solids, MW-01R (mg/L)



Histogram

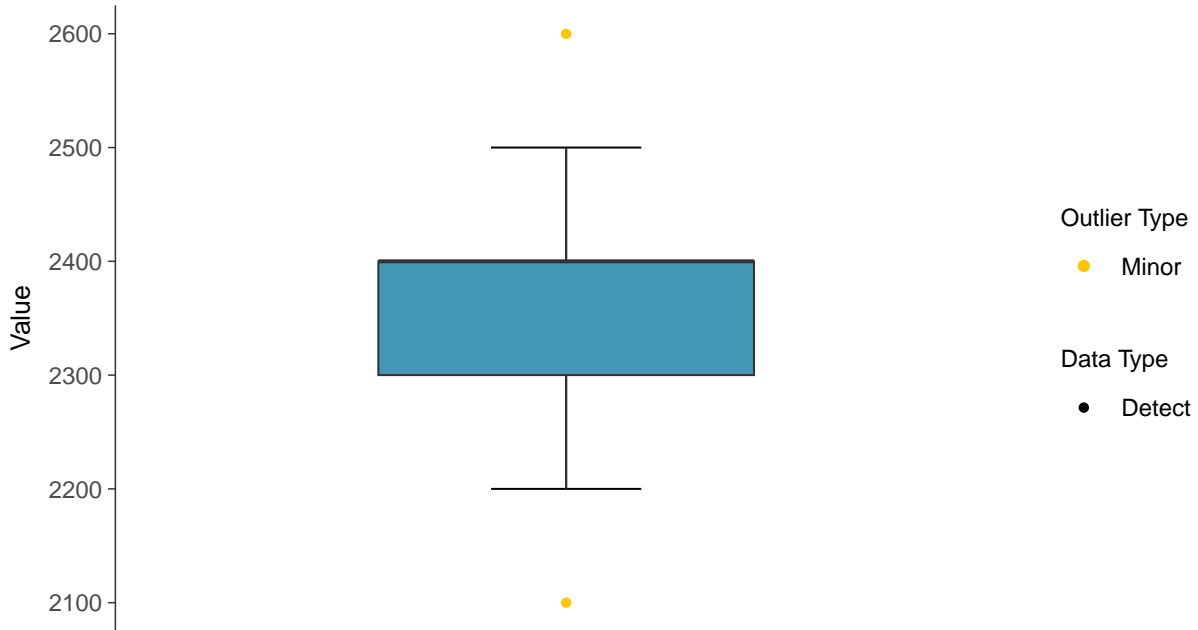
Total Dissolved Solids, MW-01R (mg/L)





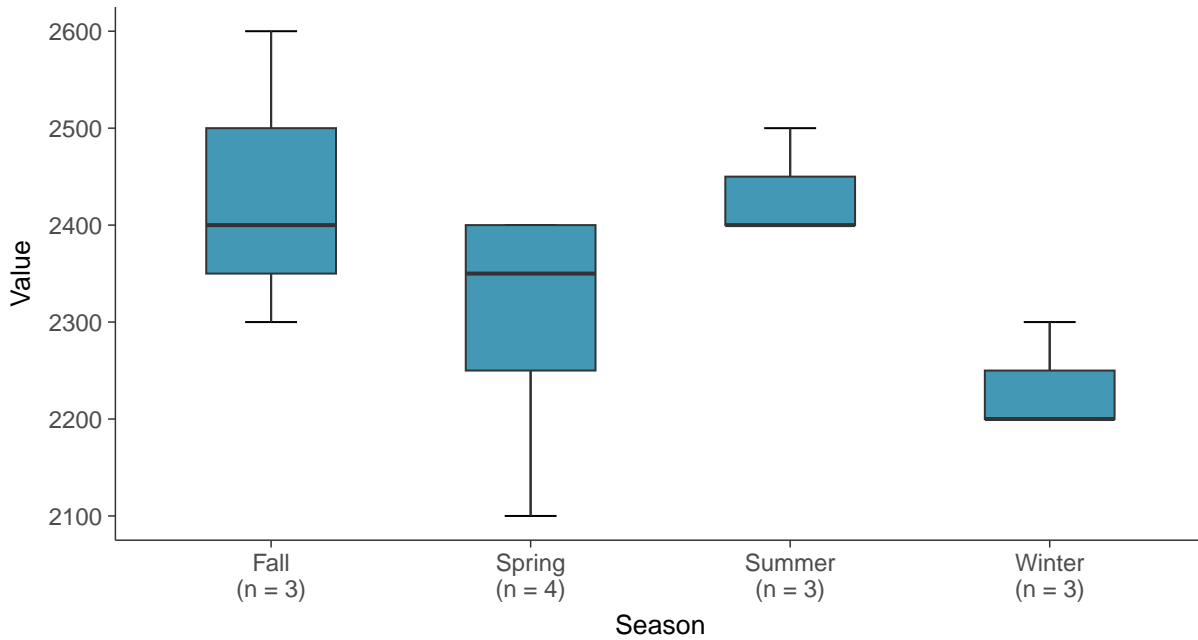
Boxplot

Total Dissolved Solids, MW-01R (mg/L)



Boxplot by Season

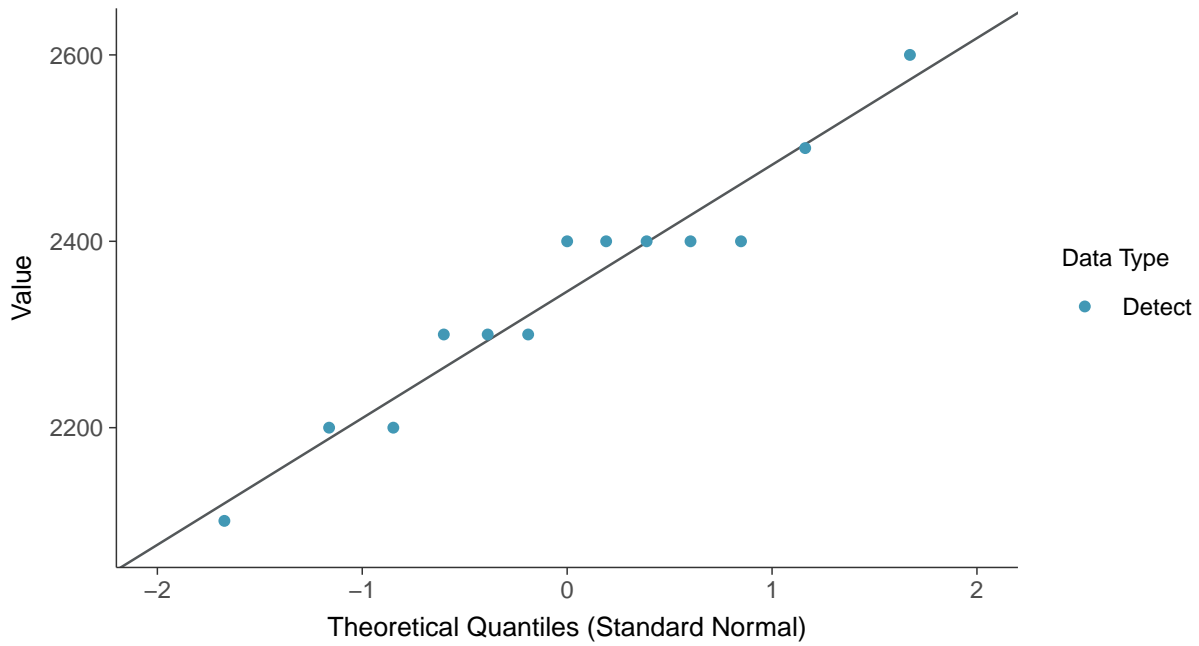
Total Dissolved Solids, MW-01R (mg/L)





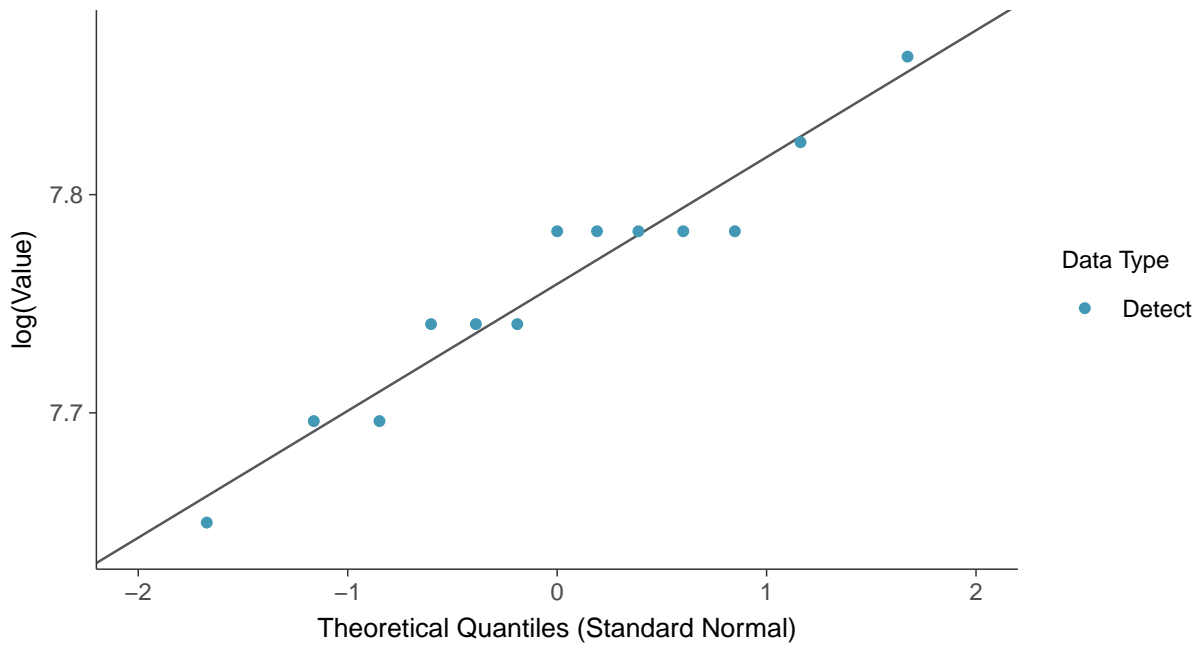
Normal Q-Q plot

Total Dissolved Solids, MW-01R (mg/L)



Lognormal Q-Q plot

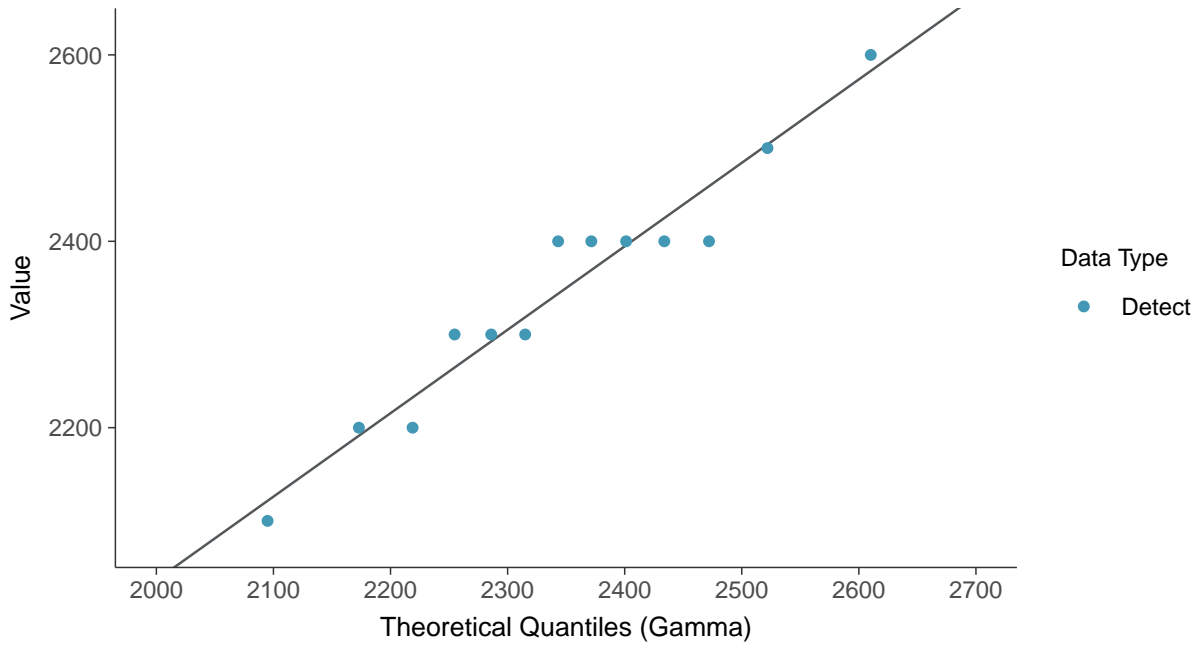
Total Dissolved Solids, MW-01R (mg/L)





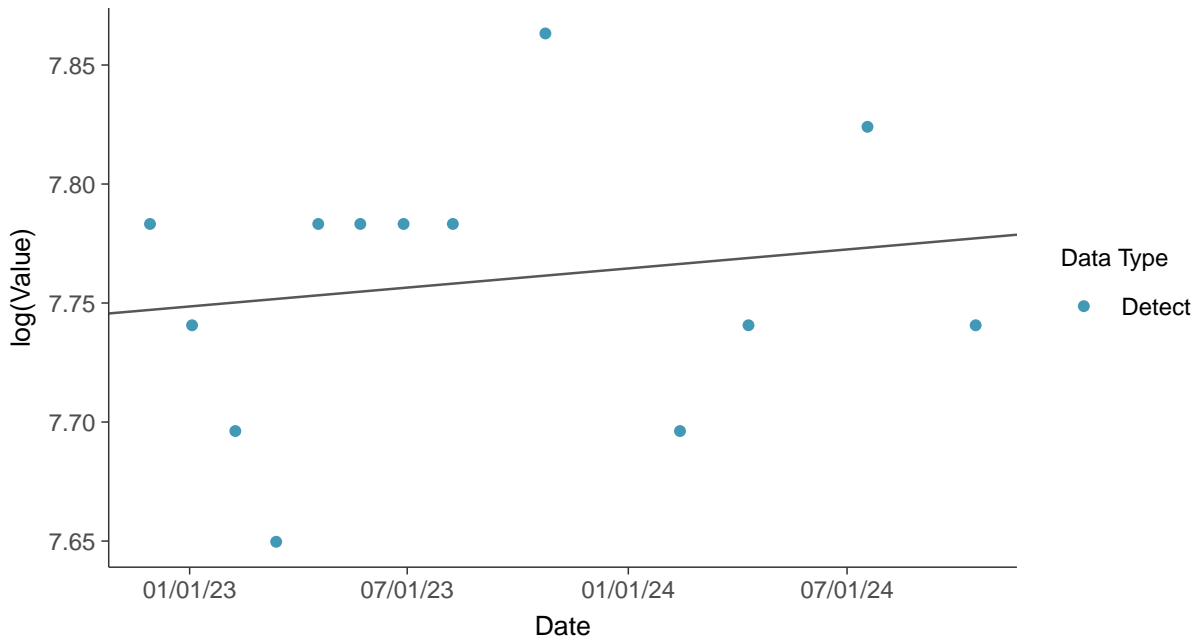
Gamma Q-Q plot

Total Dissolved Solids, MW-01R (mg/L)



Trend Regression: Lognormal MLE

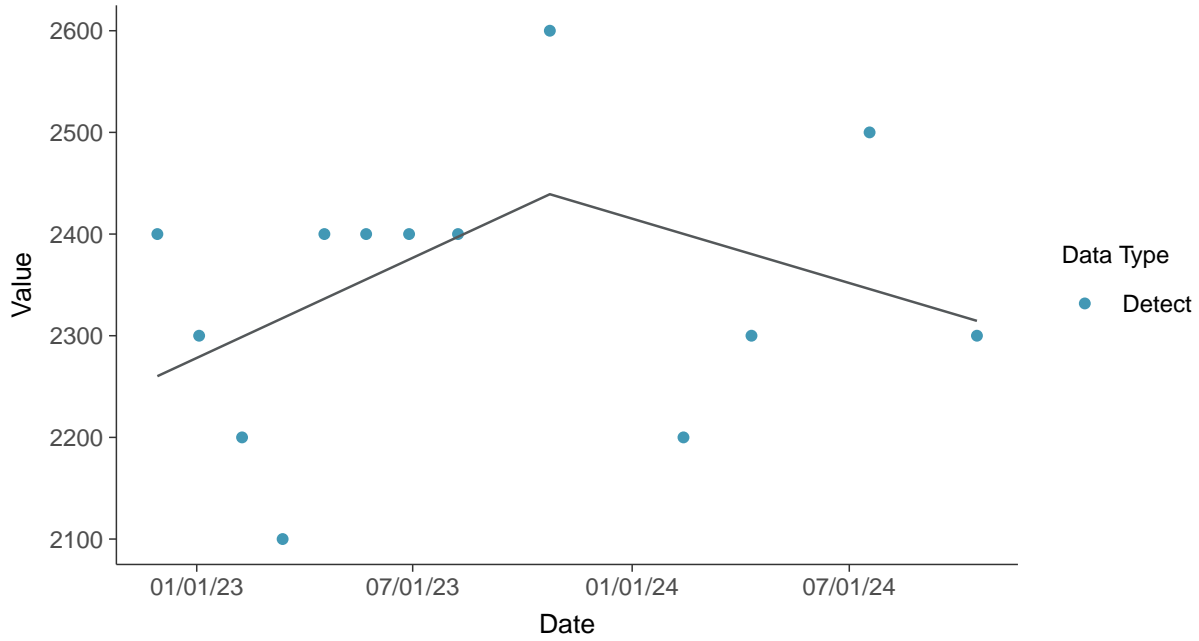
Total Dissolved Solids, MW-01R (mg/L)





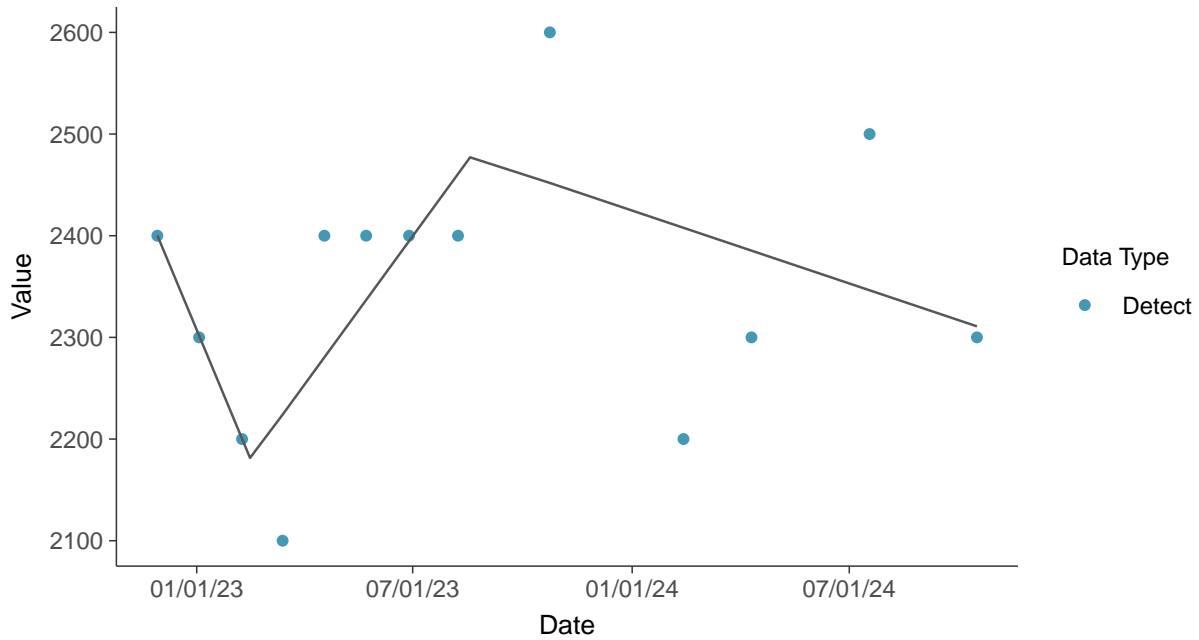
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-01R (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Total Dissolved Solids, MW-01R (mg/L)



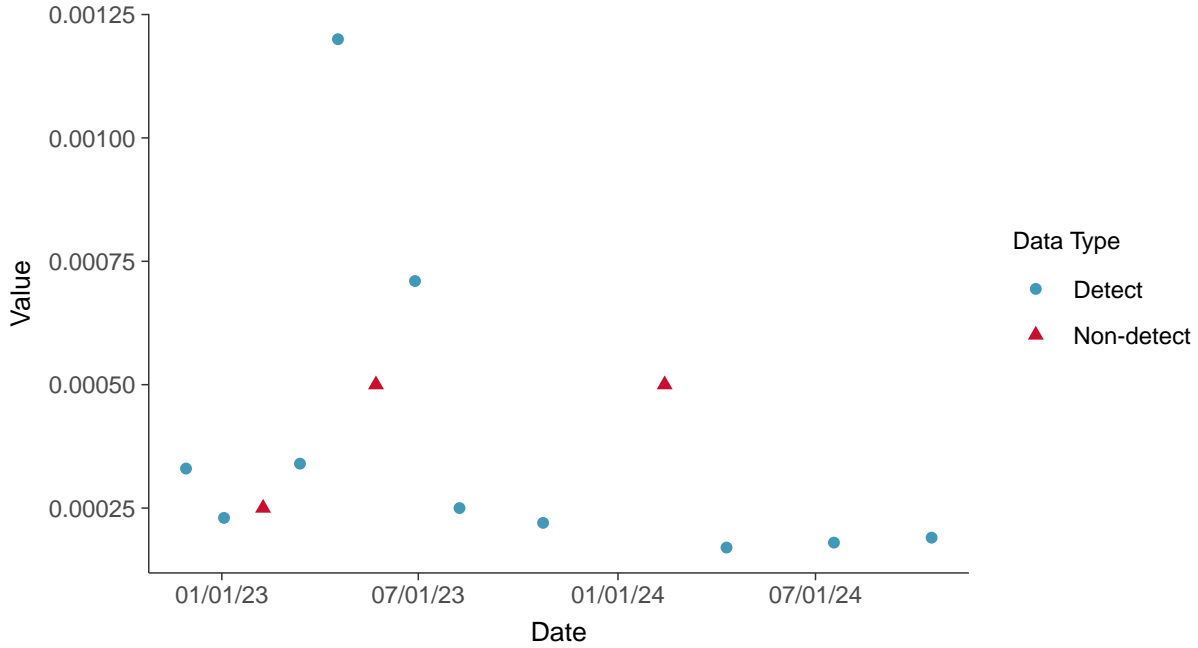


Appendix IV: Antimony, MW-01R

ID: 2_11_2_5_101

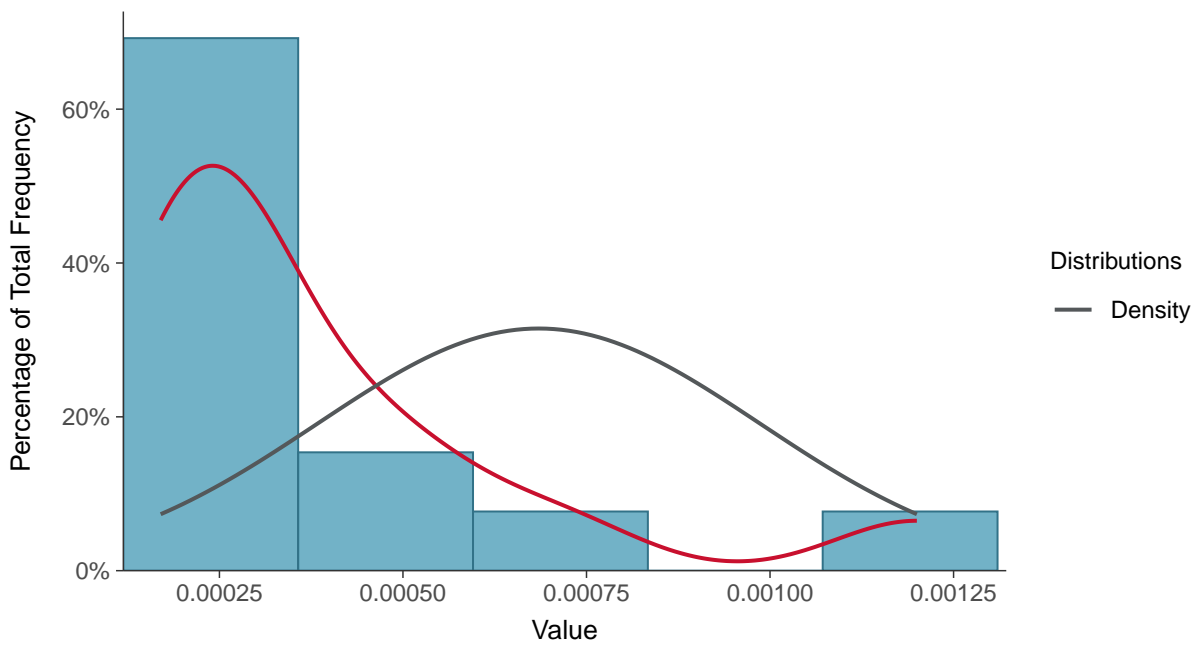
Scatter Plot

Antimony, MW-01R (mg/L)



Histogram

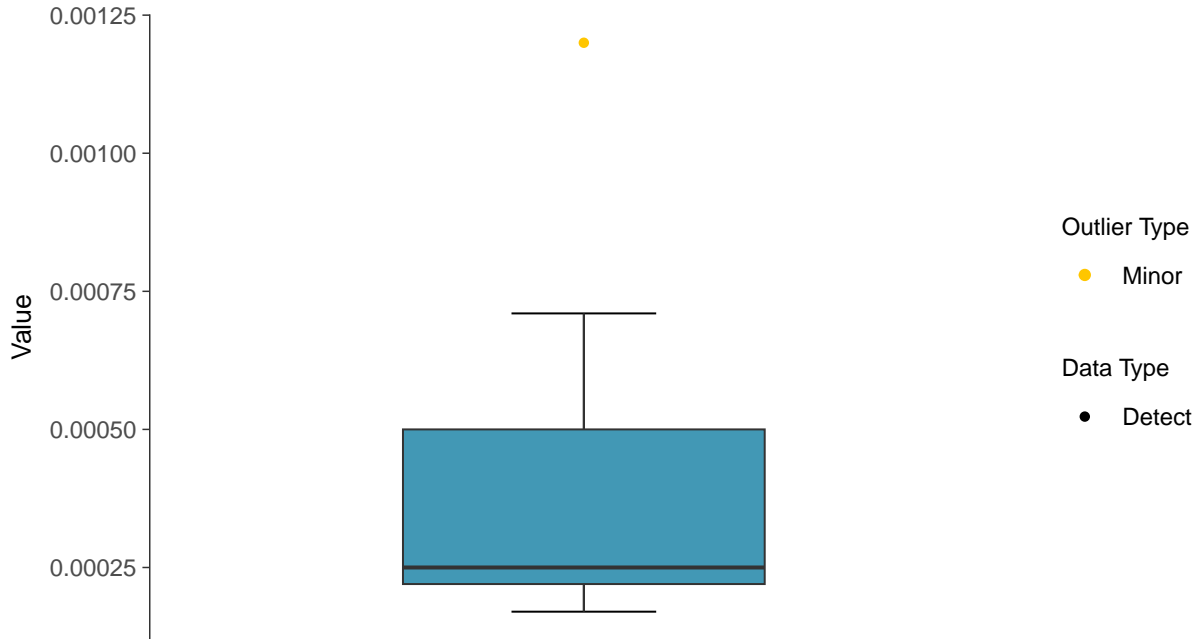
Antimony, MW-01R (mg/L)





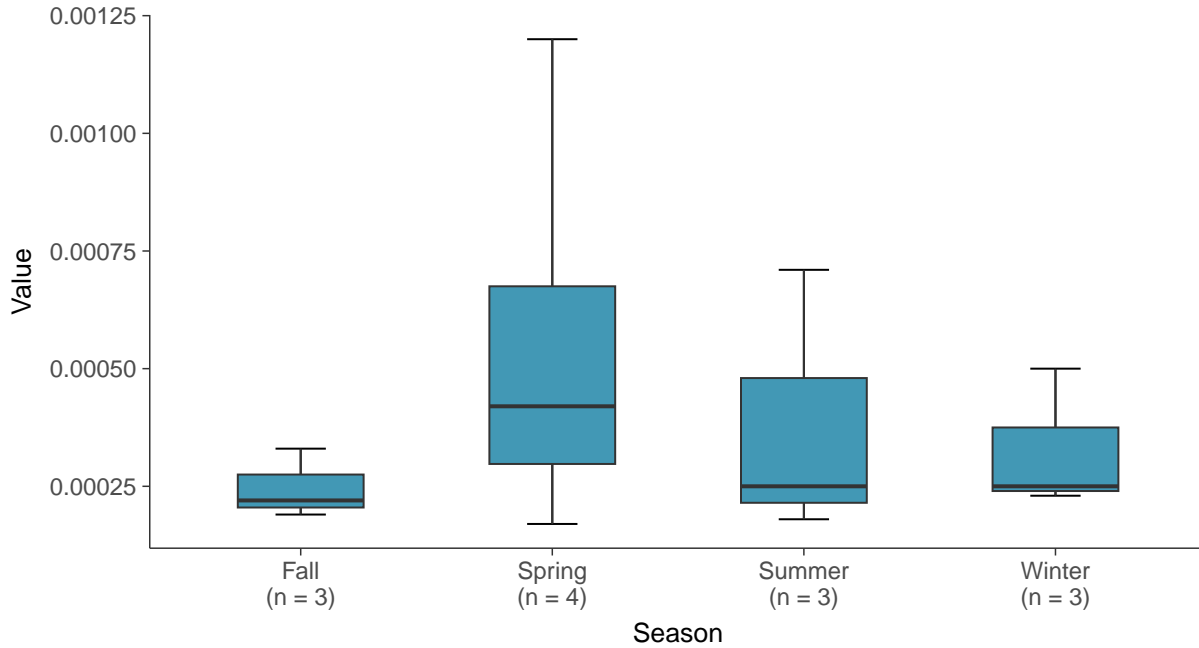
Boxplot

Antimony, MW-01R (mg/L)



Boxplot by Season

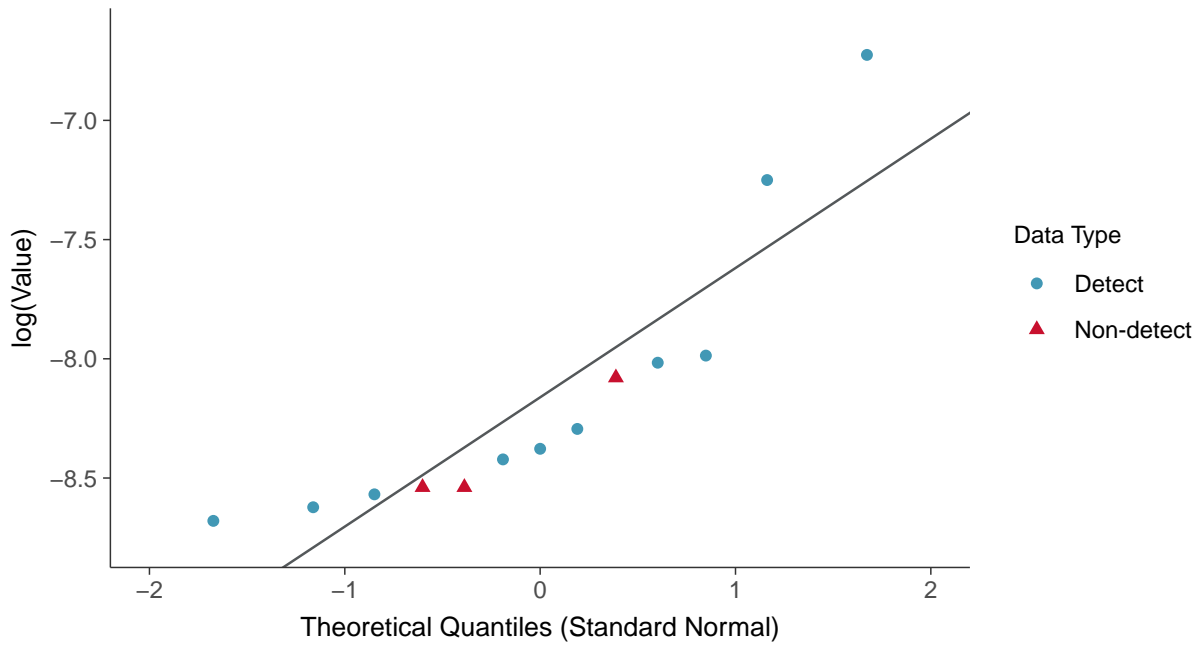
Antimony, MW-01R (mg/L)





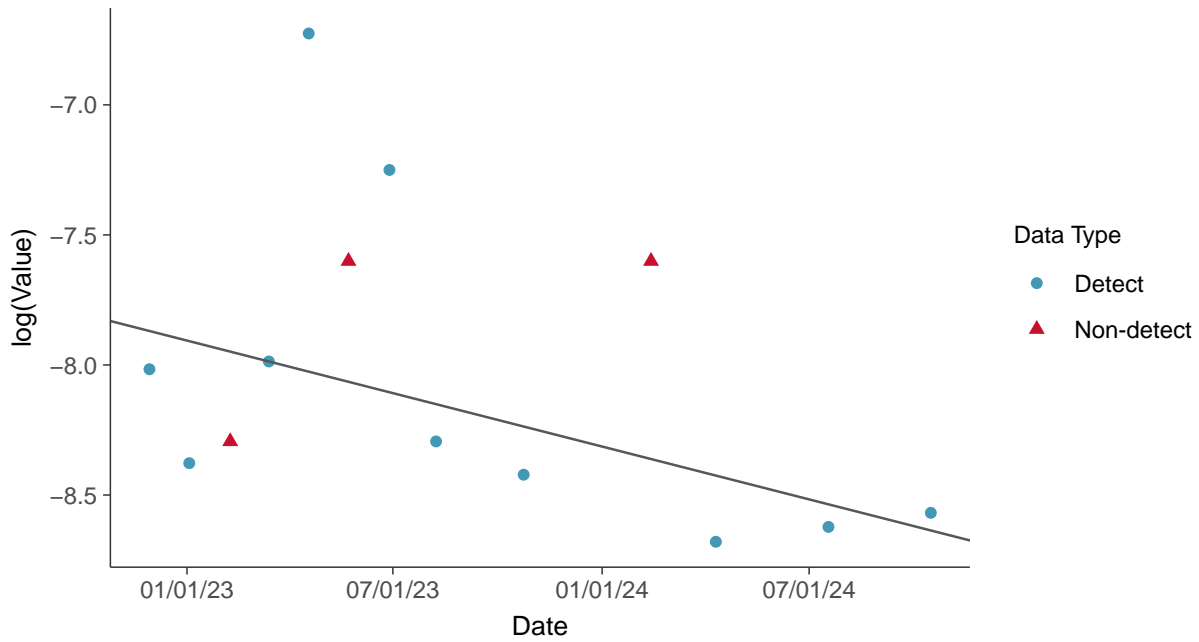
Lognormal Q-Q plot using ROS Imputed Estimates

Antimony, MW-01R (mg/L)



Trend Regression: Lognormal MLE

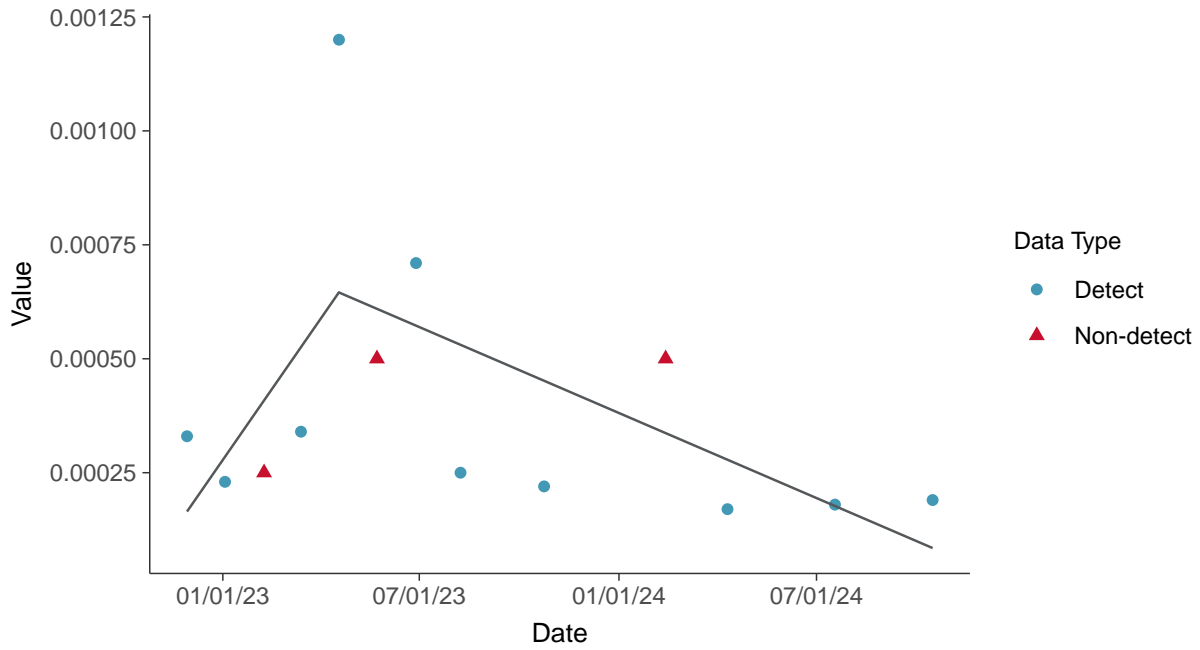
Antimony, MW-01R (mg/L)





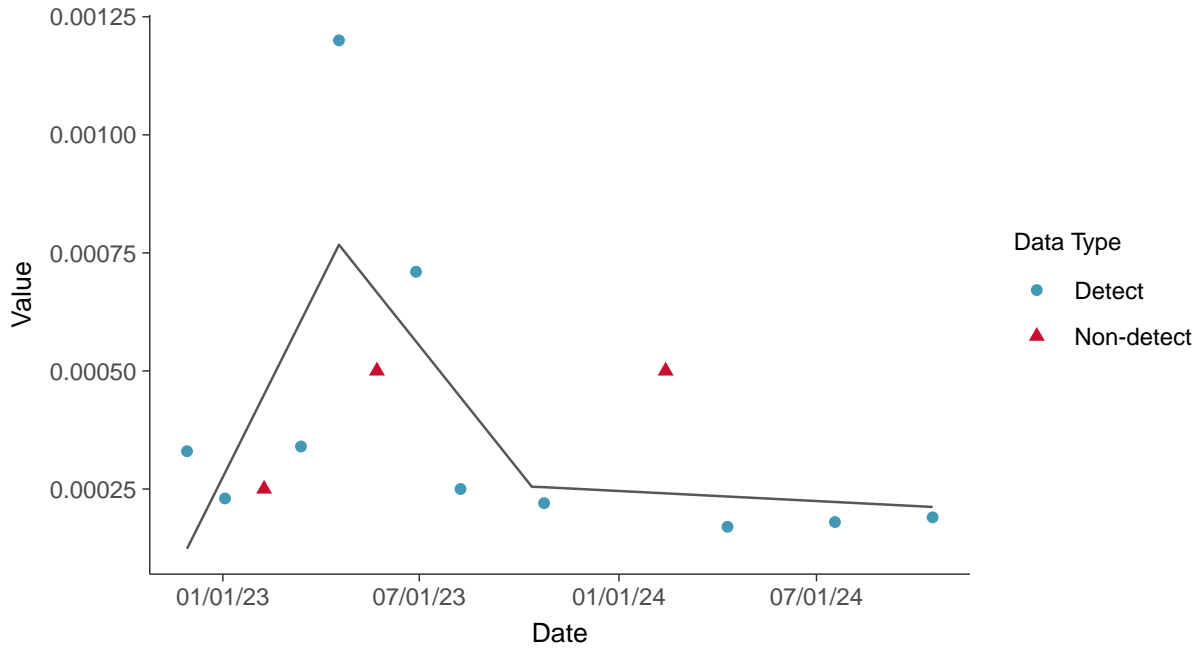
Trend Regression: Piecewise Linear-Linear

Antimony, MW-01R (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

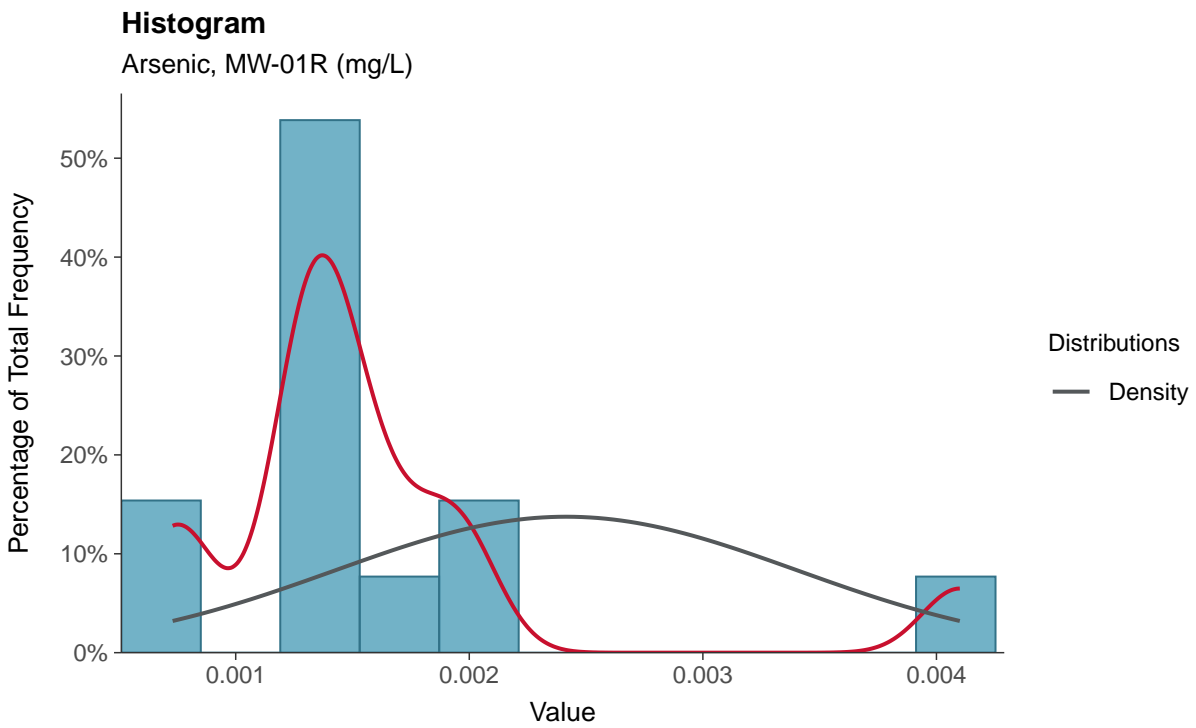
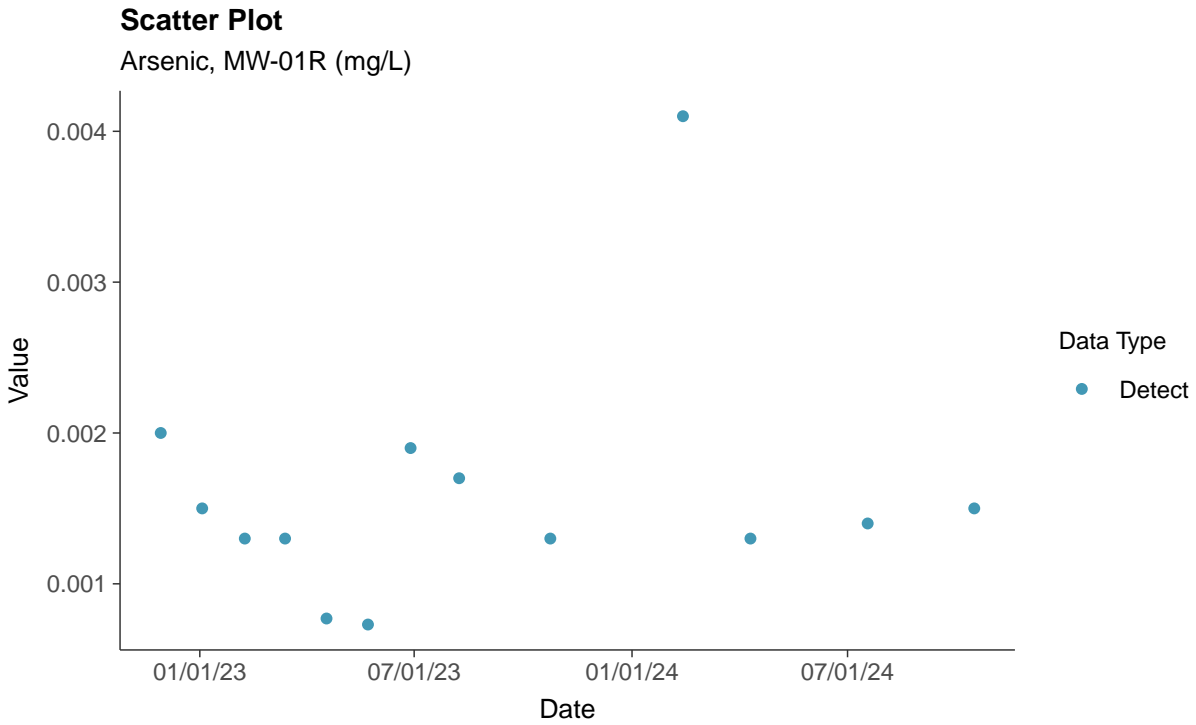
Antimony, MW-01R (mg/L)





Appendix IV: Arsenic, MW-01R

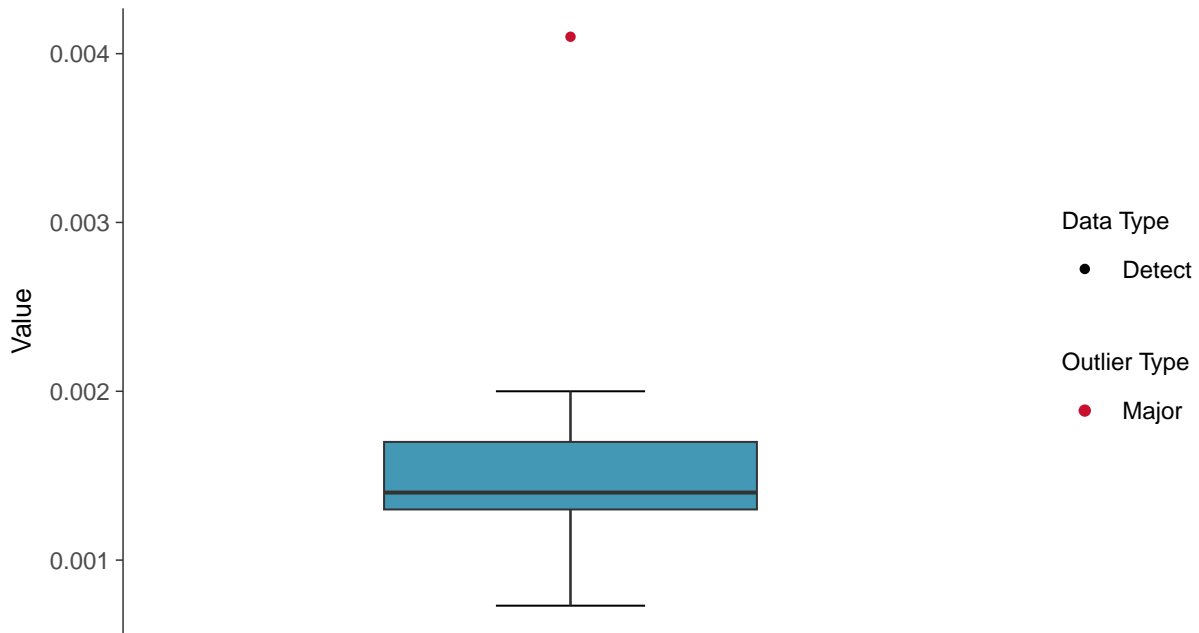
ID: 2_11_2_5_102





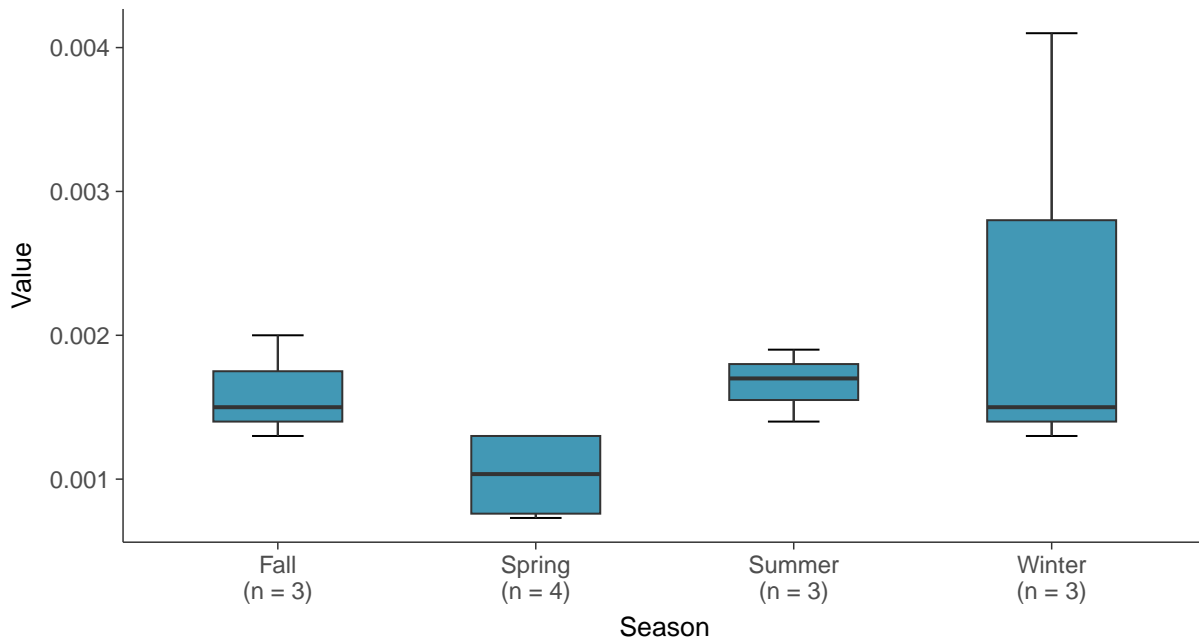
Boxplot

Arsenic, MW-01R (mg/L)



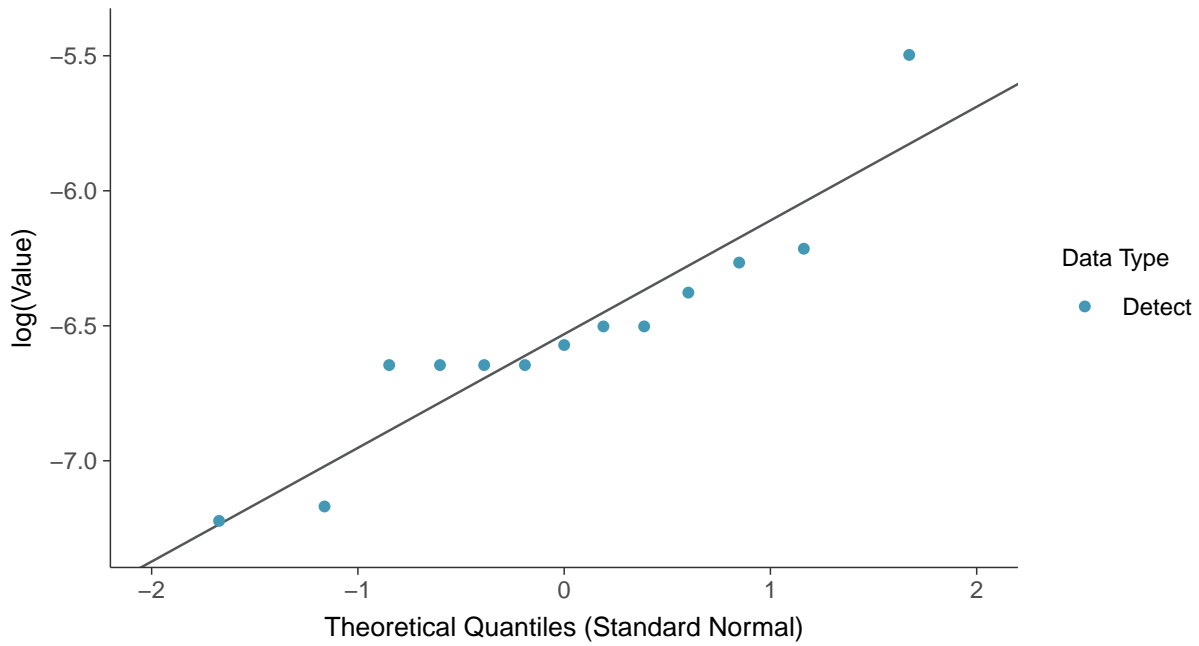
Boxplot by Season

Arsenic, MW-01R (mg/L)

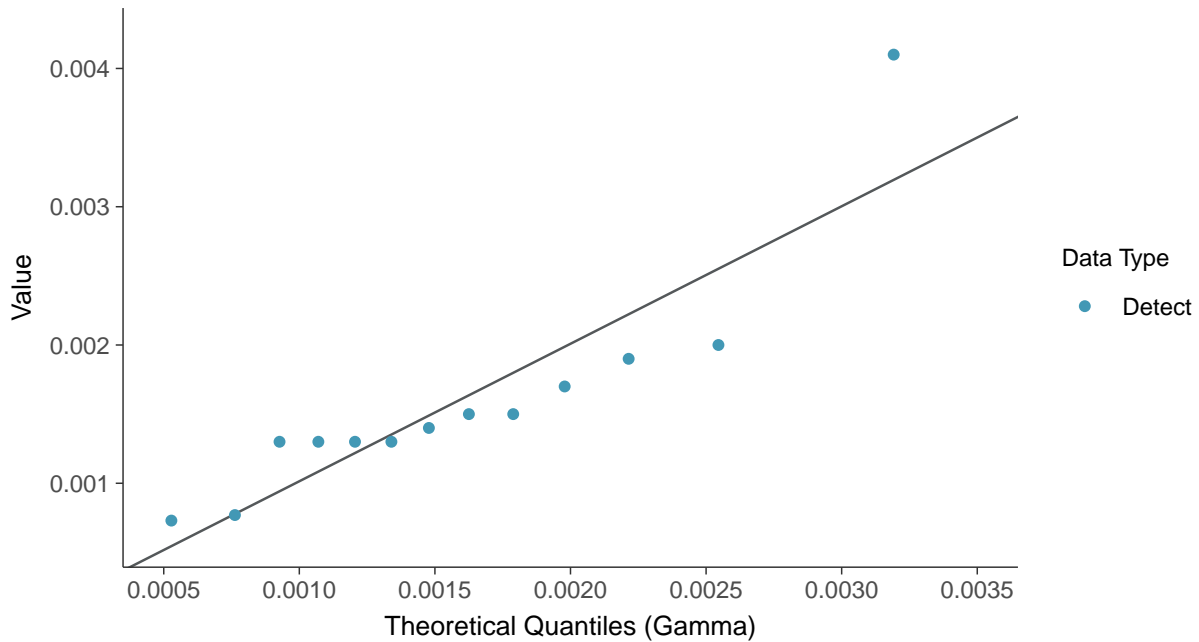




Lognormal Q-Q plot
Arsenic, MW-01R (mg/L)



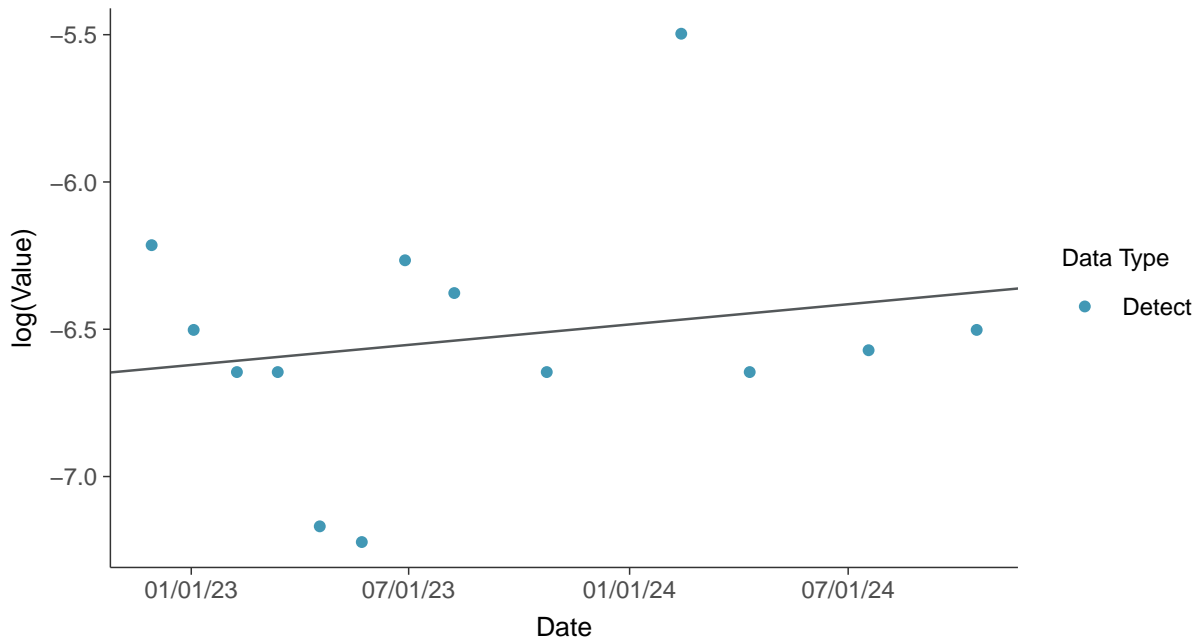
Gamma Q-Q plot
Arsenic, MW-01R (mg/L)





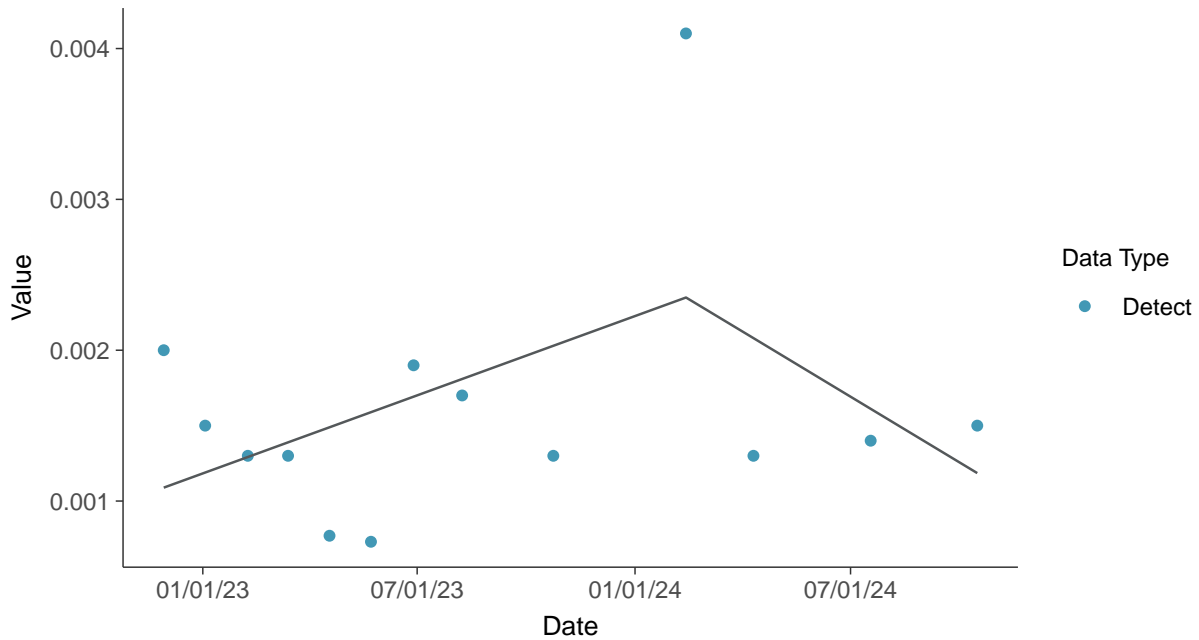
Trend Regression: Lognormal MLE

Arsenic, MW-01R (mg/L)



Trend Regression: Piecewise Linear-Linear

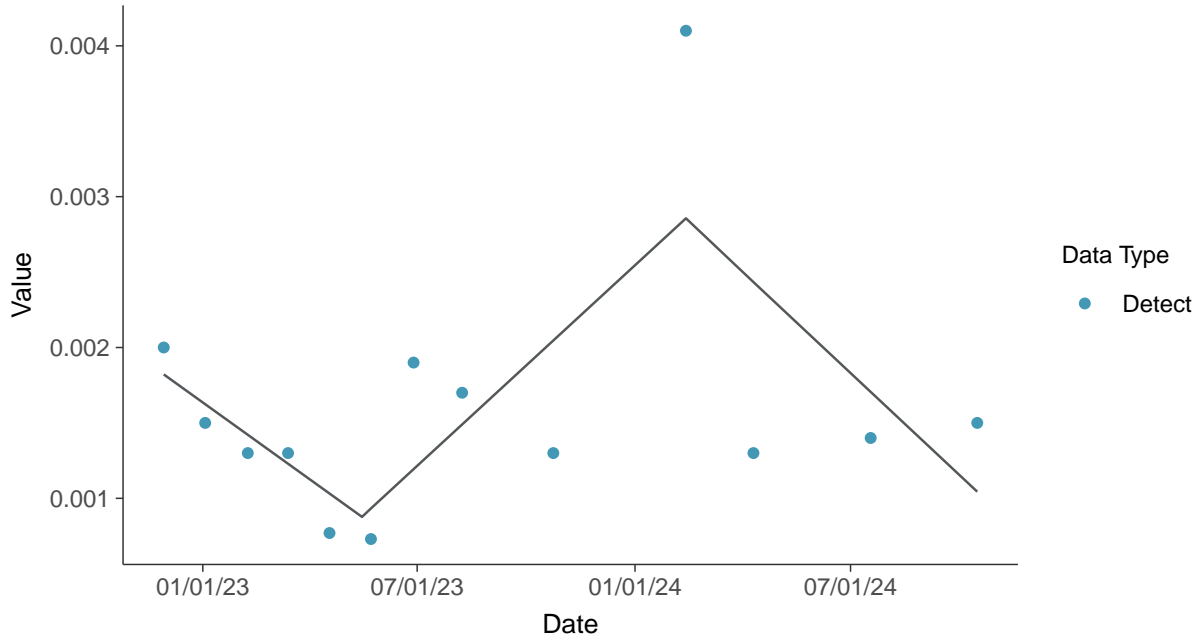
Arsenic, MW-01R (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-01R (mg/L)



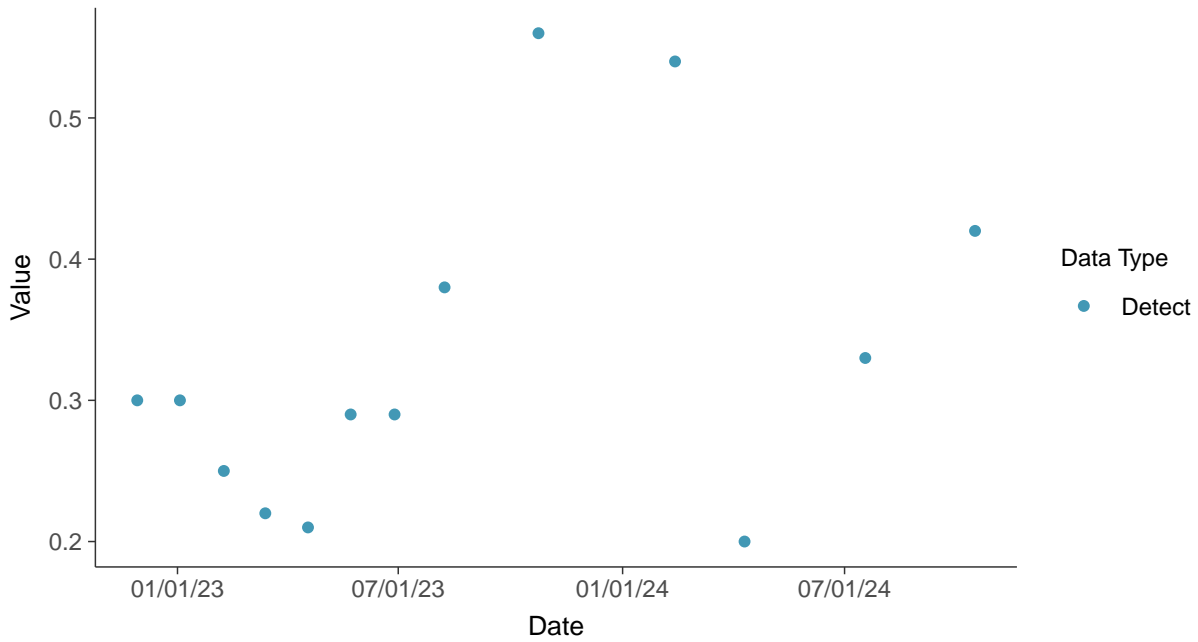


Appendix IV: Barium, MW-01R

ID: 2_11_2_5_103

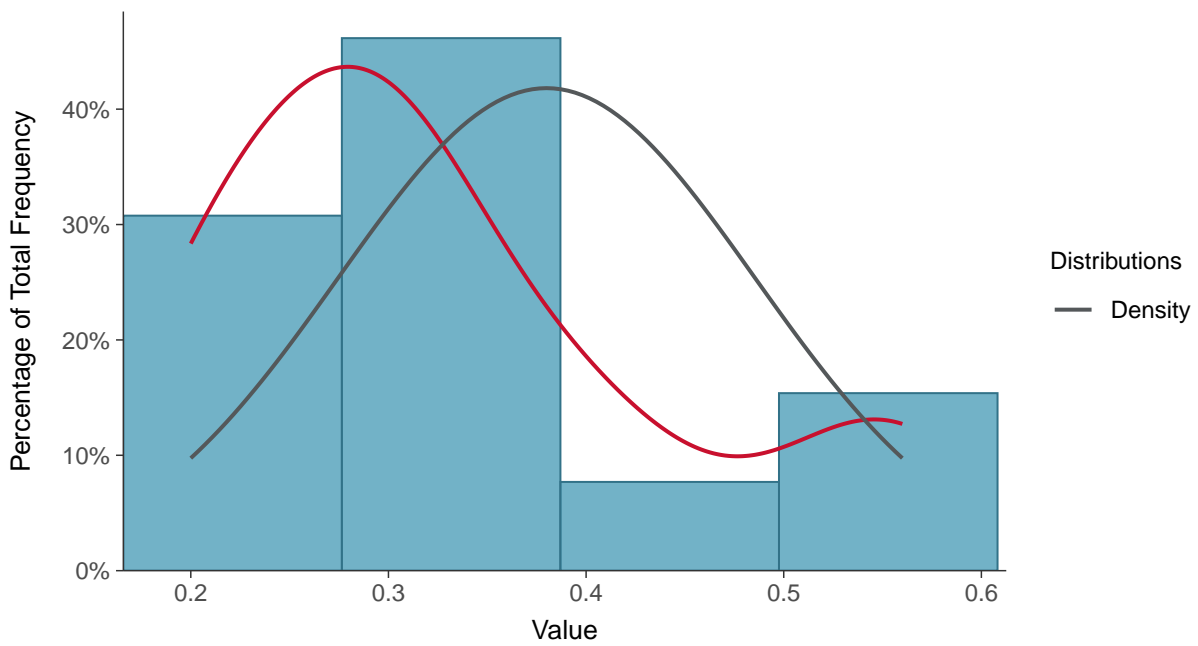
Scatter Plot

Barium, MW-01R (mg/L)



Histogram

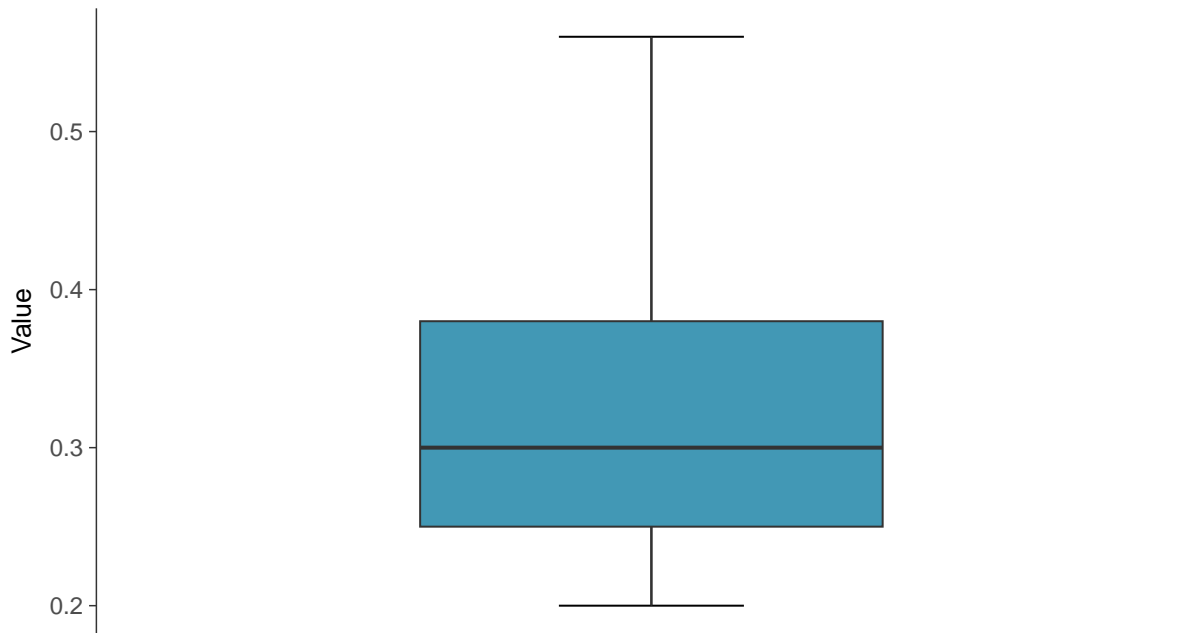
Barium, MW-01R (mg/L)





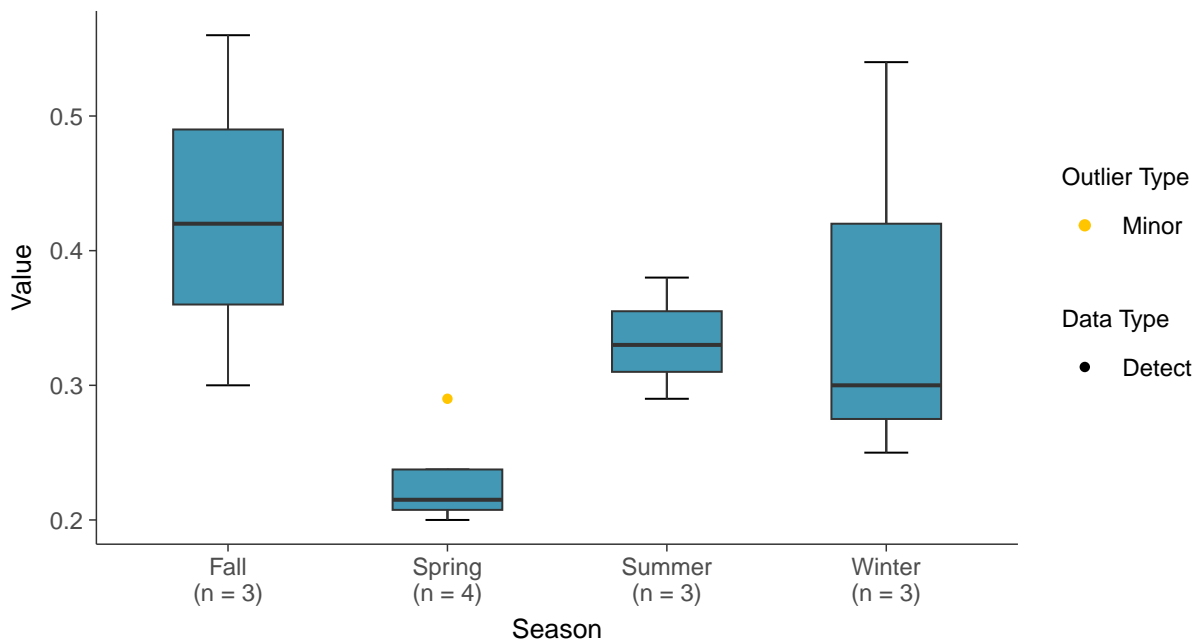
Boxplot

Barium, MW-01R (mg/L)



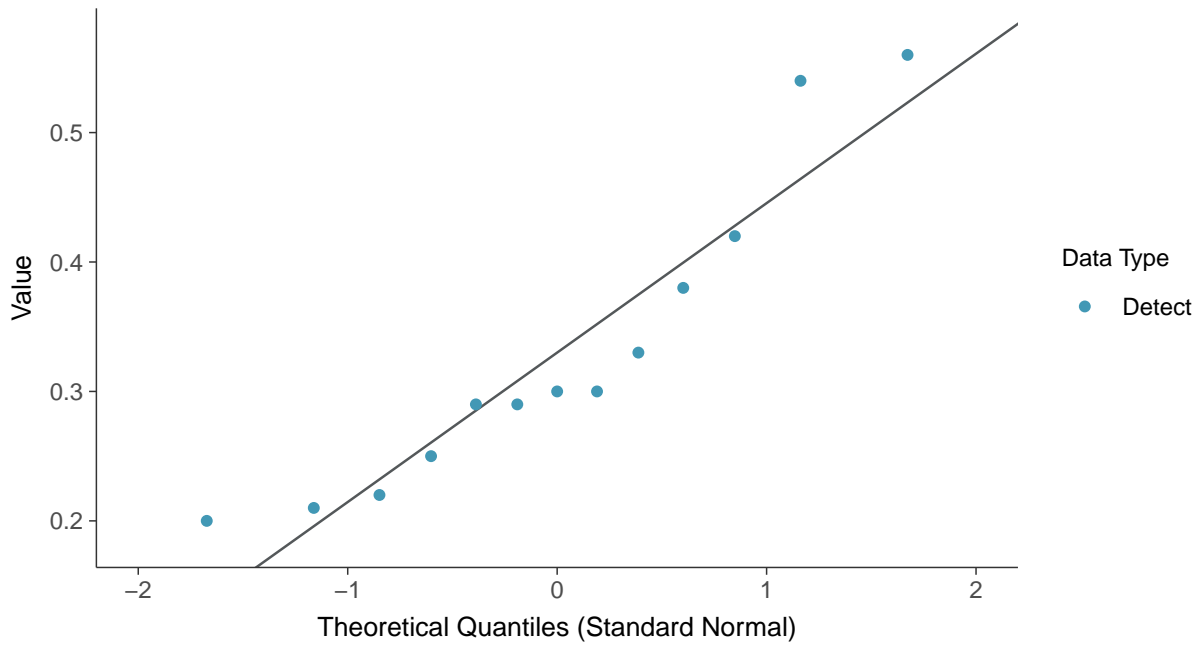
Boxplot by Season

Barium, MW-01R (mg/L)

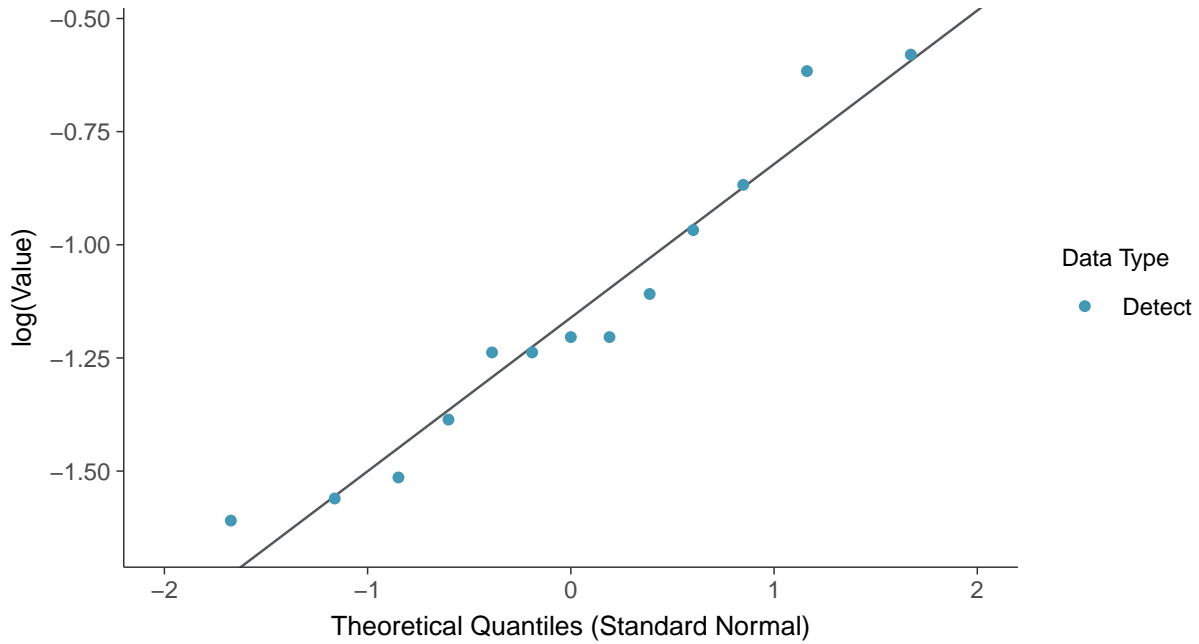




Normal Q-Q plot
Barium, MW-01R (mg/L)



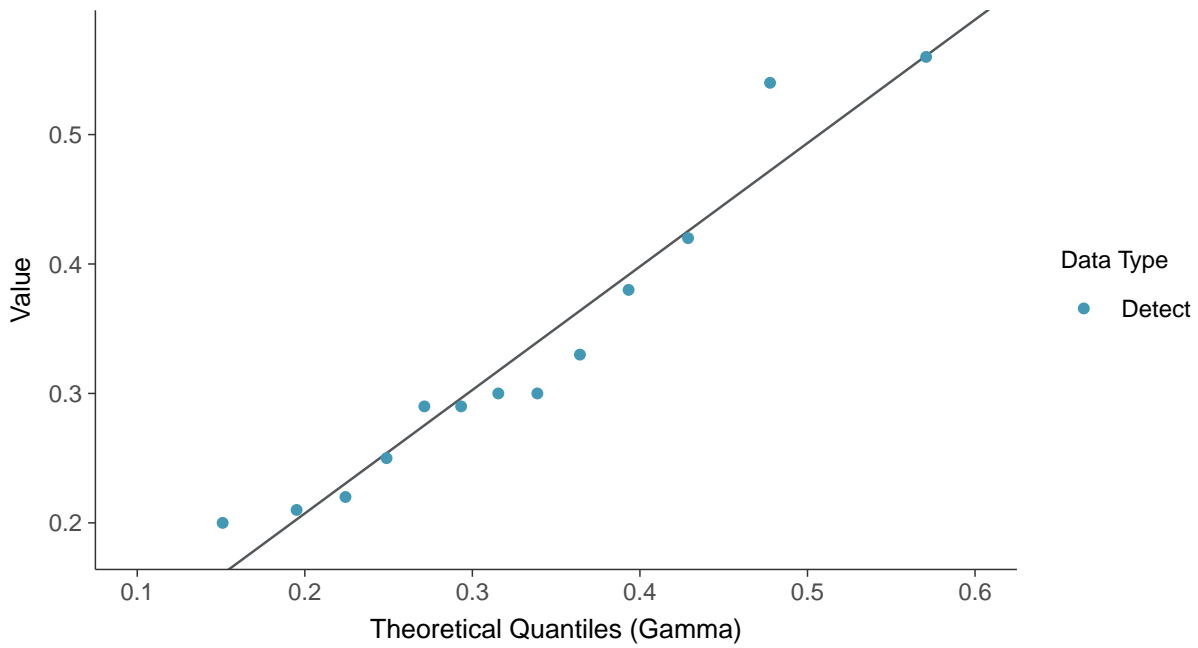
Lognormal Q-Q plot
Barium, MW-01R (mg/L)





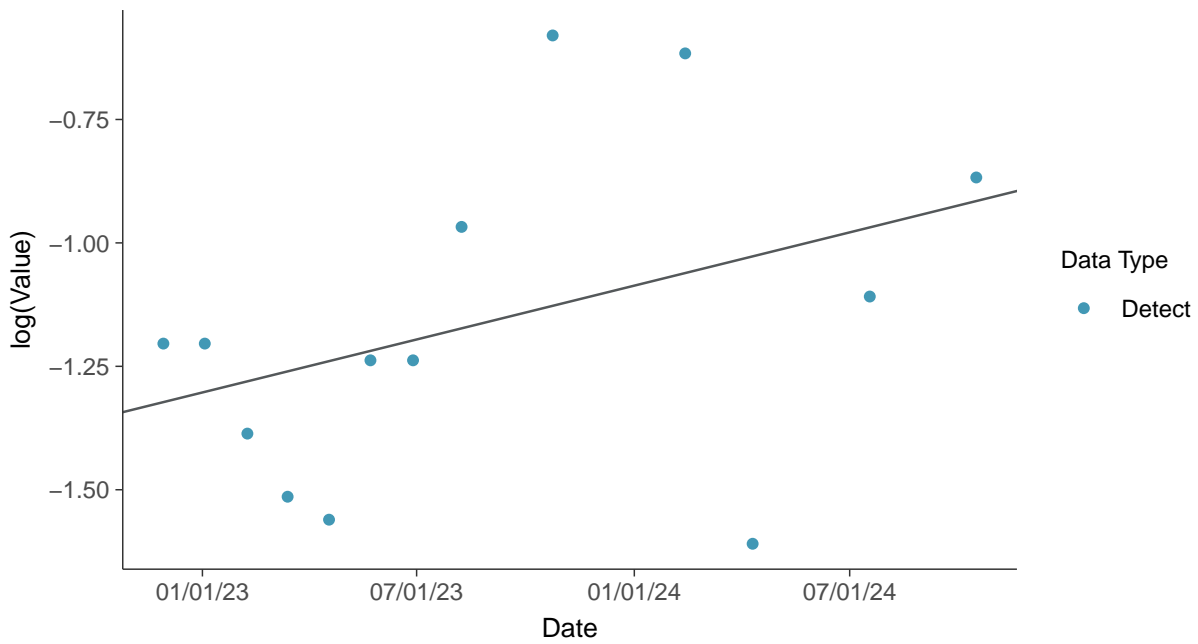
Gamma Q-Q plot

Barium, MW-01R (mg/L)



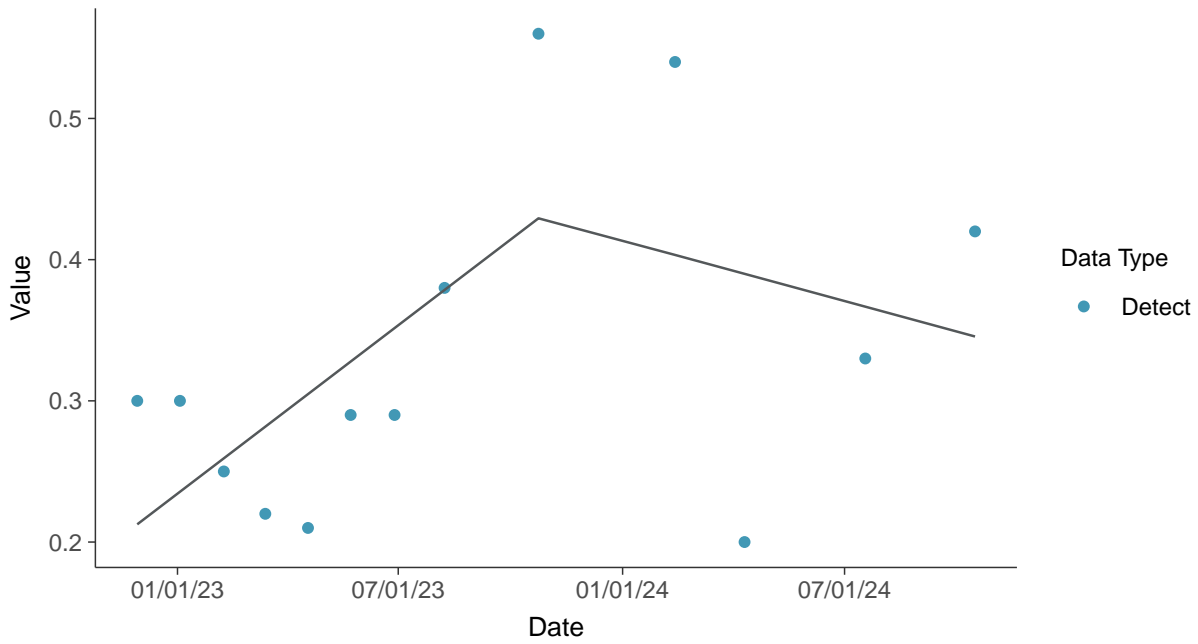
Trend Regression: Lognormal MLE

Barium, MW-01R (mg/L)

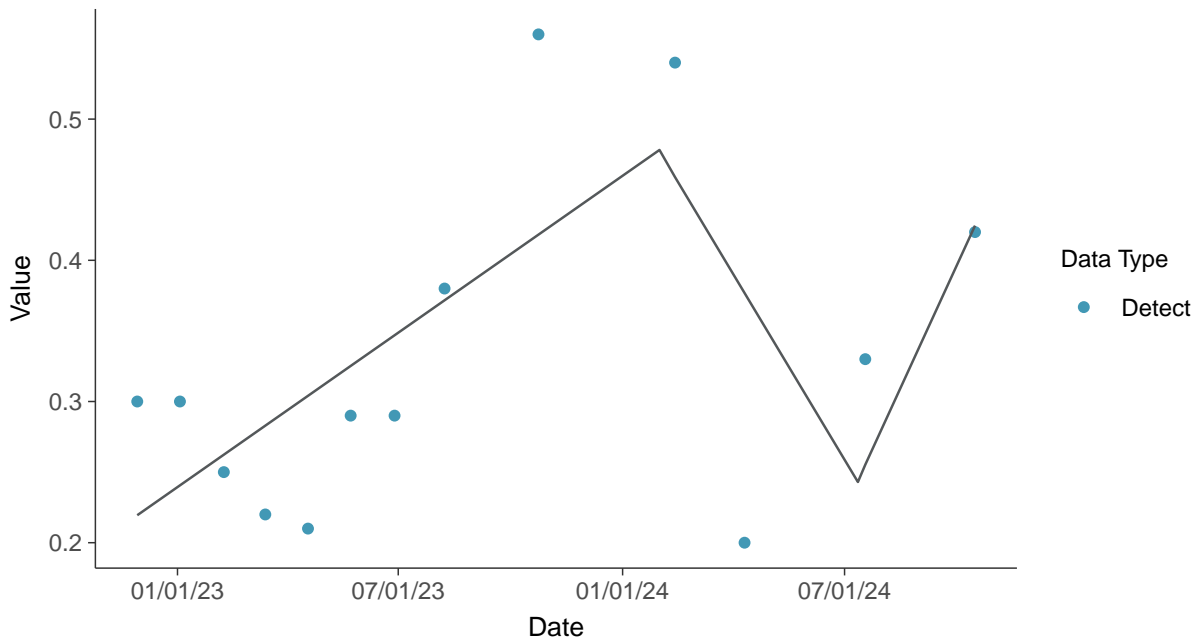




Trend Regression: Piecewise Linear-Linear
Barium, MW-01R (mg/L)



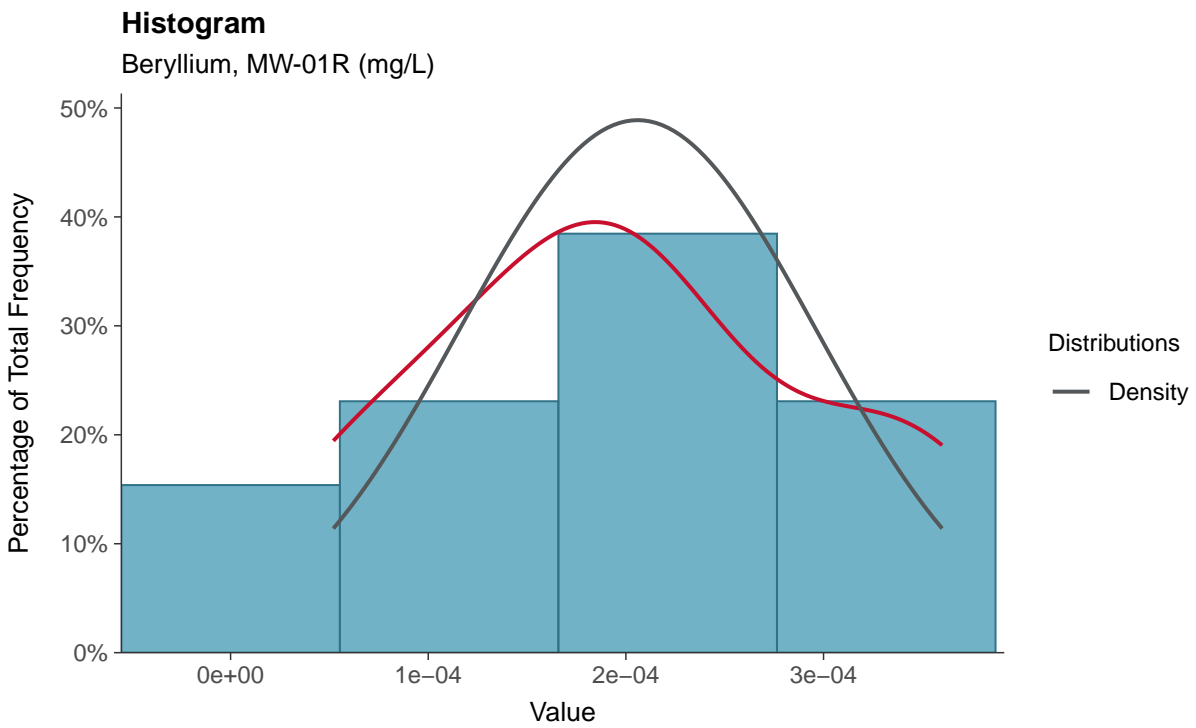
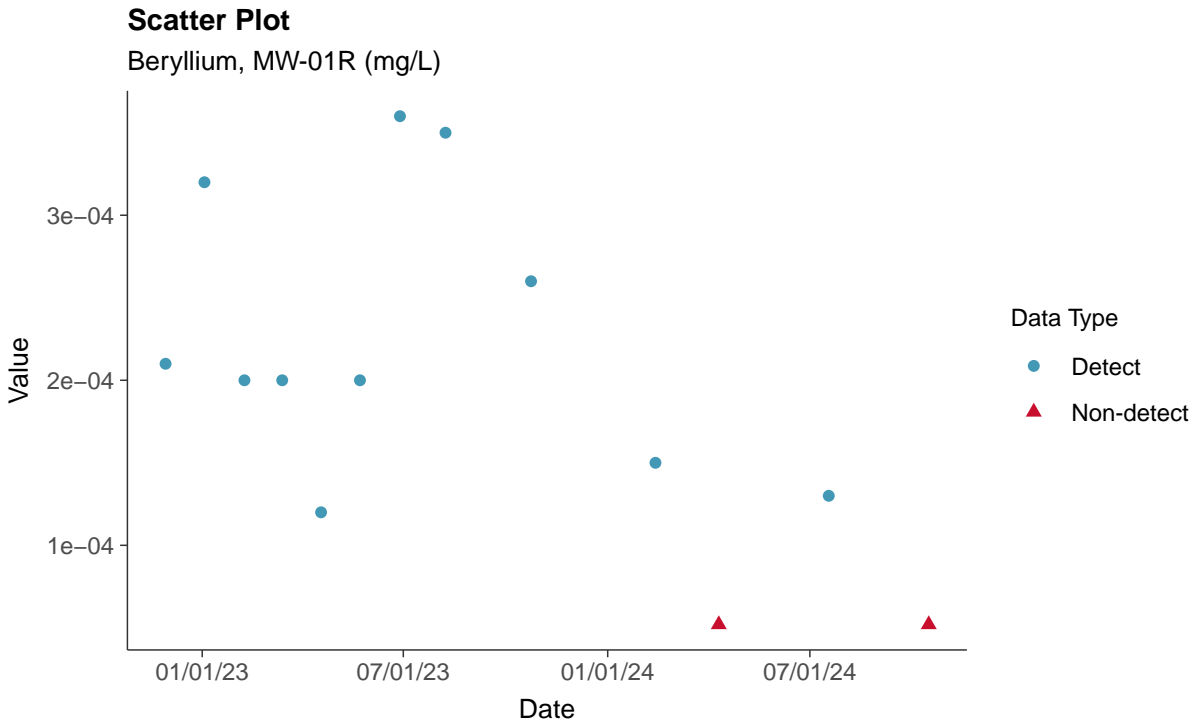
Trend Regression: Piecewise Linear-Linear-Linear
Barium, MW-01R (mg/L)





Appendix IV: Beryllium, MW-01R

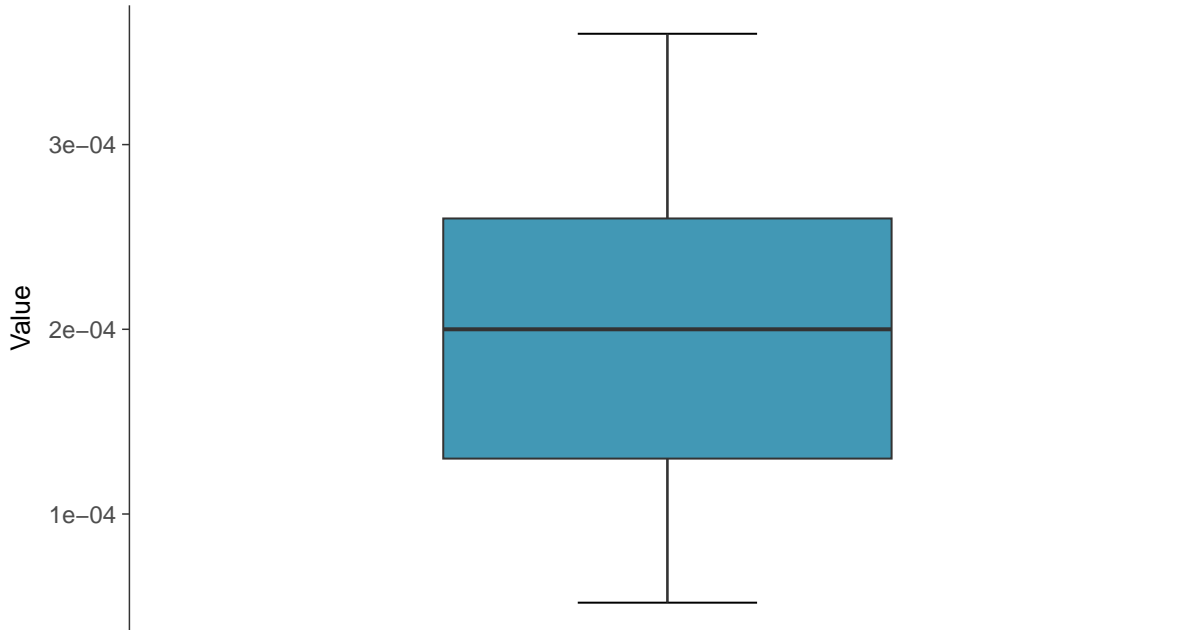
ID: 2_11_2_5_104





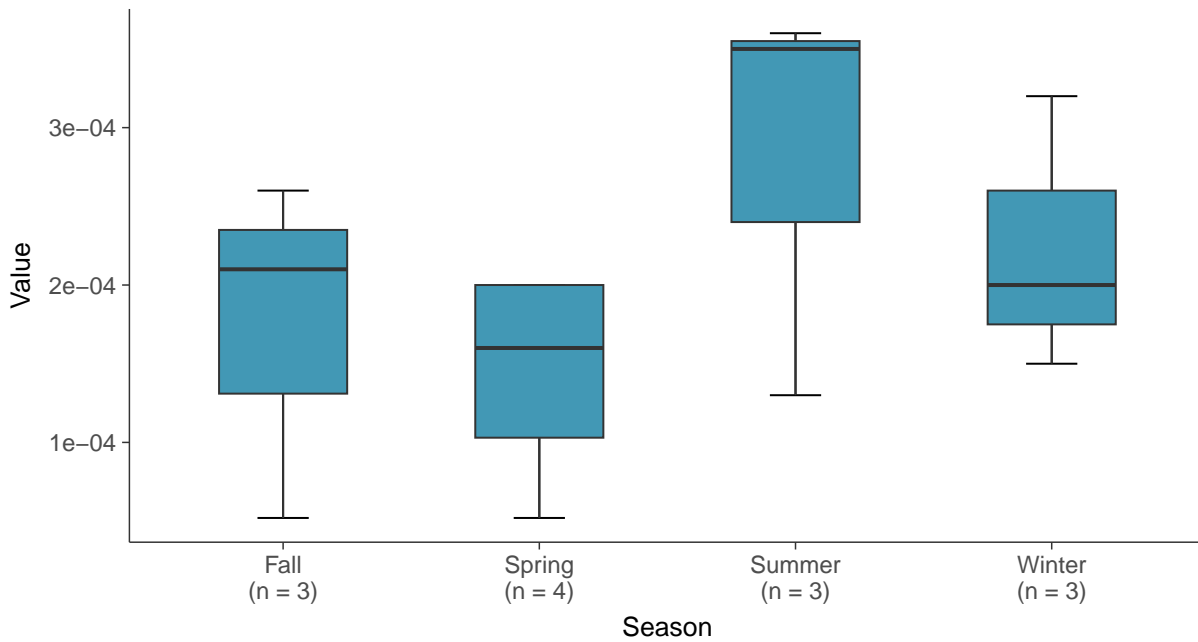
Boxplot

Beryllium, MW-01R (mg/L)



Boxplot by Season

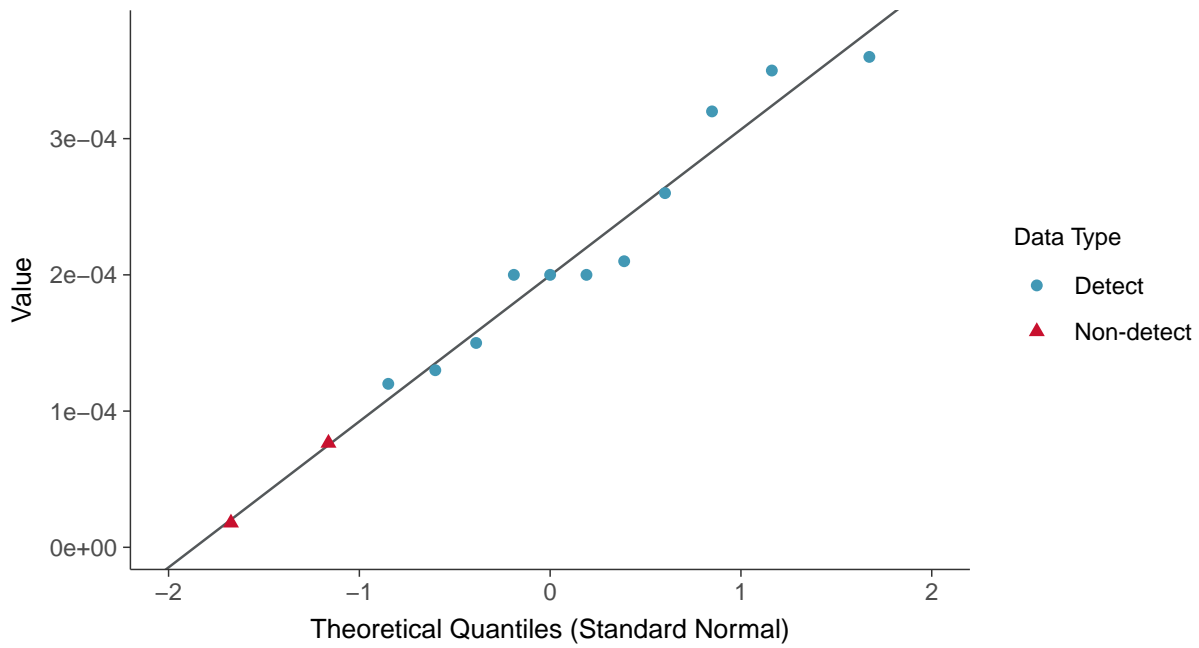
Beryllium, MW-01R (mg/L)





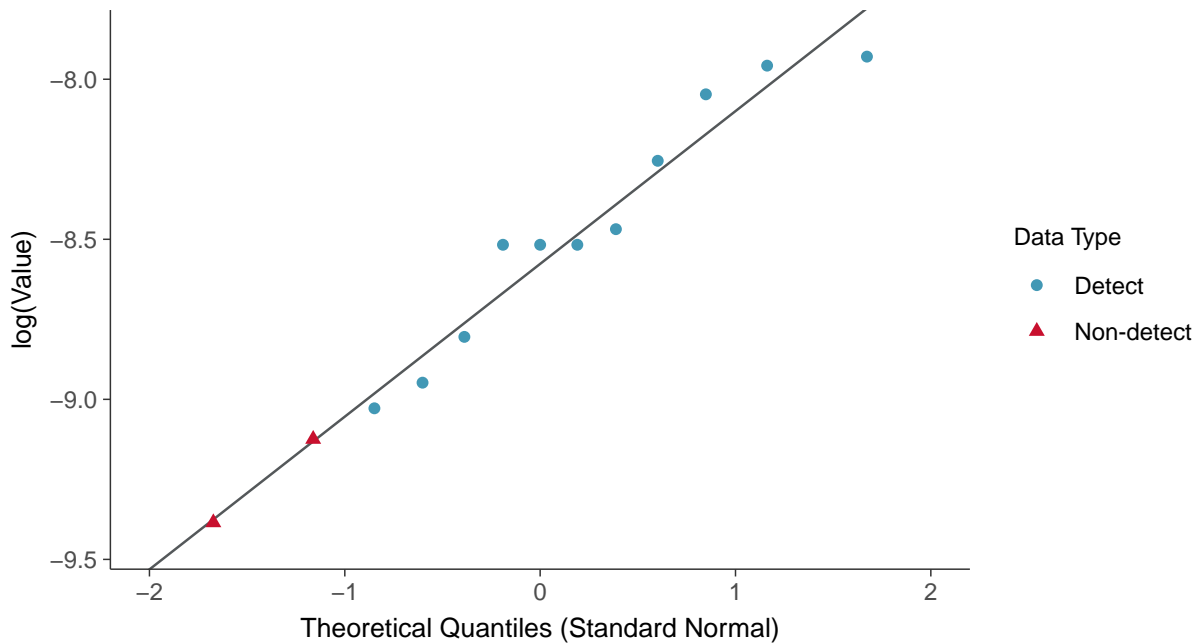
Normal Q-Q plot using ROS Imputed Estimates

Beryllium, MW-01R (mg/L)



Lognormal Q-Q plot using ROS Imputed Estimates

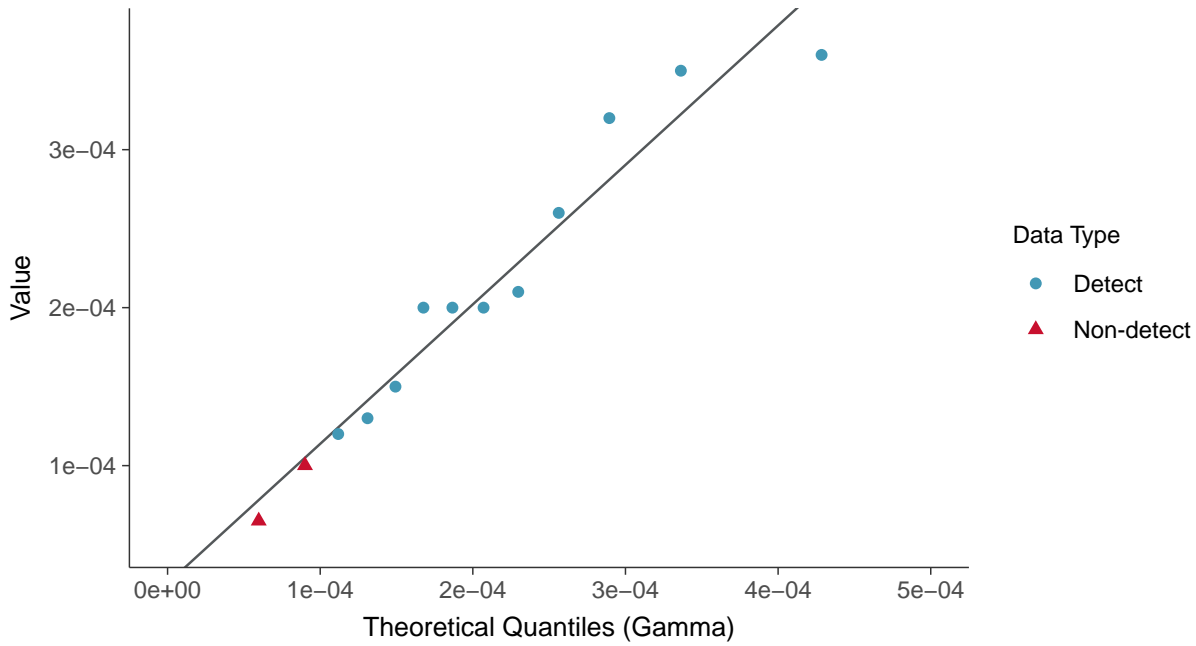
Beryllium, MW-01R (mg/L)





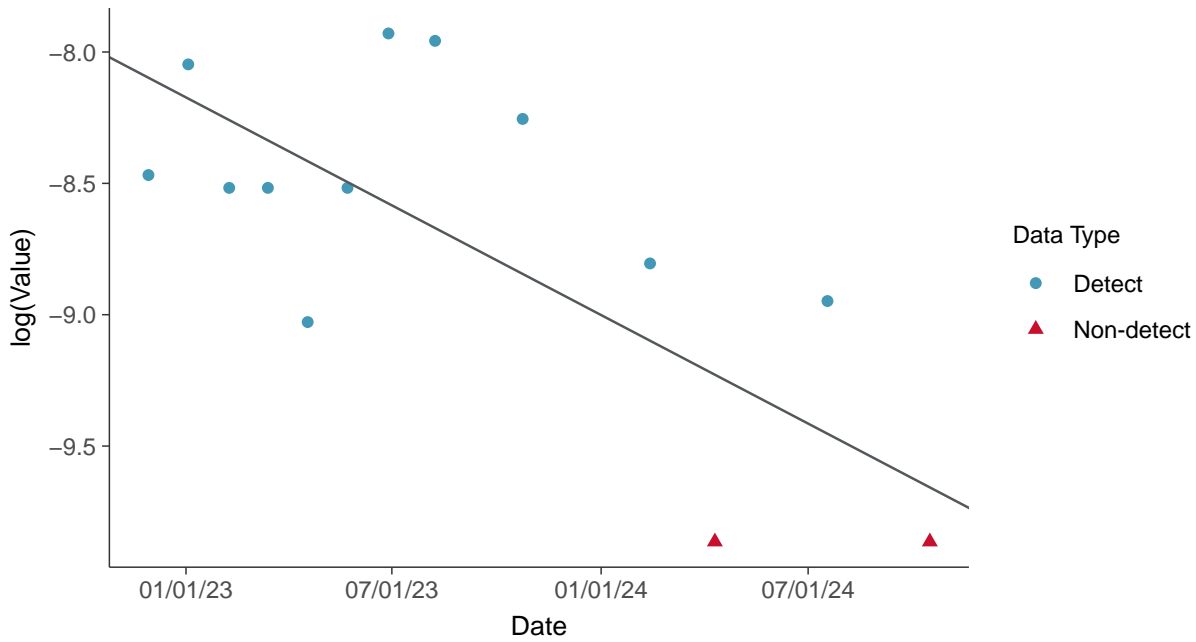
Gamma Q-Q plot using ROS Imputed Estimates

Beryllium, MW-01R (mg/L)



Trend Regression: Lognormal MLE

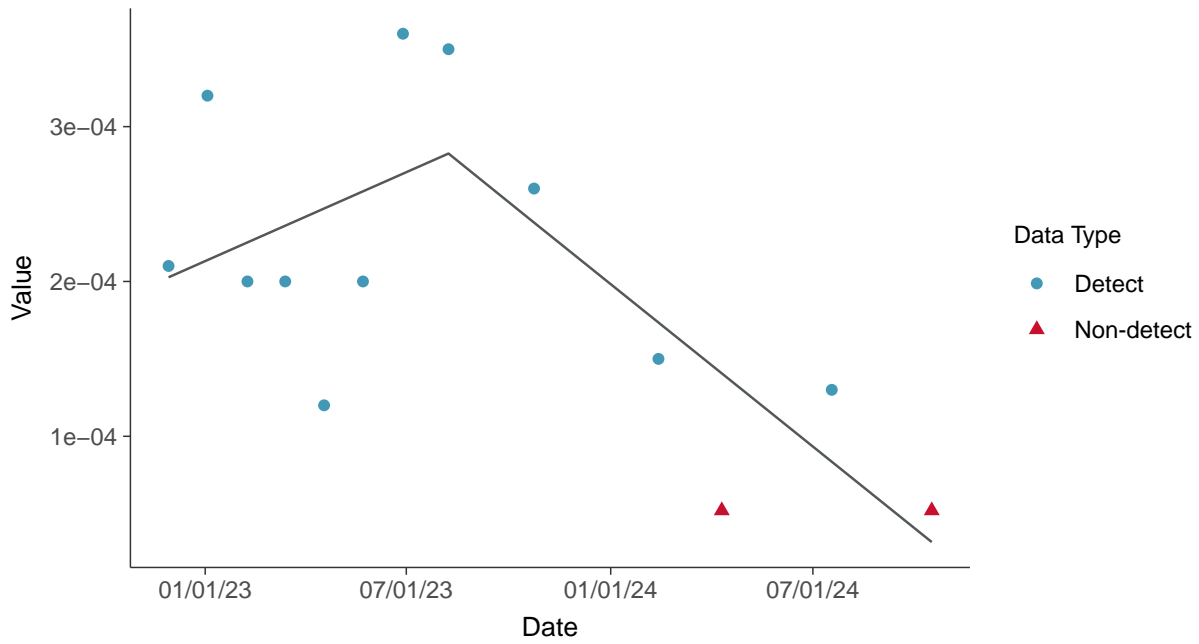
Beryllium, MW-01R (mg/L)





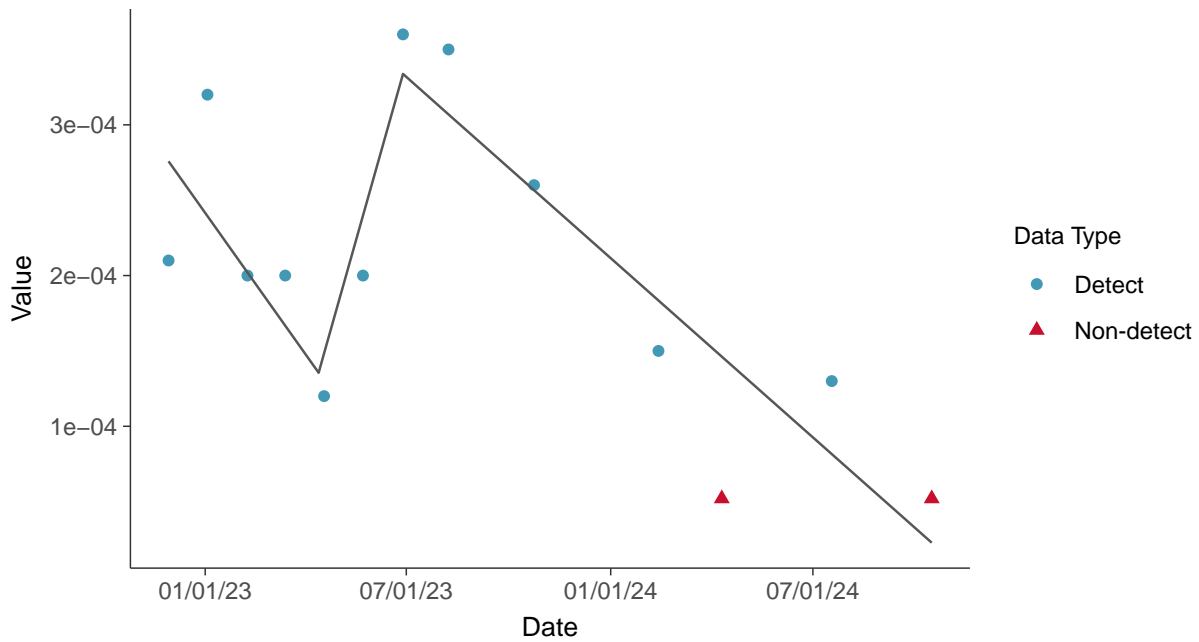
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-01R (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

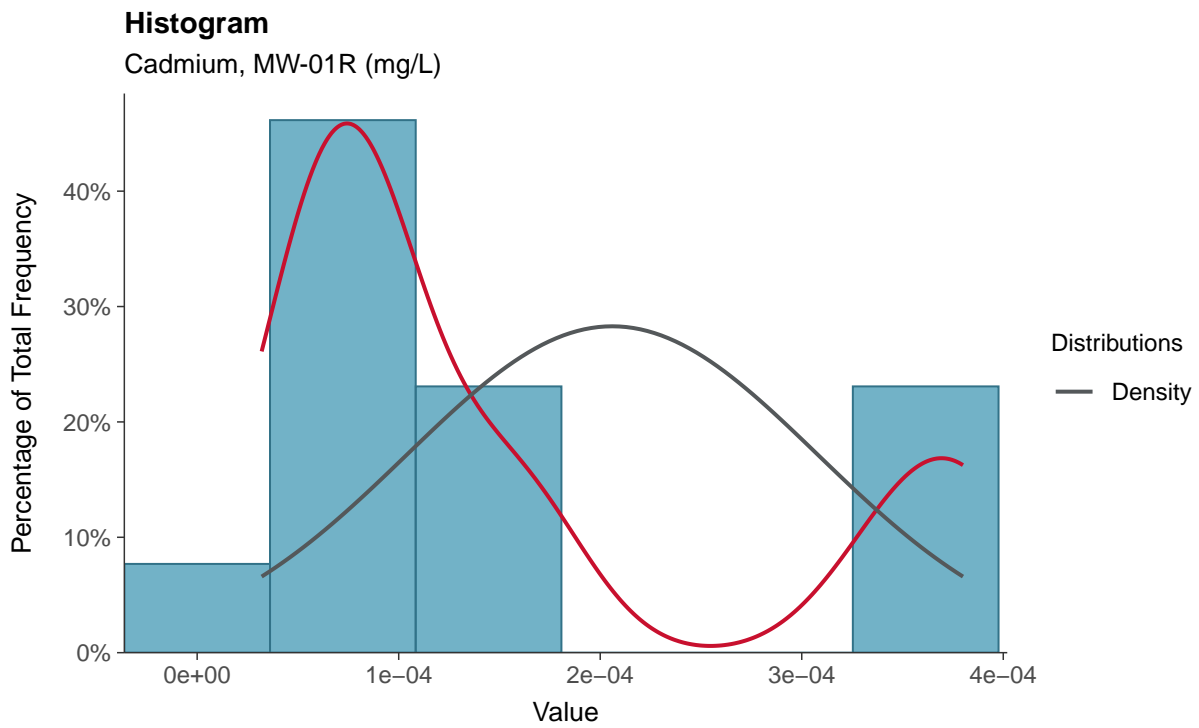
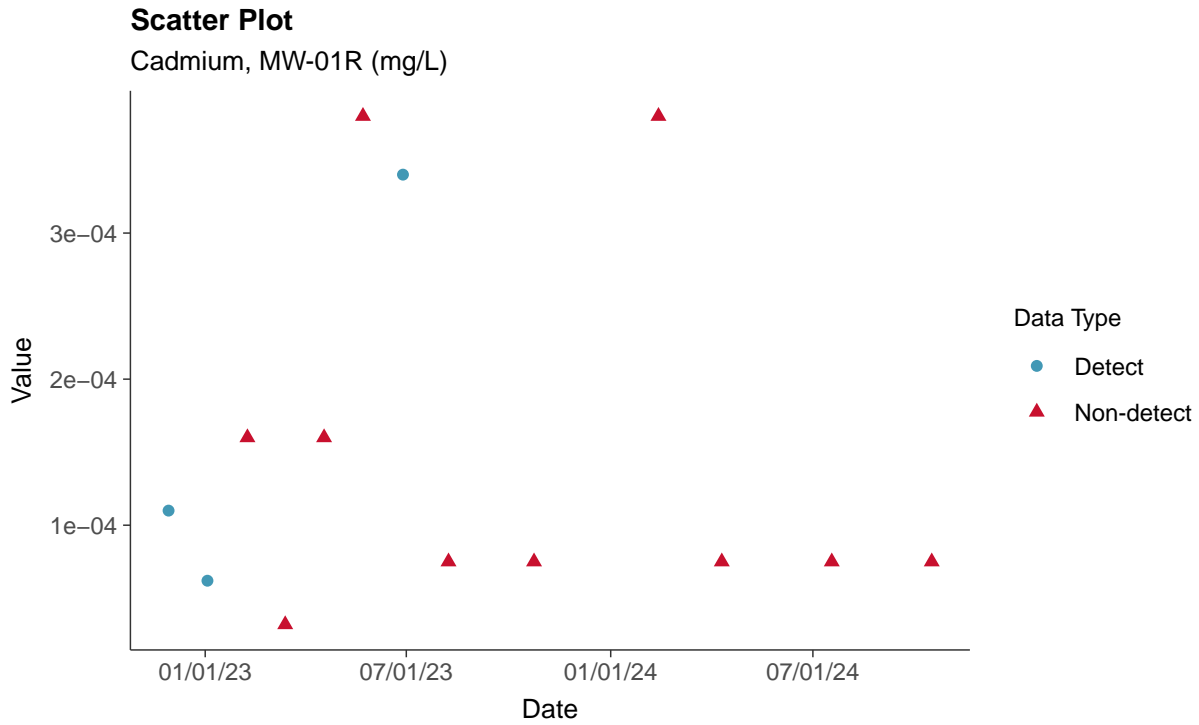
Beryllium, MW-01R (mg/L)





Appendix IV: Cadmium, MW-01R

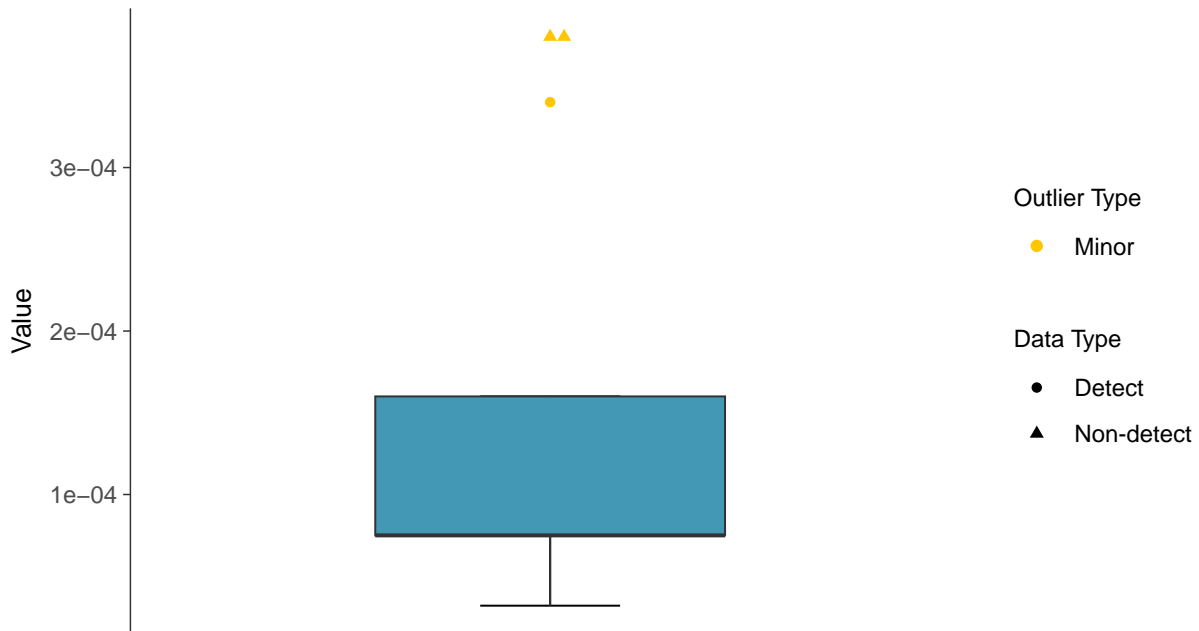
ID: 2_11_2_5_106





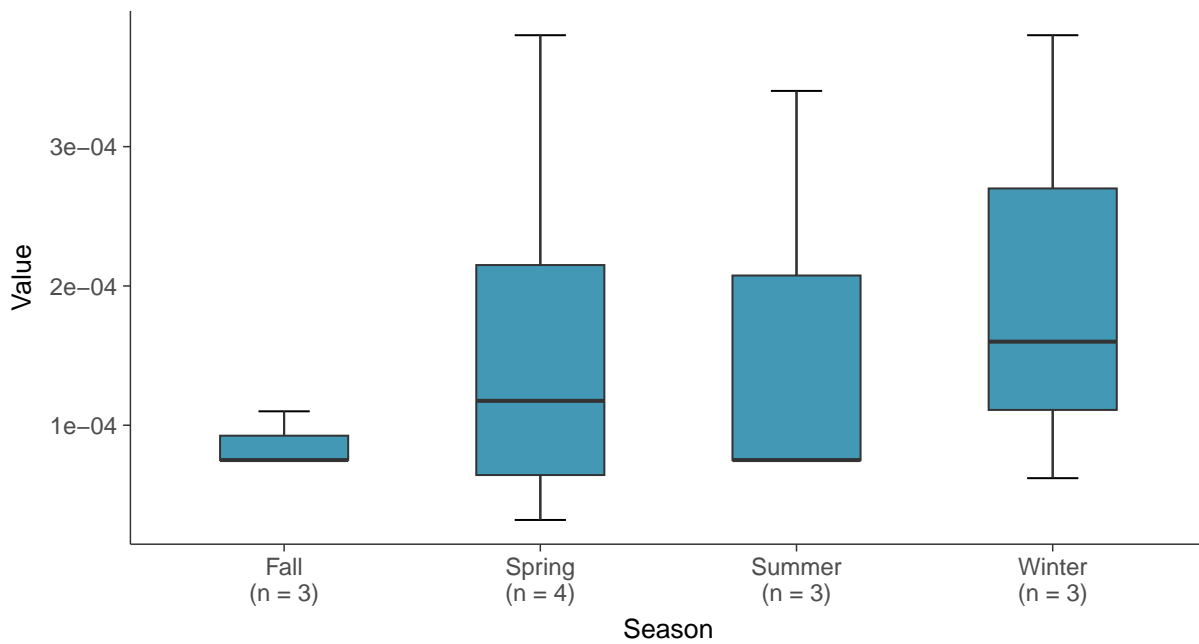
Boxplot

Cadmium, MW-01R (mg/L)



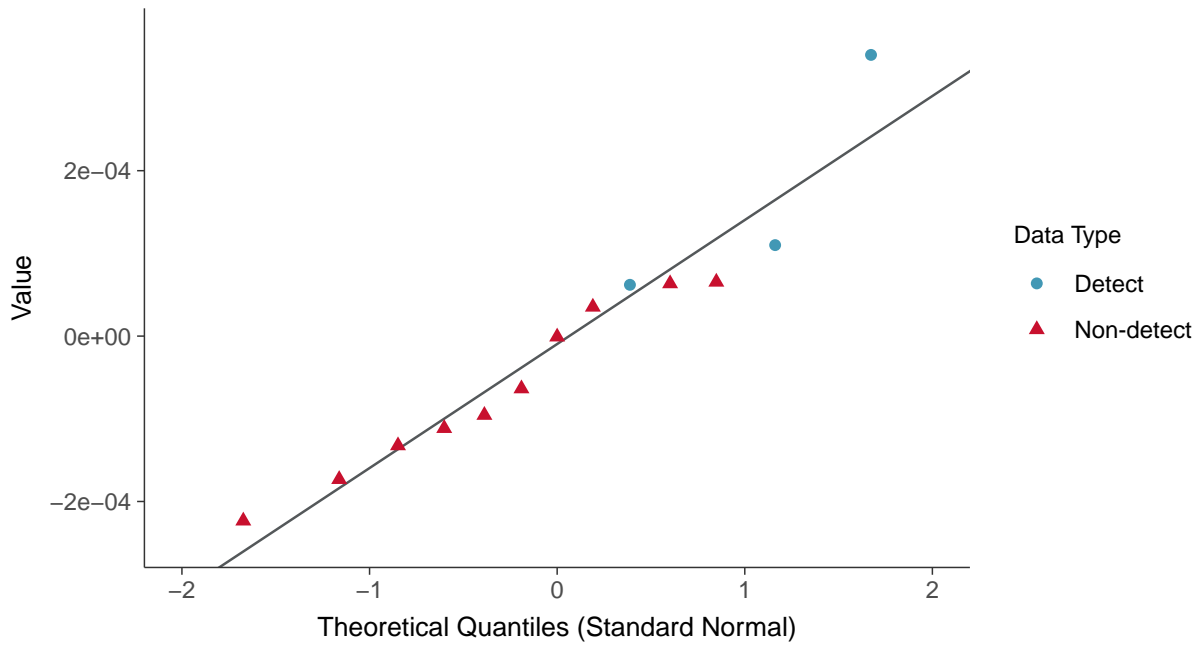
Boxplot by Season

Cadmium, MW-01R (mg/L)

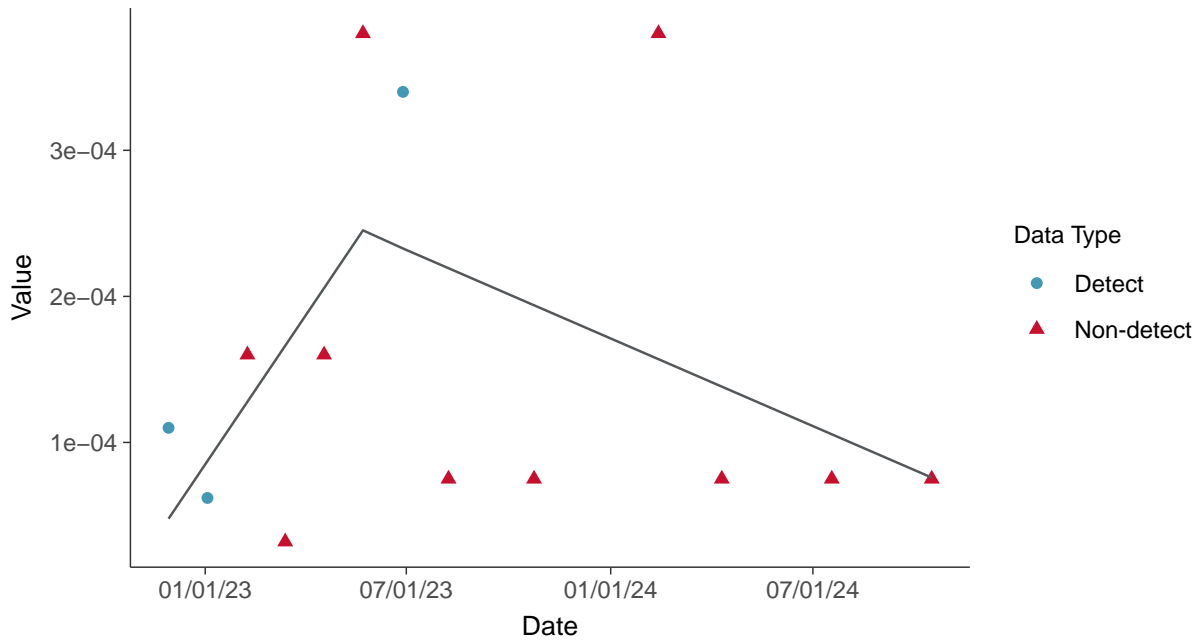




Normal Q-Q plot using ROS Imputed Estimates
Cadmium, MW-01R (mg/L)



Trend Regression: Piecewise Linear-Linear
Cadmium, MW-01R (mg/L)



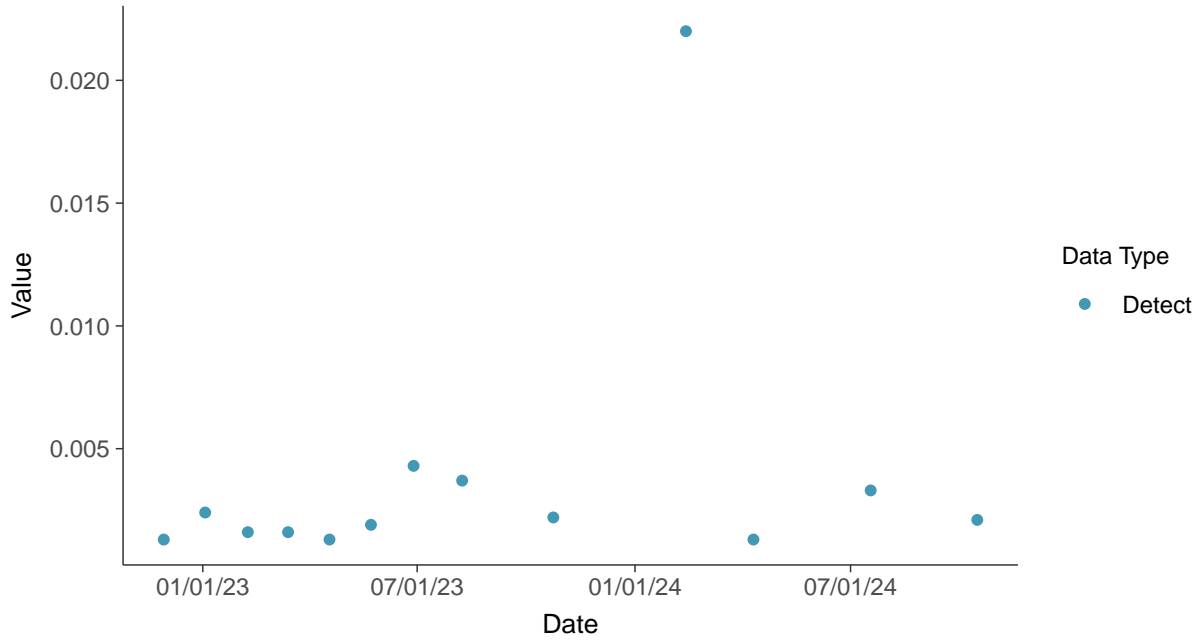


Appendix IV: Chromium, Total, MW-01R

ID: 2_11_2_5_109

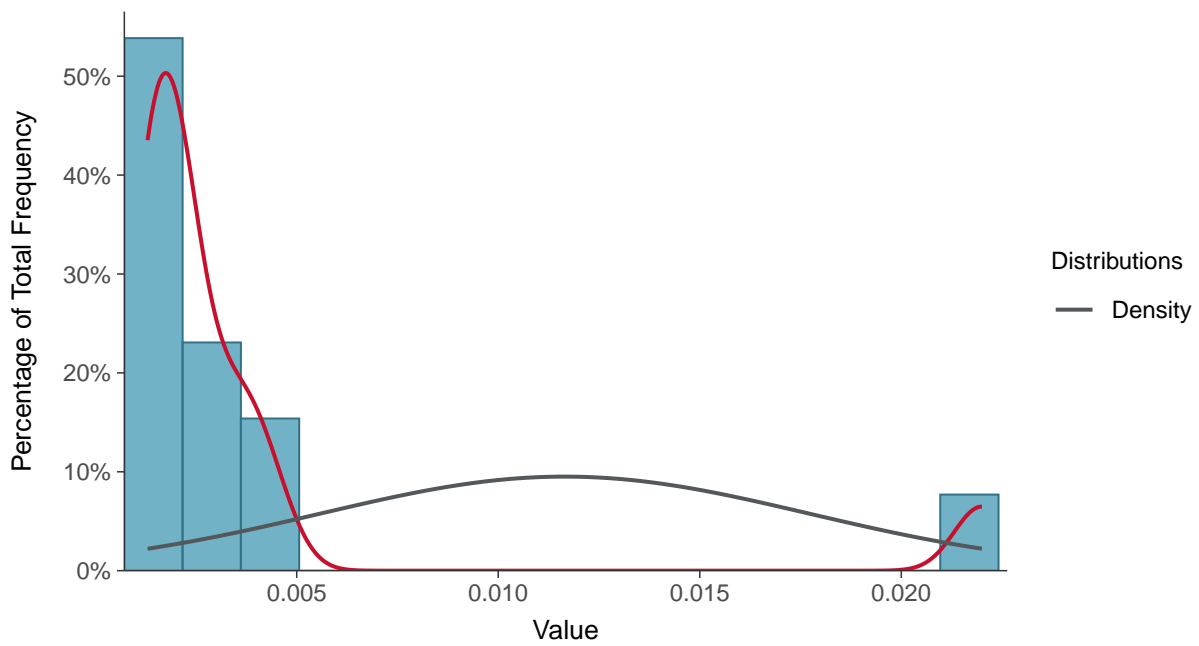
Scatter Plot

Chromium, Total, MW-01R (mg/L)



Histogram

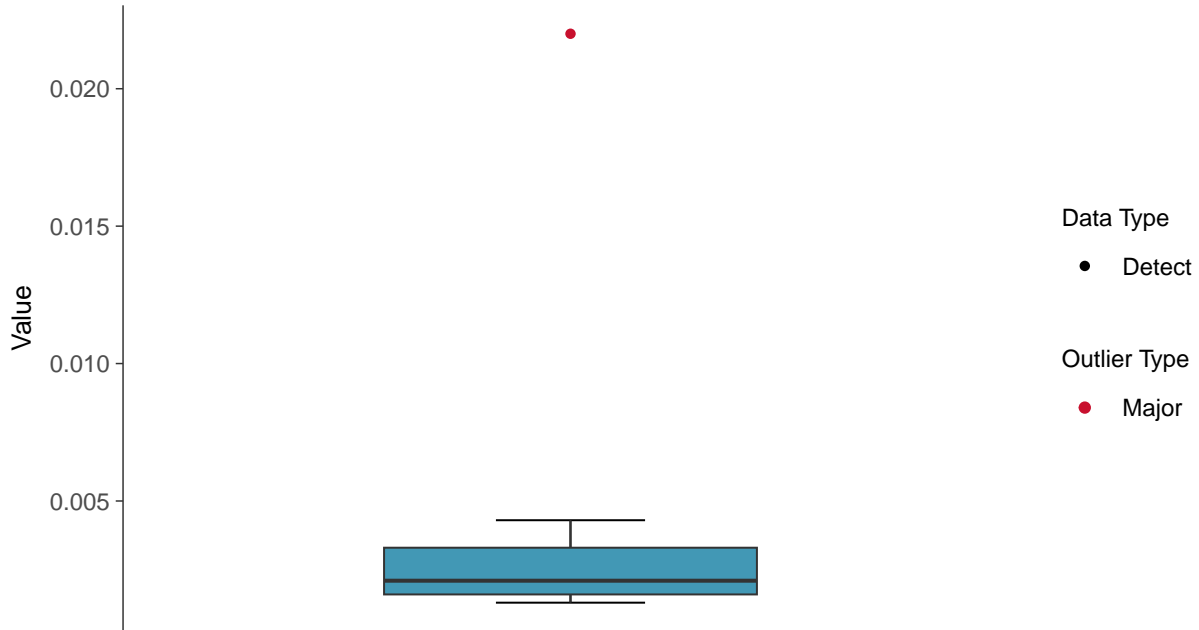
Chromium, Total, MW-01R (mg/L)





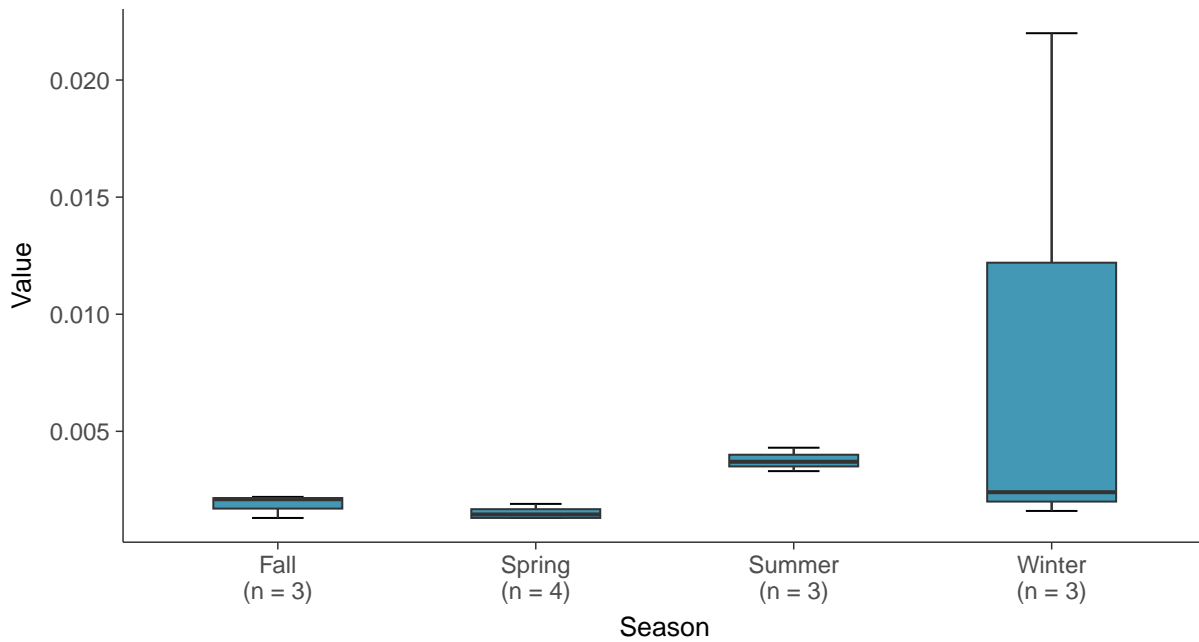
Boxplot

Chromium, Total, MW-01R (mg/L)



Boxplot by Season

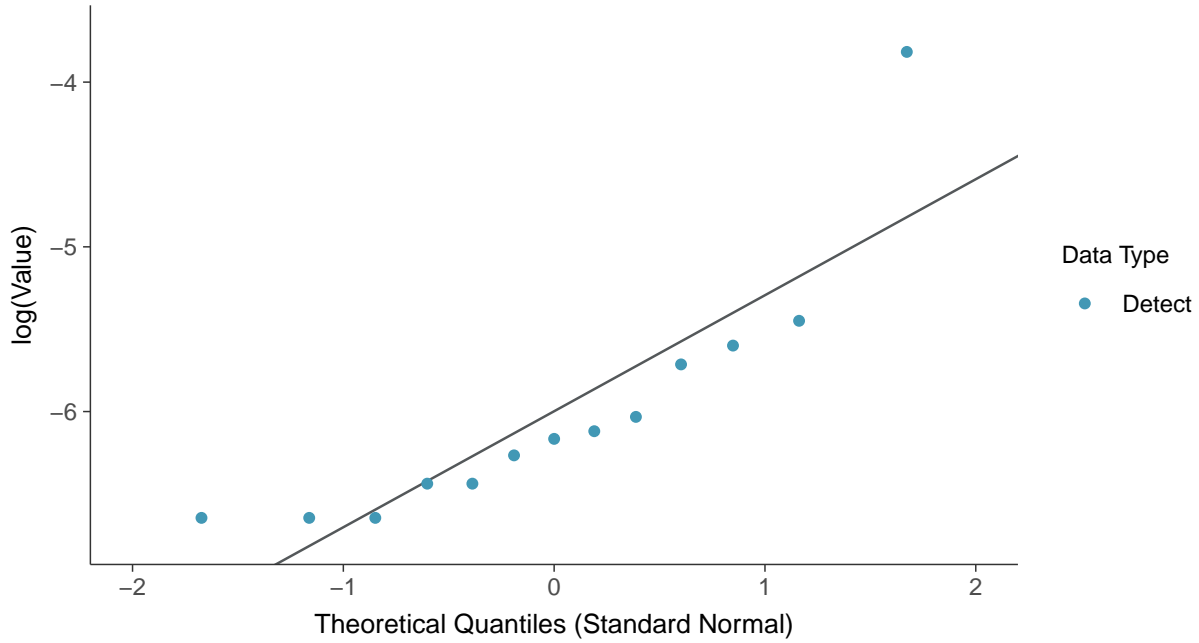
Chromium, Total, MW-01R (mg/L)





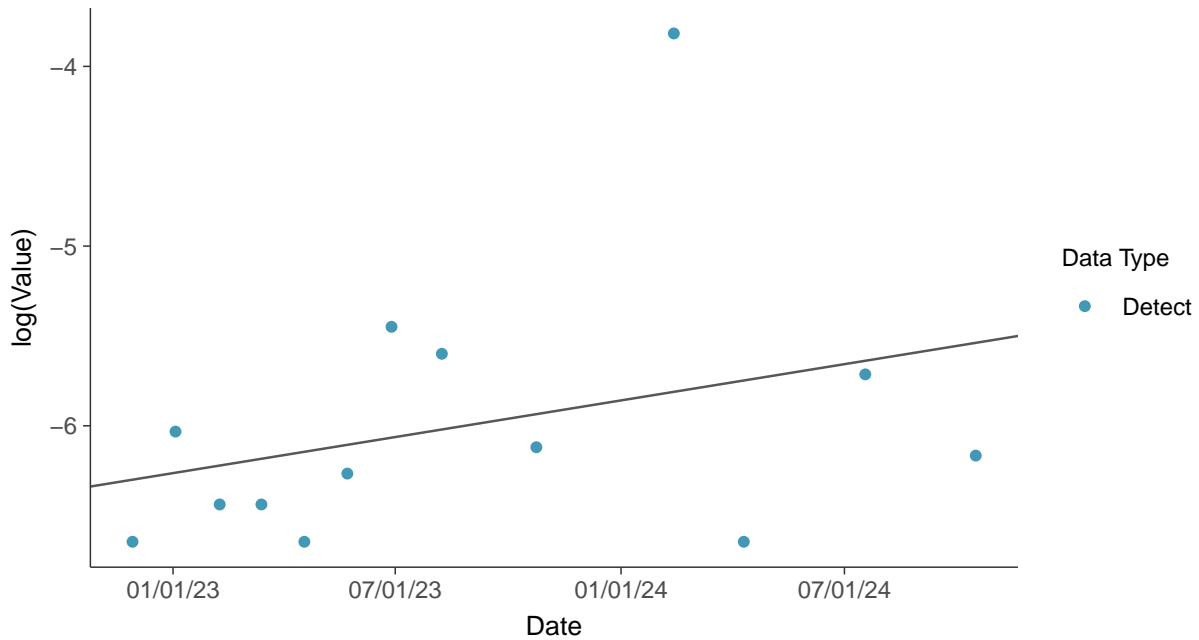
Lognormal Q-Q plot

Chromium, Total, MW-01R (mg/L)



Trend Regression: Lognormal MLE

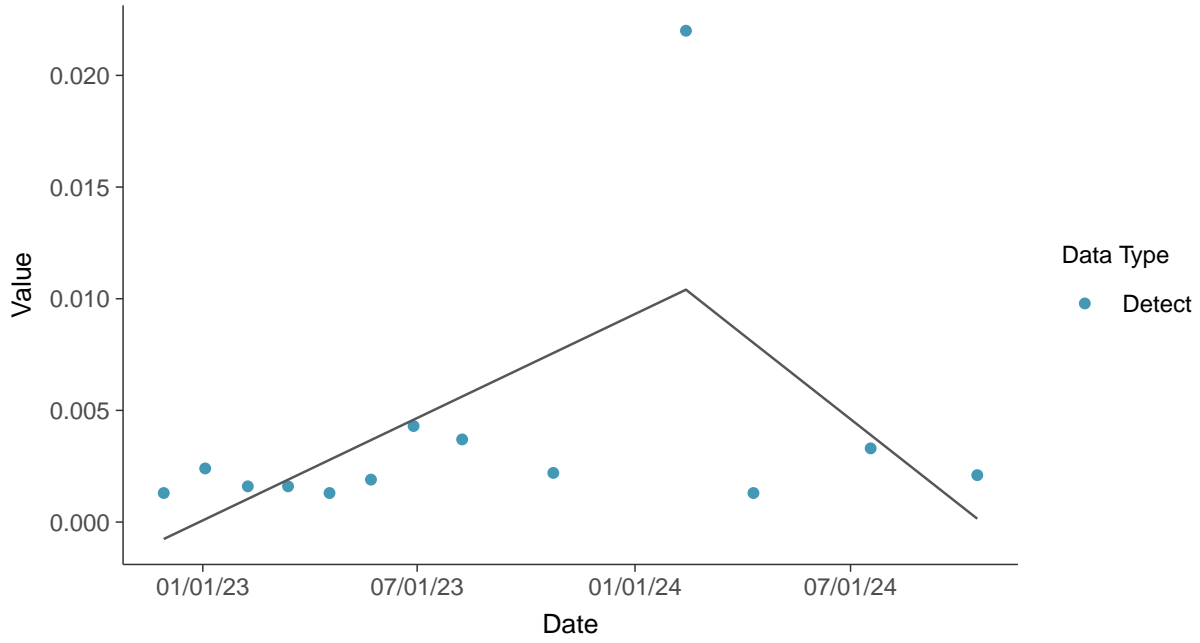
Chromium, Total, MW-01R (mg/L)





Trend Regression: Piecewise Linear-Linear

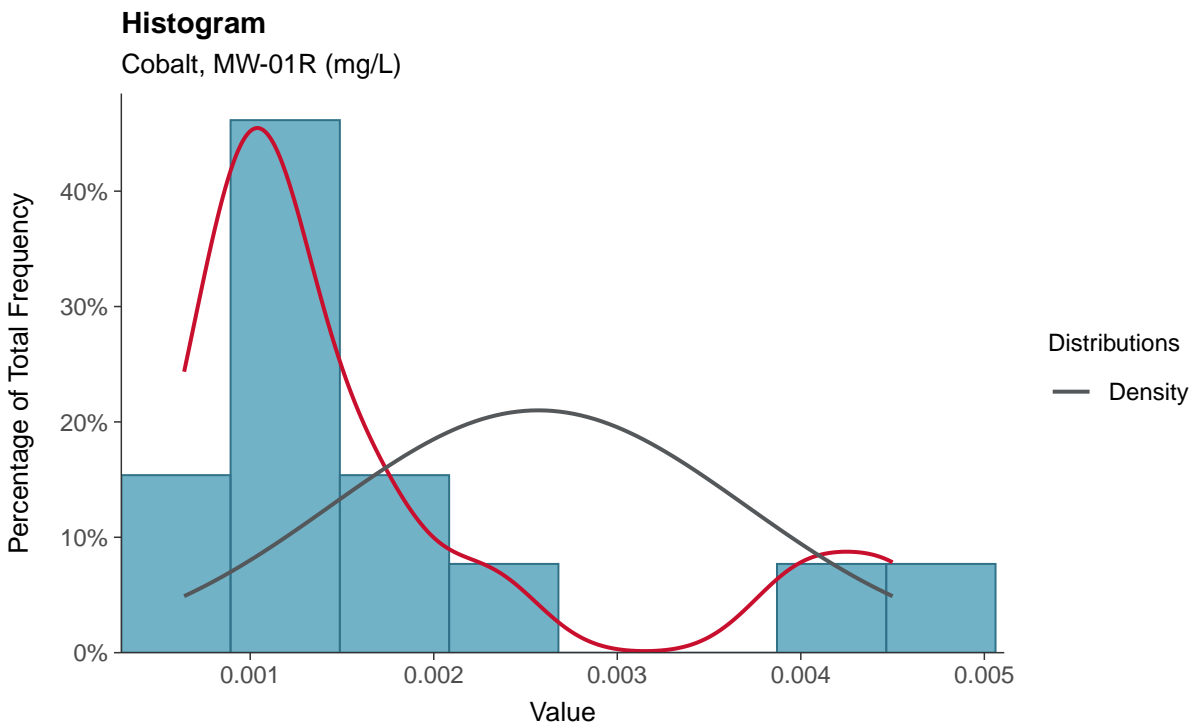
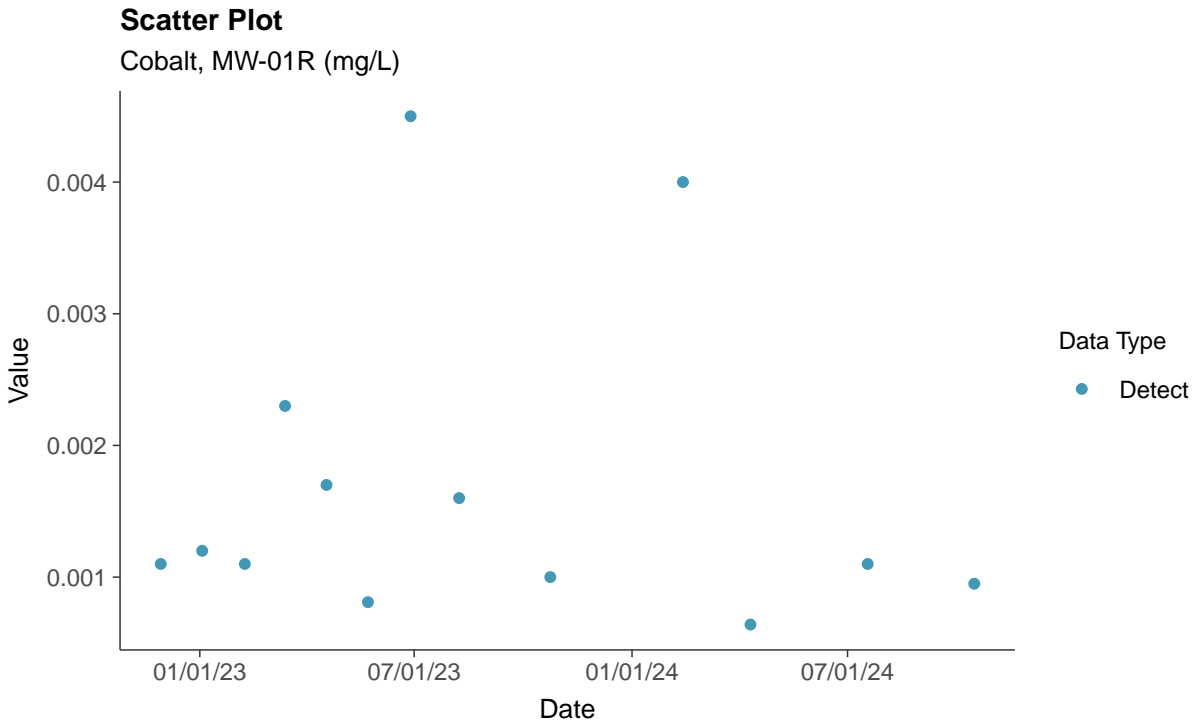
Chromium, Total, MW-01R (mg/L)





Appendix IV: Cobalt, MW-01R

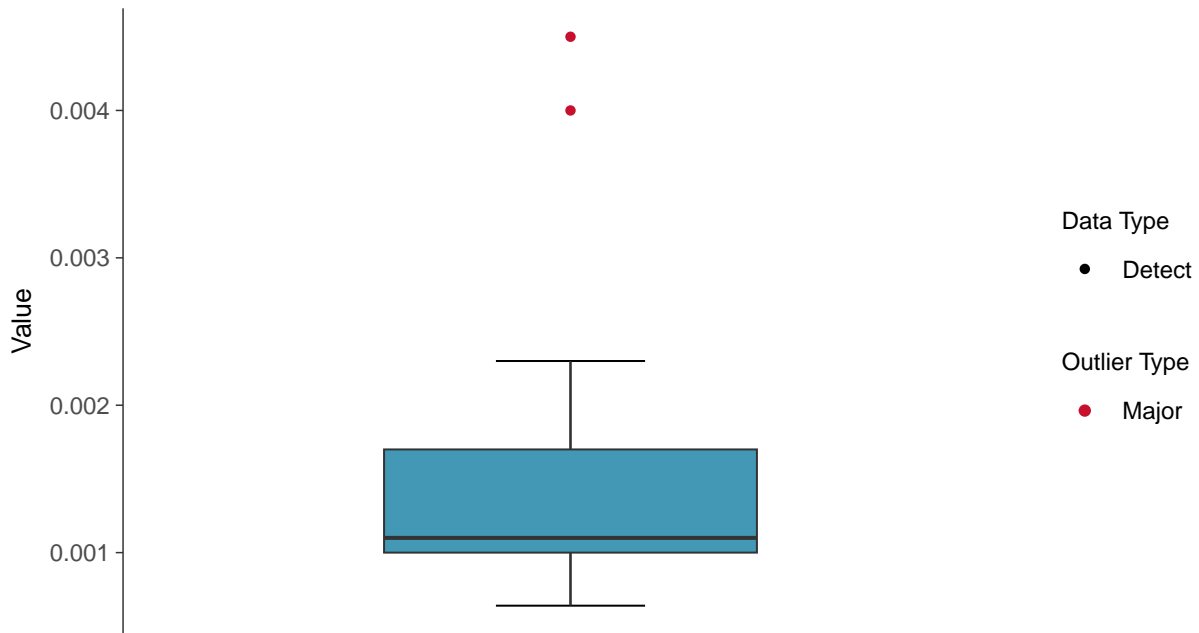
ID: 2_11_2_5_110





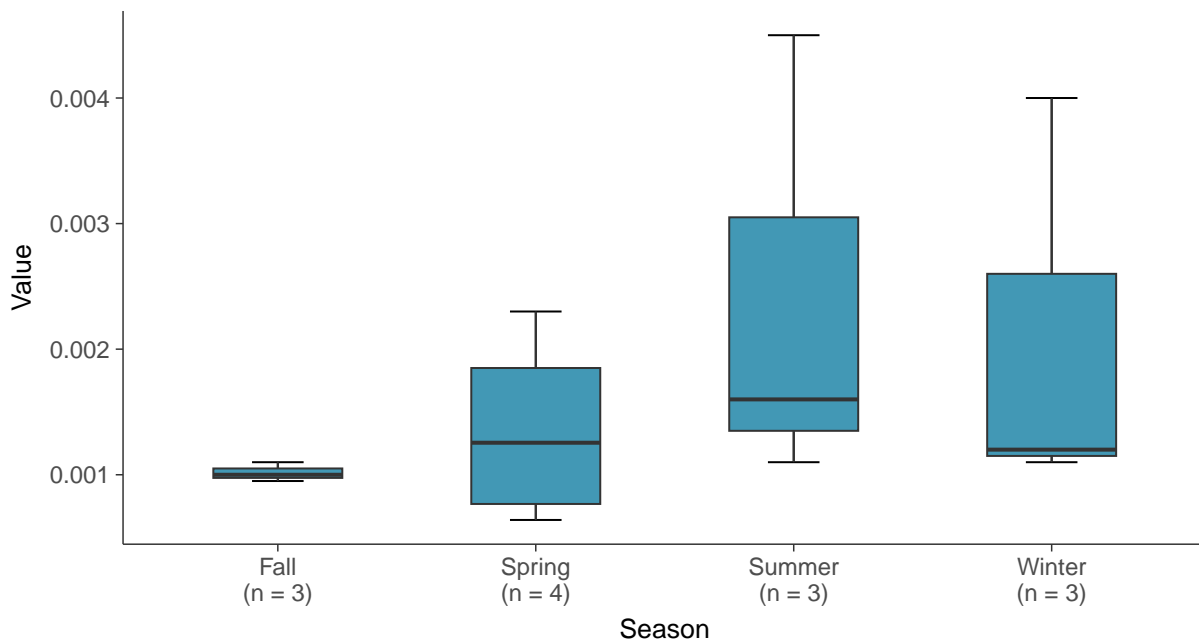
Boxplot

Cobalt, MW-01R (mg/L)



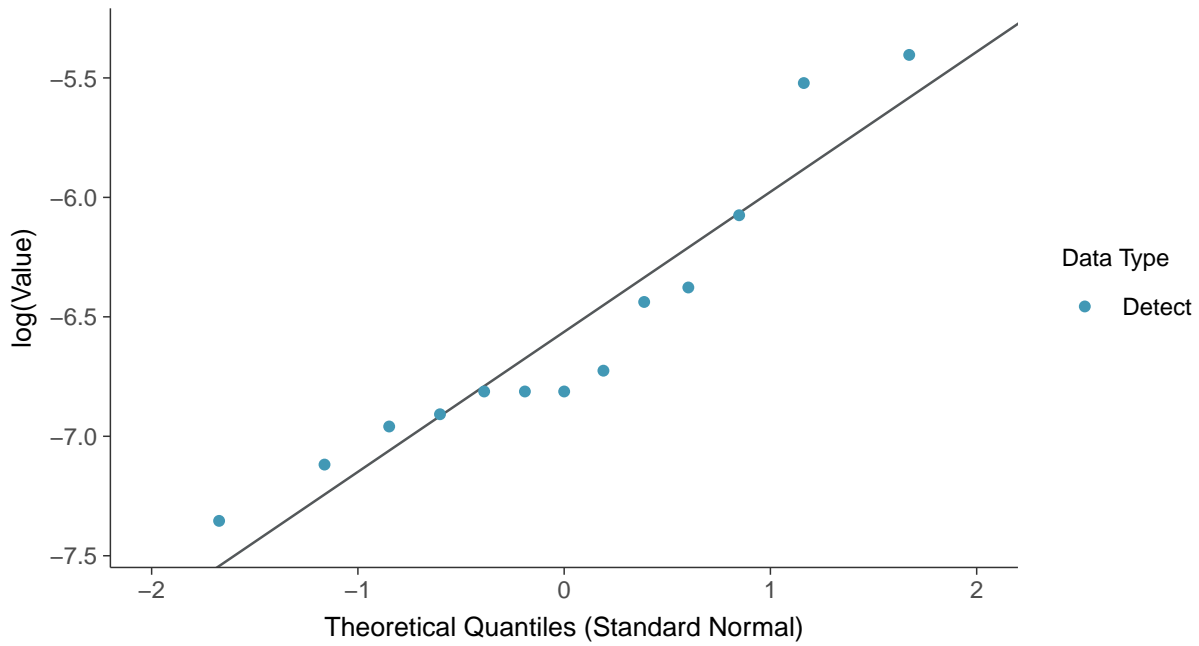
Boxplot by Season

Cobalt, MW-01R (mg/L)

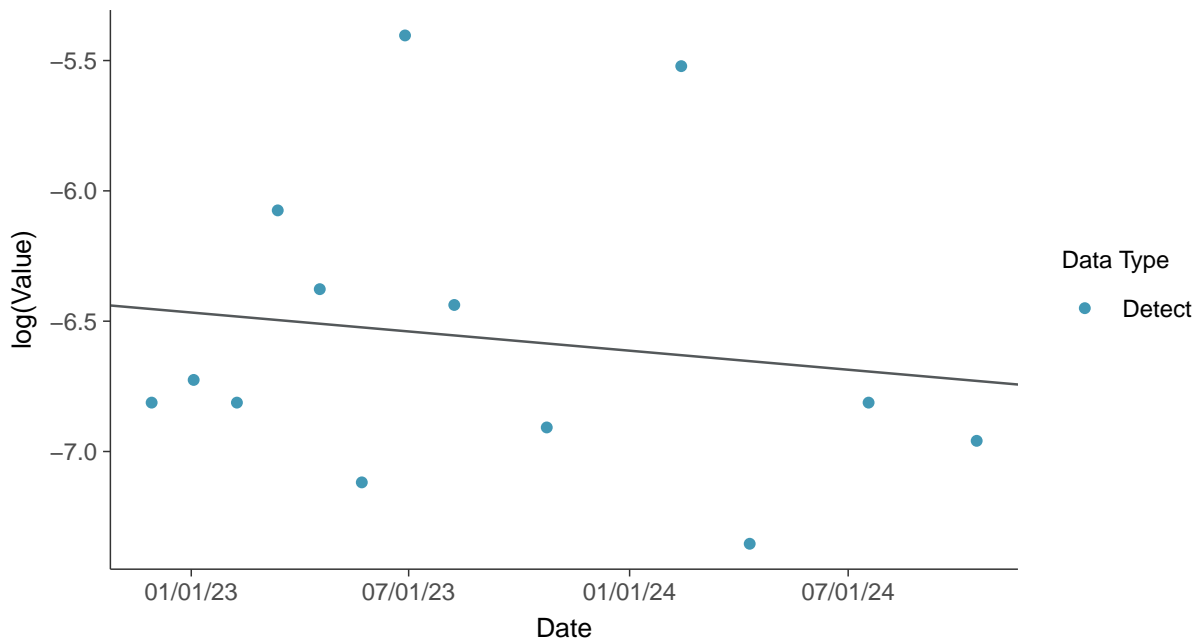




Lognormal Q-Q plot
Cobalt, MW-01R (mg/L)



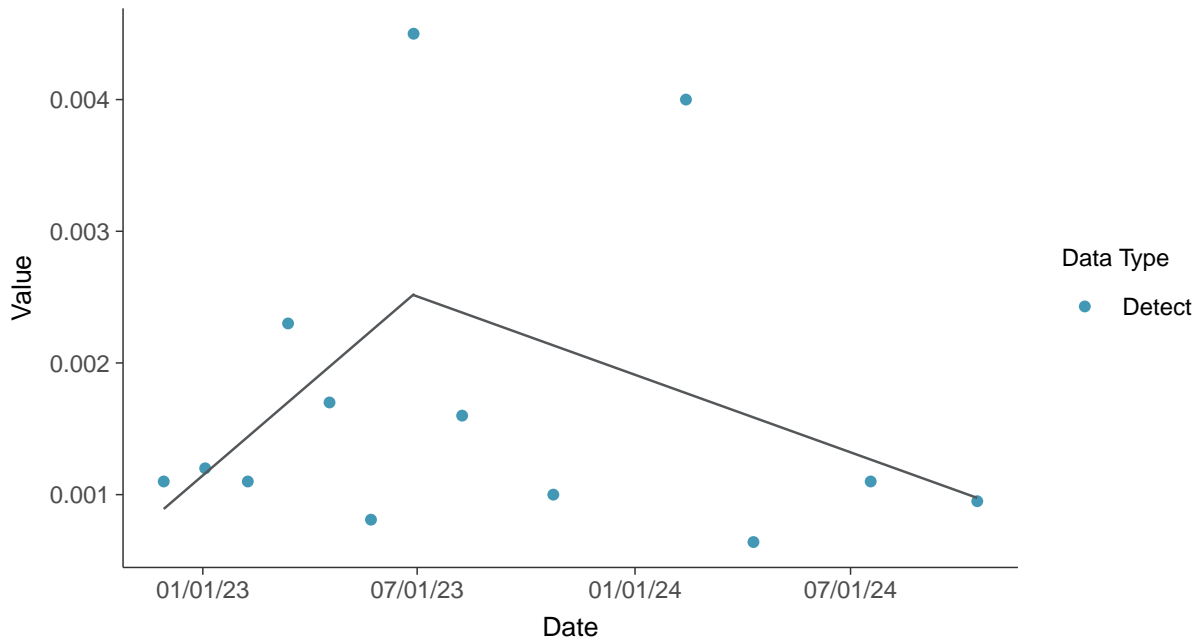
Trend Regression: Lognormal MLE
Cobalt, MW-01R (mg/L)





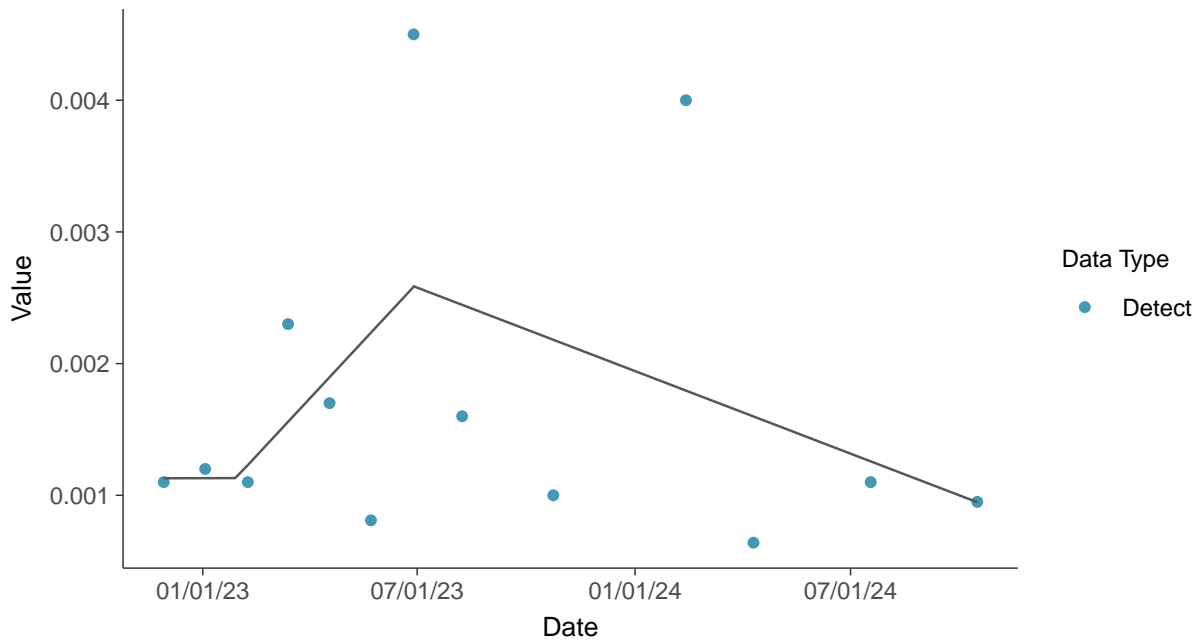
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-01R (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cobalt, MW-01R (mg/L)



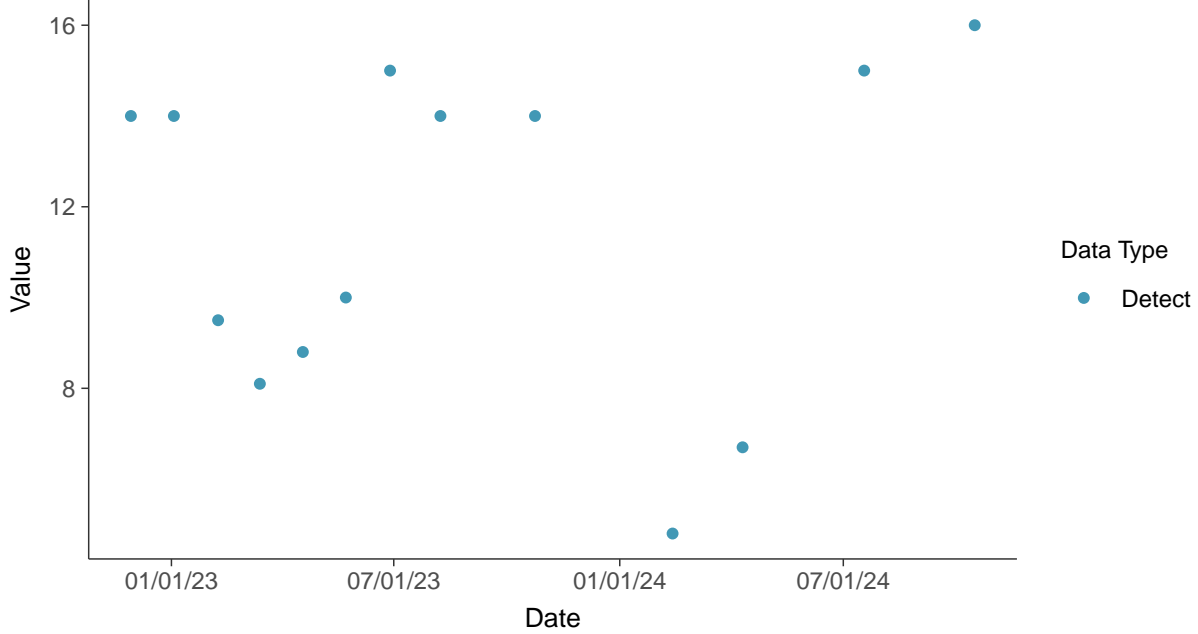


Appendix IV: Fluoride (App IV), MW-01R

ID: 2_11_2_5_113

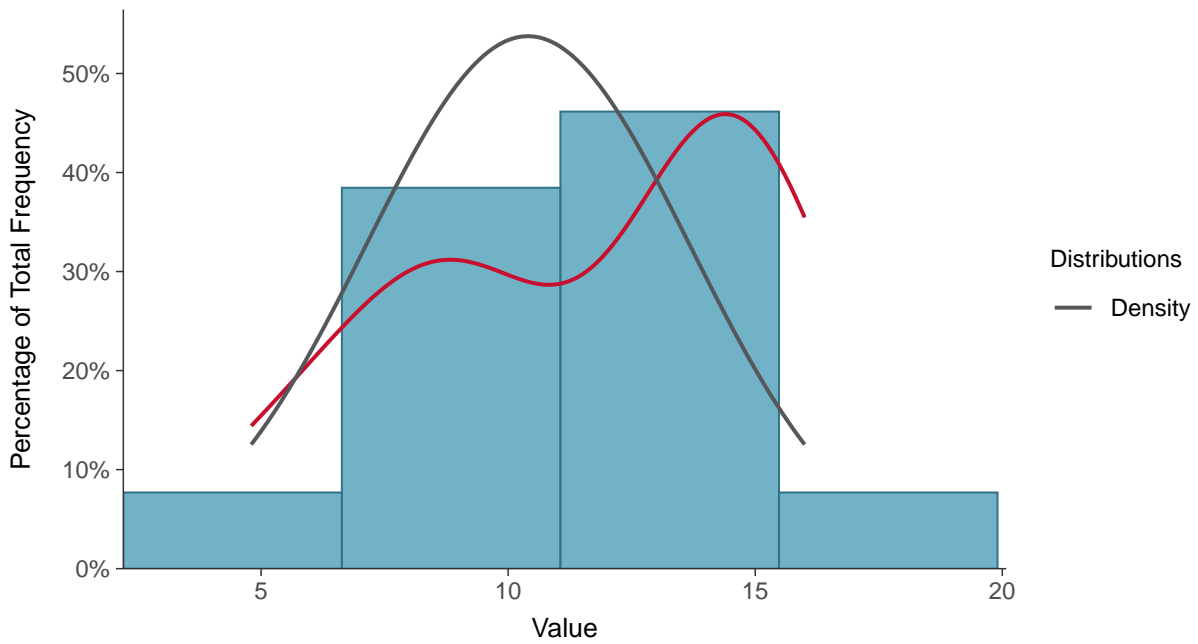
Scatter Plot

Fluoride (App IV), MW-01R (mg/L)



Histogram

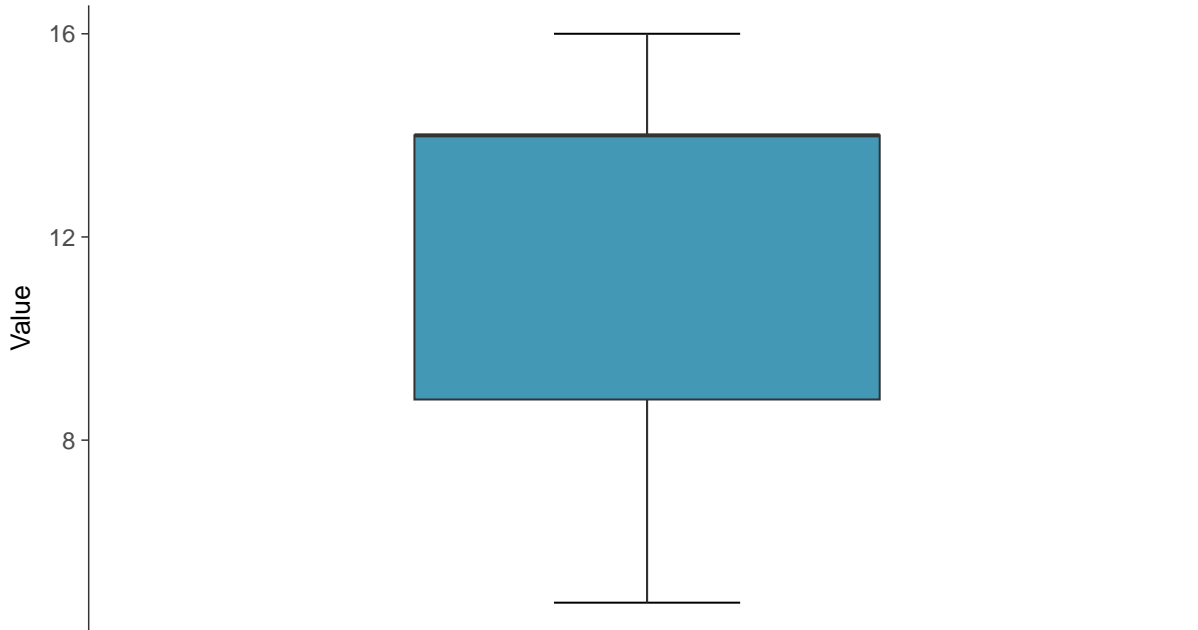
Fluoride (App IV), MW-01R (mg/L)





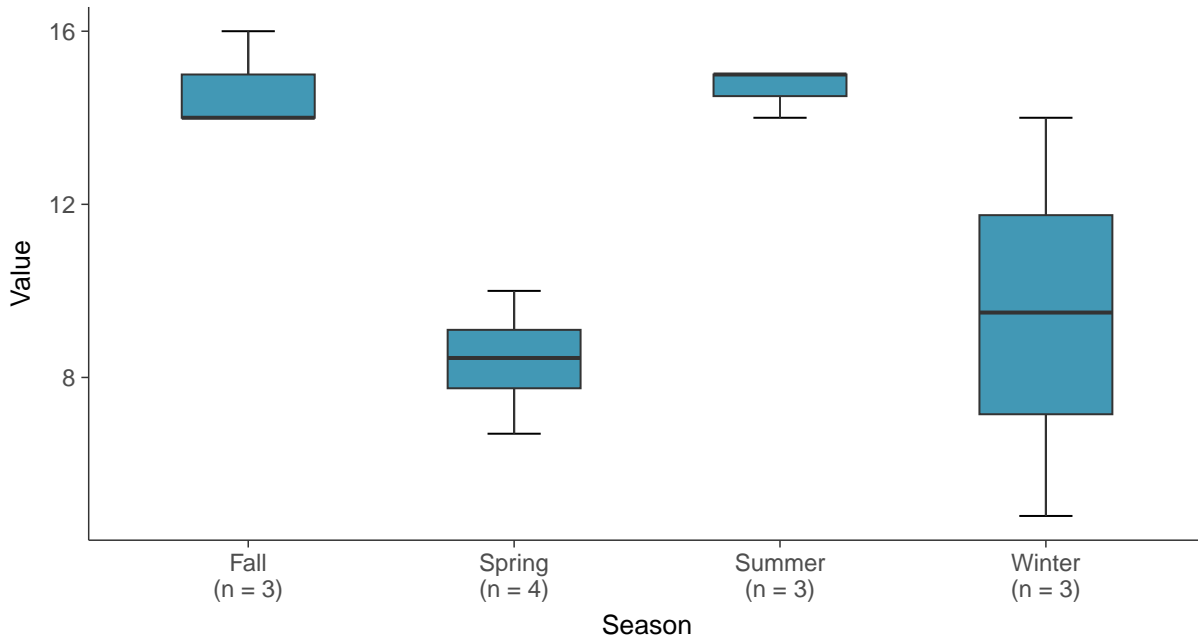
Boxplot

Fluoride (App IV), MW-01R (mg/L)



Boxplot by Season

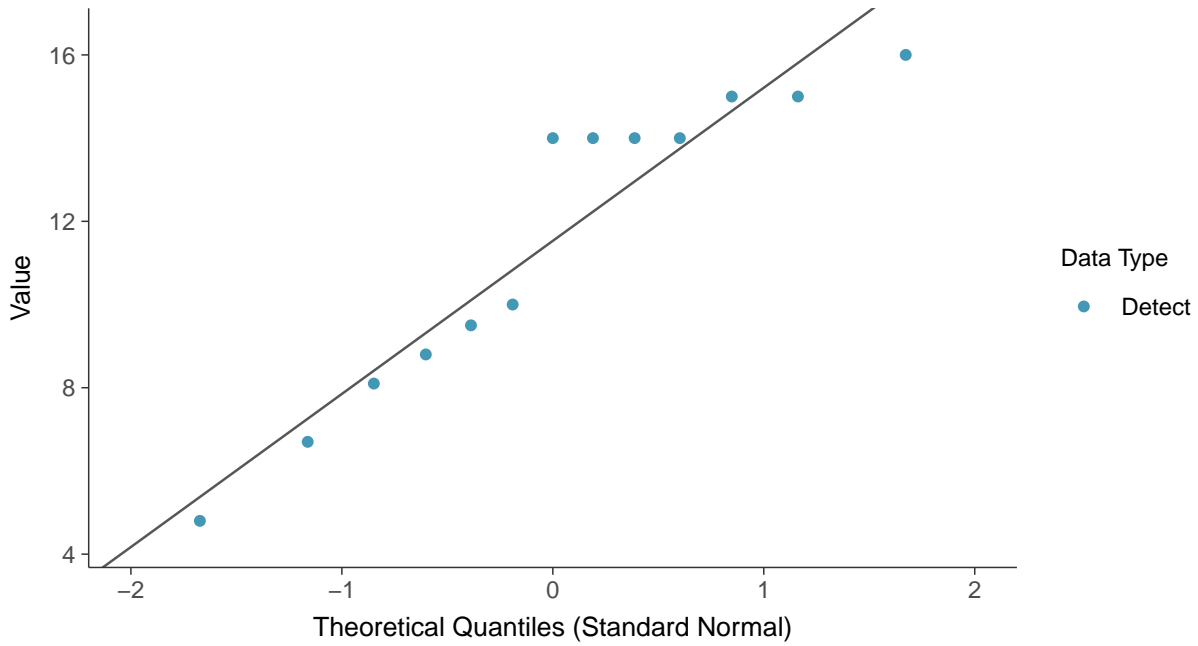
Fluoride (App IV), MW-01R (mg/L)





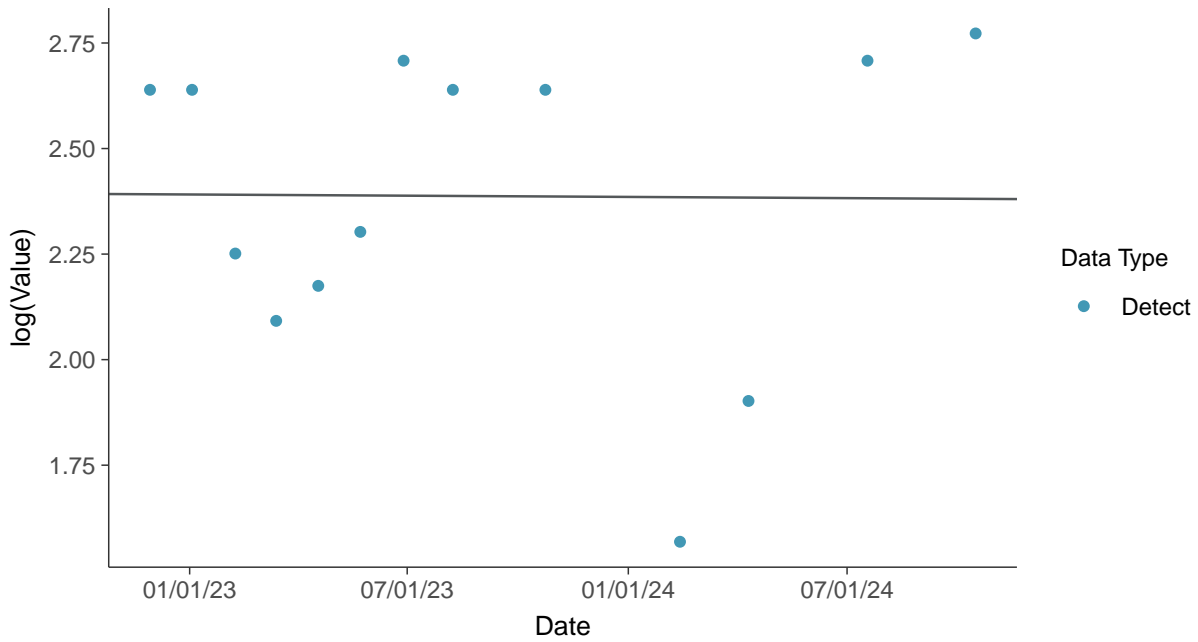
Normal Q-Q plot

Fluoride (App IV), MW-01R (mg/L)



Trend Regression: Lognormal MLE

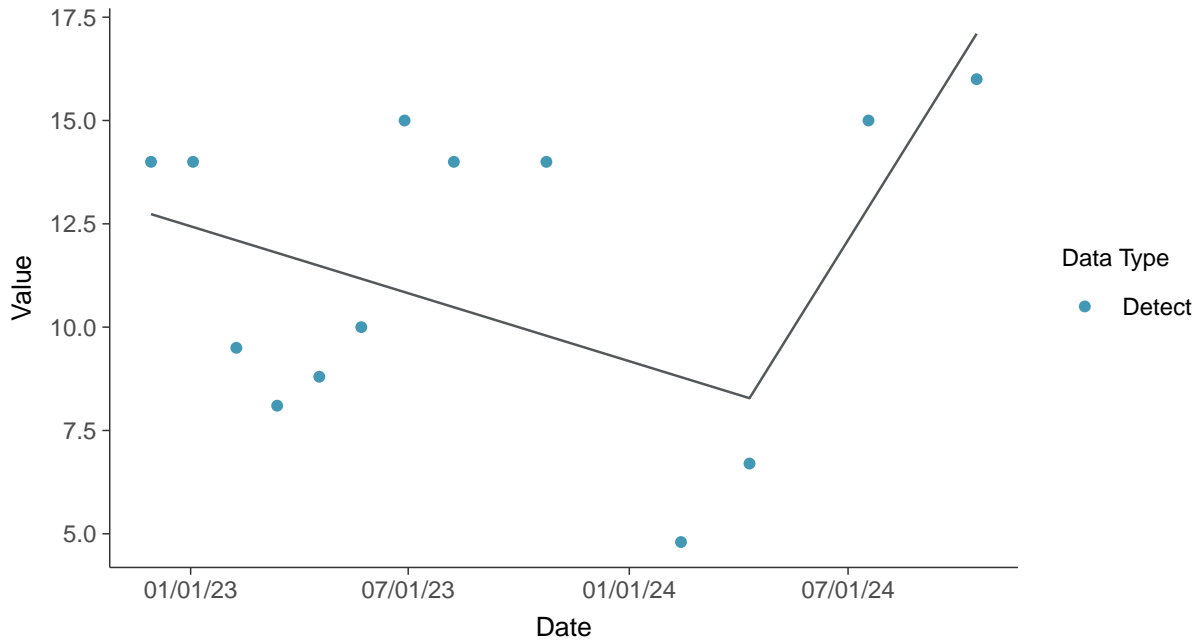
Fluoride (App IV), MW-01R (mg/L)





Trend Regression: Piecewise Linear-Linear

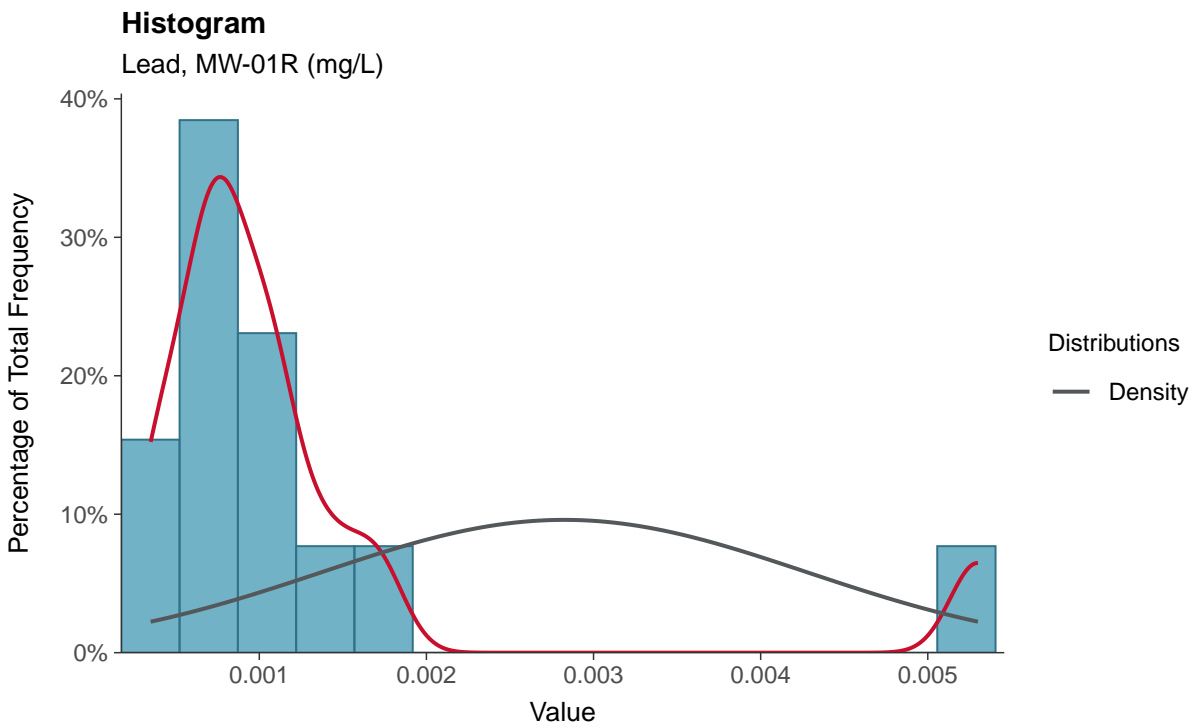
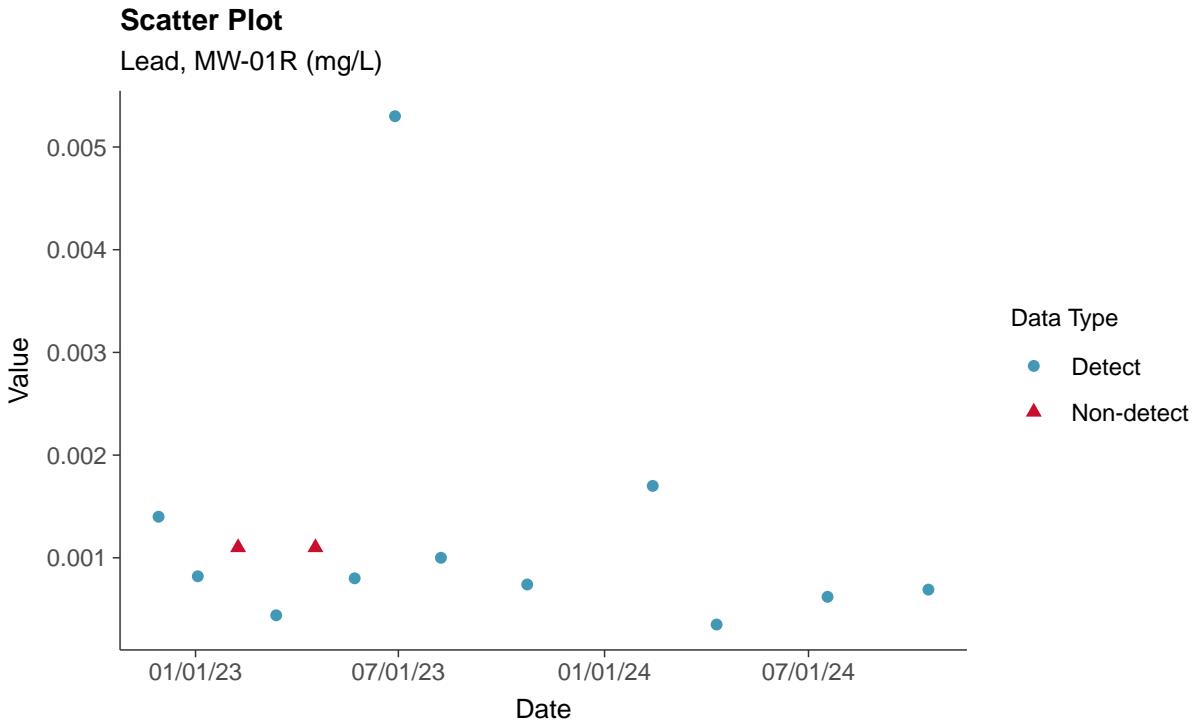
Fluoride (App IV), MW-01R (mg/L)





Appendix IV: Lead, MW-01R

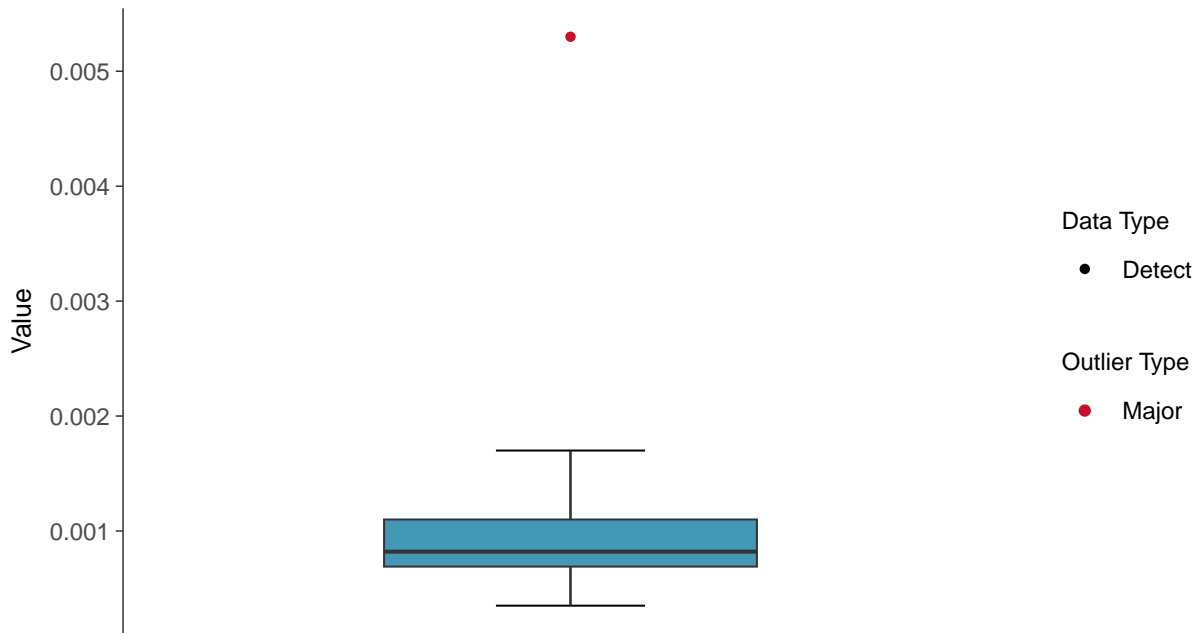
ID: 2_11_2_5_115





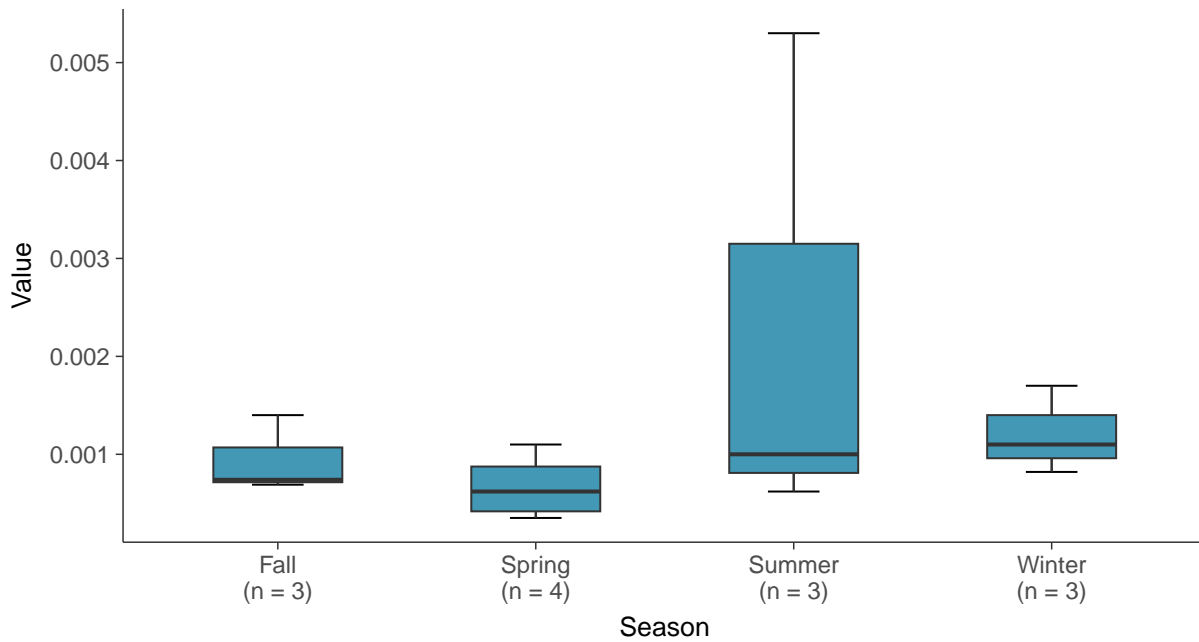
Boxplot

Lead, MW-01R (mg/L)



Boxplot by Season

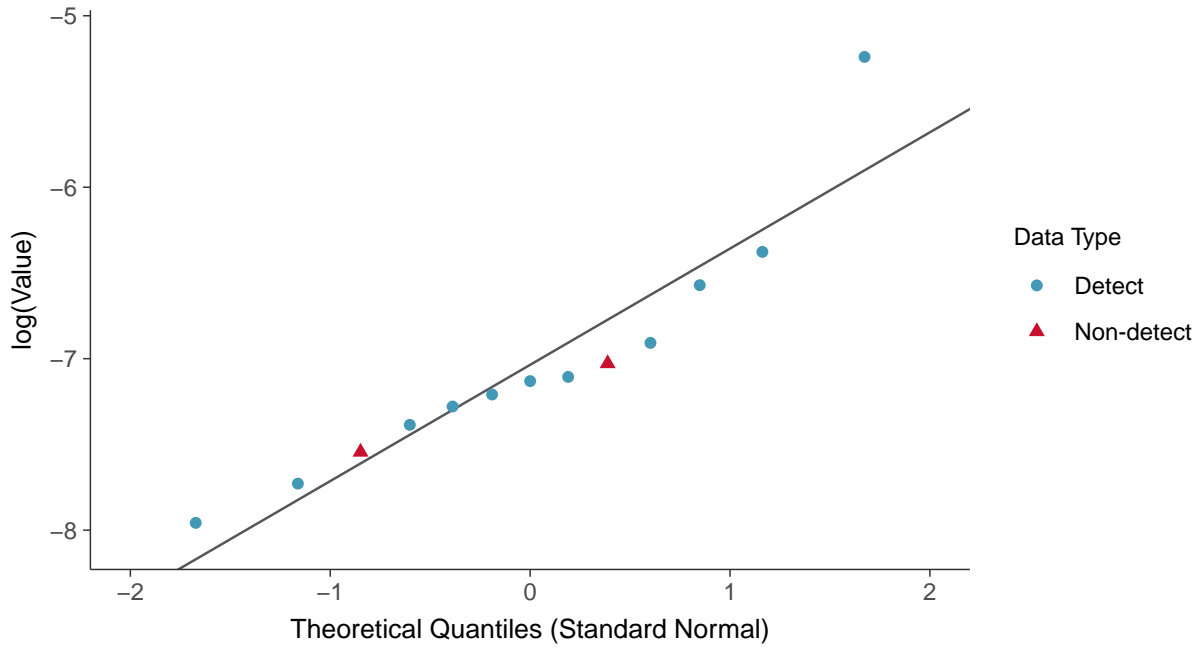
Lead, MW-01R (mg/L)





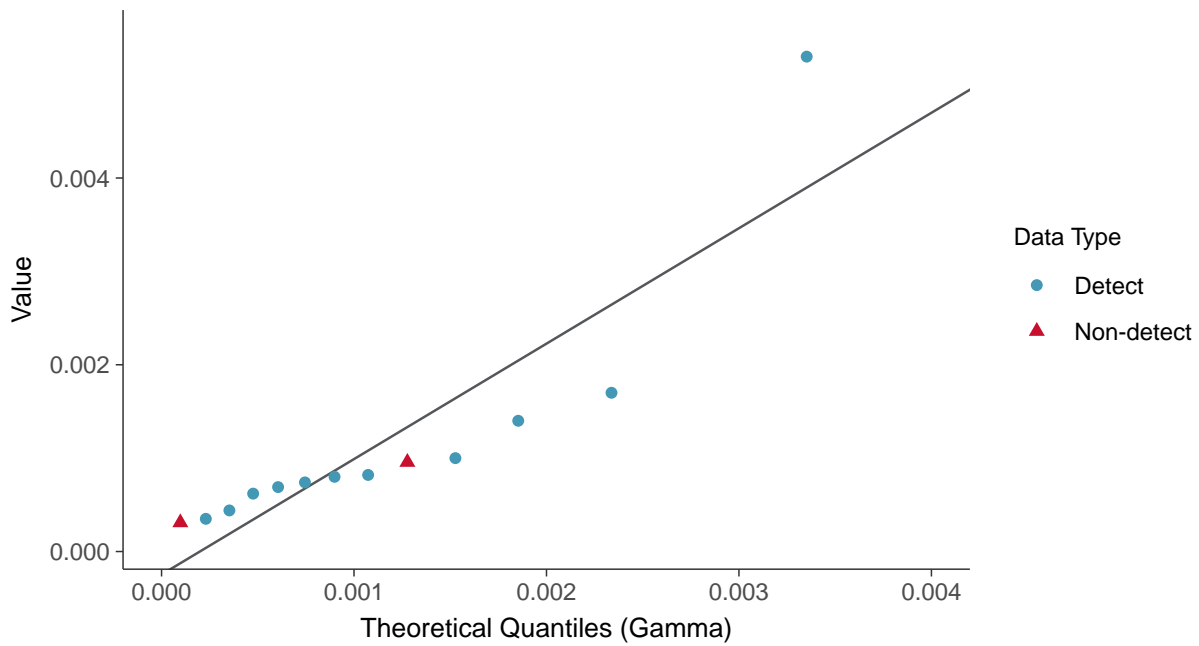
Lognormal Q-Q plot using ROS Imputed Estimates

Lead, MW-01R (mg/L)



Gamma Q-Q plot using ROS Imputed Estimates

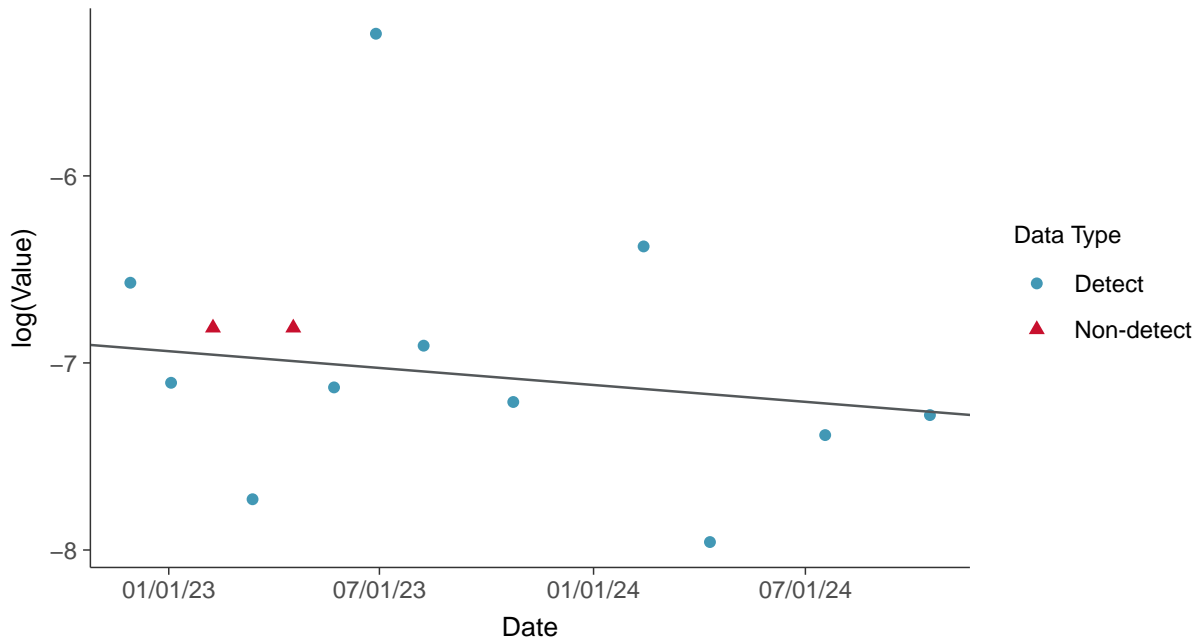
Lead, MW-01R (mg/L)





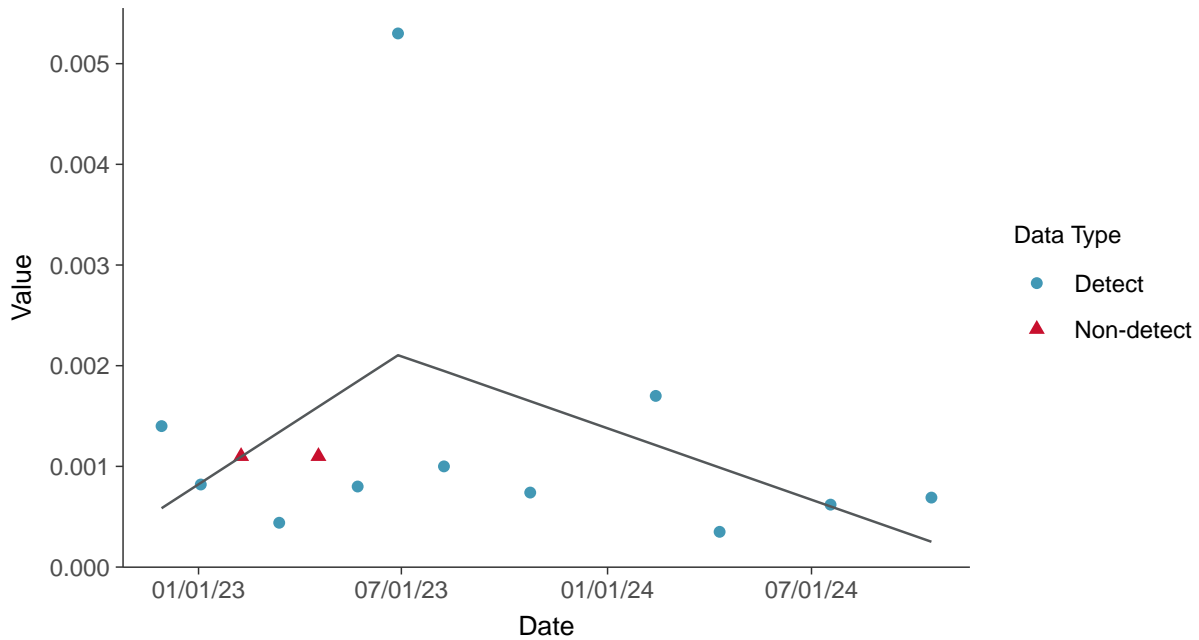
Trend Regression: Lognormal MLE

Lead, MW-01R (mg/L)



Trend Regression: Piecewise Linear-Linear

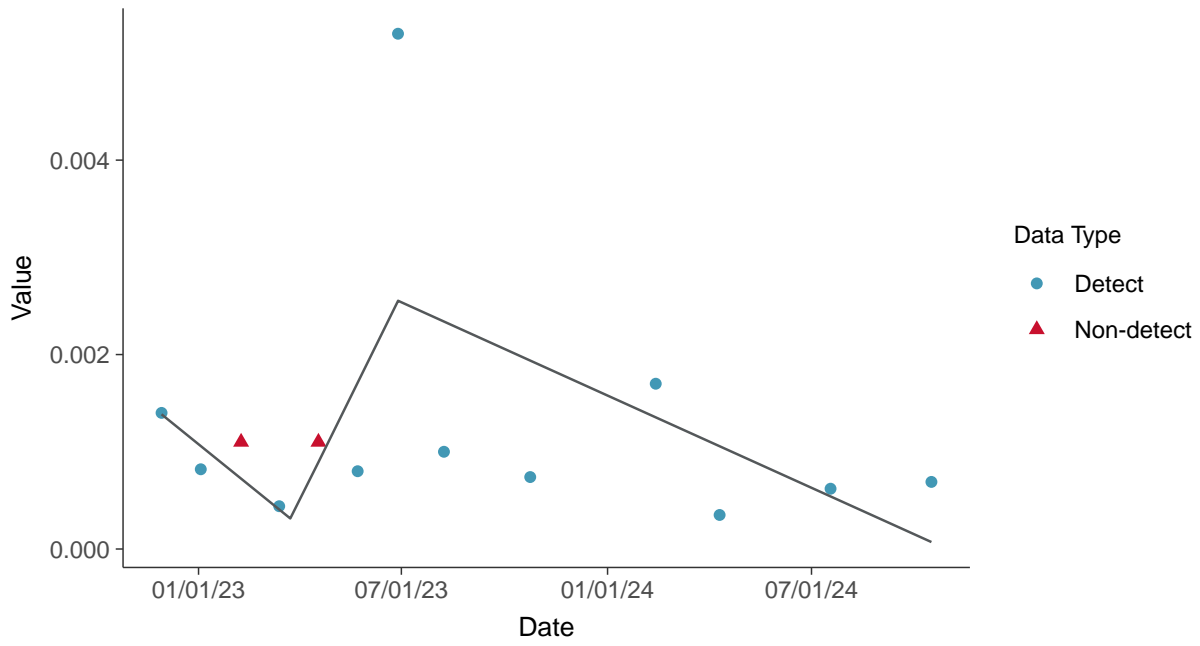
Lead, MW-01R (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

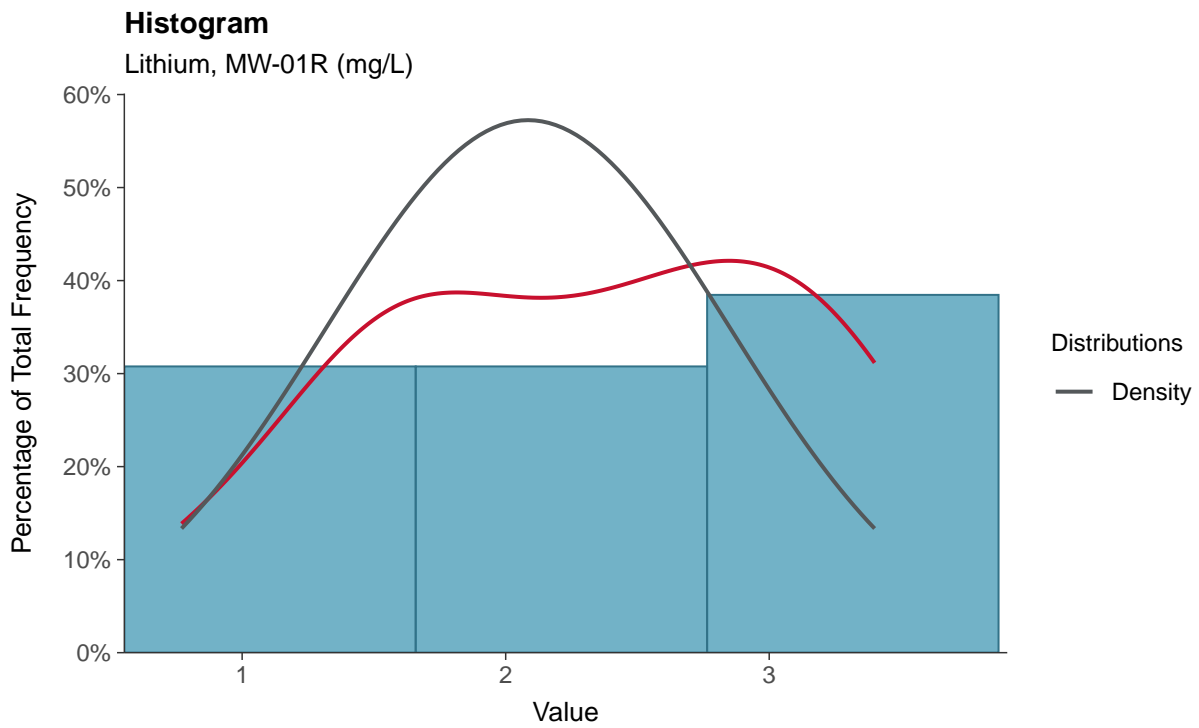
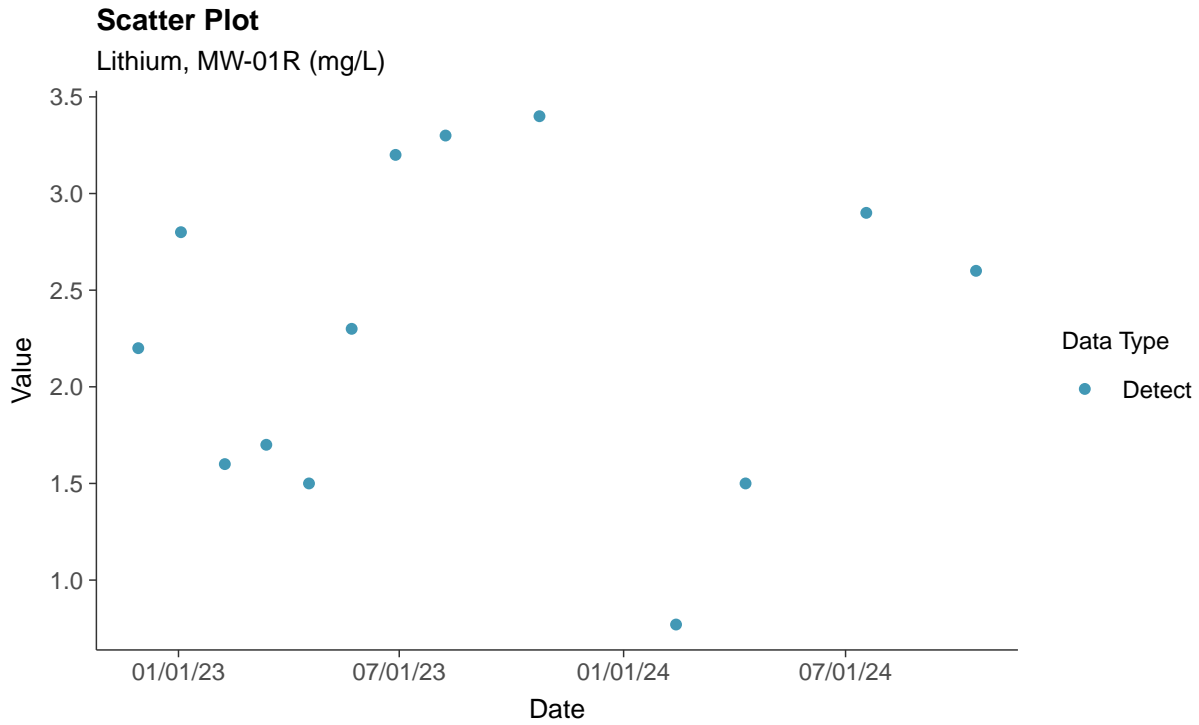
Lead, MW-01R (mg/L)





Appendix IV: Lithium, MW-01R

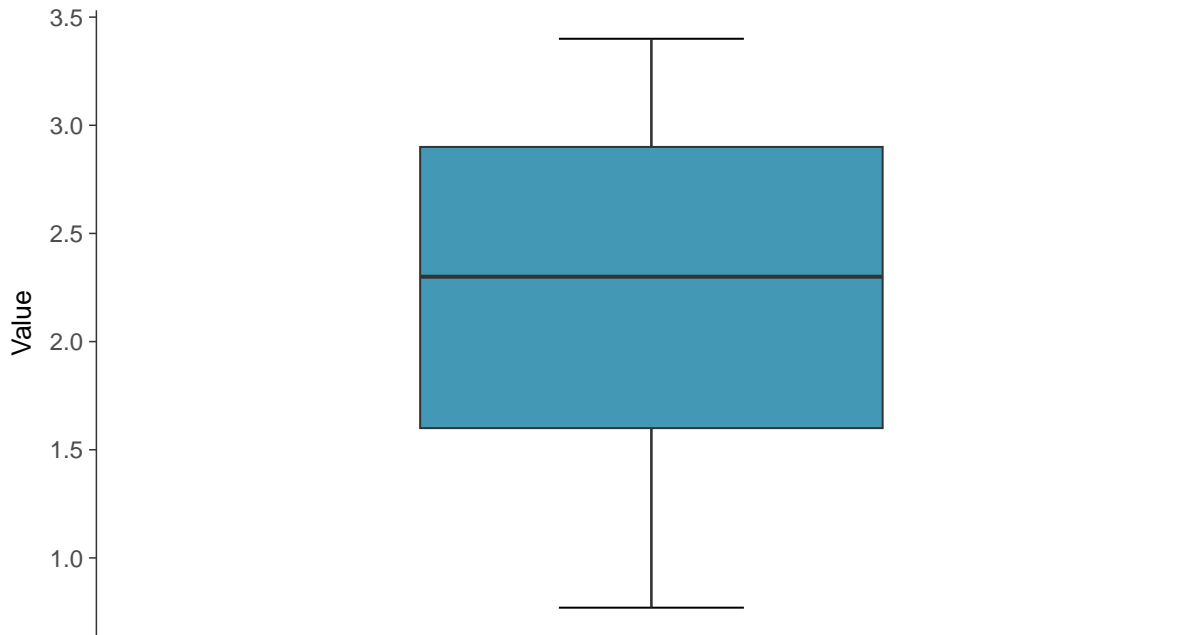
ID: 2_11_2_5_116





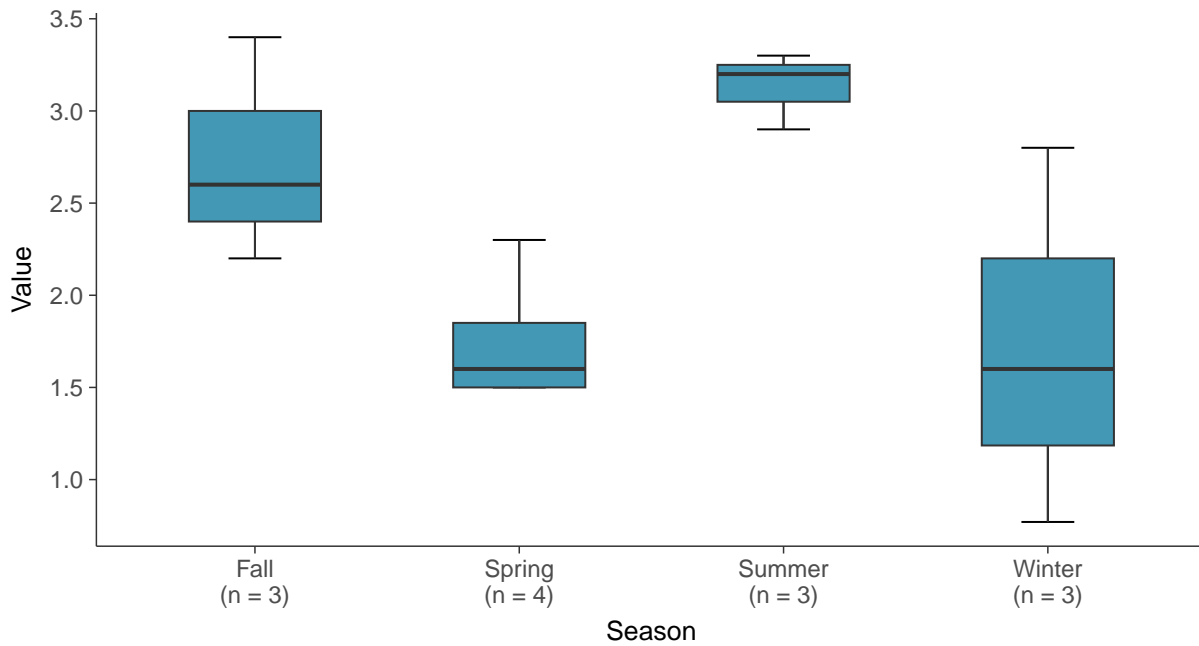
Boxplot

Lithium, MW-01R (mg/L)



Boxplot by Season

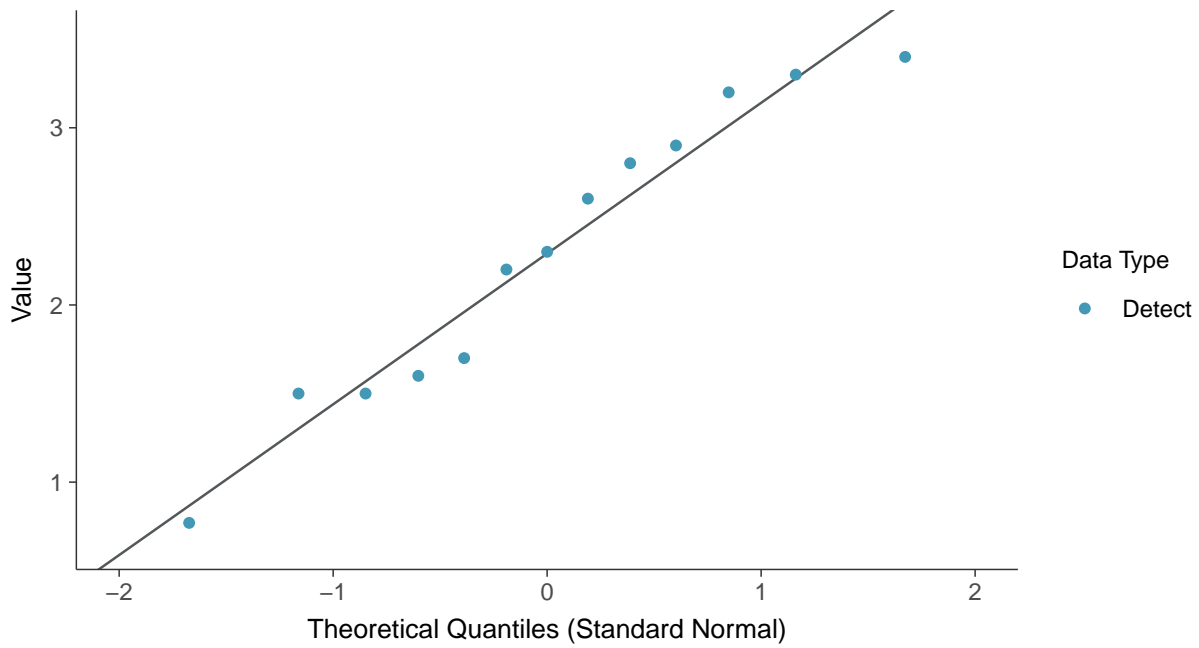
Lithium, MW-01R (mg/L)





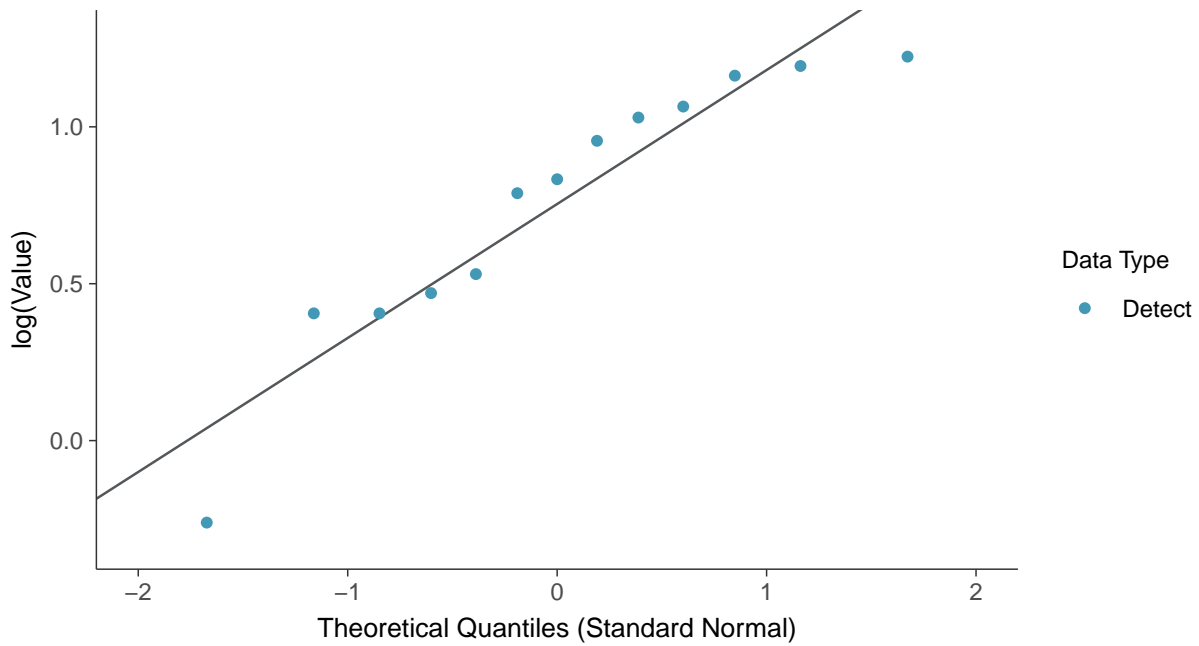
Normal Q-Q plot

Lithium, MW-01R (mg/L)



Lognormal Q-Q plot

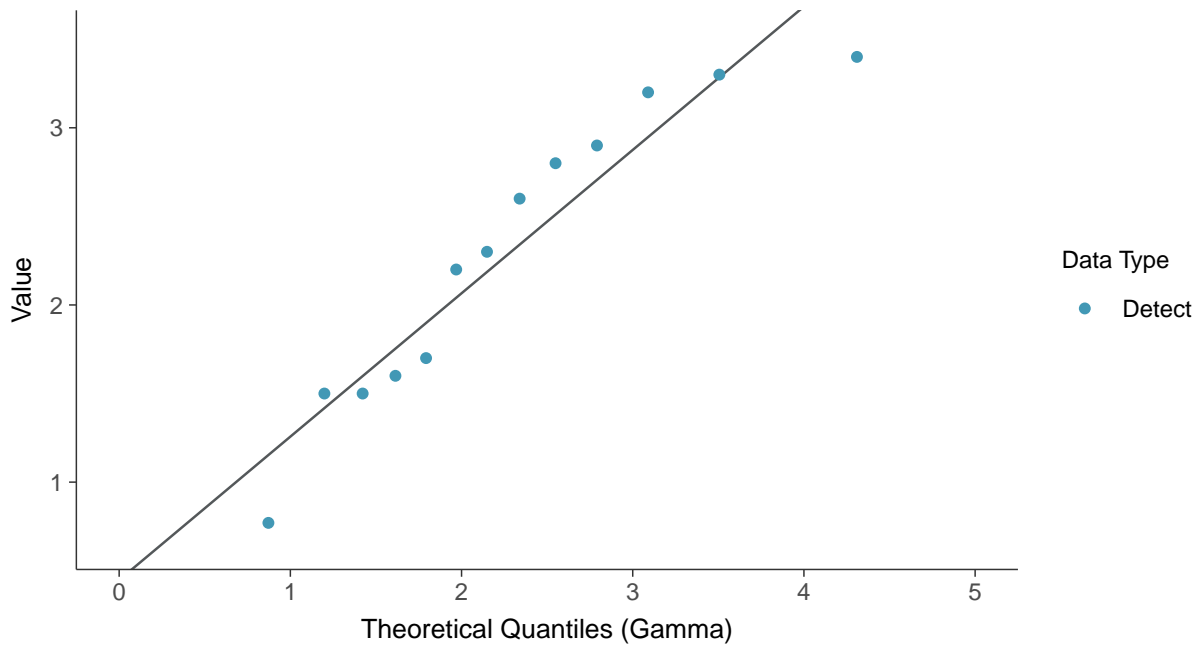
Lithium, MW-01R (mg/L)





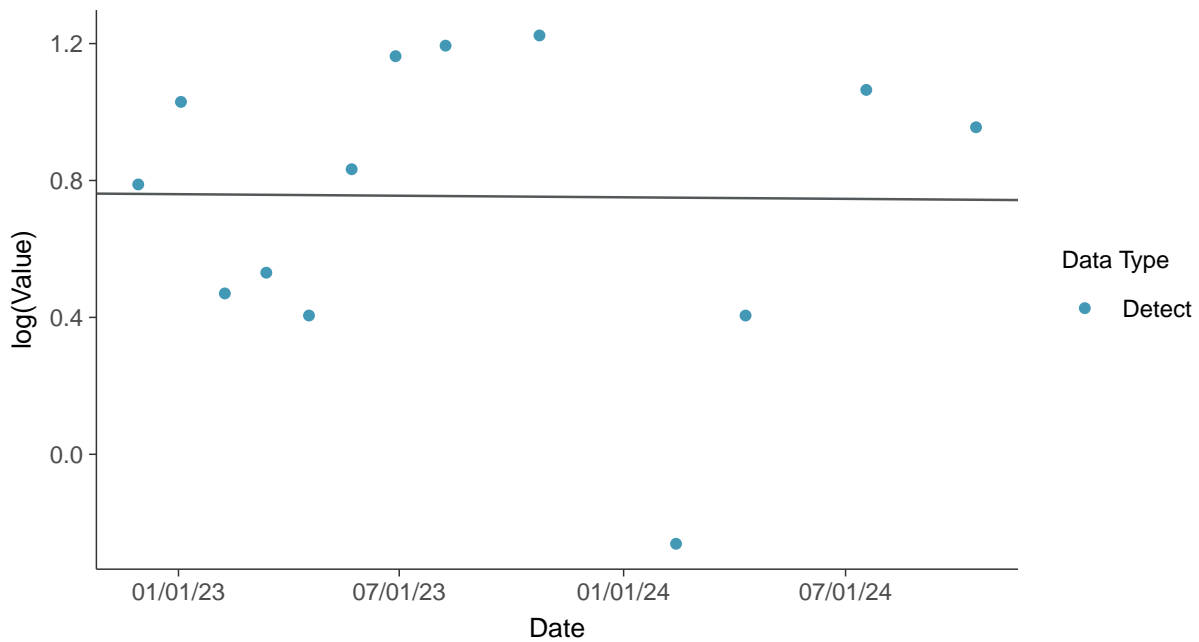
Gamma Q-Q plot

Lithium, MW-01R (mg/L)



Trend Regression: Lognormal MLE

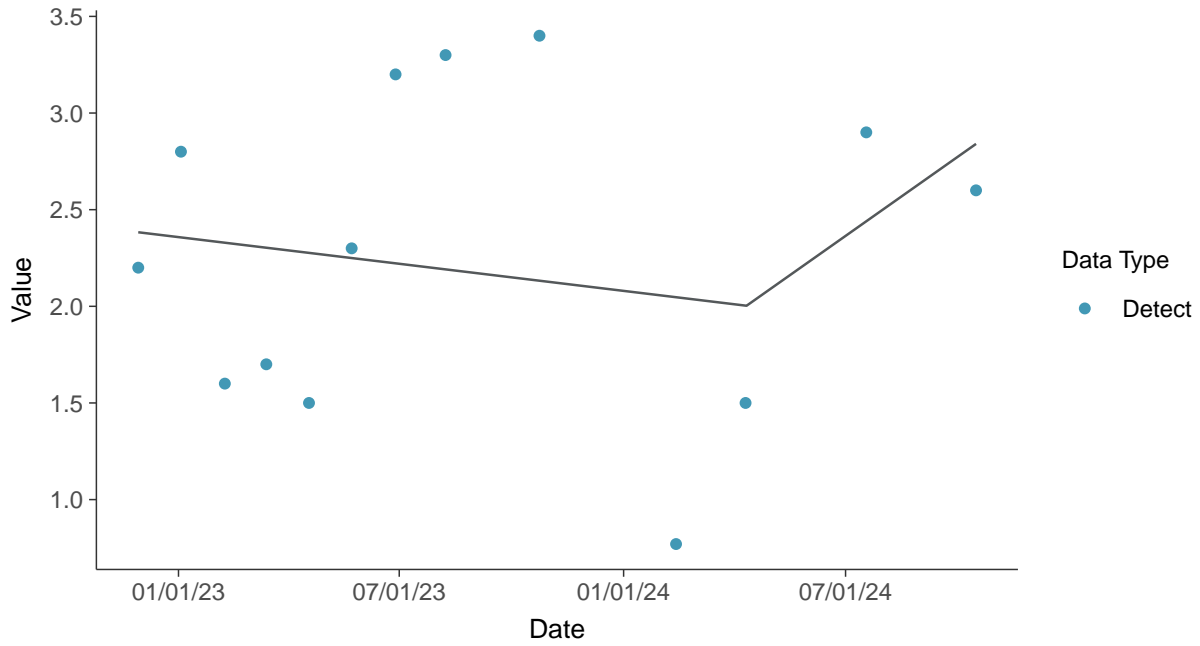
Lithium, MW-01R (mg/L)





Trend Regression: Piecewise Linear-Linear

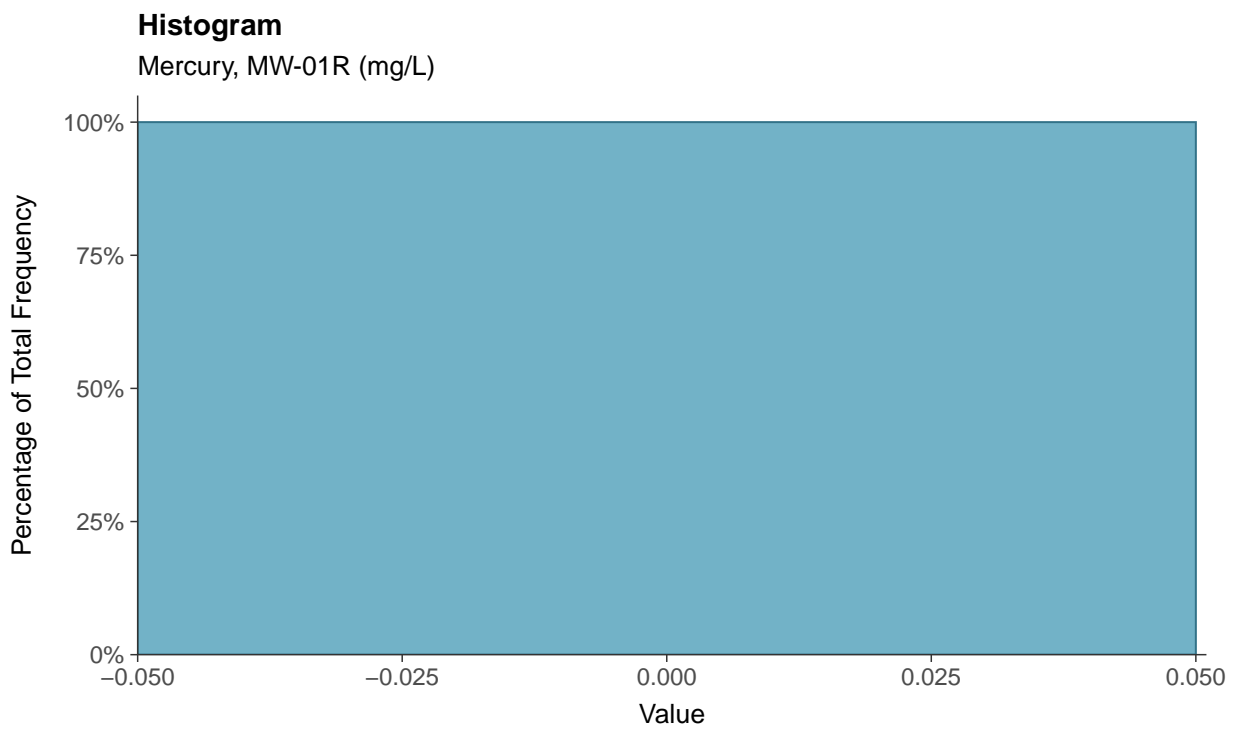
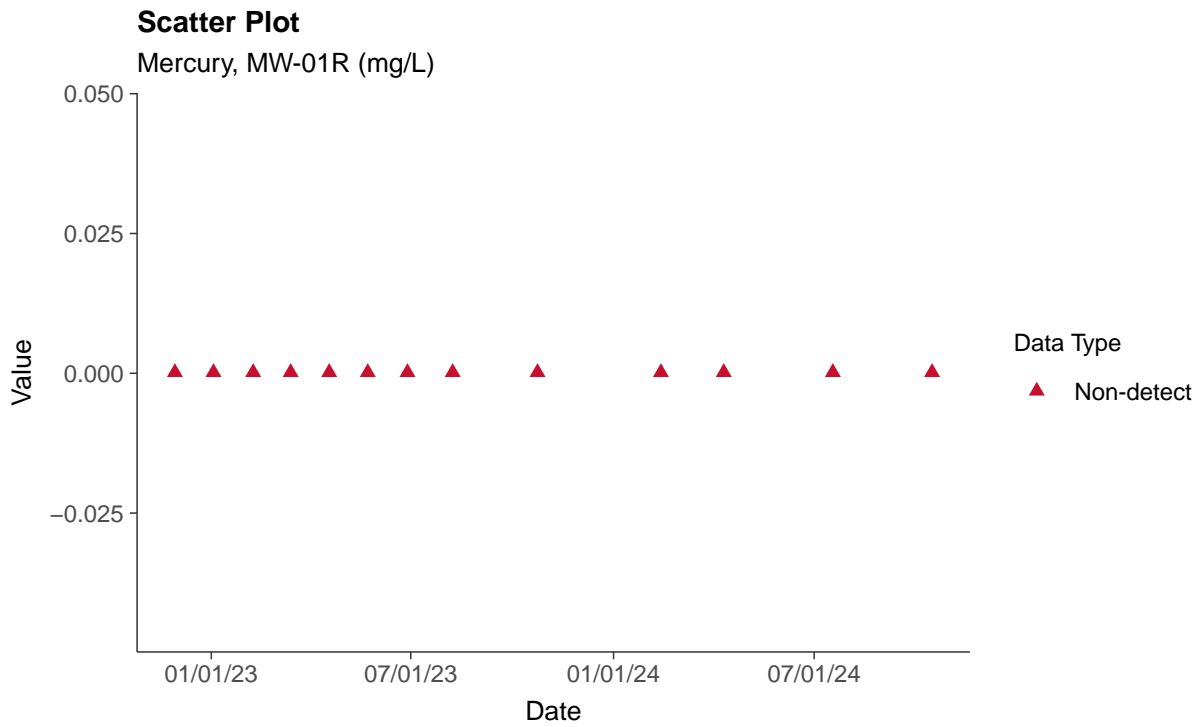
Lithium, MW-01R (mg/L)





Appendix IV: Mercury, MW-01R

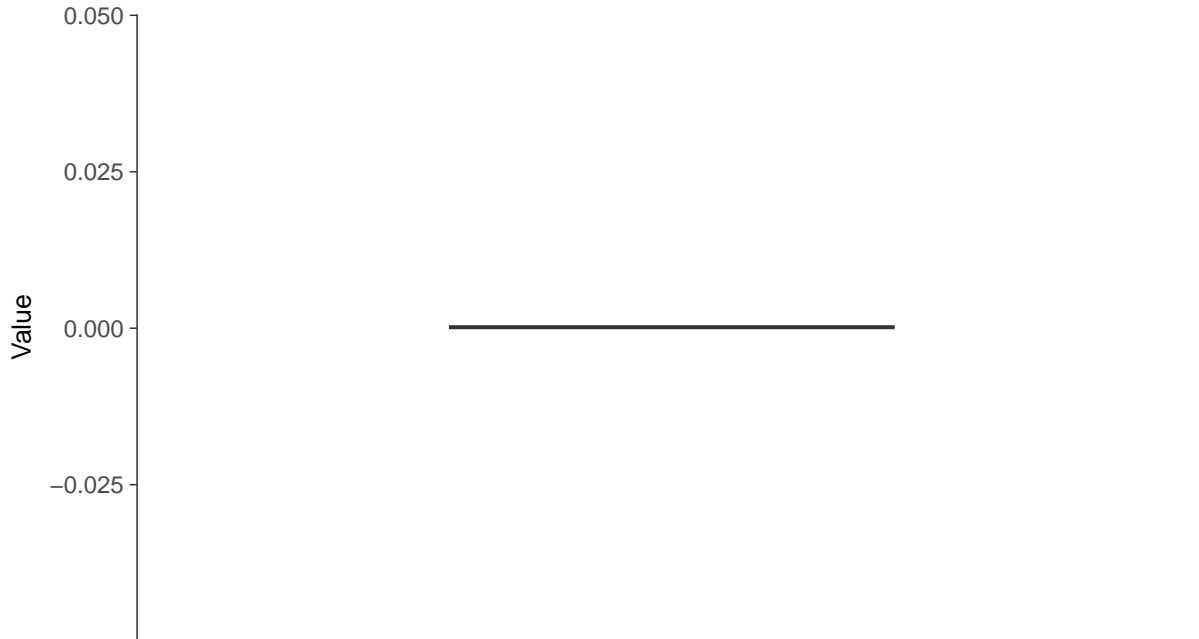
ID: 2_11_2_5_117





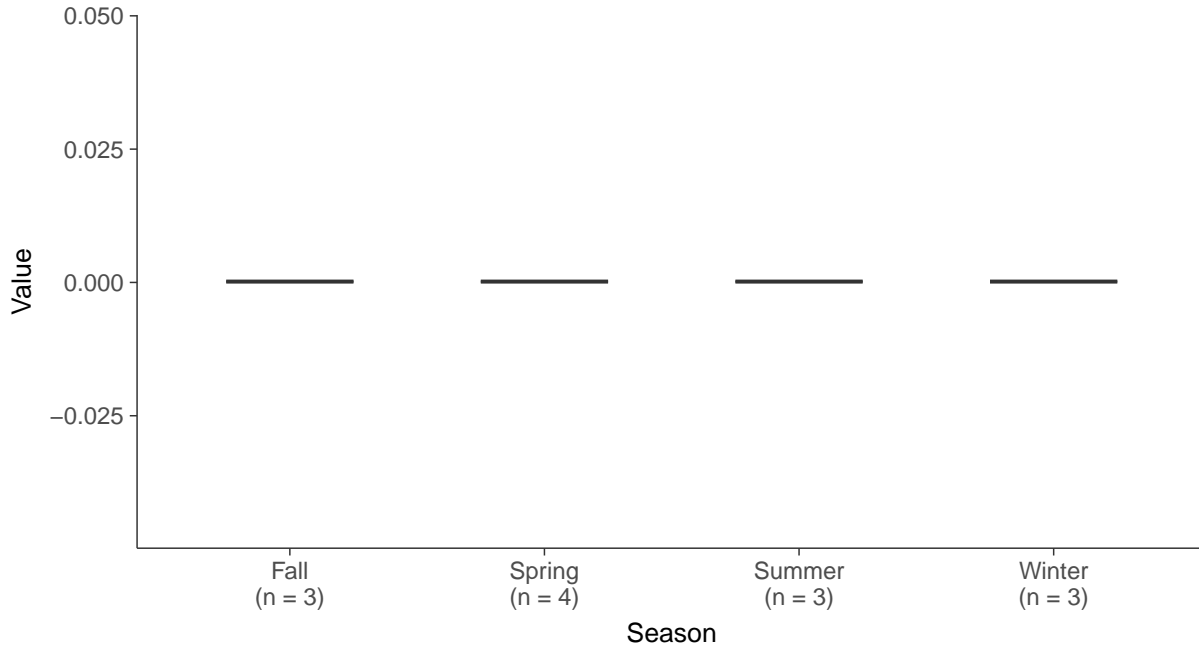
Boxplot

Mercury, MW-01R (mg/L)



Boxplot by Season

Mercury, MW-01R (mg/L)



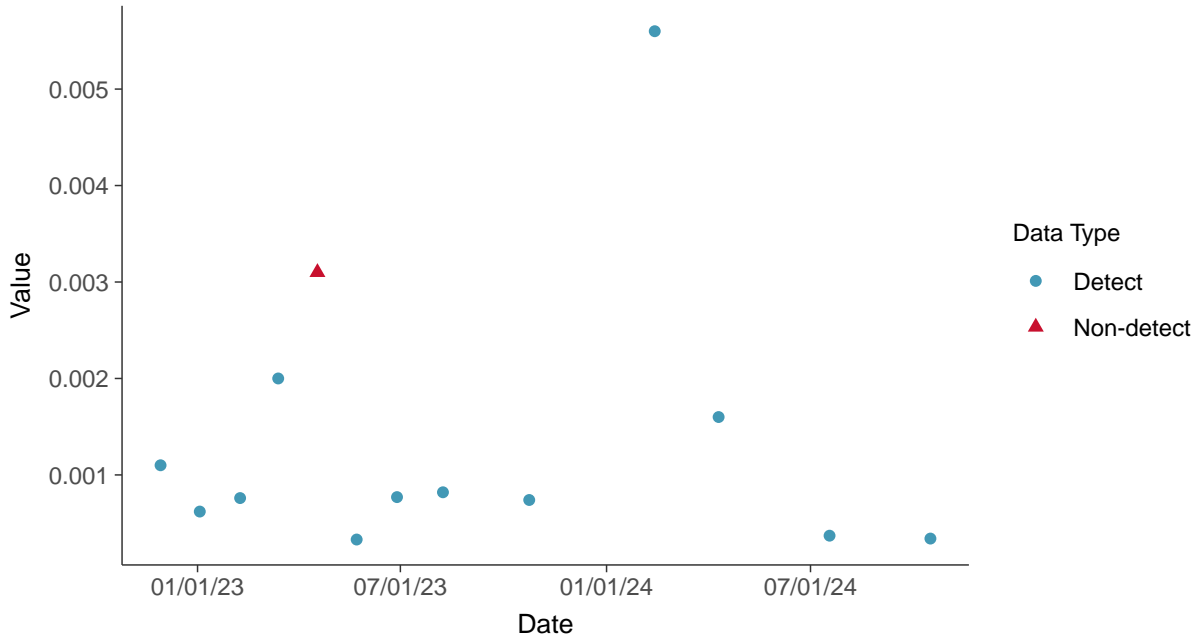


Appendix IV: Molybdenum, MW-01R

ID: 2_11_2_5_118

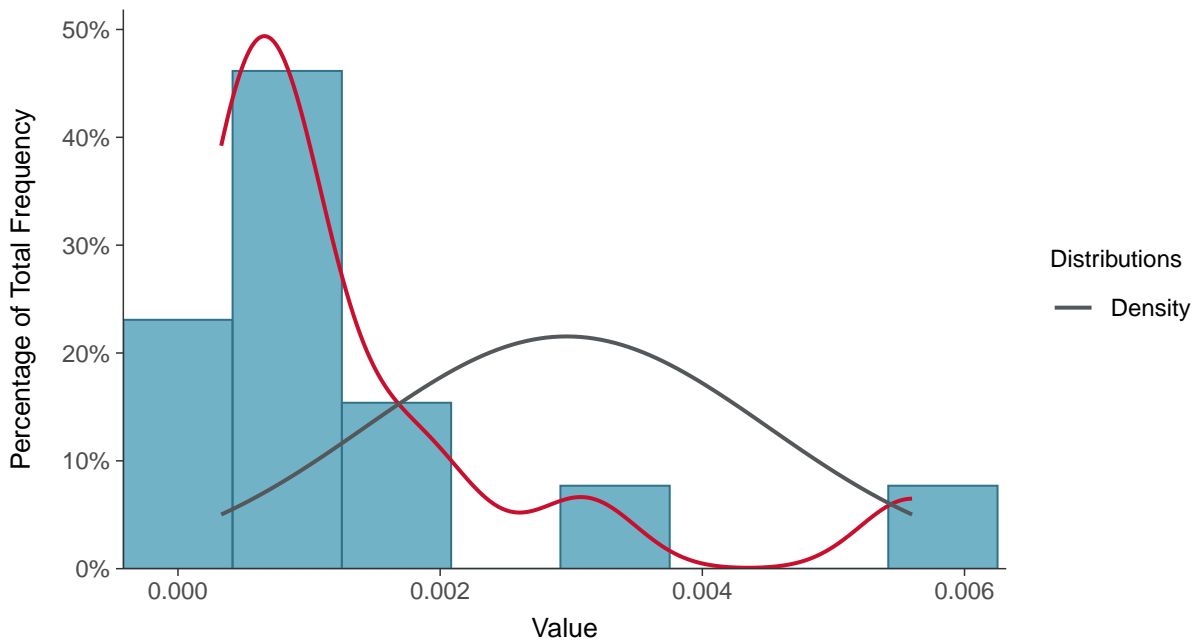
Scatter Plot

Molybdenum, MW-01R (mg/L)



Histogram

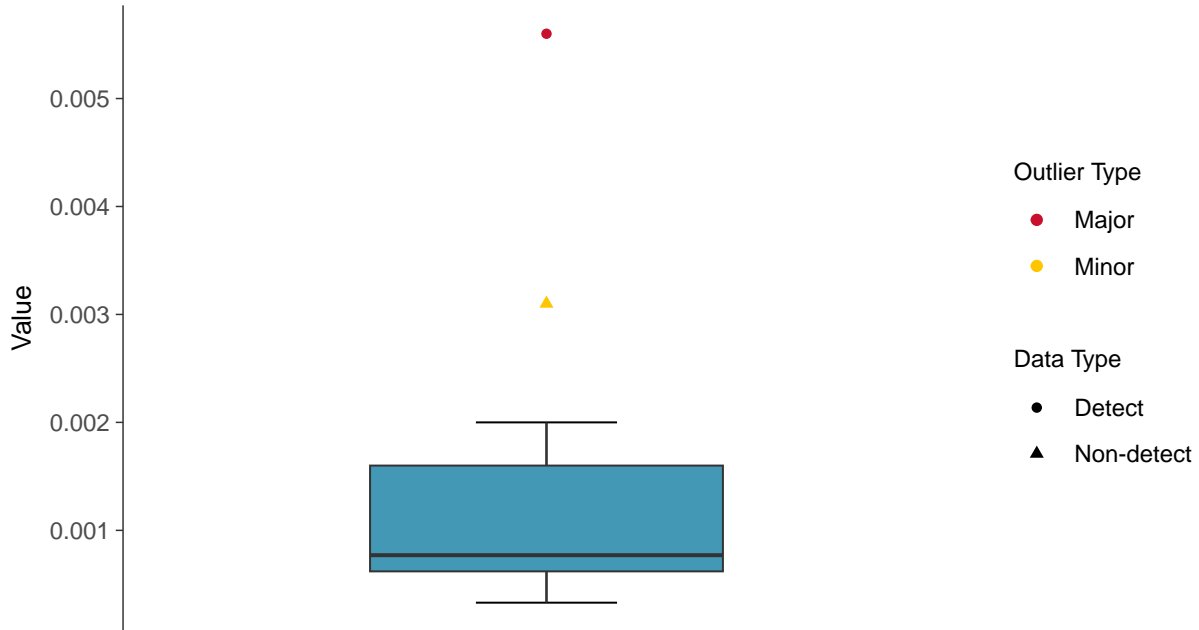
Molybdenum, MW-01R (mg/L)





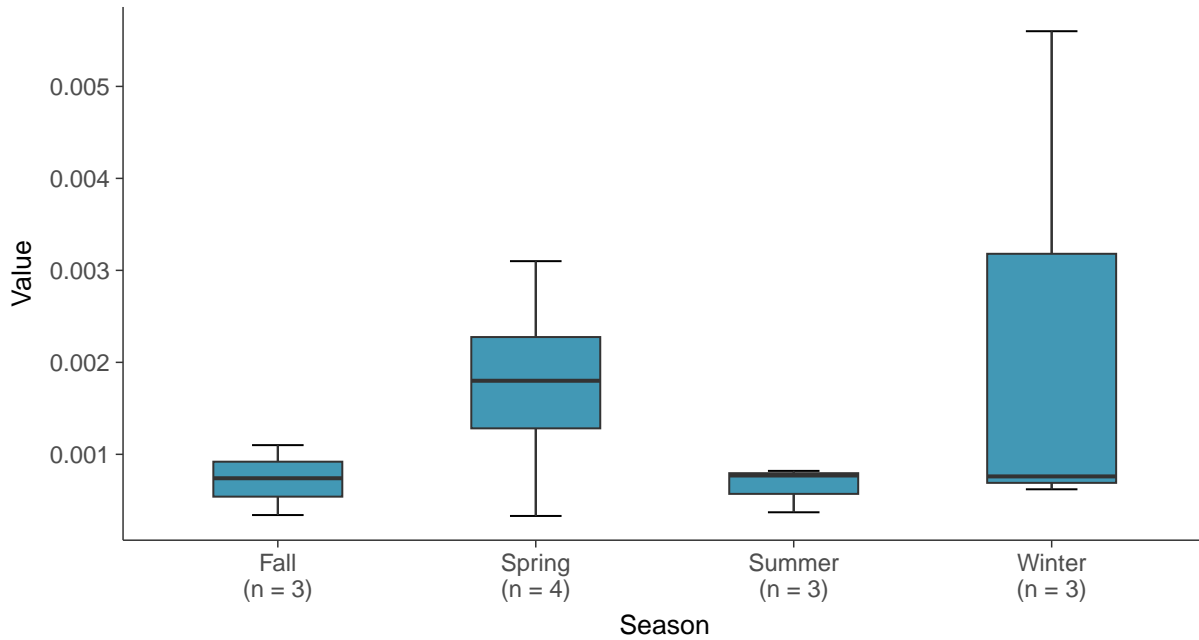
Boxplot

Molybdenum, MW-01R (mg/L)



Boxplot by Season

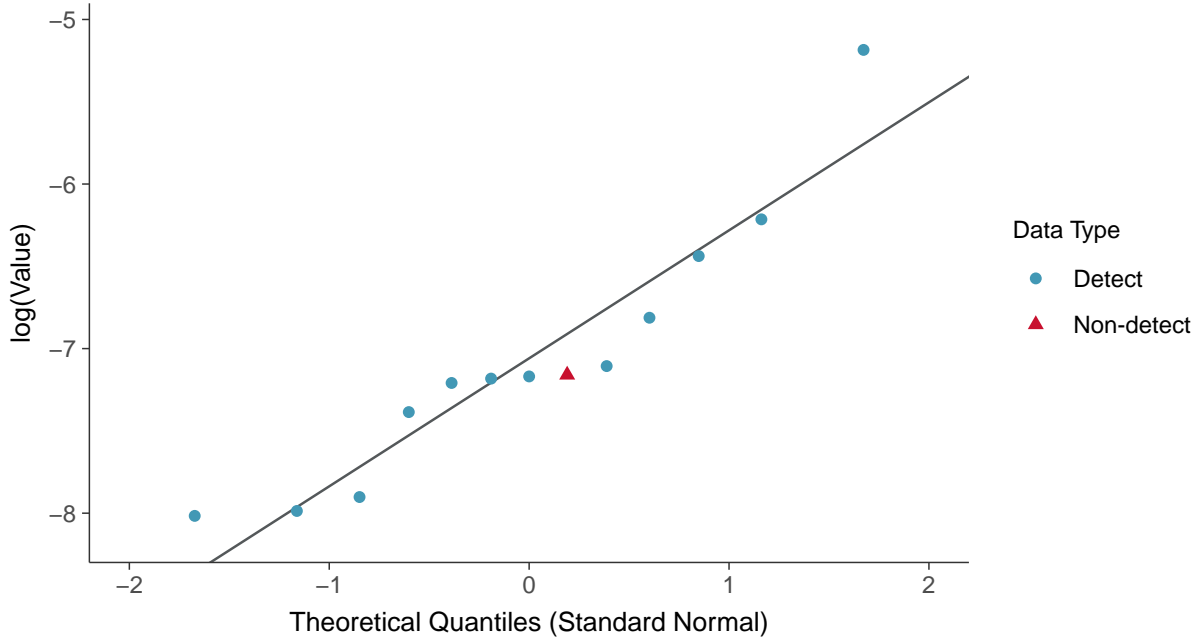
Molybdenum, MW-01R (mg/L)





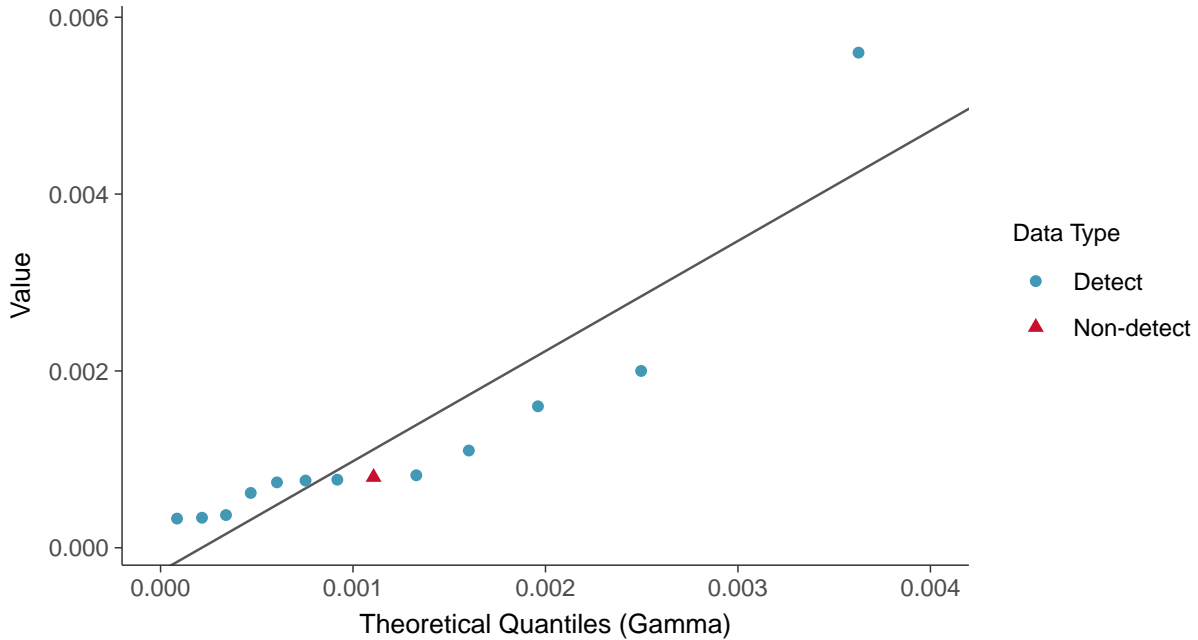
Lognormal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-01R (mg/L)



Gamma Q-Q plot using ROS Imputed Estimates

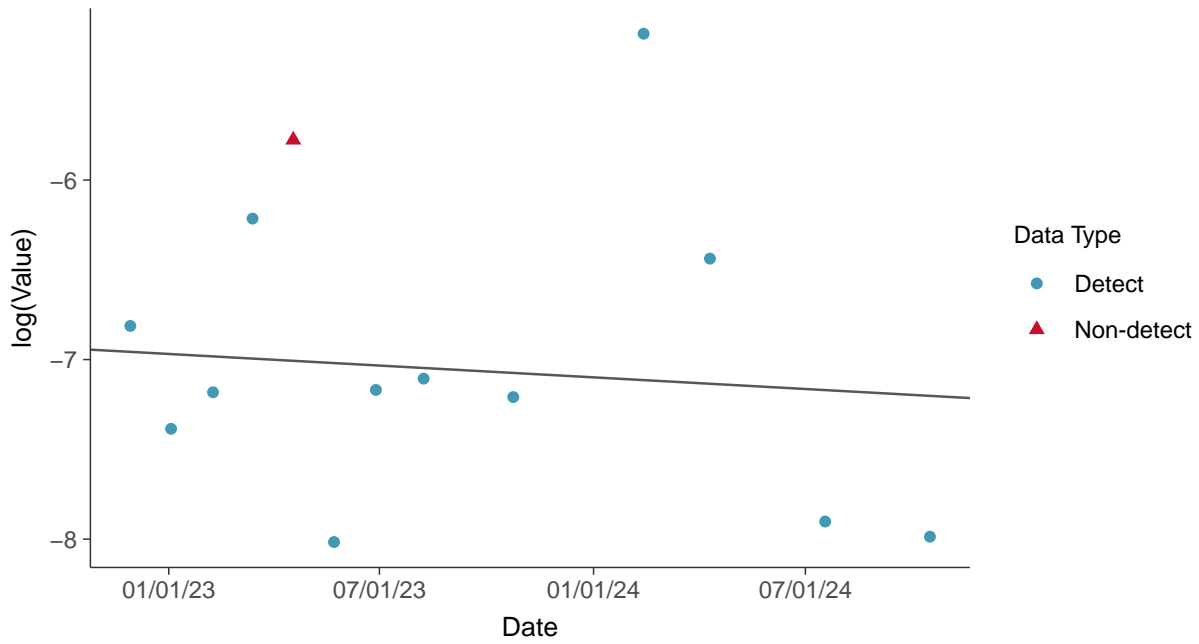
Molybdenum, MW-01R (mg/L)





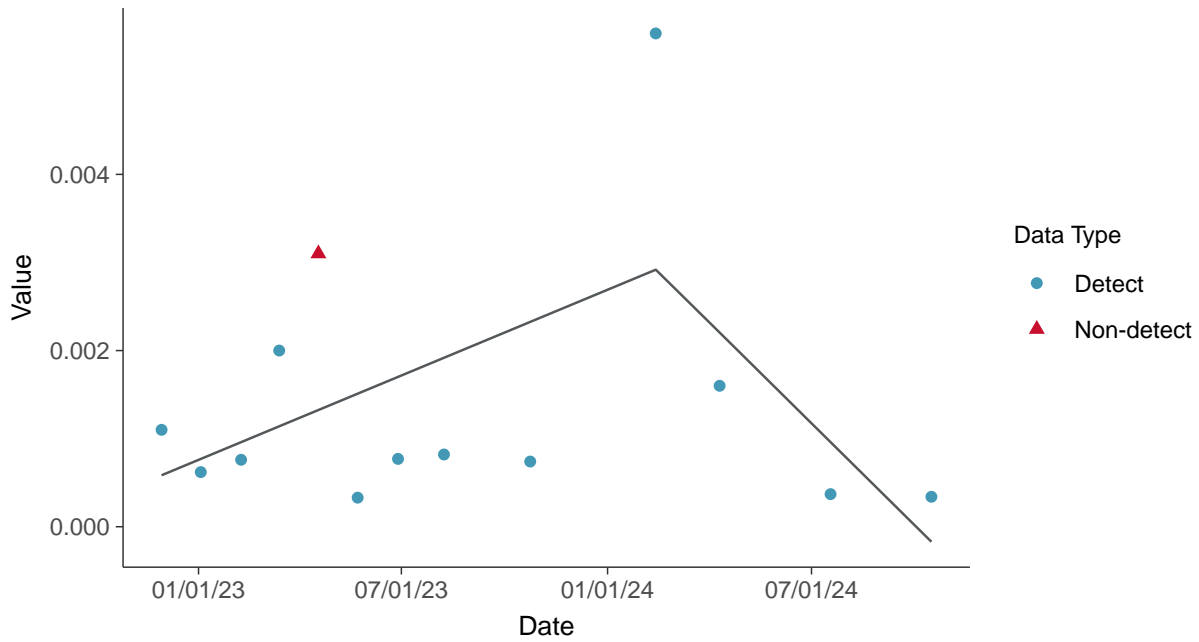
Trend Regression: Lognormal MLE

Molybdenum, MW-01R (mg/L)



Trend Regression: Piecewise Linear-Linear

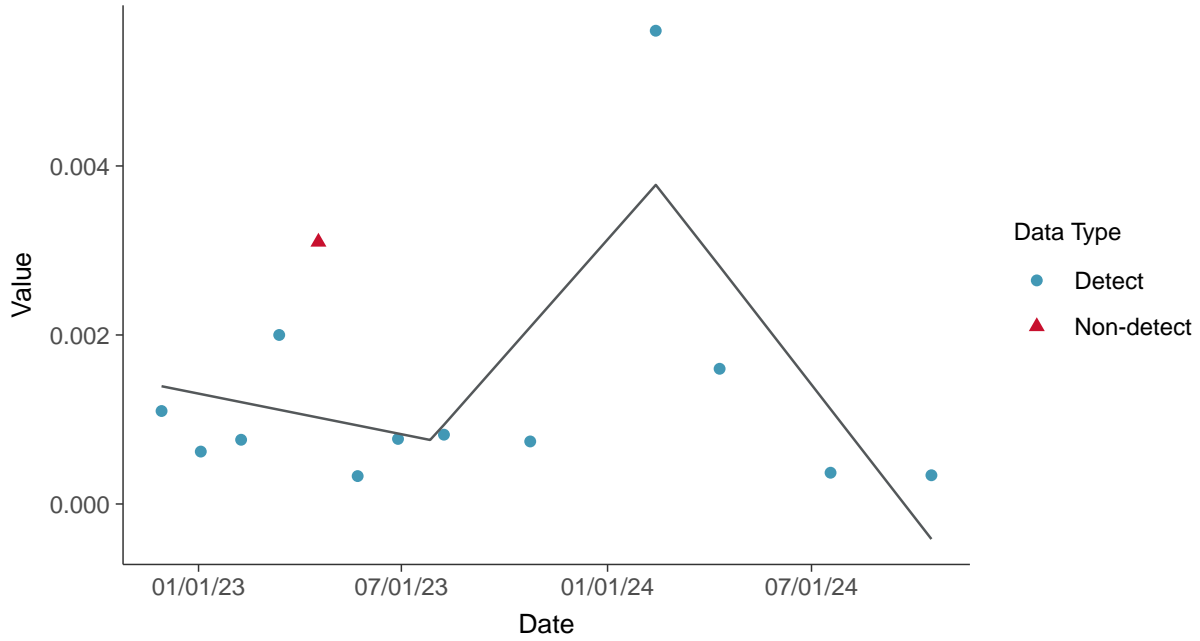
Molybdenum, MW-01R (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-01R (mg/L)



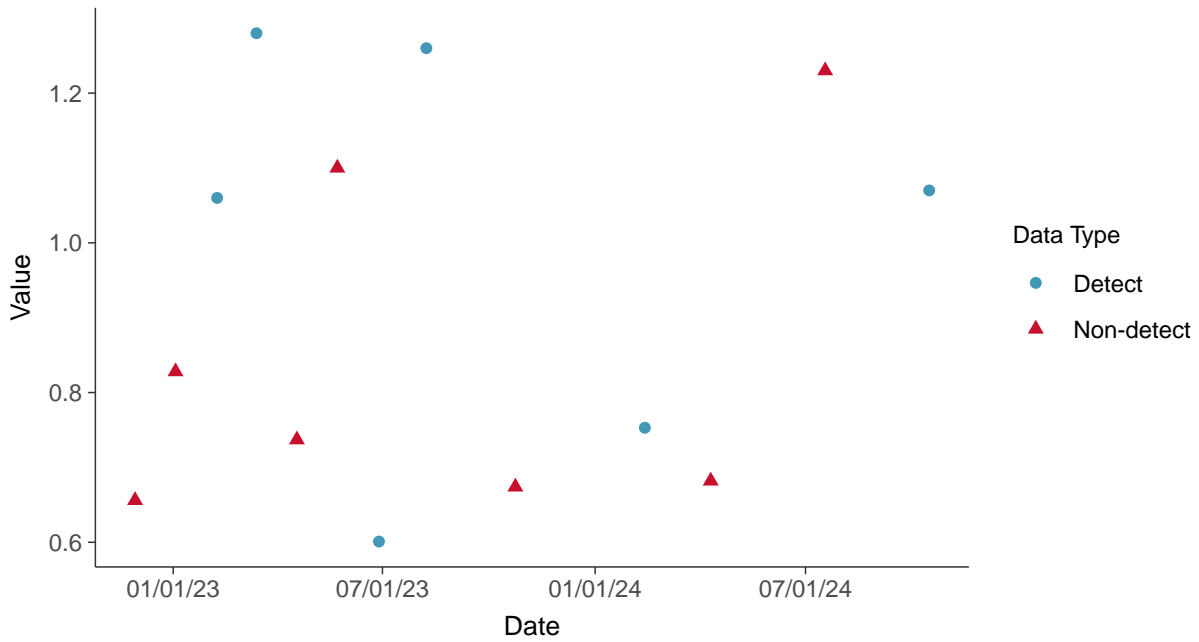


Appendix IV: Radium 226 and 228, MW-01R

ID: 2_11_2_5_121

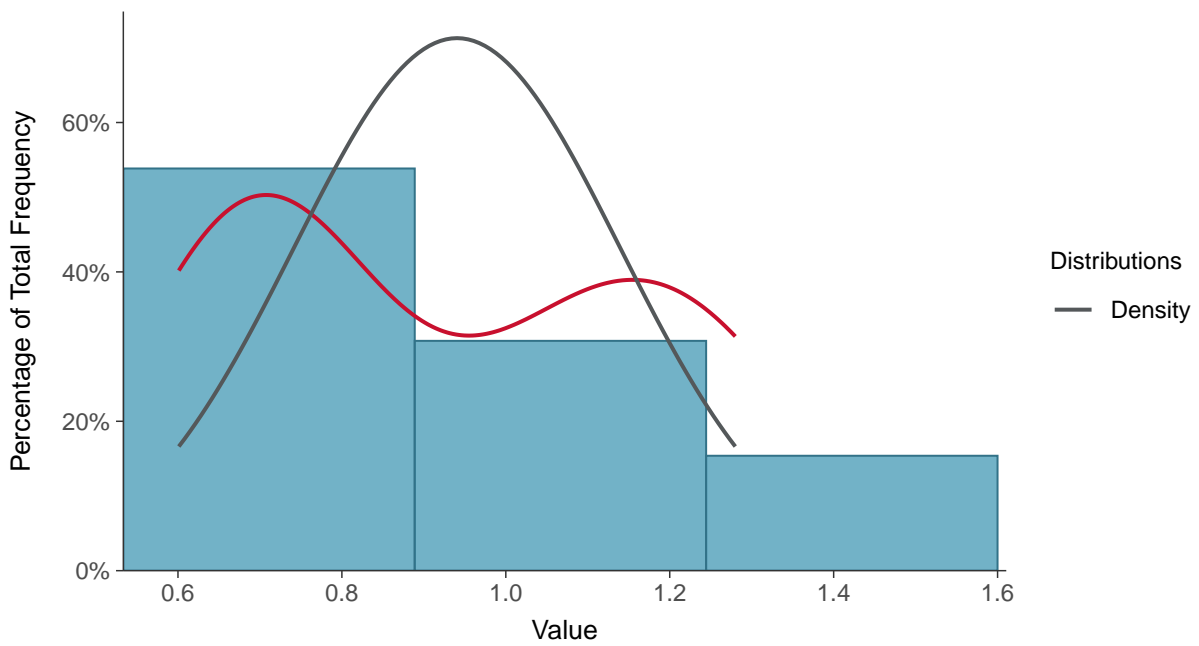
Scatter Plot

Radium 226 and 228, MW-01R (pCi/L)



Histogram

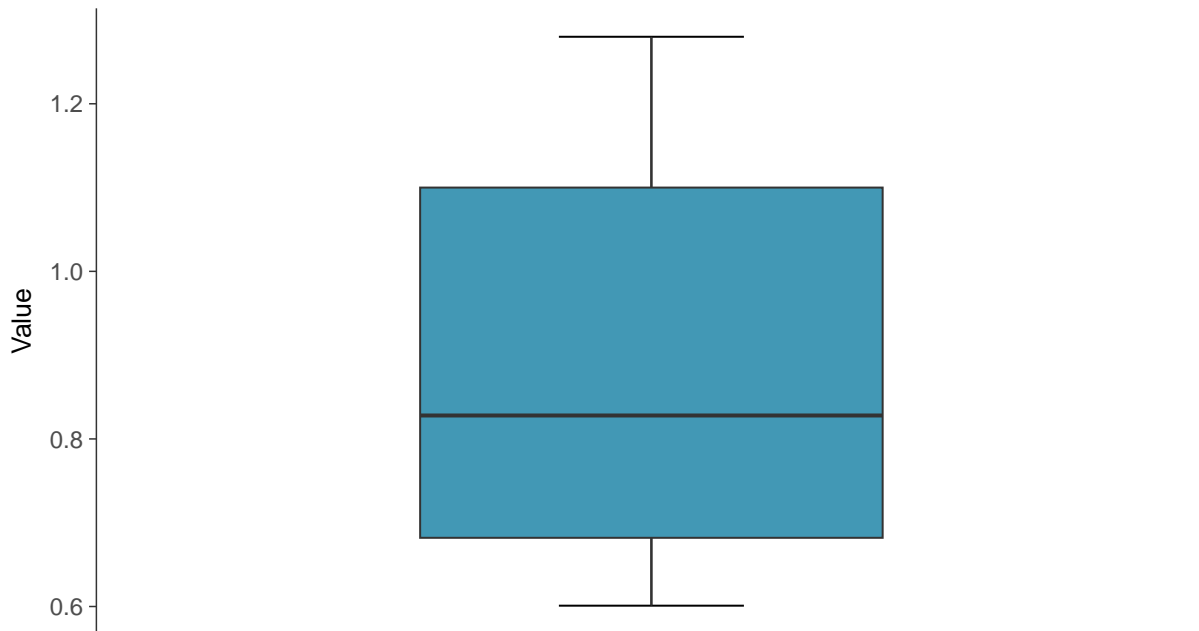
Radium 226 and 228, MW-01R (pCi/L)





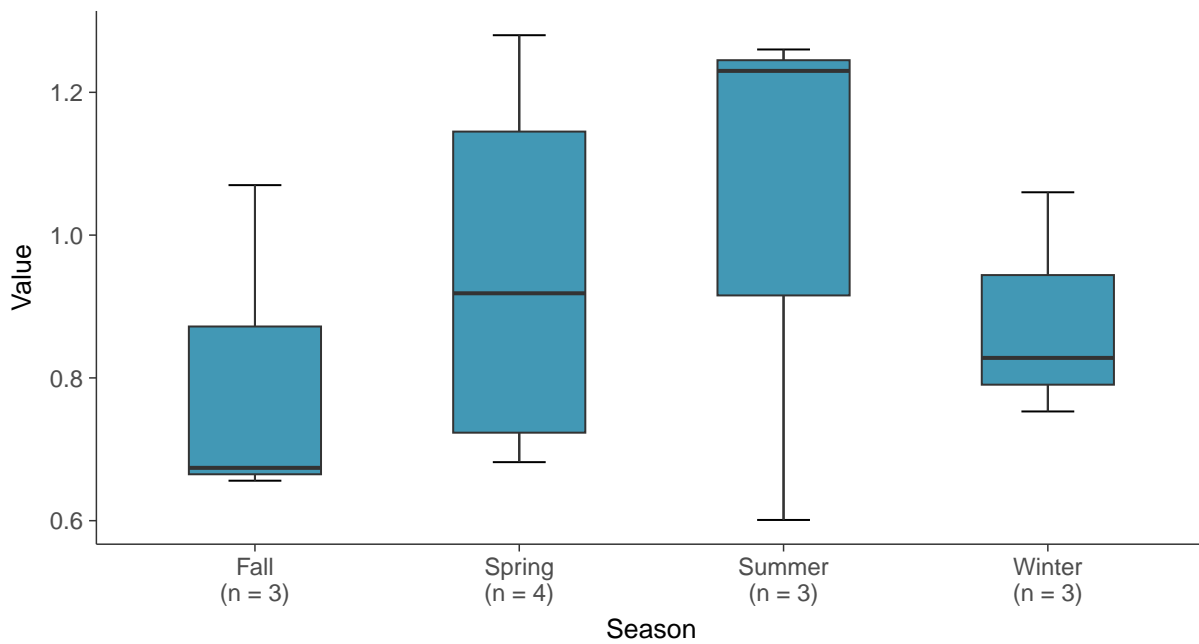
Boxplot

Radium 226 and 228, MW-01R (pCi/L)



Boxplot by Season

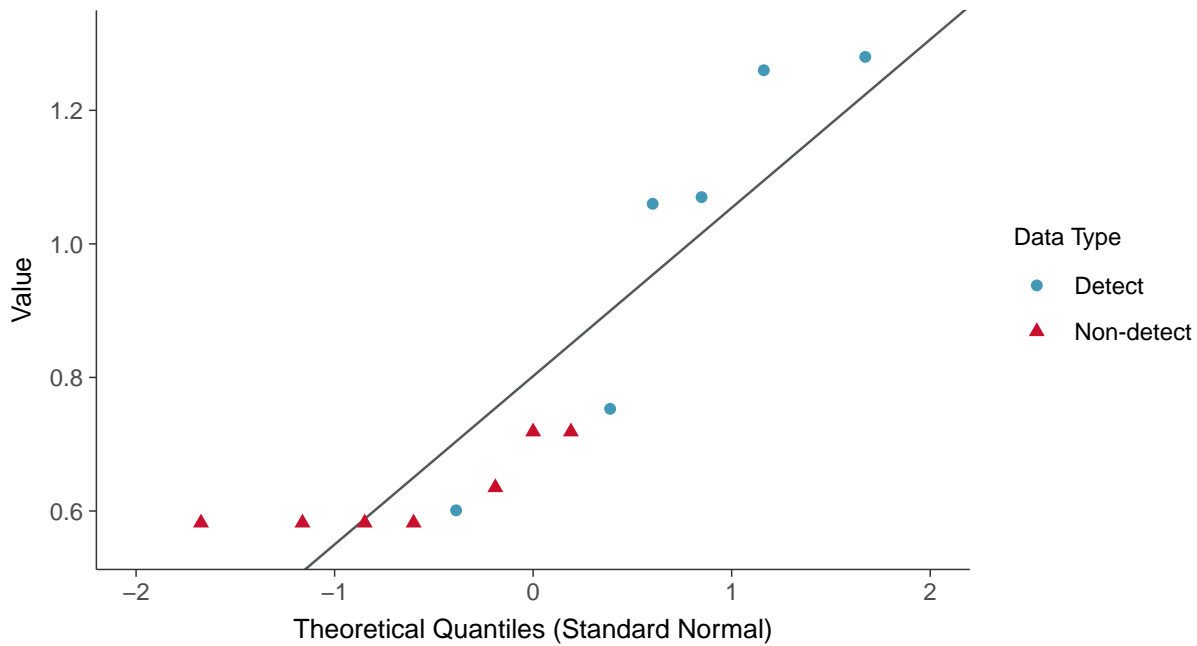
Radium 226 and 228, MW-01R (pCi/L)





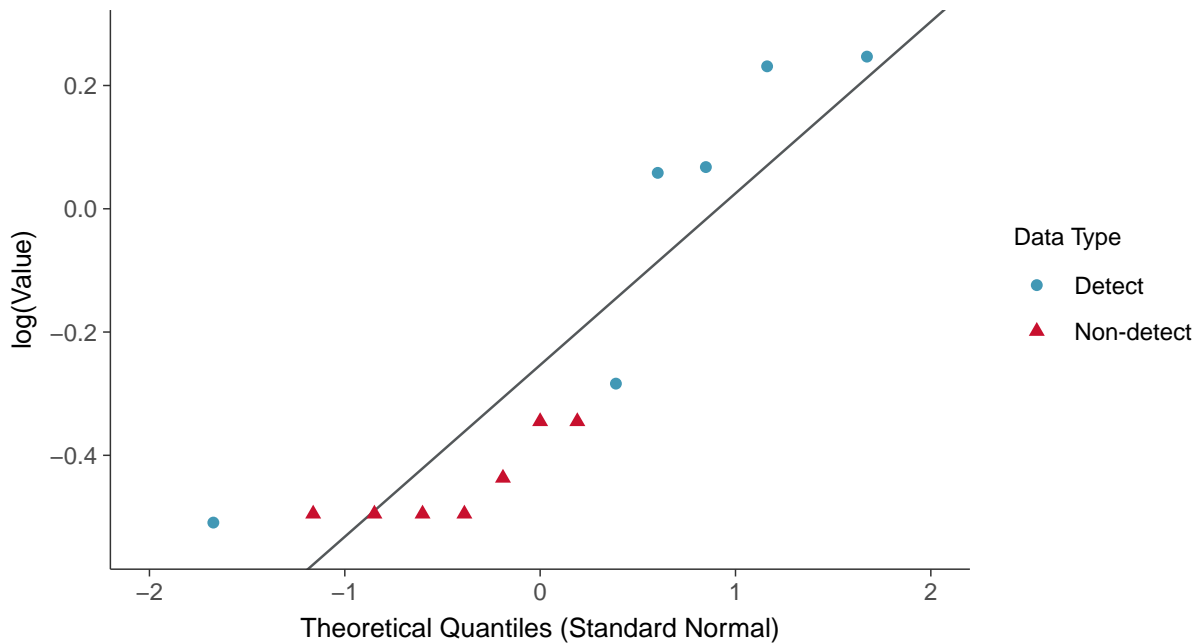
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-01R (pCi/L)



Lognormal Q-Q plot using ROS Imputed Estimates

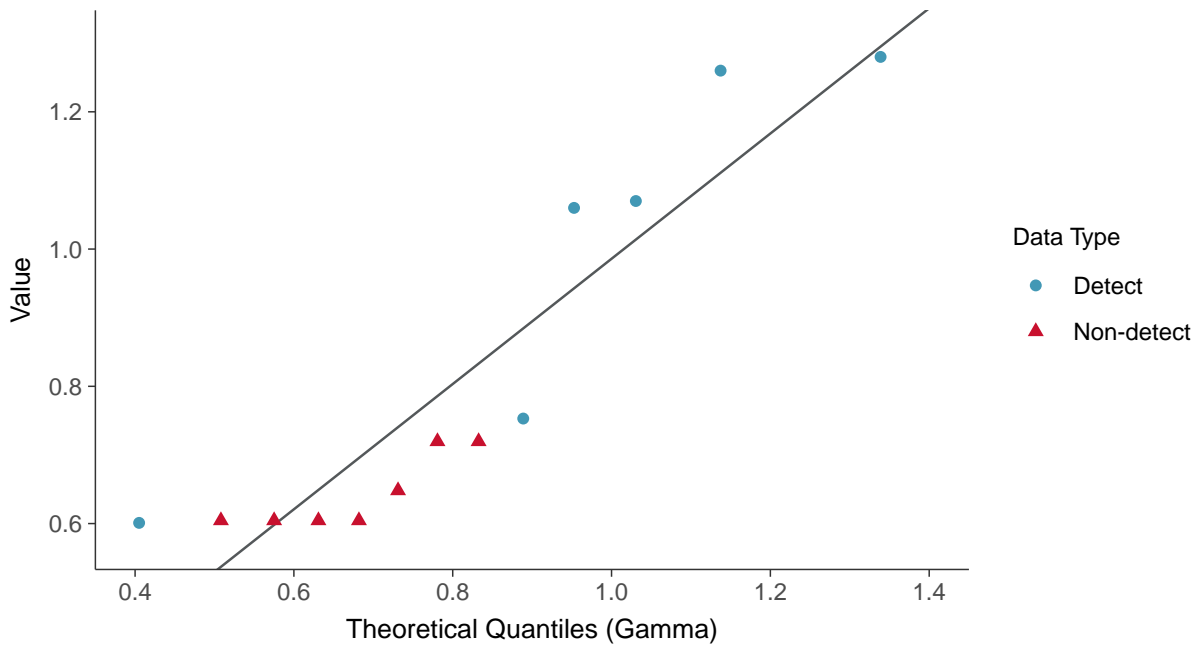
Radium 226 and 228, MW-01R (pCi/L)





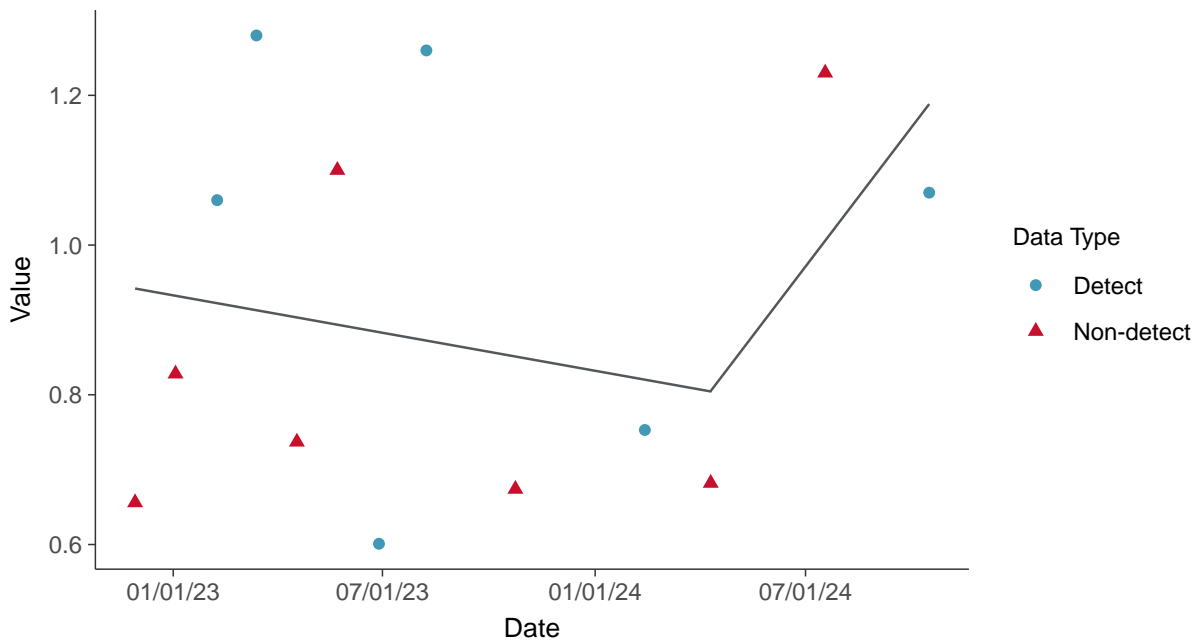
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-01R (pCi/L)



Trend Regression: Piecewise Linear-Linear

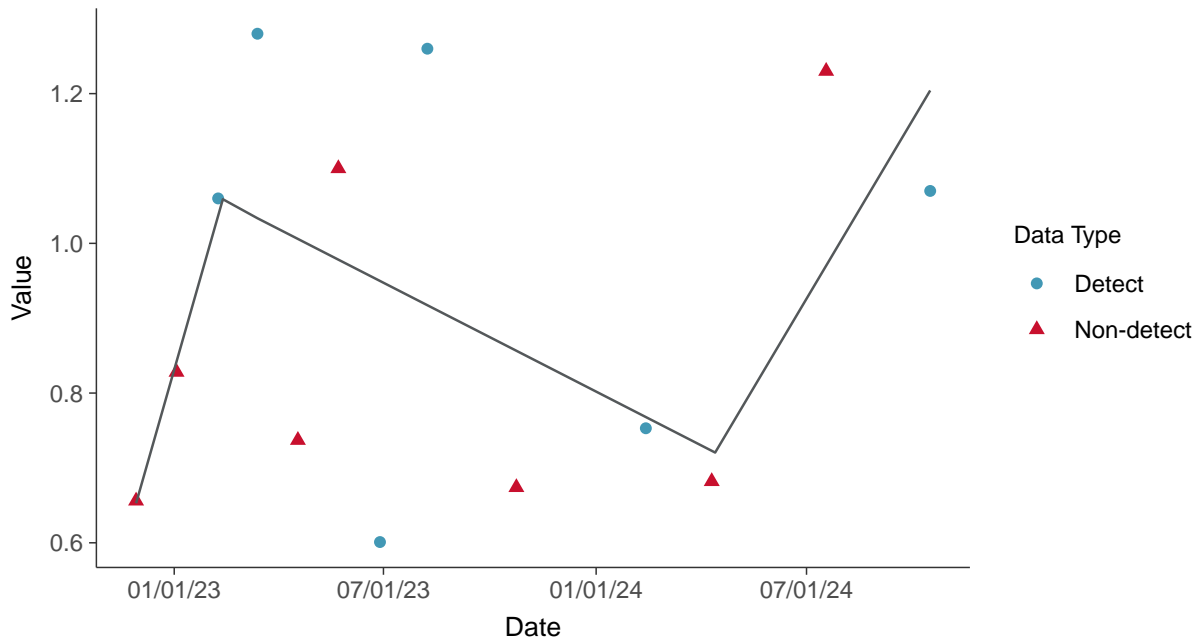
Radium 226 and 228, MW-01R (pCi/L)





Trend Regression: Piecewise Linear-Linear-Linear

Radium 226 and 228, MW-01R (pCi/L)



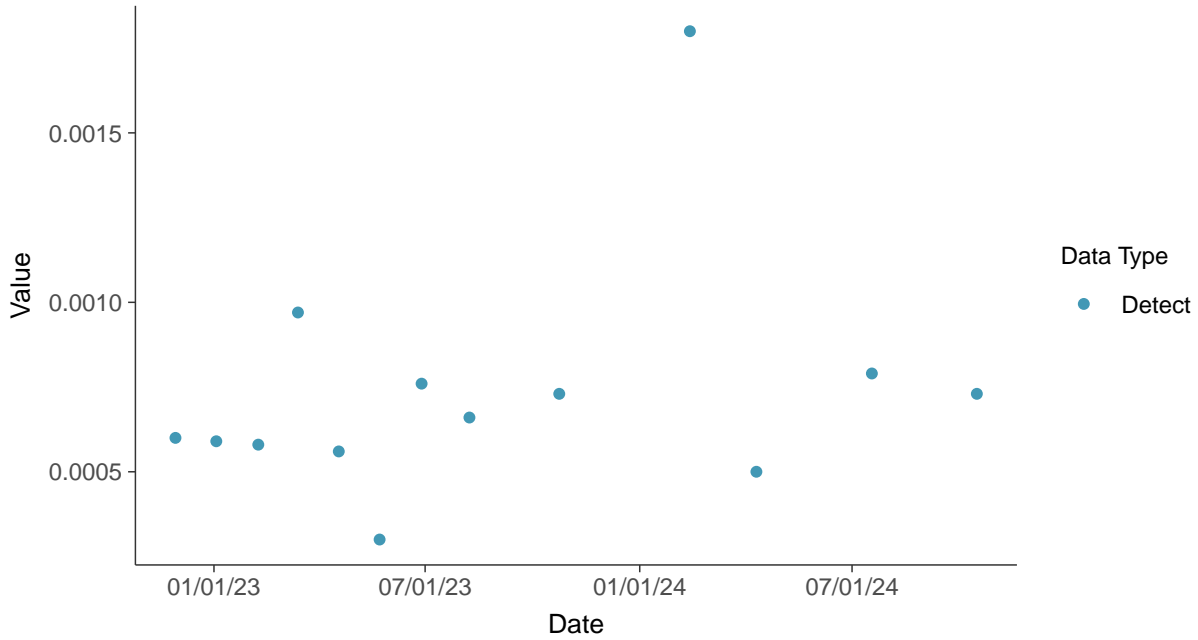


Appendix IV: Selenium, MW-01R

ID: 2_11_2_5_122

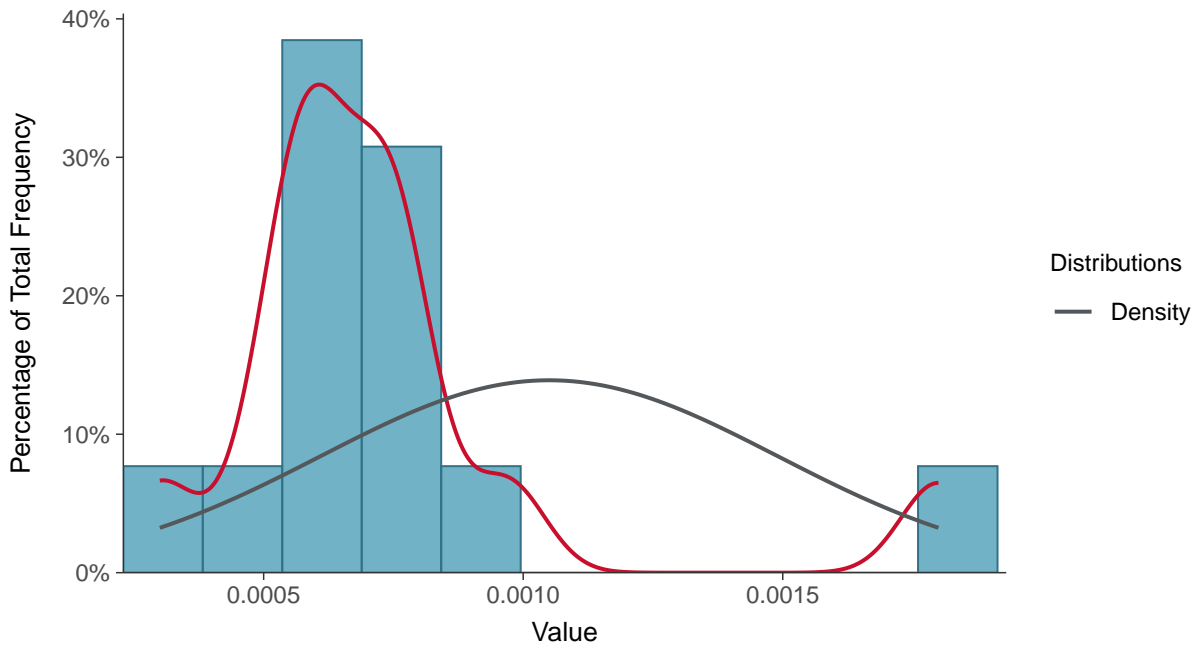
Scatter Plot

Selenium, MW-01R (mg/L)



Histogram

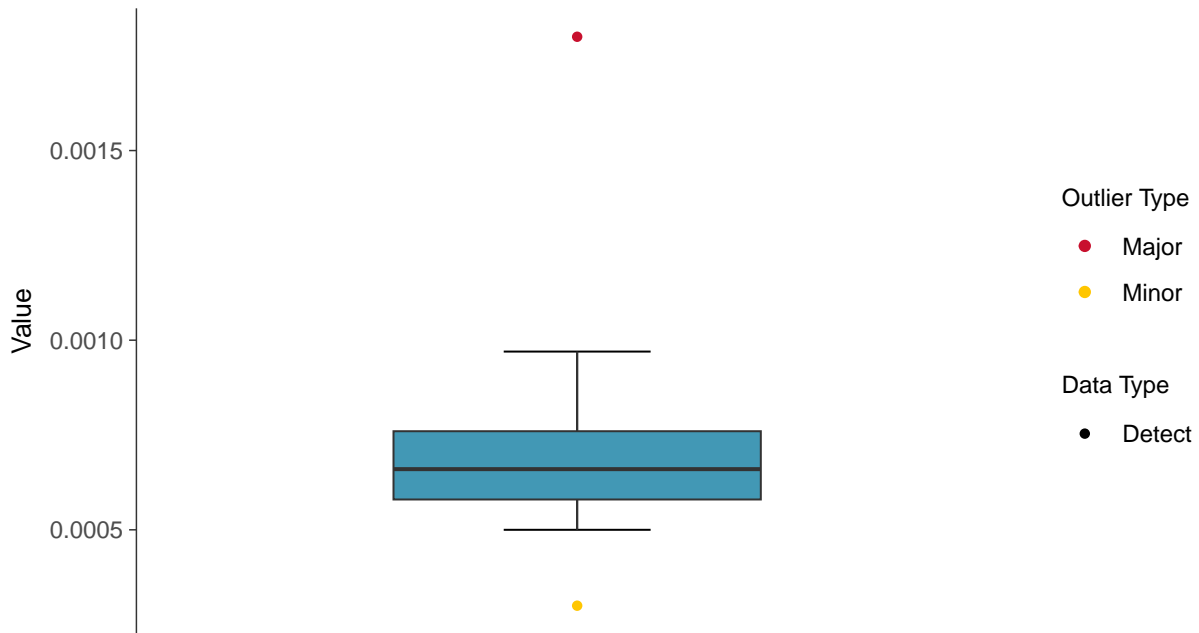
Selenium, MW-01R (mg/L)





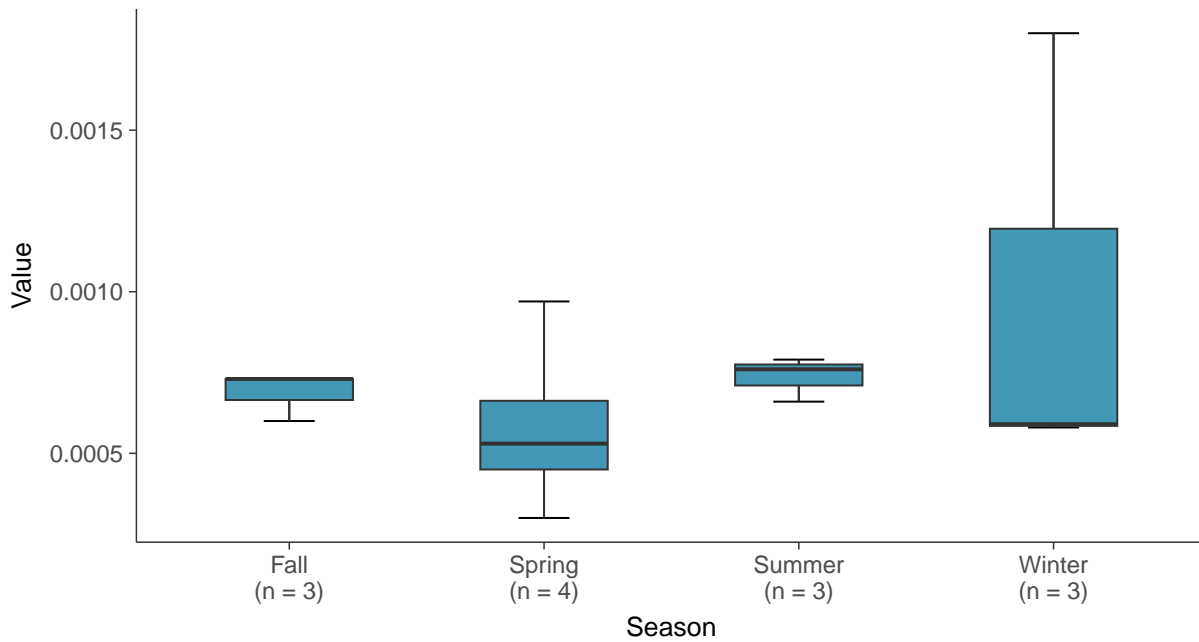
Boxplot

Selenium, MW-01R (mg/L)



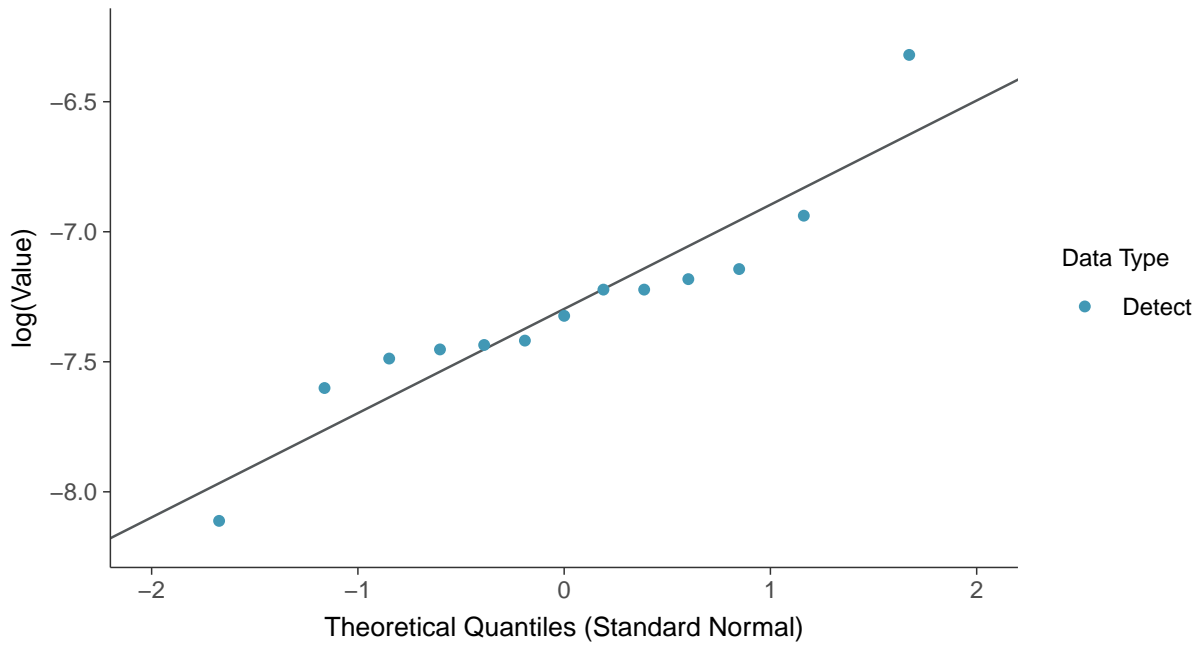
Boxplot by Season

Selenium, MW-01R (mg/L)

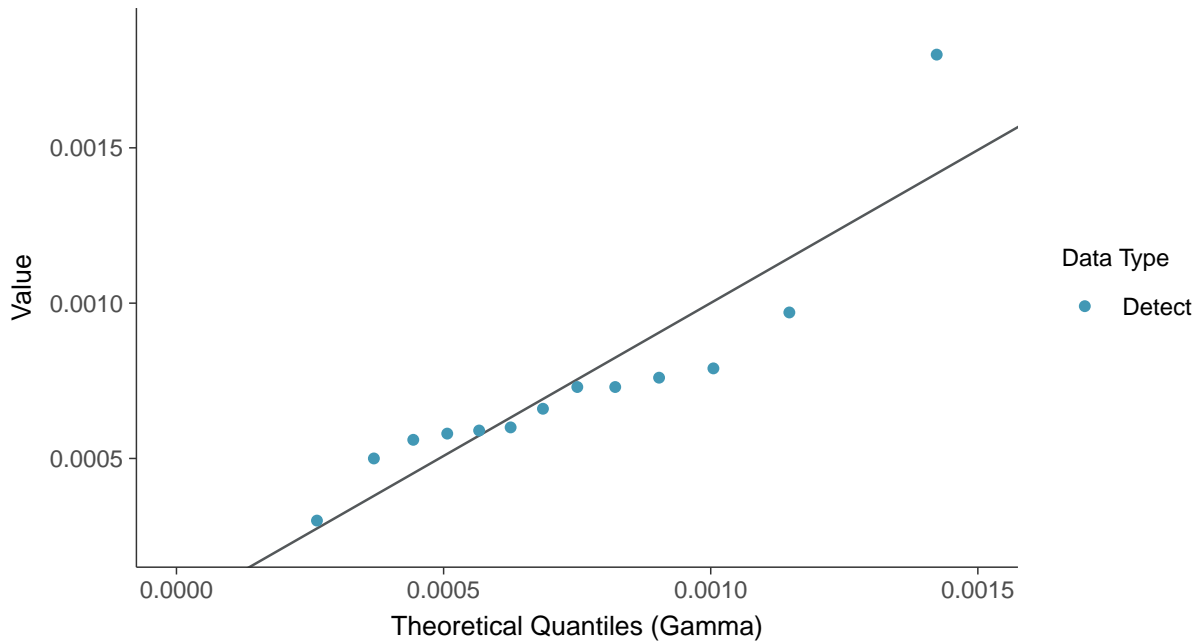




Lognormal Q-Q plot
Selenium, MW-01R (mg/L)



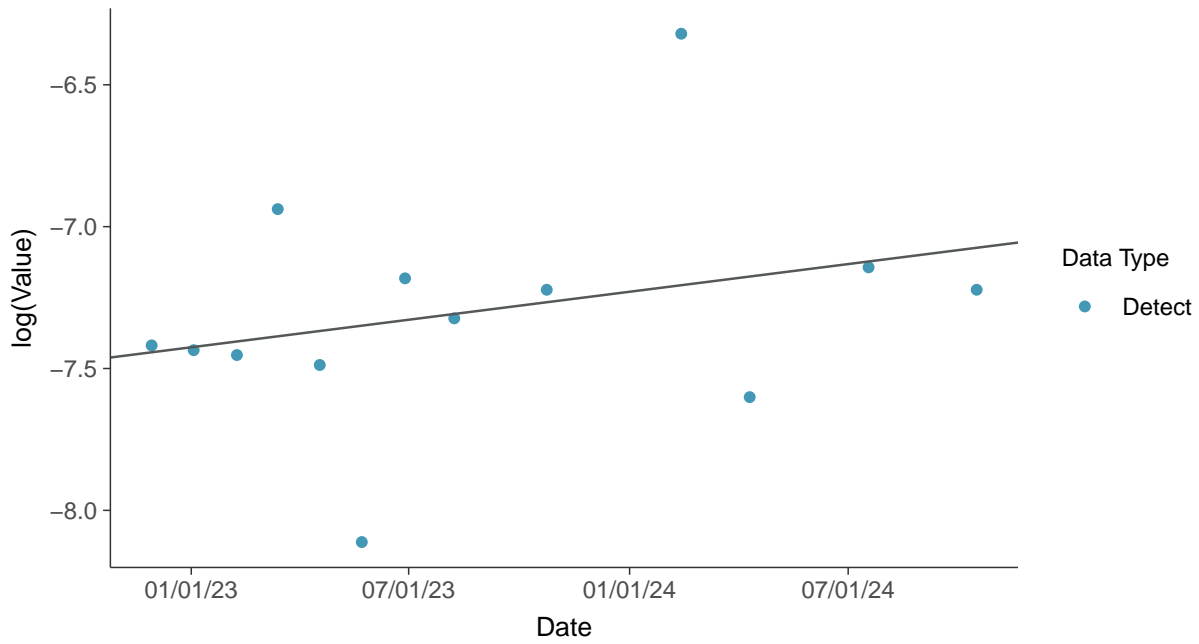
Gamma Q-Q plot
Selenium, MW-01R (mg/L)





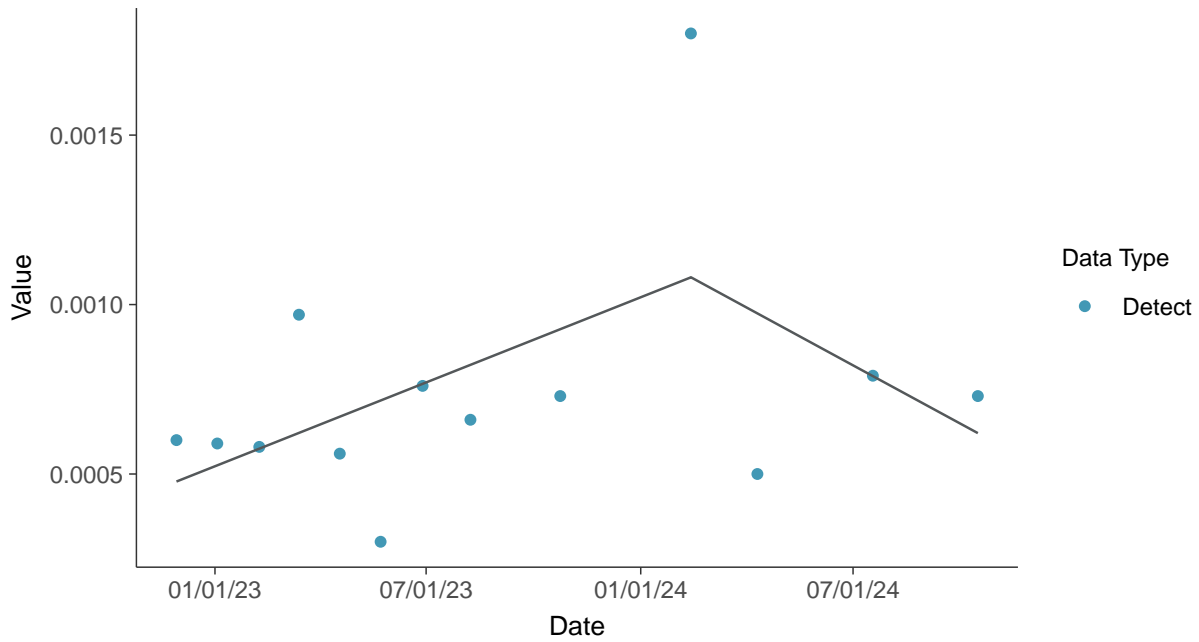
Trend Regression: Lognormal MLE

Selenium, MW-01R (mg/L)



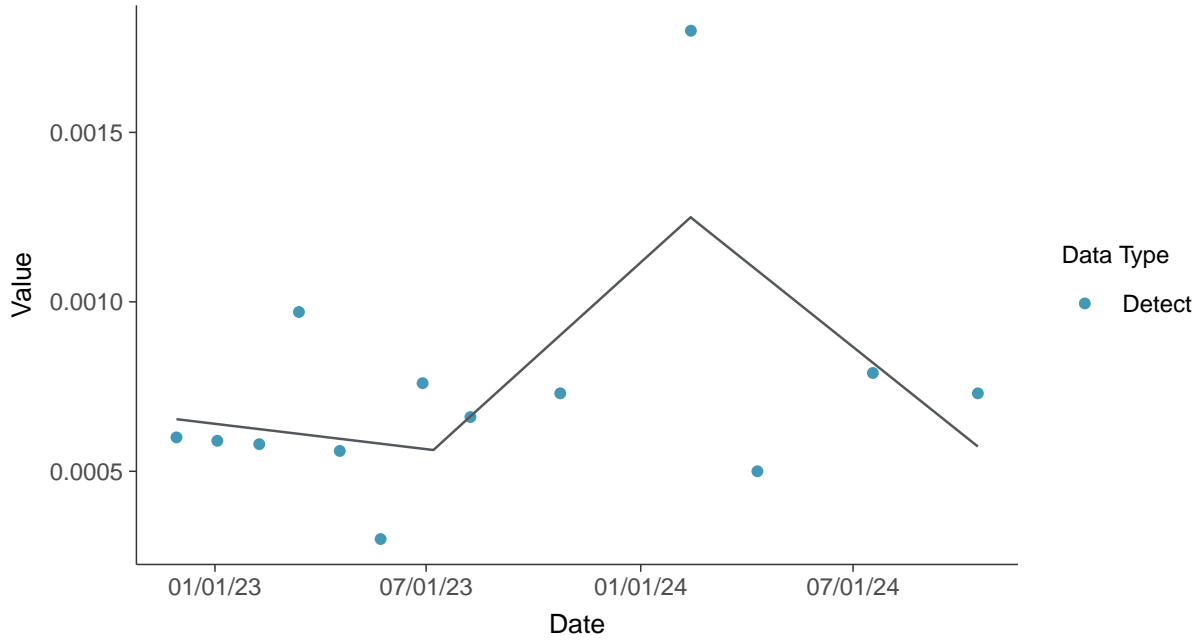
Trend Regression: Piecewise Linear-Linear

Selenium, MW-01R (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear
Selenium, MW-01R (mg/L)



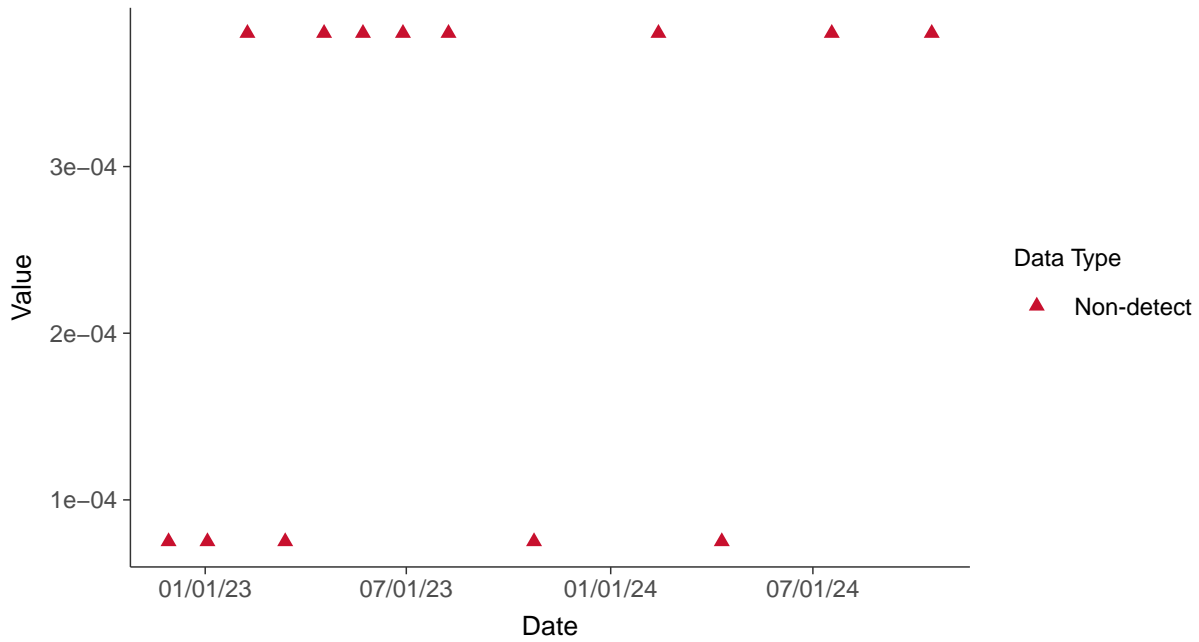


Appendix IV: Thallium, MW-01R

ID: 2_11_2_5_125

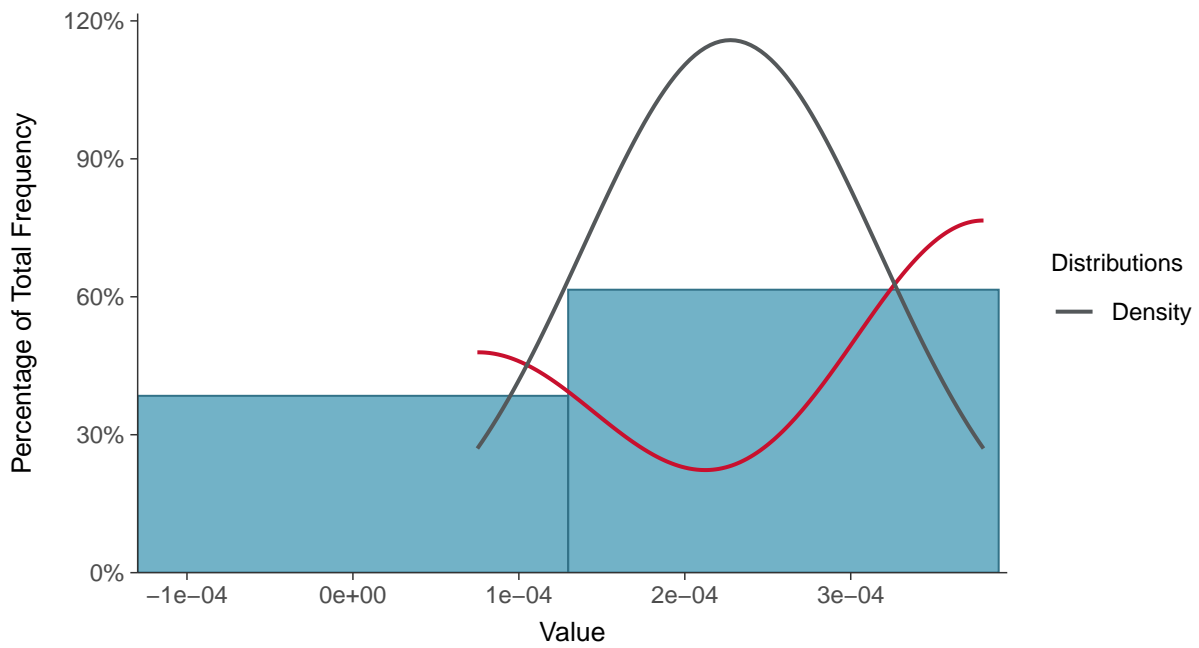
Scatter Plot

Thallium, MW-01R (mg/L)



Histogram

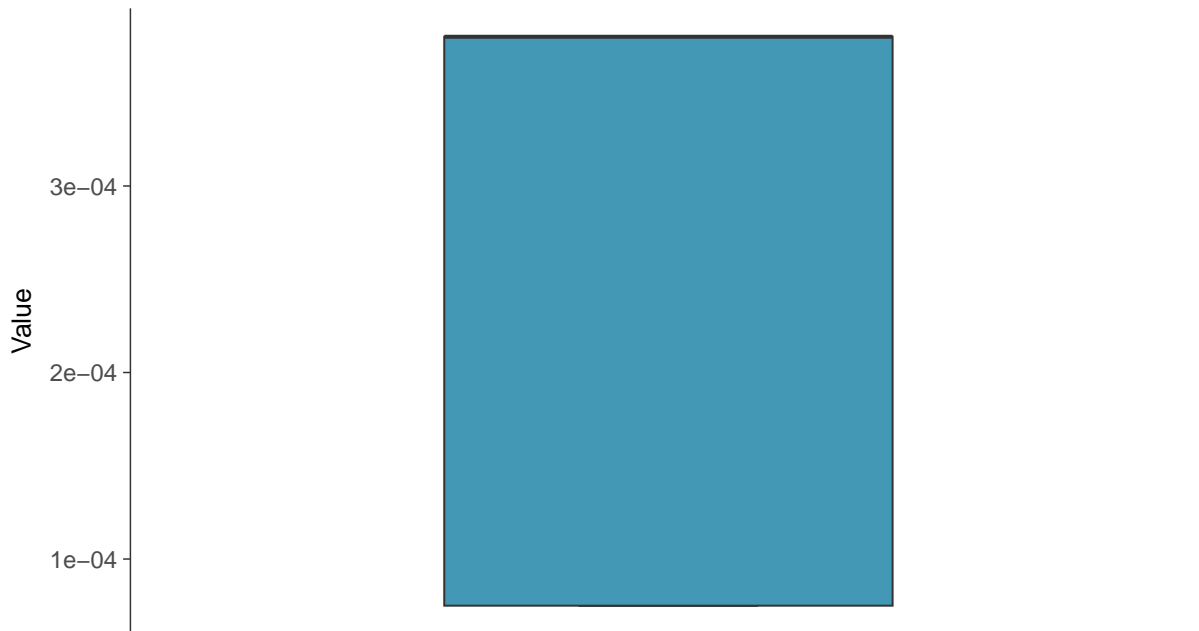
Thallium, MW-01R (mg/L)





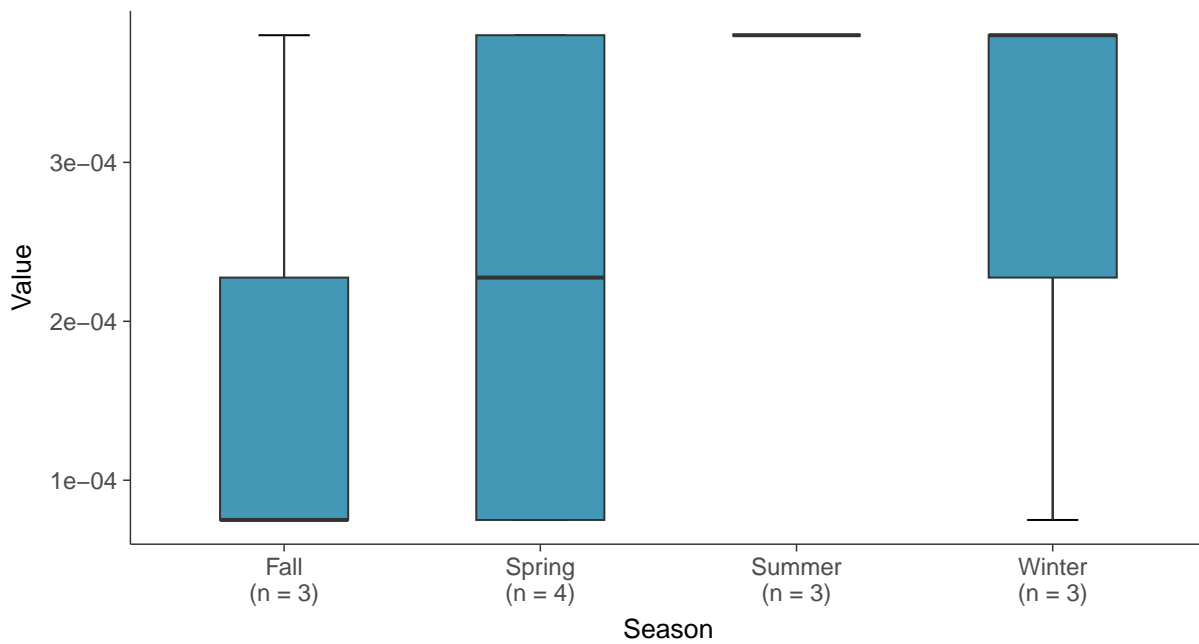
Boxplot

Thallium, MW-01R (mg/L)



Boxplot by Season

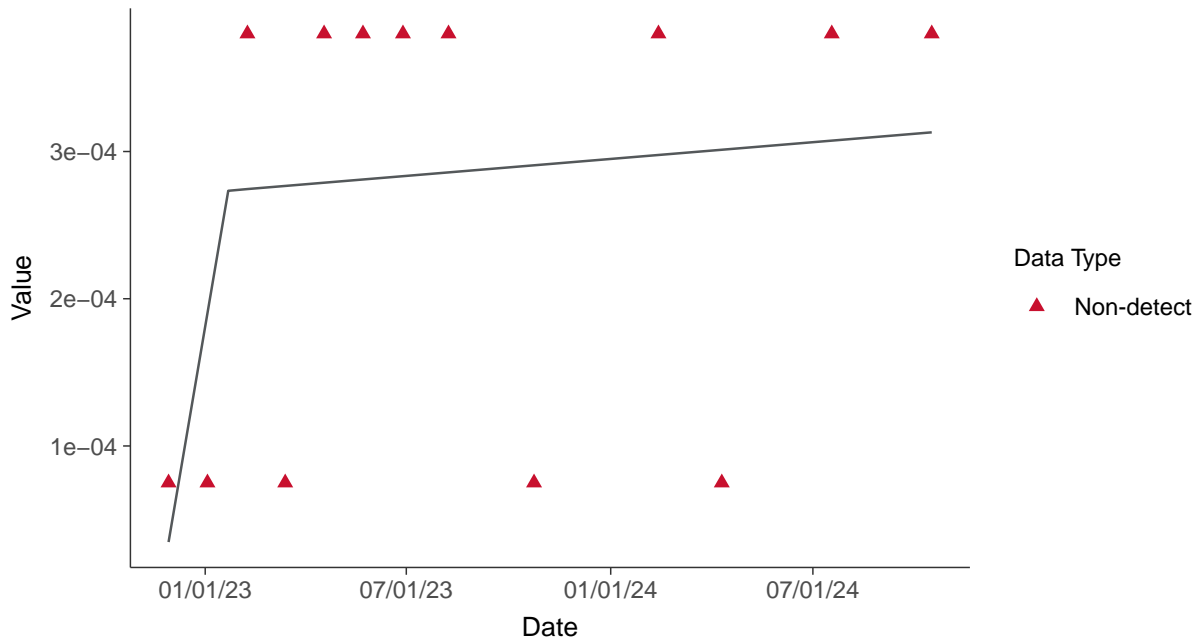
Thallium, MW-01R (mg/L)





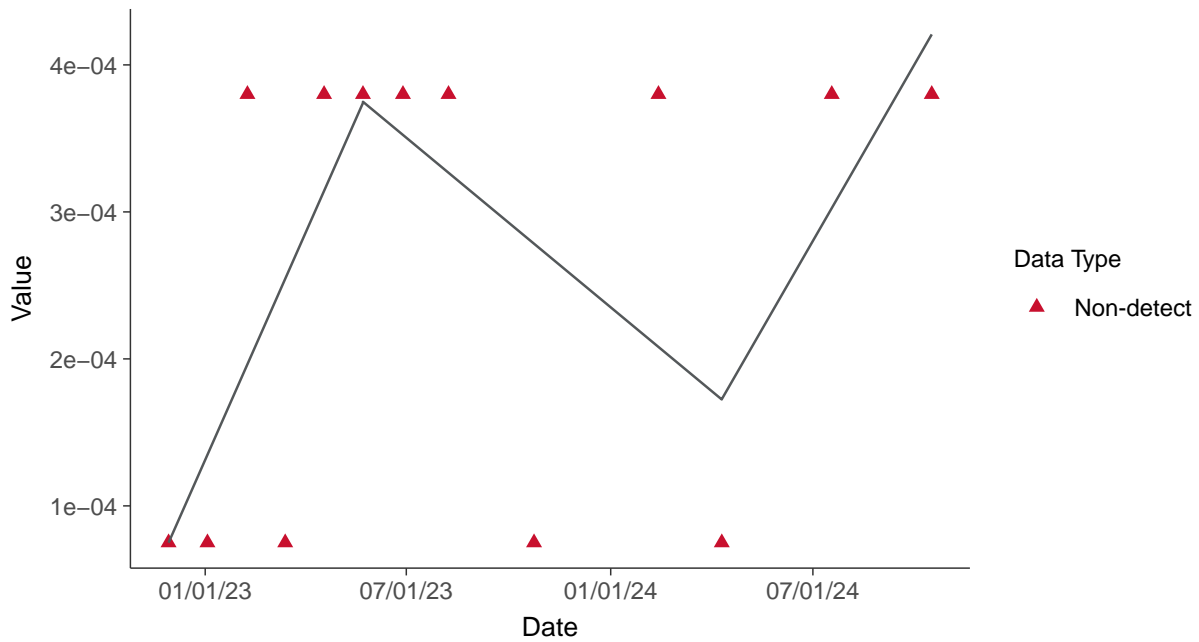
Trend Regression: Piecewise Linear-Linear

Thallium, MW-01R (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Thallium, MW-01R (mg/L)



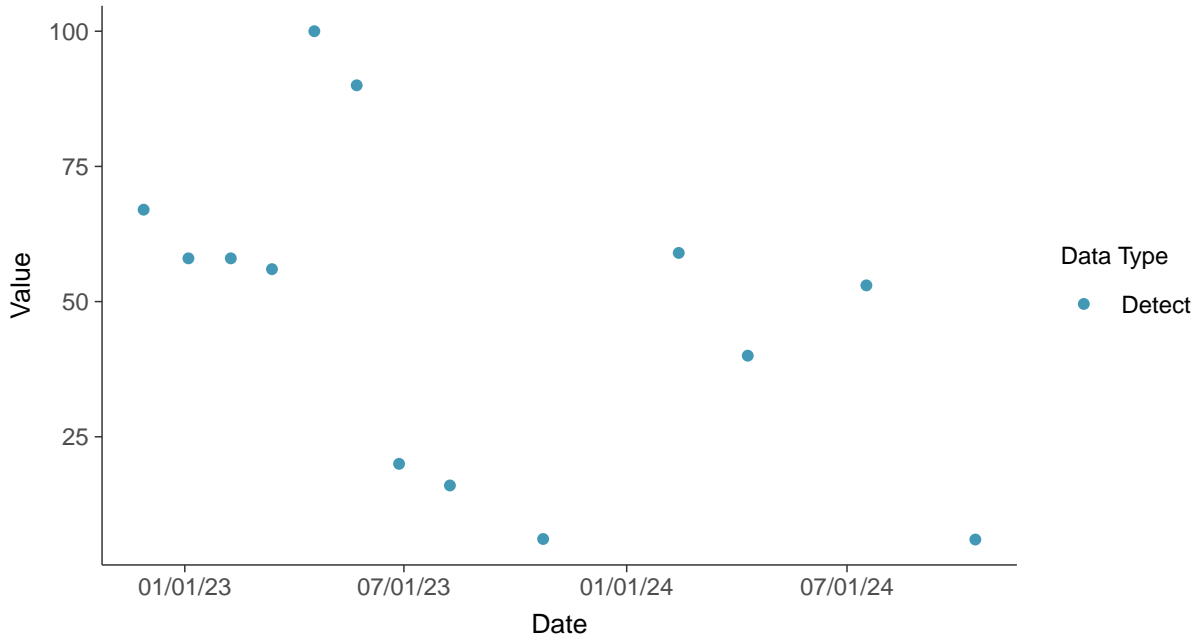


Additional Parameters: Total Suspended Solids, MW-02

ID: 2_12_2_3_127

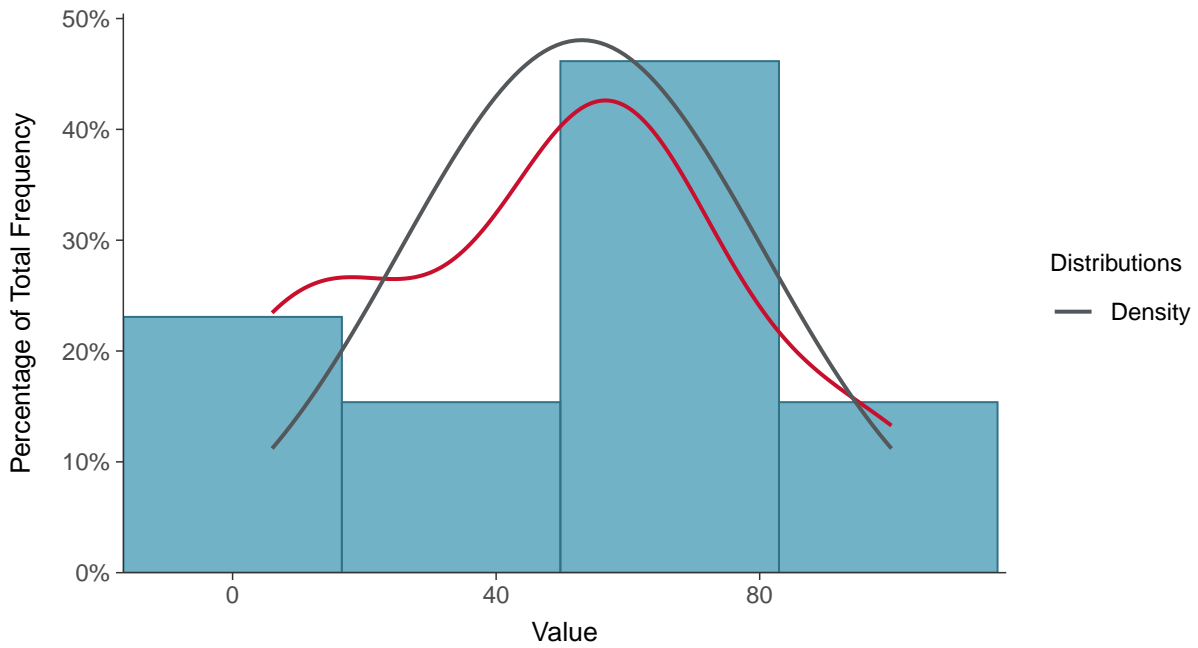
Scatter Plot

Total Suspended Solids, MW-02 (mg/L)



Histogram

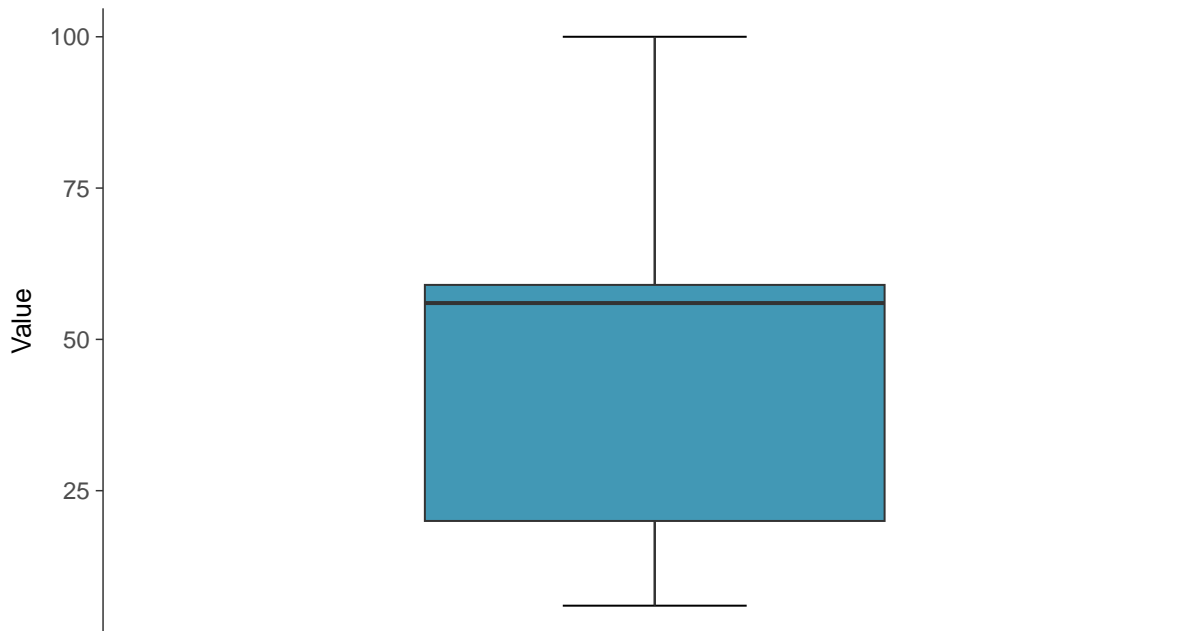
Total Suspended Solids, MW-02 (mg/L)





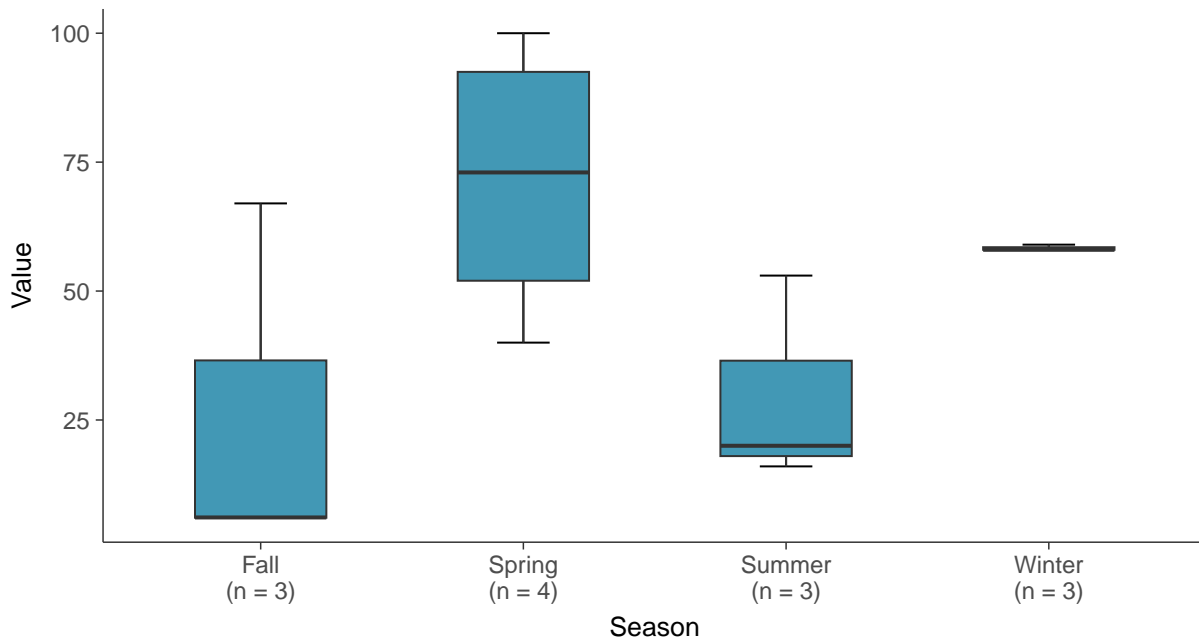
Boxplot

Total Suspended Solids, MW-02 (mg/L)



Boxplot by Season

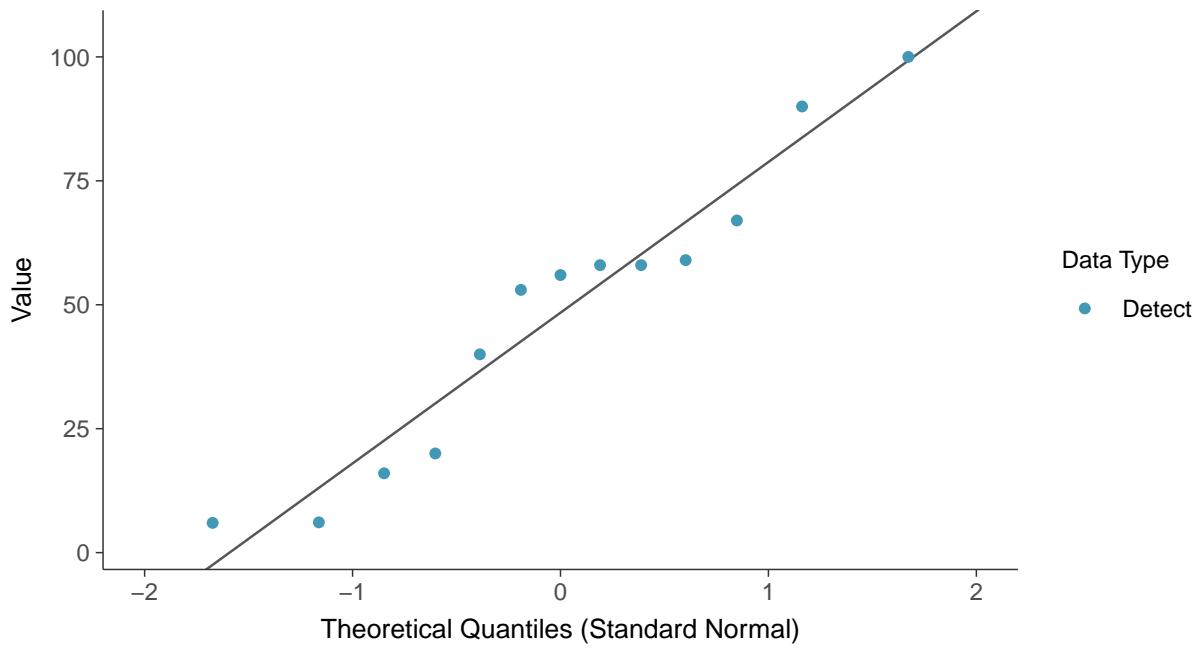
Total Suspended Solids, MW-02 (mg/L)





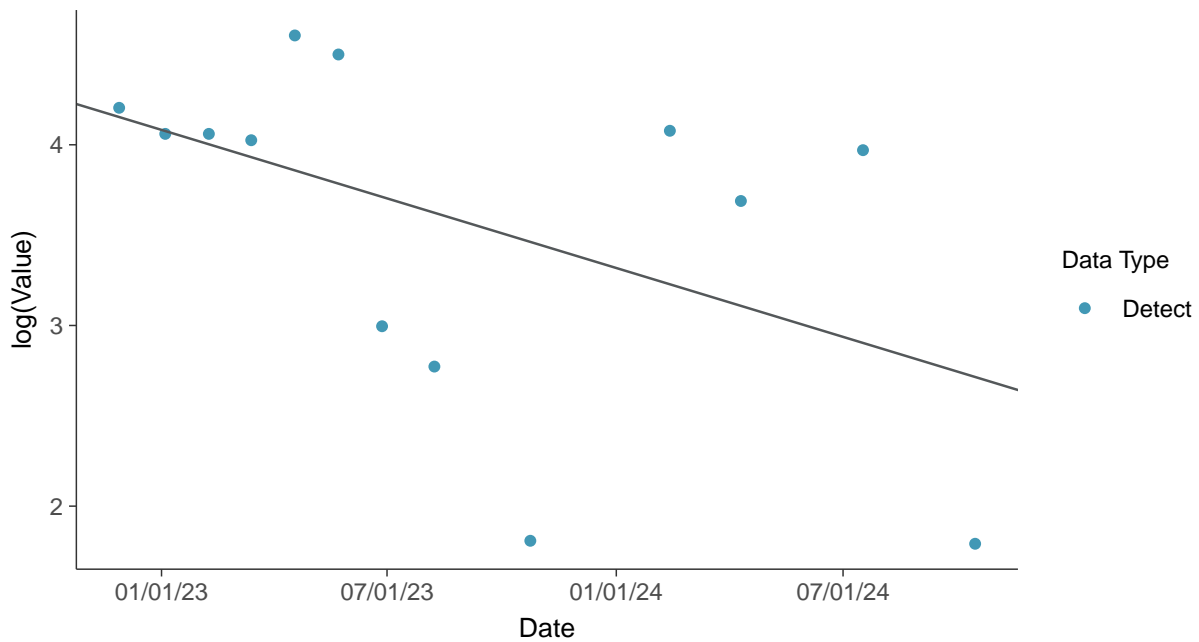
Normal Q-Q plot

Total Suspended Solids, MW-02 (mg/L)



Trend Regression: Lognormal MLE

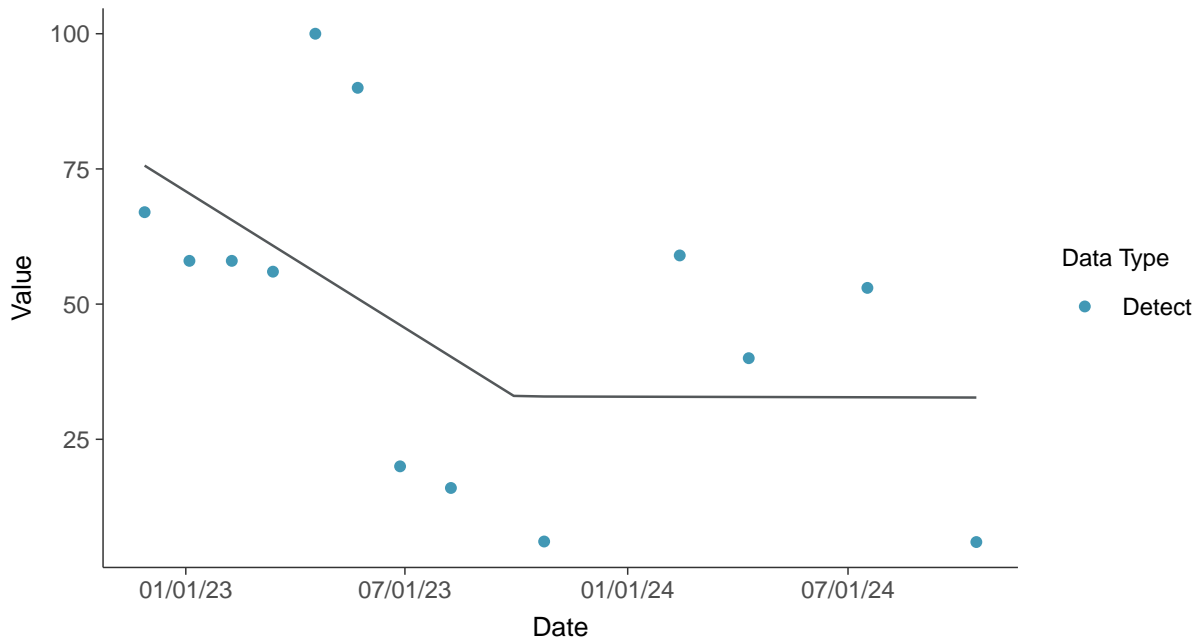
Total Suspended Solids, MW-02 (mg/L)





Trend Regression: Piecewise Linear-Linear

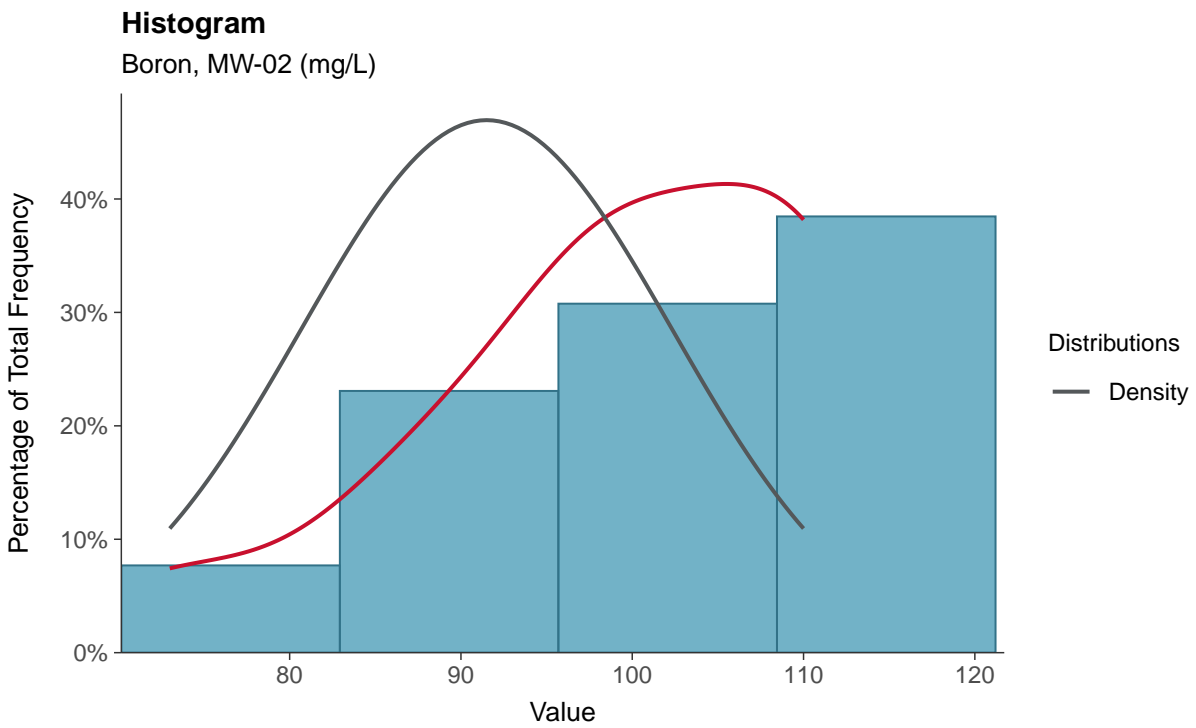
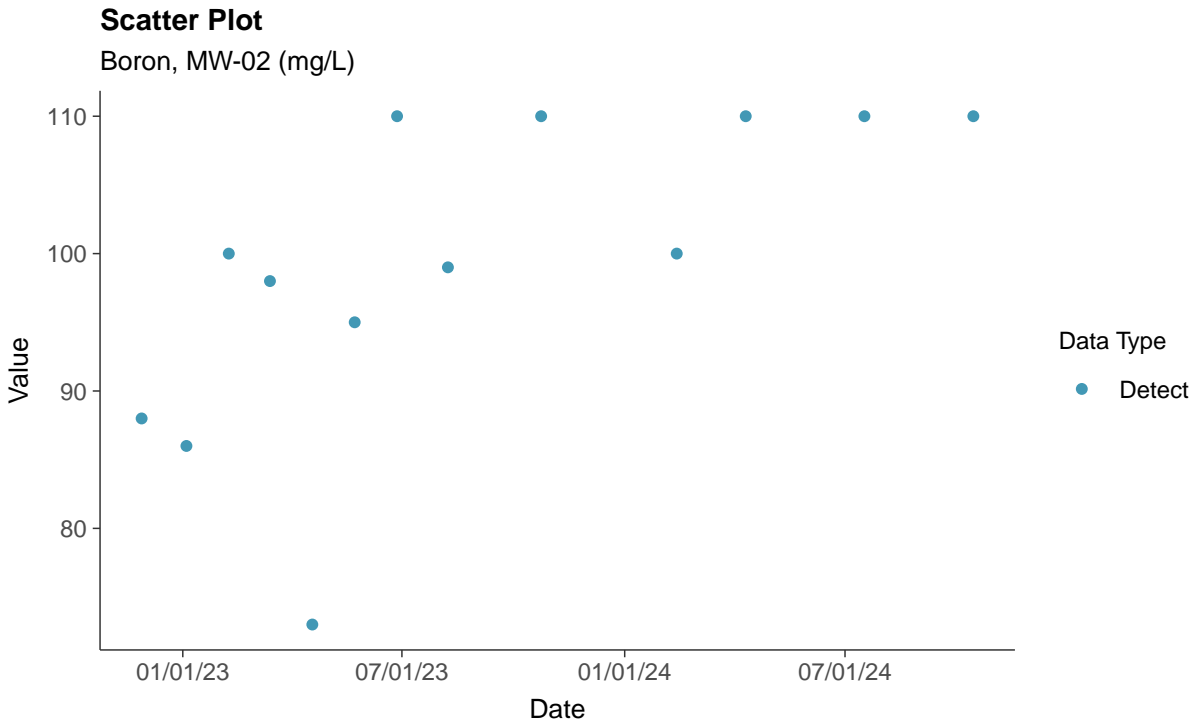
Total Suspended Solids, MW-02 (mg/L)





Appendix III: Boron, MW-02

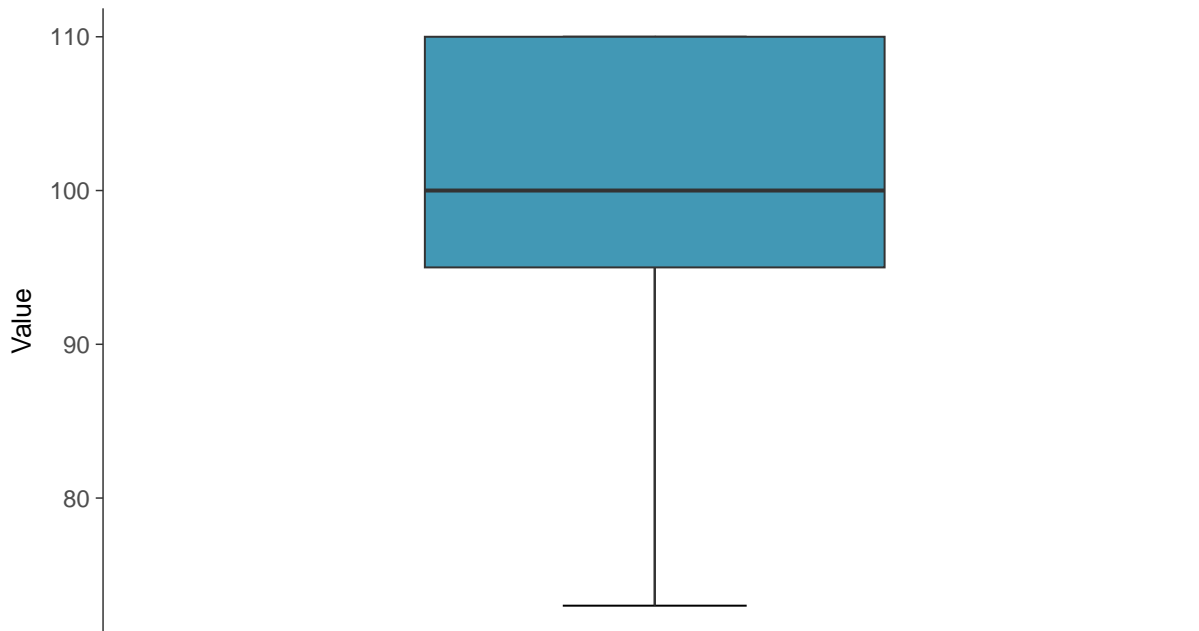
ID: 2_12_2_4_105





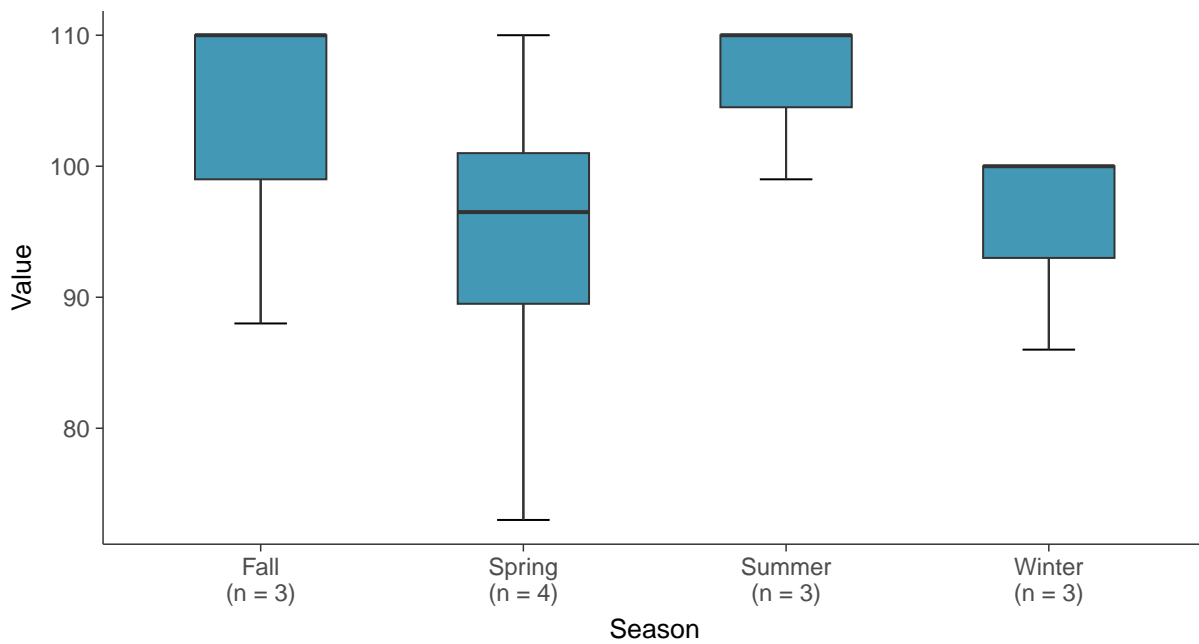
Boxplot

Boron, MW-02 (mg/L)



Boxplot by Season

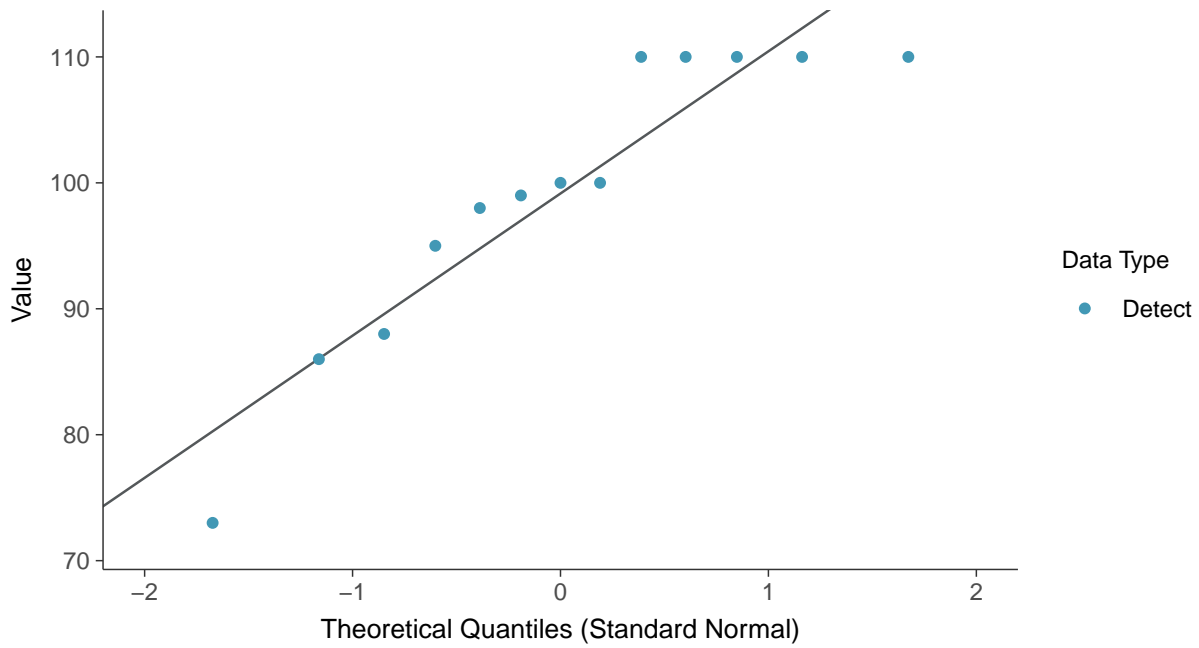
Boron, MW-02 (mg/L)





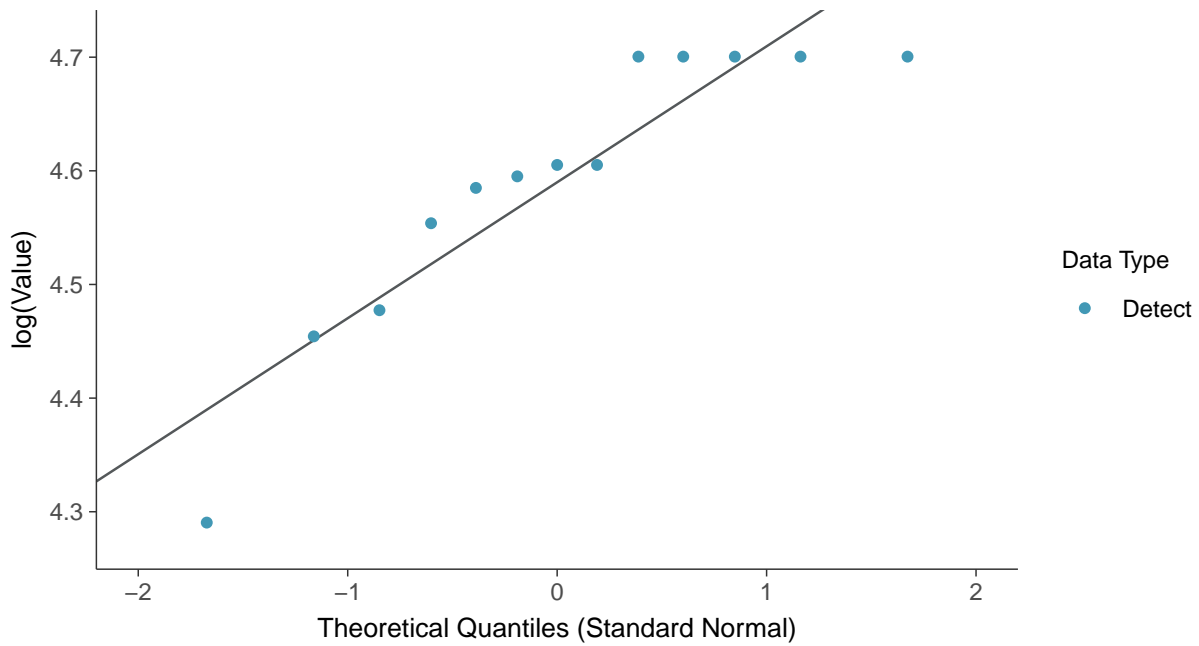
Normal Q-Q plot

Boron, MW-02 (mg/L)



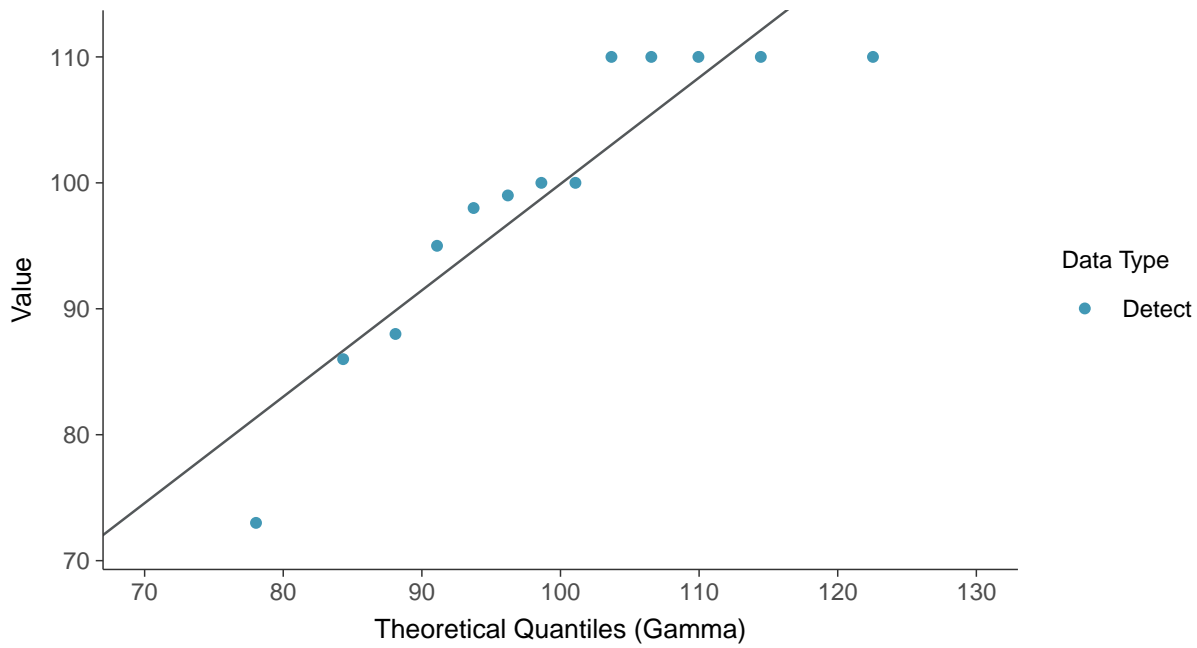
Lognormal Q-Q plot

Boron, MW-02 (mg/L)

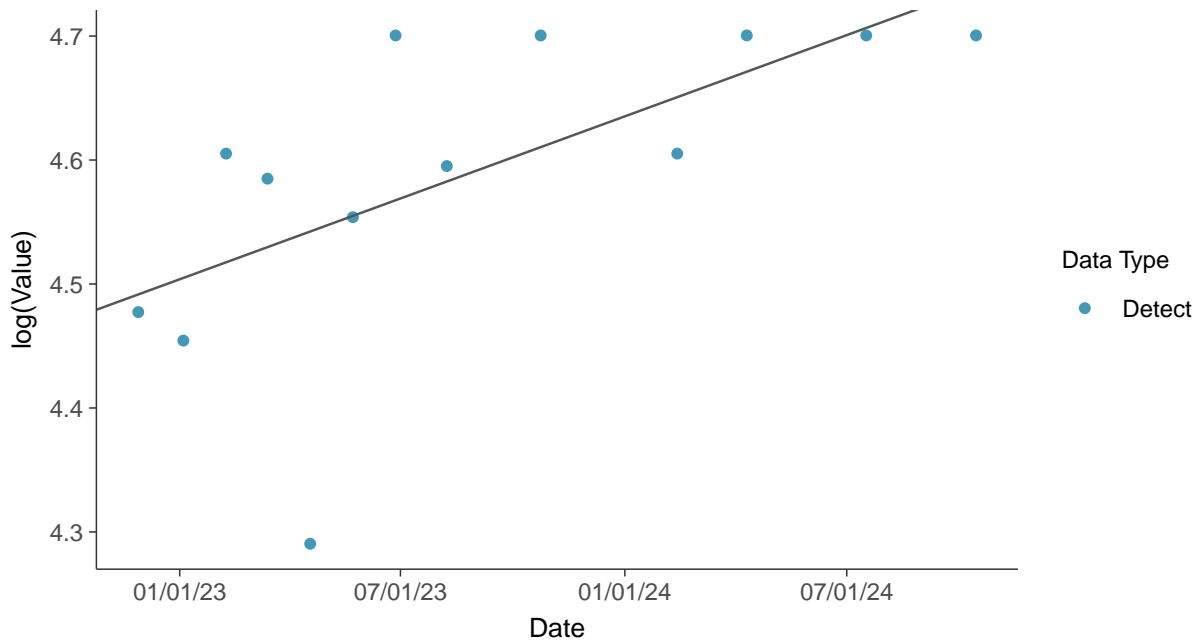




Gamma Q-Q plot
Boron, MW-02 (mg/L)



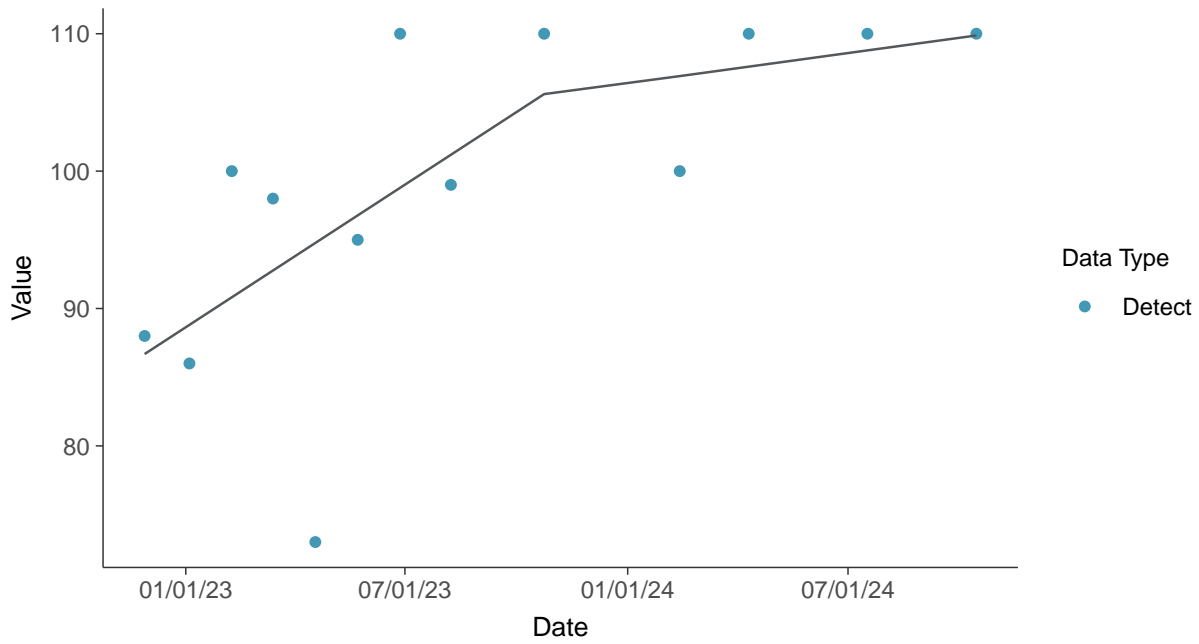
Trend Regression: Lognormal MLE
Boron, MW-02 (mg/L)





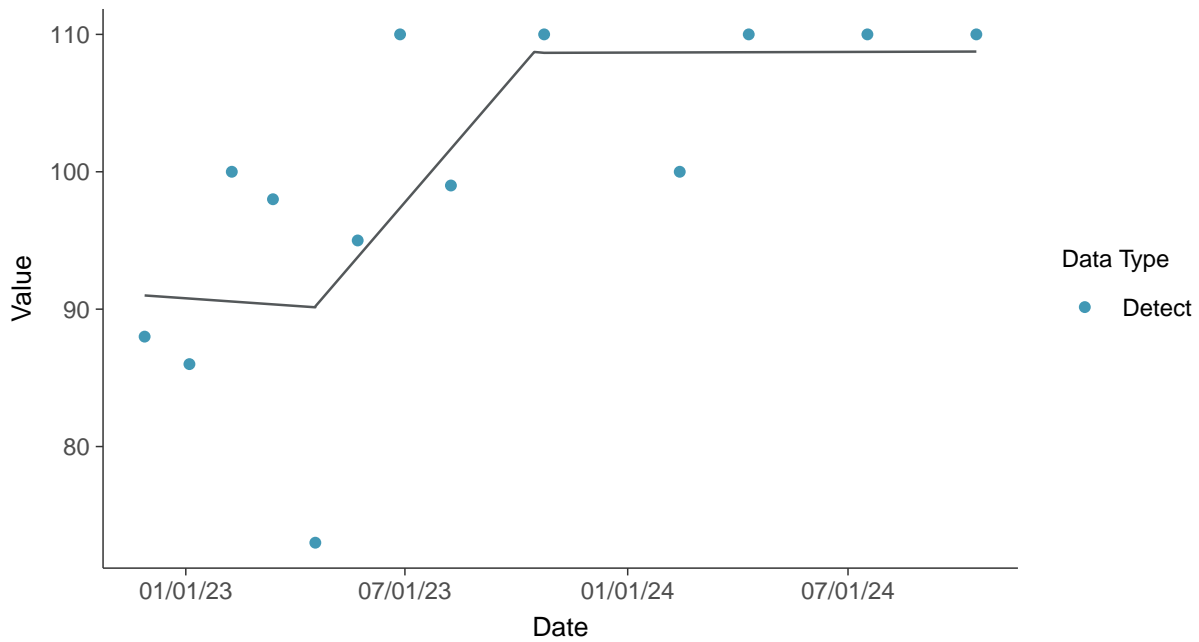
Trend Regression: Piecewise Linear-Linear

Boron, MW-02 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

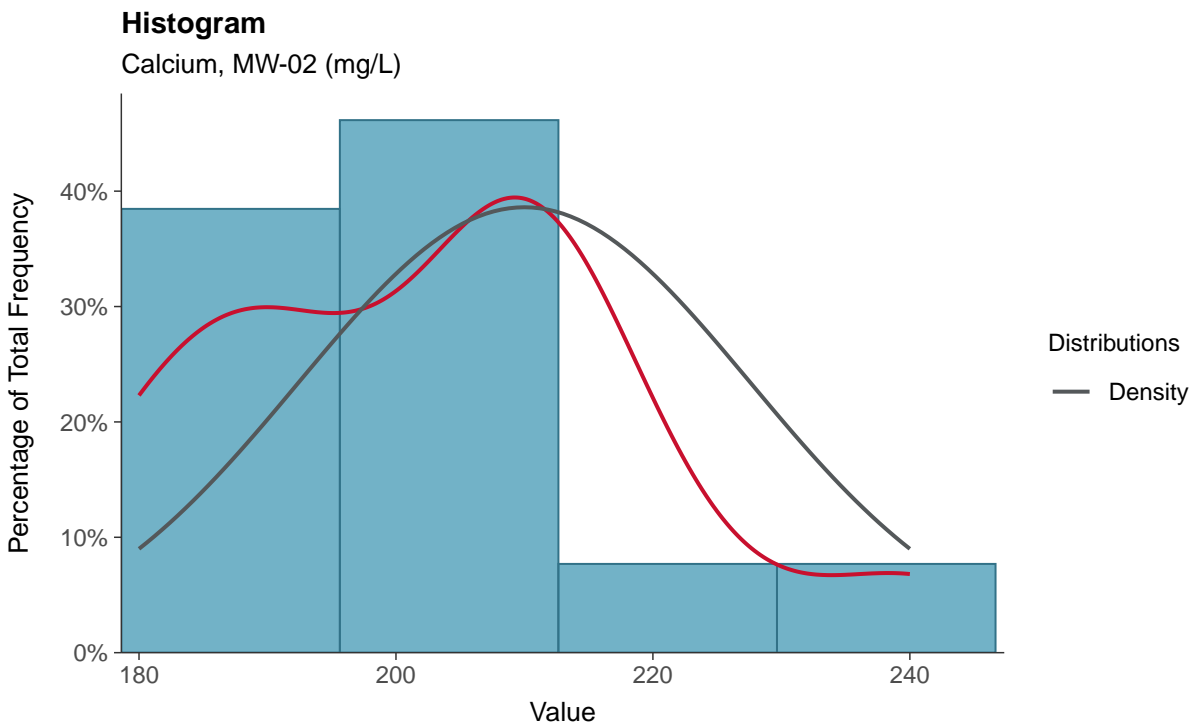
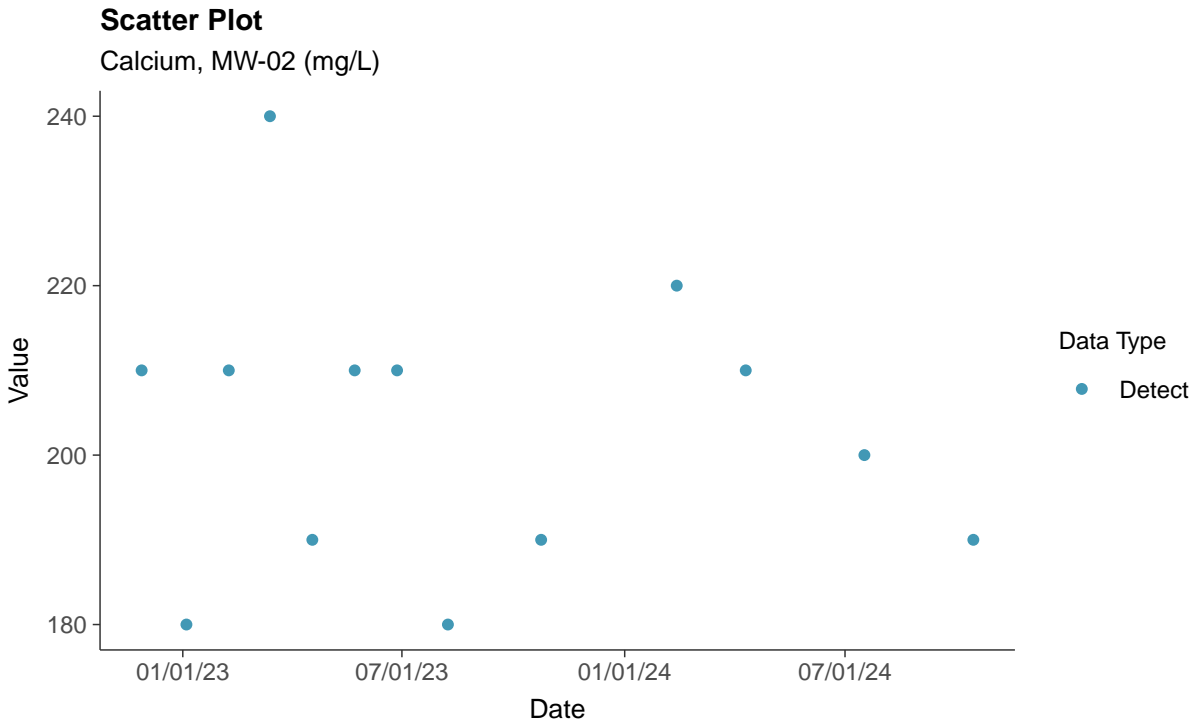
Boron, MW-02 (mg/L)





Appendix III: Calcium, MW-02

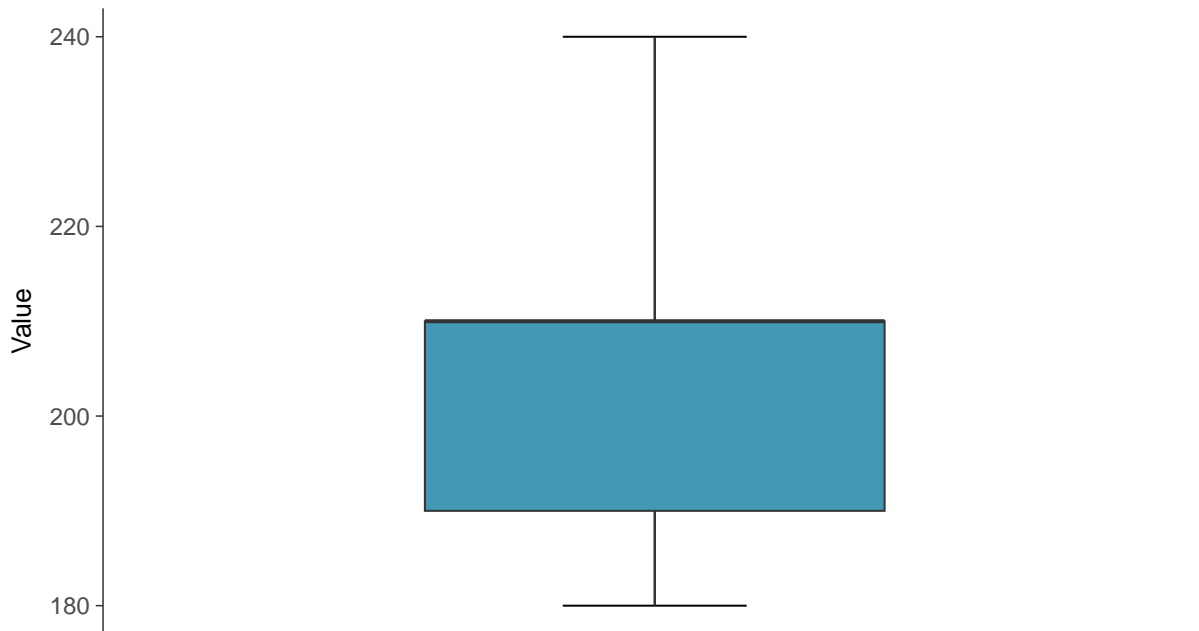
ID: 2_12_2_4_107





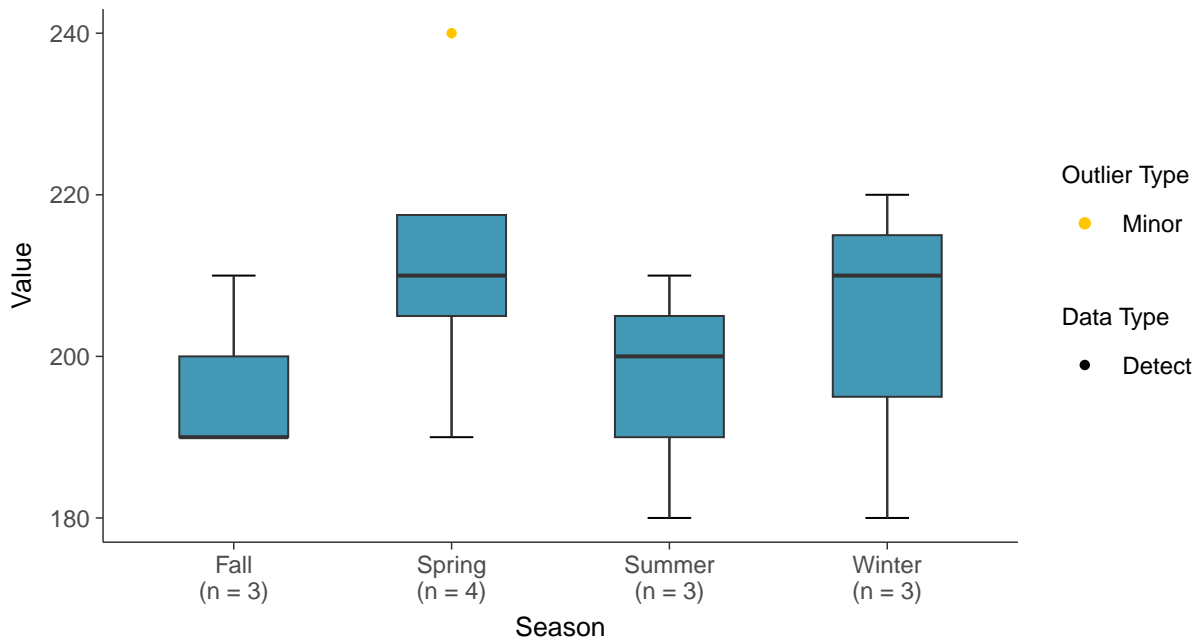
Boxplot

Calcium, MW-02 (mg/L)



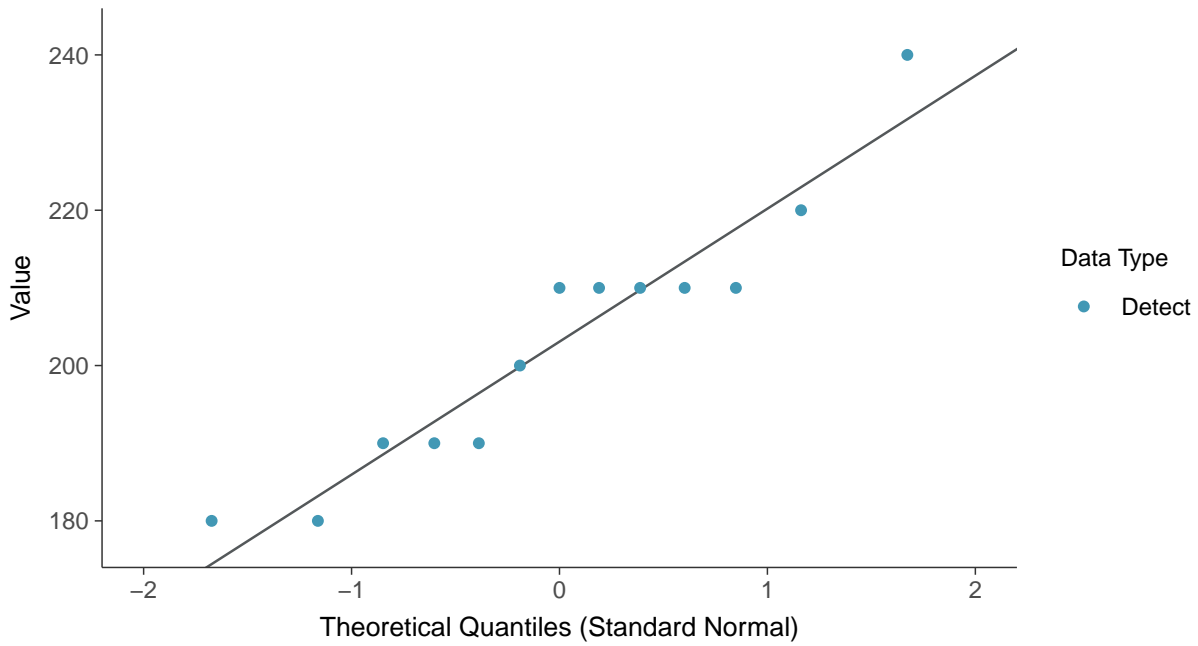
Boxplot by Season

Calcium, MW-02 (mg/L)

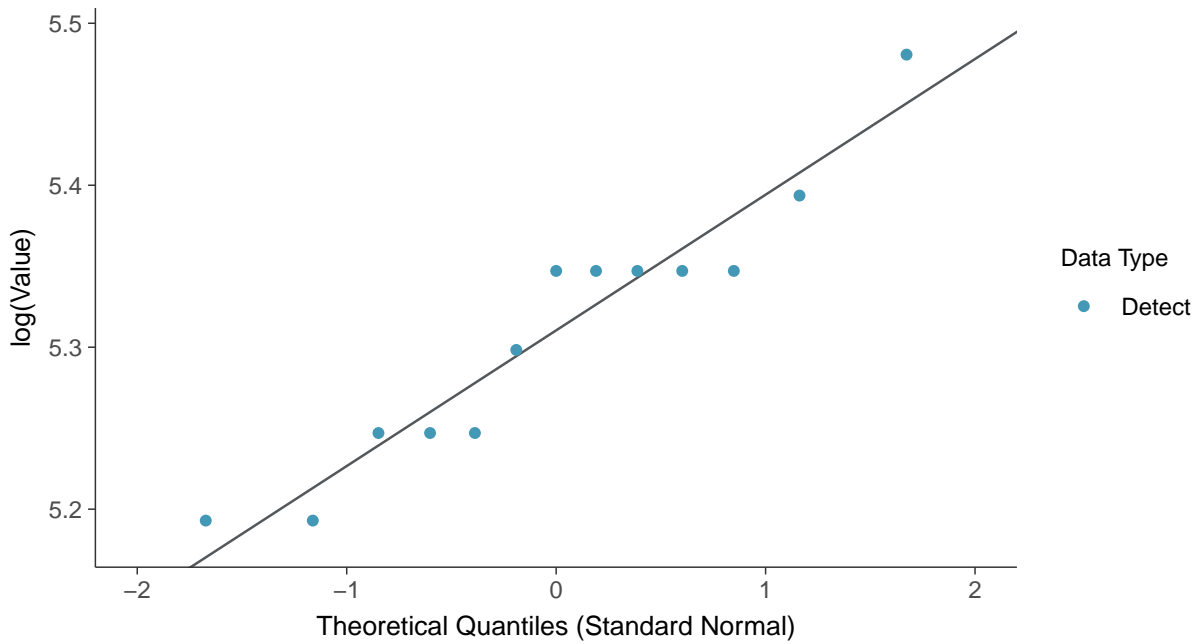




Normal Q-Q plot
Calcium, MW-02 (mg/L)

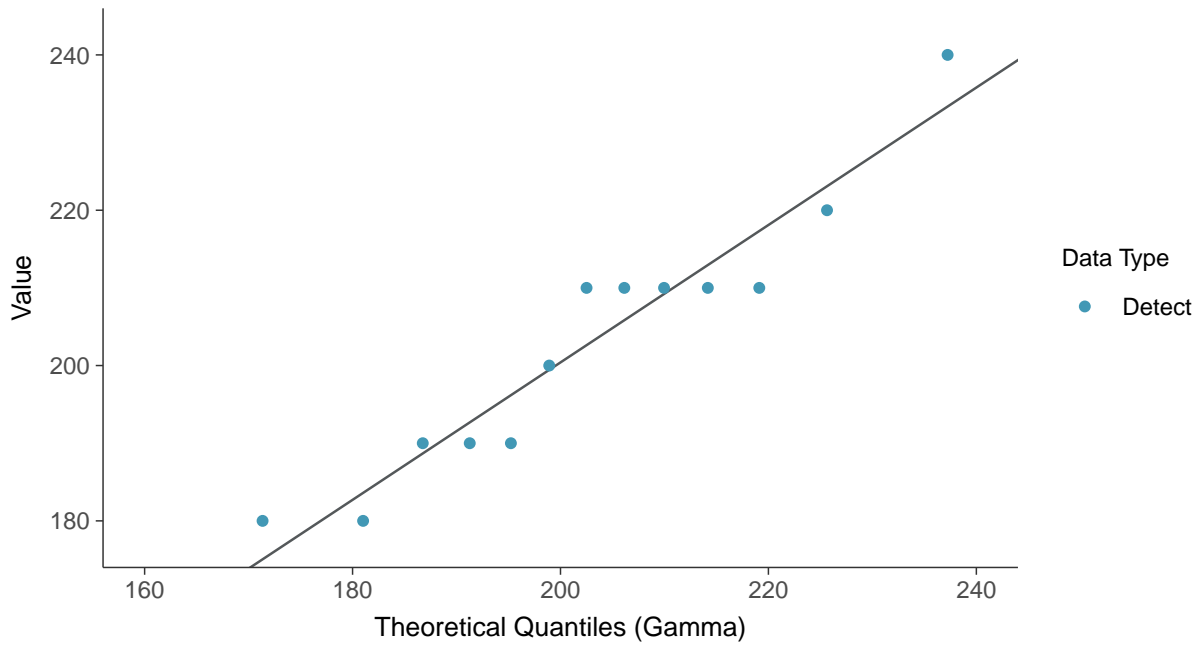


Lognormal Q-Q plot
Calcium, MW-02 (mg/L)

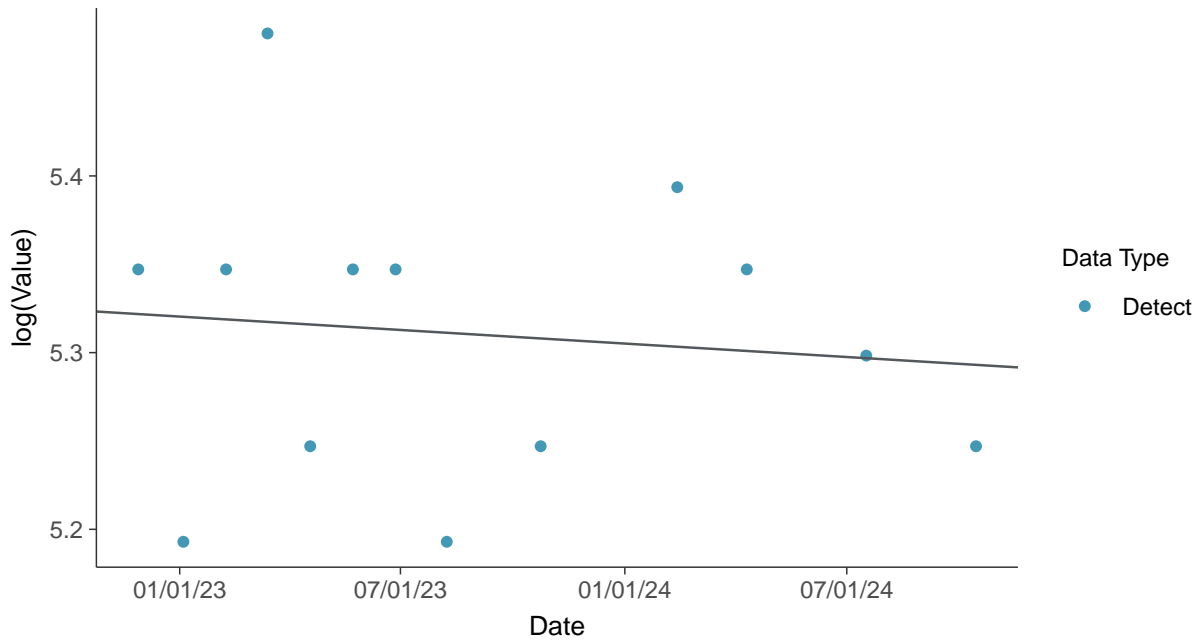




Gamma Q-Q plot
Calcium, MW-02 (mg/L)



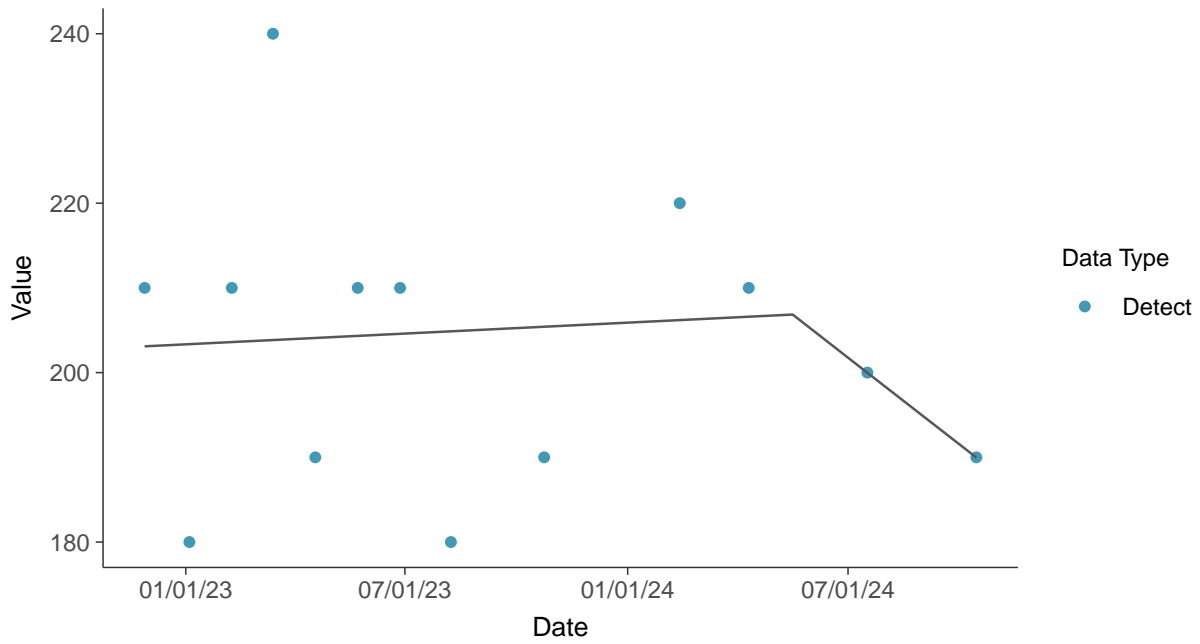
Trend Regression: Lognormal MLE
Calcium, MW-02 (mg/L)





Trend Regression: Piecewise Linear-Linear

Calcium, MW-02 (mg/L)



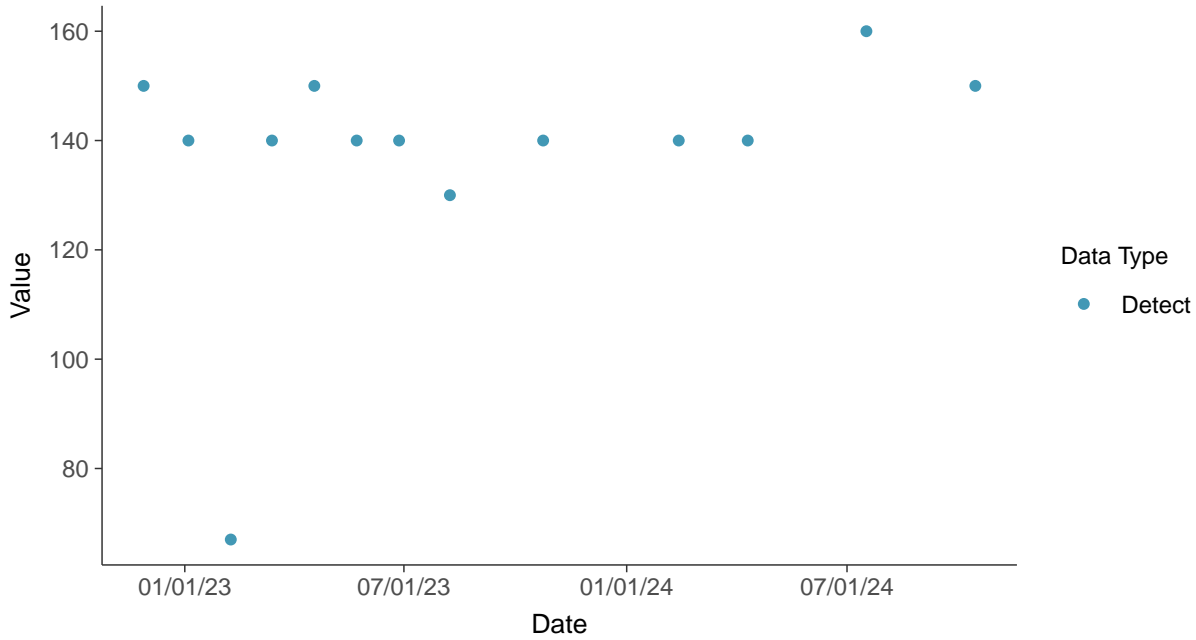


Appendix III: Chloride (as Cl), MW-02

ID: 2_12_2_4_108

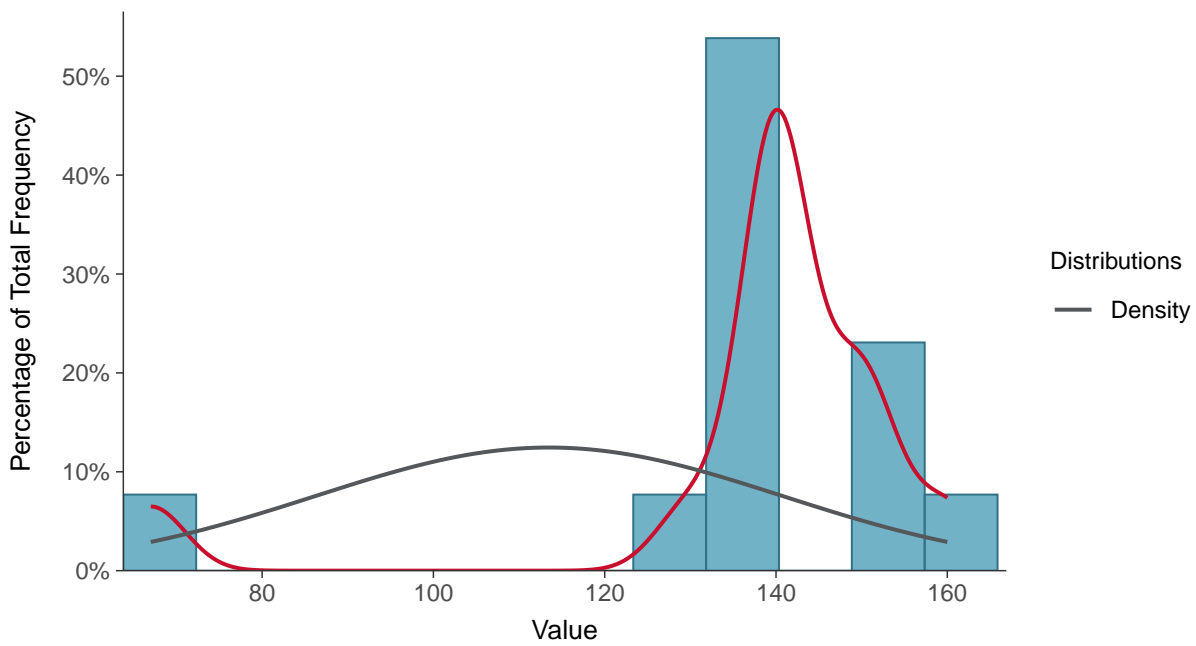
Scatter Plot

Chloride (as Cl), MW-02 (mg/L)



Histogram

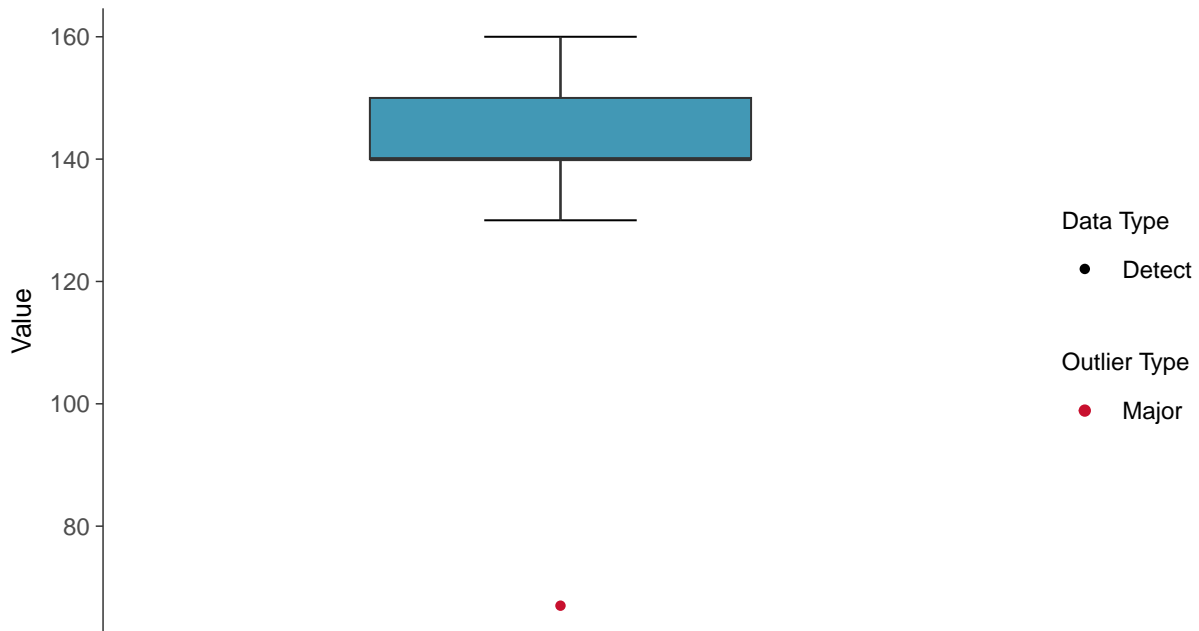
Chloride (as Cl), MW-02 (mg/L)





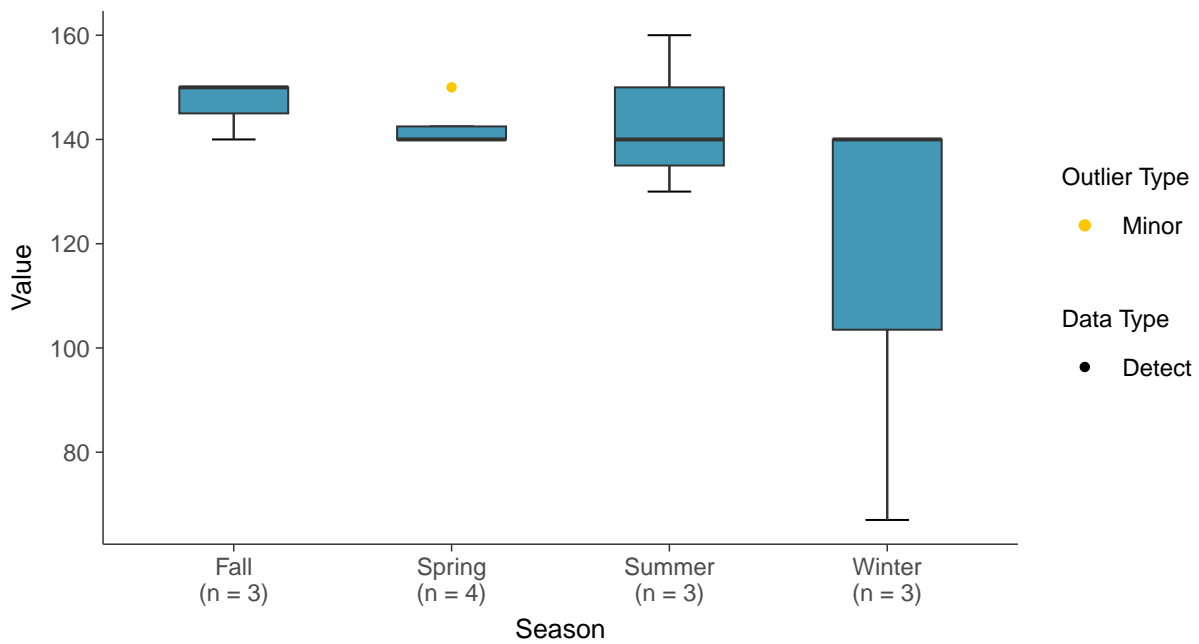
Boxplot

Chloride (as Cl), MW-02 (mg/L)



Boxplot by Season

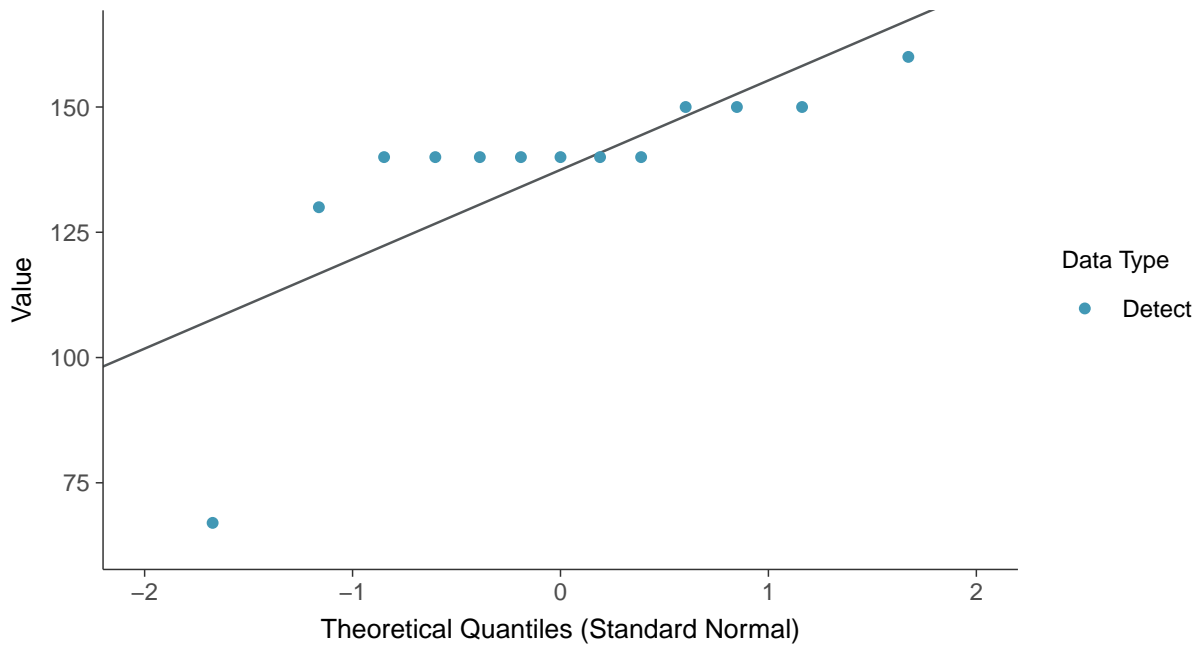
Chloride (as Cl), MW-02 (mg/L)





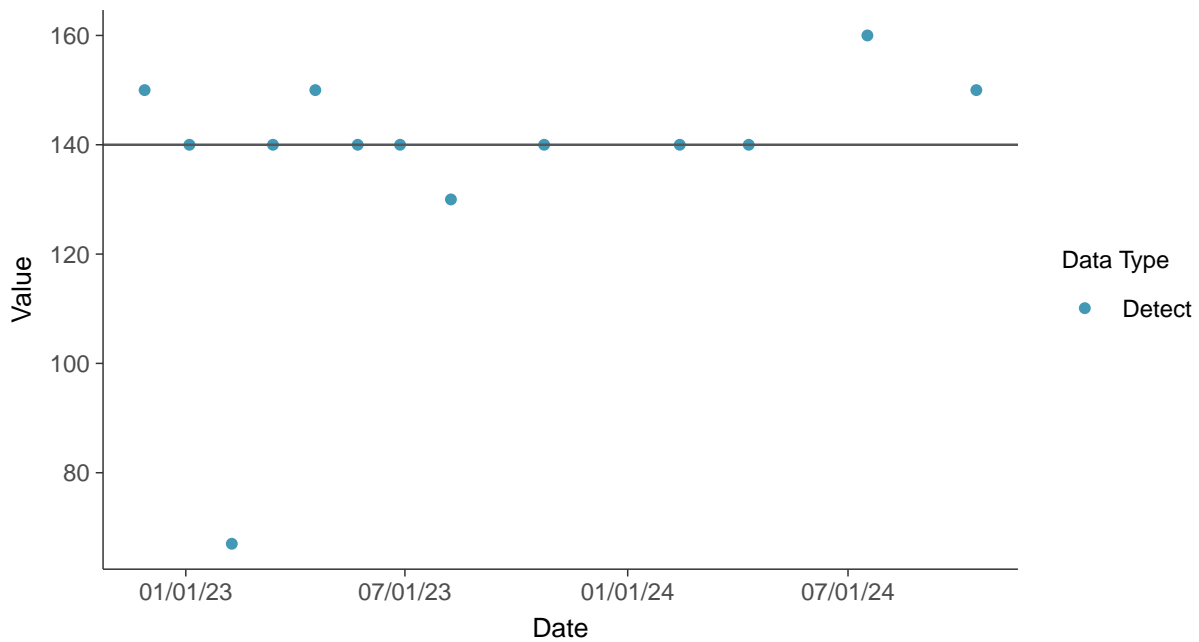
Normal Q-Q plot

Chloride (as Cl), MW-02 (mg/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

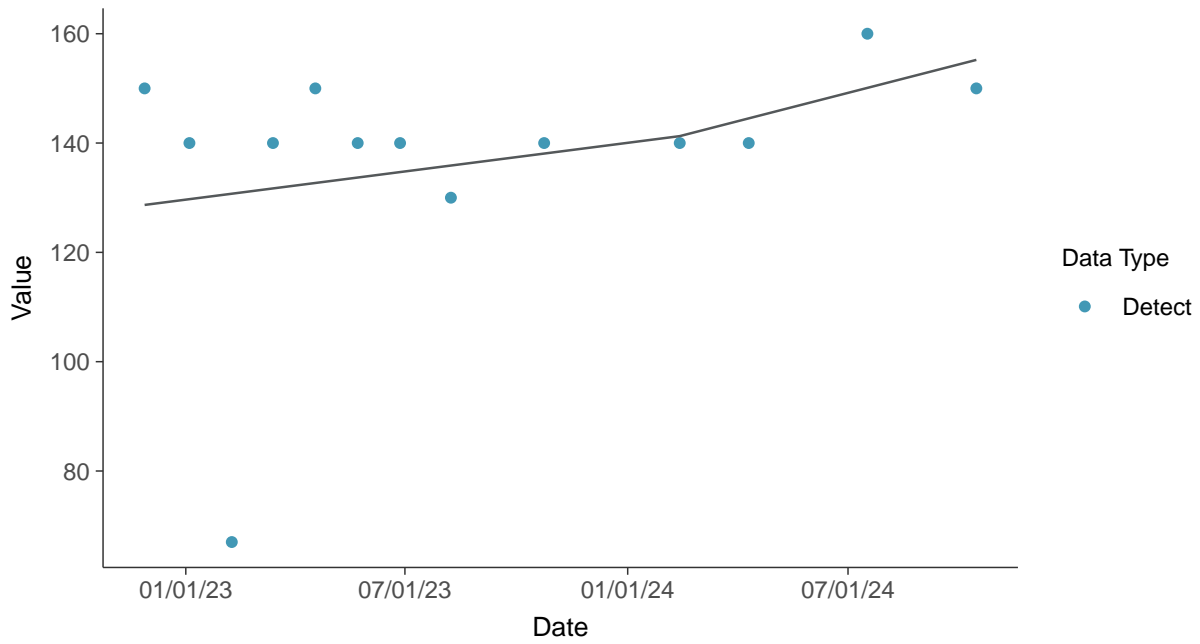
Chloride (as Cl), MW-02 (mg/L)





Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-02 (mg/L)



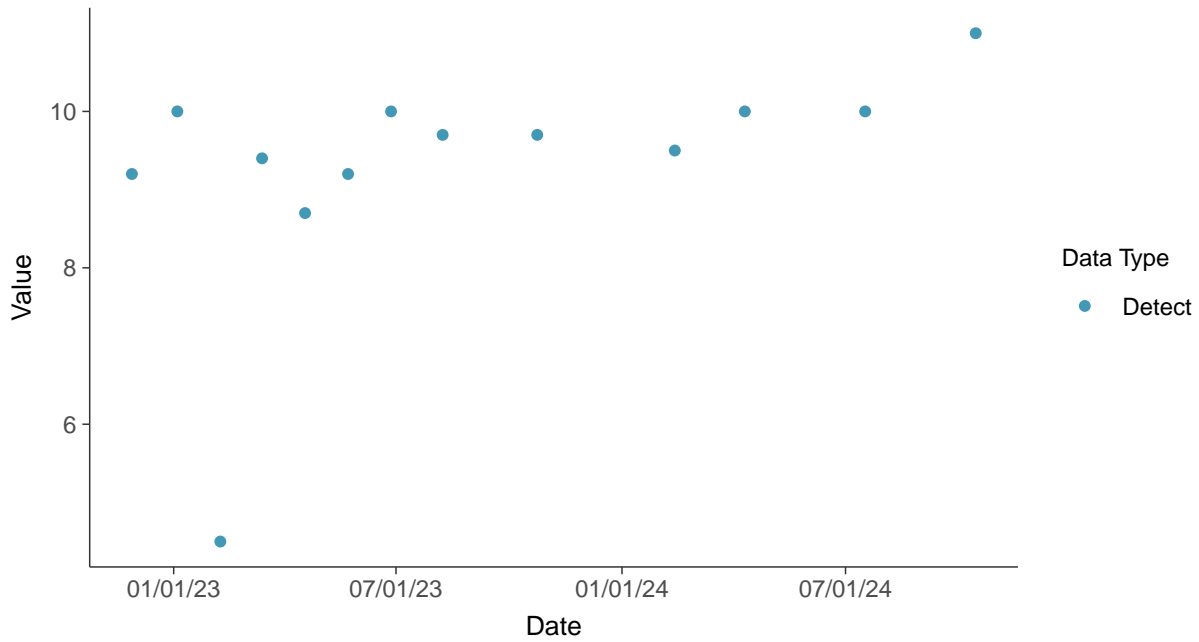


Appendix III: Fluoride, MW-02

ID: 2_12_2_4_112

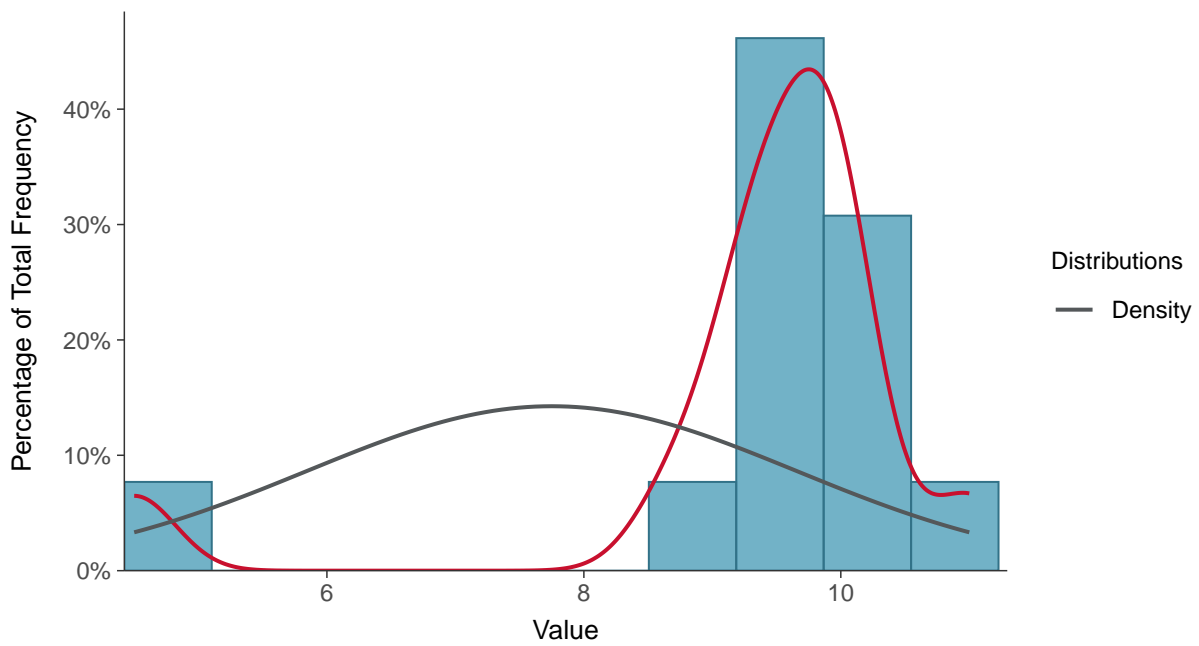
Scatter Plot

Fluoride, MW-02 (mg/L)



Histogram

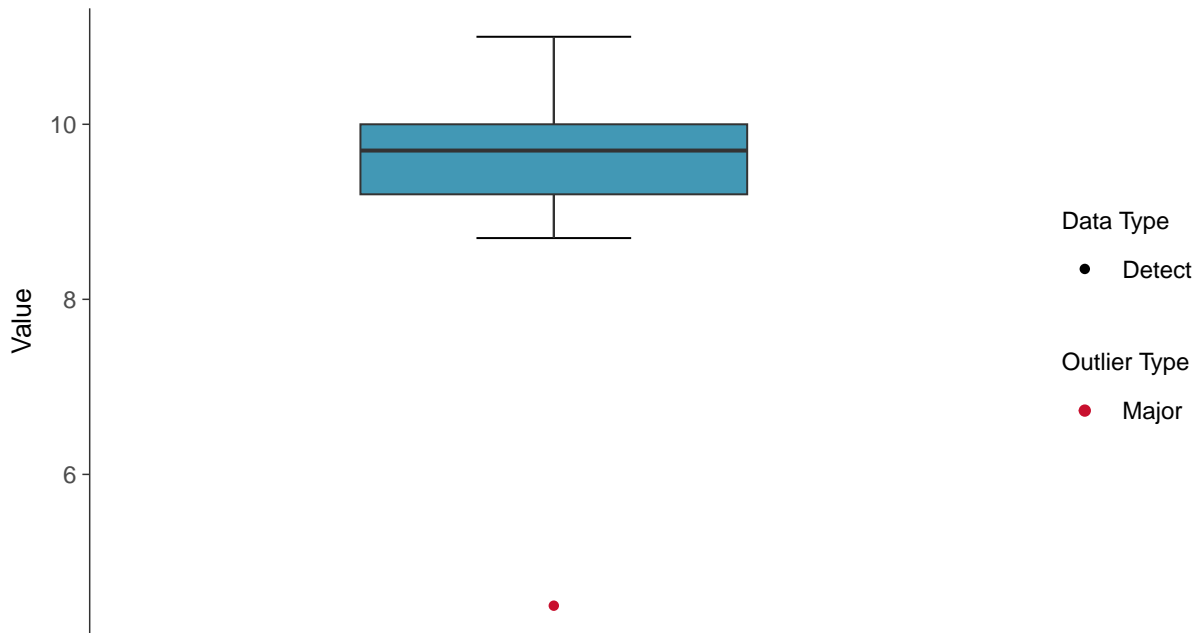
Fluoride, MW-02 (mg/L)





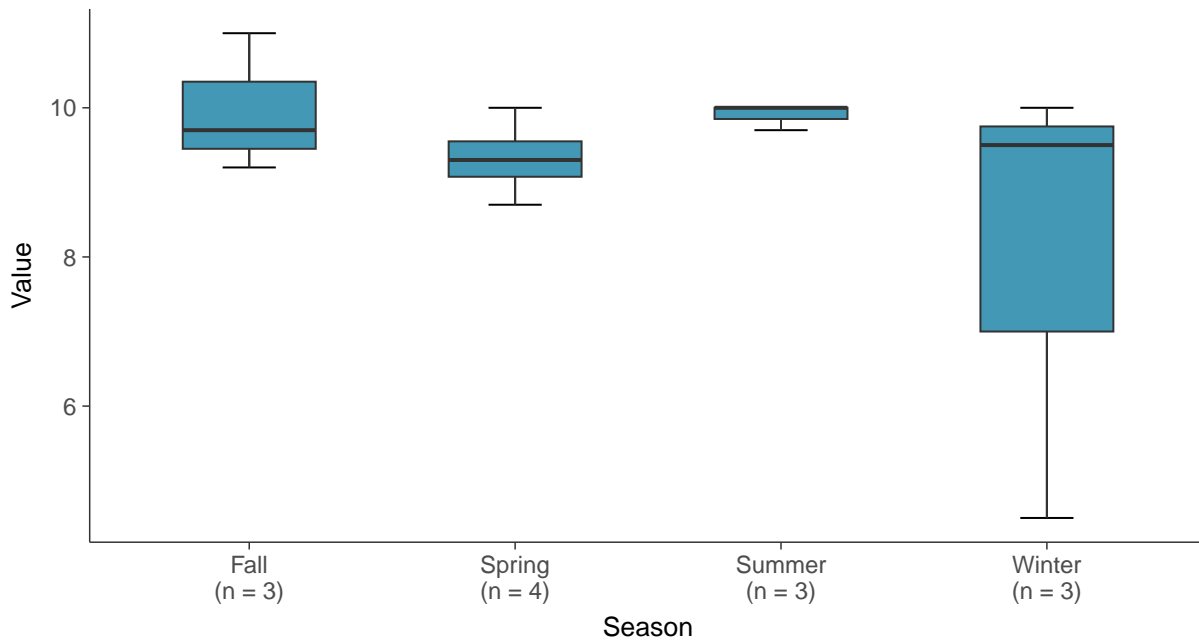
Boxplot

Fluoride, MW-02 (mg/L)



Boxplot by Season

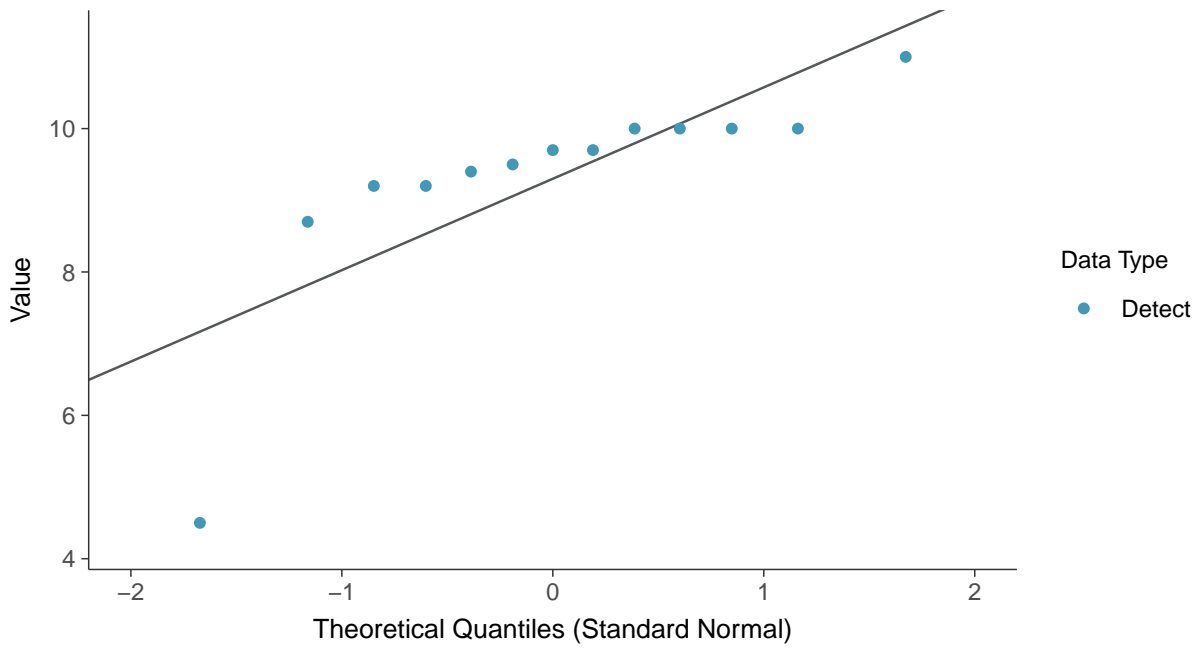
Fluoride, MW-02 (mg/L)





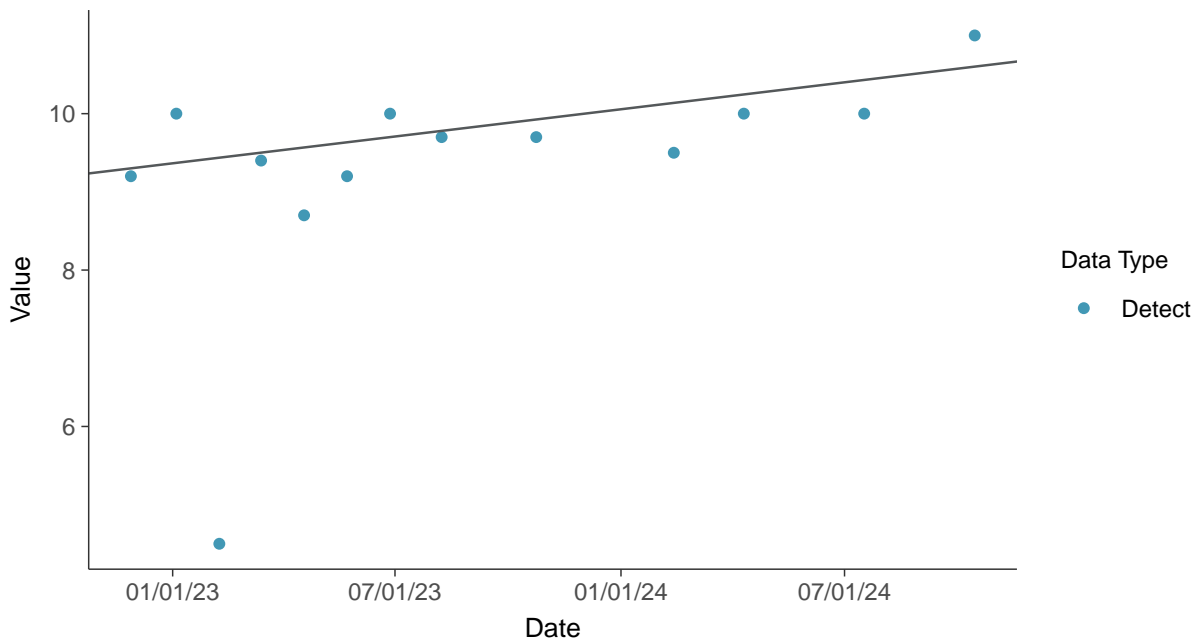
Normal Q-Q plot

Fluoride, MW-02 (mg/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

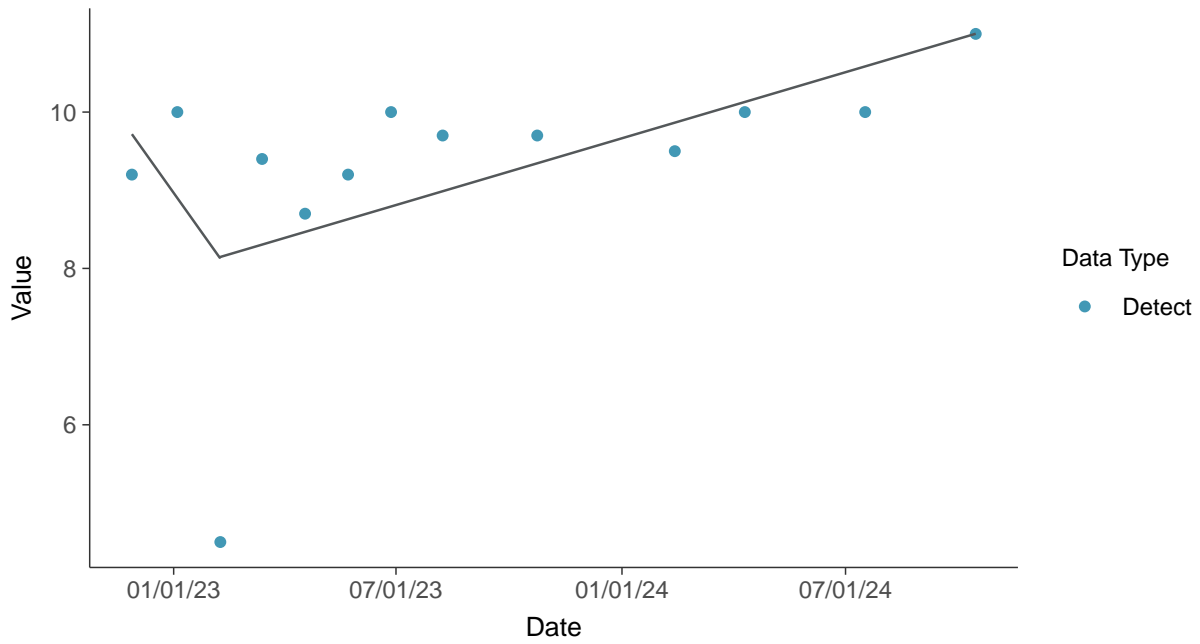
Fluoride, MW-02 (mg/L)





Trend Regression: Piecewise Linear-Linear

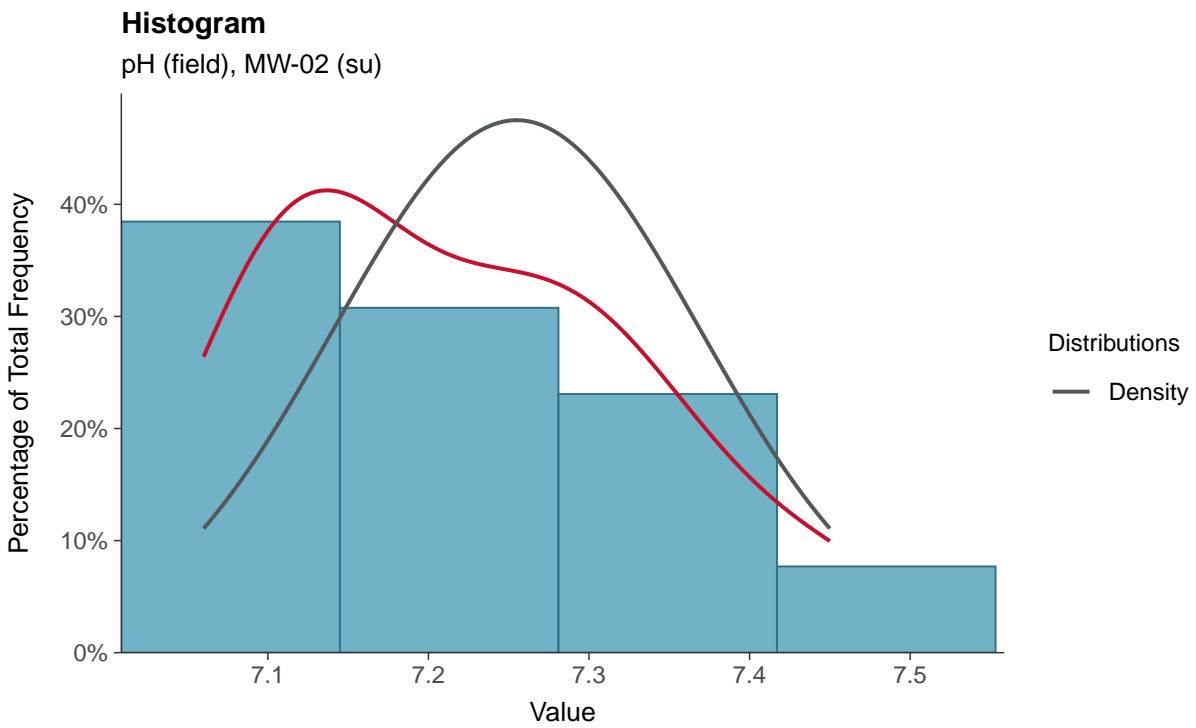
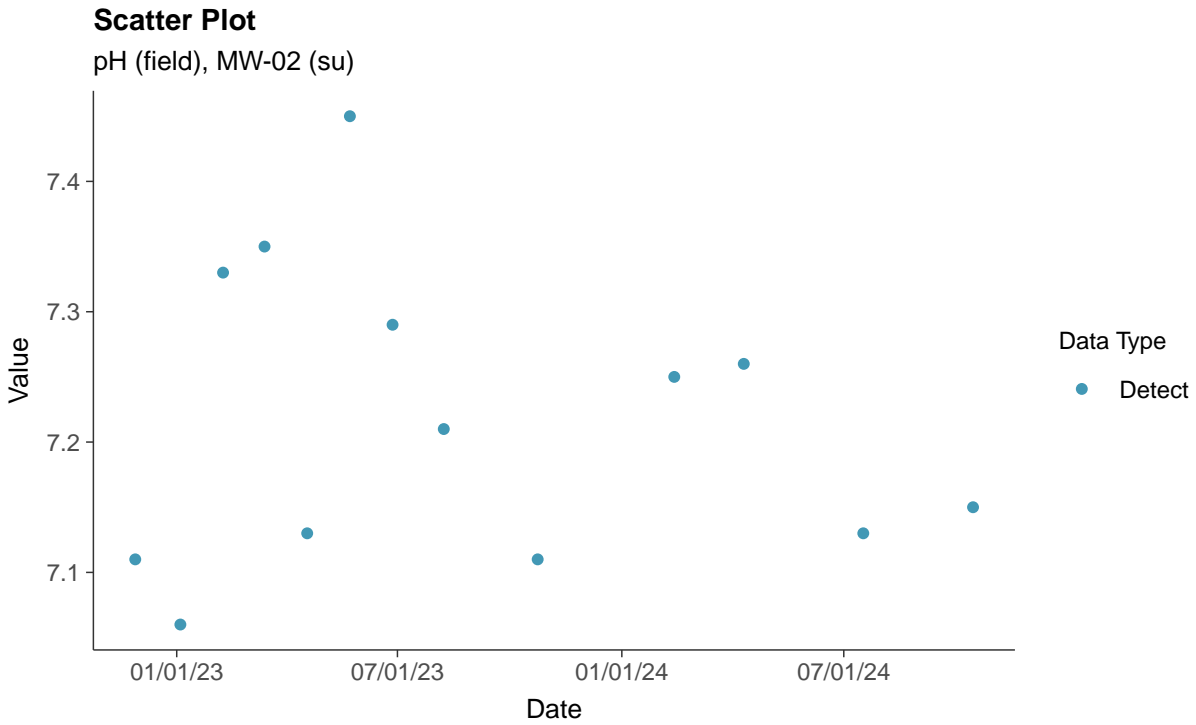
Fluoride, MW-02 (mg/L)





Appendix III: pH (field), MW-02

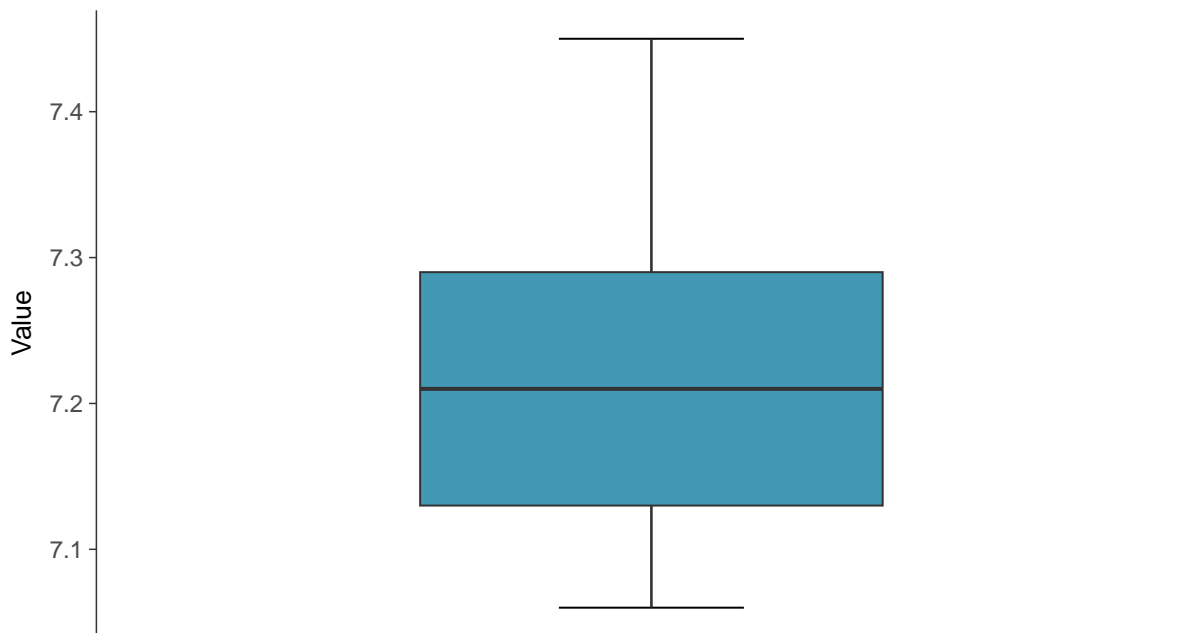
ID: 2_12_2_4_120





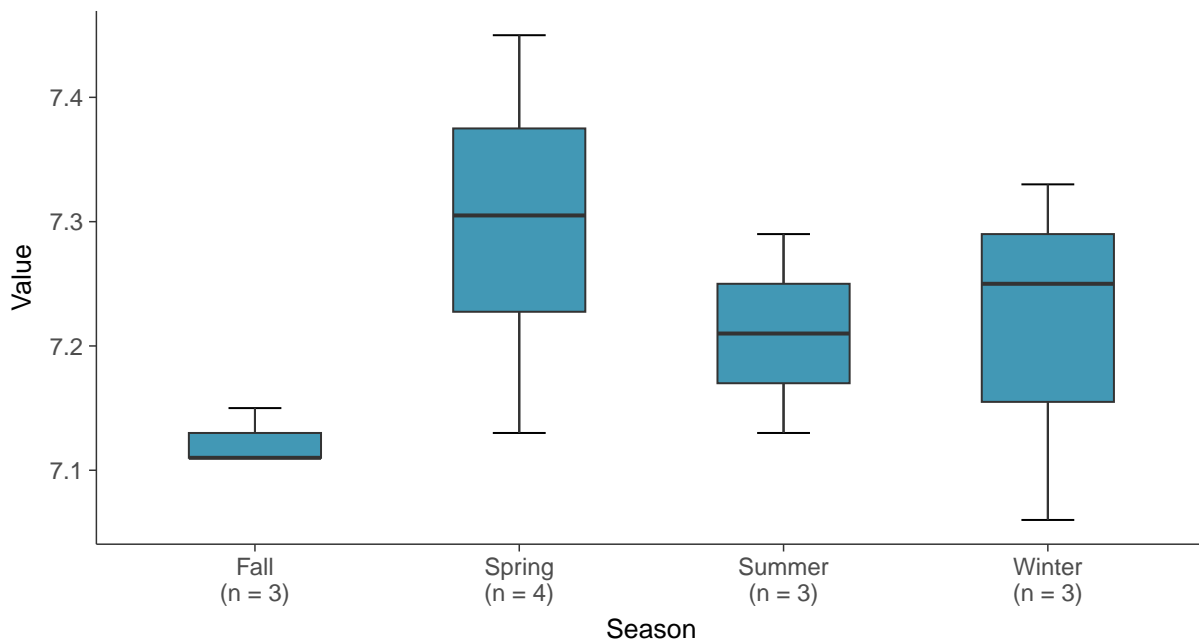
Boxplot

pH (field), MW-02 (su)



Boxplot by Season

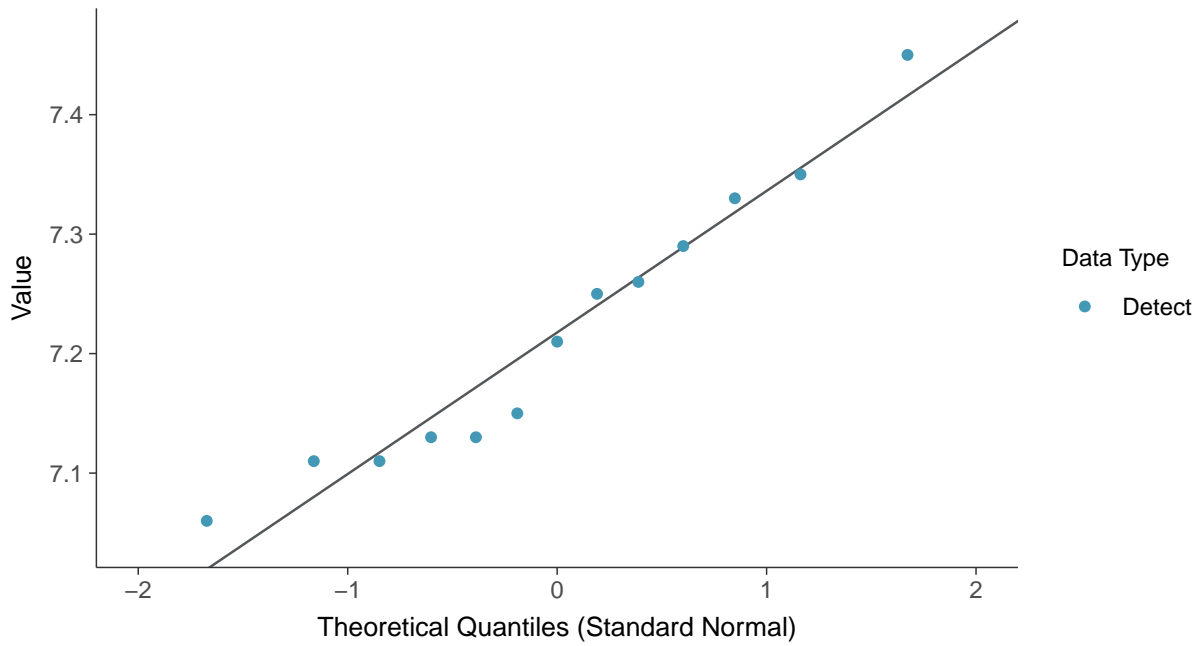
pH (field), MW-02 (su)





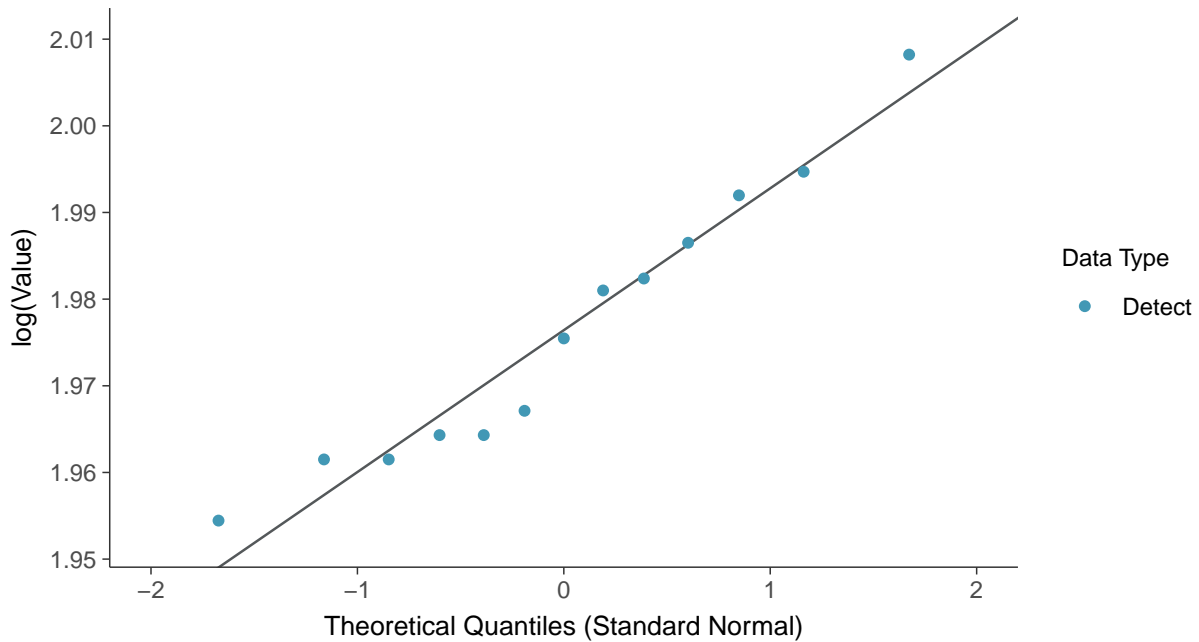
Normal Q-Q plot

pH (field), MW-02 (su)



Lognormal Q-Q plot

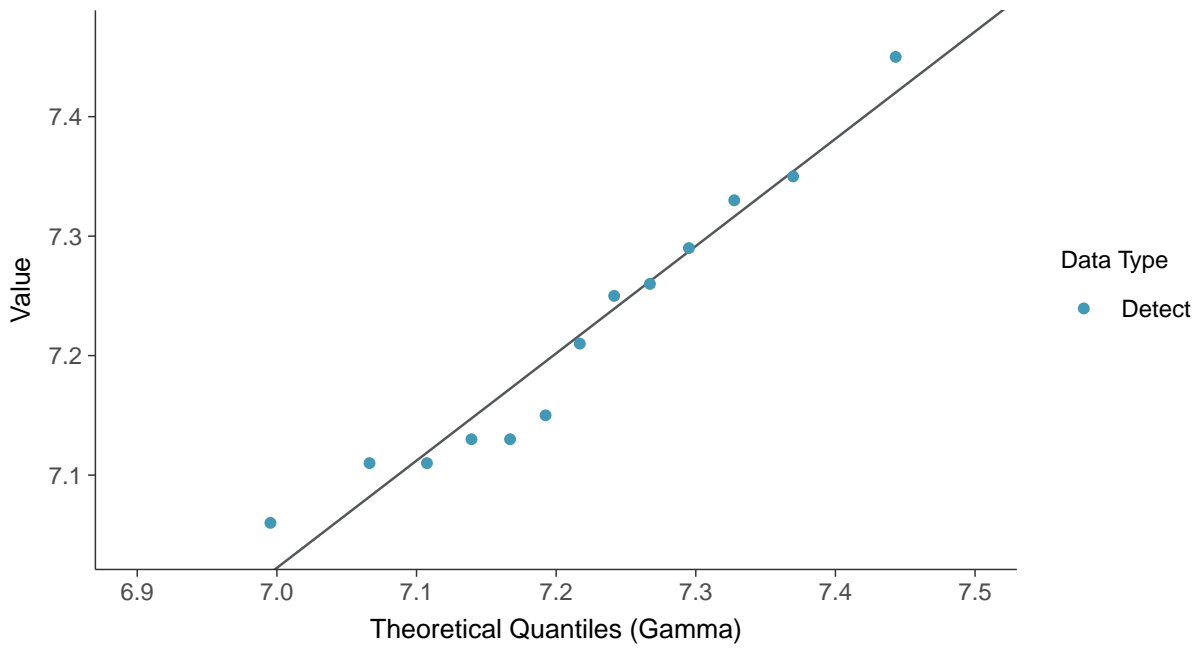
pH (field), MW-02 (su)





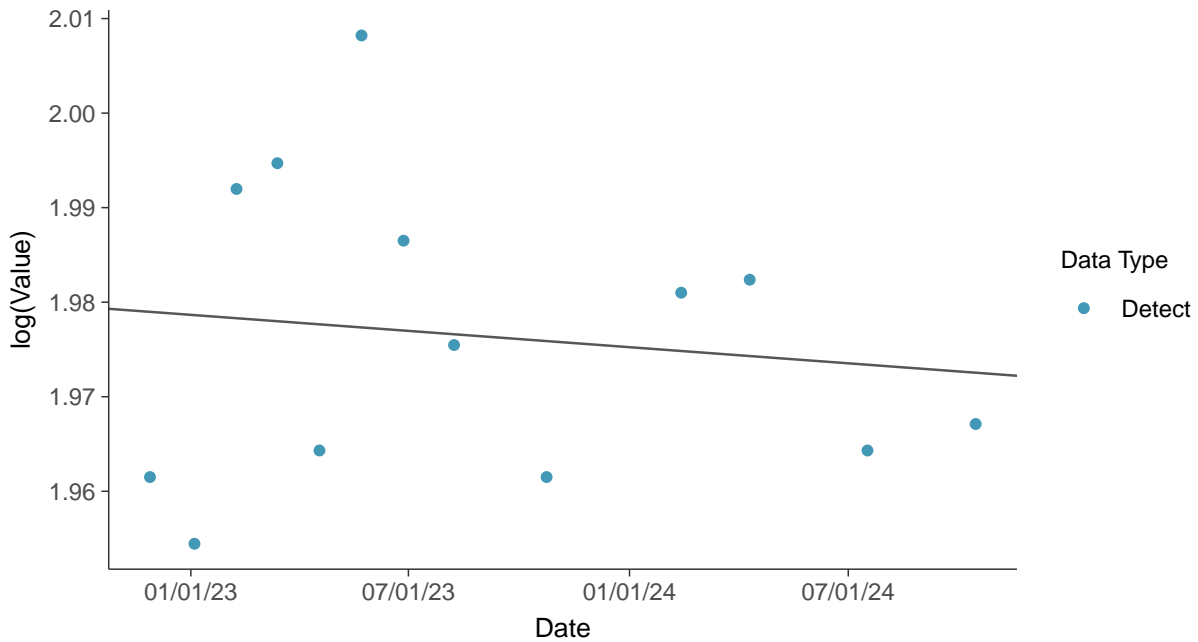
Gamma Q-Q plot

pH (field), MW-02 (su)



Trend Regression: Lognormal MLE

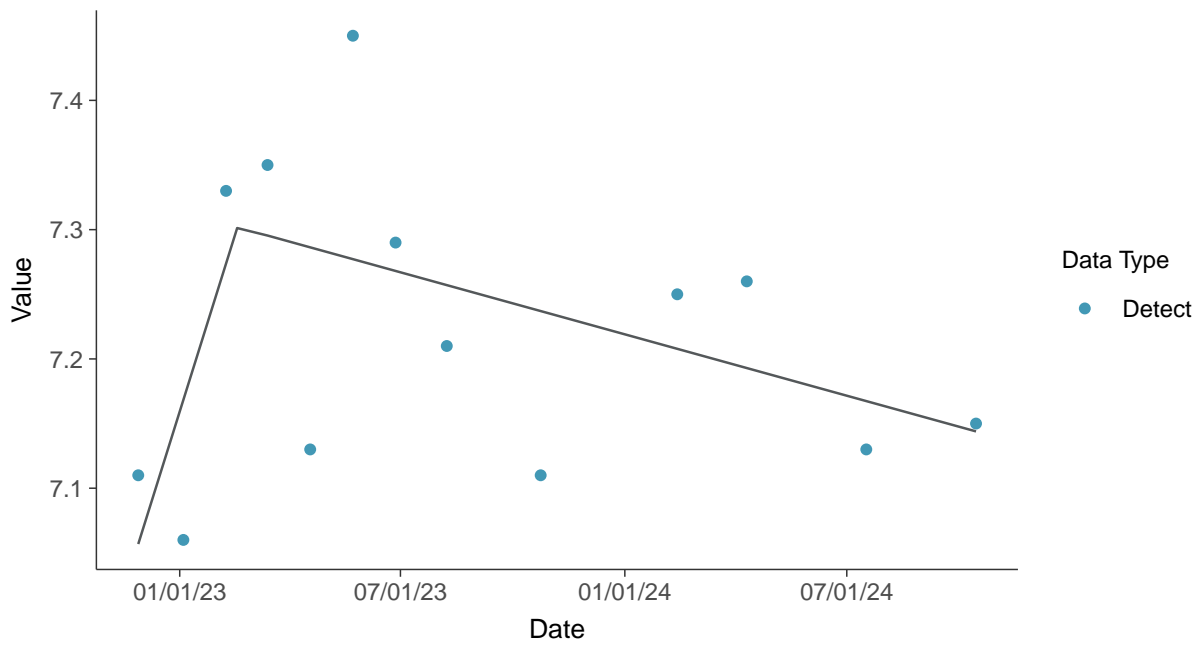
pH (field), MW-02 (su)





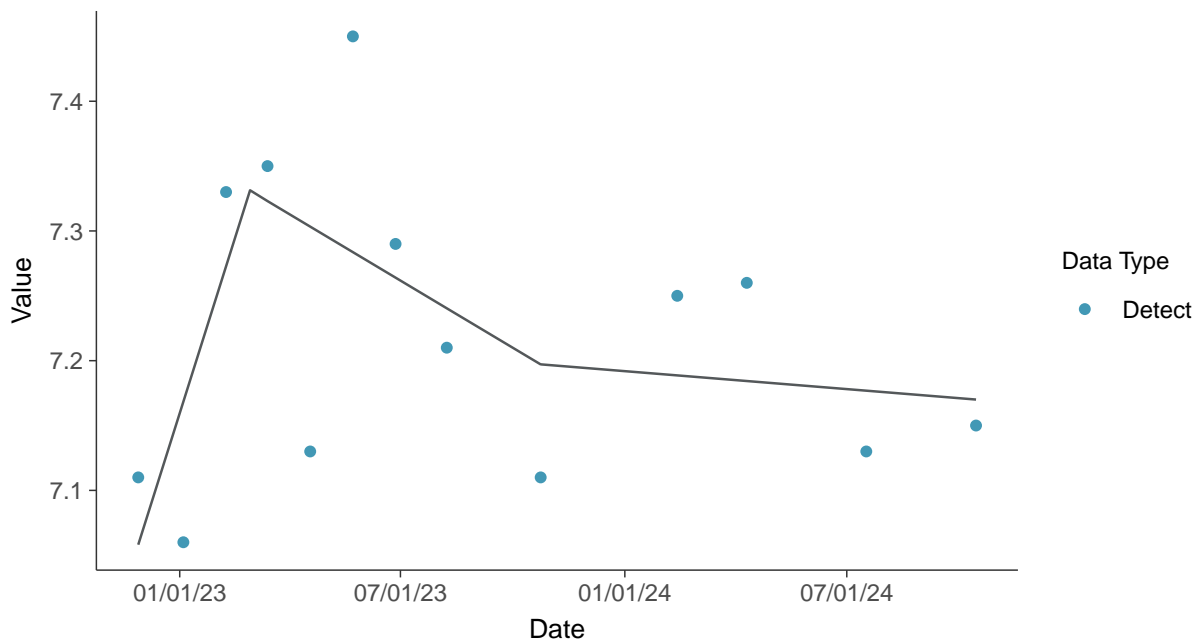
Trend Regression: Piecewise Linear-Linear

pH (field), MW-02 (su)



Trend Regression: Piecewise Linear-Linear-Linear

pH (field), MW-02 (su)



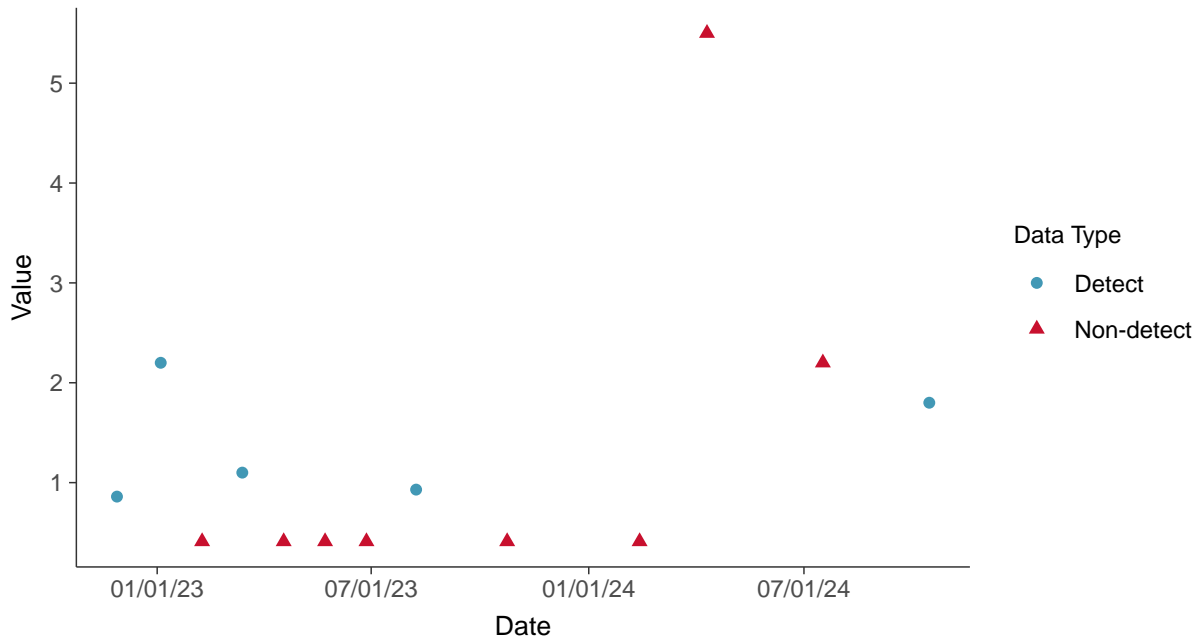


Appendix III: Sulfate (as SO₄), MW-02

ID: 2_12_2_4_124

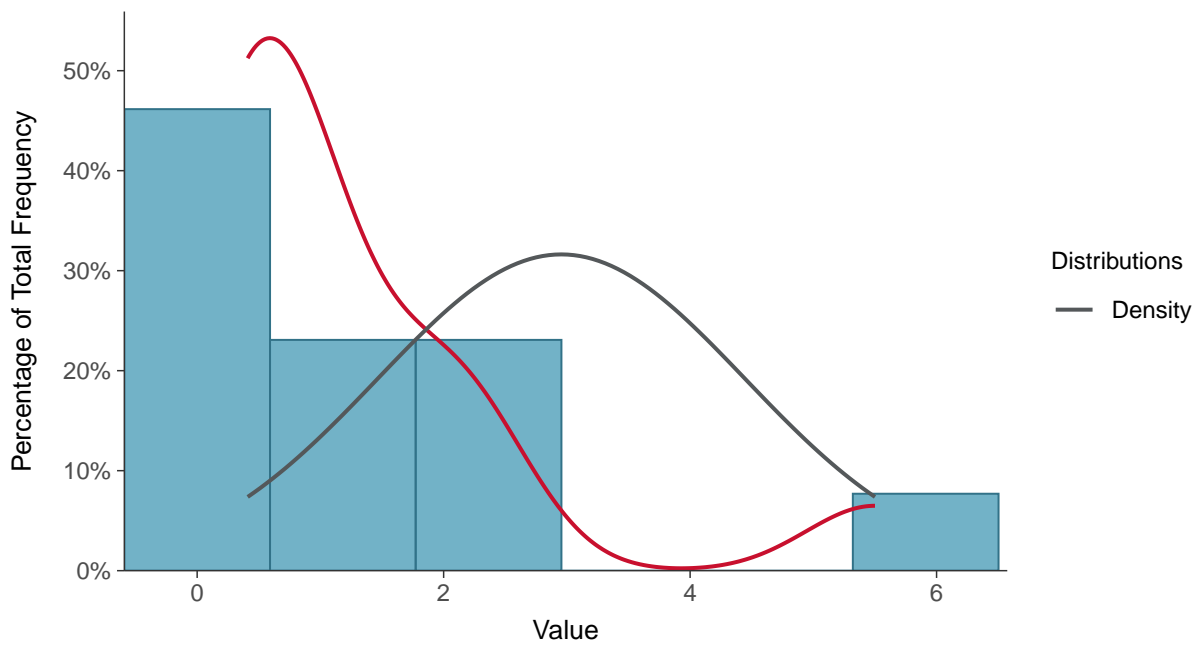
Scatter Plot

Sulfate (as SO₄), MW-02 (mg/L)



Histogram

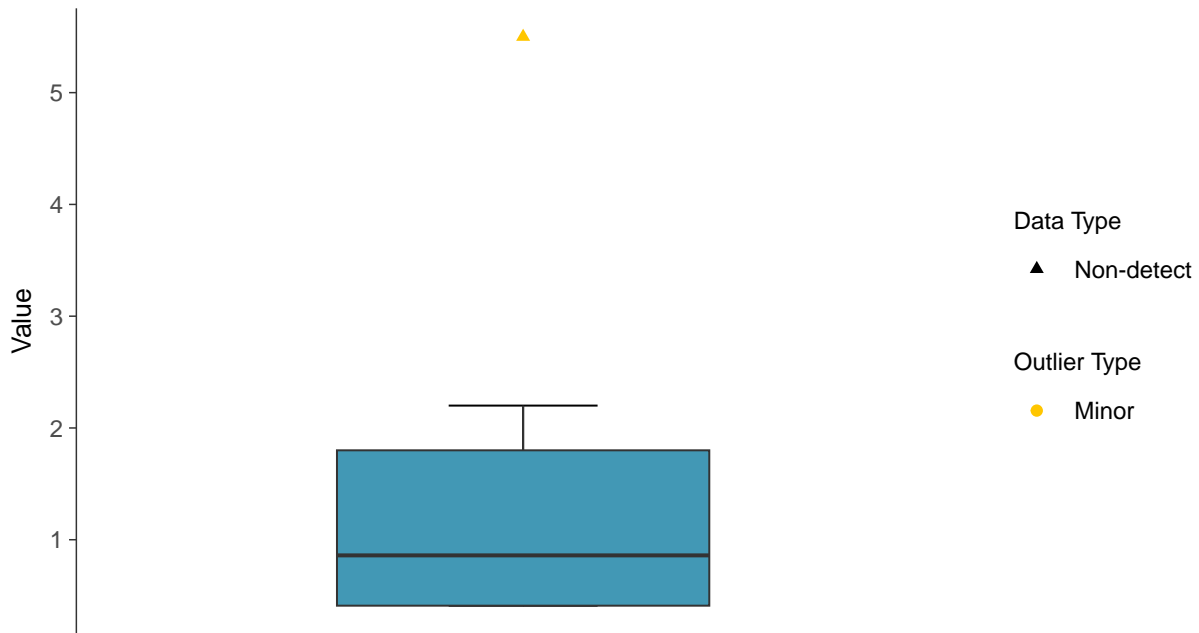
Sulfate (as SO₄), MW-02 (mg/L)





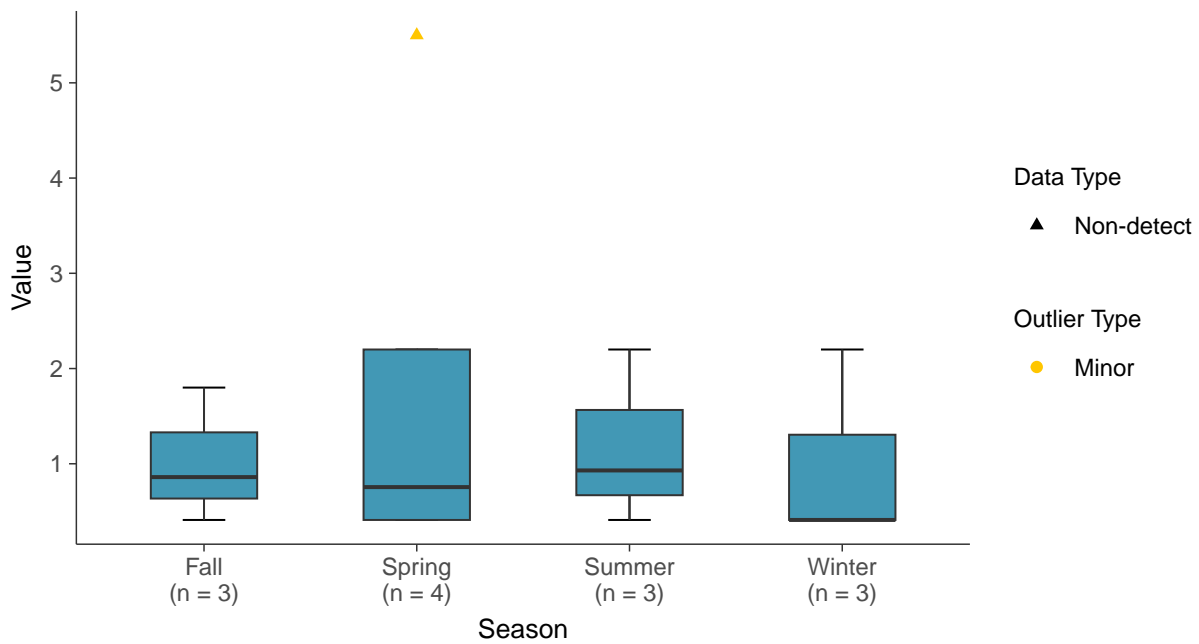
Boxplot

Sulfate (as SO₄), MW-02 (mg/L)



Boxplot by Season

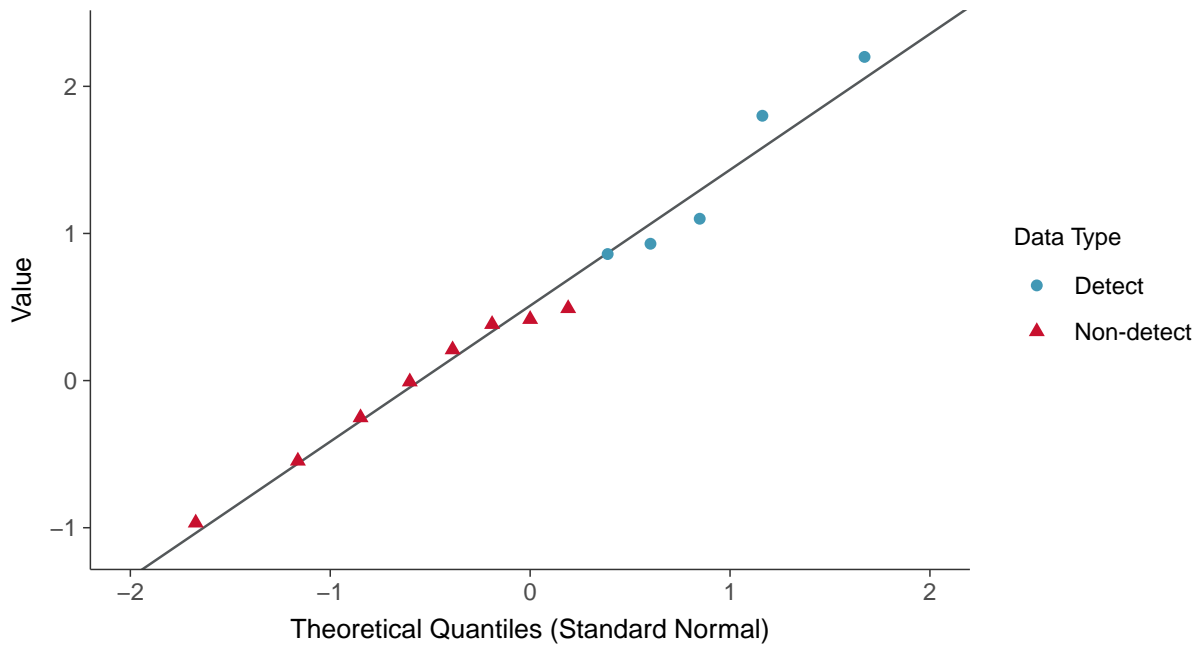
Sulfate (as SO₄), MW-02 (mg/L)





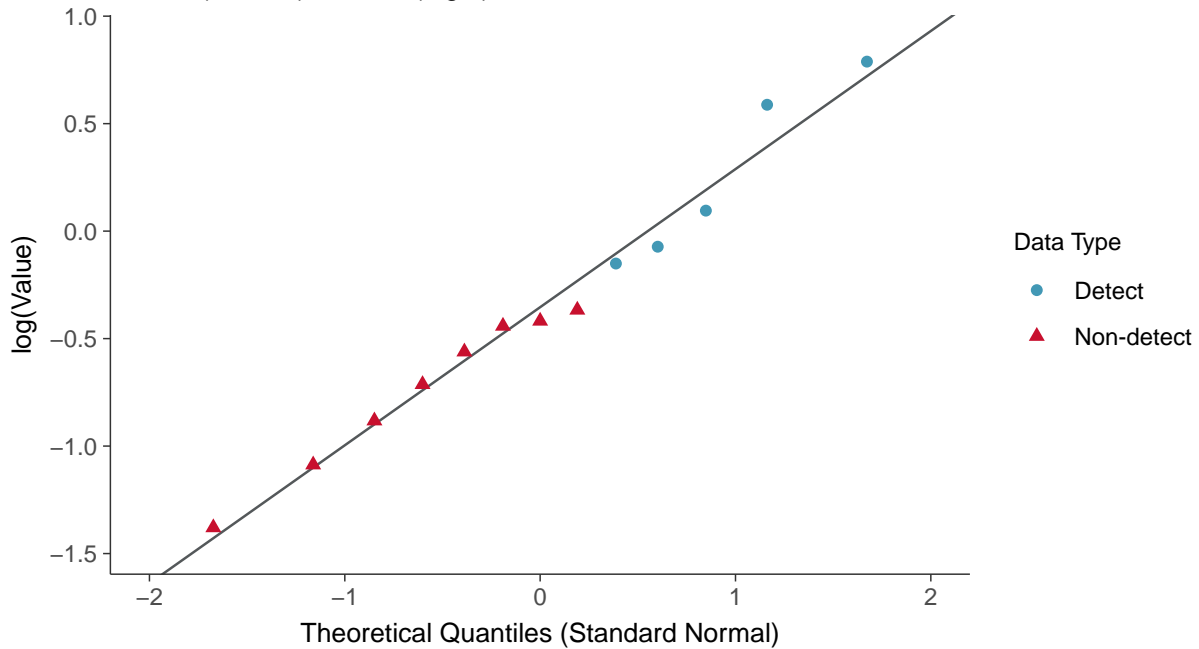
Normal Q-Q plot using ROS Imputed Estimates

Sulfate (as SO₄), MW-02 (mg/L)



Lognormal Q-Q plot using ROS Imputed Estimates

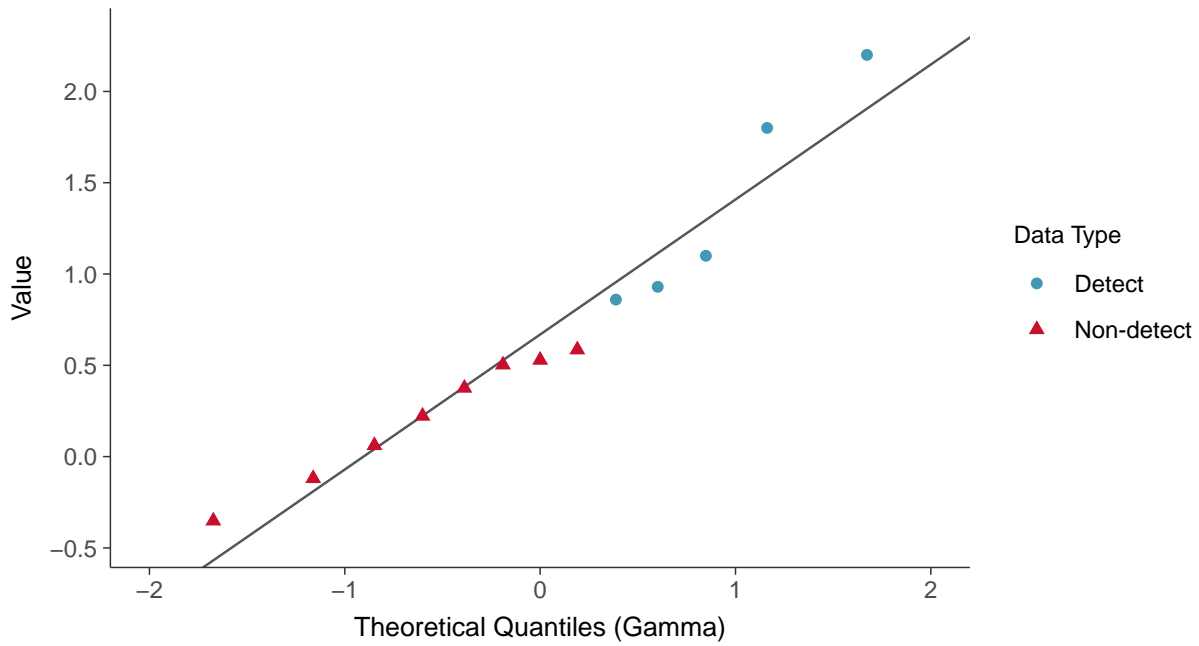
Sulfate (as SO₄), MW-02 (mg/L)





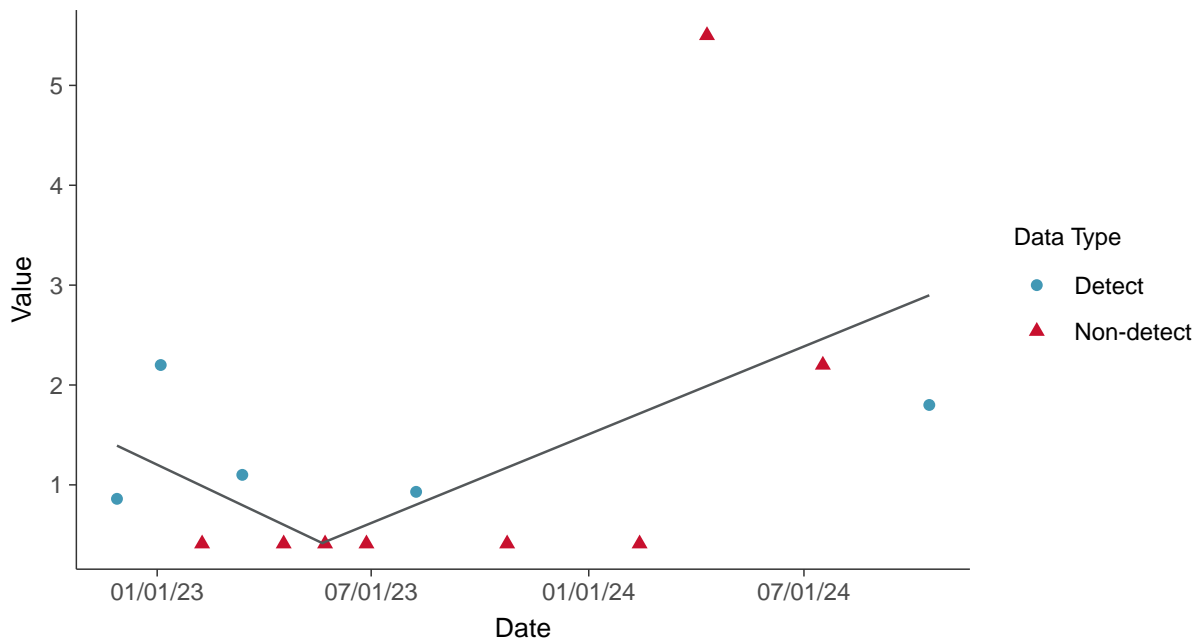
Gamma Q-Q plot using ROS Imputed Estimates

Sulfate (as SO₄), MW-02 (mg/L)



Trend Regression: Piecewise Linear-Linear

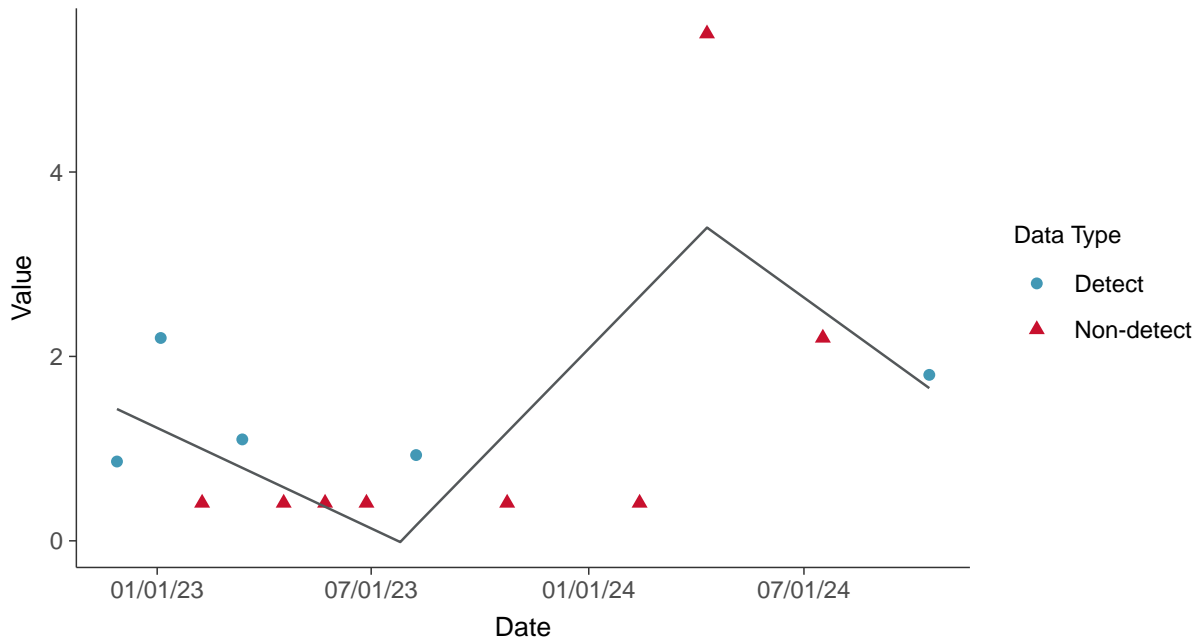
Sulfate (as SO₄), MW-02 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

Sulfate (as SO₄), MW-02 (mg/L)



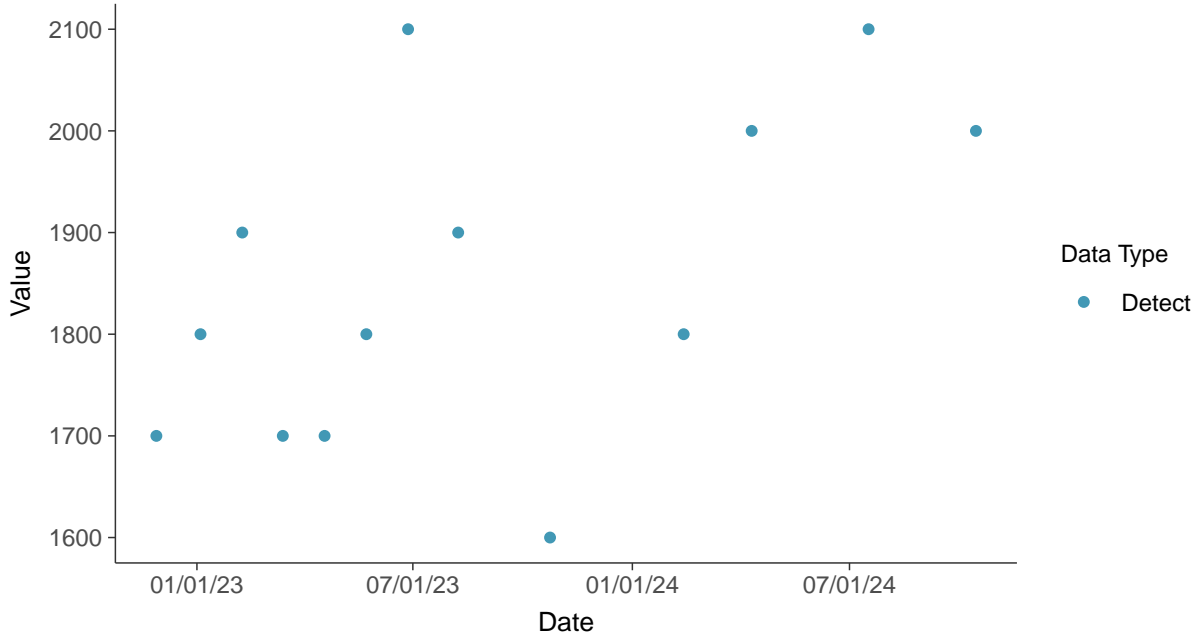


Appendix III: Total Dissolved Solids, MW-02

ID: 2_12_2_4_126

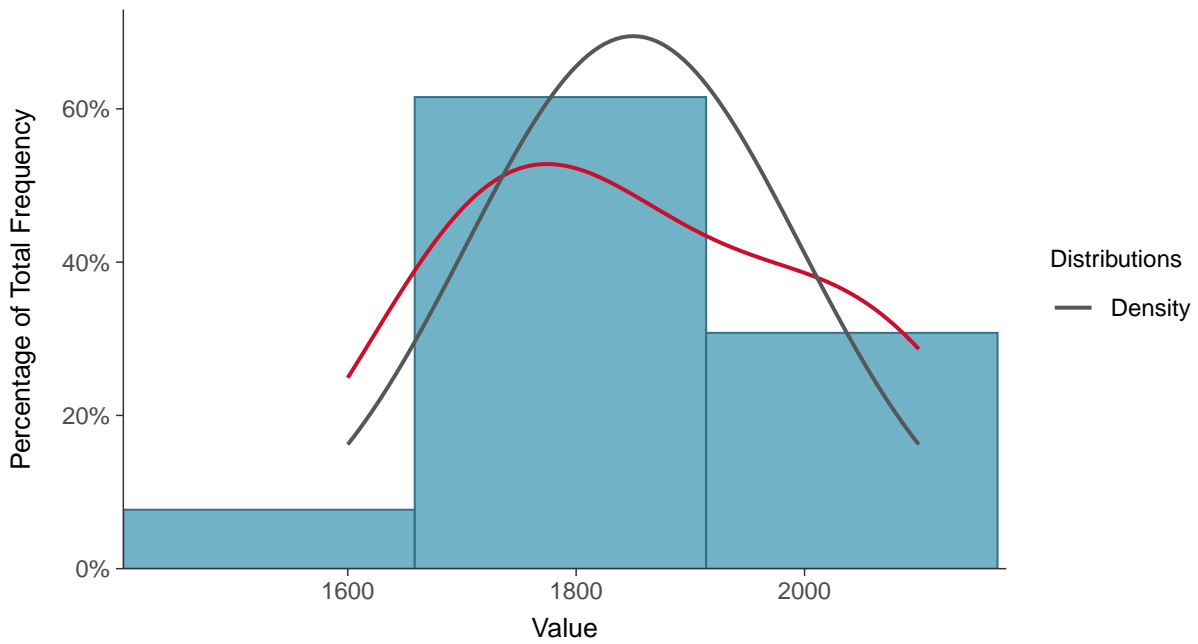
Scatter Plot

Total Dissolved Solids, MW-02 (mg/L)



Histogram

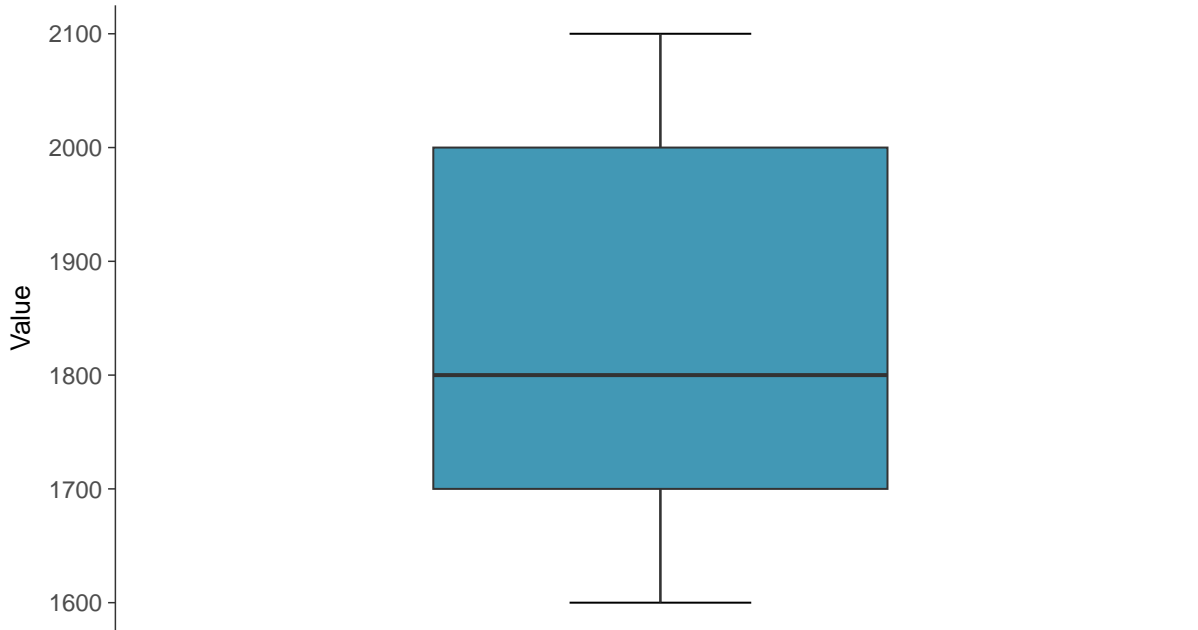
Total Dissolved Solids, MW-02 (mg/L)





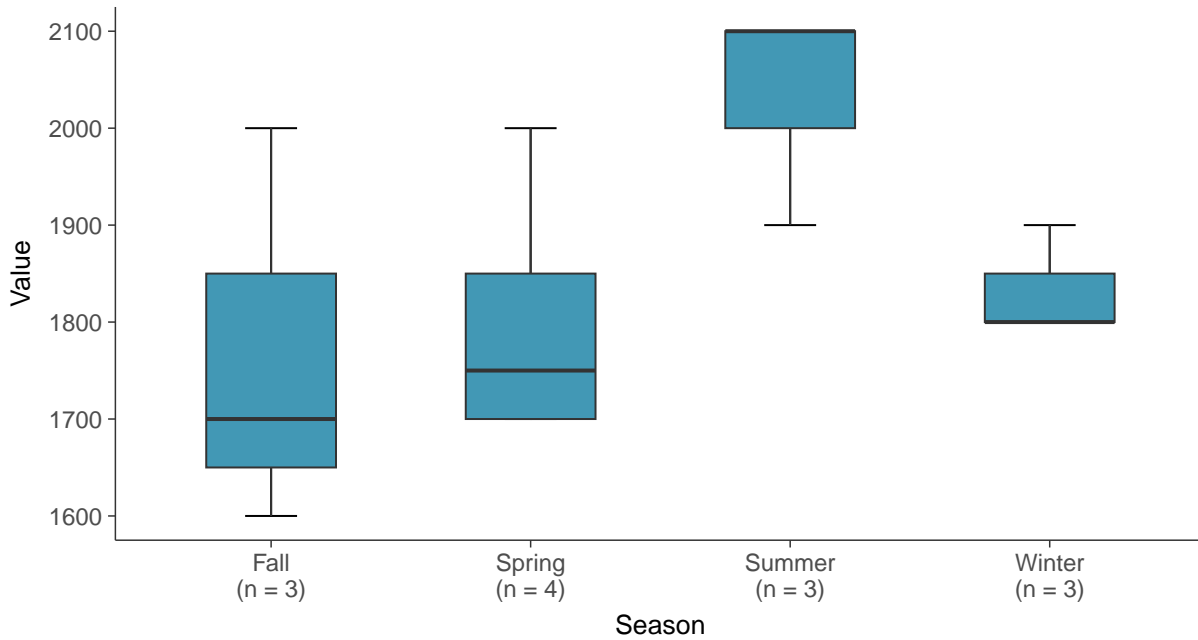
Boxplot

Total Dissolved Solids, MW-02 (mg/L)



Boxplot by Season

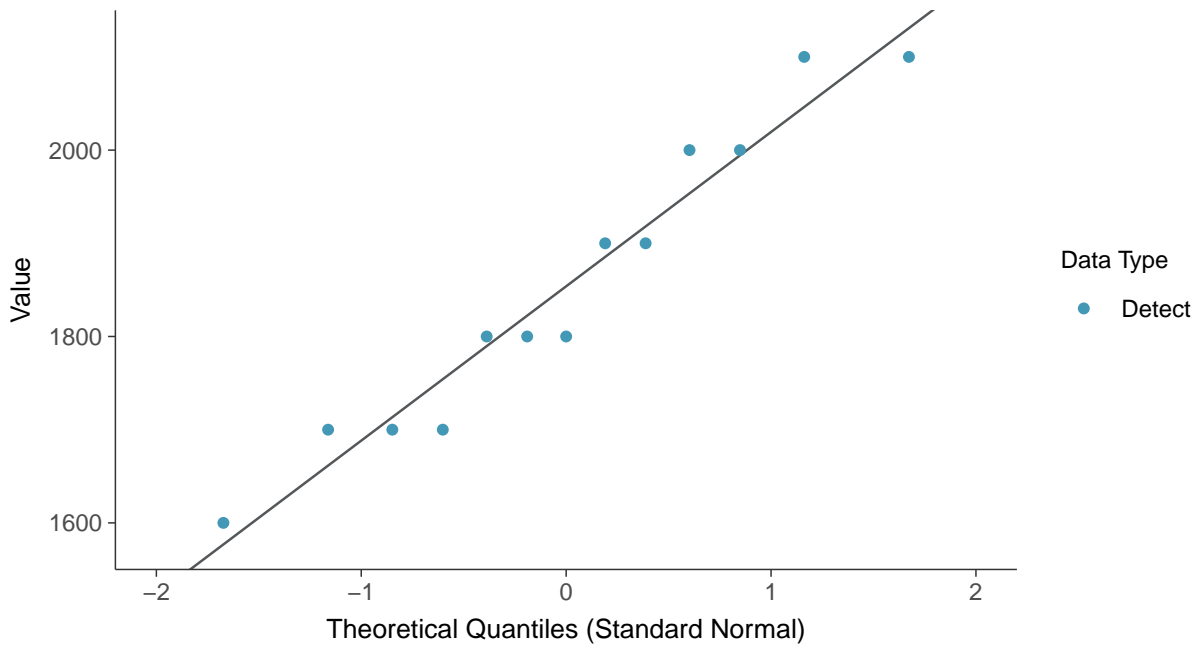
Total Dissolved Solids, MW-02 (mg/L)





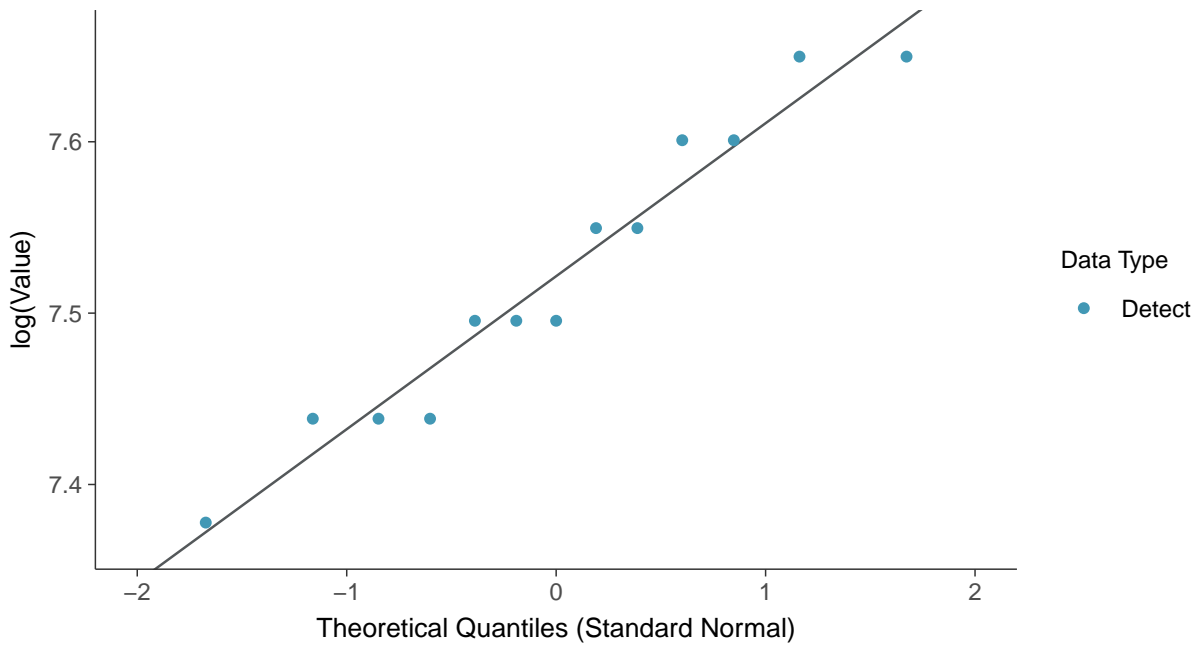
Normal Q-Q plot

Total Dissolved Solids, MW-02 (mg/L)



Lognormal Q-Q plot

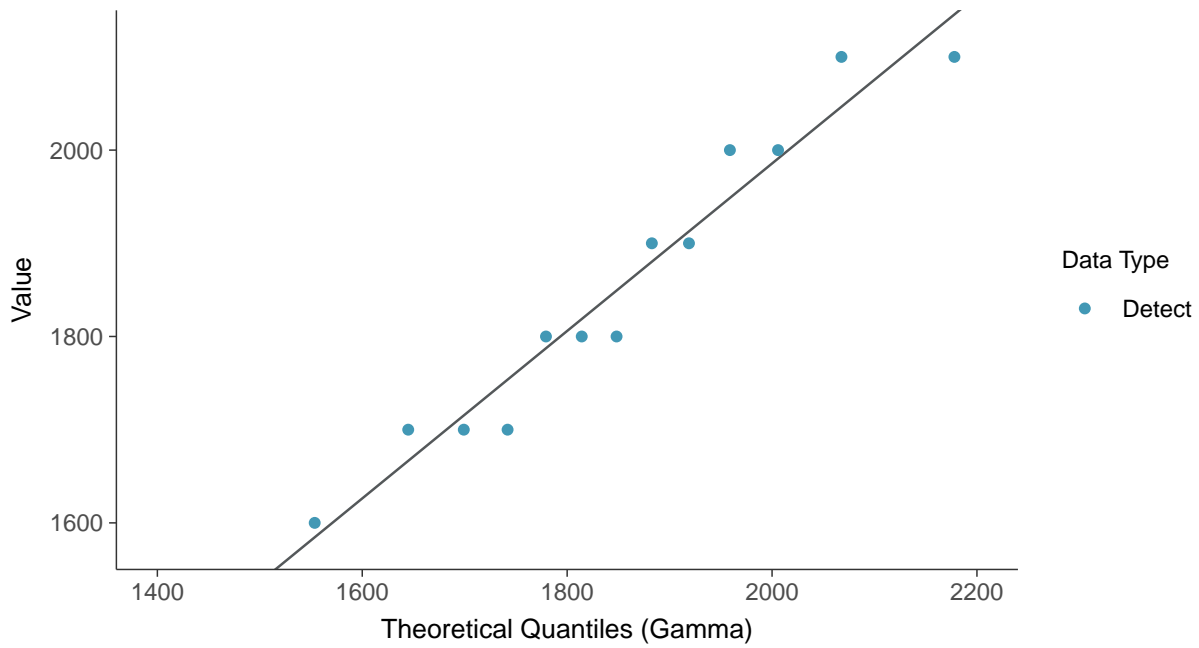
Total Dissolved Solids, MW-02 (mg/L)





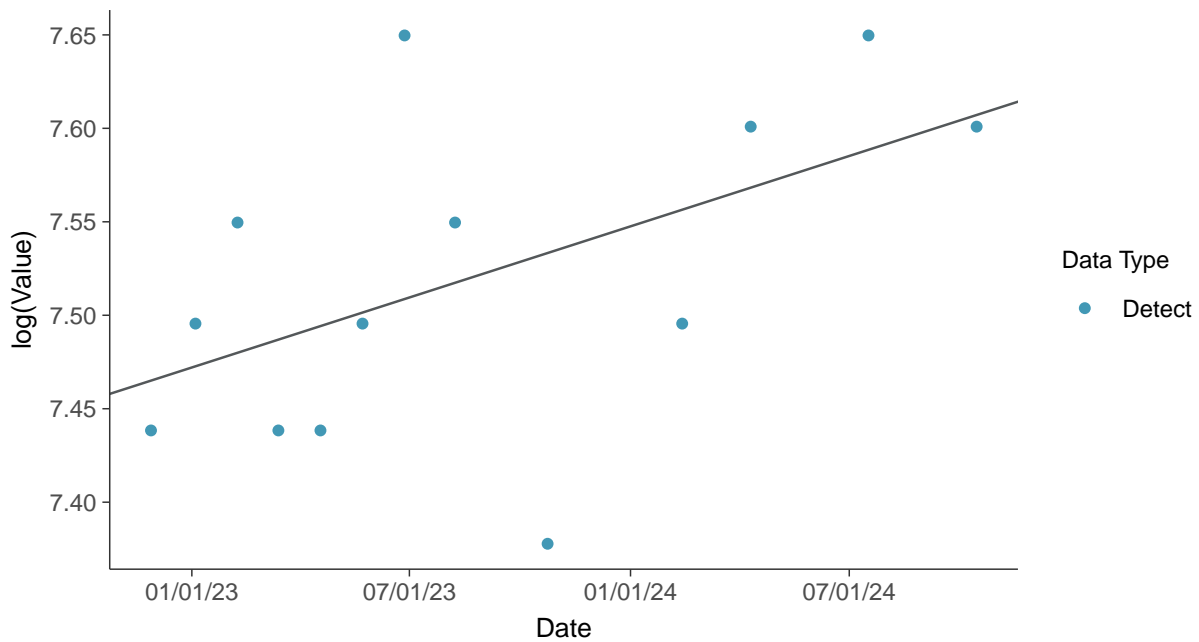
Gamma Q-Q plot

Total Dissolved Solids, MW-02 (mg/L)



Trend Regression: Lognormal MLE

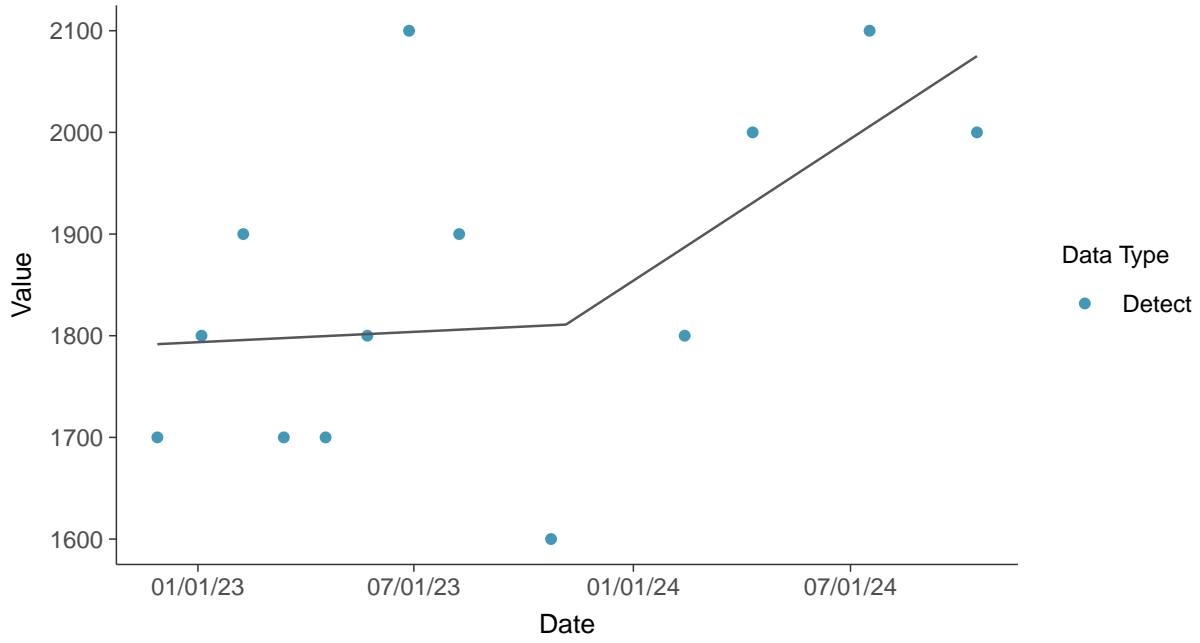
Total Dissolved Solids, MW-02 (mg/L)





Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-02 (mg/L)



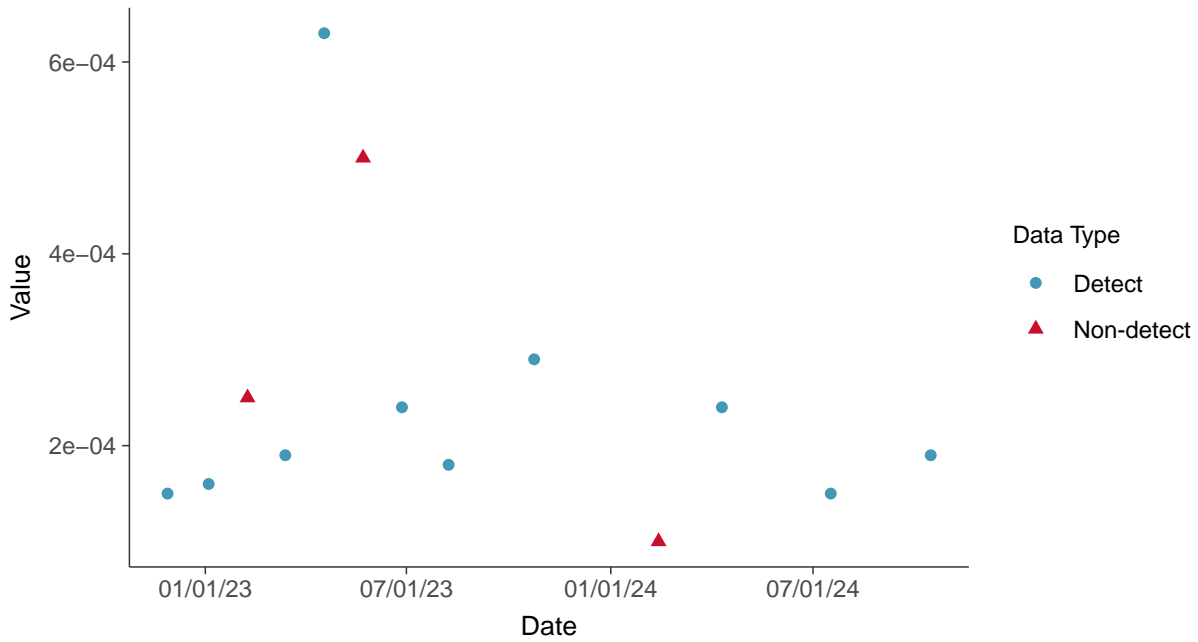


Appendix IV: Antimony, MW-02

ID: 2_12_2_5_101

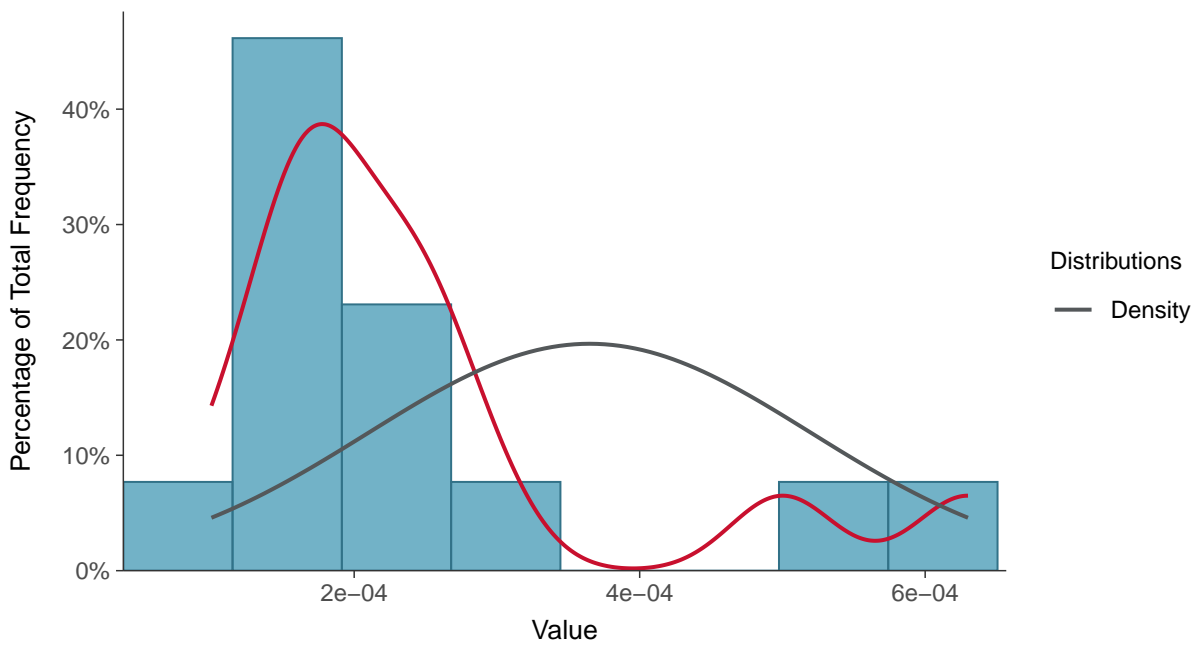
Scatter Plot

Antimony, MW-02 (mg/L)



Histogram

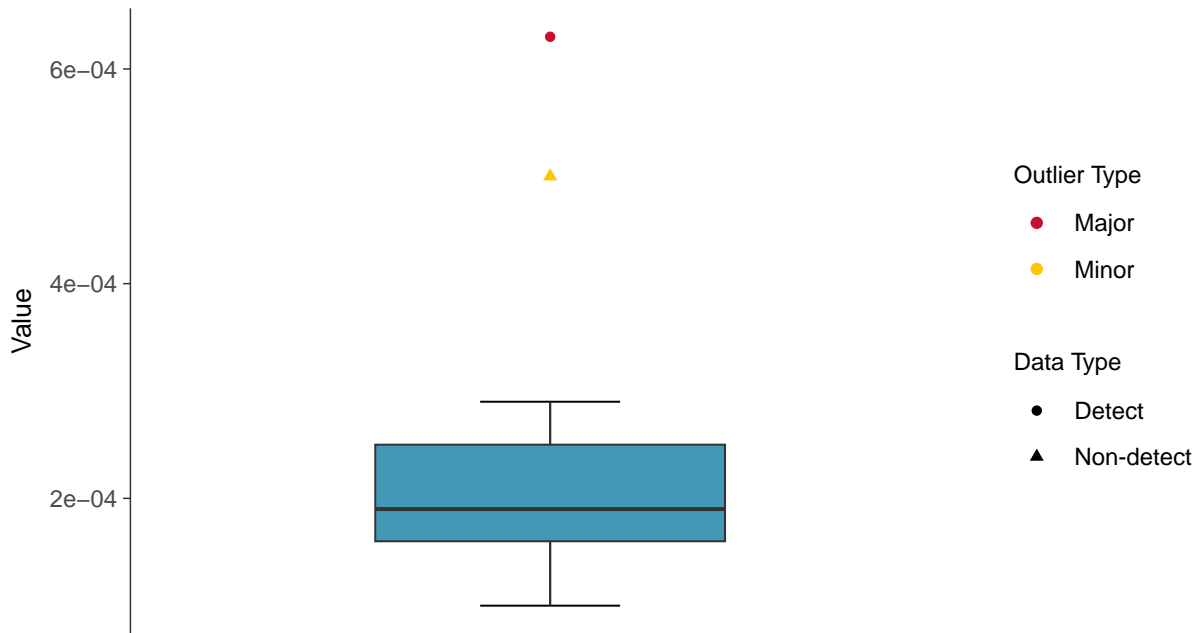
Antimony, MW-02 (mg/L)





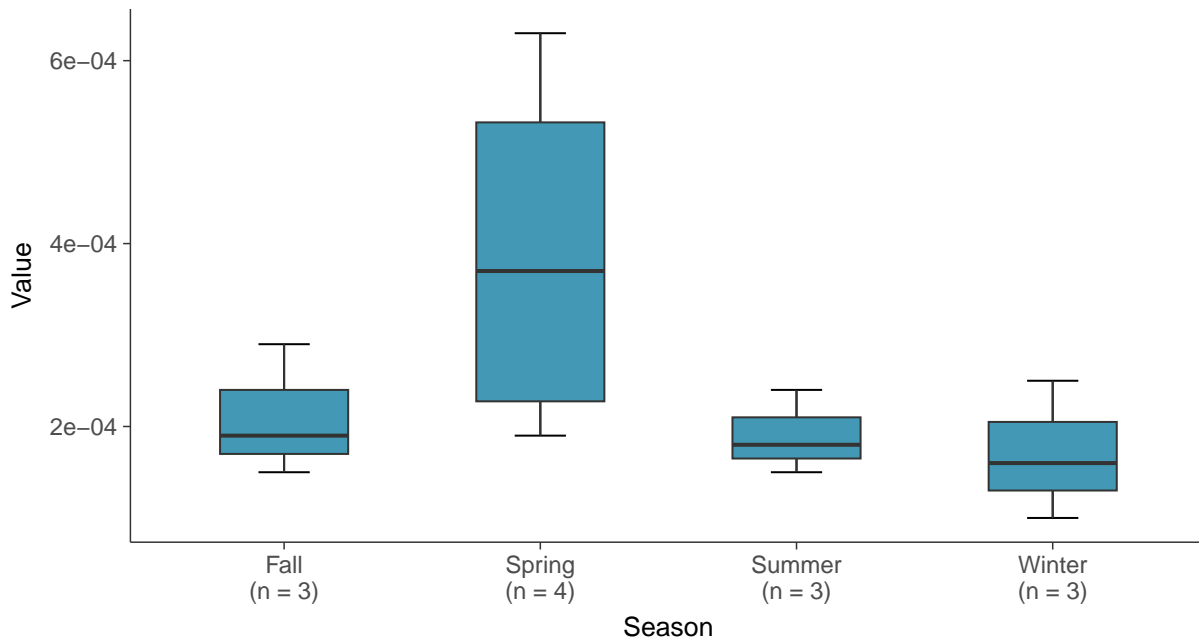
Boxplot

Antimony, MW-02 (mg/L)



Boxplot by Season

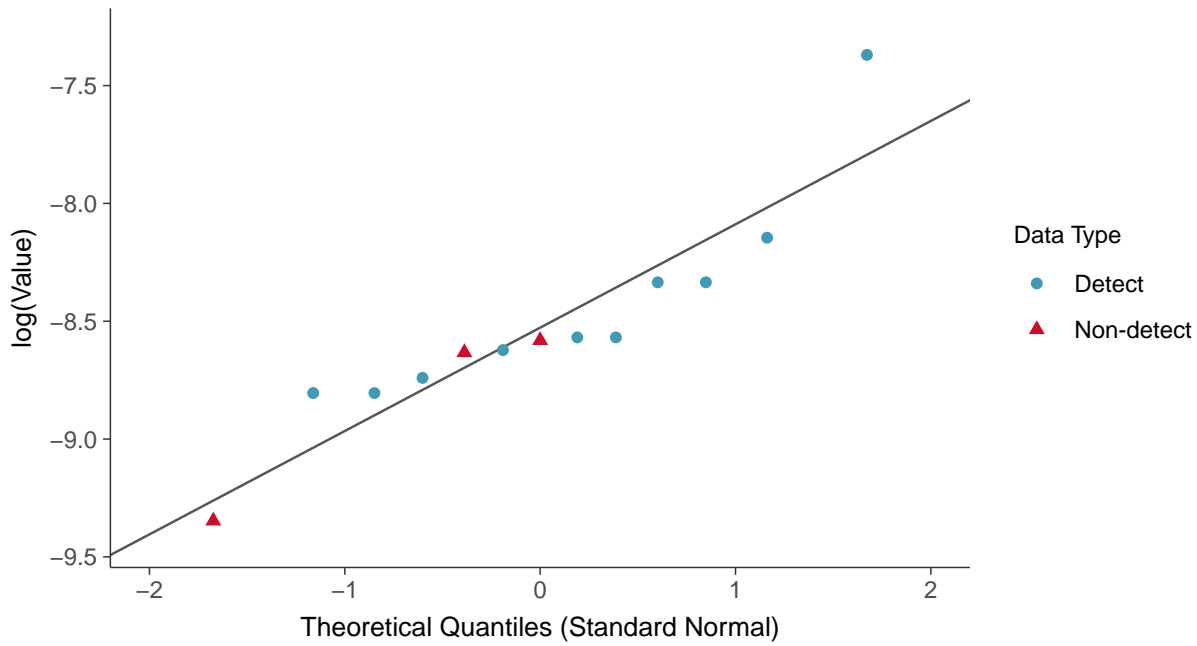
Antimony, MW-02 (mg/L)





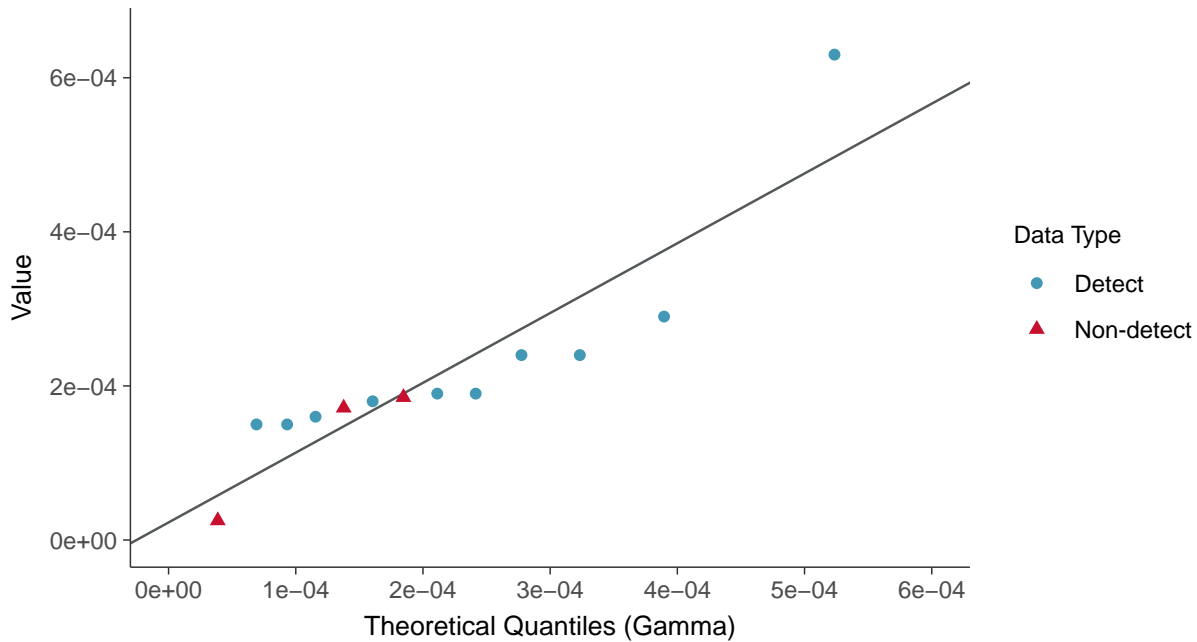
Lognormal Q-Q plot using ROS Imputed Estimates

Antimony, MW-02 (mg/L)



Gamma Q-Q plot using ROS Imputed Estimates

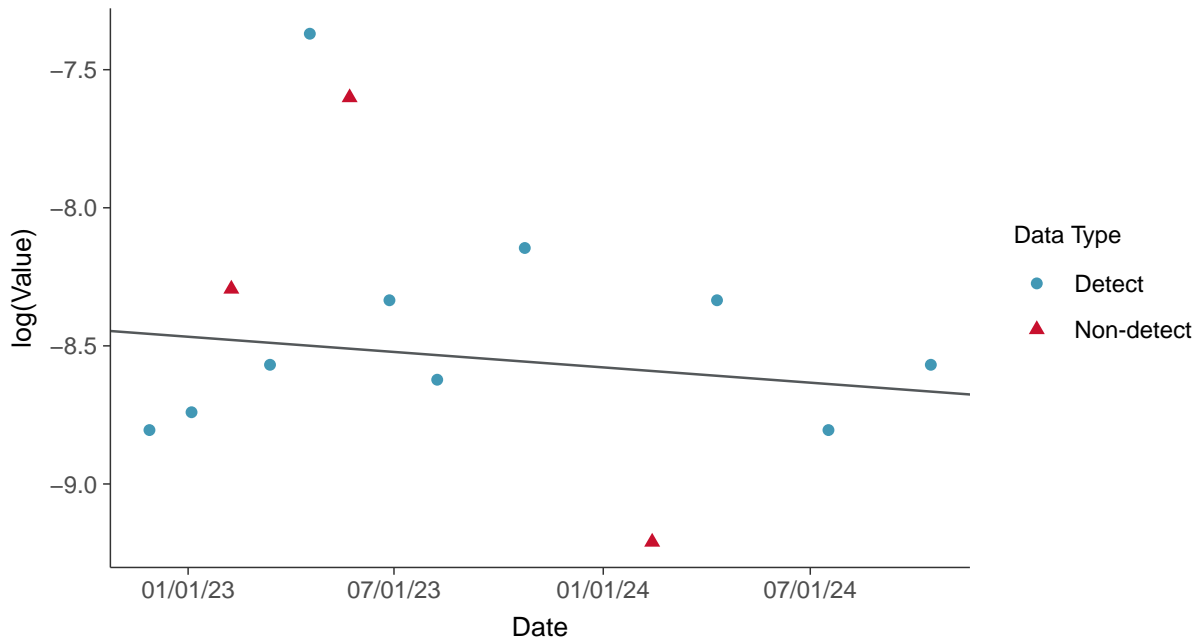
Antimony, MW-02 (mg/L)





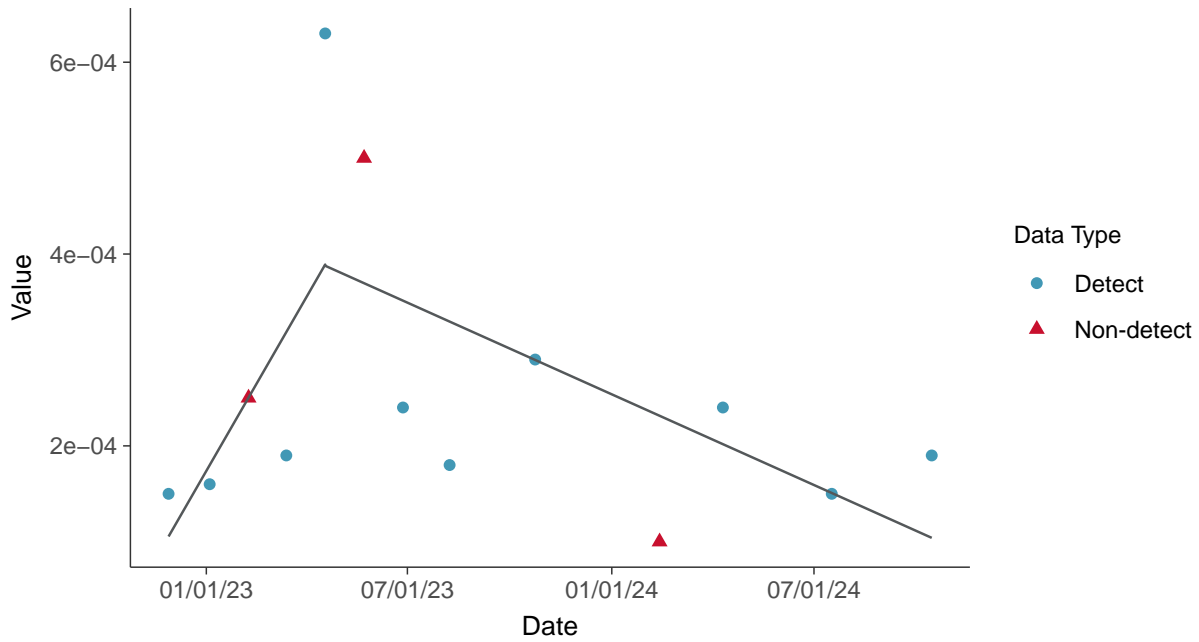
Trend Regression: Lognormal MLE

Antimony, MW-02 (mg/L)



Trend Regression: Piecewise Linear-Linear

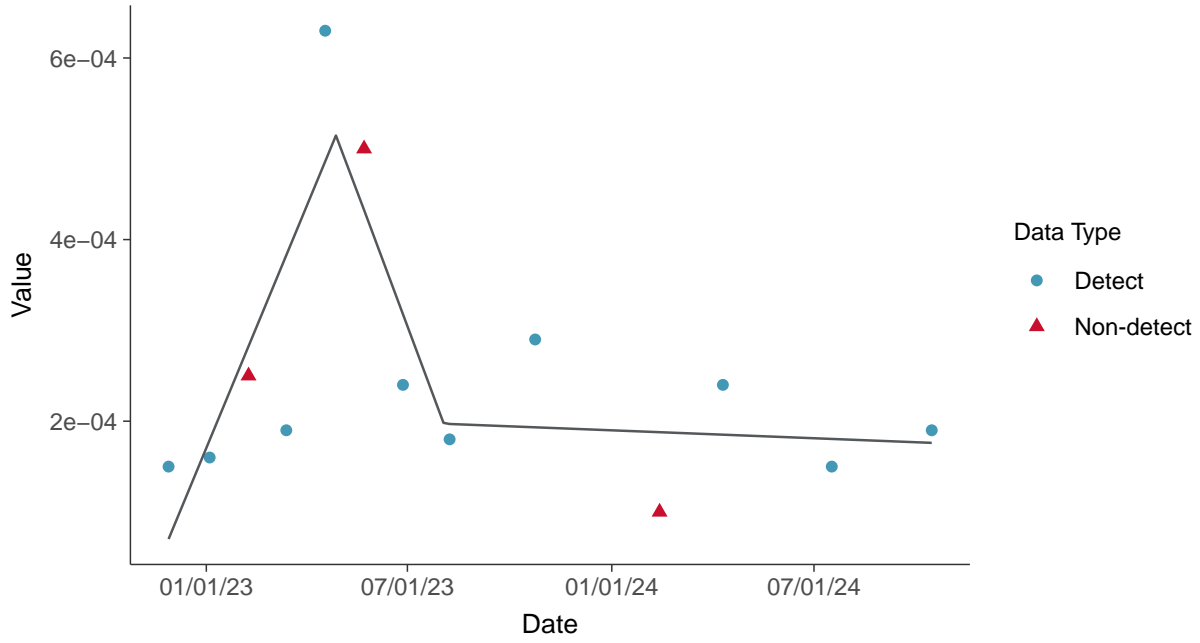
Antimony, MW-02 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

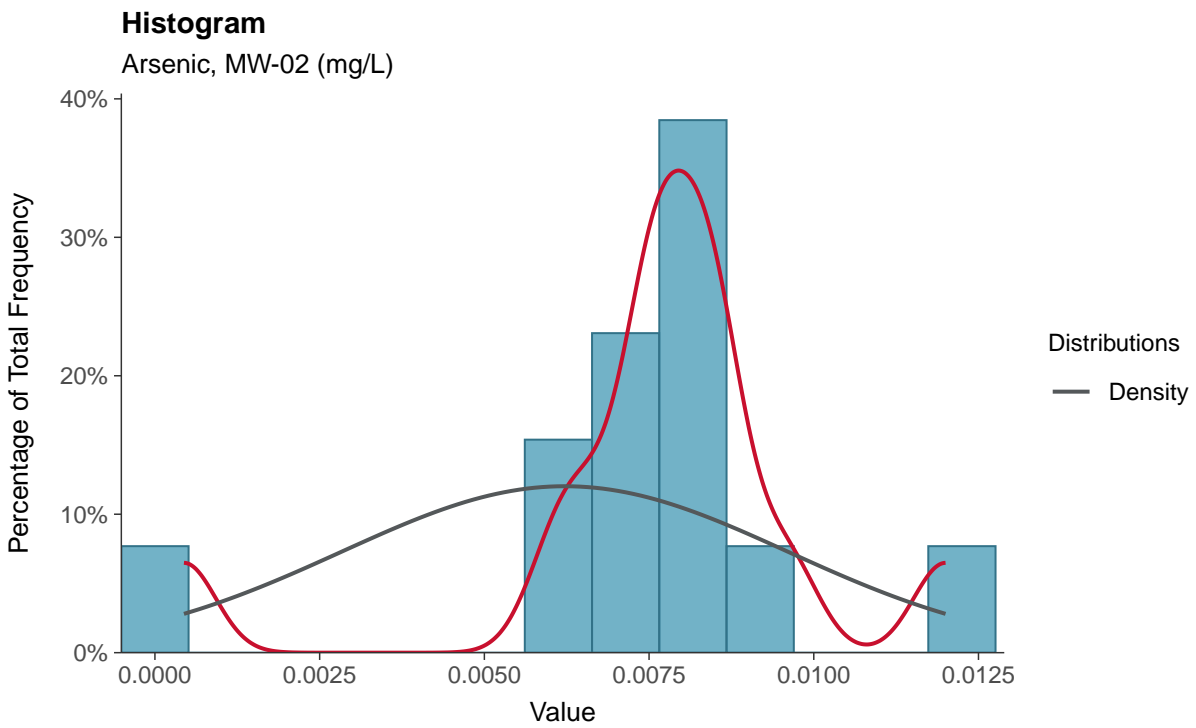
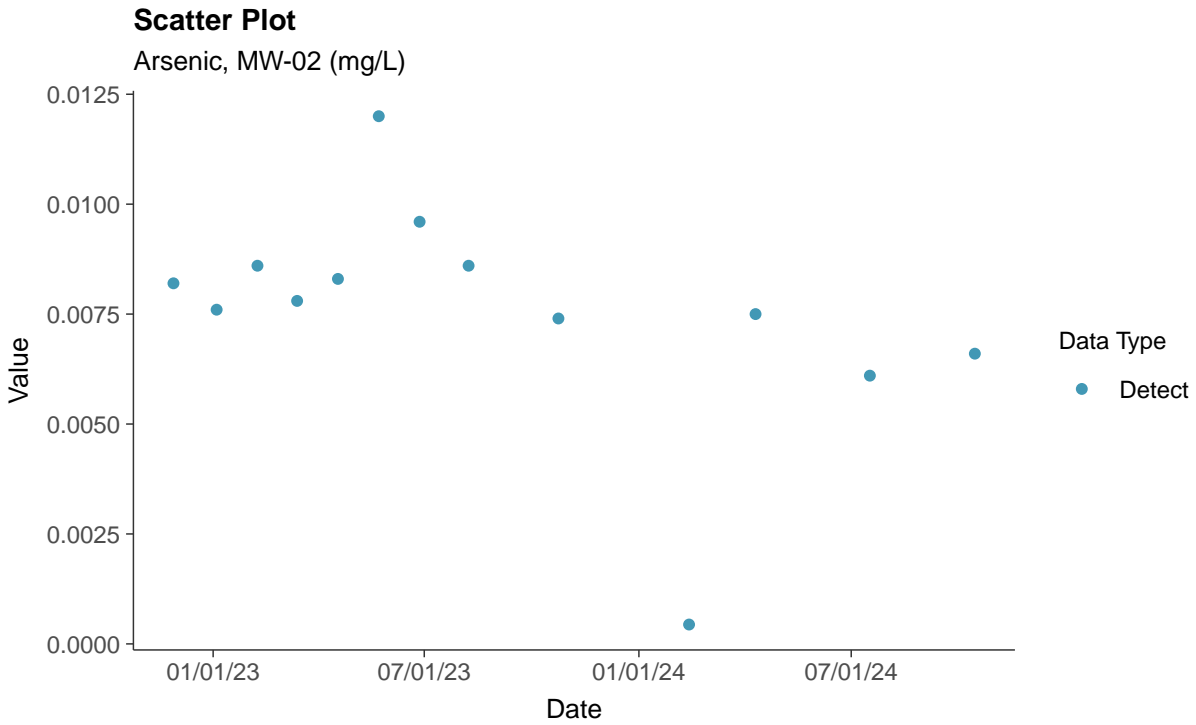
Antimony, MW-02 (mg/L)





Appendix IV: Arsenic, MW-02

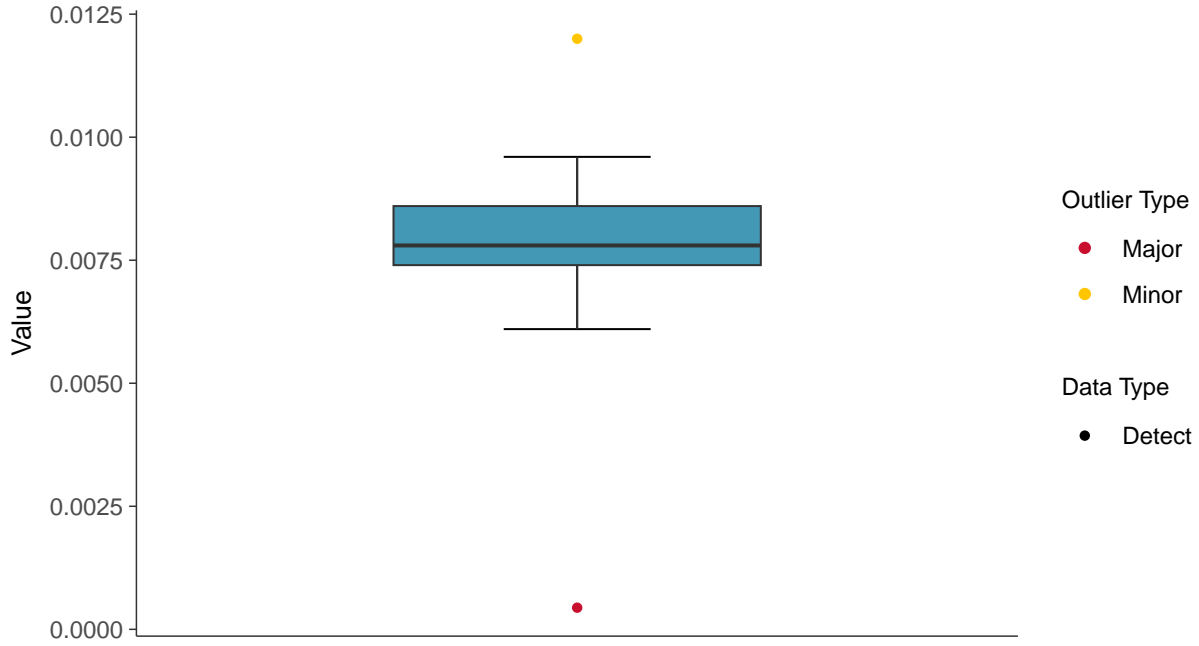
ID: 2_12_2_5_102





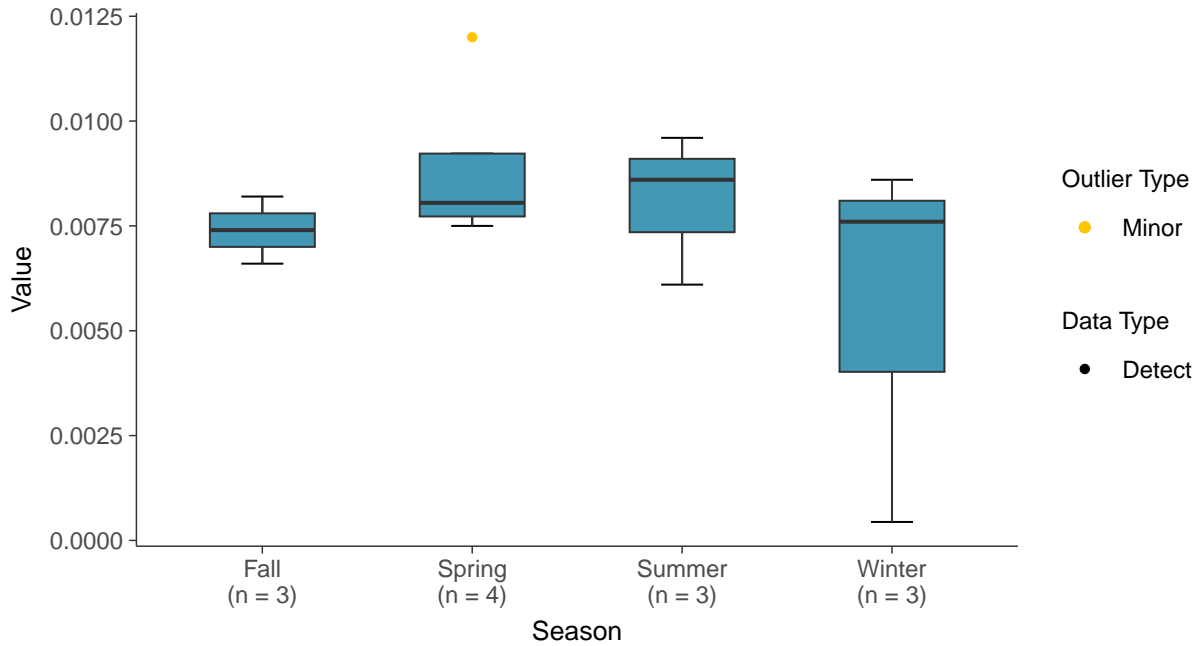
Boxplot

Arsenic, MW-02 (mg/L)



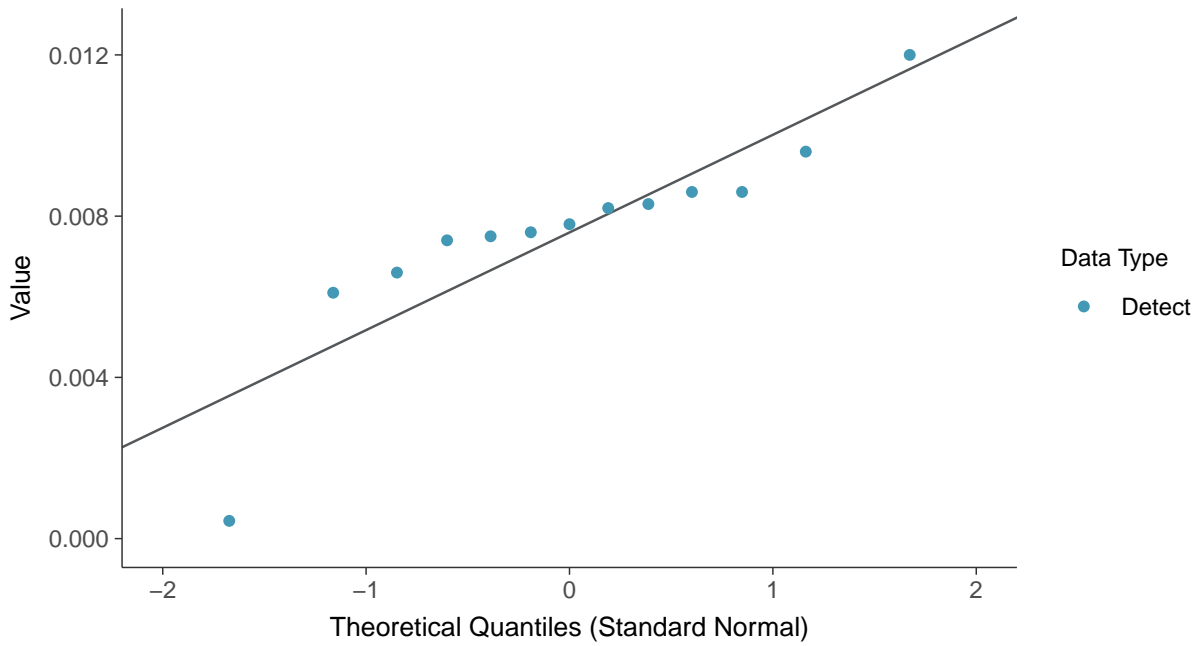
Boxplot by Season

Arsenic, MW-02 (mg/L)

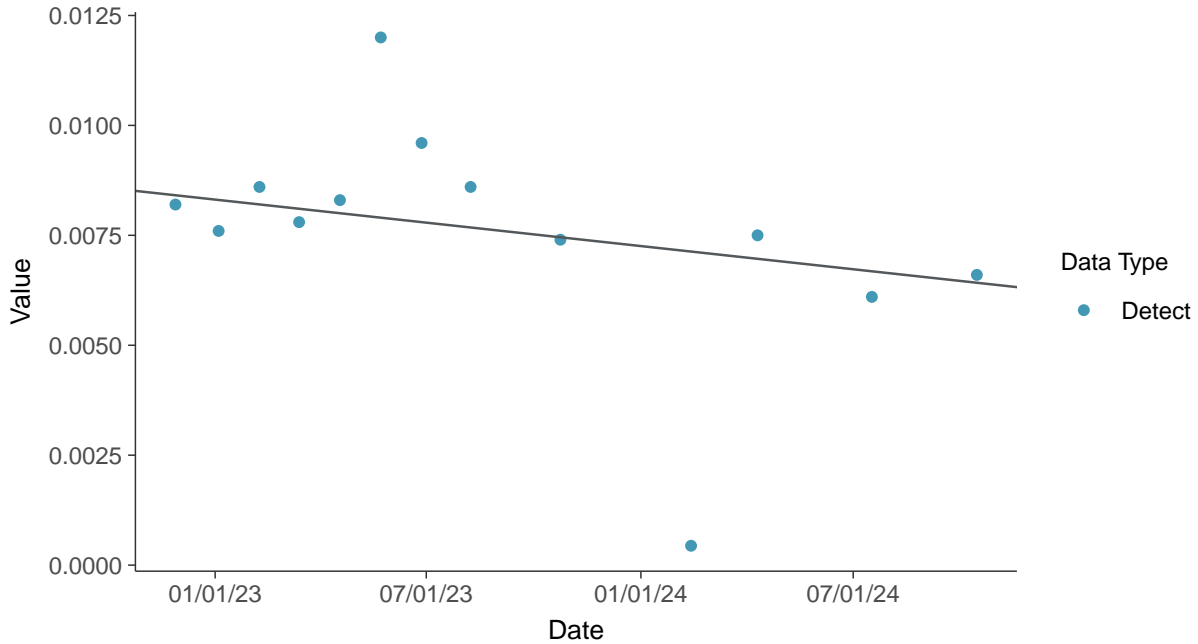




Normal Q-Q plot
Arsenic, MW-02 (mg/L)



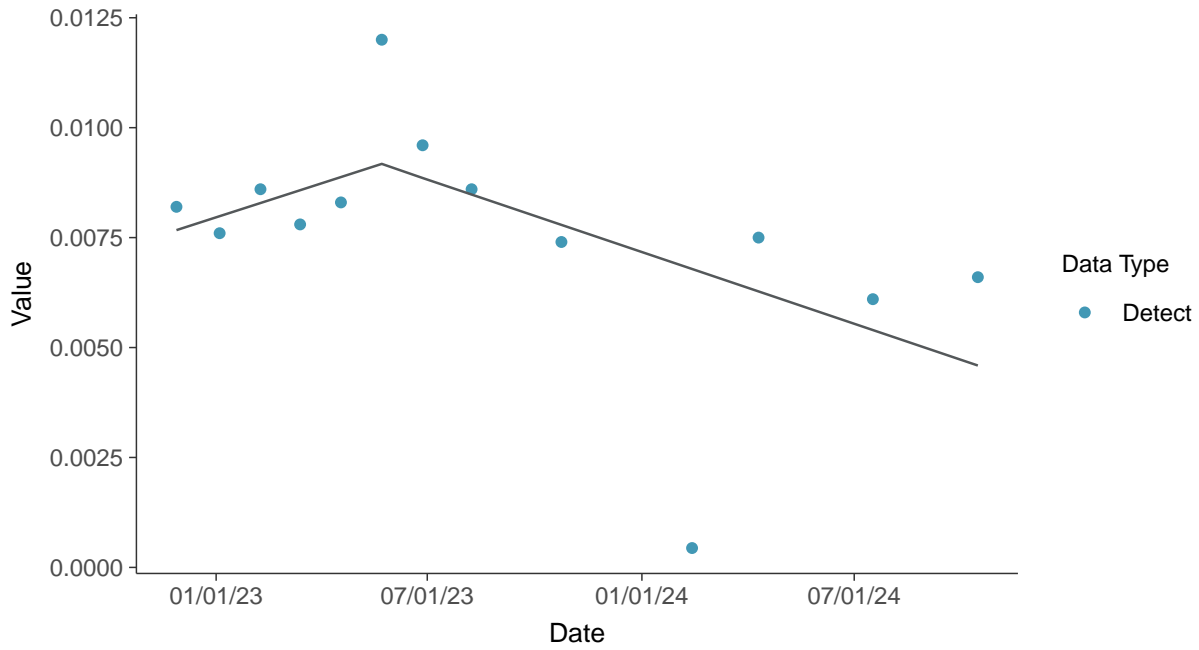
Trend Regression: Mann-Kendall/Theil-Sen Estimate
Arsenic, MW-02 (mg/L)





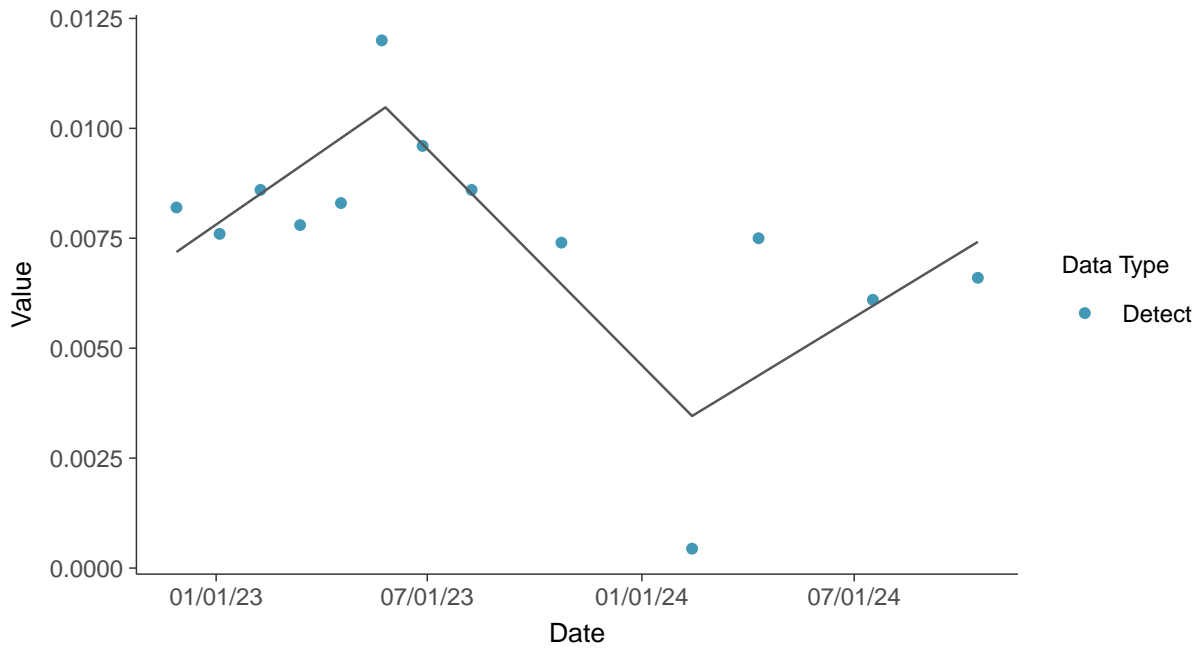
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-02 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

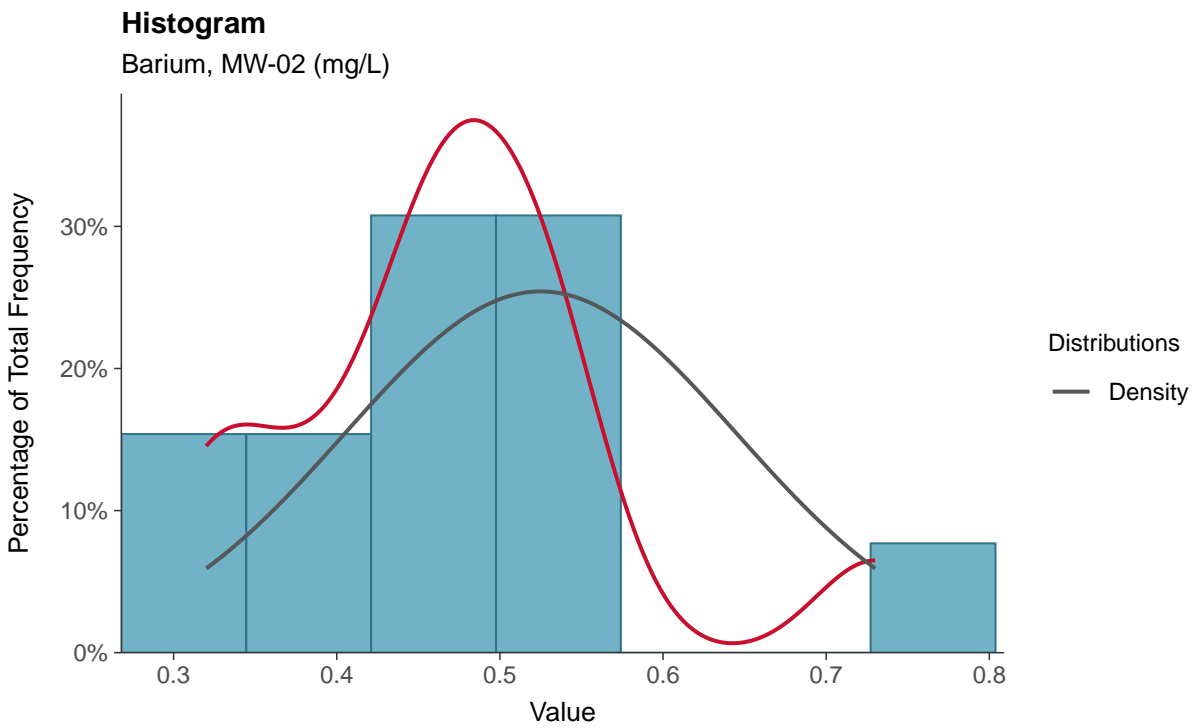
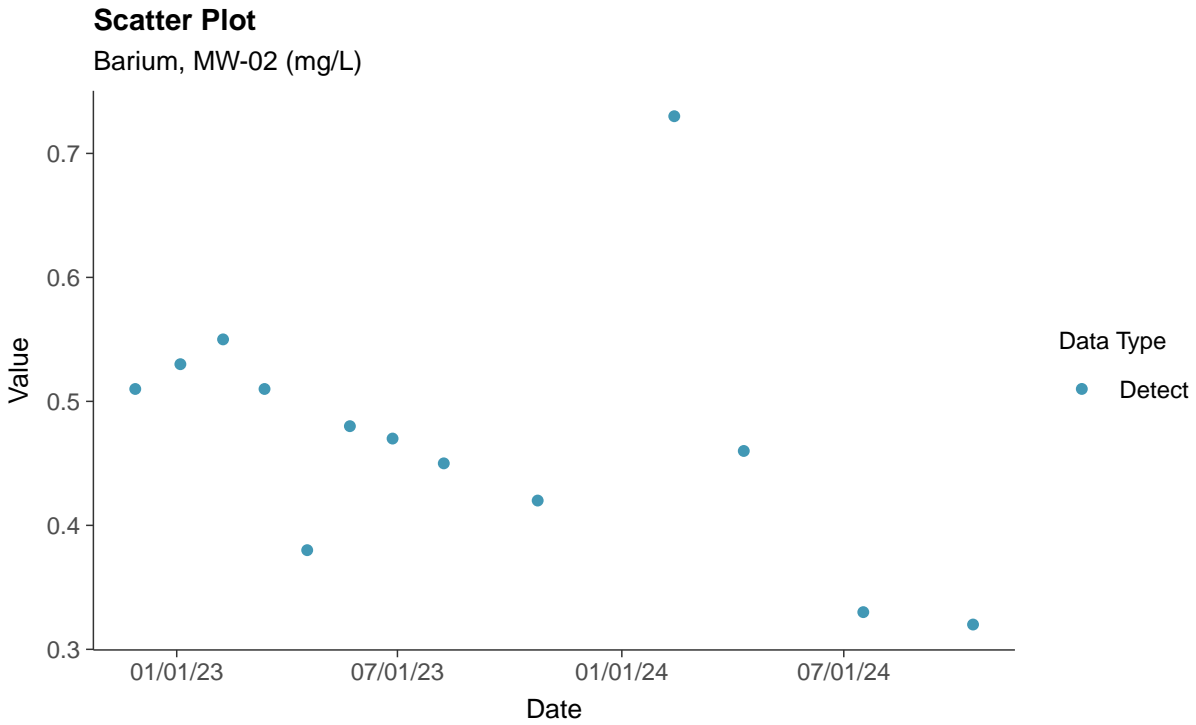
Arsenic, MW-02 (mg/L)





Appendix IV: Barium, MW-02

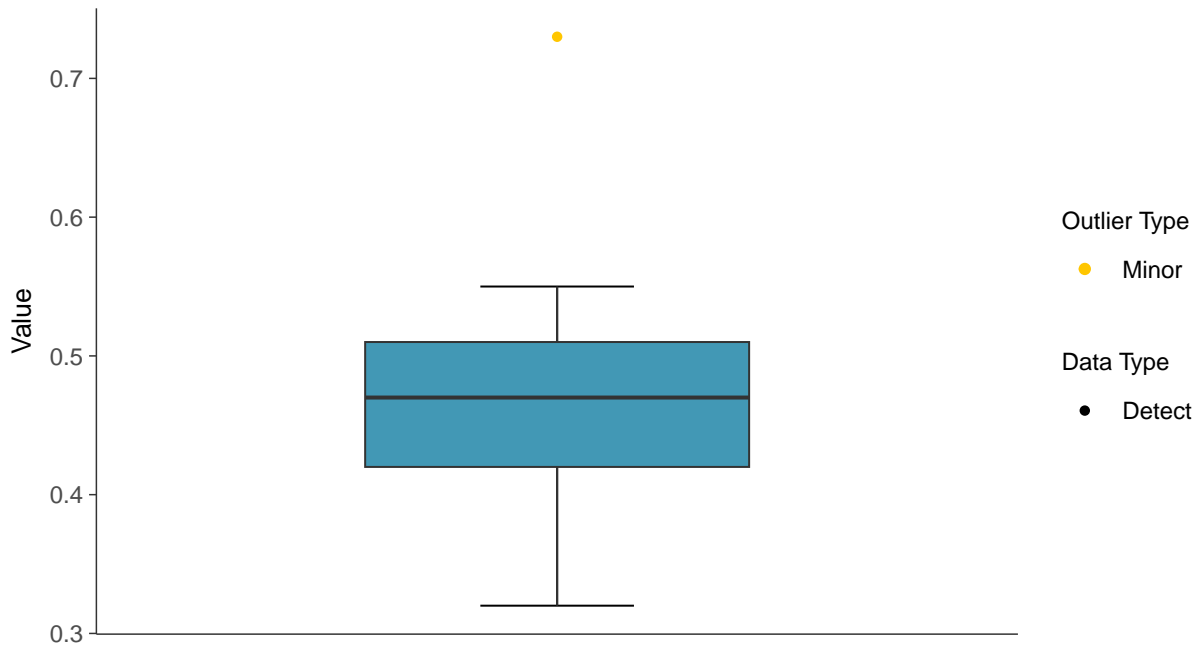
ID: 2_12_2_5_103





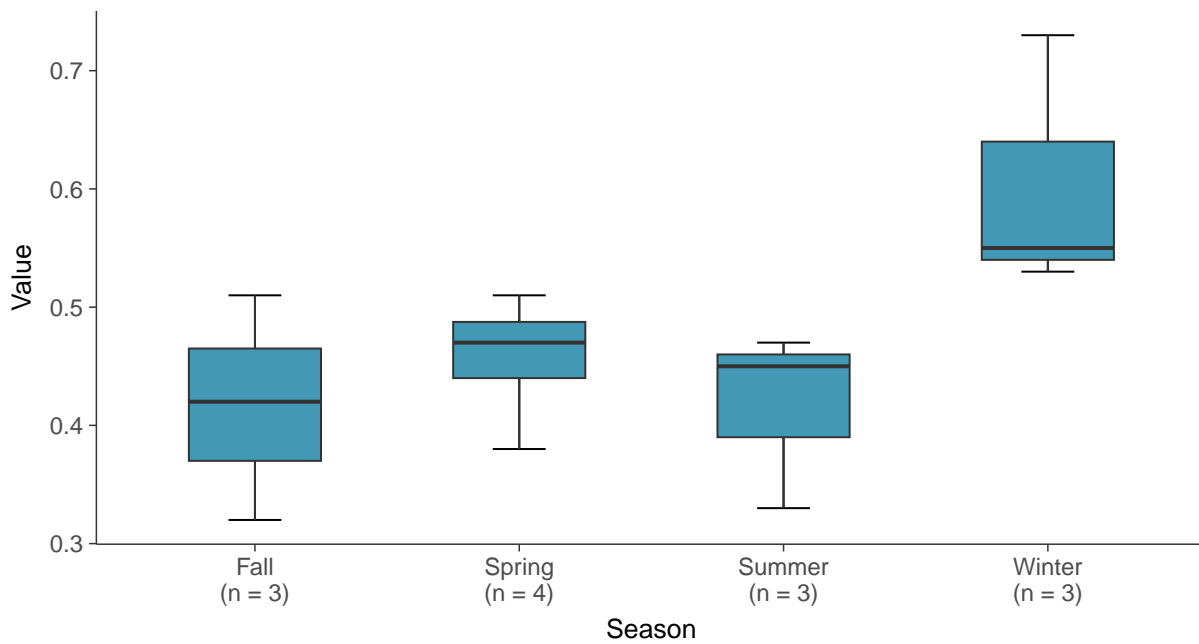
Boxplot

Barium, MW-02 (mg/L)



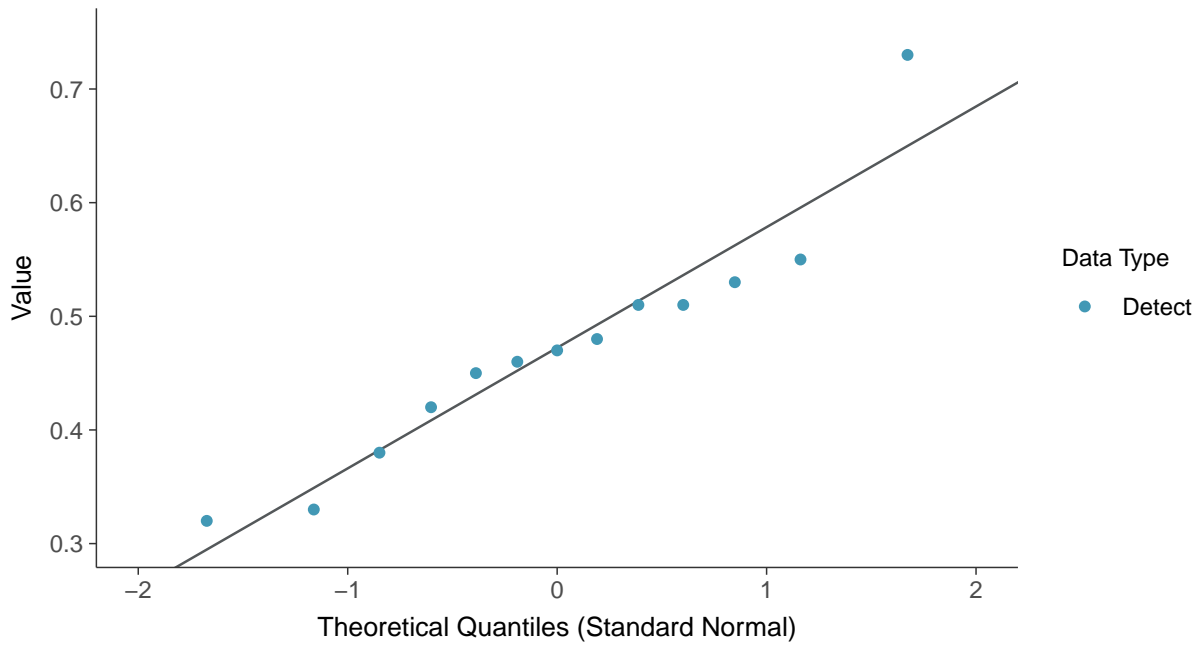
Boxplot by Season

Barium, MW-02 (mg/L)

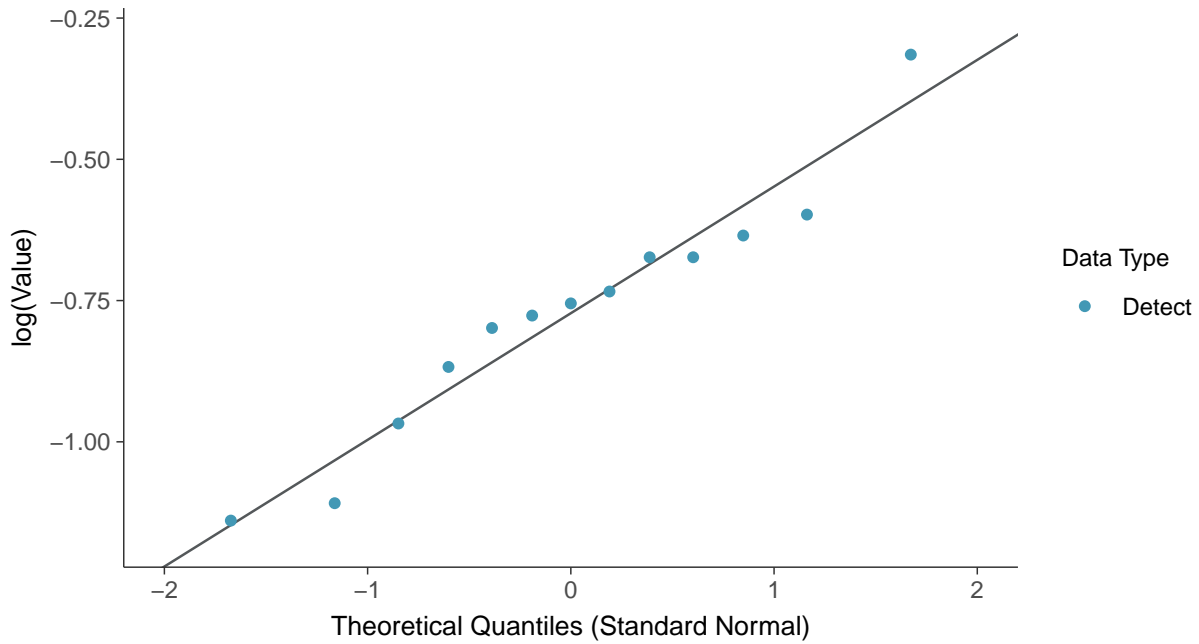




Normal Q-Q plot
Barium, MW-02 (mg/L)

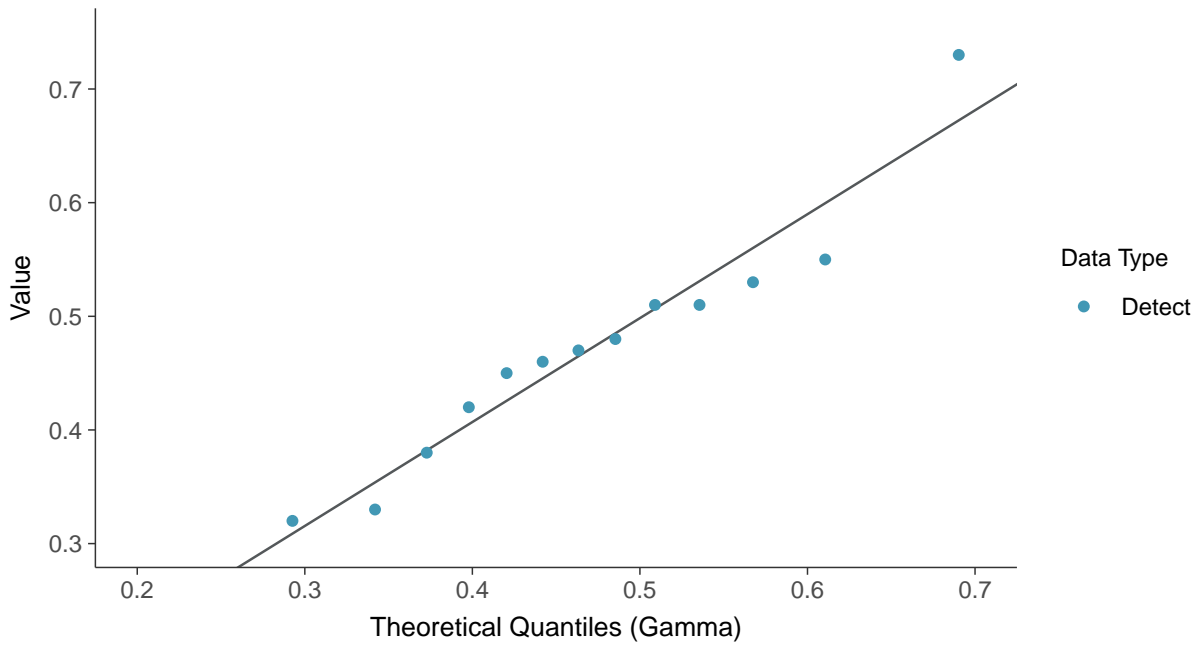


Lognormal Q-Q plot
Barium, MW-02 (mg/L)

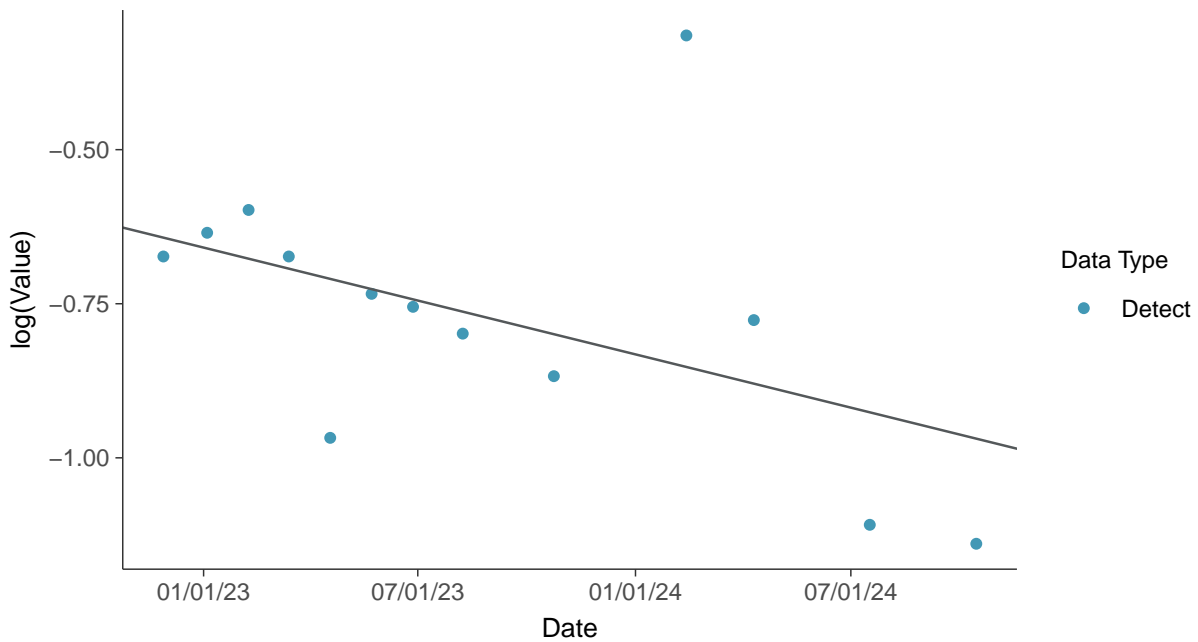




Gamma Q-Q plot
Barium, MW-02 (mg/L)

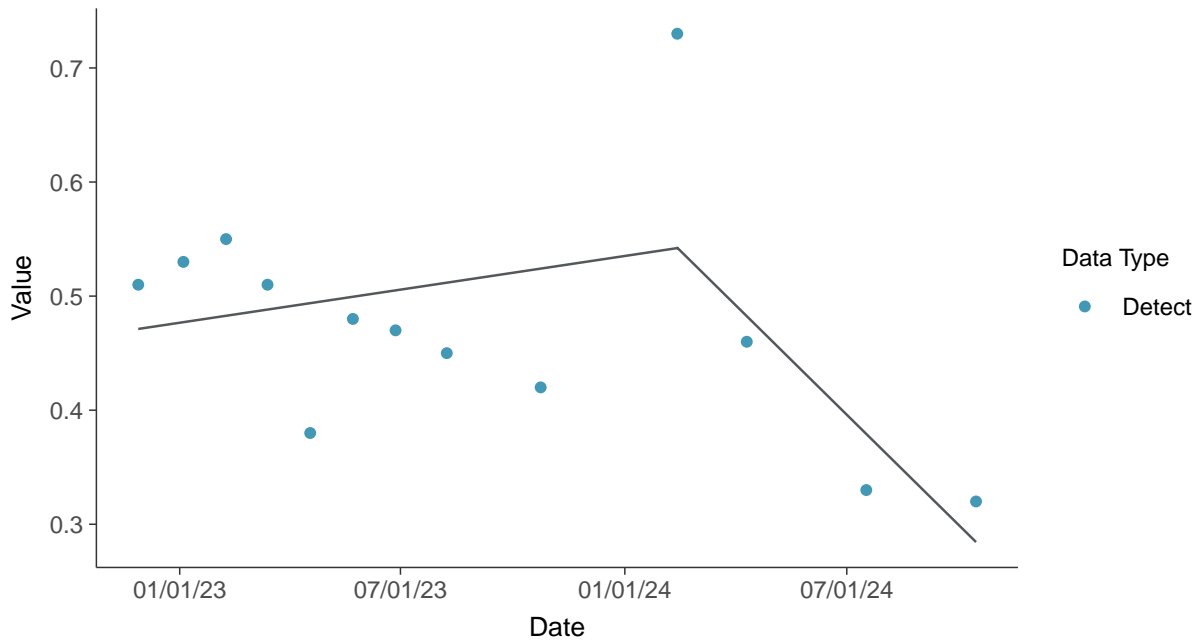


Trend Regression: Lognormal MLE
Barium, MW-02 (mg/L)

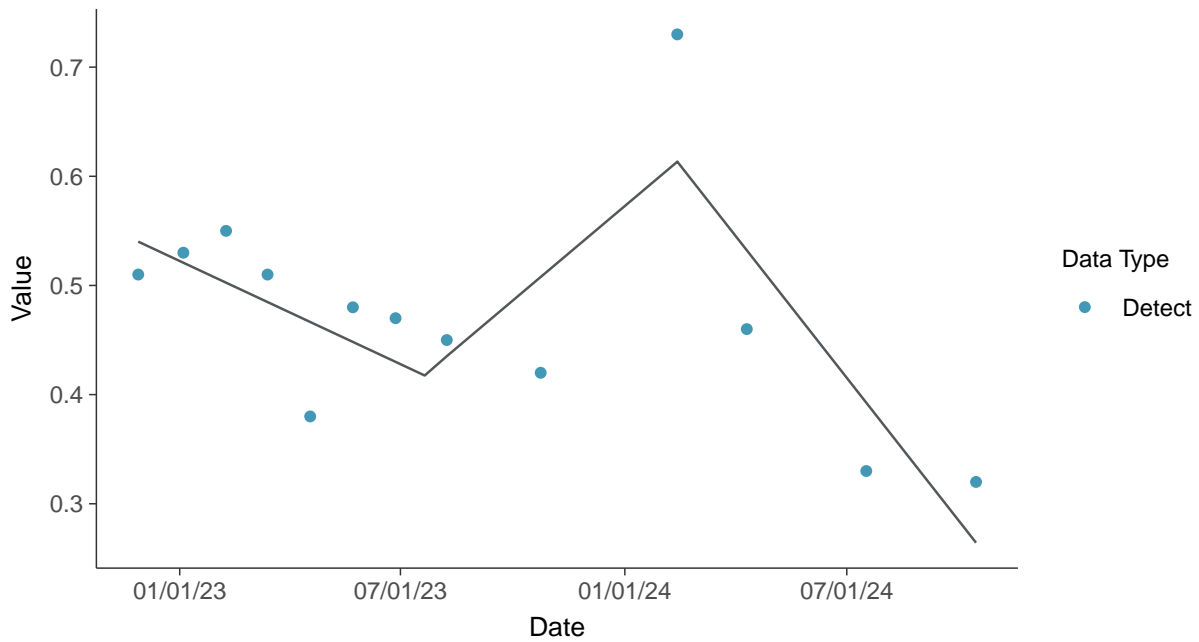




Trend Regression: Piecewise Linear-Linear
Barium, MW-02 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Barium, MW-02 (mg/L)



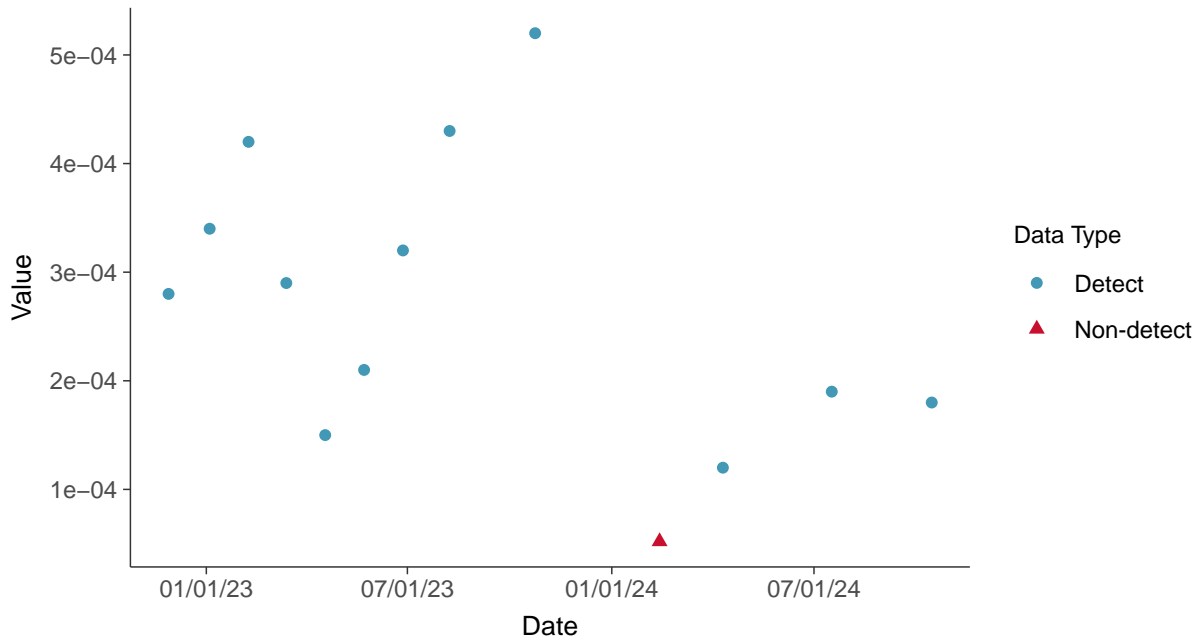


Appendix IV: Beryllium, MW-02

ID: 2_12_2_5_104

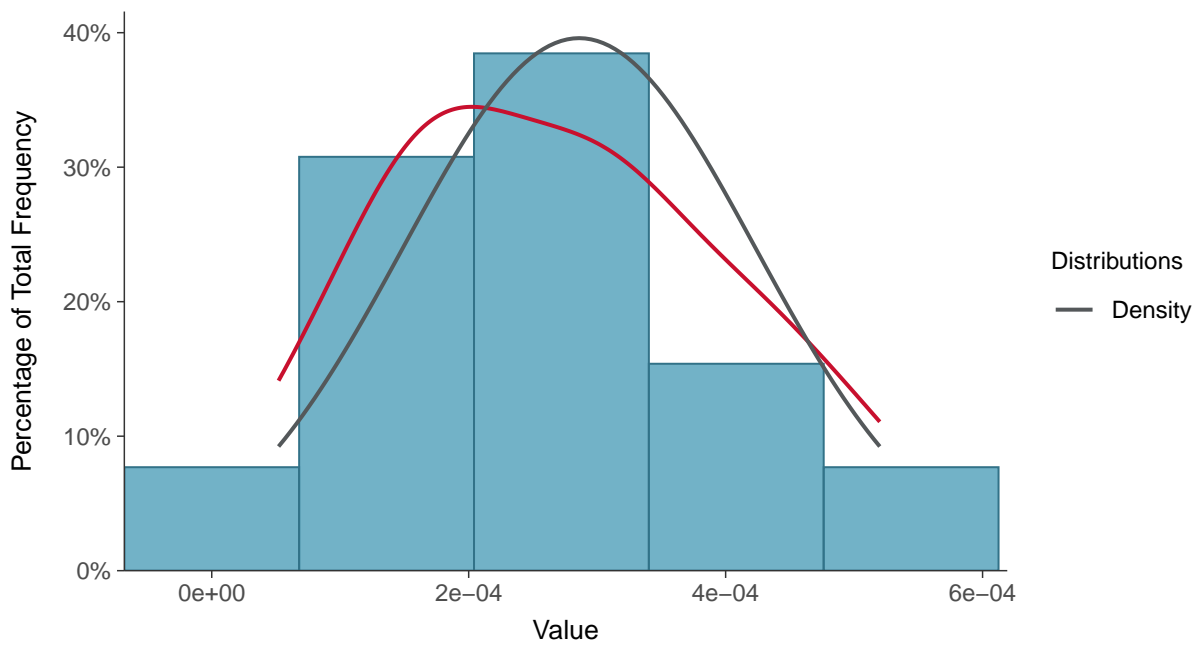
Scatter Plot

Beryllium, MW-02 (mg/L)



Histogram

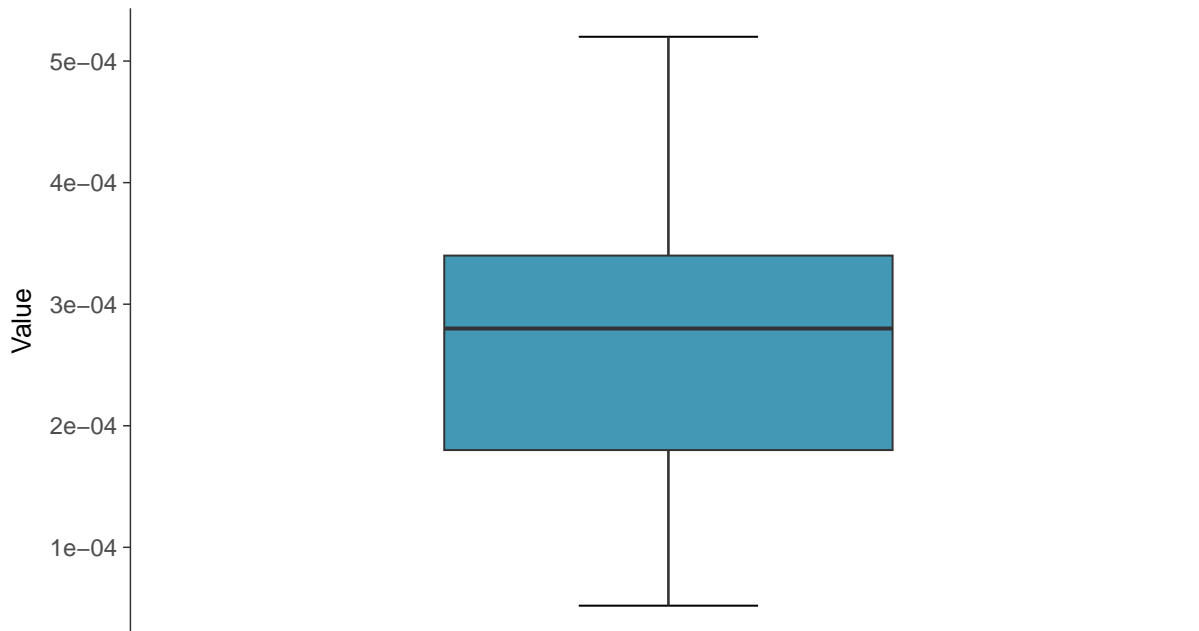
Beryllium, MW-02 (mg/L)





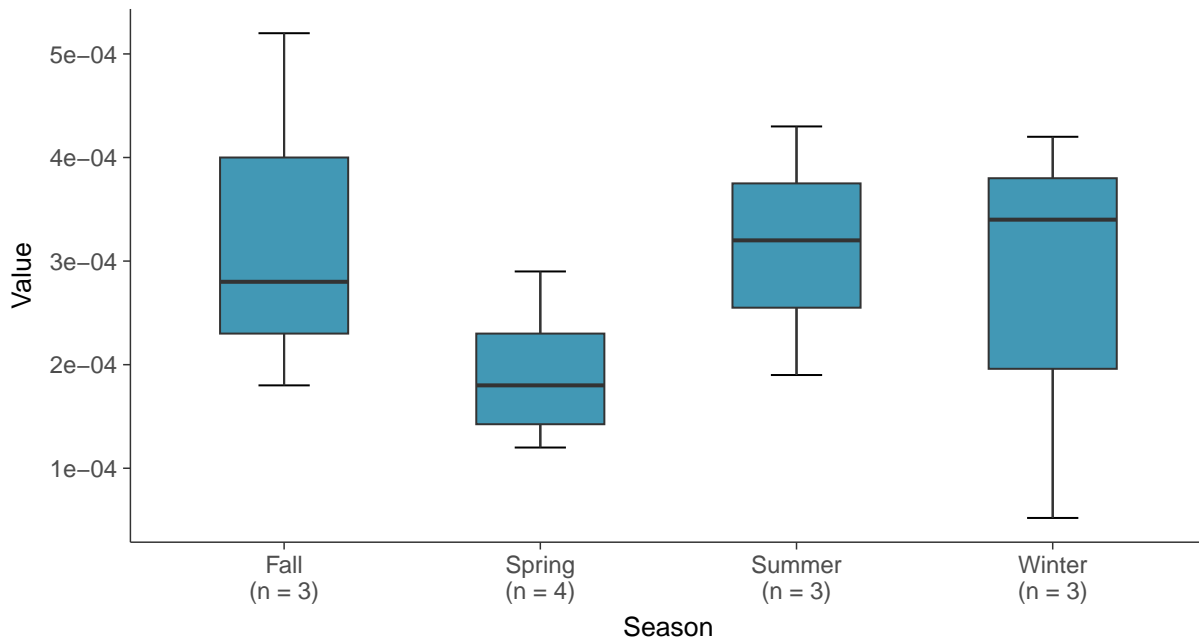
Boxplot

Beryllium, MW-02 (mg/L)



Boxplot by Season

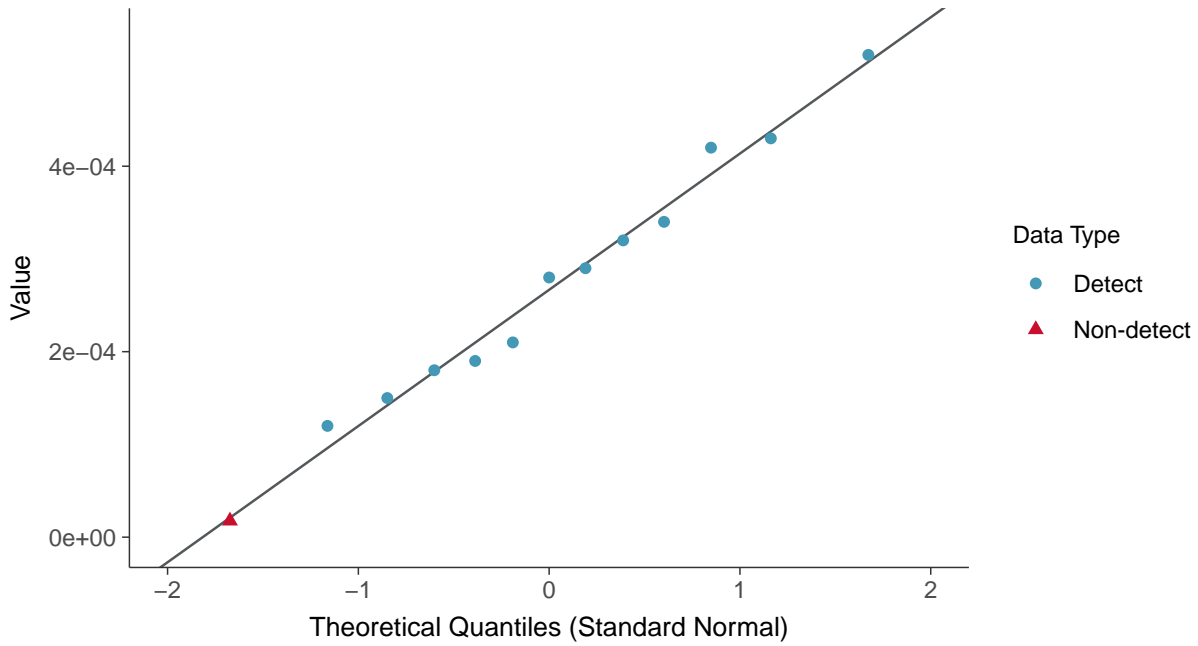
Beryllium, MW-02 (mg/L)





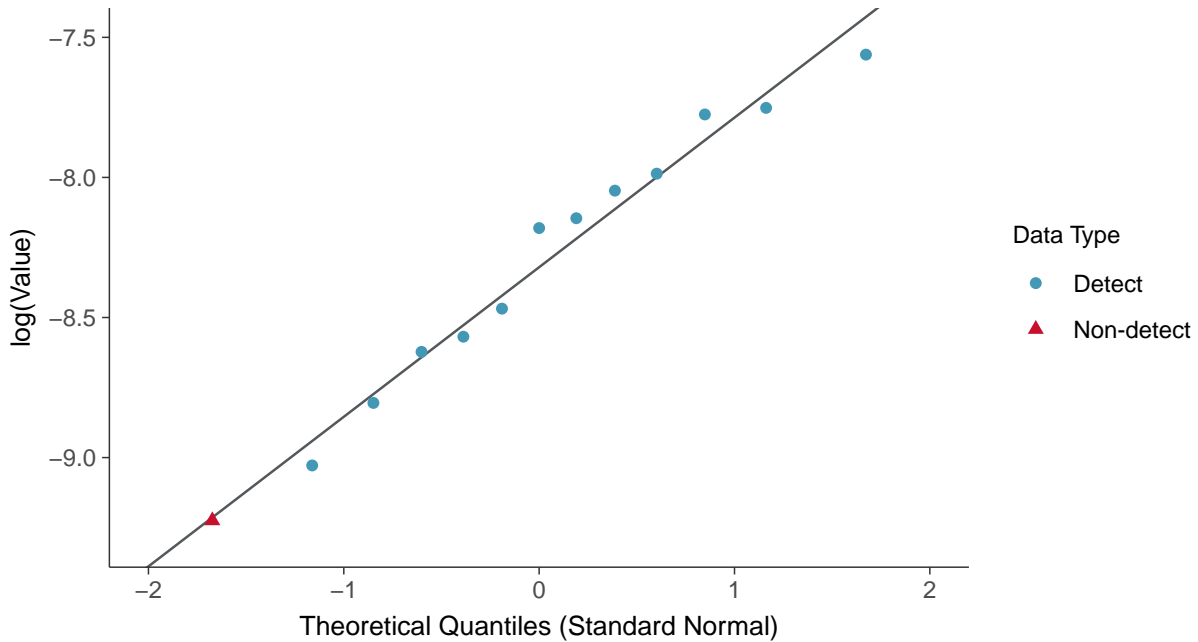
Normal Q-Q plot using ROS Imputed Estimates

Beryllium, MW-02 (mg/L)



Lognormal Q-Q plot using ROS Imputed Estimates

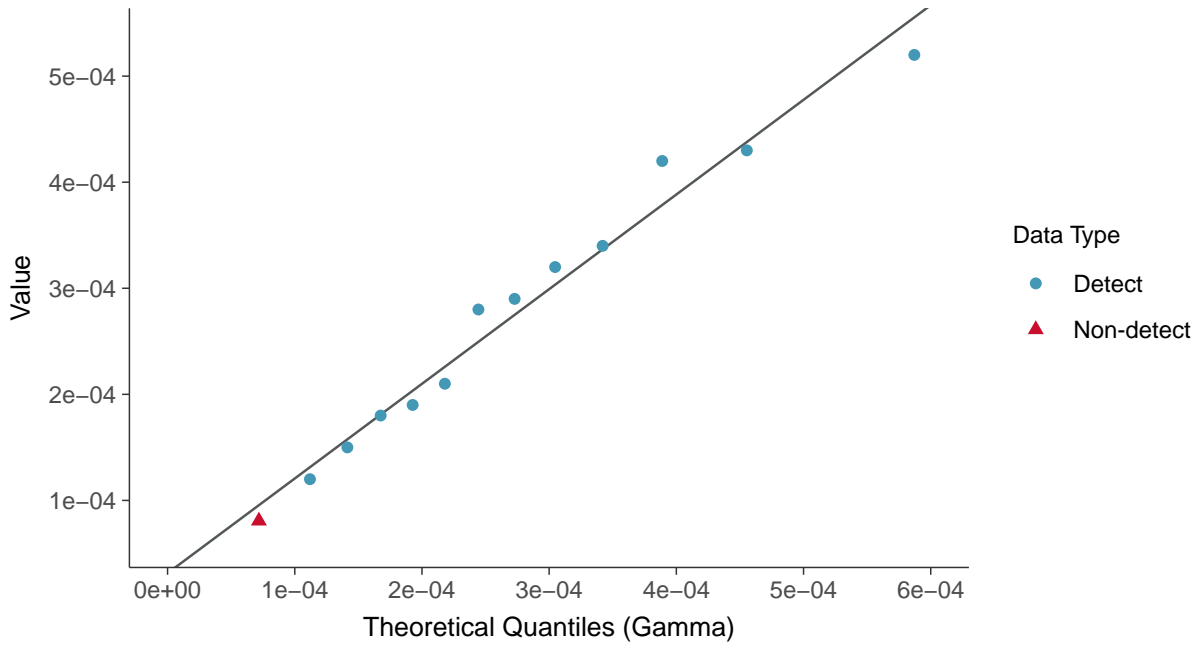
Beryllium, MW-02 (mg/L)





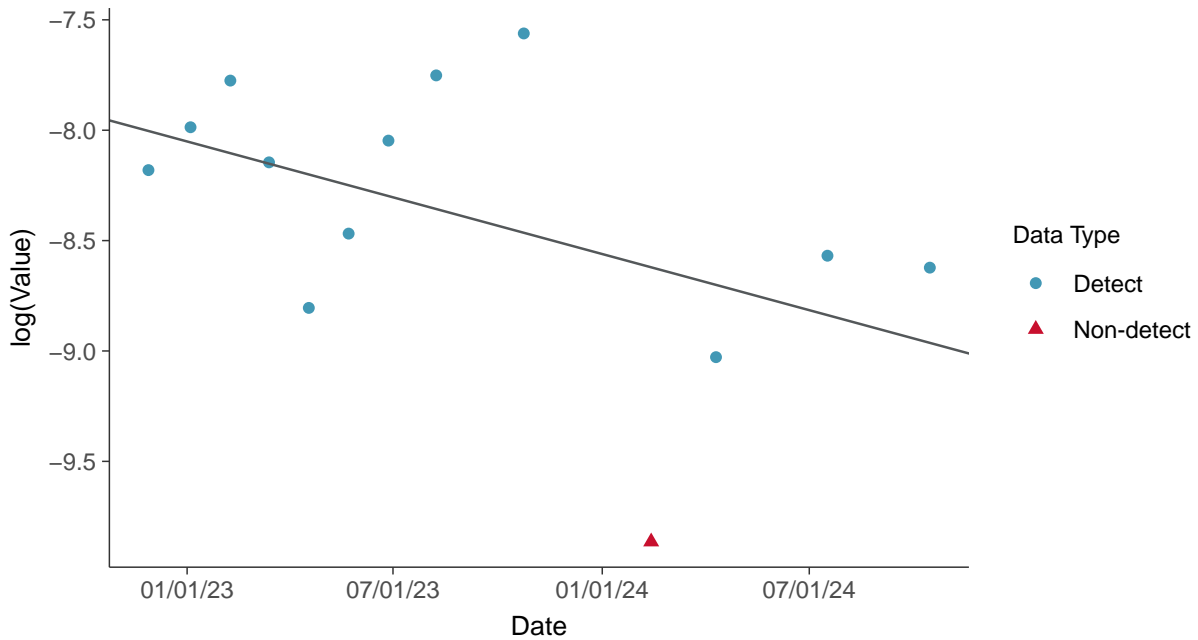
Gamma Q-Q plot using ROS Imputed Estimates

Beryllium, MW-02 (mg/L)



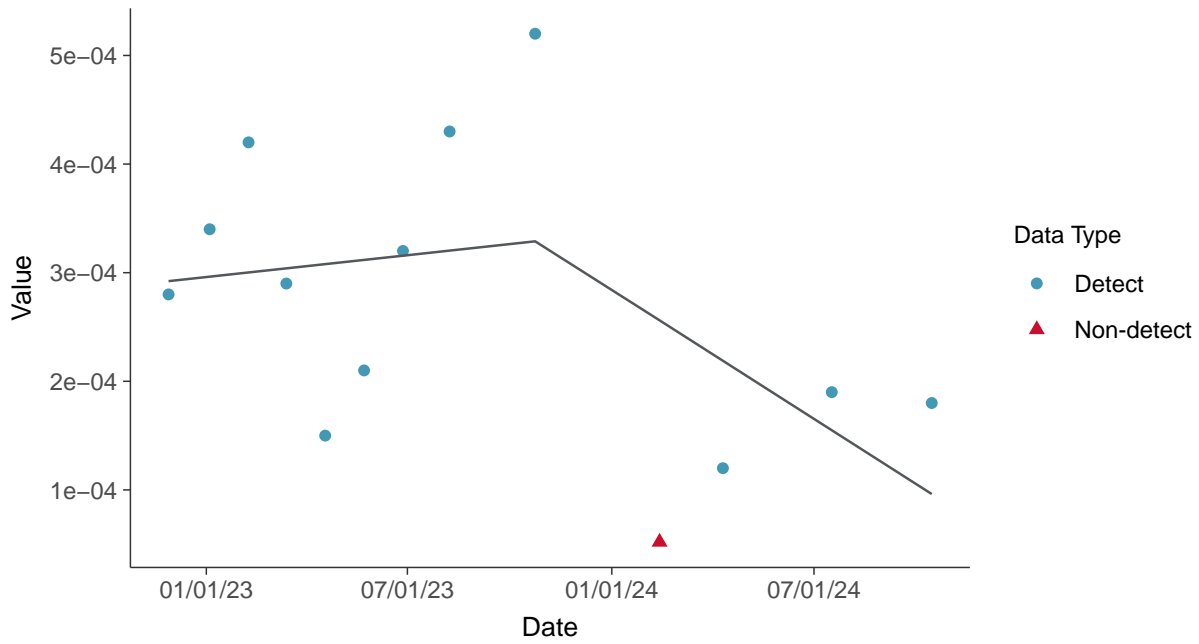
Trend Regression: Lognormal MLE

Beryllium, MW-02 (mg/L)

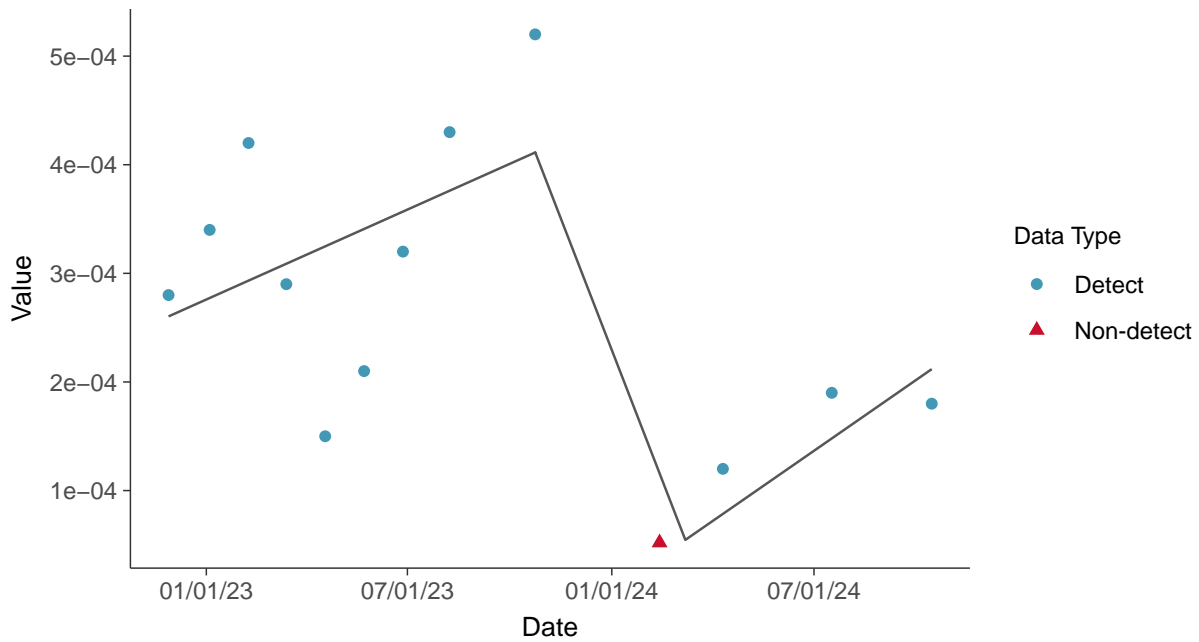




Trend Regression: Piecewise Linear-Linear
Beryllium, MW-02 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Beryllium, MW-02 (mg/L)



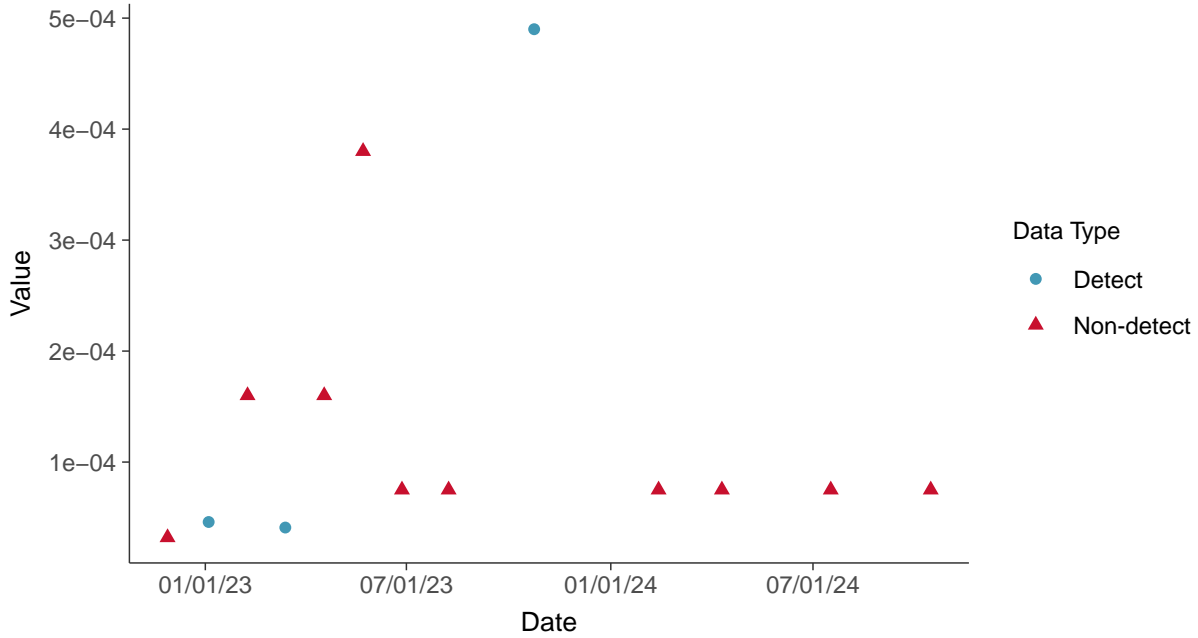


Appendix IV: Cadmium, MW-02

ID: 2_12_2_5_106

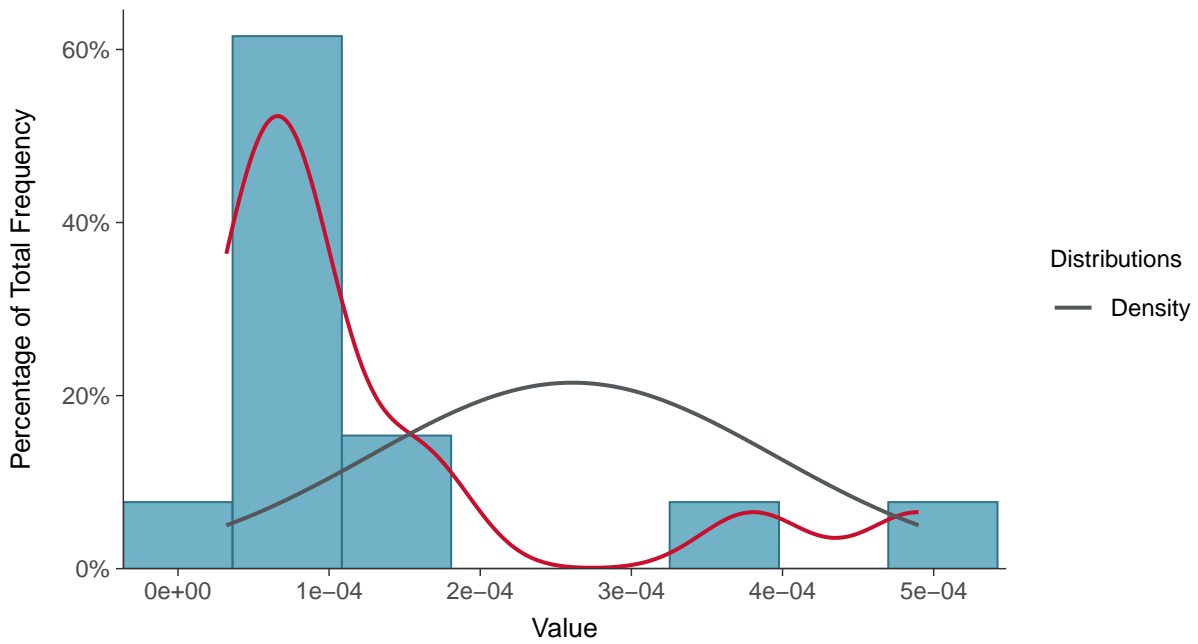
Scatter Plot

Cadmium, MW-02 (mg/L)



Histogram

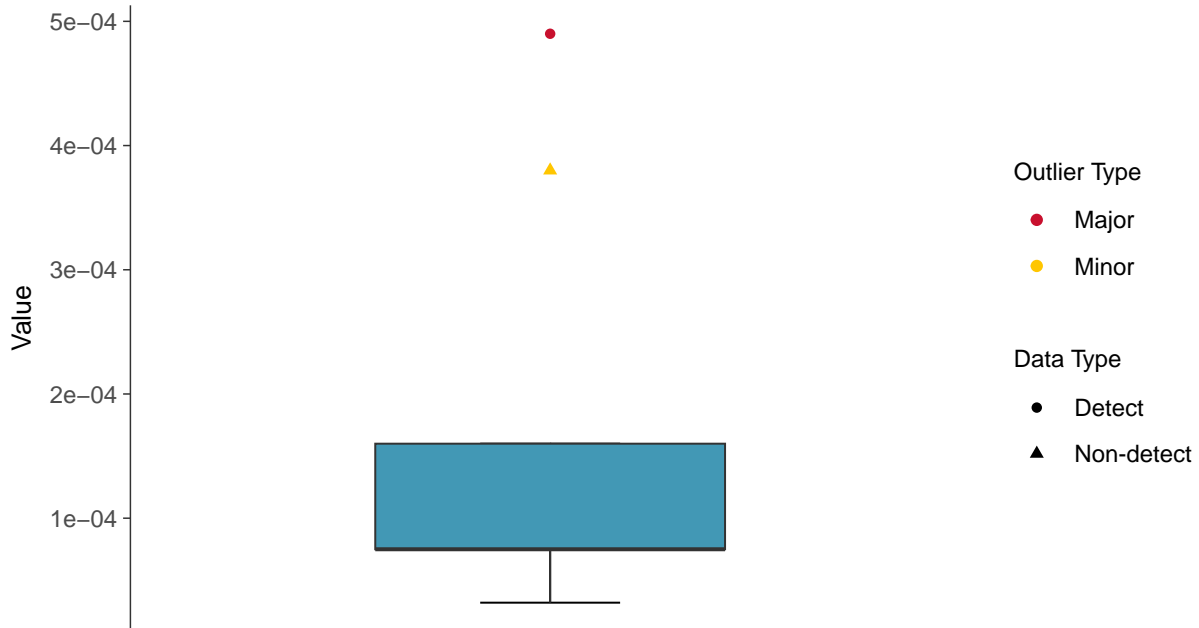
Cadmium, MW-02 (mg/L)





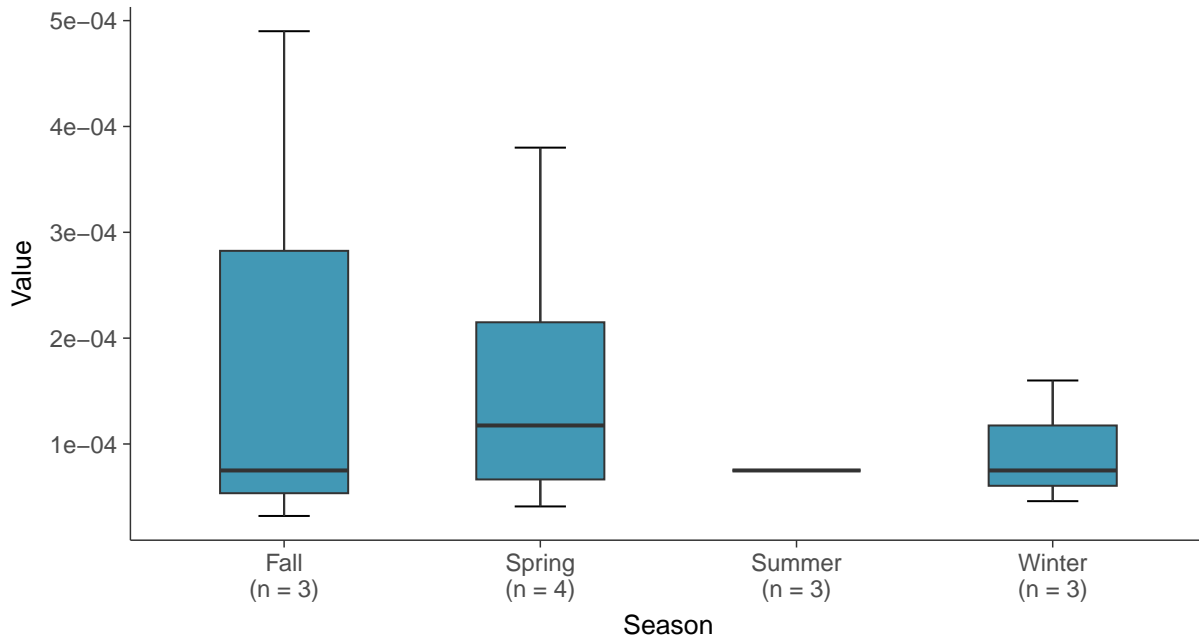
Boxplot

Cadmium, MW-02 (mg/L)



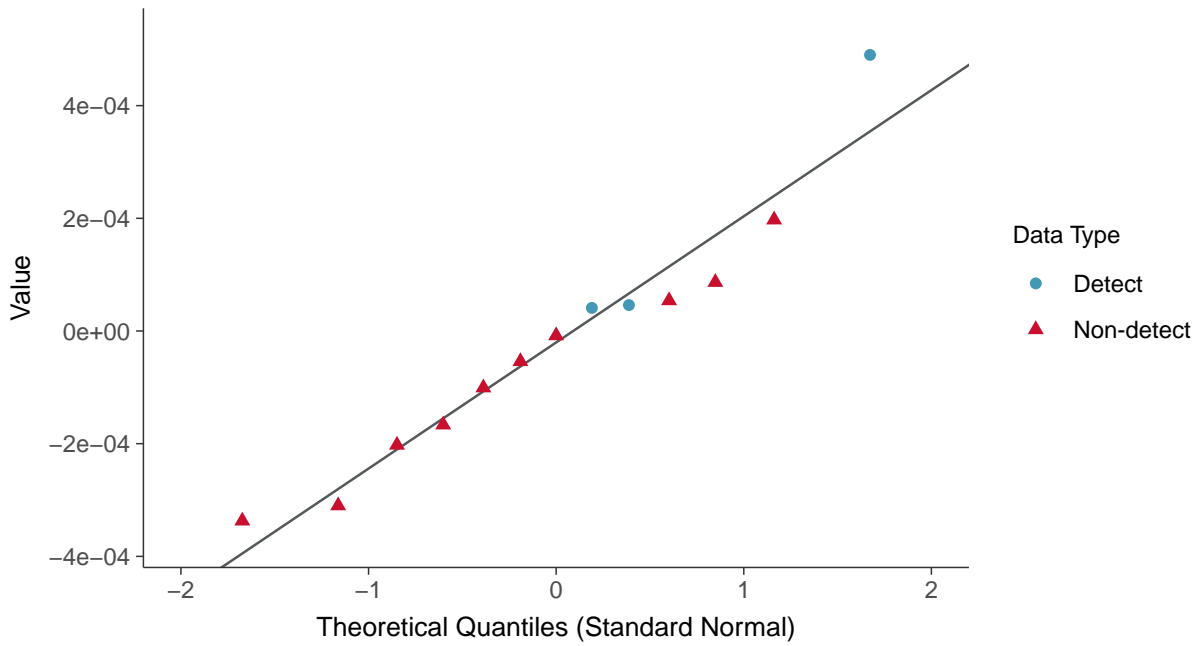
Boxplot by Season

Cadmium, MW-02 (mg/L)

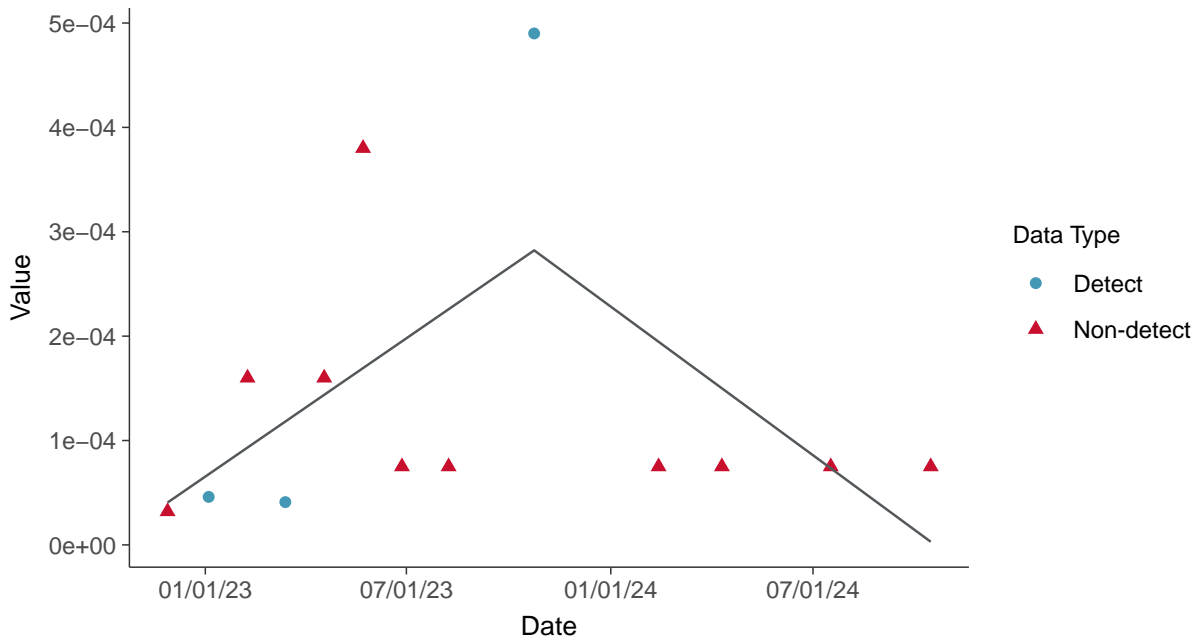




Normal Q-Q plot using ROS Imputed Estimates
Cadmium, MW-02 (mg/L)

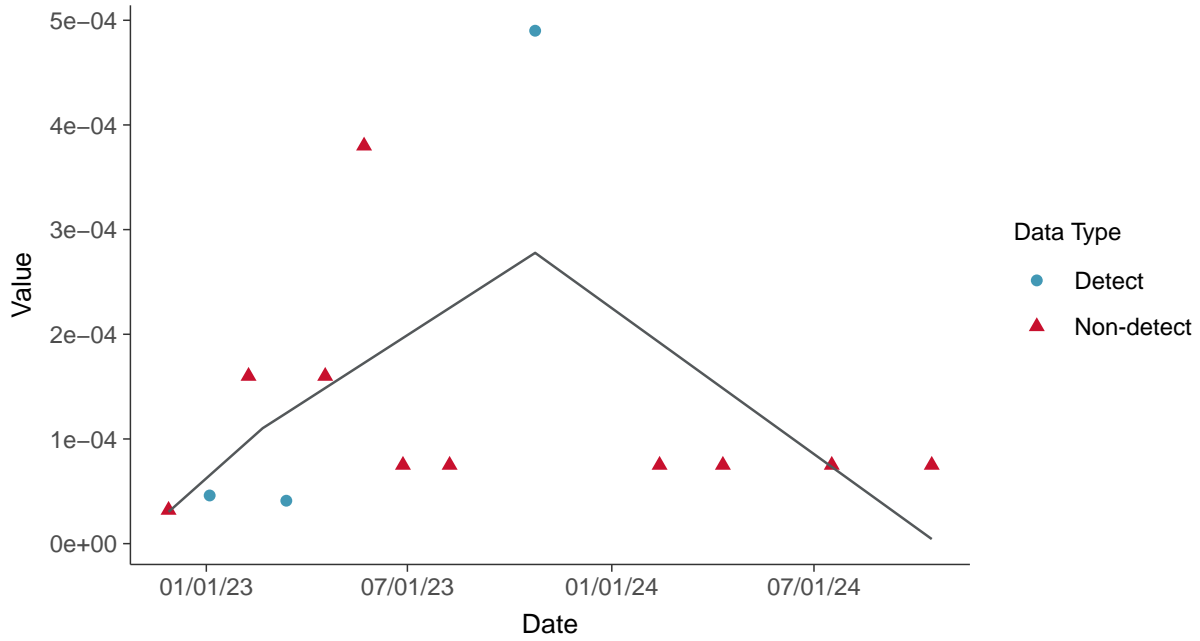


Trend Regression: Piecewise Linear-Linear
Cadmium, MW-02 (mg/L)





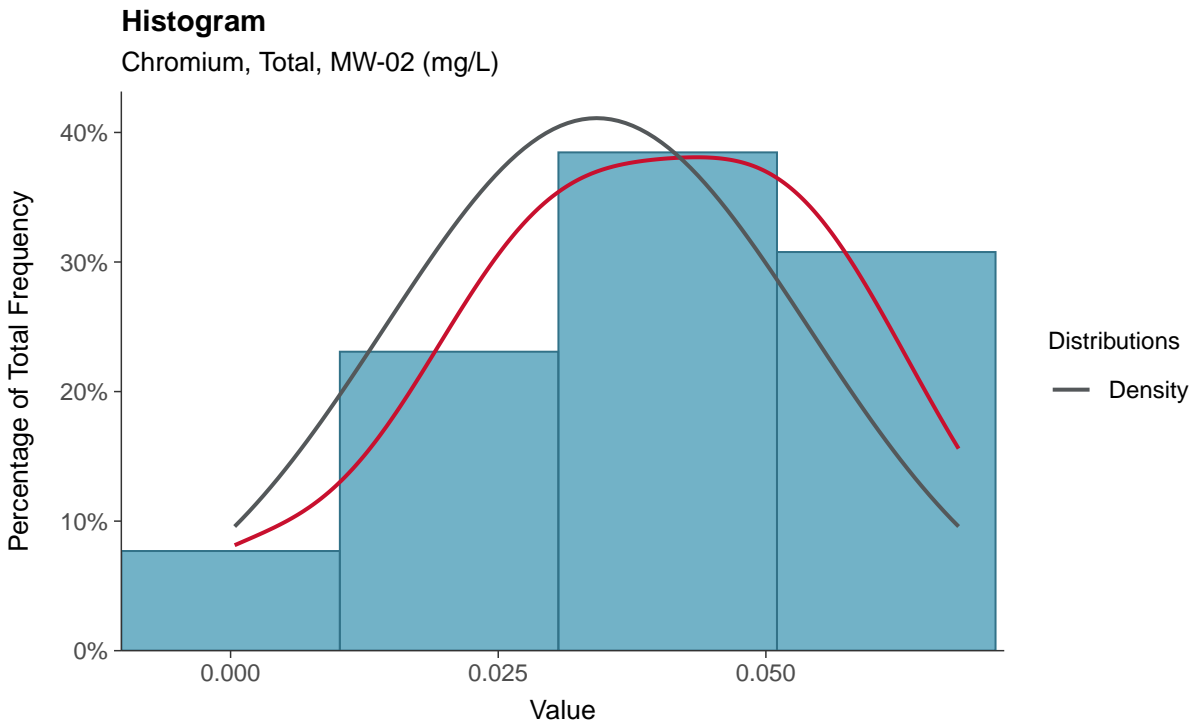
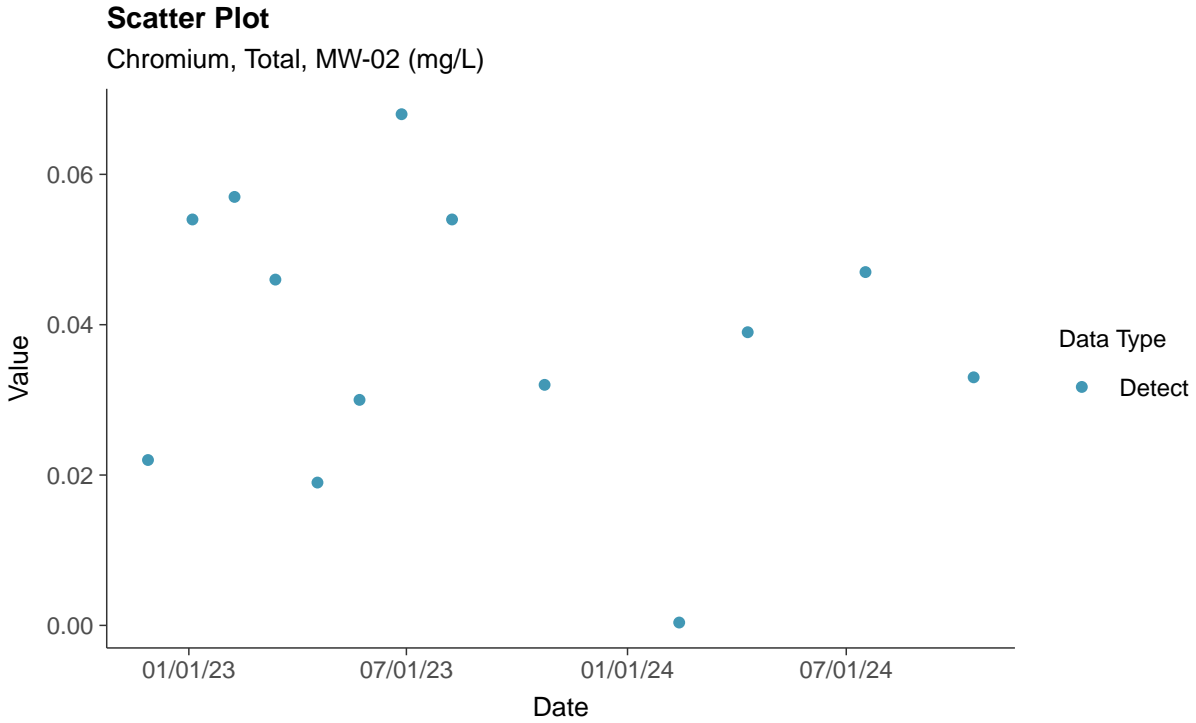
Trend Regression: Piecewise Linear-Linear-Linear Cadmium, MW-02 (mg/L)





Appendix IV: Chromium, Total, MW-02

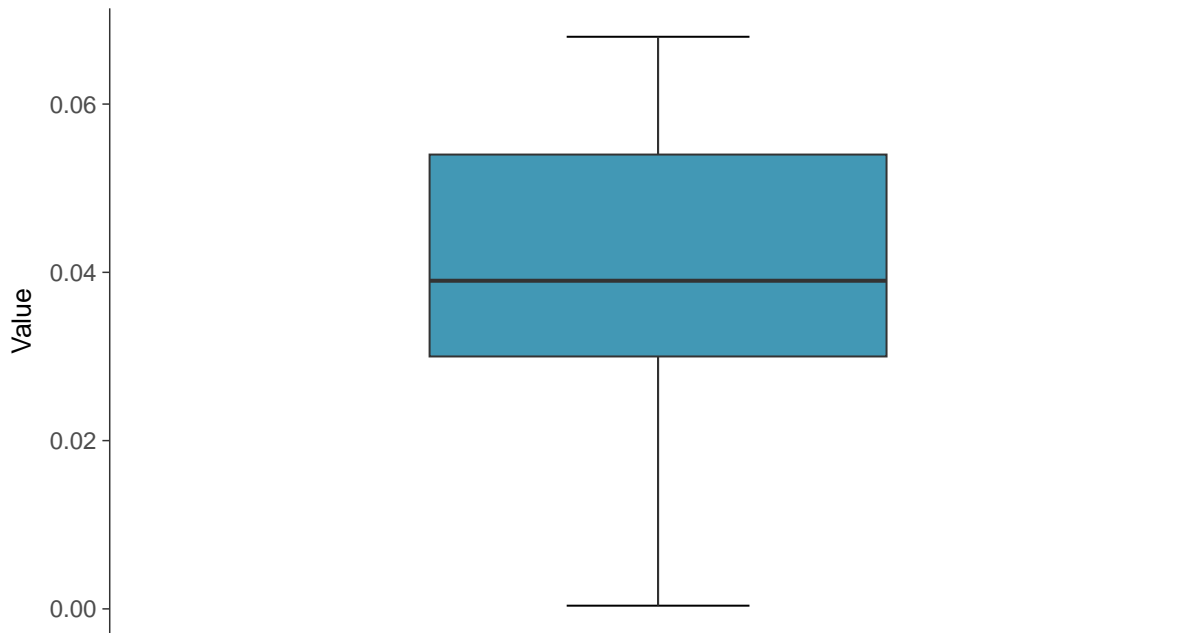
ID: 2_12_2_5_109





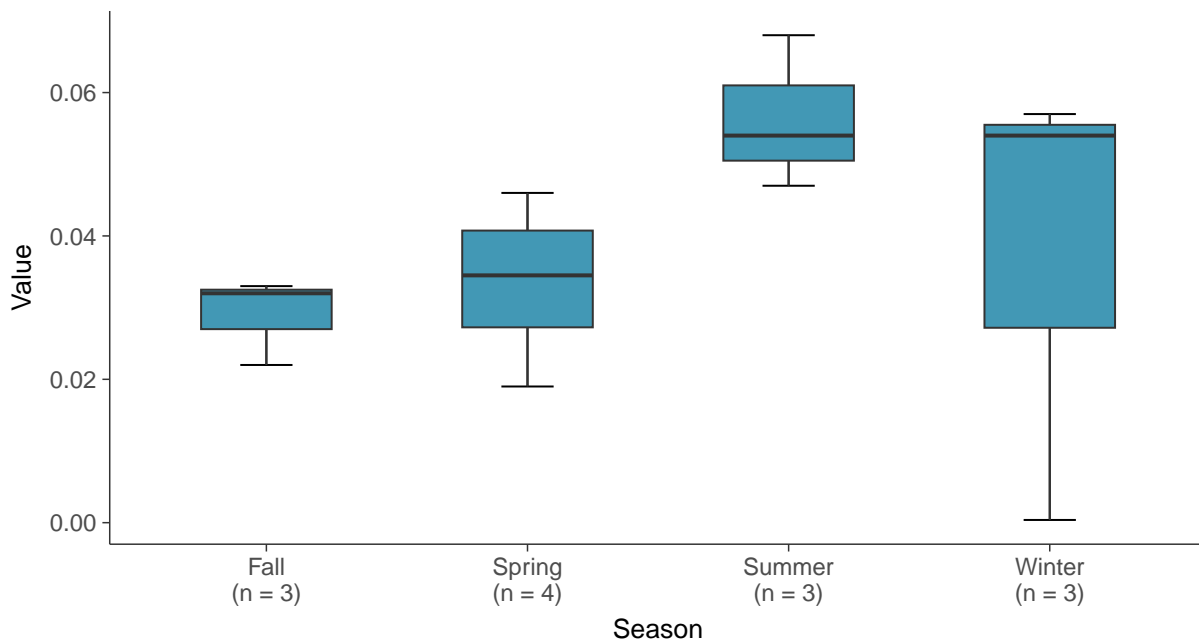
Boxplot

Chromium, Total, MW-02 (mg/L)



Boxplot by Season

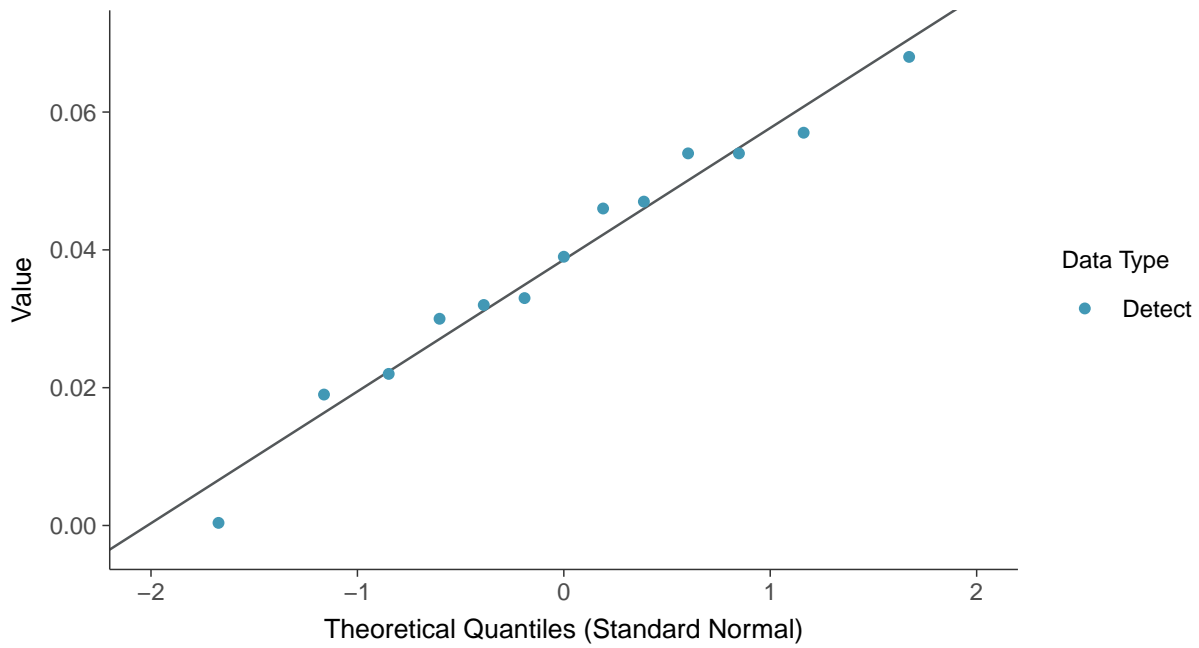
Chromium, Total, MW-02 (mg/L)





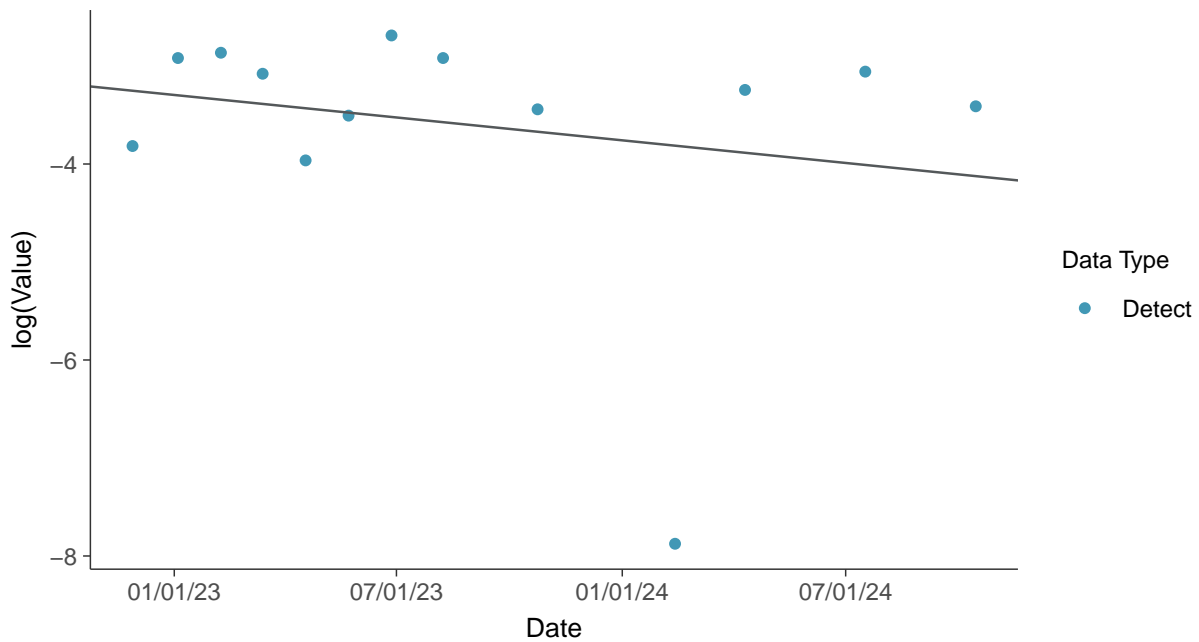
Normal Q-Q plot

Chromium, Total, MW-02 (mg/L)



Trend Regression: Lognormal MLE

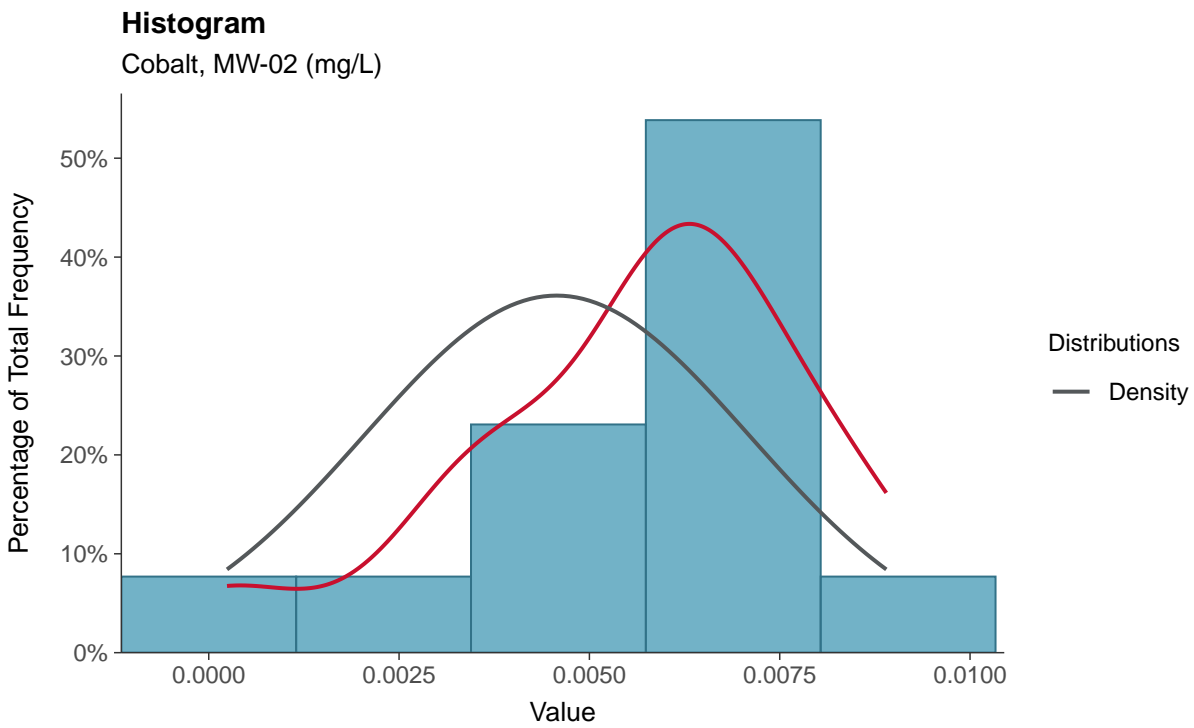
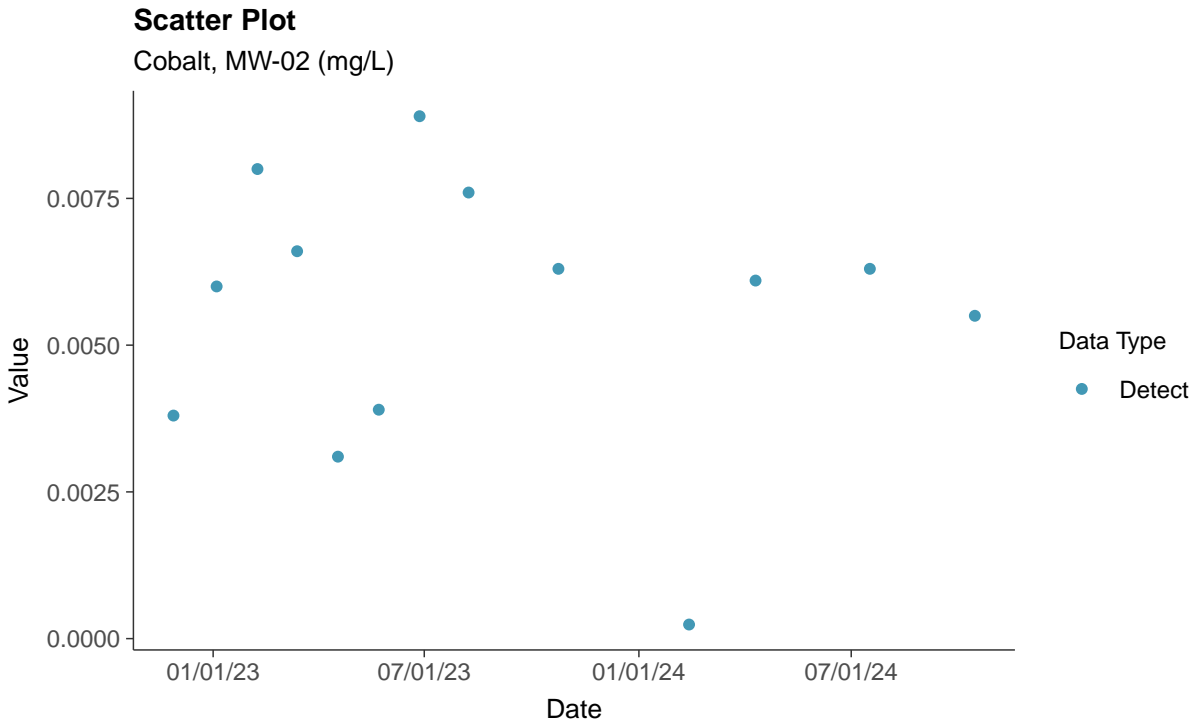
Chromium, Total, MW-02 (mg/L)





Appendix IV: Cobalt, MW-02

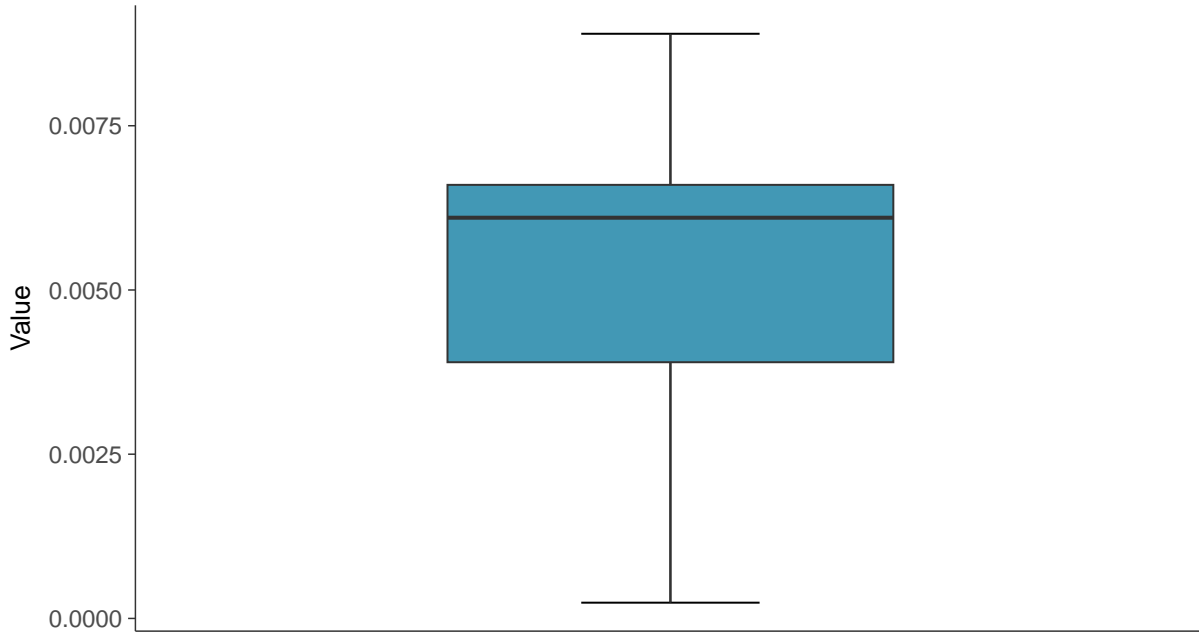
ID: 2_12_2_5_110





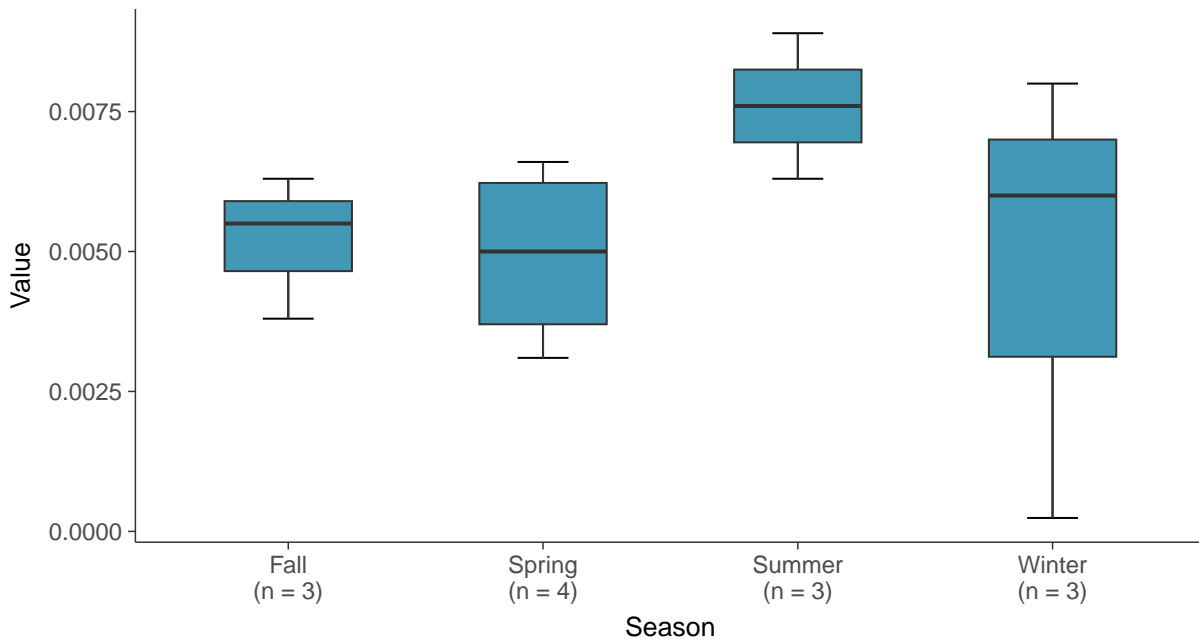
Boxplot

Cobalt, MW-02 (mg/L)



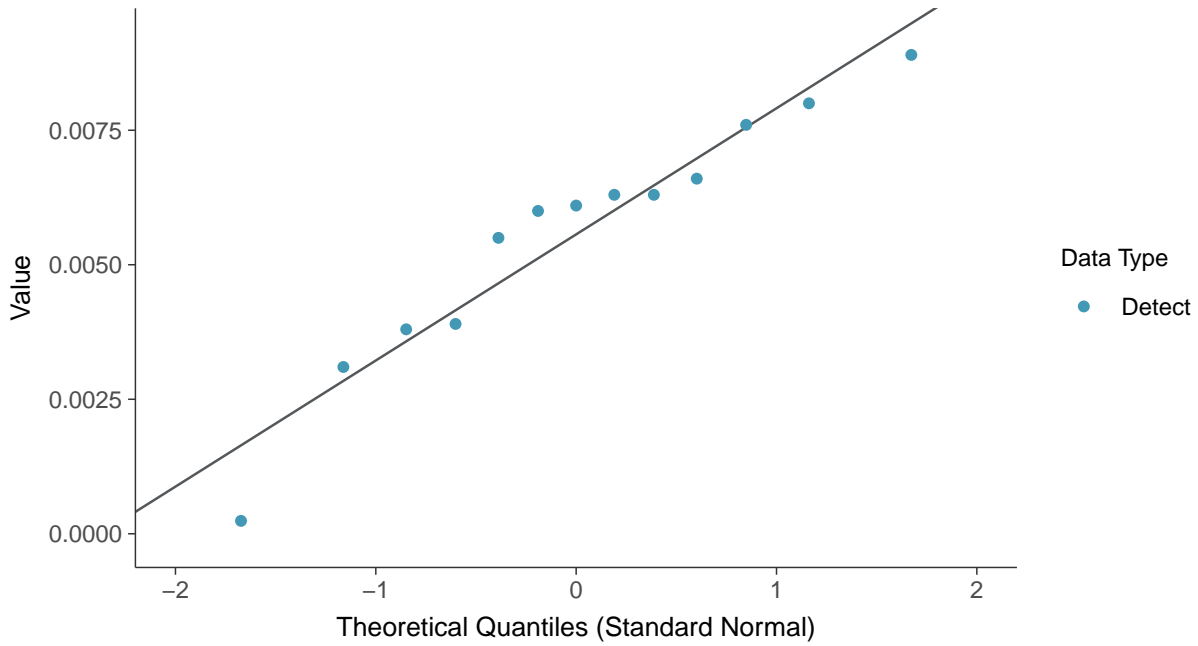
Boxplot by Season

Cobalt, MW-02 (mg/L)

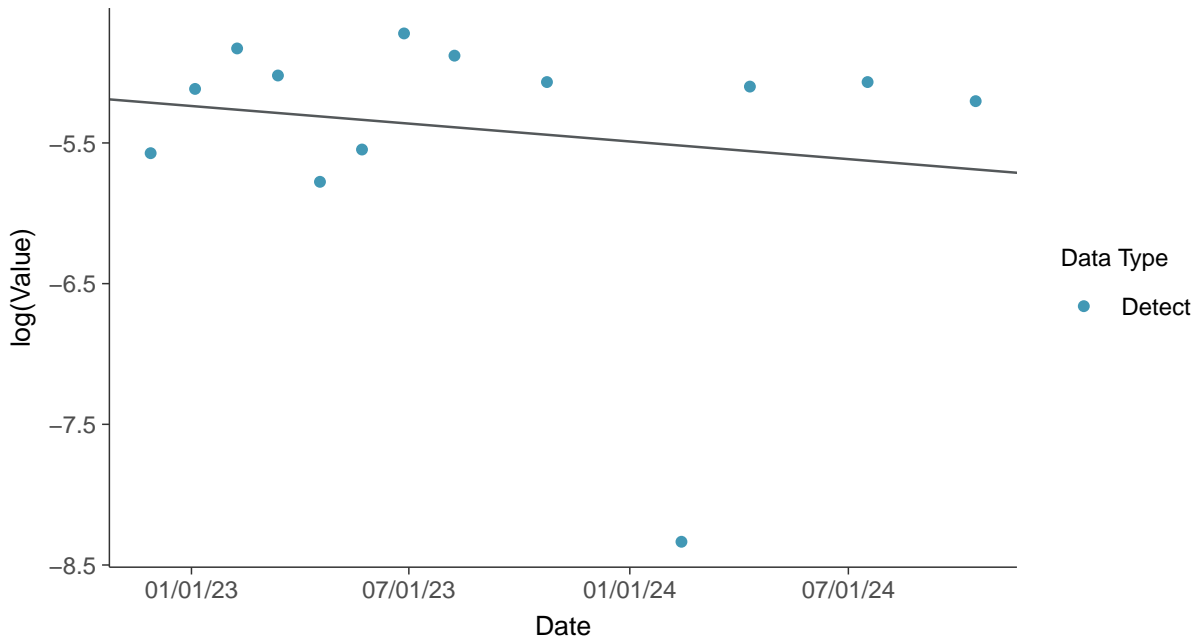




Normal Q-Q plot
Cobalt, MW-02 (mg/L)



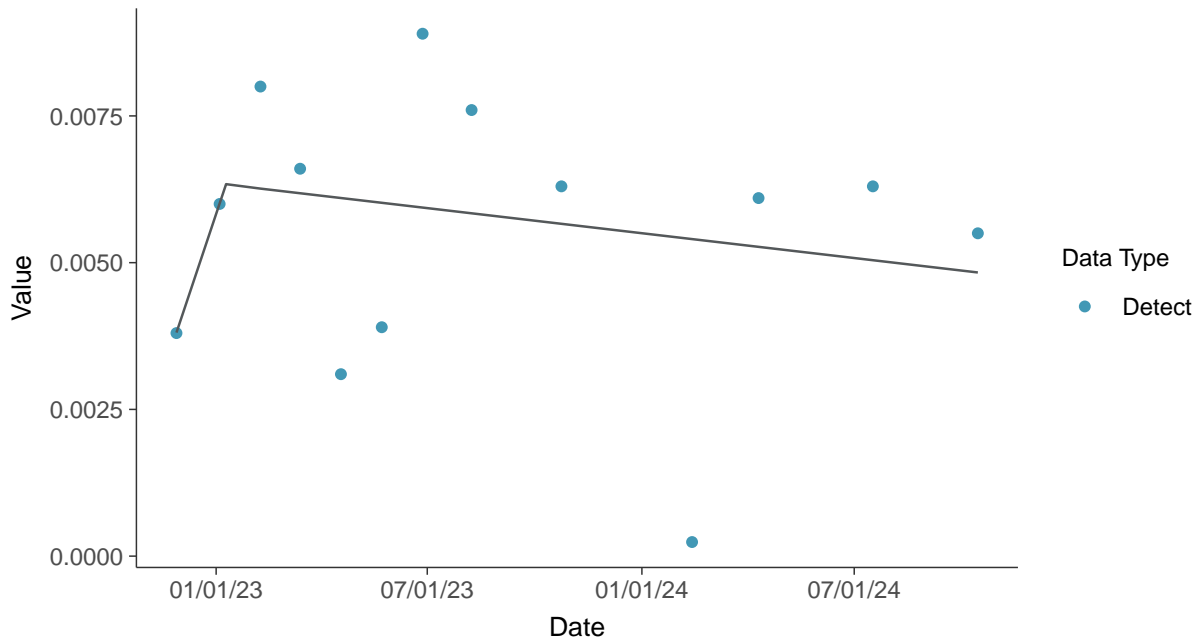
Trend Regression: Lognormal MLE
Cobalt, MW-02 (mg/L)





Trend Regression: Piecewise Linear-Linear

Cobalt, MW-02 (mg/L)



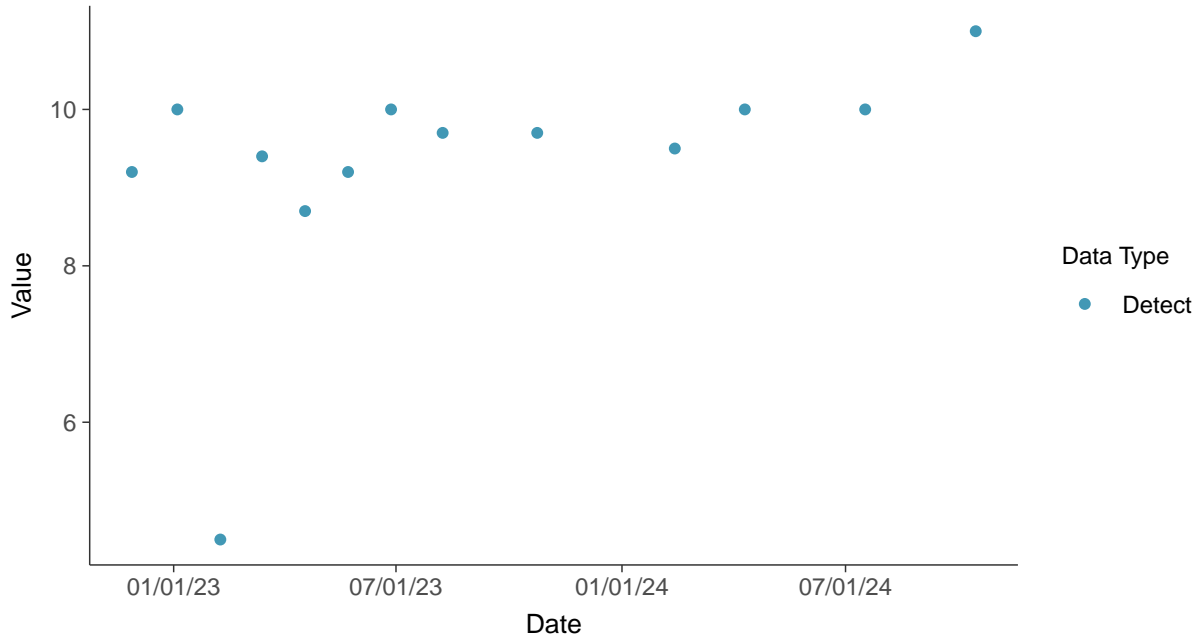


Appendix IV: Fluoride (App IV), MW-02

ID: 2_12_2_5_113

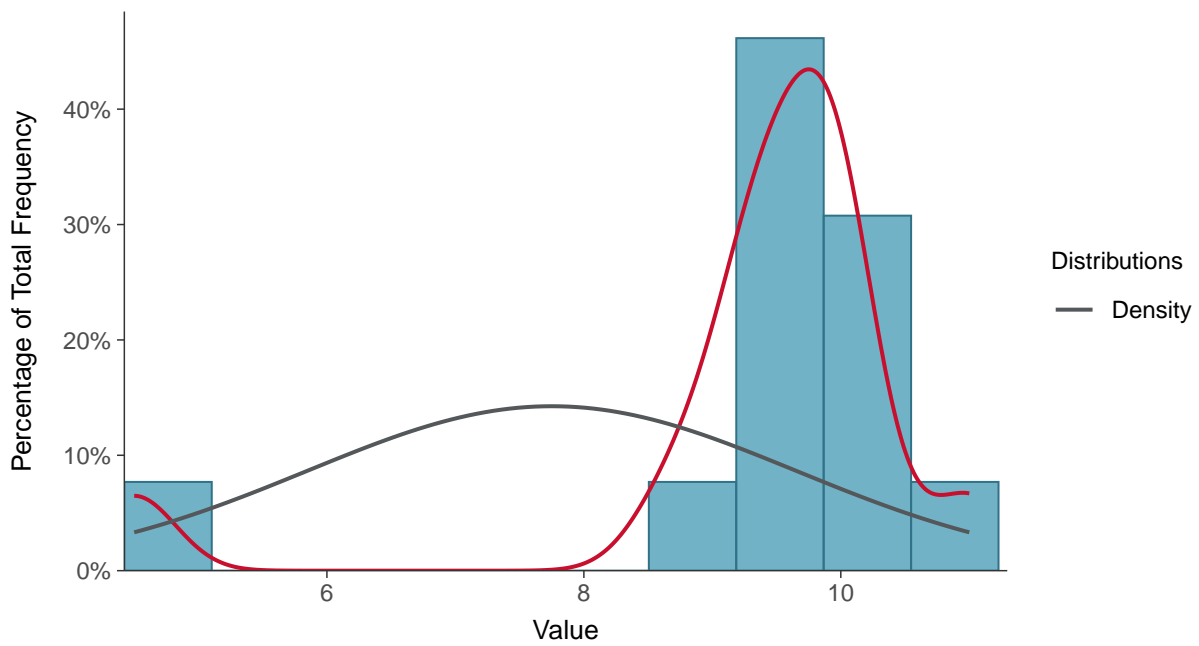
Scatter Plot

Fluoride (App IV), MW-02 (mg/L)



Histogram

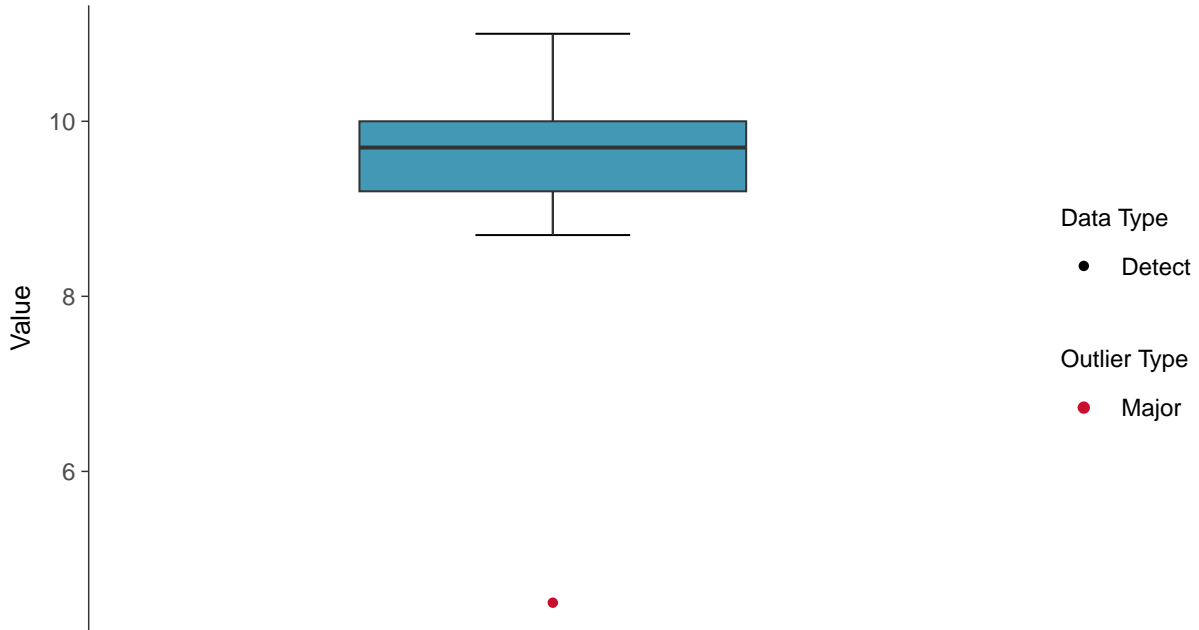
Fluoride (App IV), MW-02 (mg/L)





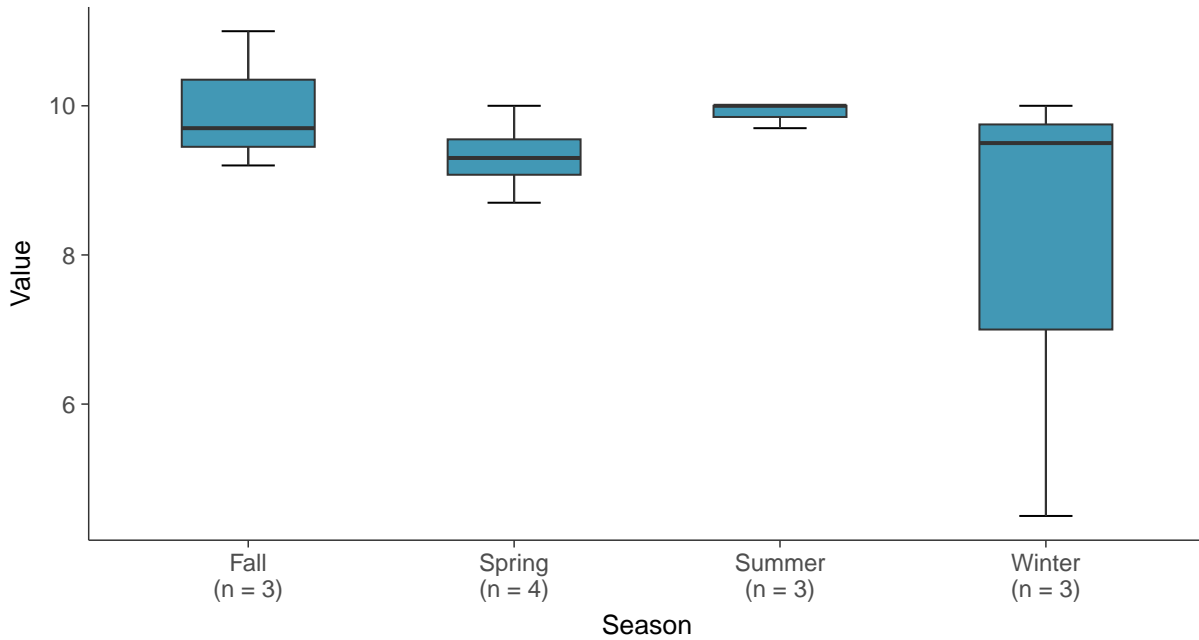
Boxplot

Fluoride (App IV), MW-02 (mg/L)



Boxplot by Season

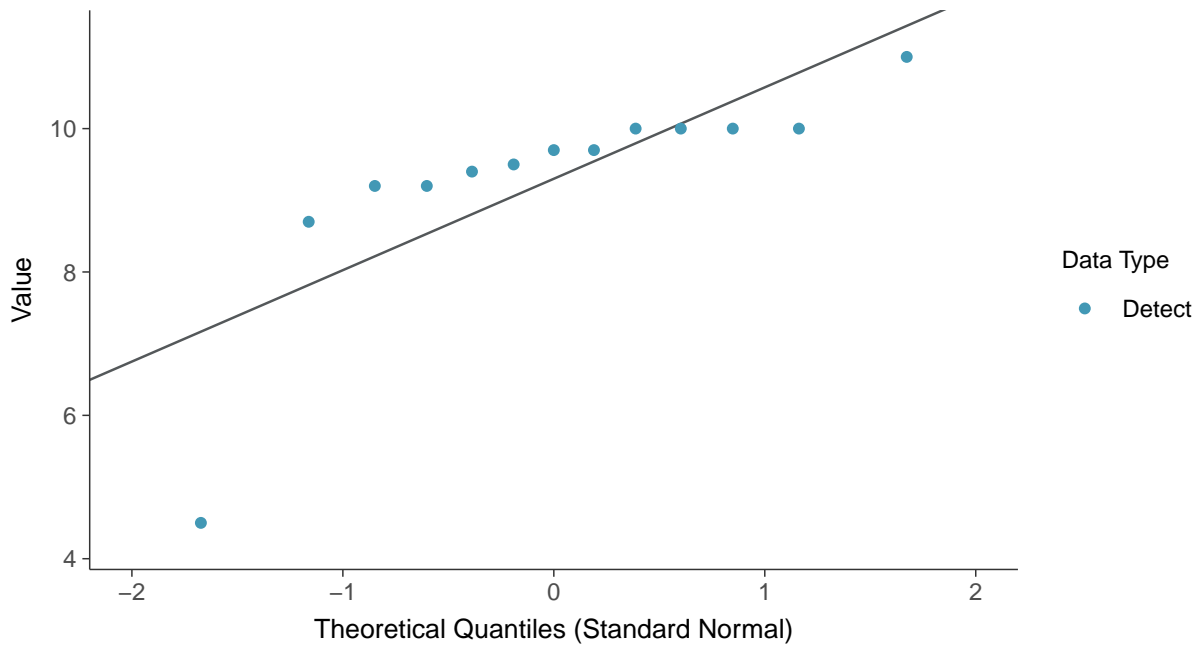
Fluoride (App IV), MW-02 (mg/L)





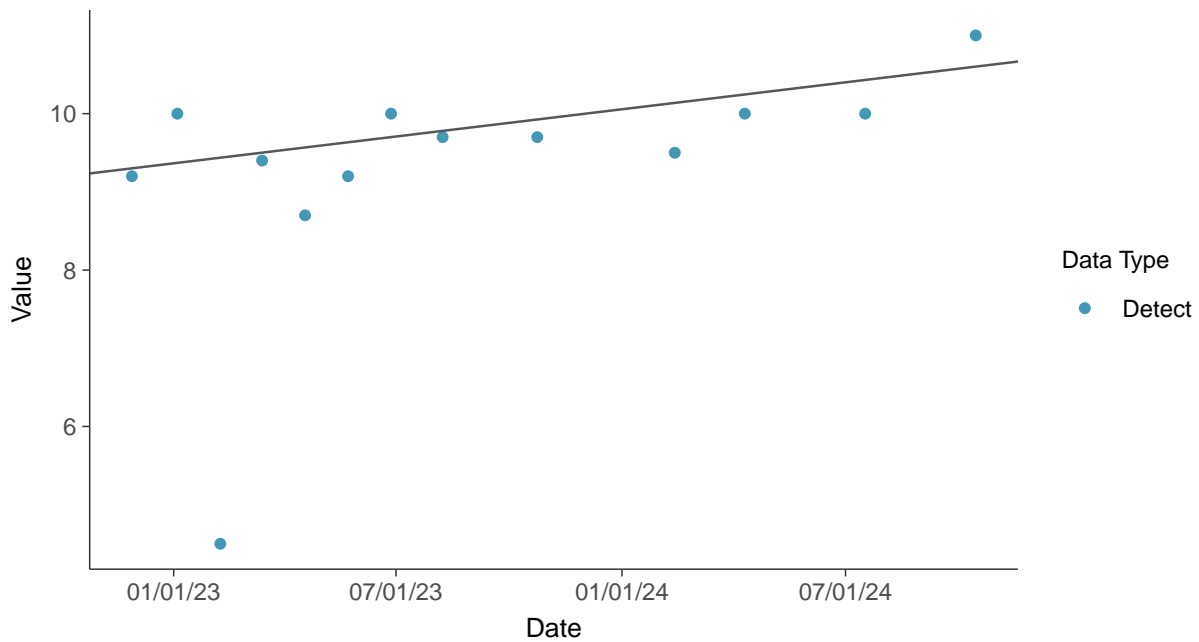
Normal Q-Q plot

Fluoride (App IV), MW-02 (mg/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

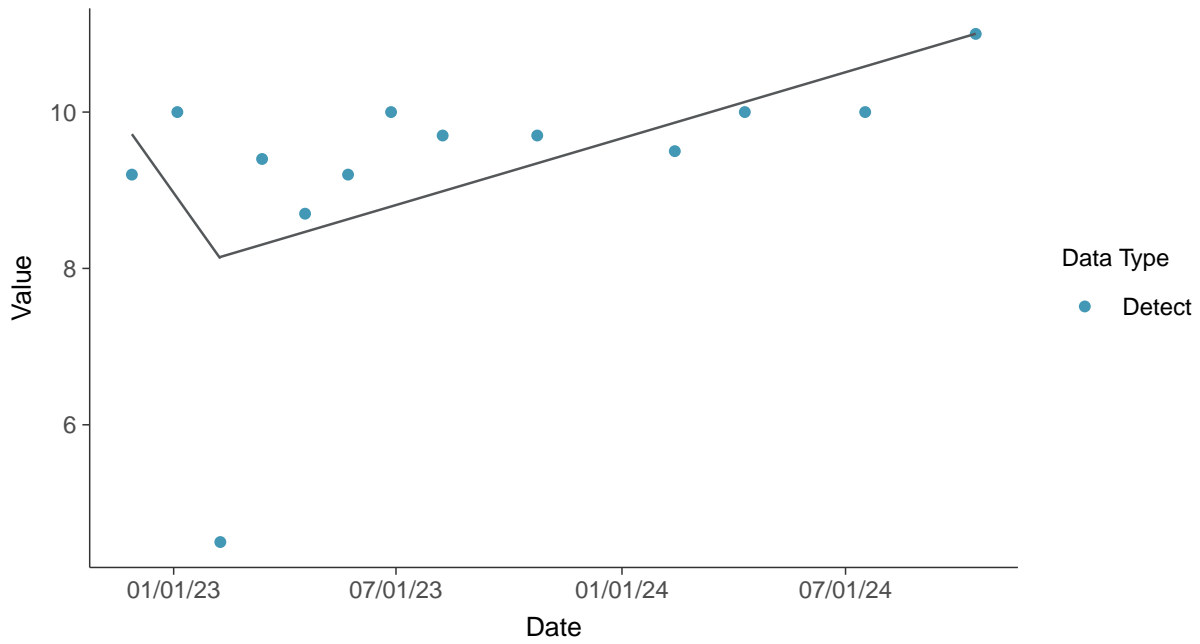
Fluoride (App IV), MW-02 (mg/L)





Trend Regression: Piecewise Linear-Linear

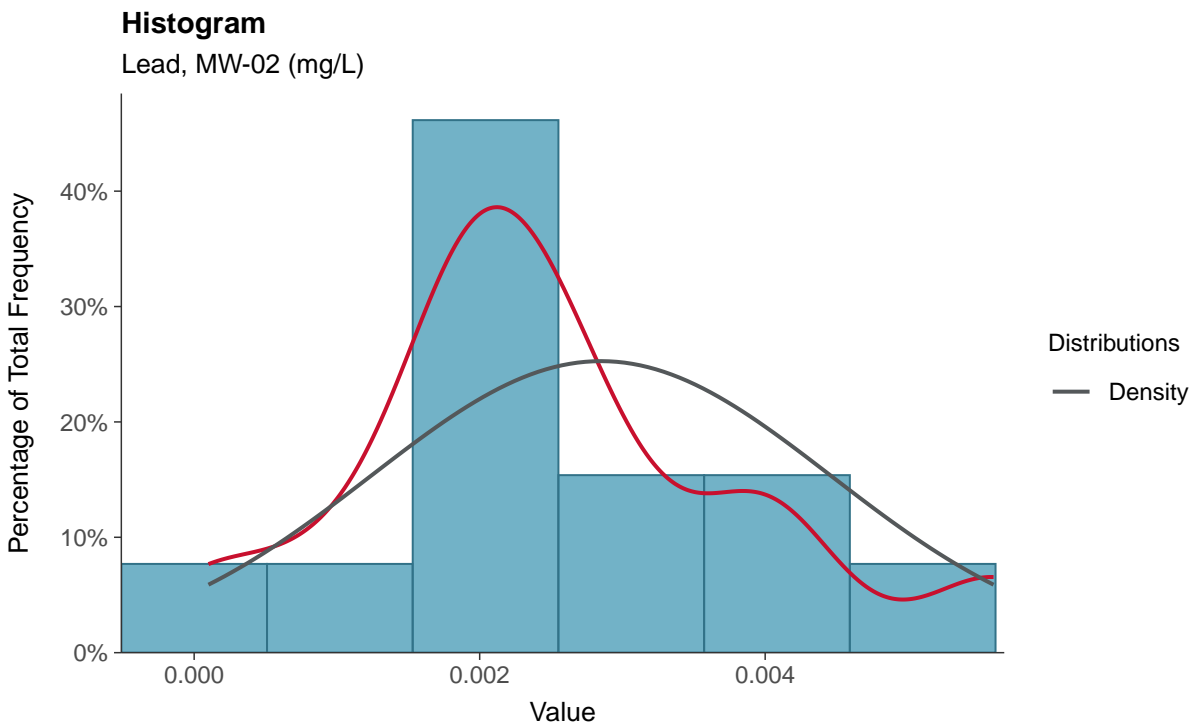
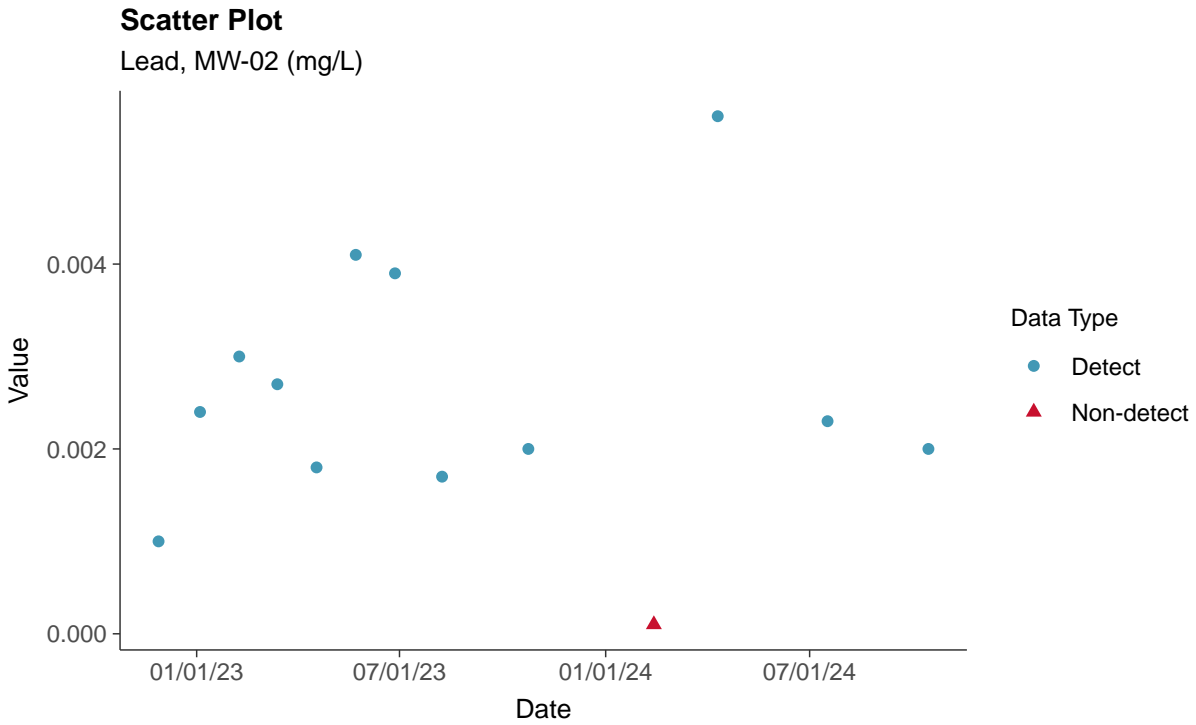
Fluoride (App IV), MW-02 (mg/L)





Appendix IV: Lead, MW-02

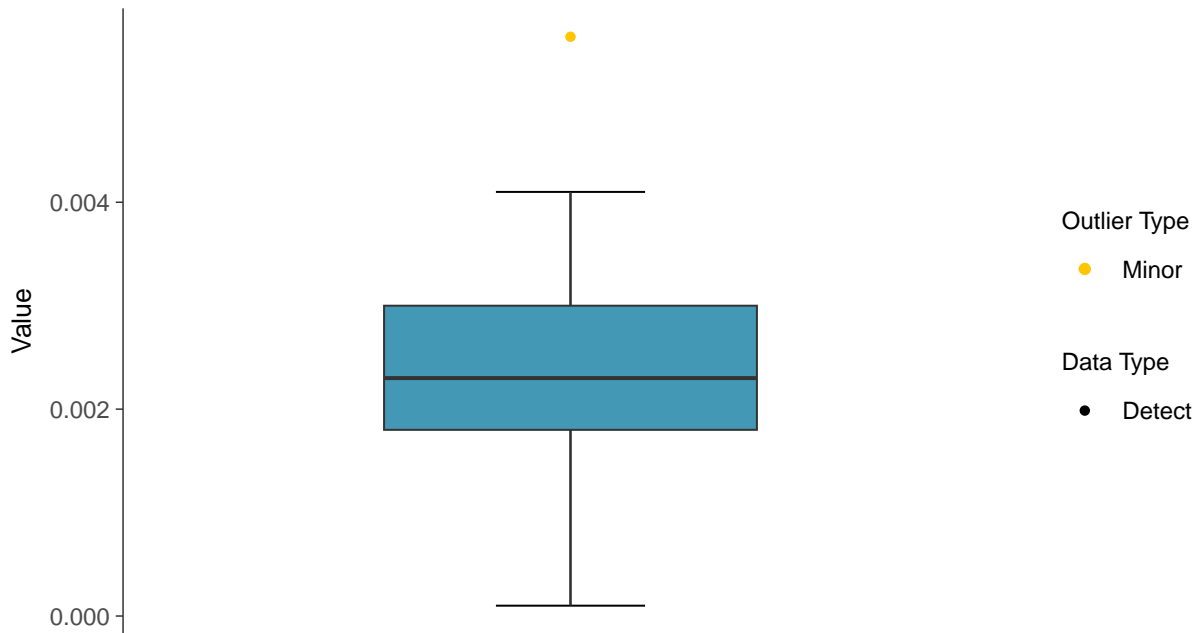
ID: 2_12_2_5_115





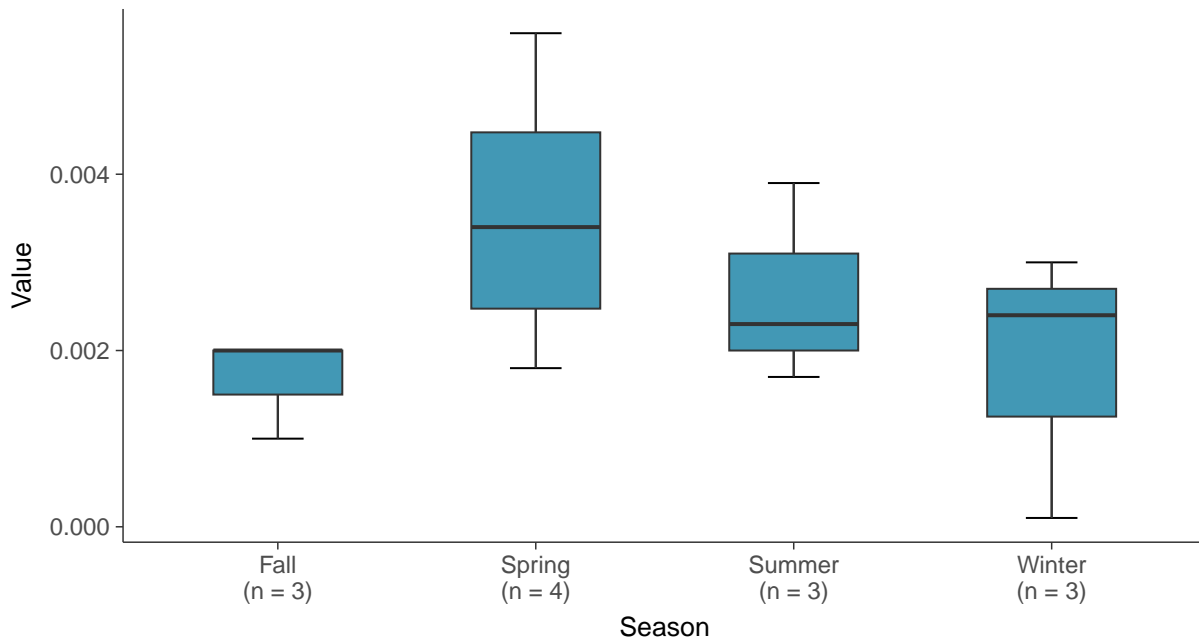
Boxplot

Lead, MW-02 (mg/L)



Boxplot by Season

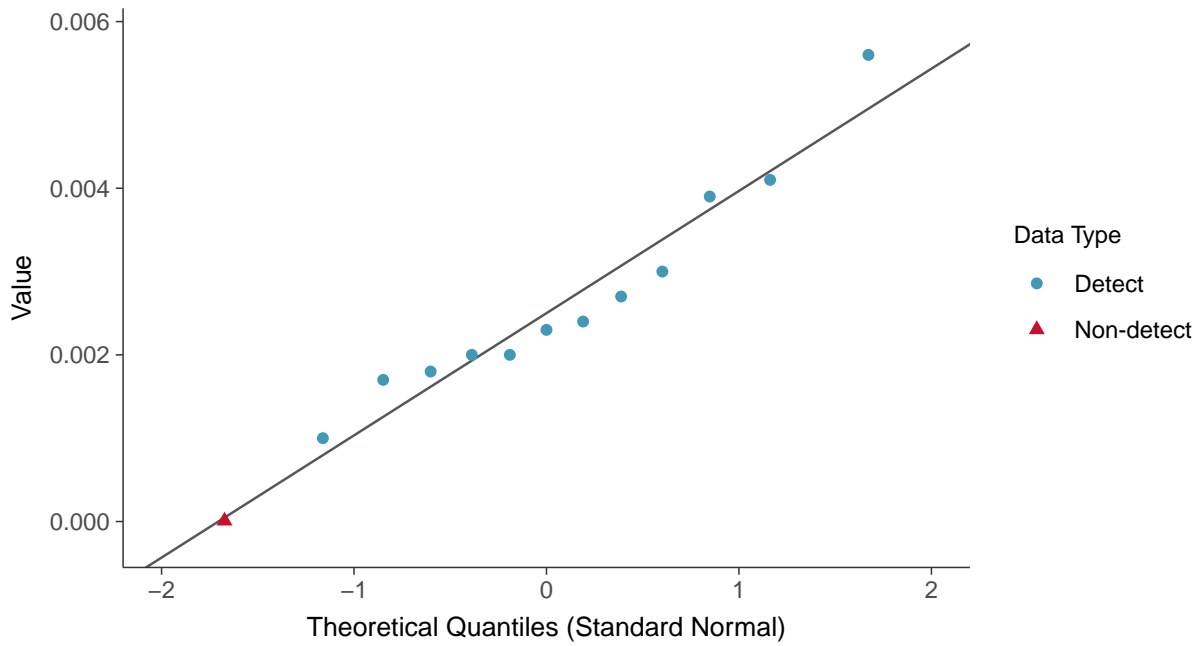
Lead, MW-02 (mg/L)





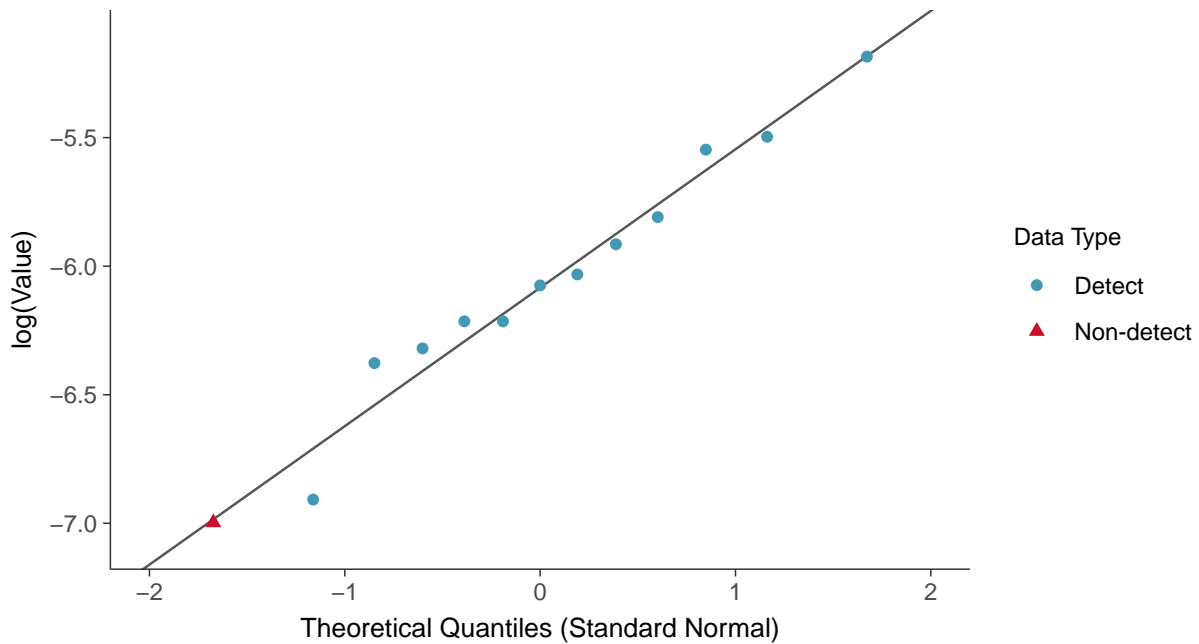
Normal Q-Q plot using ROS Imputed Estimates

Lead, MW-02 (mg/L)



Lognormal Q-Q plot using ROS Imputed Estimates

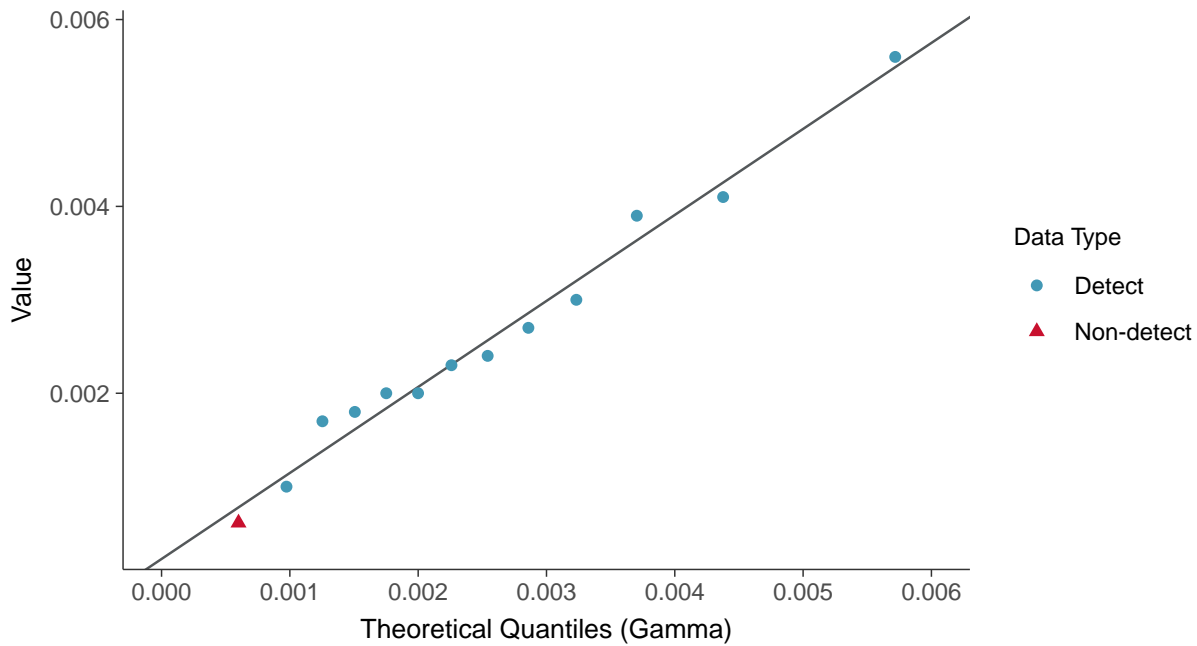
Lead, MW-02 (mg/L)





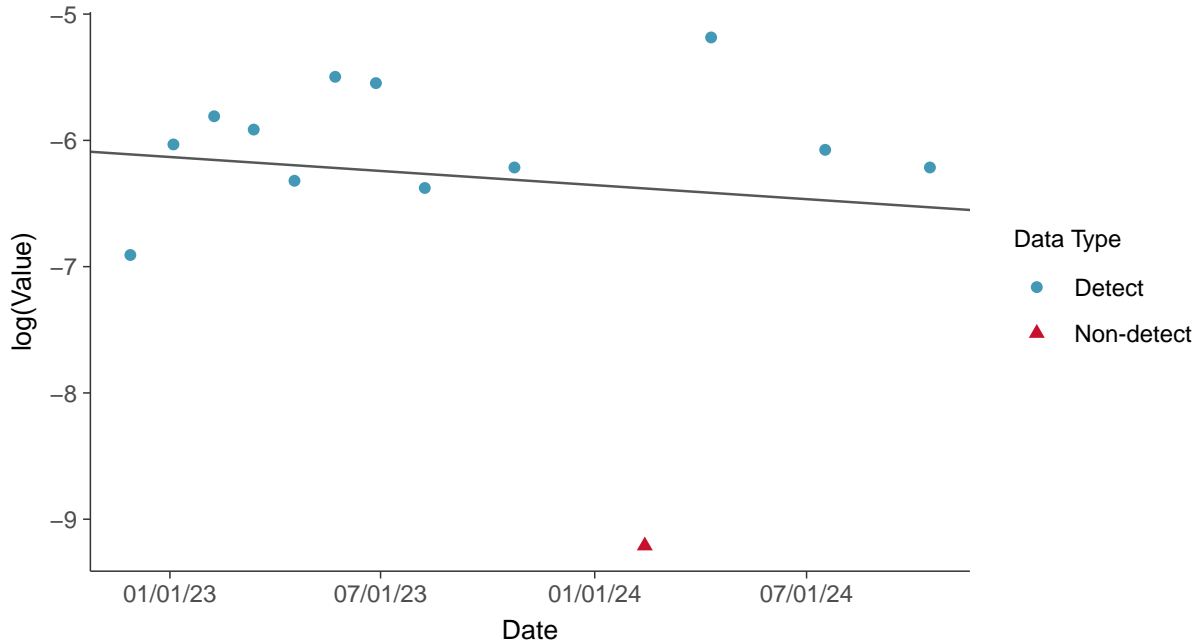
Gamma Q-Q plot using ROS Imputed Estimates

Lead, MW-02 (mg/L)



Trend Regression: Lognormal MLE

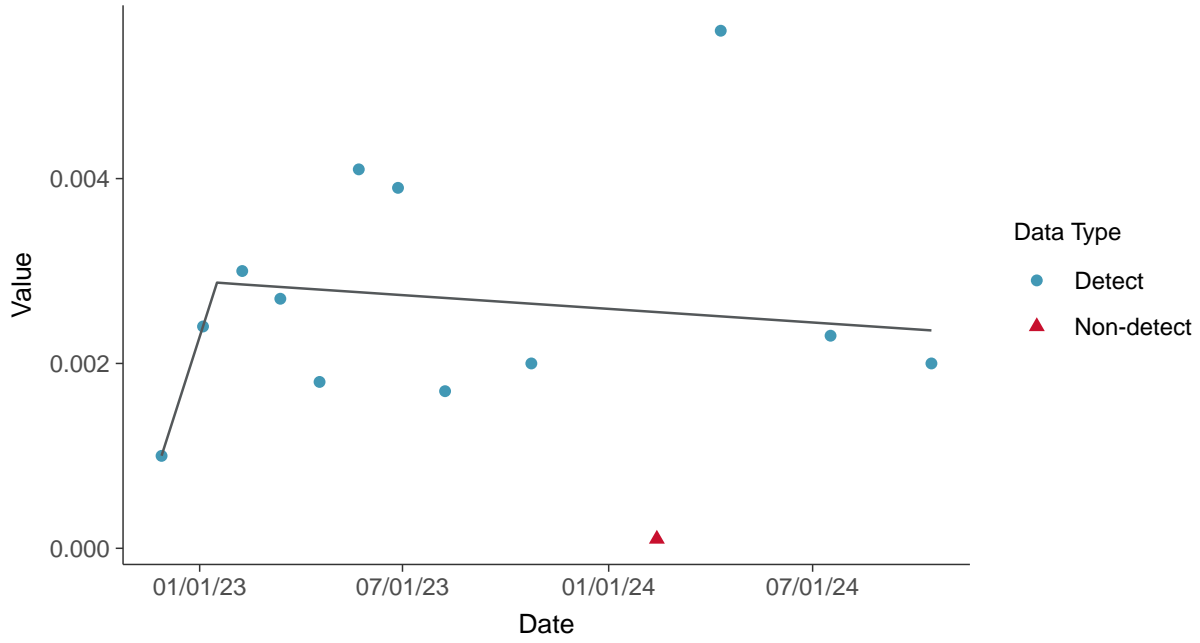
Lead, MW-02 (mg/L)





Trend Regression: Piecewise Linear-Linear

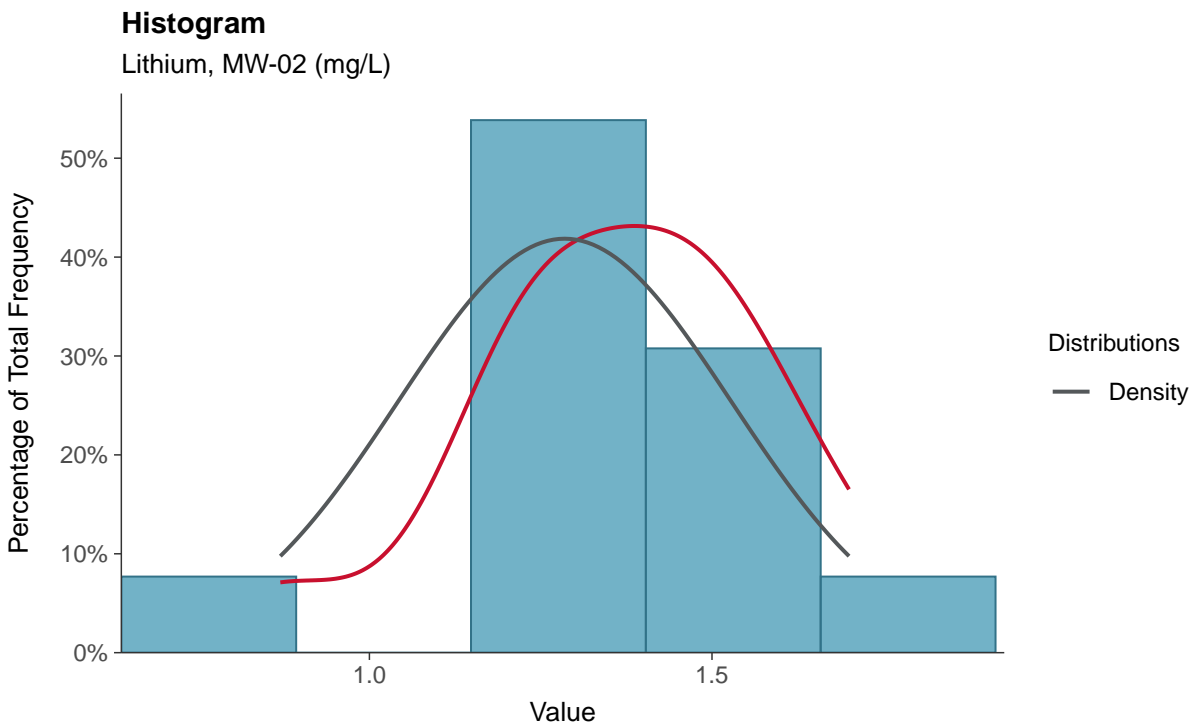
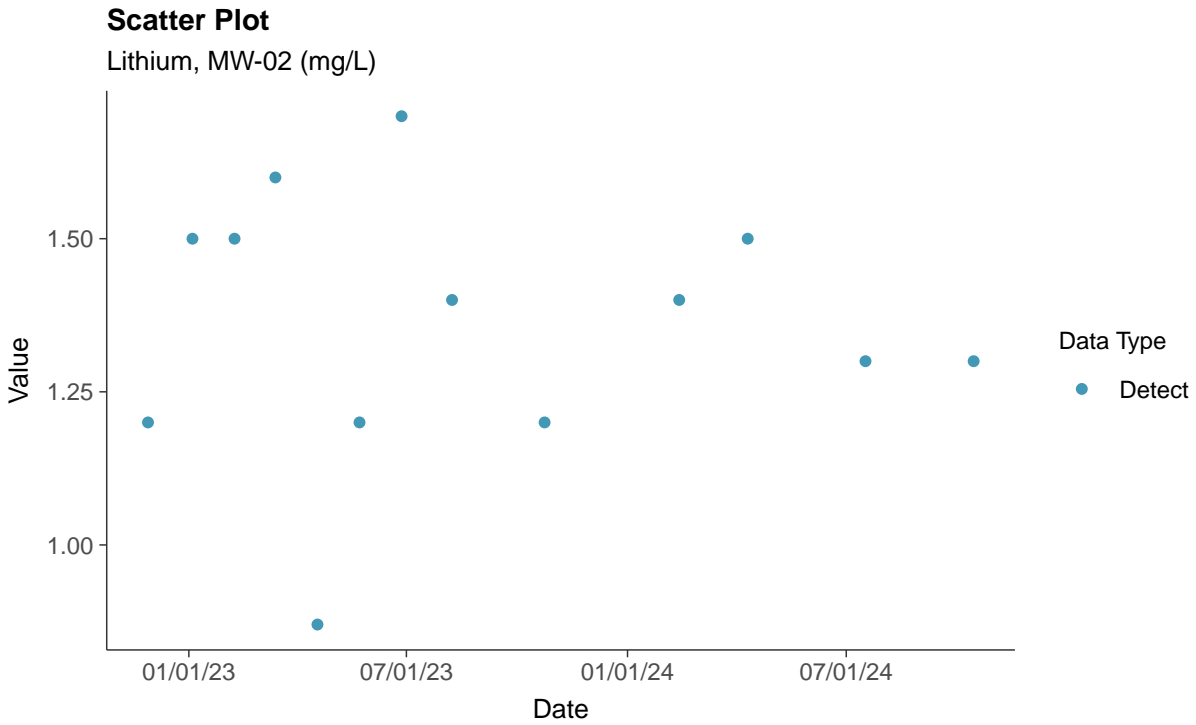
Lead, MW-02 (mg/L)





Appendix IV: Lithium, MW-02

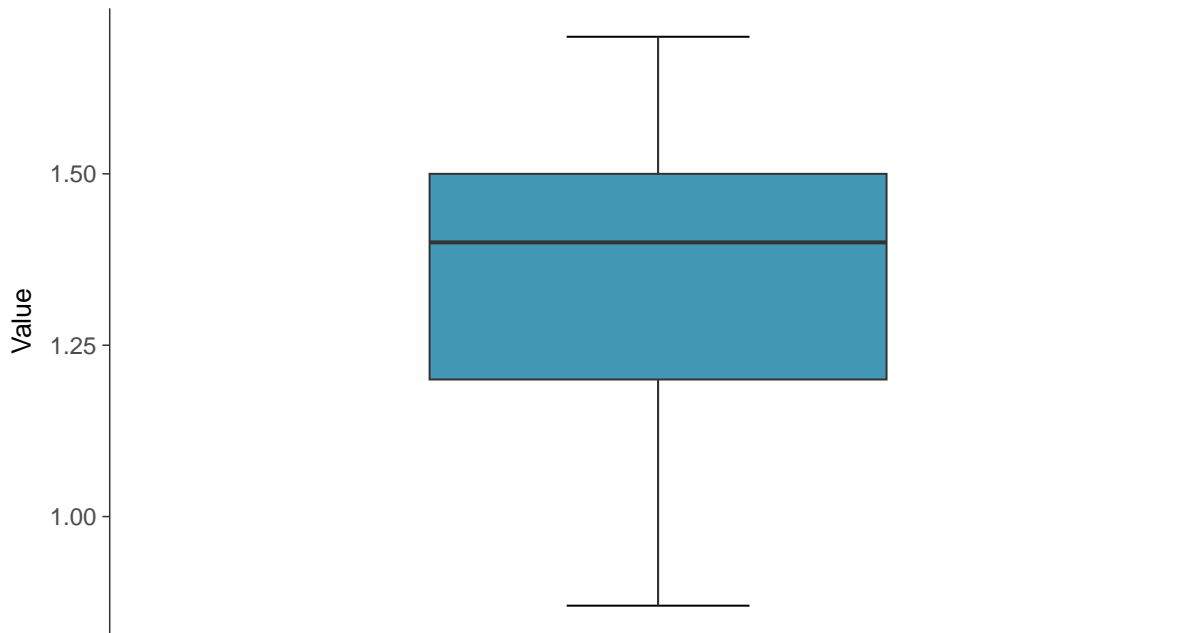
ID: 2_12_2_5_116





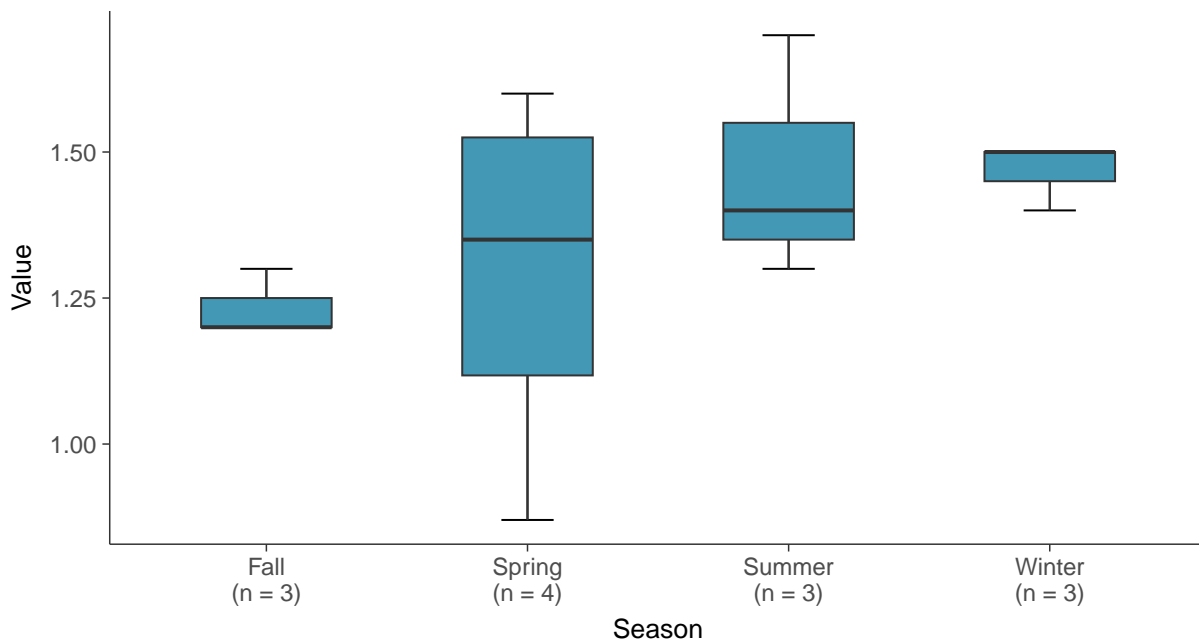
Boxplot

Lithium, MW-02 (mg/L)



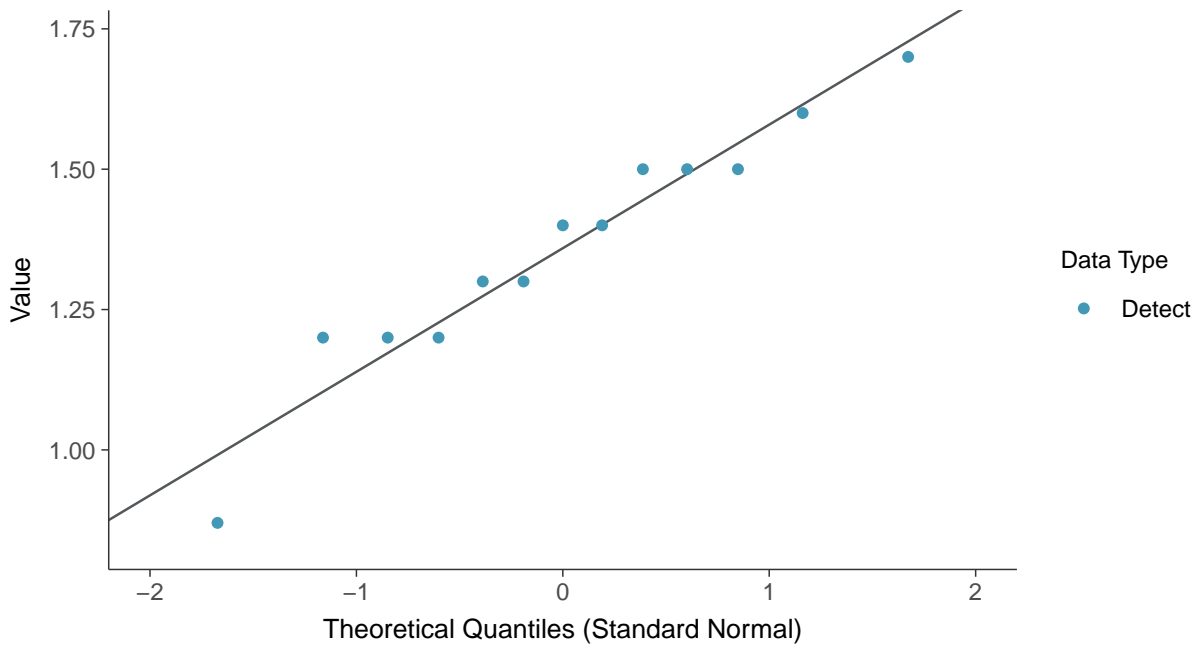
Boxplot by Season

Lithium, MW-02 (mg/L)

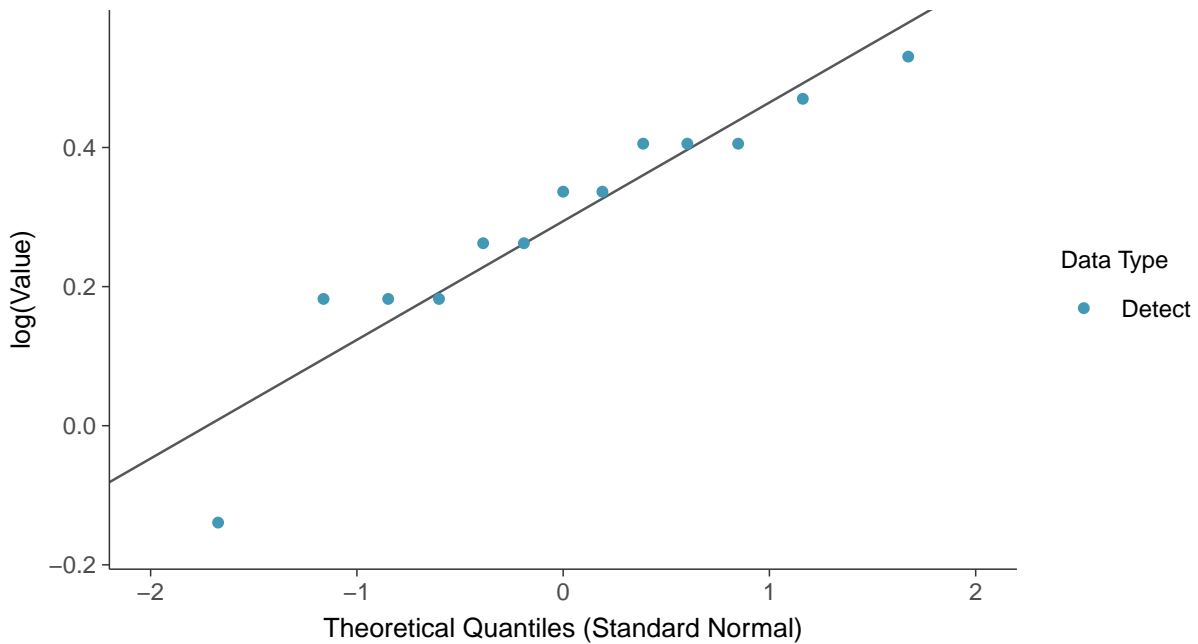




Normal Q-Q plot
Lithium, MW-02 (mg/L)

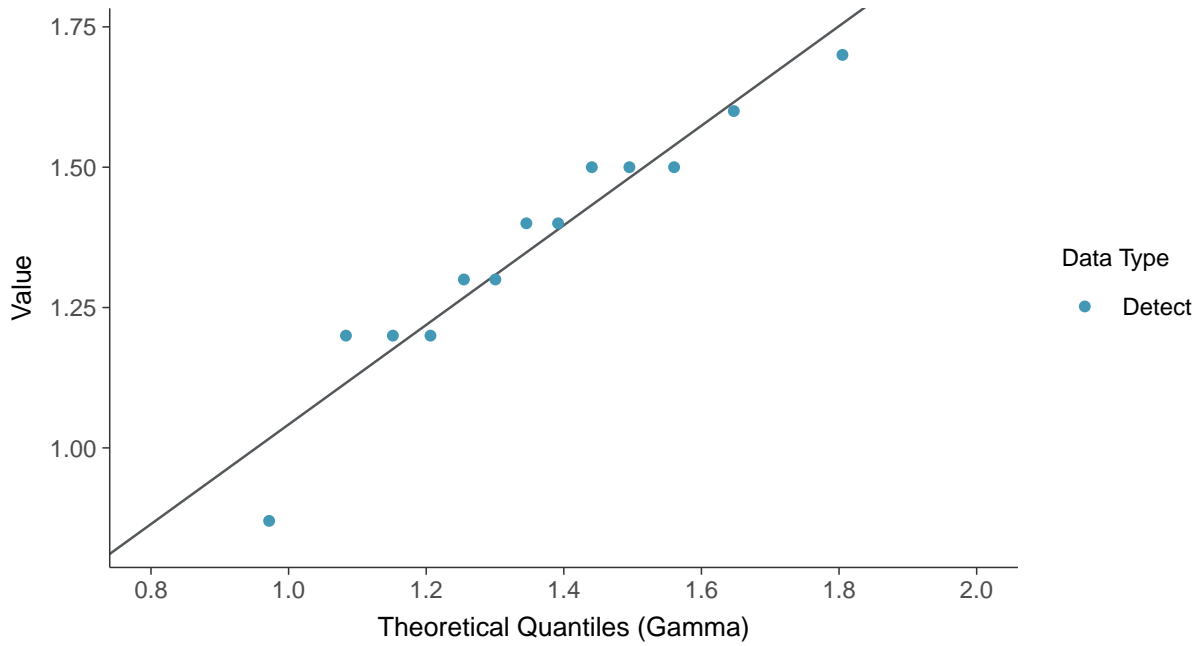


Lognormal Q-Q plot
Lithium, MW-02 (mg/L)

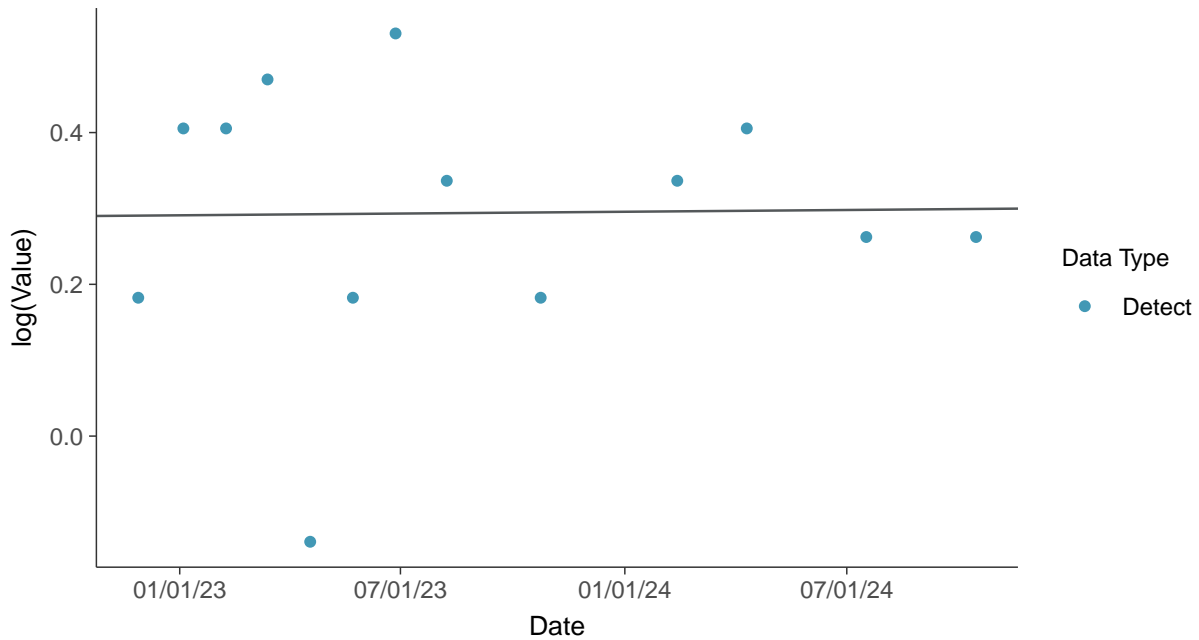




Gamma Q-Q plot
Lithium, MW-02 (mg/L)



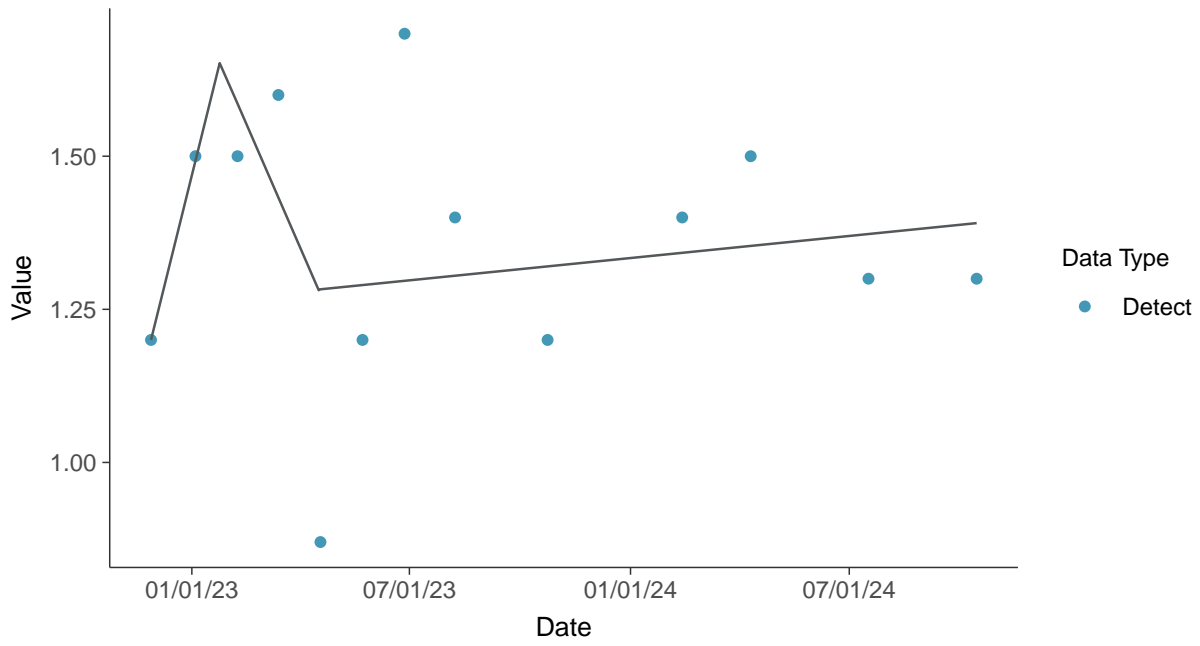
Trend Regression: Lognormal MLE
Lithium, MW-02 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

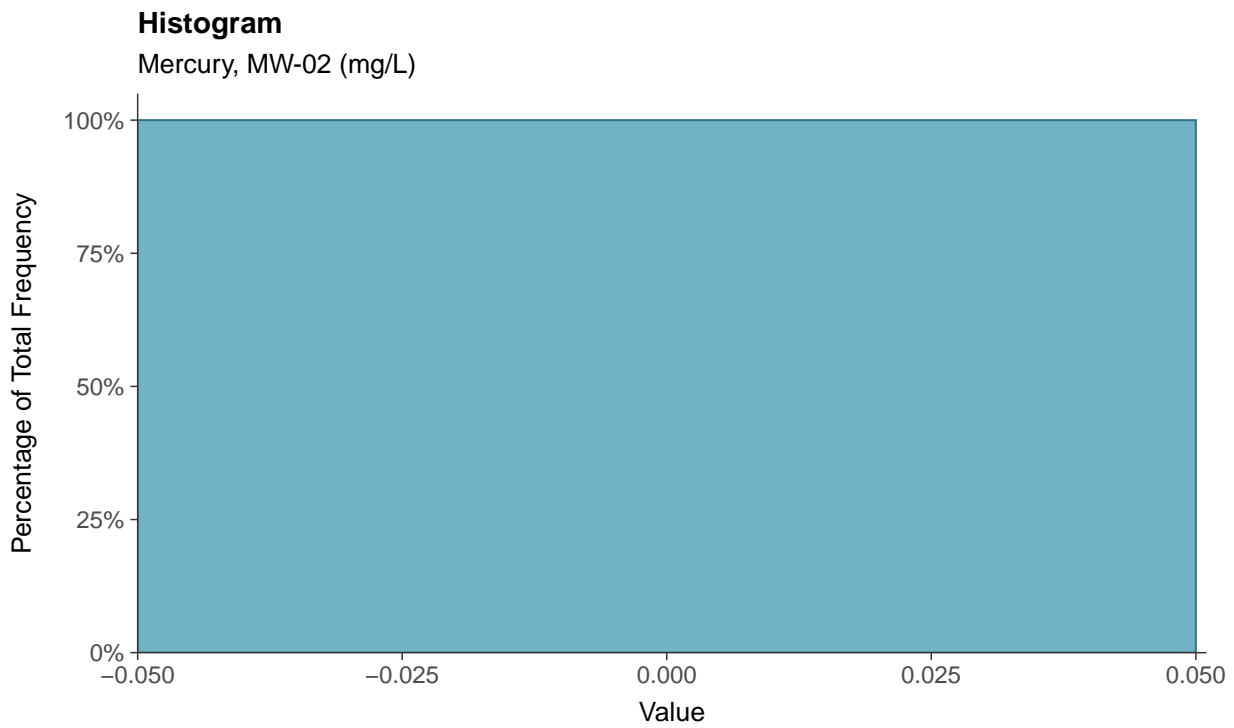
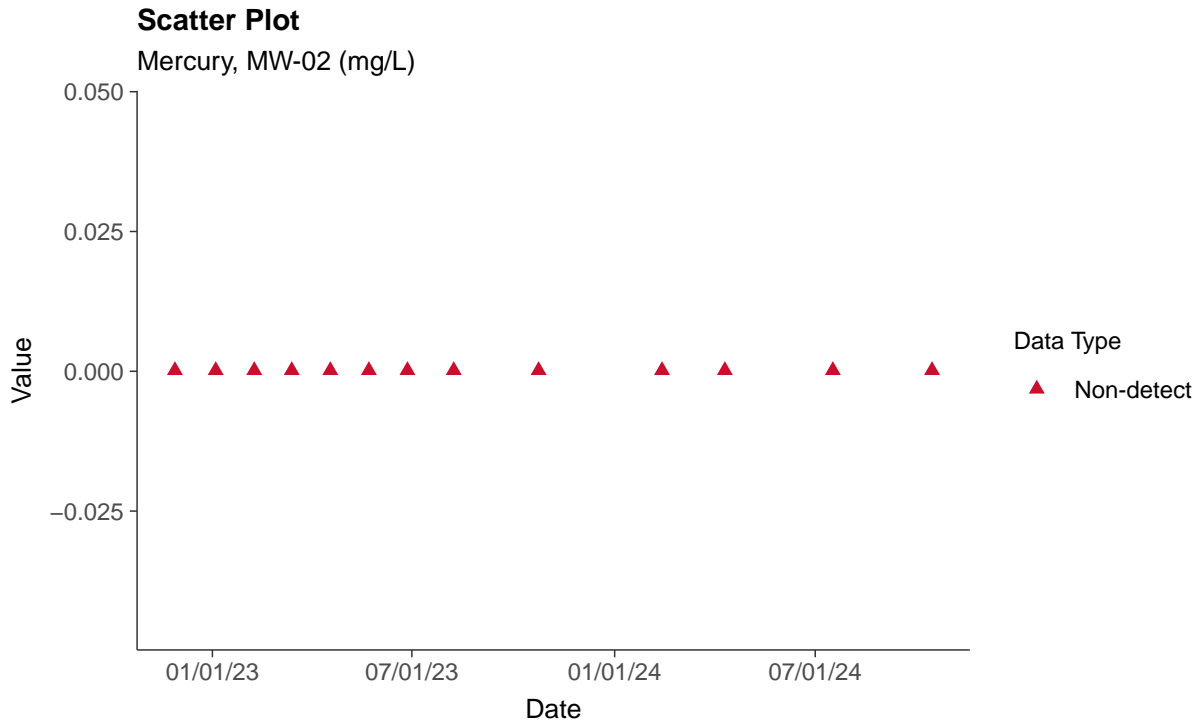
Lithium, MW-02 (mg/L)





Appendix IV: Mercury, MW-02

ID: 2_12_2_5_117





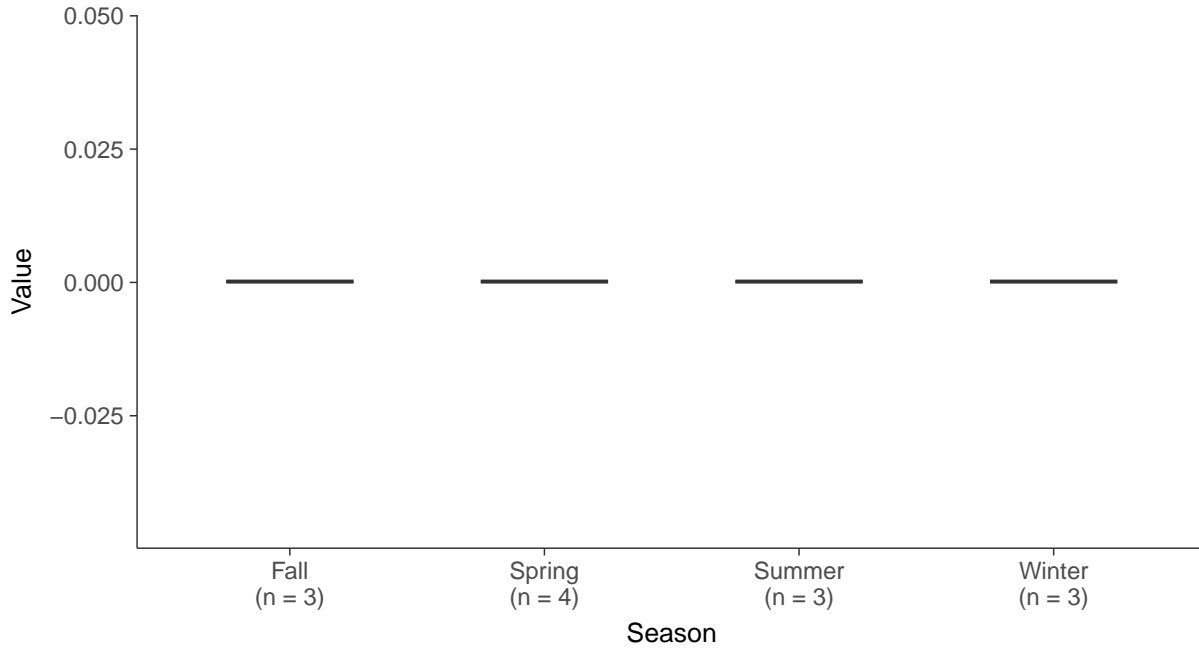
Boxplot

Mercury, MW-02 (mg/L)



Boxplot by Season

Mercury, MW-02 (mg/L)



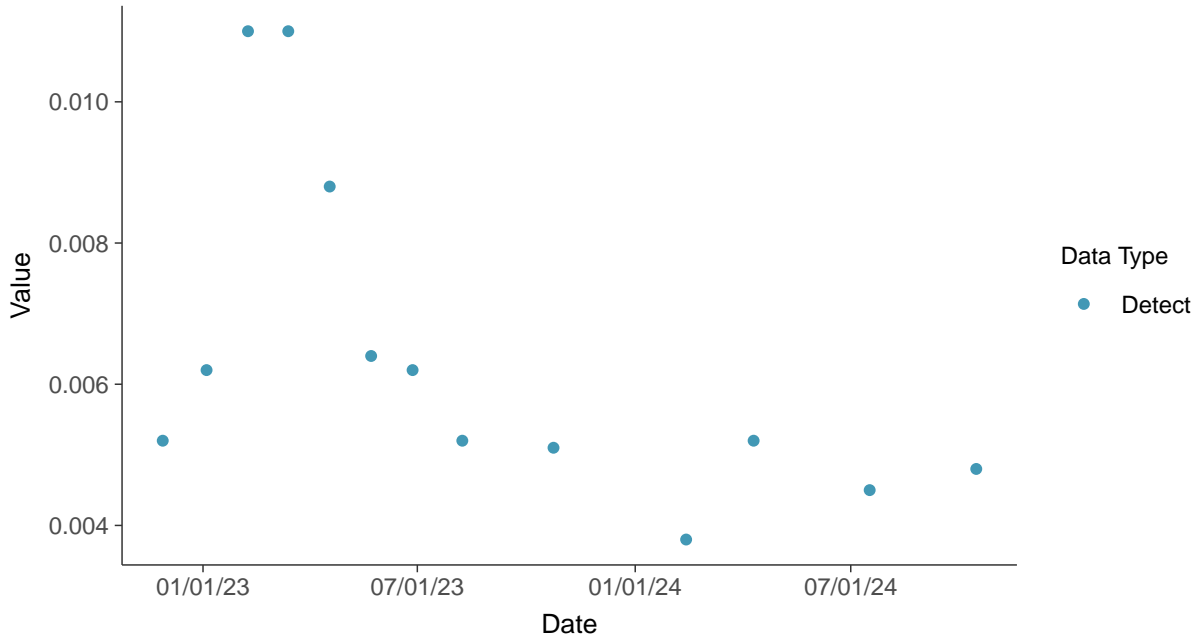


Appendix IV: Molybdenum, MW-02

ID: 2_12_2_5_118

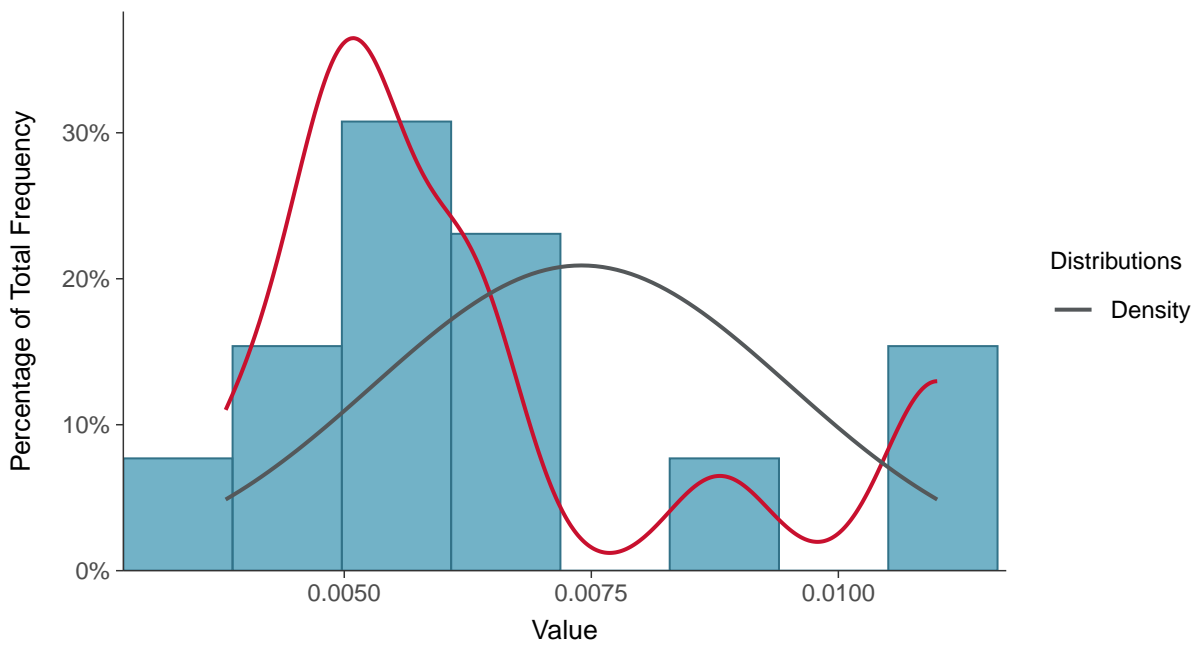
Scatter Plot

Molybdenum, MW-02 (mg/L)



Histogram

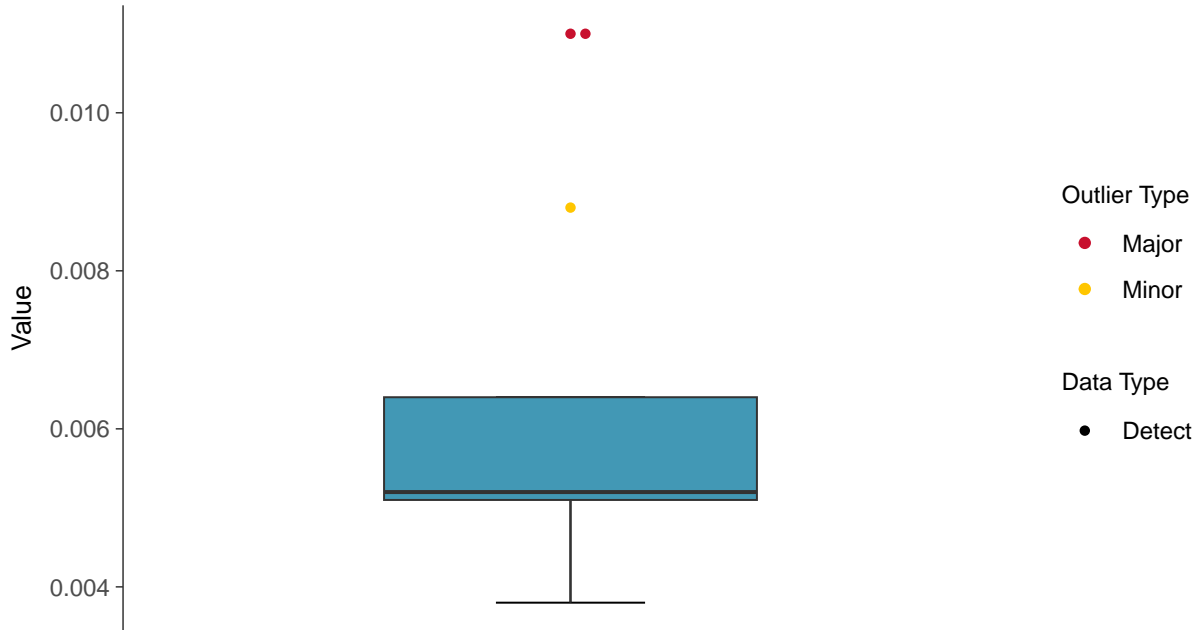
Molybdenum, MW-02 (mg/L)





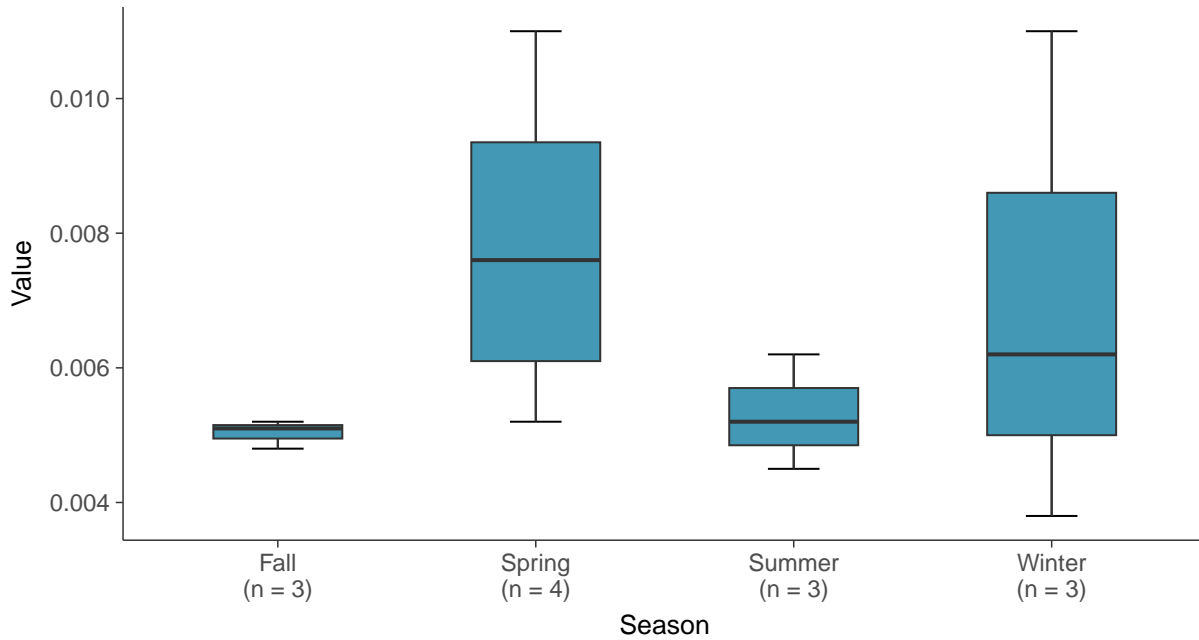
Boxplot

Molybdenum, MW-02 (mg/L)



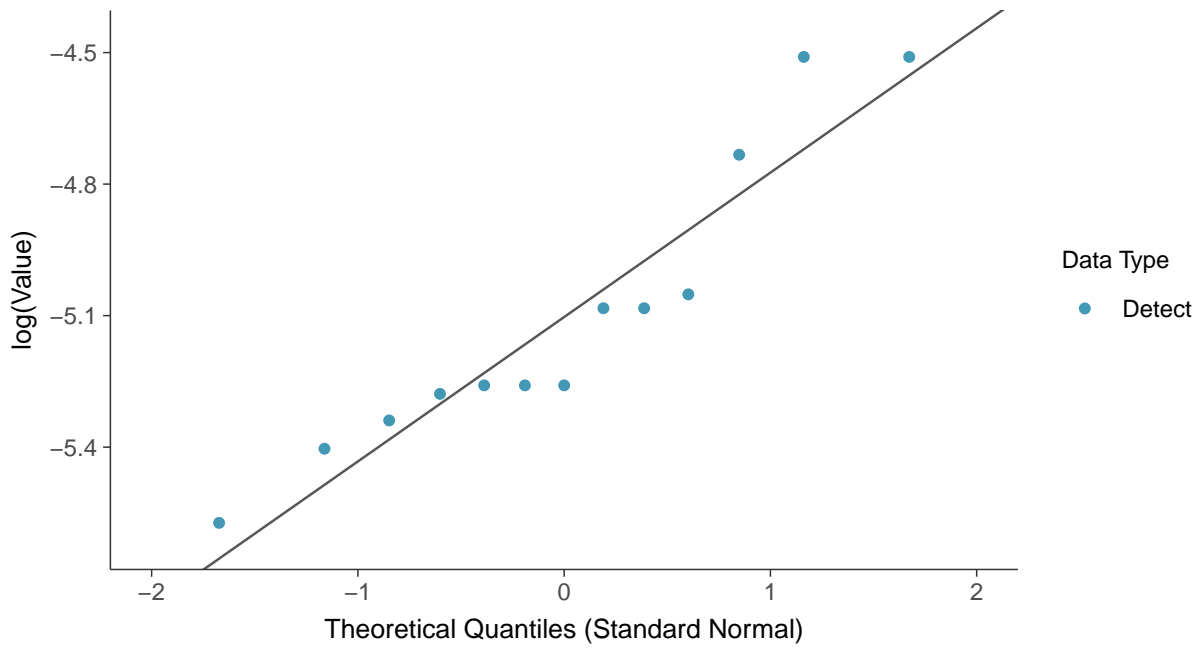
Boxplot by Season

Molybdenum, MW-02 (mg/L)

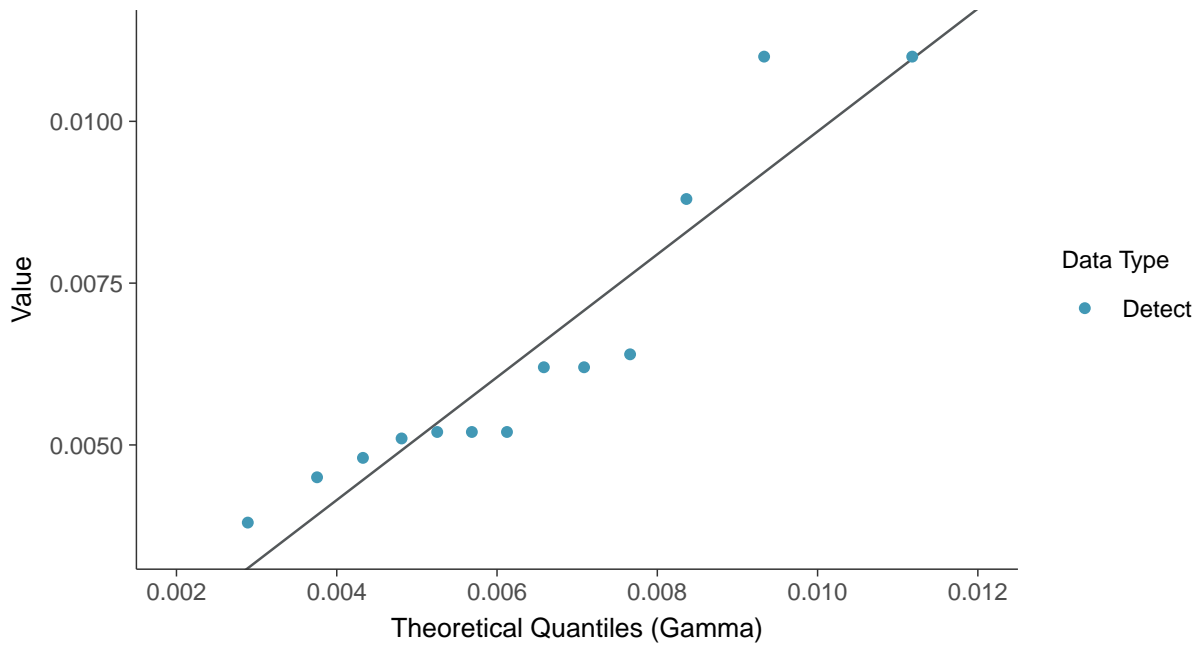




Lognormal Q-Q plot
Molybdenum, MW-02 (mg/L)



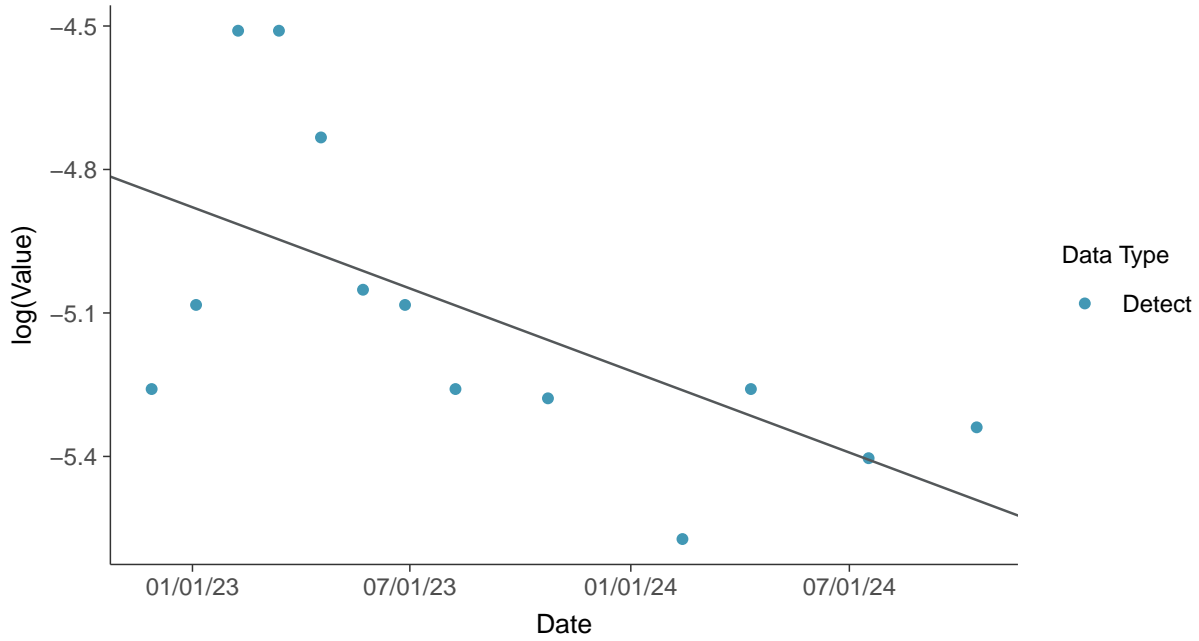
Gamma Q-Q plot
Molybdenum, MW-02 (mg/L)





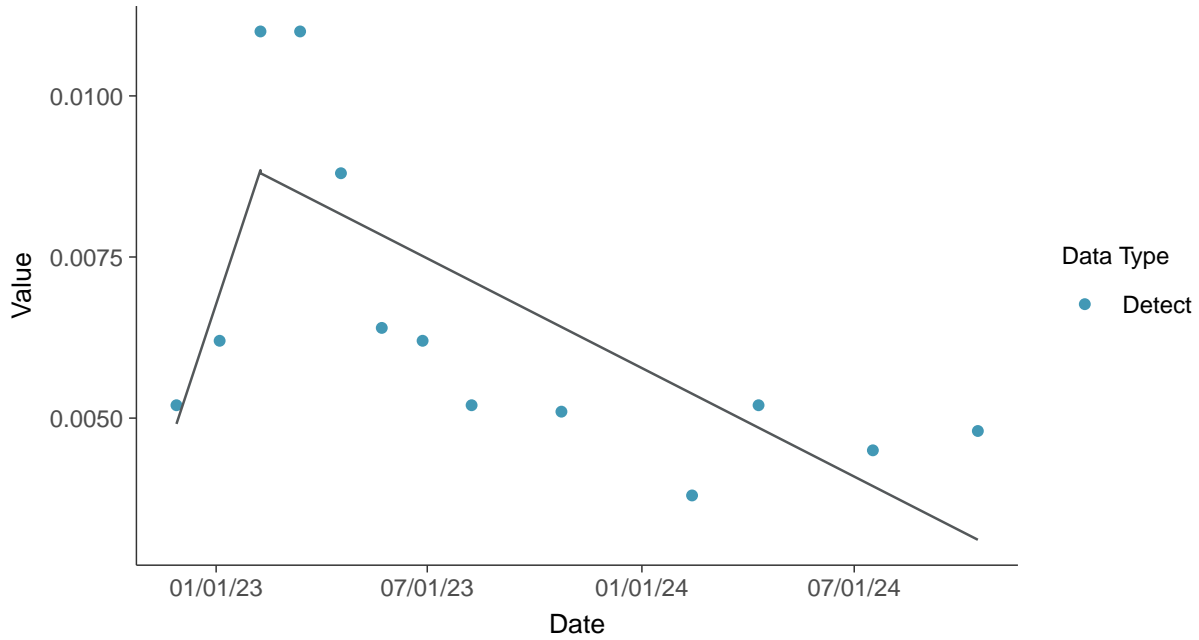
Trend Regression: Lognormal MLE

Molybdenum, MW-02 (mg/L)



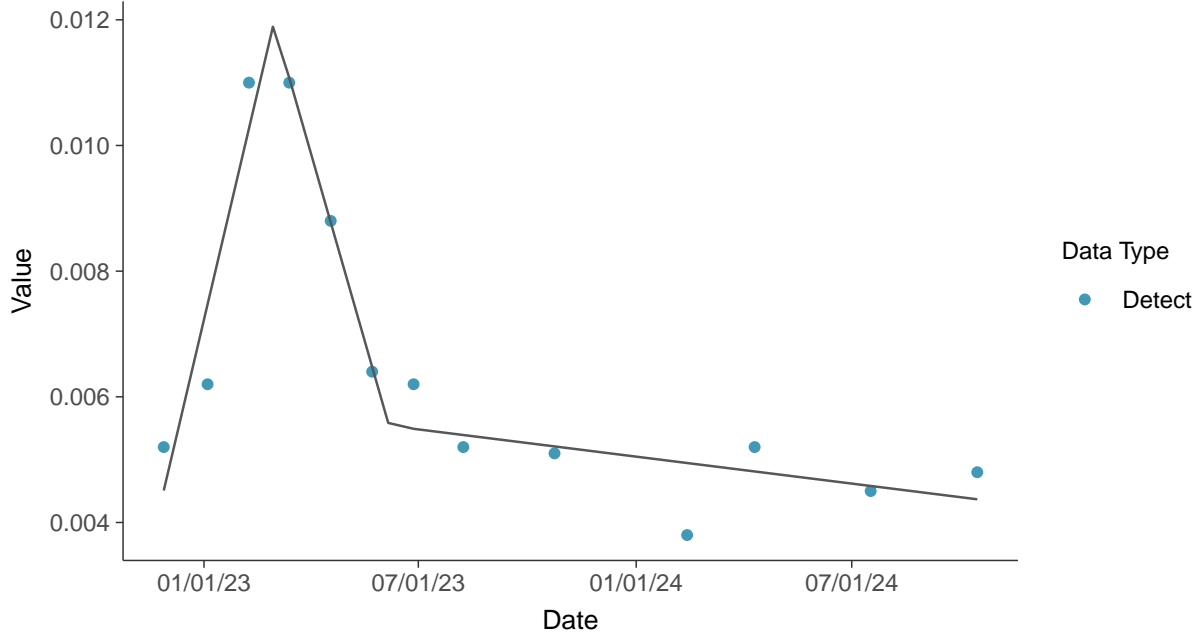
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-02 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear
Molybdenum, MW-02 (mg/L)



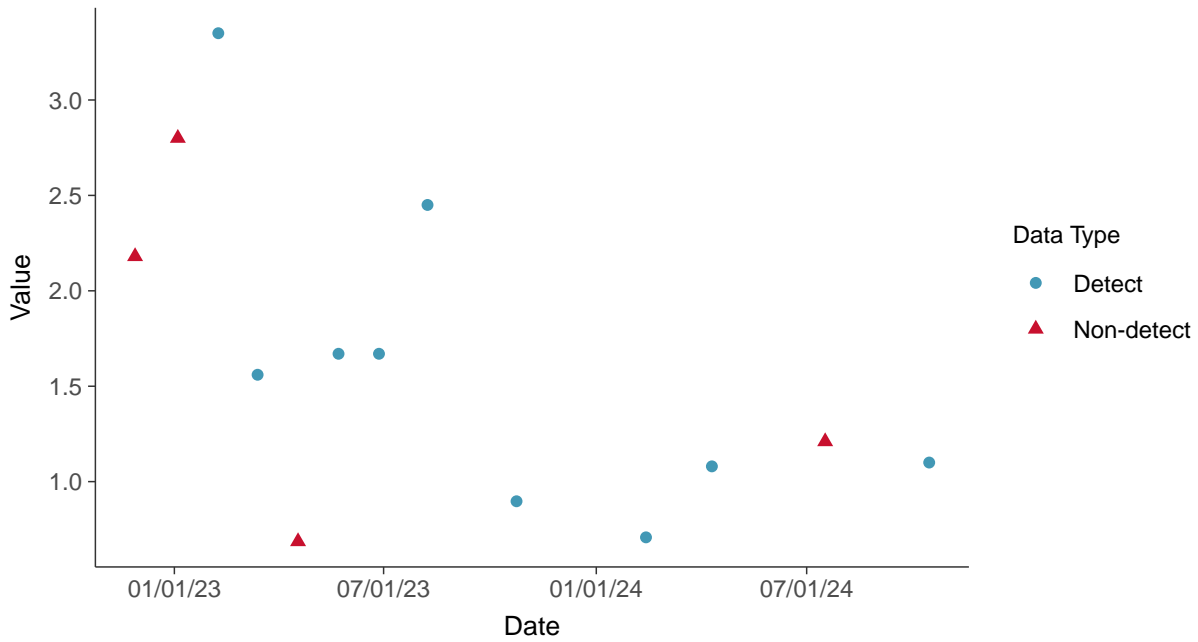


Appendix IV: Radium 226 and 228, MW-02

ID: 2_12_2_5_121

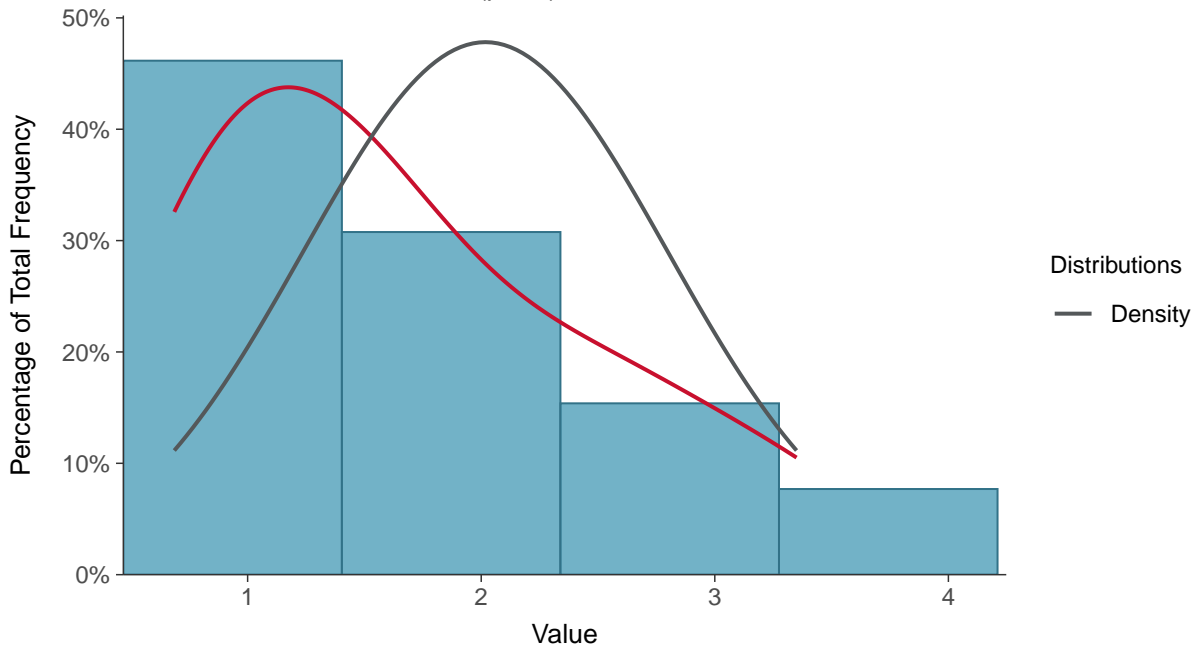
Scatter Plot

Radium 226 and 228, MW-02 (pCi/L)



Histogram

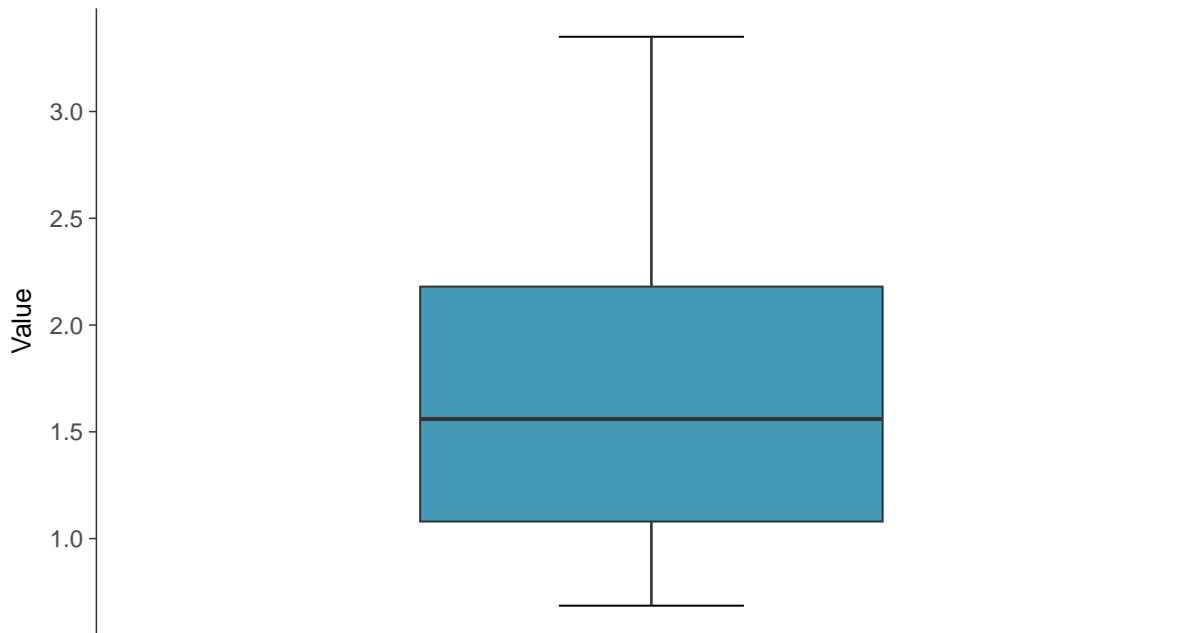
Radium 226 and 228, MW-02 (pCi/L)





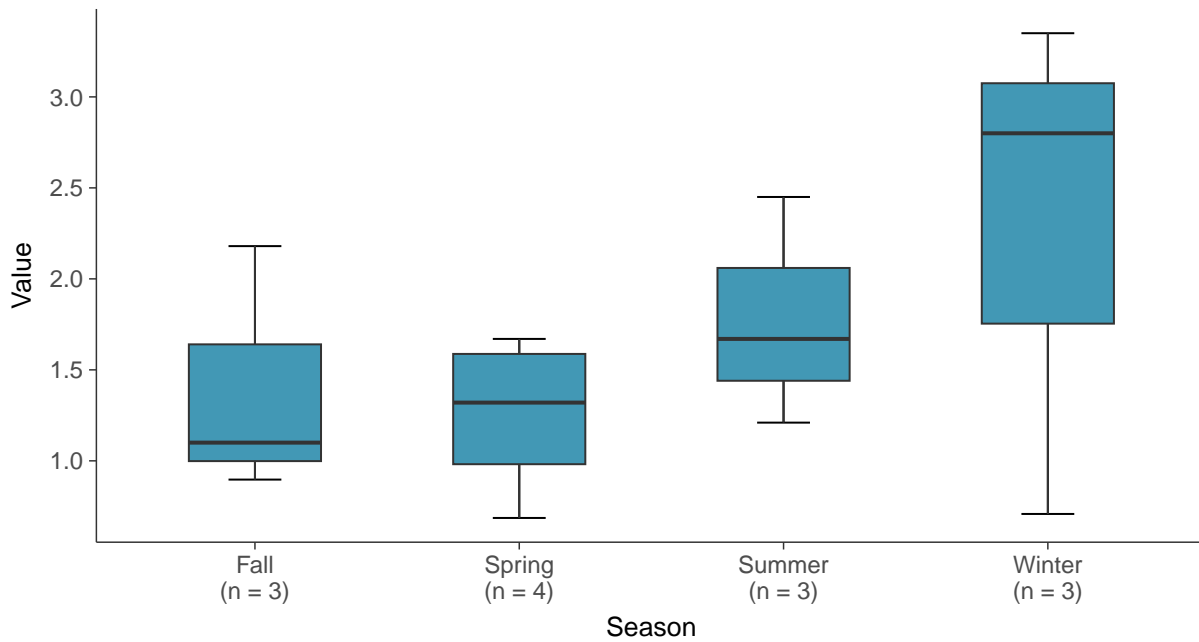
Boxplot

Radium 226 and 228, MW-02 (pCi/L)



Boxplot by Season

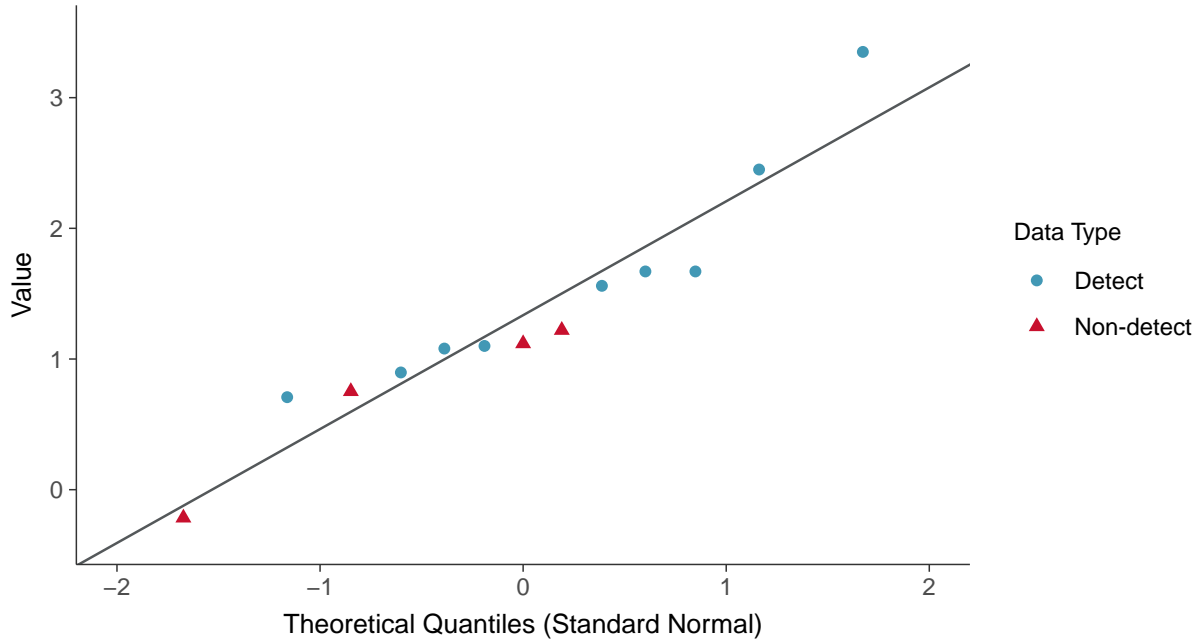
Radium 226 and 228, MW-02 (pCi/L)





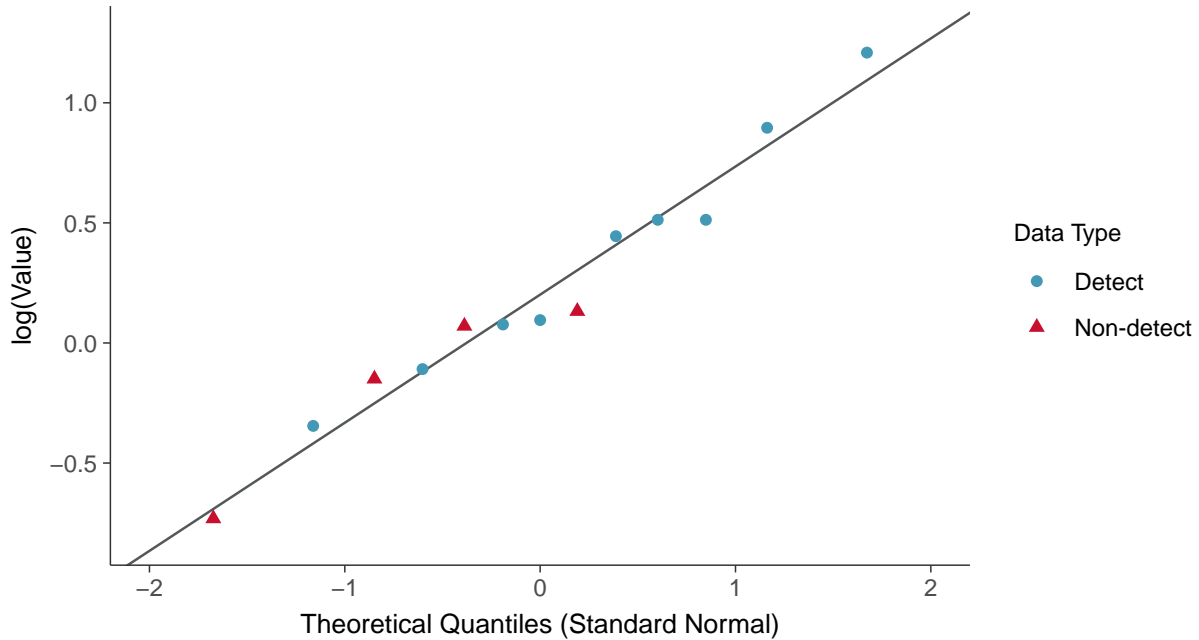
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-02 (pCi/L)



Lognormal Q-Q plot using ROS Imputed Estimates

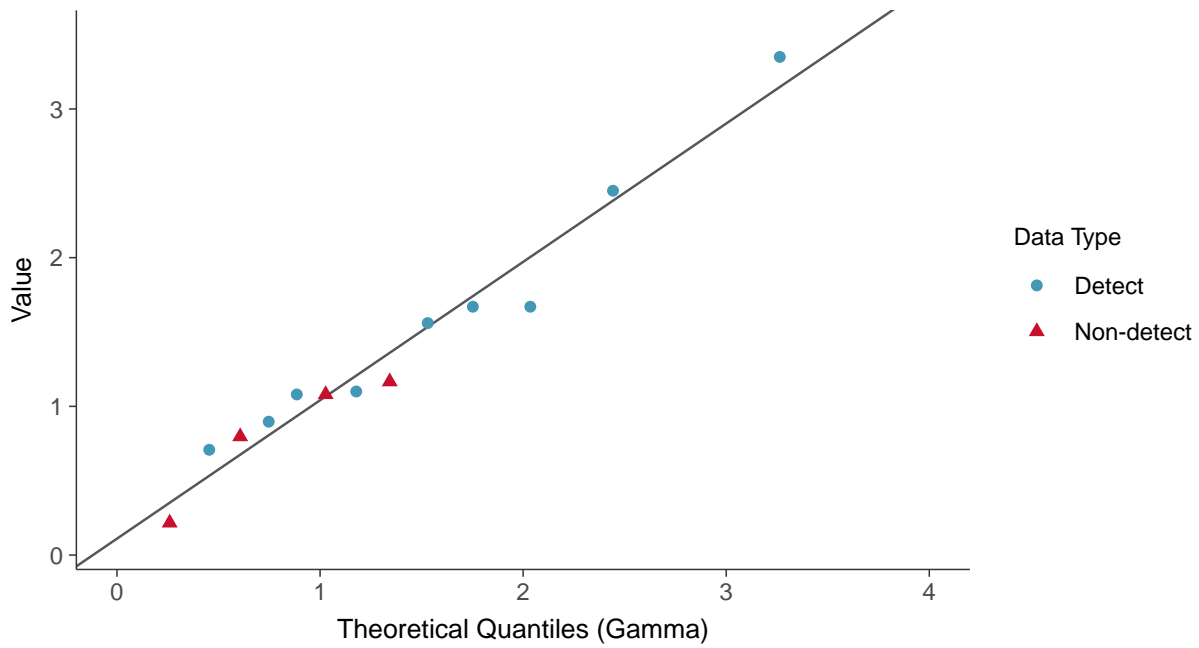
Radium 226 and 228, MW-02 (pCi/L)





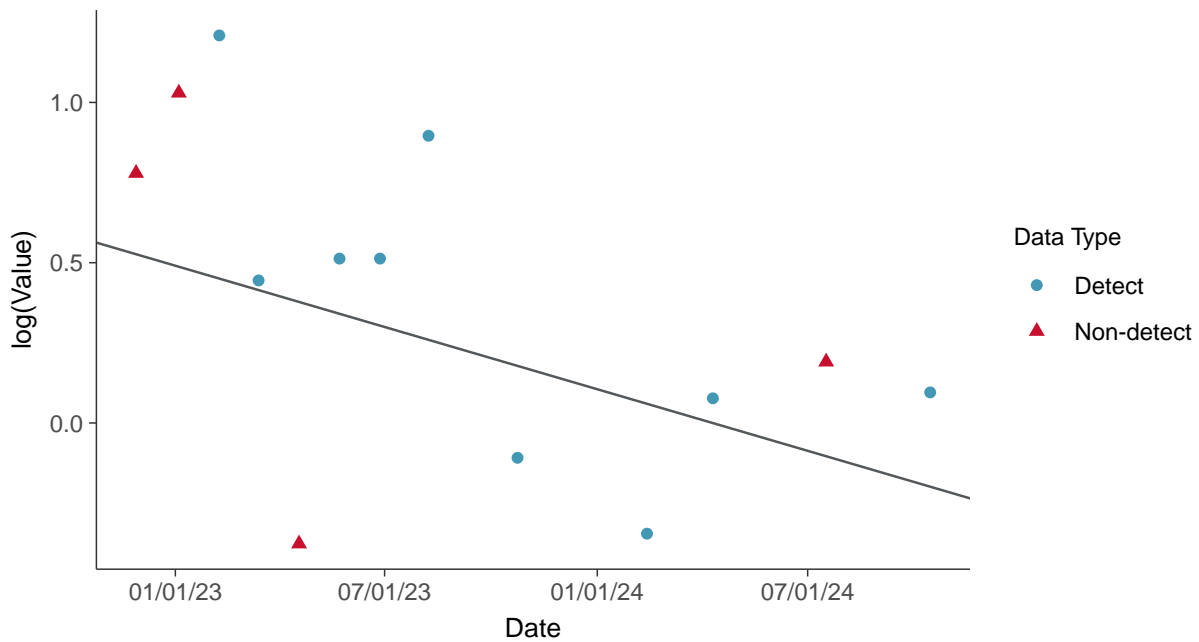
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-02 (pCi/L)



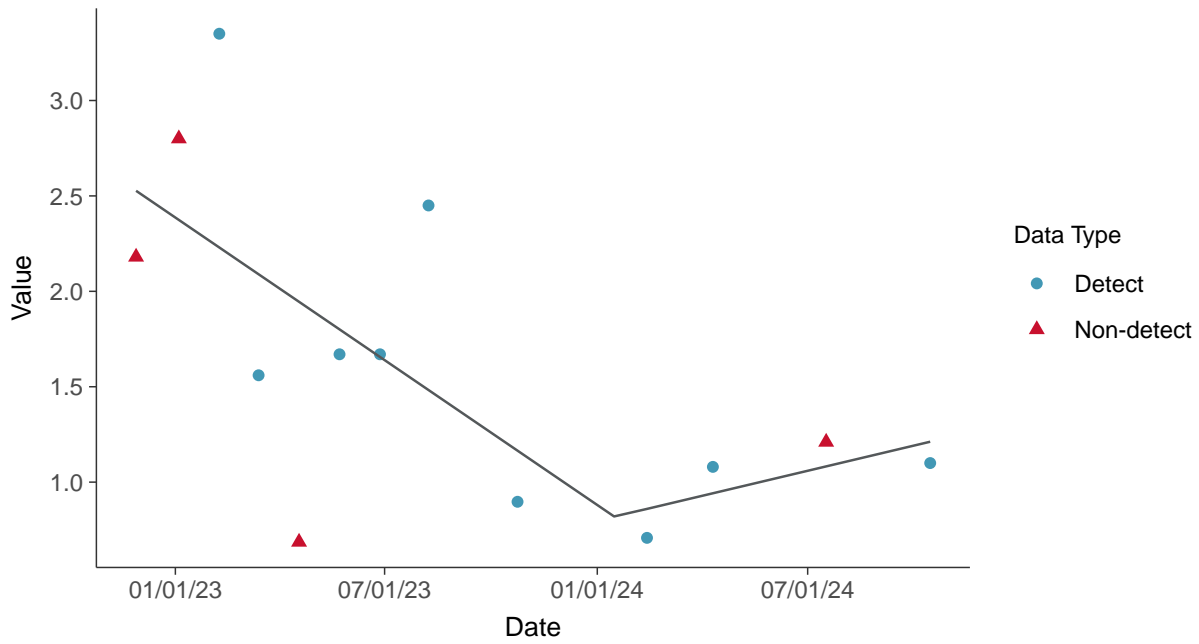
Trend Regression: Lognormal MLE

Radium 226 and 228, MW-02 (pCi/L)

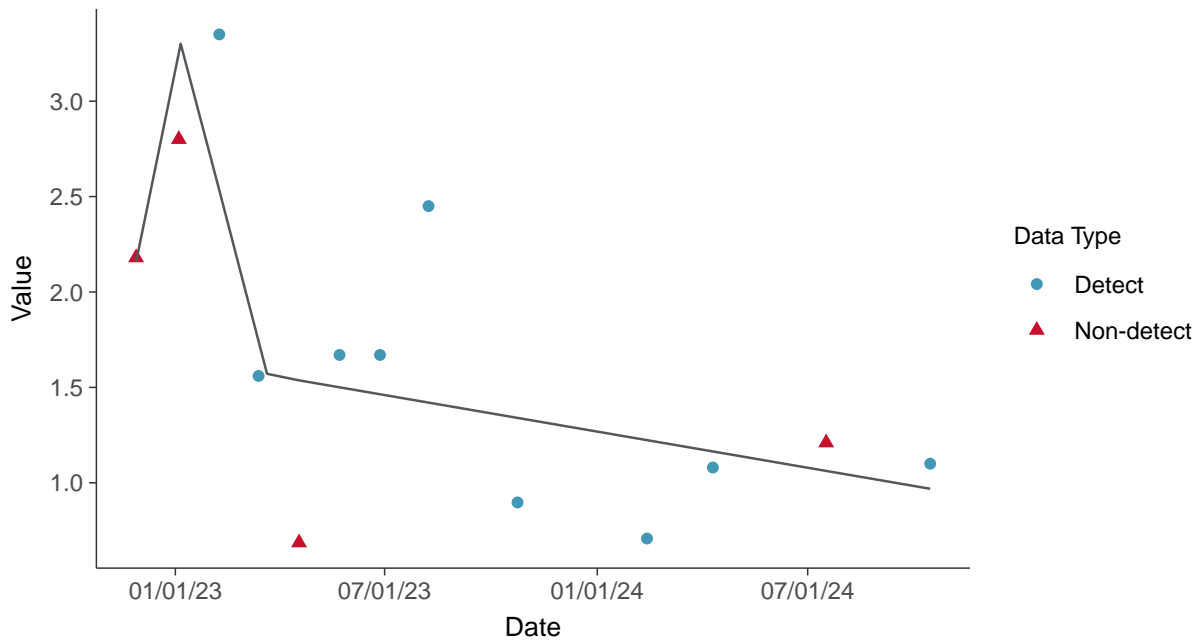




Trend Regression: Piecewise Linear-Linear
Radium 226 and 228, MW-02 (pCi/L)



Trend Regression: Piecewise Linear-Linear-Linear
Radium 226 and 228, MW-02 (pCi/L)



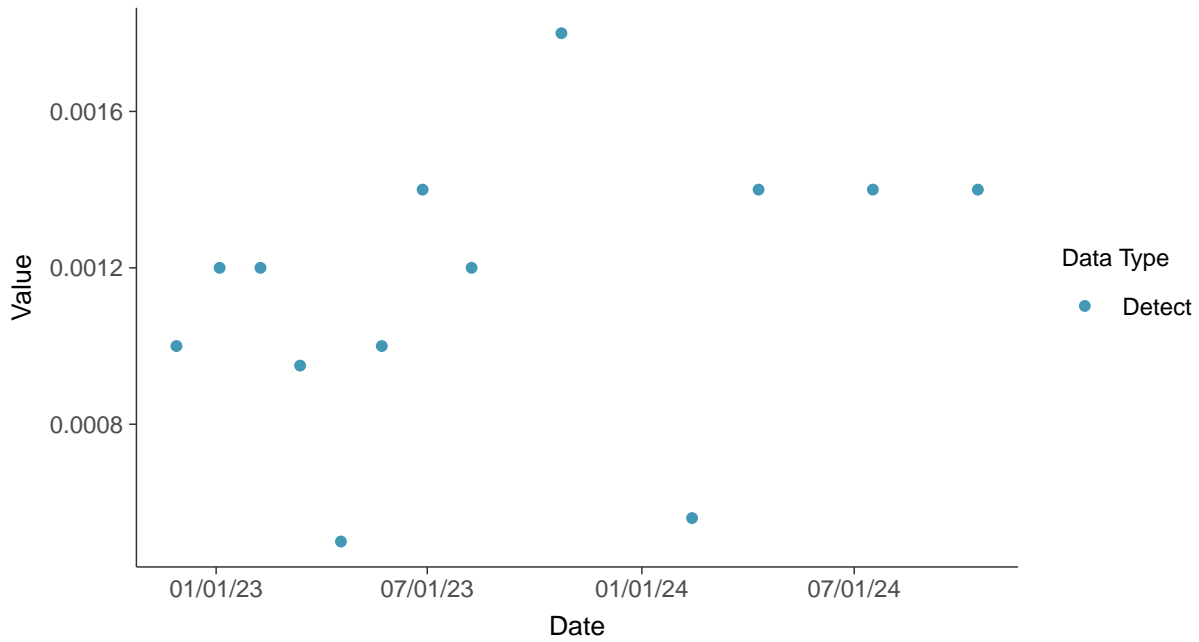


Appendix IV: Selenium, MW-02

ID: 2_12_2_5_122

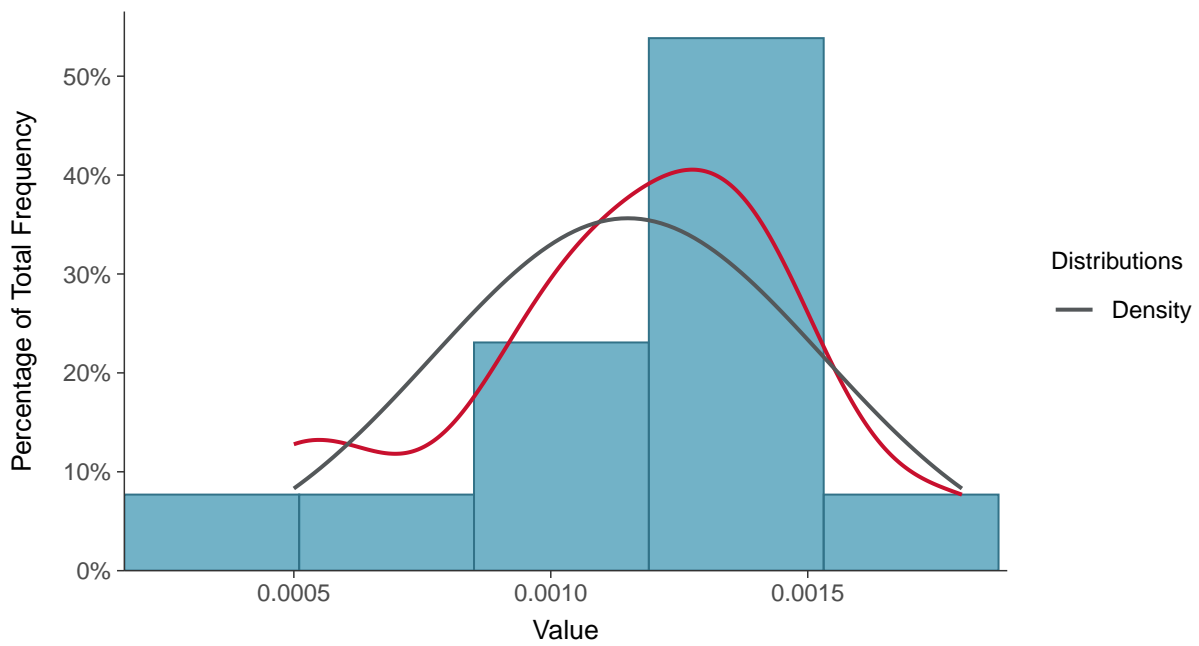
Scatter Plot

Selenium, MW-02 (mg/L)



Histogram

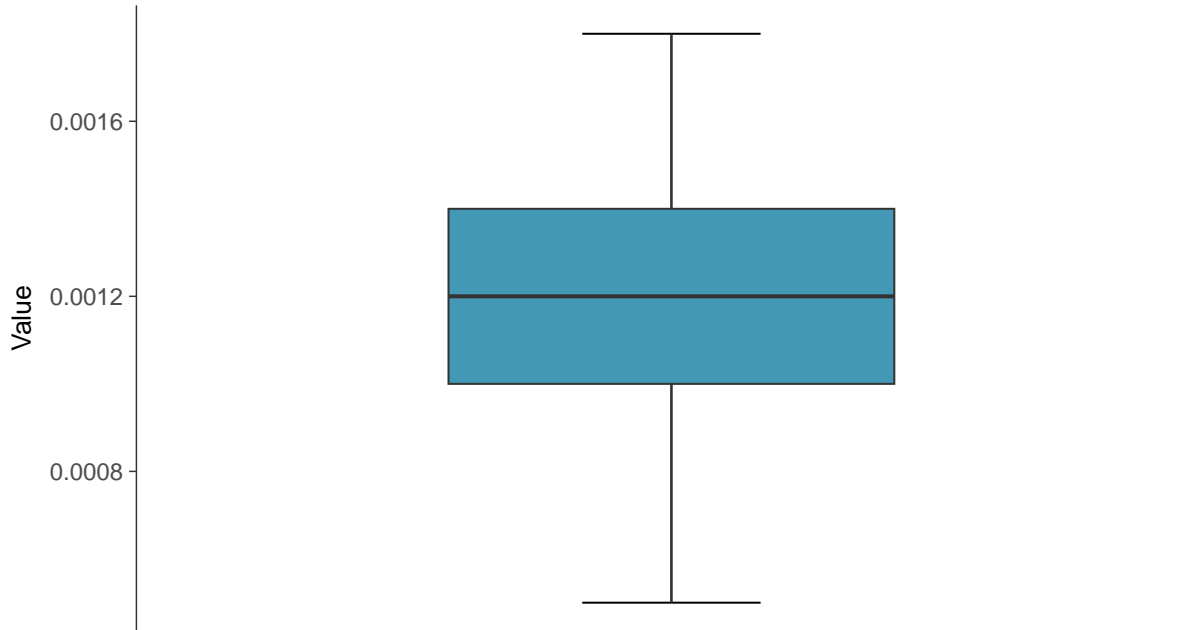
Selenium, MW-02 (mg/L)





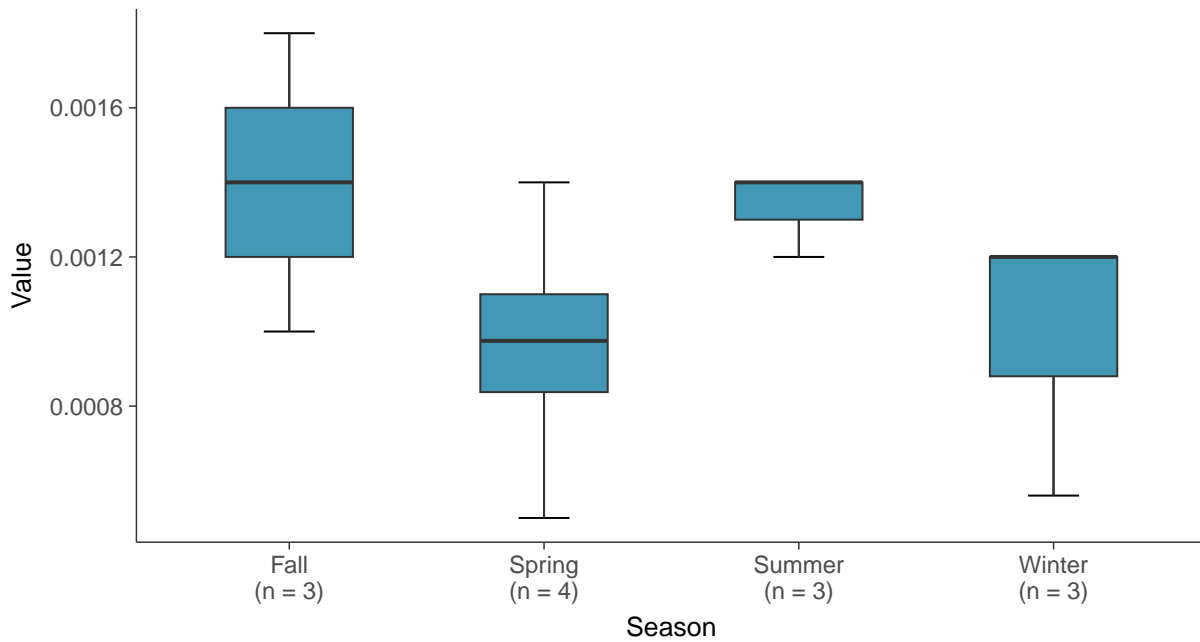
Boxplot

Selenium, MW-02 (mg/L)



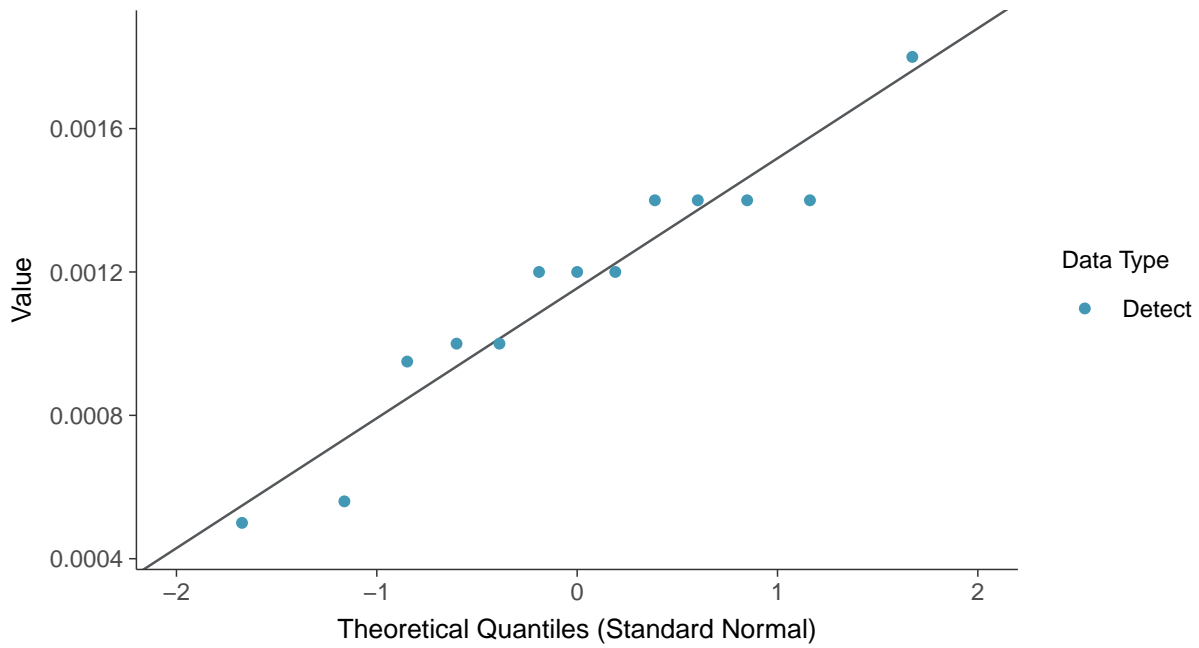
Boxplot by Season

Selenium, MW-02 (mg/L)

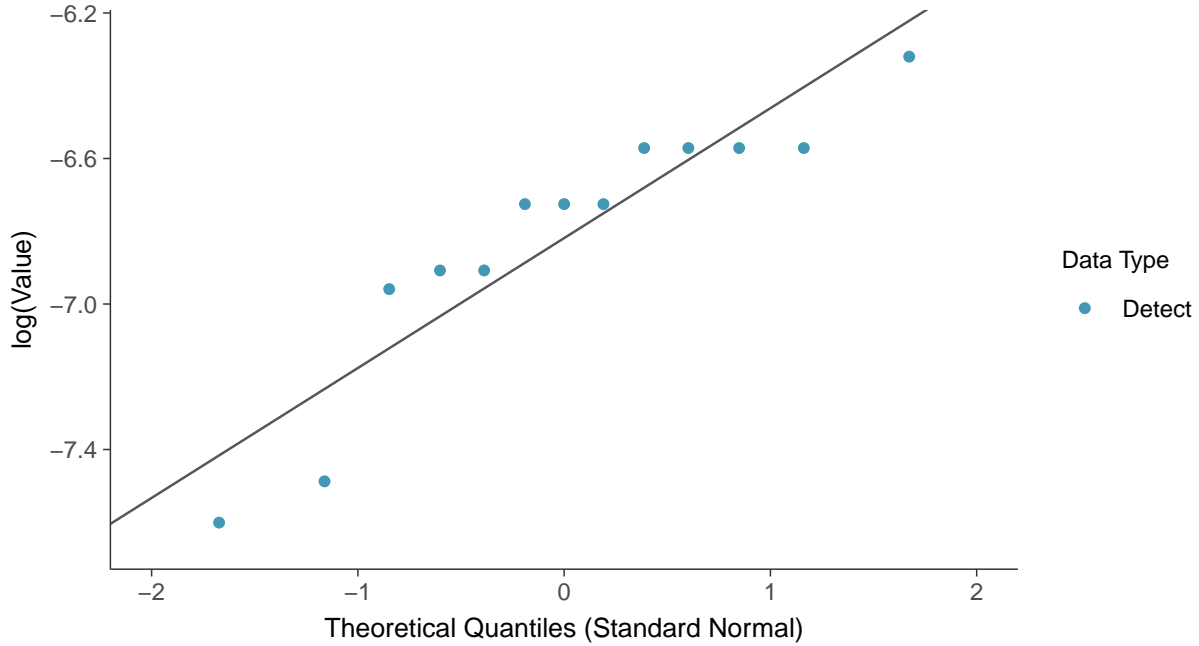




Normal Q-Q plot
Selenium, MW-02 (mg/L)

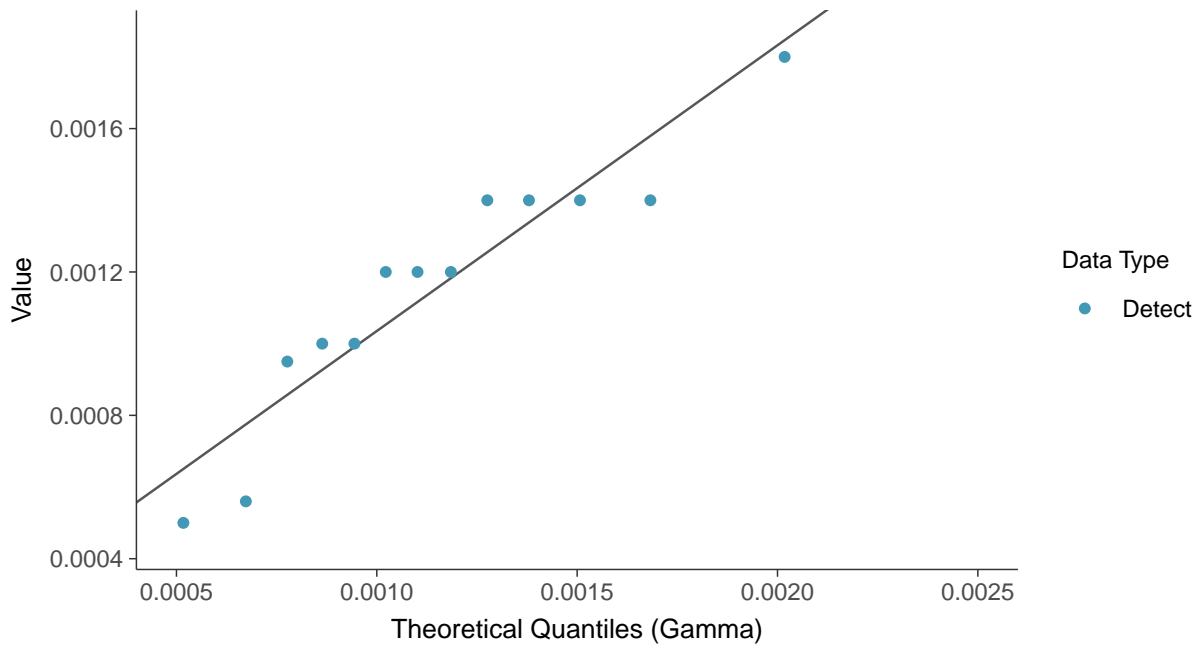


Lognormal Q-Q plot
Selenium, MW-02 (mg/L)

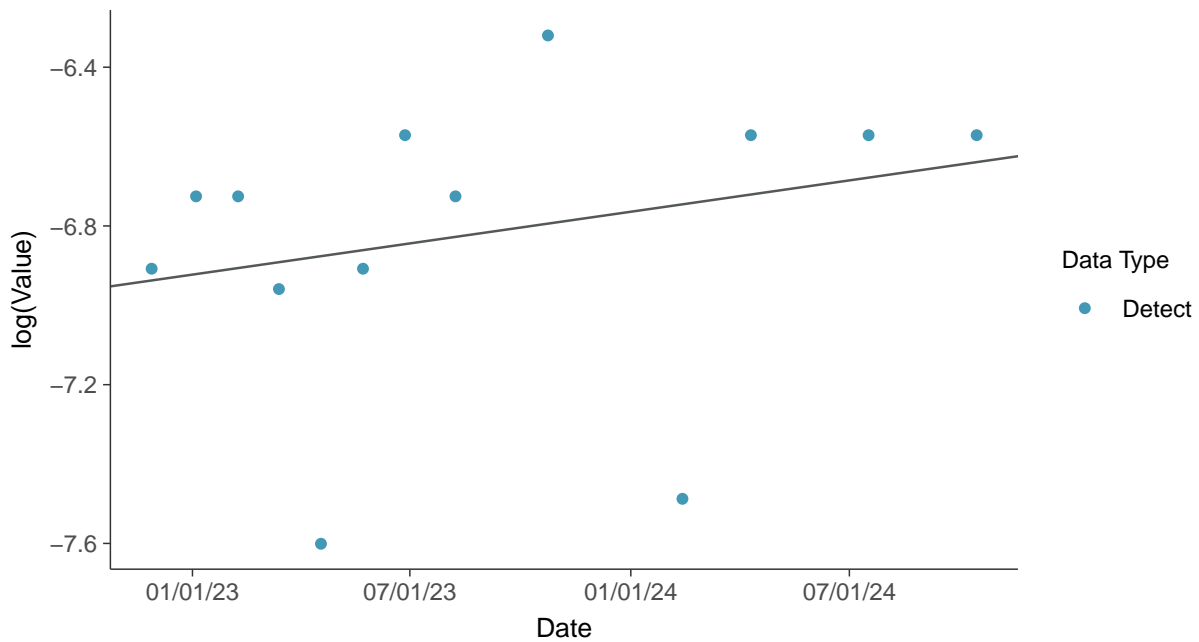




Gamma Q-Q plot
Selenium, MW-02 (mg/L)

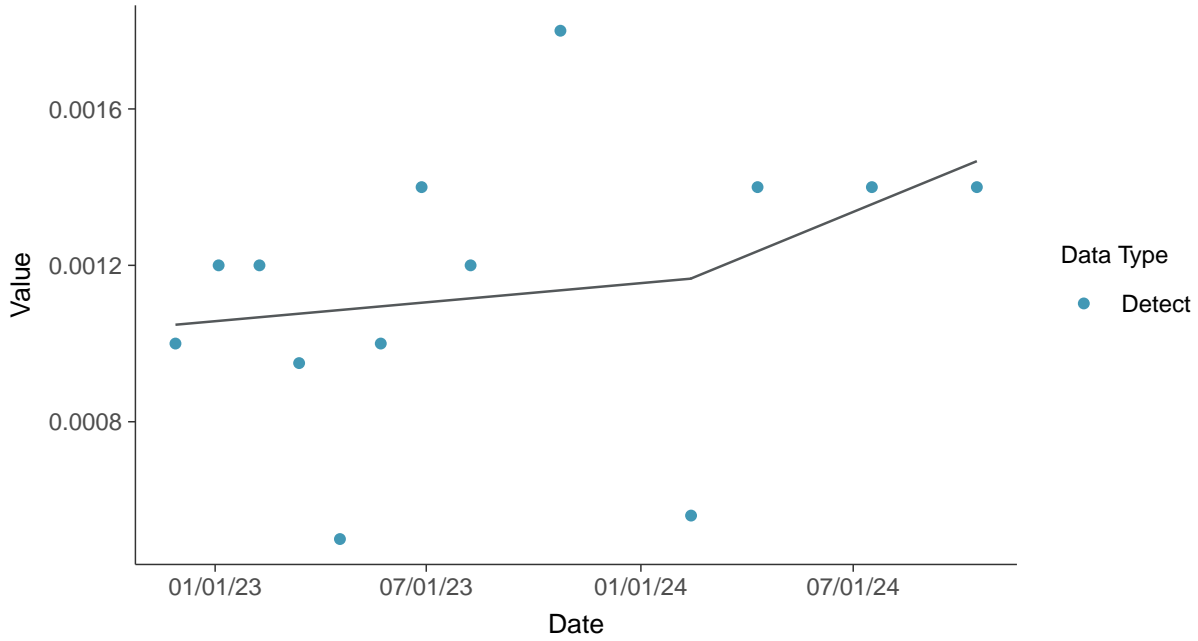


Trend Regression: Lognormal MLE
Selenium, MW-02 (mg/L)

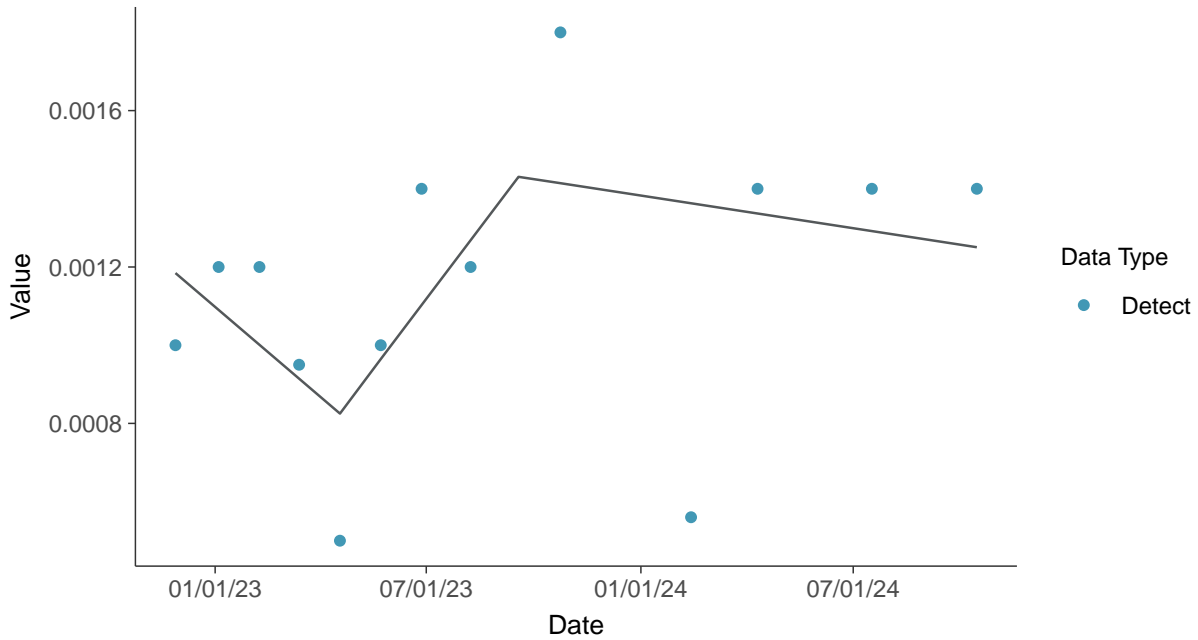




Trend Regression: Piecewise Linear-Linear
Selenium, MW-02 (mg/L)



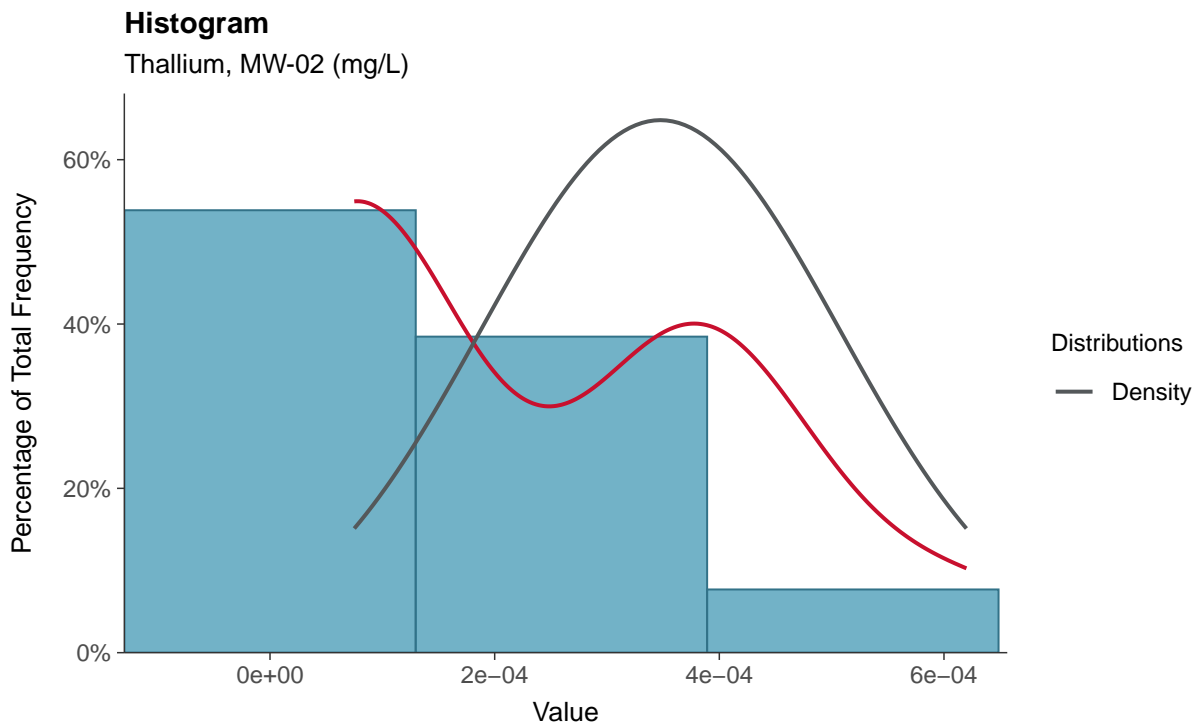
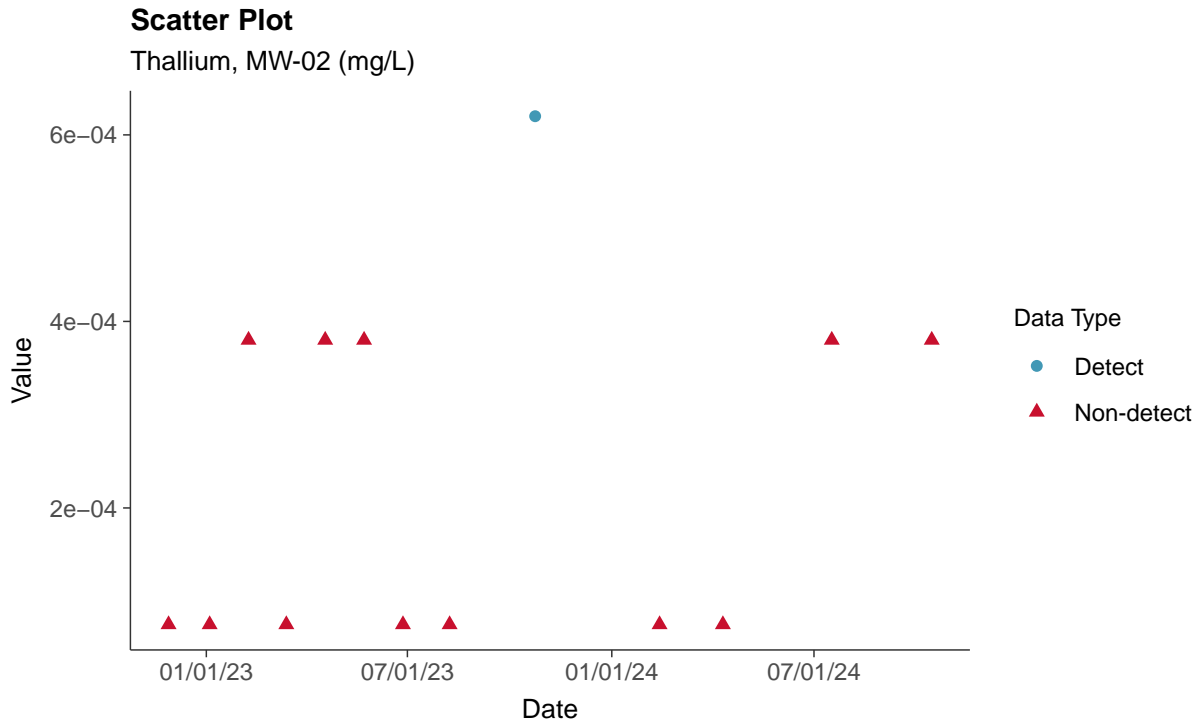
Trend Regression: Piecewise Linear-Linear-Linear
Selenium, MW-02 (mg/L)





Appendix IV: Thallium, MW-02

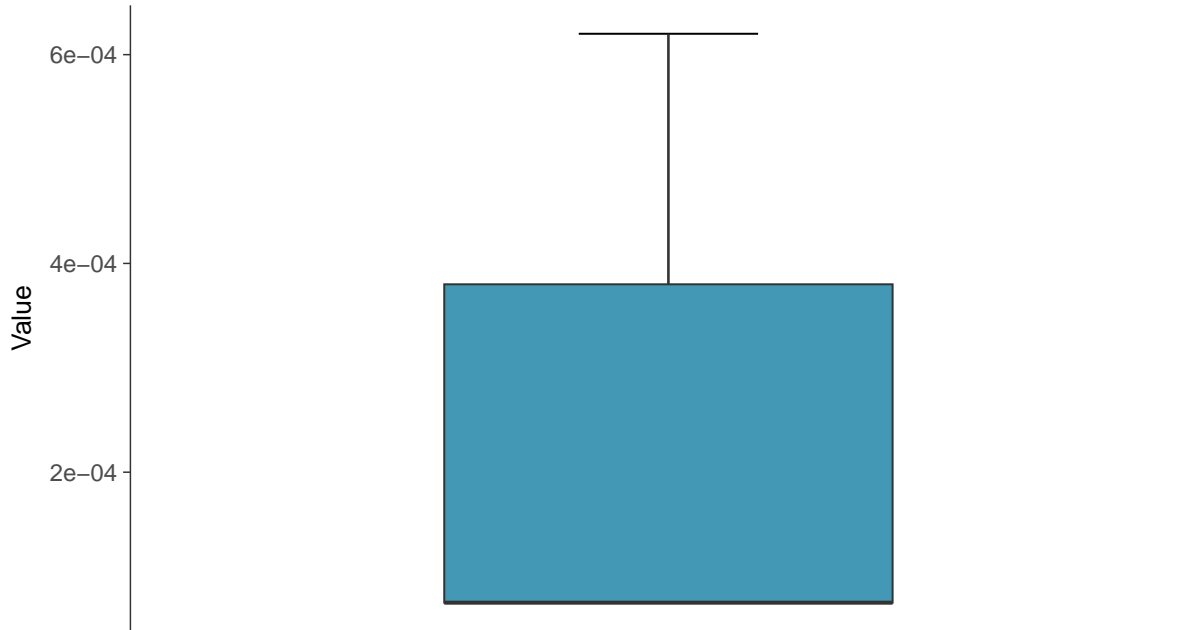
ID: 2_12_2_5_125





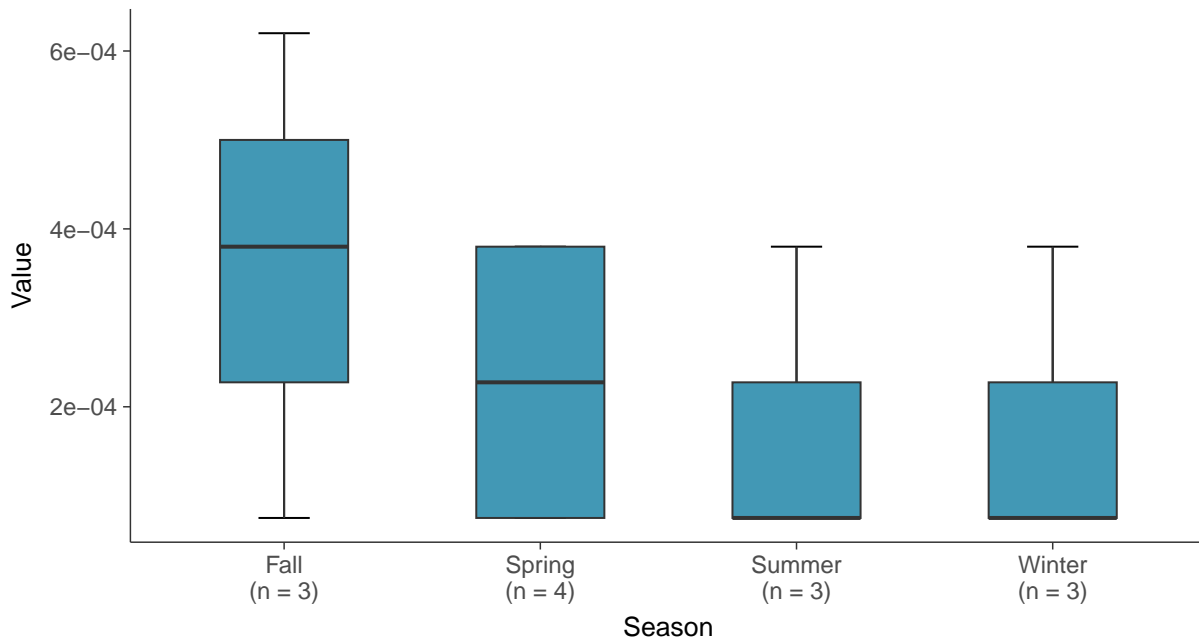
Boxplot

Thallium, MW-02 (mg/L)



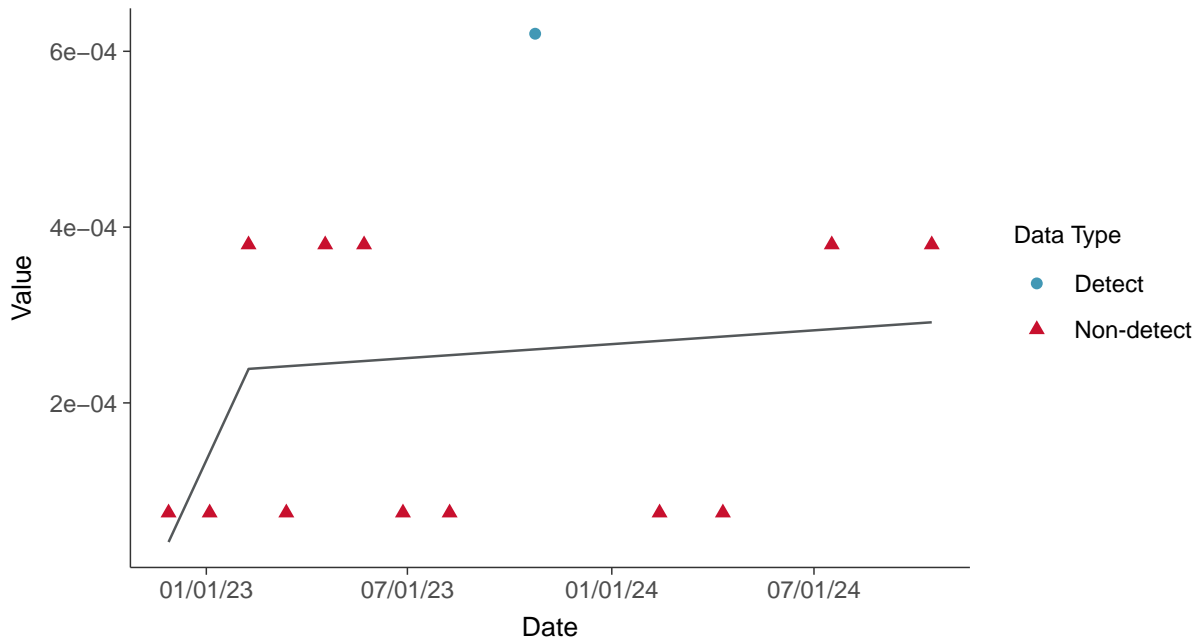
Boxplot by Season

Thallium, MW-02 (mg/L)

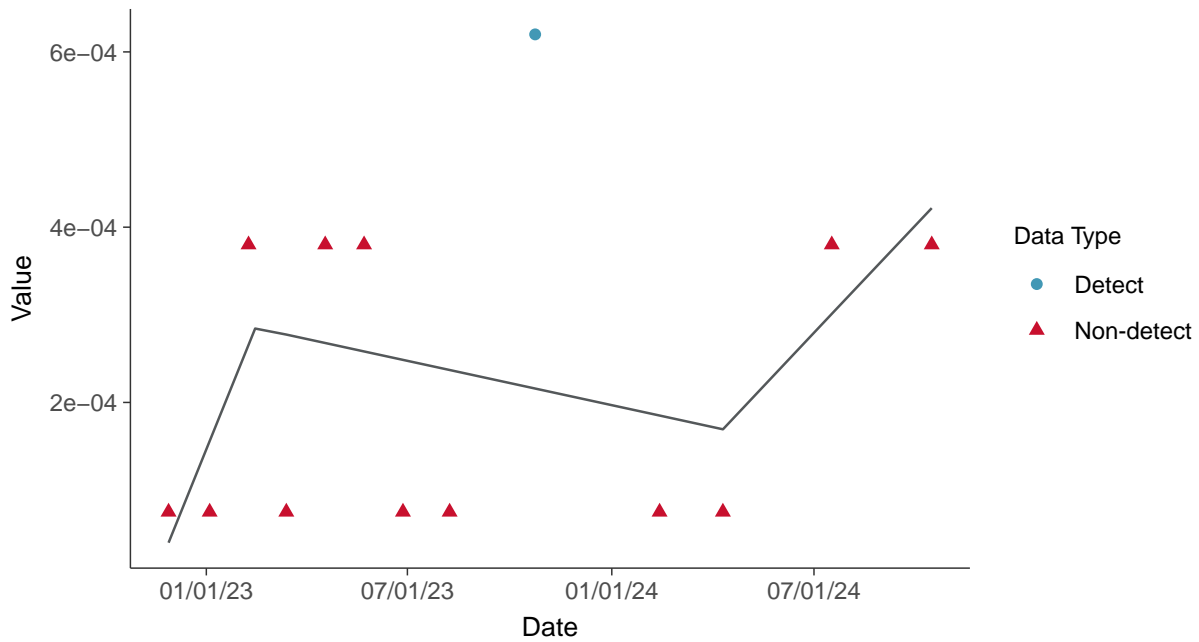




Trend Regression: Piecewise Linear-Linear
Thallium, MW-02 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Thallium, MW-02 (mg/L)



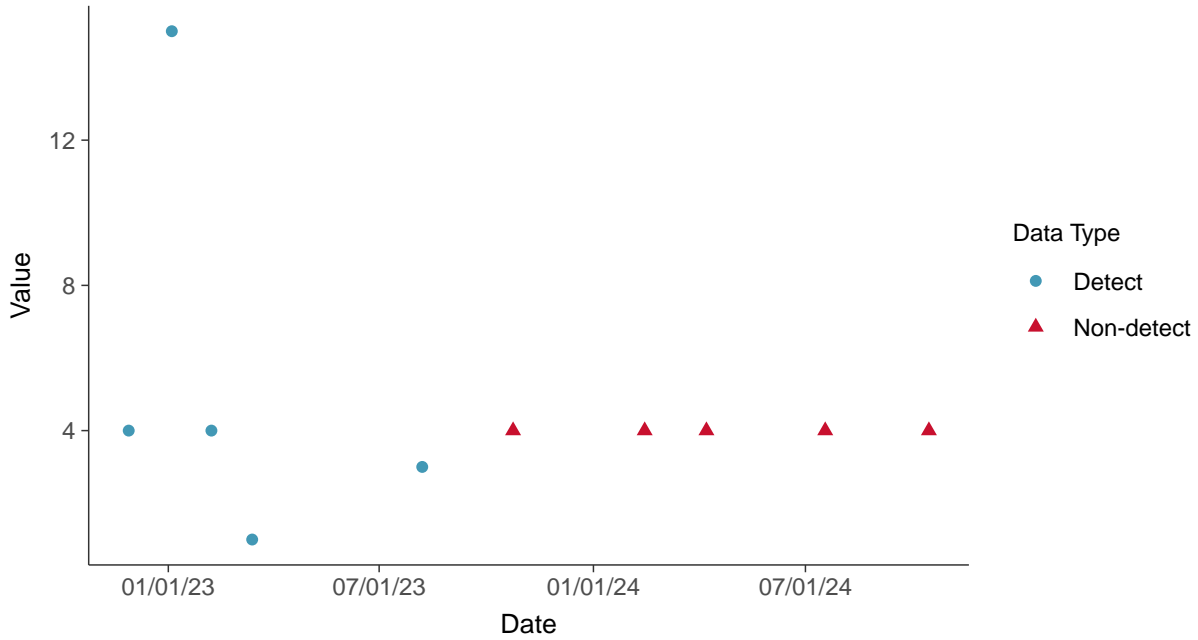


Additional Parameters: Total Suspended Solids, MW-03

ID: 2_13_2_3_127

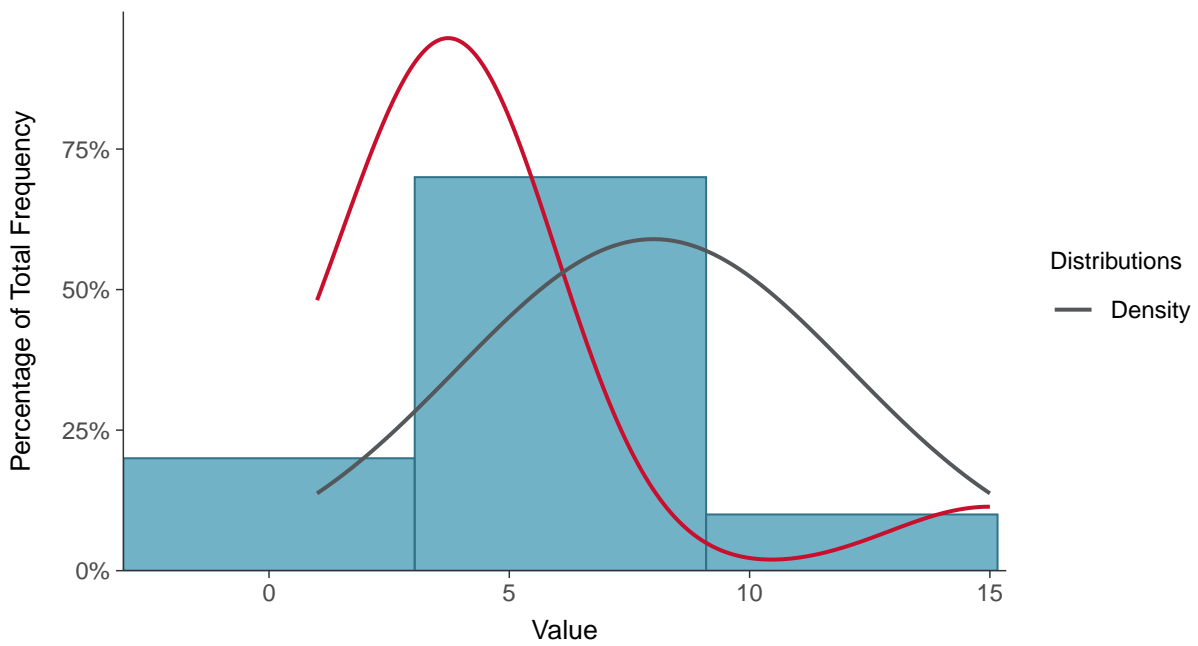
Scatter Plot

Total Suspended Solids, MW-03 (mg/L)



Histogram

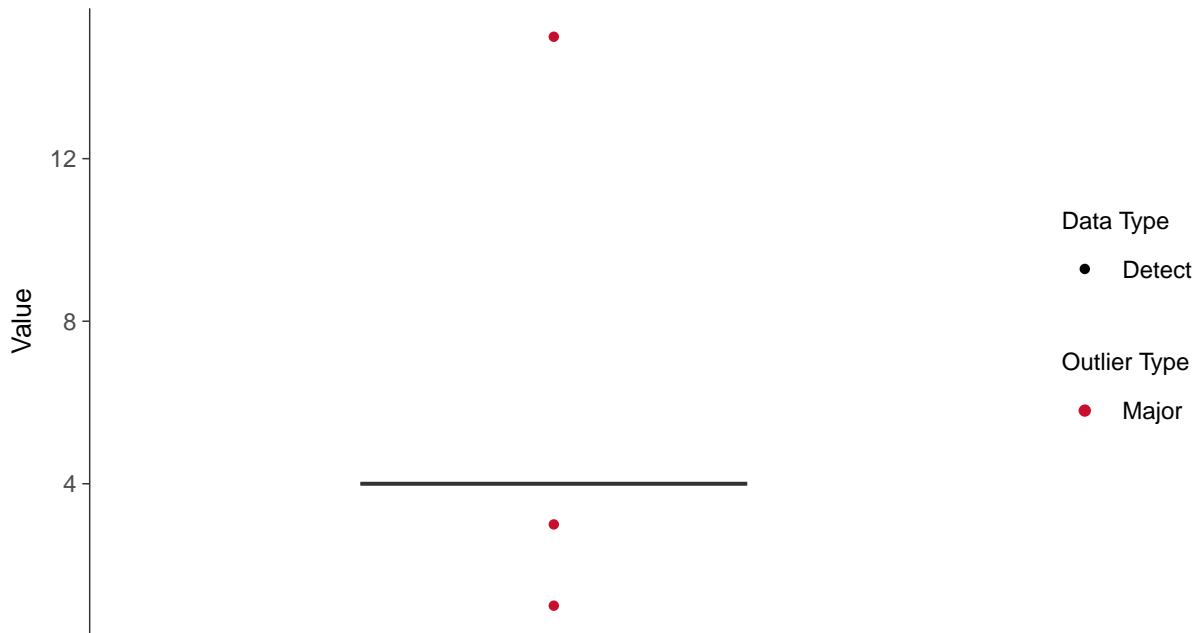
Total Suspended Solids, MW-03 (mg/L)





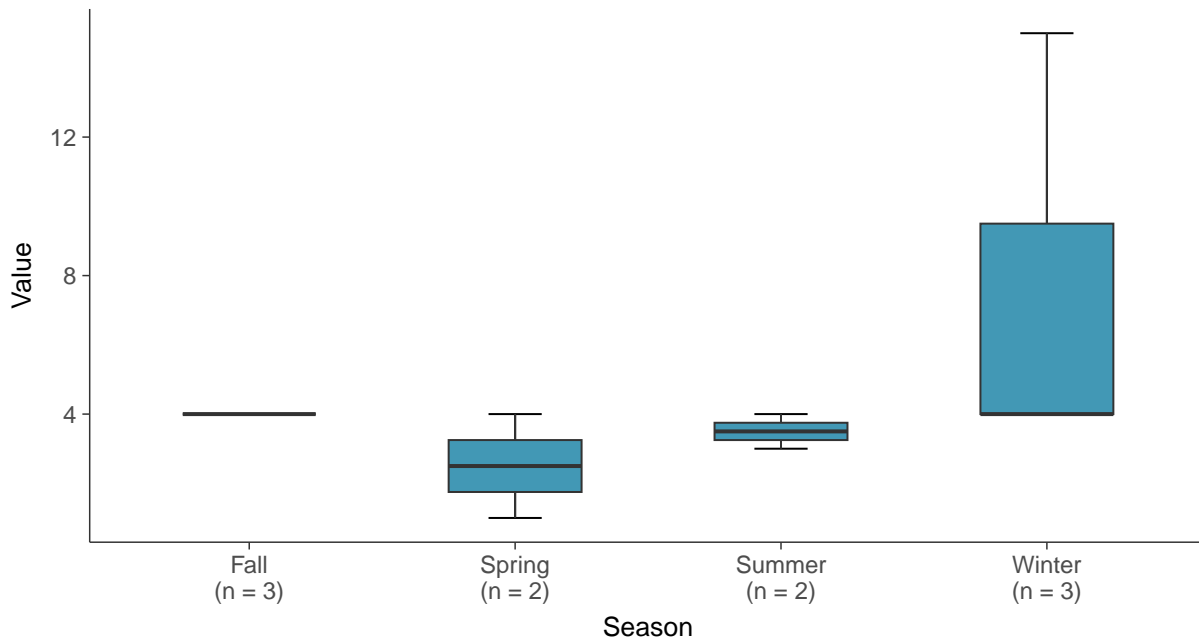
Boxplot

Total Suspended Solids, MW-03 (mg/L)



Boxplot by Season

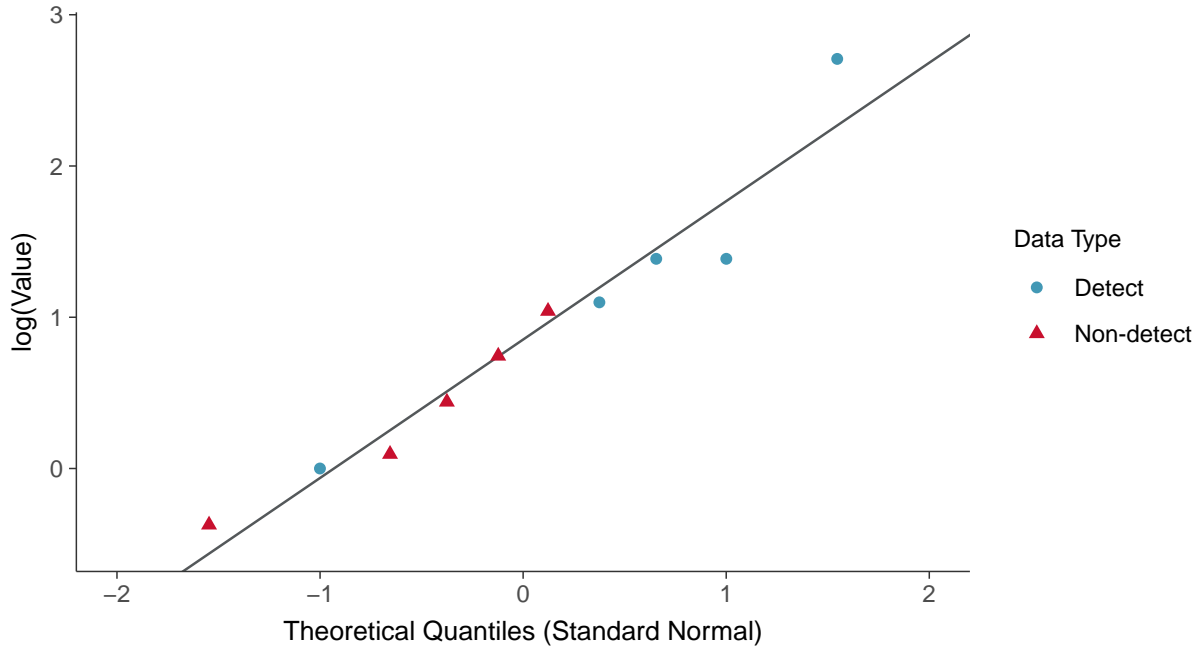
Total Suspended Solids, MW-03 (mg/L)





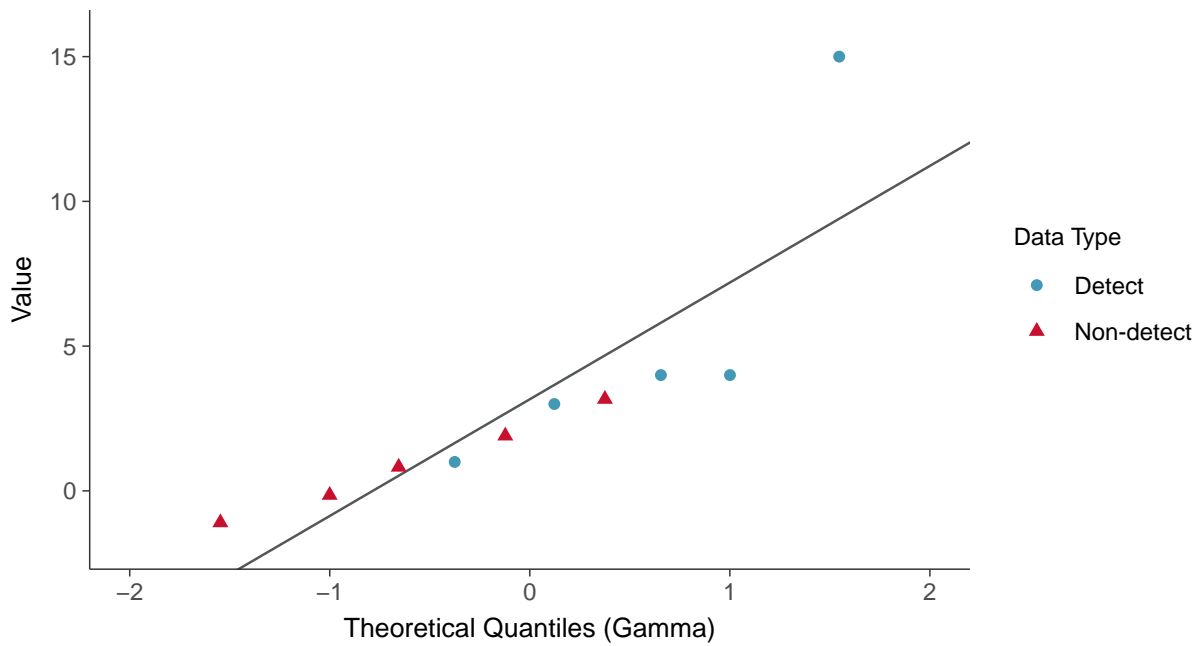
Lognormal Q-Q plot using ROS Imputed Estimates

Total Suspended Solids, MW-03 (mg/L)



Gamma Q-Q plot using ROS Imputed Estimates

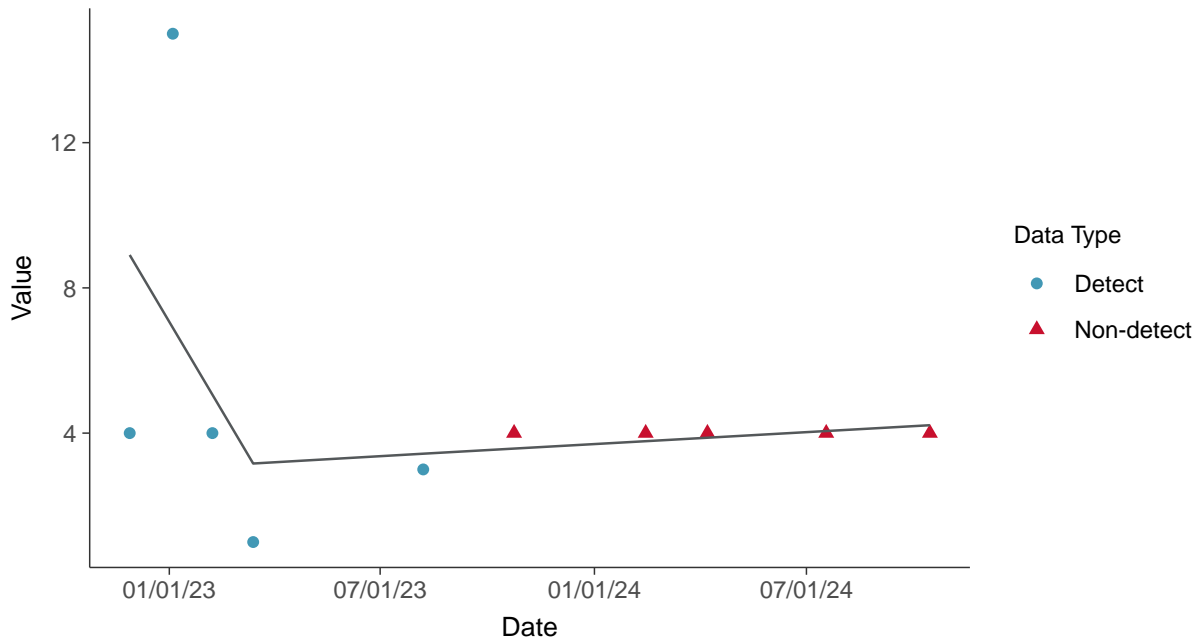
Total Suspended Solids, MW-03 (mg/L)





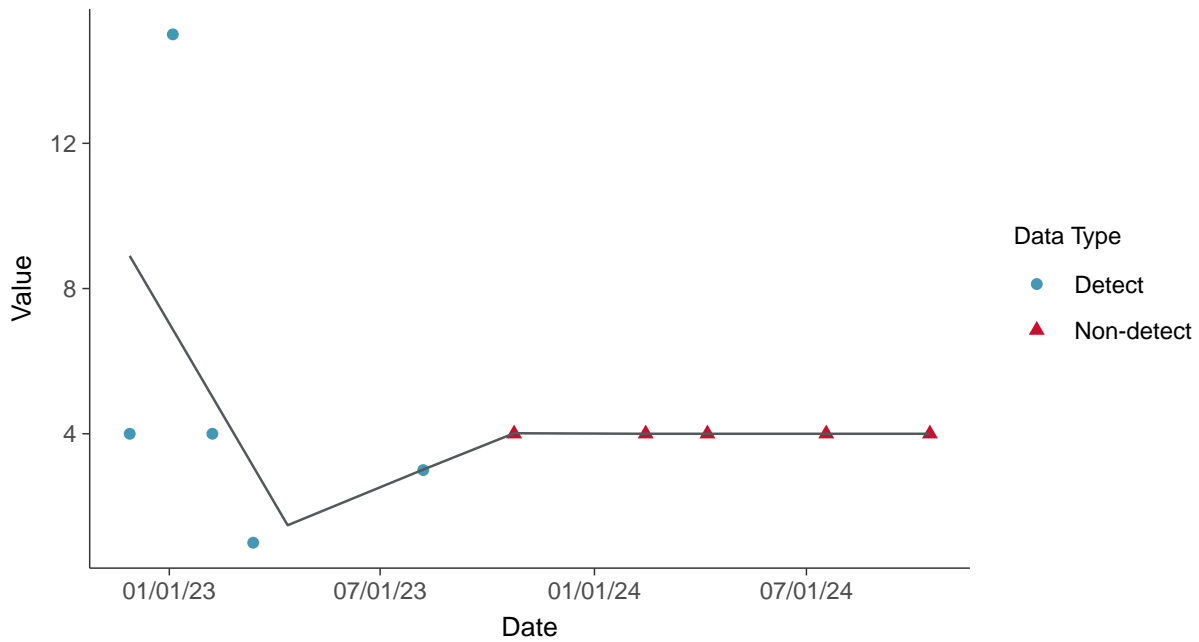
Trend Regression: Piecewise Linear-Linear

Total Suspended Solids, MW-03 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

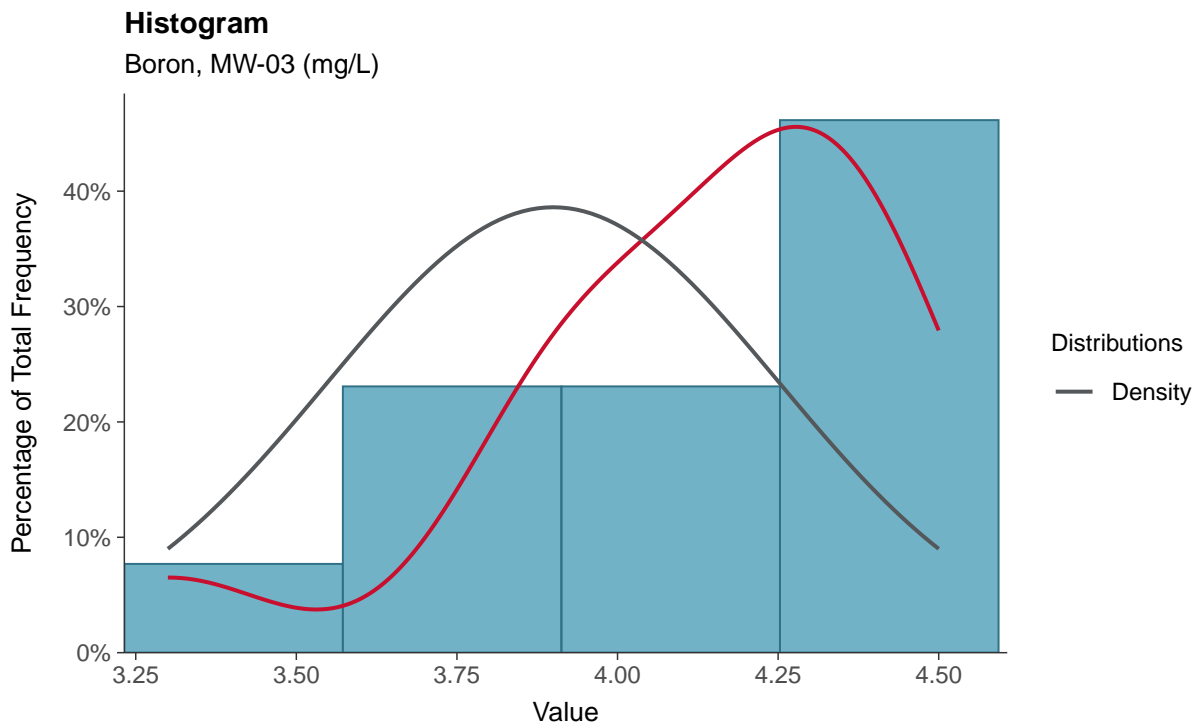
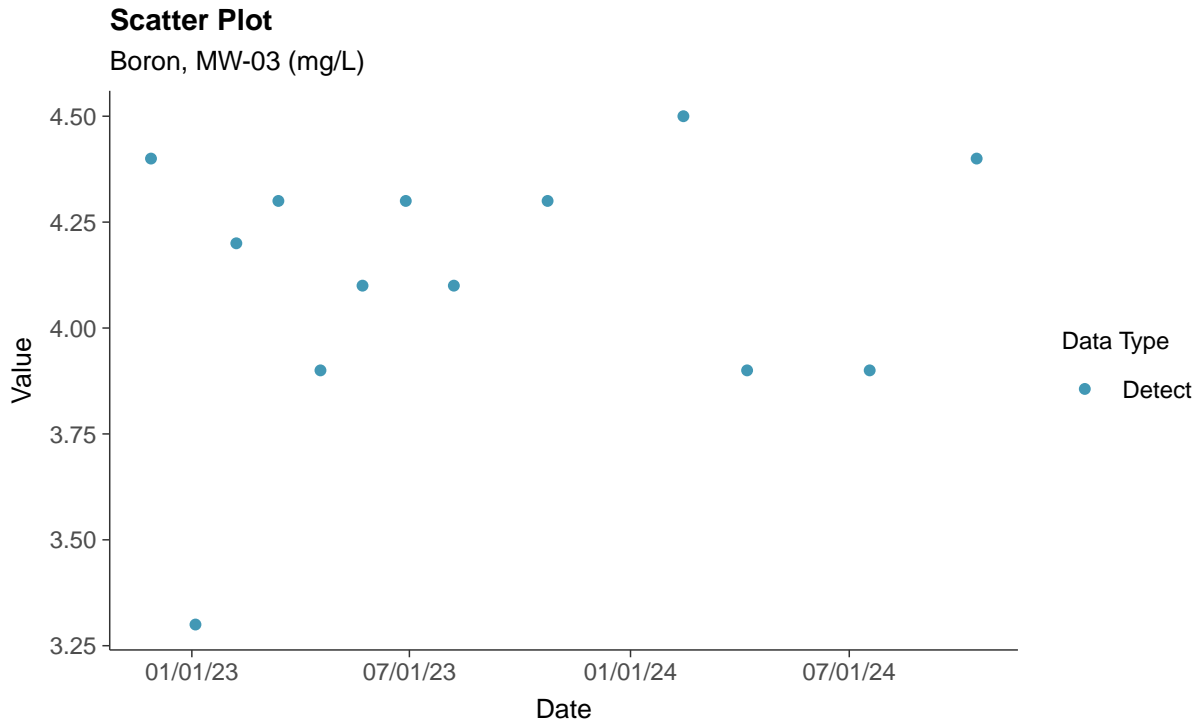
Total Suspended Solids, MW-03 (mg/L)





Appendix III: Boron, MW-03

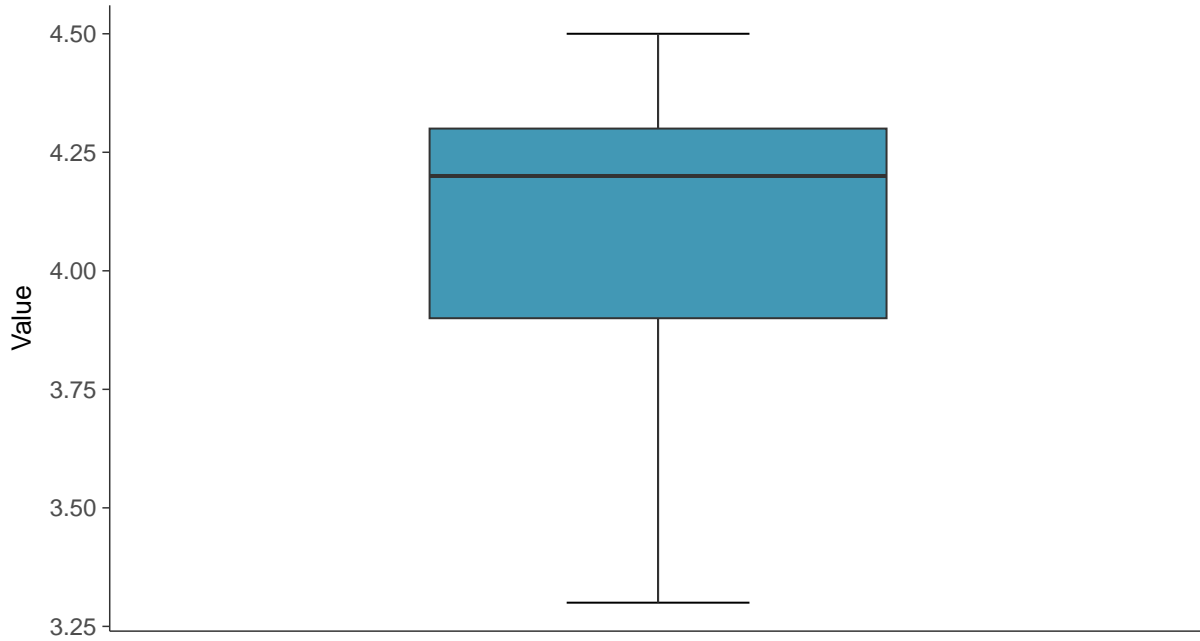
ID: 2_13_2_4_105





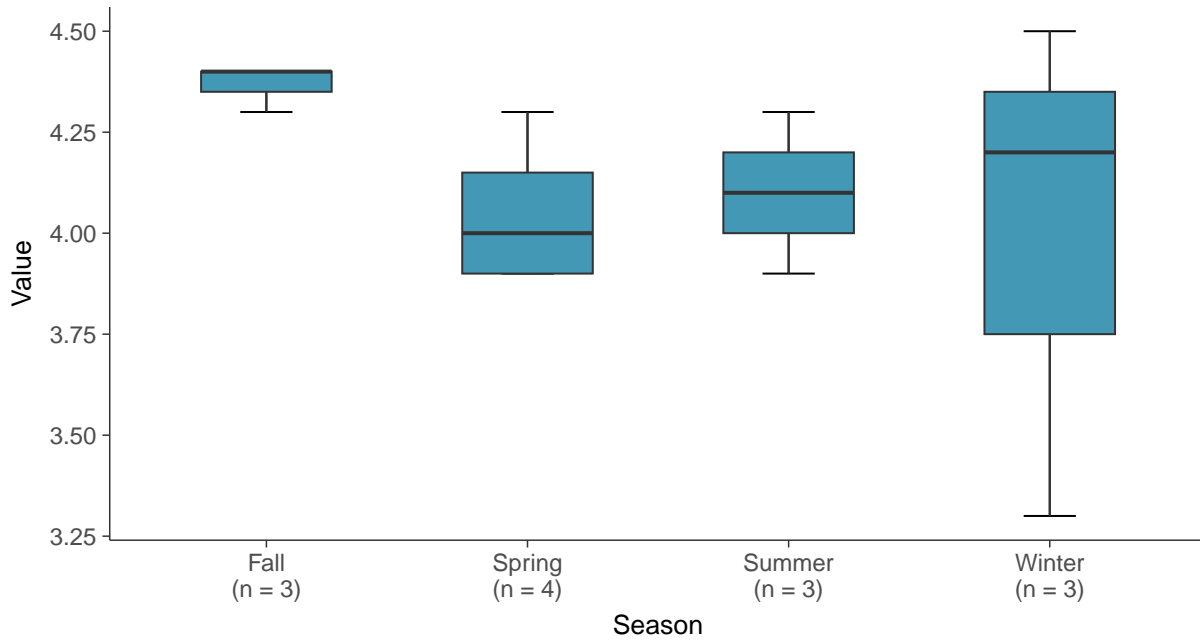
Boxplot

Boron, MW-03 (mg/L)



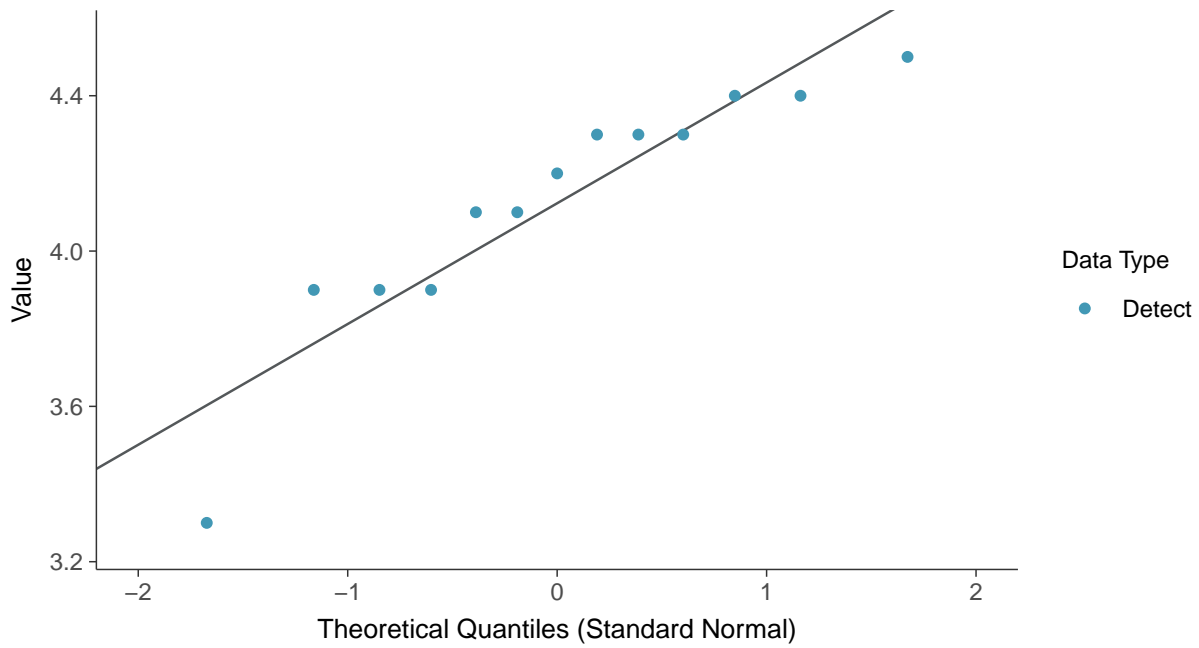
Boxplot by Season

Boron, MW-03 (mg/L)

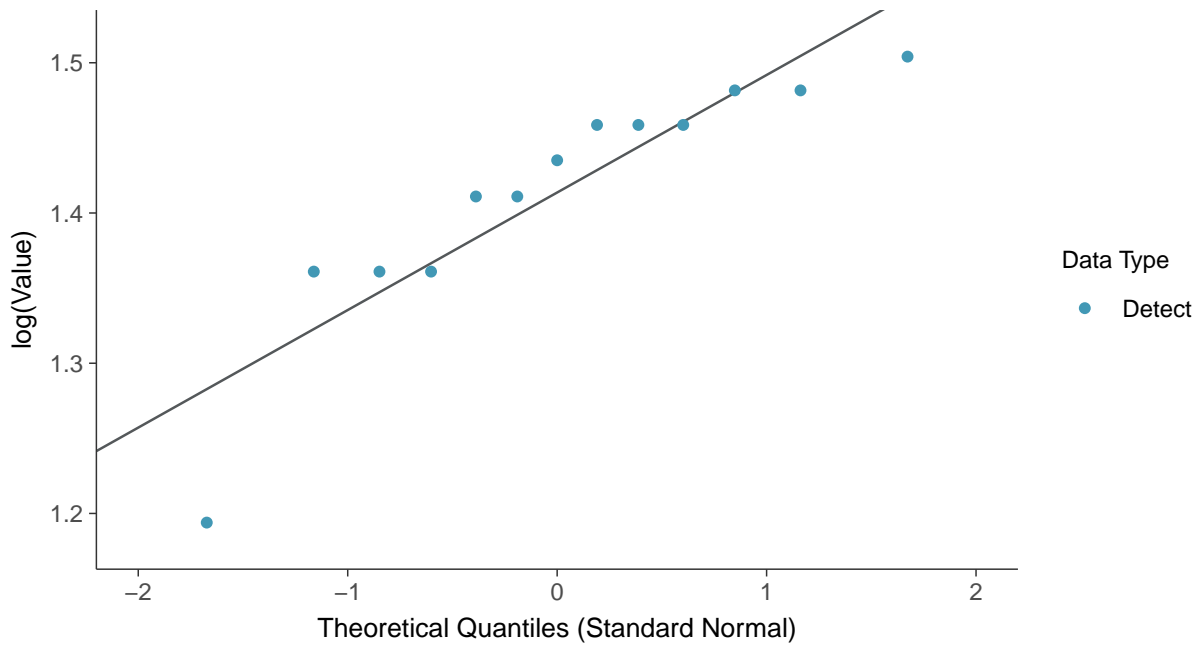




Normal Q-Q plot
Boron, MW-03 (mg/L)

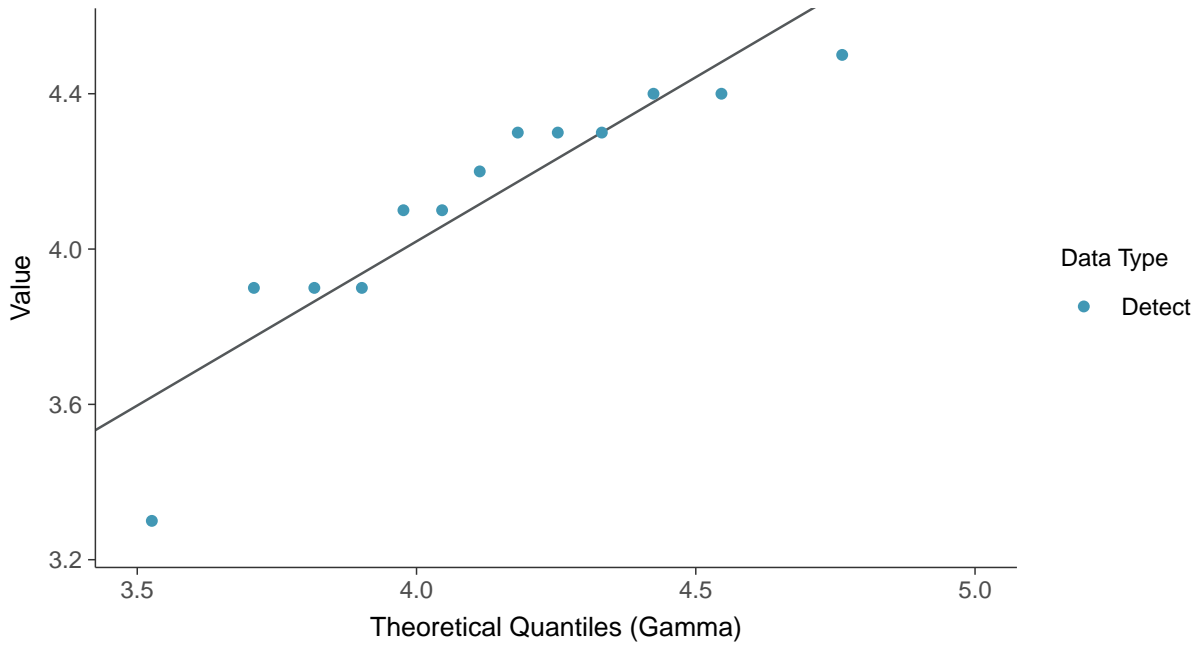


Lognormal Q-Q plot
Boron, MW-03 (mg/L)

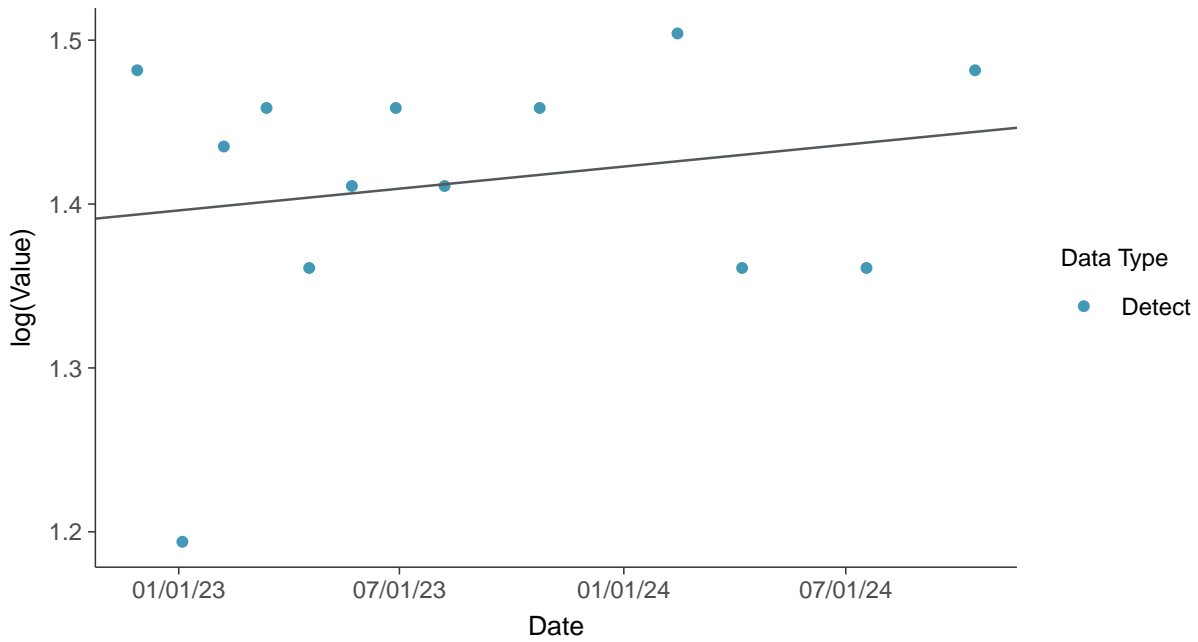




Gamma Q-Q plot
Boron, MW-03 (mg/L)



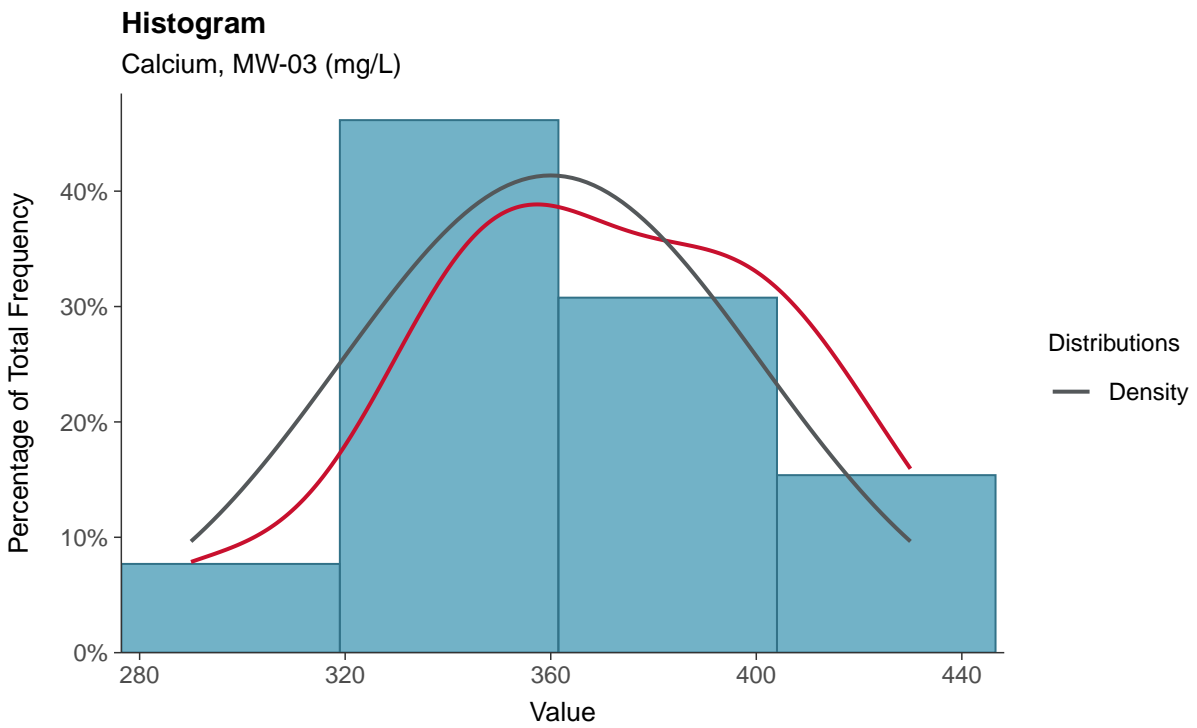
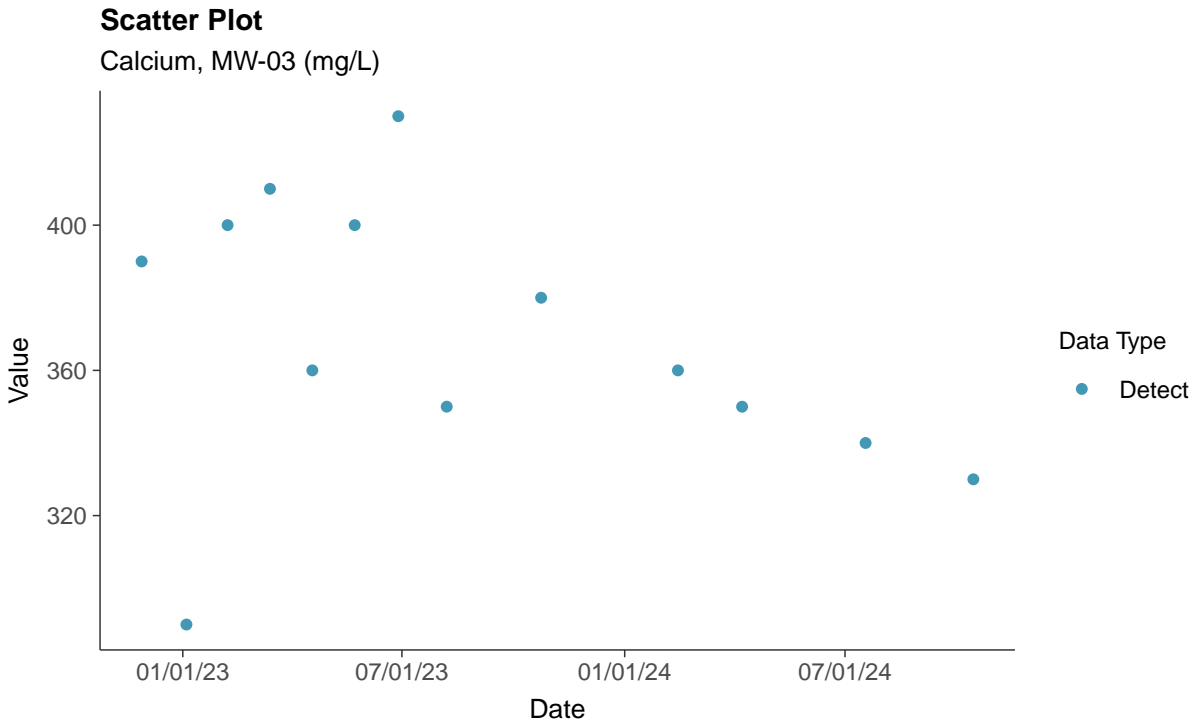
Trend Regression: Lognormal MLE
Boron, MW-03 (mg/L)





Appendix III: Calcium, MW-03

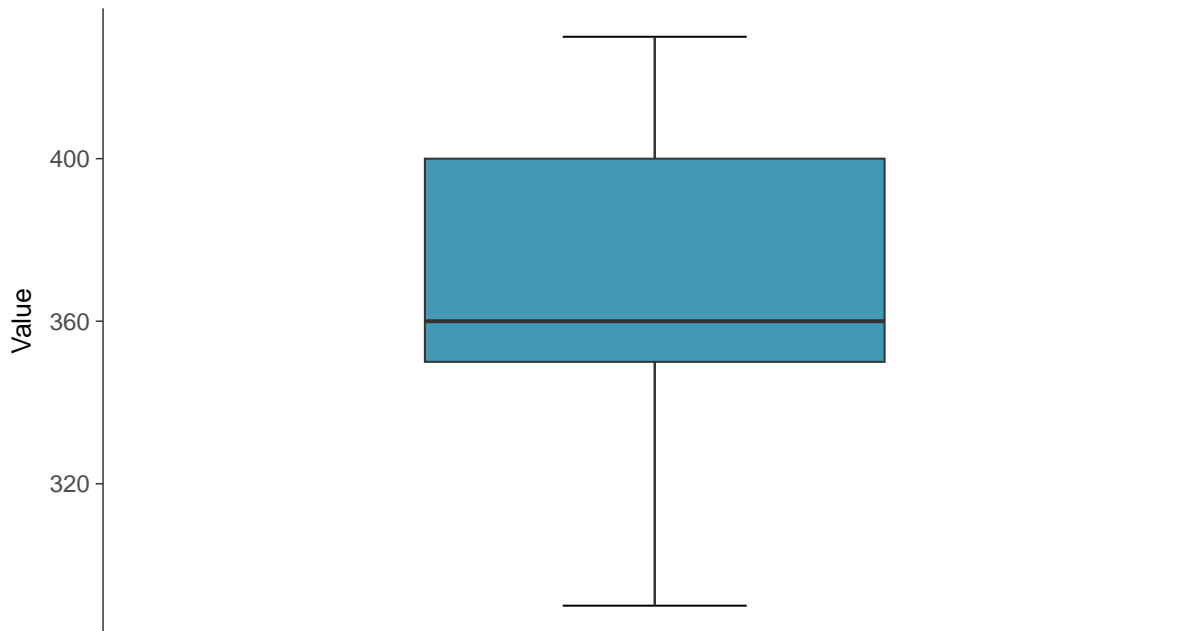
ID: 2_13_2_4_107





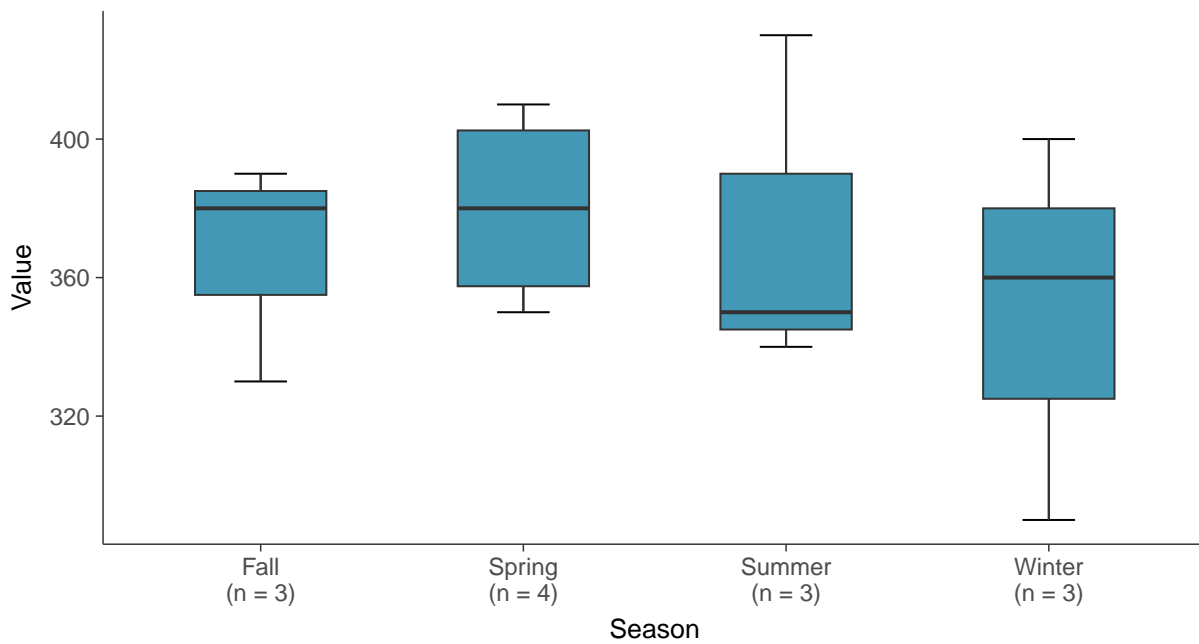
Boxplot

Calcium, MW-03 (mg/L)



Boxplot by Season

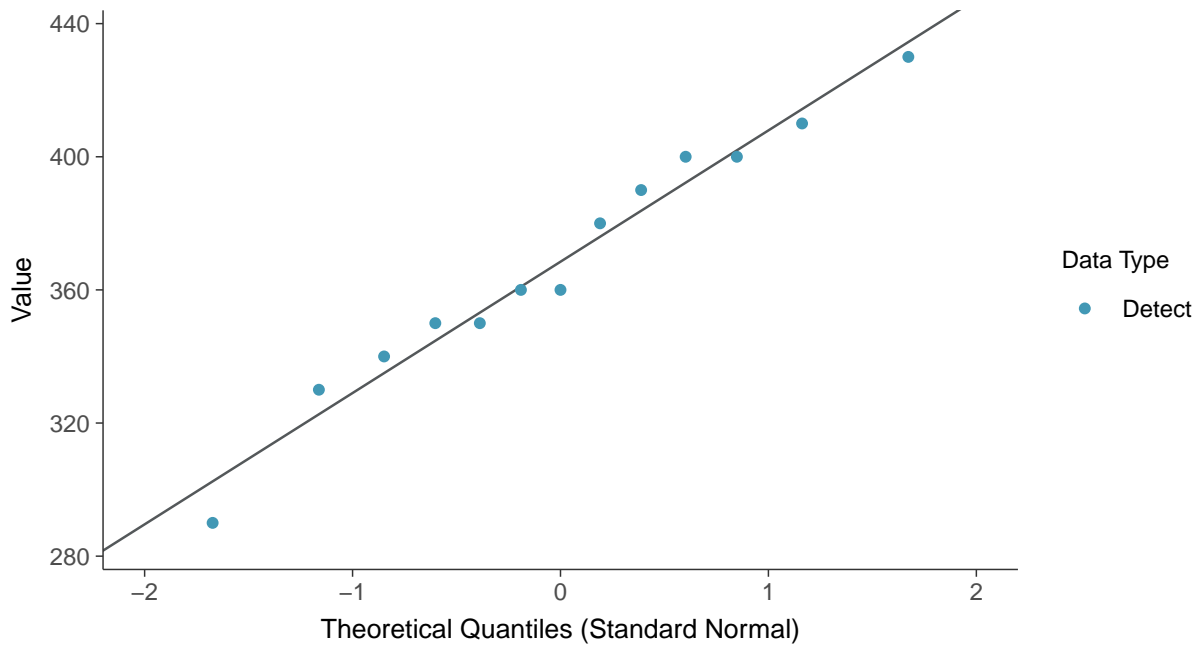
Calcium, MW-03 (mg/L)





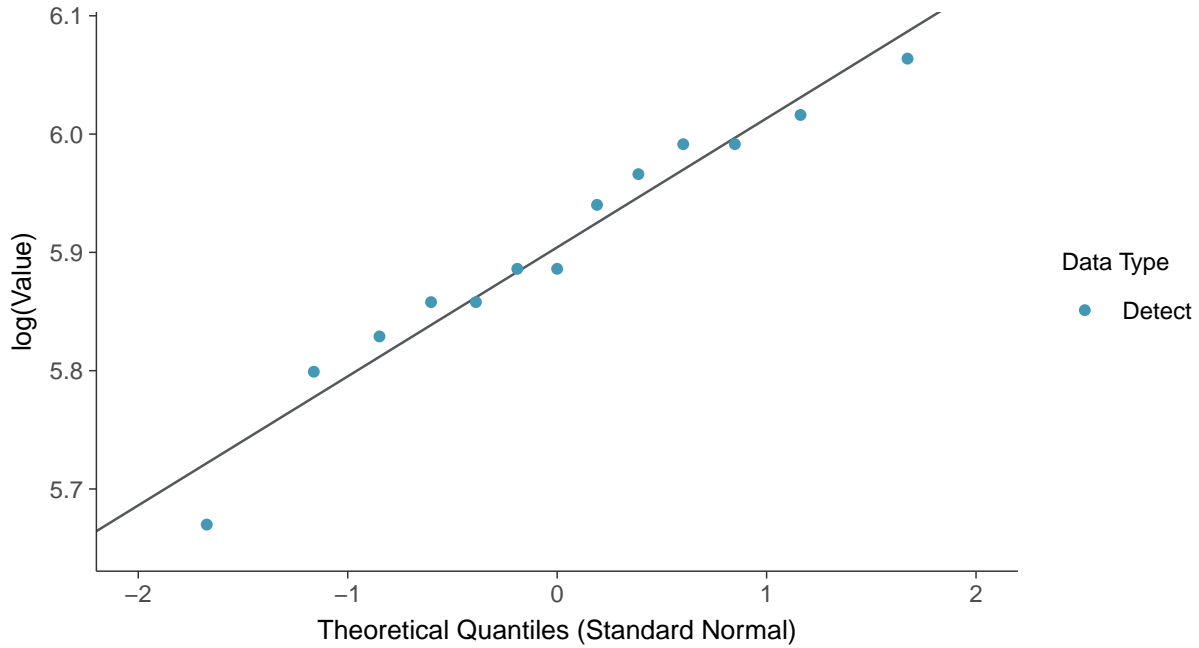
Normal Q-Q plot

Calcium, MW-03 (mg/L)



Lognormal Q-Q plot

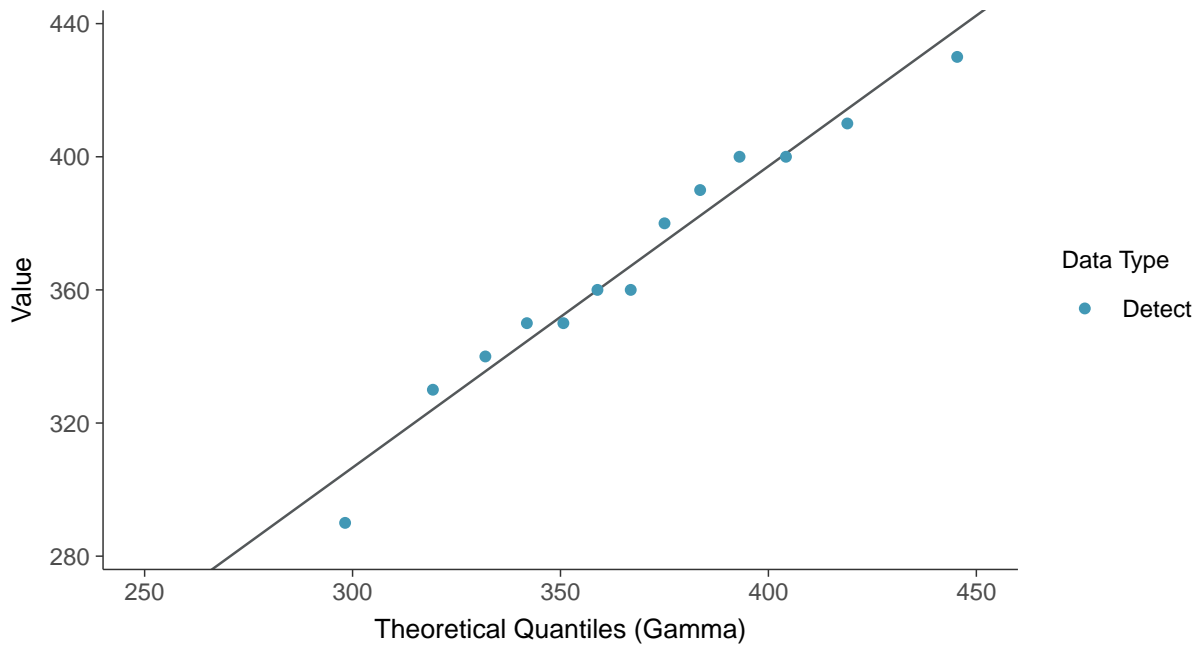
Calcium, MW-03 (mg/L)





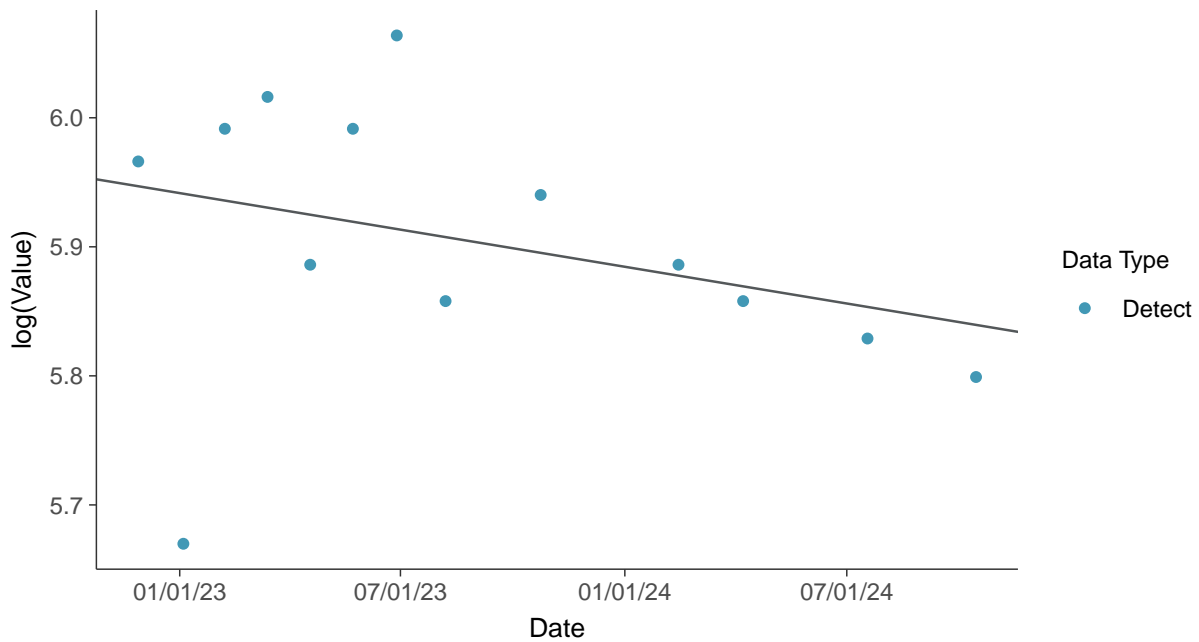
Gamma Q-Q plot

Calcium, MW-03 (mg/L)



Trend Regression: Lognormal MLE

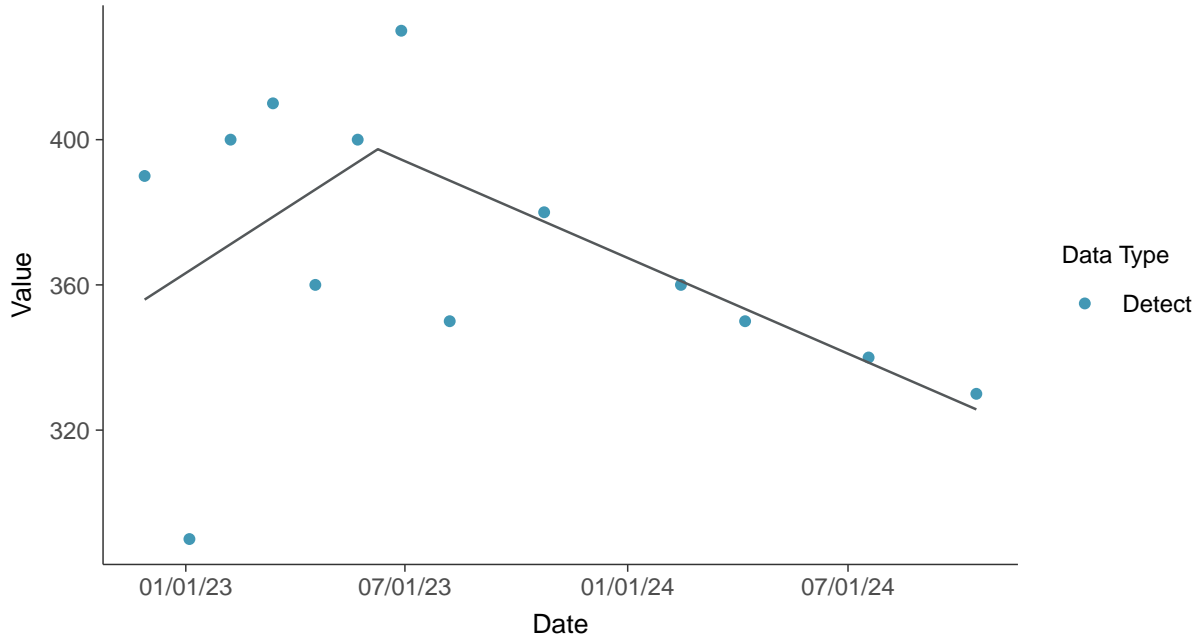
Calcium, MW-03 (mg/L)





Trend Regression: Piecewise Linear-Linear

Calcium, MW-03 (mg/L)



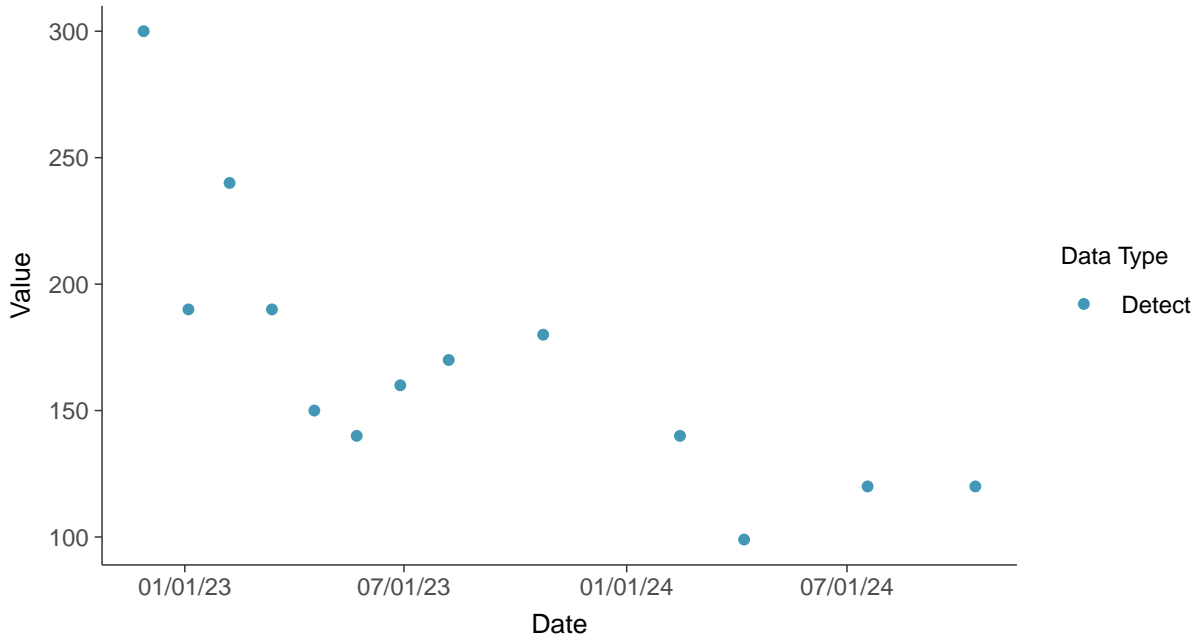


Appendix III: Chloride (as Cl), MW-03

ID: 2_13_2_4_108

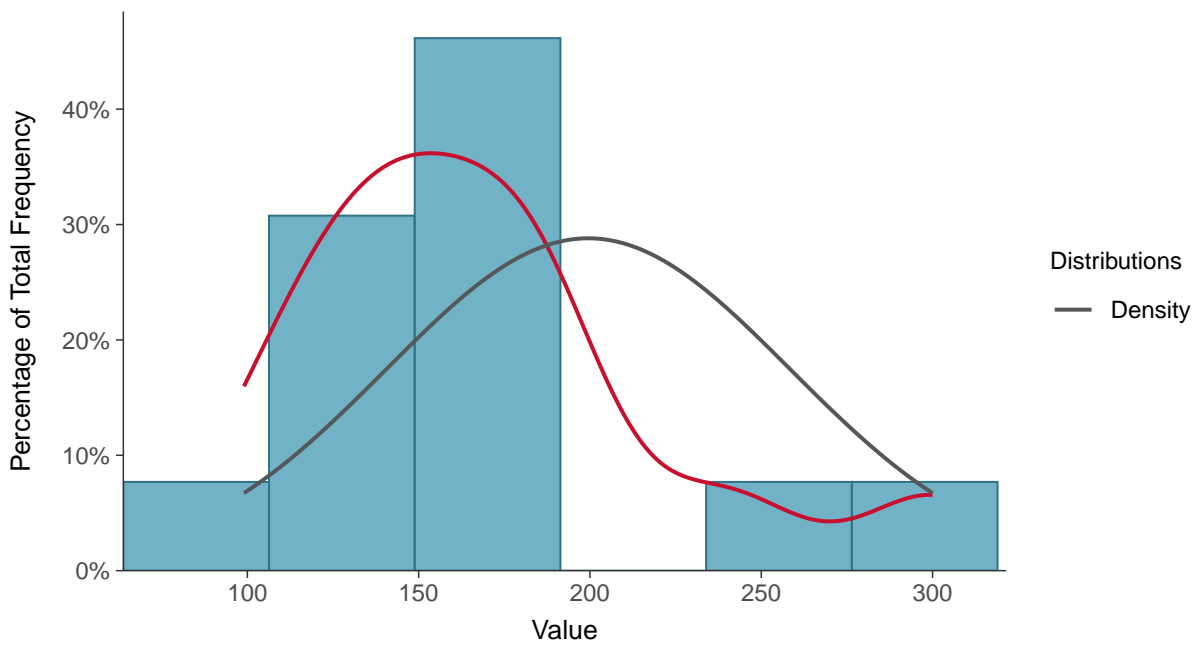
Scatter Plot

Chloride (as Cl), MW-03 (mg/L)



Histogram

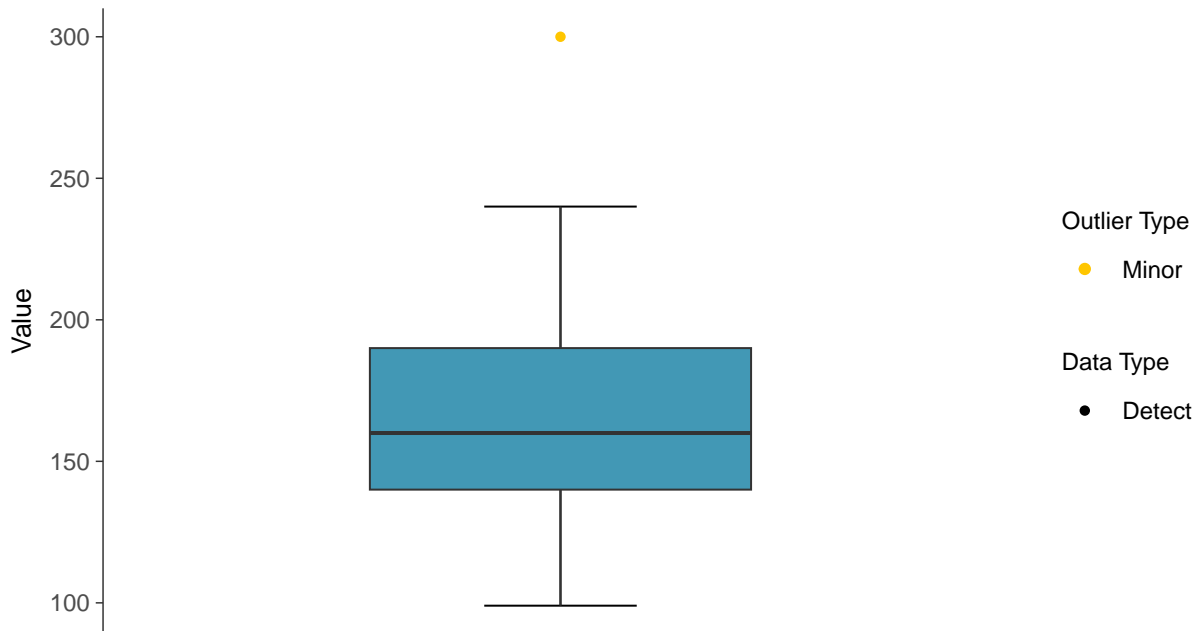
Chloride (as Cl), MW-03 (mg/L)





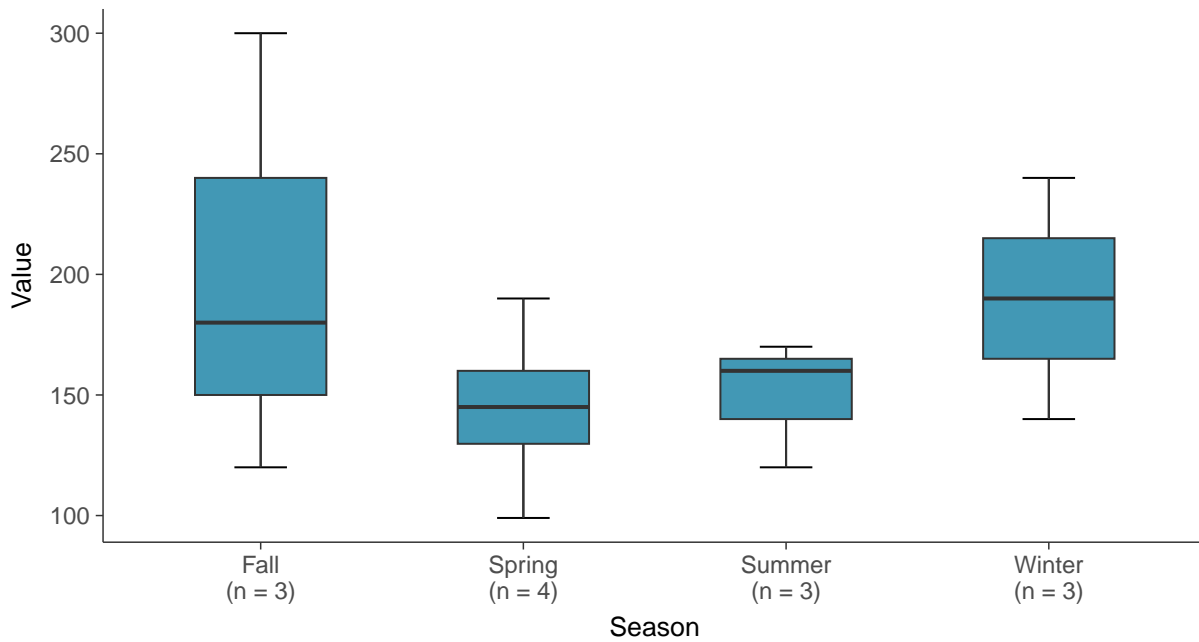
Boxplot

Chloride (as Cl), MW-03 (mg/L)



Boxplot by Season

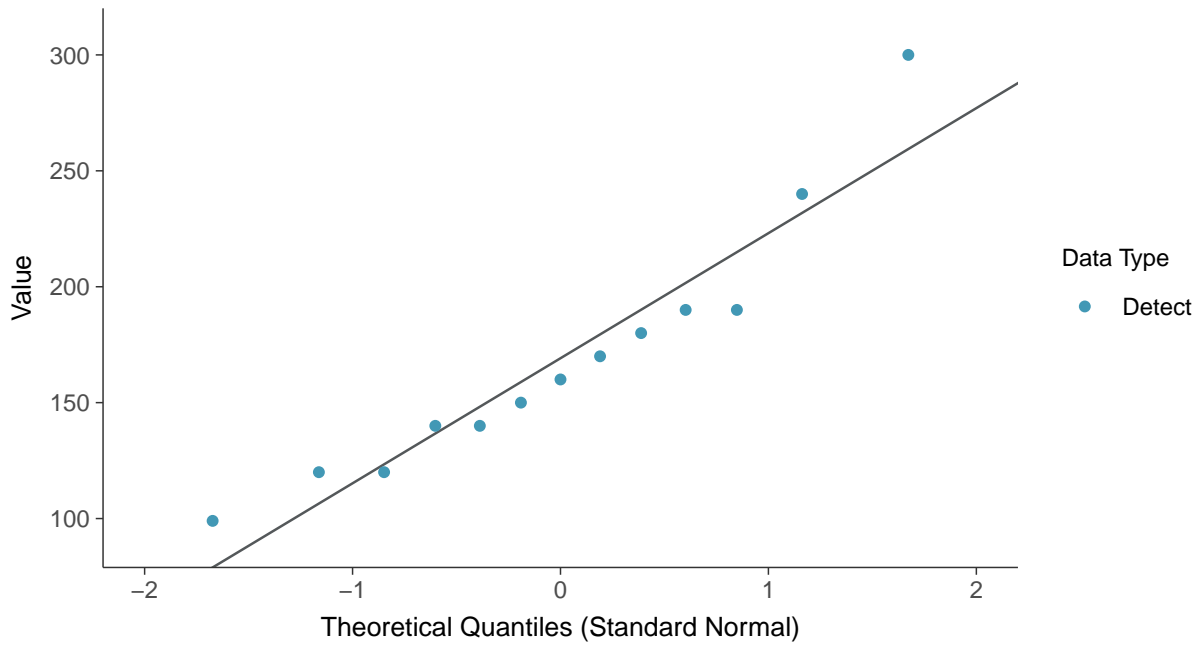
Chloride (as Cl), MW-03 (mg/L)





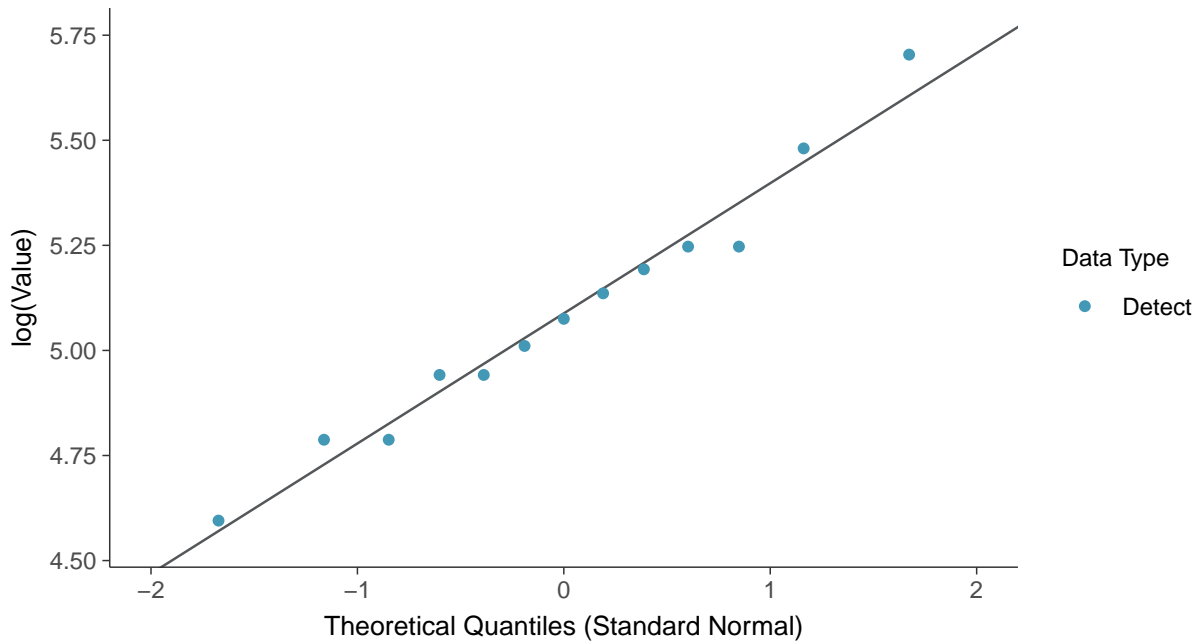
Normal Q-Q plot

Chloride (as Cl), MW-03 (mg/L)



Lognormal Q-Q plot

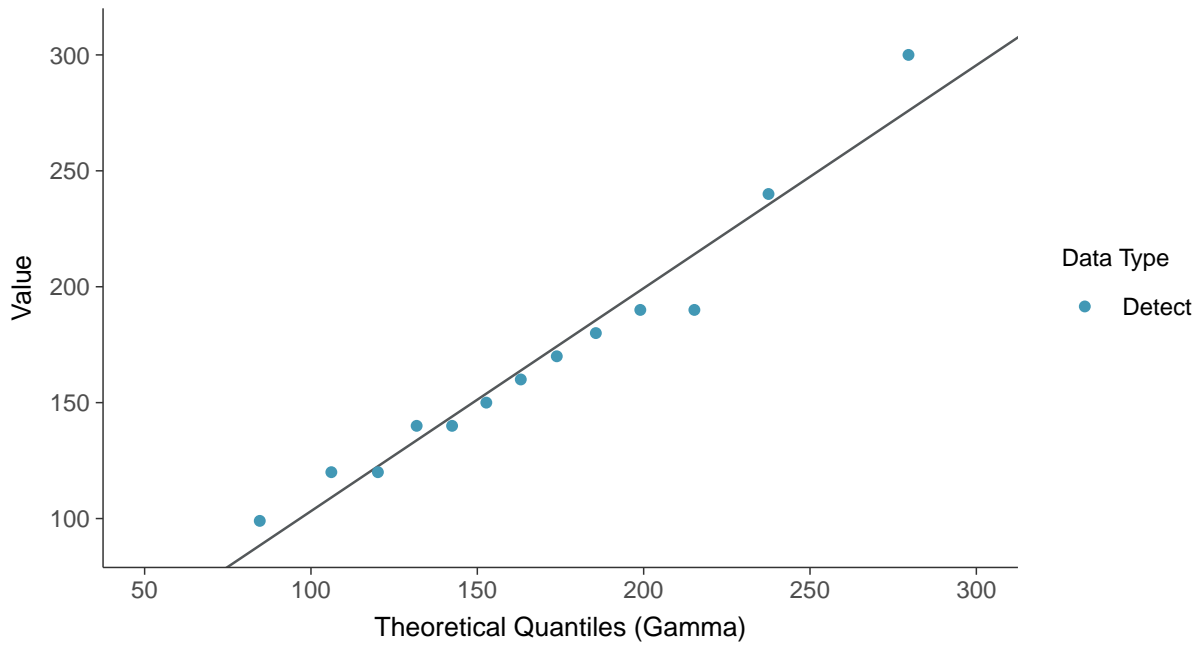
Chloride (as Cl), MW-03 (mg/L)





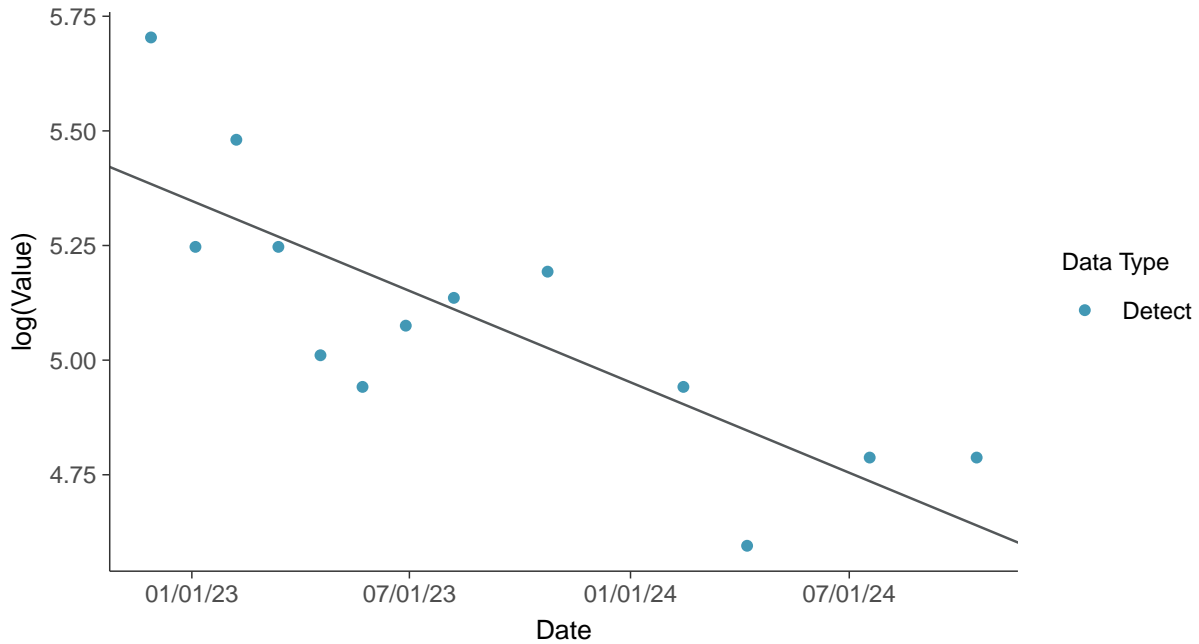
Gamma Q-Q plot

Chloride (as Cl), MW-03 (mg/L)



Trend Regression: Lognormal MLE

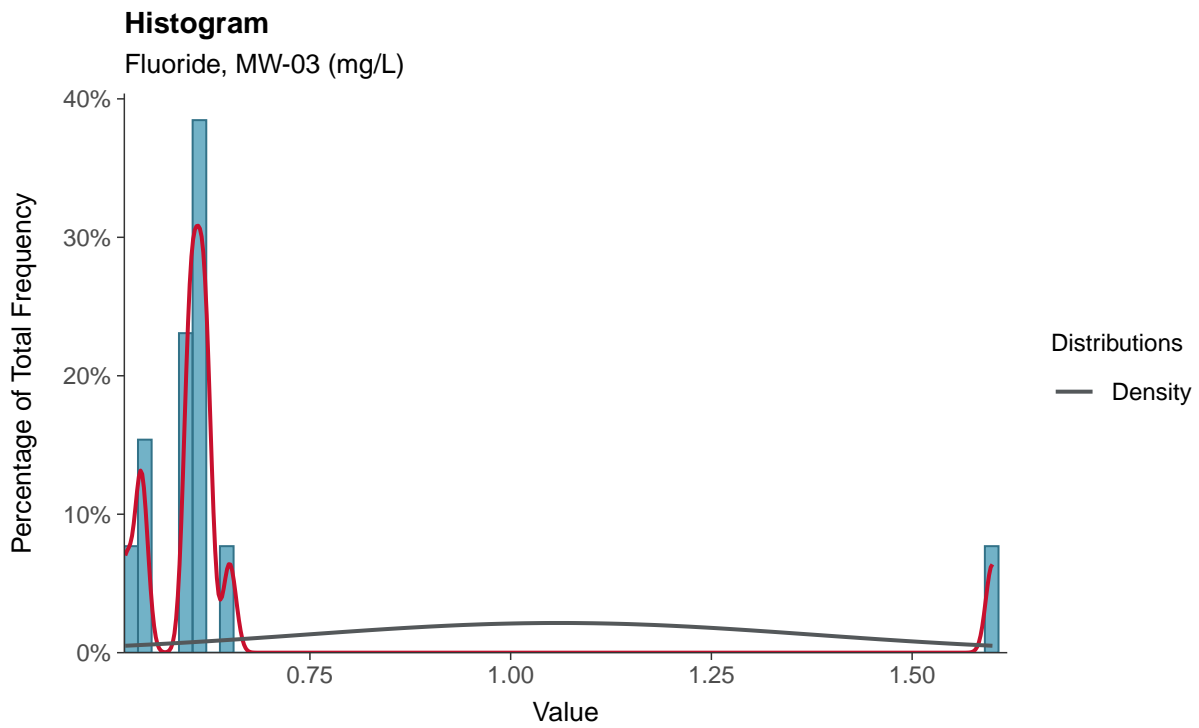
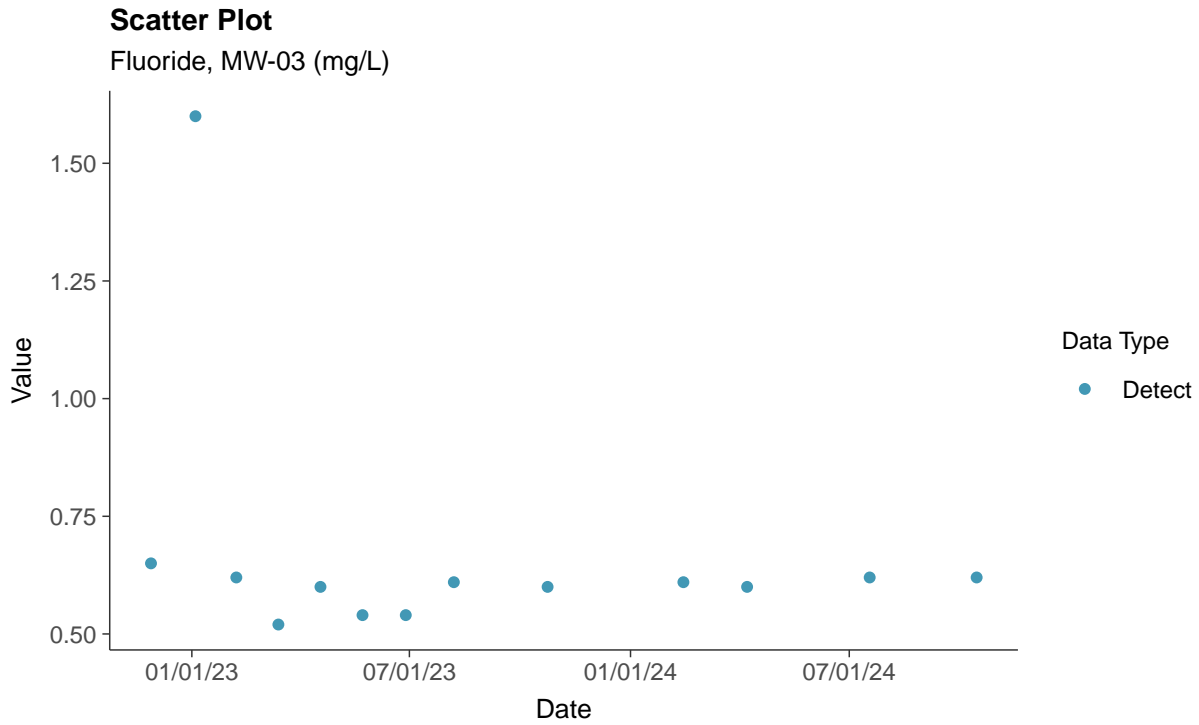
Chloride (as Cl), MW-03 (mg/L)





Appendix III: Fluoride, MW-03

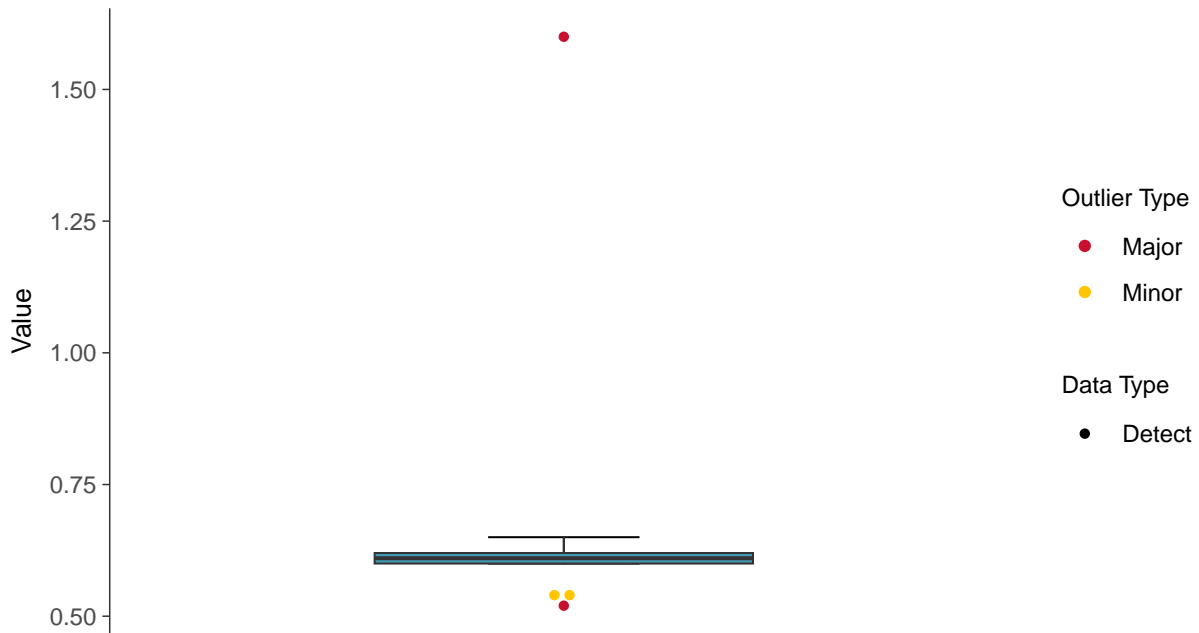
ID: 2_13_2_4_112





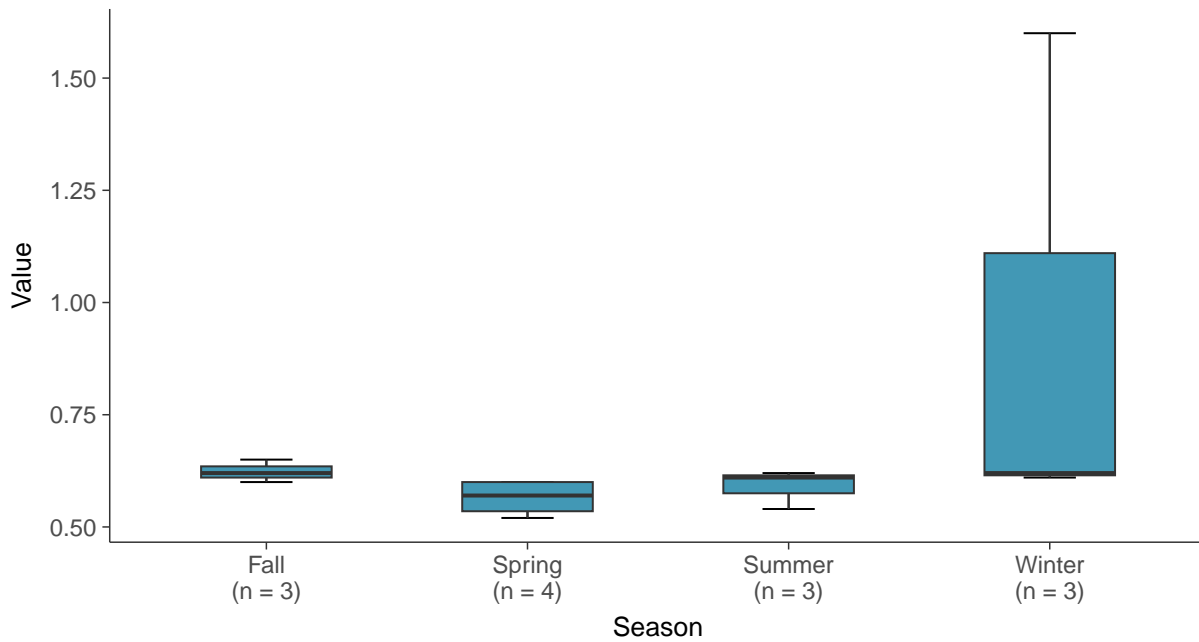
Boxplot

Fluoride, MW-03 (mg/L)



Boxplot by Season

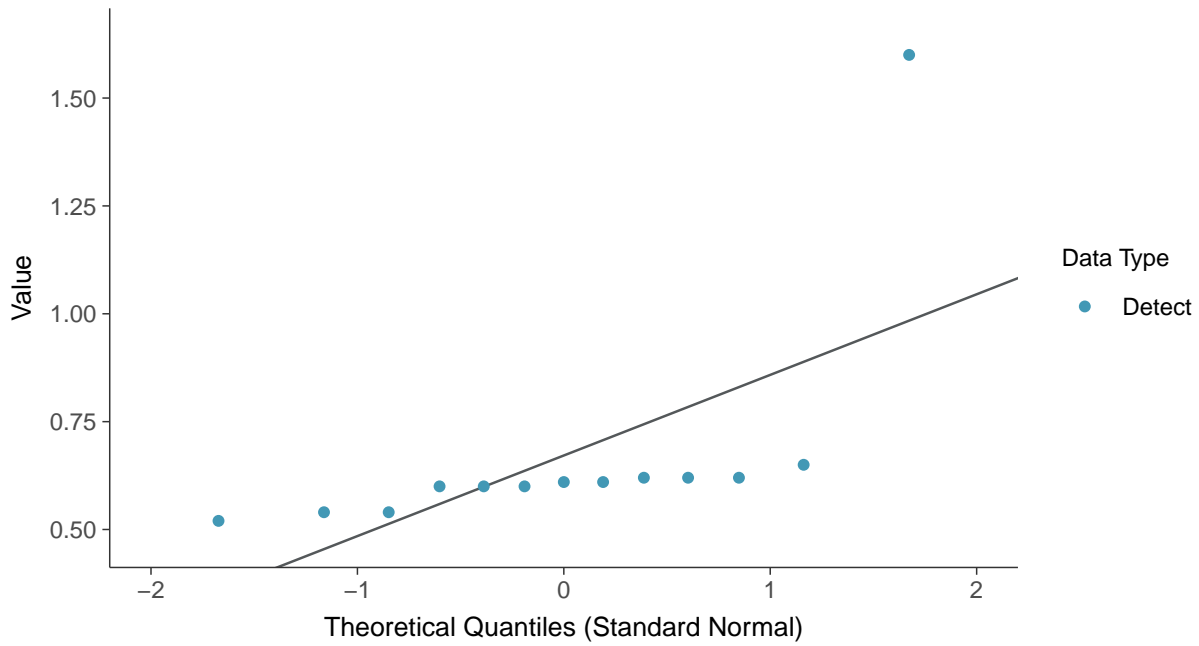
Fluoride, MW-03 (mg/L)





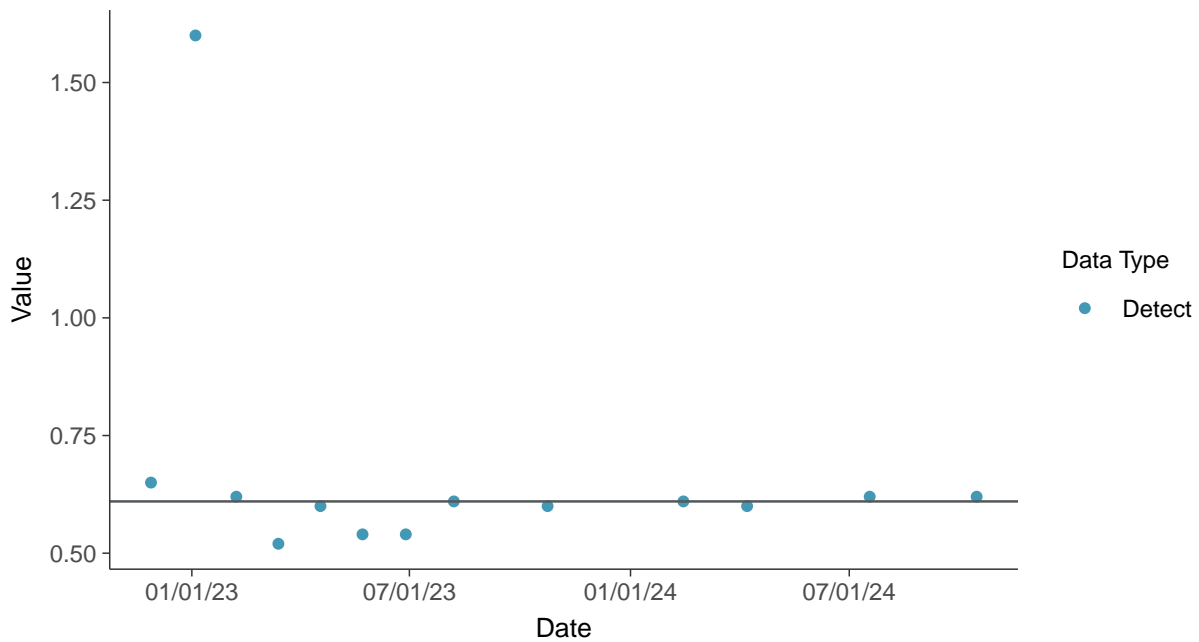
Normal Q-Q plot

Fluoride, MW-03 (mg/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

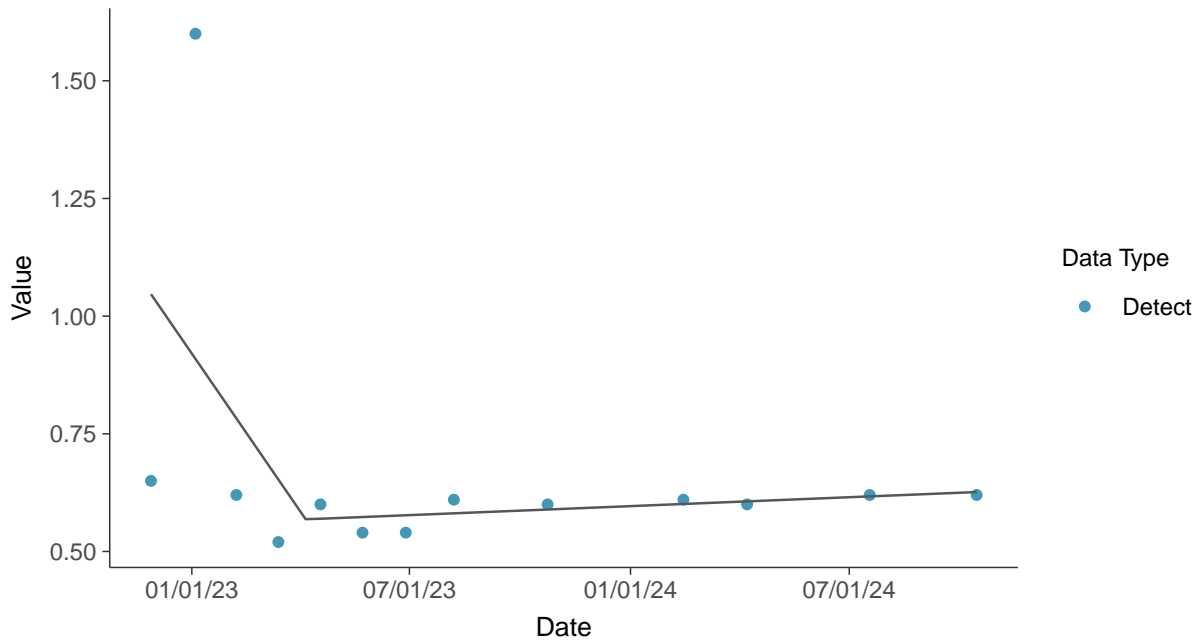
Fluoride, MW-03 (mg/L)





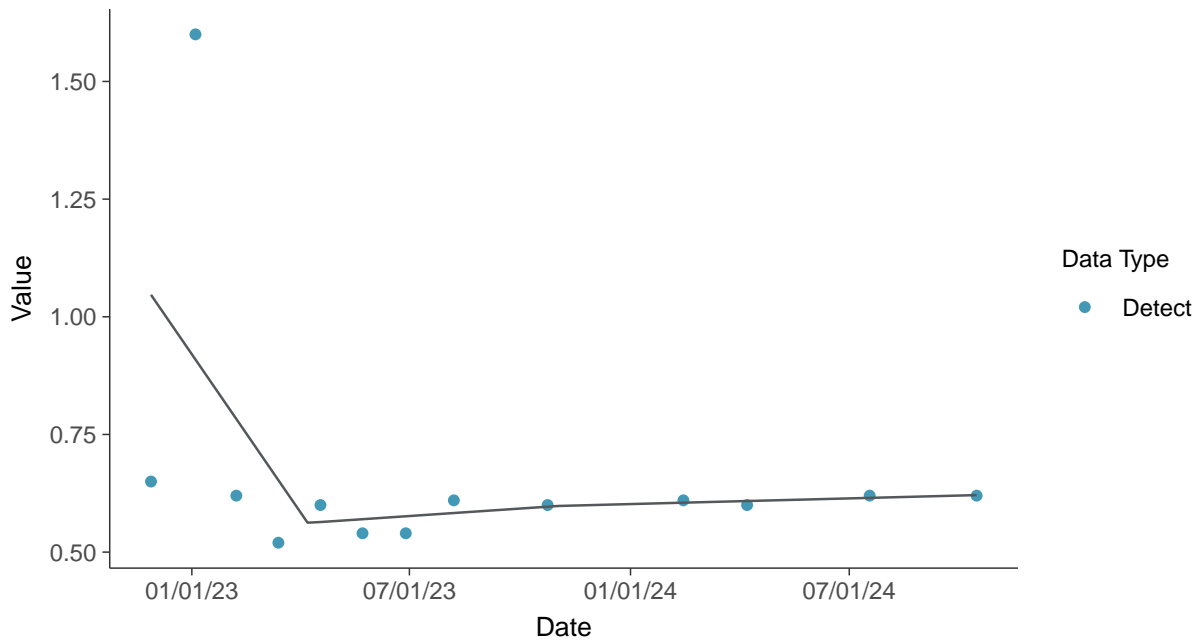
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-03 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

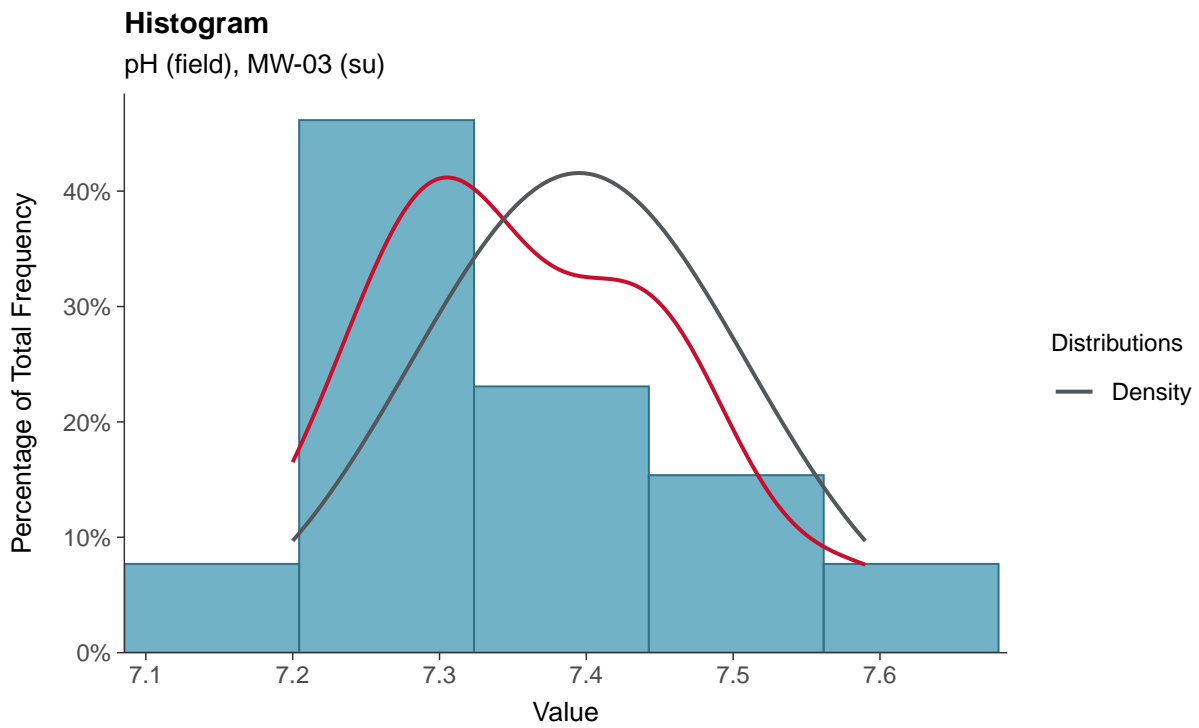
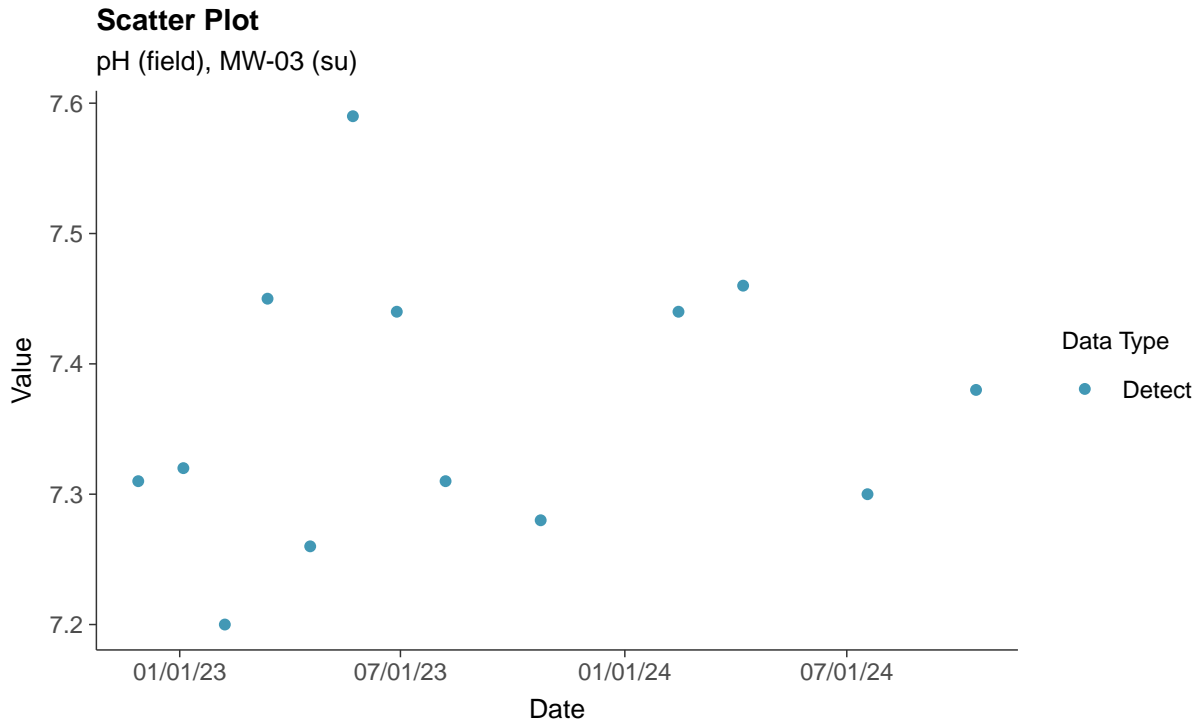
Fluoride, MW-03 (mg/L)





Appendix III: pH (field), MW-03

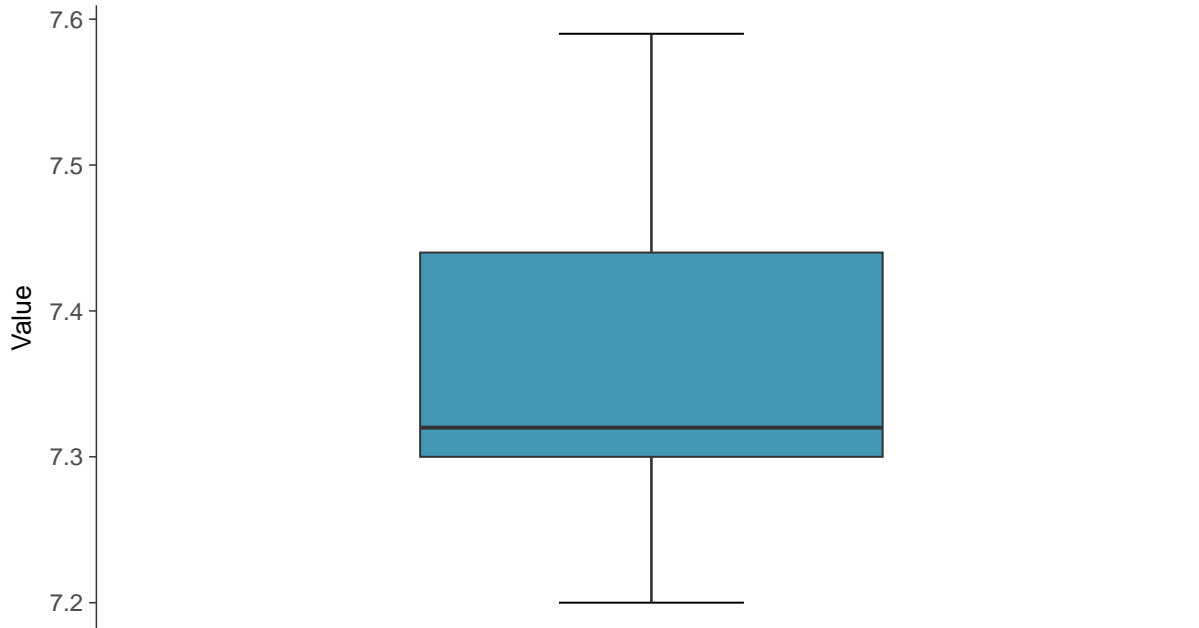
ID: 2_13_2_4_120





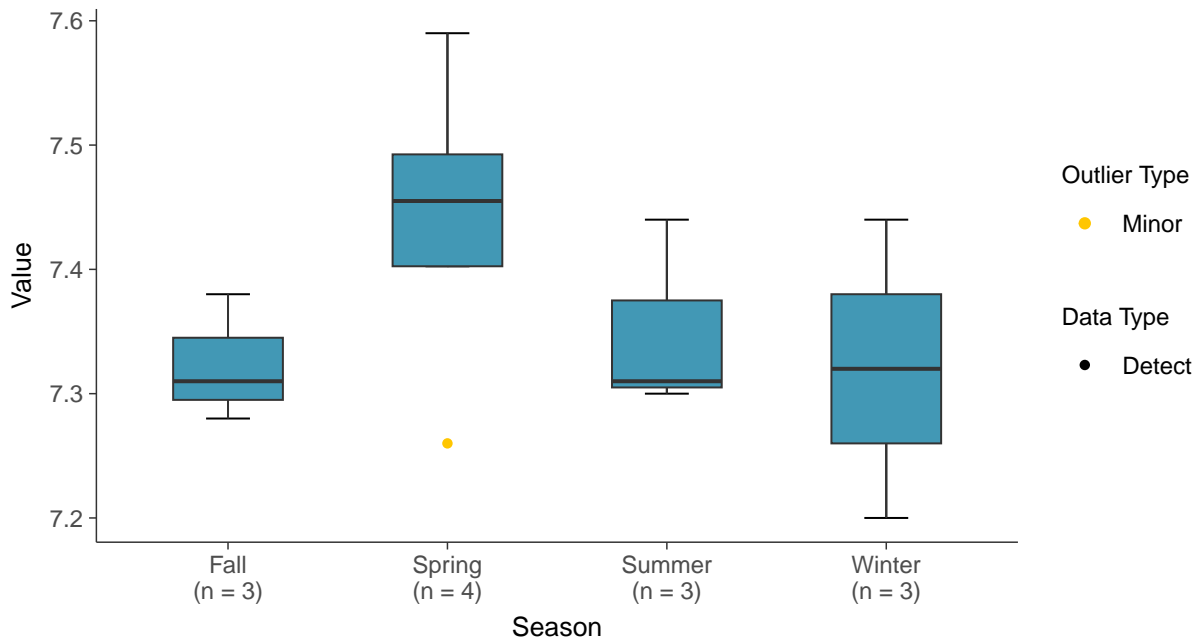
Boxplot

pH (field), MW-03 (su)



Boxplot by Season

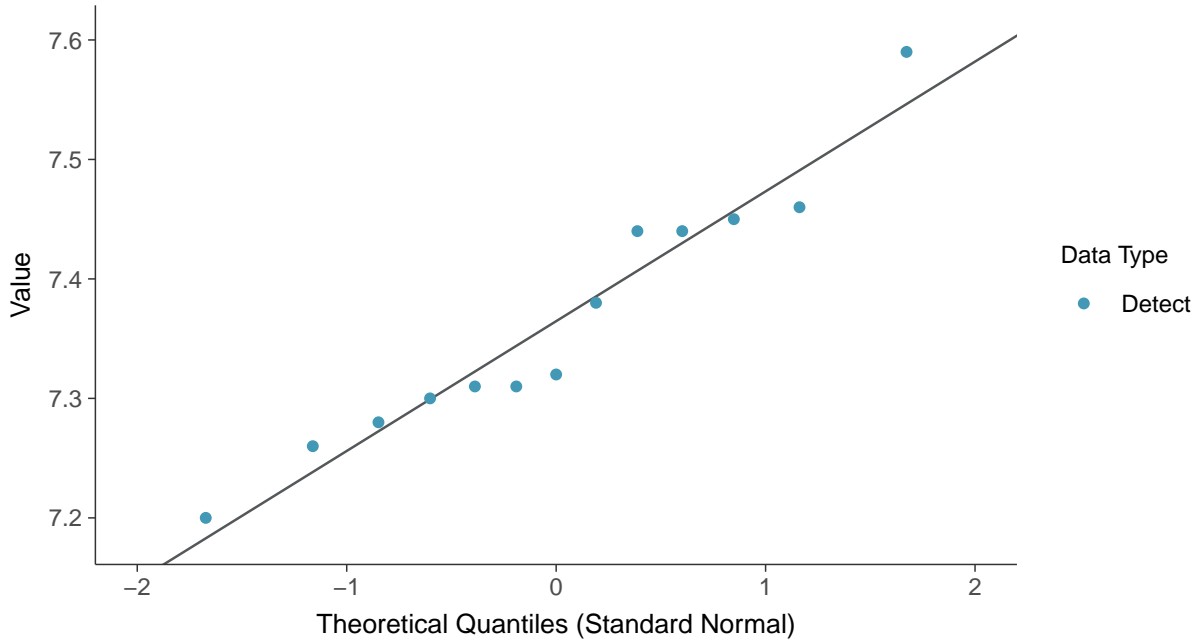
pH (field), MW-03 (su)





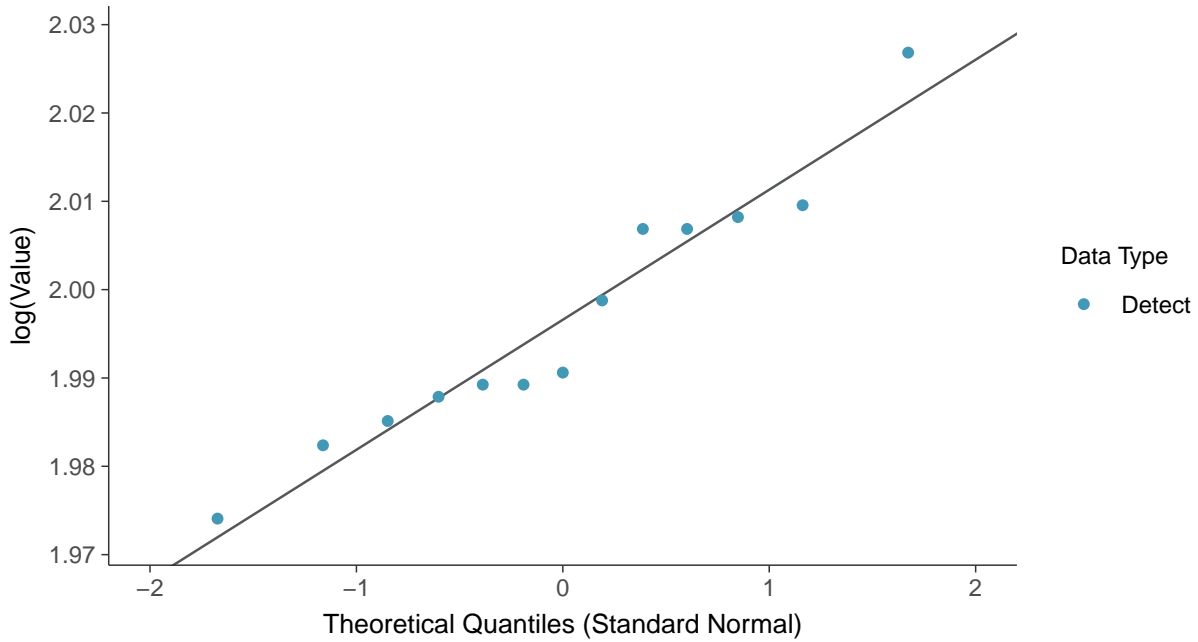
Normal Q-Q plot

pH (field), MW-03 (su)



Lognormal Q-Q plot

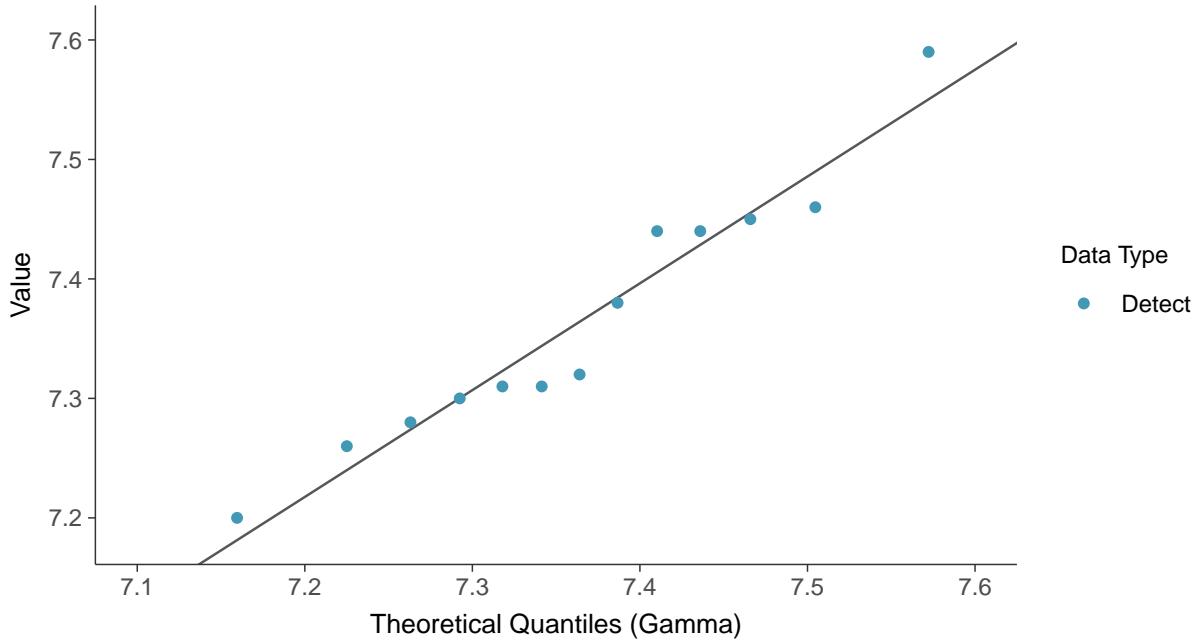
pH (field), MW-03 (su)





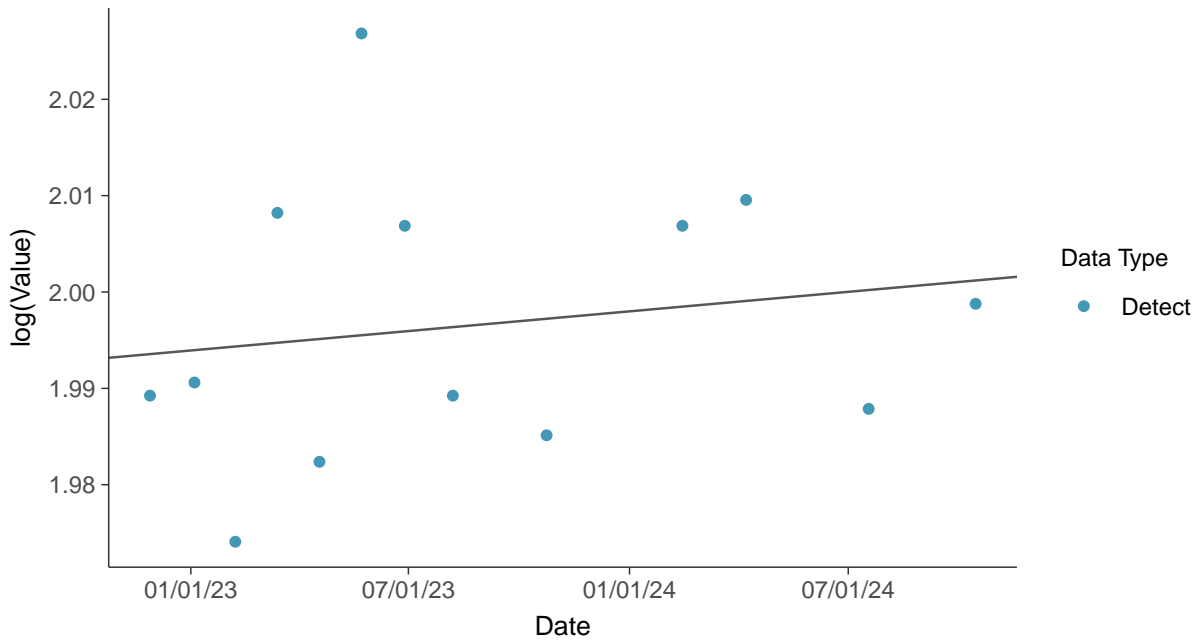
Gamma Q-Q plot

pH (field), MW-03 (su)



Trend Regression: Lognormal MLE

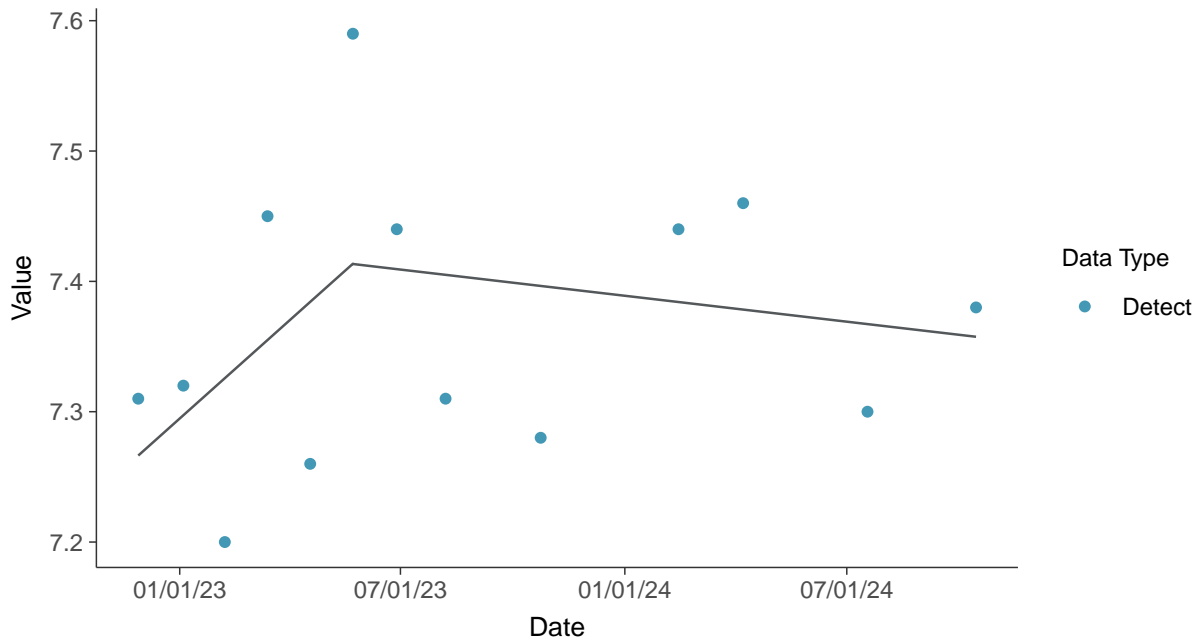
pH (field), MW-03 (su)





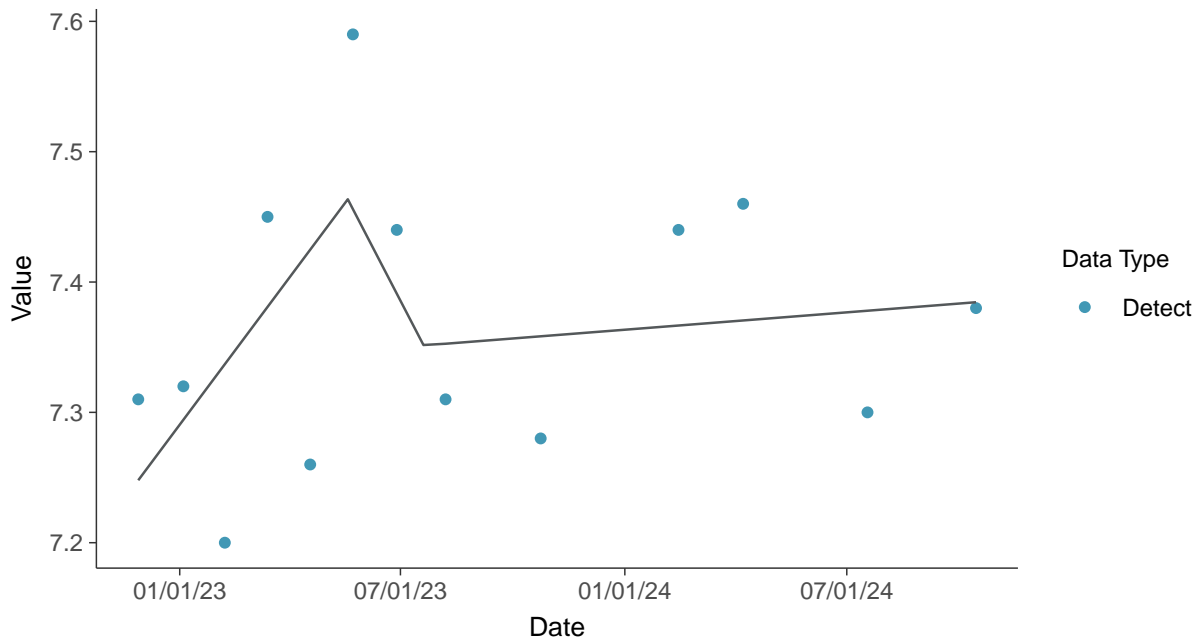
Trend Regression: Piecewise Linear-Linear

pH (field), MW-03 (su)



Trend Regression: Piecewise Linear-Linear-Linear

pH (field), MW-03 (su)



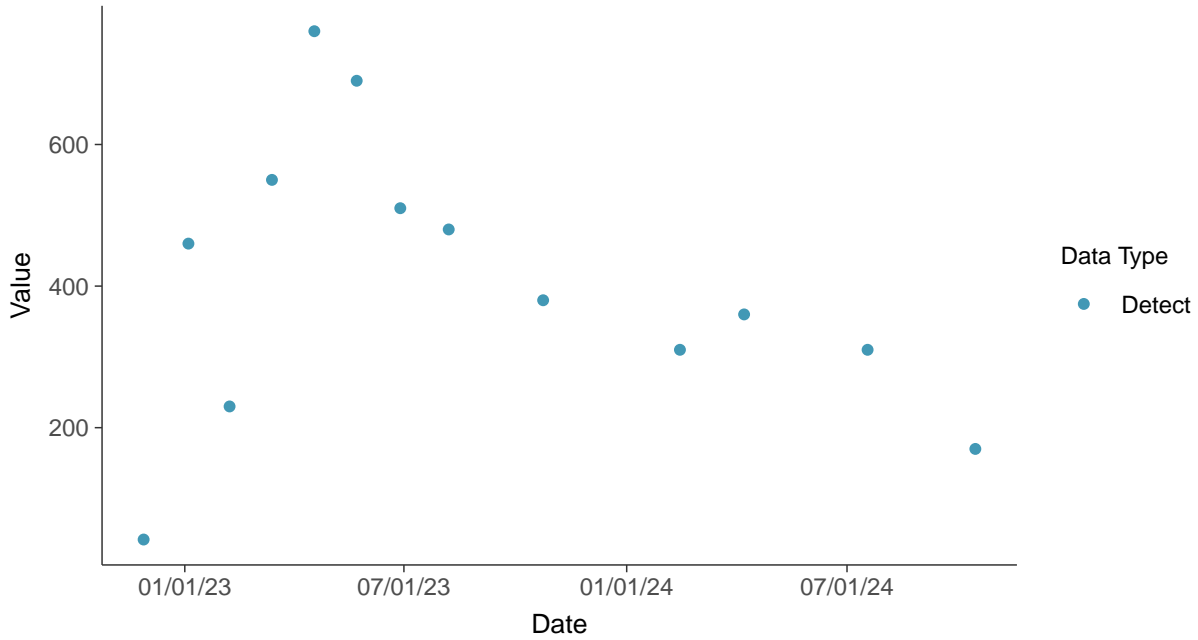


Appendix III: Sulfate (as SO₄), MW-03

ID: 2_13_2_4_124

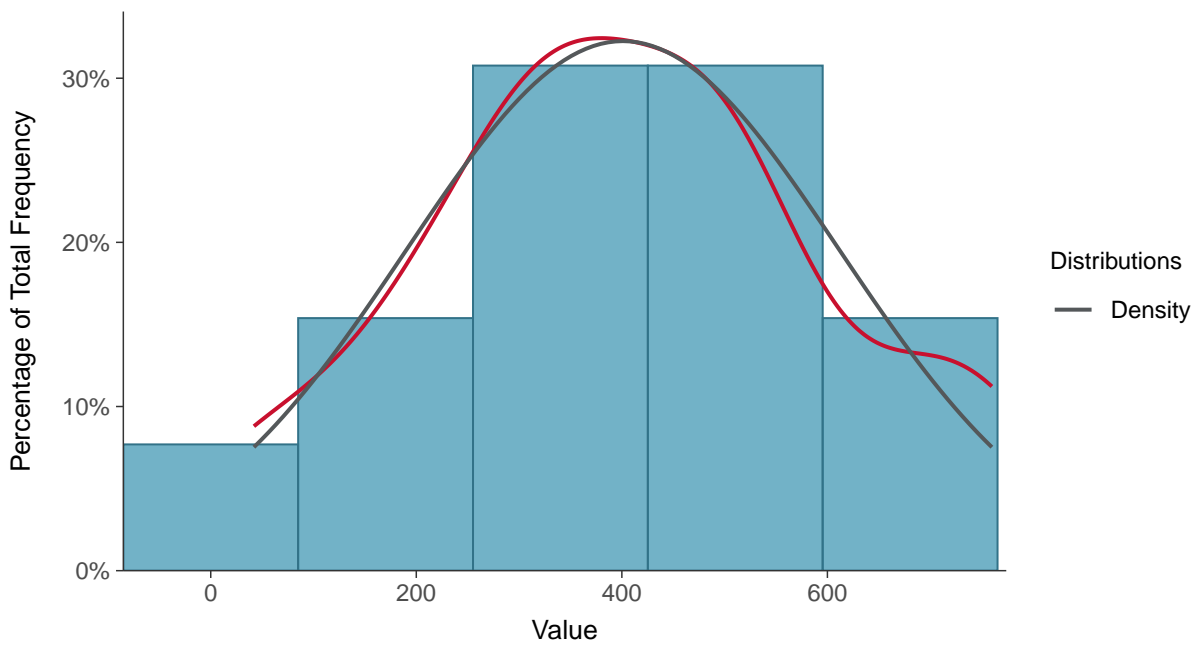
Scatter Plot

Sulfate (as SO₄), MW-03 (mg/L)



Histogram

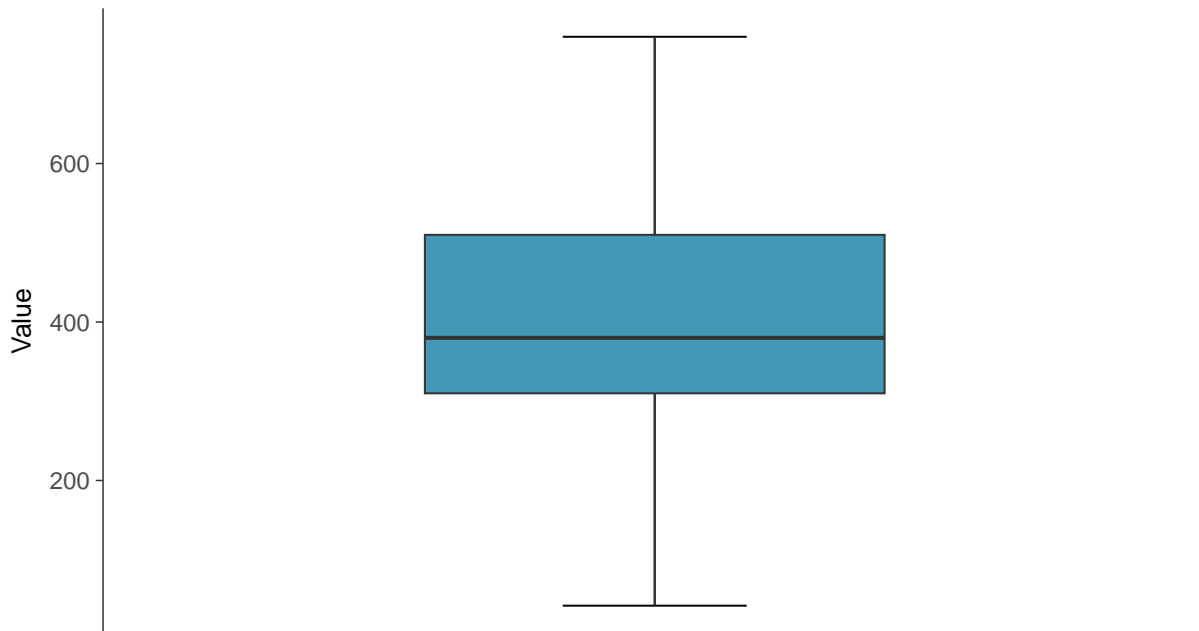
Sulfate (as SO₄), MW-03 (mg/L)





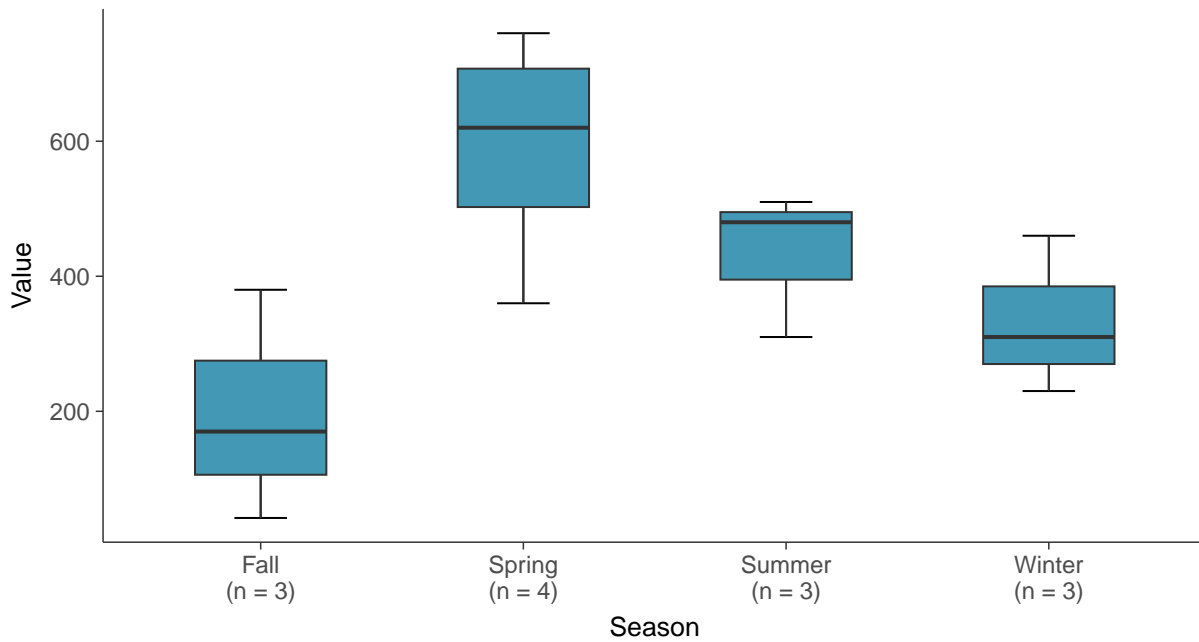
Boxplot

Sulfate (as SO₄), MW-03 (mg/L)



Boxplot by Season

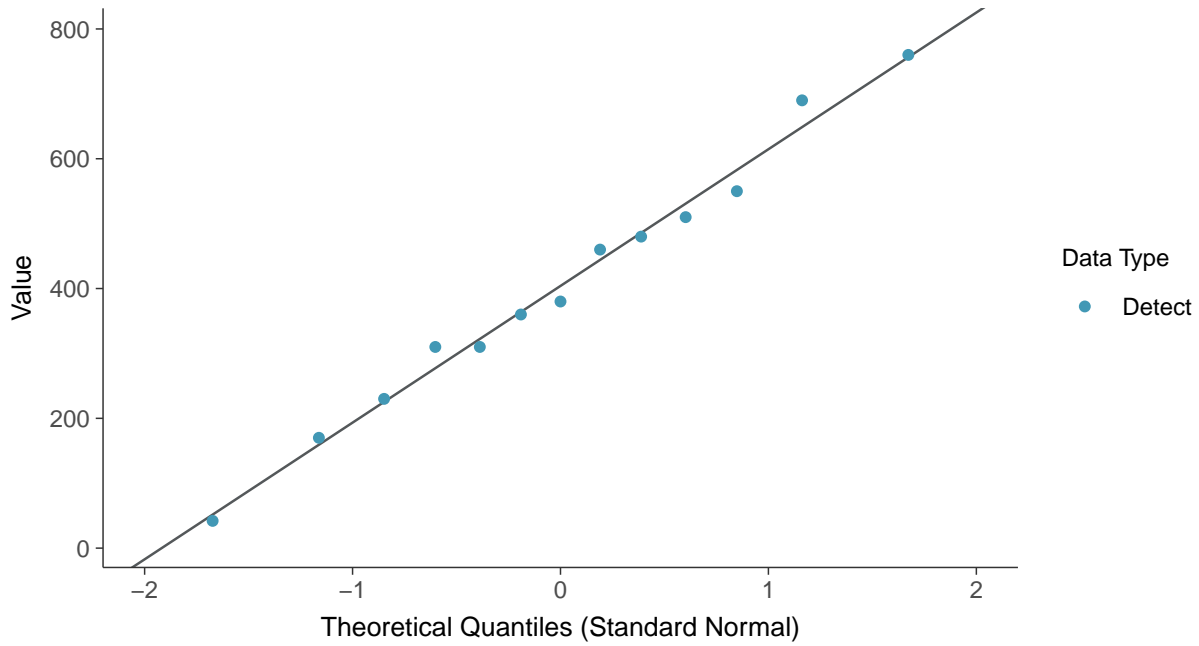
Sulfate (as SO₄), MW-03 (mg/L)





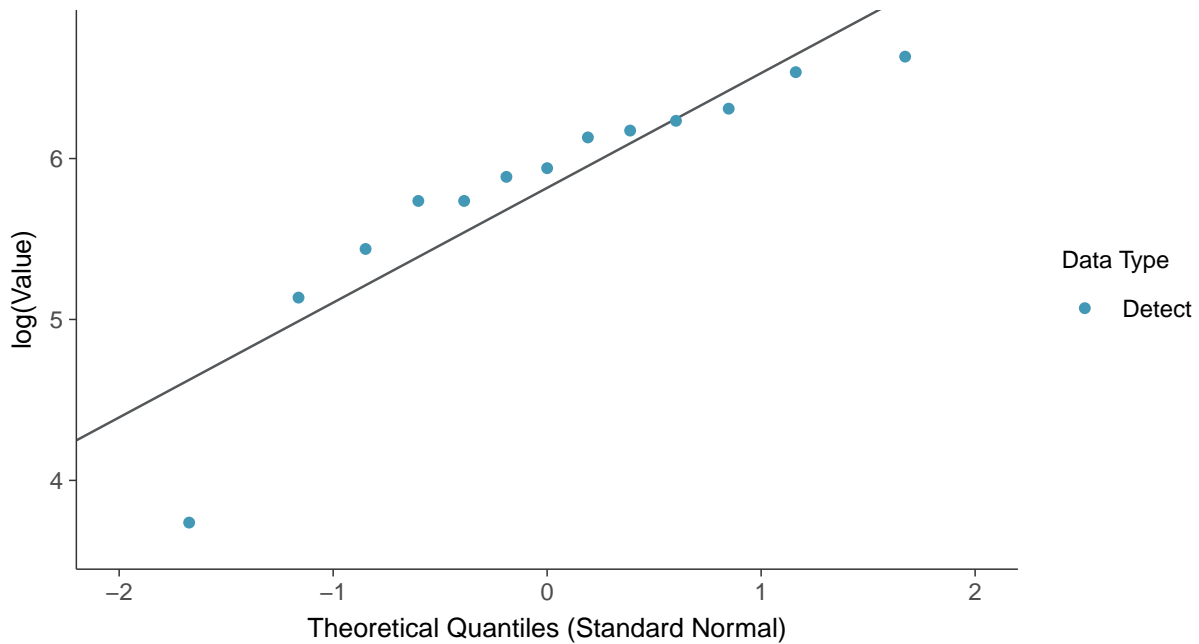
Normal Q-Q plot

Sulfate (as SO₄), MW-03 (mg/L)



Lognormal Q-Q plot

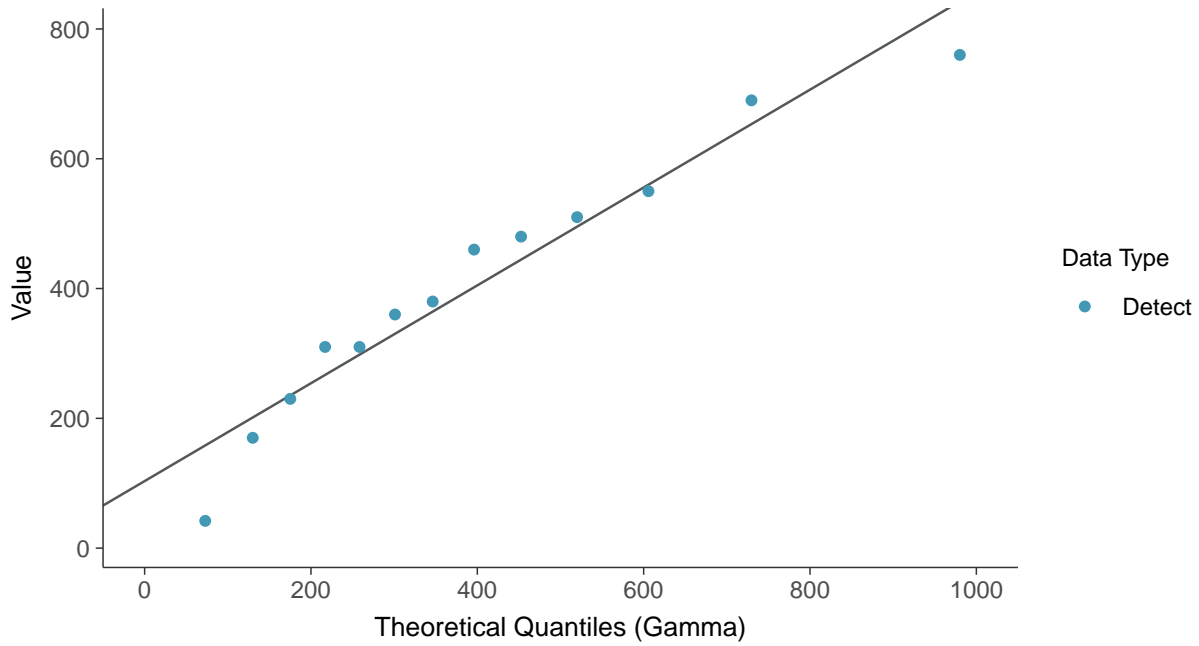
Sulfate (as SO₄), MW-03 (mg/L)





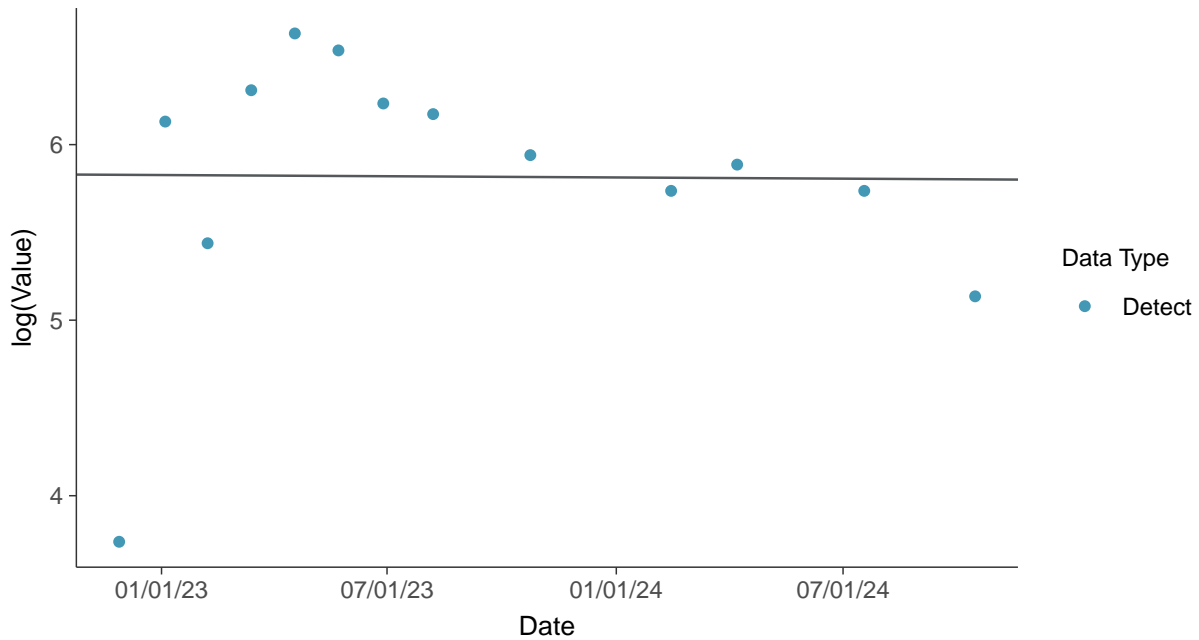
Gamma Q-Q plot

Sulfate (as SO₄), MW-03 (mg/L)



Trend Regression: Lognormal MLE

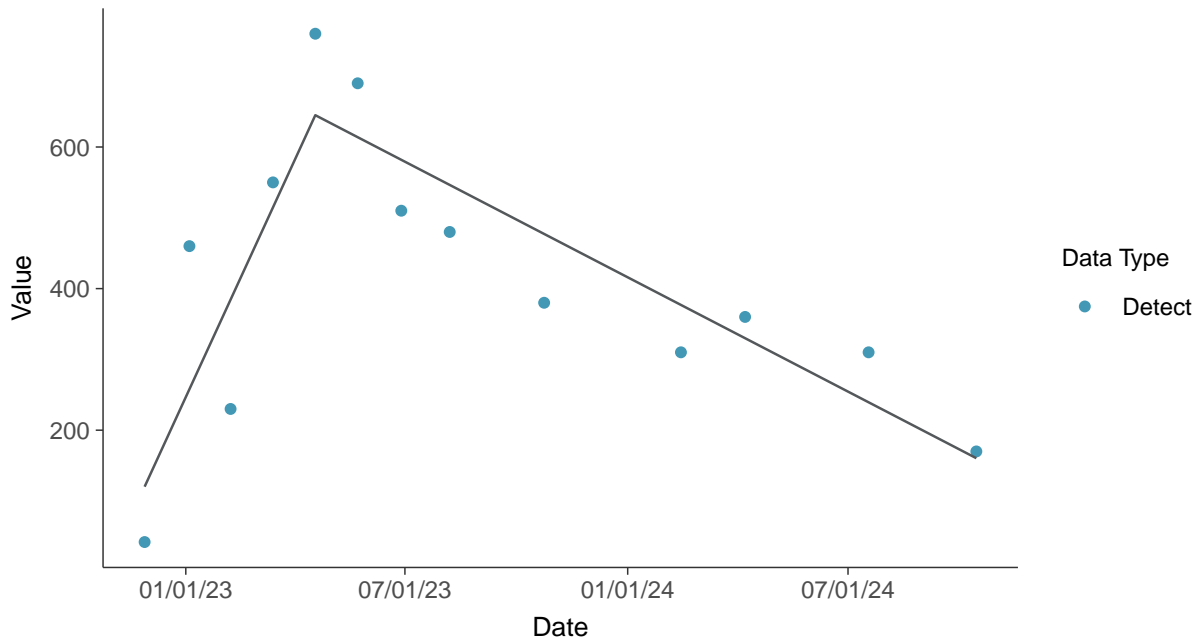
Sulfate (as SO₄), MW-03 (mg/L)





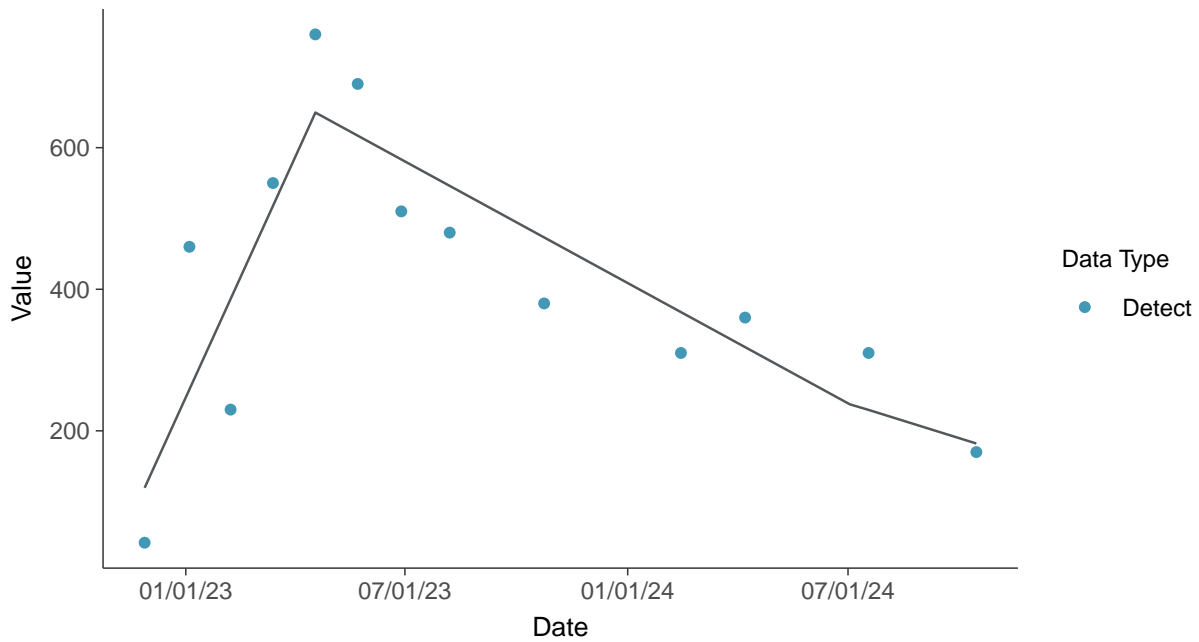
Trend Regression: Piecewise Linear-Linear

Sulfate (as SO4), MW-03 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Sulfate (as SO4), MW-03 (mg/L)



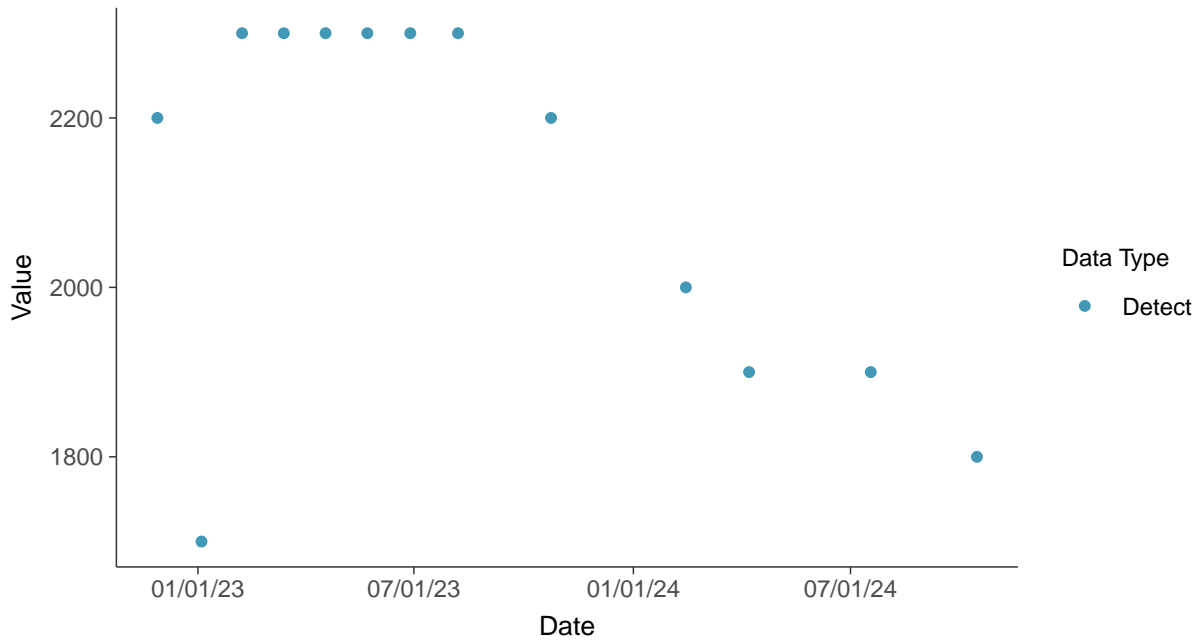


Appendix III: Total Dissolved Solids, MW-03

ID: 2_13_2_4_126

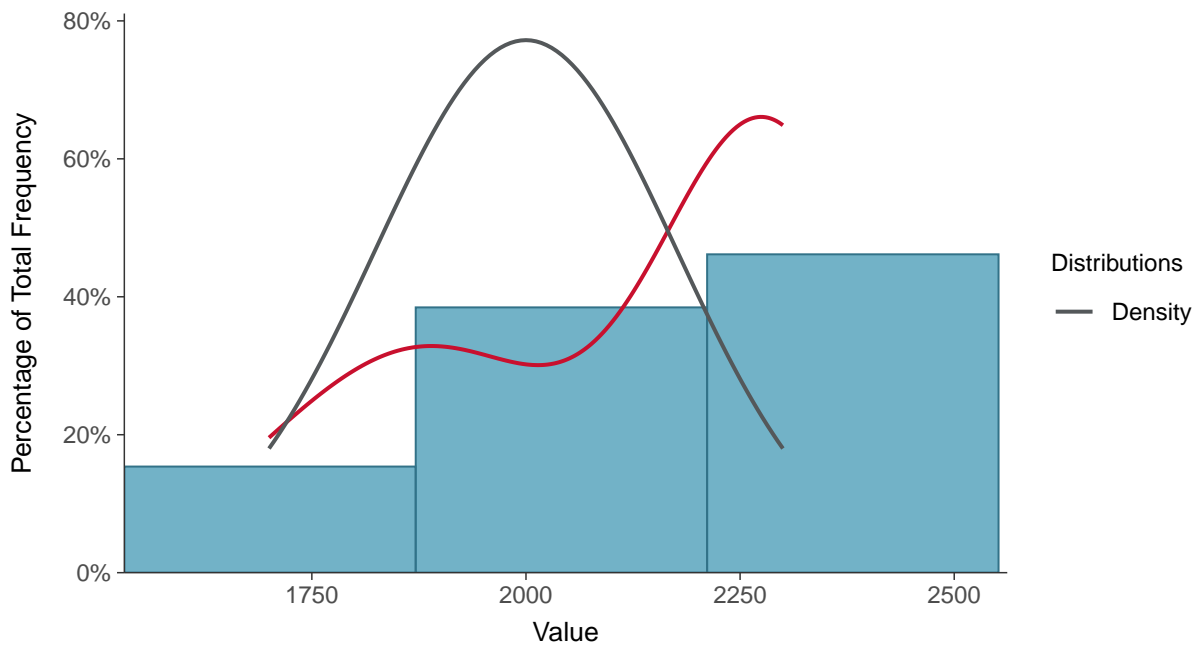
Scatter Plot

Total Dissolved Solids, MW-03 (mg/L)



Histogram

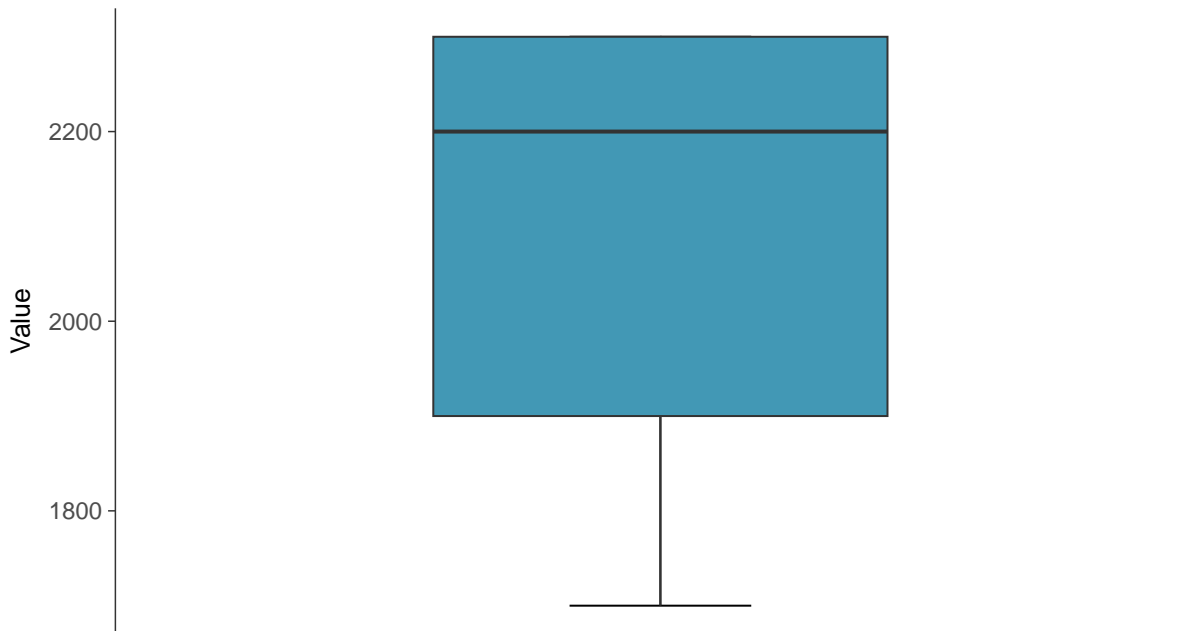
Total Dissolved Solids, MW-03 (mg/L)





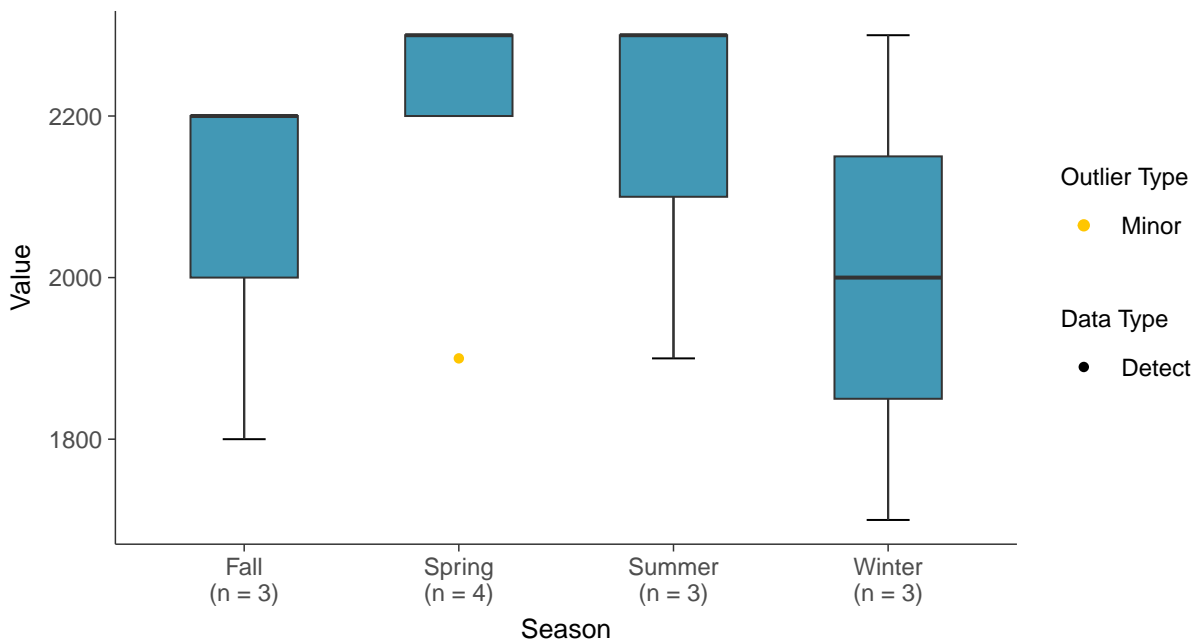
Boxplot

Total Dissolved Solids, MW-03 (mg/L)



Boxplot by Season

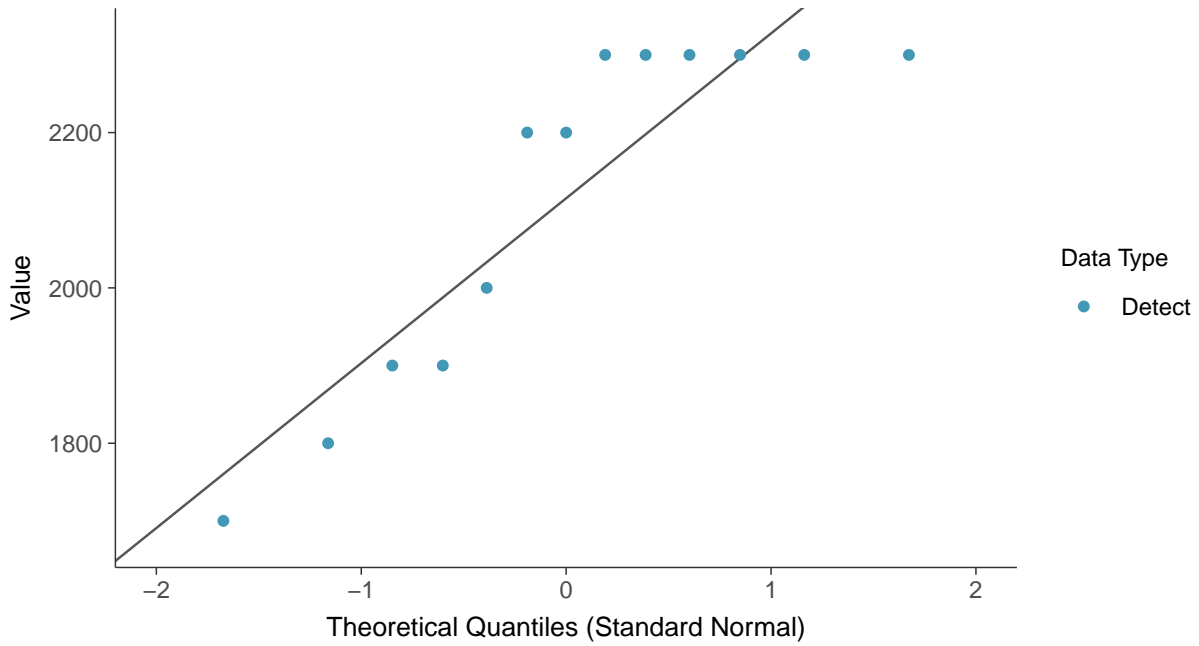
Total Dissolved Solids, MW-03 (mg/L)





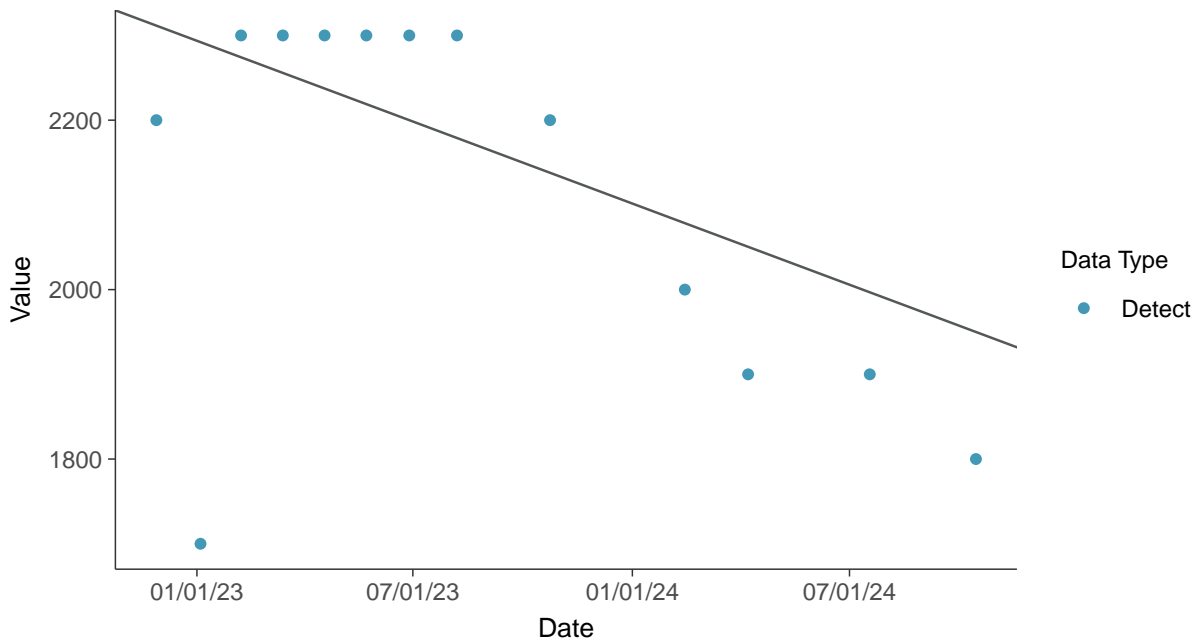
Normal Q-Q plot

Total Dissolved Solids, MW-03 (mg/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

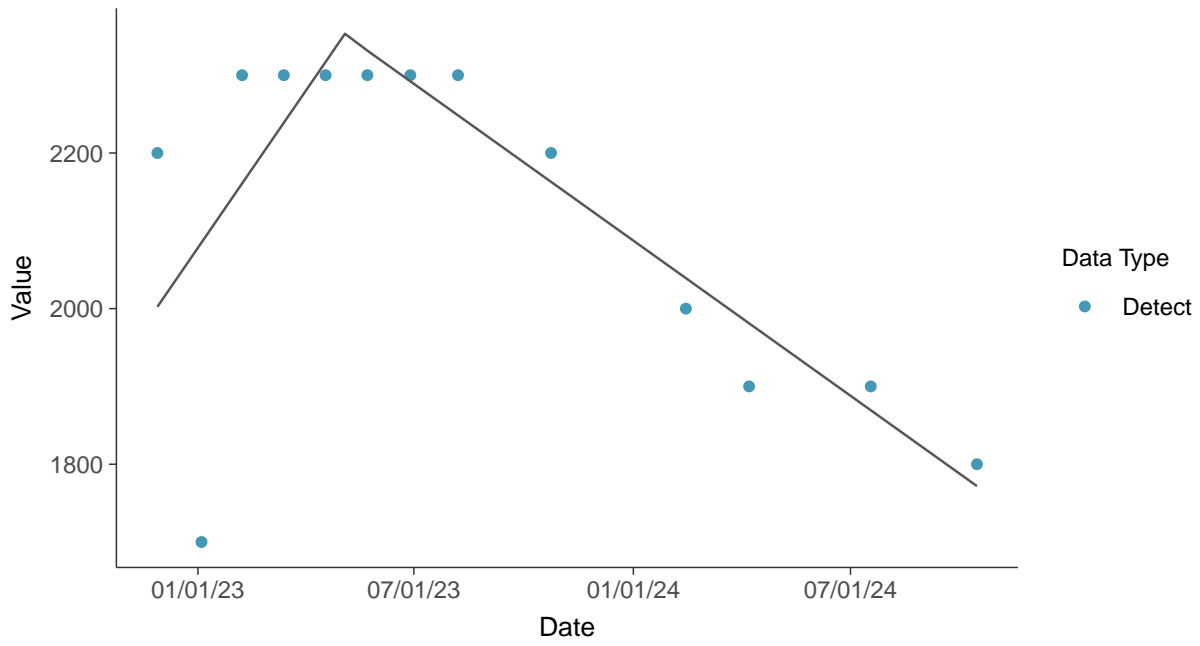
Total Dissolved Solids, MW-03 (mg/L)





Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-03 (mg/L)



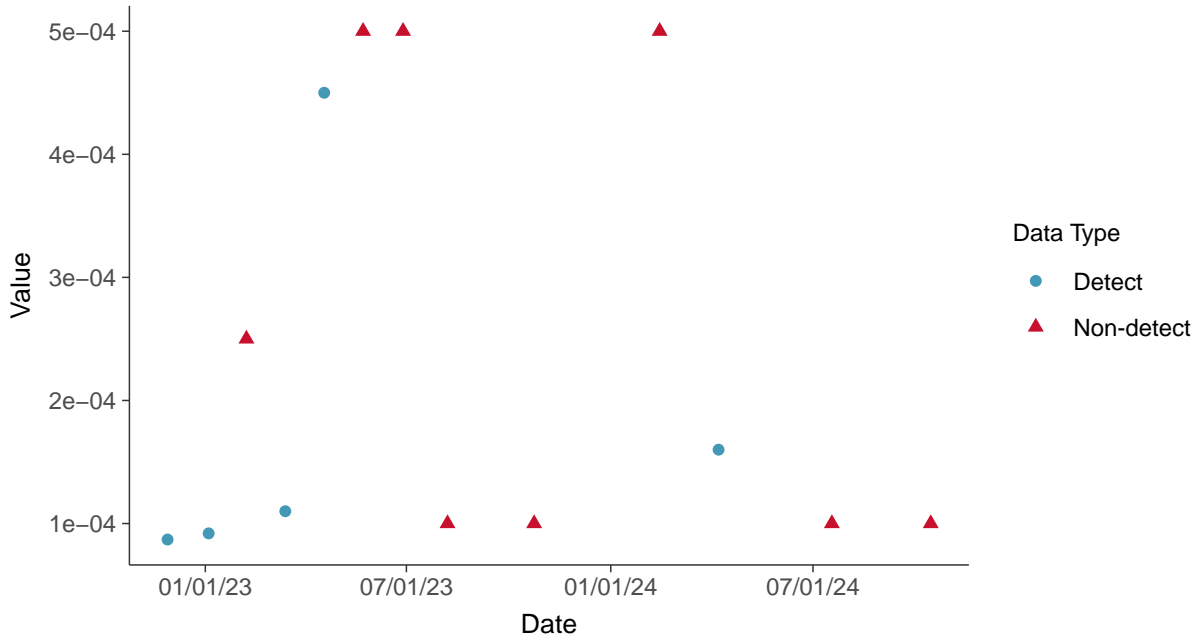


Appendix IV: Antimony, MW-03

ID: 2_13_2_5_101

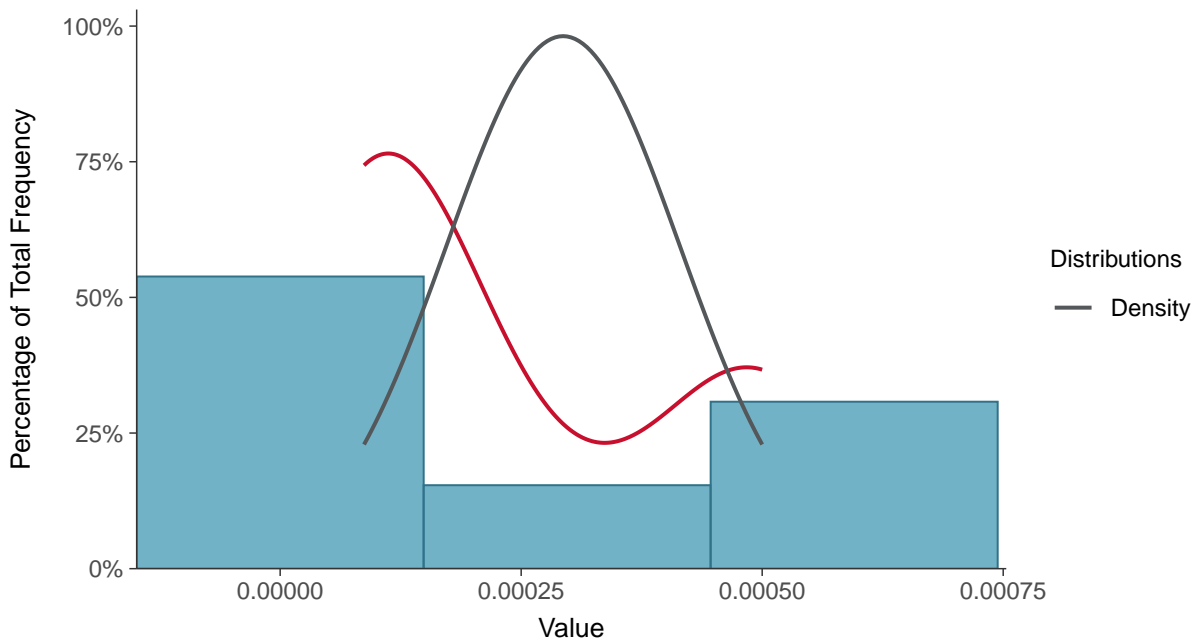
Scatter Plot

Antimony, MW-03 (mg/L)



Histogram

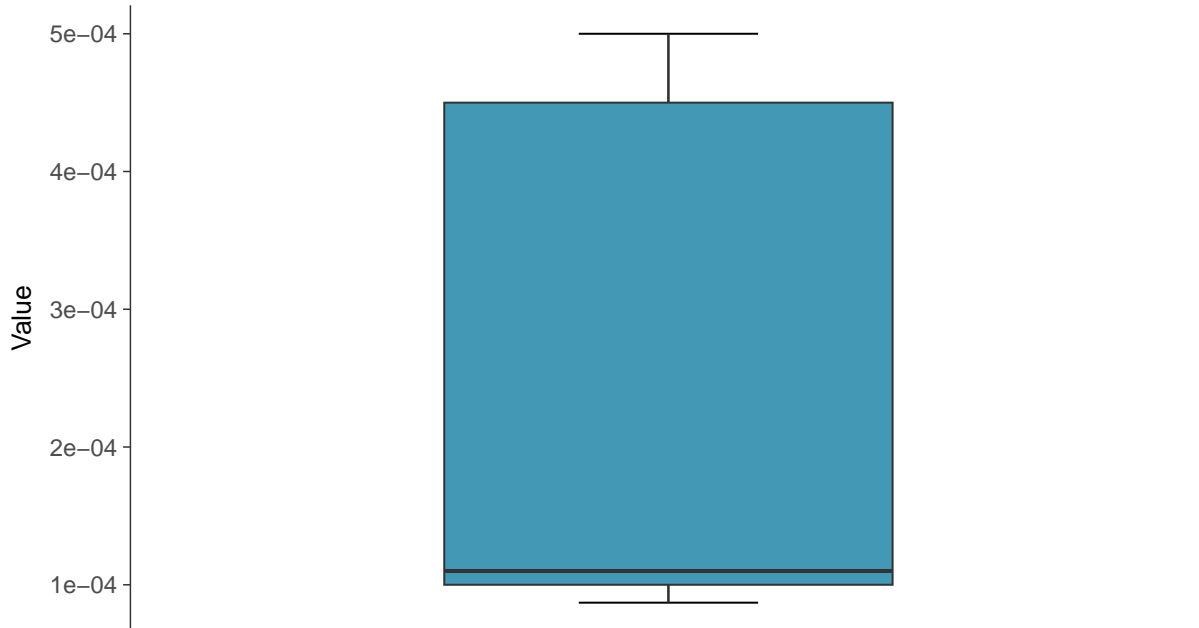
Antimony, MW-03 (mg/L)





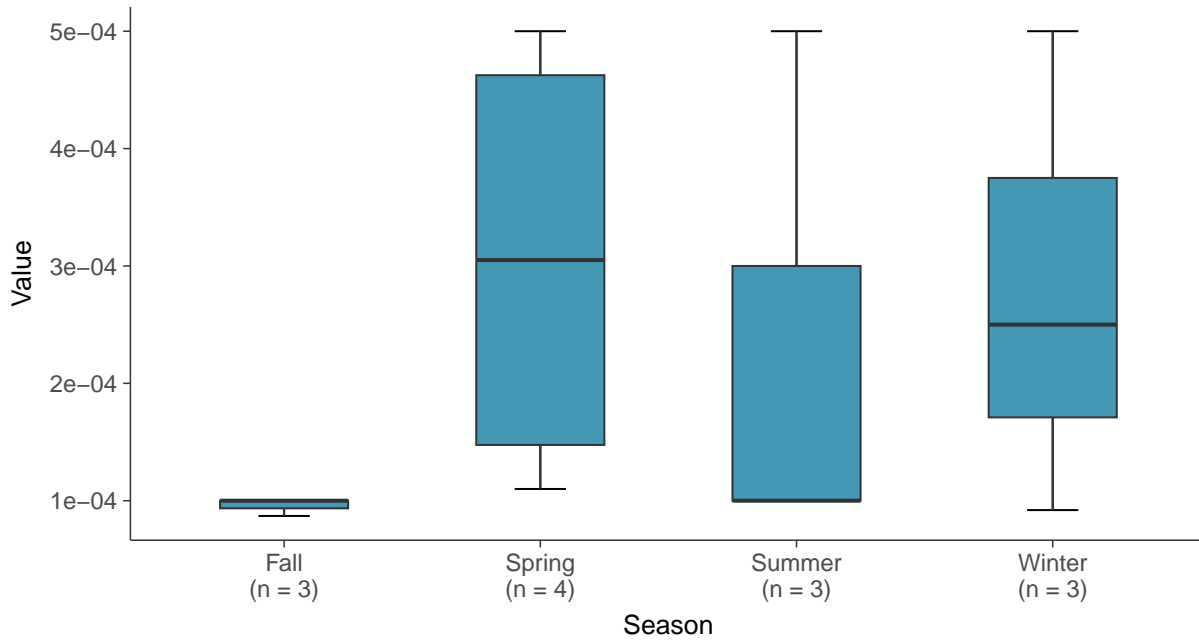
Boxplot

Antimony, MW-03 (mg/L)



Boxplot by Season

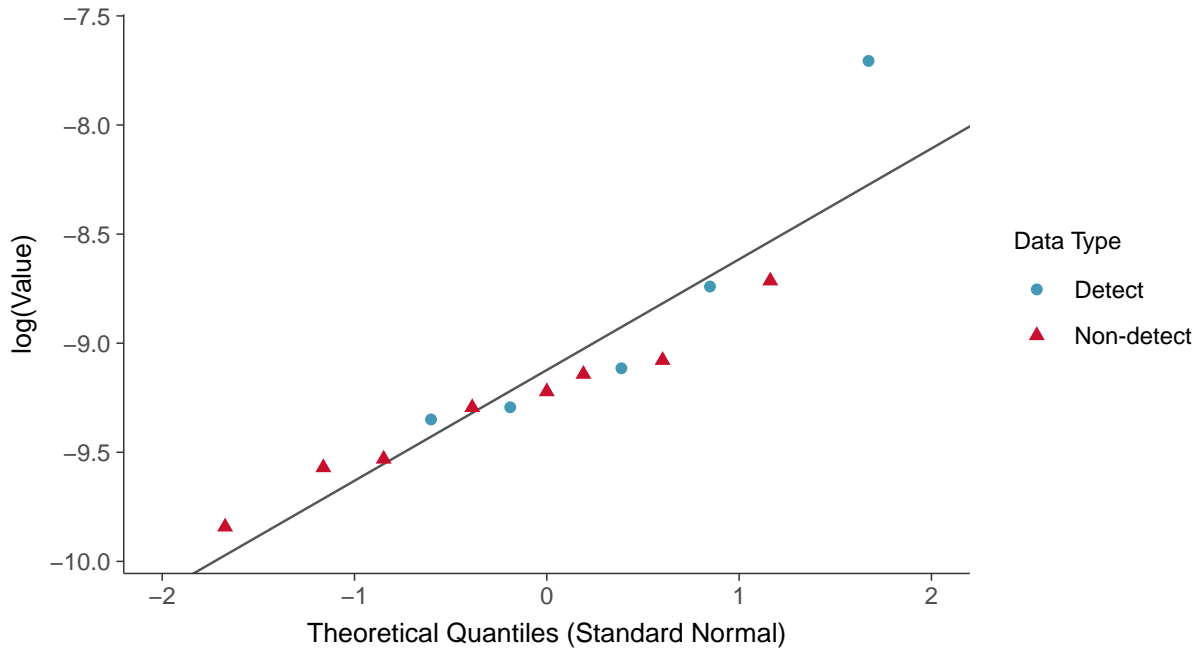
Antimony, MW-03 (mg/L)





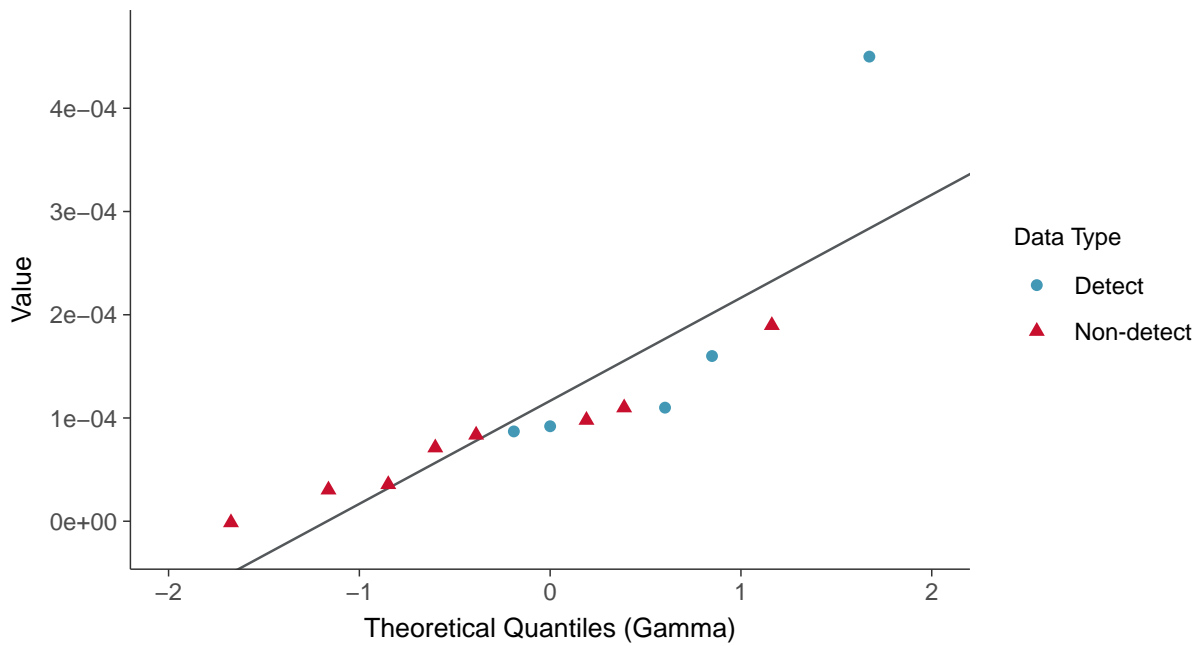
Lognormal Q-Q plot using ROS Imputed Estimates

Antimony, MW-03 (mg/L)



Gamma Q-Q plot using ROS Imputed Estimates

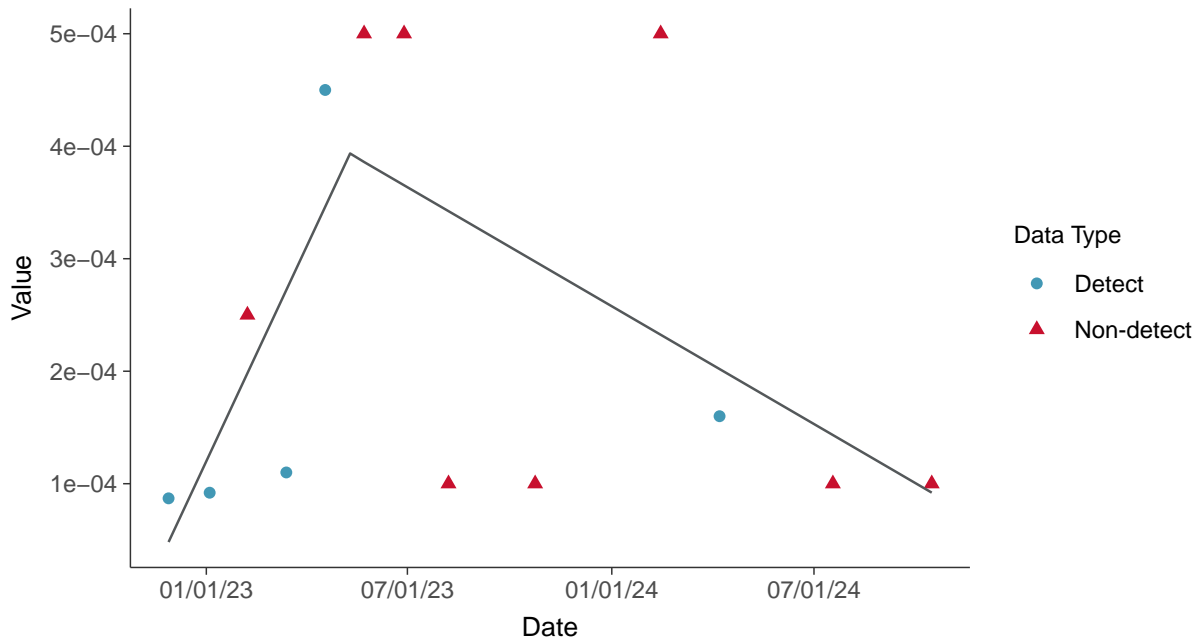
Antimony, MW-03 (mg/L)





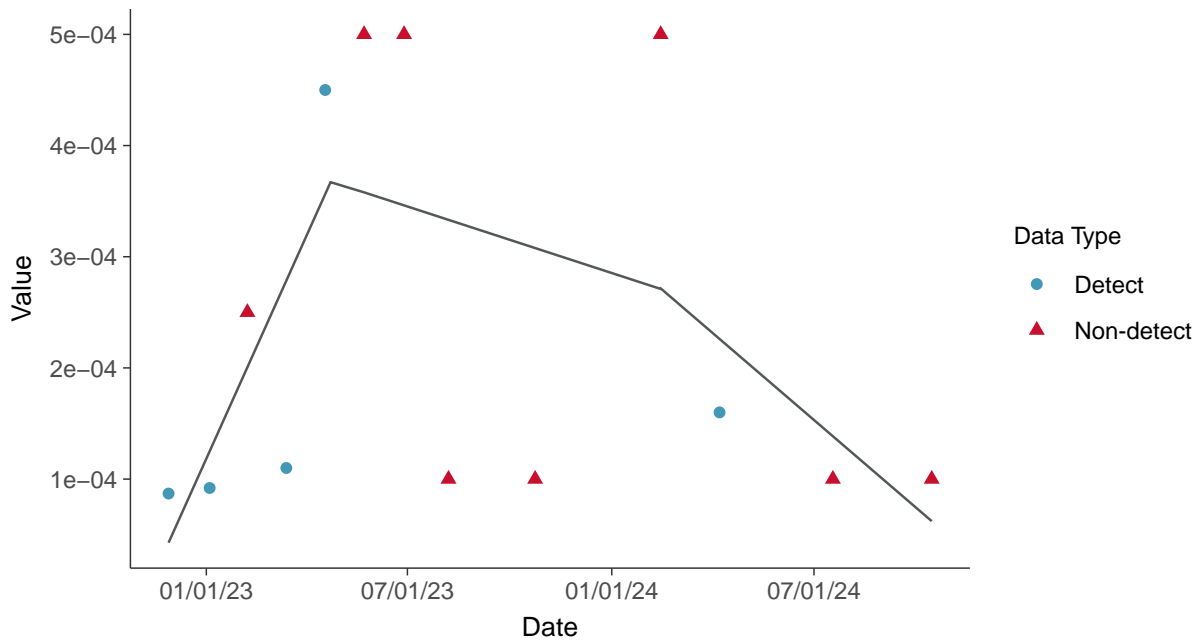
Trend Regression: Piecewise Linear-Linear

Antimony, MW-03 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Antimony, MW-03 (mg/L)



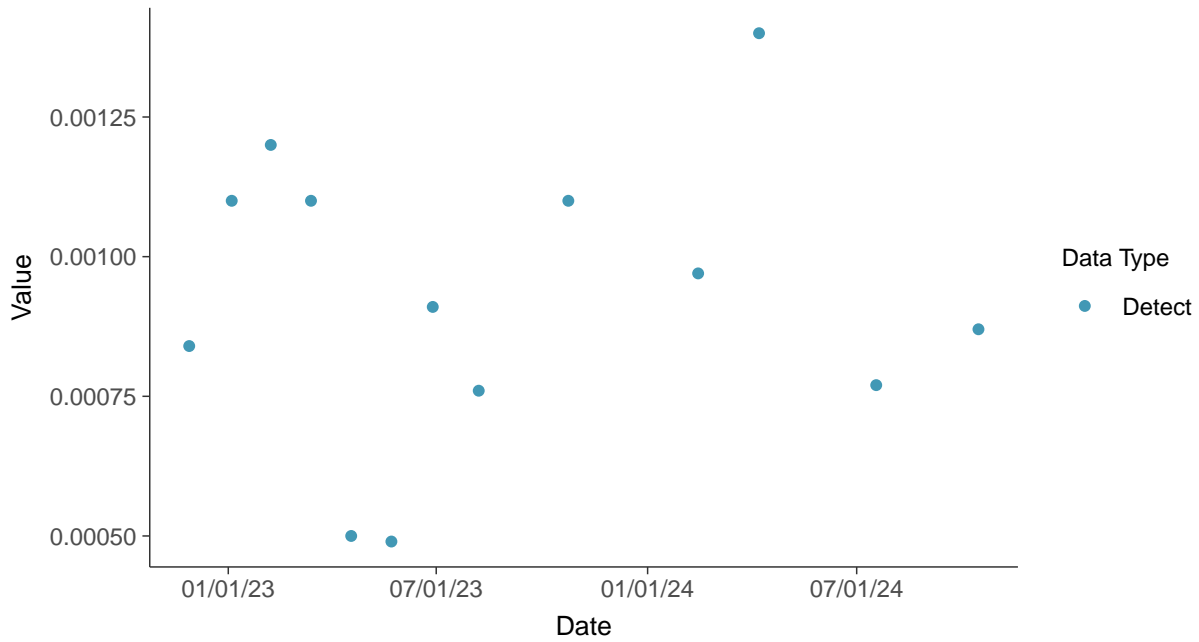


Appendix IV: Arsenic, MW-03

ID: 2_13_2_5_102

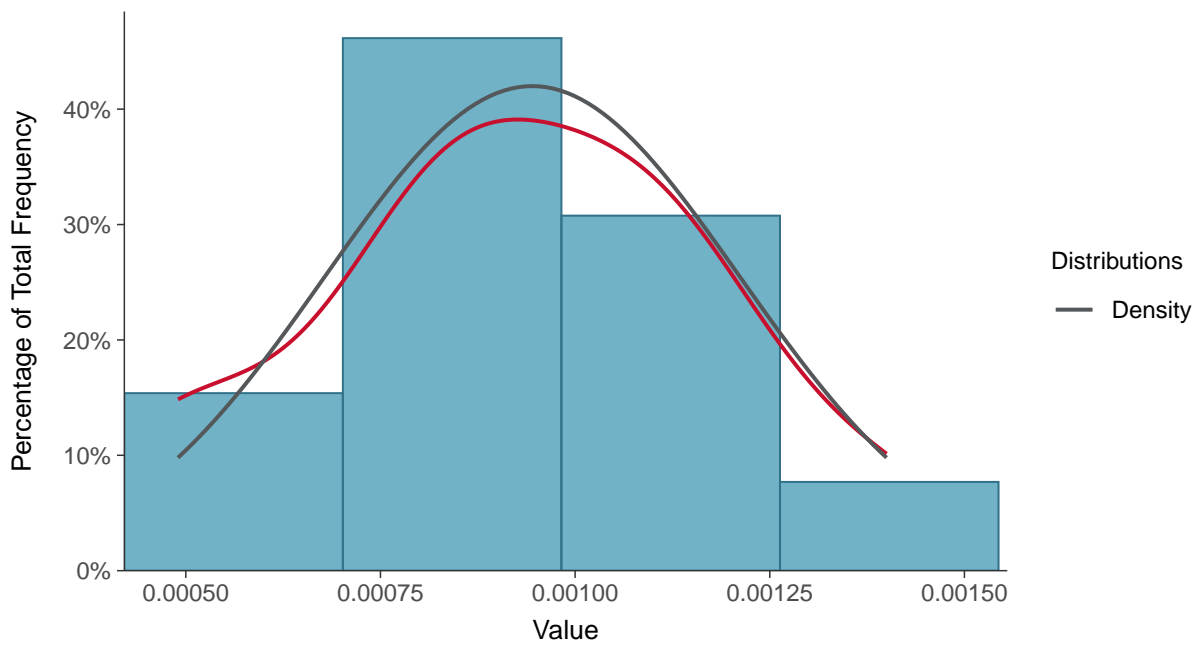
Scatter Plot

Arsenic, MW-03 (mg/L)



Histogram

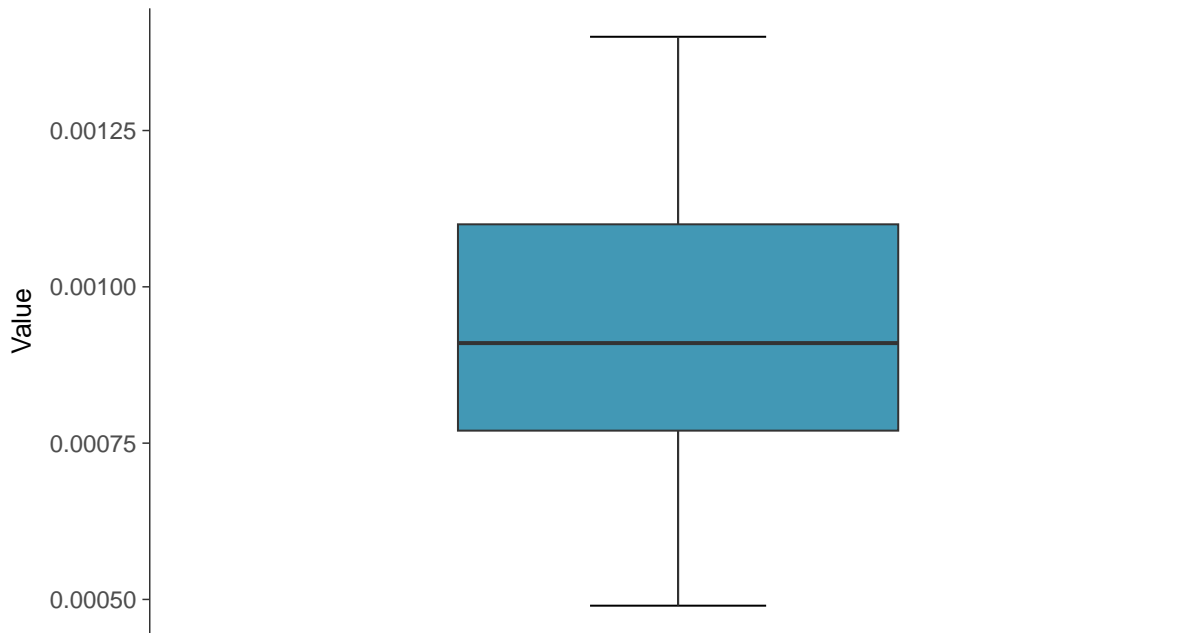
Arsenic, MW-03 (mg/L)





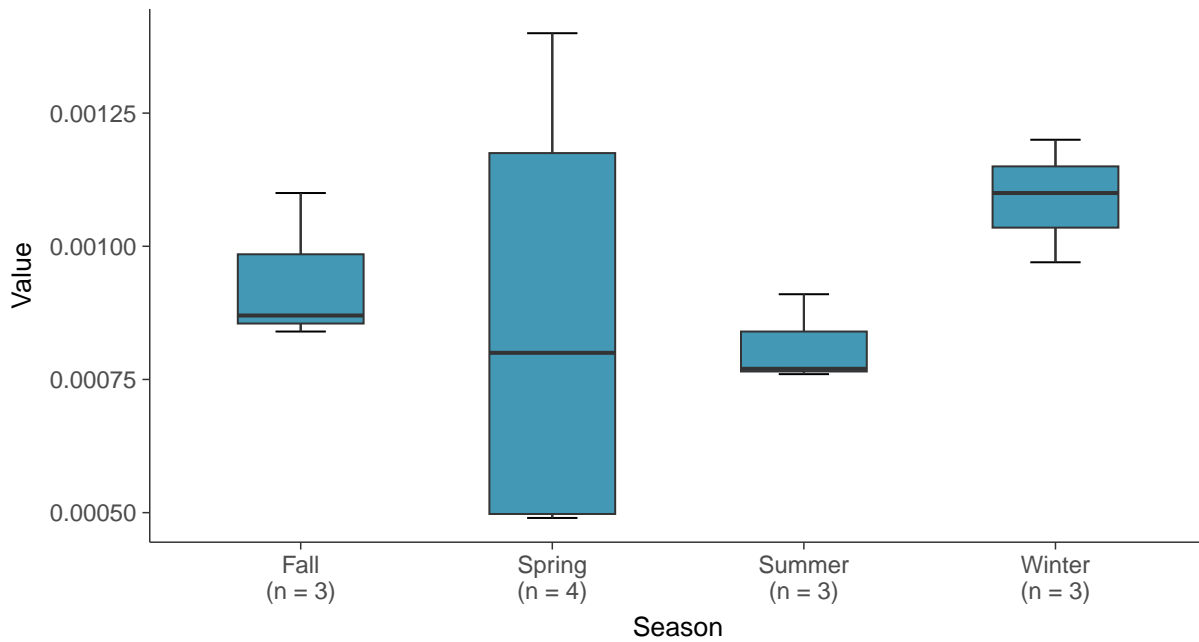
Boxplot

Arsenic, MW-03 (mg/L)



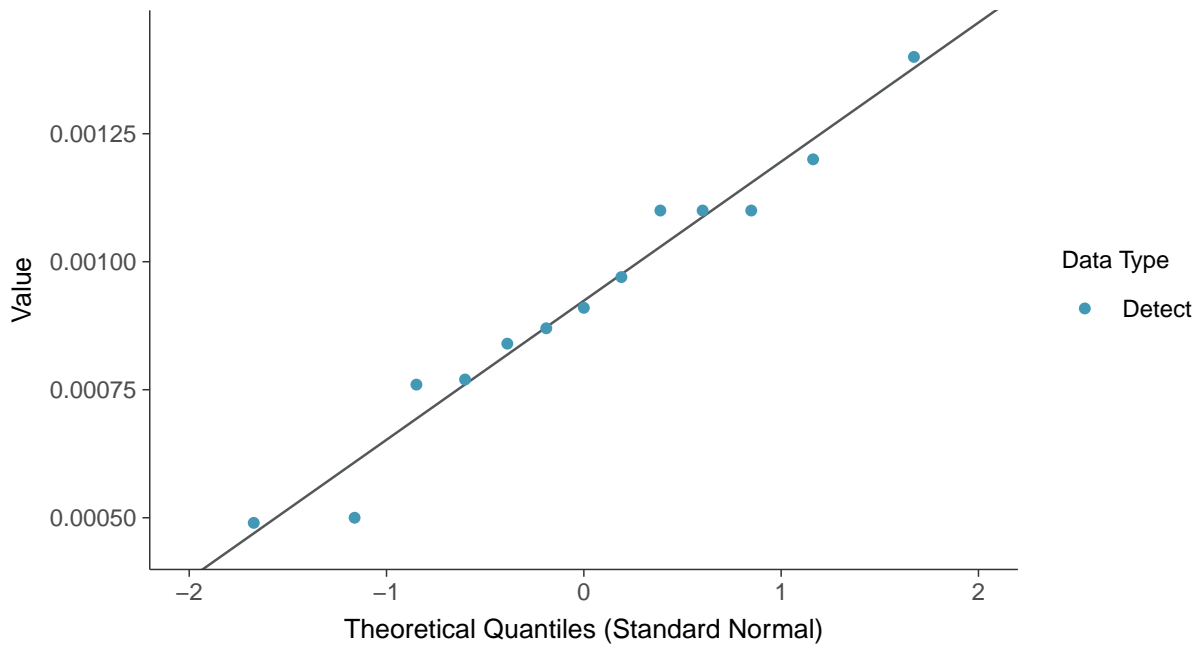
Boxplot by Season

Arsenic, MW-03 (mg/L)

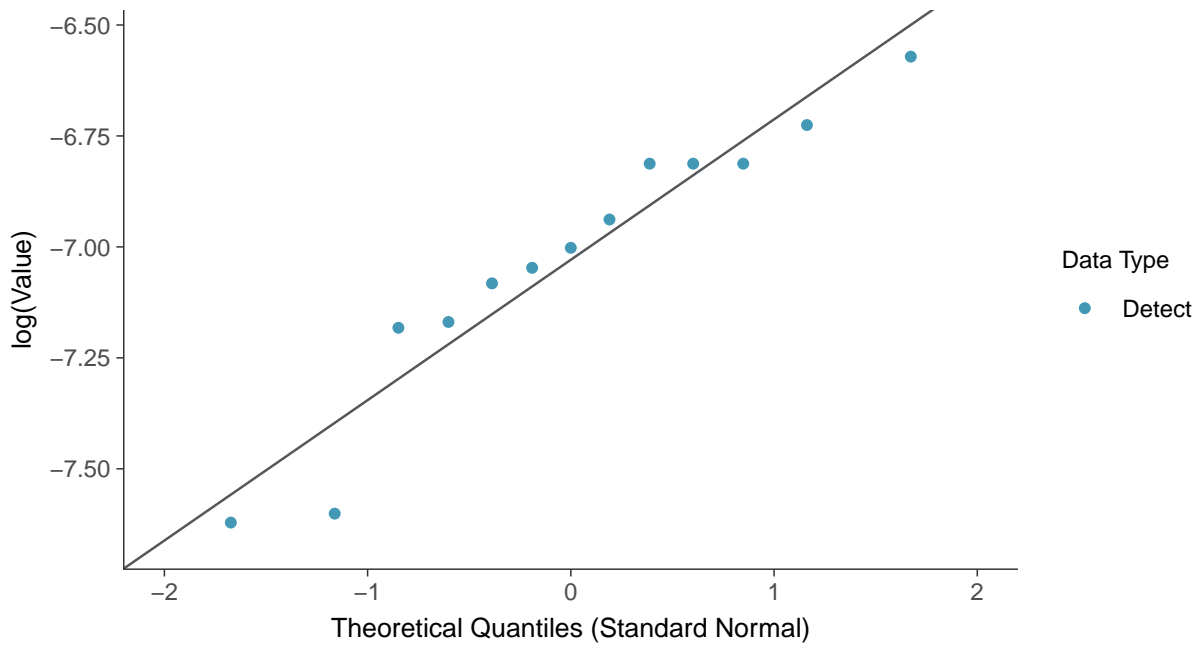




Normal Q-Q plot
Arsenic, MW-03 (mg/L)

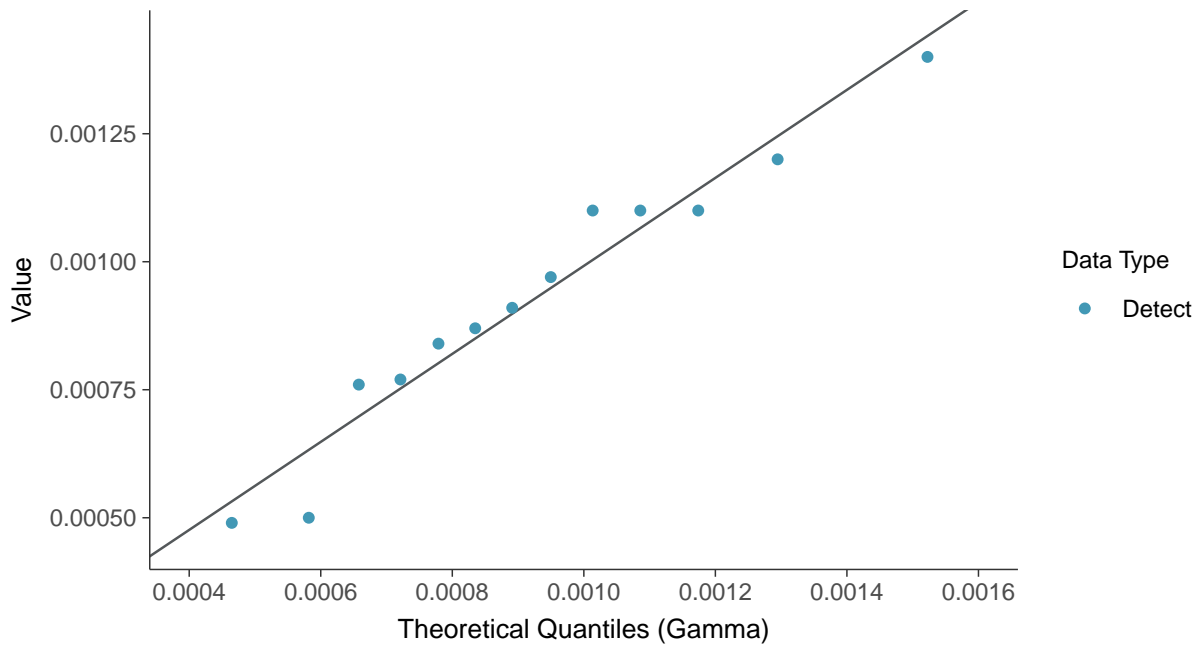


Lognormal Q-Q plot
Arsenic, MW-03 (mg/L)

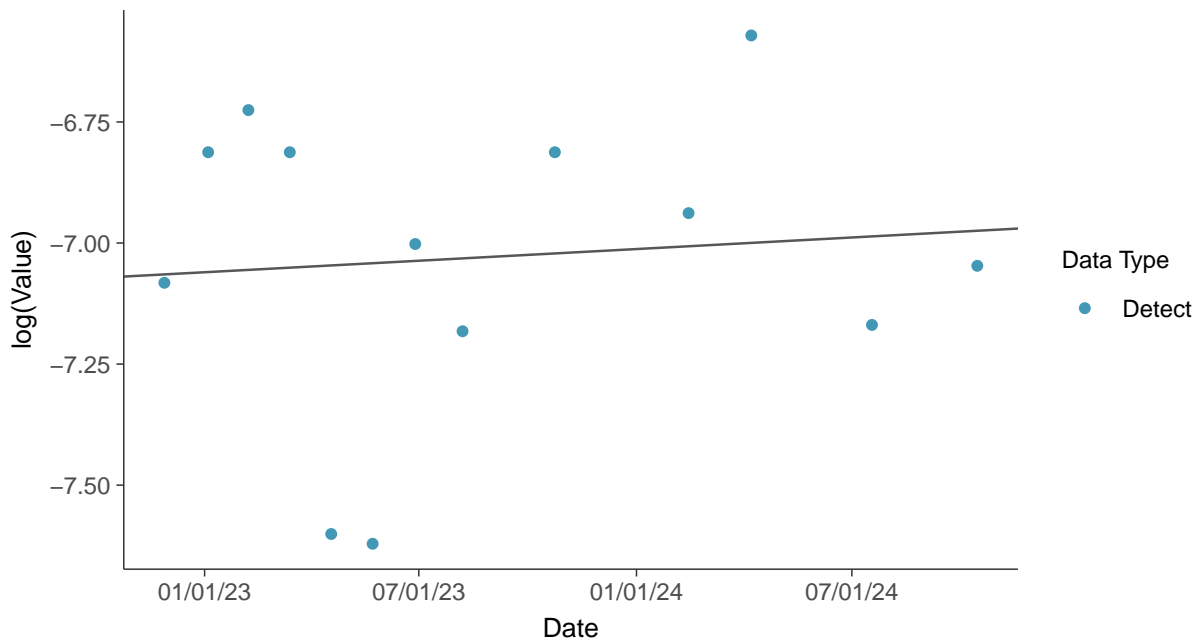




Gamma Q-Q plot
Arsenic, MW-03 (mg/L)



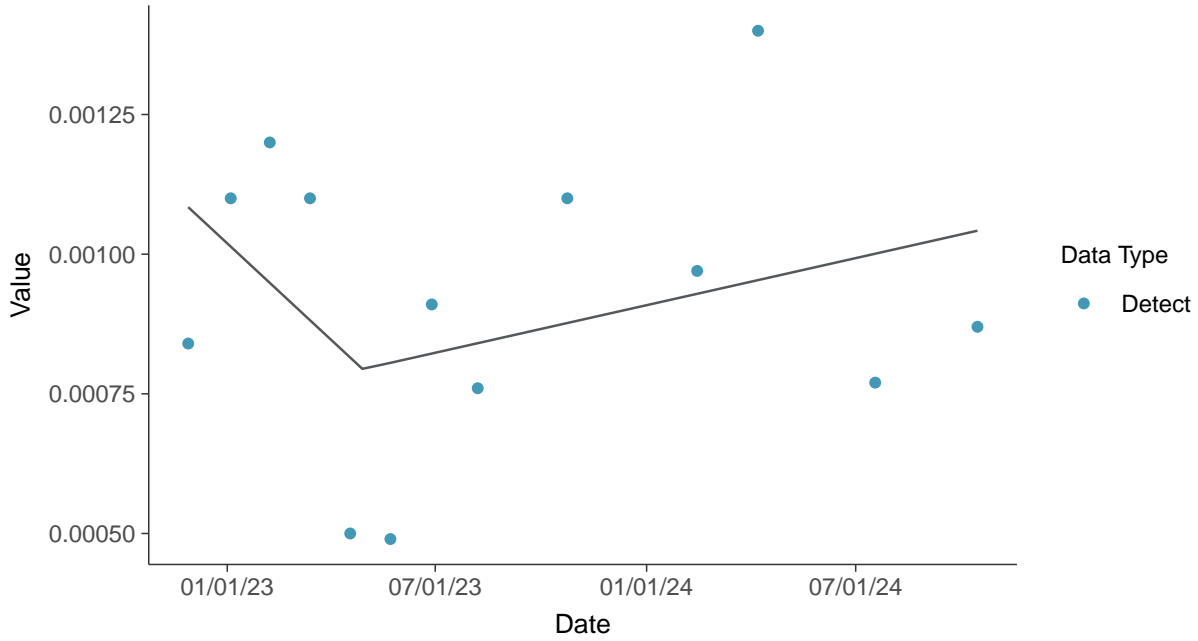
Trend Regression: Lognormal MLE
Arsenic, MW-03 (mg/L)





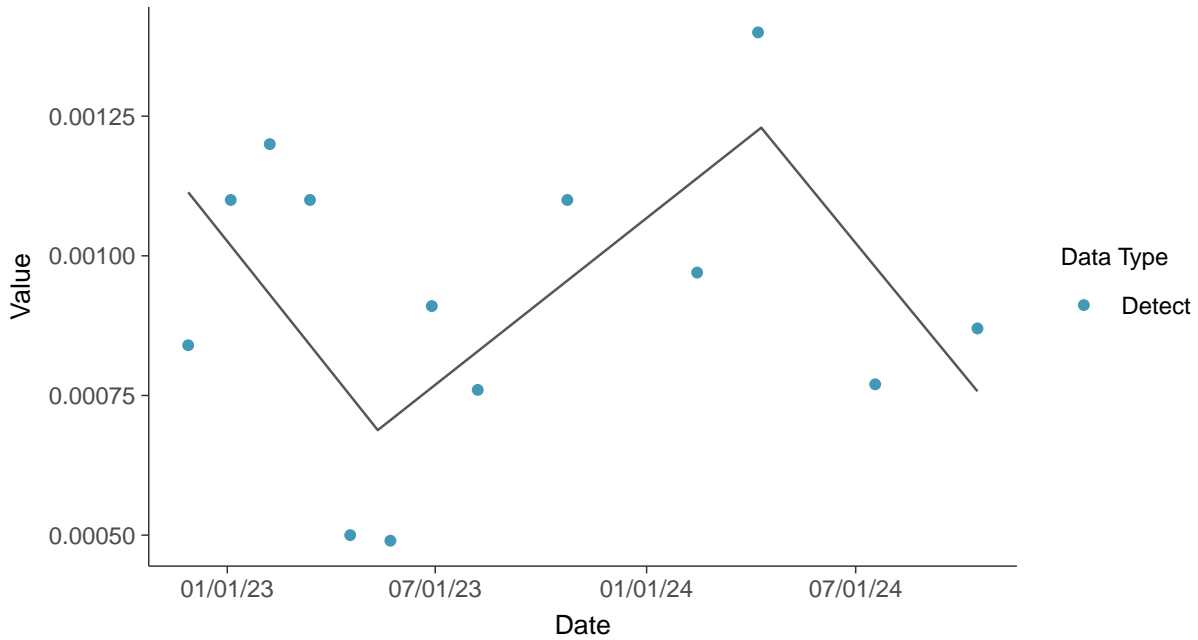
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-03 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

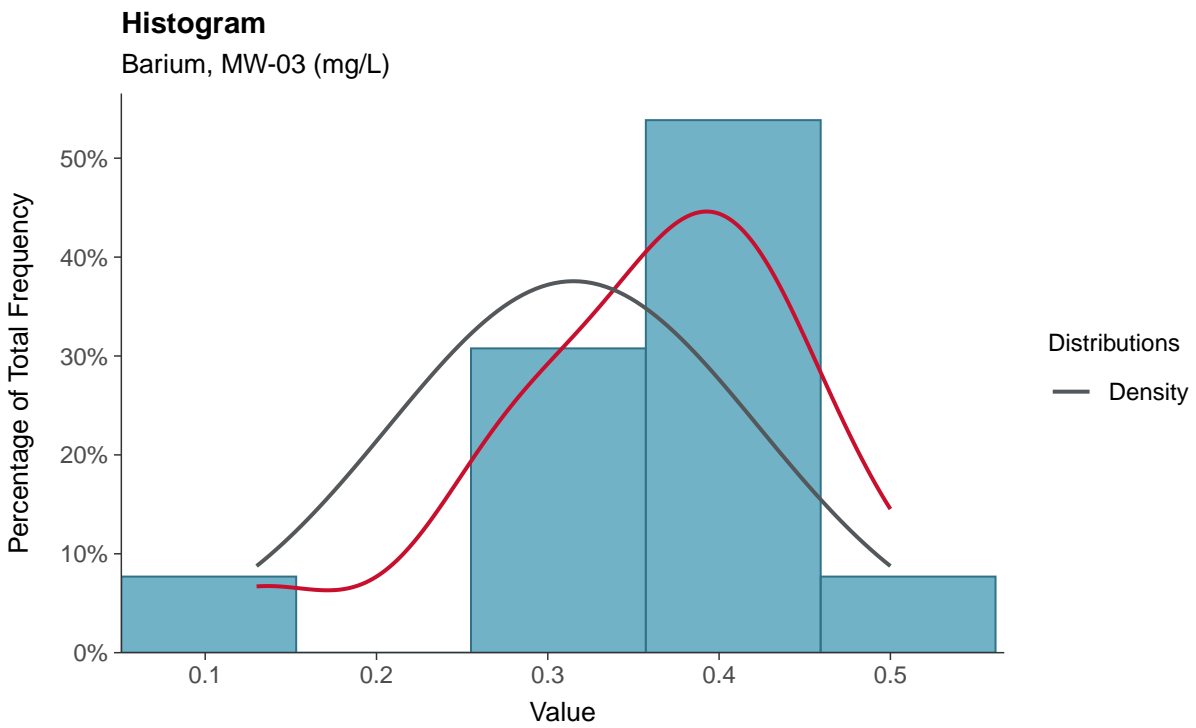
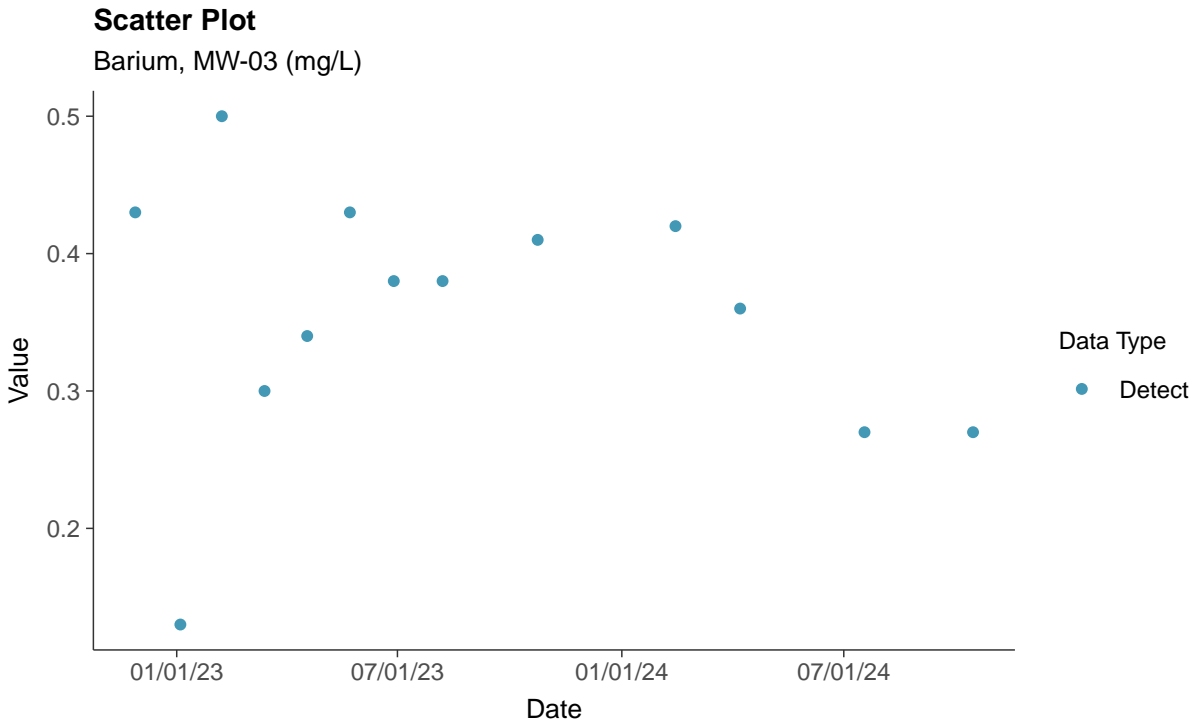
Arsenic, MW-03 (mg/L)





Appendix IV: Barium, MW-03

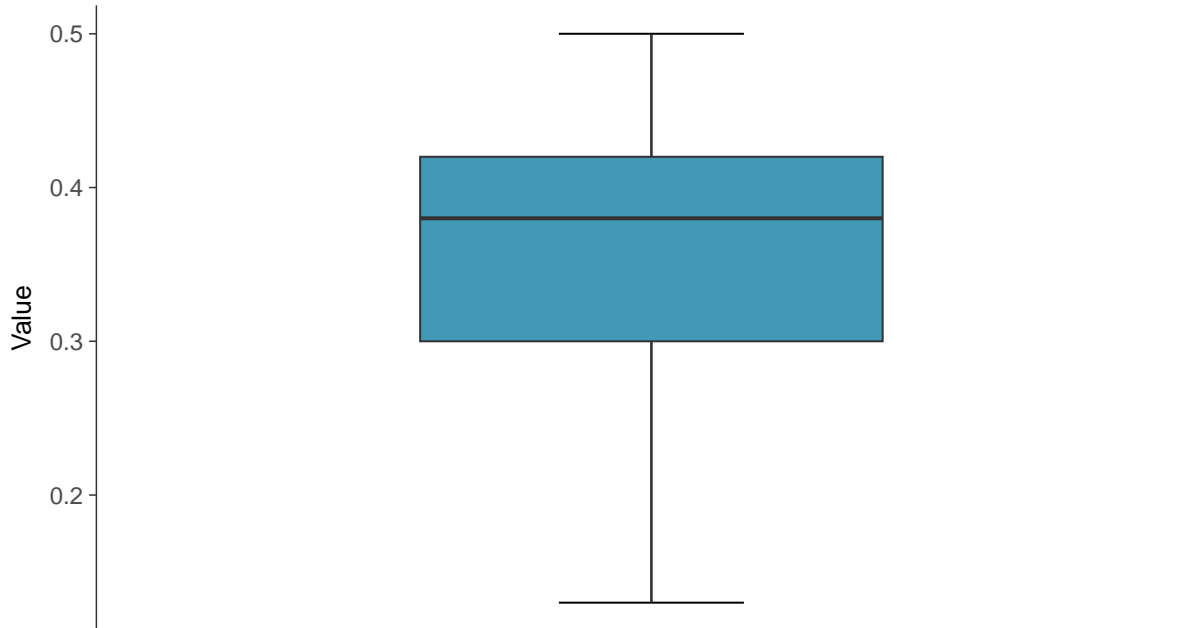
ID: 2_13_2_5_103





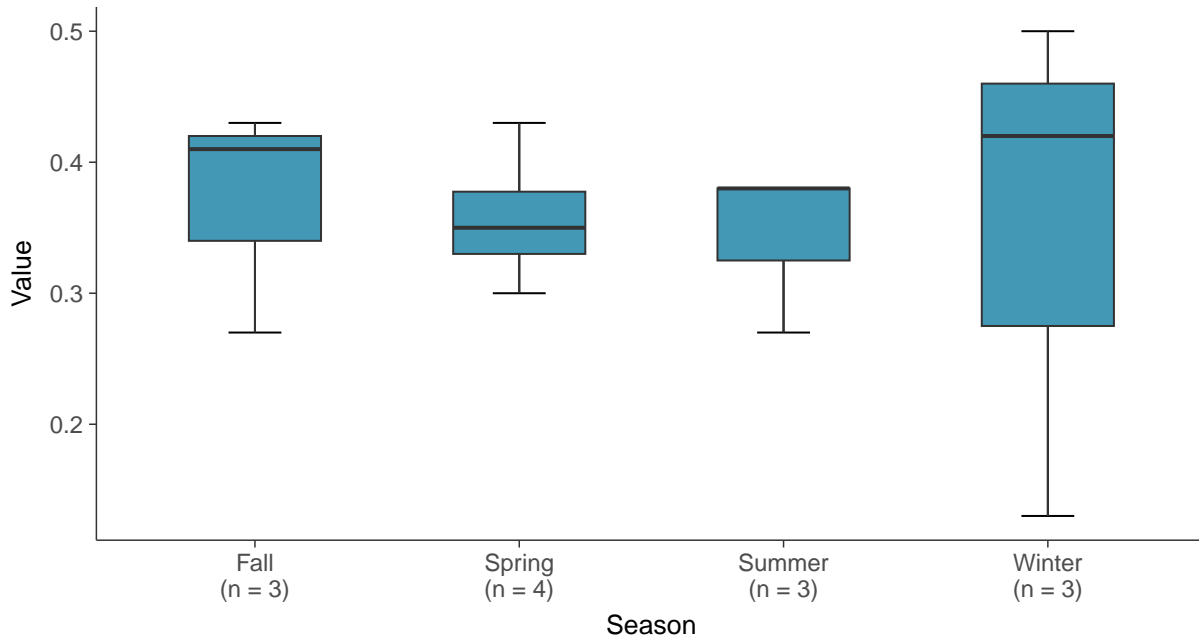
Boxplot

Barium, MW-03 (mg/L)



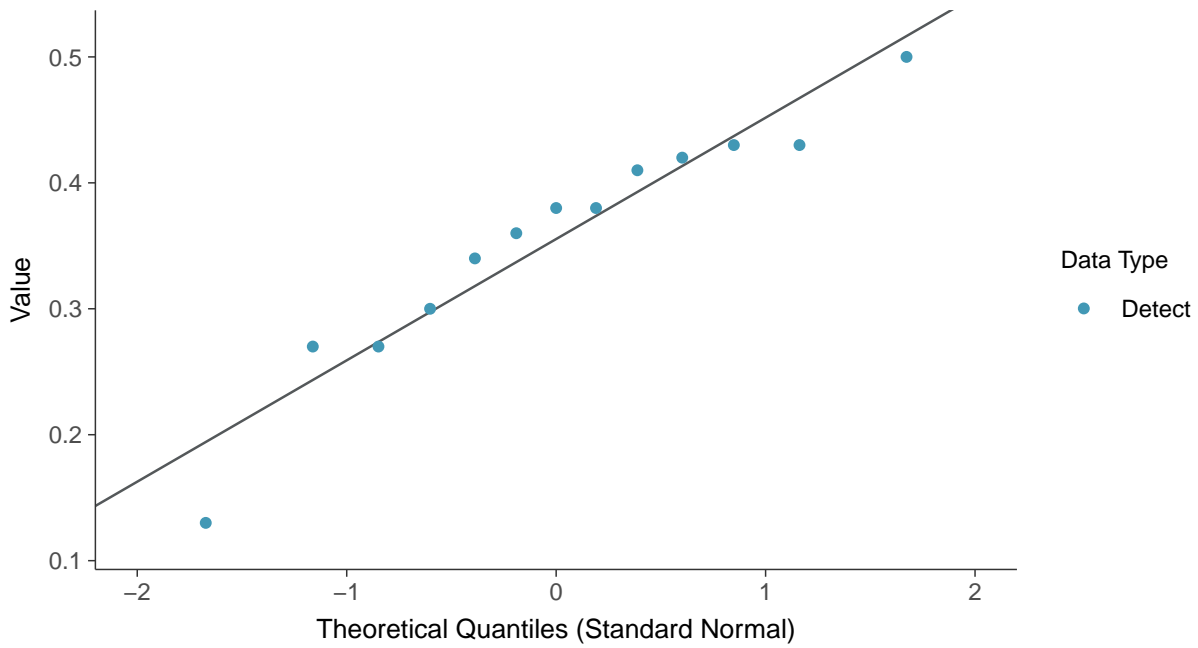
Boxplot by Season

Barium, MW-03 (mg/L)

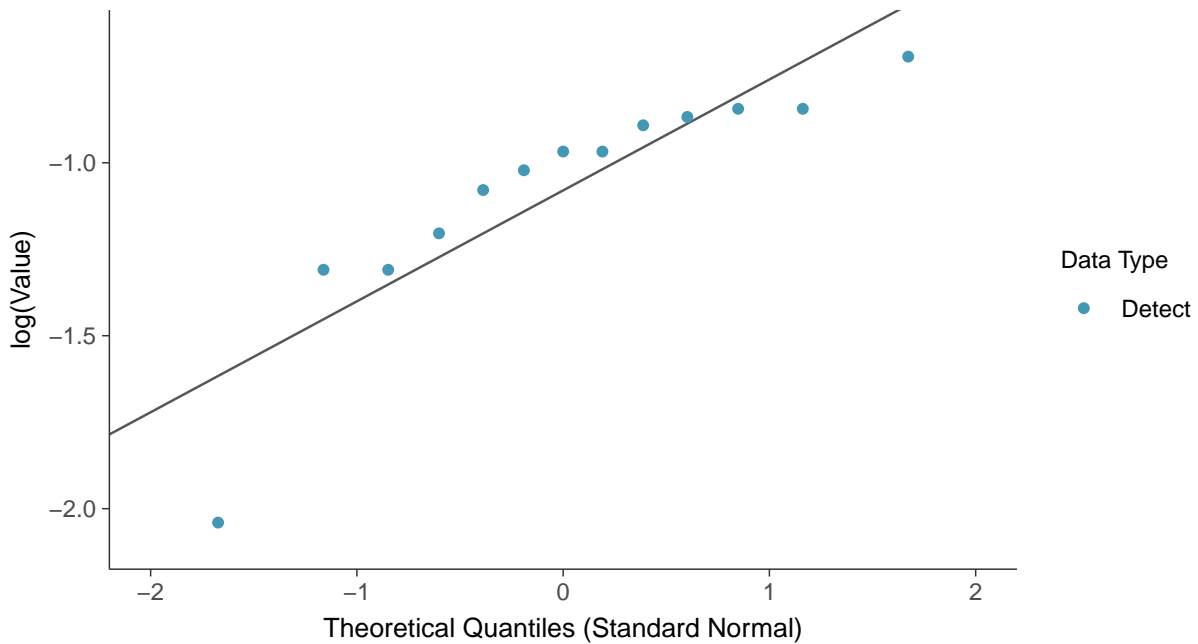




Normal Q-Q plot
Barium, MW-03 (mg/L)

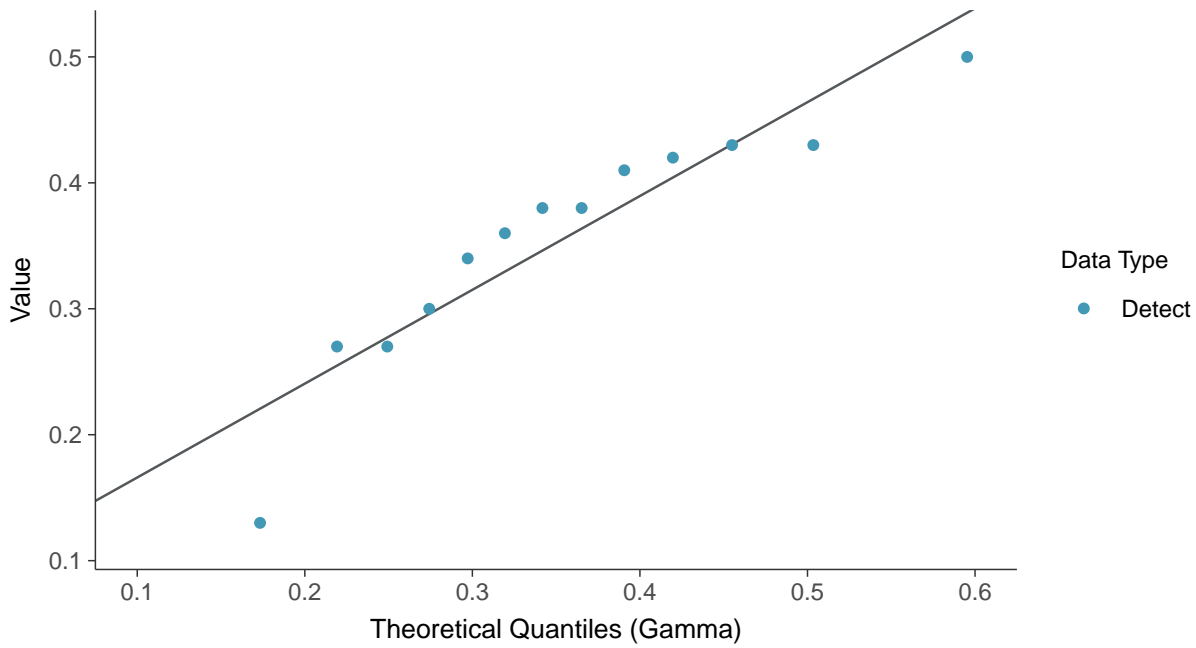


Lognormal Q-Q plot
Barium, MW-03 (mg/L)

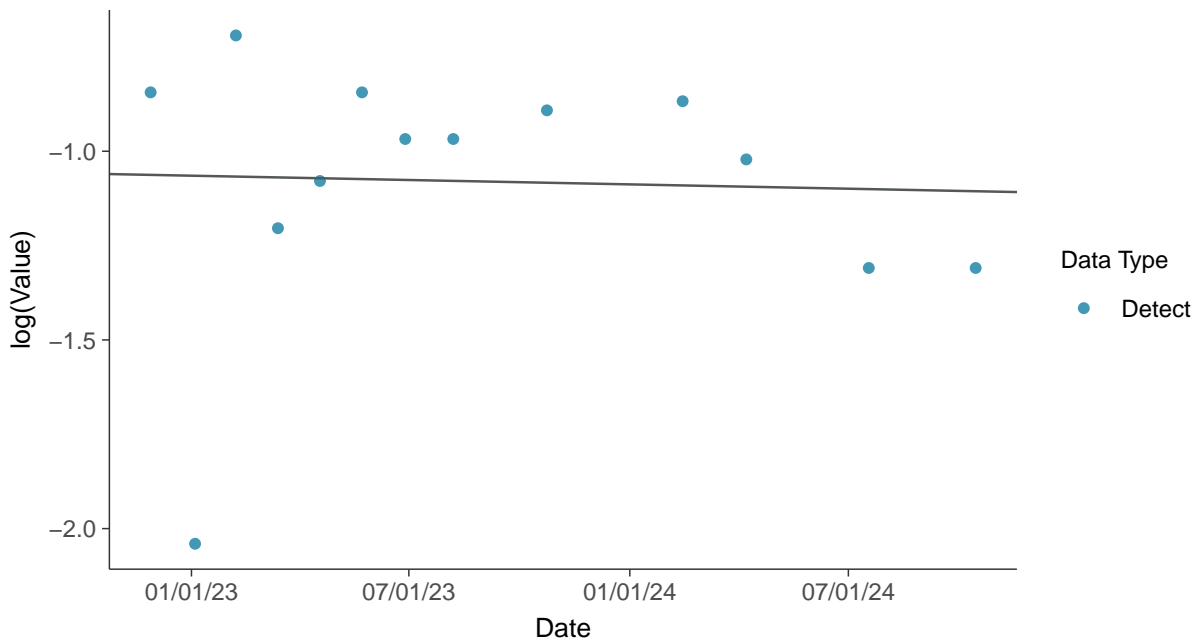




Gamma Q-Q plot
Barium, MW-03 (mg/L)

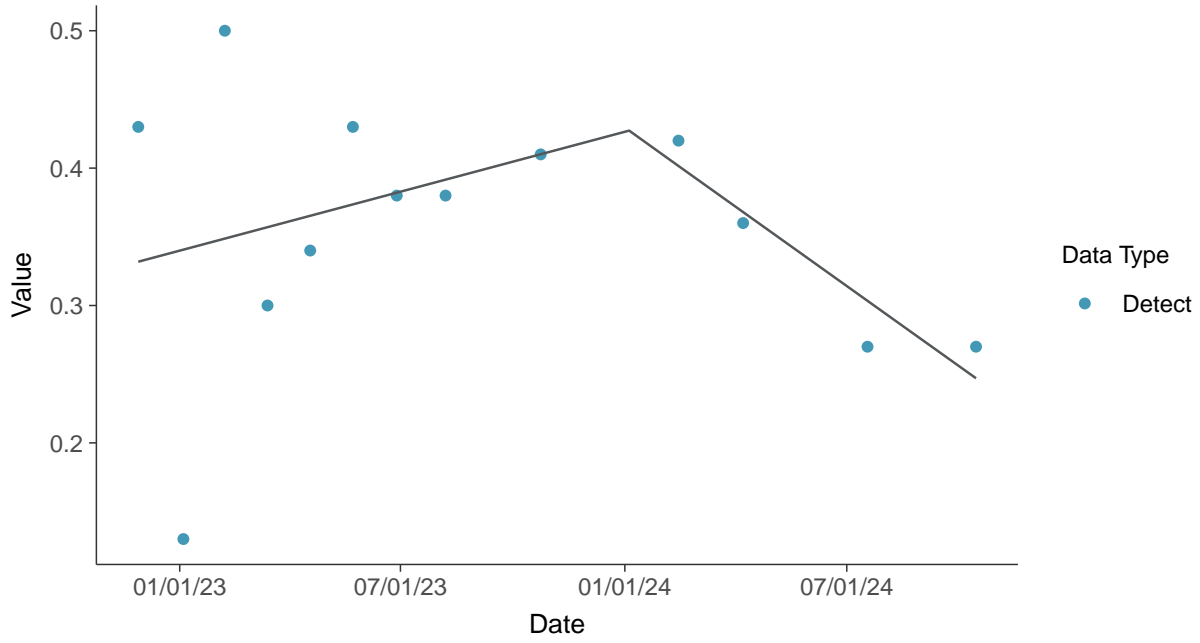


Trend Regression: Lognormal MLE
Barium, MW-03 (mg/L)





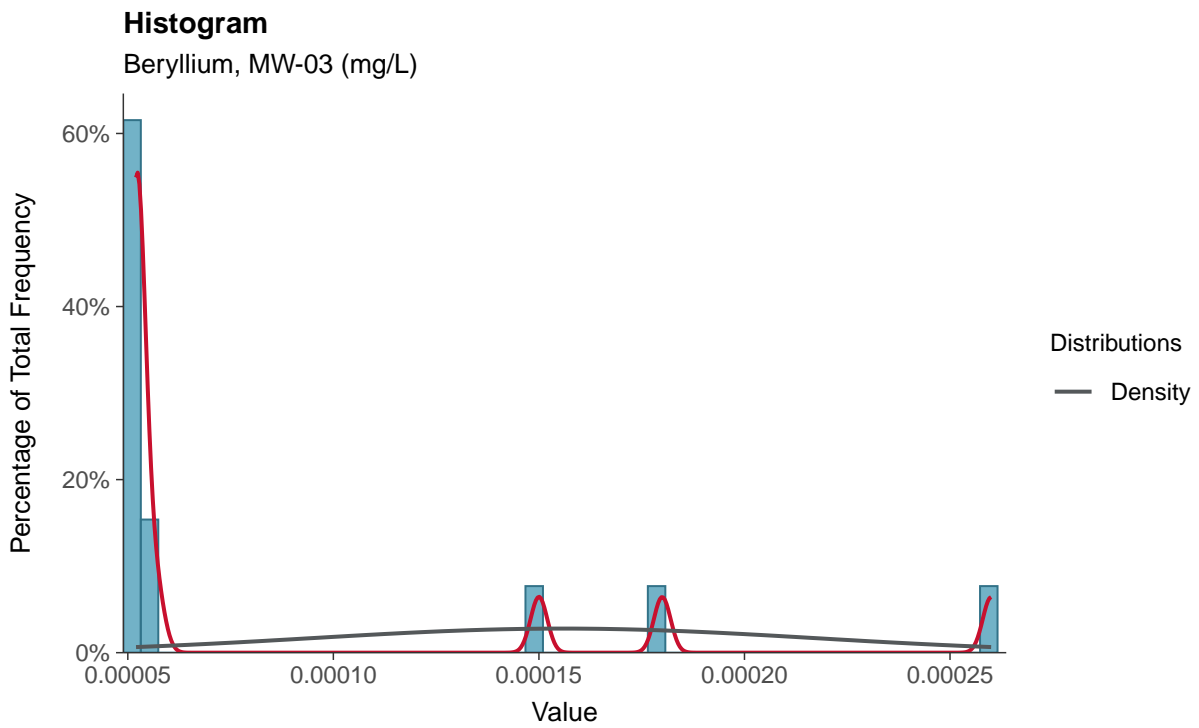
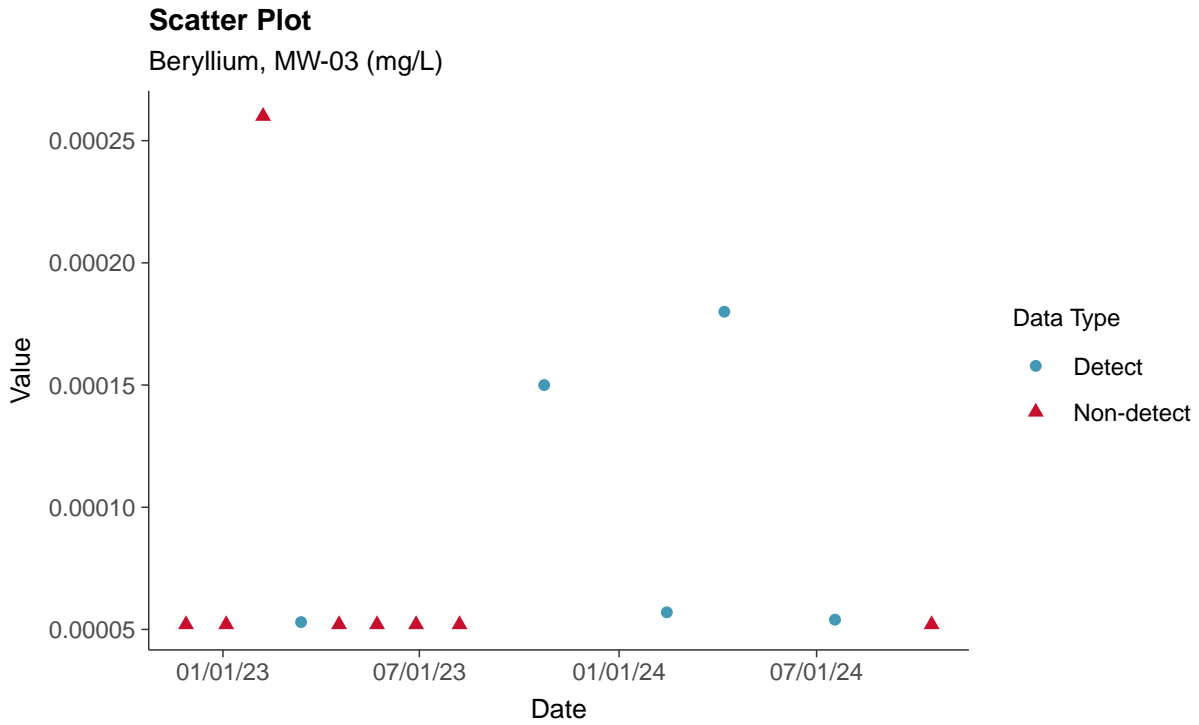
Trend Regression: Piecewise Linear-Linear
Barium, MW-03 (mg/L)





Appendix IV: Beryllium, MW-03

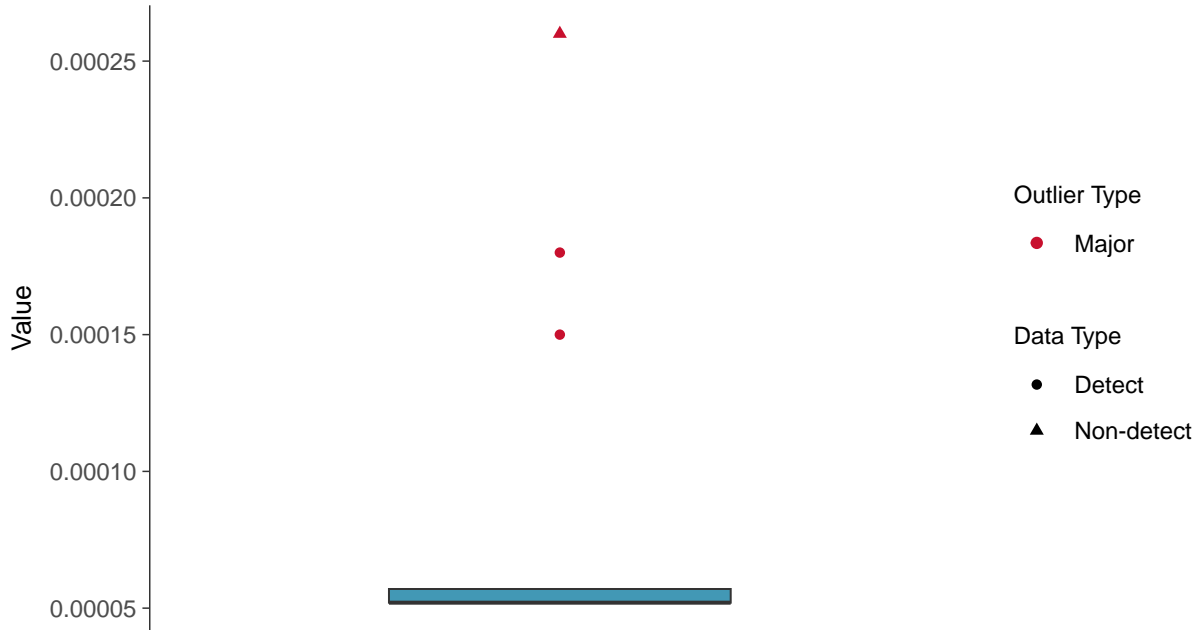
ID: 2_13_2_5_104





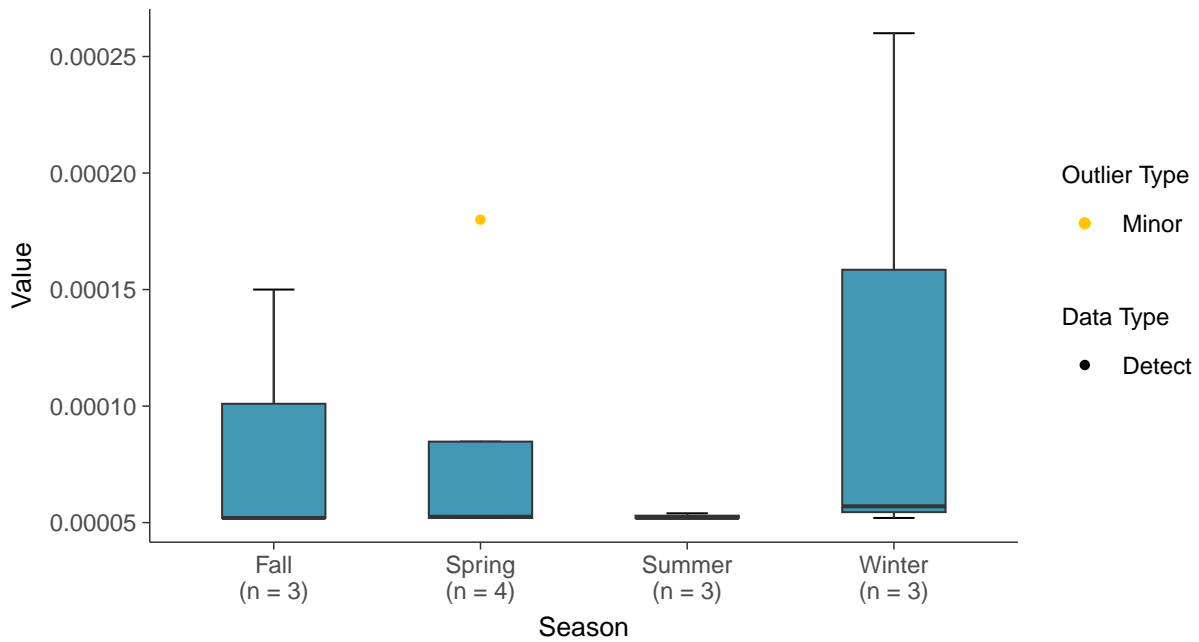
Boxplot

Beryllium, MW-03 (mg/L)



Boxplot by Season

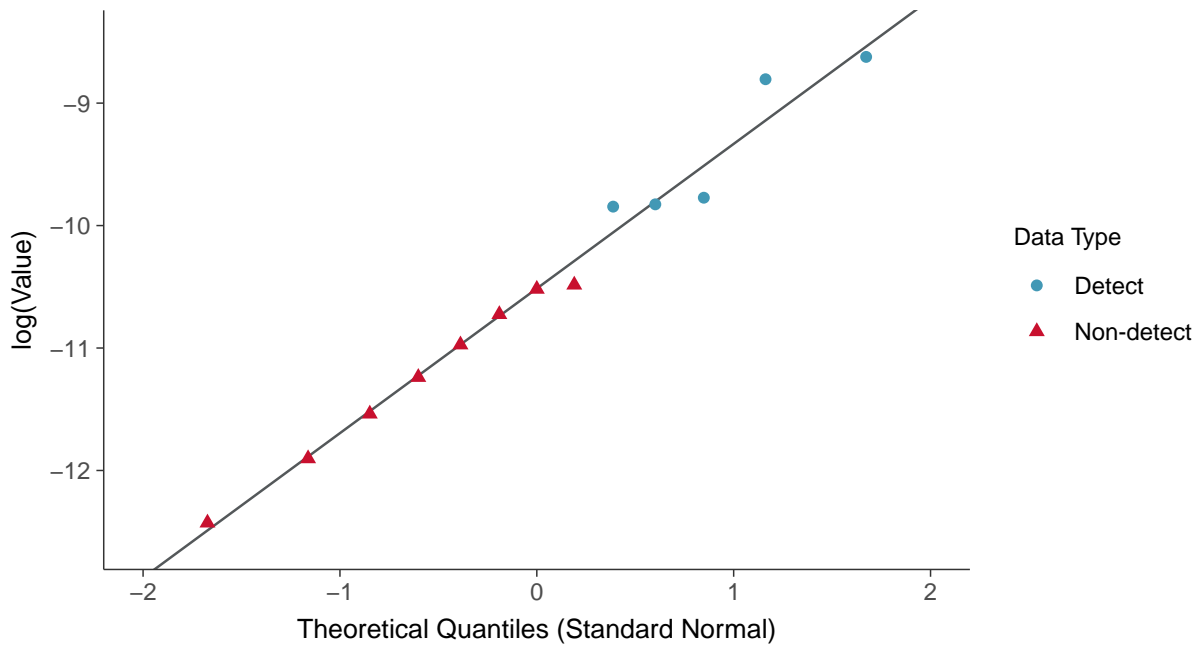
Beryllium, MW-03 (mg/L)





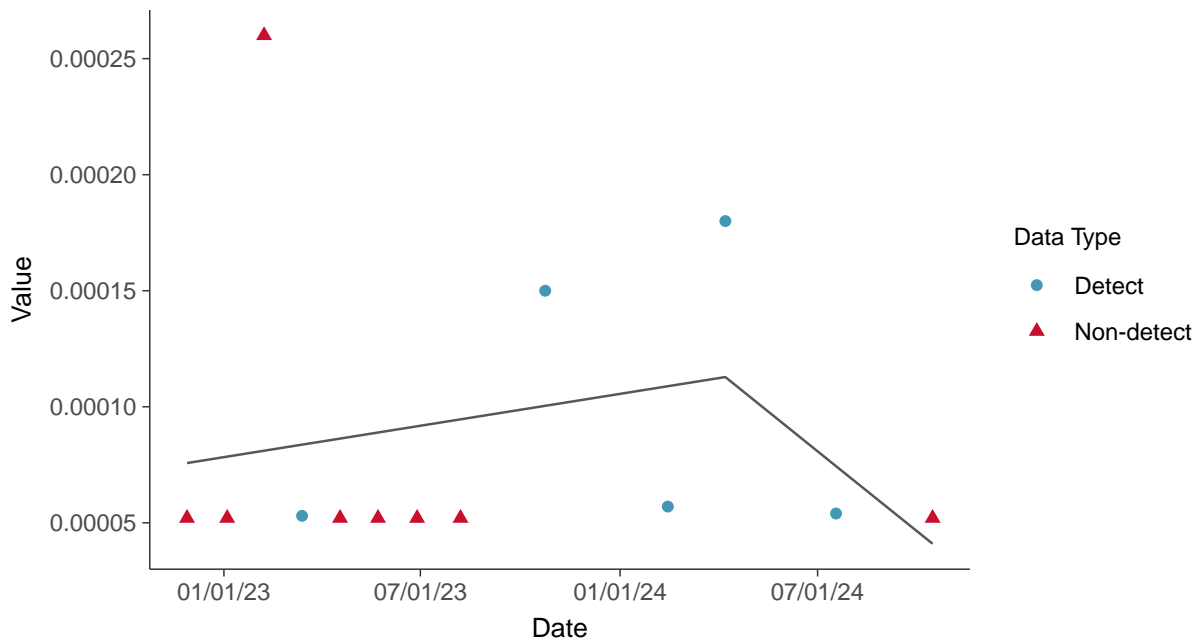
Lognormal Q-Q plot using ROS Imputed Estimates

Beryllium, MW-03 (mg/L)



Trend Regression: Piecewise Linear-Linear

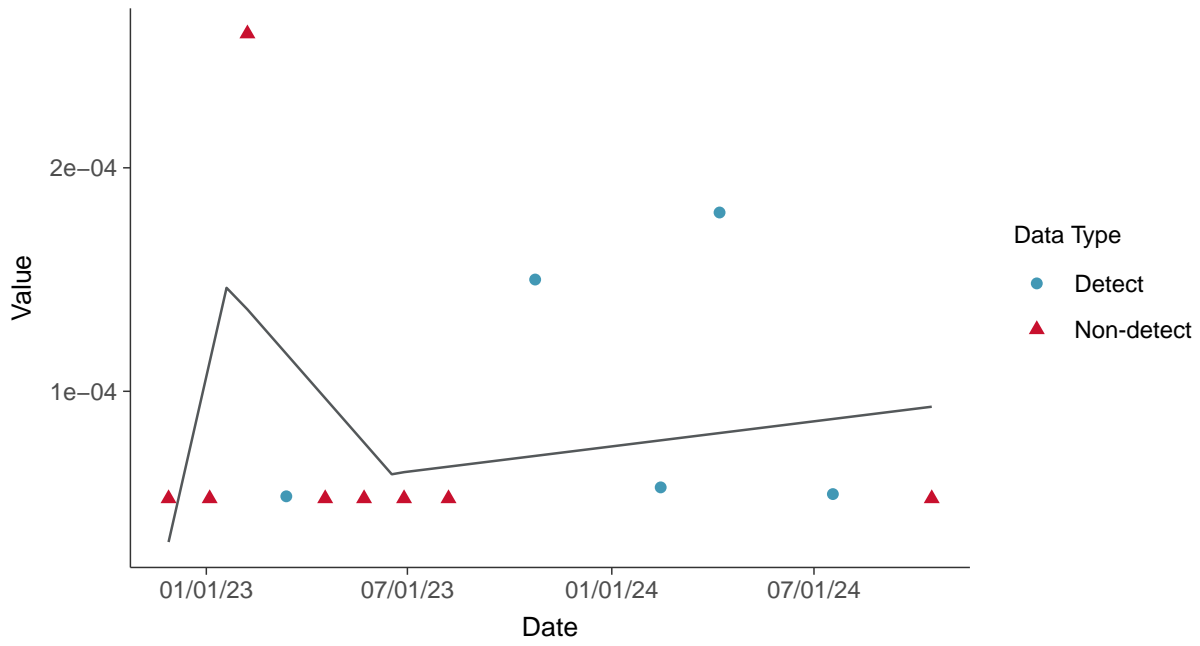
Beryllium, MW-03 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

Beryllium, MW-03 (mg/L)



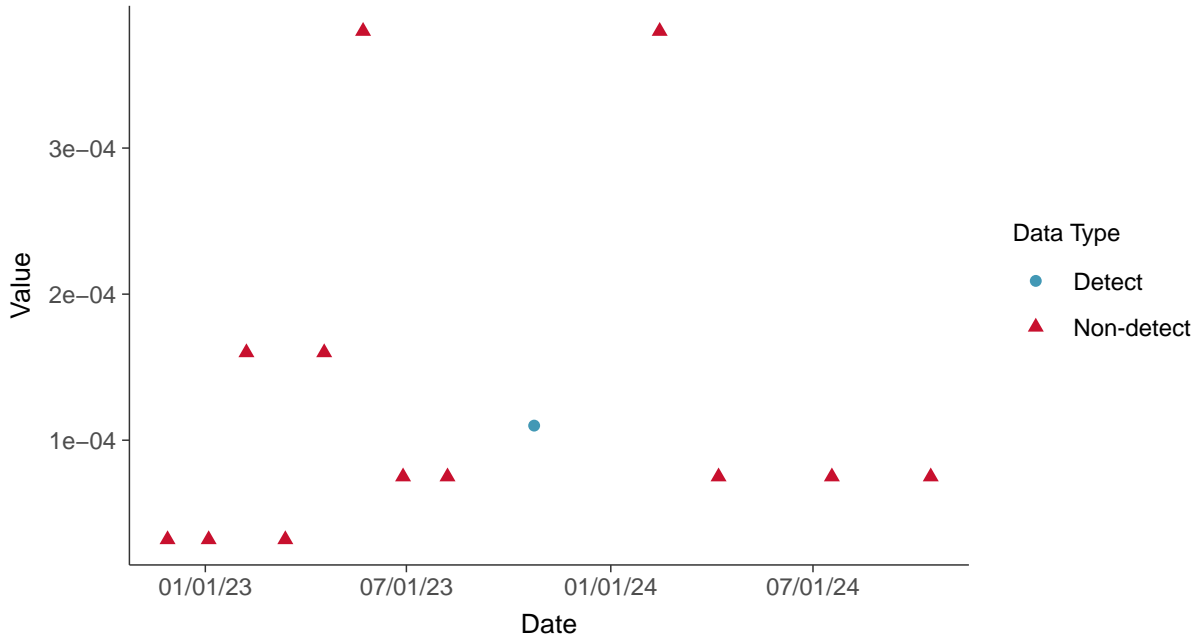


Appendix IV: Cadmium, MW-03

ID: 2_13_2_5_106

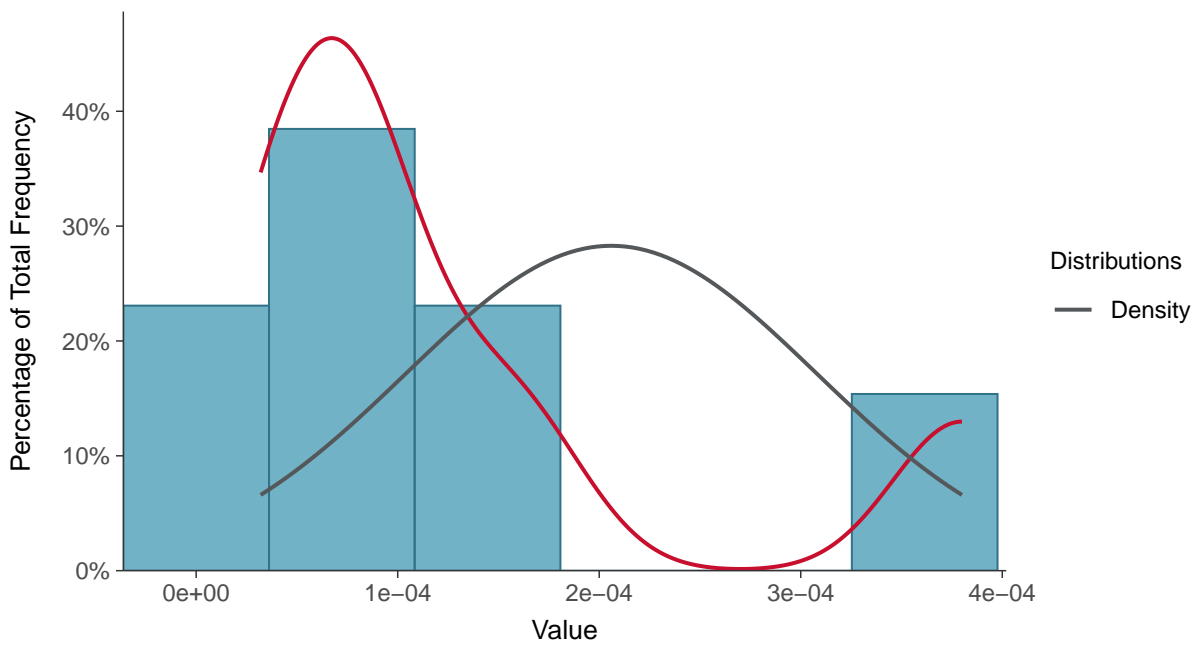
Scatter Plot

Cadmium, MW-03 (mg/L)



Histogram

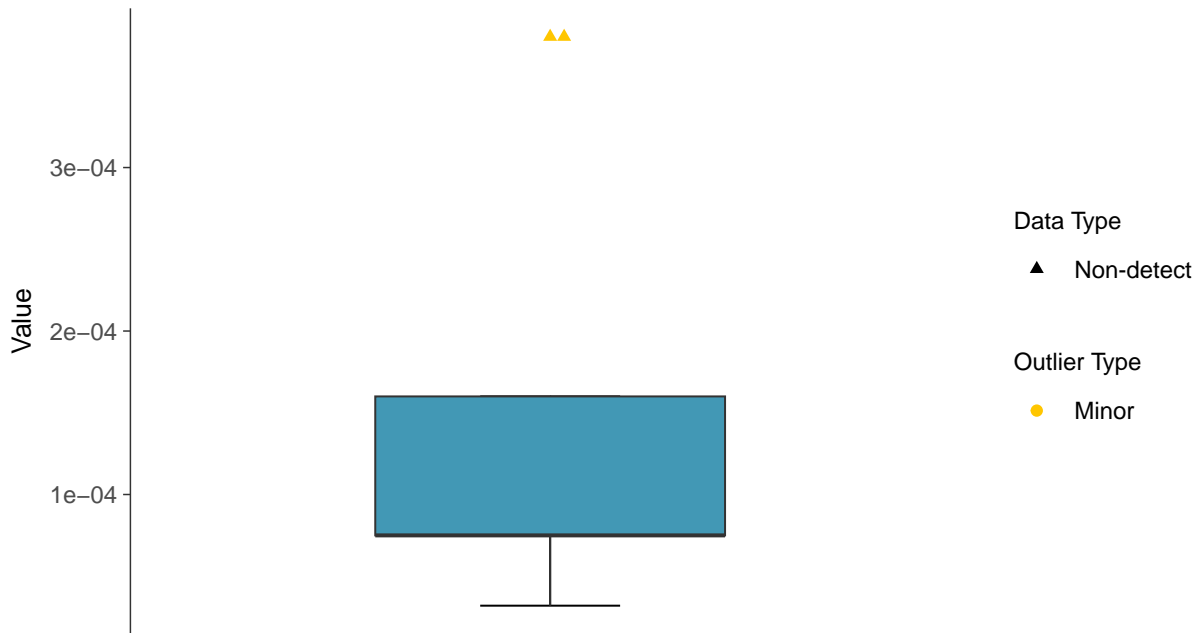
Cadmium, MW-03 (mg/L)





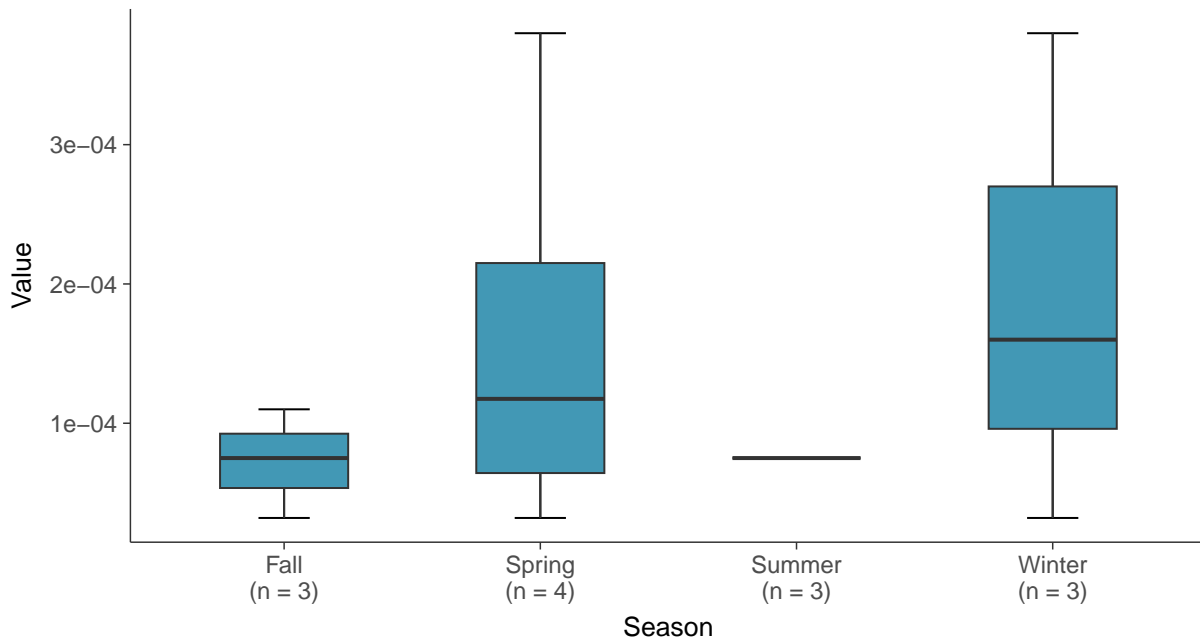
Boxplot

Cadmium, MW-03 (mg/L)



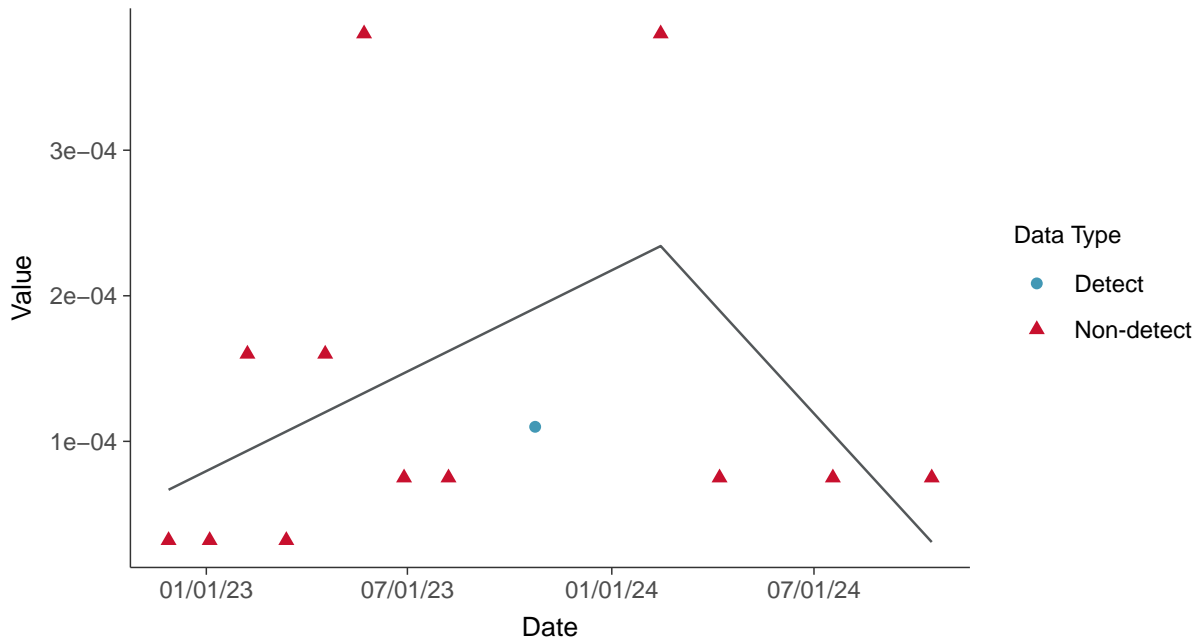
Boxplot by Season

Cadmium, MW-03 (mg/L)

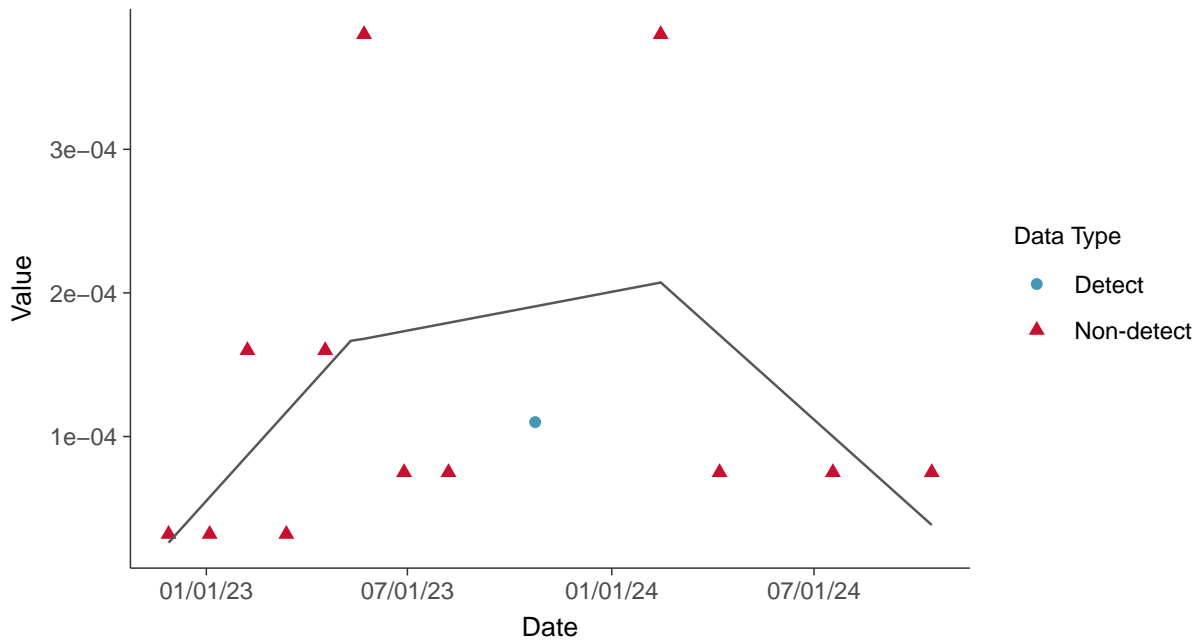




Trend Regression: Piecewise Linear-Linear
Cadmium, MW-03 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Cadmium, MW-03 (mg/L)



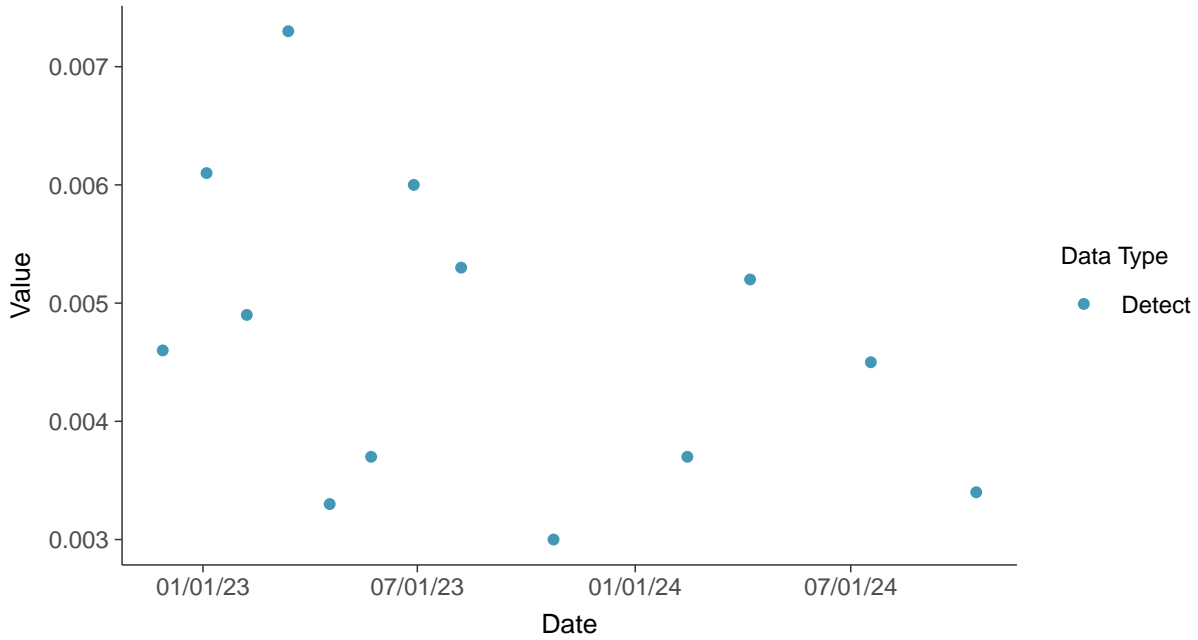


Appendix IV: Chromium, Total, MW-03

ID: 2_13_2_5_109

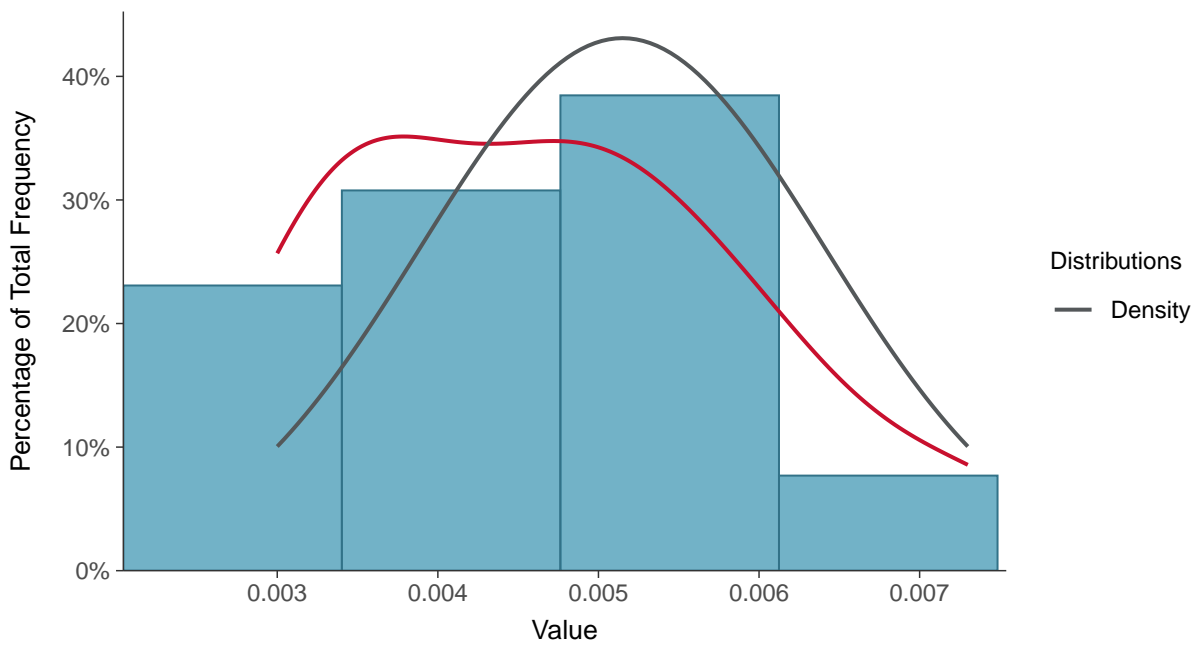
Scatter Plot

Chromium, Total, MW-03 (mg/L)



Histogram

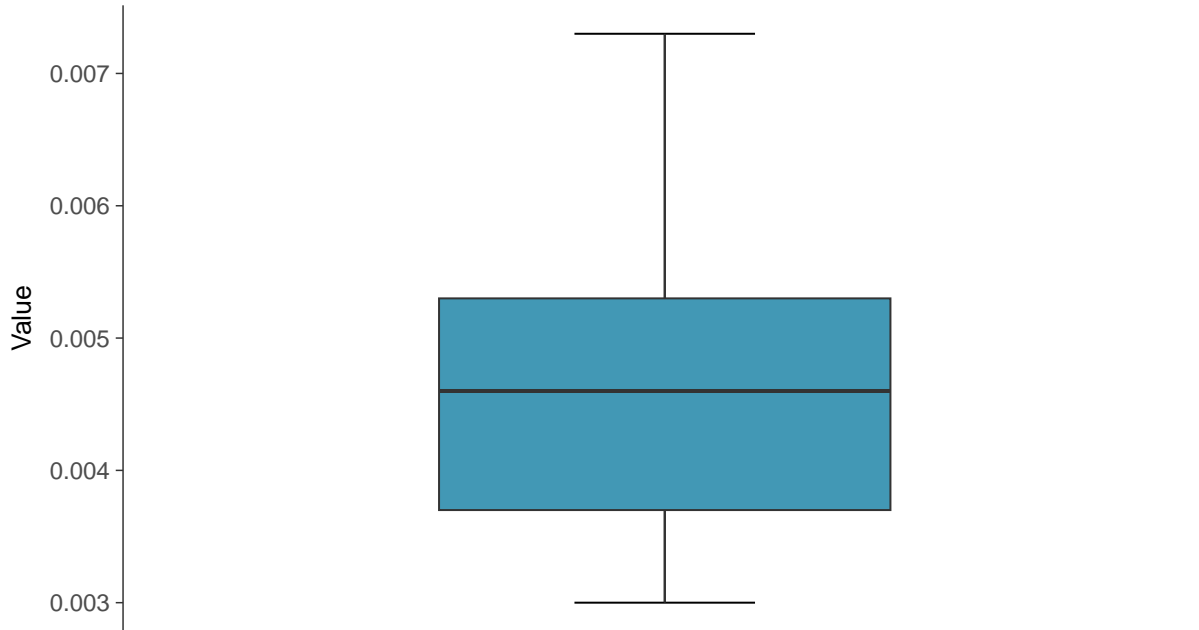
Chromium, Total, MW-03 (mg/L)





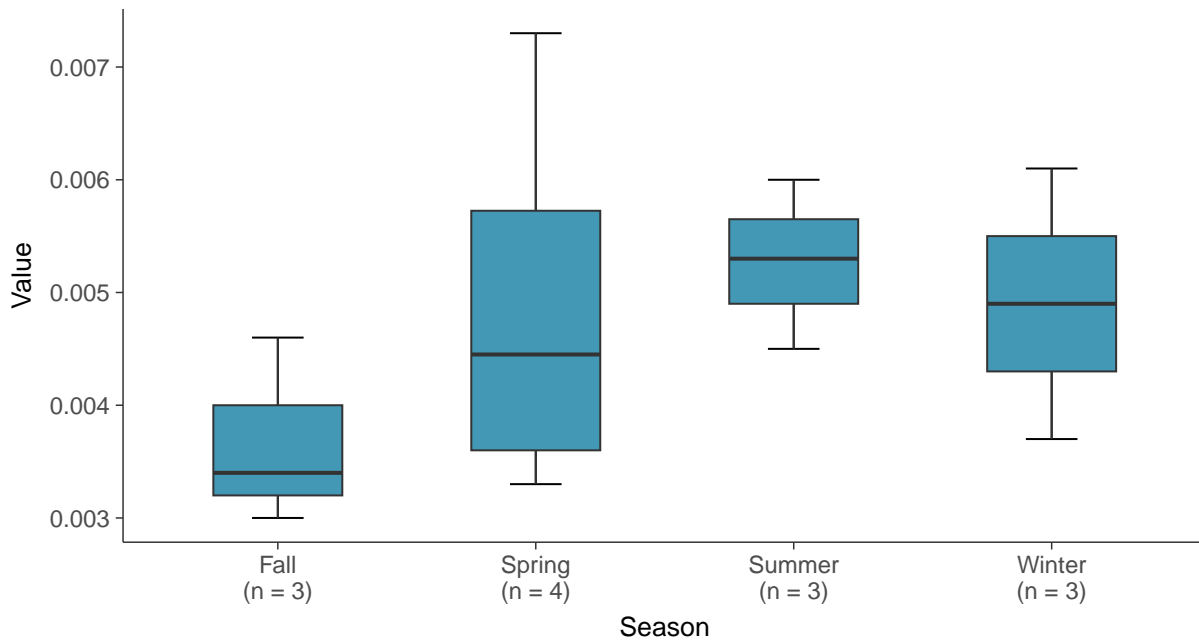
Boxplot

Chromium, Total, MW-03 (mg/L)



Boxplot by Season

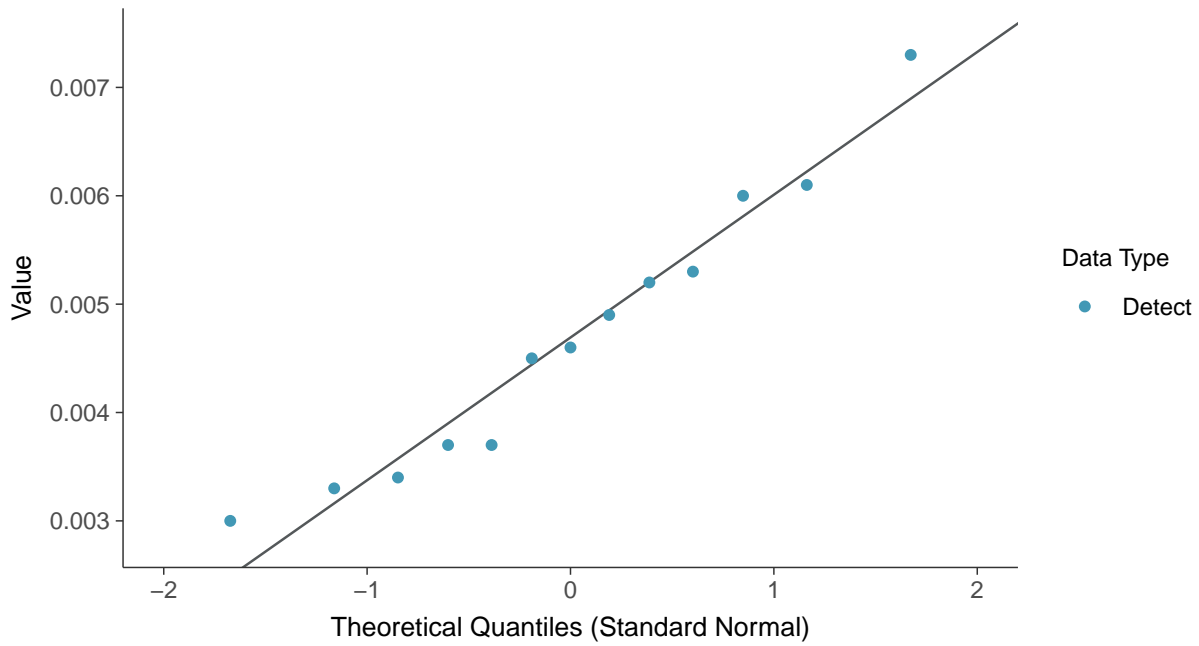
Chromium, Total, MW-03 (mg/L)





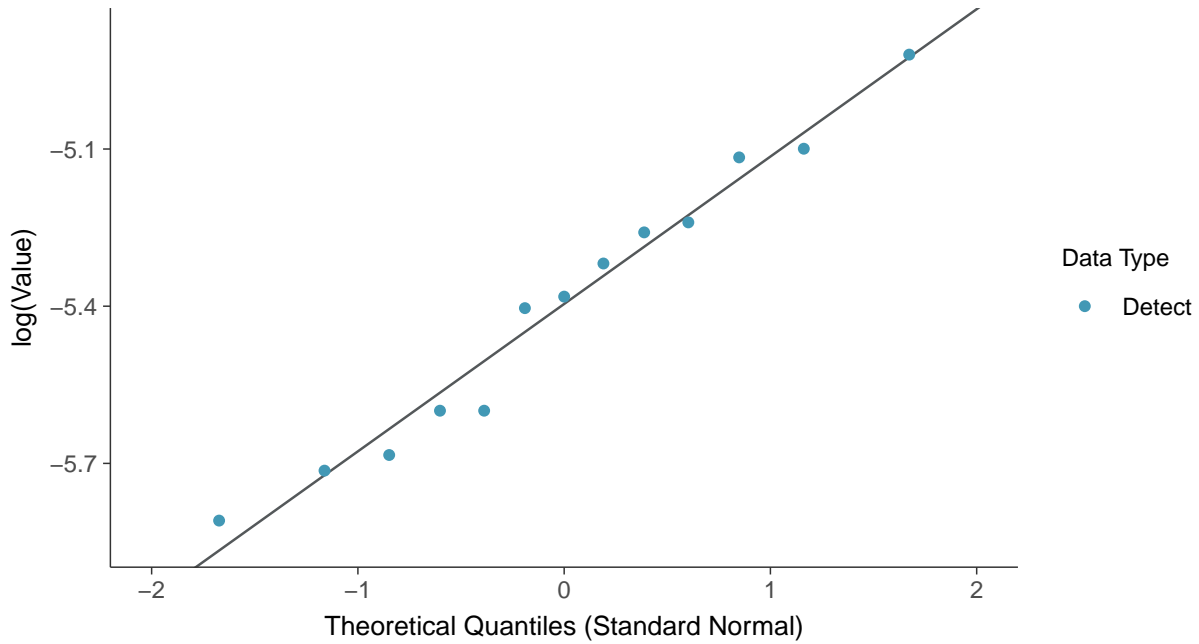
Normal Q-Q plot

Chromium, Total, MW-03 (mg/L)



Lognormal Q-Q plot

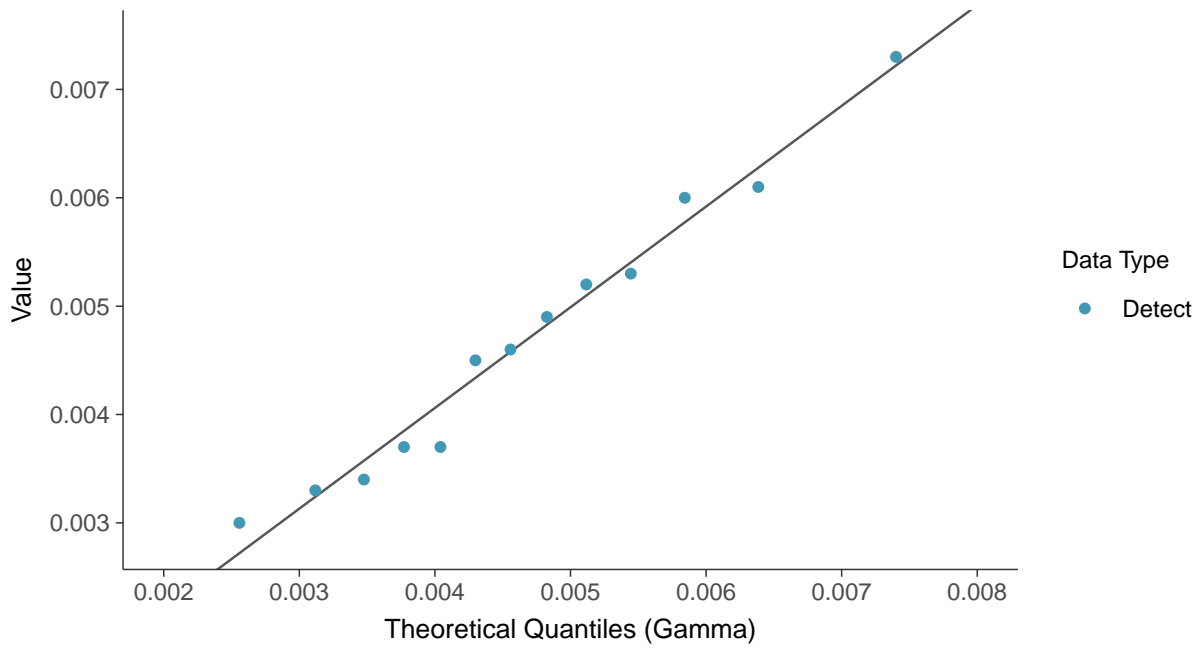
Chromium, Total, MW-03 (mg/L)





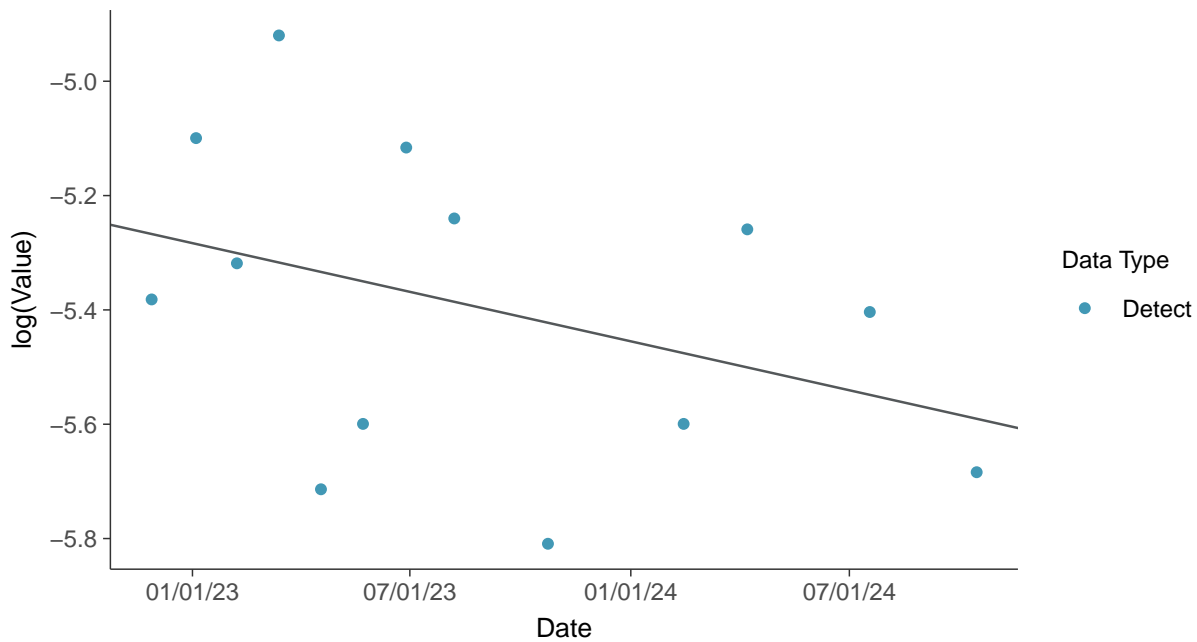
Gamma Q-Q plot

Chromium, Total, MW-03 (mg/L)



Trend Regression: Lognormal MLE

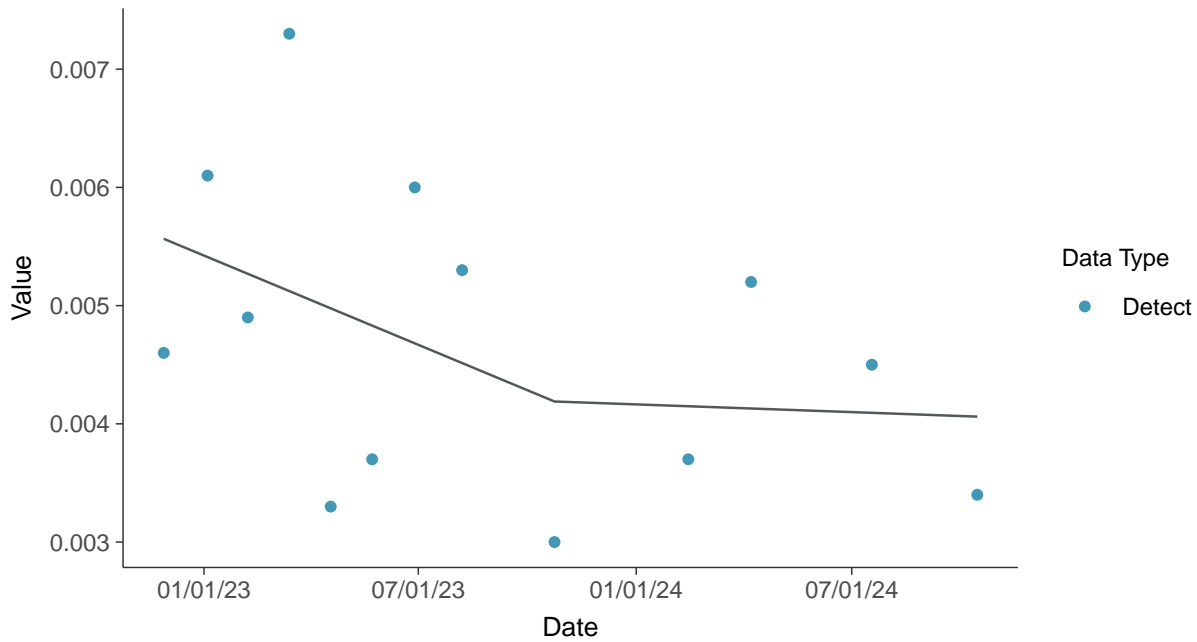
Chromium, Total, MW-03 (mg/L)





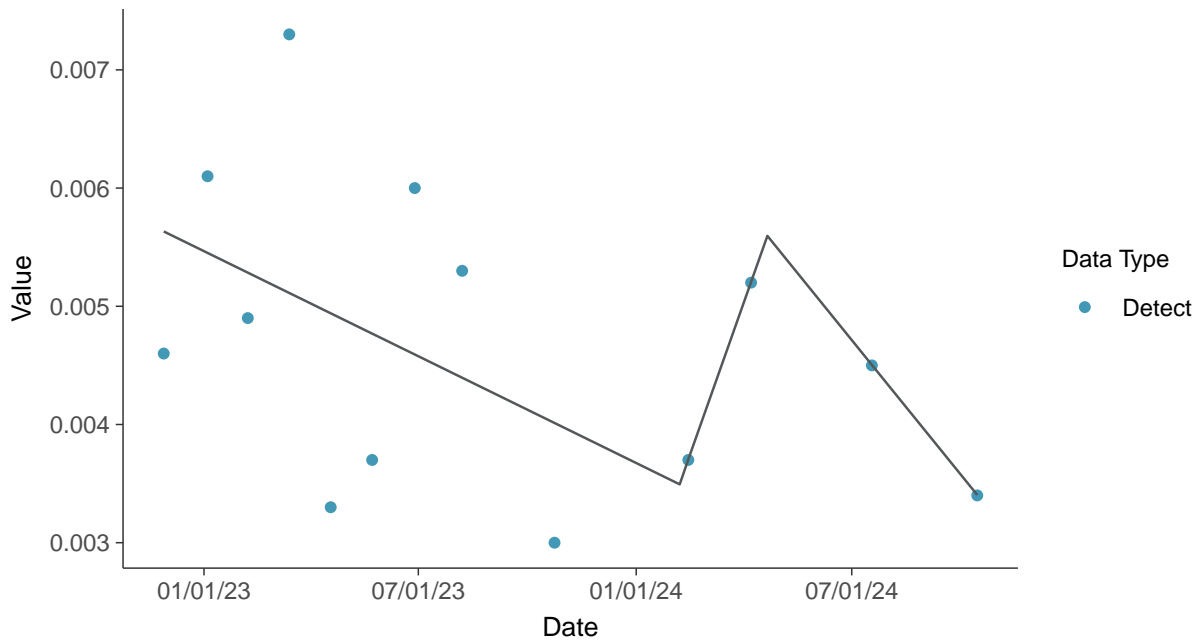
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-03 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Chromium, Total, MW-03 (mg/L)



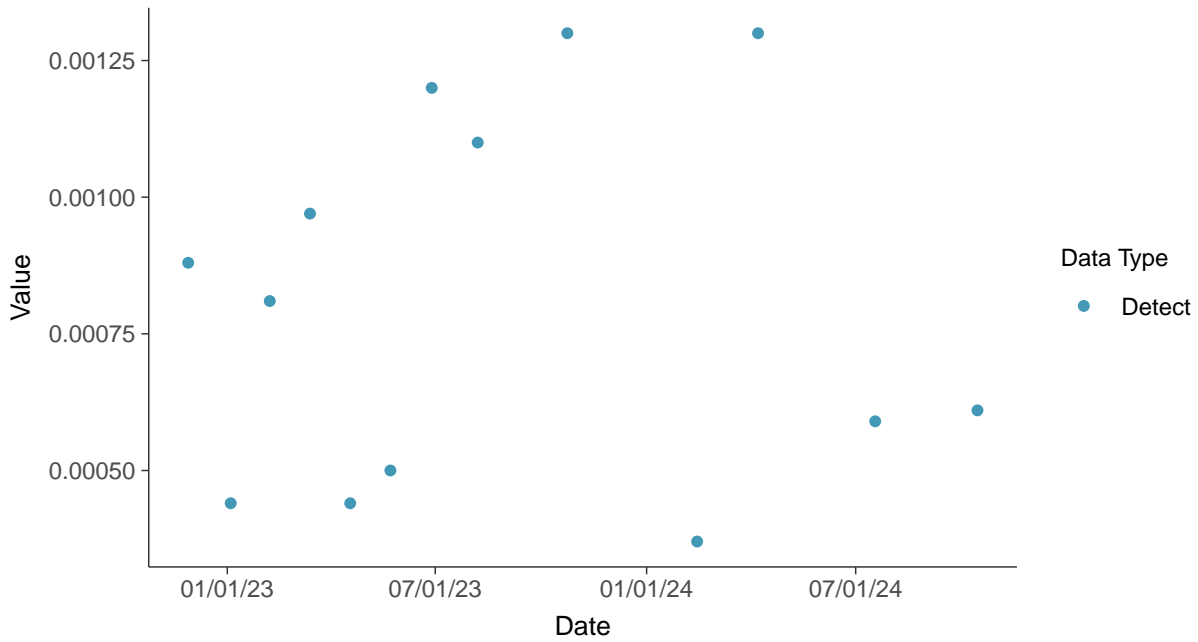


Appendix IV: Cobalt, MW-03

ID: 2_13_2_5_110

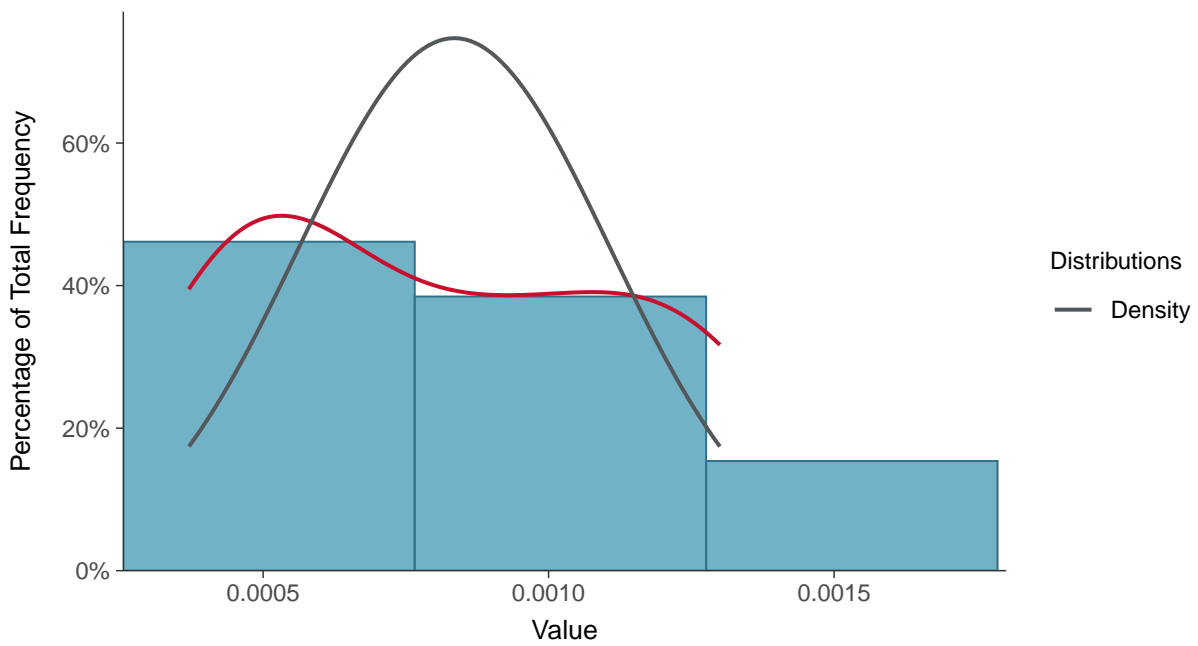
Scatter Plot

Cobalt, MW-03 (mg/L)



Histogram

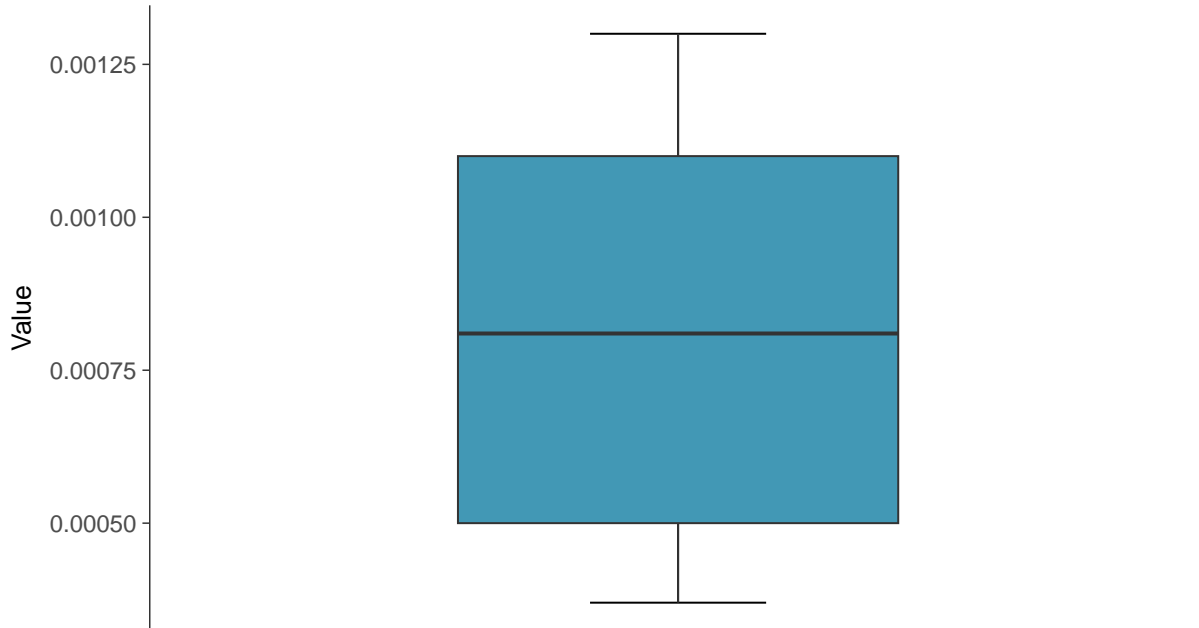
Cobalt, MW-03 (mg/L)





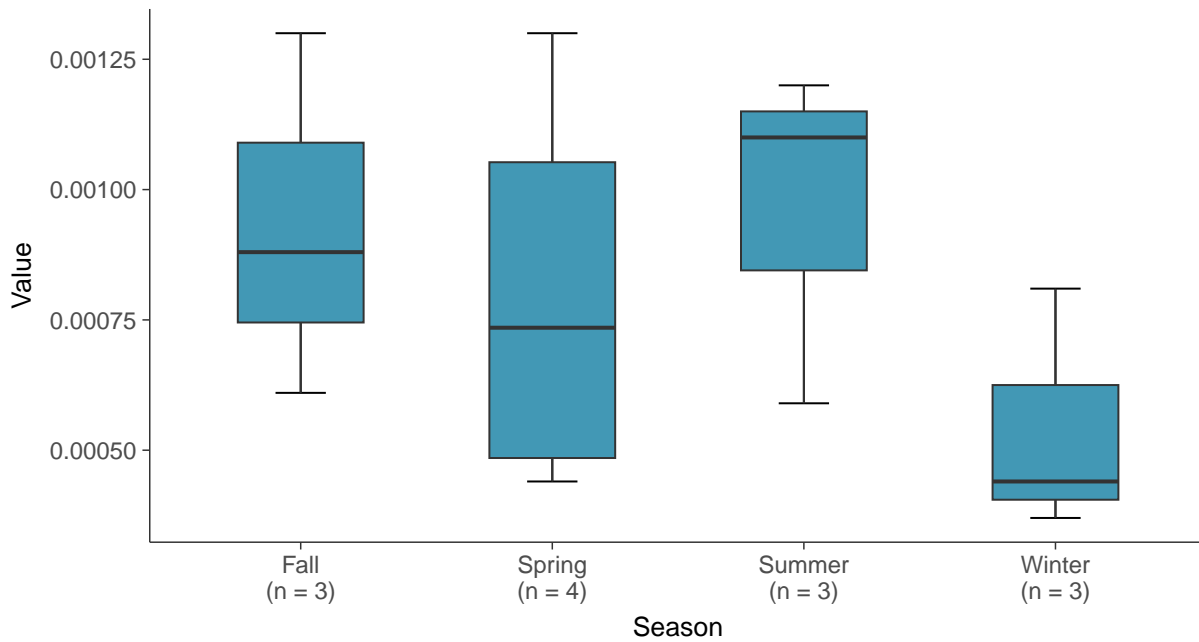
Boxplot

Cobalt, MW-03 (mg/L)



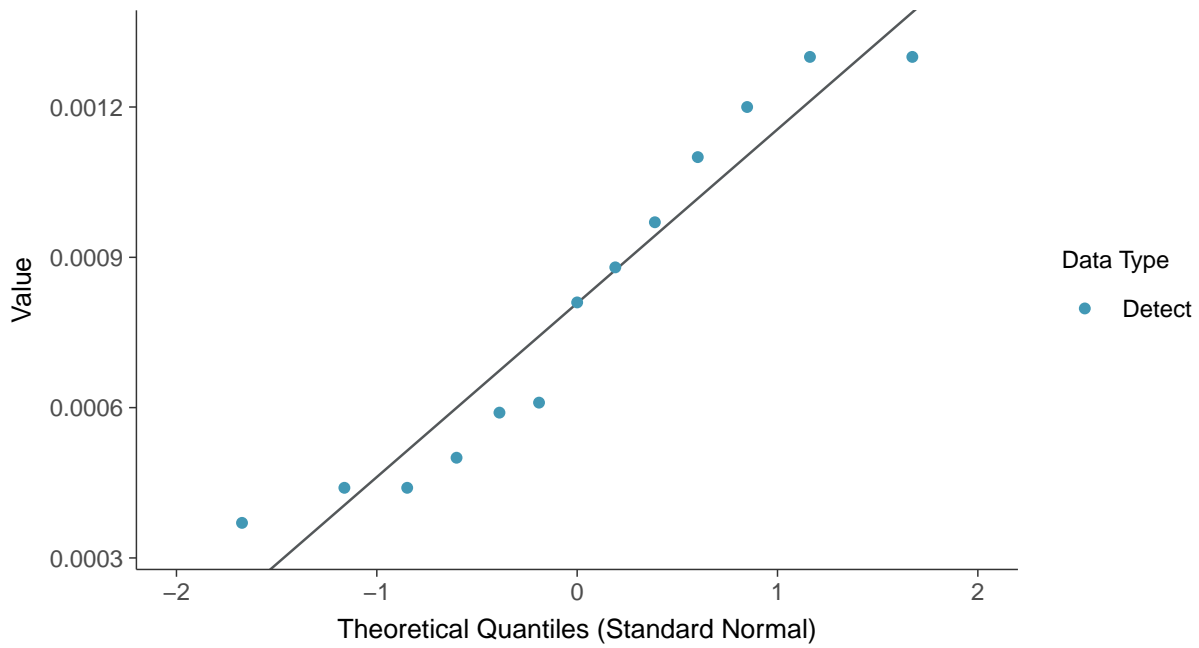
Boxplot by Season

Cobalt, MW-03 (mg/L)

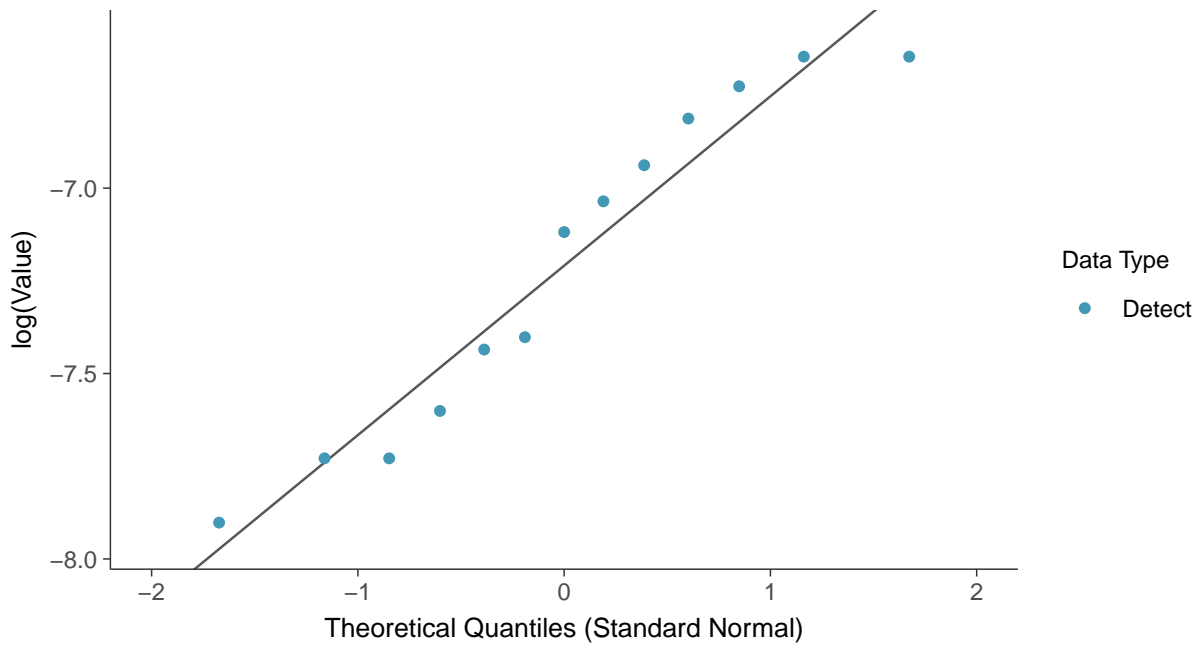




Normal Q-Q plot
Cobalt, MW-03 (mg/L)

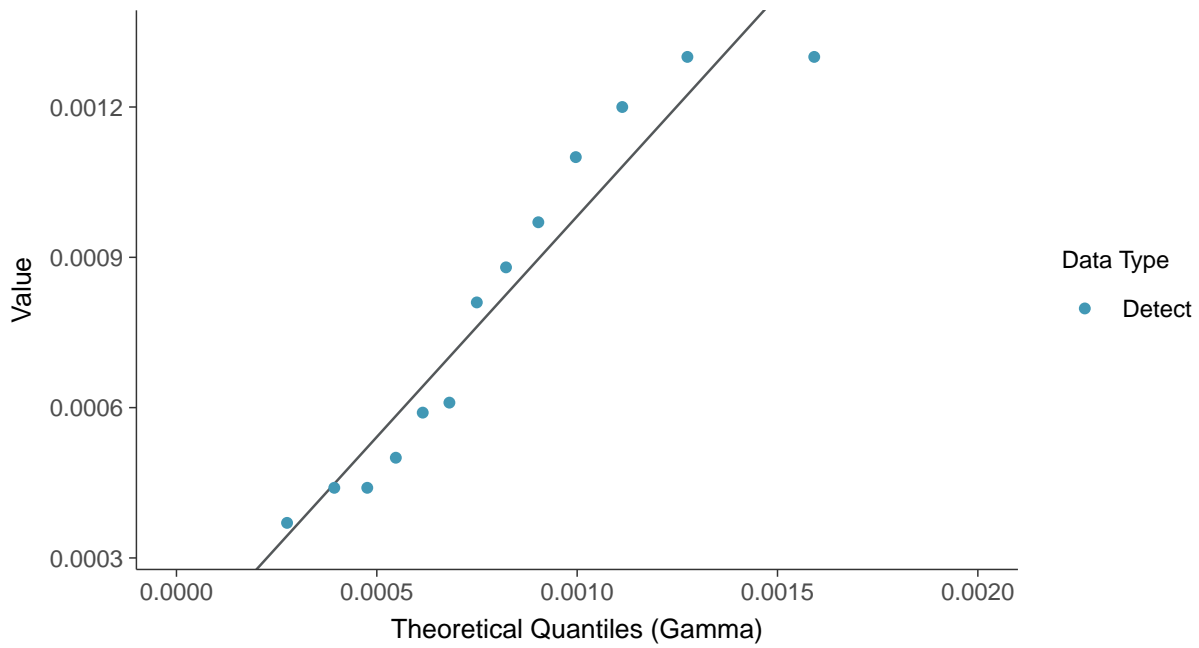


Lognormal Q-Q plot
Cobalt, MW-03 (mg/L)

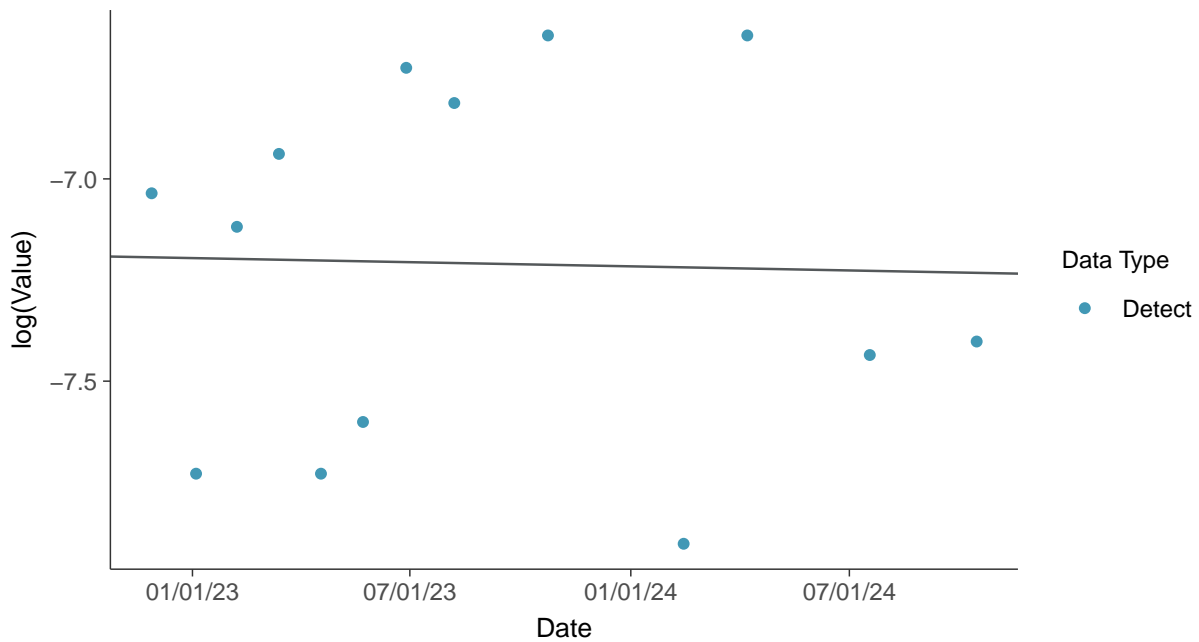




Gamma Q-Q plot
Cobalt, MW-03 (mg/L)



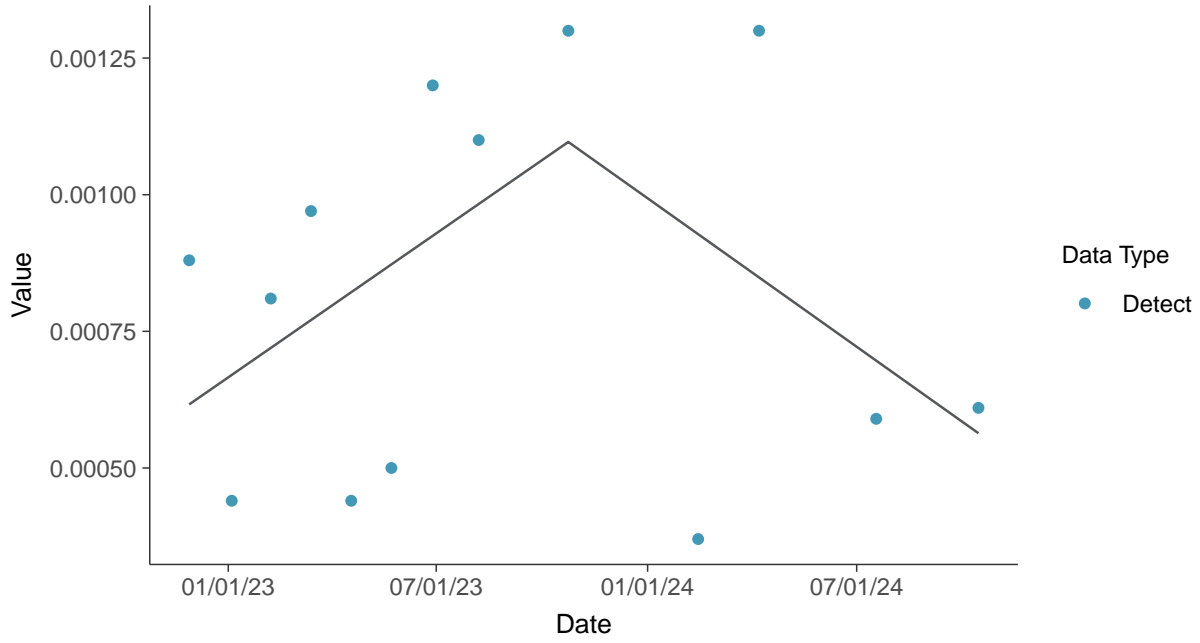
Trend Regression: Lognormal MLE
Cobalt, MW-03 (mg/L)





Trend Regression: Piecewise Linear-Linear

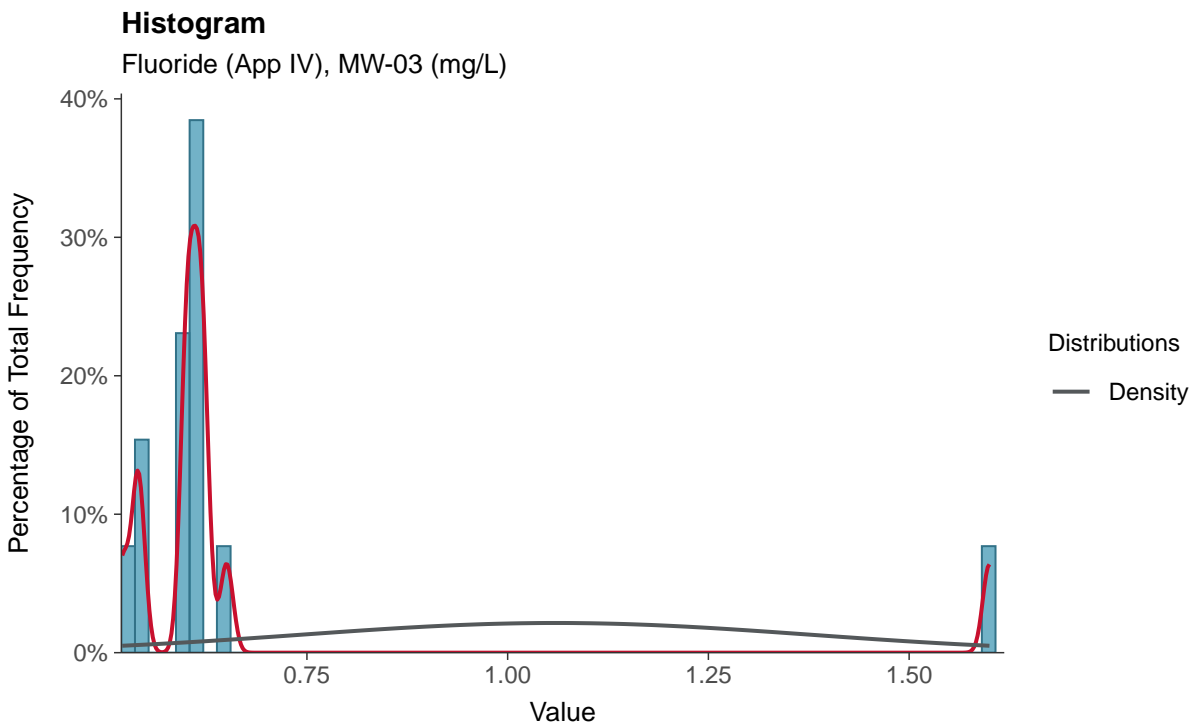
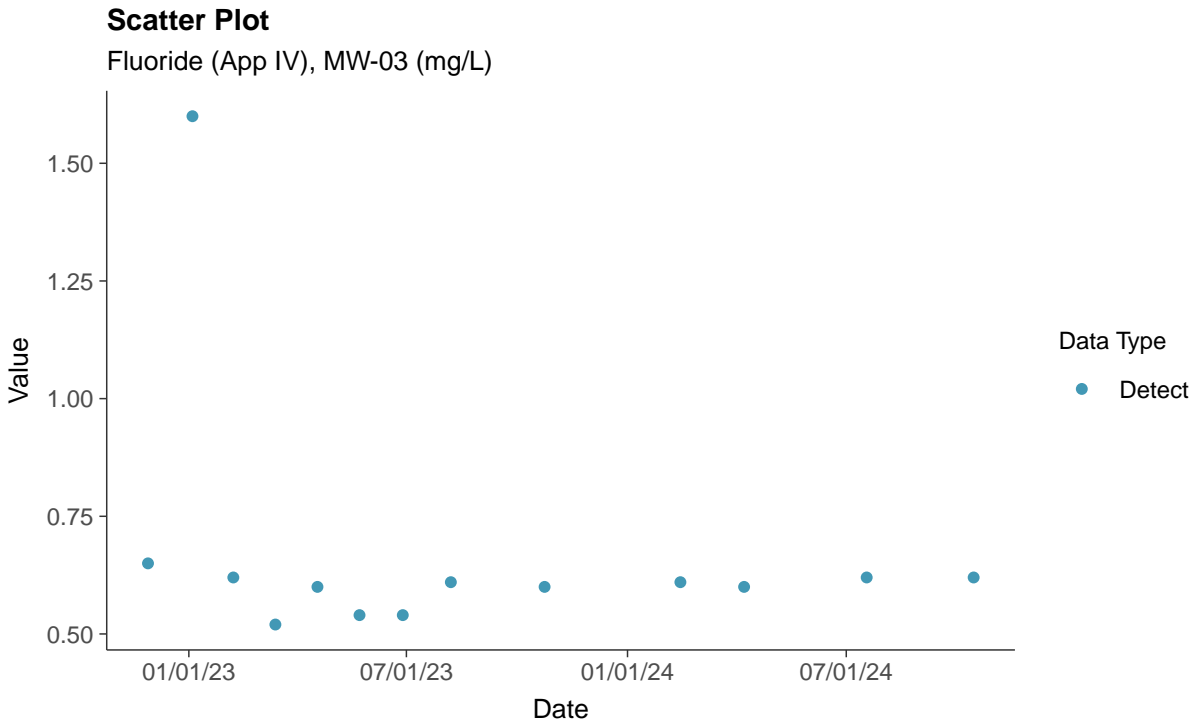
Cobalt, MW-03 (mg/L)





Appendix IV: Fluoride (App IV), MW-03

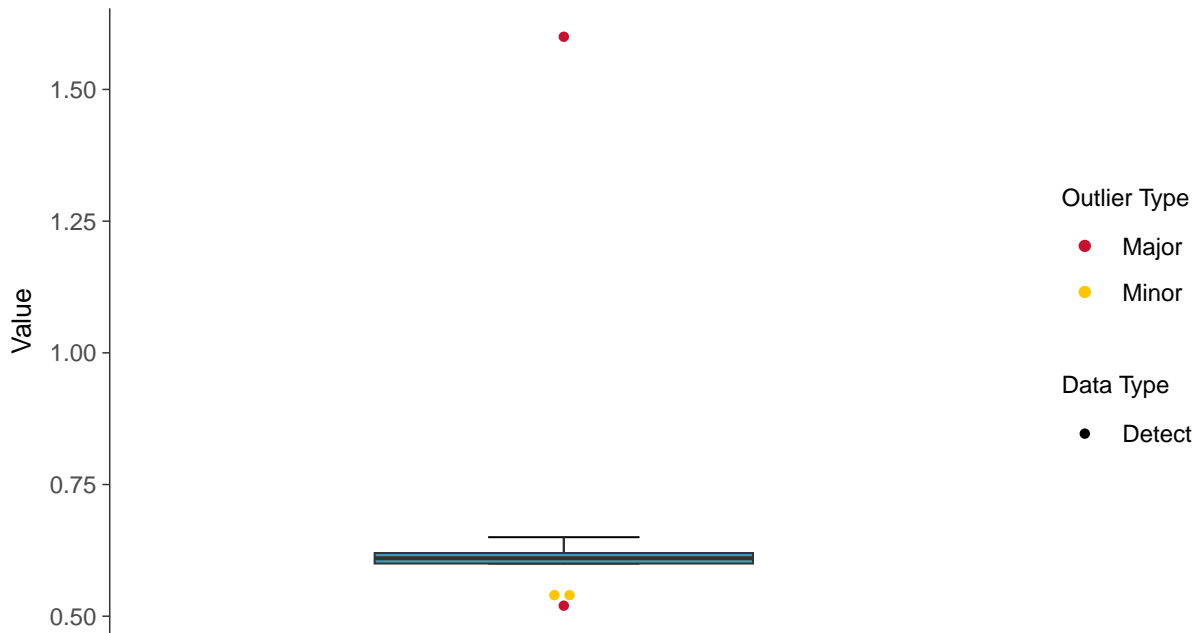
ID: 2_13_2_5_113





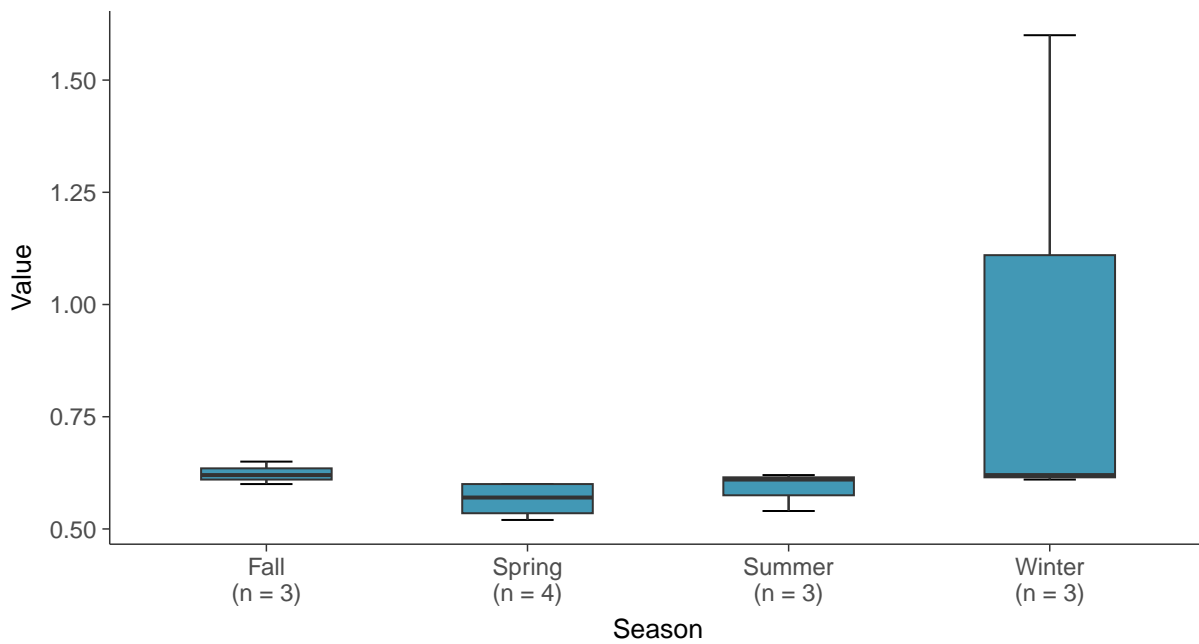
Boxplot

Fluoride (App IV), MW-03 (mg/L)



Boxplot by Season

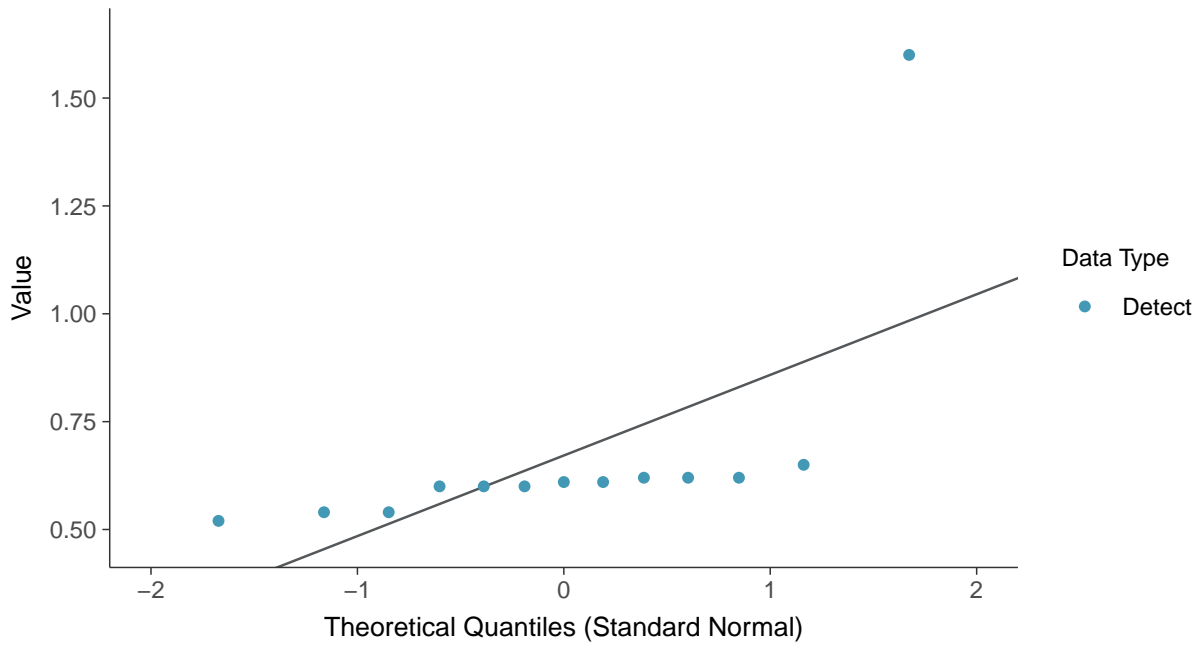
Fluoride (App IV), MW-03 (mg/L)





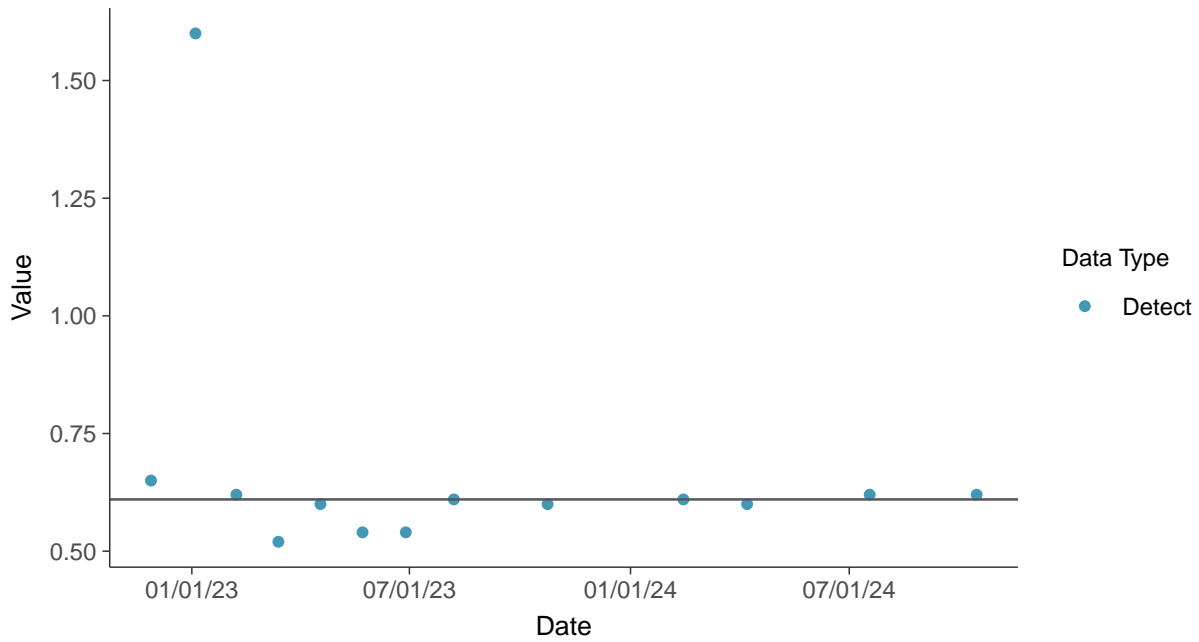
Normal Q-Q plot

Fluoride (App IV), MW-03 (mg/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

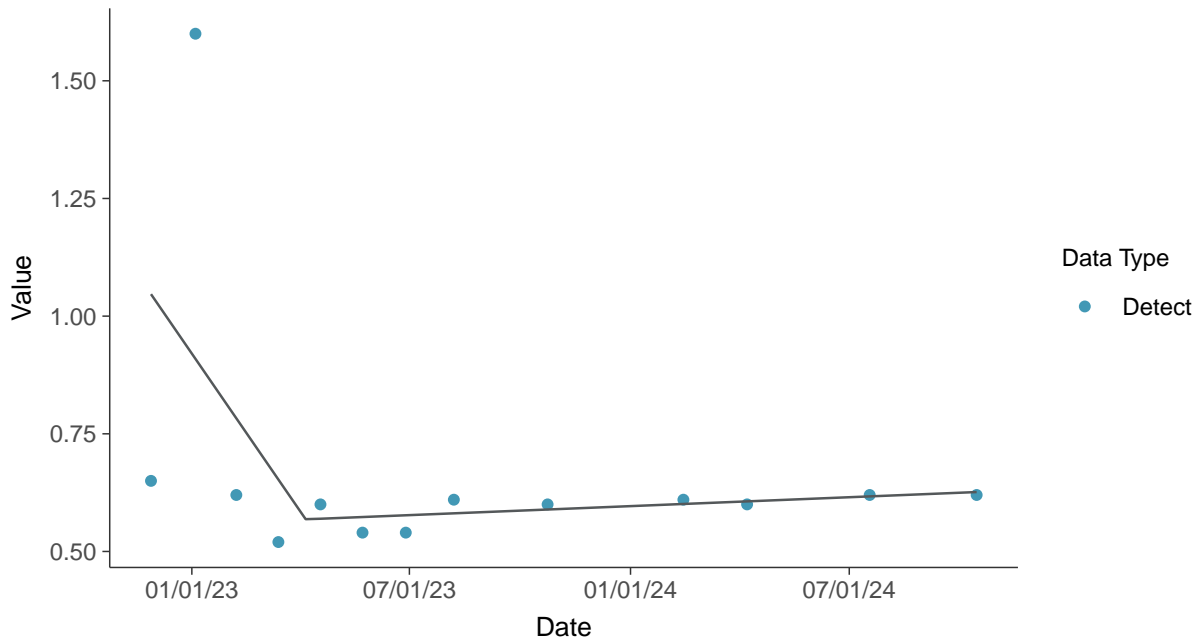
Fluoride (App IV), MW-03 (mg/L)





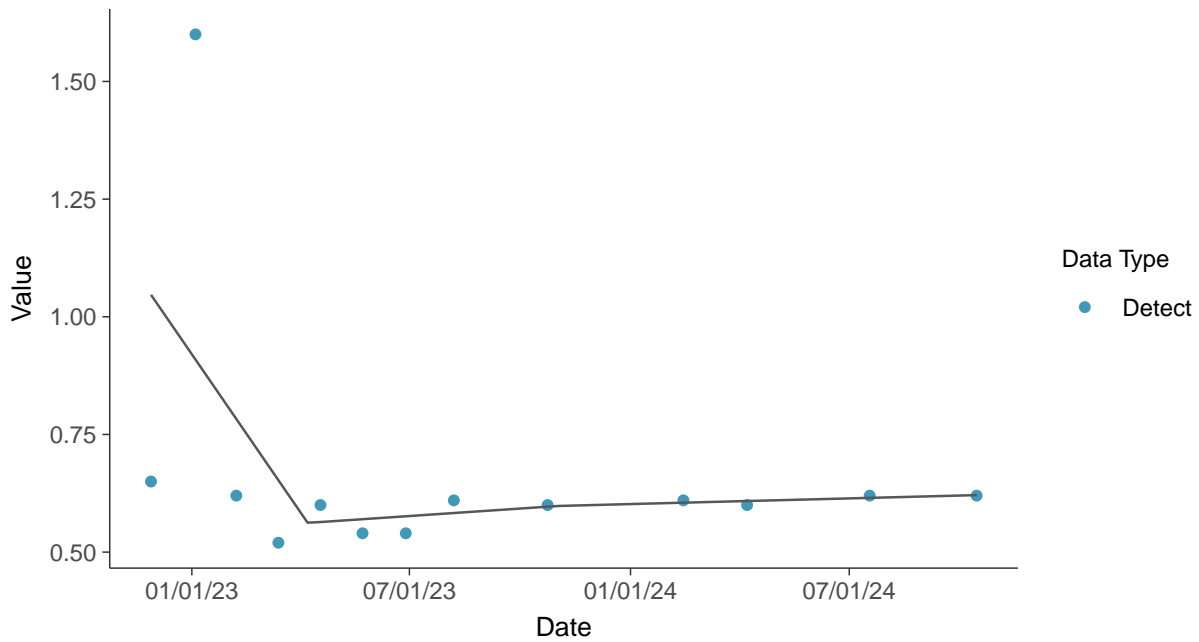
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-03 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Fluoride (App IV), MW-03 (mg/L)



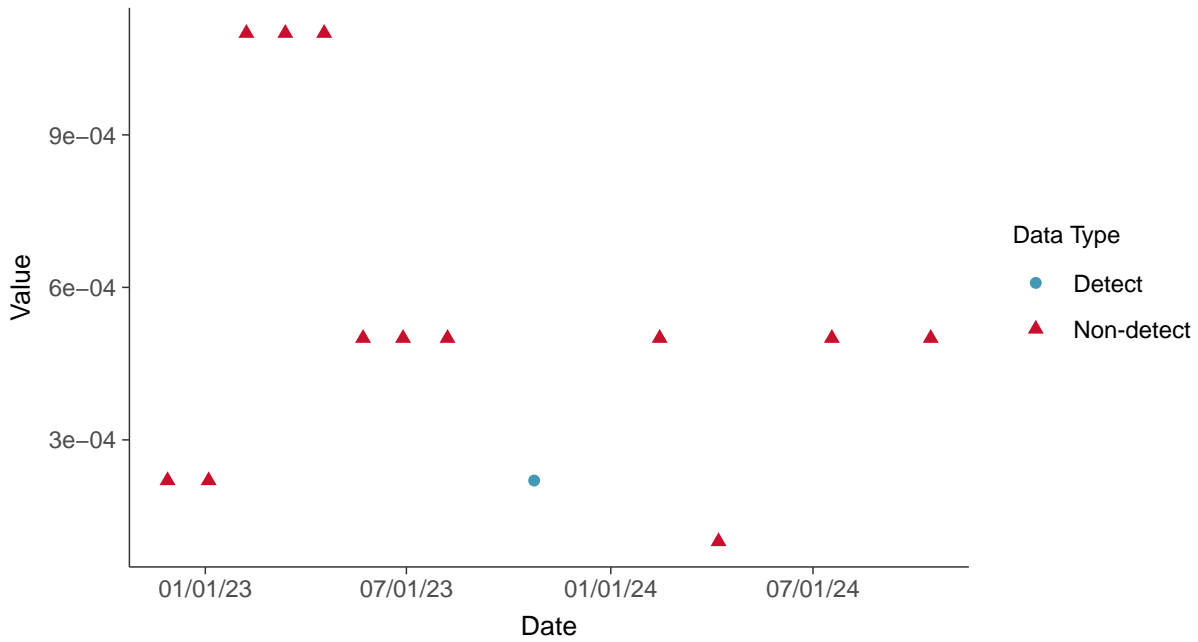


Appendix IV: Lead, MW-03

ID: 2_13_2_5_115

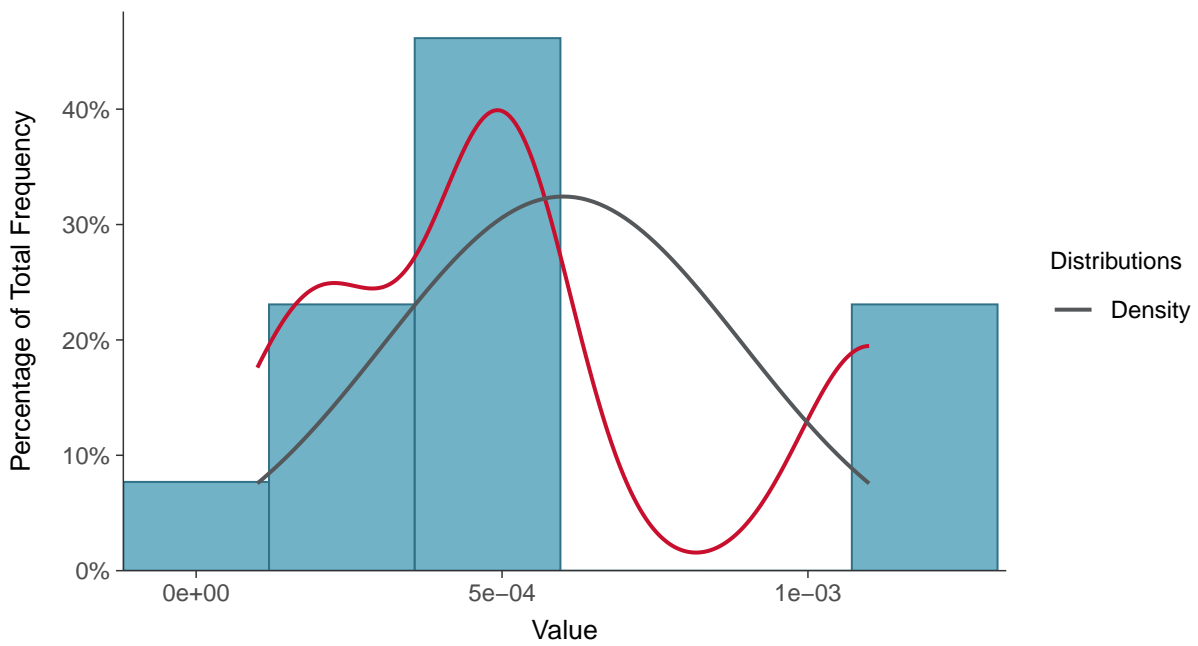
Scatter Plot

Lead, MW-03 (mg/L)



Histogram

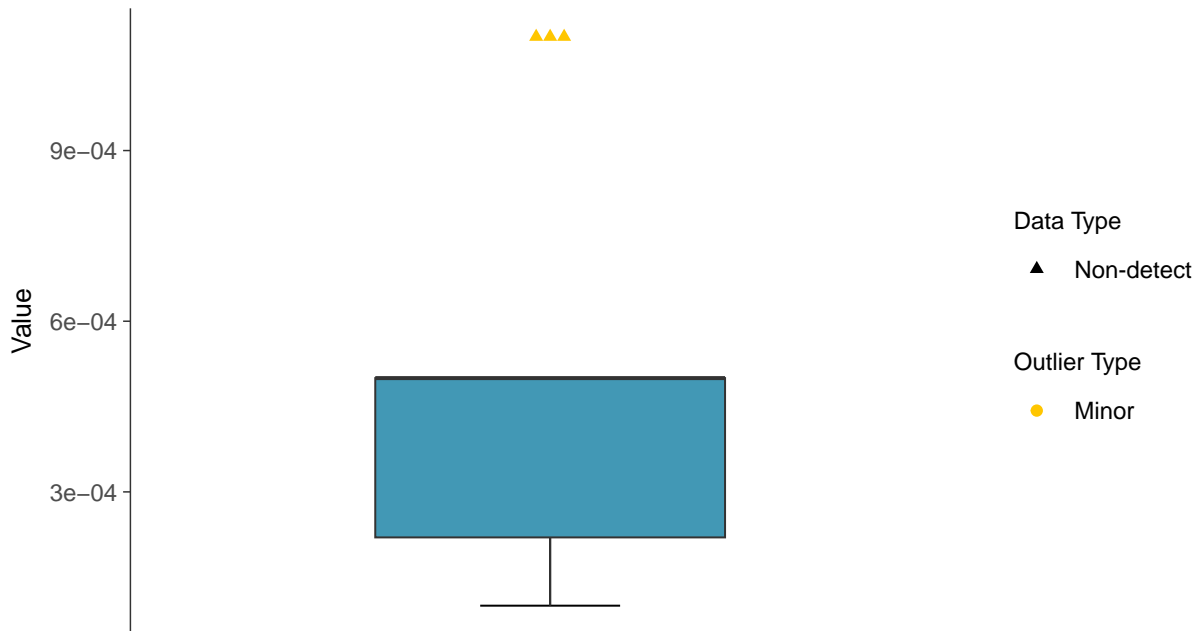
Lead, MW-03 (mg/L)





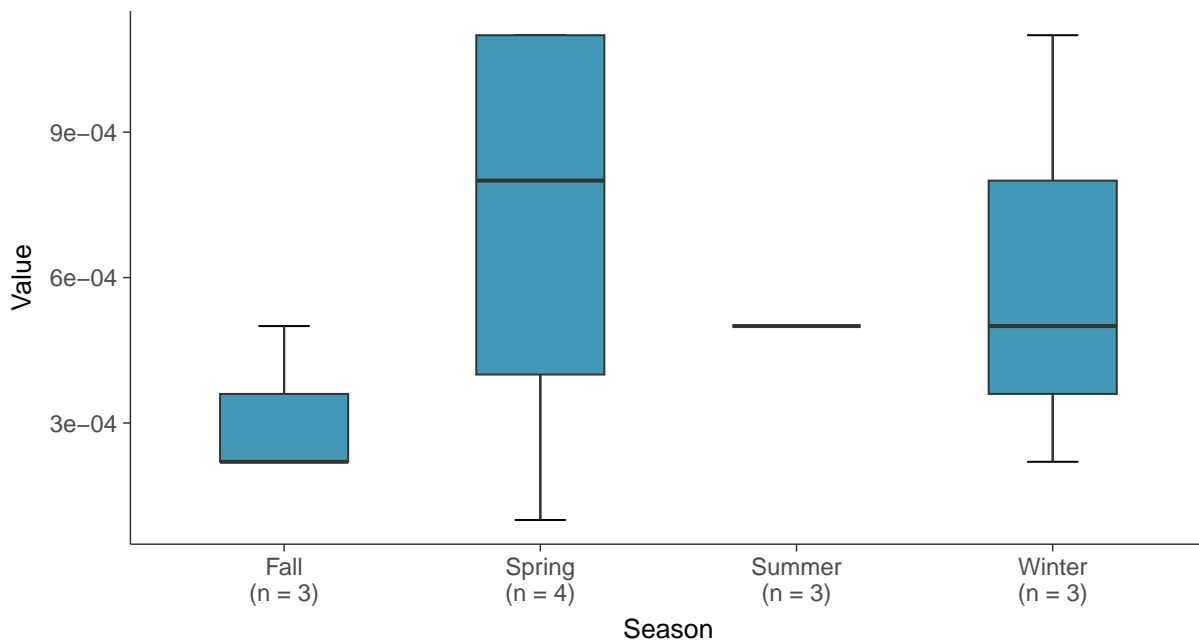
Boxplot

Lead, MW-03 (mg/L)



Boxplot by Season

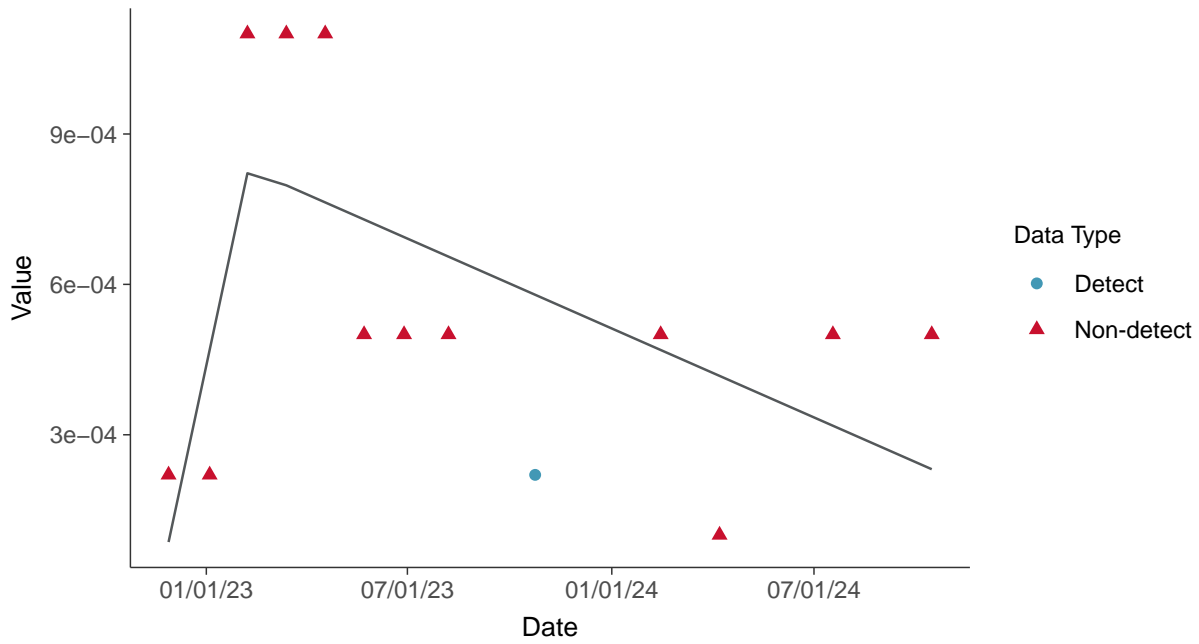
Lead, MW-03 (mg/L)





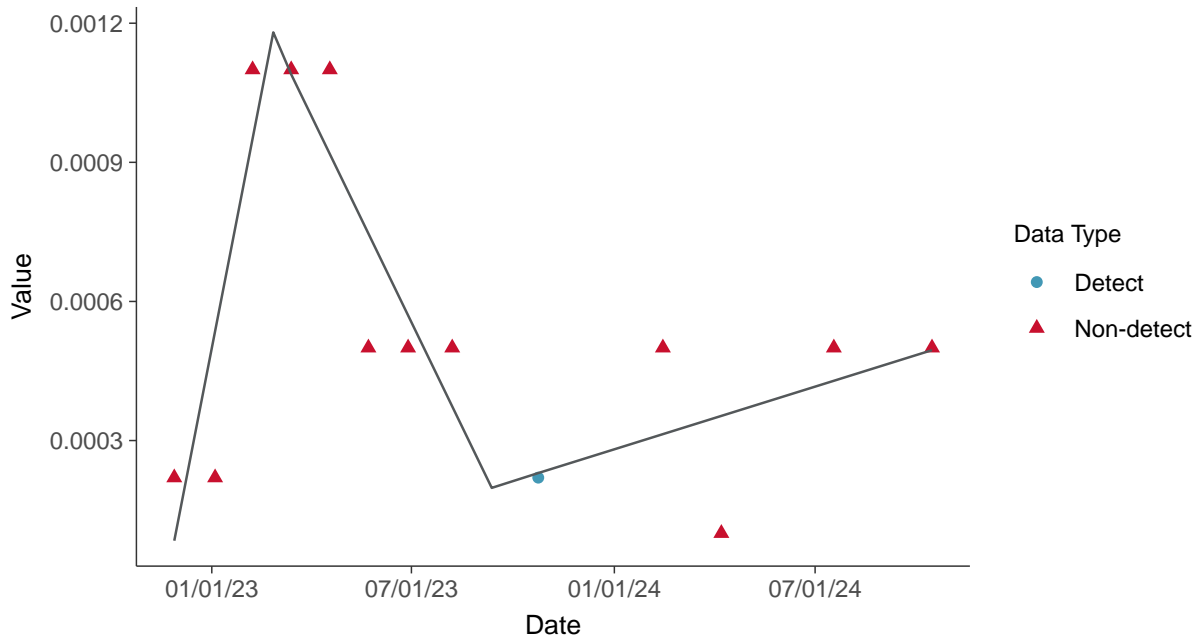
Trend Regression: Piecewise Linear-Linear

Lead, MW-03 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

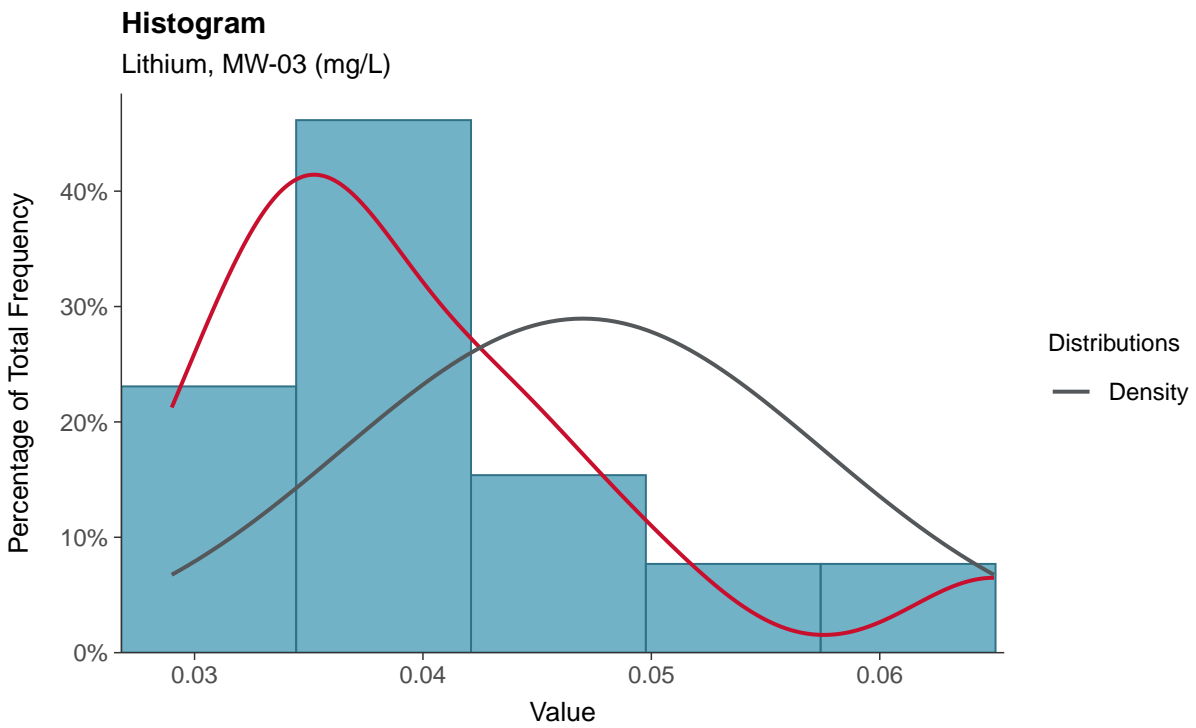
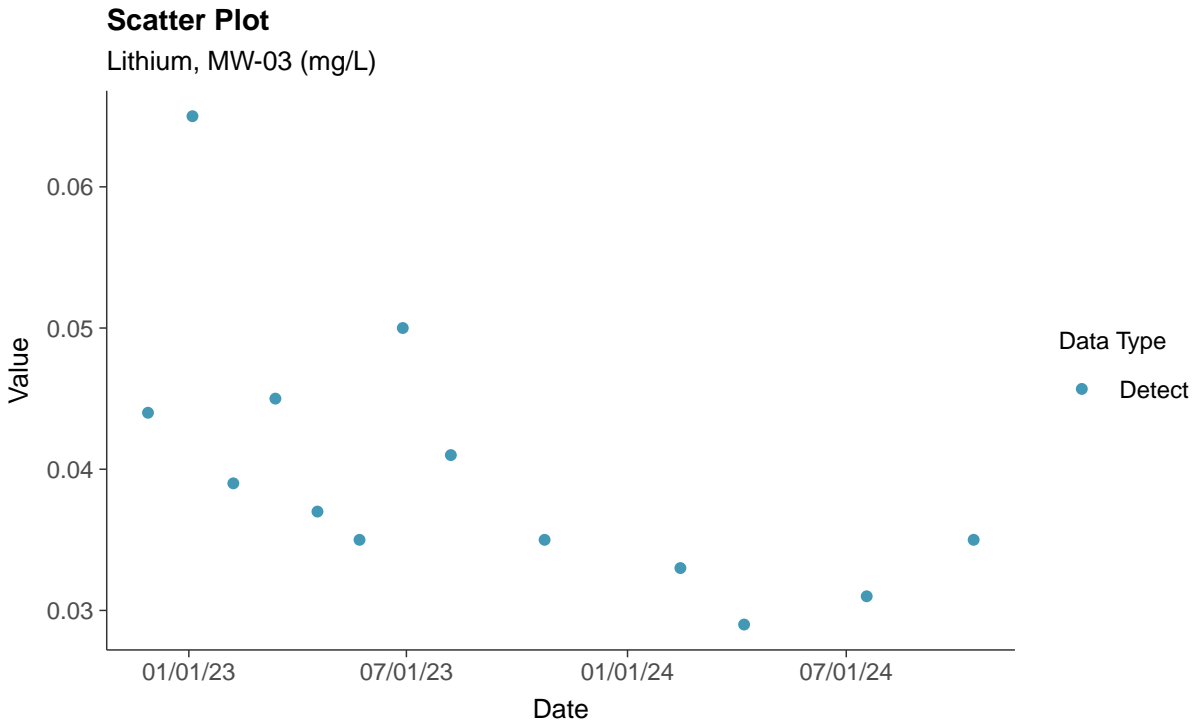
Lead, MW-03 (mg/L)





Appendix IV: Lithium, MW-03

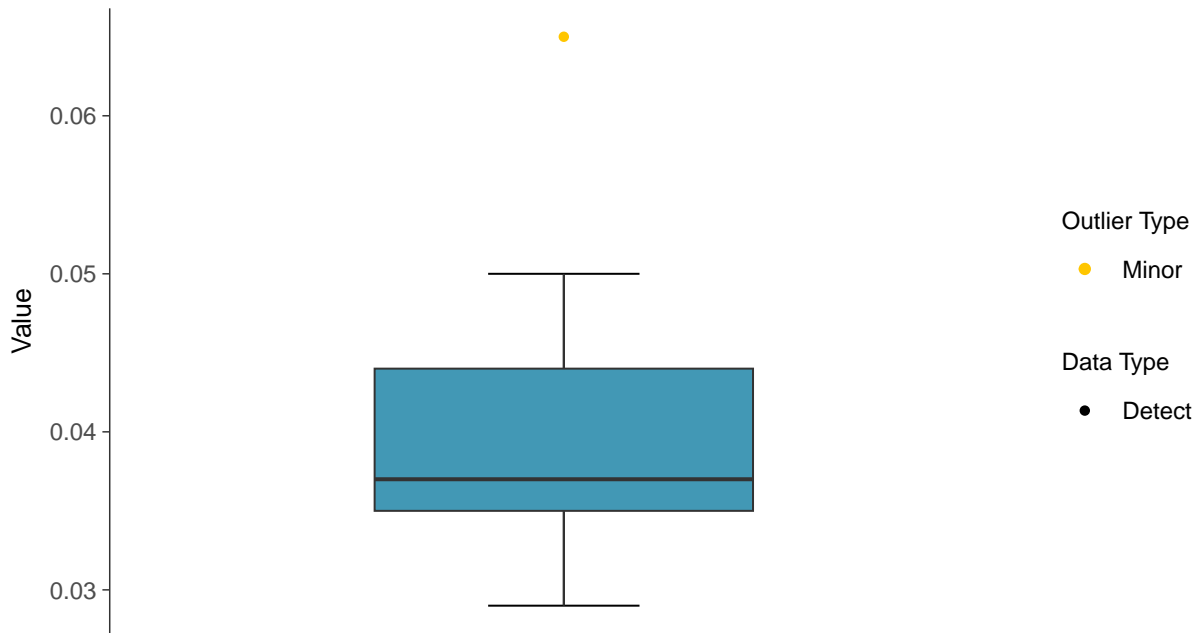
ID: 2_13_2_5_116





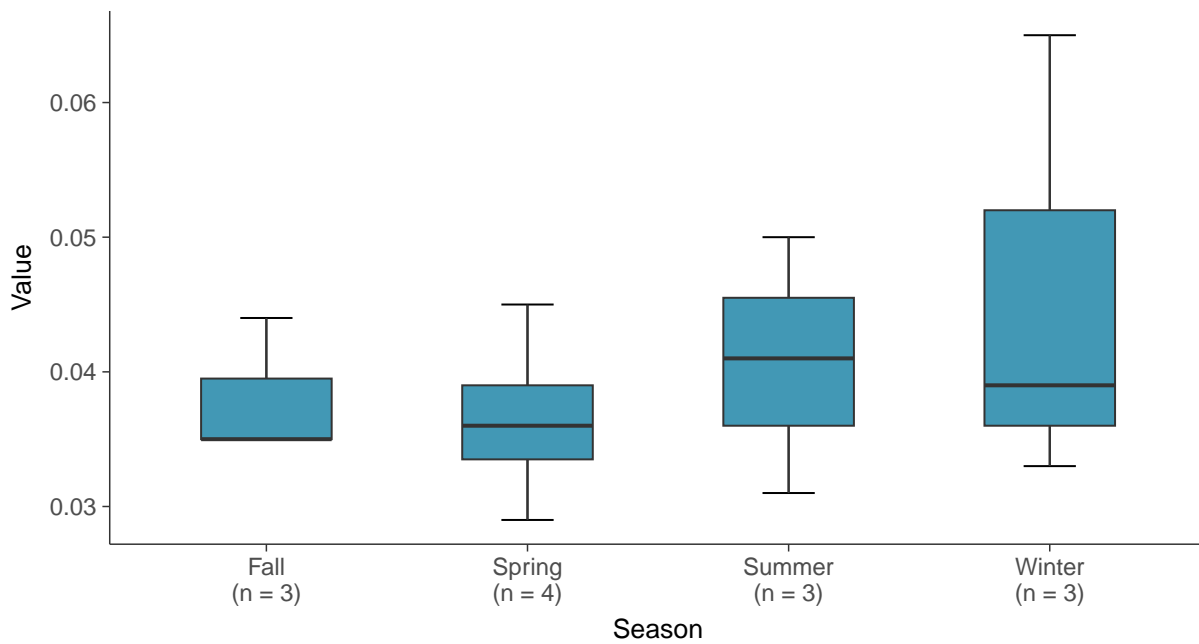
Boxplot

Lithium, MW-03 (mg/L)



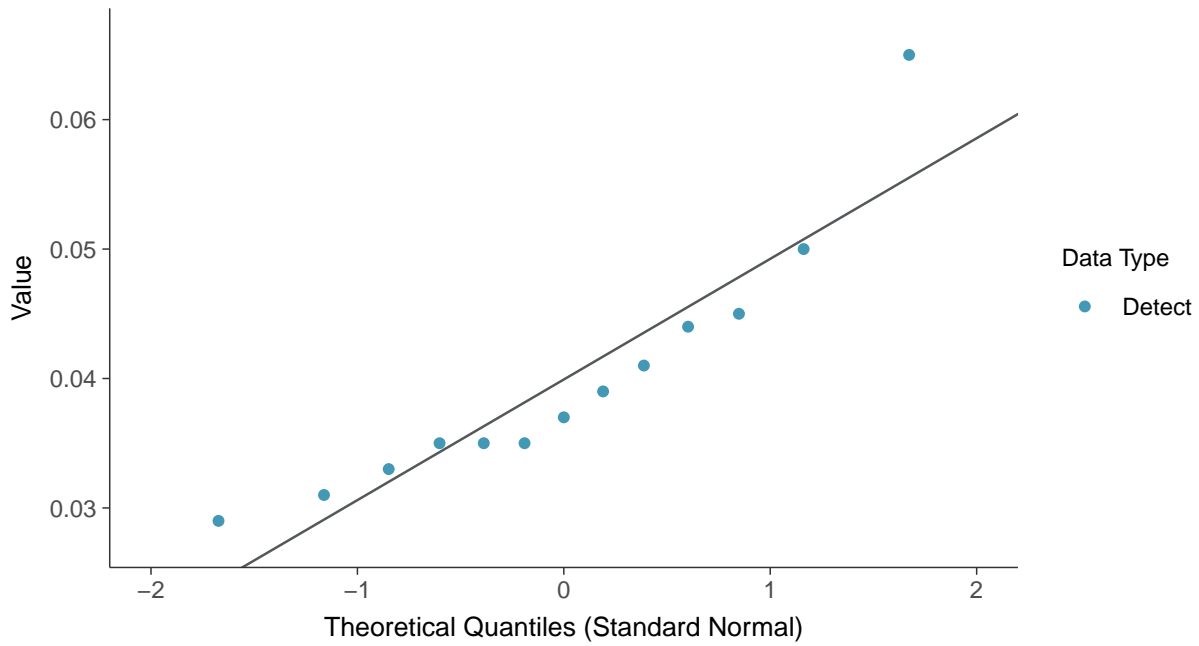
Boxplot by Season

Lithium, MW-03 (mg/L)

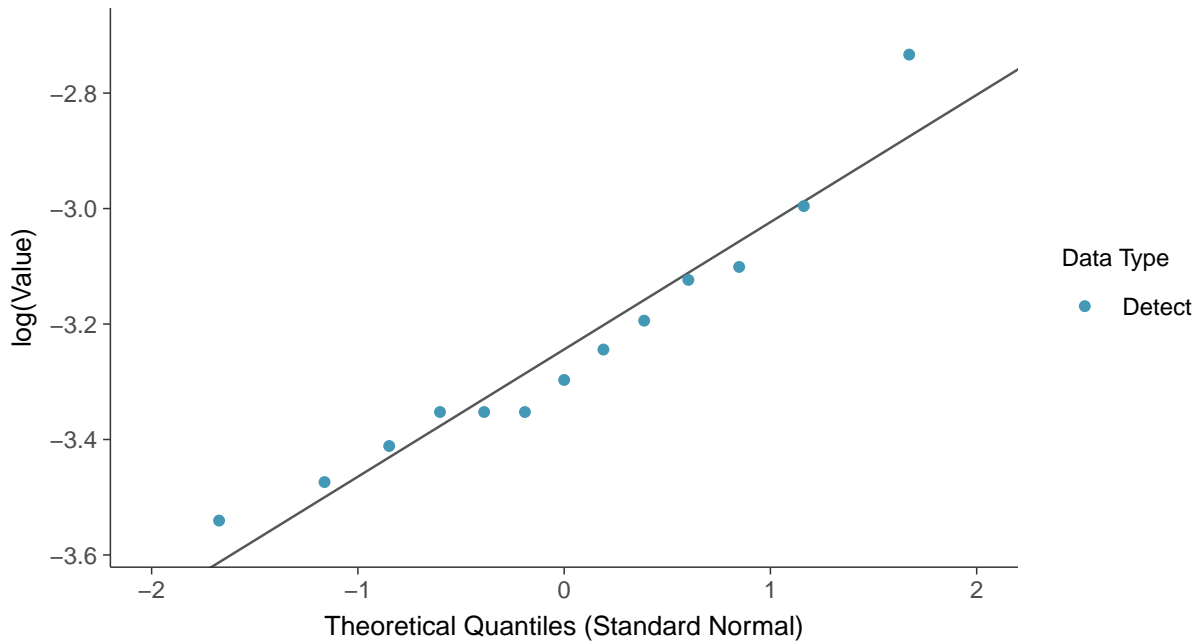




Normal Q-Q plot
Lithium, MW-03 (mg/L)

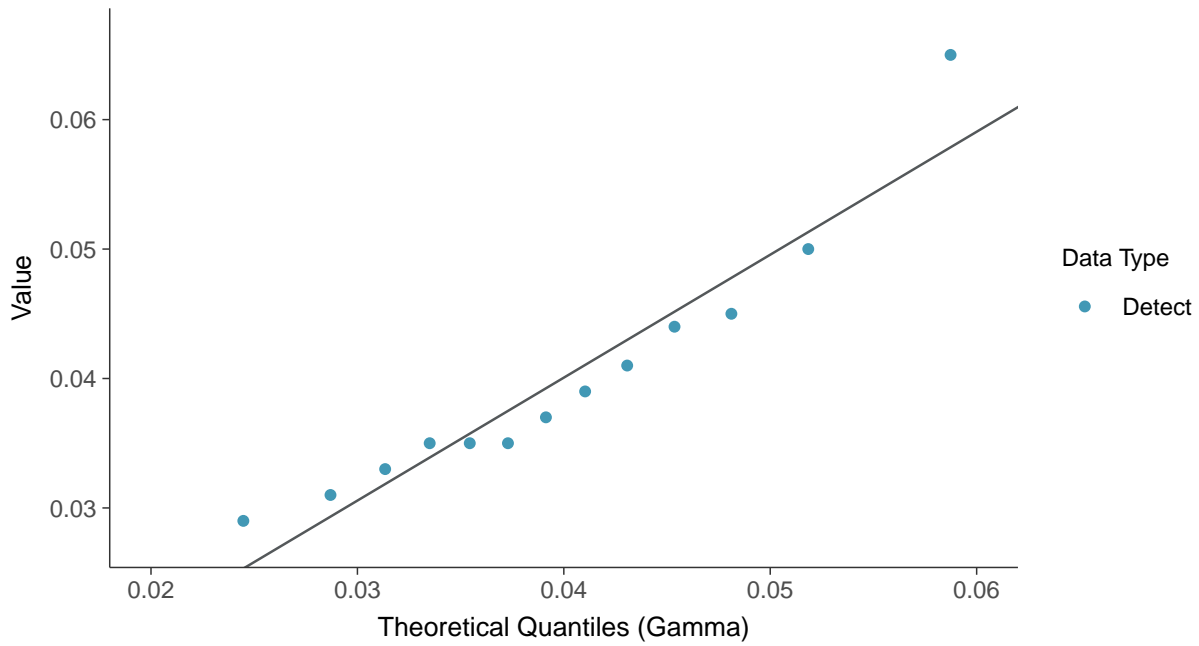


Lognormal Q-Q plot
Lithium, MW-03 (mg/L)

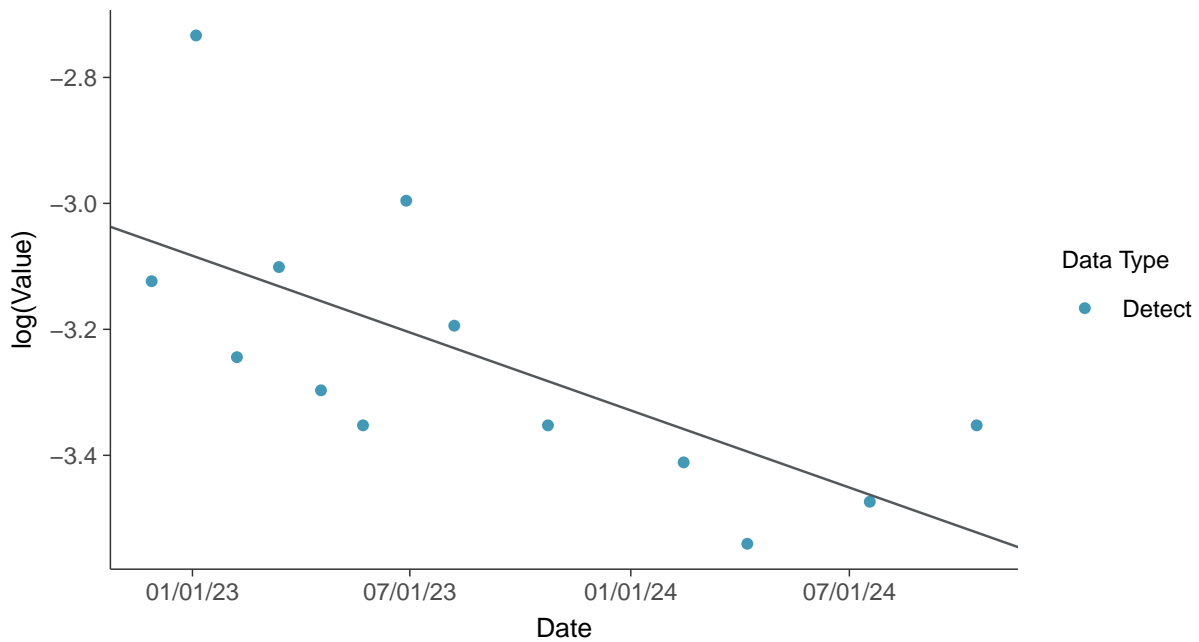




Gamma Q-Q plot
Lithium, MW-03 (mg/L)

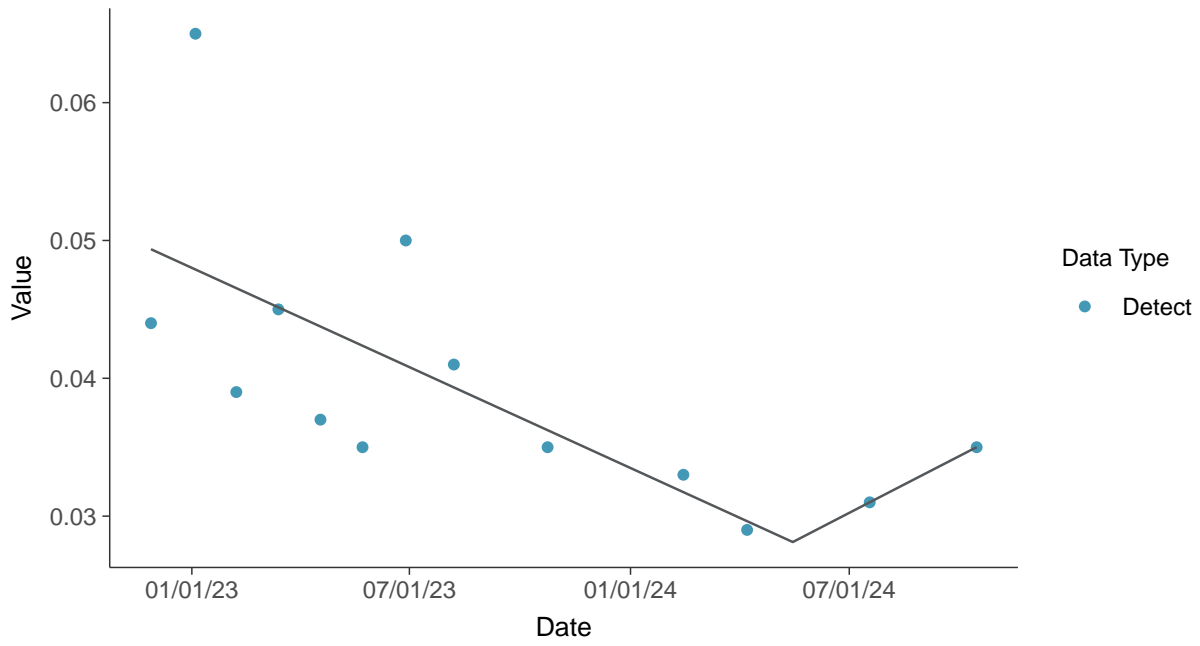


Trend Regression: Lognormal MLE
Lithium, MW-03 (mg/L)





Trend Regression: Piecewise Linear-Linear
Lithium, MW-03 (mg/L)



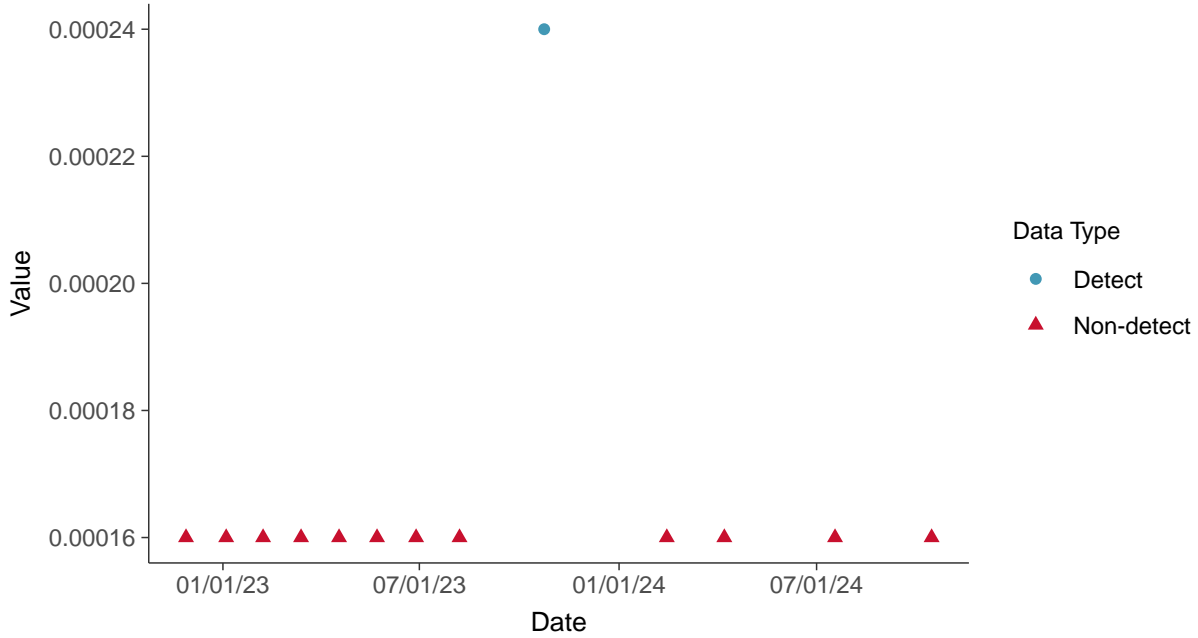


Appendix IV: Mercury, MW-03

ID: 2_13_2_5_117

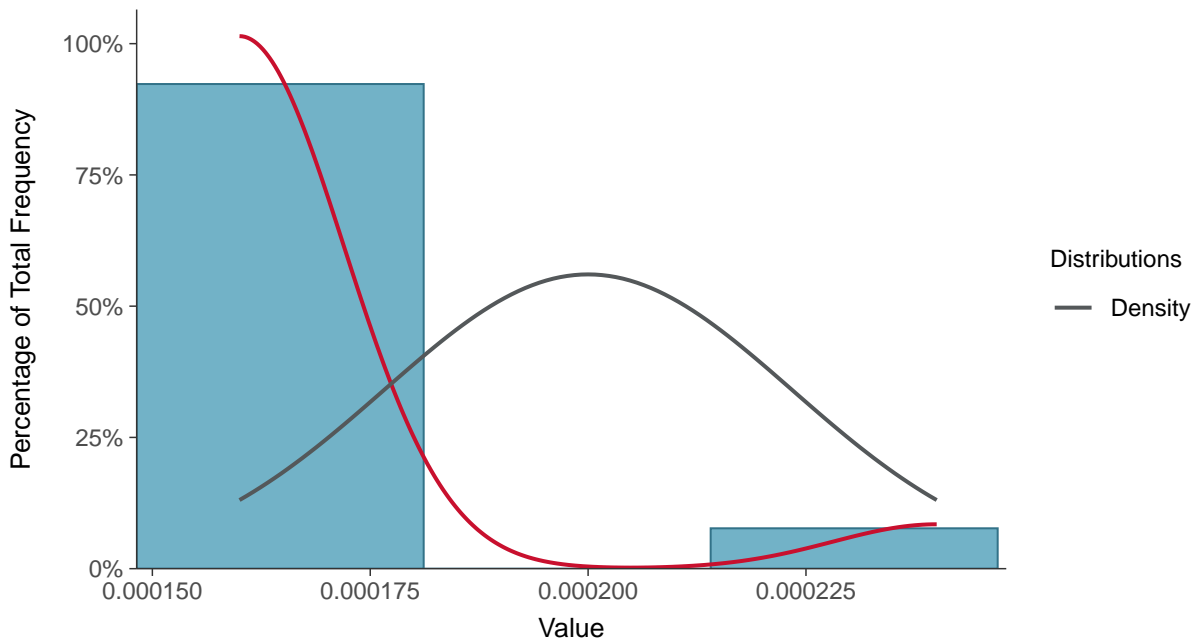
Scatter Plot

Mercury, MW-03 (mg/L)



Histogram

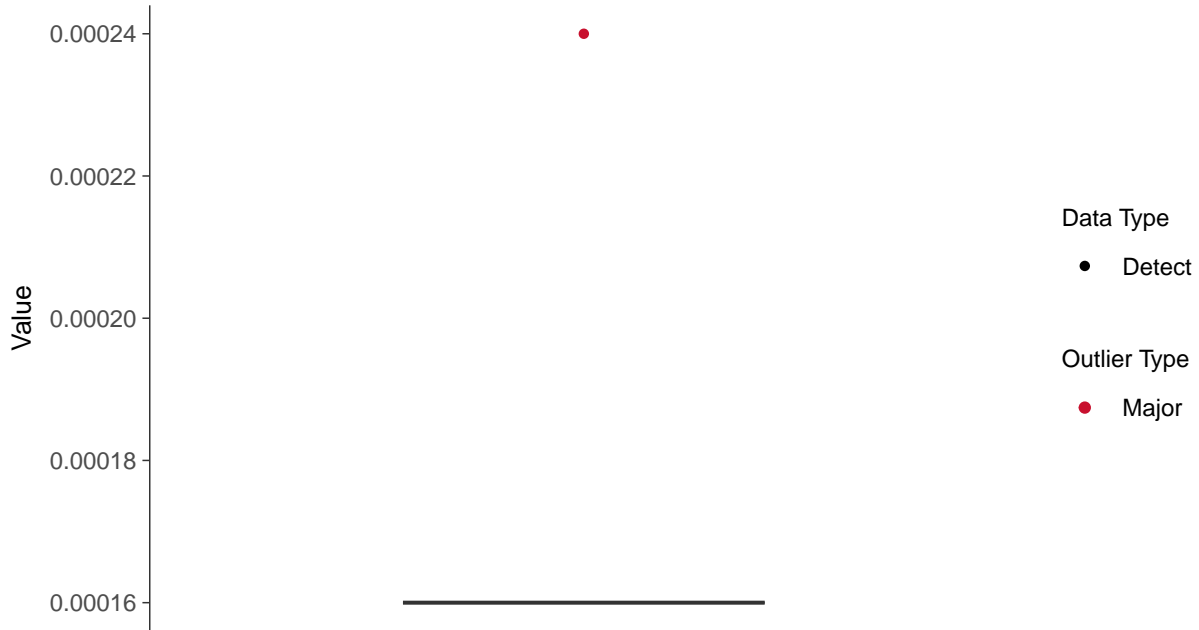
Mercury, MW-03 (mg/L)





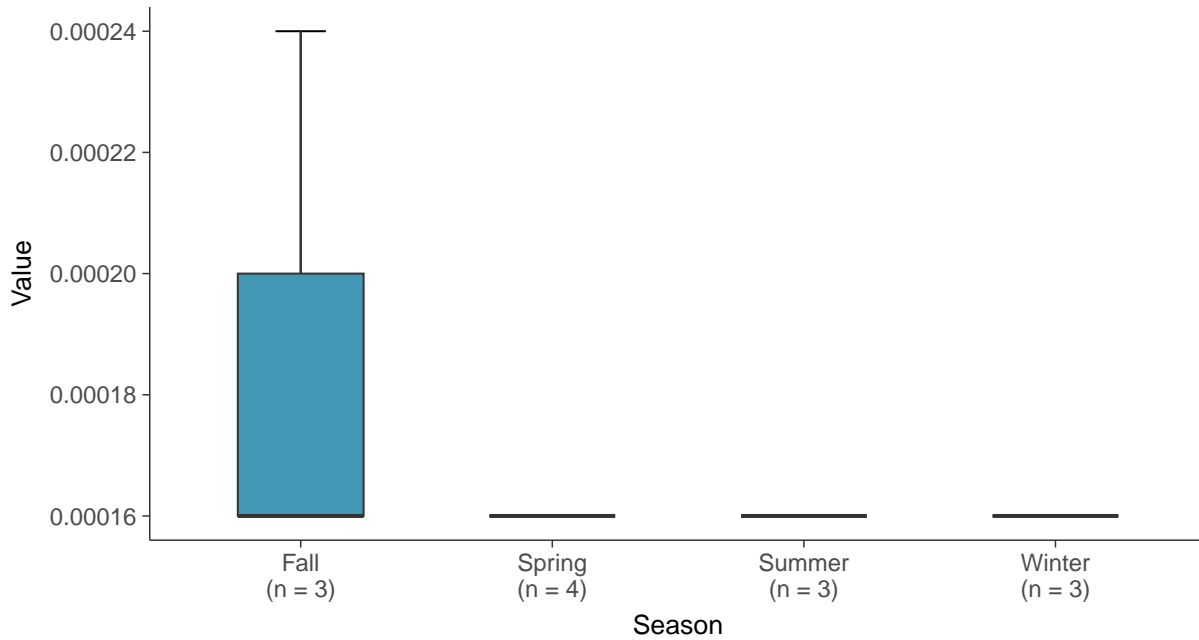
Boxplot

Mercury, MW-03 (mg/L)



Boxplot by Season

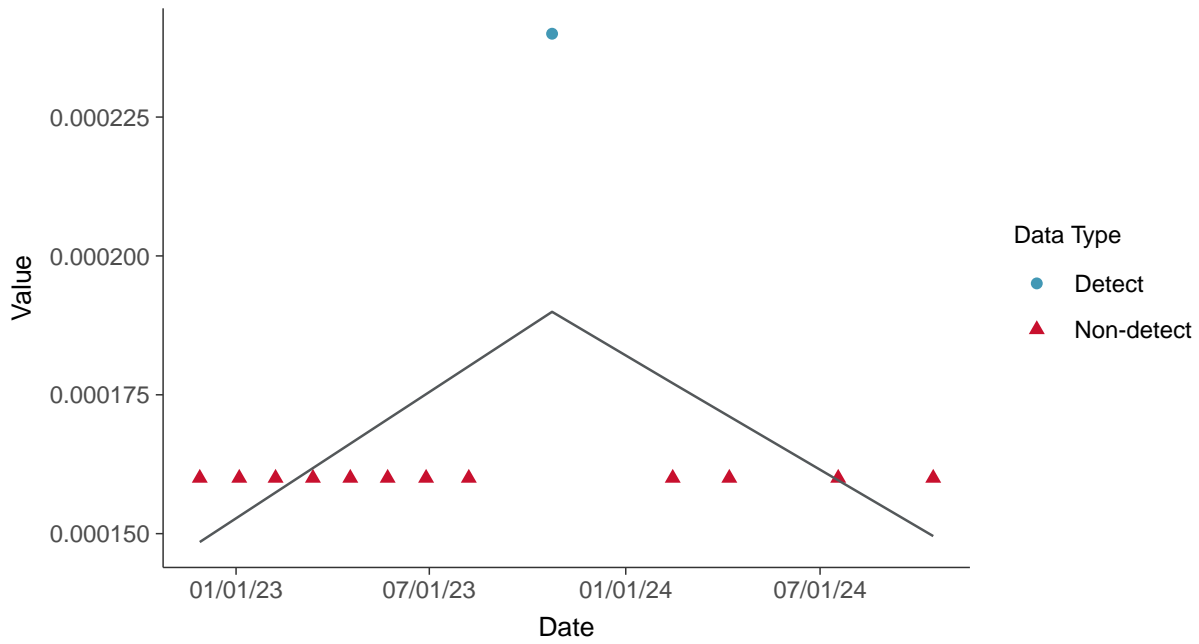
Mercury, MW-03 (mg/L)





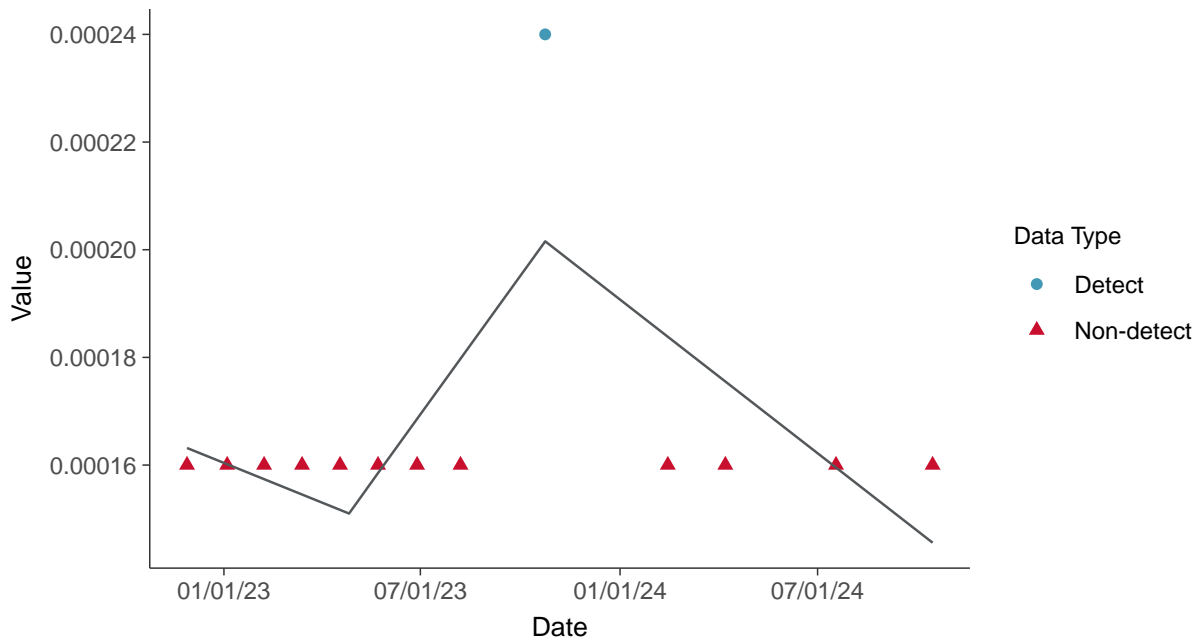
Trend Regression: Piecewise Linear-Linear

Mercury, MW-03 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

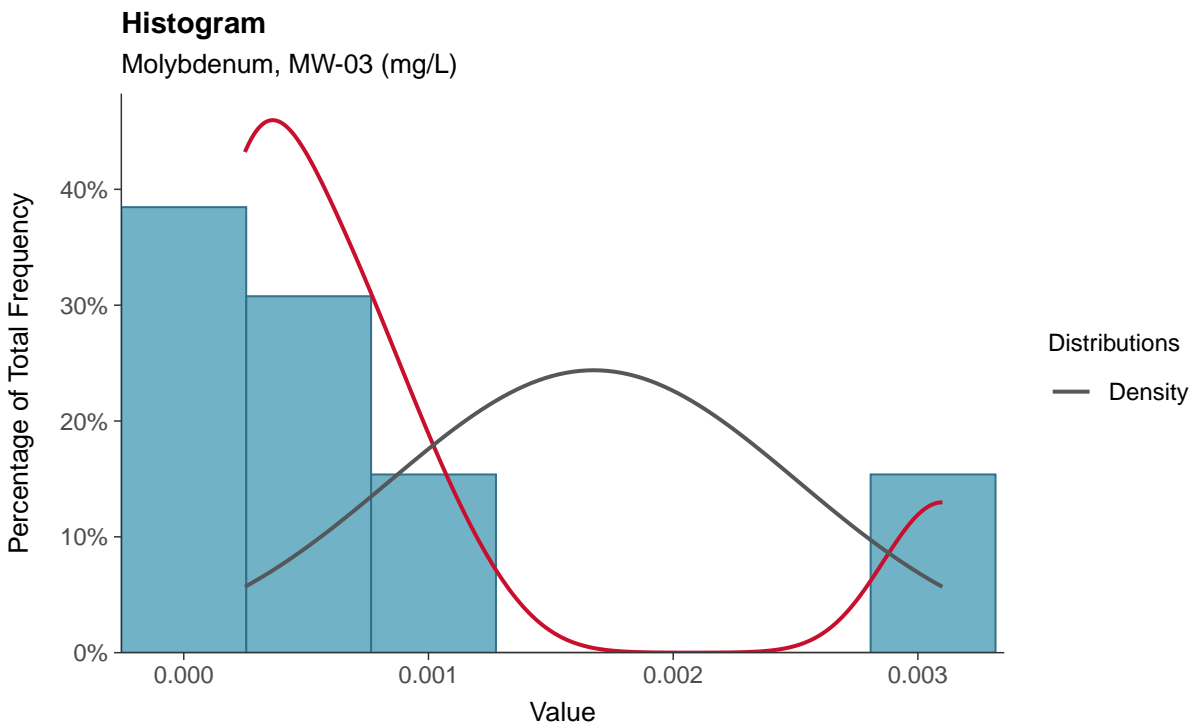
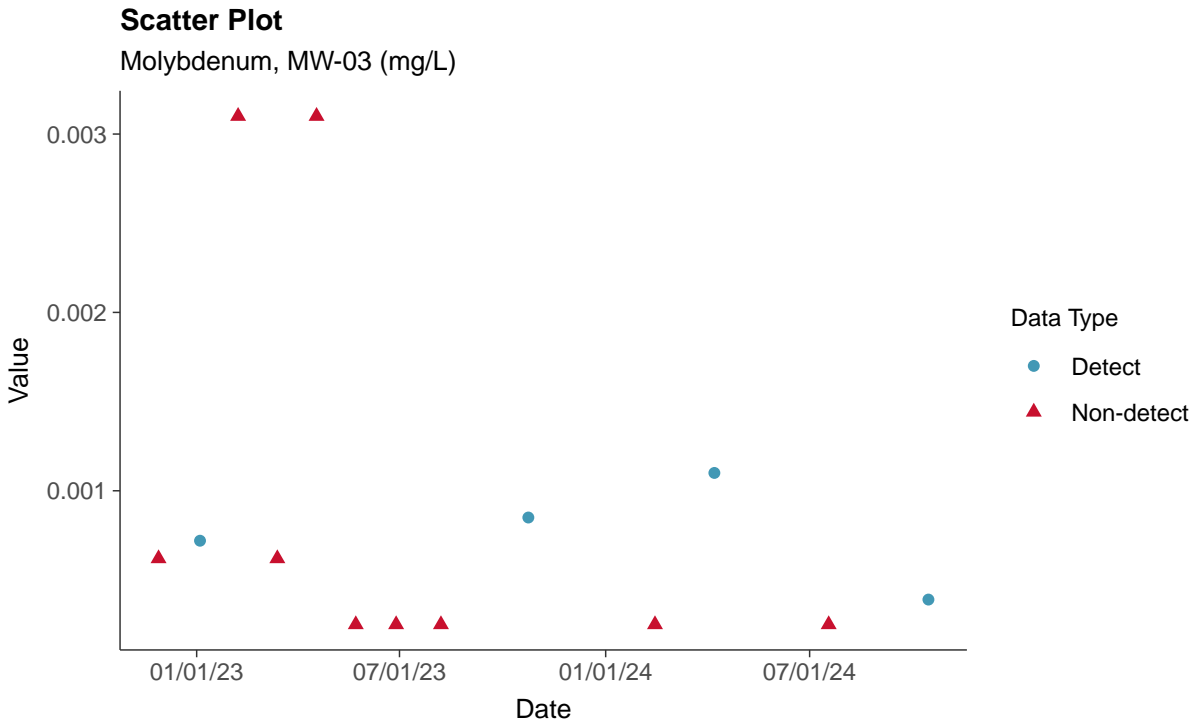
Mercury, MW-03 (mg/L)





Appendix IV: Molybdenum, MW-03

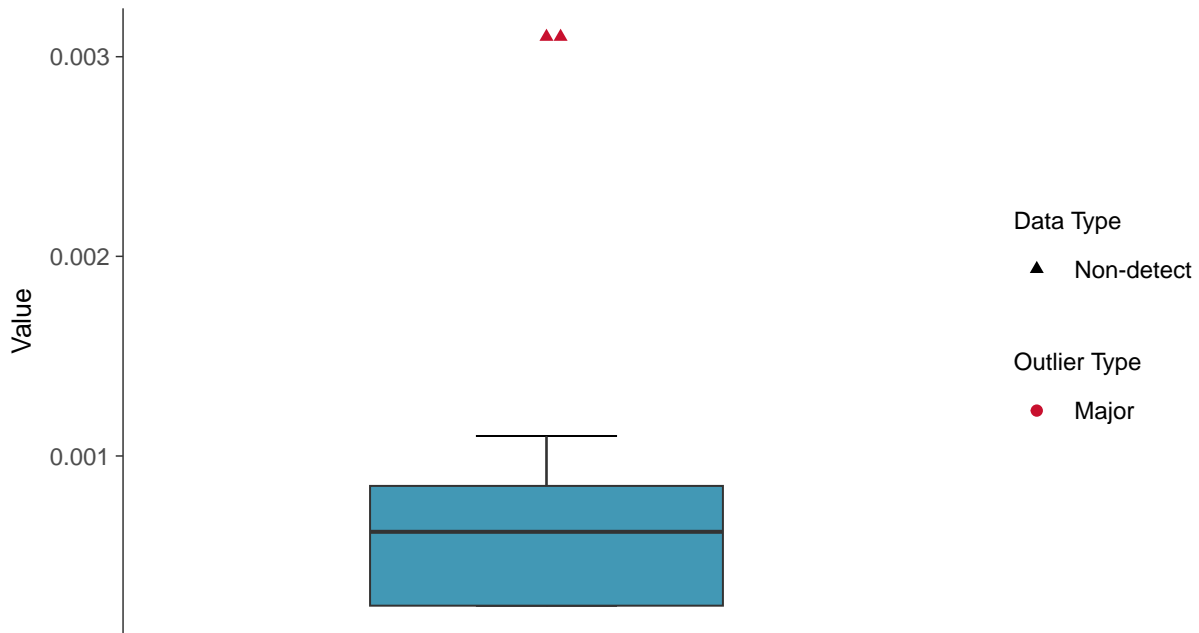
ID: 2_13_2_5_118





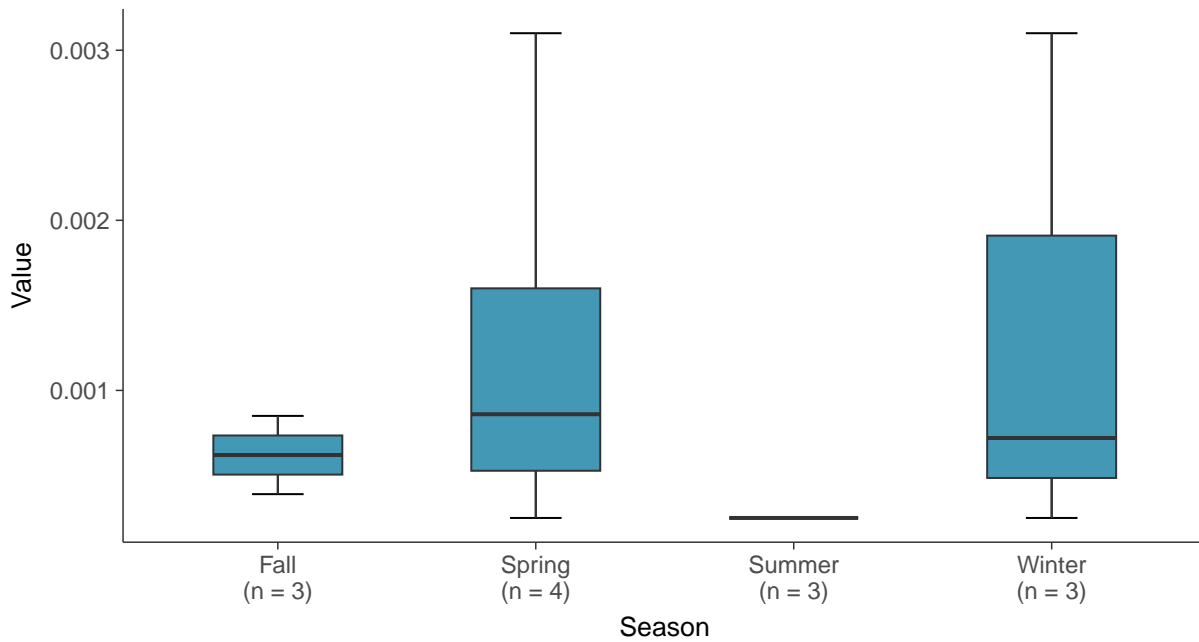
Boxplot

Molybdenum, MW-03 (mg/L)



Boxplot by Season

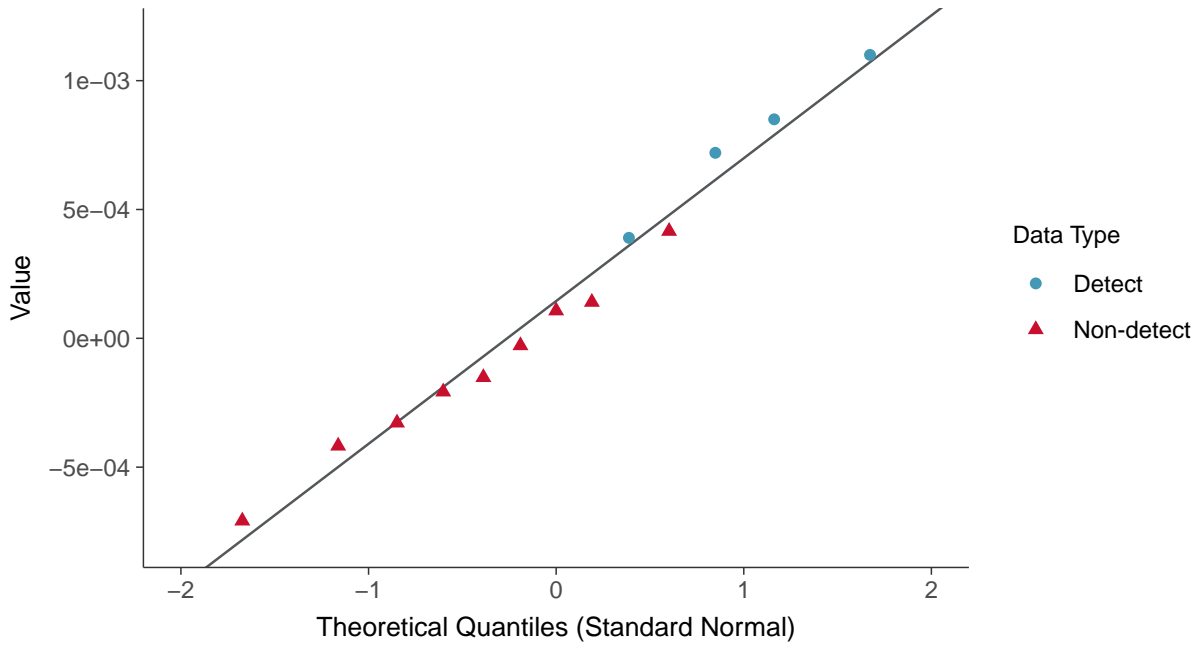
Molybdenum, MW-03 (mg/L)





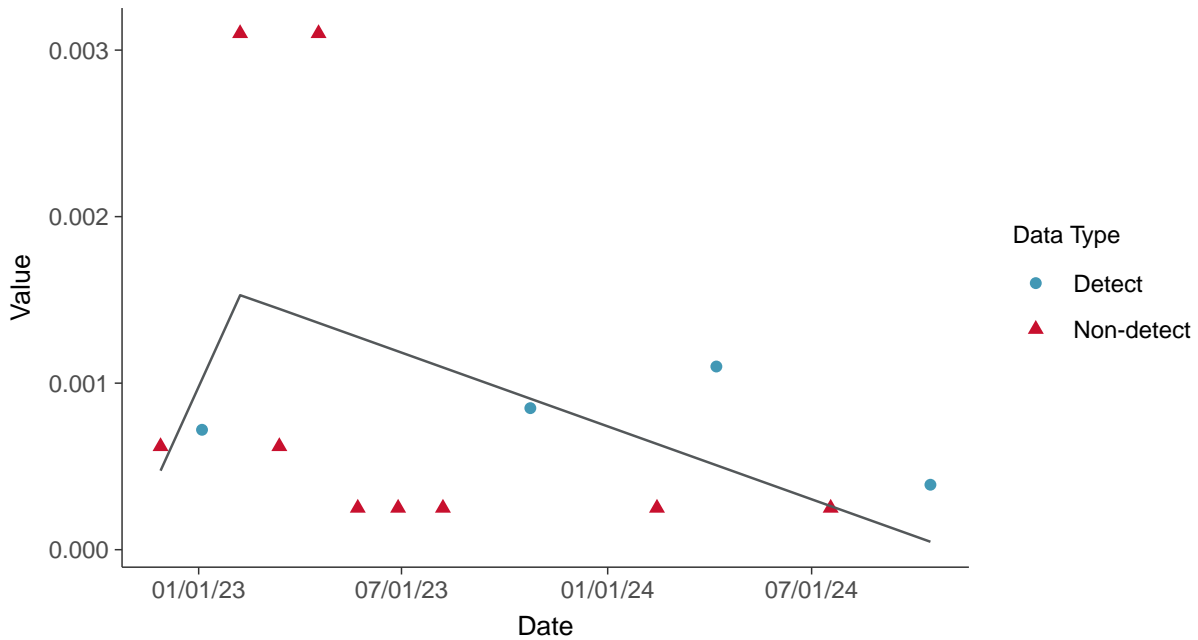
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-03 (mg/L)



Trend Regression: Piecewise Linear-Linear

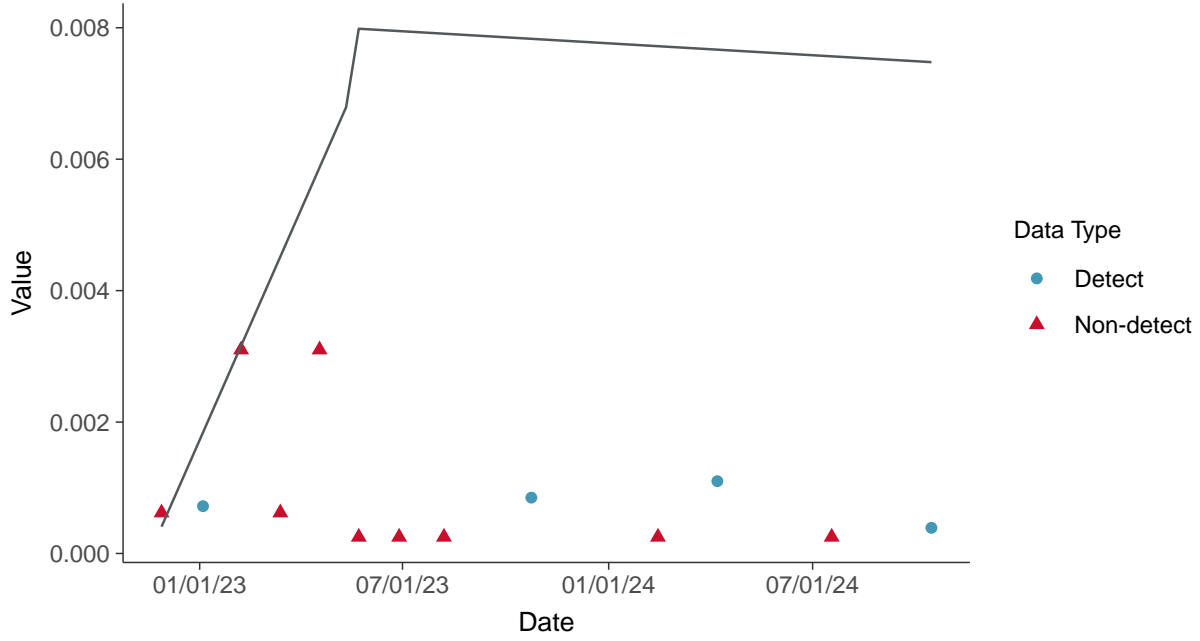
Molybdenum, MW-03 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-03 (mg/L)



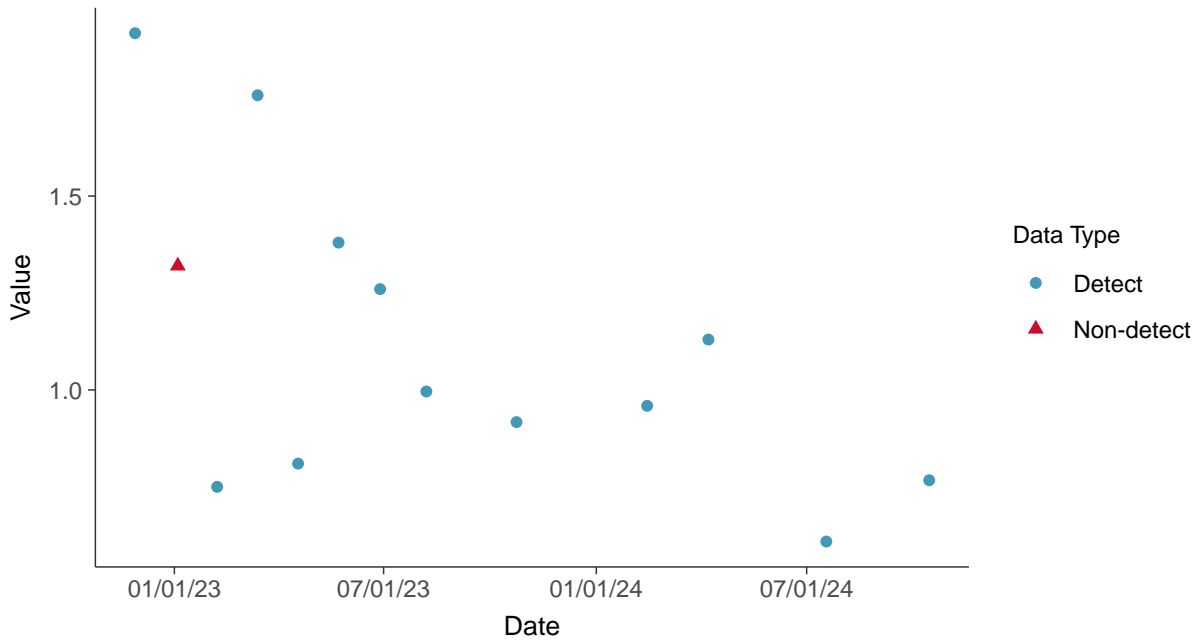


Appendix IV: Radium 226 and 228, MW-03

ID: 2_13_2_5_121

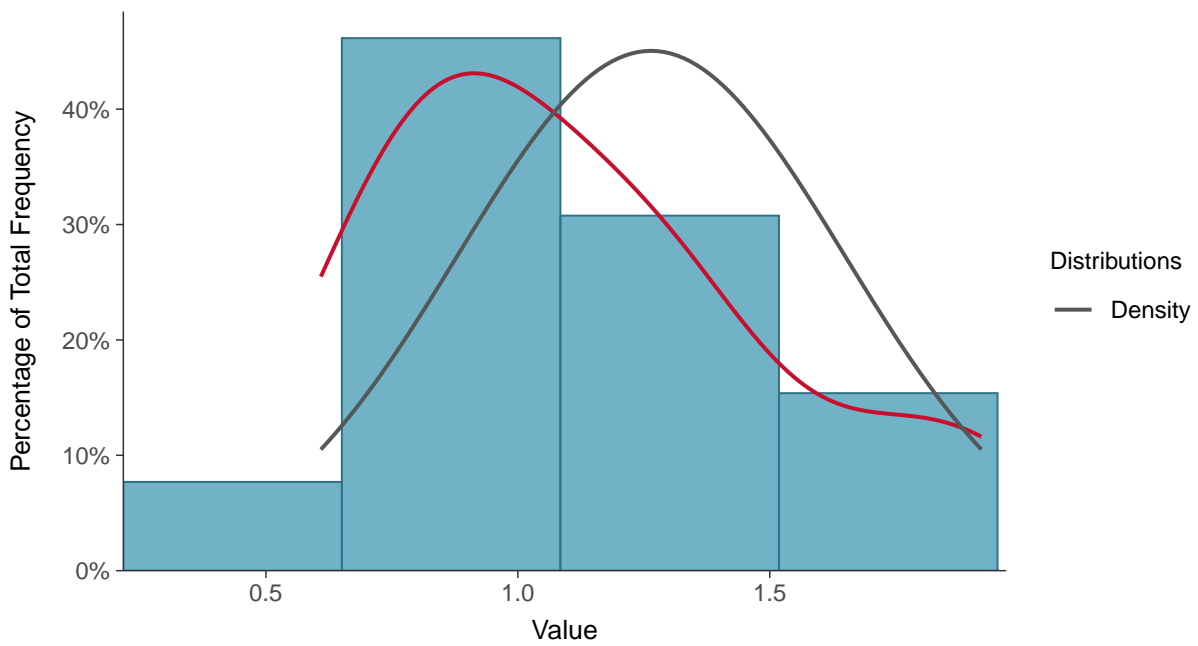
Scatter Plot

Radium 226 and 228, MW-03 (pCi/L)



Histogram

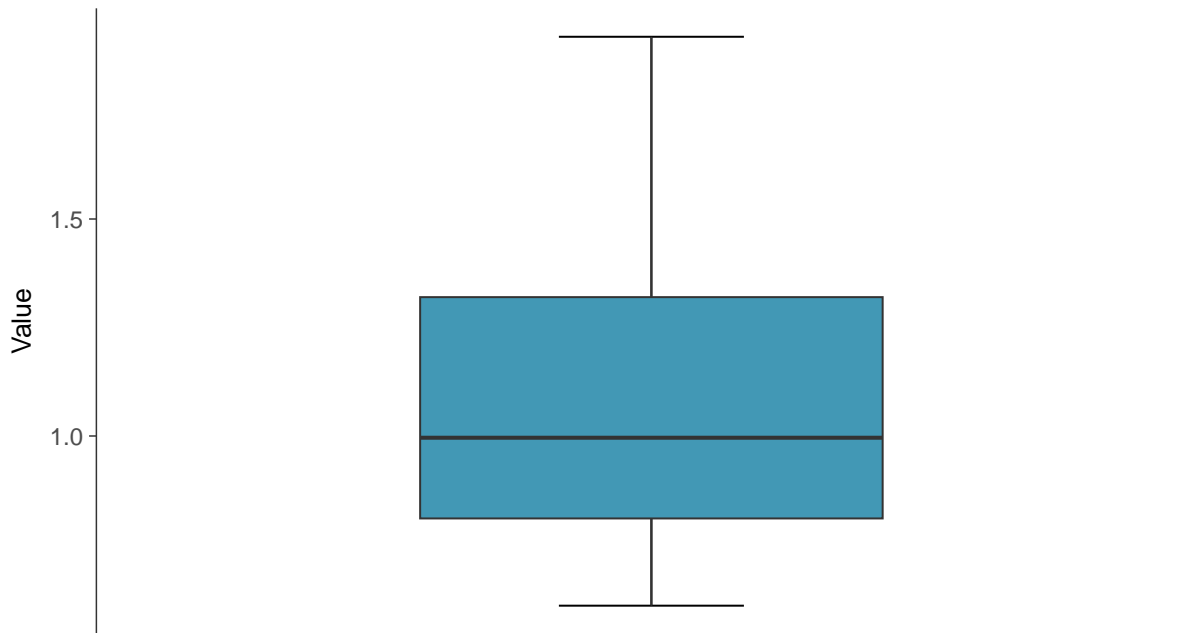
Radium 226 and 228, MW-03 (pCi/L)





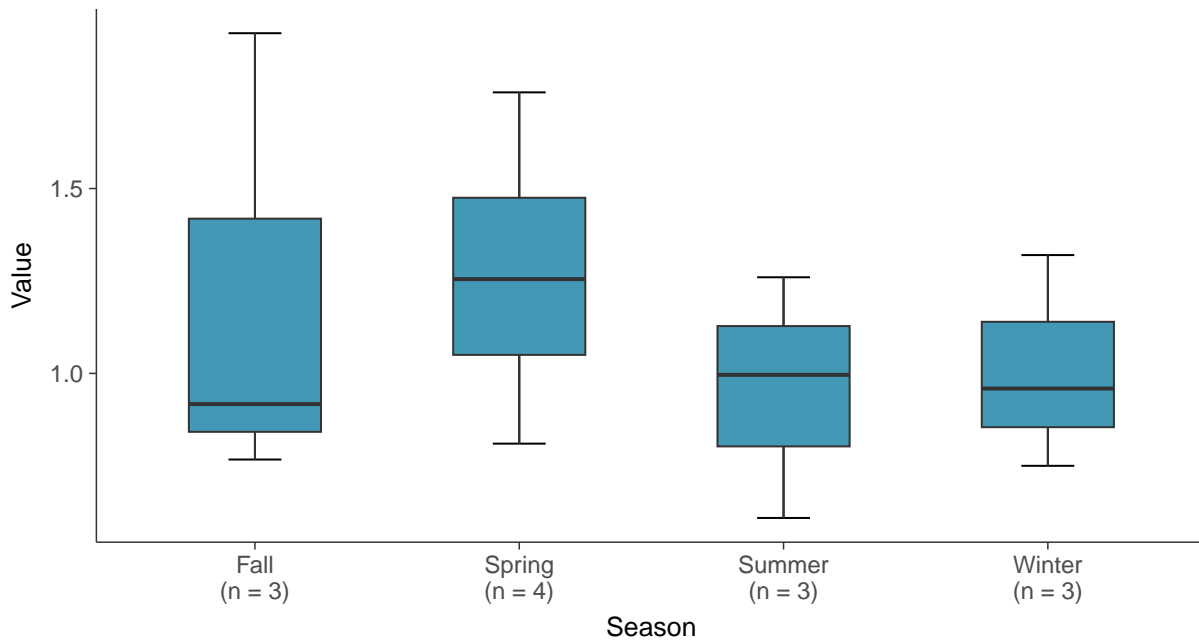
Boxplot

Radium 226 and 228, MW-03 (pCi/L)



Boxplot by Season

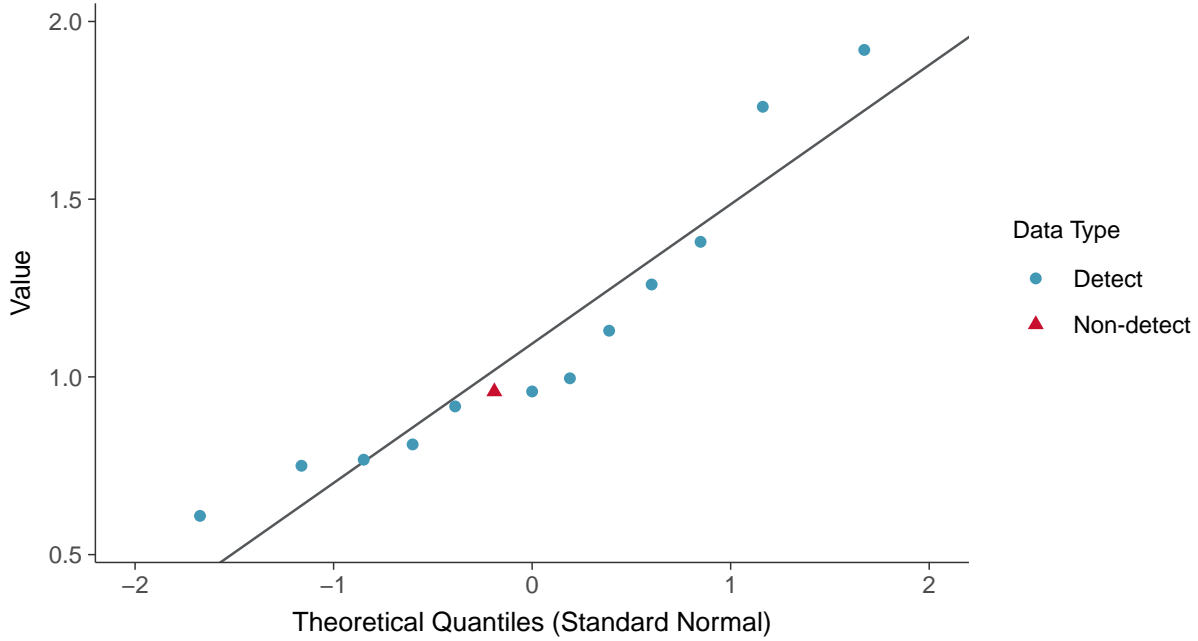
Radium 226 and 228, MW-03 (pCi/L)





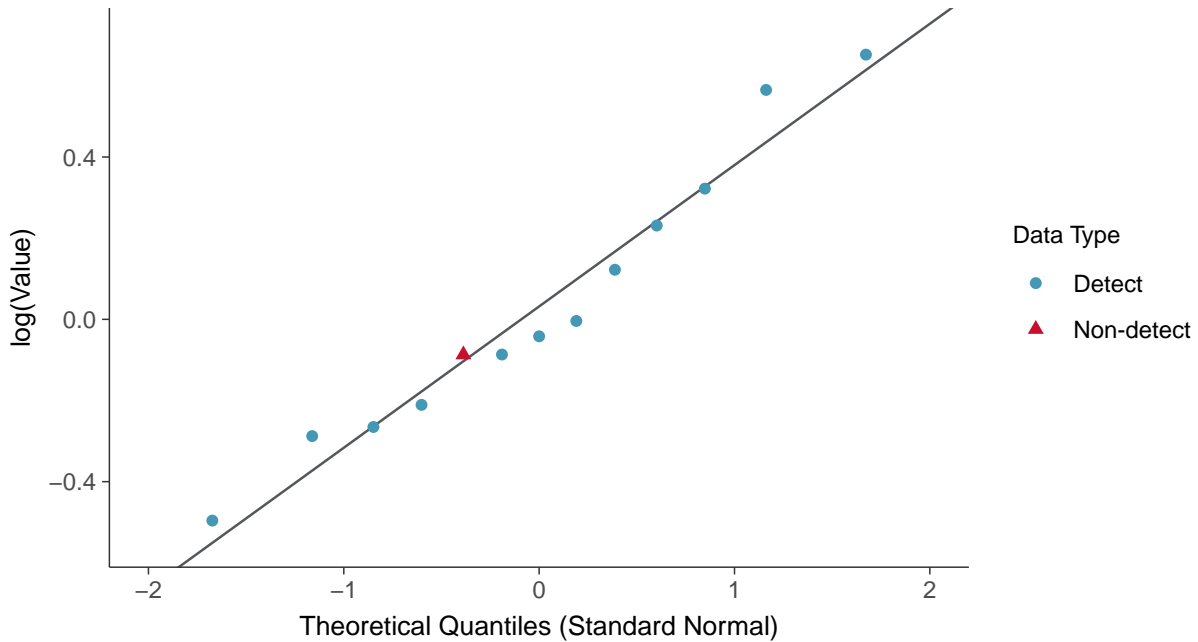
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-03 (pCi/L)



Lognormal Q-Q plot using ROS Imputed Estimates

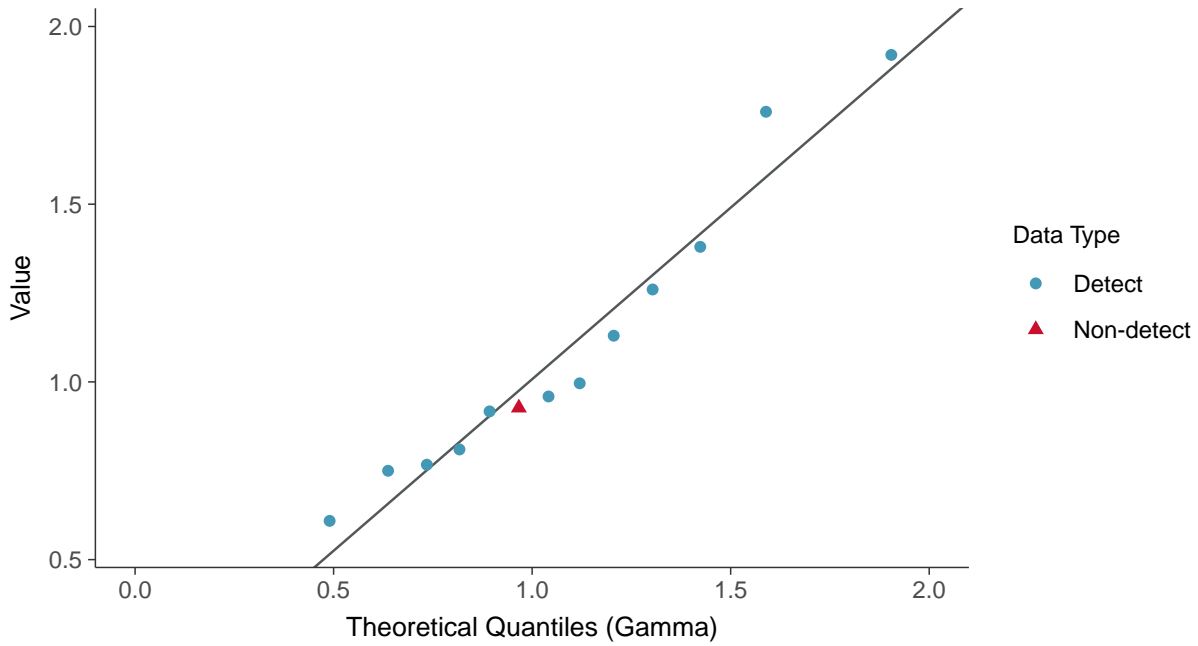
Radium 226 and 228, MW-03 (pCi/L)





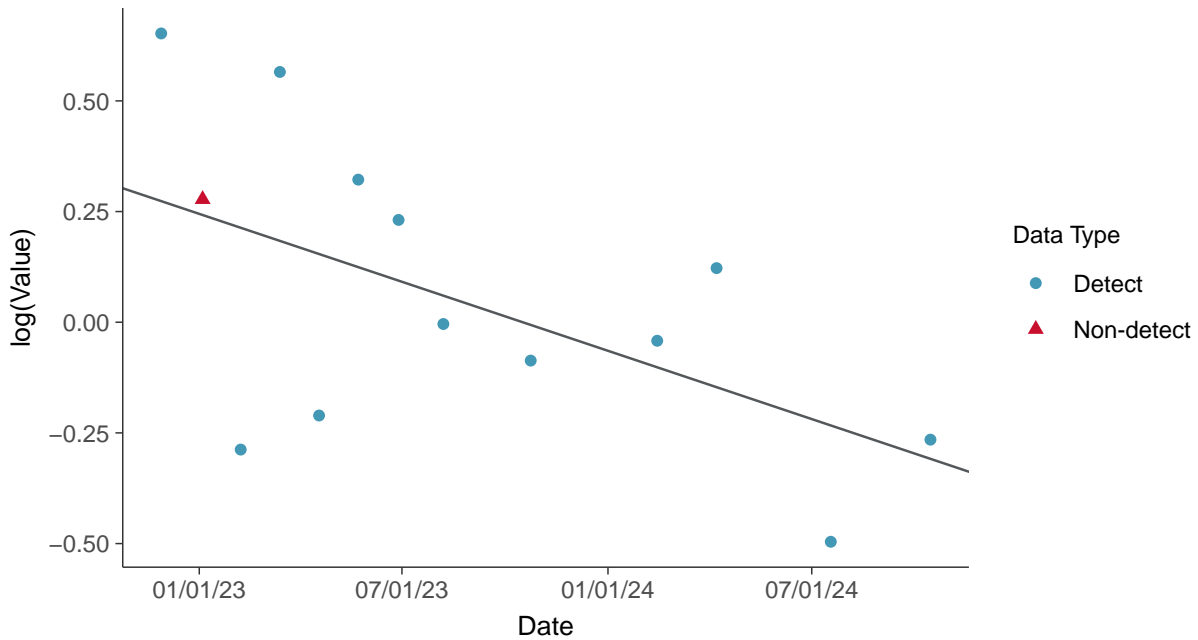
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-03 (pCi/L)



Trend Regression: Lognormal MLE

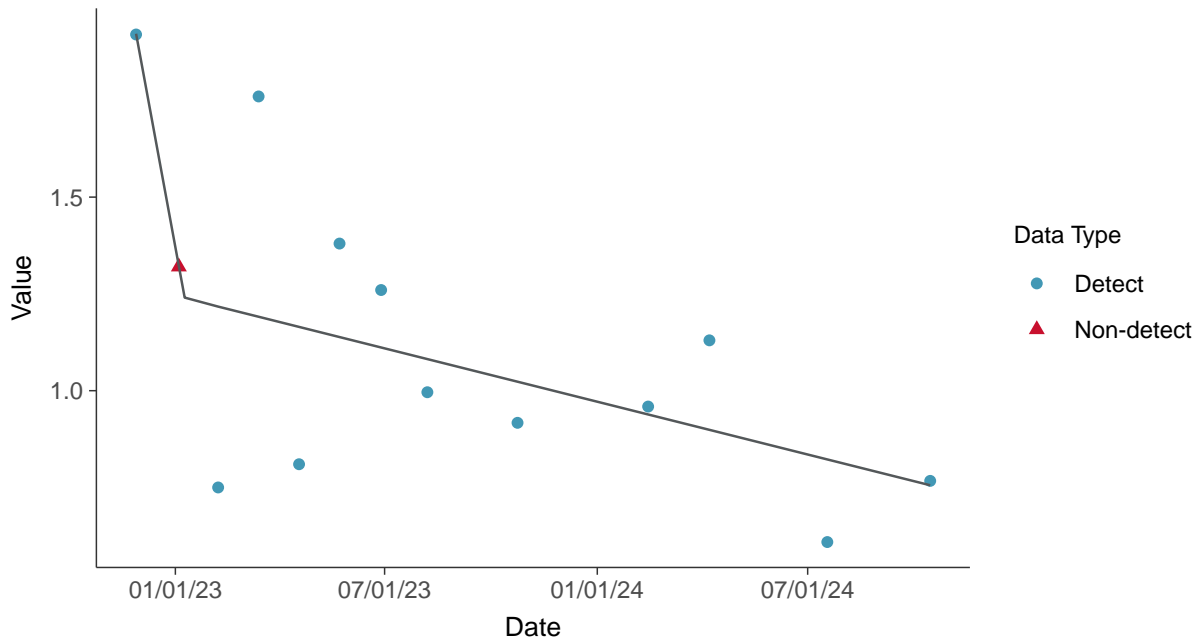
Radium 226 and 228, MW-03 (pCi/L)





Trend Regression: Piecewise Linear-Linear

Radium 226 and 228, MW-03 (pCi/L)



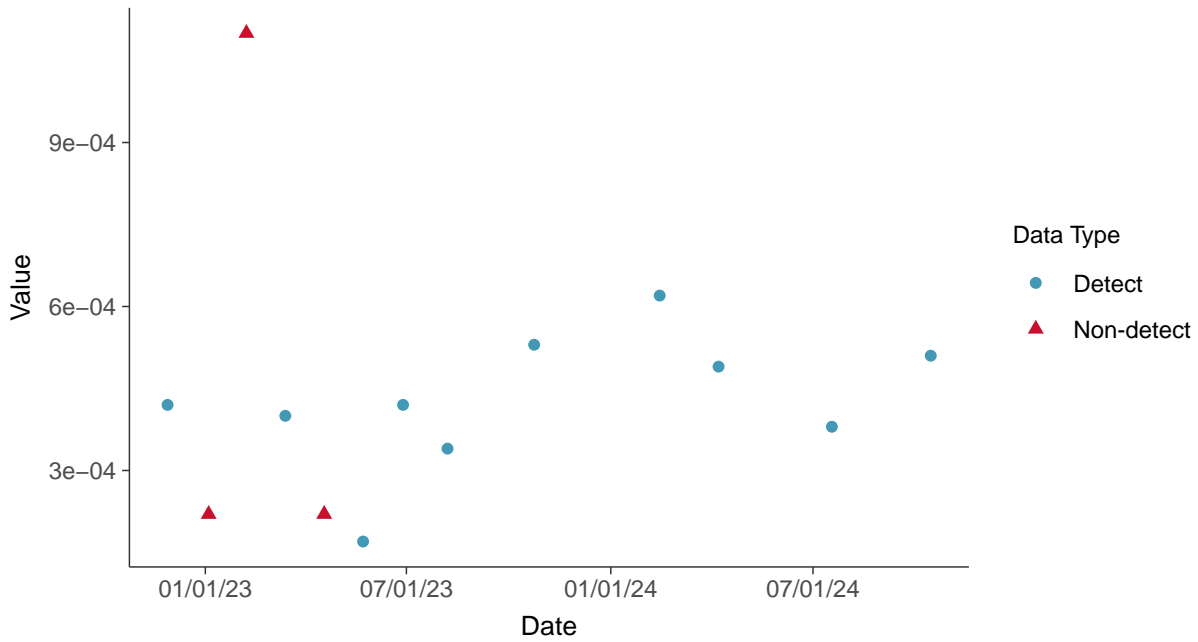


Appendix IV: Selenium, MW-03

ID: 2_13_2_5_122

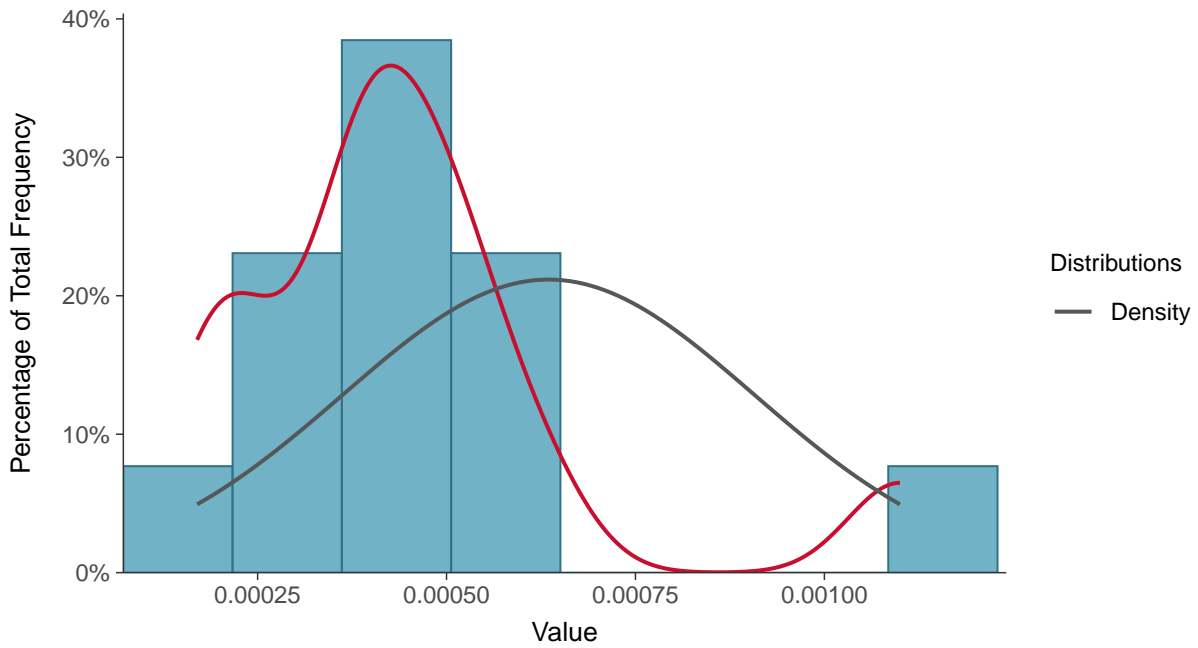
Scatter Plot

Selenium, MW-03 (mg/L)



Histogram

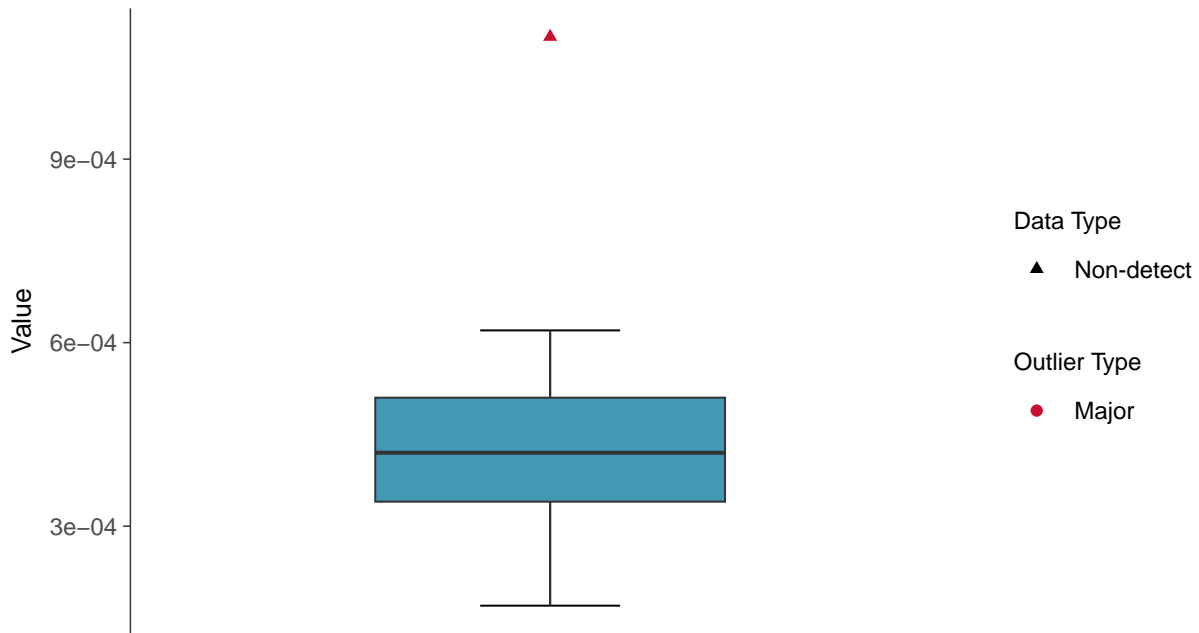
Selenium, MW-03 (mg/L)





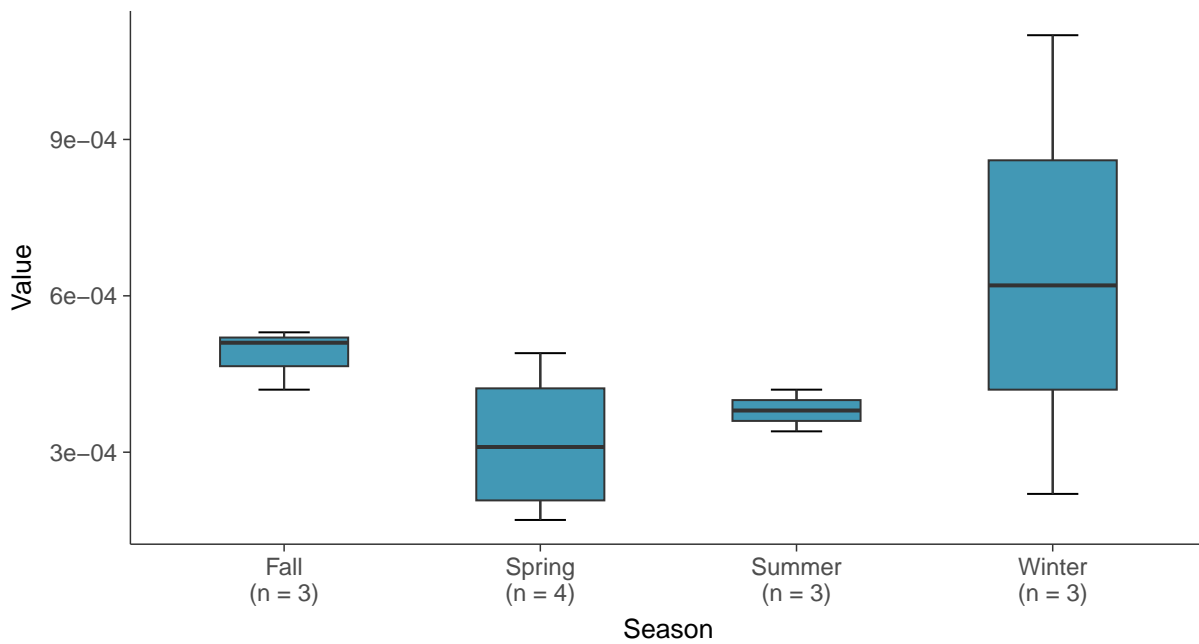
Boxplot

Selenium, MW-03 (mg/L)



Boxplot by Season

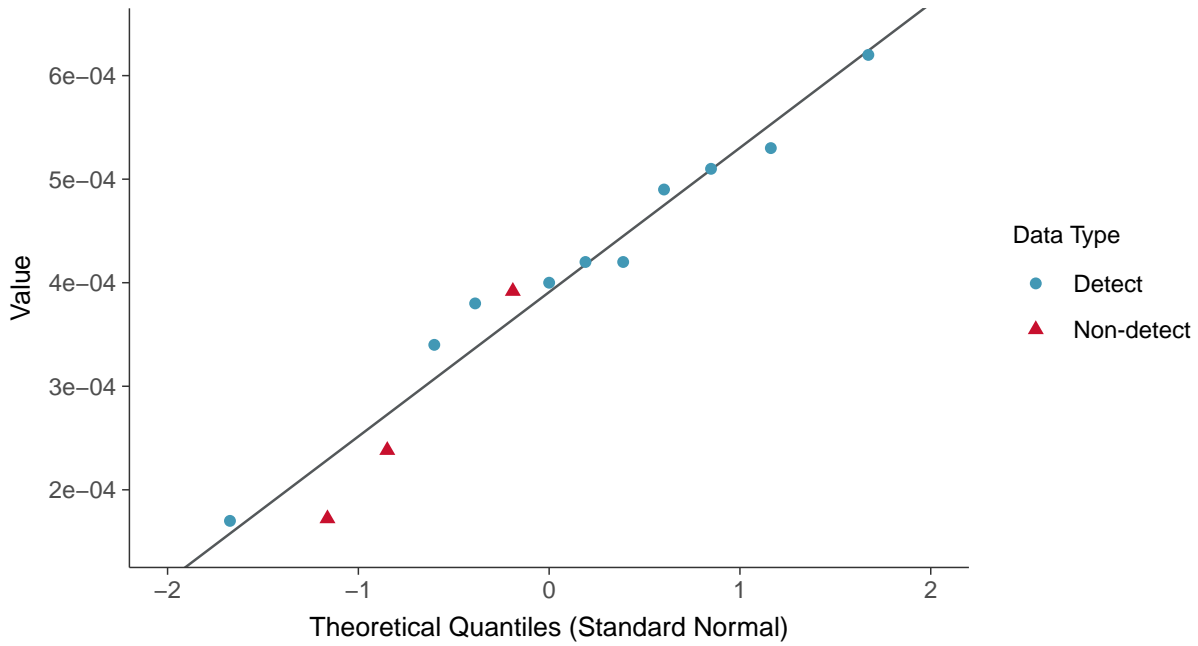
Selenium, MW-03 (mg/L)





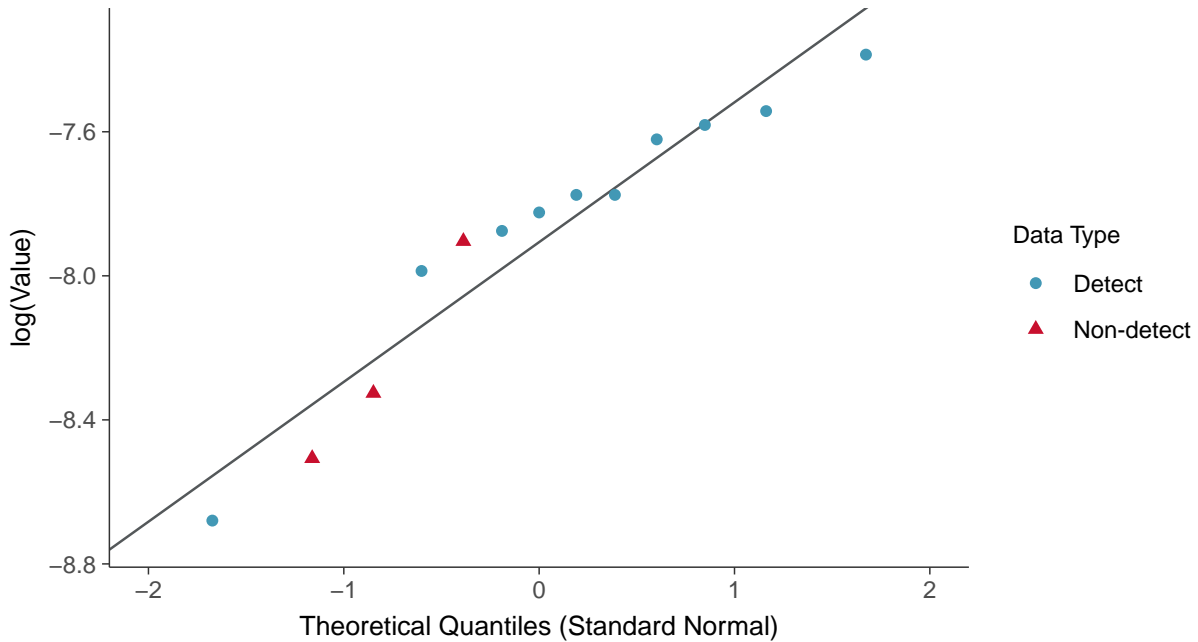
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-03 (mg/L)



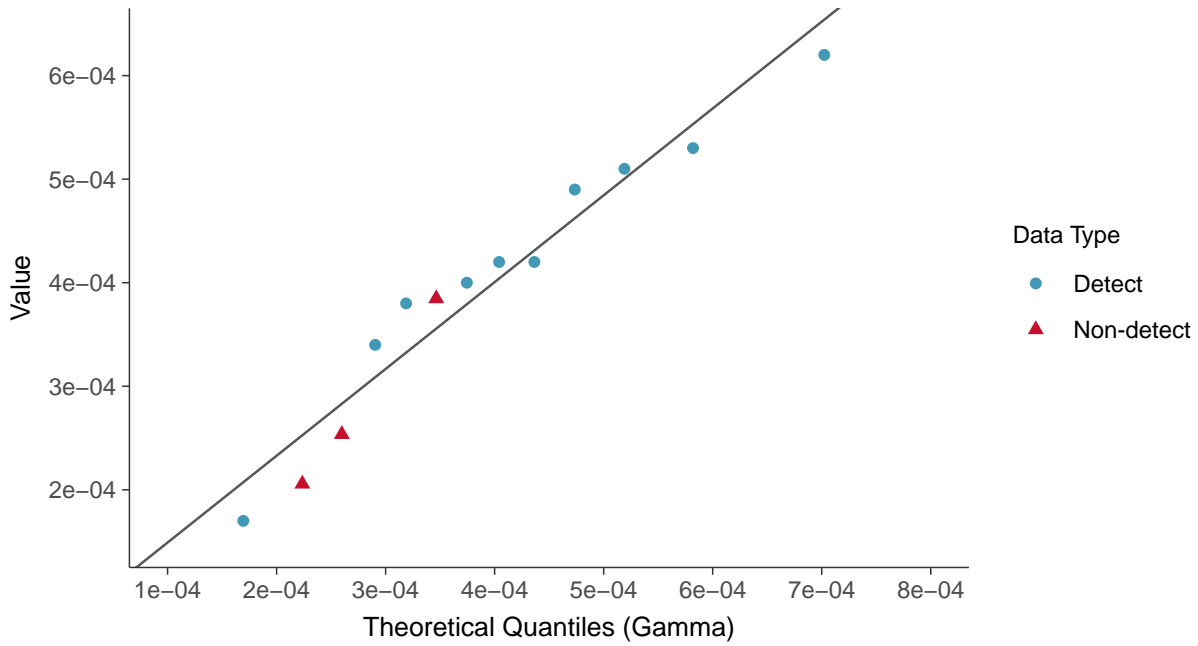
Lognormal Q-Q plot using ROS Imputed Estimates

Selenium, MW-03 (mg/L)

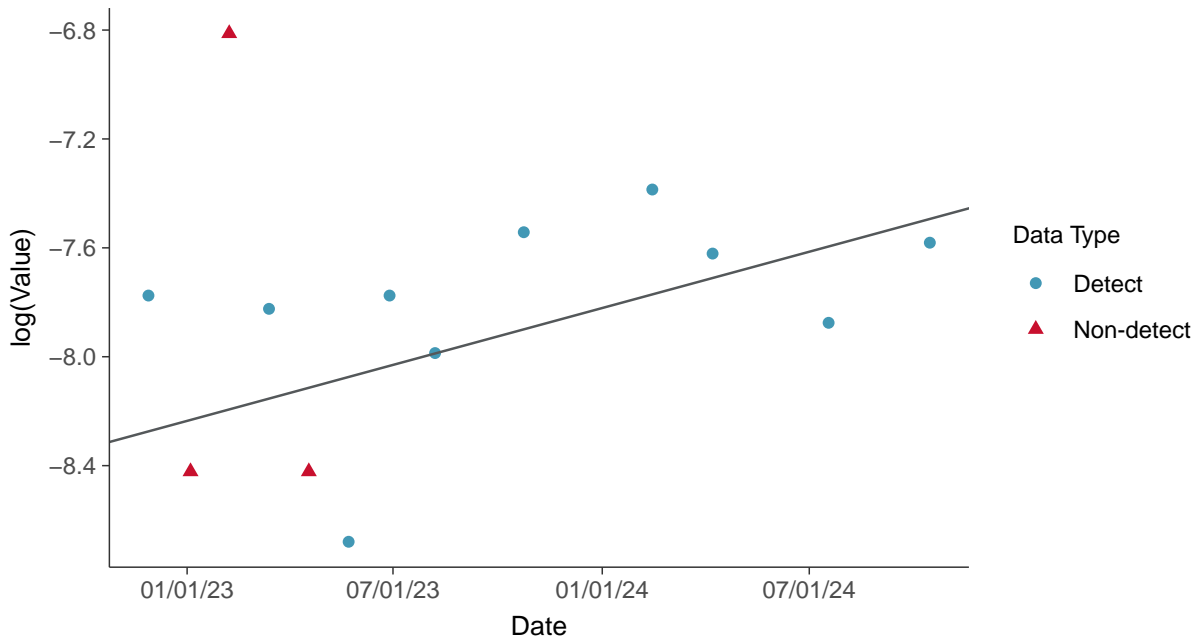




Gamma Q-Q plot using ROS Imputed Estimates
Selenium, MW-03 (mg/L)

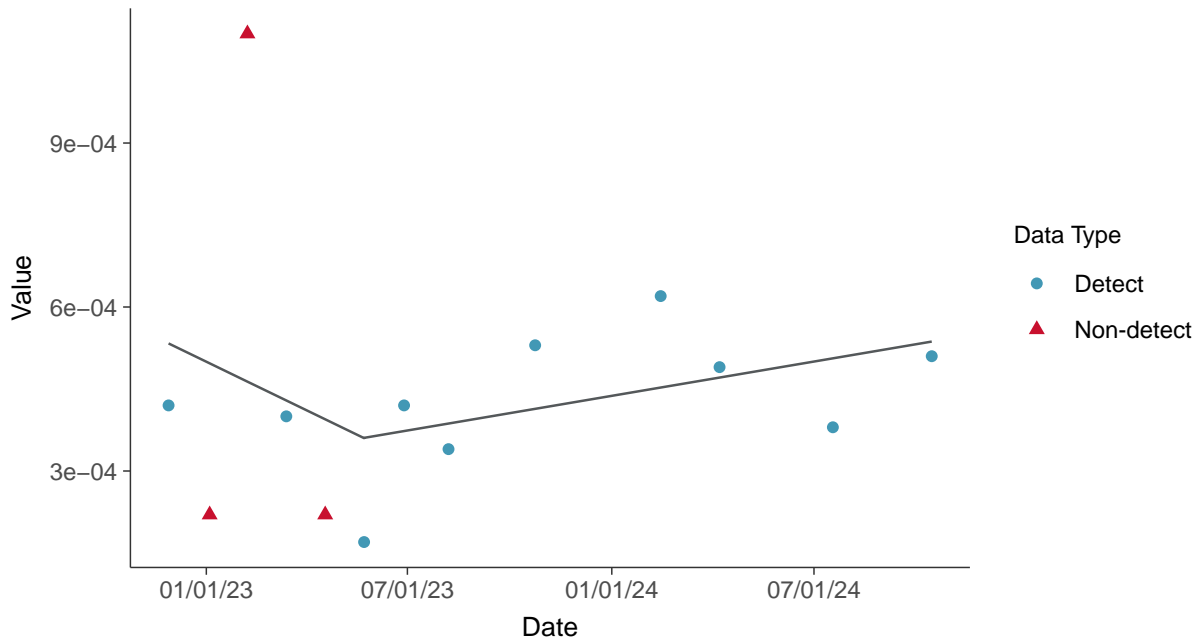


Trend Regression: Lognormal MLE
Selenium, MW-03 (mg/L)

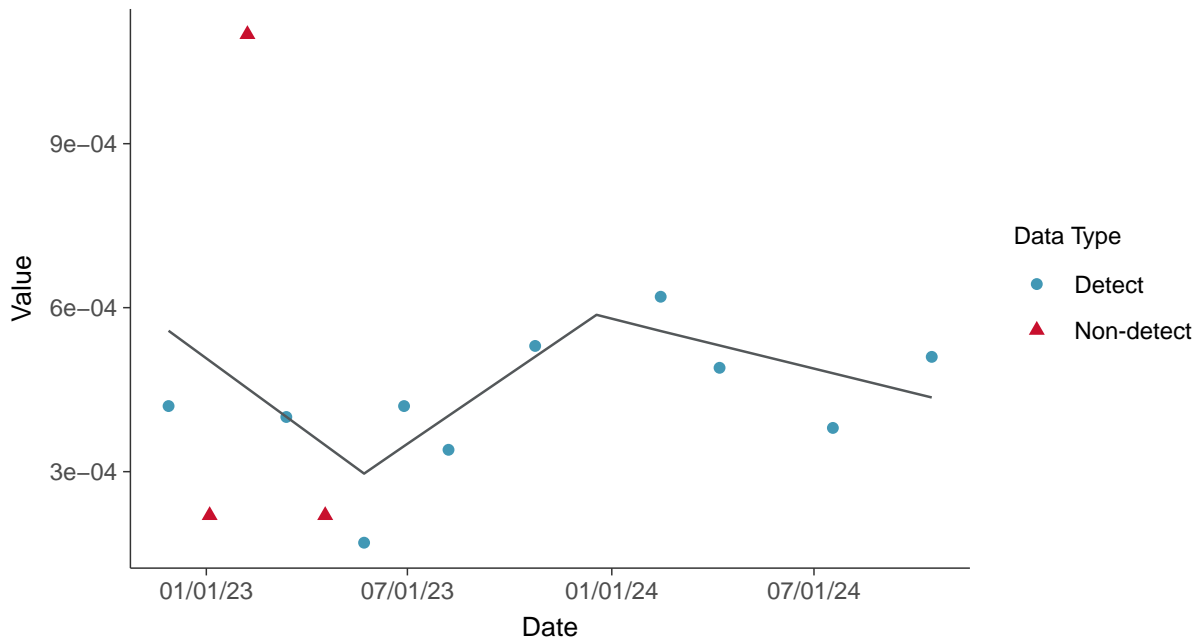




Trend Regression: Piecewise Linear-Linear
Selenium, MW-03 (mg/L)



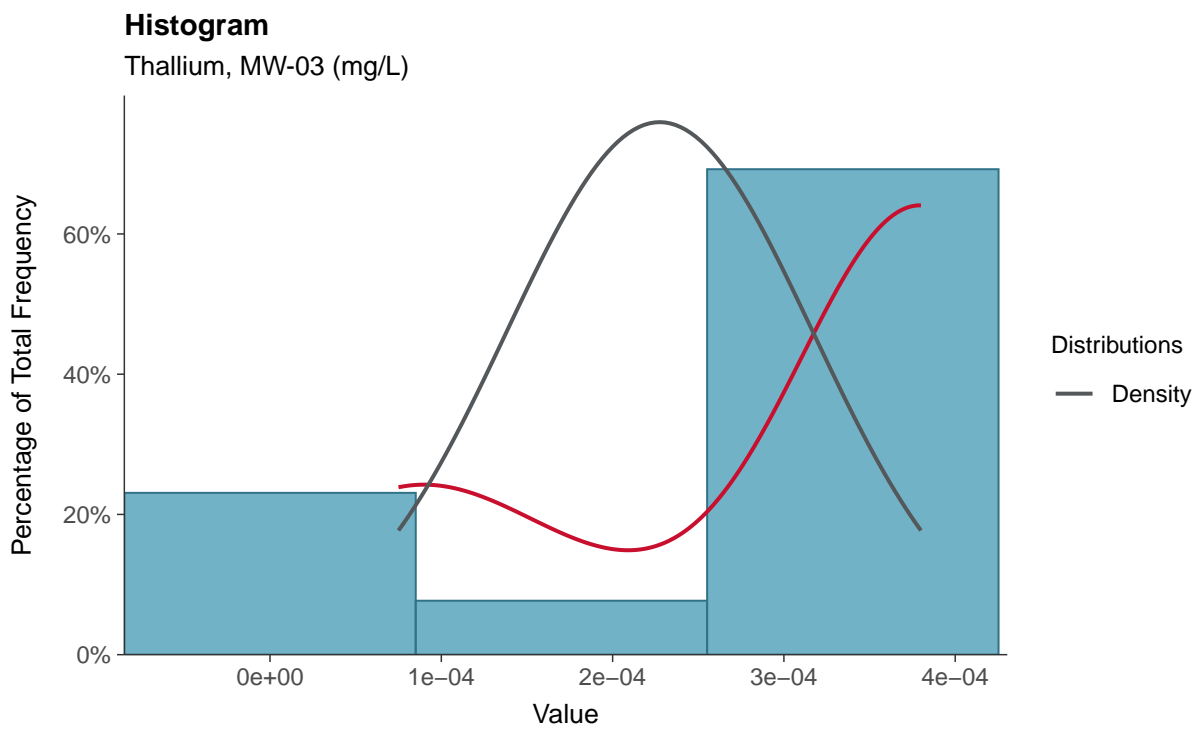
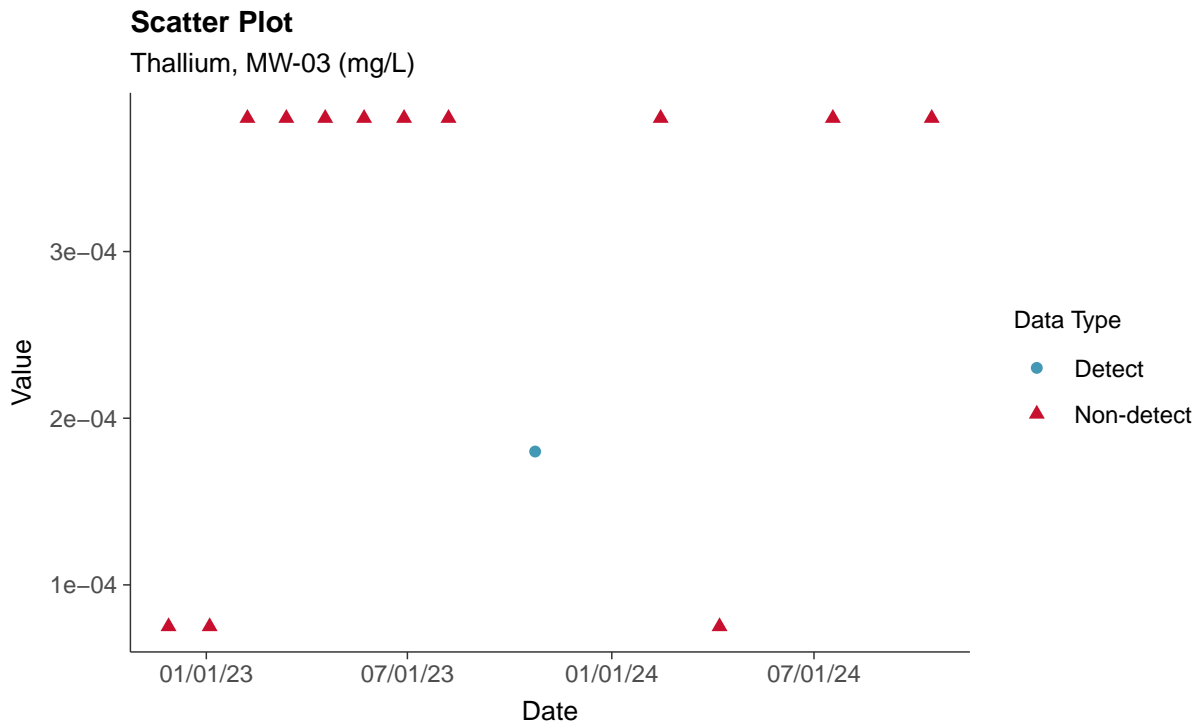
Trend Regression: Piecewise Linear-Linear-Linear
Selenium, MW-03 (mg/L)





Appendix IV: Thallium, MW-03

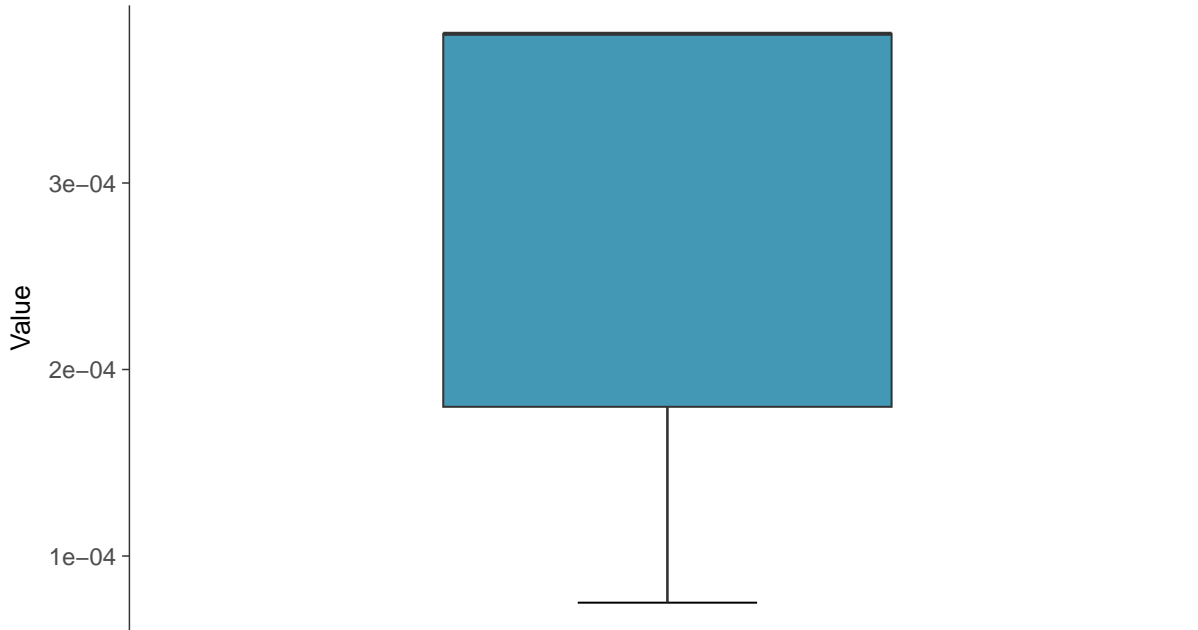
ID: 2_13_2_5_125





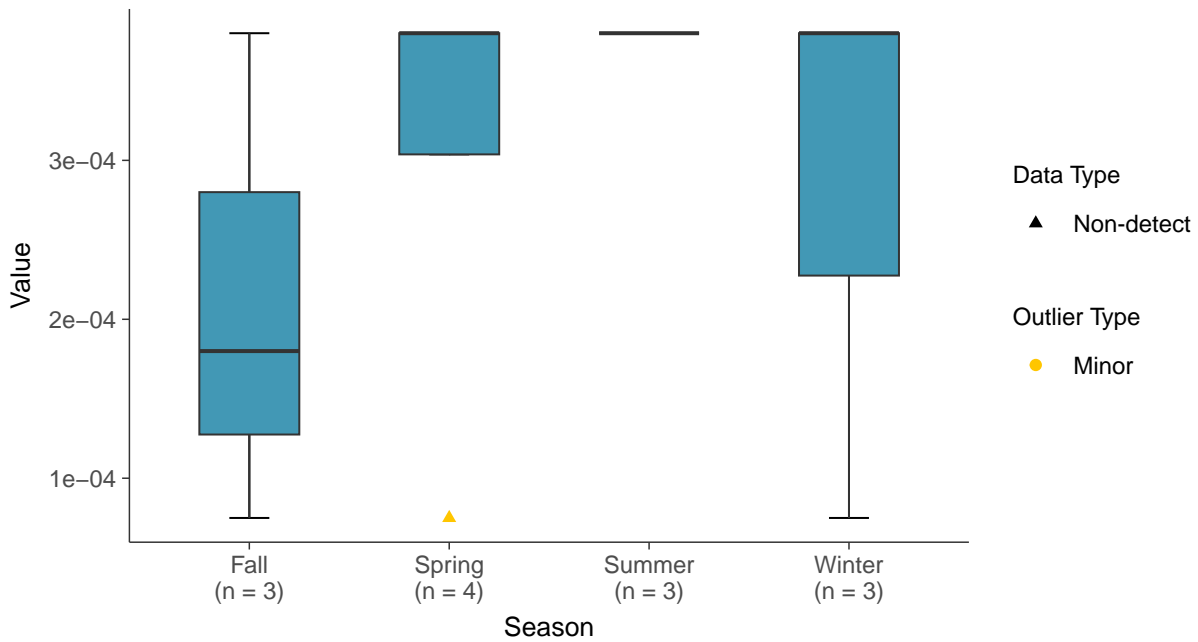
Boxplot

Thallium, MW-03 (mg/L)



Boxplot by Season

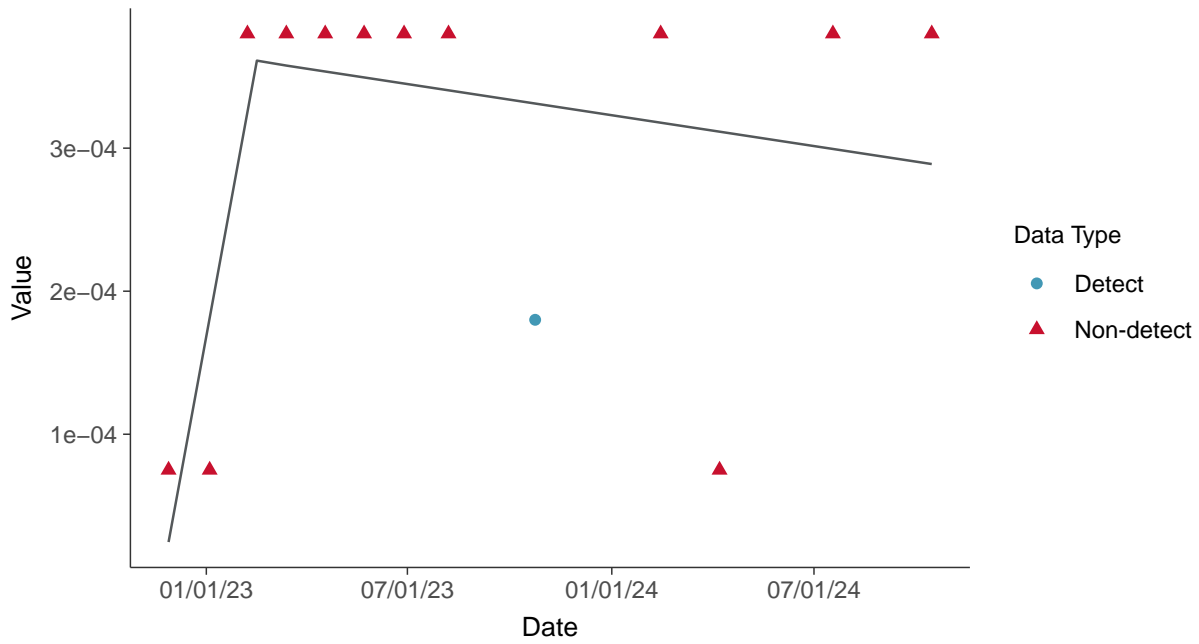
Thallium, MW-03 (mg/L)





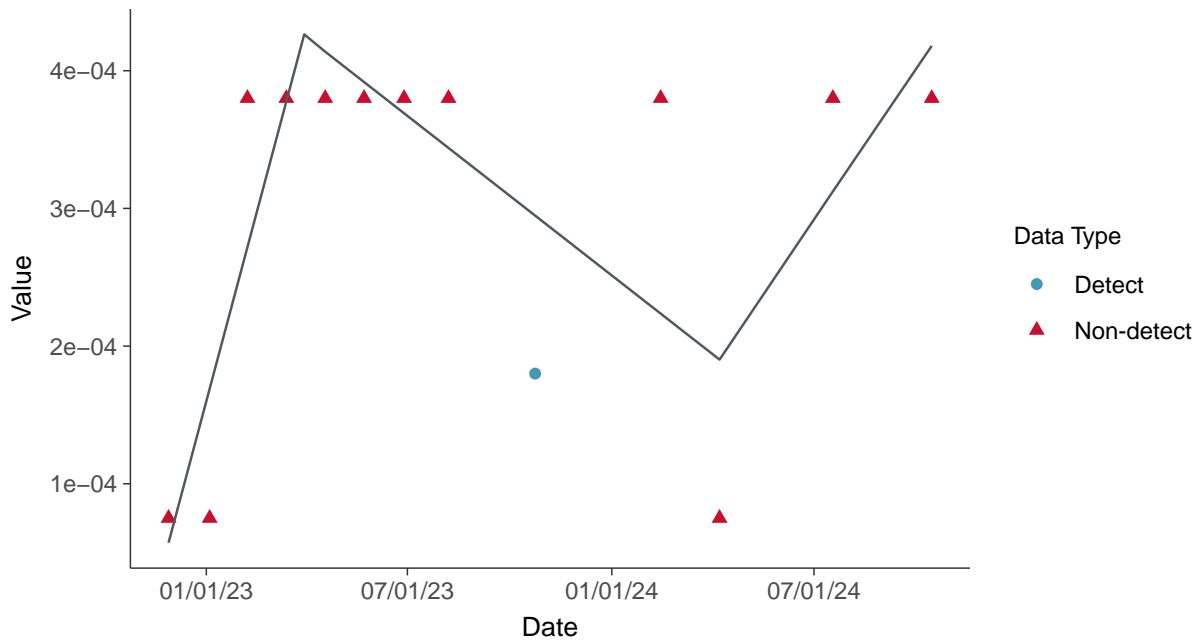
Trend Regression: Piecewise Linear-Linear

Thallium, MW-03 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Thallium, MW-03 (mg/L)



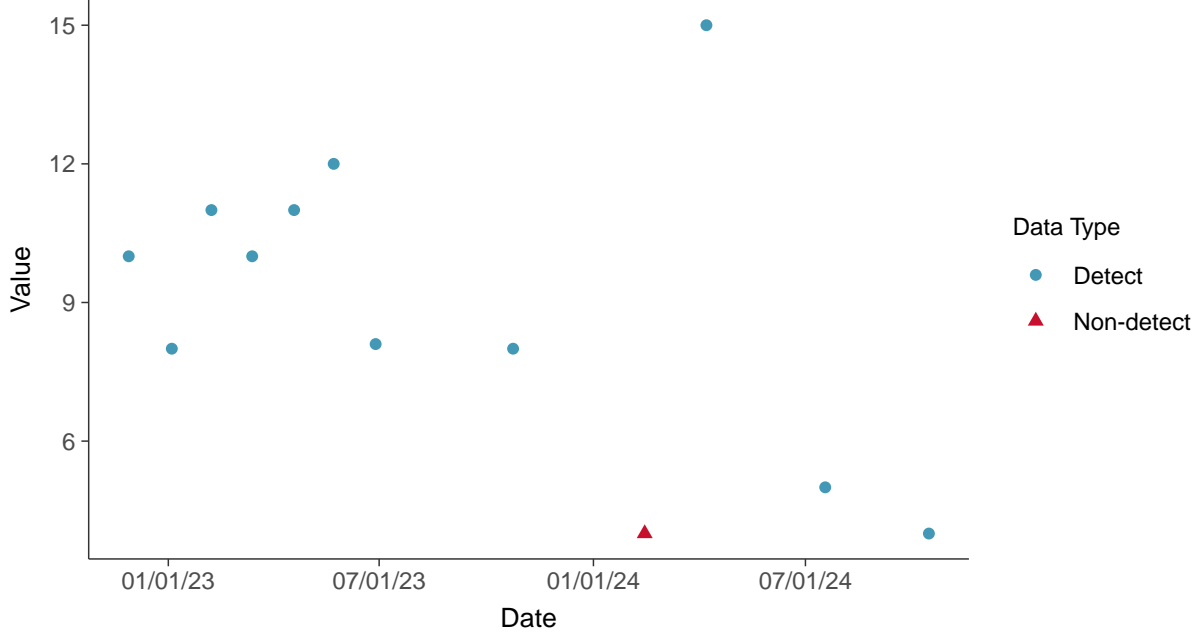


Additional Parameters: Total Suspended Solids, MW-04

ID: 2_14_2_3_127

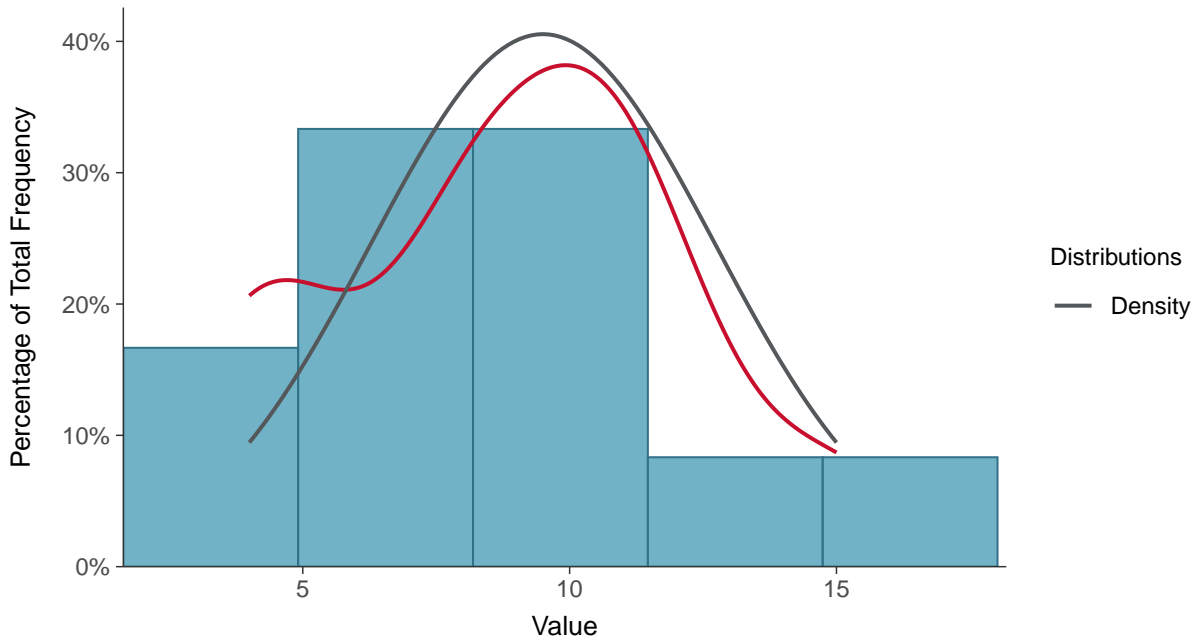
Scatter Plot

Total Suspended Solids, MW-04 (mg/L)



Histogram

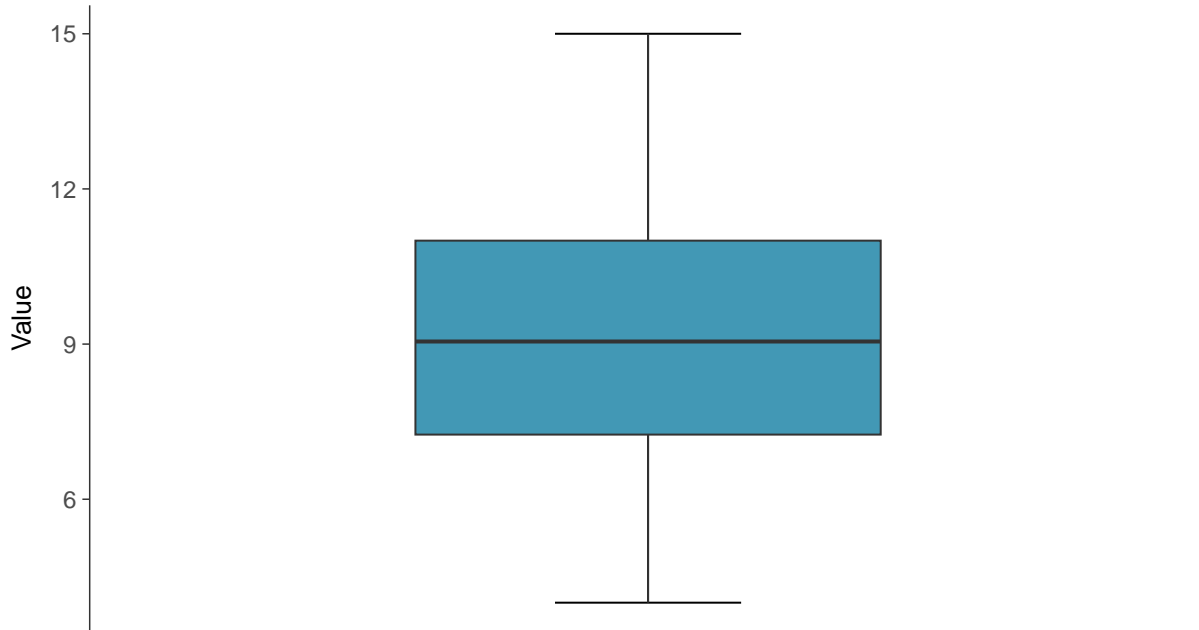
Total Suspended Solids, MW-04 (mg/L)





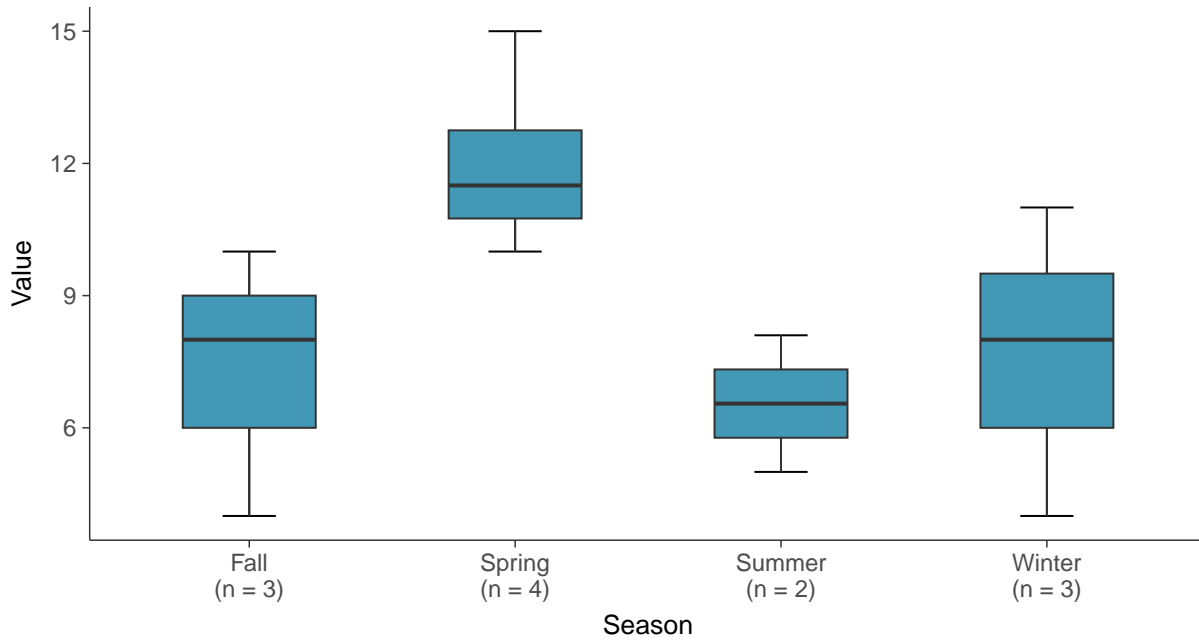
Boxplot

Total Suspended Solids, MW-04 (mg/L)



Boxplot by Season

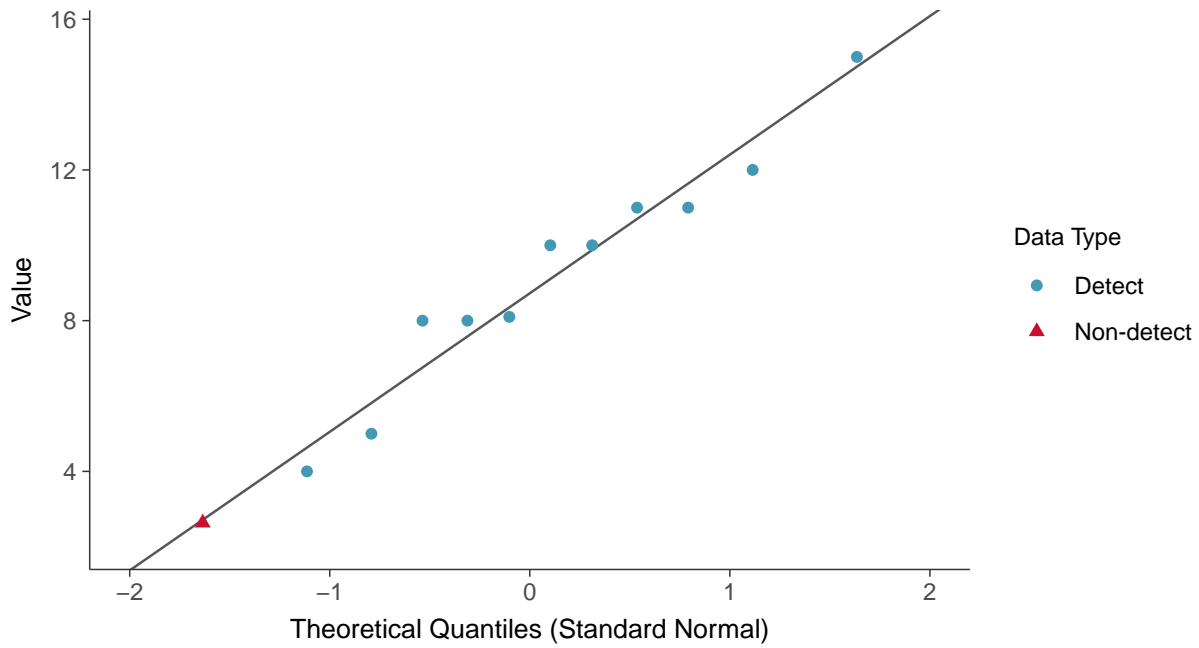
Total Suspended Solids, MW-04 (mg/L)





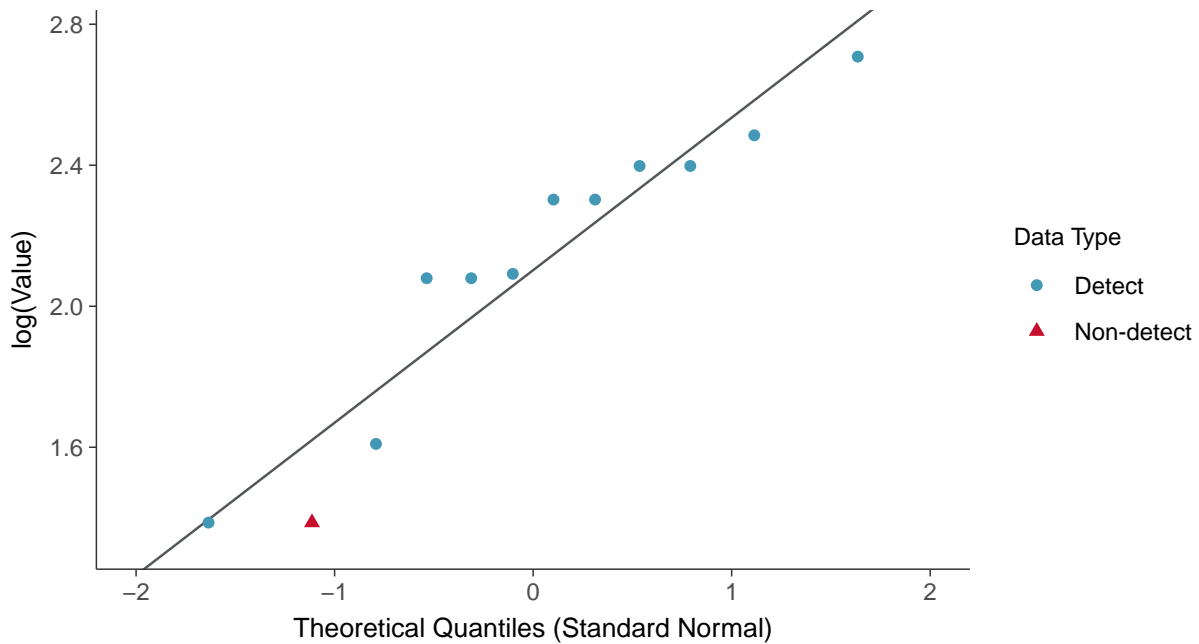
Normal Q-Q plot using ROS Imputed Estimates

Total Suspended Solids, MW-04 (mg/L)



Lognormal Q-Q plot using ROS Imputed Estimates

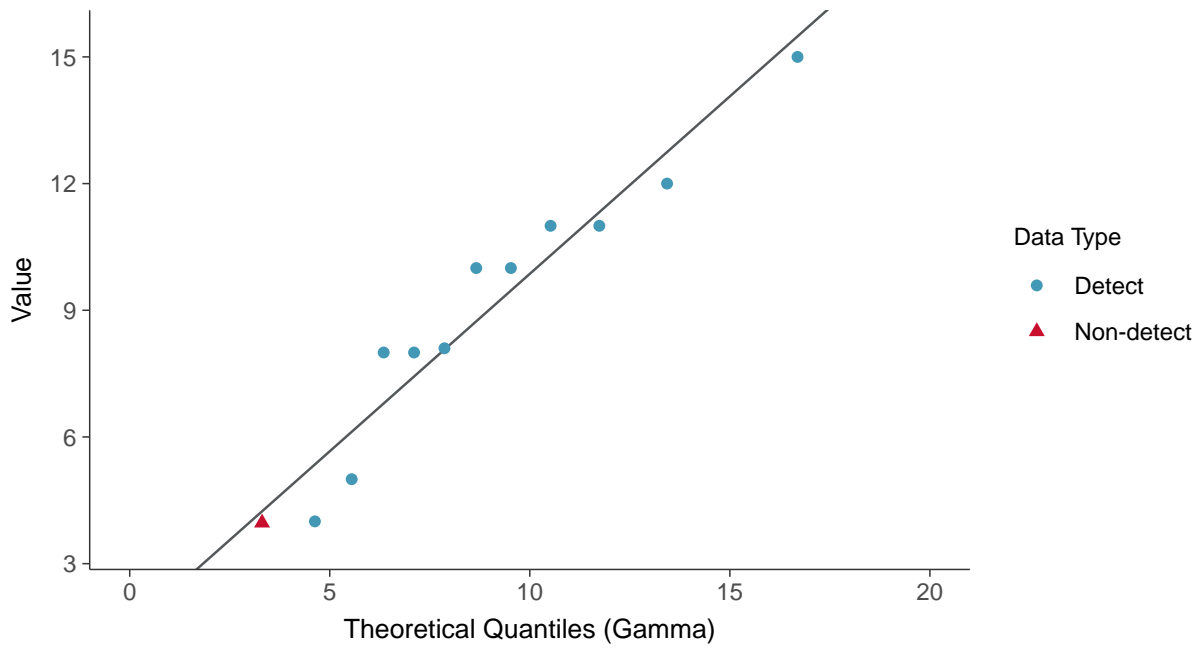
Total Suspended Solids, MW-04 (mg/L)





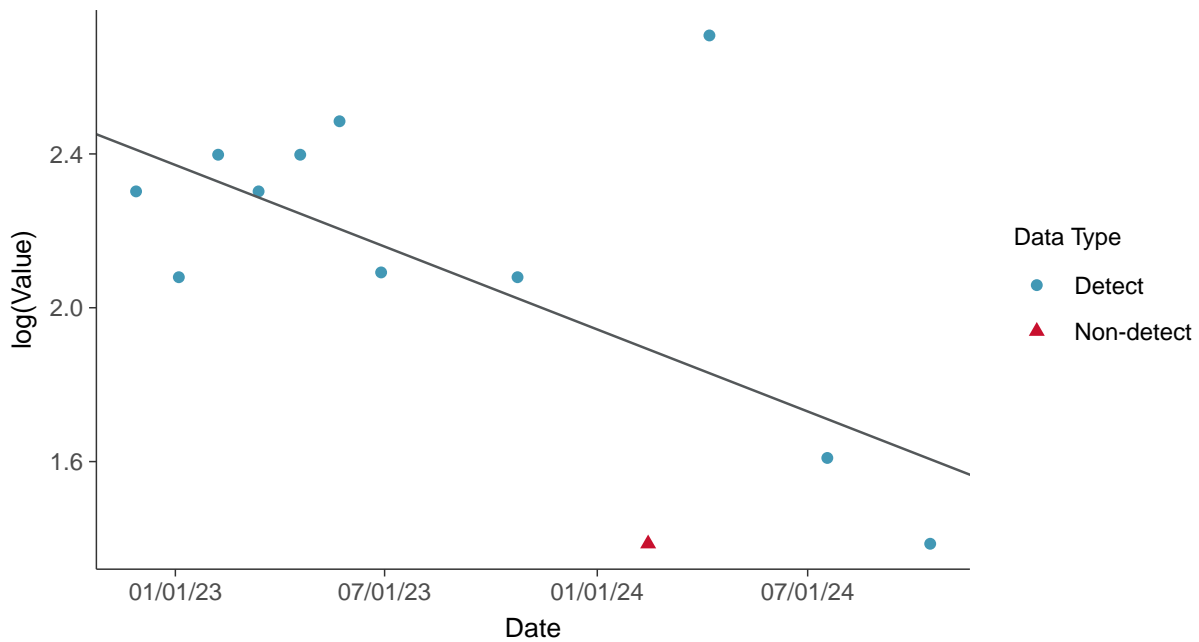
Gamma Q-Q plot using ROS Imputed Estimates

Total Suspended Solids, MW-04 (mg/L)



Trend Regression: Lognormal MLE

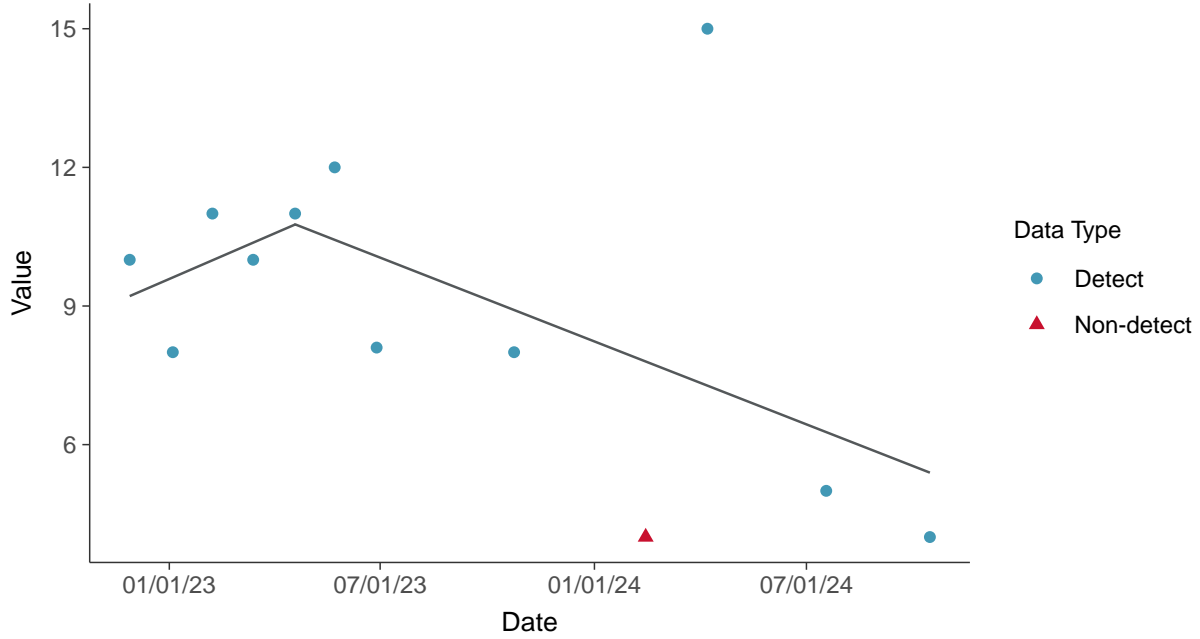
Total Suspended Solids, MW-04 (mg/L)





Trend Regression: Piecewise Linear-Linear

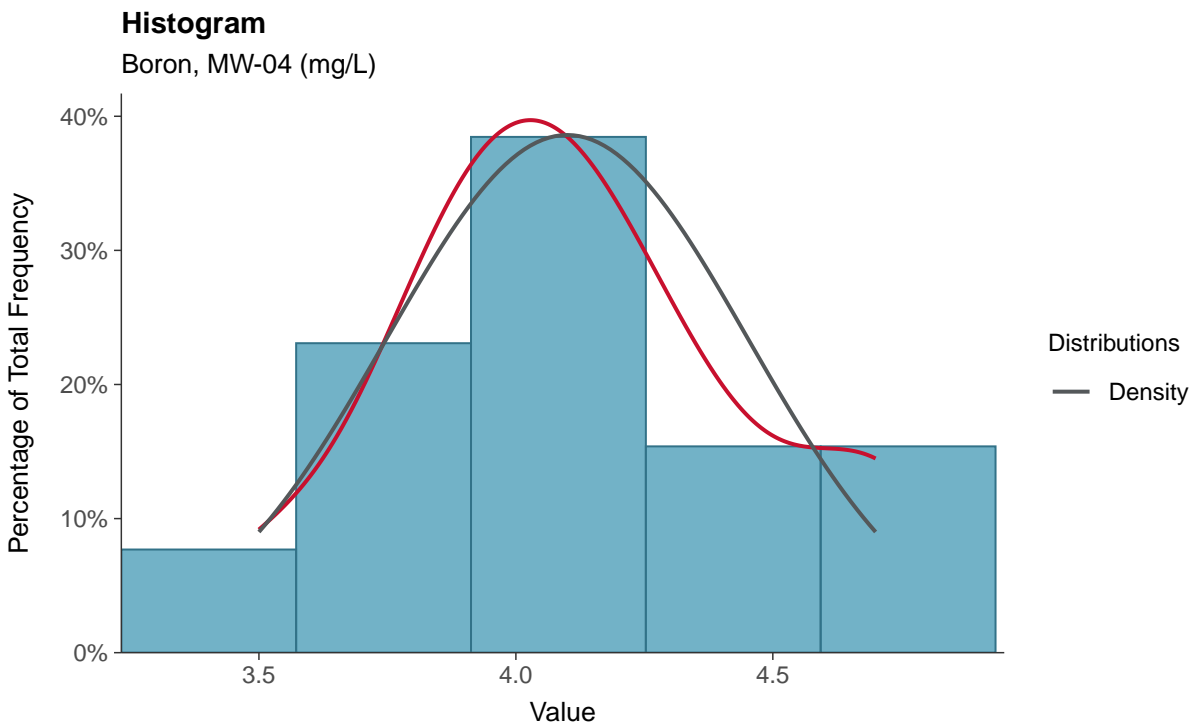
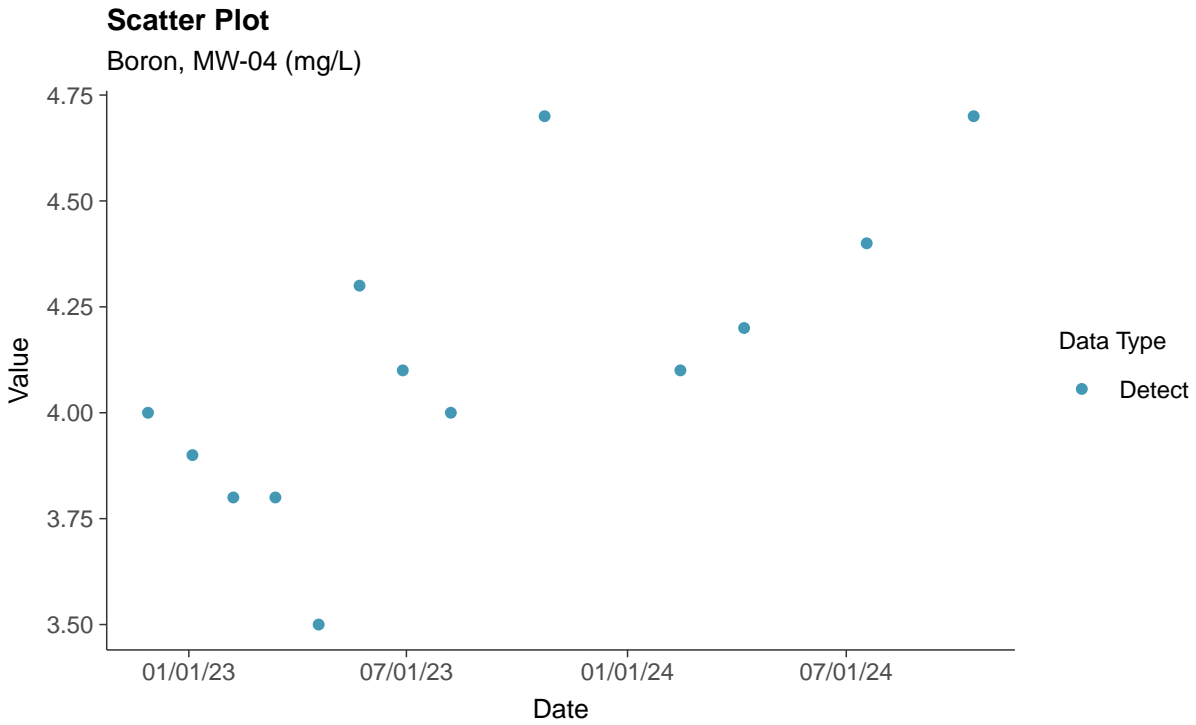
Total Suspended Solids, MW-04 (mg/L)





Appendix III: Boron, MW-04

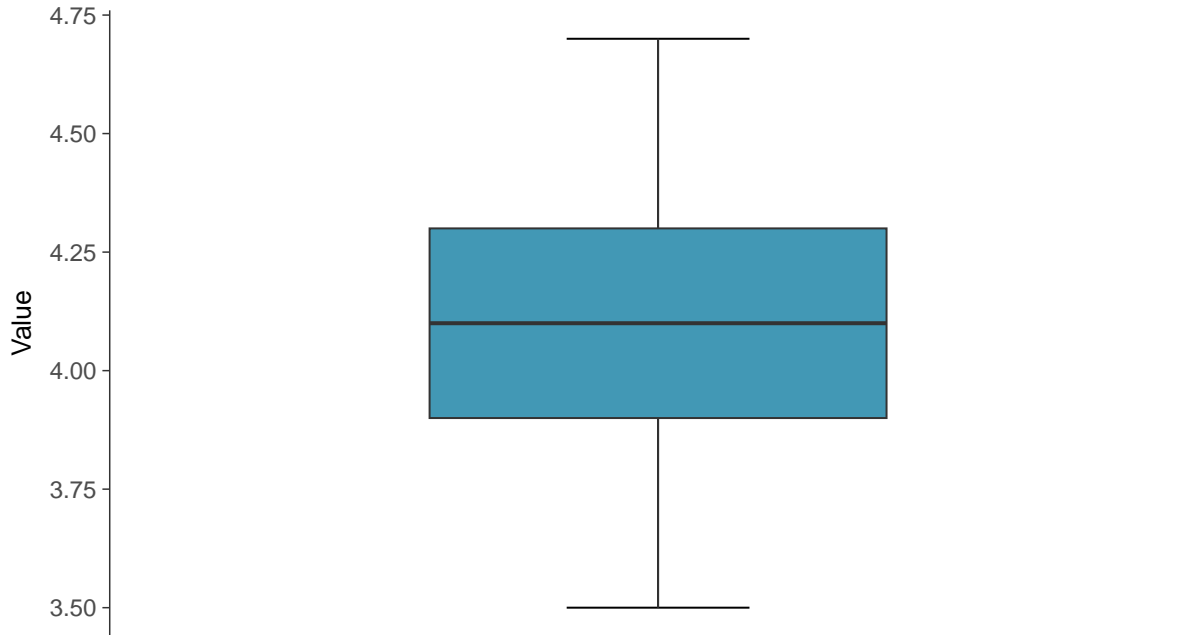
ID: 2_14_2_4_105





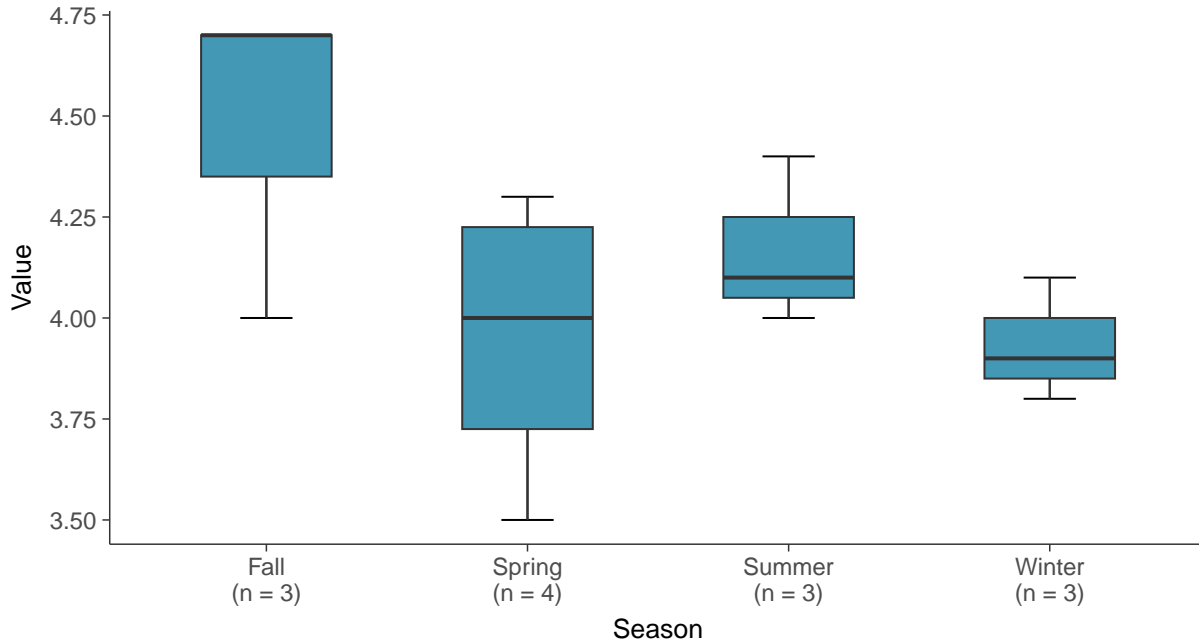
Boxplot

Boron, MW-04 (mg/L)



Boxplot by Season

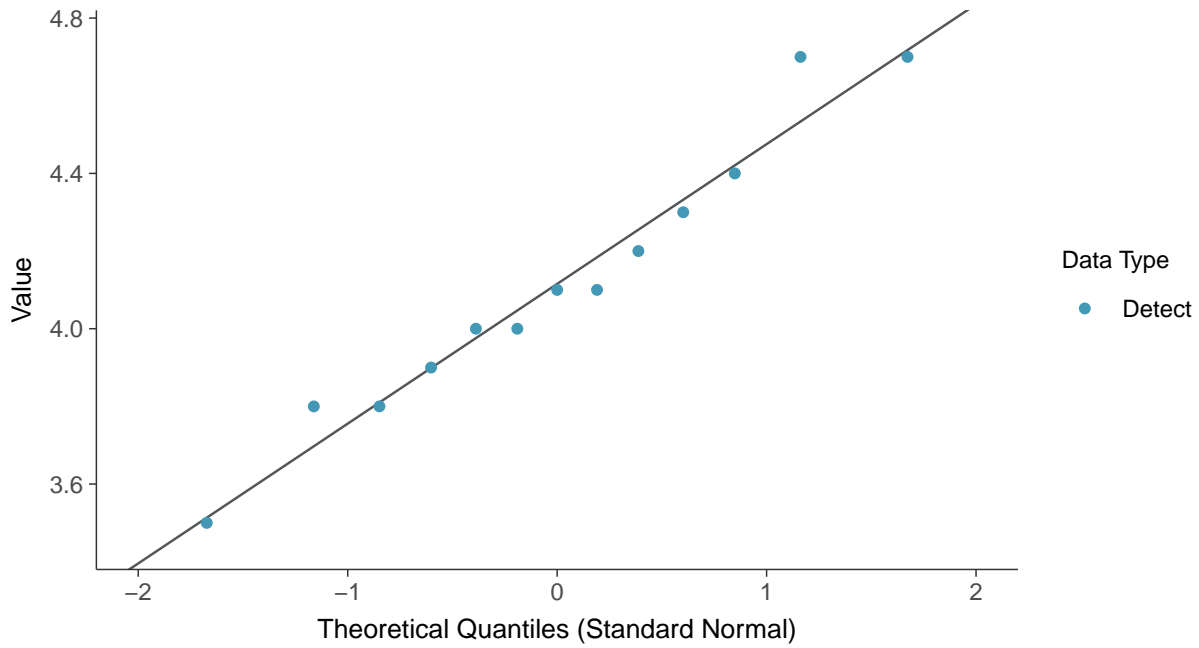
Boron, MW-04 (mg/L)





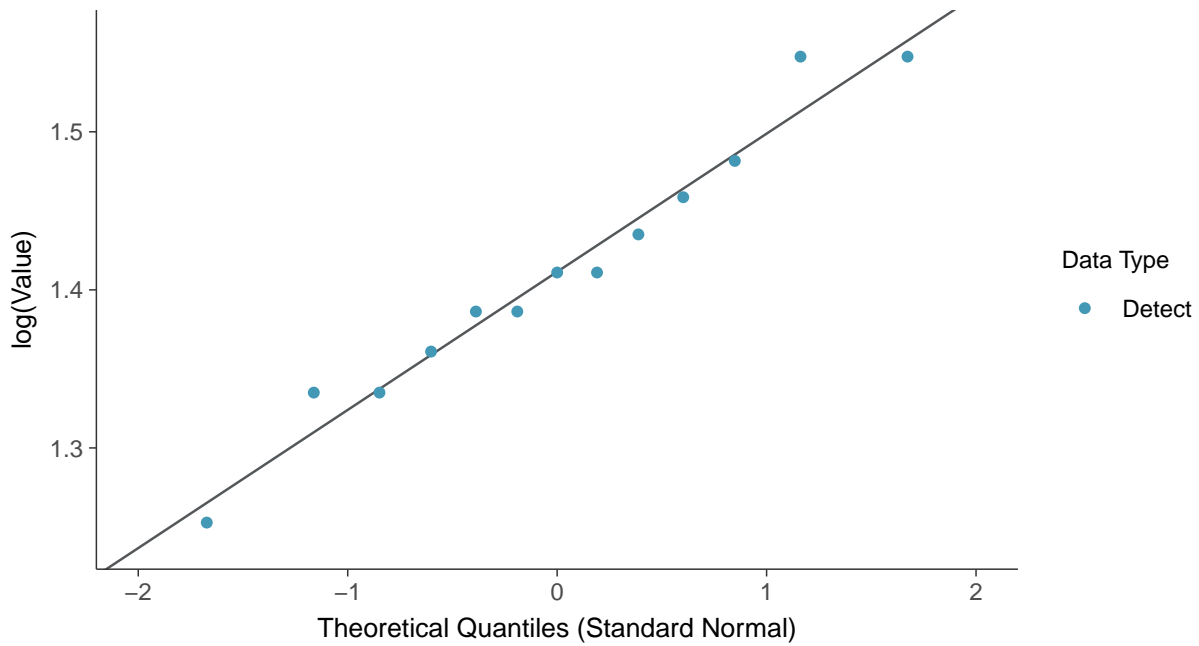
Normal Q-Q plot

Boron, MW-04 (mg/L)



Lognormal Q-Q plot

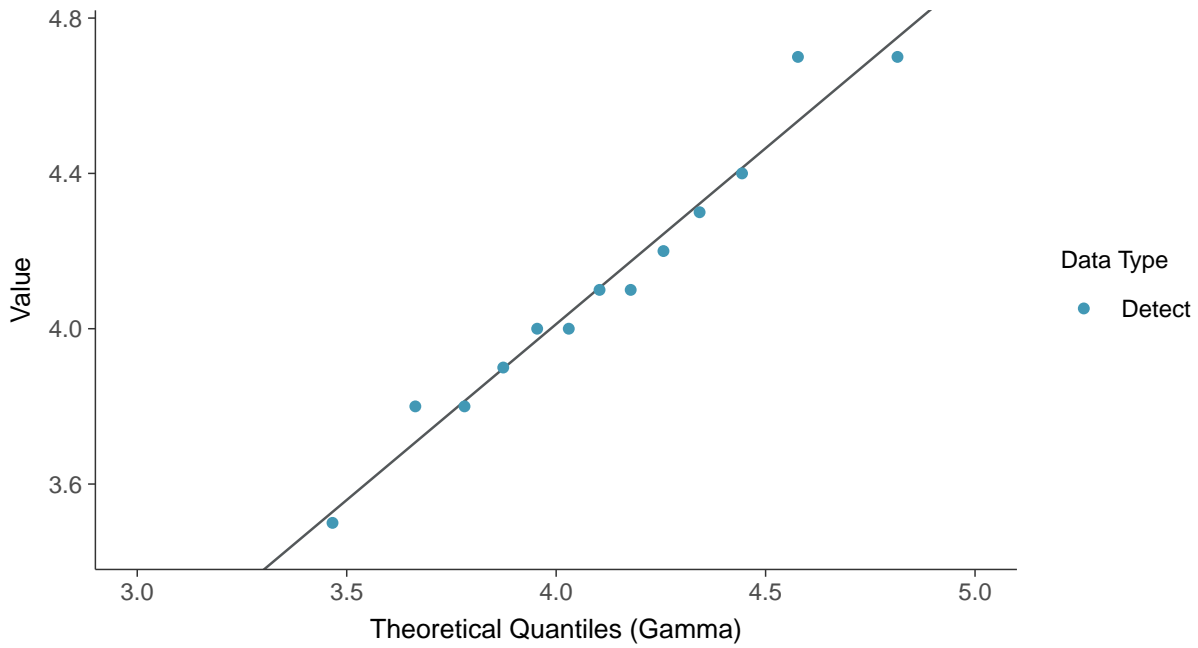
Boron, MW-04 (mg/L)





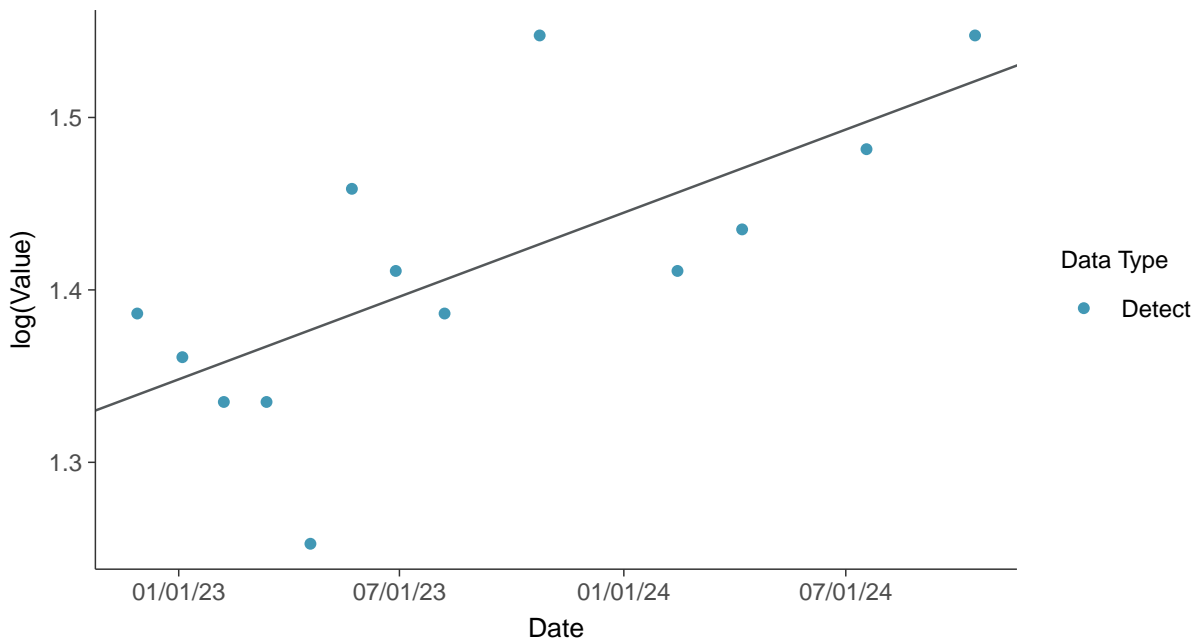
Gamma Q-Q plot

Boron, MW-04 (mg/L)



Trend Regression: Lognormal MLE

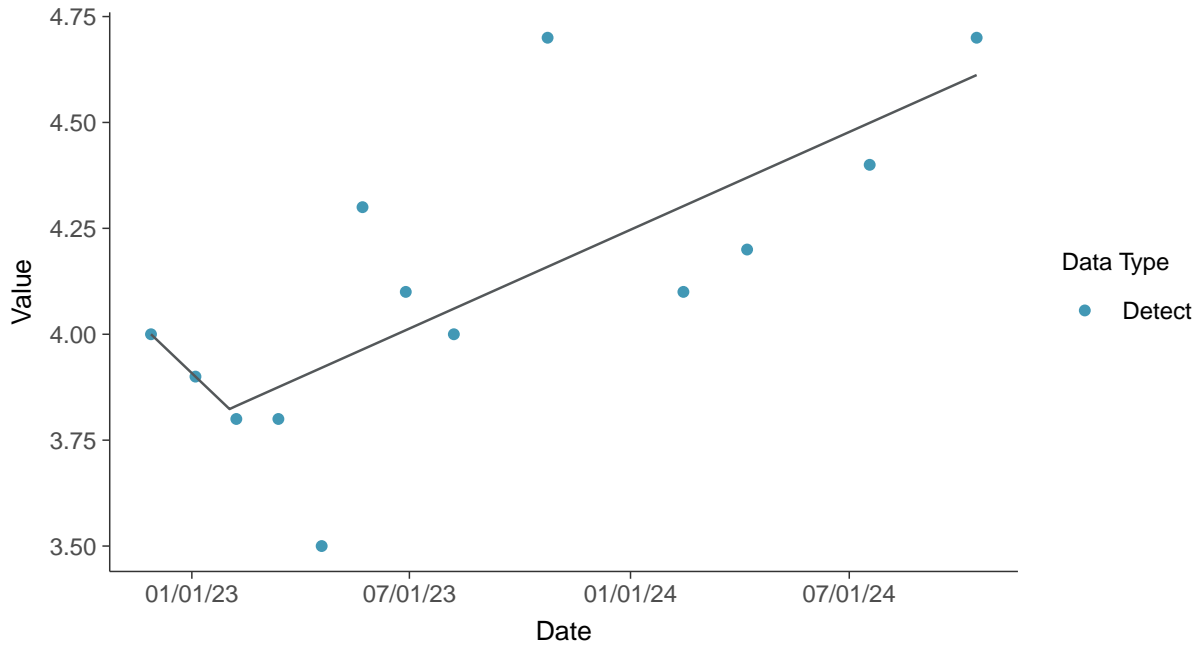
Boron, MW-04 (mg/L)





Trend Regression: Piecewise Linear-Linear

Boron, MW-04 (mg/L)



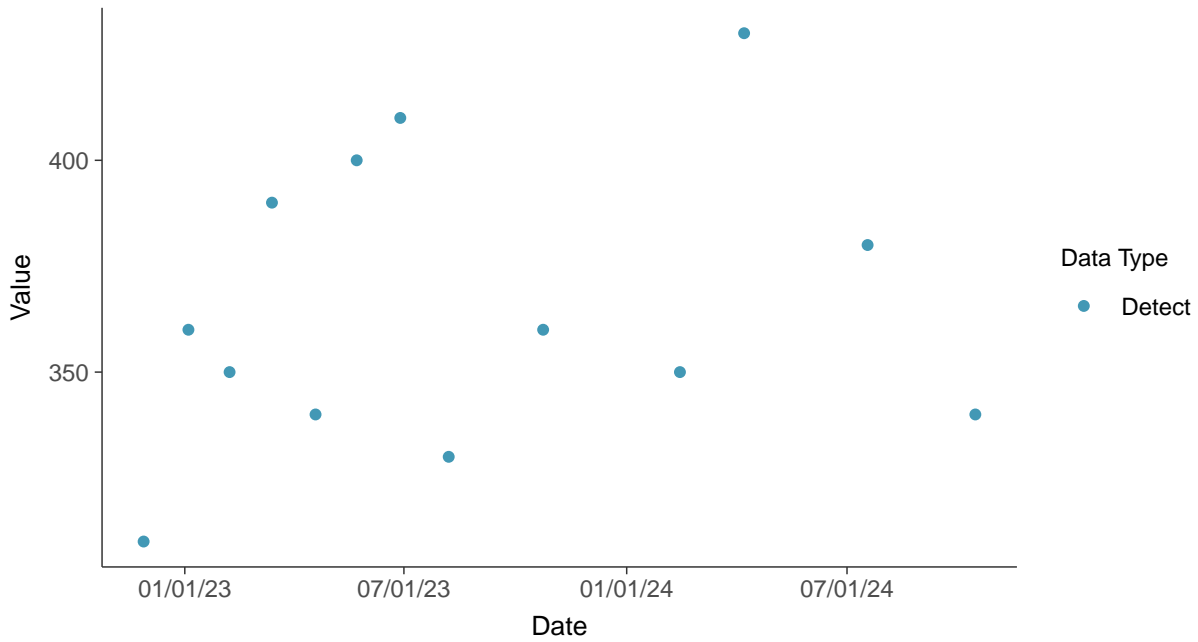


Appendix III: Calcium, MW-04

ID: 2_14_2_4_107

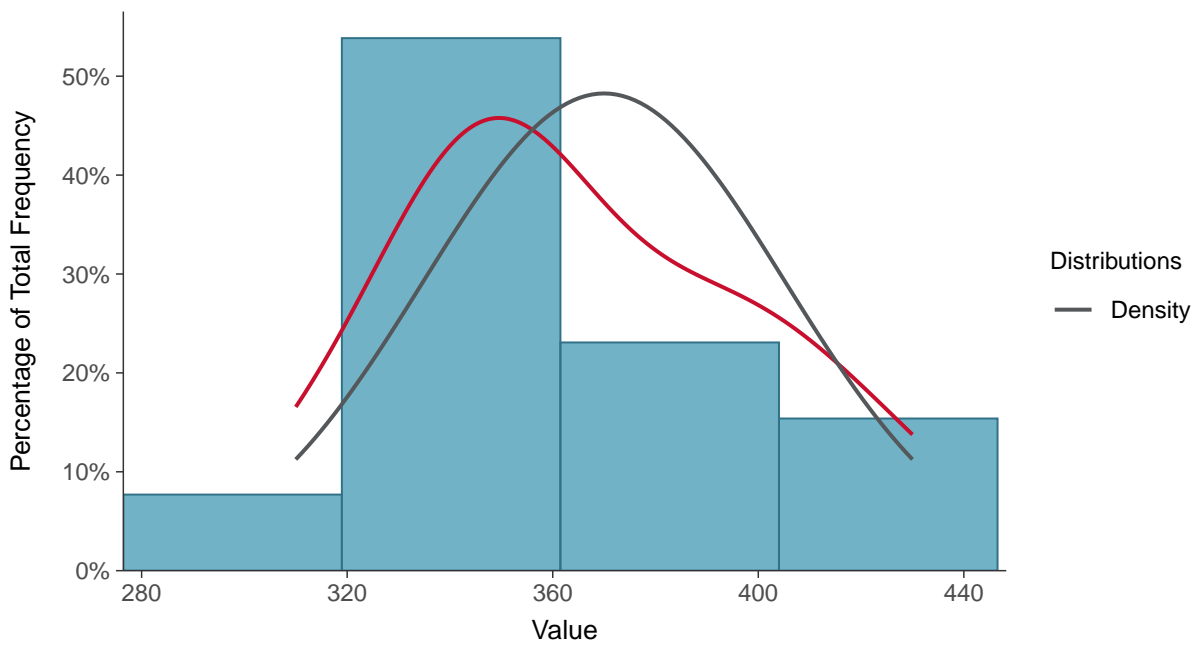
Scatter Plot

Calcium, MW-04 (mg/L)



Histogram

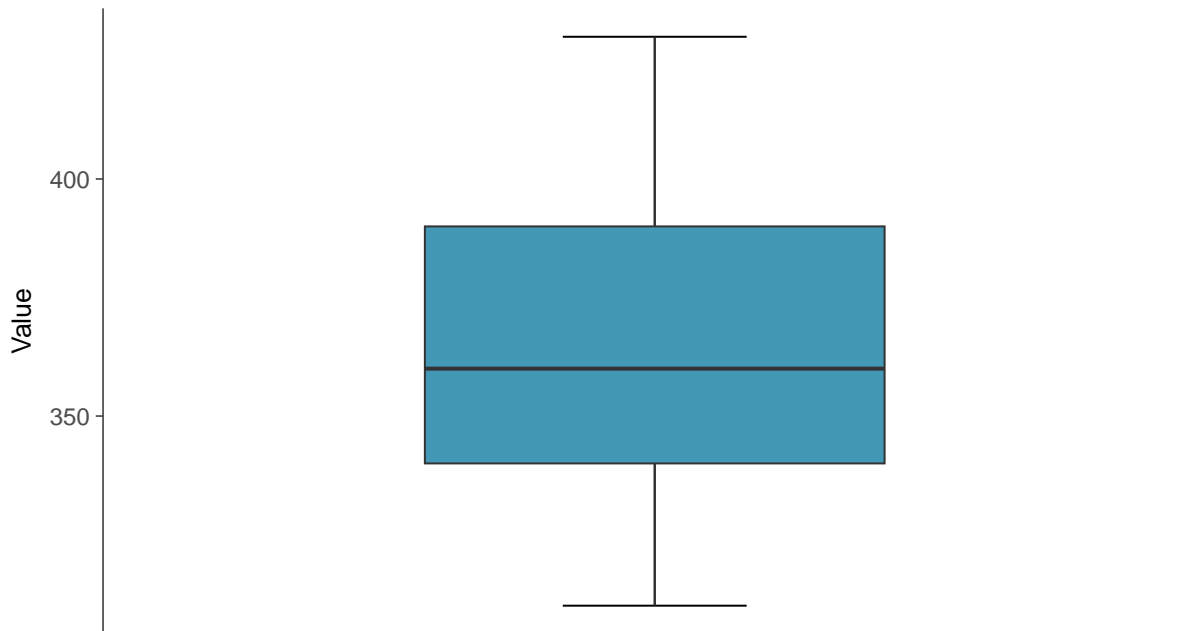
Calcium, MW-04 (mg/L)





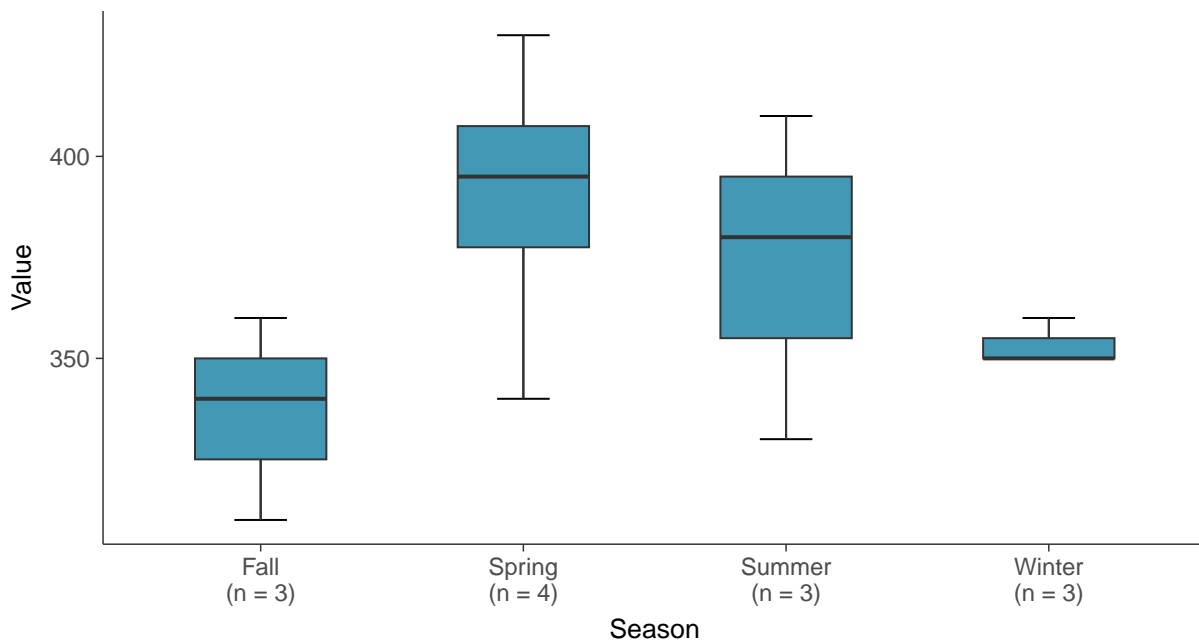
Boxplot

Calcium, MW-04 (mg/L)



Boxplot by Season

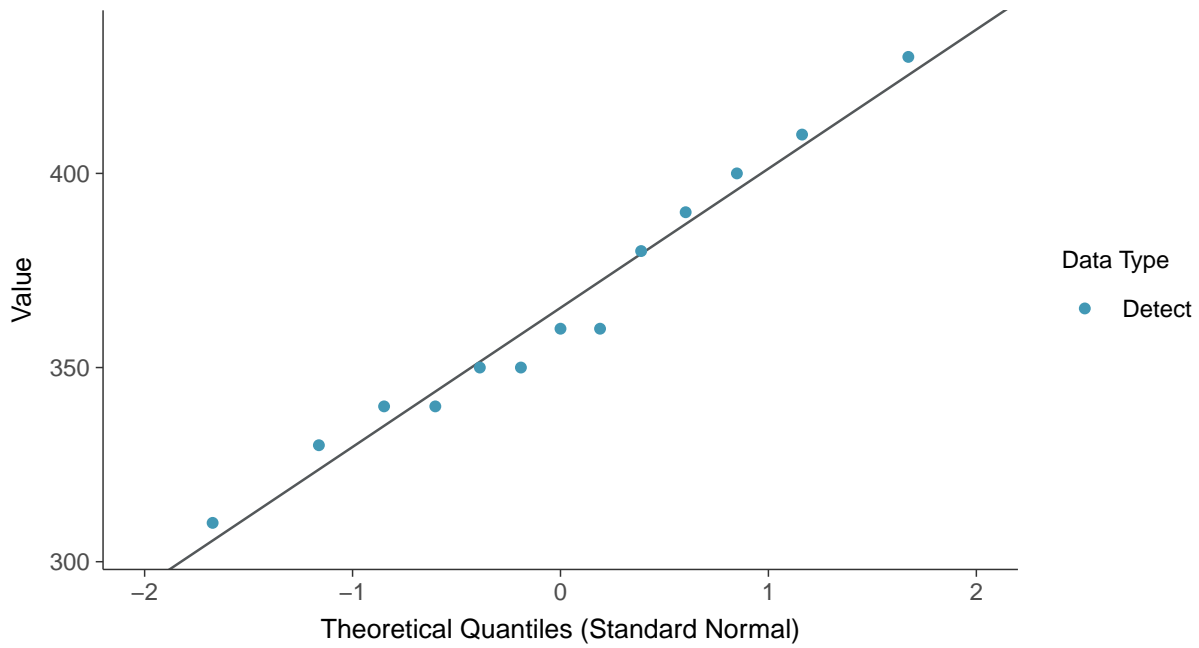
Calcium, MW-04 (mg/L)





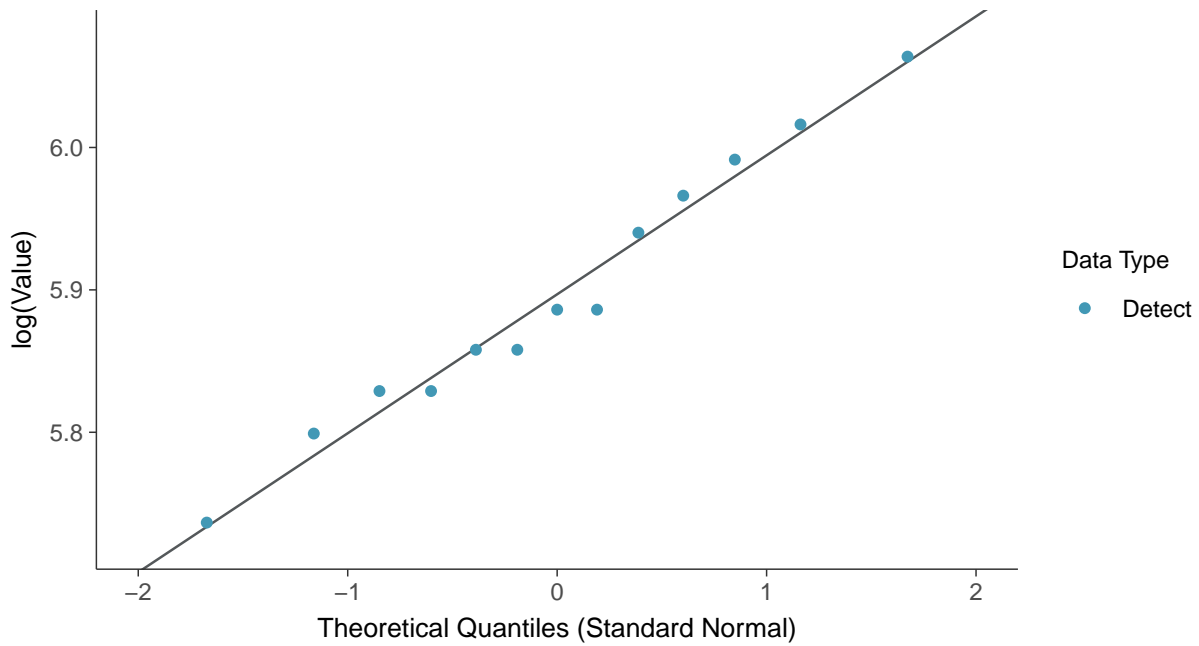
Normal Q-Q plot

Calcium, MW-04 (mg/L)



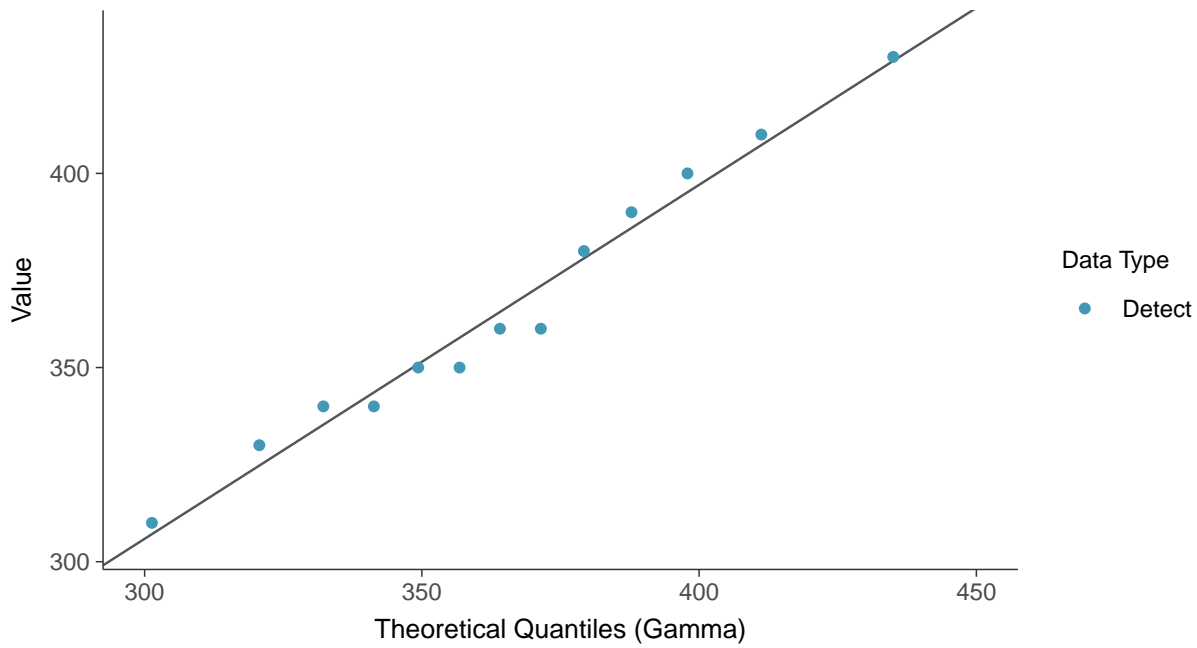
Lognormal Q-Q plot

Calcium, MW-04 (mg/L)

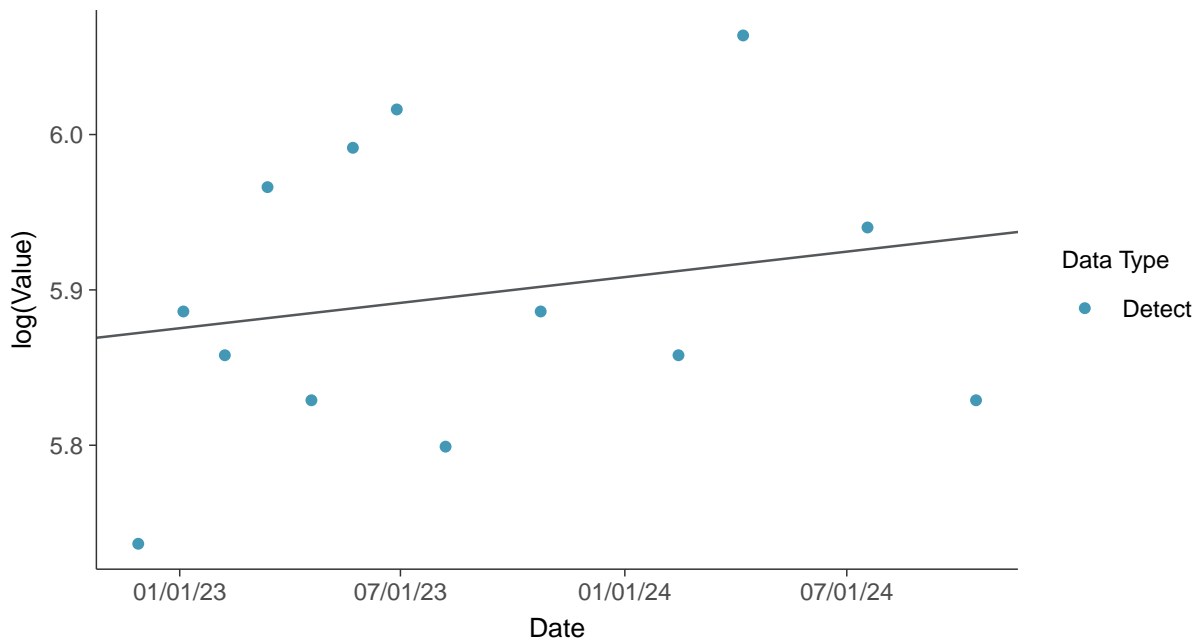




Gamma Q-Q plot
Calcium, MW-04 (mg/L)



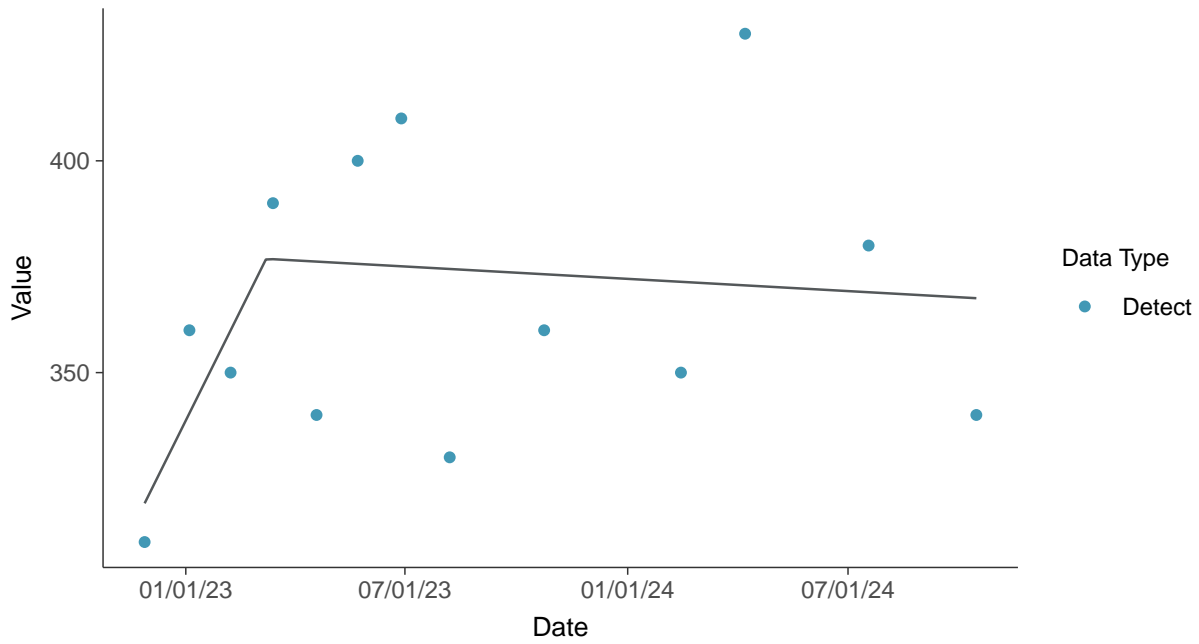
Trend Regression: Lognormal MLE
Calcium, MW-04 (mg/L)





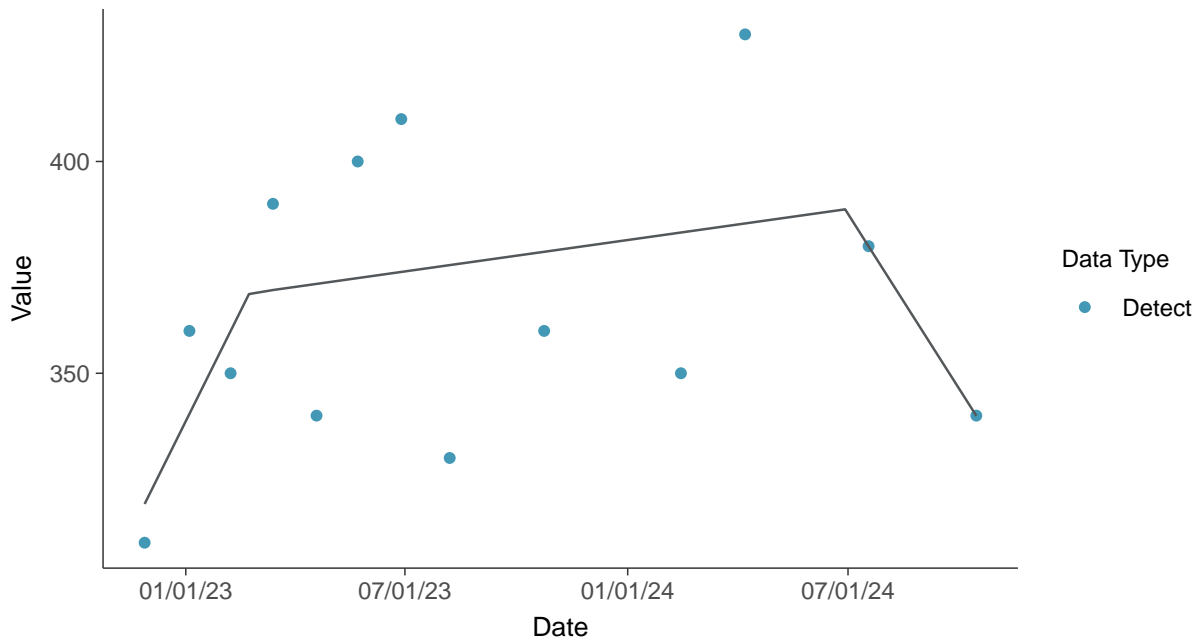
Trend Regression: Piecewise Linear-Linear

Calcium, MW-04 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Calcium, MW-04 (mg/L)



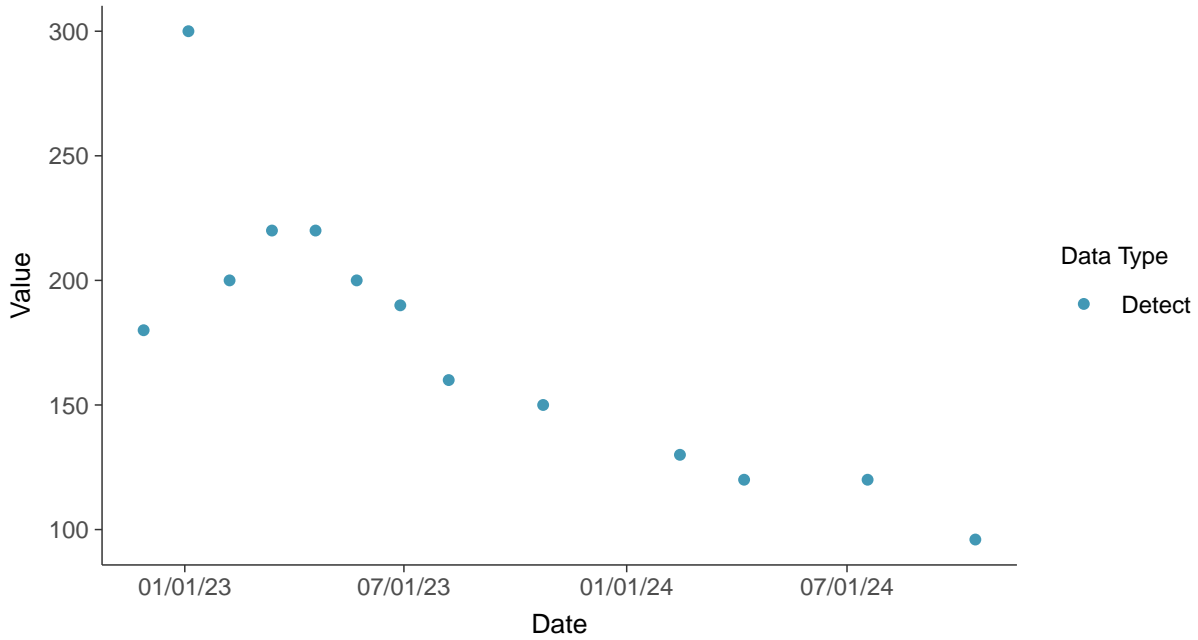


Appendix III: Chloride (as Cl), MW-04

ID: 2_14_2_4_108

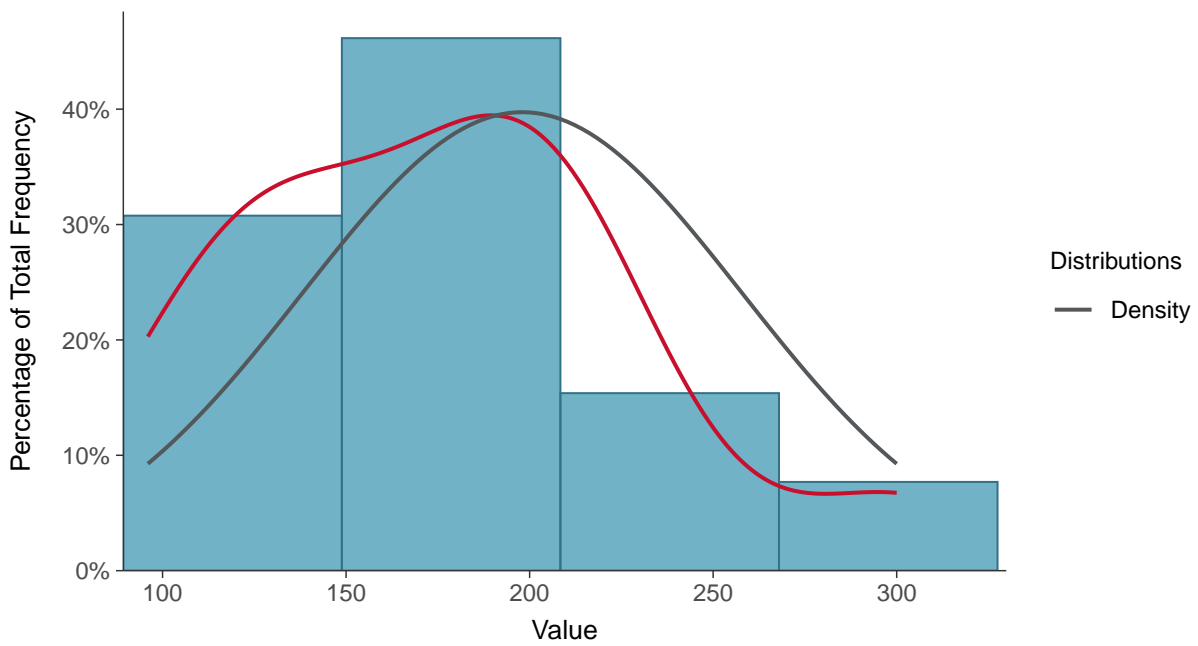
Scatter Plot

Chloride (as Cl), MW-04 (mg/L)



Histogram

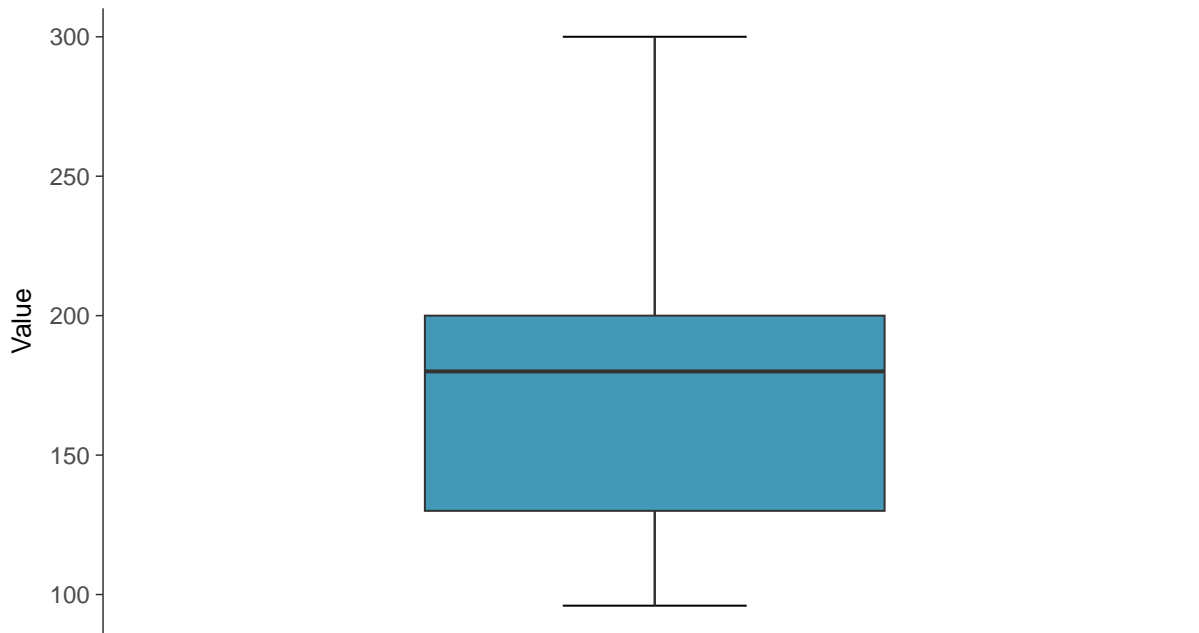
Chloride (as Cl), MW-04 (mg/L)





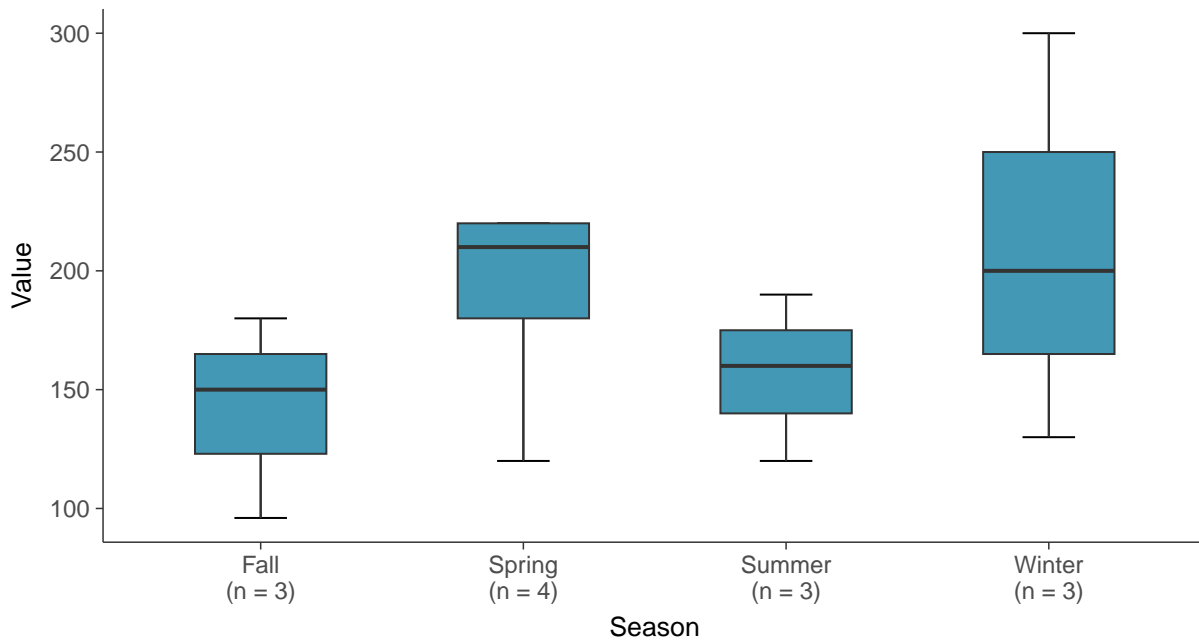
Boxplot

Chloride (as Cl), MW-04 (mg/L)



Boxplot by Season

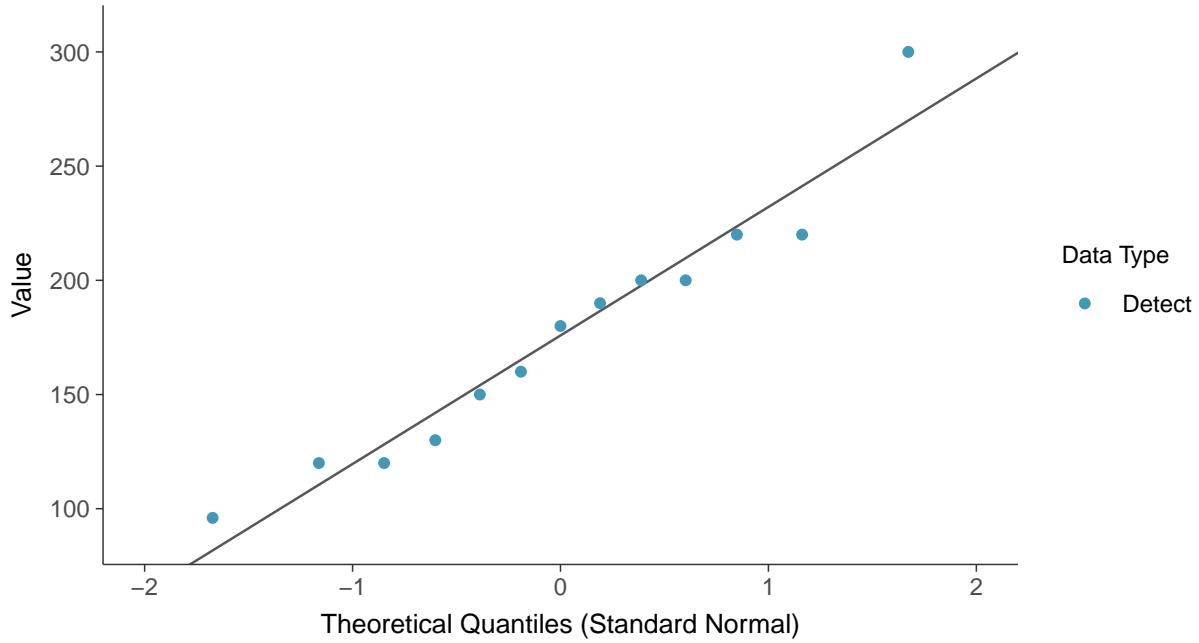
Chloride (as Cl), MW-04 (mg/L)





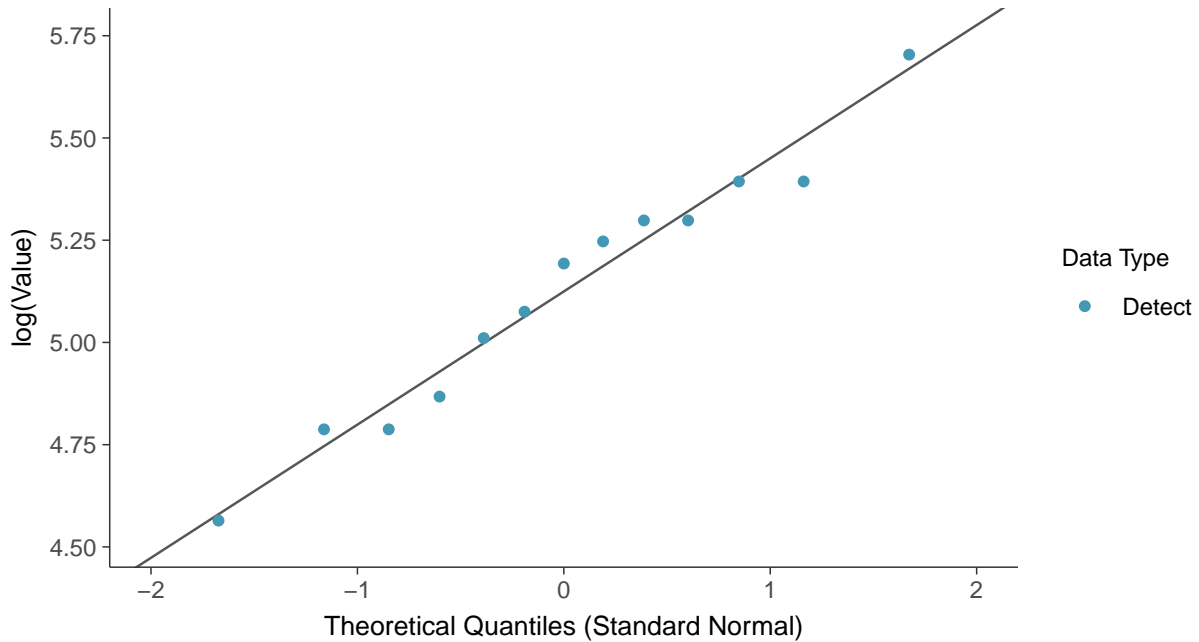
Normal Q-Q plot

Chloride (as Cl), MW-04 (mg/L)



Lognormal Q-Q plot

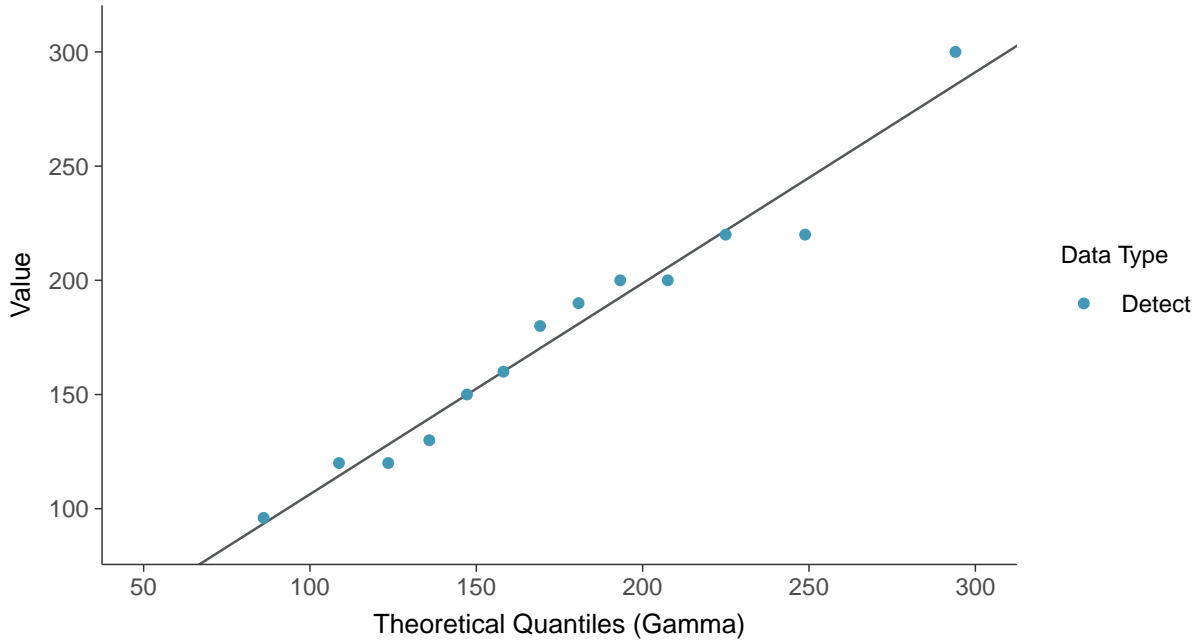
Chloride (as Cl), MW-04 (mg/L)





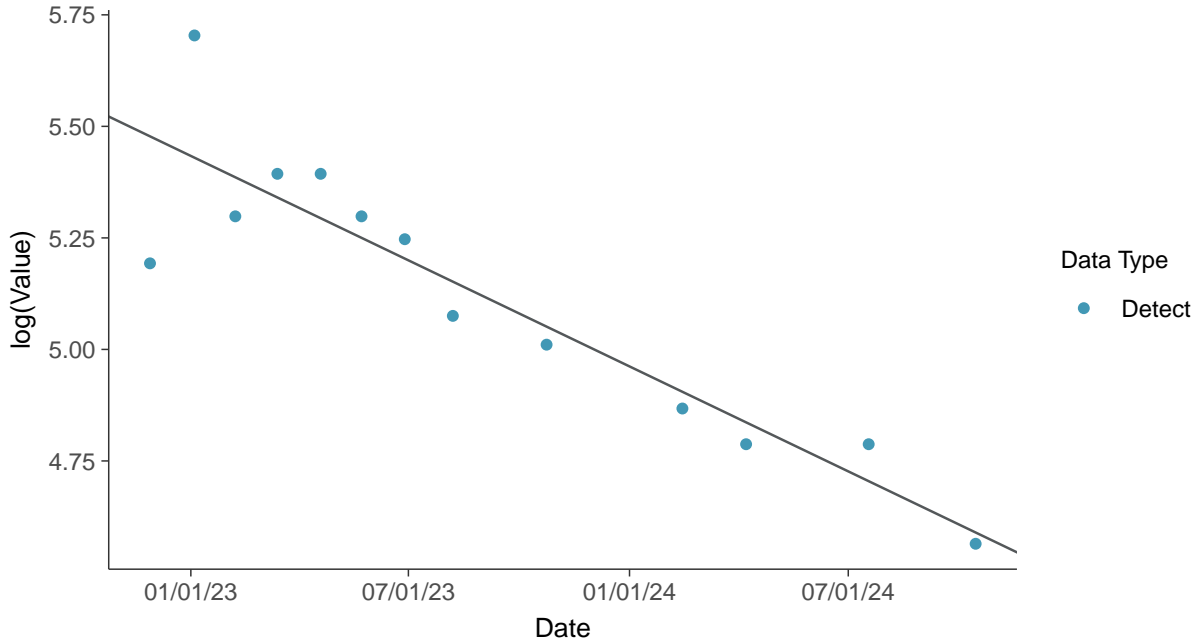
Gamma Q-Q plot

Chloride (as Cl), MW-04 (mg/L)



Trend Regression: Lognormal MLE

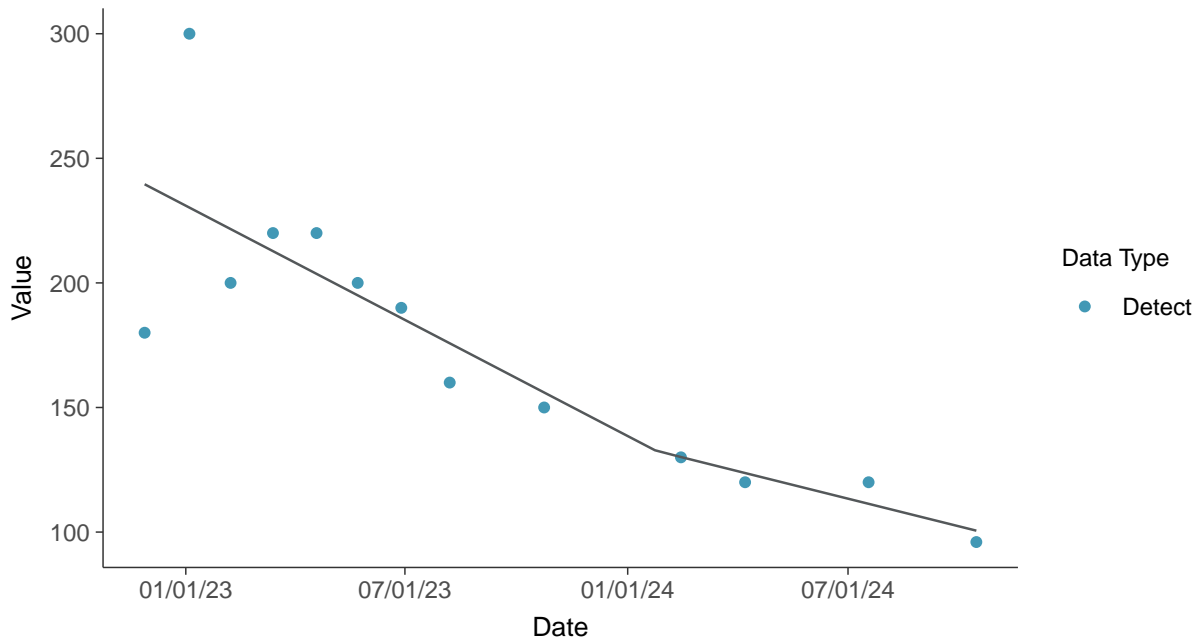
Chloride (as Cl), MW-04 (mg/L)





Trend Regression: Piecewise Linear-Linear

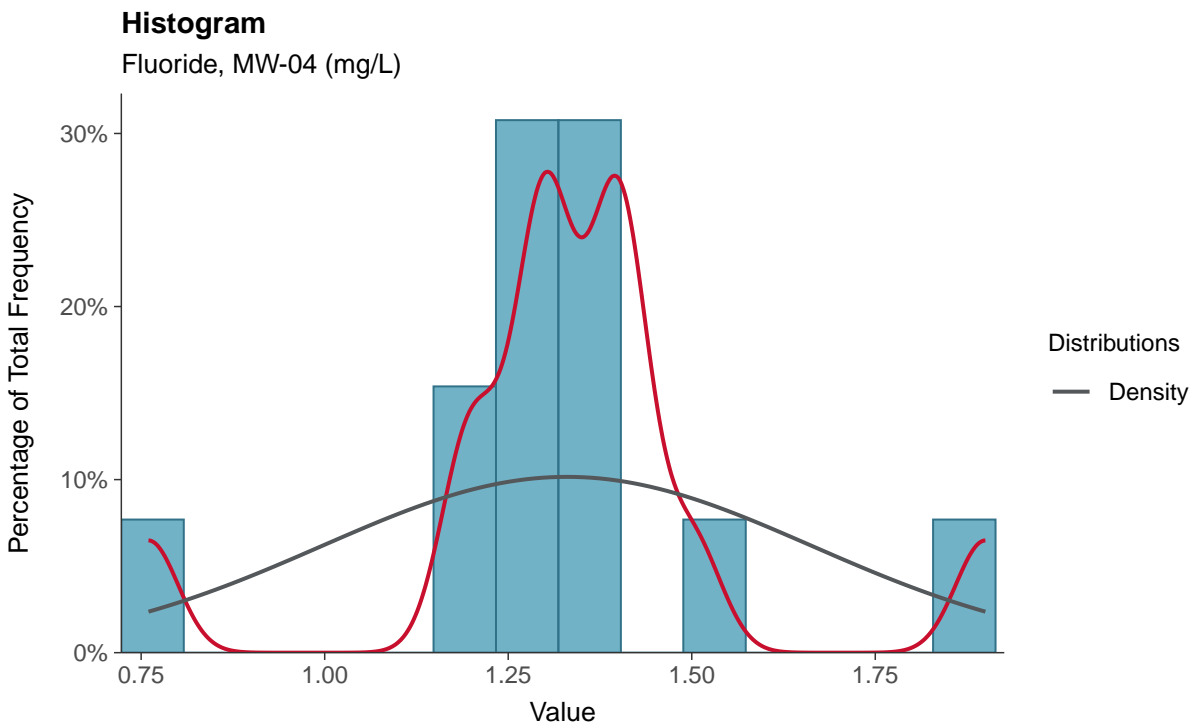
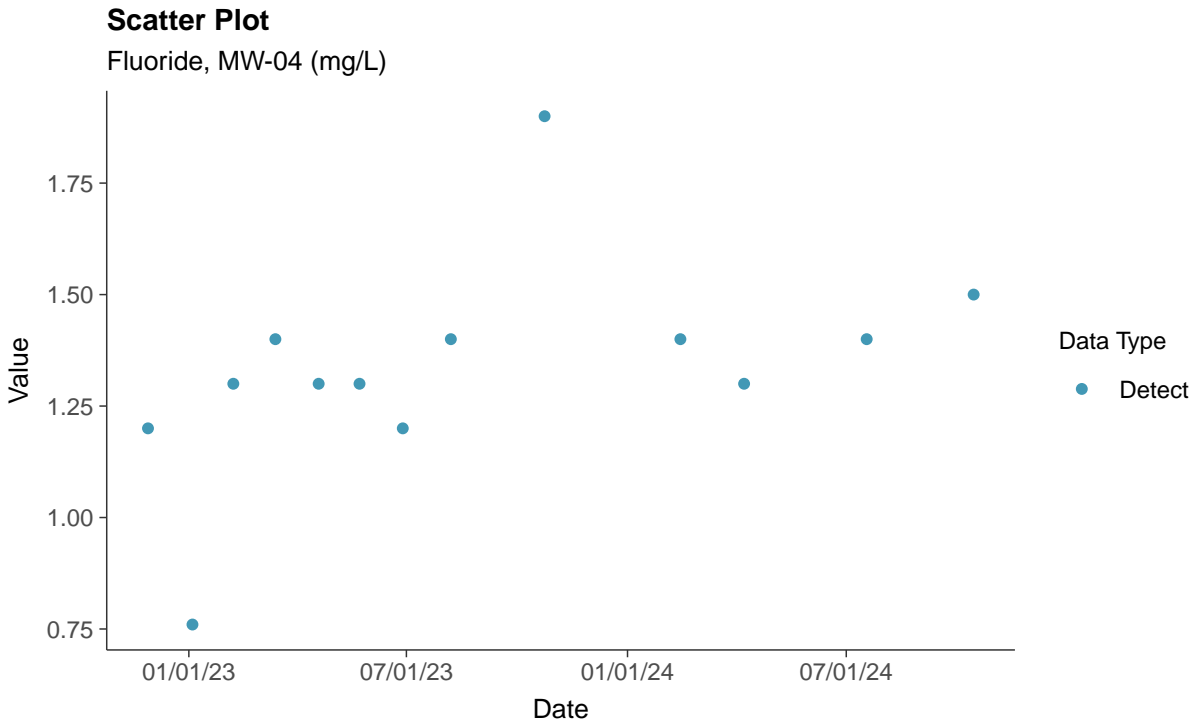
Chloride (as Cl), MW-04 (mg/L)





Appendix III: Fluoride, MW-04

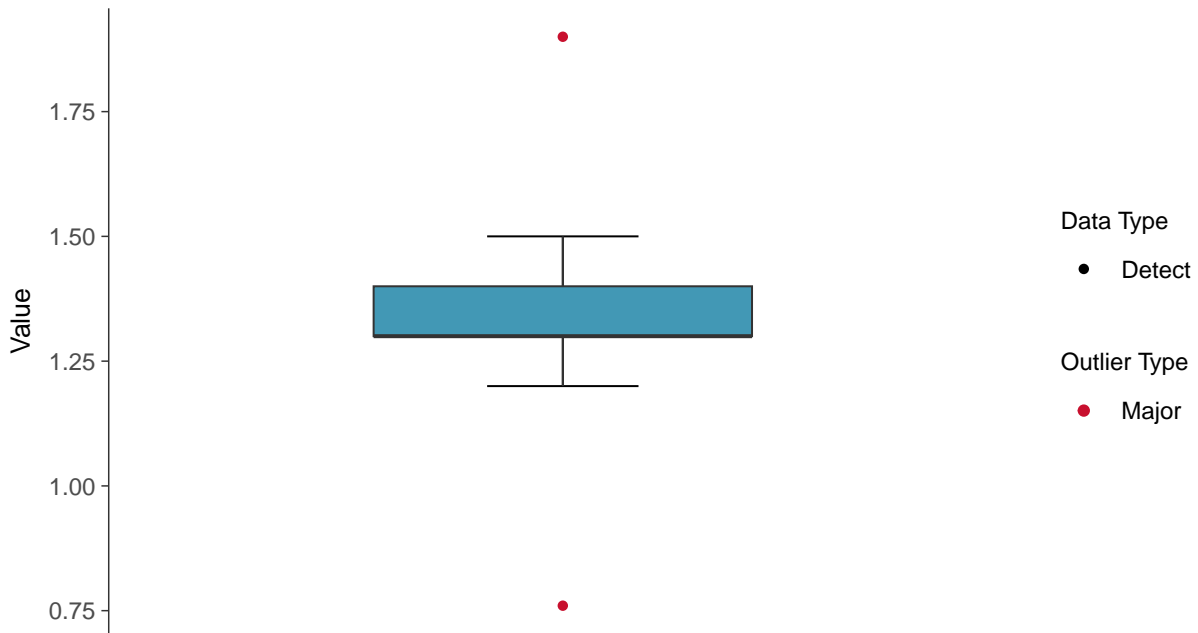
ID: 2_14_2_4_112





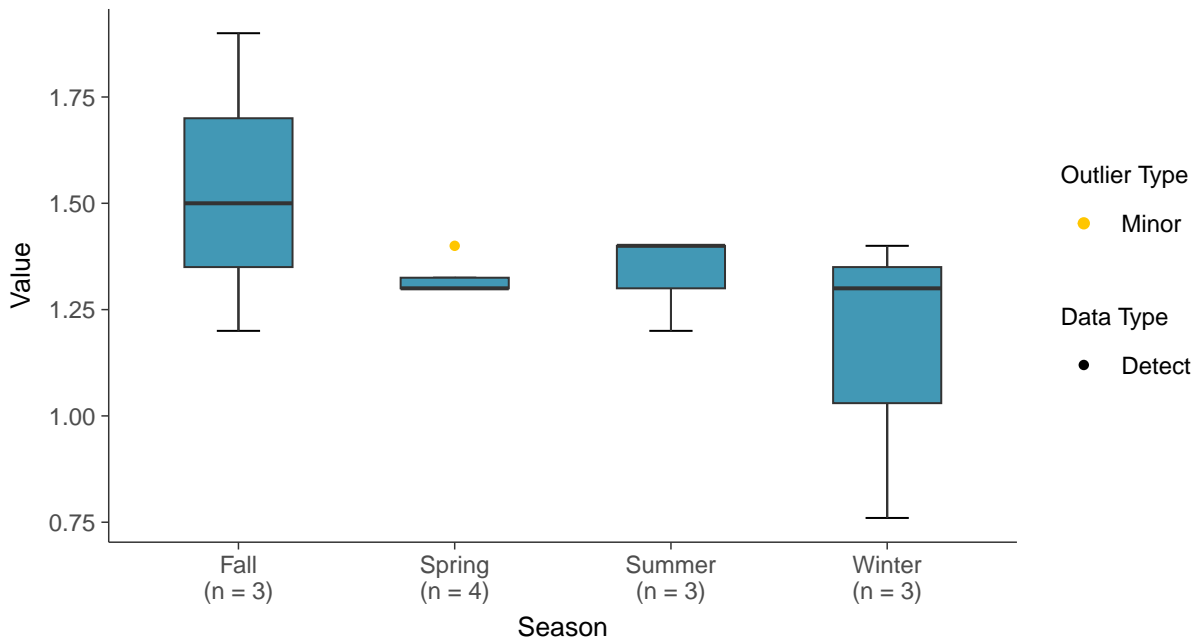
Boxplot

Fluoride, MW-04 (mg/L)



Boxplot by Season

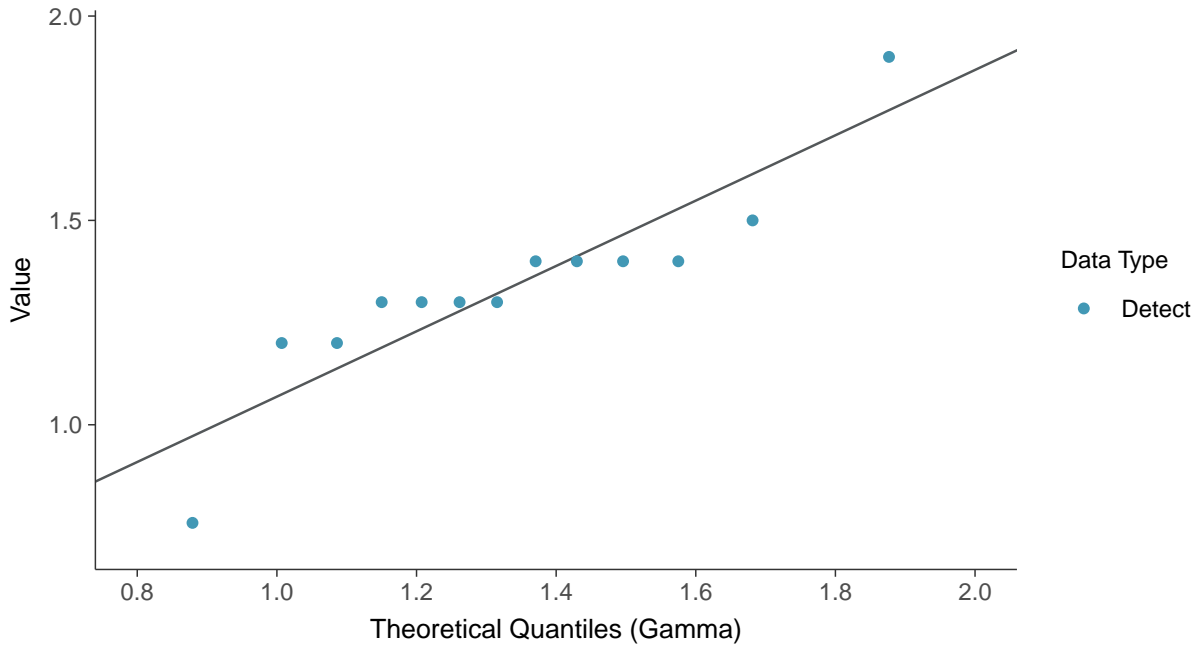
Fluoride, MW-04 (mg/L)





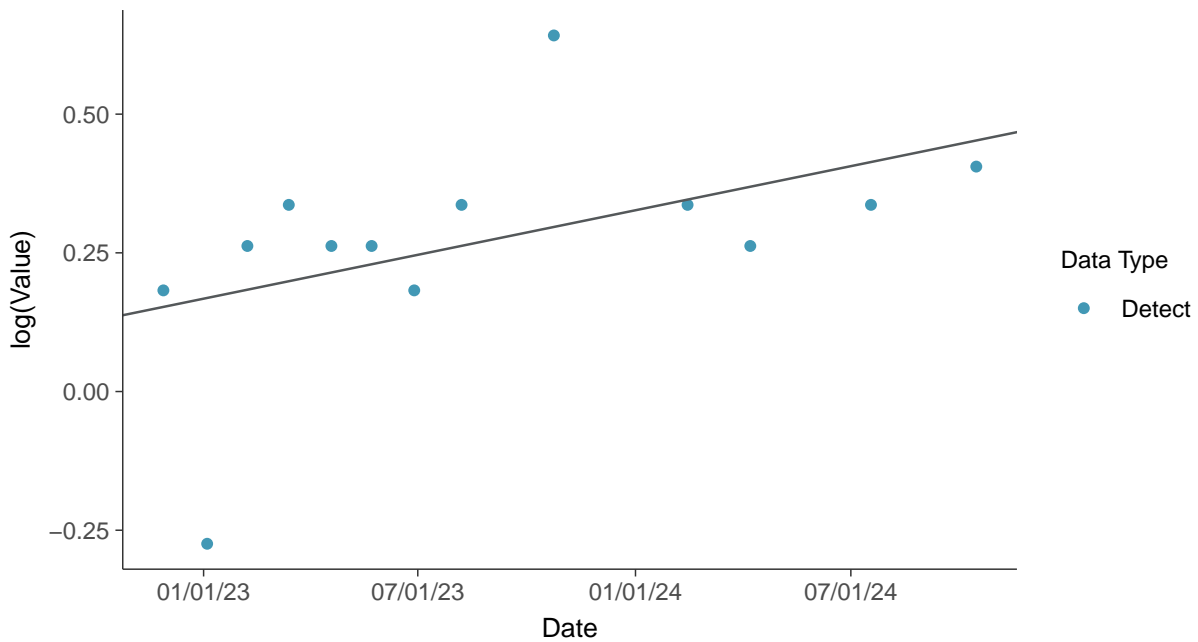
Gamma Q-Q plot

Fluoride, MW-04 (mg/L)



Trend Regression: Lognormal MLE

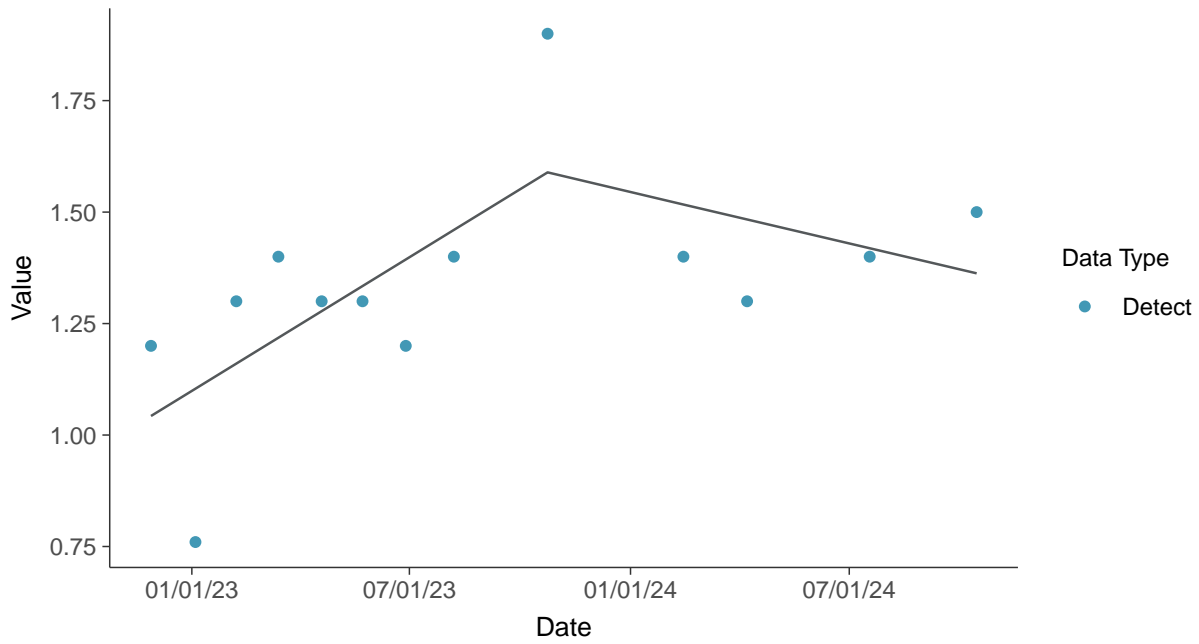
Fluoride, MW-04 (mg/L)





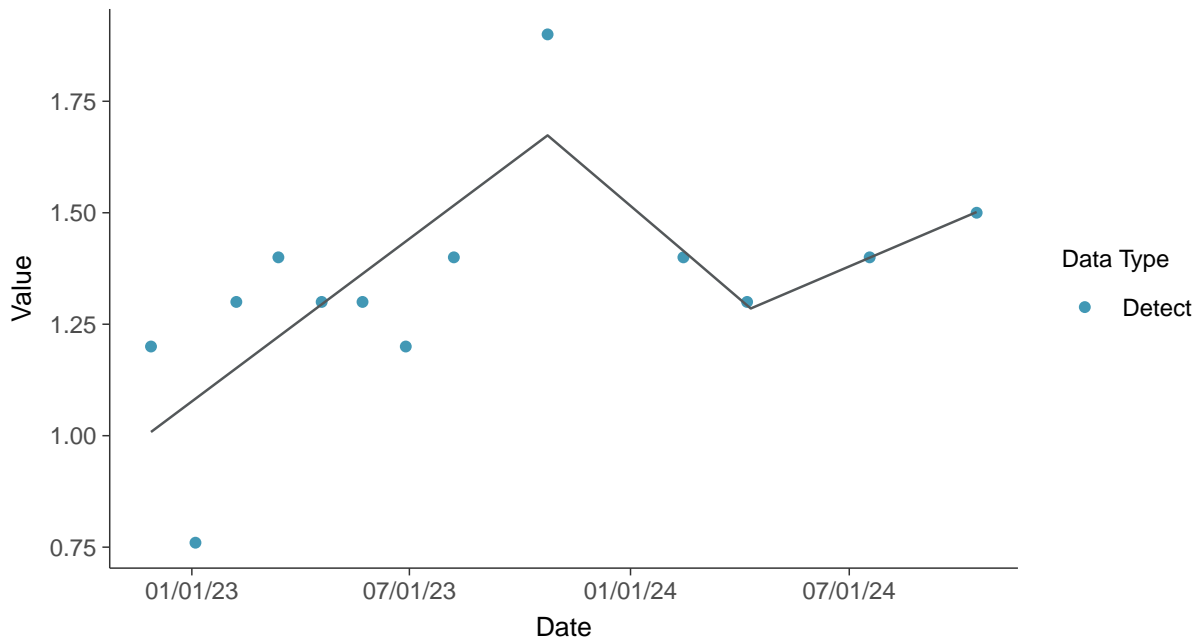
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-04 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

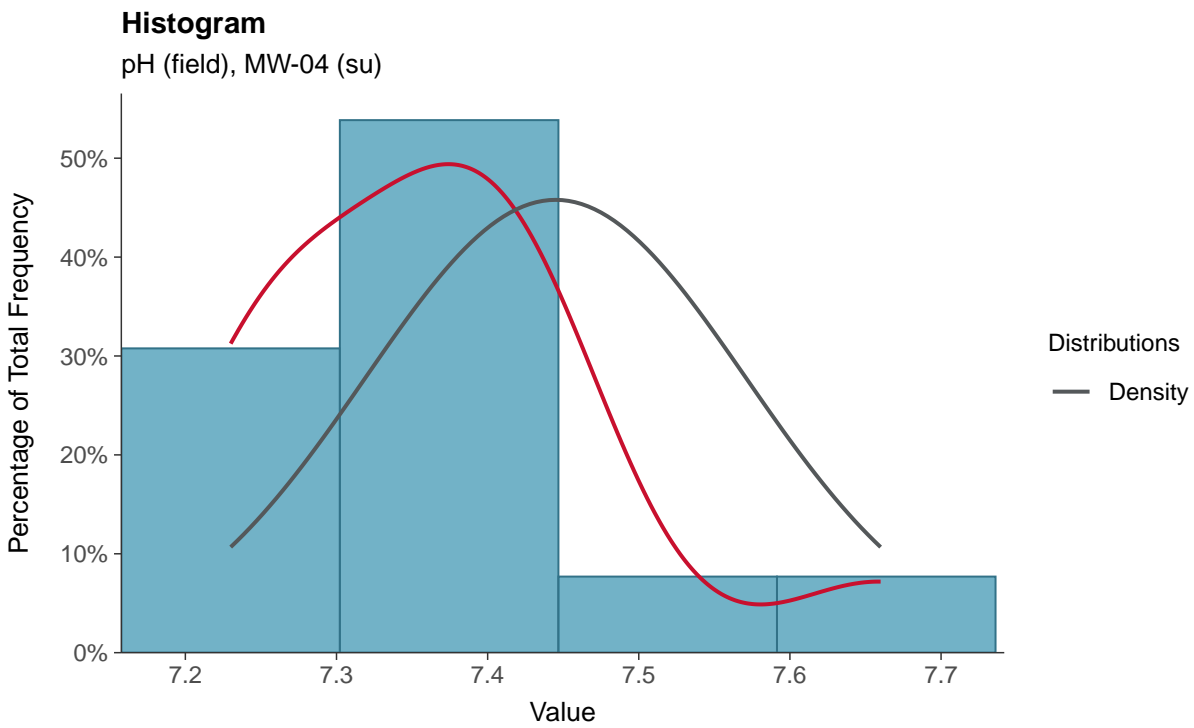
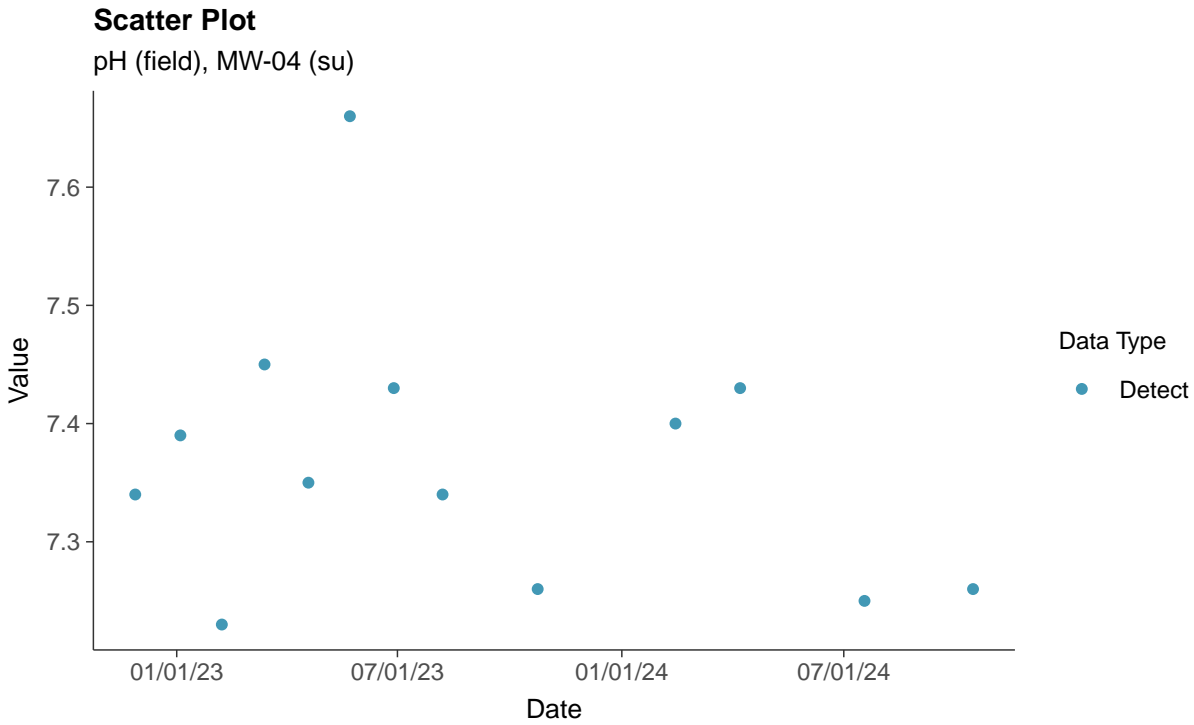
Fluoride, MW-04 (mg/L)





Appendix III: pH (field), MW-04

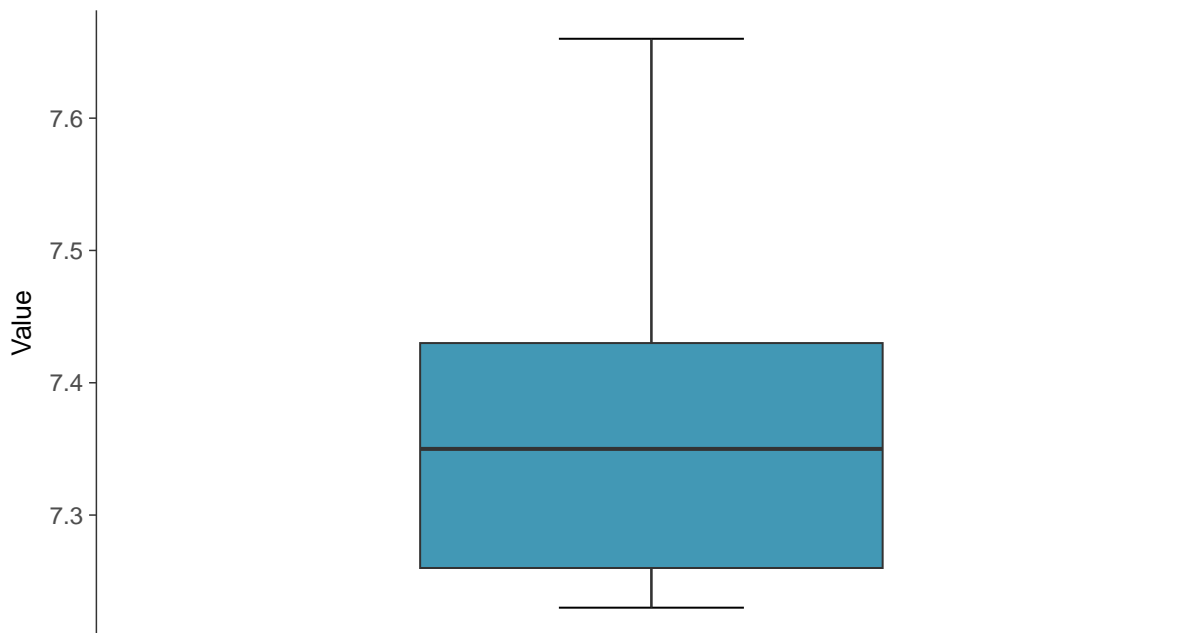
ID: 2_14_2_4_120





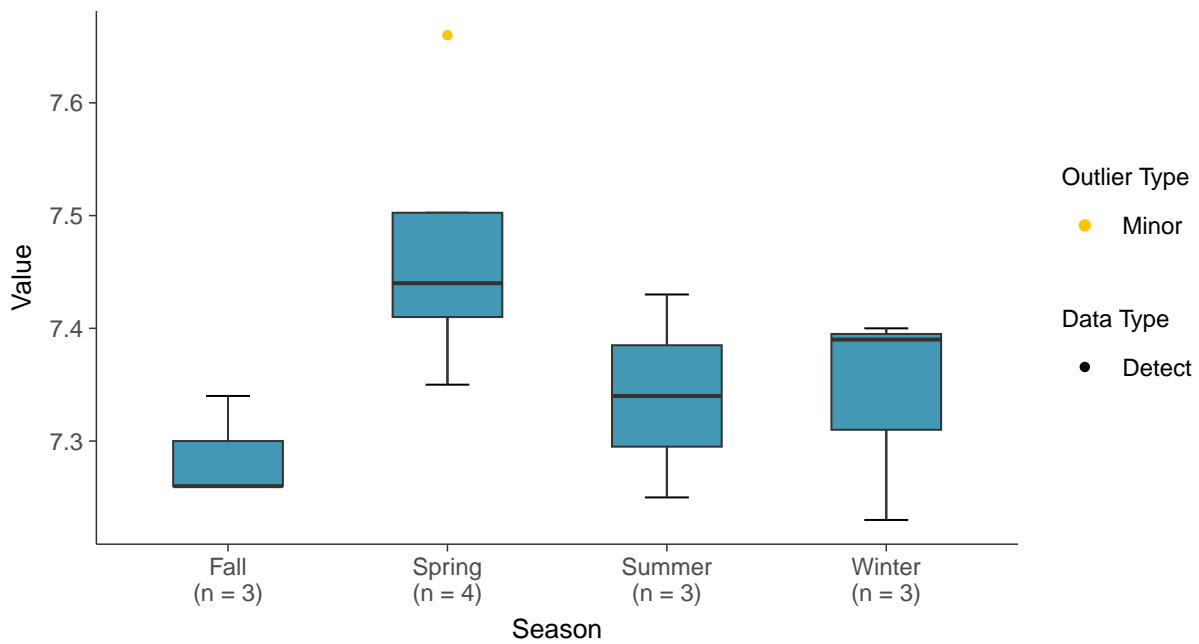
Boxplot

pH (field), MW-04 (su)



Boxplot by Season

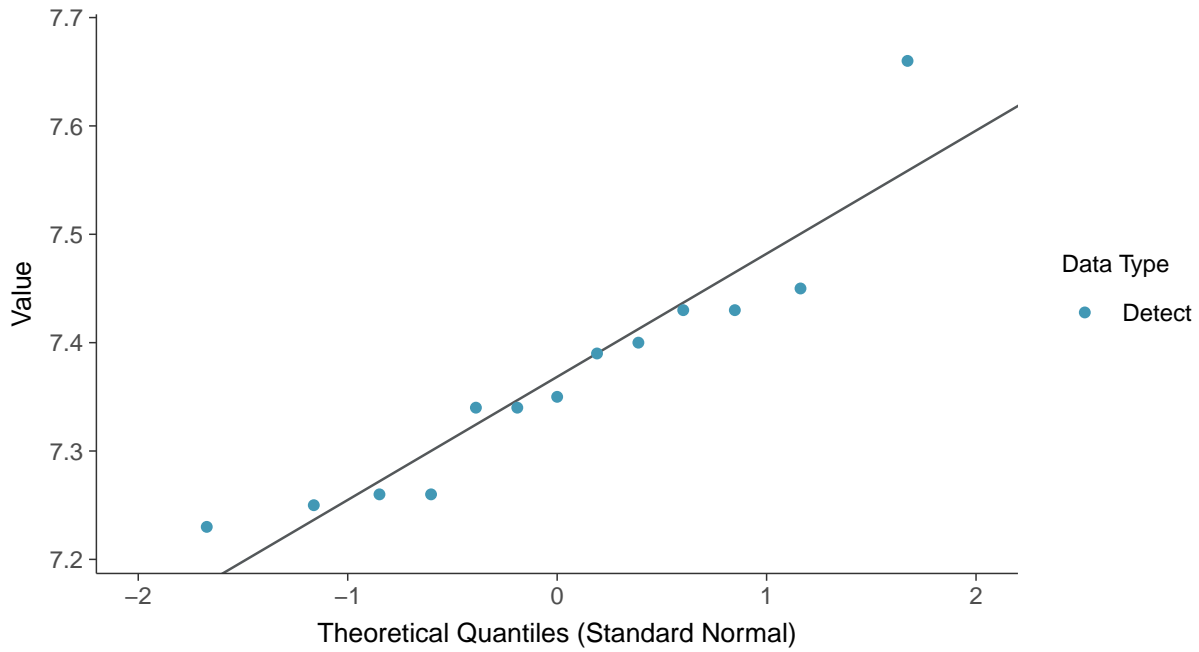
pH (field), MW-04 (su)





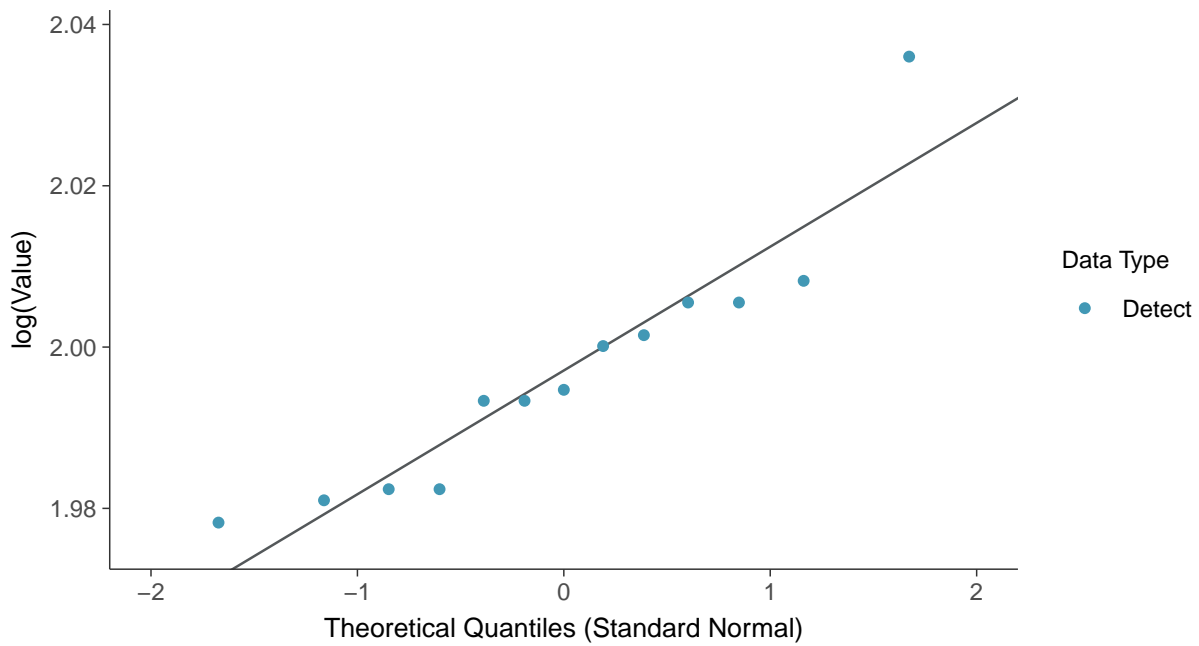
Normal Q-Q plot

pH (field), MW-04 (su)



Lognormal Q-Q plot

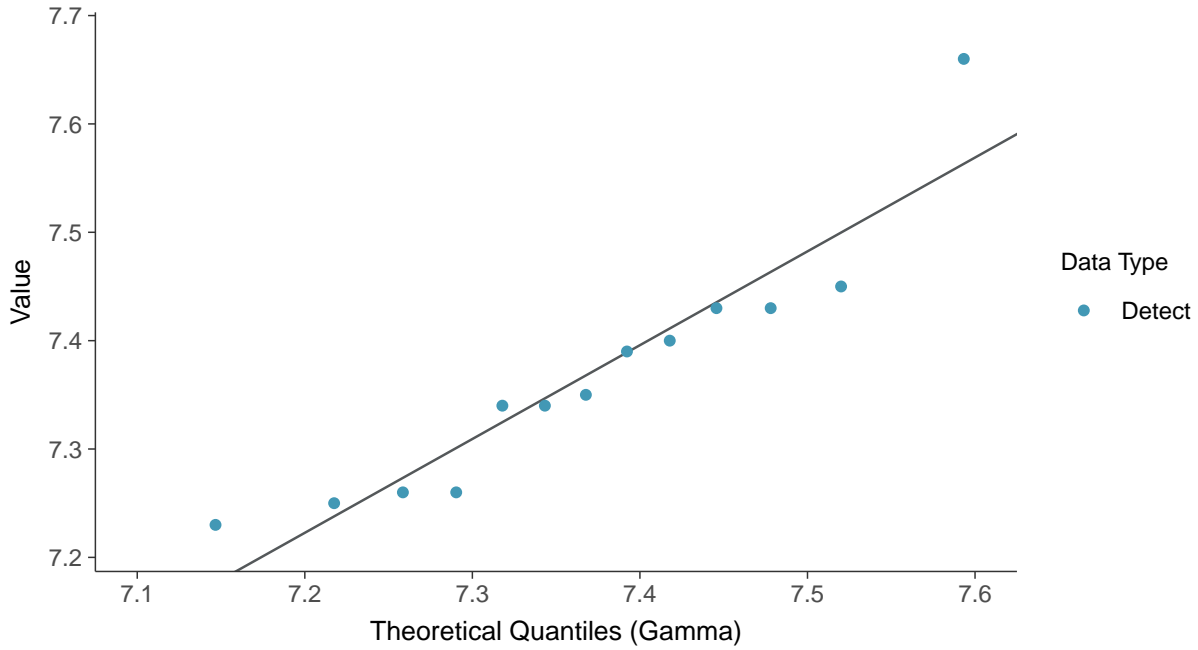
pH (field), MW-04 (su)





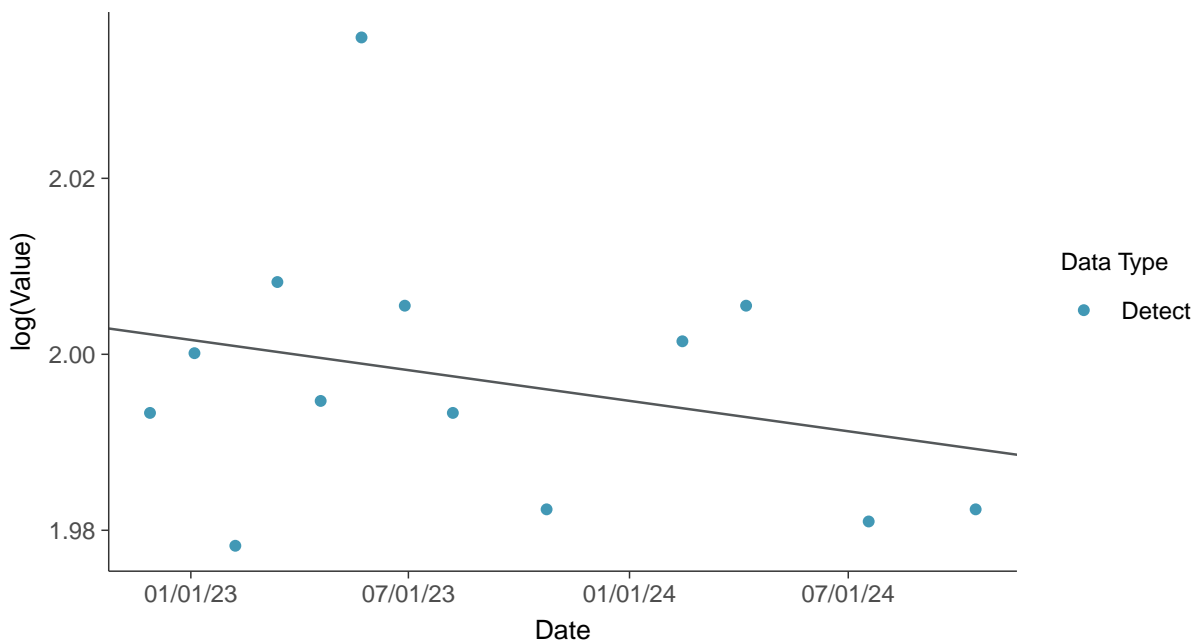
Gamma Q-Q plot

pH (field), MW-04 (su)



Trend Regression: Lognormal MLE

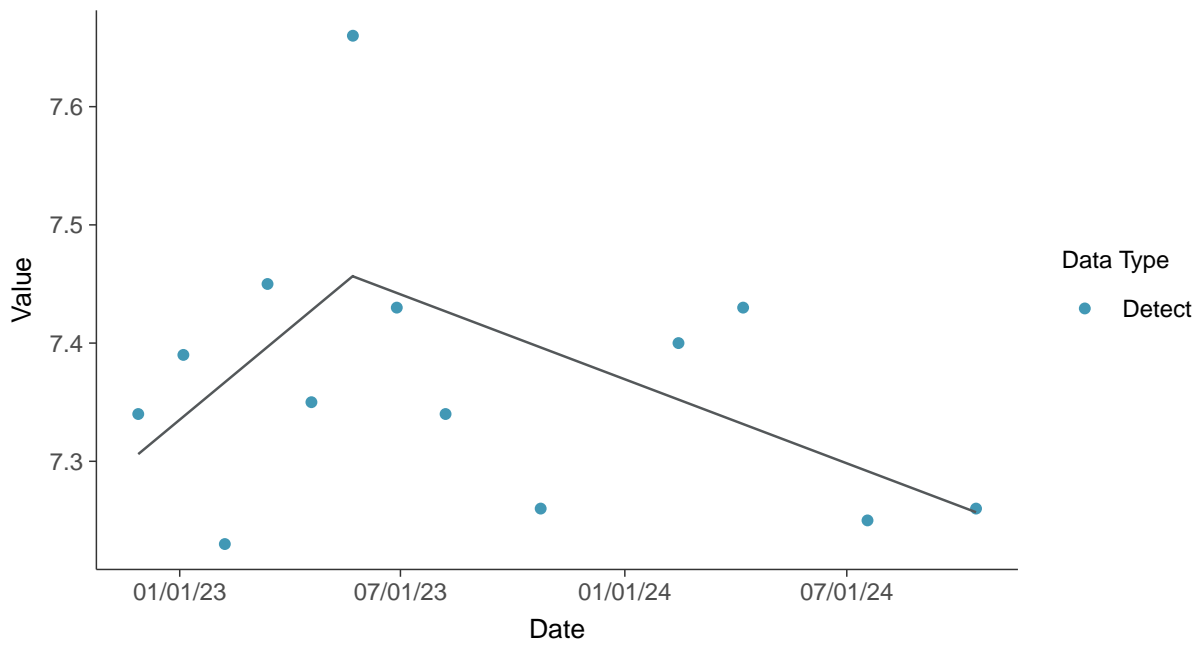
pH (field), MW-04 (su)





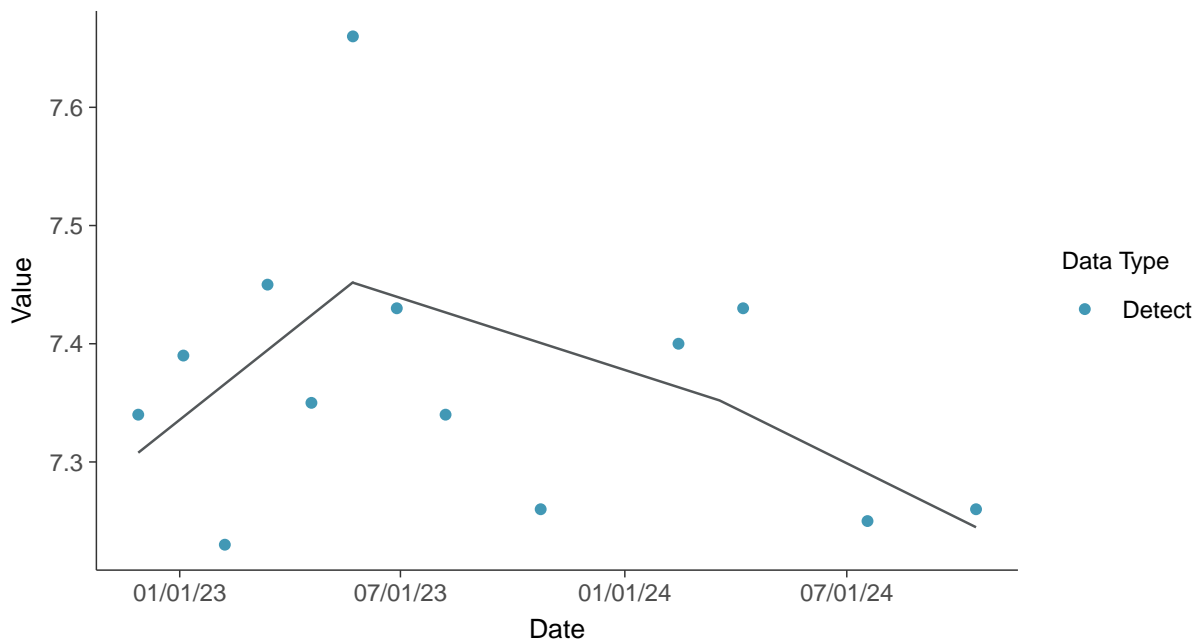
Trend Regression: Piecewise Linear-Linear

pH (field), MW-04 (su)



Trend Regression: Piecewise Linear-Linear-Linear

pH (field), MW-04 (su)



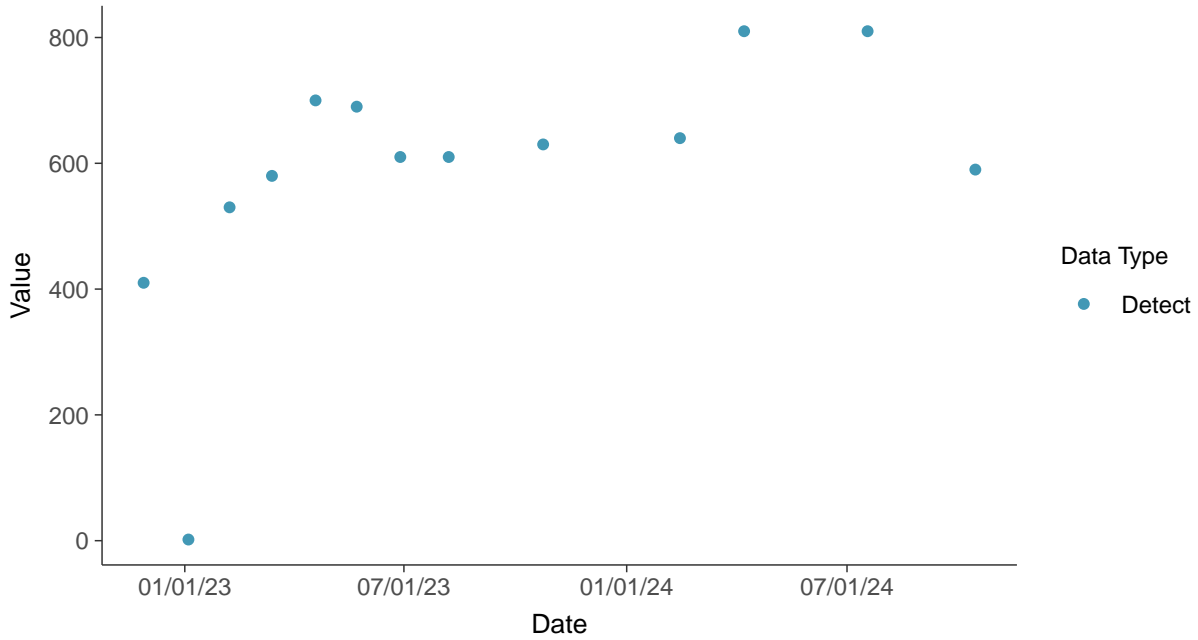


Appendix III: Sulfate (as SO4), MW-04

ID: 2_14_2_4_124

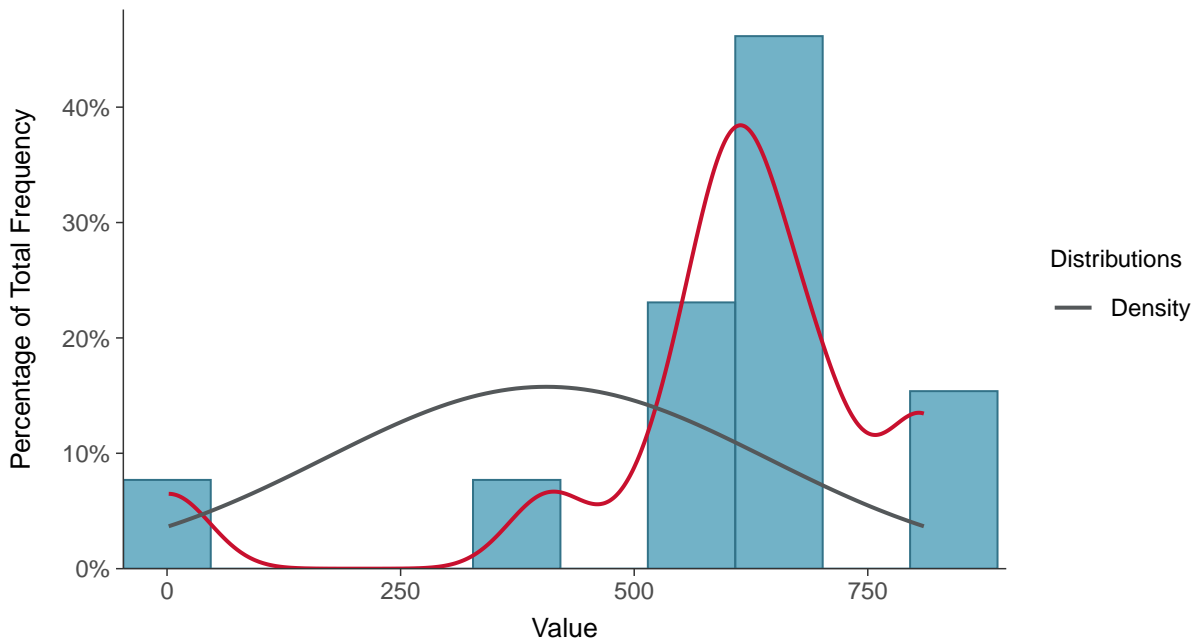
Scatter Plot

Sulfate (as SO4), MW-04 (mg/L)



Histogram

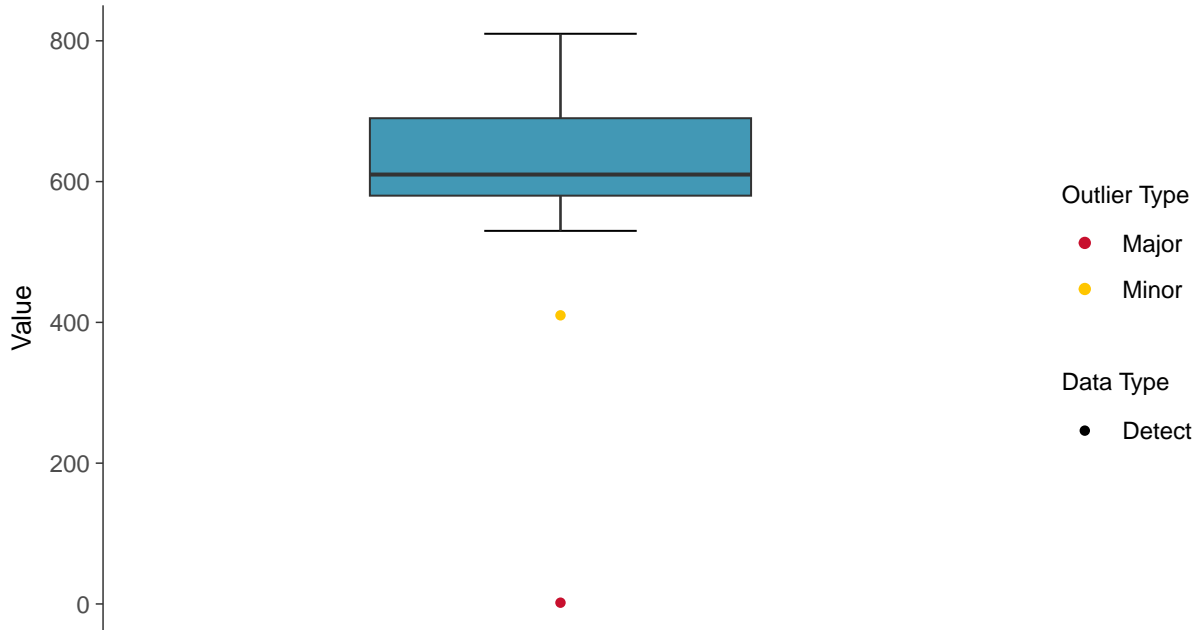
Sulfate (as SO4), MW-04 (mg/L)





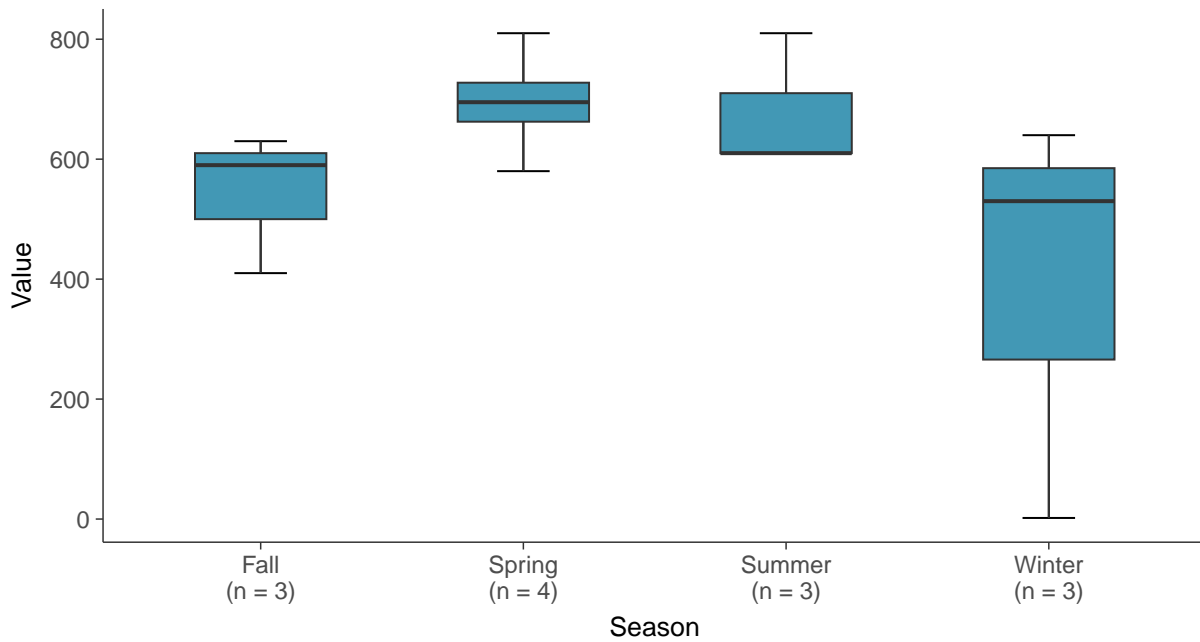
Boxplot

Sulfate (as SO₄), MW-04 (mg/L)



Boxplot by Season

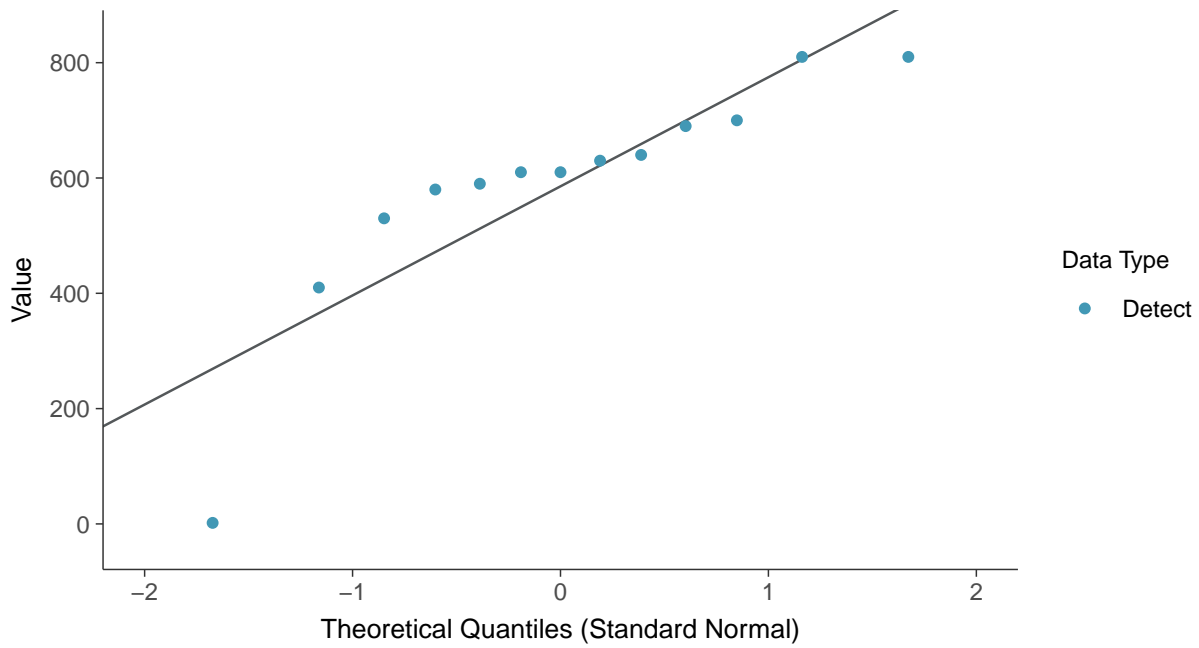
Sulfate (as SO₄), MW-04 (mg/L)





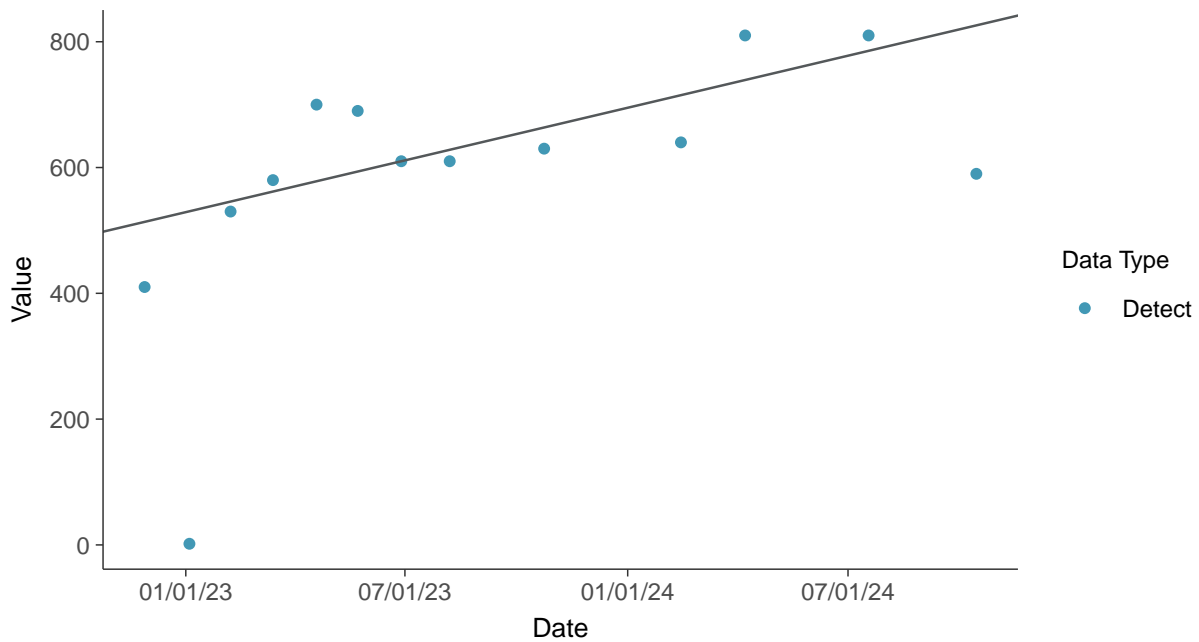
Normal Q-Q plot

Sulfate (as SO₄), MW-04 (mg/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

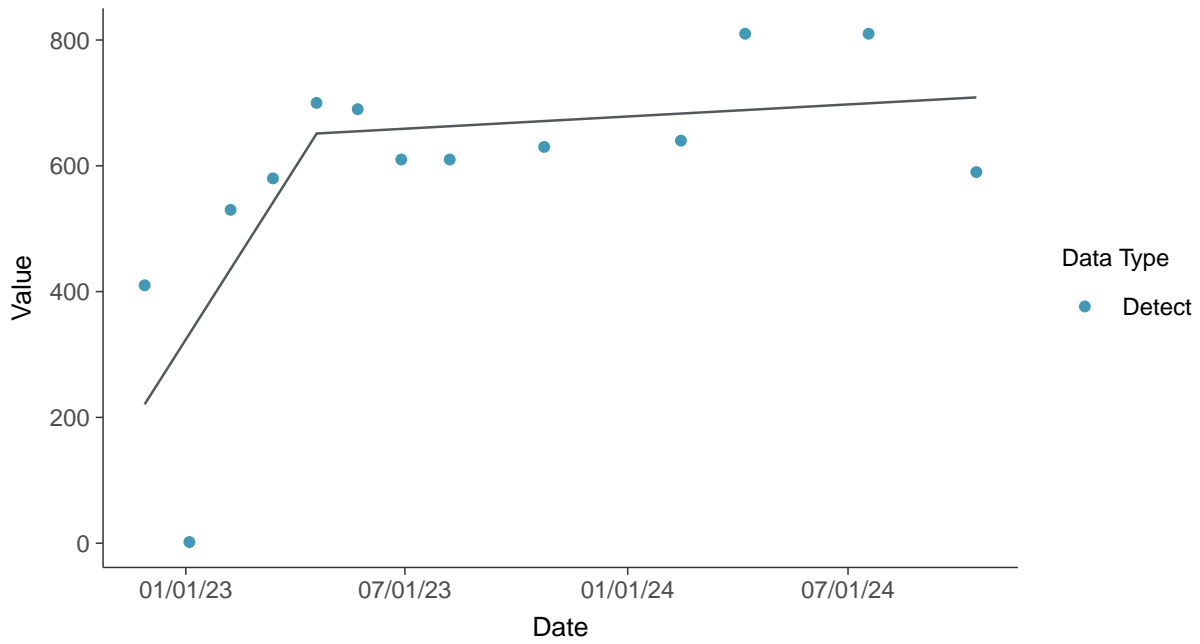
Sulfate (as SO₄), MW-04 (mg/L)





Trend Regression: Piecewise Linear-Linear

Sulfate (as SO4), MW-04 (mg/L)



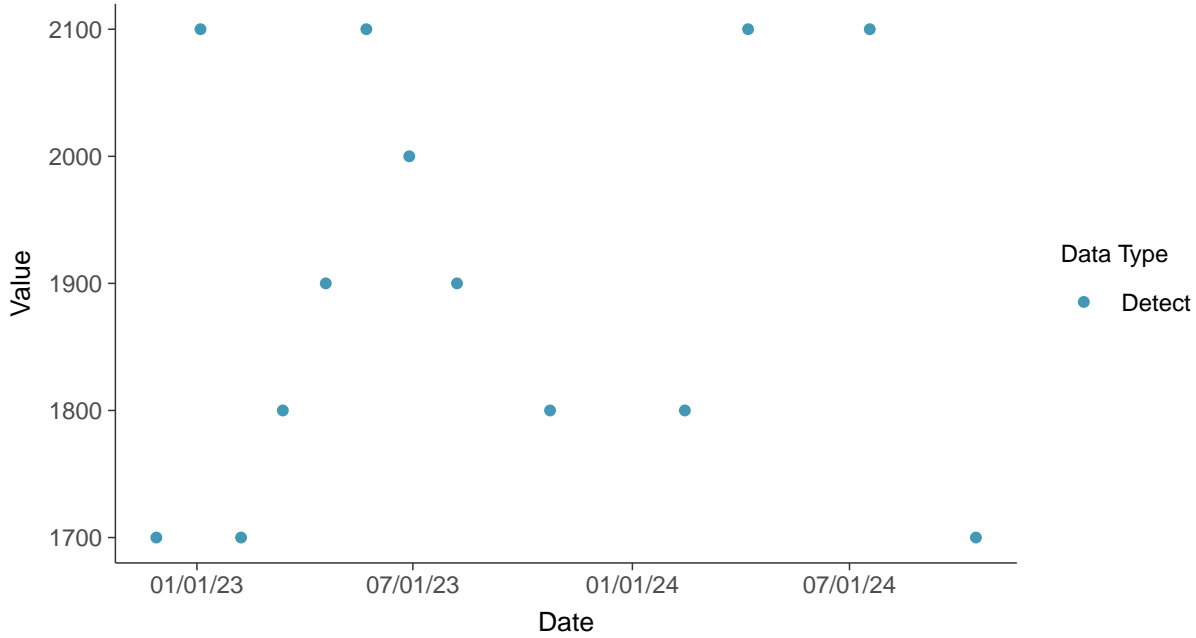


Appendix III: Total Dissolved Solids, MW-04

ID: 2_14_2_4_126

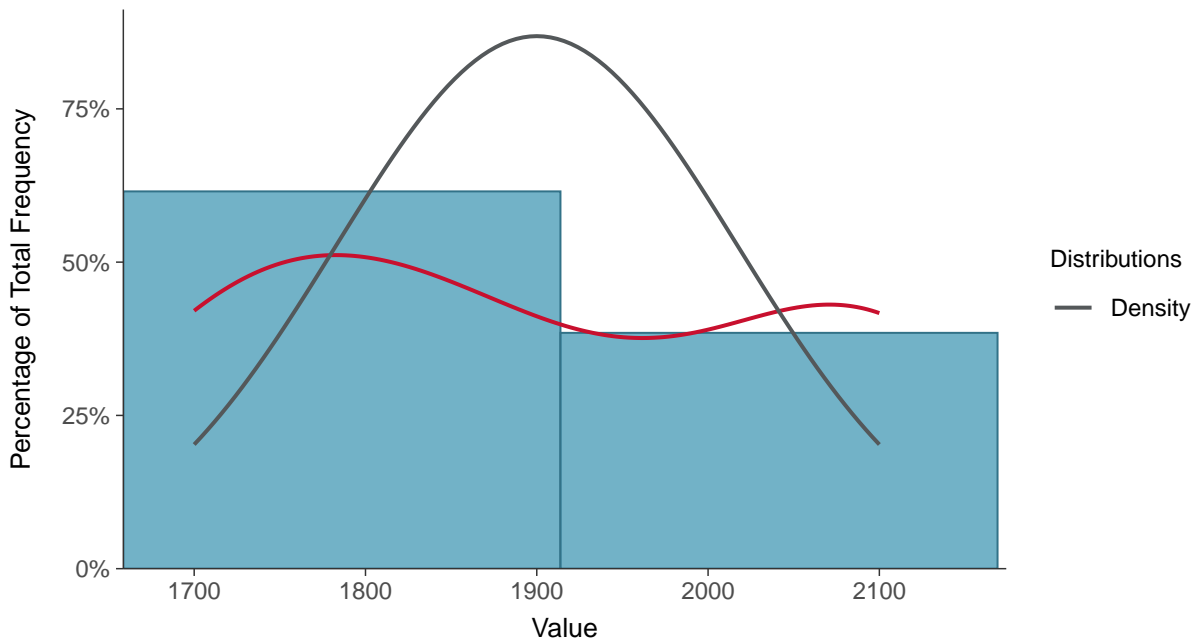
Scatter Plot

Total Dissolved Solids, MW-04 (mg/L)



Histogram

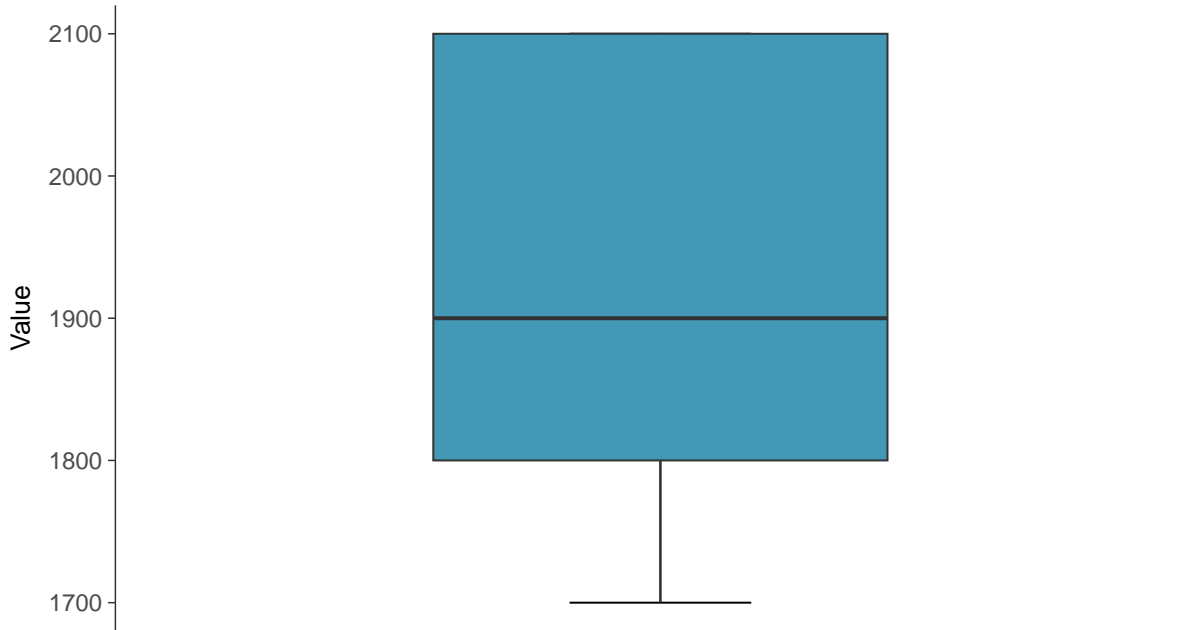
Total Dissolved Solids, MW-04 (mg/L)





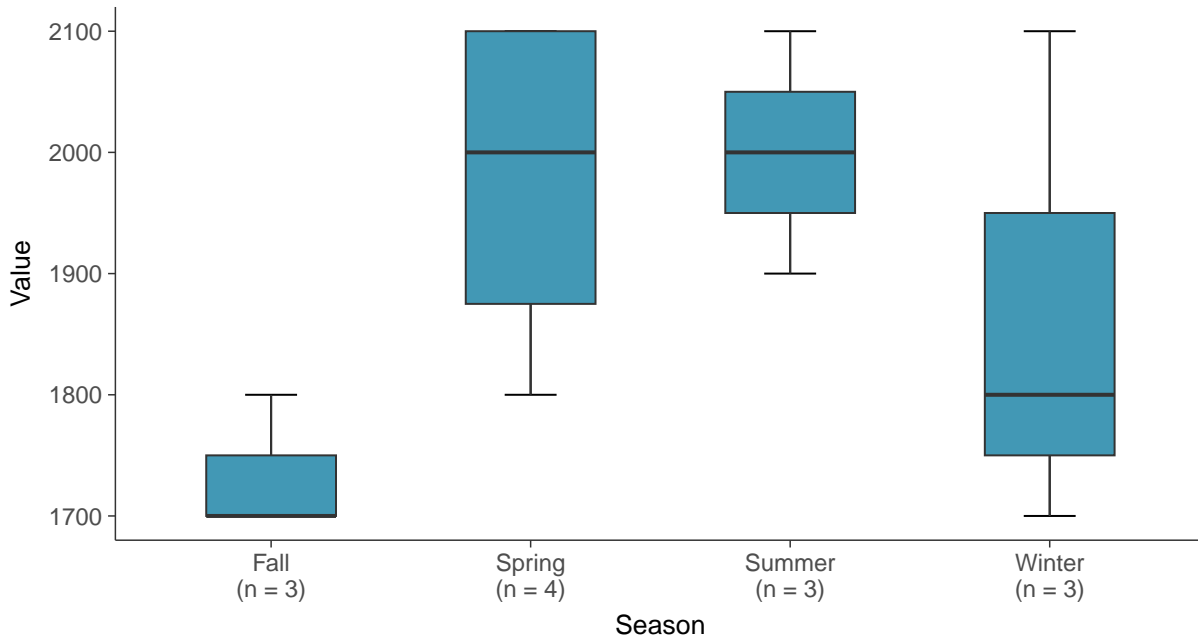
Boxplot

Total Dissolved Solids, MW-04 (mg/L)



Boxplot by Season

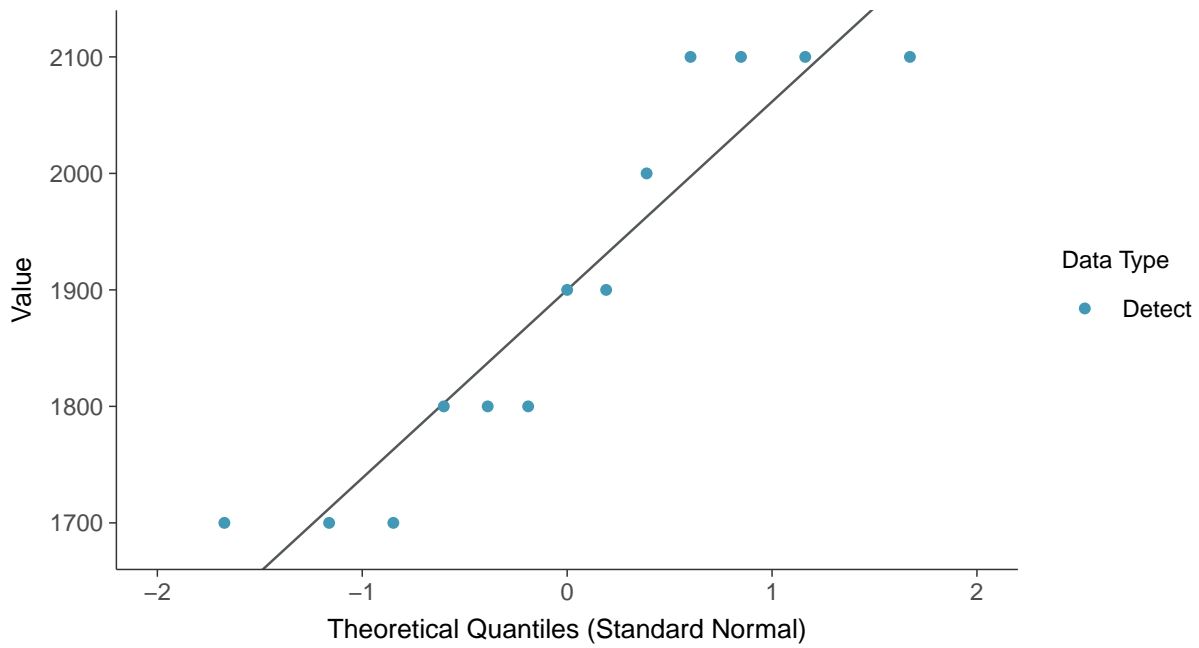
Total Dissolved Solids, MW-04 (mg/L)





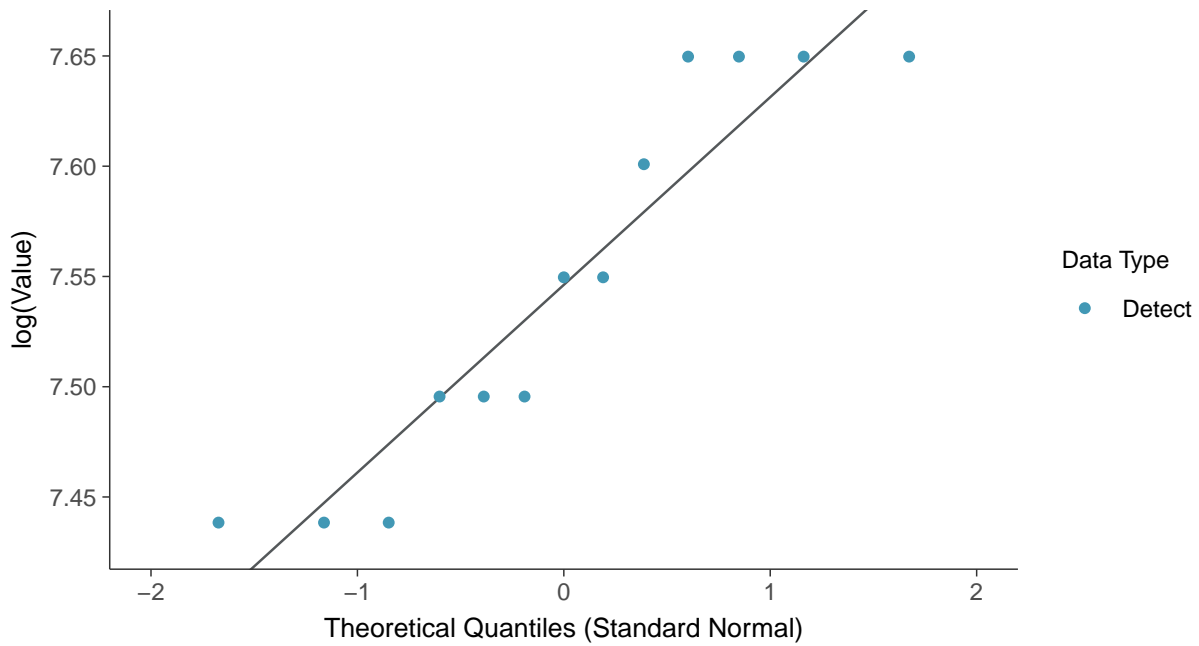
Normal Q-Q plot

Total Dissolved Solids, MW-04 (mg/L)



Lognormal Q-Q plot

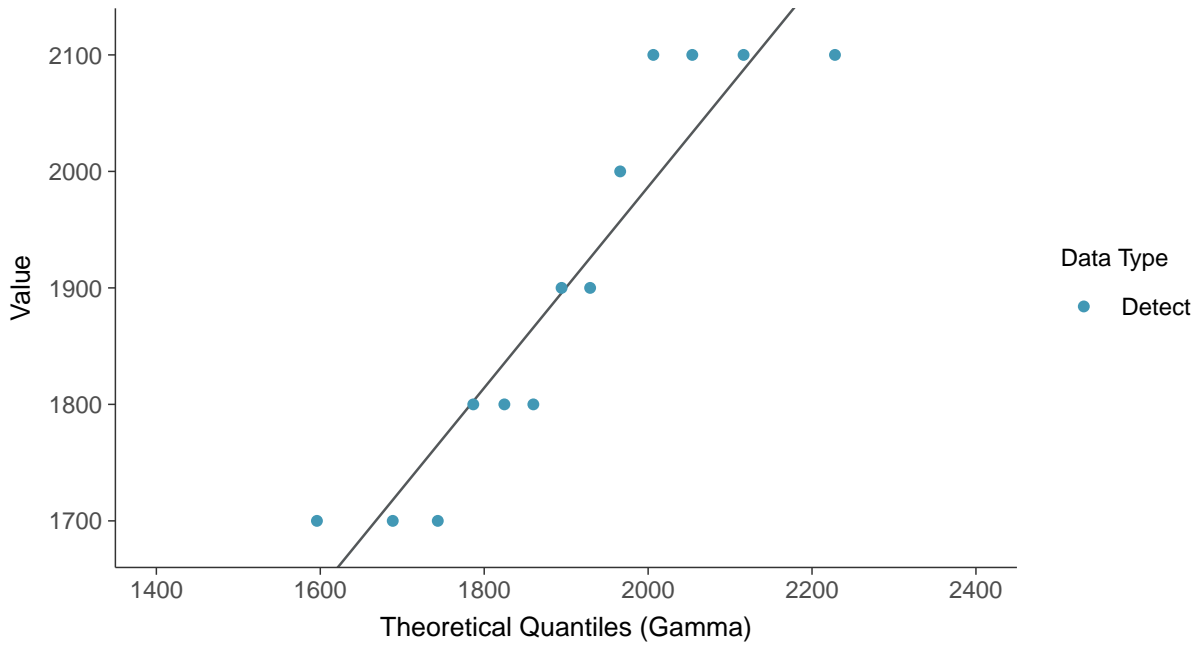
Total Dissolved Solids, MW-04 (mg/L)





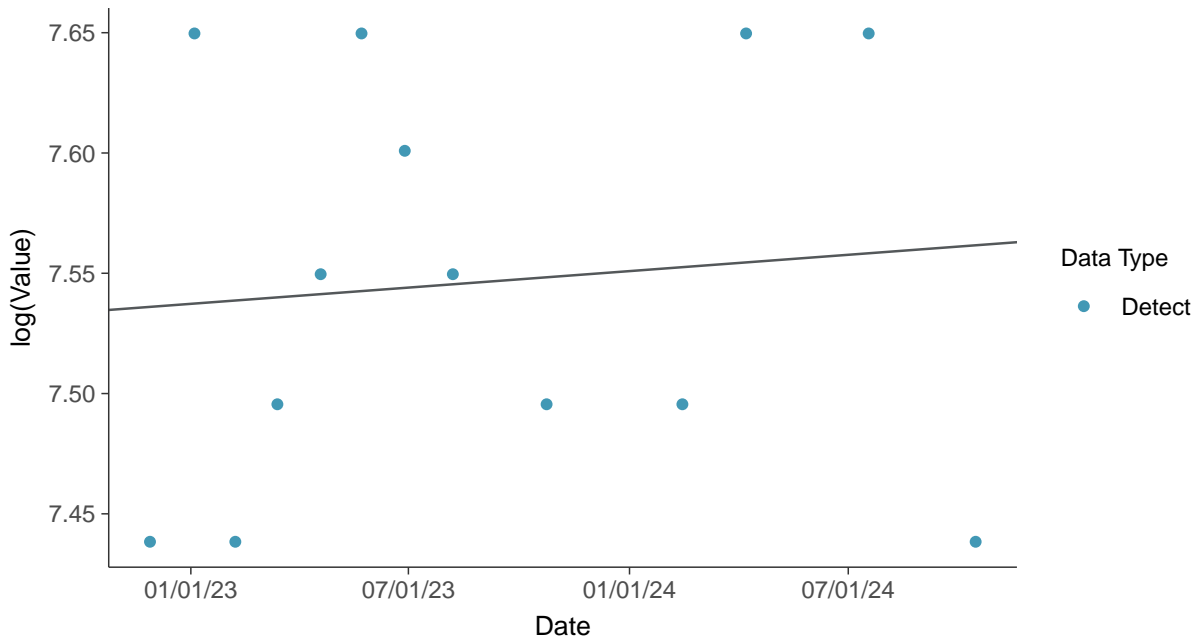
Gamma Q-Q plot

Total Dissolved Solids, MW-04 (mg/L)



Trend Regression: Lognormal MLE

Total Dissolved Solids, MW-04 (mg/L)



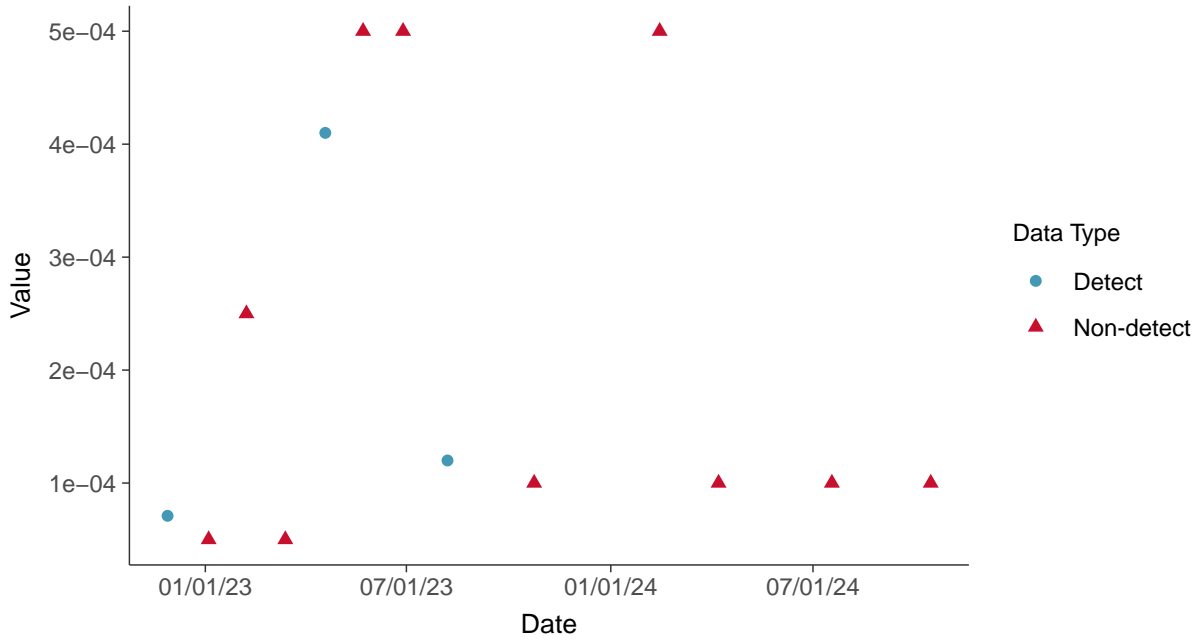


Appendix IV: Antimony, MW-04

ID: 2_14_2_5_101

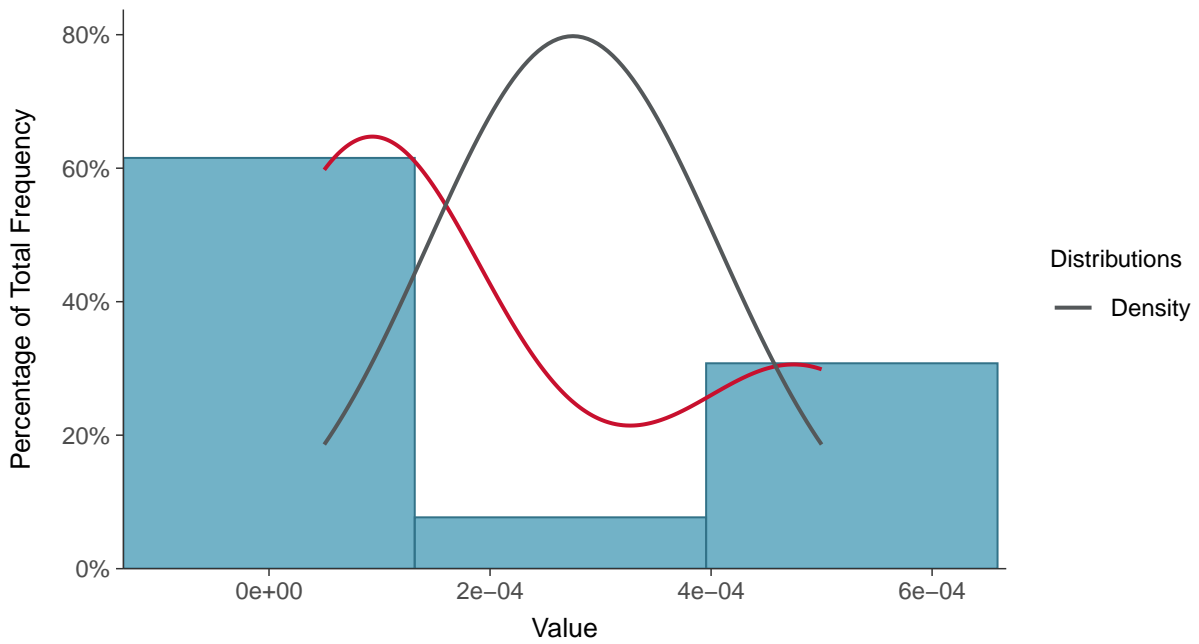
Scatter Plot

Antimony, MW-04 (mg/L)



Histogram

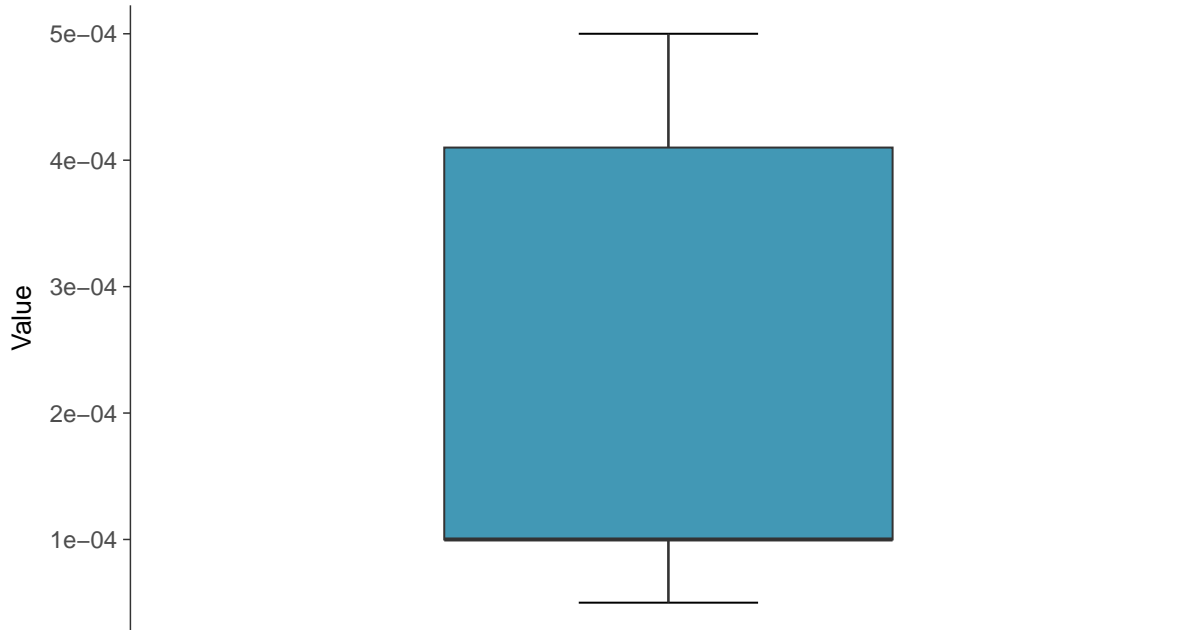
Antimony, MW-04 (mg/L)





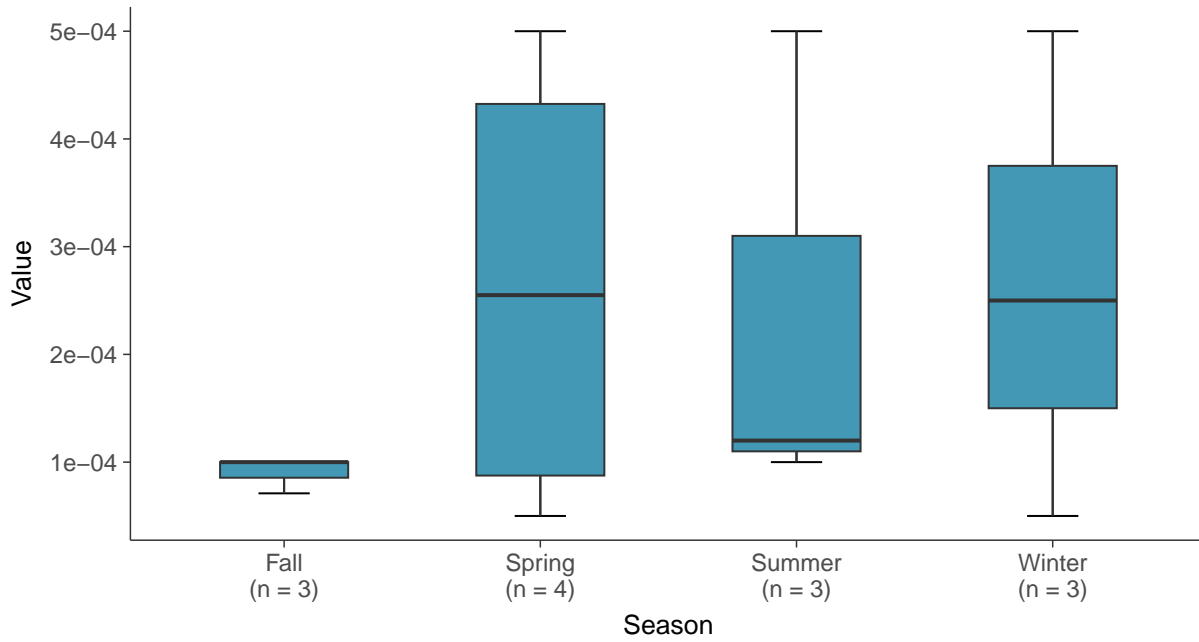
Boxplot

Antimony, MW-04 (mg/L)



Boxplot by Season

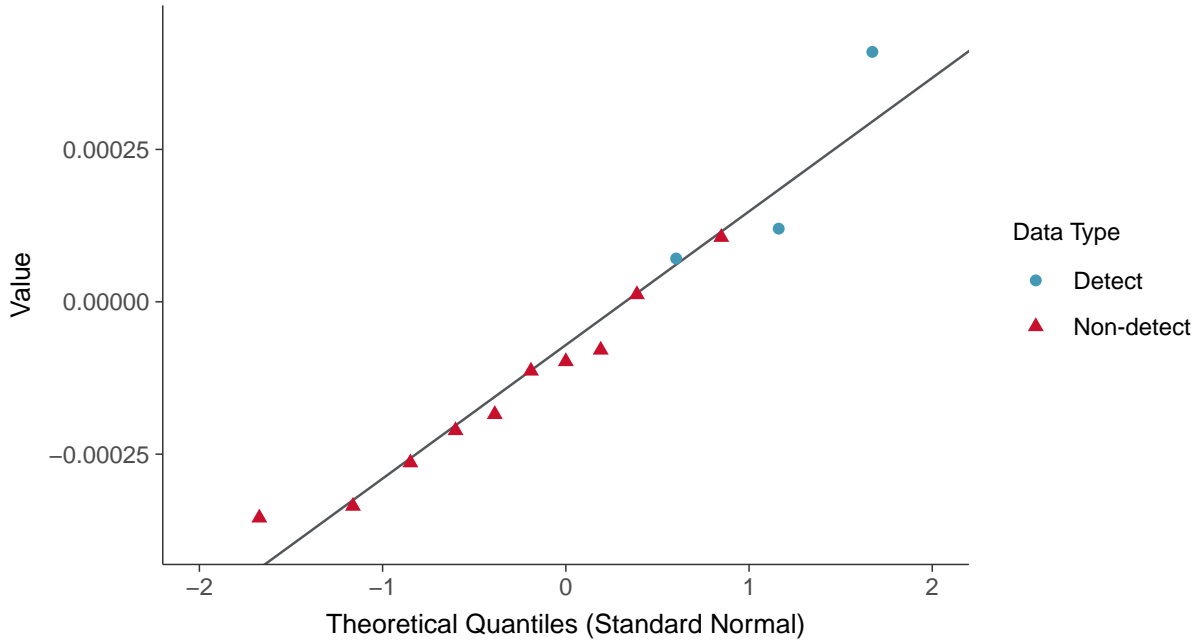
Antimony, MW-04 (mg/L)





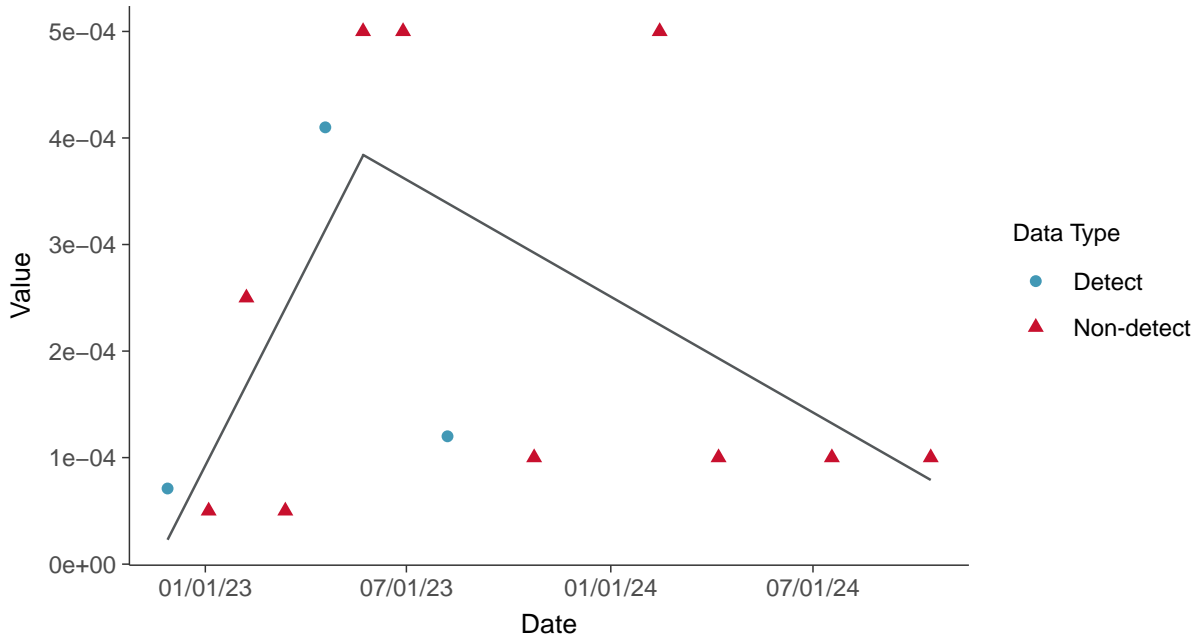
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-04 (mg/L)



Trend Regression: Piecewise Linear-Linear

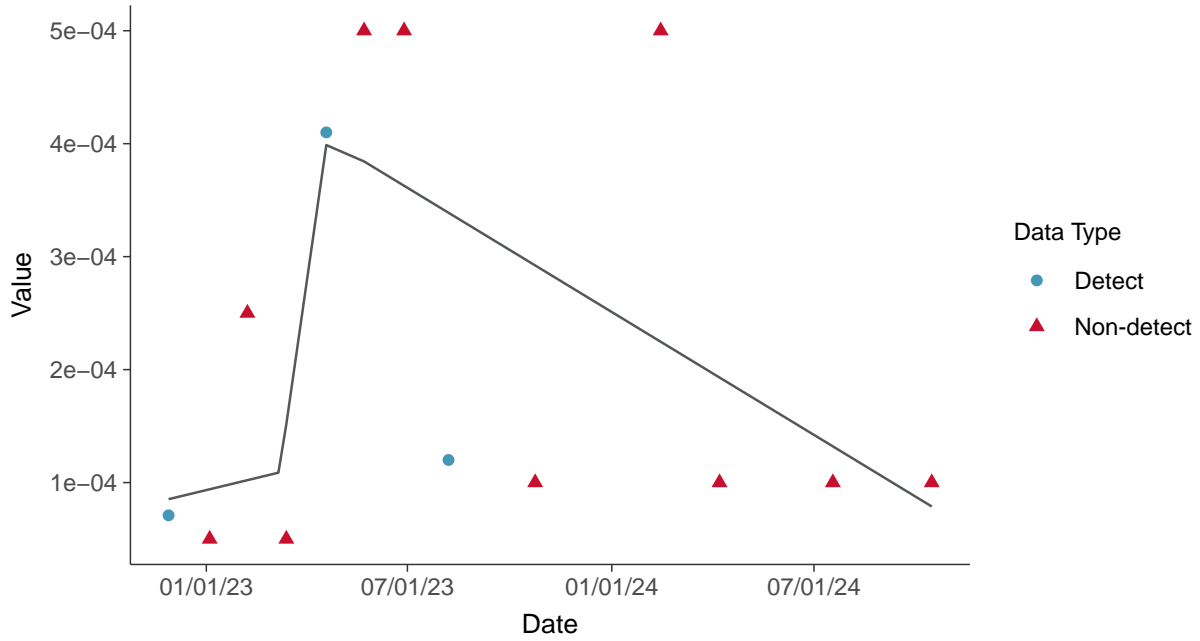
Antimony, MW-04 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

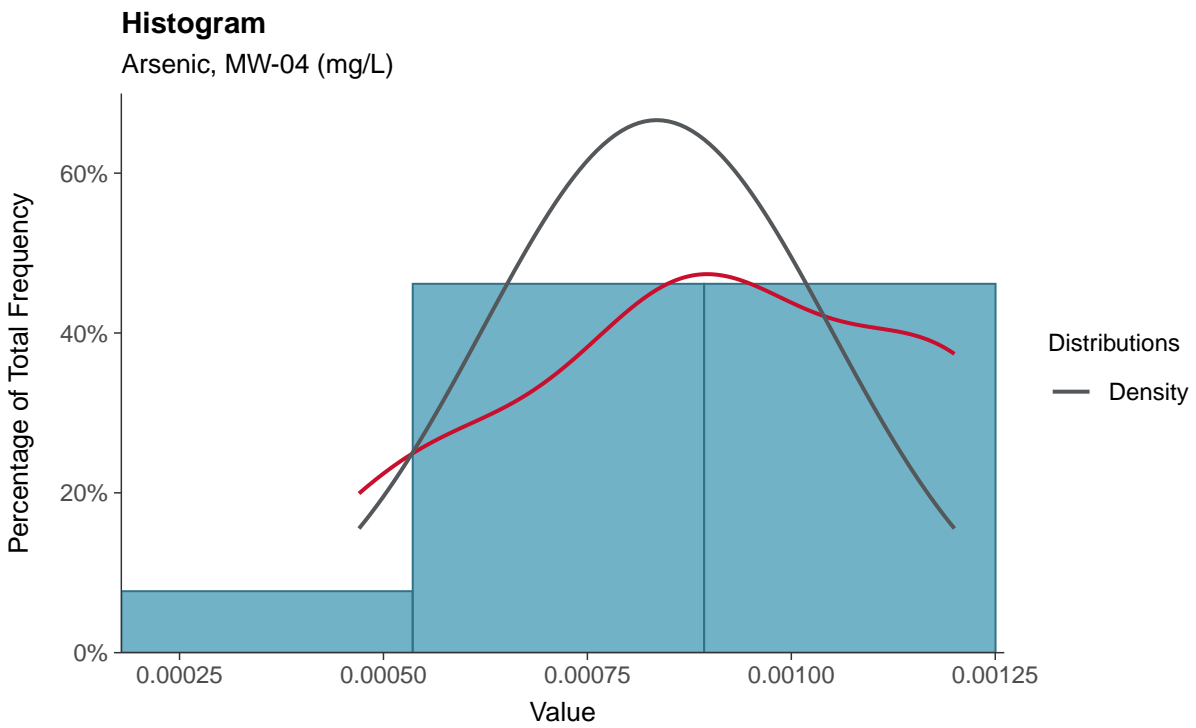
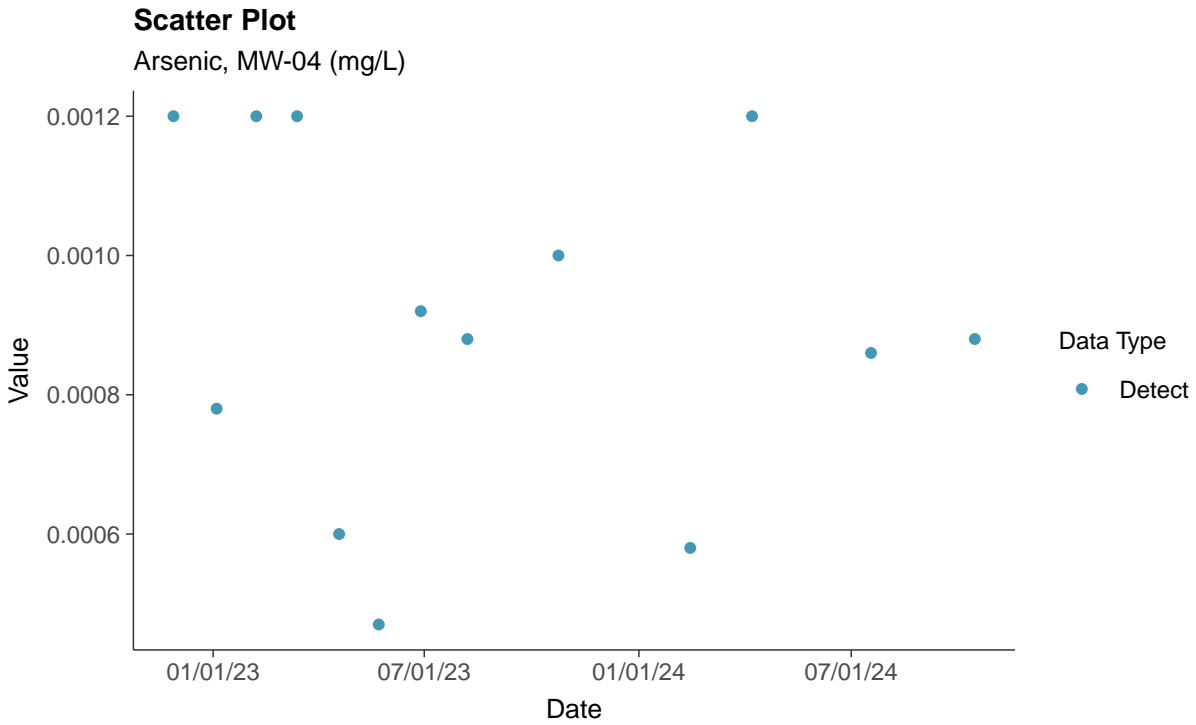
Antimony, MW-04 (mg/L)





Appendix IV: Arsenic, MW-04

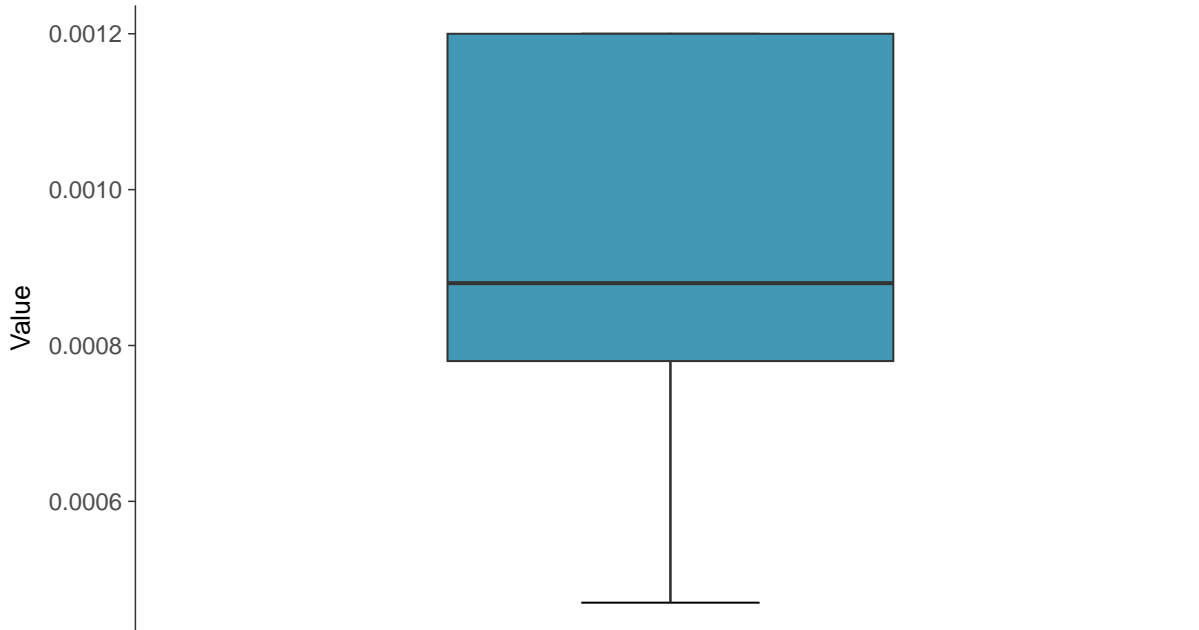
ID: 2_14_2_5_102





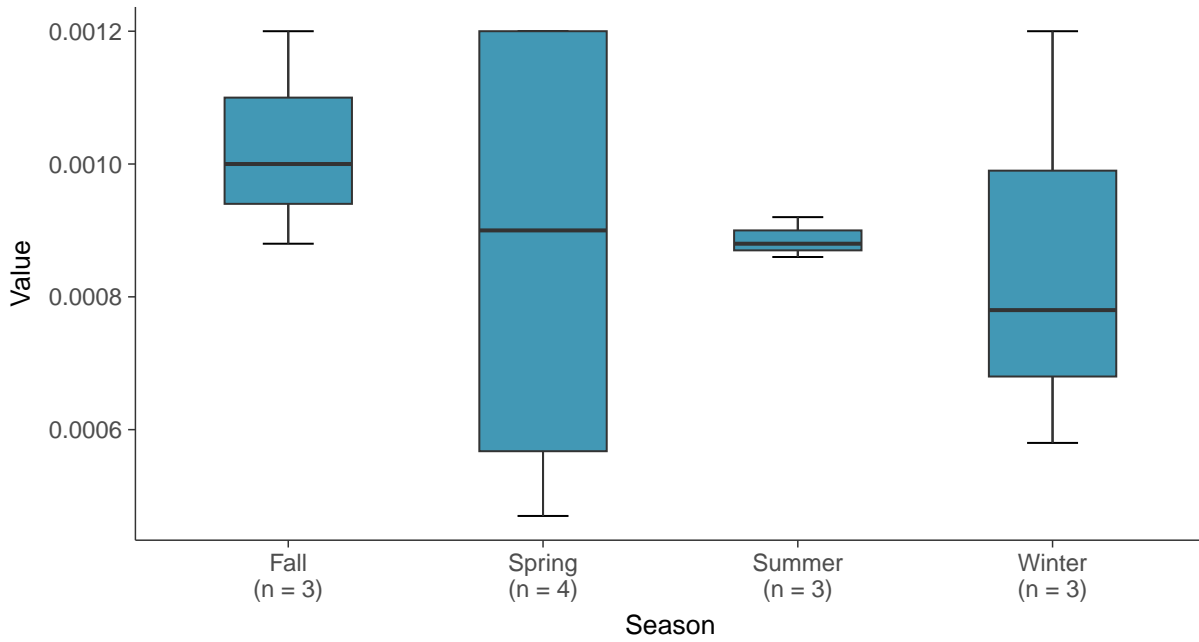
Boxplot

Arsenic, MW-04 (mg/L)



Boxplot by Season

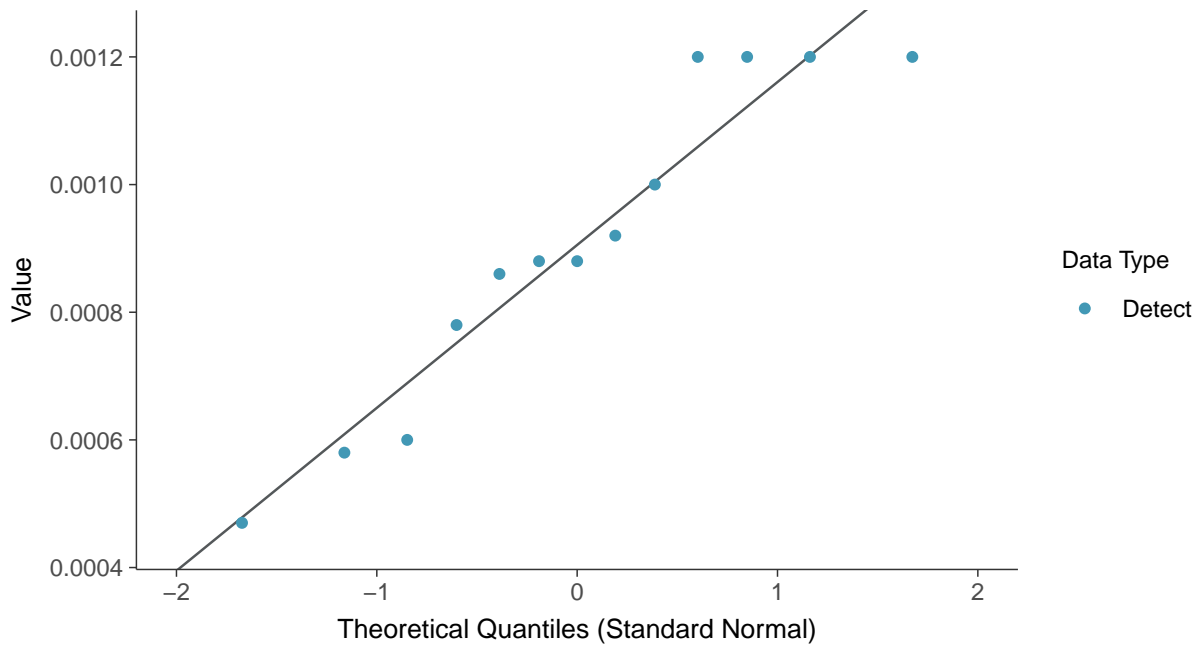
Arsenic, MW-04 (mg/L)





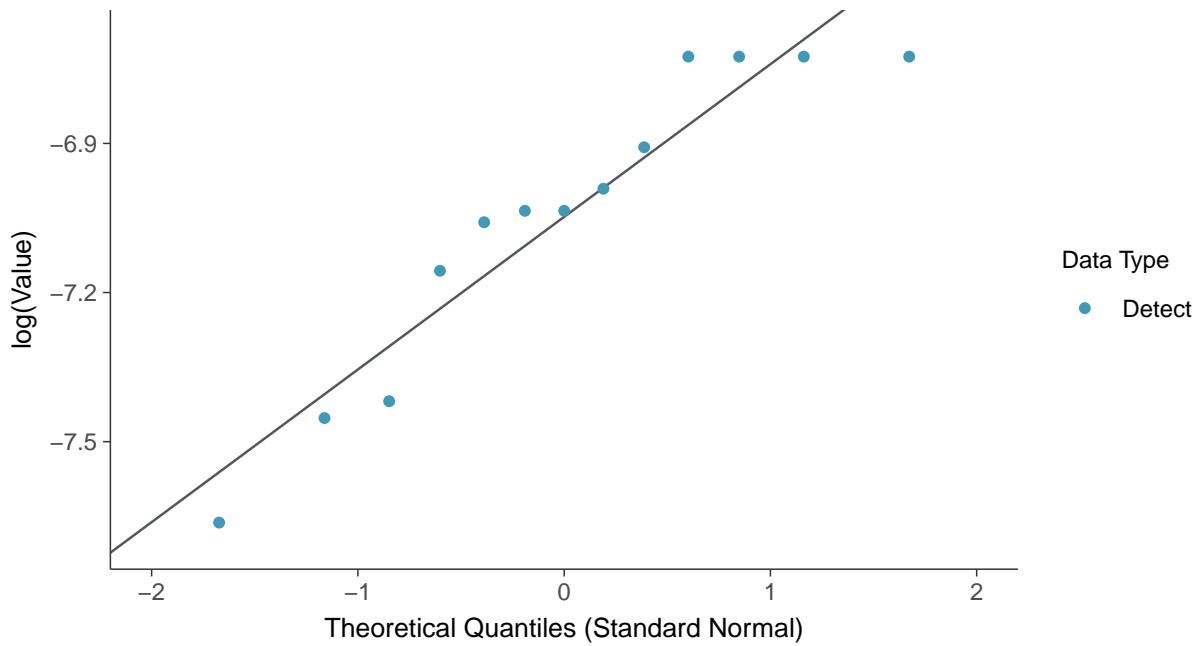
Normal Q-Q plot

Arsenic, MW-04 (mg/L)



Lognormal Q-Q plot

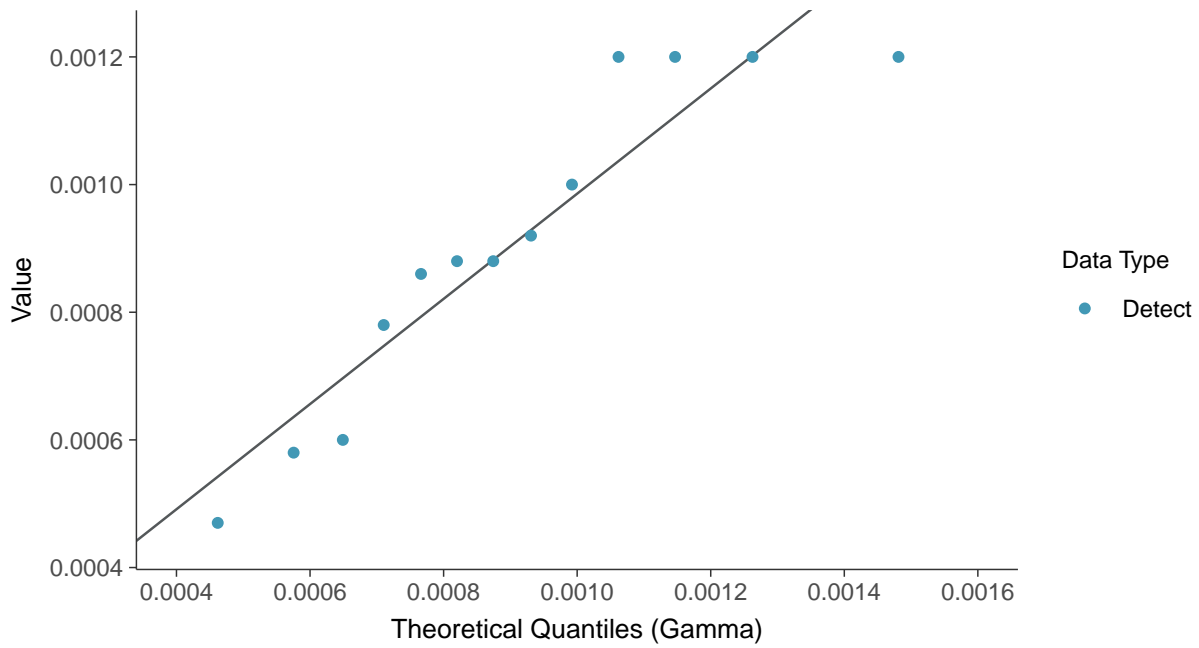
Arsenic, MW-04 (mg/L)





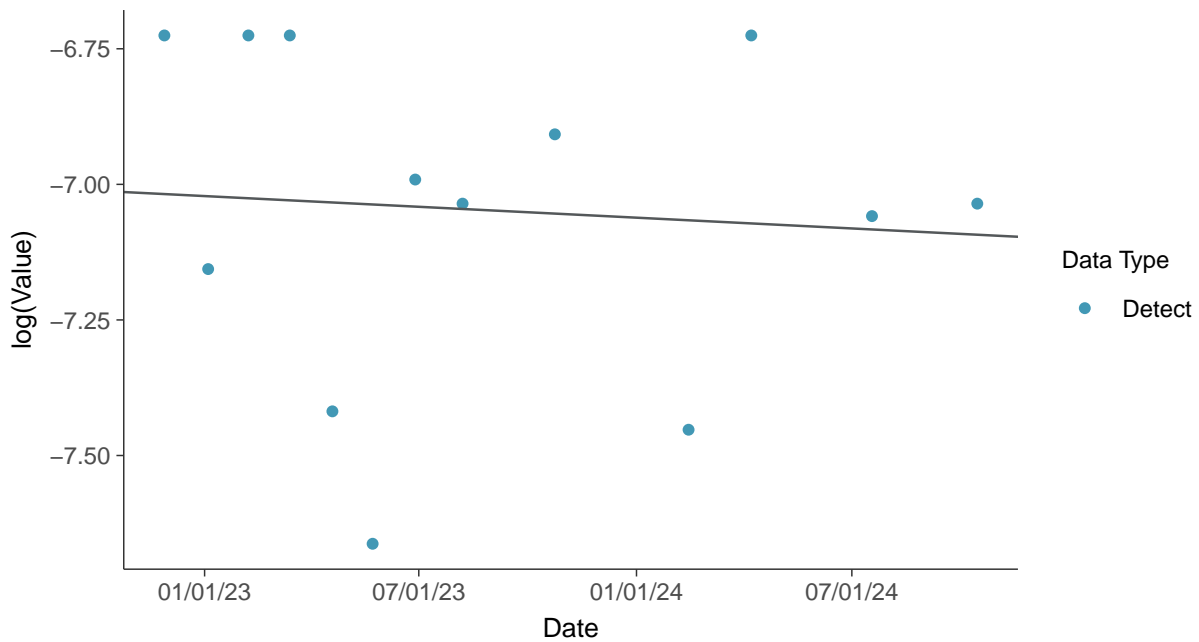
Gamma Q-Q plot

Arsenic, MW-04 (mg/L)



Trend Regression: Lognormal MLE

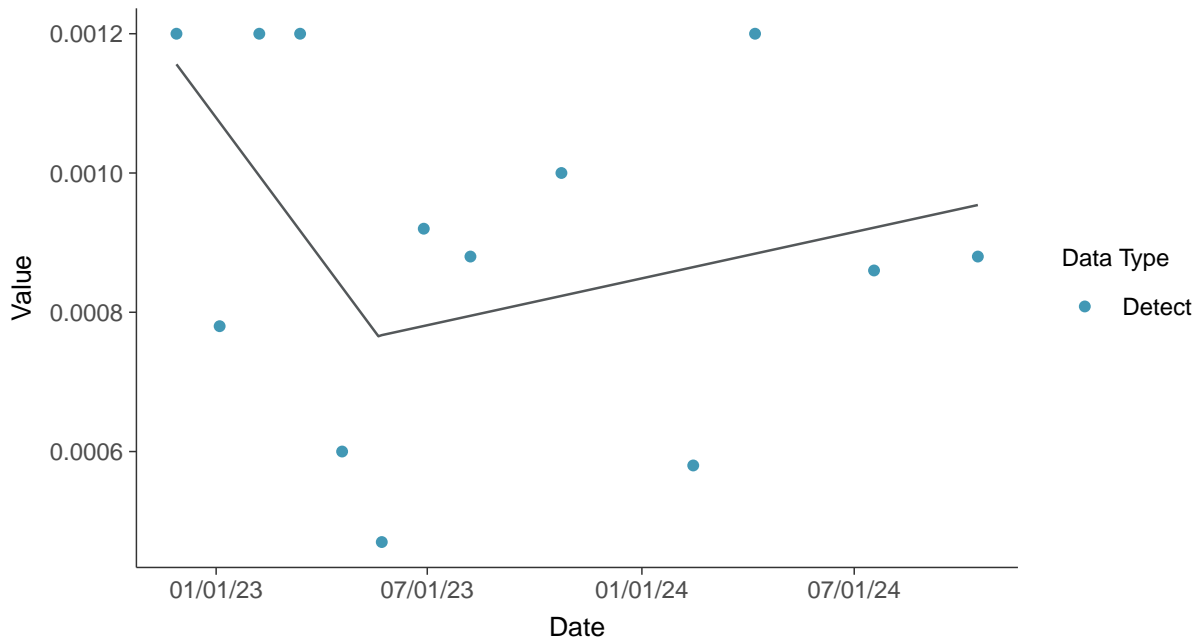
Arsenic, MW-04 (mg/L)





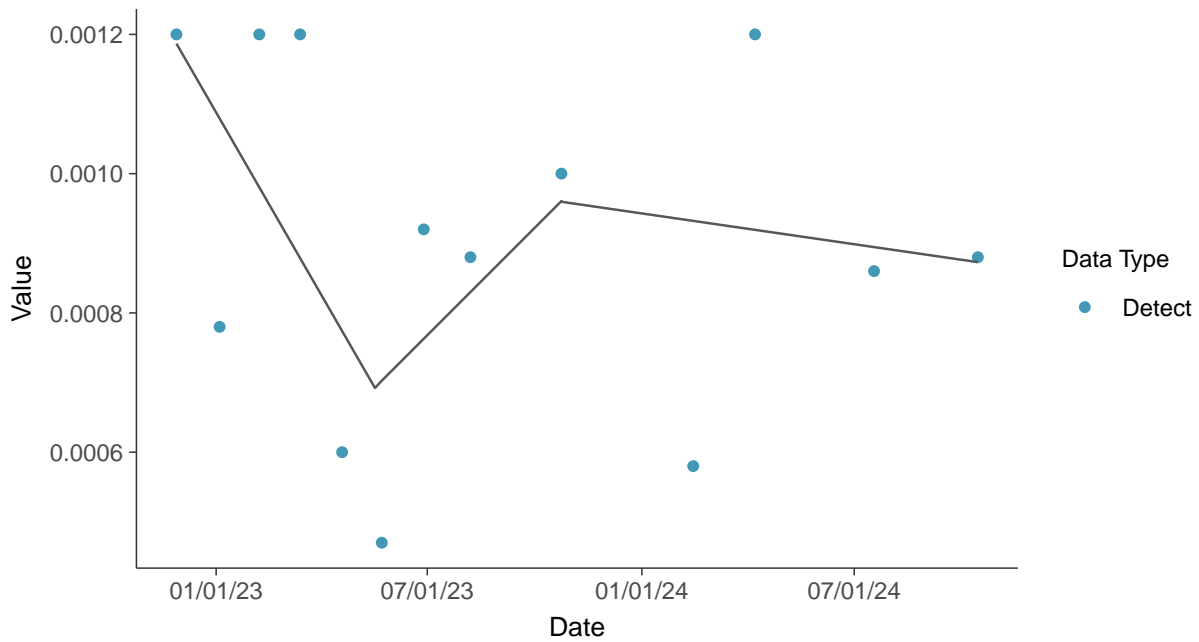
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-04 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

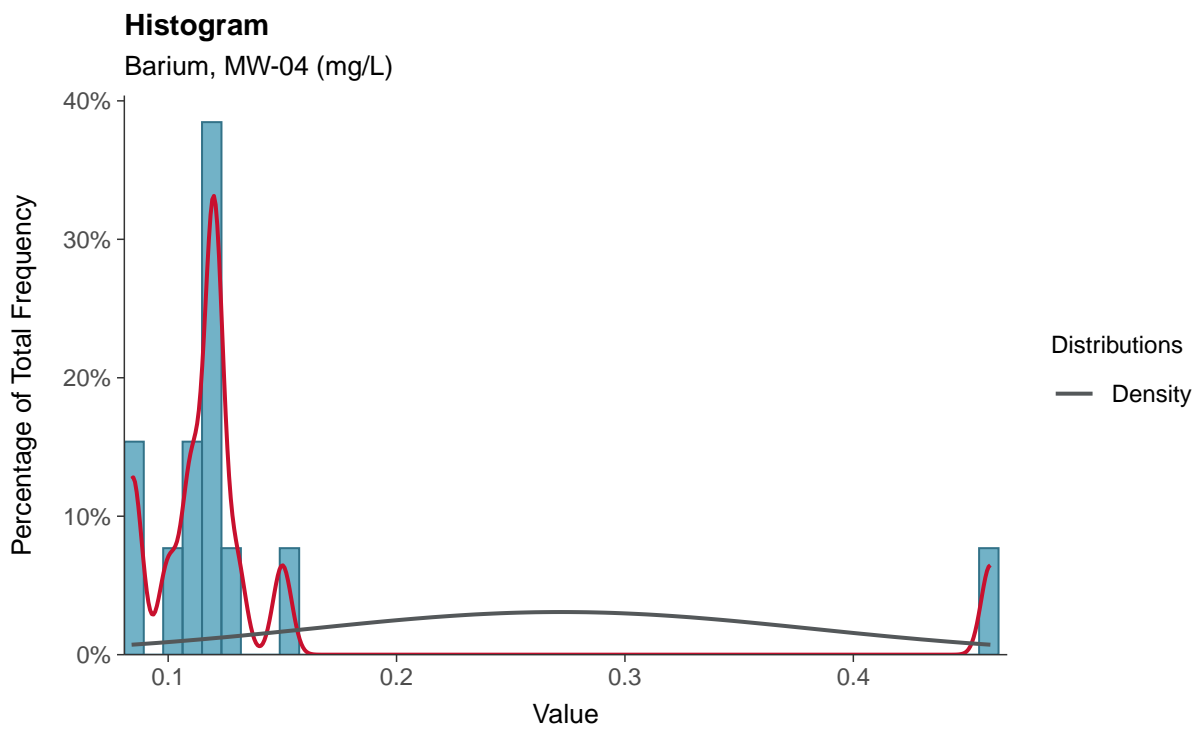
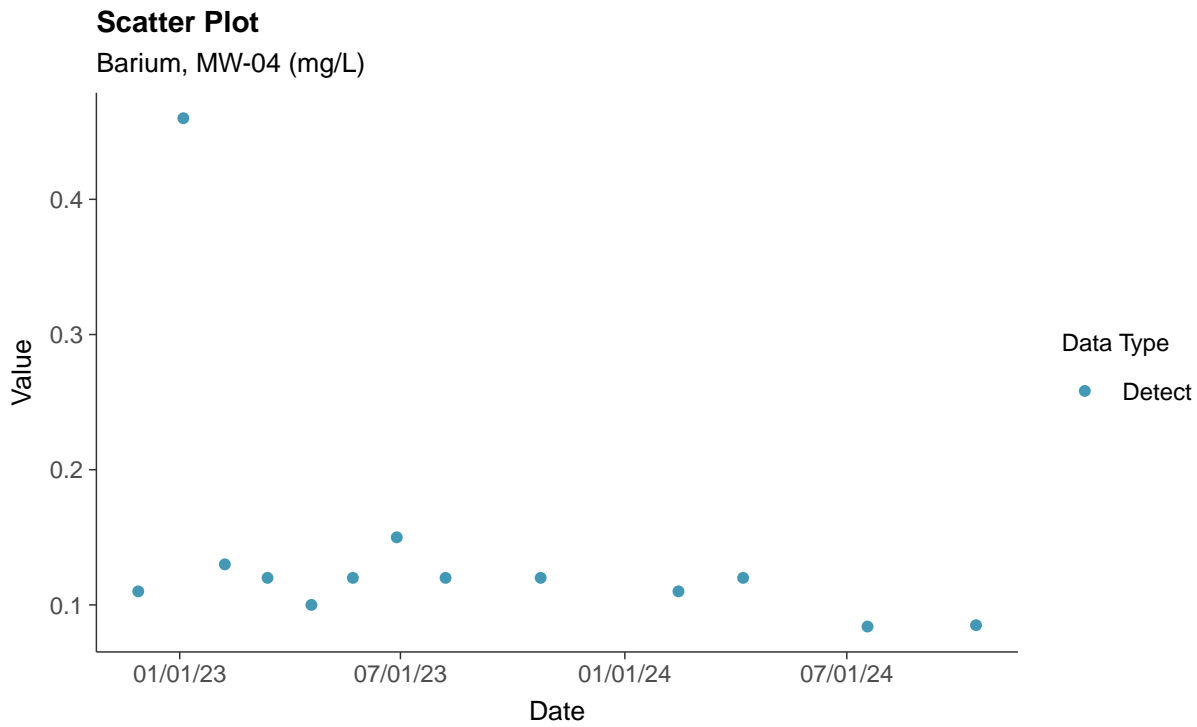
Arsenic, MW-04 (mg/L)





Appendix IV: Barium, MW-04

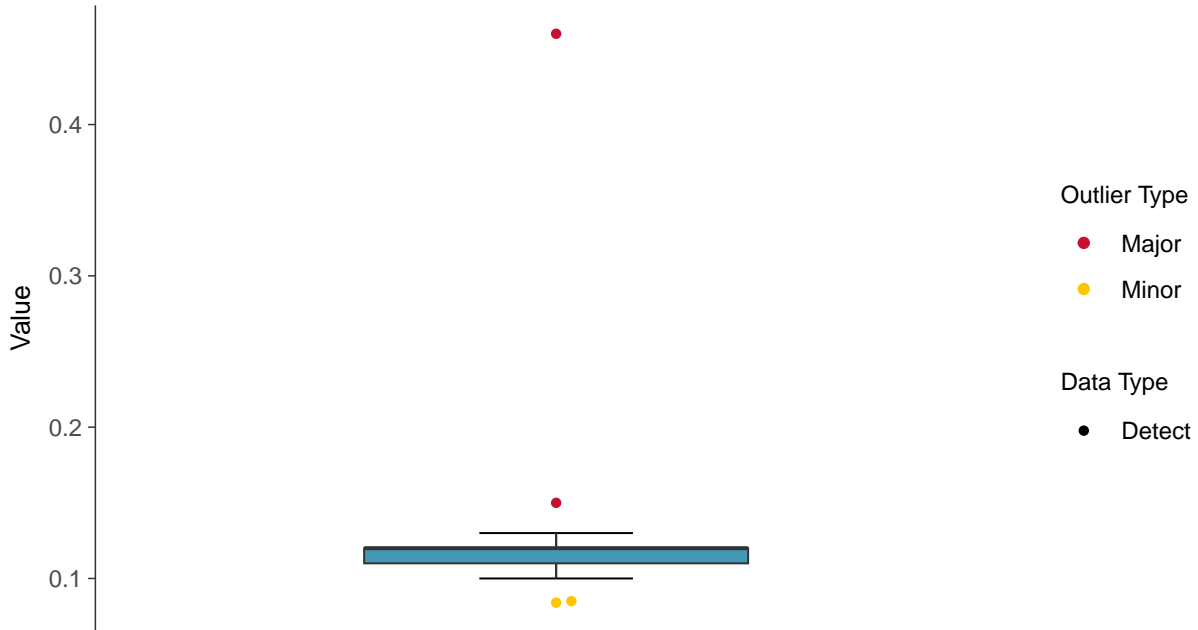
ID: 2_14_2_5_103





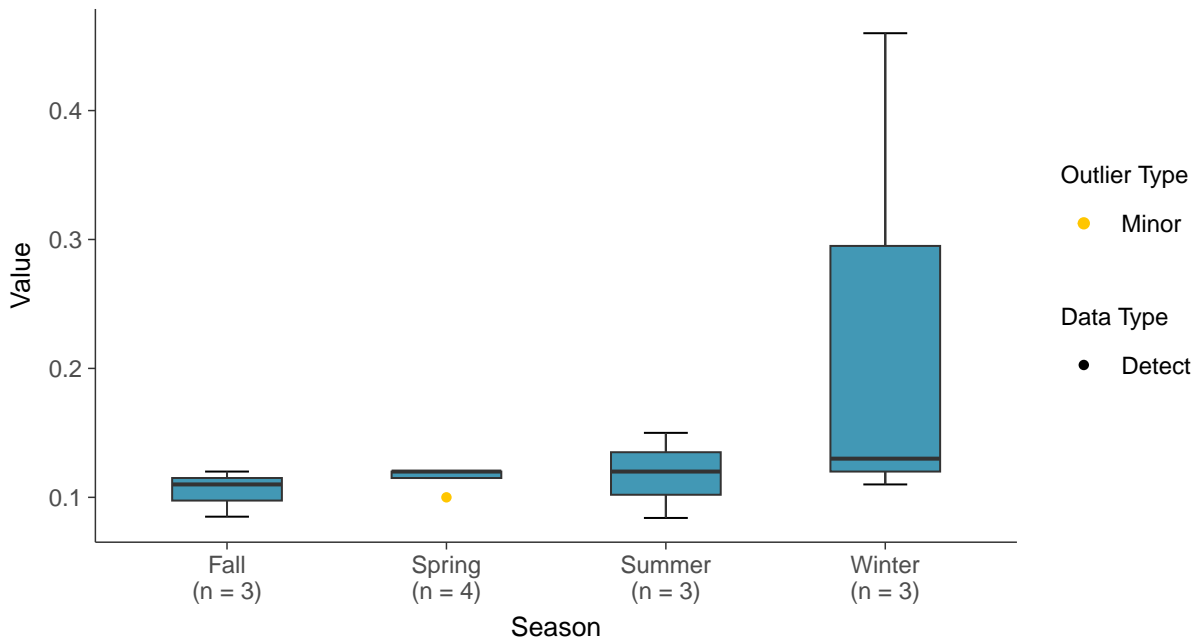
Boxplot

Barium, MW-04 (mg/L)



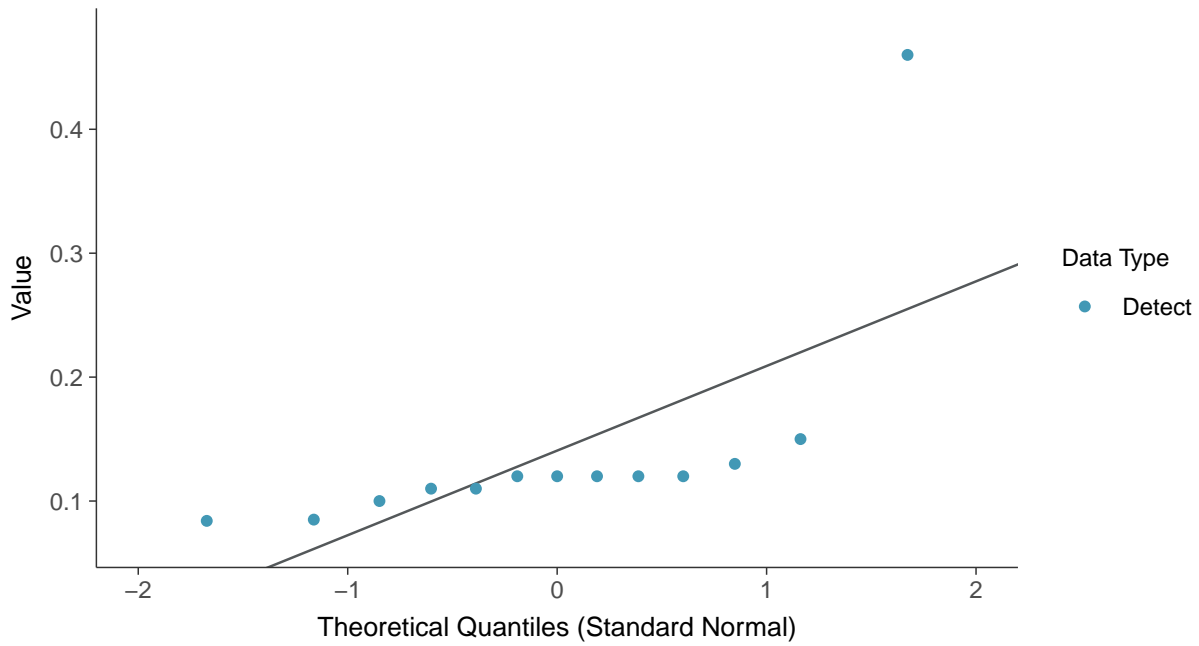
Boxplot by Season

Barium, MW-04 (mg/L)

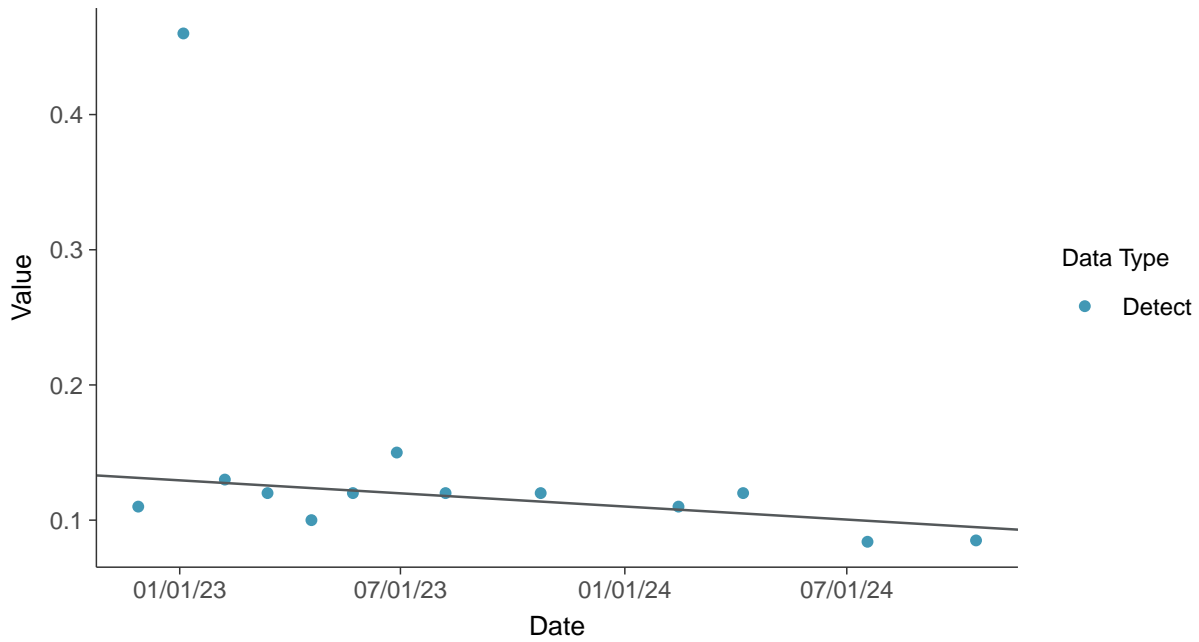




Normal Q-Q plot
Barium, MW-04 (mg/L)

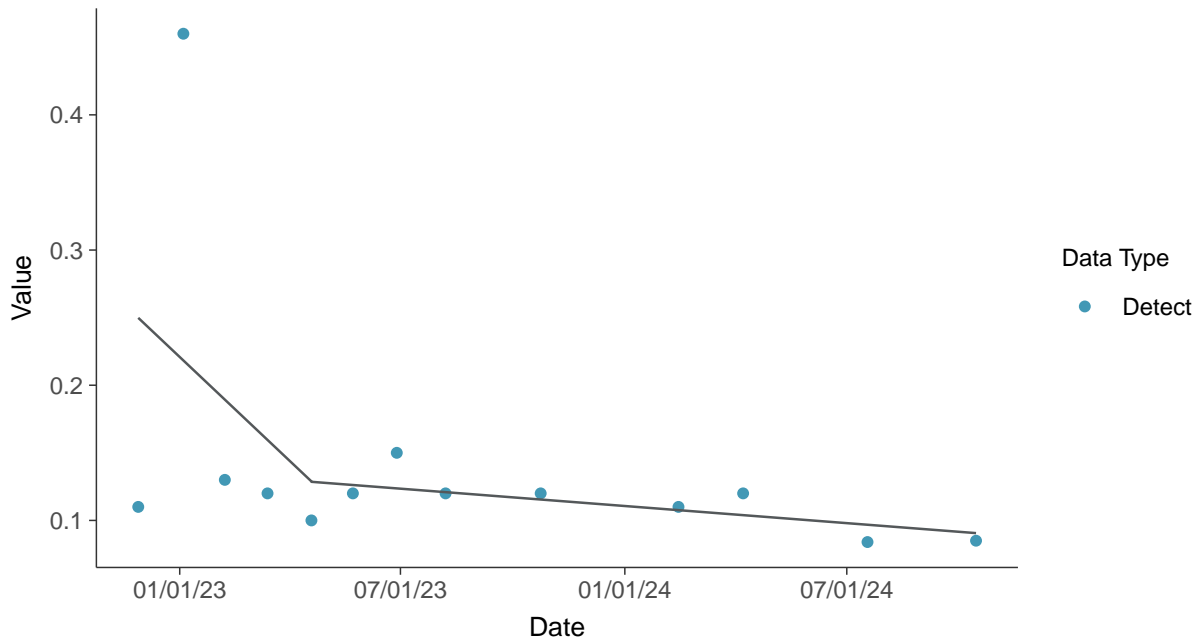


Trend Regression: Mann-Kendall/Theil-Sen Estimate
Barium, MW-04 (mg/L)





Trend Regression: Piecewise Linear-Linear
Barium, MW-04 (mg/L)



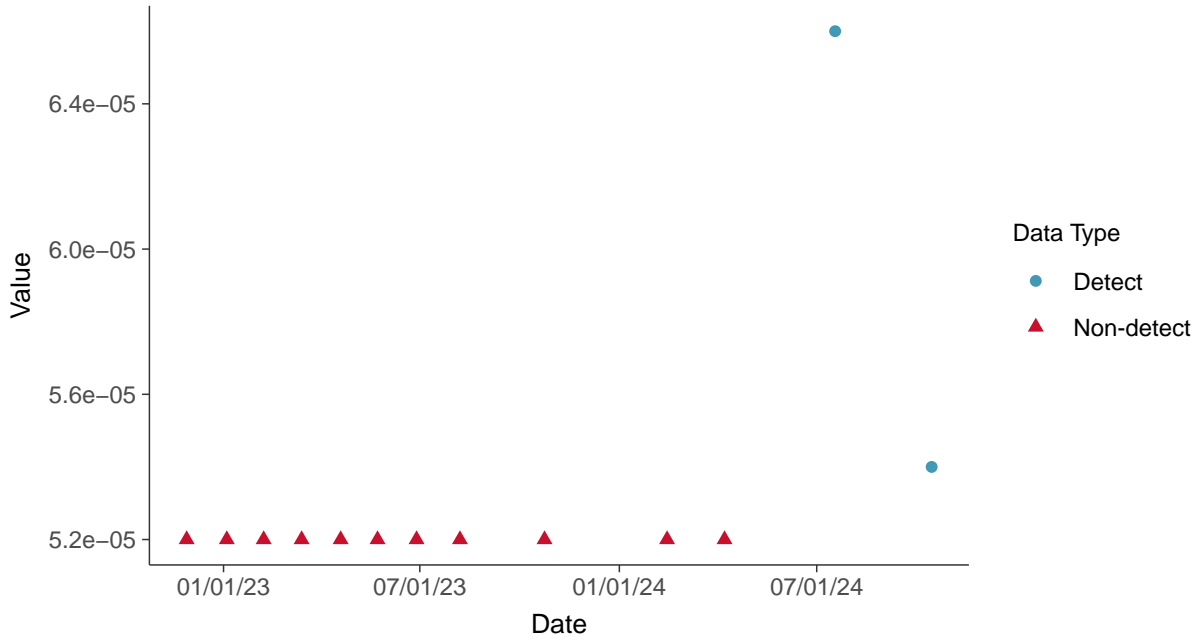


Appendix IV: Beryllium, MW-04

ID: 2_14_2_5_104

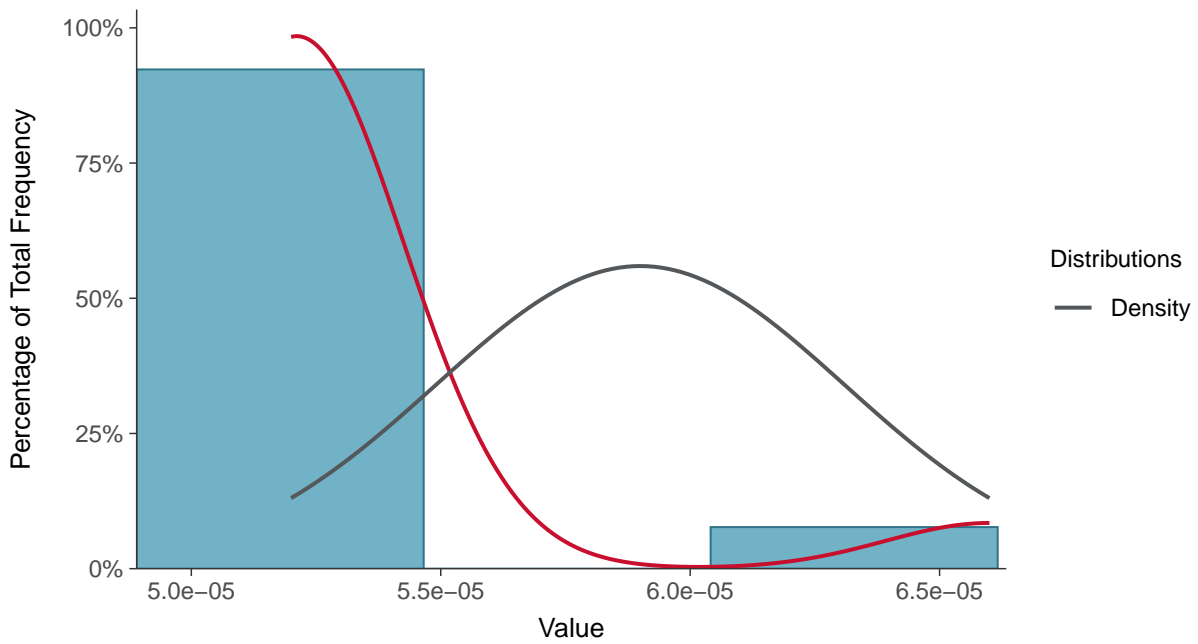
Scatter Plot

Beryllium, MW-04 (mg/L)



Histogram

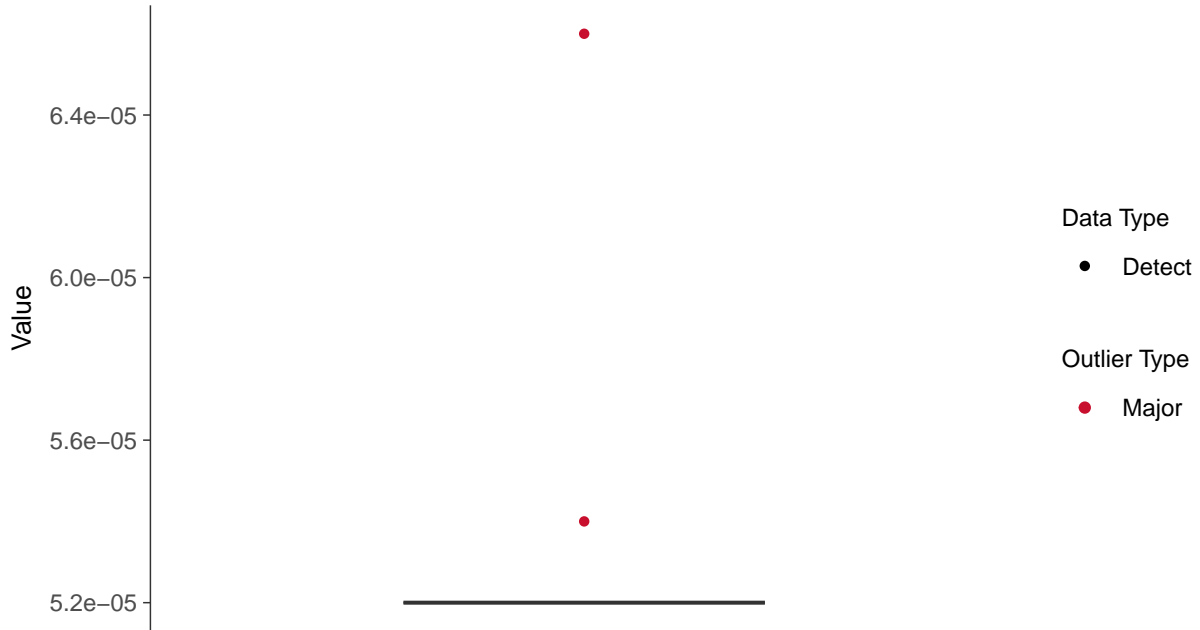
Beryllium, MW-04 (mg/L)





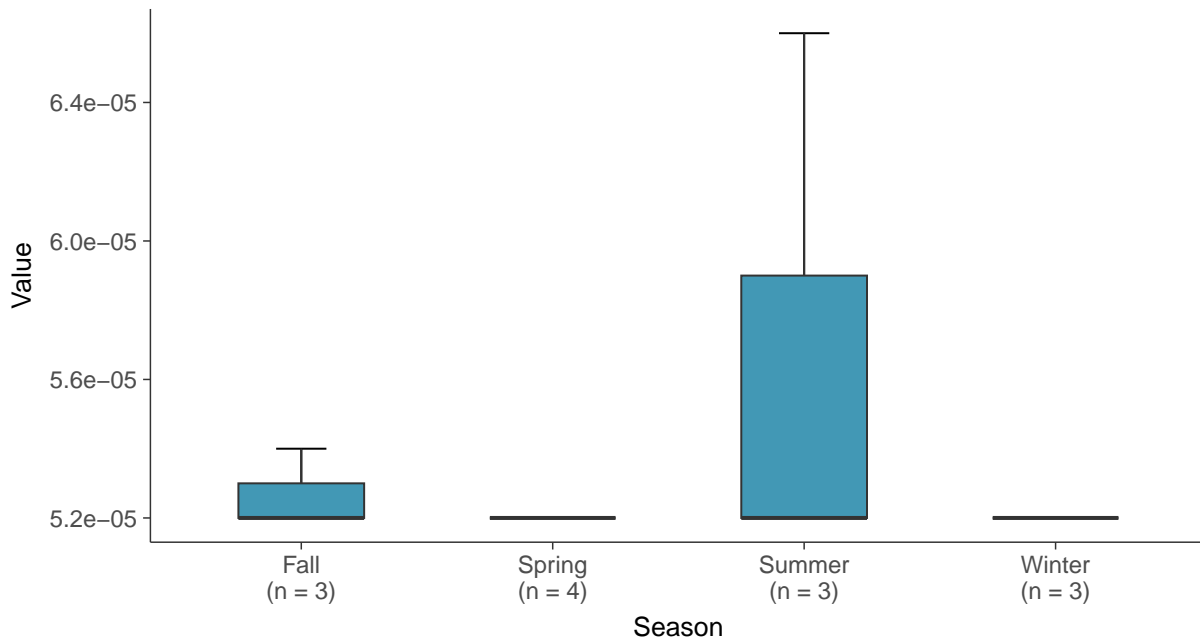
Boxplot

Beryllium, MW-04 (mg/L)



Boxplot by Season

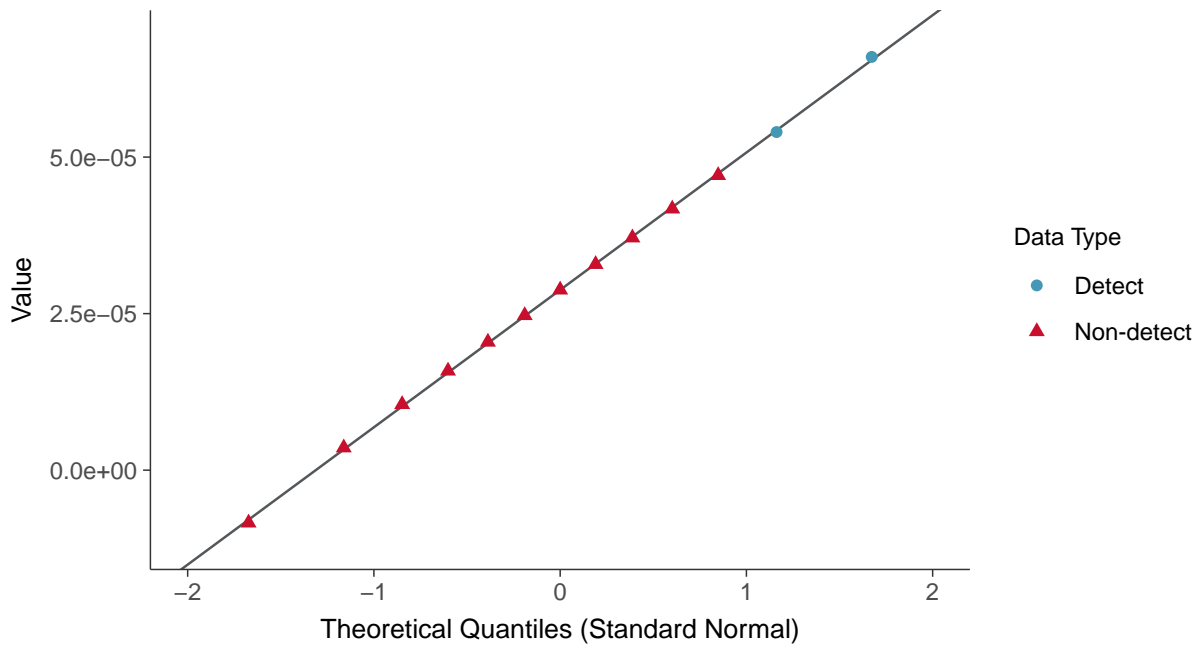
Beryllium, MW-04 (mg/L)





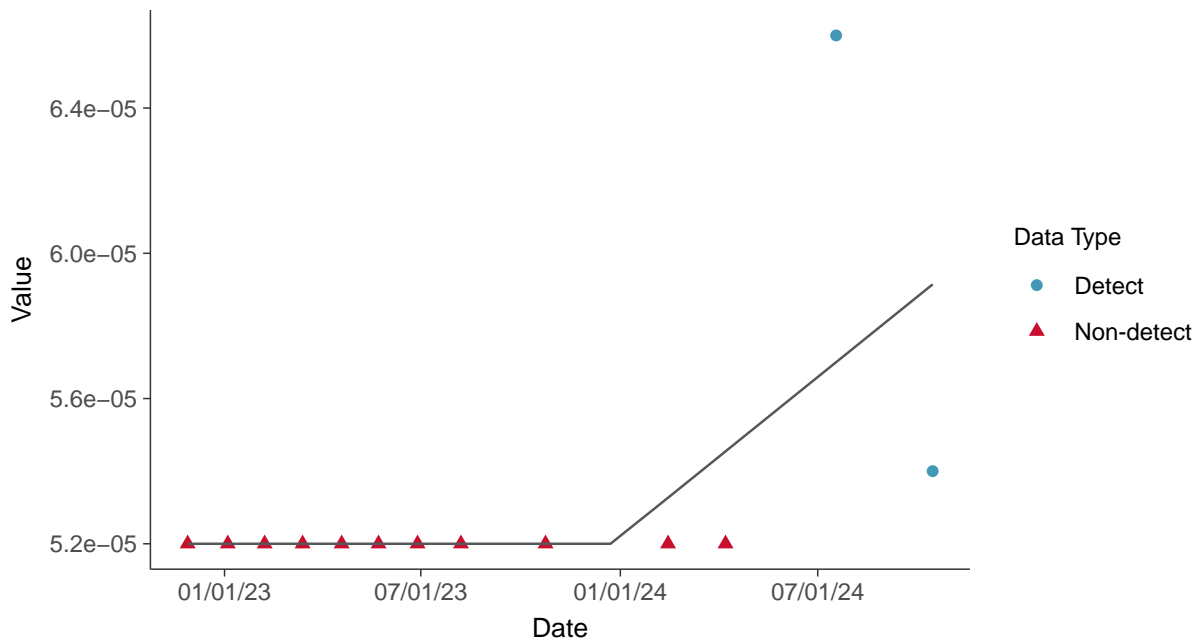
Normal Q-Q plot using ROS Imputed Estimates

Beryllium, MW-04 (mg/L)



Trend Regression: Piecewise Linear-Linear

Beryllium, MW-04 (mg/L)



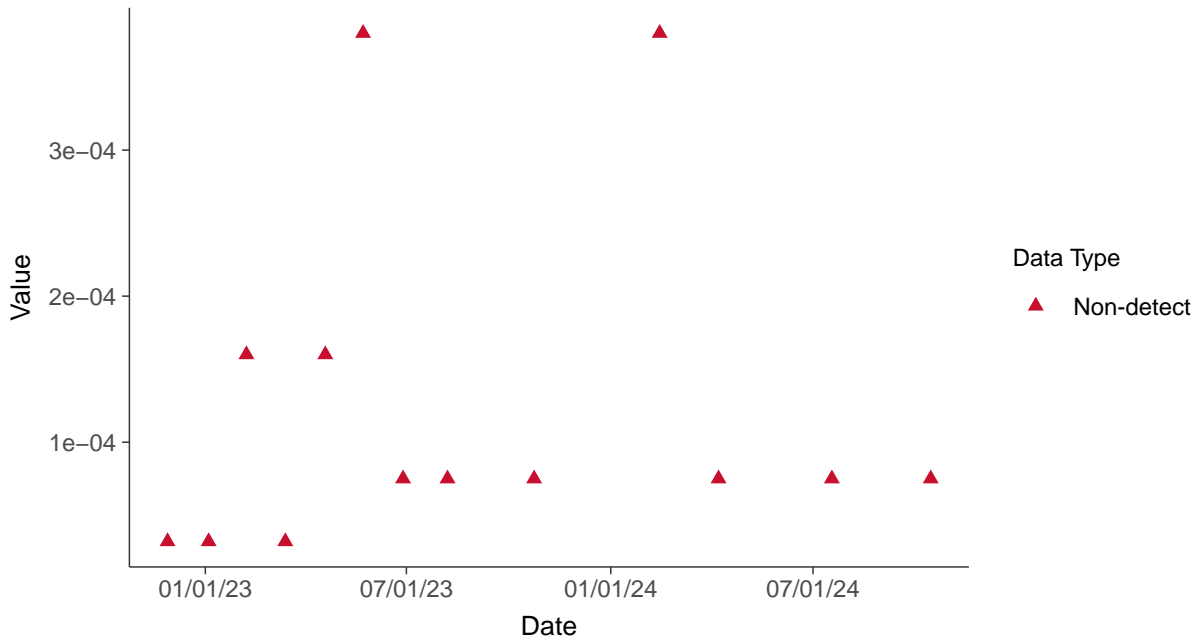


Appendix IV: Cadmium, MW-04

ID: 2_14_2_5_106

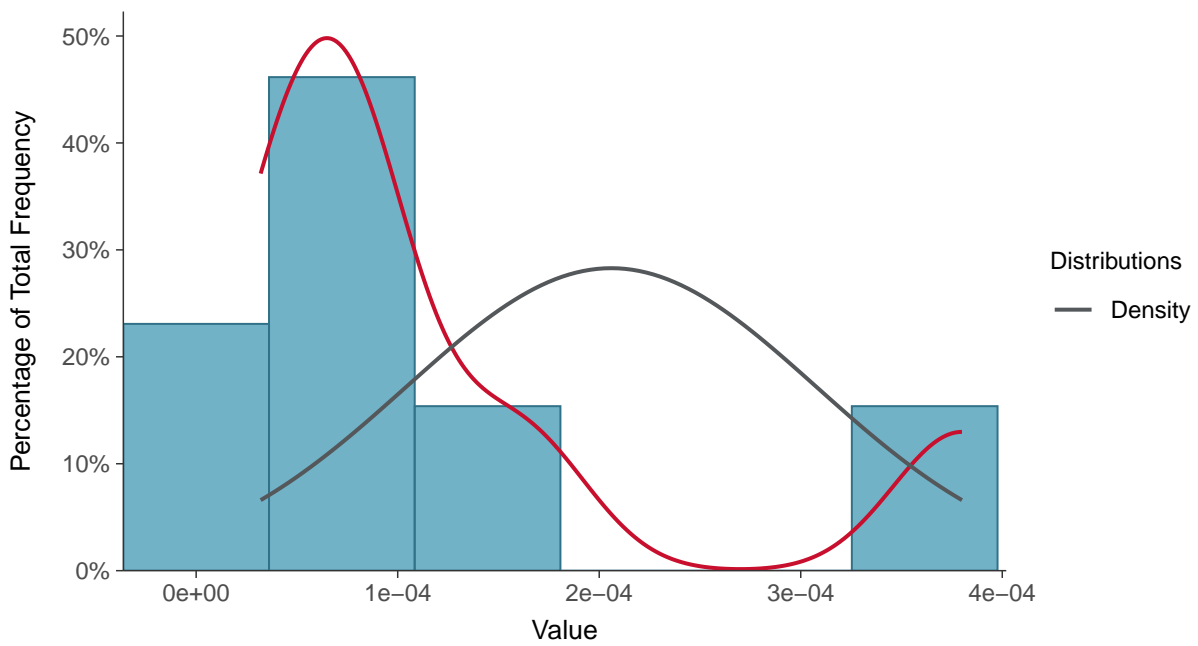
Scatter Plot

Cadmium, MW-04 (mg/L)



Histogram

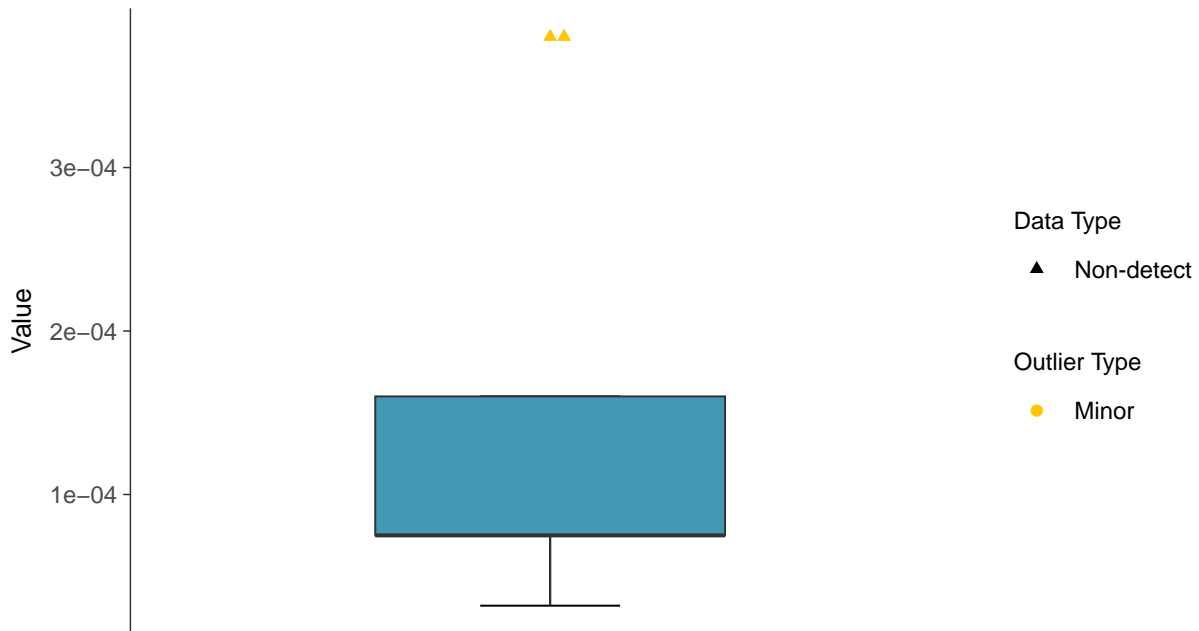
Cadmium, MW-04 (mg/L)





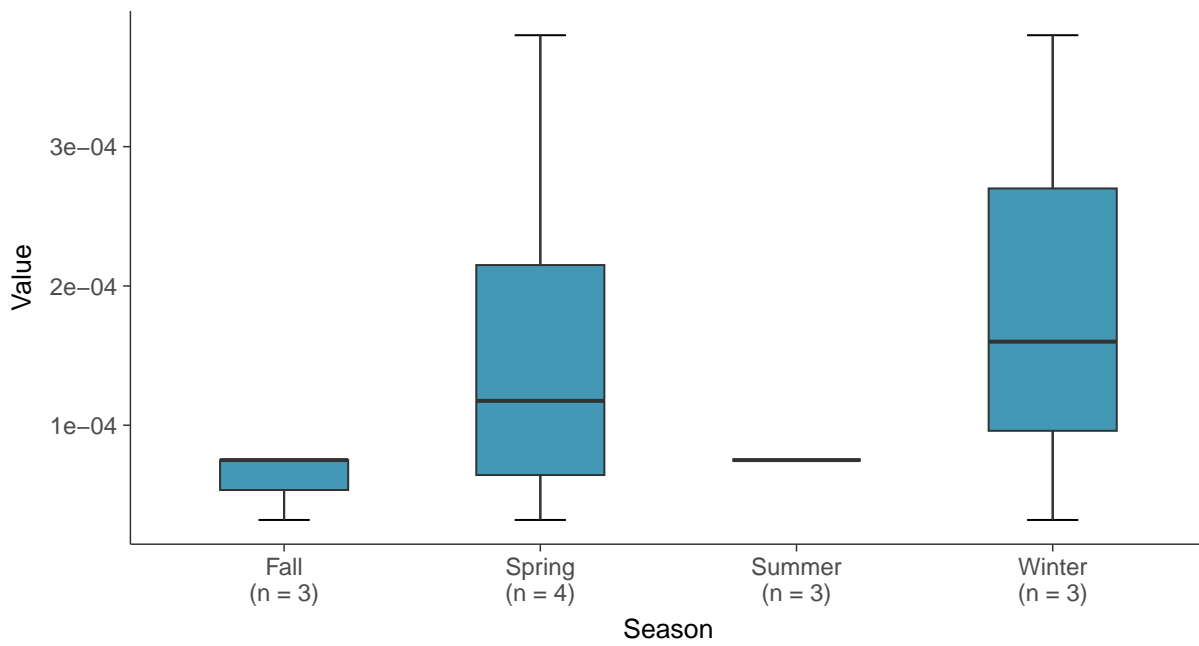
Boxplot

Cadmium, MW-04 (mg/L)



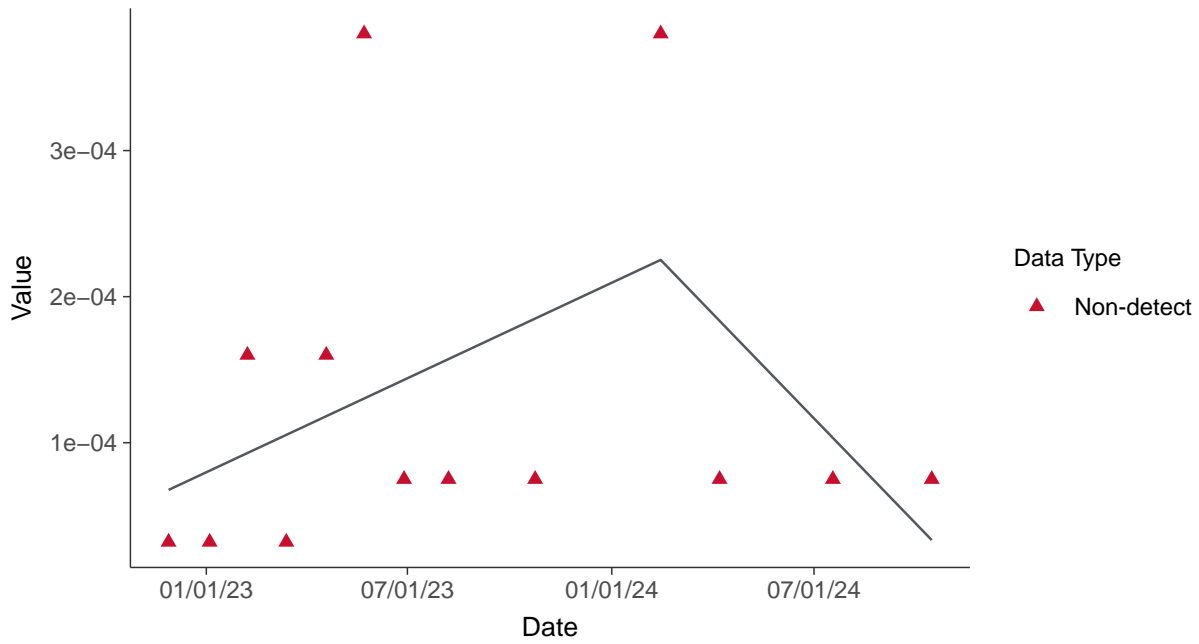
Boxplot by Season

Cadmium, MW-04 (mg/L)

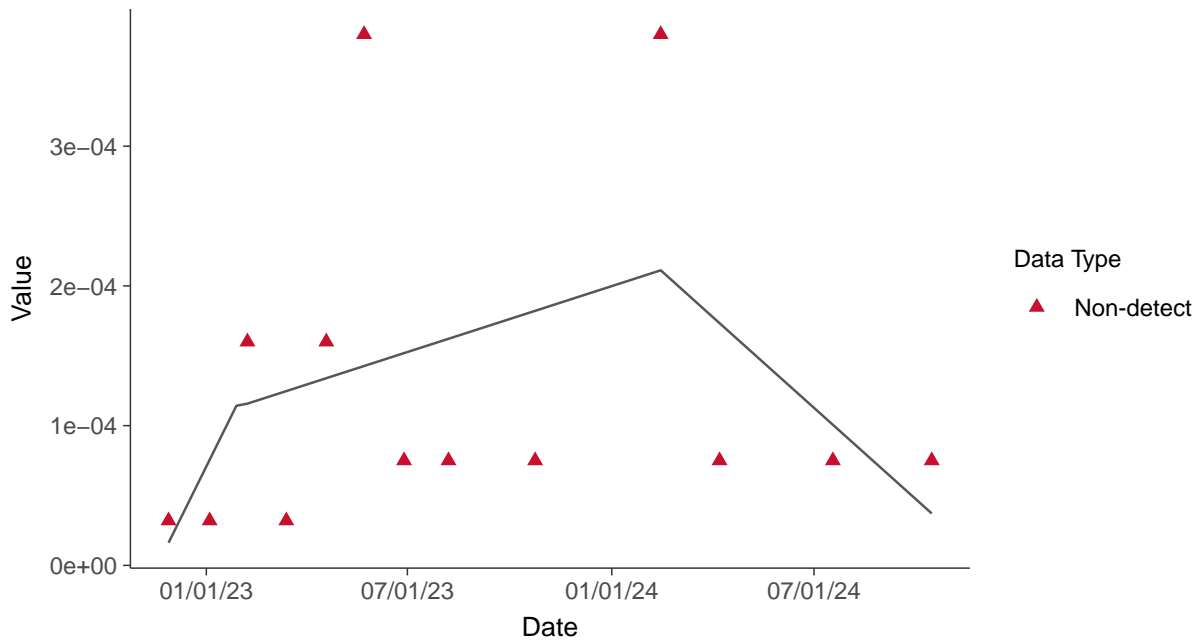




Trend Regression: Piecewise Linear-Linear
Cadmium, MW-04 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Cadmium, MW-04 (mg/L)



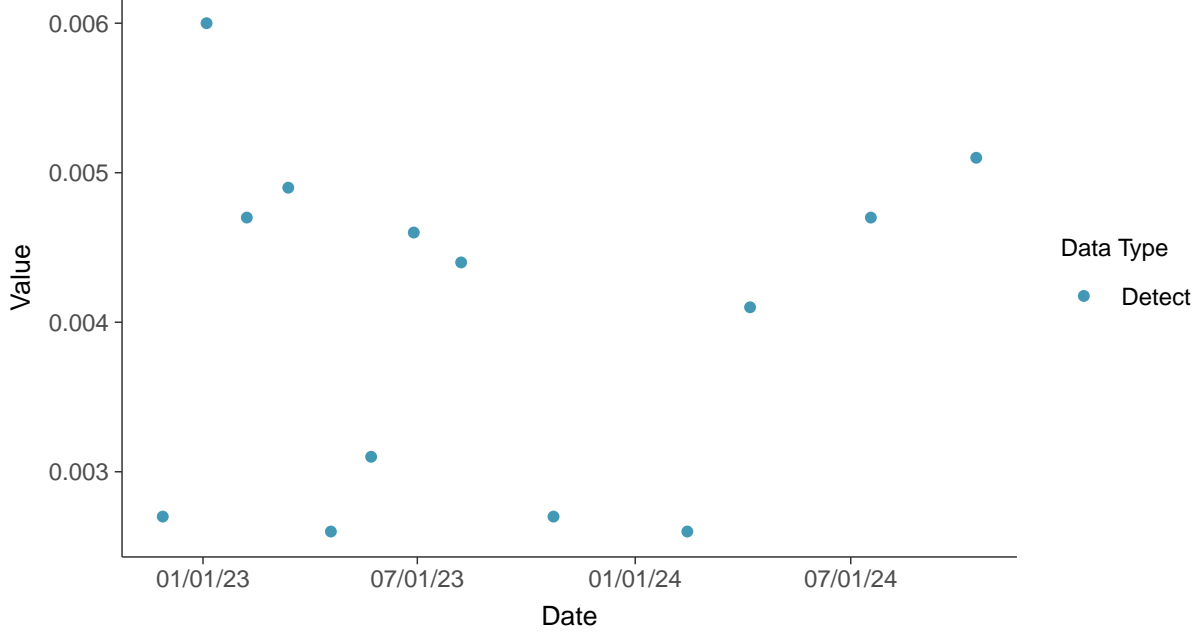


Appendix IV: Chromium, Total, MW-04

ID: 2_14_2_5_109

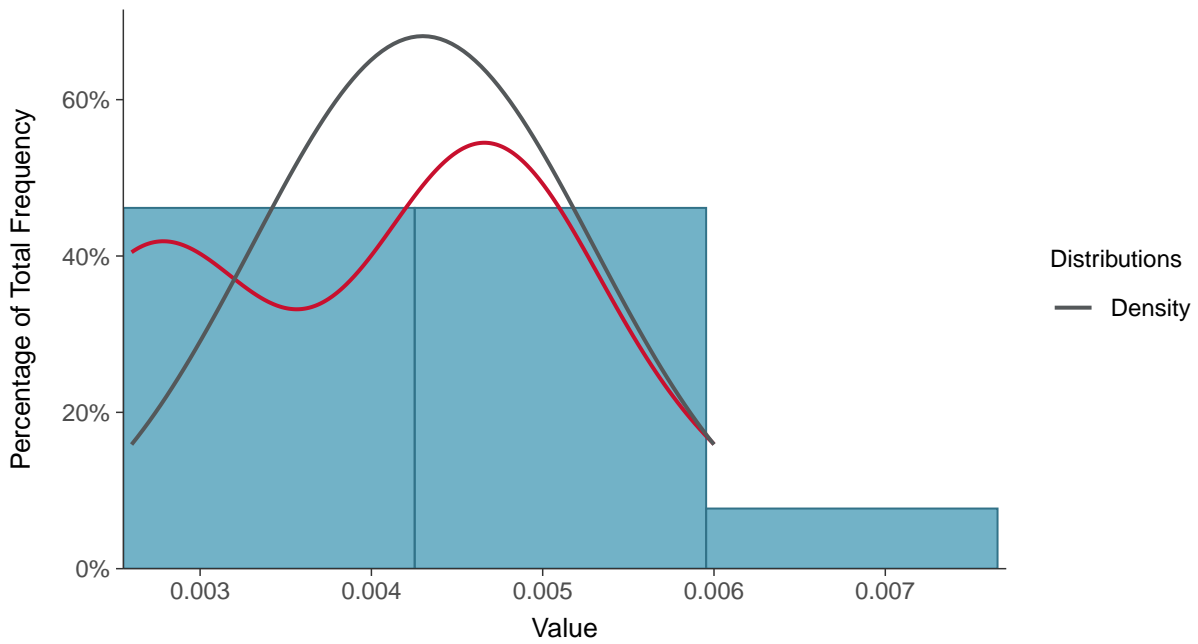
Scatter Plot

Chromium, Total, MW-04 (mg/L)



Histogram

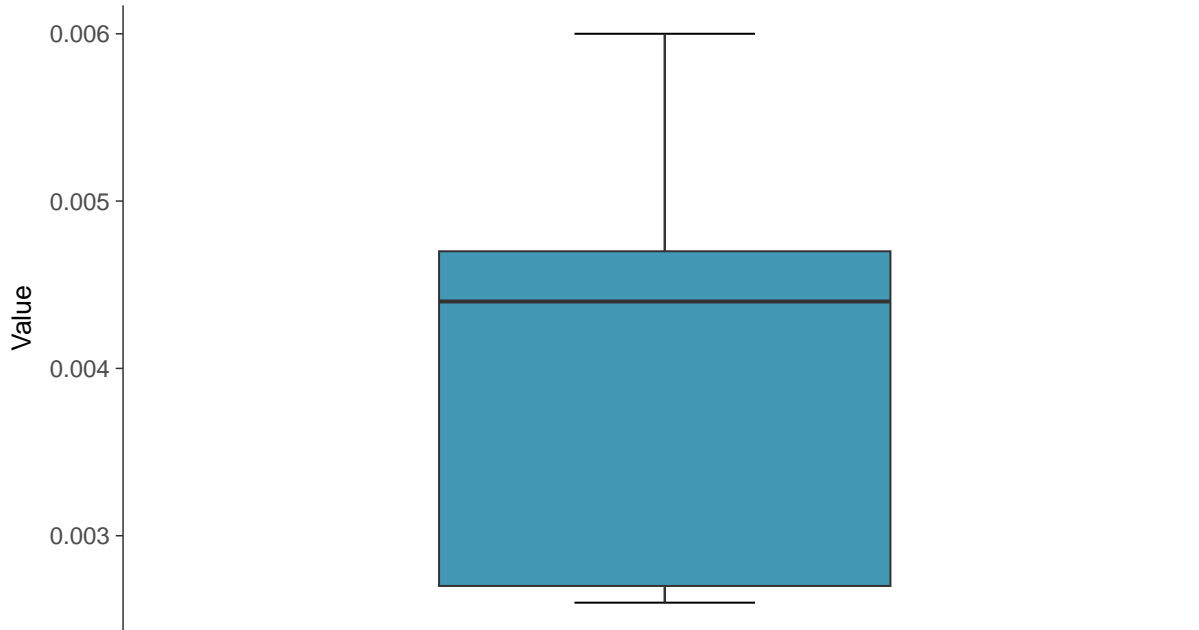
Chromium, Total, MW-04 (mg/L)





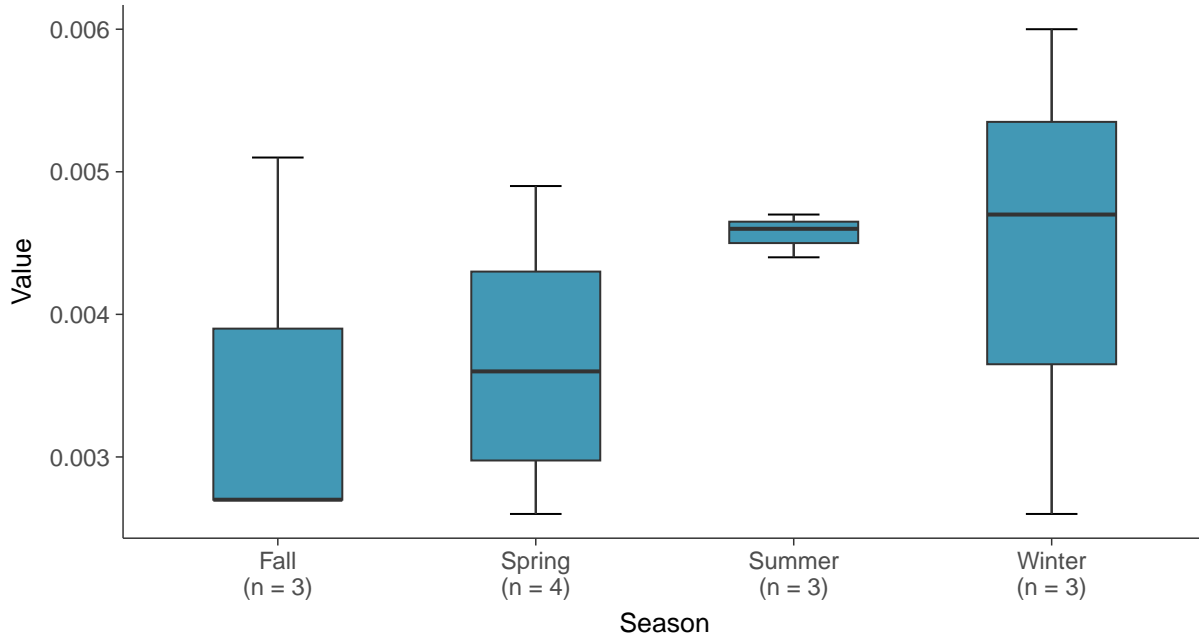
Boxplot

Chromium, Total, MW-04 (mg/L)



Boxplot by Season

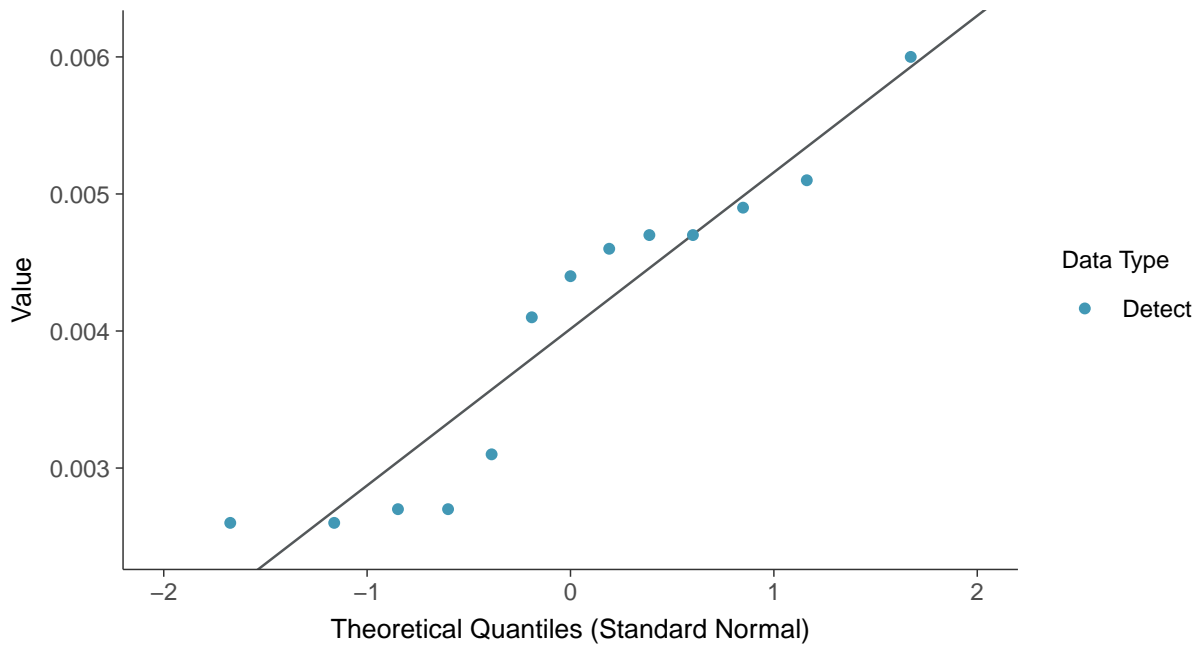
Chromium, Total, MW-04 (mg/L)





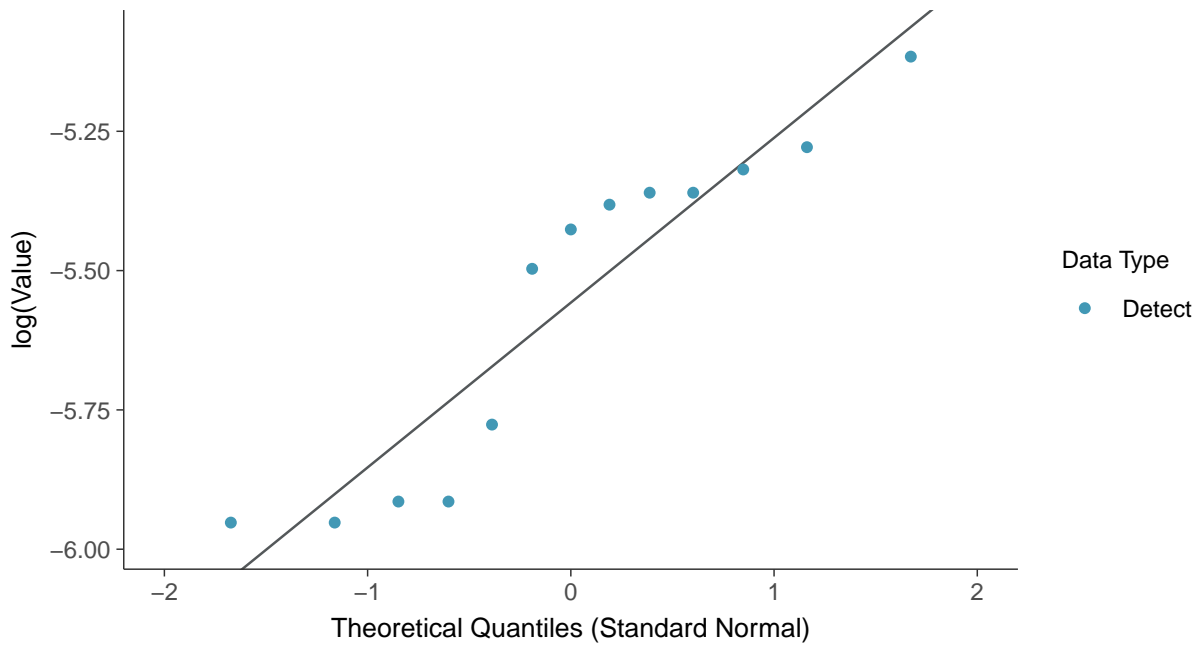
Normal Q-Q plot

Chromium, Total, MW-04 (mg/L)



Lognormal Q-Q plot

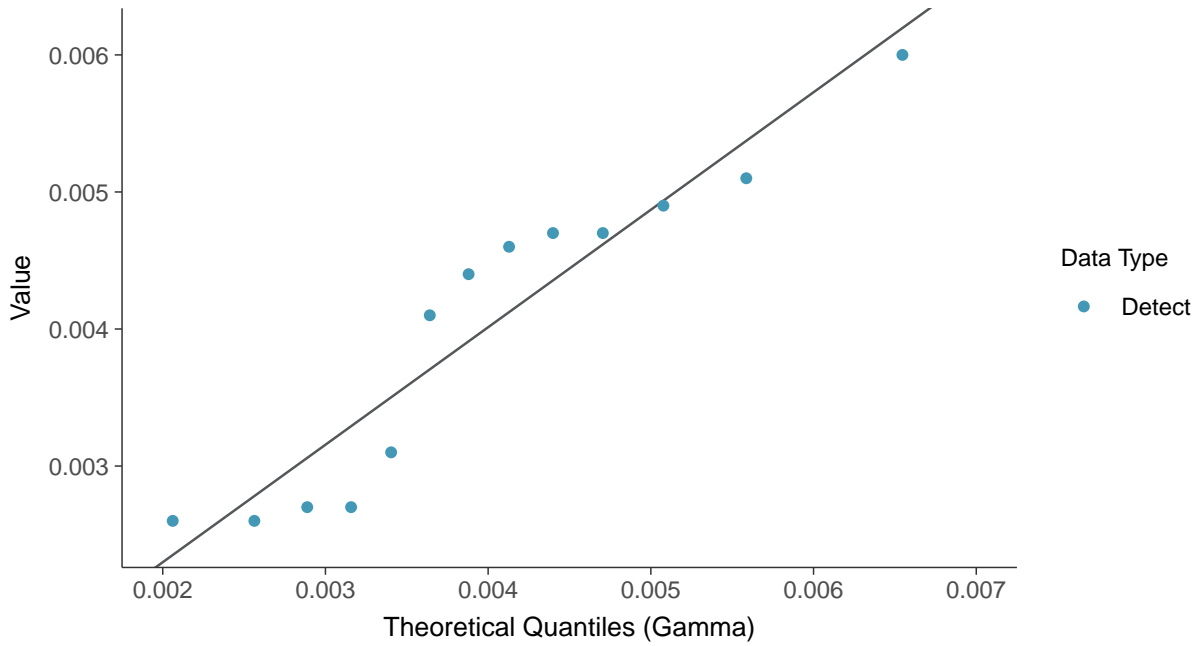
Chromium, Total, MW-04 (mg/L)





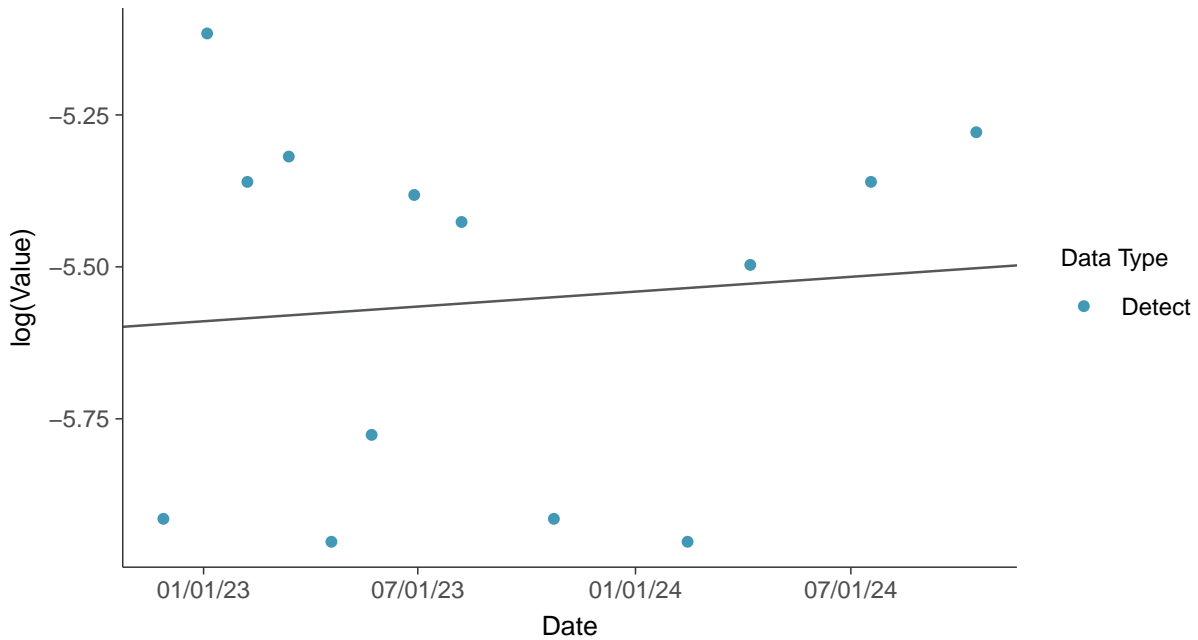
Gamma Q-Q plot

Chromium, Total, MW-04 (mg/L)



Trend Regression: Lognormal MLE

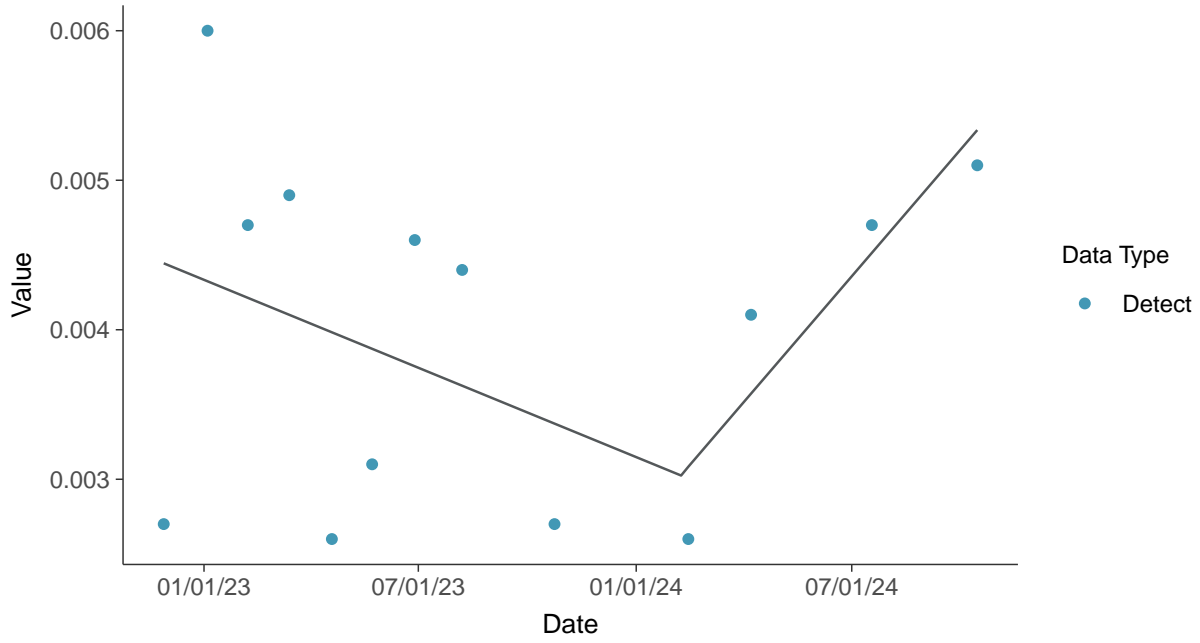
Chromium, Total, MW-04 (mg/L)





Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-04 (mg/L)



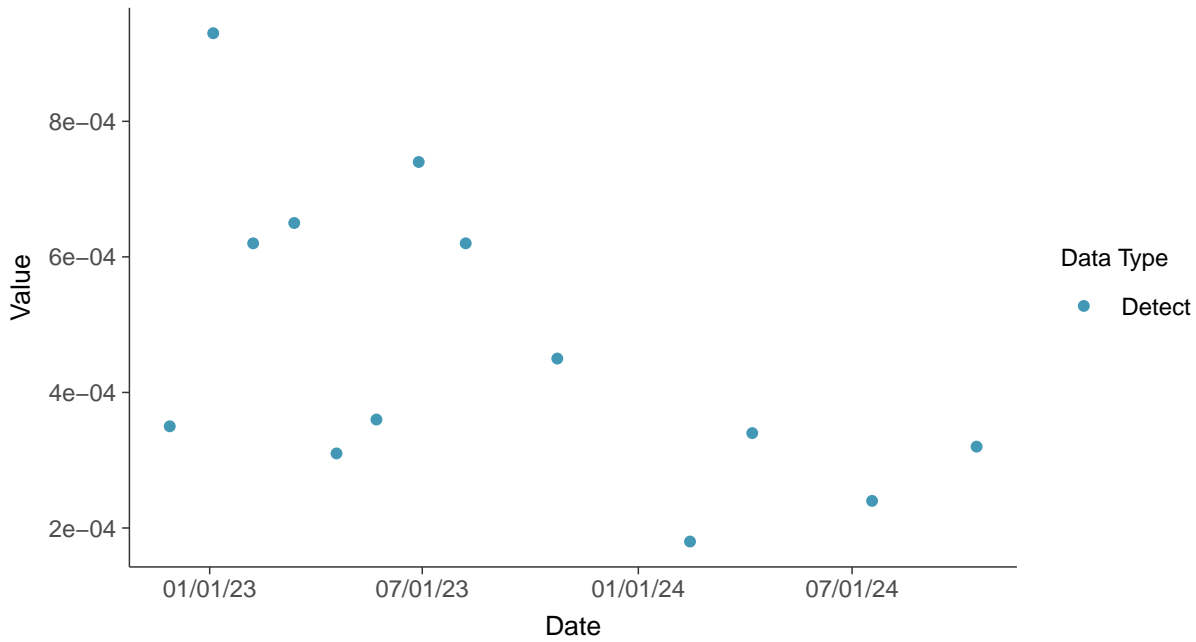


Appendix IV: Cobalt, MW-04

ID: 2_14_2_5_110

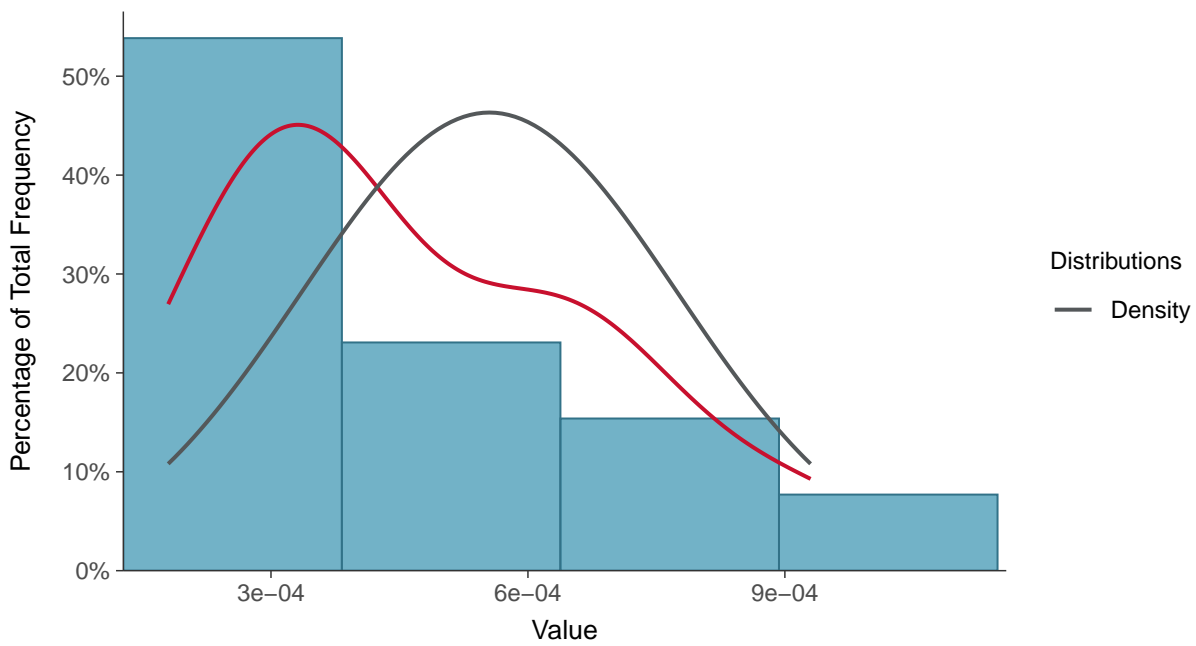
Scatter Plot

Cobalt, MW-04 (mg/L)



Histogram

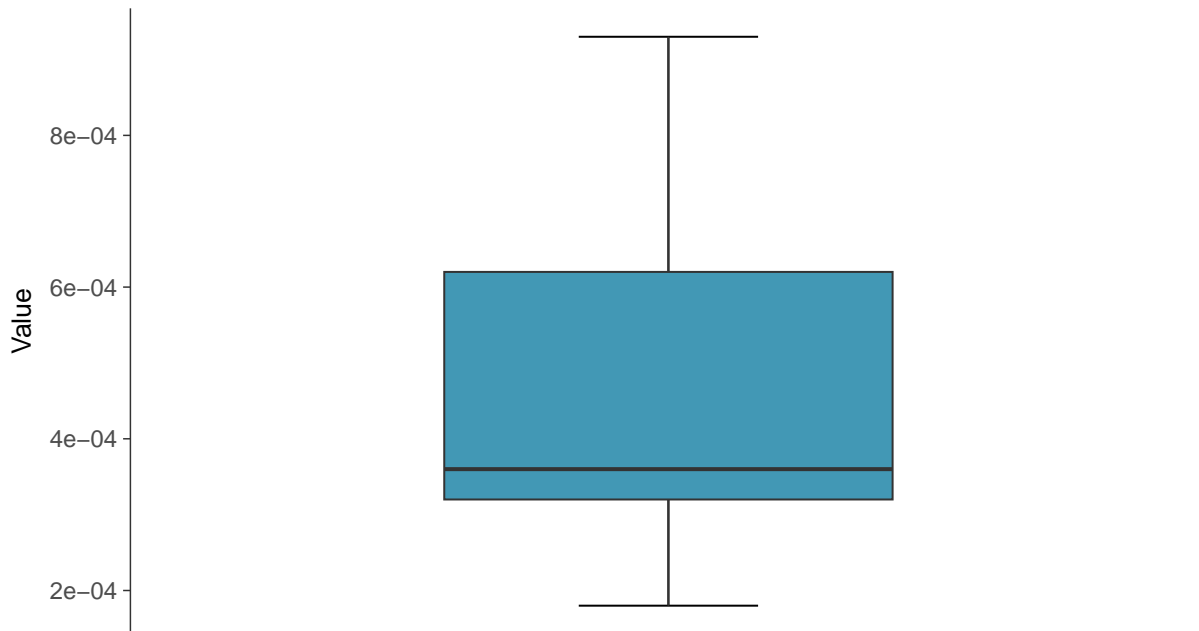
Cobalt, MW-04 (mg/L)





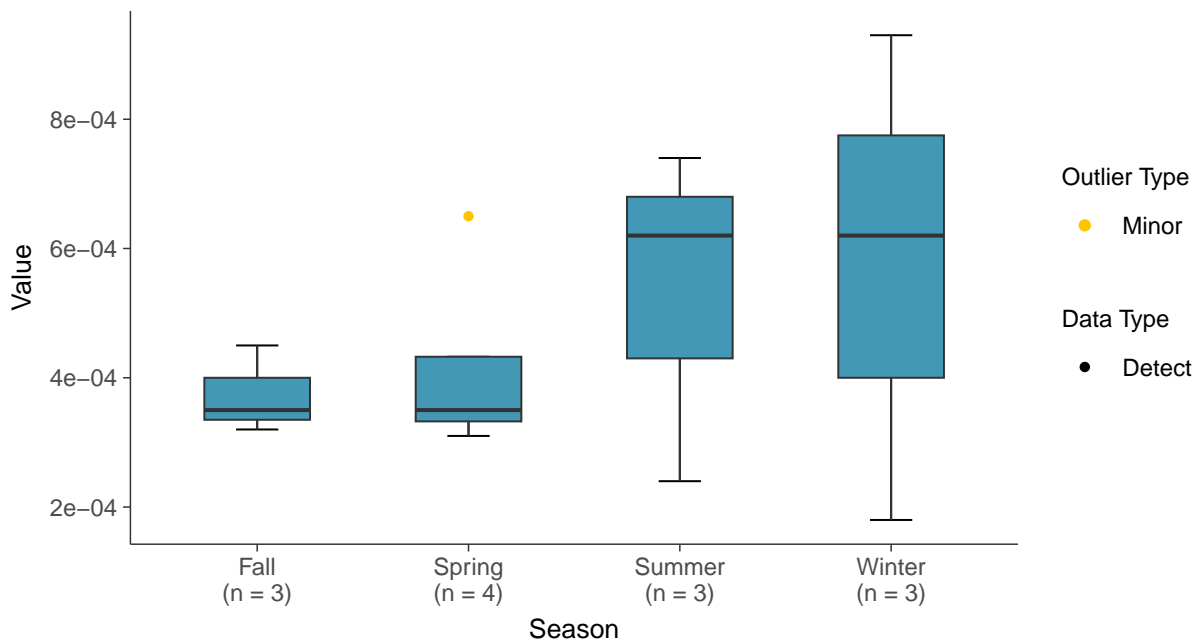
Boxplot

Cobalt, MW-04 (mg/L)



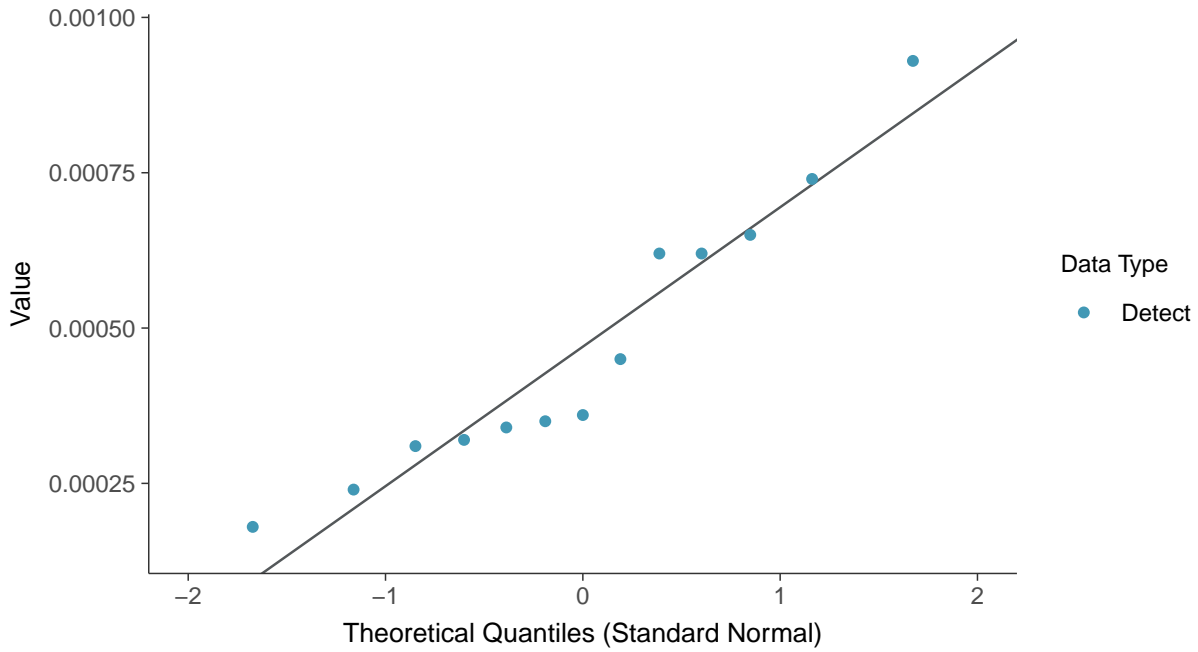
Boxplot by Season

Cobalt, MW-04 (mg/L)

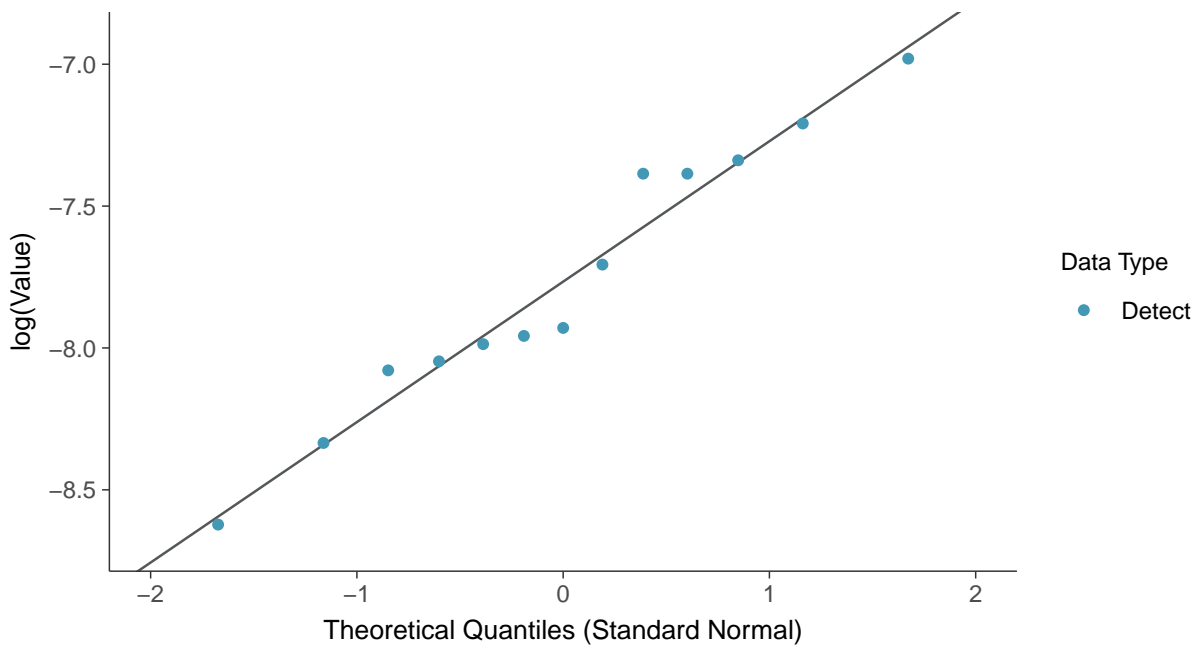




Normal Q-Q plot
Cobalt, MW-04 (mg/L)

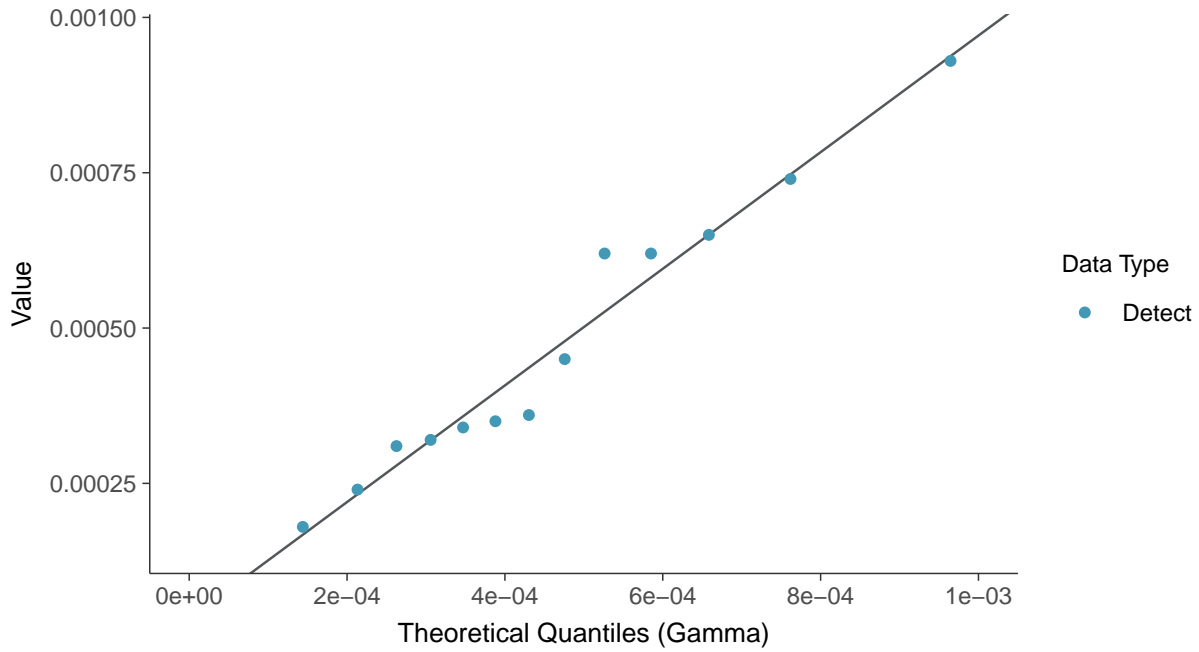


Lognormal Q-Q plot
Cobalt, MW-04 (mg/L)

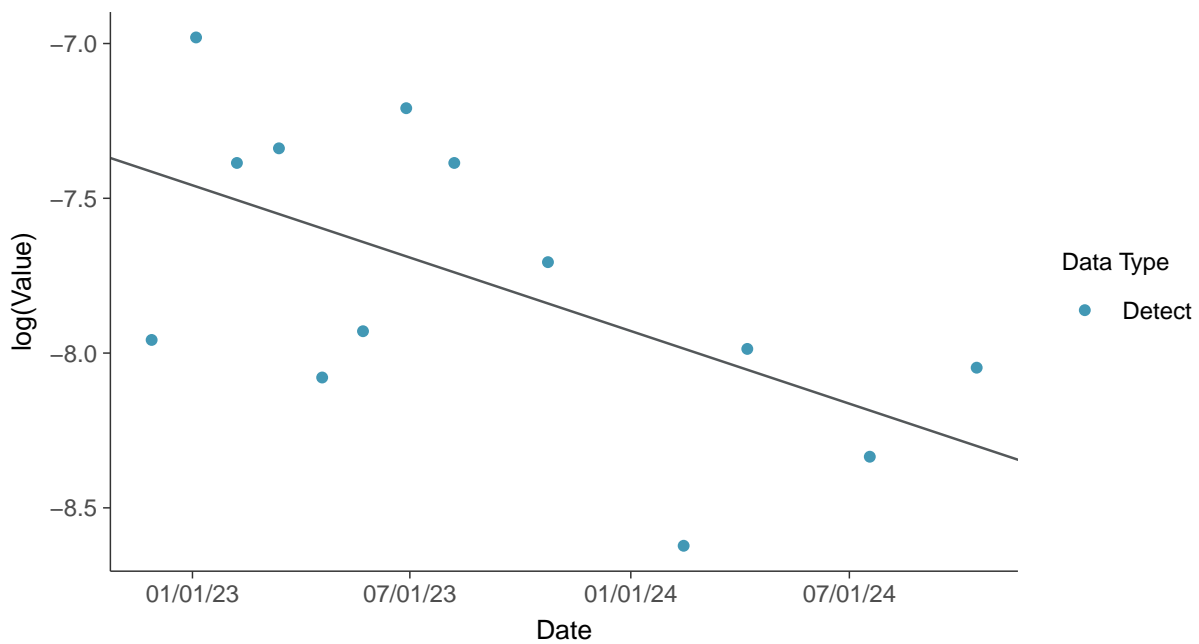




Gamma Q-Q plot
Cobalt, MW-04 (mg/L)



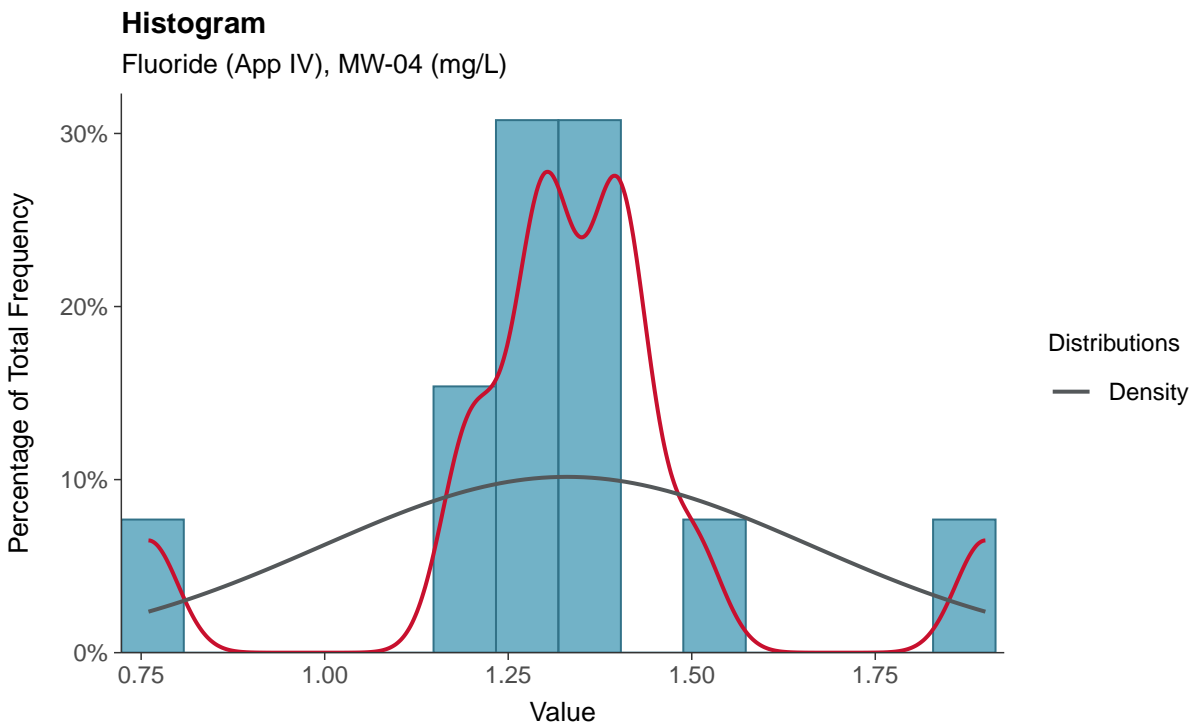
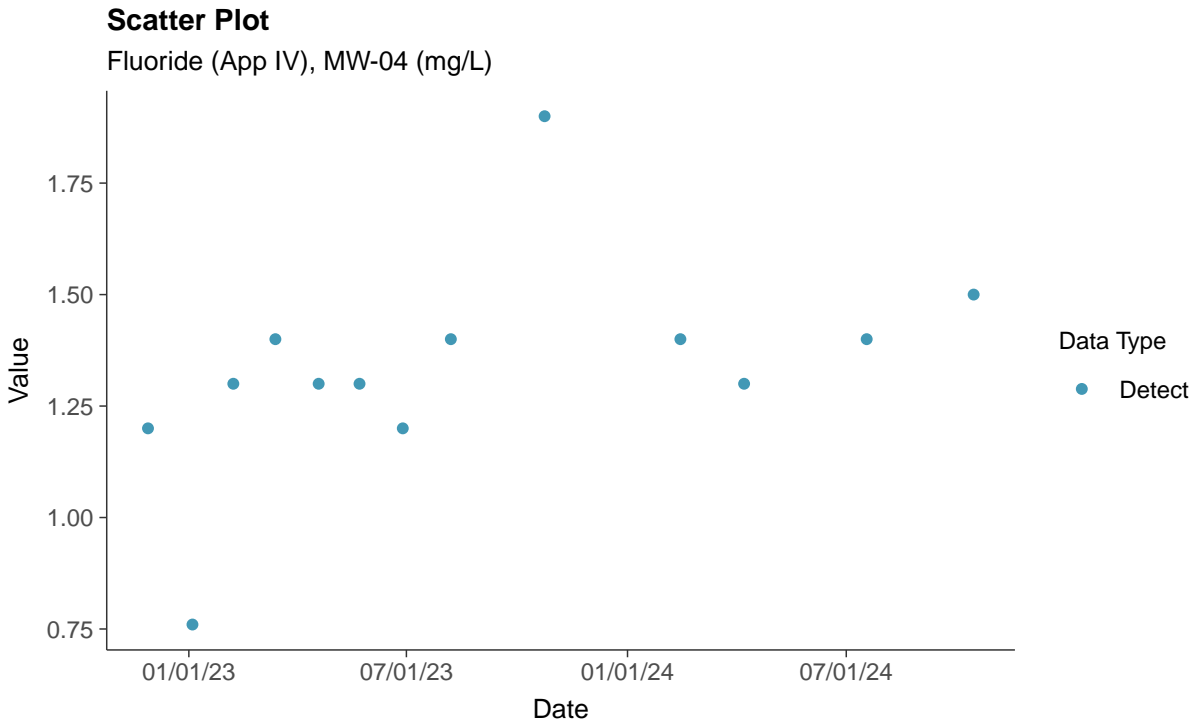
Trend Regression: Lognormal MLE
Cobalt, MW-04 (mg/L)





Appendix IV: Fluoride (App IV), MW-04

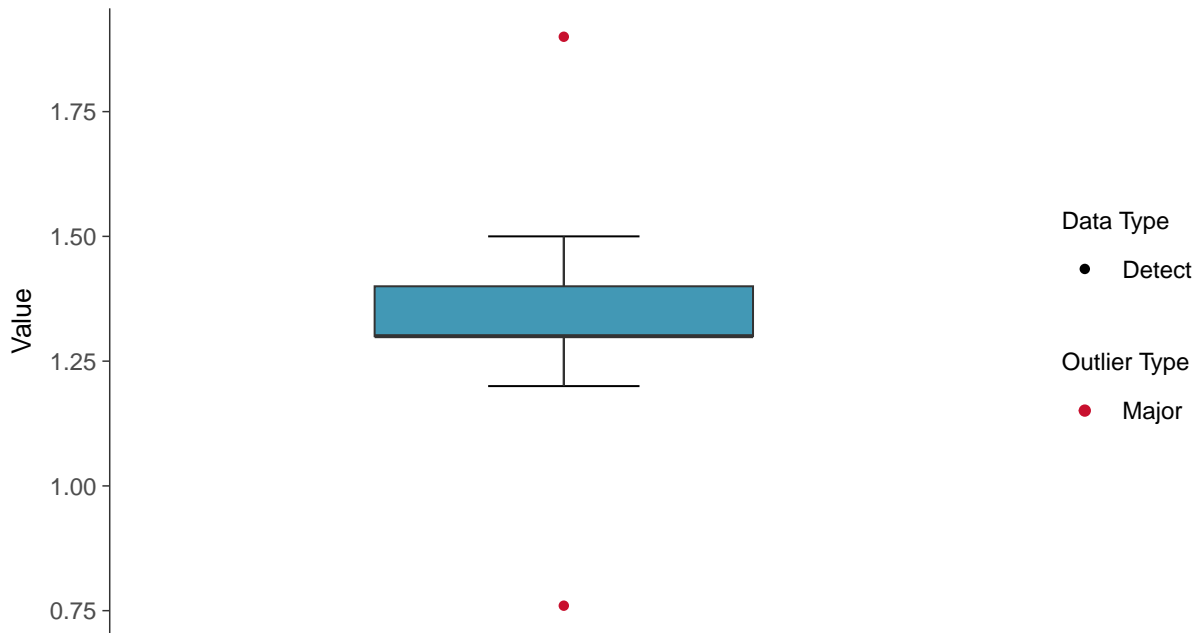
ID: 2_14_2_5_113





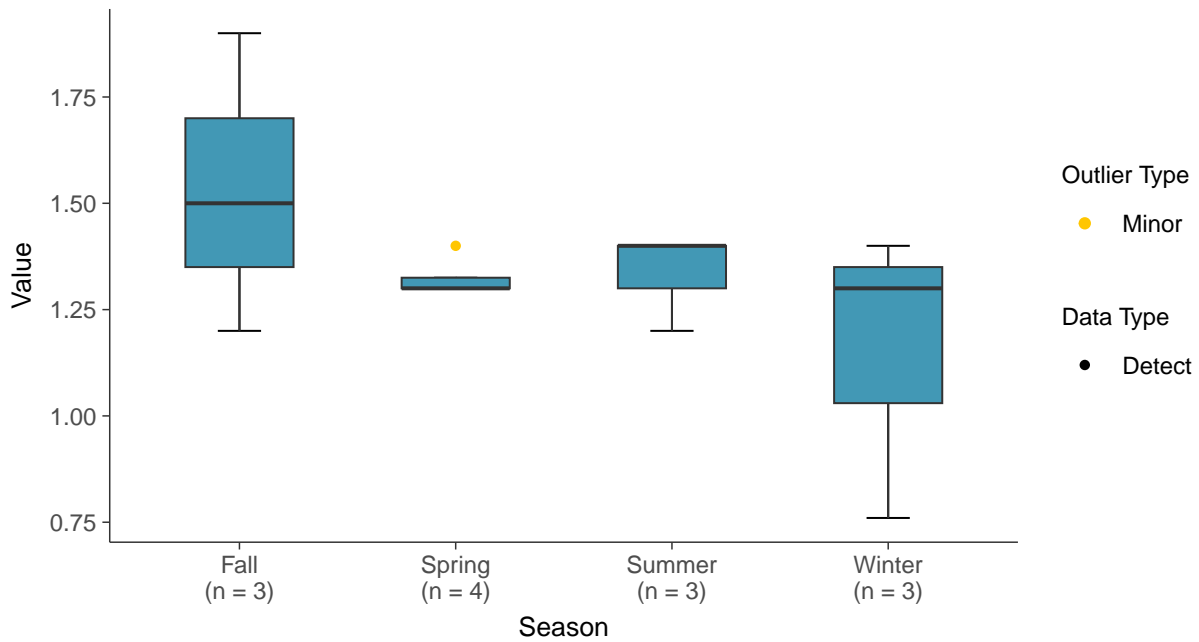
Boxplot

Fluoride (App IV), MW-04 (mg/L)



Boxplot by Season

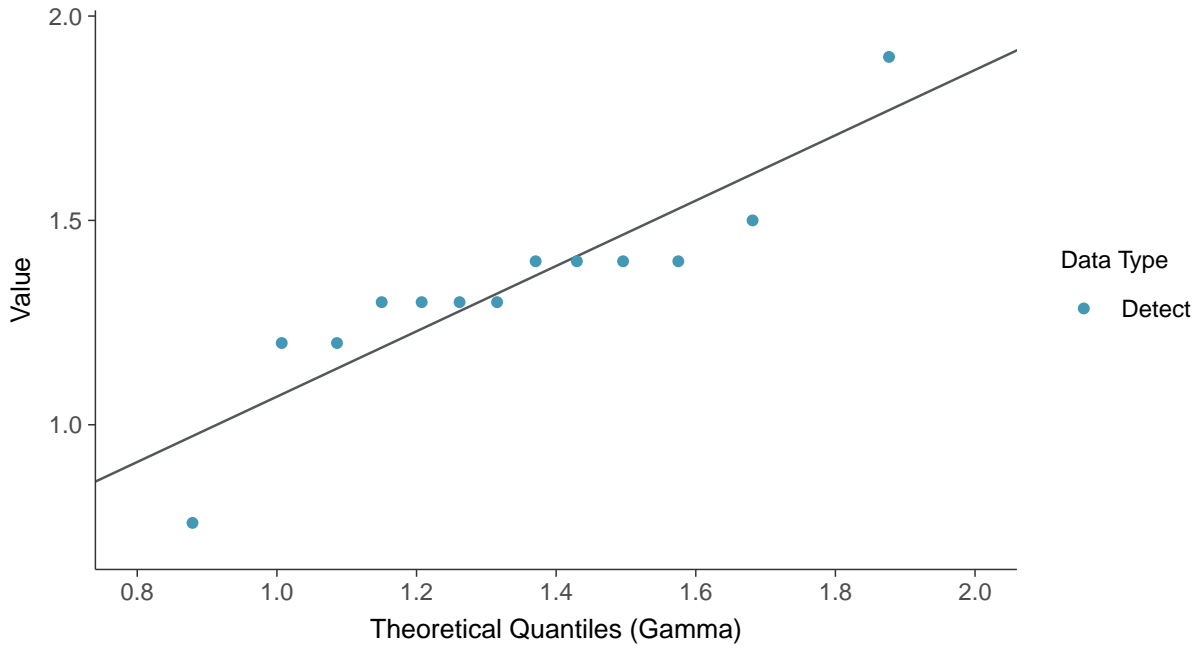
Fluoride (App IV), MW-04 (mg/L)





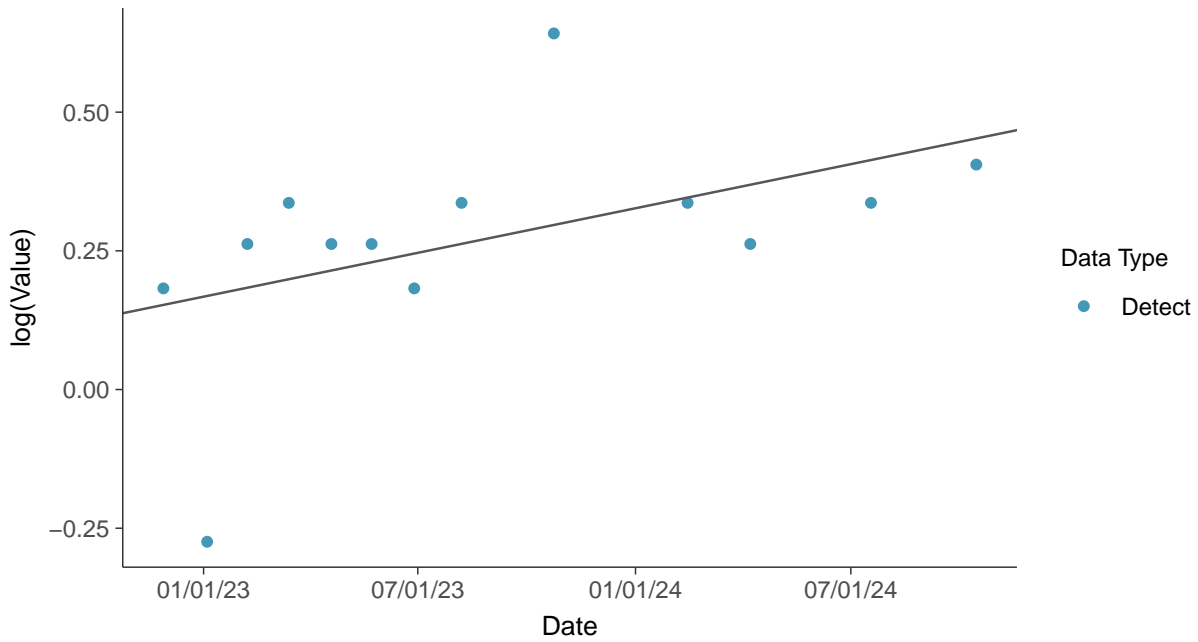
Gamma Q-Q plot

Fluoride (App IV), MW-04 (mg/L)



Trend Regression: Lognormal MLE

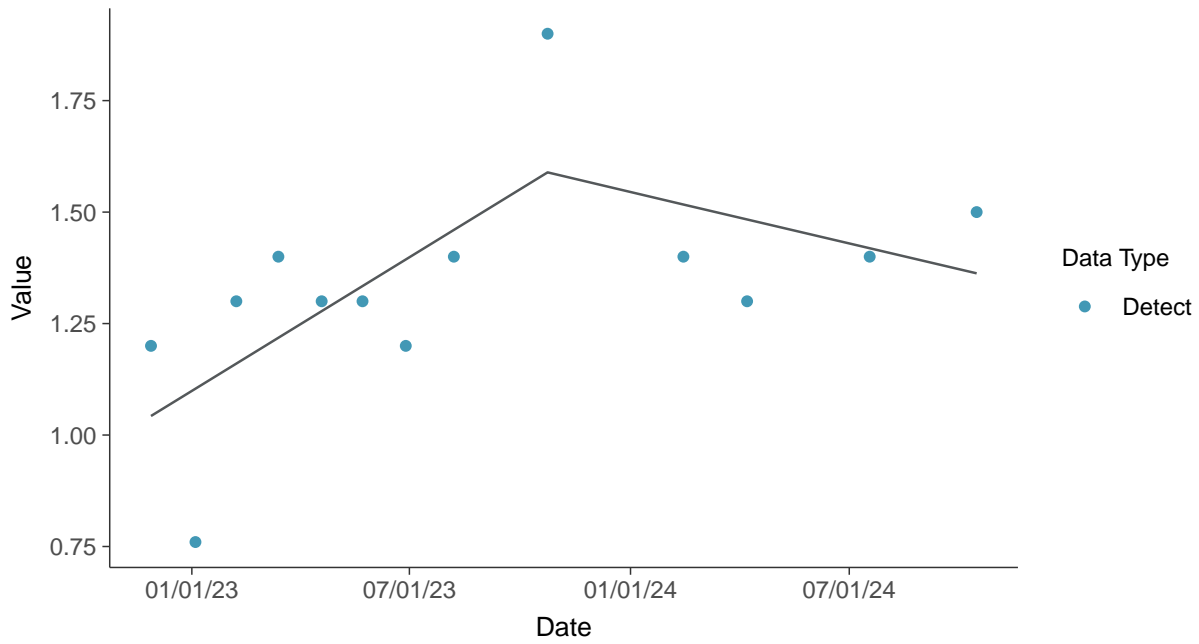
Fluoride (App IV), MW-04 (mg/L)





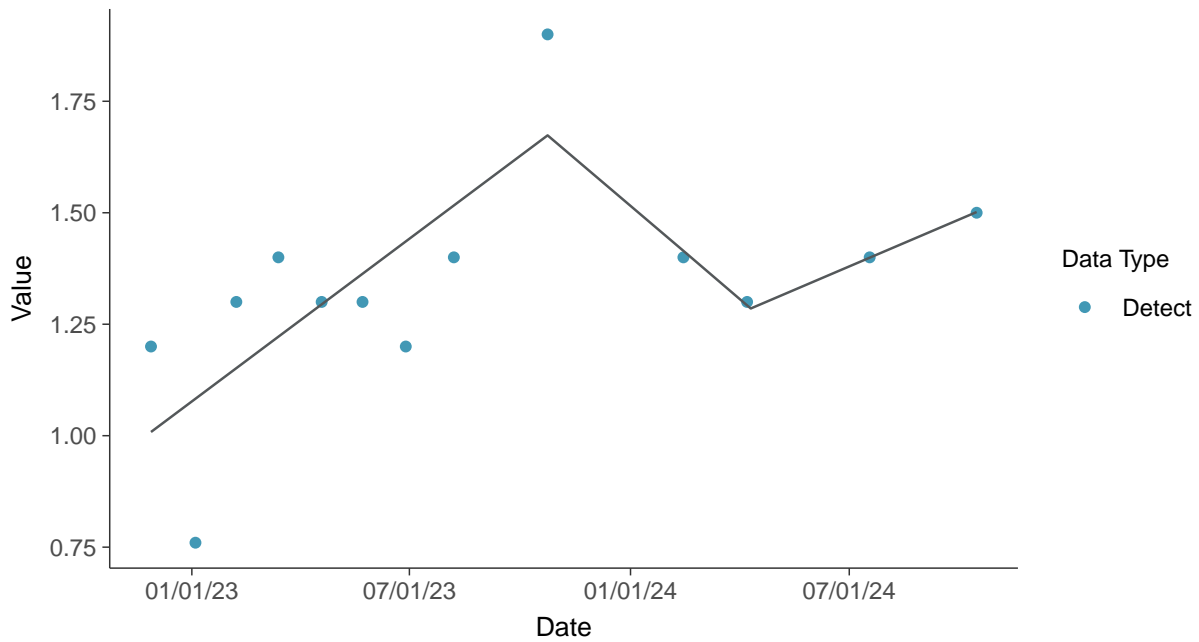
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-04 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Fluoride (App IV), MW-04 (mg/L)



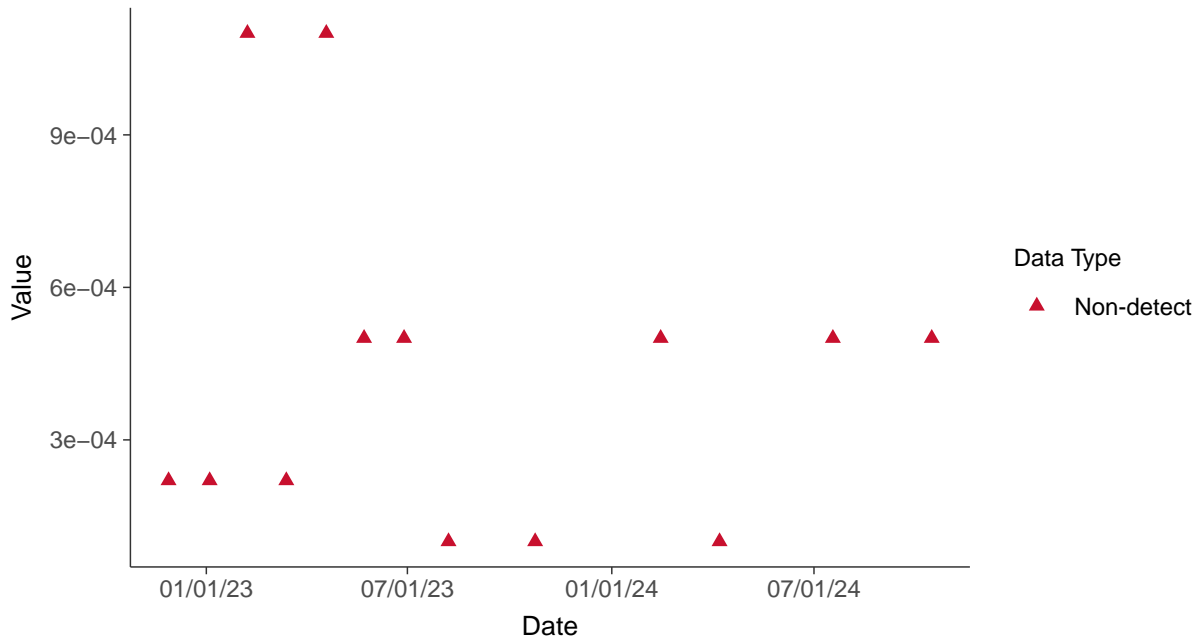


Appendix IV: Lead, MW-04

ID: 2_14_2_5_115

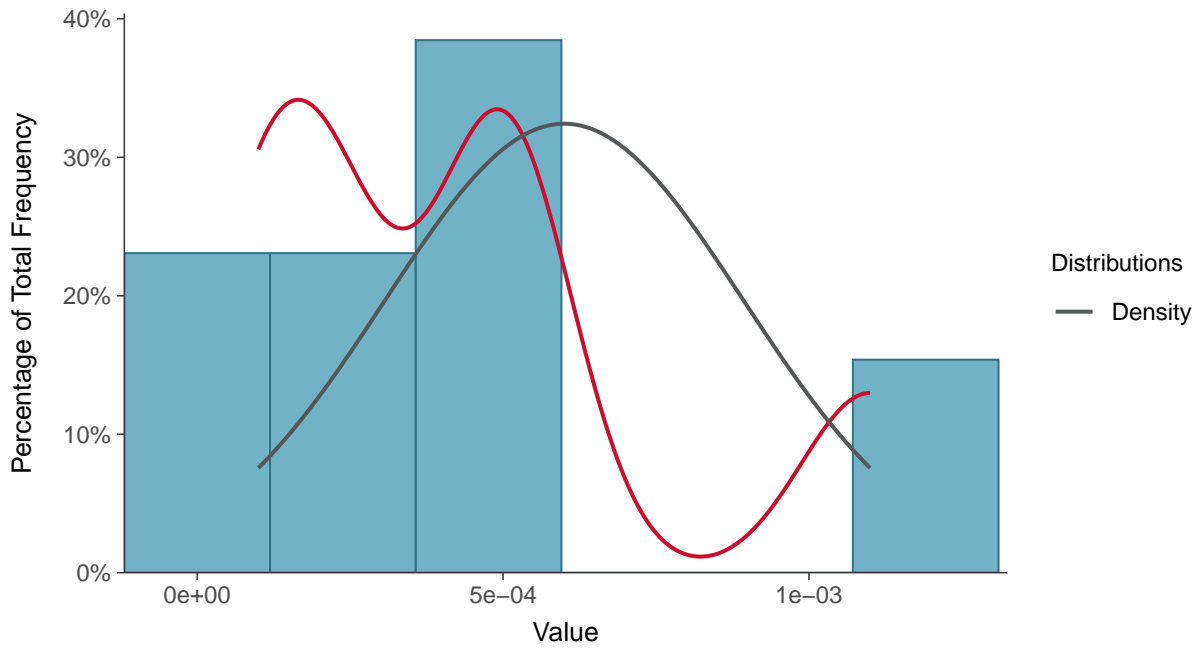
Scatter Plot

Lead, MW-04 (mg/L)



Histogram

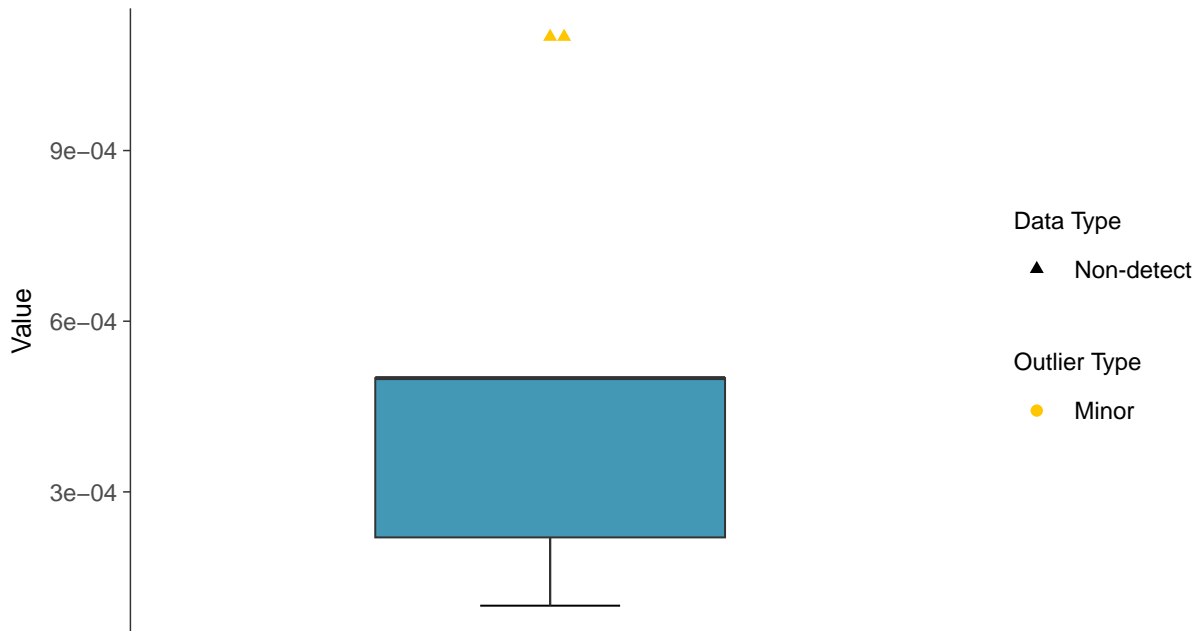
Lead, MW-04 (mg/L)





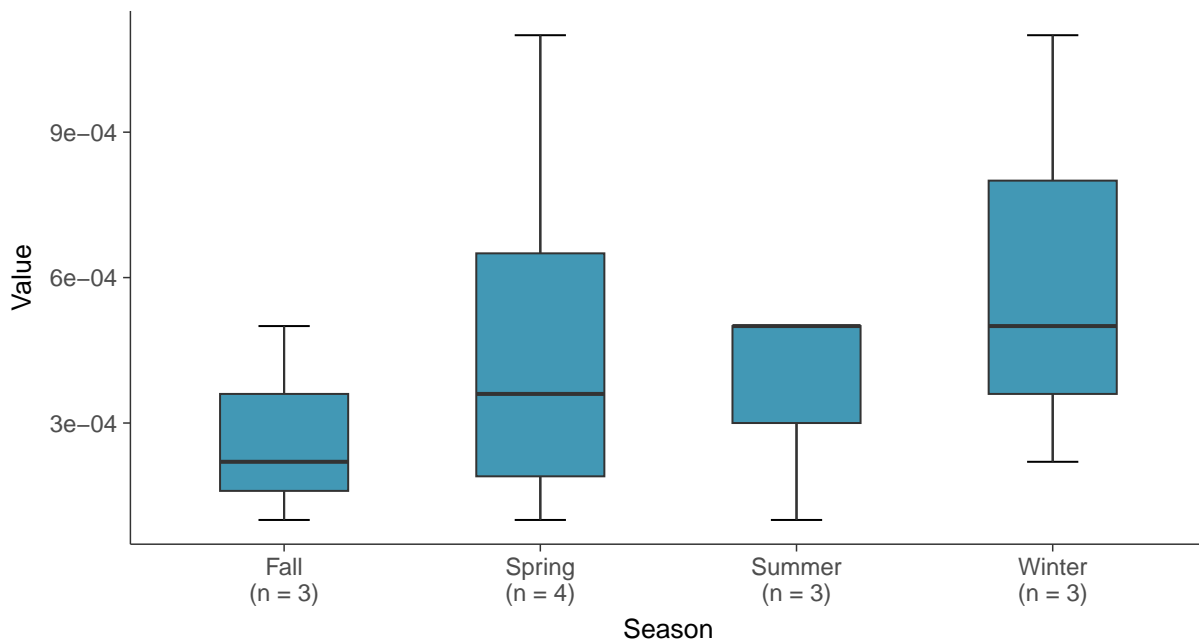
Boxplot

Lead, MW-04 (mg/L)



Boxplot by Season

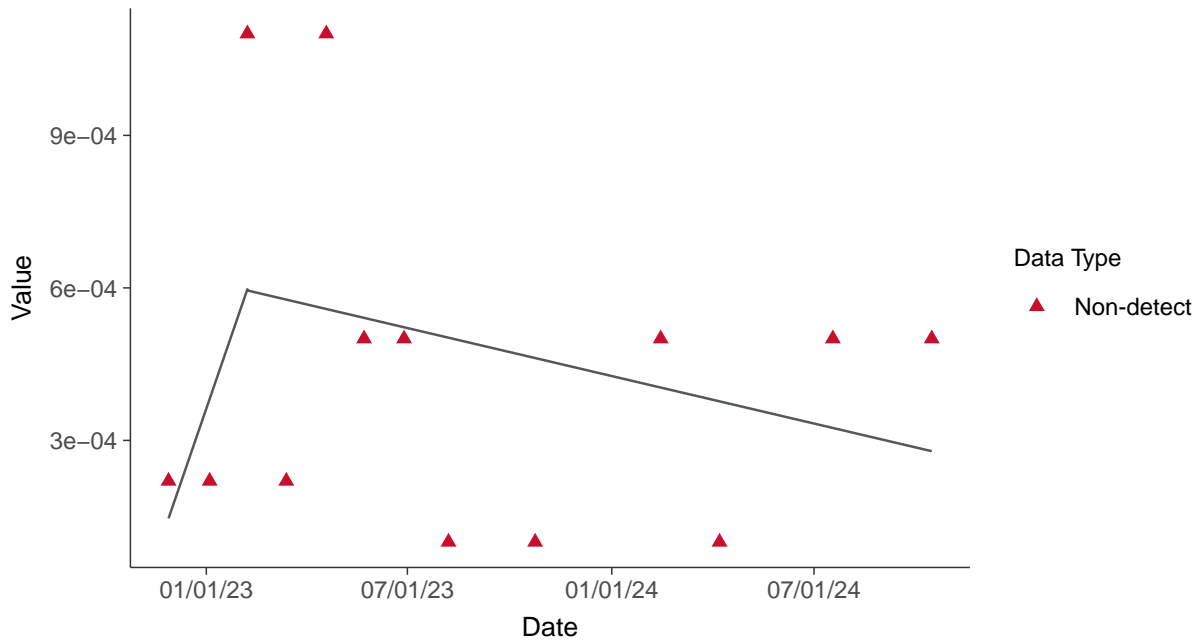
Lead, MW-04 (mg/L)





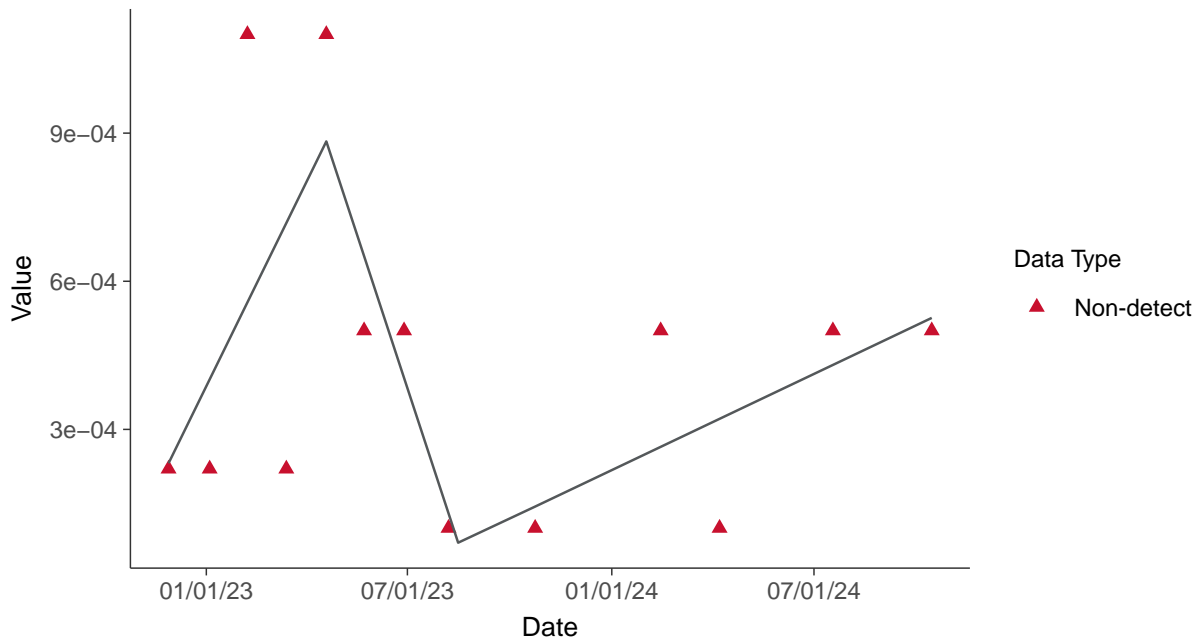
Trend Regression: Piecewise Linear-Linear

Lead, MW-04 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Lead, MW-04 (mg/L)



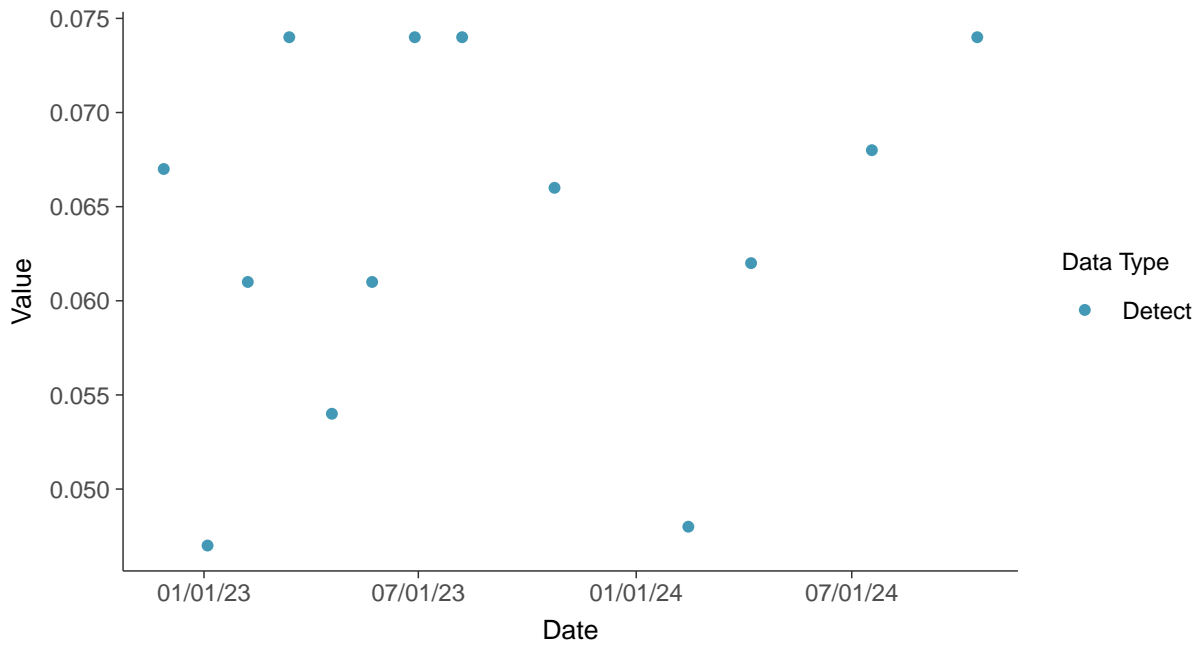


Appendix IV: Lithium, MW-04

ID: 2_14_2_5_116

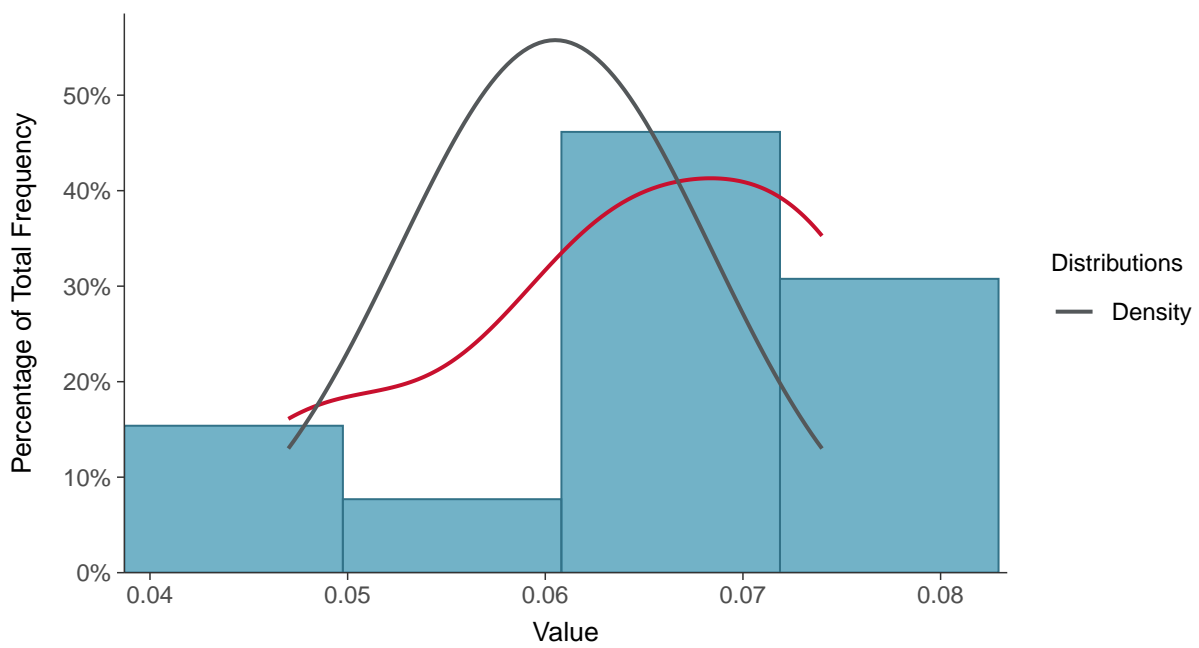
Scatter Plot

Lithium, MW-04 (mg/L)



Histogram

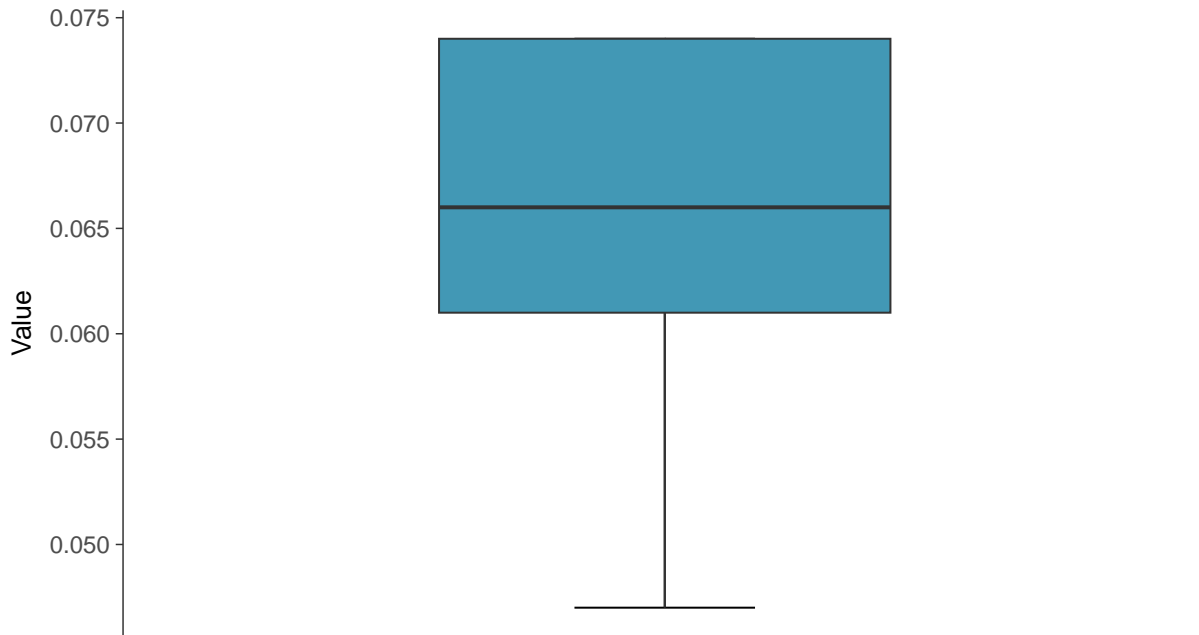
Lithium, MW-04 (mg/L)





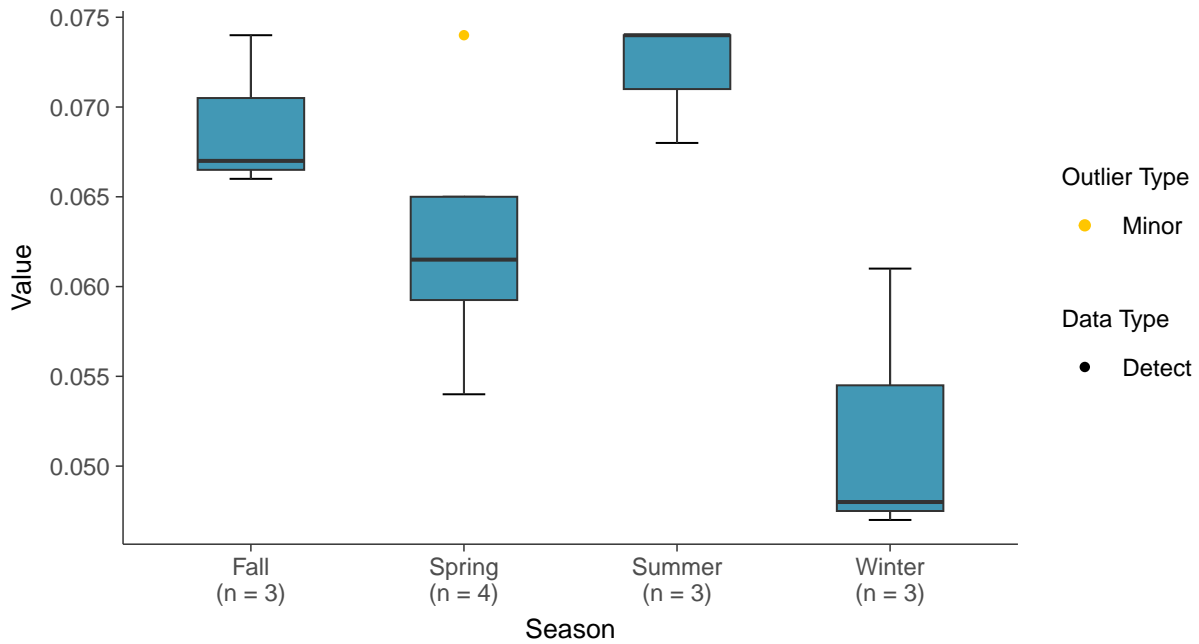
Boxplot

Lithium, MW-04 (mg/L)



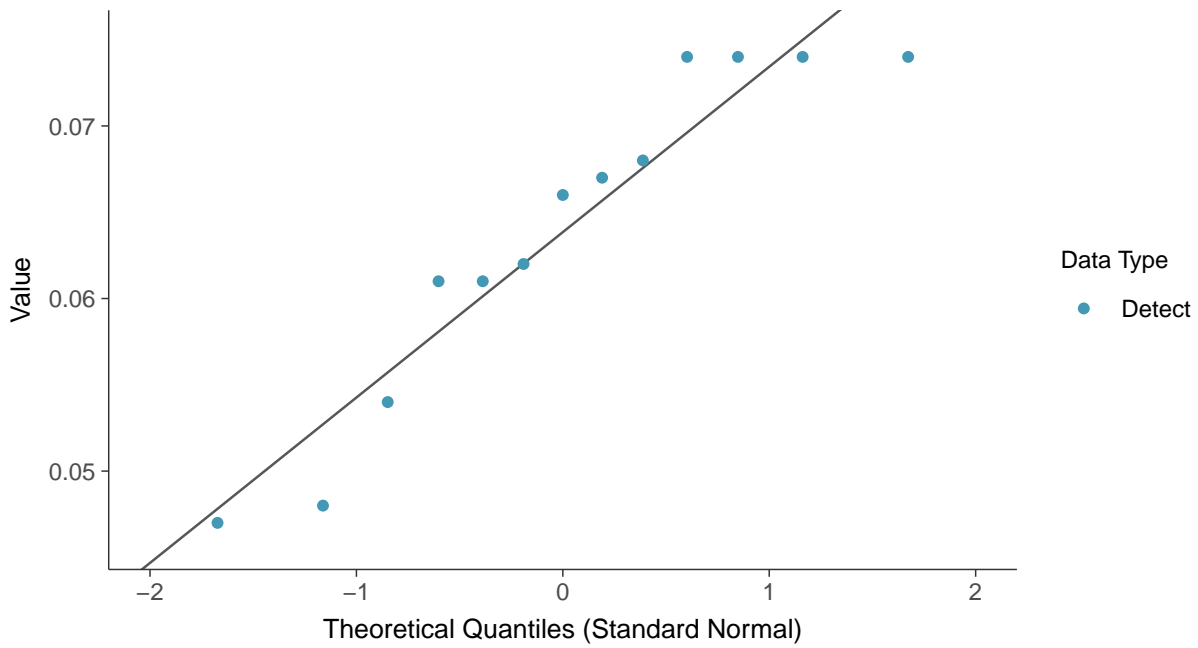
Boxplot by Season

Lithium, MW-04 (mg/L)

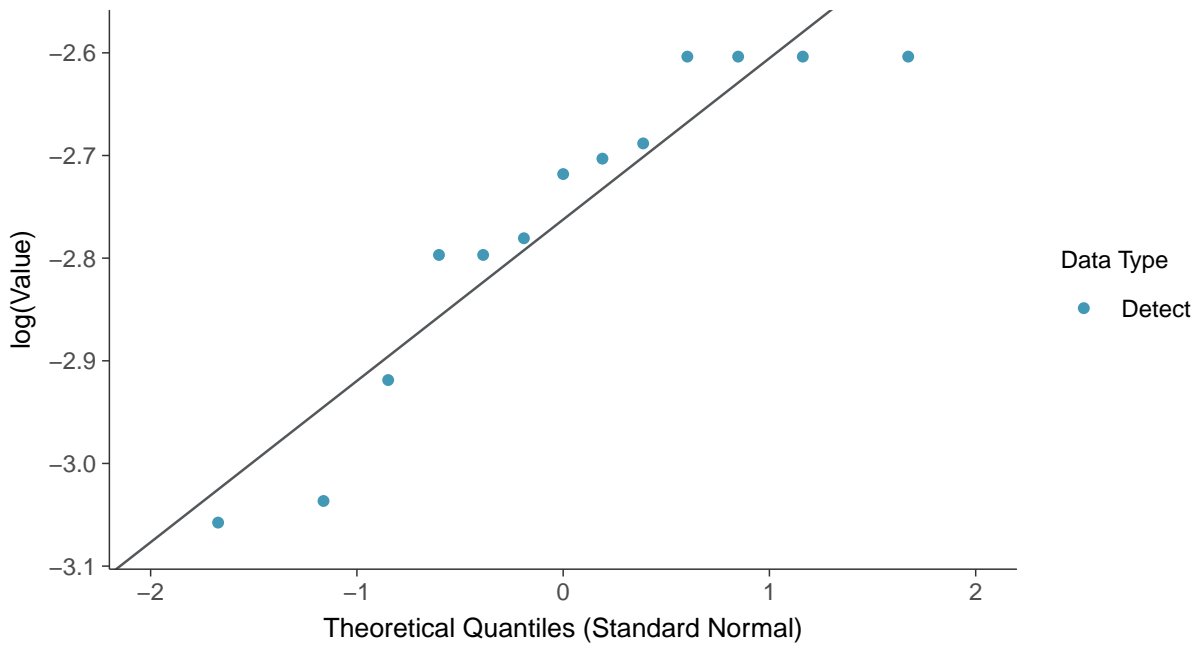




Normal Q-Q plot
Lithium, MW-04 (mg/L)

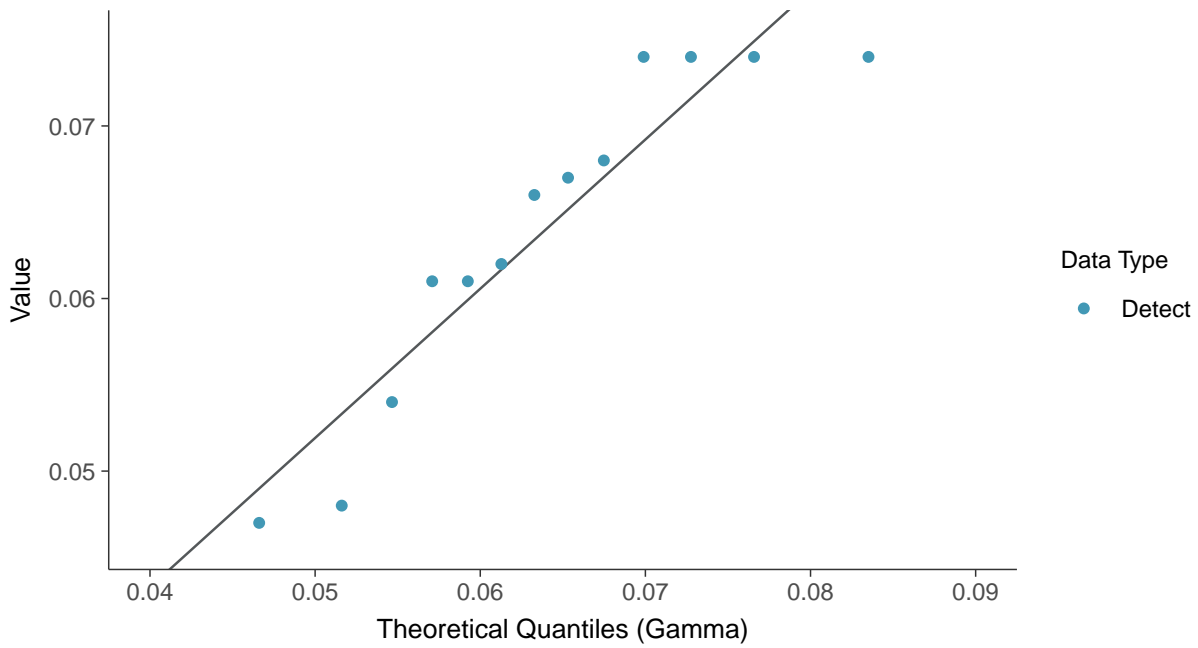


Lognormal Q-Q plot
Lithium, MW-04 (mg/L)

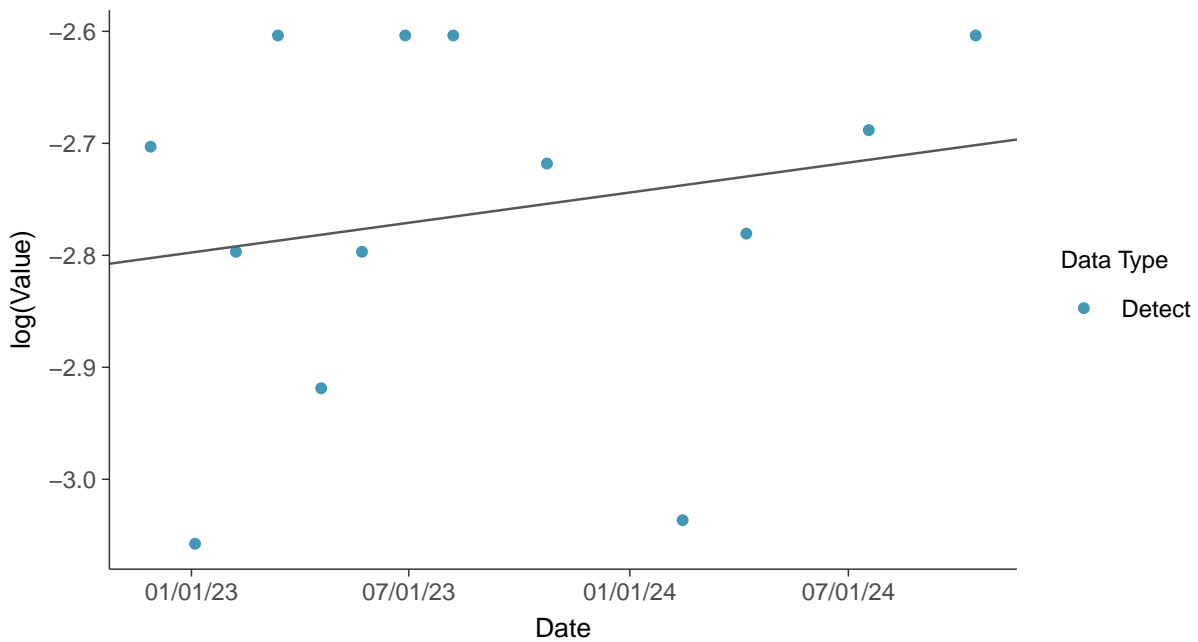




Gamma Q-Q plot
Lithium, MW-04 (mg/L)



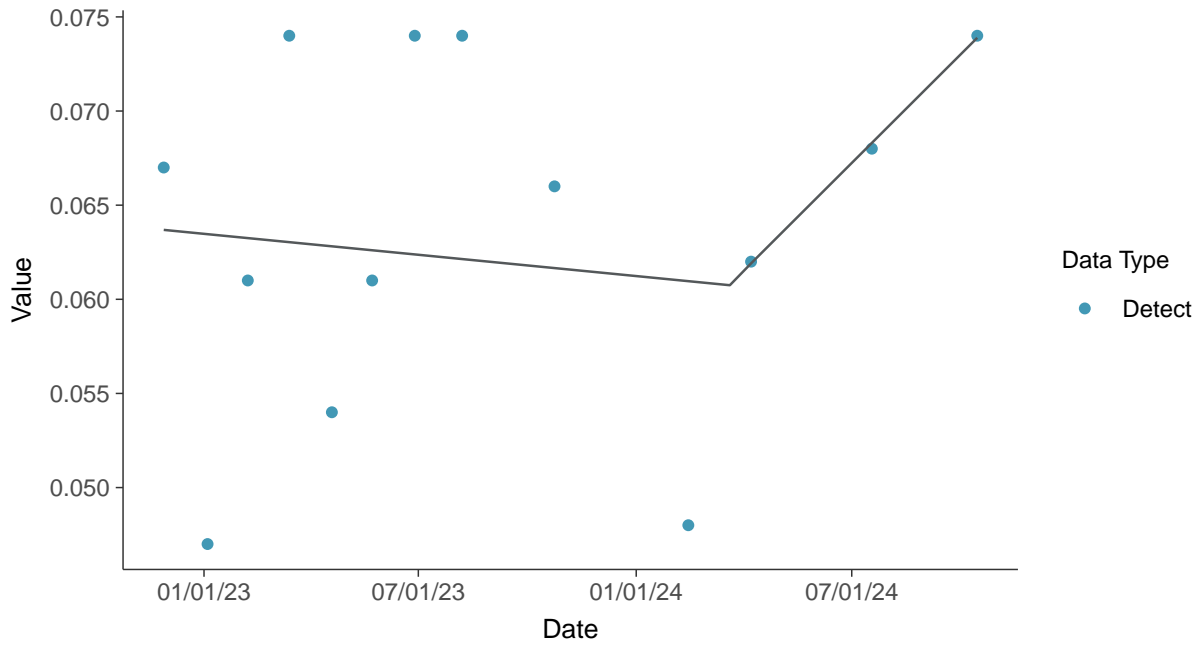
Trend Regression: Lognormal MLE
Lithium, MW-04 (mg/L)





Trend Regression: Piecewise Linear-Linear

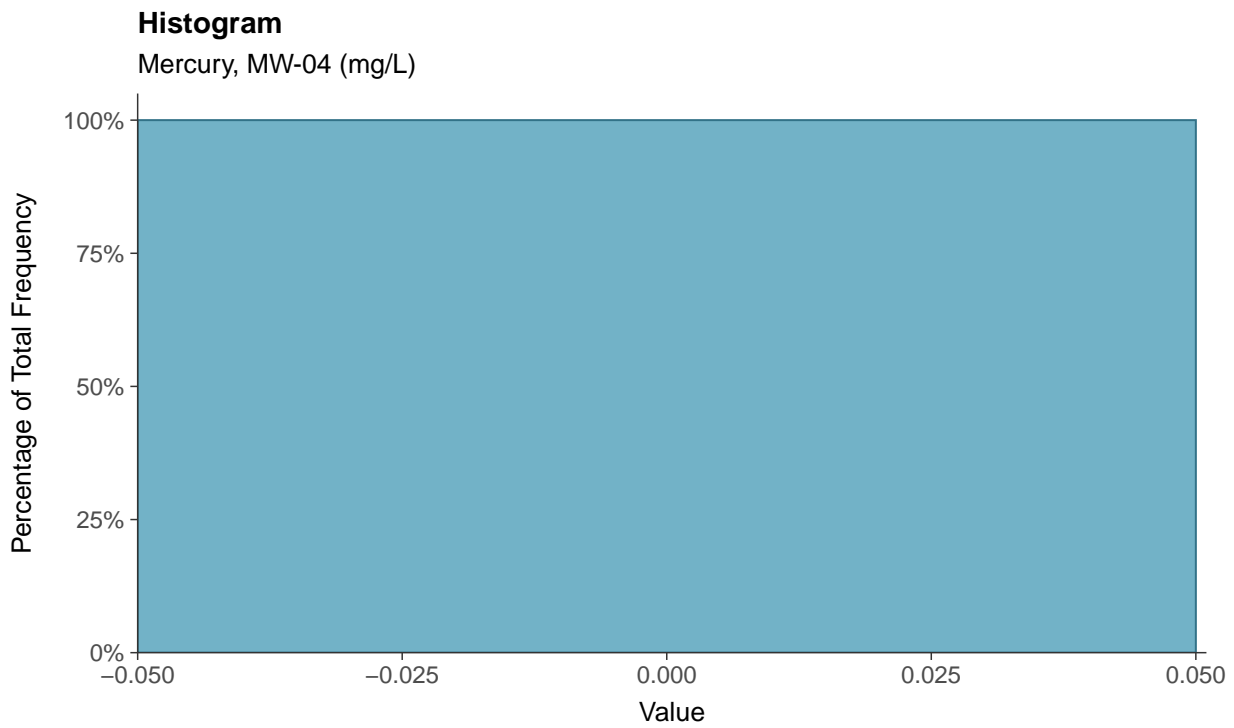
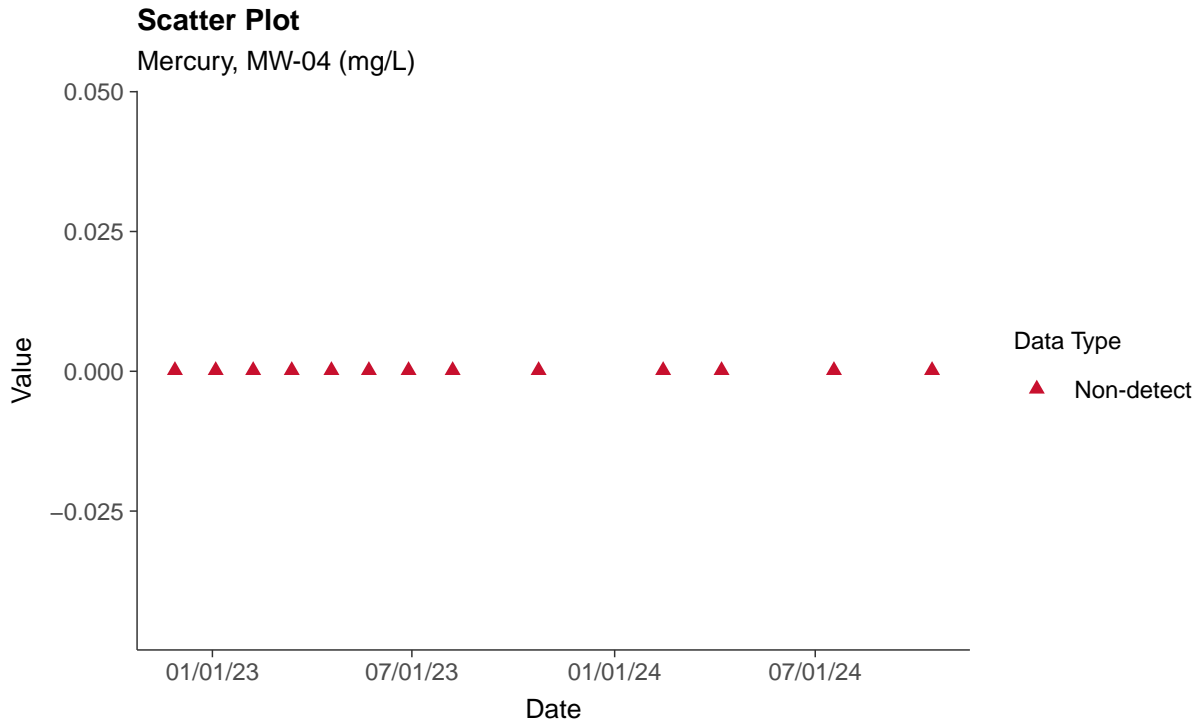
Lithium, MW-04 (mg/L)





Appendix IV: Mercury, MW-04

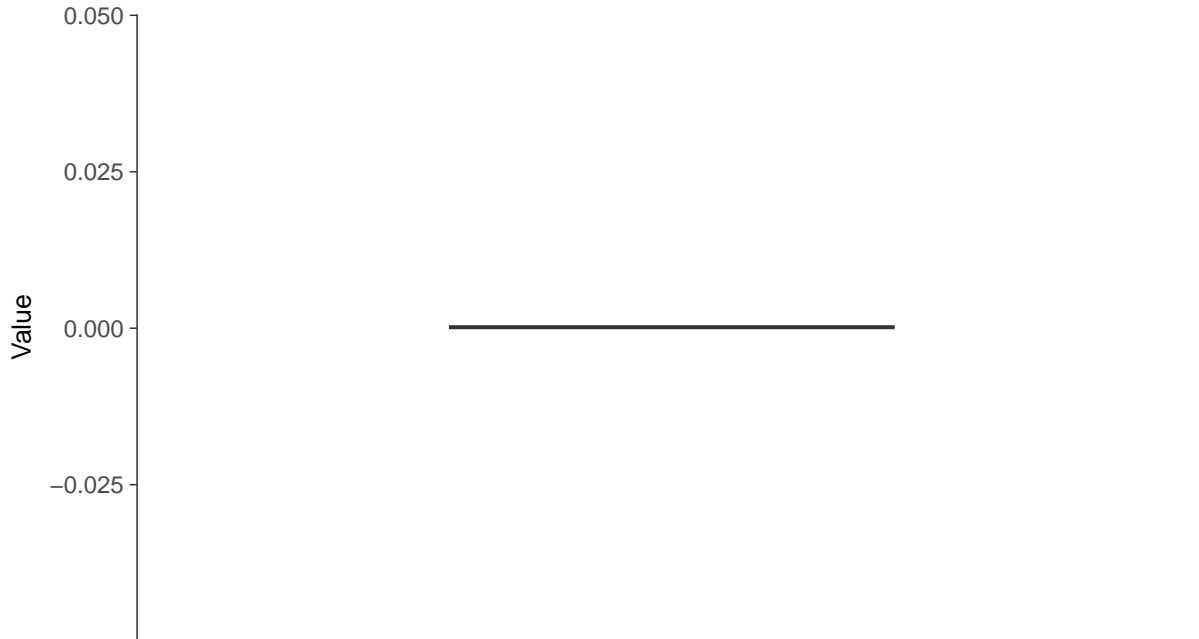
ID: 2_14_2_5_117





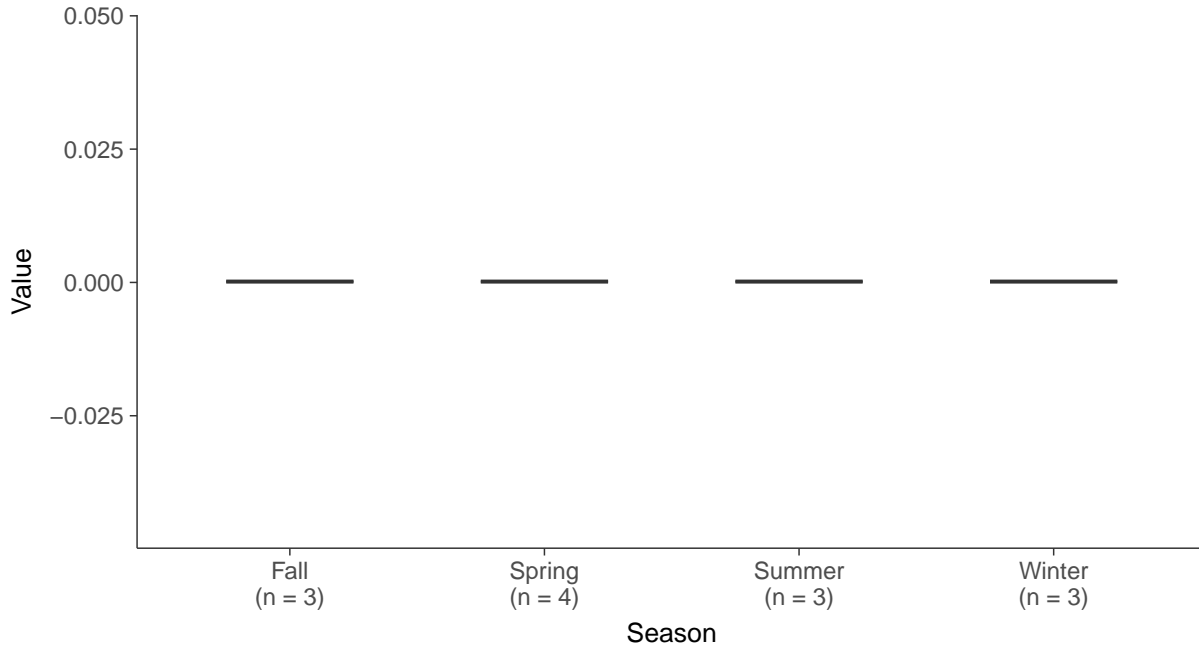
Boxplot

Mercury, MW-04 (mg/L)



Boxplot by Season

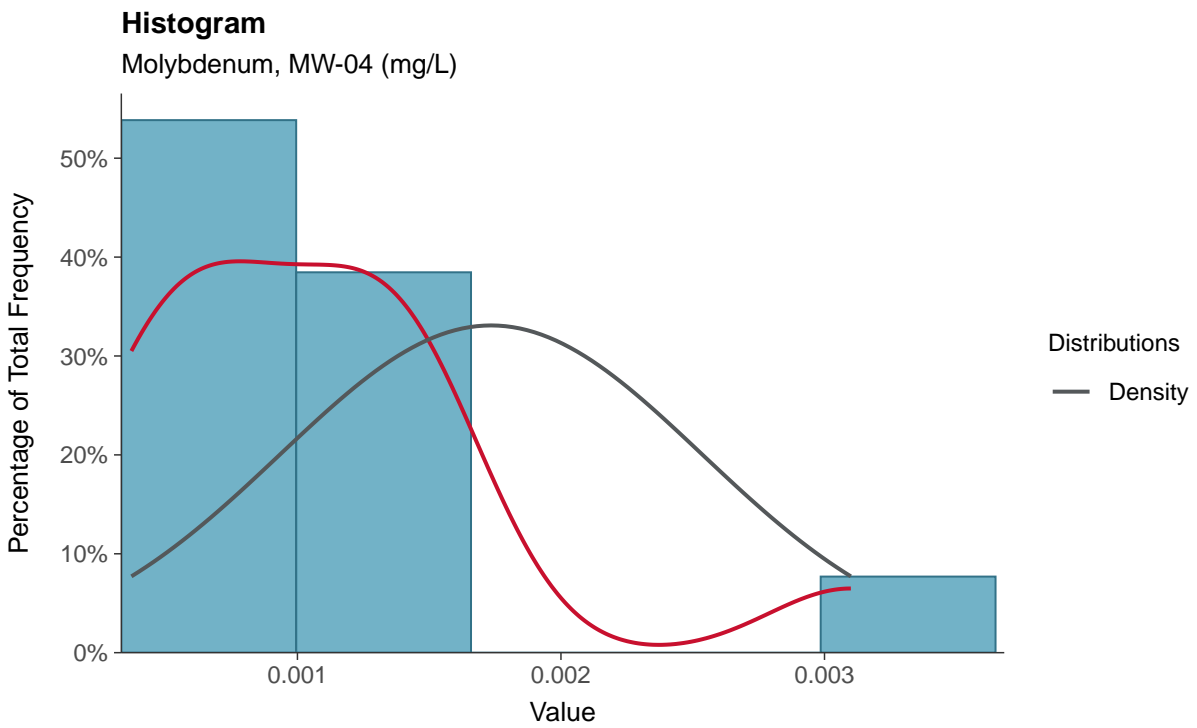
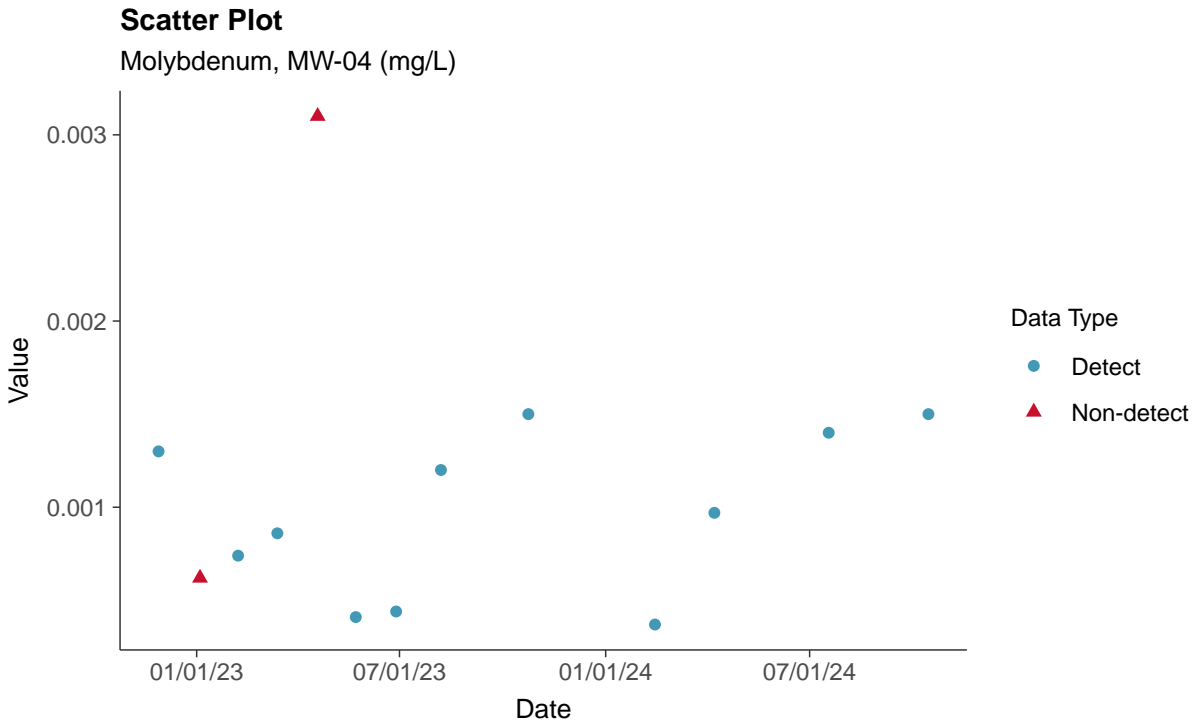
Mercury, MW-04 (mg/L)





Appendix IV: Molybdenum, MW-04

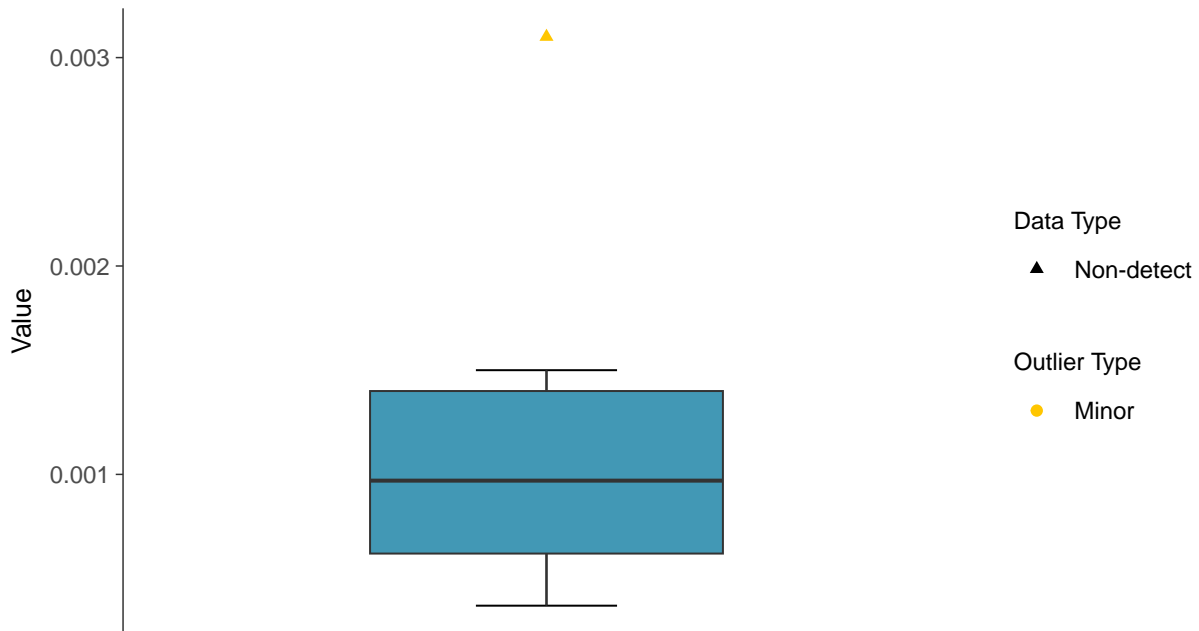
ID: 2_14_2_5_118





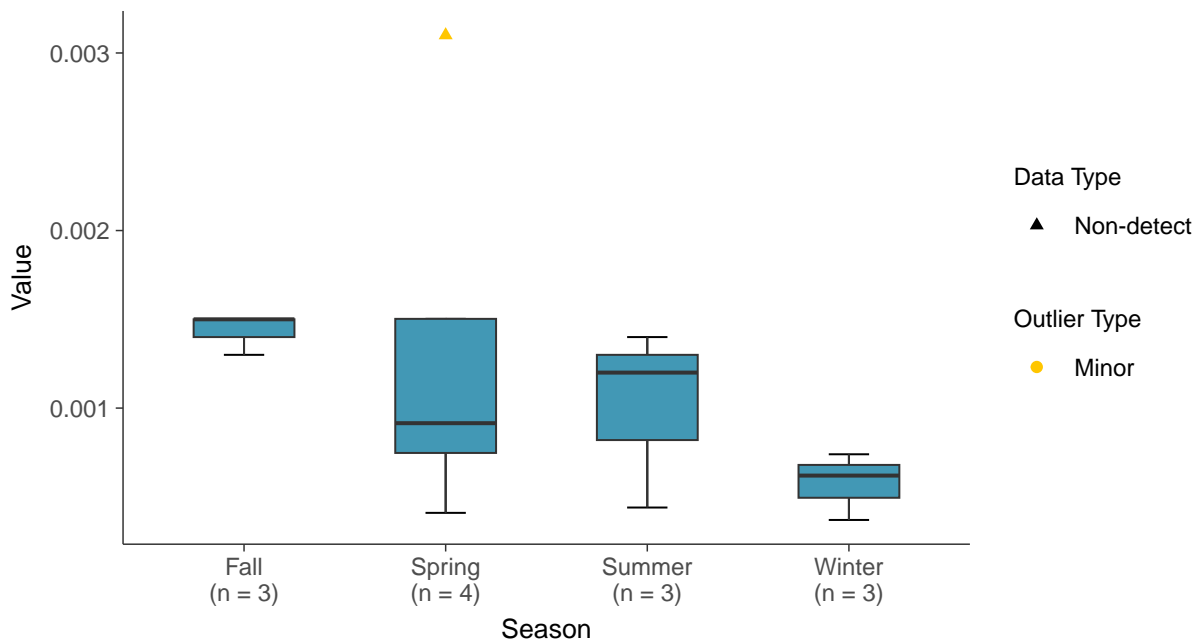
Boxplot

Molybdenum, MW-04 (mg/L)



Boxplot by Season

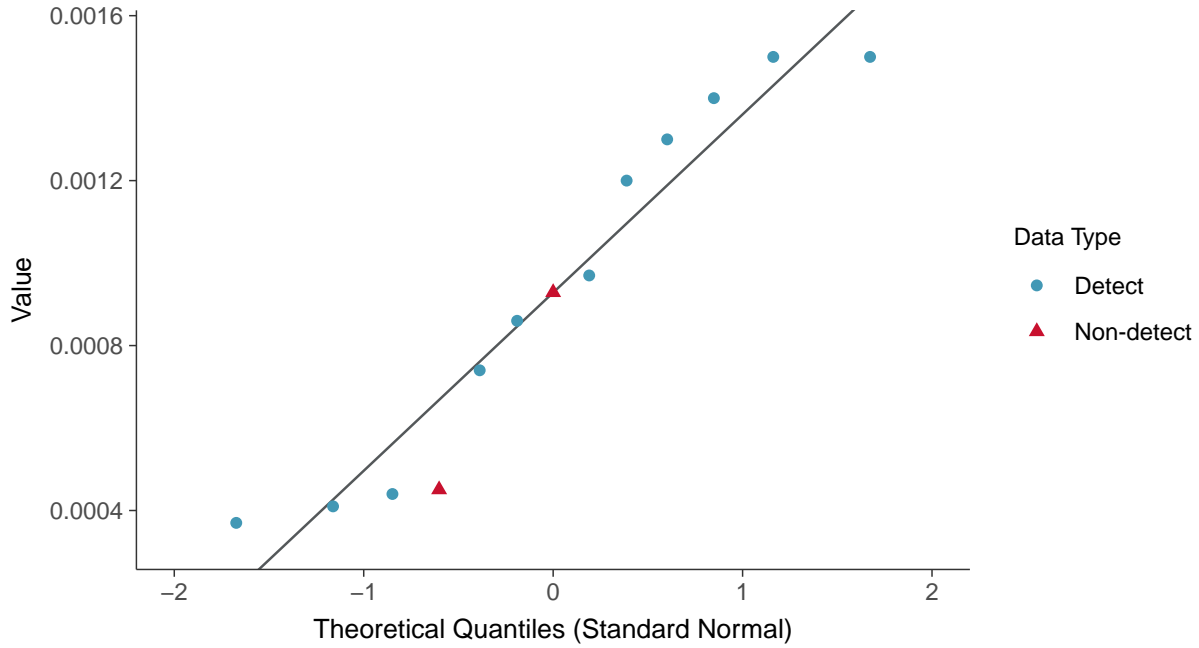
Molybdenum, MW-04 (mg/L)





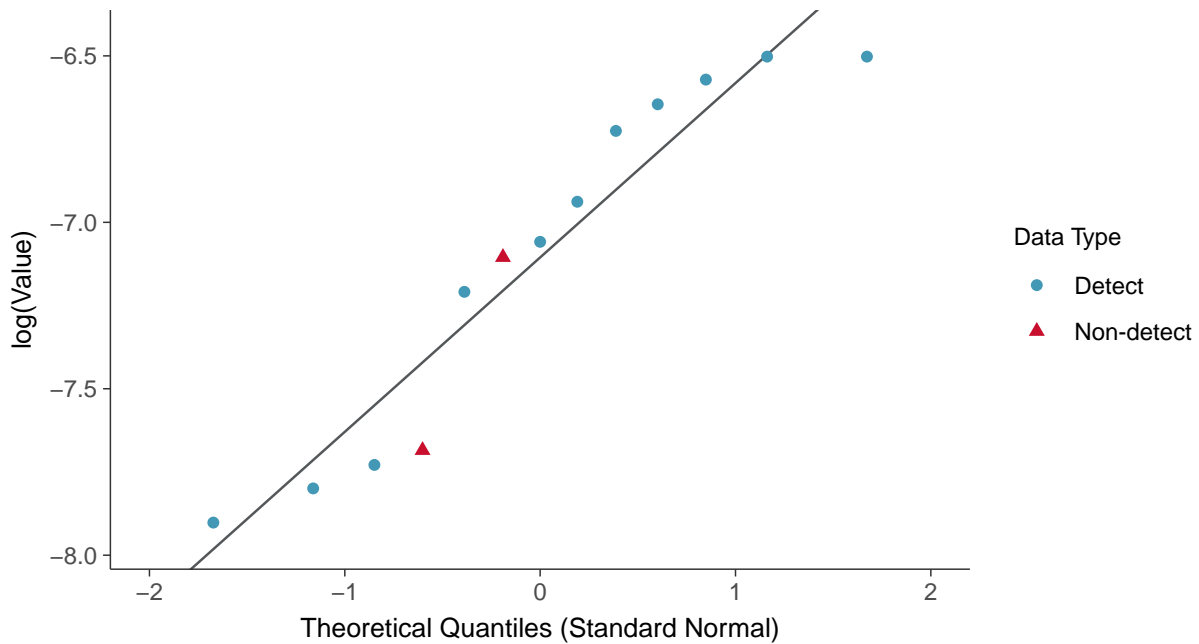
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-04 (mg/L)



Lognormal Q-Q plot using ROS Imputed Estimates

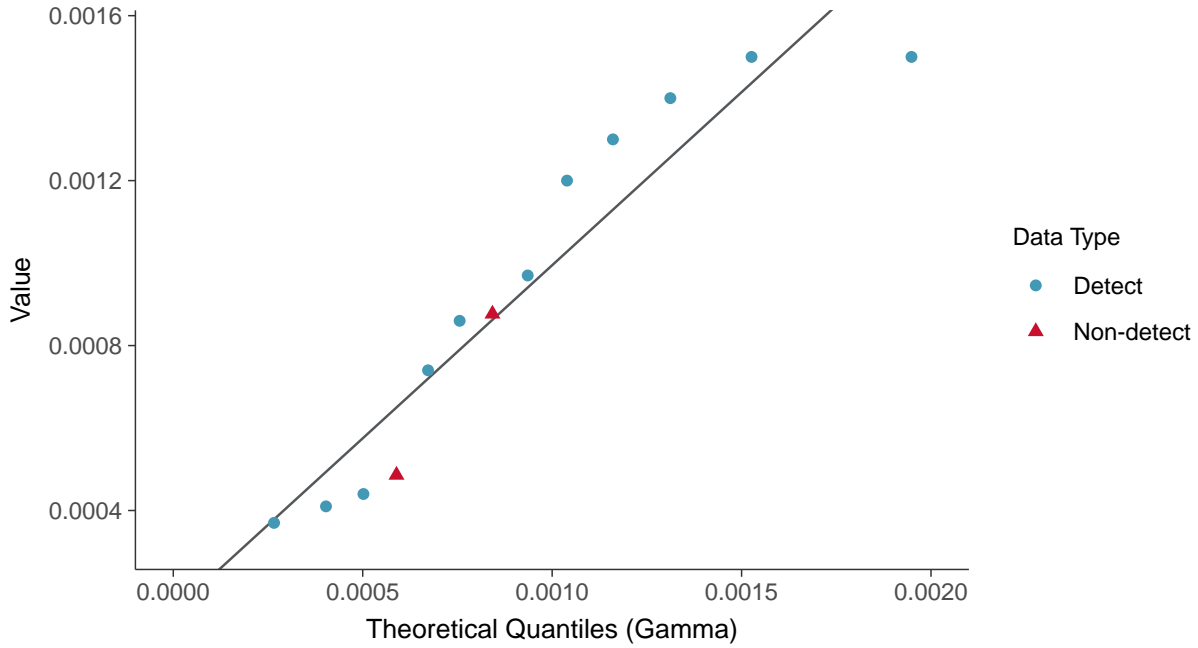
Molybdenum, MW-04 (mg/L)





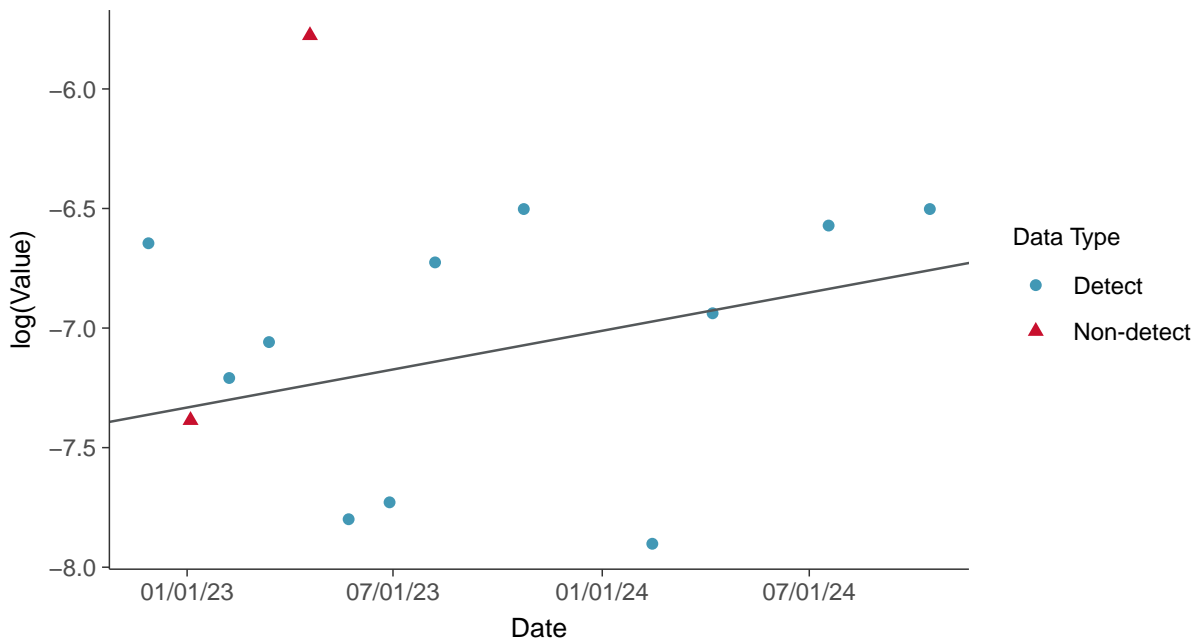
Gamma Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-04 (mg/L)



Trend Regression: Lognormal MLE

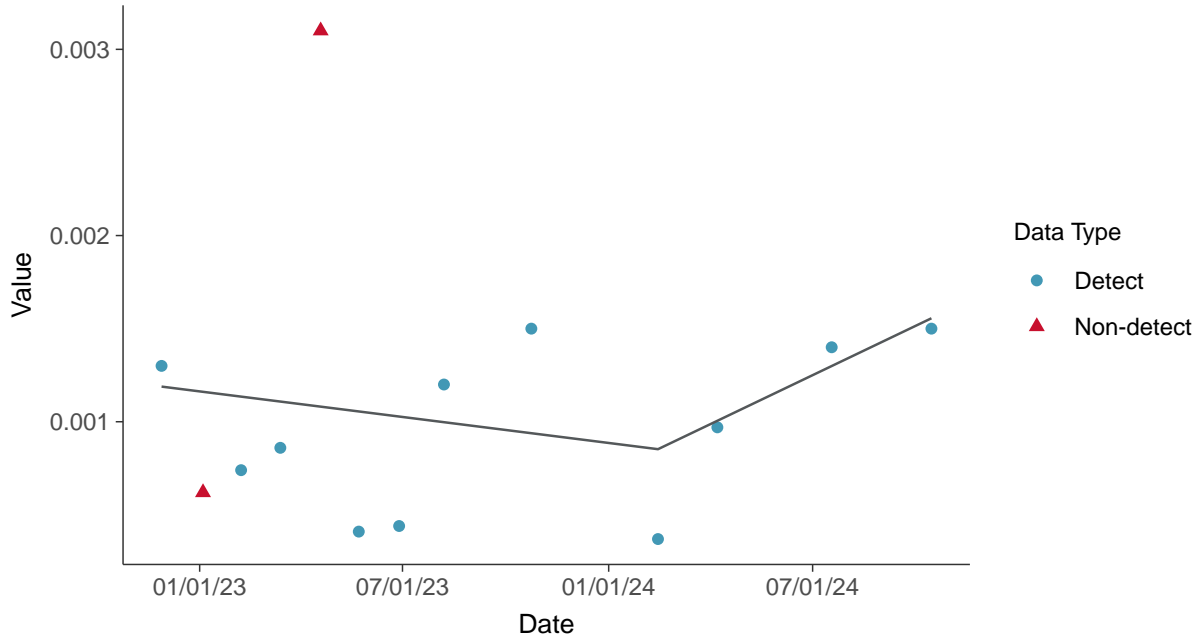
Molybdenum, MW-04 (mg/L)





Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-04 (mg/L)



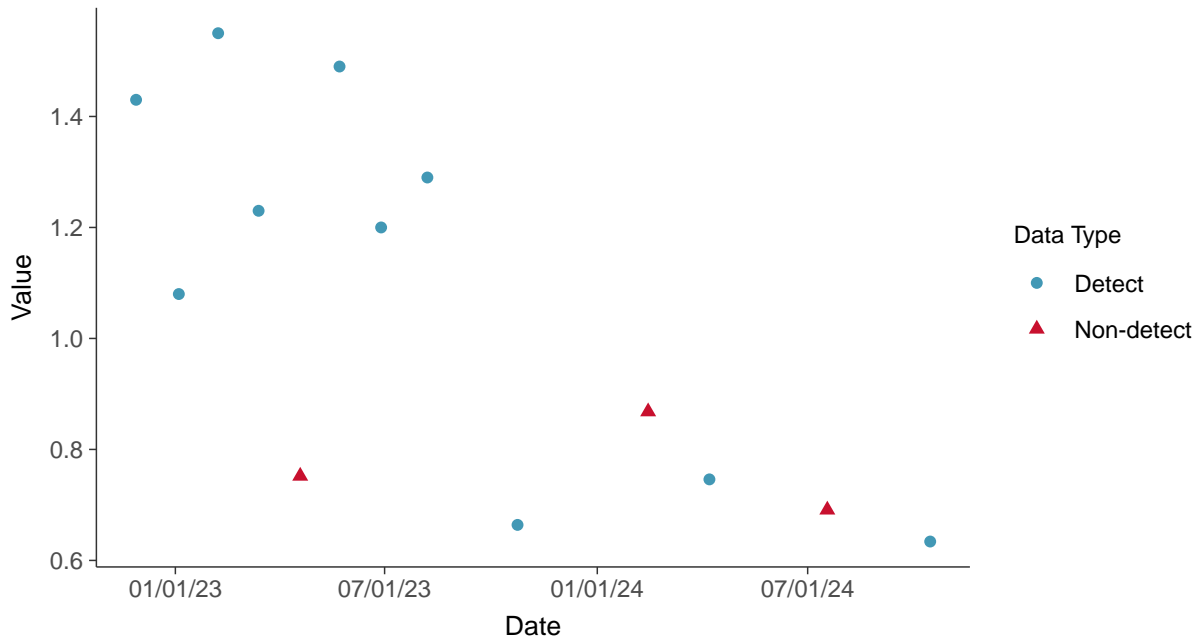


Appendix IV: Radium 226 and 228, MW-04

ID: 2_14_2_5_121

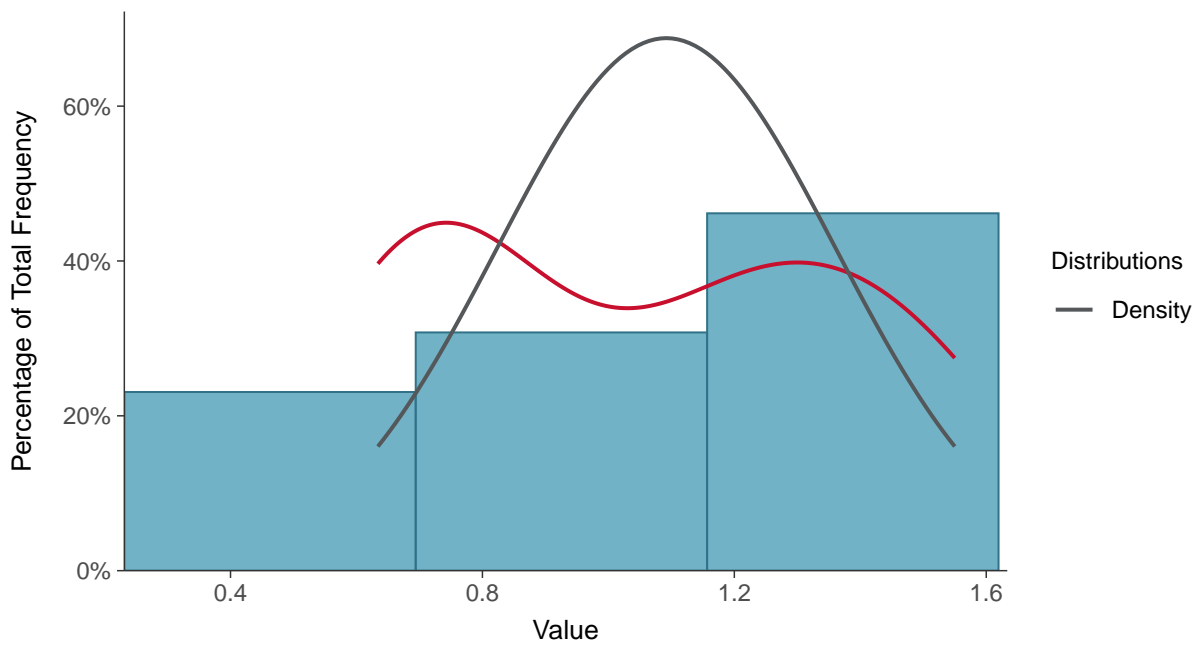
Scatter Plot

Radium 226 and 228, MW-04 (pCi/L)



Histogram

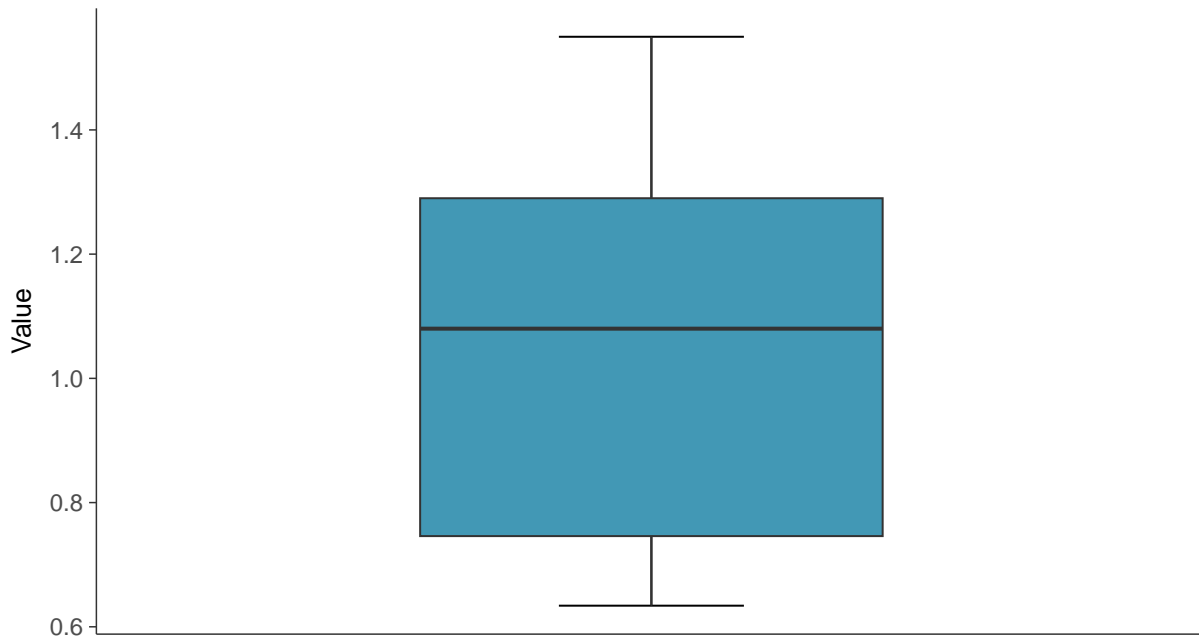
Radium 226 and 228, MW-04 (pCi/L)





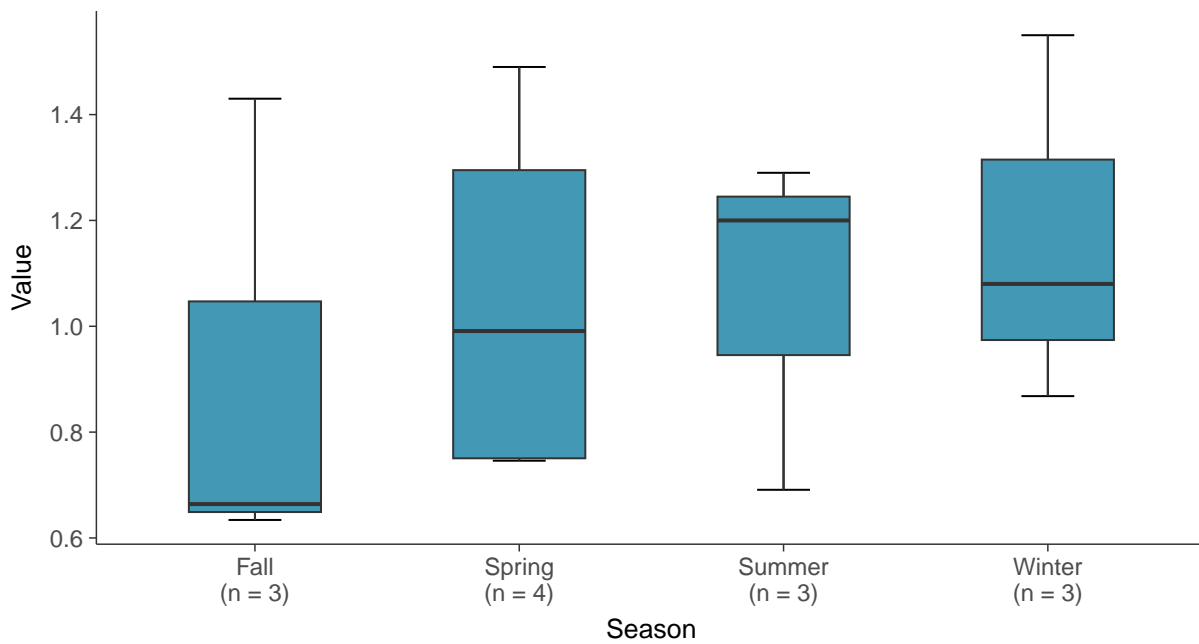
Boxplot

Radium 226 and 228, MW-04 (pCi/L)



Boxplot by Season

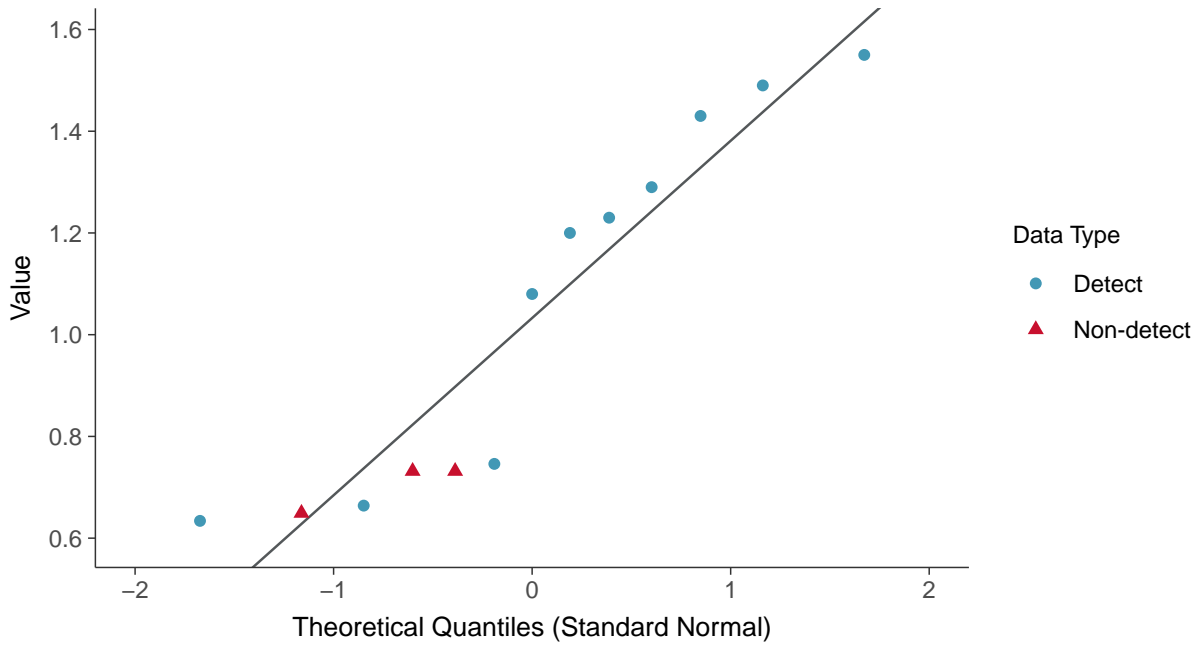
Radium 226 and 228, MW-04 (pCi/L)





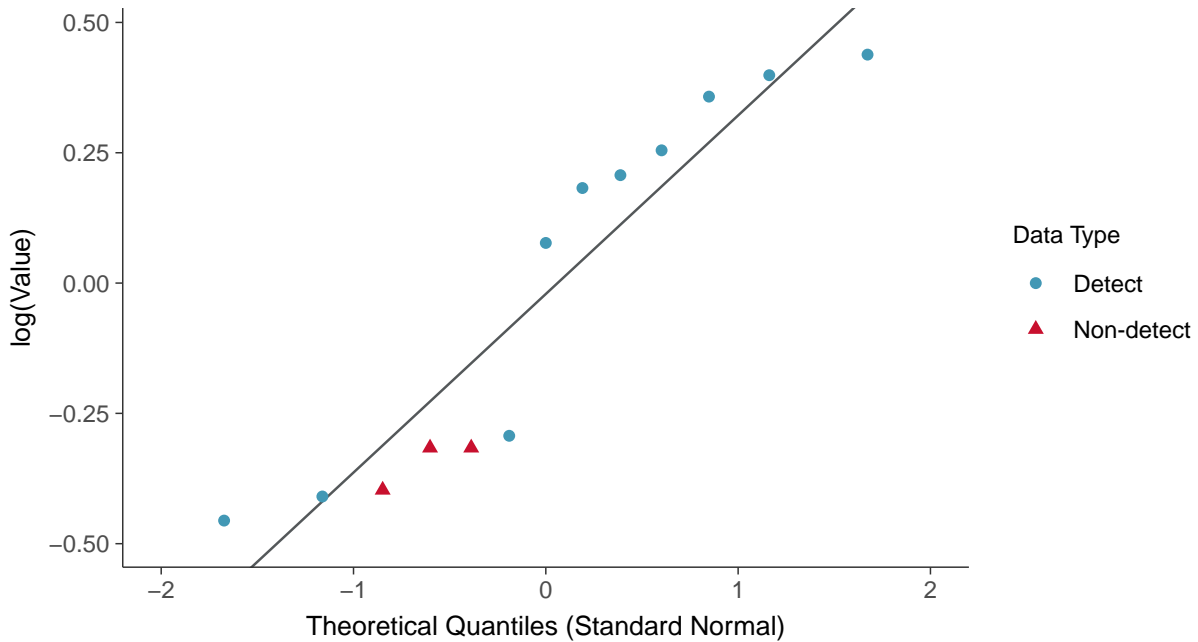
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-04 (pCi/L)



Lognormal Q-Q plot using ROS Imputed Estimates

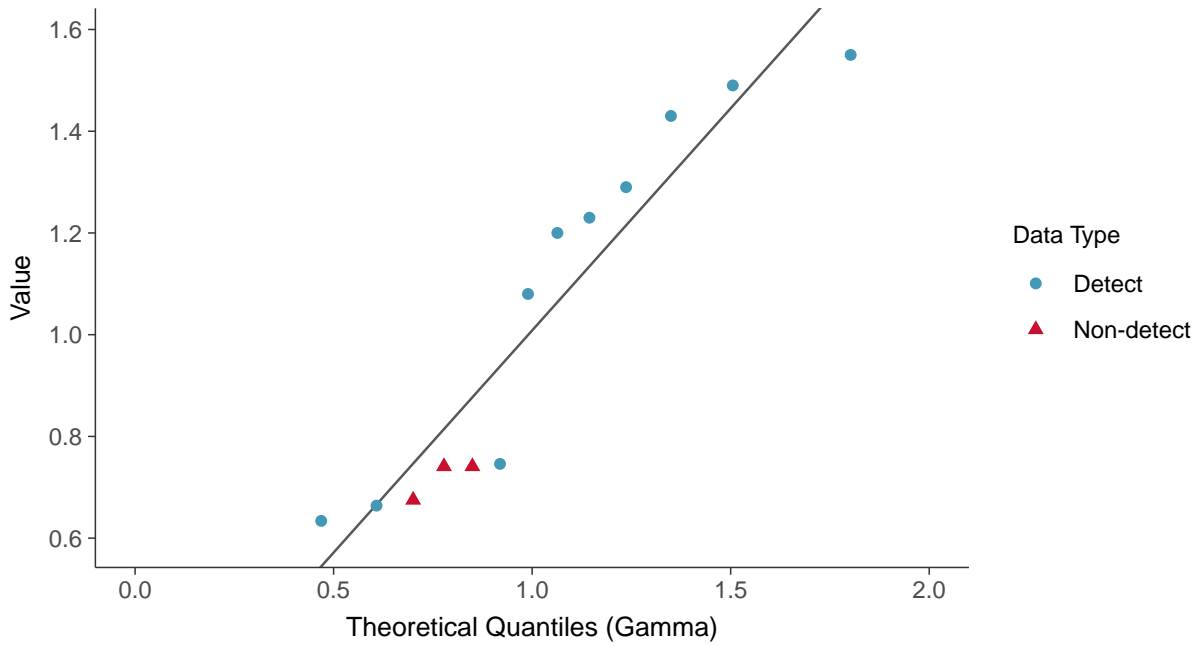
Radium 226 and 228, MW-04 (pCi/L)





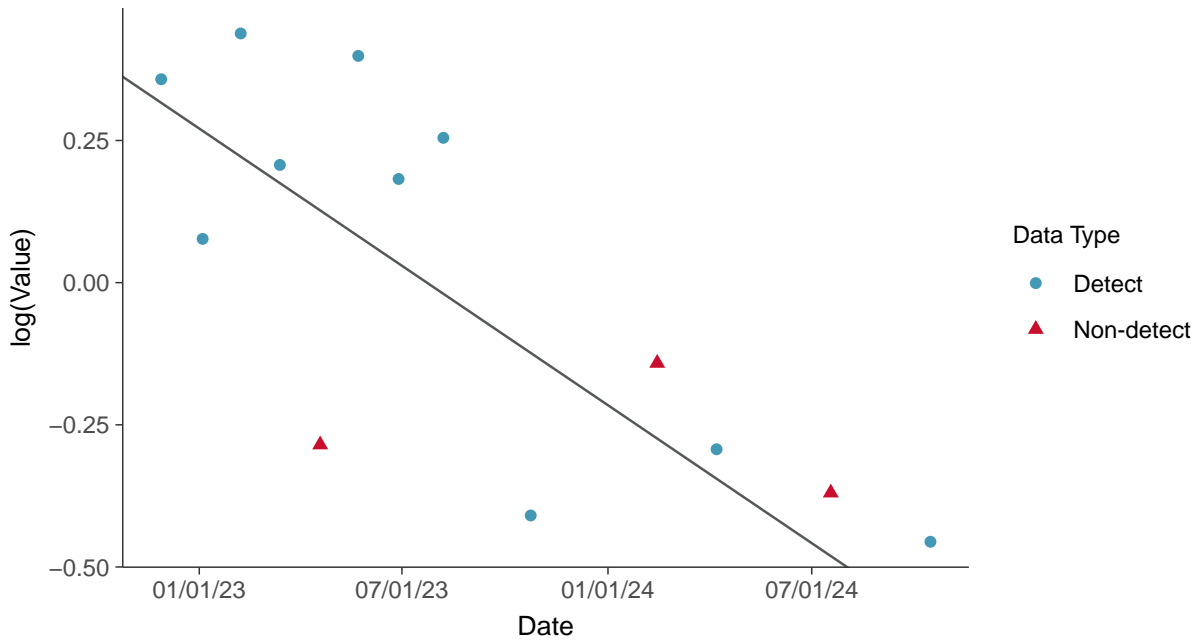
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-04 (pCi/L)



Trend Regression: Lognormal MLE

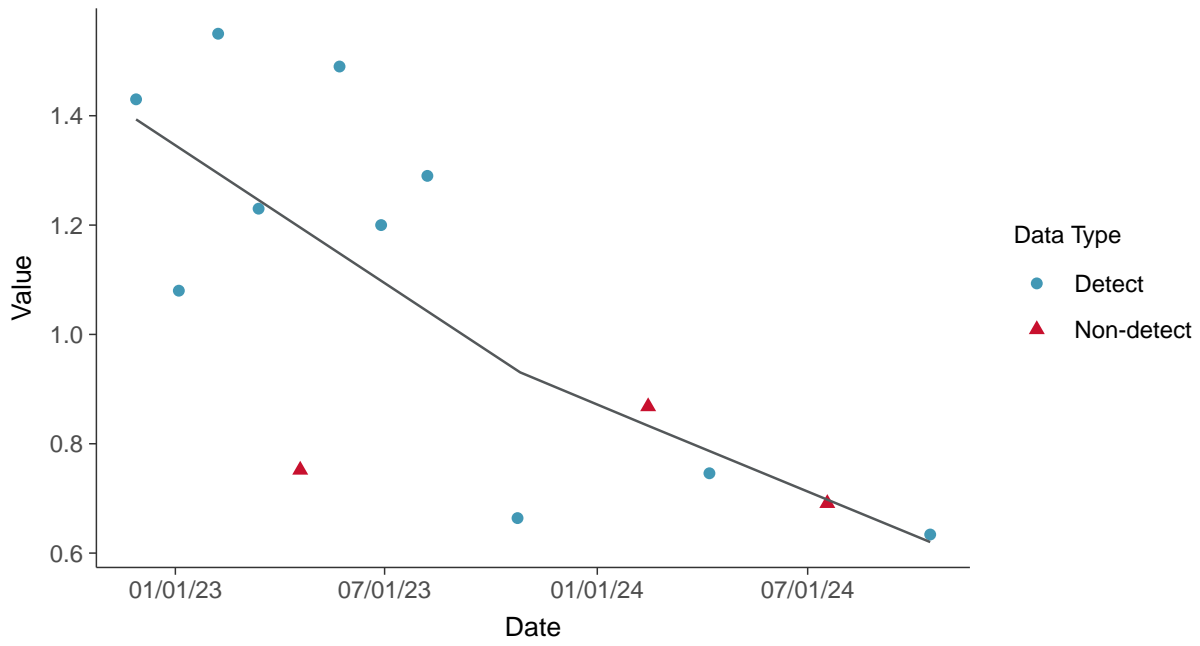
Radium 226 and 228, MW-04 (pCi/L)





Trend Regression: Piecewise Linear-Linear

Radium 226 and 228, MW-04 (pCi/L)



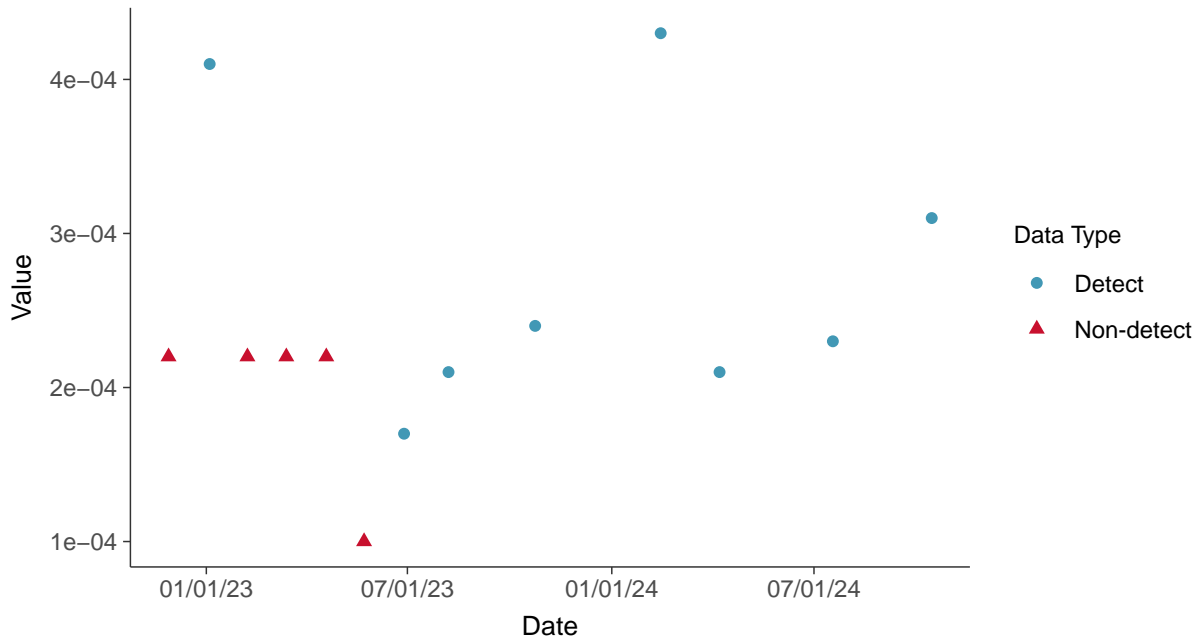


Appendix IV: Selenium, MW-04

ID: 2_14_2_5_122

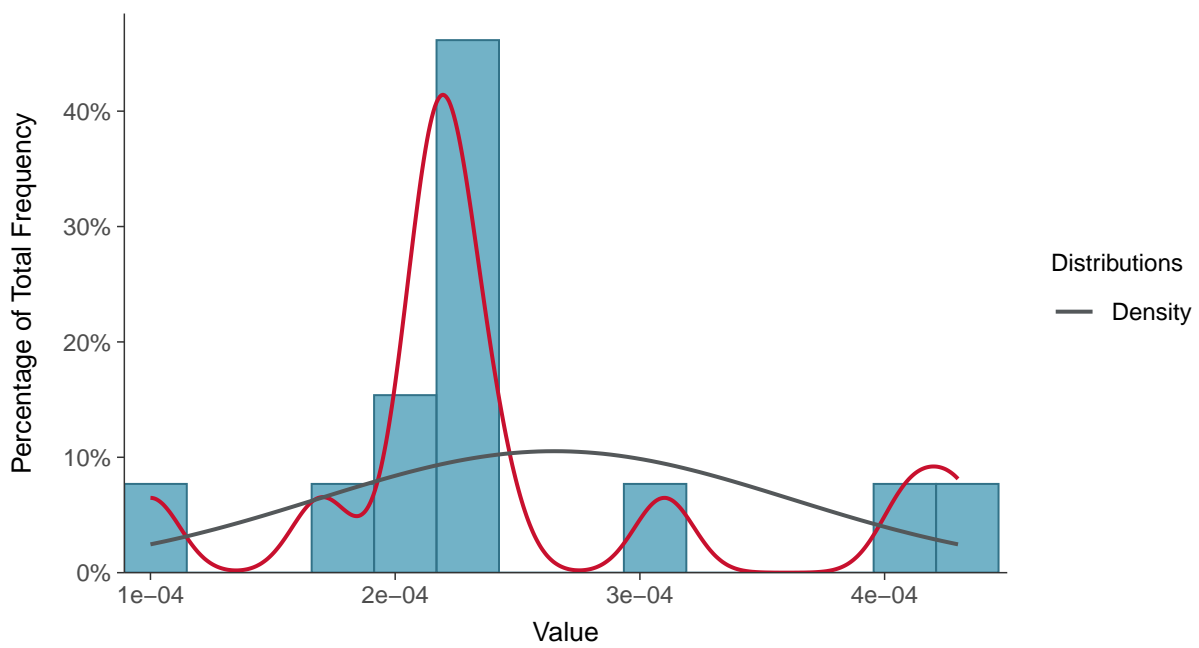
Scatter Plot

Selenium, MW-04 (mg/L)



Histogram

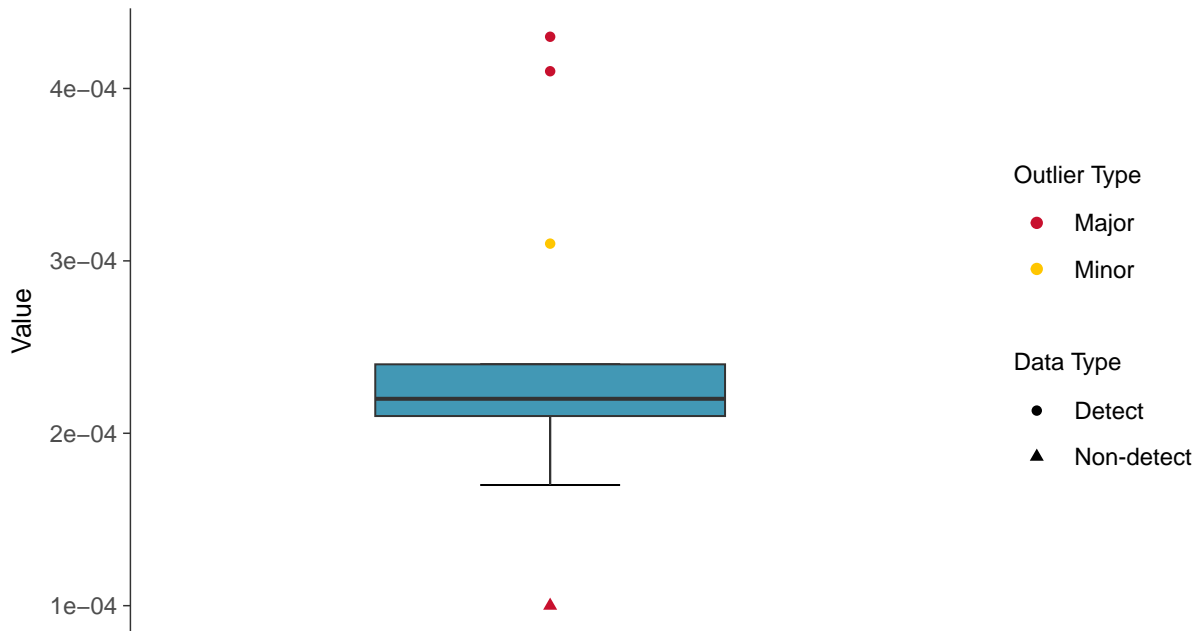
Selenium, MW-04 (mg/L)





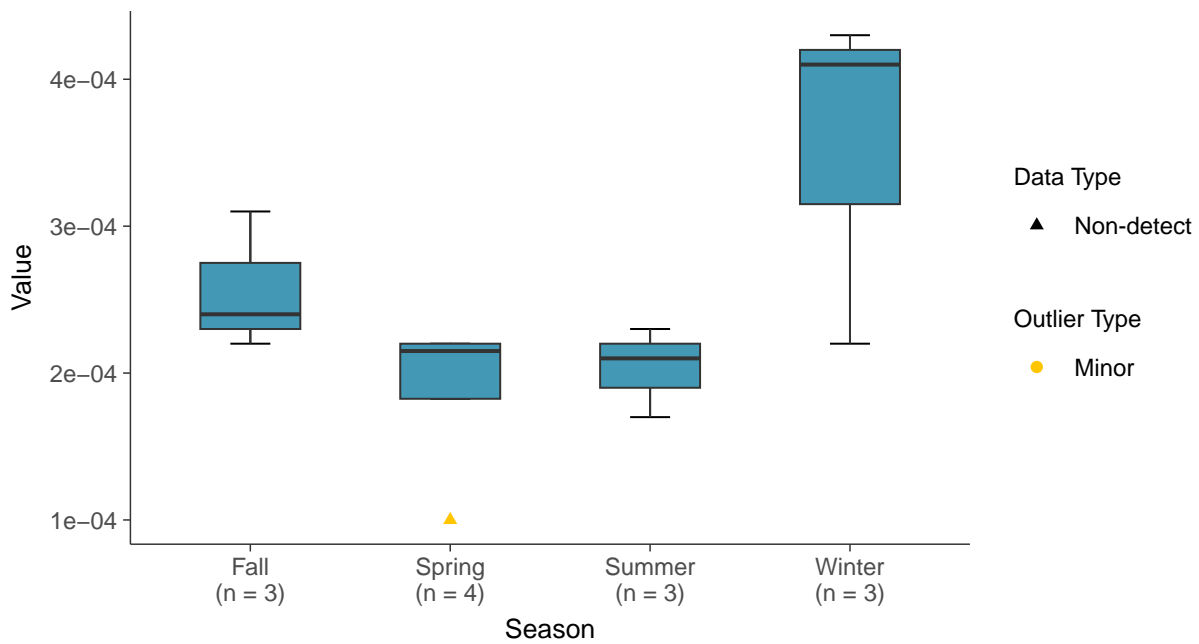
Boxplot

Selenium, MW-04 (mg/L)



Boxplot by Season

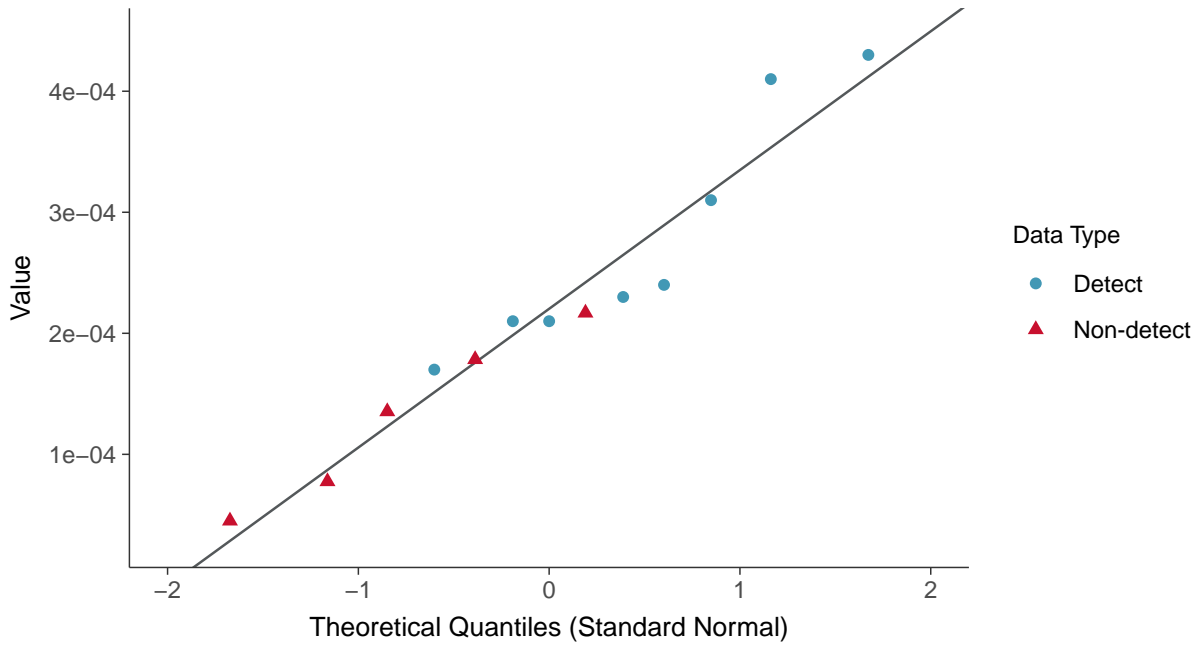
Selenium, MW-04 (mg/L)





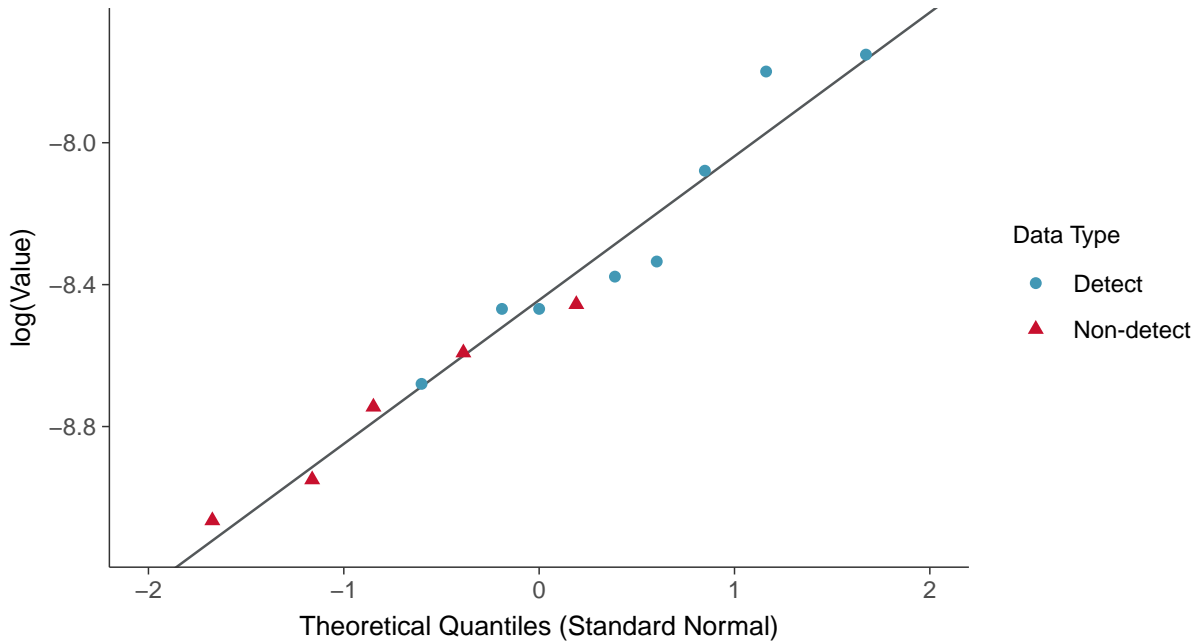
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-04 (mg/L)



Lognormal Q-Q plot using ROS Imputed Estimates

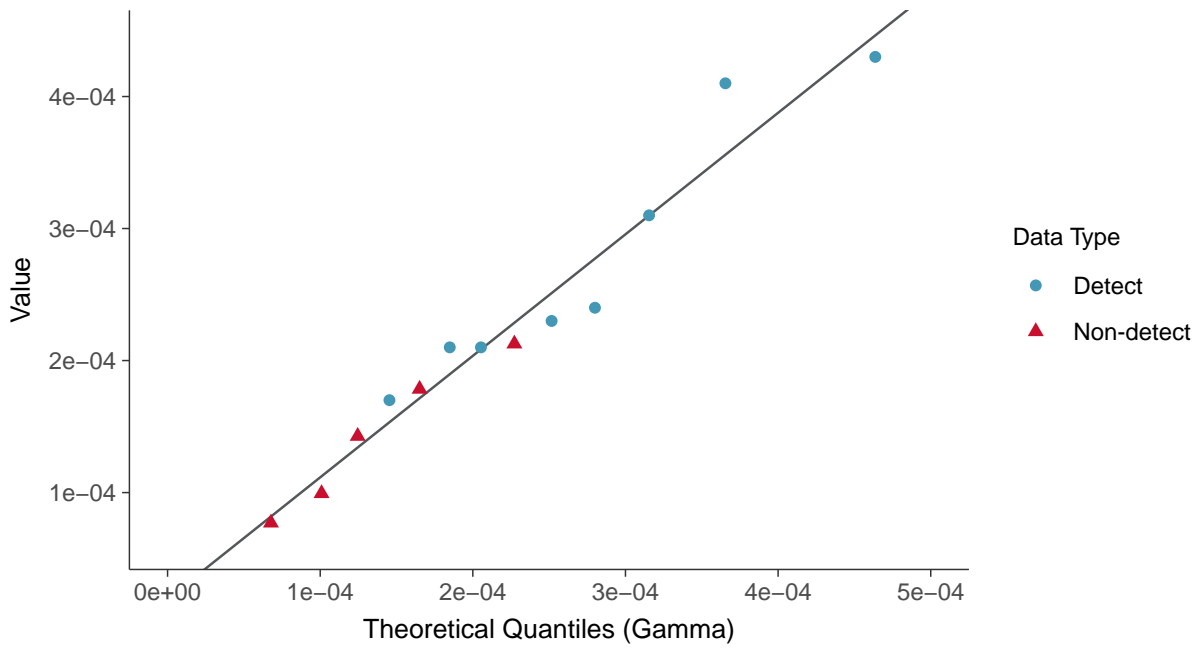
Selenium, MW-04 (mg/L)





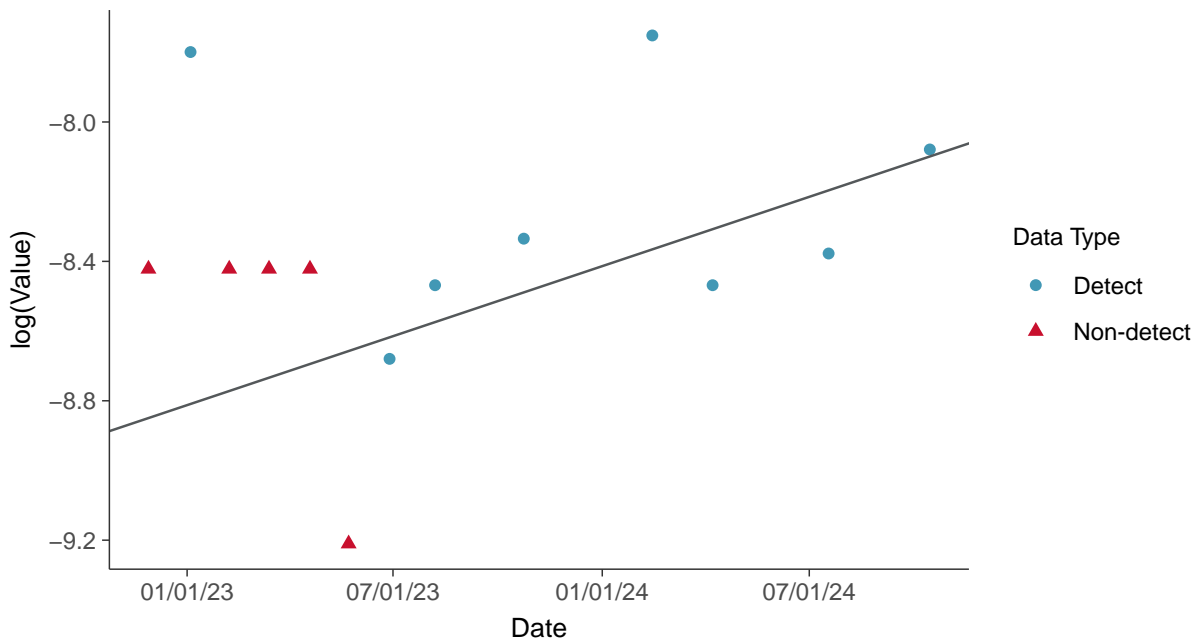
Gamma Q-Q plot using ROS Imputed Estimates

Selenium, MW-04 (mg/L)



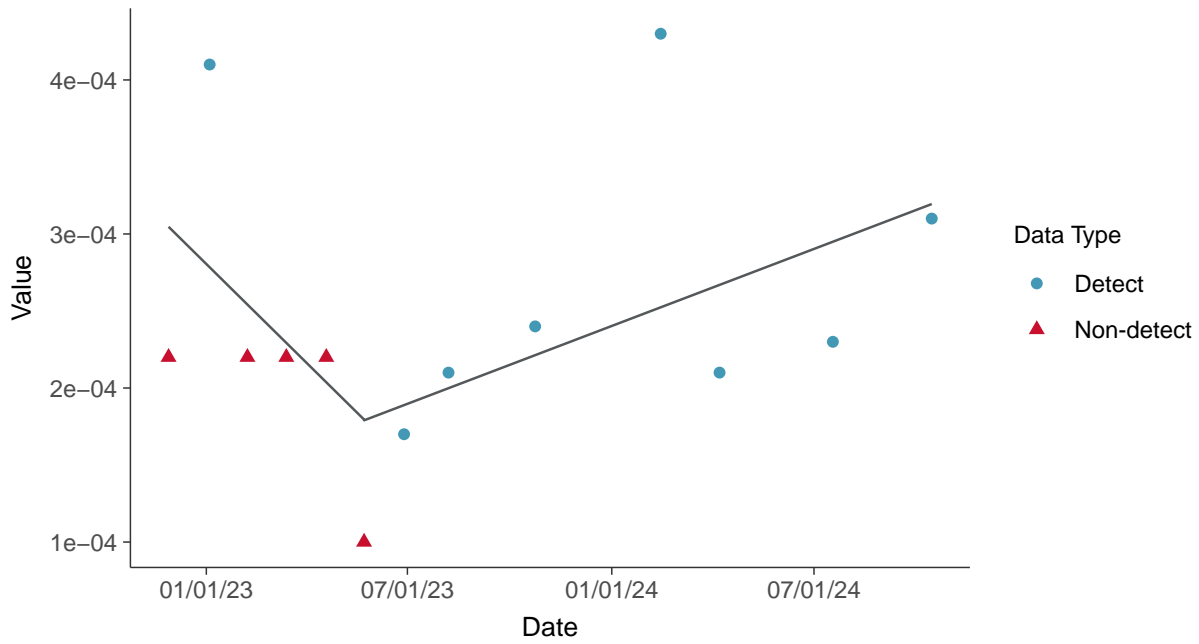
Trend Regression: Lognormal MLE

Selenium, MW-04 (mg/L)

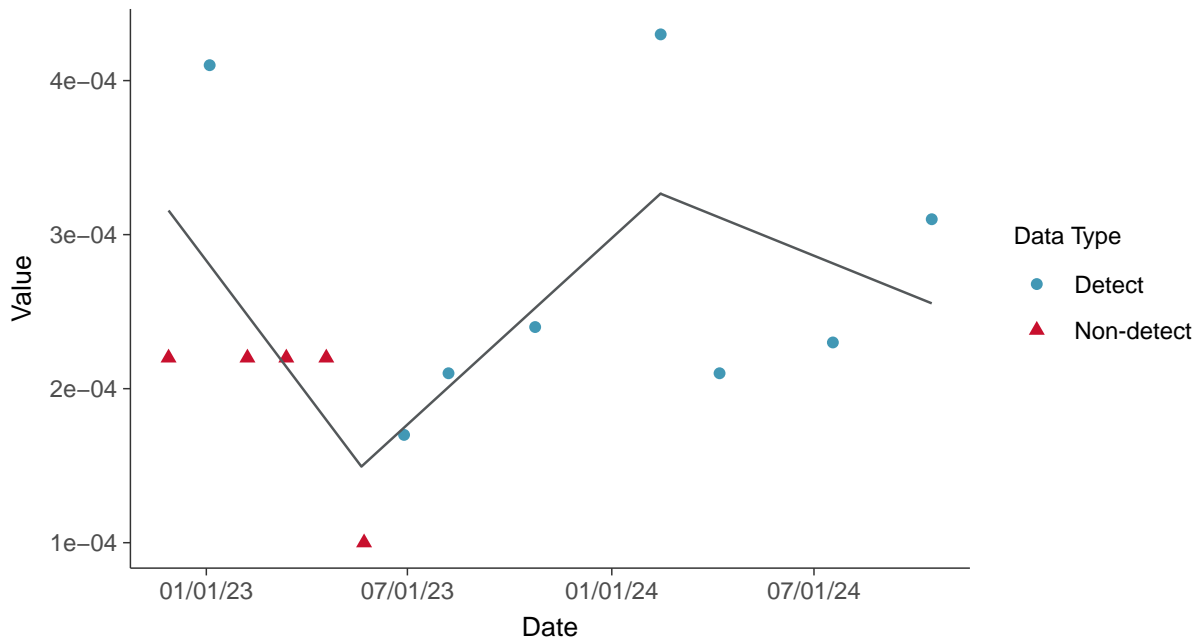




Trend Regression: Piecewise Linear-Linear
Selenium, MW-04 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Selenium, MW-04 (mg/L)



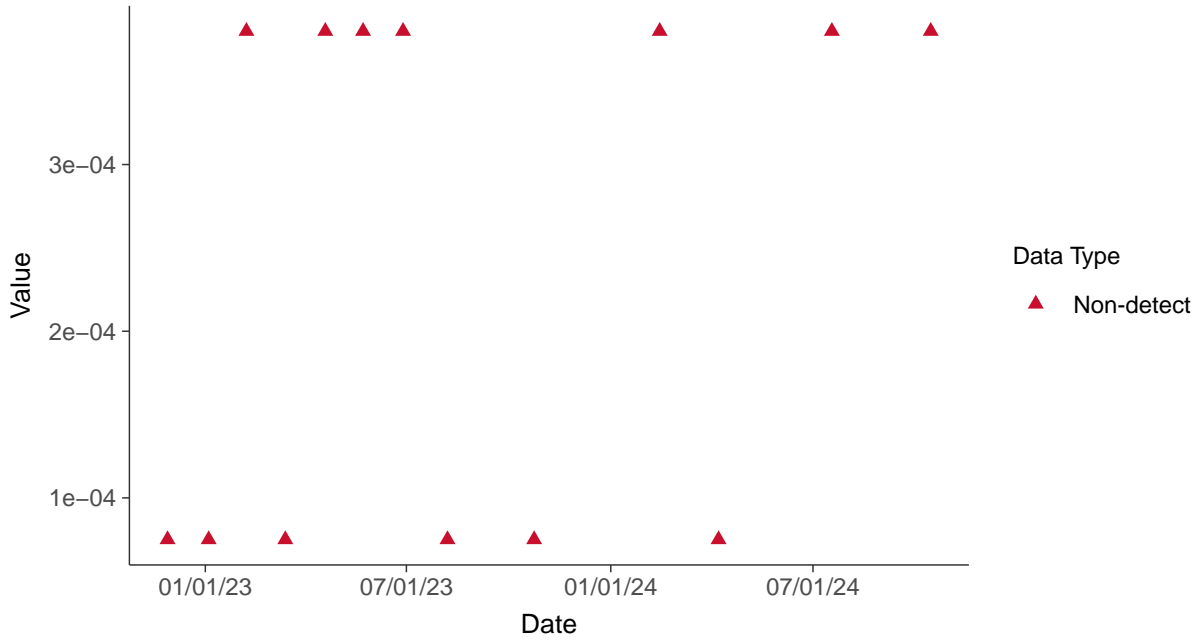


Appendix IV: Thallium, MW-04

ID: 2_14_2_5_125

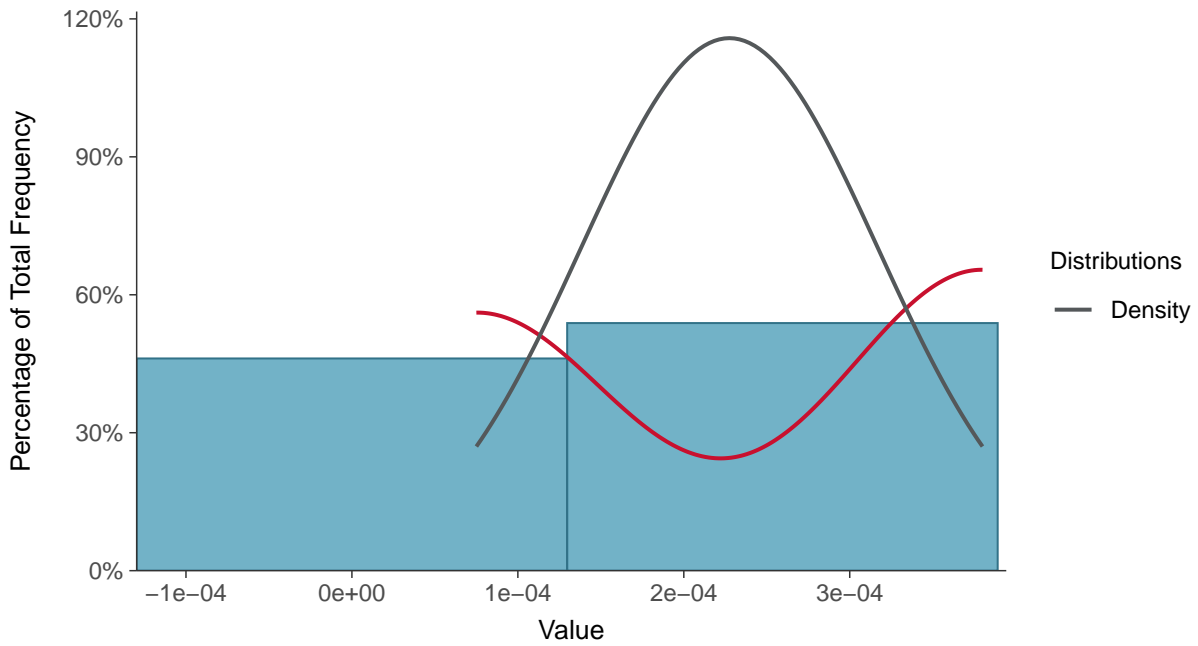
Scatter Plot

Thallium, MW-04 (mg/L)



Histogram

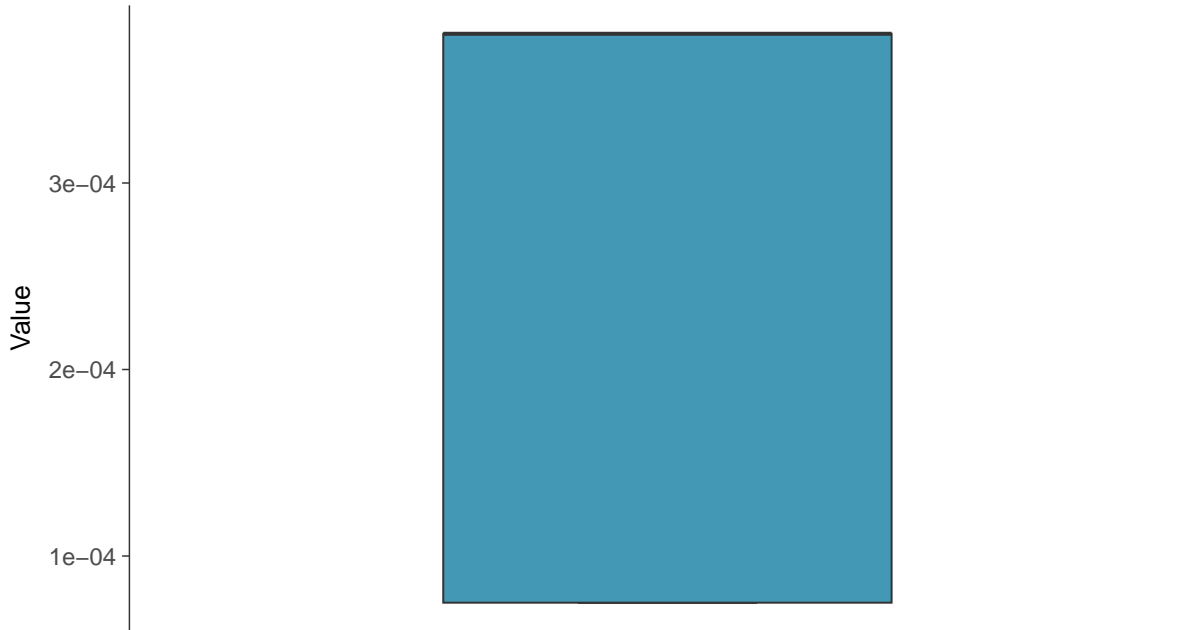
Thallium, MW-04 (mg/L)





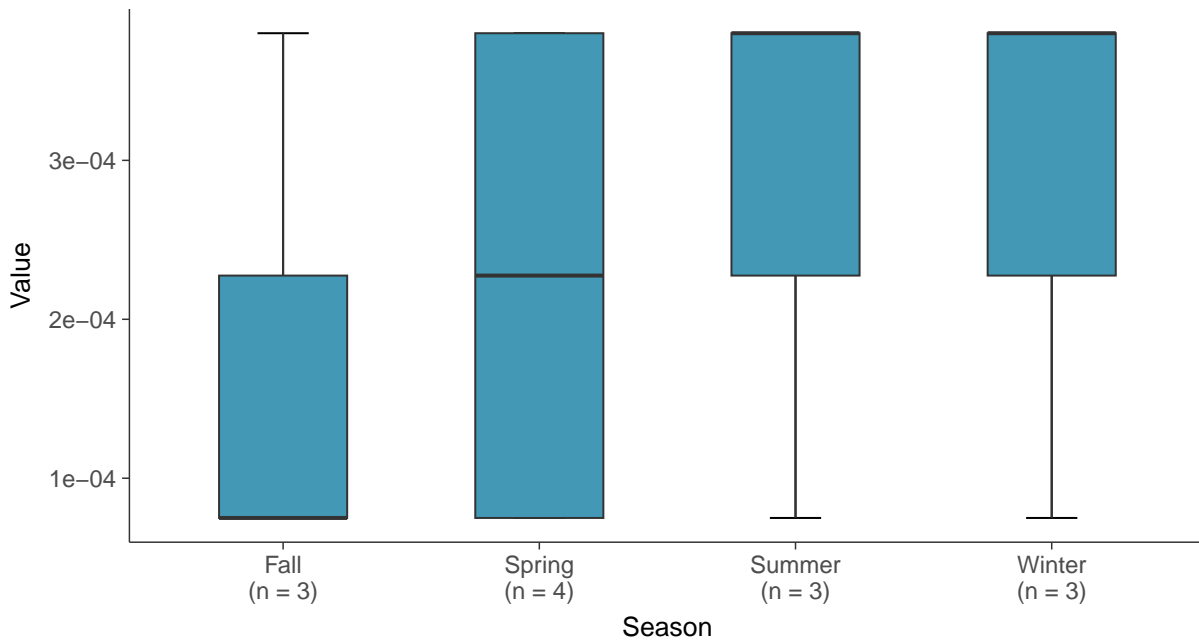
Boxplot

Thallium, MW-04 (mg/L)



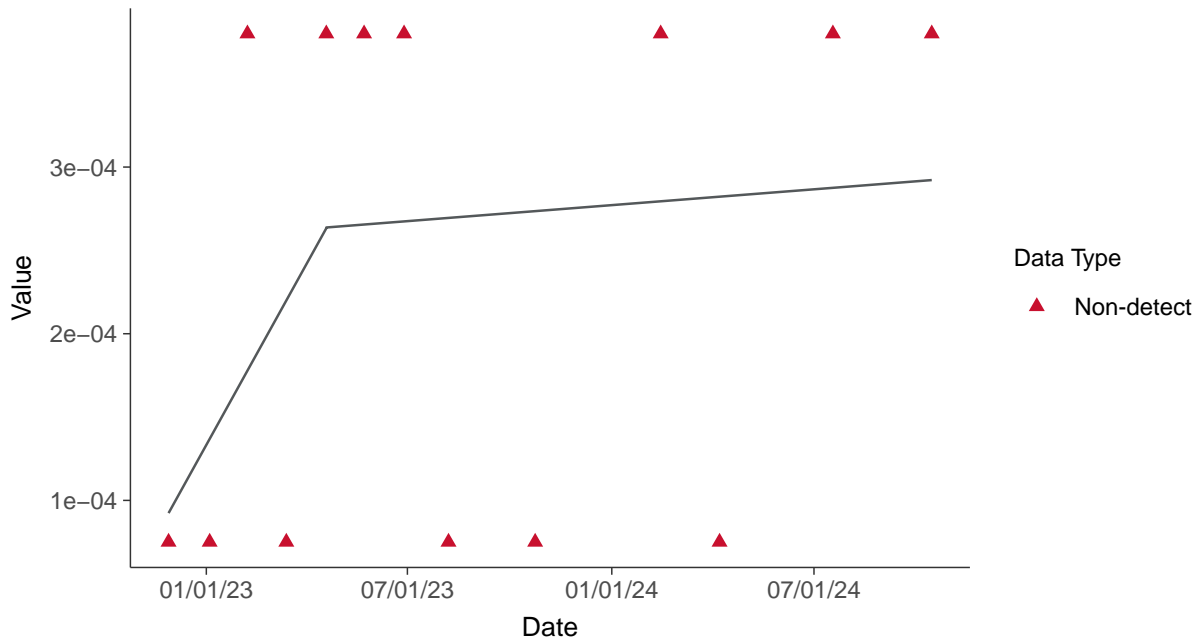
Boxplot by Season

Thallium, MW-04 (mg/L)

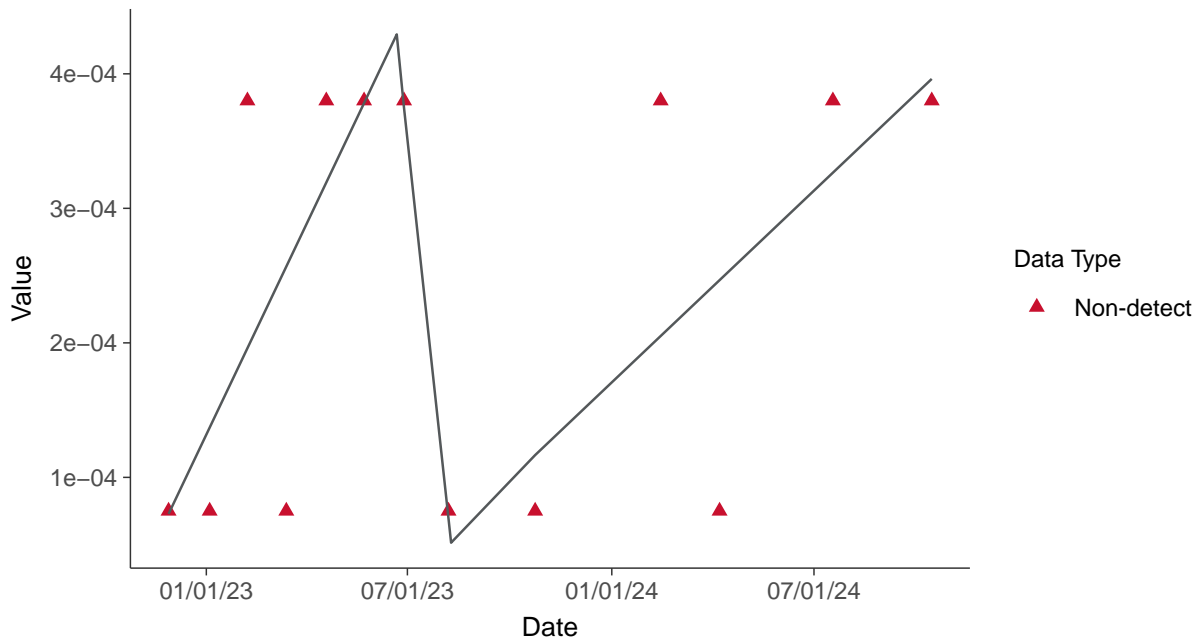




Trend Regression: Piecewise Linear-Linear
Thallium, MW-04 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Thallium, MW-04 (mg/L)



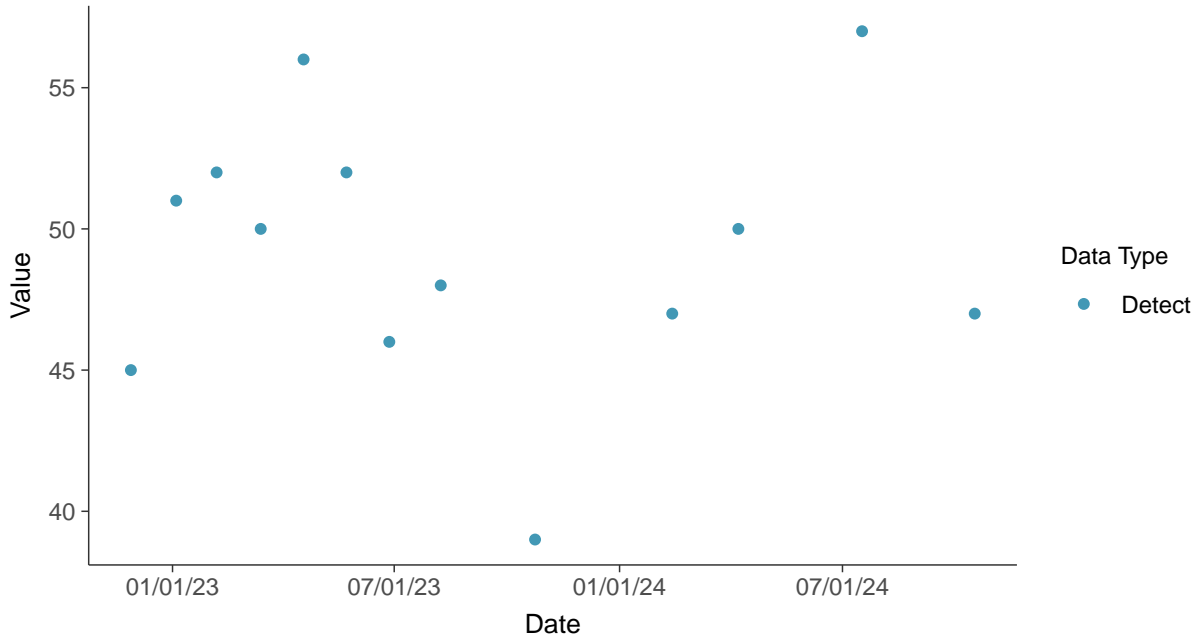


Additional Parameters: Total Suspended Solids, MW-09

ID: 2_19_2_3_127

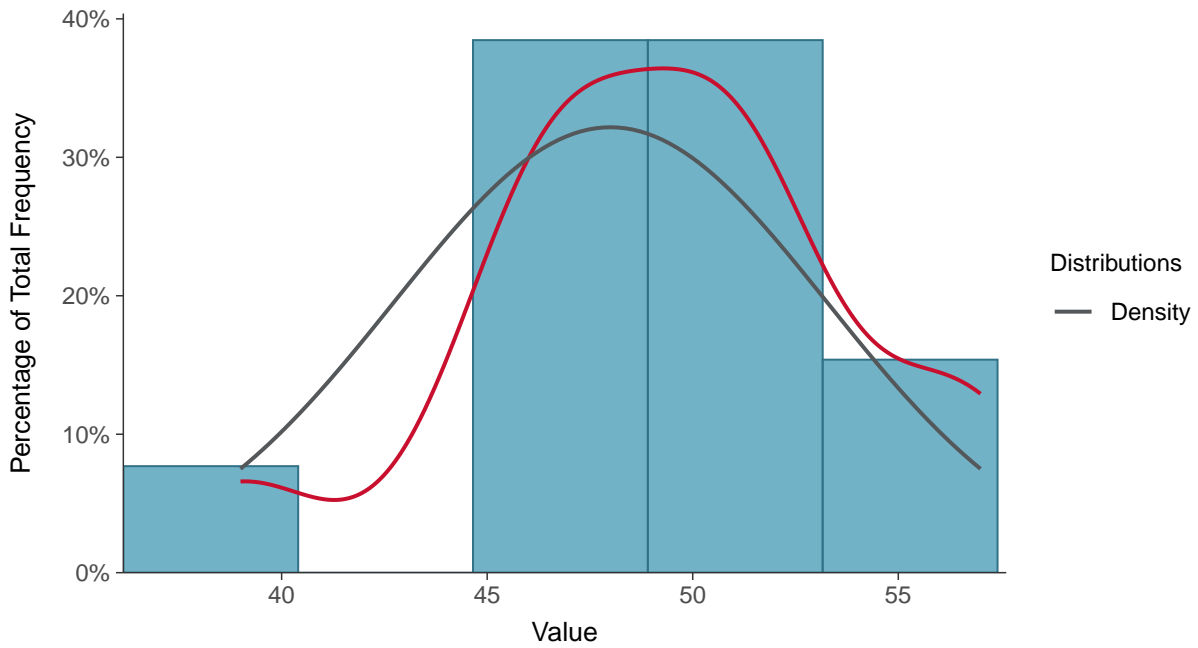
Scatter Plot

Total Suspended Solids, MW-09 (mg/L)



Histogram

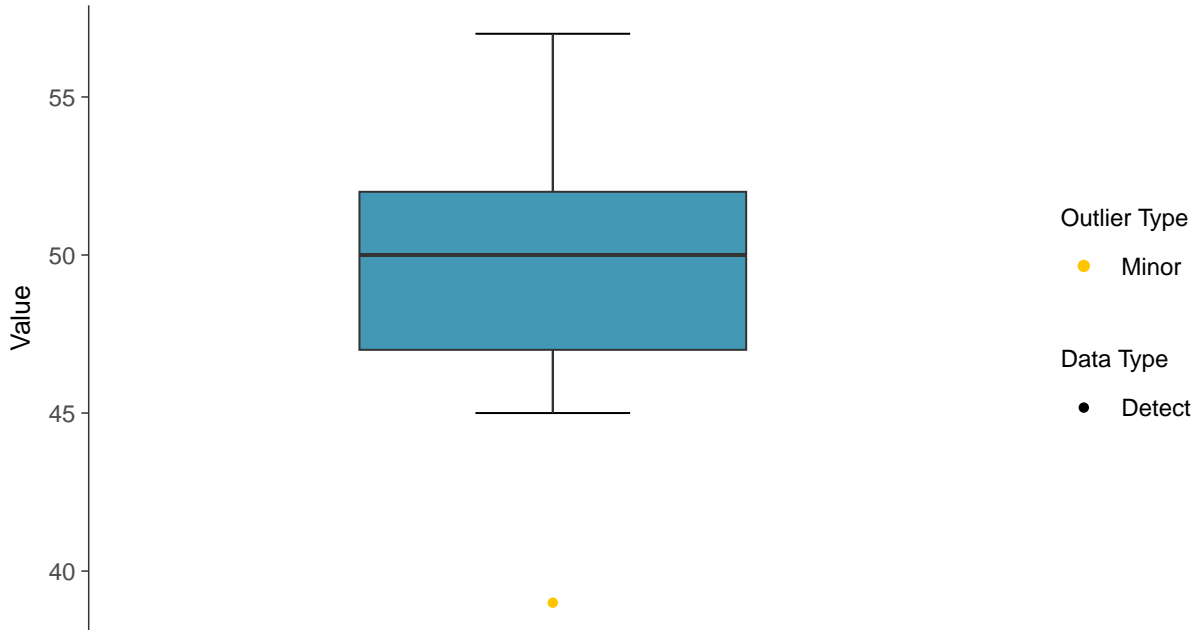
Total Suspended Solids, MW-09 (mg/L)





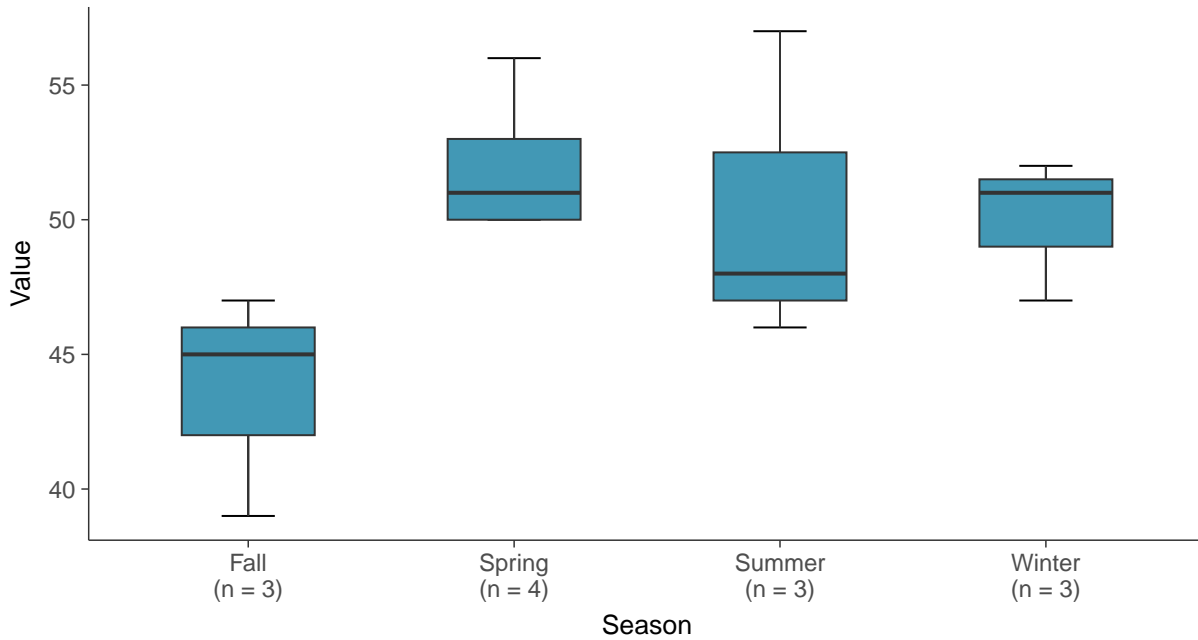
Boxplot

Total Suspended Solids, MW-09 (mg/L)



Boxplot by Season

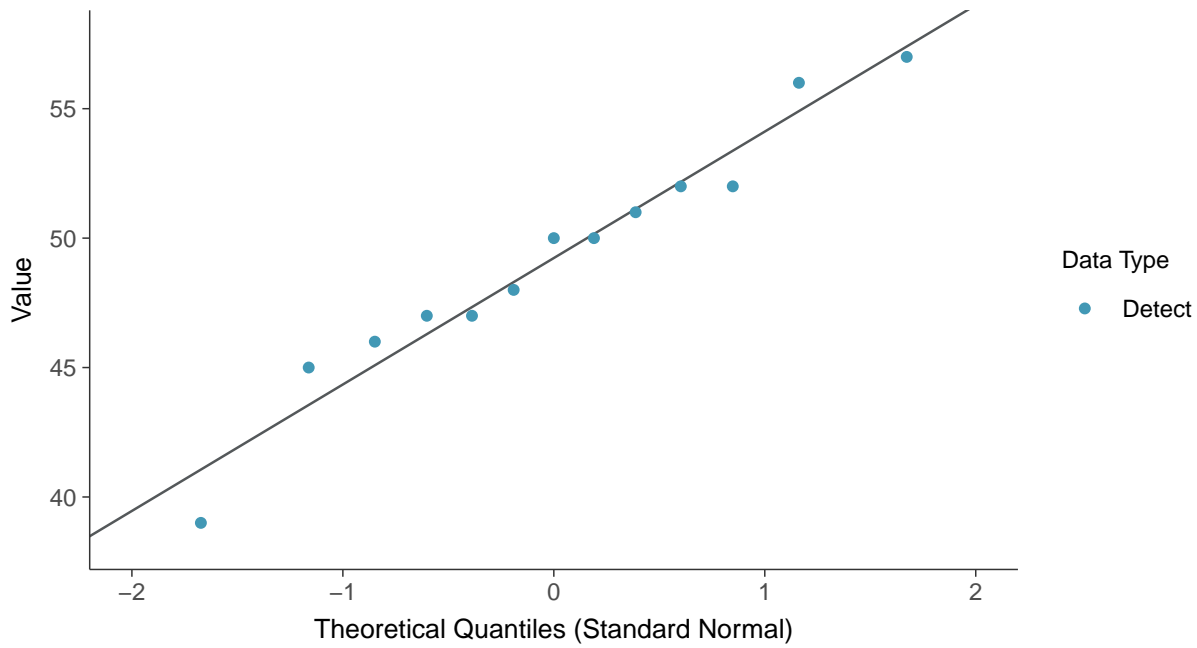
Total Suspended Solids, MW-09 (mg/L)





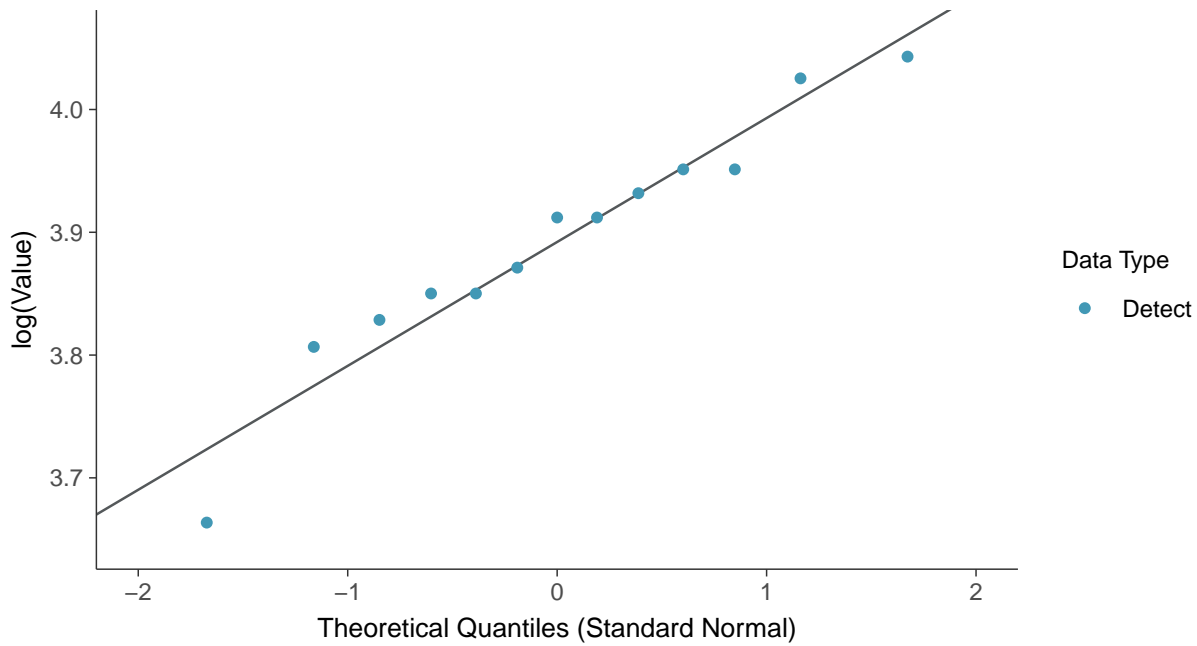
Normal Q-Q plot

Total Suspended Solids, MW-09 (mg/L)



Lognormal Q-Q plot

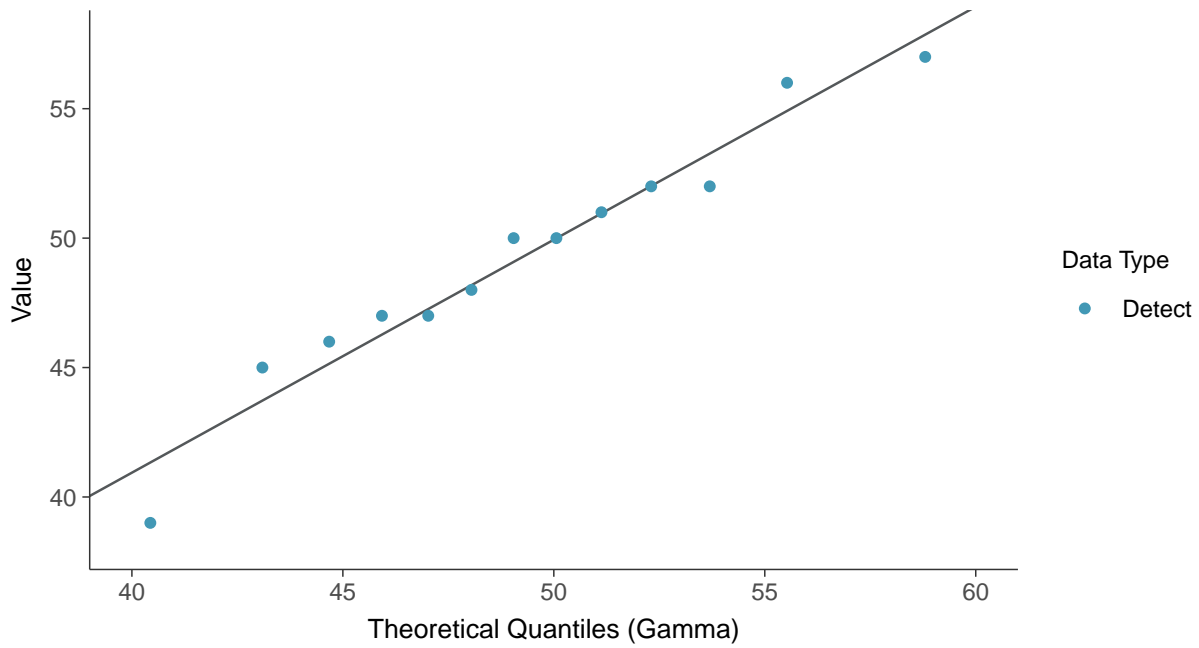
Total Suspended Solids, MW-09 (mg/L)





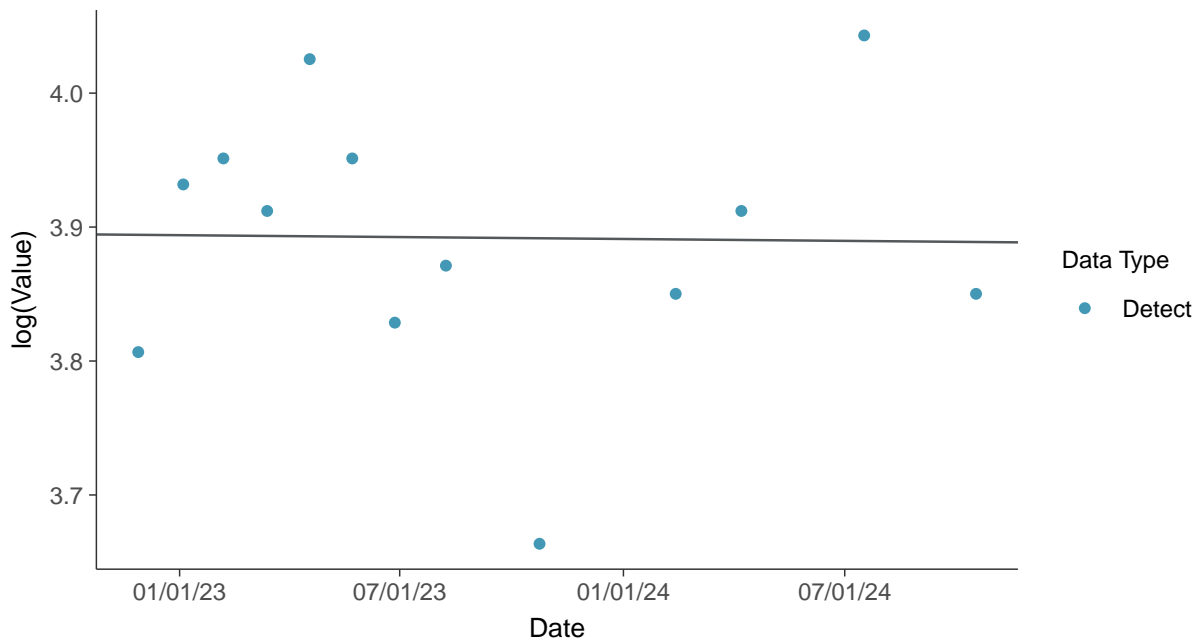
Gamma Q-Q plot

Total Suspended Solids, MW-09 (mg/L)



Trend Regression: Lognormal MLE

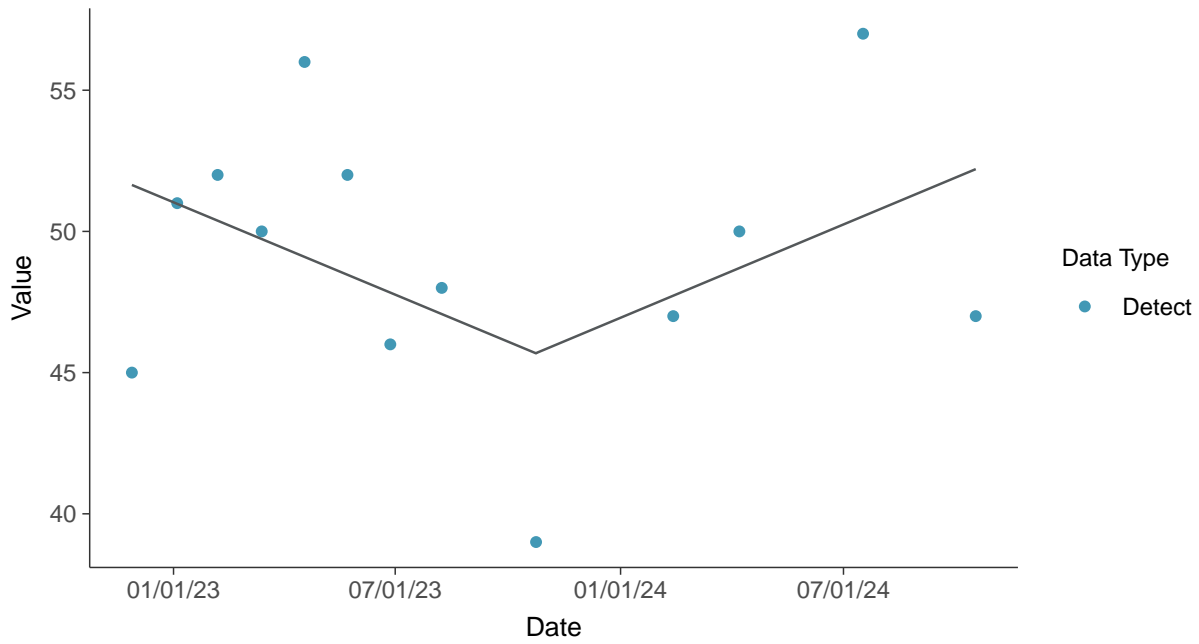
Total Suspended Solids, MW-09 (mg/L)





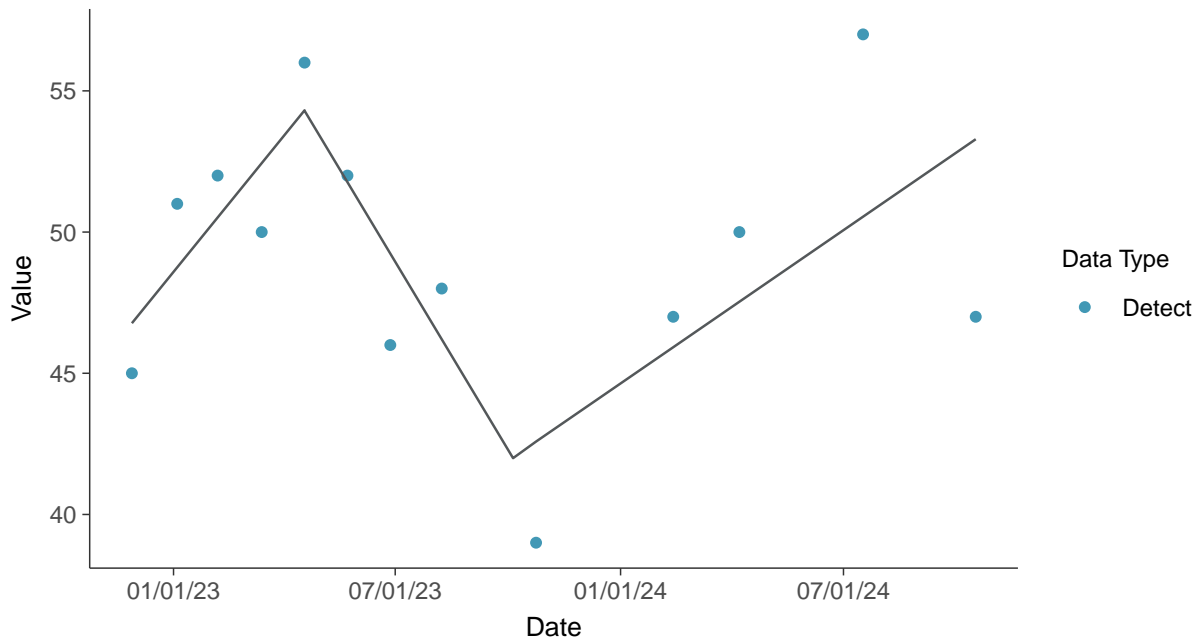
Trend Regression: Piecewise Linear-Linear

Total Suspended Solids, MW-09 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

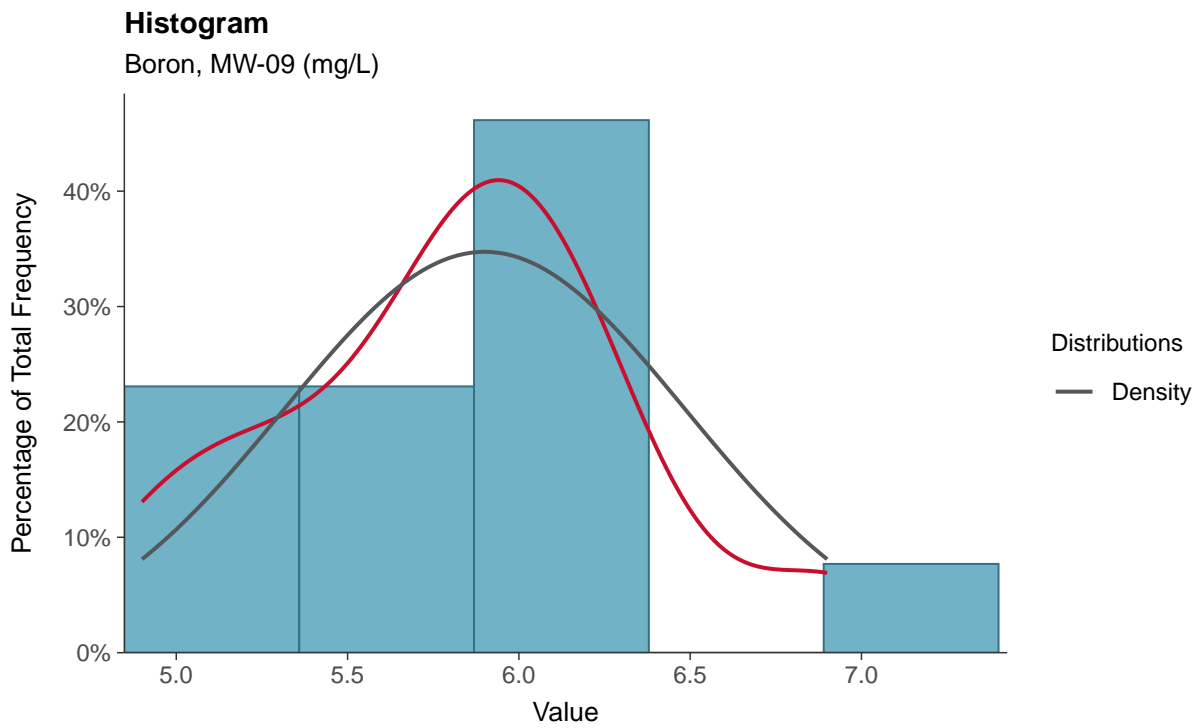
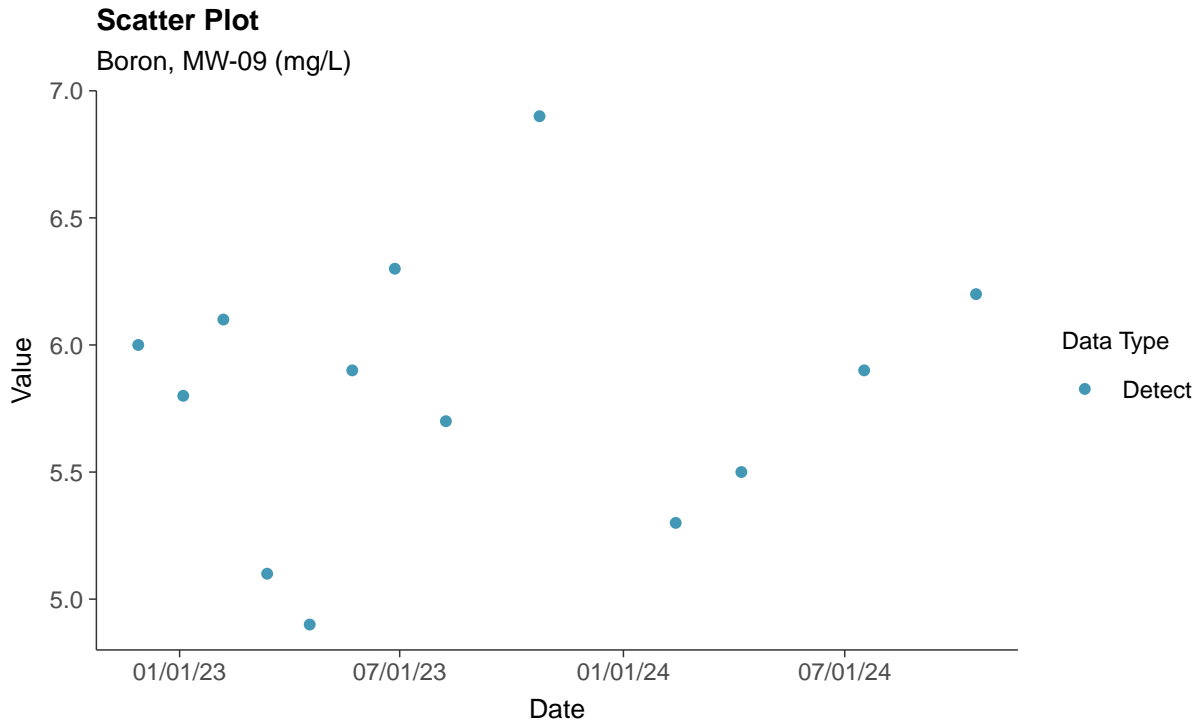
Total Suspended Solids, MW-09 (mg/L)





Appendix III: Boron, MW-09

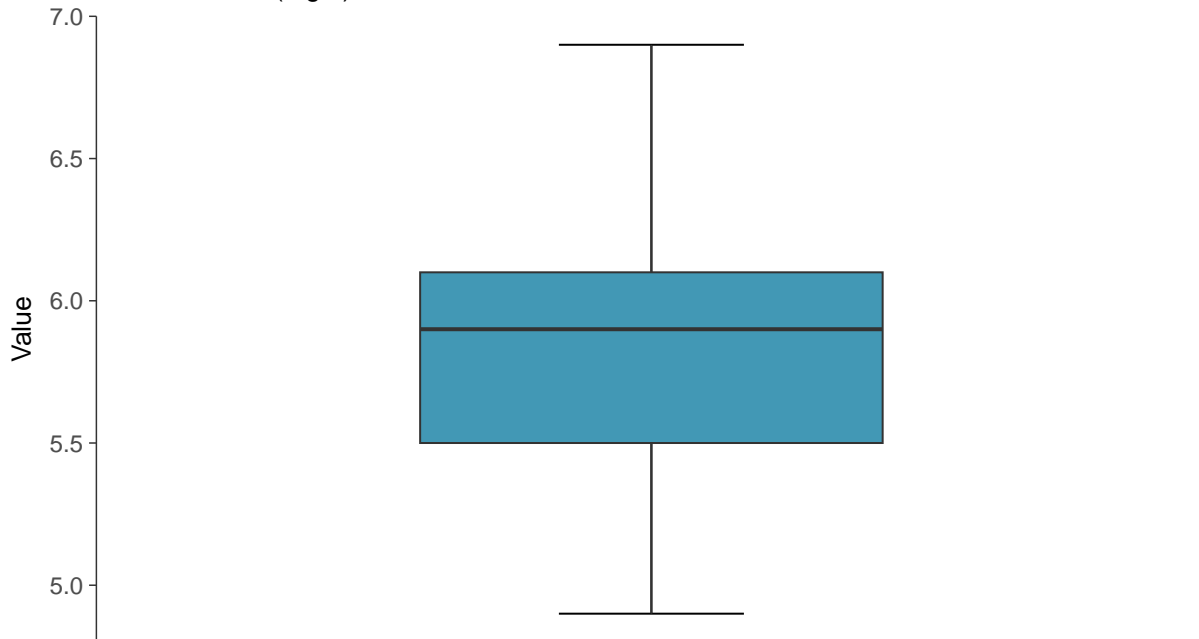
ID: 2_19_2_4_105





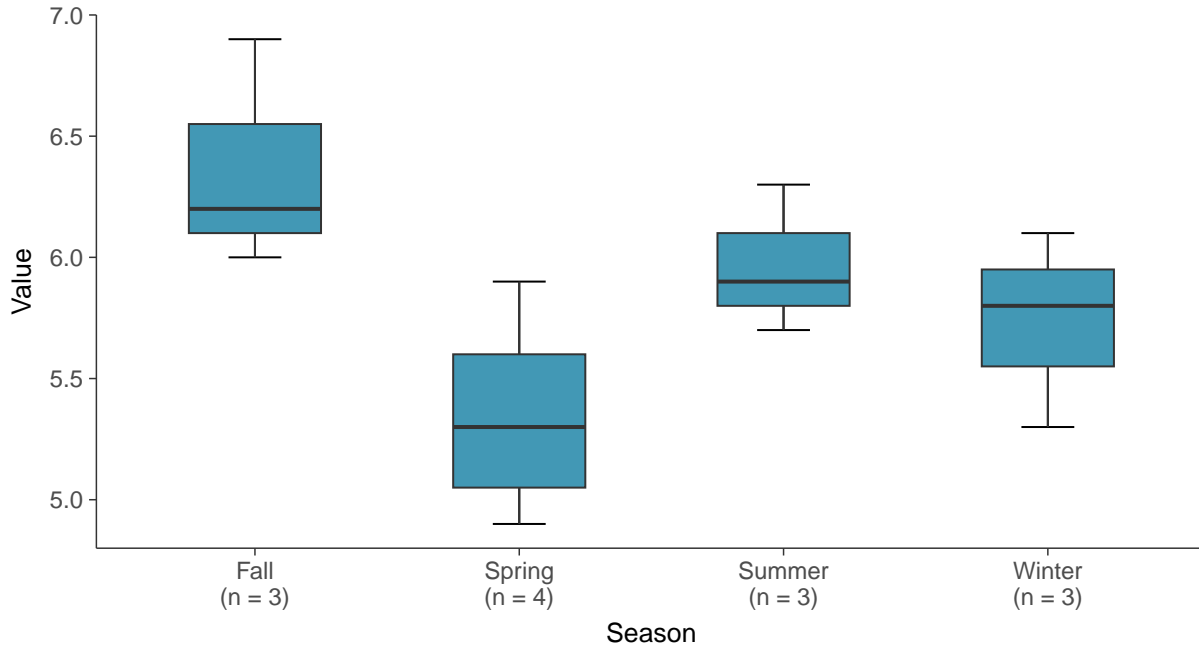
Boxplot

Boron, MW-09 (mg/L)



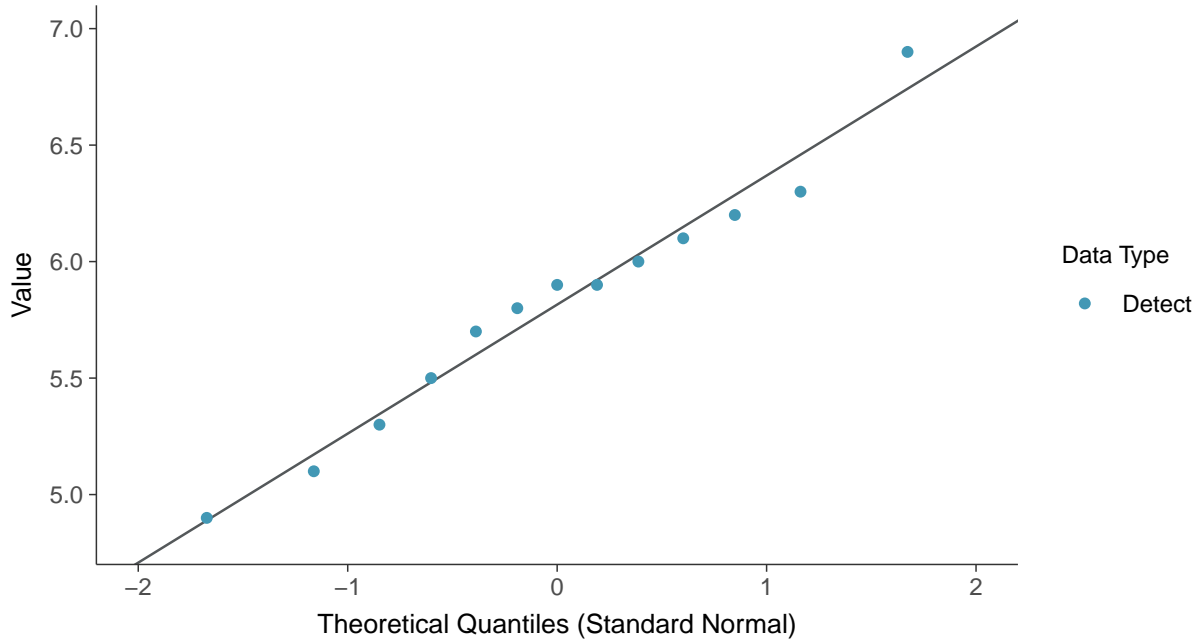
Boxplot by Season

Boron, MW-09 (mg/L)

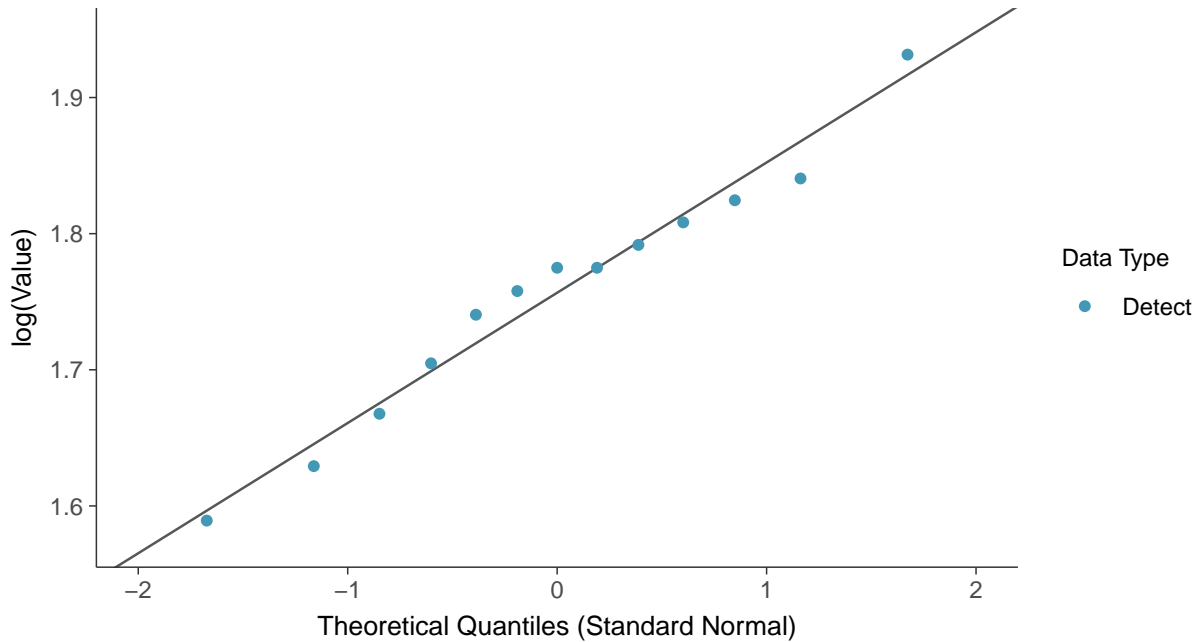




Normal Q-Q plot
Boron, MW-09 (mg/L)

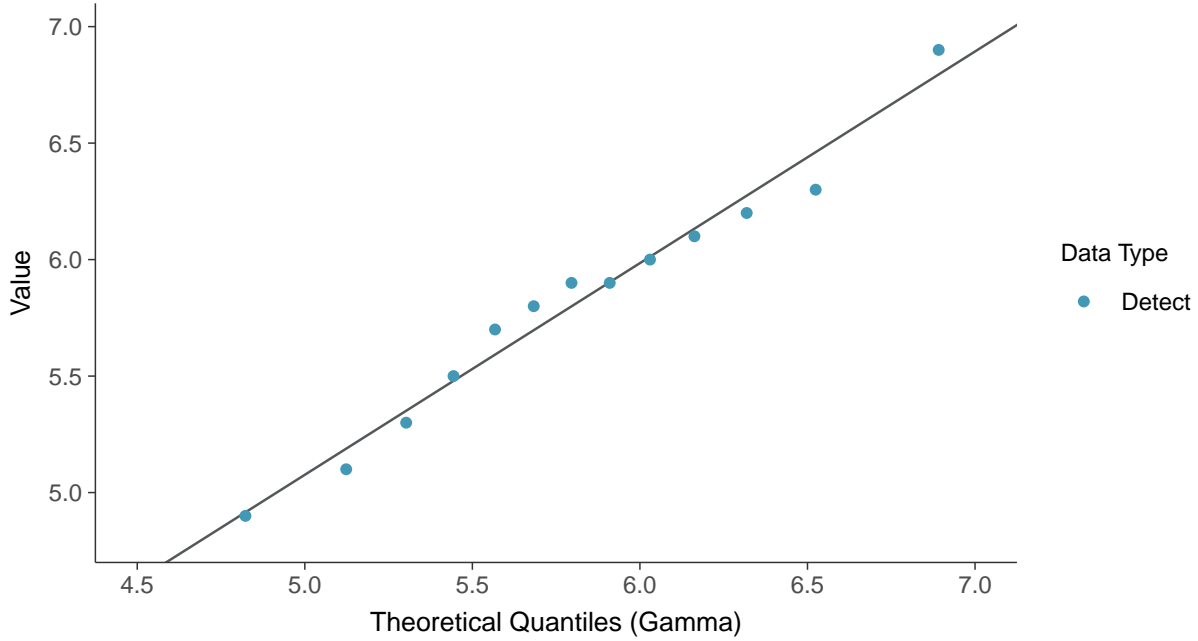


Lognormal Q-Q plot
Boron, MW-09 (mg/L)

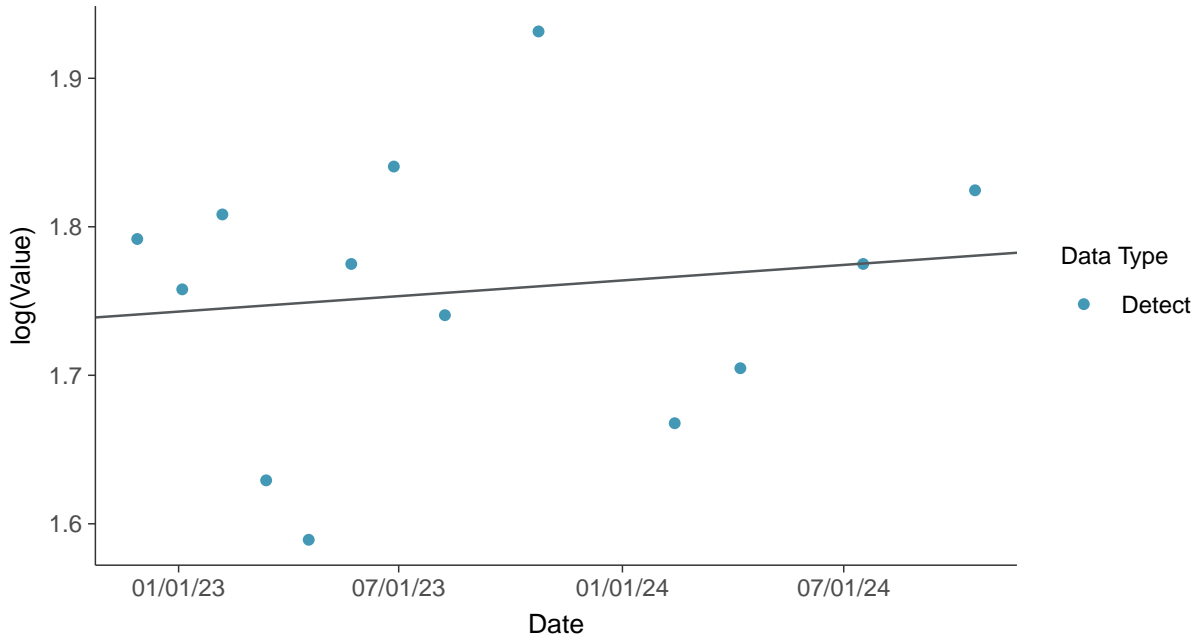




Gamma Q-Q plot
Boron, MW-09 (mg/L)



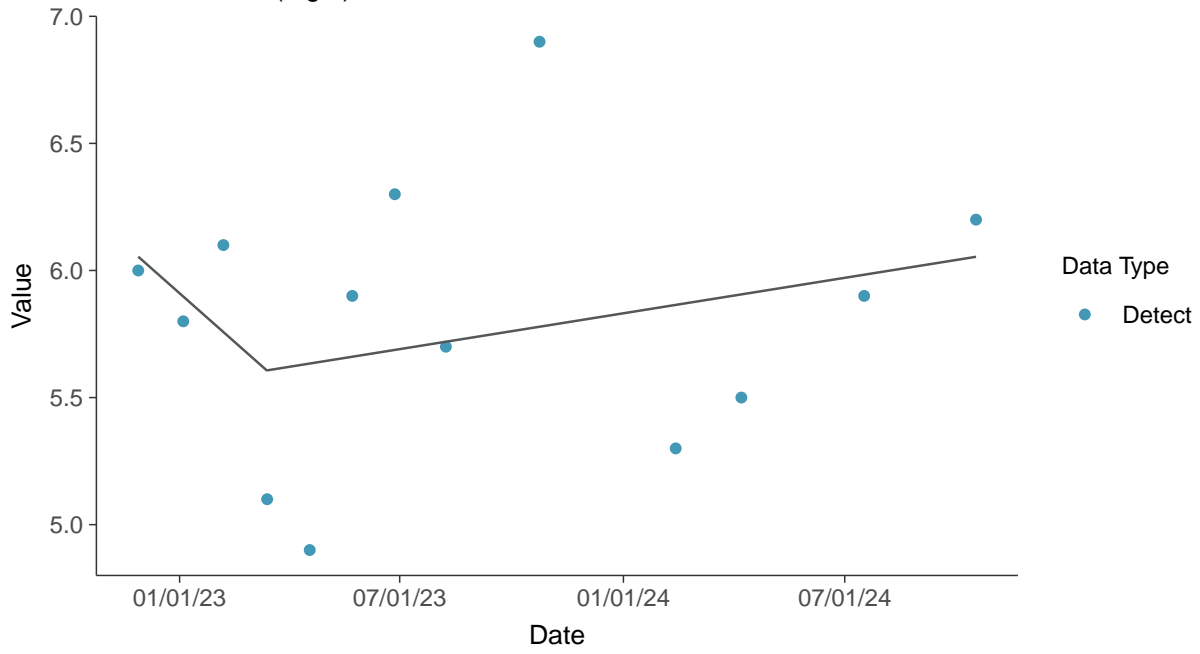
Trend Regression: Lognormal MLE
Boron, MW-09 (mg/L)





Trend Regression: Piecewise Linear-Linear

Boron, MW-09 (mg/L)



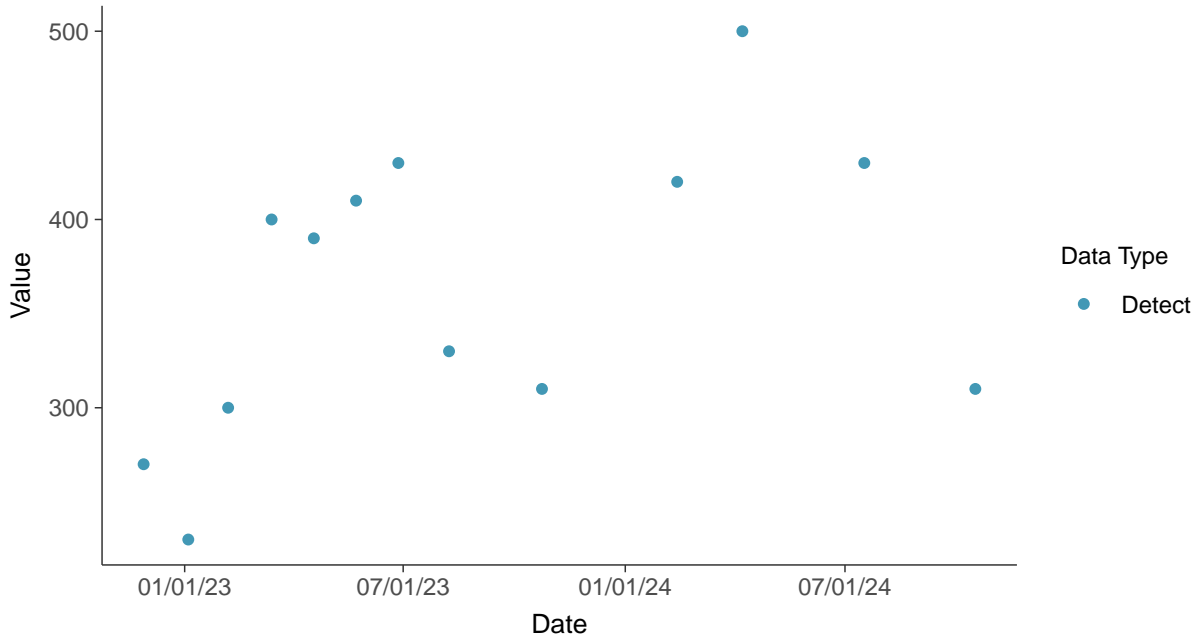


Appendix III: Calcium, MW-09

ID: 2_19_2_4_107

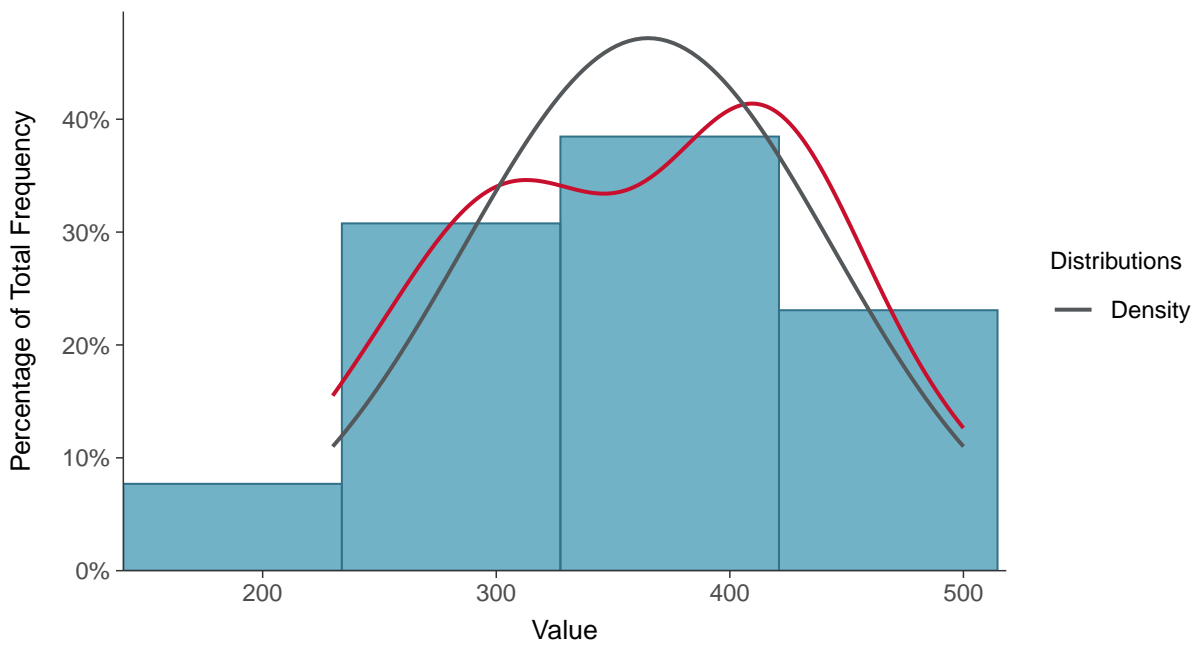
Scatter Plot

Calcium, MW-09 (mg/L)



Histogram

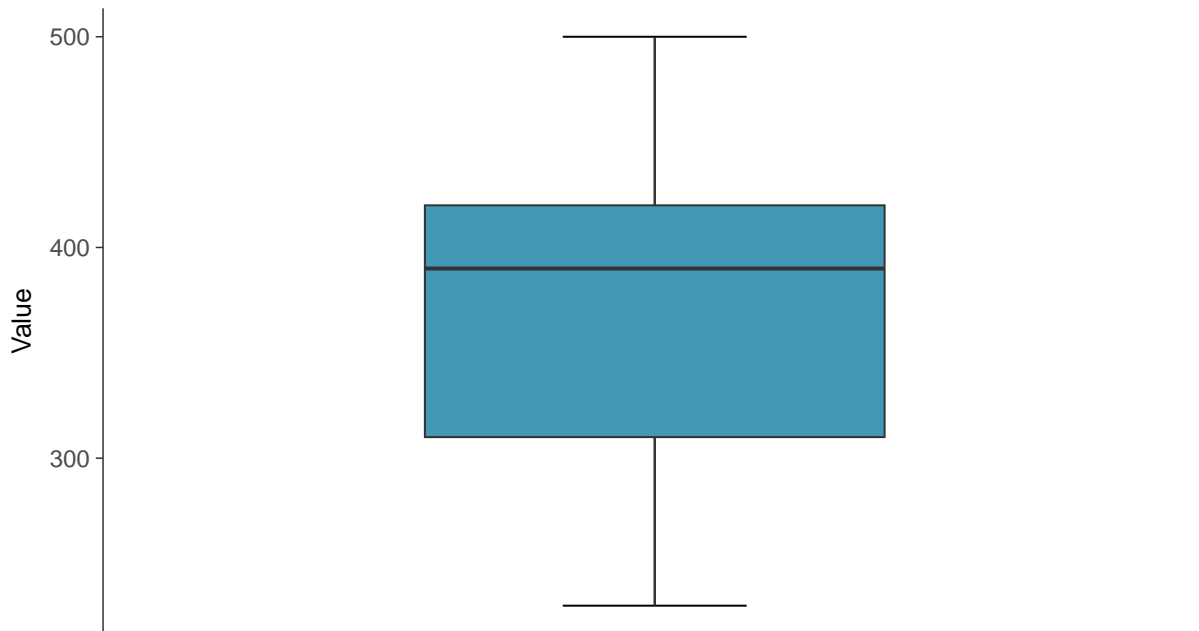
Calcium, MW-09 (mg/L)





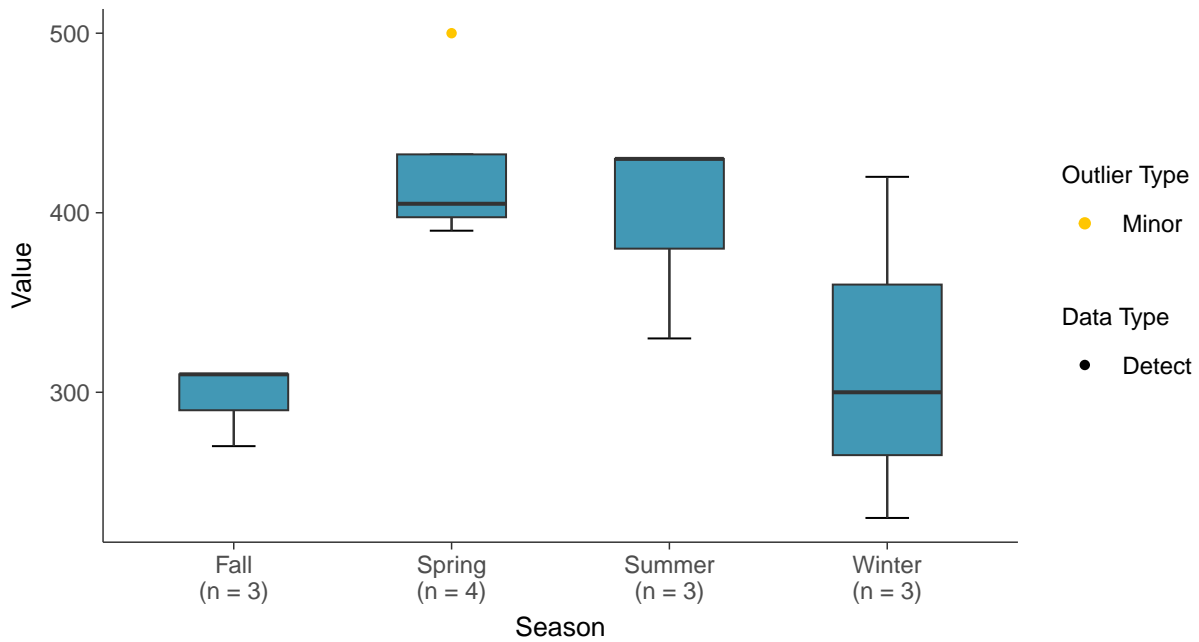
Boxplot

Calcium, MW-09 (mg/L)



Boxplot by Season

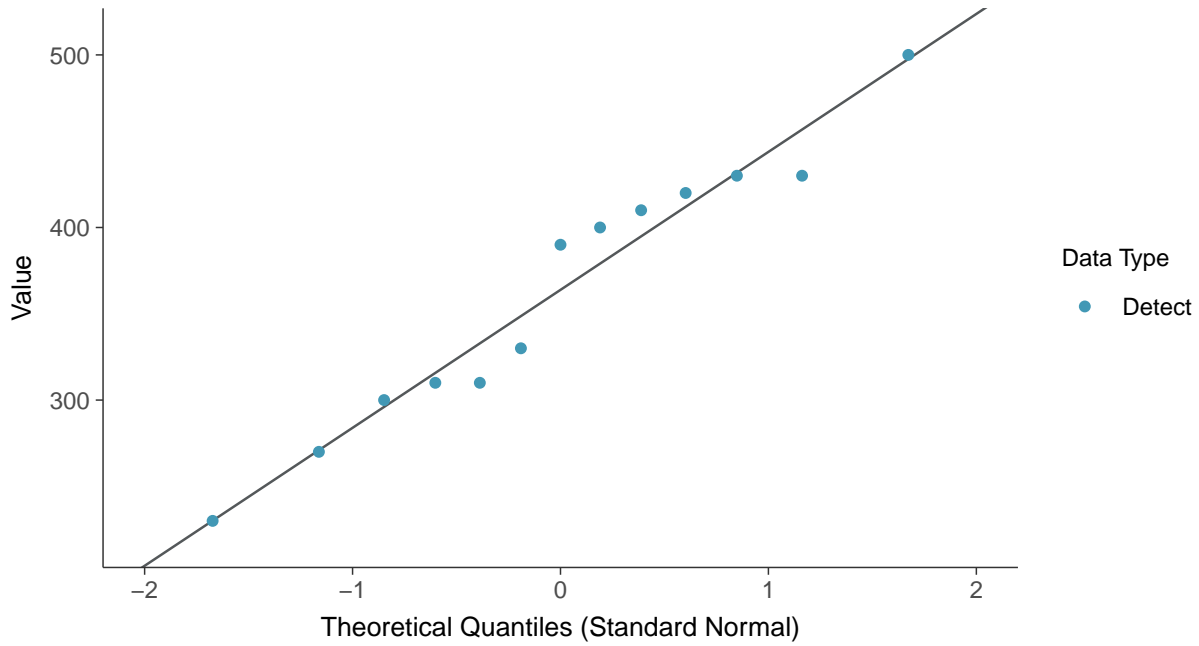
Calcium, MW-09 (mg/L)





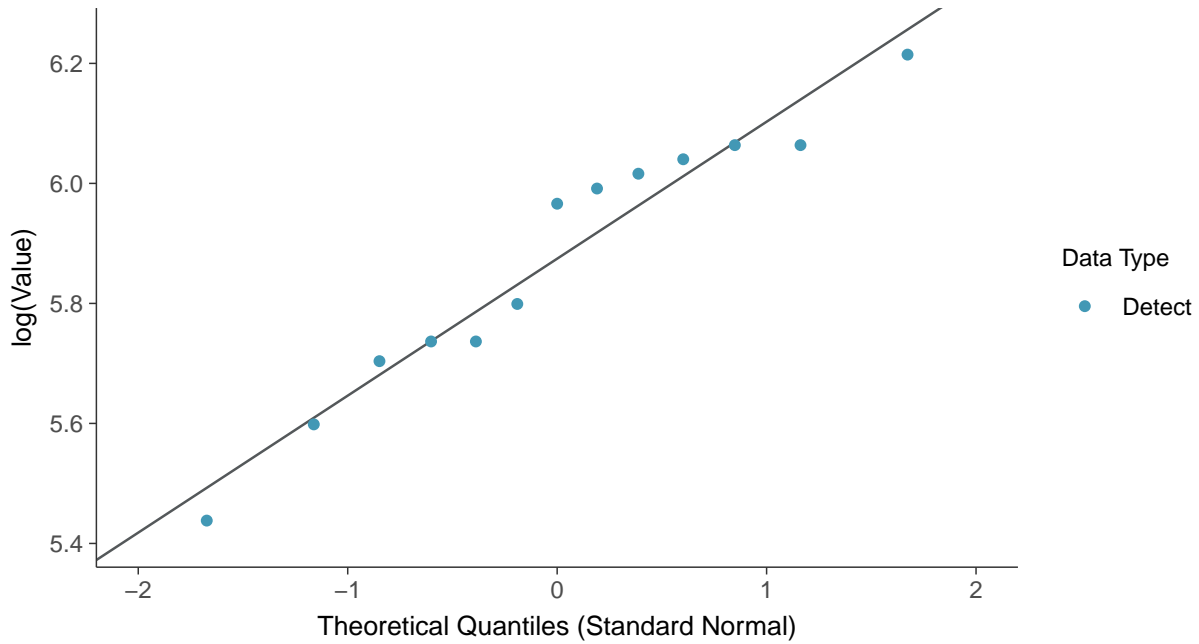
Normal Q-Q plot

Calcium, MW-09 (mg/L)



Lognormal Q-Q plot

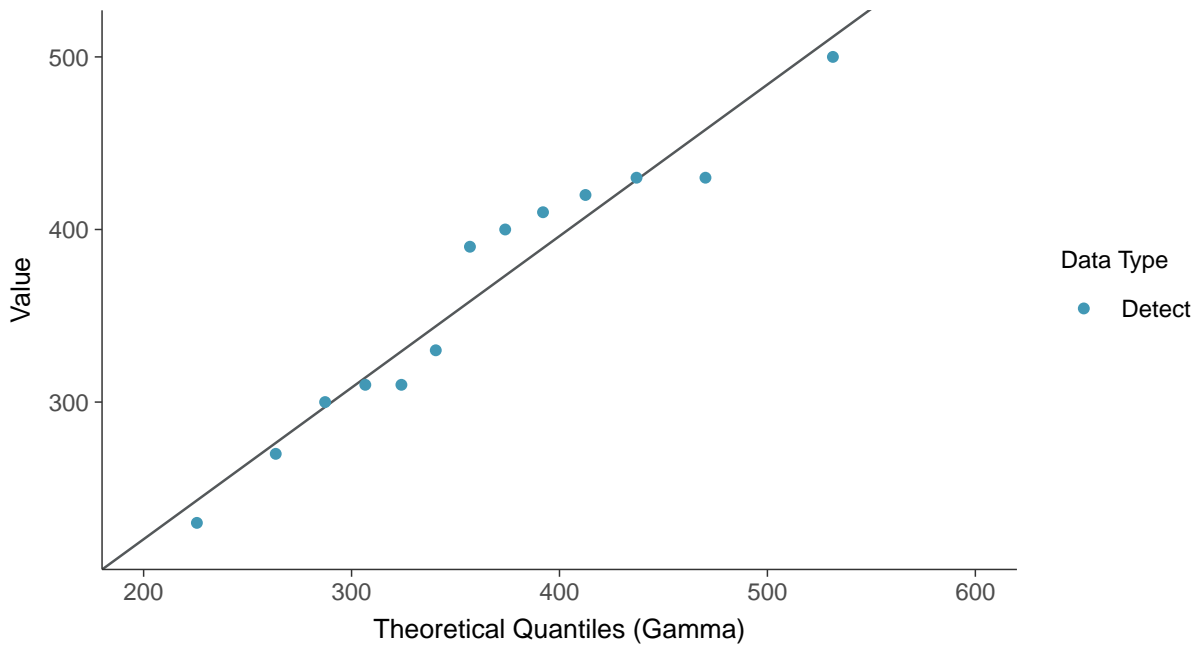
Calcium, MW-09 (mg/L)





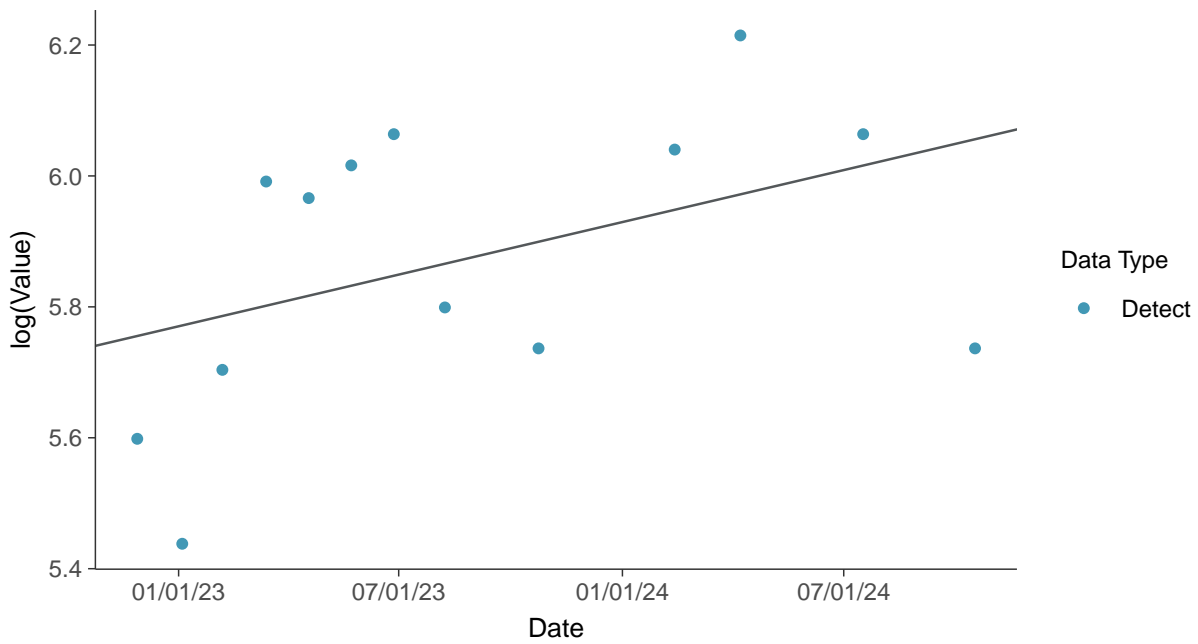
Gamma Q-Q plot

Calcium, MW-09 (mg/L)



Trend Regression: Lognormal MLE

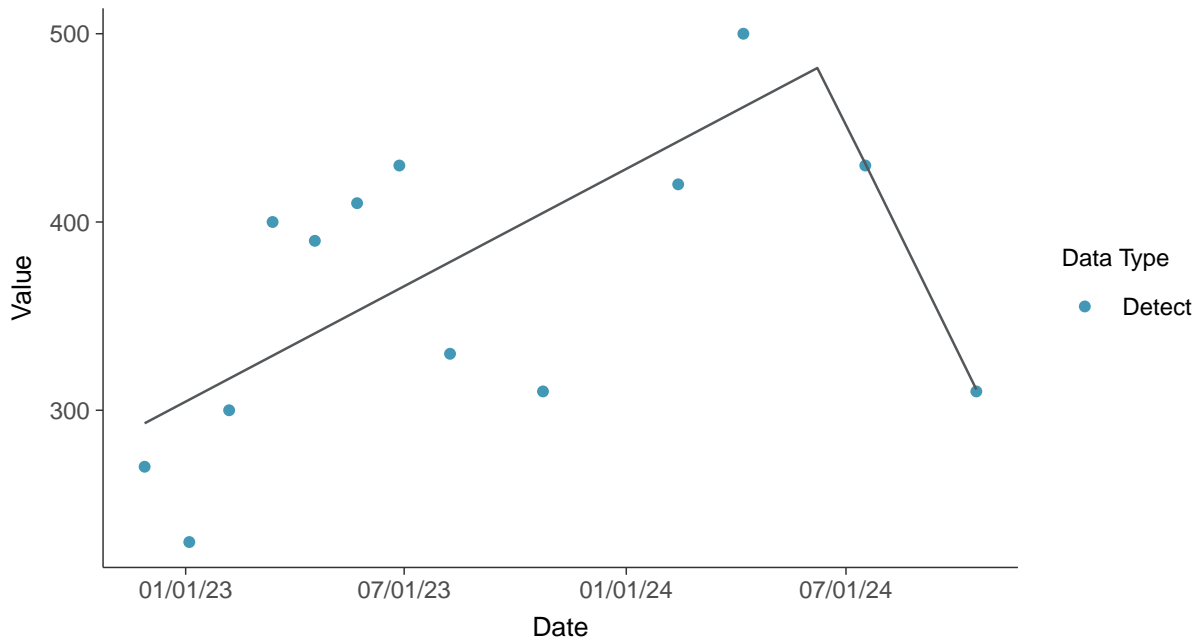
Calcium, MW-09 (mg/L)





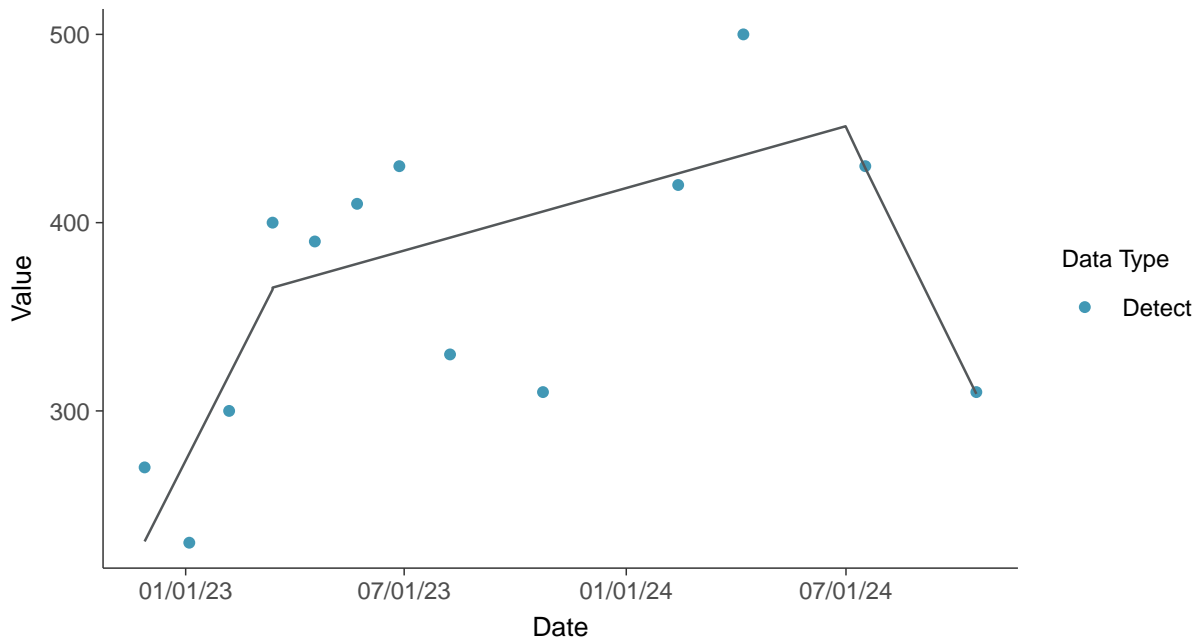
Trend Regression: Piecewise Linear-Linear

Calcium, MW-09 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Calcium, MW-09 (mg/L)



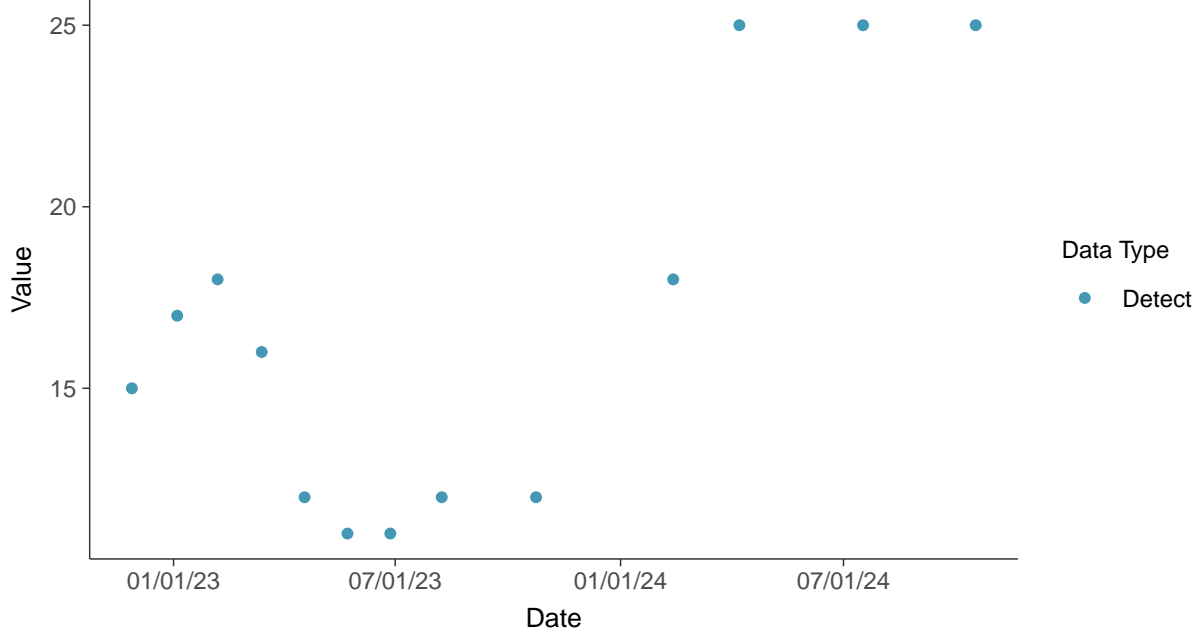


Appendix III: Chloride (as Cl), MW-09

ID: 2_19_2_4_108

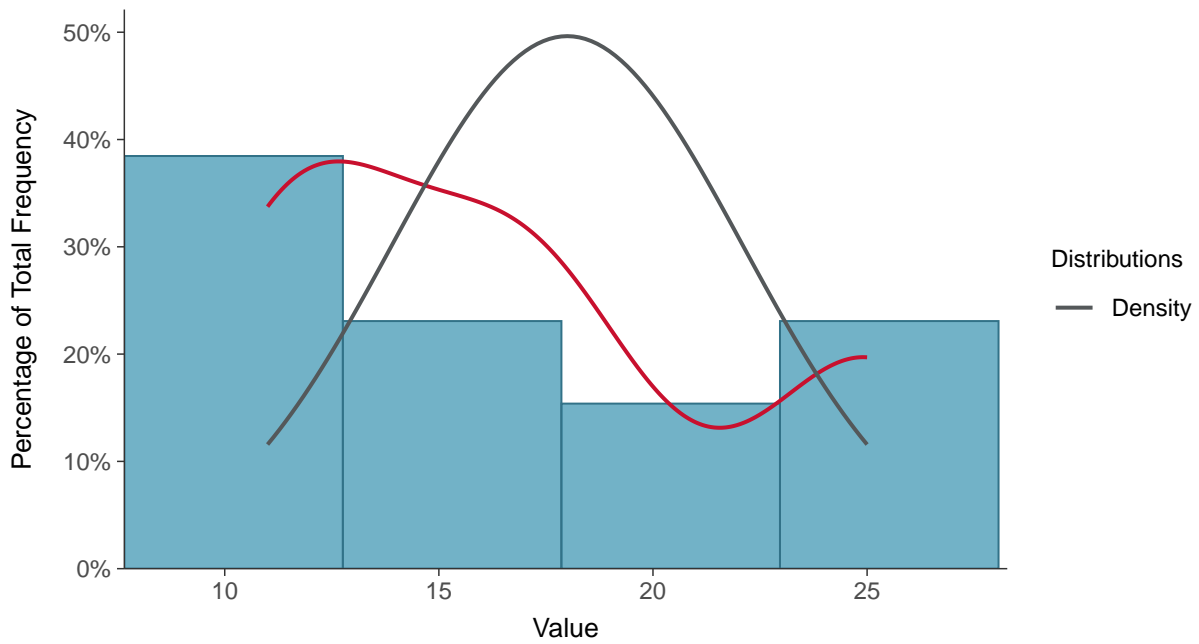
Scatter Plot

Chloride (as Cl), MW-09 (mg/L)



Histogram

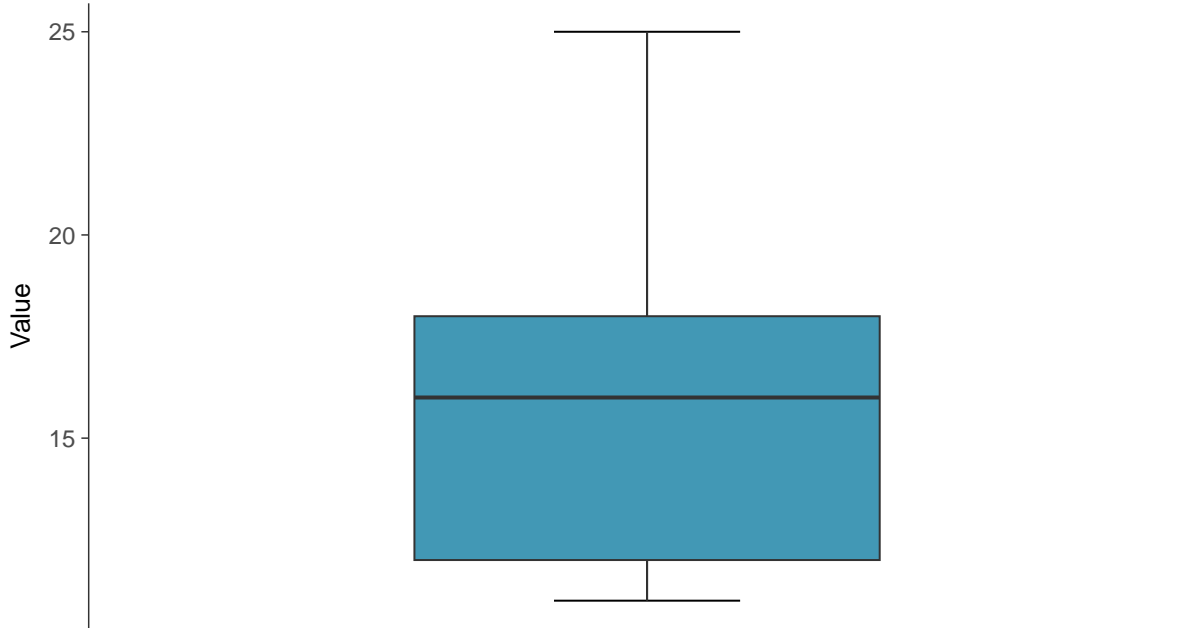
Chloride (as Cl), MW-09 (mg/L)





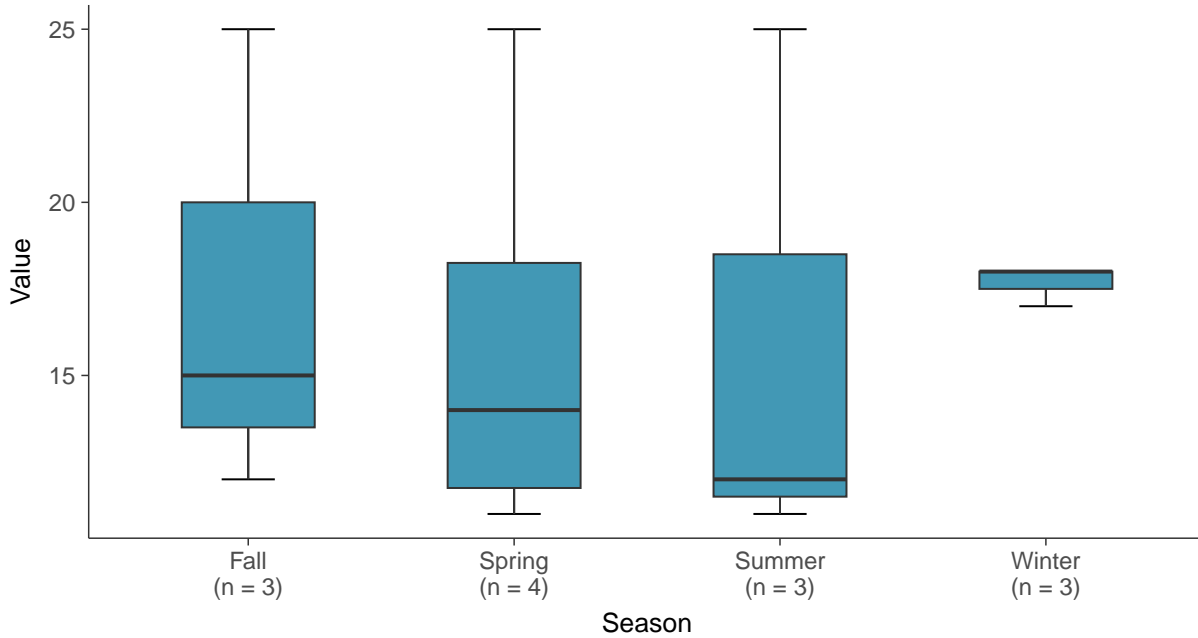
Boxplot

Chloride (as Cl), MW-09 (mg/L)



Boxplot by Season

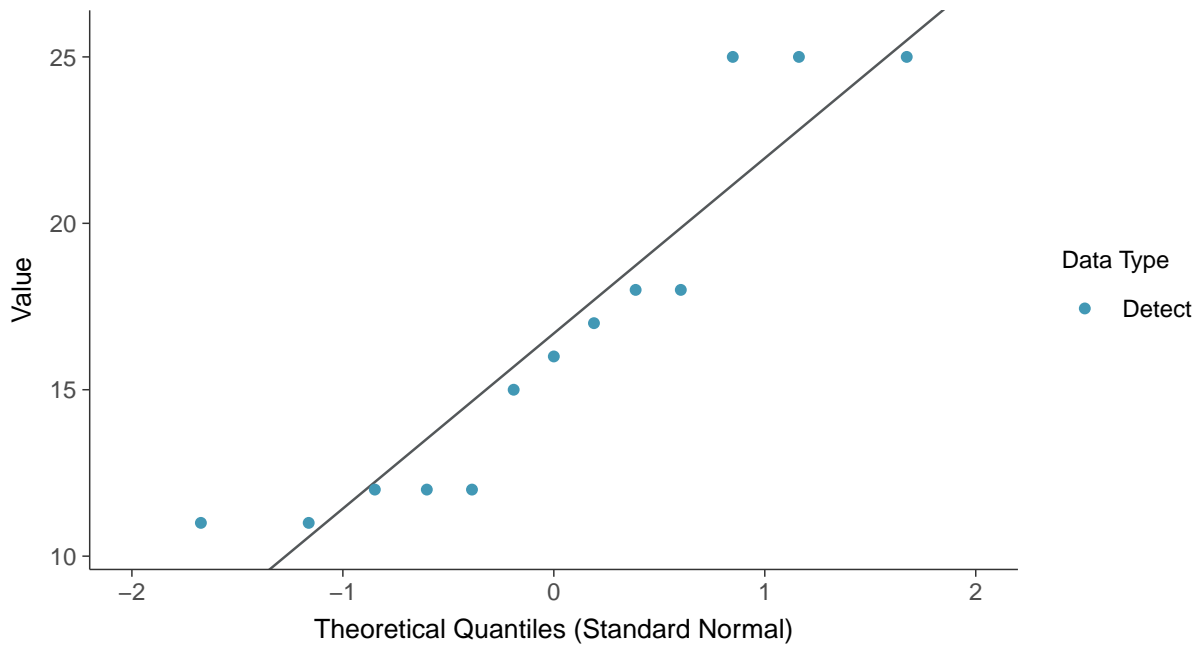
Chloride (as Cl), MW-09 (mg/L)





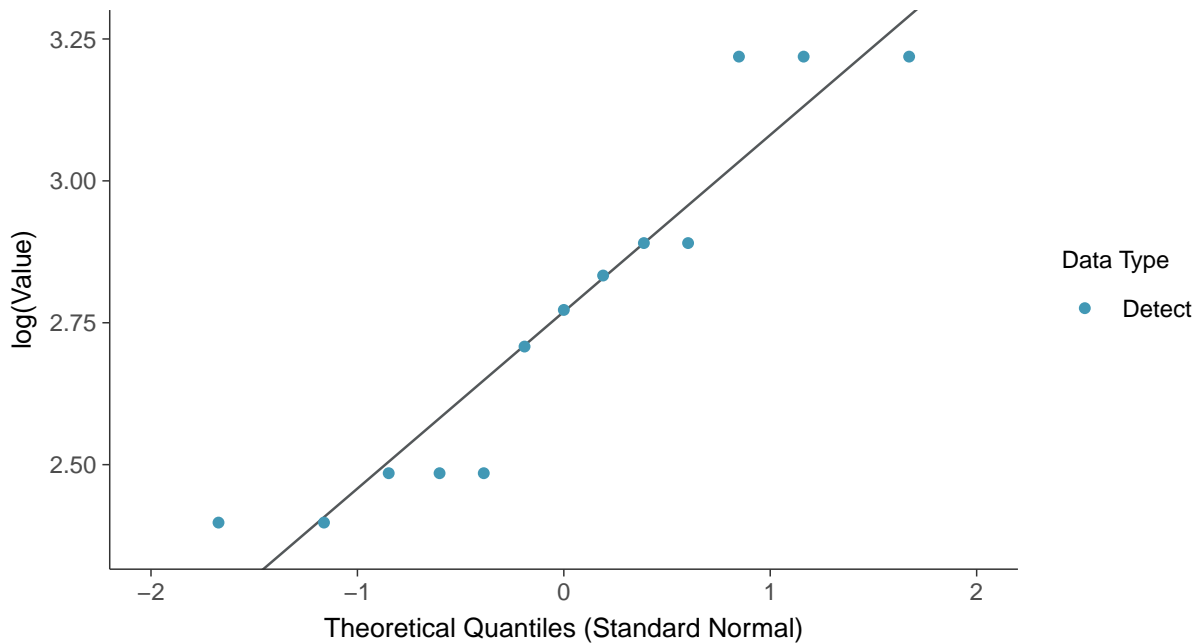
Normal Q-Q plot

Chloride (as Cl), MW-09 (mg/L)



Lognormal Q-Q plot

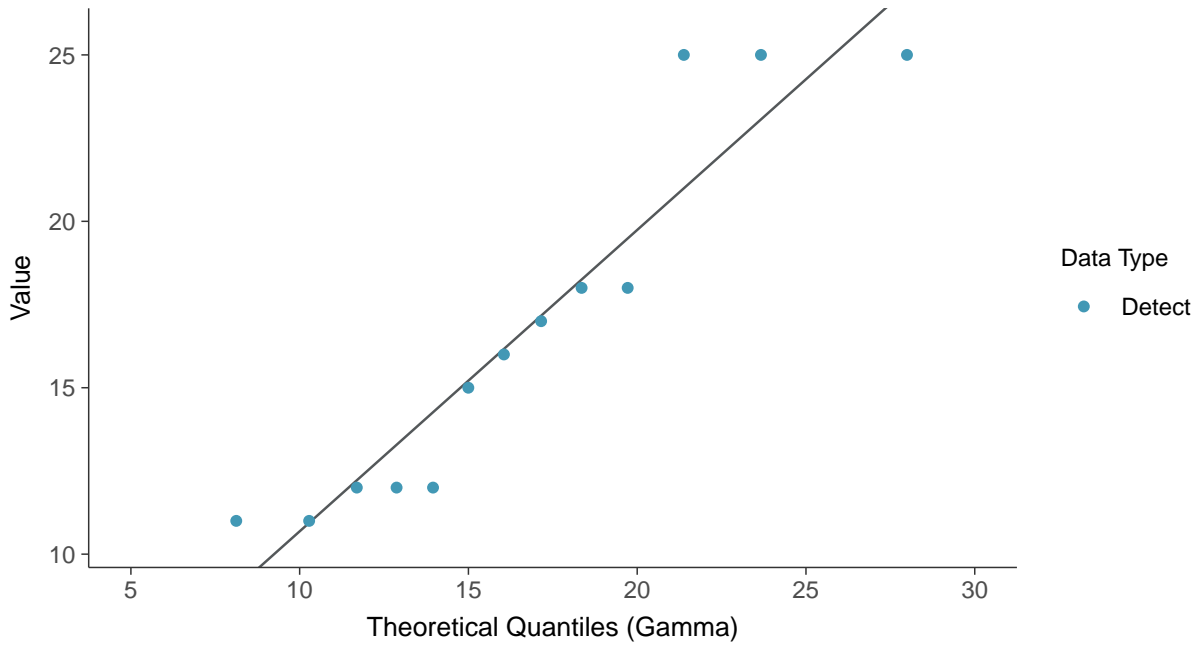
Chloride (as Cl), MW-09 (mg/L)





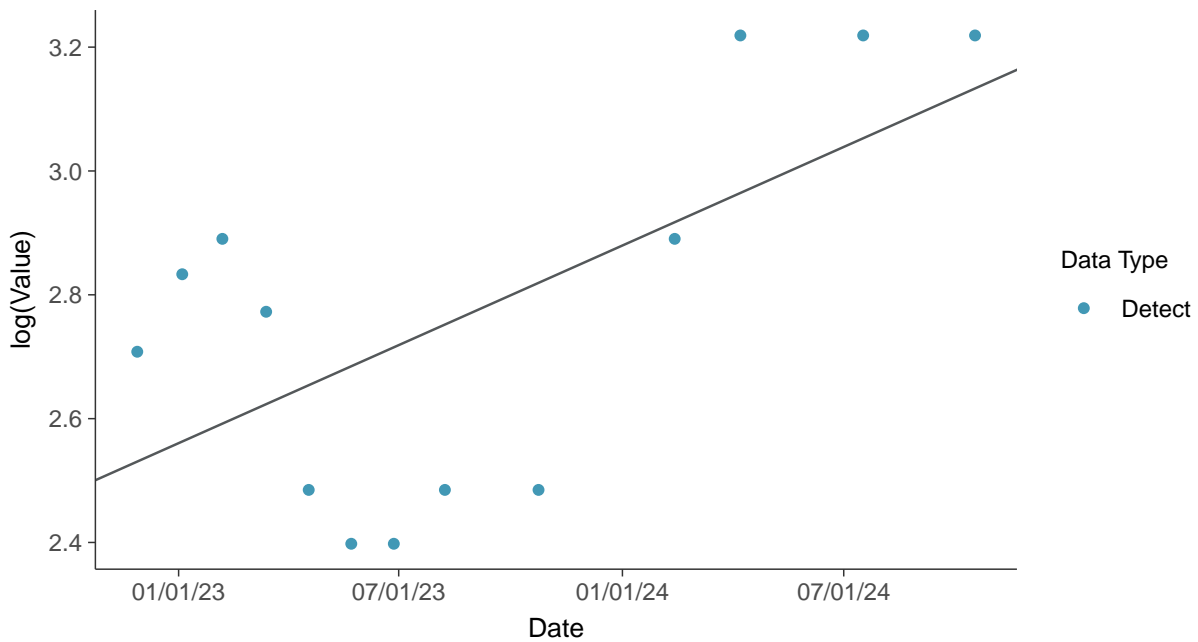
Gamma Q-Q plot

Chloride (as Cl), MW-09 (mg/L)



Trend Regression: Lognormal MLE

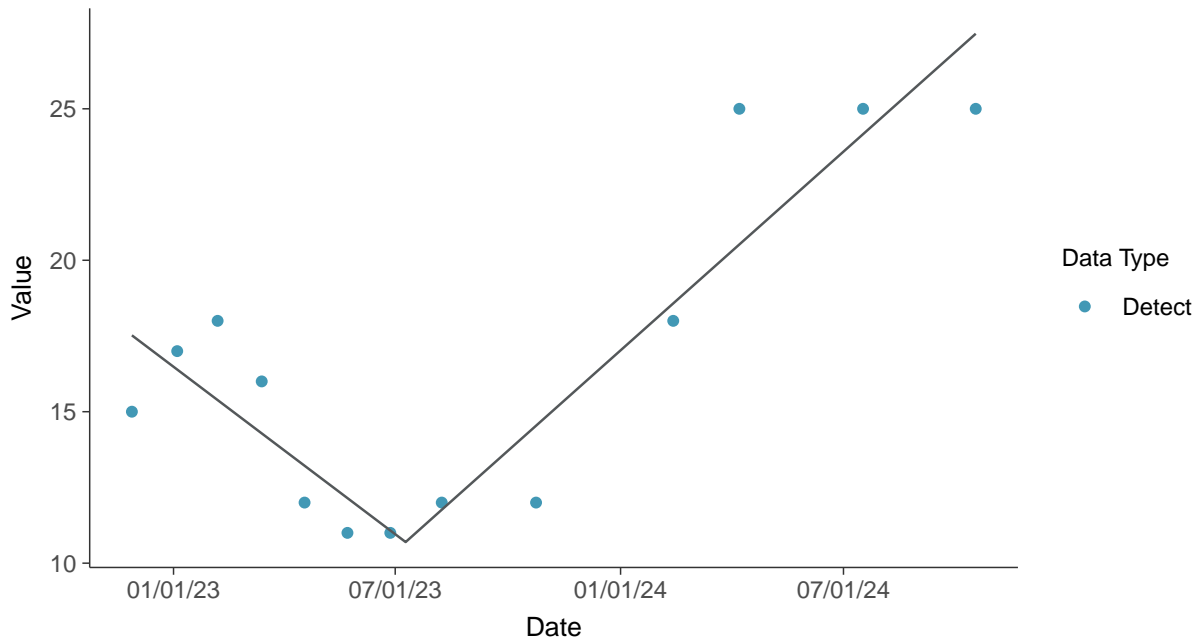
Chloride (as Cl), MW-09 (mg/L)





Trend Regression: Piecewise Linear-Linear

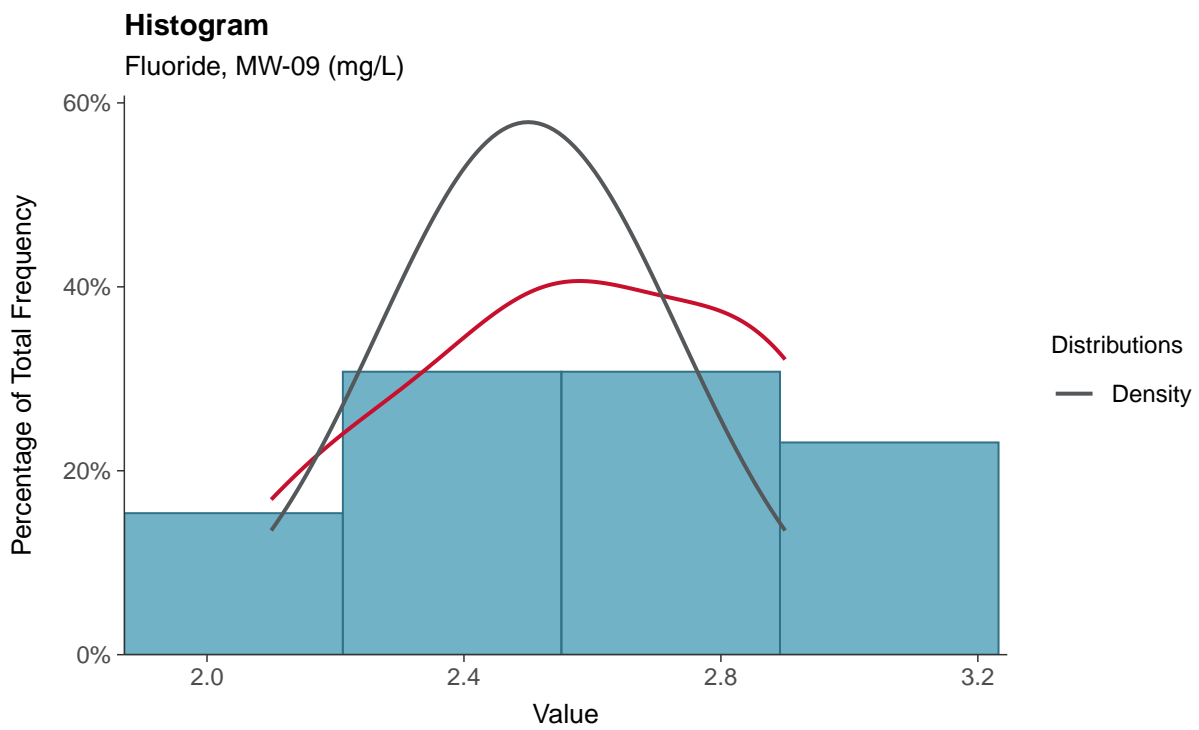
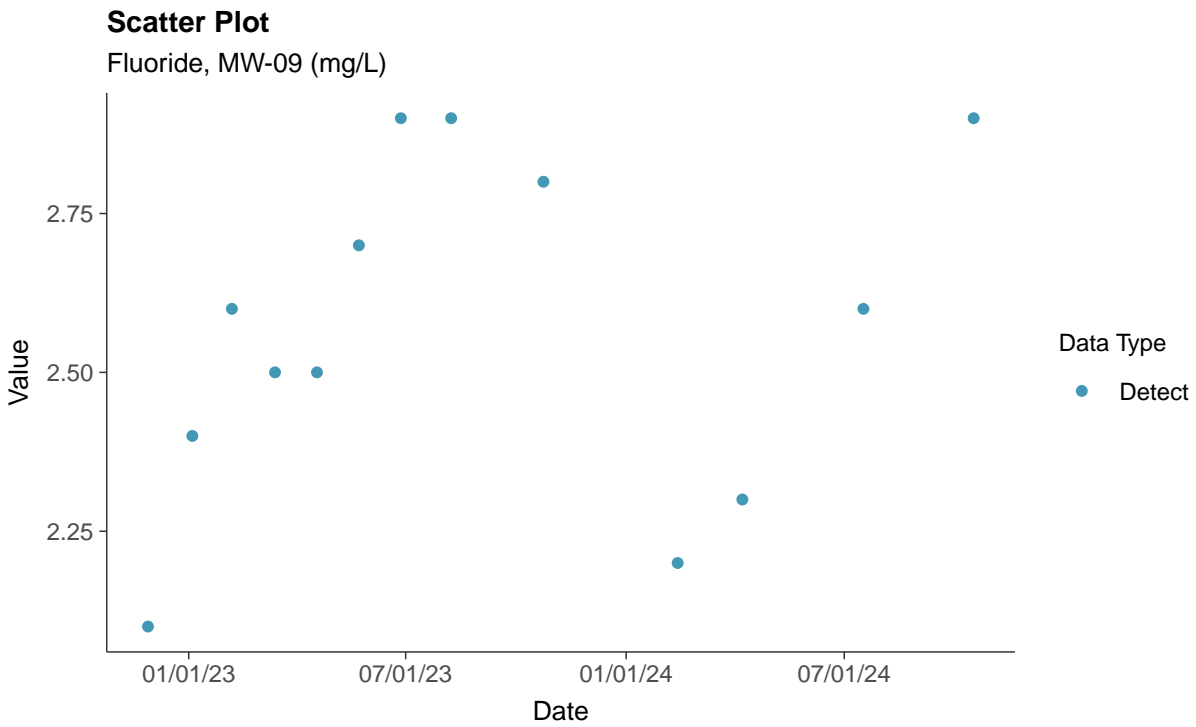
Chloride (as Cl), MW-09 (mg/L)





Appendix III: Fluoride, MW-09

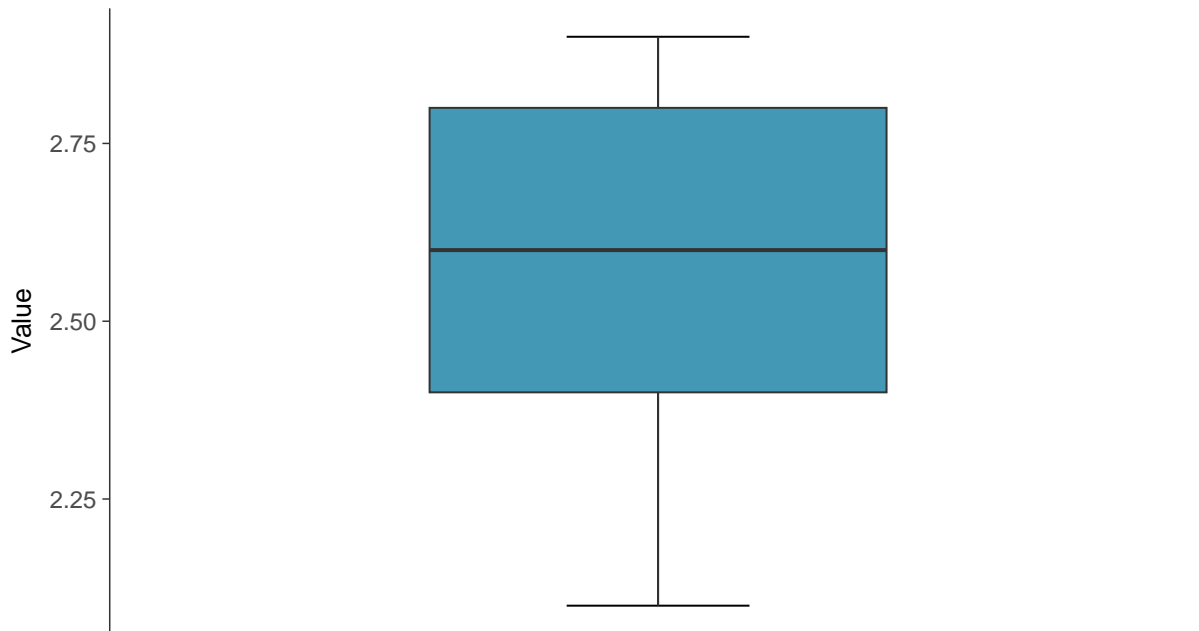
ID: 2_19_2_4_112





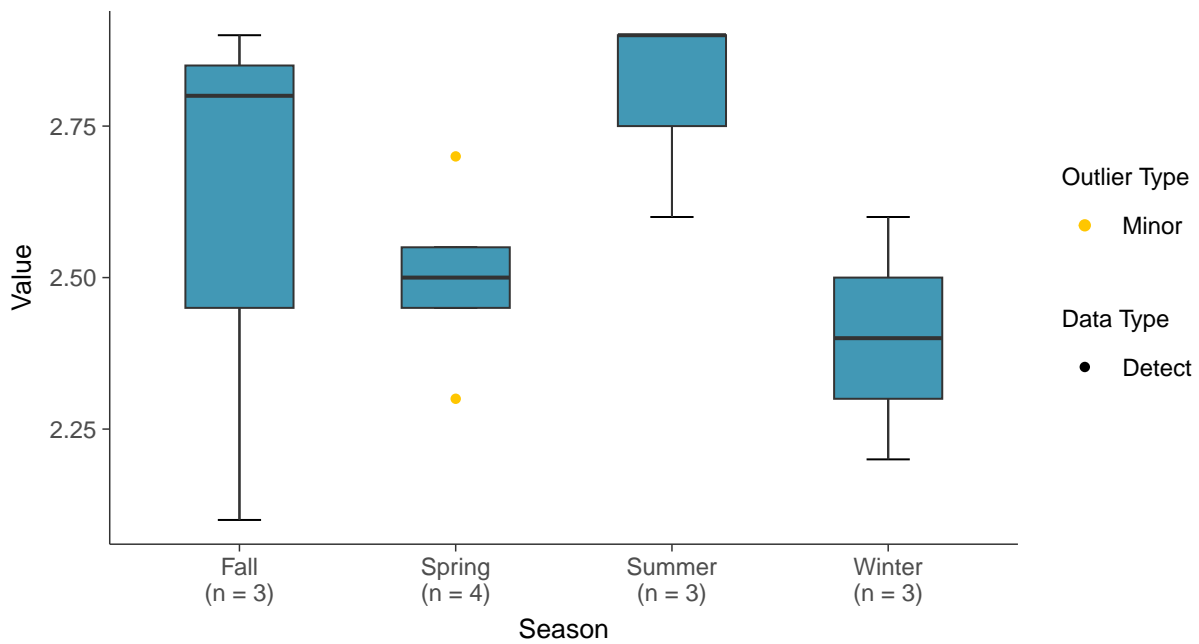
Boxplot

Fluoride, MW-09 (mg/L)



Boxplot by Season

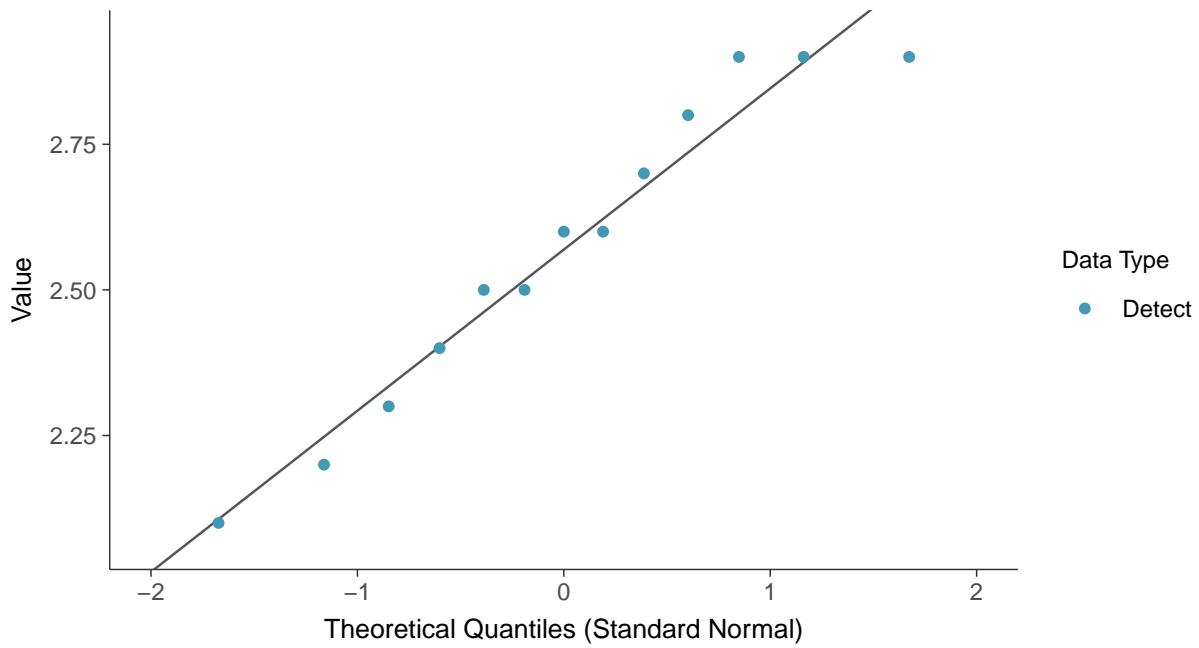
Fluoride, MW-09 (mg/L)





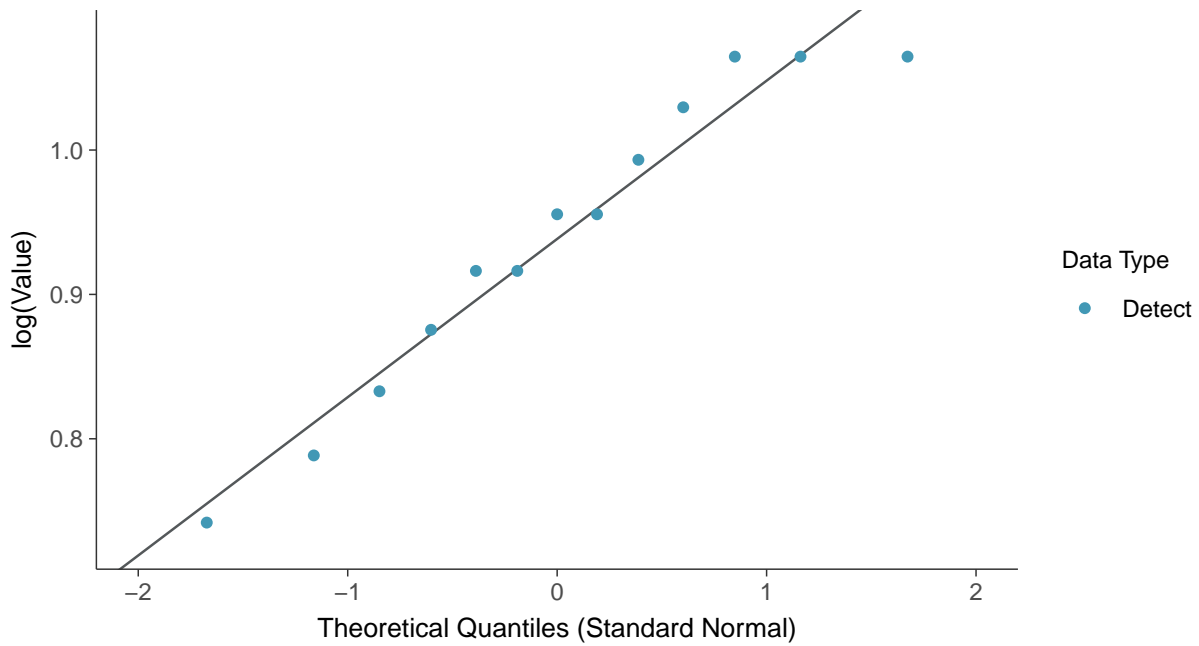
Normal Q-Q plot

Fluoride, MW-09 (mg/L)



Lognormal Q-Q plot

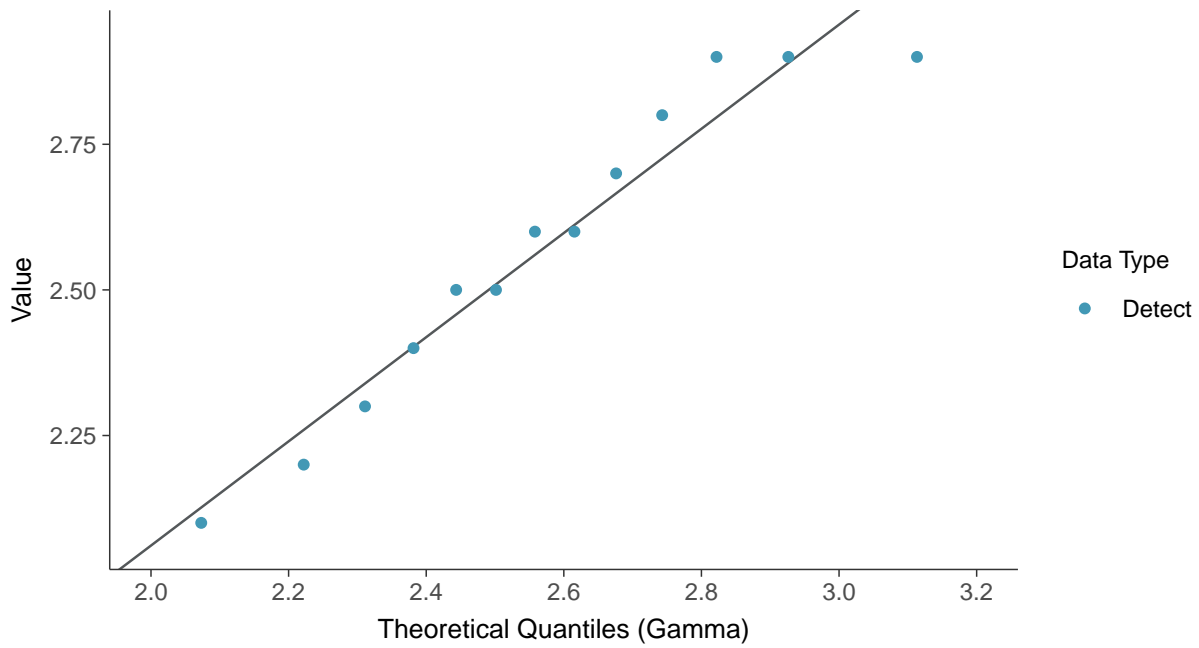
Fluoride, MW-09 (mg/L)





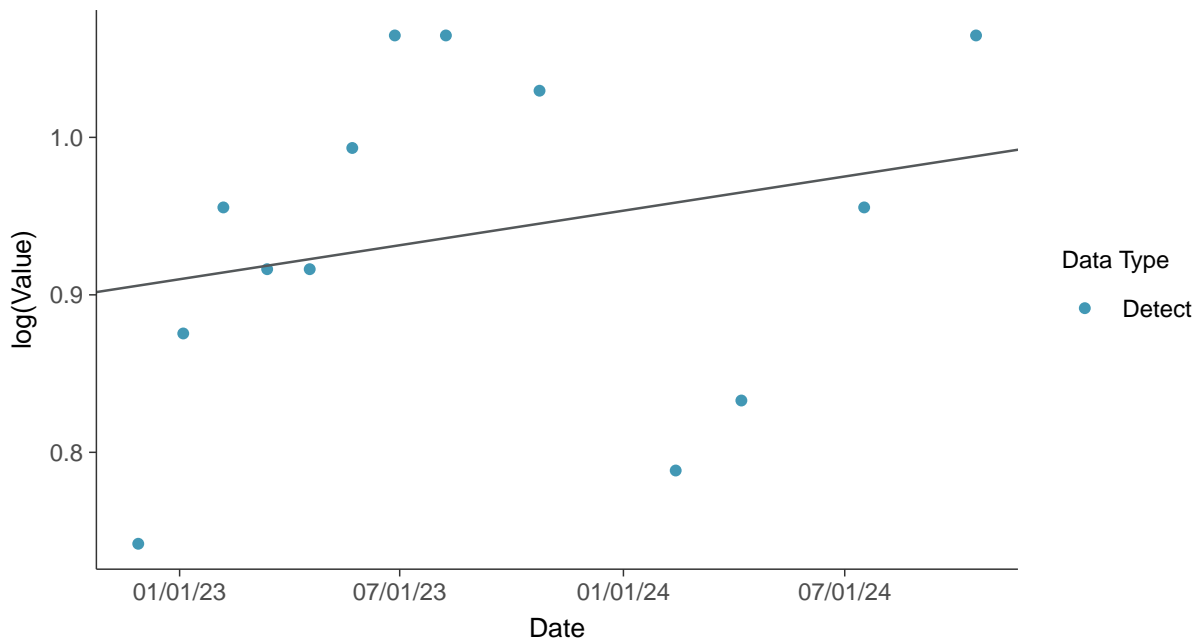
Gamma Q-Q plot

Fluoride, MW-09 (mg/L)



Trend Regression: Lognormal MLE

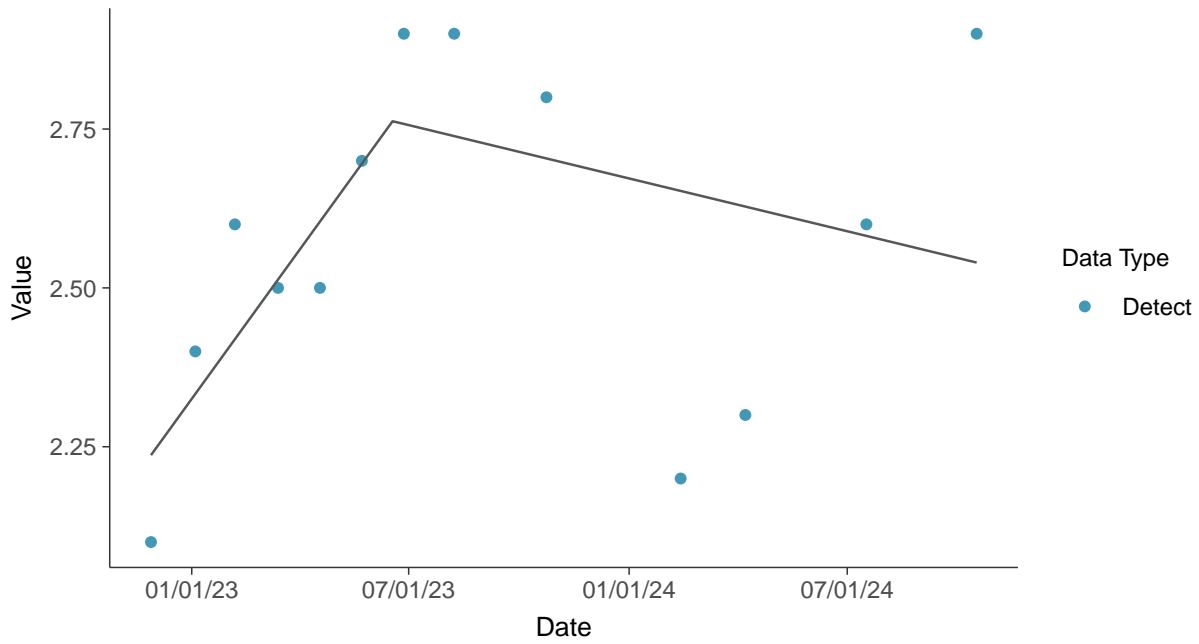
Fluoride, MW-09 (mg/L)





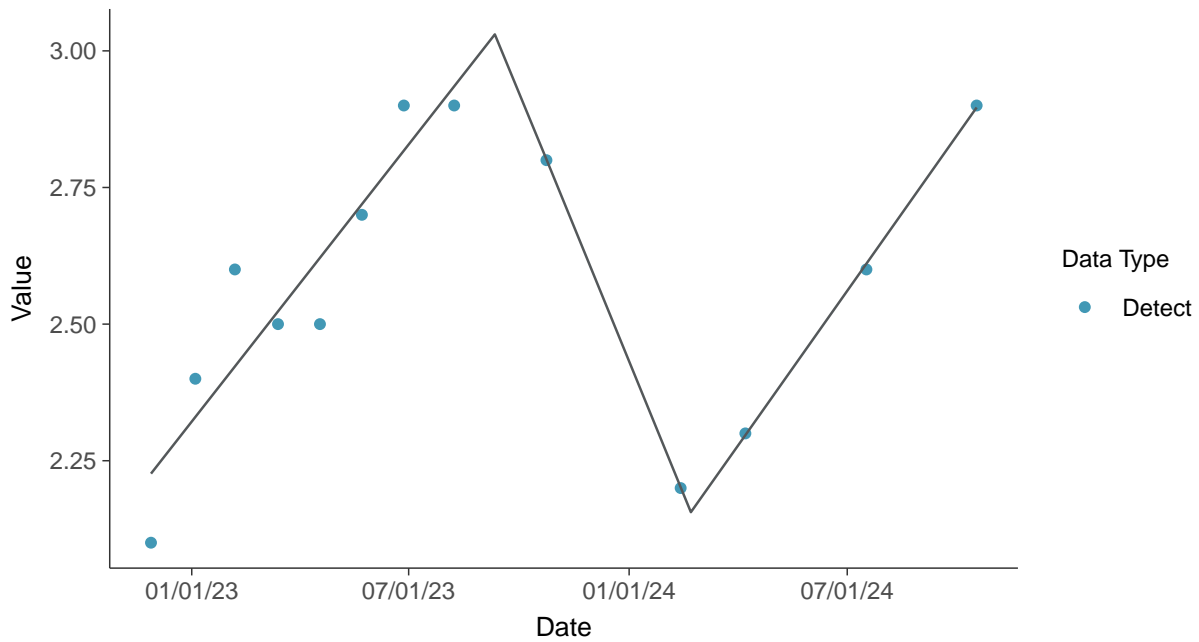
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-09 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

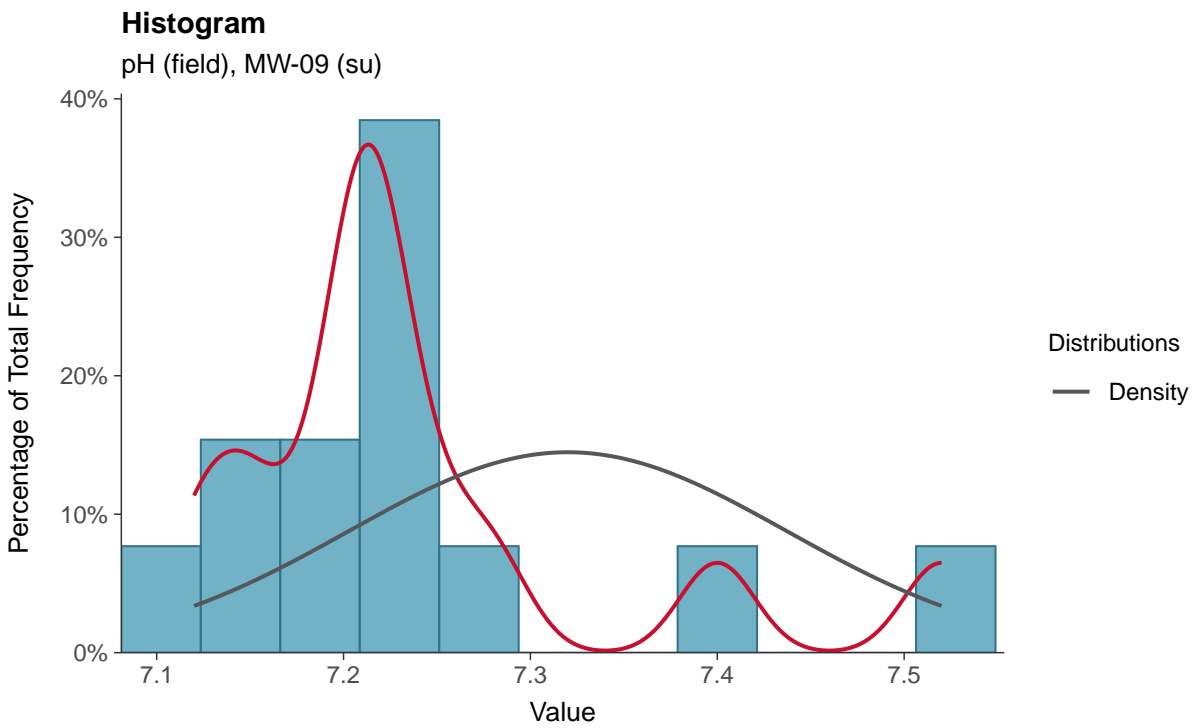
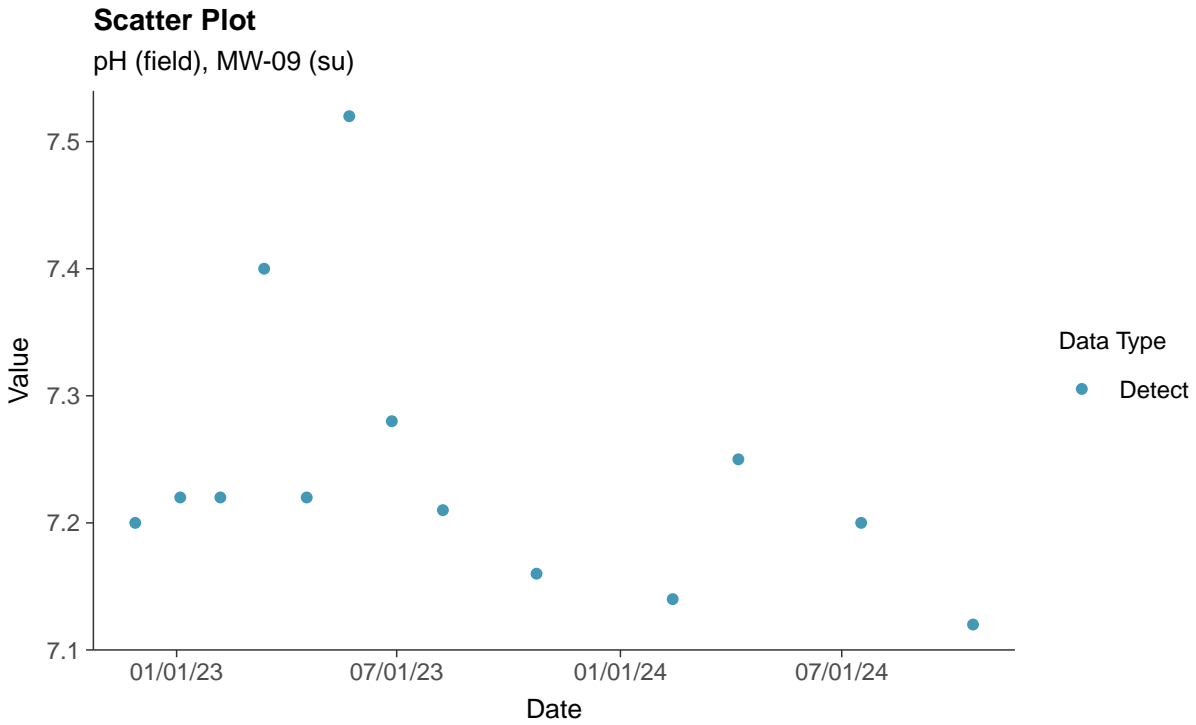
Fluoride, MW-09 (mg/L)





Appendix III: pH (field), MW-09

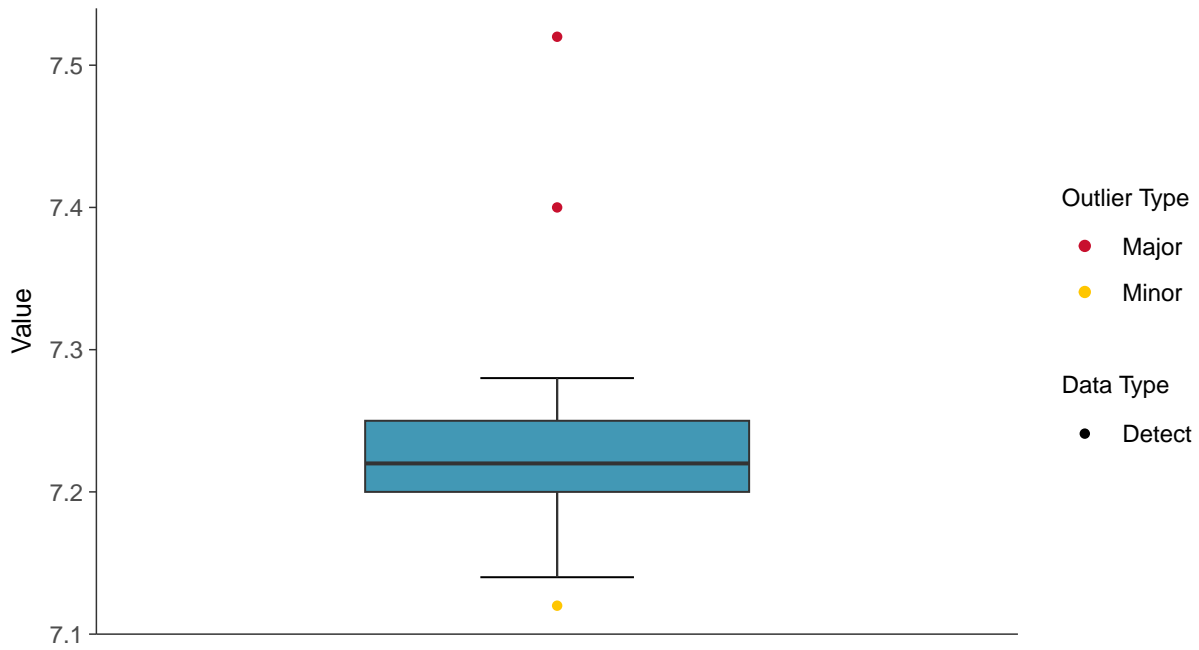
ID: 2_19_2_4_120





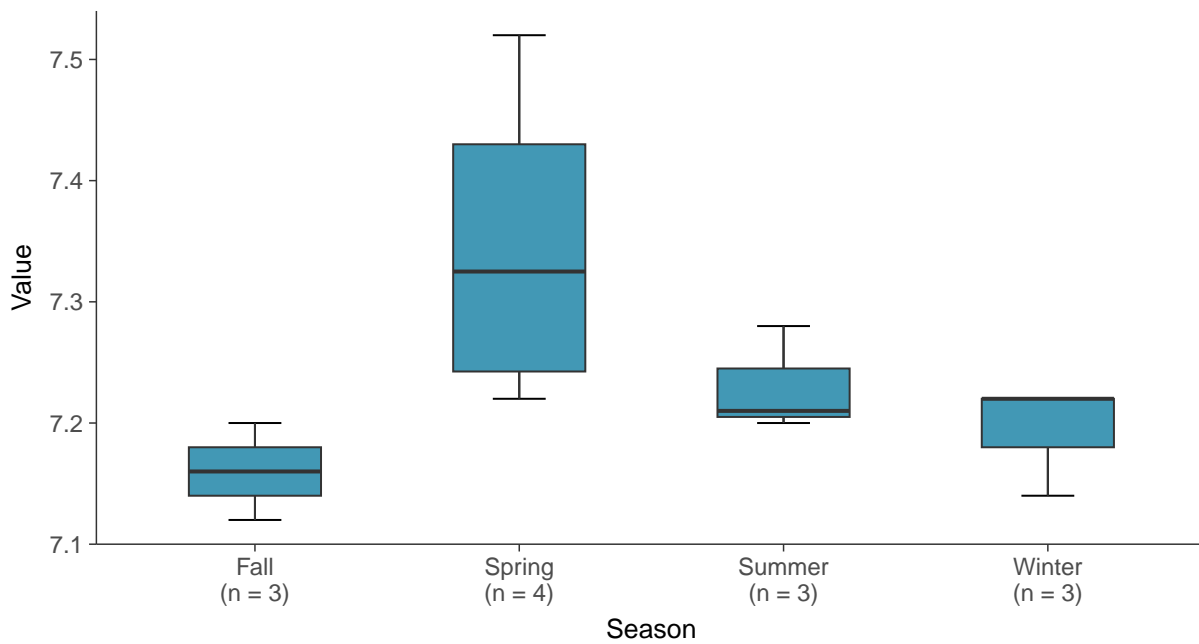
Boxplot

pH (field), MW-09 (su)



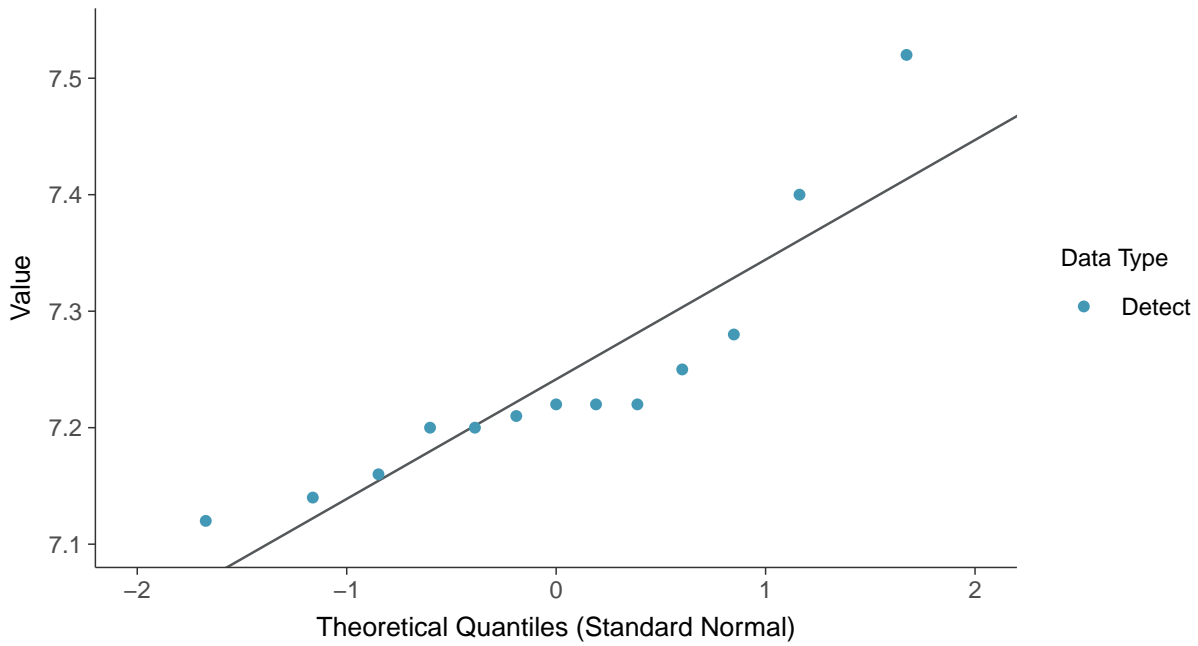
Boxplot by Season

pH (field), MW-09 (su)

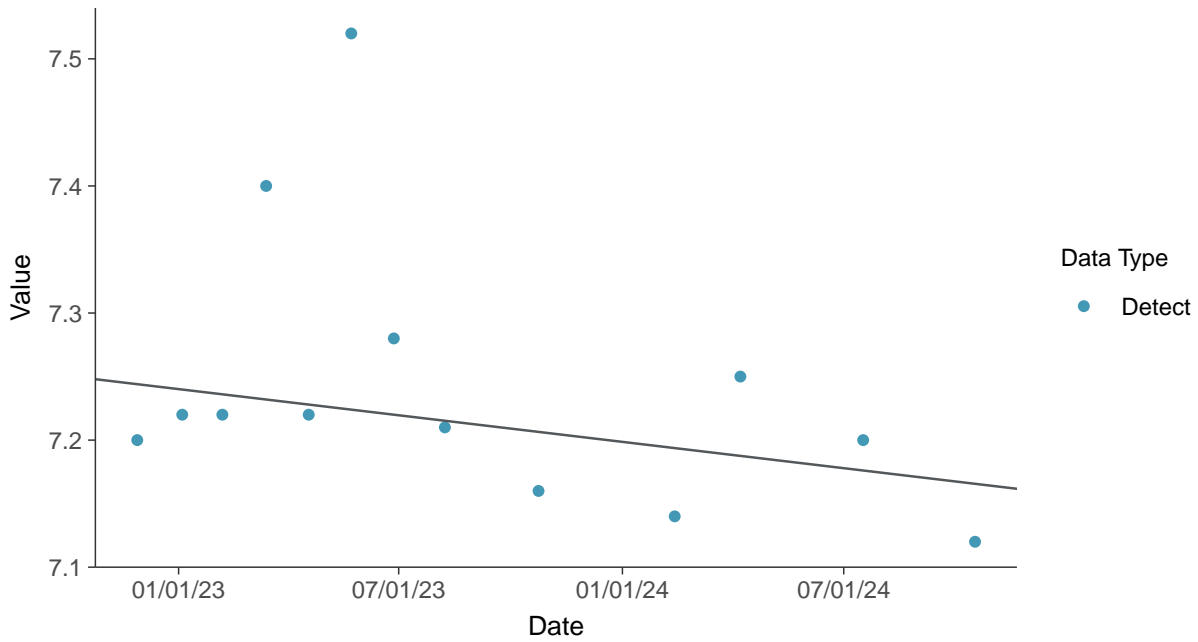




Normal Q-Q plot
pH (field), MW-09 (su)



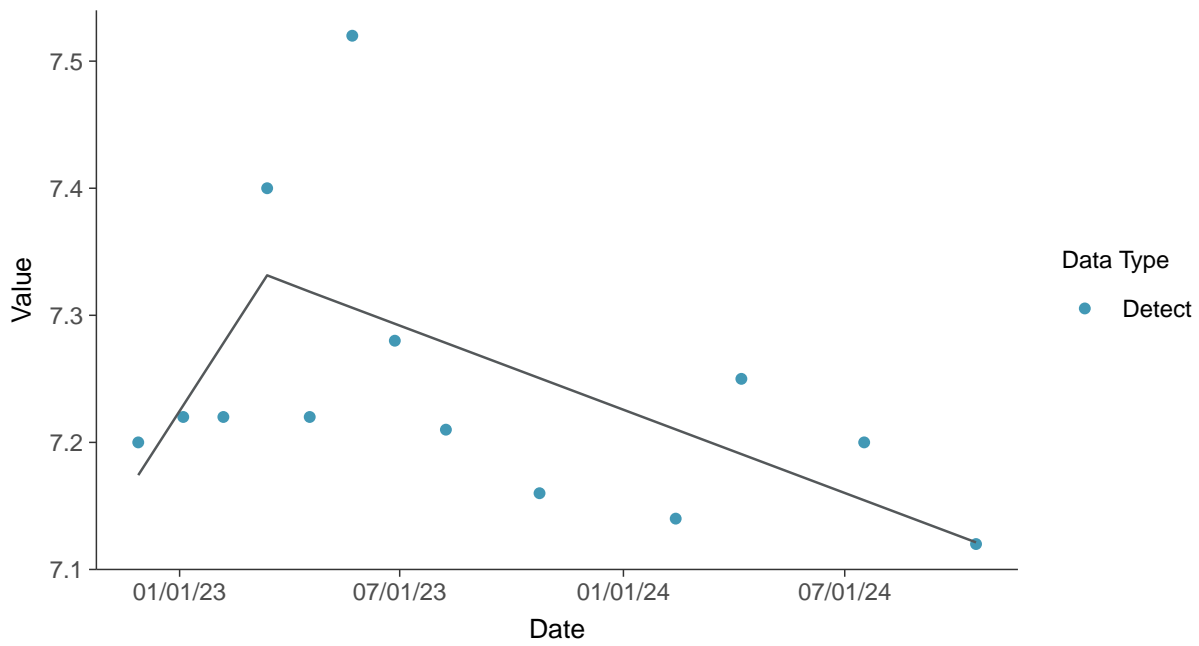
Trend Regression: Mann-Kendall/Theil-Sen Estimate
pH (field), MW-09 (su)





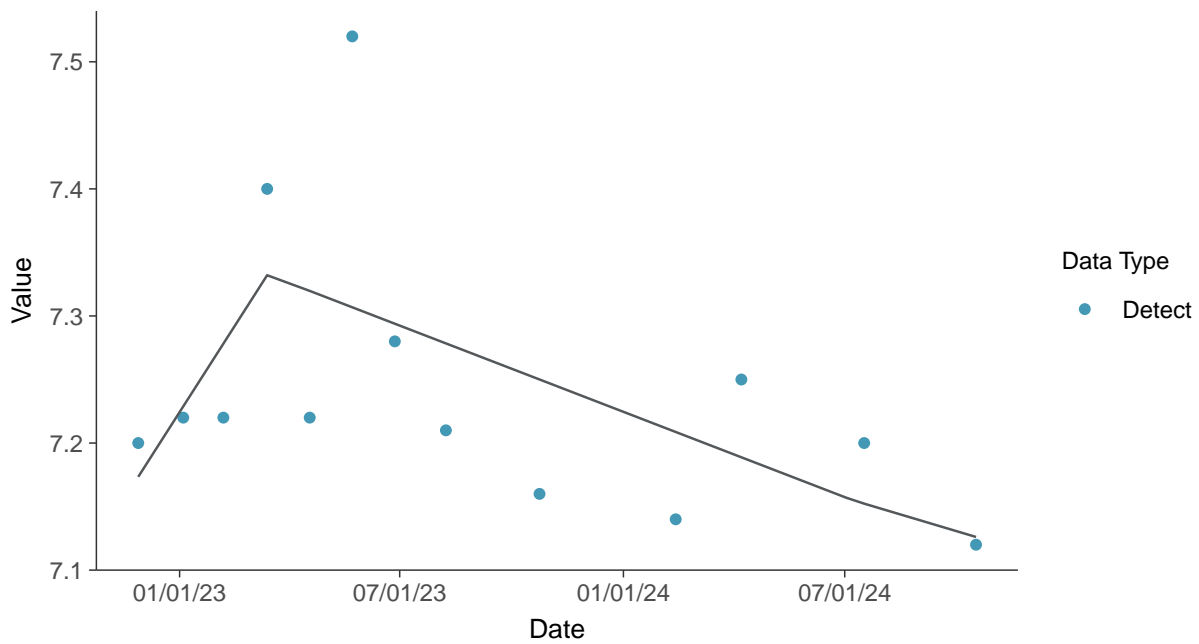
Trend Regression: Piecewise Linear-Linear

pH (field), MW-09 (su)



Trend Regression: Piecewise Linear-Linear-Linear

pH (field), MW-09 (su)



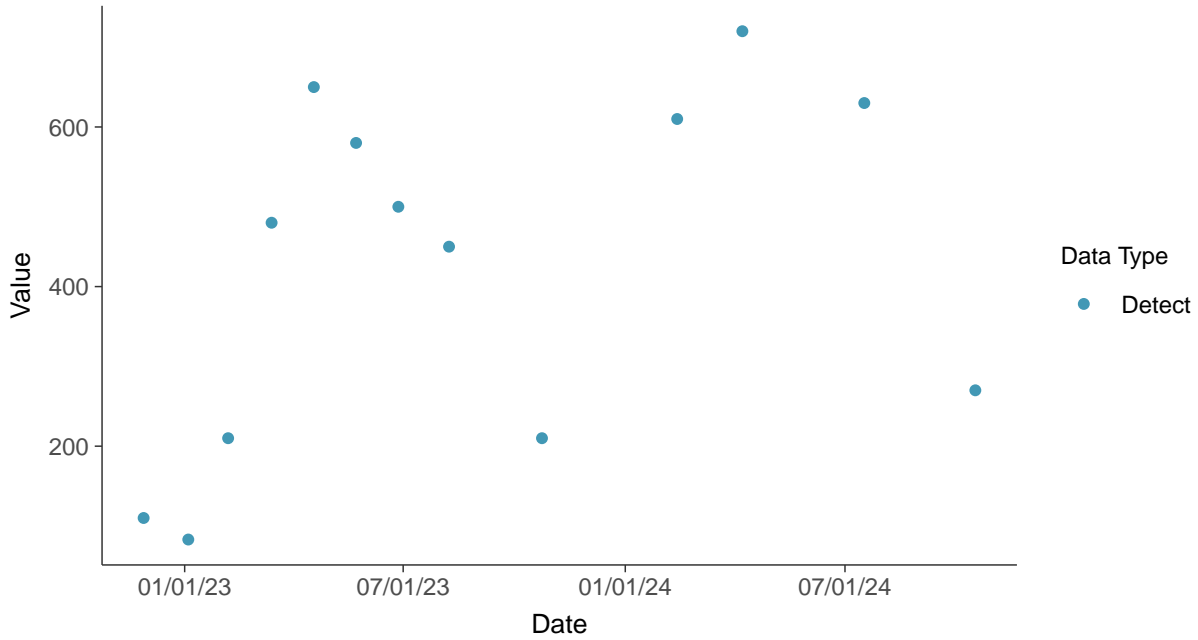


Appendix III: Sulfate (as SO4), MW-09

ID: 2_19_2_4_124

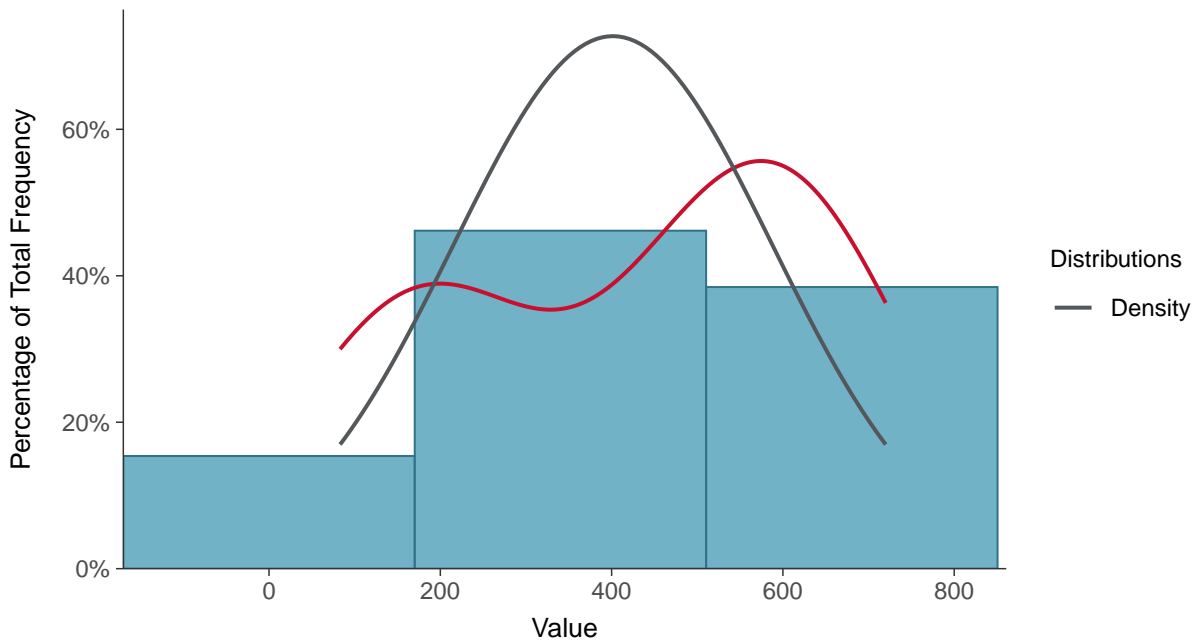
Scatter Plot

Sulfate (as SO4), MW-09 (mg/L)



Histogram

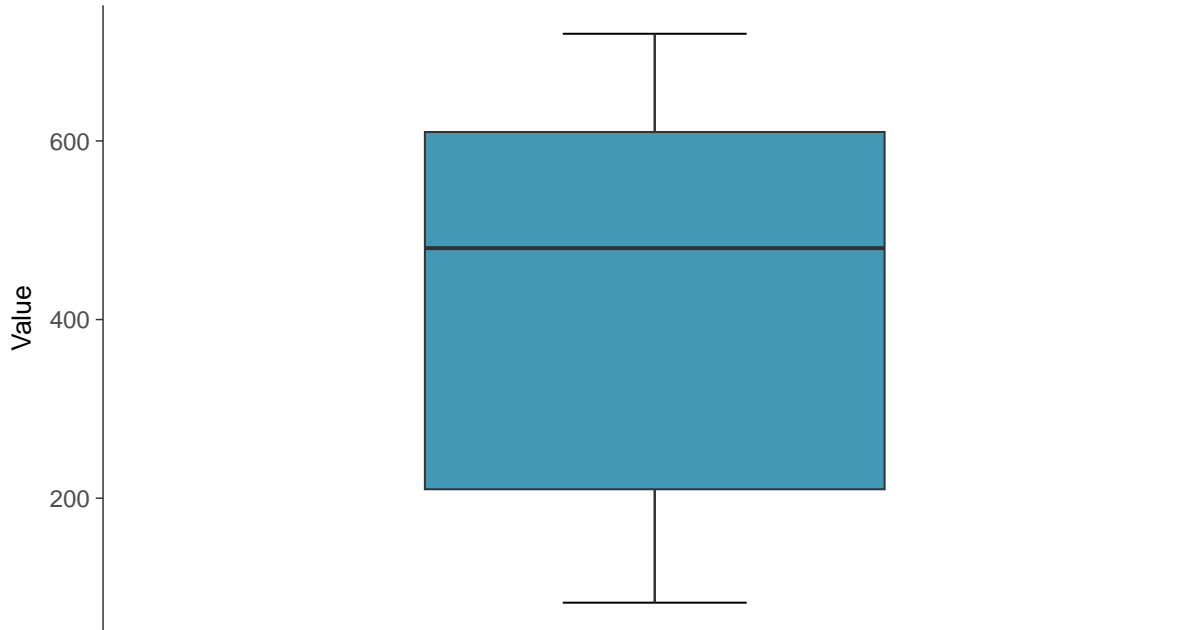
Sulfate (as SO4), MW-09 (mg/L)





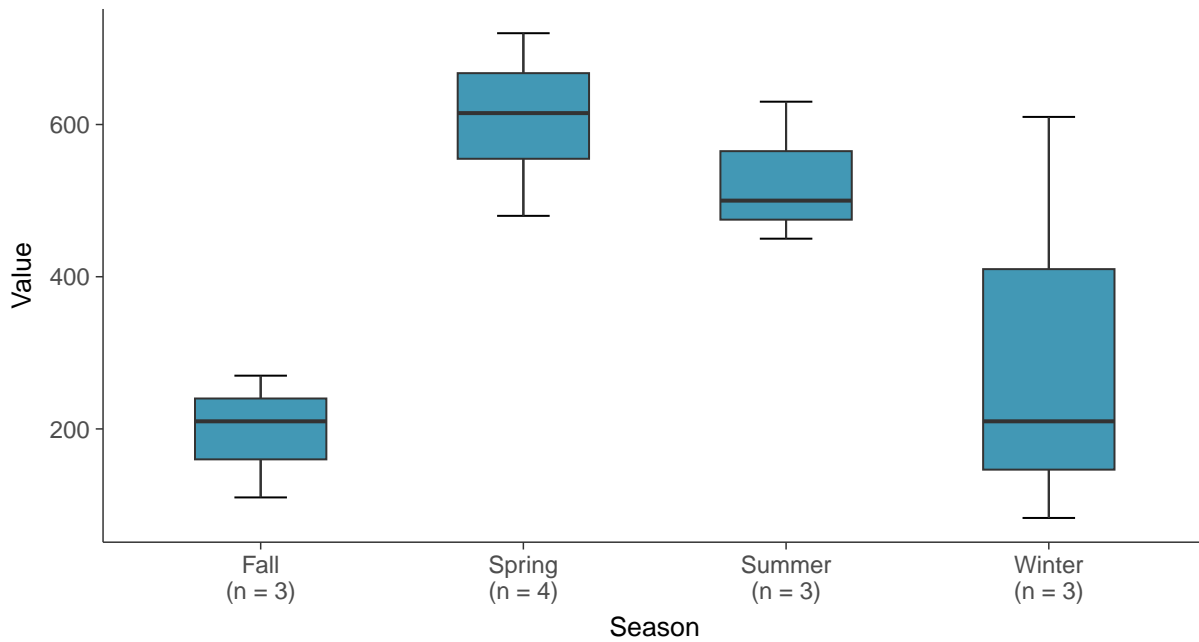
Boxplot

Sulfate (as SO₄), MW-09 (mg/L)



Boxplot by Season

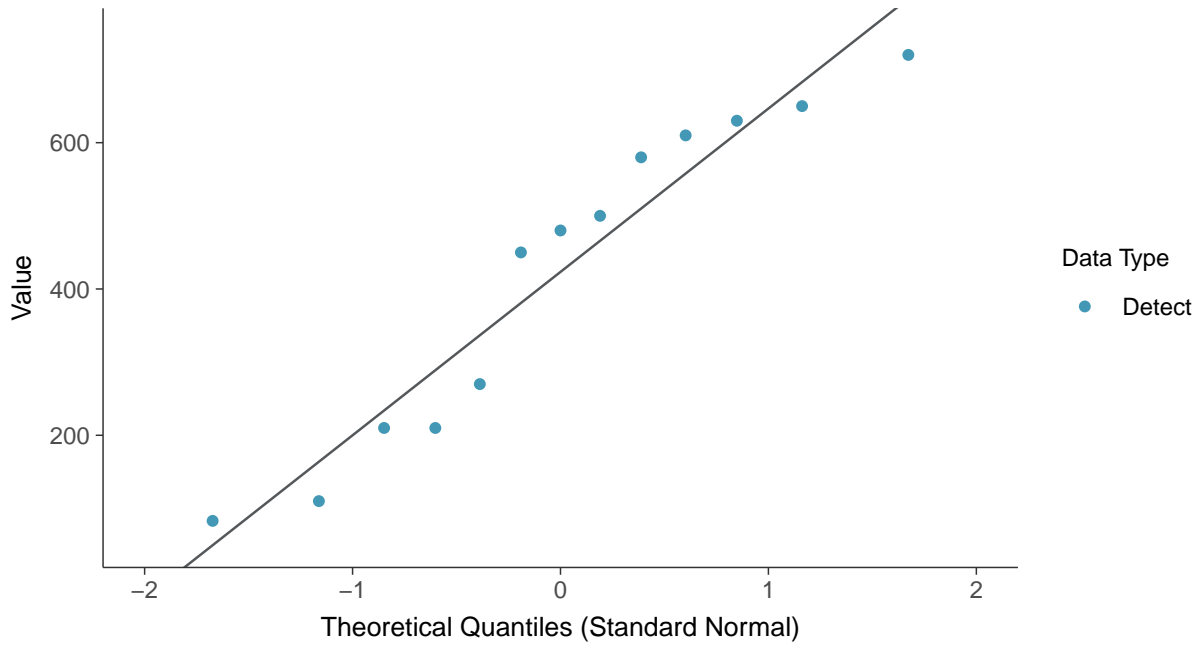
Sulfate (as SO₄), MW-09 (mg/L)





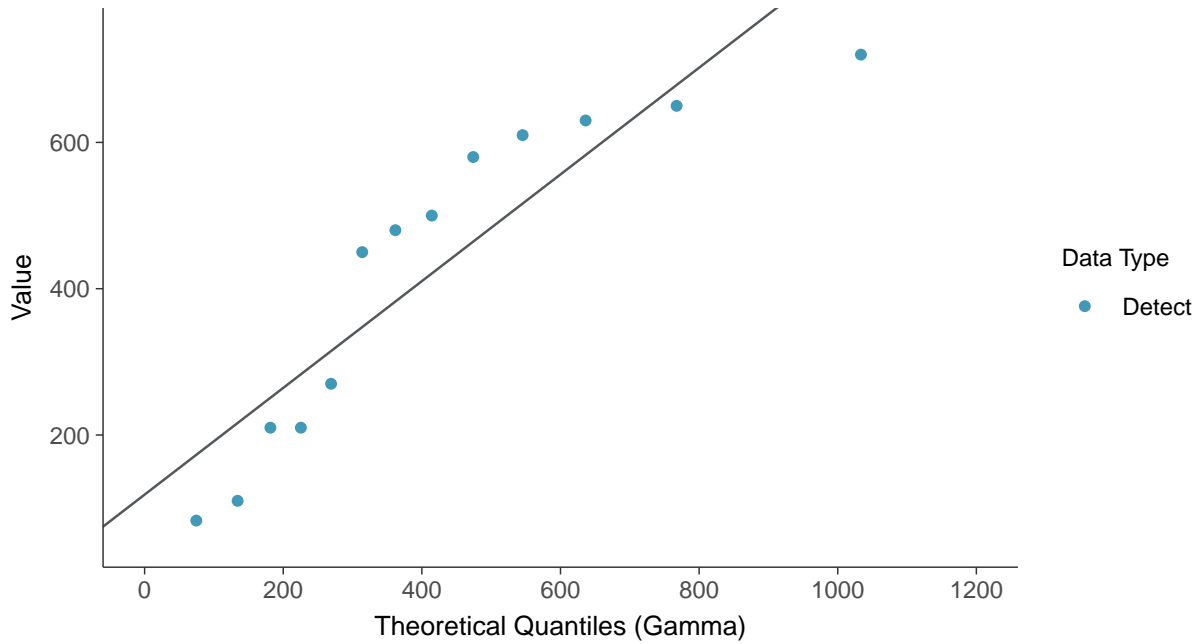
Normal Q-Q plot

Sulfate (as SO₄), MW-09 (mg/L)



Gamma Q-Q plot

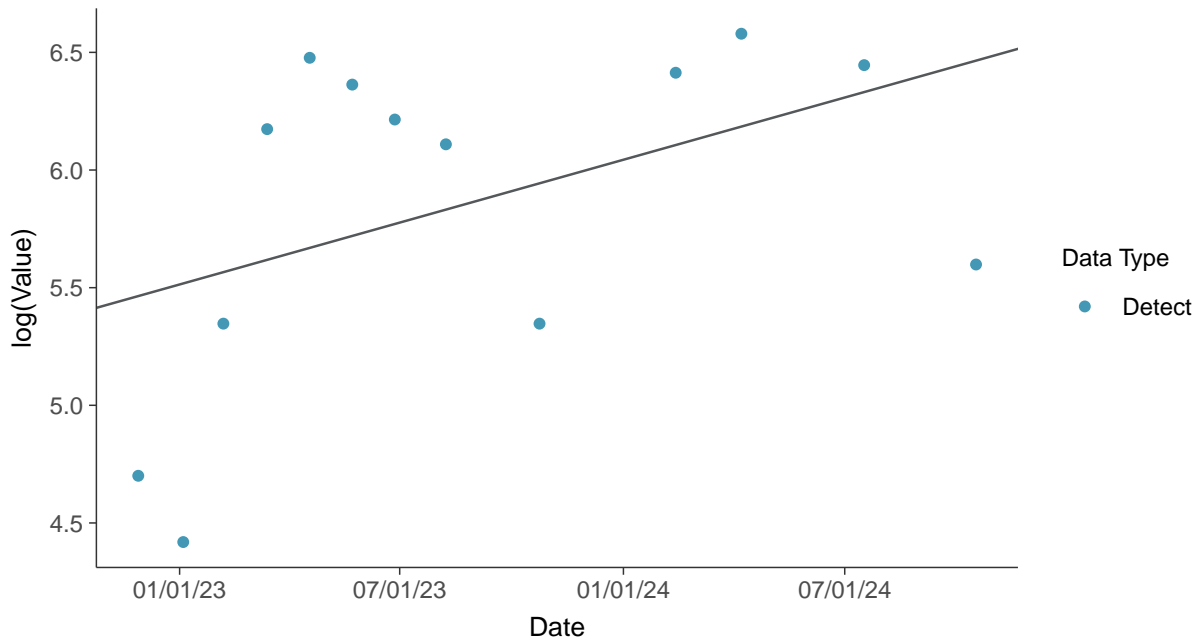
Sulfate (as SO₄), MW-09 (mg/L)





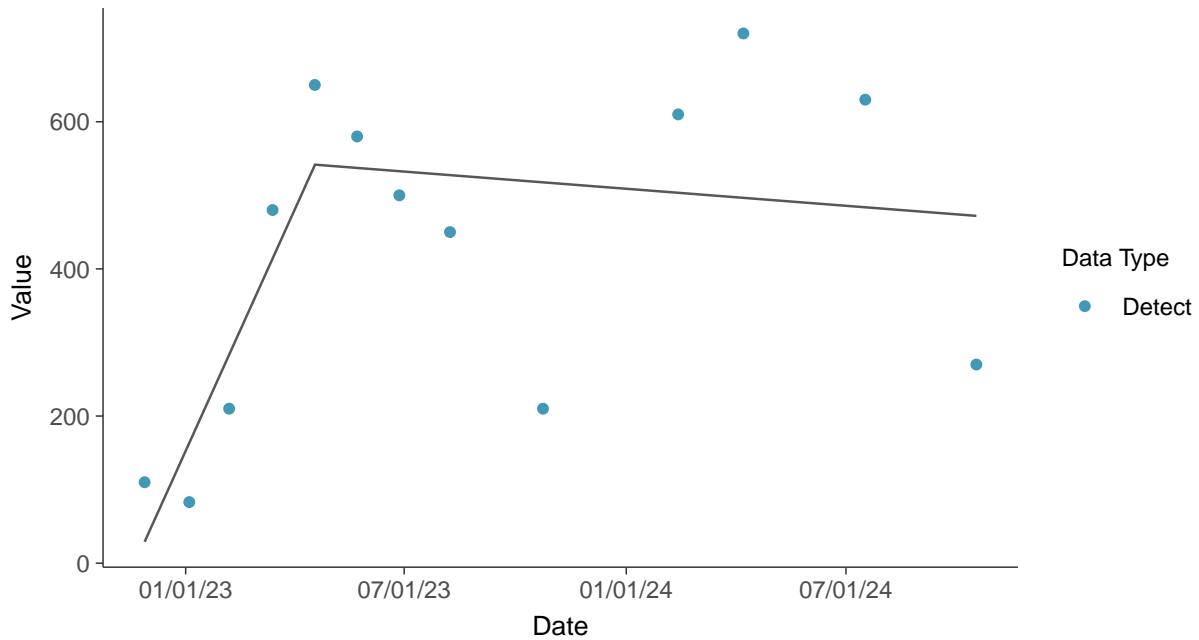
Trend Regression: Lognormal MLE

Sulfate (as SO₄), MW-09 (mg/L)



Trend Regression: Piecewise Linear-Linear

Sulfate (as SO₄), MW-09 (mg/L)



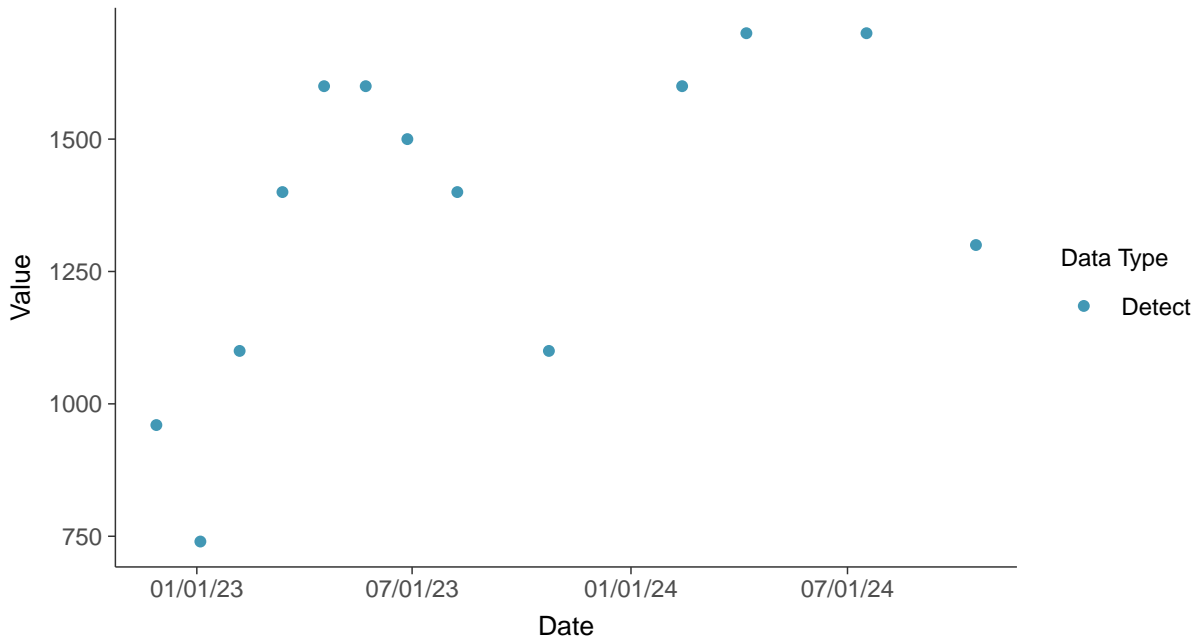


Appendix III: Total Dissolved Solids, MW-09

ID: 2_19_2_4_126

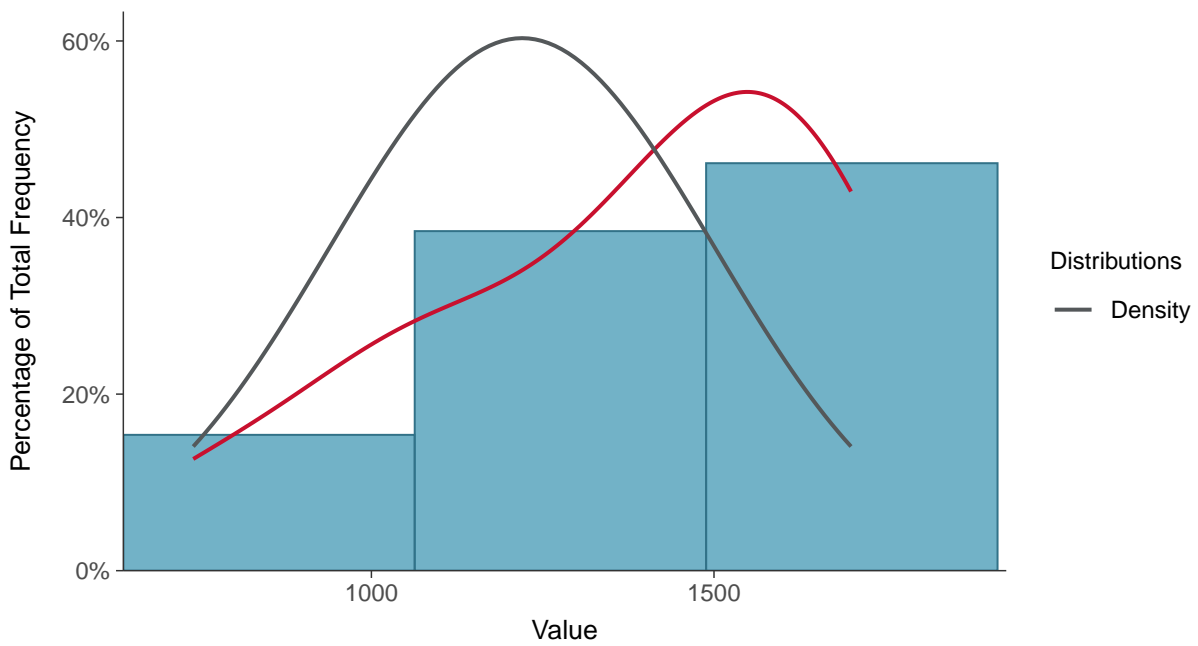
Scatter Plot

Total Dissolved Solids, MW-09 (mg/L)



Histogram

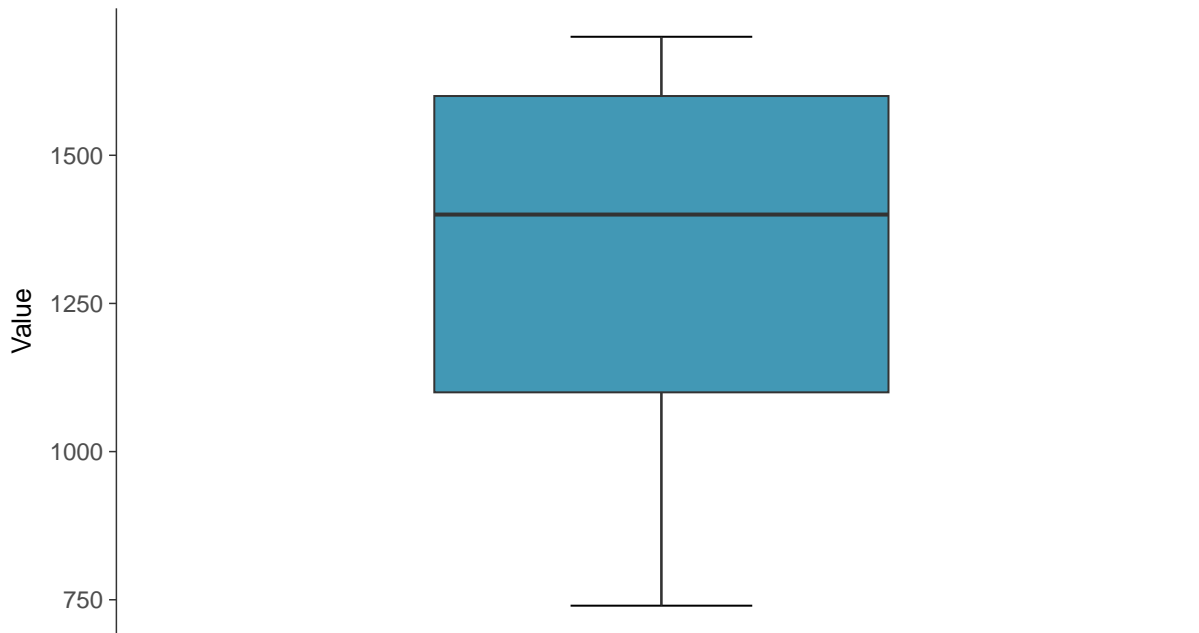
Total Dissolved Solids, MW-09 (mg/L)





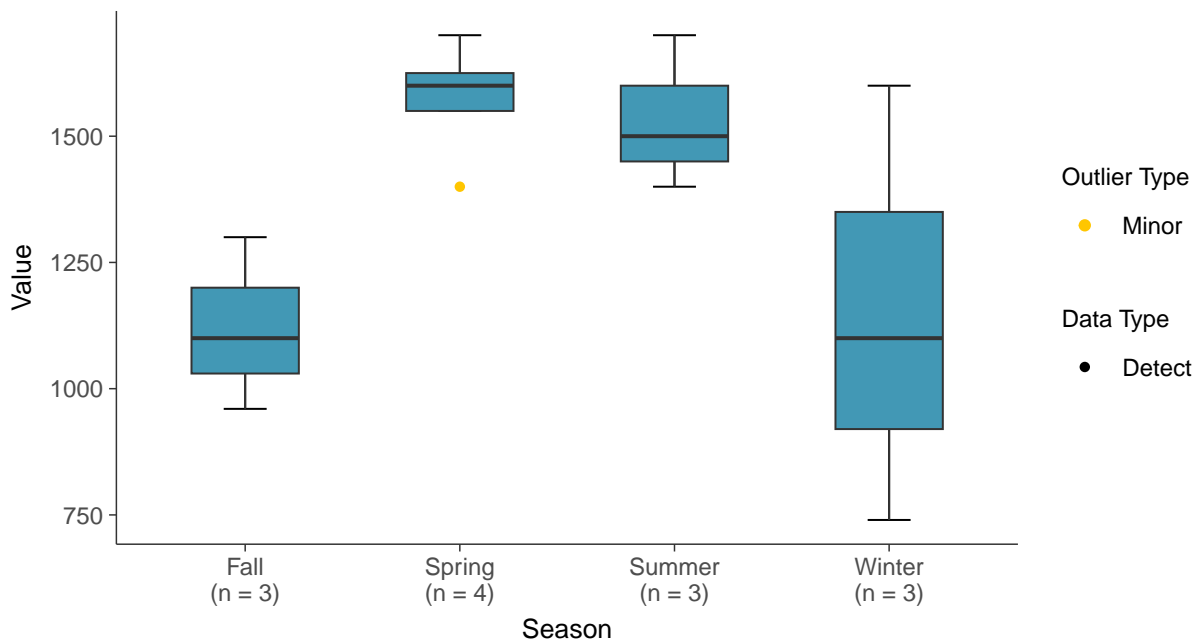
Boxplot

Total Dissolved Solids, MW-09 (mg/L)



Boxplot by Season

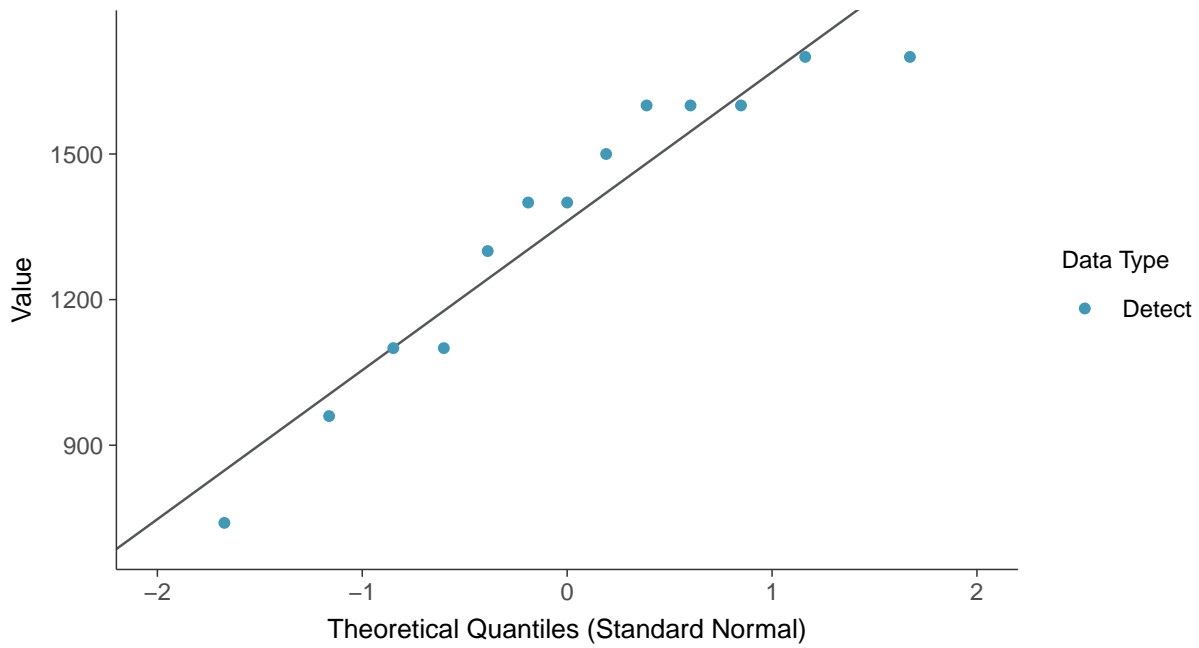
Total Dissolved Solids, MW-09 (mg/L)





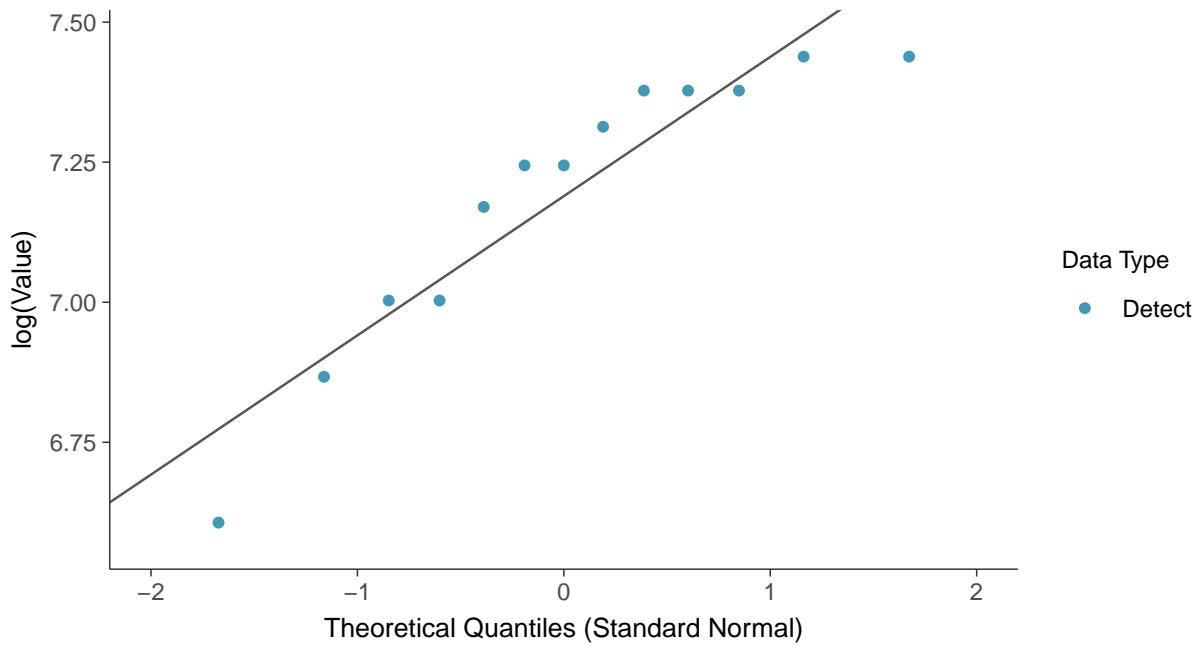
Normal Q-Q plot

Total Dissolved Solids, MW-09 (mg/L)



Lognormal Q-Q plot

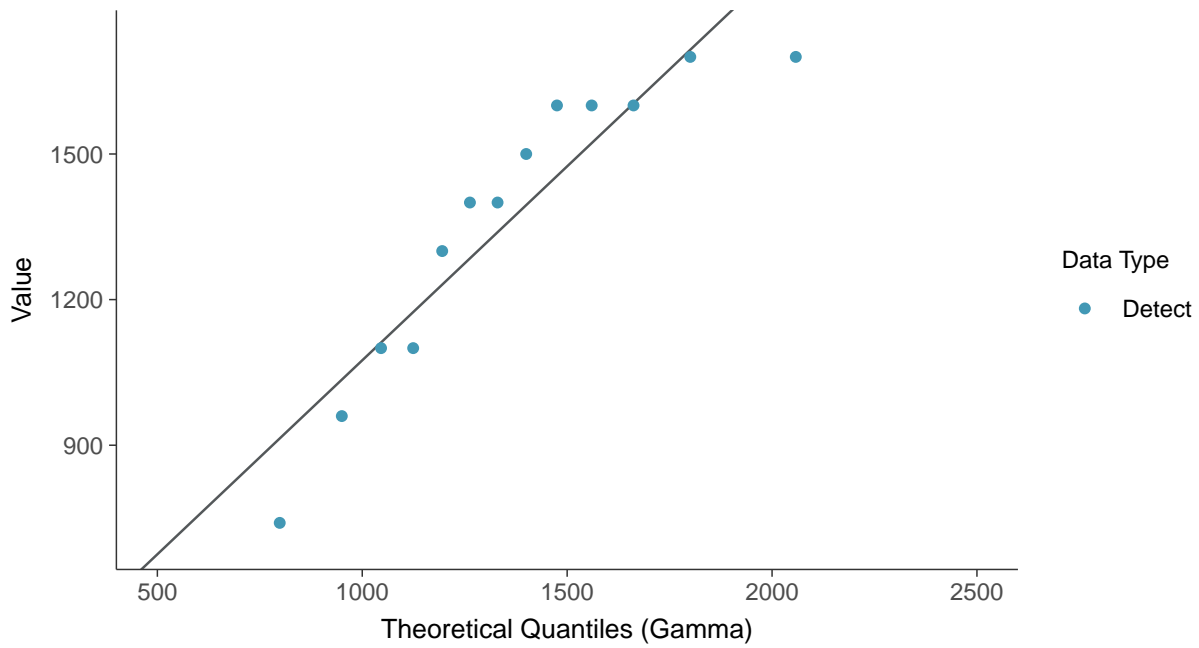
Total Dissolved Solids, MW-09 (mg/L)





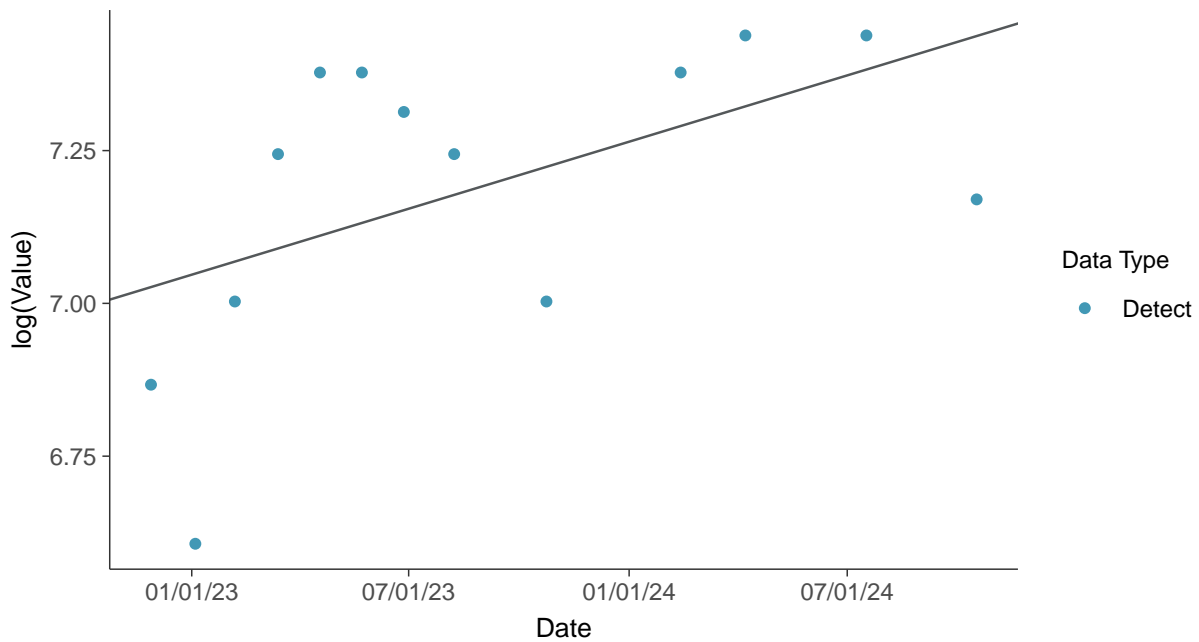
Gamma Q-Q plot

Total Dissolved Solids, MW-09 (mg/L)



Trend Regression: Lognormal MLE

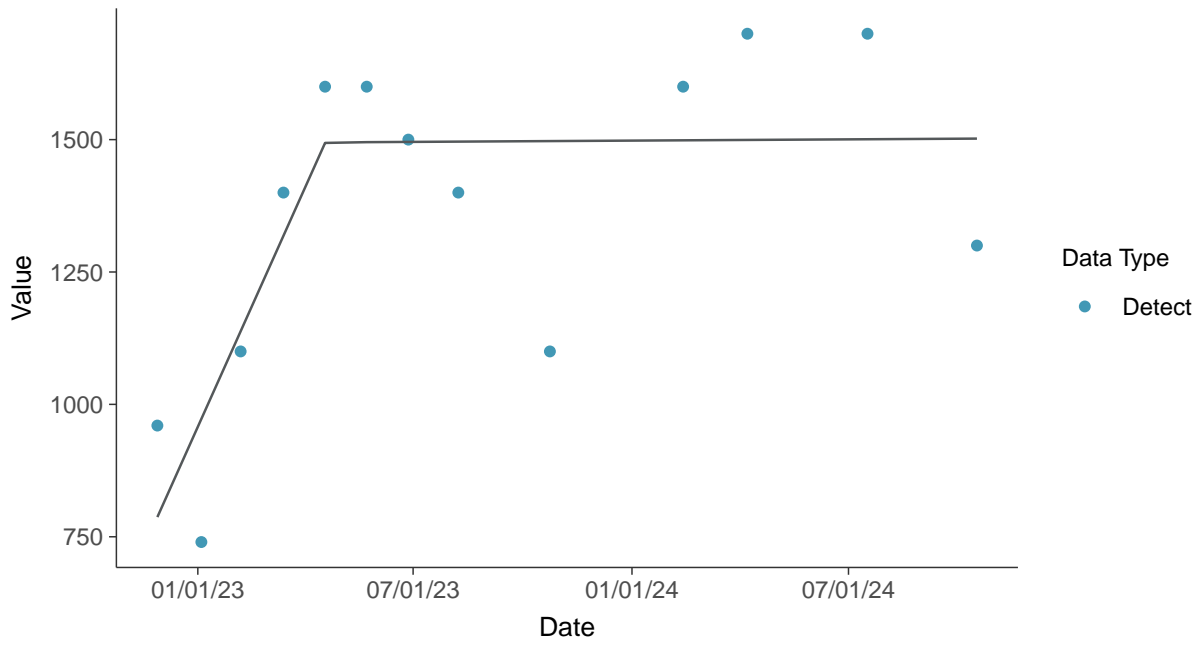
Total Dissolved Solids, MW-09 (mg/L)





Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-09 (mg/L)



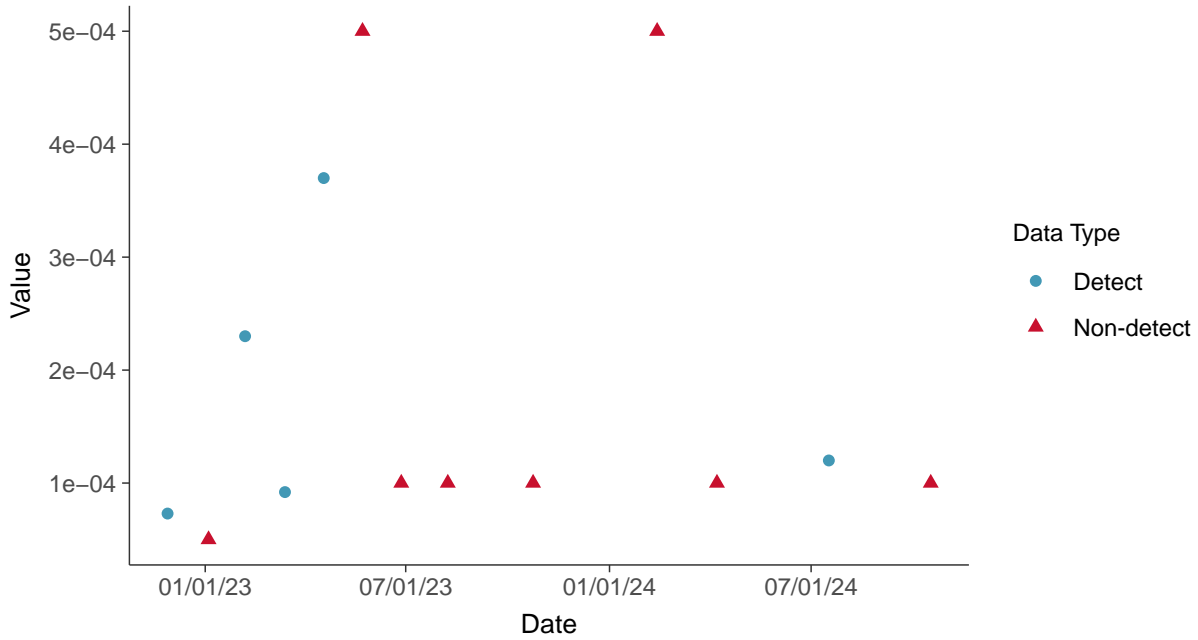


Appendix IV: Antimony, MW-09

ID: 2_19_2_5_101

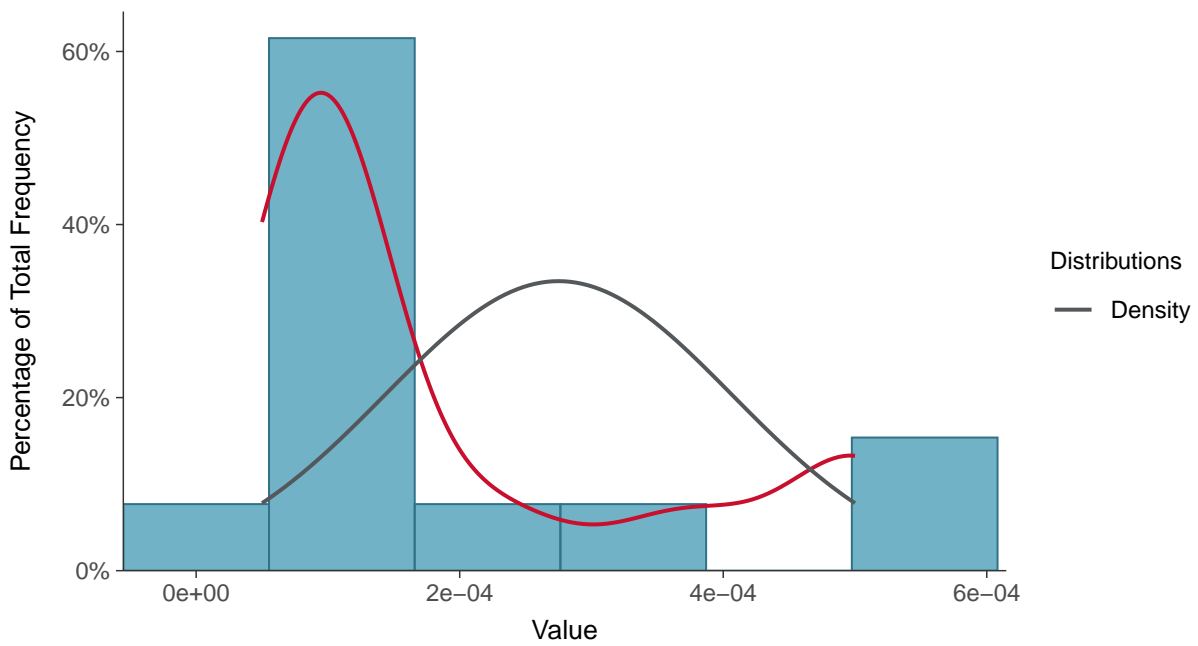
Scatter Plot

Antimony, MW-09 (mg/L)



Histogram

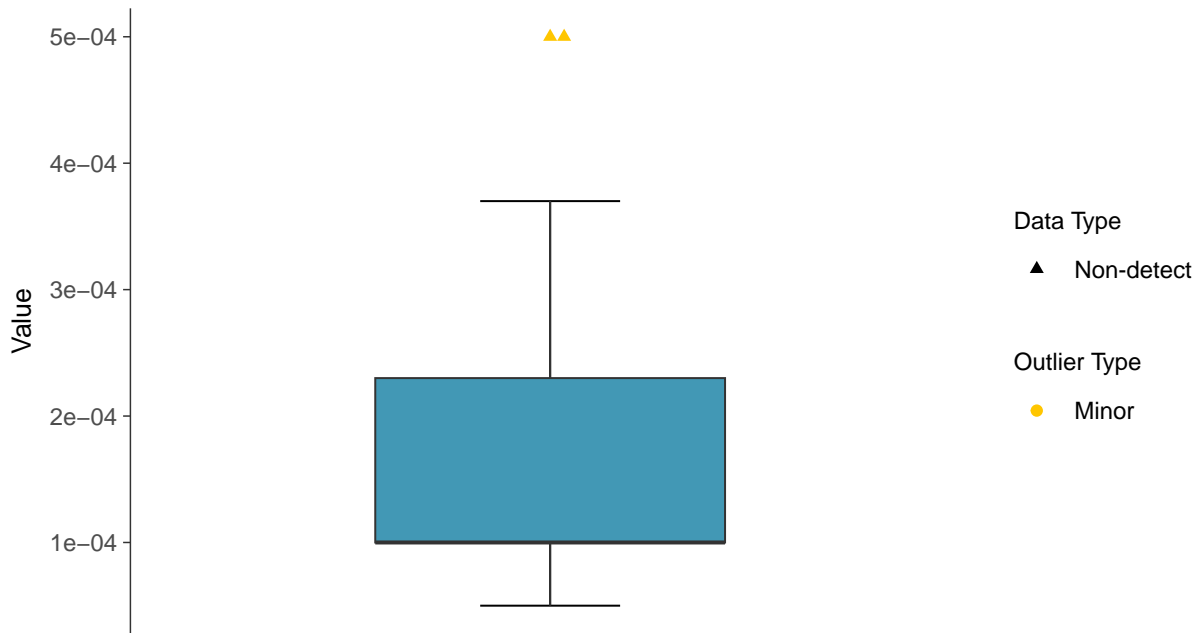
Antimony, MW-09 (mg/L)





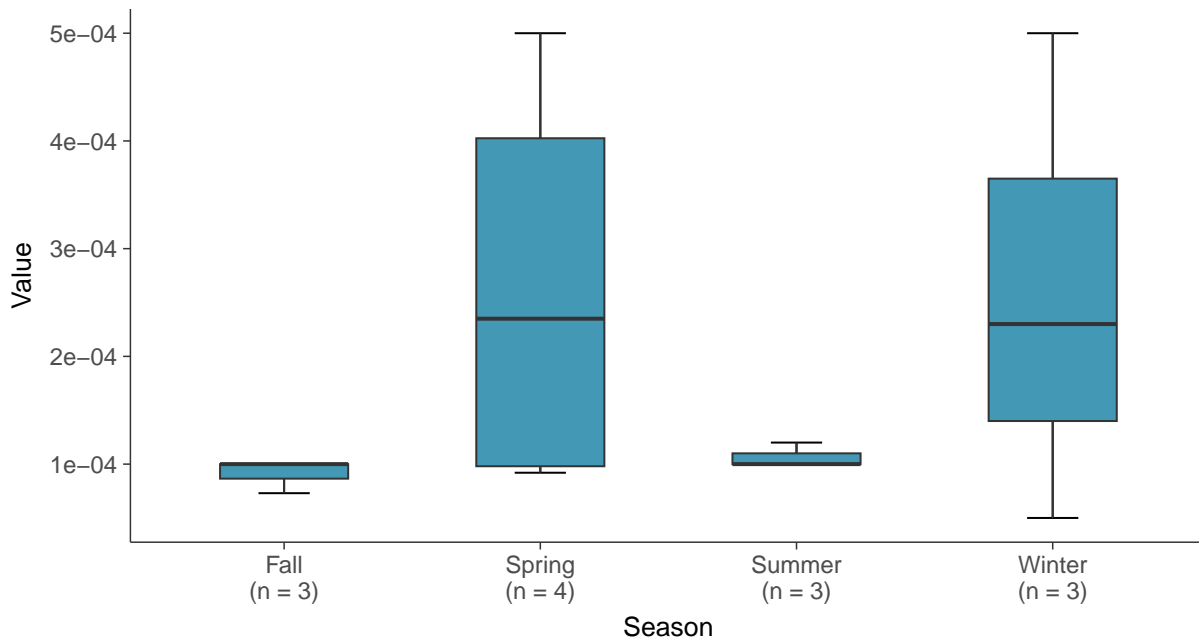
Boxplot

Antimony, MW-09 (mg/L)



Boxplot by Season

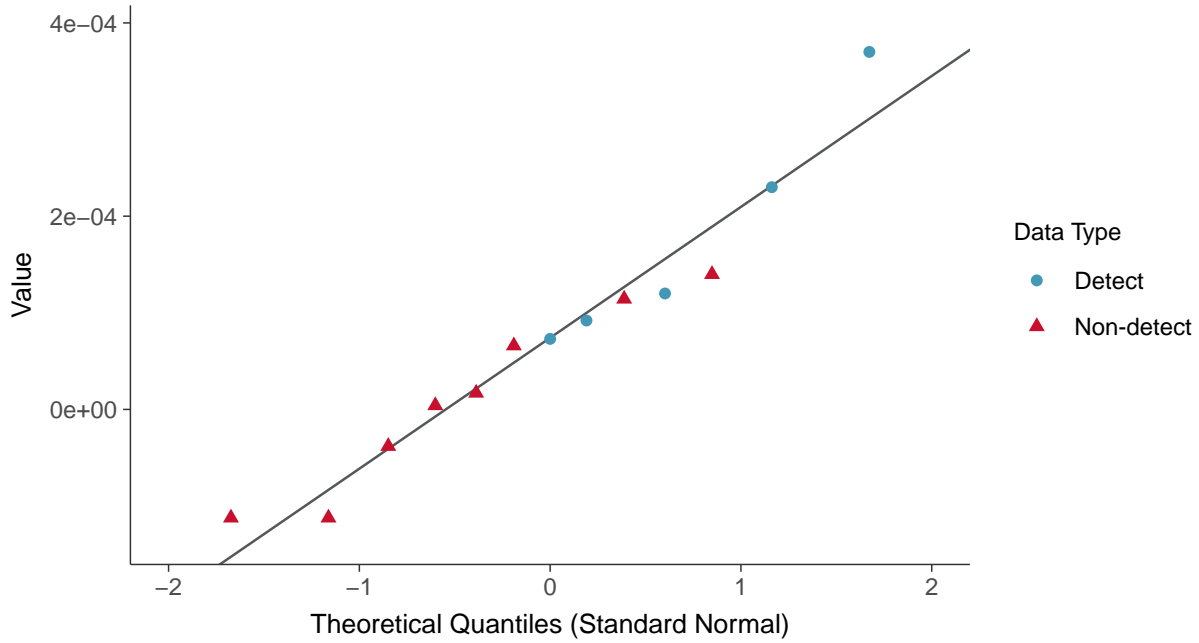
Antimony, MW-09 (mg/L)





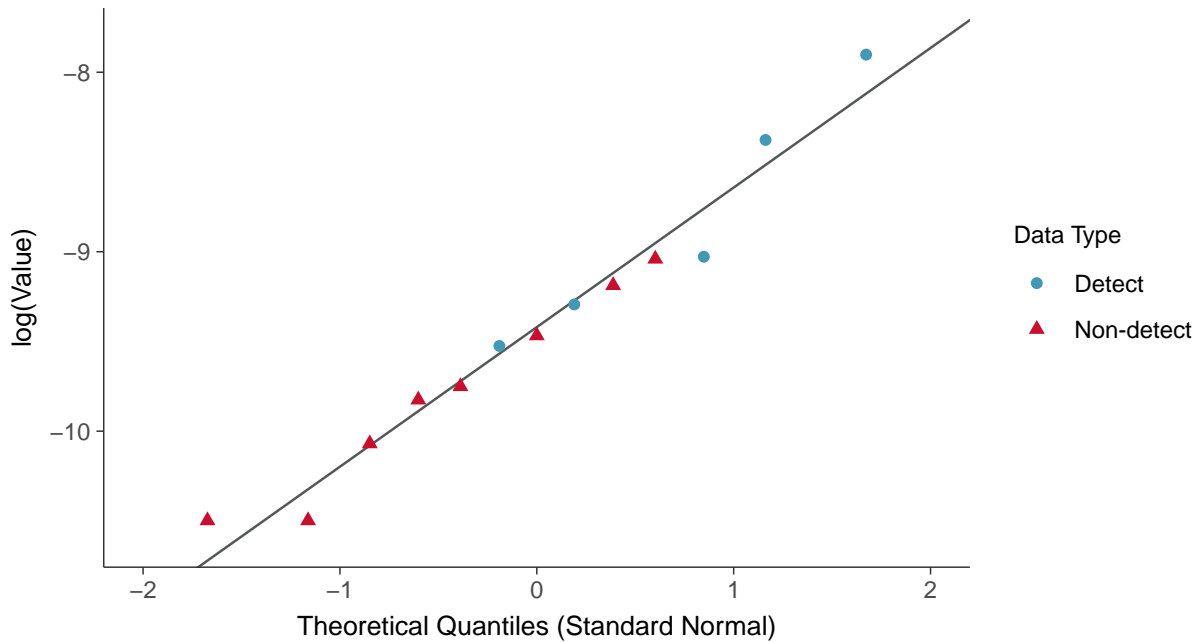
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-09 (mg/L)



Lognormal Q-Q plot using ROS Imputed Estimates

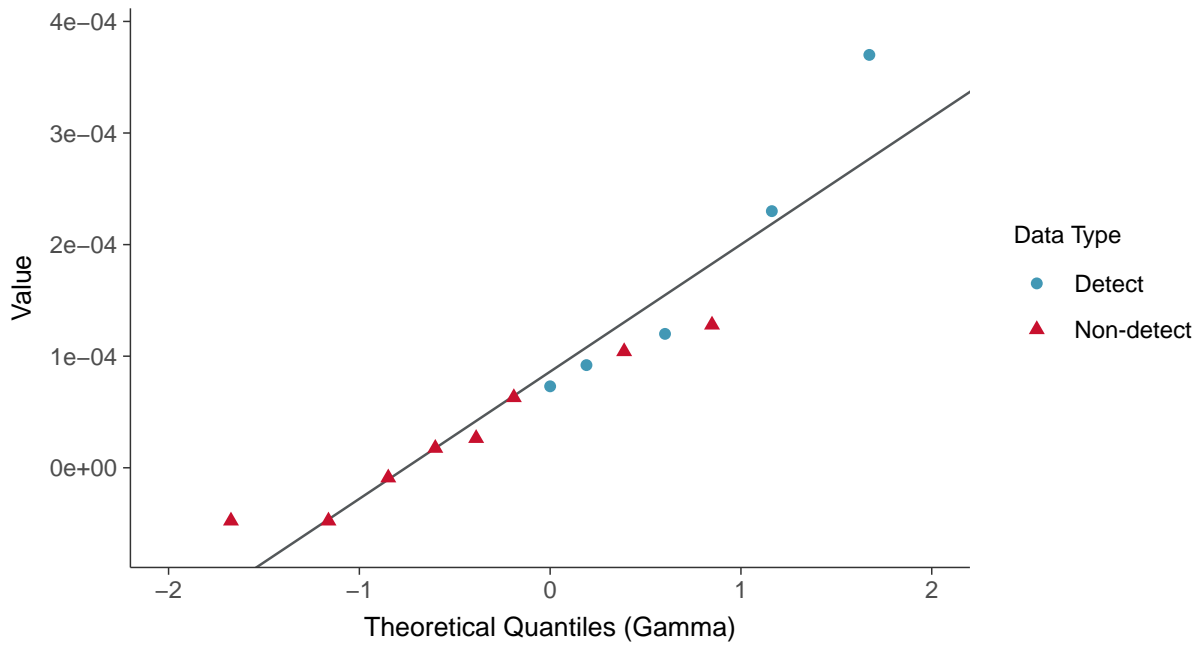
Antimony, MW-09 (mg/L)





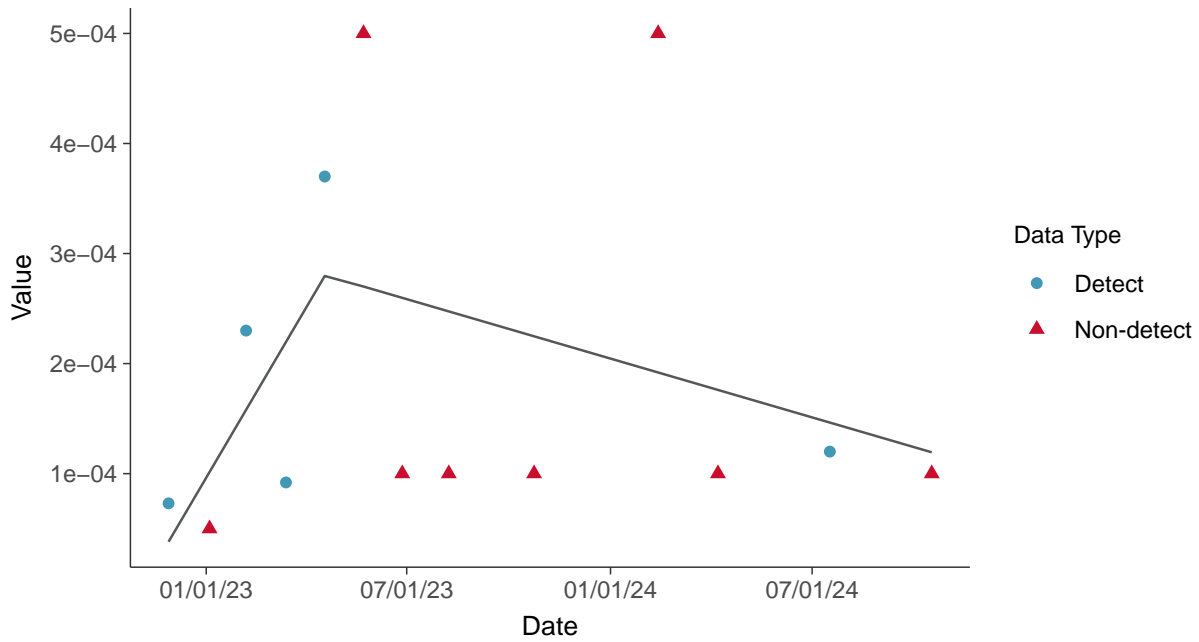
Gamma Q-Q plot using ROS Imputed Estimates

Antimony, MW-09 (mg/L)



Trend Regression: Piecewise Linear-Linear

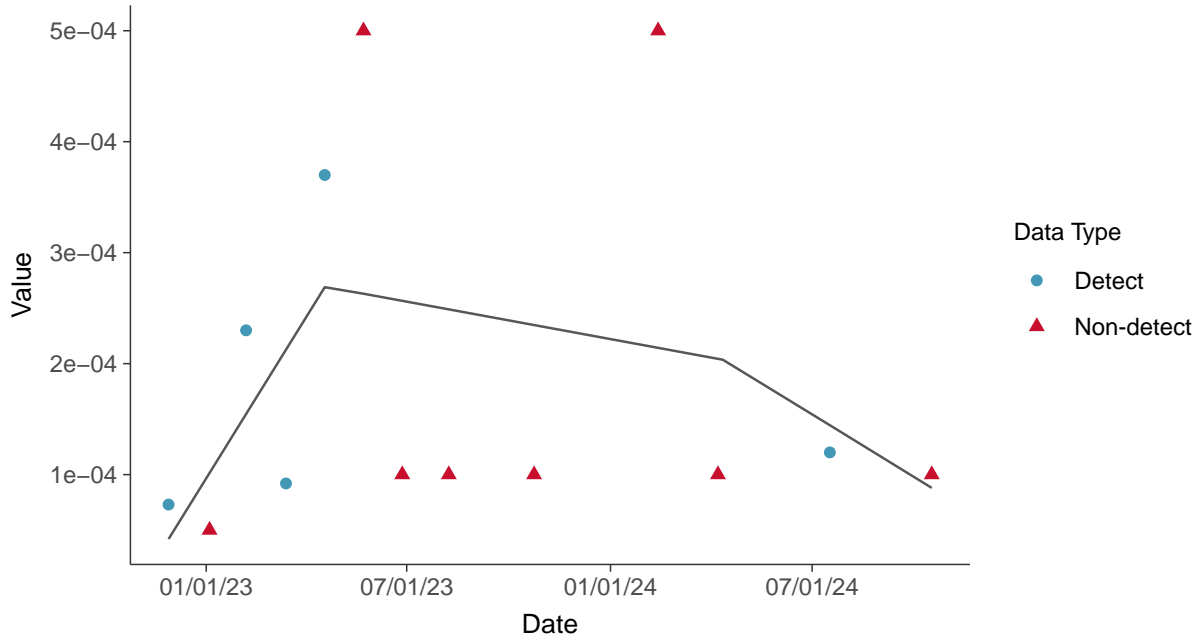
Antimony, MW-09 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

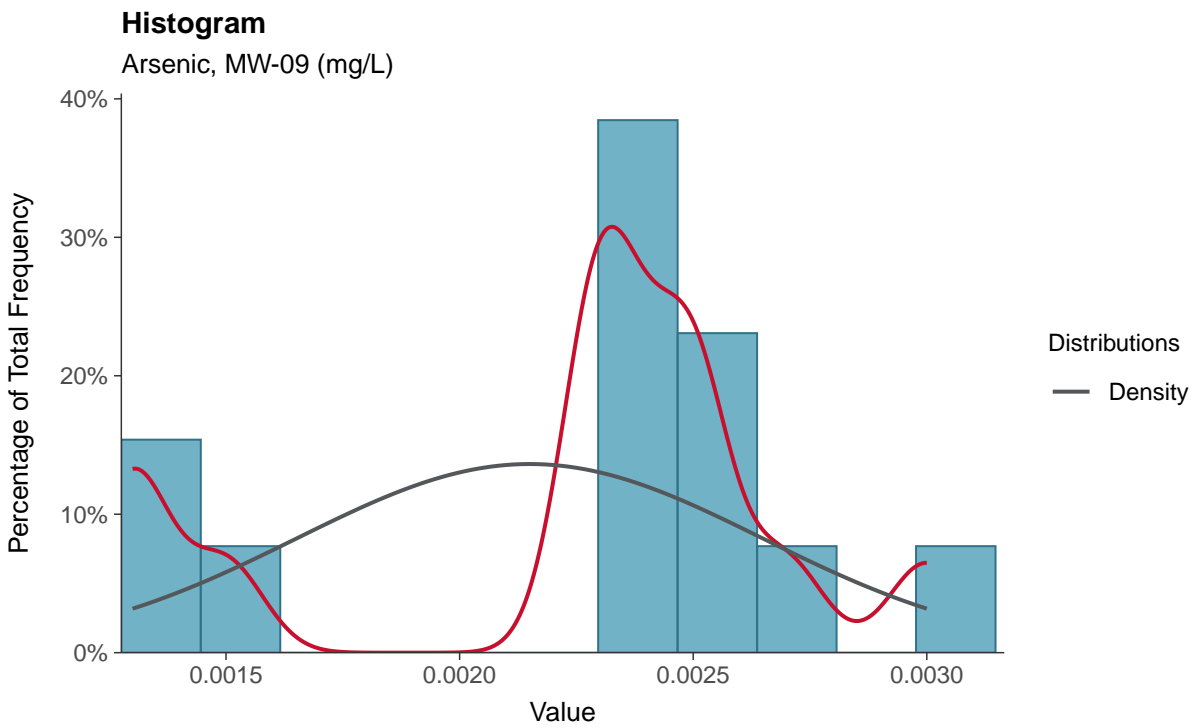
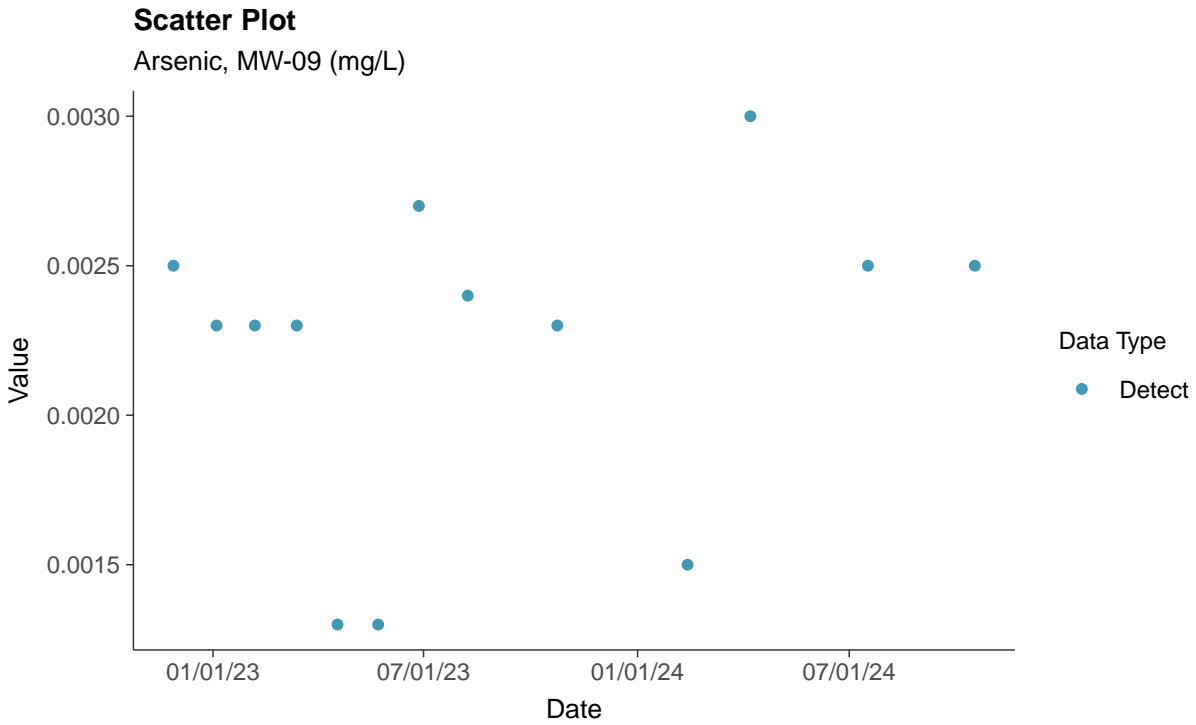
Antimony, MW-09 (mg/L)





Appendix IV: Arsenic, MW-09

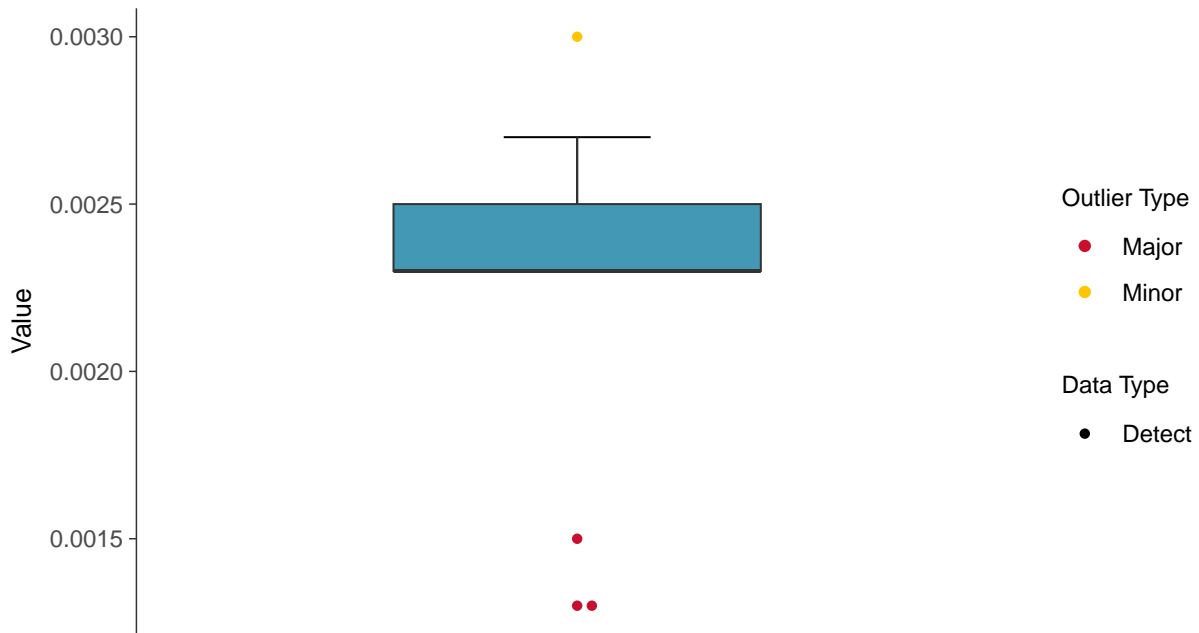
ID: 2_19_2_5_102





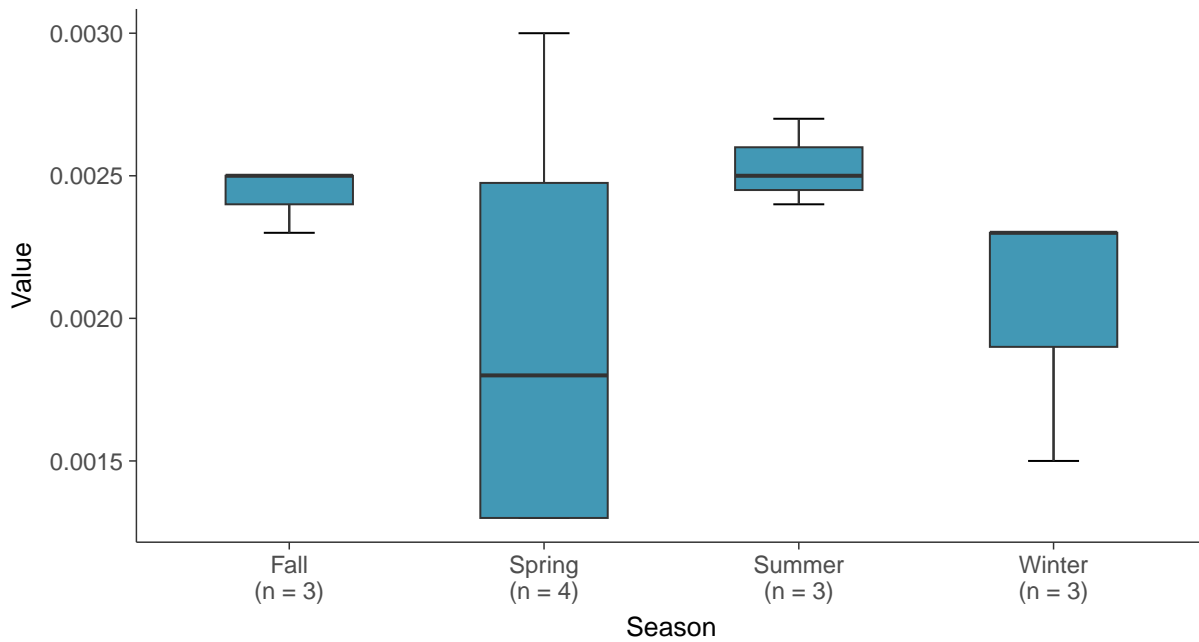
Boxplot

Arsenic, MW-09 (mg/L)



Boxplot by Season

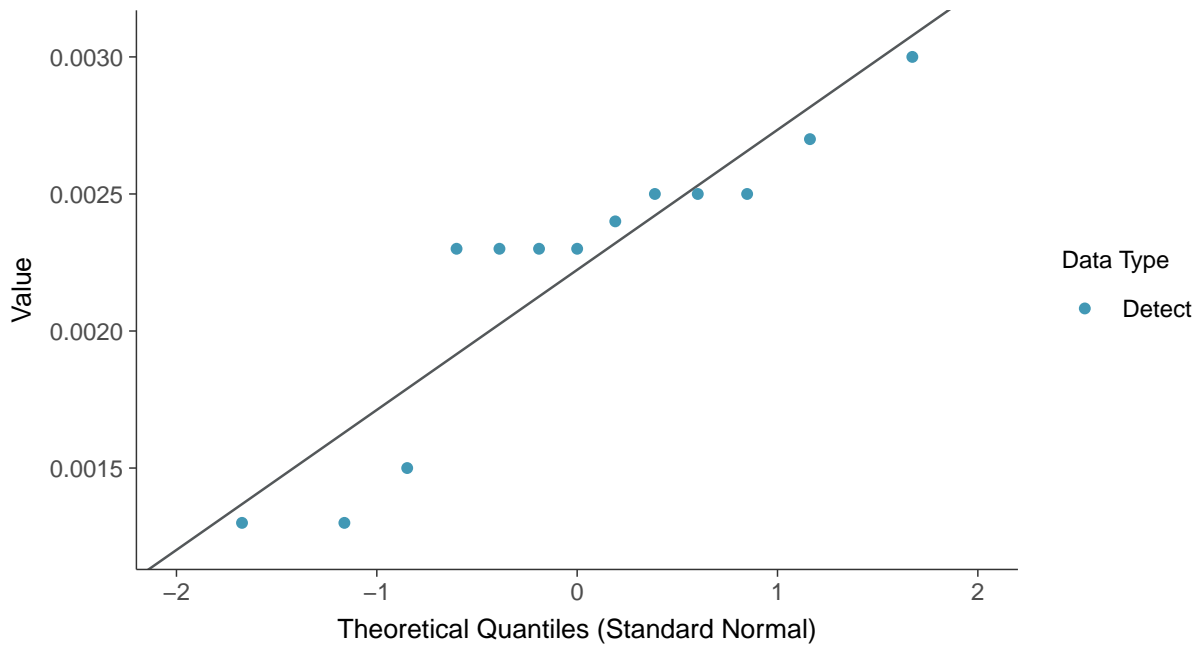
Arsenic, MW-09 (mg/L)





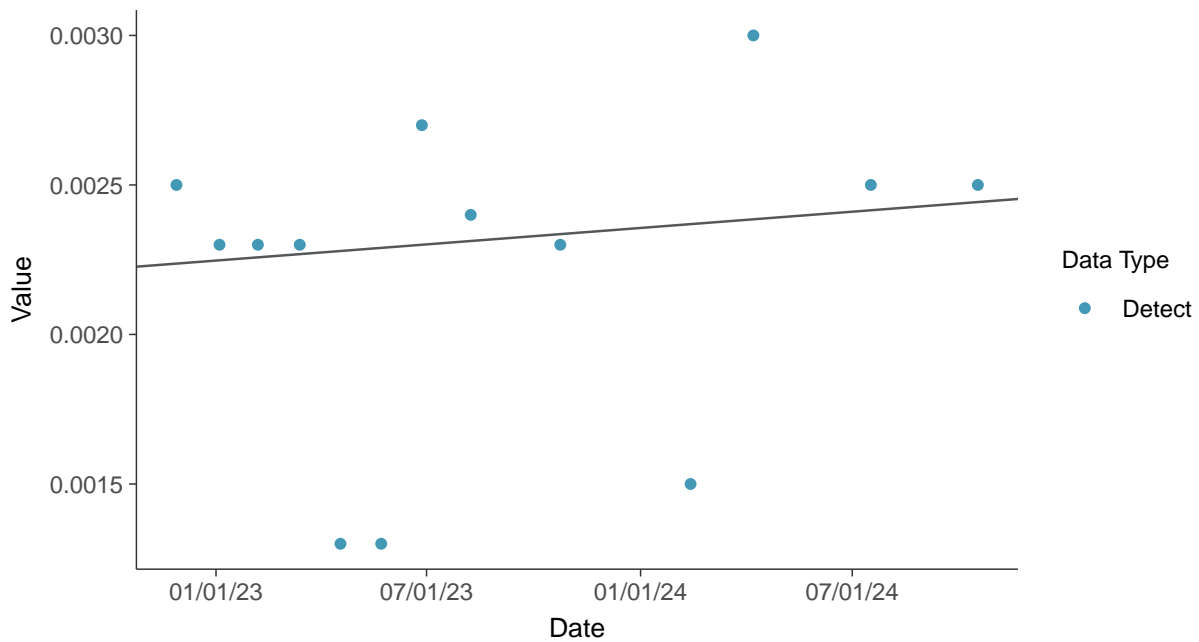
Normal Q-Q plot

Arsenic, MW-09 (mg/L)



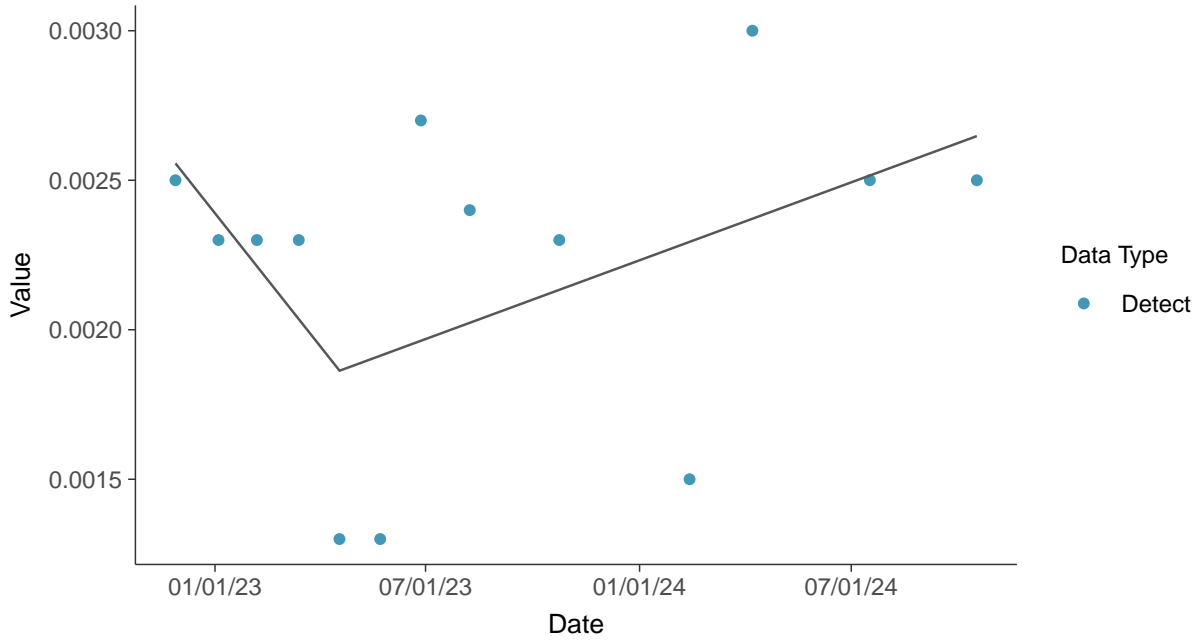
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Arsenic, MW-09 (mg/L)

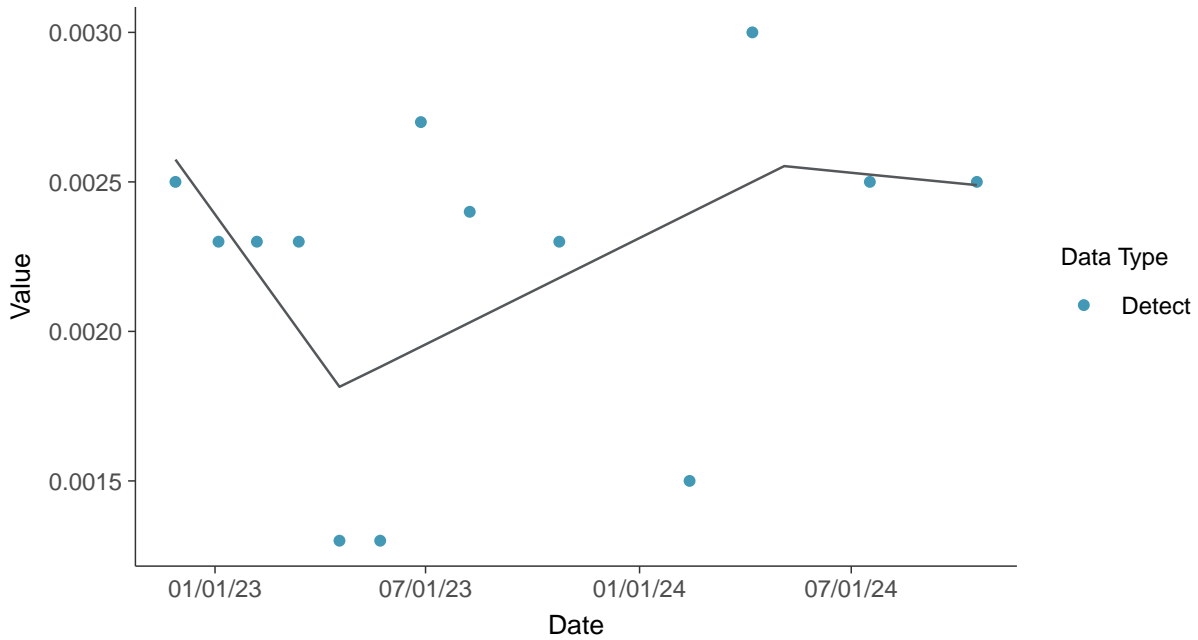




Trend Regression: Piecewise Linear-Linear
Arsenic, MW-09 (mg/L)



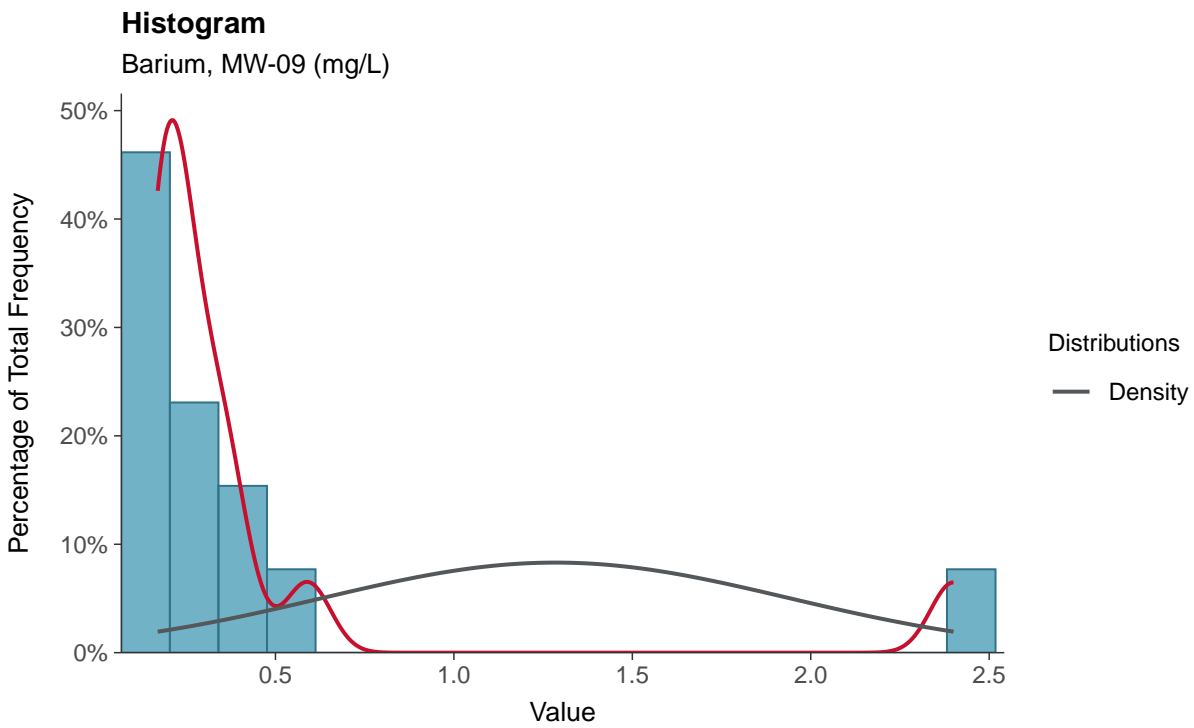
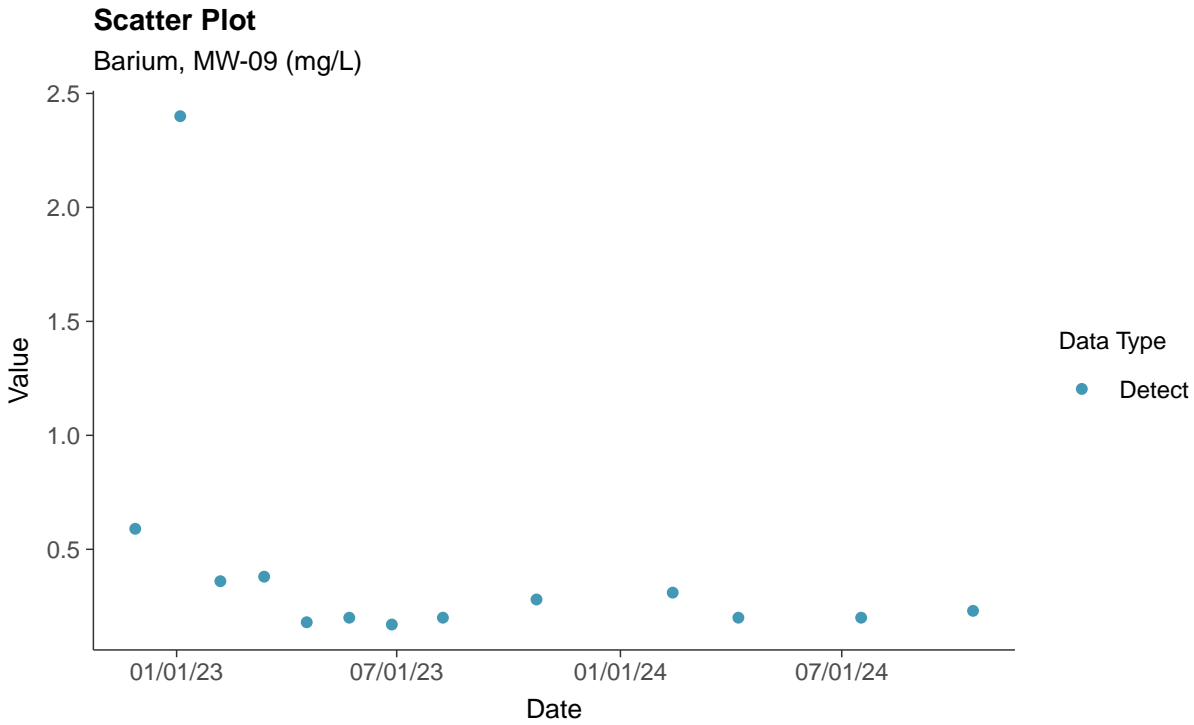
Trend Regression: Piecewise Linear-Linear-Linear
Arsenic, MW-09 (mg/L)





Appendix IV: Barium, MW-09

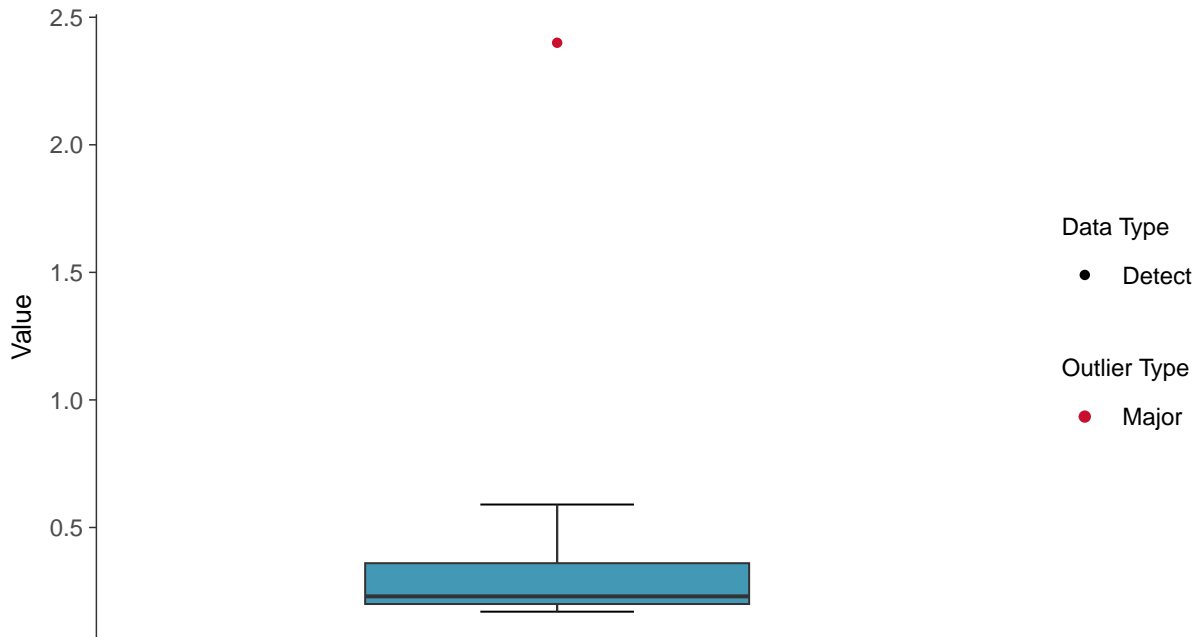
ID: 2_19_2_5_103





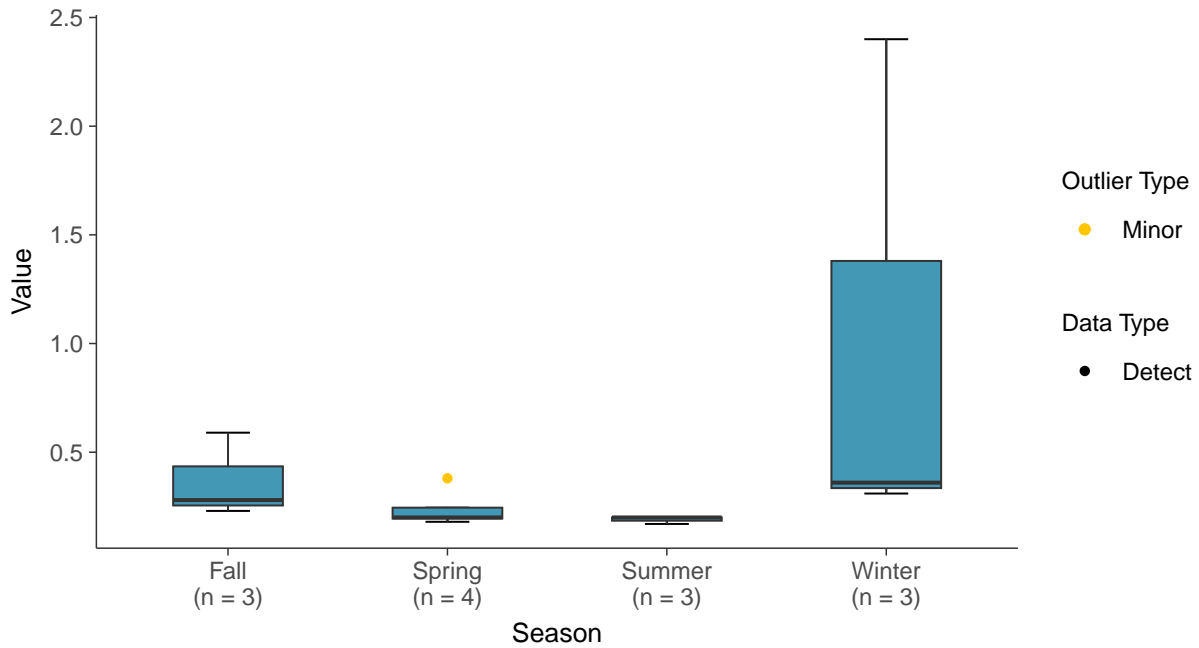
Boxplot

Barium, MW-09 (mg/L)



Boxplot by Season

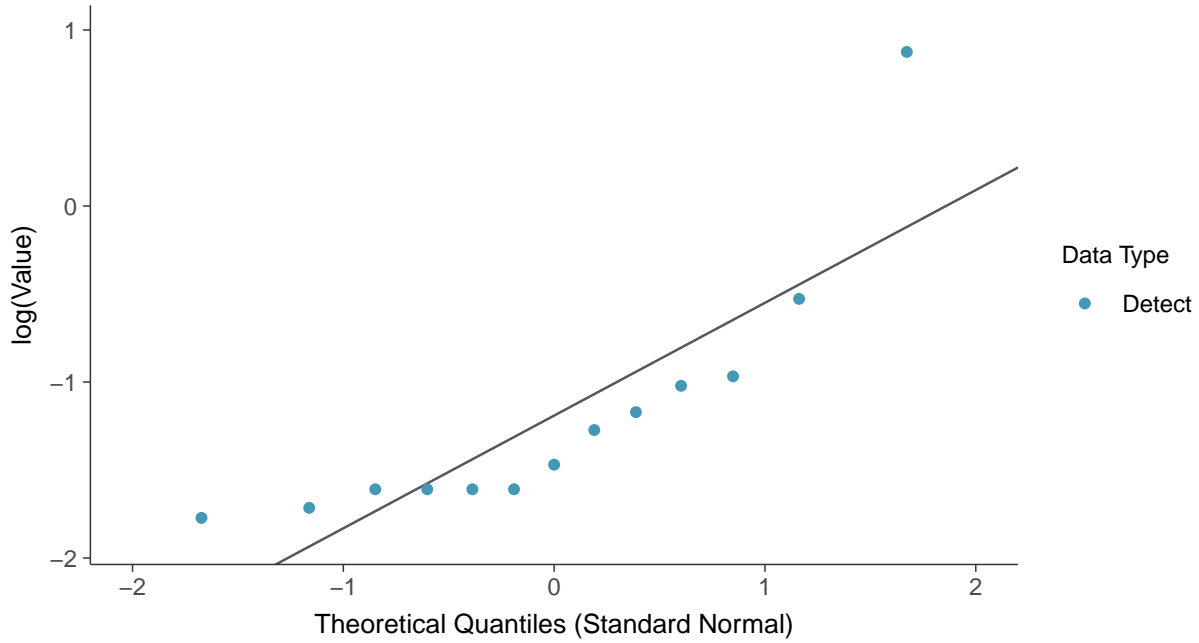
Barium, MW-09 (mg/L)





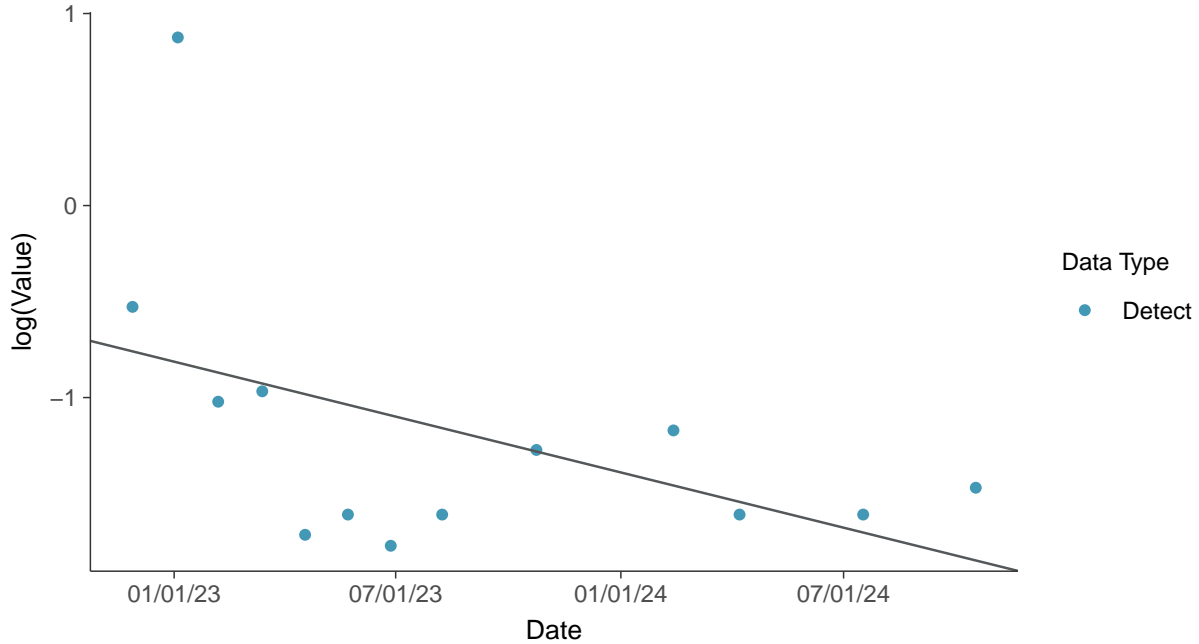
Lognormal Q-Q plot

Barium, MW-09 (mg/L)



Trend Regression: Lognormal MLE

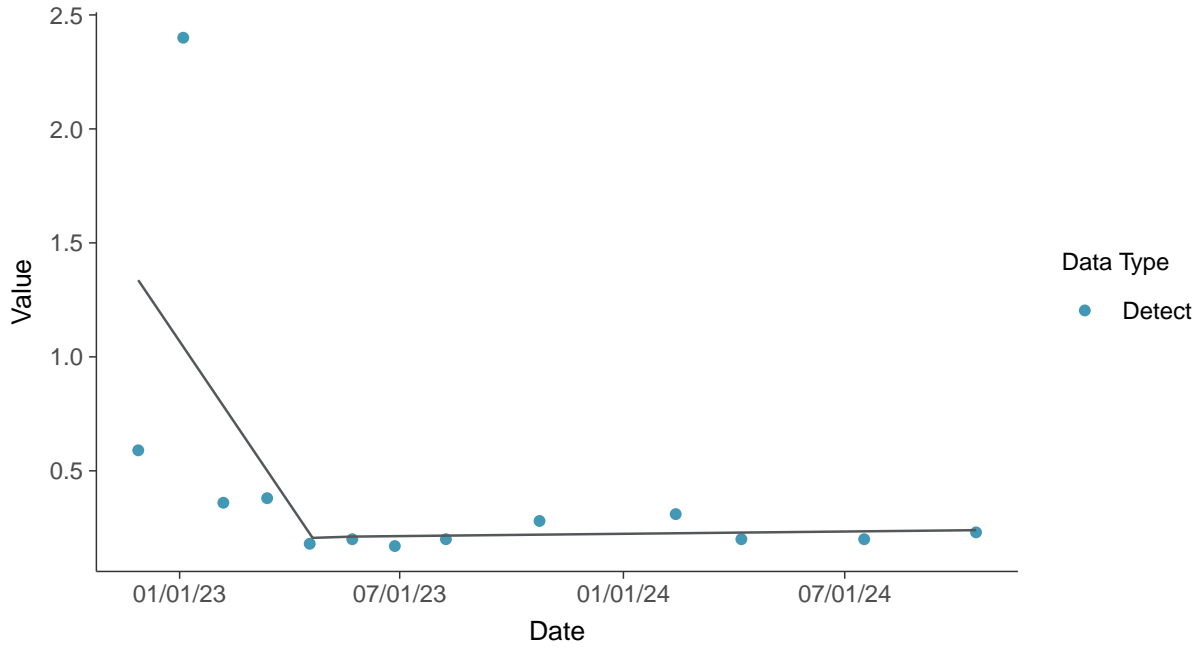
Barium, MW-09 (mg/L)





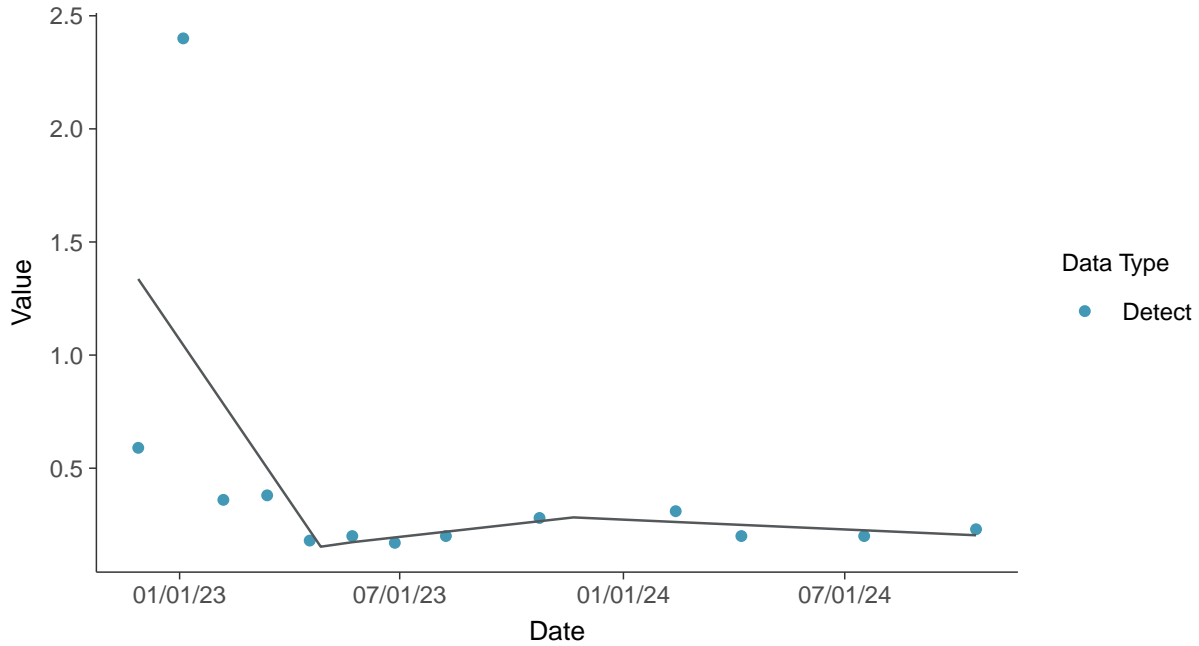
Trend Regression: Piecewise Linear-Linear

Barium, MW-09 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Barium, MW-09 (mg/L)



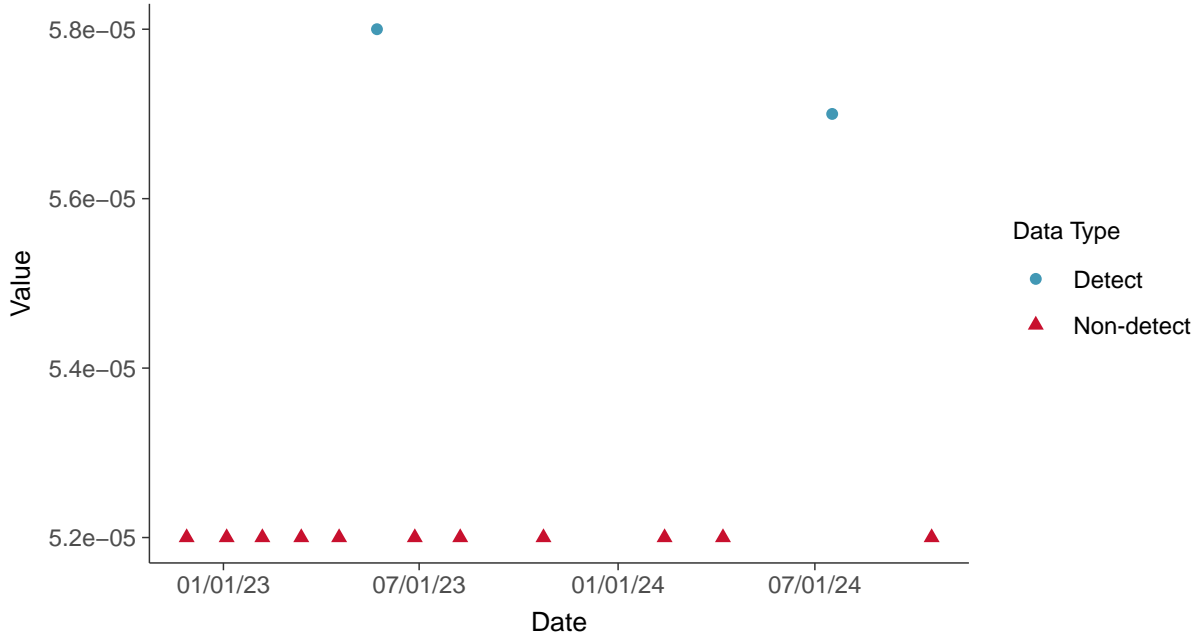


Appendix IV: Beryllium, MW-09

ID: 2_19_2_5_104

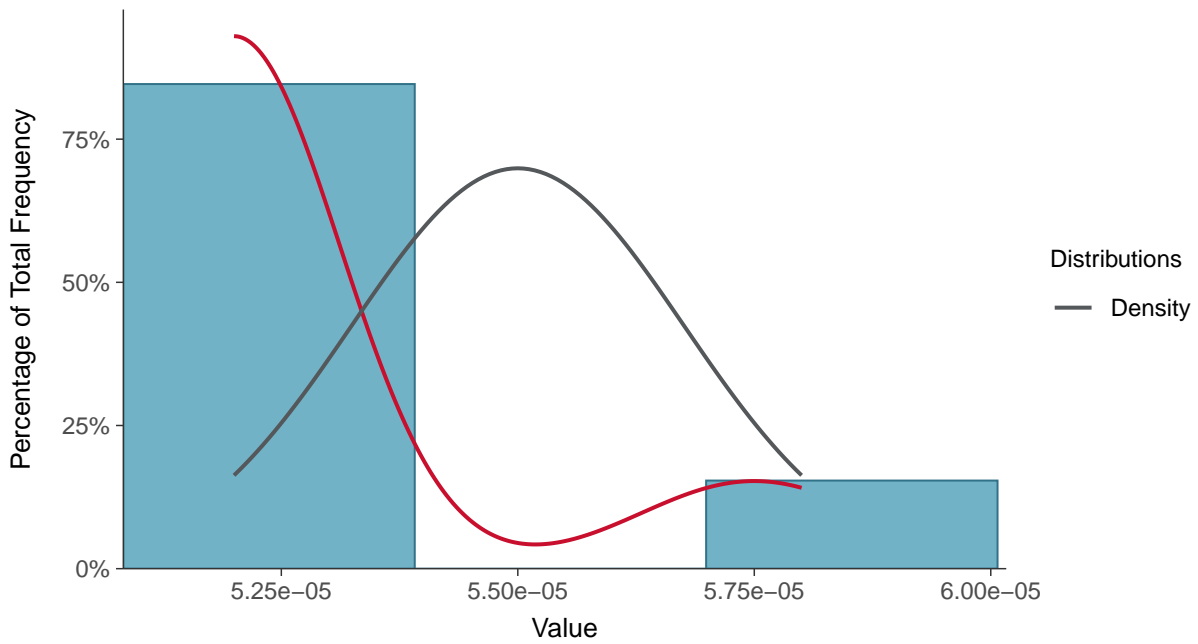
Scatter Plot

Beryllium, MW-09 (mg/L)



Histogram

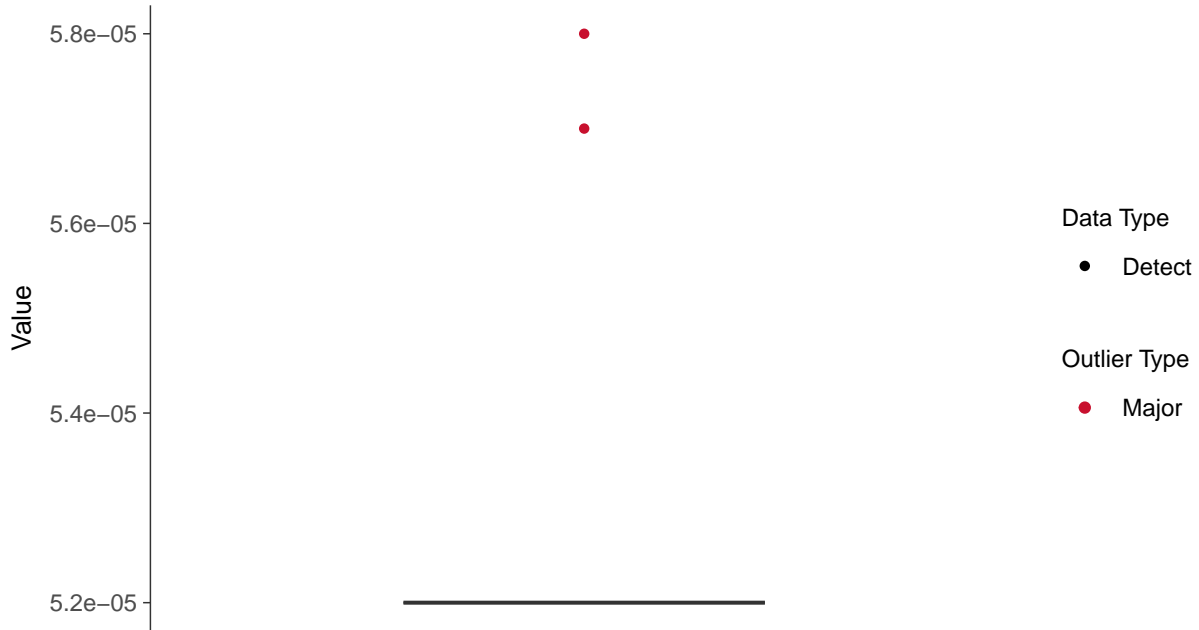
Beryllium, MW-09 (mg/L)





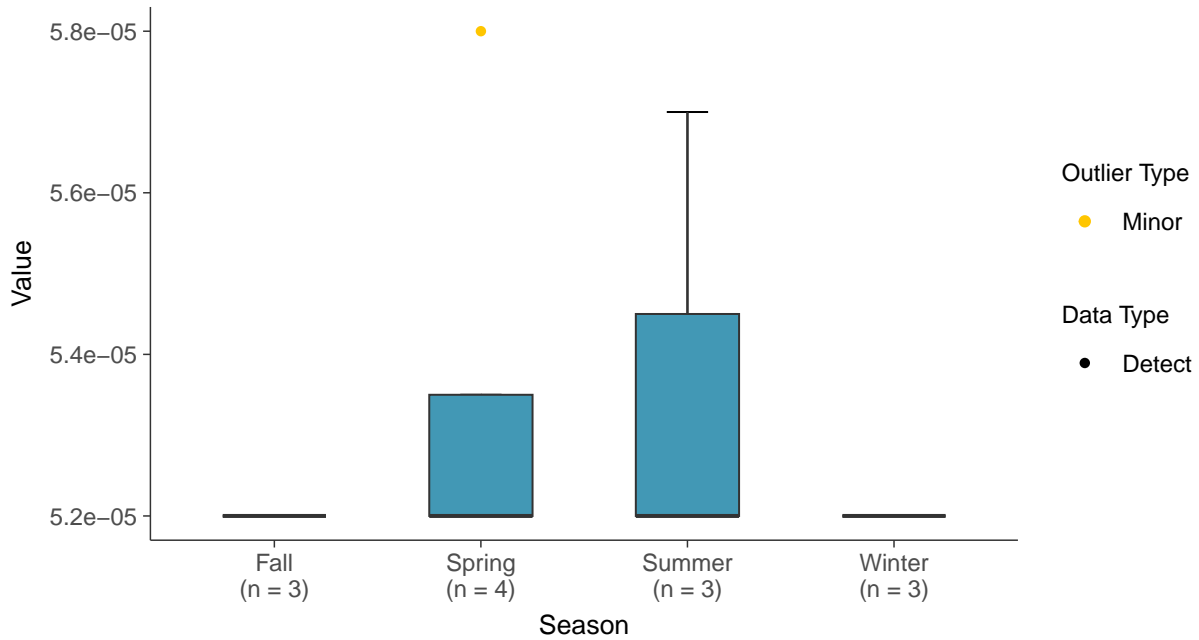
Boxplot

Beryllium, MW-09 (mg/L)



Boxplot by Season

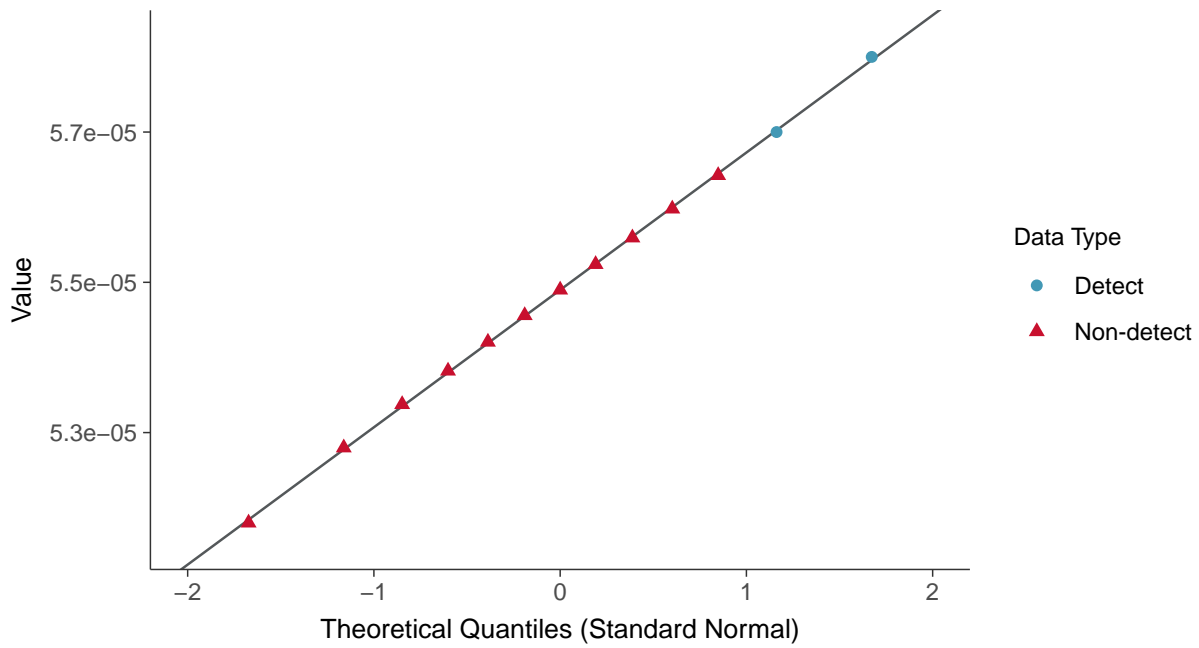
Beryllium, MW-09 (mg/L)





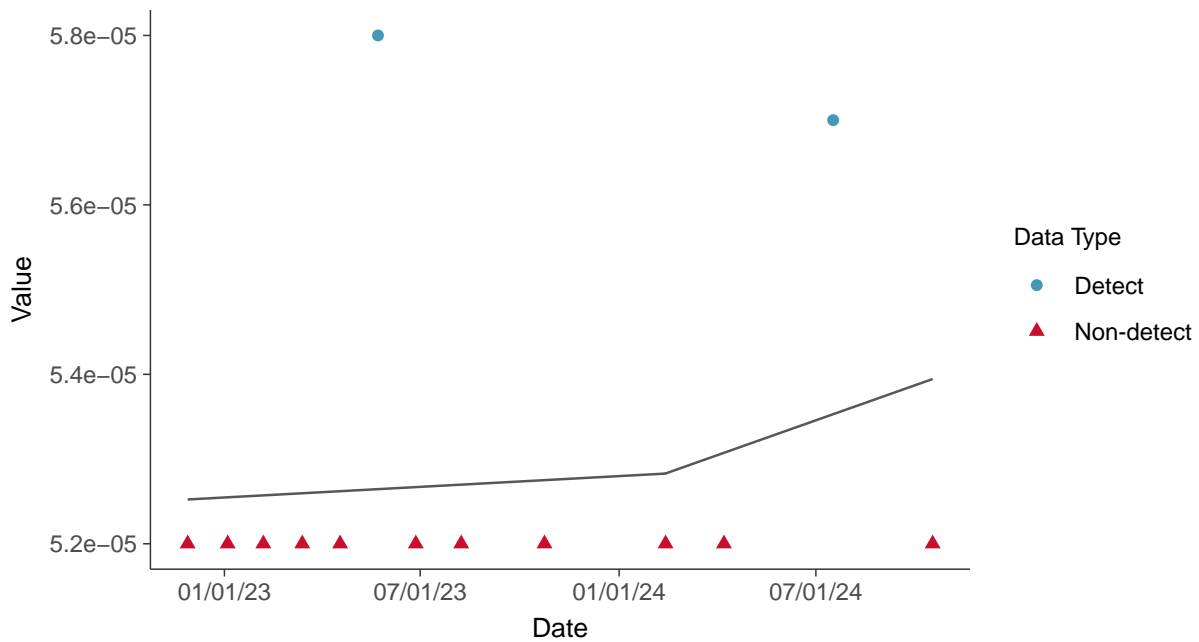
Normal Q-Q plot using ROS Imputed Estimates

Beryllium, MW-09 (mg/L)



Trend Regression: Piecewise Linear-Linear

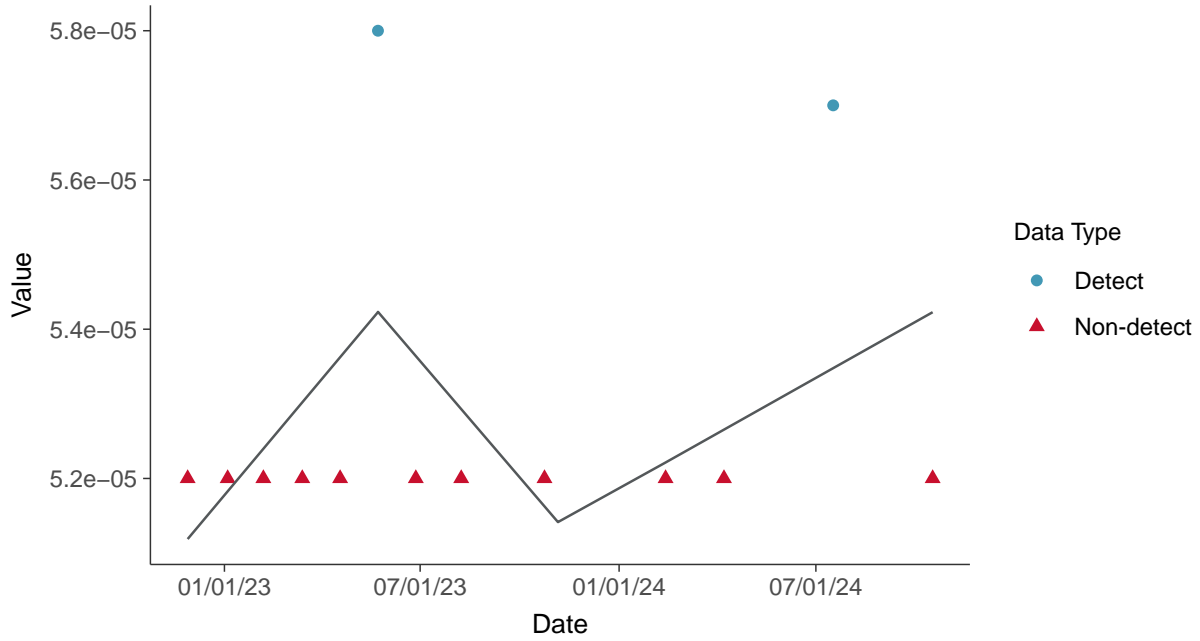
Beryllium, MW-09 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

Beryllium, MW-09 (mg/L)



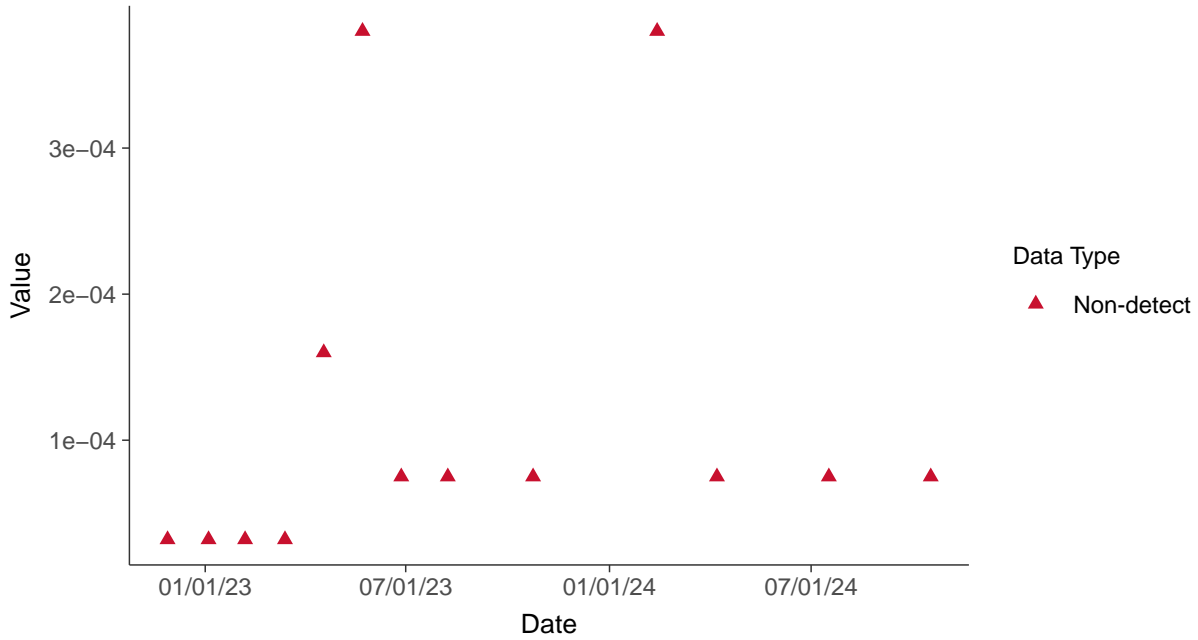


Appendix IV: Cadmium, MW-09

ID: 2_19_2_5_106

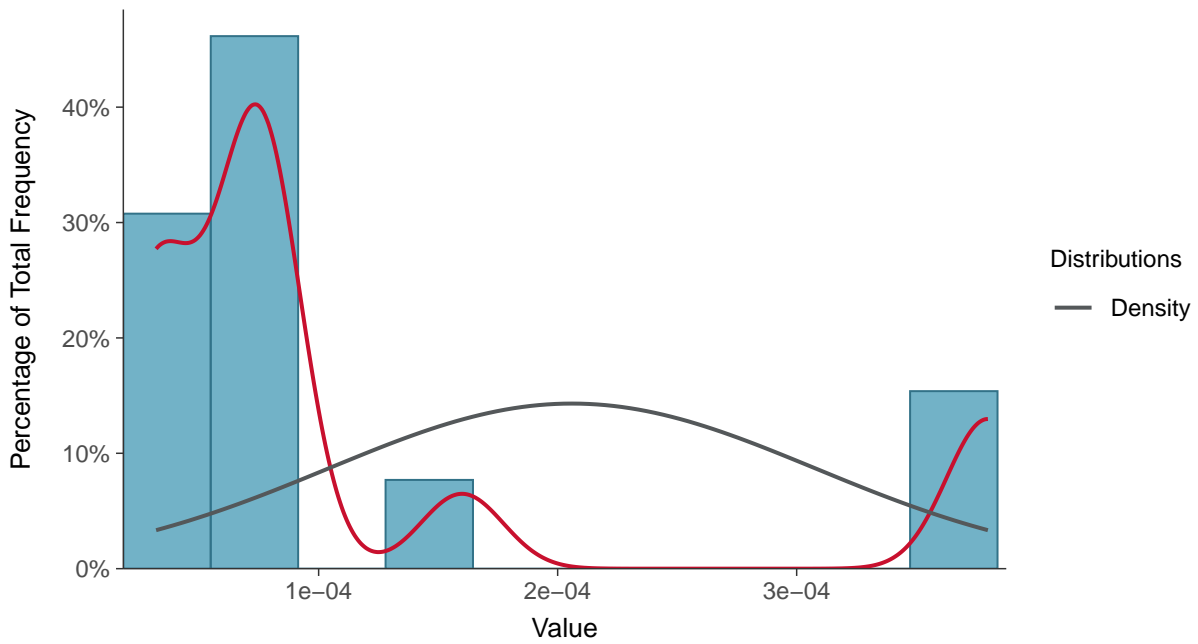
Scatter Plot

Cadmium, MW-09 (mg/L)



Histogram

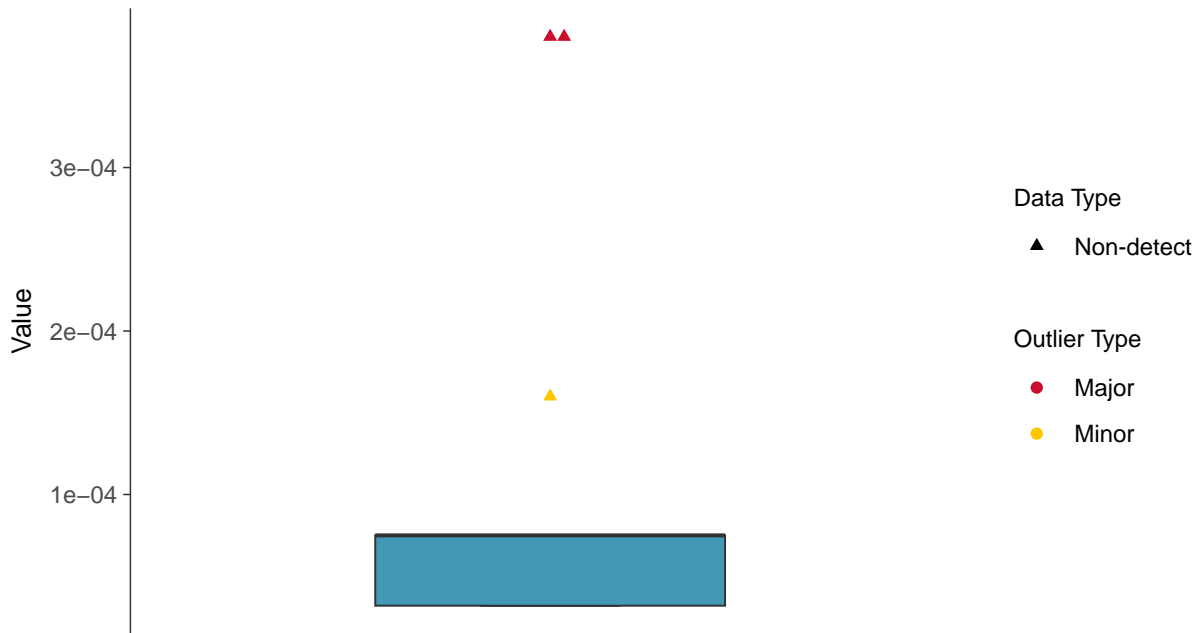
Cadmium, MW-09 (mg/L)





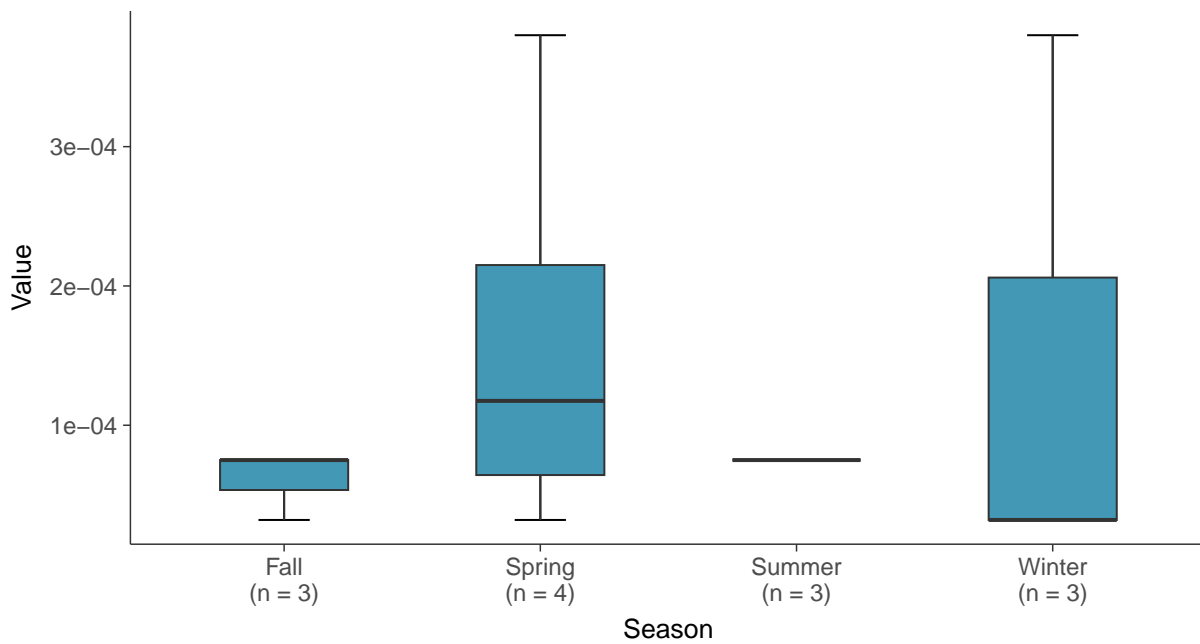
Boxplot

Cadmium, MW-09 (mg/L)



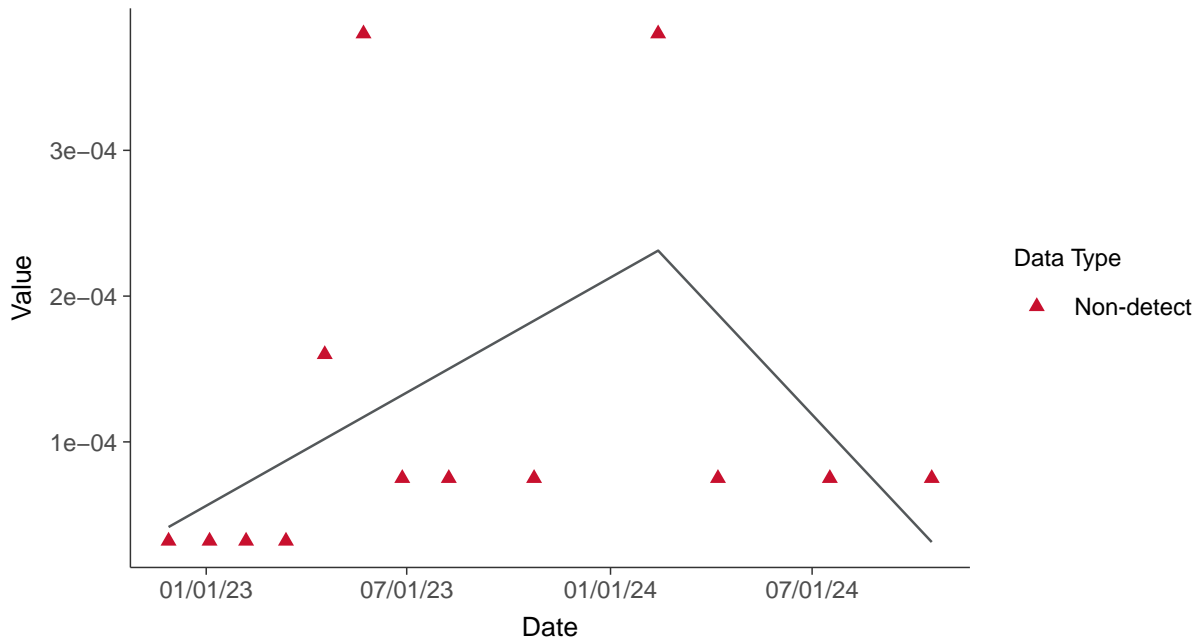
Boxplot by Season

Cadmium, MW-09 (mg/L)

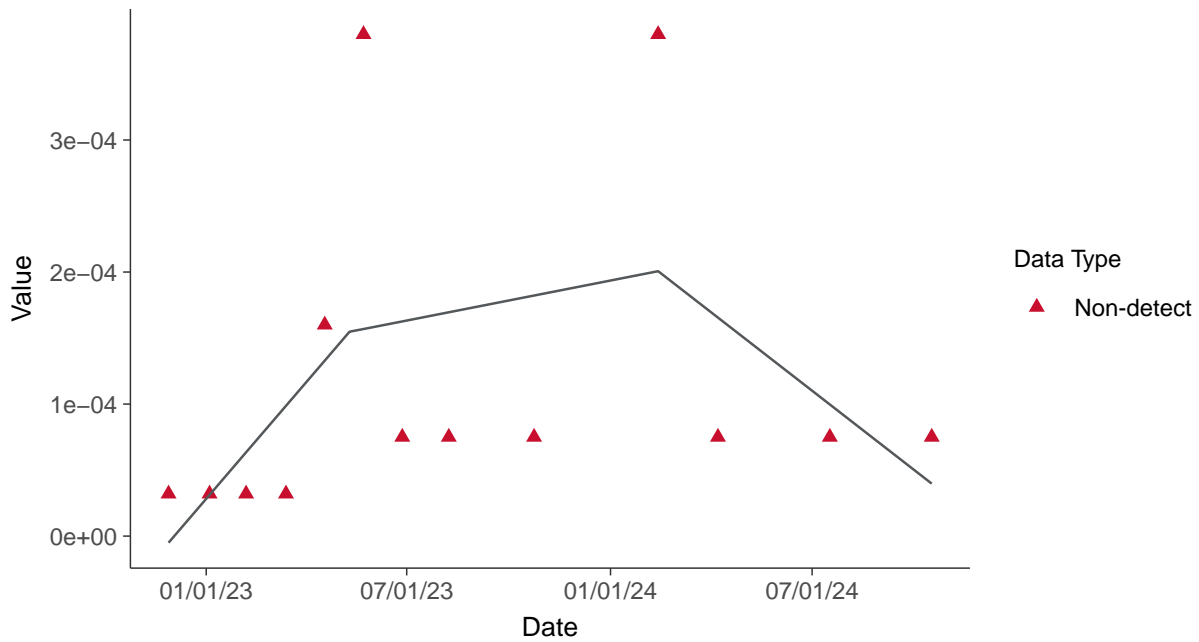




Trend Regression: Piecewise Linear-Linear
Cadmium, MW-09 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Cadmium, MW-09 (mg/L)



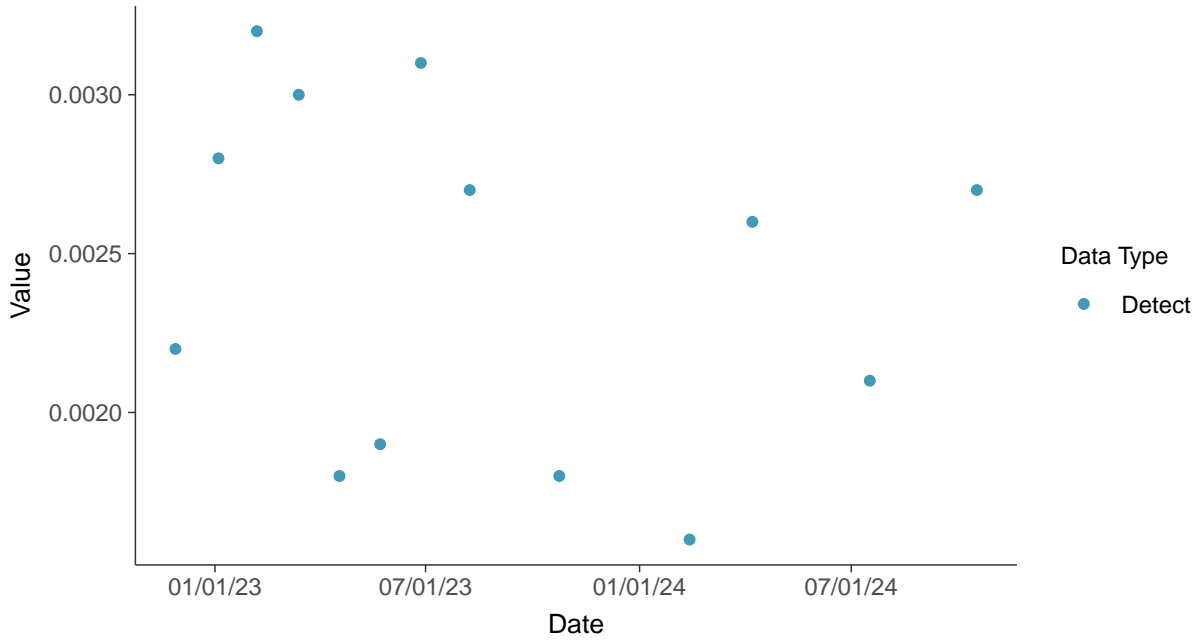


Appendix IV: Chromium, Total, MW-09

ID: 2_19_2_5_109

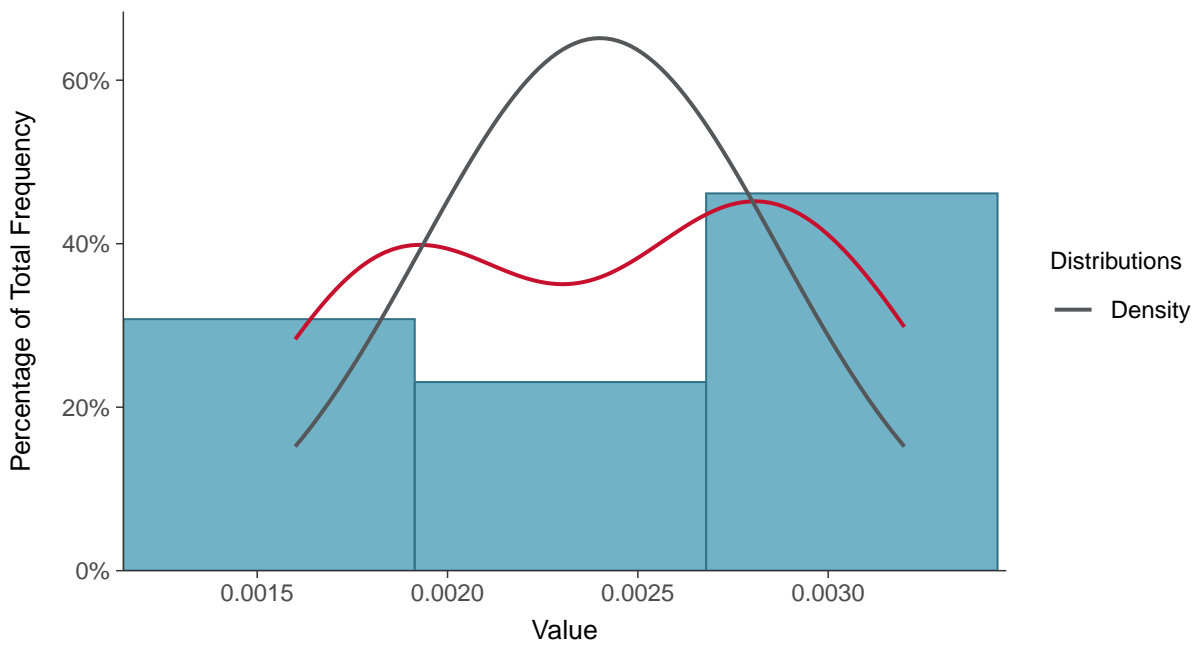
Scatter Plot

Chromium, Total, MW-09 (mg/L)



Histogram

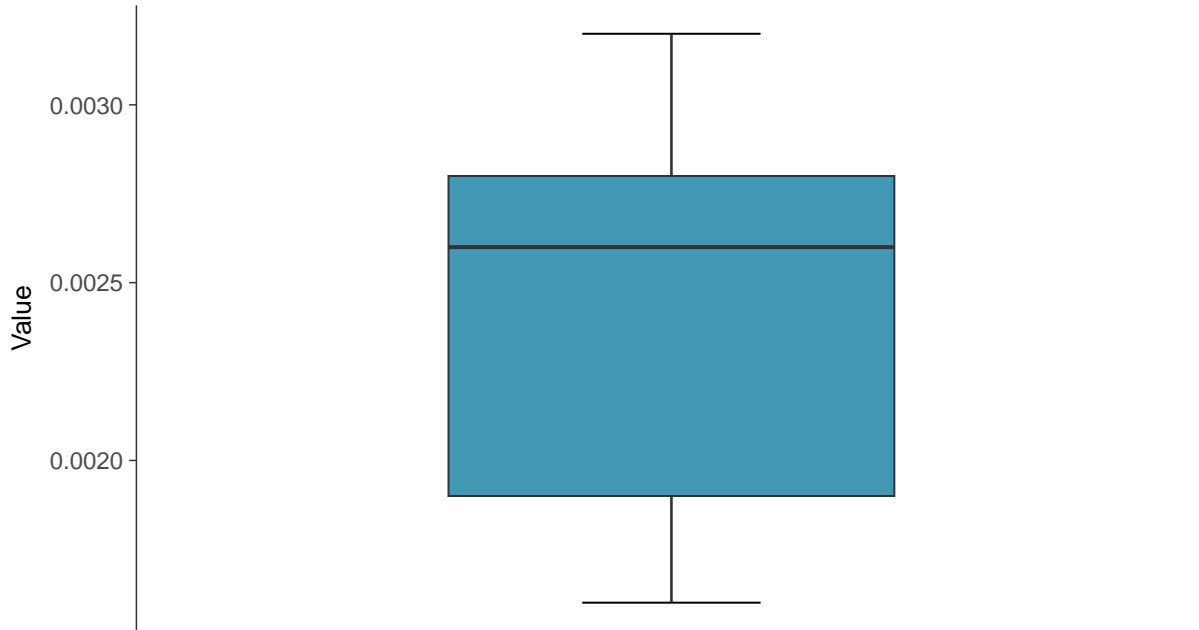
Chromium, Total, MW-09 (mg/L)





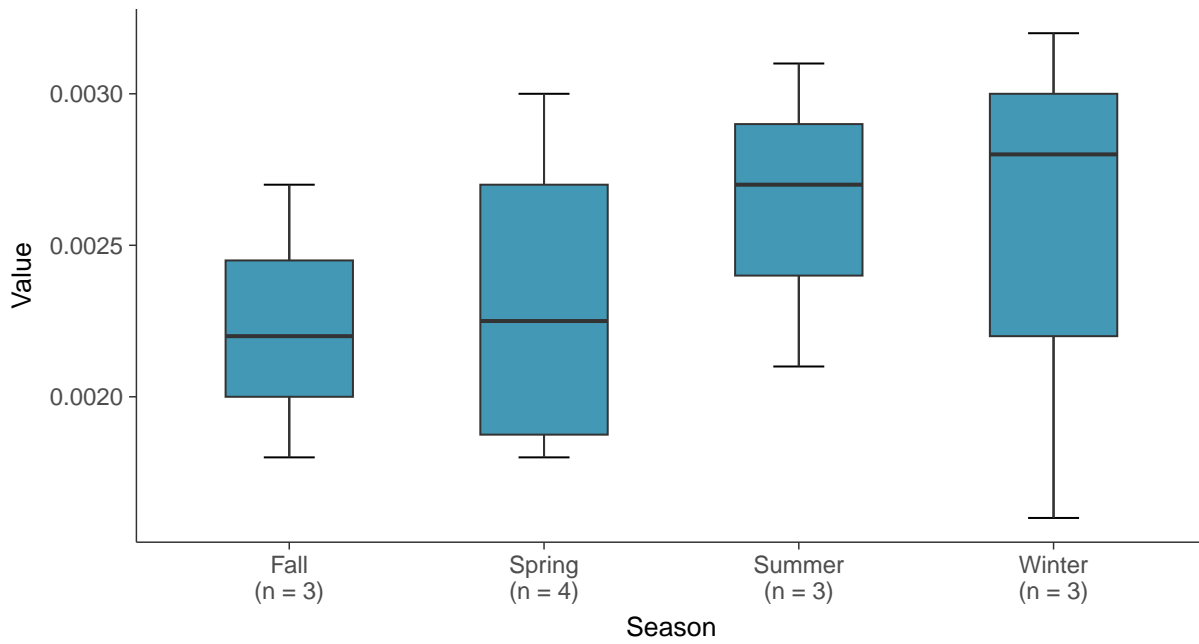
Boxplot

Chromium, Total, MW-09 (mg/L)



Boxplot by Season

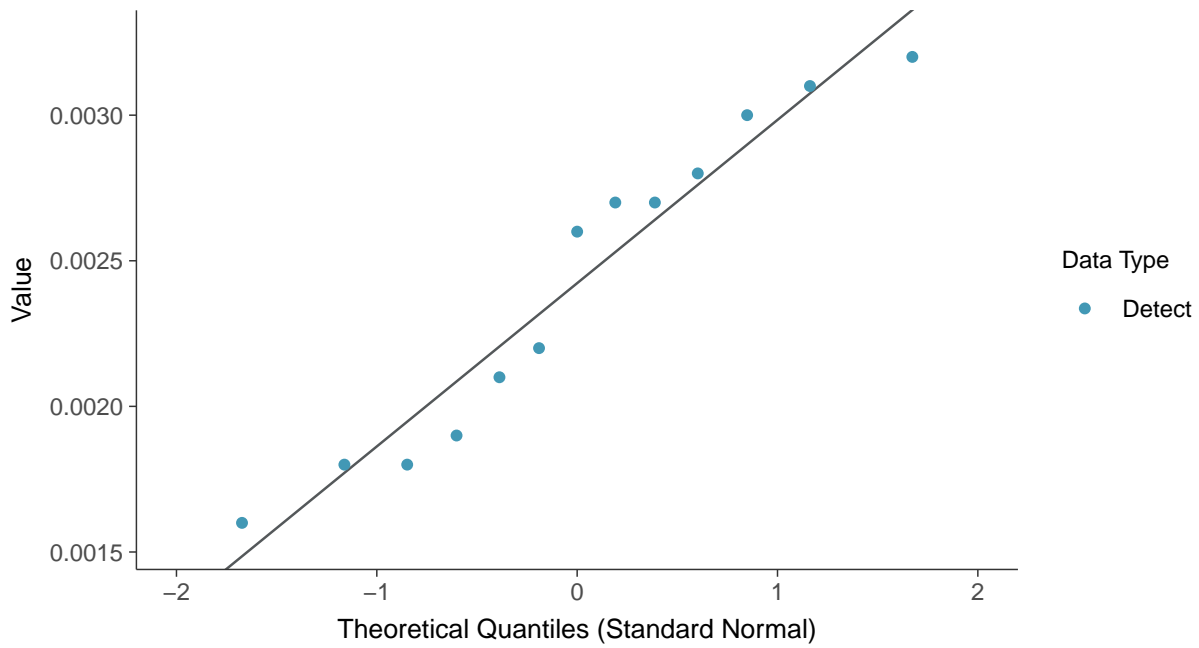
Chromium, Total, MW-09 (mg/L)





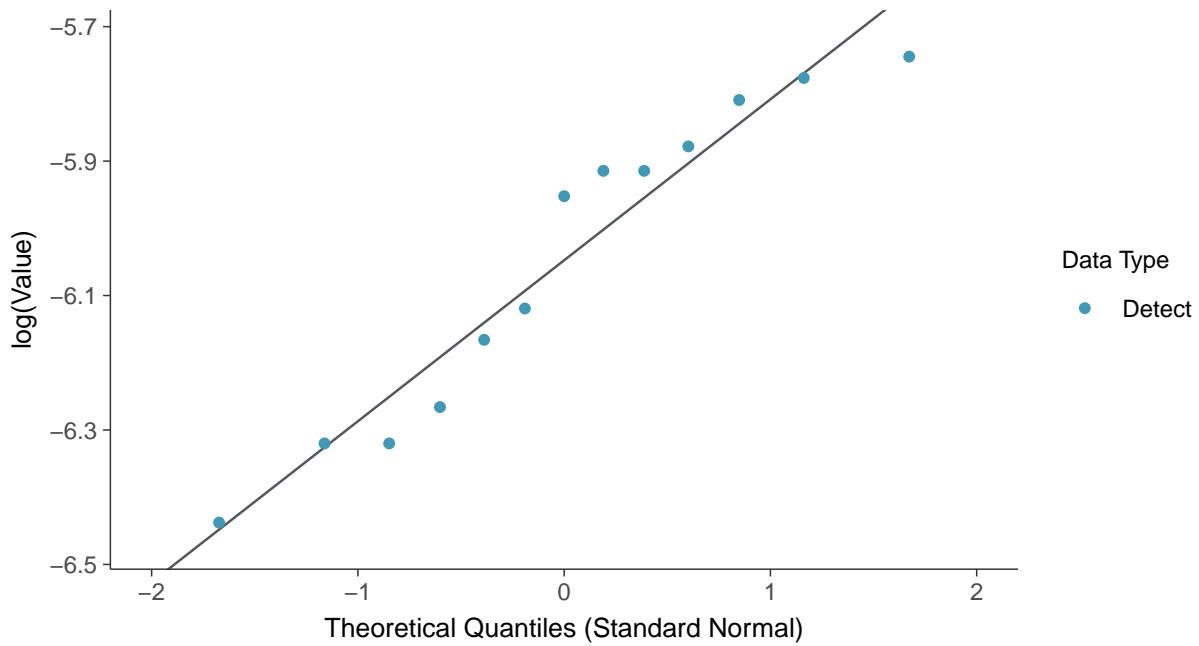
Normal Q-Q plot

Chromium, Total, MW-09 (mg/L)



Lognormal Q-Q plot

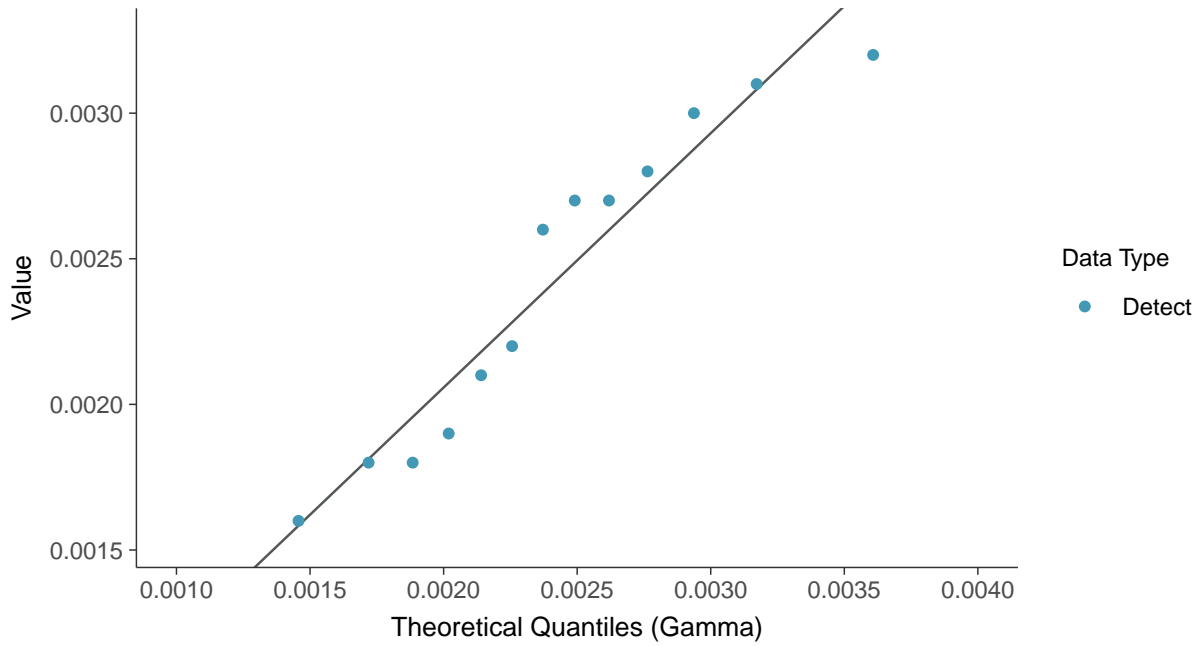
Chromium, Total, MW-09 (mg/L)





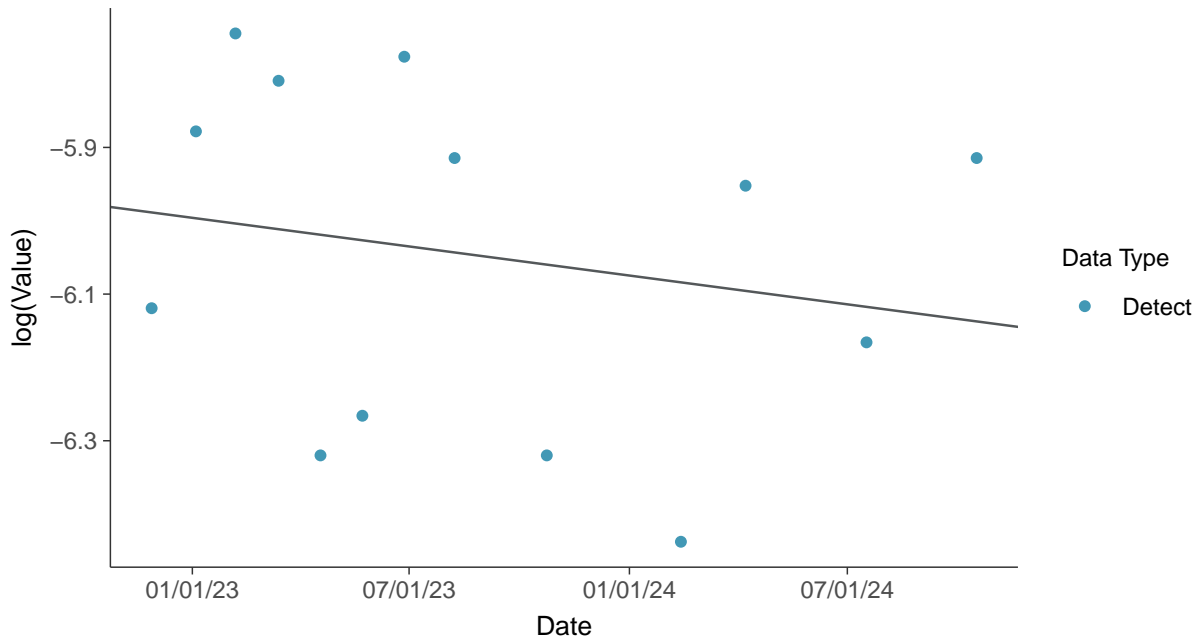
Gamma Q-Q plot

Chromium, Total, MW-09 (mg/L)



Trend Regression: Lognormal MLE

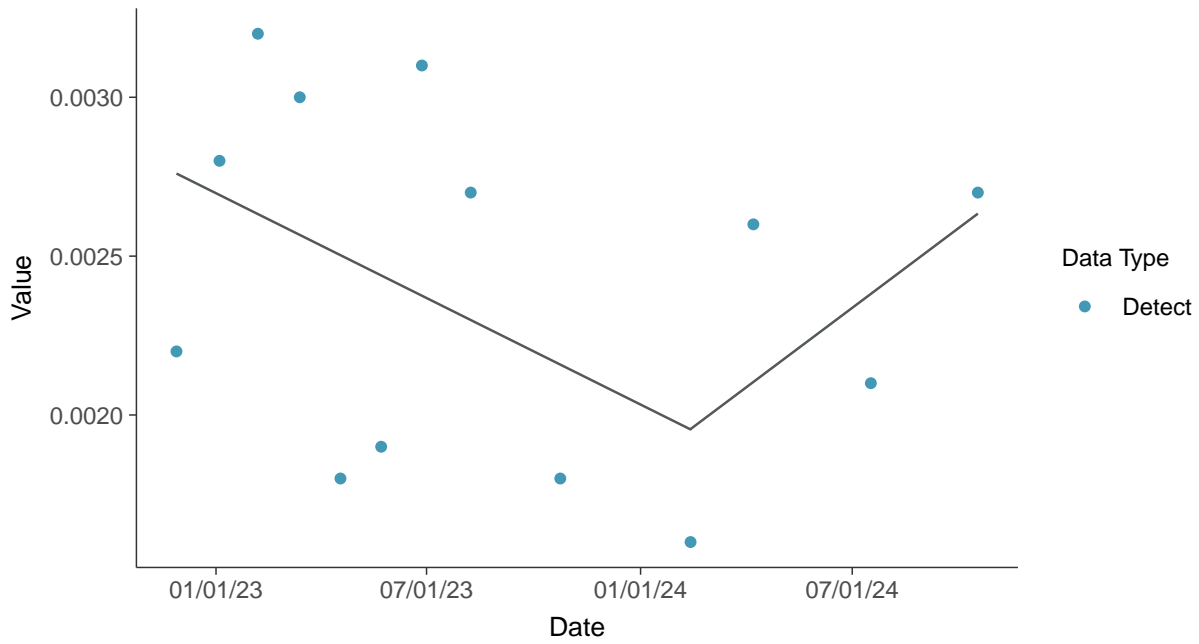
Chromium, Total, MW-09 (mg/L)





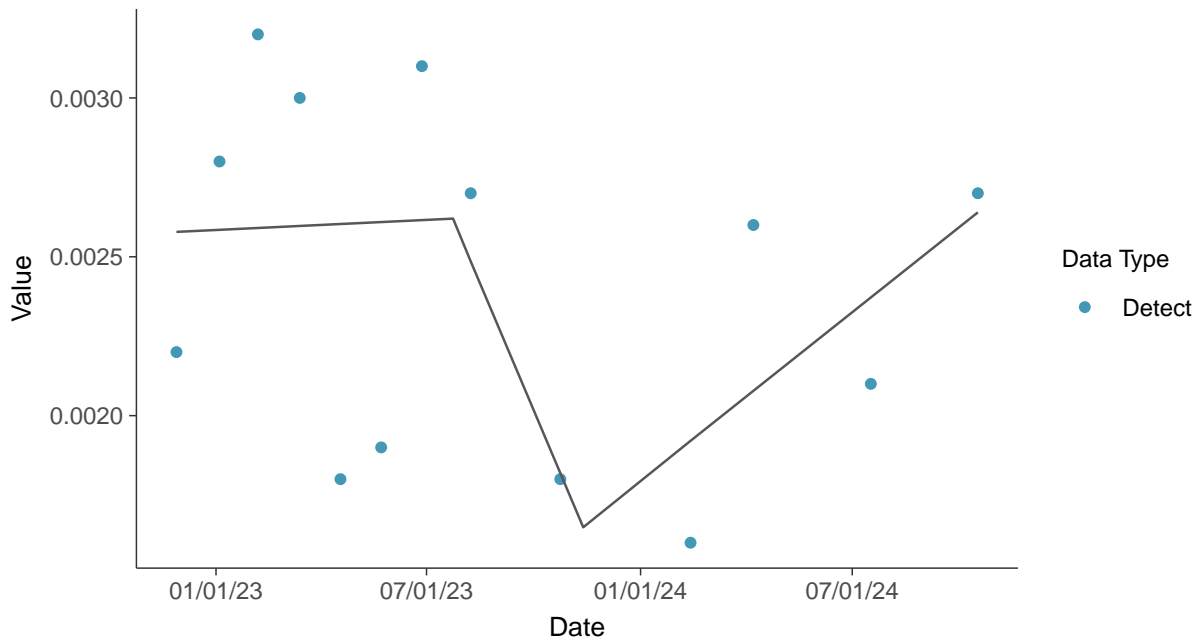
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-09 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

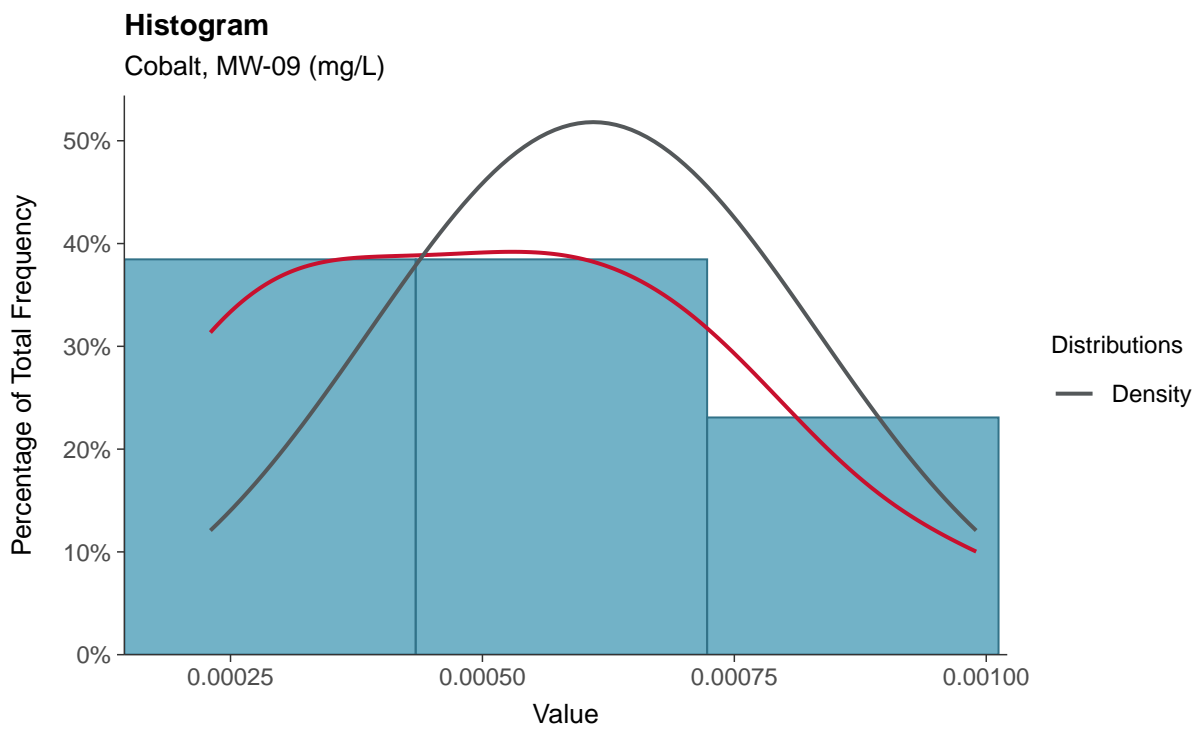
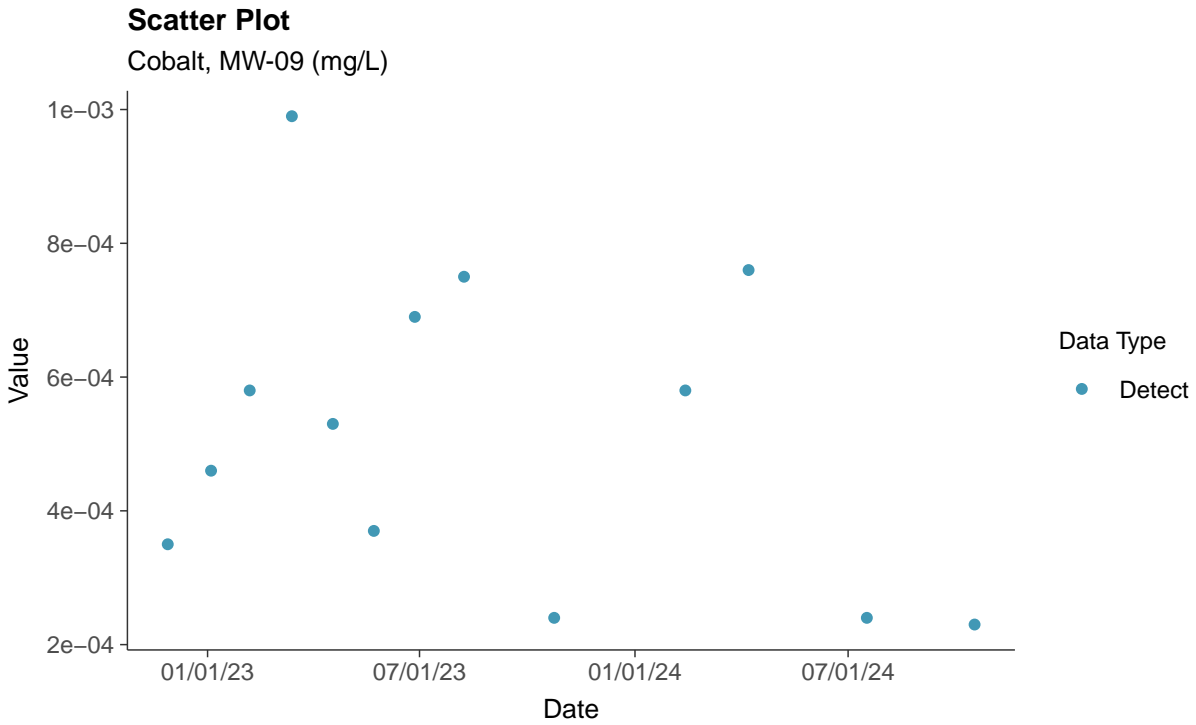
Chromium, Total, MW-09 (mg/L)





Appendix IV: Cobalt, MW-09

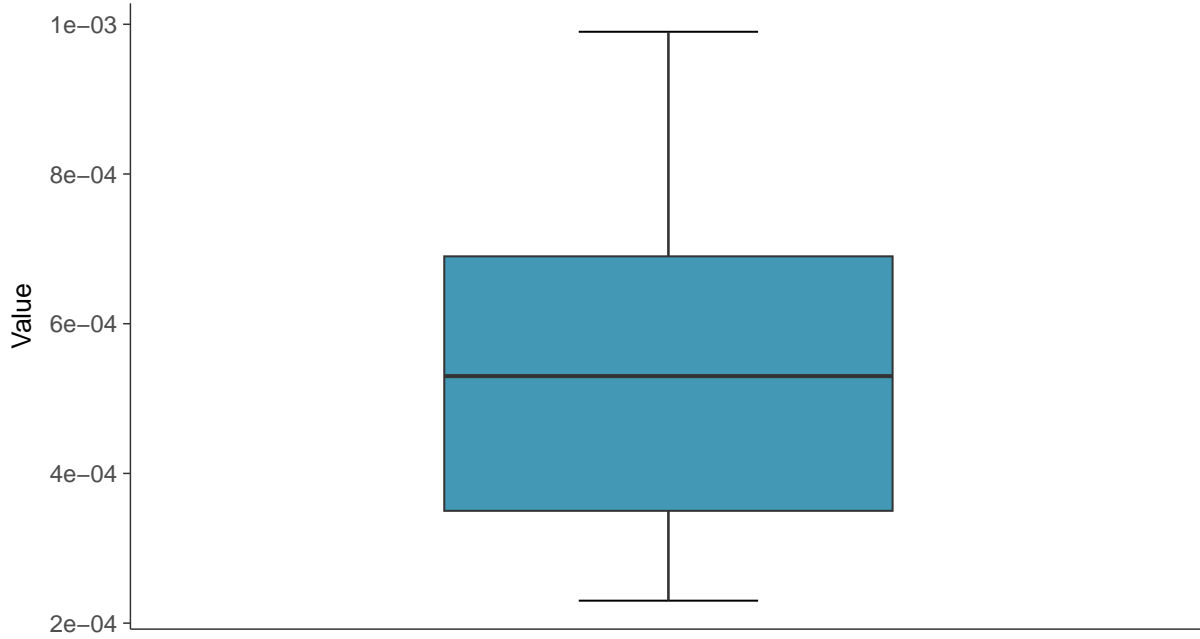
ID: 2_19_2_5_110





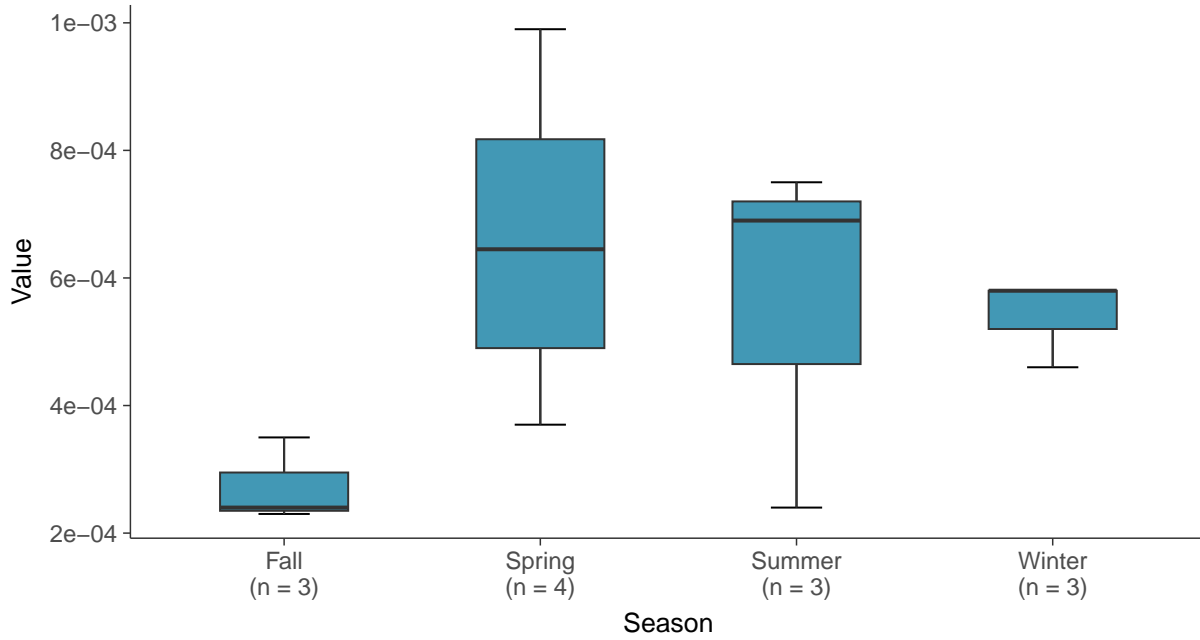
Boxplot

Cobalt, MW-09 (mg/L)



Boxplot by Season

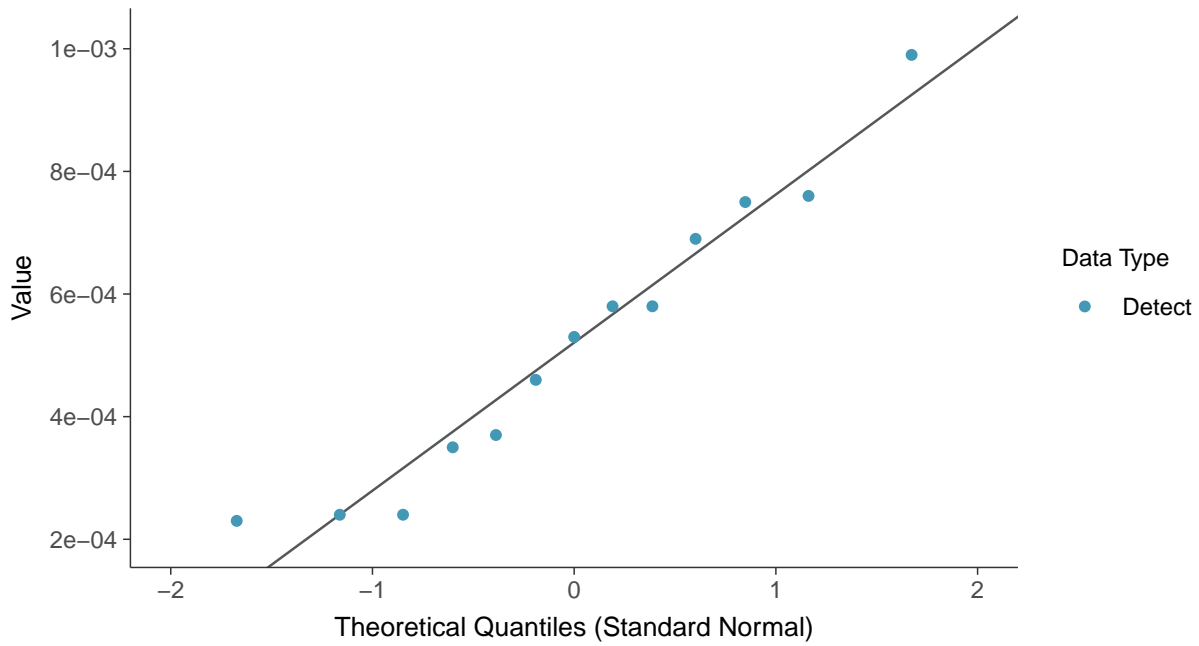
Cobalt, MW-09 (mg/L)





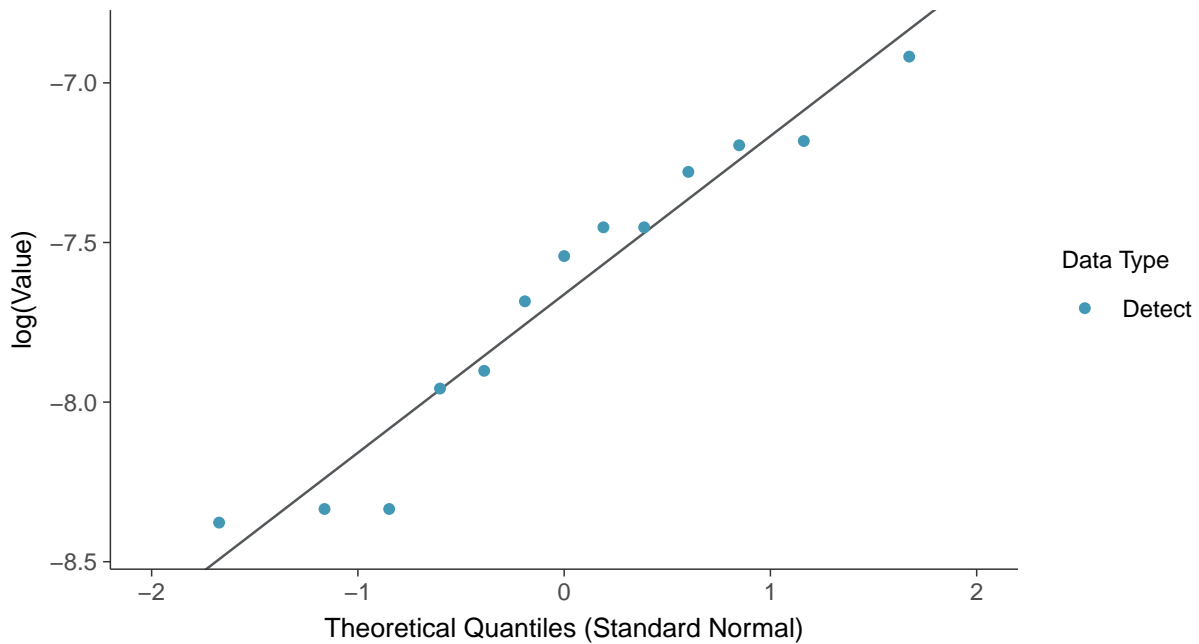
Normal Q-Q plot

Cobalt, MW-09 (mg/L)



Lognormal Q-Q plot

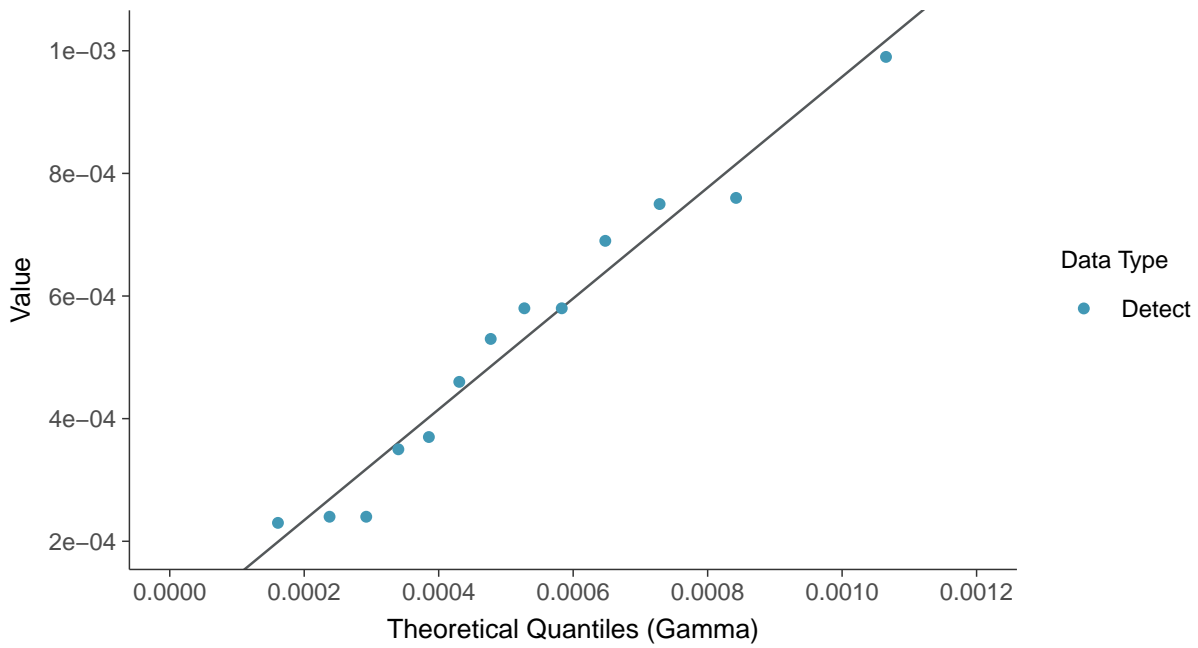
Cobalt, MW-09 (mg/L)





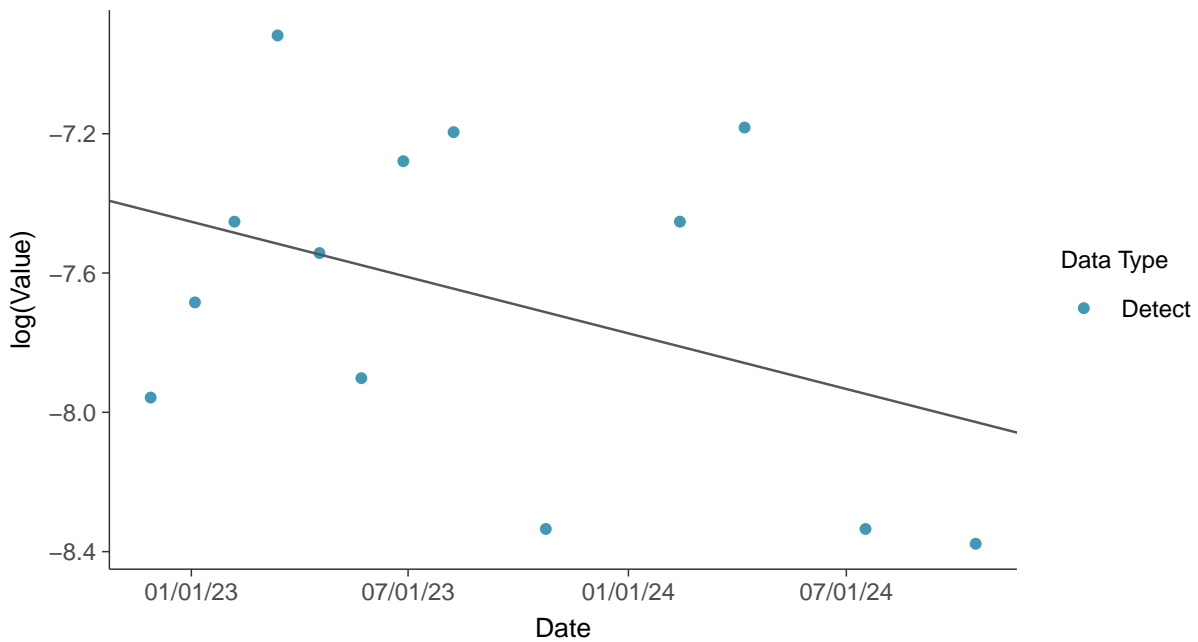
Gamma Q-Q plot

Cobalt, MW-09 (mg/L)



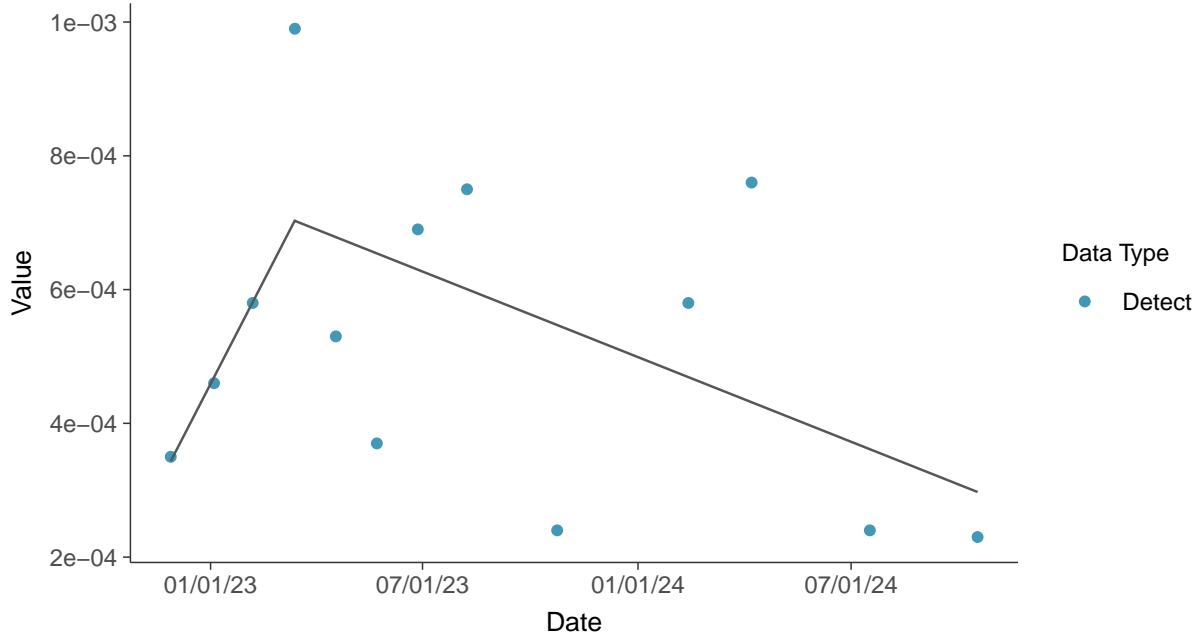
Trend Regression: Lognormal MLE

Cobalt, MW-09 (mg/L)

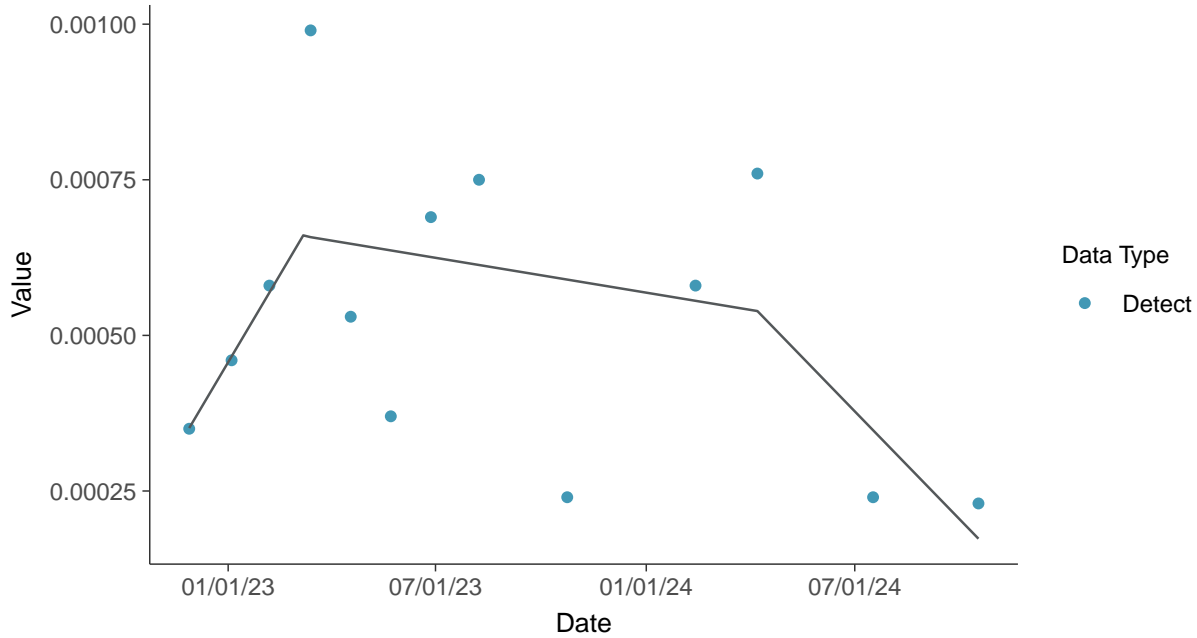




Trend Regression: Piecewise Linear-Linear
Cobalt, MW-09 (mg/L)



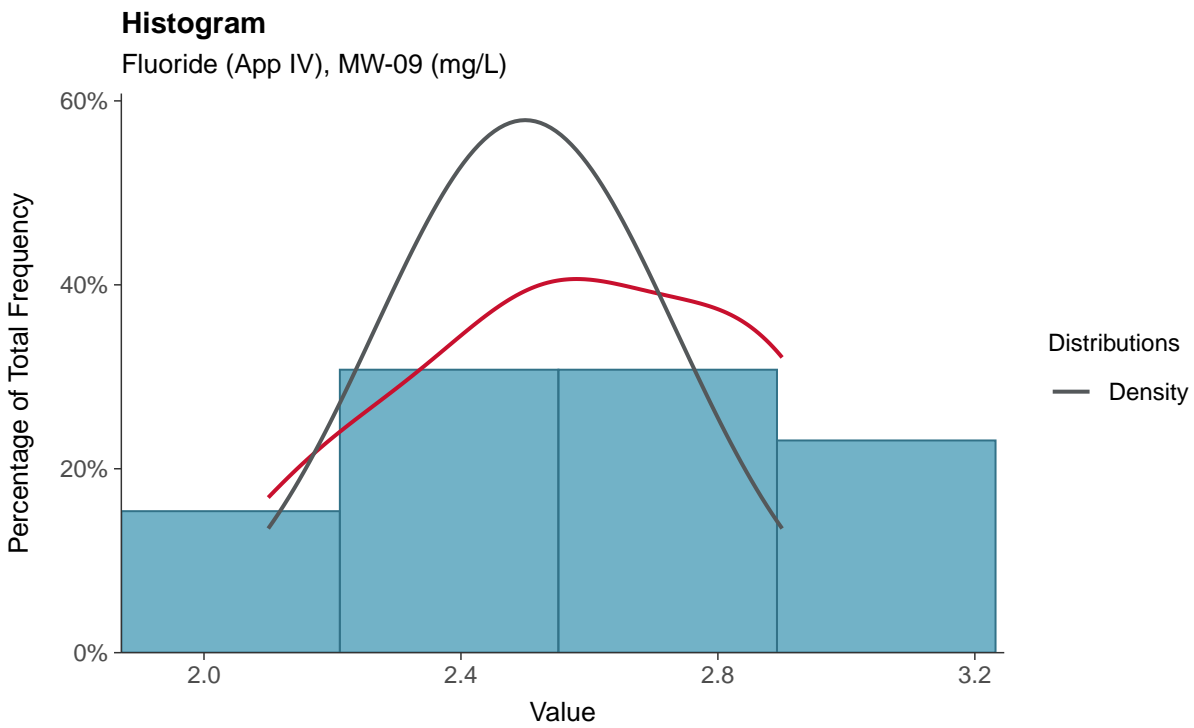
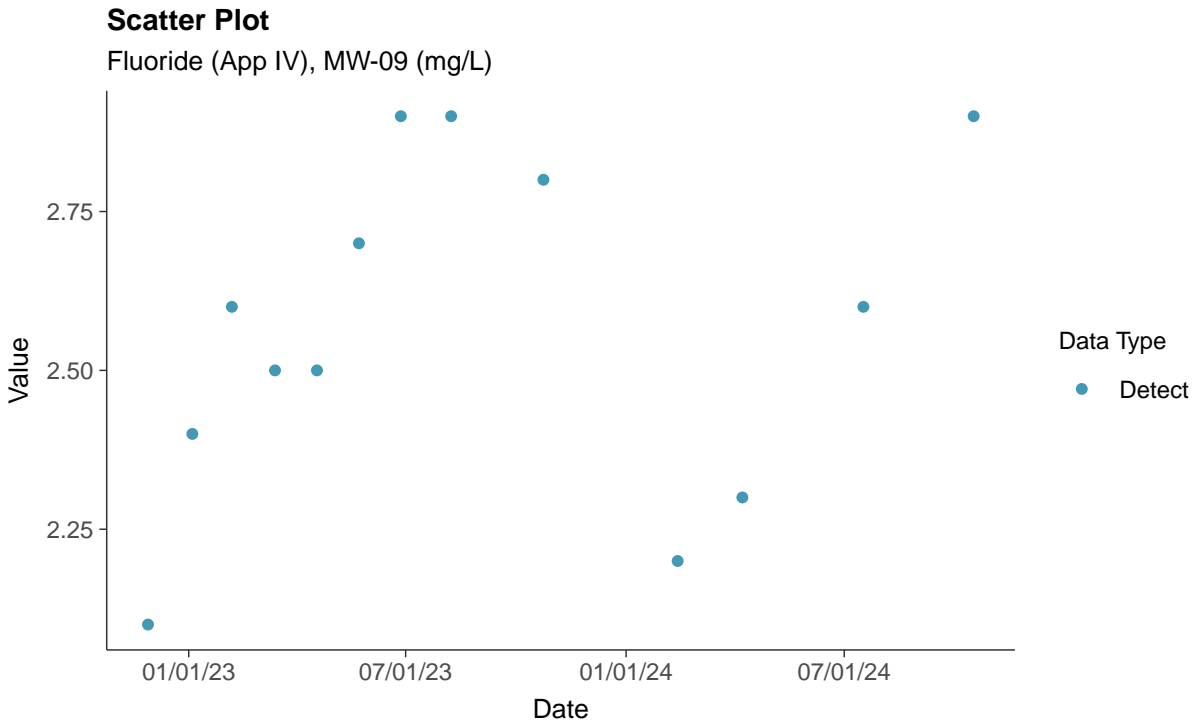
Trend Regression: Piecewise Linear-Linear-Linear
Cobalt, MW-09 (mg/L)





Appendix IV: Fluoride (App IV), MW-09

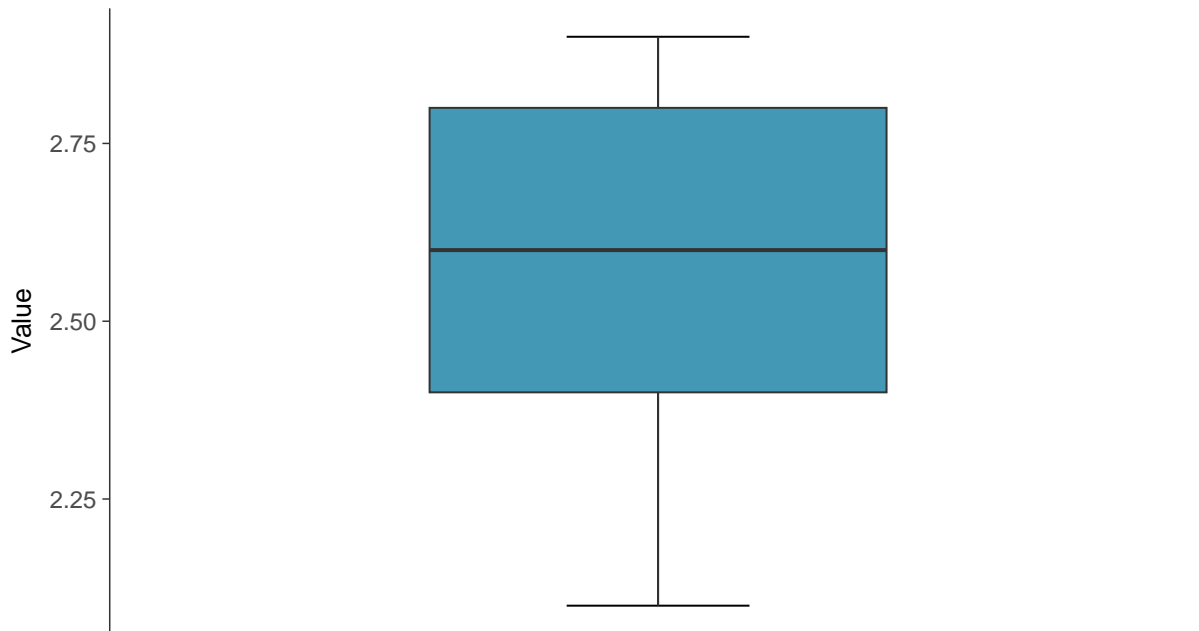
ID: 2_19_2_5_113





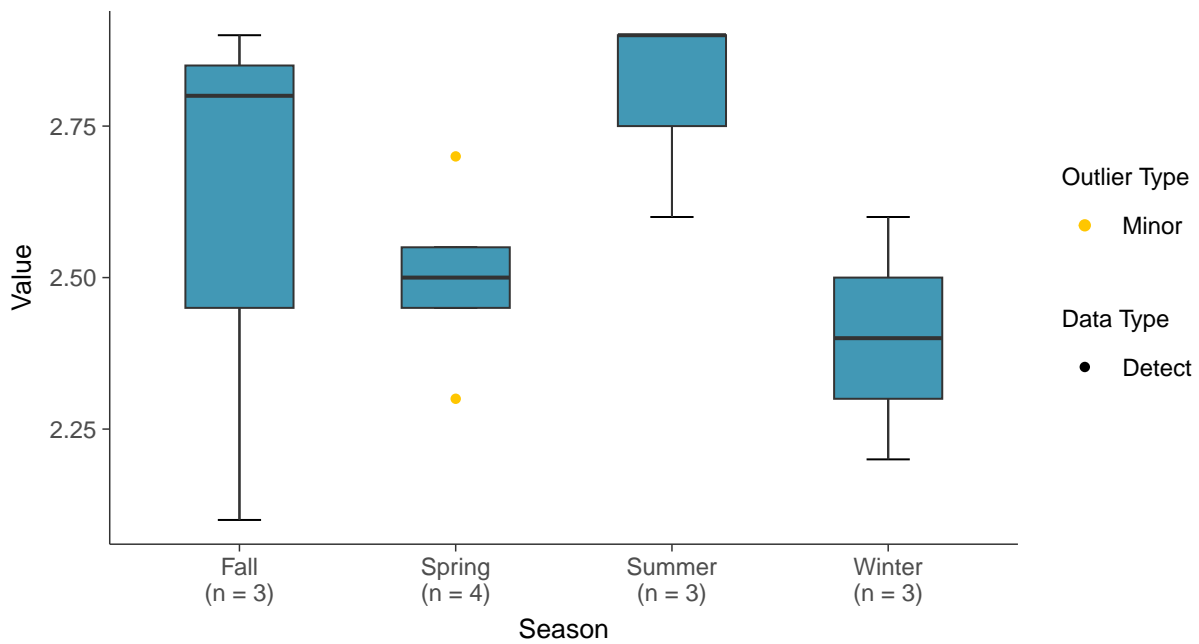
Boxplot

Fluoride (App IV), MW-09 (mg/L)



Boxplot by Season

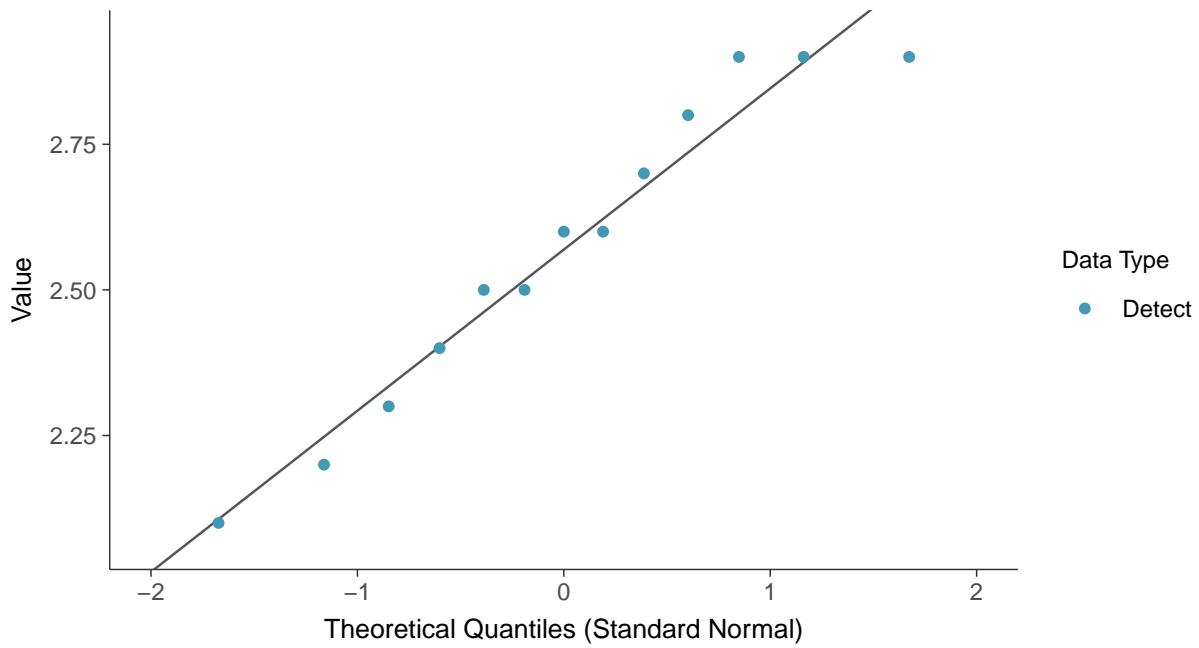
Fluoride (App IV), MW-09 (mg/L)





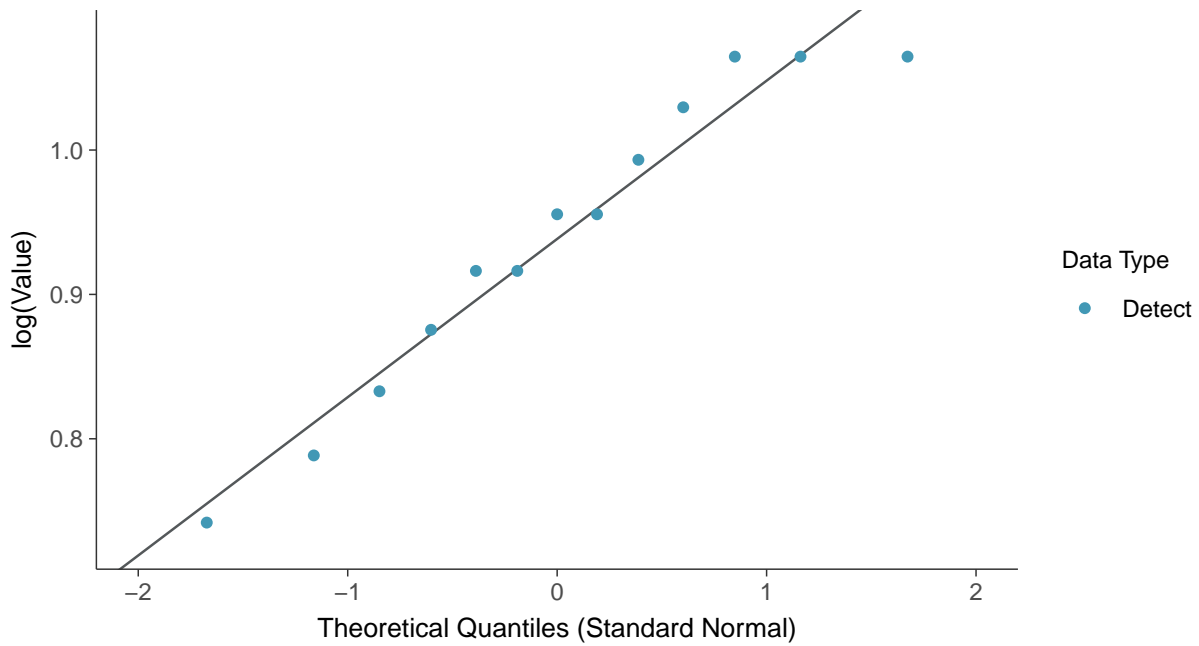
Normal Q-Q plot

Fluoride (App IV), MW-09 (mg/L)



Lognormal Q-Q plot

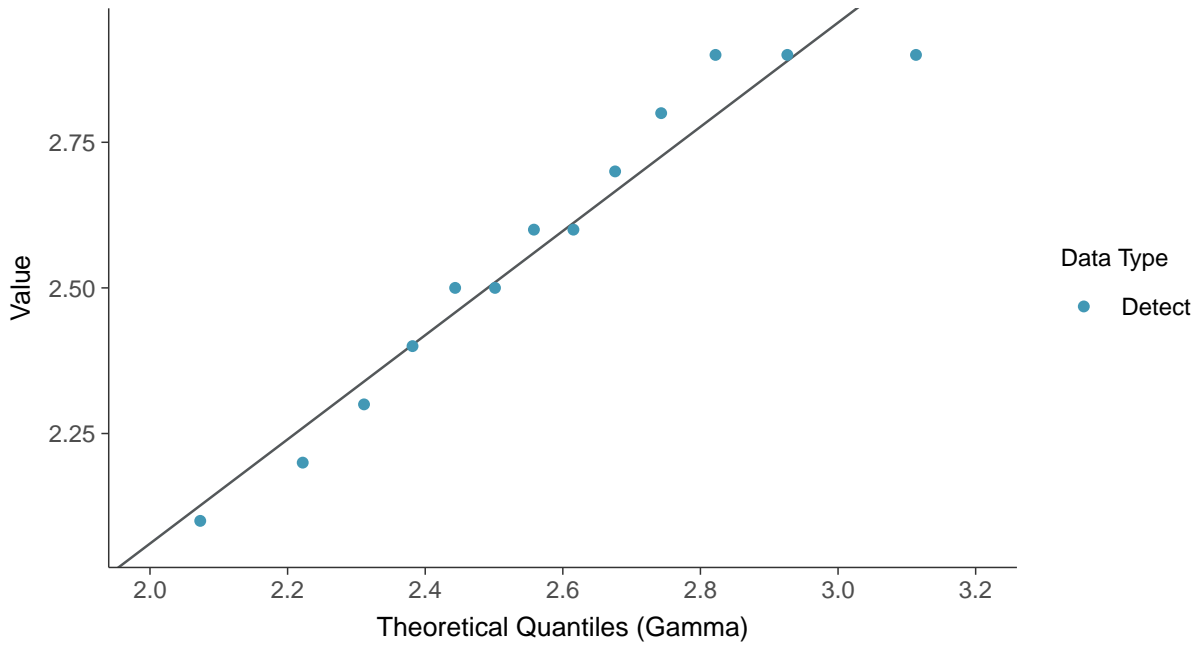
Fluoride (App IV), MW-09 (mg/L)





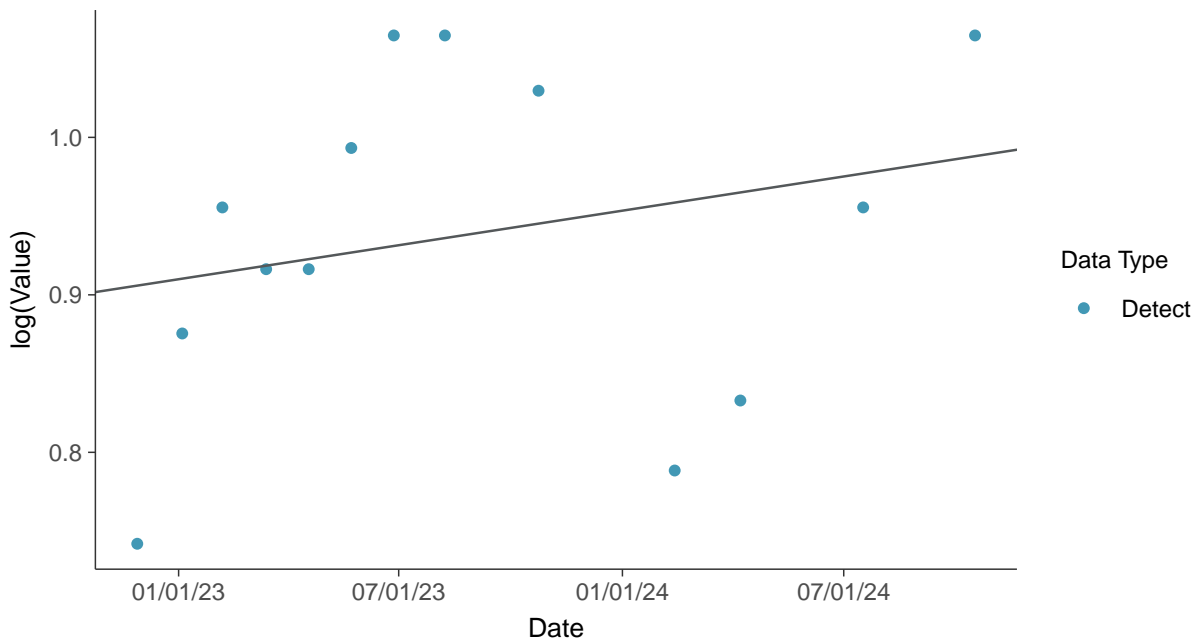
Gamma Q-Q plot

Fluoride (App IV), MW-09 (mg/L)



Trend Regression: Lognormal MLE

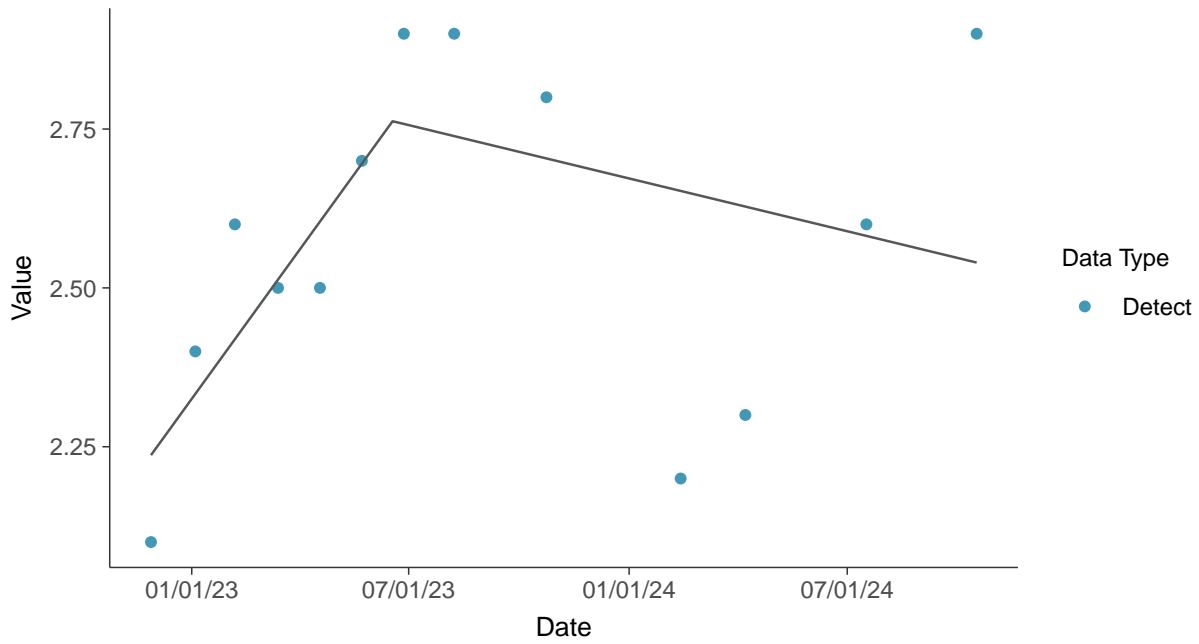
Fluoride (App IV), MW-09 (mg/L)





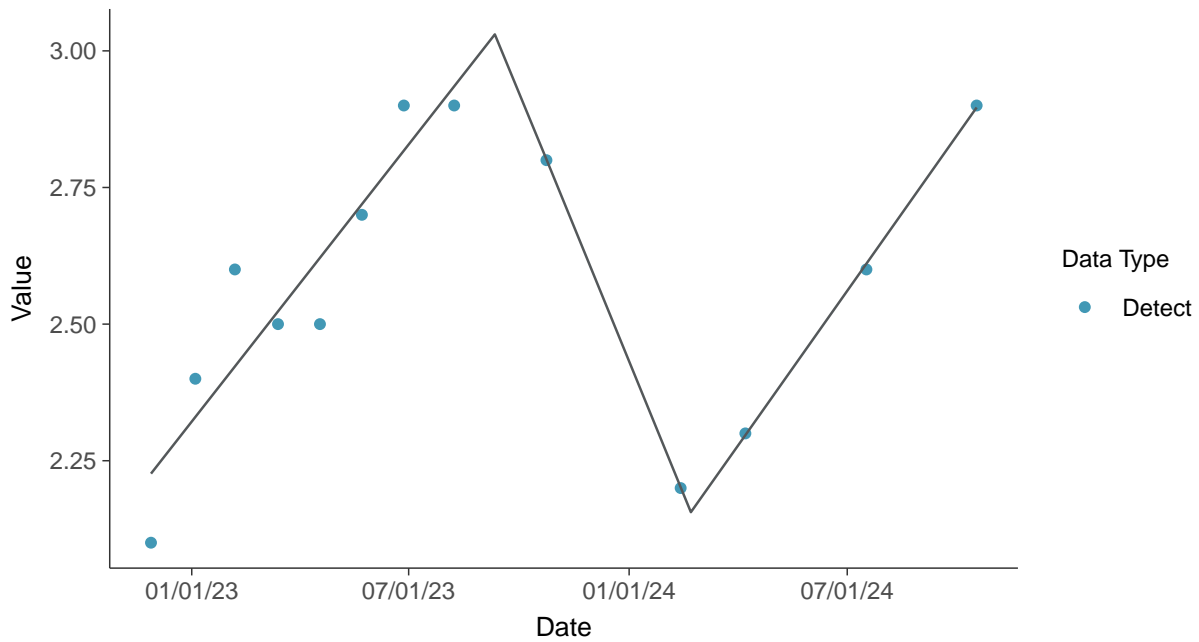
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-09 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

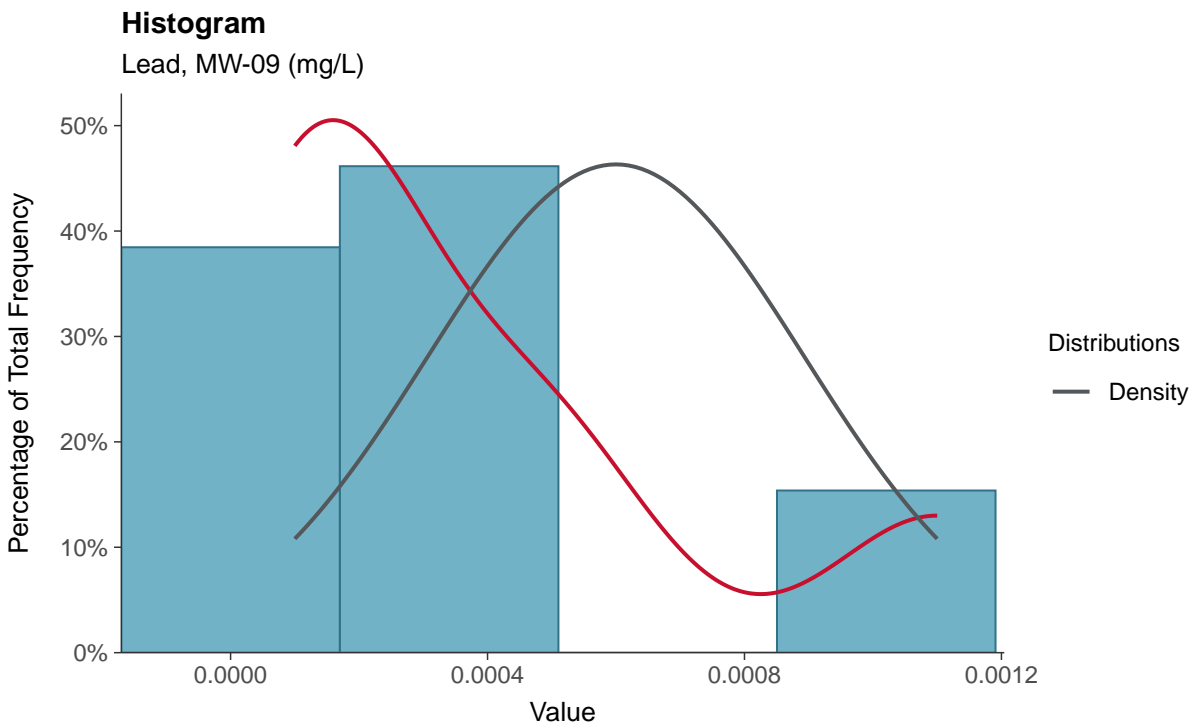
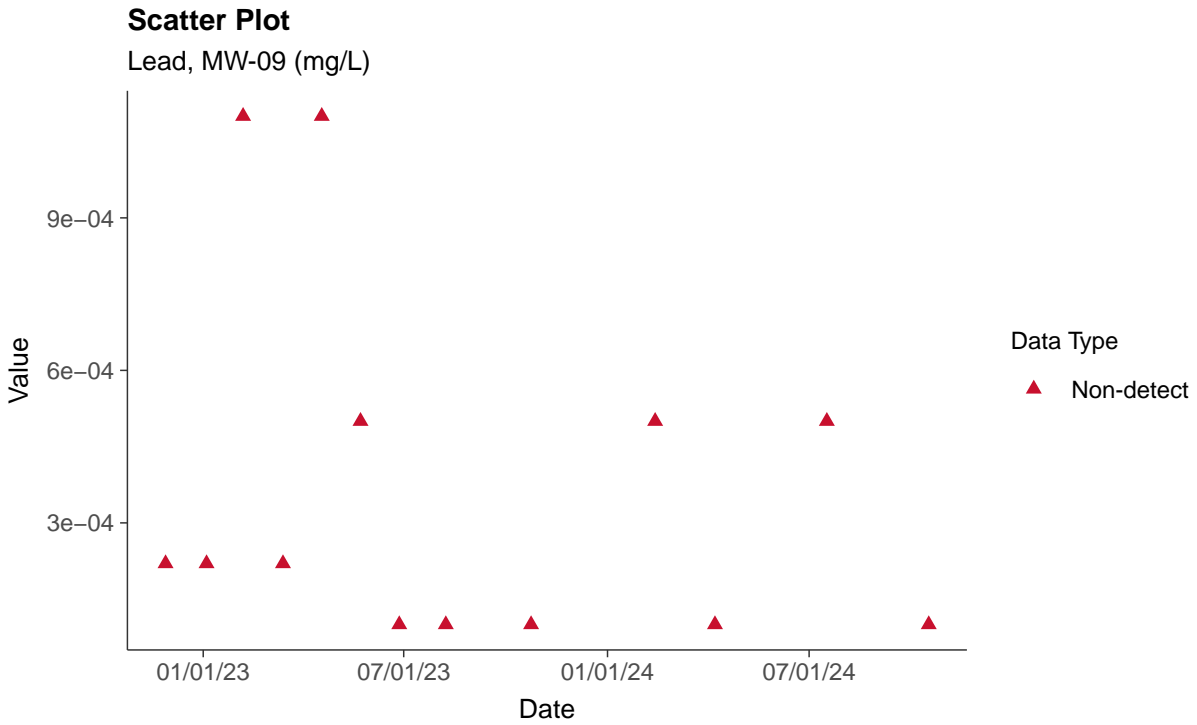
Fluoride (App IV), MW-09 (mg/L)





Appendix IV: Lead, MW-09

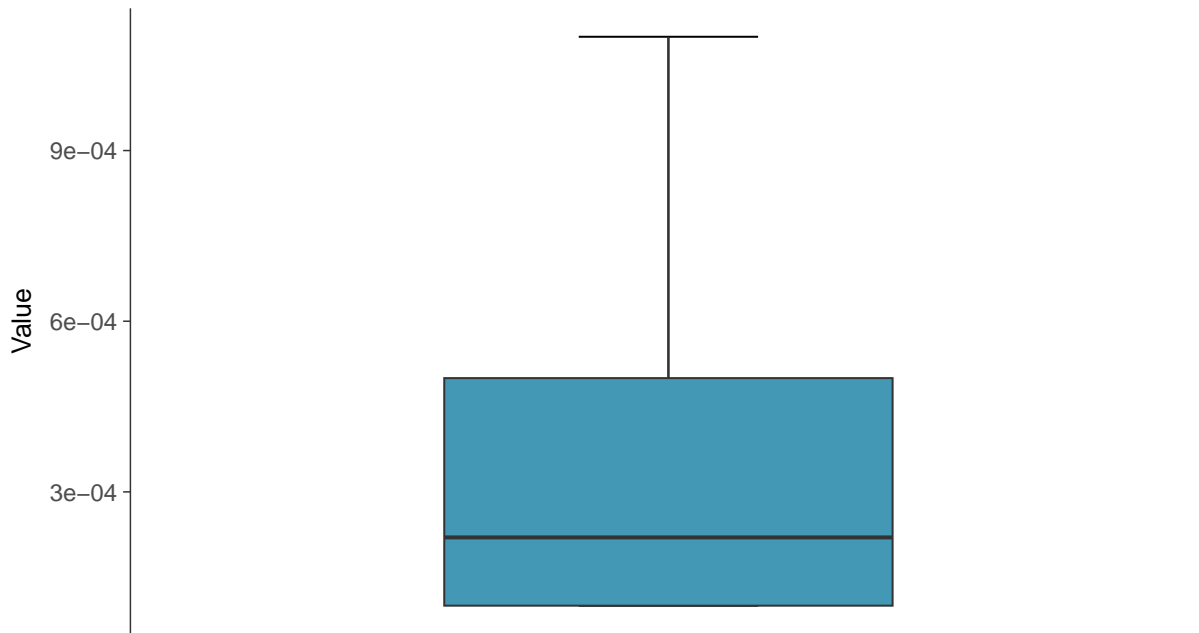
ID: 2_19_2_5_115





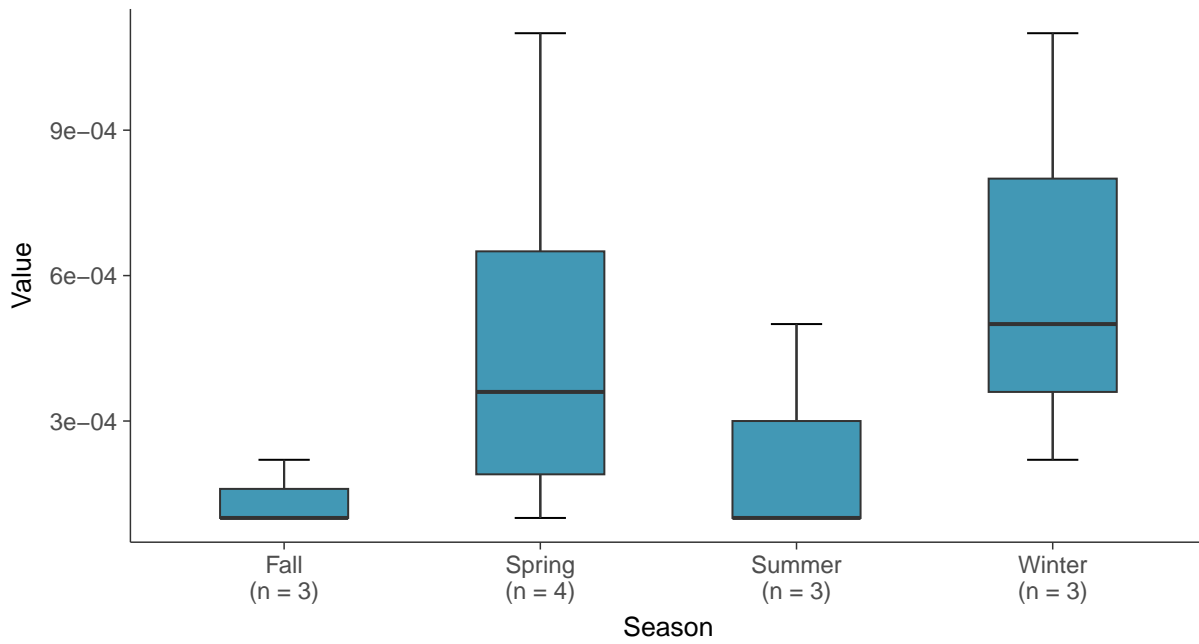
Boxplot

Lead, MW-09 (mg/L)



Boxplot by Season

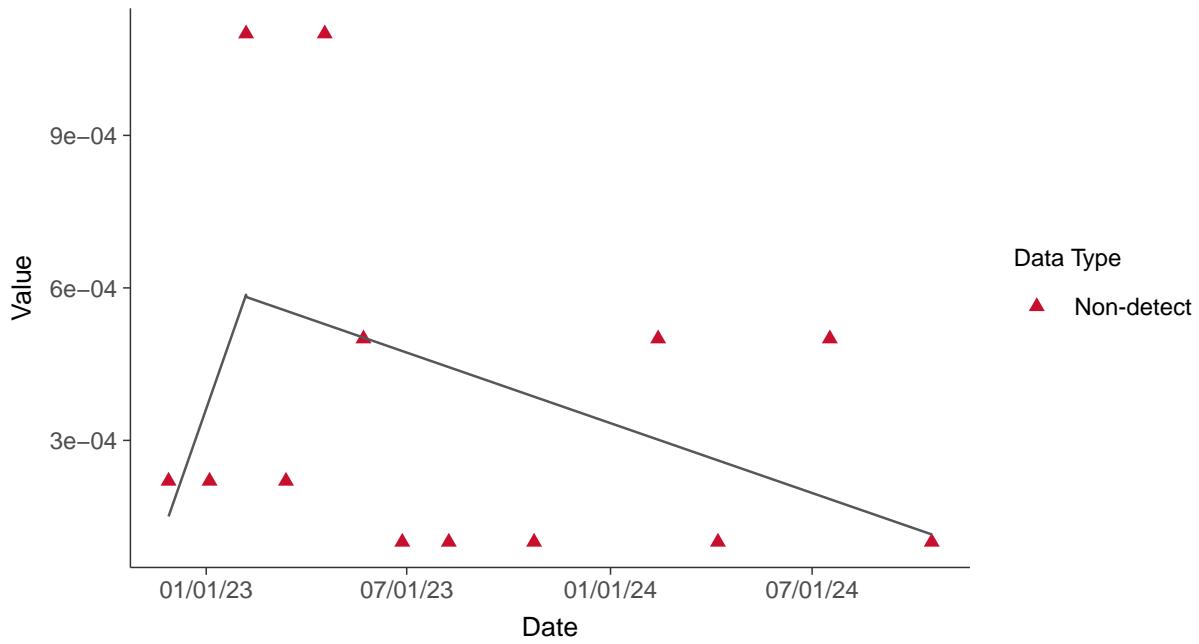
Lead, MW-09 (mg/L)





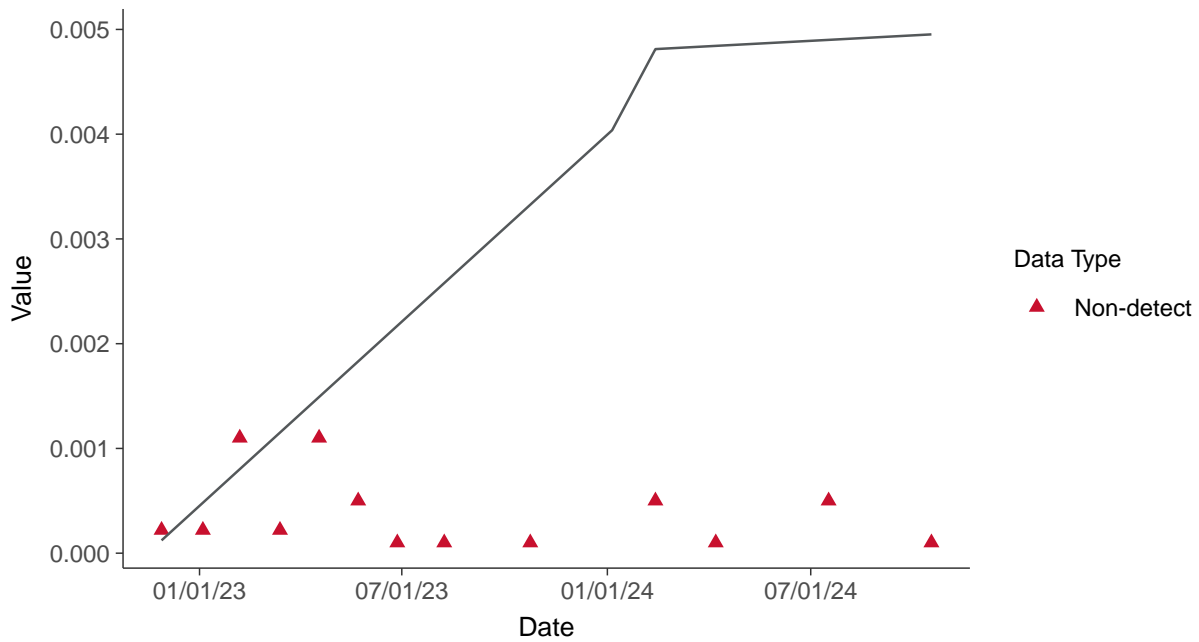
Trend Regression: Piecewise Linear-Linear

Lead, MW-09 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

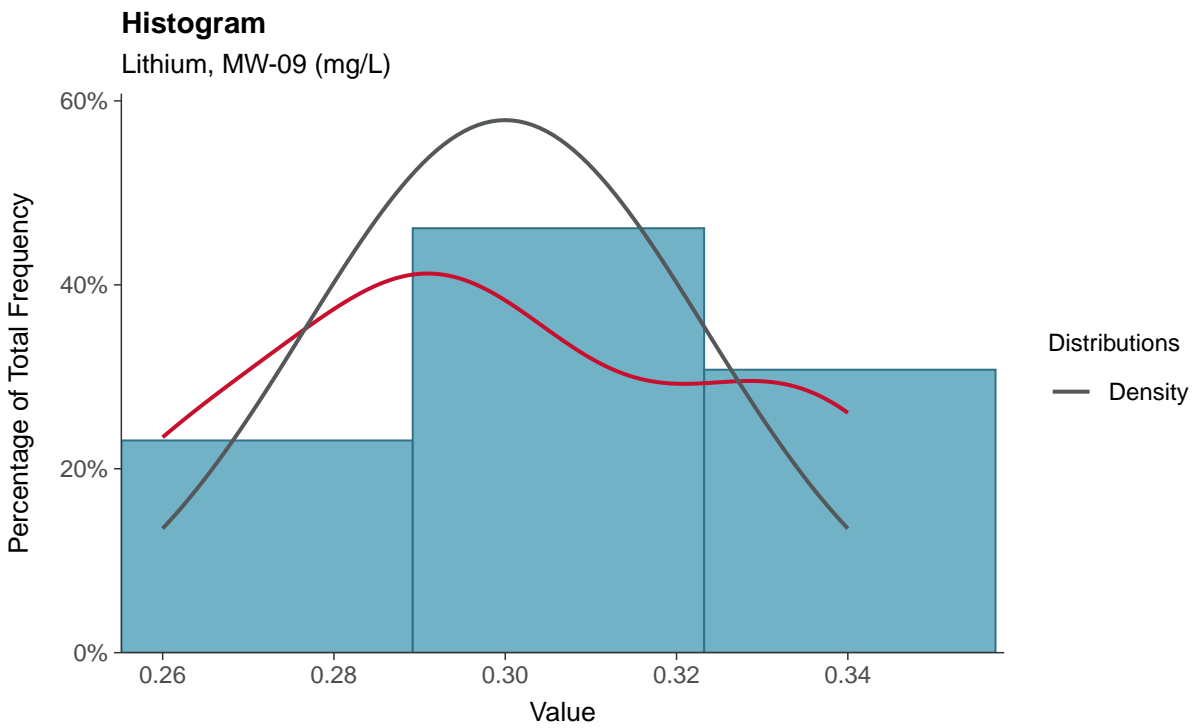
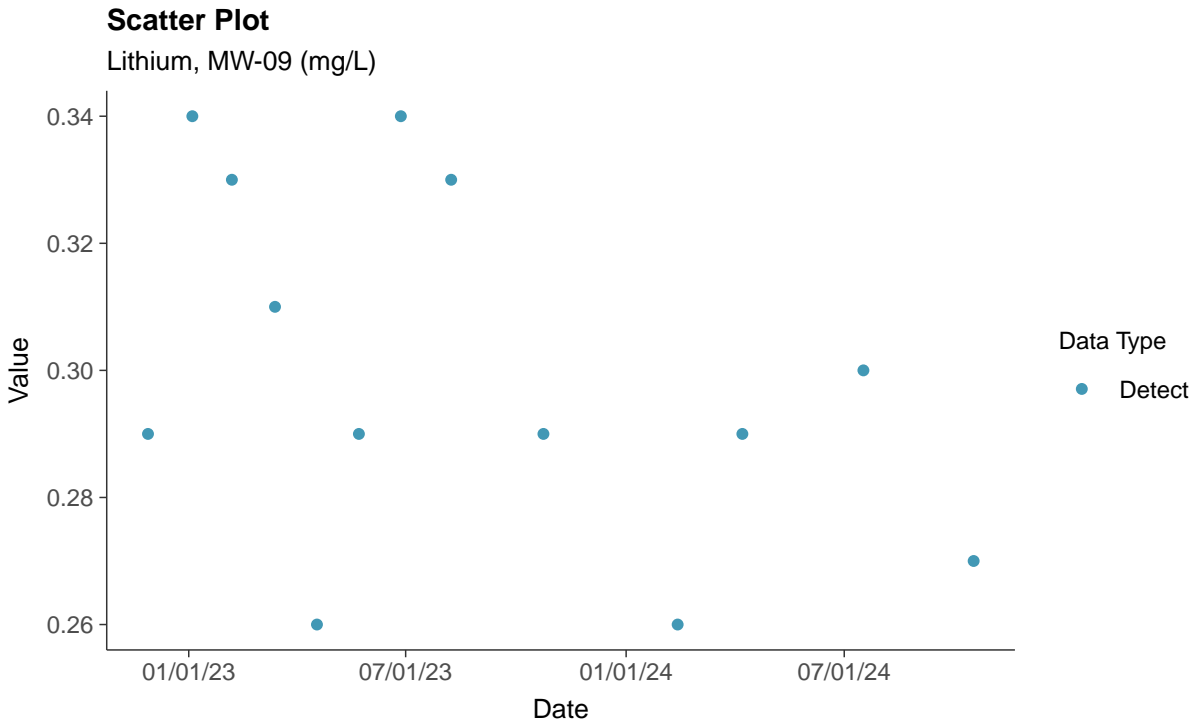
Lead, MW-09 (mg/L)





Appendix IV: Lithium, MW-09

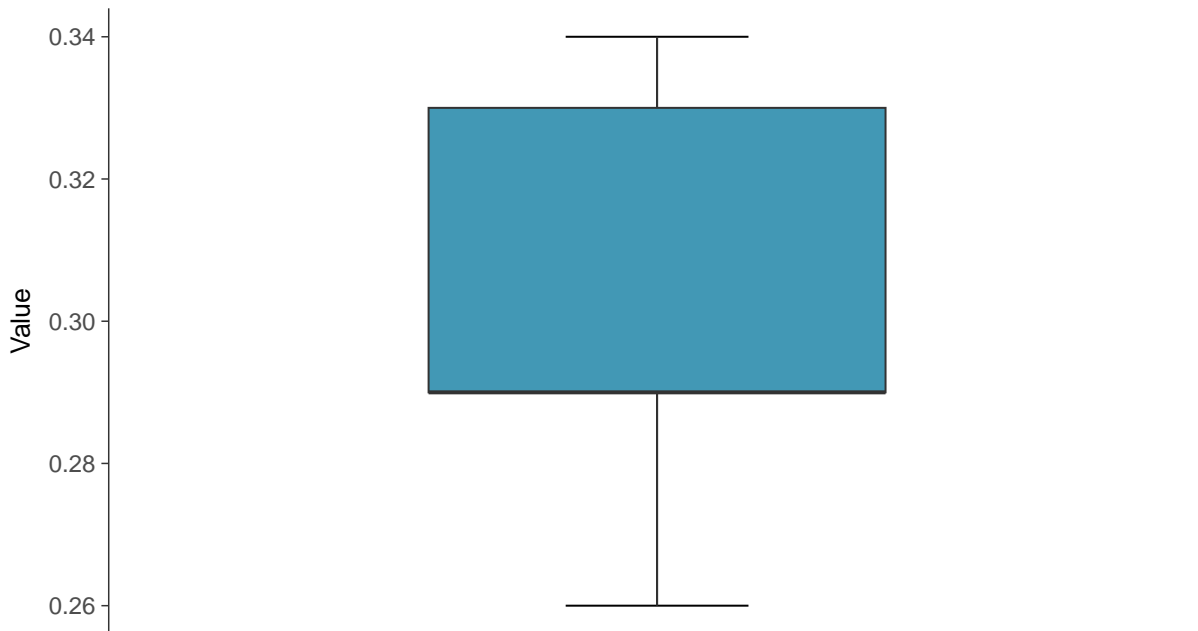
ID: 2_19_2_5_116





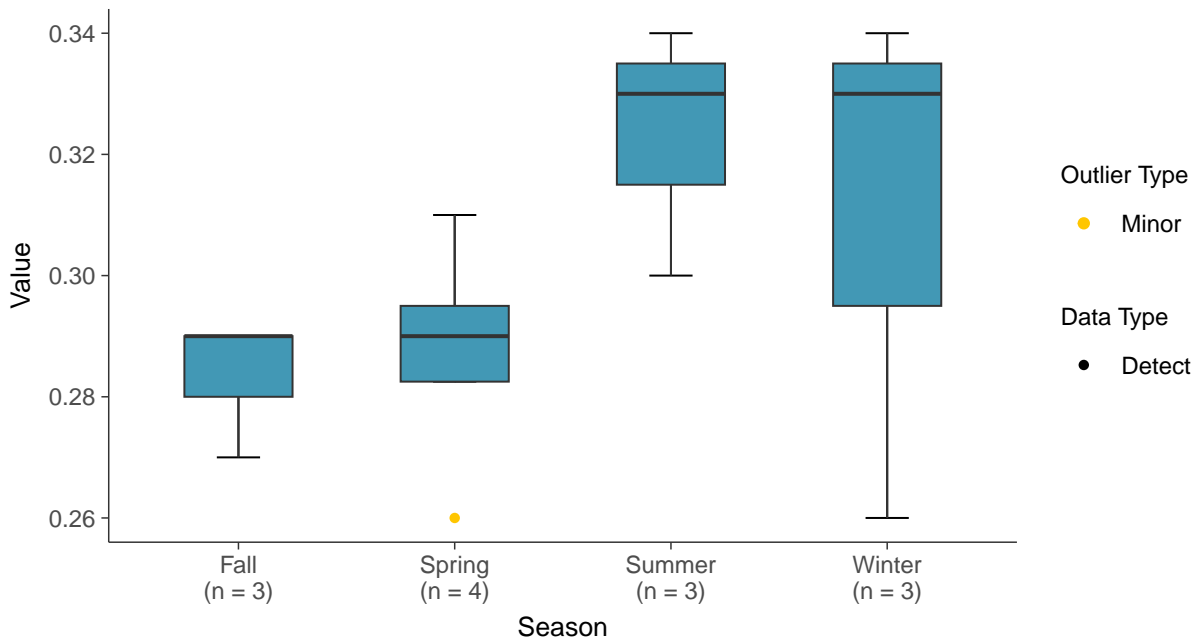
Boxplot

Lithium, MW-09 (mg/L)



Boxplot by Season

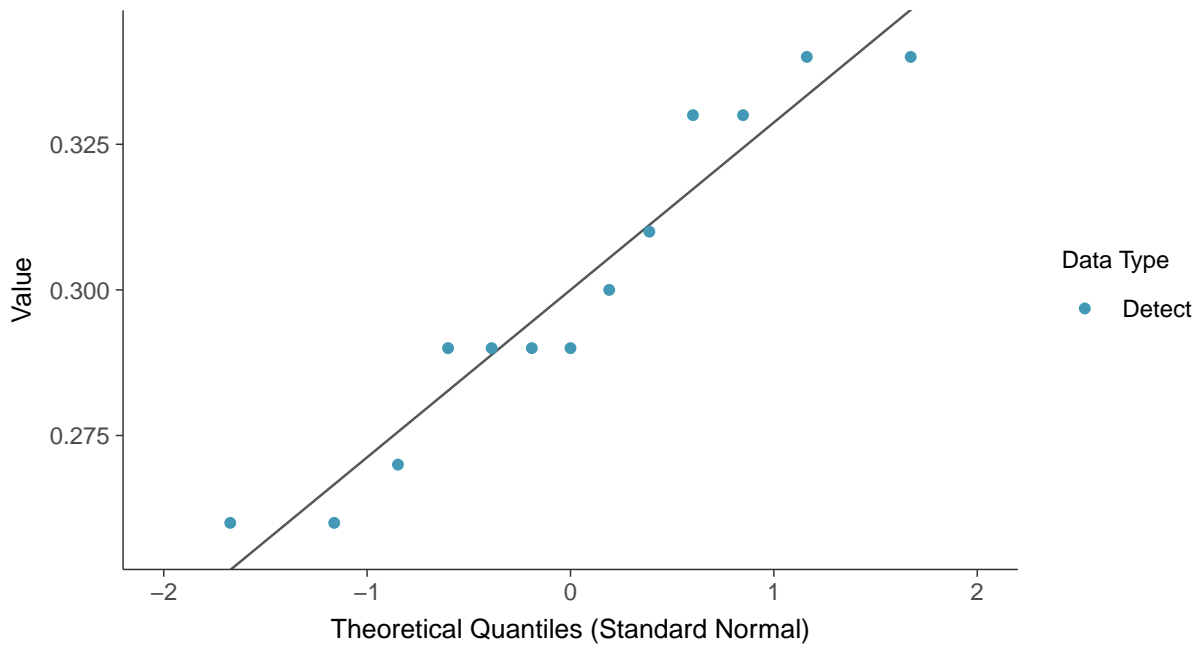
Lithium, MW-09 (mg/L)





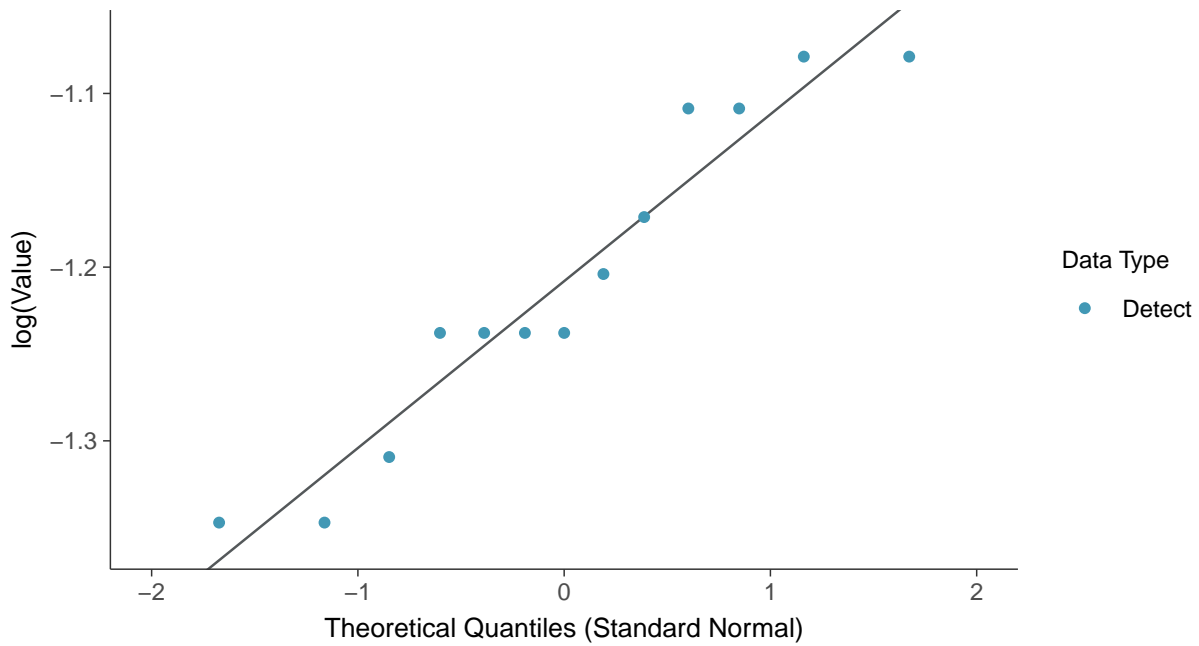
Normal Q-Q plot

Lithium, MW-09 (mg/L)



Lognormal Q-Q plot

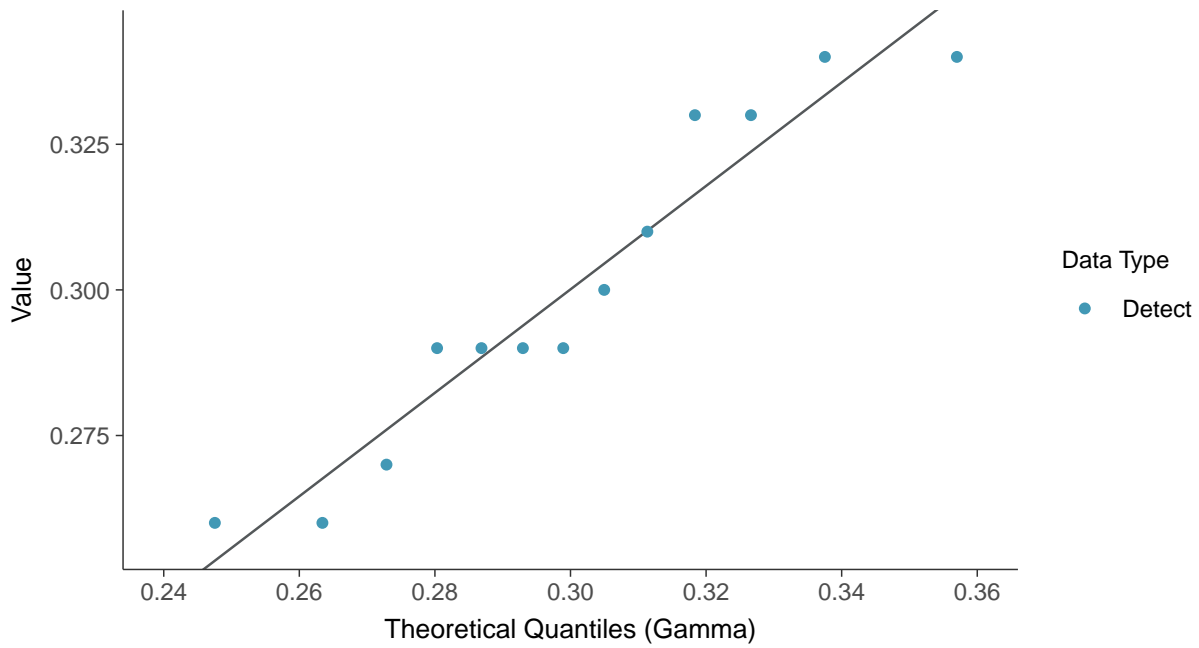
Lithium, MW-09 (mg/L)





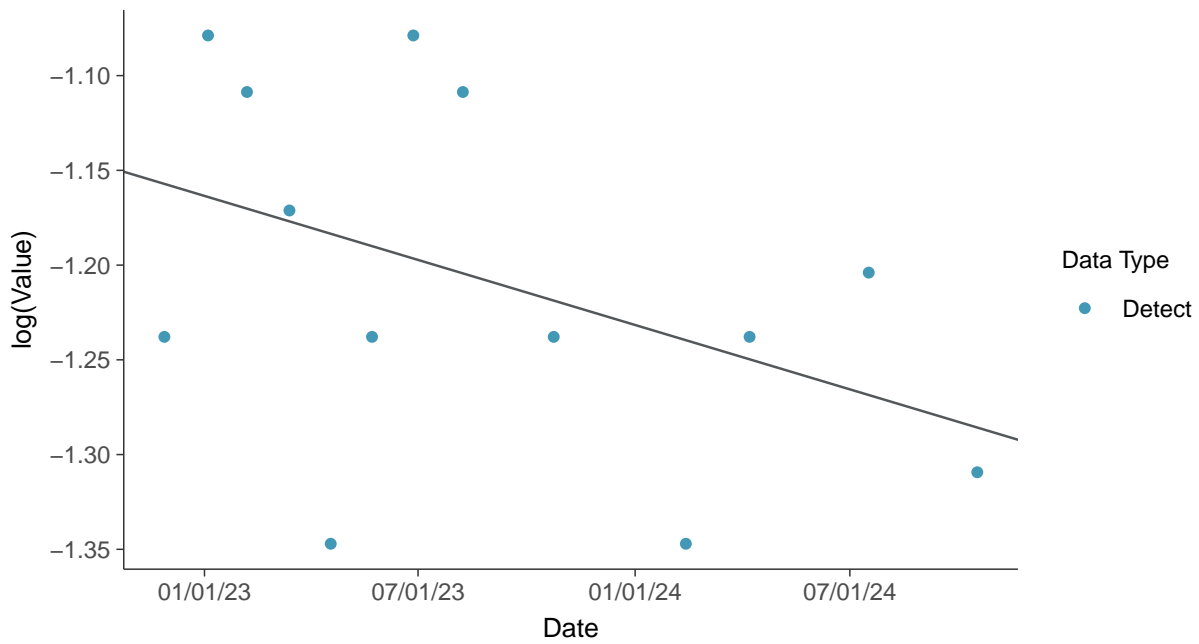
Gamma Q-Q plot

Lithium, MW-09 (mg/L)



Trend Regression: Lognormal MLE

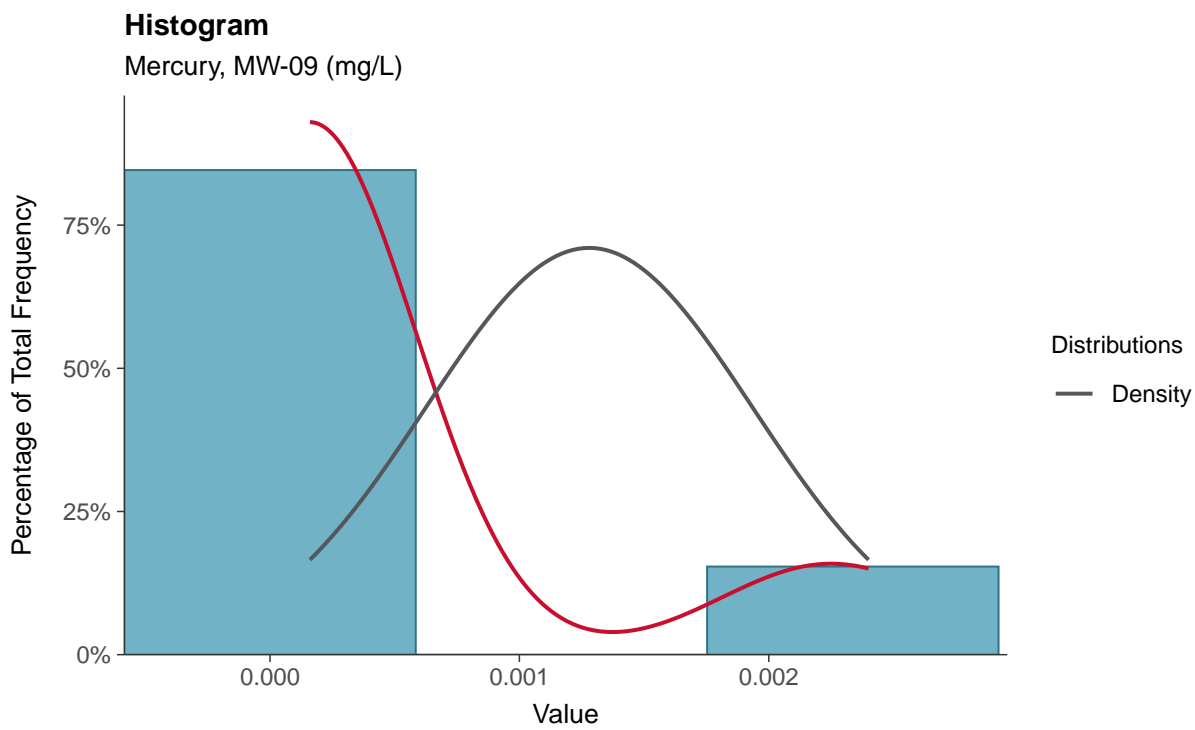
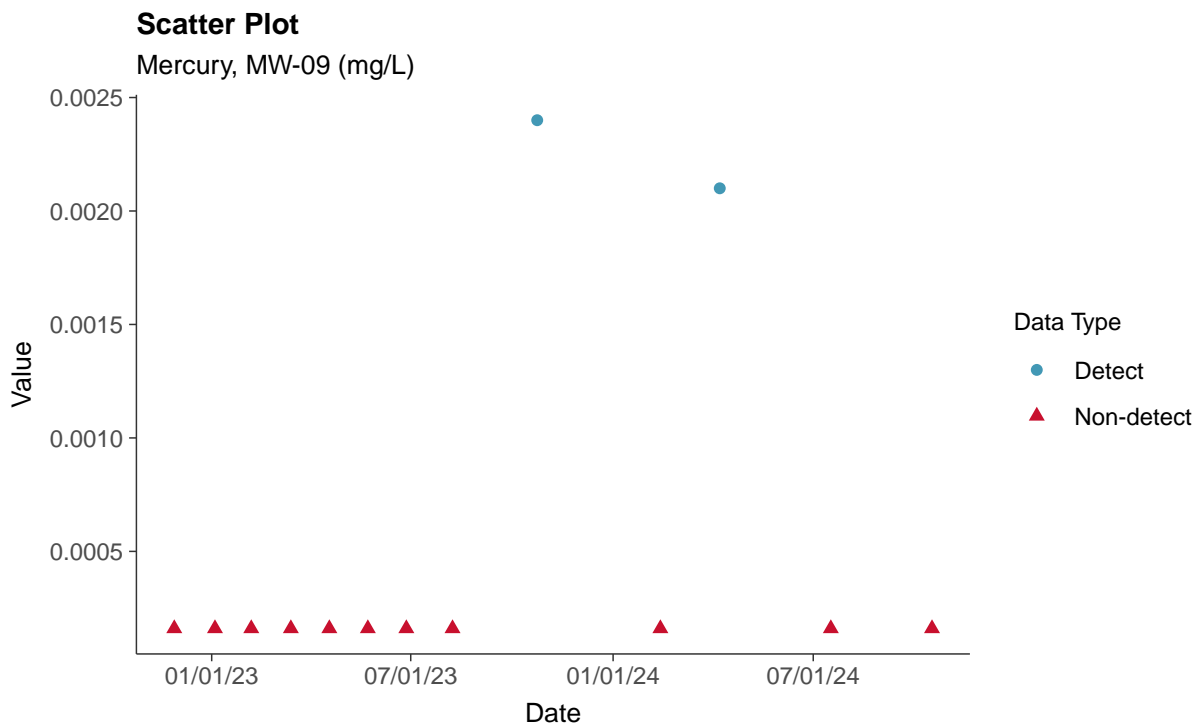
Lithium, MW-09 (mg/L)





Appendix IV: Mercury, MW-09

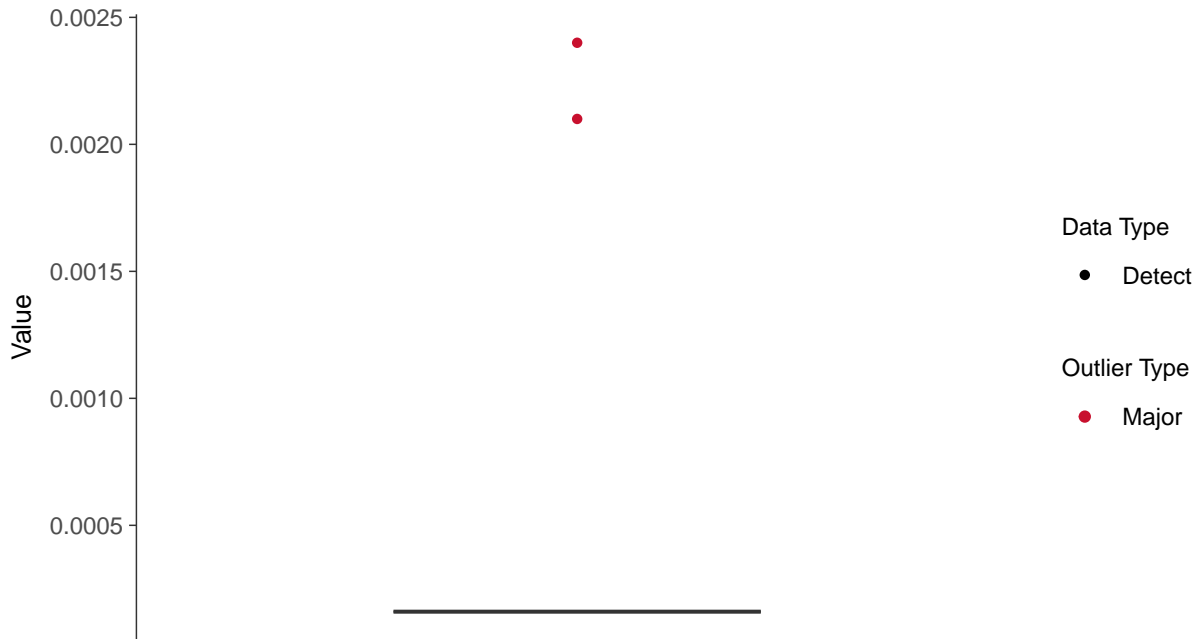
ID: 2_19_2_5_117





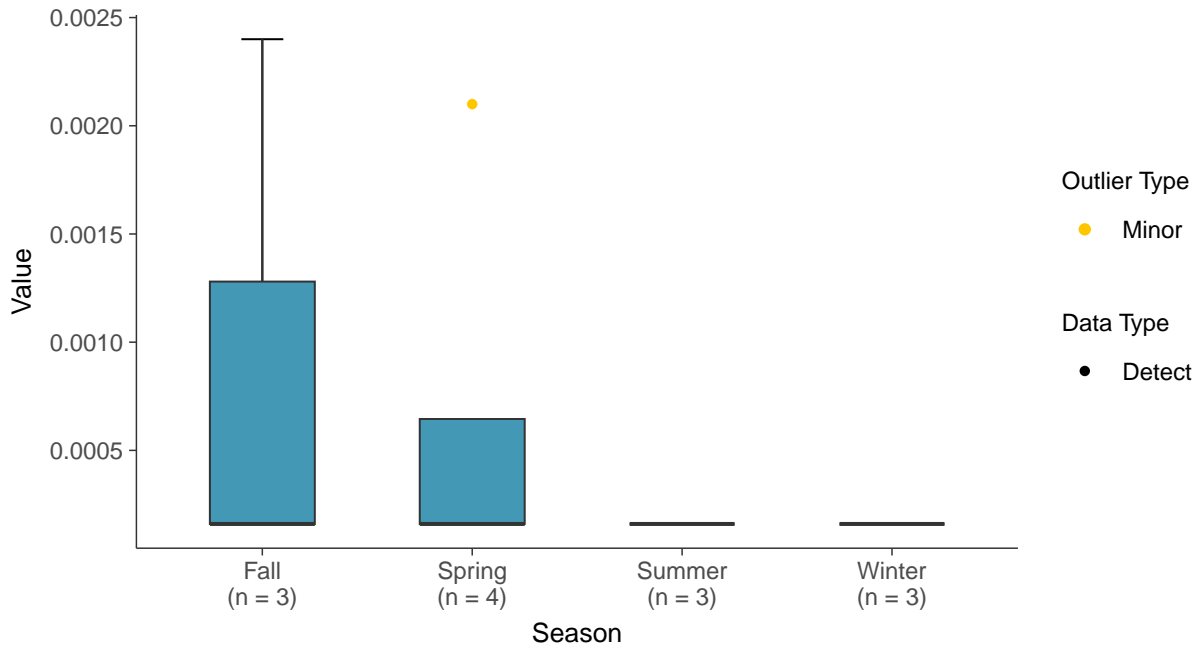
Boxplot

Mercury, MW-09 (mg/L)



Boxplot by Season

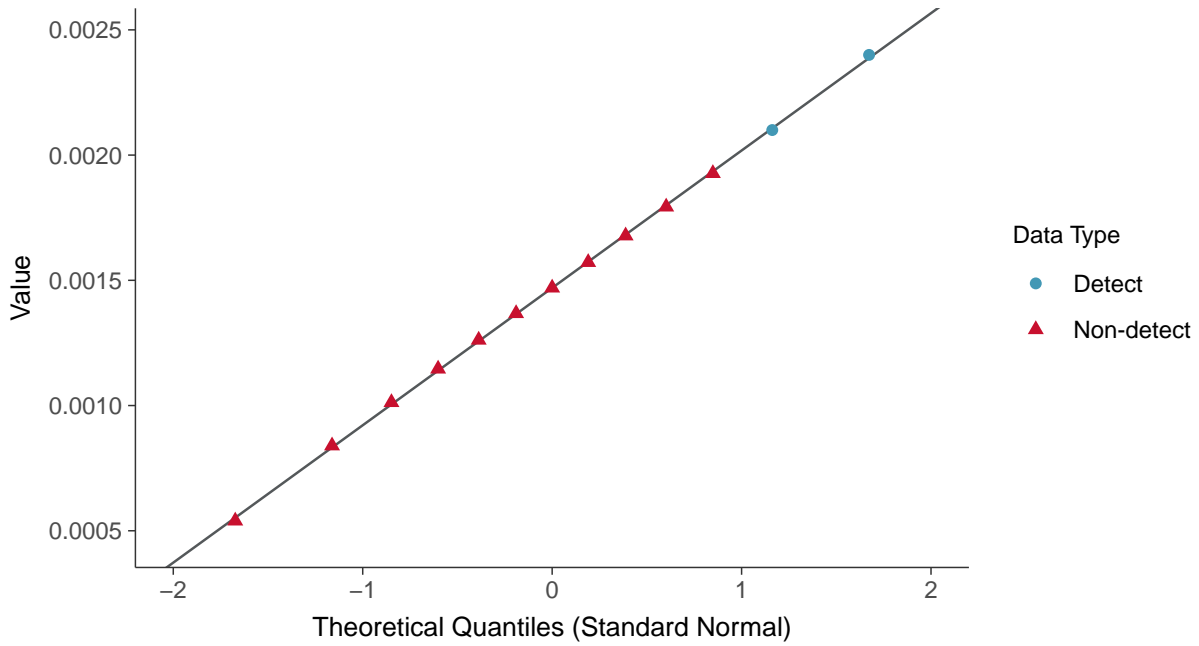
Mercury, MW-09 (mg/L)





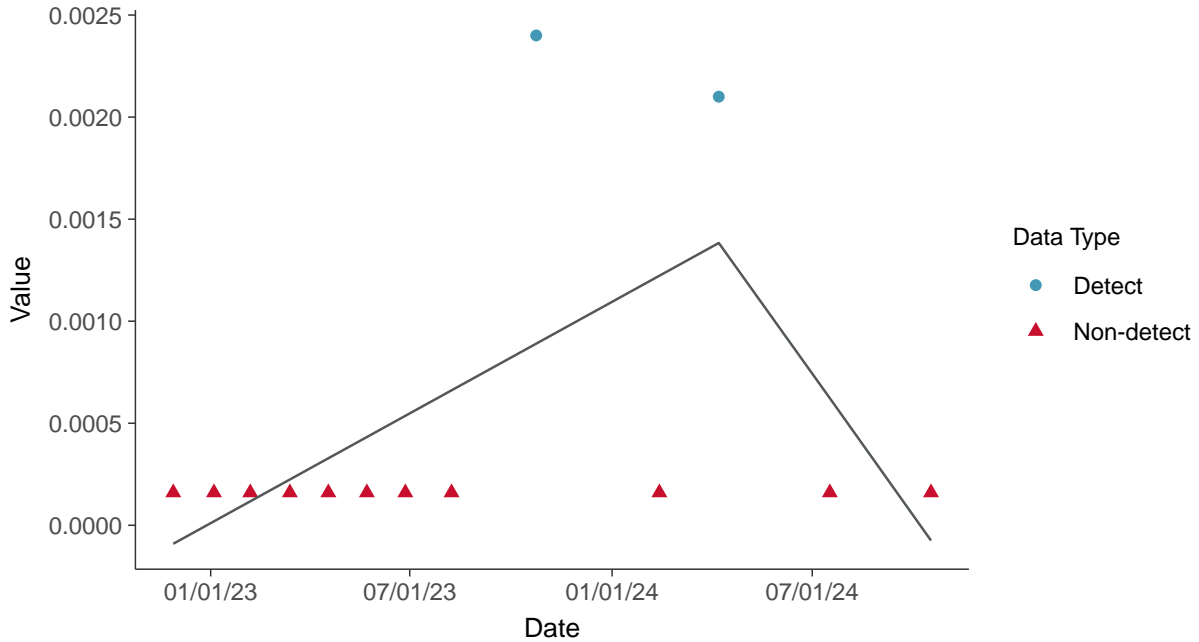
Normal Q-Q plot using ROS Imputed Estimates

Mercury, MW-09 (mg/L)



Trend Regression: Piecewise Linear-Linear

Mercury, MW-09 (mg/L)



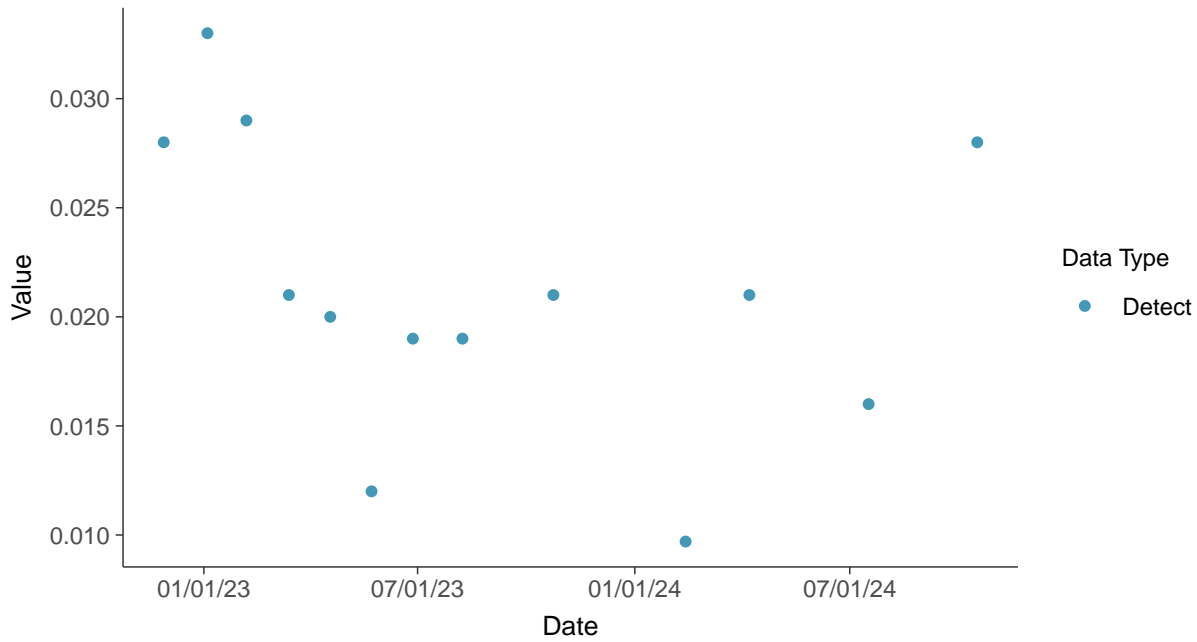


Appendix IV: Molybdenum, MW-09

ID: 2_19_2_5_118

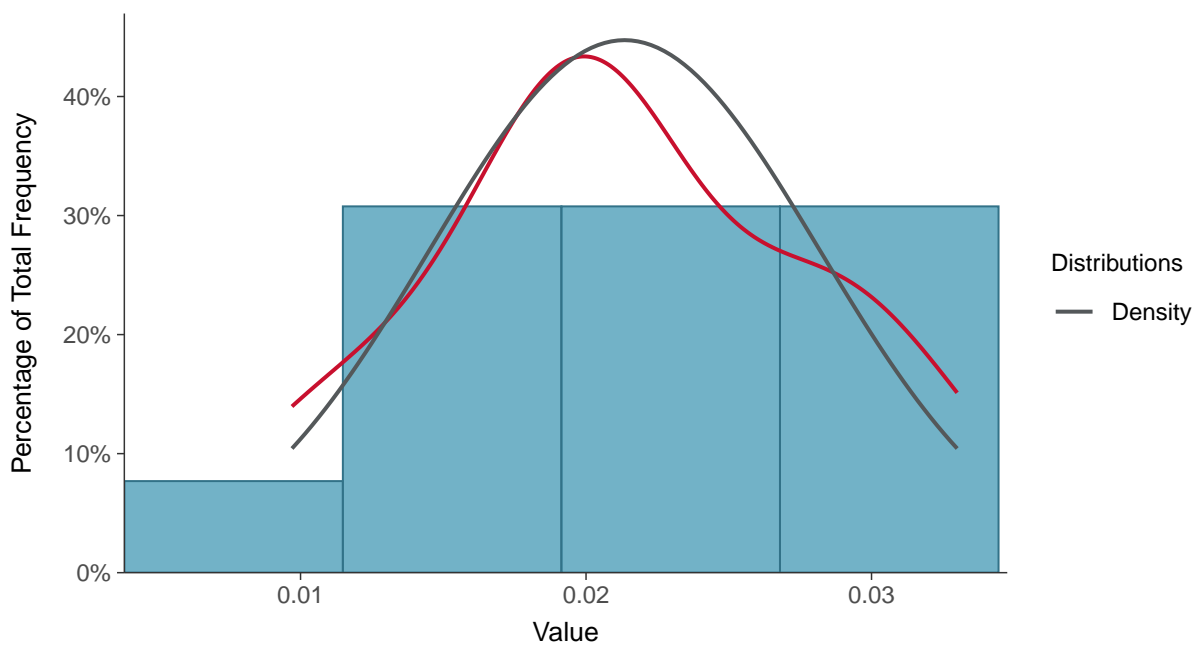
Scatter Plot

Molybdenum, MW-09 (mg/L)



Histogram

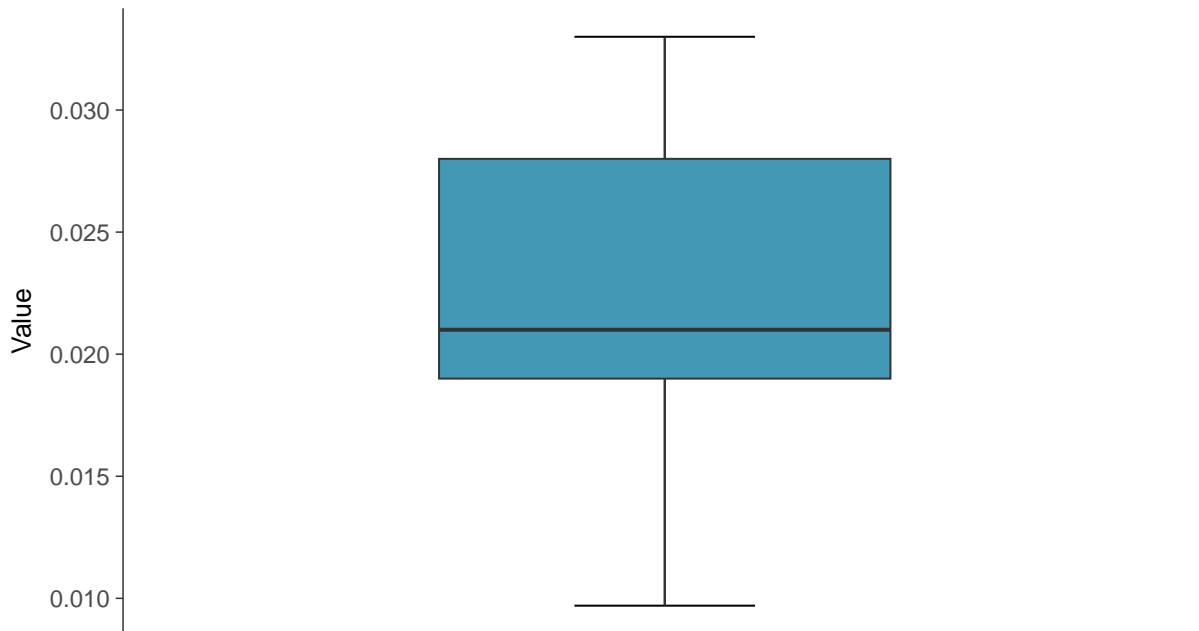
Molybdenum, MW-09 (mg/L)





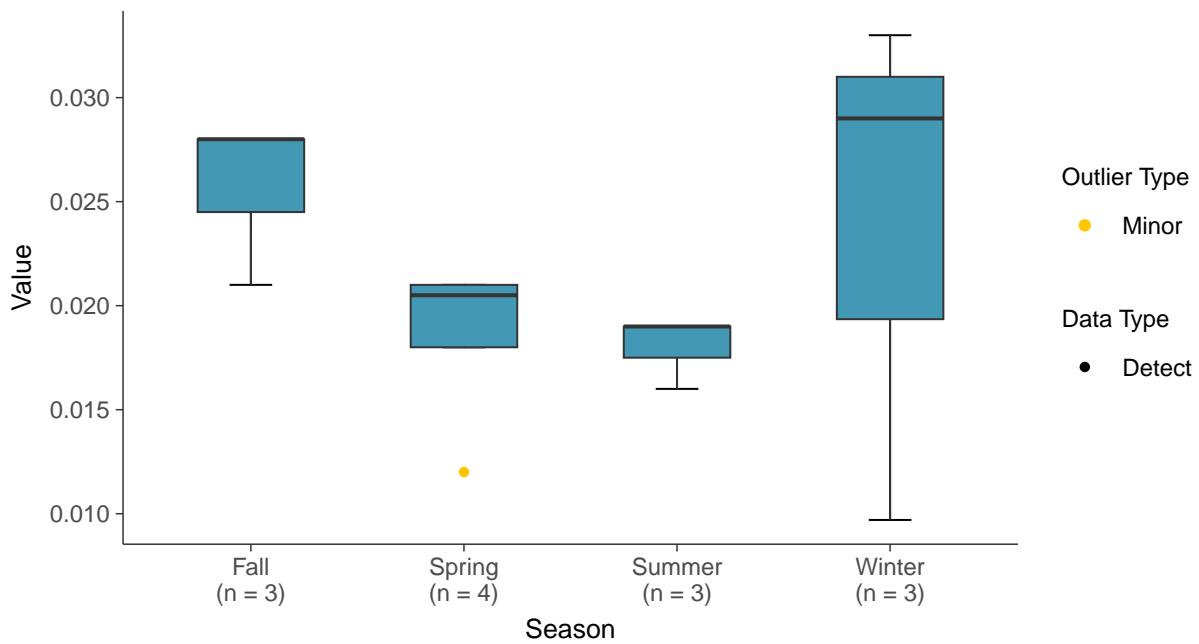
Boxplot

Molybdenum, MW-09 (mg/L)



Boxplot by Season

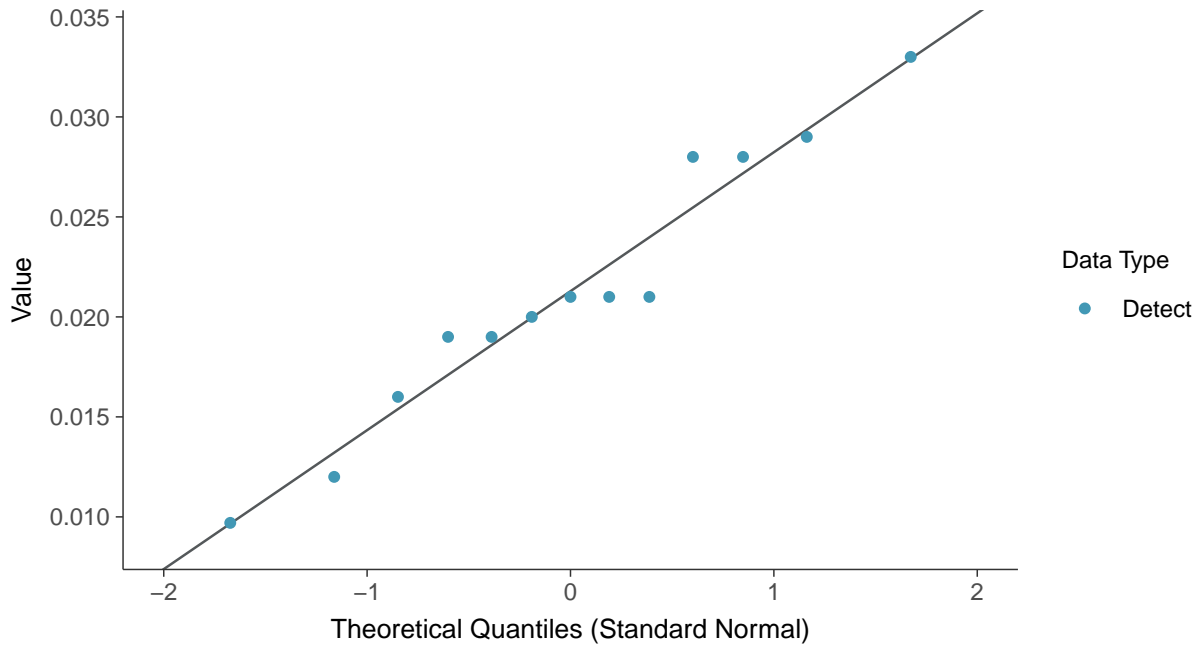
Molybdenum, MW-09 (mg/L)





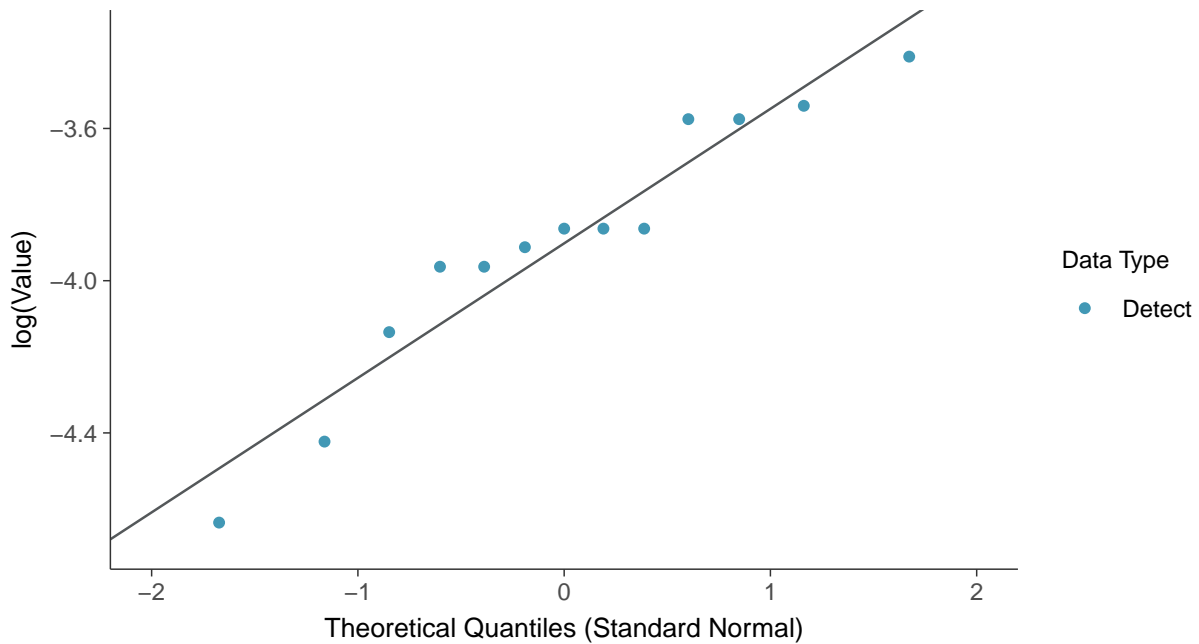
Normal Q-Q plot

Molybdenum, MW-09 (mg/L)



Lognormal Q-Q plot

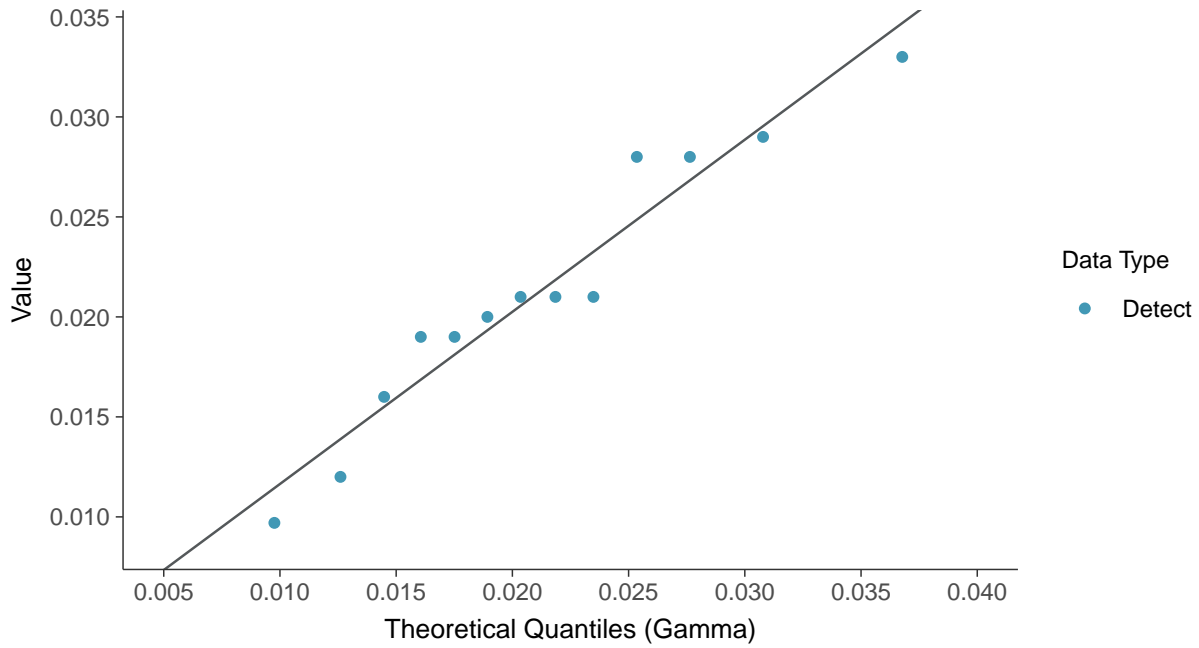
Molybdenum, MW-09 (mg/L)





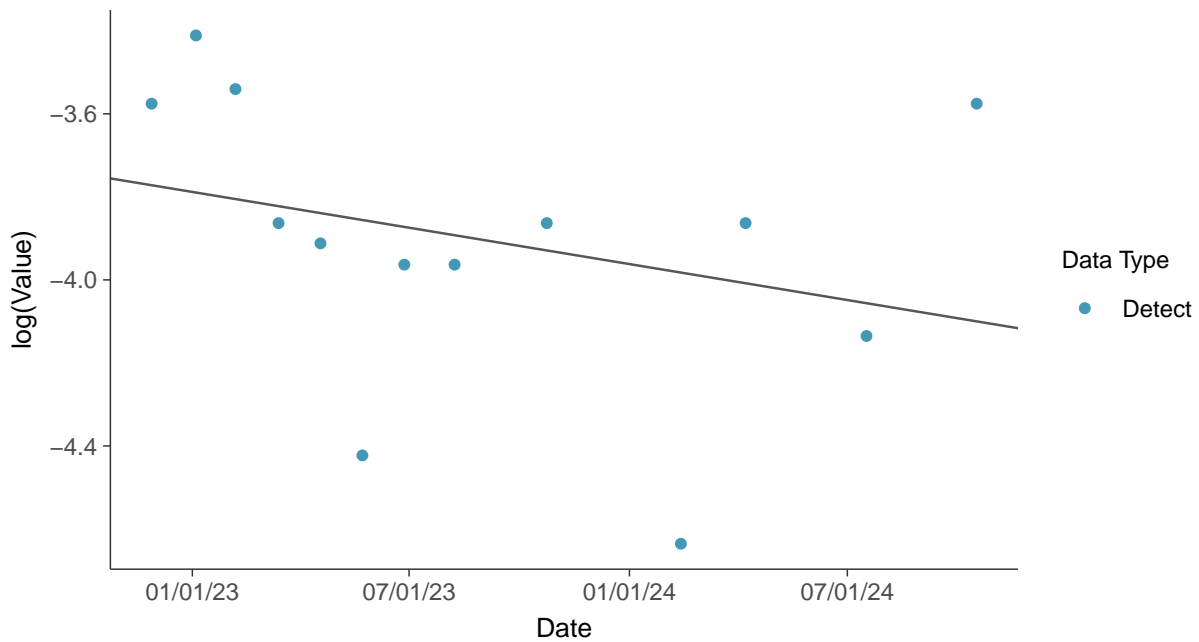
Gamma Q-Q plot

Molybdenum, MW-09 (mg/L)



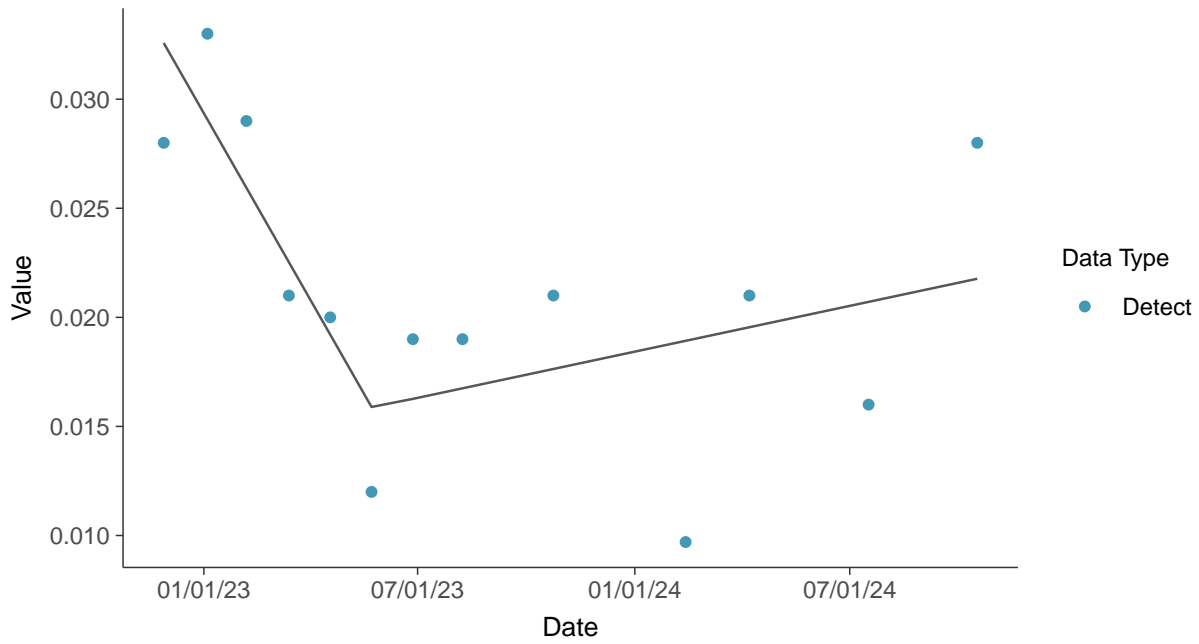
Trend Regression: Lognormal MLE

Molybdenum, MW-09 (mg/L)

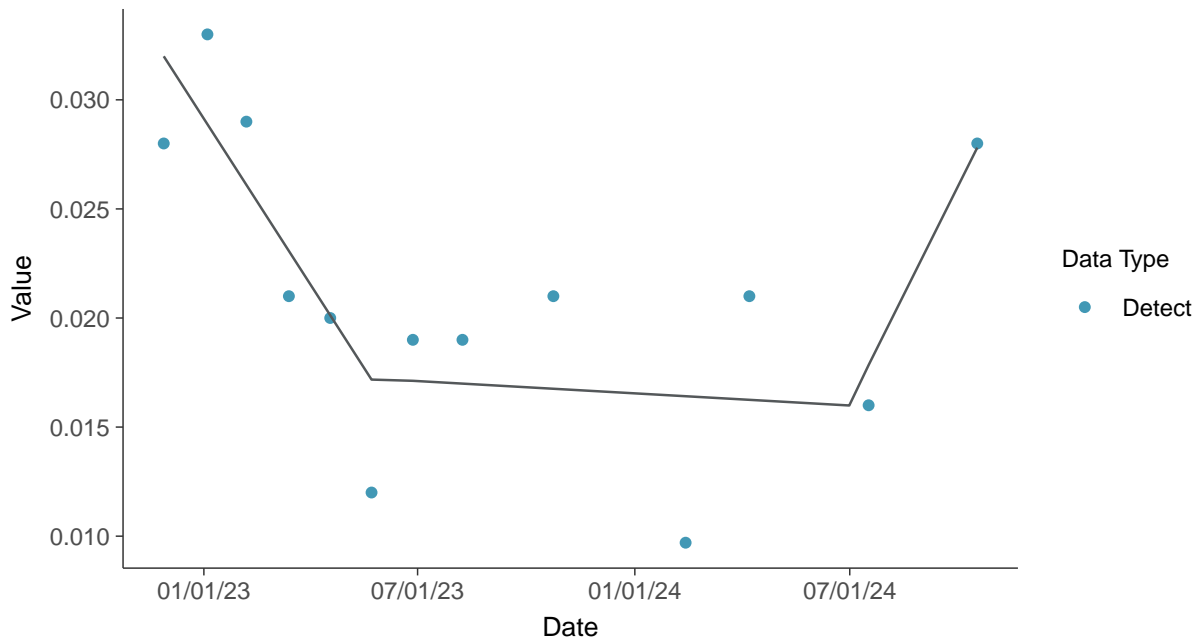




Trend Regression: Piecewise Linear-Linear
Molybdenum, MW-09 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Molybdenum, MW-09 (mg/L)



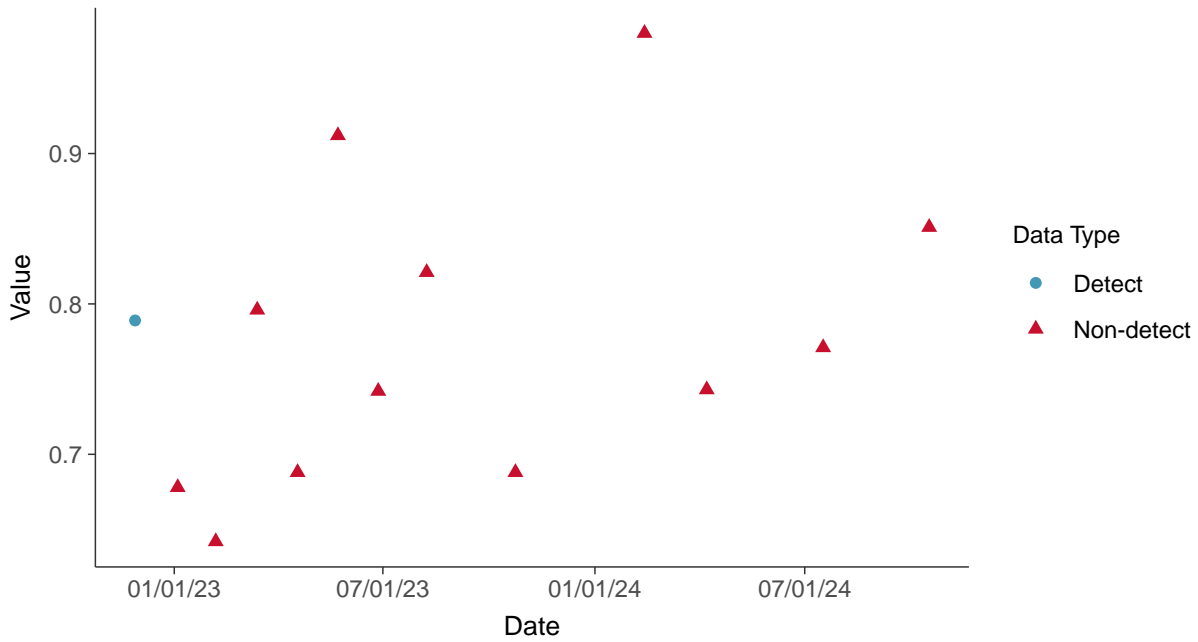


Appendix IV: Radium 226 and 228, MW-09

ID: 2_19_2_5_121

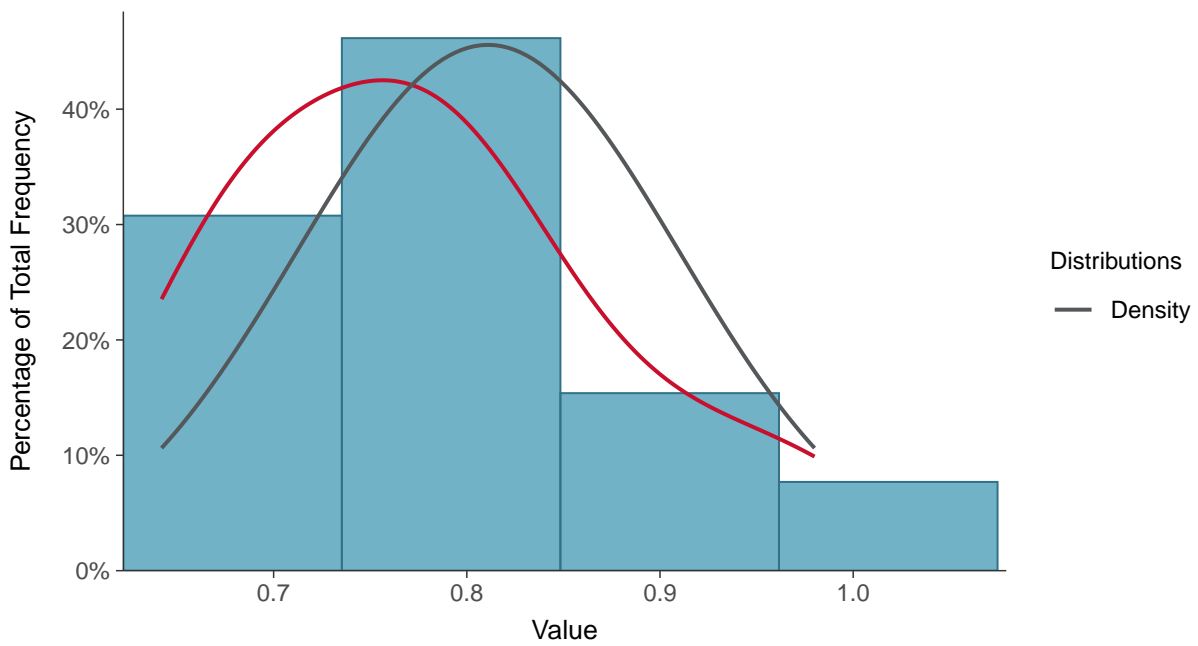
Scatter Plot

Radium 226 and 228, MW-09 (pCi/L)



Histogram

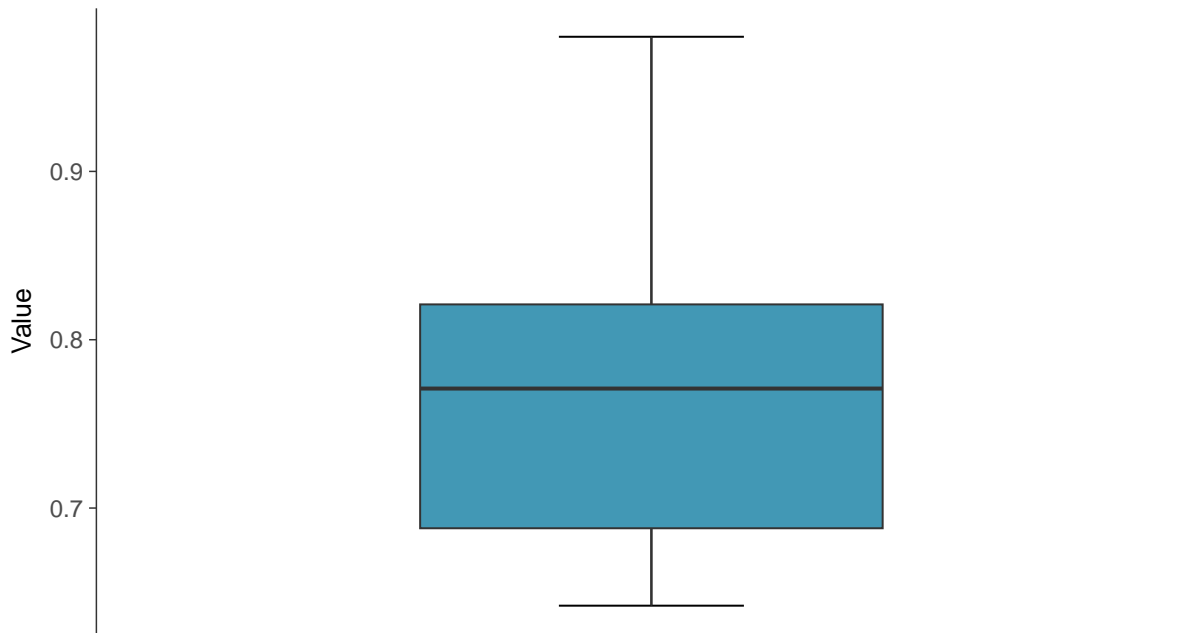
Radium 226 and 228, MW-09 (pCi/L)





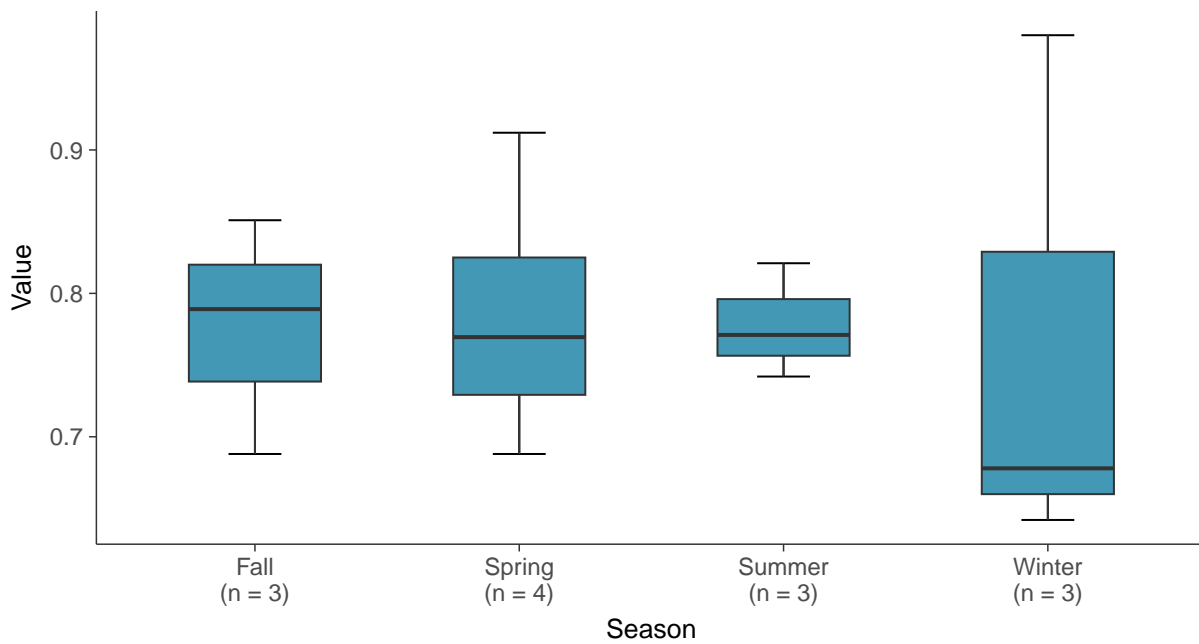
Boxplot

Radium 226 and 228, MW-09 (pCi/L)



Boxplot by Season

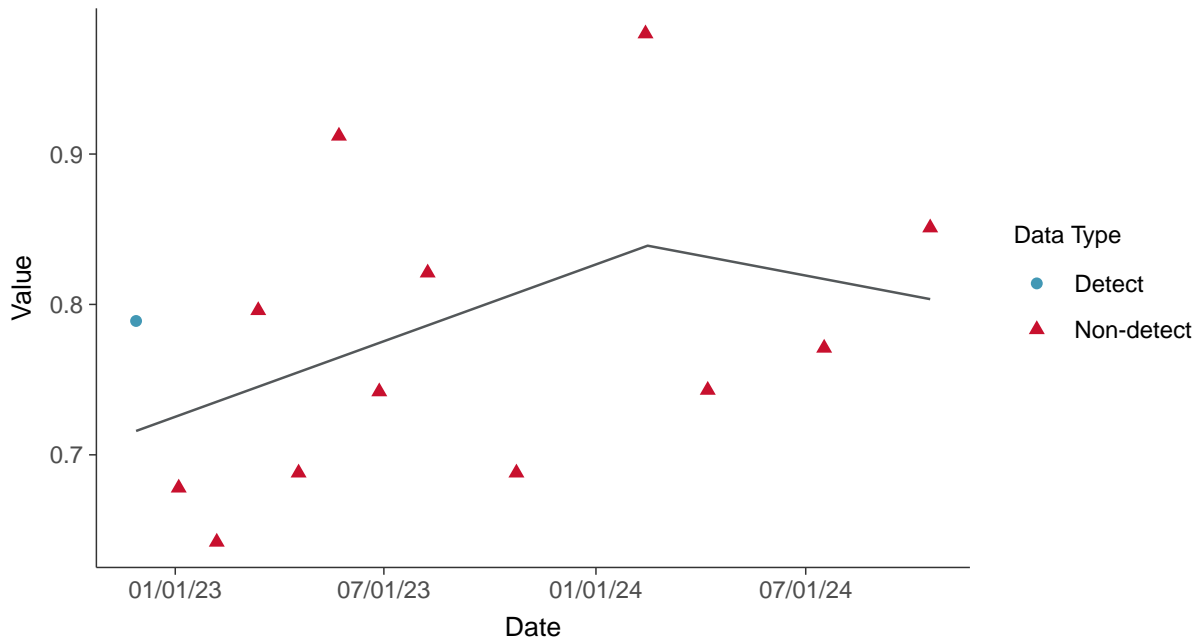
Radium 226 and 228, MW-09 (pCi/L)





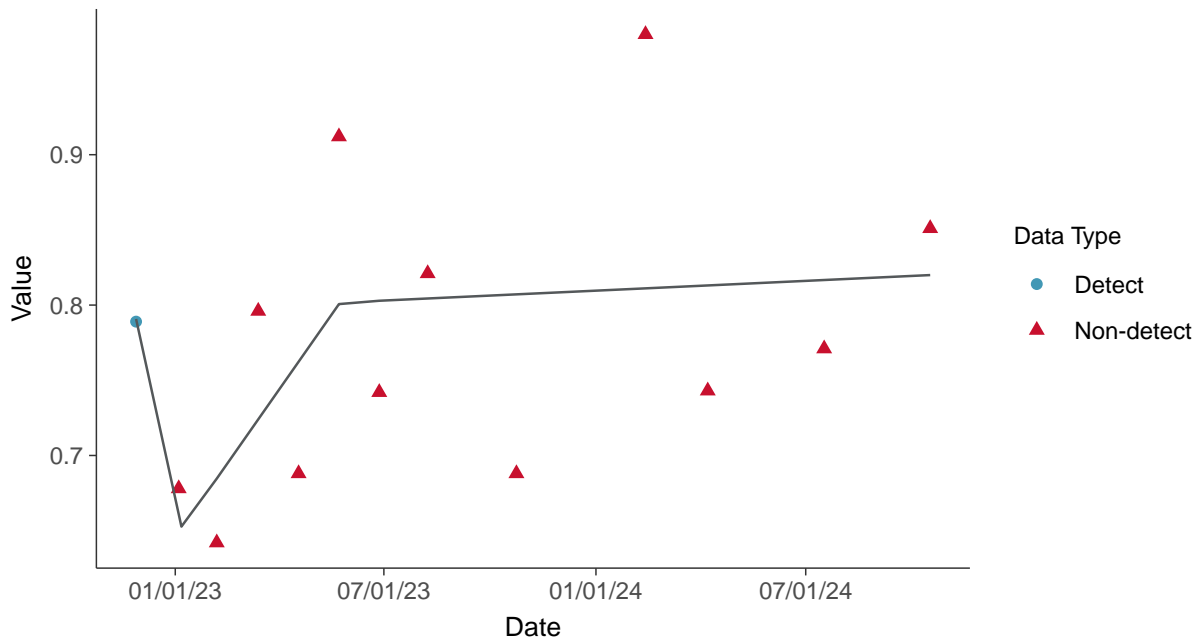
Trend Regression: Piecewise Linear-Linear

Radium 226 and 228, MW-09 (pCi/L)



Trend Regression: Piecewise Linear-Linear-Linear

Radium 226 and 228, MW-09 (pCi/L)



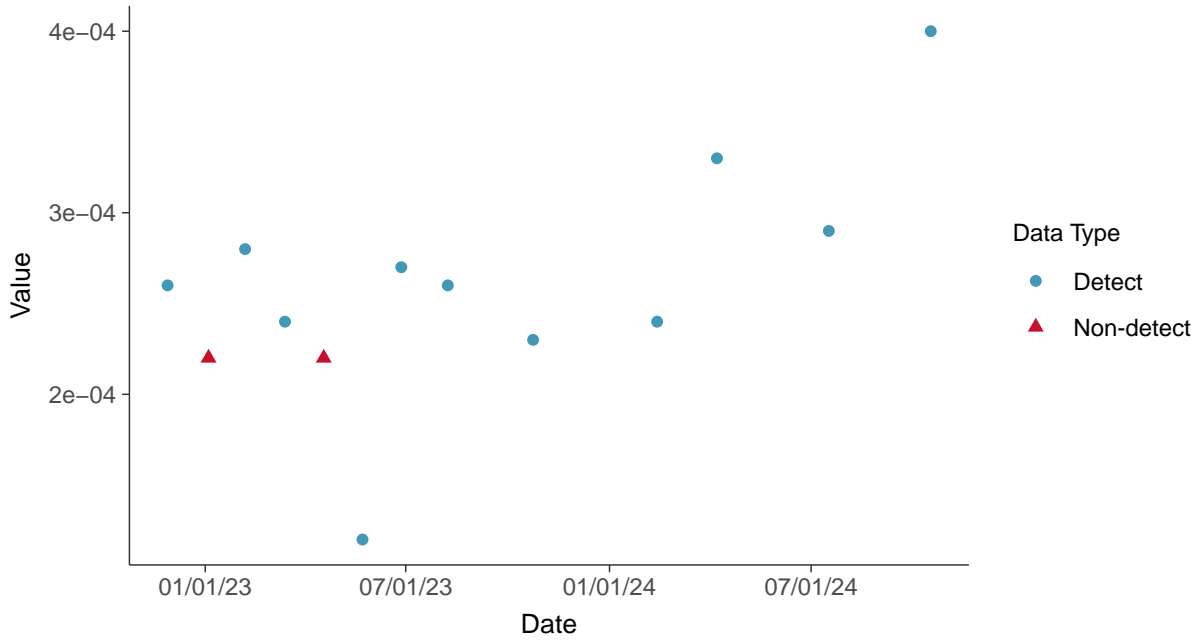


Appendix IV: Selenium, MW-09

ID: 2_19_2_5_122

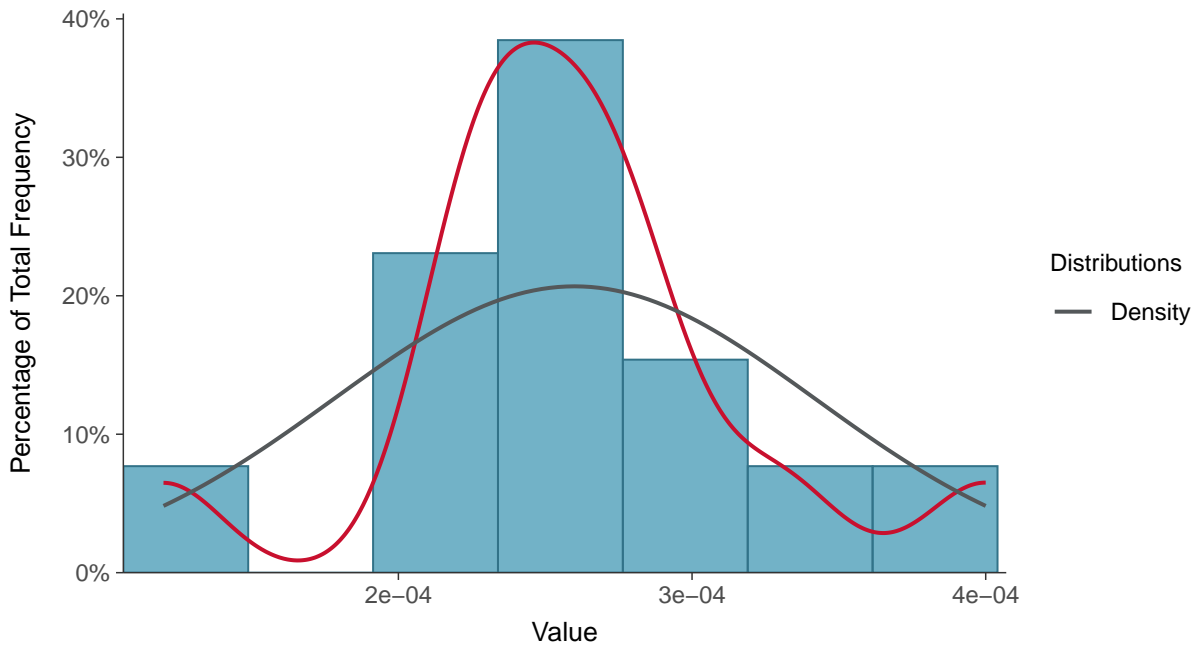
Scatter Plot

Selenium, MW-09 (mg/L)



Histogram

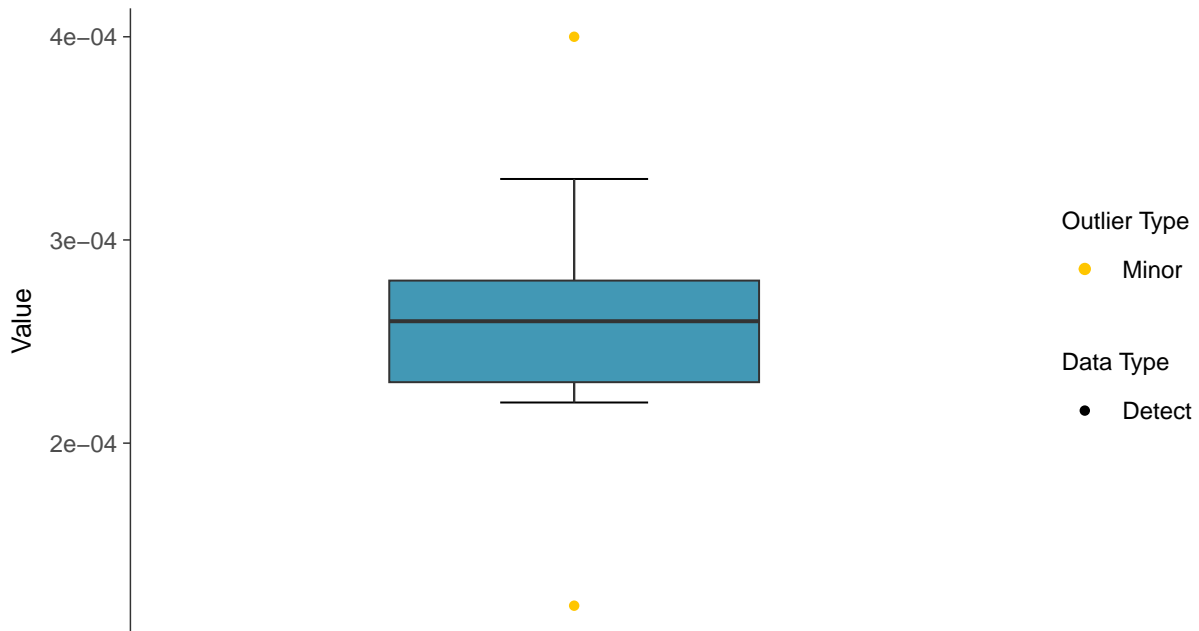
Selenium, MW-09 (mg/L)





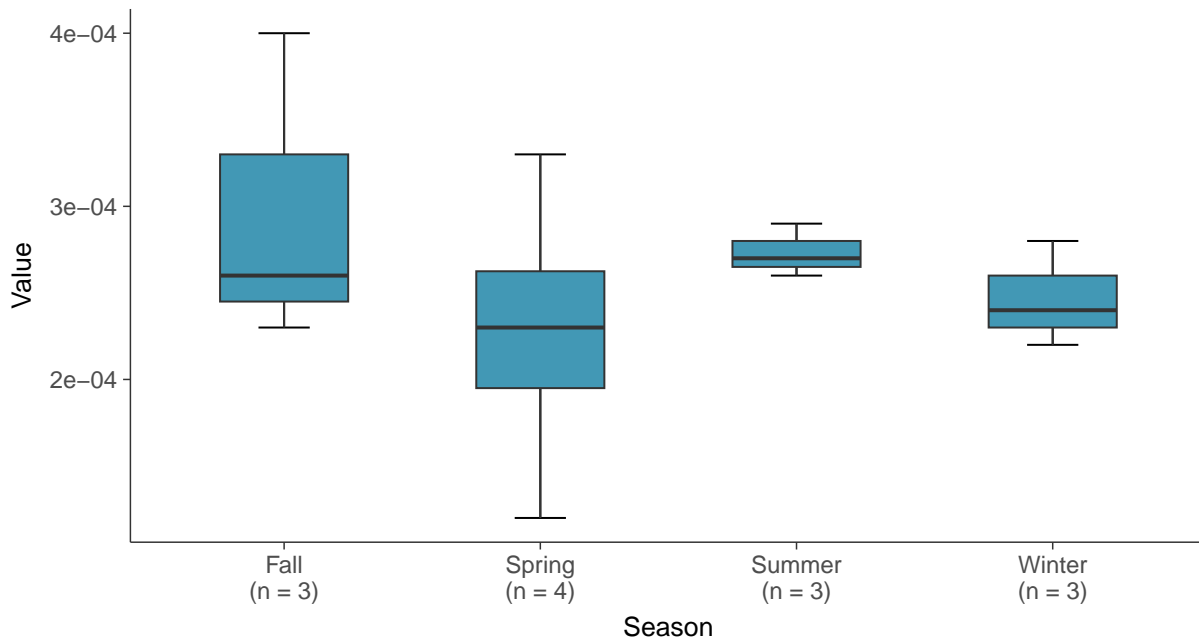
Boxplot

Selenium, MW-09 (mg/L)



Boxplot by Season

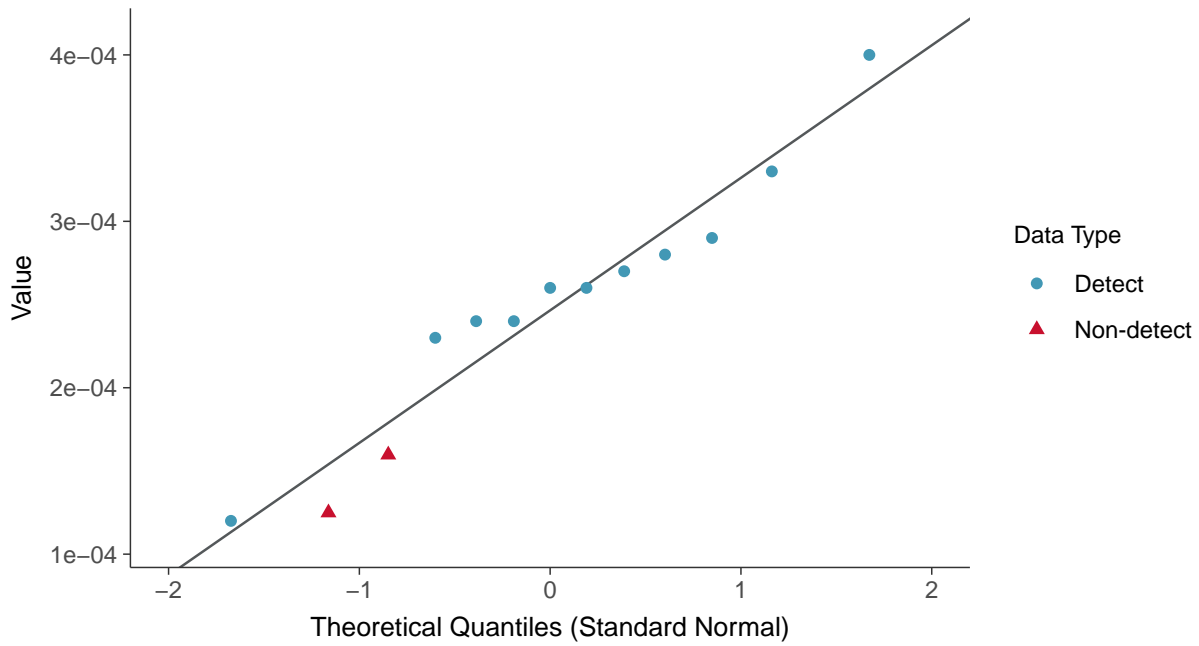
Selenium, MW-09 (mg/L)





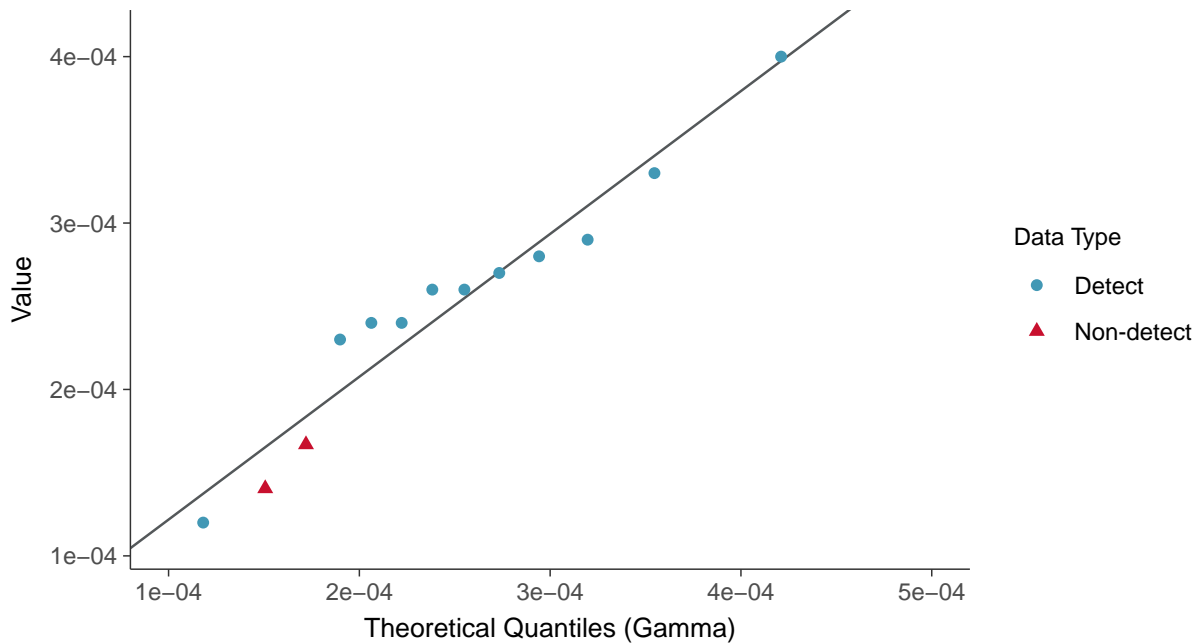
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-09 (mg/L)



Gamma Q-Q plot using ROS Imputed Estimates

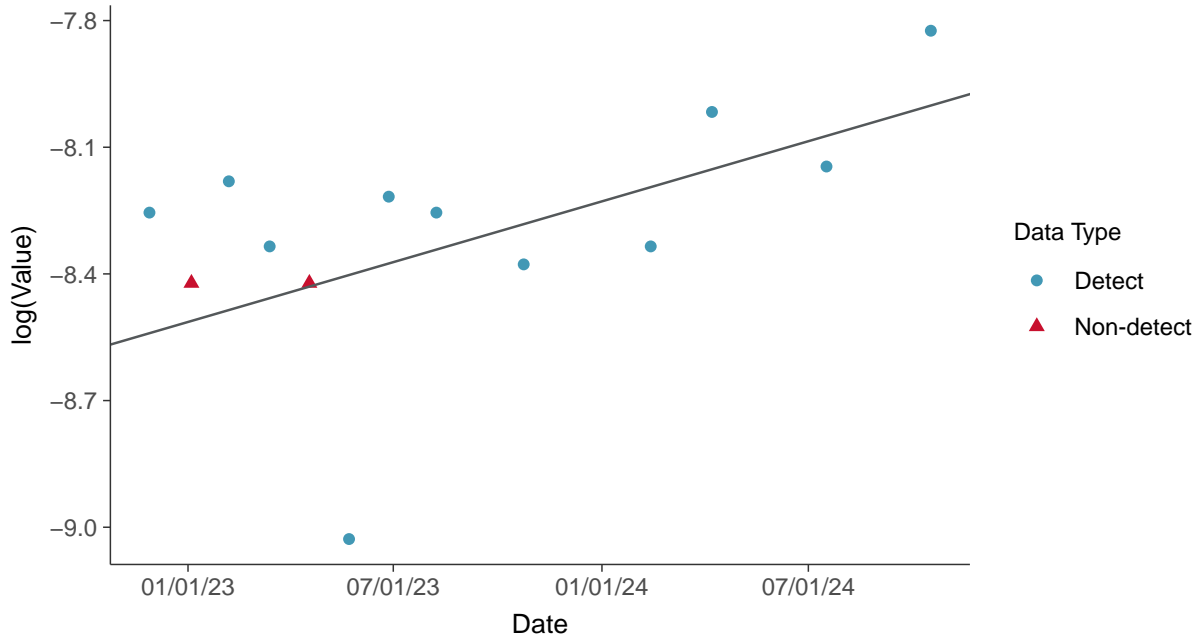
Selenium, MW-09 (mg/L)





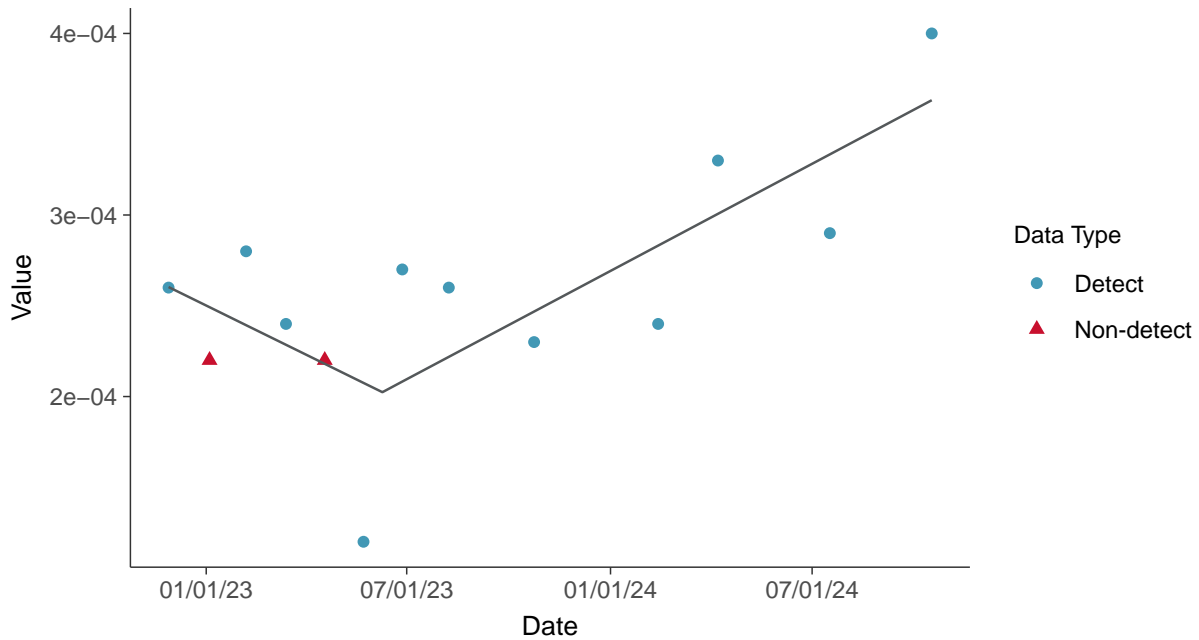
Trend Regression: Lognormal MLE

Selenium, MW-09 (mg/L)



Trend Regression: Piecewise Linear-Linear

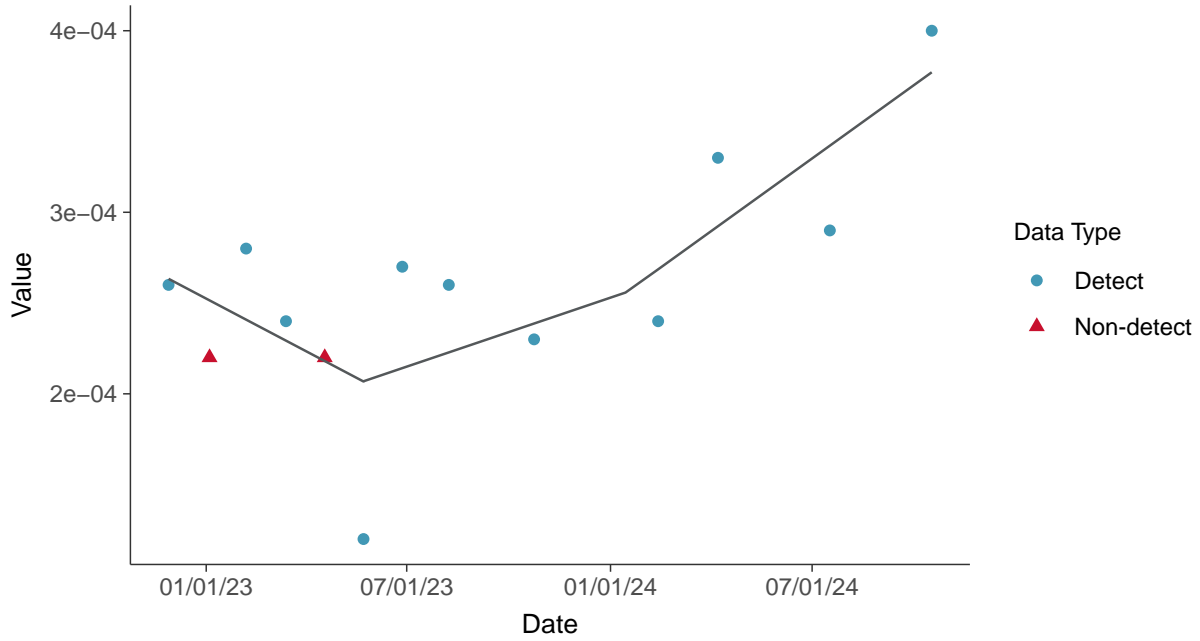
Selenium, MW-09 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

Selenium, MW-09 (mg/L)



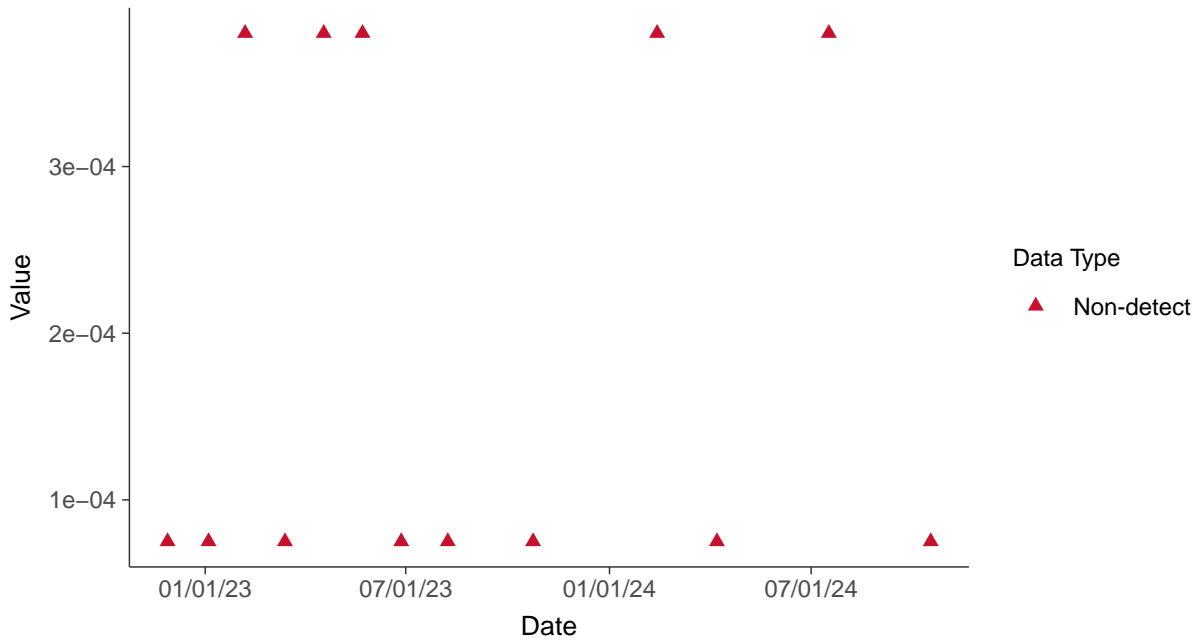


Appendix IV: Thallium, MW-09

ID: 2_19_2_5_125

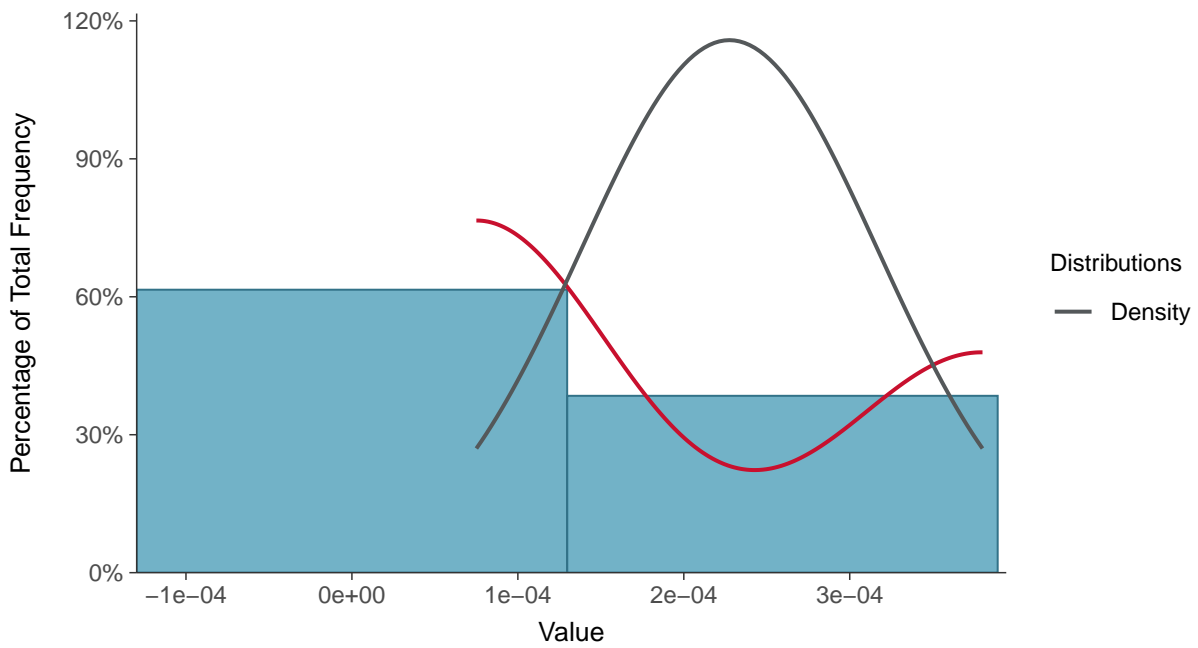
Scatter Plot

Thallium, MW-09 (mg/L)



Histogram

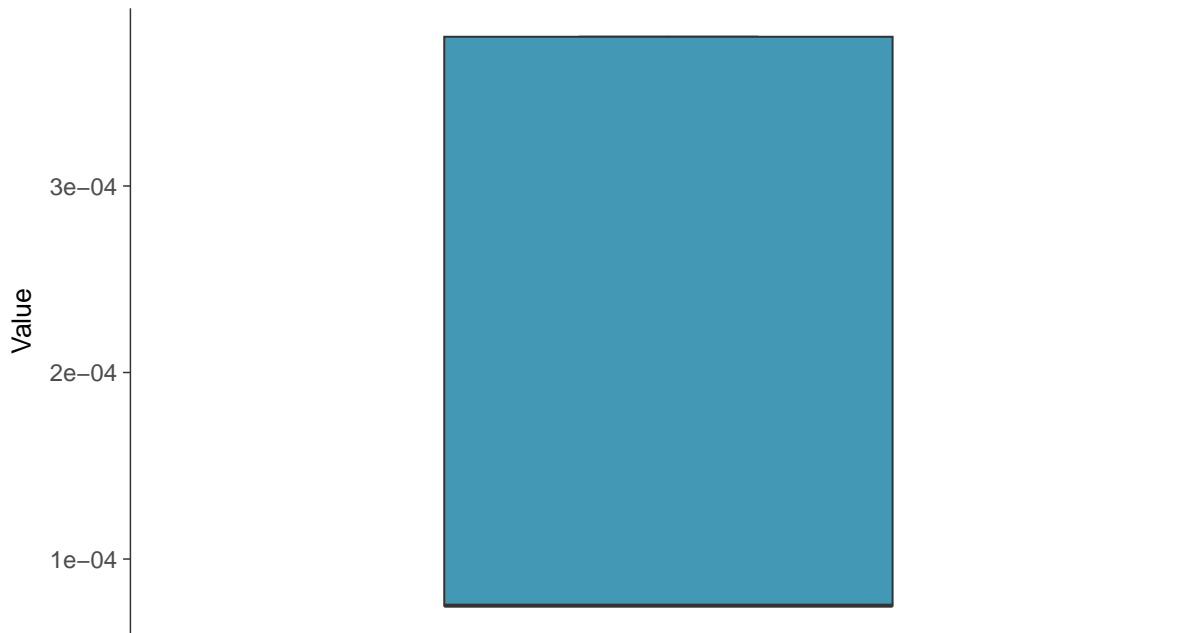
Thallium, MW-09 (mg/L)





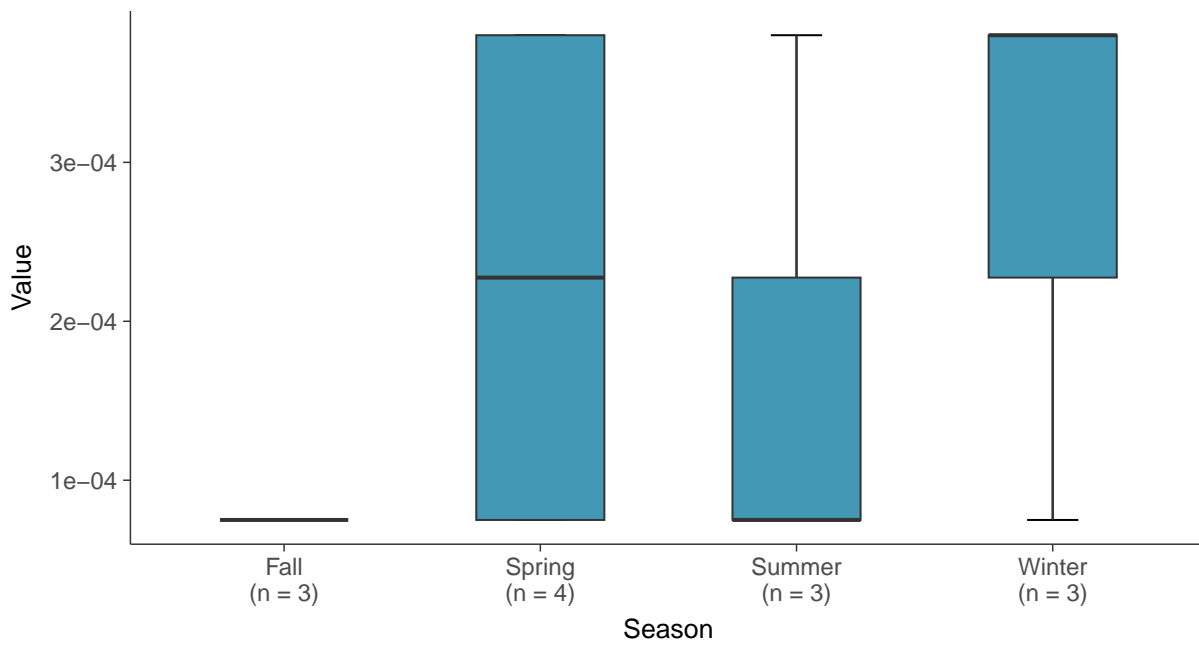
Boxplot

Thallium, MW-09 (mg/L)



Boxplot by Season

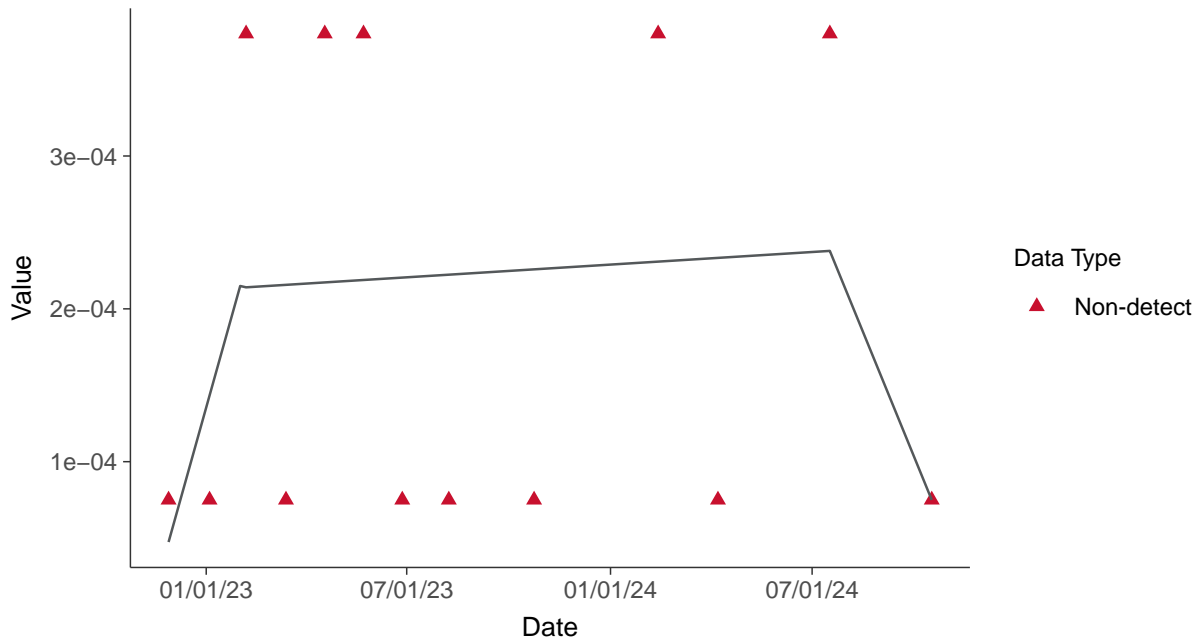
Thallium, MW-09 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

Thallium, MW-09 (mg/L)



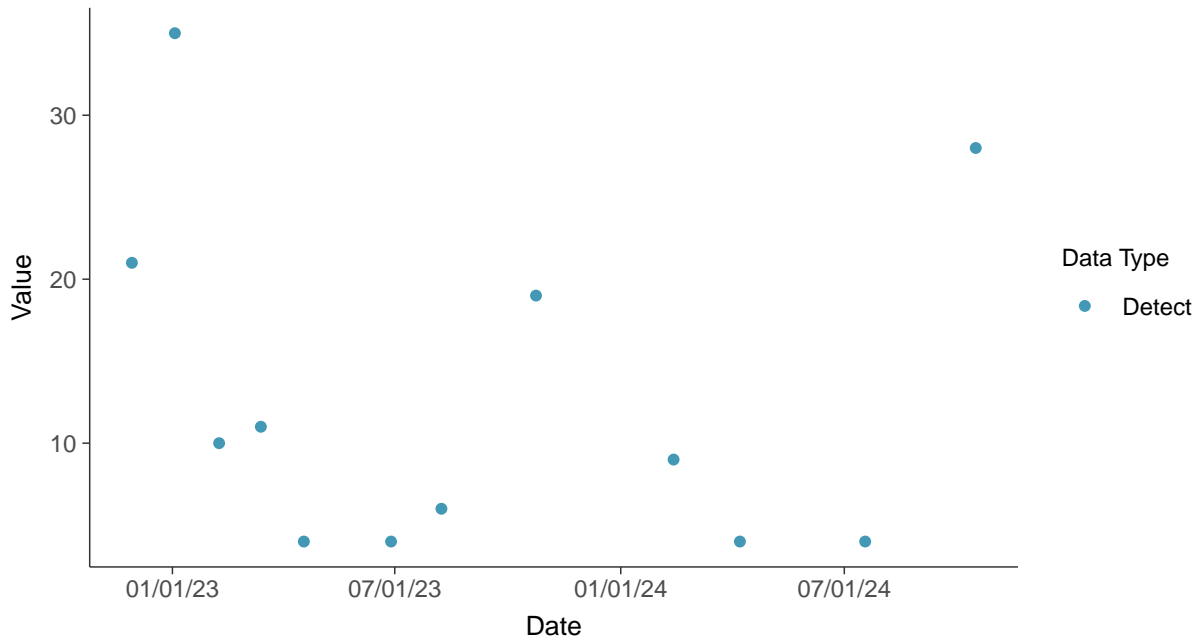


Additional Parameters: Total Suspended Solids, MW-11

ID: 2_21_2_3_127

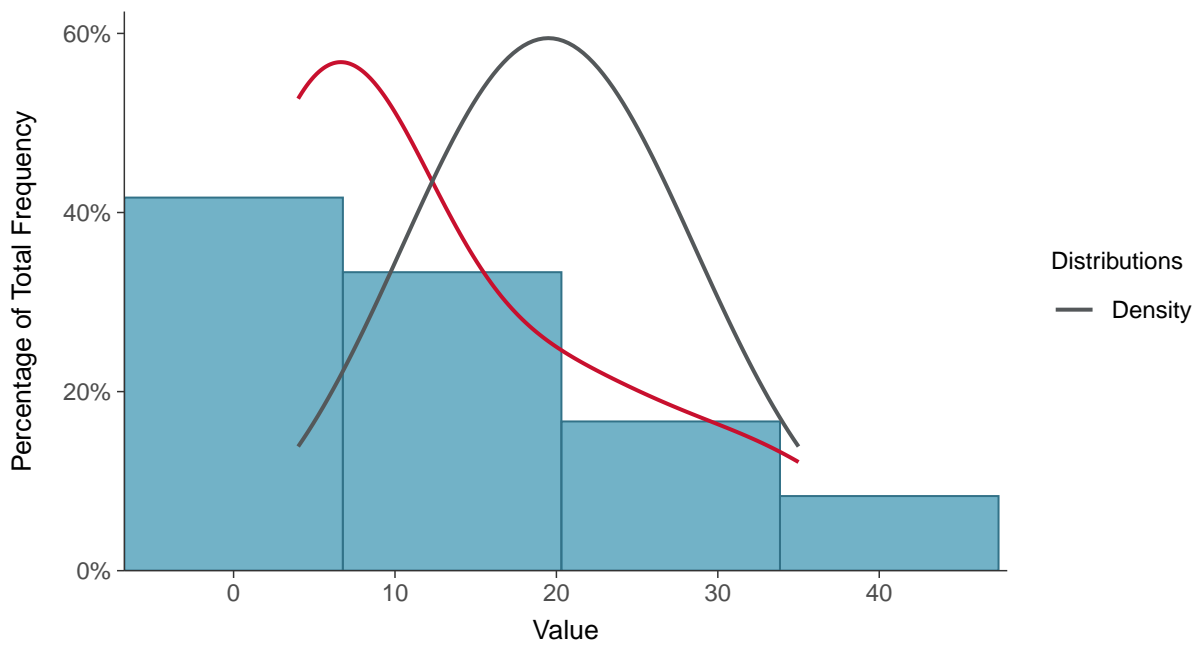
Scatter Plot

Total Suspended Solids, MW-11 (mg/L)



Histogram

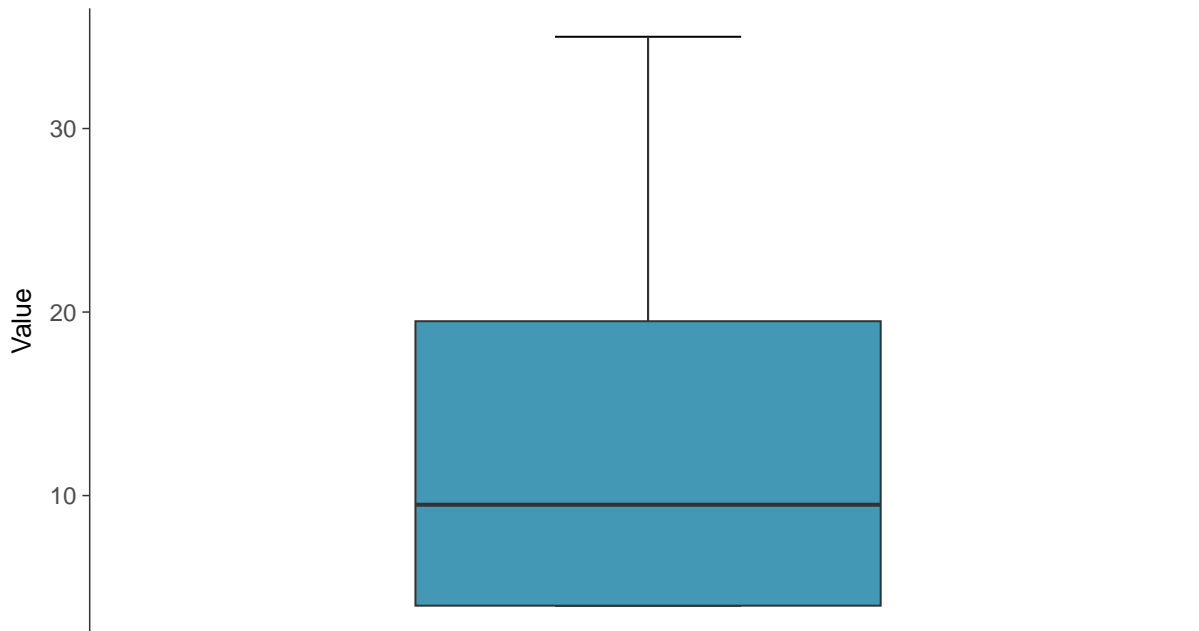
Total Suspended Solids, MW-11 (mg/L)





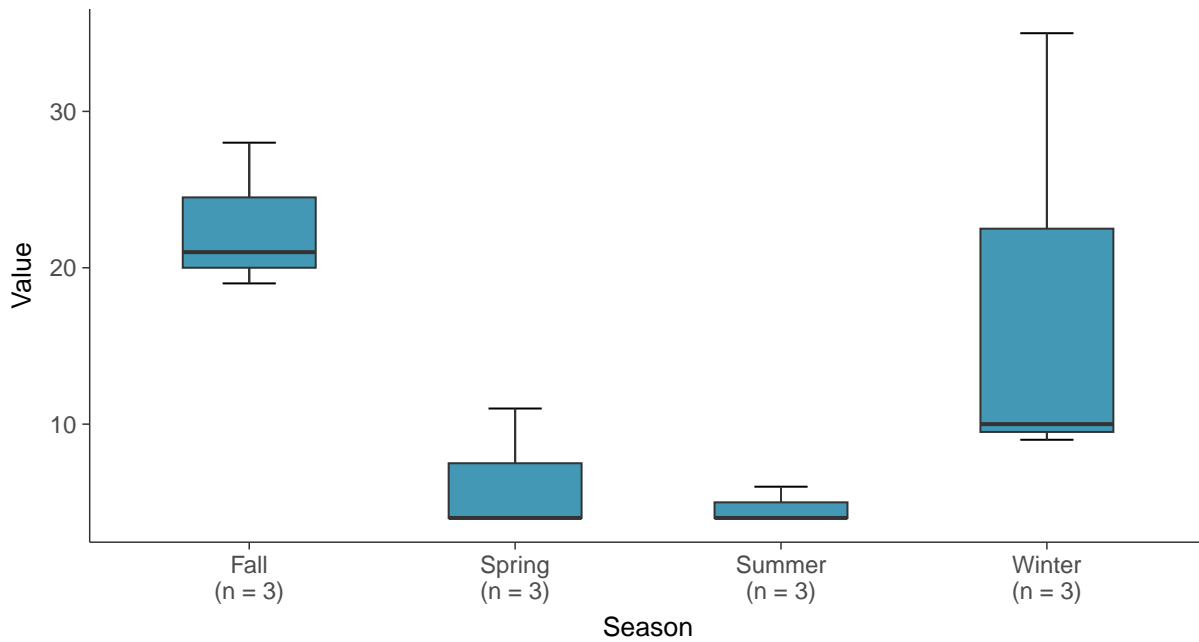
Boxplot

Total Suspended Solids, MW-11 (mg/L)



Boxplot by Season

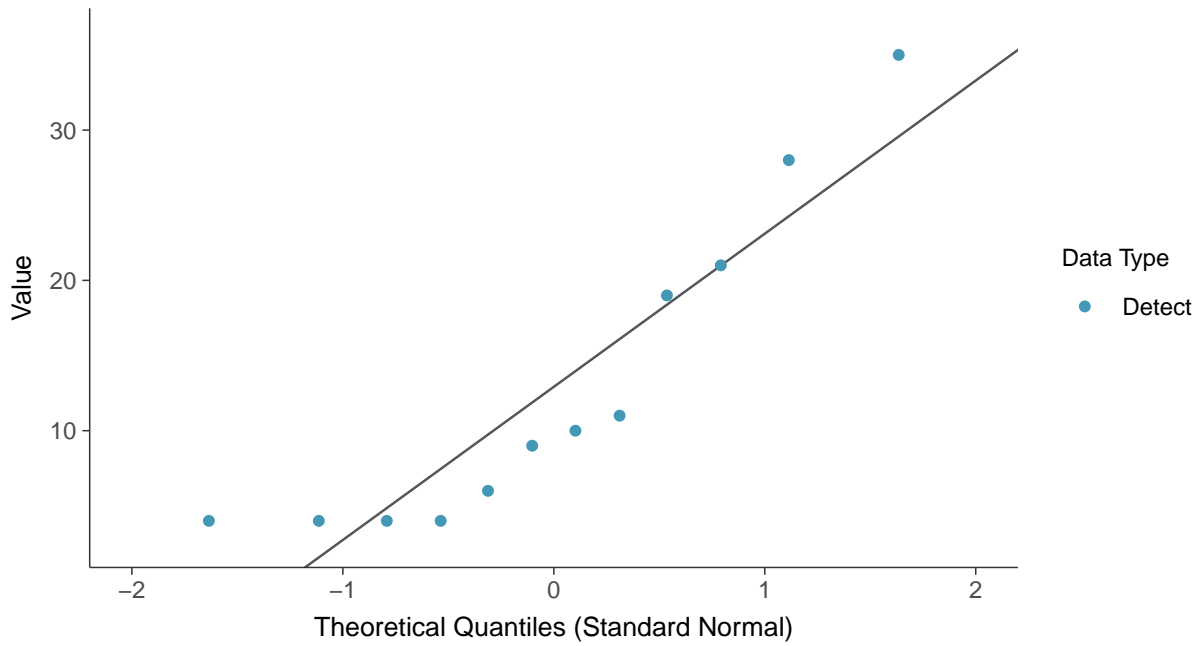
Total Suspended Solids, MW-11 (mg/L)





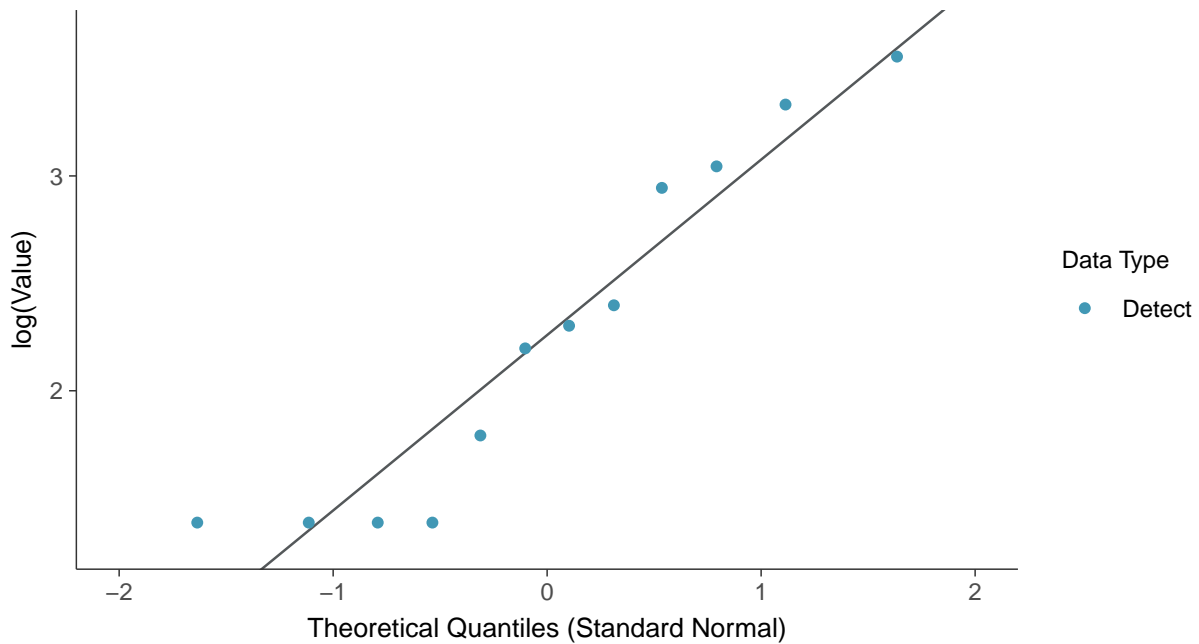
Normal Q-Q plot

Total Suspended Solids, MW-11 (mg/L)



Lognormal Q-Q plot

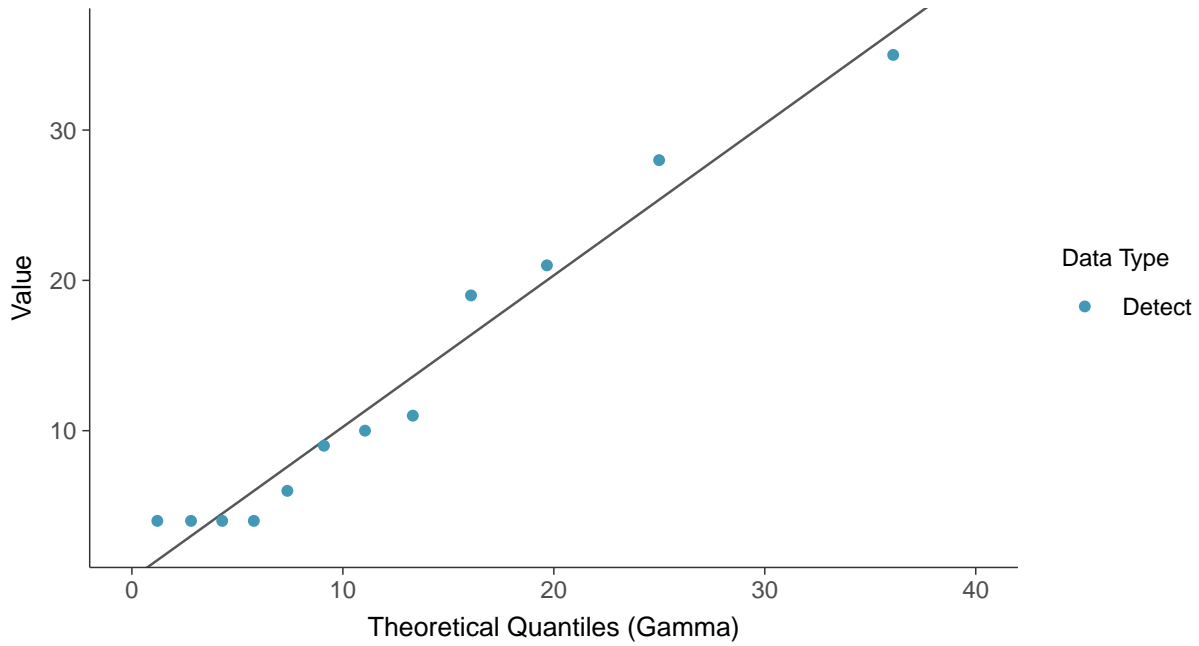
Total Suspended Solids, MW-11 (mg/L)





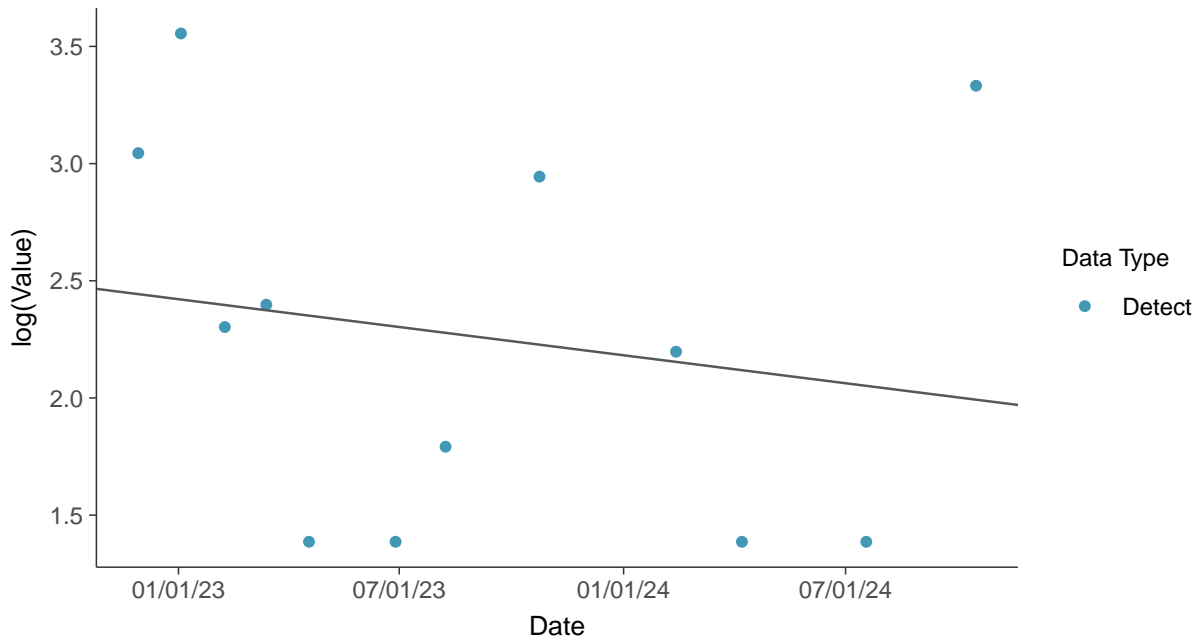
Gamma Q-Q plot

Total Suspended Solids, MW-11 (mg/L)



Trend Regression: Lognormal MLE

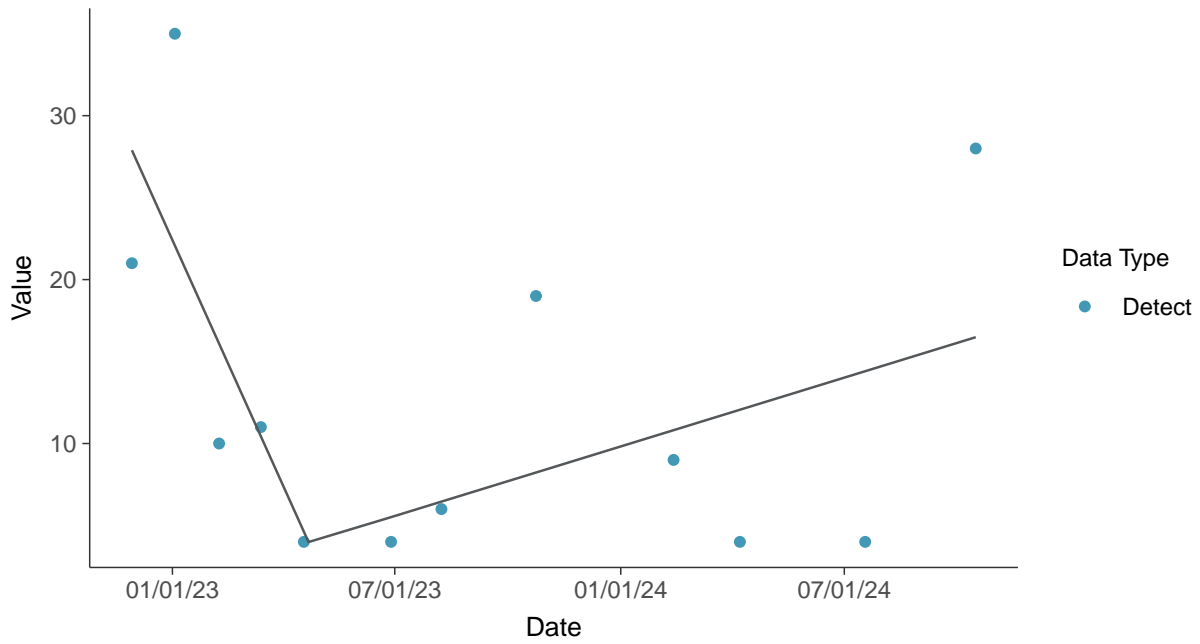
Total Suspended Solids, MW-11 (mg/L)





Trend Regression: Piecewise Linear-Linear

Total Suspended Solids, MW-11 (mg/L)



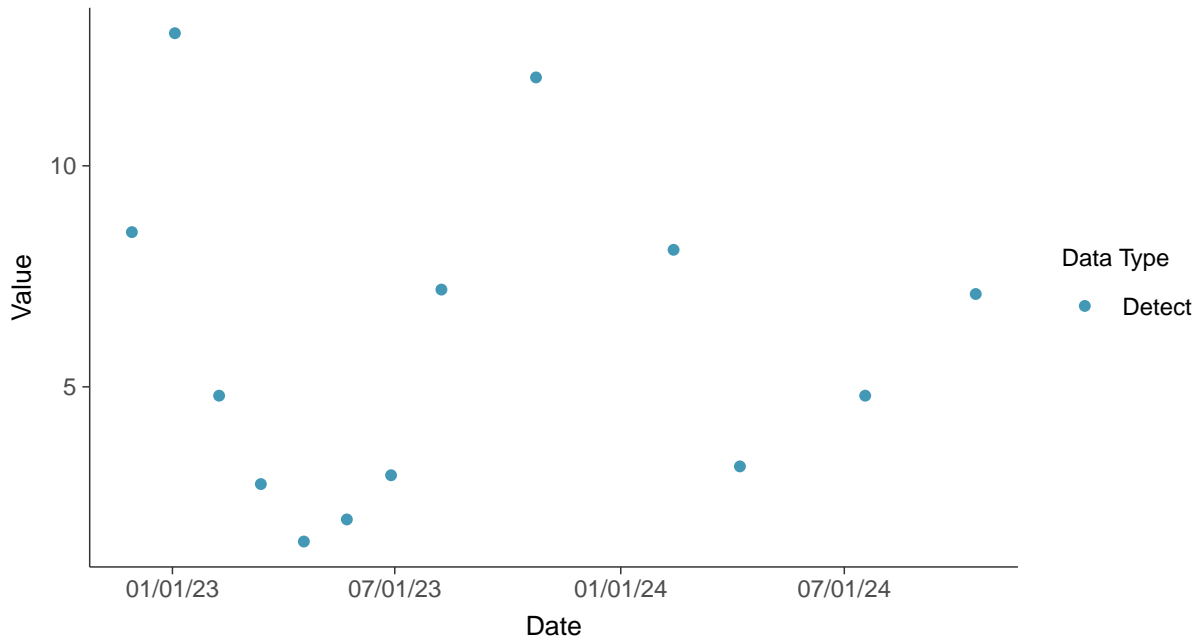


Appendix III: Boron, MW-11

ID: 2_21_2_4_105

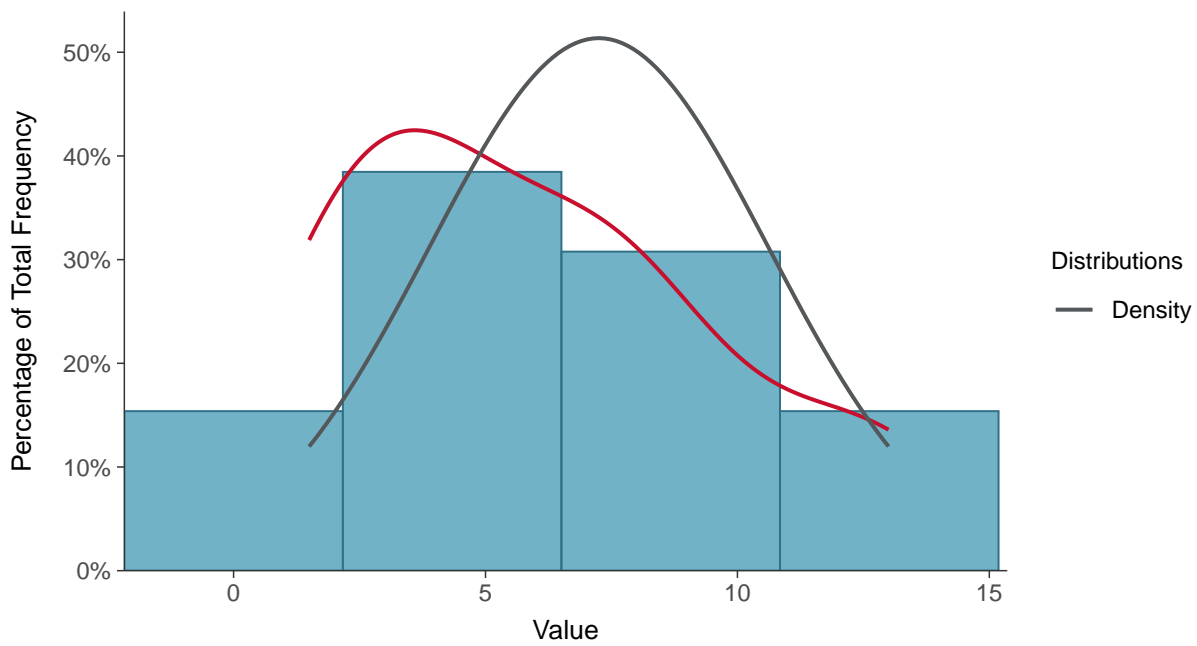
Scatter Plot

Boron, MW-11 (mg/L)



Histogram

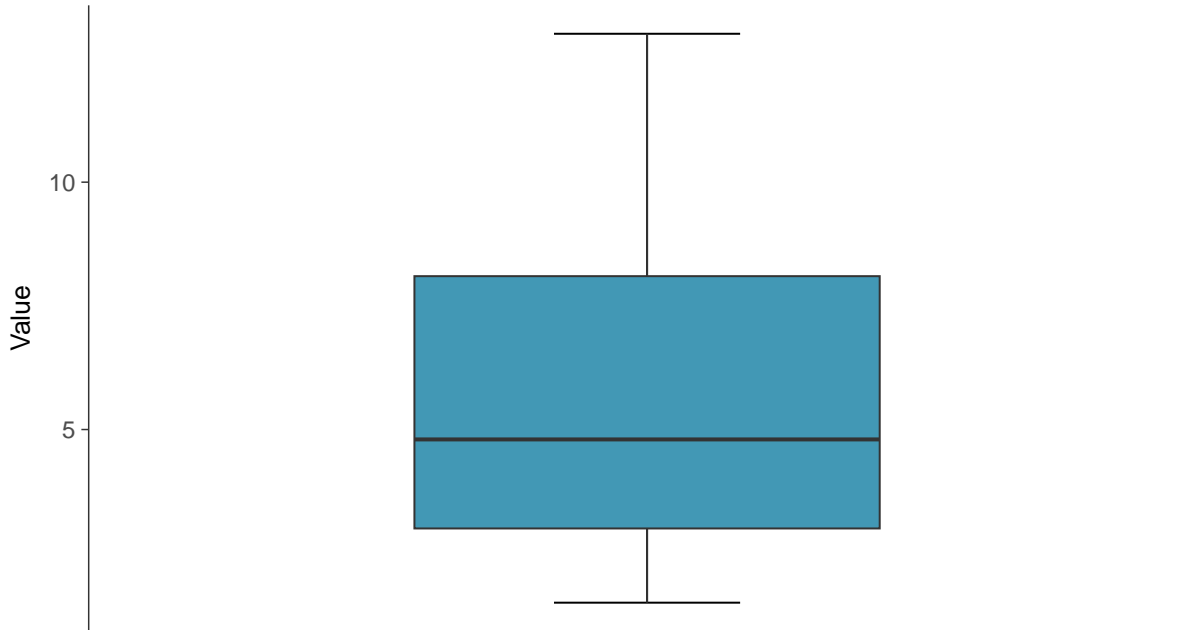
Boron, MW-11 (mg/L)





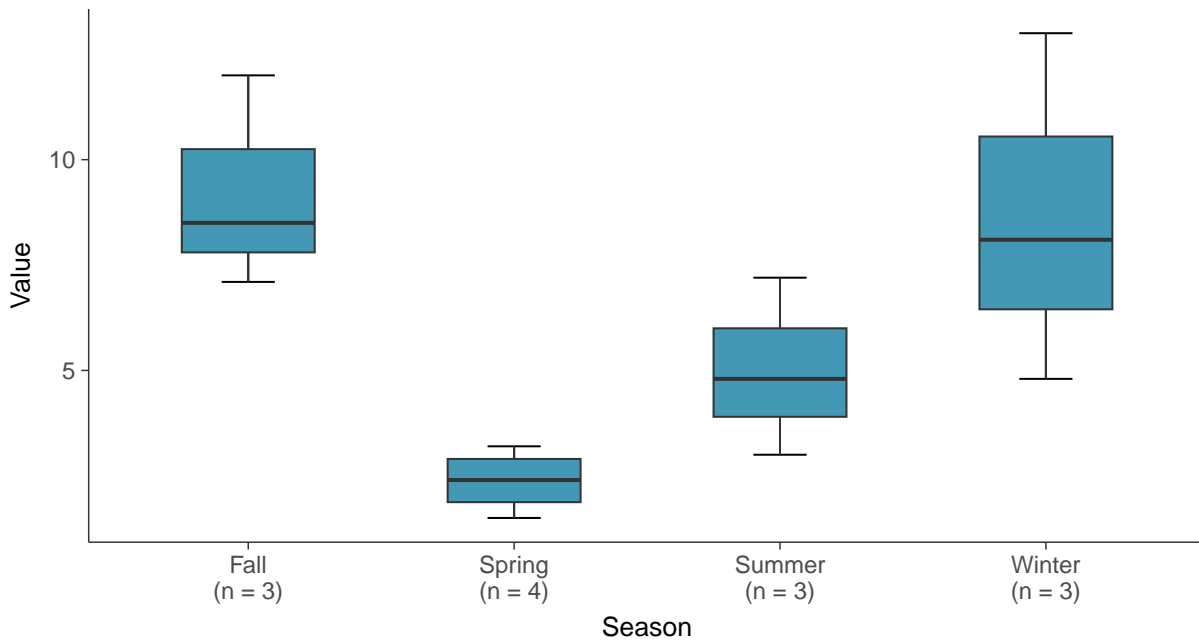
Boxplot

Boron, MW-11 (mg/L)



Boxplot by Season

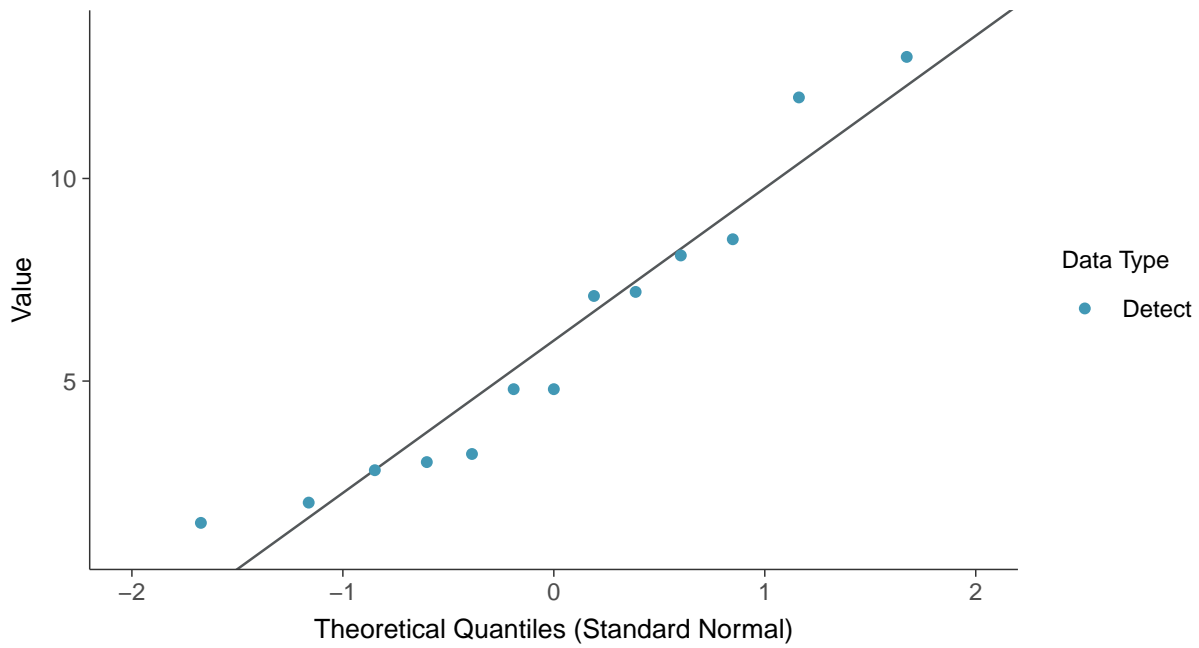
Boron, MW-11 (mg/L)





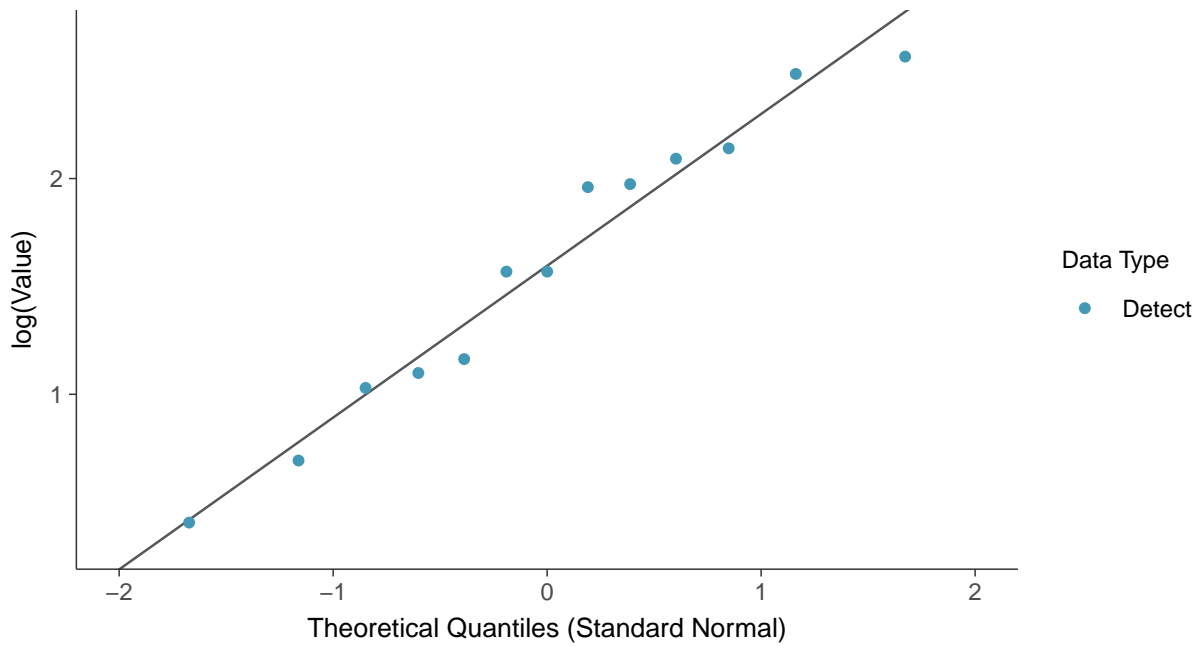
Normal Q-Q plot

Boron, MW-11 (mg/L)



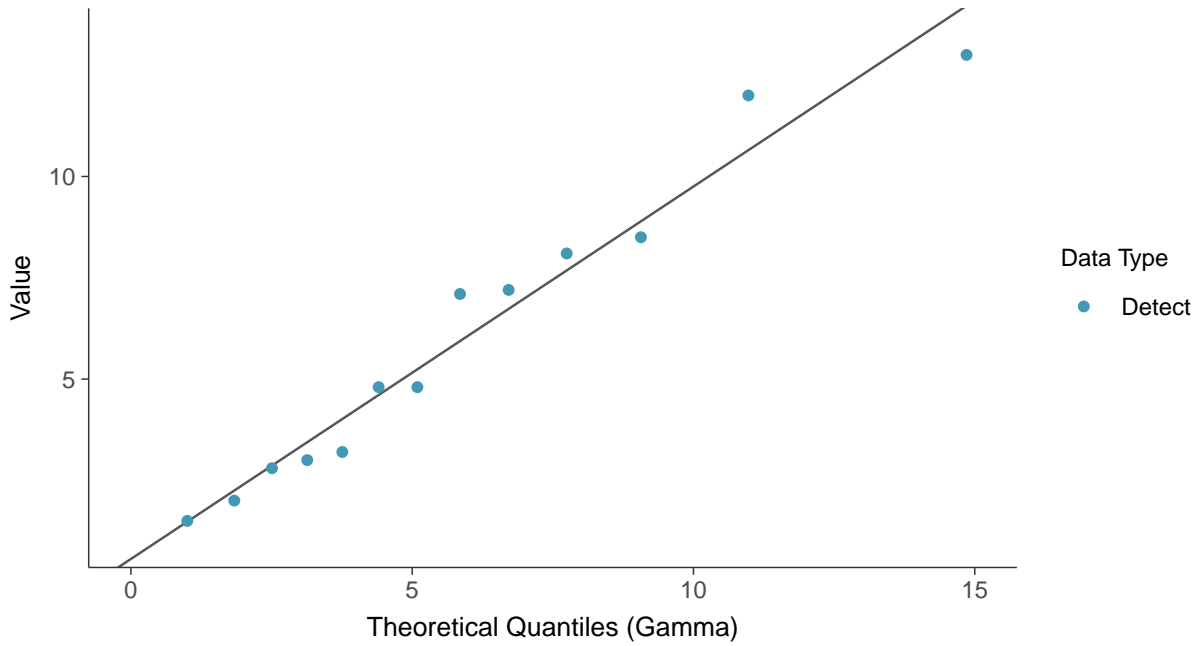
Lognormal Q-Q plot

Boron, MW-11 (mg/L)

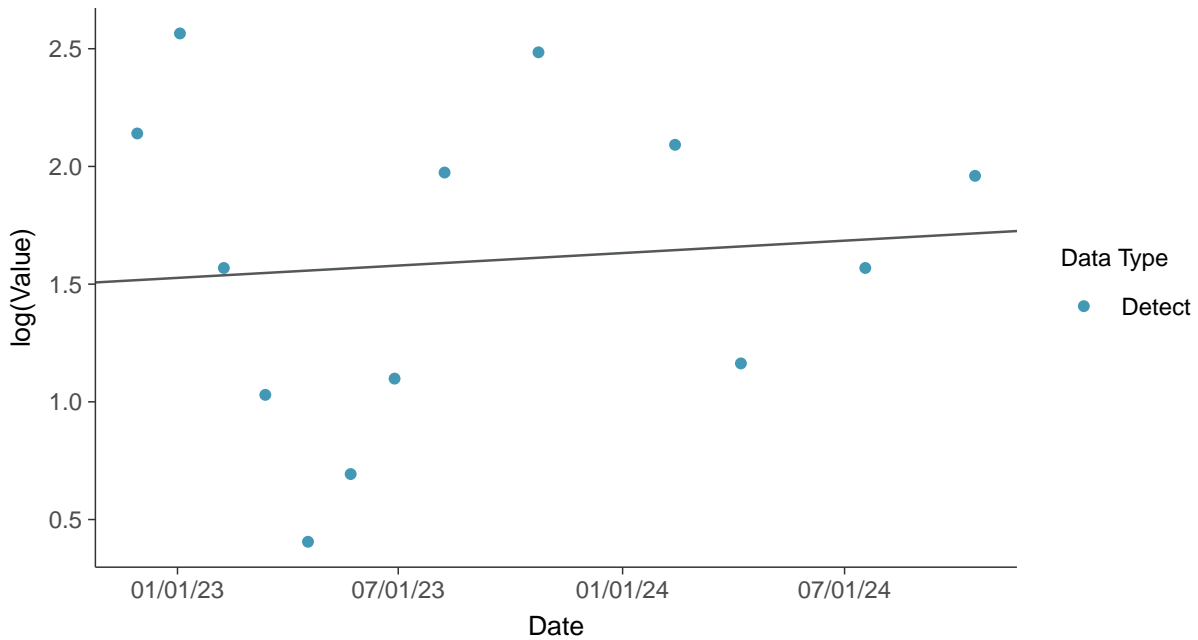




Gamma Q-Q plot
Boron, MW-11 (mg/L)



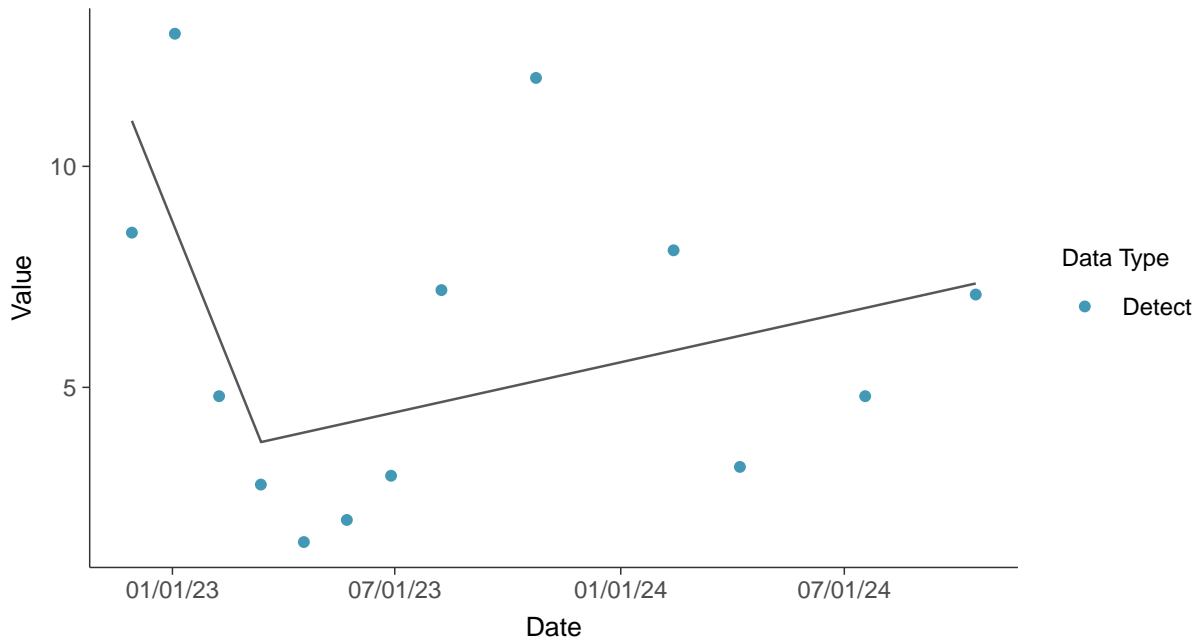
Trend Regression: Lognormal MLE
Boron, MW-11 (mg/L)





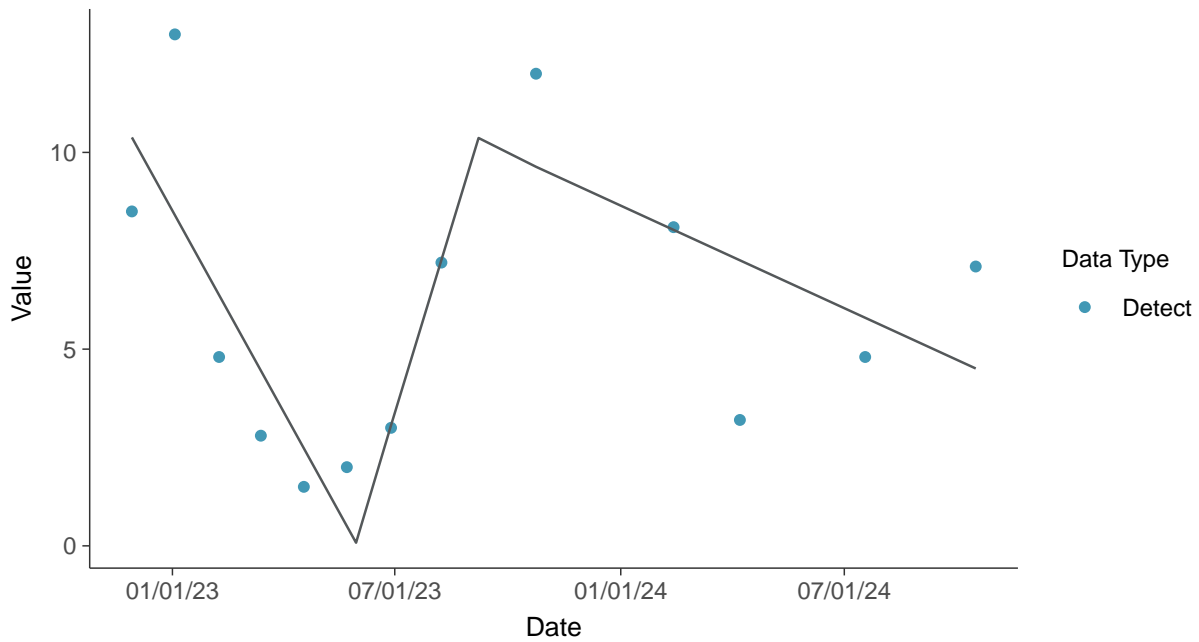
Trend Regression: Piecewise Linear-Linear

Boron, MW-11 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Boron, MW-11 (mg/L)



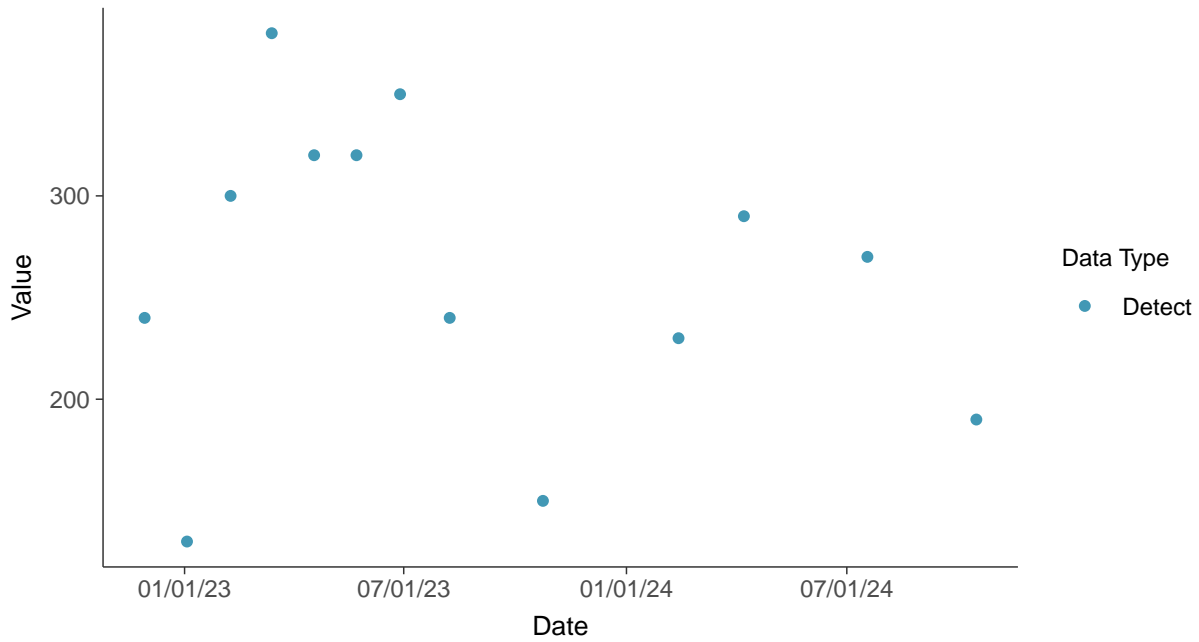


Appendix III: Calcium, MW-11

ID: 2_21_2_4_107

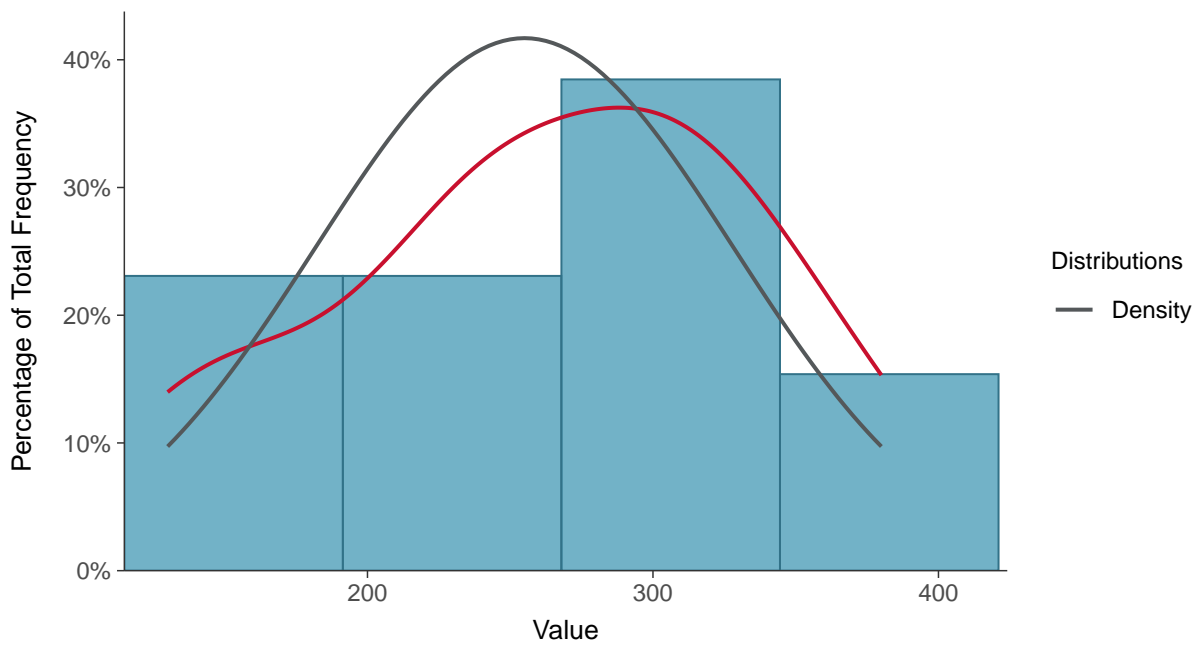
Scatter Plot

Calcium, MW-11 (mg/L)



Histogram

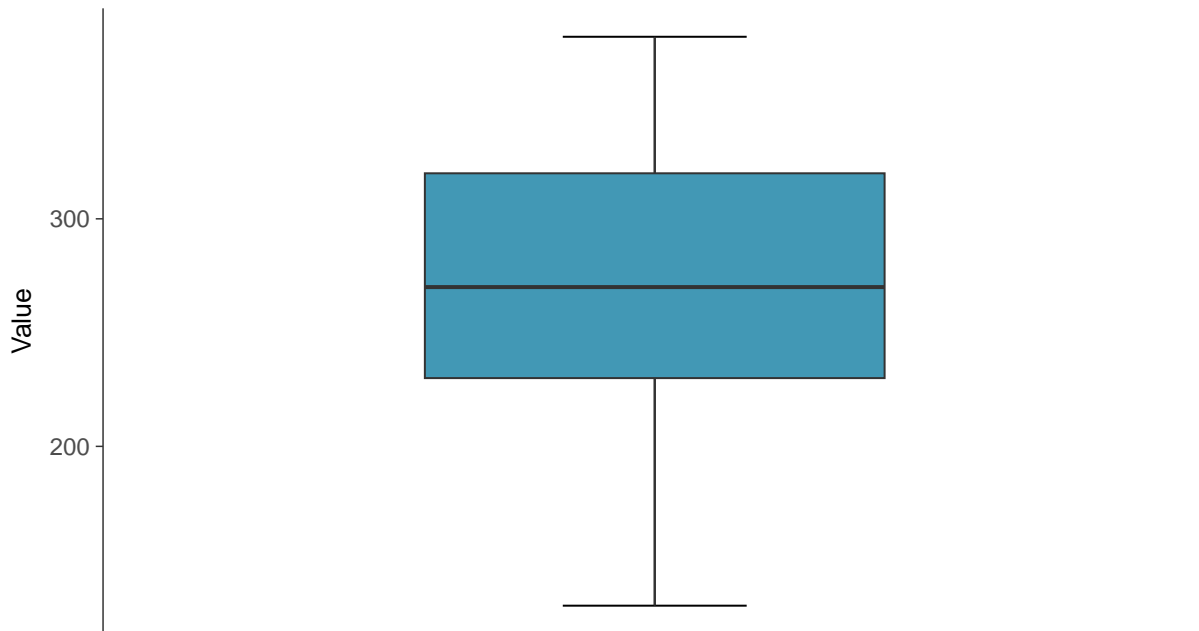
Calcium, MW-11 (mg/L)





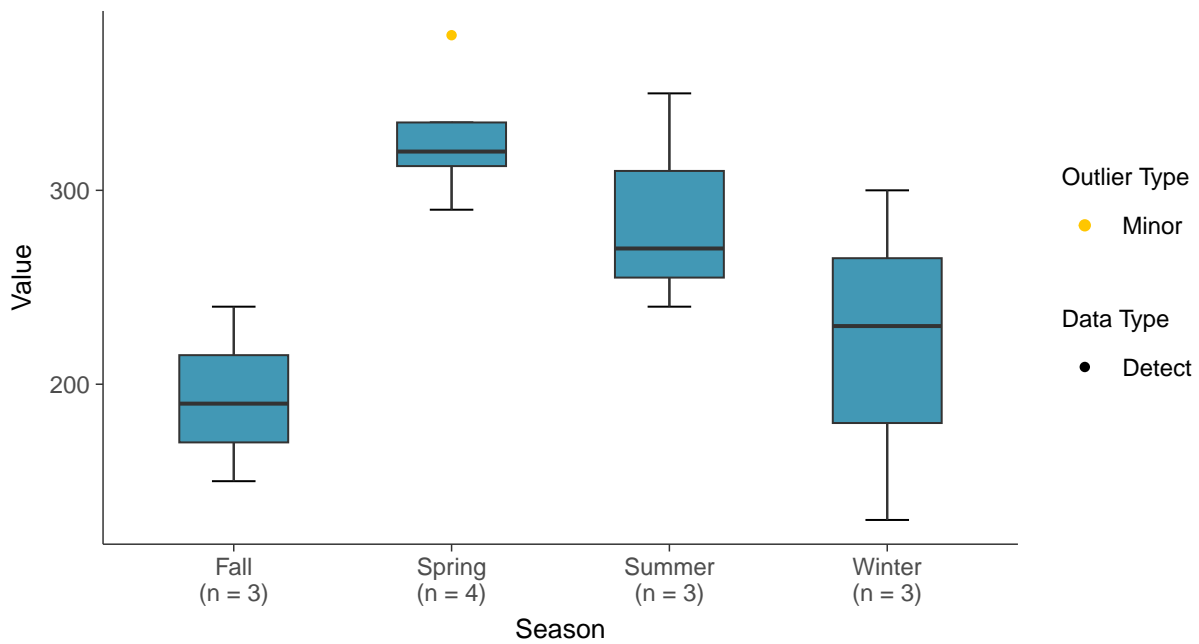
Boxplot

Calcium, MW-11 (mg/L)



Boxplot by Season

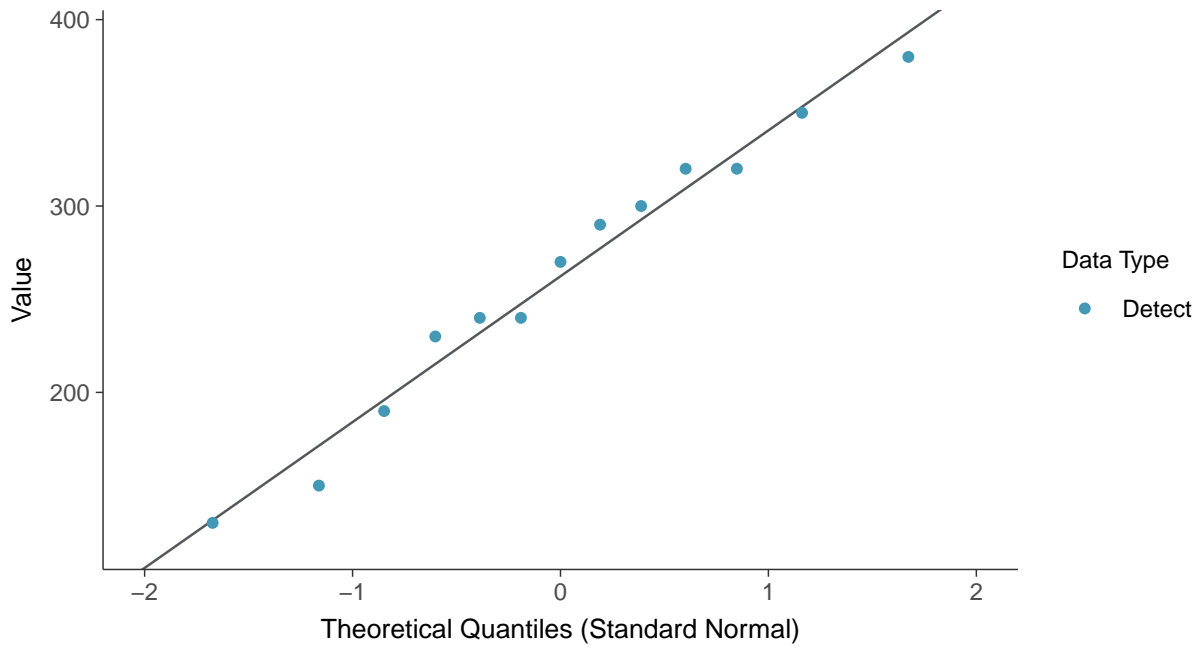
Calcium, MW-11 (mg/L)





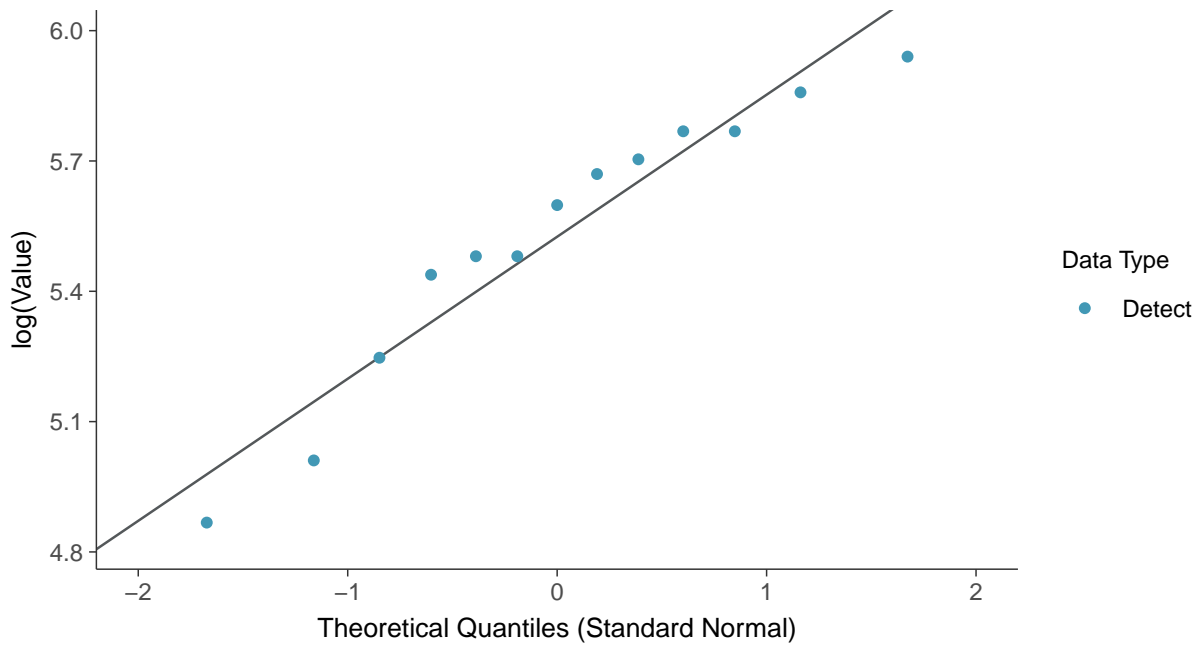
Normal Q-Q plot

Calcium, MW-11 (mg/L)



Lognormal Q-Q plot

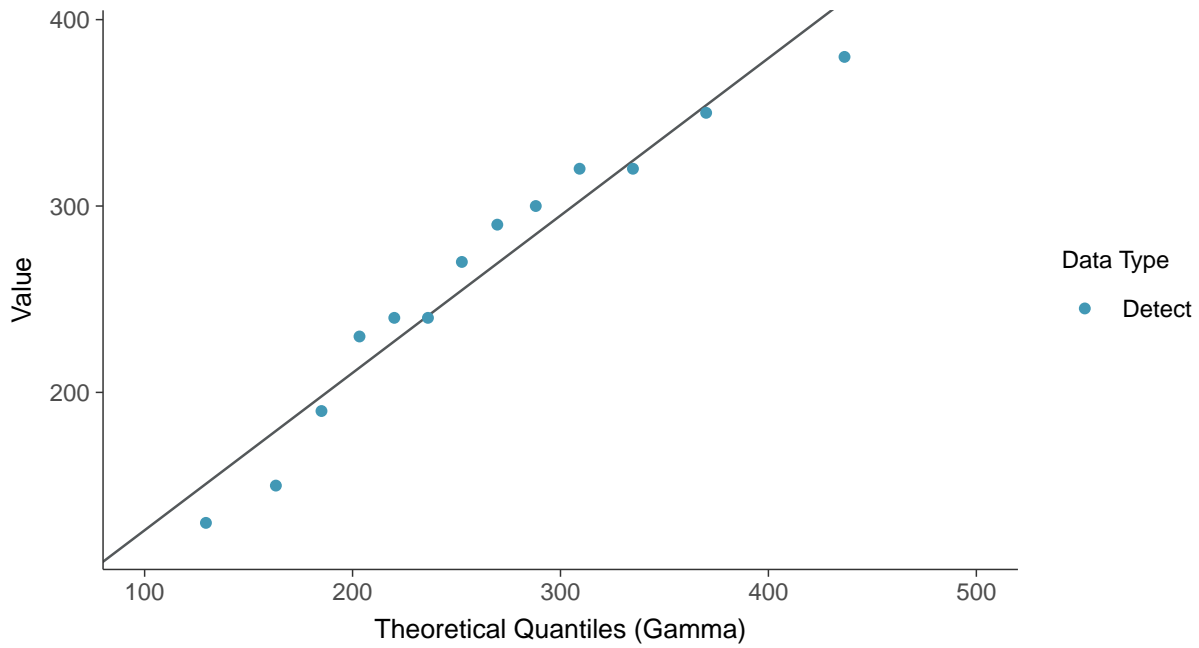
Calcium, MW-11 (mg/L)





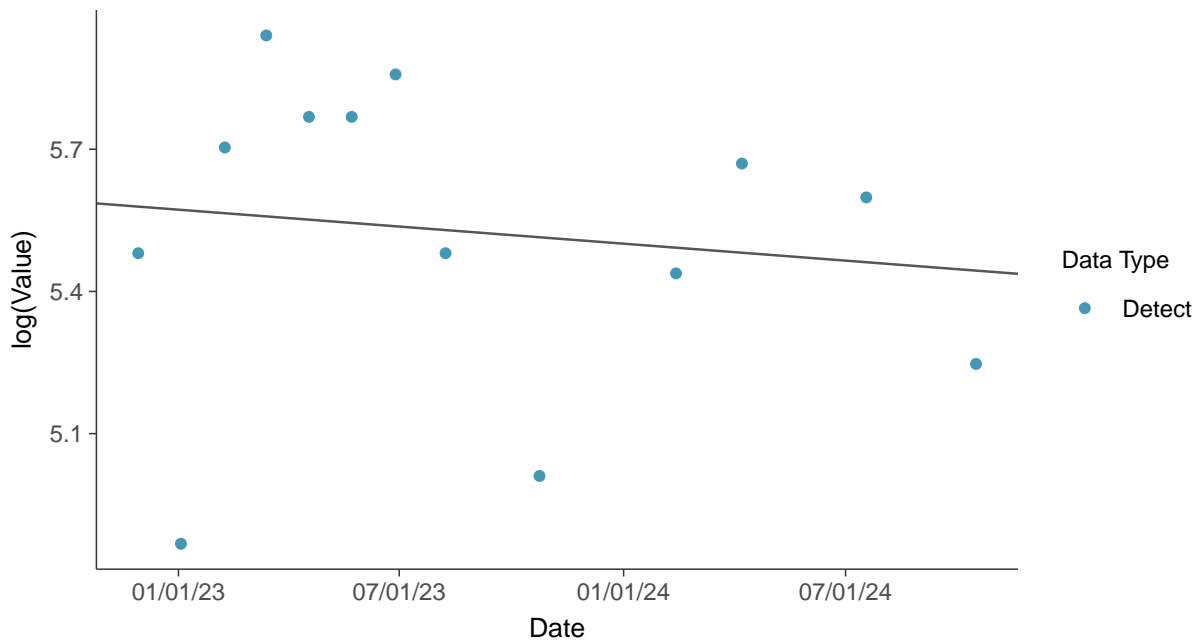
Gamma Q-Q plot

Calcium, MW-11 (mg/L)



Trend Regression: Lognormal MLE

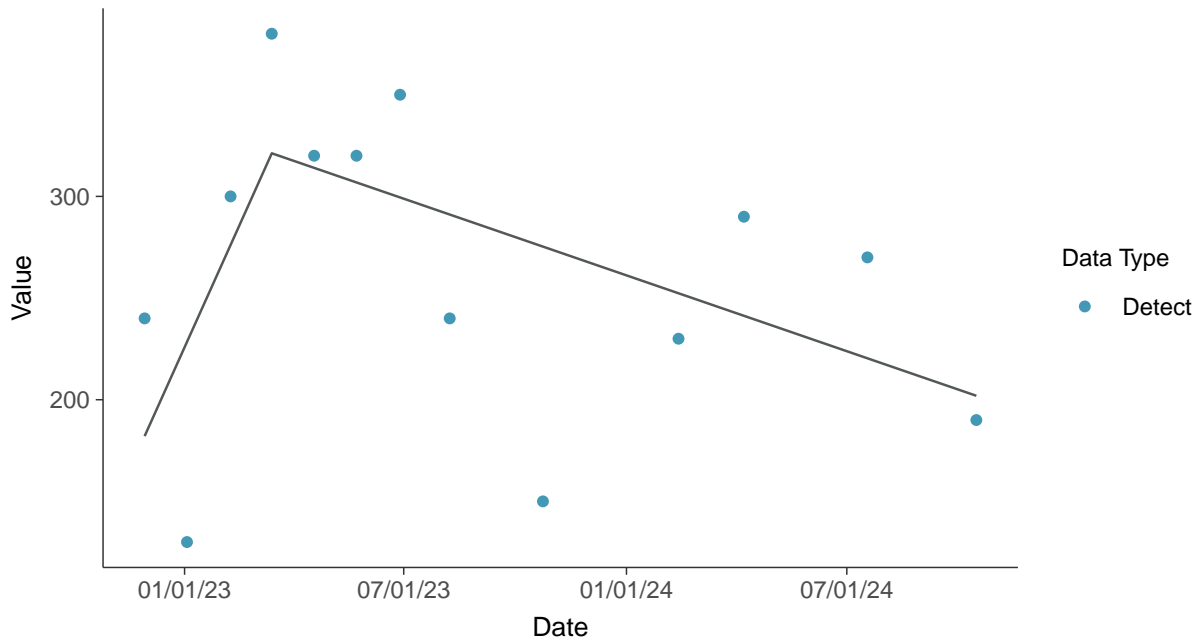
Calcium, MW-11 (mg/L)





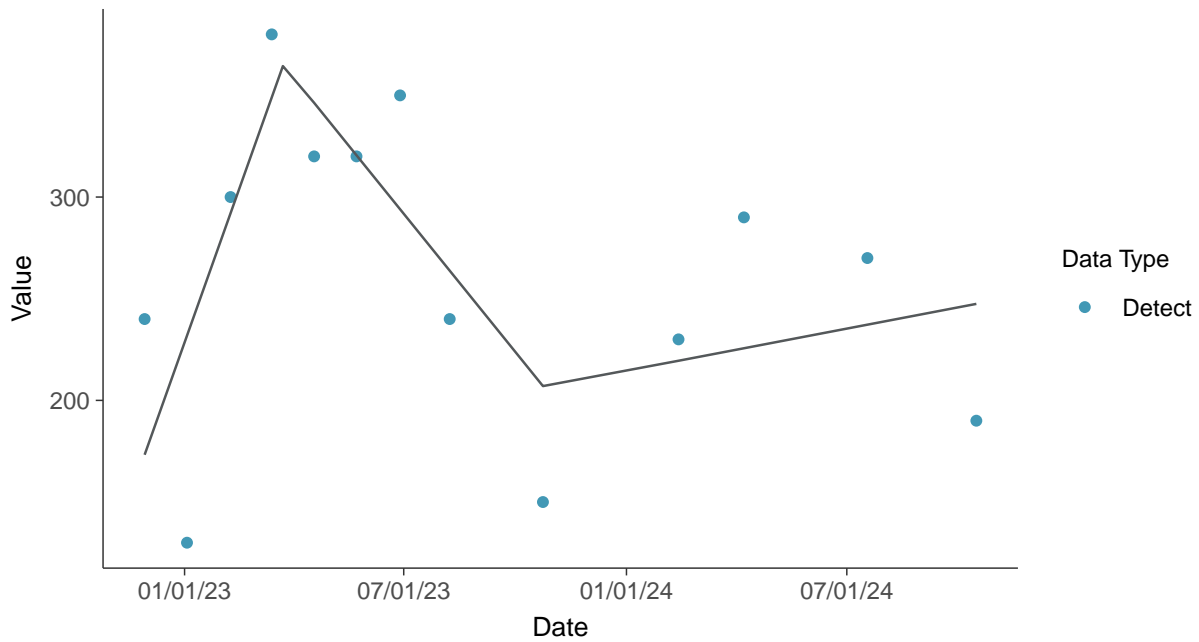
Trend Regression: Piecewise Linear-Linear

Calcium, MW-11 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Calcium, MW-11 (mg/L)



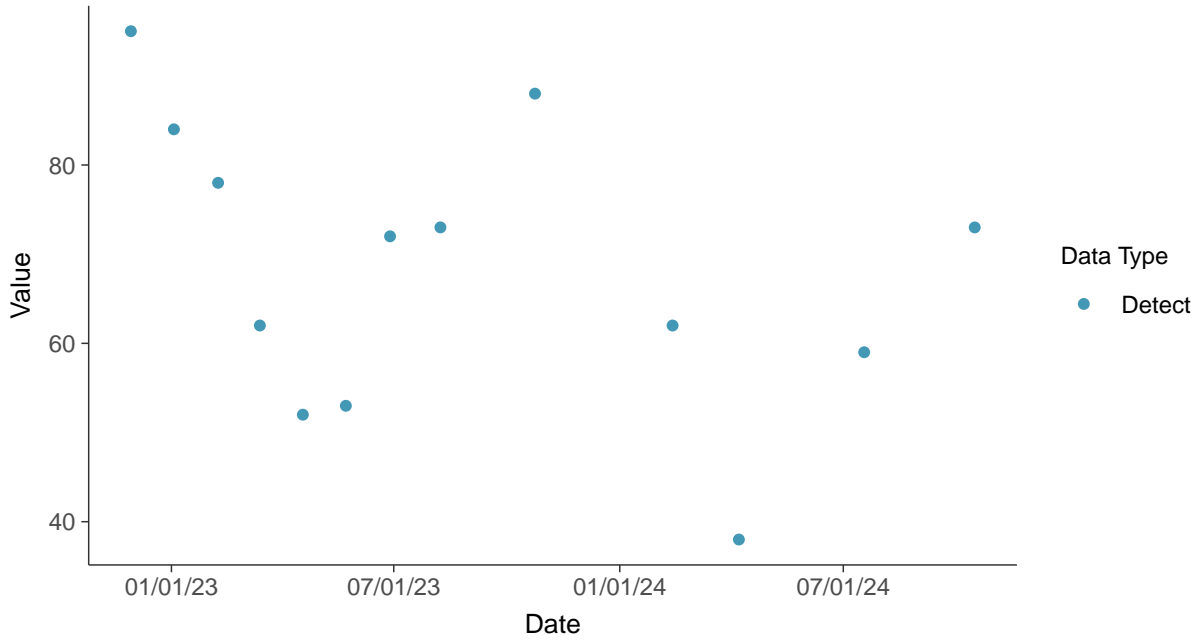


Appendix III: Chloride (as Cl), MW-11

ID: 2_21_2_4_108

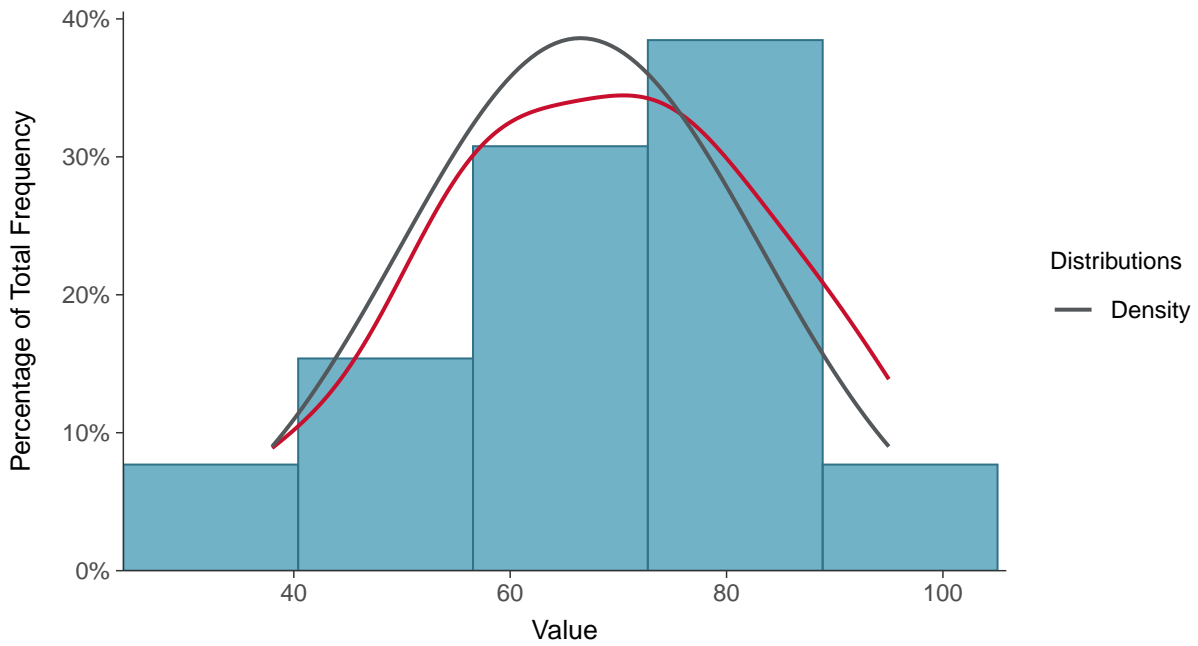
Scatter Plot

Chloride (as Cl), MW-11 (mg/L)



Histogram

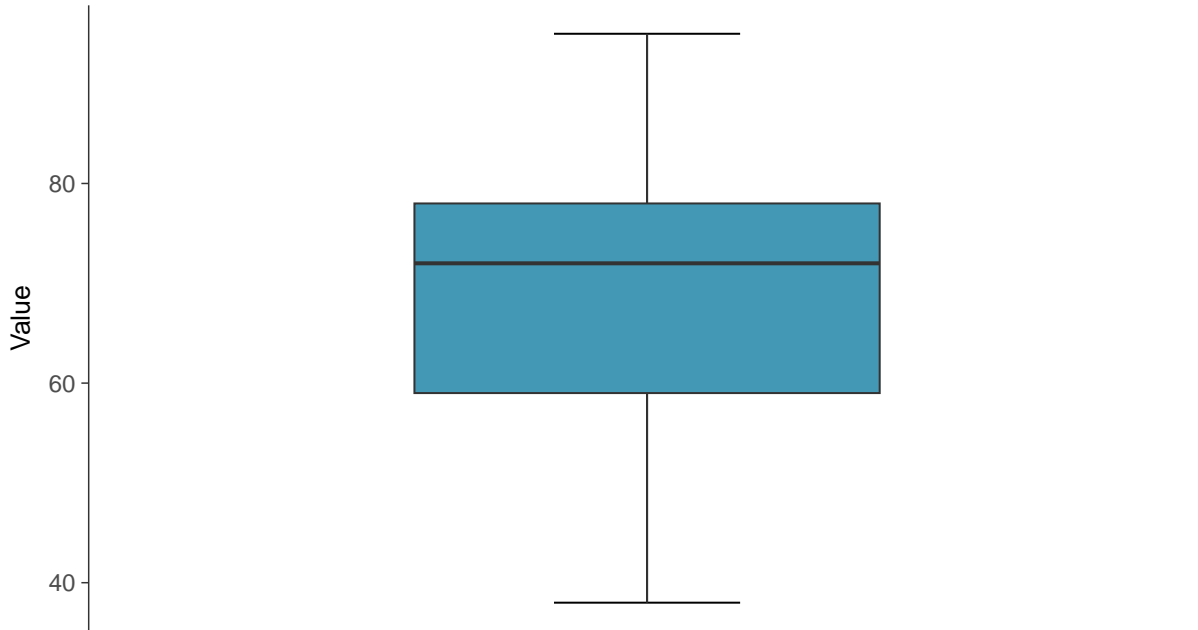
Chloride (as Cl), MW-11 (mg/L)





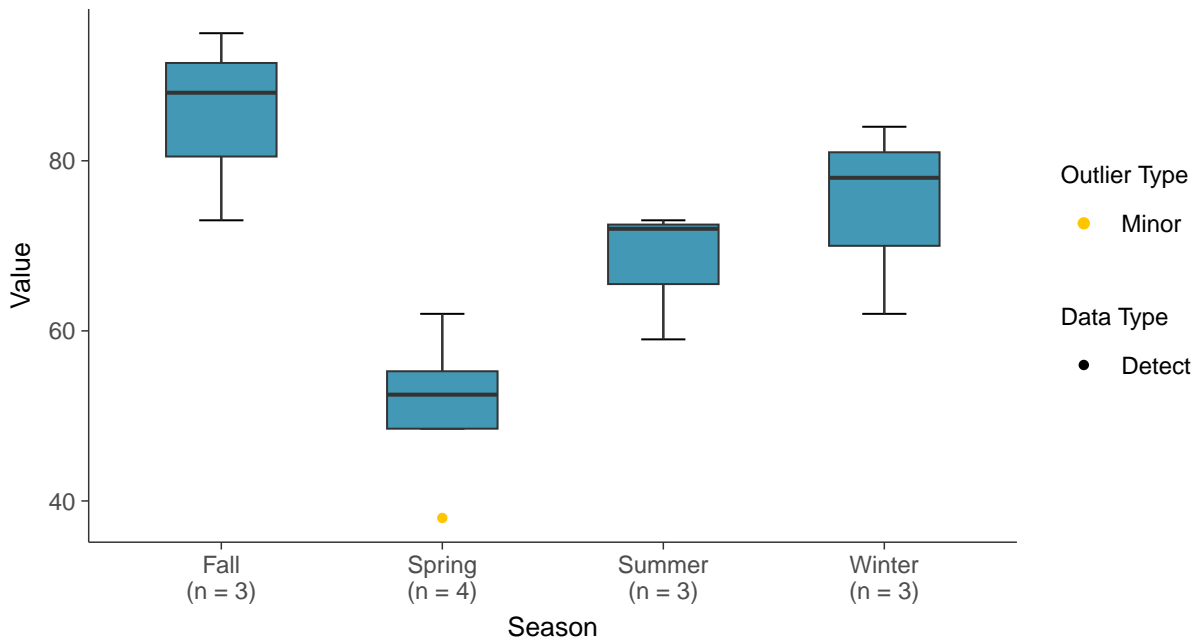
Boxplot

Chloride (as Cl), MW-11 (mg/L)



Boxplot by Season

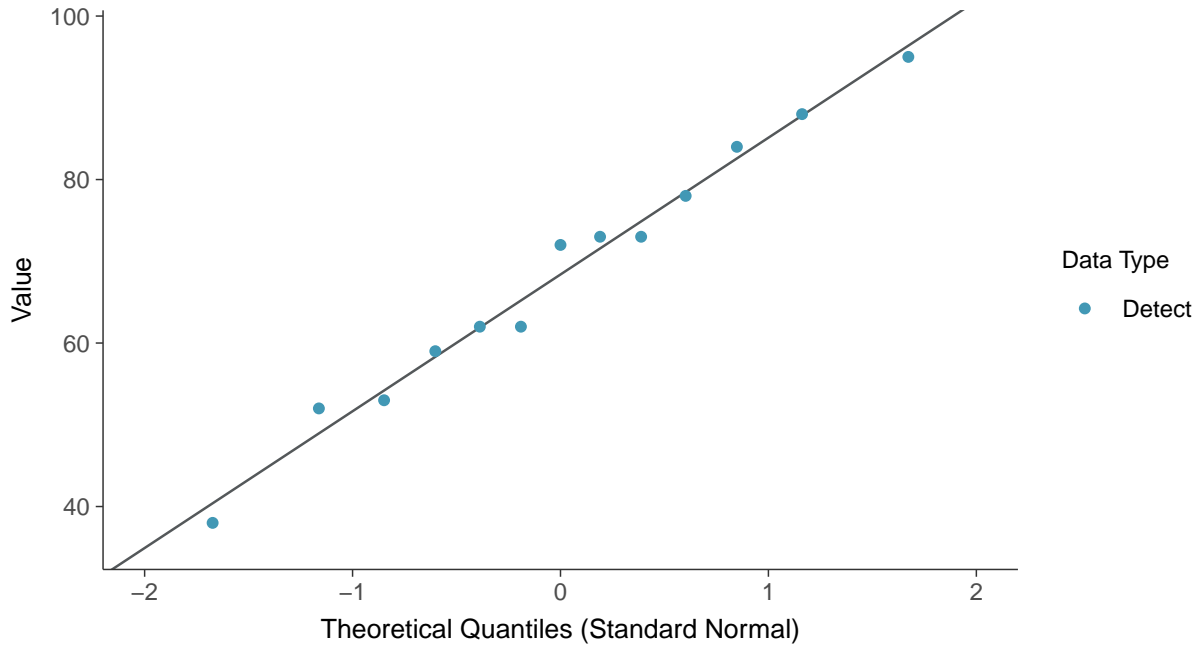
Chloride (as Cl), MW-11 (mg/L)





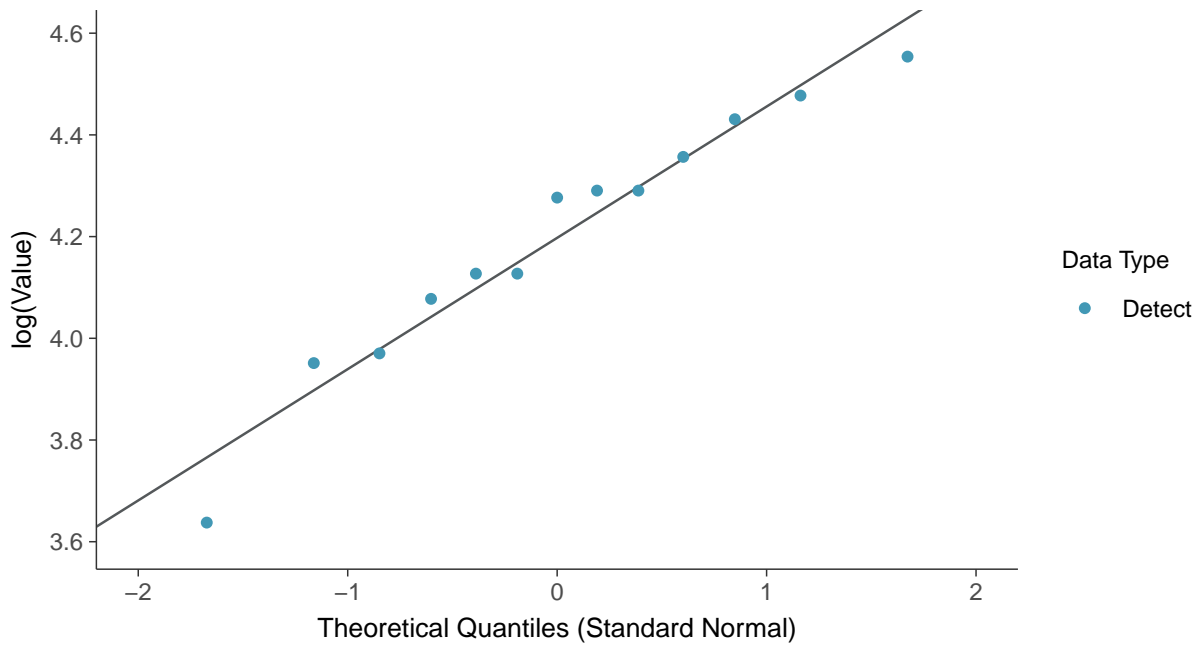
Normal Q-Q plot

Chloride (as Cl), MW-11 (mg/L)



Lognormal Q-Q plot

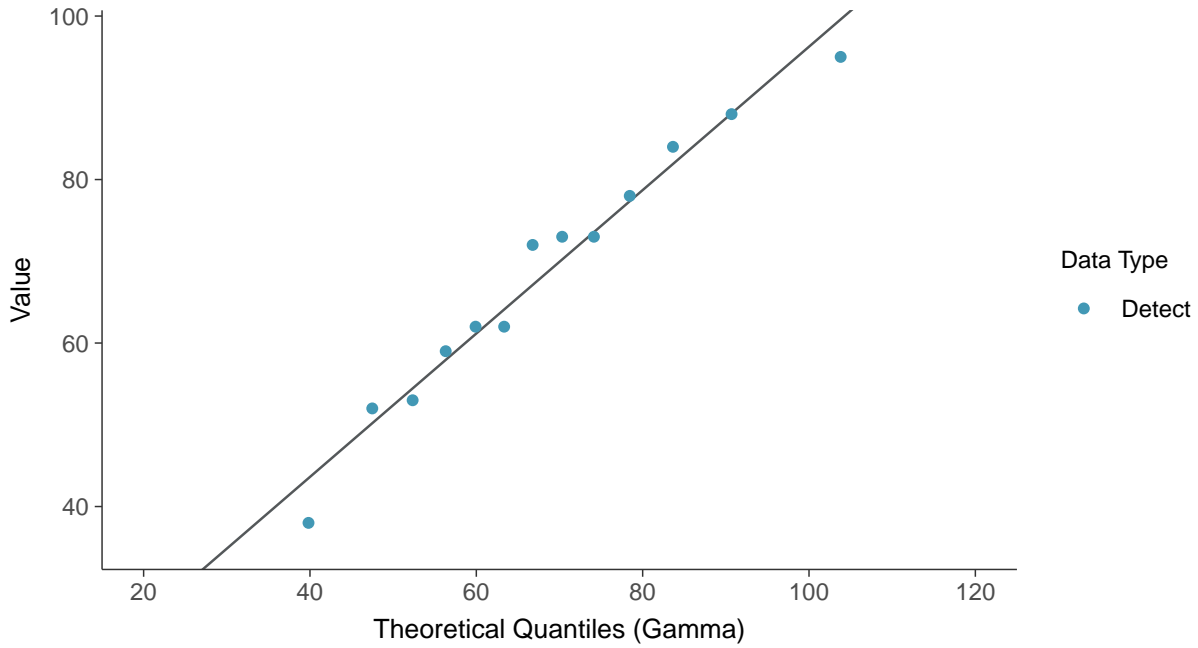
Chloride (as Cl), MW-11 (mg/L)





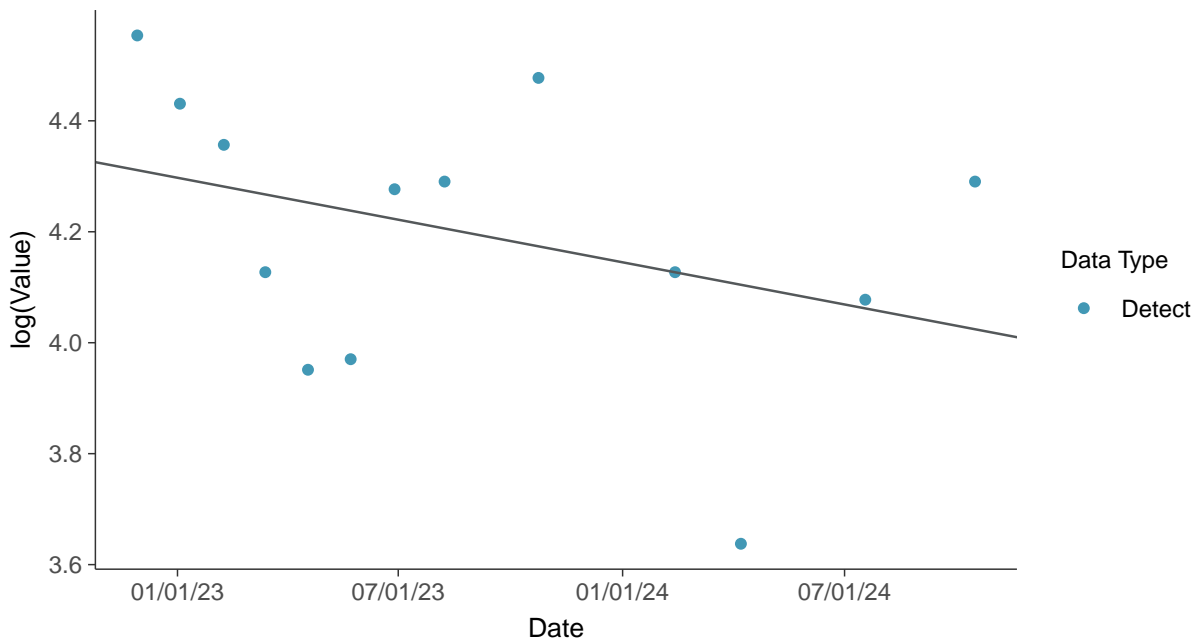
Gamma Q-Q plot

Chloride (as Cl), MW-11 (mg/L)



Trend Regression: Lognormal MLE

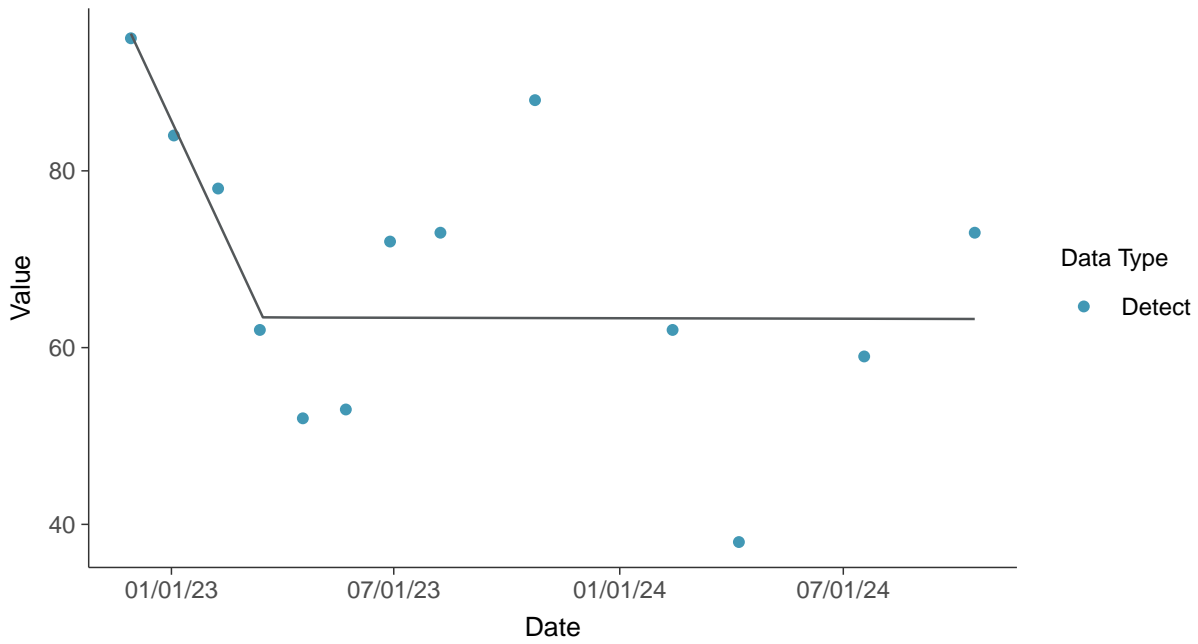
Chloride (as Cl), MW-11 (mg/L)





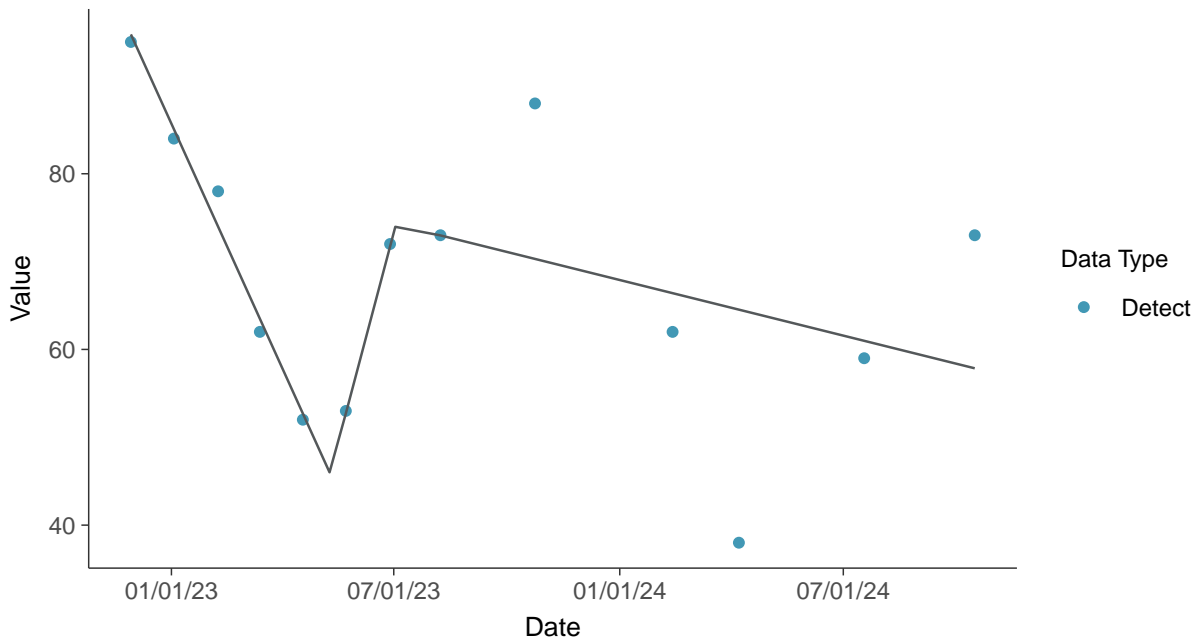
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-11 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Chloride (as Cl), MW-11 (mg/L)



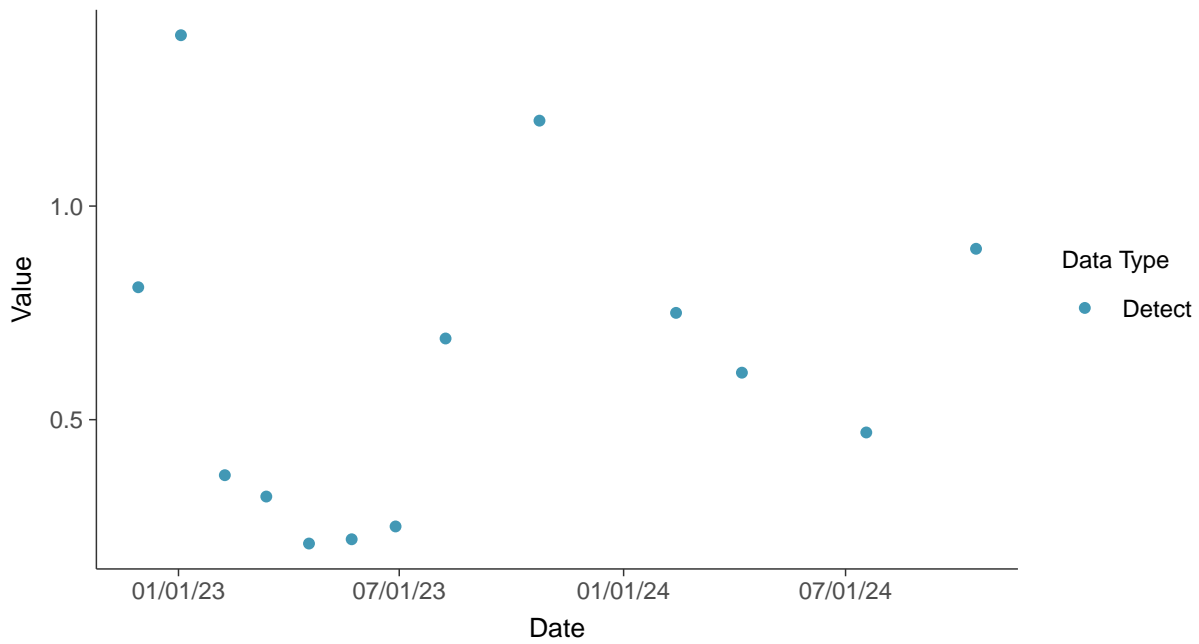


Appendix III: Fluoride, MW-11

ID: 2_21_2_4_112

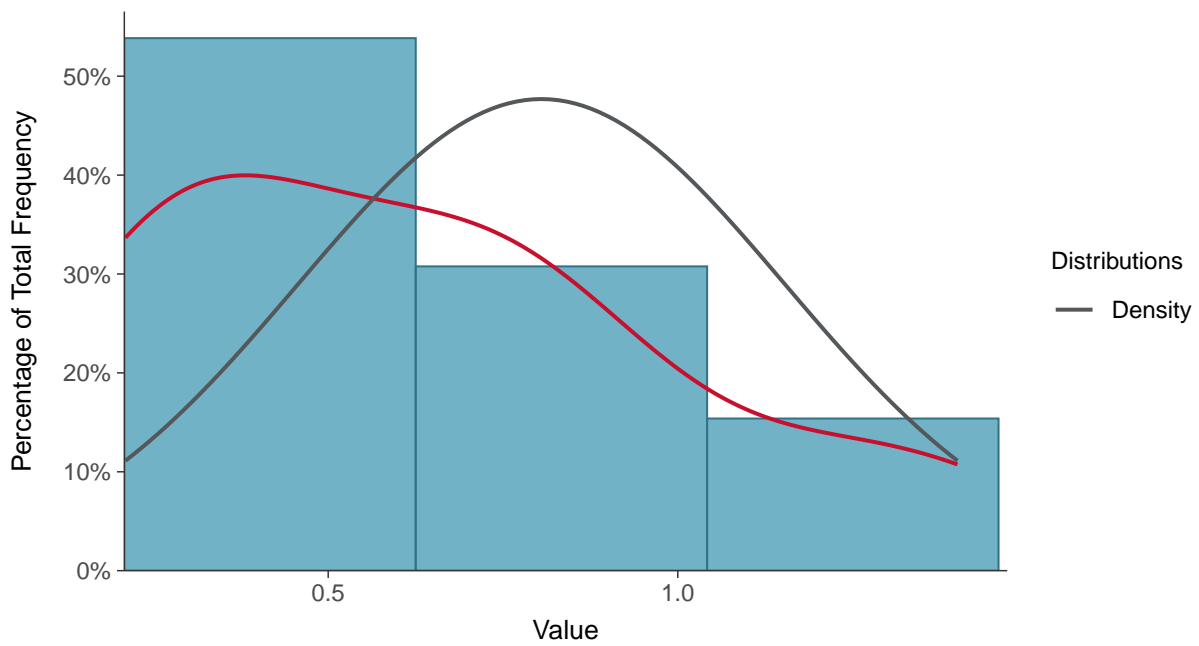
Scatter Plot

Fluoride, MW-11 (mg/L)



Histogram

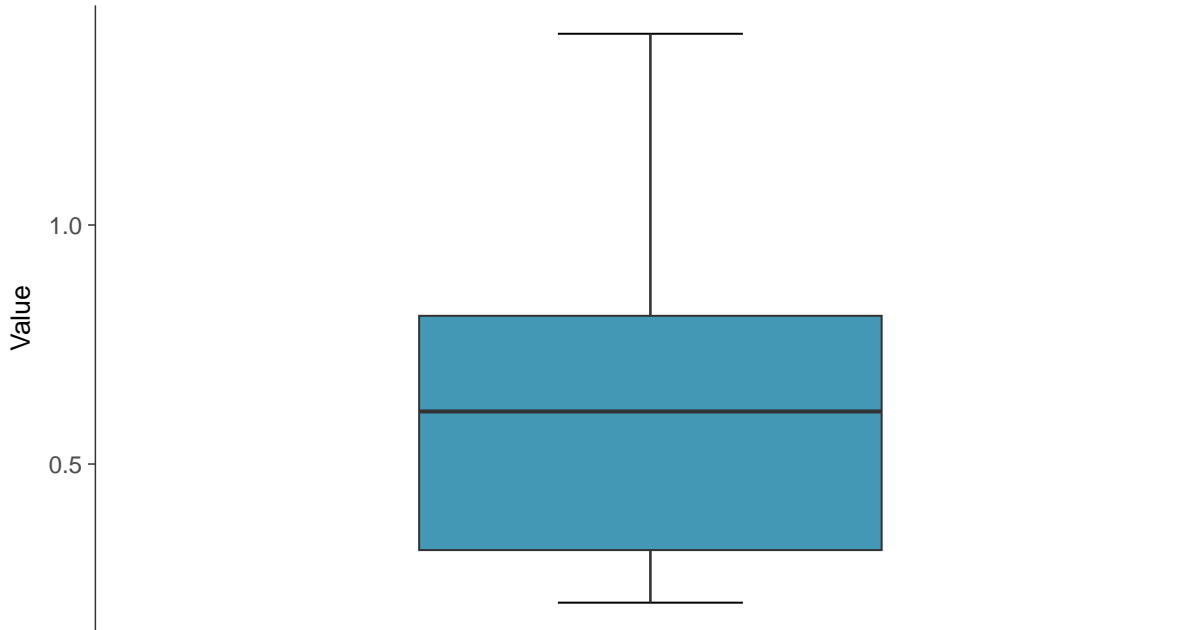
Fluoride, MW-11 (mg/L)





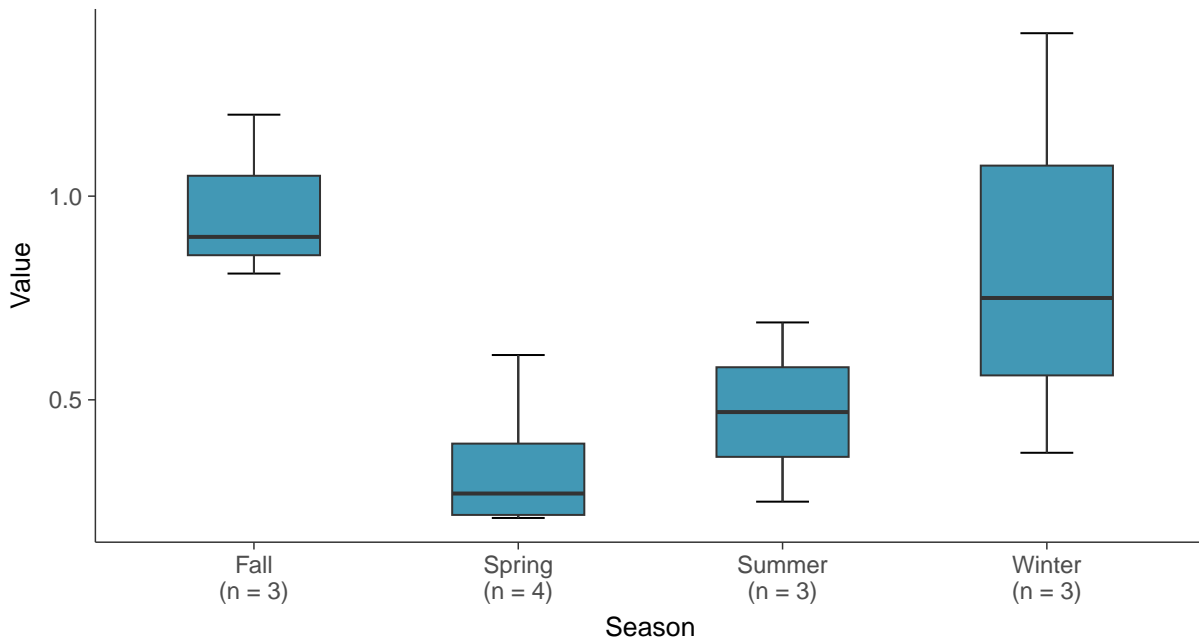
Boxplot

Fluoride, MW-11 (mg/L)



Boxplot by Season

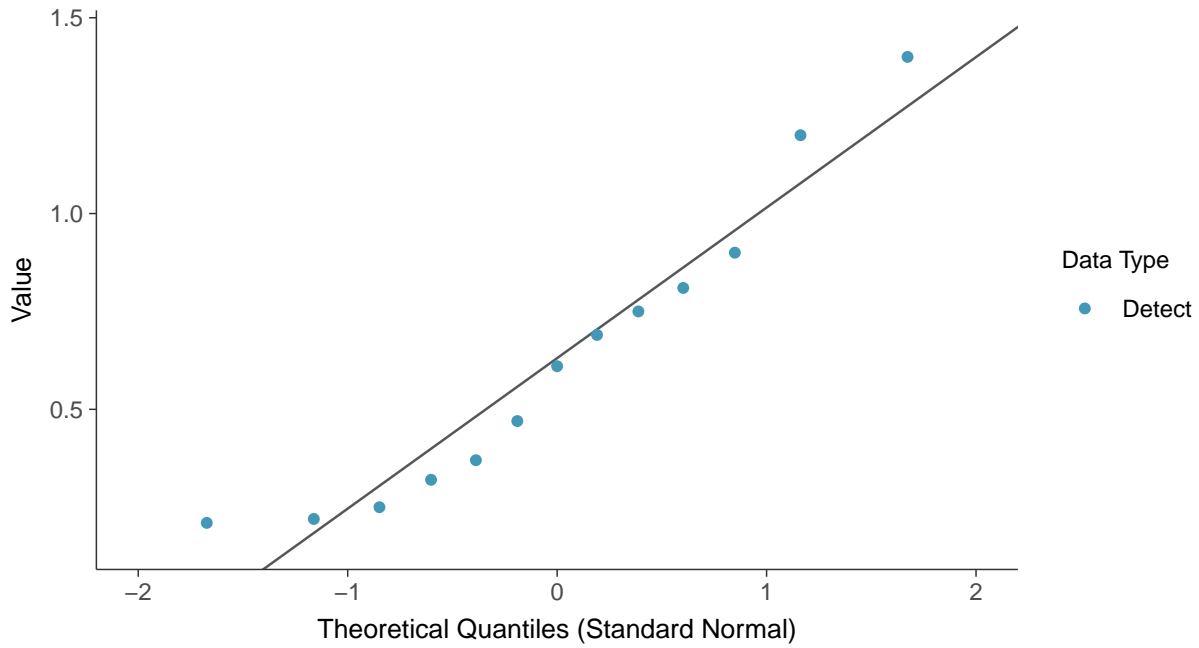
Fluoride, MW-11 (mg/L)





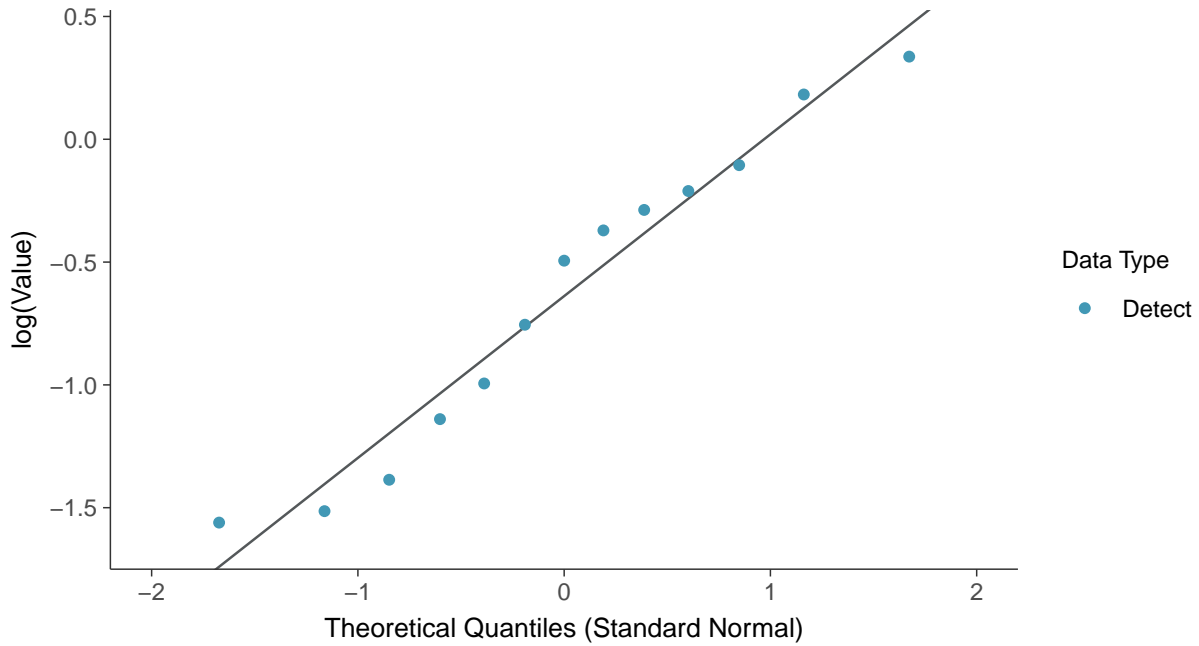
Normal Q-Q plot

Fluoride, MW-11 (mg/L)



Lognormal Q-Q plot

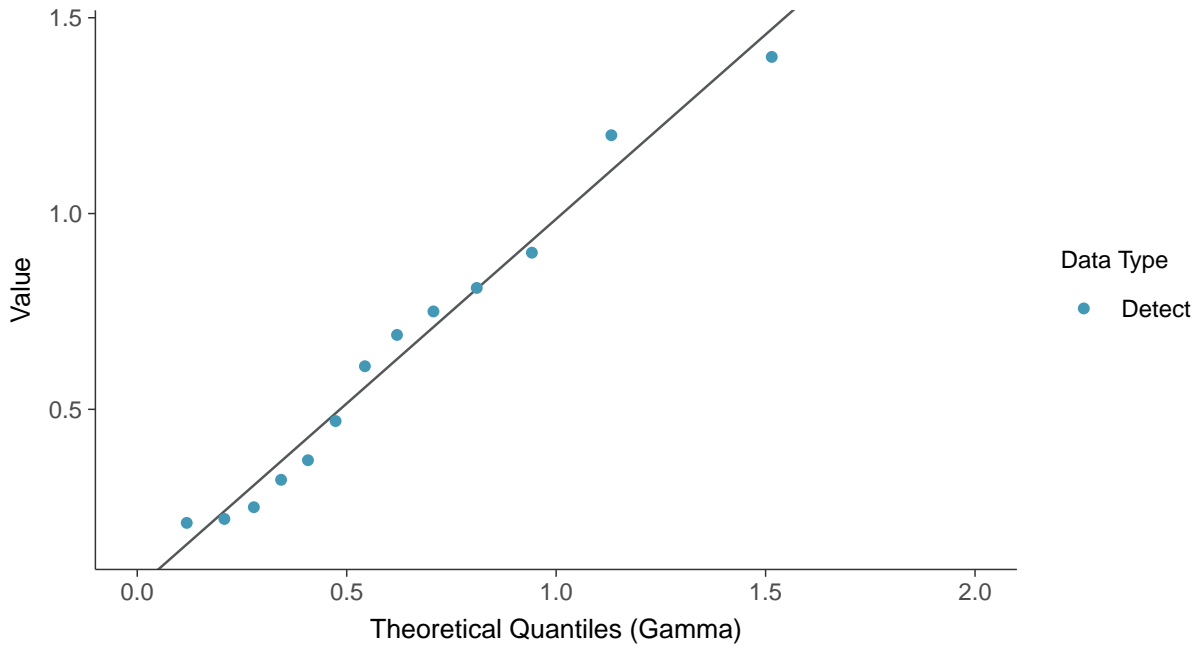
Fluoride, MW-11 (mg/L)





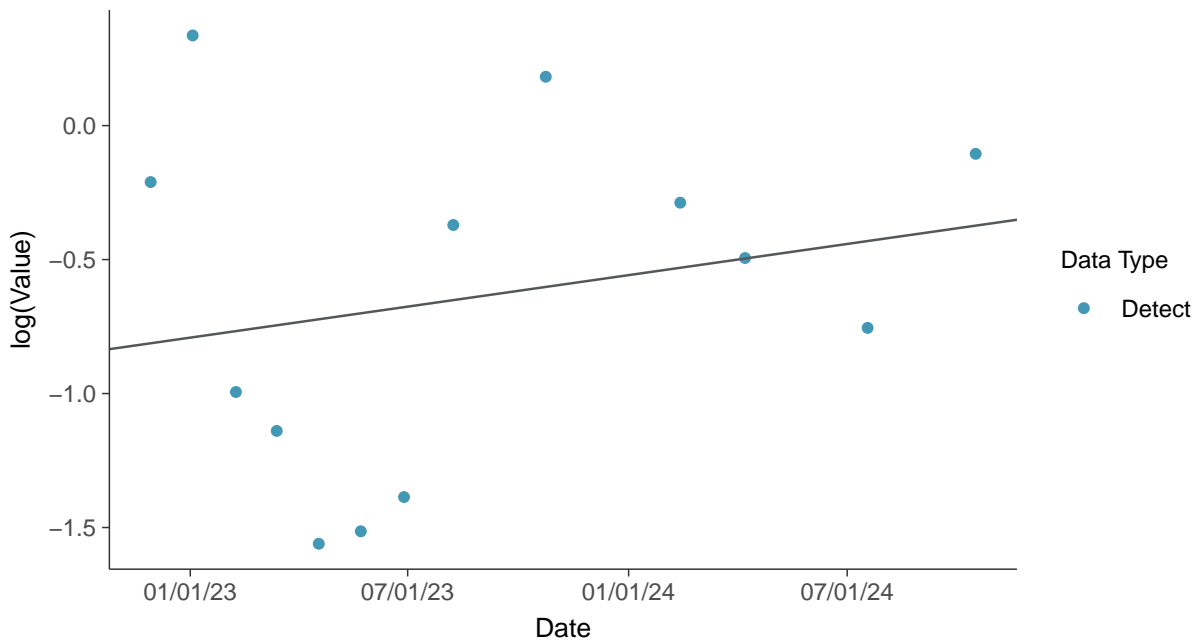
Gamma Q-Q plot

Fluoride, MW-11 (mg/L)



Trend Regression: Lognormal MLE

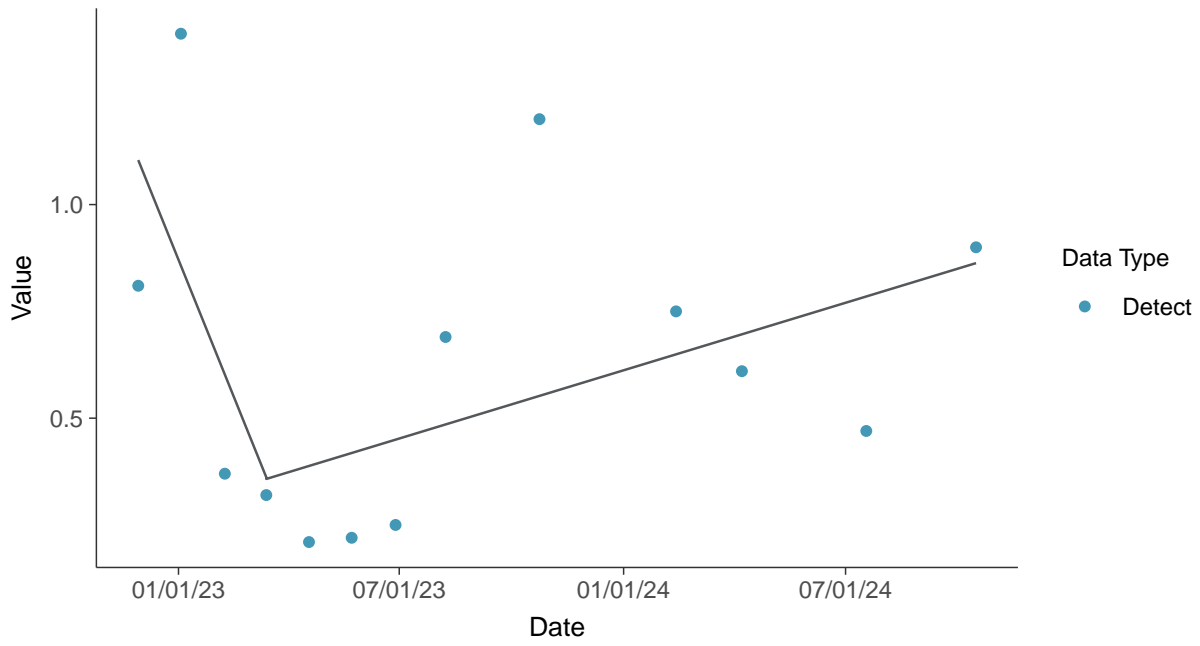
Fluoride, MW-11 (mg/L)





Trend Regression: Piecewise Linear-Linear

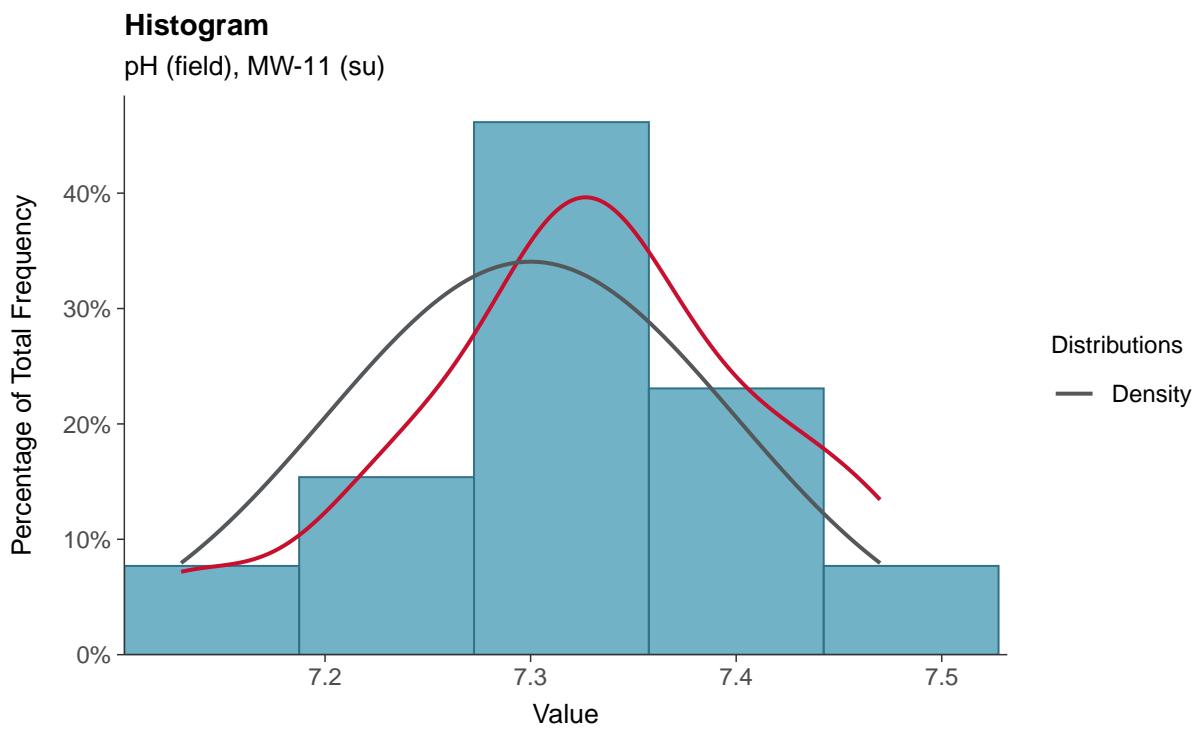
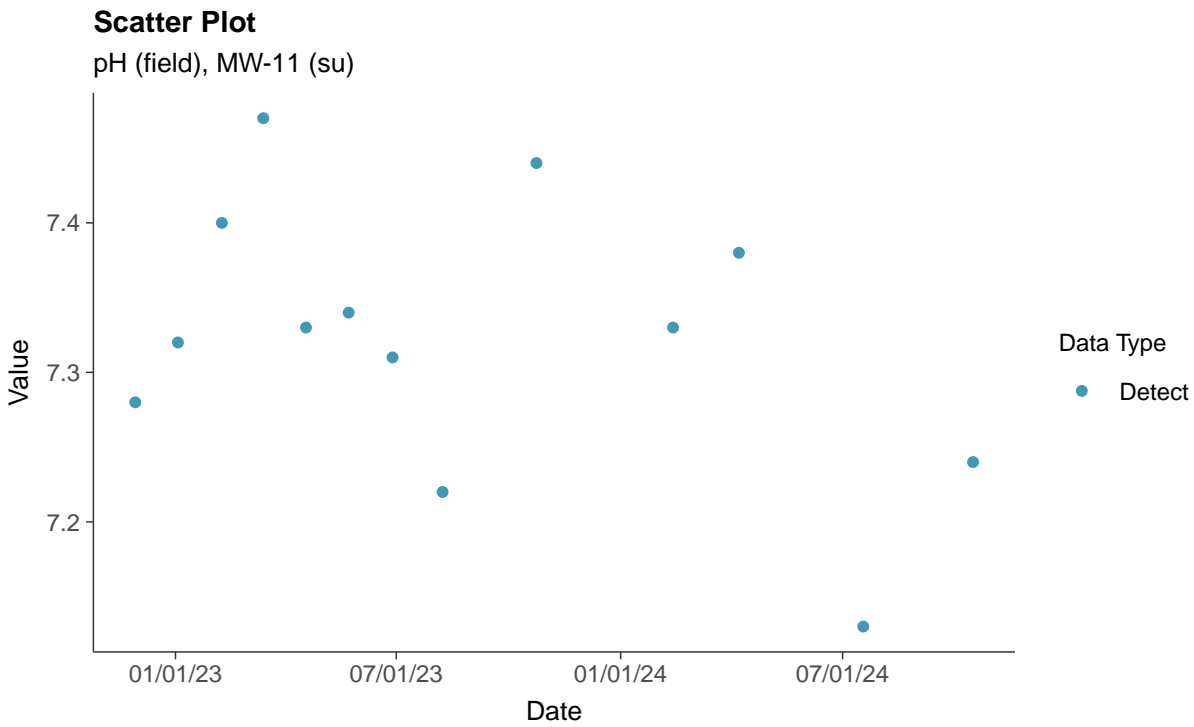
Fluoride, MW-11 (mg/L)





Appendix III: pH (field), MW-11

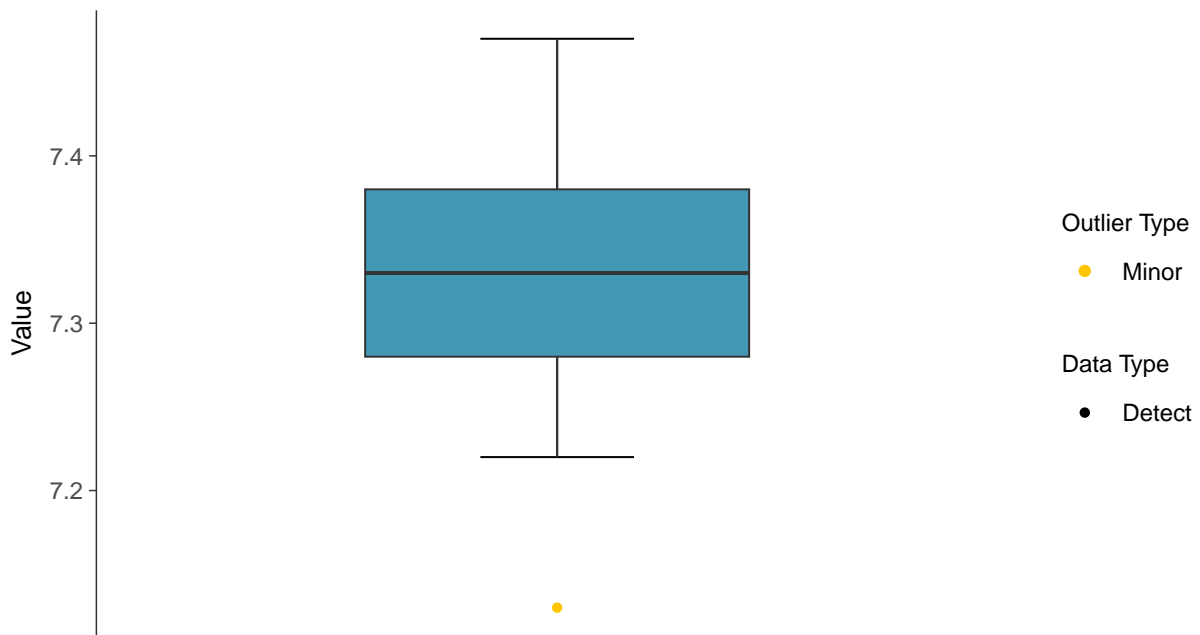
ID: 2_21_2_4_120





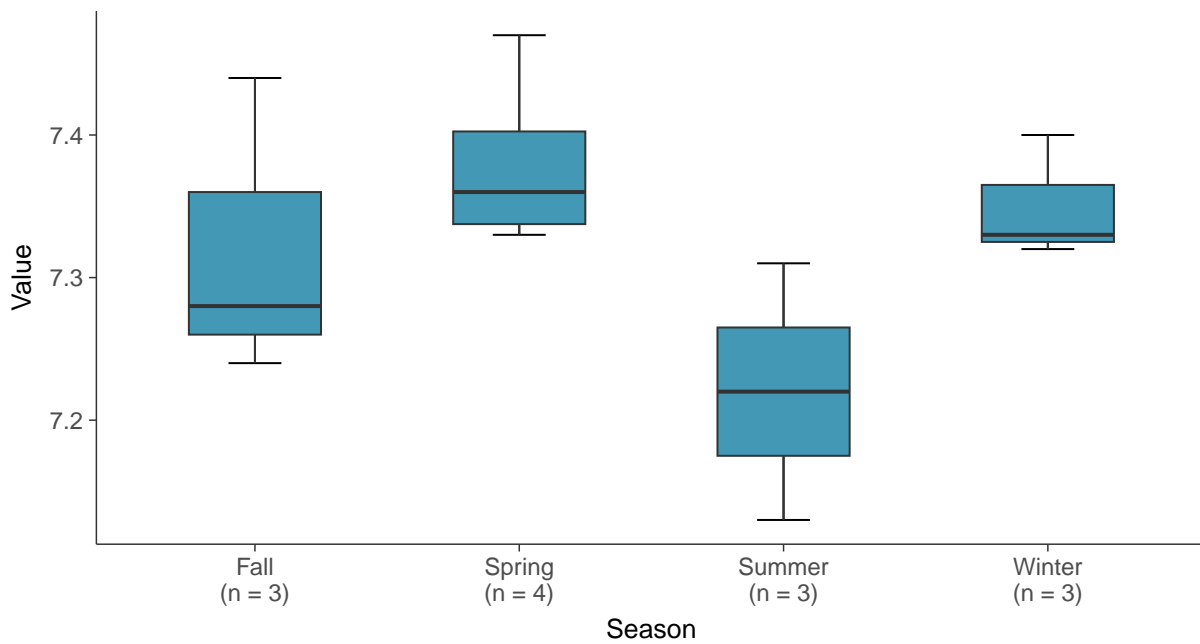
Boxplot

pH (field), MW-11 (su)



Boxplot by Season

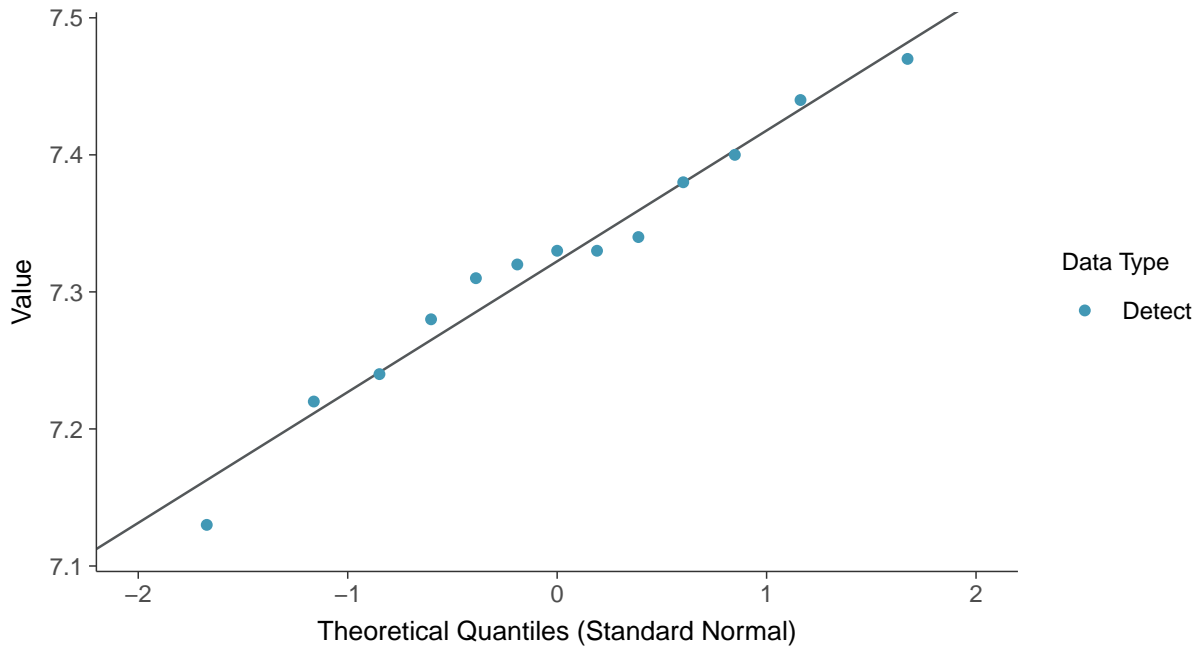
pH (field), MW-11 (su)





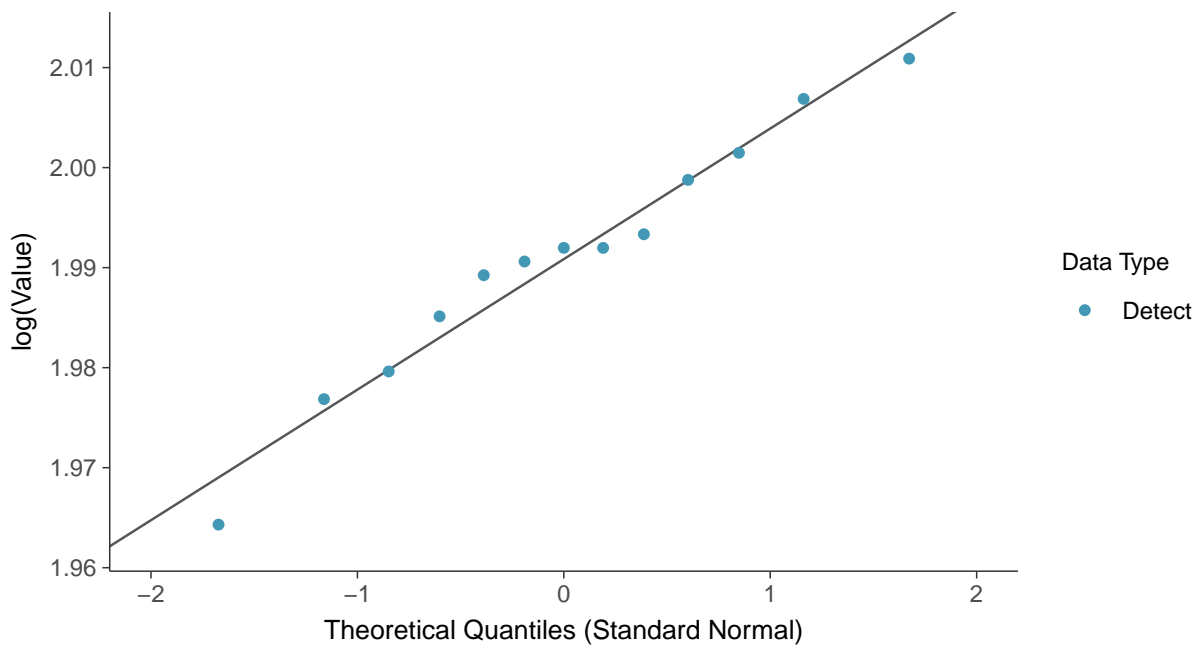
Normal Q-Q plot

pH (field), MW-11 (su)



Lognormal Q-Q plot

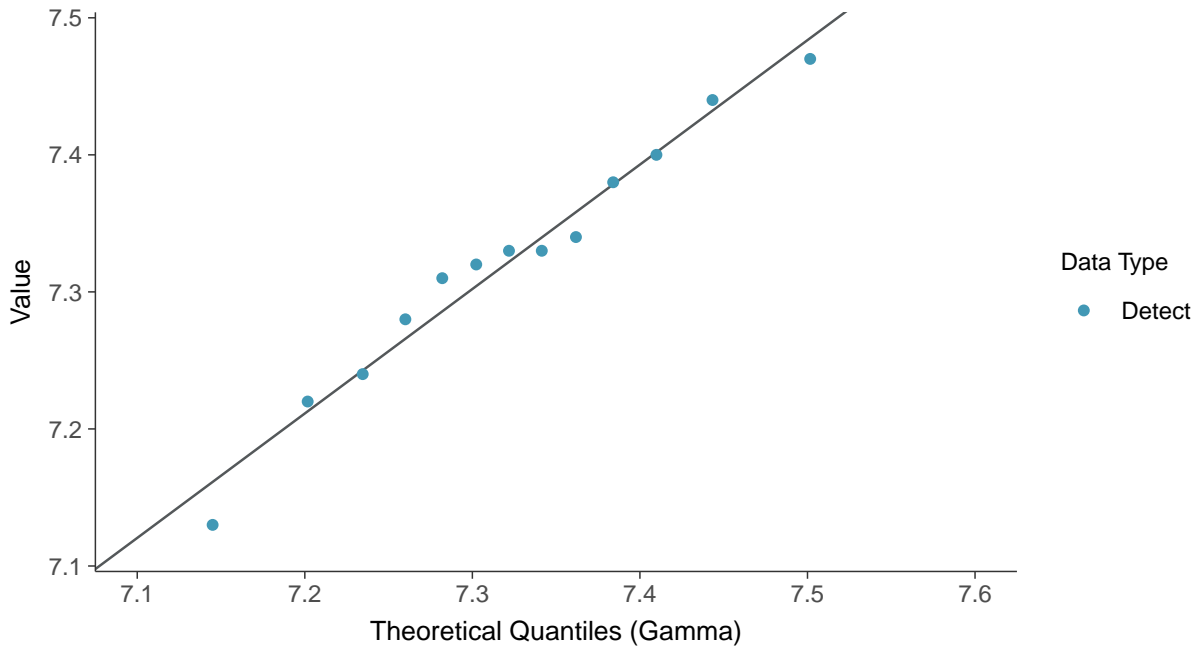
pH (field), MW-11 (su)





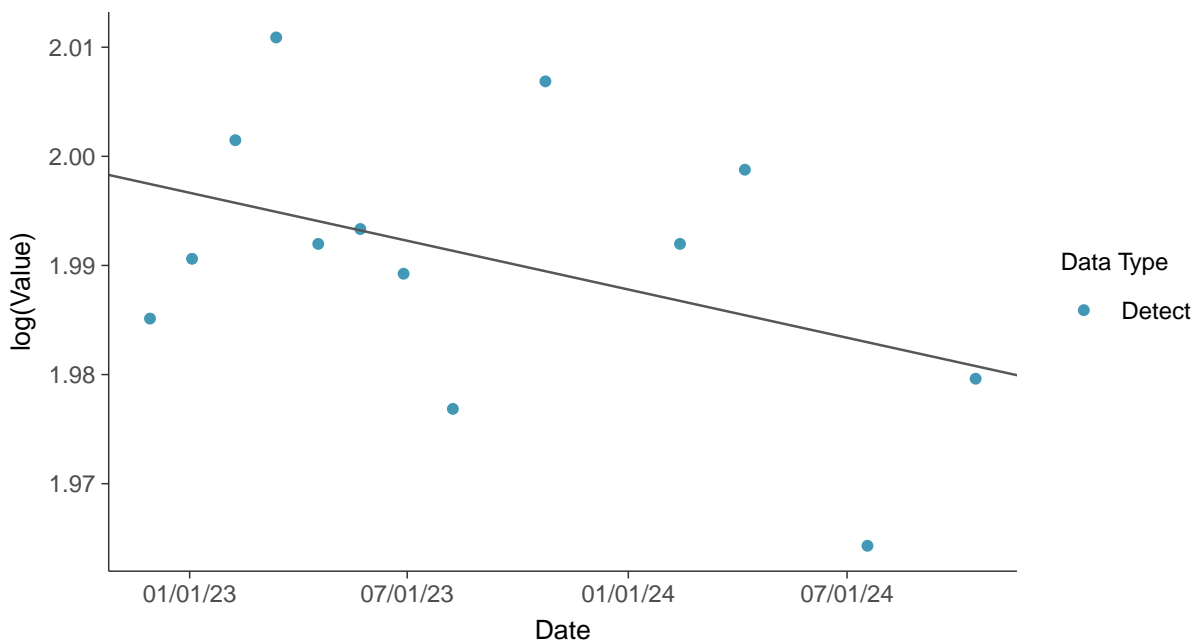
Gamma Q-Q plot

pH (field), MW-11 (su)



Trend Regression: Lognormal MLE

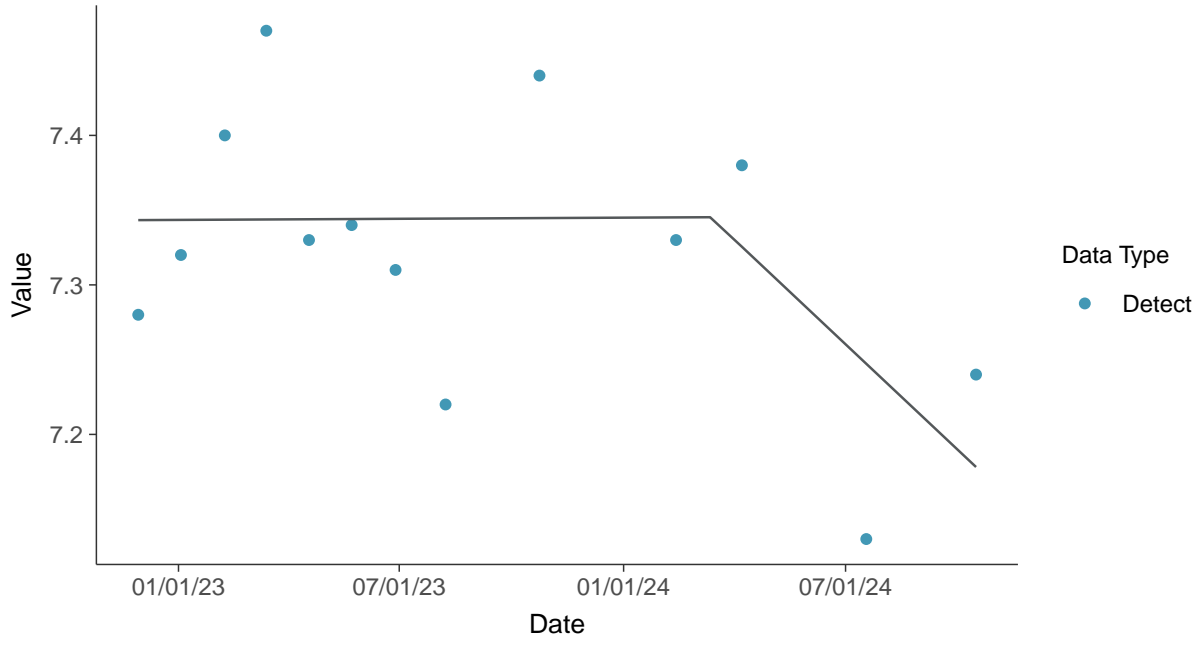
pH (field), MW-11 (su)





Trend Regression: Piecewise Linear-Linear

pH (field), MW-11 (su)



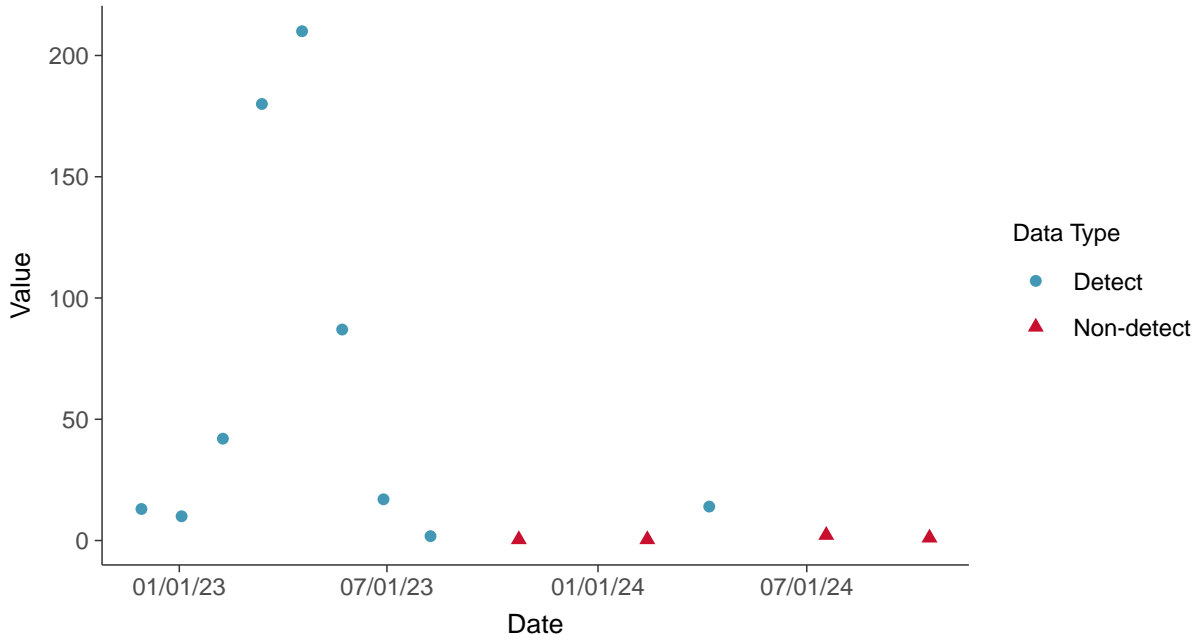


Appendix III: Sulfate (as SO₄), MW-11

ID: 2_21_2_4_124

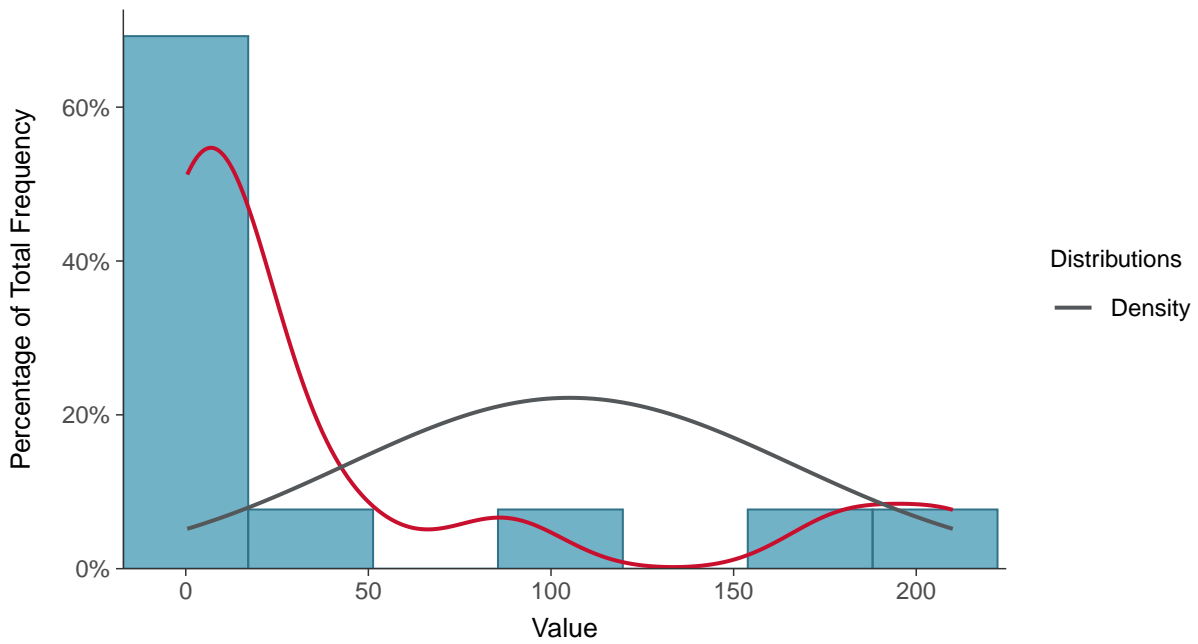
Scatter Plot

Sulfate (as SO₄), MW-11 (mg/L)



Histogram

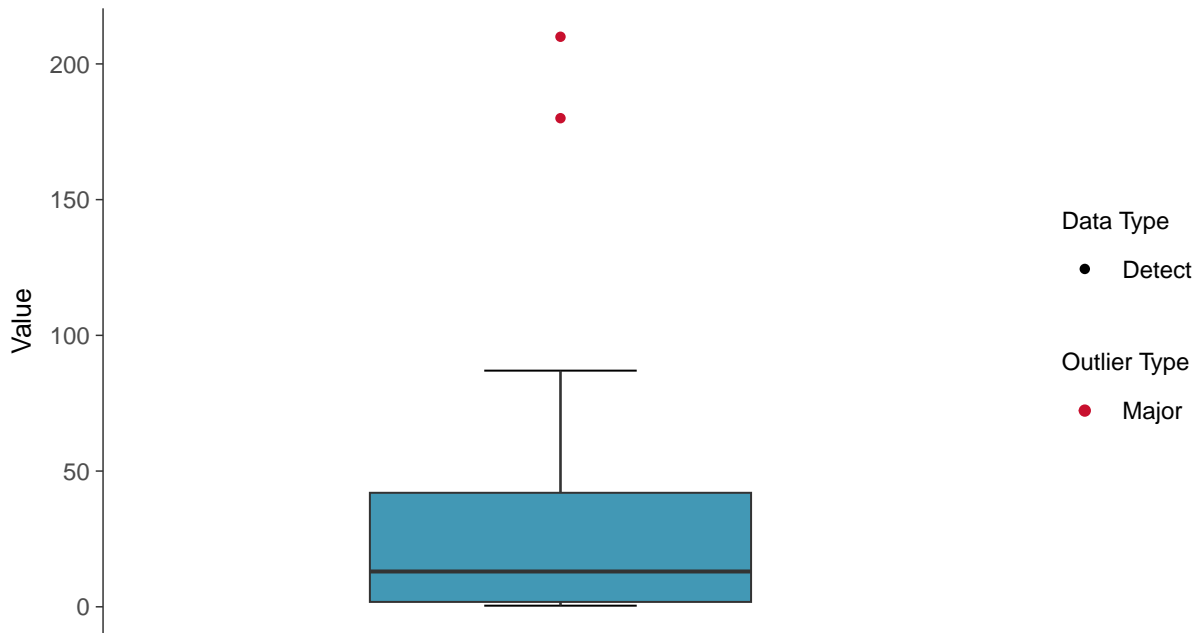
Sulfate (as SO₄), MW-11 (mg/L)





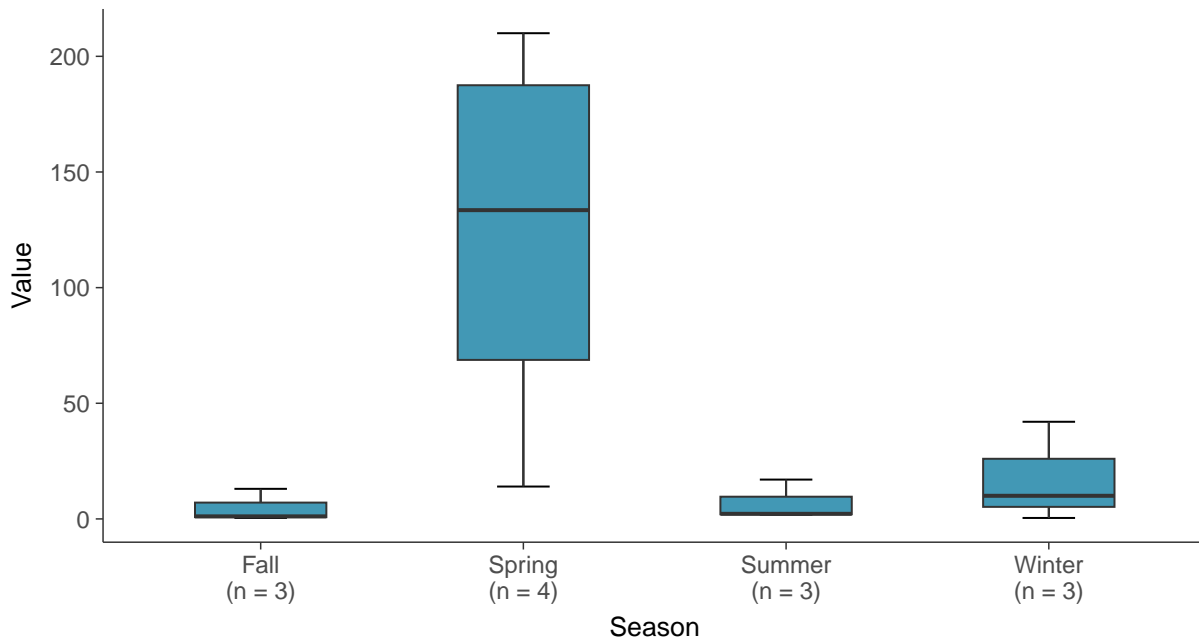
Boxplot

Sulfate (as SO₄), MW-11 (mg/L)



Boxplot by Season

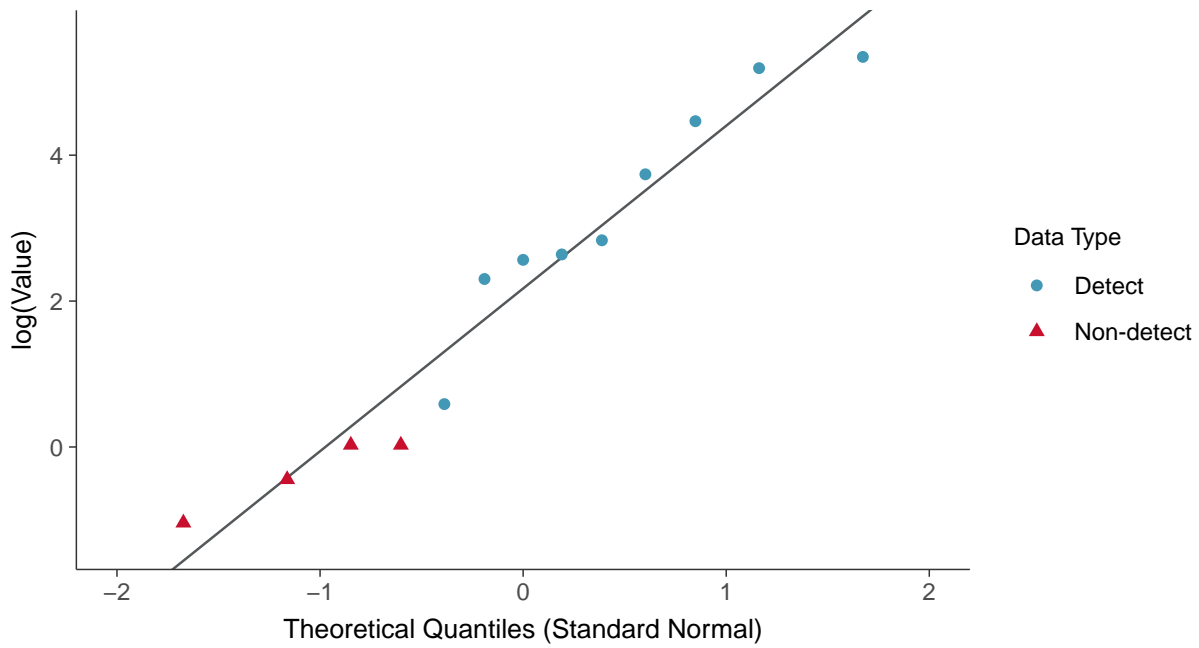
Sulfate (as SO₄), MW-11 (mg/L)





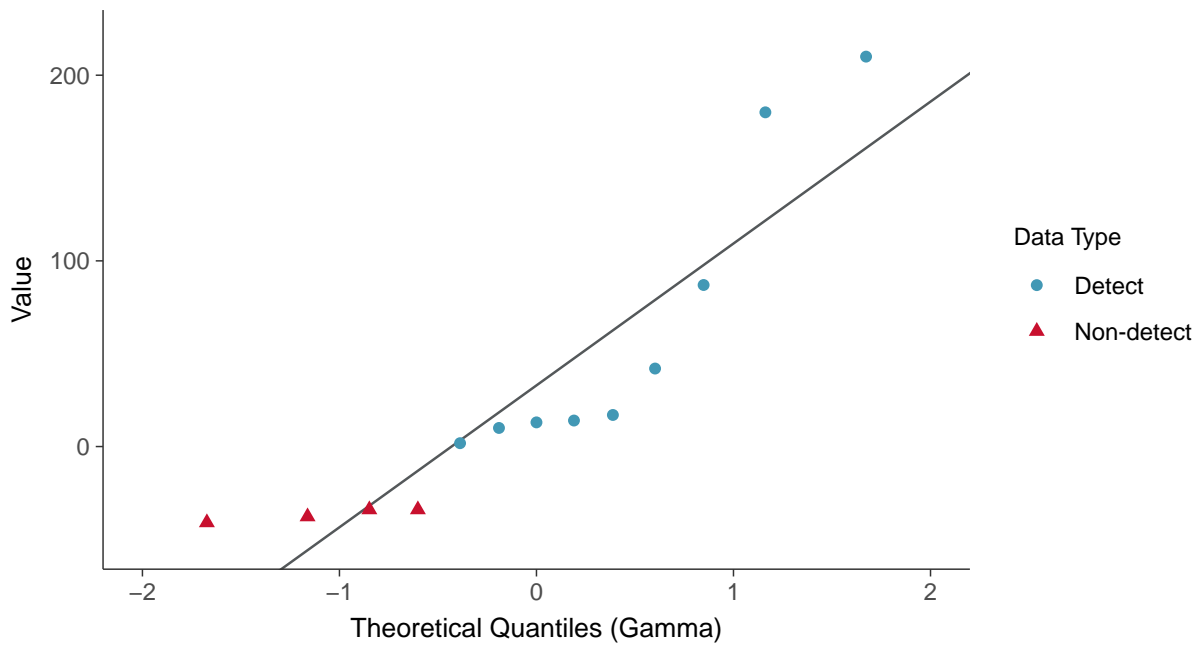
Lognormal Q-Q plot using ROS Imputed Estimates

Sulfate (as SO₄), MW-11 (mg/L)



Gamma Q-Q plot using ROS Imputed Estimates

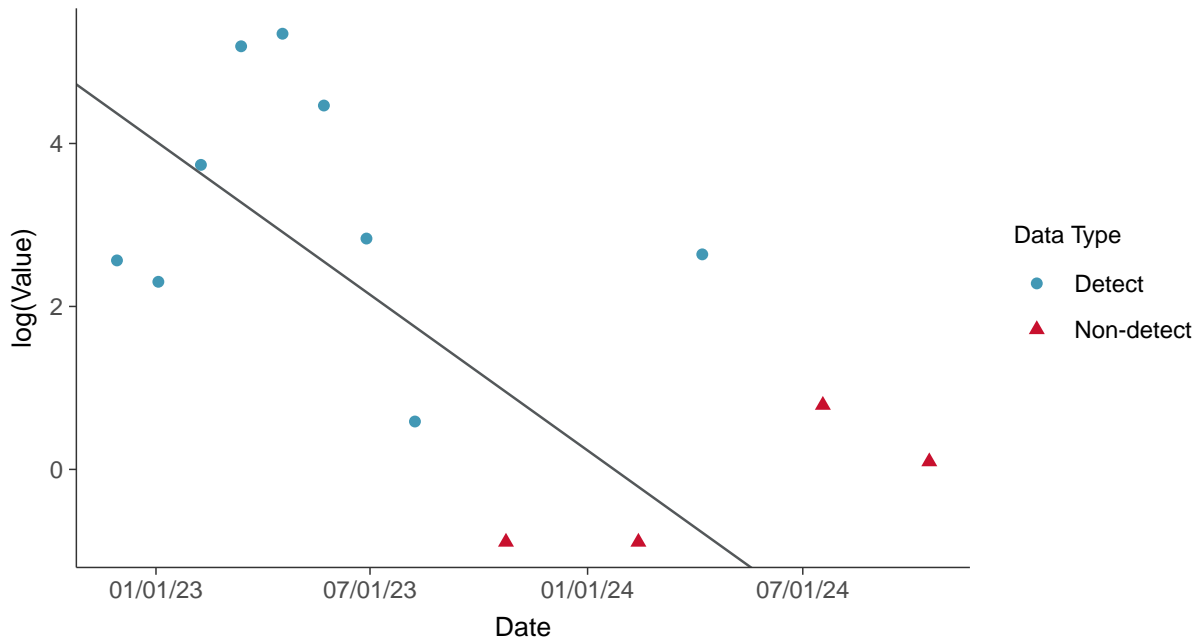
Sulfate (as SO₄), MW-11 (mg/L)





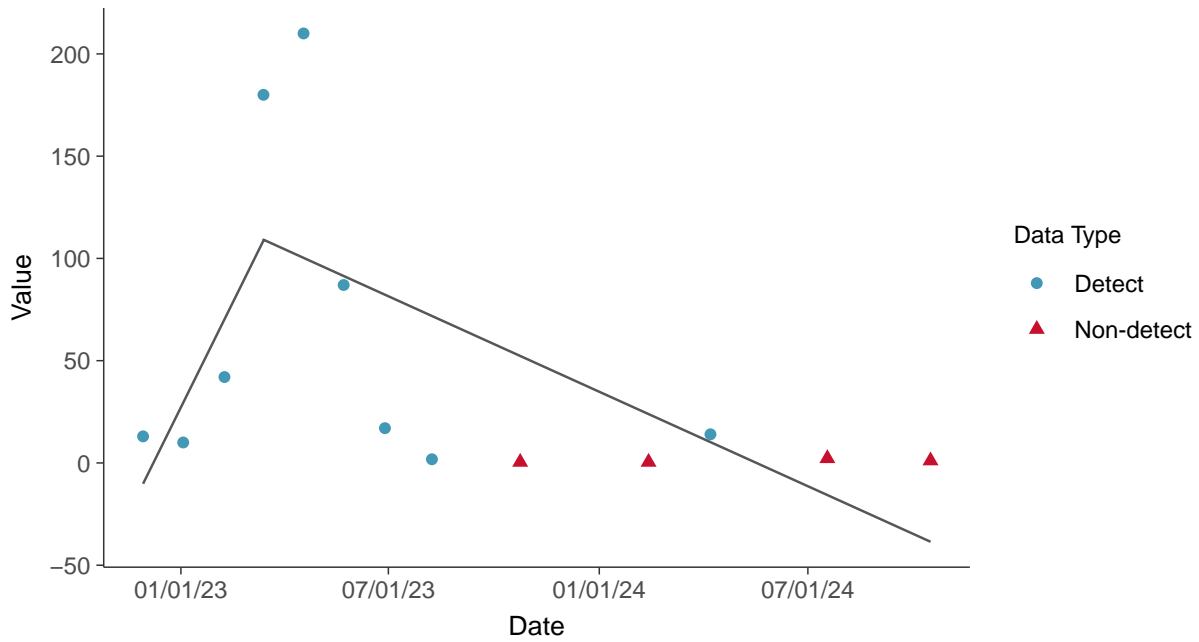
Trend Regression: Lognormal MLE

Sulfate (as SO₄), MW-11 (mg/L)



Trend Regression: Piecewise Linear-Linear

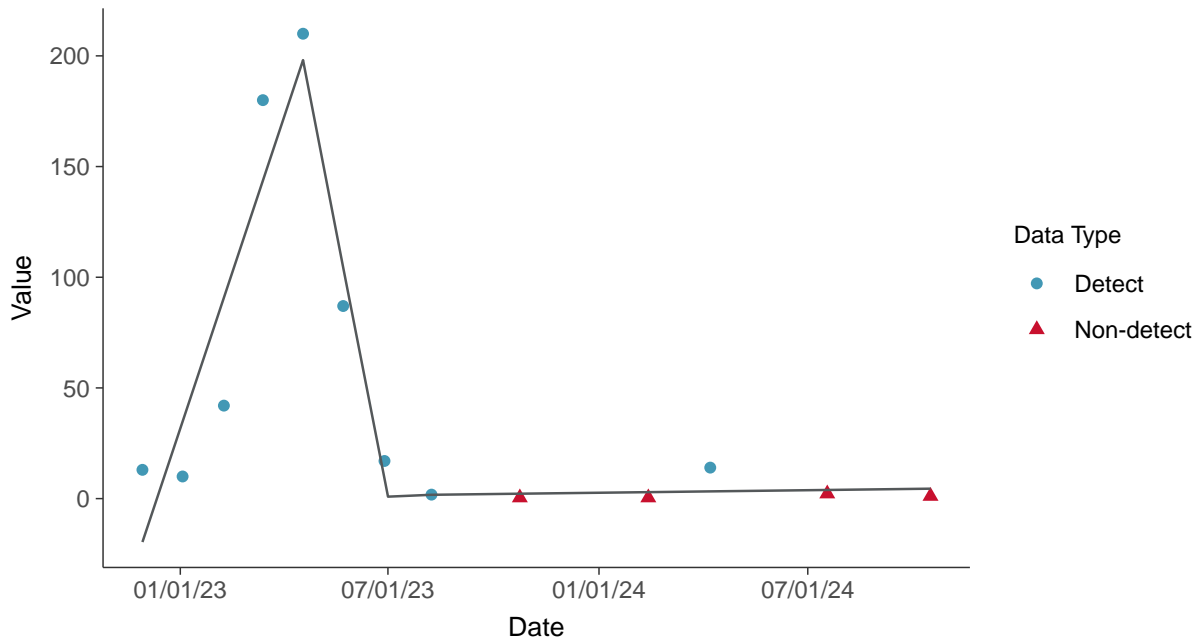
Sulfate (as SO₄), MW-11 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

Sulfate (as SO₄), MW-11 (mg/L)



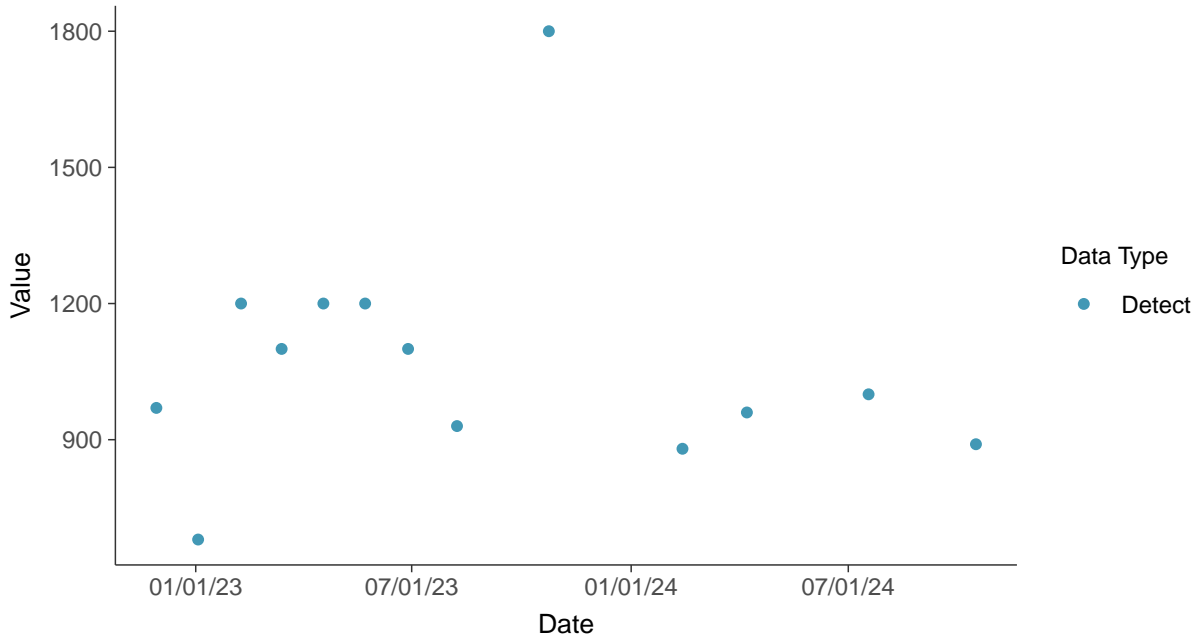


Appendix III: Total Dissolved Solids, MW-11

ID: 2_21_2_4_126

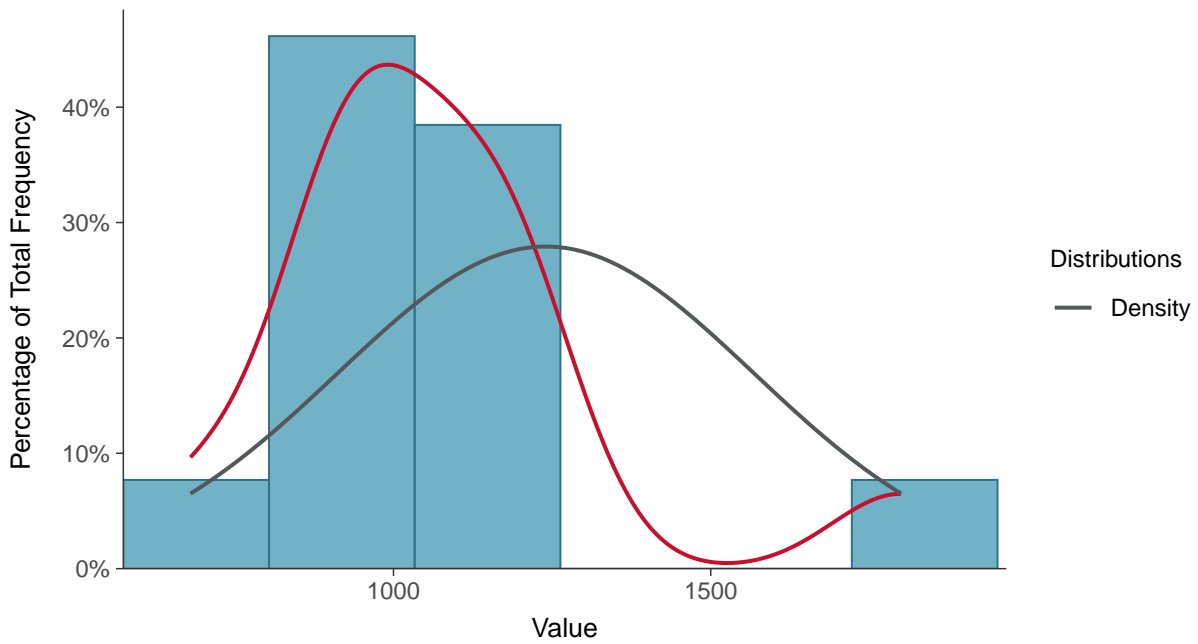
Scatter Plot

Total Dissolved Solids, MW-11 (mg/L)



Histogram

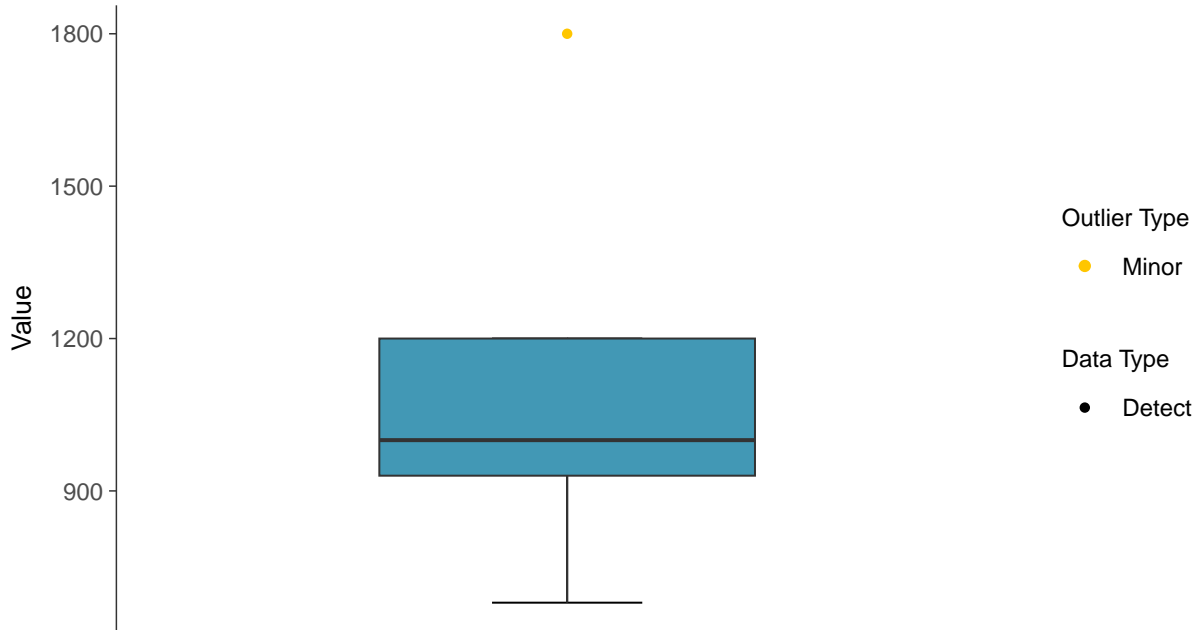
Total Dissolved Solids, MW-11 (mg/L)





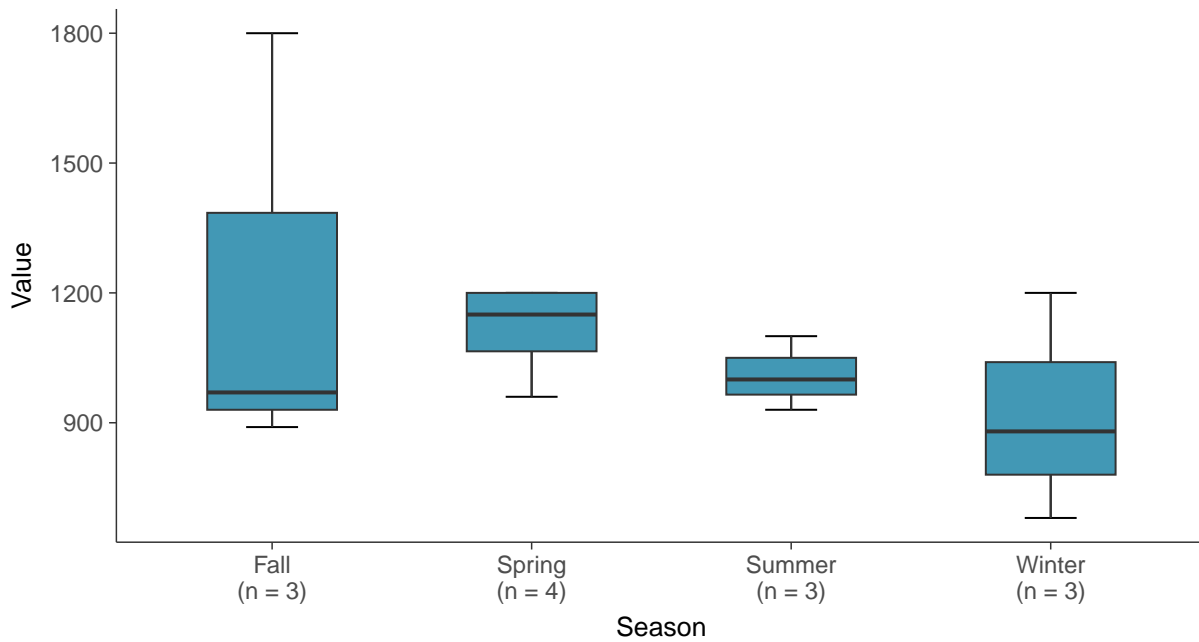
Boxplot

Total Dissolved Solids, MW-11 (mg/L)



Boxplot by Season

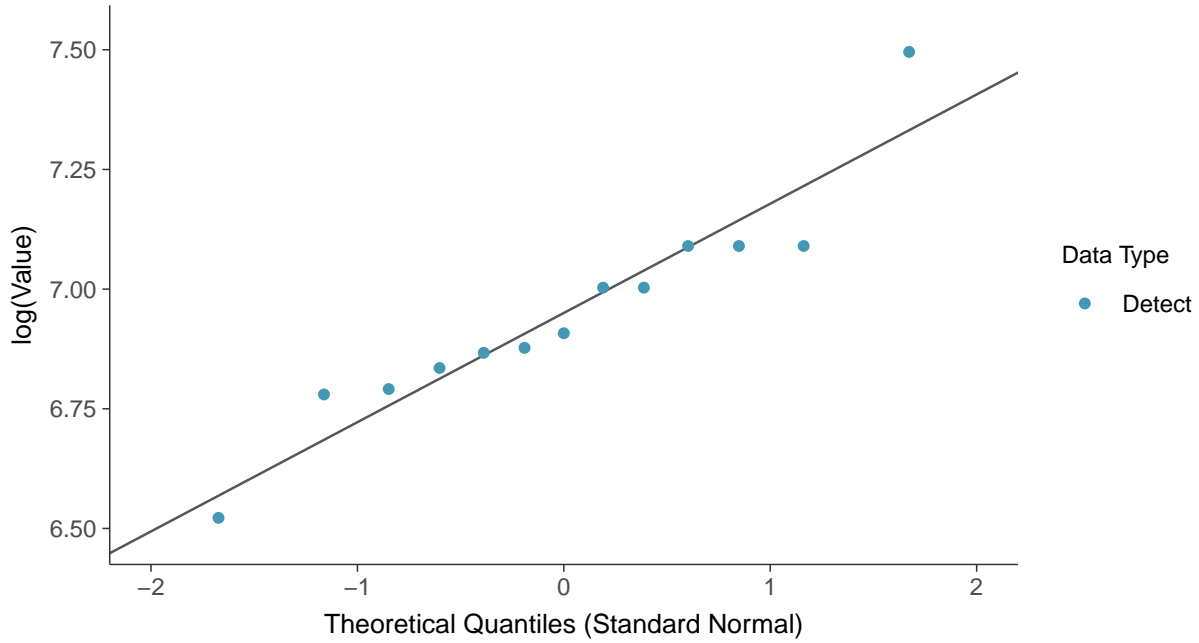
Total Dissolved Solids, MW-11 (mg/L)





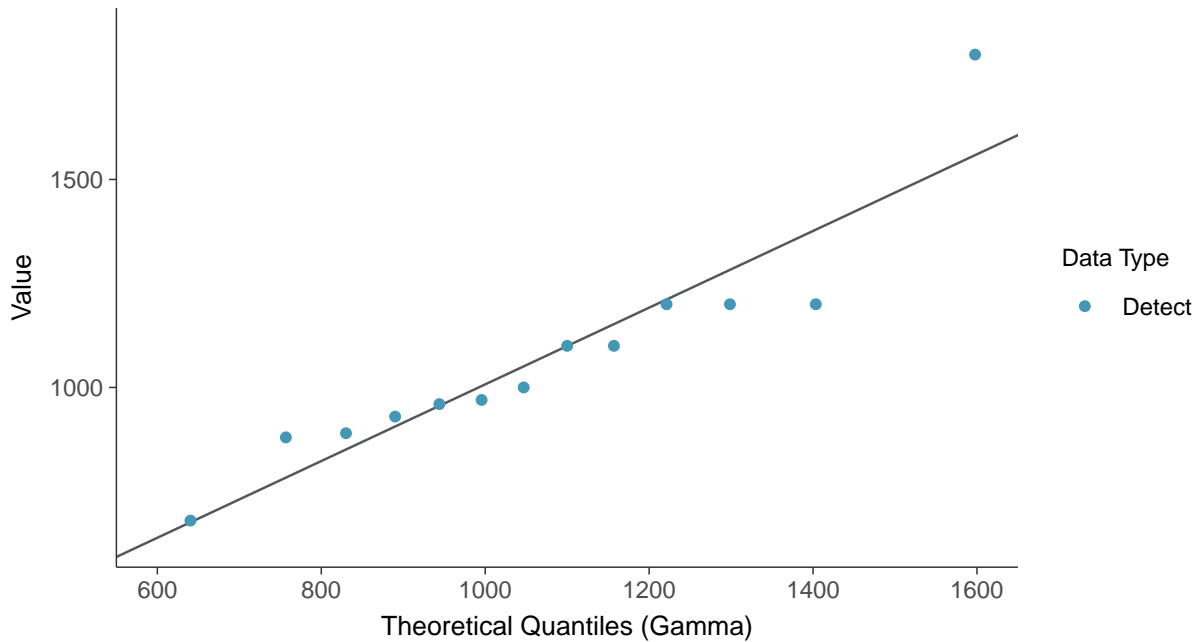
Lognormal Q-Q plot

Total Dissolved Solids, MW-11 (mg/L)



Gamma Q-Q plot

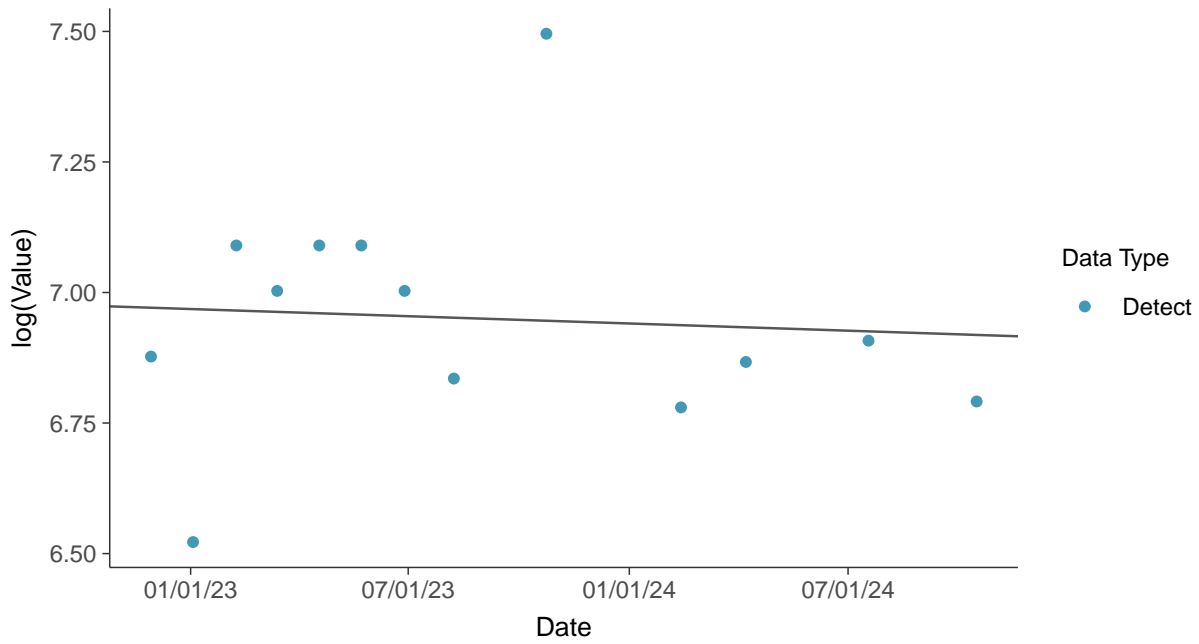
Total Dissolved Solids, MW-11 (mg/L)





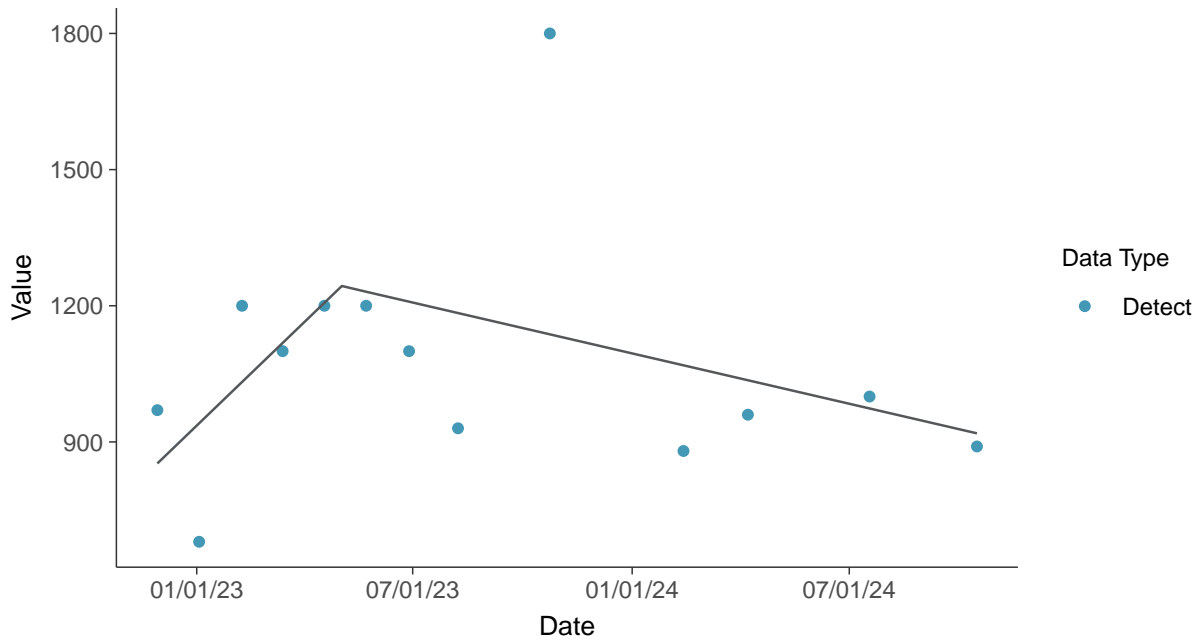
Trend Regression: Lognormal MLE

Total Dissolved Solids, MW-11 (mg/L)



Trend Regression: Piecewise Linear-Linear

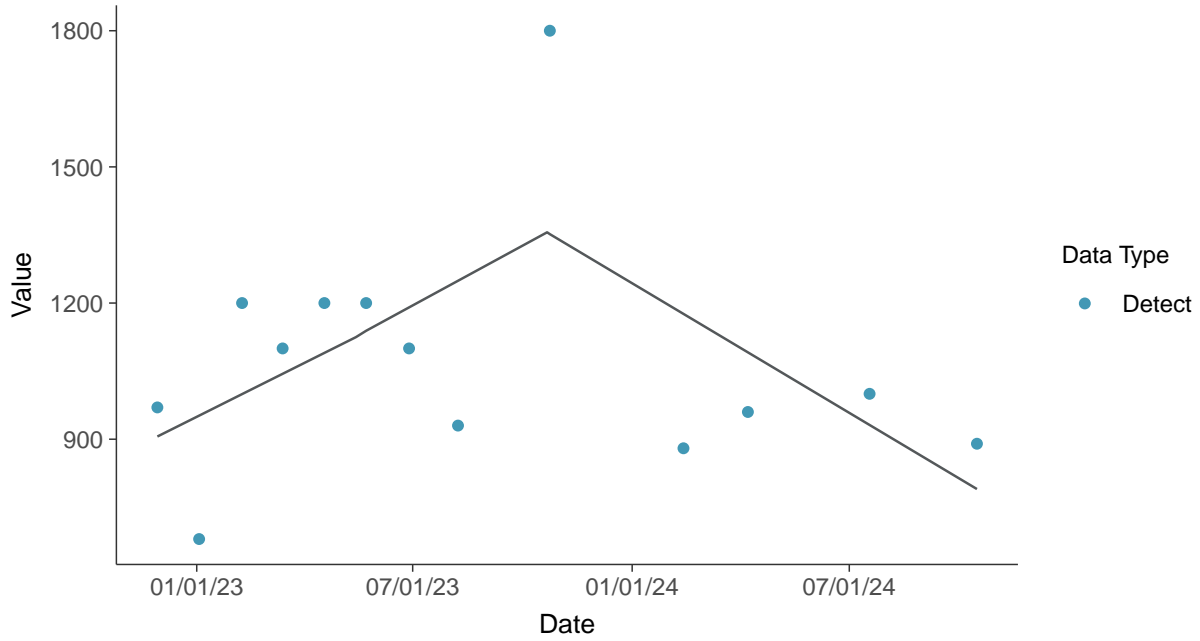
Total Dissolved Solids, MW-11 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

Total Dissolved Solids, MW-11 (mg/L)



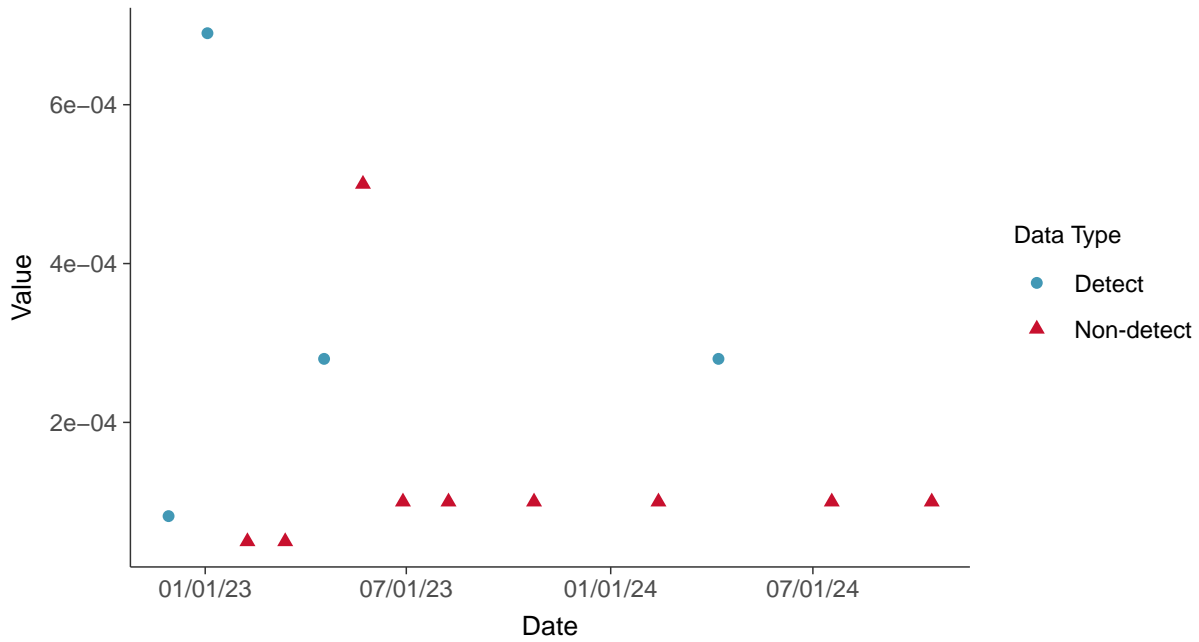


Appendix IV: Antimony, MW-11

ID: 2_21_2_5_101

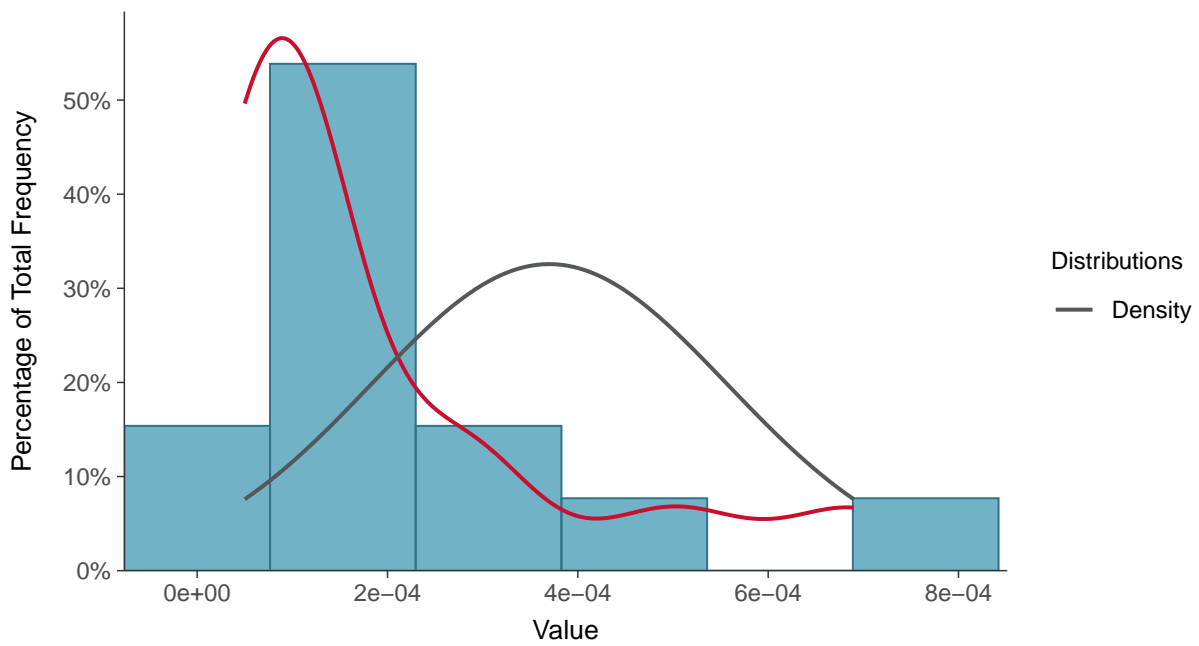
Scatter Plot

Antimony, MW-11 (mg/L)



Histogram

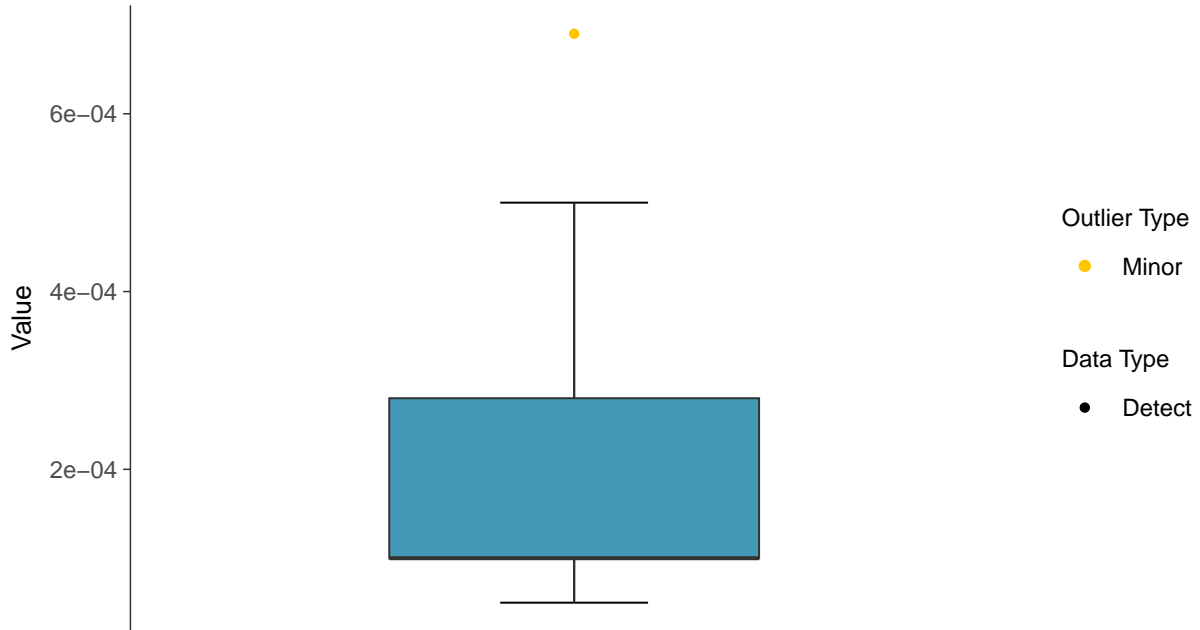
Antimony, MW-11 (mg/L)





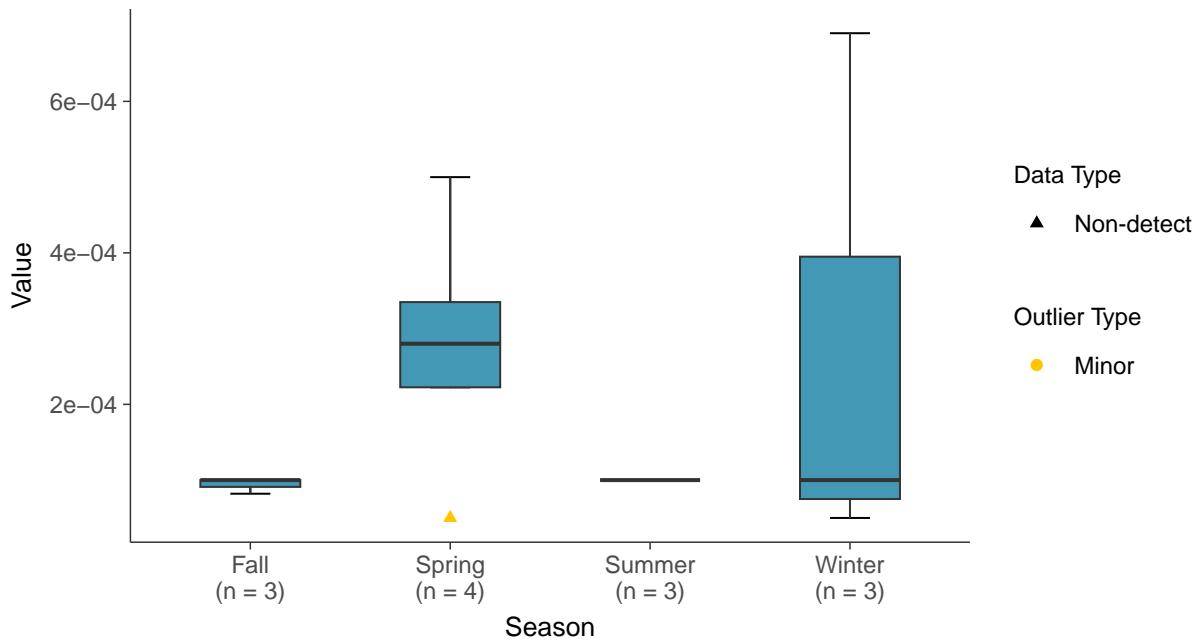
Boxplot

Antimony, MW-11 (mg/L)



Boxplot by Season

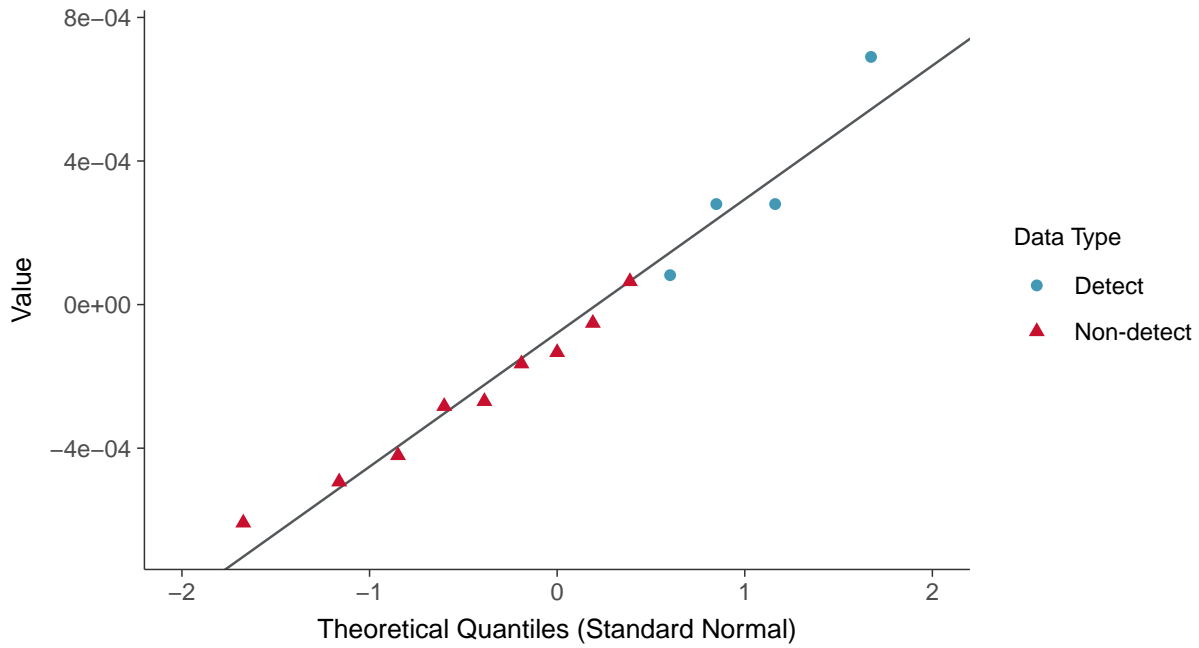
Antimony, MW-11 (mg/L)





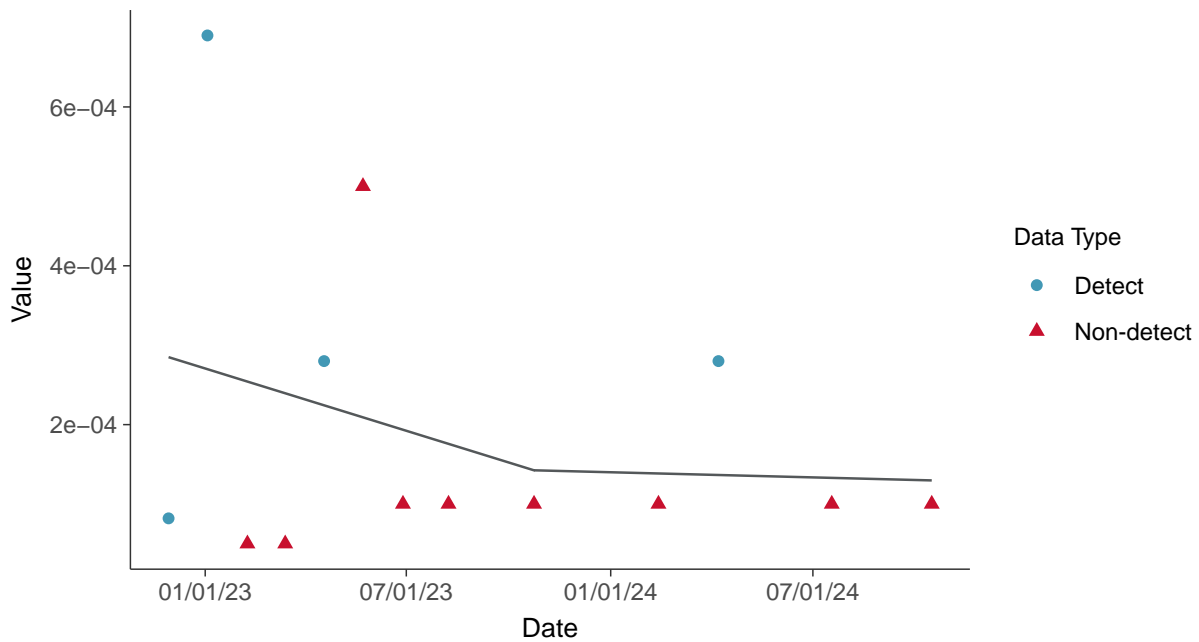
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-11 (mg/L)



Trend Regression: Piecewise Linear-Linear

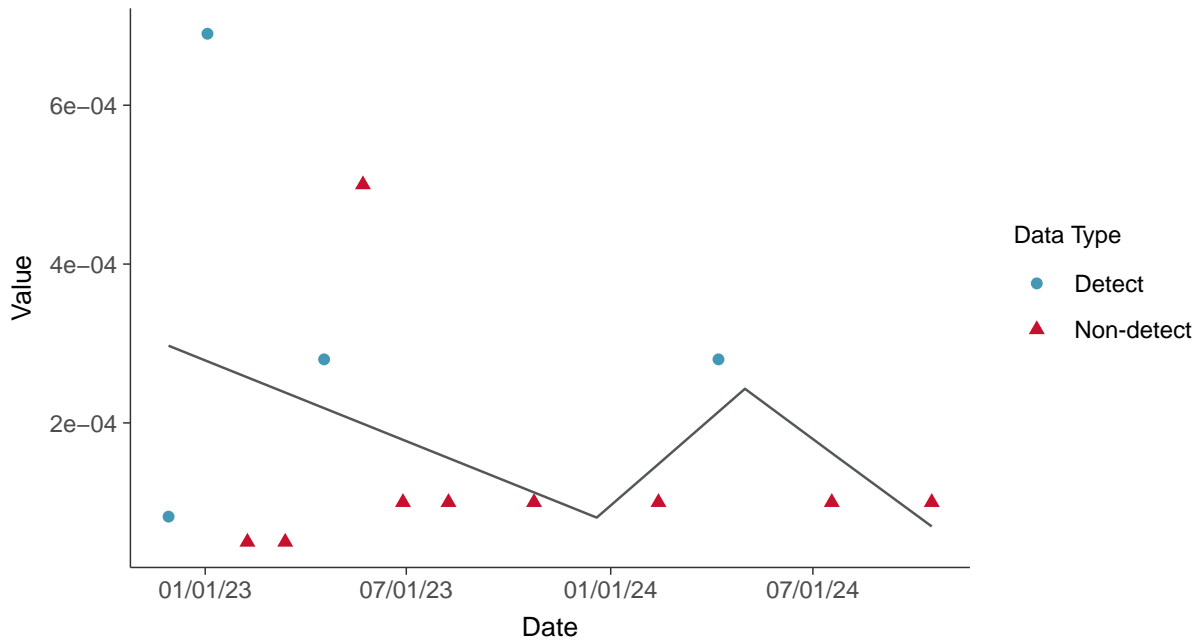
Antimony, MW-11 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

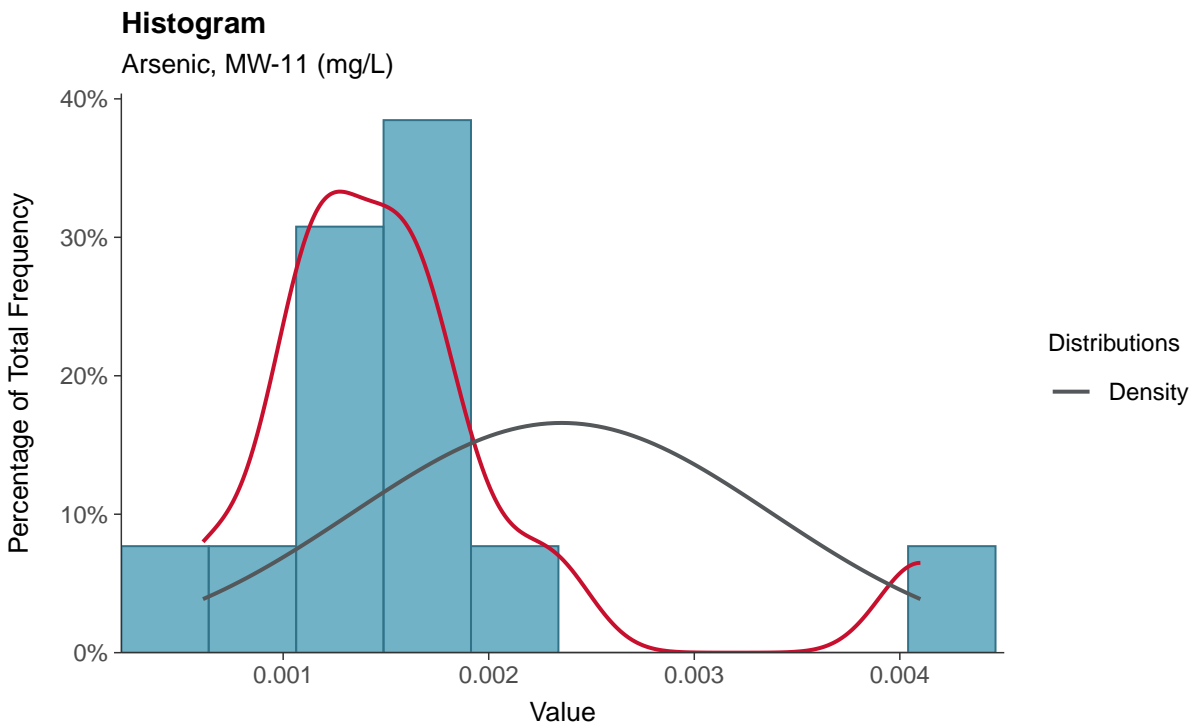
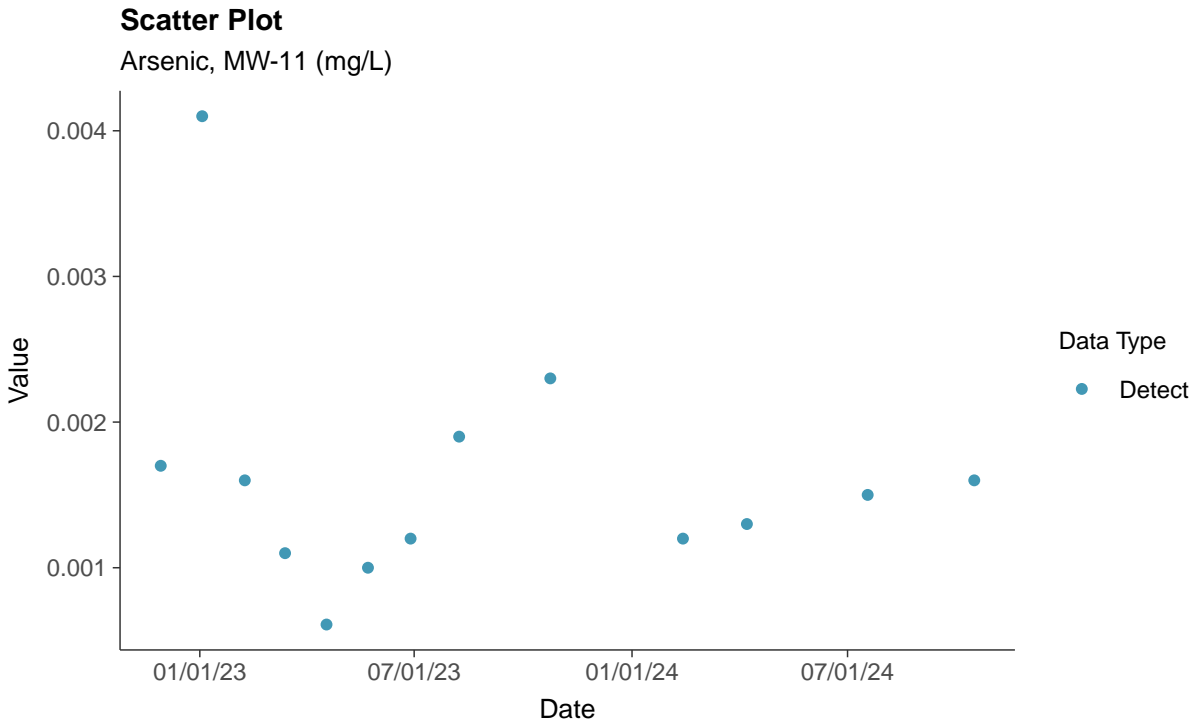
Antimony, MW-11 (mg/L)





Appendix IV: Arsenic, MW-11

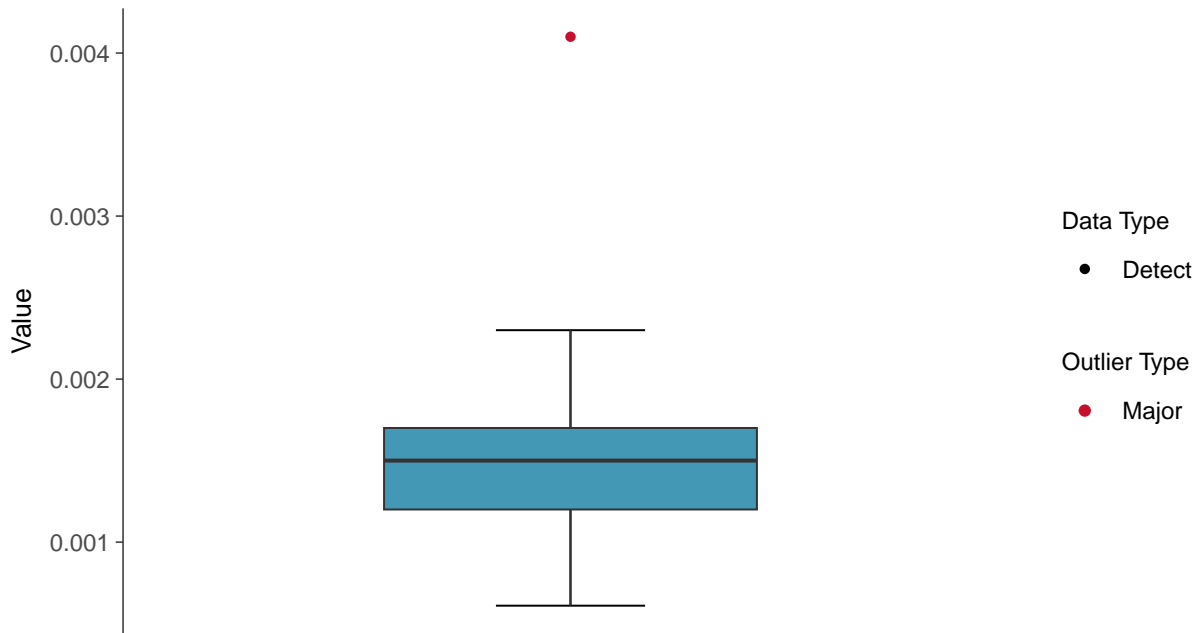
ID: 2_21_2_5_102





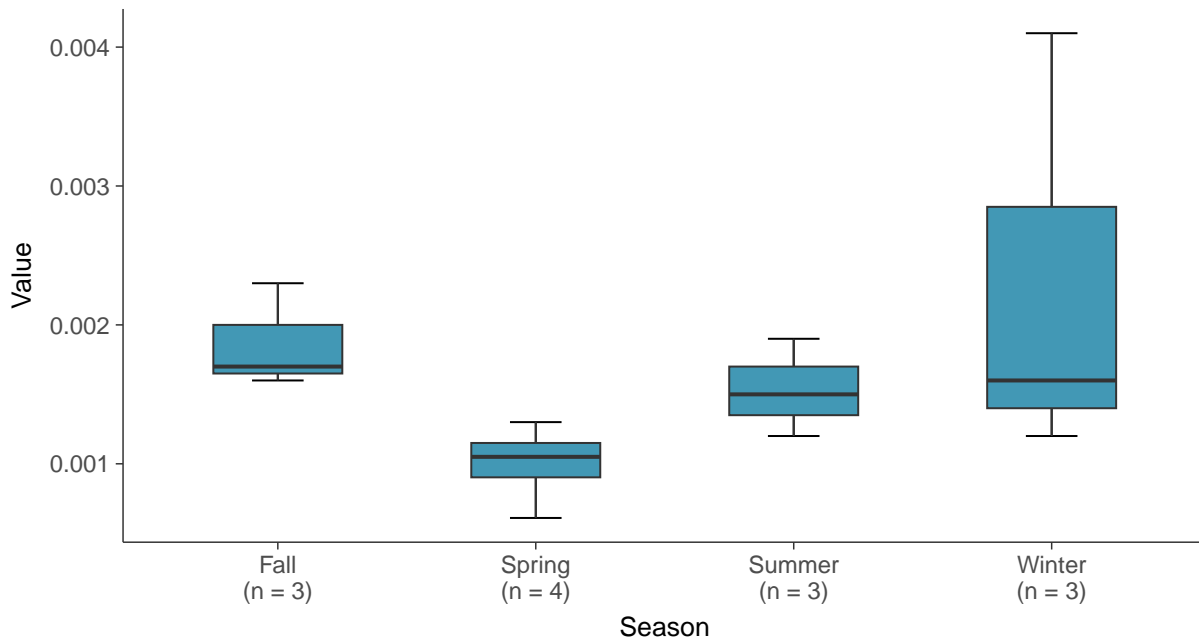
Boxplot

Arsenic, MW-11 (mg/L)



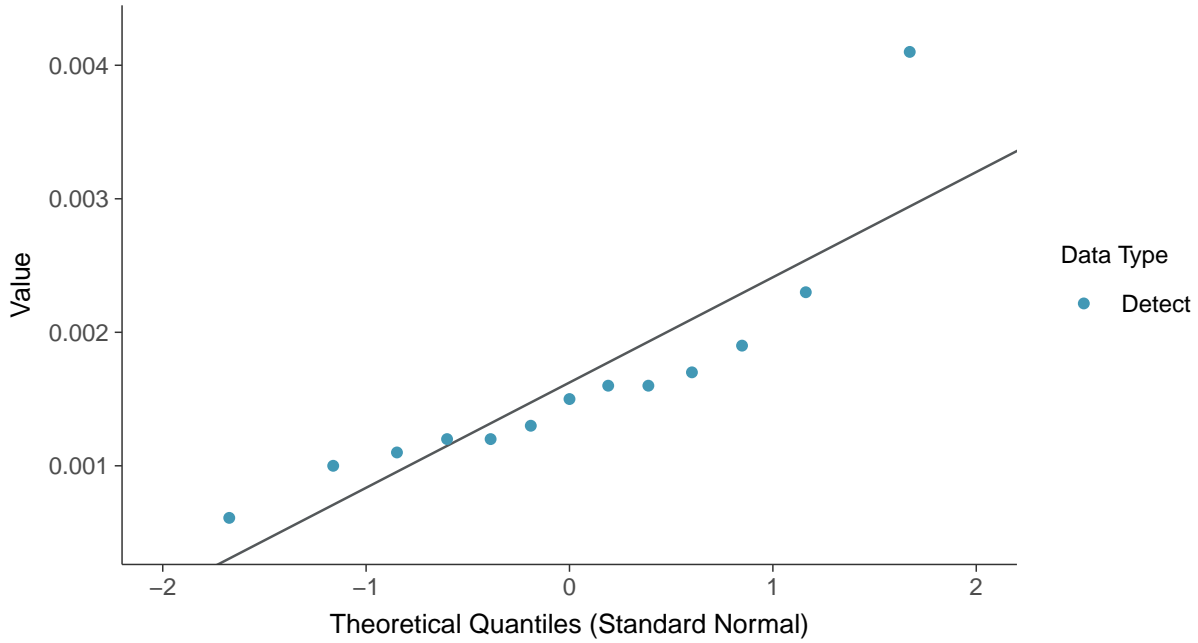
Boxplot by Season

Arsenic, MW-11 (mg/L)

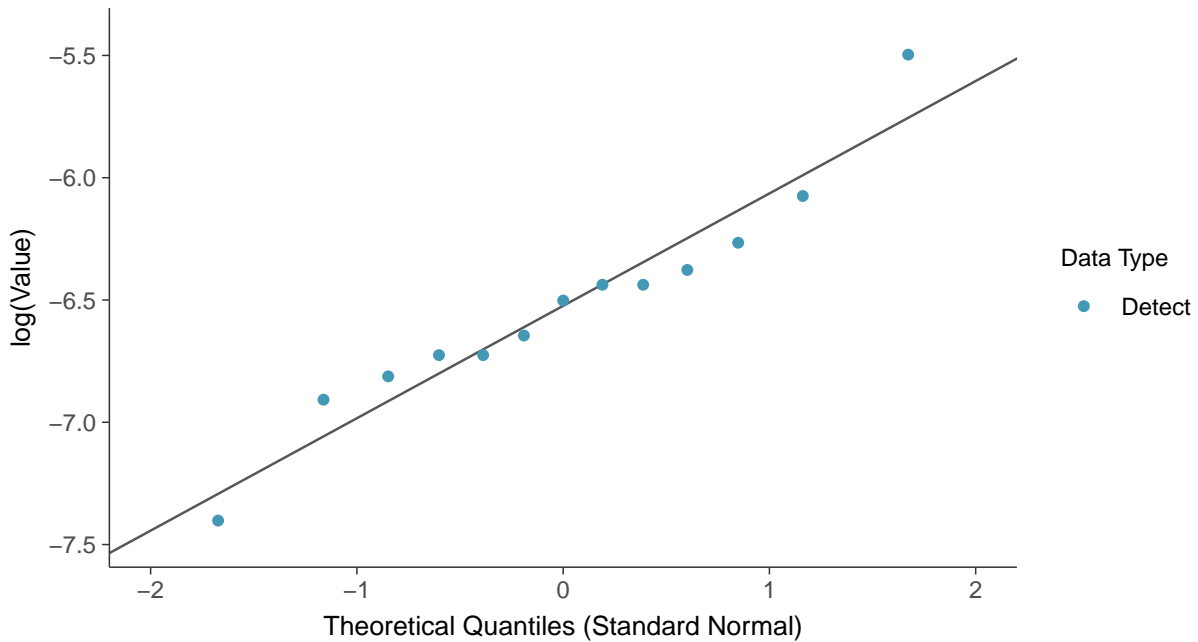




Normal Q-Q plot
Arsenic, MW-11 (mg/L)

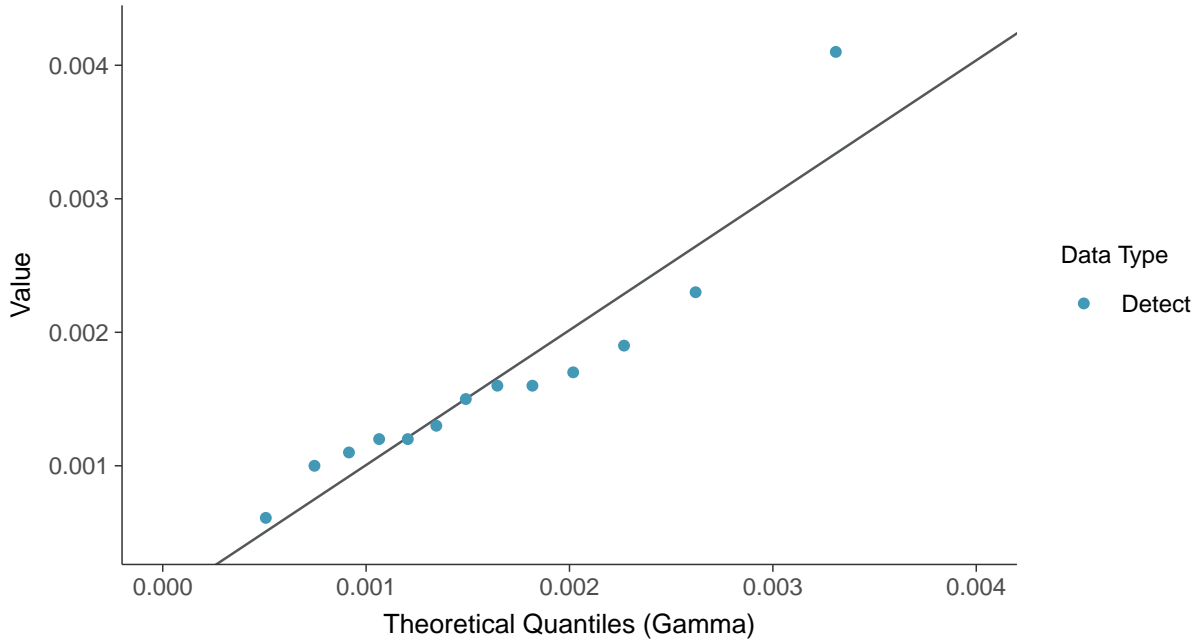


Lognormal Q-Q plot
Arsenic, MW-11 (mg/L)

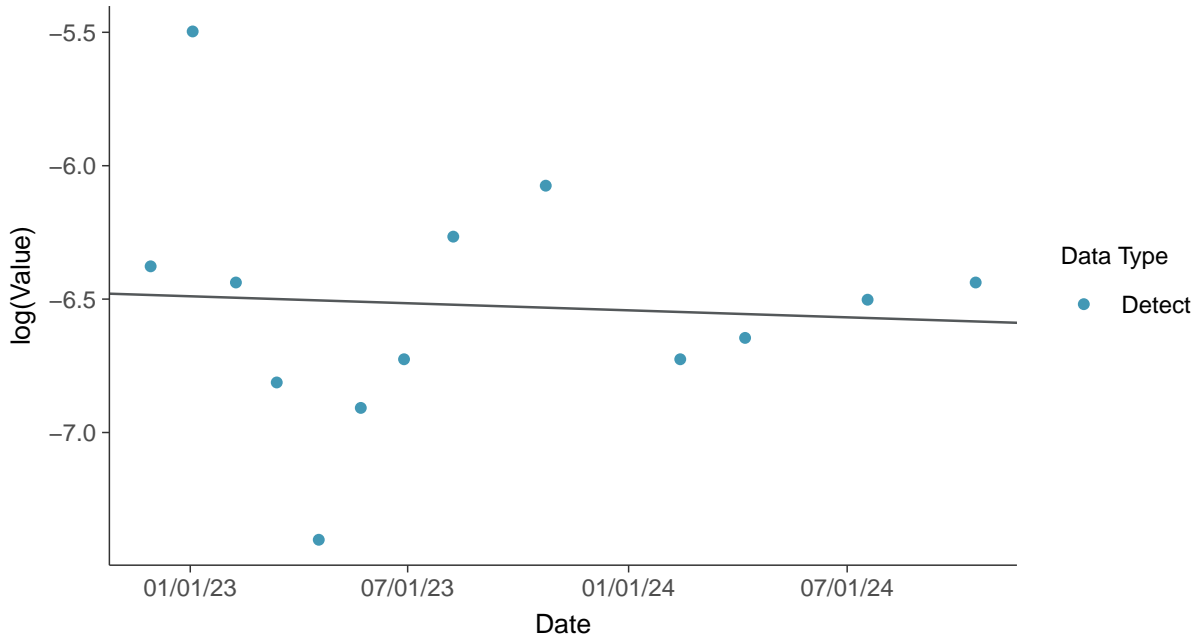




Gamma Q-Q plot
Arsenic, MW-11 (mg/L)



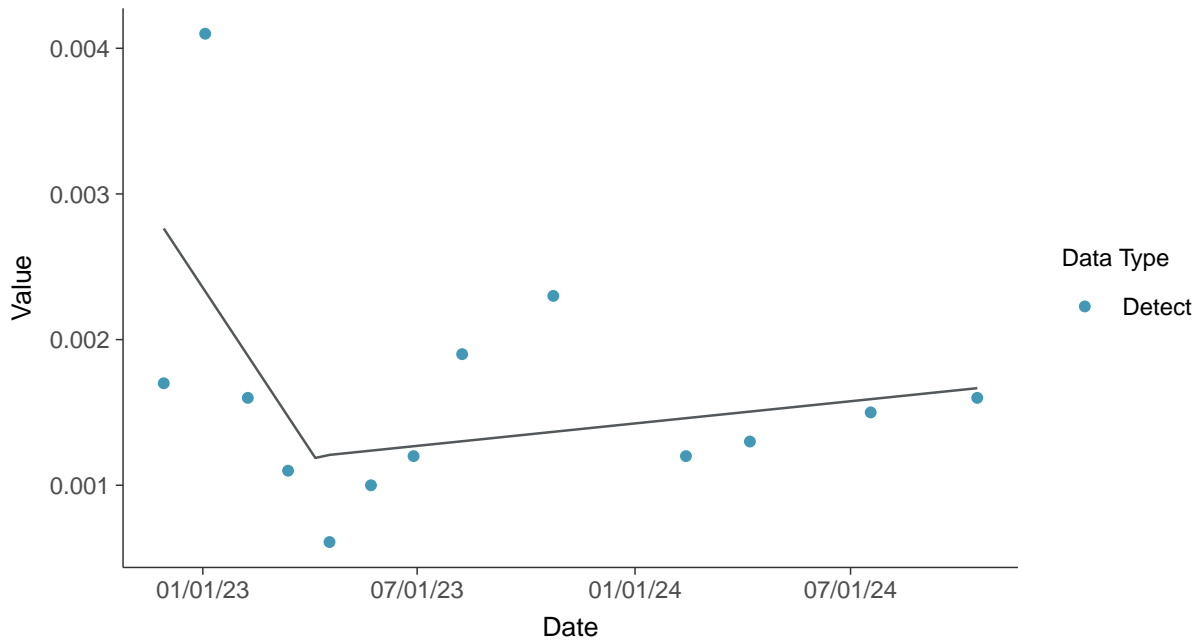
Trend Regression: Lognormal MLE
Arsenic, MW-11 (mg/L)





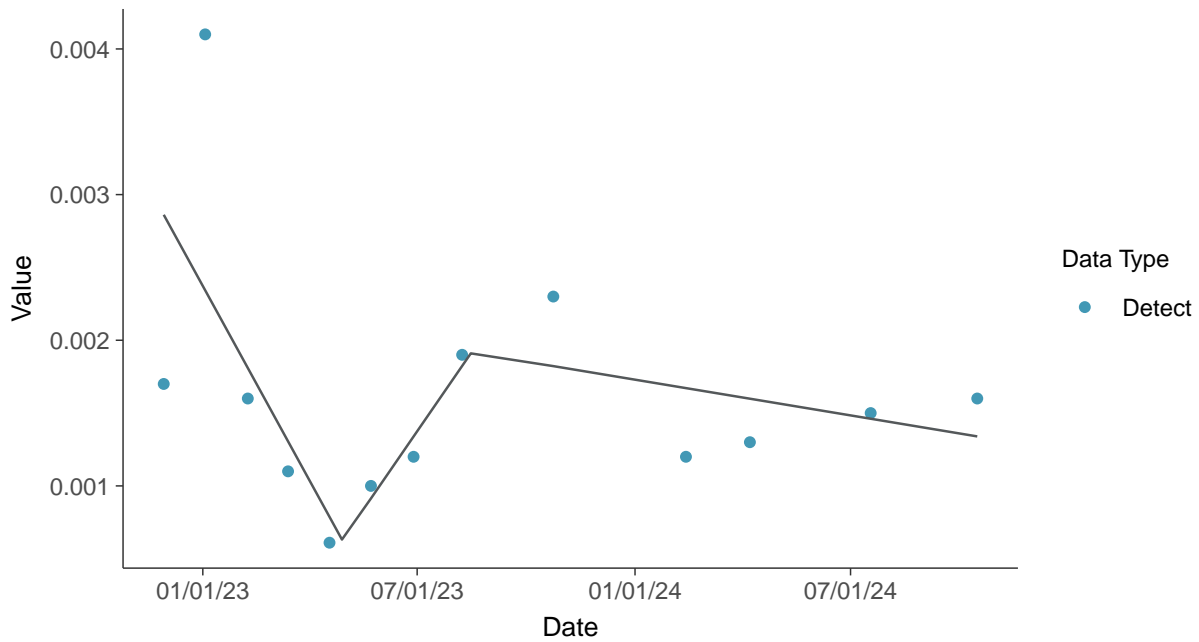
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-11 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

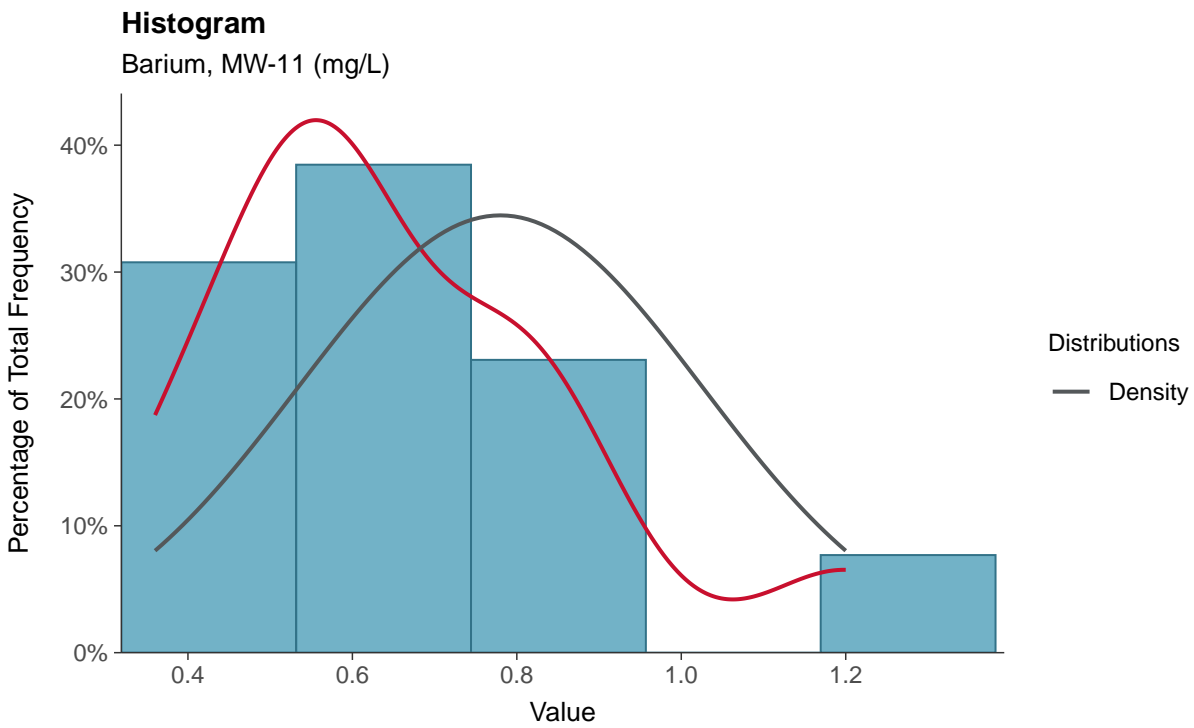
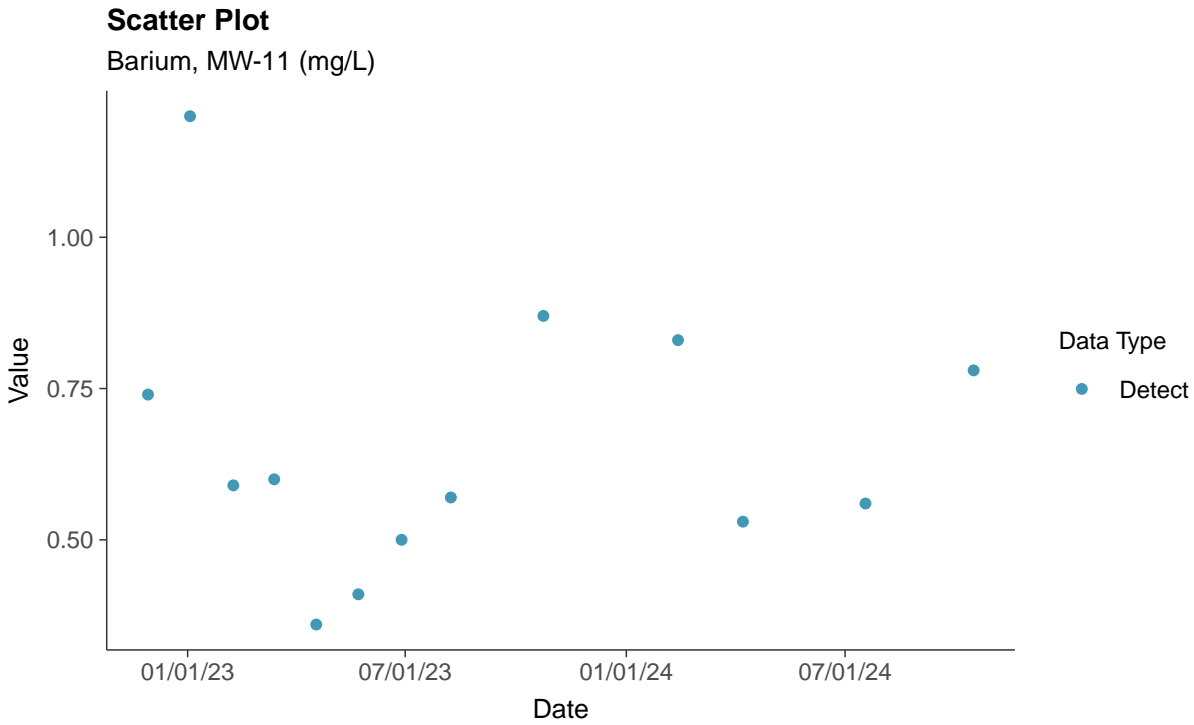
Arsenic, MW-11 (mg/L)





Appendix IV: Barium, MW-11

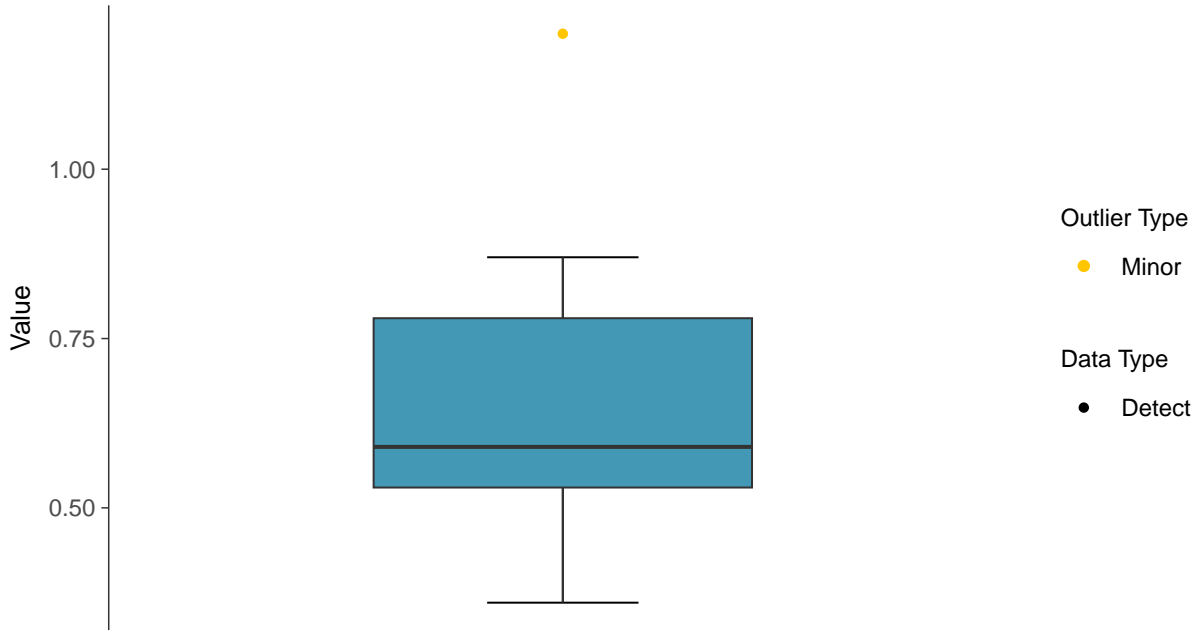
ID: 2_21_2_5_103





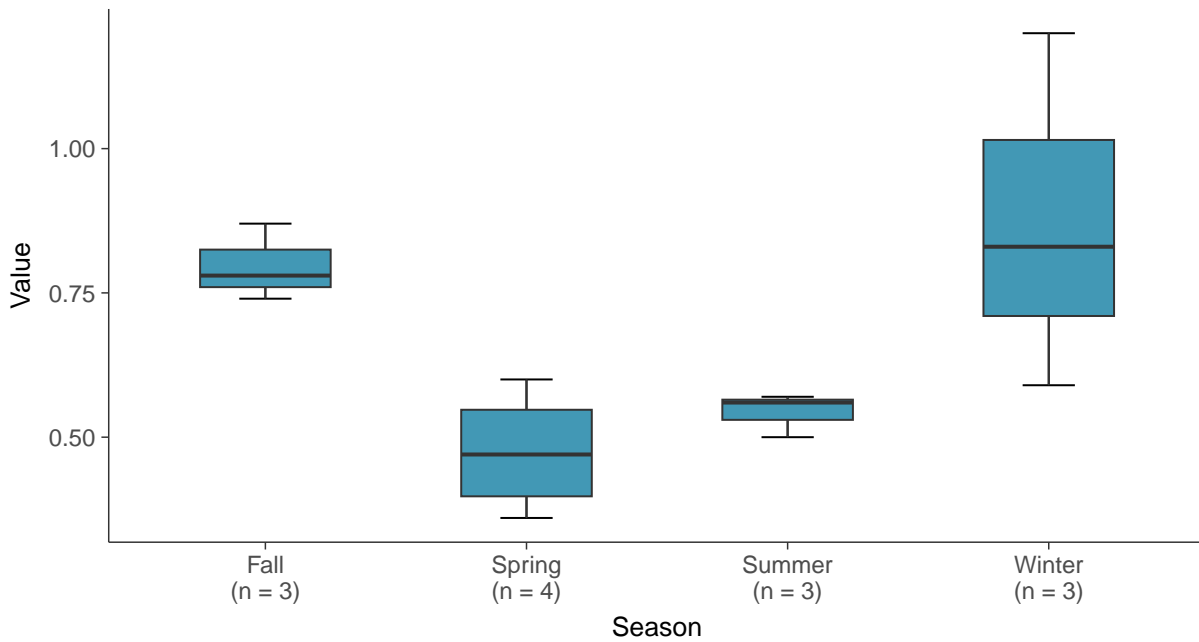
Boxplot

Barium, MW-11 (mg/L)



Boxplot by Season

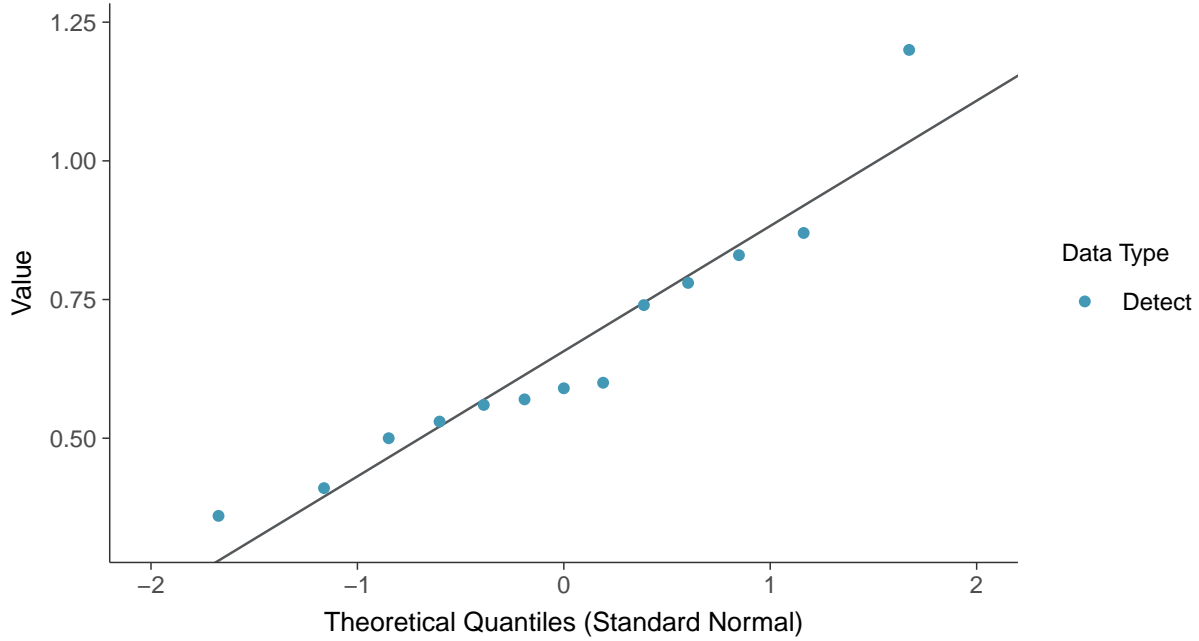
Barium, MW-11 (mg/L)





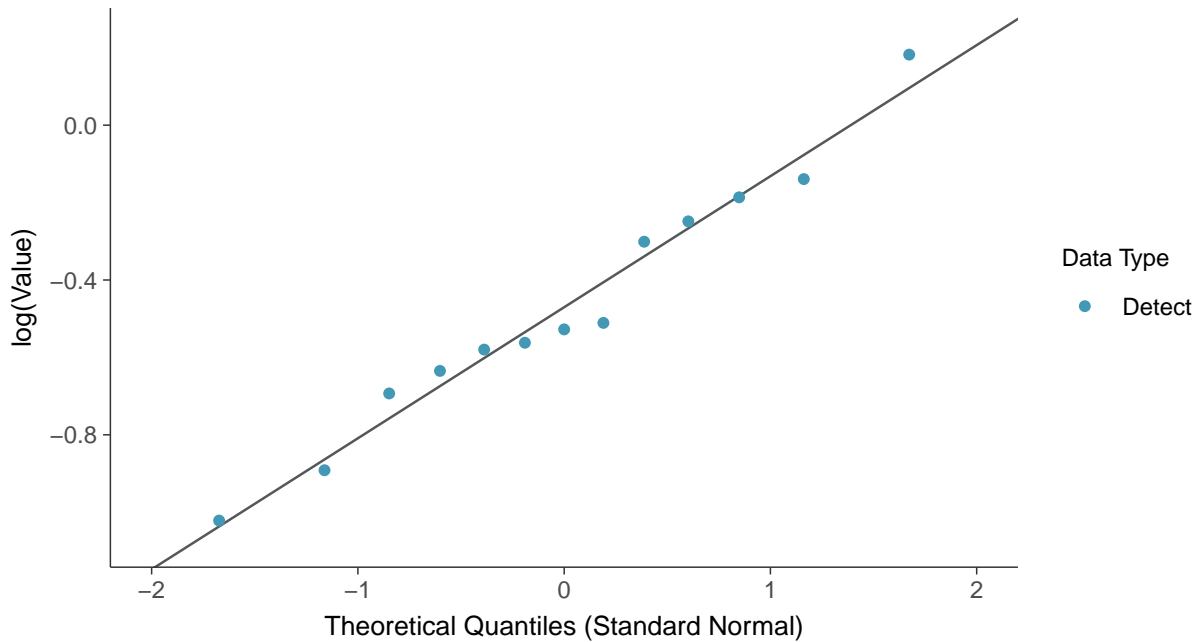
Normal Q-Q plot

Barium, MW-11 (mg/L)



Lognormal Q-Q plot

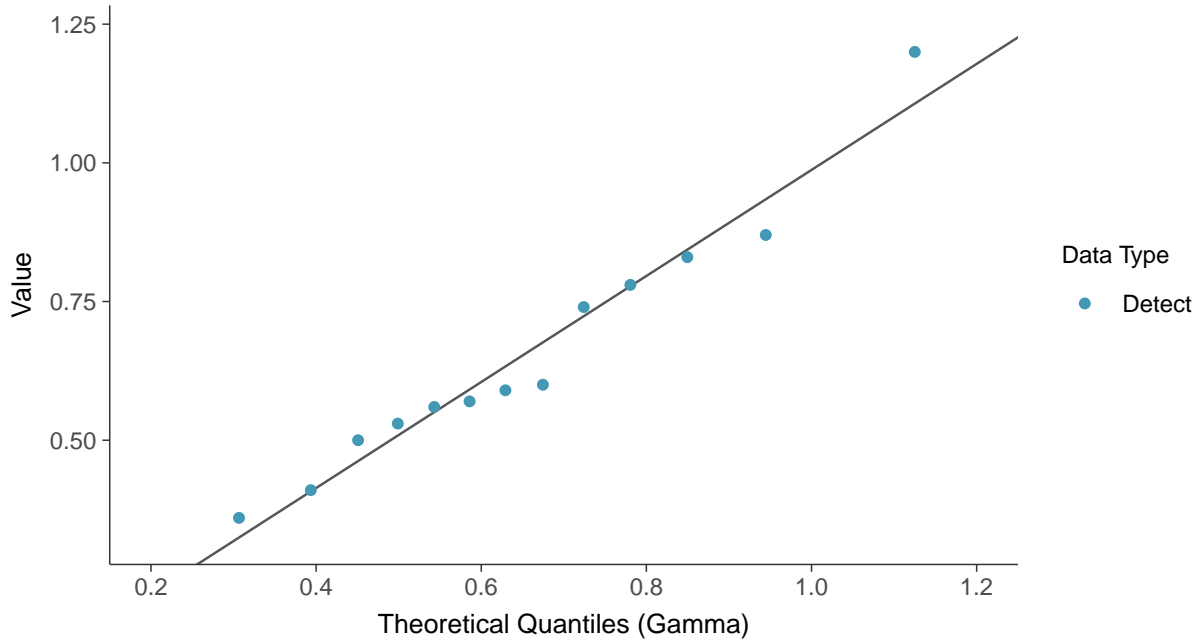
Barium, MW-11 (mg/L)





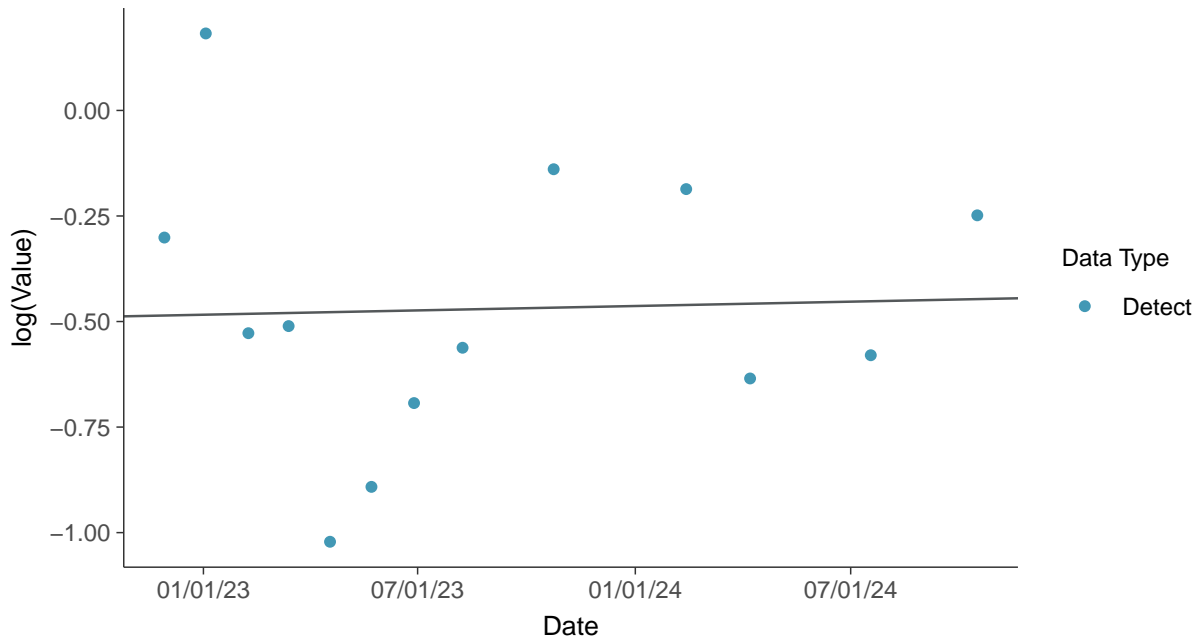
Gamma Q-Q plot

Barium, MW-11 (mg/L)



Trend Regression: Lognormal MLE

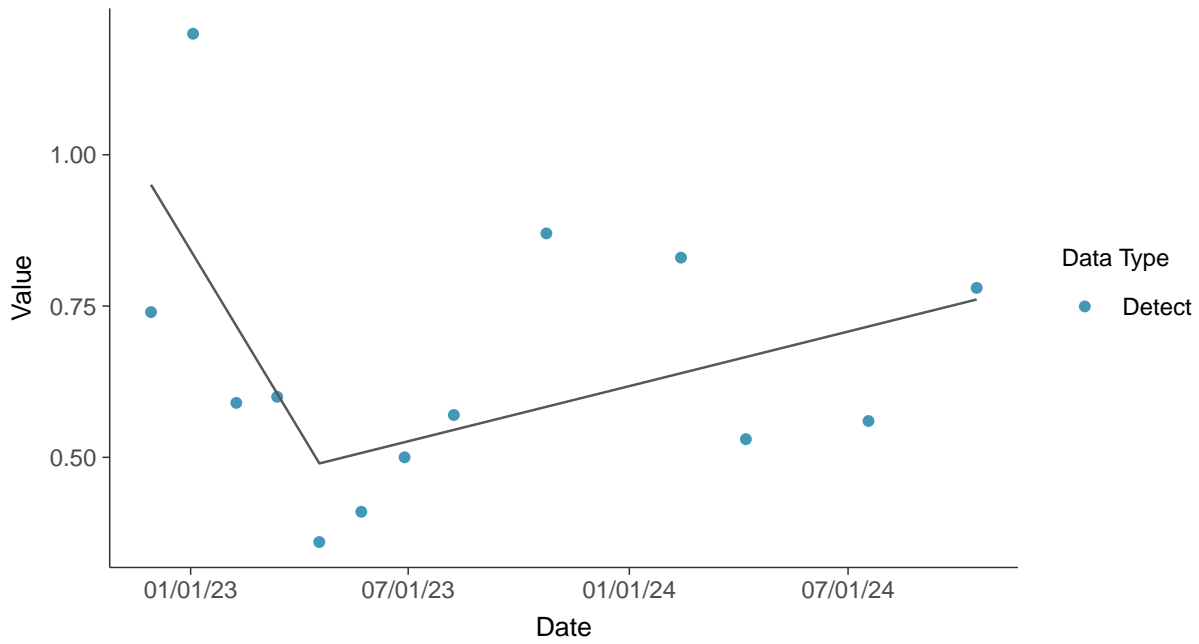
Barium, MW-11 (mg/L)





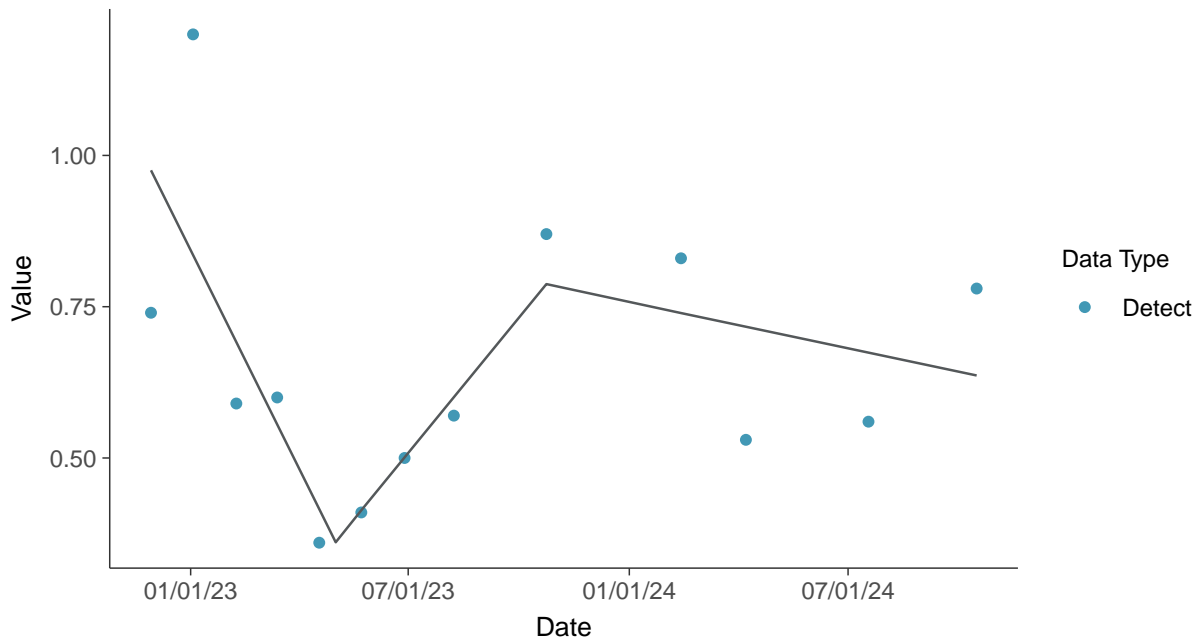
Trend Regression: Piecewise Linear-Linear

Barium, MW-11 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Barium, MW-11 (mg/L)



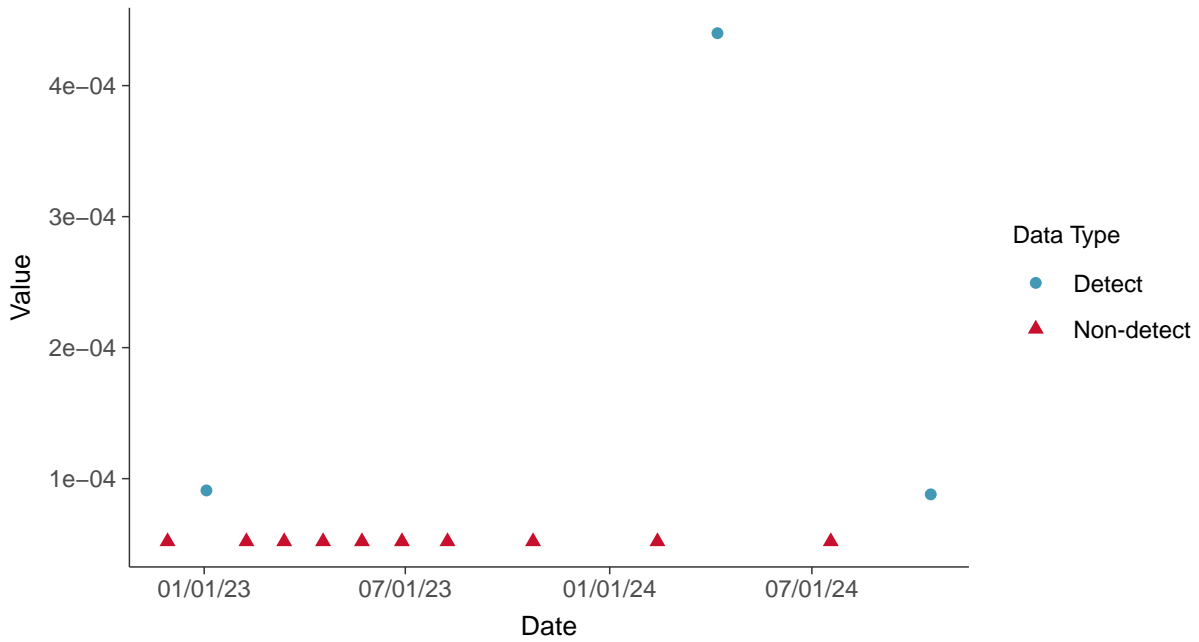


Appendix IV: Beryllium, MW-11

ID: 2_21_2_5_104

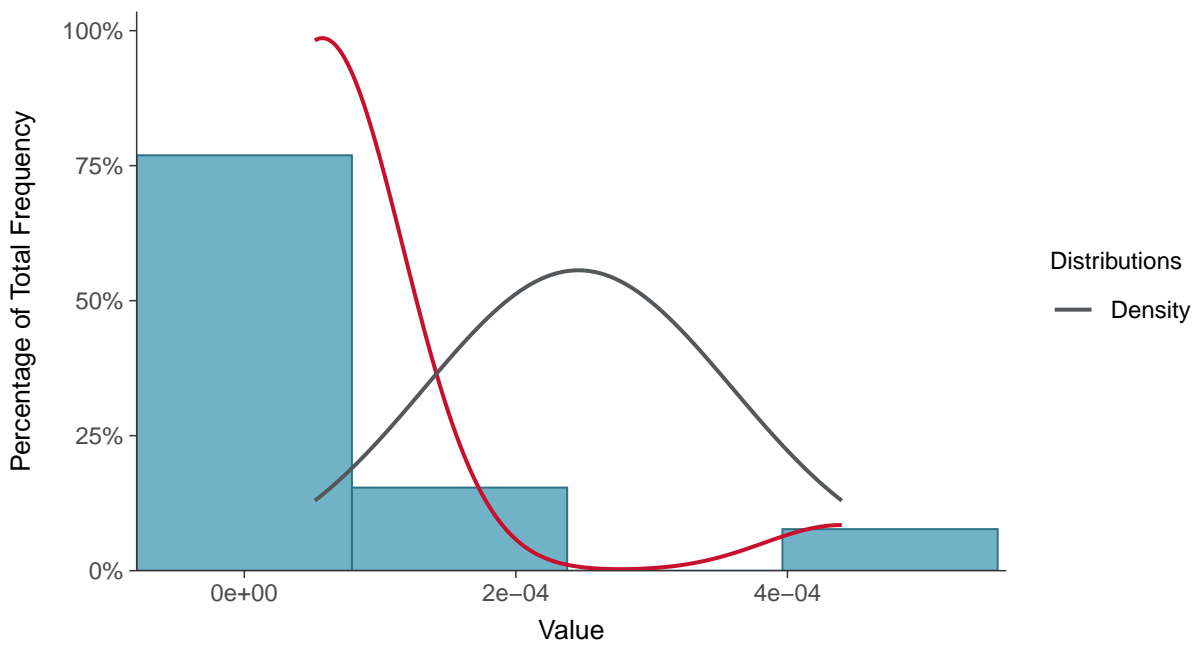
Scatter Plot

Beryllium, MW-11 (mg/L)



Histogram

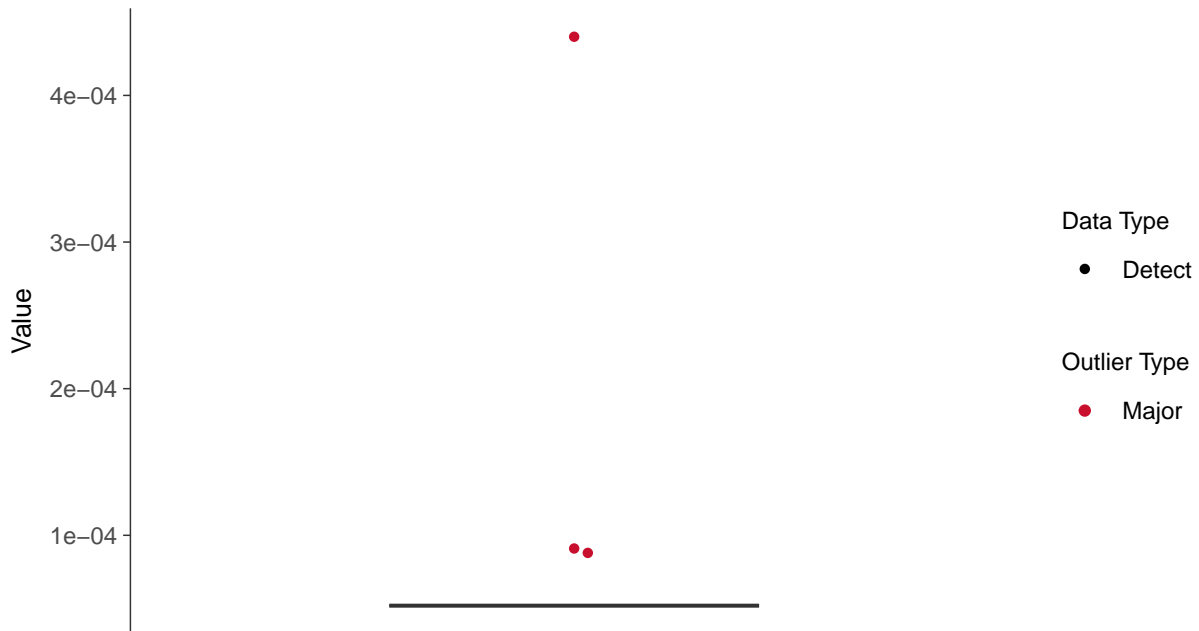
Beryllium, MW-11 (mg/L)





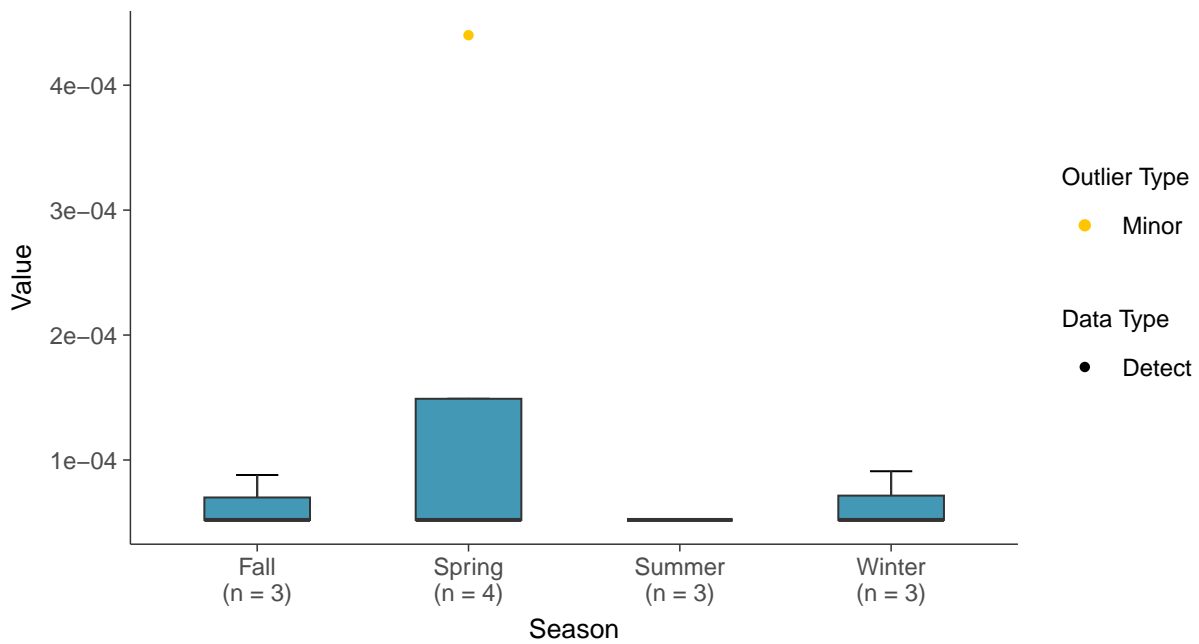
Boxplot

Beryllium, MW-11 (mg/L)



Boxplot by Season

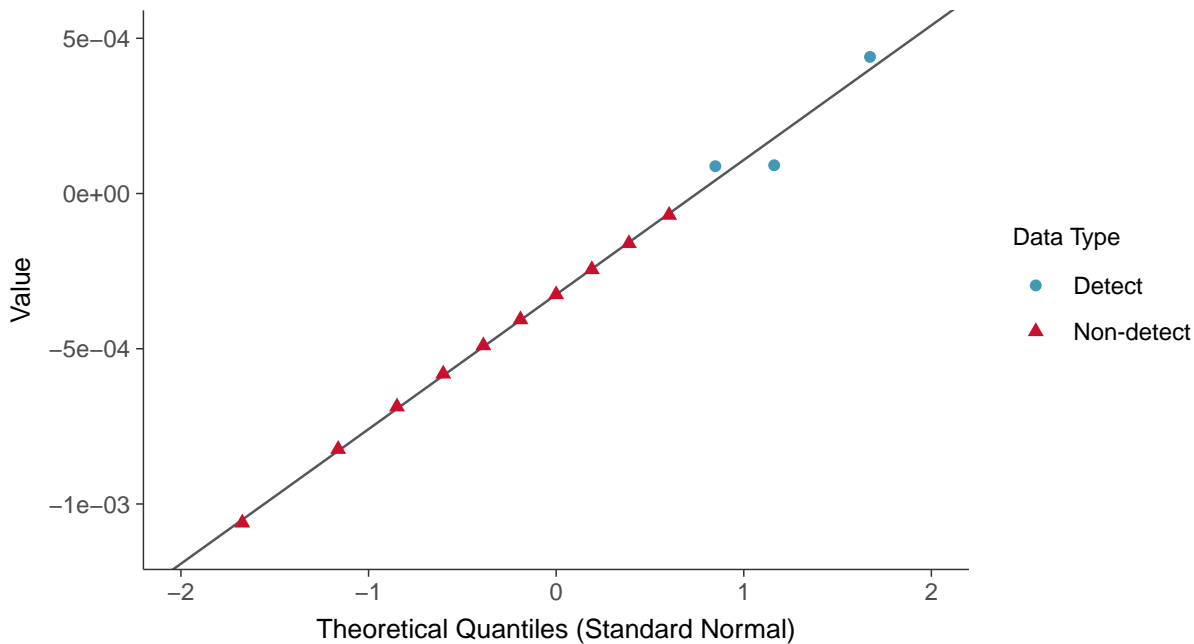
Beryllium, MW-11 (mg/L)





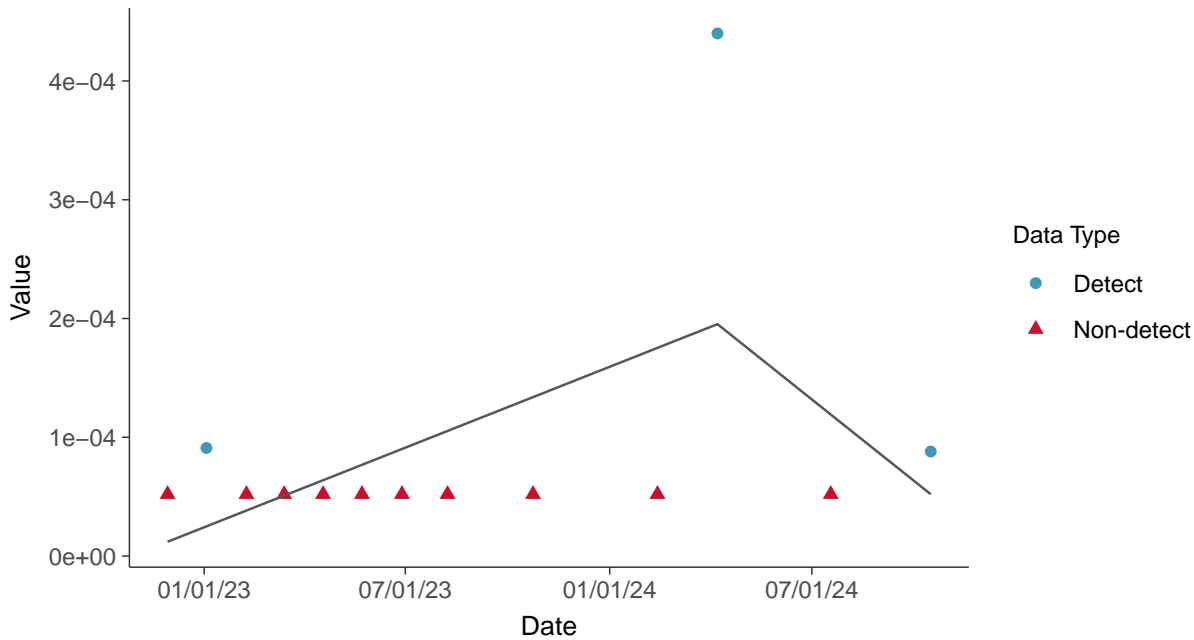
Normal Q-Q plot using ROS Imputed Estimates

Beryllium, MW-11 (mg/L)



Trend Regression: Piecewise Linear-Linear

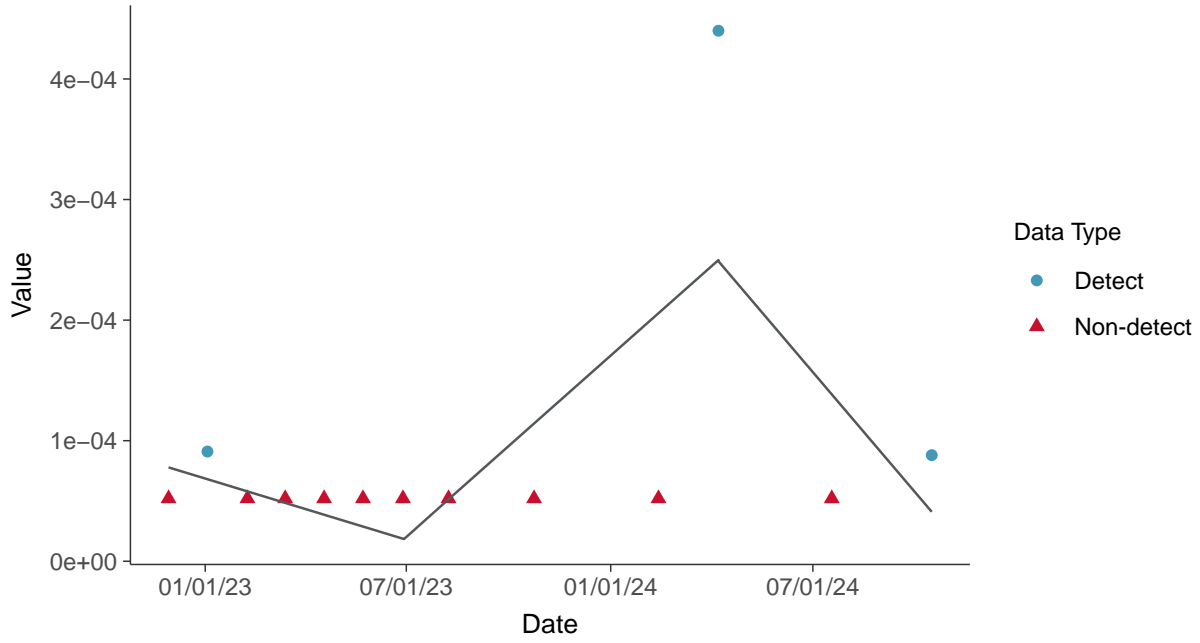
Beryllium, MW-11 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

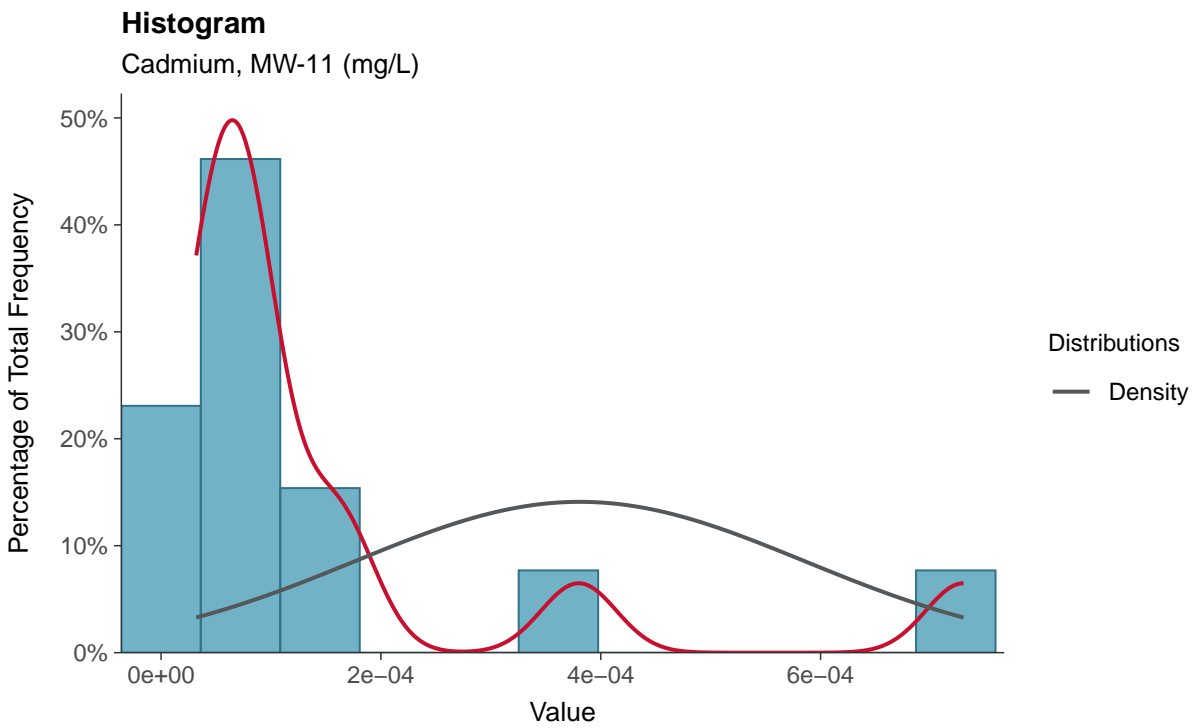
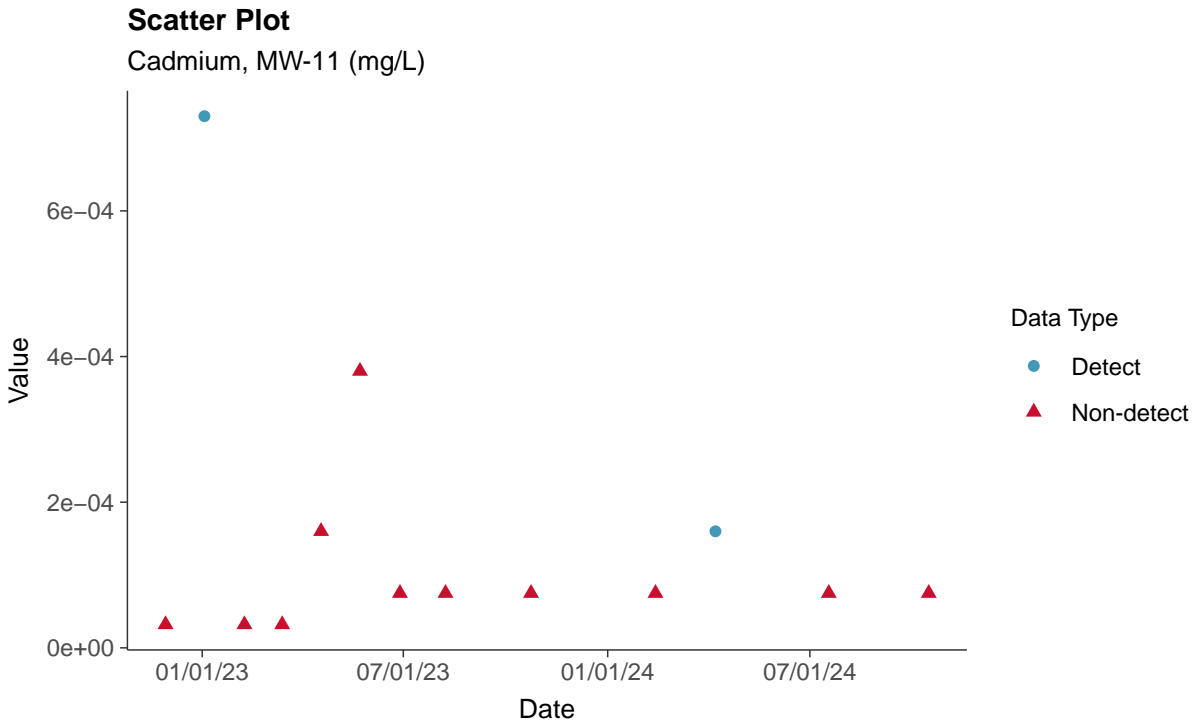
Beryllium, MW-11 (mg/L)





Appendix IV: Cadmium, MW-11

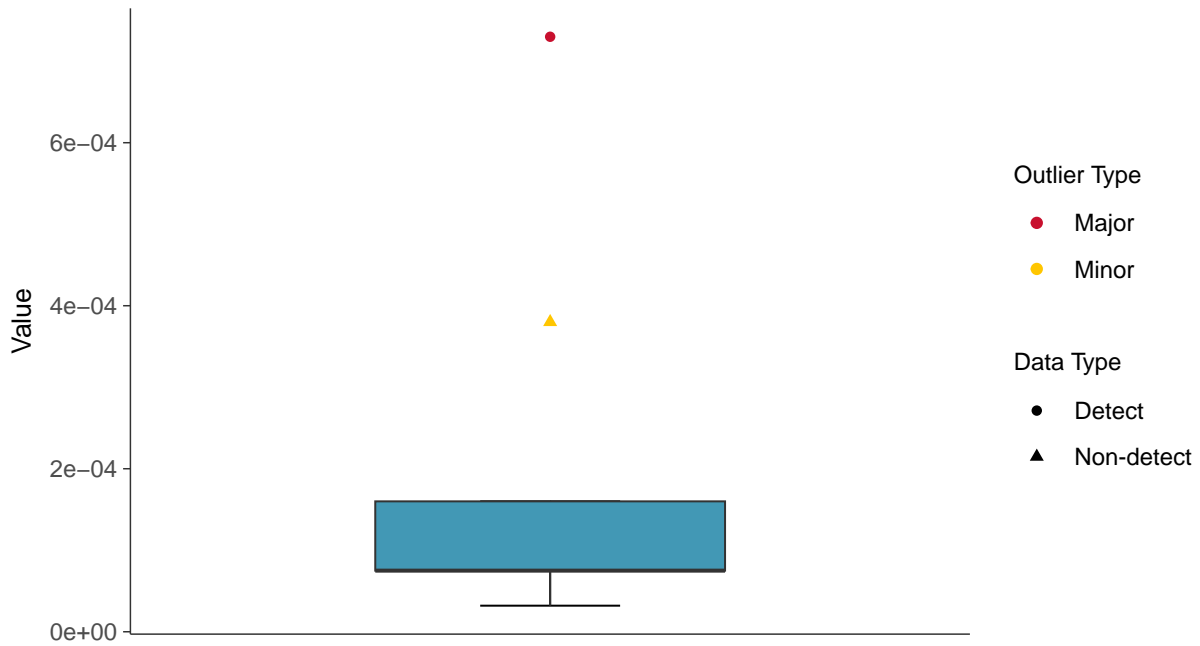
ID: 2_21_2_5_106





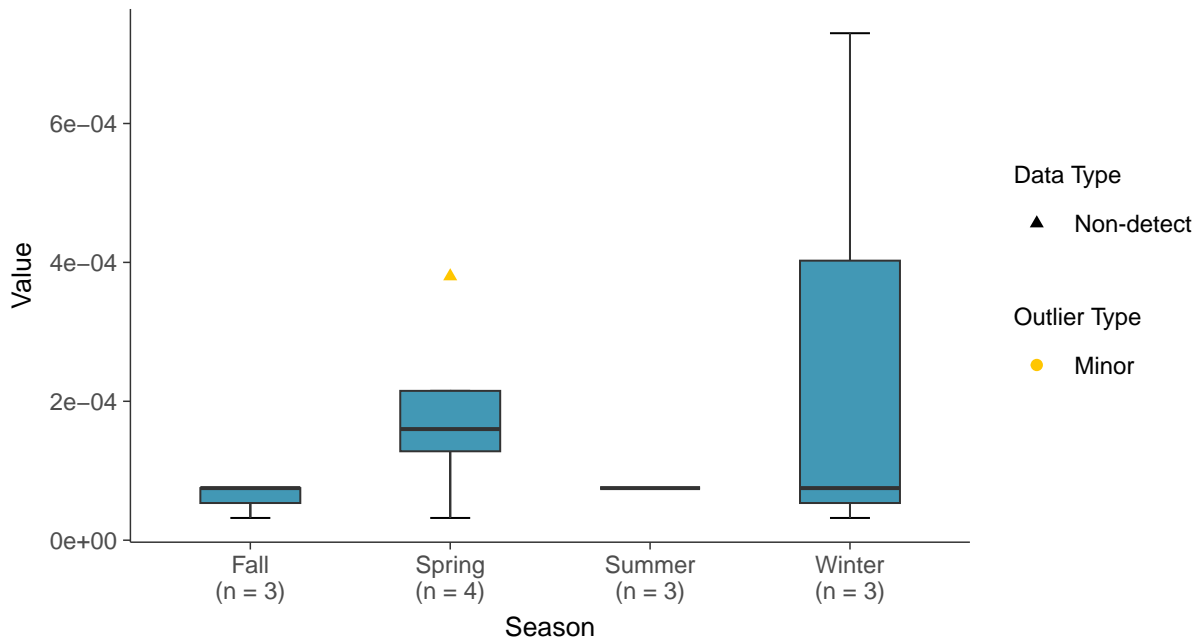
Boxplot

Cadmium, MW-11 (mg/L)



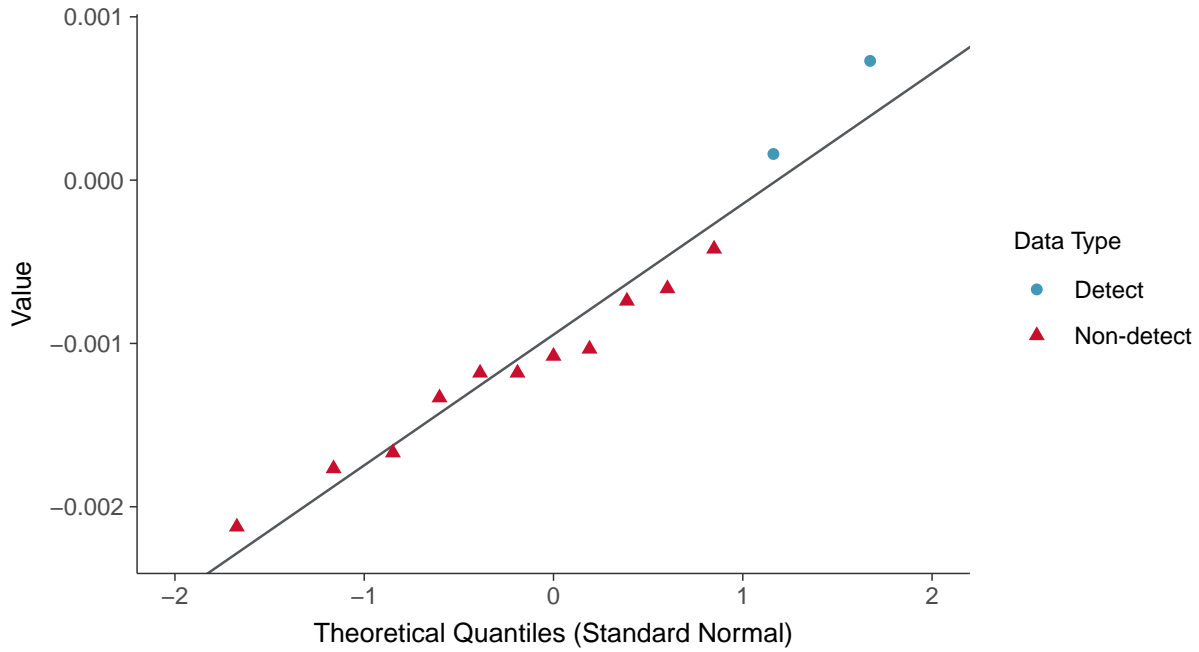
Boxplot by Season

Cadmium, MW-11 (mg/L)

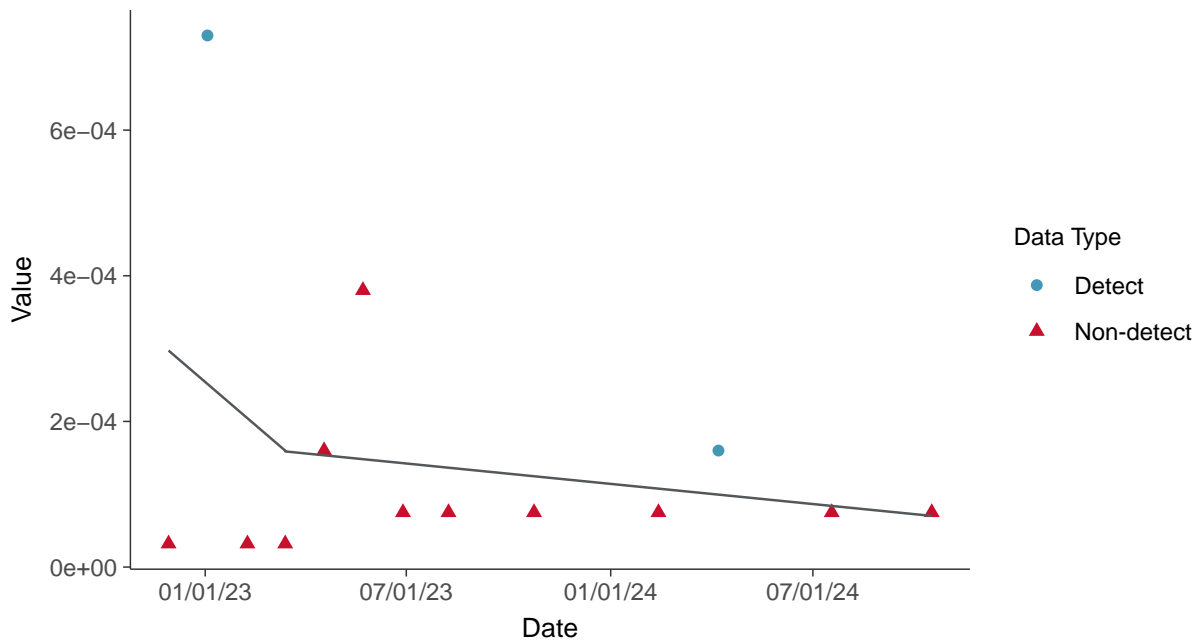




Normal Q-Q plot using ROS Imputed Estimates
Cadmium, MW-11 (mg/L)

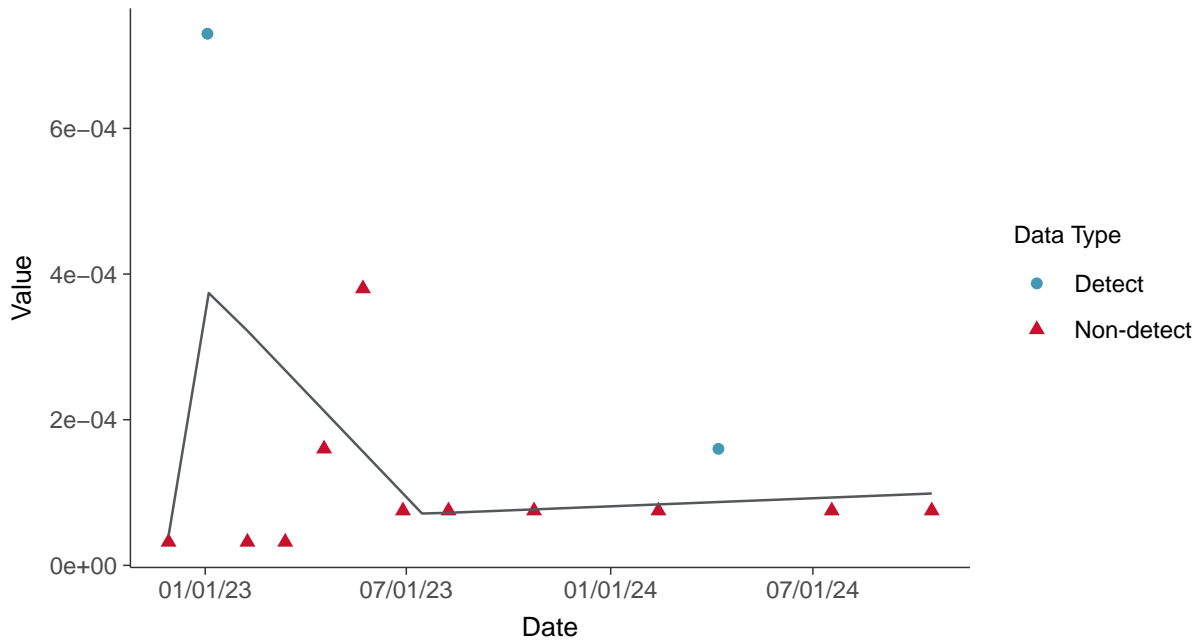


Trend Regression: Piecewise Linear-Linear
Cadmium, MW-11 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear Cadmium, MW-11 (mg/L)



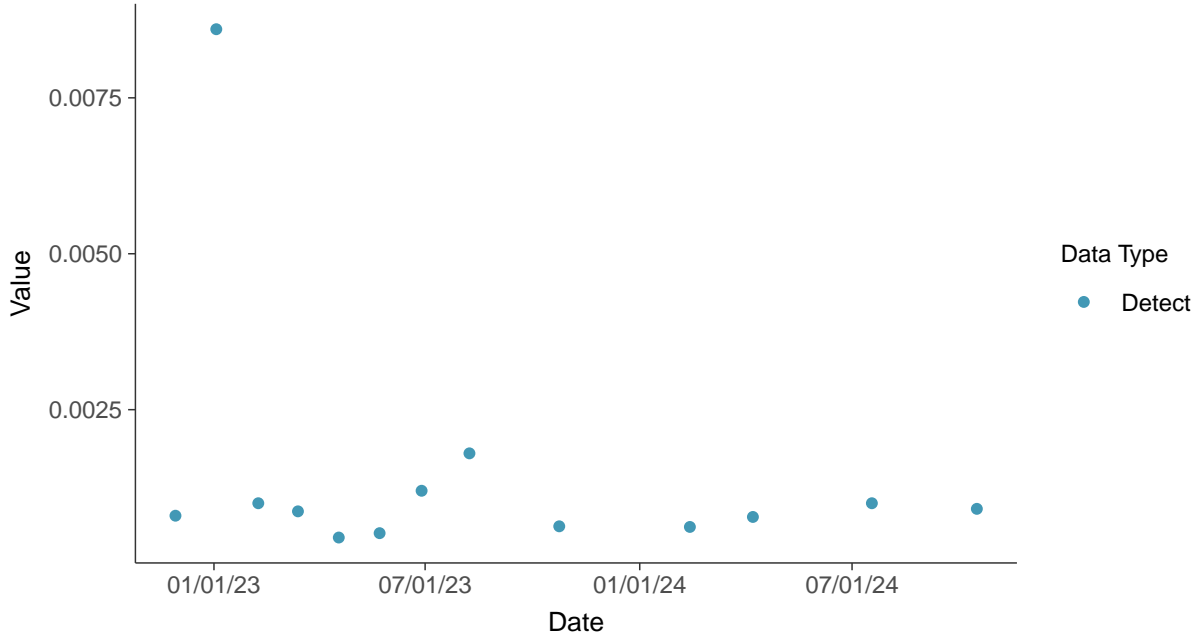


Appendix IV: Chromium, Total, MW-11

ID: 2_21_2_5_109

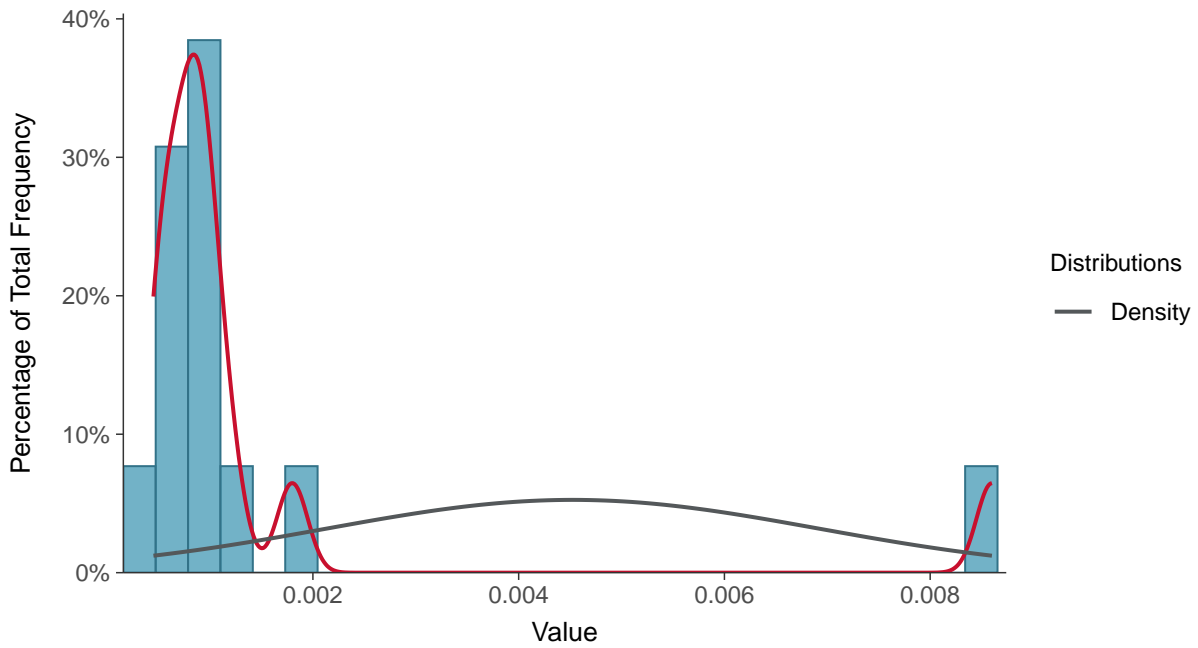
Scatter Plot

Chromium, Total, MW-11 (mg/L)



Histogram

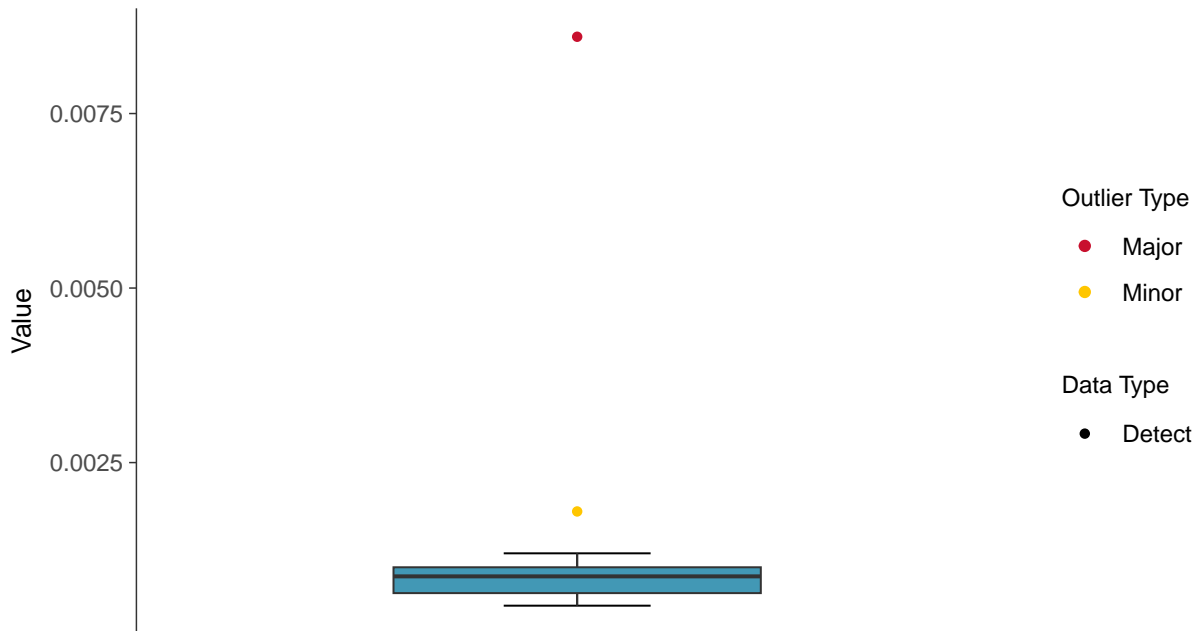
Chromium, Total, MW-11 (mg/L)





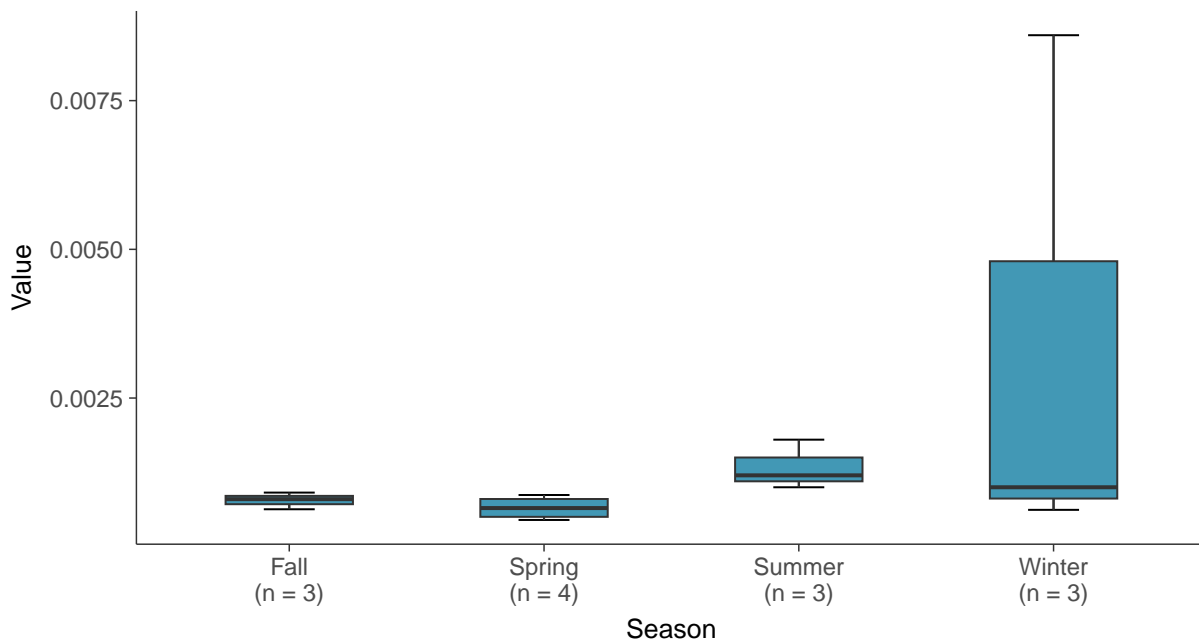
Boxplot

Chromium, Total, MW-11 (mg/L)



Boxplot by Season

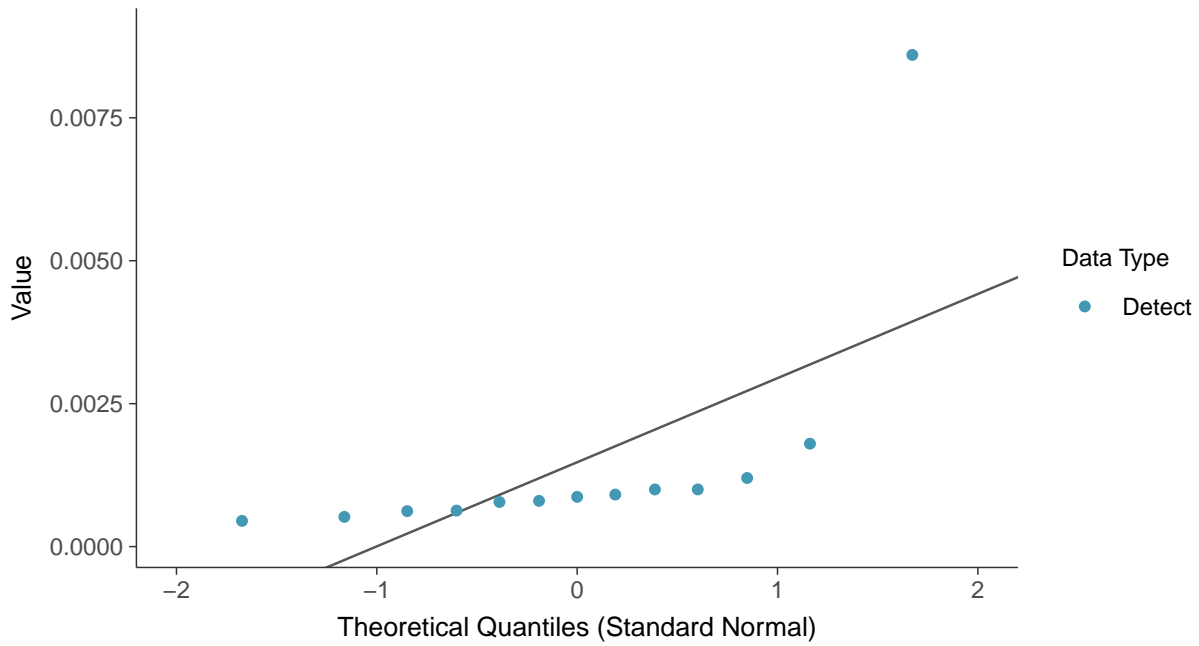
Chromium, Total, MW-11 (mg/L)





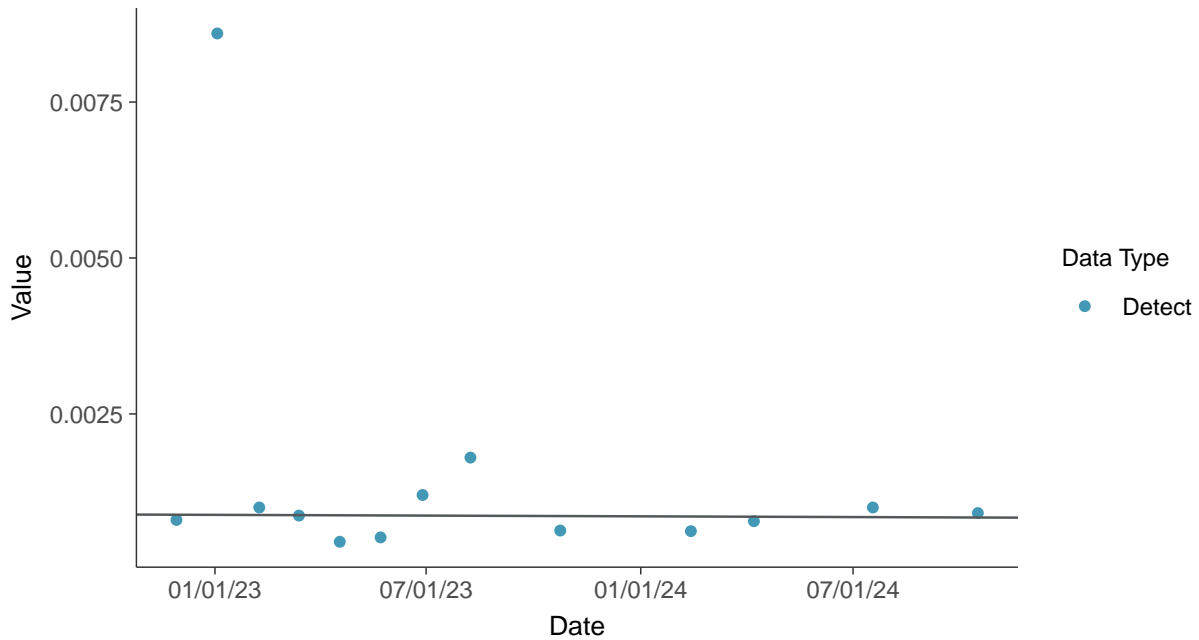
Normal Q-Q plot

Chromium, Total, MW-11 (mg/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

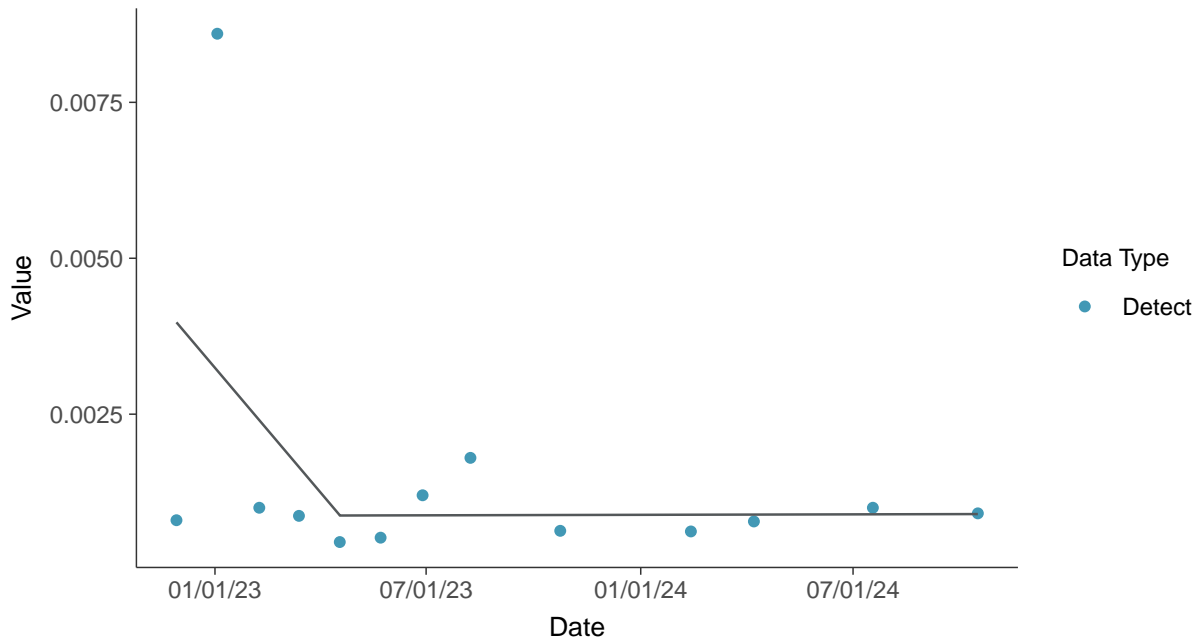
Chromium, Total, MW-11 (mg/L)





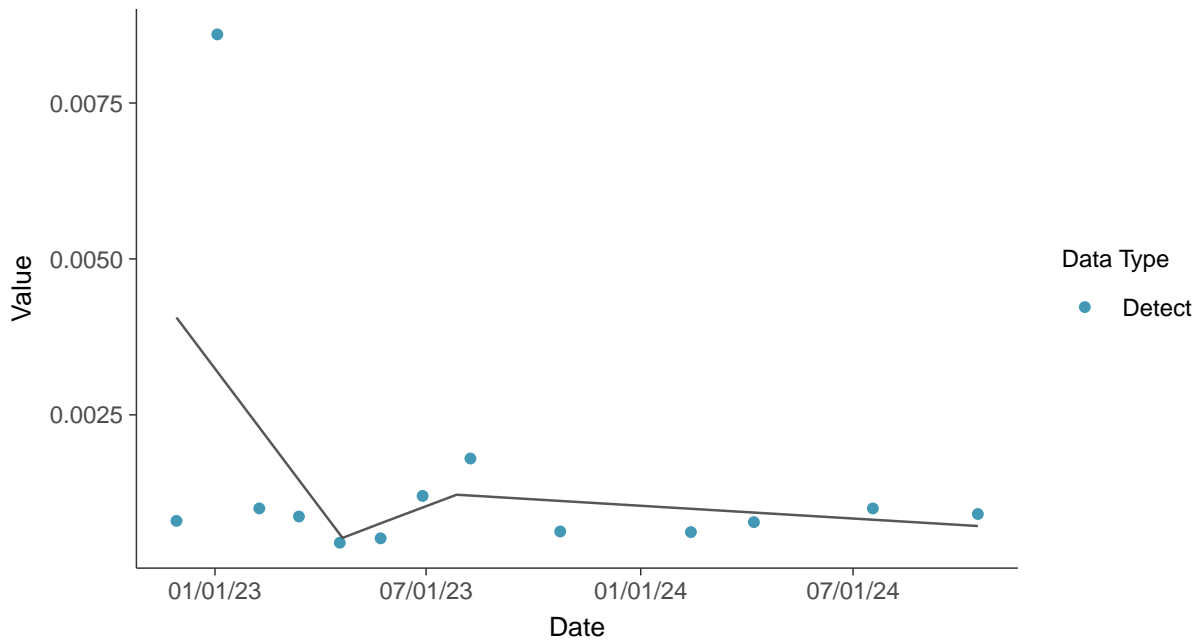
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-11 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

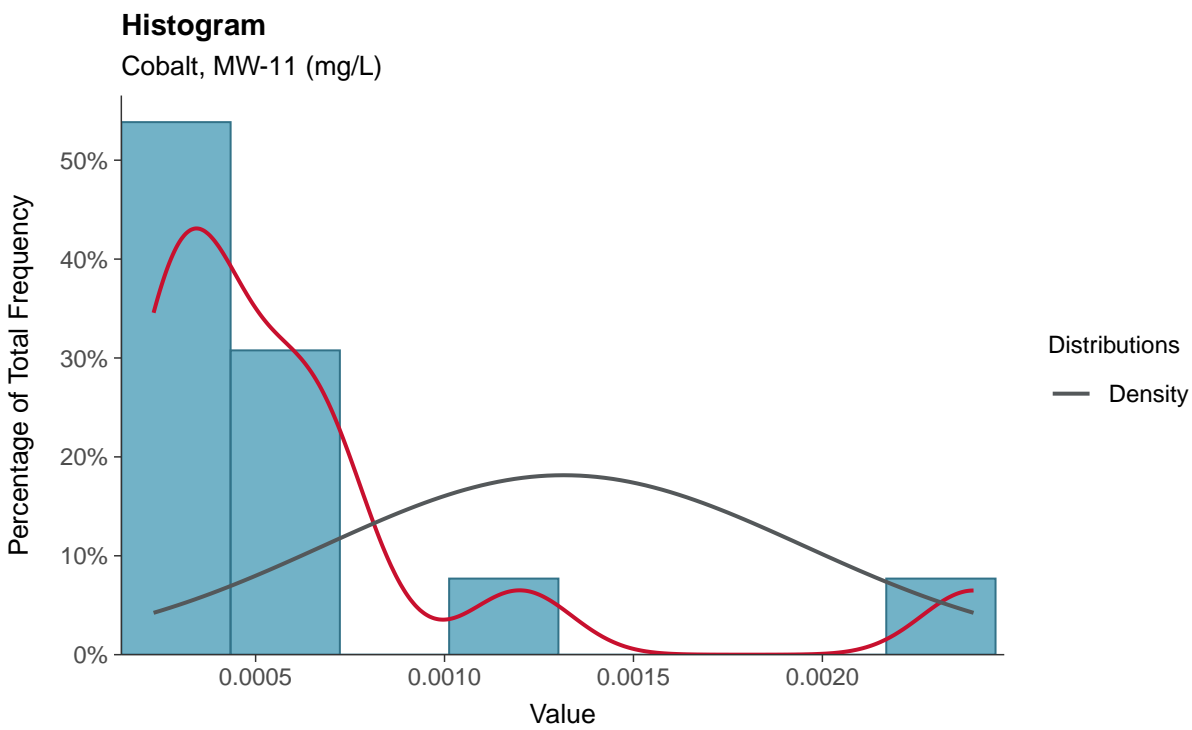
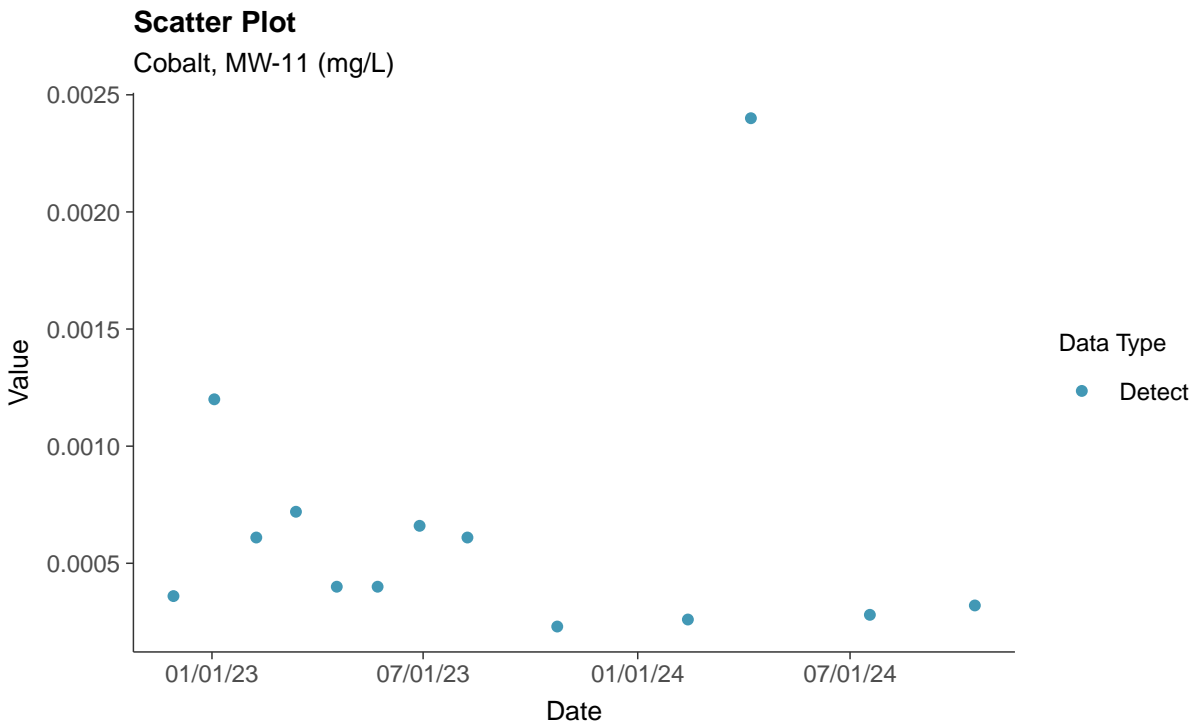
Chromium, Total, MW-11 (mg/L)





Appendix IV: Cobalt, MW-11

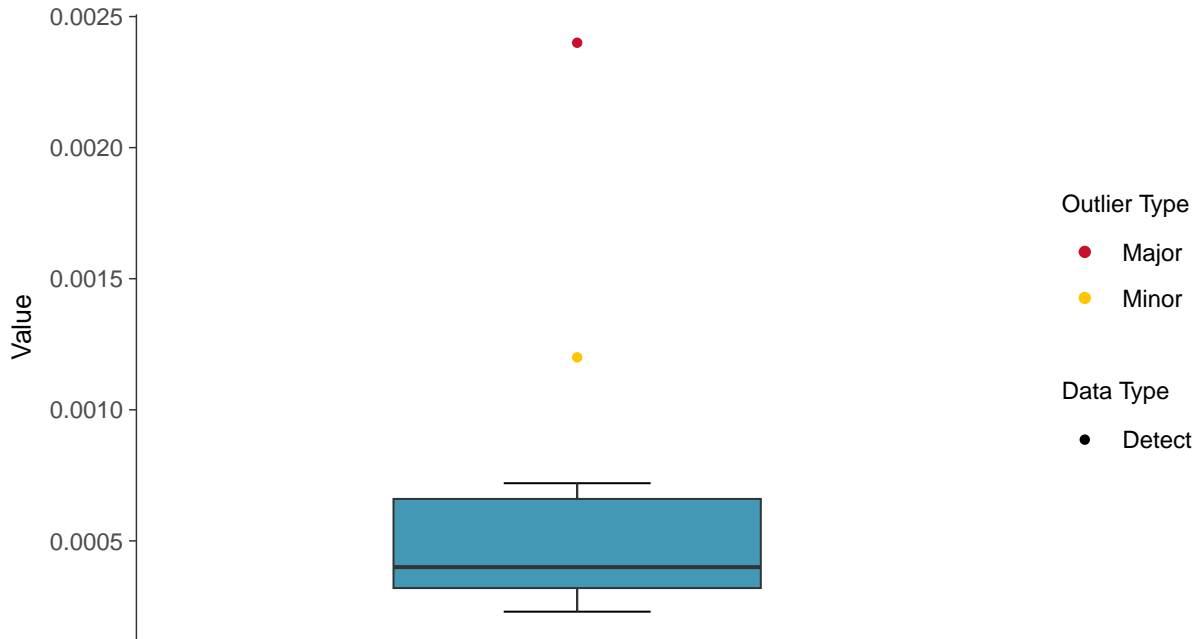
ID: 2_21_2_5_110





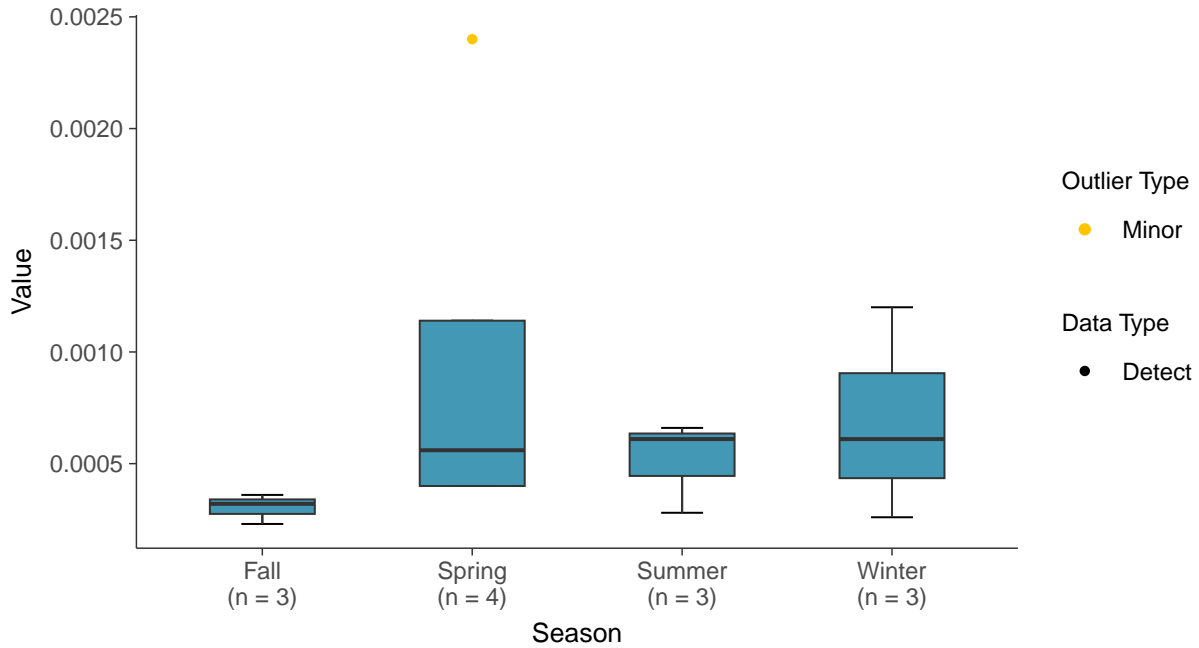
Boxplot

Cobalt, MW-11 (mg/L)



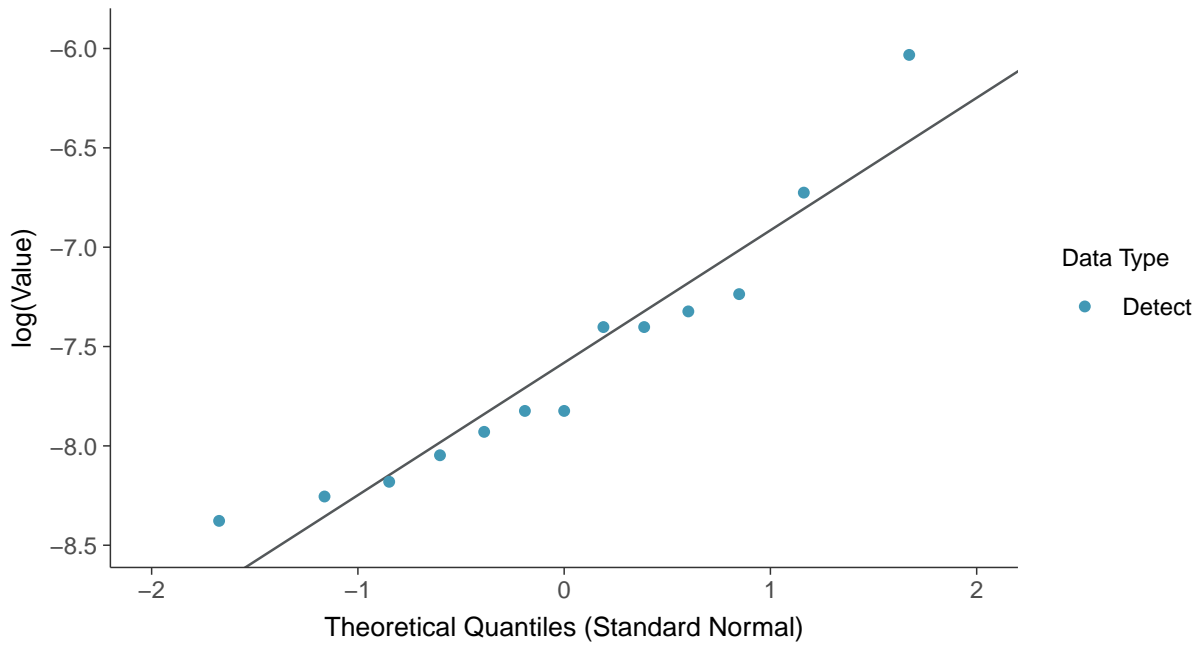
Boxplot by Season

Cobalt, MW-11 (mg/L)

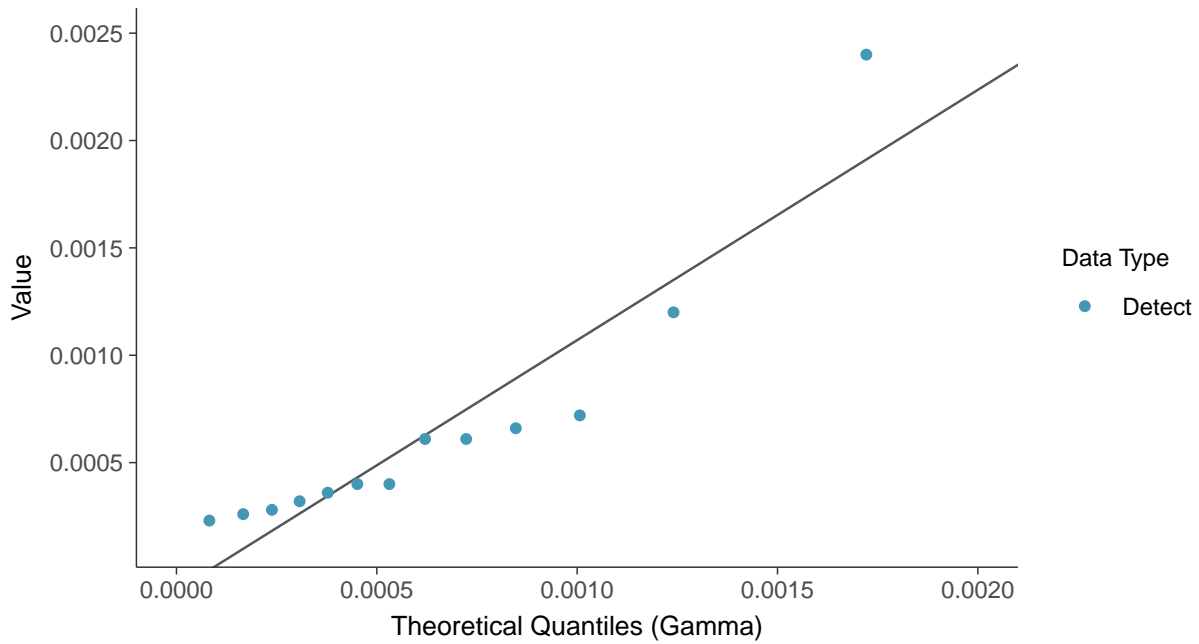




Lognormal Q-Q plot
Cobalt, MW-11 (mg/L)



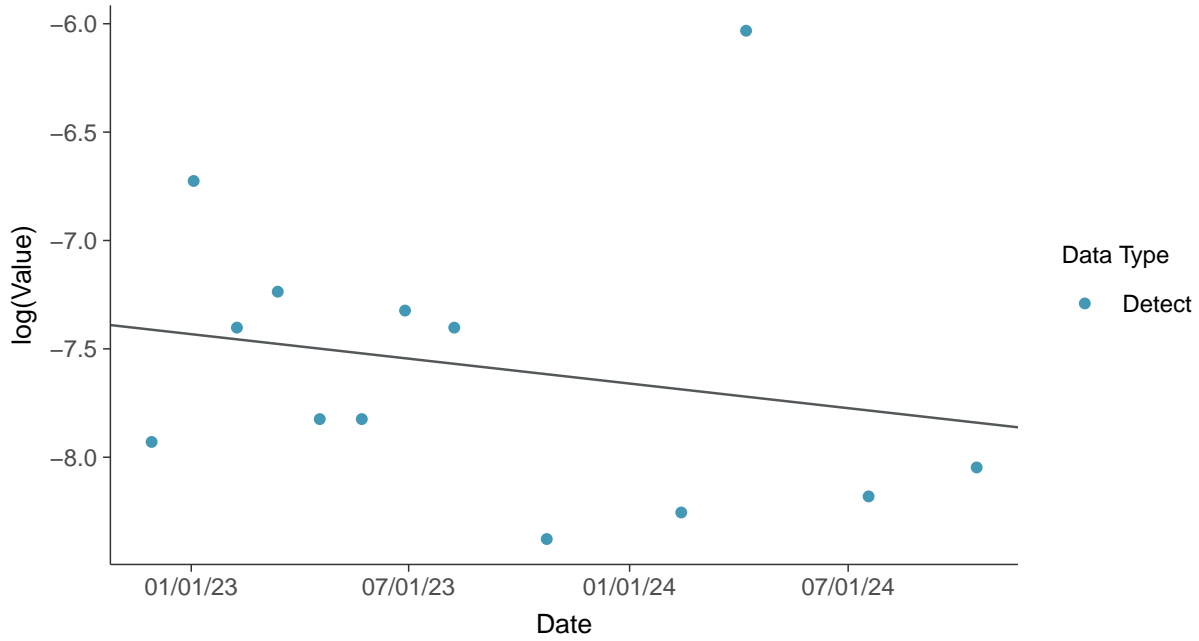
Gamma Q-Q plot
Cobalt, MW-11 (mg/L)





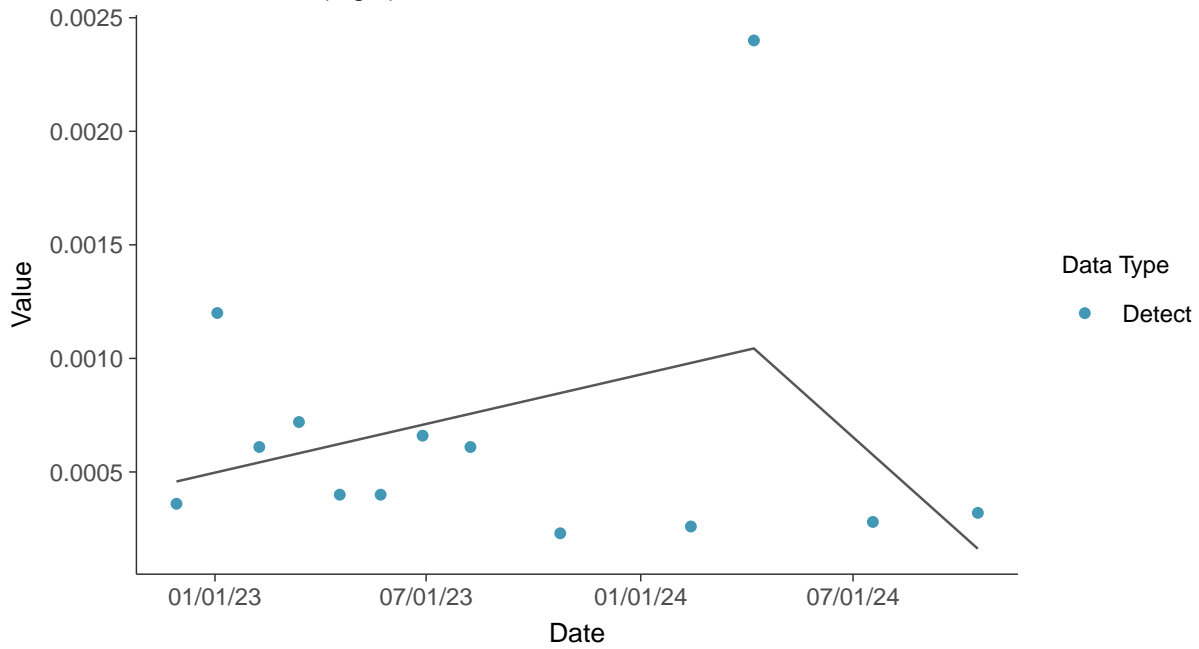
Trend Regression: Lognormal MLE

Cobalt, MW-11 (mg/L)



Trend Regression: Piecewise Linear-Linear

Cobalt, MW-11 (mg/L)



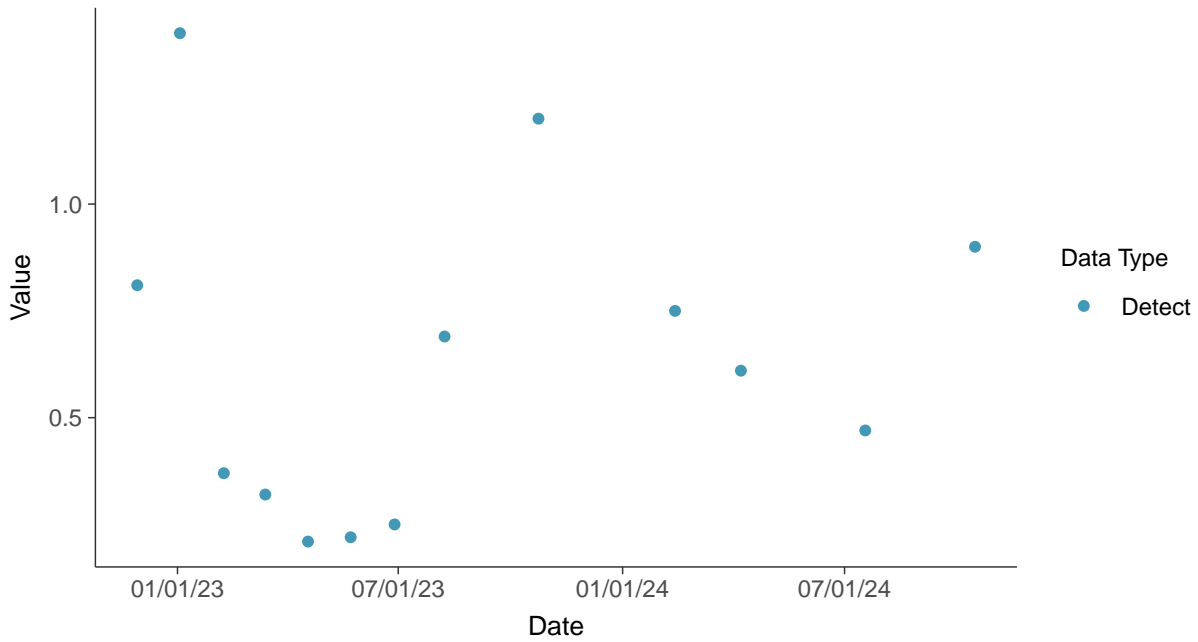


Appendix IV: Fluoride (App IV), MW-11

ID: 2_21_2_5_113

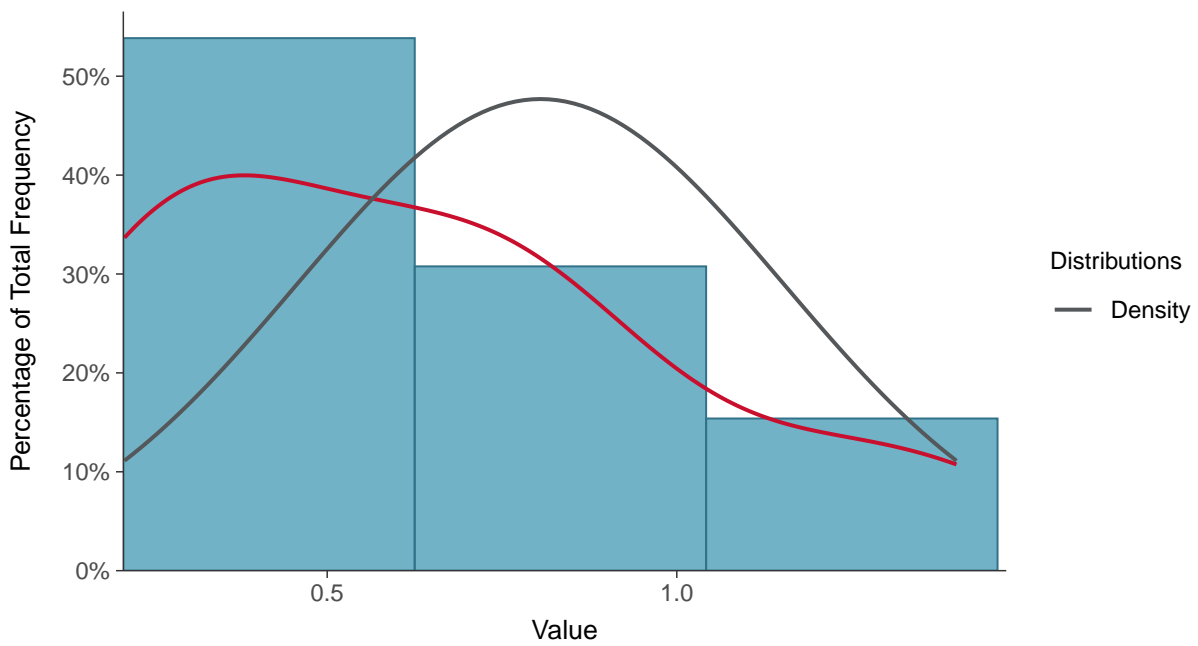
Scatter Plot

Fluoride (App IV), MW-11 (mg/L)



Histogram

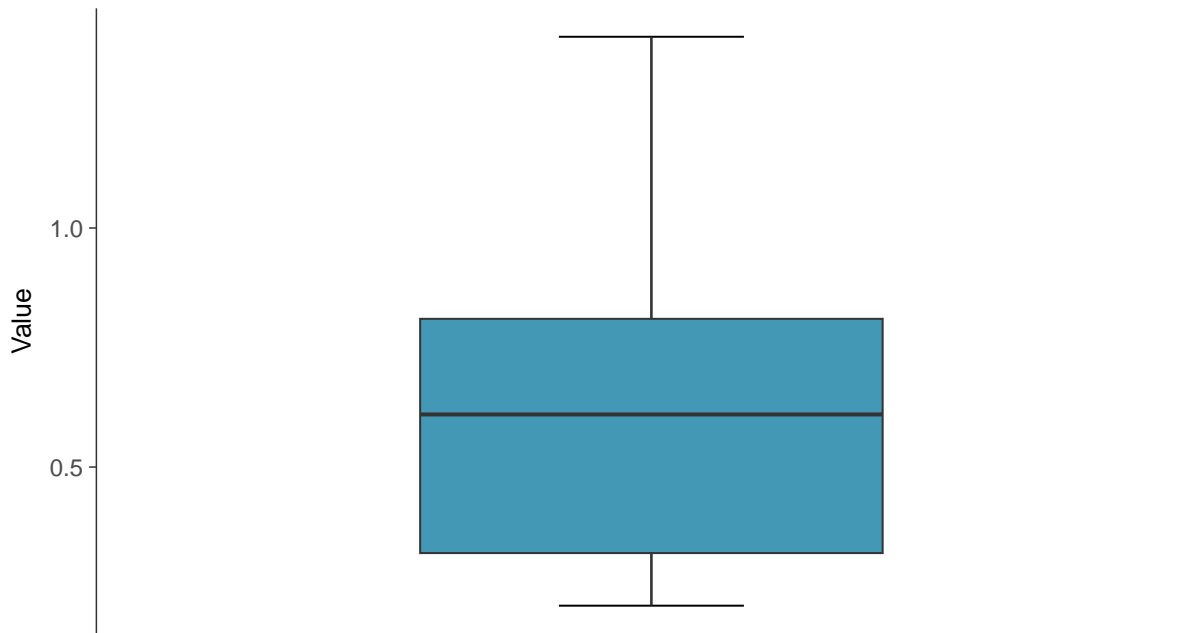
Fluoride (App IV), MW-11 (mg/L)





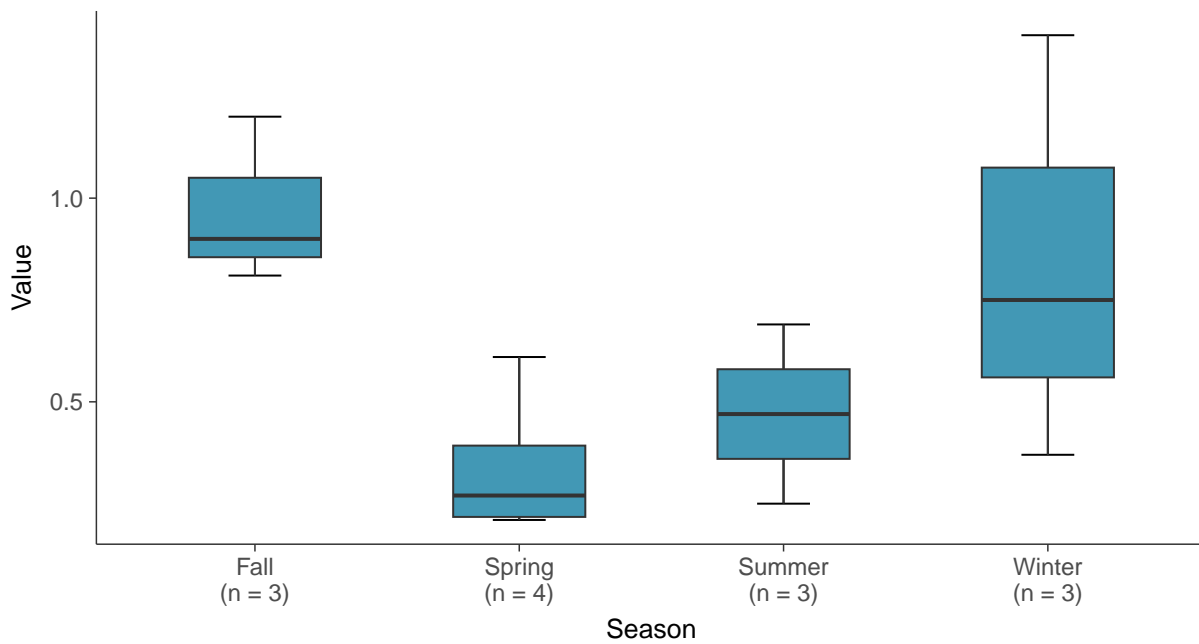
Boxplot

Fluoride (App IV), MW-11 (mg/L)



Boxplot by Season

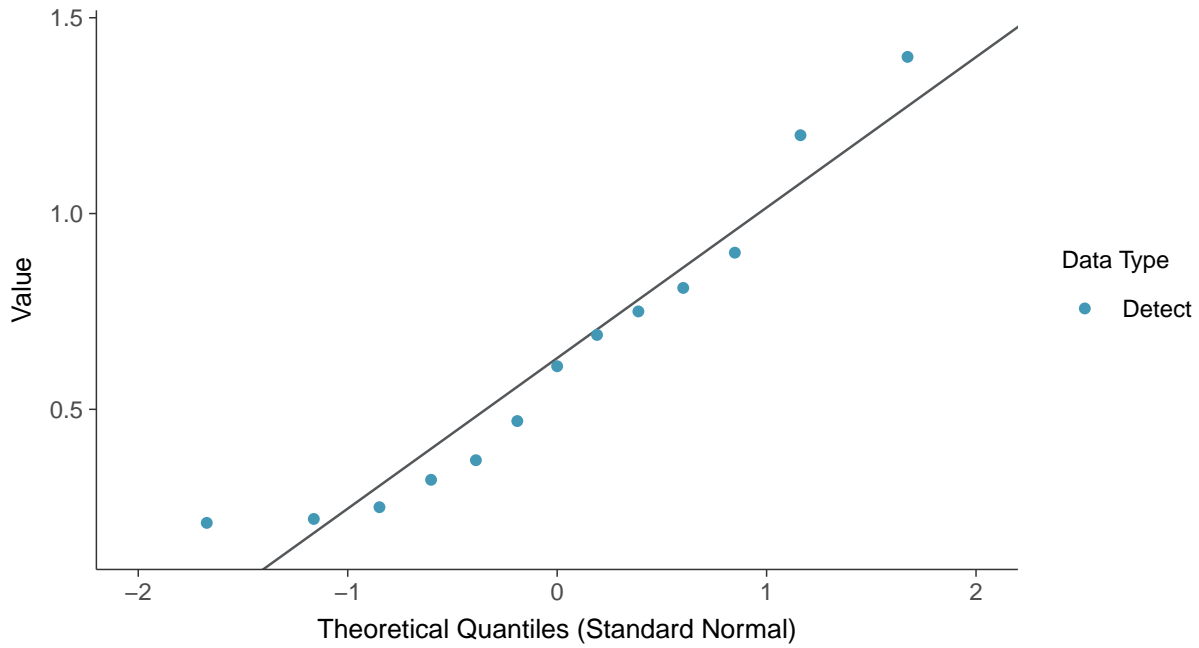
Fluoride (App IV), MW-11 (mg/L)





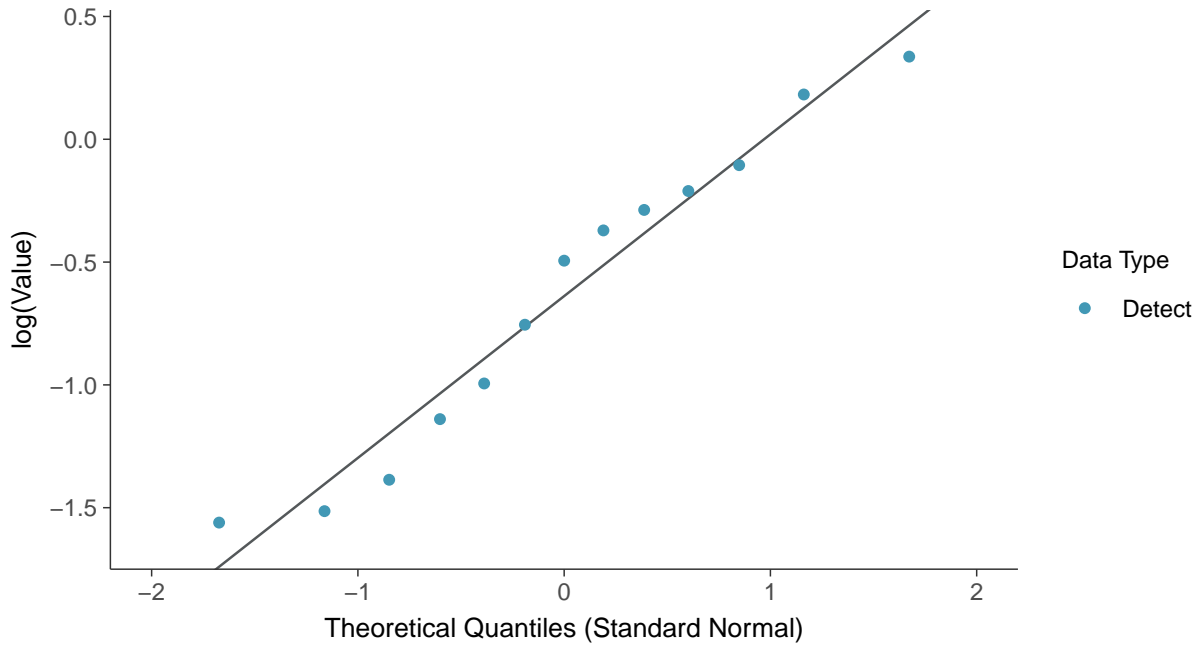
Normal Q-Q plot

Fluoride (App IV), MW-11 (mg/L)



Lognormal Q-Q plot

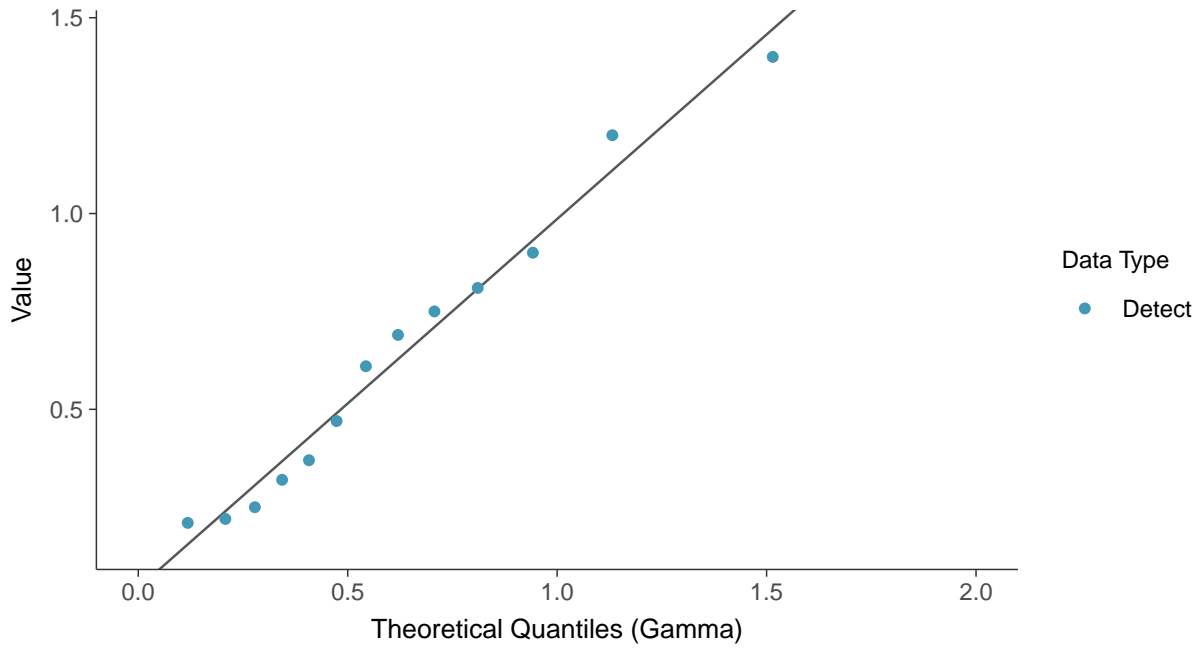
Fluoride (App IV), MW-11 (mg/L)





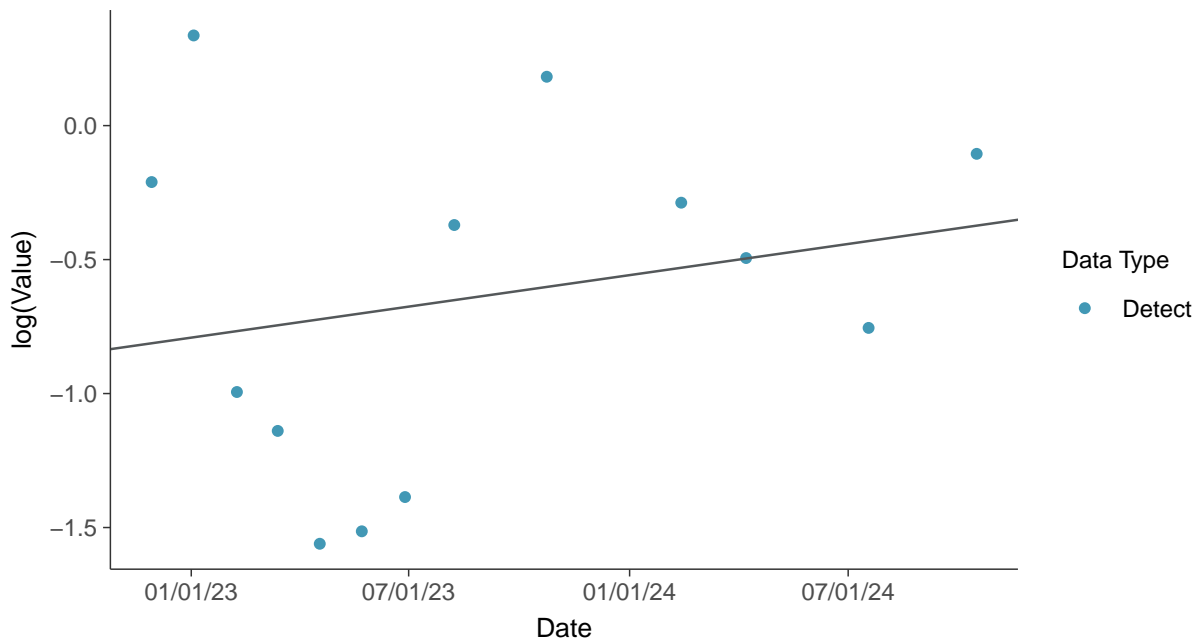
Gamma Q-Q plot

Fluoride (App IV), MW-11 (mg/L)



Trend Regression: Lognormal MLE

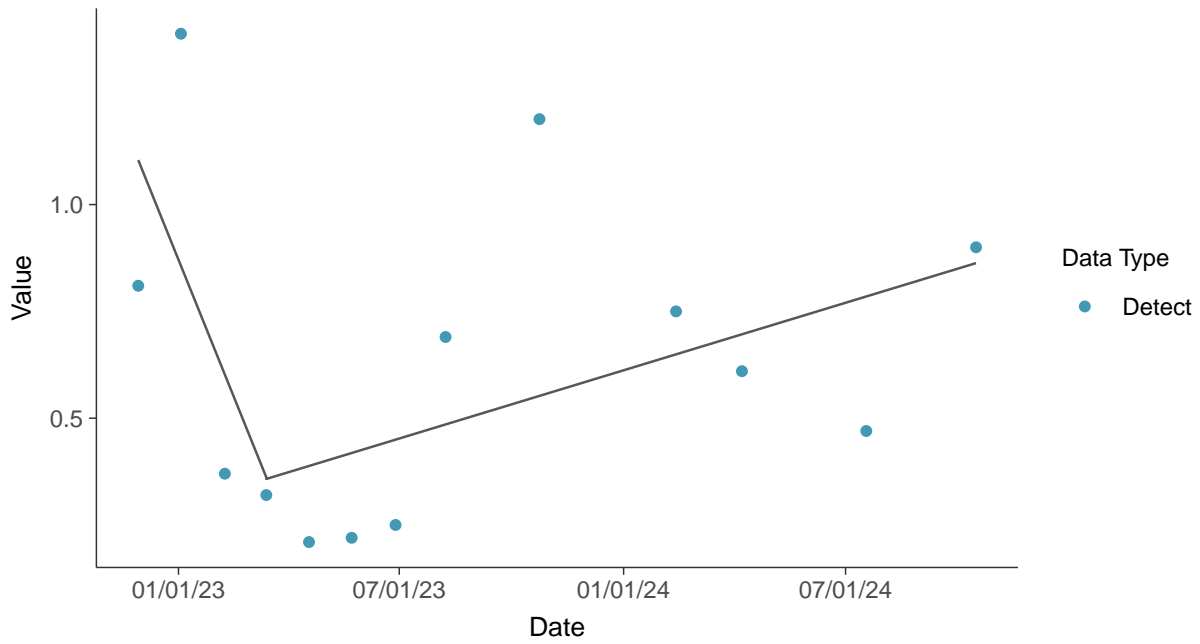
Fluoride (App IV), MW-11 (mg/L)





Trend Regression: Piecewise Linear-Linear

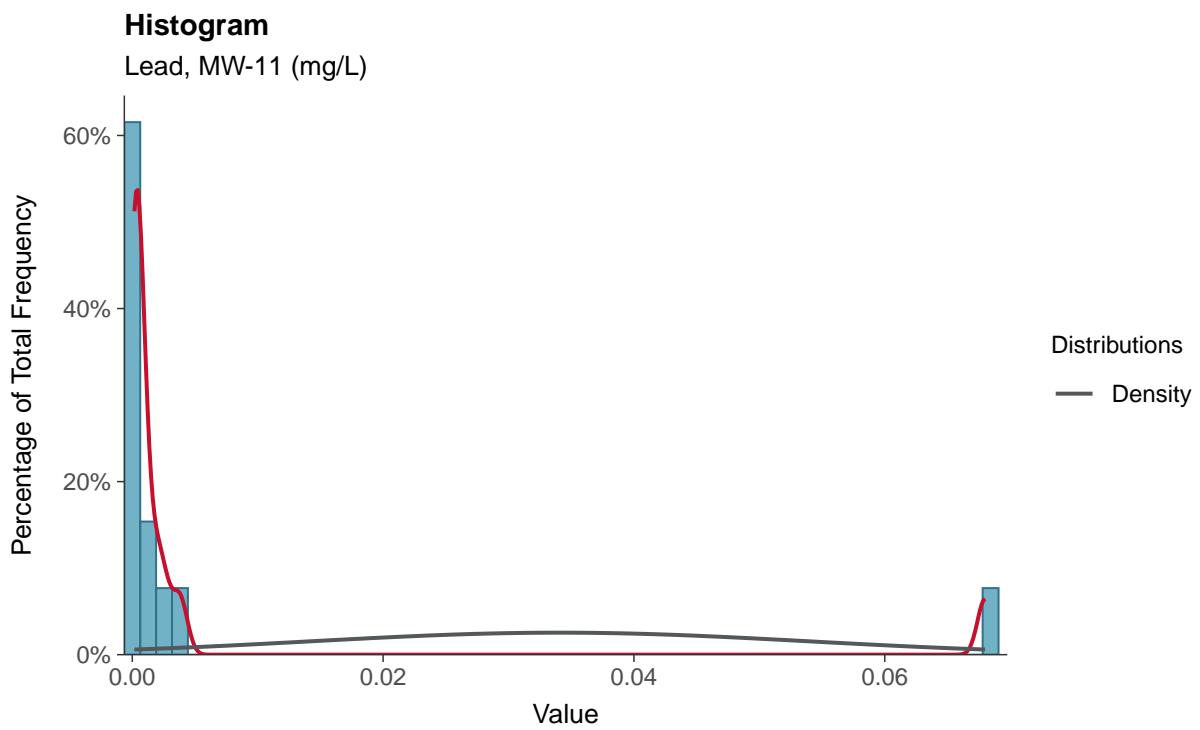
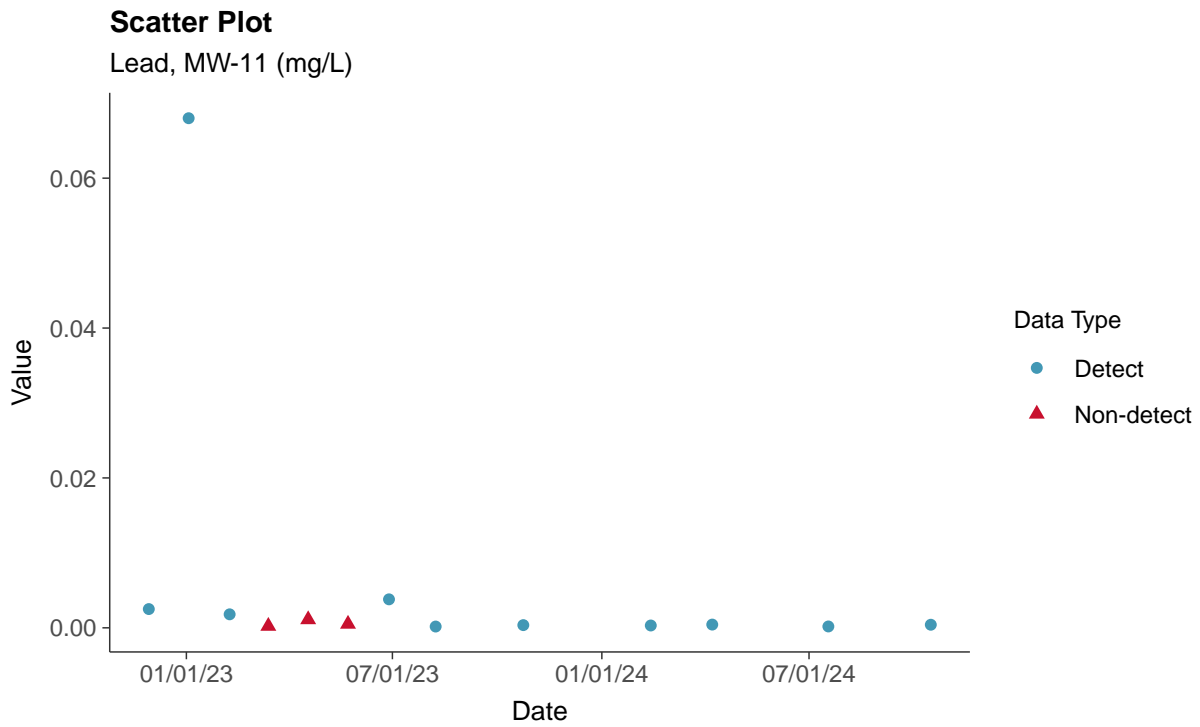
Fluoride (App IV), MW-11 (mg/L)





Appendix IV: Lead, MW-11

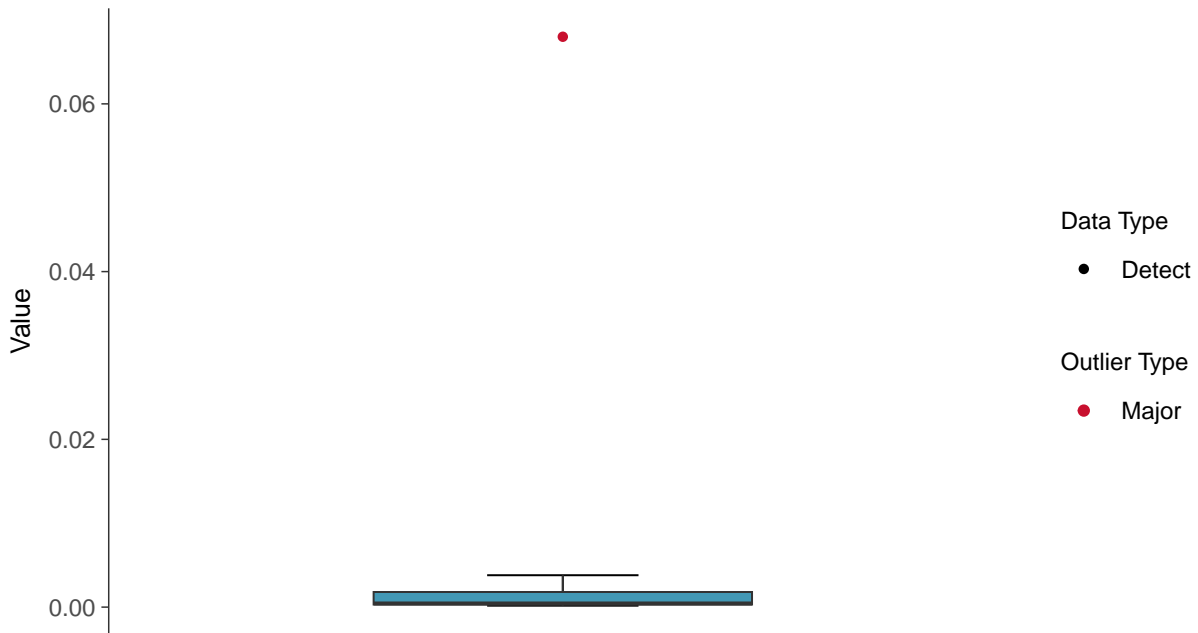
ID: 2_21_2_5_115





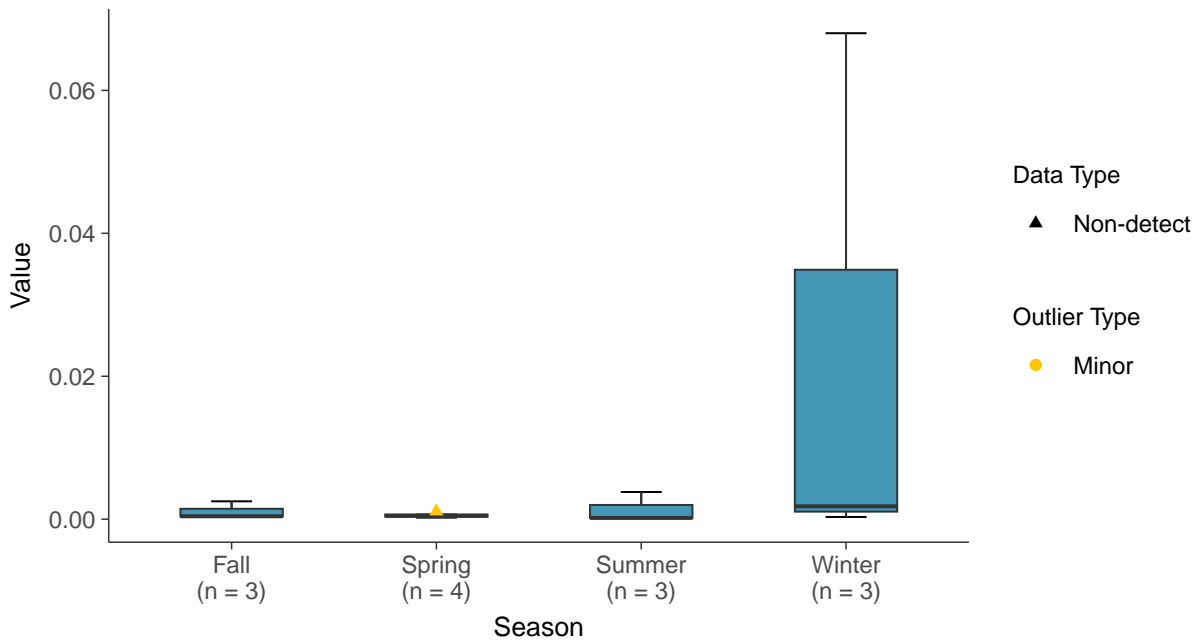
Boxplot

Lead, MW-11 (mg/L)



Boxplot by Season

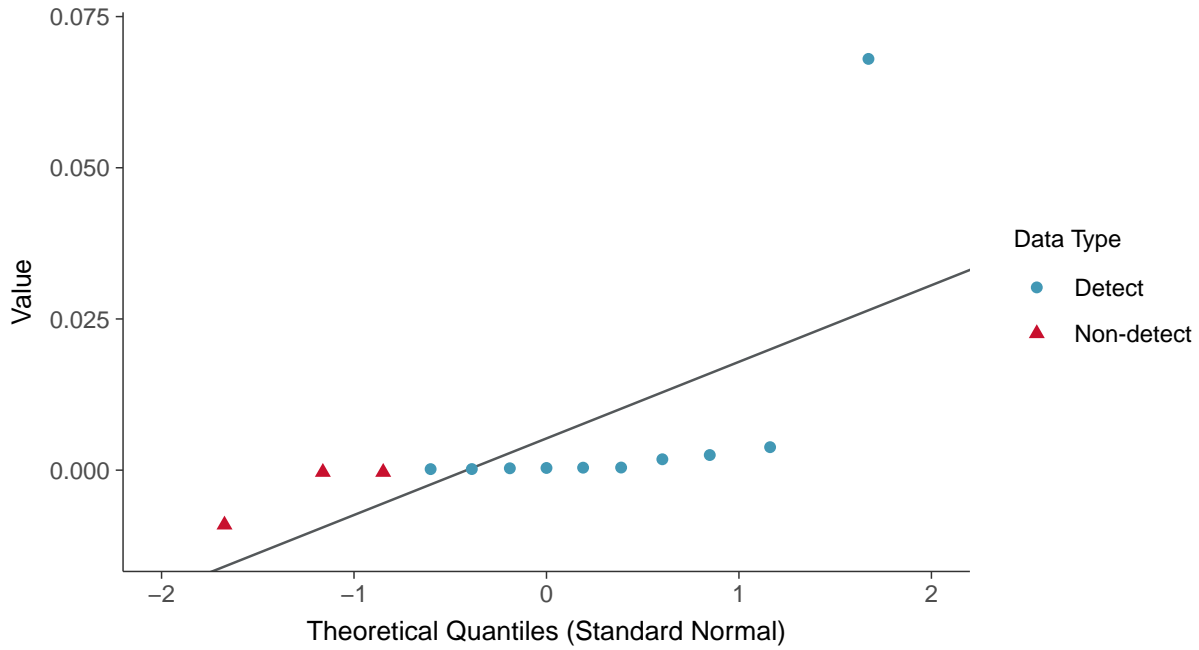
Lead, MW-11 (mg/L)





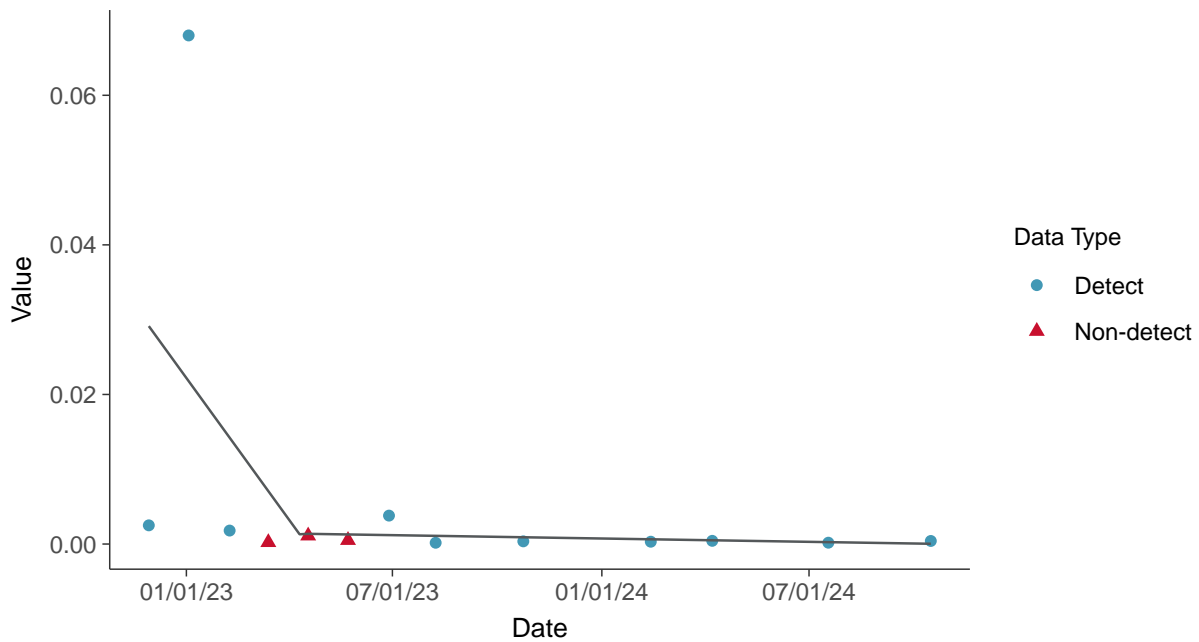
Normal Q-Q plot using ROS Imputed Estimates

Lead, MW-11 (mg/L)



Trend Regression: Piecewise Linear-Linear

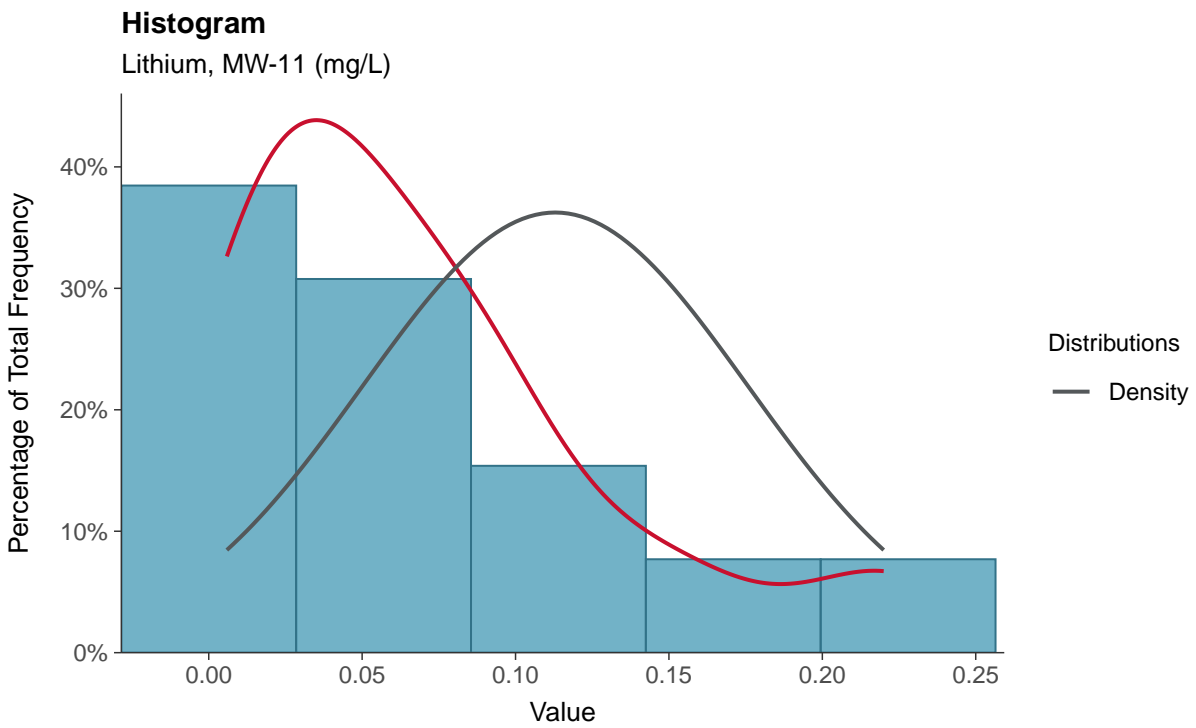
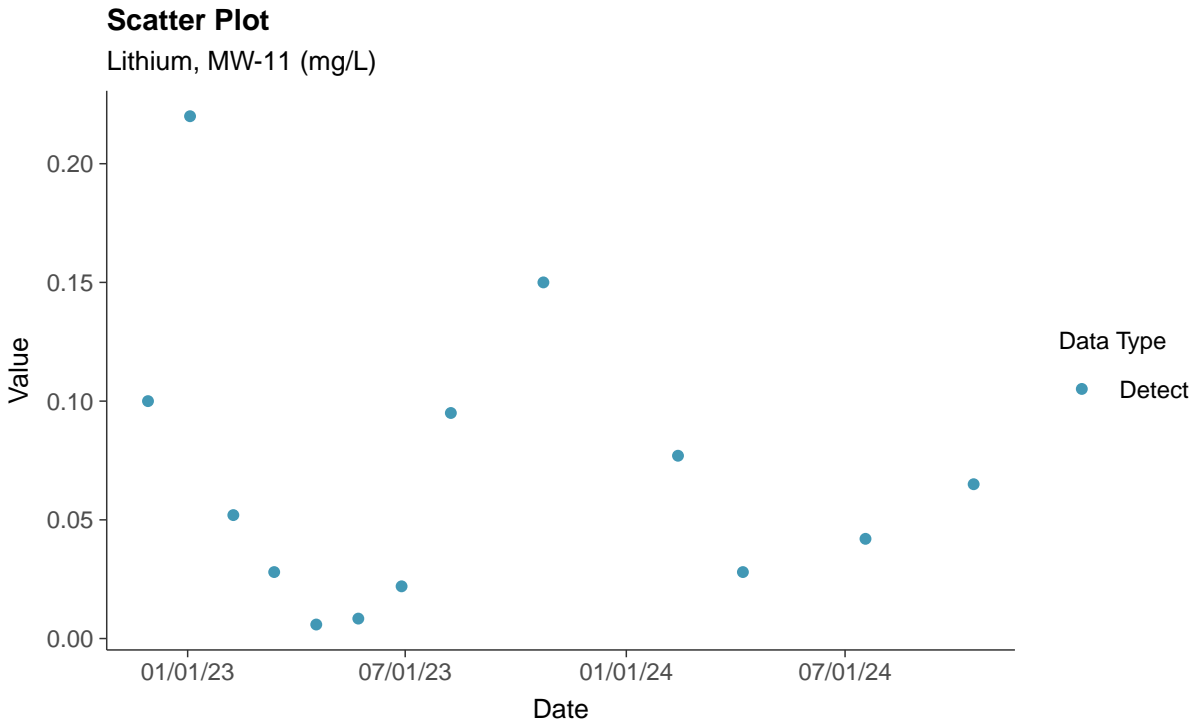
Lead, MW-11 (mg/L)





Appendix IV: Lithium, MW-11

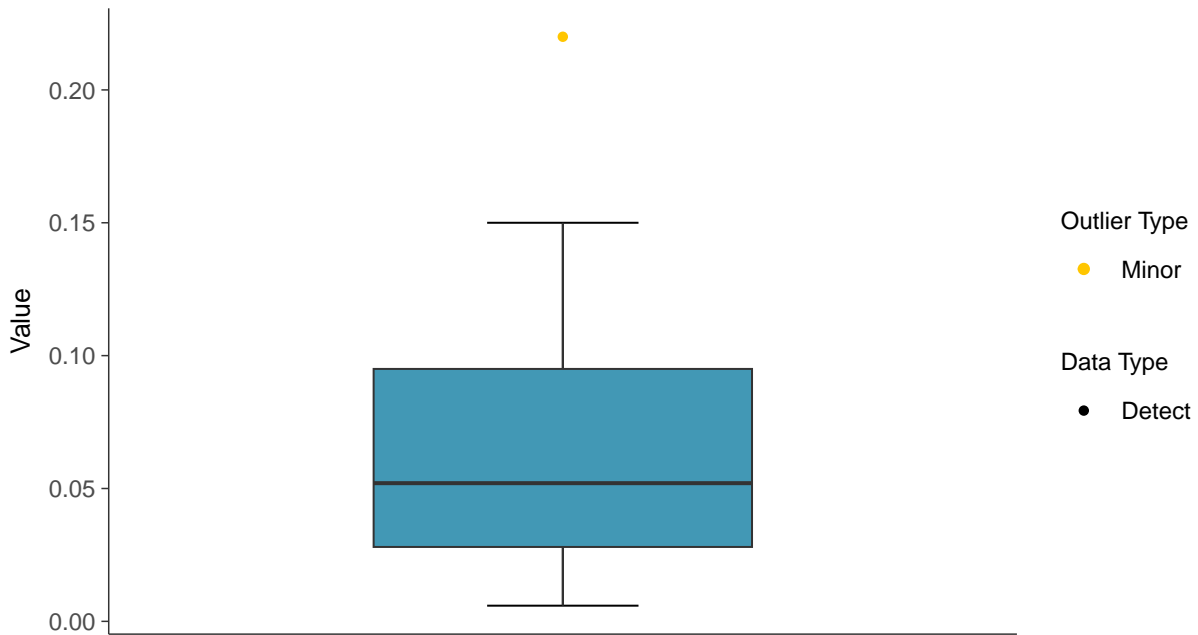
ID: 2_21_2_5_116





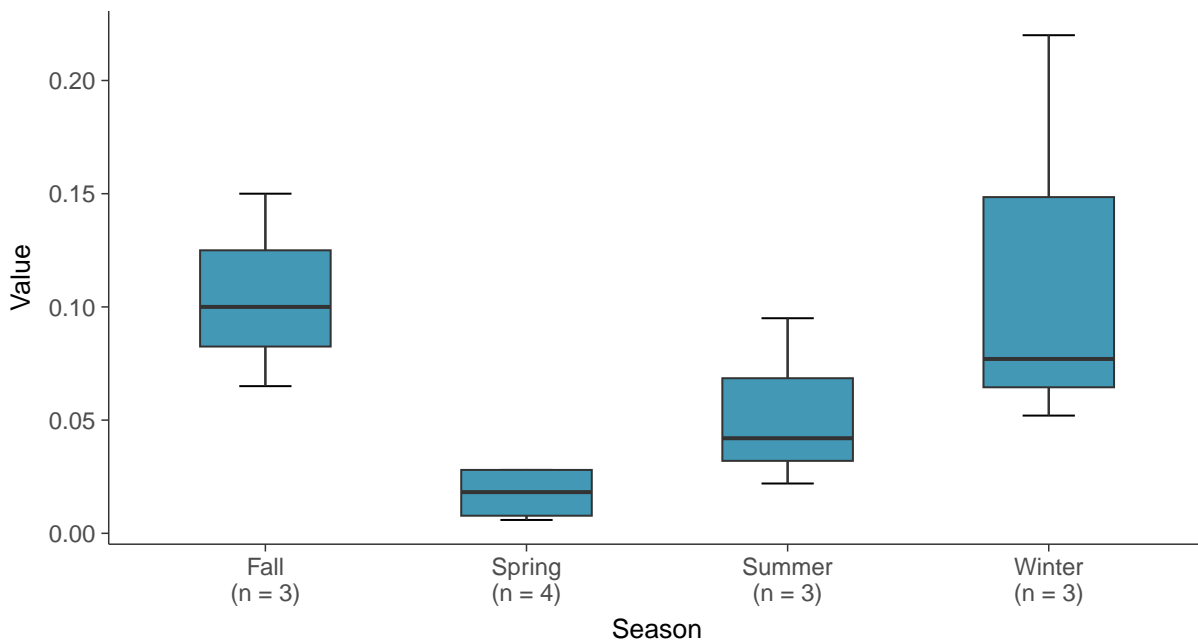
Boxplot

Lithium, MW-11 (mg/L)



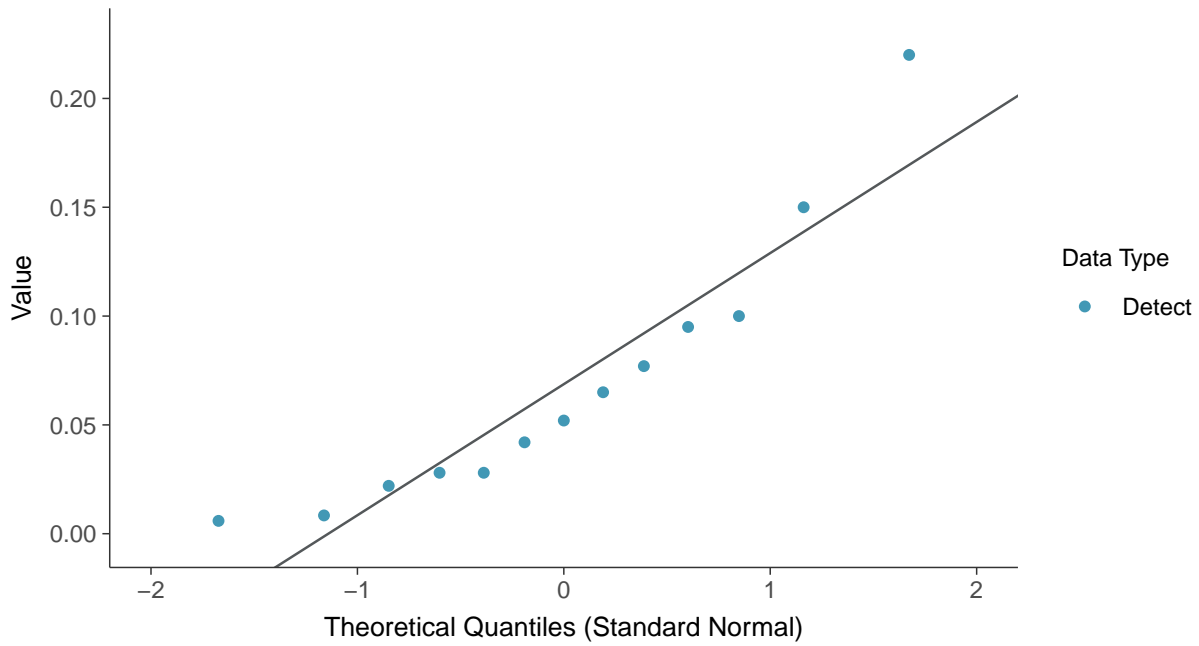
Boxplot by Season

Lithium, MW-11 (mg/L)

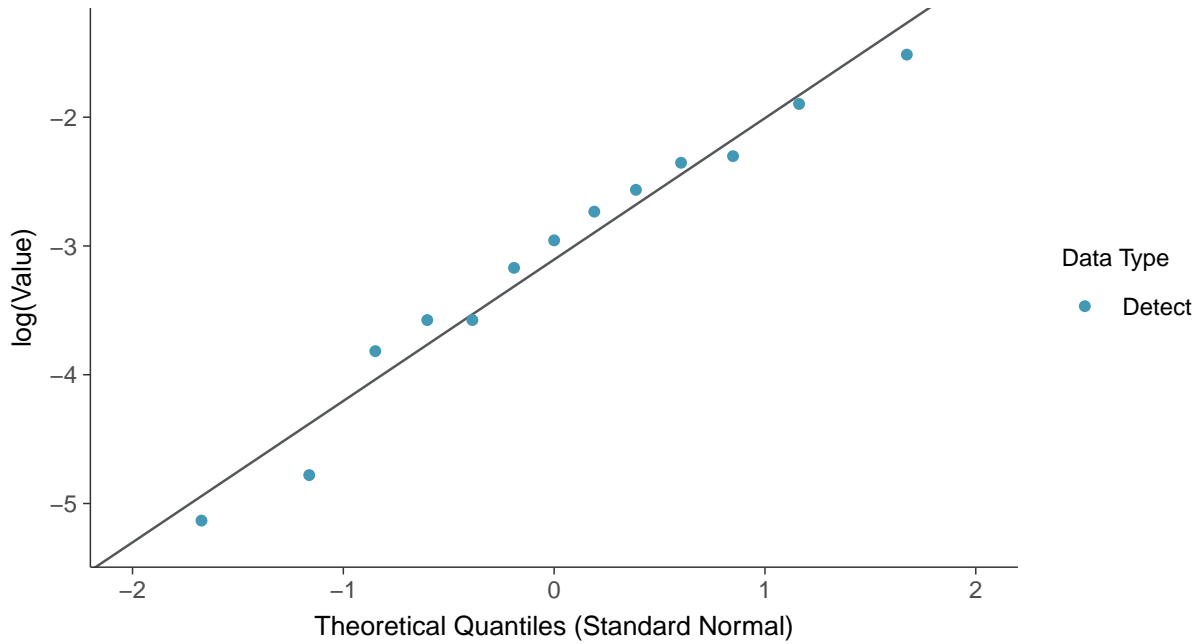




Normal Q-Q plot
Lithium, MW-11 (mg/L)

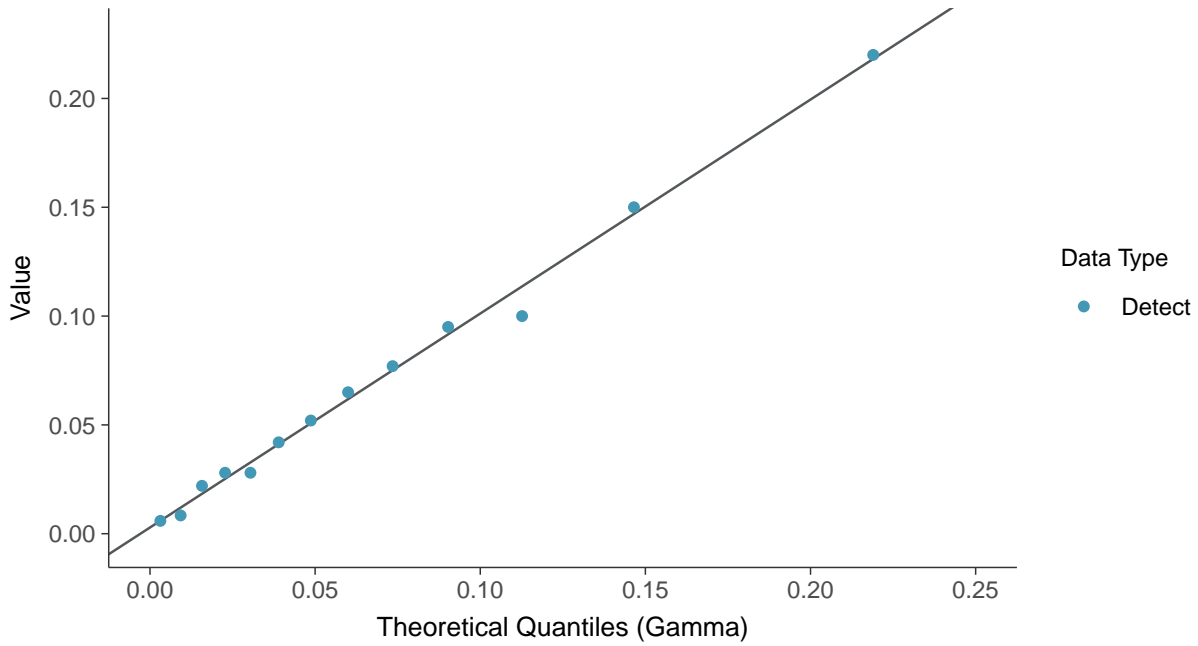


Lognormal Q-Q plot
Lithium, MW-11 (mg/L)

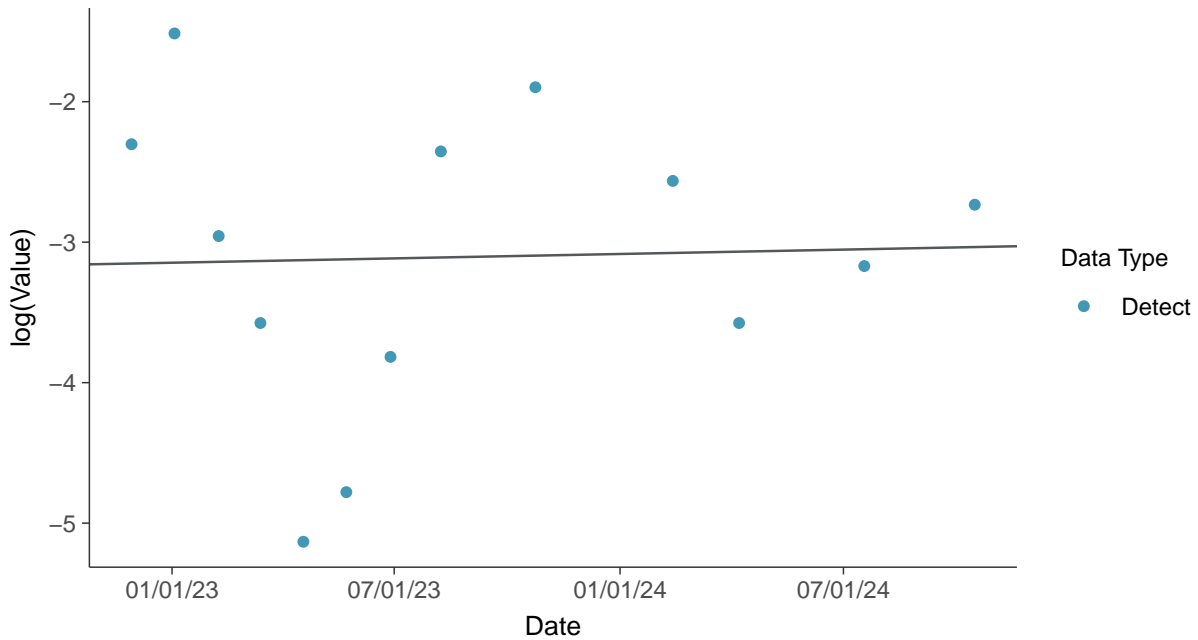




Gamma Q-Q plot
Lithium, MW-11 (mg/L)



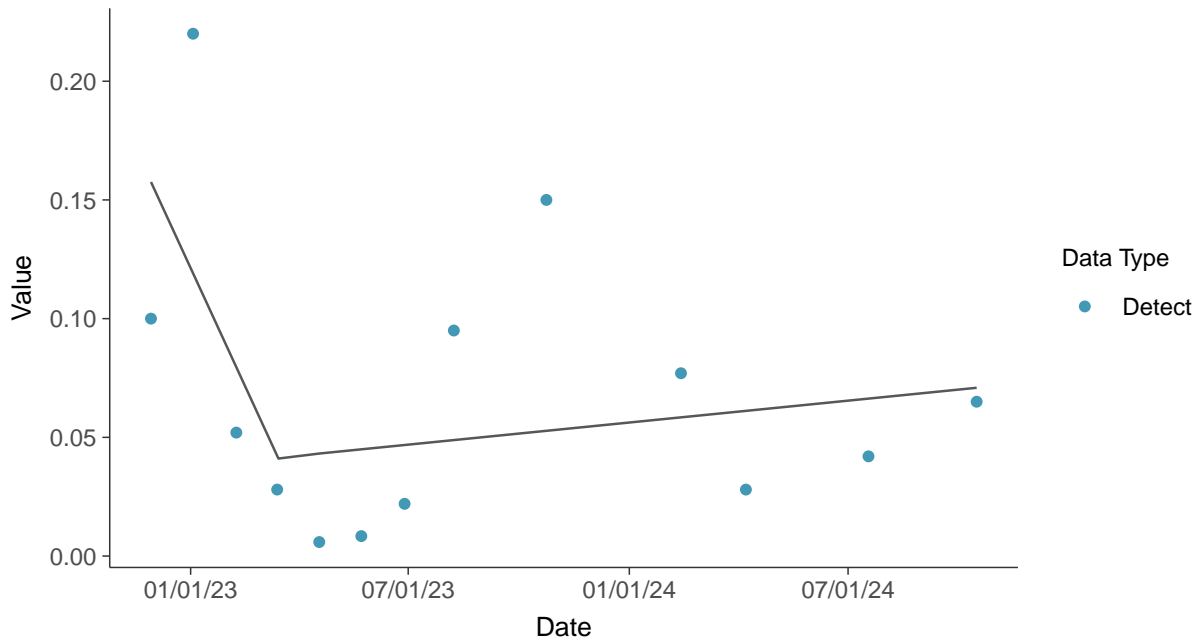
Trend Regression: Lognormal MLE
Lithium, MW-11 (mg/L)





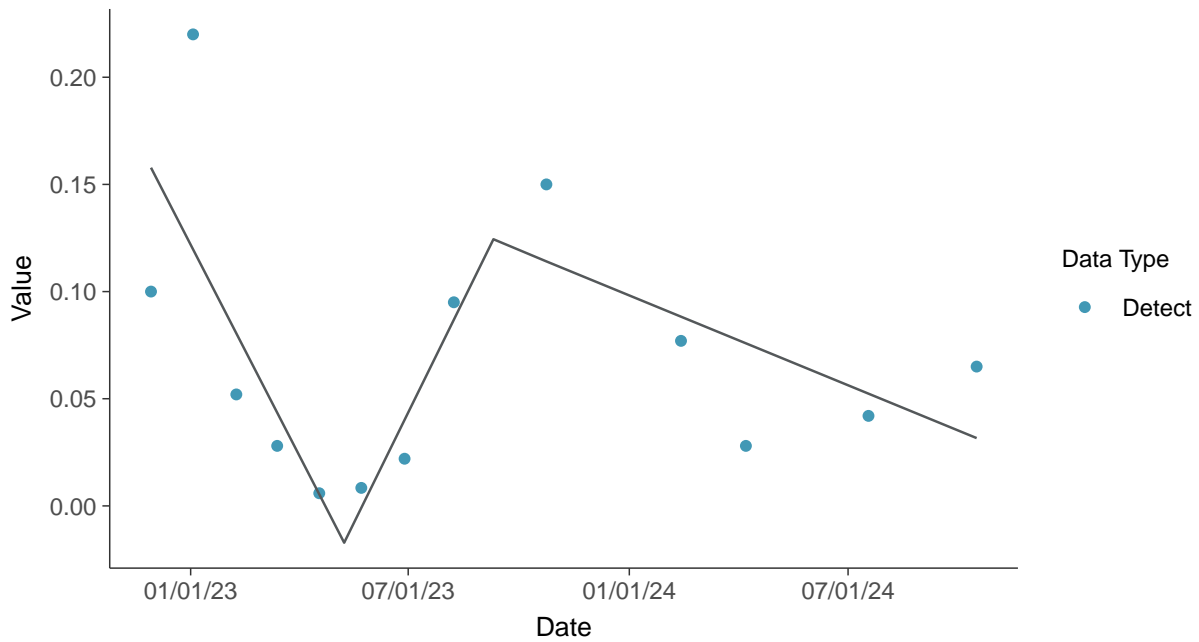
Trend Regression: Piecewise Linear-Linear

Lithium, MW-11 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Lithium, MW-11 (mg/L)



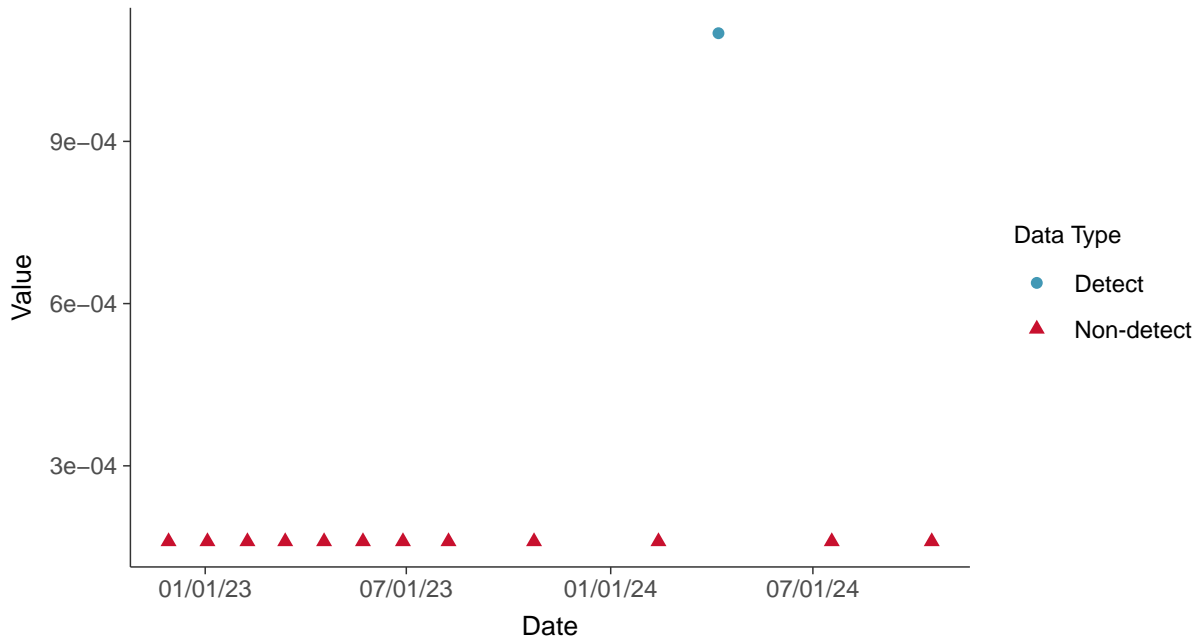


Appendix IV: Mercury, MW-11

ID: 2_21_2_5_117

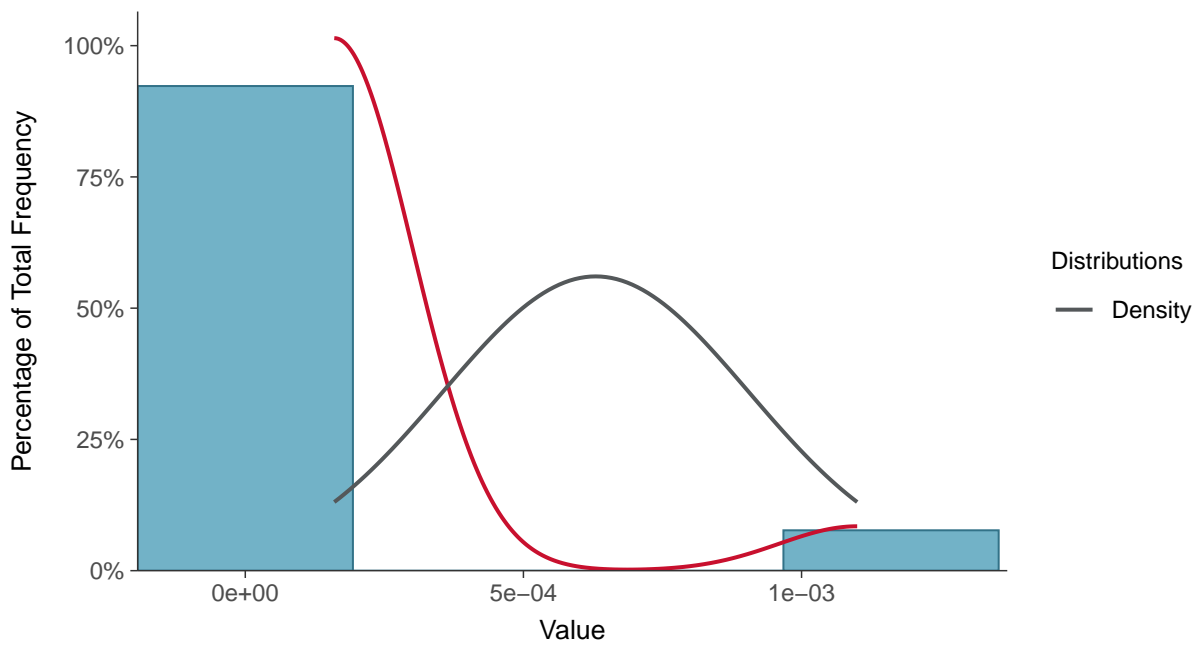
Scatter Plot

Mercury, MW-11 (mg/L)



Histogram

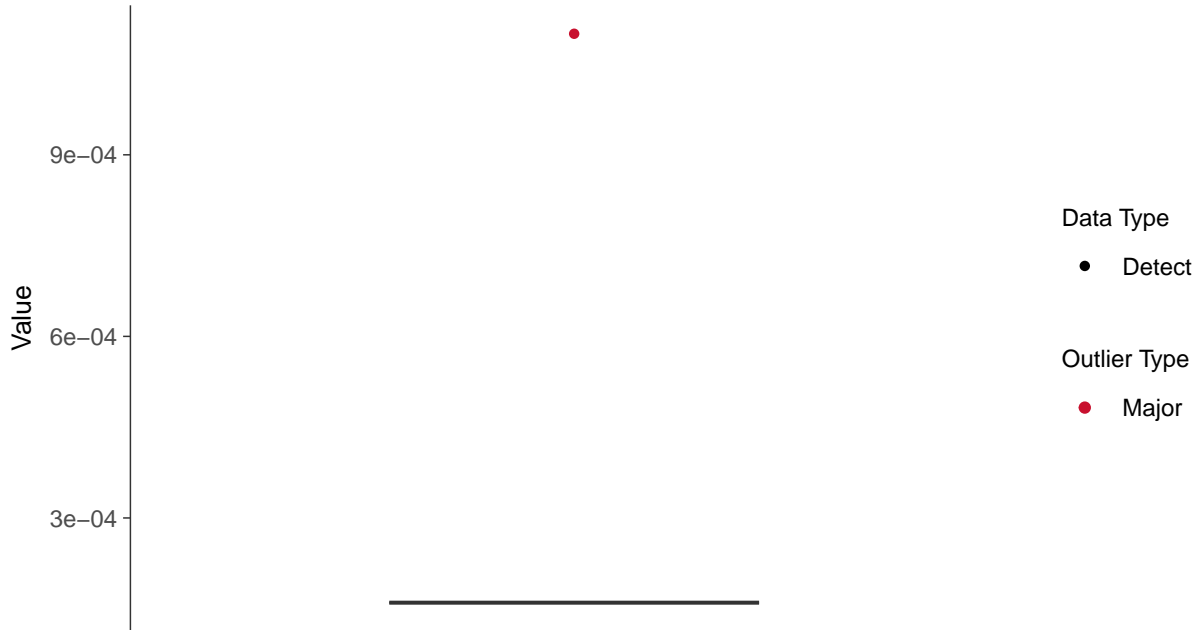
Mercury, MW-11 (mg/L)





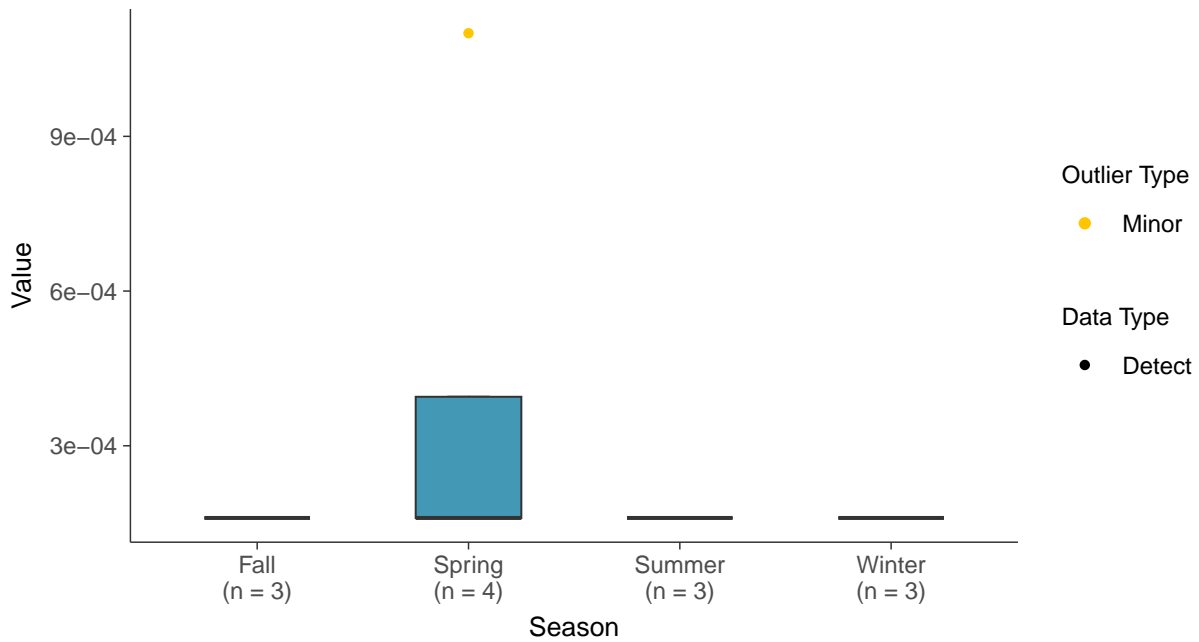
Boxplot

Mercury, MW-11 (mg/L)



Boxplot by Season

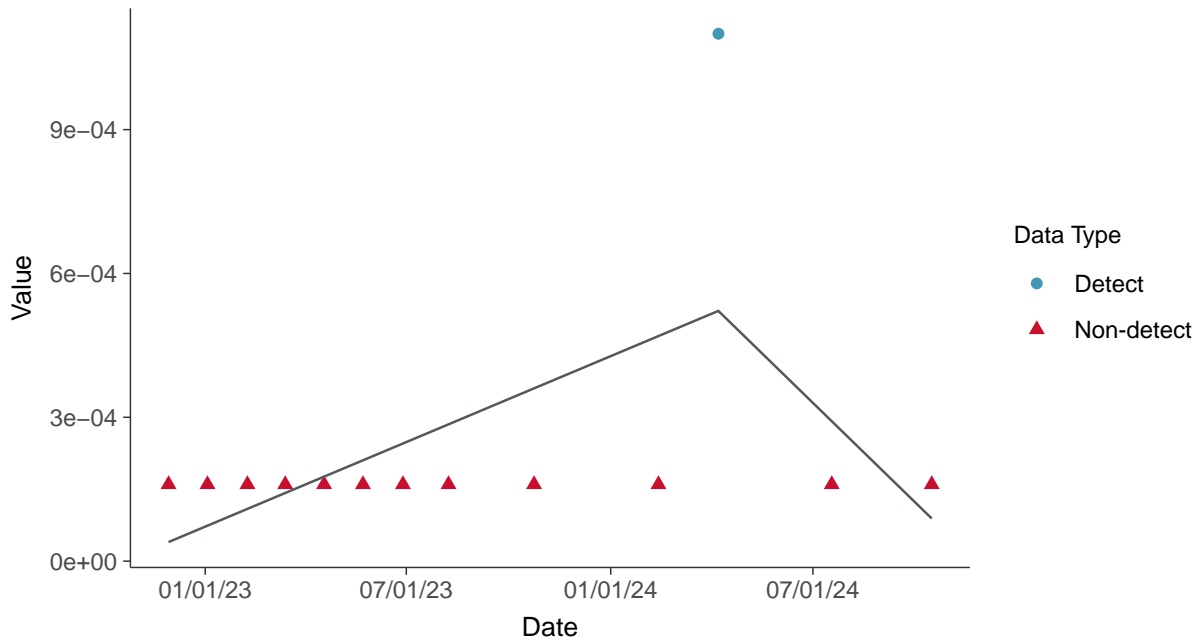
Mercury, MW-11 (mg/L)





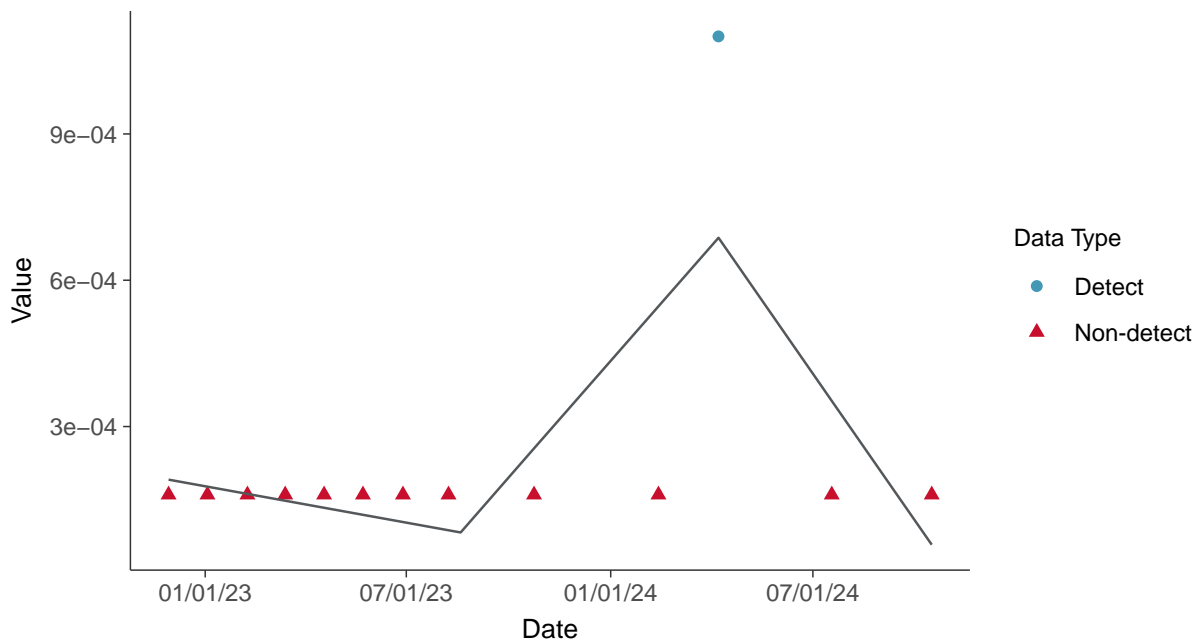
Trend Regression: Piecewise Linear-Linear

Mercury, MW-11 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Mercury, MW-11 (mg/L)



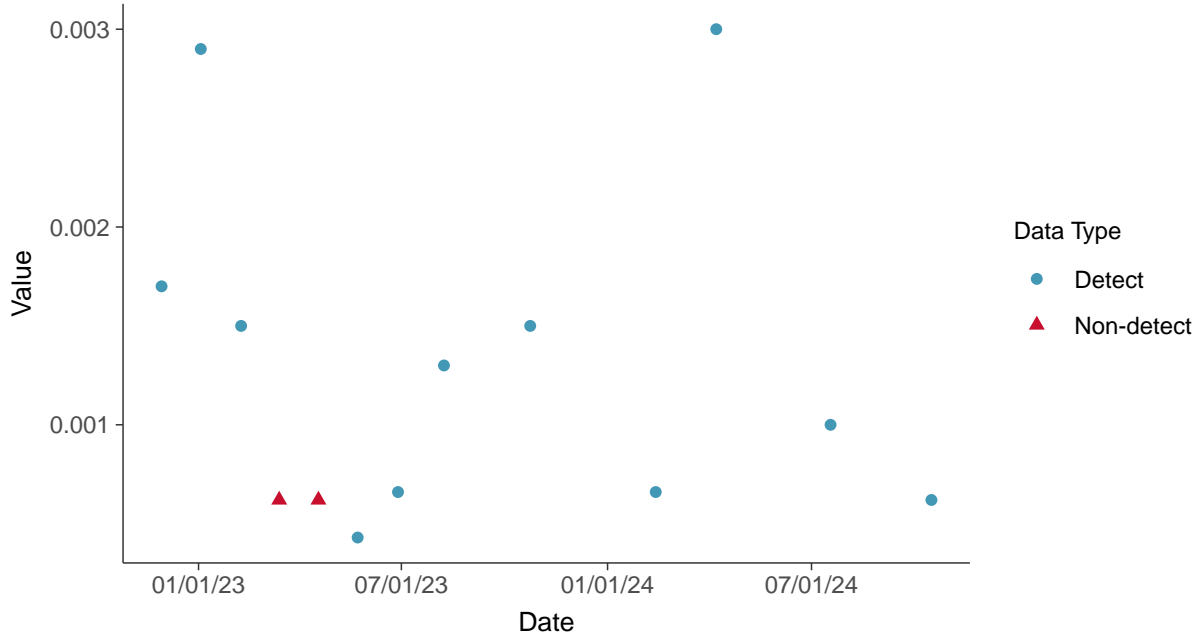


Appendix IV: Molybdenum, MW-11

ID: 2_21_2_5_118

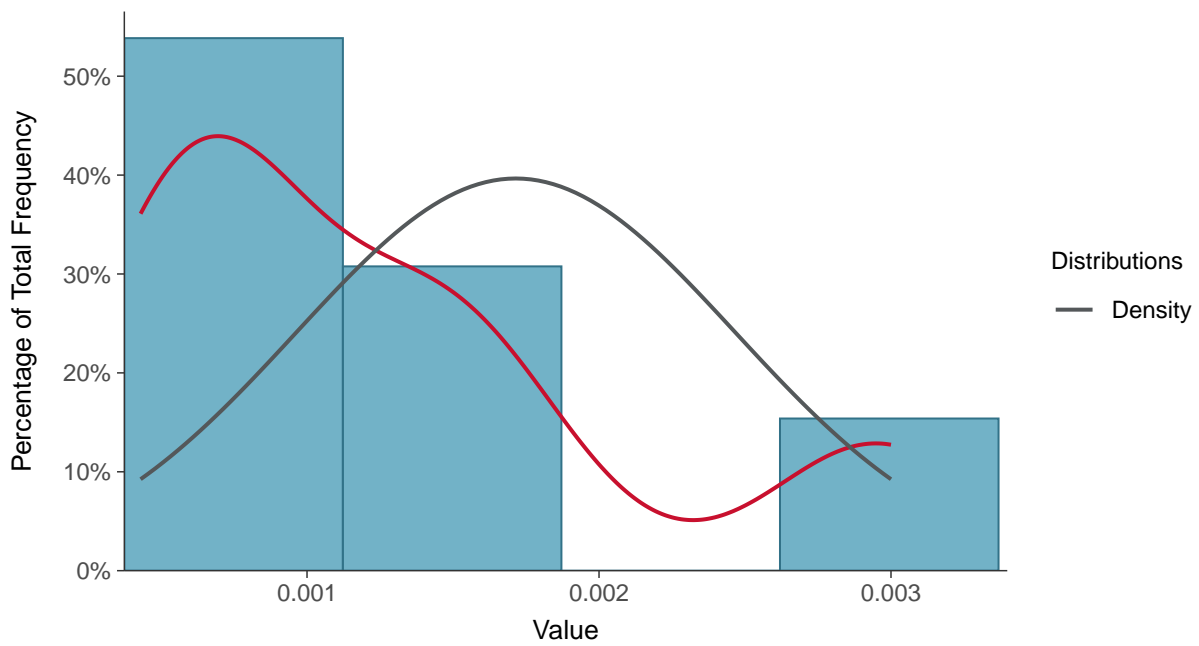
Scatter Plot

Molybdenum, MW-11 (mg/L)



Histogram

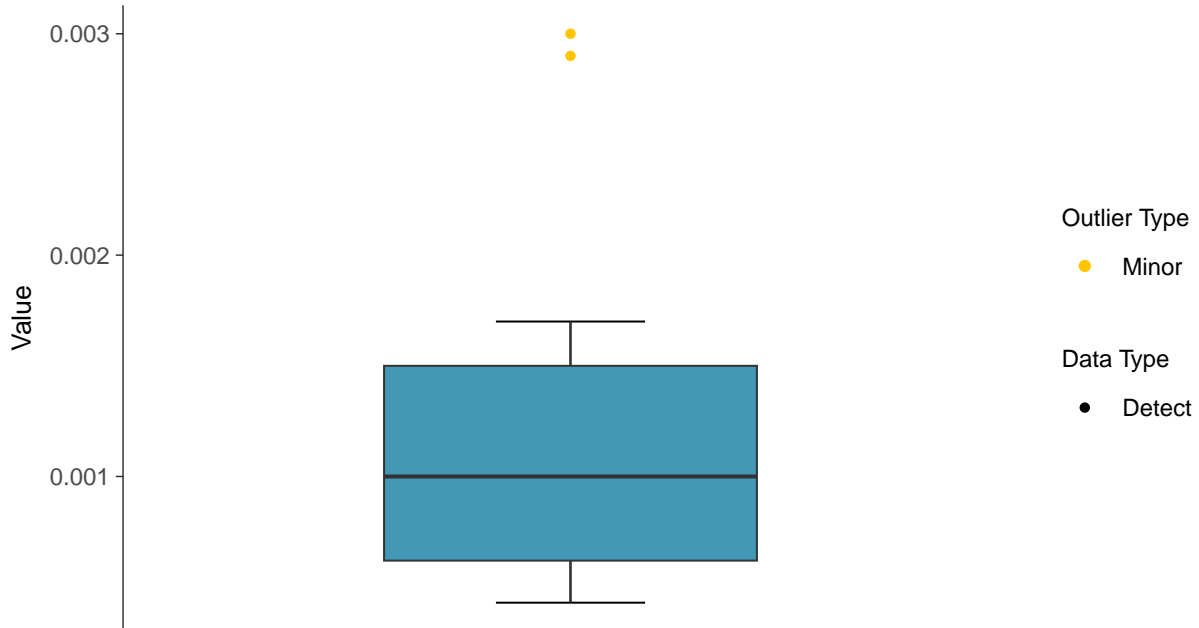
Molybdenum, MW-11 (mg/L)





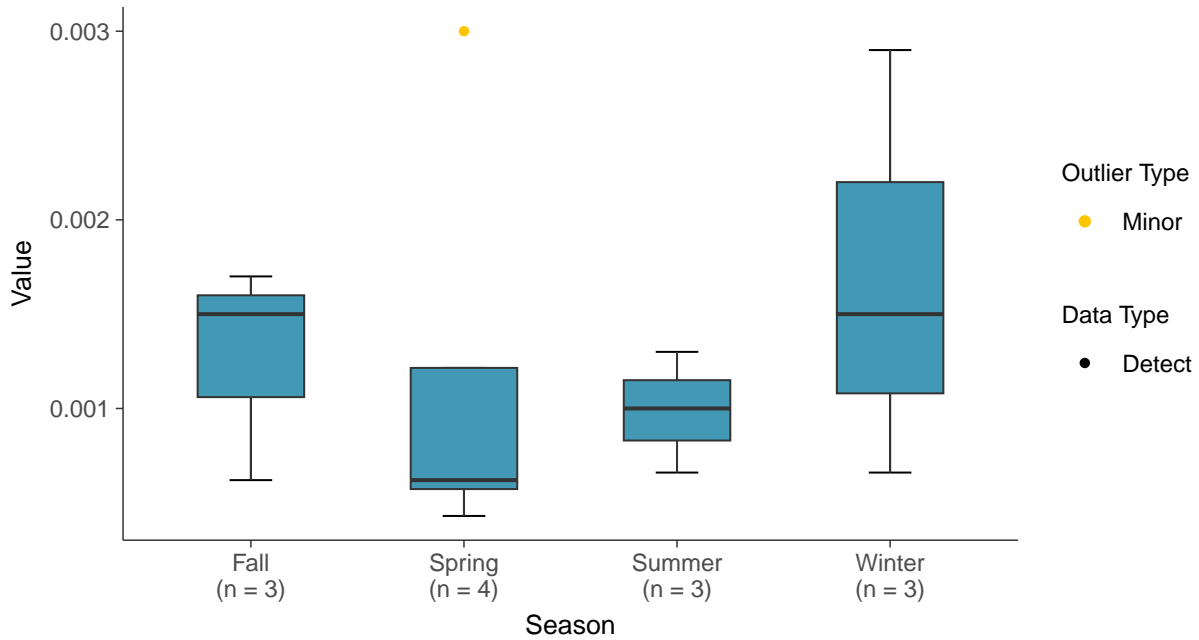
Boxplot

Molybdenum, MW-11 (mg/L)



Boxplot by Season

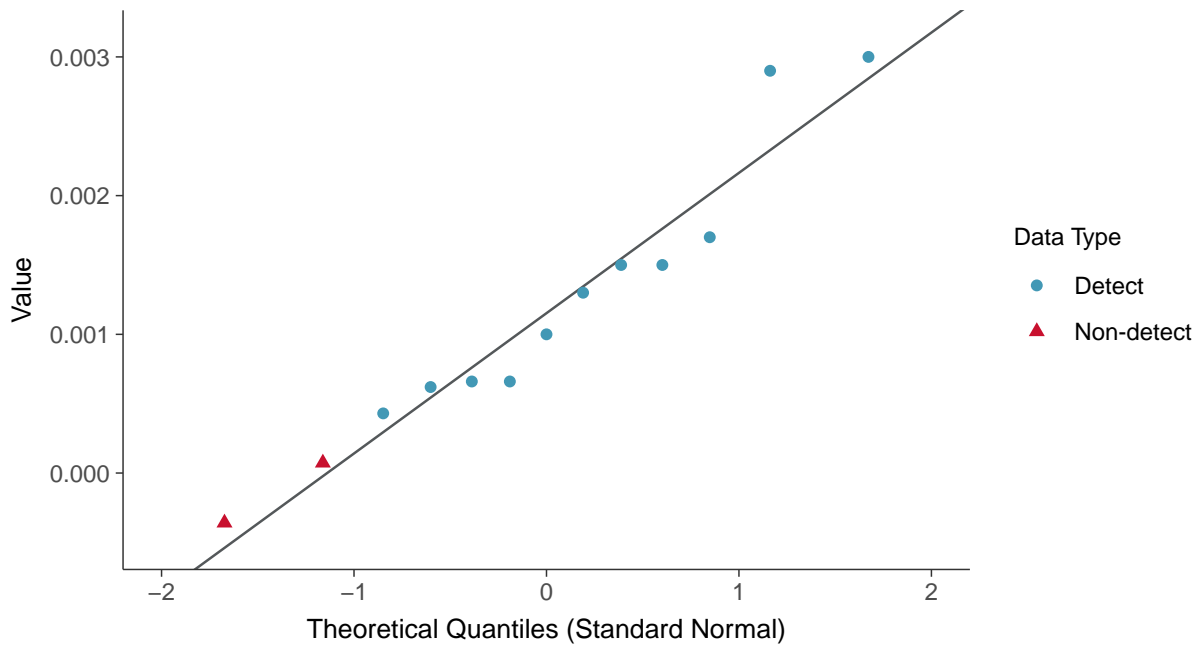
Molybdenum, MW-11 (mg/L)





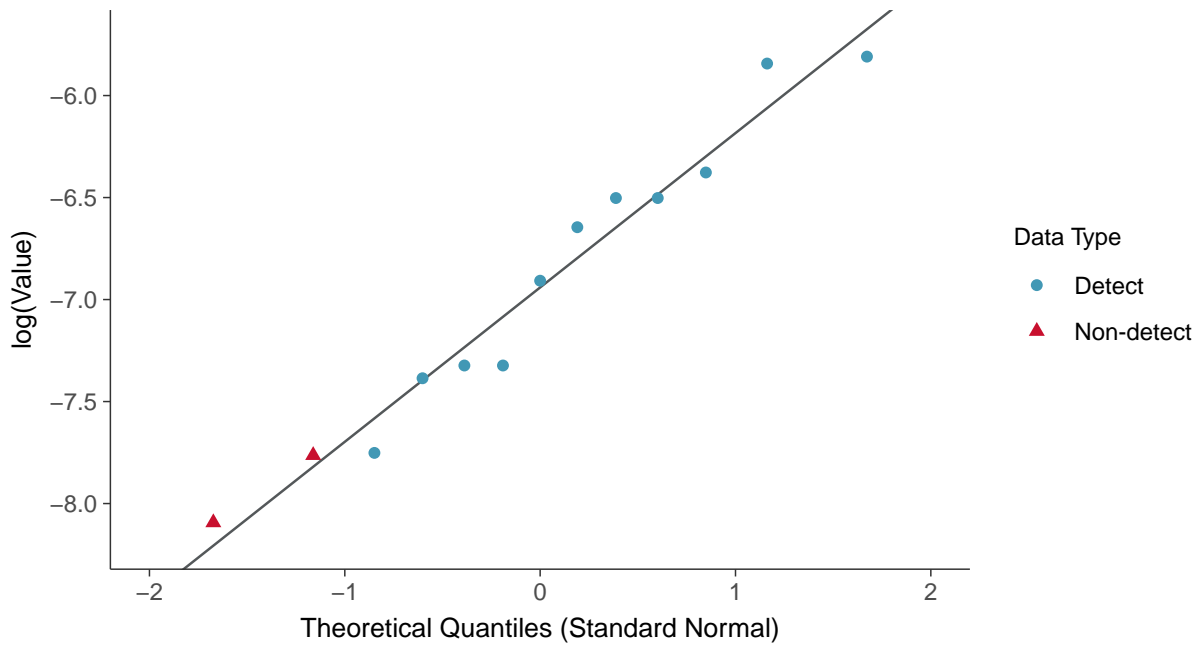
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-11 (mg/L)



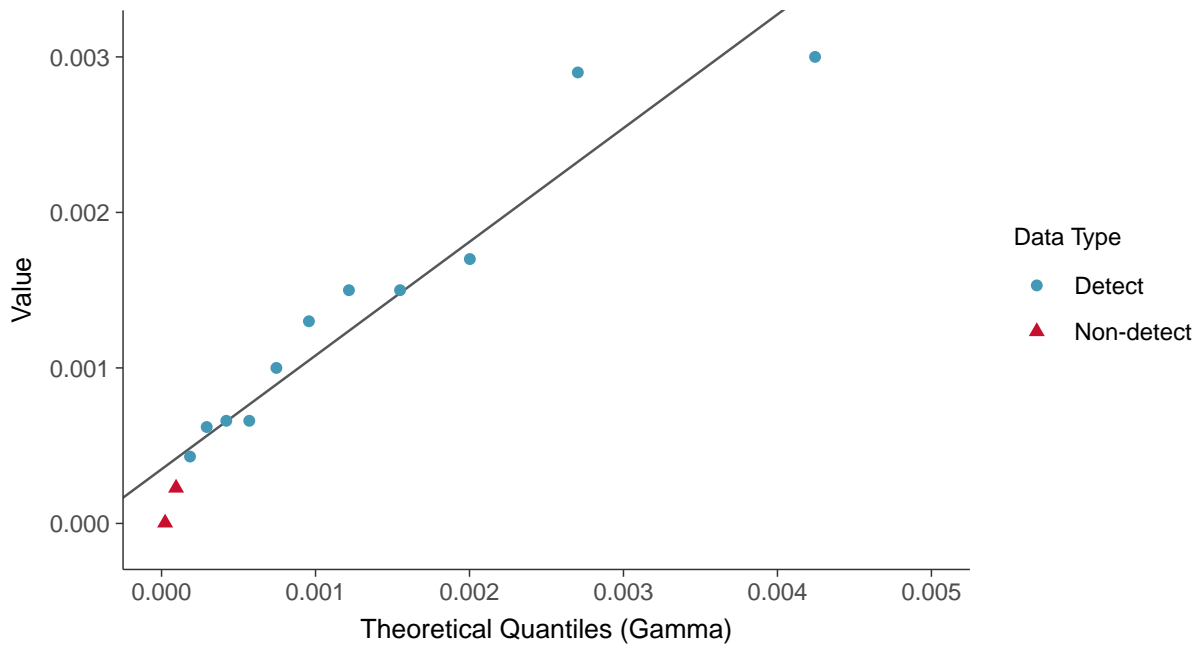
Lognormal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-11 (mg/L)

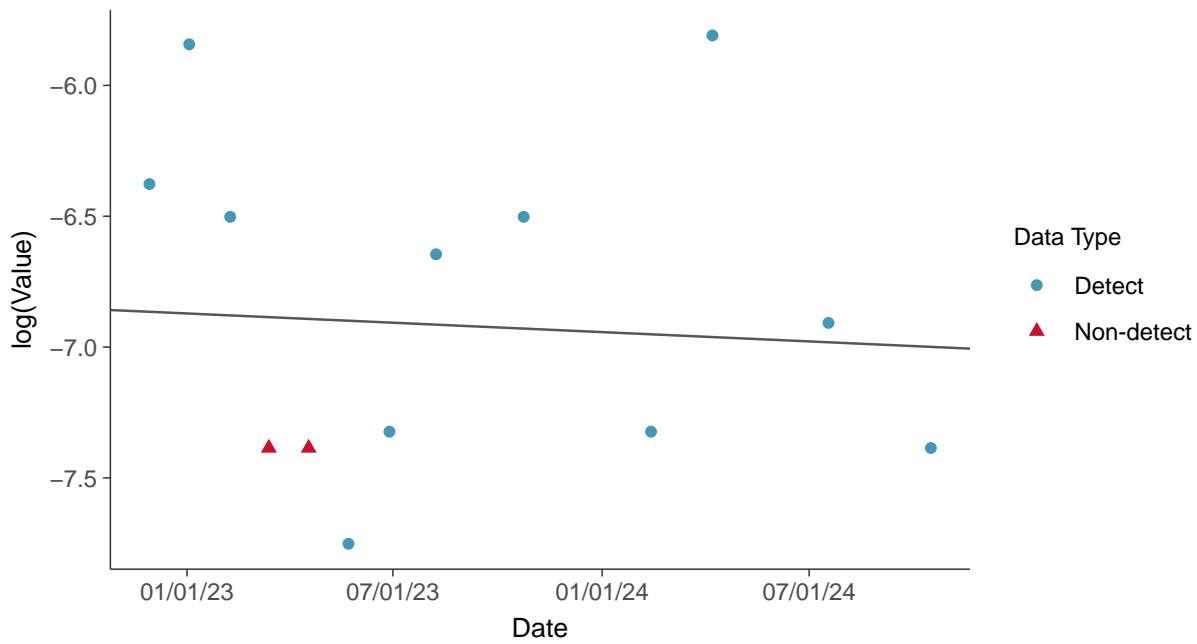




Gamma Q-Q plot using ROS Imputed Estimates
Molybdenum, MW-11 (mg/L)

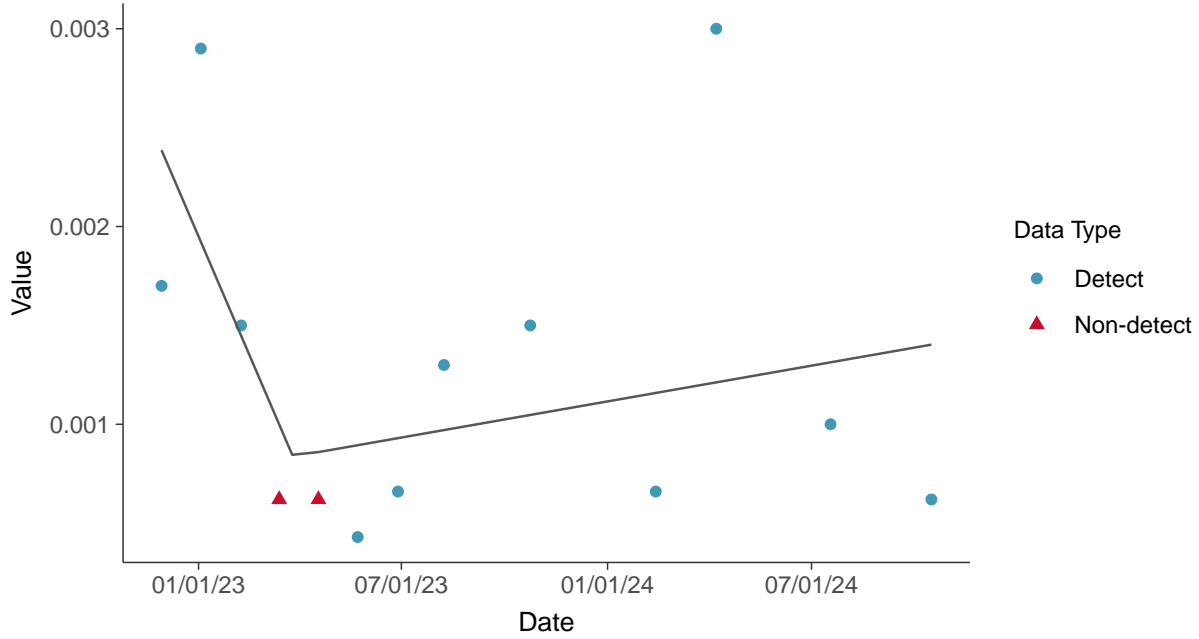


Trend Regression: Lognormal MLE
Molybdenum, MW-11 (mg/L)

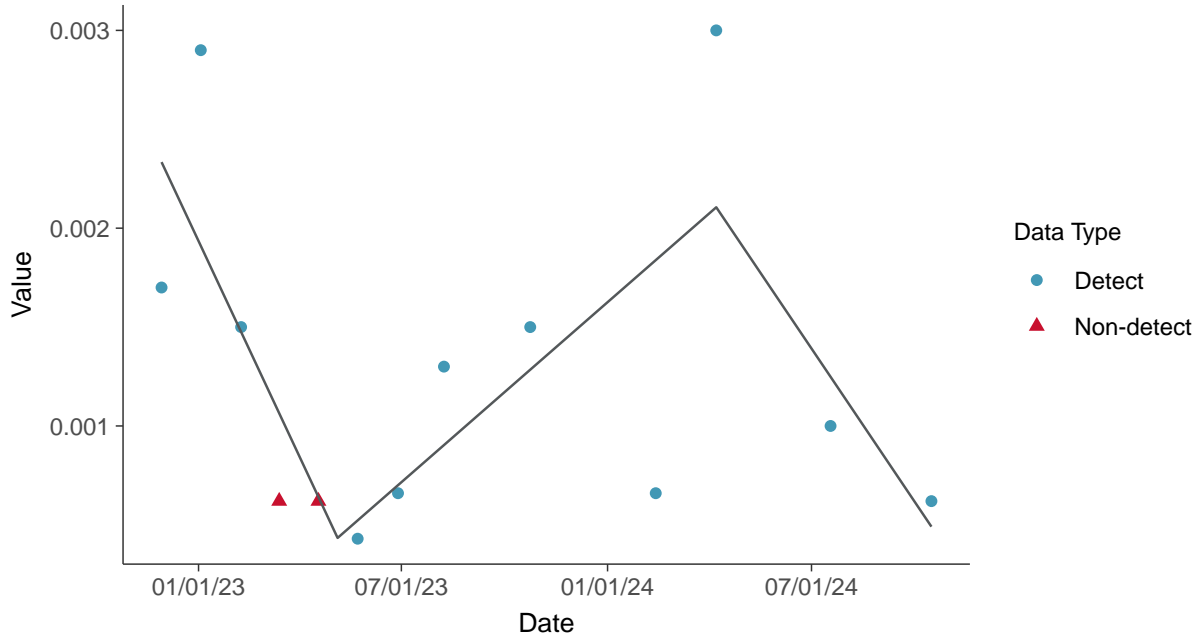




Trend Regression: Piecewise Linear-Linear
Molybdenum, MW-11 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Molybdenum, MW-11 (mg/L)



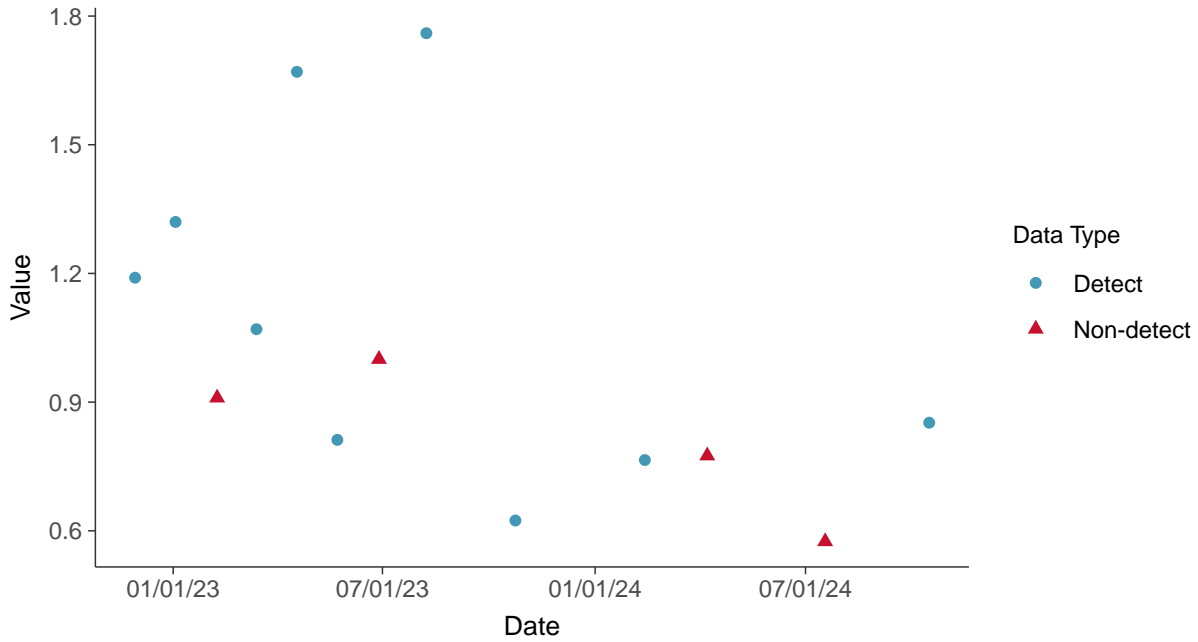


Appendix IV: Radium 226 and 228, MW-11

ID: 2_21_2_5_121

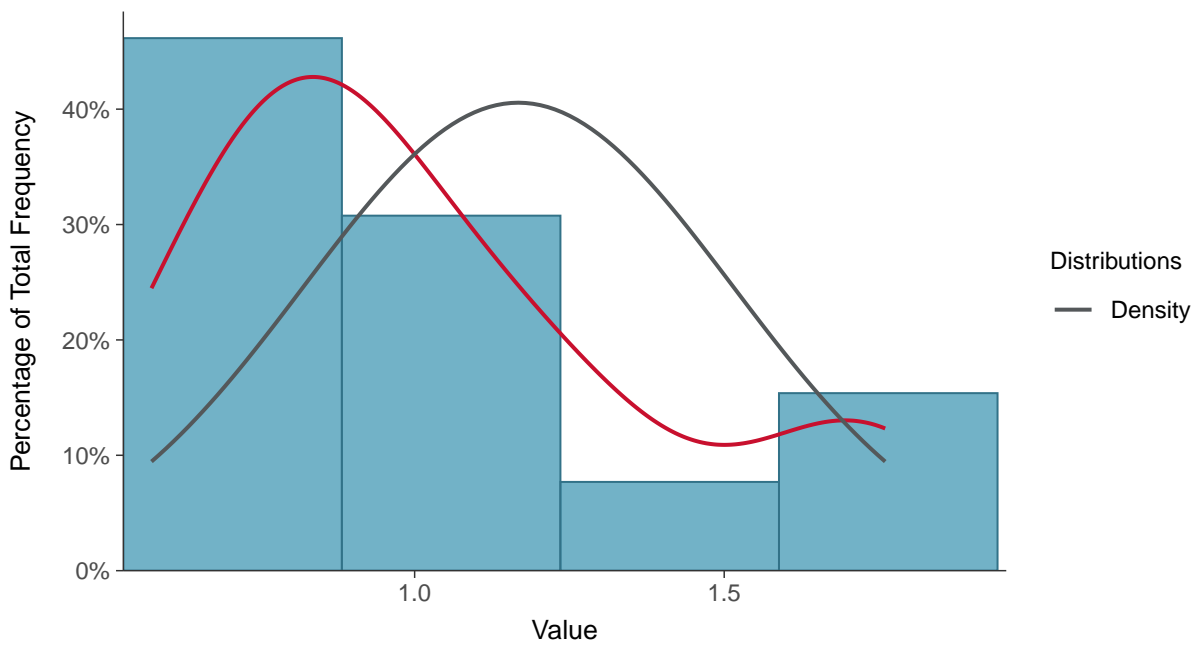
Scatter Plot

Radium 226 and 228, MW-11 (pCi/L)



Histogram

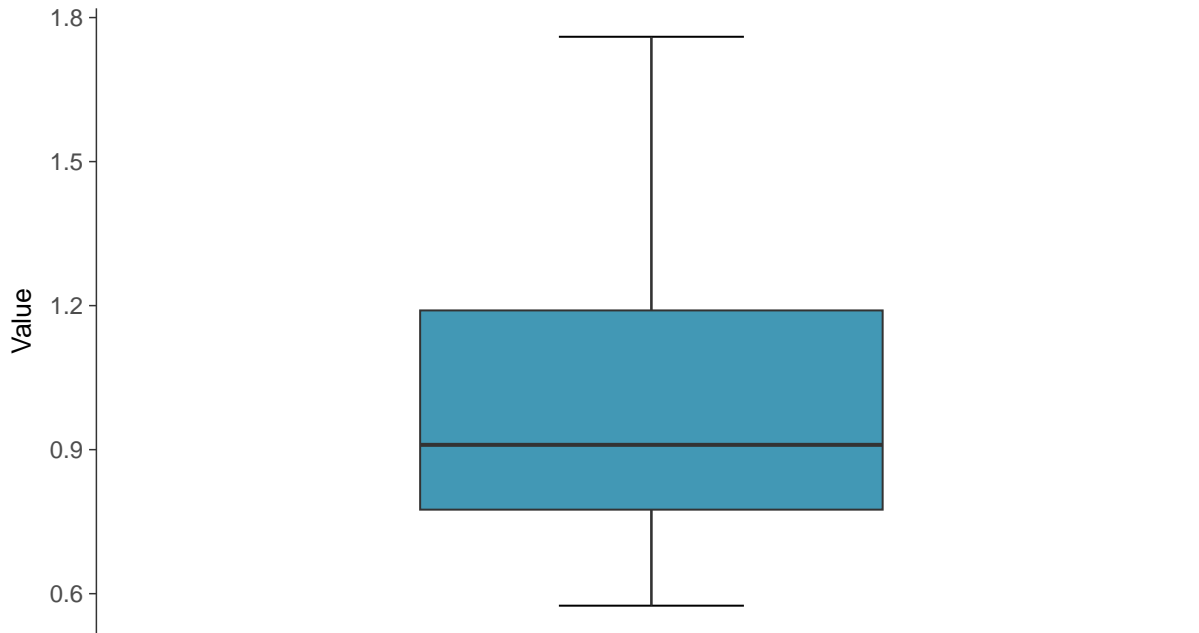
Radium 226 and 228, MW-11 (pCi/L)





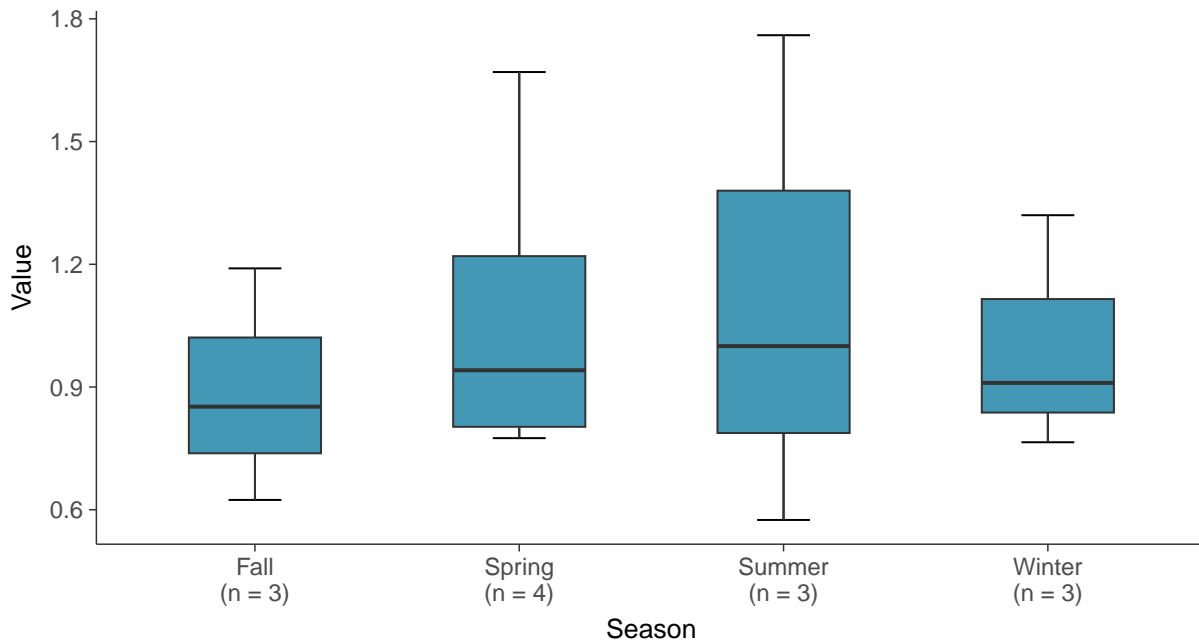
Boxplot

Radium 226 and 228, MW-11 (pCi/L)



Boxplot by Season

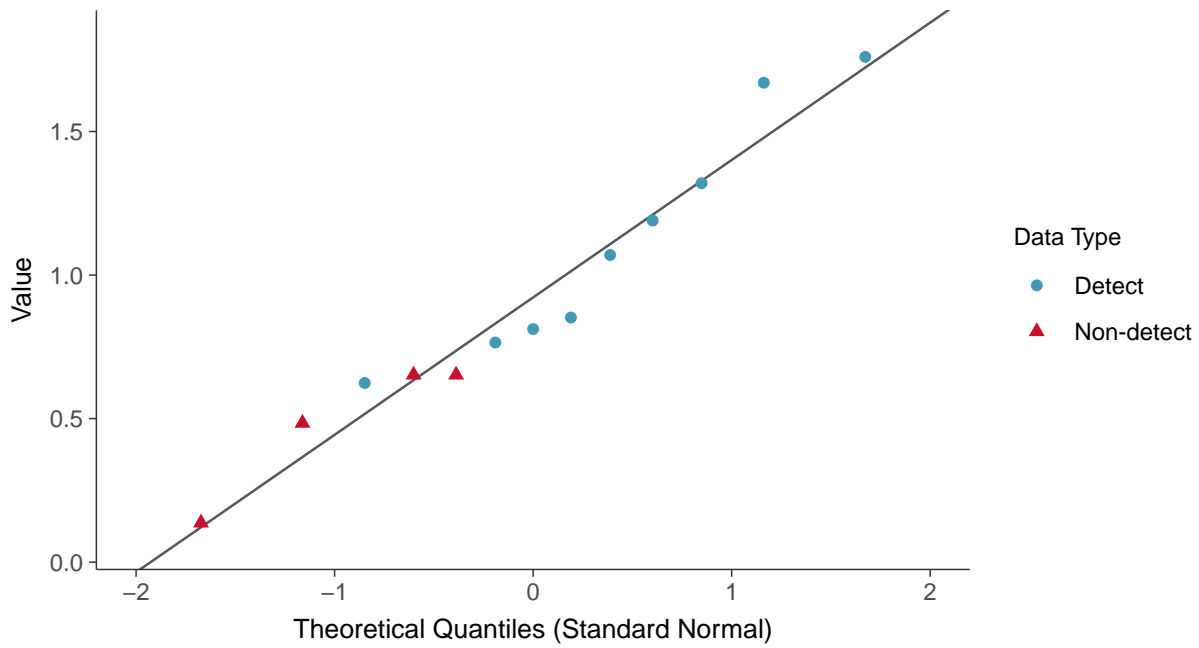
Radium 226 and 228, MW-11 (pCi/L)





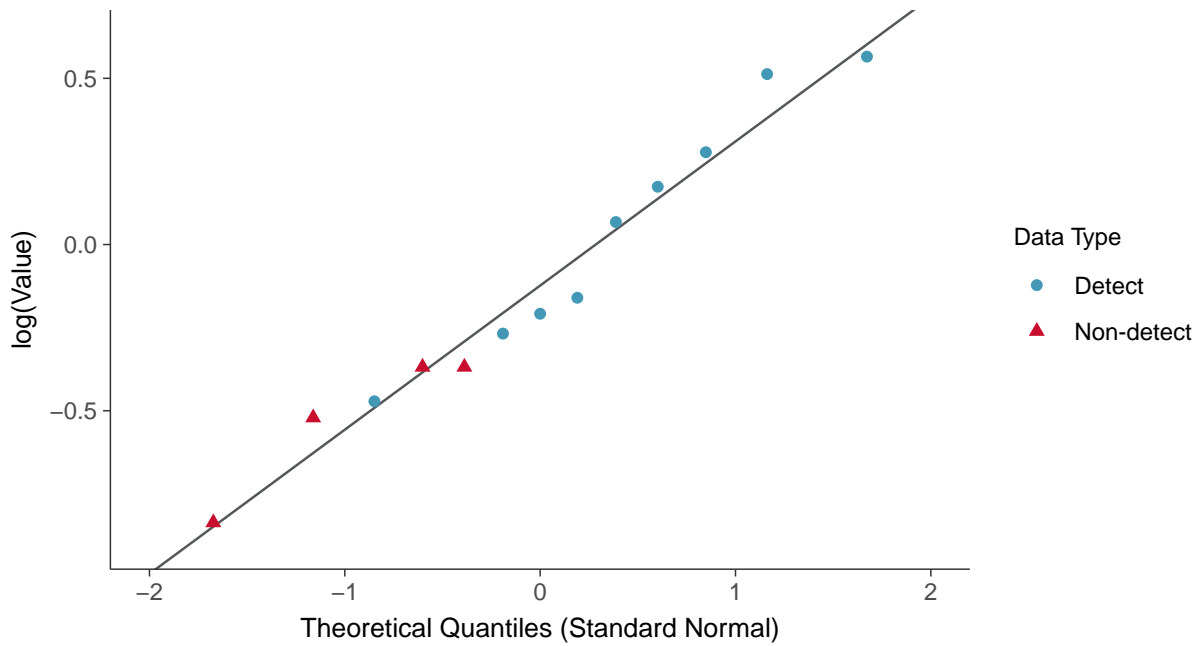
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-11 (pCi/L)



Lognormal Q-Q plot using ROS Imputed Estimates

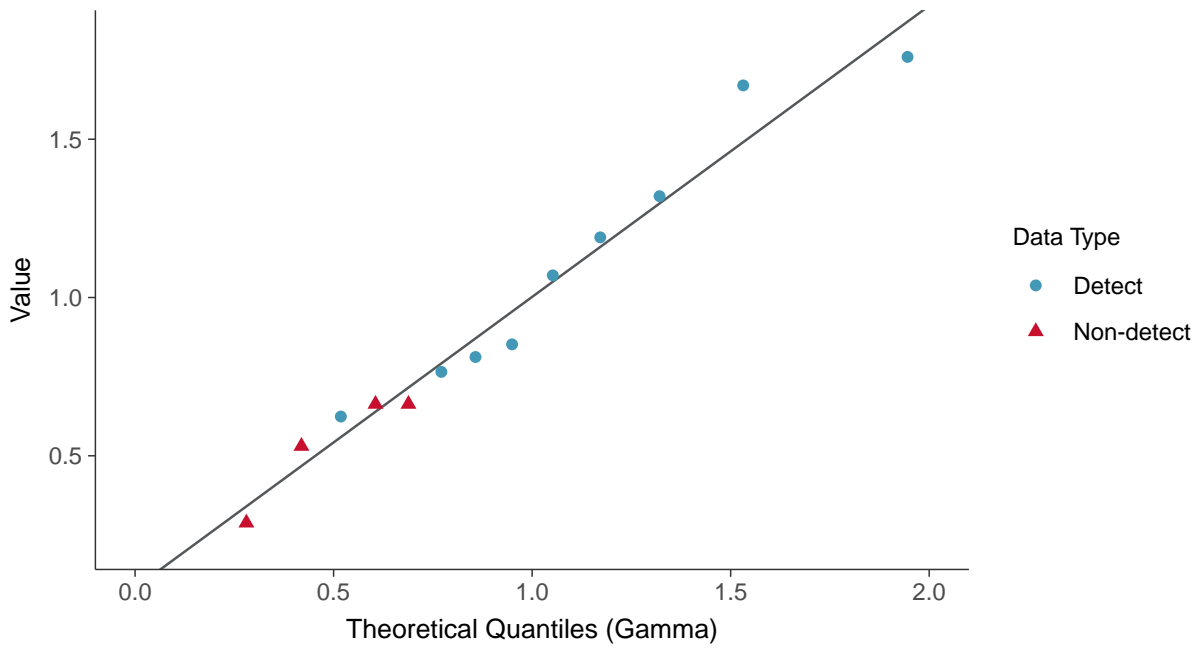
Radium 226 and 228, MW-11 (pCi/L)





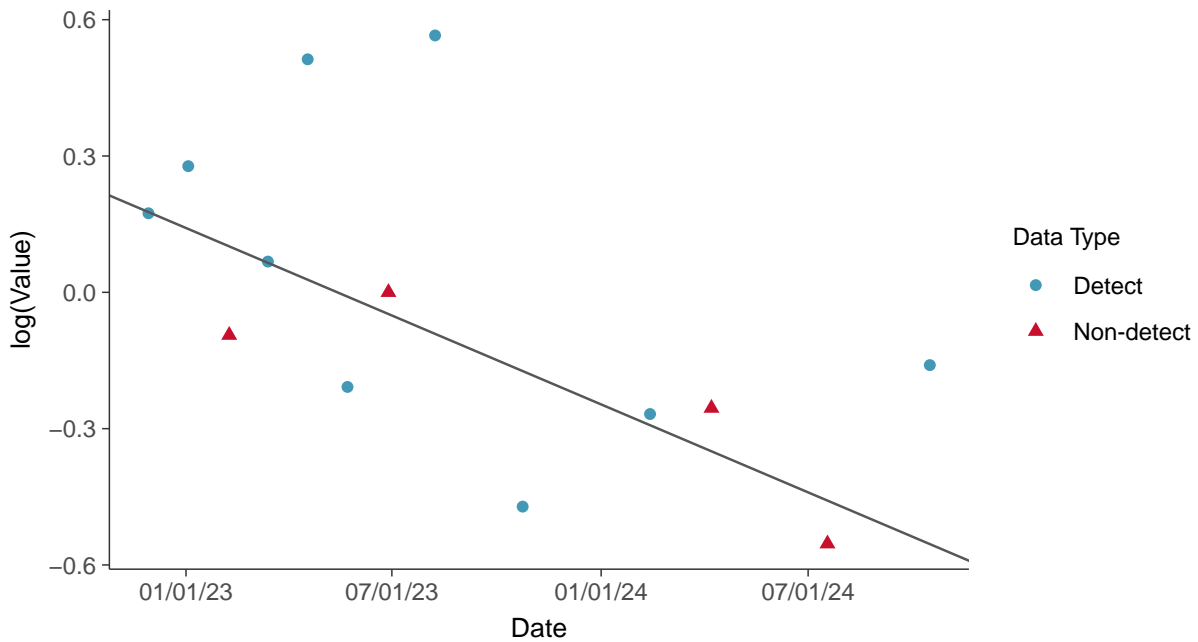
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-11 (pCi/L)



Trend Regression: Lognormal MLE

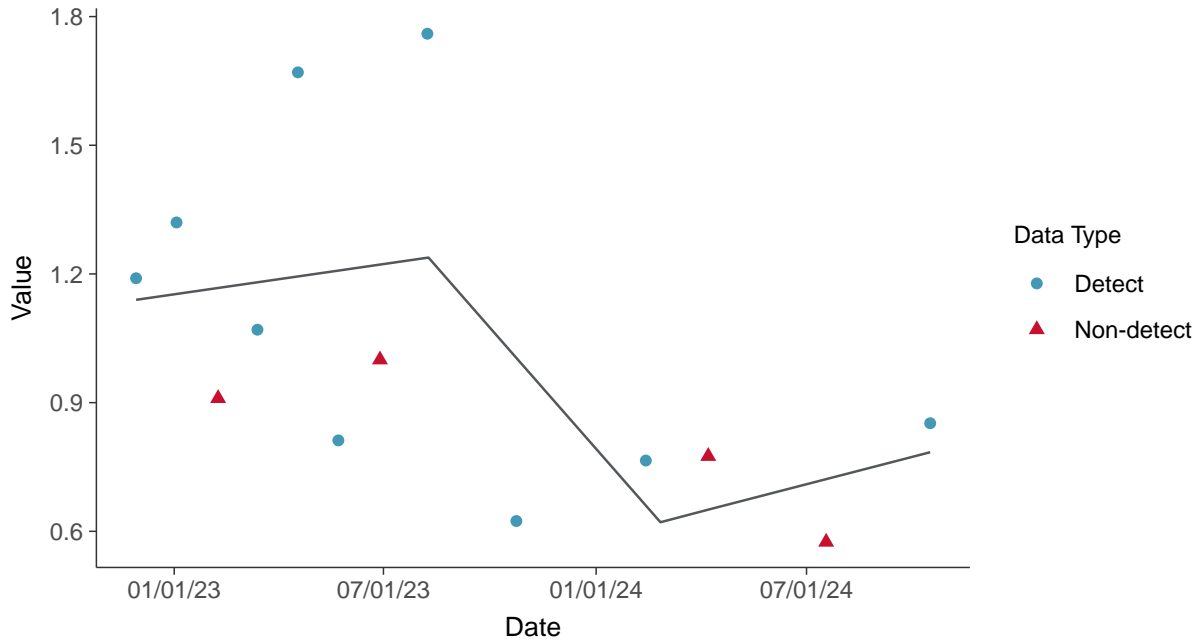
Radium 226 and 228, MW-11 (pCi/L)





Trend Regression: Piecewise Linear-Linear-Linear

Radium 226 and 228, MW-11 (pCi/L)



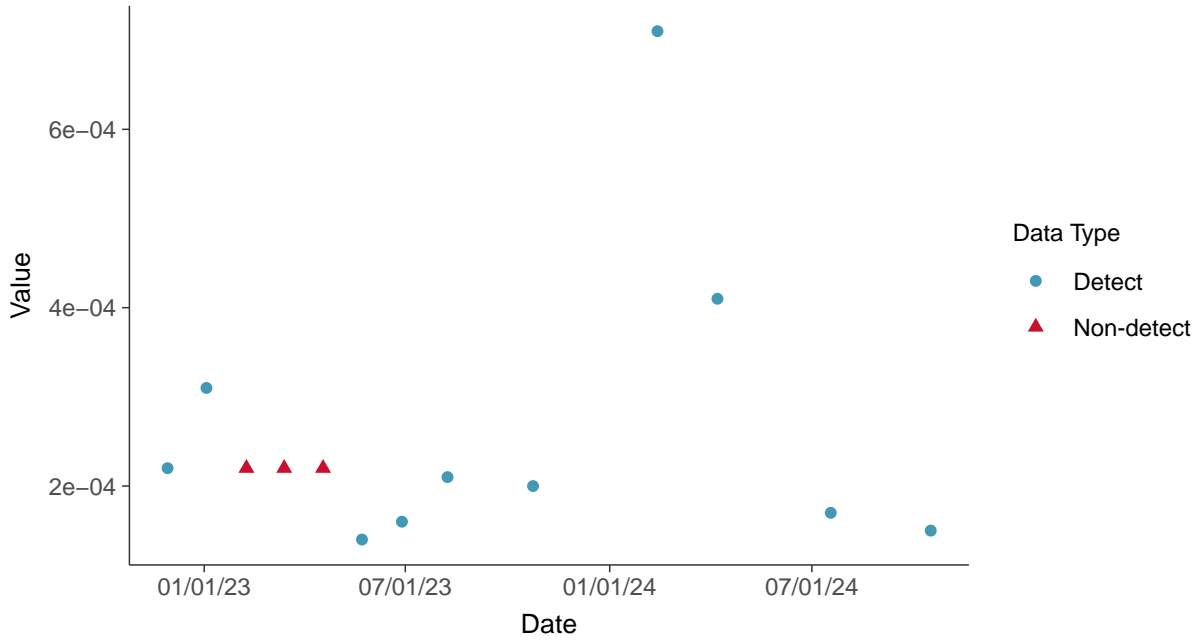


Appendix IV: Selenium, MW-11

ID: 2_21_2_5_122

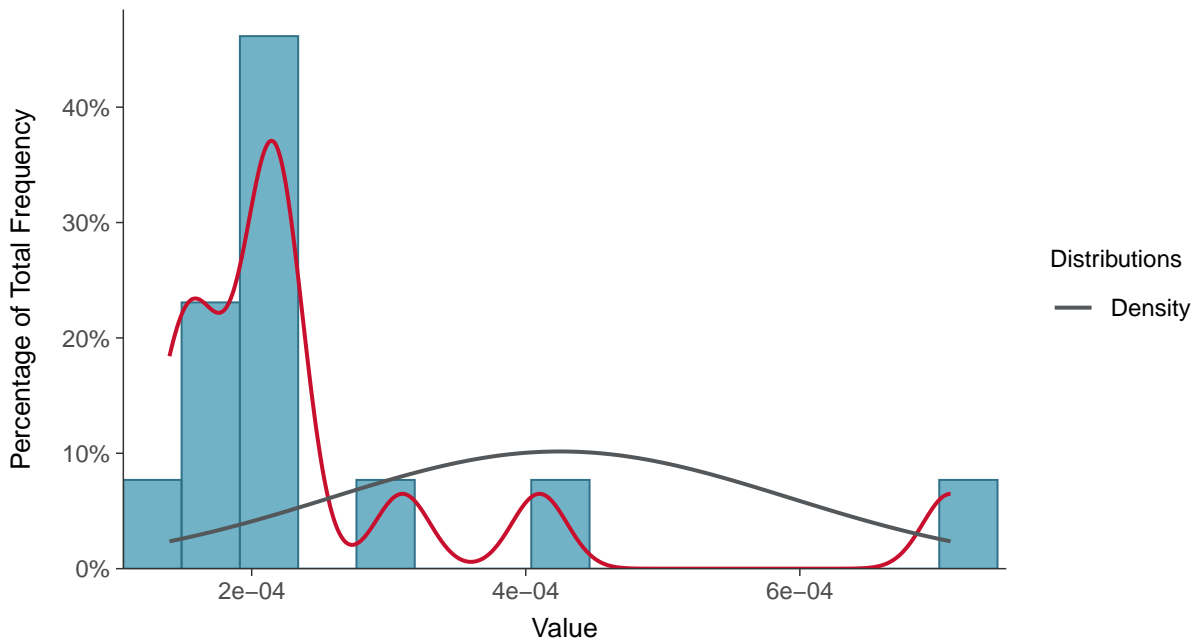
Scatter Plot

Selenium, MW-11 (mg/L)



Histogram

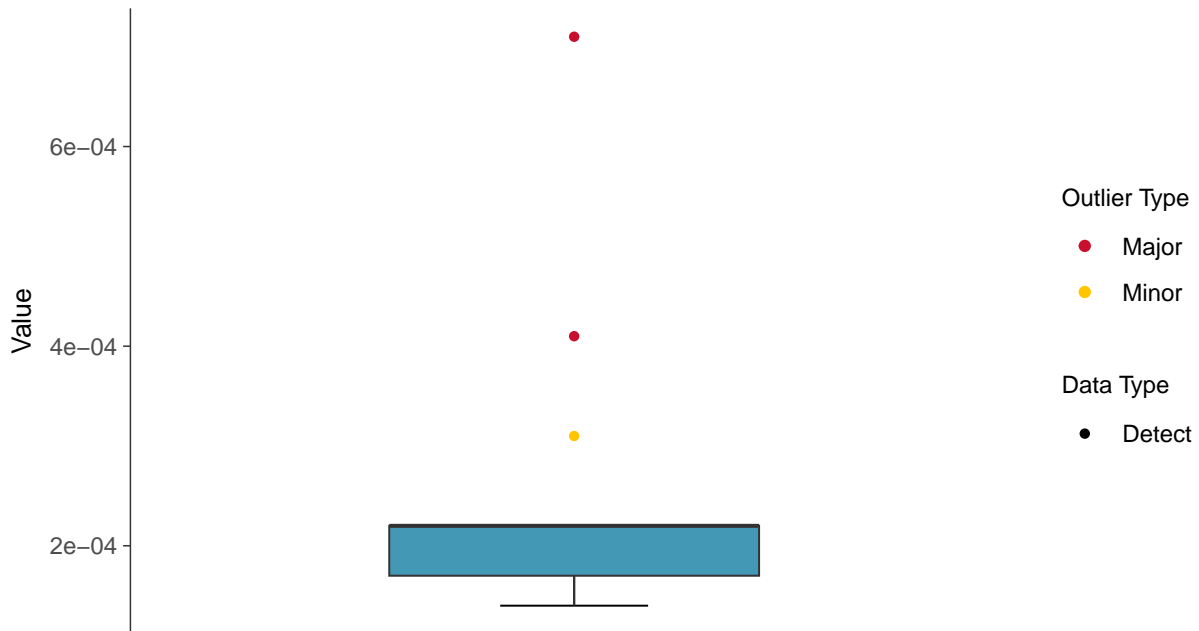
Selenium, MW-11 (mg/L)





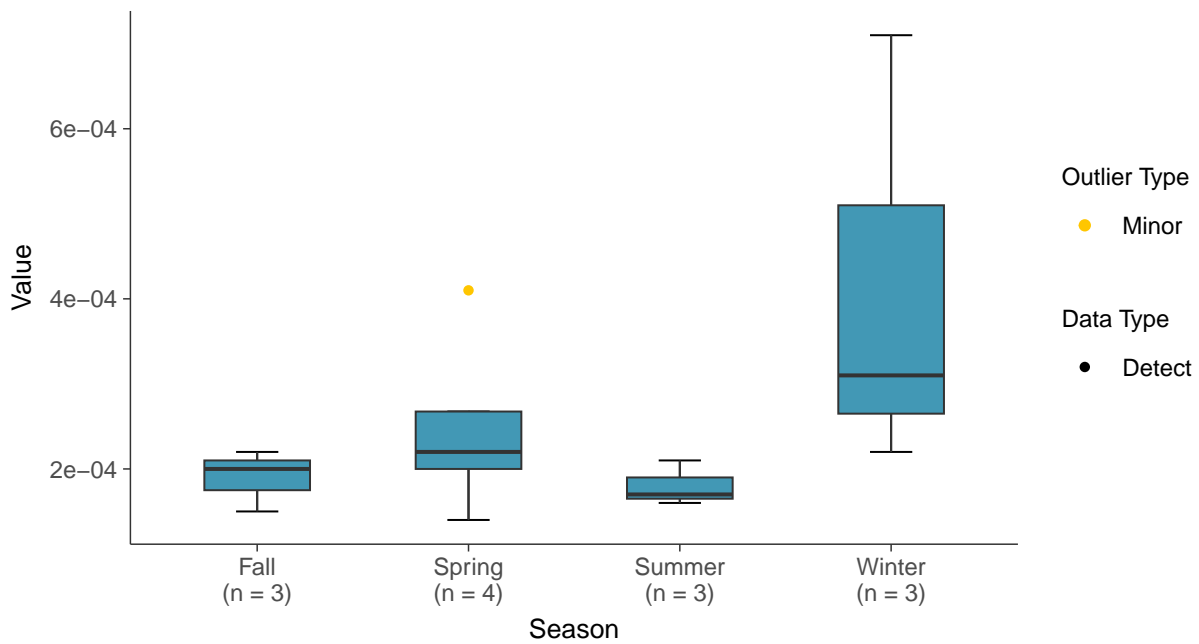
Boxplot

Selenium, MW-11 (mg/L)



Boxplot by Season

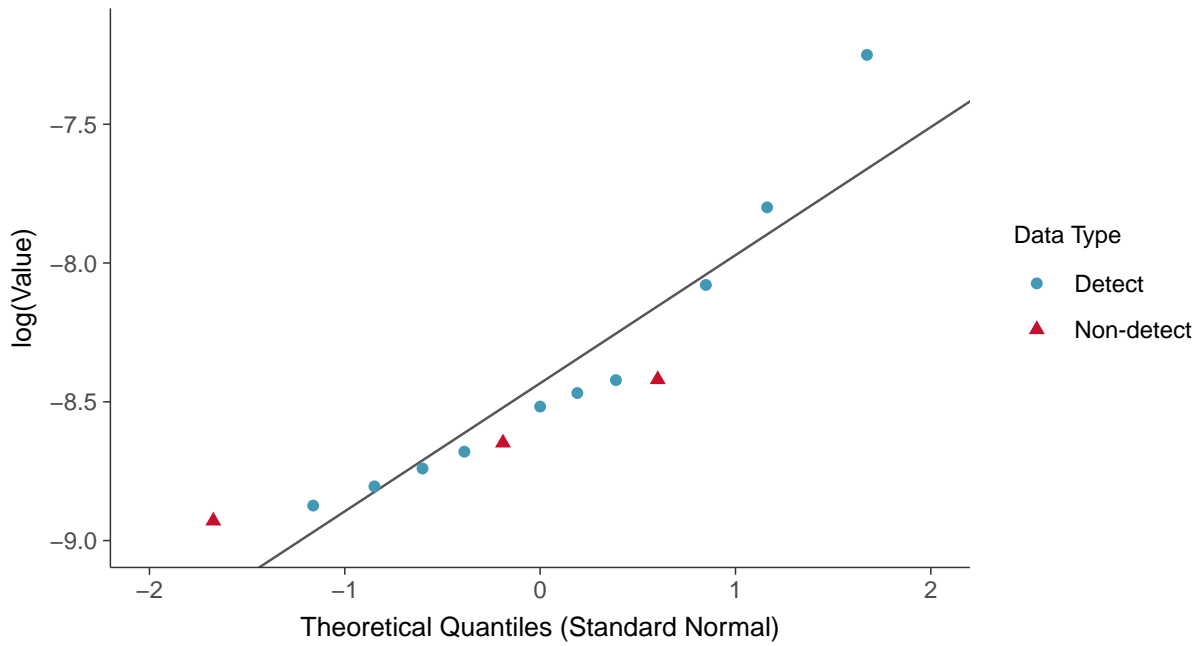
Selenium, MW-11 (mg/L)





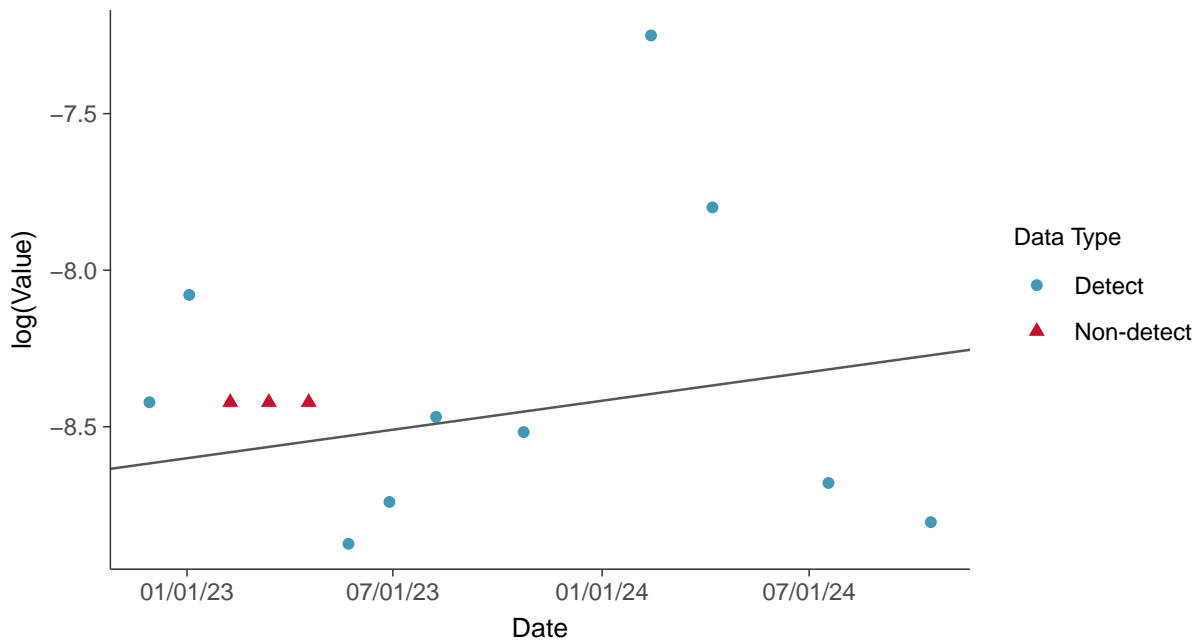
Lognormal Q-Q plot using ROS Imputed Estimates

Selenium, MW-11 (mg/L)



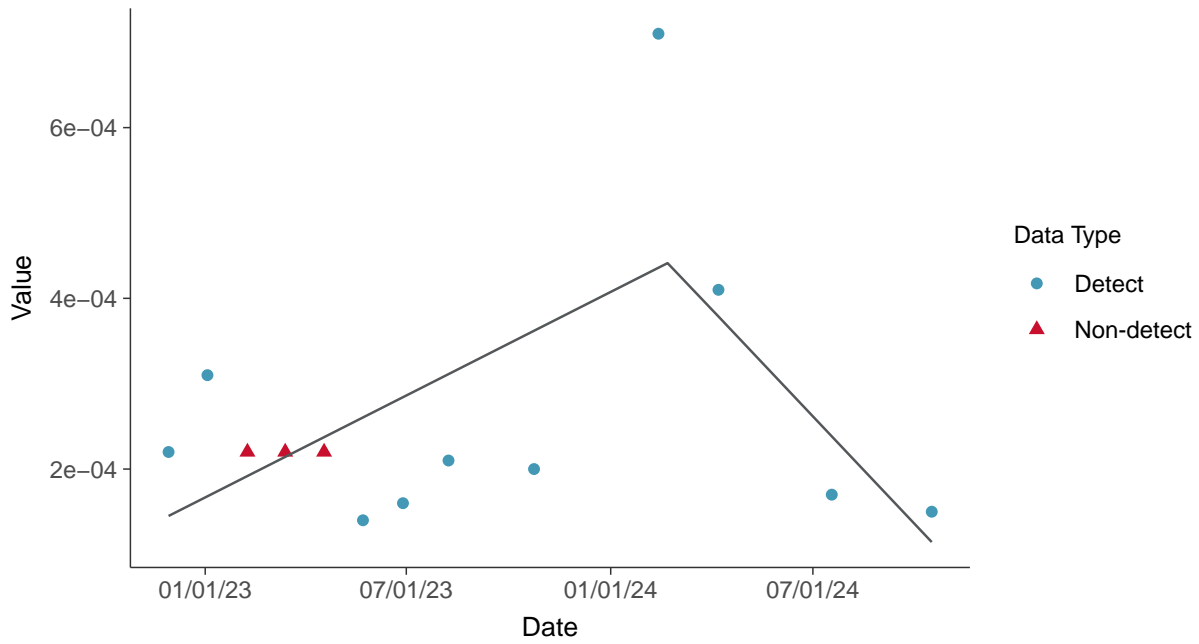
Trend Regression: Lognormal MLE

Selenium, MW-11 (mg/L)

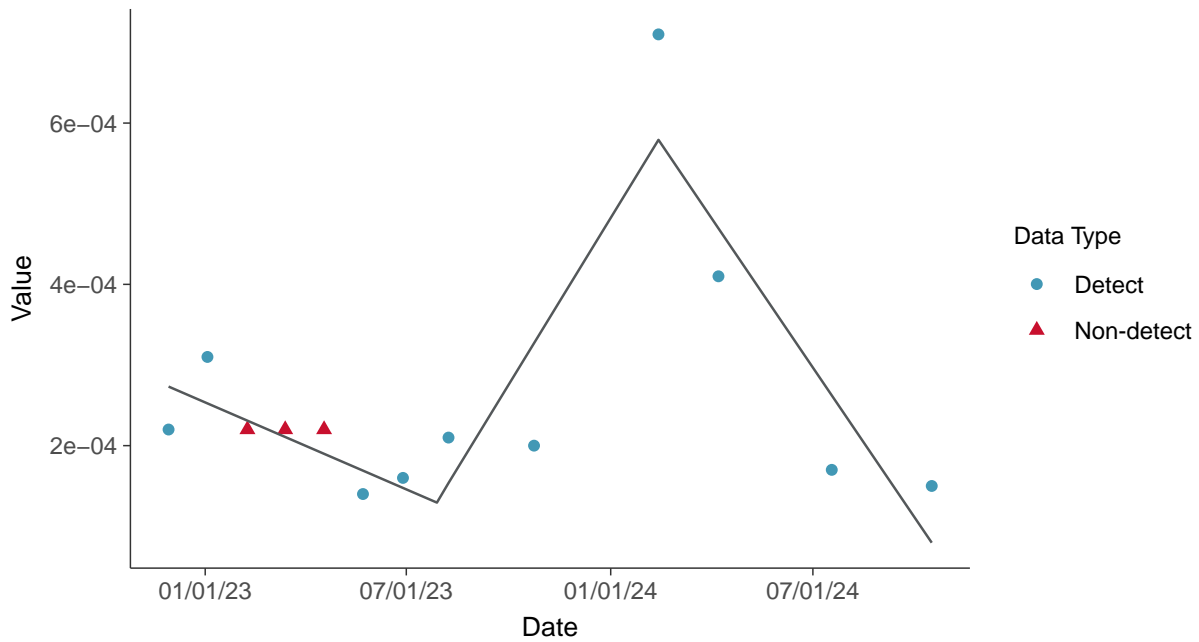




Trend Regression: Piecewise Linear-Linear
Selenium, MW-11 (mg/L)



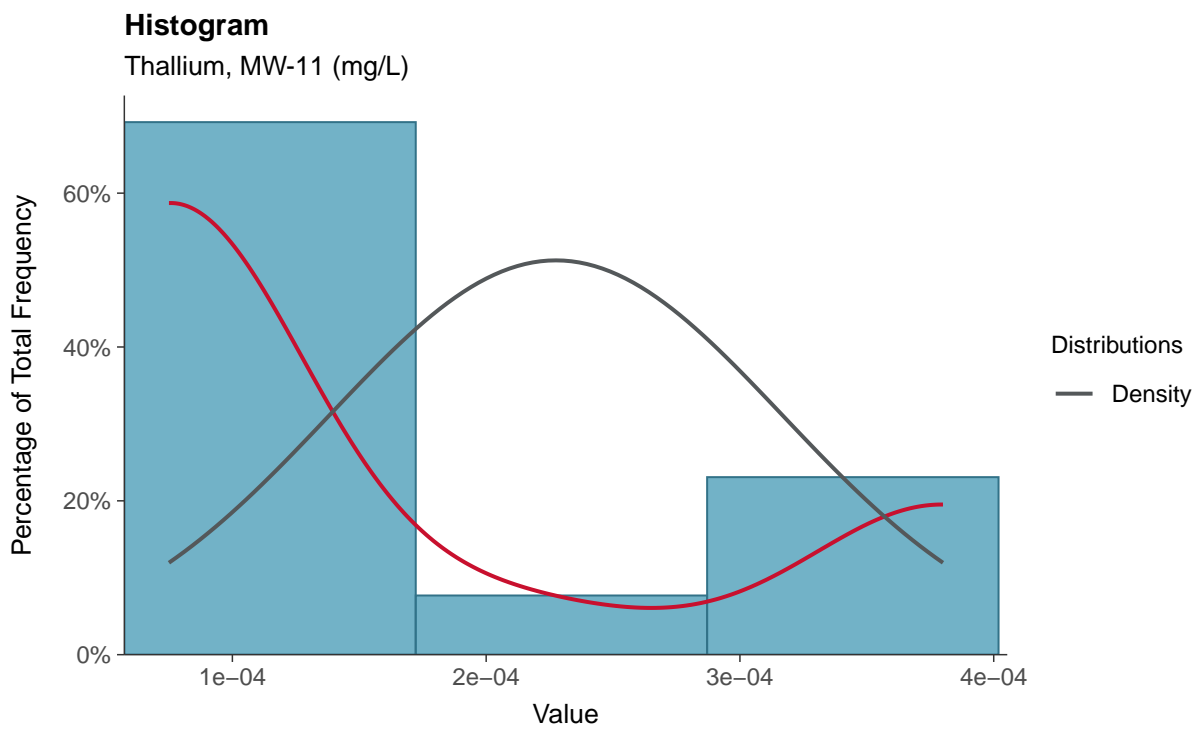
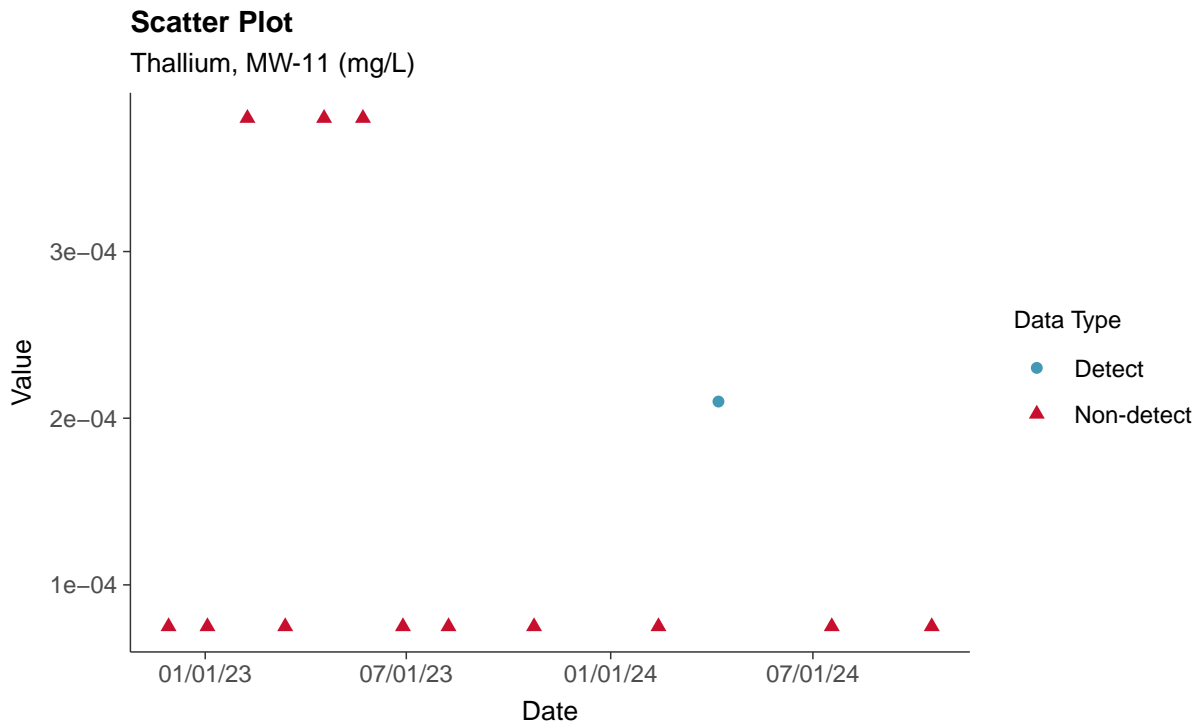
Trend Regression: Piecewise Linear-Linear-Linear
Selenium, MW-11 (mg/L)





Appendix IV: Thallium, MW-11

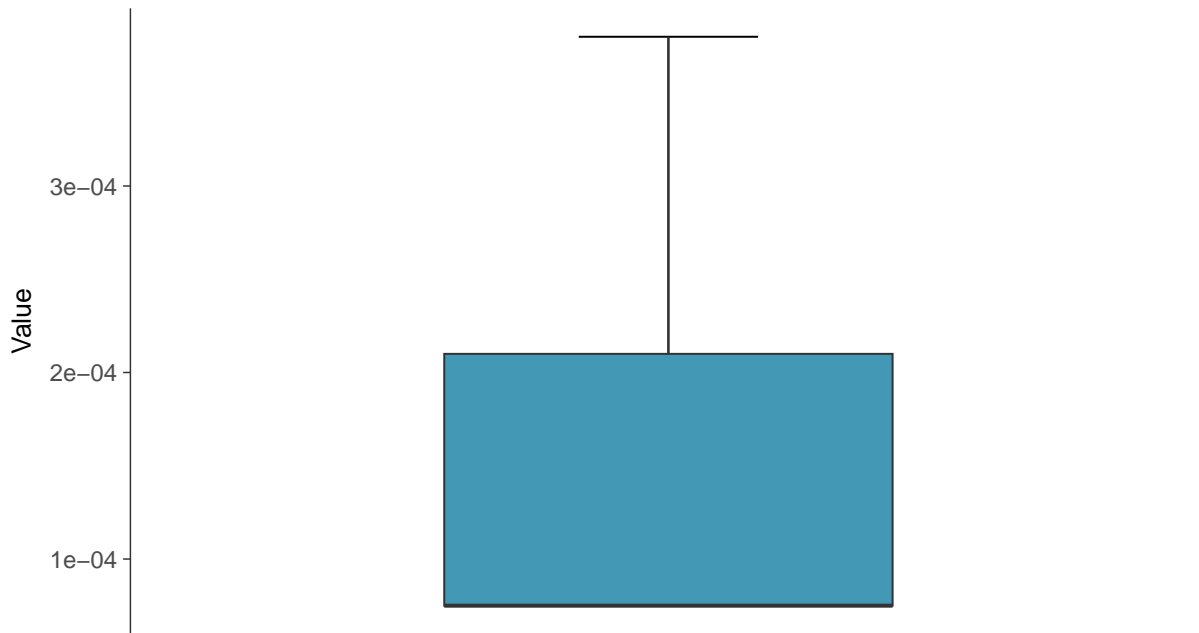
ID: 2_21_2_5_125





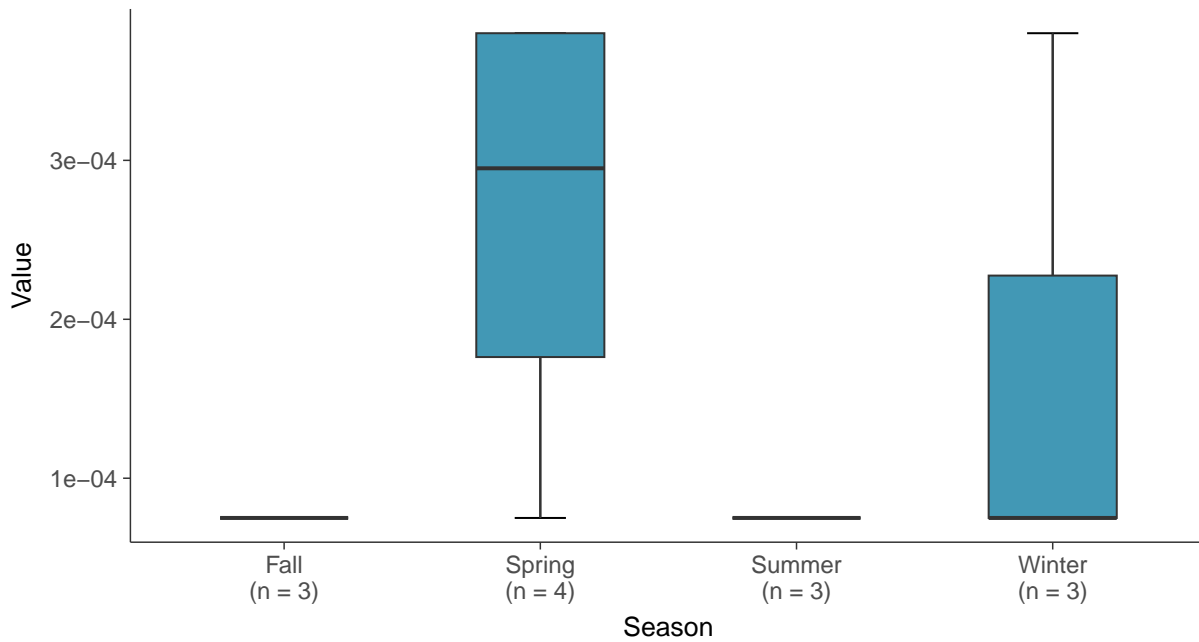
Boxplot

Thallium, MW-11 (mg/L)



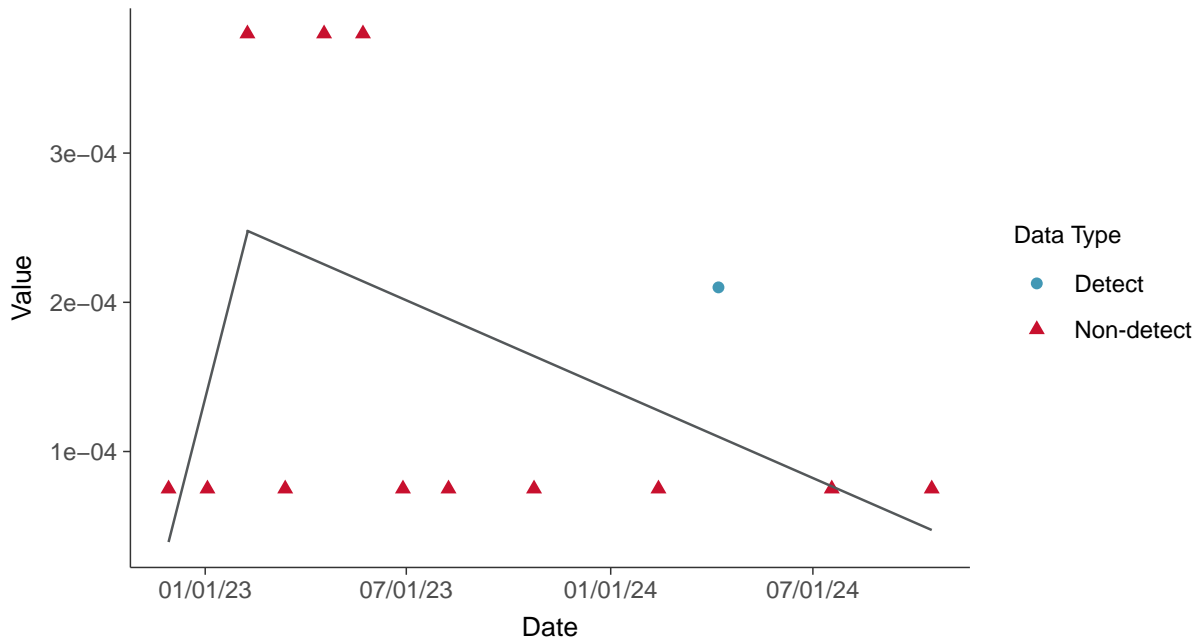
Boxplot by Season

Thallium, MW-11 (mg/L)

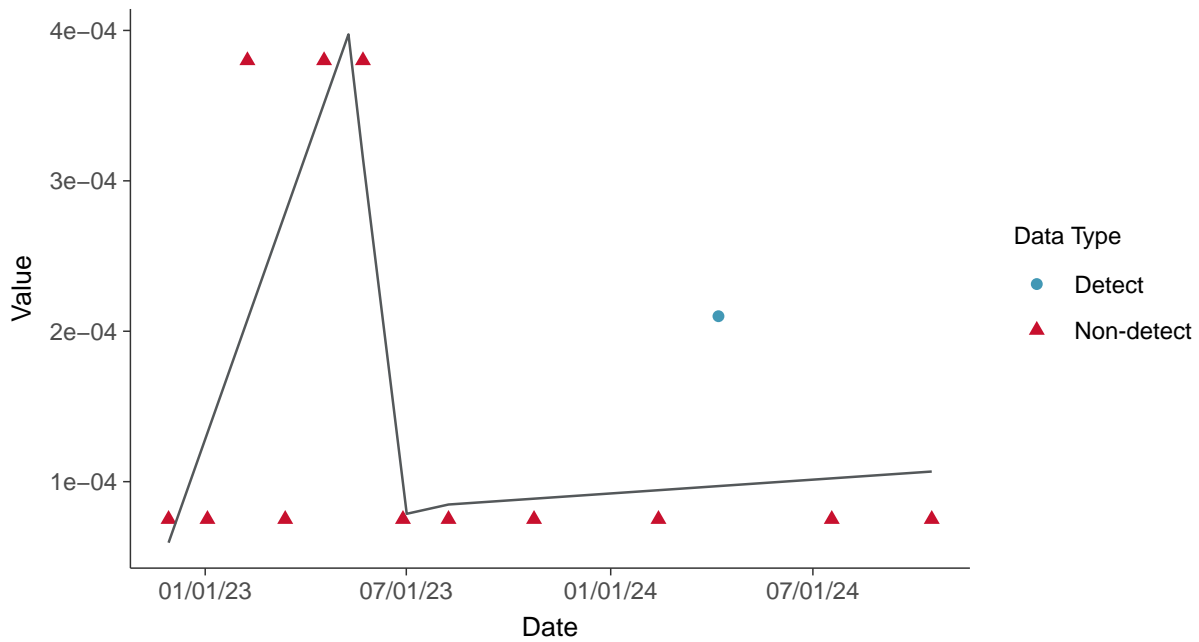




Trend Regression: Piecewise Linear-Linear
Thallium, MW-11 (mg/L)



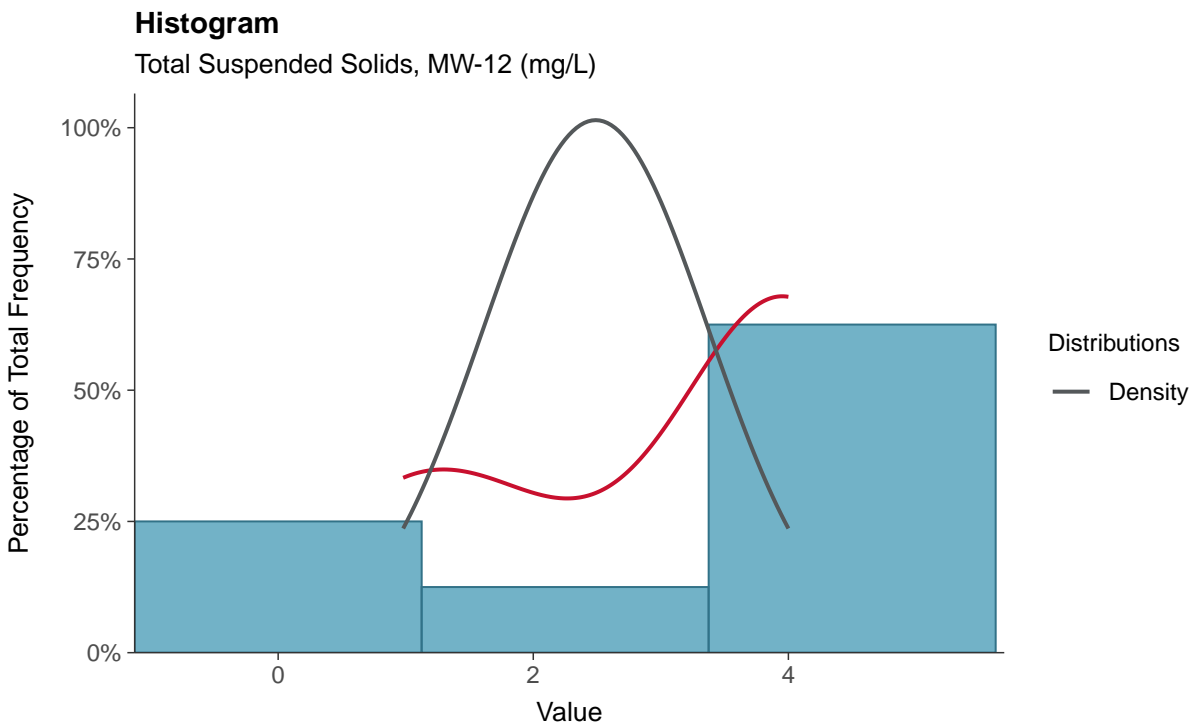
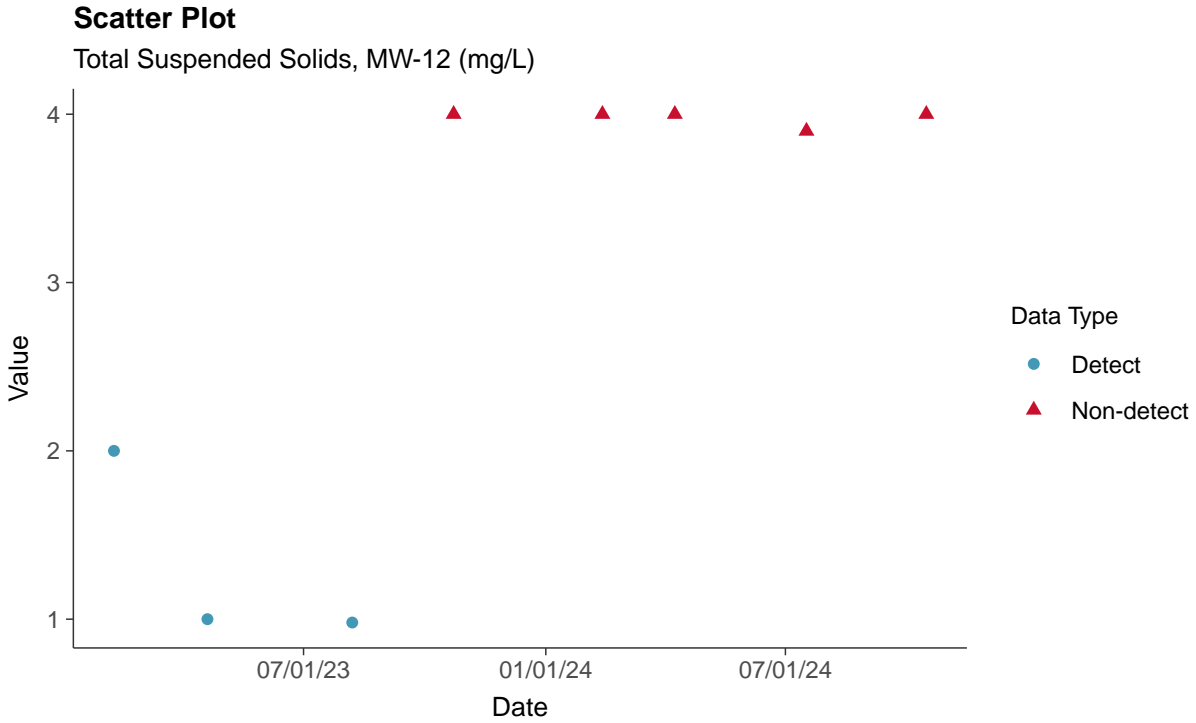
Trend Regression: Piecewise Linear-Linear-Linear
Thallium, MW-11 (mg/L)





Additional Parameters: Total Suspended Solids, MW-12

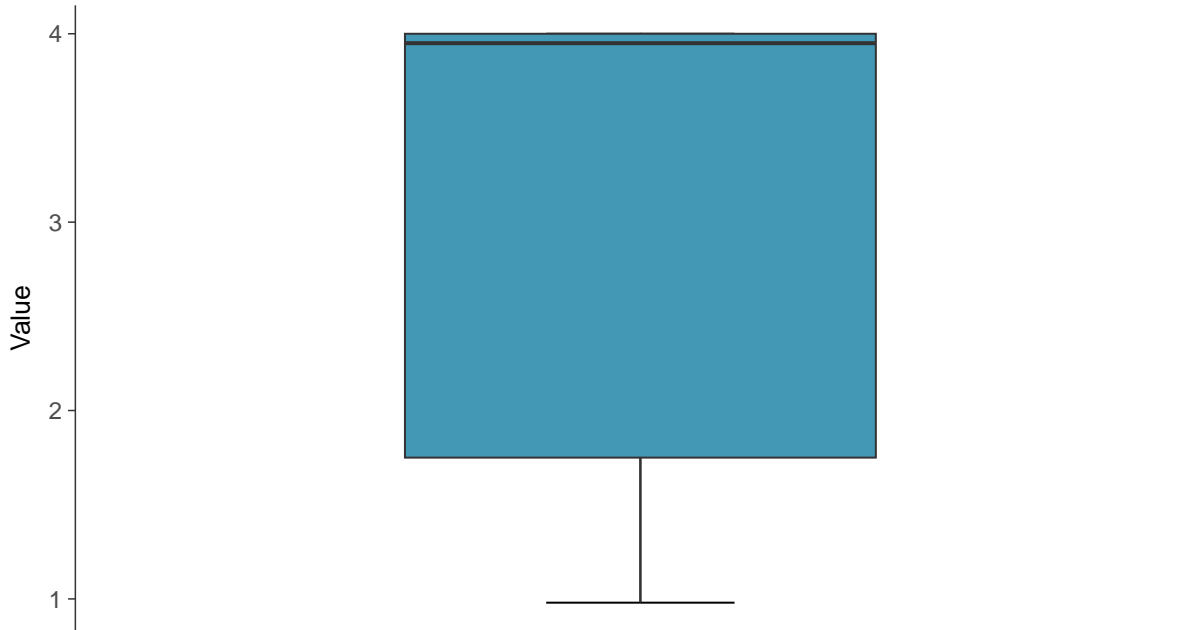
ID: 2_22_2_3_127





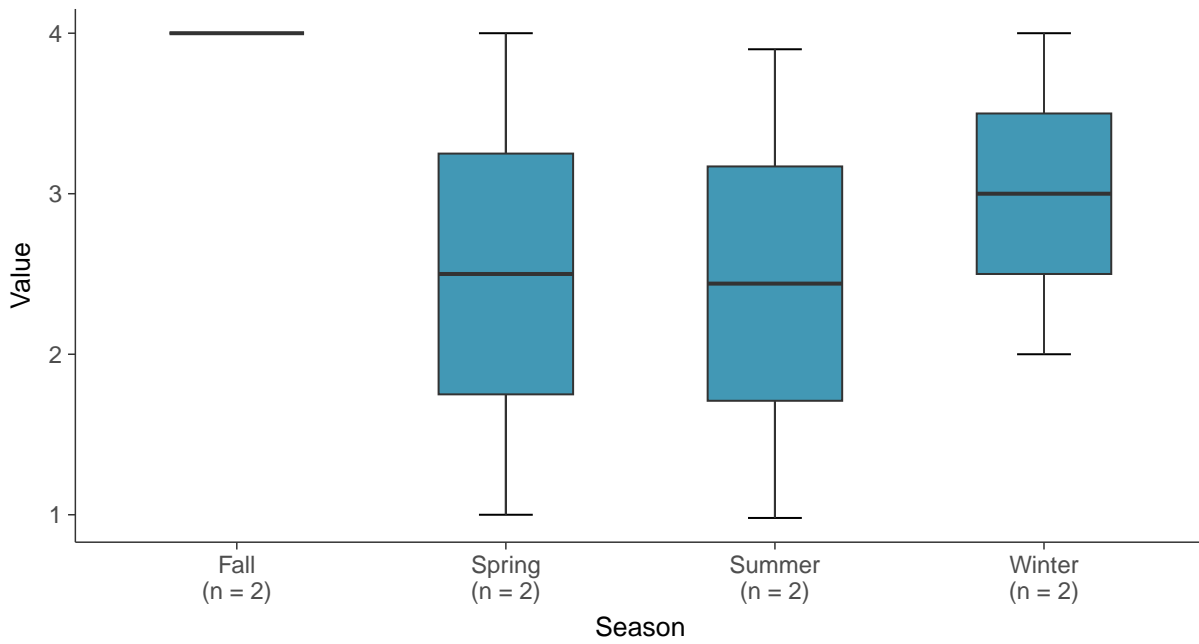
Boxplot

Total Suspended Solids, MW-12 (mg/L)



Boxplot by Season

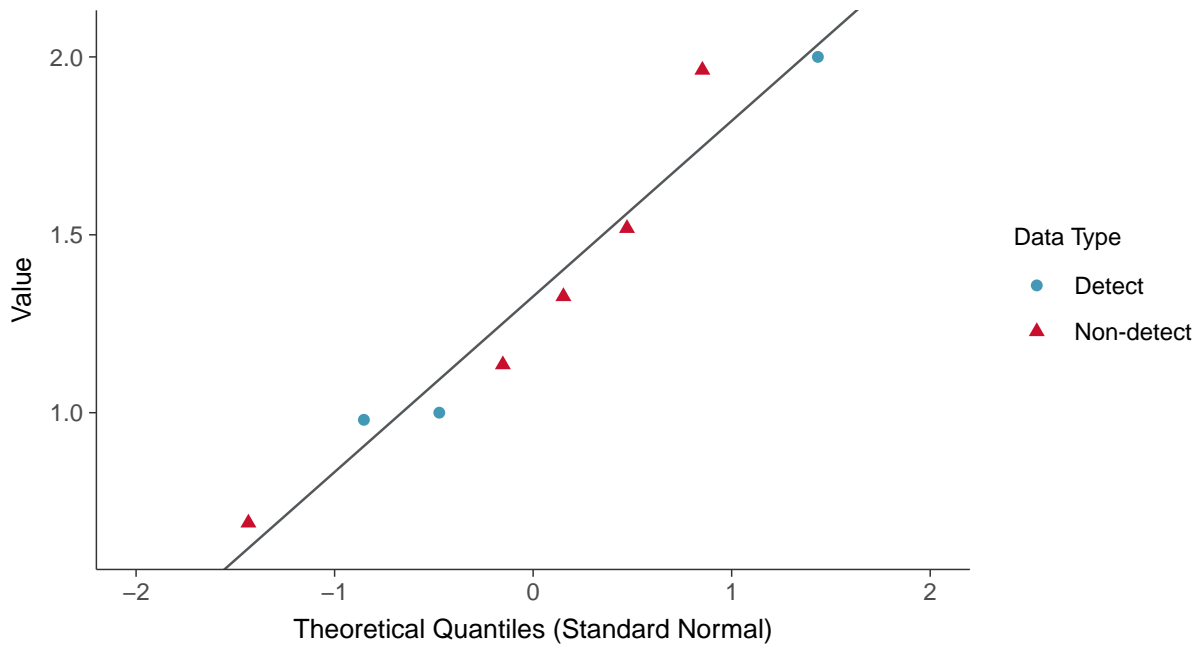
Total Suspended Solids, MW-12 (mg/L)





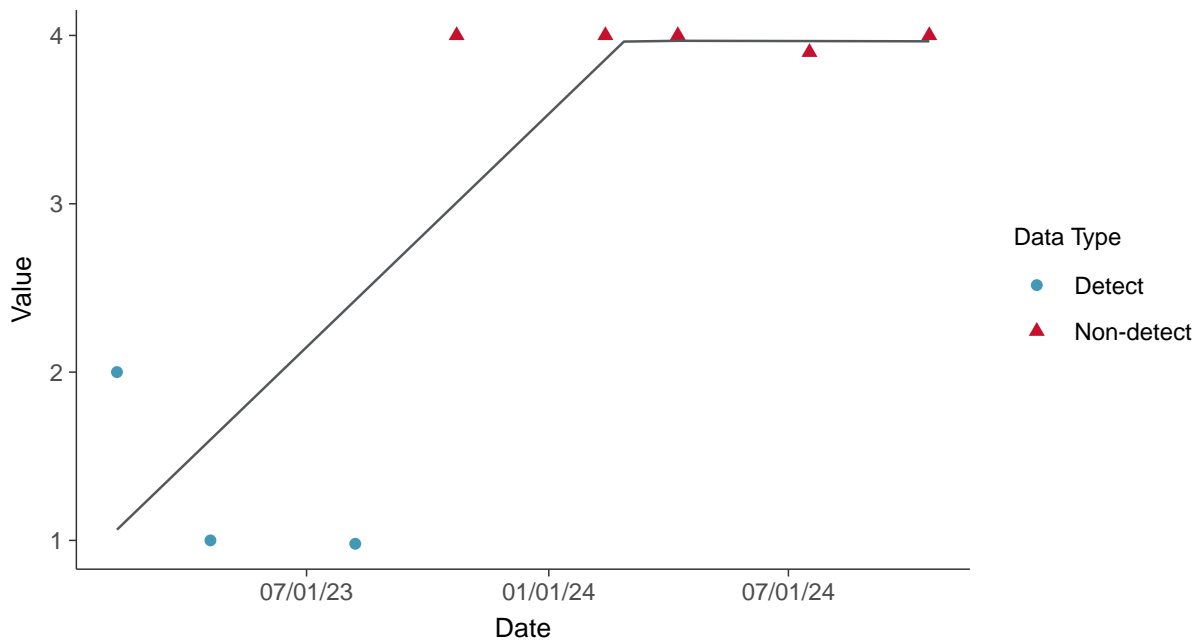
Normal Q-Q plot using ROS Imputed Estimates

Total Suspended Solids, MW-12 (mg/L)



Trend Regression: Piecewise Linear-Linear

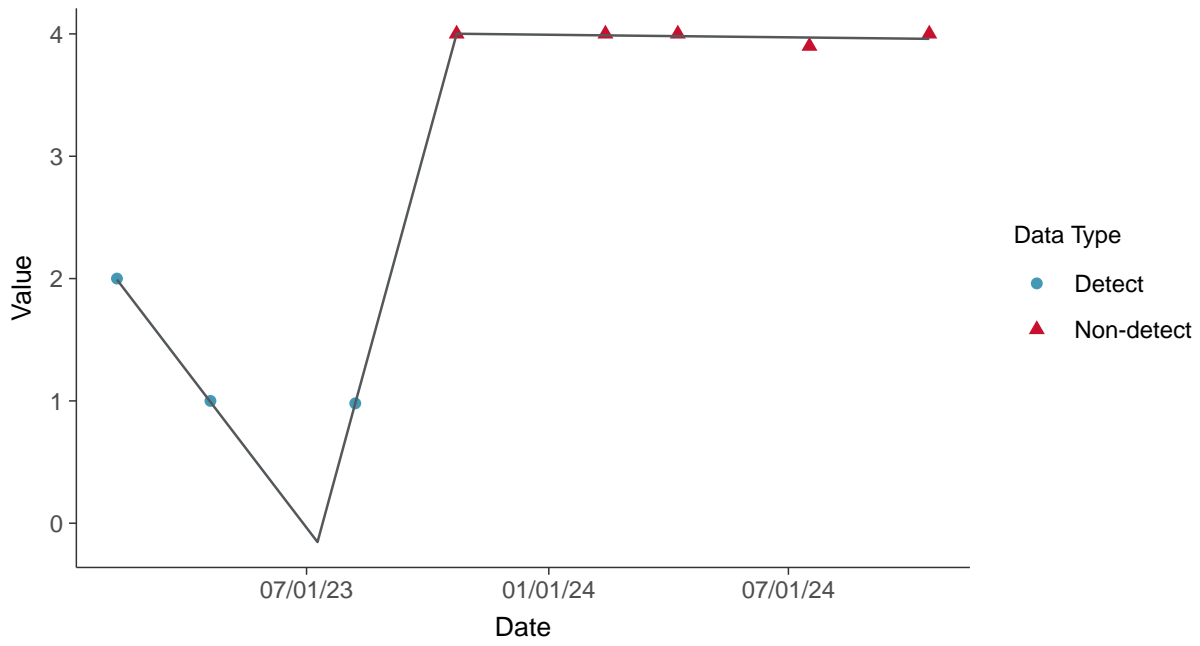
Total Suspended Solids, MW-12 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

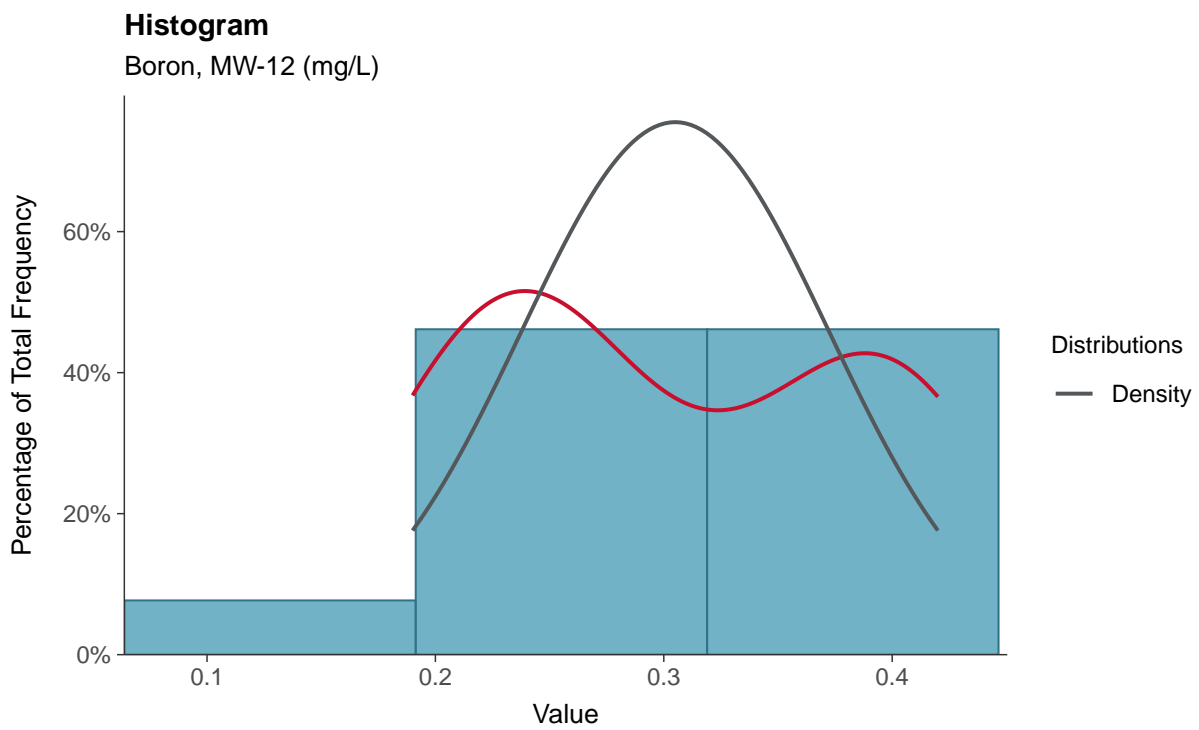
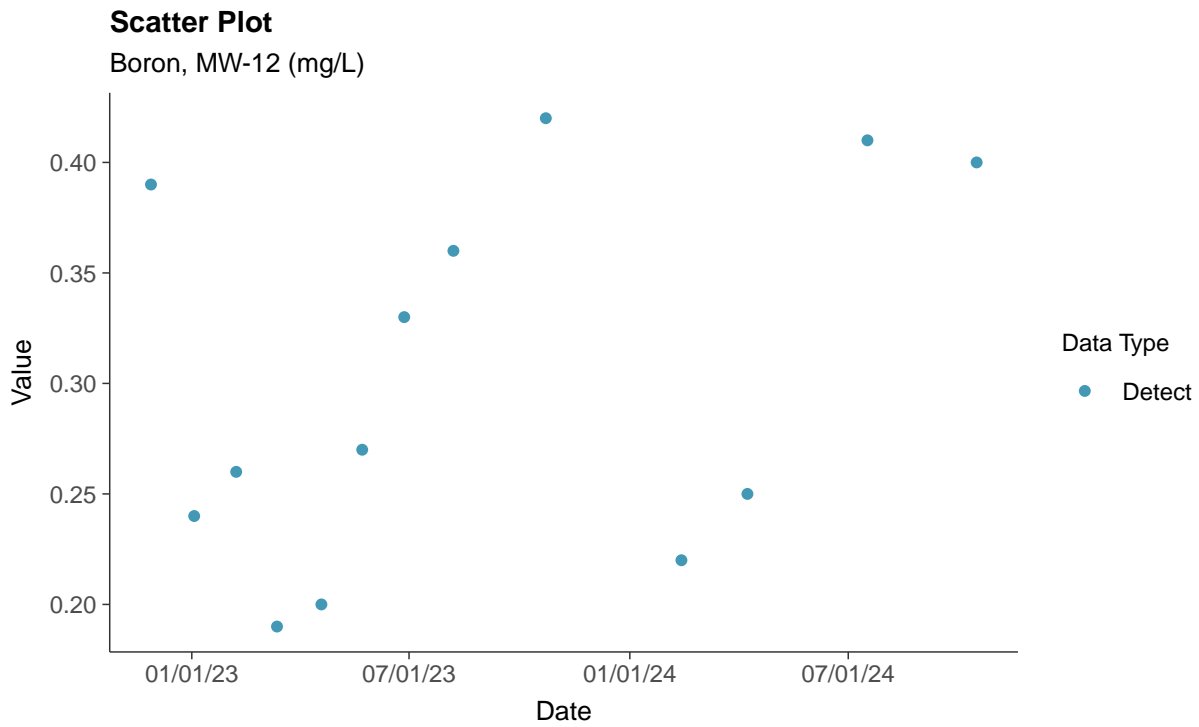
Total Suspended Solids, MW-12 (mg/L)





Appendix III: Boron, MW-12

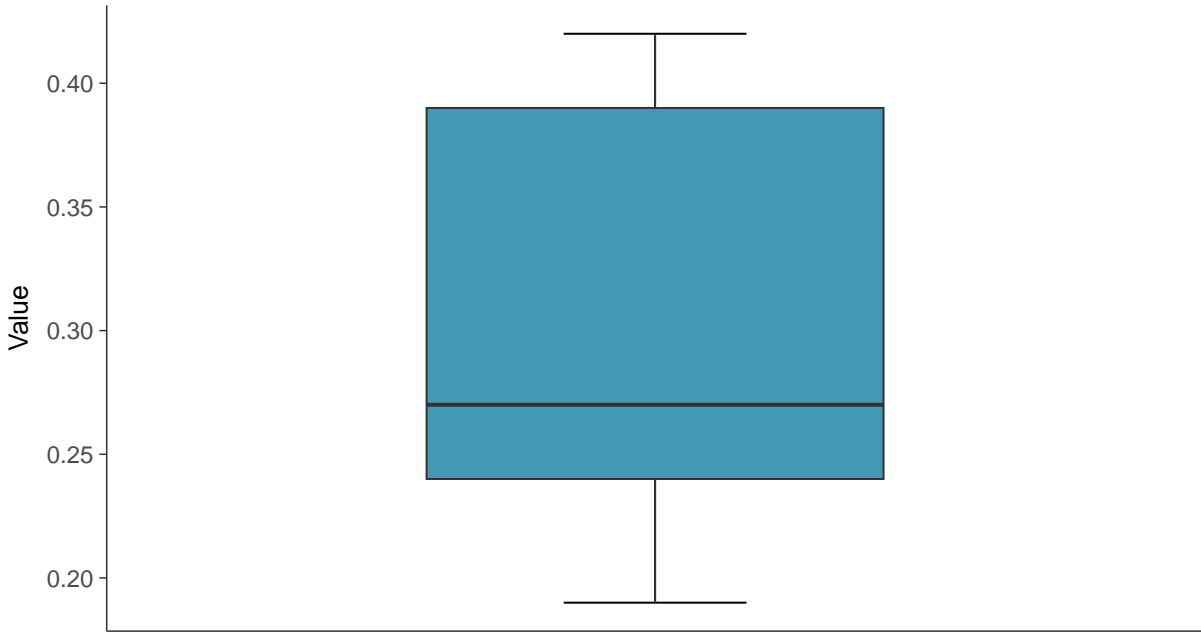
ID: 2_22_2_4_105





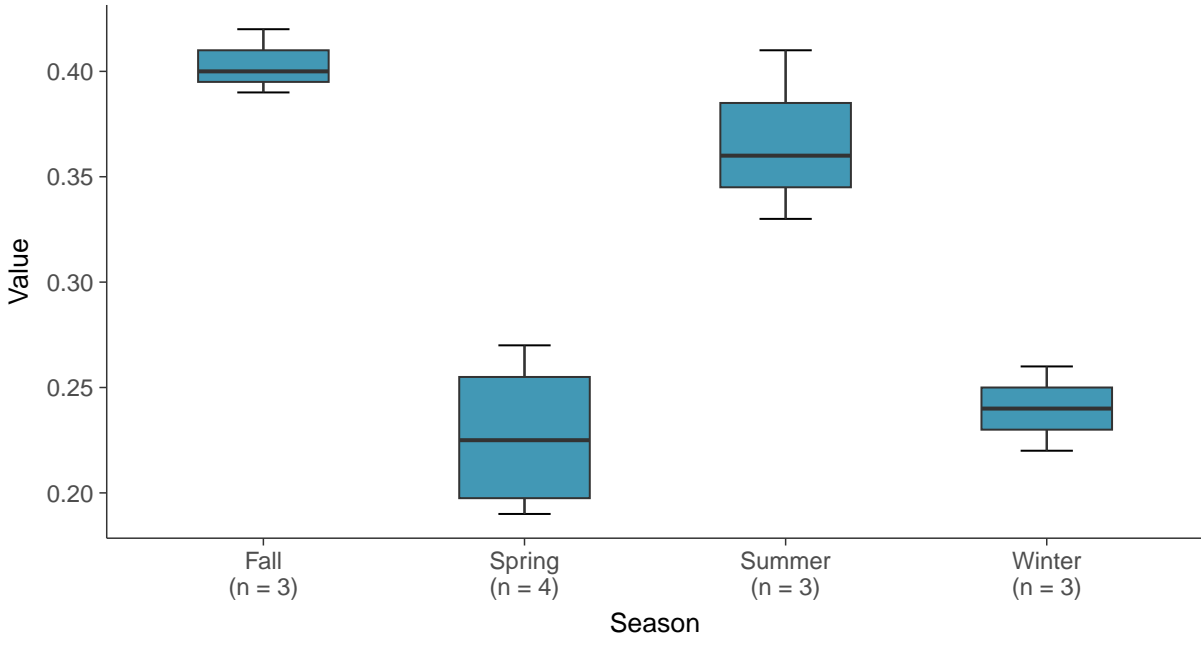
Boxplot

Boron, MW-12 (mg/L)



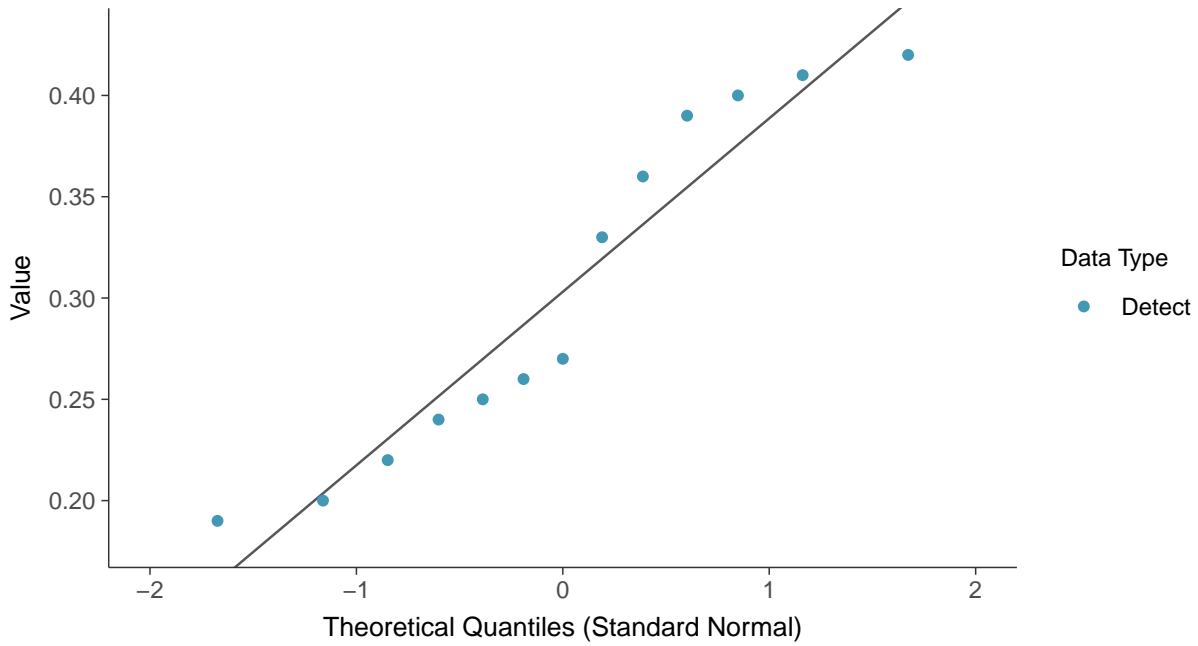
Boxplot by Season

Boron, MW-12 (mg/L)

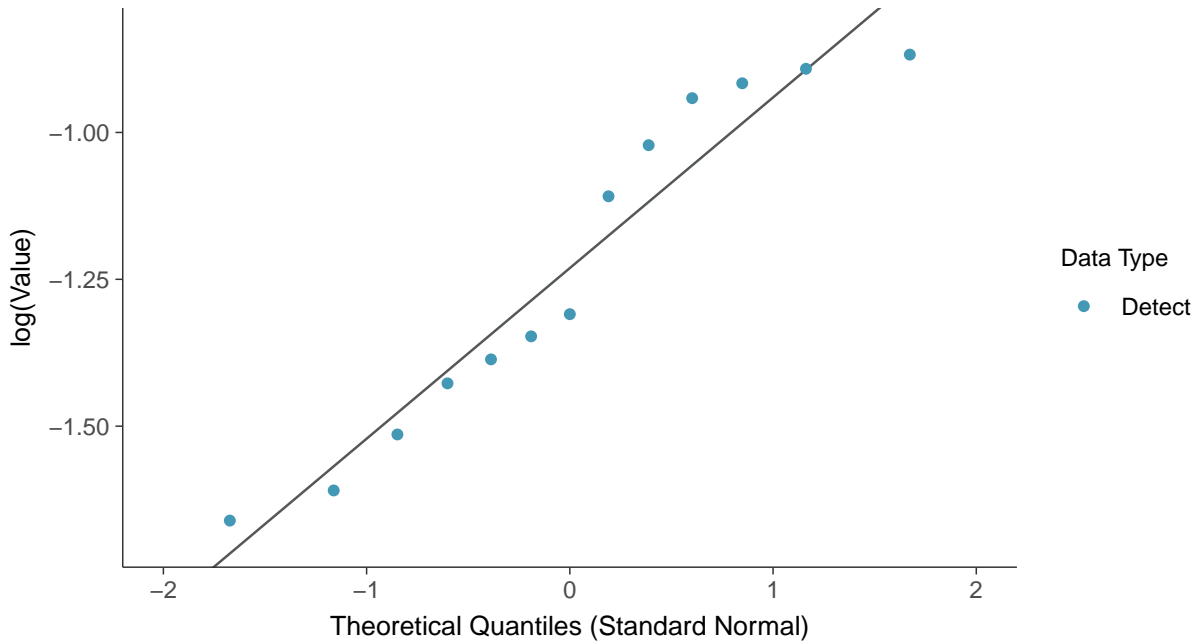




Normal Q-Q plot
Boron, MW-12 (mg/L)

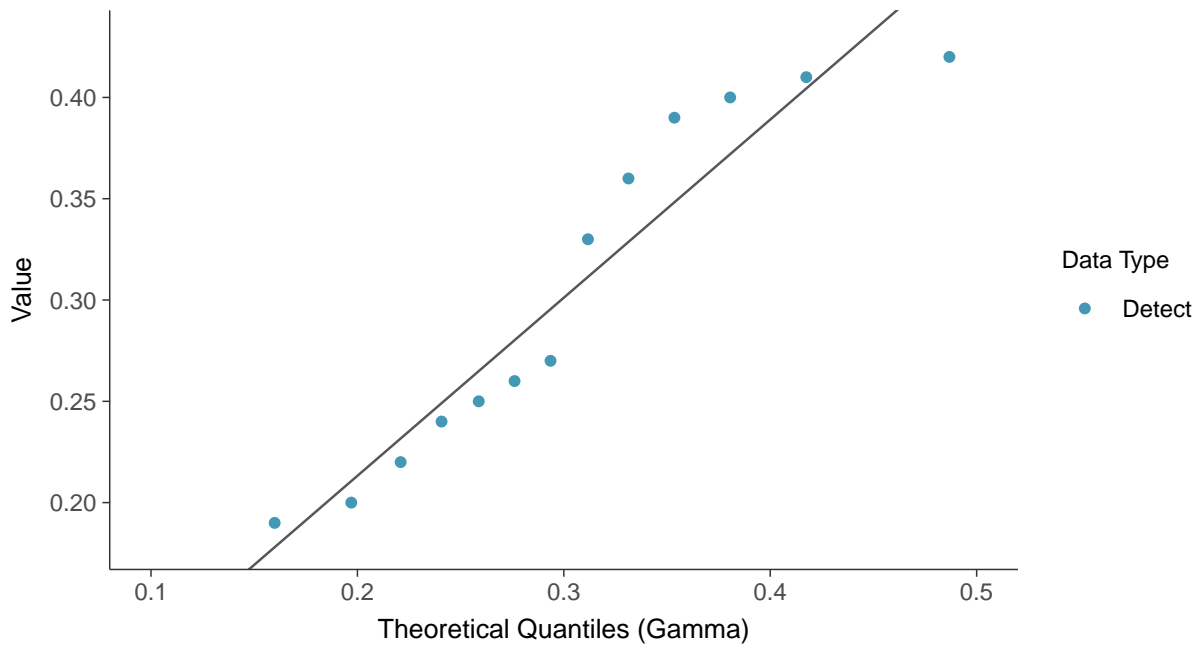


Lognormal Q-Q plot
Boron, MW-12 (mg/L)

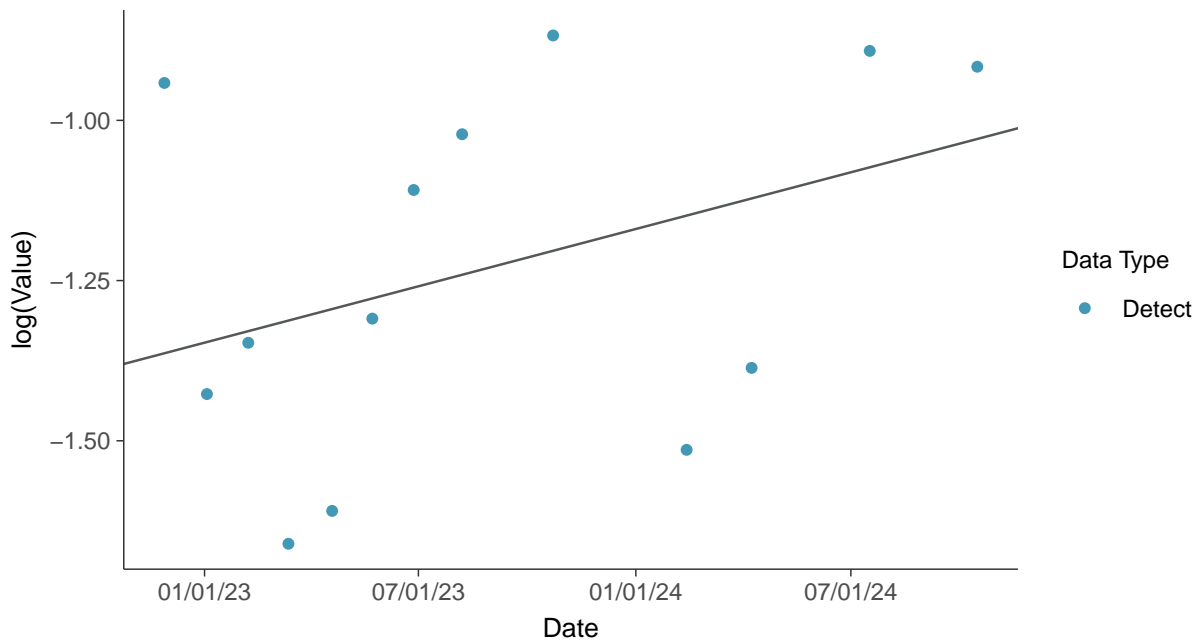




Gamma Q-Q plot
Boron, MW-12 (mg/L)



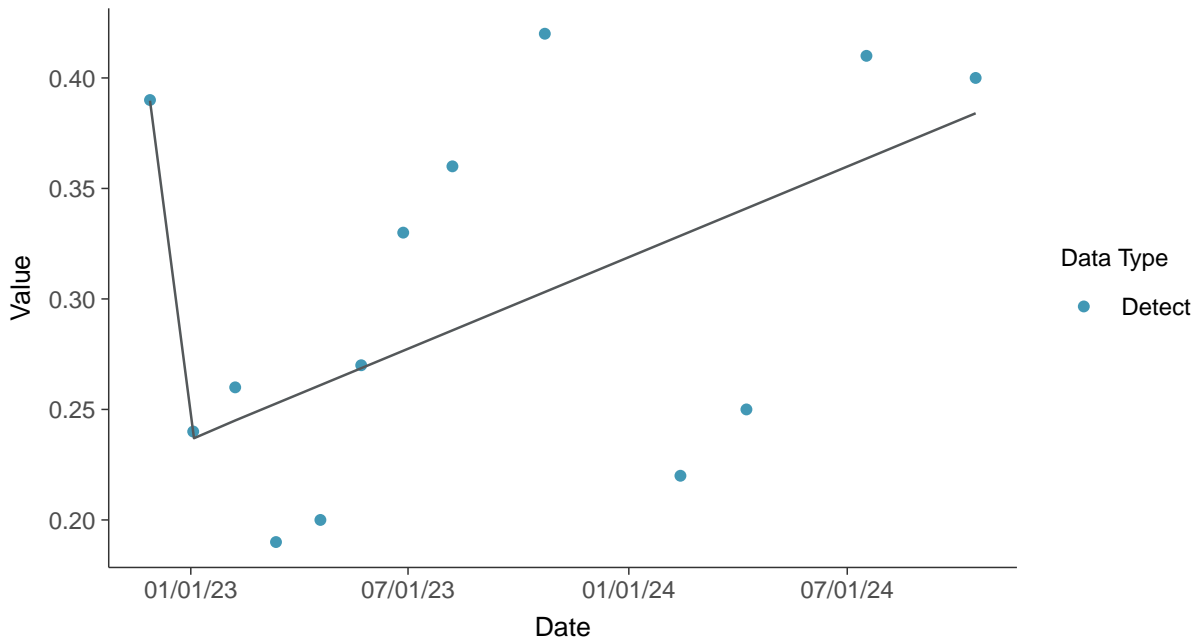
Trend Regression: Lognormal MLE
Boron, MW-12 (mg/L)





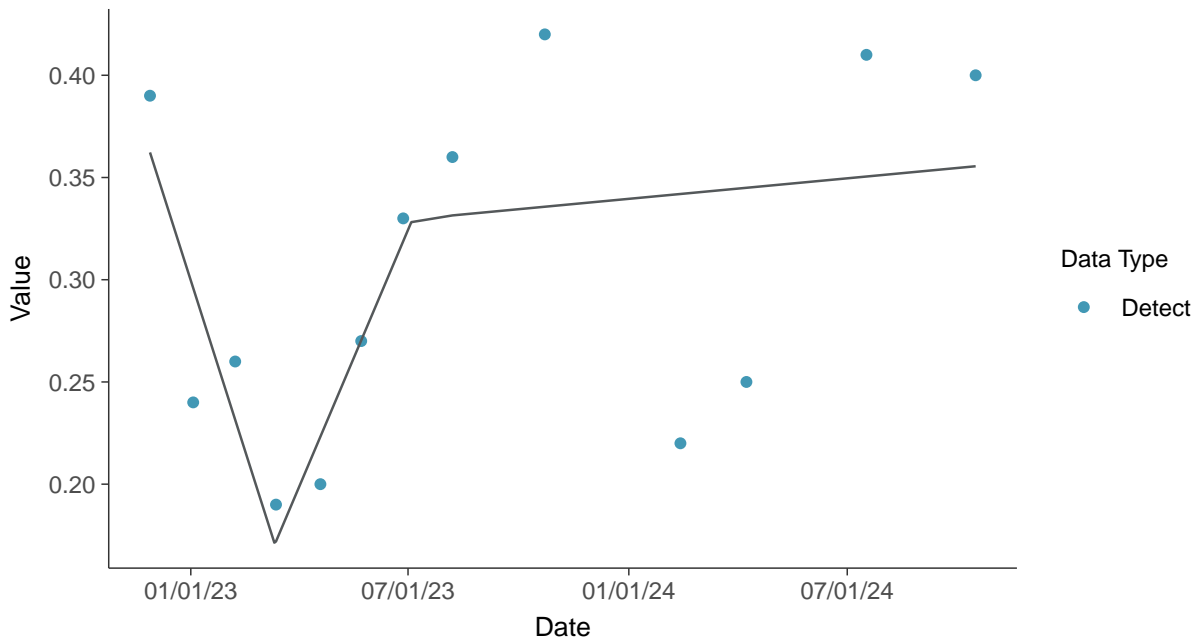
Trend Regression: Piecewise Linear-Linear

Boron, MW-12 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Boron, MW-12 (mg/L)



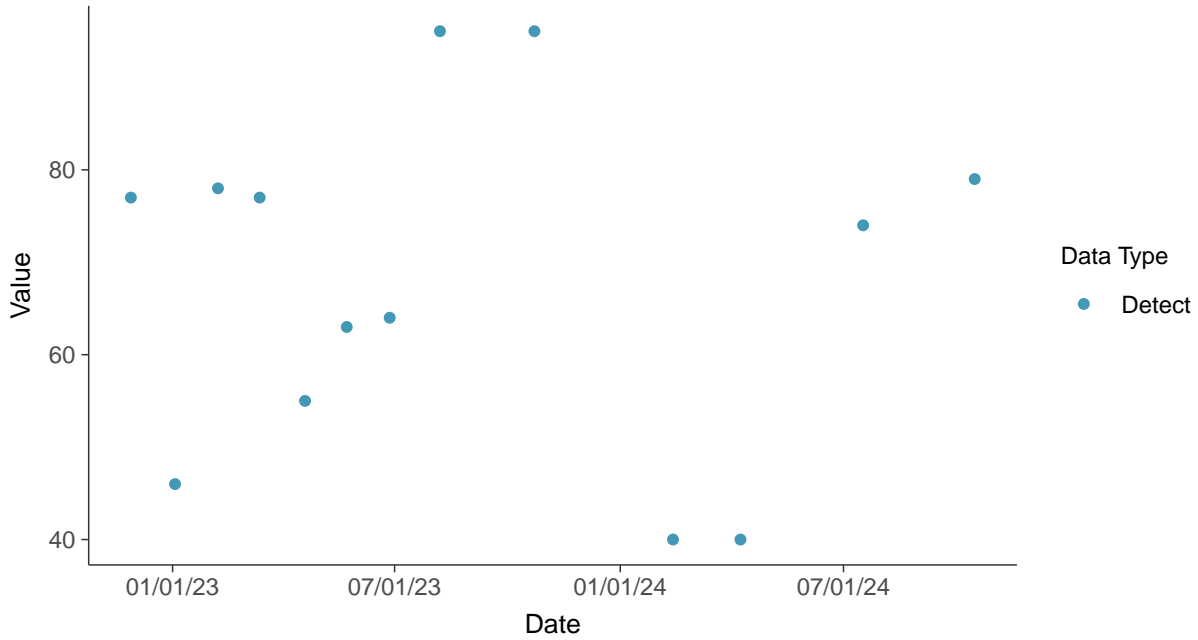


Appendix III: Calcium, MW-12

ID: 2_22_2_4_107

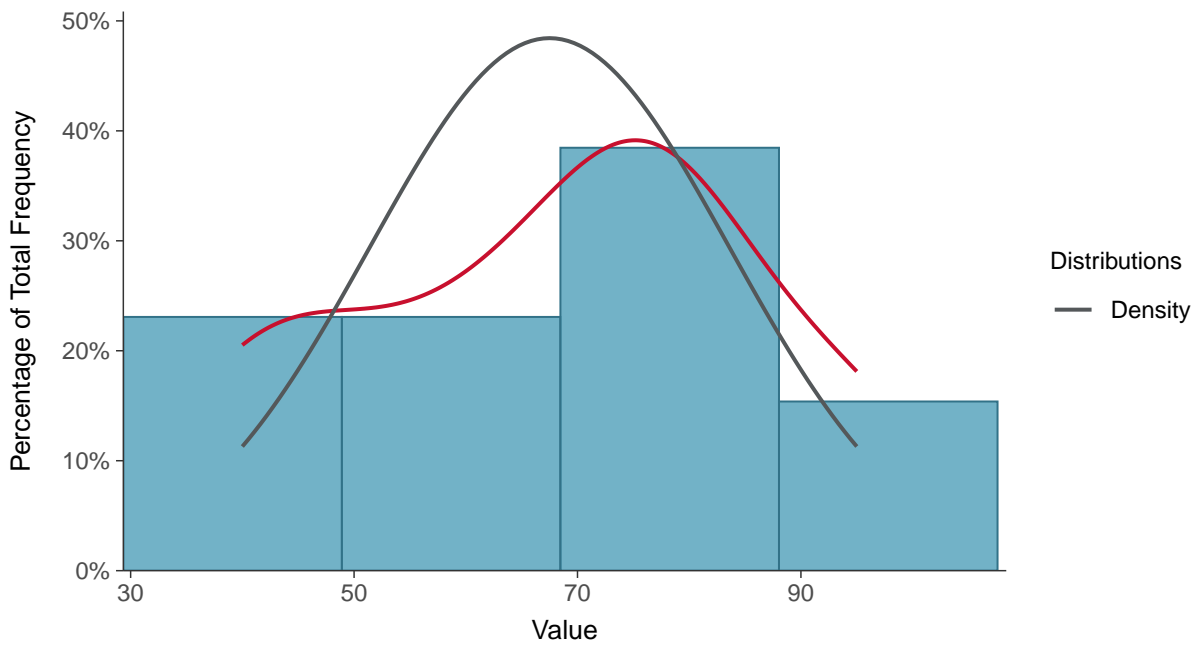
Scatter Plot

Calcium, MW-12 (mg/L)



Histogram

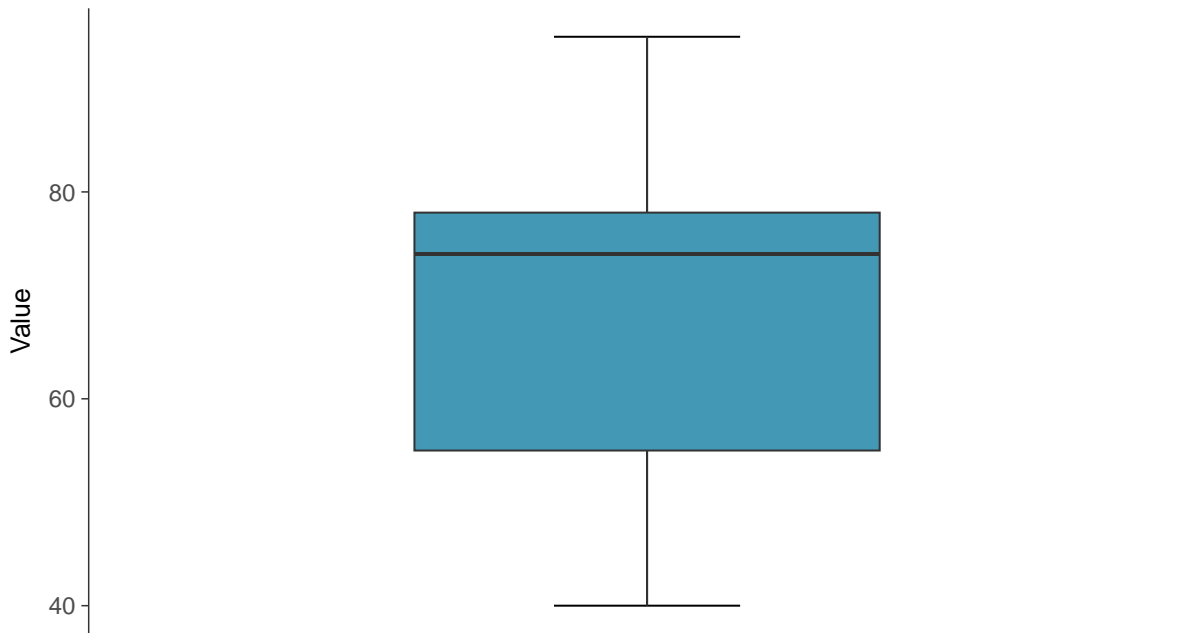
Calcium, MW-12 (mg/L)





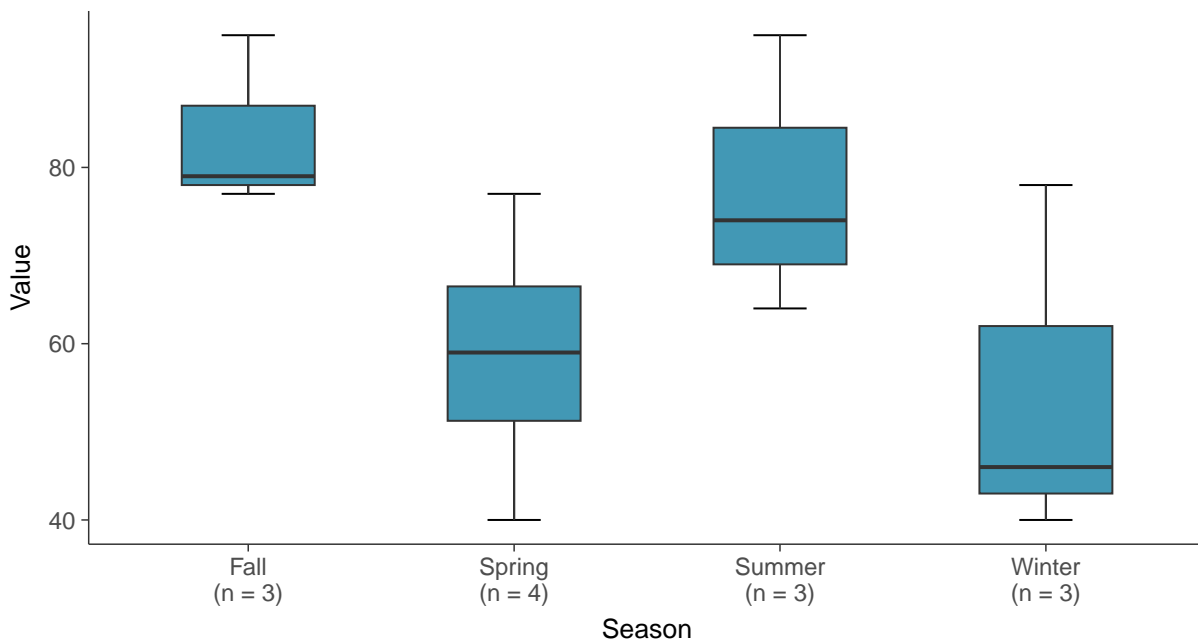
Boxplot

Calcium, MW-12 (mg/L)



Boxplot by Season

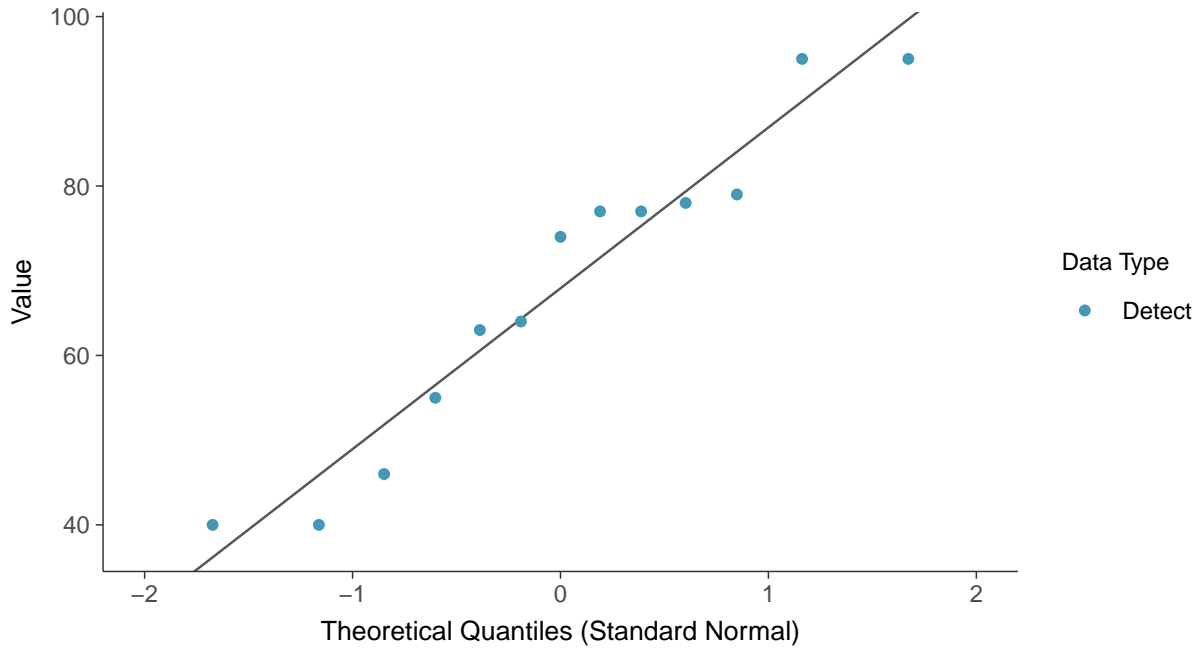
Calcium, MW-12 (mg/L)





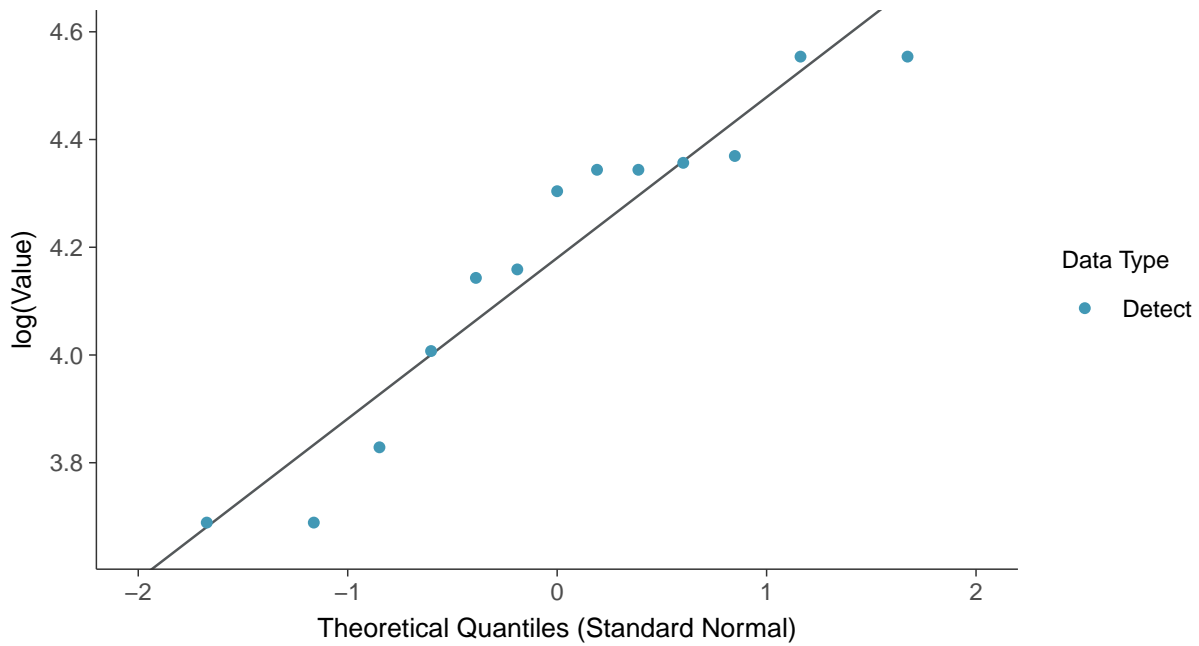
Normal Q-Q plot

Calcium, MW-12 (mg/L)



Lognormal Q-Q plot

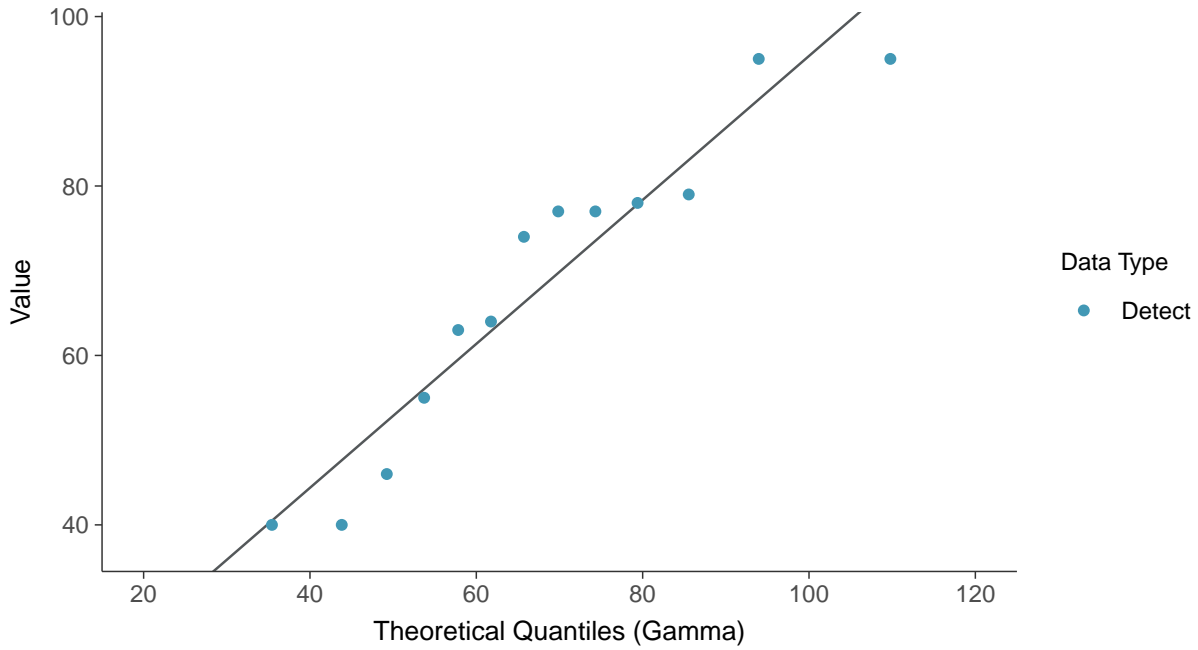
Calcium, MW-12 (mg/L)





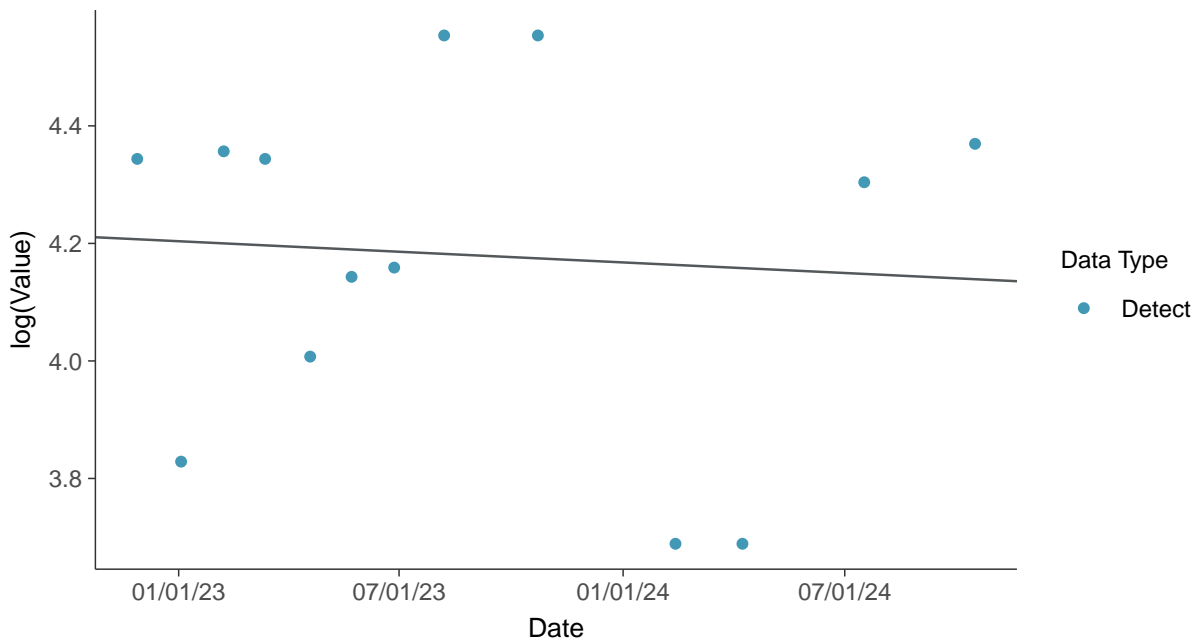
Gamma Q-Q plot

Calcium, MW-12 (mg/L)



Trend Regression: Lognormal MLE

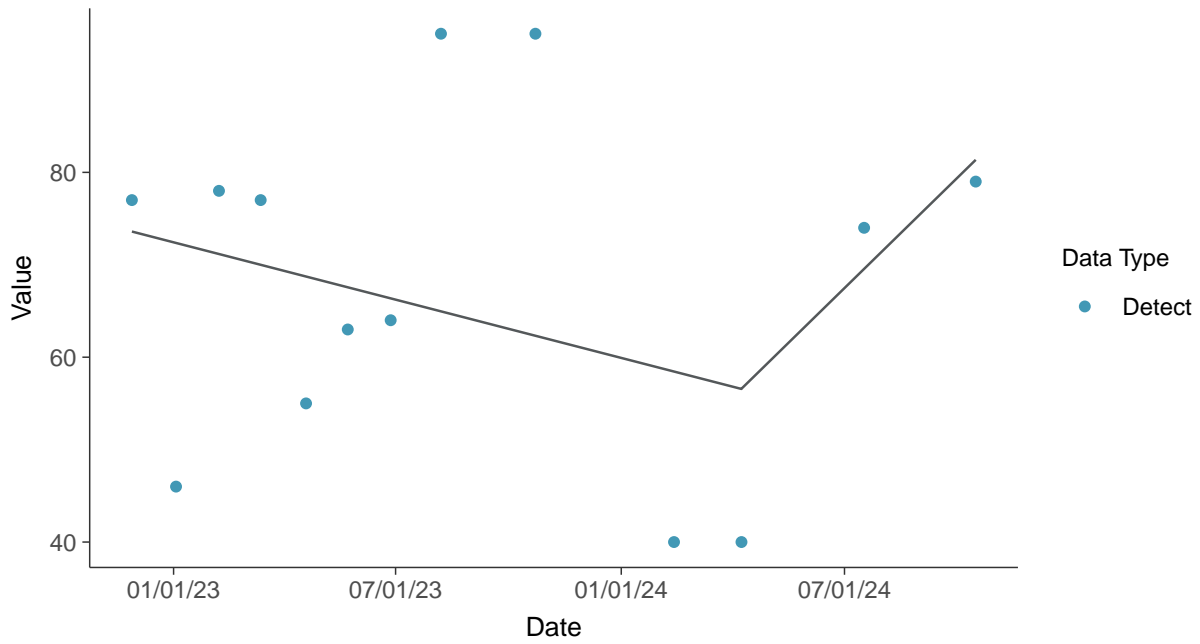
Calcium, MW-12 (mg/L)





Trend Regression: Piecewise Linear-Linear

Calcium, MW-12 (mg/L)



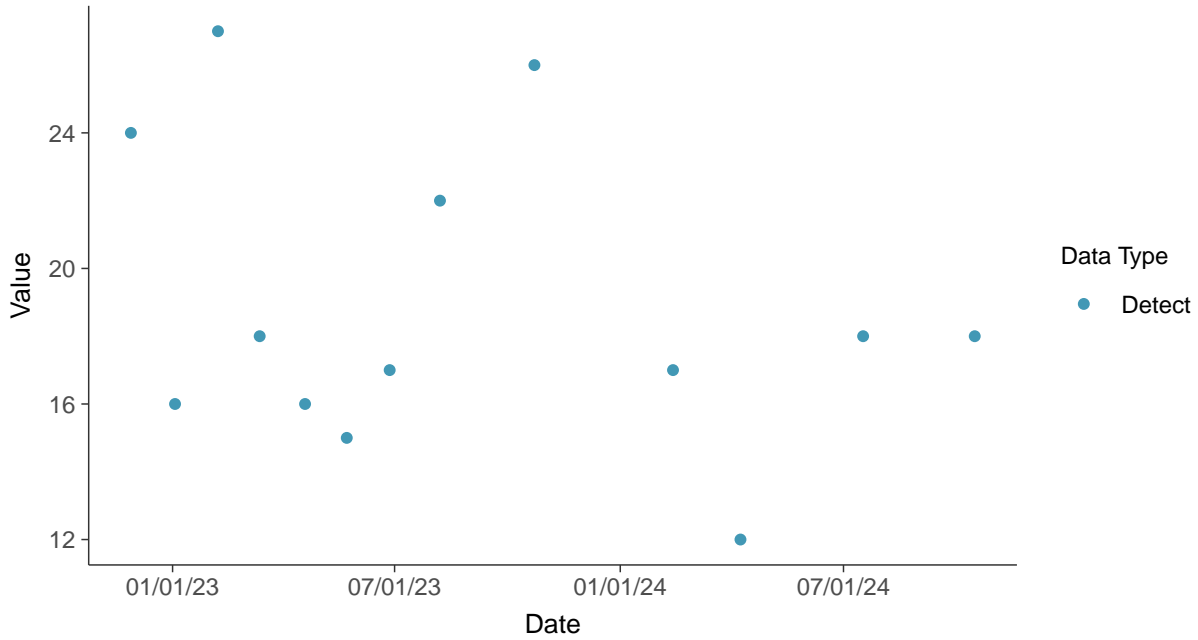


Appendix III: Chloride (as Cl), MW-12

ID: 2_22_2_4_108

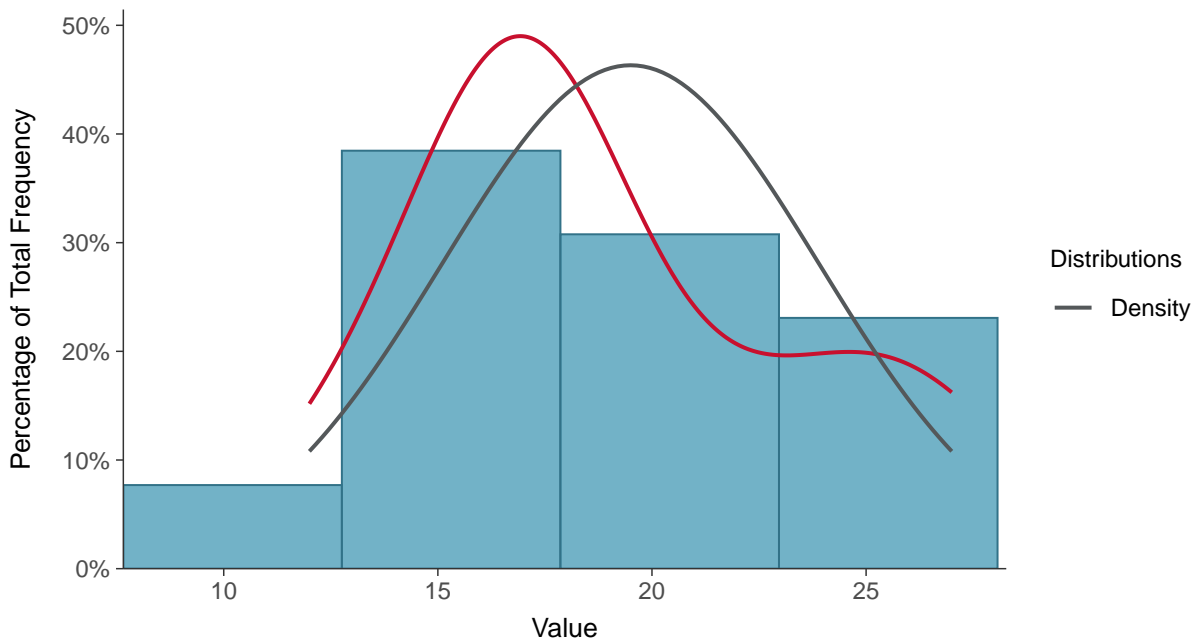
Scatter Plot

Chloride (as Cl), MW-12 (mg/L)



Histogram

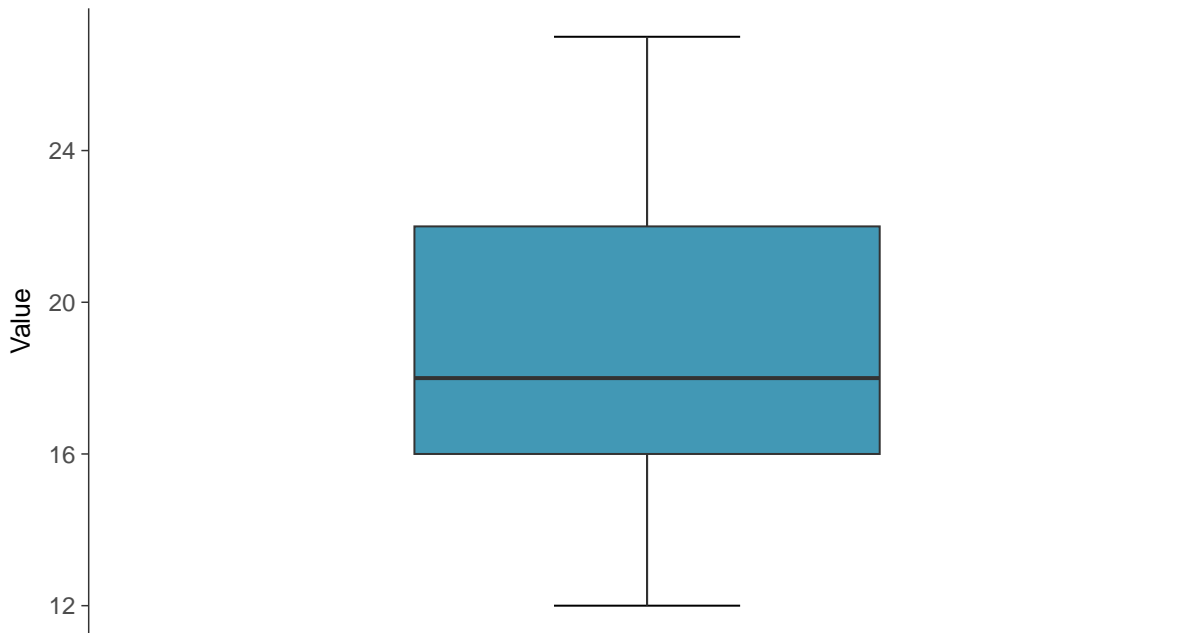
Chloride (as Cl), MW-12 (mg/L)





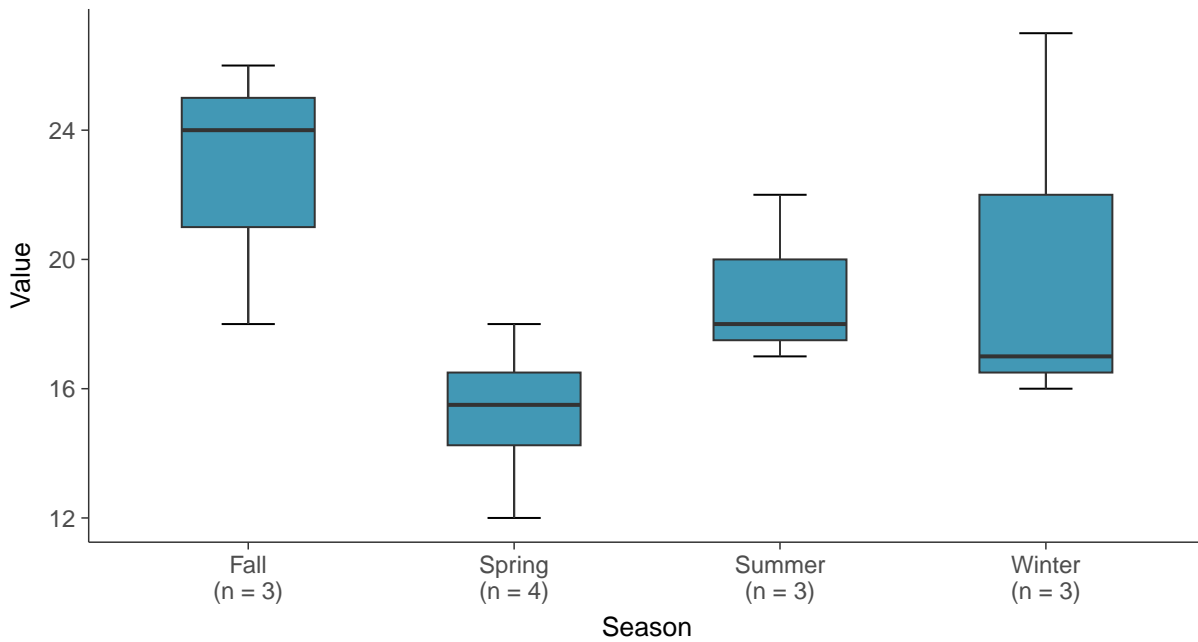
Boxplot

Chloride (as Cl), MW-12 (mg/L)



Boxplot by Season

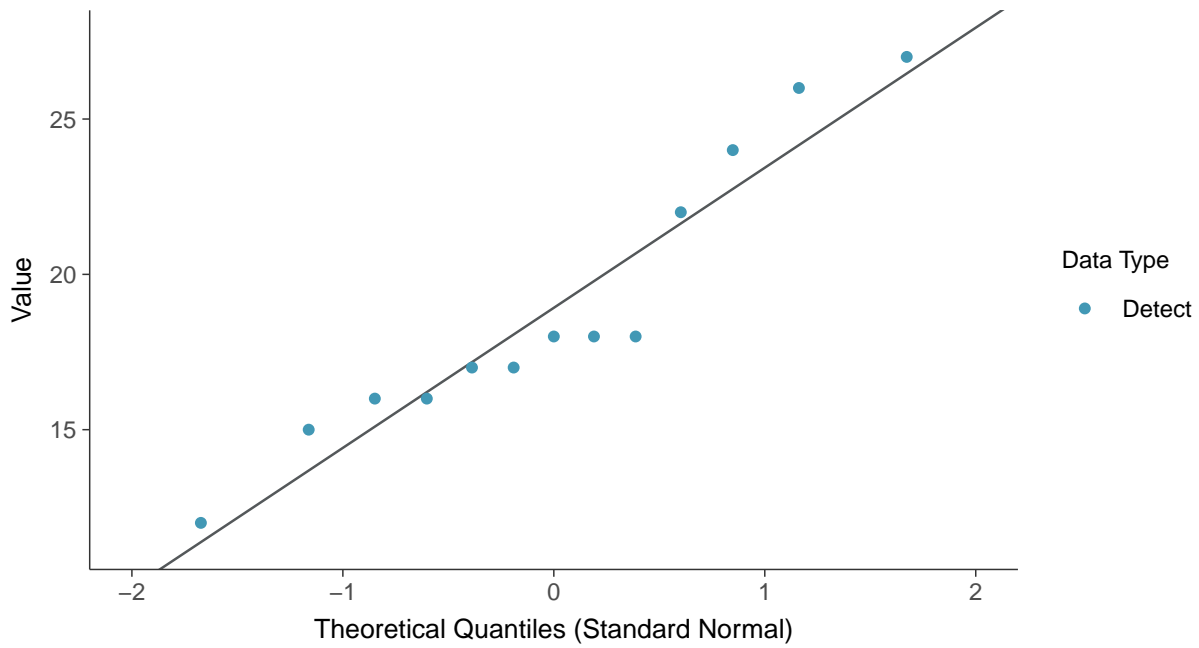
Chloride (as Cl), MW-12 (mg/L)





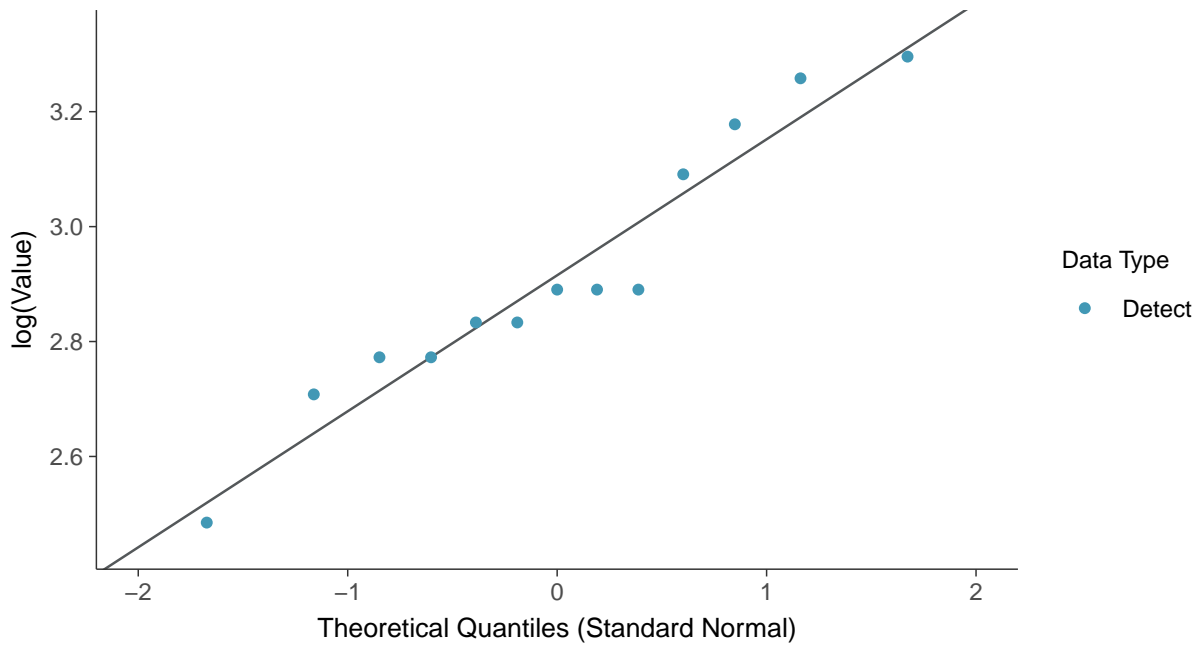
Normal Q-Q plot

Chloride (as Cl), MW-12 (mg/L)



Lognormal Q-Q plot

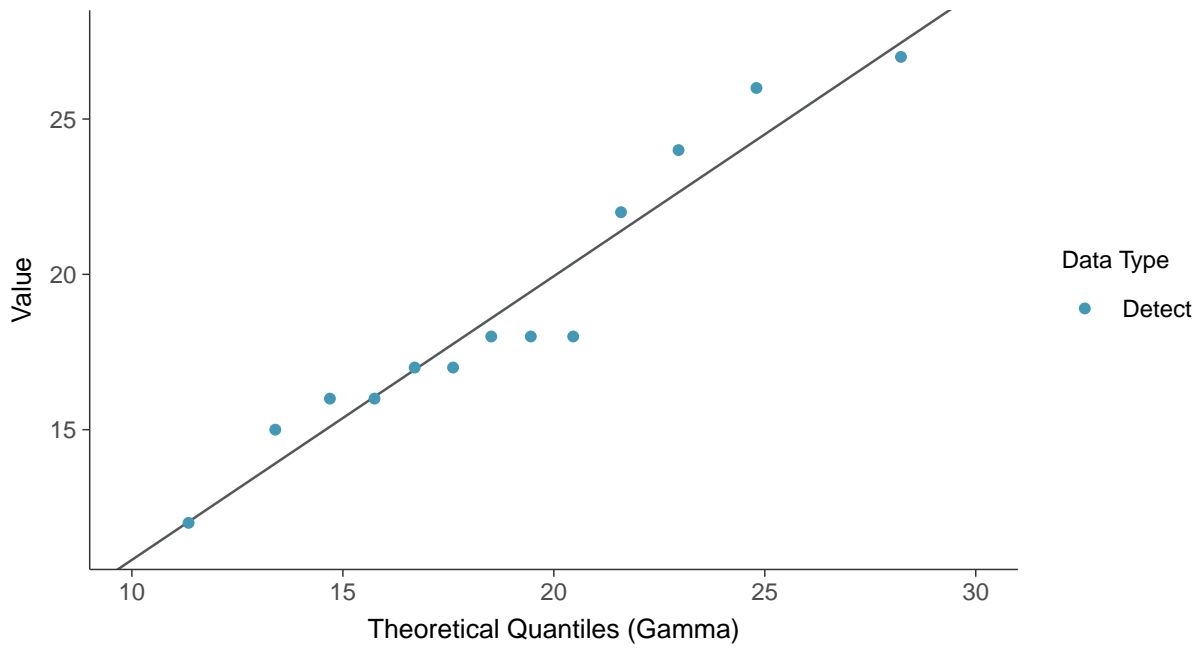
Chloride (as Cl), MW-12 (mg/L)





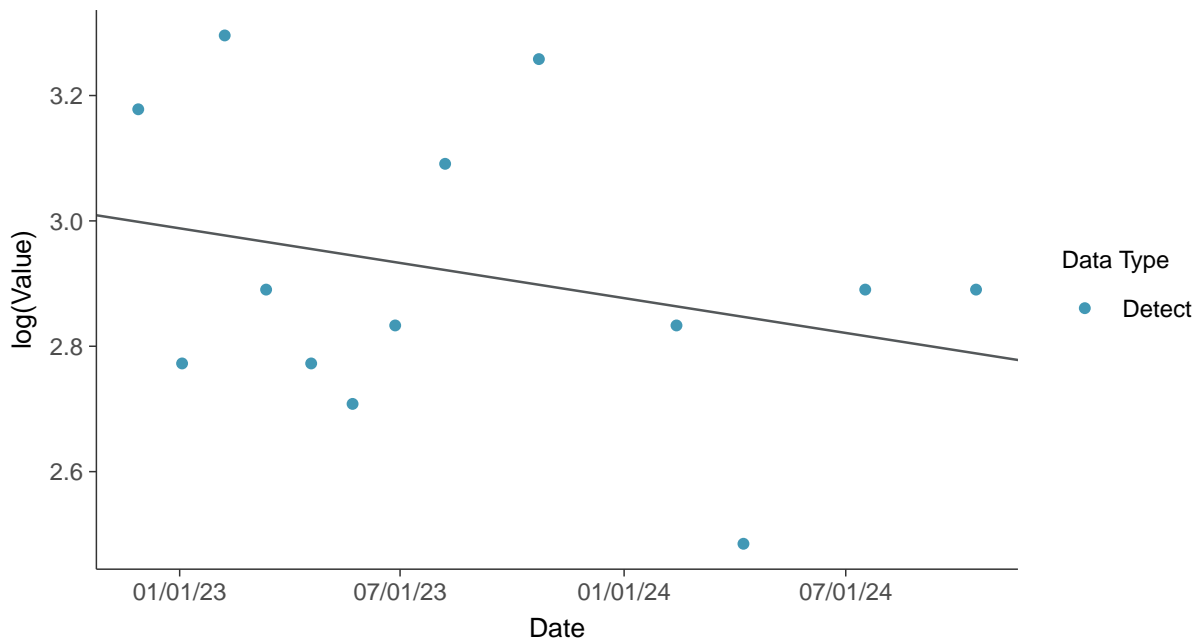
Gamma Q-Q plot

Chloride (as Cl), MW-12 (mg/L)



Trend Regression: Lognormal MLE

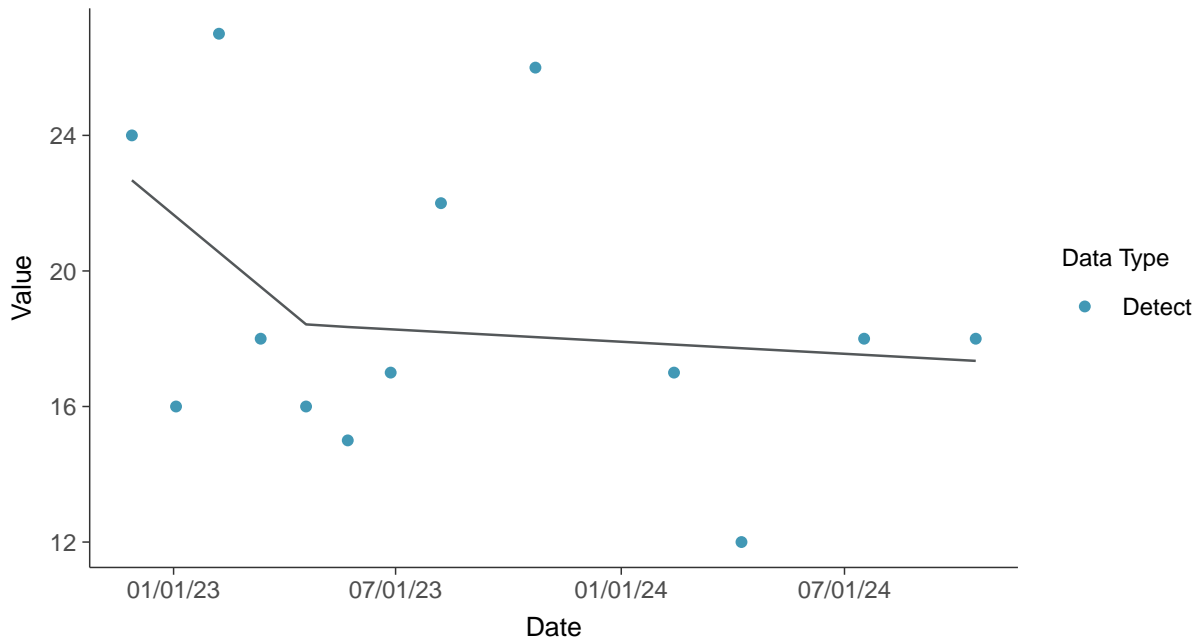
Chloride (as Cl), MW-12 (mg/L)





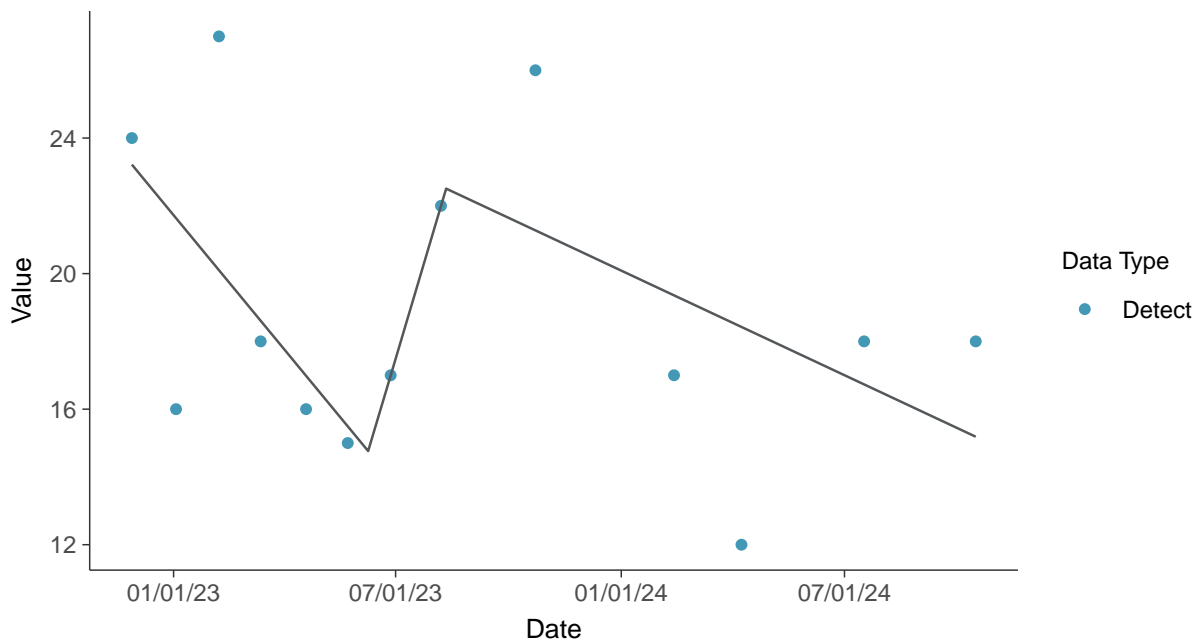
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-12 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Chloride (as Cl), MW-12 (mg/L)



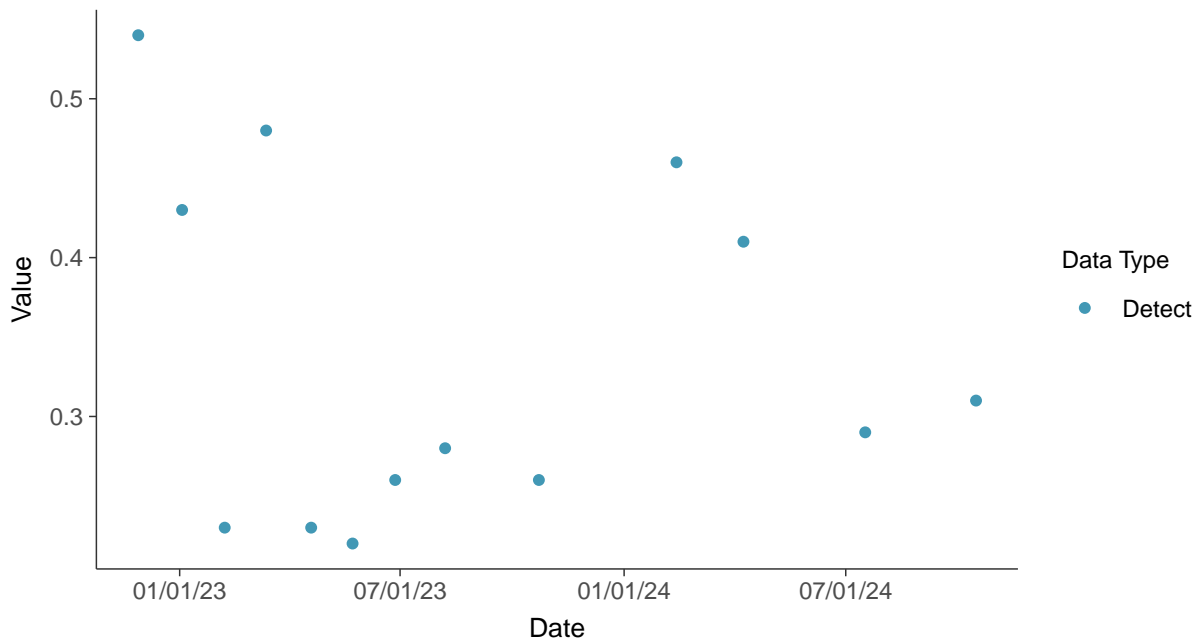


Appendix III: Fluoride, MW-12

ID: 2_22_2_4_112

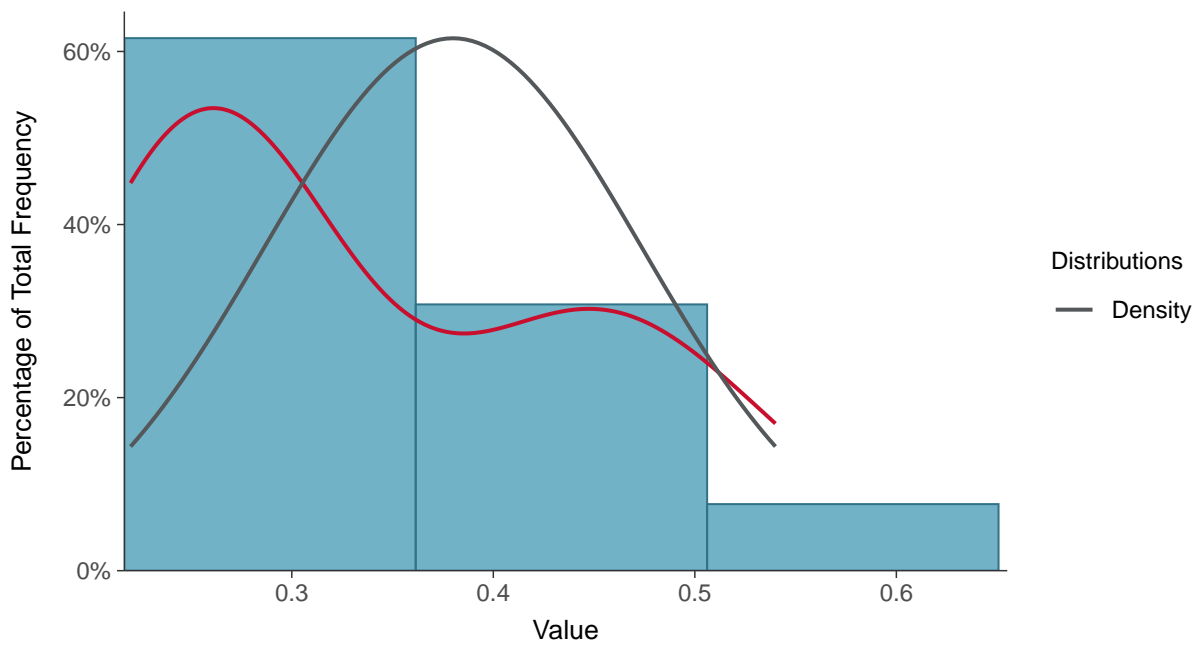
Scatter Plot

Fluoride, MW-12 (mg/L)



Histogram

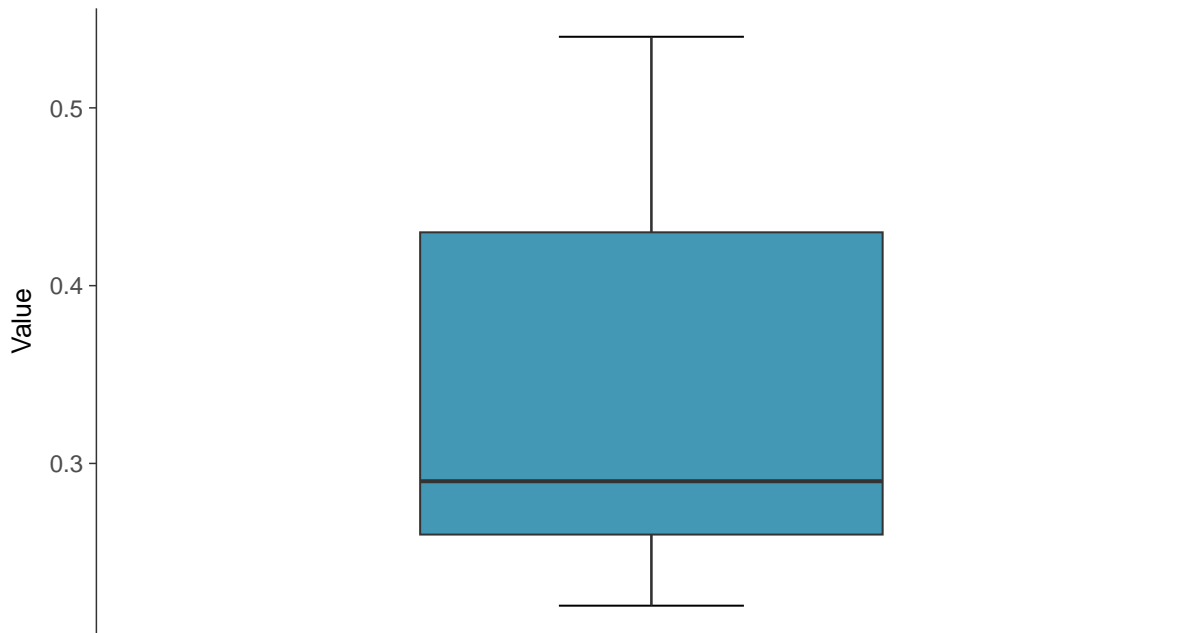
Fluoride, MW-12 (mg/L)





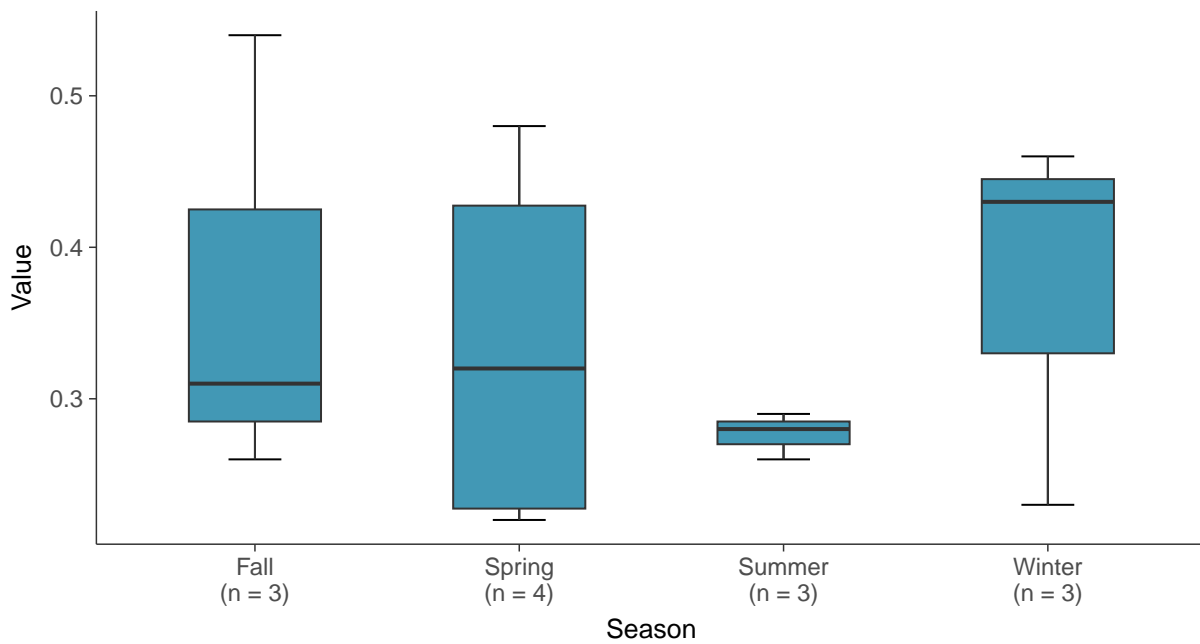
Boxplot

Fluoride, MW-12 (mg/L)



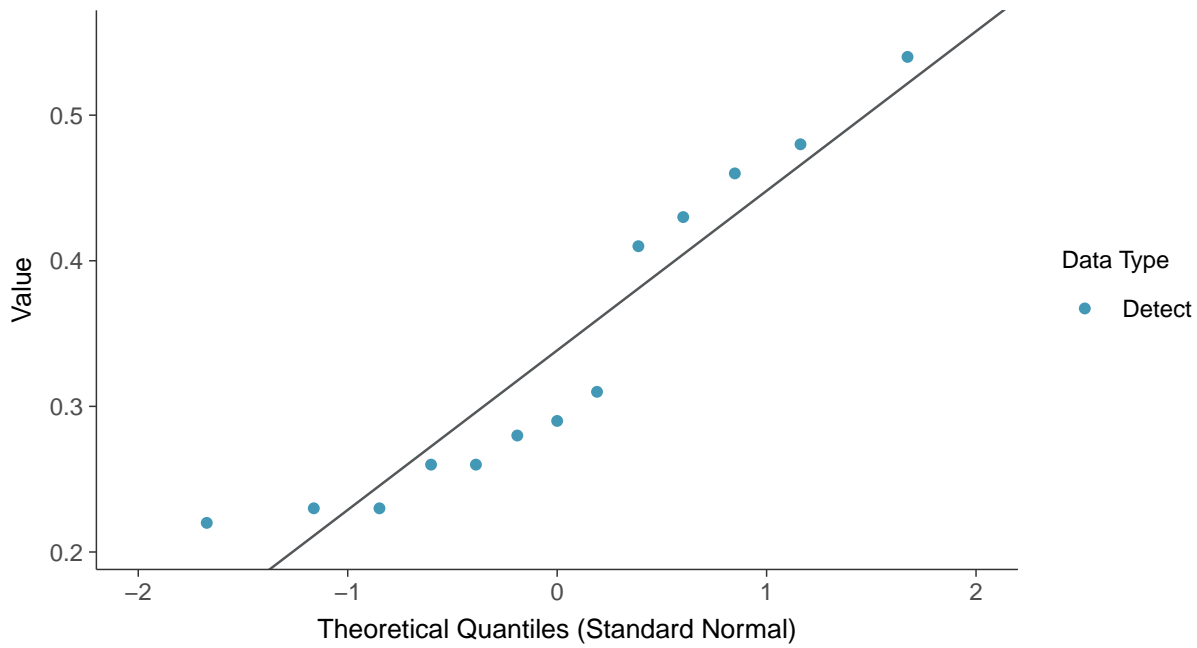
Boxplot by Season

Fluoride, MW-12 (mg/L)

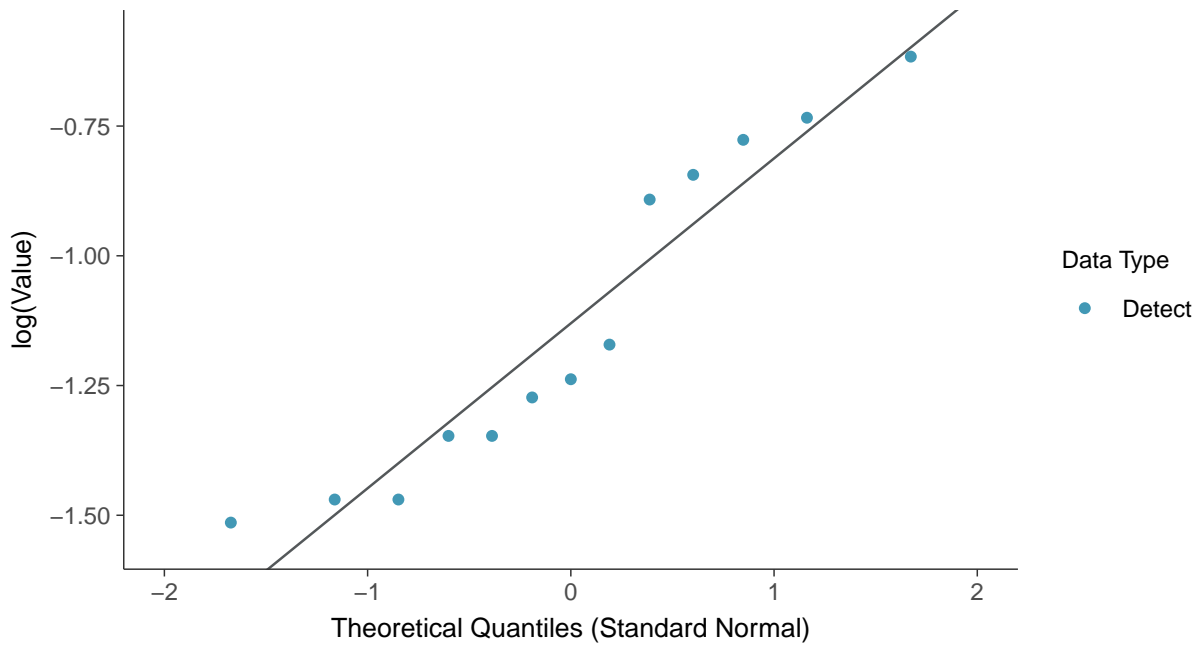




Normal Q-Q plot
Fluoride, MW-12 (mg/L)



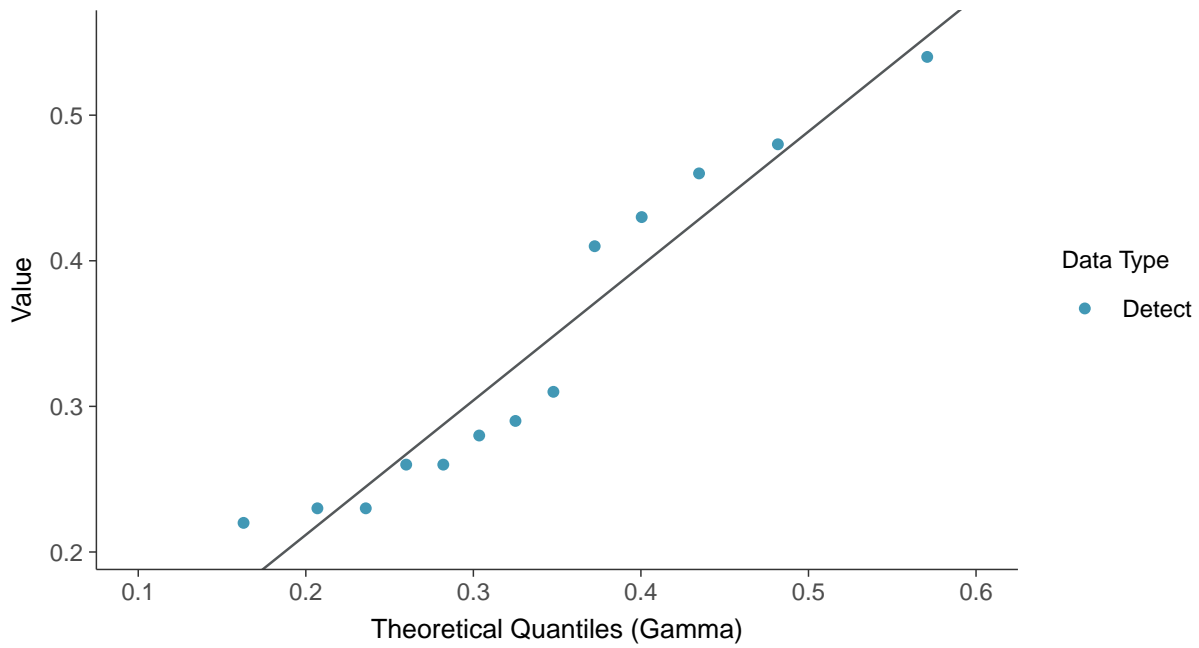
Lognormal Q-Q plot
Fluoride, MW-12 (mg/L)





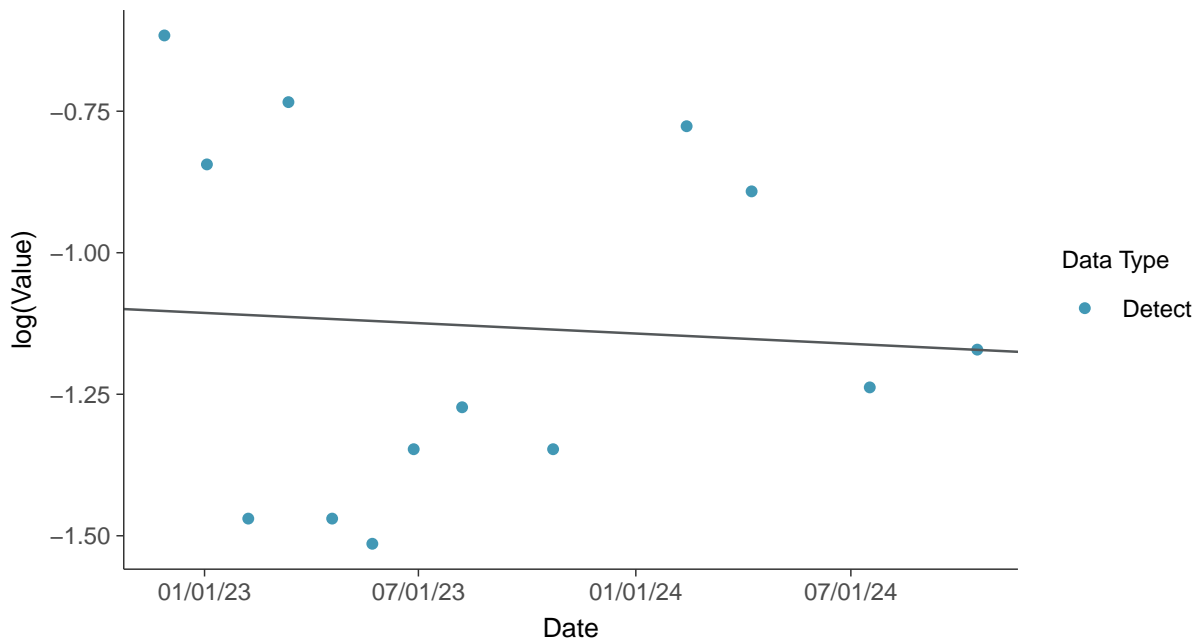
Gamma Q-Q plot

Fluoride, MW-12 (mg/L)



Trend Regression: Lognormal MLE

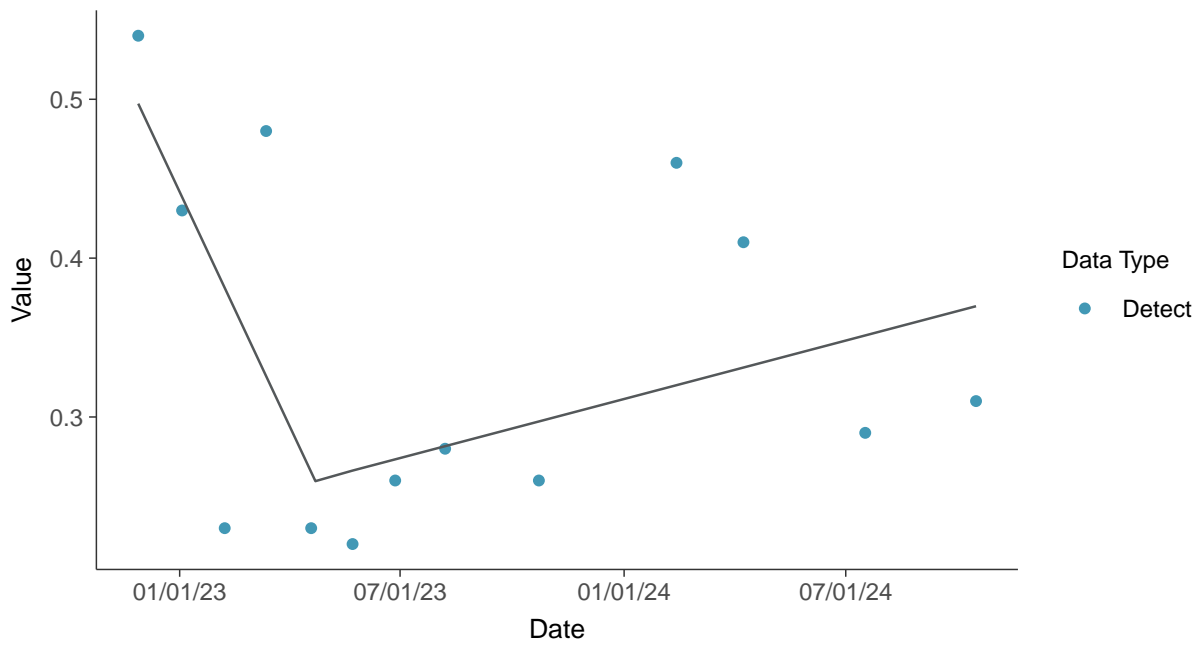
Fluoride, MW-12 (mg/L)





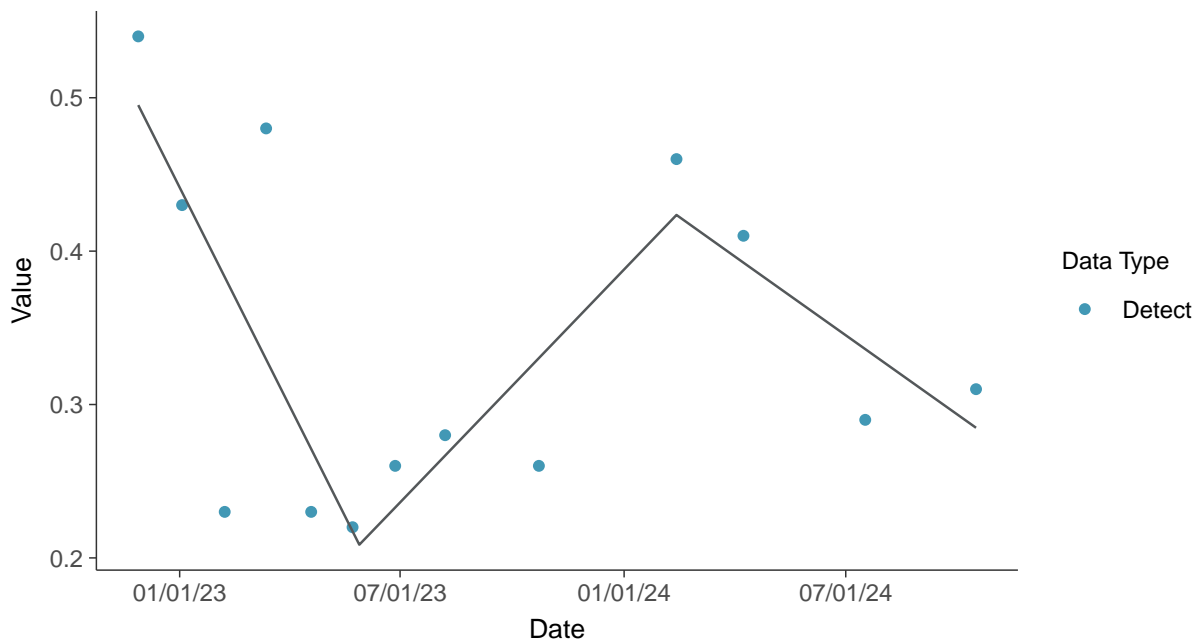
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-12 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

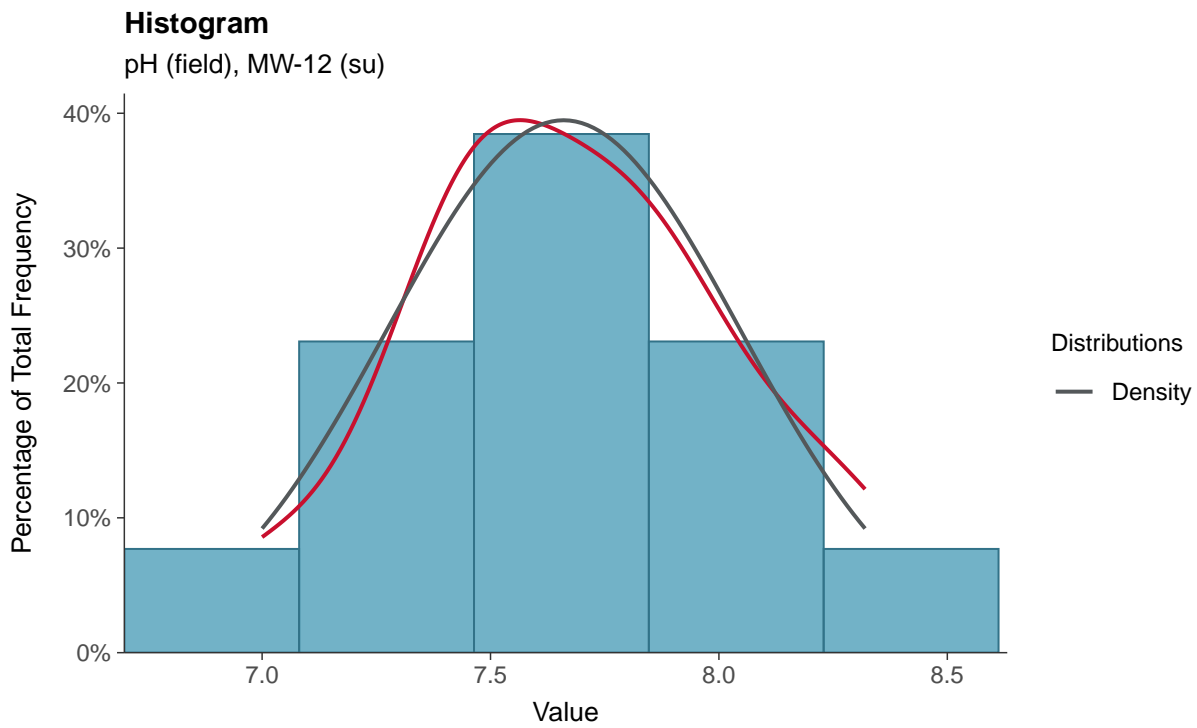
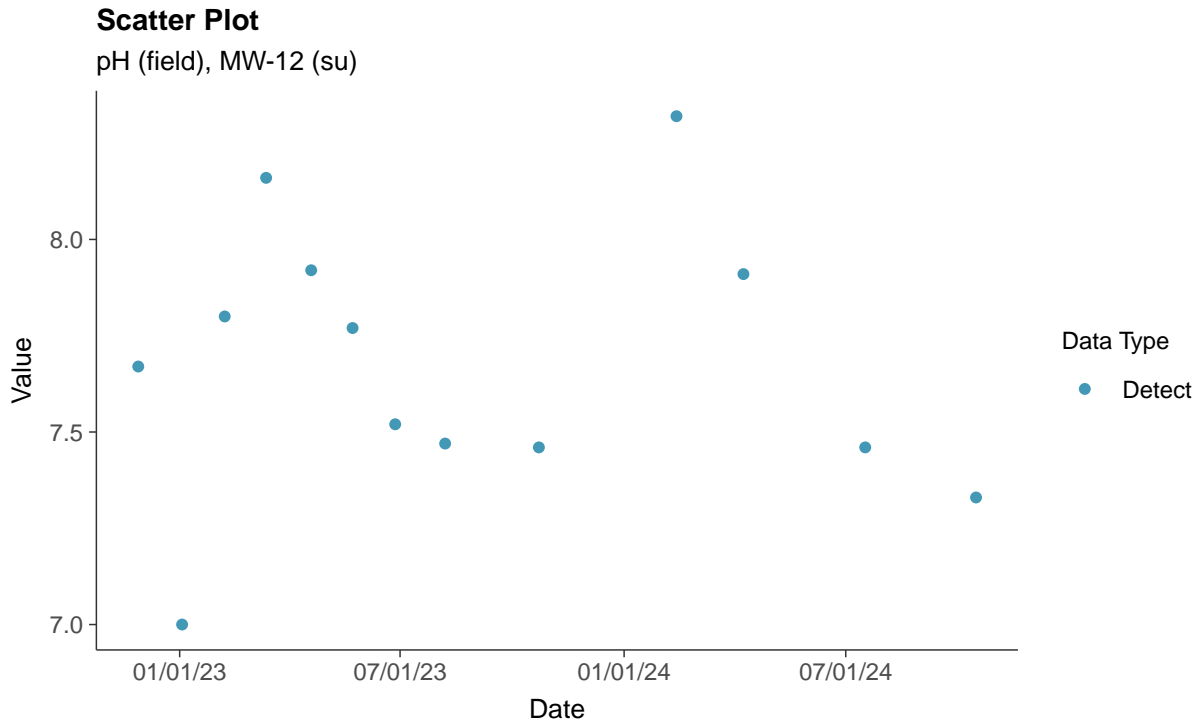
Fluoride, MW-12 (mg/L)





Appendix III: pH (field), MW-12

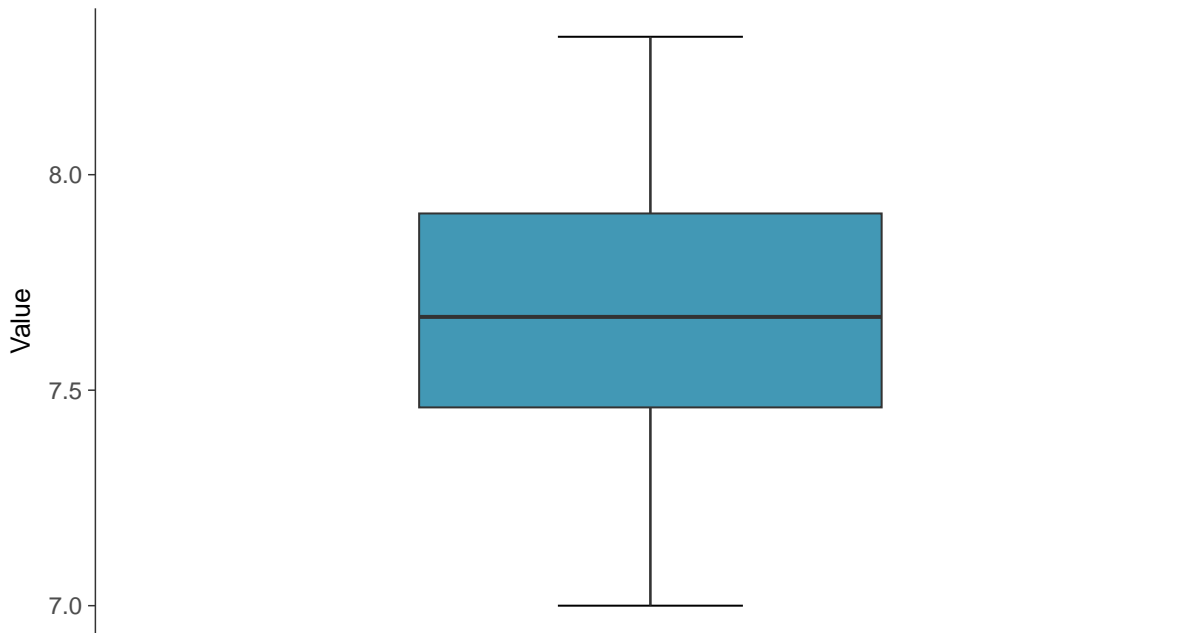
ID: 2_22_2_4_120





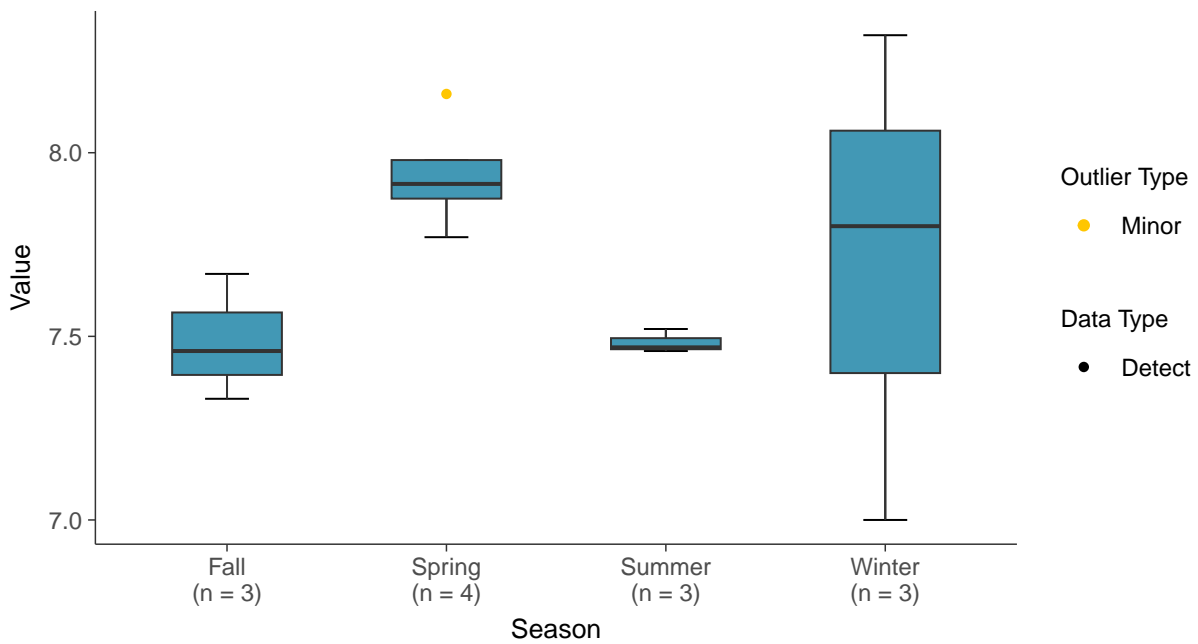
Boxplot

pH (field), MW-12 (su)



Boxplot by Season

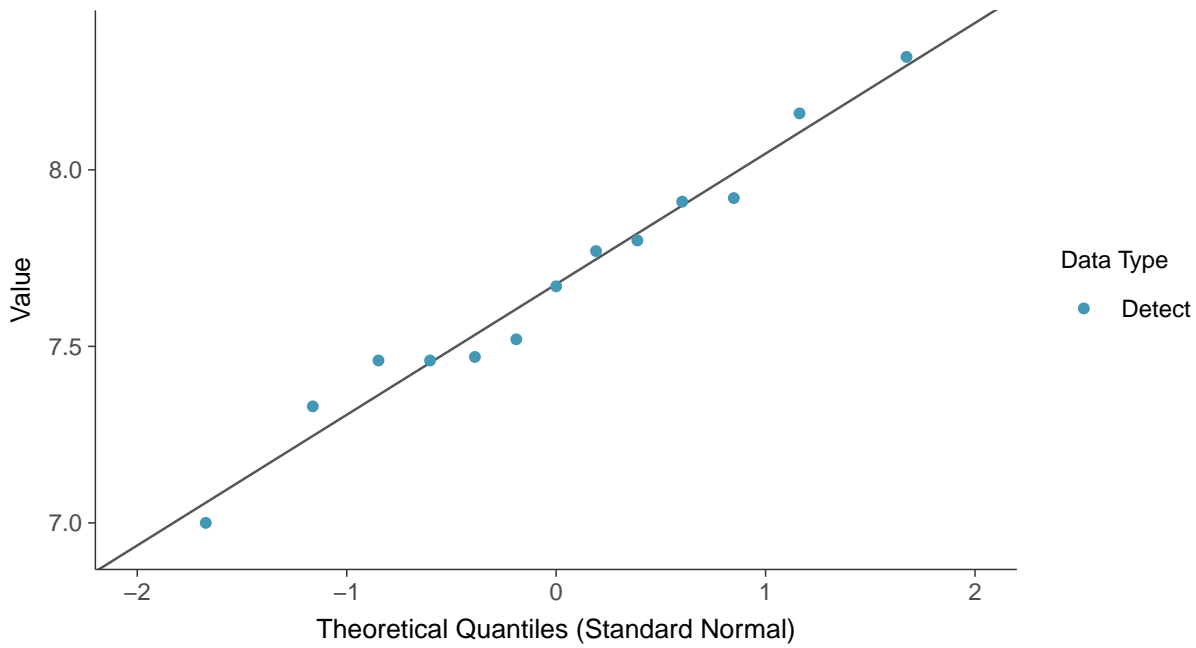
pH (field), MW-12 (su)





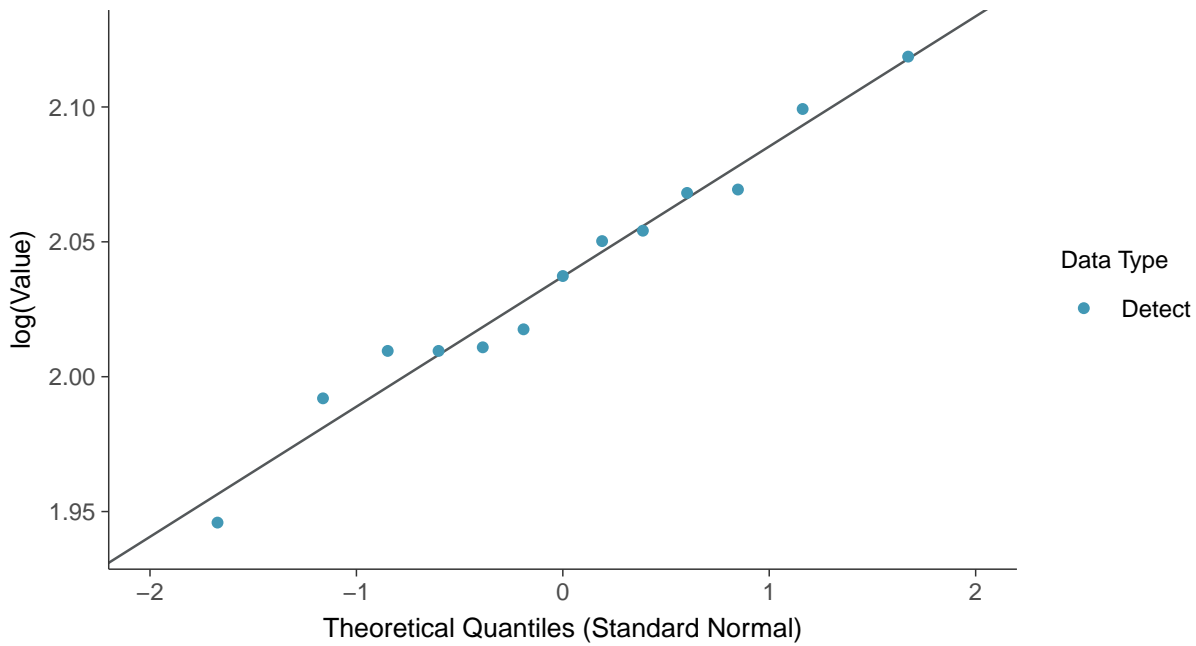
Normal Q-Q plot

pH (field), MW-12 (su)



Lognormal Q-Q plot

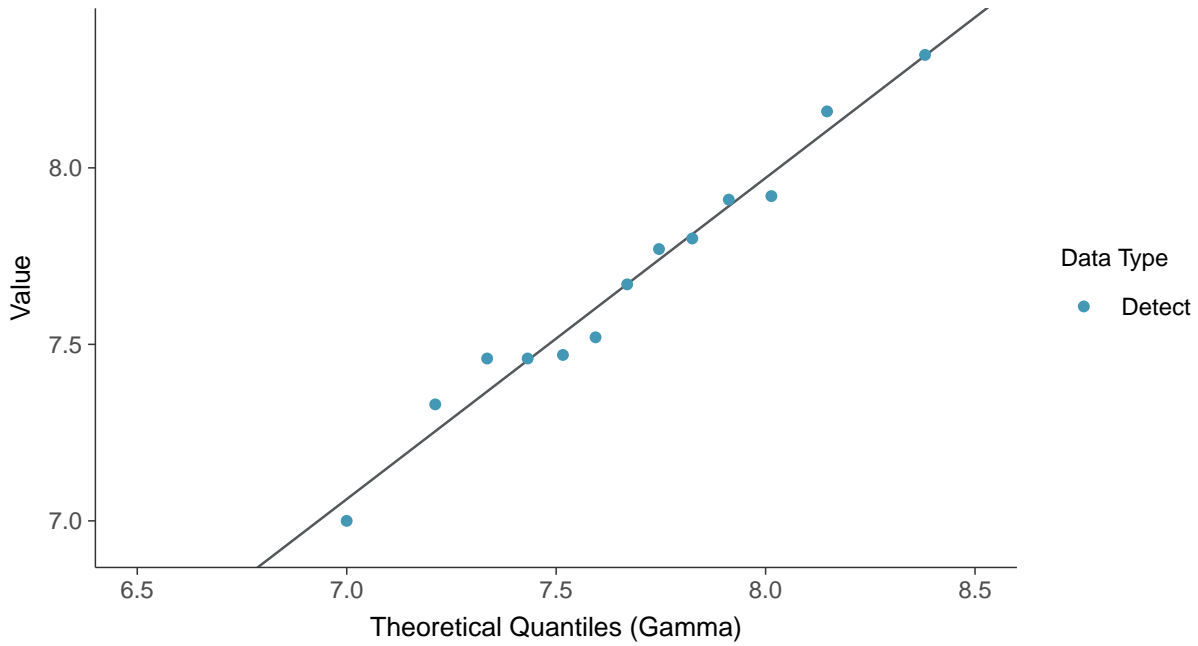
pH (field), MW-12 (su)





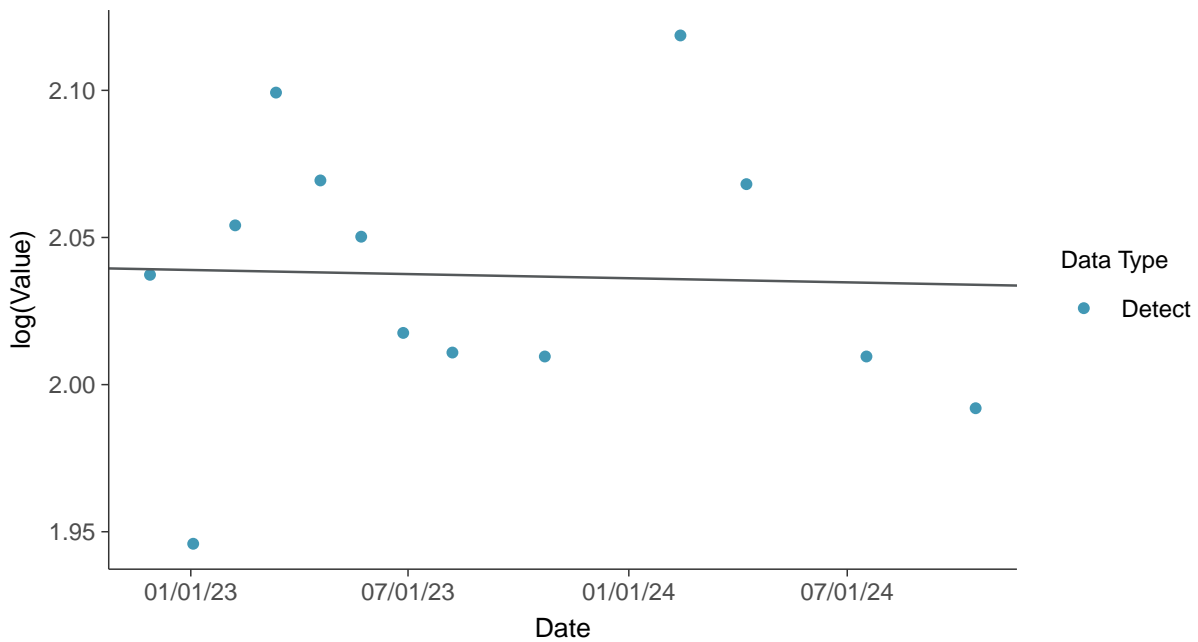
Gamma Q-Q plot

pH (field), MW-12 (su)



Trend Regression: Lognormal MLE

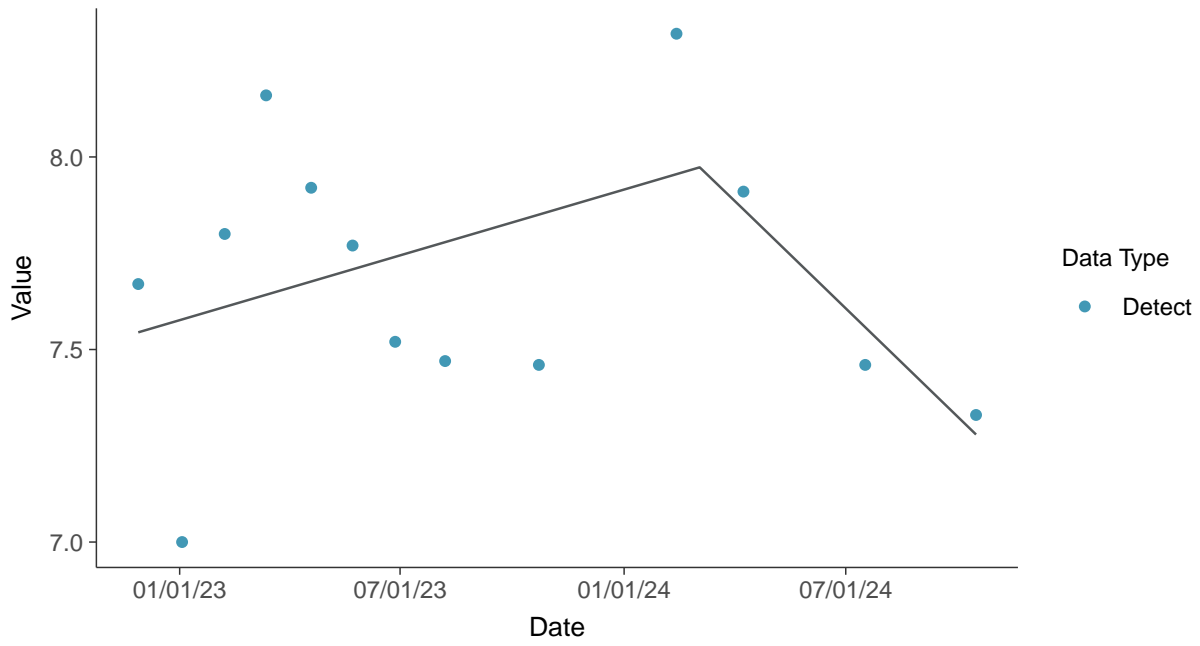
pH (field), MW-12 (su)





Trend Regression: Piecewise Linear-Linear

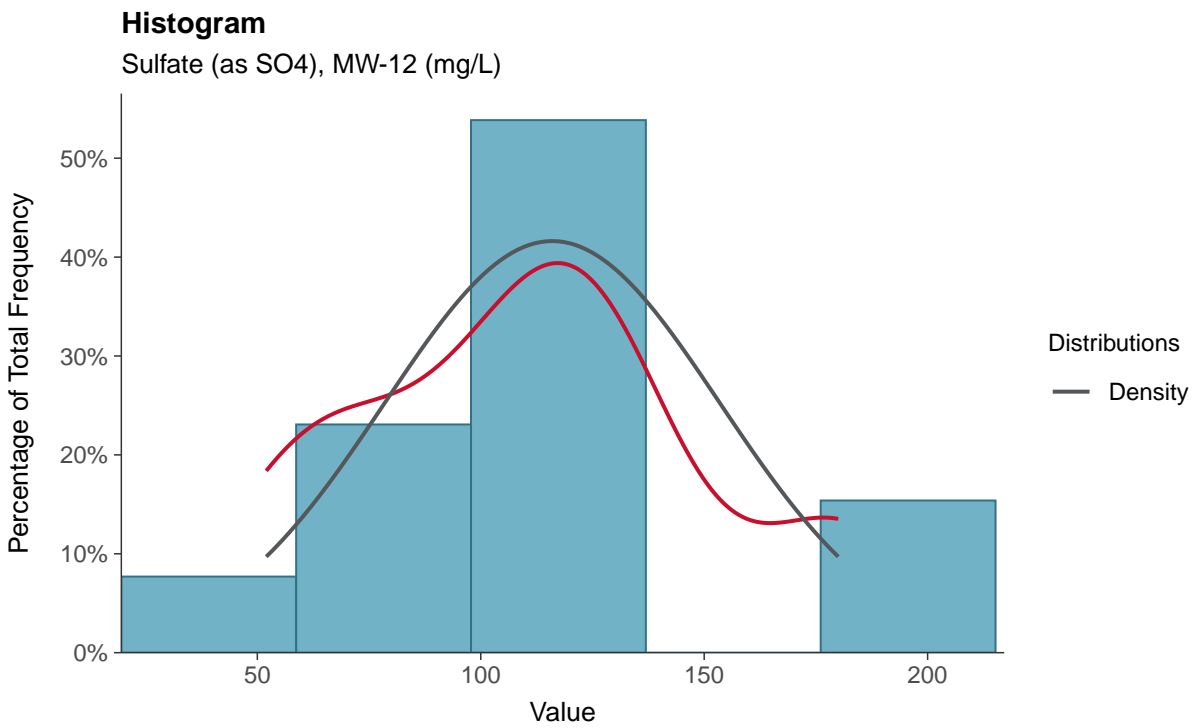
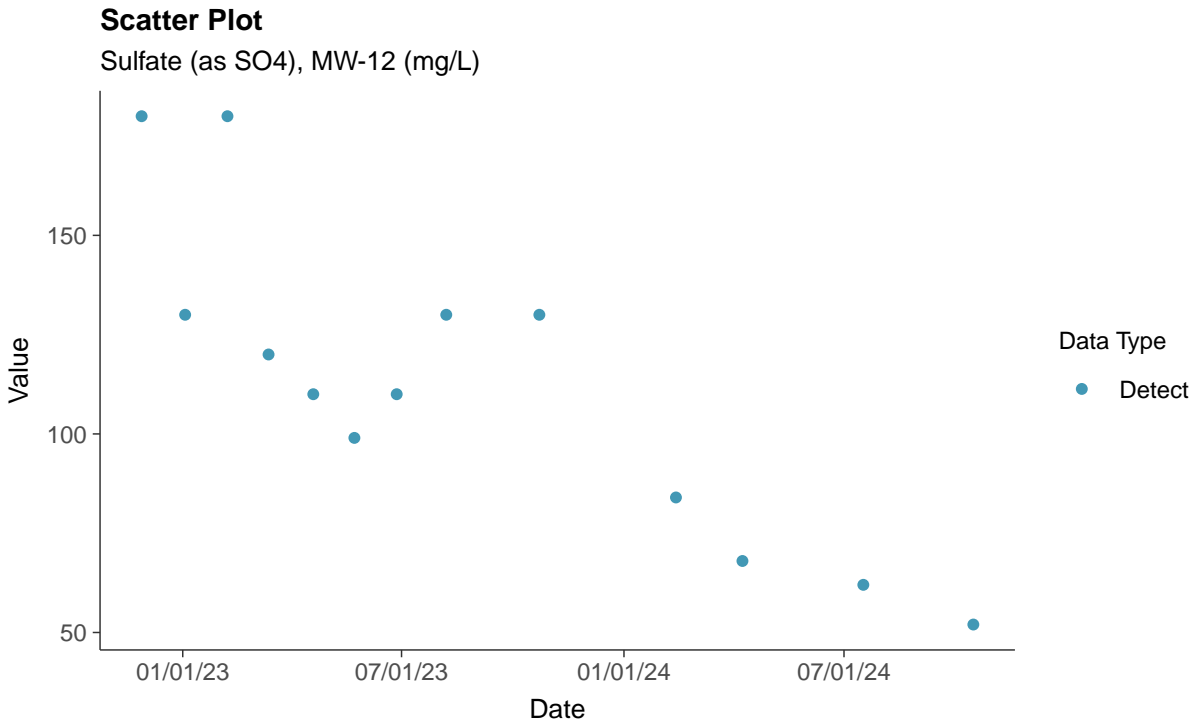
pH (field), MW-12 (su)





Appendix III: Sulfate (as SO4), MW-12

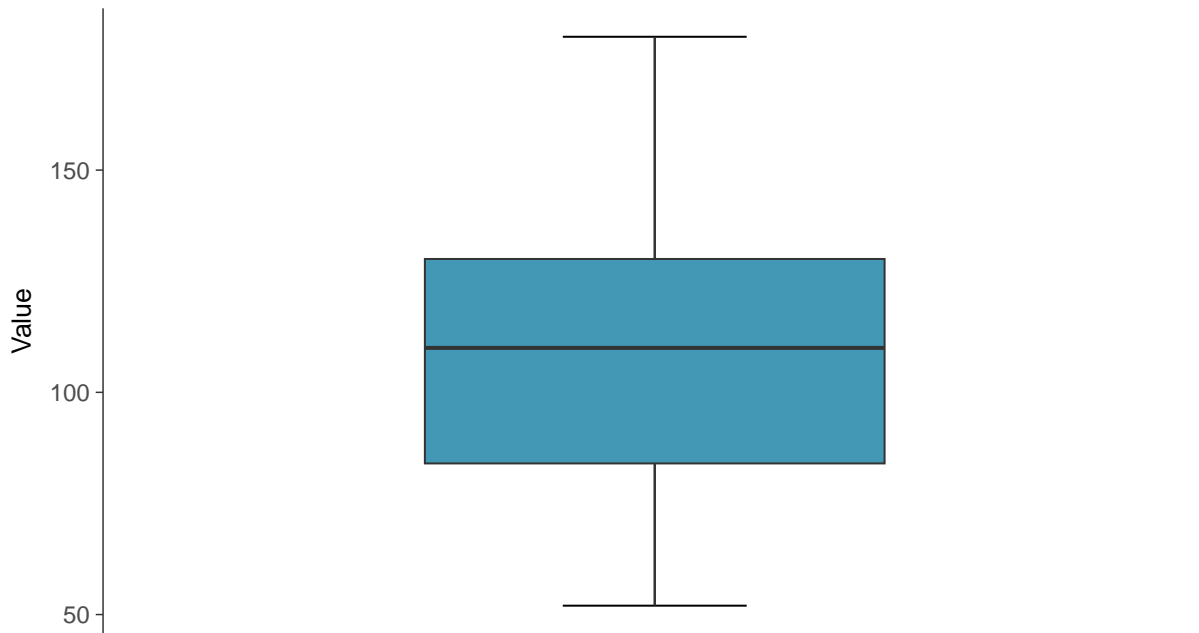
ID: 2_22_2_4_124





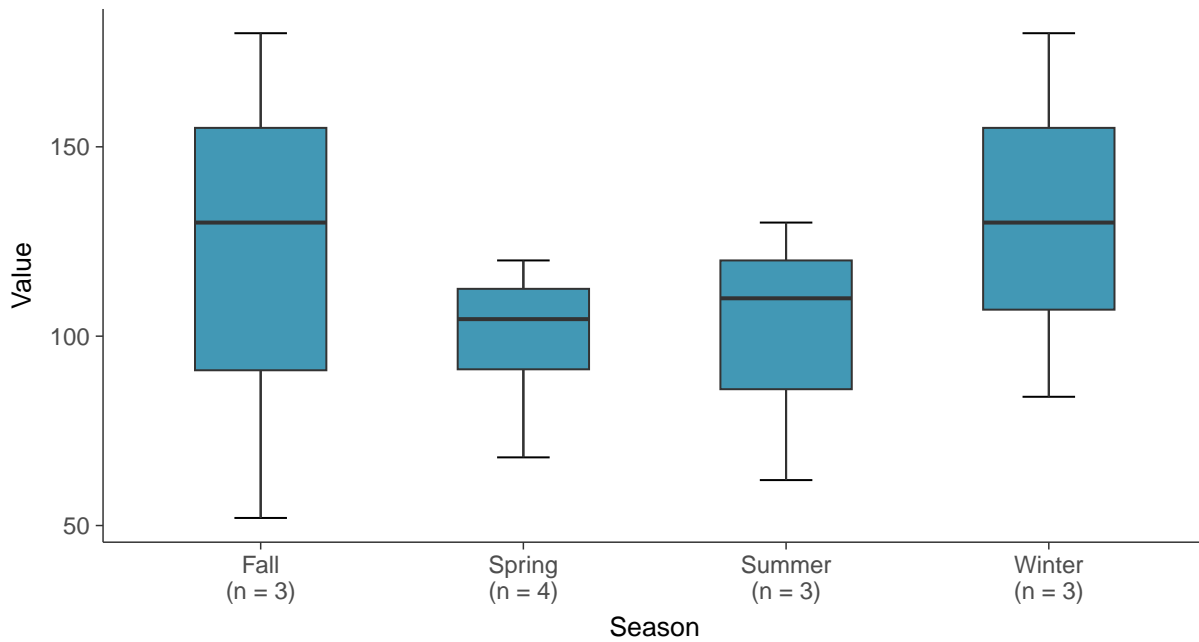
Boxplot

Sulfate (as SO₄), MW-12 (mg/L)



Boxplot by Season

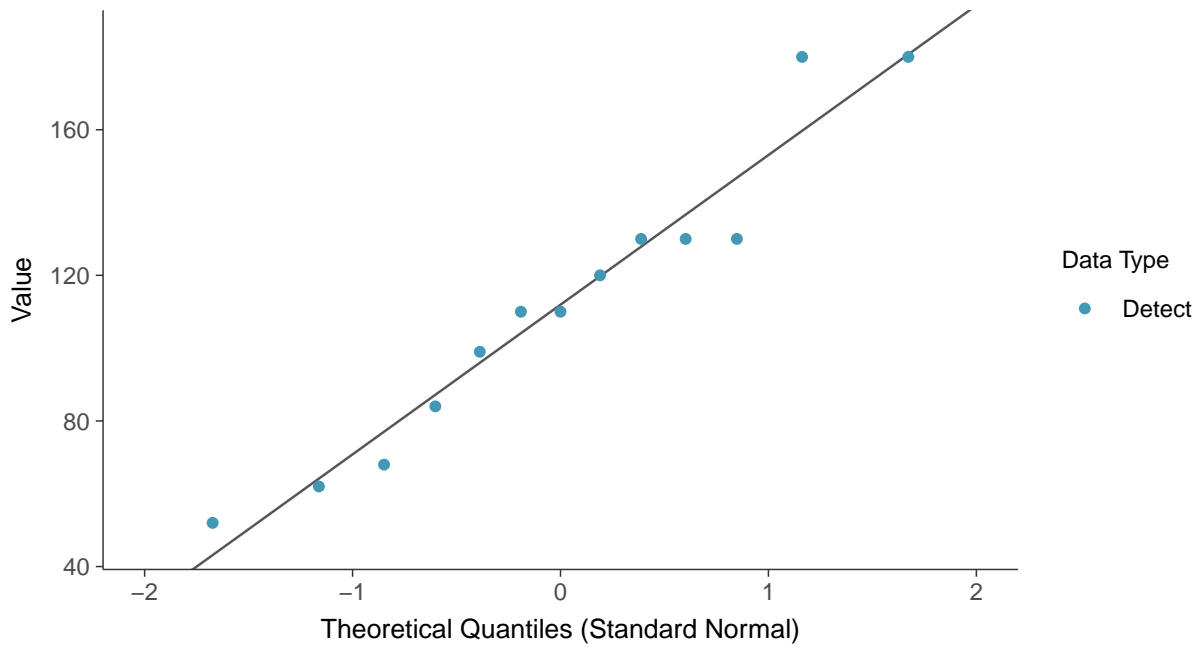
Sulfate (as SO₄), MW-12 (mg/L)





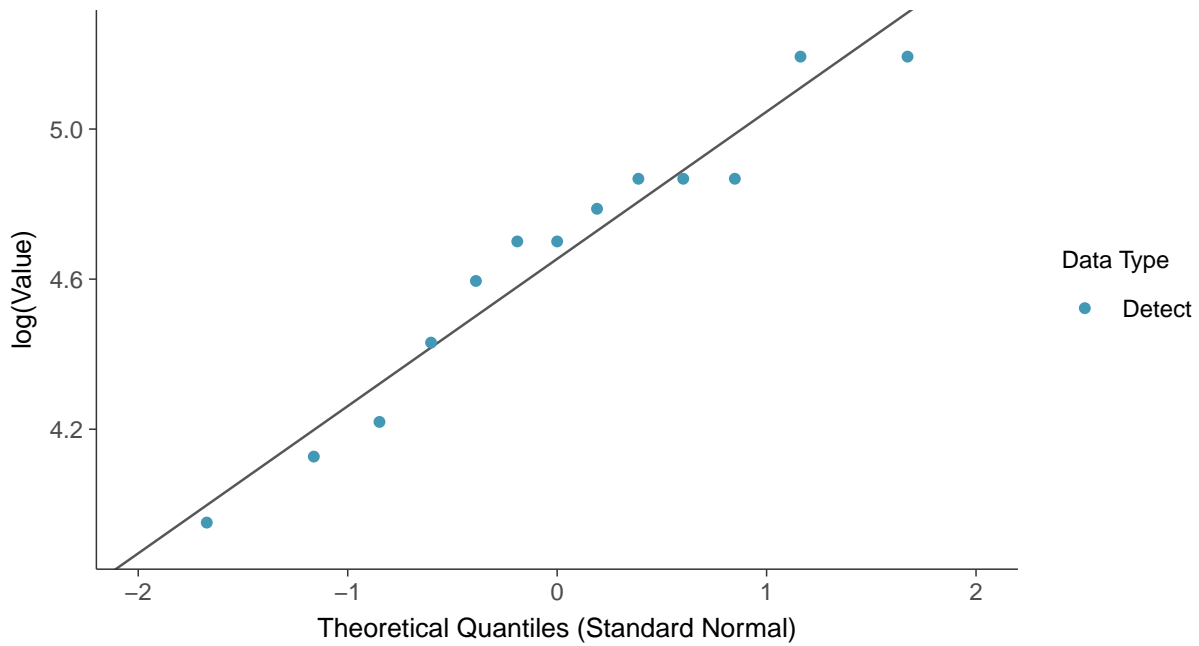
Normal Q-Q plot

Sulfate (as SO₄), MW-12 (mg/L)



Lognormal Q-Q plot

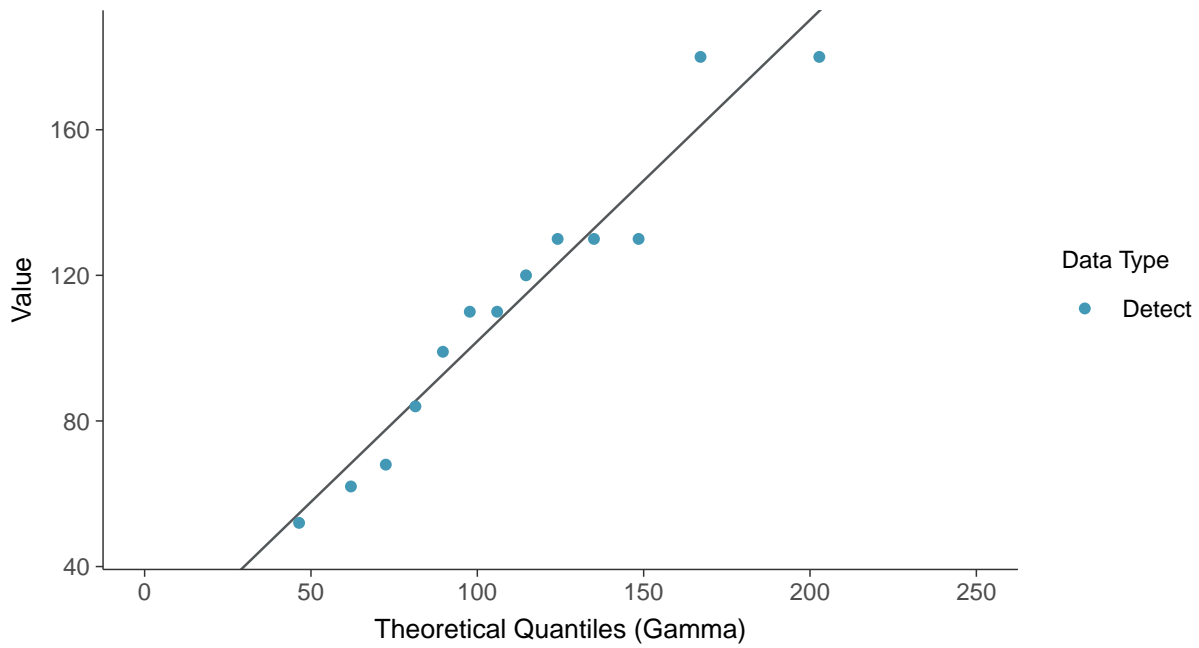
Sulfate (as SO₄), MW-12 (mg/L)





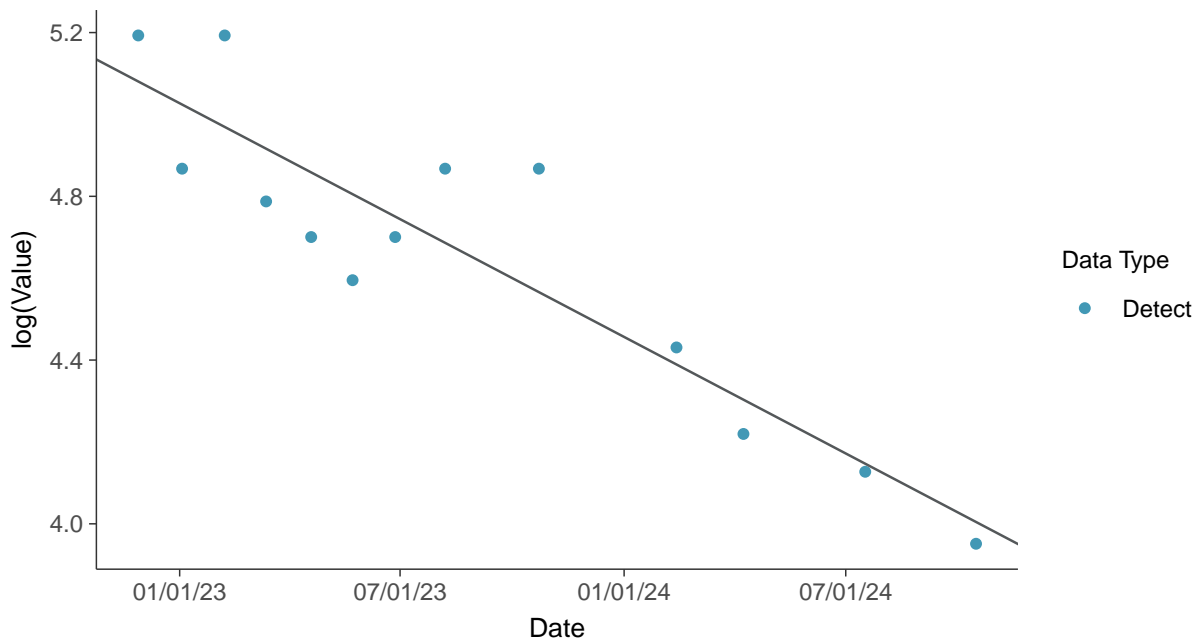
Gamma Q-Q plot

Sulfate (as SO₄), MW-12 (mg/L)



Trend Regression: Lognormal MLE

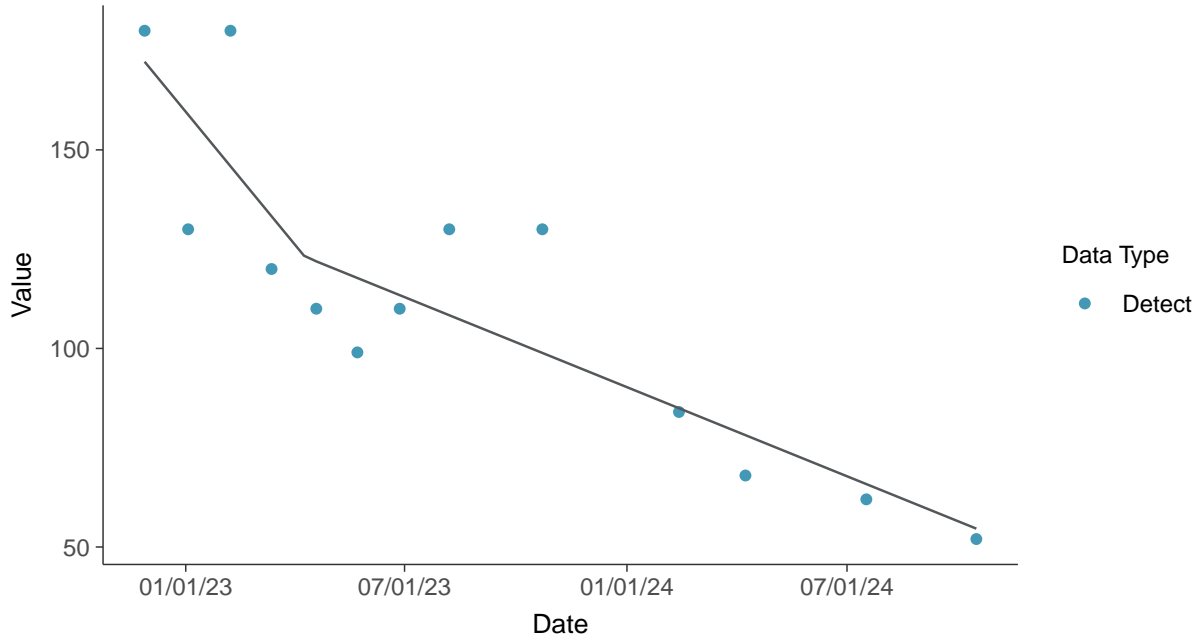
Sulfate (as SO₄), MW-12 (mg/L)





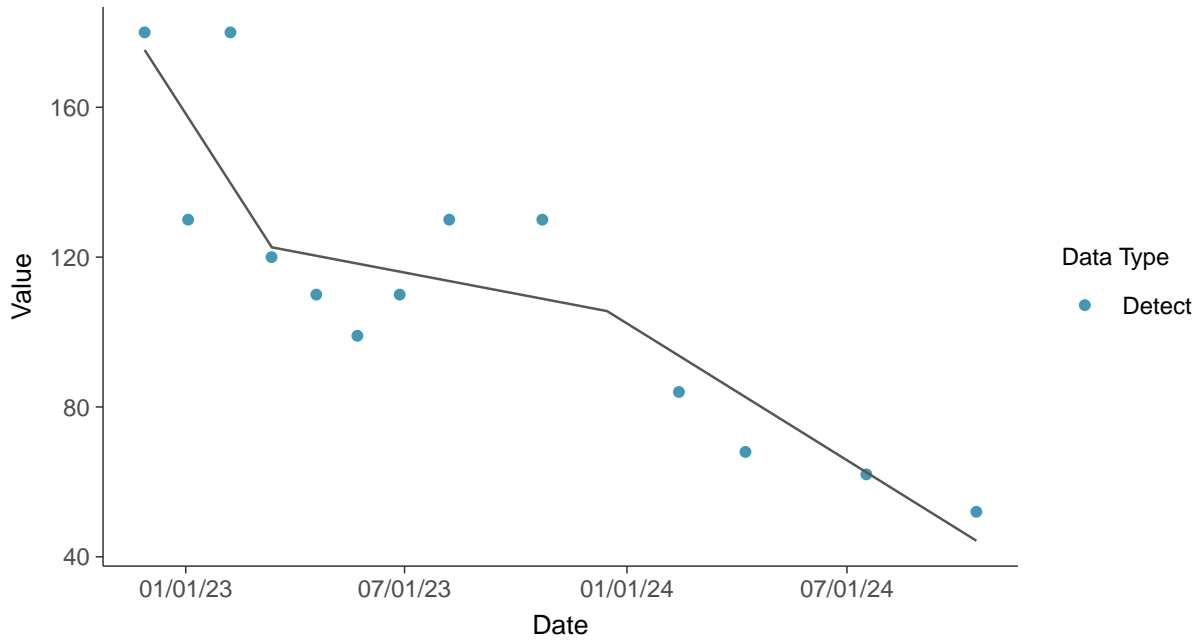
Trend Regression: Piecewise Linear-Linear

Sulfate (as SO₄), MW-12 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Sulfate (as SO₄), MW-12 (mg/L)



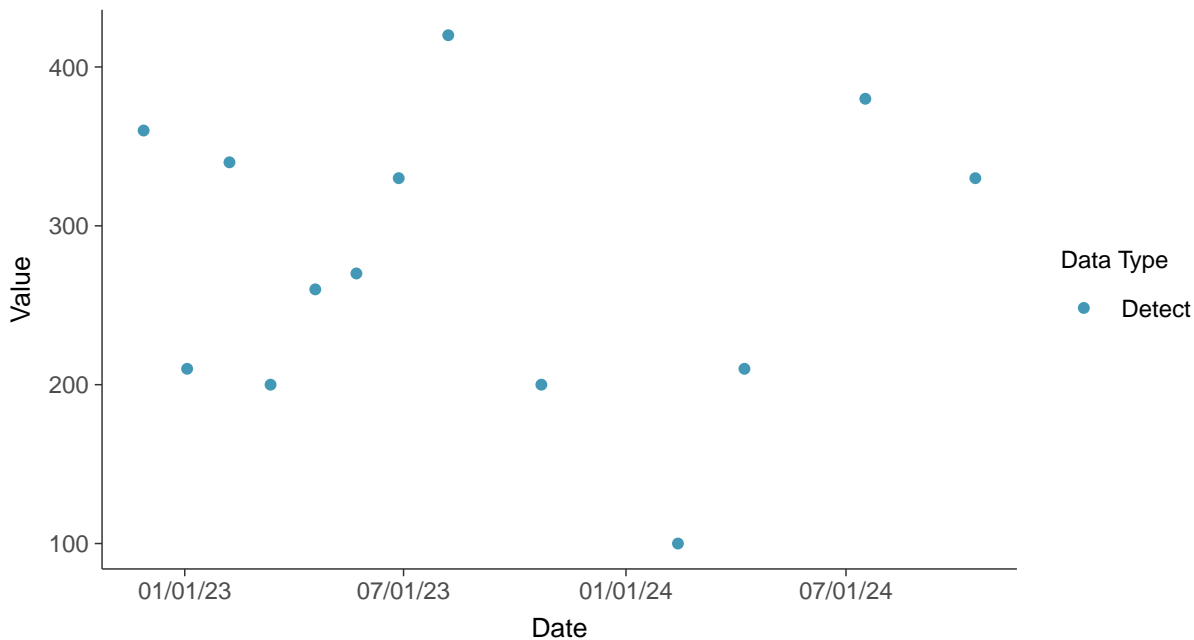


Appendix III: Total Dissolved Solids, MW-12

ID: 2_22_2_4_126

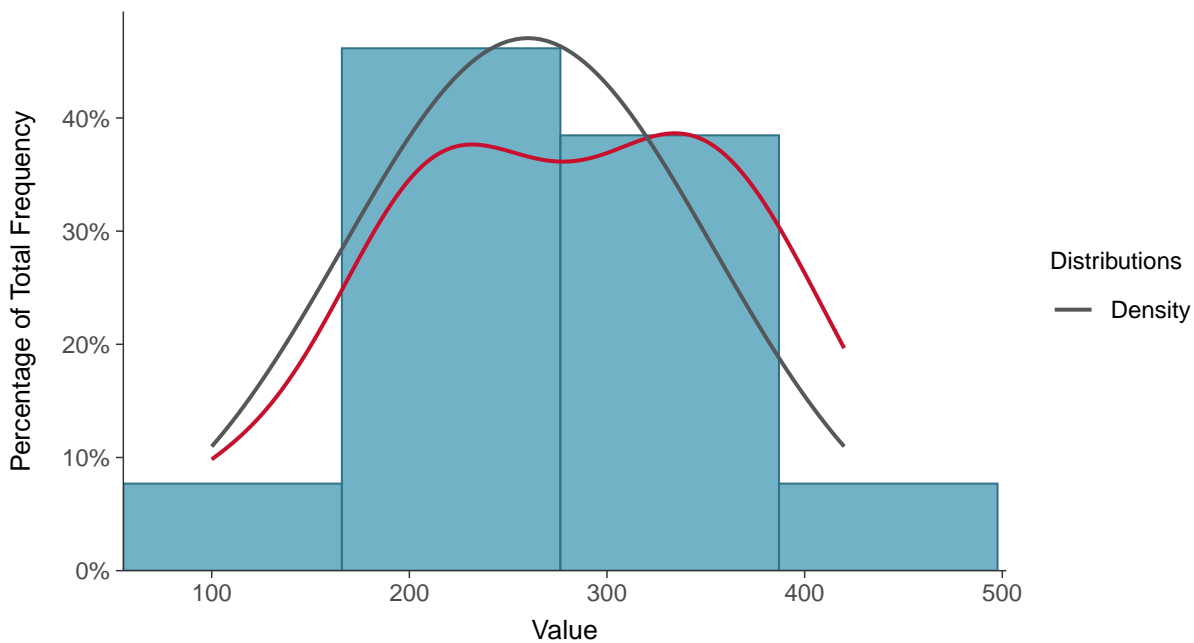
Scatter Plot

Total Dissolved Solids, MW-12 (mg/L)



Histogram

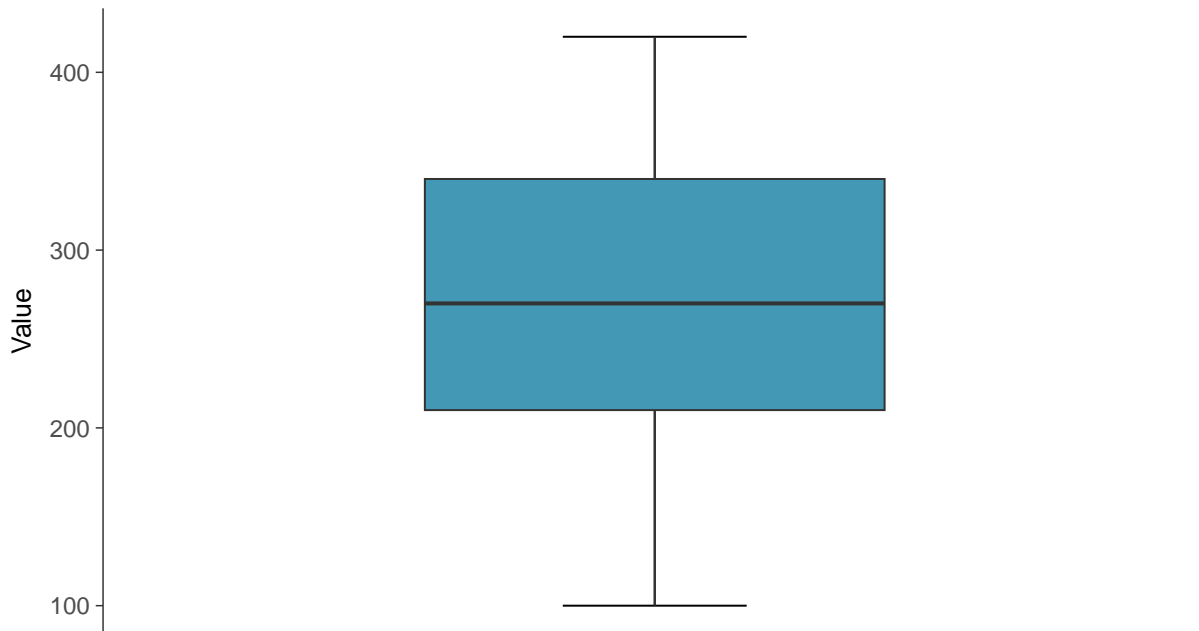
Total Dissolved Solids, MW-12 (mg/L)





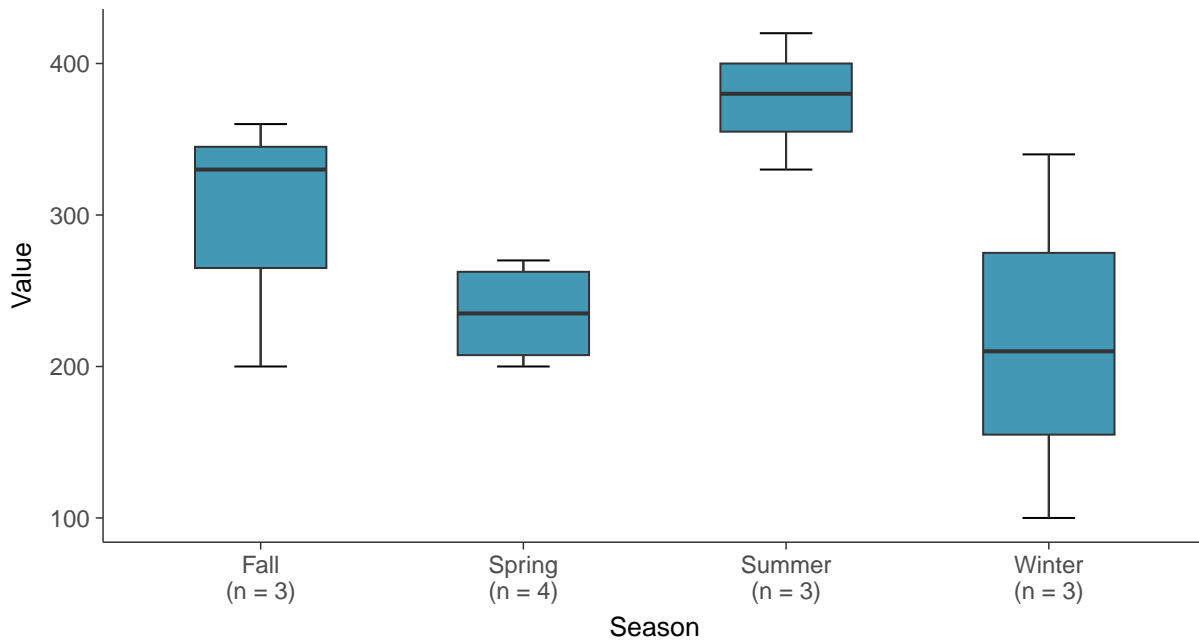
Boxplot

Total Dissolved Solids, MW-12 (mg/L)



Boxplot by Season

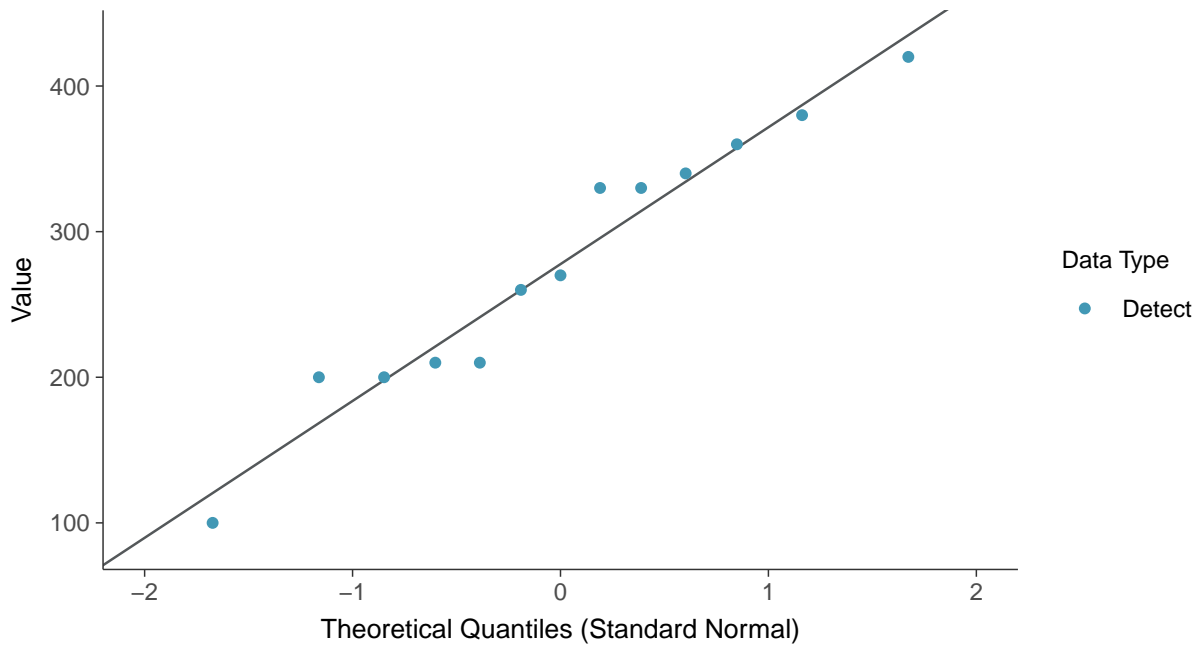
Total Dissolved Solids, MW-12 (mg/L)





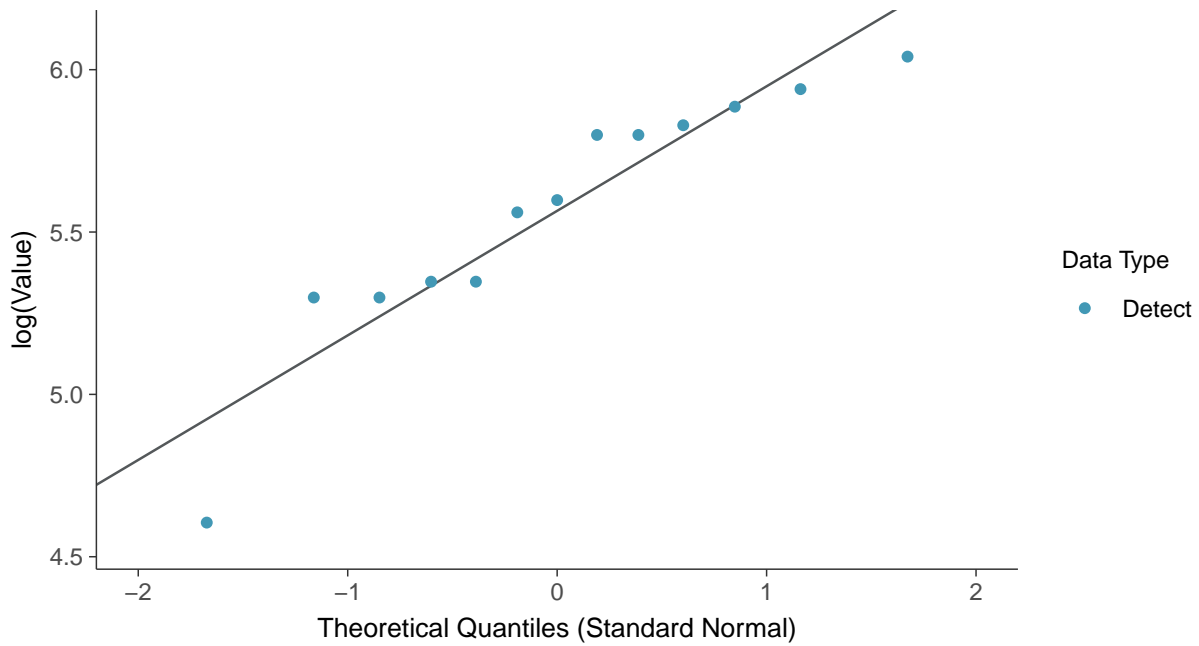
Normal Q-Q plot

Total Dissolved Solids, MW-12 (mg/L)



Lognormal Q-Q plot

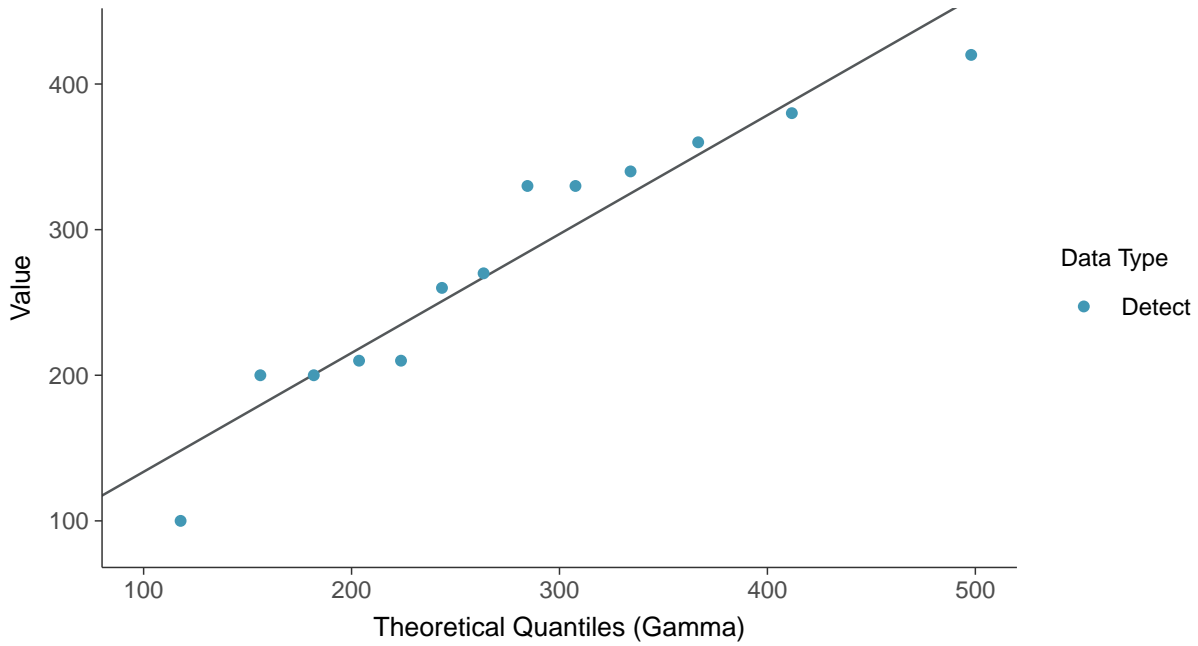
Total Dissolved Solids, MW-12 (mg/L)





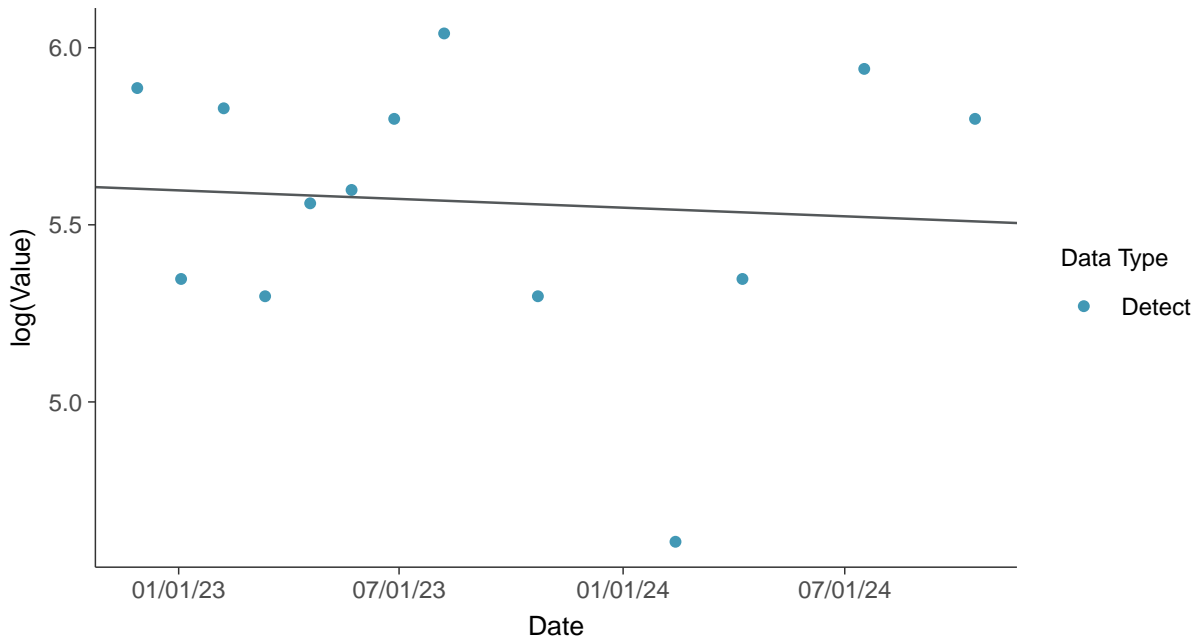
Gamma Q-Q plot

Total Dissolved Solids, MW-12 (mg/L)



Trend Regression: Lognormal MLE

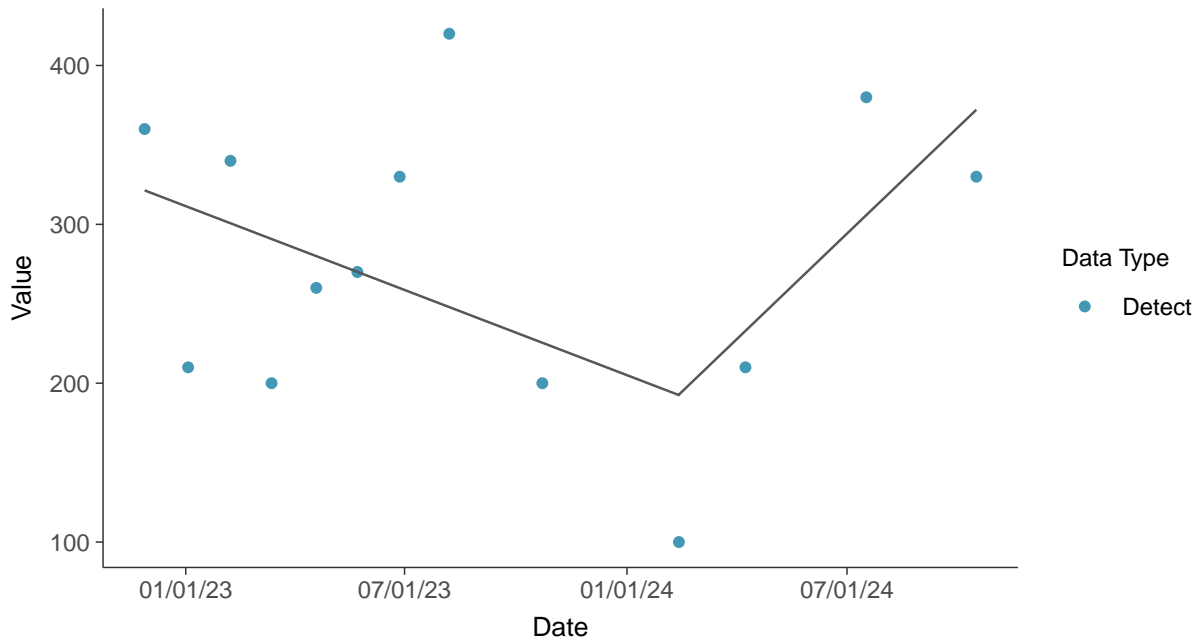
Total Dissolved Solids, MW-12 (mg/L)





Trend Regression: Piecewise Linear-Linear

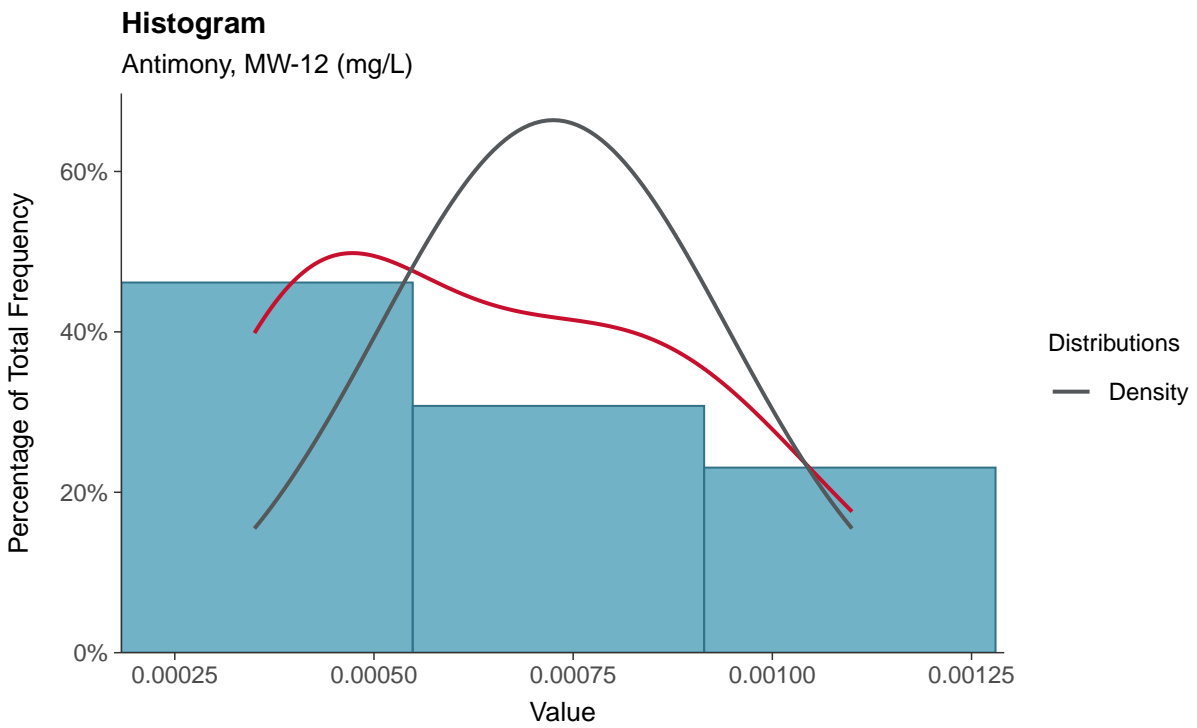
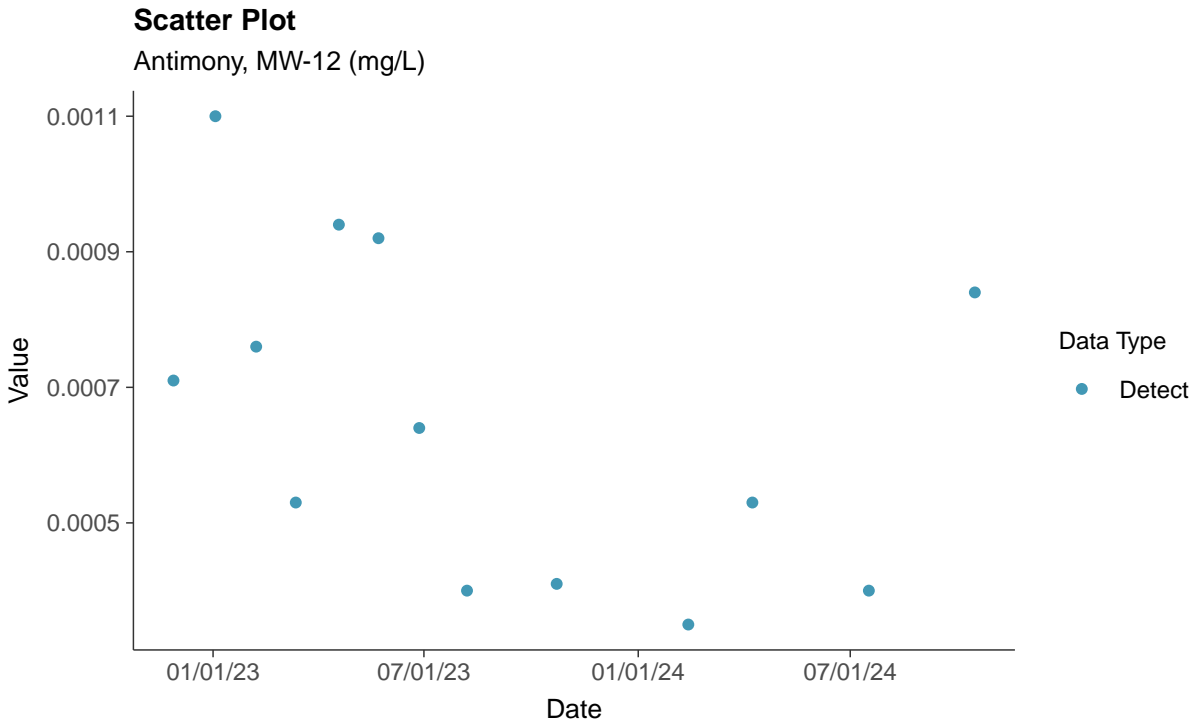
Total Dissolved Solids, MW-12 (mg/L)





Appendix IV: Antimony, MW-12

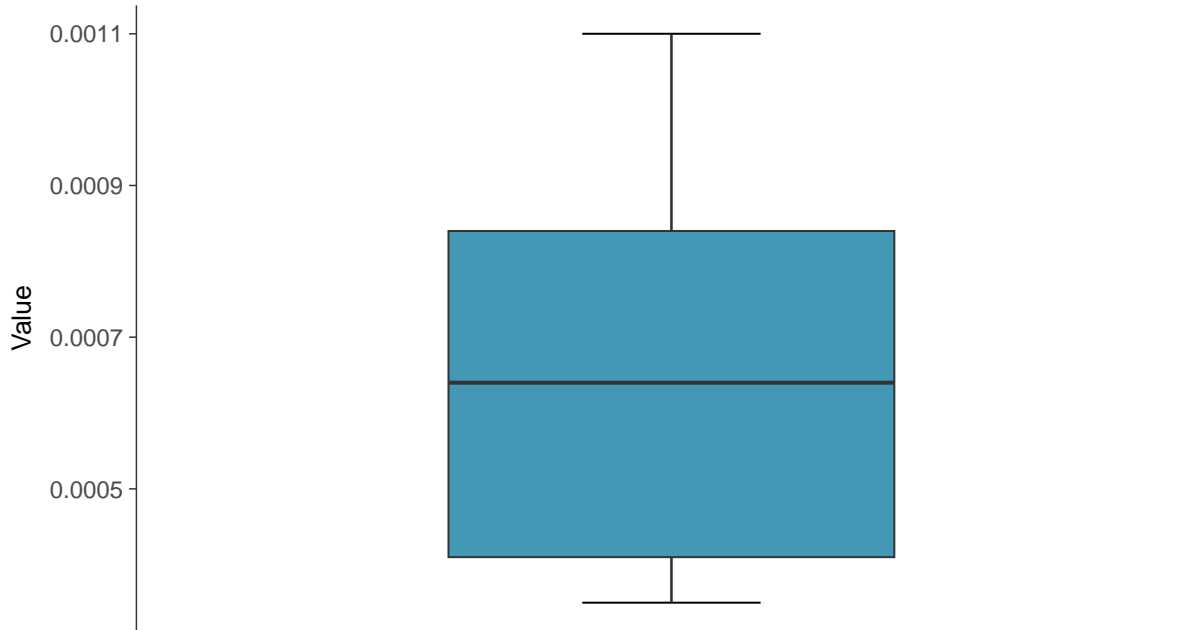
ID: 2_22_2_5_101





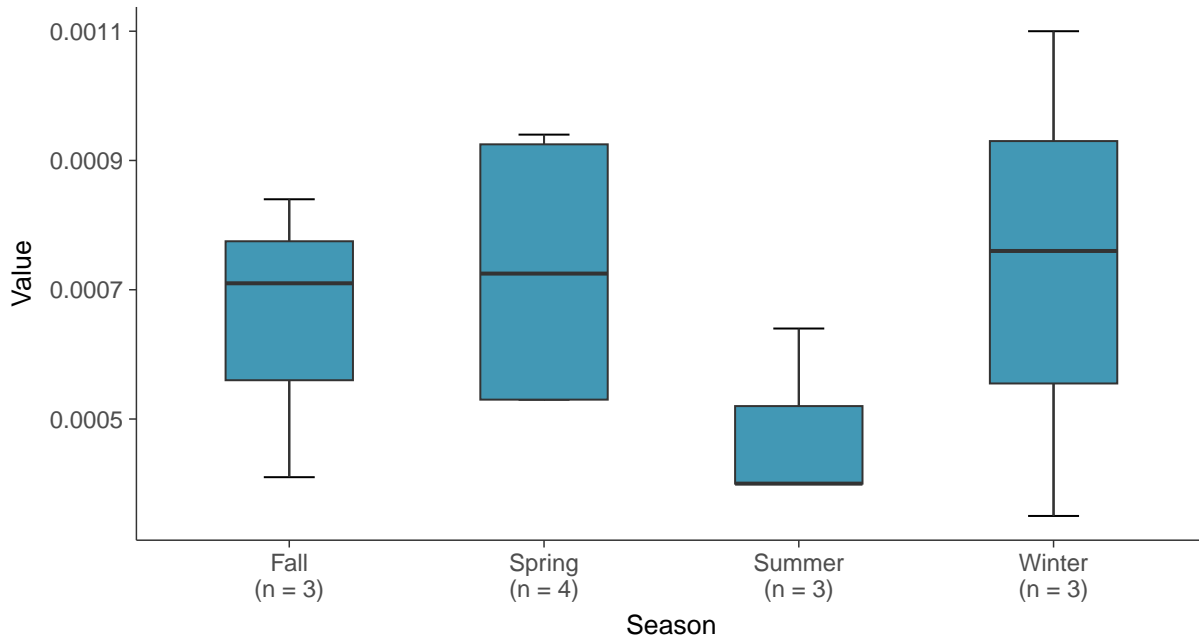
Boxplot

Antimony, MW-12 (mg/L)



Boxplot by Season

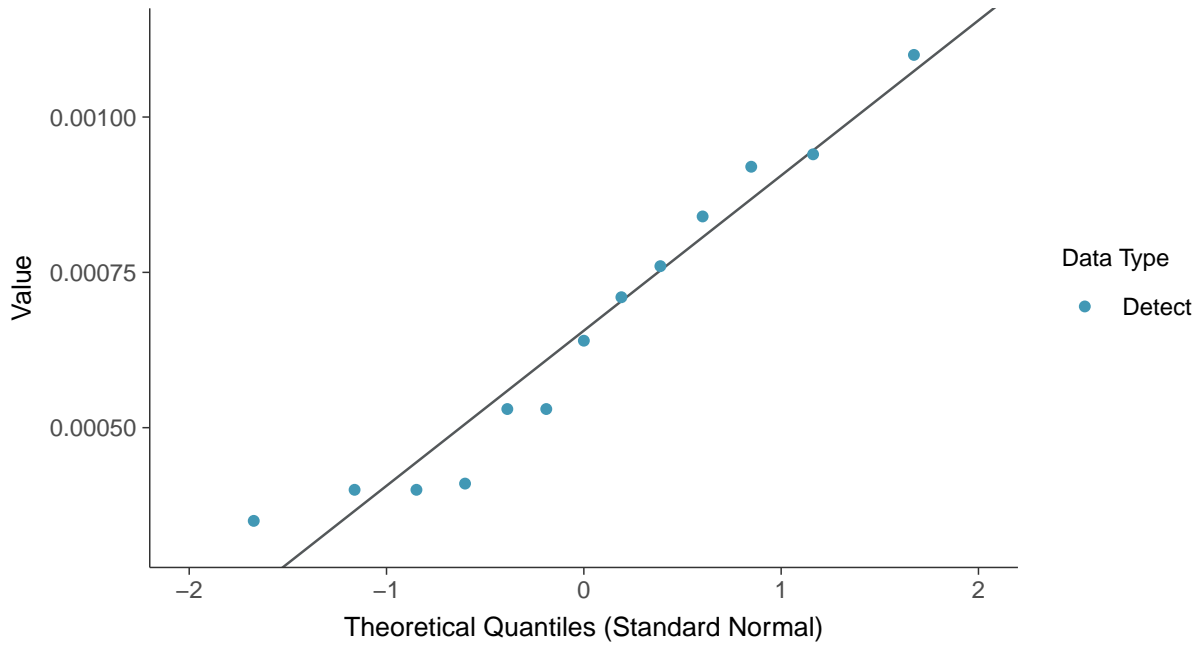
Antimony, MW-12 (mg/L)





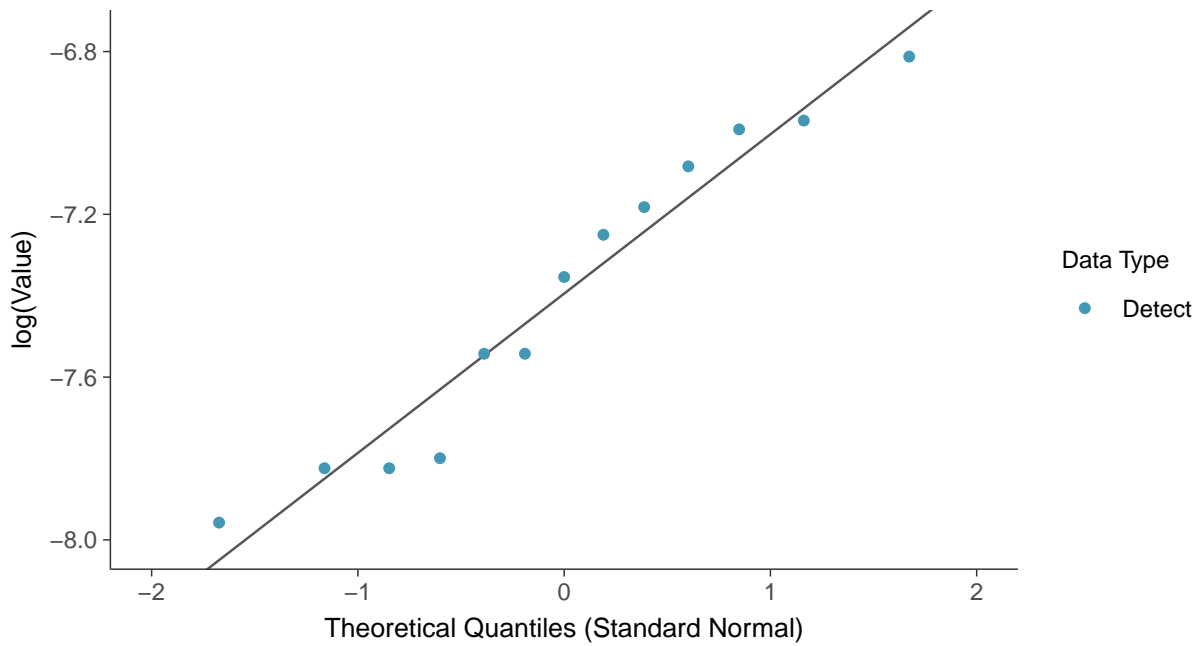
Normal Q-Q plot

Antimony, MW-12 (mg/L)



Lognormal Q-Q plot

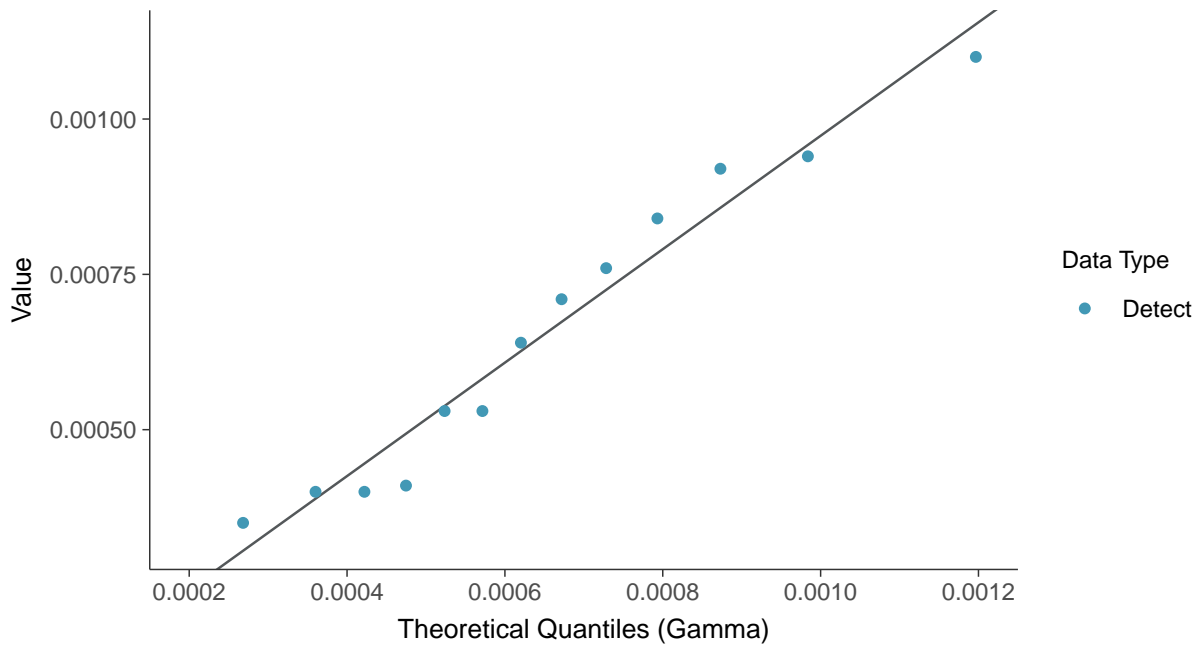
Antimony, MW-12 (mg/L)





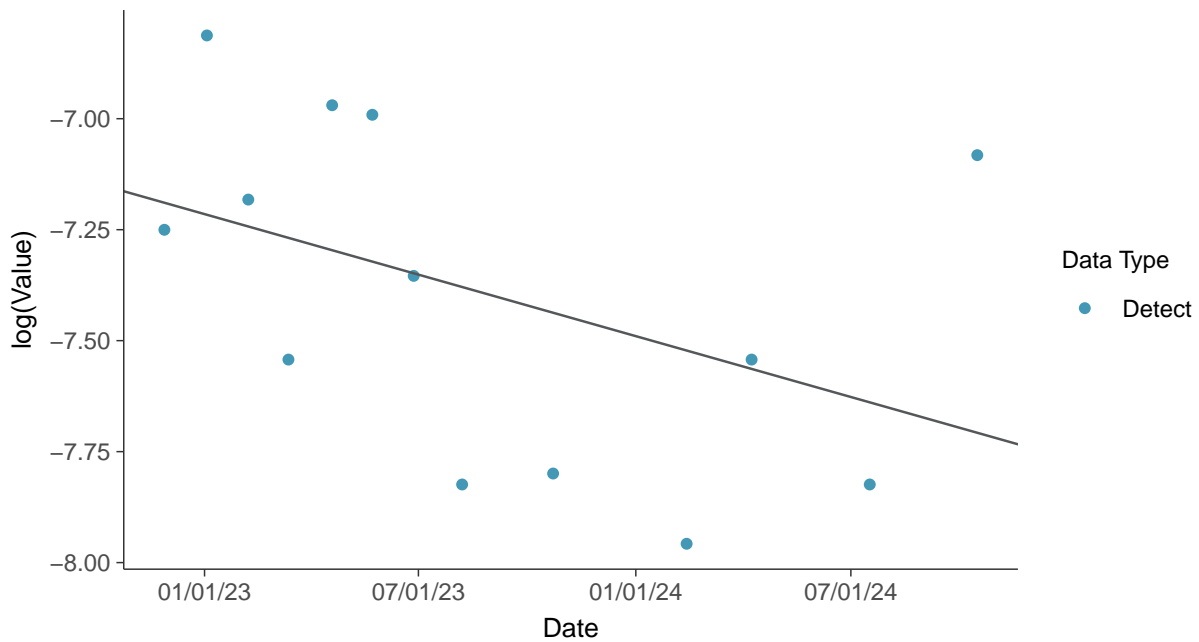
Gamma Q-Q plot

Antimony, MW-12 (mg/L)



Trend Regression: Lognormal MLE

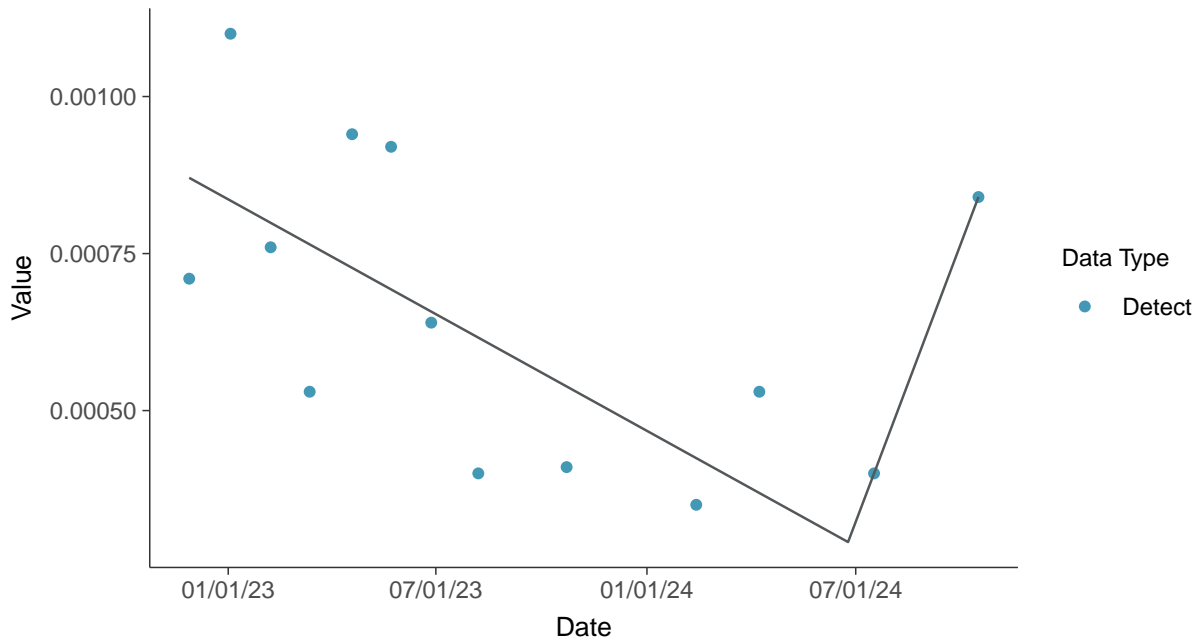
Antimony, MW-12 (mg/L)





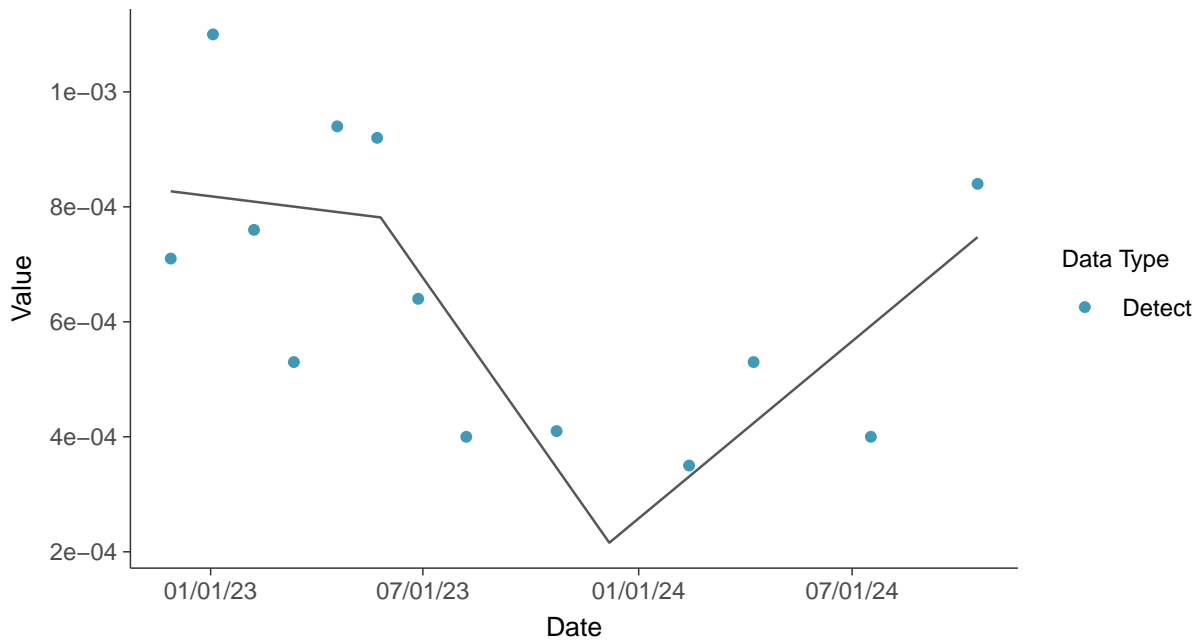
Trend Regression: Piecewise Linear-Linear

Antimony, MW-12 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Antimony, MW-12 (mg/L)



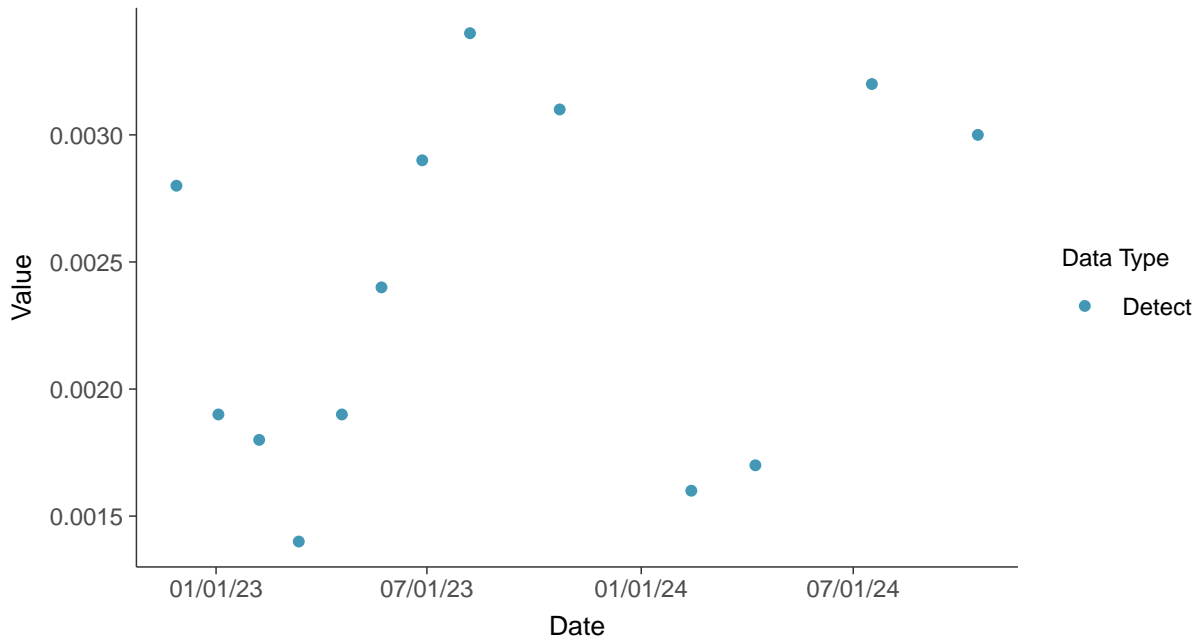


Appendix IV: Arsenic, MW-12

ID: 2_22_2_5_102

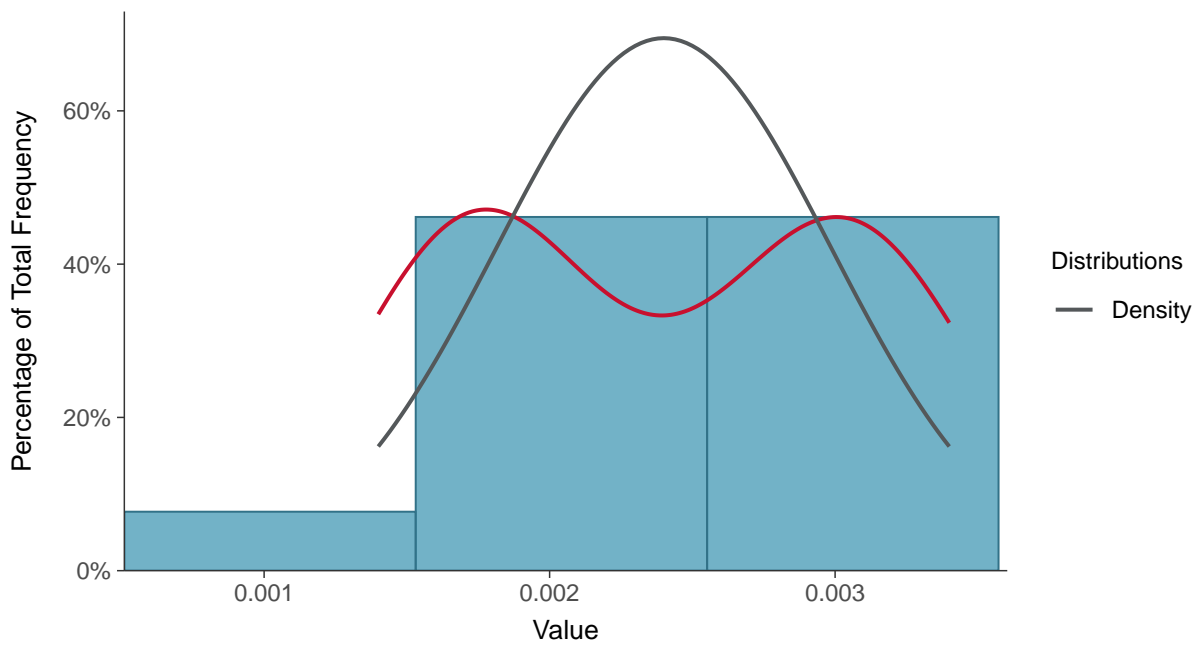
Scatter Plot

Arsenic, MW-12 (mg/L)



Histogram

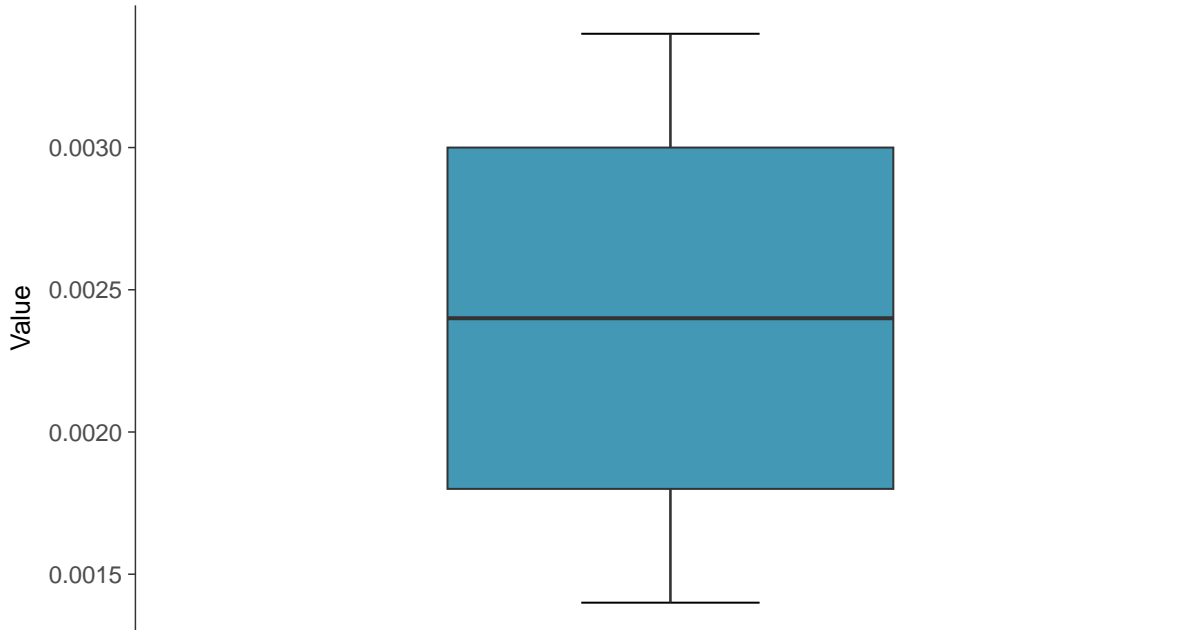
Arsenic, MW-12 (mg/L)





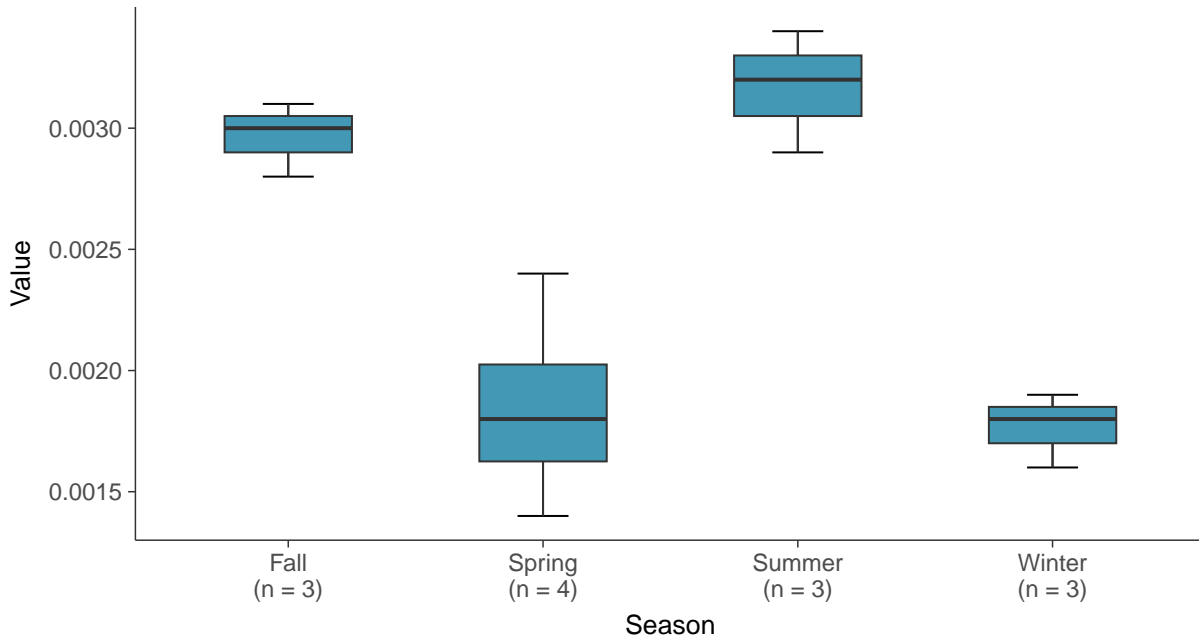
Boxplot

Arsenic, MW-12 (mg/L)



Boxplot by Season

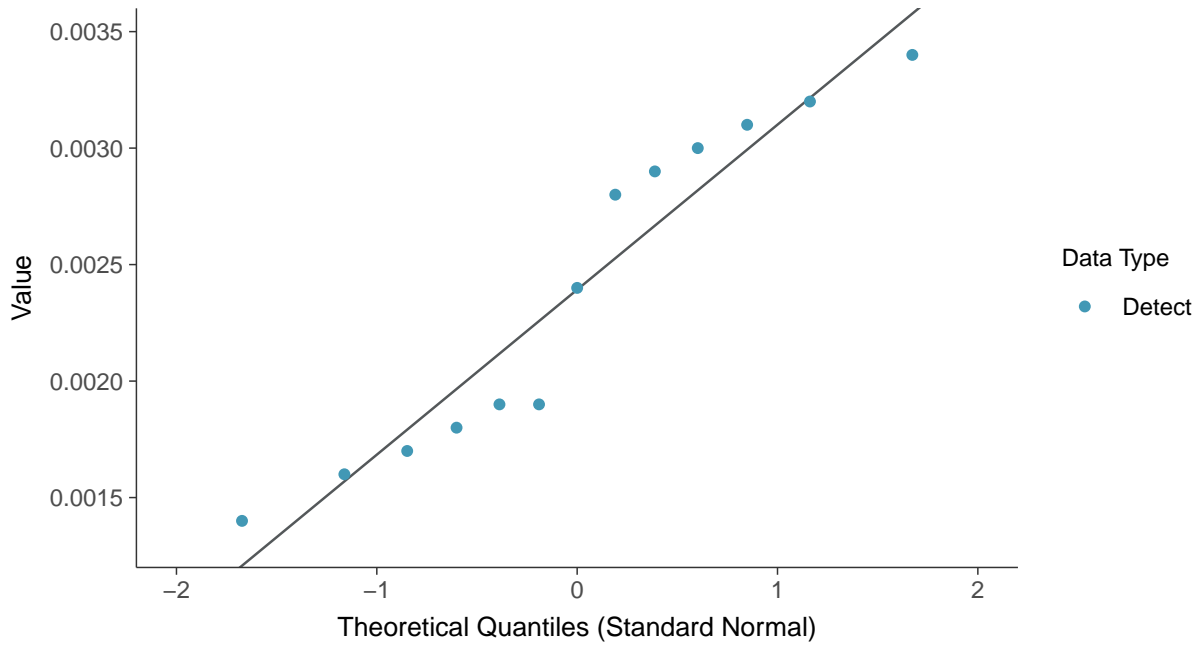
Arsenic, MW-12 (mg/L)





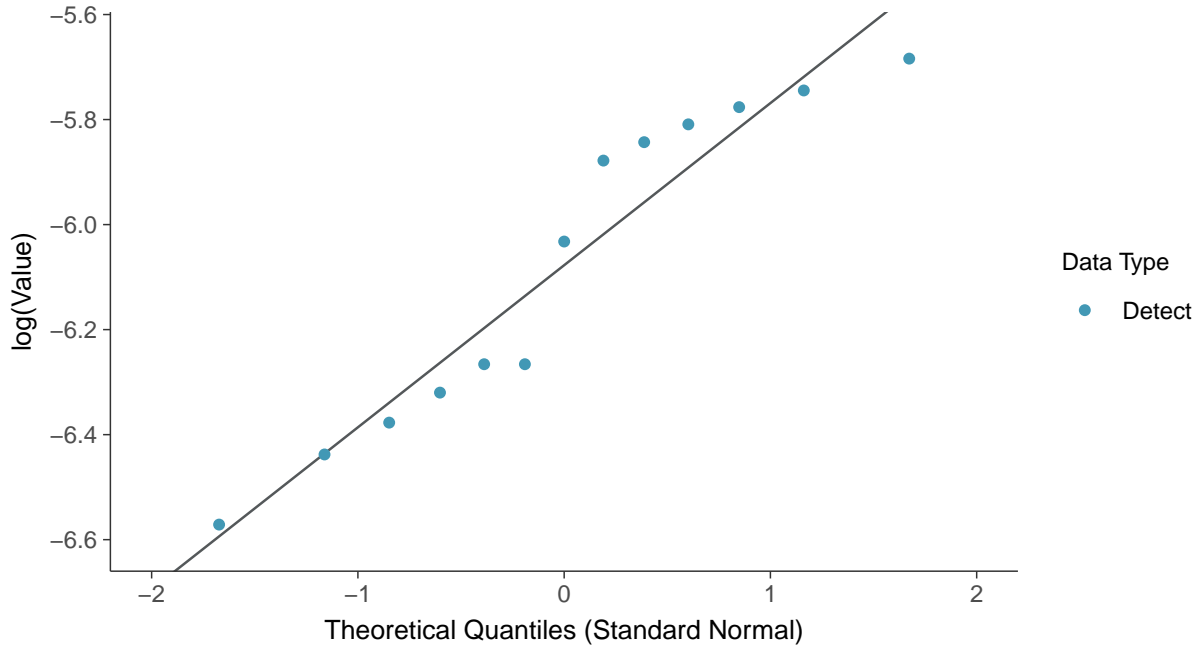
Normal Q-Q plot

Arsenic, MW-12 (mg/L)



Lognormal Q-Q plot

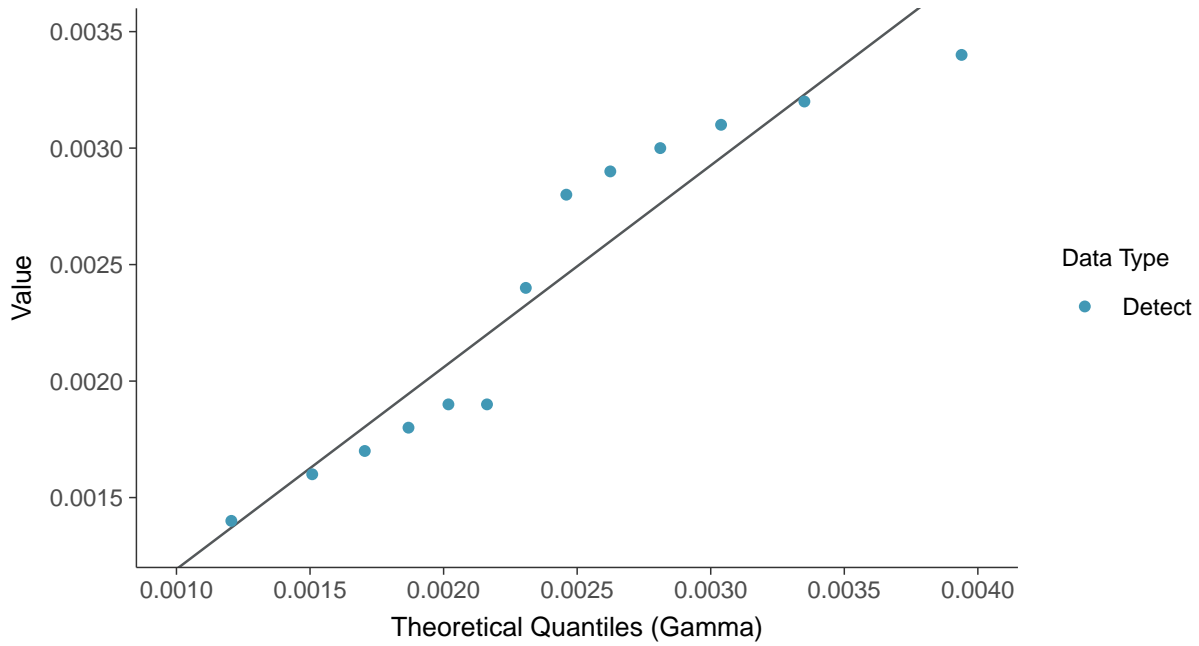
Arsenic, MW-12 (mg/L)





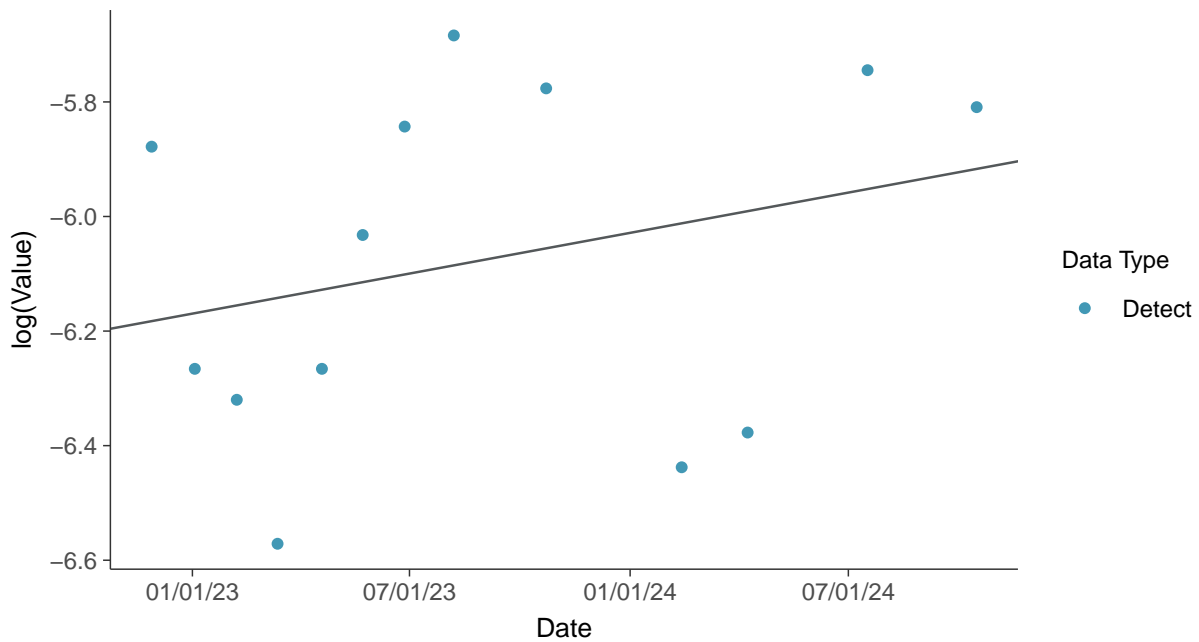
Gamma Q-Q plot

Arsenic, MW-12 (mg/L)



Trend Regression: Lognormal MLE

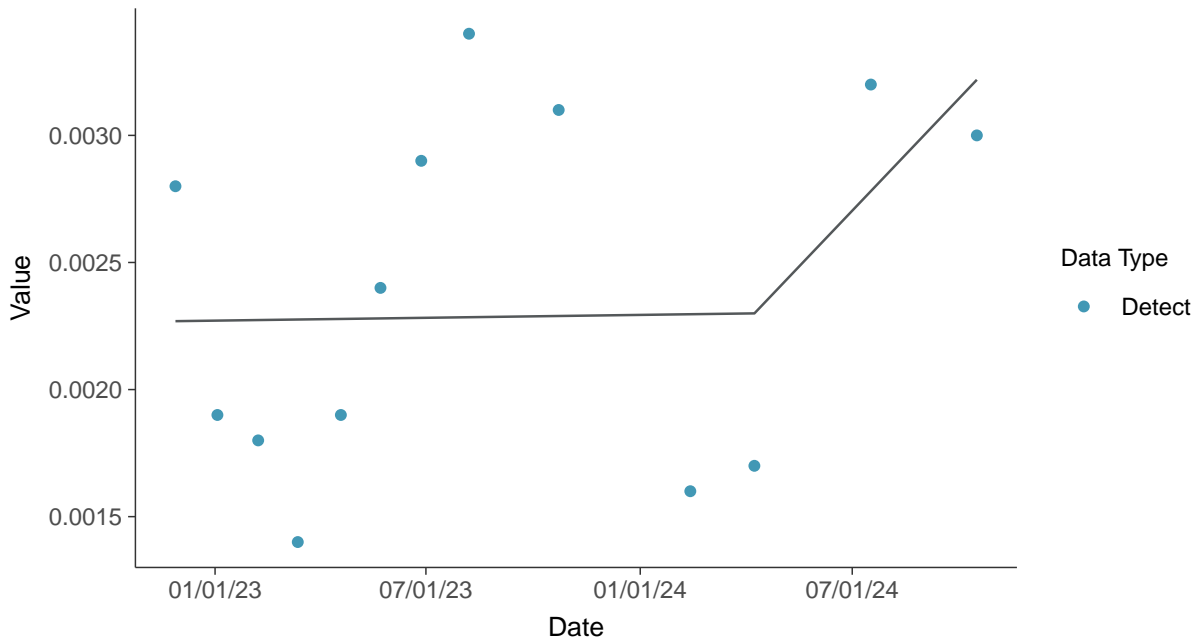
Arsenic, MW-12 (mg/L)





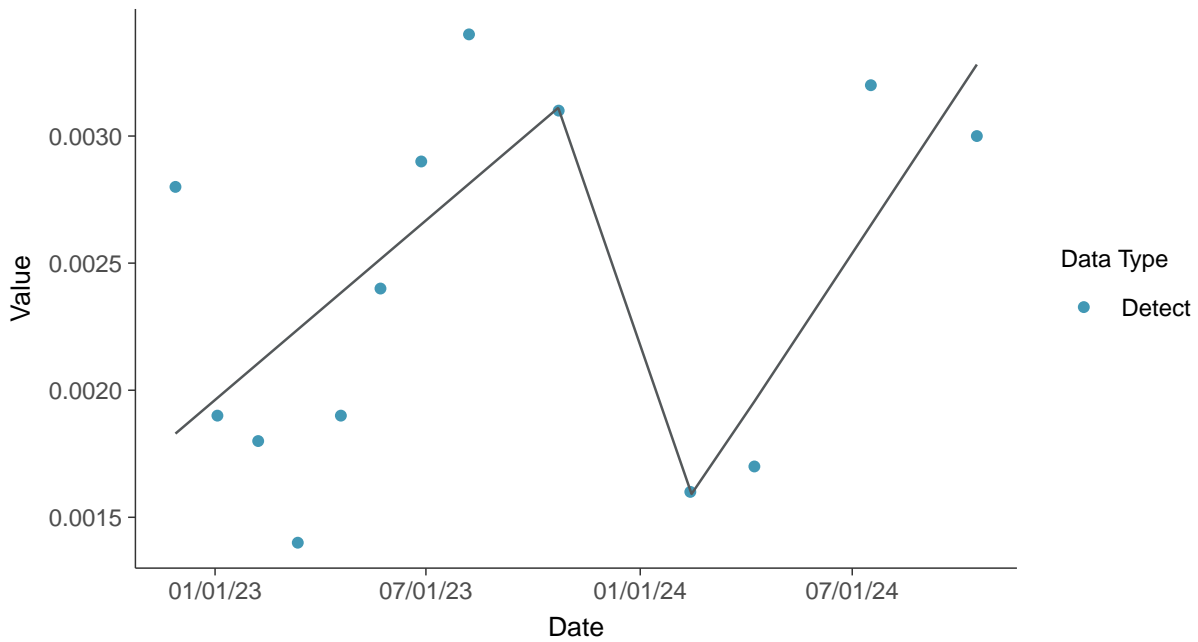
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-12 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-12 (mg/L)



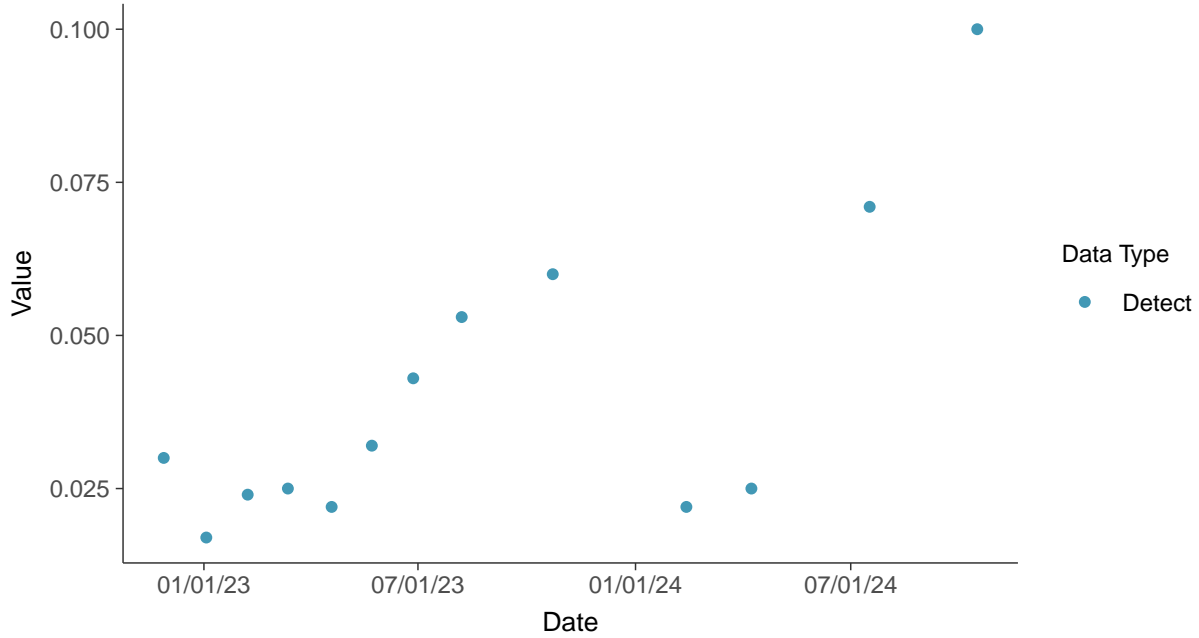


Appendix IV: Barium, MW-12

ID: 2_22_2_5_103

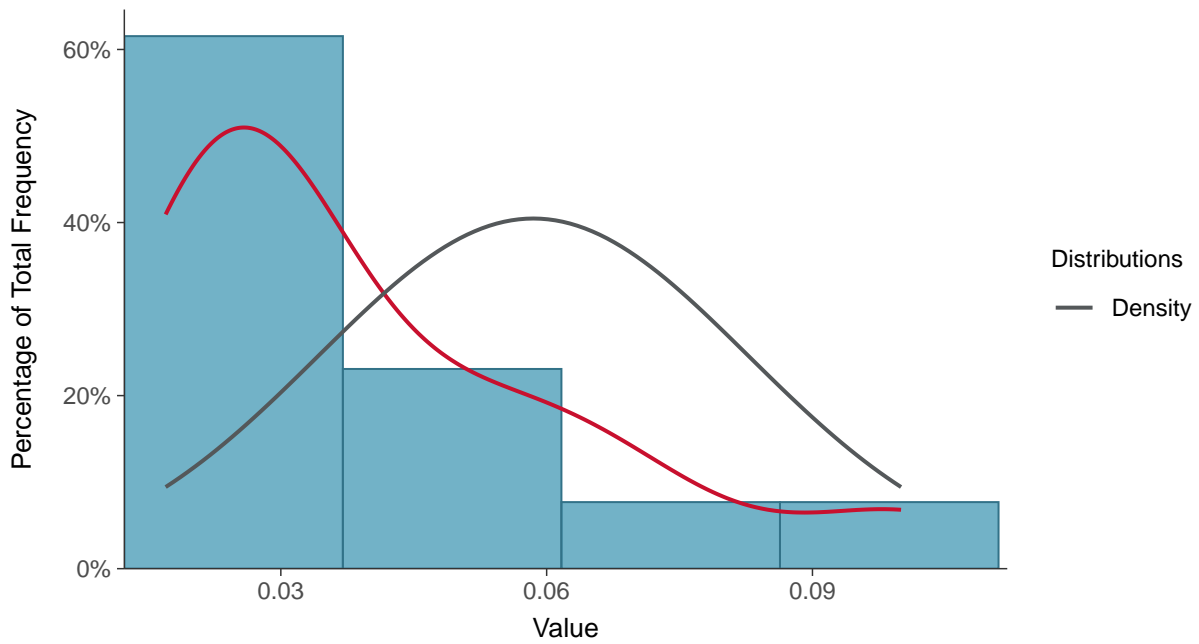
Scatter Plot

Barium, MW-12 (mg/L)



Histogram

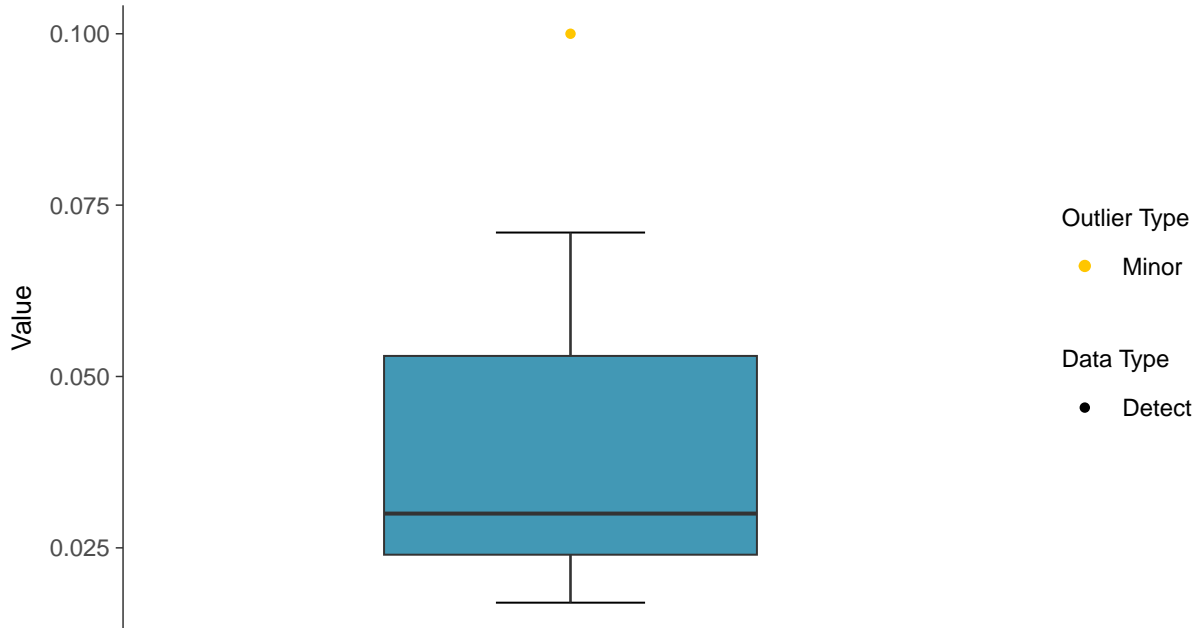
Barium, MW-12 (mg/L)





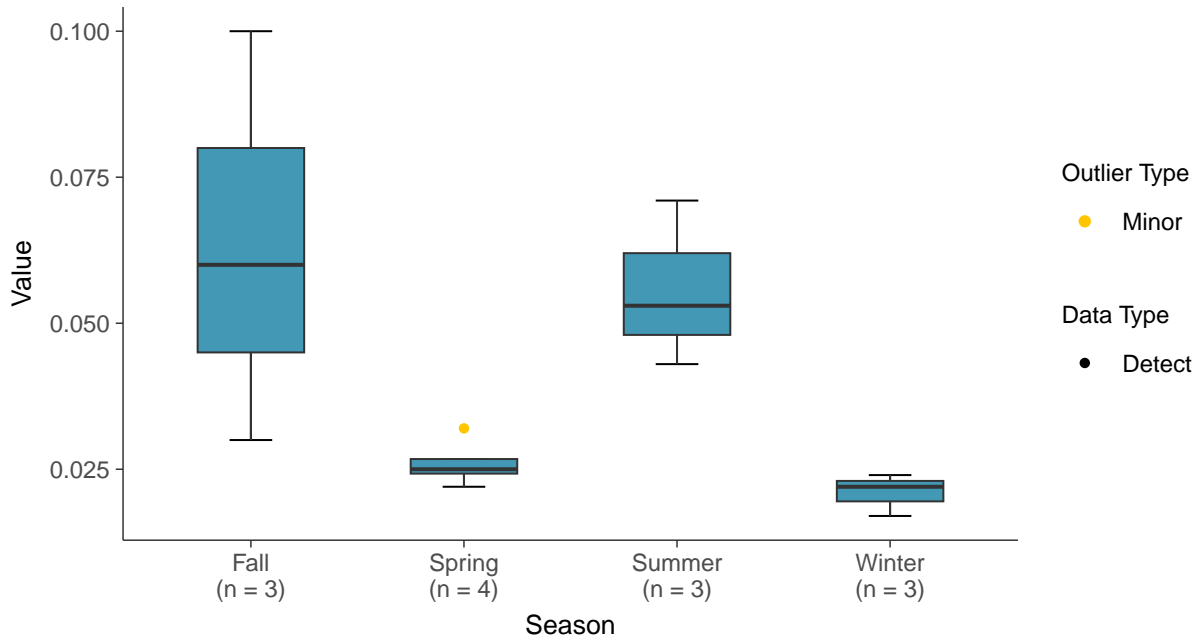
Boxplot

Barium, MW-12 (mg/L)



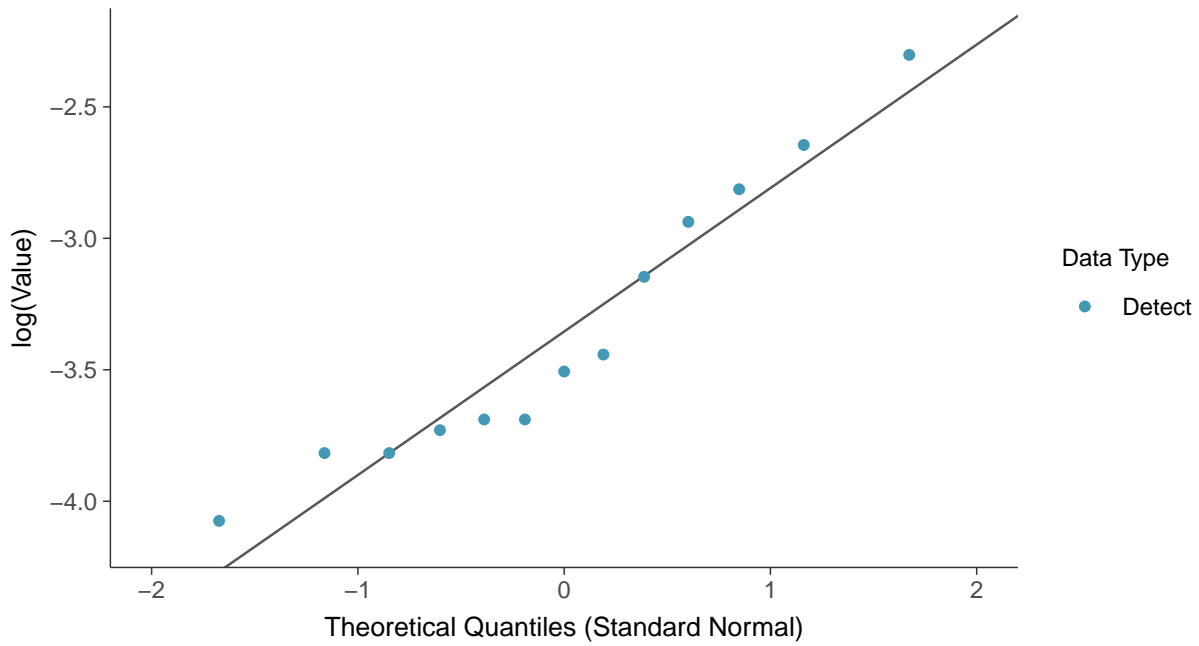
Boxplot by Season

Barium, MW-12 (mg/L)

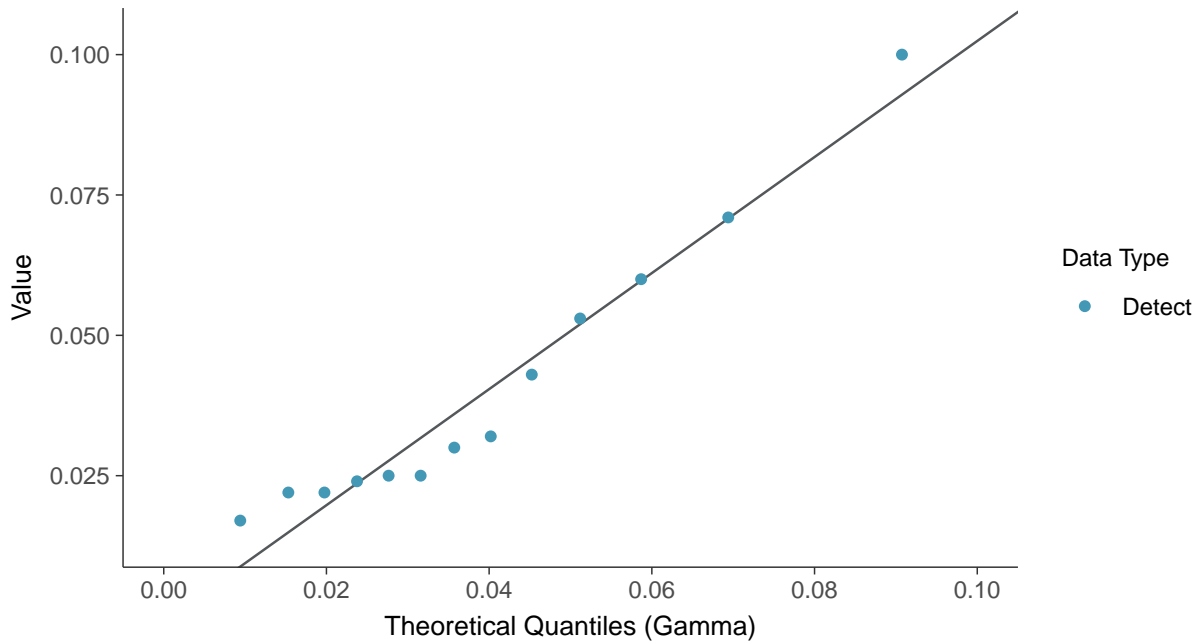




Lognormal Q-Q plot
Barium, MW-12 (mg/L)



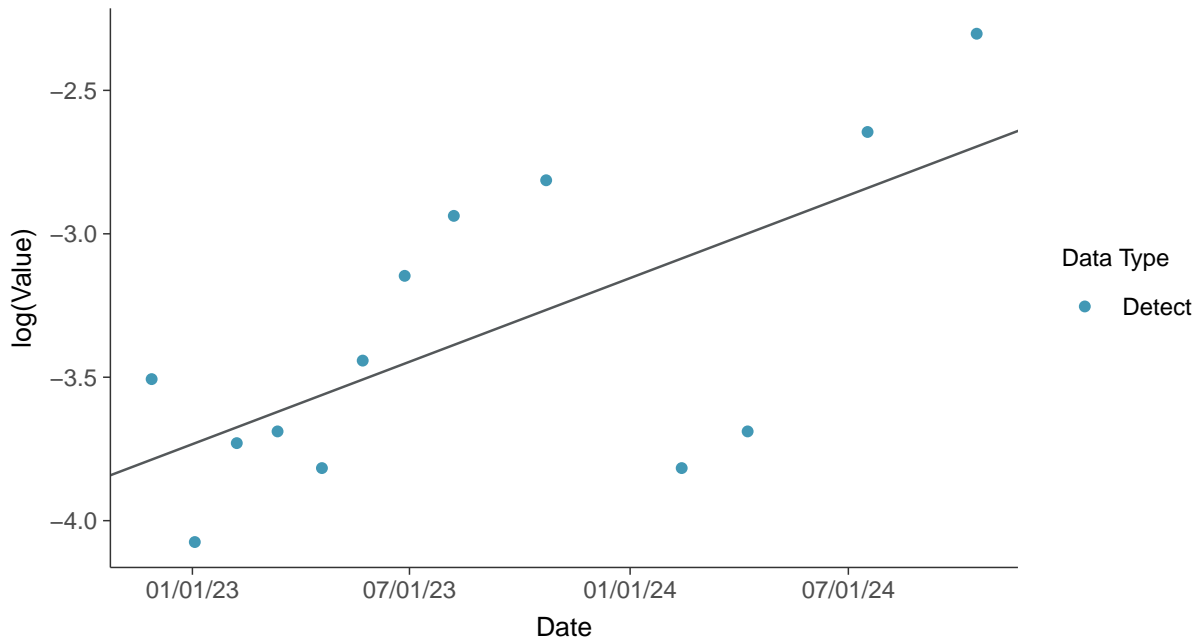
Gamma Q-Q plot
Barium, MW-12 (mg/L)





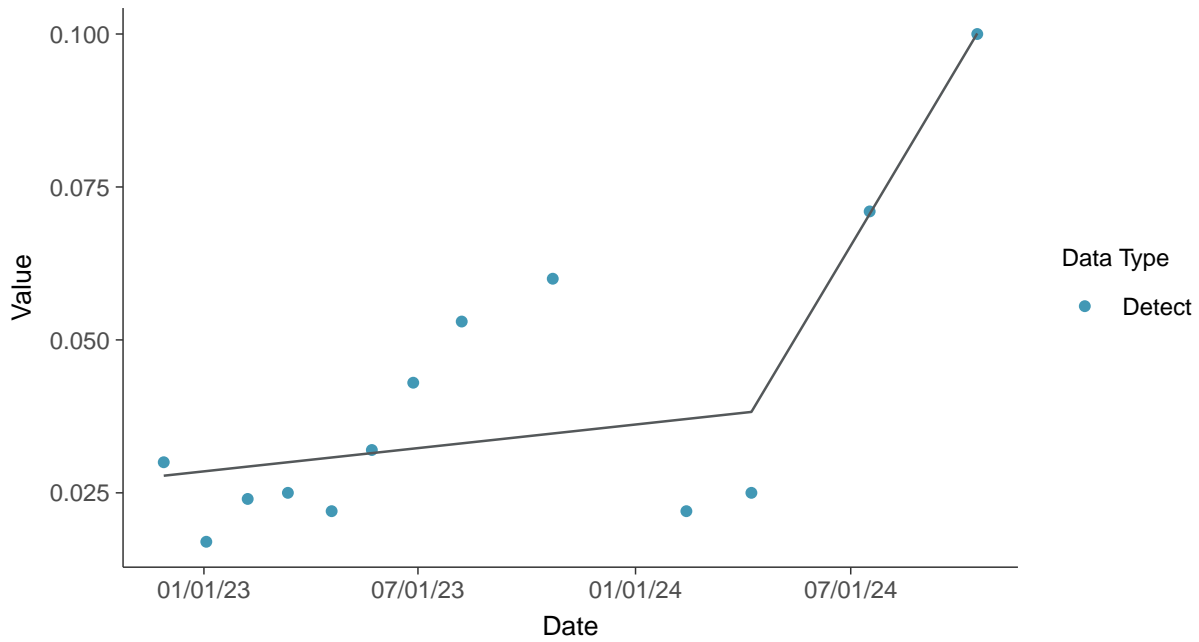
Trend Regression: Lognormal MLE

Barium, MW-12 (mg/L)



Trend Regression: Piecewise Linear-Linear

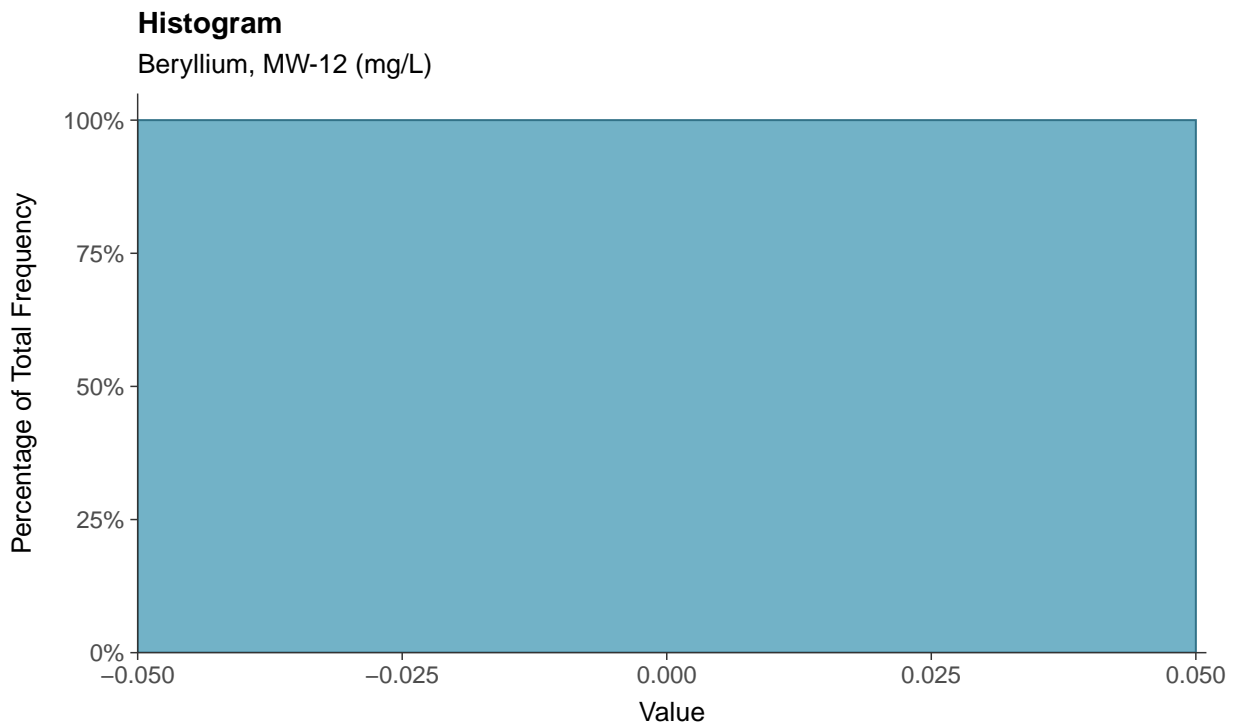
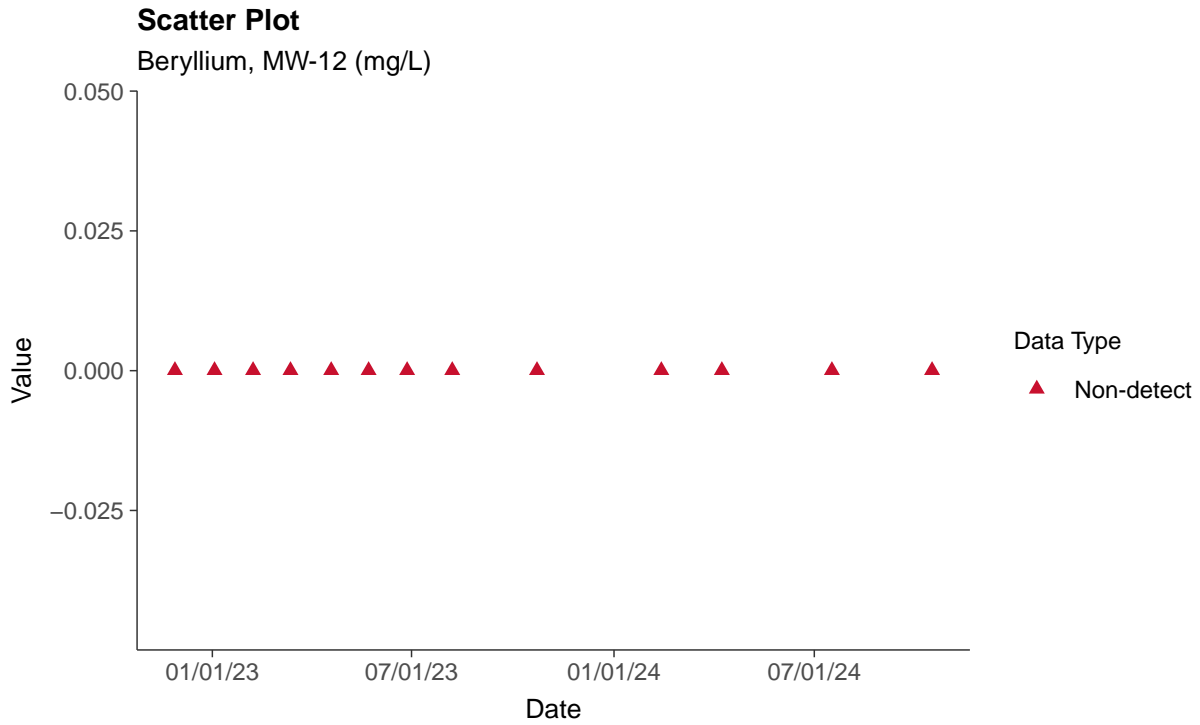
Barium, MW-12 (mg/L)





Appendix IV: Beryllium, MW-12

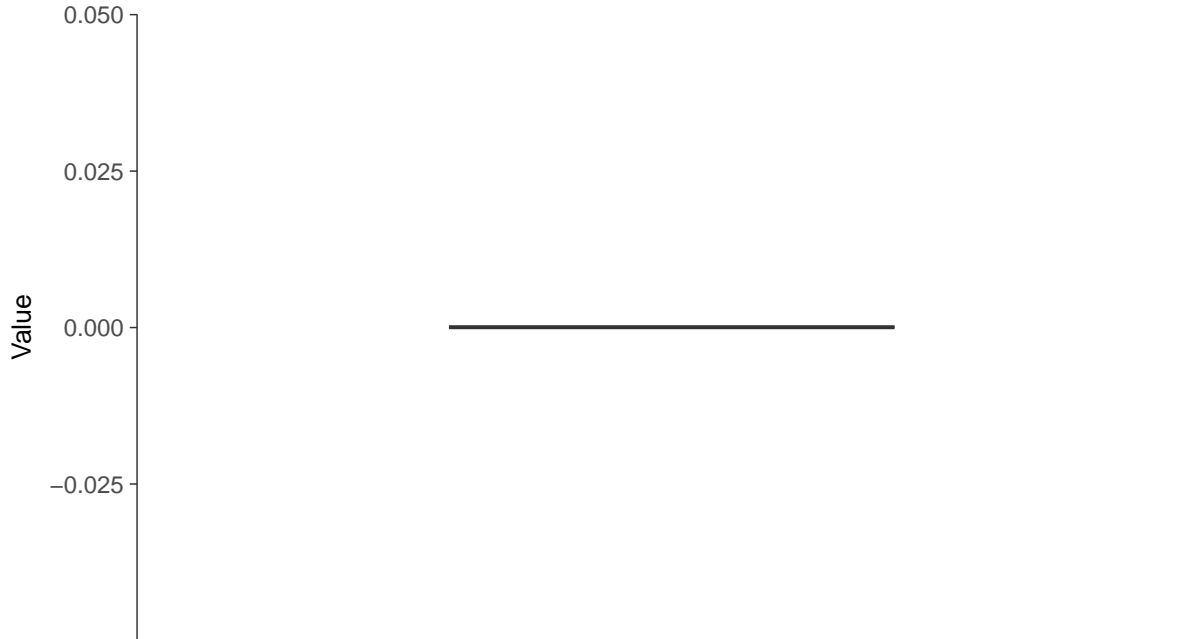
ID: 2_22_2_5_104





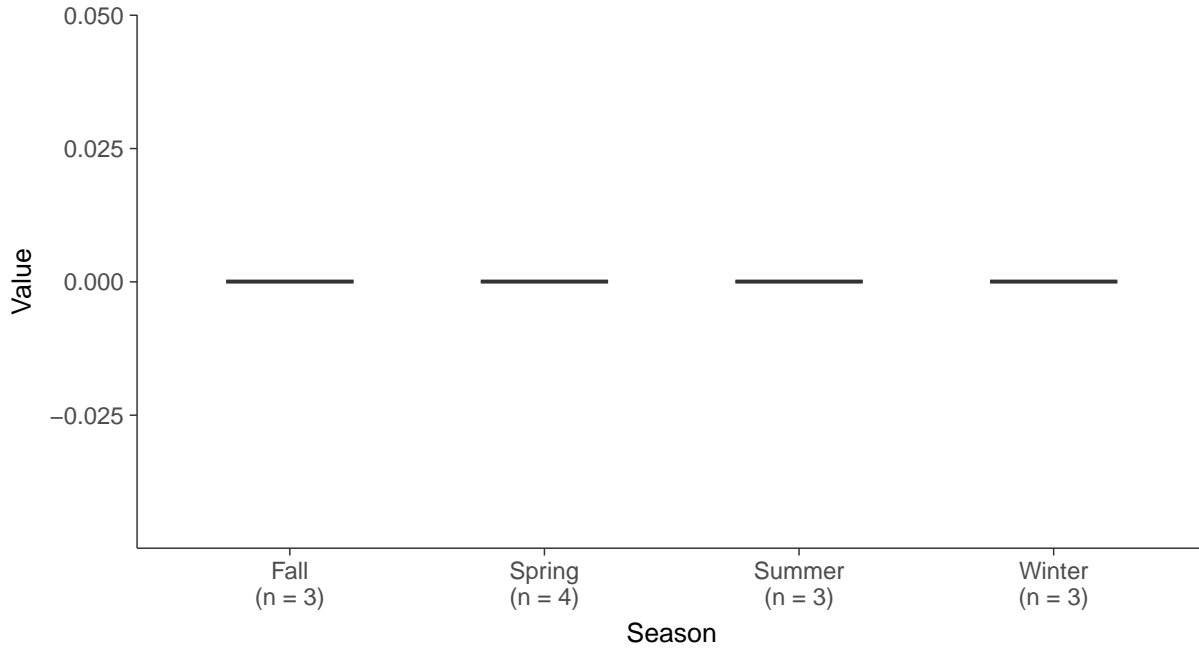
Boxplot

Beryllium, MW-12 (mg/L)



Boxplot by Season

Beryllium, MW-12 (mg/L)



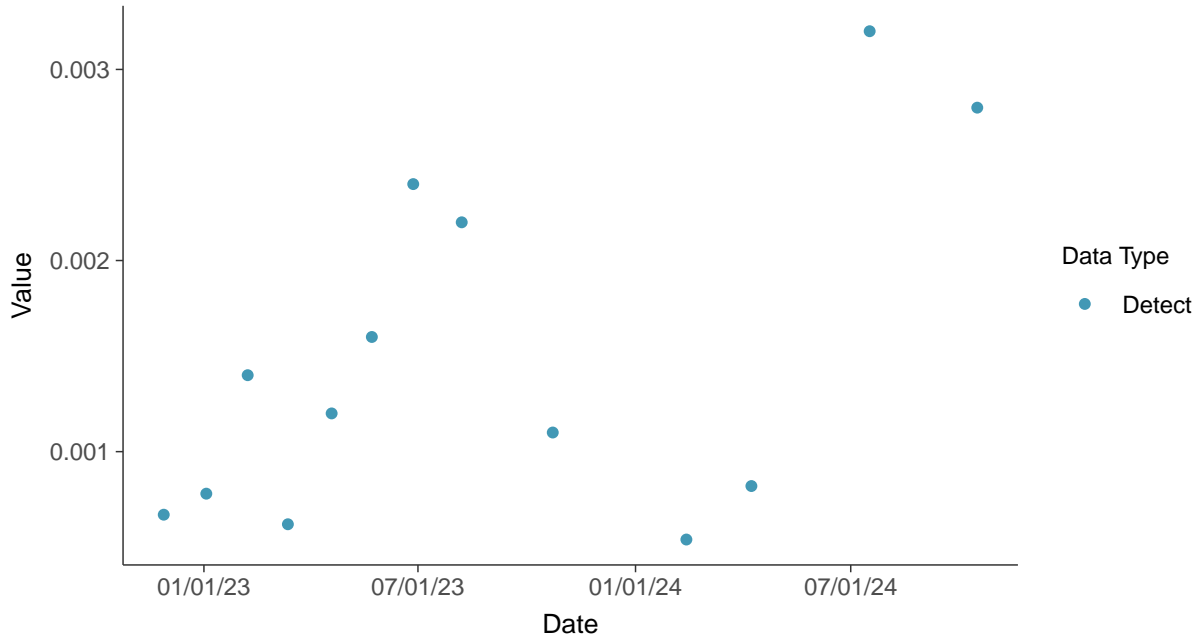


Appendix IV: Cadmium, MW-12

ID: 2_22_2_5_106

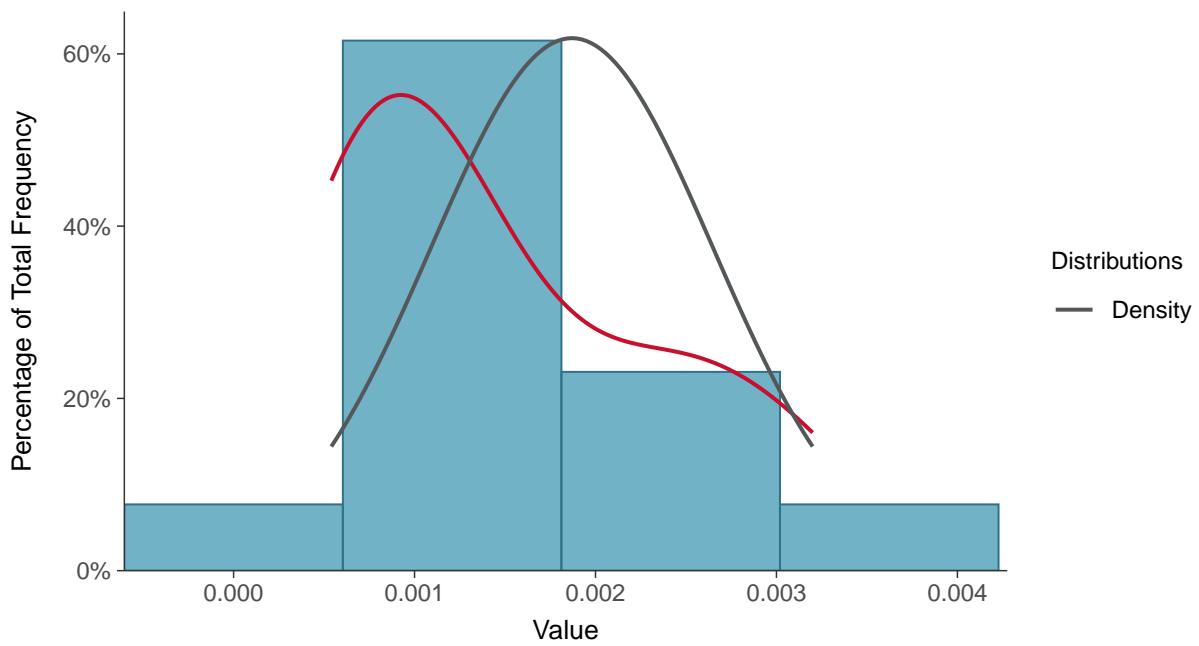
Scatter Plot

Cadmium, MW-12 (mg/L)



Histogram

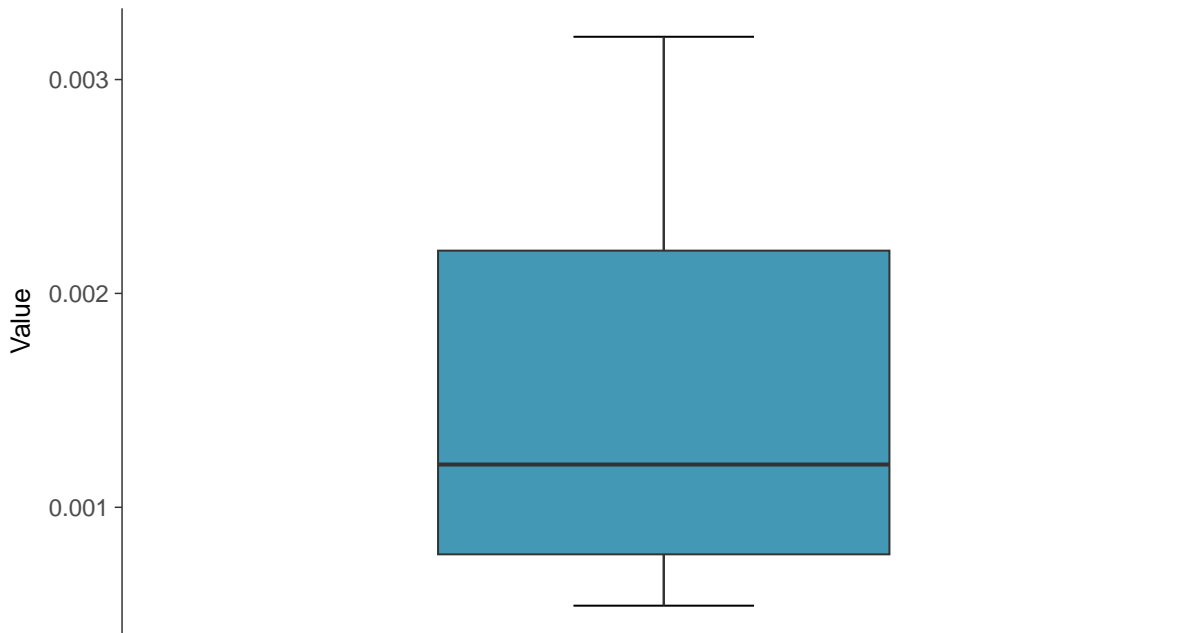
Cadmium, MW-12 (mg/L)





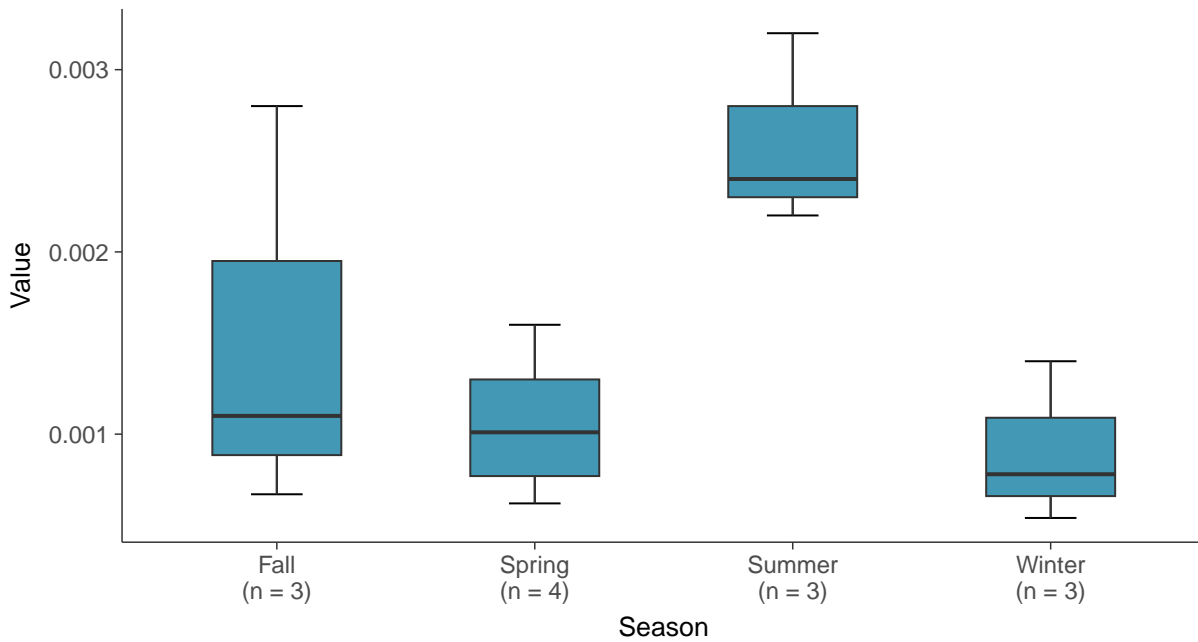
Boxplot

Cadmium, MW-12 (mg/L)



Boxplot by Season

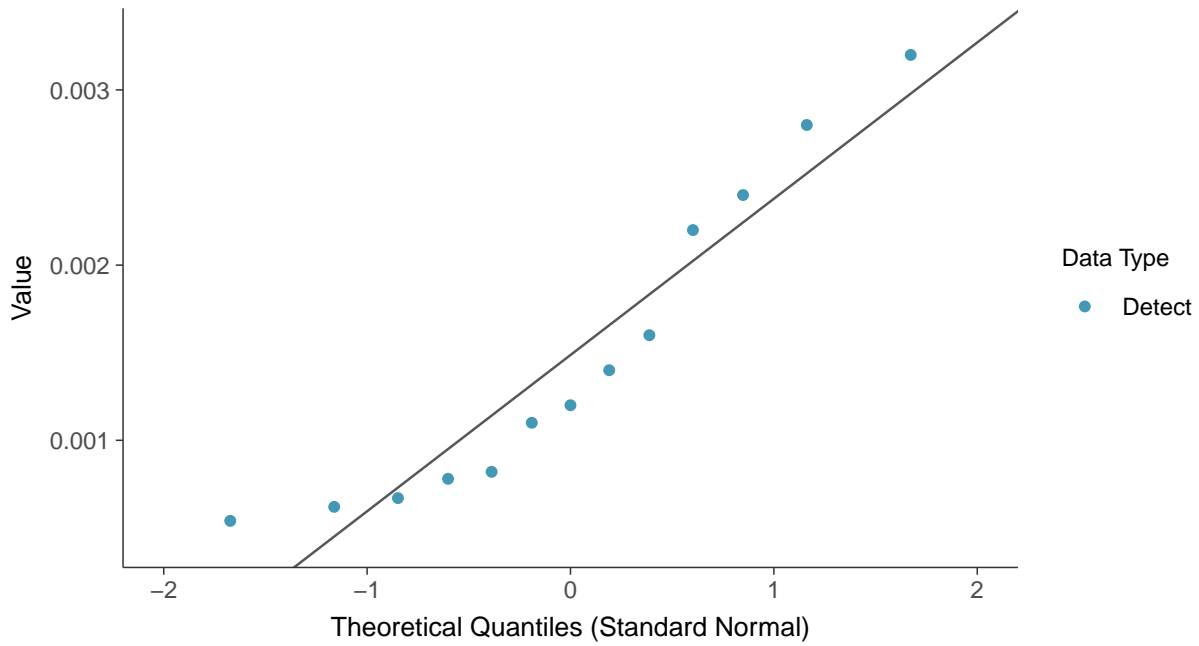
Cadmium, MW-12 (mg/L)





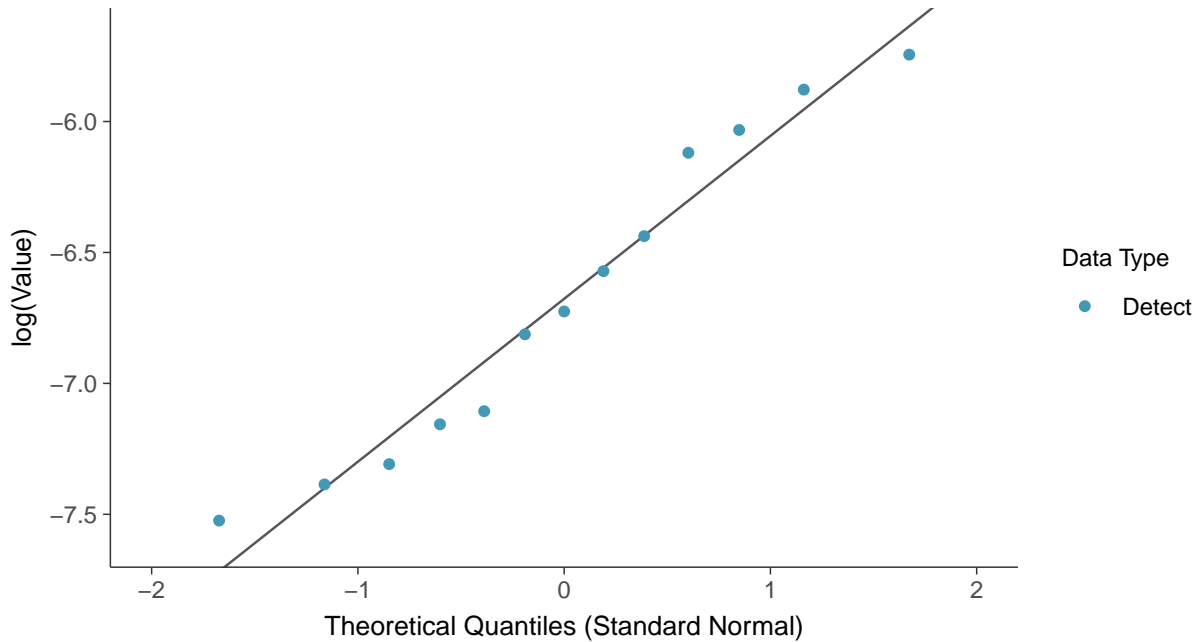
Normal Q-Q plot

Cadmium, MW-12 (mg/L)



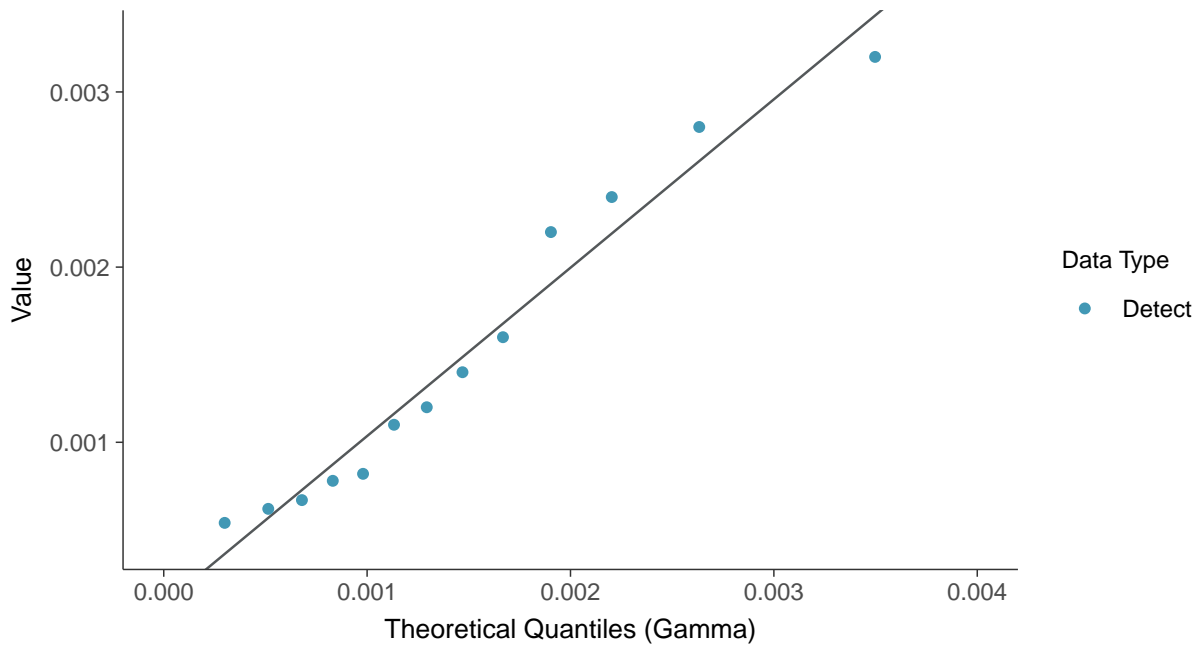
Lognormal Q-Q plot

Cadmium, MW-12 (mg/L)

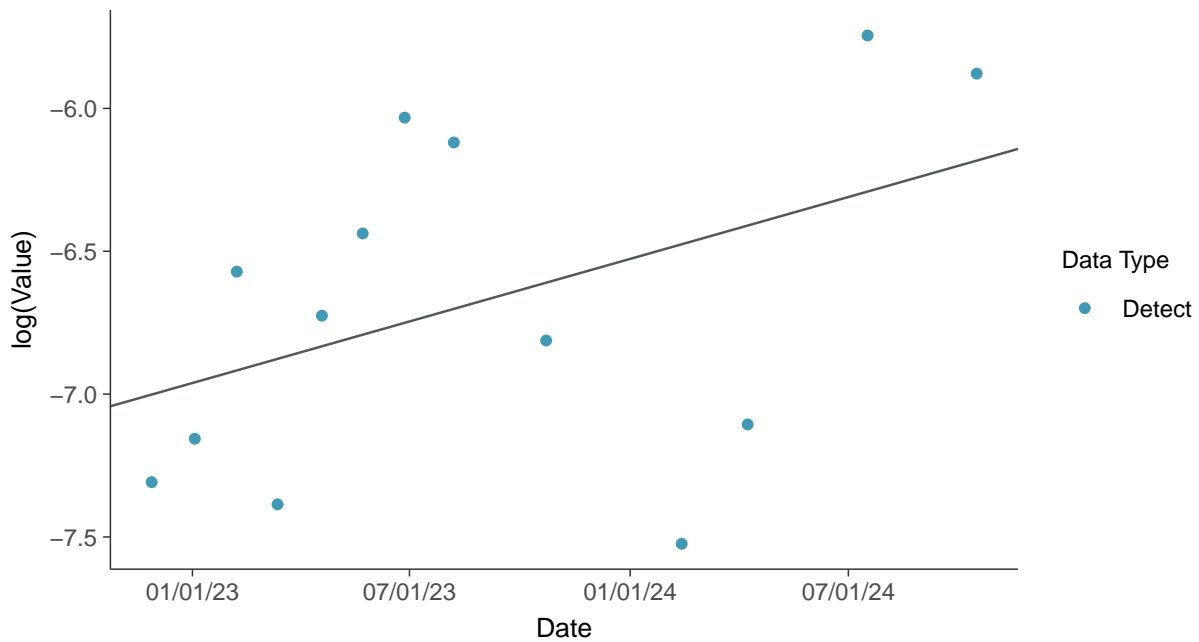




Gamma Q-Q plot
Cadmium, MW-12 (mg/L)

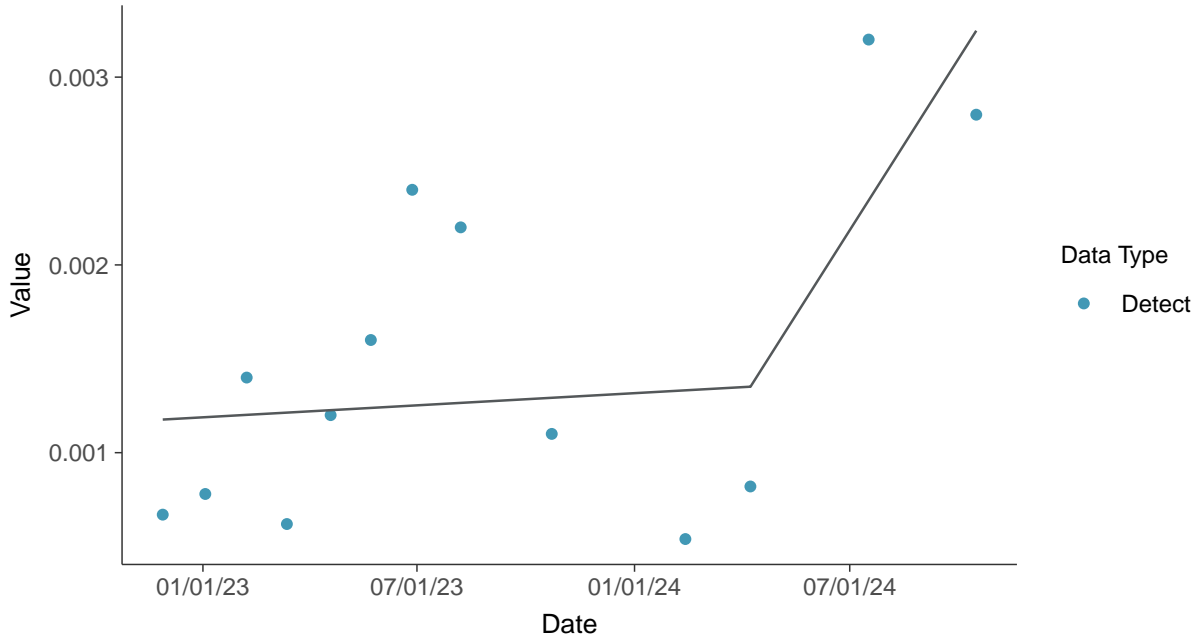


Trend Regression: Lognormal MLE
Cadmium, MW-12 (mg/L)

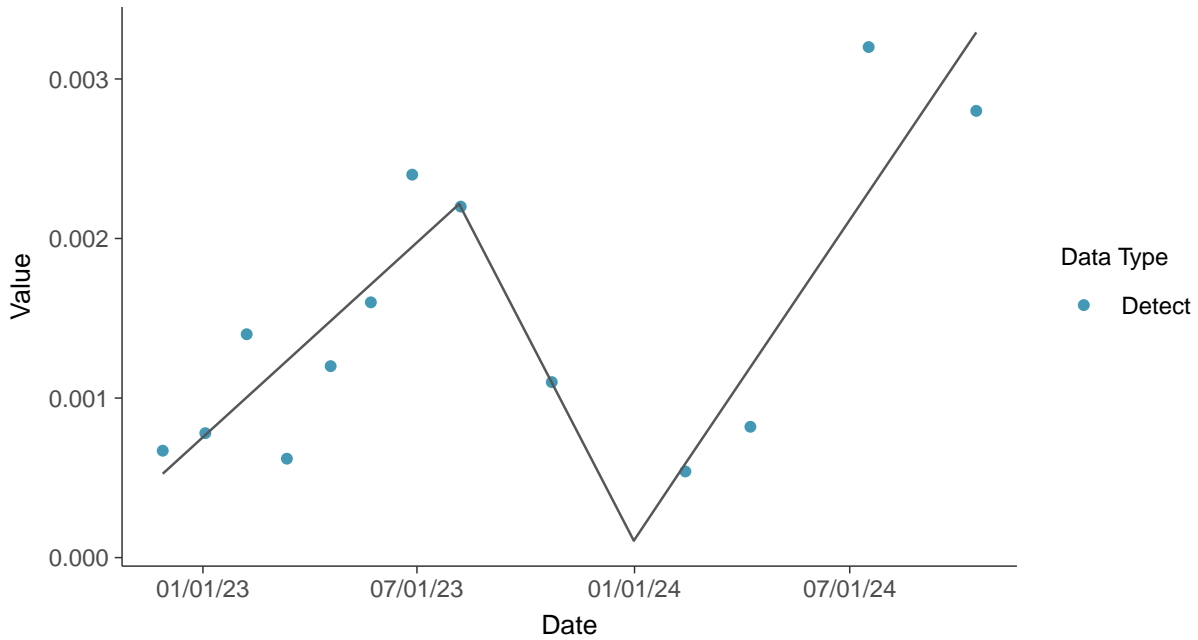




Trend Regression: Piecewise Linear-Linear
Cadmium, MW-12 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Cadmium, MW-12 (mg/L)



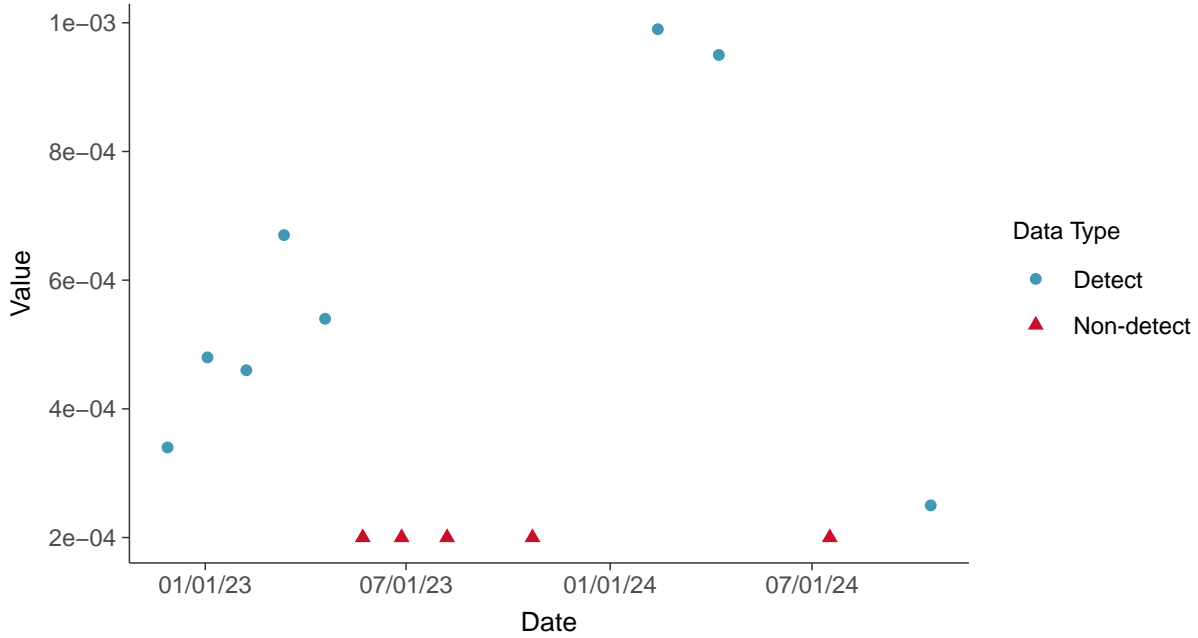


Appendix IV: Chromium, Total, MW-12

ID: 2_22_2_5_109

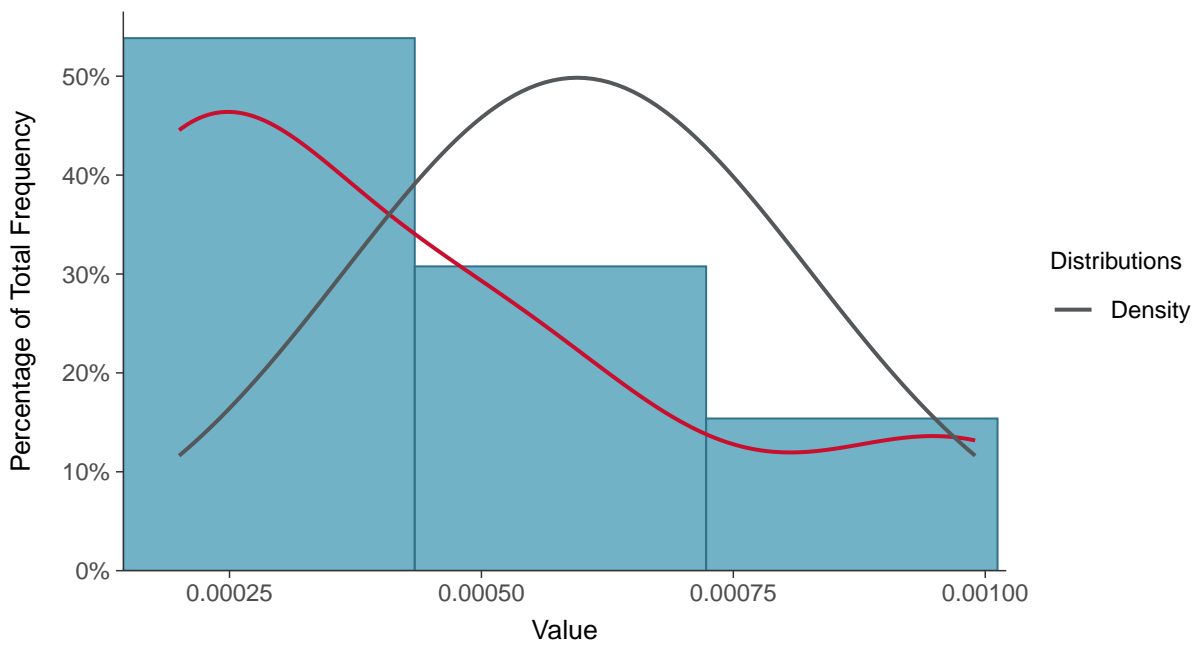
Scatter Plot

Chromium, Total, MW-12 (mg/L)



Histogram

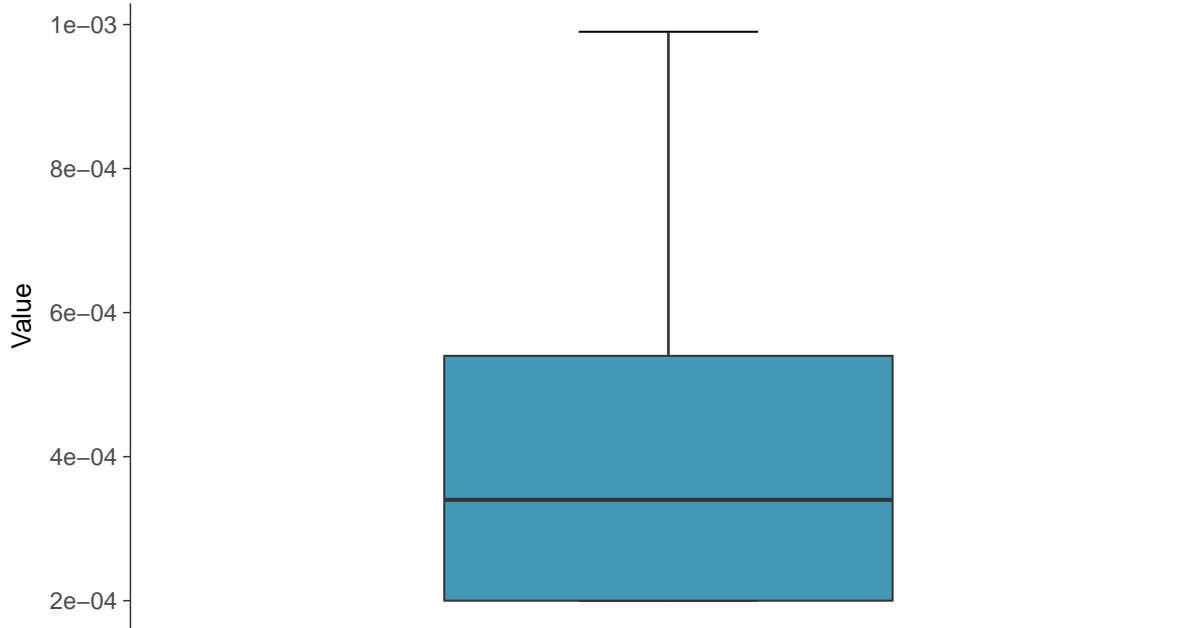
Chromium, Total, MW-12 (mg/L)





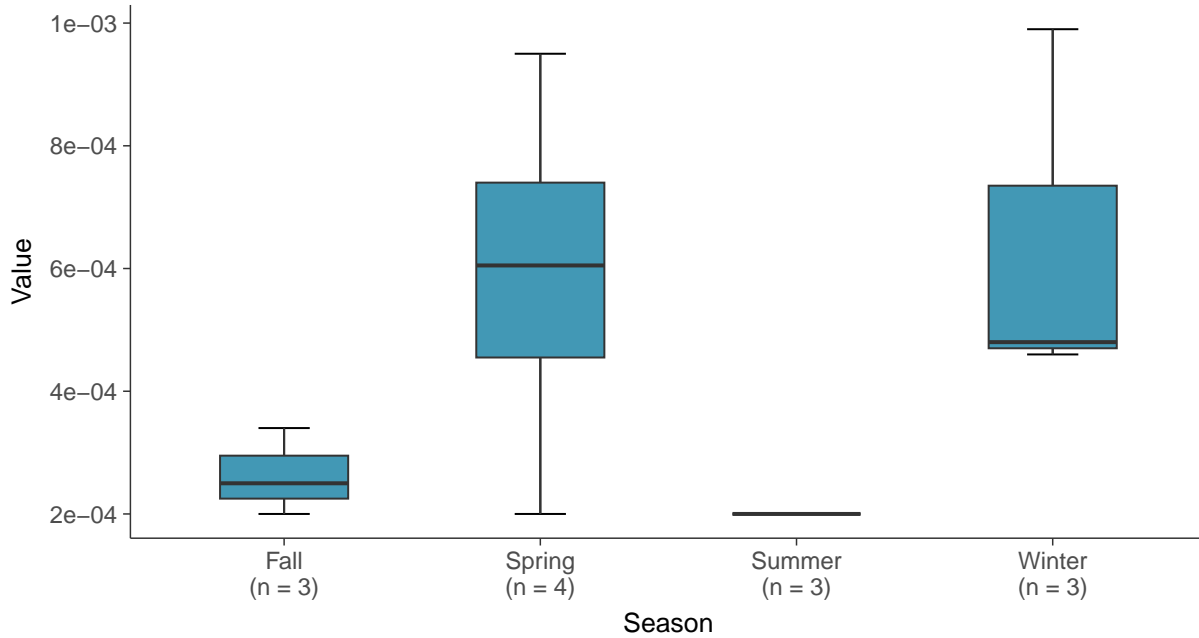
Boxplot

Chromium, Total, MW-12 (mg/L)



Boxplot by Season

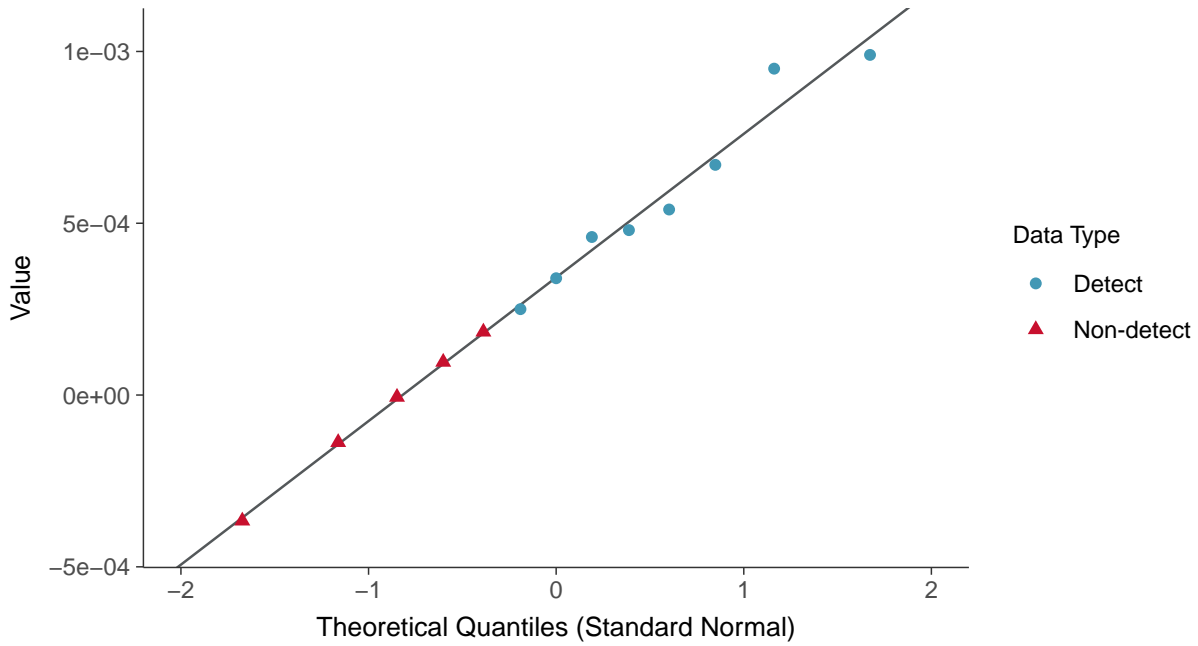
Chromium, Total, MW-12 (mg/L)





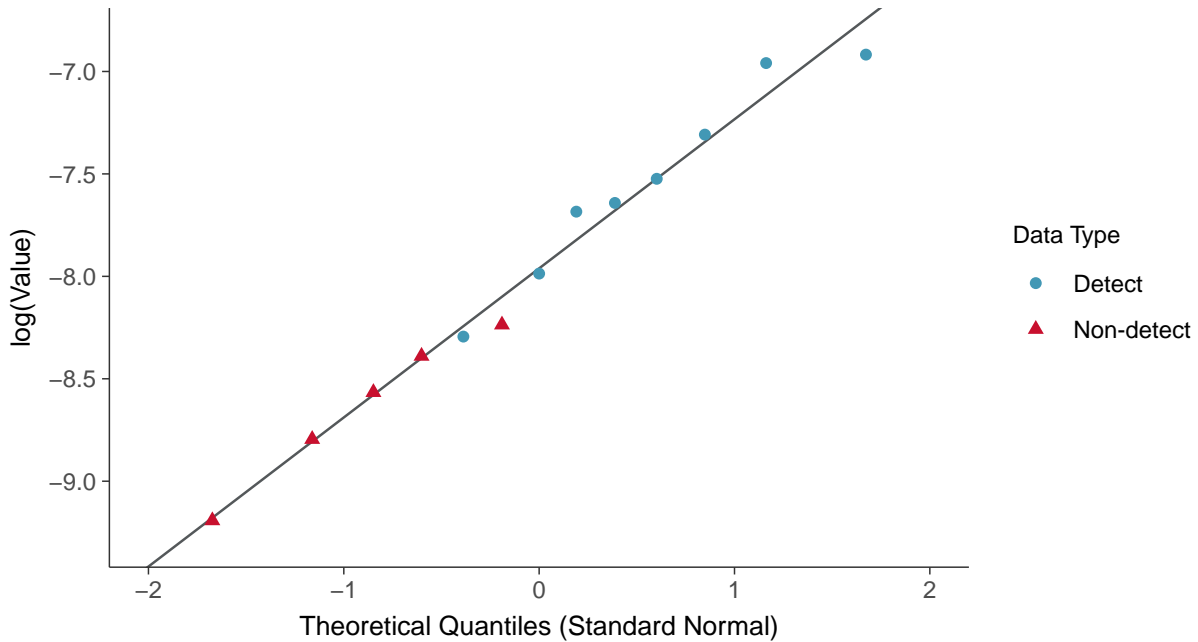
Normal Q-Q plot using ROS Imputed Estimates

Chromium, Total, MW-12 (mg/L)



Lognormal Q-Q plot using ROS Imputed Estimates

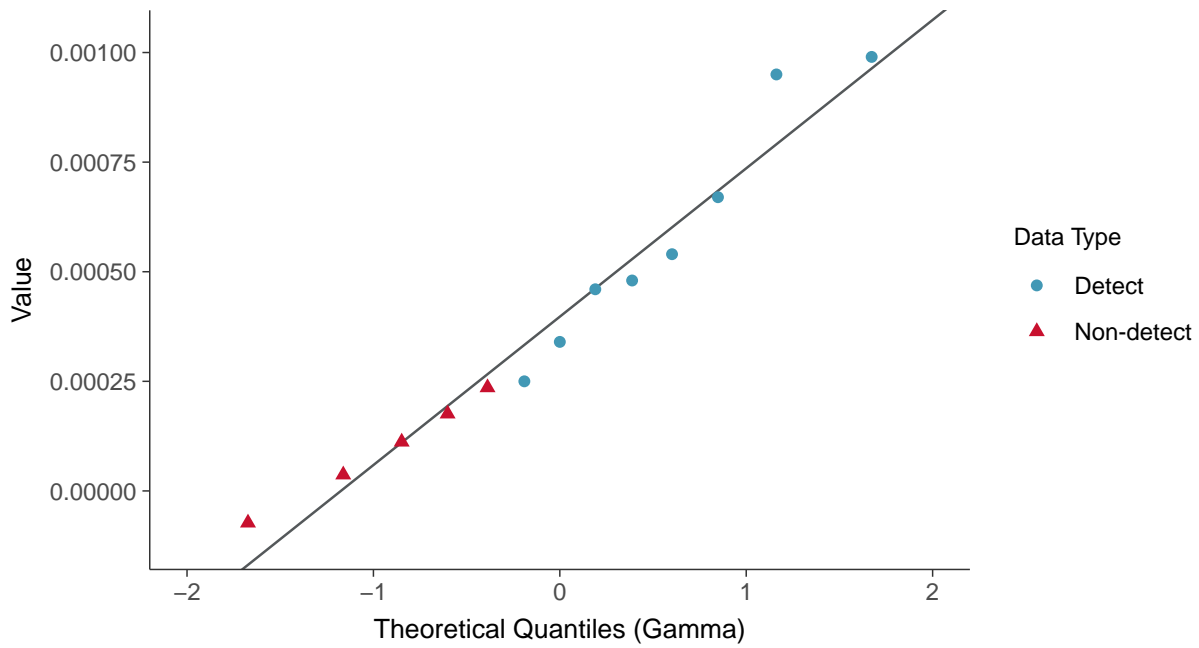
Chromium, Total, MW-12 (mg/L)





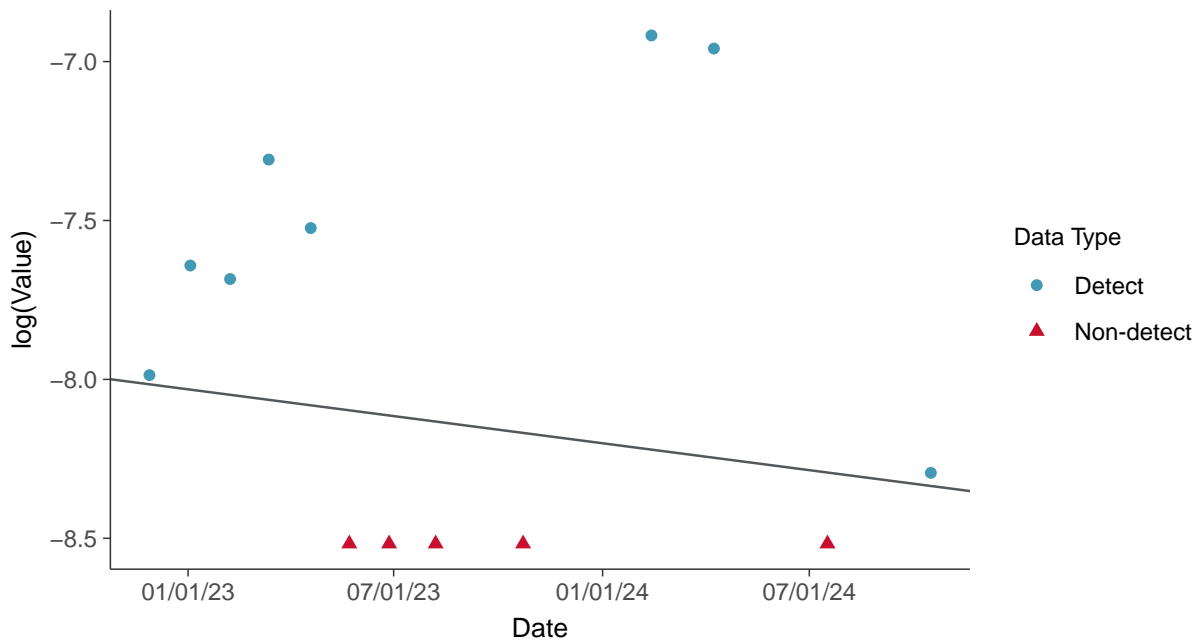
Gamma Q-Q plot using ROS Imputed Estimates

Chromium, Total, MW-12 (mg/L)



Trend Regression: Lognormal MLE

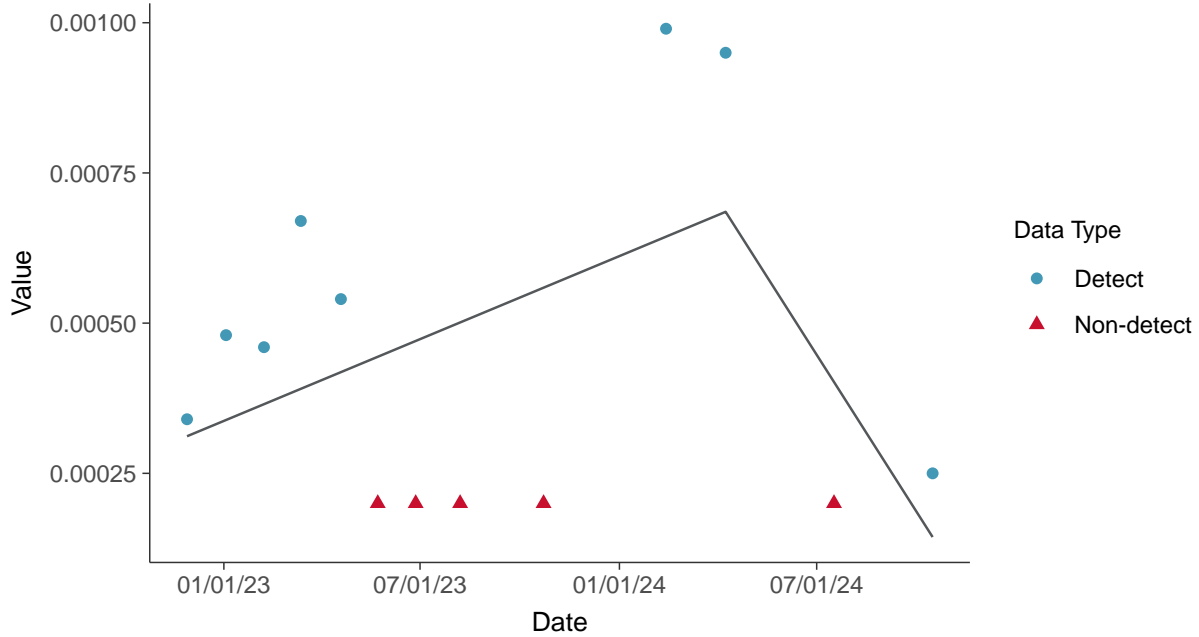
Chromium, Total, MW-12 (mg/L)





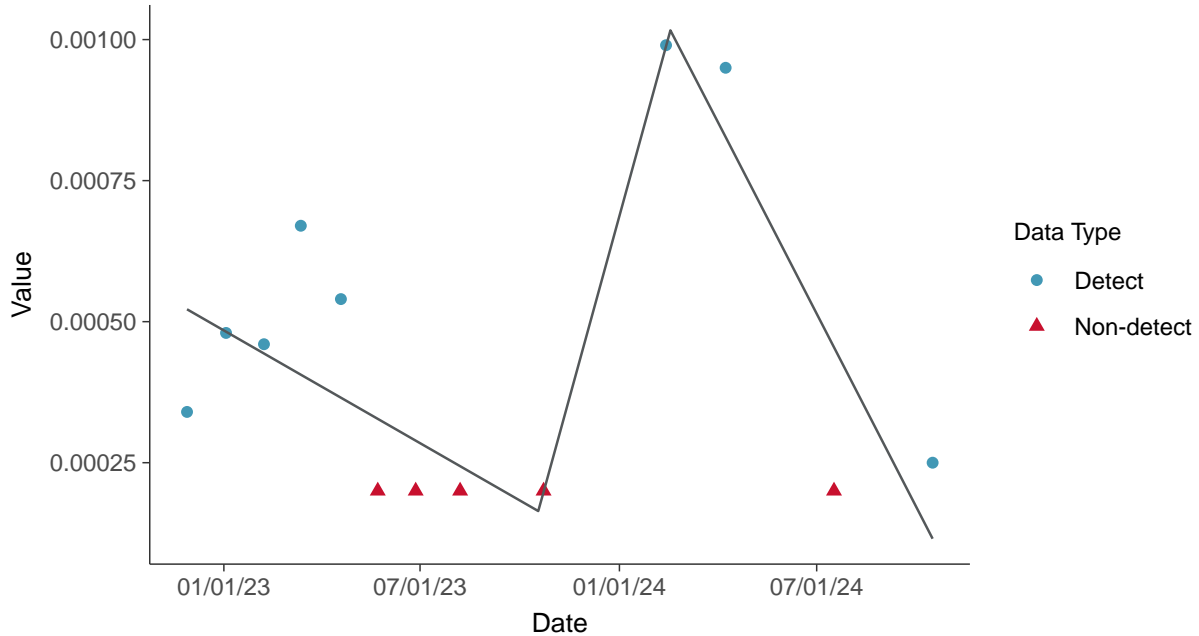
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-12 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

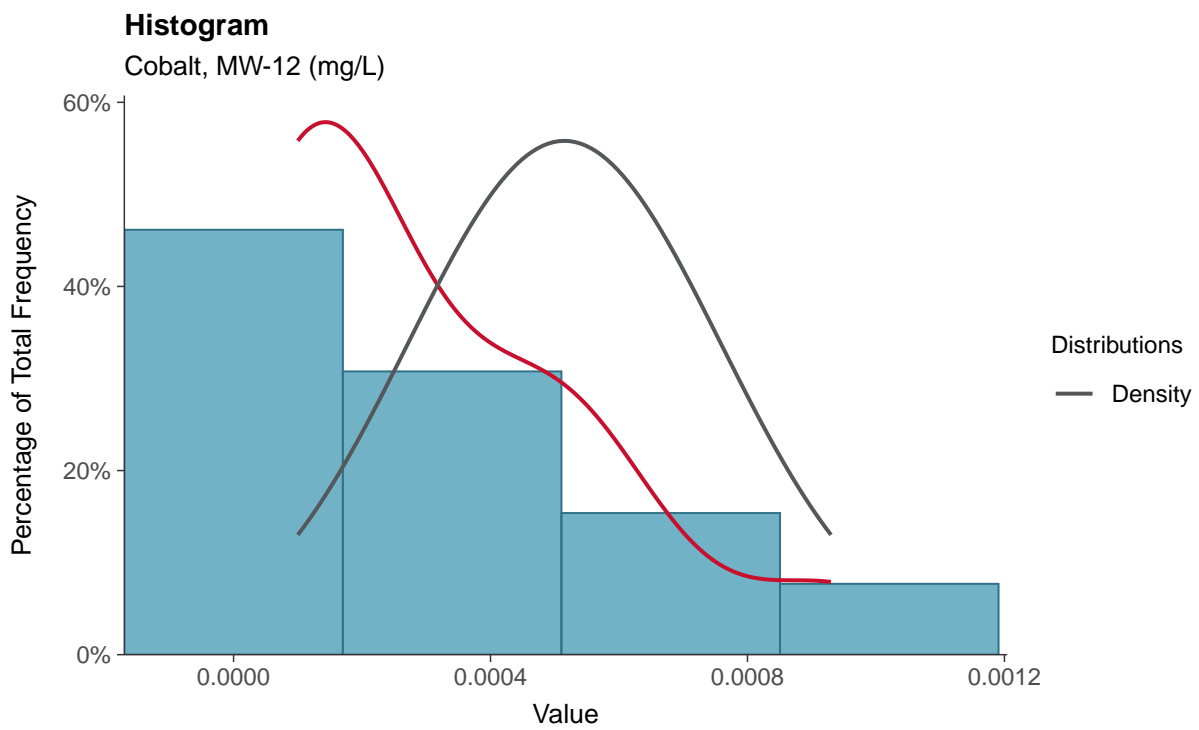
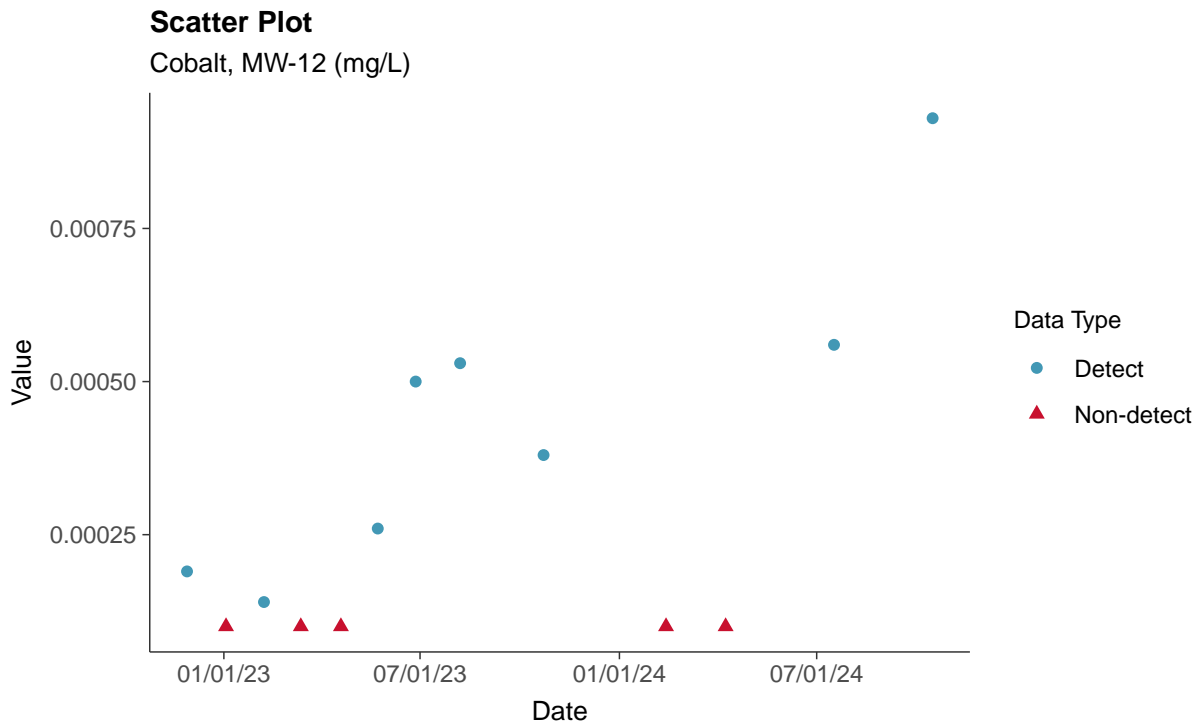
Chromium, Total, MW-12 (mg/L)





Appendix IV: Cobalt, MW-12

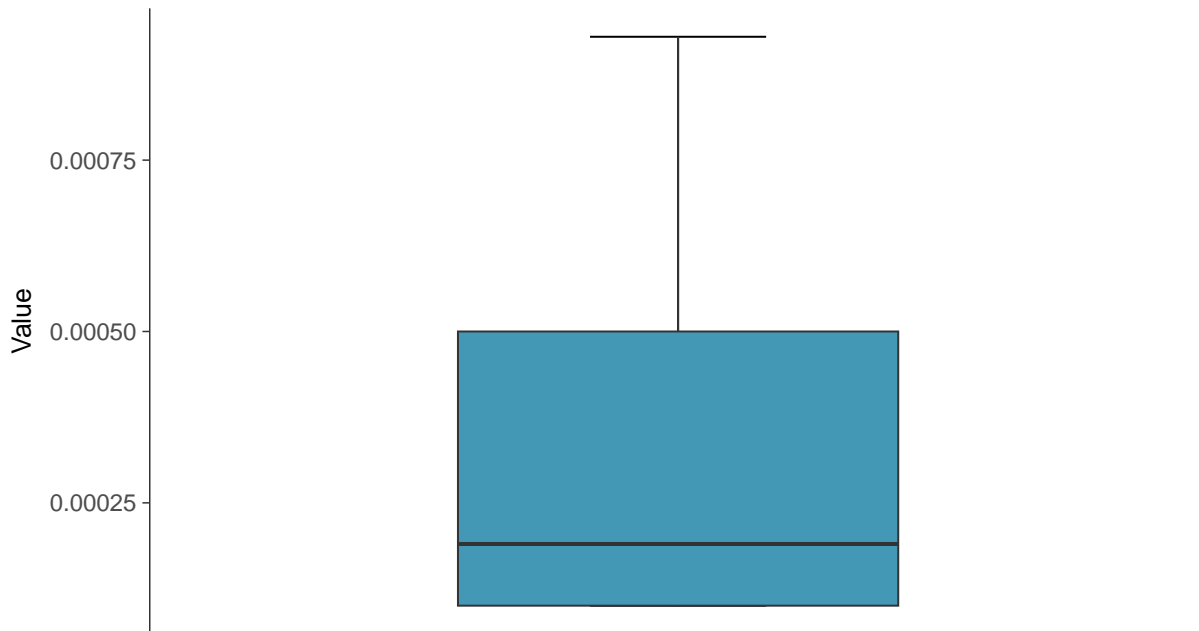
ID: 2_22_2_5_110





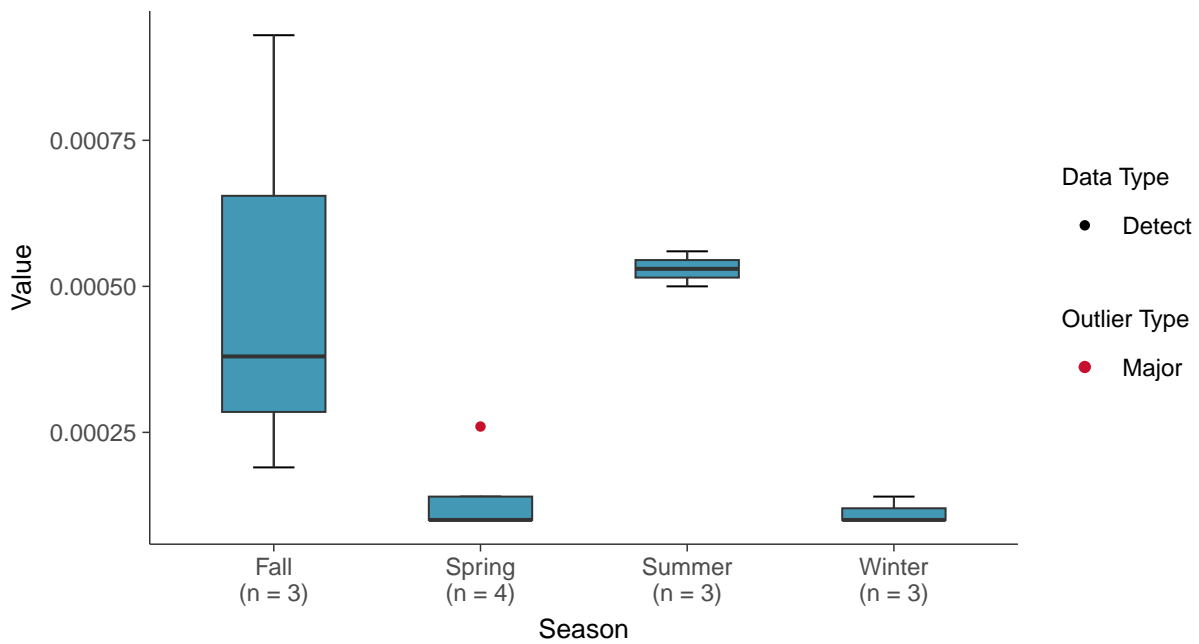
Boxplot

Cobalt, MW-12 (mg/L)



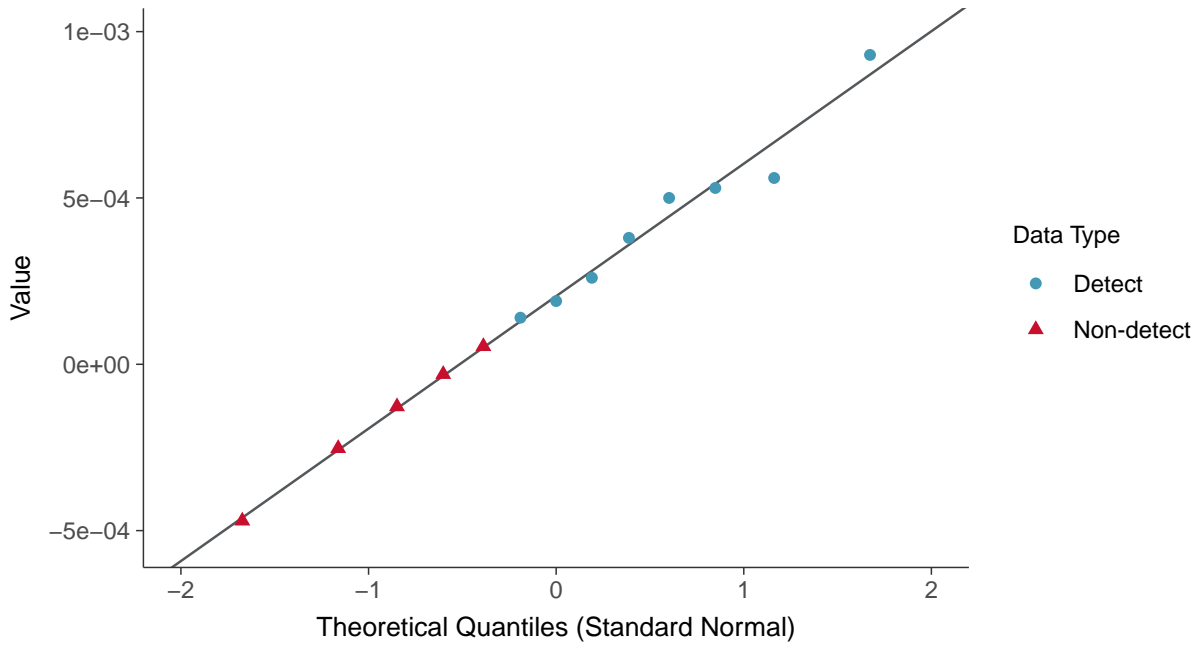
Boxplot by Season

Cobalt, MW-12 (mg/L)

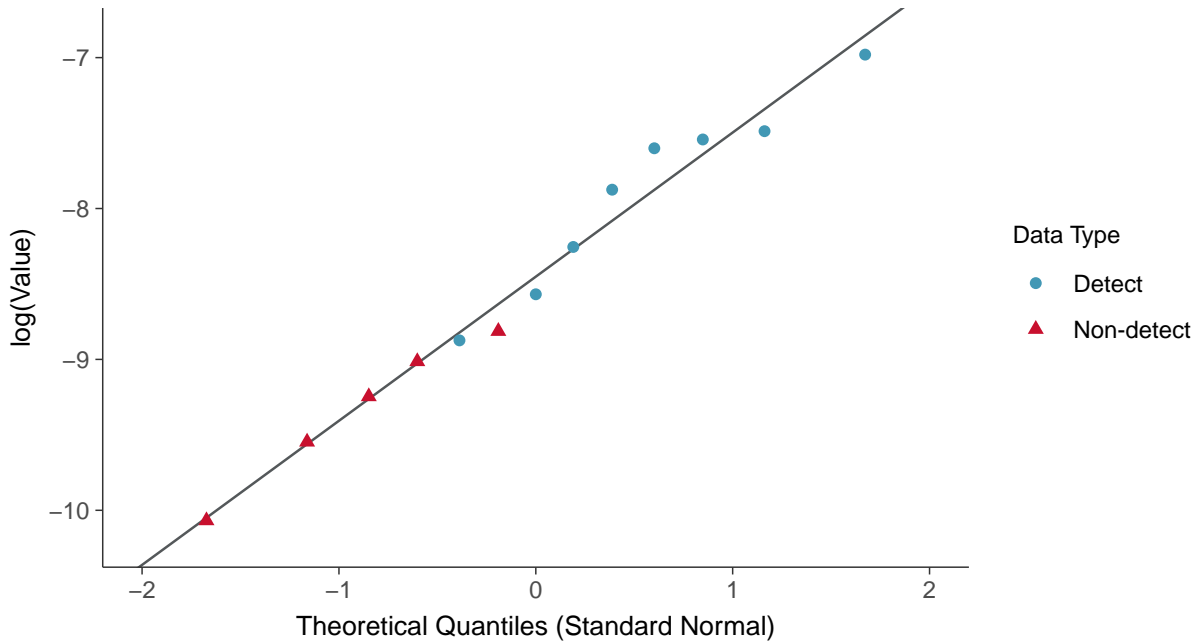




Normal Q-Q plot using ROS Imputed Estimates Cobalt, MW-12 (mg/L)



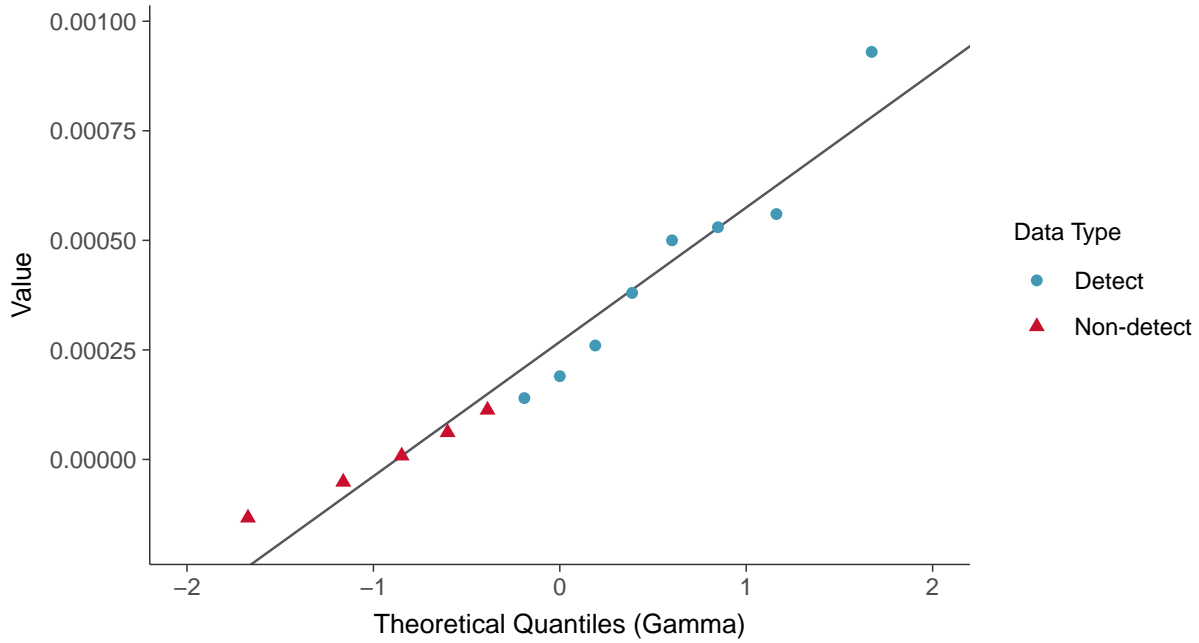
Lognormal Q-Q plot using ROS Imputed Estimates Cobalt, MW-12 (mg/L)





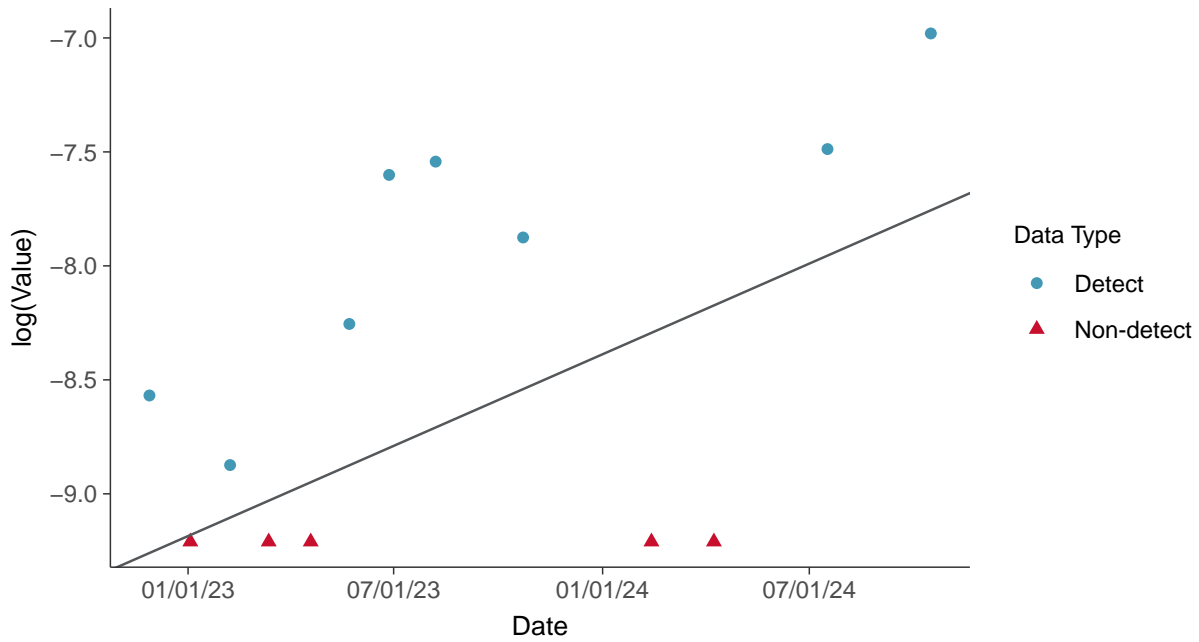
Gamma Q-Q plot using ROS Imputed Estimates

Cobalt, MW-12 (mg/L)



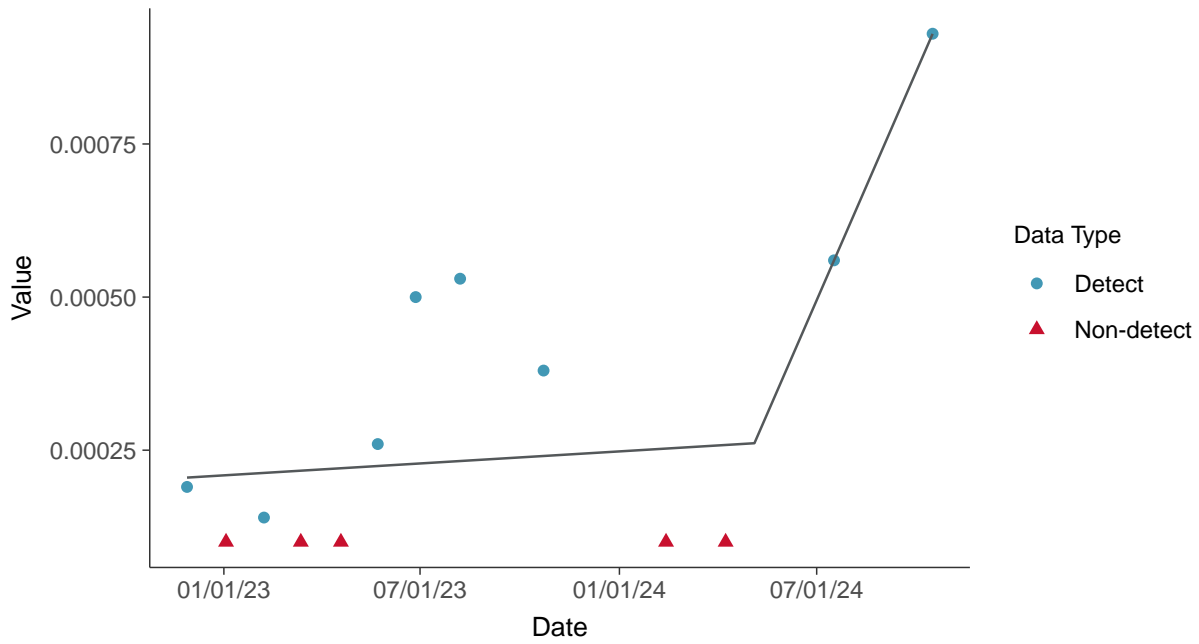
Trend Regression: Lognormal MLE

Cobalt, MW-12 (mg/L)

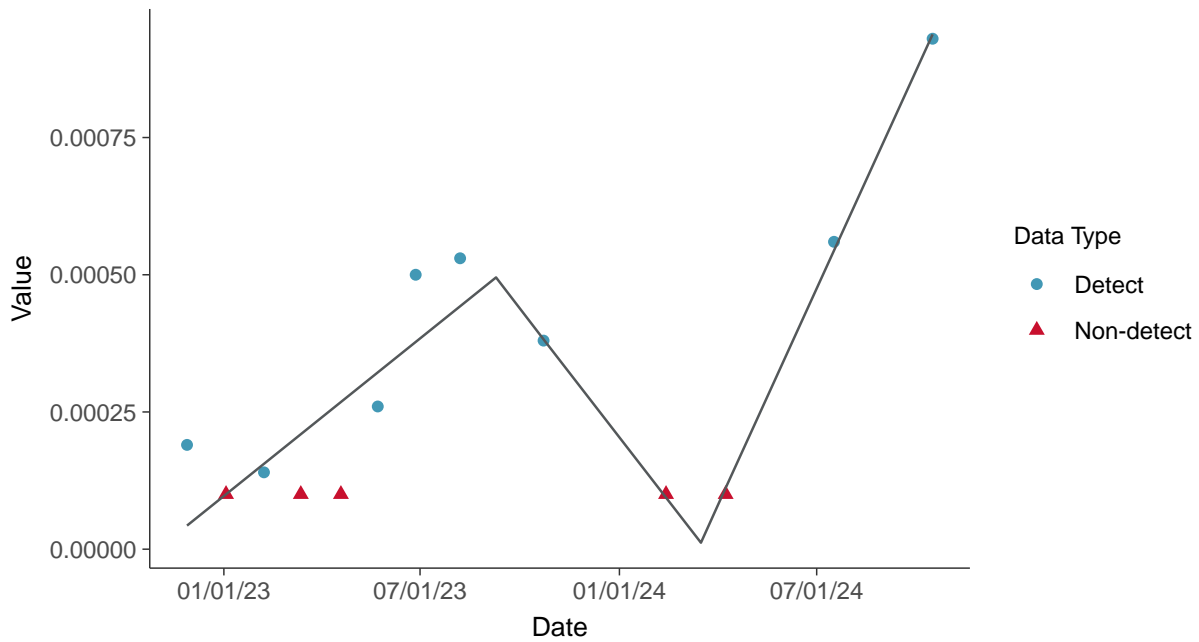




Trend Regression: Piecewise Linear-Linear
Cobalt, MW-12 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Cobalt, MW-12 (mg/L)



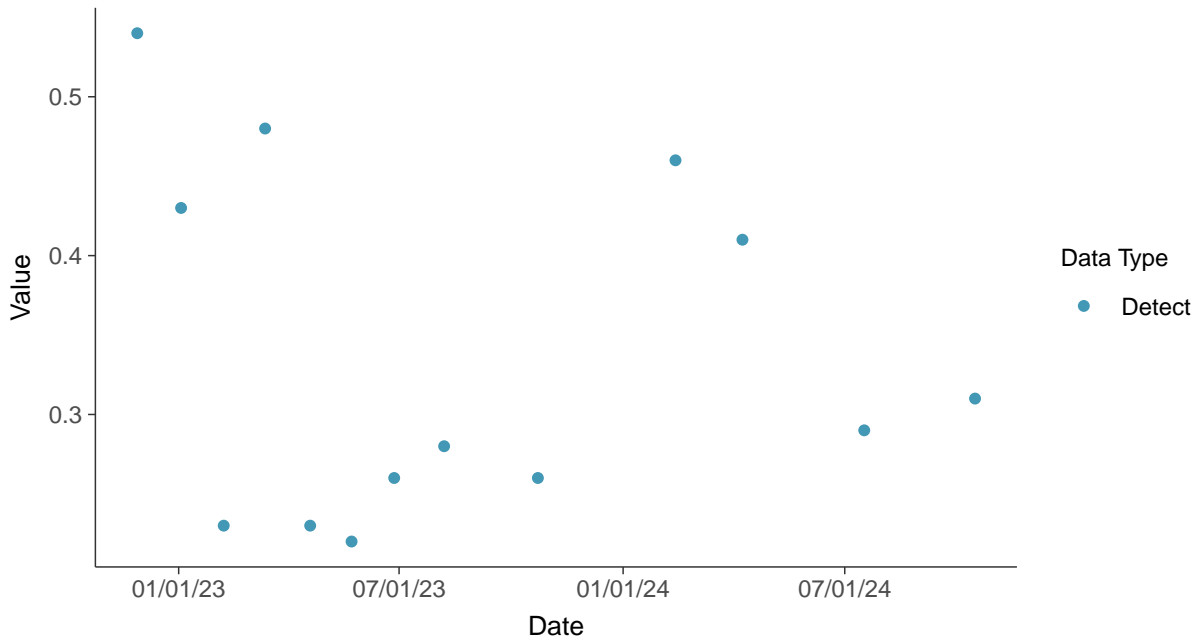


Appendix IV: Fluoride (App IV), MW-12

ID: 2_22_2_5_113

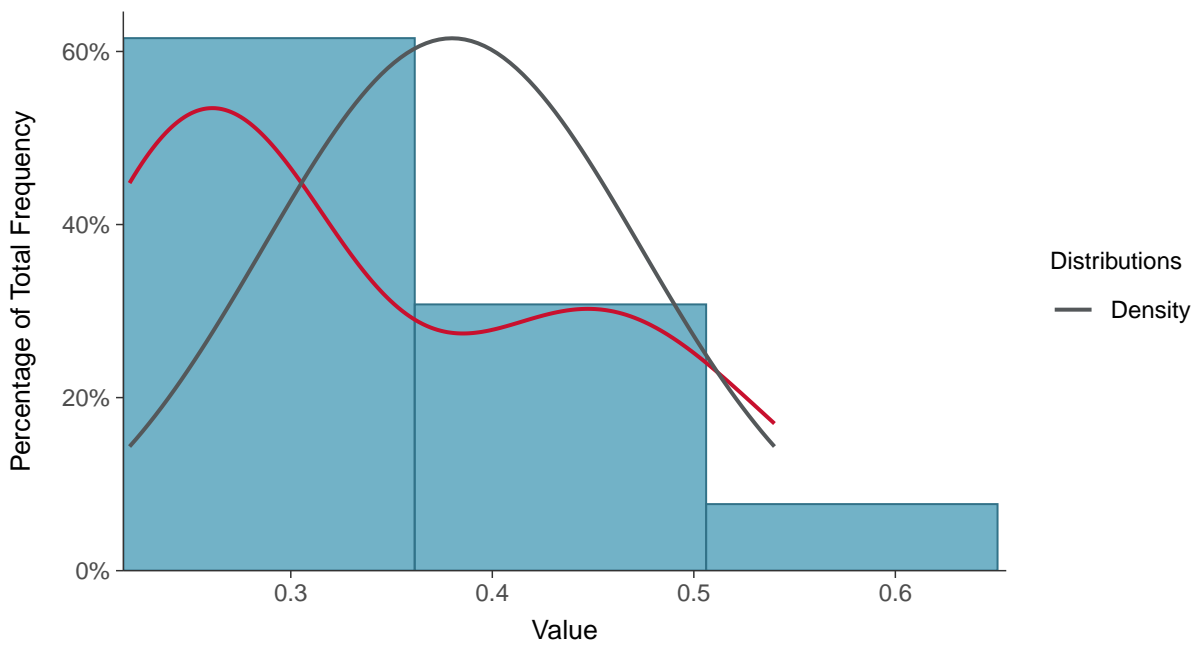
Scatter Plot

Fluoride (App IV), MW-12 (mg/L)



Histogram

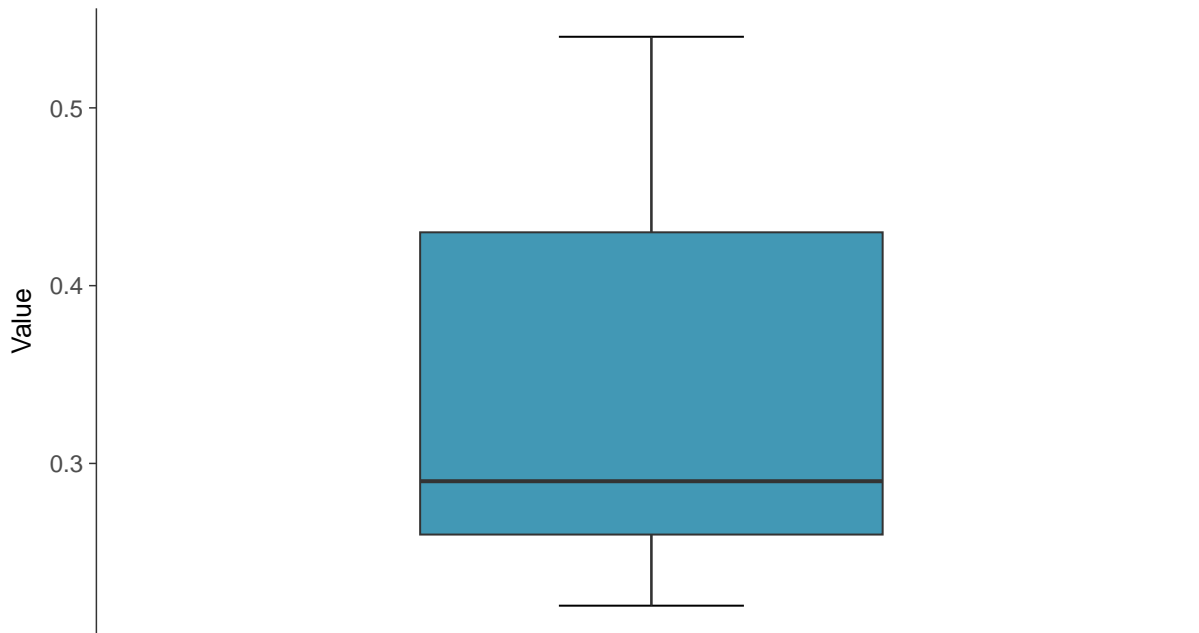
Fluoride (App IV), MW-12 (mg/L)





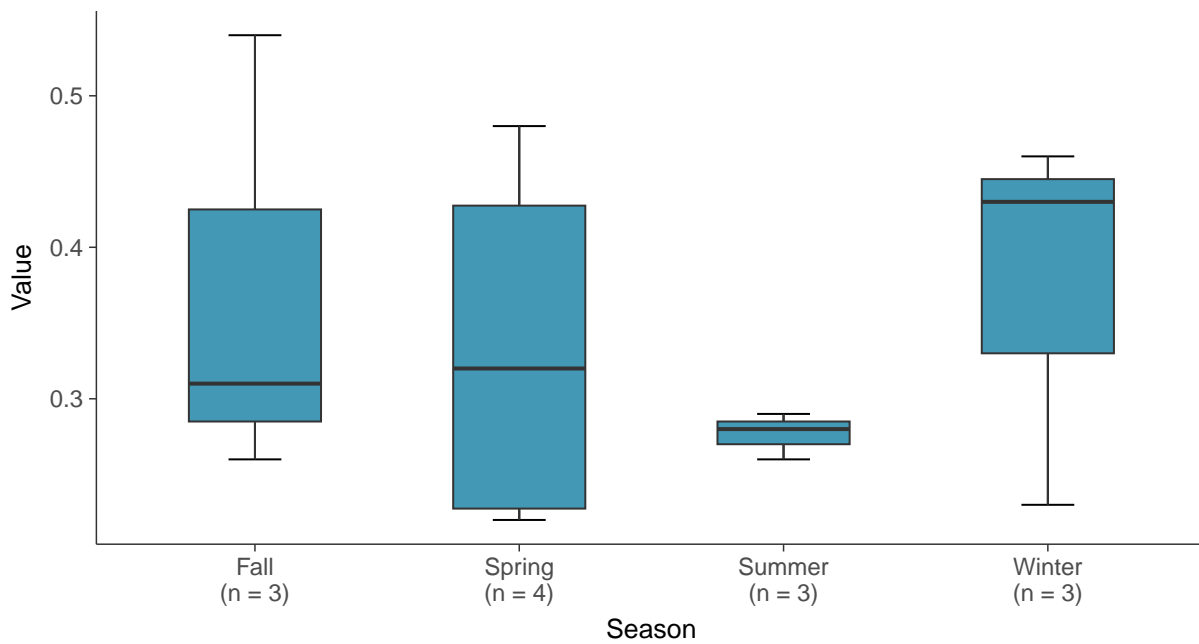
Boxplot

Fluoride (App IV), MW-12 (mg/L)



Boxplot by Season

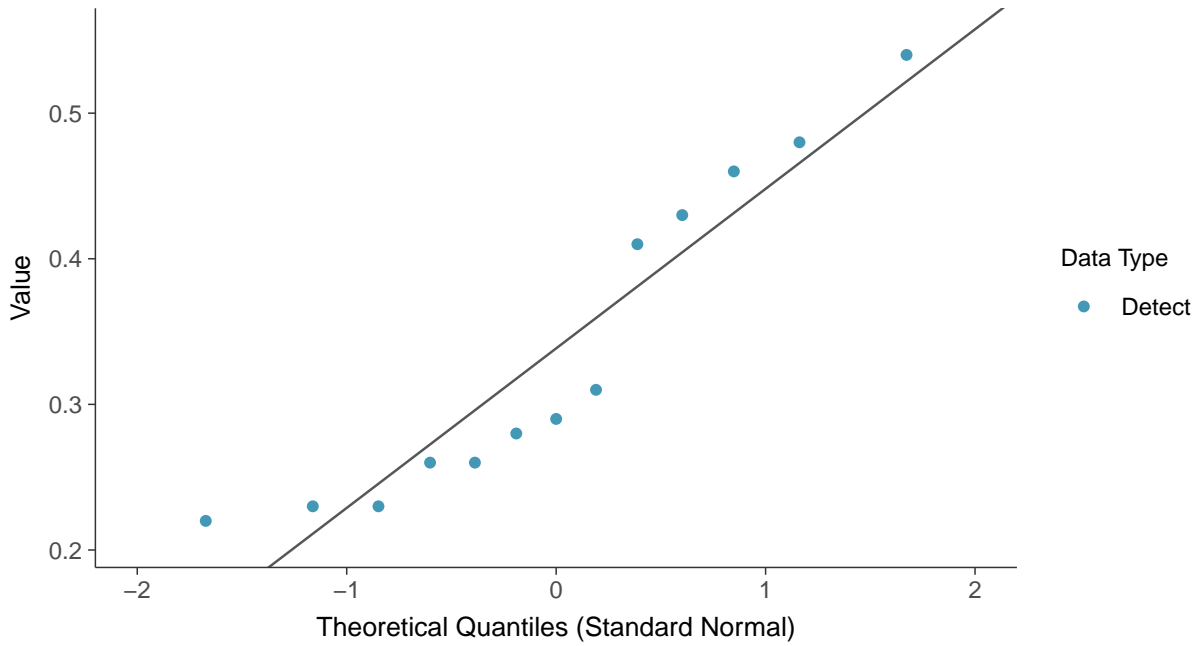
Fluoride (App IV), MW-12 (mg/L)





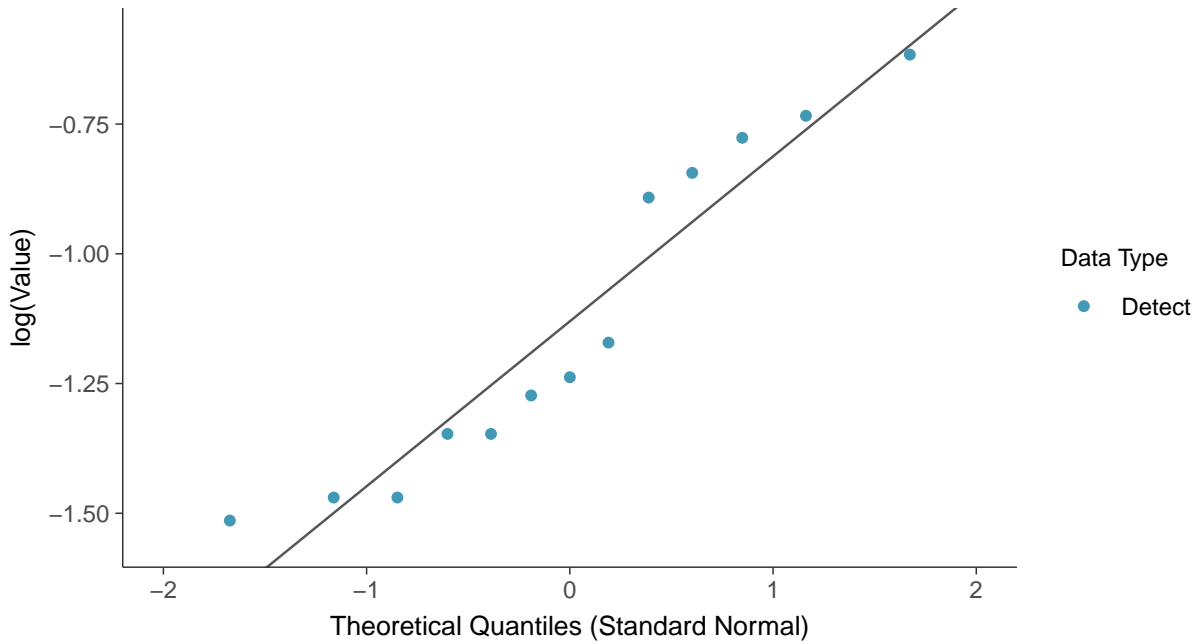
Normal Q-Q plot

Fluoride (App IV), MW-12 (mg/L)



Lognormal Q-Q plot

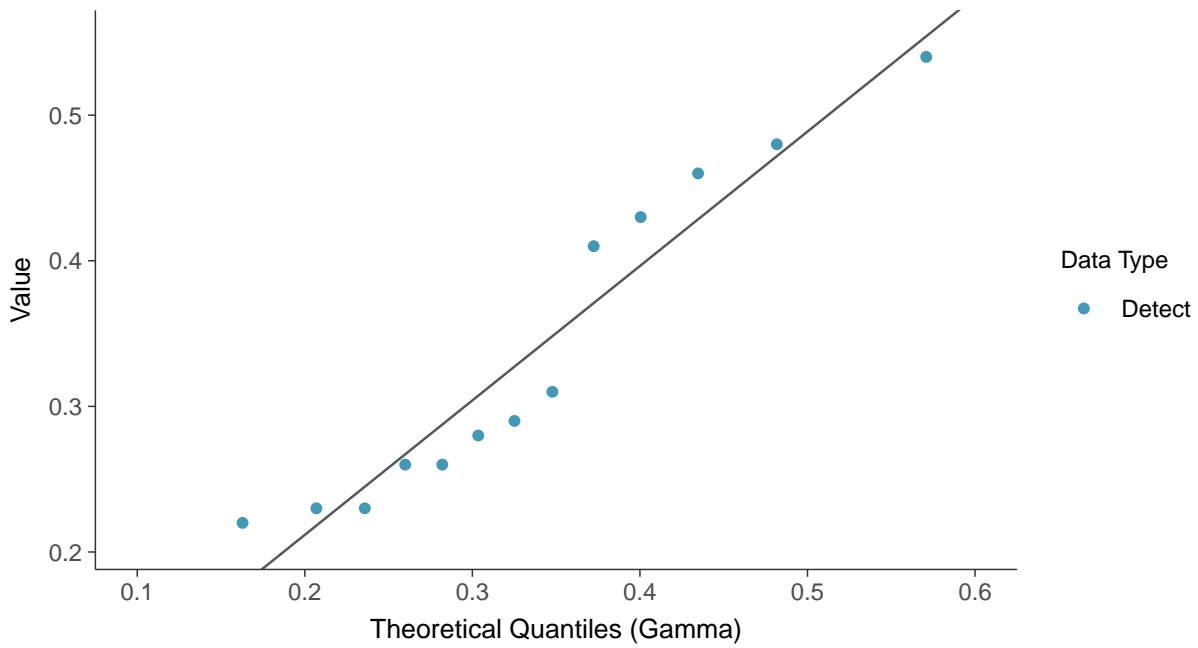
Fluoride (App IV), MW-12 (mg/L)





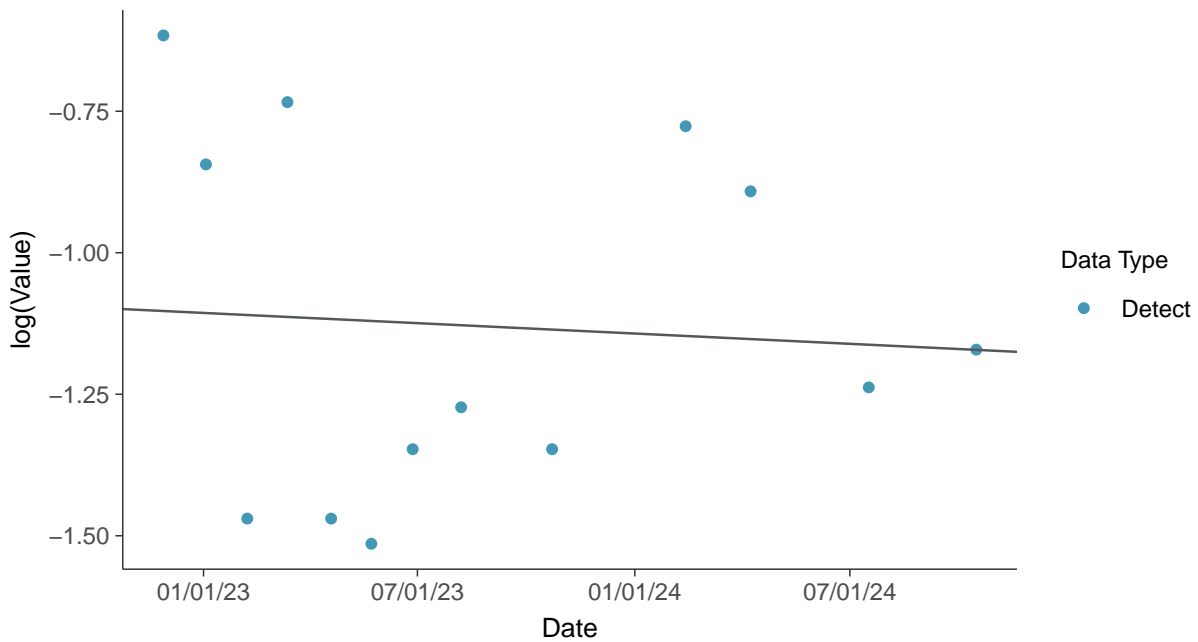
Gamma Q-Q plot

Fluoride (App IV), MW-12 (mg/L)



Trend Regression: Lognormal MLE

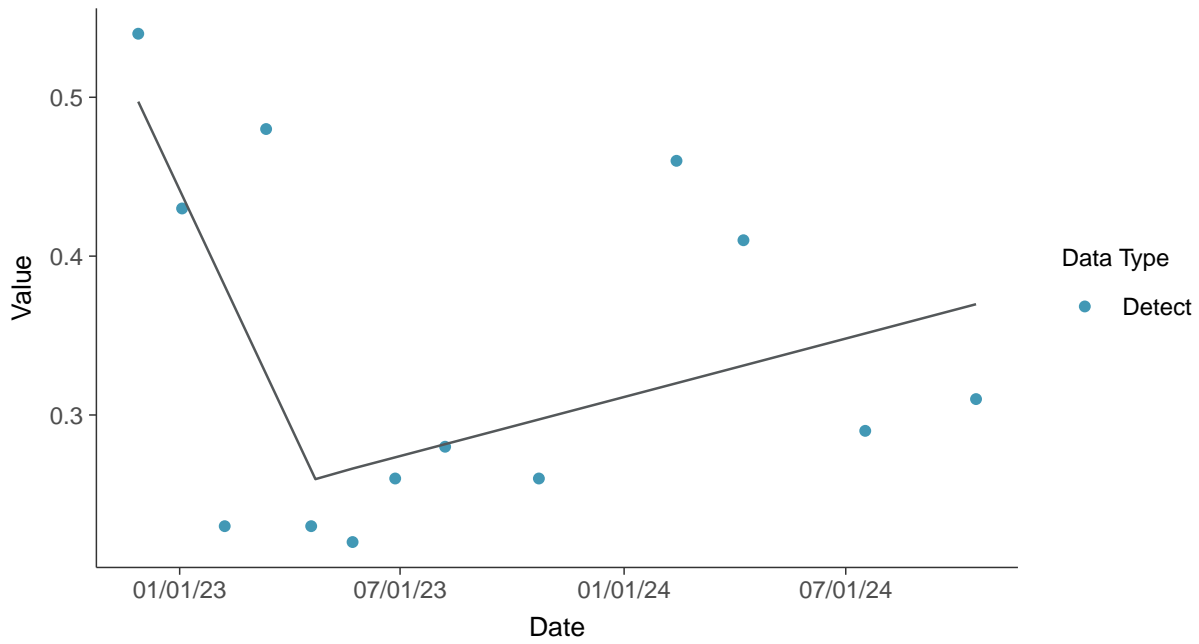
Fluoride (App IV), MW-12 (mg/L)





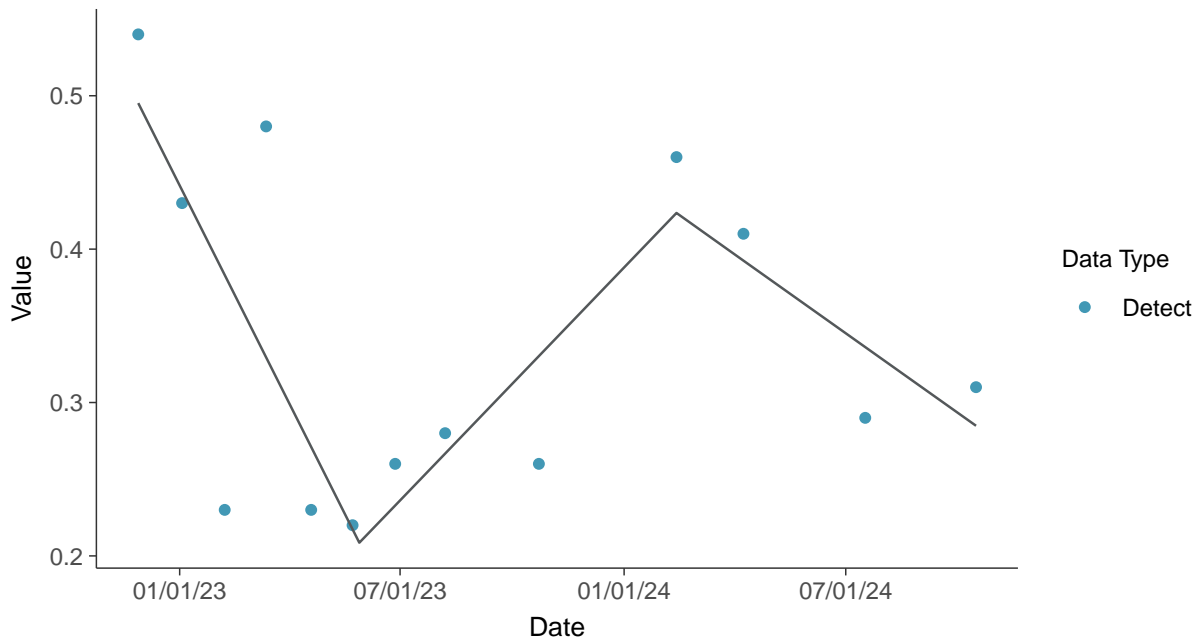
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-12 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Fluoride (App IV), MW-12 (mg/L)



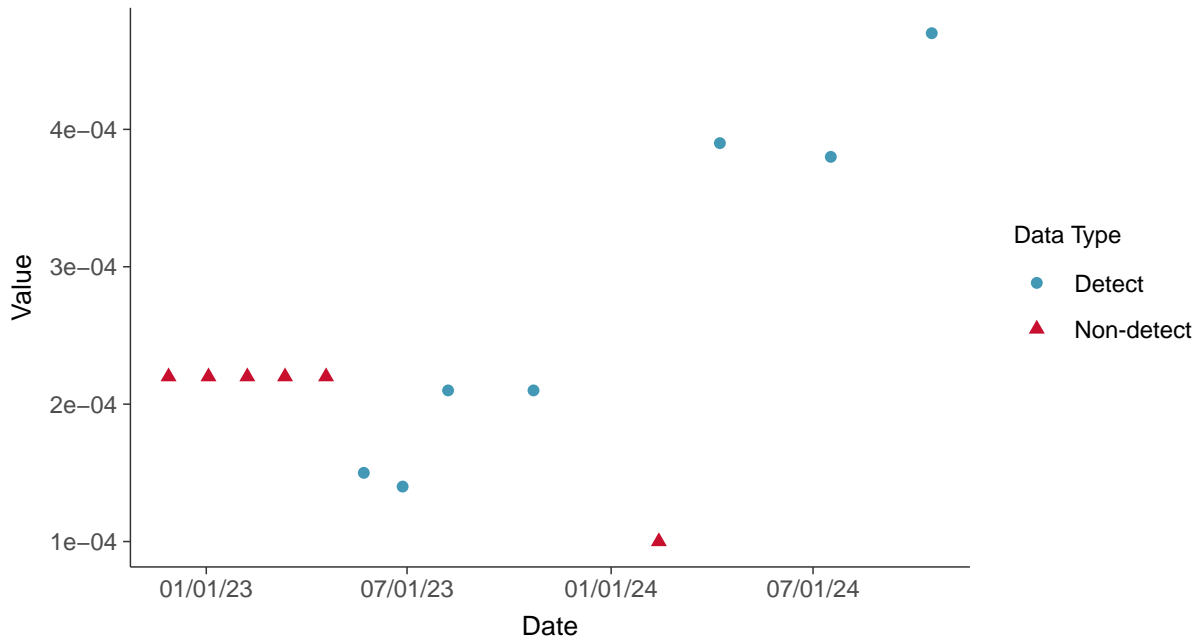


Appendix IV: Lead, MW-12

ID: 2_22_2_5_115

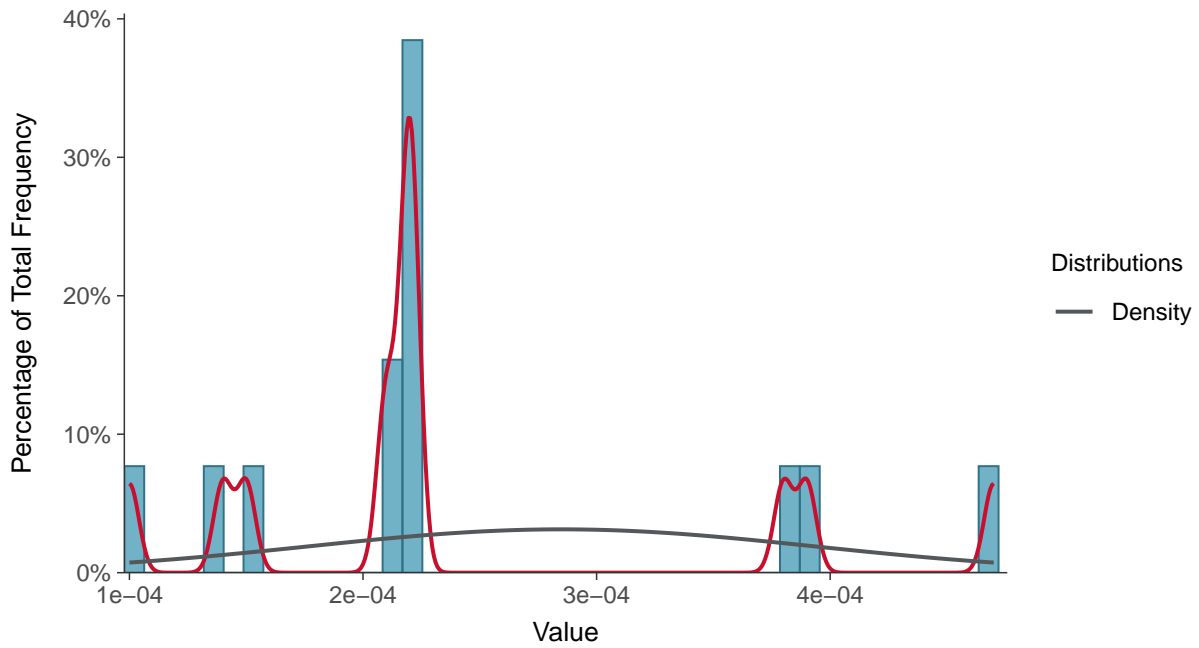
Scatter Plot

Lead, MW-12 (mg/L)



Histogram

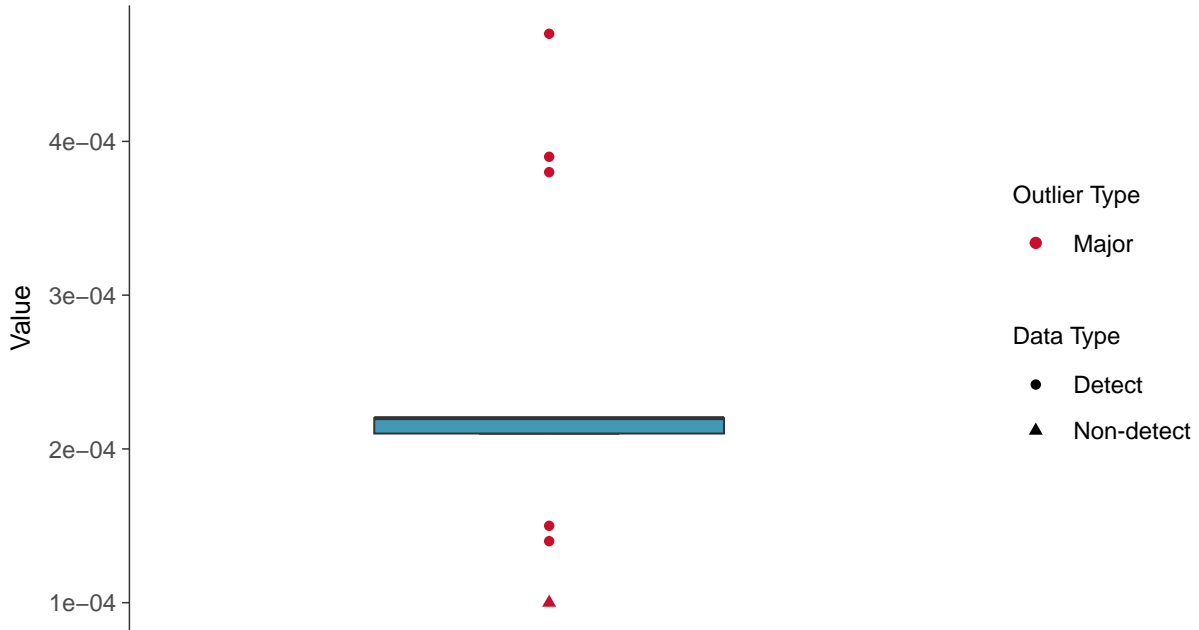
Lead, MW-12 (mg/L)





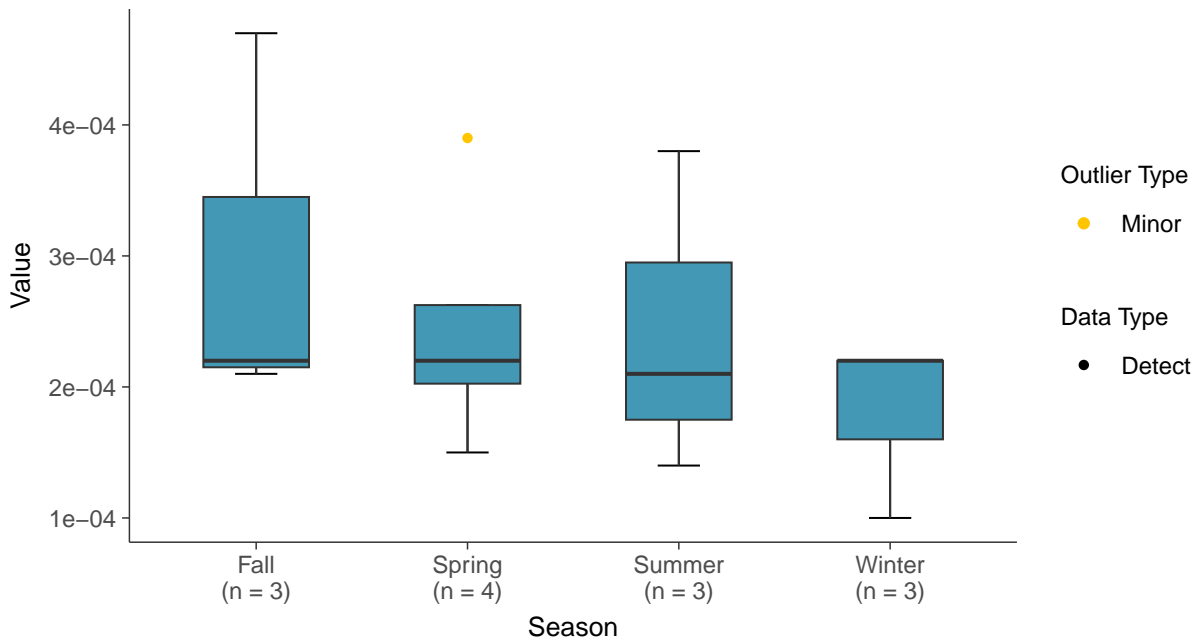
Boxplot

Lead, MW-12 (mg/L)



Boxplot by Season

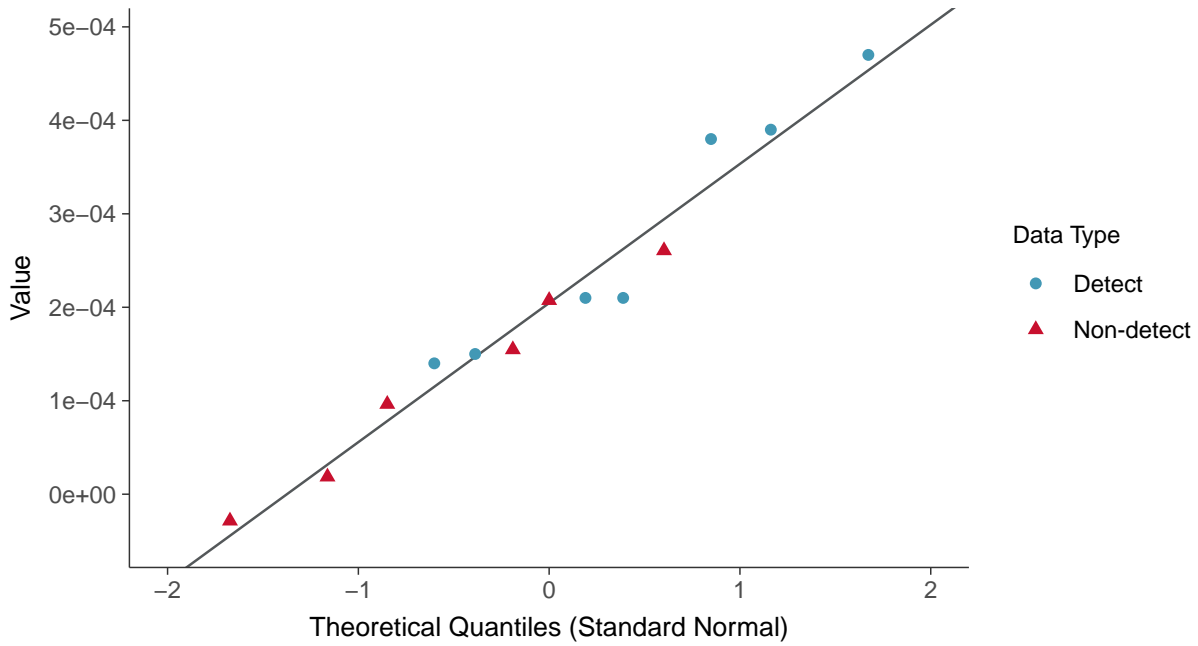
Lead, MW-12 (mg/L)





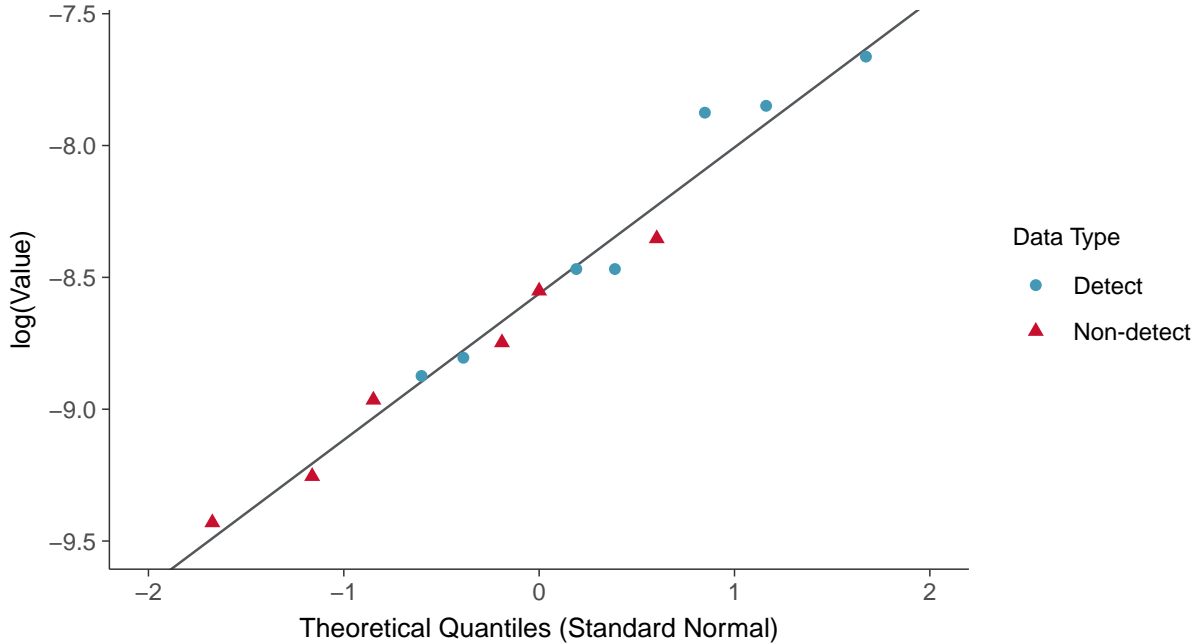
Normal Q-Q plot using ROS Imputed Estimates

Lead, MW-12 (mg/L)



Lognormal Q-Q plot using ROS Imputed Estimates

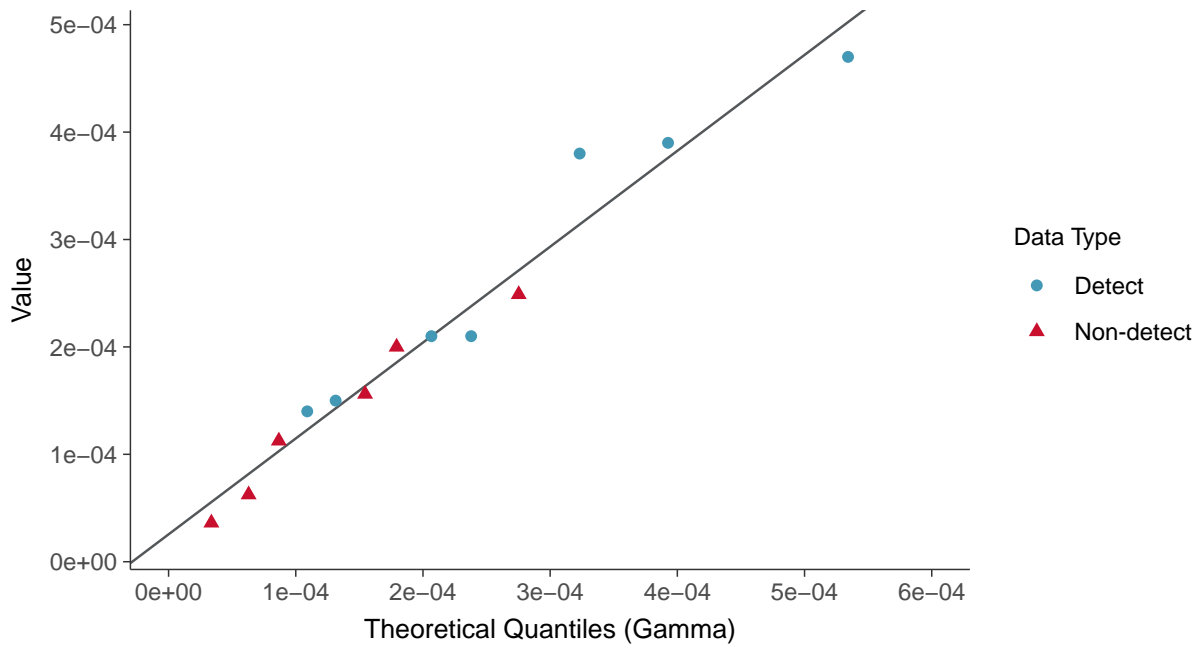
Lead, MW-12 (mg/L)





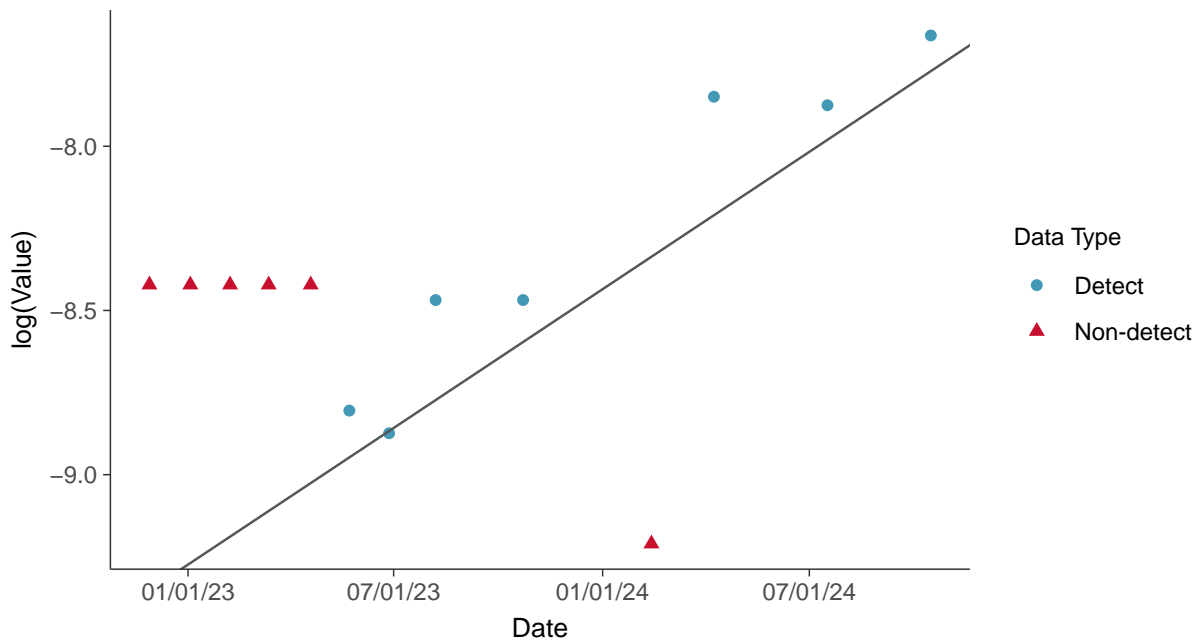
Gamma Q-Q plot using ROS Imputed Estimates

Lead, MW-12 (mg/L)



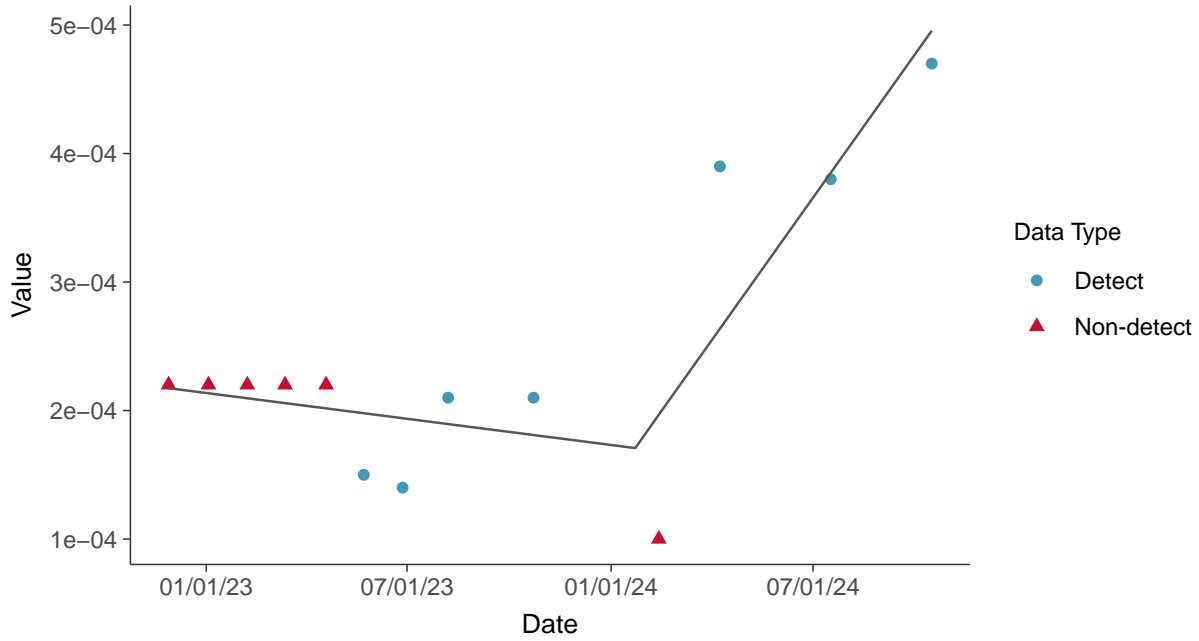
Trend Regression: Lognormal MLE

Lead, MW-12 (mg/L)

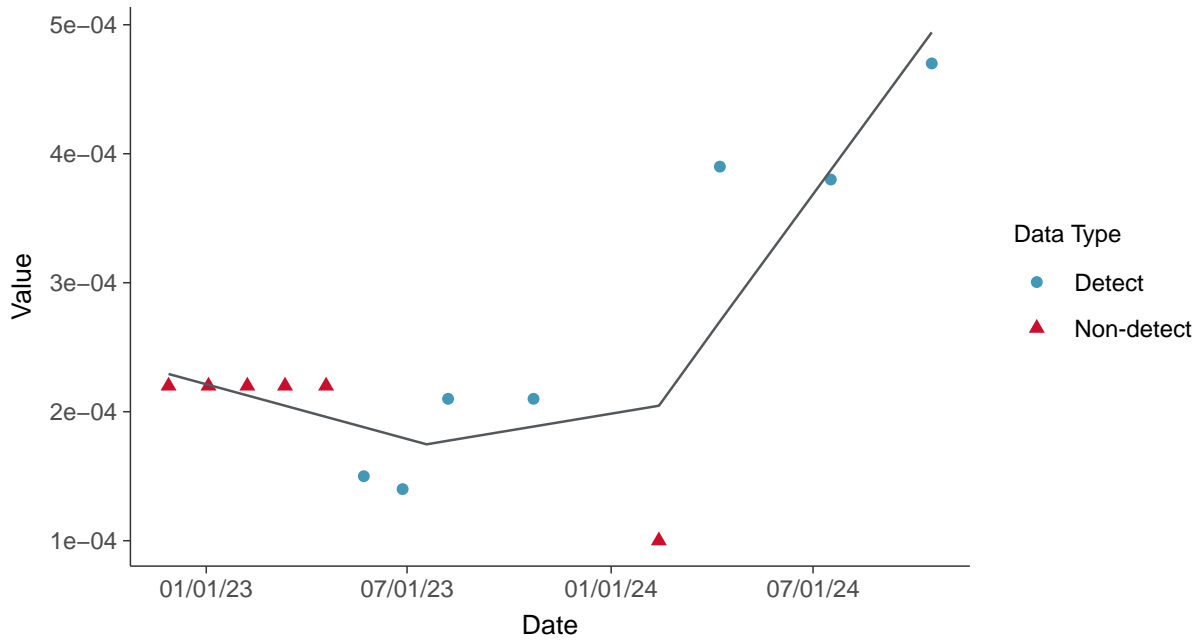




Trend Regression: Piecewise Linear-Linear
Lead, MW-12 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Lead, MW-12 (mg/L)



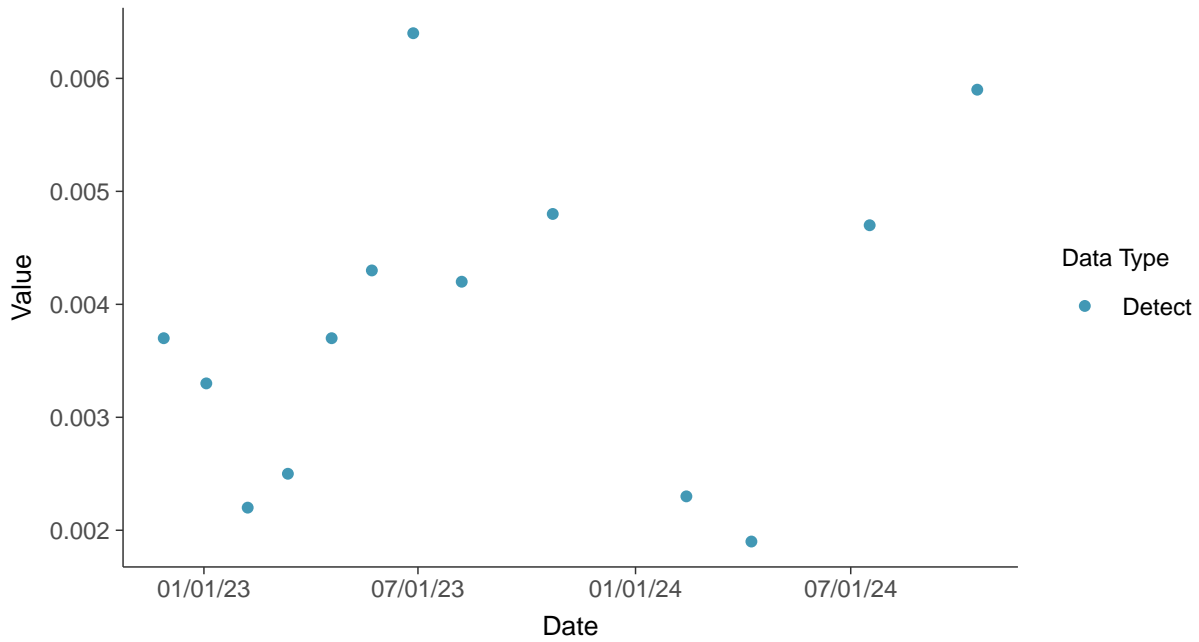


Appendix IV: Lithium, MW-12

ID: 2_22_2_5_116

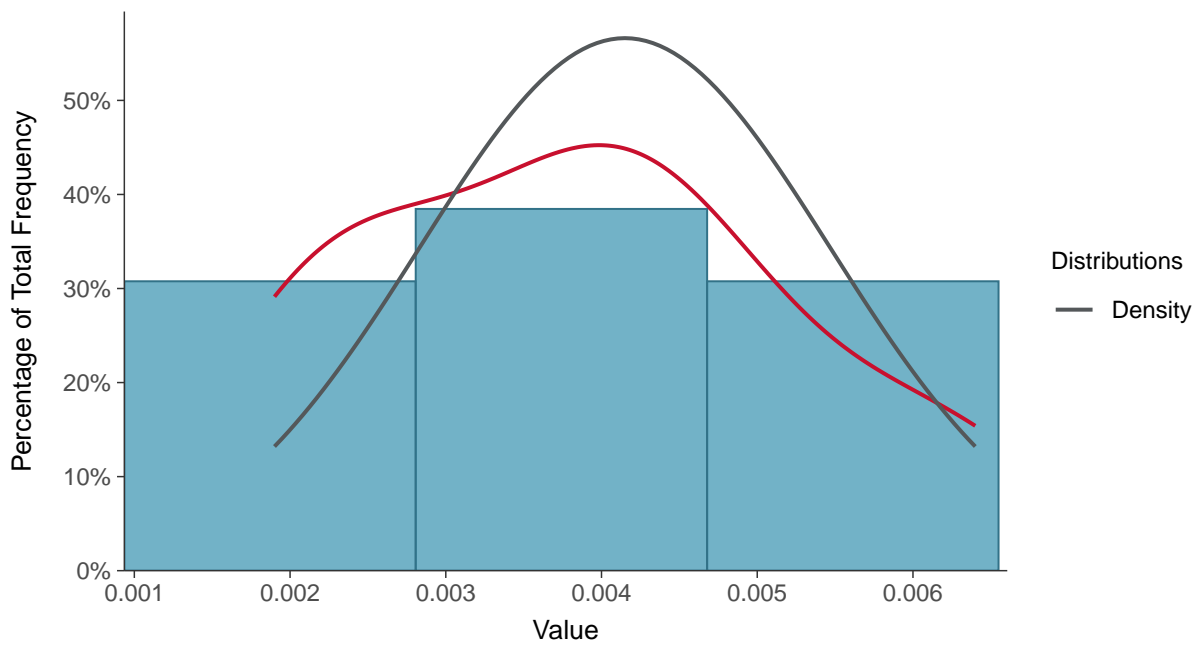
Scatter Plot

Lithium, MW-12 (mg/L)



Histogram

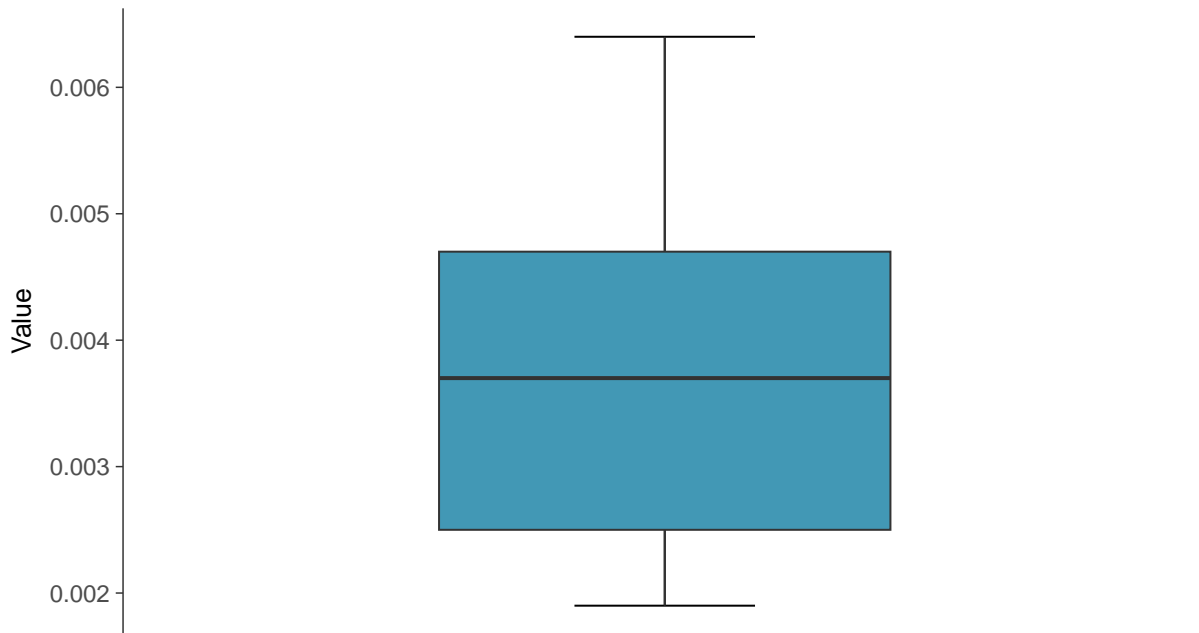
Lithium, MW-12 (mg/L)





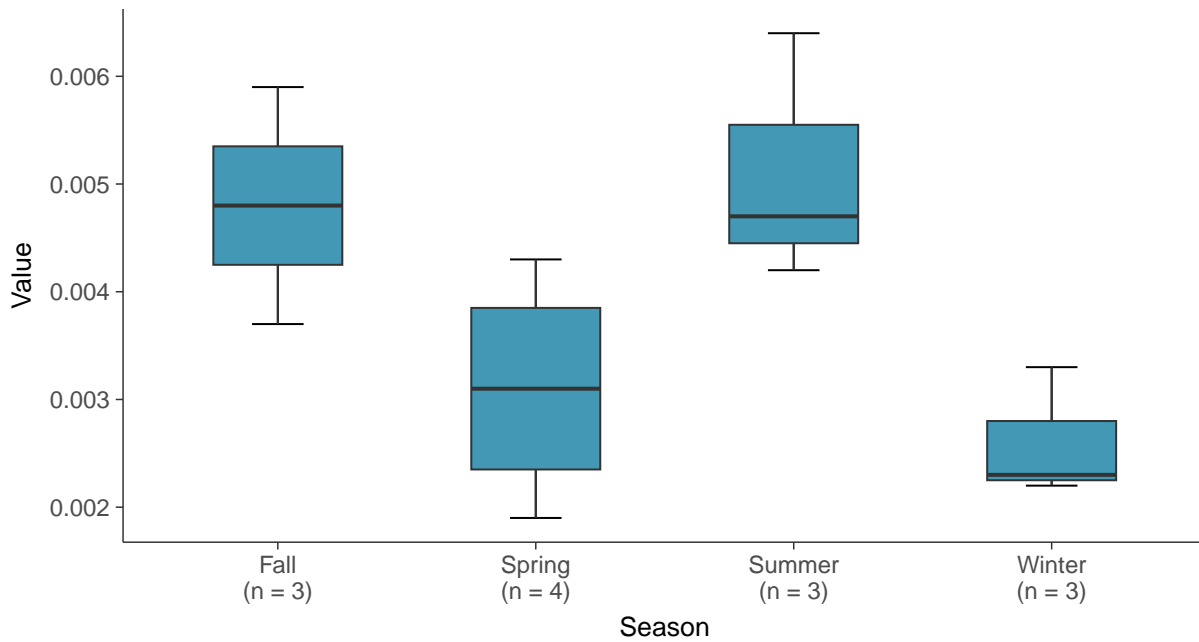
Boxplot

Lithium, MW-12 (mg/L)



Boxplot by Season

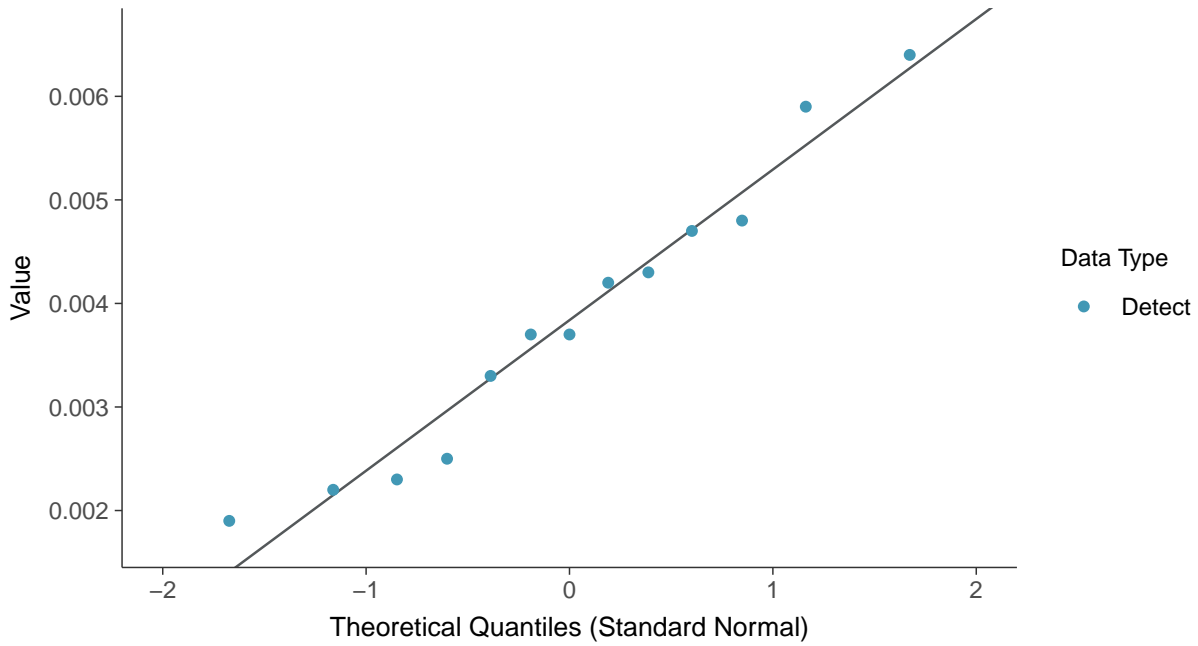
Lithium, MW-12 (mg/L)





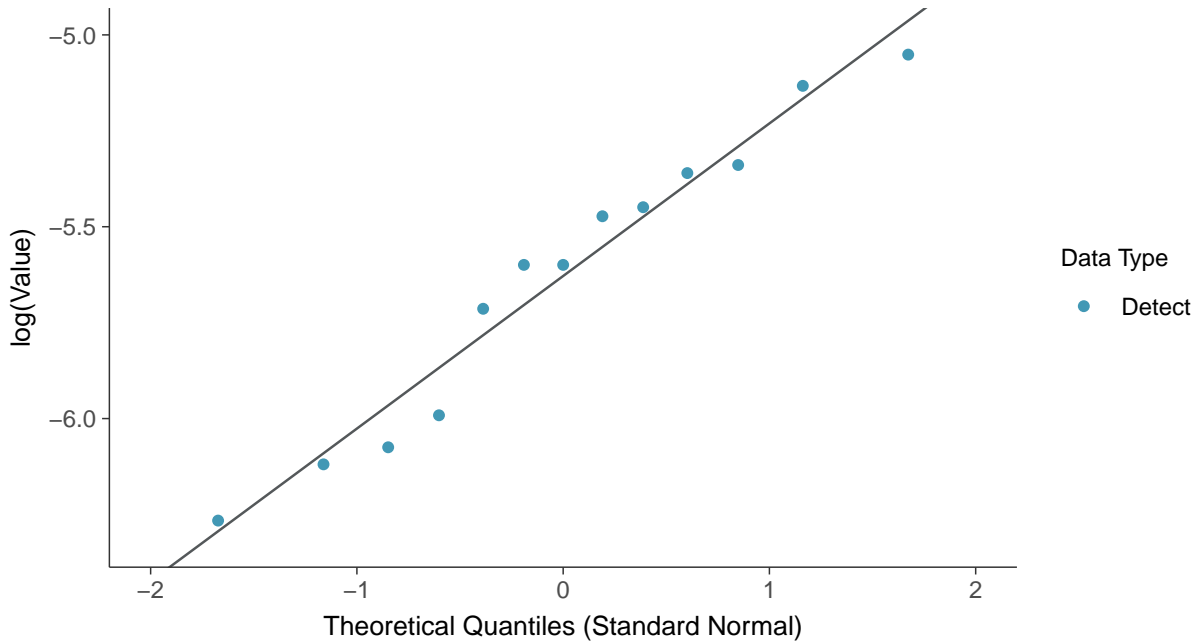
Normal Q-Q plot

Lithium, MW-12 (mg/L)



Lognormal Q-Q plot

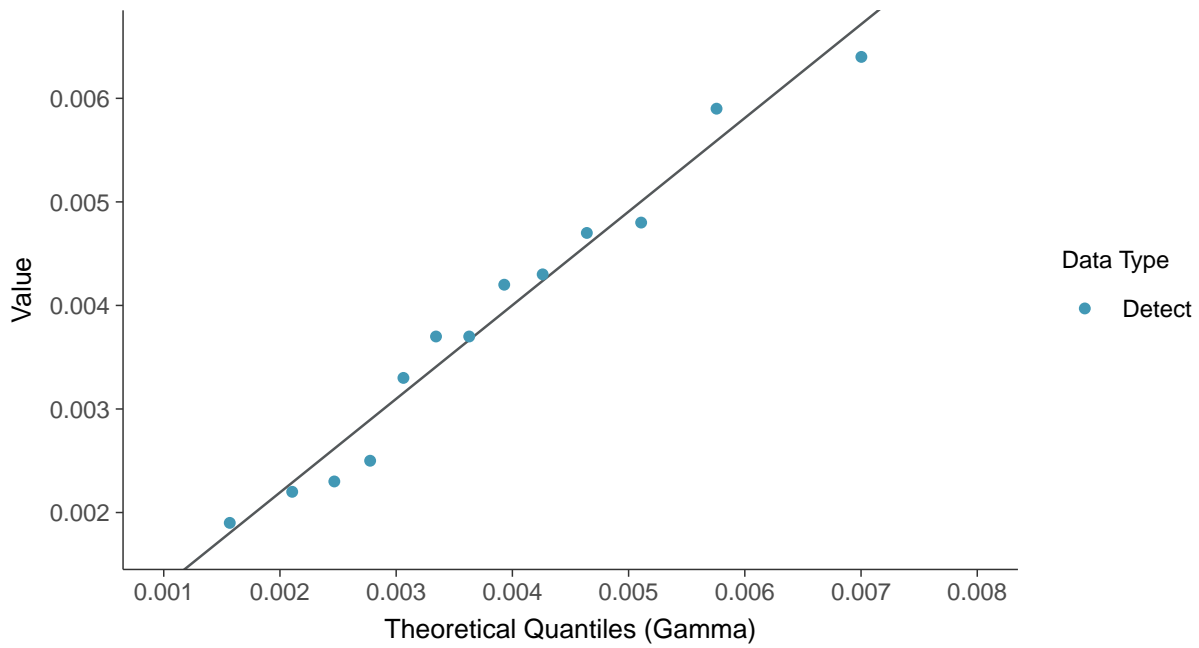
Lithium, MW-12 (mg/L)





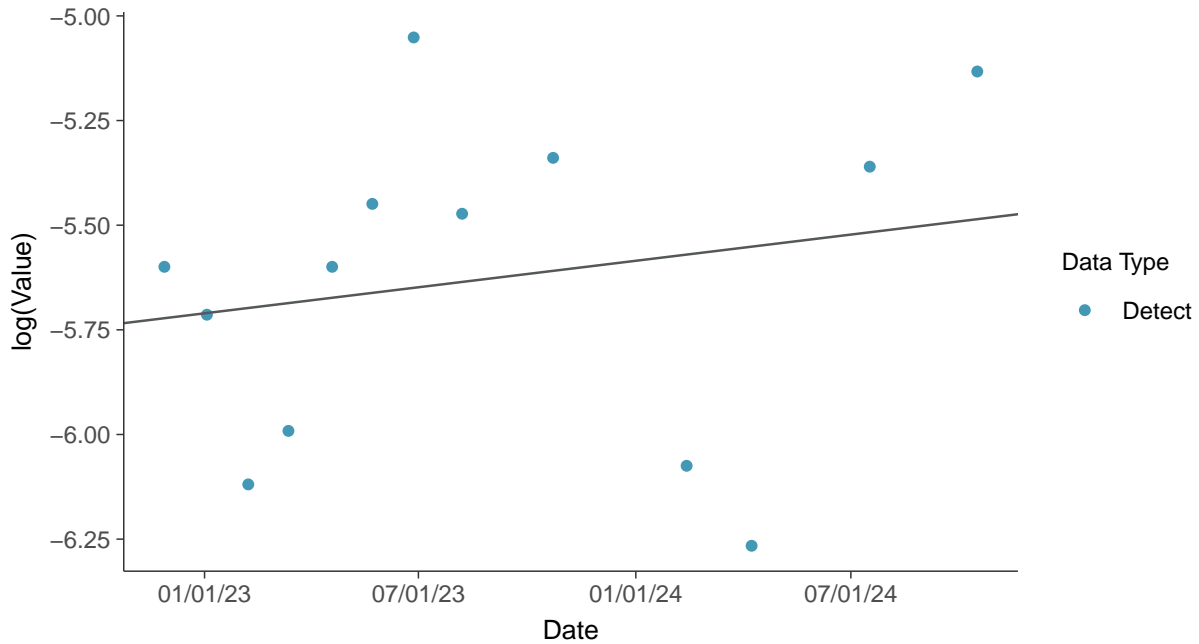
Gamma Q-Q plot

Lithium, MW-12 (mg/L)



Trend Regression: Lognormal MLE

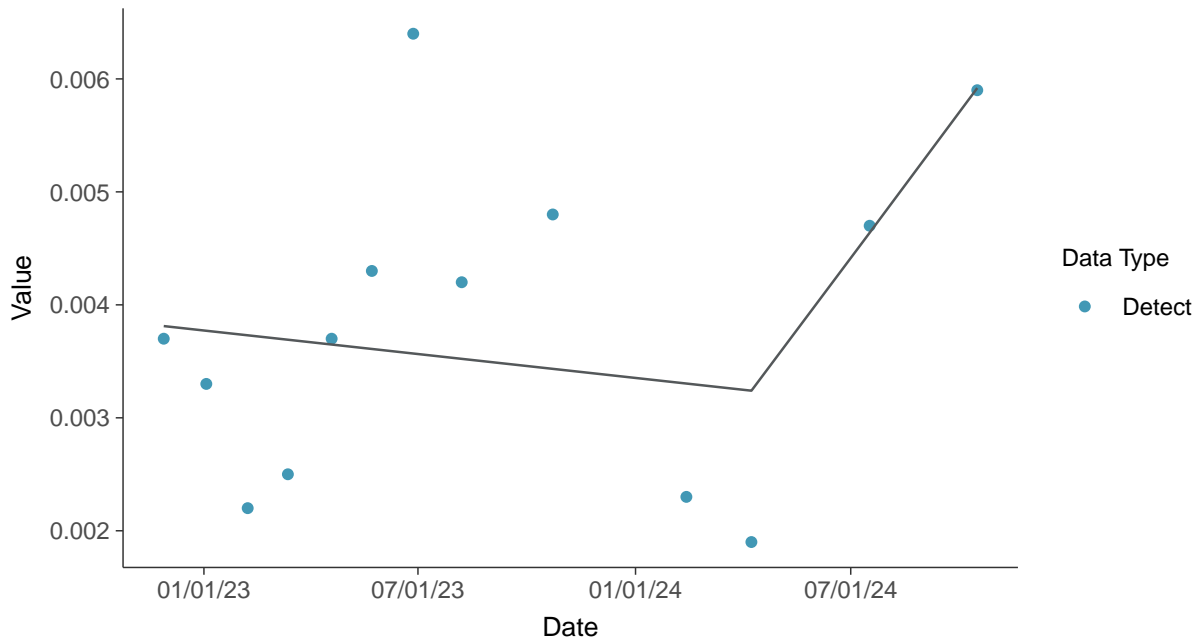
Lithium, MW-12 (mg/L)





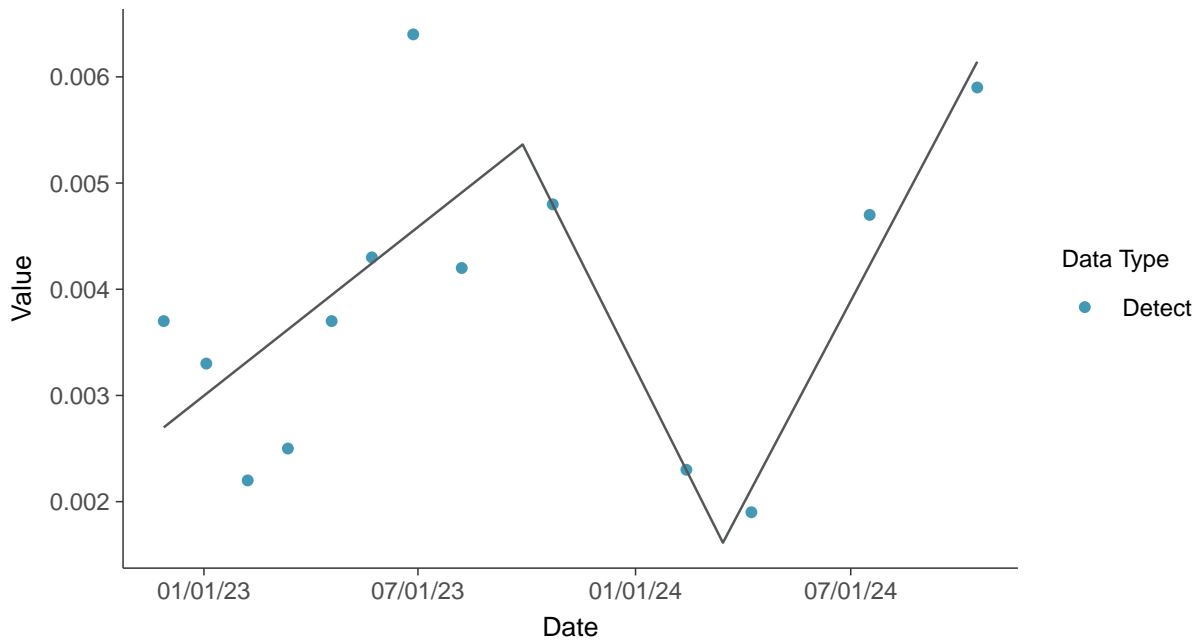
Trend Regression: Piecewise Linear-Linear

Lithium, MW-12 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

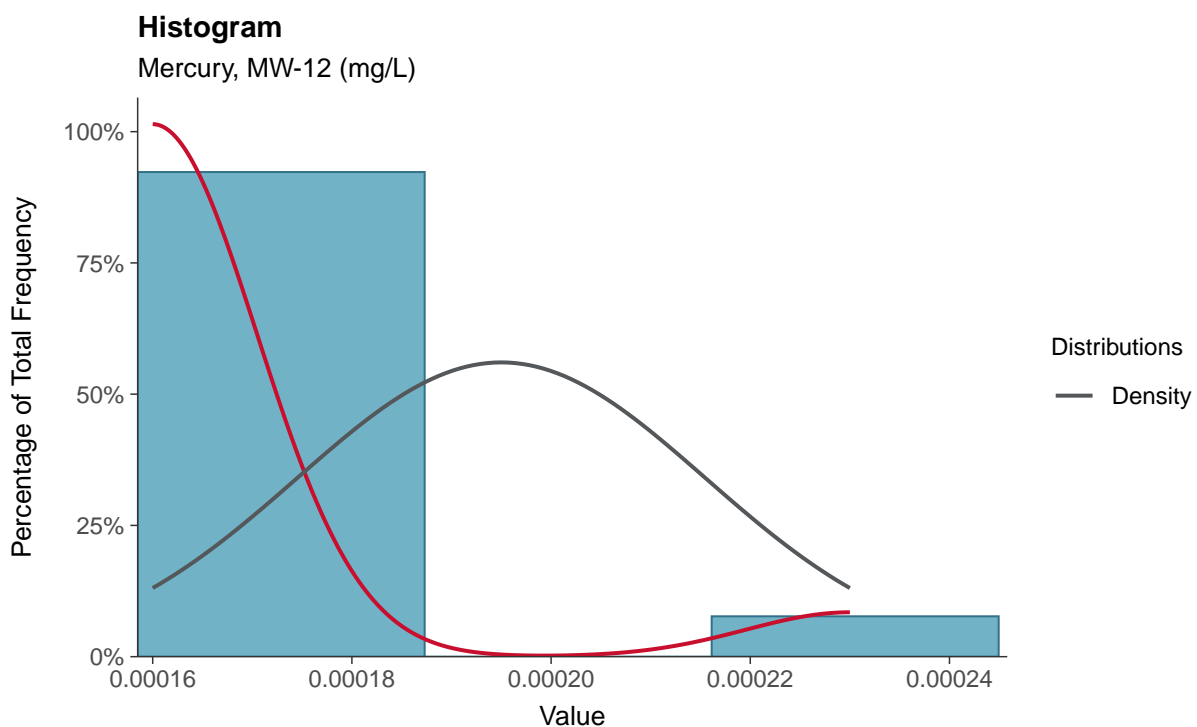
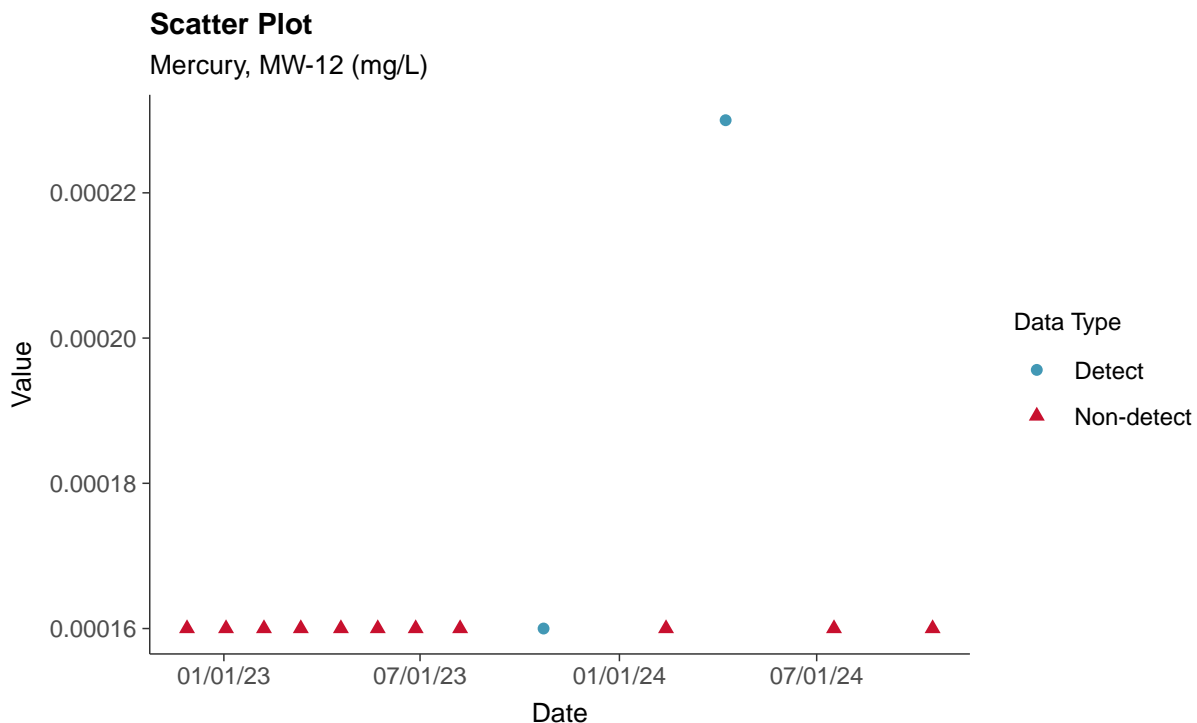
Lithium, MW-12 (mg/L)





Appendix IV: Mercury, MW-12

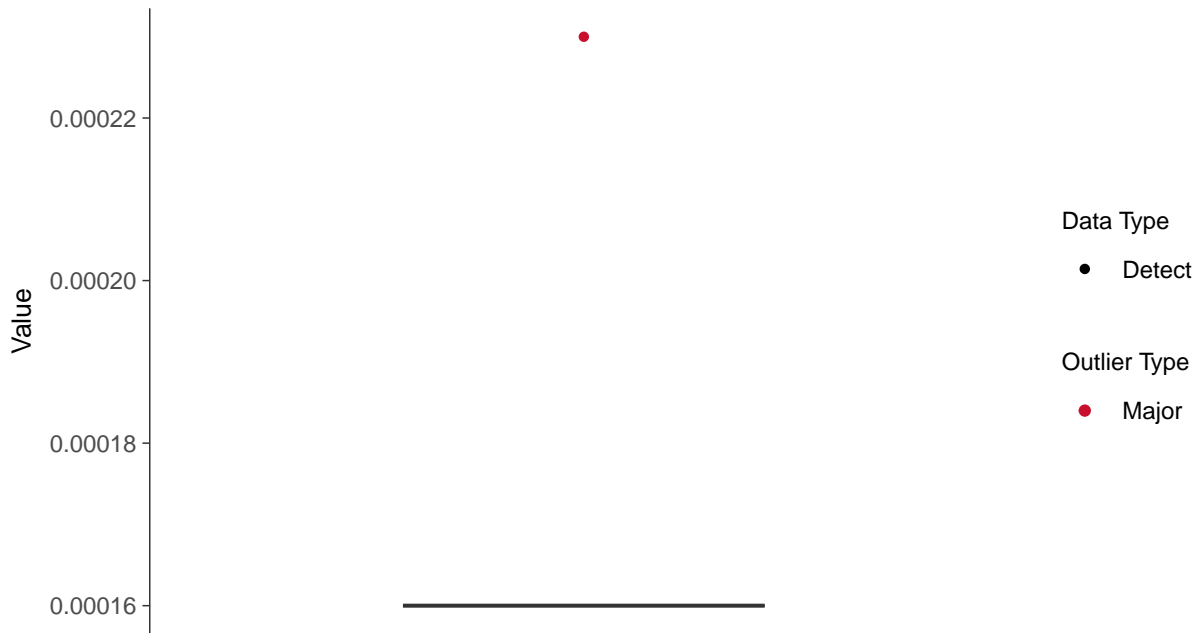
ID: 2_22_2_5_117





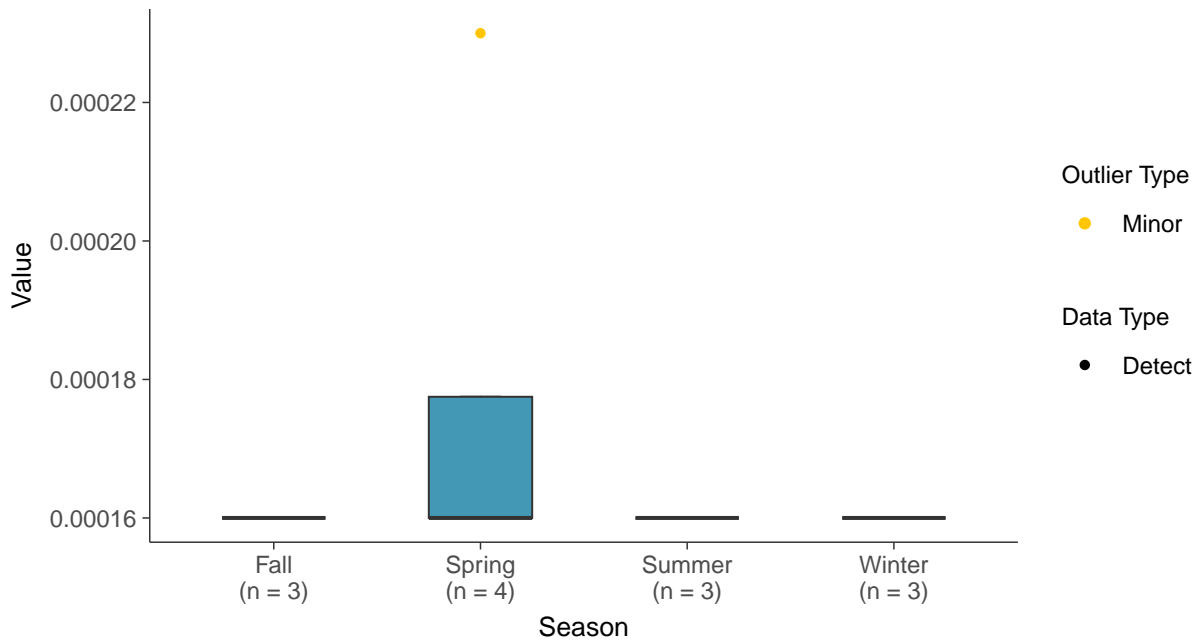
Boxplot

Mercury, MW-12 (mg/L)



Boxplot by Season

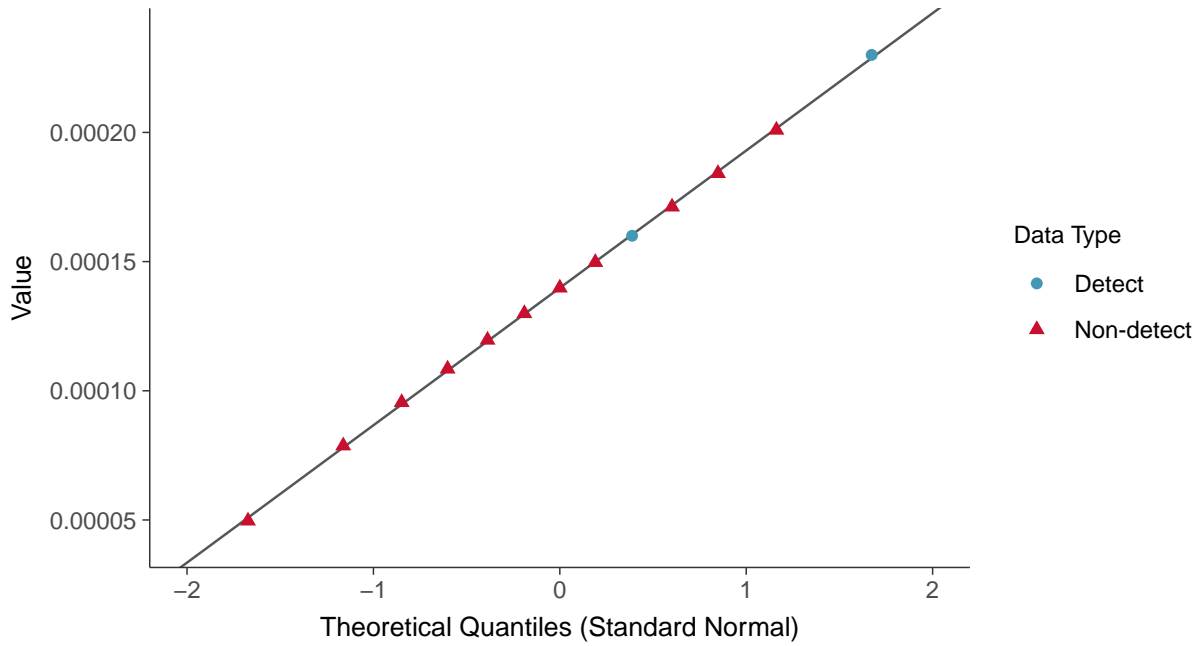
Mercury, MW-12 (mg/L)





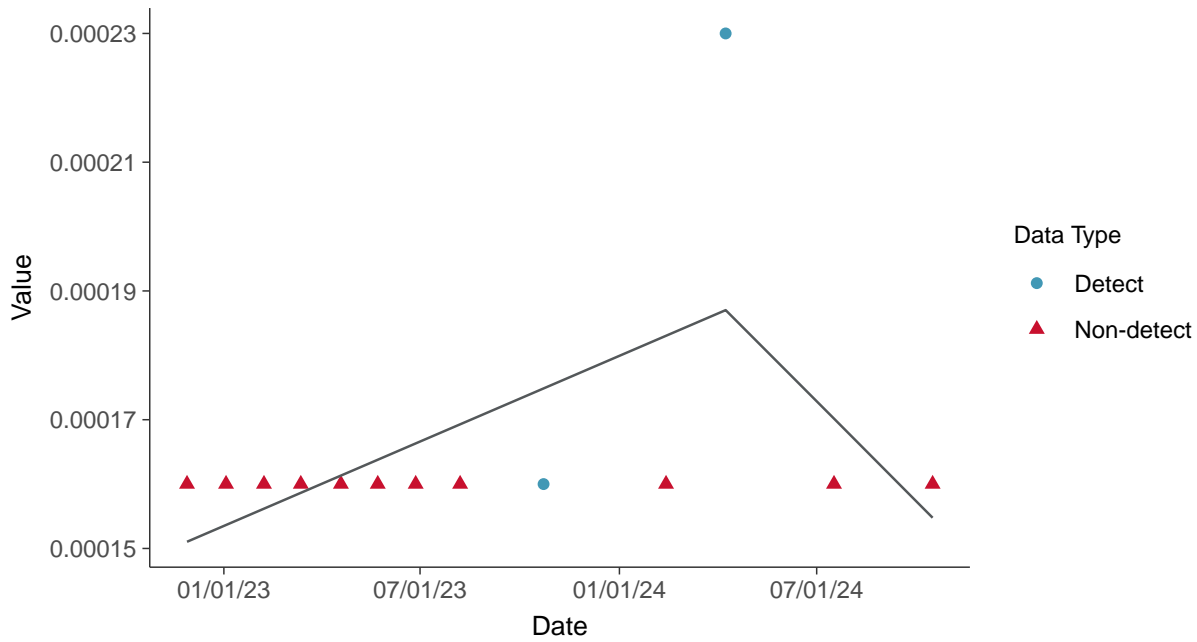
Normal Q-Q plot using ROS Imputed Estimates

Mercury, MW-12 (mg/L)



Trend Regression: Piecewise Linear-Linear

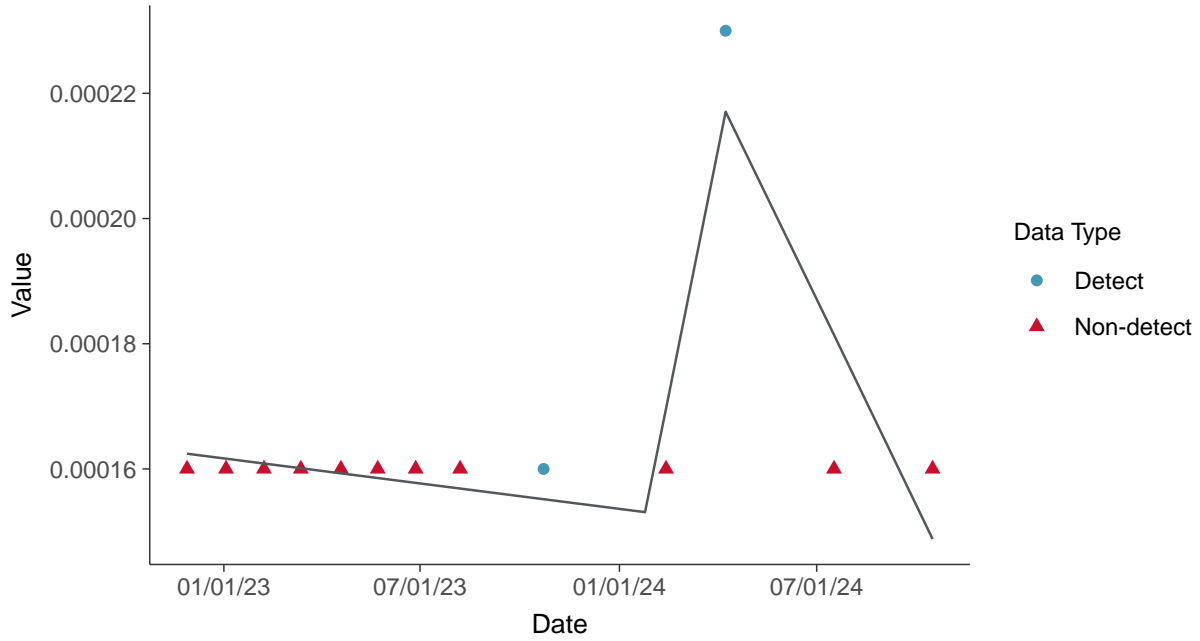
Mercury, MW-12 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

Mercury, MW-12 (mg/L)



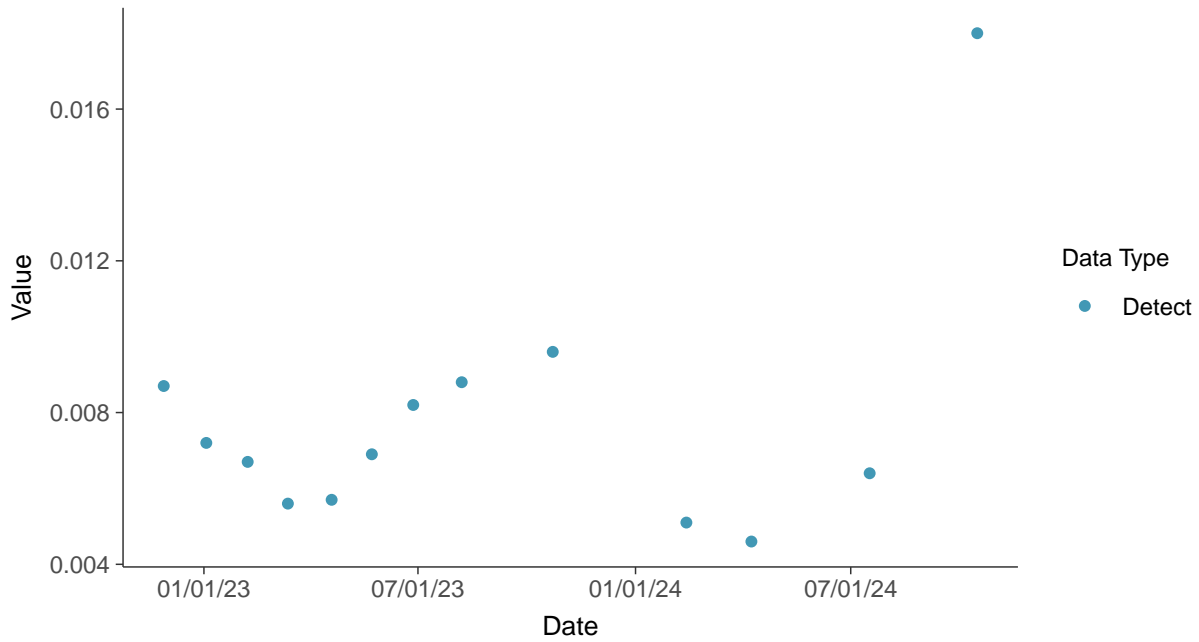


Appendix IV: Molybdenum, MW-12

ID: 2_22_2_5_118

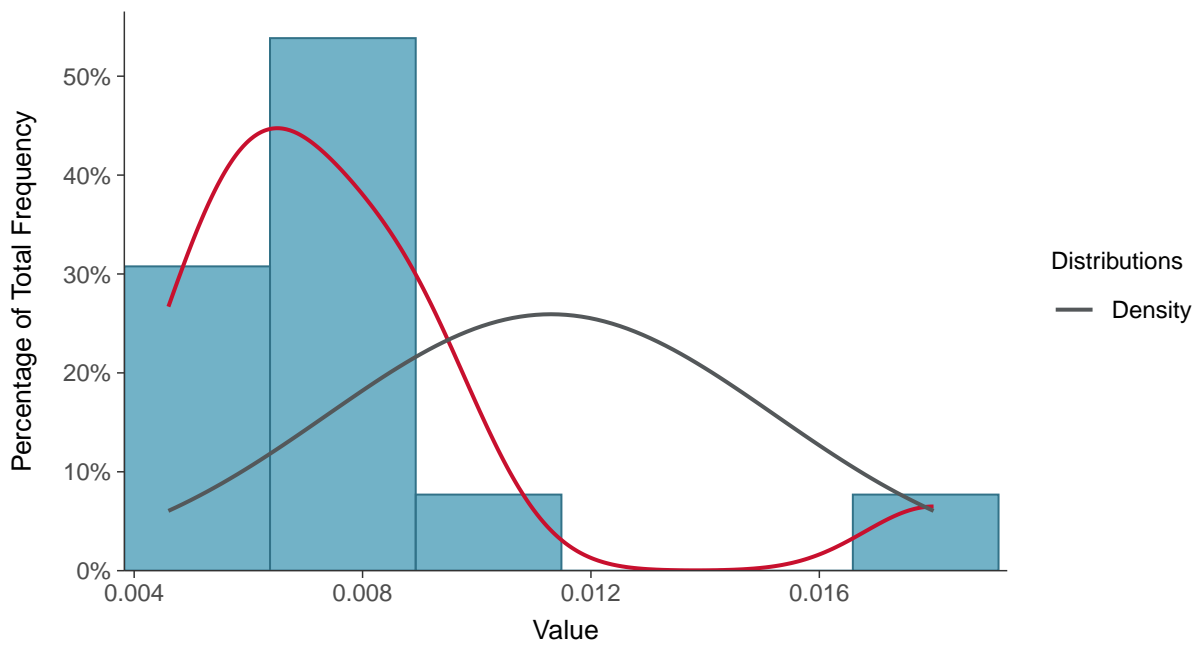
Scatter Plot

Molybdenum, MW-12 (mg/L)



Histogram

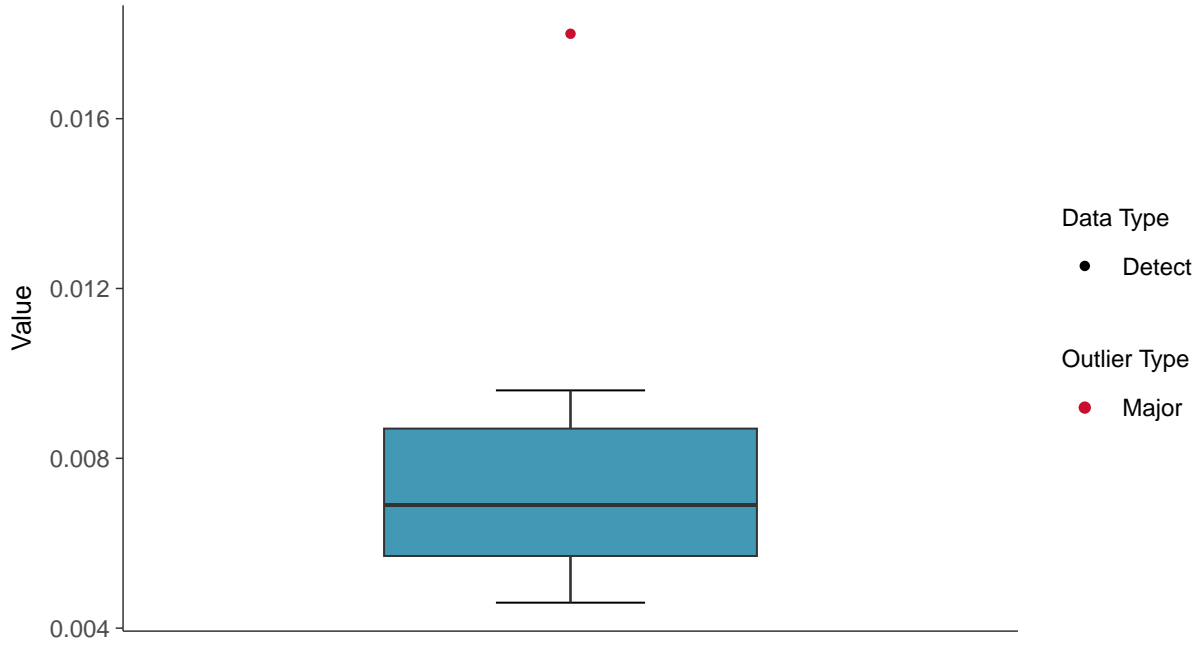
Molybdenum, MW-12 (mg/L)





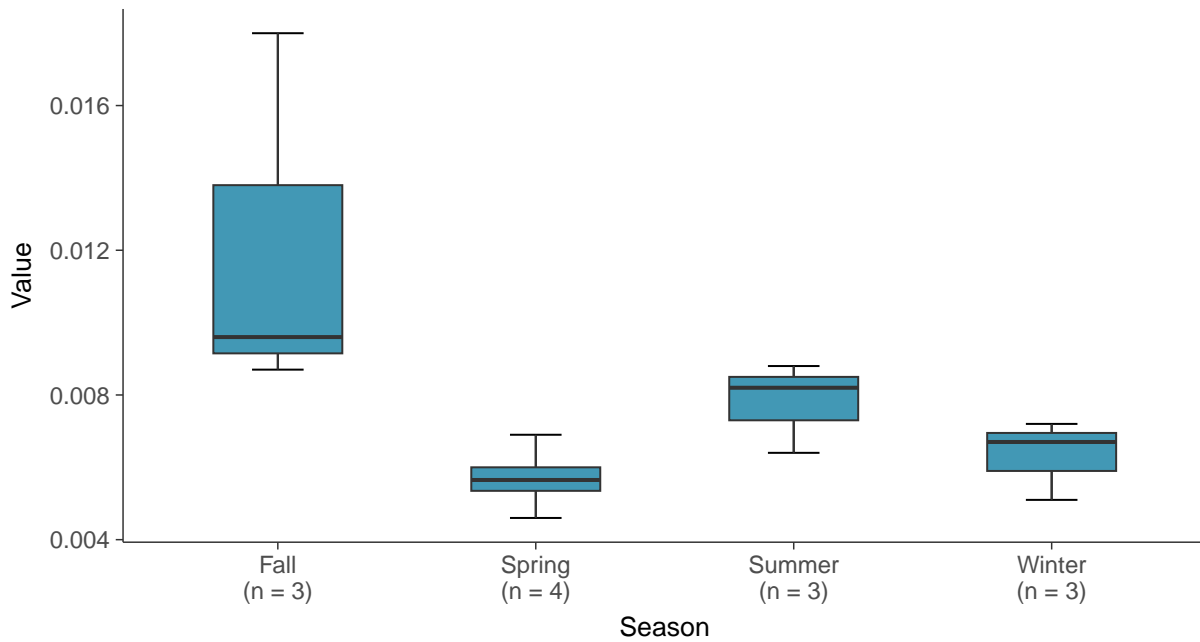
Boxplot

Molybdenum, MW-12 (mg/L)



Boxplot by Season

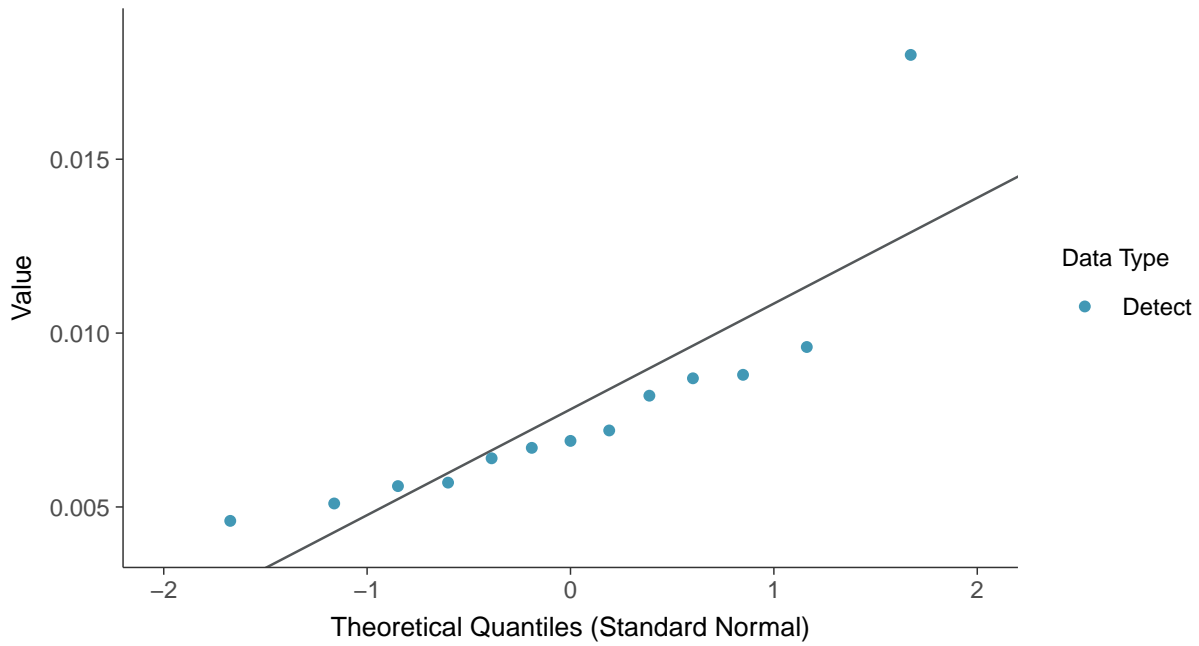
Molybdenum, MW-12 (mg/L)





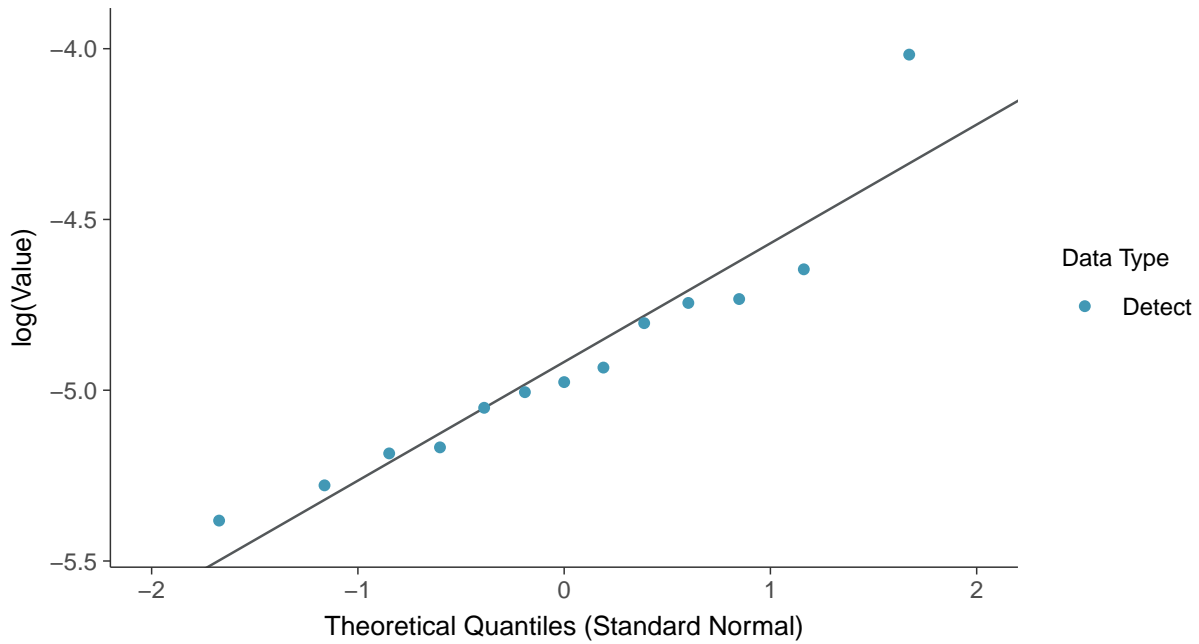
Normal Q-Q plot

Molybdenum, MW-12 (mg/L)



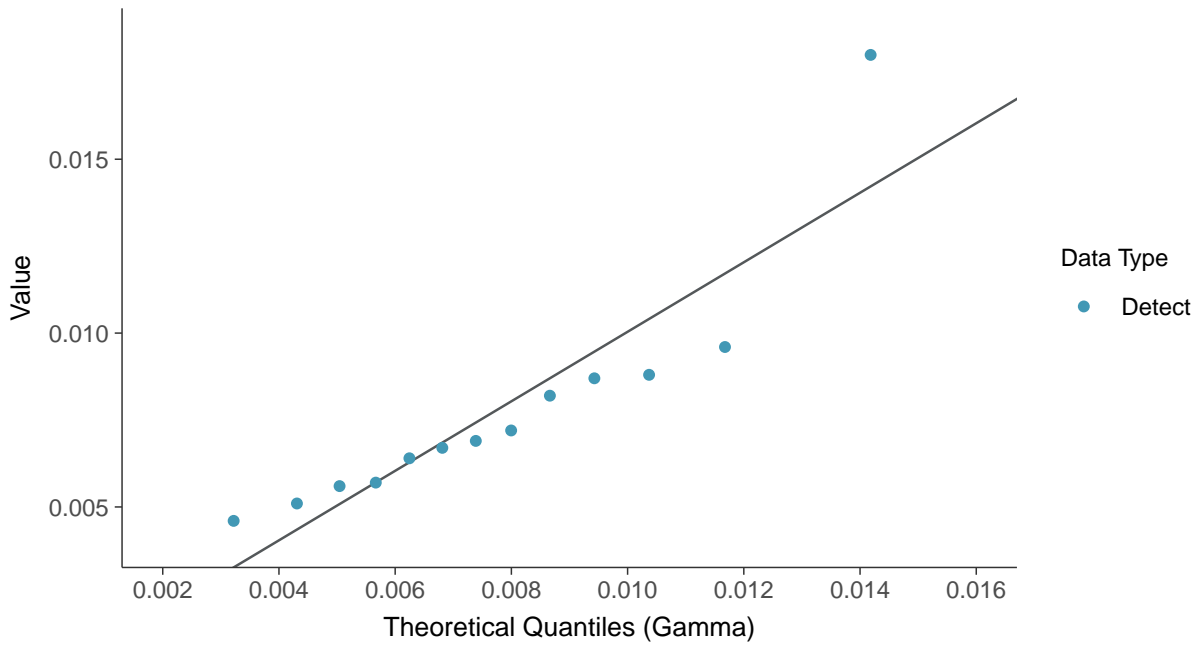
Lognormal Q-Q plot

Molybdenum, MW-12 (mg/L)

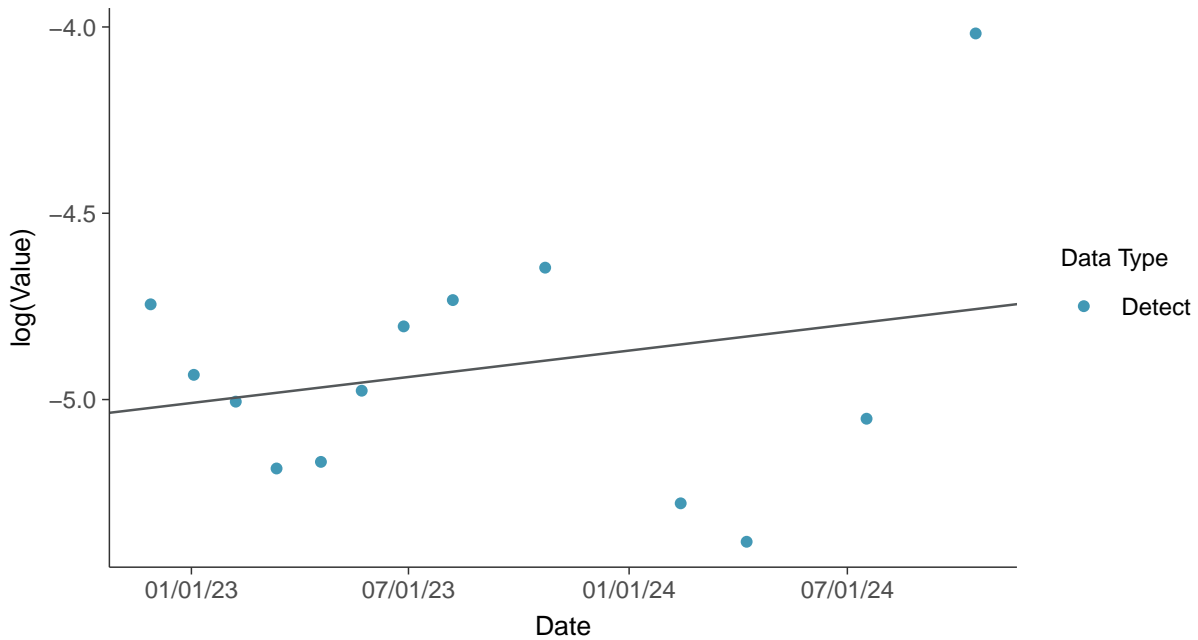




Gamma Q-Q plot
Molybdenum, MW-12 (mg/L)

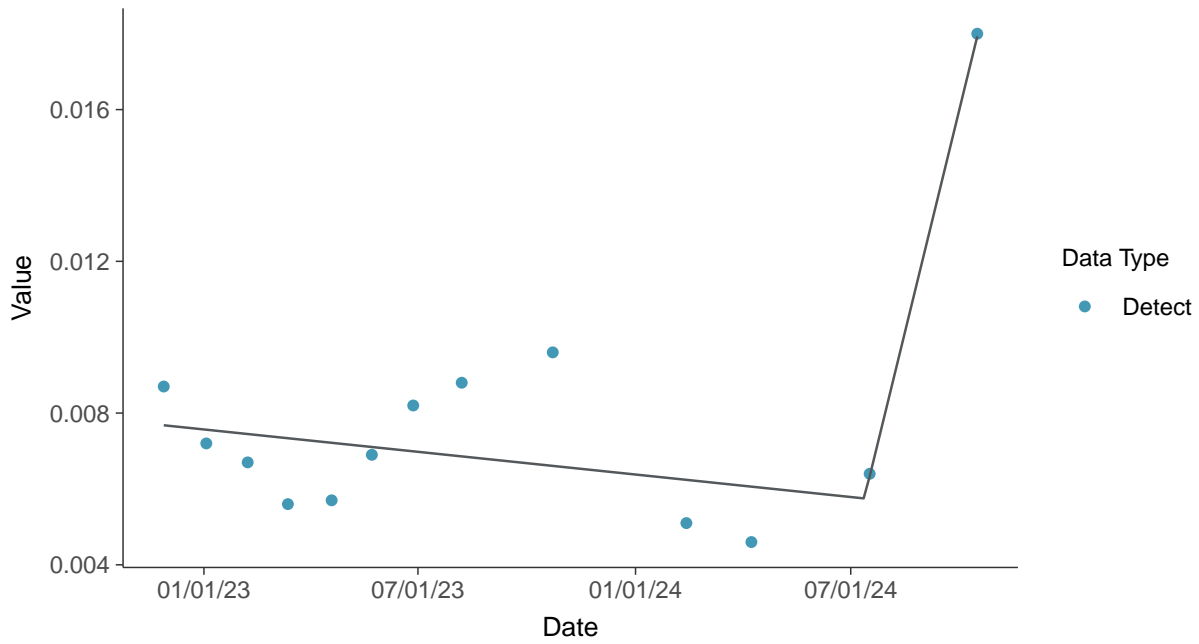


Trend Regression: Lognormal MLE
Molybdenum, MW-12 (mg/L)

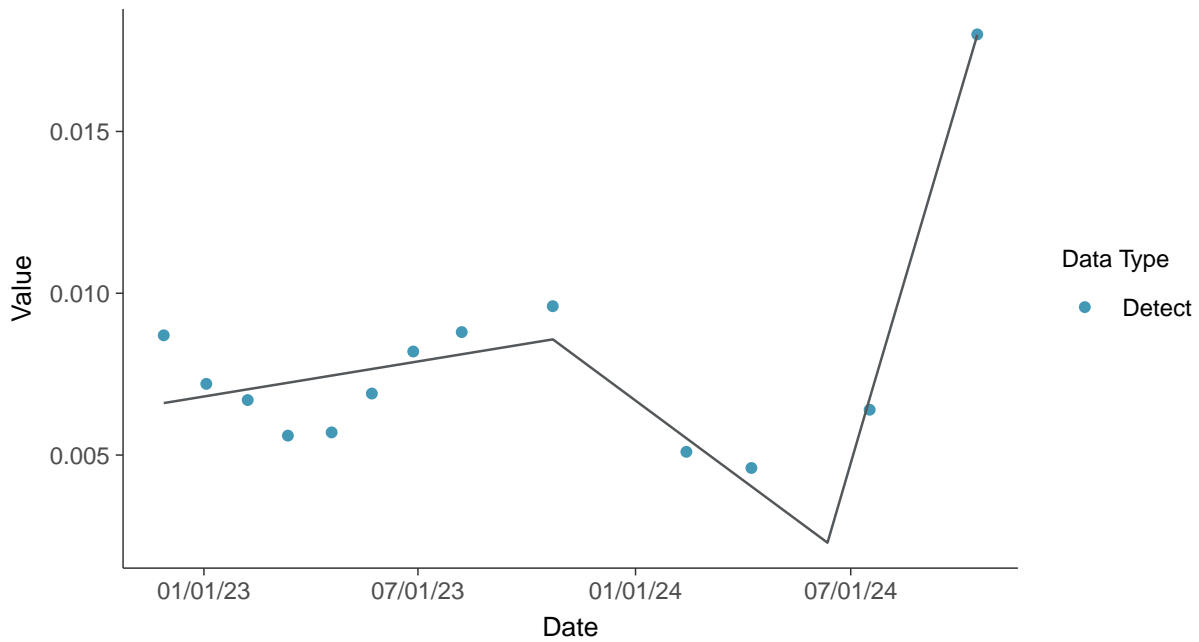




Trend Regression: Piecewise Linear-Linear
Molybdenum, MW-12 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Molybdenum, MW-12 (mg/L)



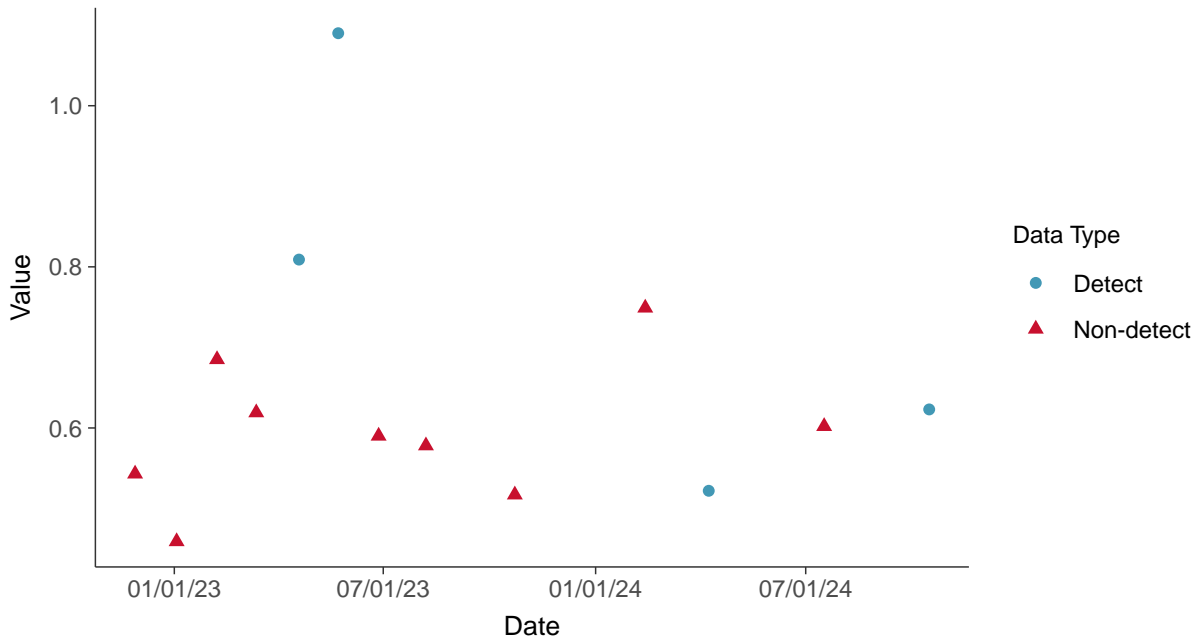


Appendix IV: Radium 226 and 228, MW-12

ID: 2_22_2_5_121

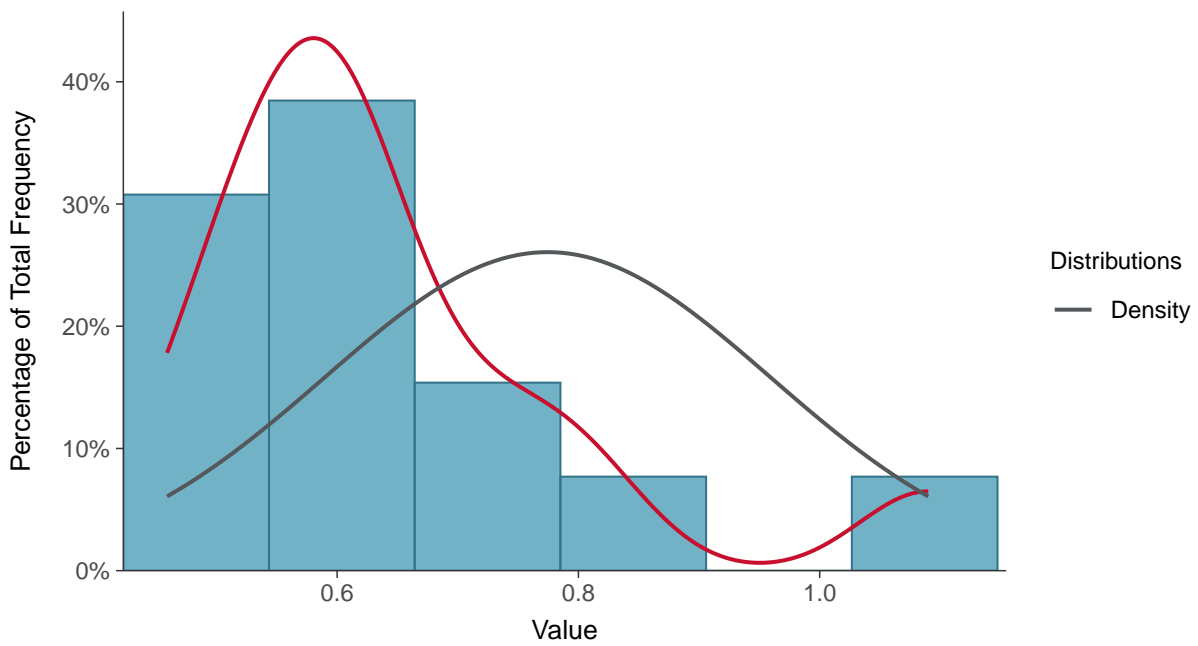
Scatter Plot

Radium 226 and 228, MW-12 (pCi/L)



Histogram

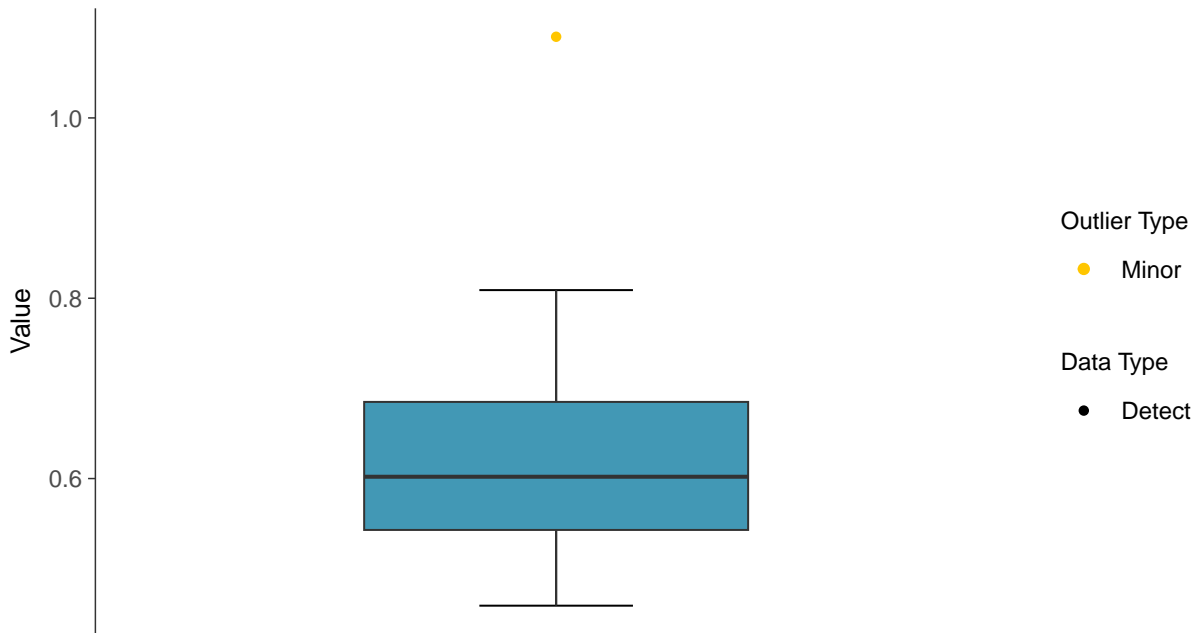
Radium 226 and 228, MW-12 (pCi/L)





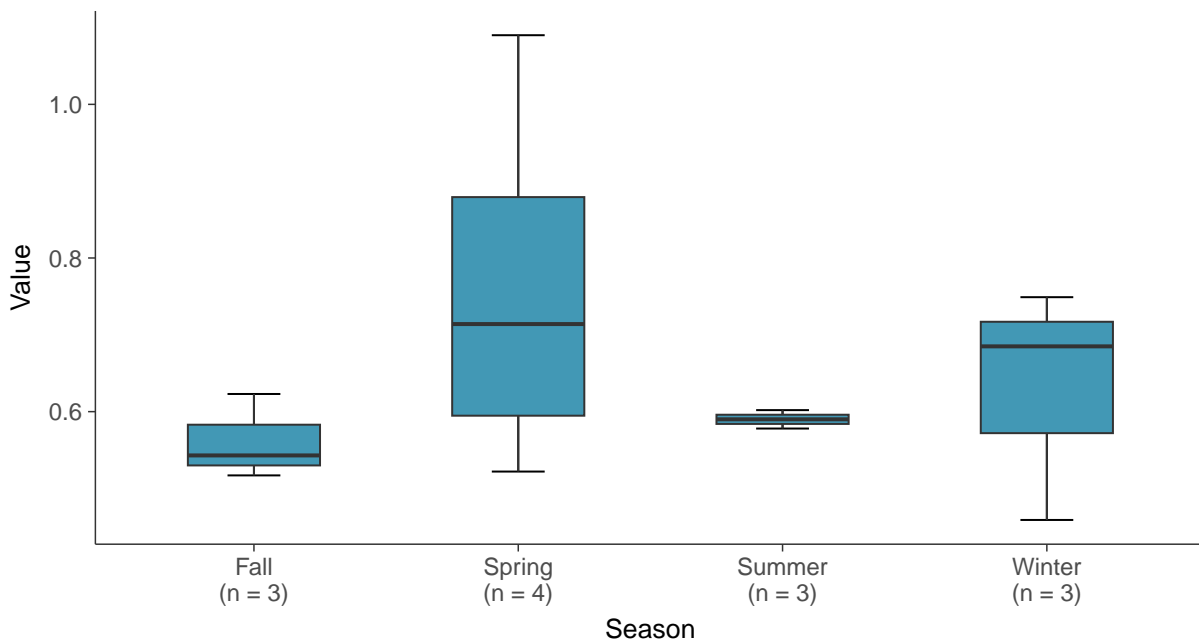
Boxplot

Radium 226 and 228, MW-12 (pCi/L)



Boxplot by Season

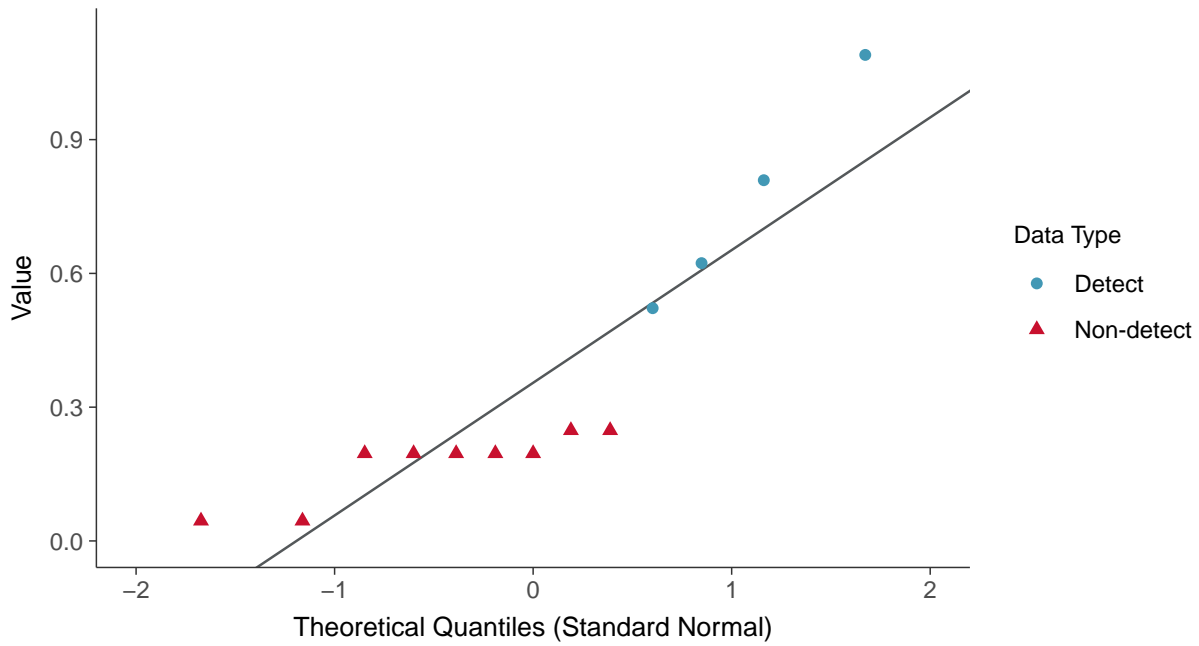
Radium 226 and 228, MW-12 (pCi/L)





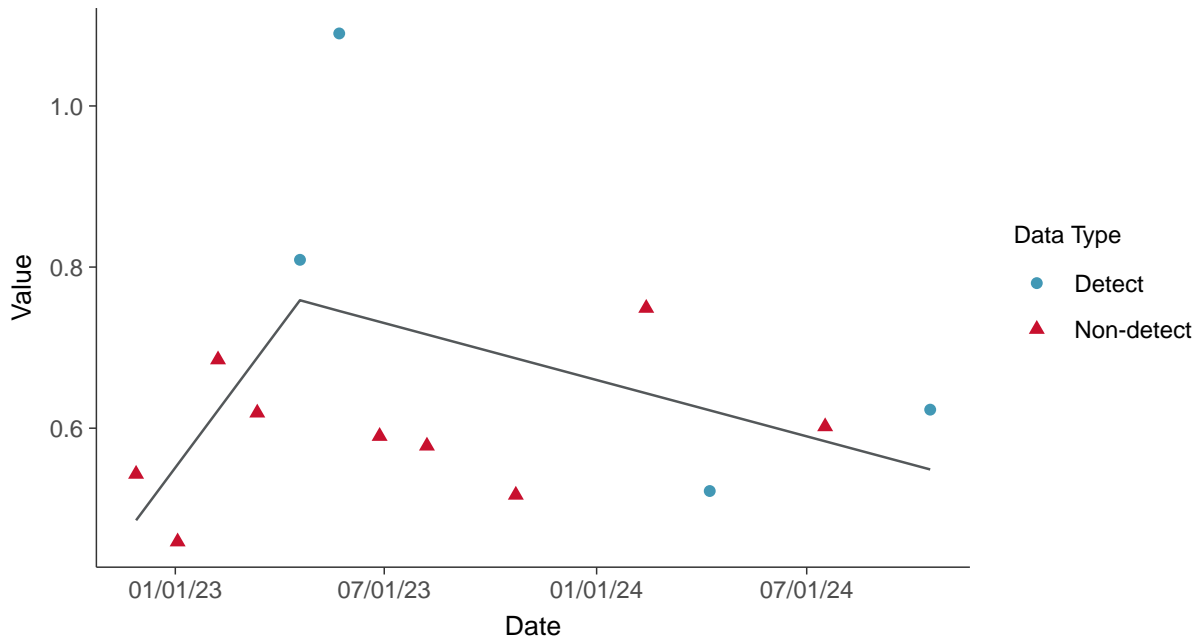
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-12 (pCi/L)



Trend Regression: Piecewise Linear-Linear

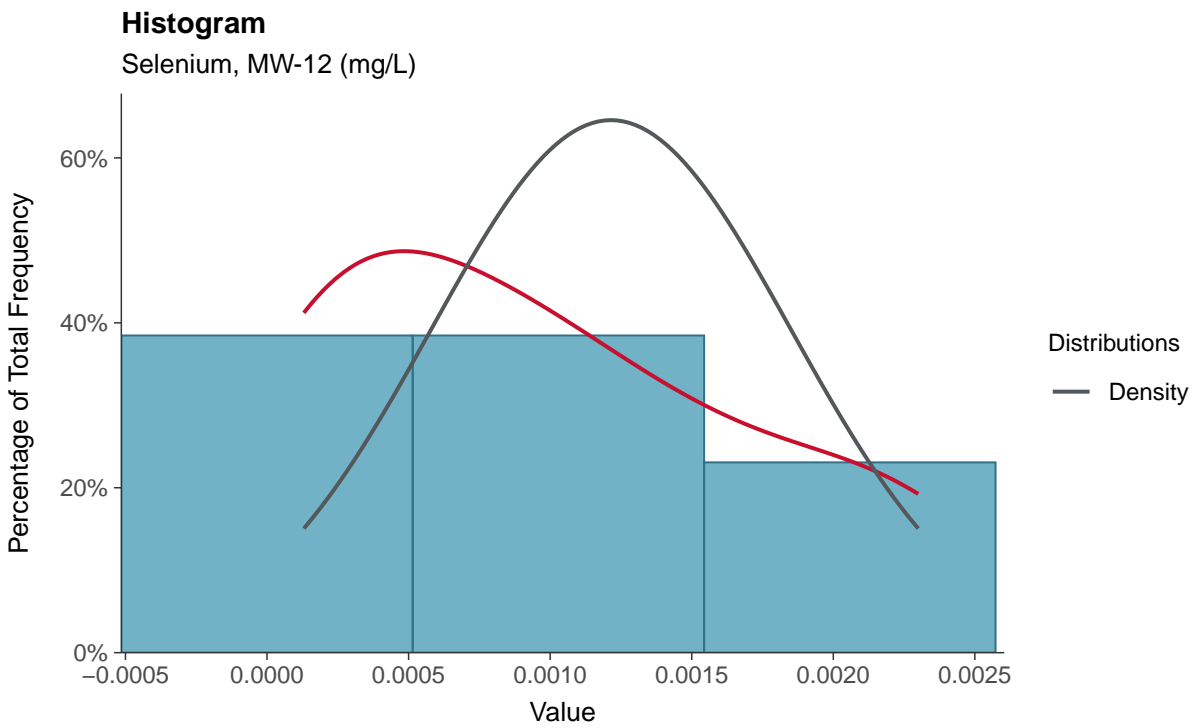
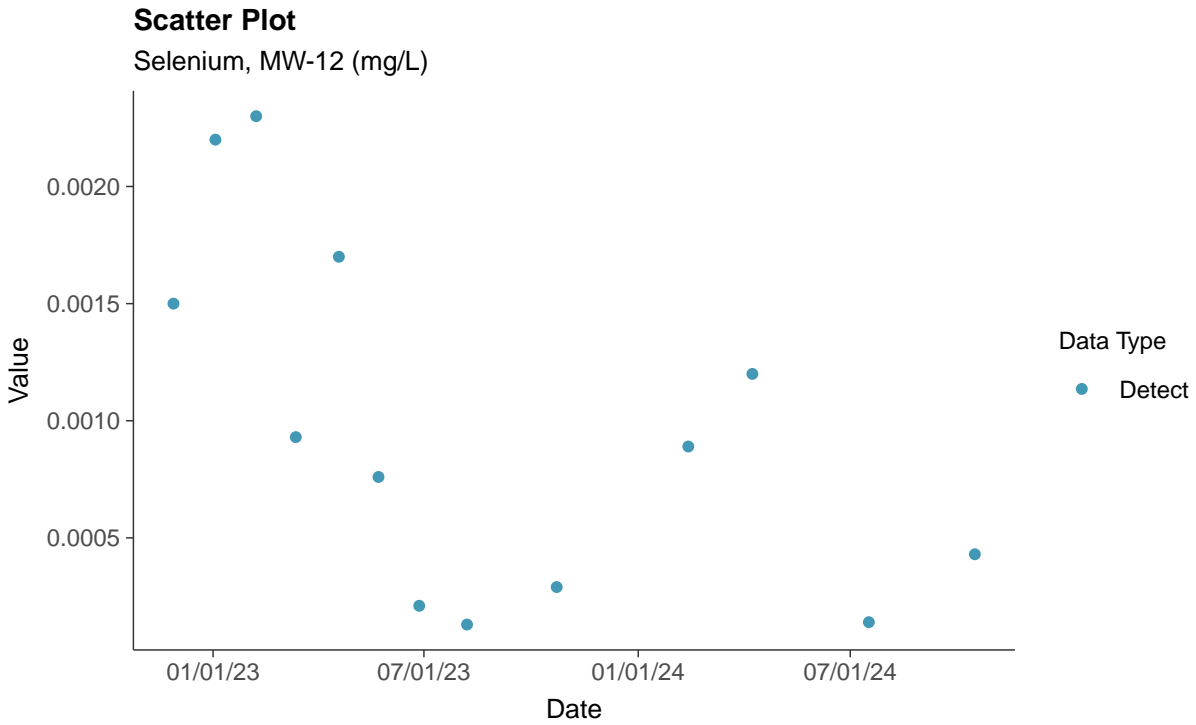
Radium 226 and 228, MW-12 (pCi/L)





Appendix IV: Selenium, MW-12

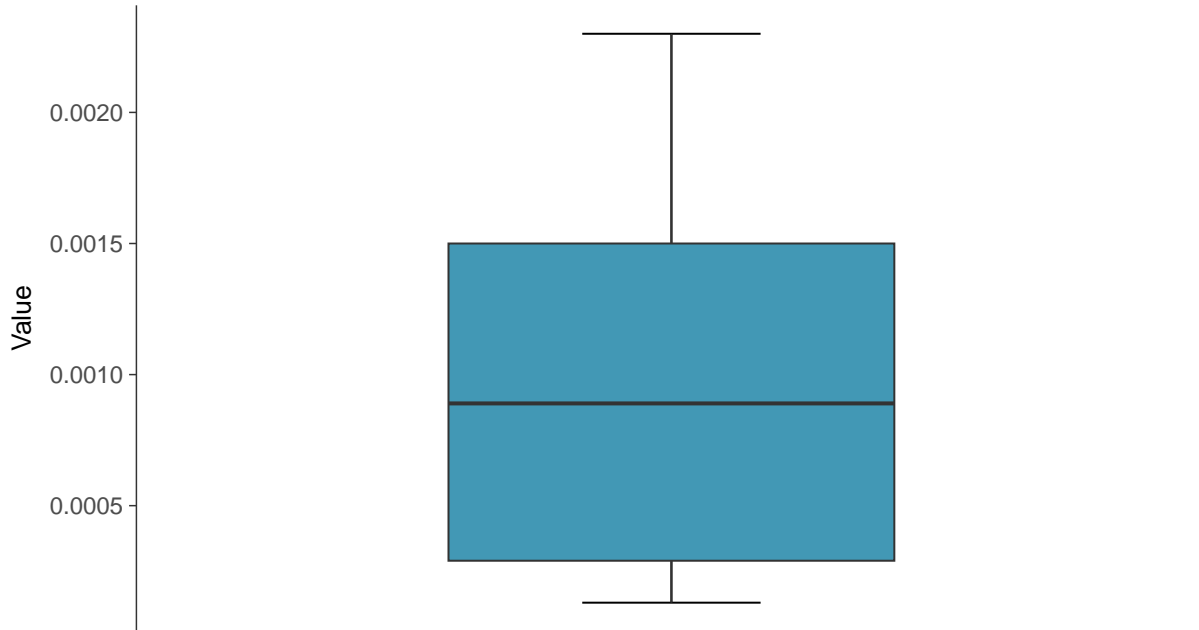
ID: 2_22_2_5_122





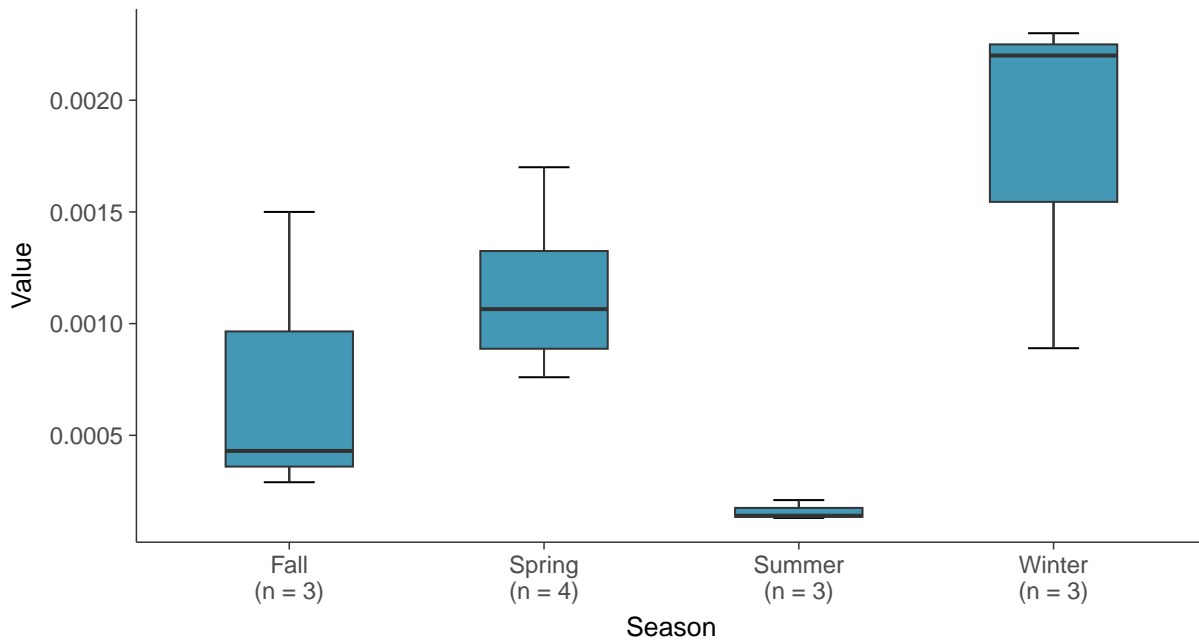
Boxplot

Selenium, MW-12 (mg/L)



Boxplot by Season

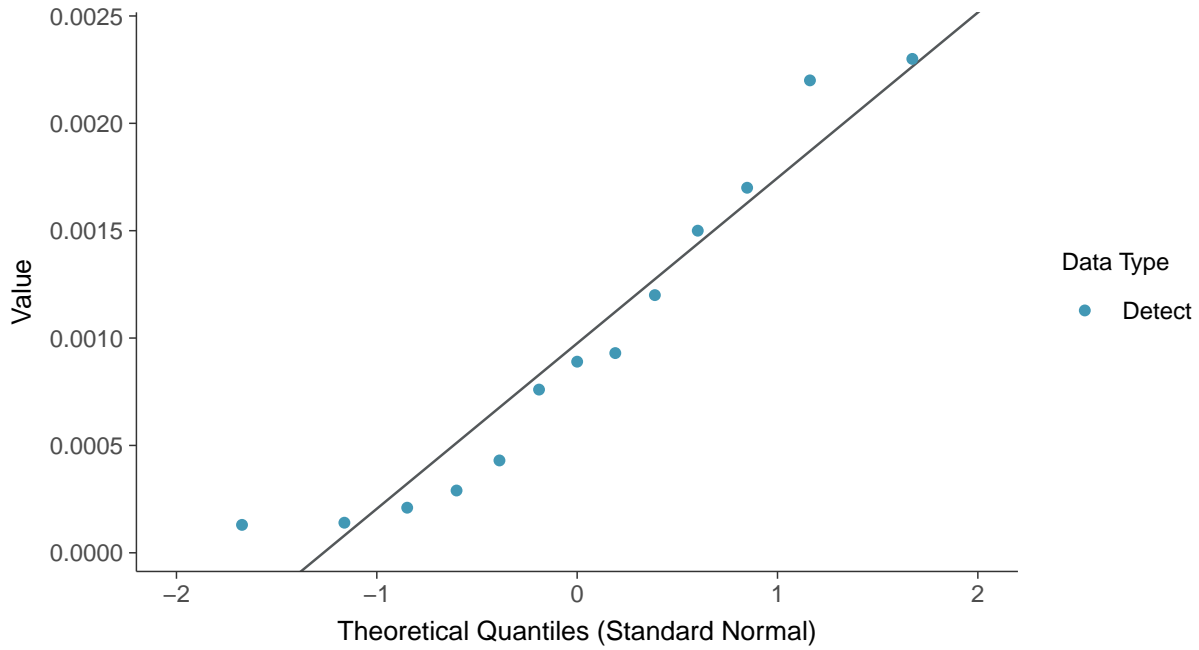
Selenium, MW-12 (mg/L)





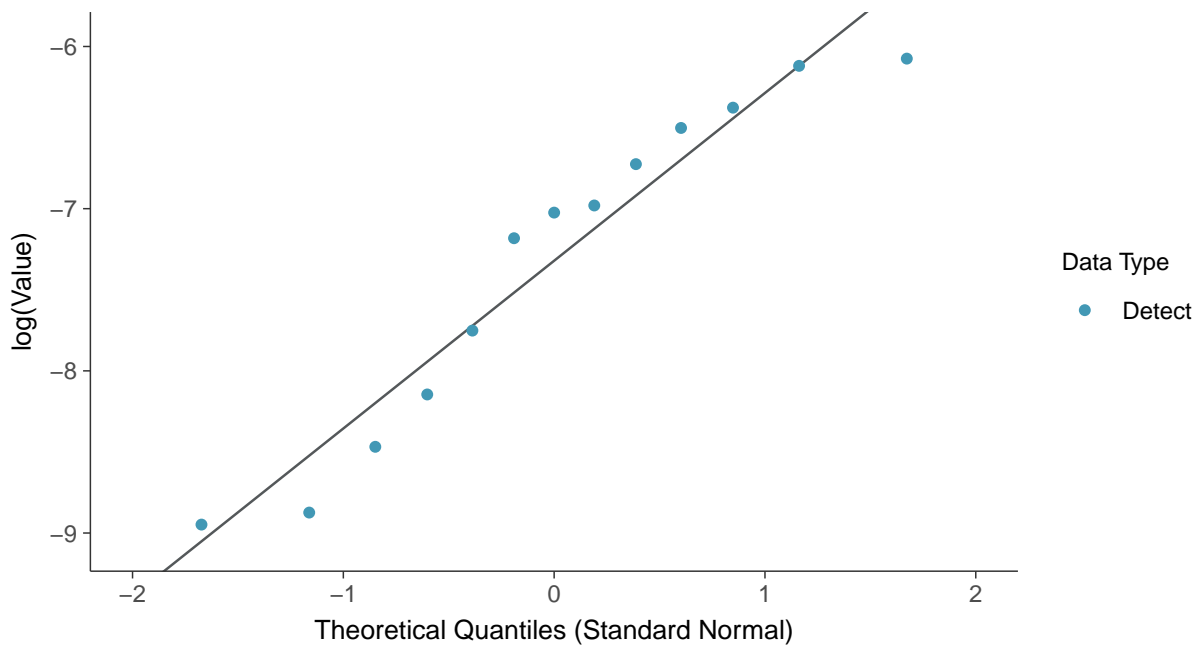
Normal Q-Q plot

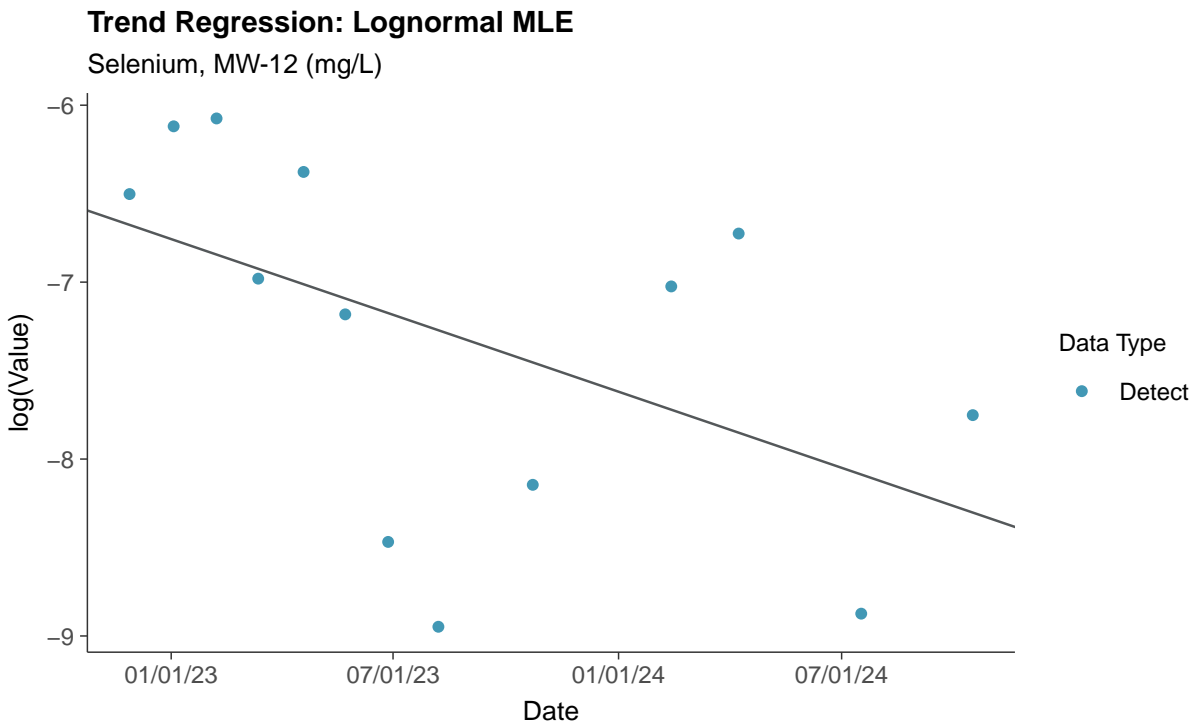
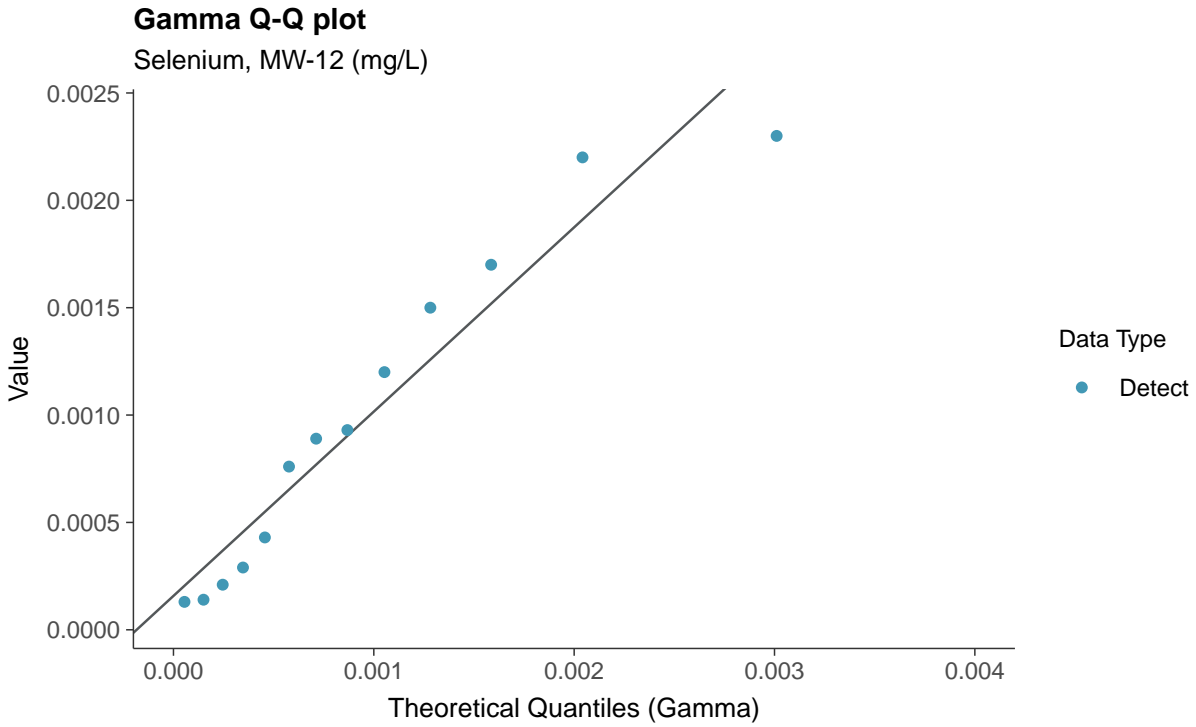
Selenium, MW-12 (mg/L)



Lognormal Q-Q plot

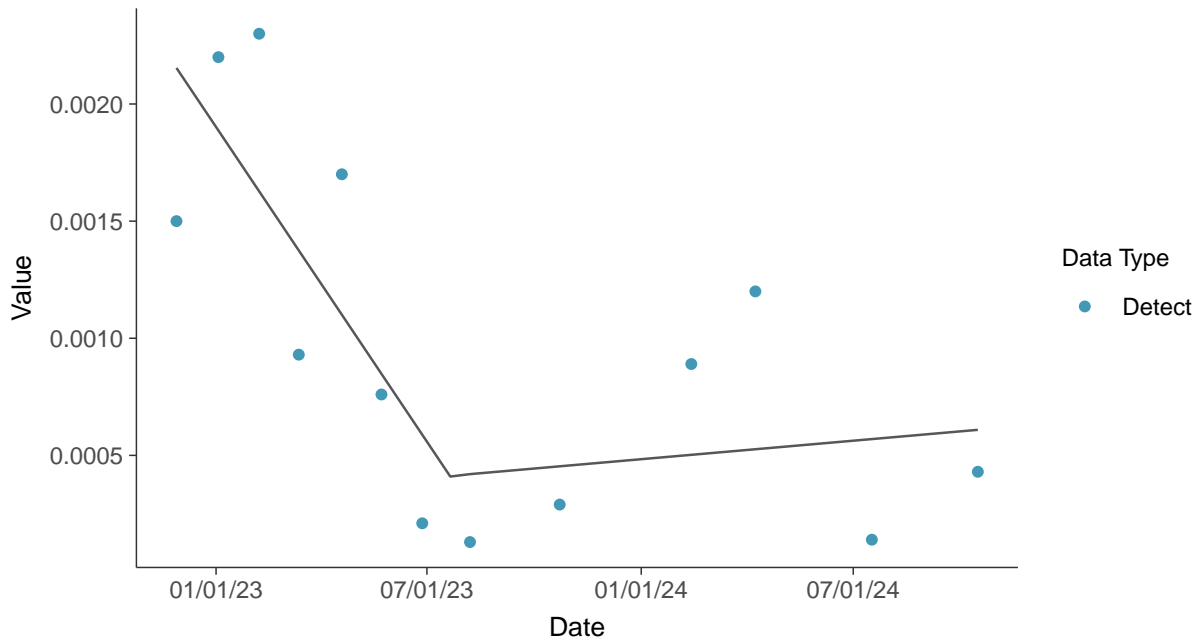
Selenium, MW-12 (mg/L)



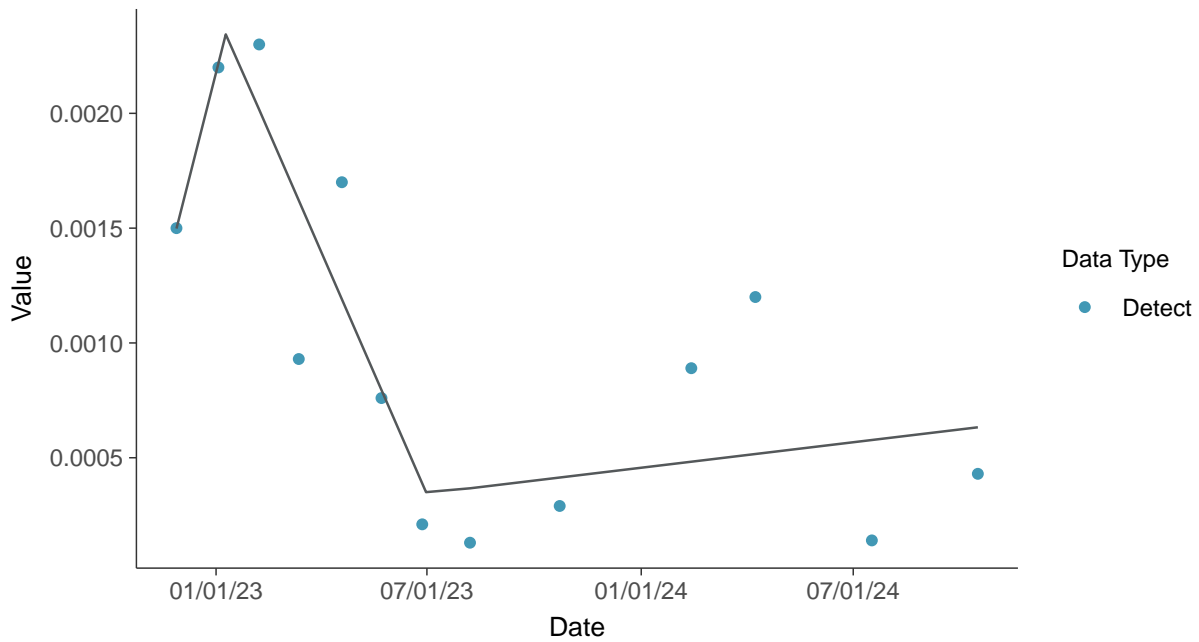




Trend Regression: Piecewise Linear-Linear
Selenium, MW-12 (mg/L)



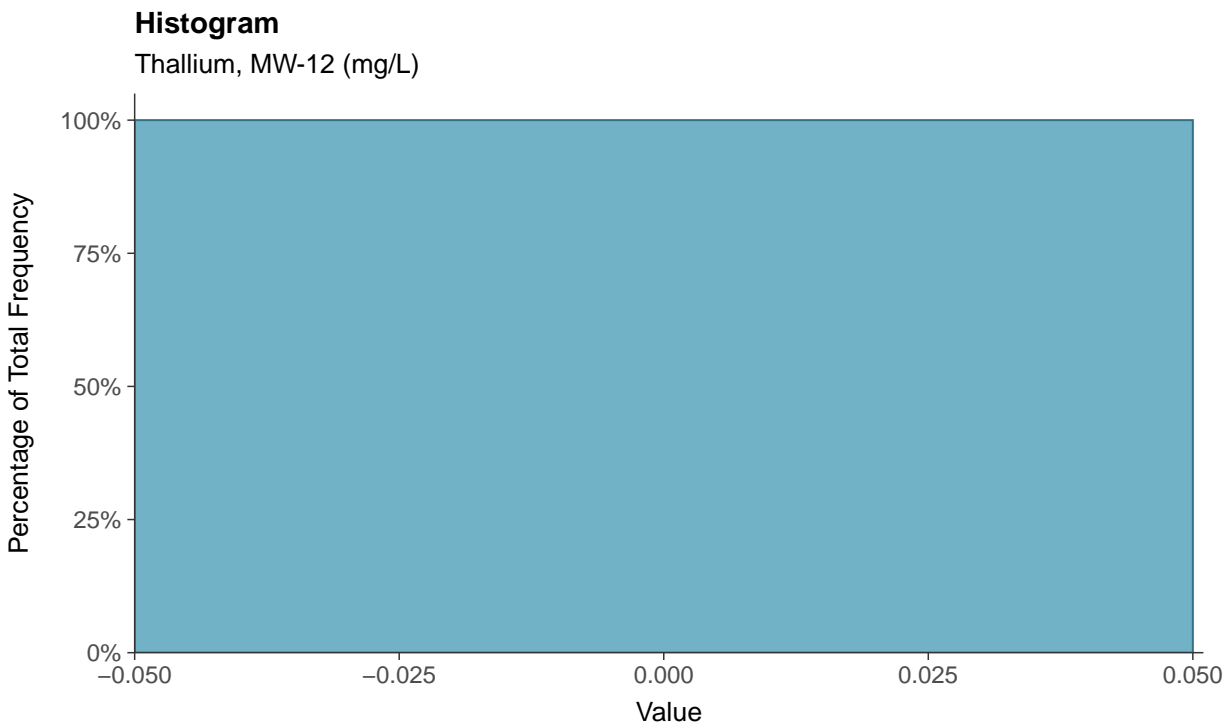
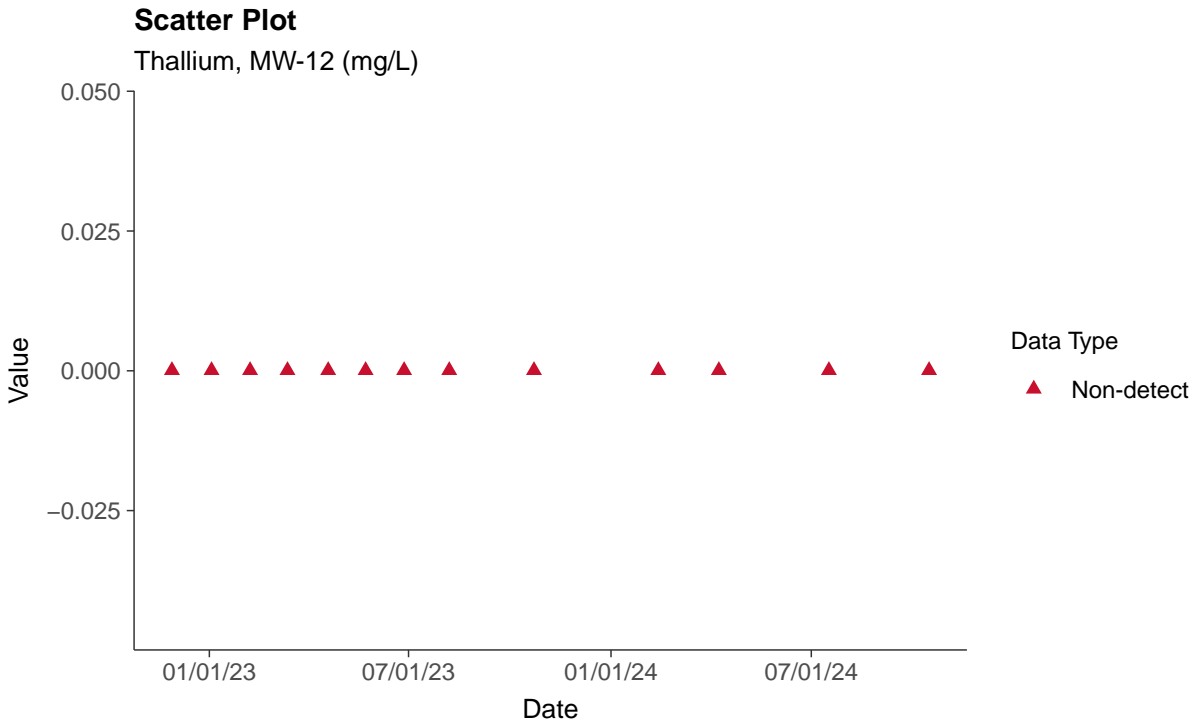
Trend Regression: Piecewise Linear-Linear-Linear
Selenium, MW-12 (mg/L)





Appendix IV: Thallium, MW-12

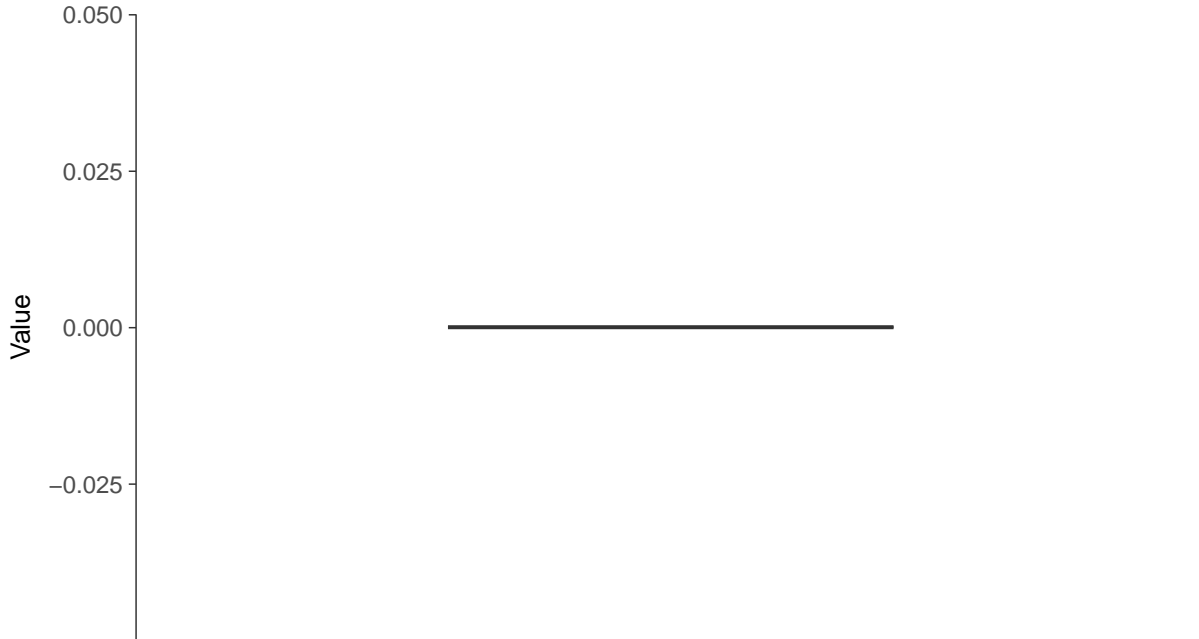
ID: 2_22_2_5_125





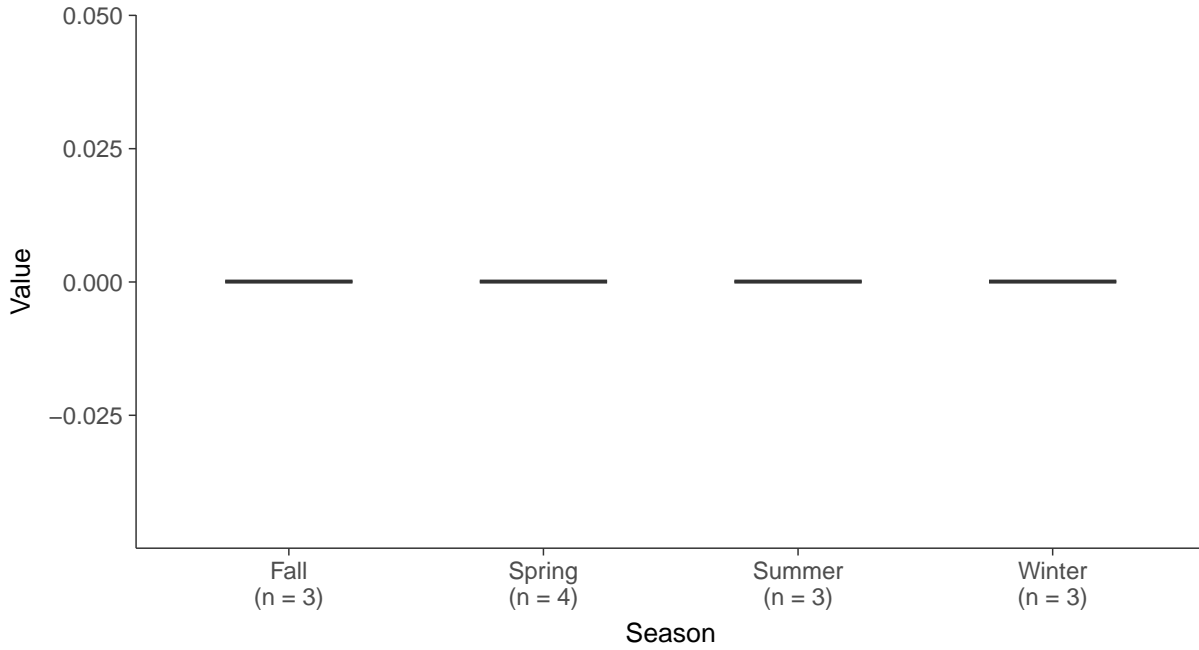
Boxplot

Thallium, MW-12 (mg/L)



Boxplot by Season

Thallium, MW-12 (mg/L)



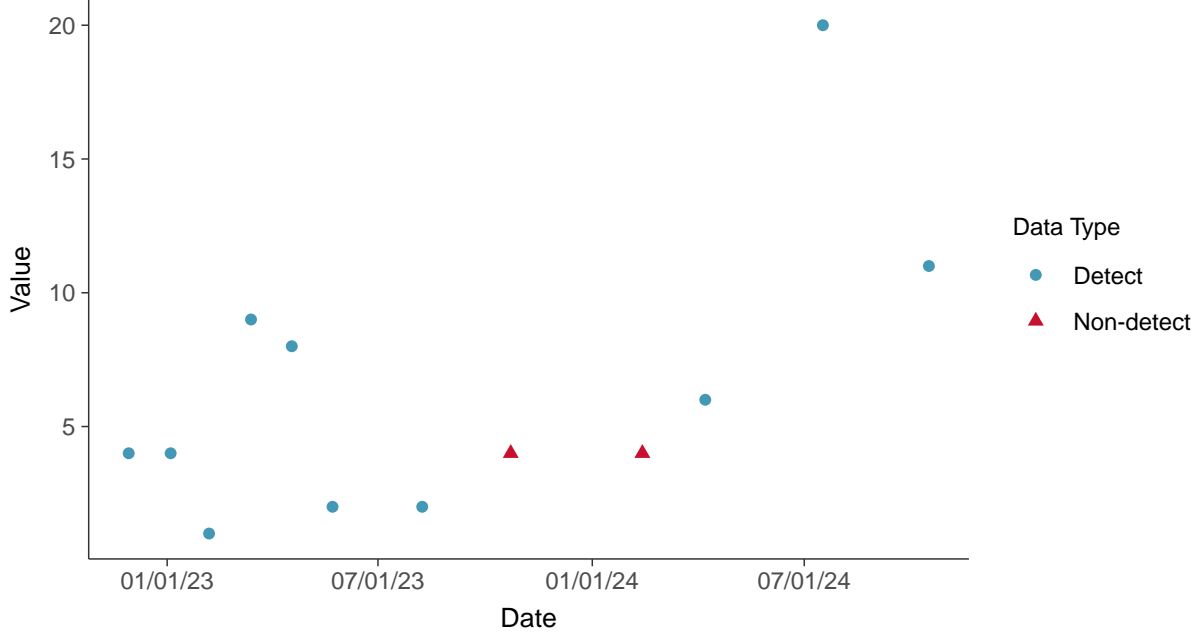


Additional Parameters: Total Suspended Solids, MW-10

ID: 3_20_3_3_127

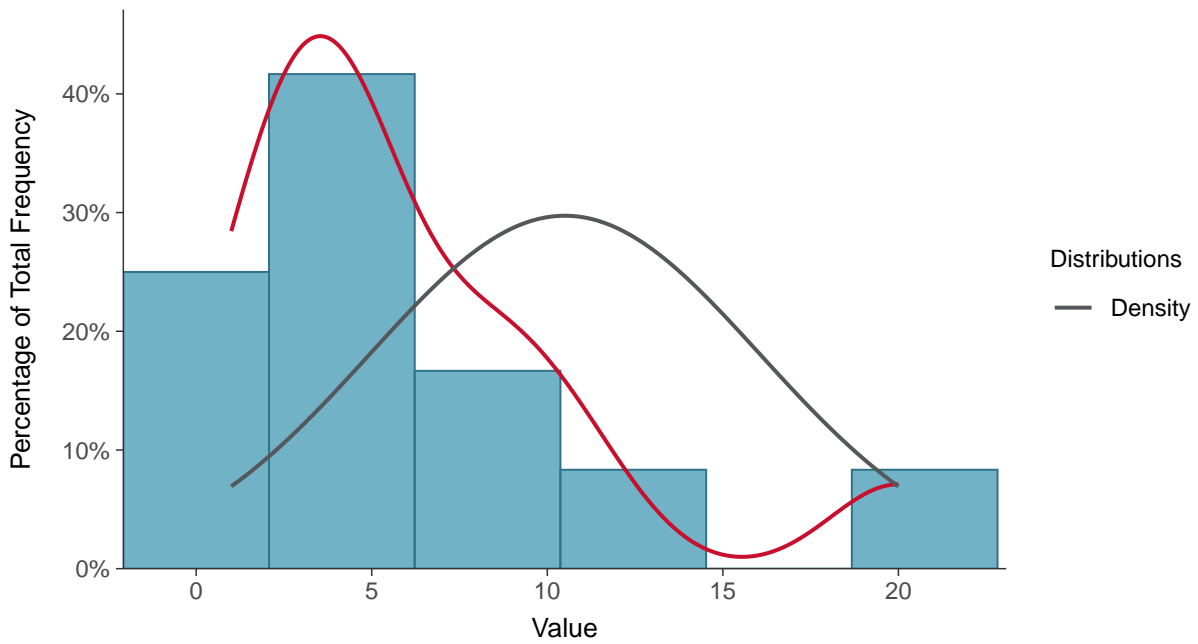
Scatter Plot

Total Suspended Solids, MW-10 (mg/L)



Histogram

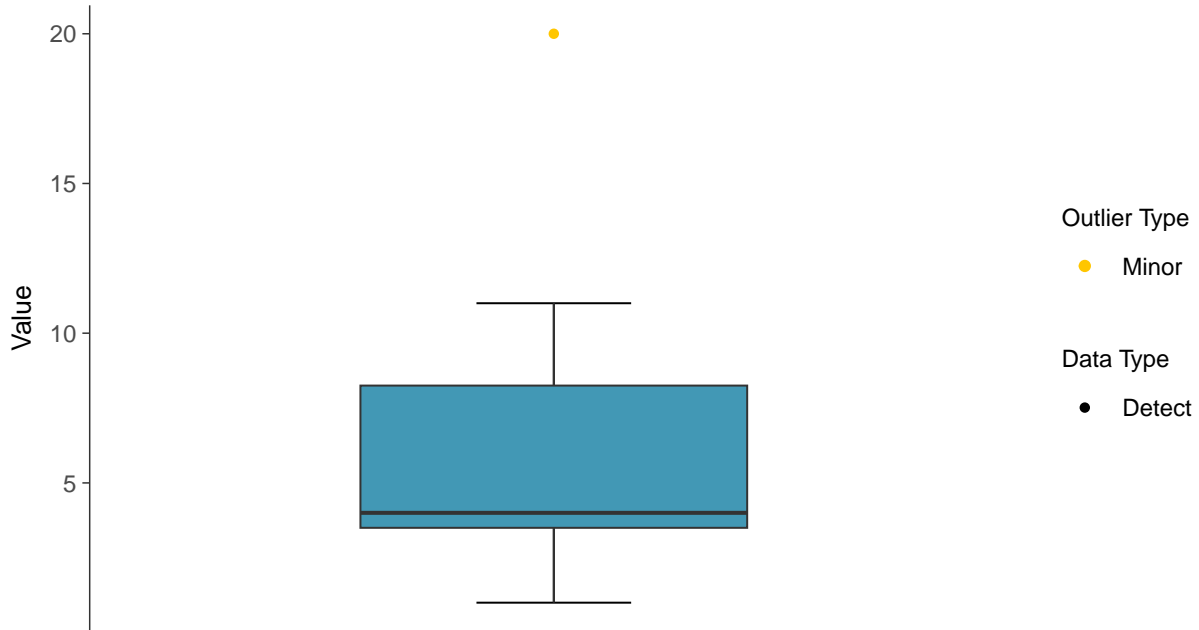
Total Suspended Solids, MW-10 (mg/L)





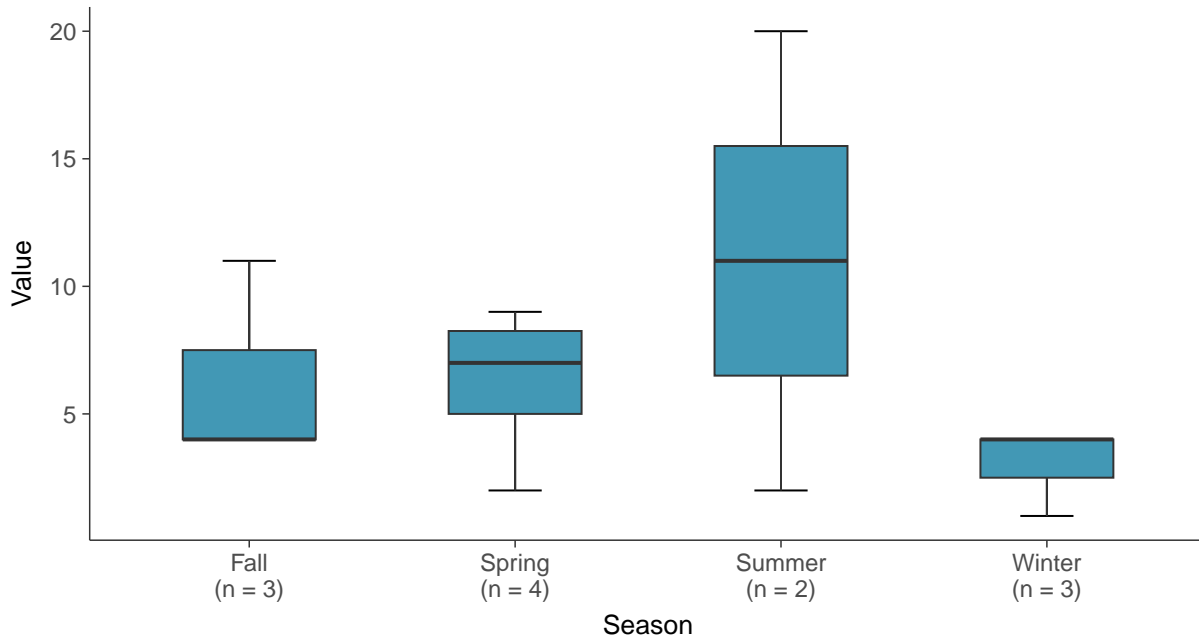
Boxplot

Total Suspended Solids, MW-10 (mg/L)



Boxplot by Season

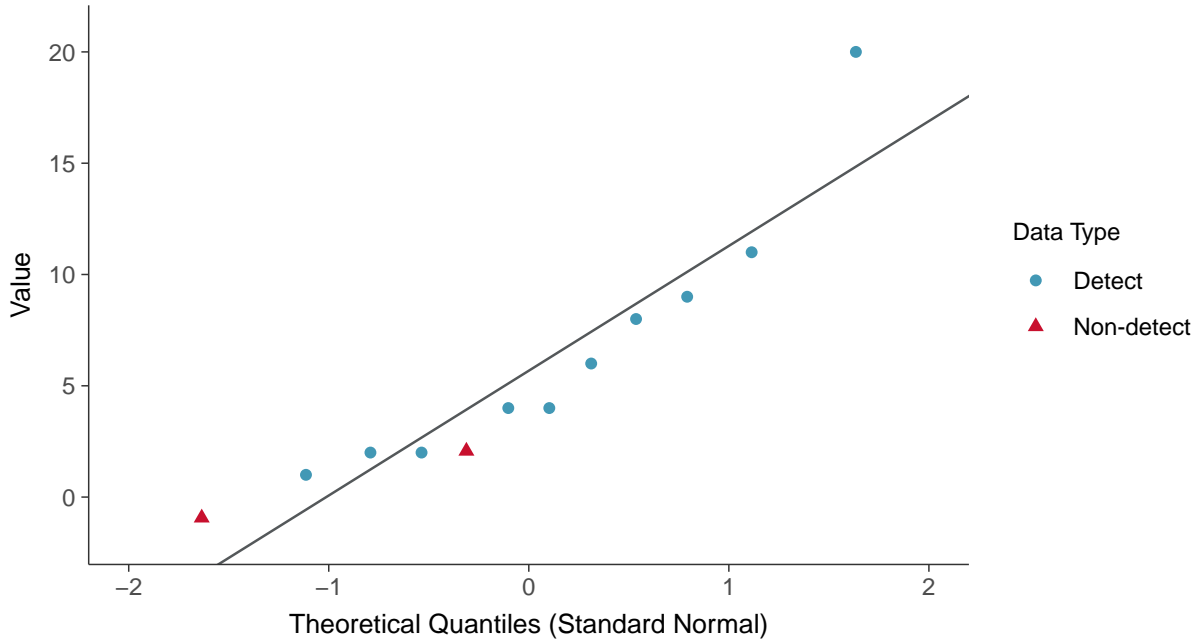
Total Suspended Solids, MW-10 (mg/L)





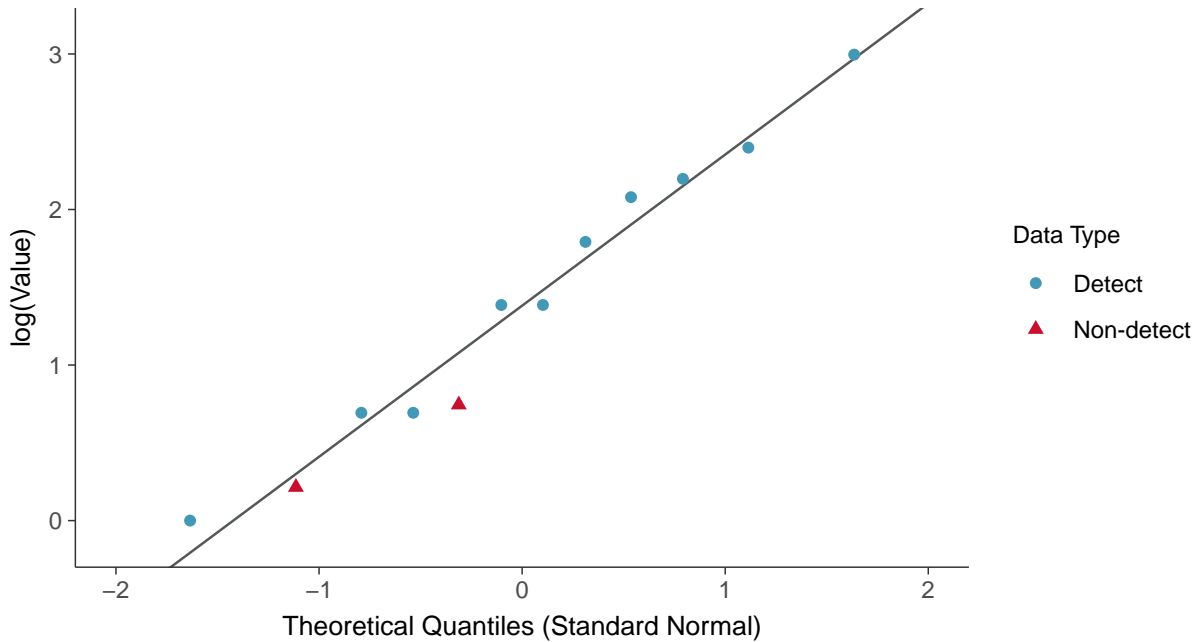
Normal Q-Q plot using ROS Imputed Estimates

Total Suspended Solids, MW-10 (mg/L)



Lognormal Q-Q plot using ROS Imputed Estimates

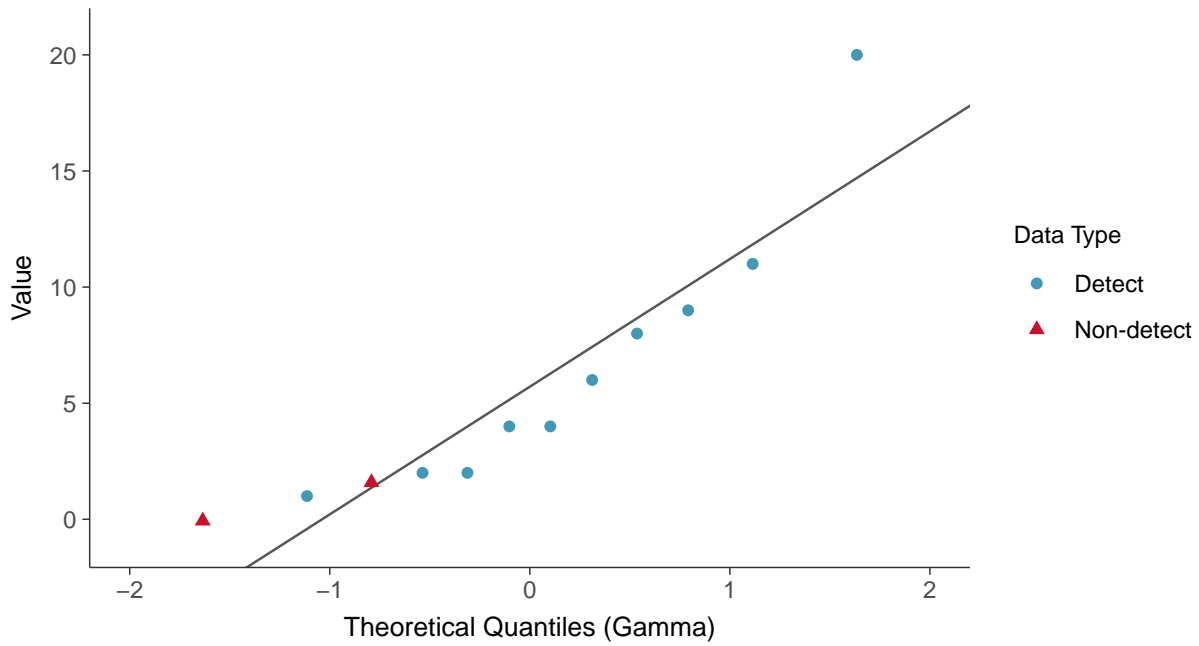
Total Suspended Solids, MW-10 (mg/L)





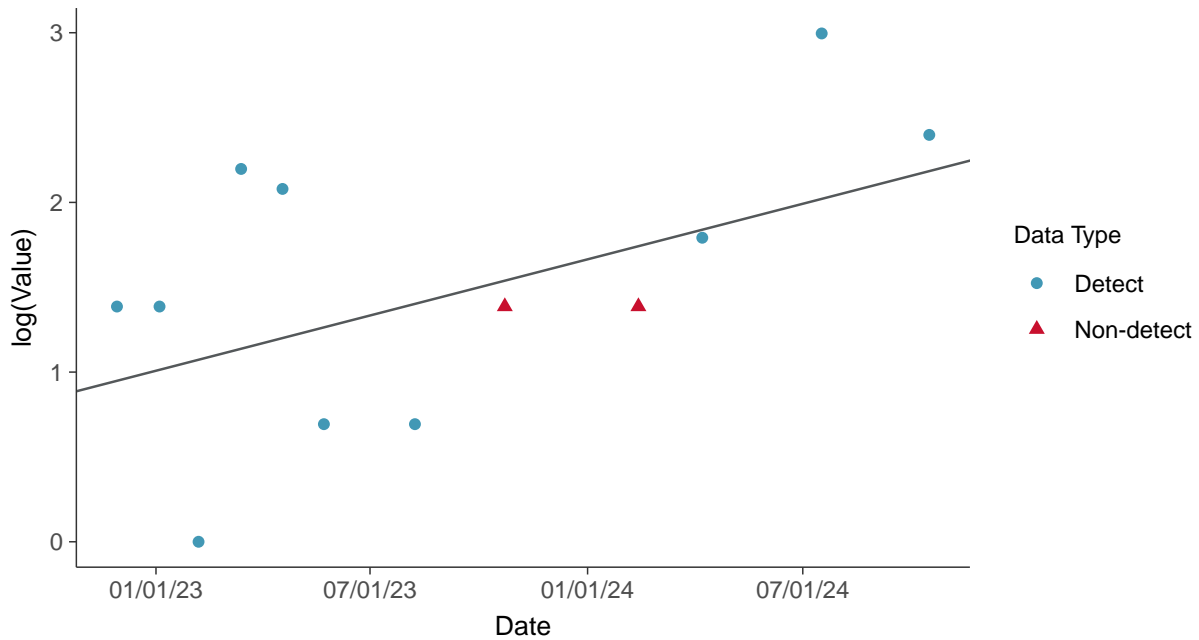
Gamma Q-Q plot using ROS Imputed Estimates

Total Suspended Solids, MW-10 (mg/L)



Trend Regression: Lognormal MLE

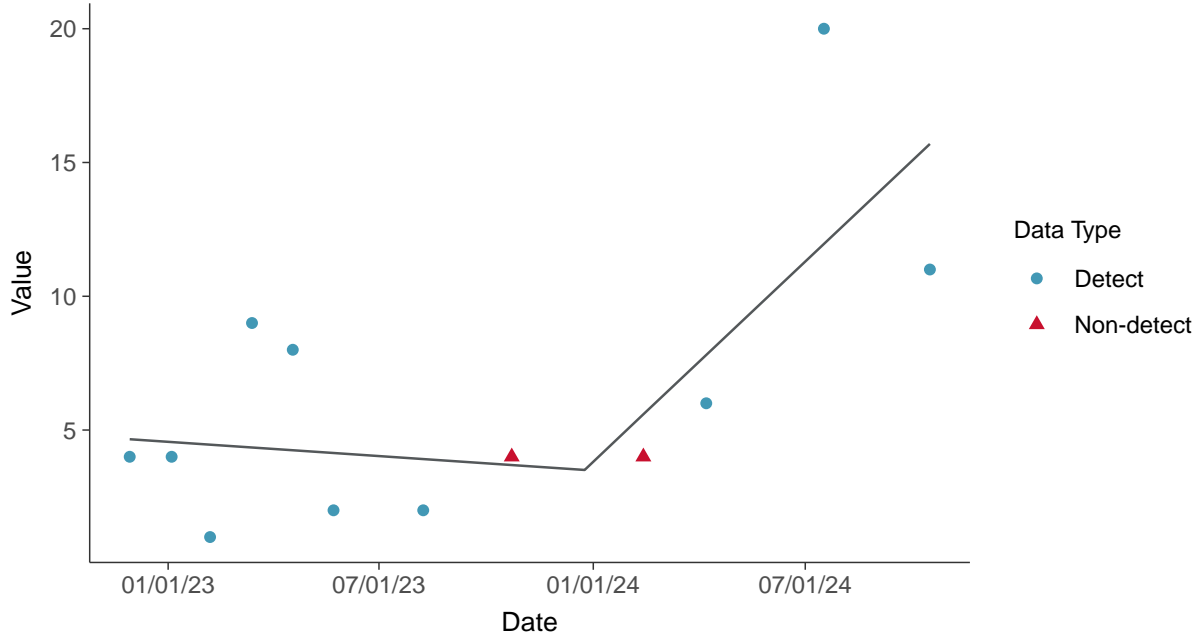
Total Suspended Solids, MW-10 (mg/L)





Trend Regression: Piecewise Linear-Linear

Total Suspended Solids, MW-10 (mg/L)



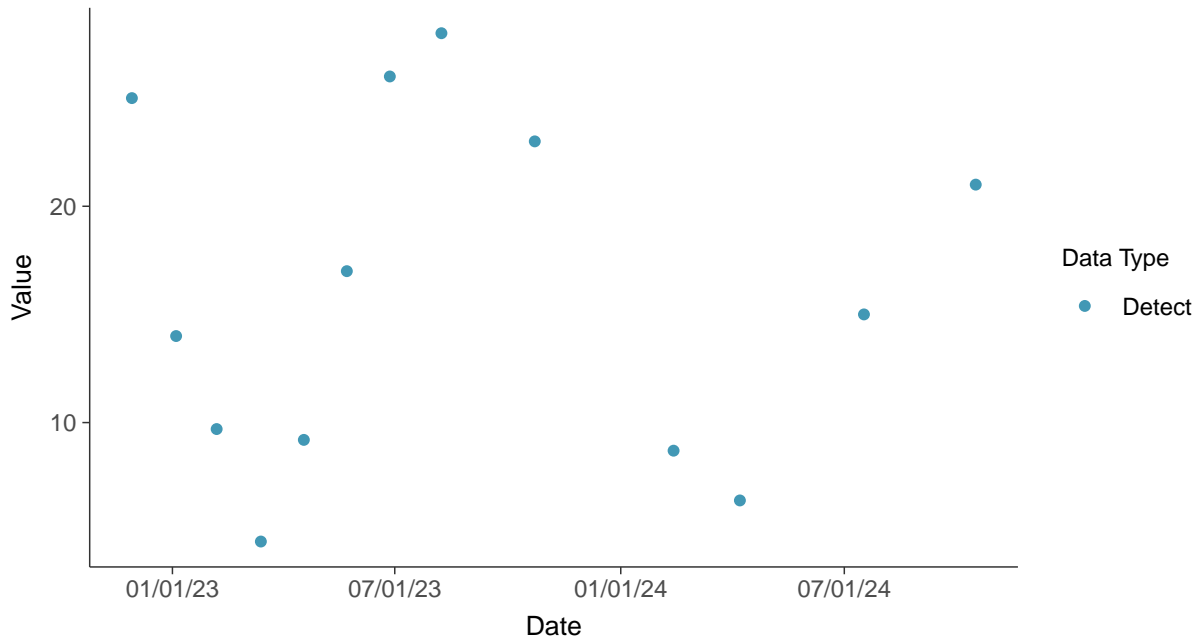


Appendix III: Boron, MW-10

ID: 3_20_3_4_105

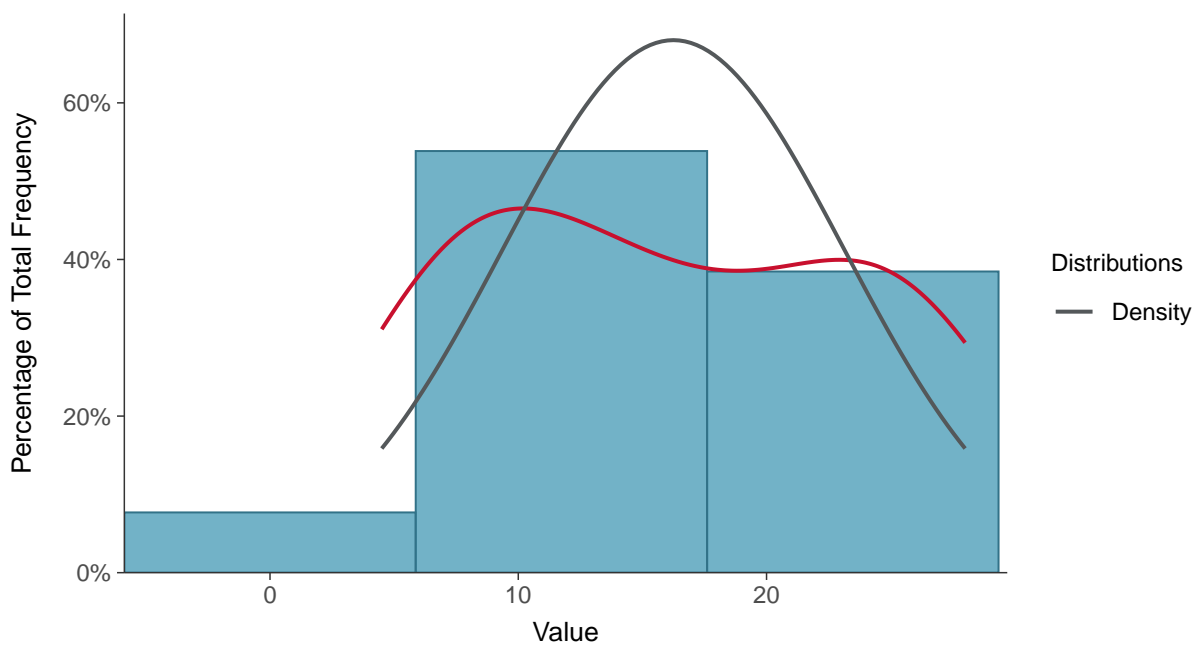
Scatter Plot

Boron, MW-10 (mg/L)



Histogram

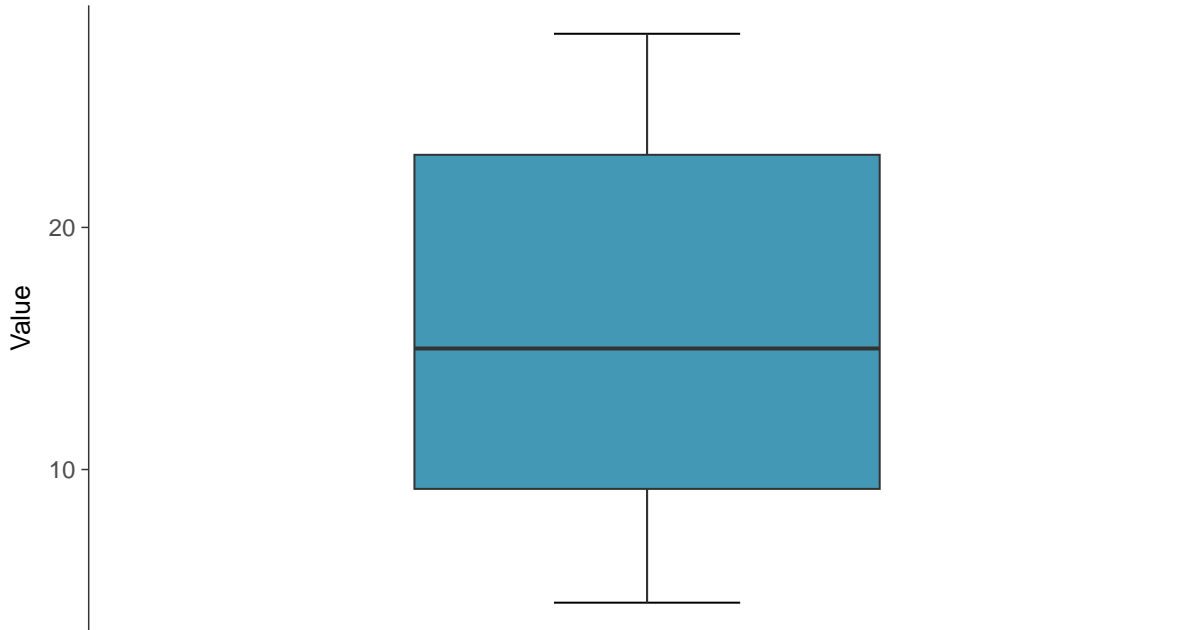
Boron, MW-10 (mg/L)





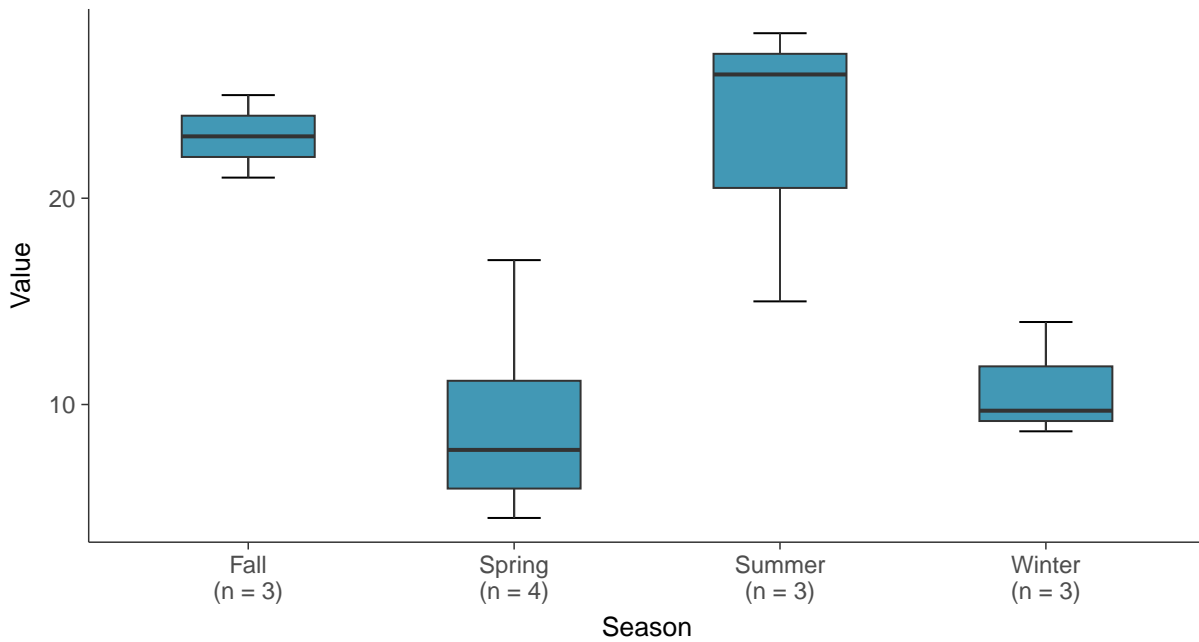
Boxplot

Boron, MW-10 (mg/L)



Boxplot by Season

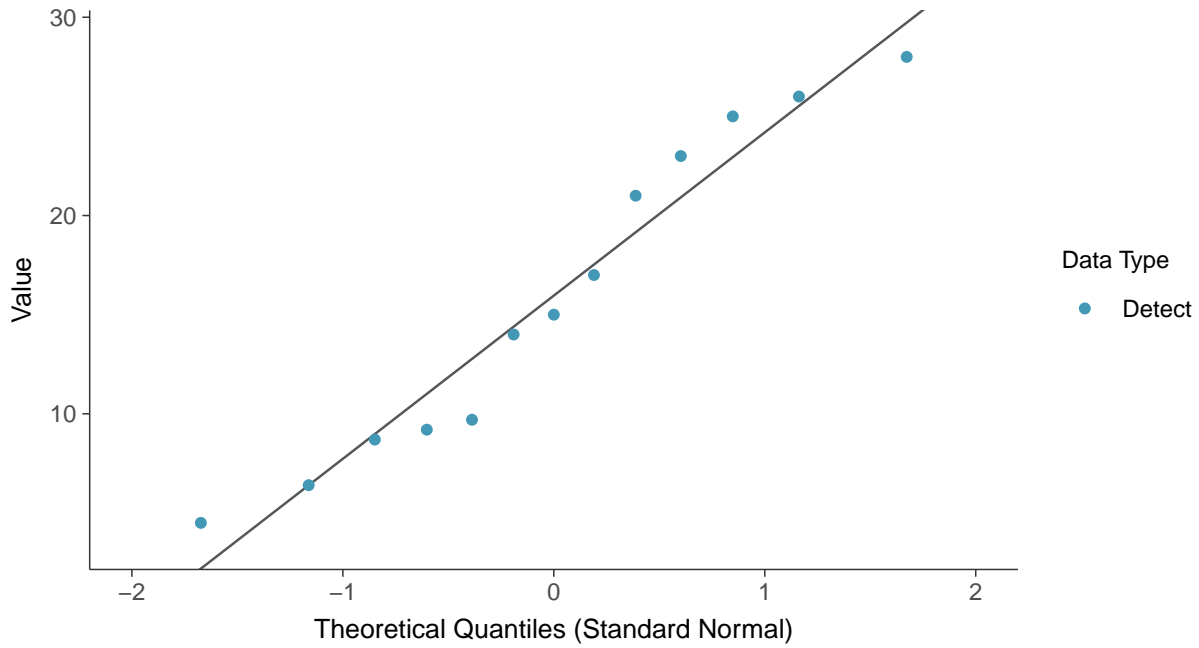
Boron, MW-10 (mg/L)





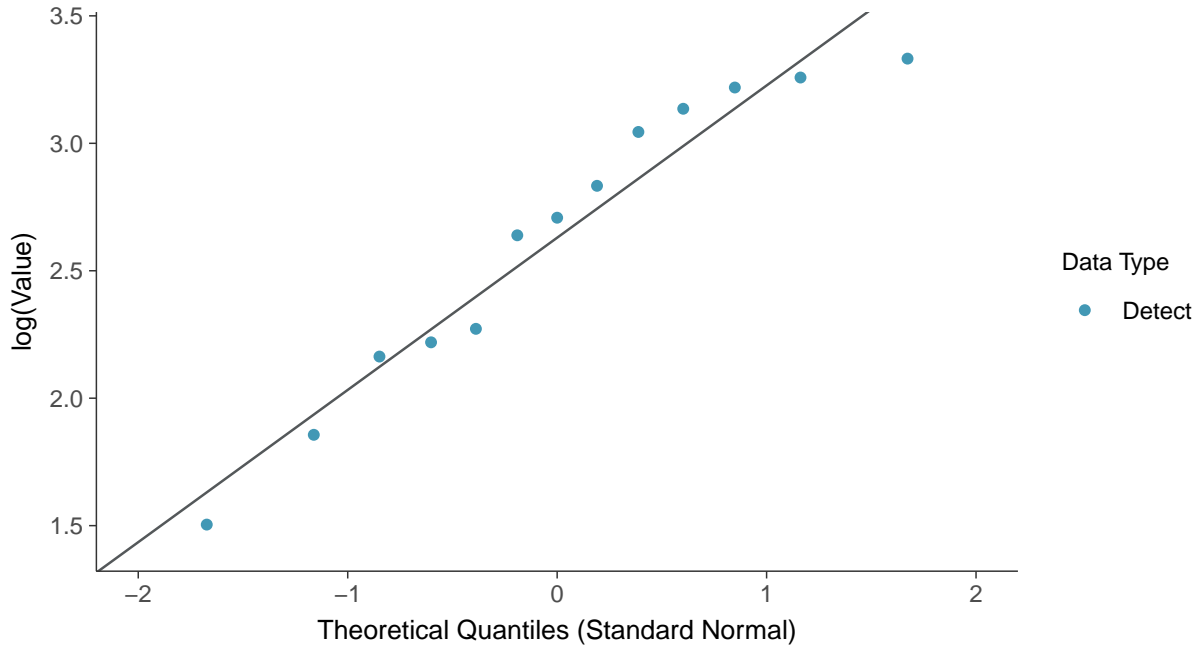
Normal Q-Q plot

Boron, MW-10 (mg/L)



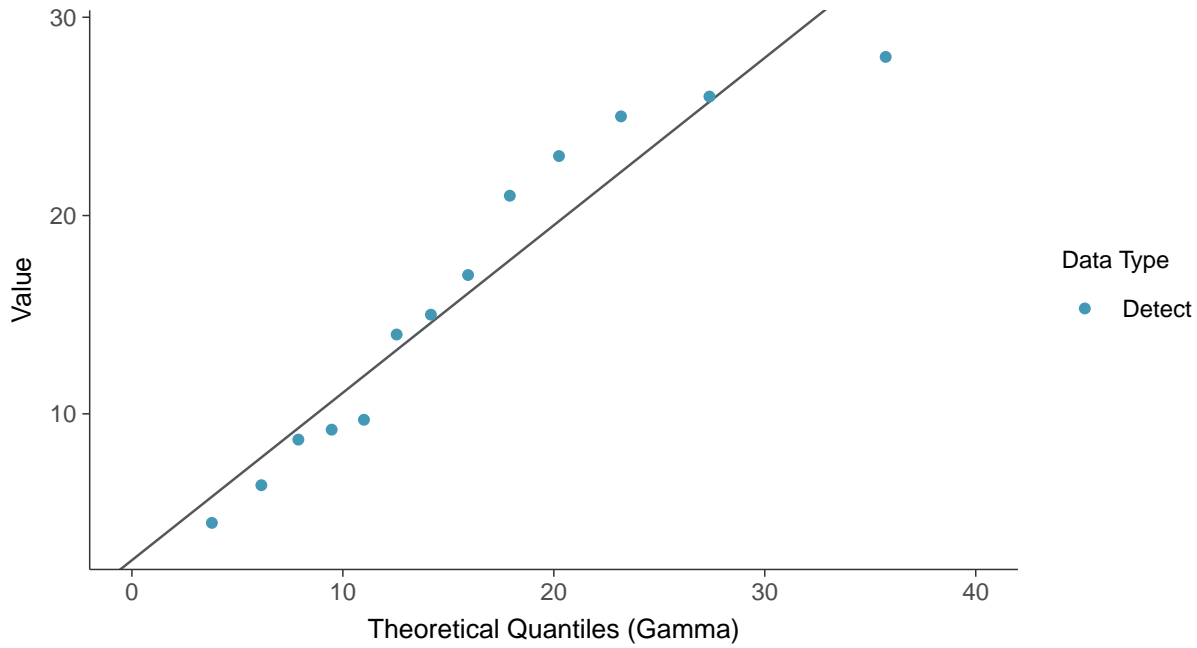
Lognormal Q-Q plot

Boron, MW-10 (mg/L)

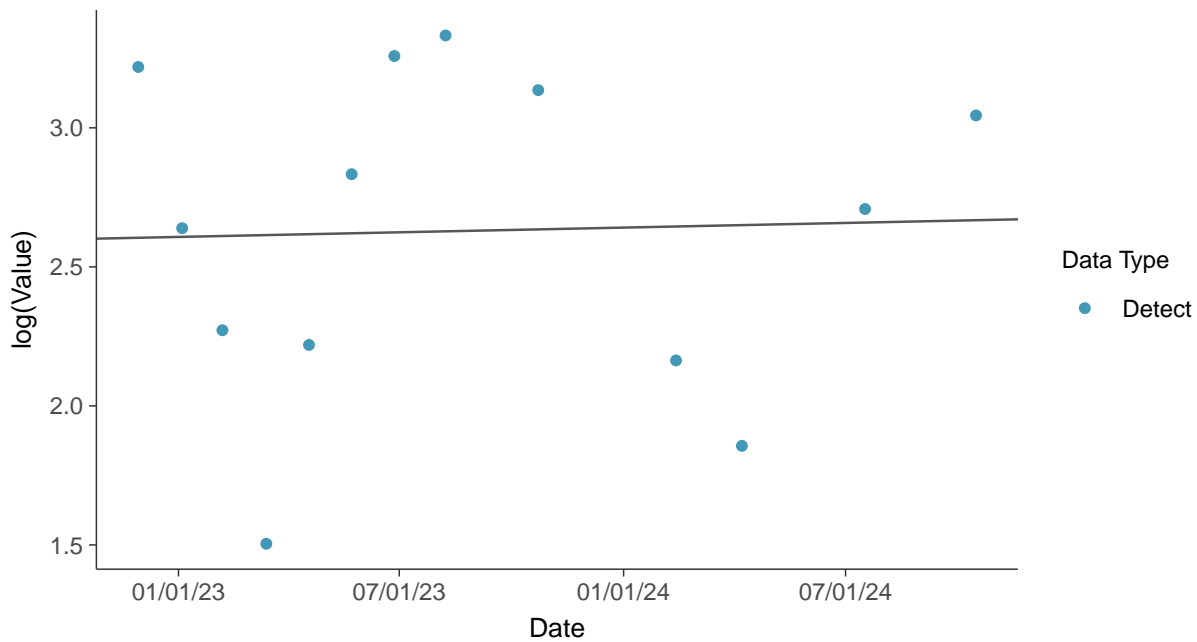




Gamma Q-Q plot
Boron, MW-10 (mg/L)



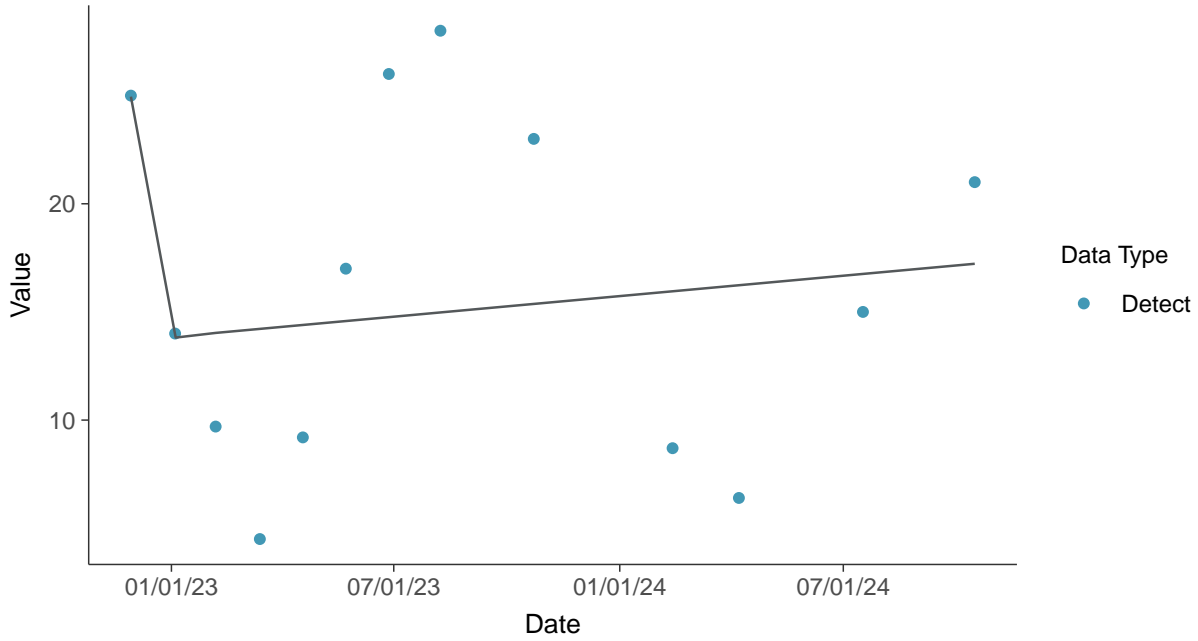
Trend Regression: Lognormal MLE
Boron, MW-10 (mg/L)





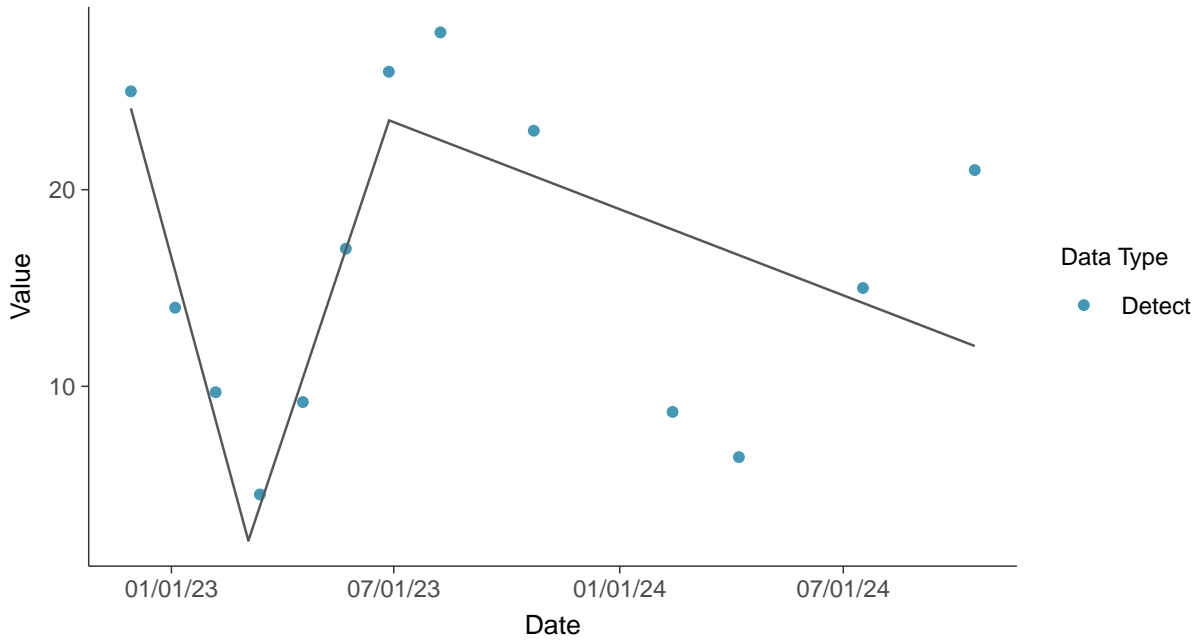
Trend Regression: Piecewise Linear-Linear

Boron, MW-10 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Boron, MW-10 (mg/L)



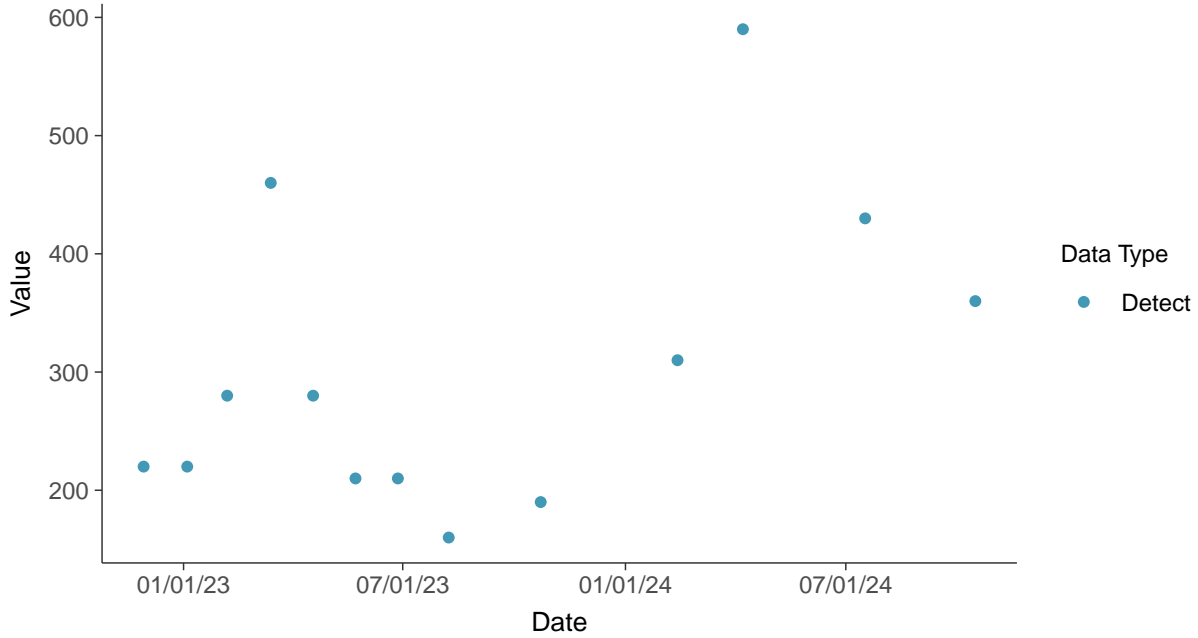


Appendix III: Calcium, MW-10

ID: 3_20_3_4_107

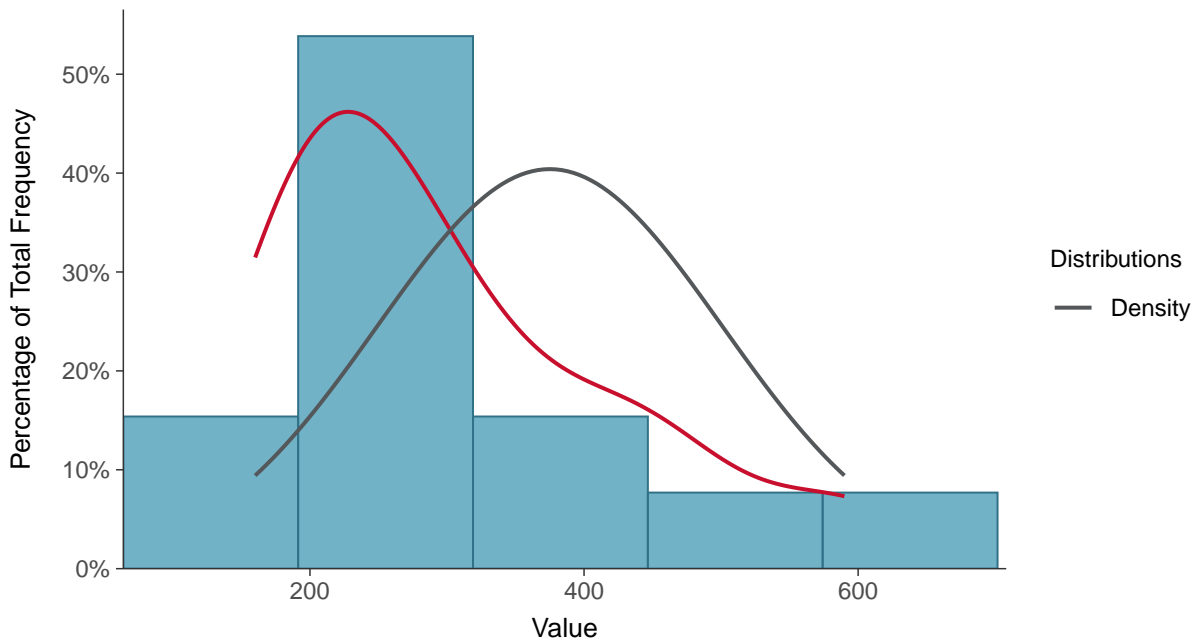
Scatter Plot

Calcium, MW-10 (mg/L)



Histogram

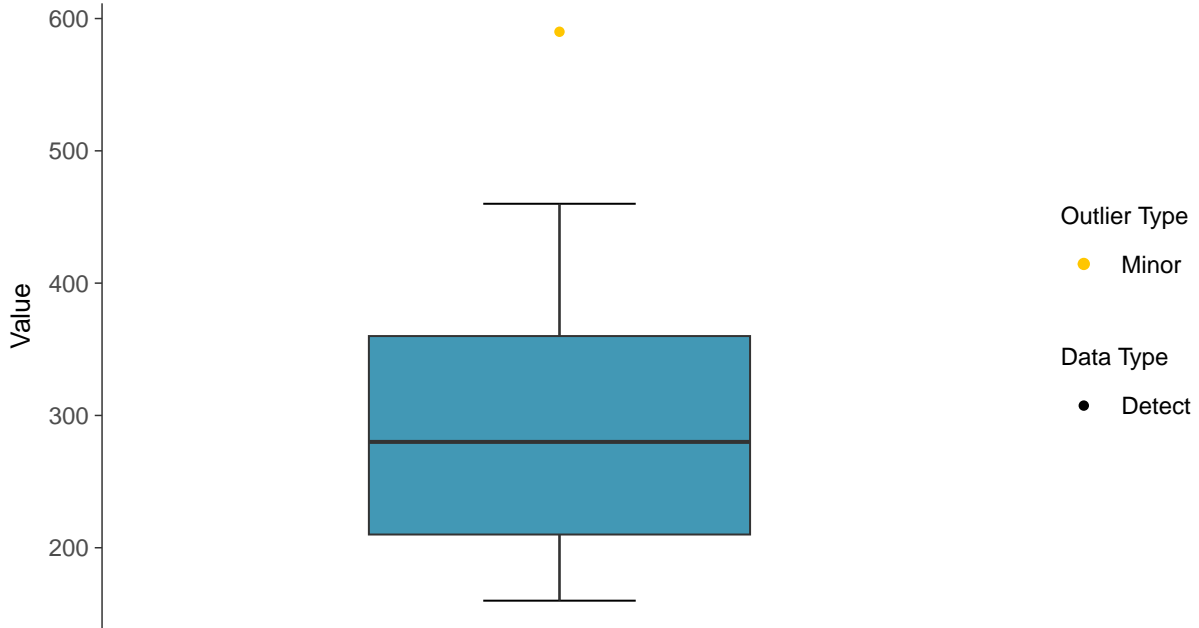
Calcium, MW-10 (mg/L)





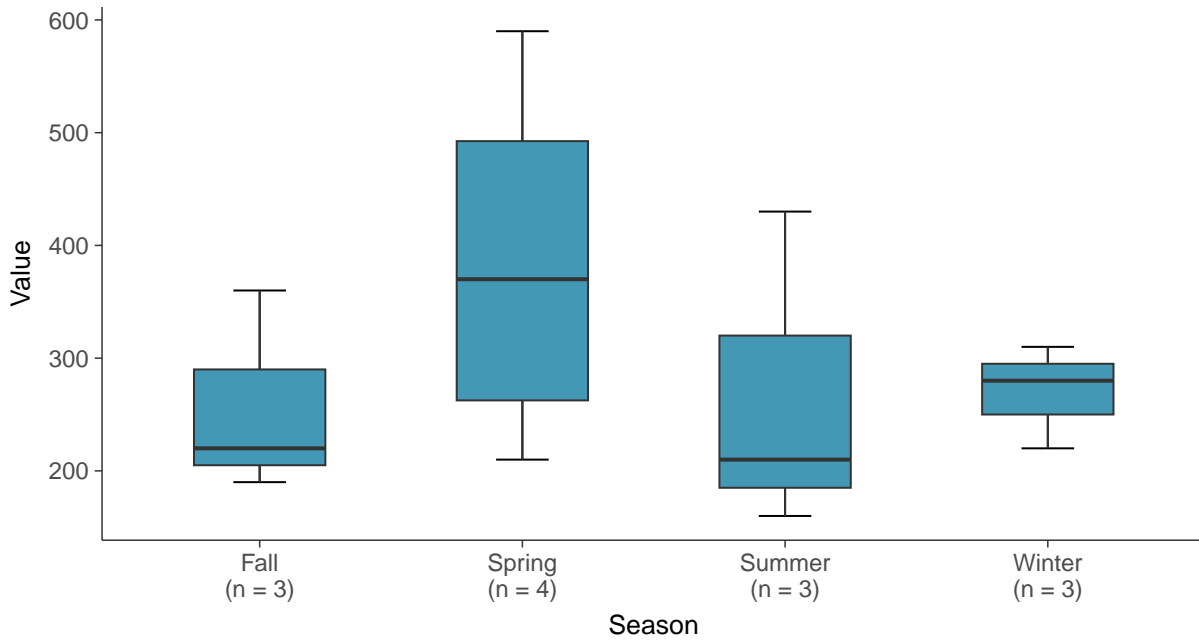
Boxplot

Calcium, MW-10 (mg/L)



Boxplot by Season

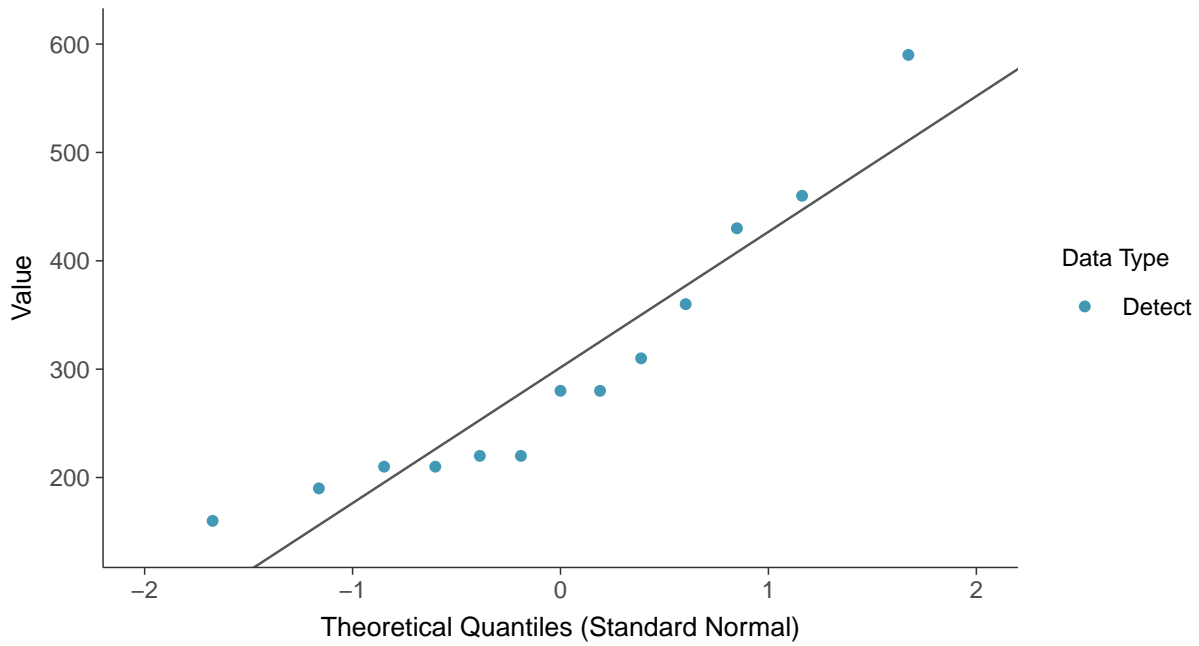
Calcium, MW-10 (mg/L)





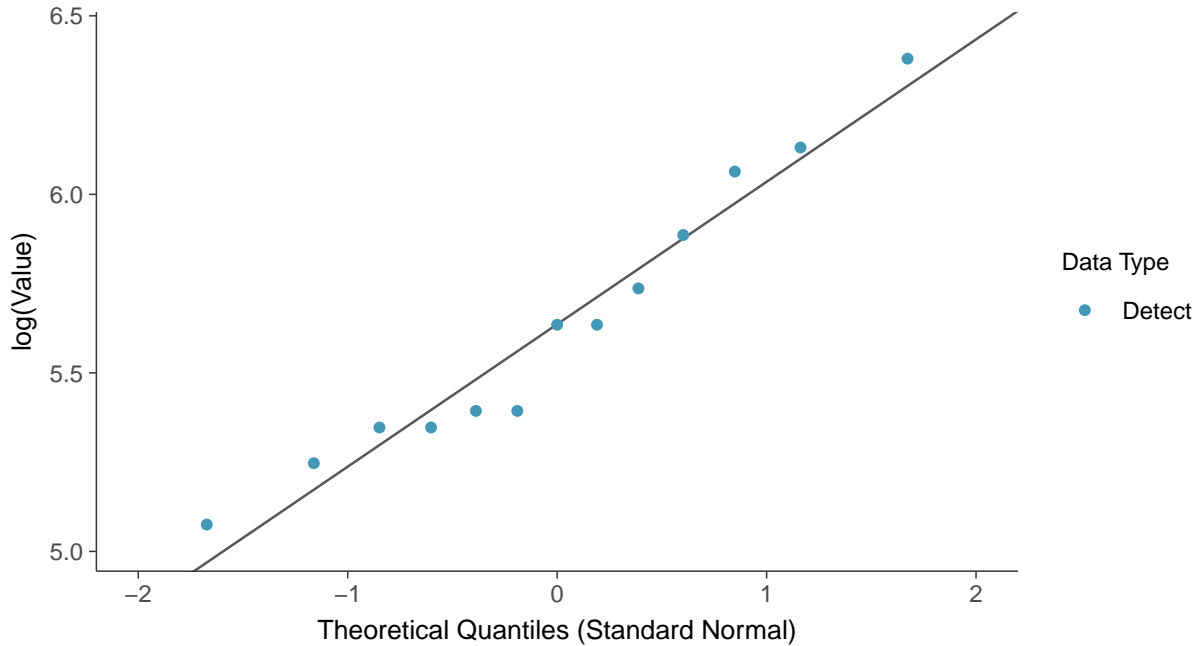
Normal Q-Q plot

Calcium, MW-10 (mg/L)



Lognormal Q-Q plot

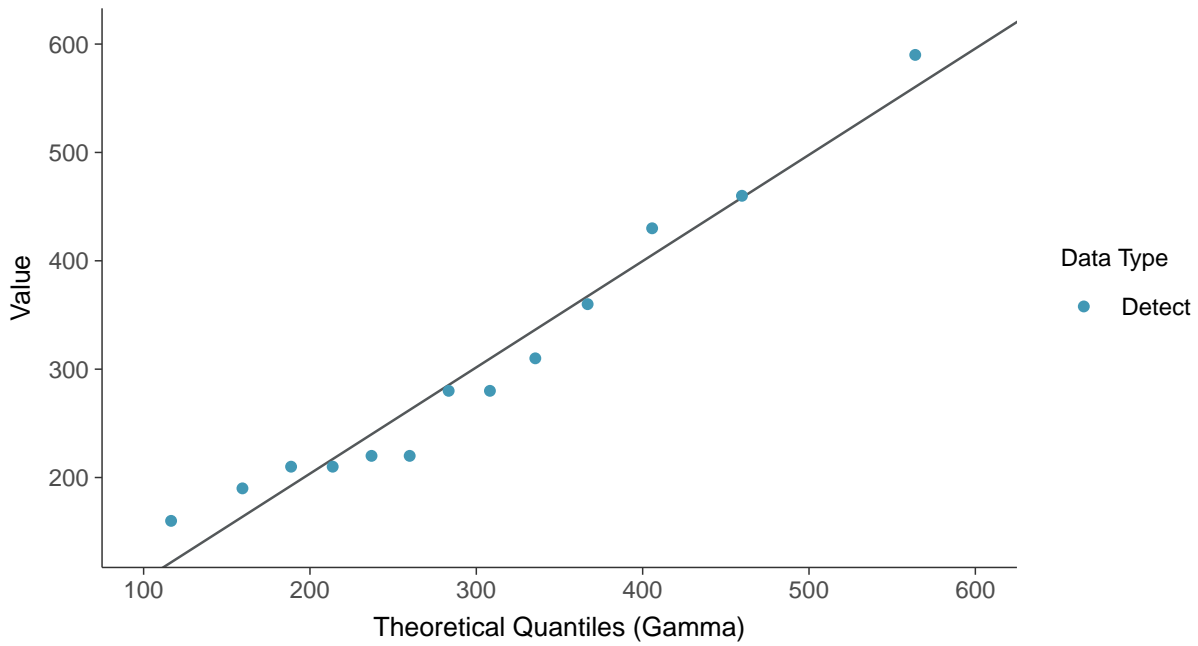
Calcium, MW-10 (mg/L)





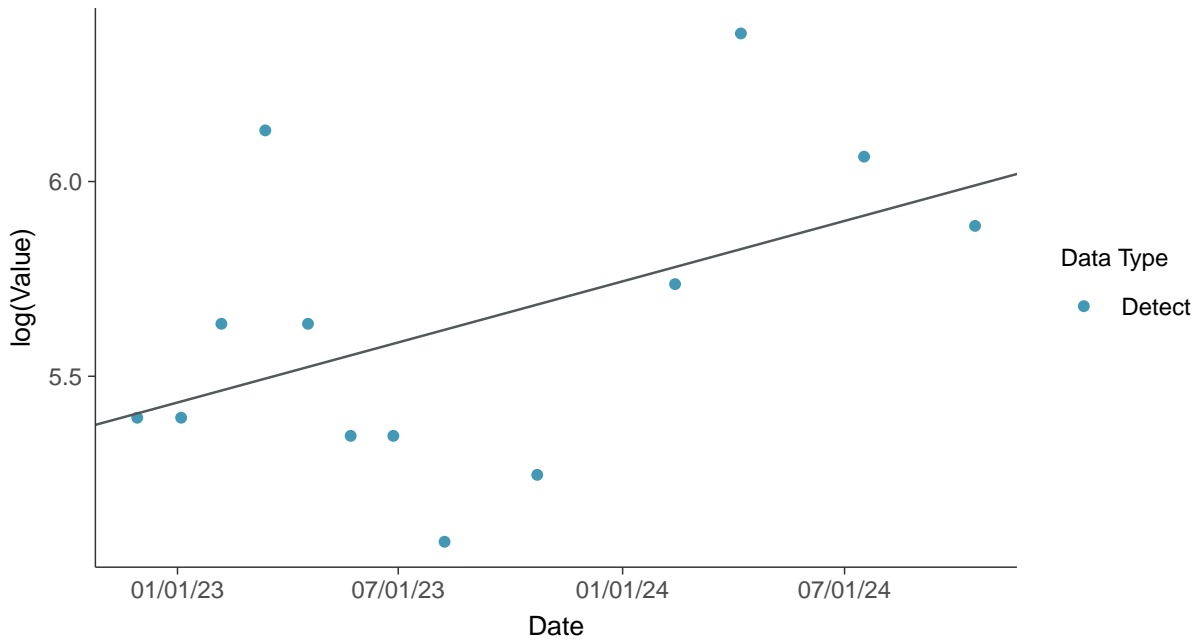
Gamma Q-Q plot

Calcium, MW-10 (mg/L)



Trend Regression: Lognormal MLE

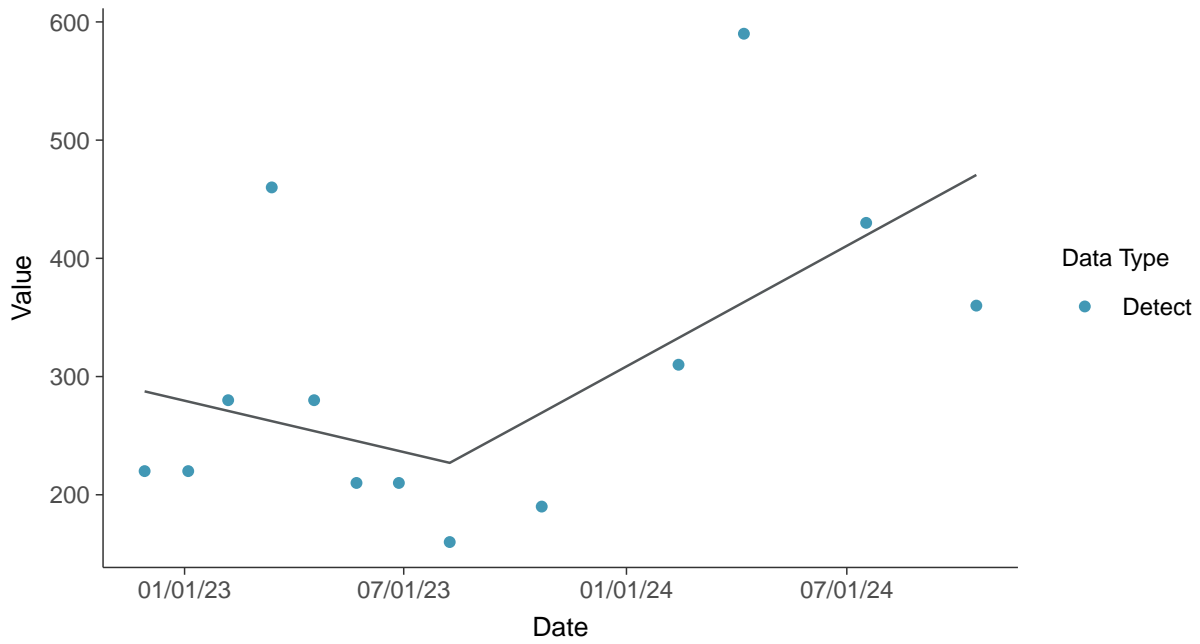
Calcium, MW-10 (mg/L)





Trend Regression: Piecewise Linear-Linear

Calcium, MW-10 (mg/L)



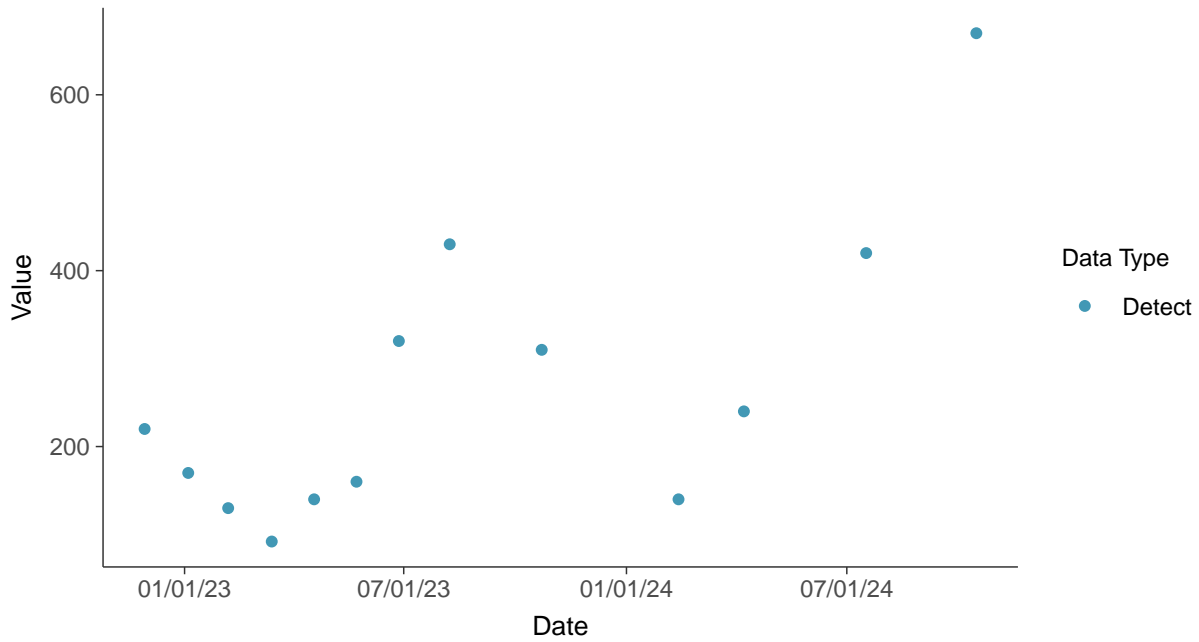


Appendix III: Chloride (as Cl), MW-10

ID: 3_20_3_4_108

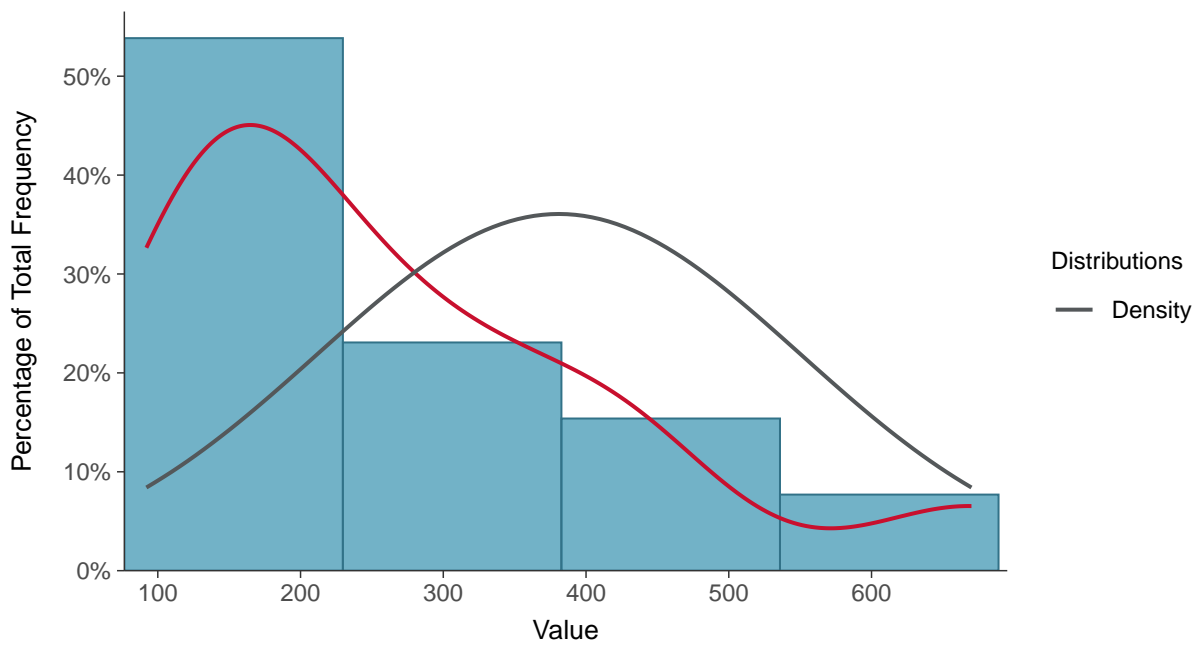
Scatter Plot

Chloride (as Cl), MW-10 (mg/L)



Histogram

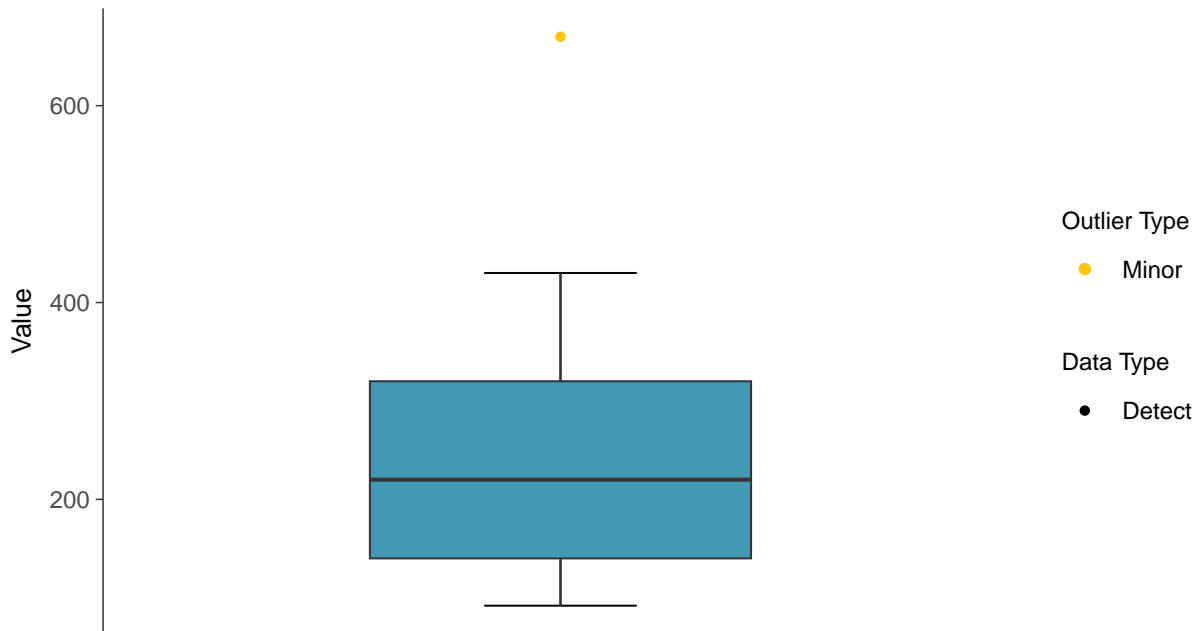
Chloride (as Cl), MW-10 (mg/L)





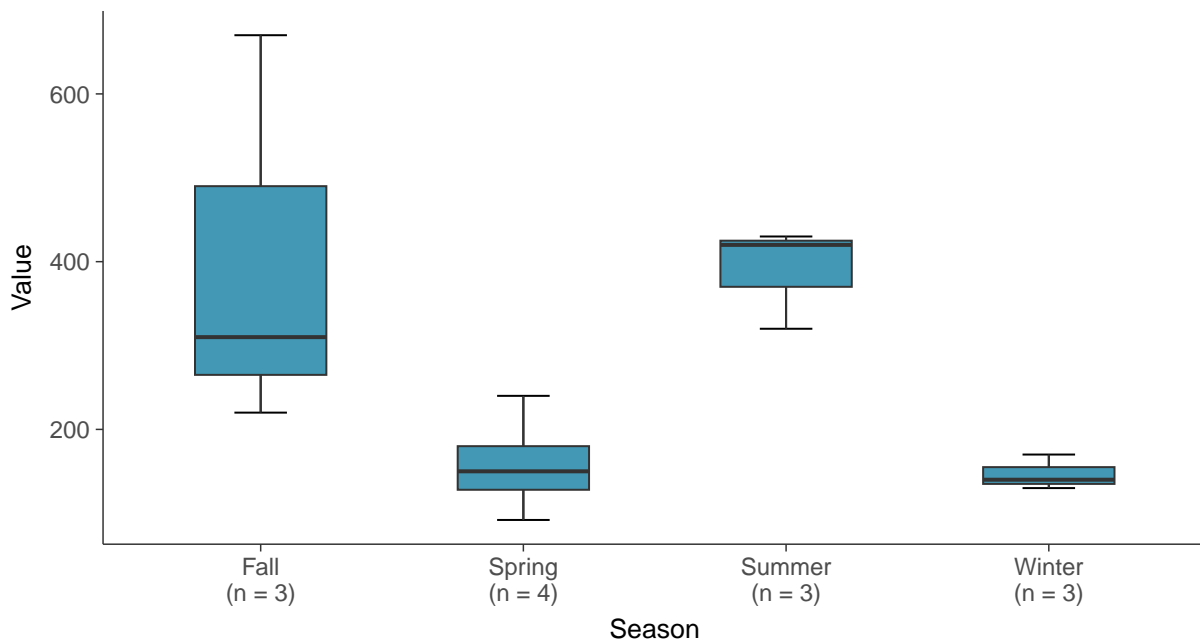
Boxplot

Chloride (as Cl), MW-10 (mg/L)



Boxplot by Season

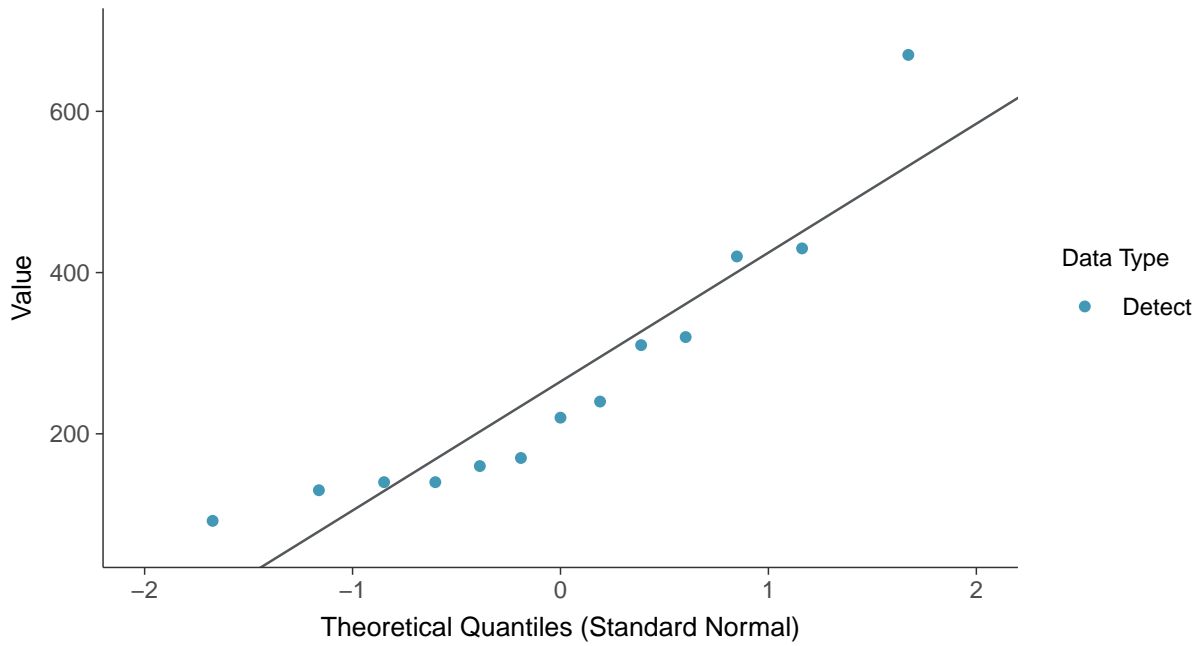
Chloride (as Cl), MW-10 (mg/L)





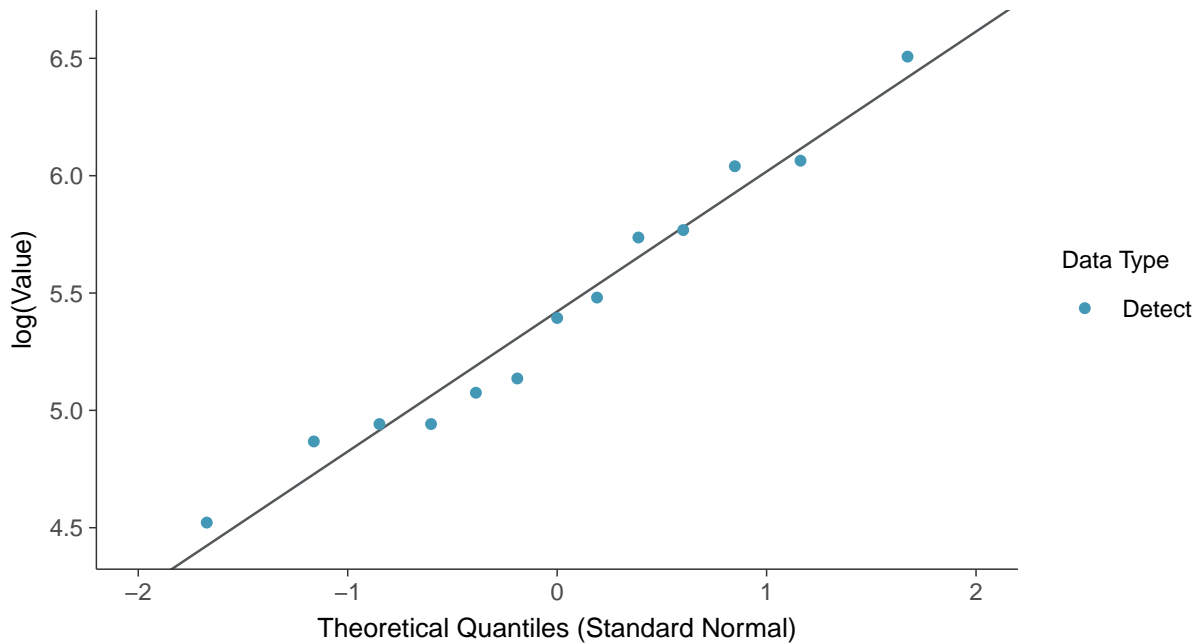
Normal Q-Q plot

Chloride (as Cl), MW-10 (mg/L)



Lognormal Q-Q plot

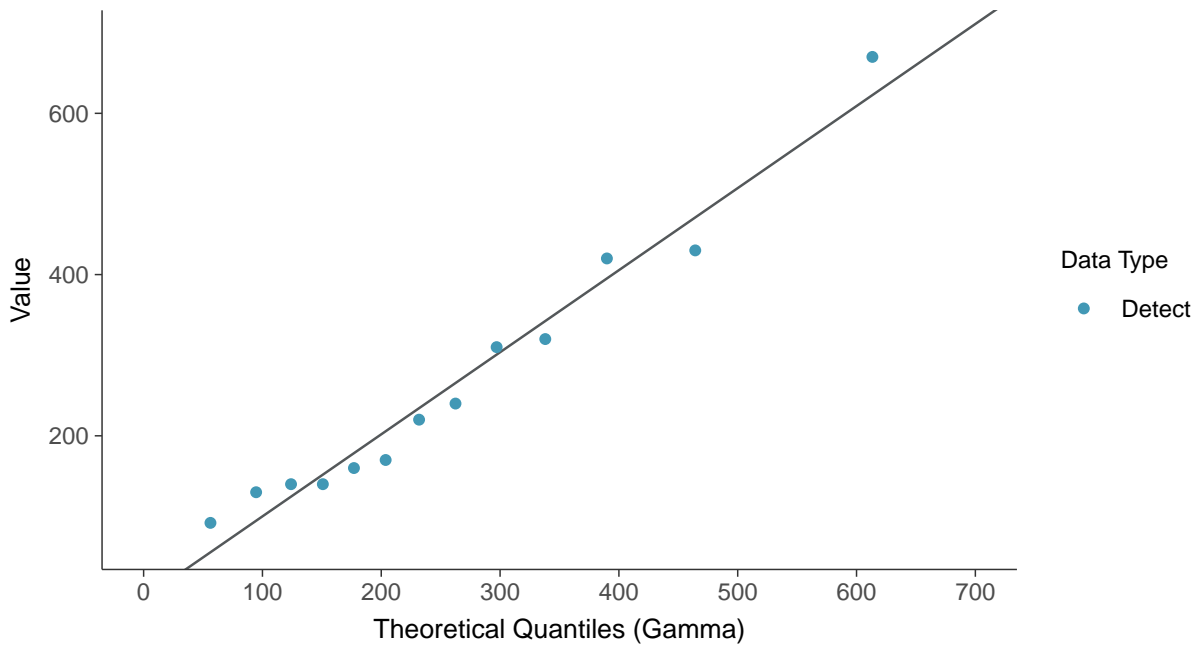
Chloride (as Cl), MW-10 (mg/L)





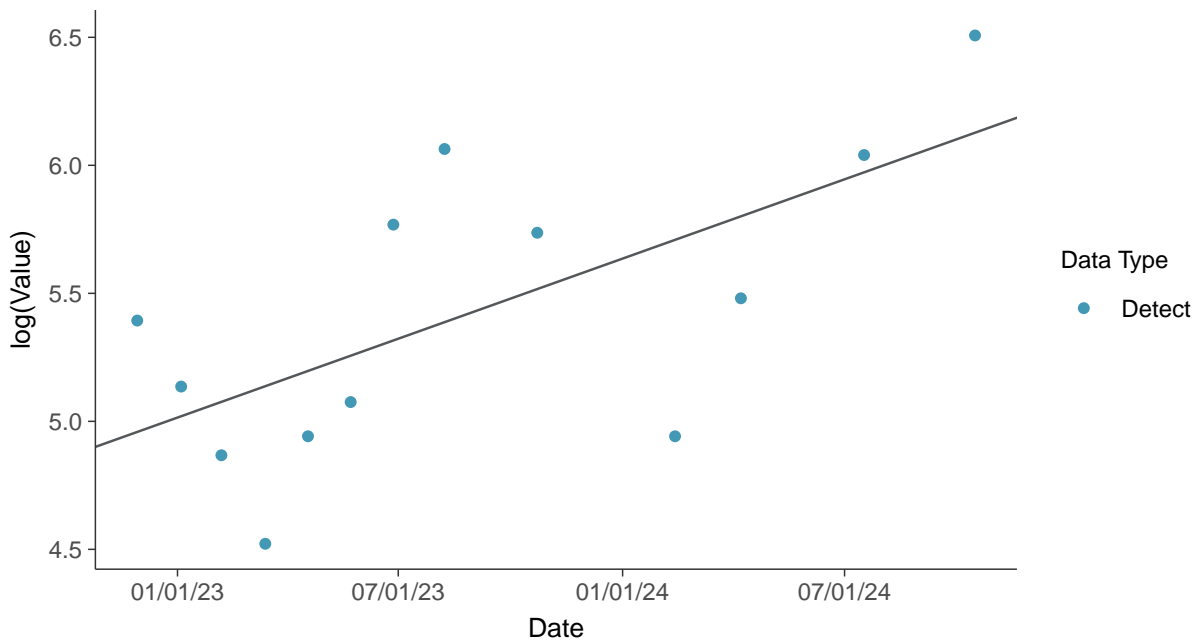
Gamma Q-Q plot

Chloride (as Cl), MW-10 (mg/L)



Trend Regression: Lognormal MLE

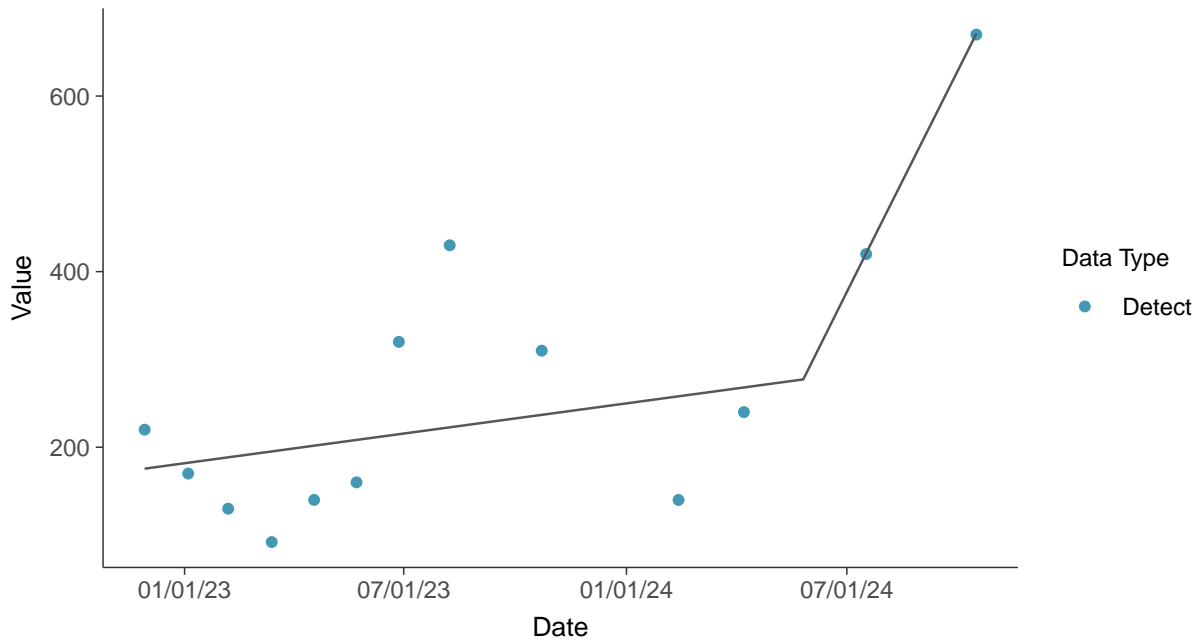
Chloride (as Cl), MW-10 (mg/L)





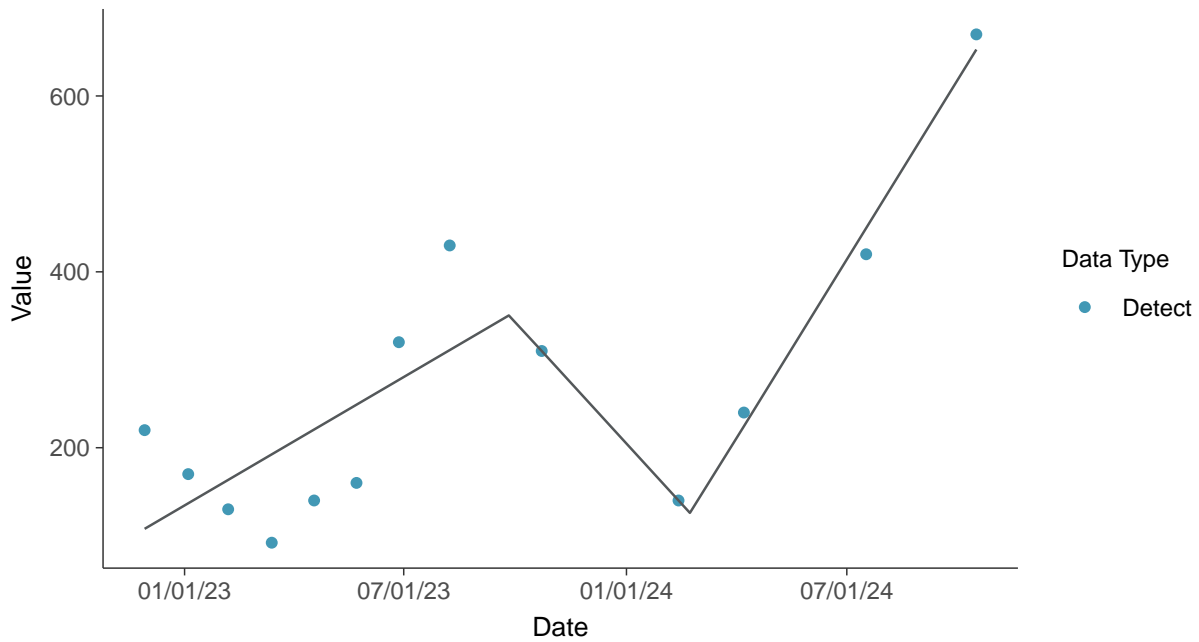
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-10 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

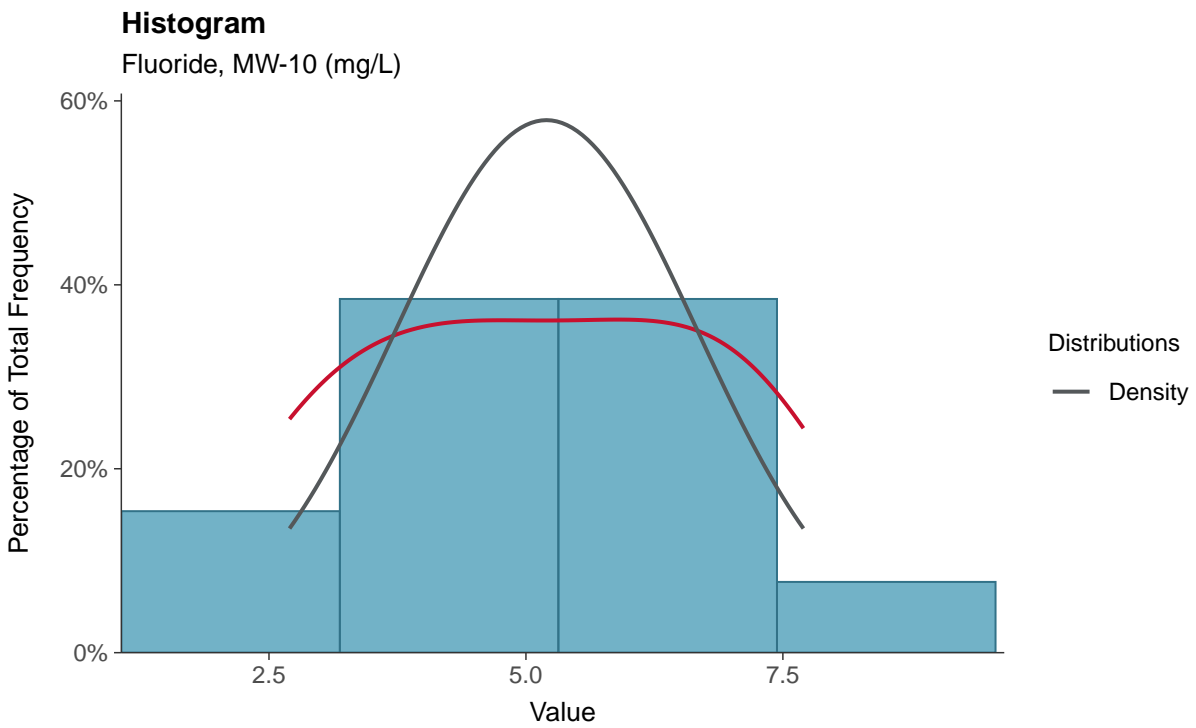
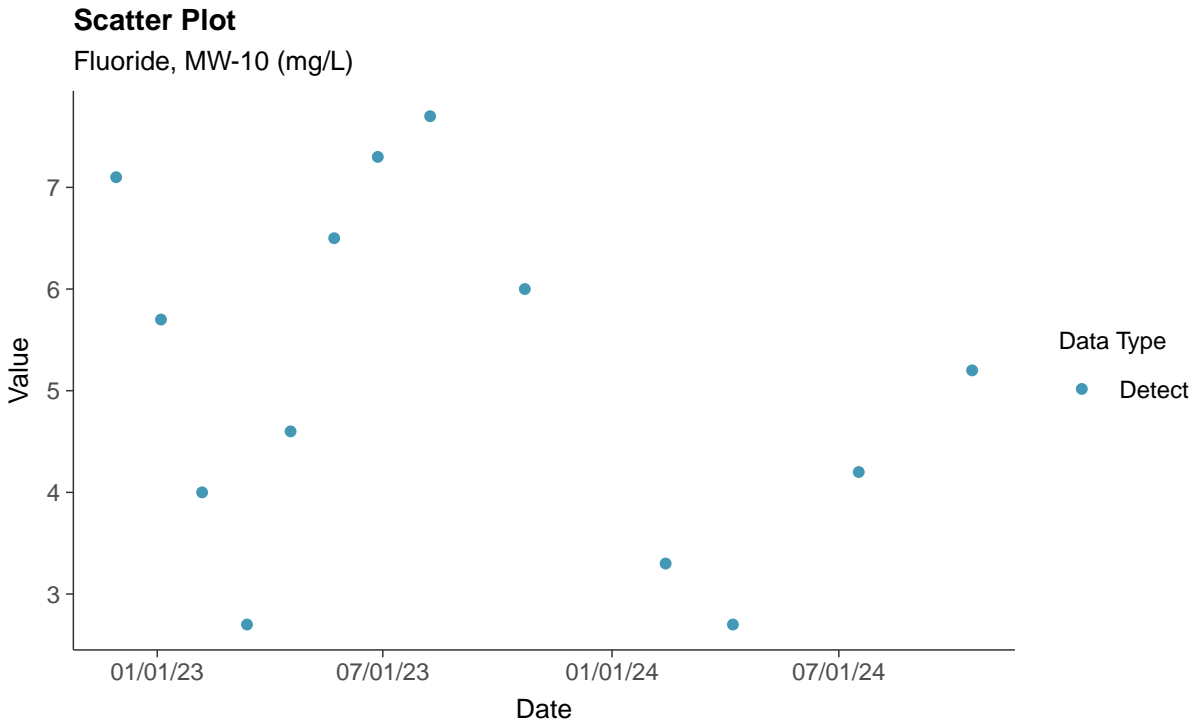
Chloride (as Cl), MW-10 (mg/L)





Appendix III: Fluoride, MW-10

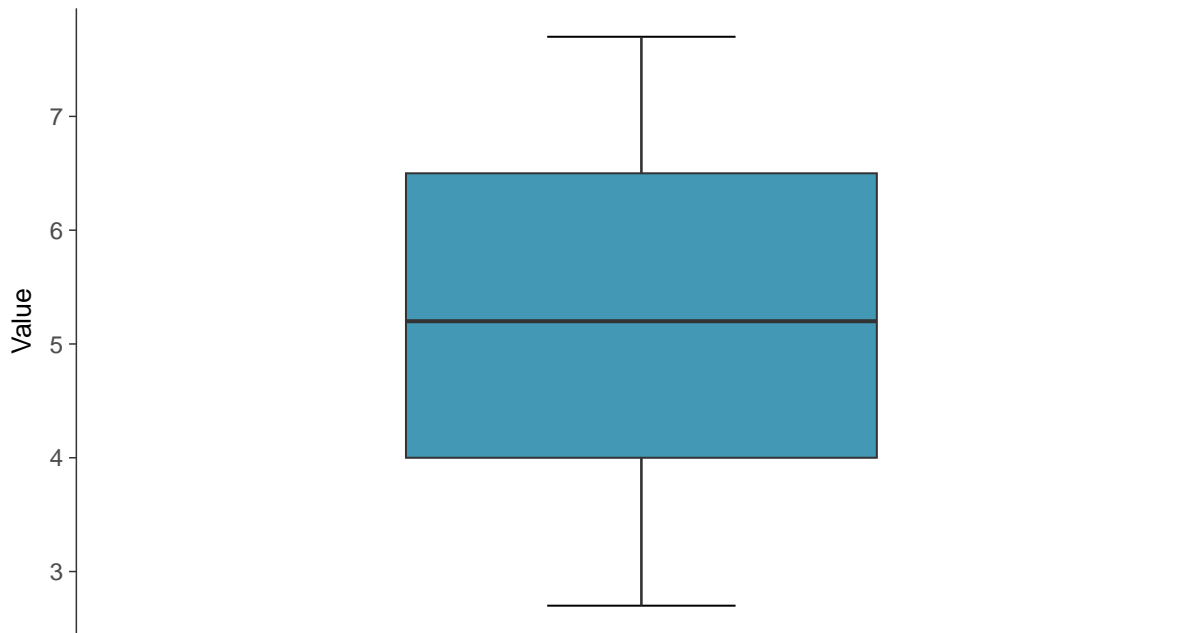
ID: 3_20_3_4_112





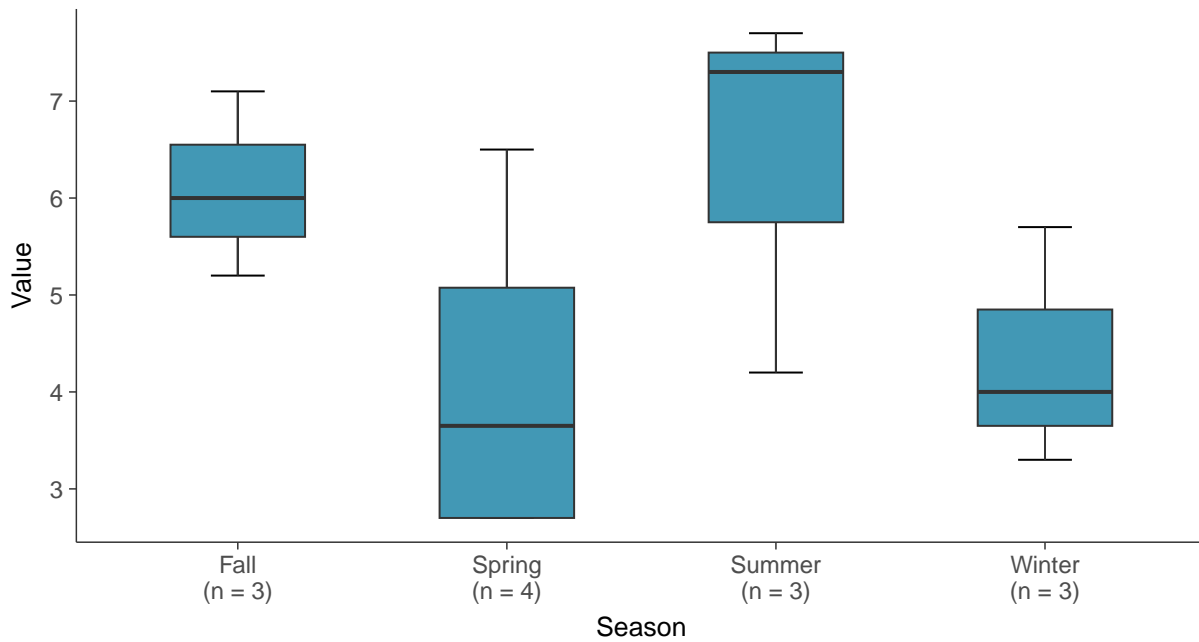
Boxplot

Fluoride, MW-10 (mg/L)



Boxplot by Season

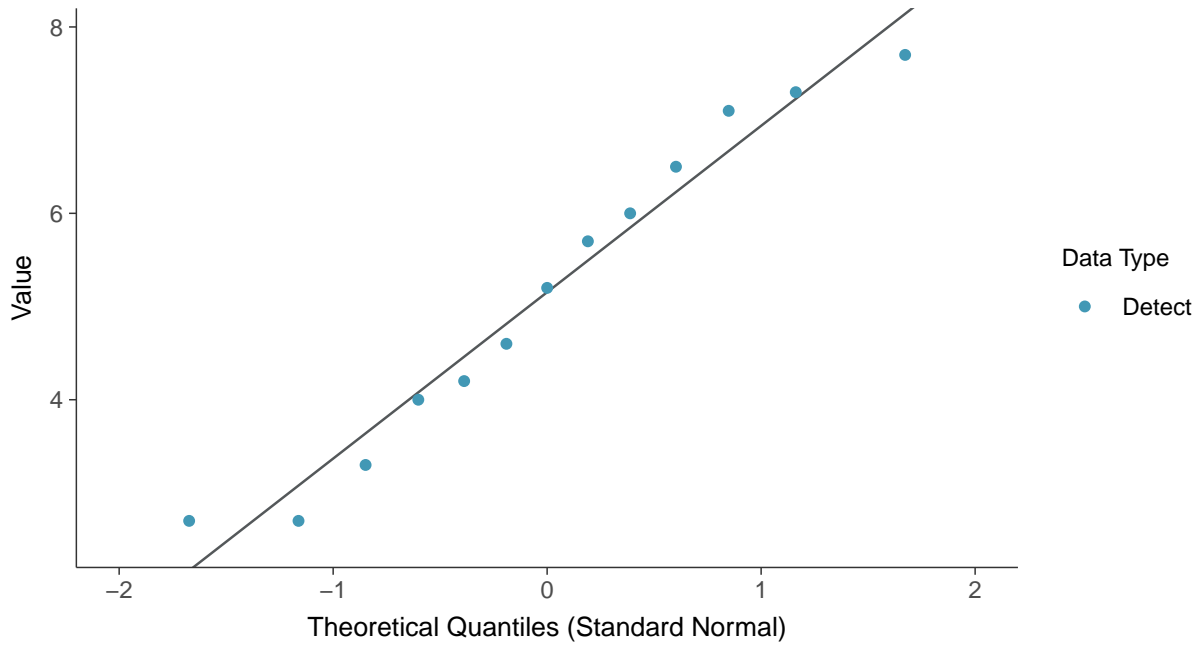
Fluoride, MW-10 (mg/L)





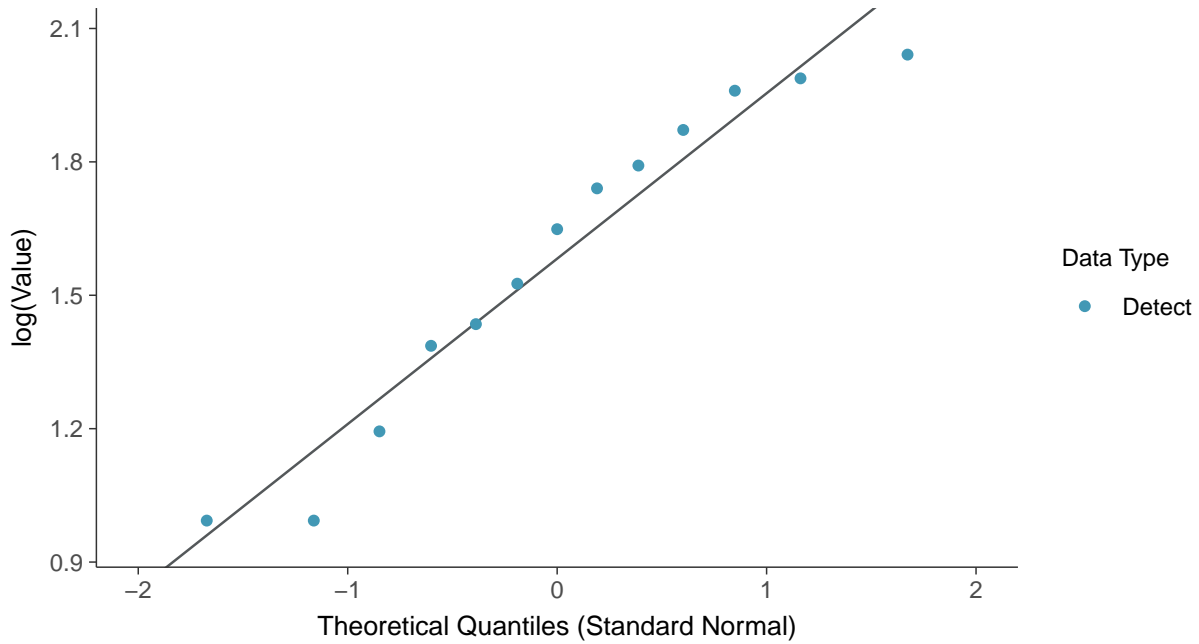
Normal Q-Q plot

Fluoride, MW-10 (mg/L)



Lognormal Q-Q plot

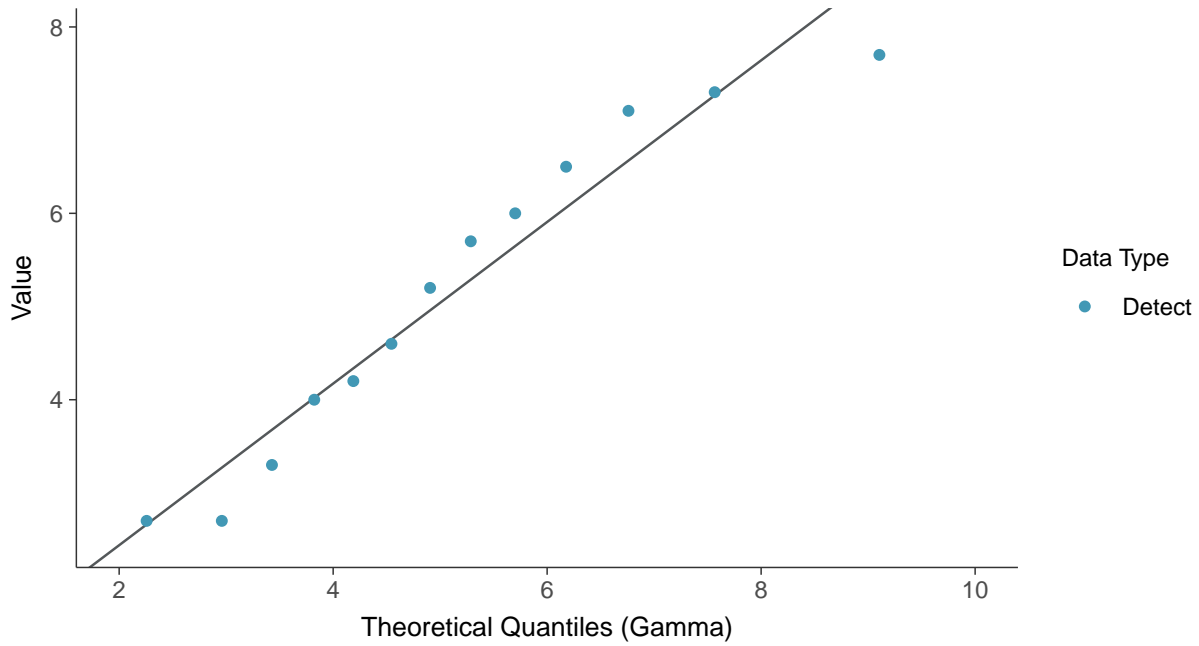
Fluoride, MW-10 (mg/L)





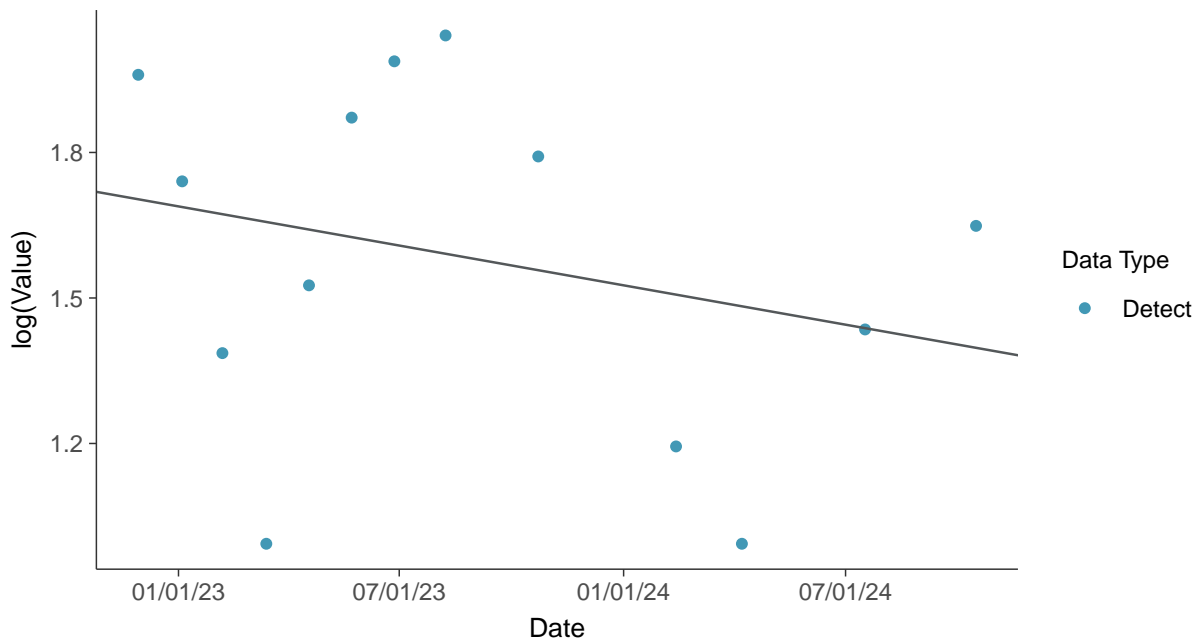
Gamma Q-Q plot

Fluoride, MW-10 (mg/L)



Trend Regression: Lognormal MLE

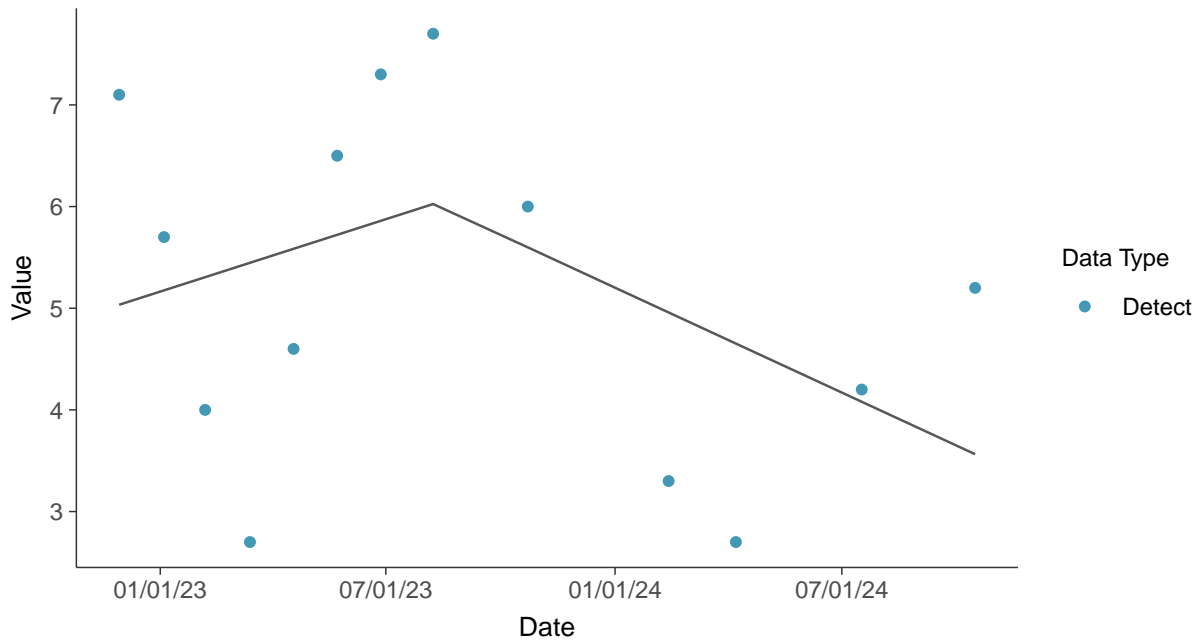
Fluoride, MW-10 (mg/L)





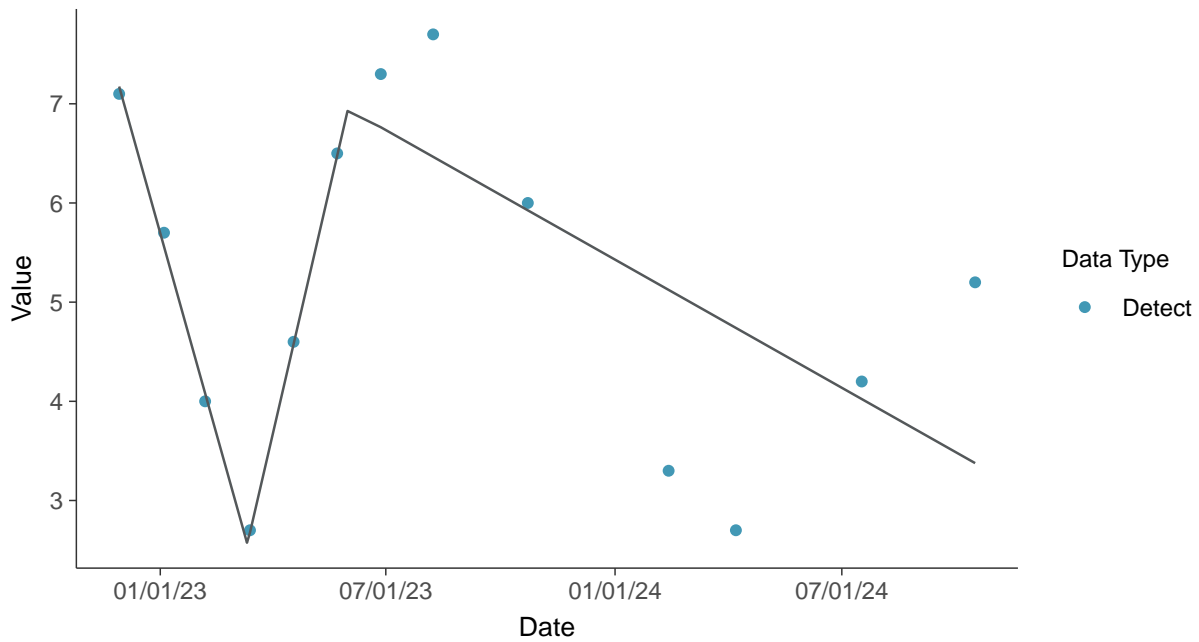
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-10 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

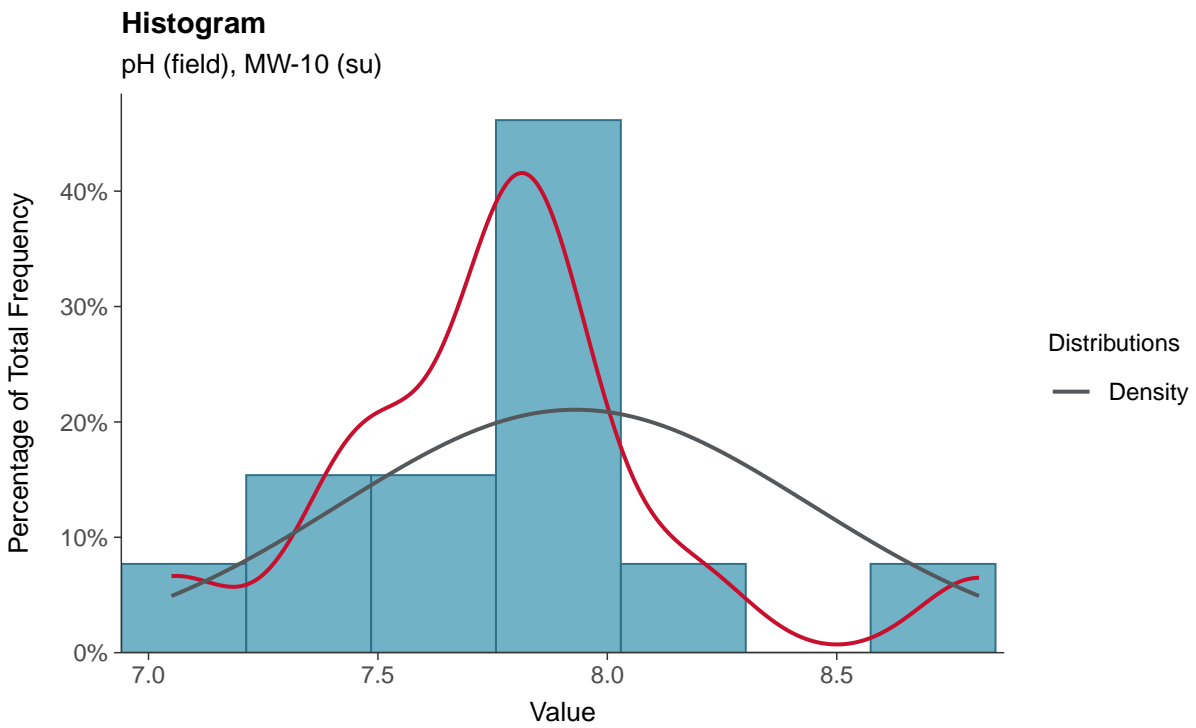
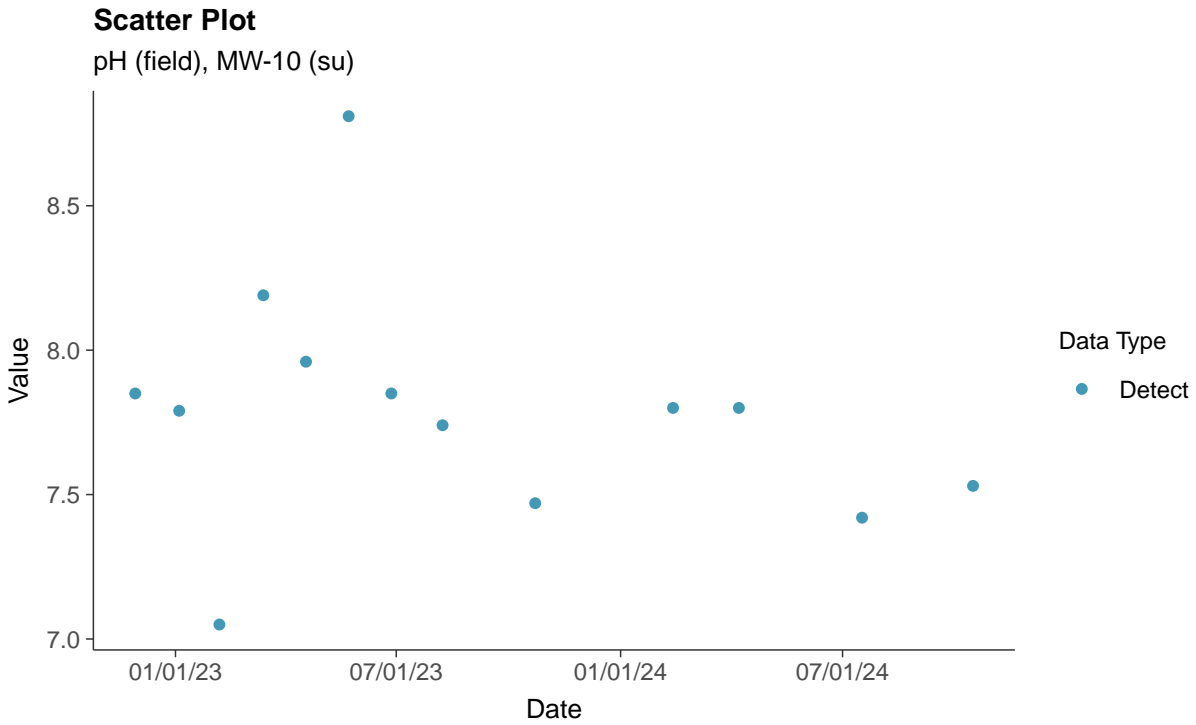
Fluoride, MW-10 (mg/L)





Appendix III: pH (field), MW-10

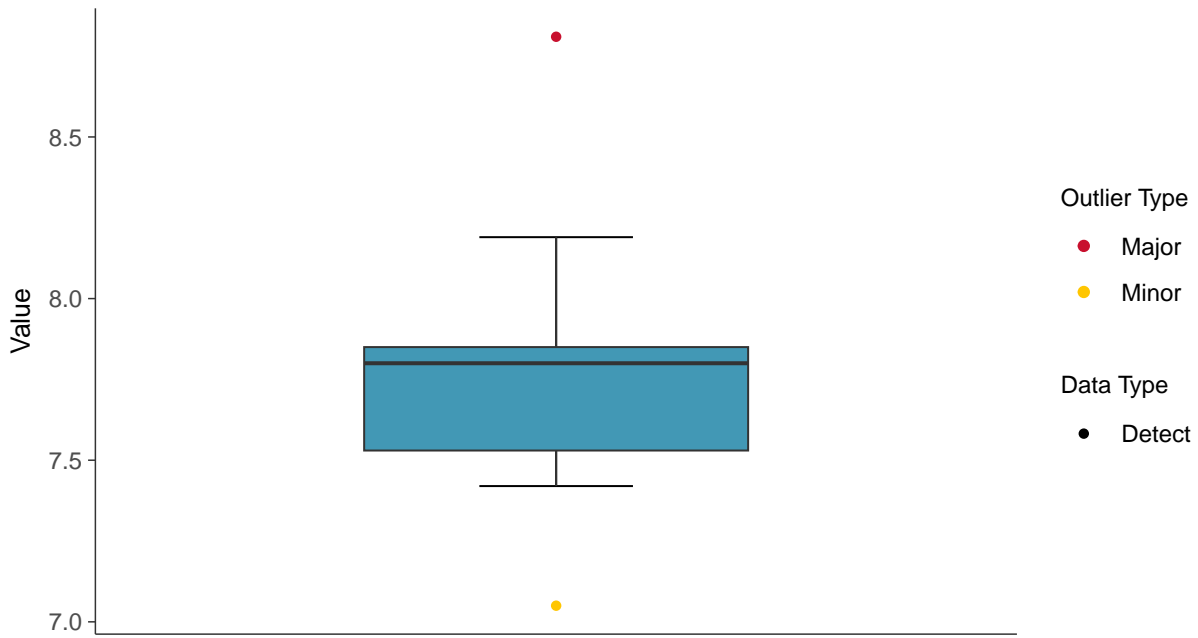
ID: 3_20_3_4_120





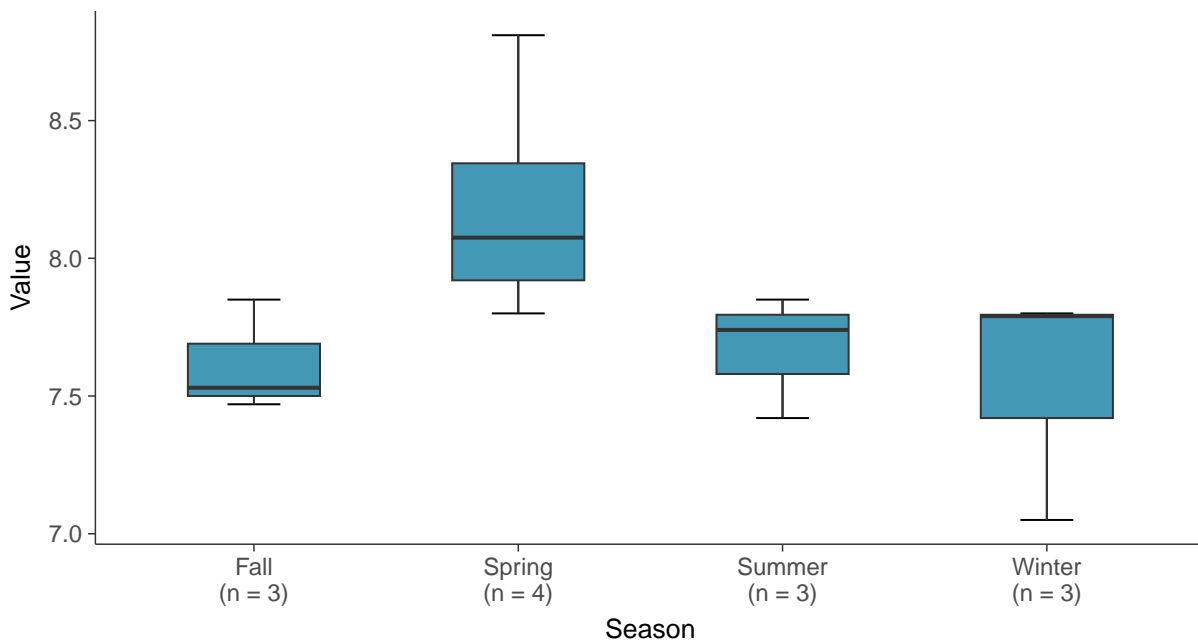
Boxplot

pH (field), MW-10 (su)



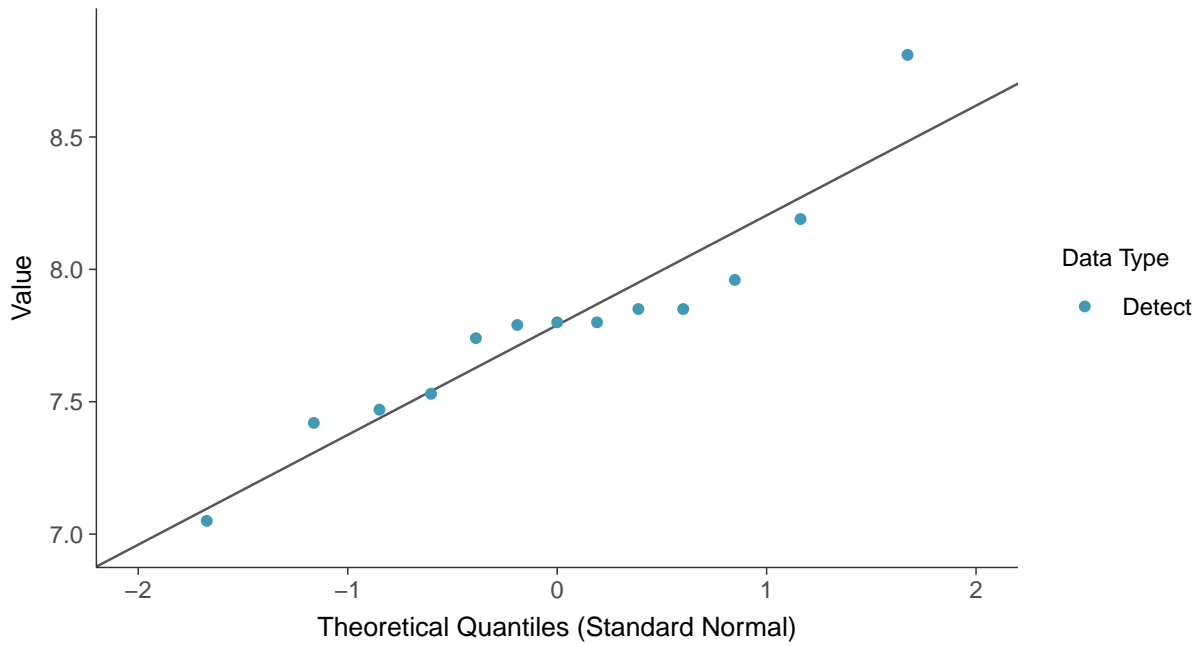
Boxplot by Season

pH (field), MW-10 (su)

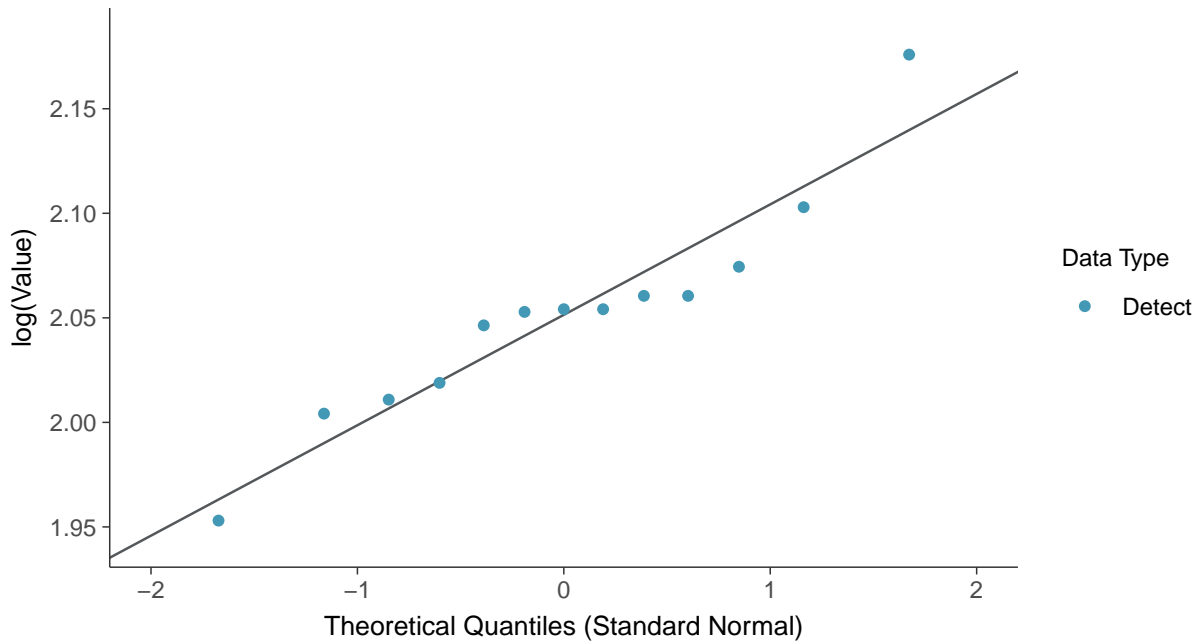




Normal Q-Q plot
pH (field), MW-10 (su)



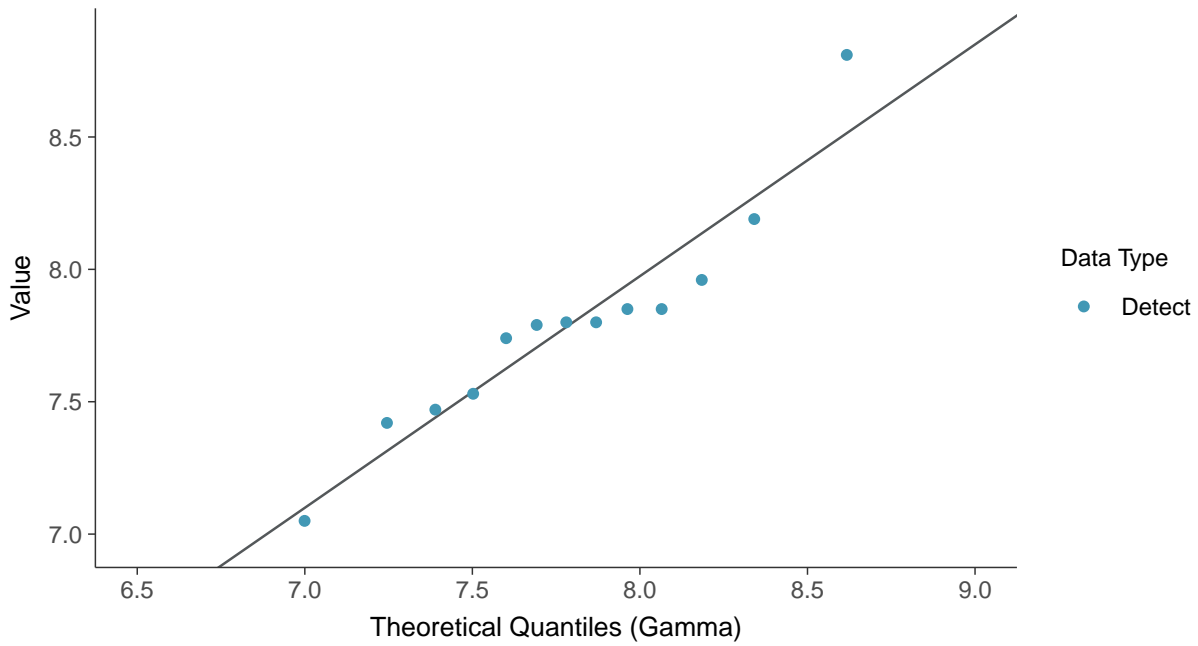
Lognormal Q-Q plot
pH (field), MW-10 (su)





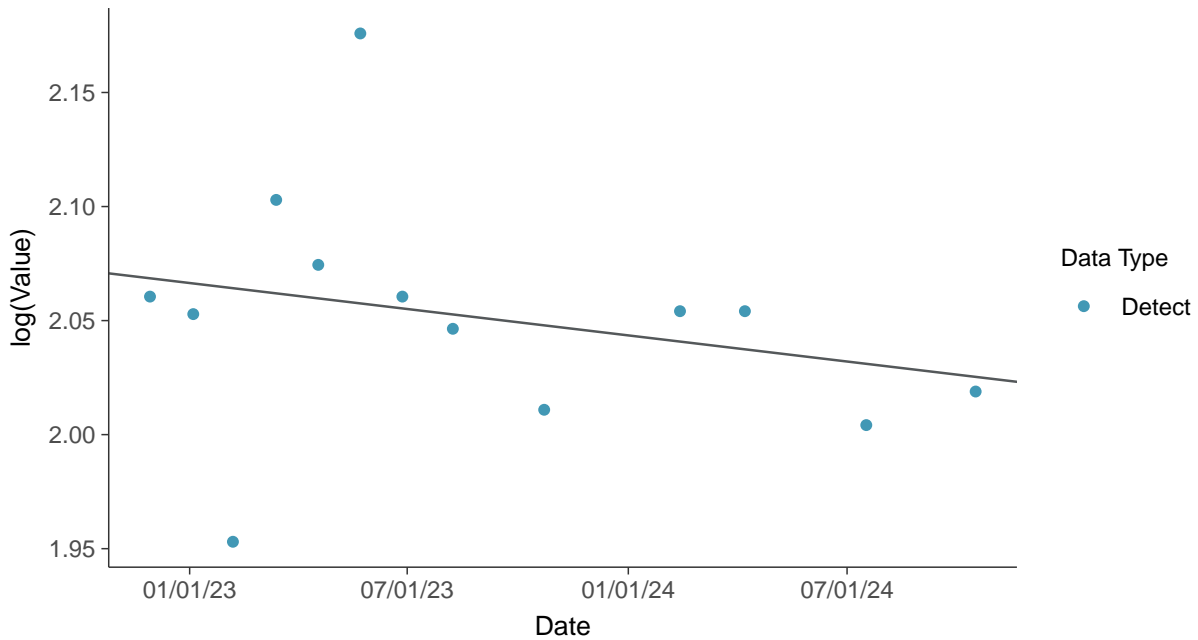
Gamma Q-Q plot

pH (field), MW-10 (su)



Trend Regression: Lognormal MLE

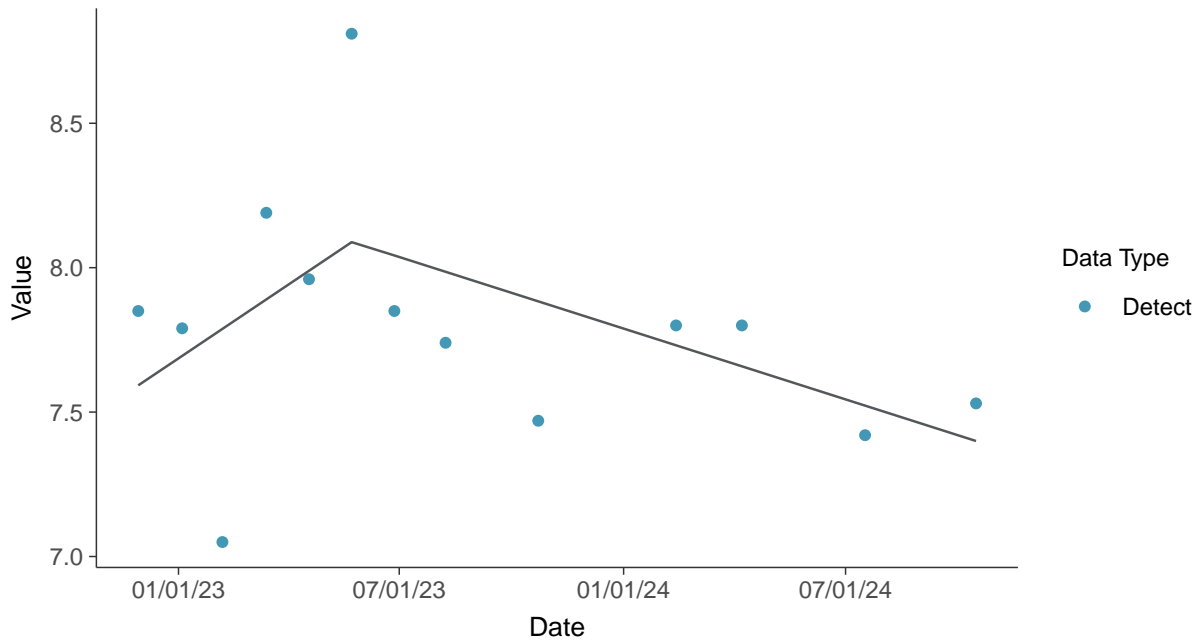
pH (field), MW-10 (su)





Trend Regression: Piecewise Linear-Linear

pH (field), MW-10 (su)



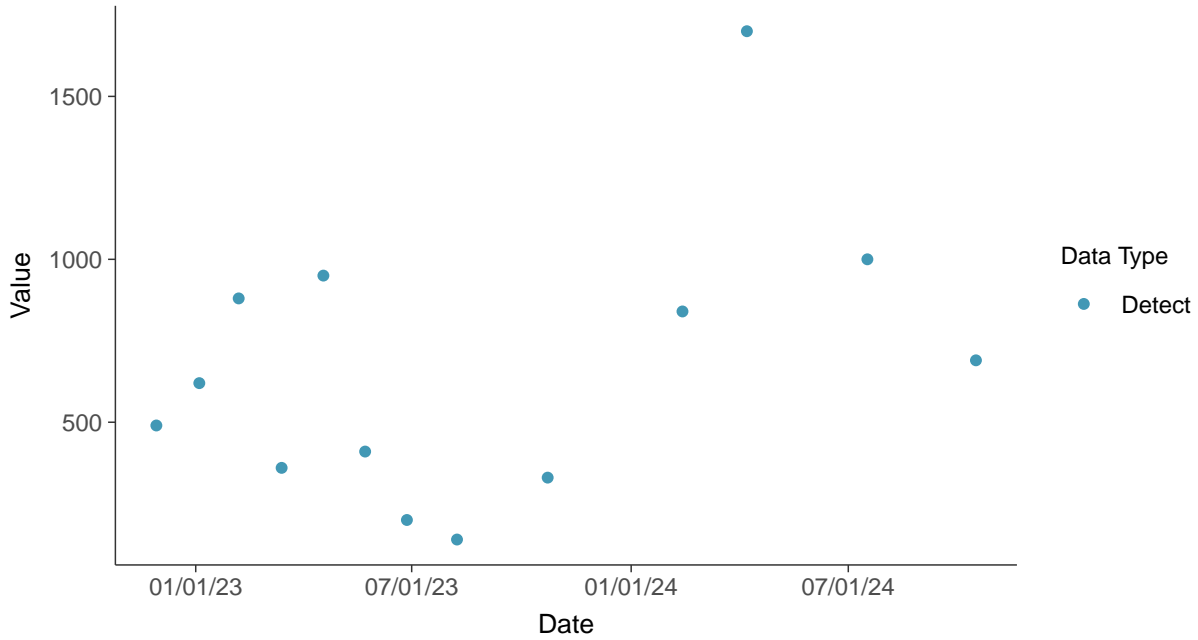


Appendix III: Sulfate (as SO₄), MW-10

ID: 3_20_3_4_124

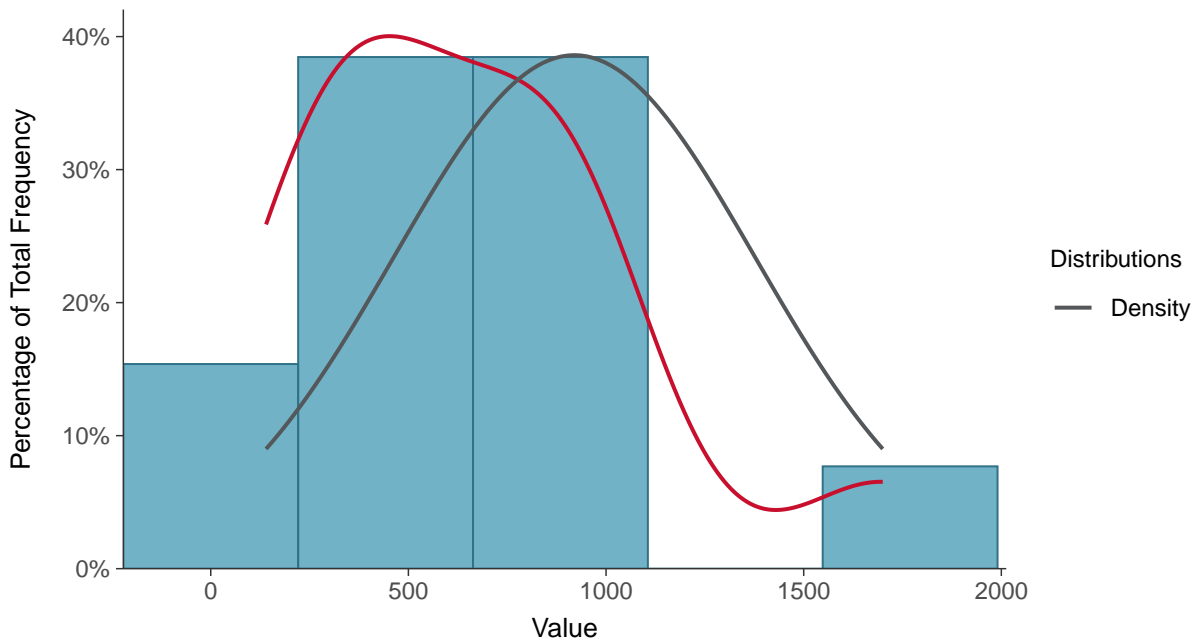
Scatter Plot

Sulfate (as SO₄), MW-10 (mg/L)



Histogram

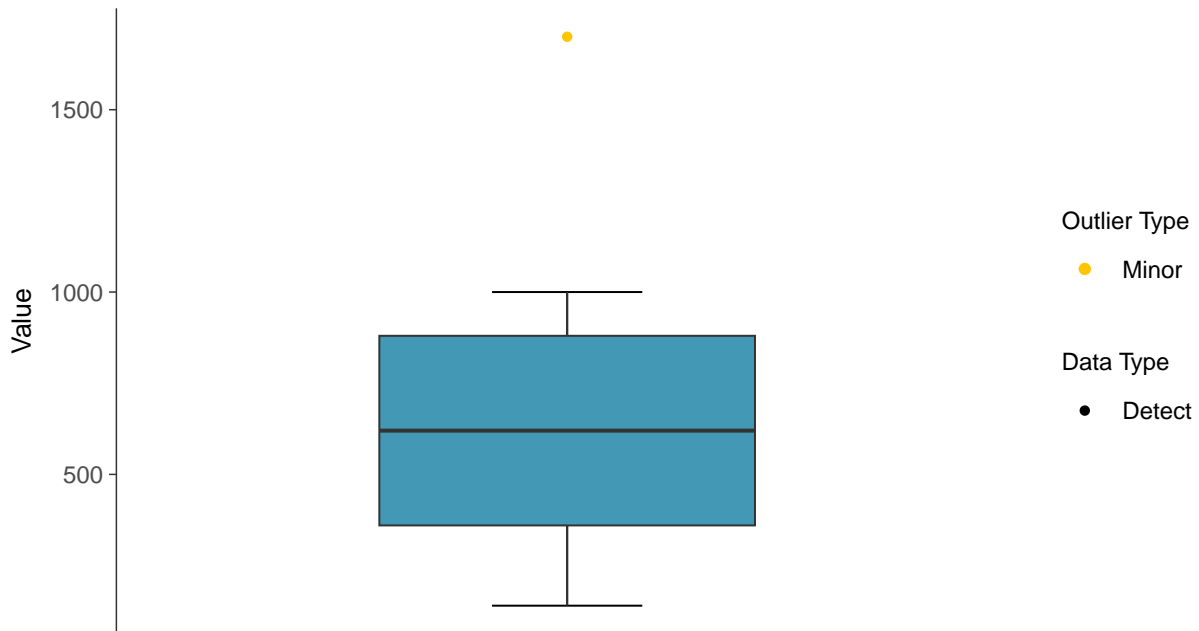
Sulfate (as SO₄), MW-10 (mg/L)





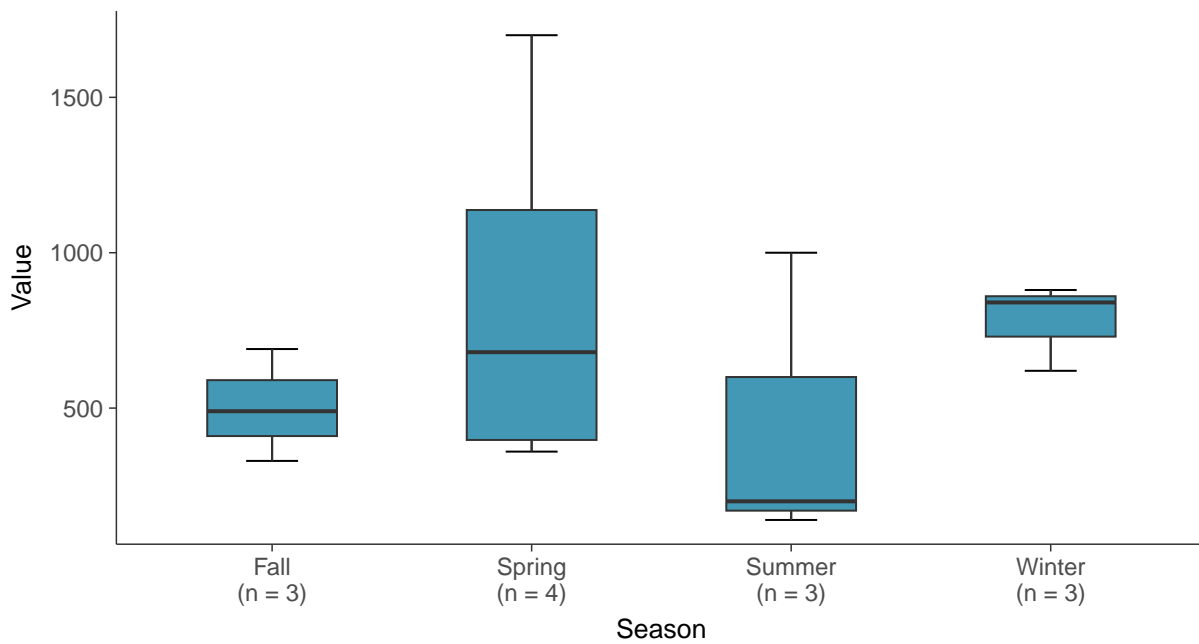
Boxplot

Sulfate (as SO₄), MW-10 (mg/L)



Boxplot by Season

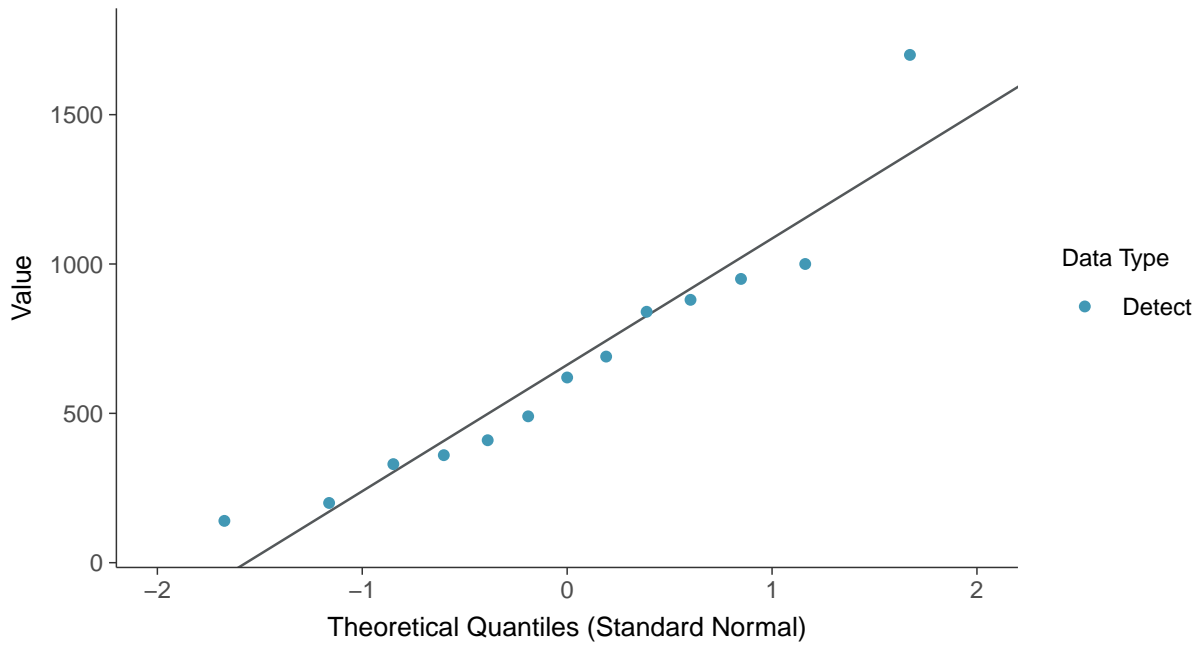
Sulfate (as SO₄), MW-10 (mg/L)





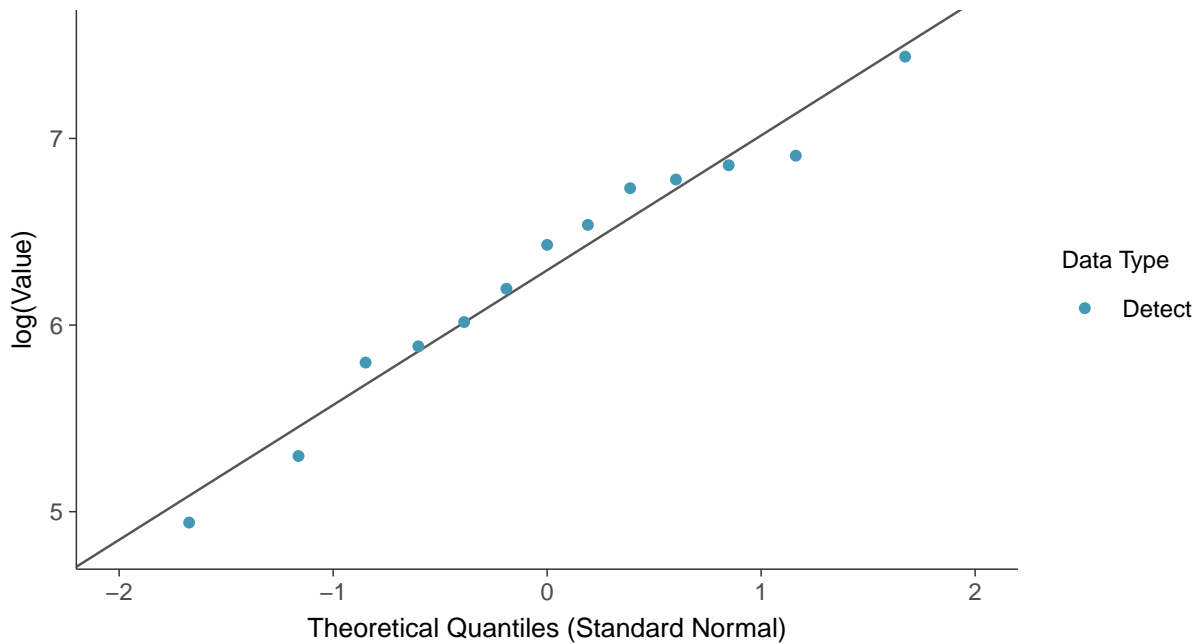
Normal Q-Q plot

Sulfate (as SO₄), MW-10 (mg/L)



Lognormal Q-Q plot

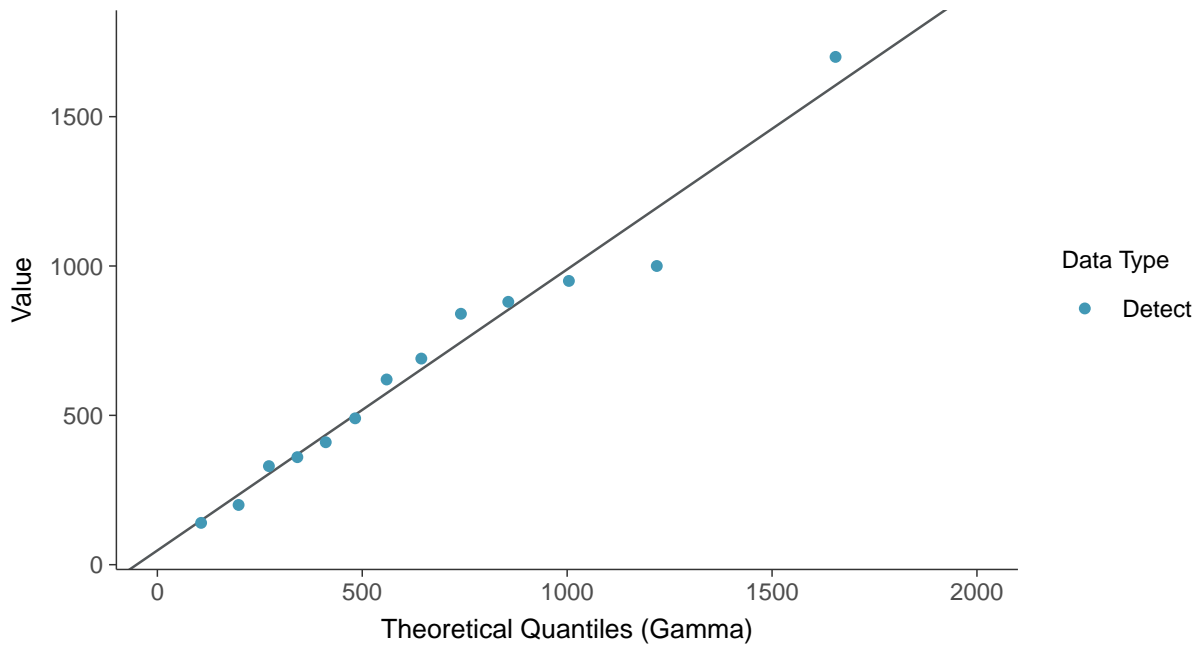
Sulfate (as SO₄), MW-10 (mg/L)





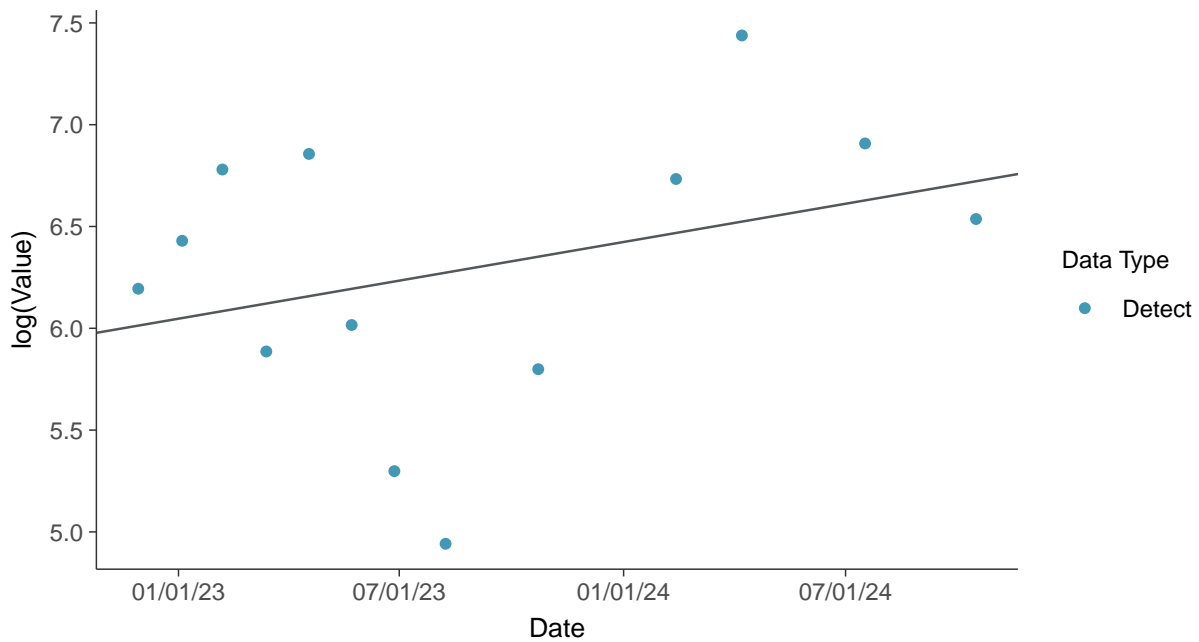
Gamma Q-Q plot

Sulfate (as SO₄), MW-10 (mg/L)



Trend Regression: Lognormal MLE

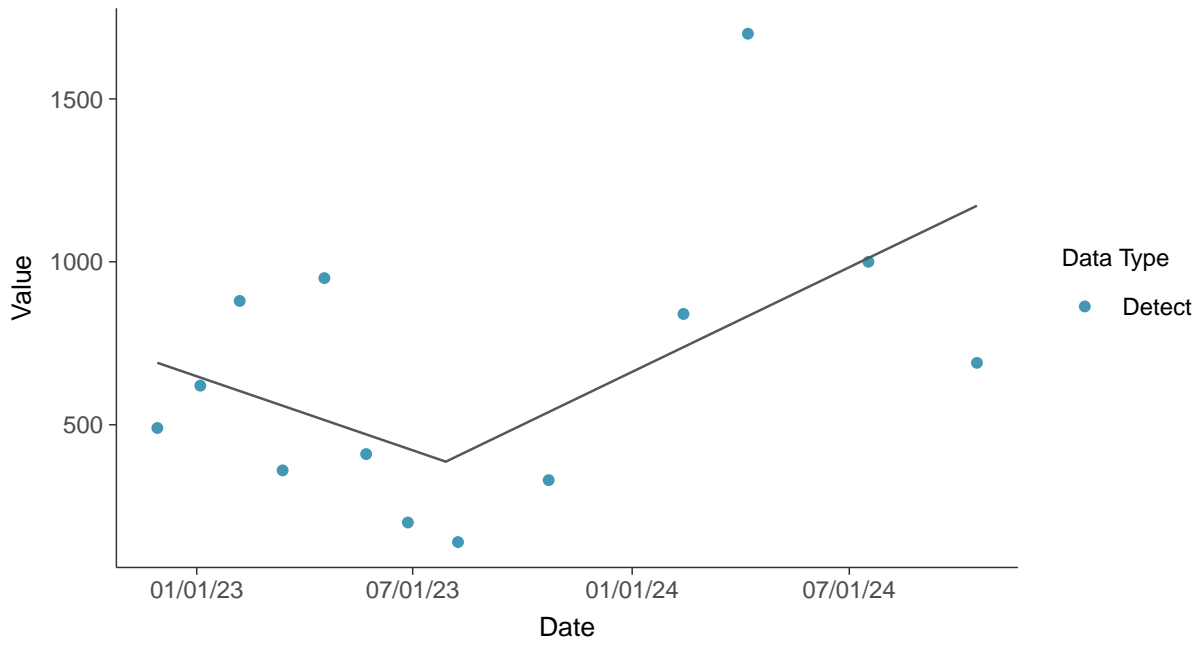
Sulfate (as SO₄), MW-10 (mg/L)





Trend Regression: Piecewise Linear-Linear

Sulfate (as SO₄), MW-10 (mg/L)



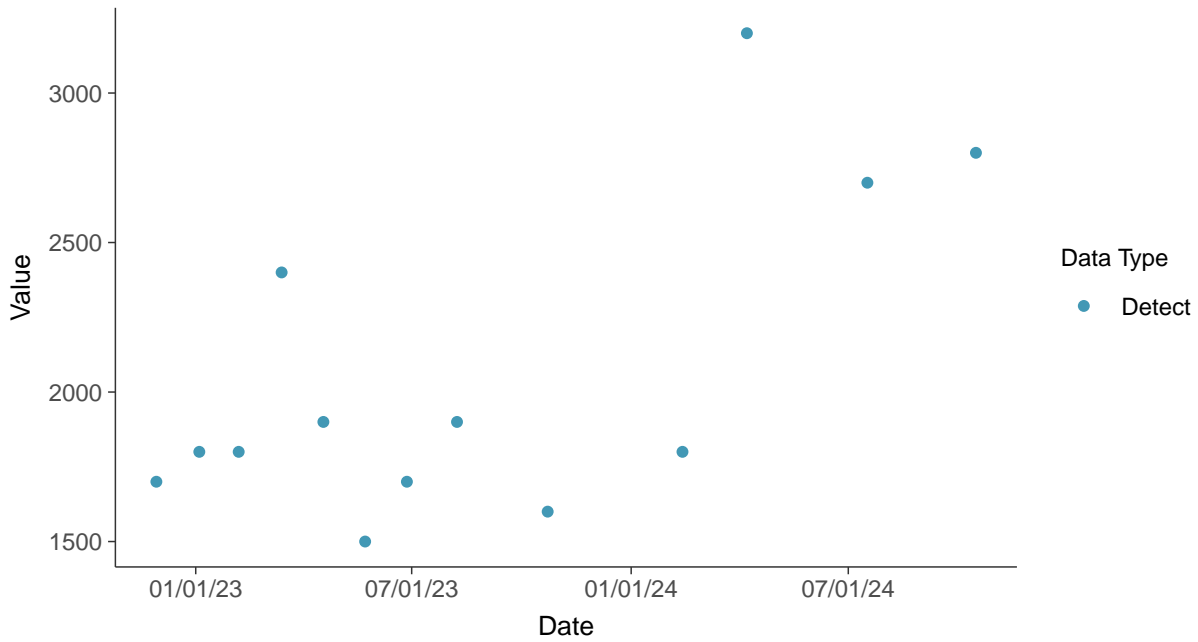


Appendix III: Total Dissolved Solids, MW-10

ID: 3_20_3_4_126

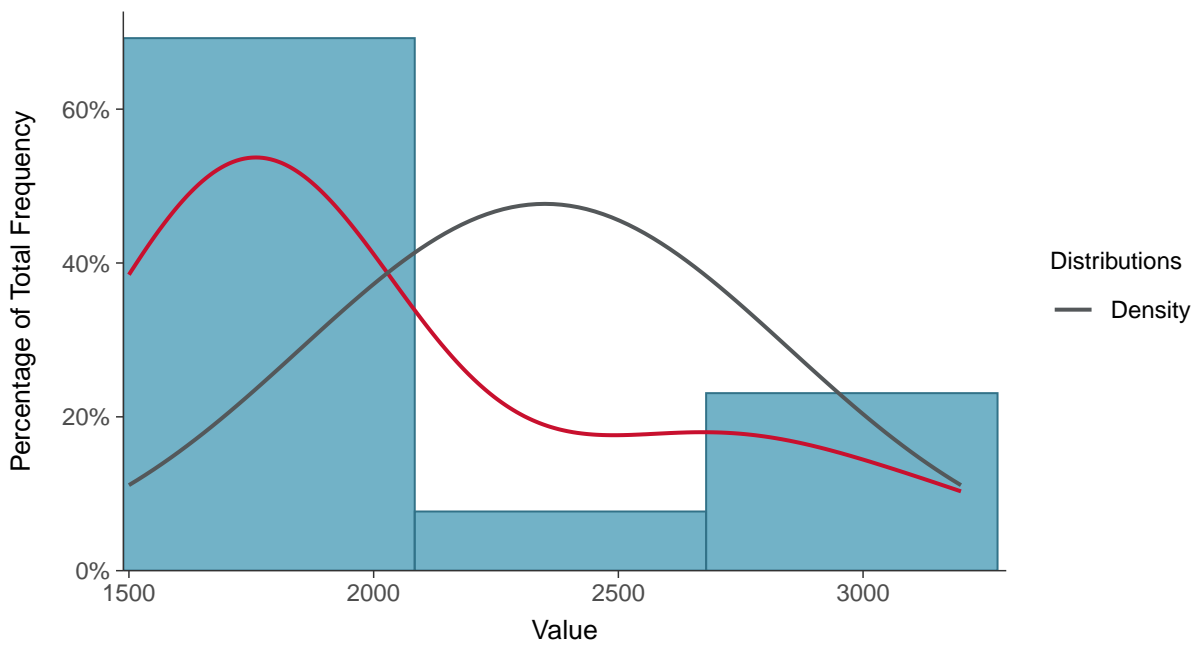
Scatter Plot

Total Dissolved Solids, MW-10 (mg/L)



Histogram

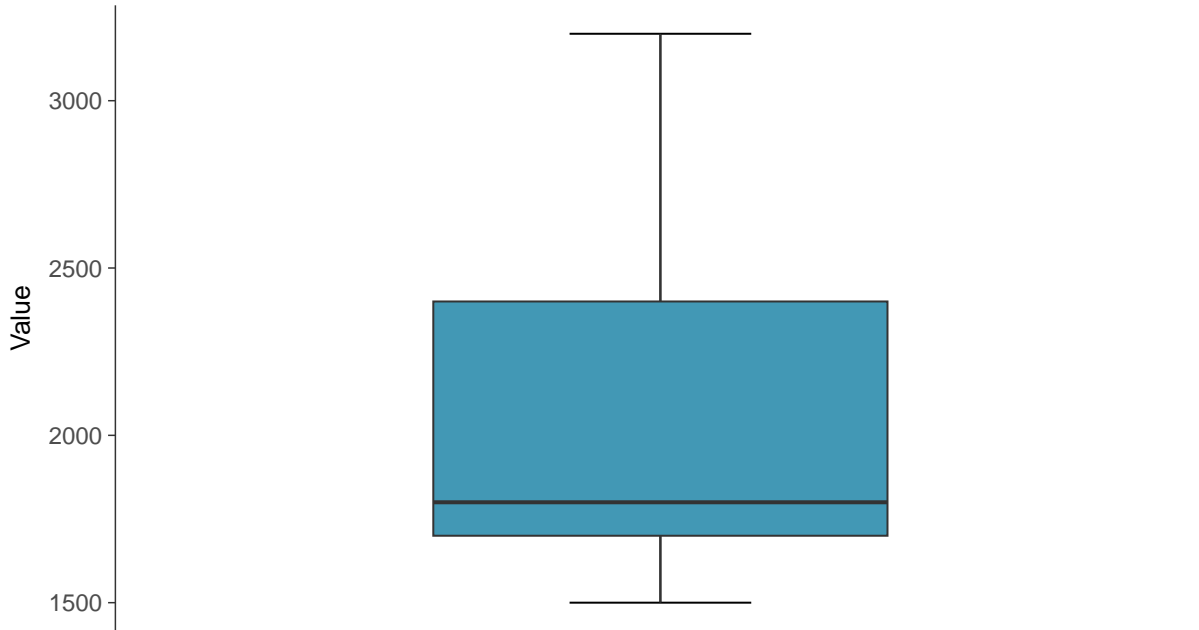
Total Dissolved Solids, MW-10 (mg/L)





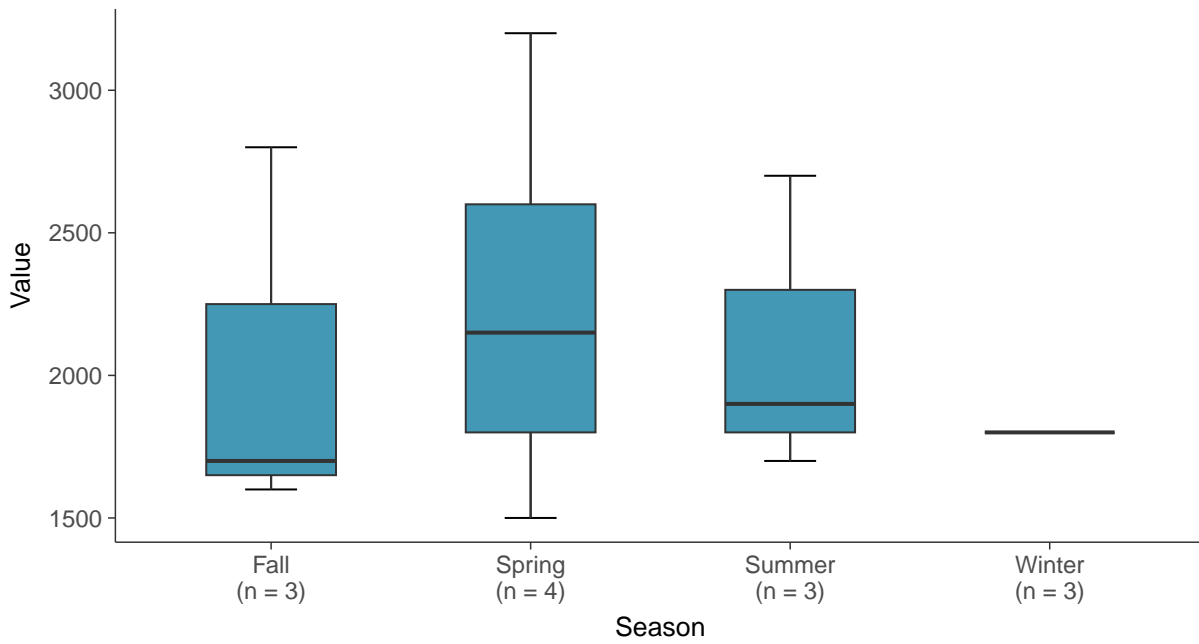
Boxplot

Total Dissolved Solids, MW-10 (mg/L)



Boxplot by Season

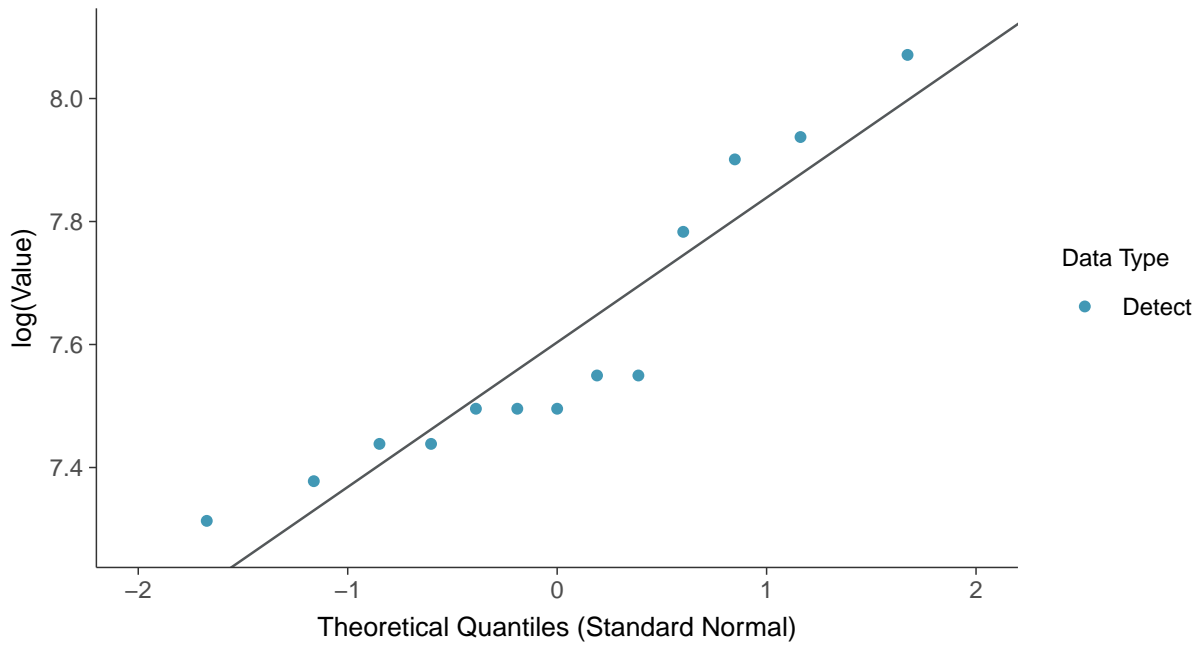
Total Dissolved Solids, MW-10 (mg/L)





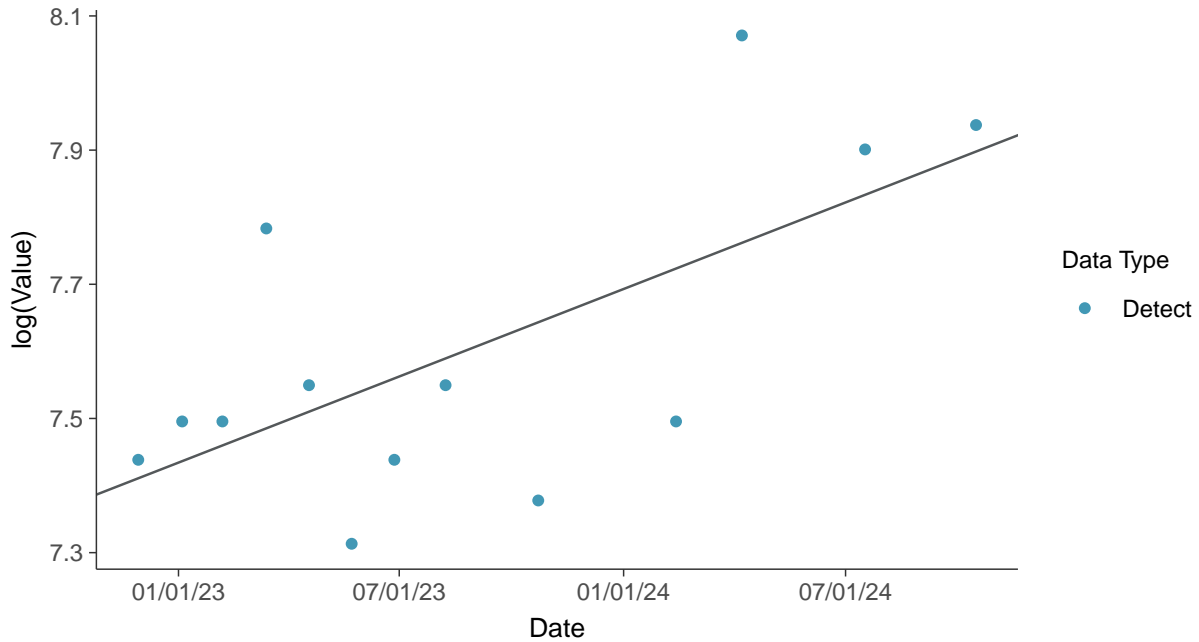
Lognormal Q-Q plot

Total Dissolved Solids, MW-10 (mg/L)



Trend Regression: Lognormal MLE

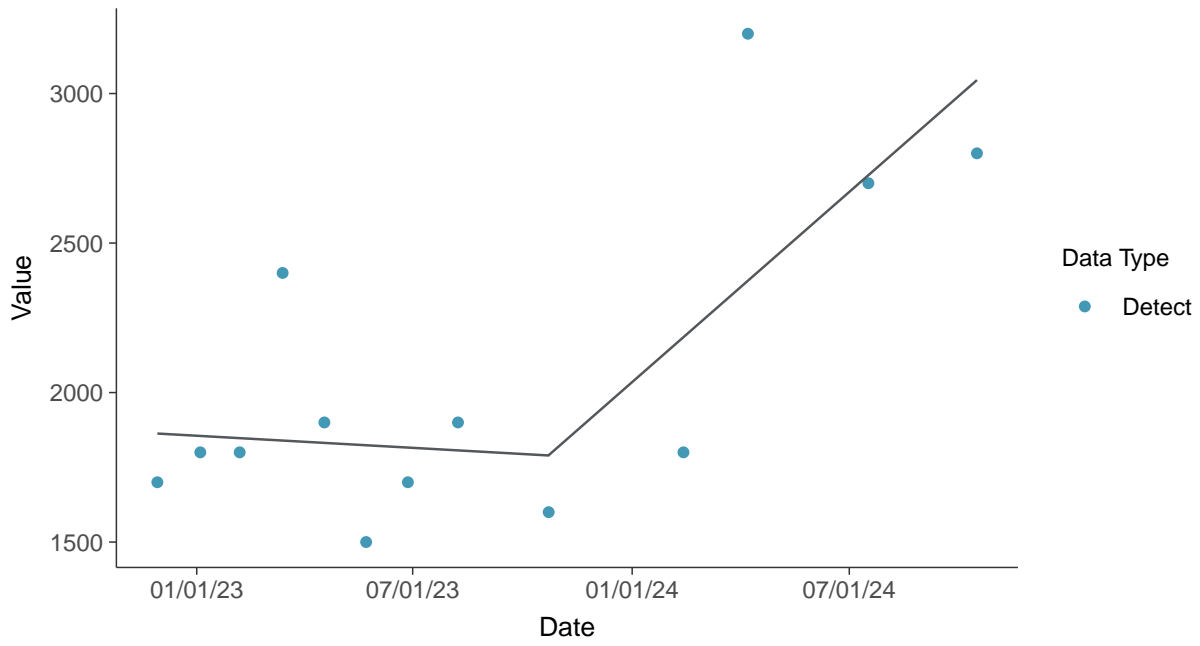
Total Dissolved Solids, MW-10 (mg/L)





Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-10 (mg/L)



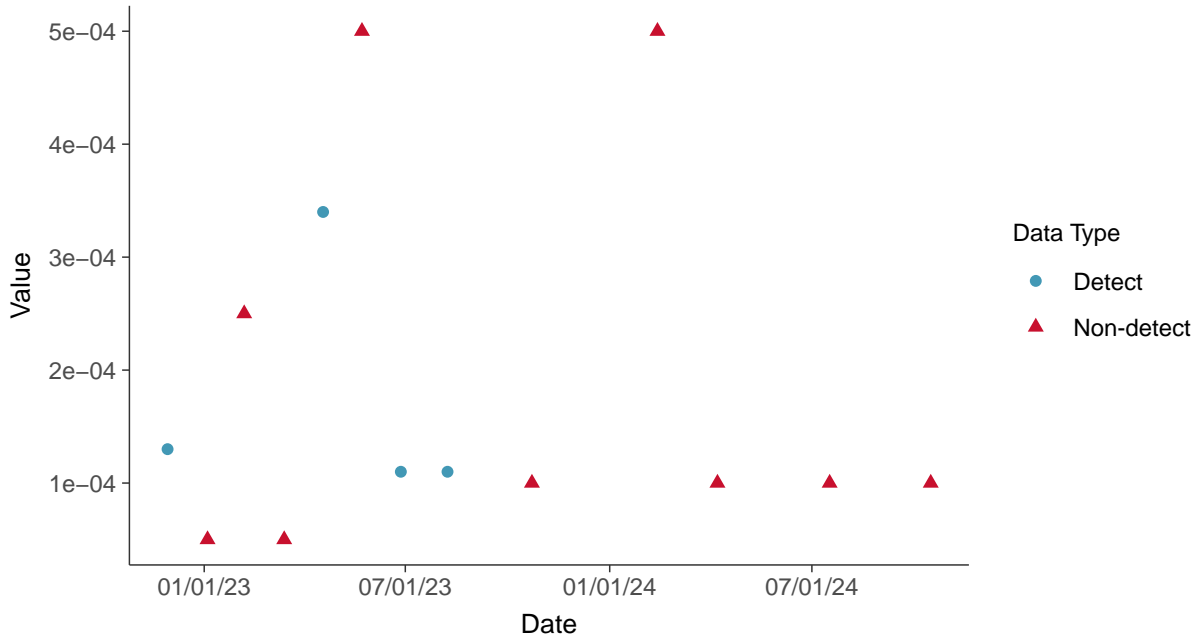


Appendix IV: Antimony, MW-10

ID: 3_20_3_5_101

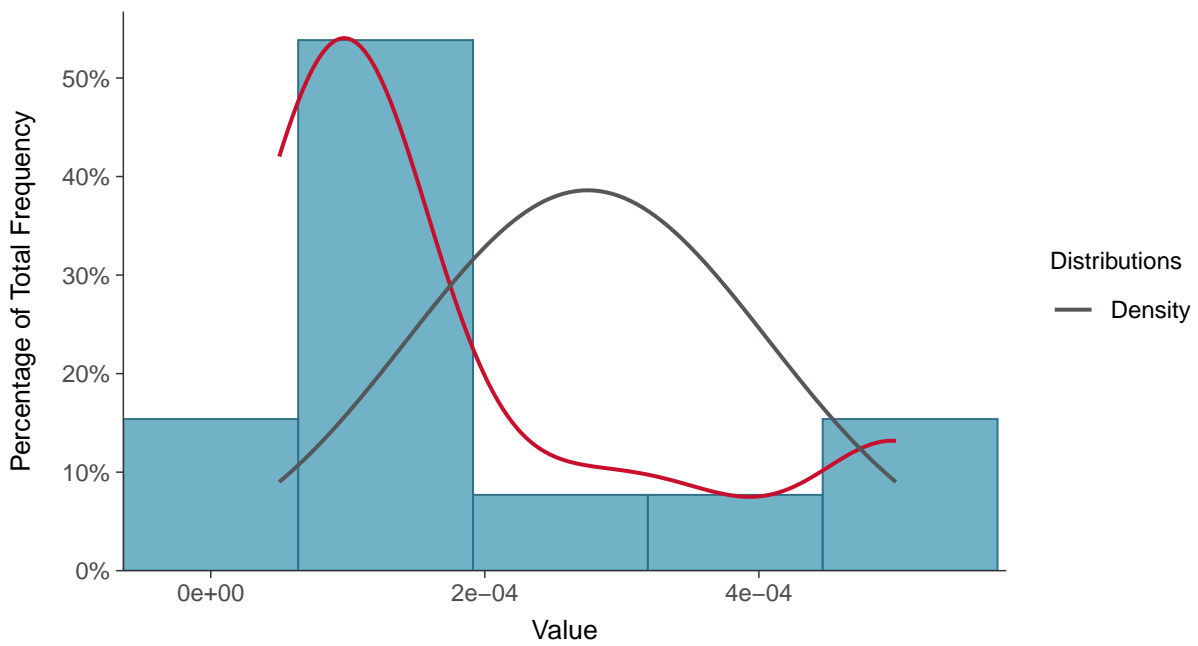
Scatter Plot

Antimony, MW-10 (mg/L)



Histogram

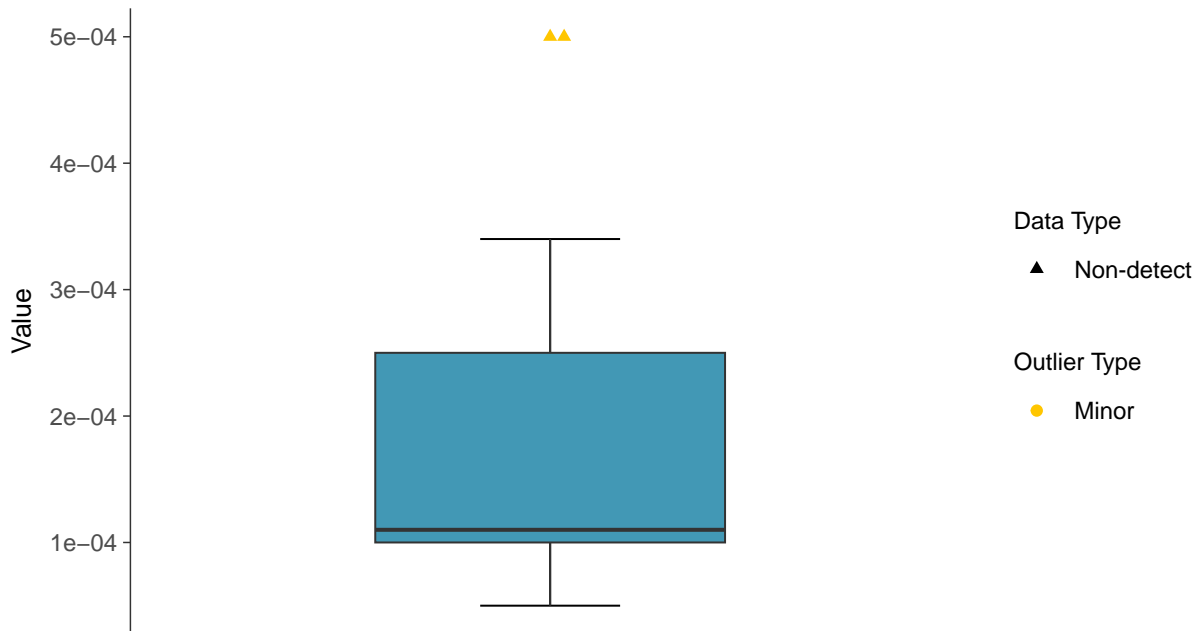
Antimony, MW-10 (mg/L)





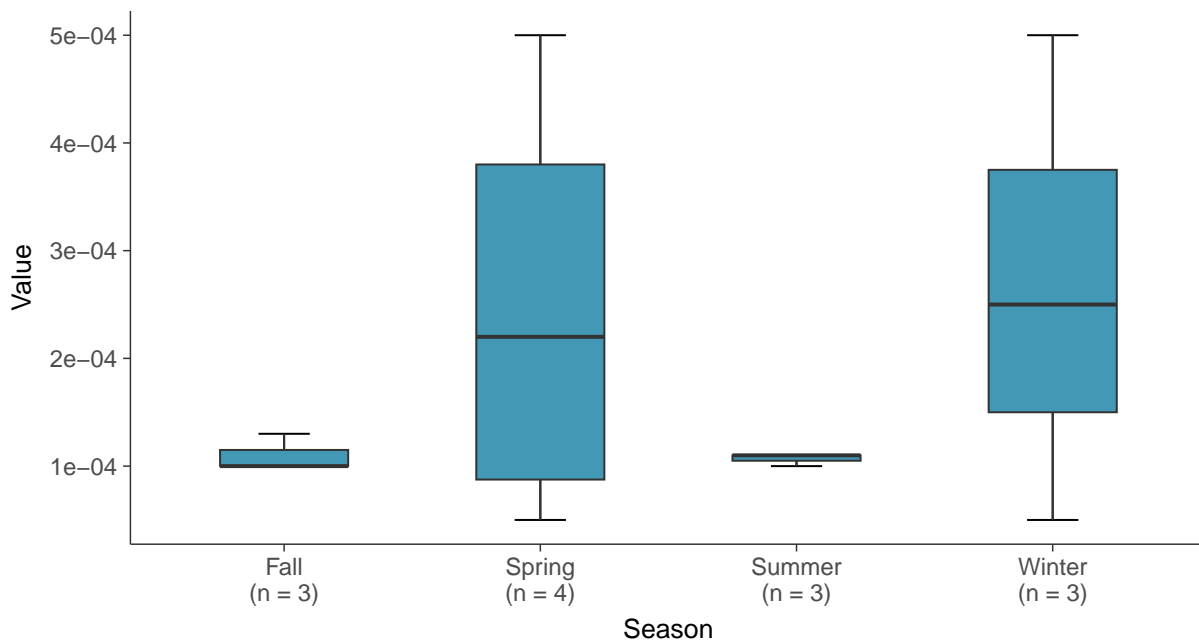
Boxplot

Antimony, MW-10 (mg/L)



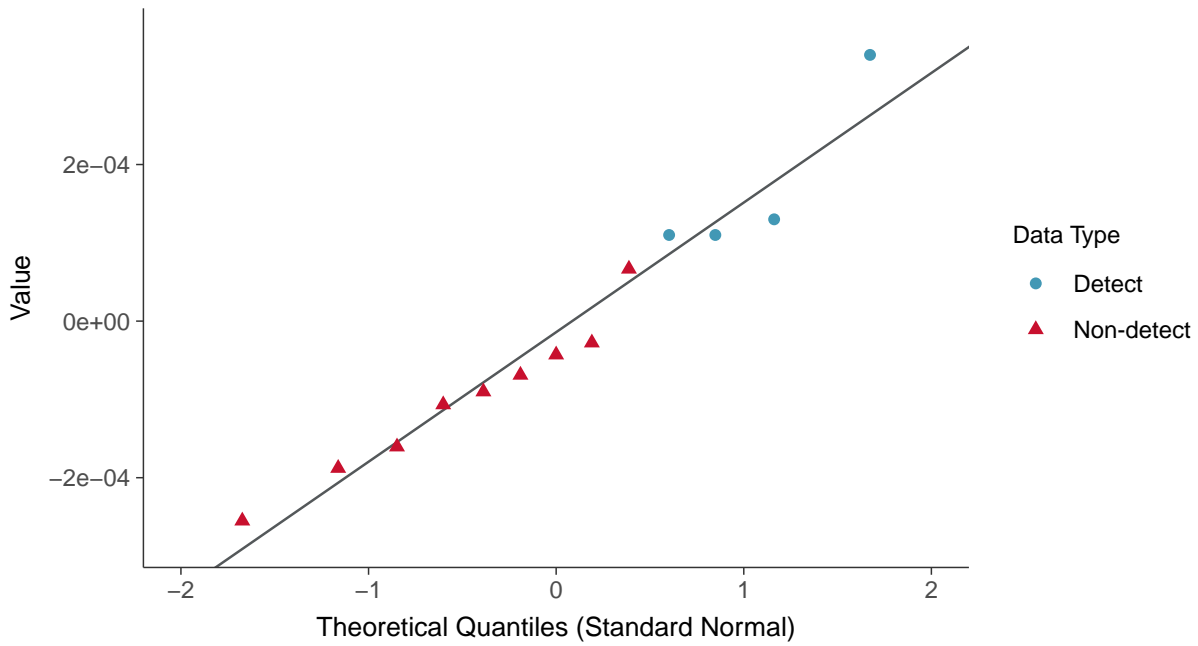
Boxplot by Season

Antimony, MW-10 (mg/L)

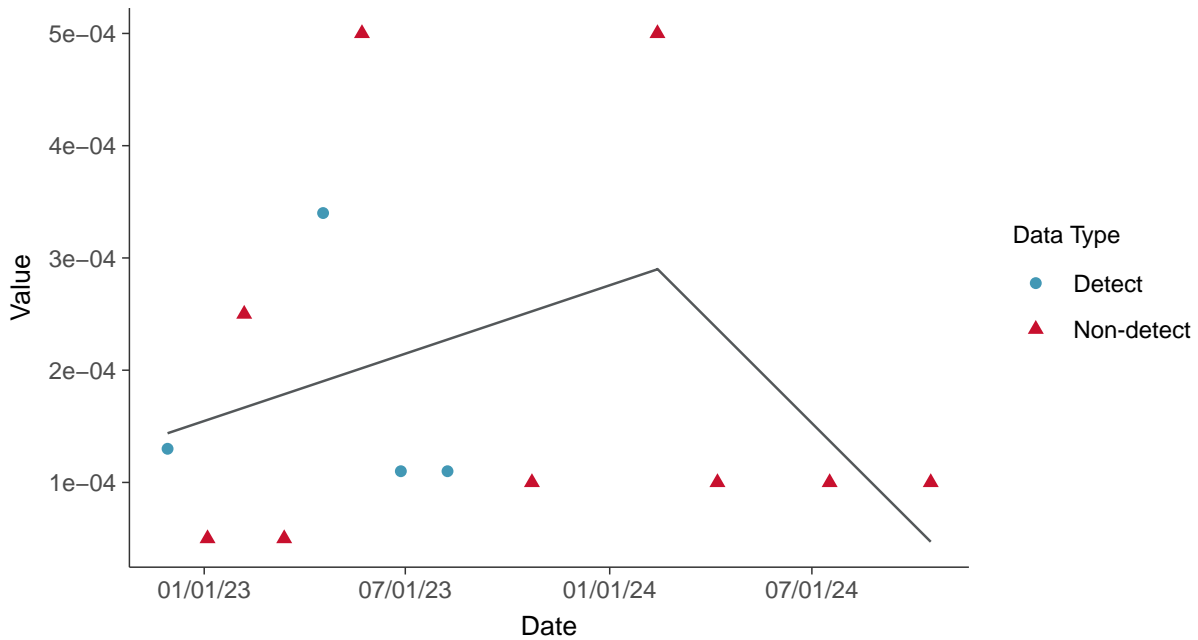




Normal Q-Q plot using ROS Imputed Estimates
Antimony, MW-10 (mg/L)



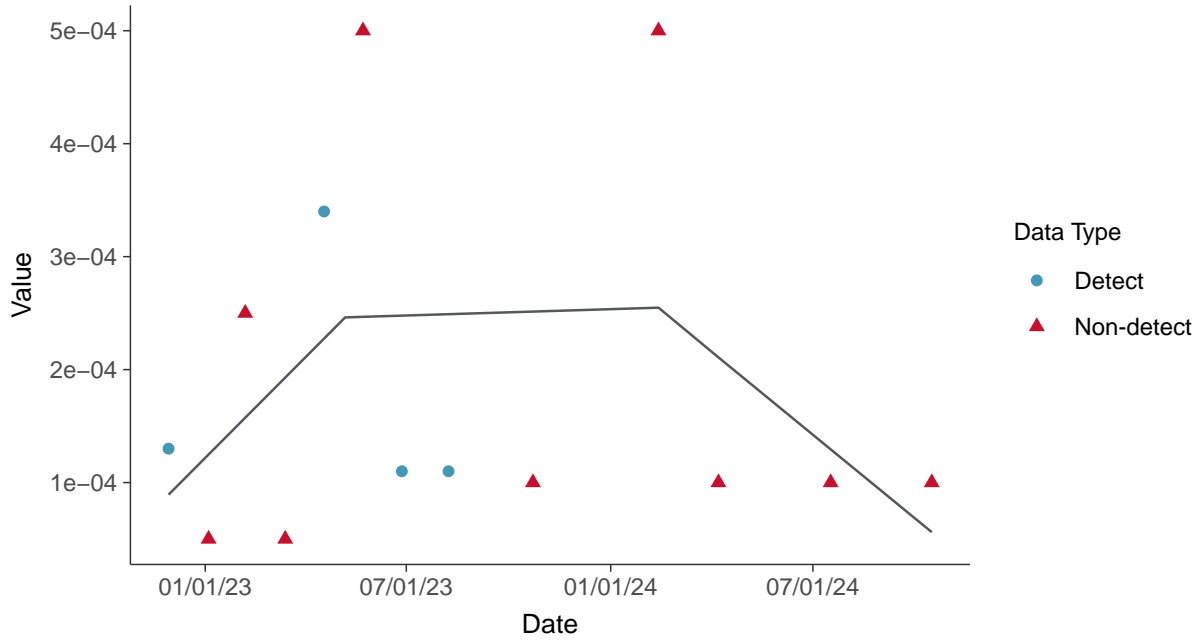
Trend Regression: Piecewise Linear-Linear
Antimony, MW-10 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

Antimony, MW-10 (mg/L)



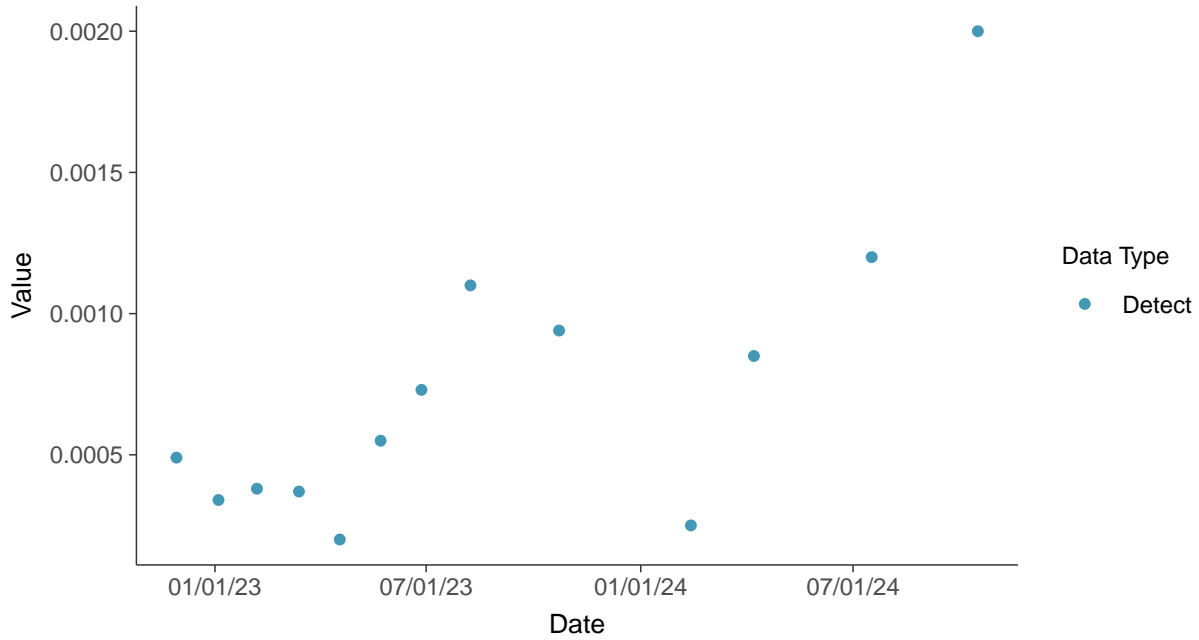


Appendix IV: Arsenic, MW-10

ID: 3_20_3_5_102

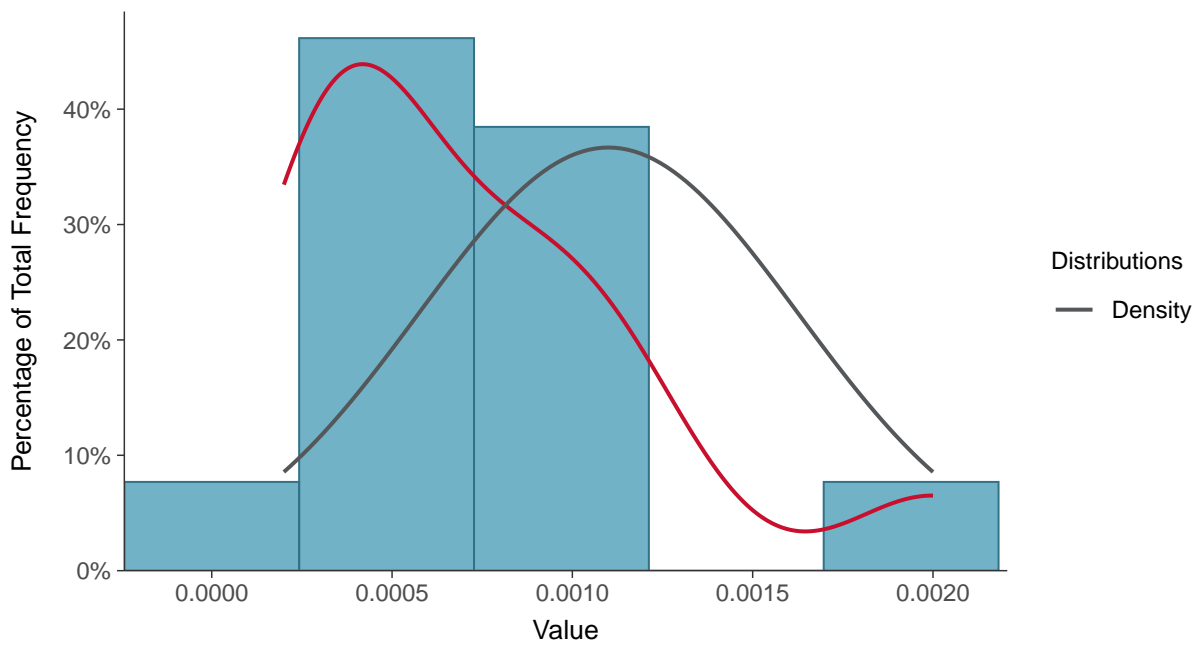
Scatter Plot

Arsenic, MW-10 (mg/L)



Histogram

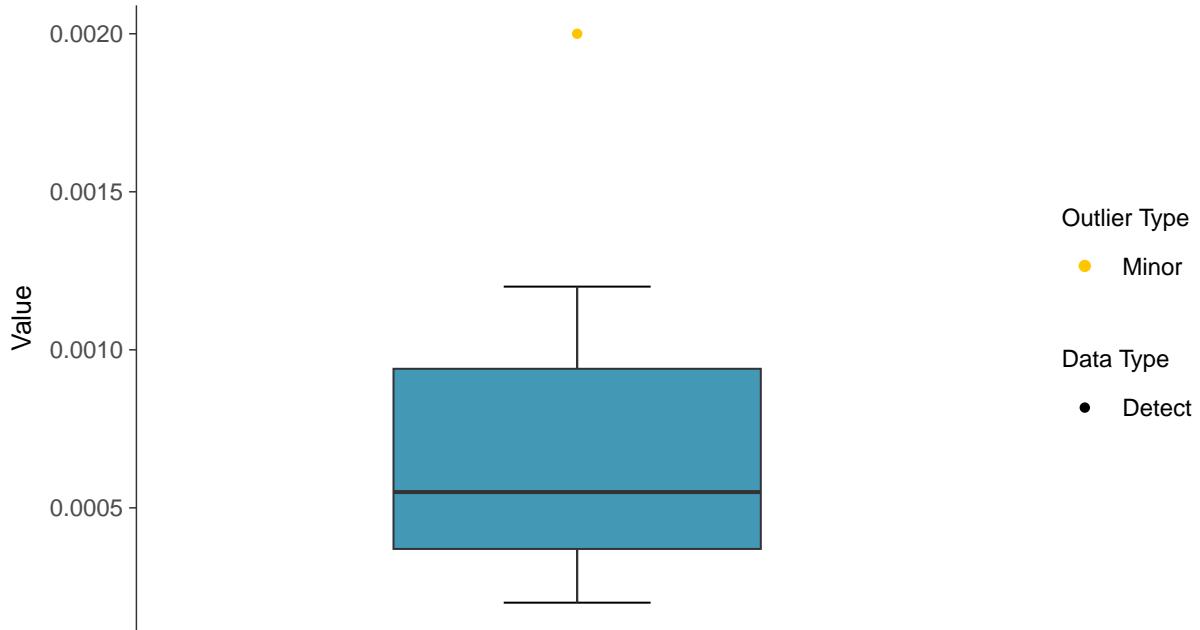
Arsenic, MW-10 (mg/L)





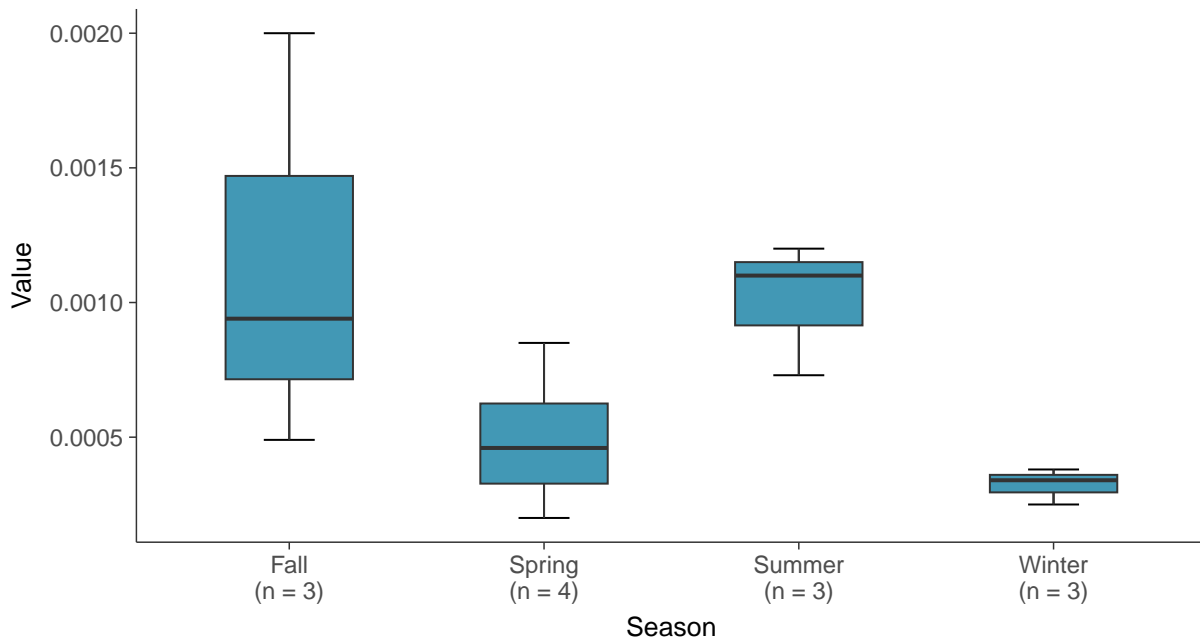
Boxplot

Arsenic, MW-10 (mg/L)



Boxplot by Season

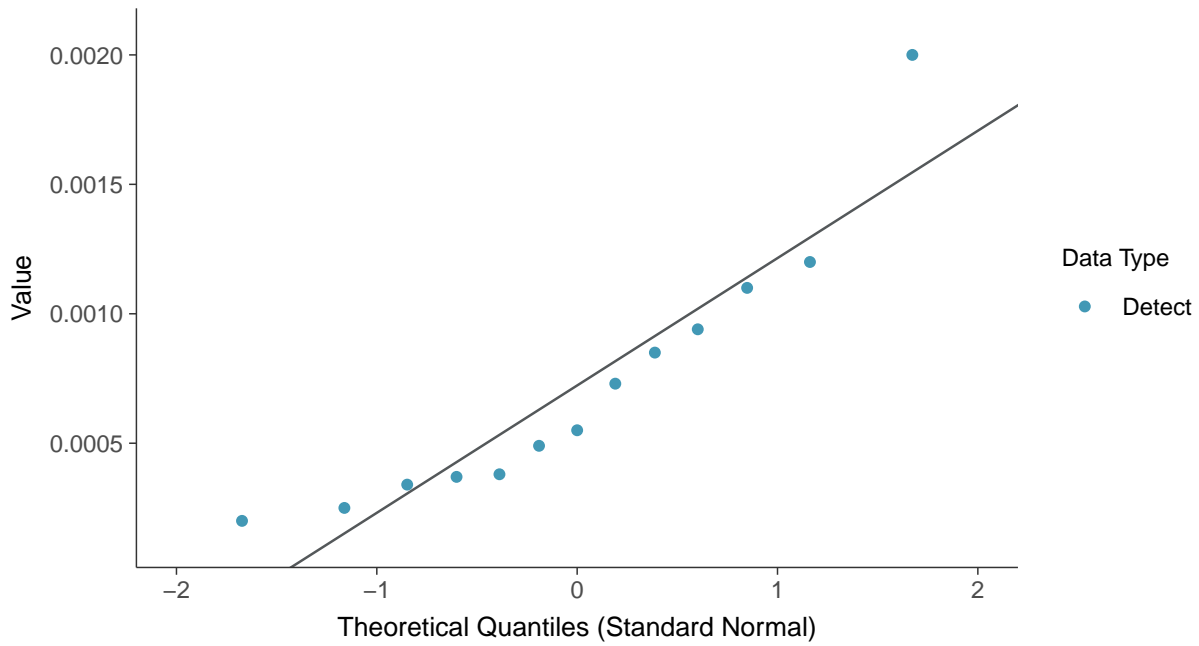
Arsenic, MW-10 (mg/L)





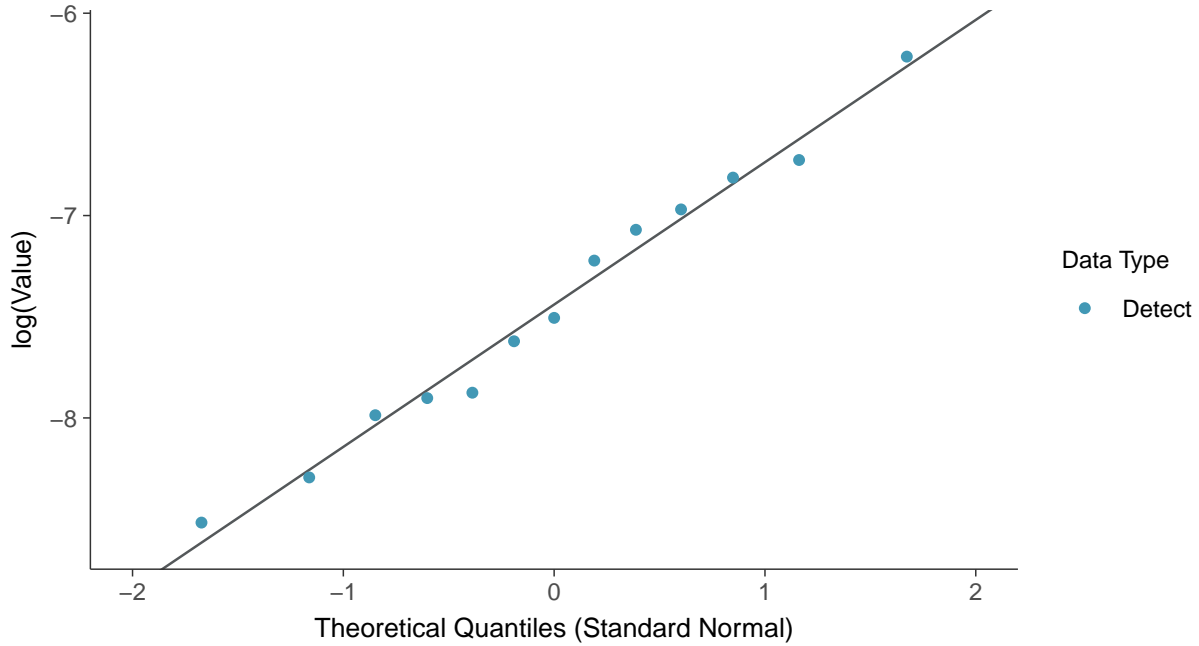
Normal Q-Q plot

Arsenic, MW-10 (mg/L)



Lognormal Q-Q plot

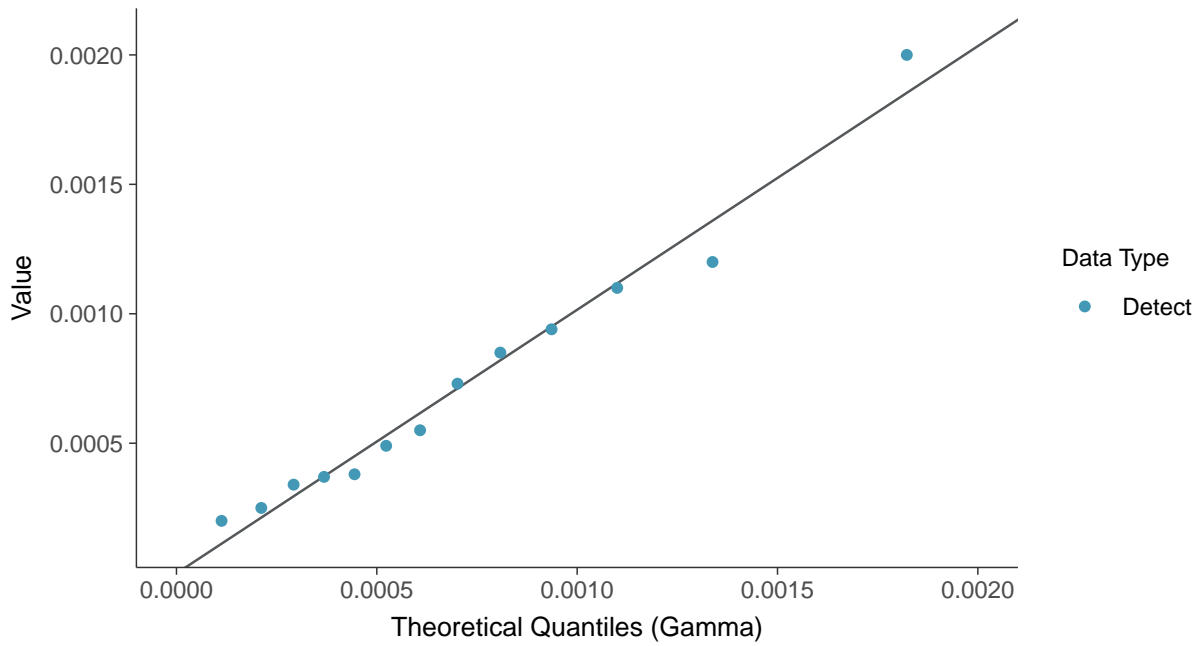
Arsenic, MW-10 (mg/L)





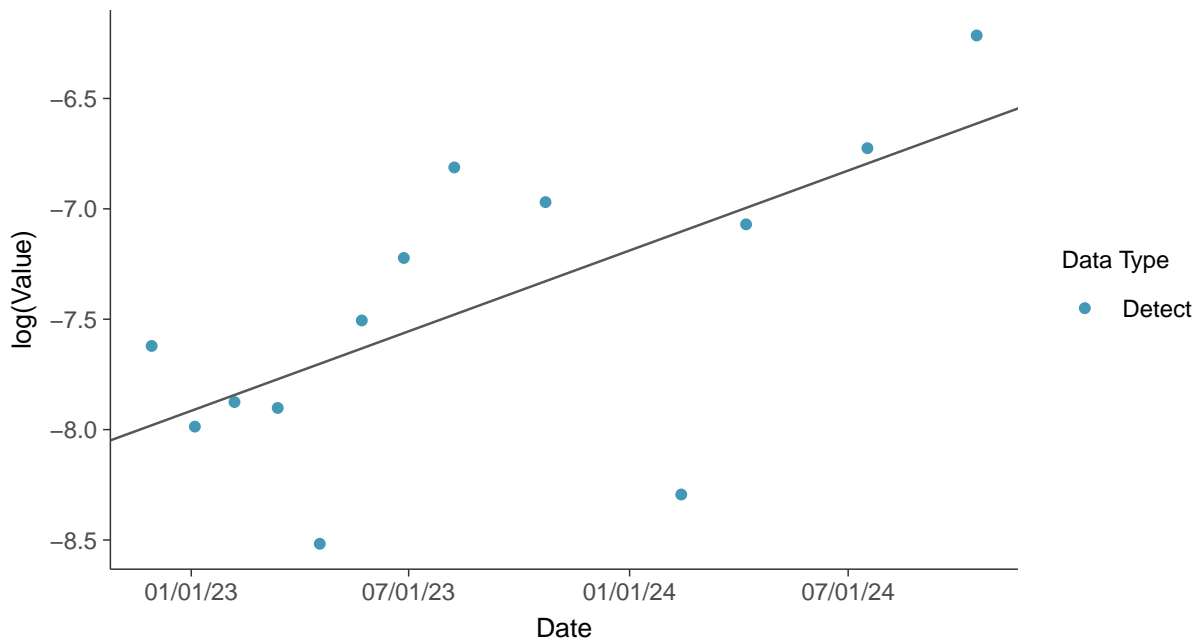
Gamma Q-Q plot

Arsenic, MW-10 (mg/L)



Trend Regression: Lognormal MLE

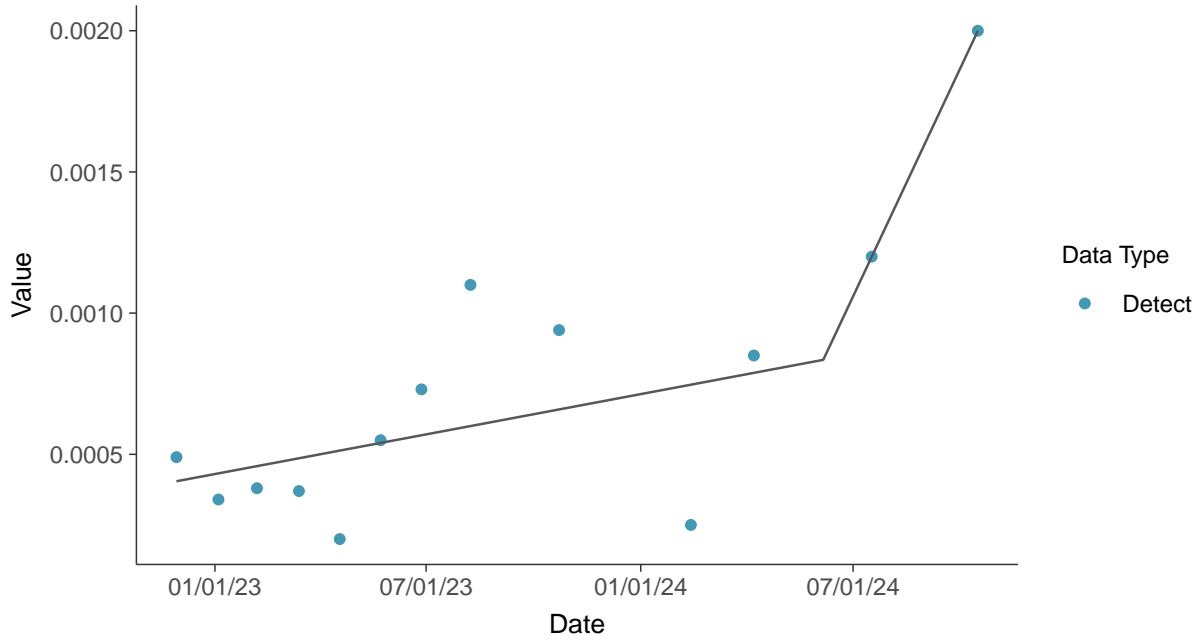
Arsenic, MW-10 (mg/L)





Trend Regression: Piecewise Linear-Linear

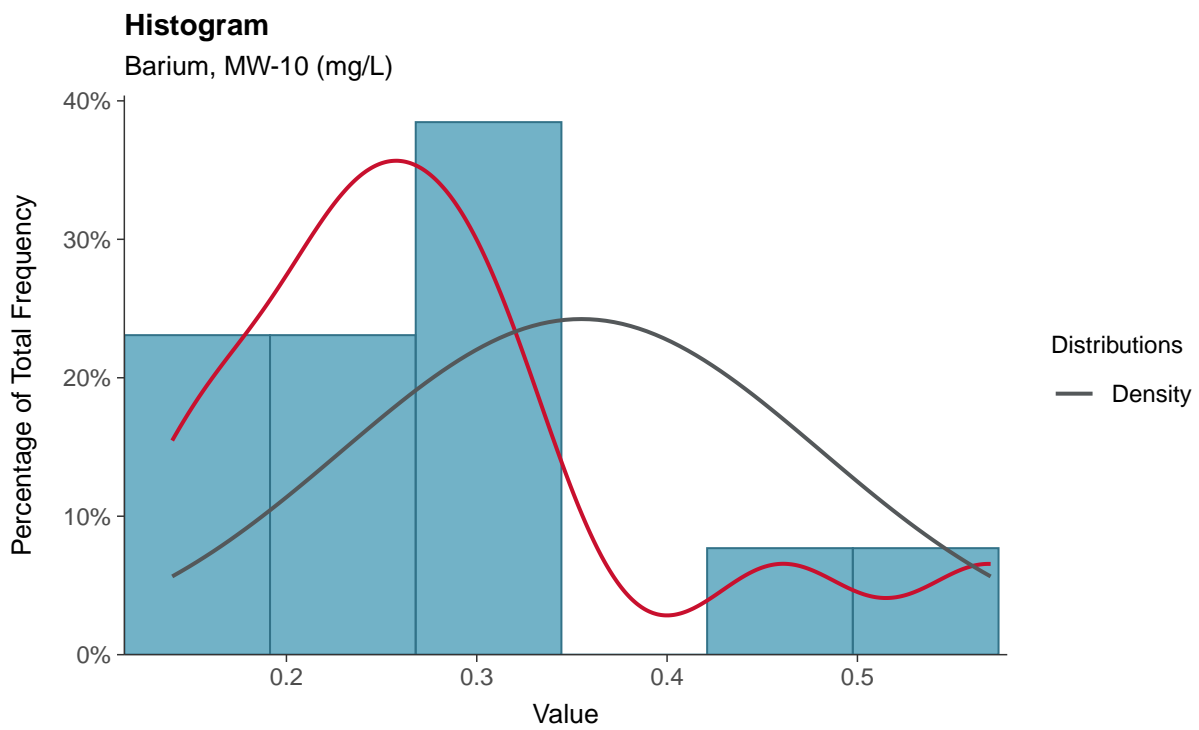
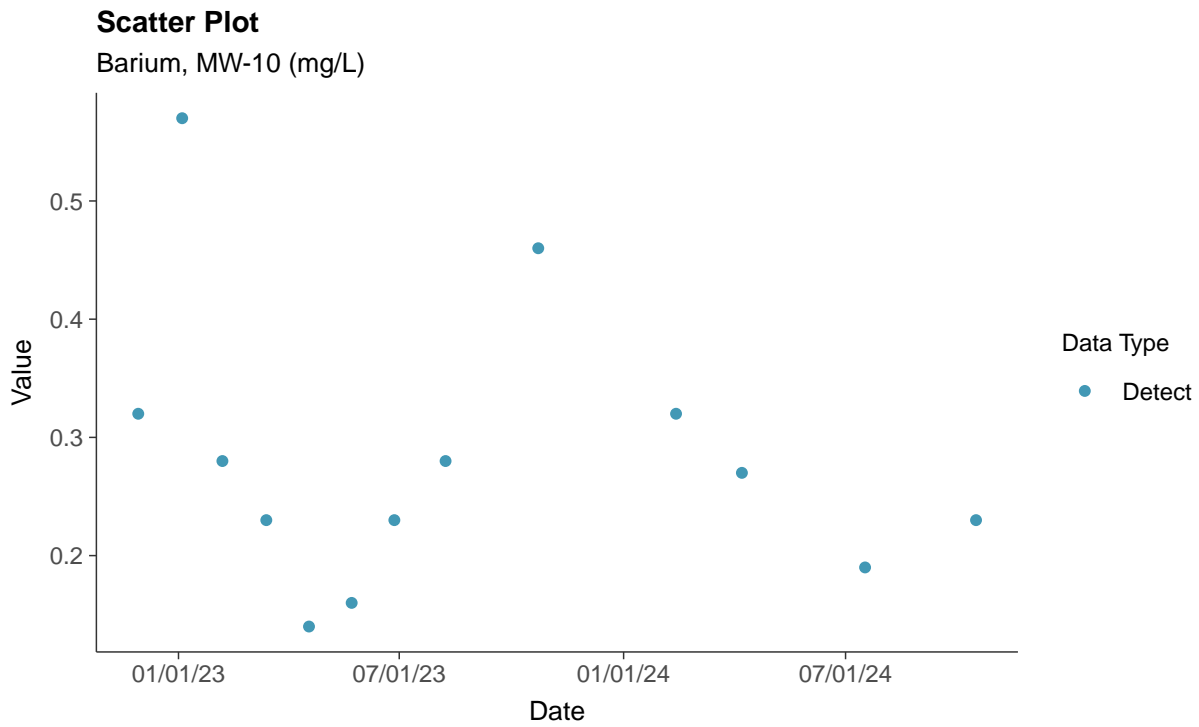
Arsenic, MW-10 (mg/L)





Appendix IV: Barium, MW-10

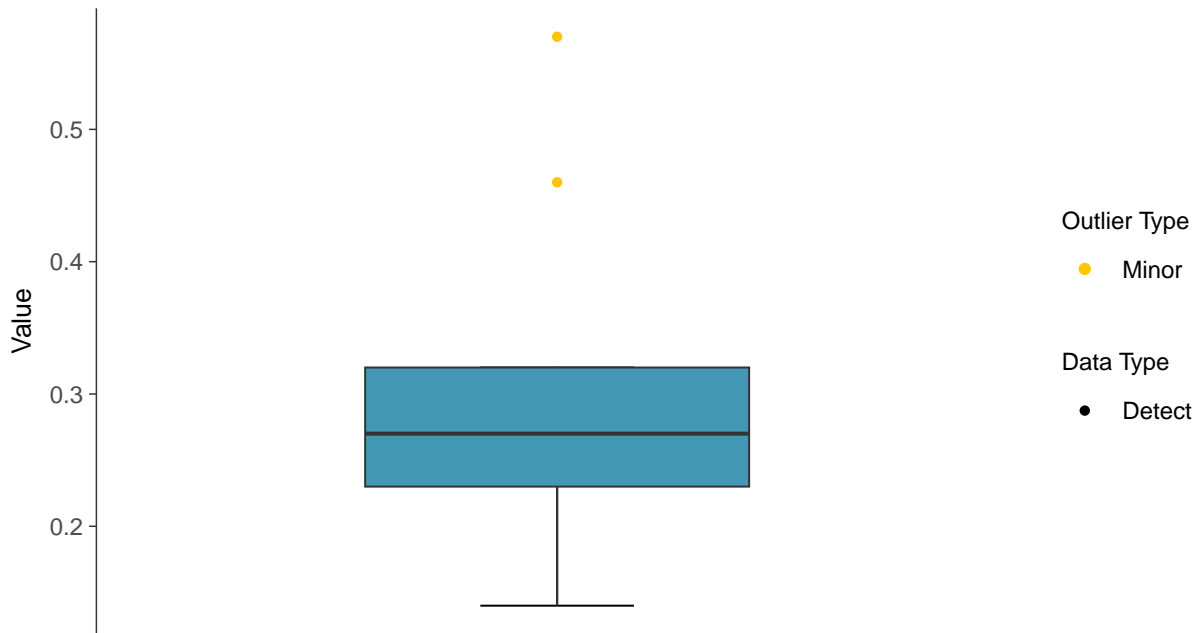
ID: 3_20_3_5_103





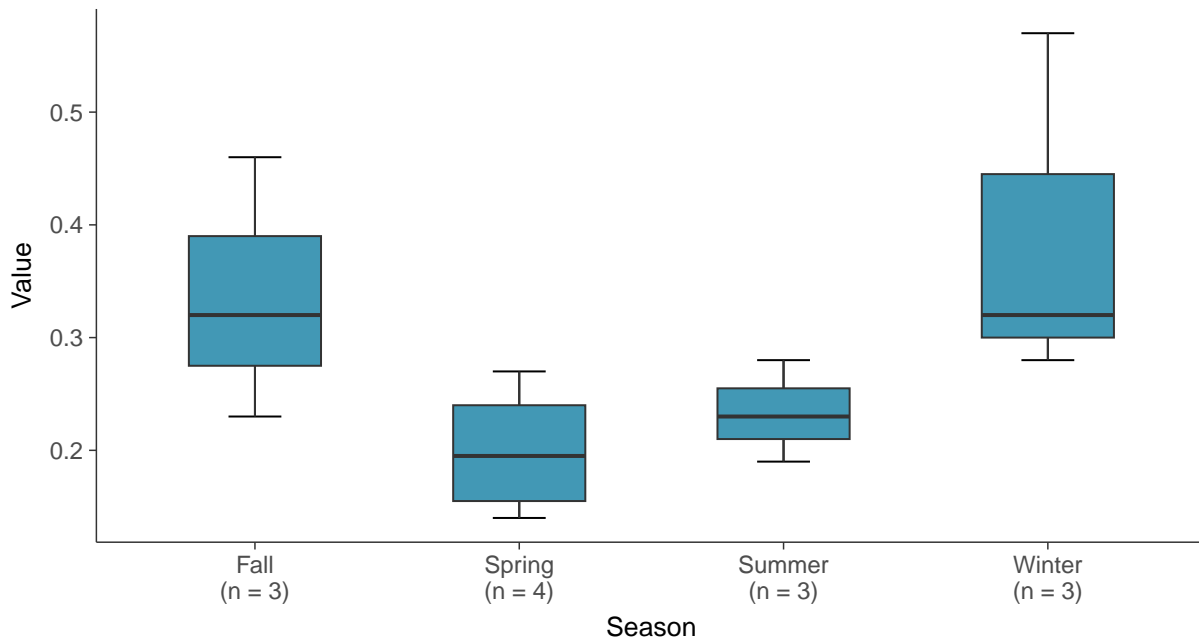
Boxplot

Barium, MW-10 (mg/L)



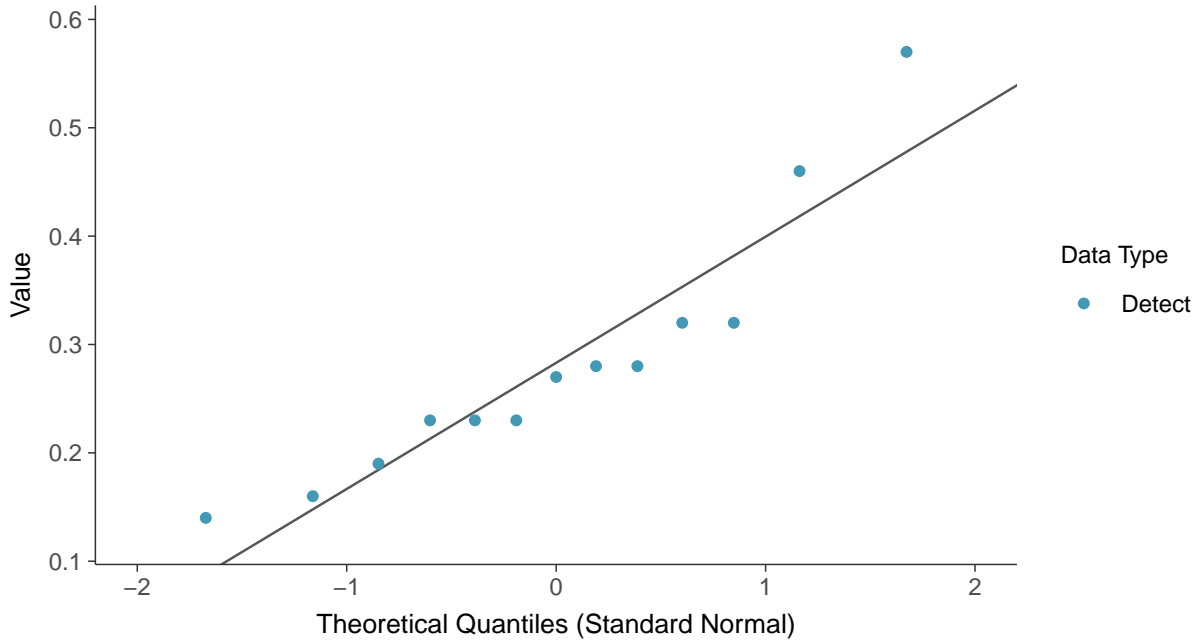
Boxplot by Season

Barium, MW-10 (mg/L)

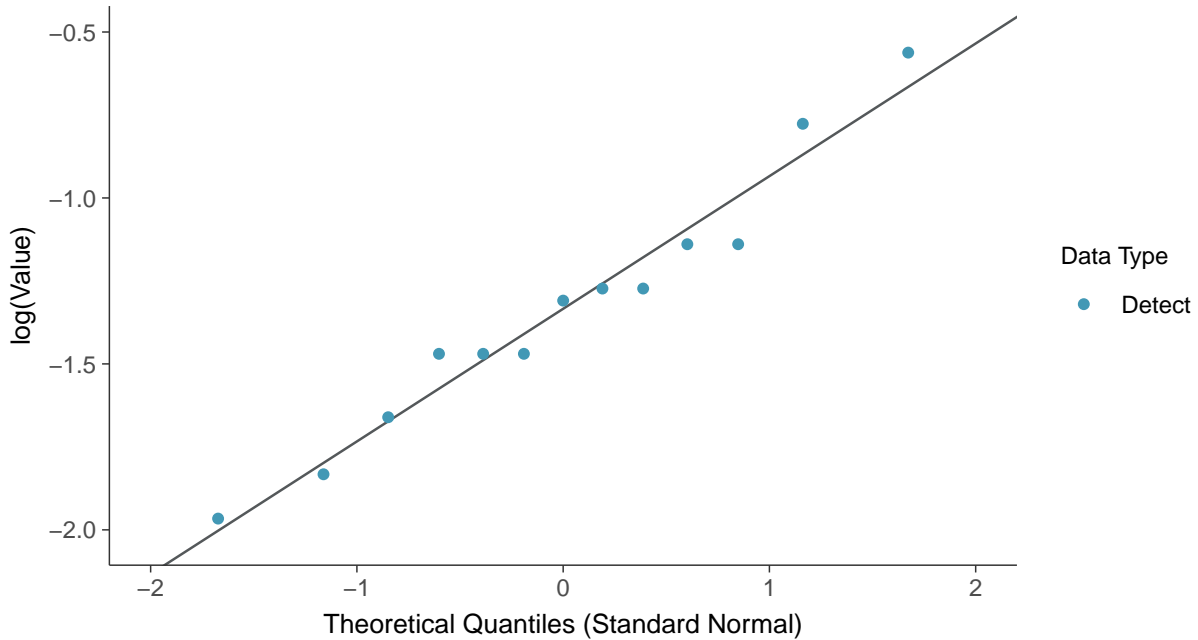




Normal Q-Q plot
Barium, MW-10 (mg/L)

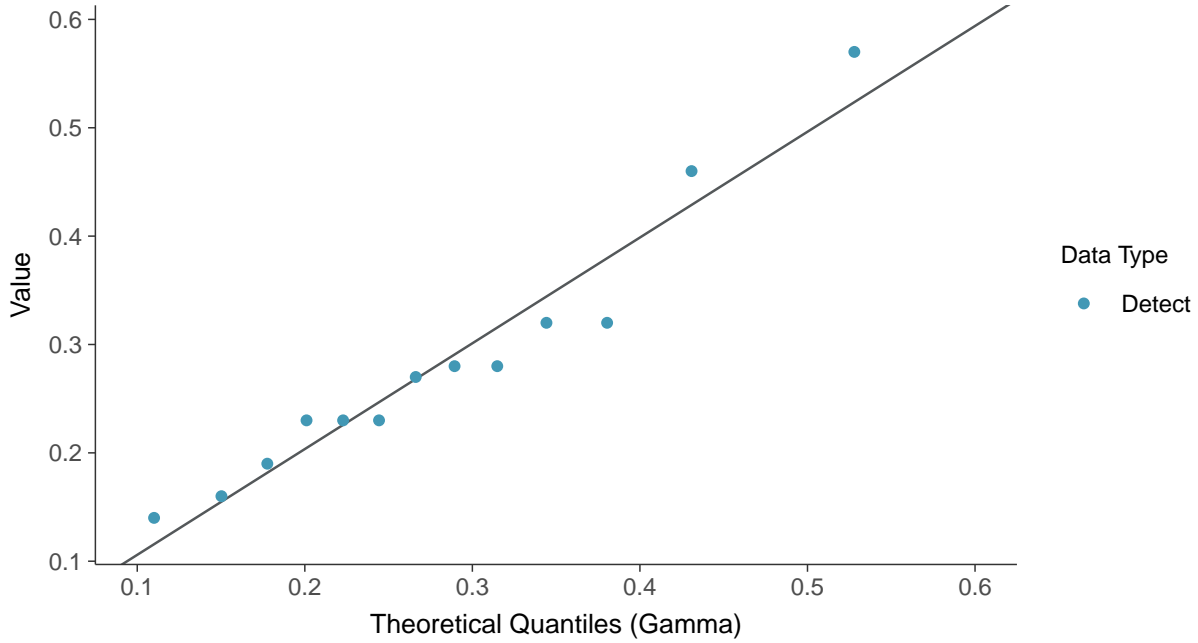


Lognormal Q-Q plot
Barium, MW-10 (mg/L)

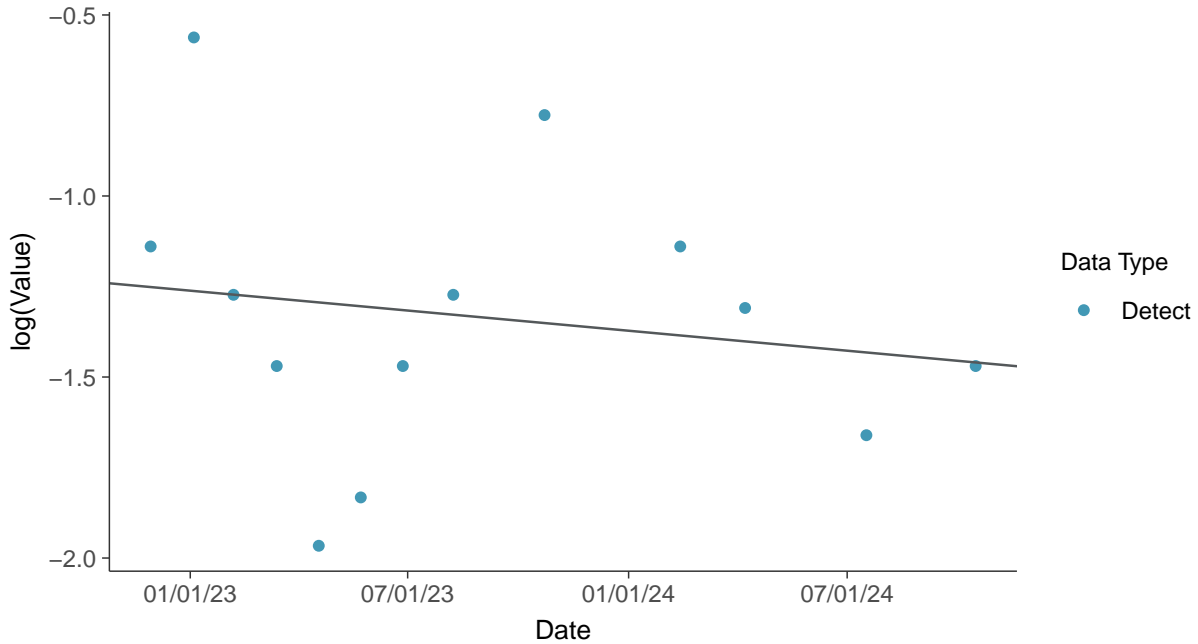




Gamma Q-Q plot
Barium, MW-10 (mg/L)

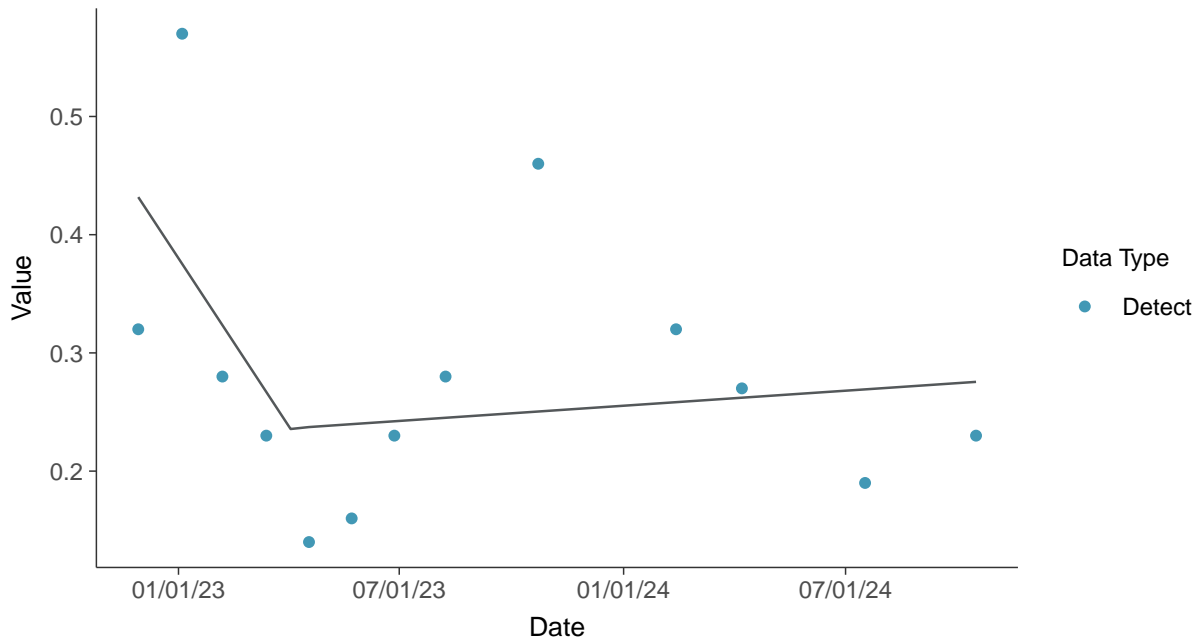


Trend Regression: Lognormal MLE
Barium, MW-10 (mg/L)

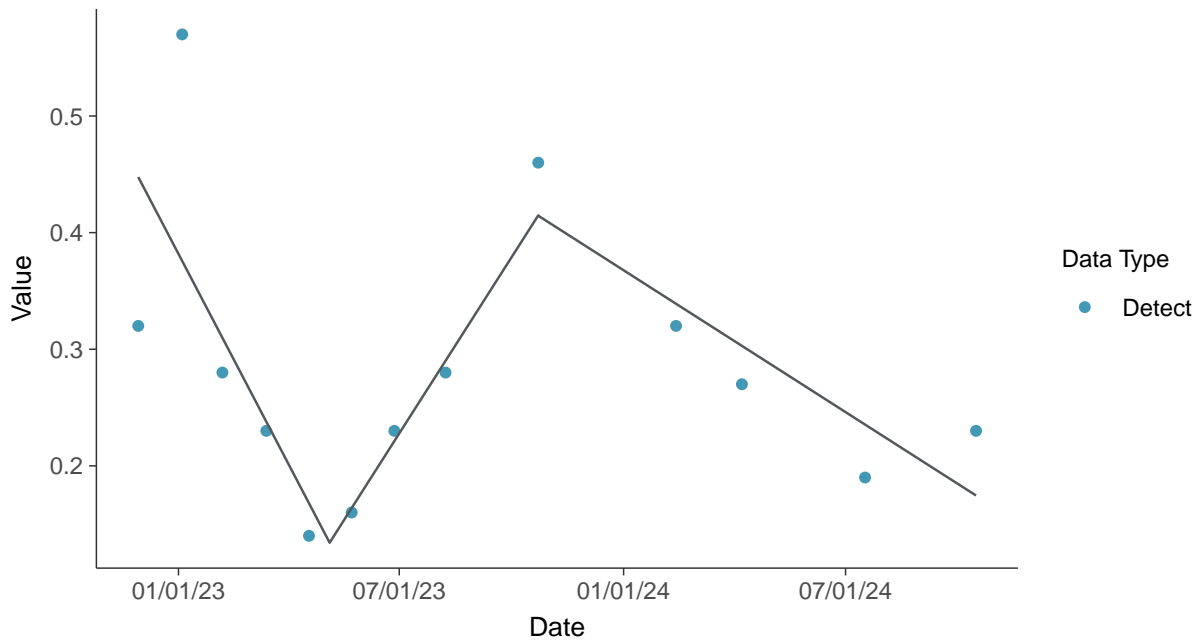




Trend Regression: Piecewise Linear-Linear
Barium, MW-10 (mg/L)



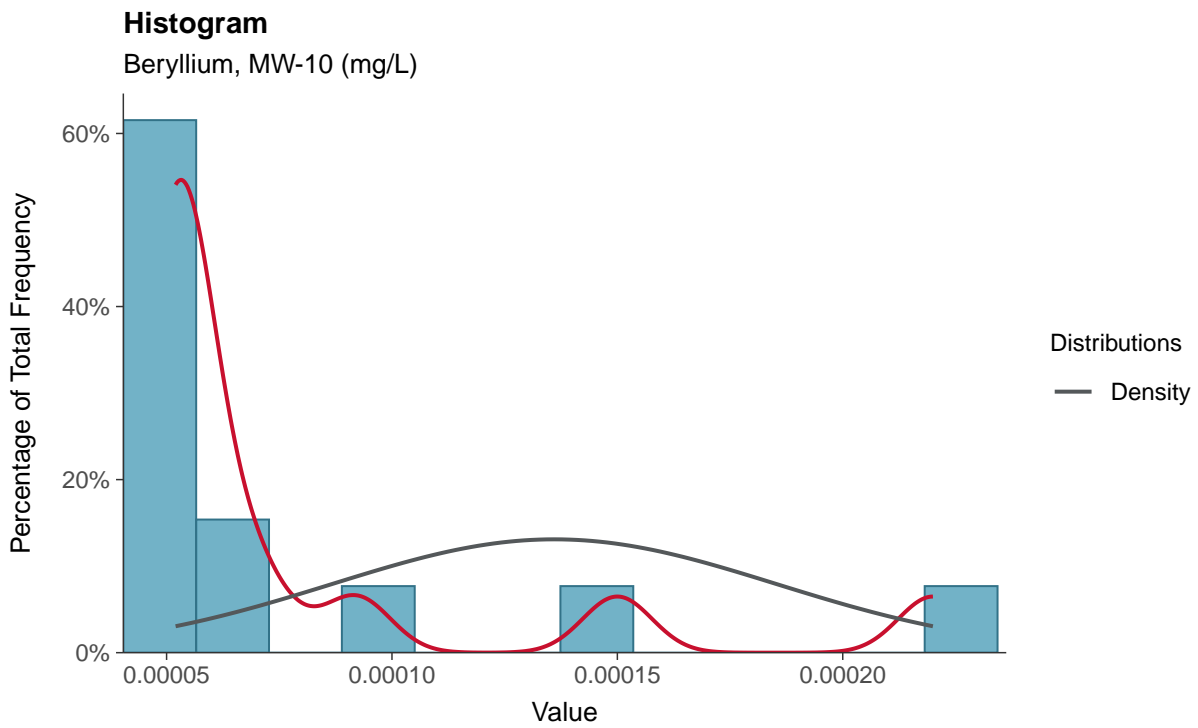
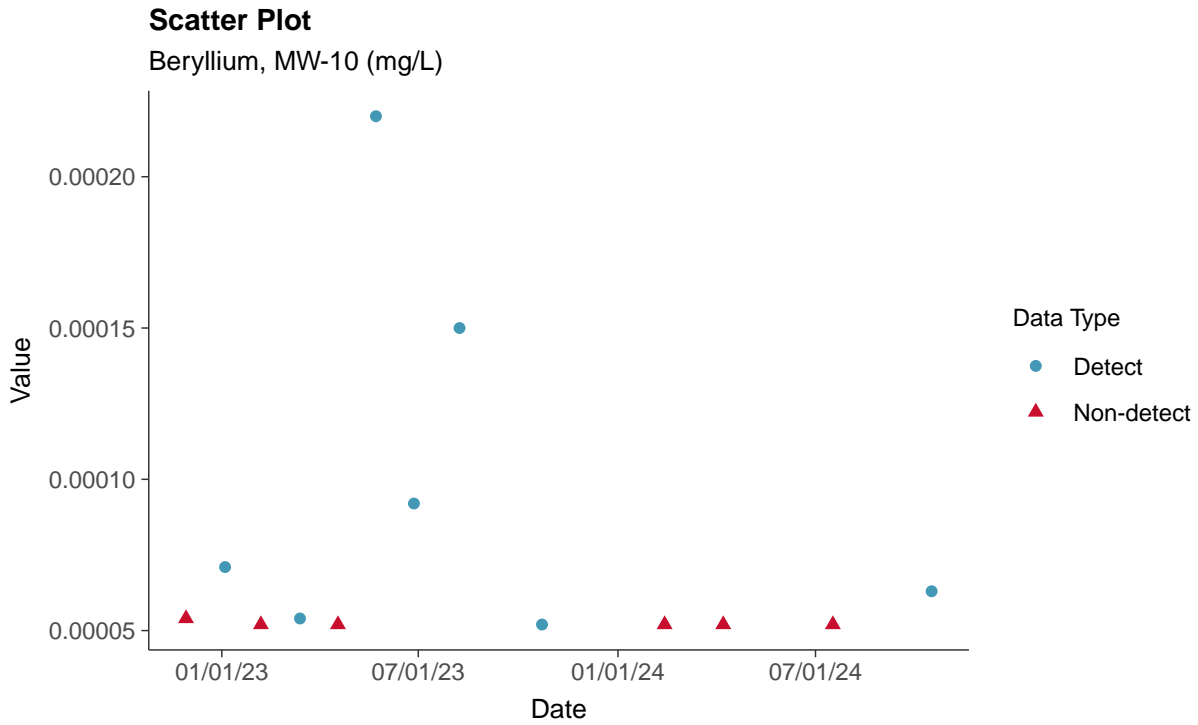
Trend Regression: Piecewise Linear-Linear-Linear
Barium, MW-10 (mg/L)





Appendix IV: Beryllium, MW-10

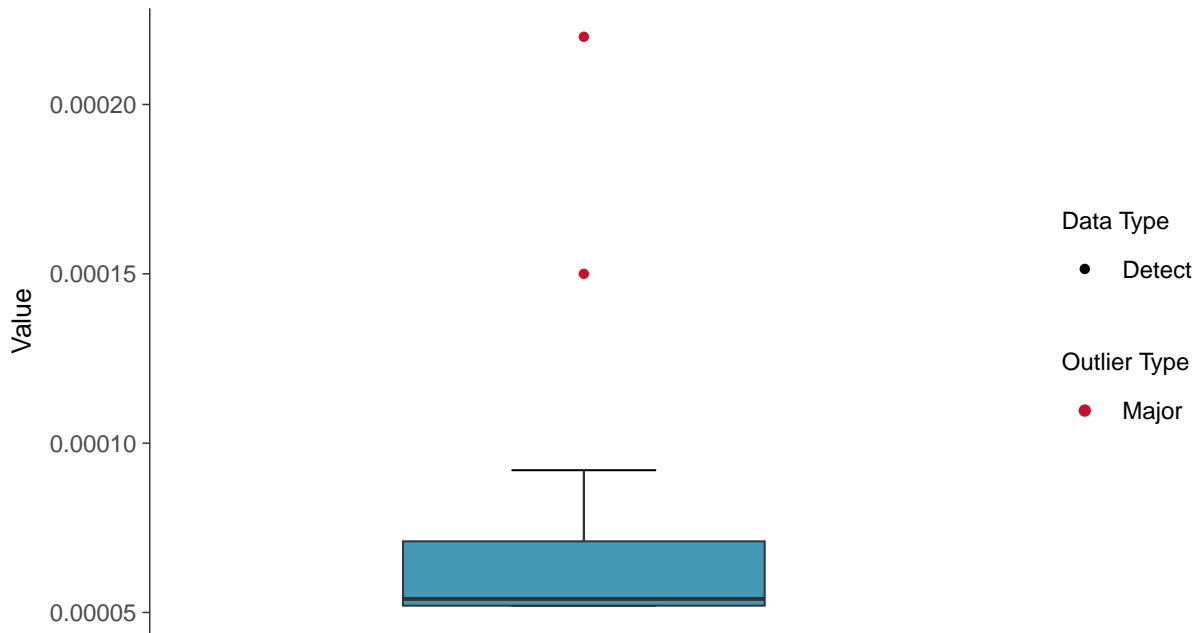
ID: 3_20_3_5_104





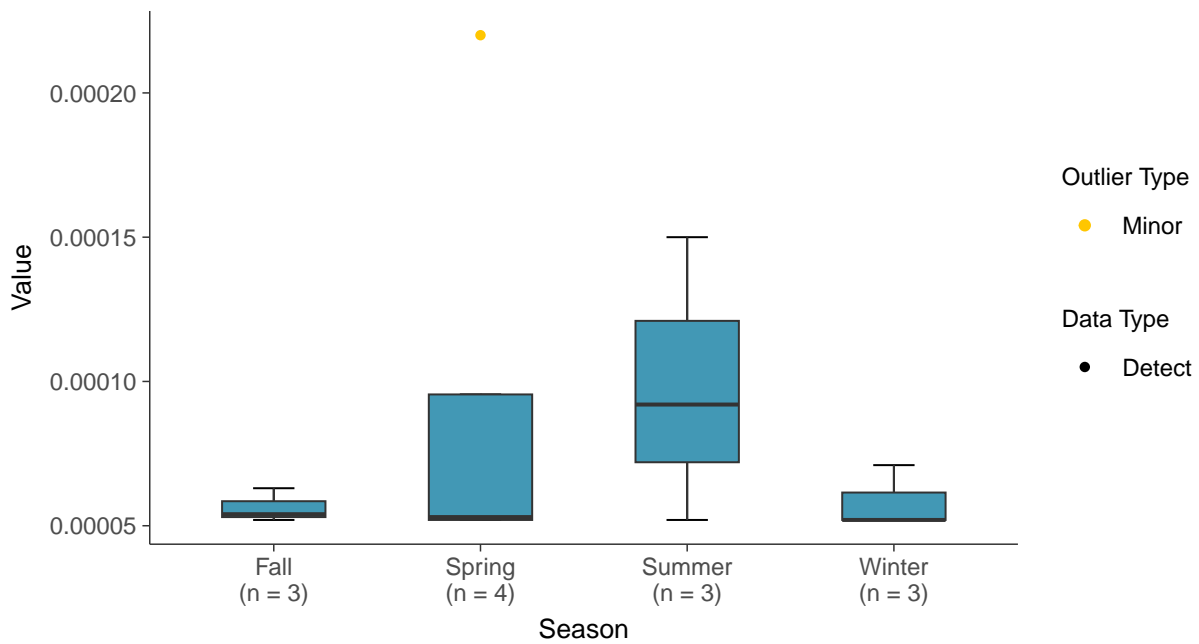
Boxplot

Beryllium, MW-10 (mg/L)



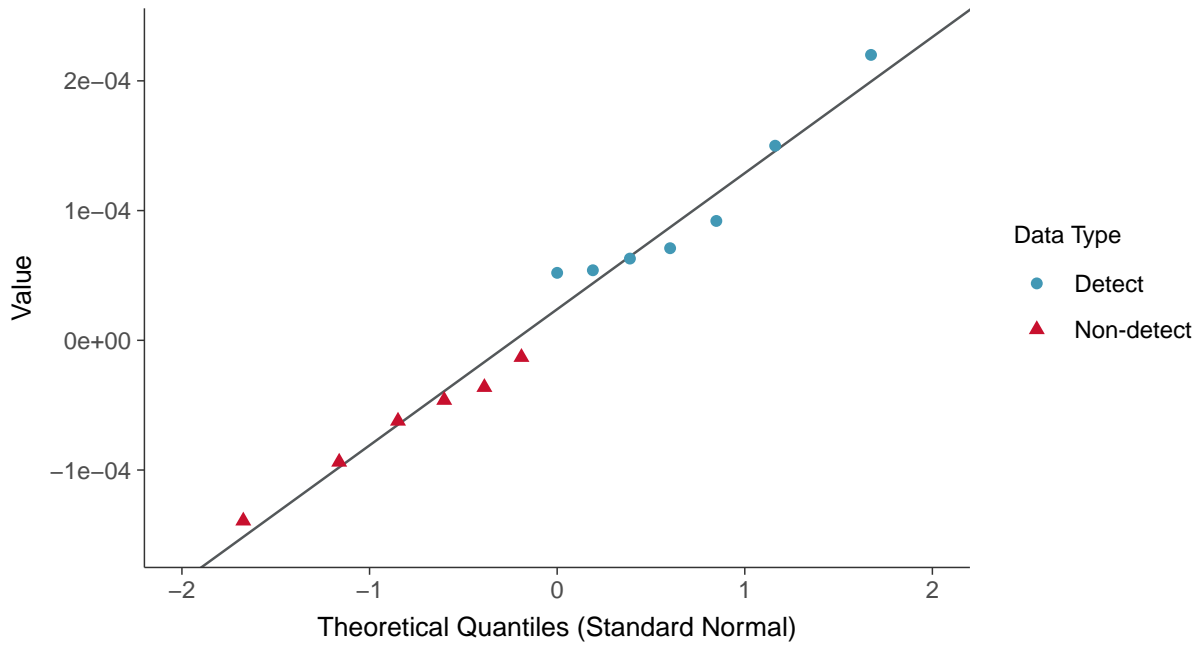
Boxplot by Season

Beryllium, MW-10 (mg/L)

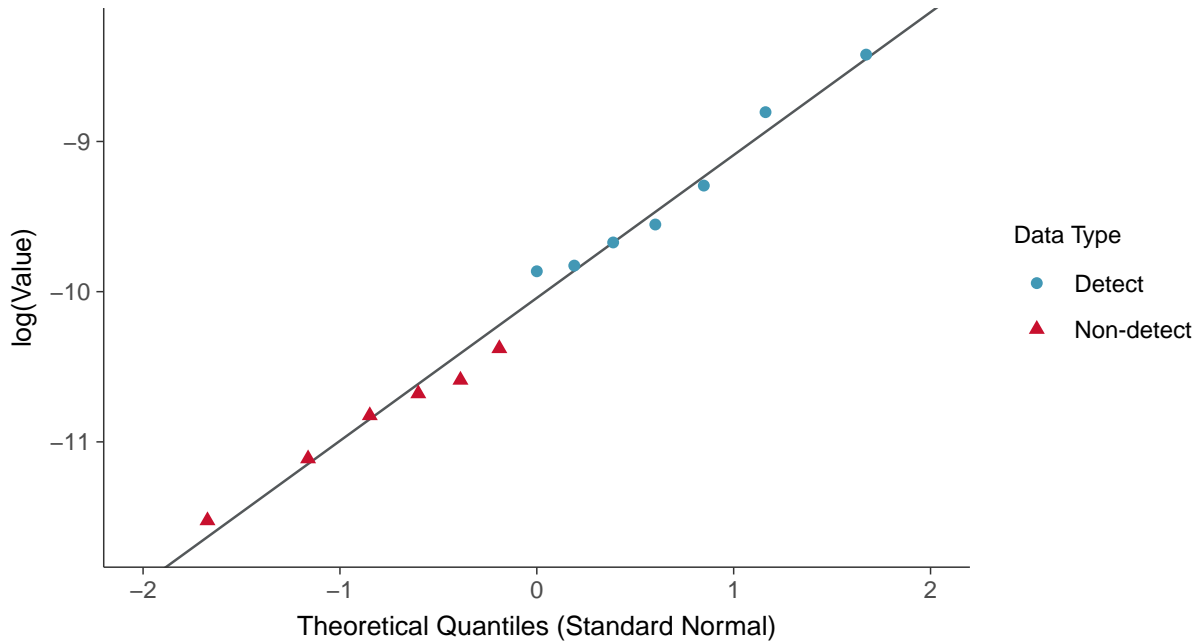




Normal Q-Q plot using ROS Imputed Estimates
Beryllium, MW-10 (mg/L)



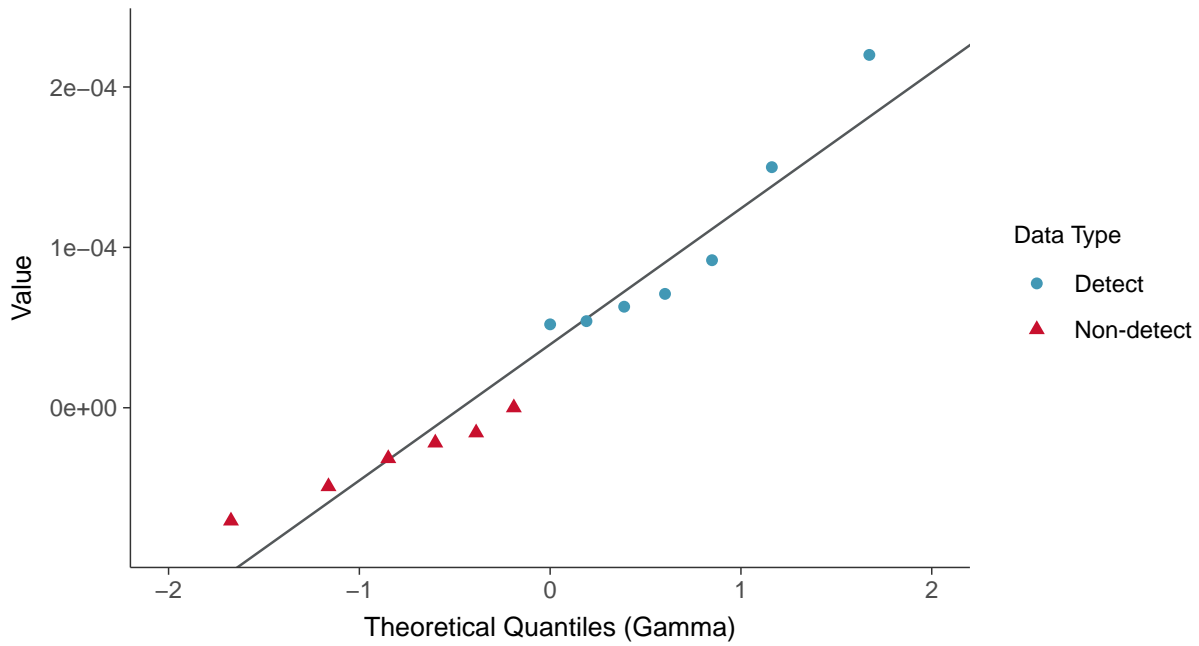
Lognormal Q-Q plot using ROS Imputed Estimates
Beryllium, MW-10 (mg/L)





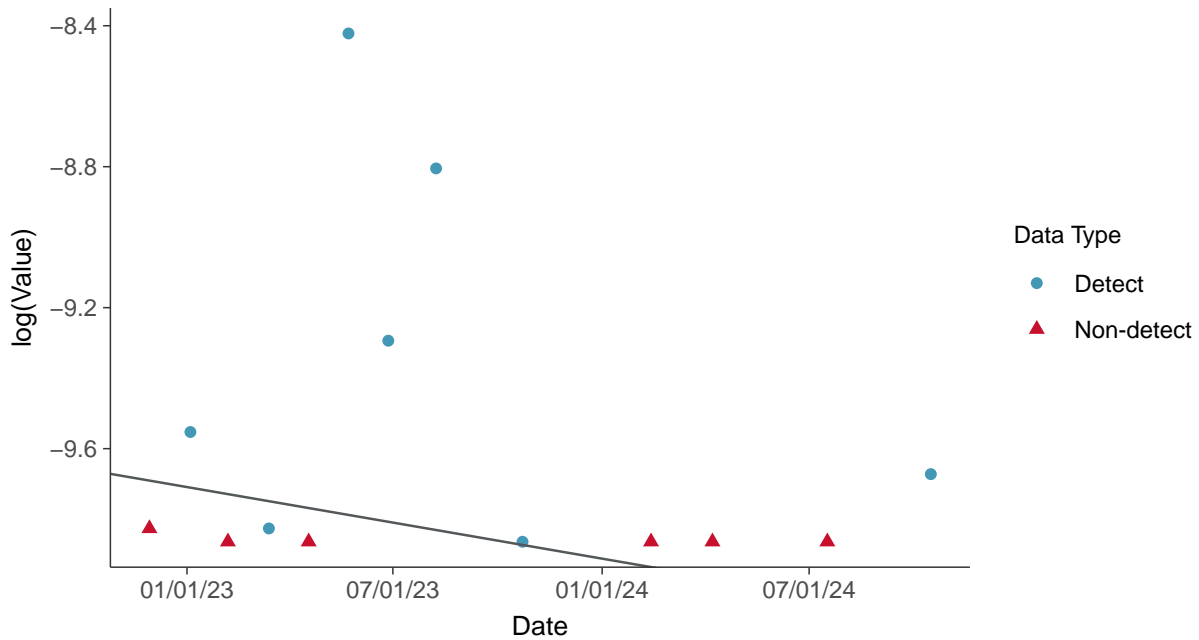
Gamma Q-Q plot using ROS Imputed Estimates

Beryllium, MW-10 (mg/L)



Trend Regression: Lognormal MLE

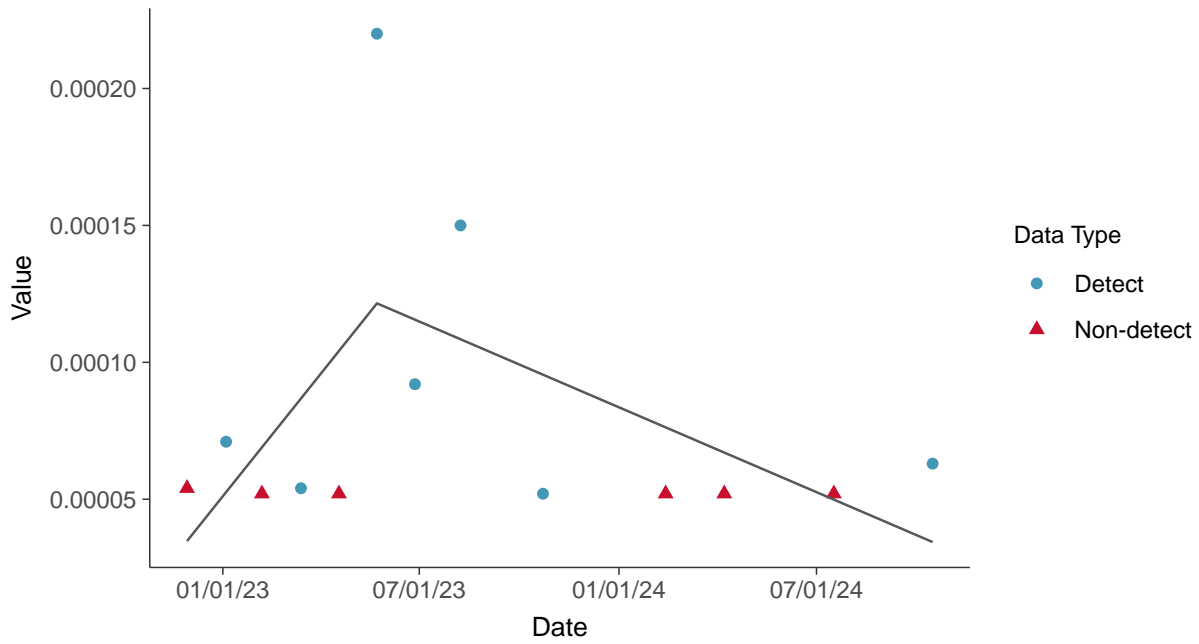
Beryllium, MW-10 (mg/L)





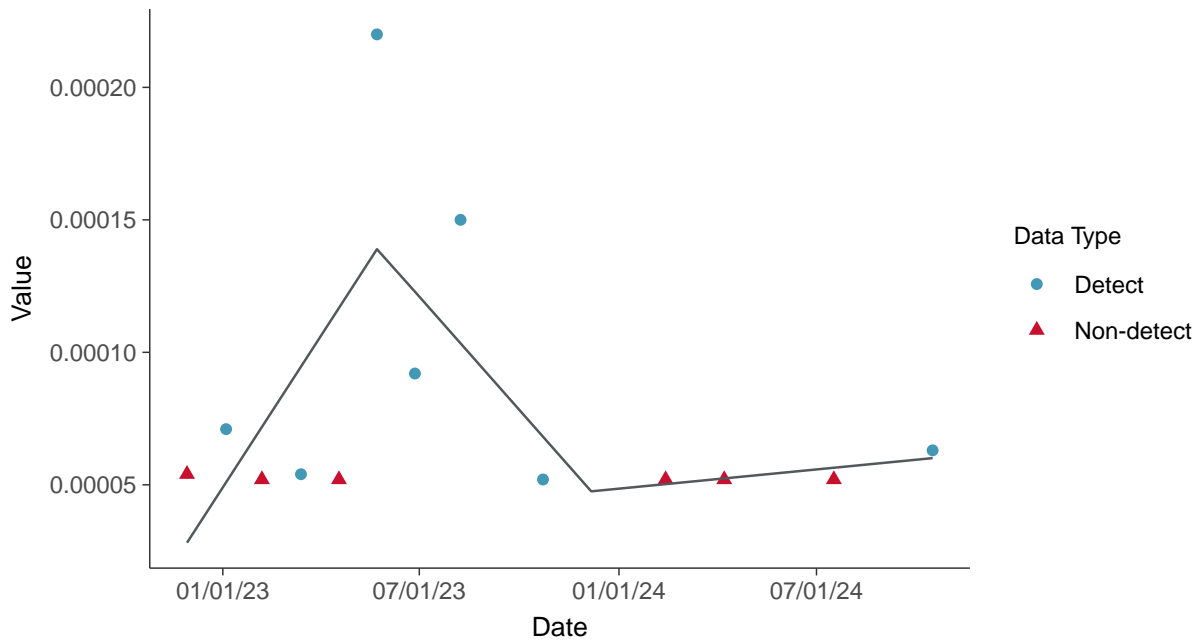
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-10 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Beryllium, MW-10 (mg/L)



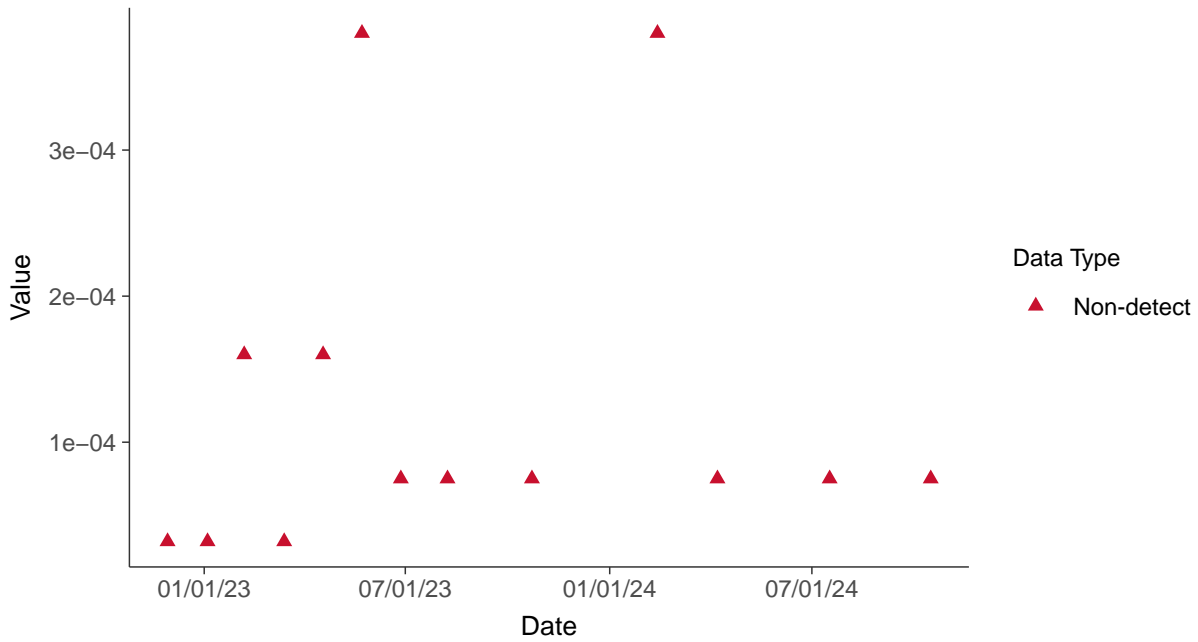


Appendix IV: Cadmium, MW-10

ID: 3_20_3_5_106

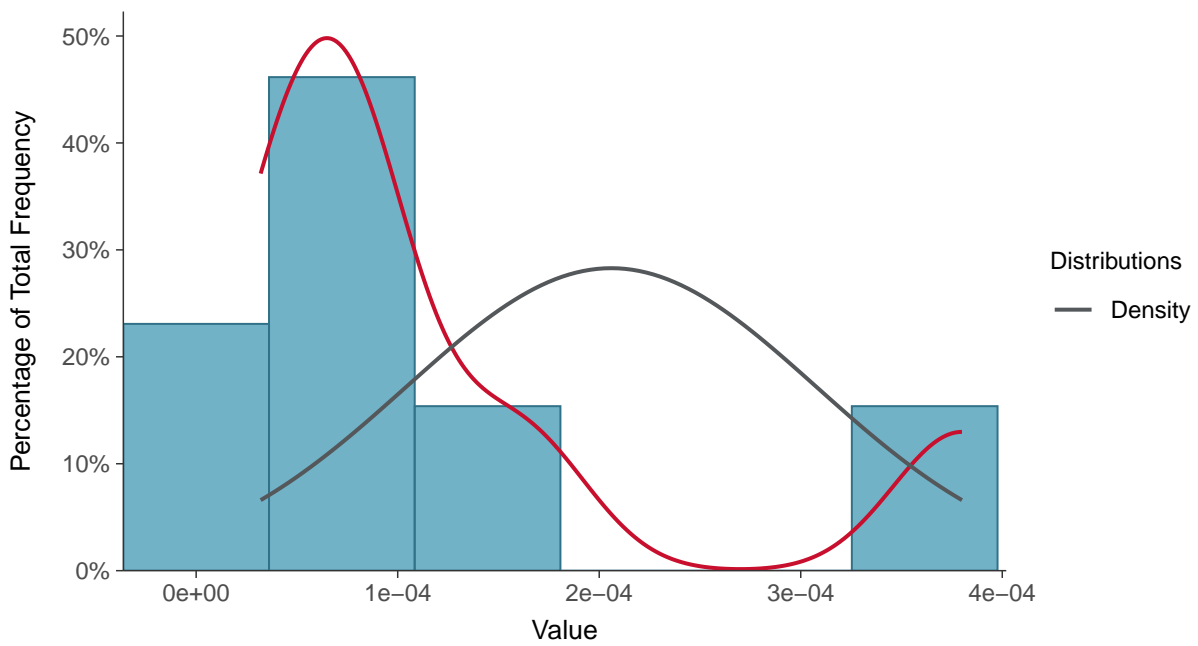
Scatter Plot

Cadmium, MW-10 (mg/L)



Histogram

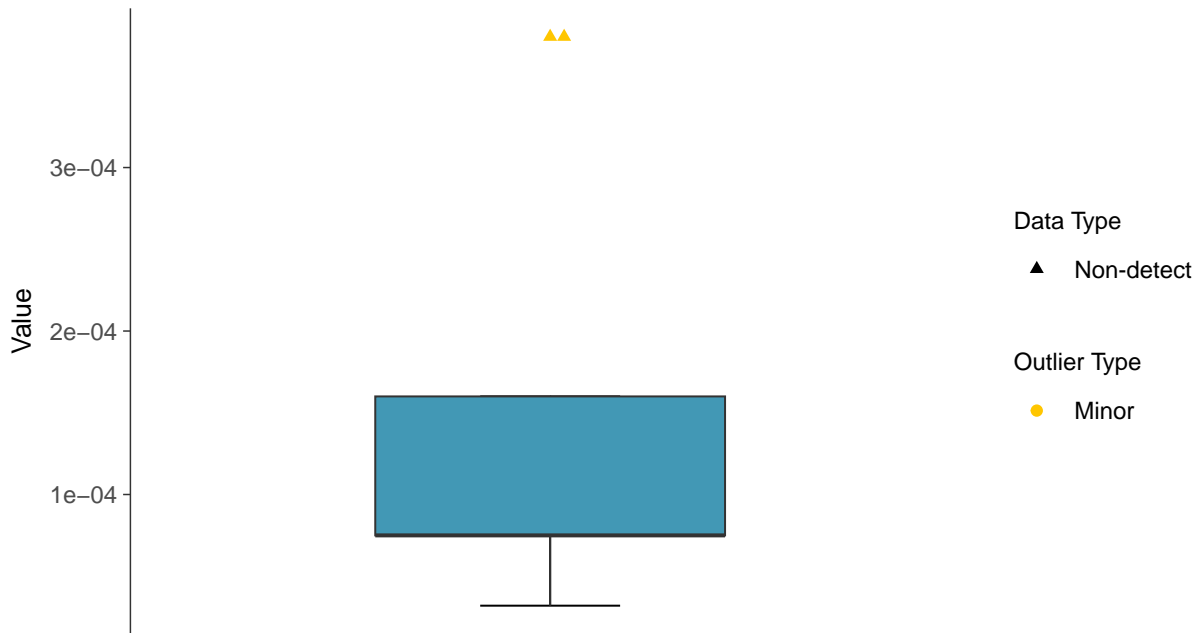
Cadmium, MW-10 (mg/L)





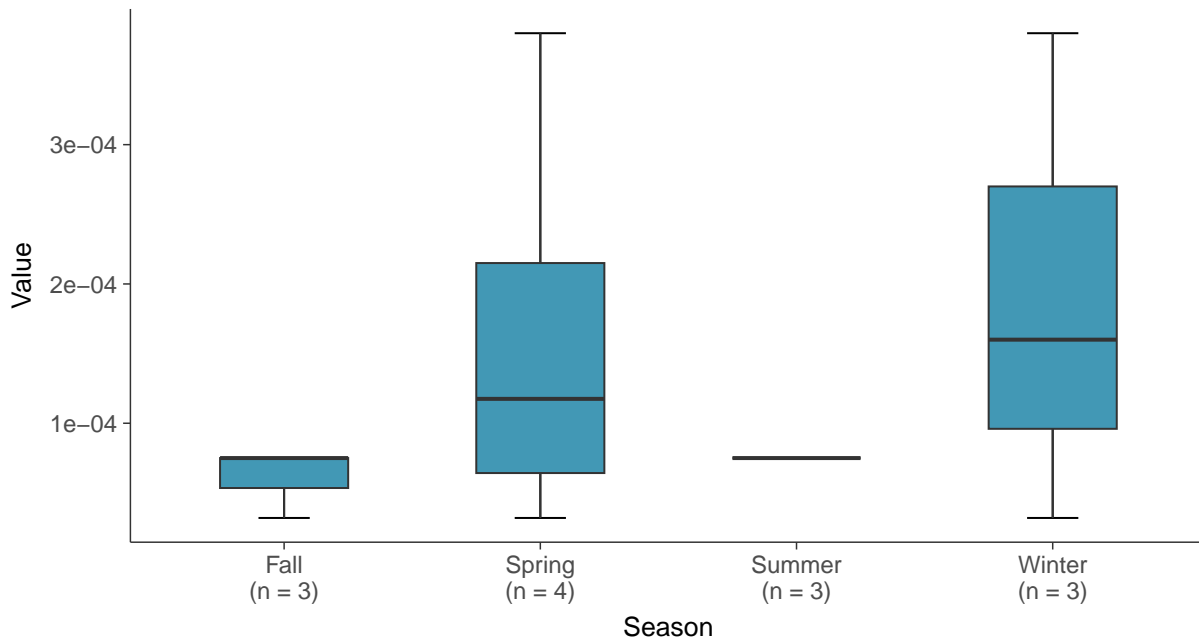
Boxplot

Cadmium, MW-10 (mg/L)



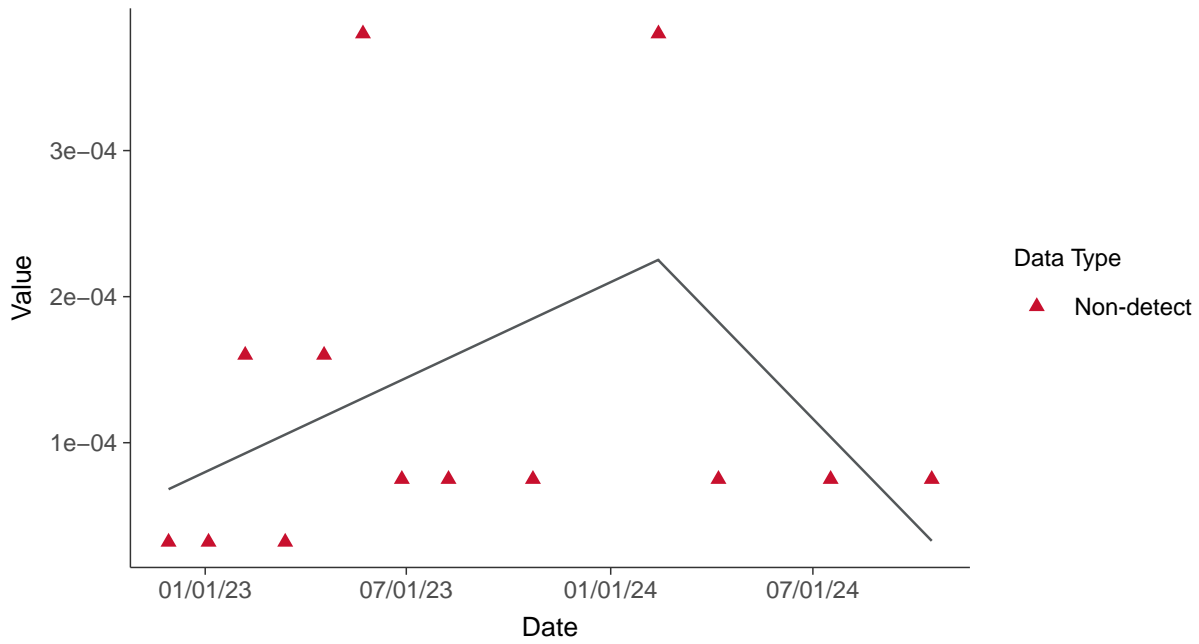
Boxplot by Season

Cadmium, MW-10 (mg/L)

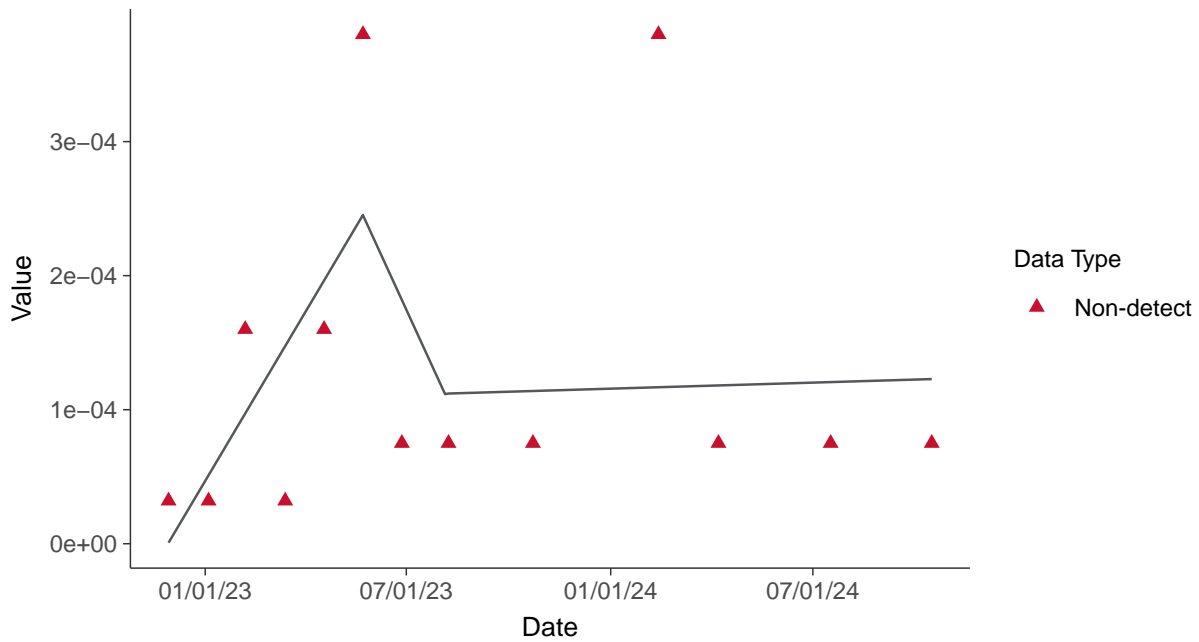




Trend Regression: Piecewise Linear-Linear
Cadmium, MW-10 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Cadmium, MW-10 (mg/L)



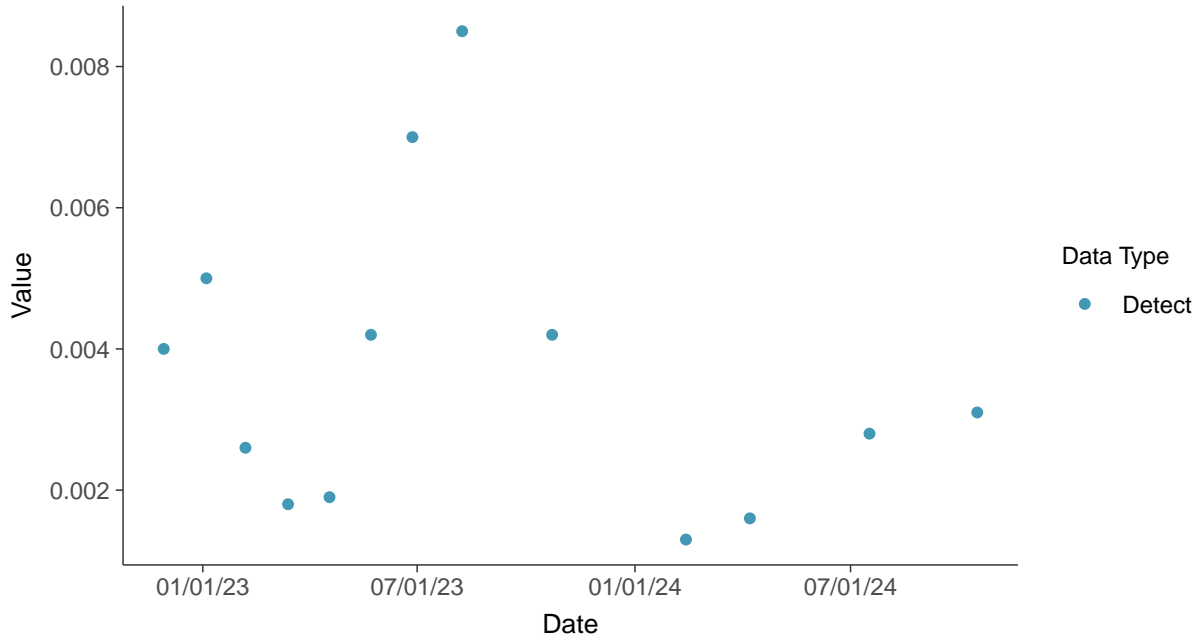


Appendix IV: Chromium, Total, MW-10

ID: 3_20_3_5_109

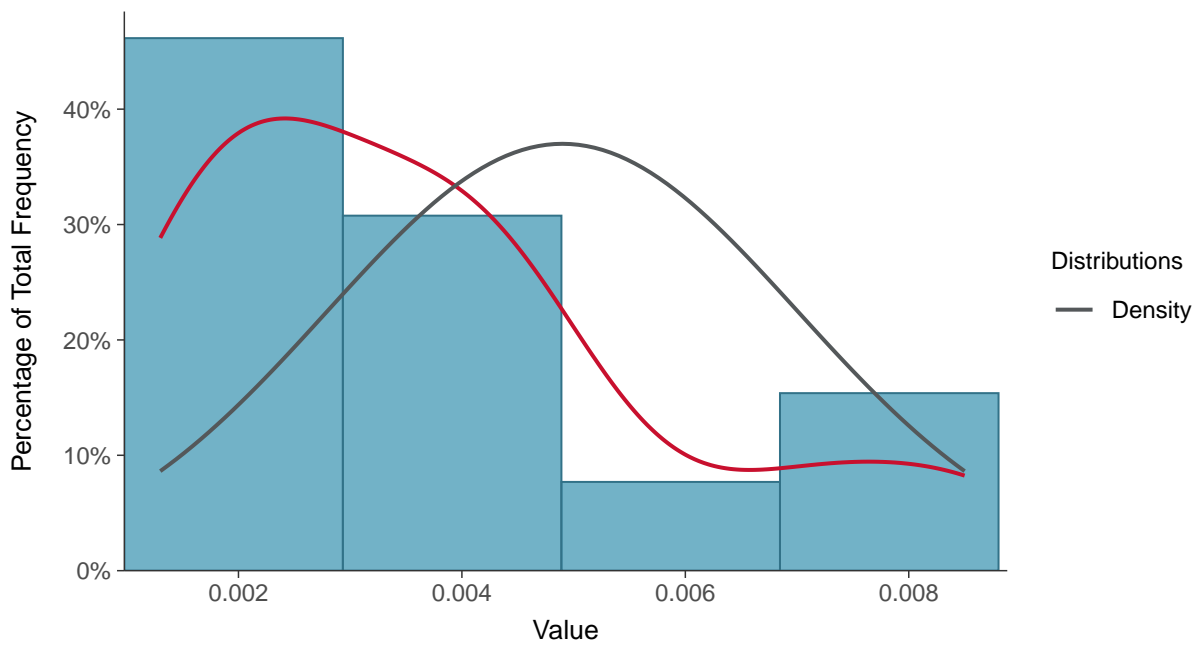
Scatter Plot

Chromium, Total, MW-10 (mg/L)



Histogram

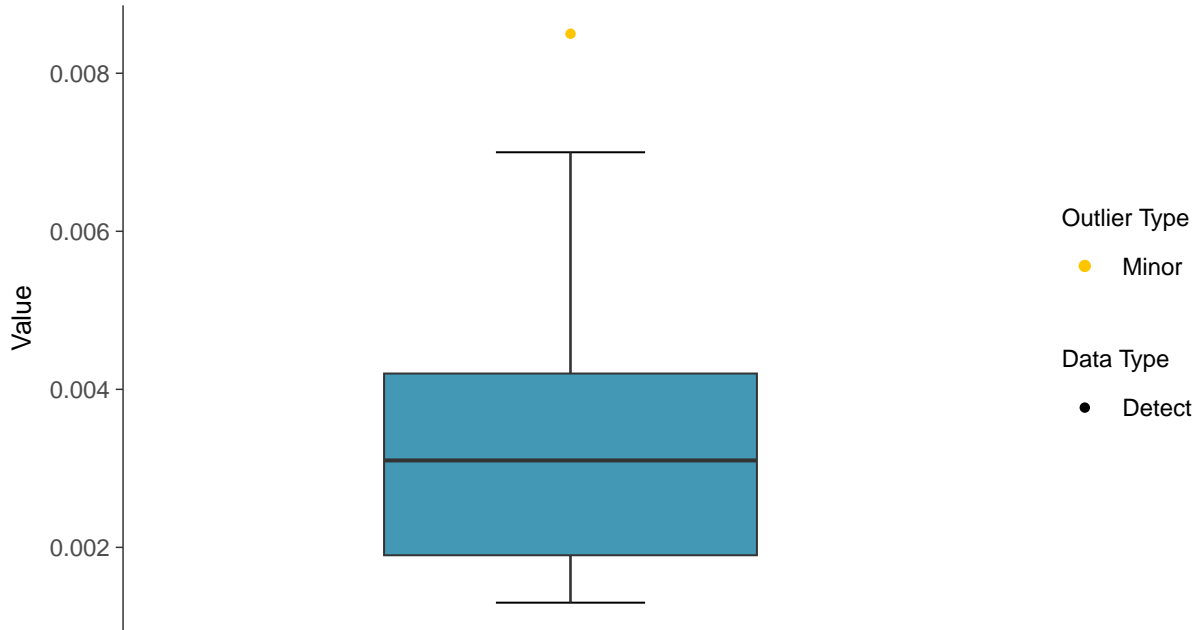
Chromium, Total, MW-10 (mg/L)





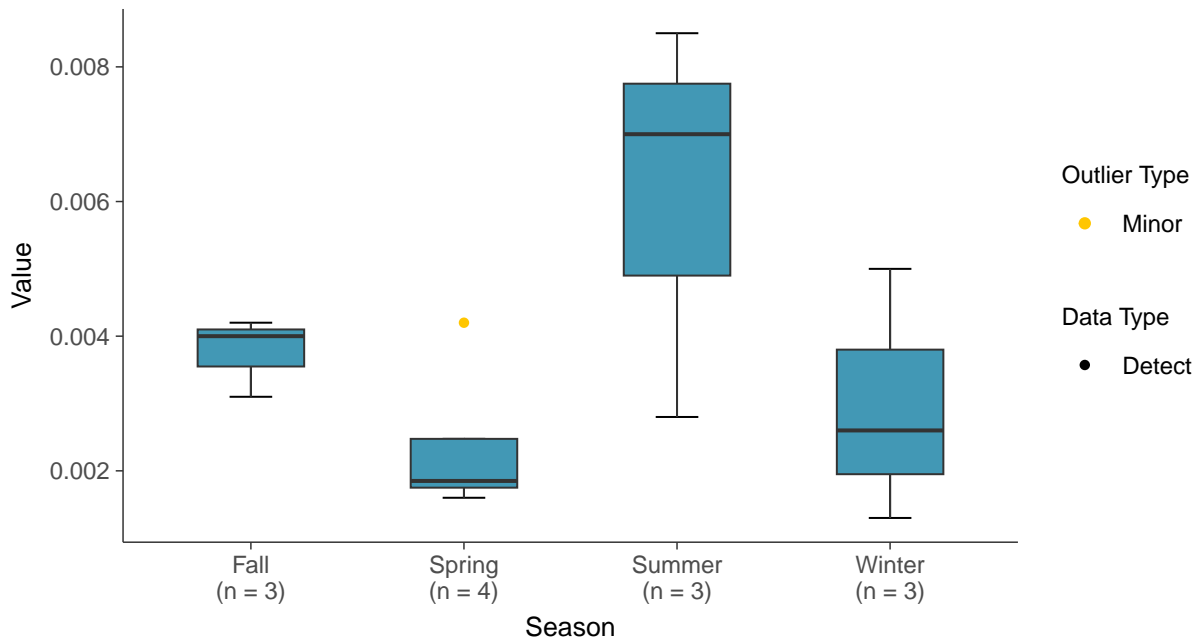
Boxplot

Chromium, Total, MW-10 (mg/L)



Boxplot by Season

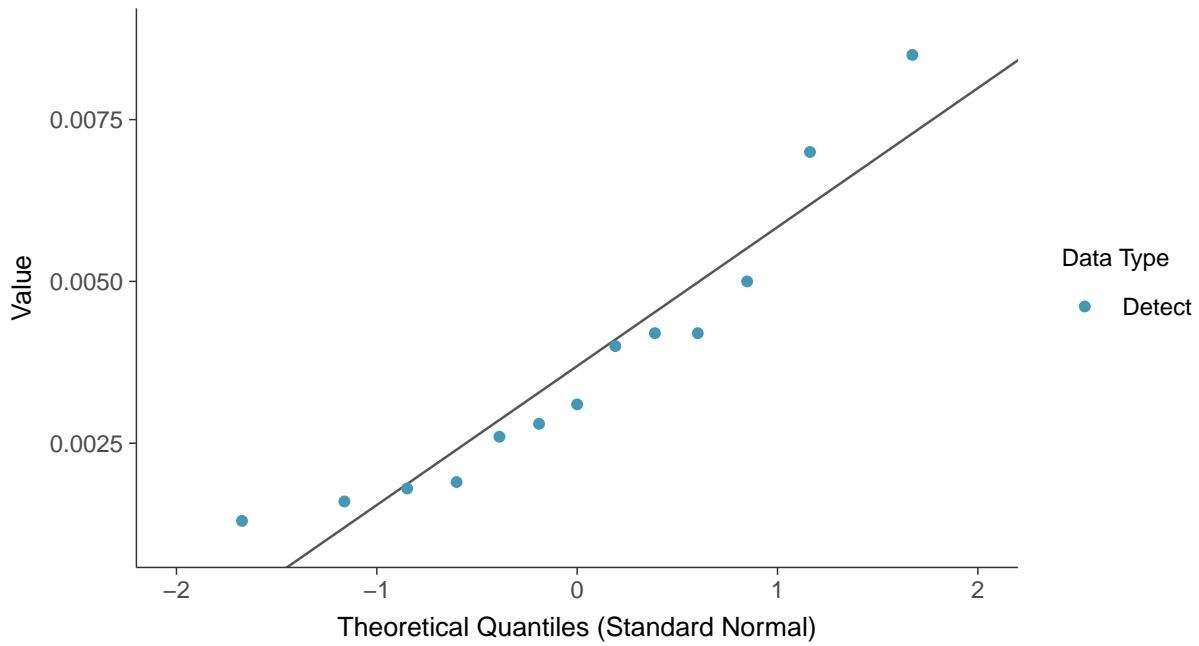
Chromium, Total, MW-10 (mg/L)





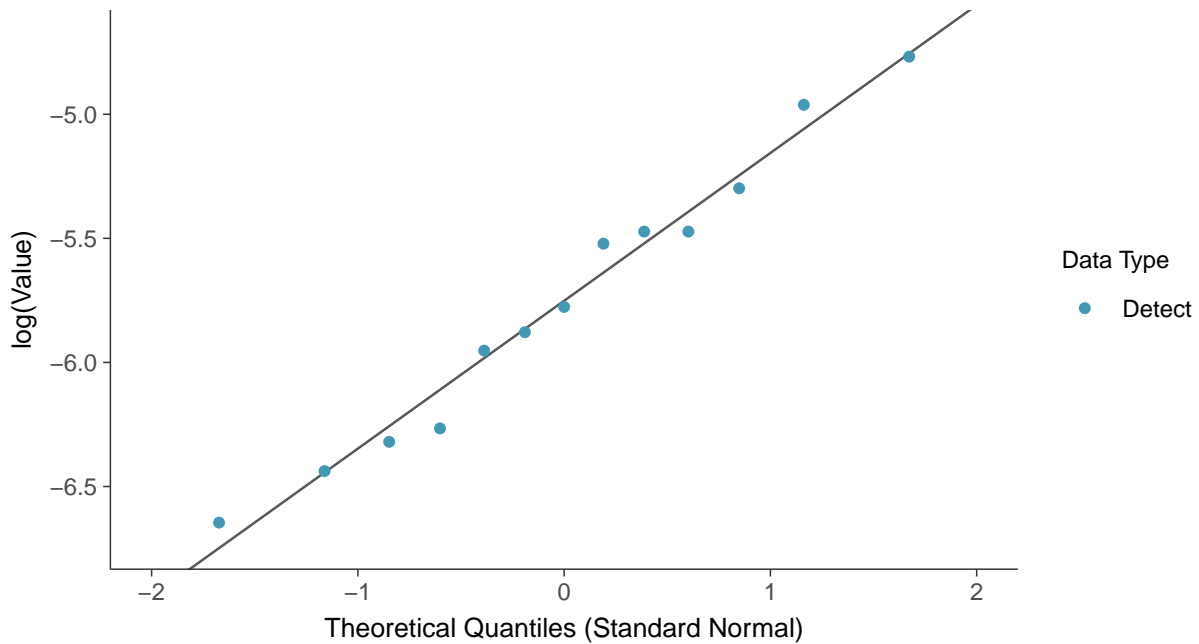
Normal Q-Q plot

Chromium, Total, MW-10 (mg/L)



Lognormal Q-Q plot

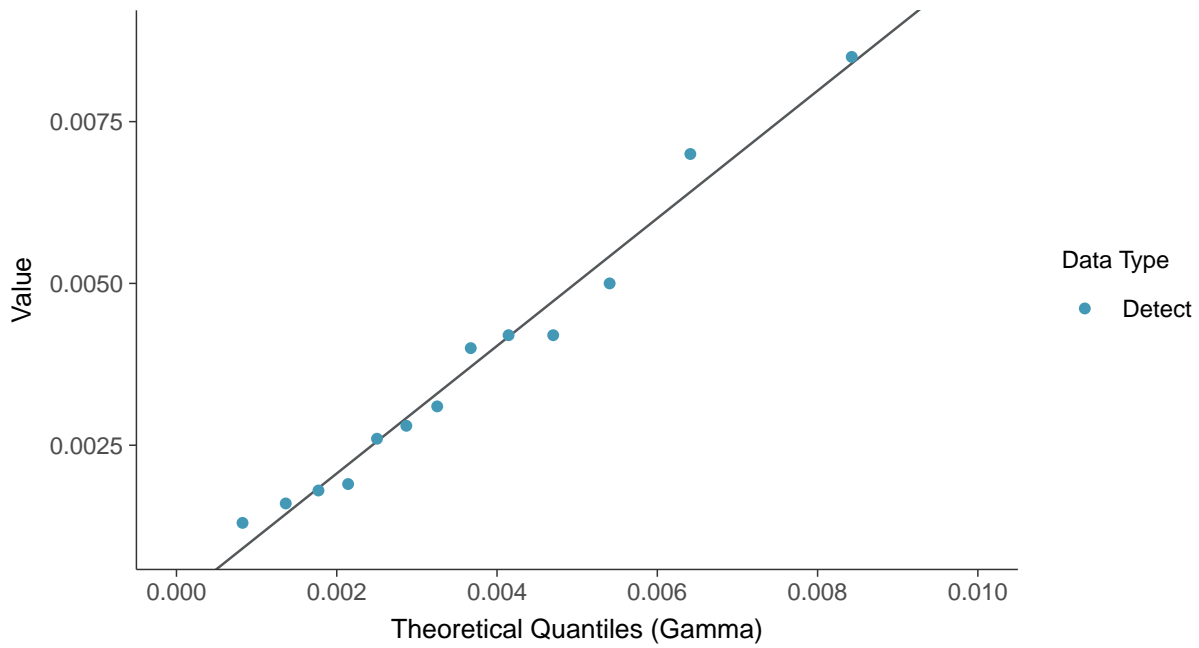
Chromium, Total, MW-10 (mg/L)





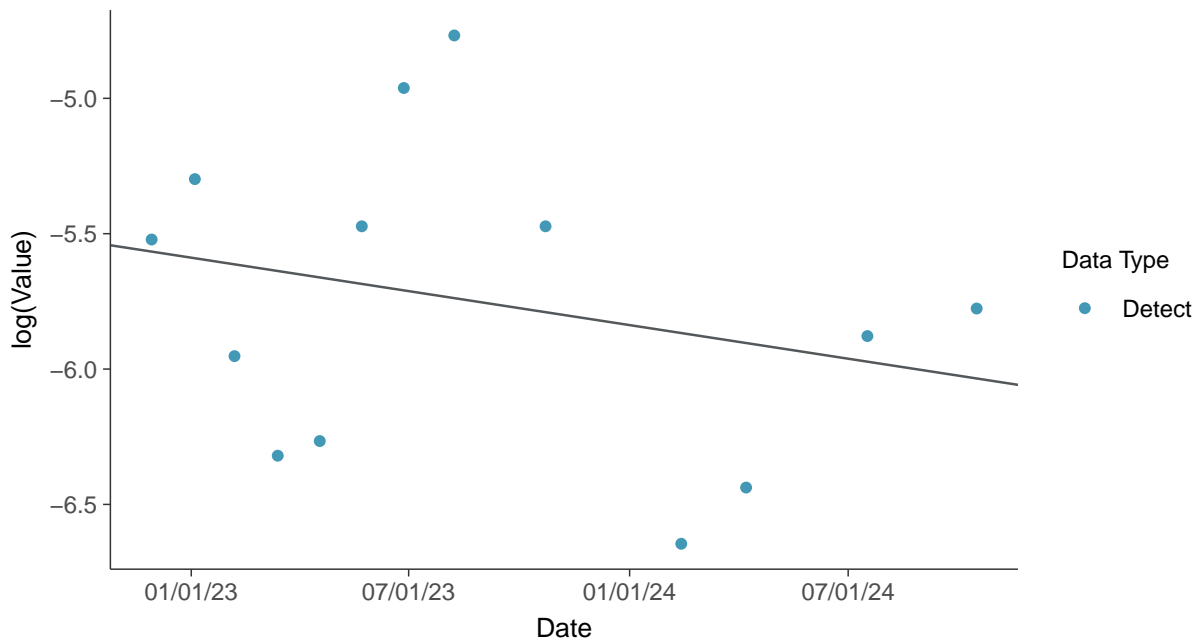
Gamma Q-Q plot

Chromium, Total, MW-10 (mg/L)



Trend Regression: Lognormal MLE

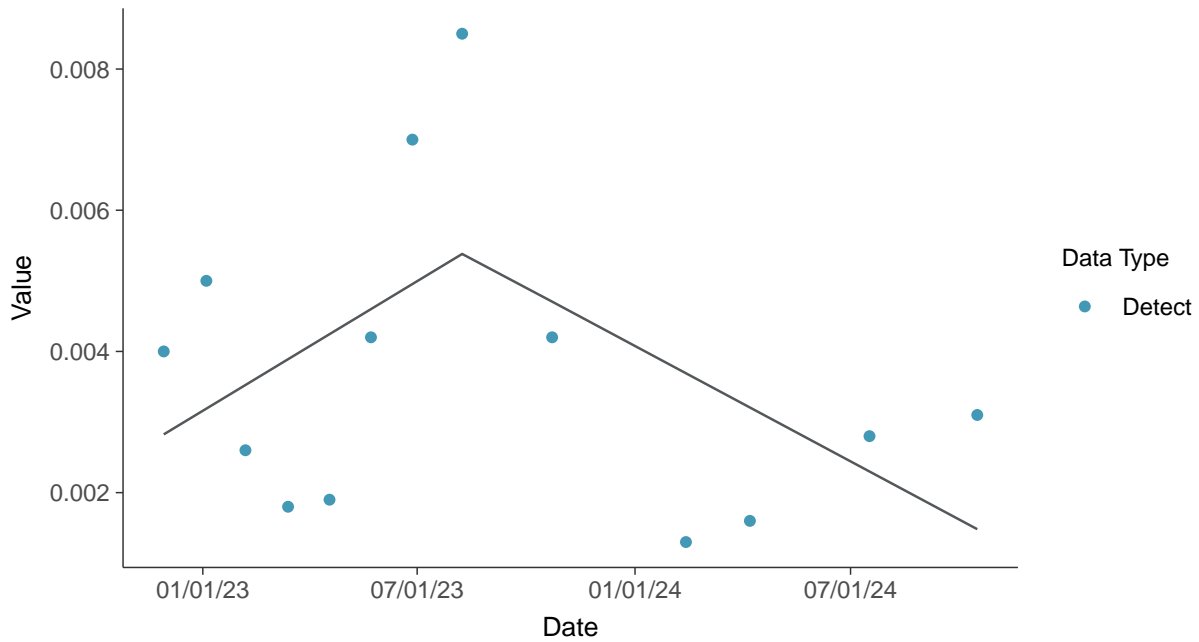
Chromium, Total, MW-10 (mg/L)





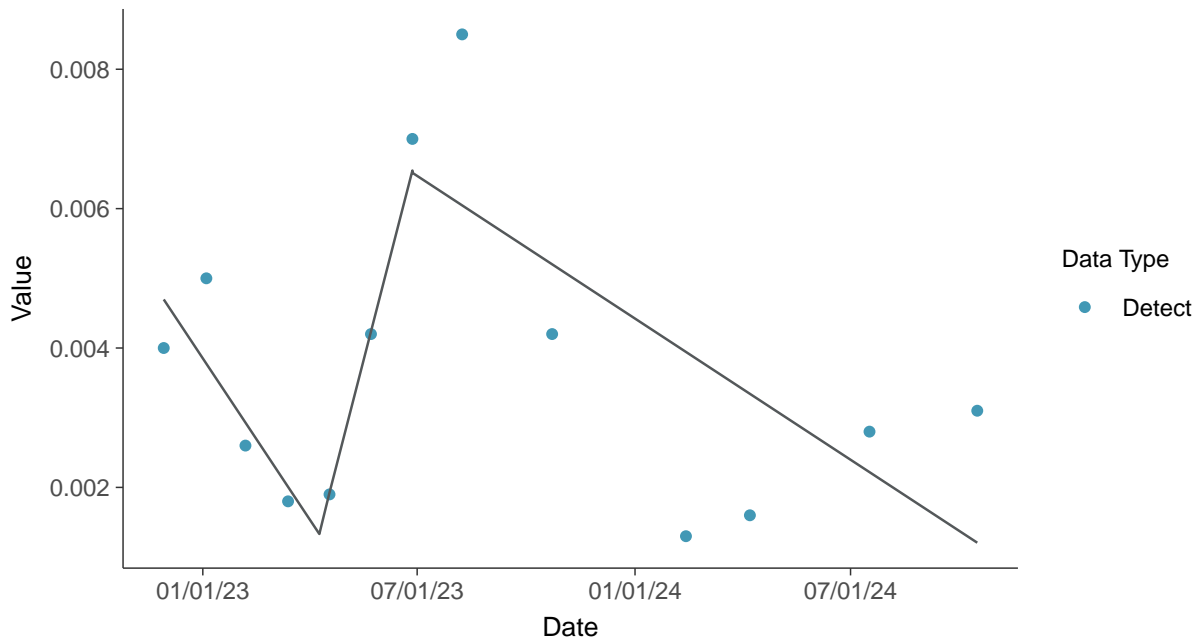
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-10 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Chromium, Total, MW-10 (mg/L)



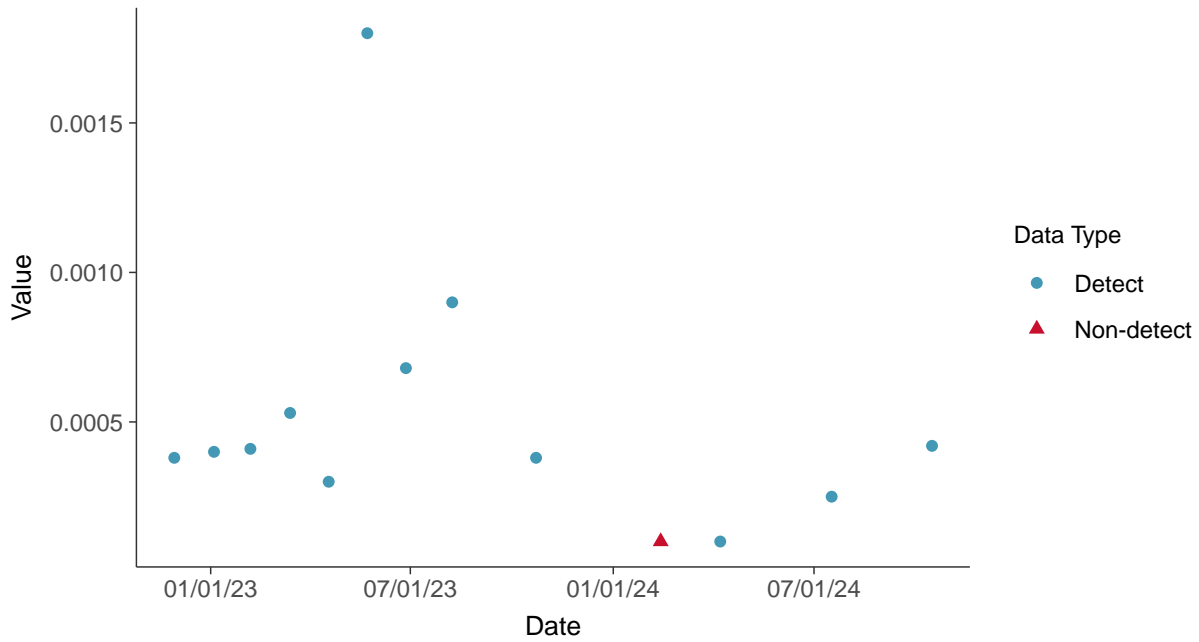


Appendix IV: Cobalt, MW-10

ID: 3_20_3_5_110

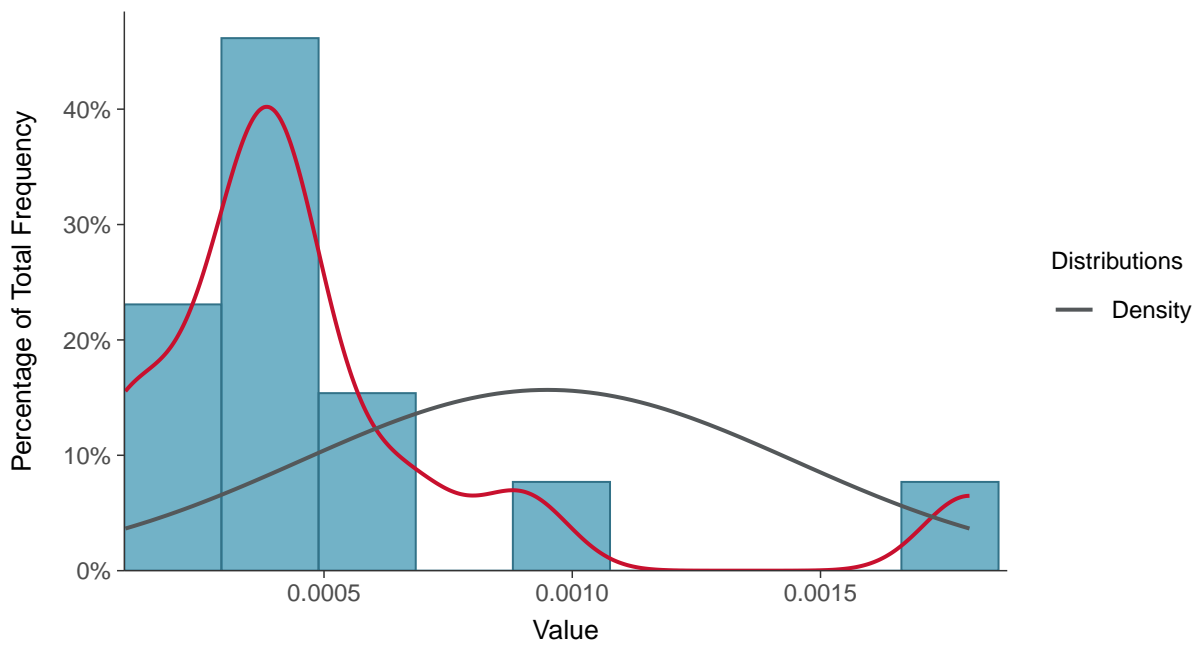
Scatter Plot

Cobalt, MW-10 (mg/L)



Histogram

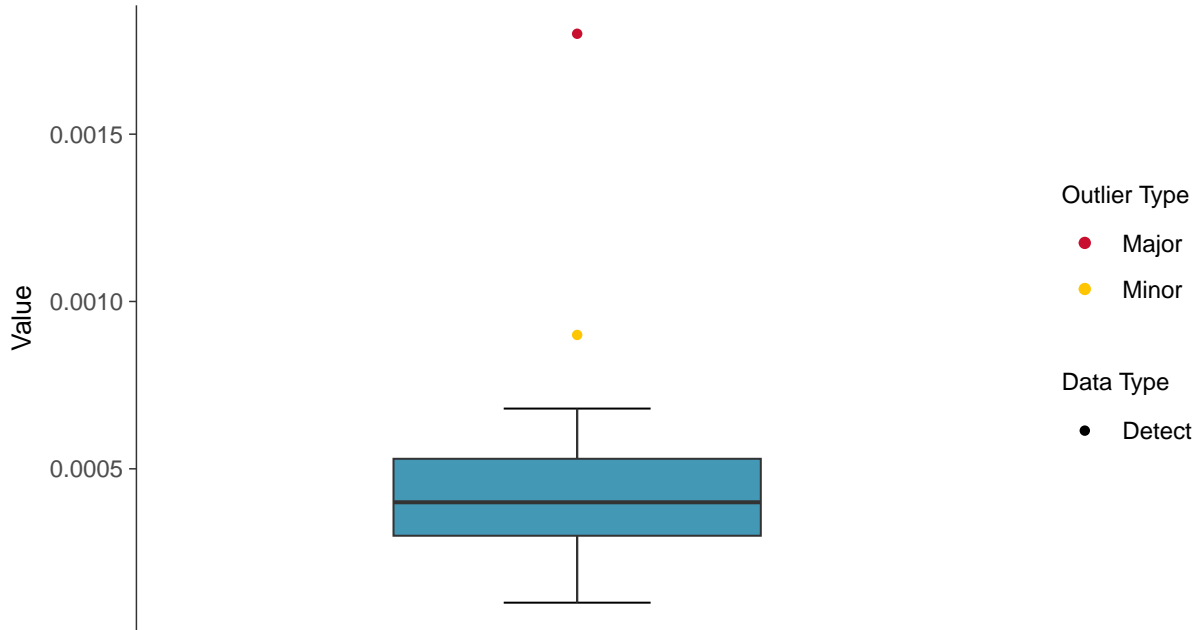
Cobalt, MW-10 (mg/L)





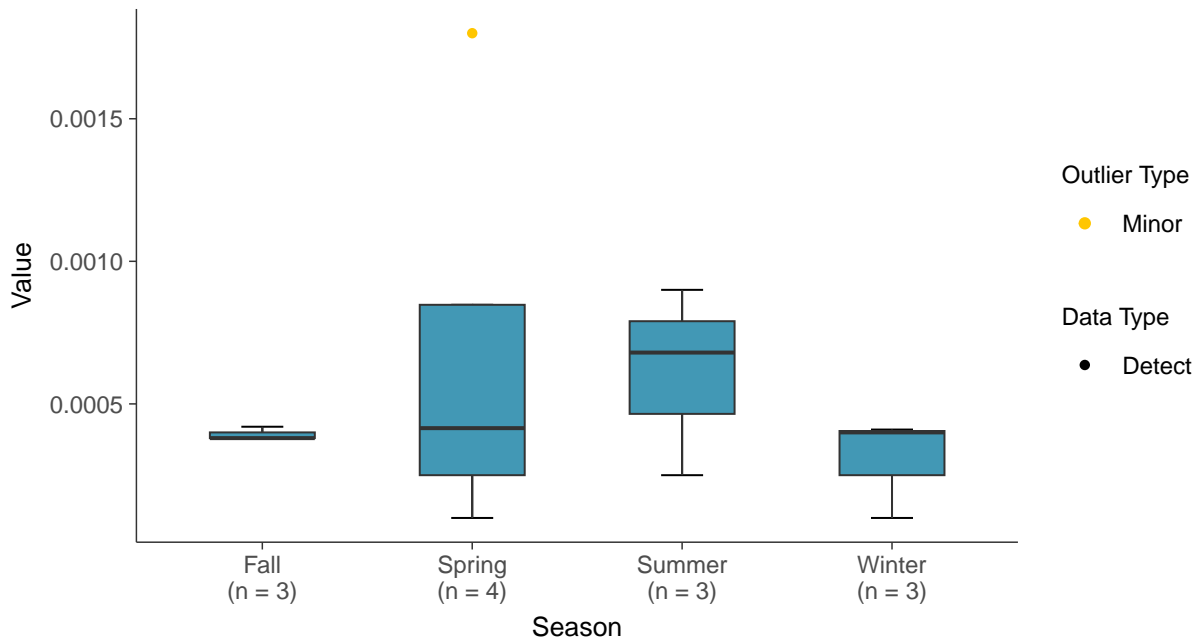
Boxplot

Cobalt, MW-10 (mg/L)



Boxplot by Season

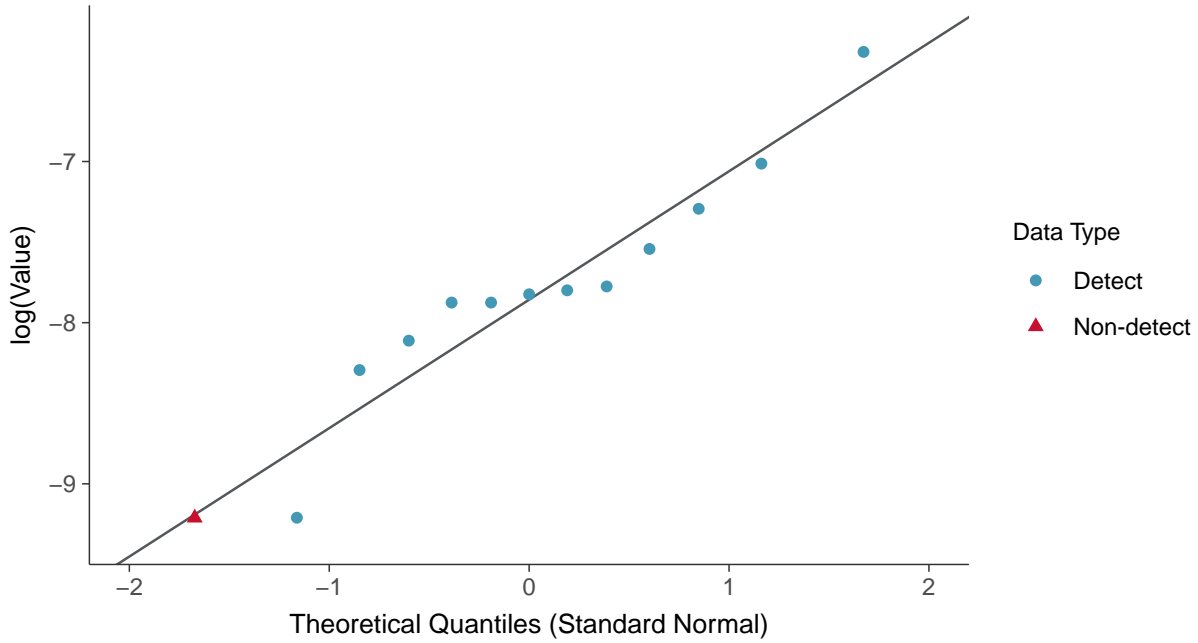
Cobalt, MW-10 (mg/L)





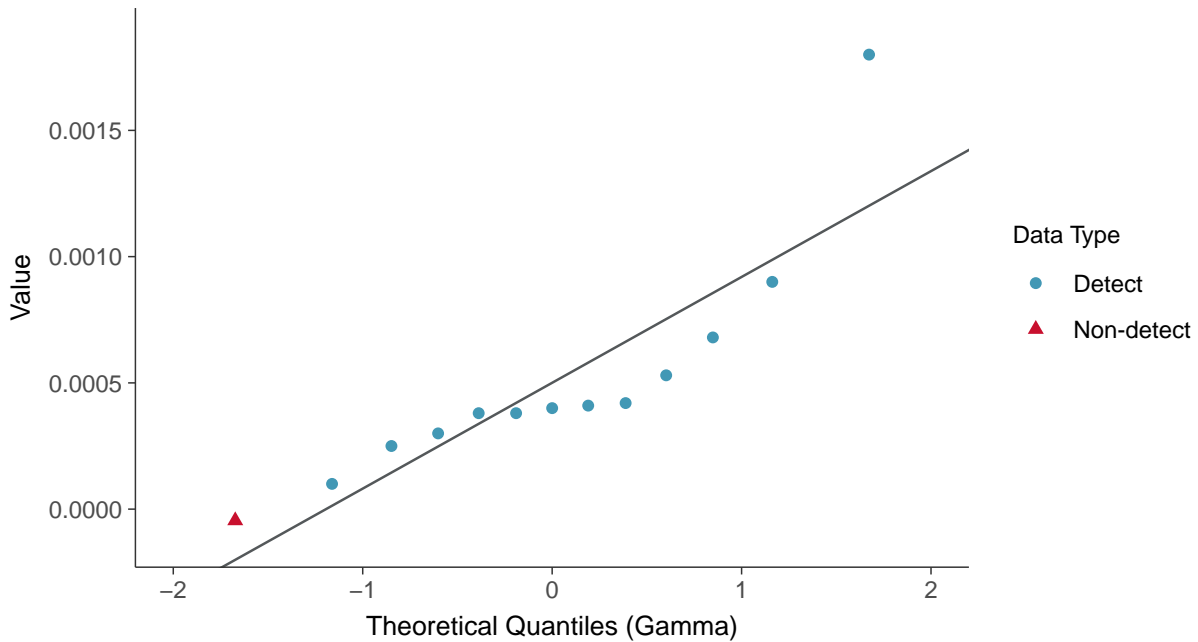
Lognormal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-10 (mg/L)



Gamma Q-Q plot using ROS Imputed Estimates

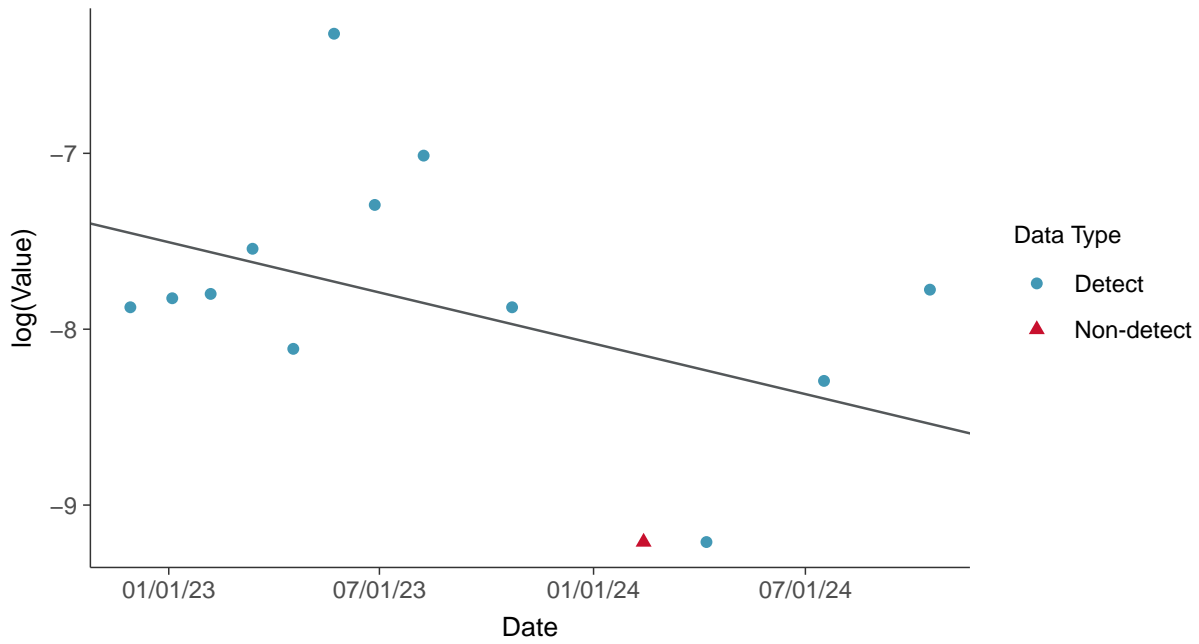
Cobalt, MW-10 (mg/L)





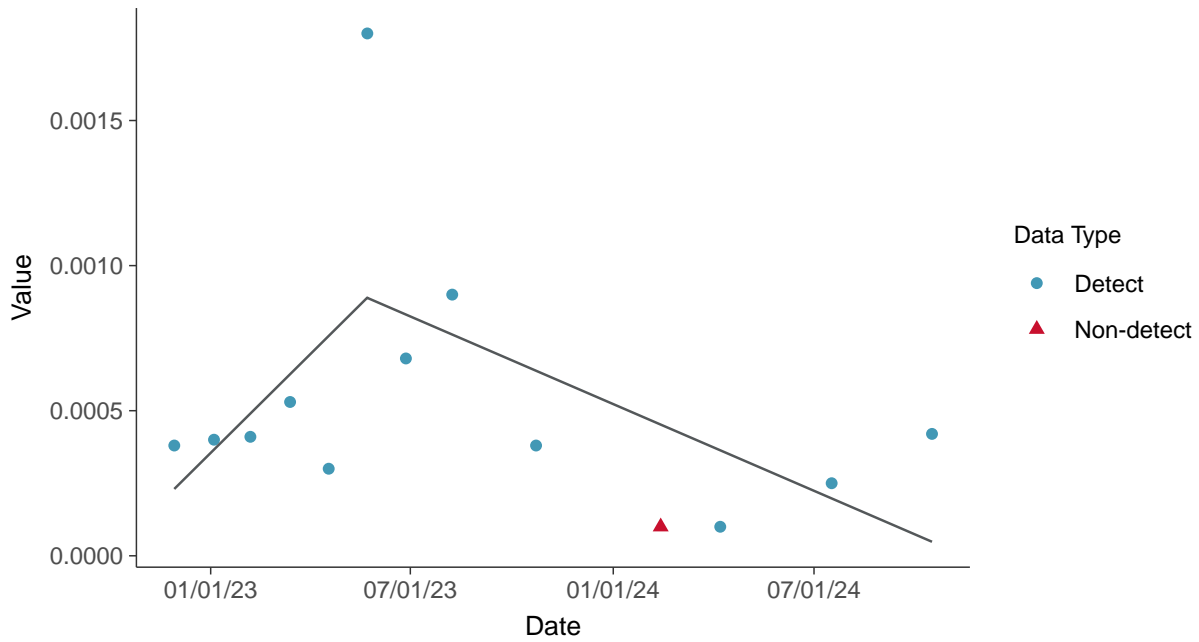
Trend Regression: Lognormal MLE

Cobalt, MW-10 (mg/L)



Trend Regression: Piecewise Linear-Linear

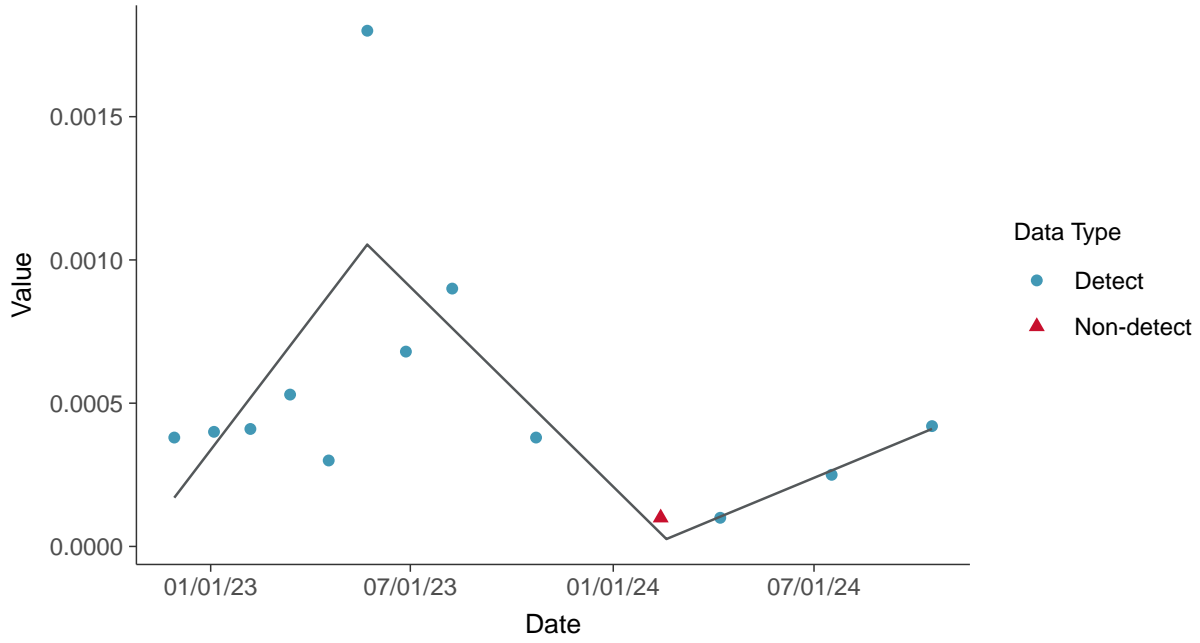
Cobalt, MW-10 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

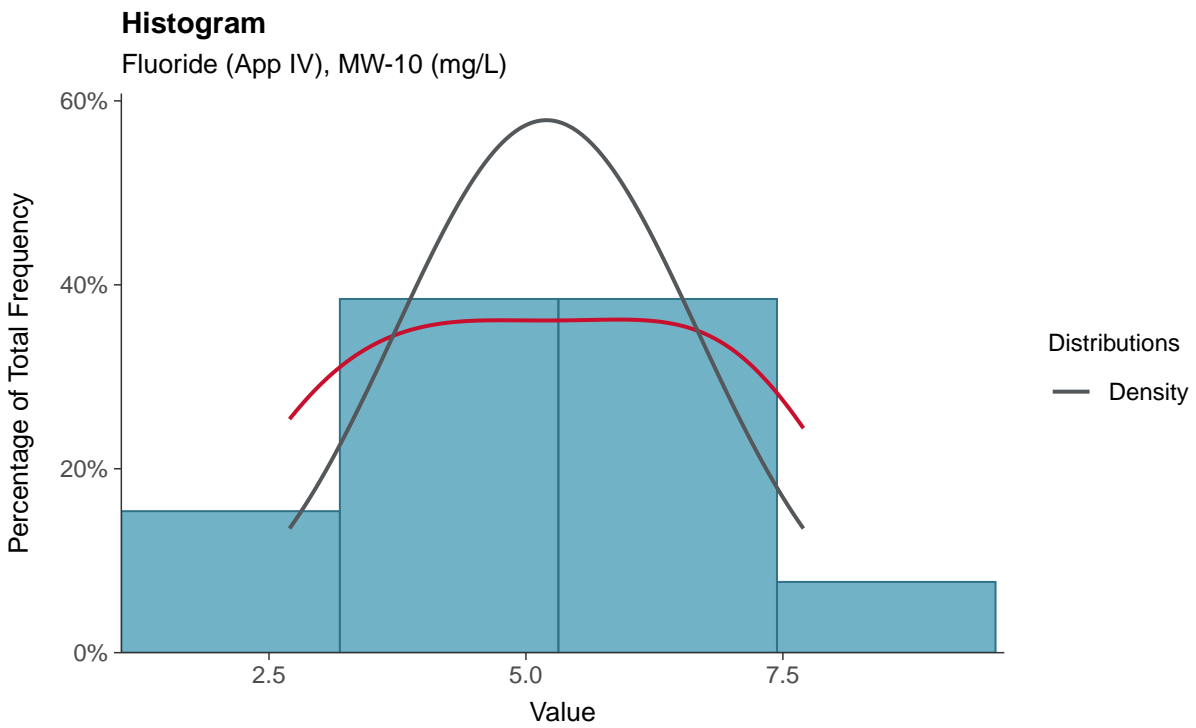
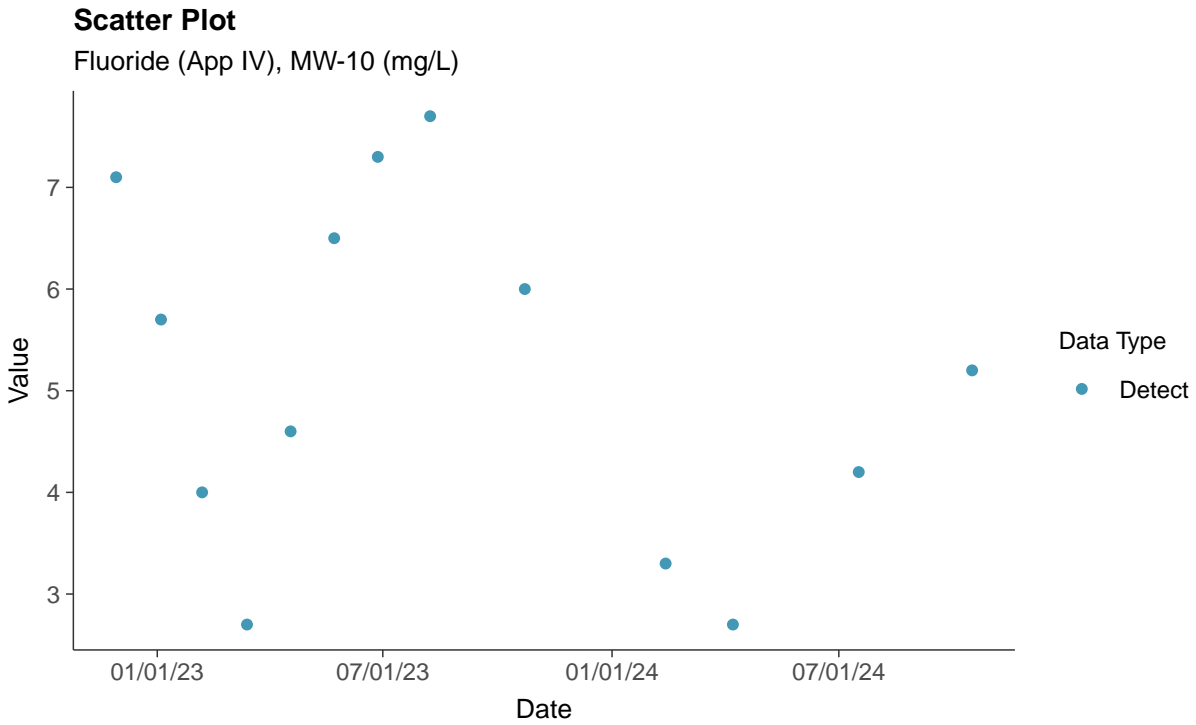
Cobalt, MW-10 (mg/L)





Appendix IV: Fluoride (App IV), MW-10

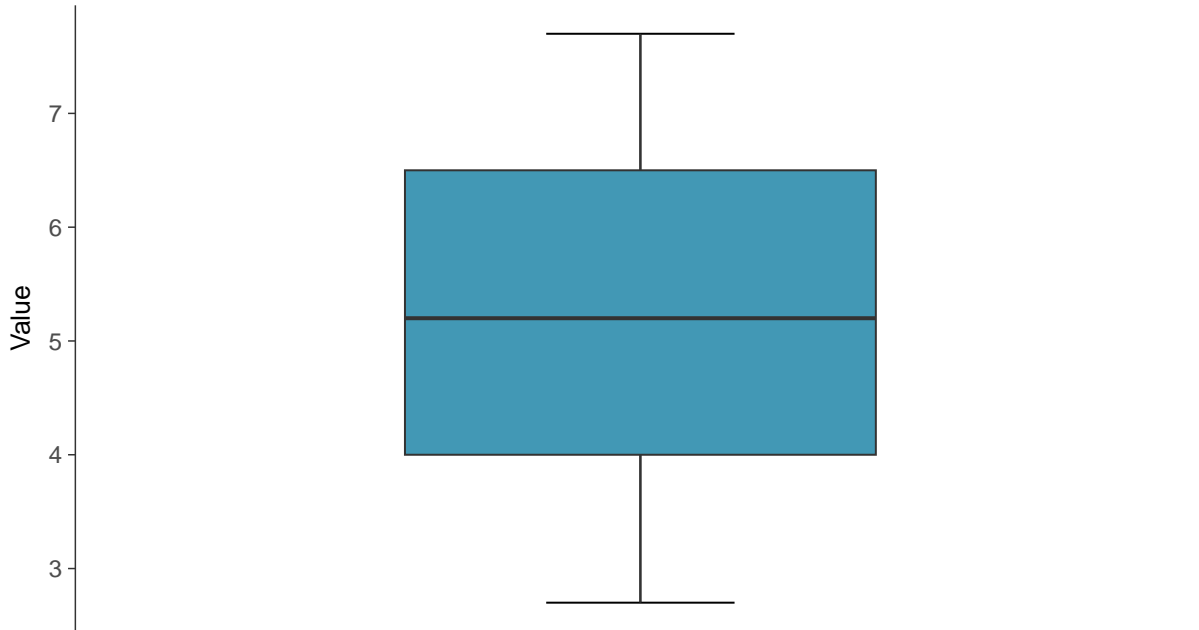
ID: 3_20_3_5_113





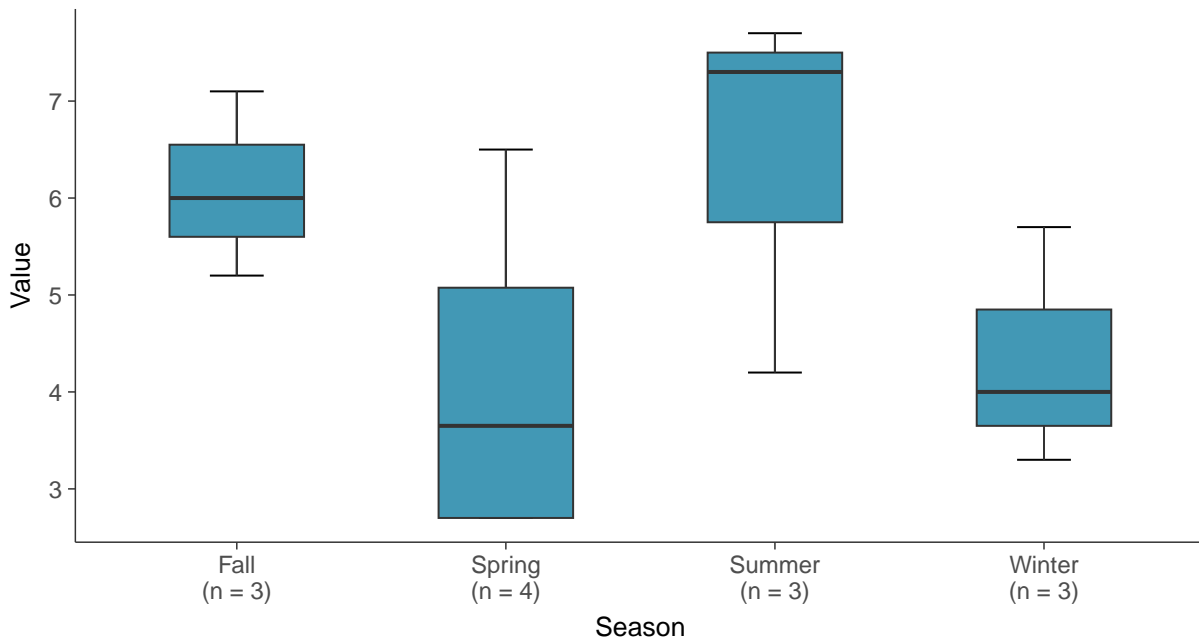
Boxplot

Fluoride (App IV), MW-10 (mg/L)



Boxplot by Season

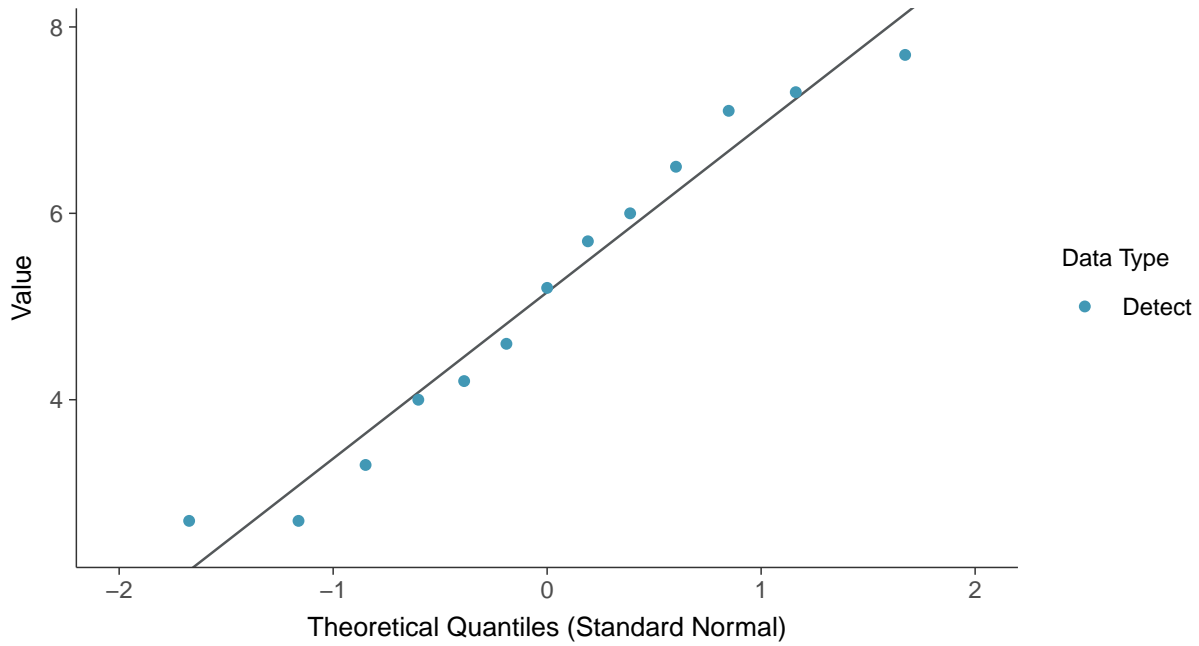
Fluoride (App IV), MW-10 (mg/L)





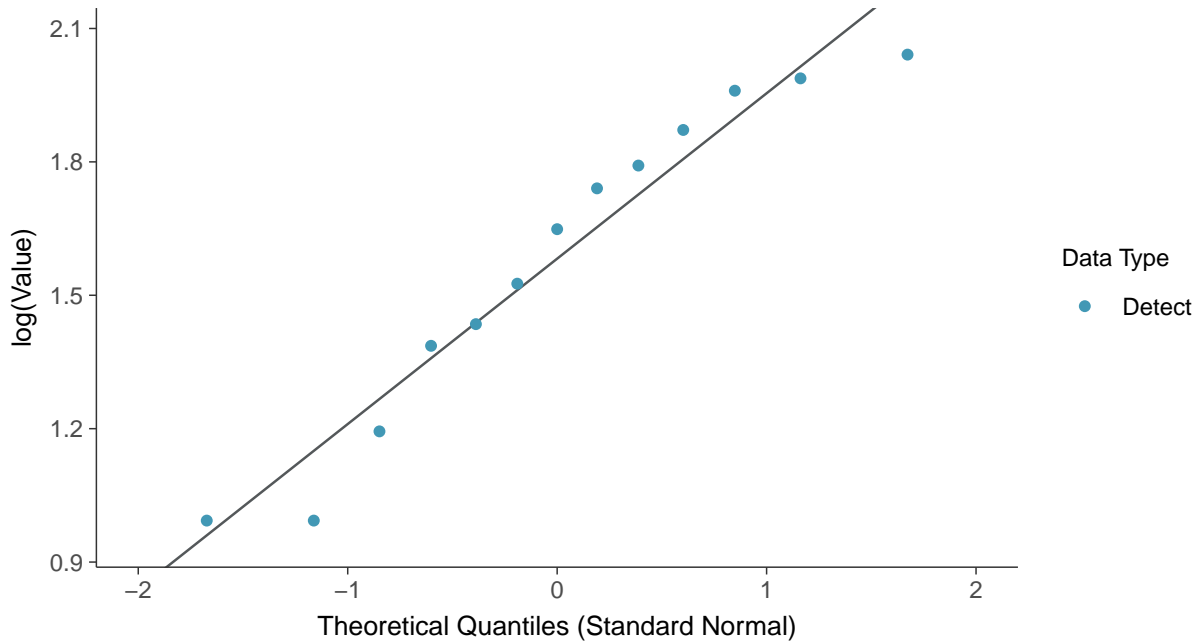
Normal Q-Q plot

Fluoride (App IV), MW-10 (mg/L)



Lognormal Q-Q plot

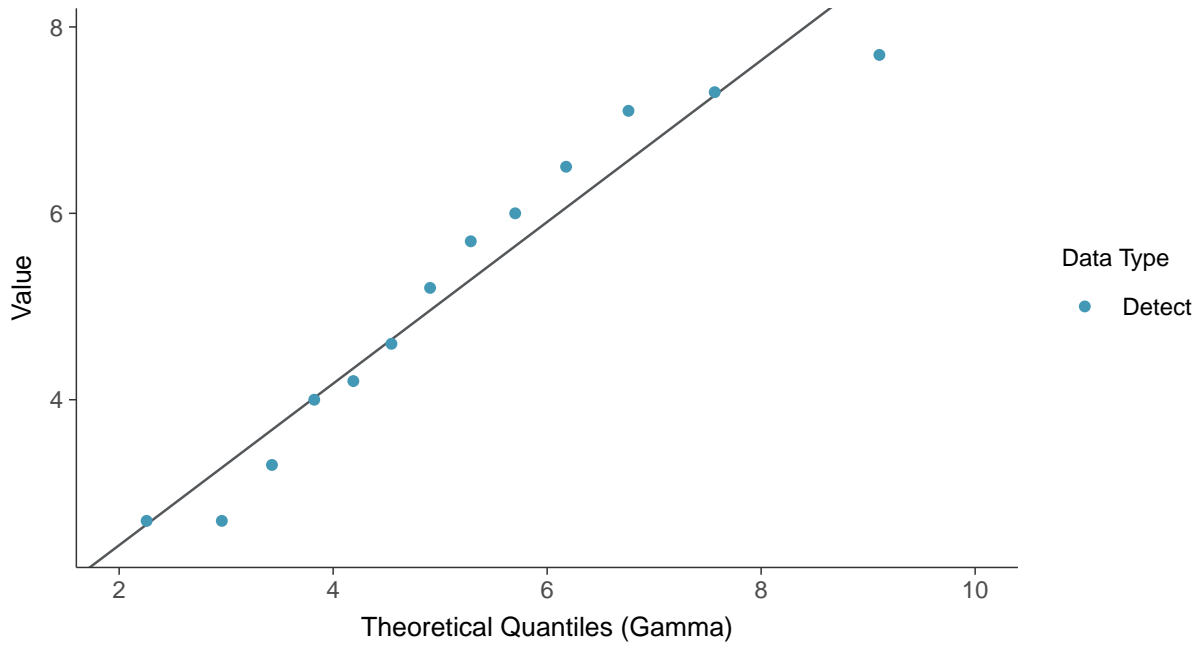
Fluoride (App IV), MW-10 (mg/L)





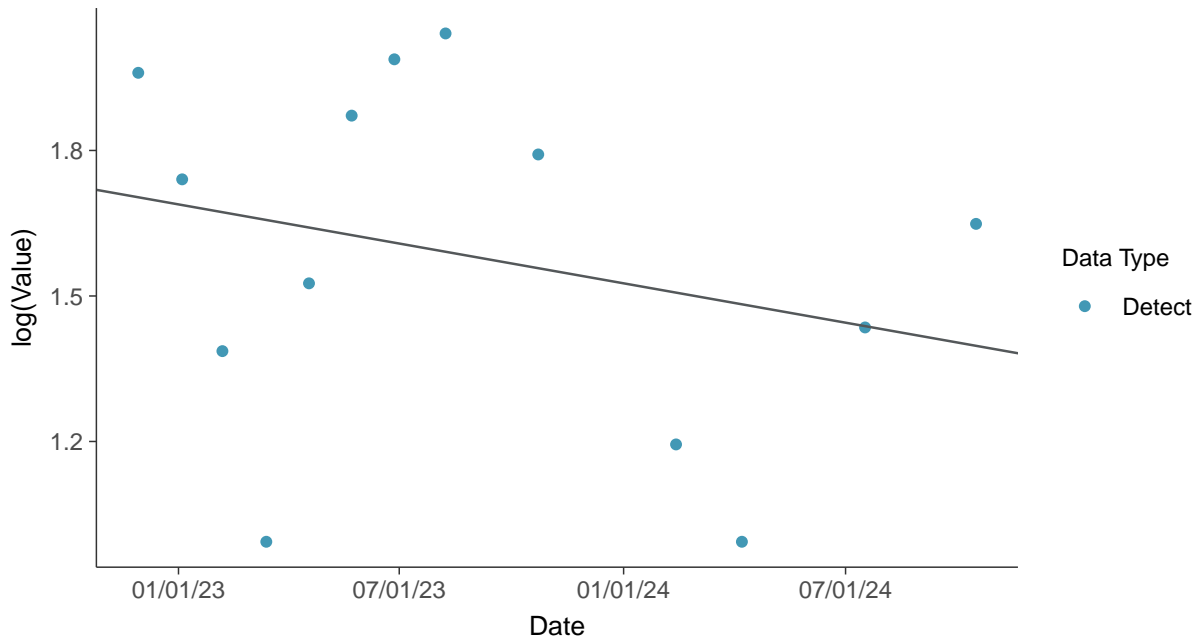
Gamma Q-Q plot

Fluoride (App IV), MW-10 (mg/L)



Trend Regression: Lognormal MLE

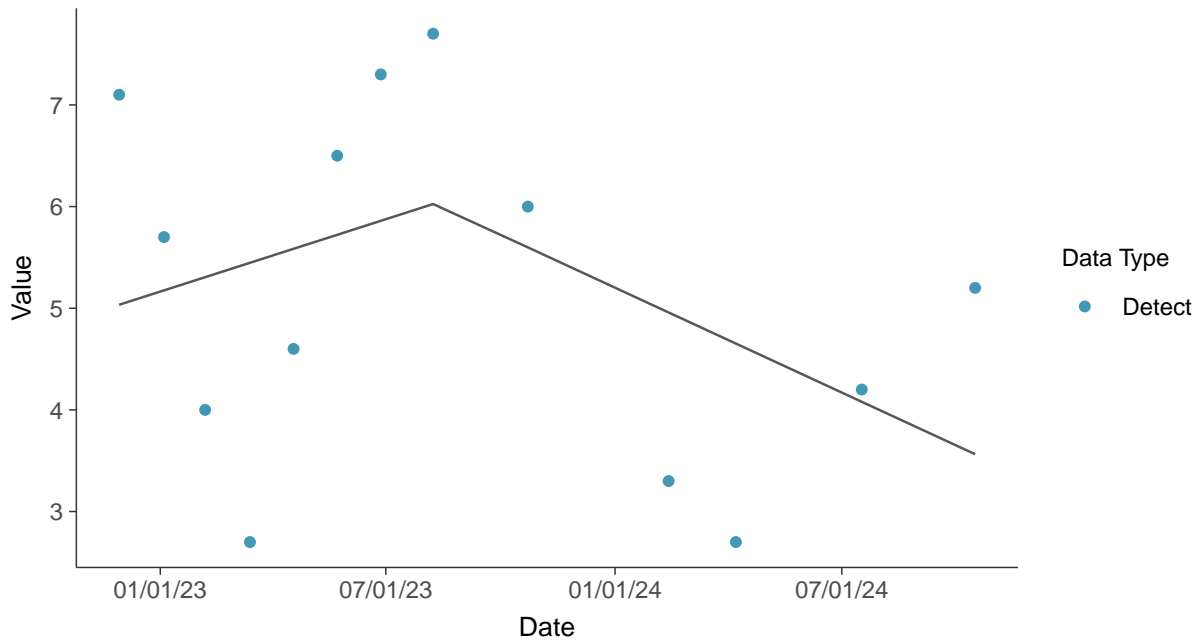
Fluoride (App IV), MW-10 (mg/L)





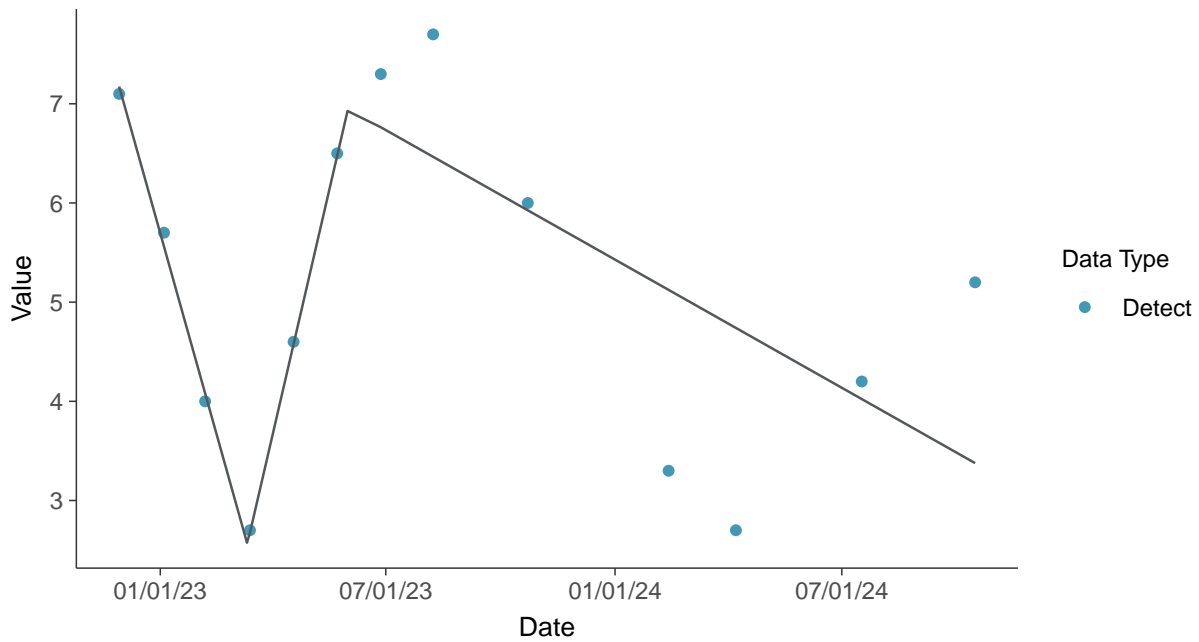
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-10 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

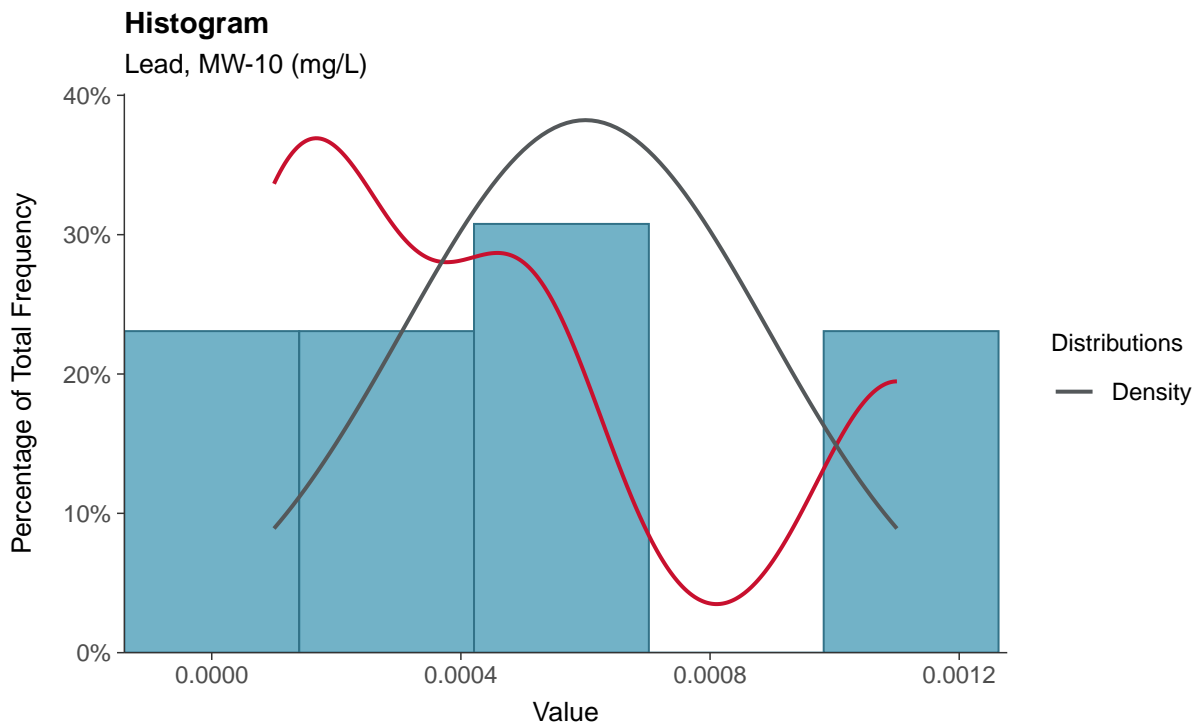
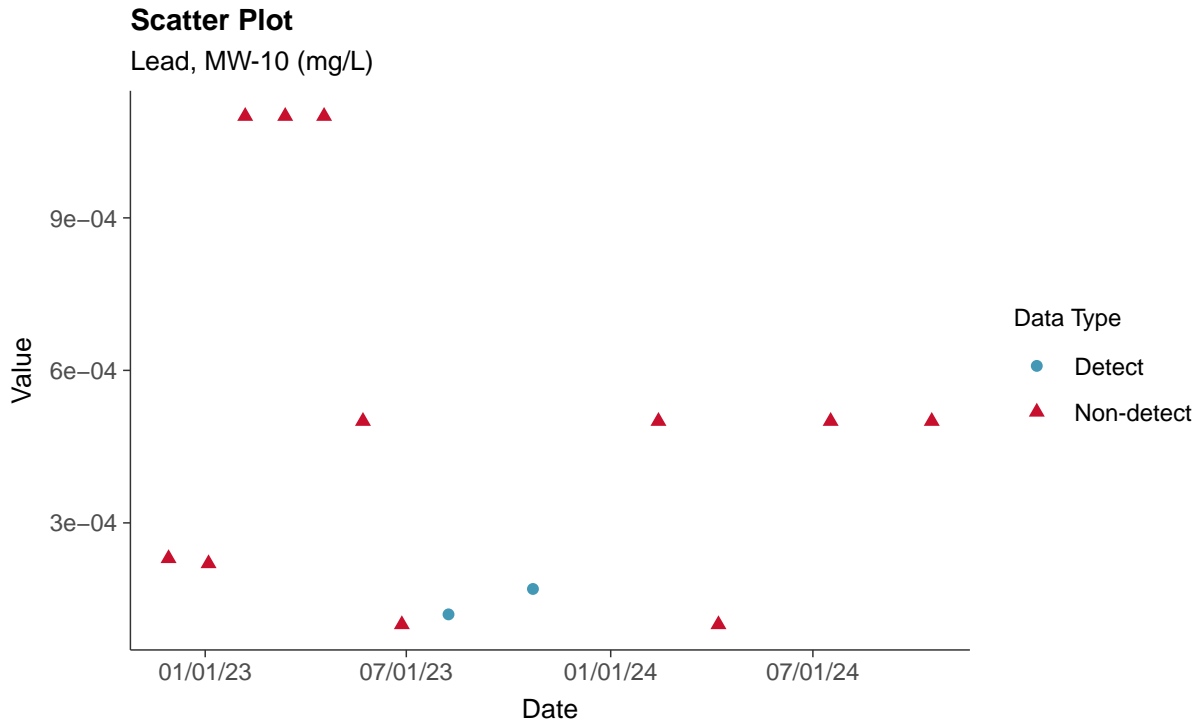
Fluoride (App IV), MW-10 (mg/L)





Appendix IV: Lead, MW-10

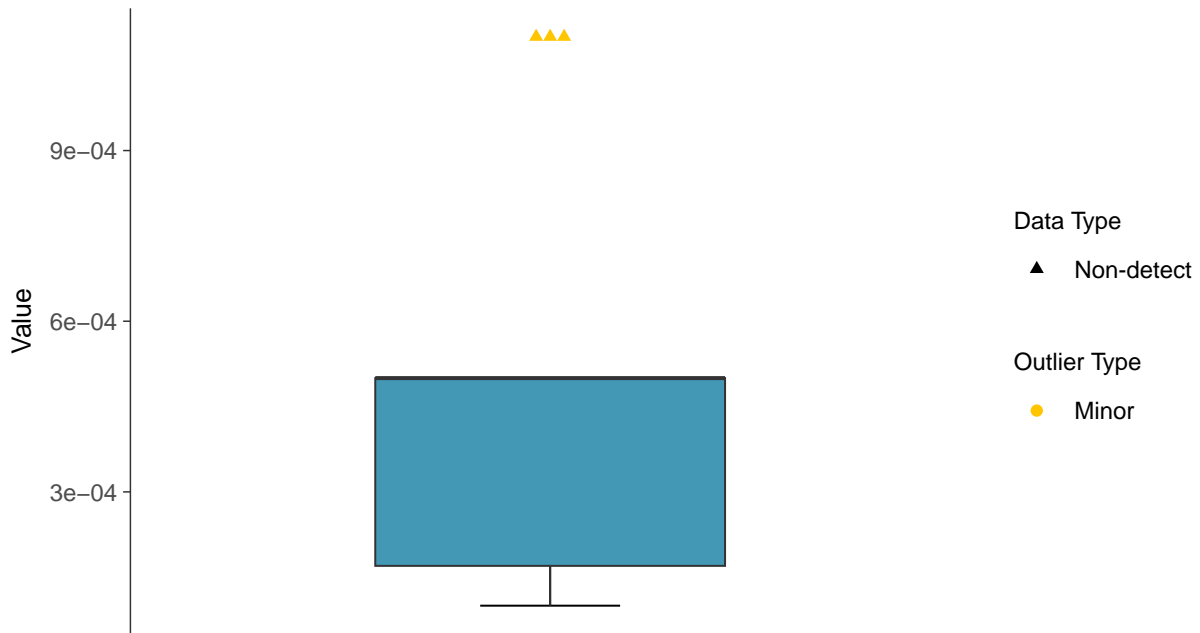
ID: 3_20_3_5_115





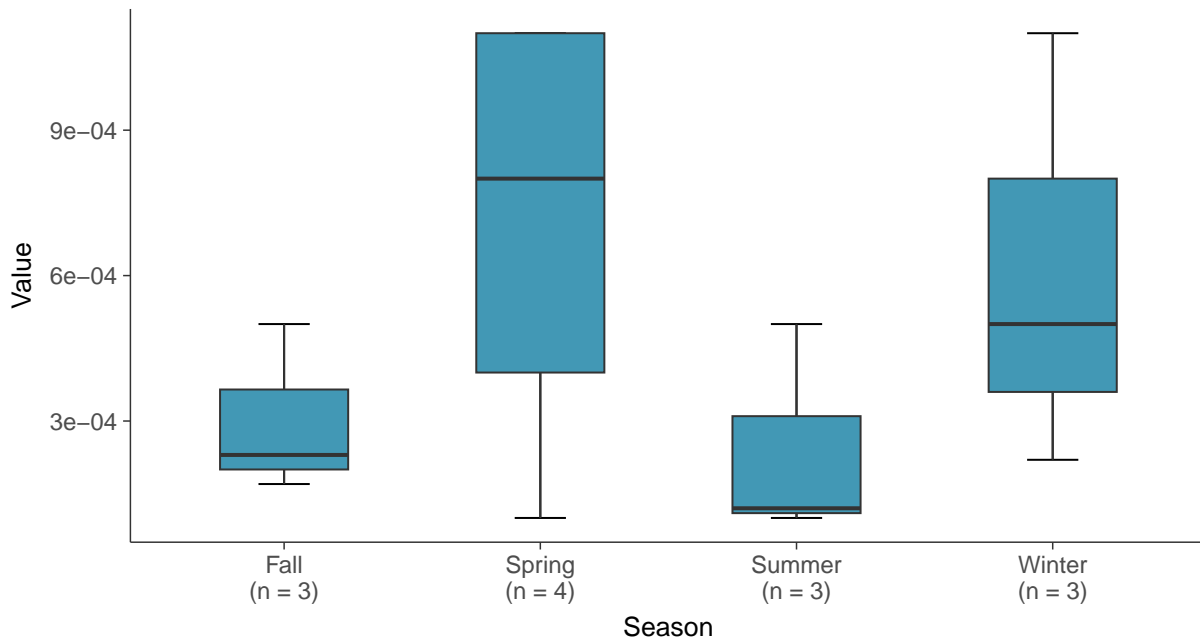
Boxplot

Lead, MW-10 (mg/L)



Boxplot by Season

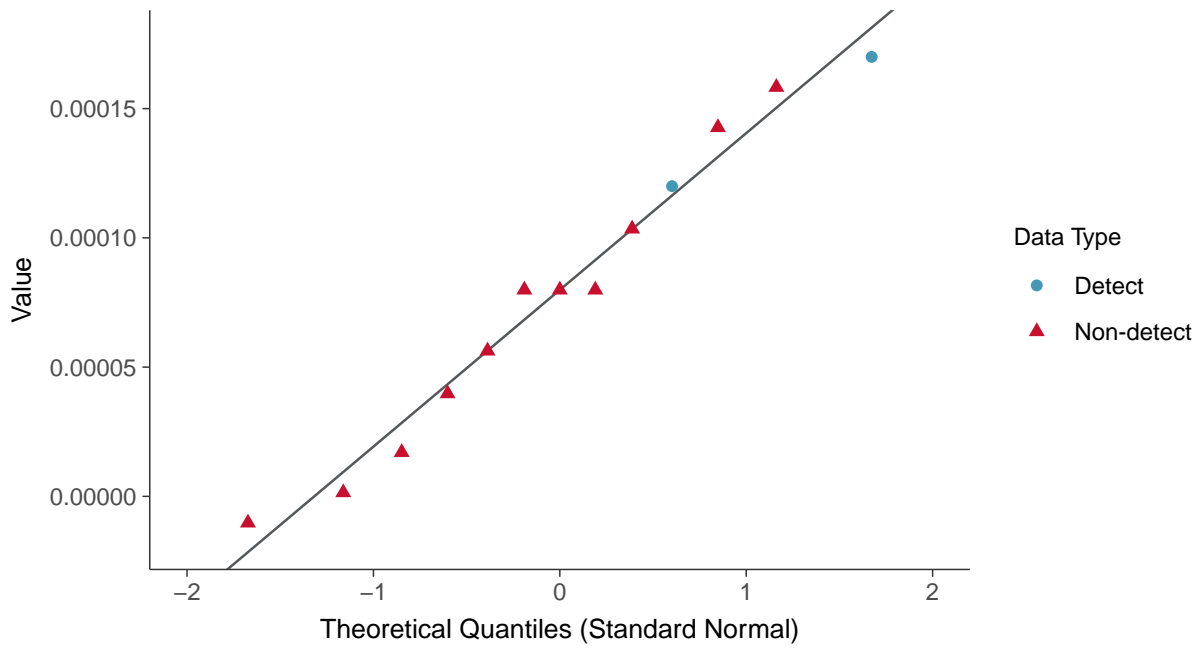
Lead, MW-10 (mg/L)





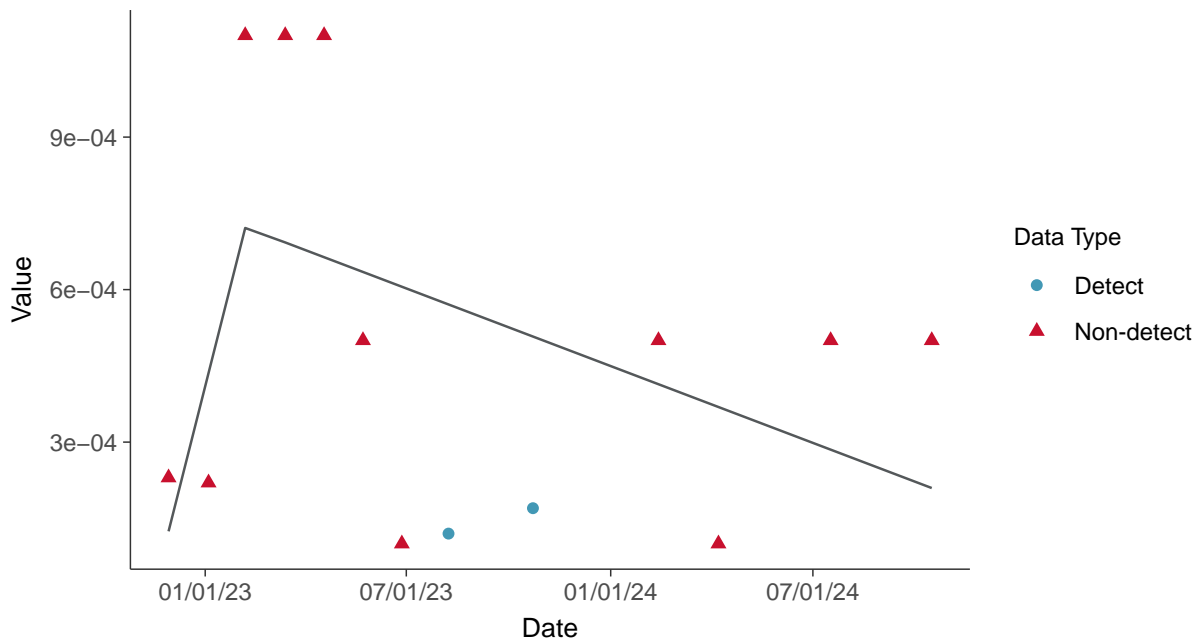
Normal Q-Q plot using ROS Imputed Estimates

Lead, MW-10 (mg/L)



Trend Regression: Piecewise Linear-Linear

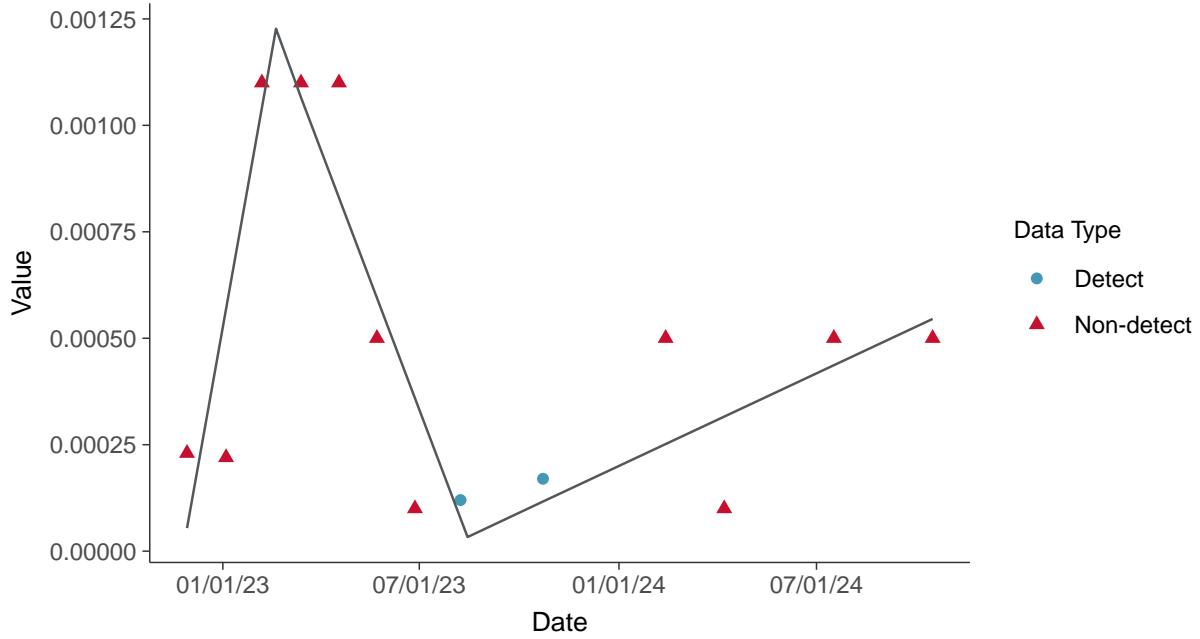
Lead, MW-10 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear

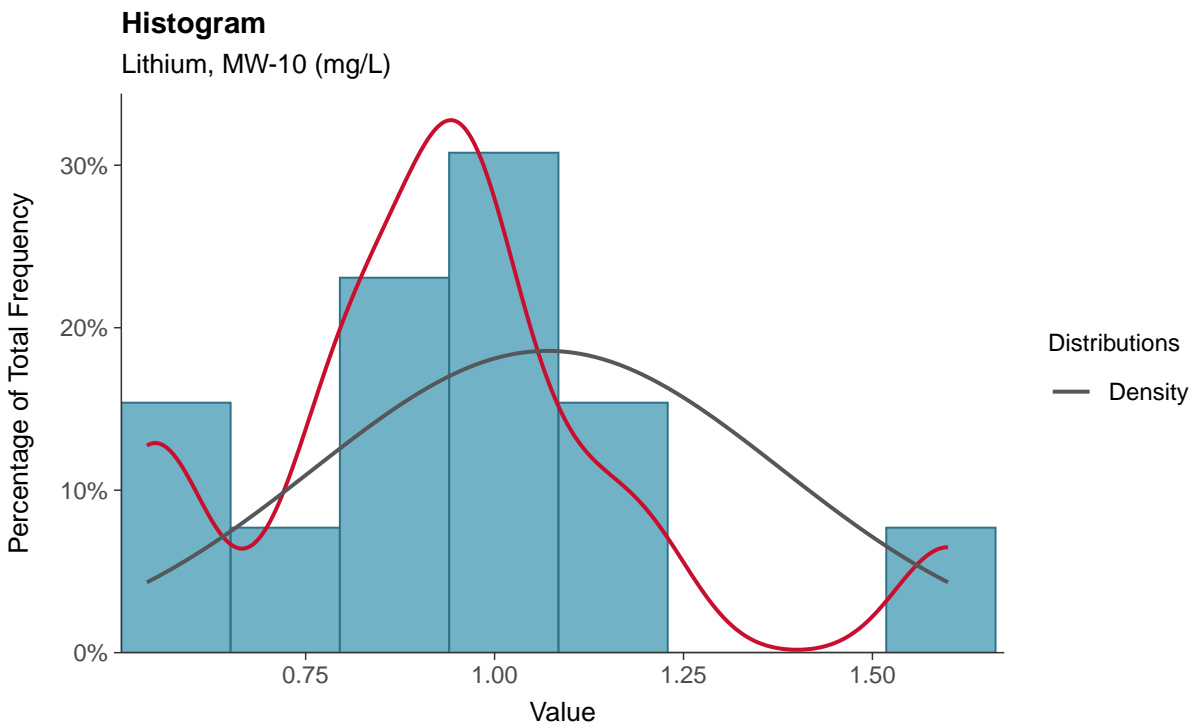
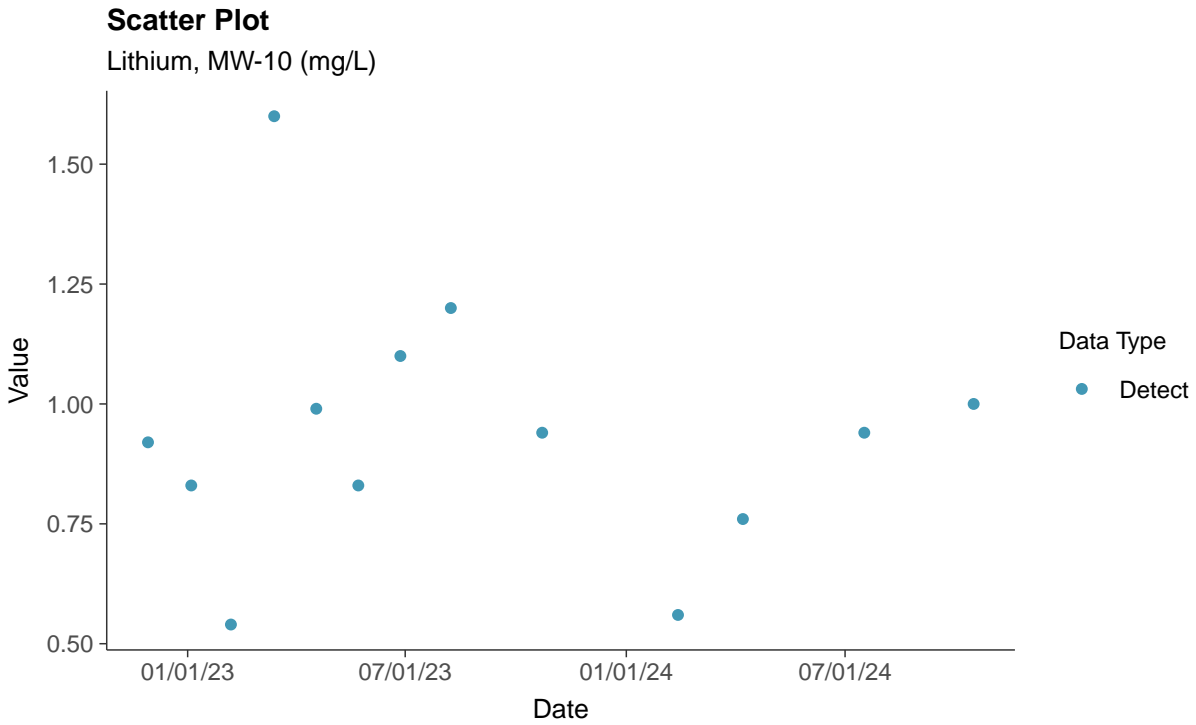
Lead, MW-10 (mg/L)





Appendix IV: Lithium, MW-10

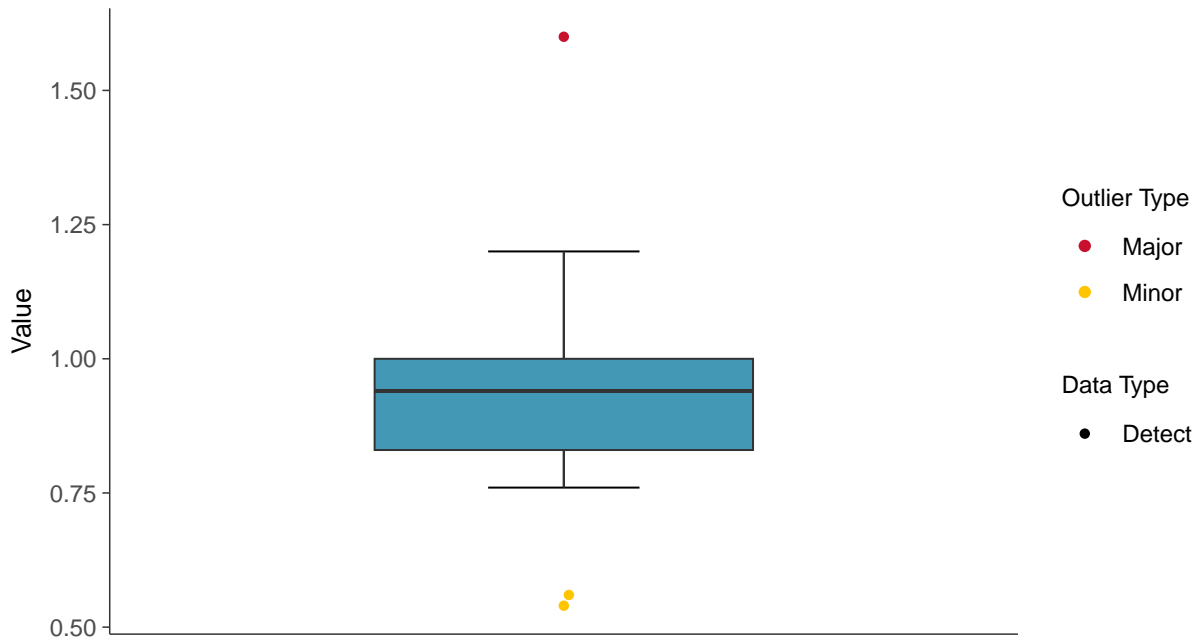
ID: 3_20_3_5_116





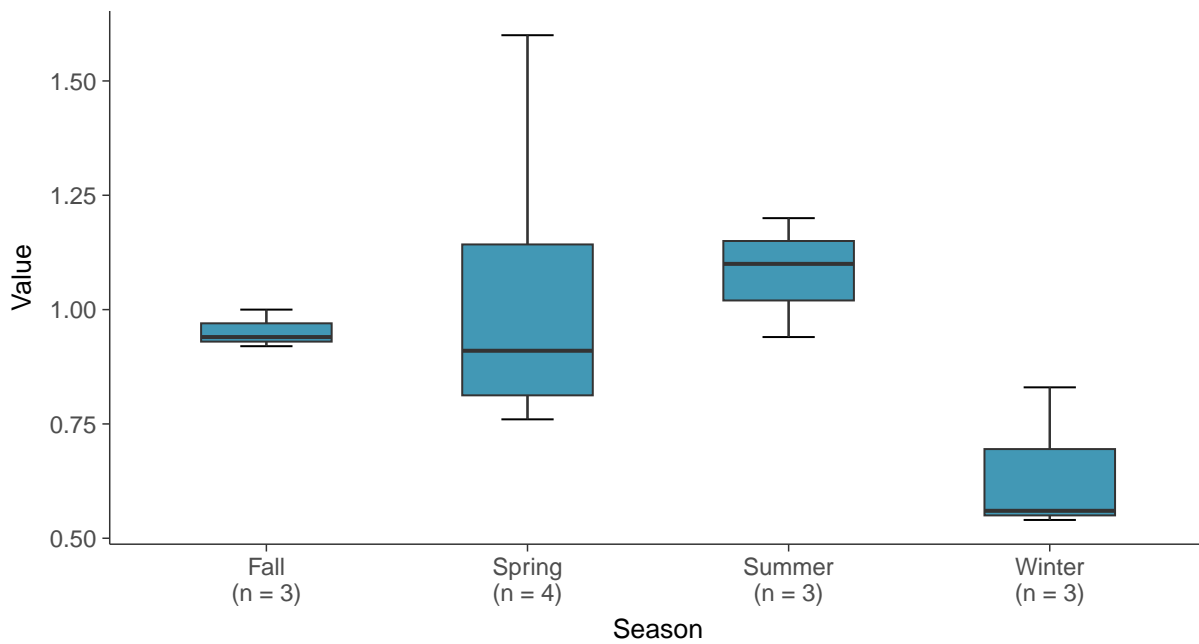
Boxplot

Lithium, MW-10 (mg/L)



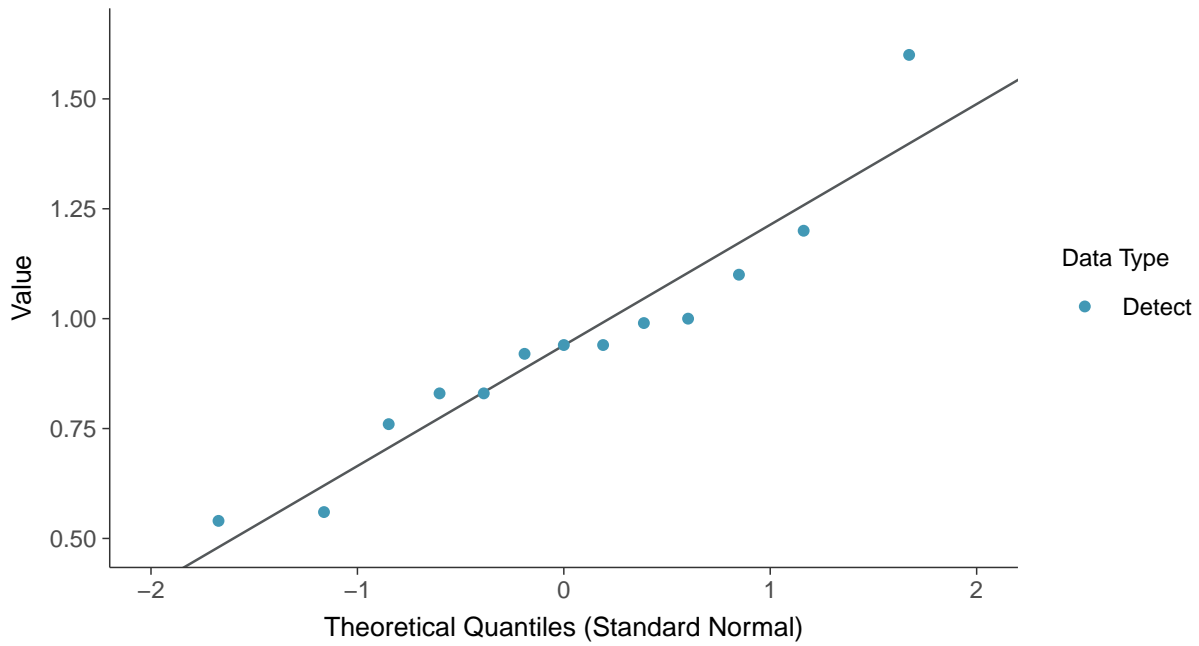
Boxplot by Season

Lithium, MW-10 (mg/L)

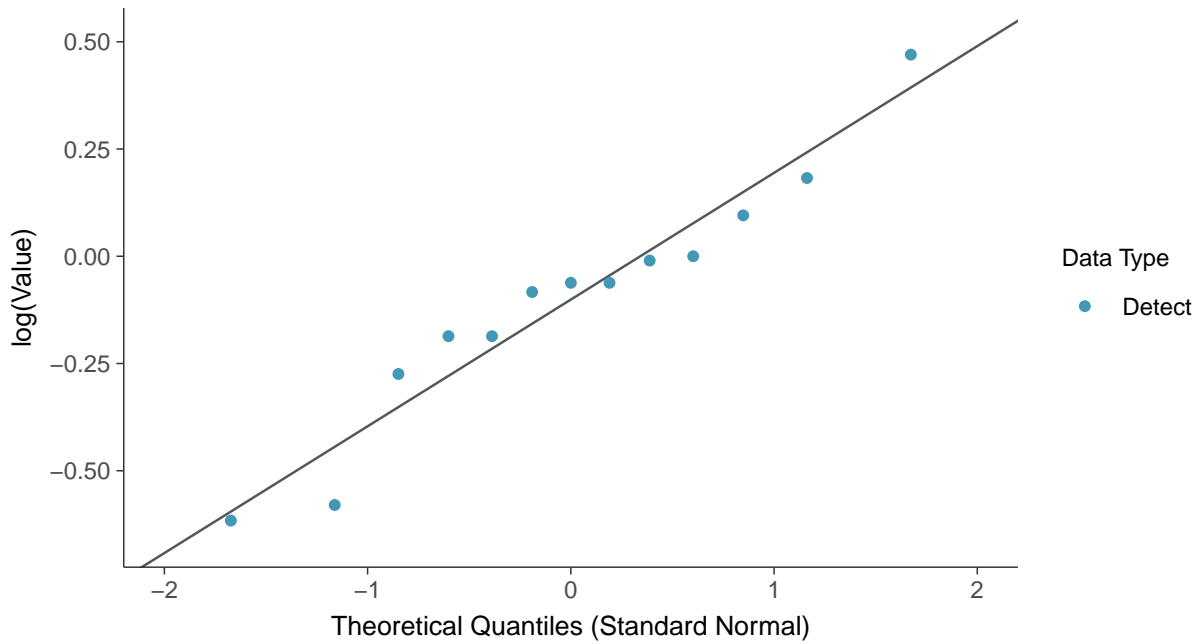




Normal Q-Q plot
Lithium, MW-10 (mg/L)

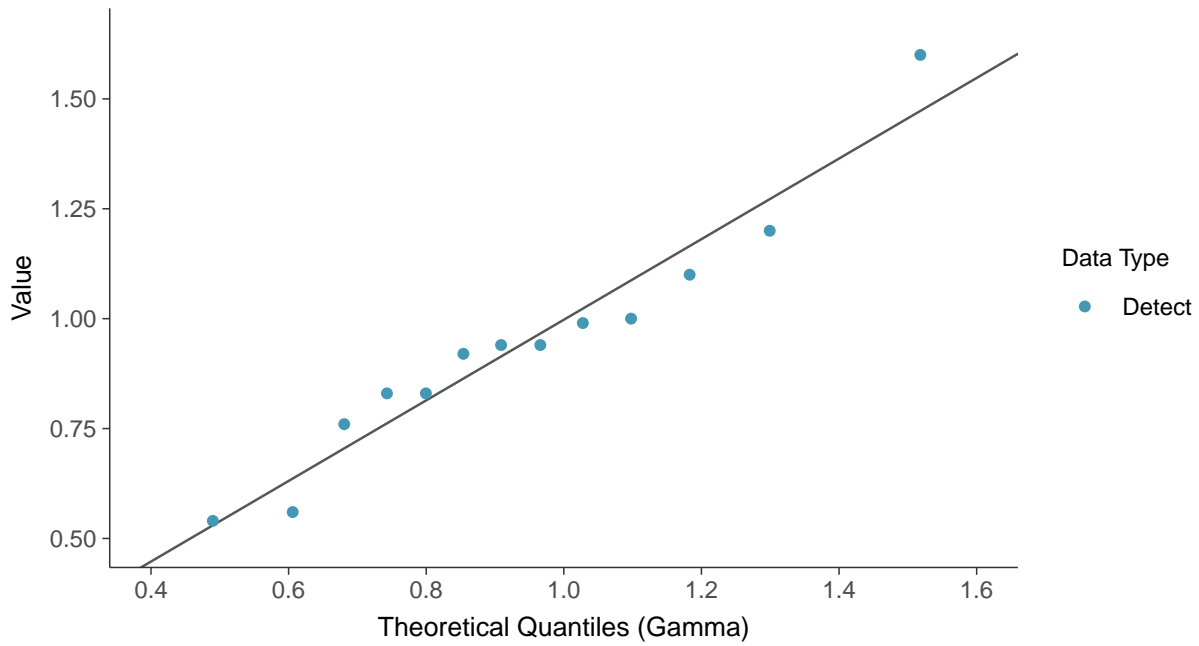


Lognormal Q-Q plot
Lithium, MW-10 (mg/L)

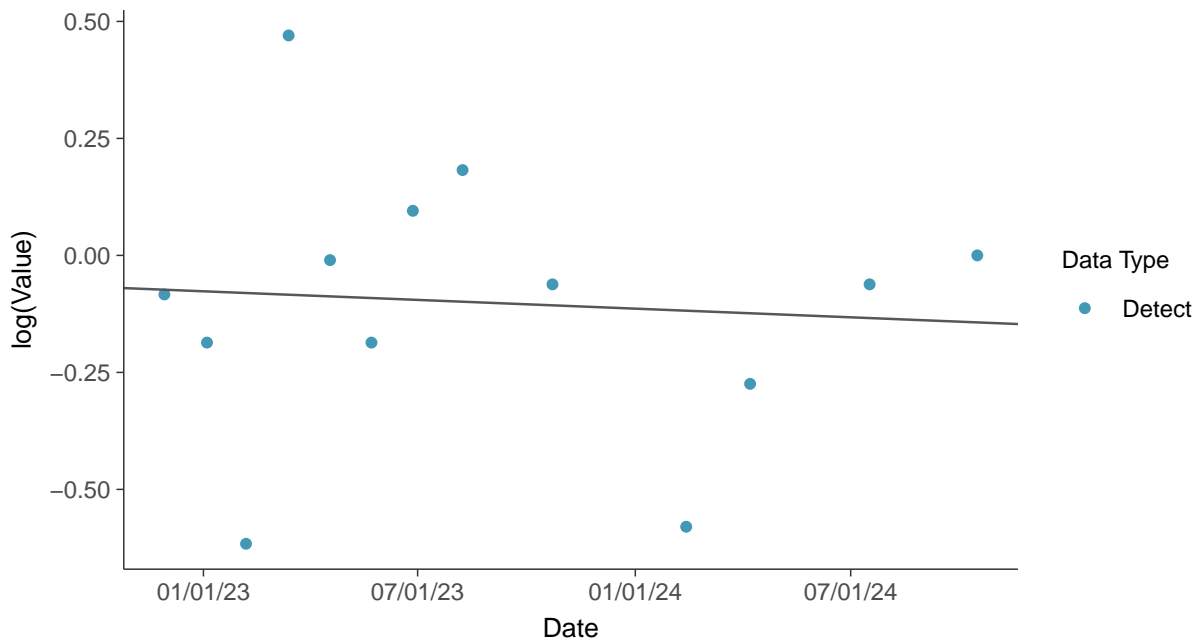




Gamma Q-Q plot
Lithium, MW-10 (mg/L)



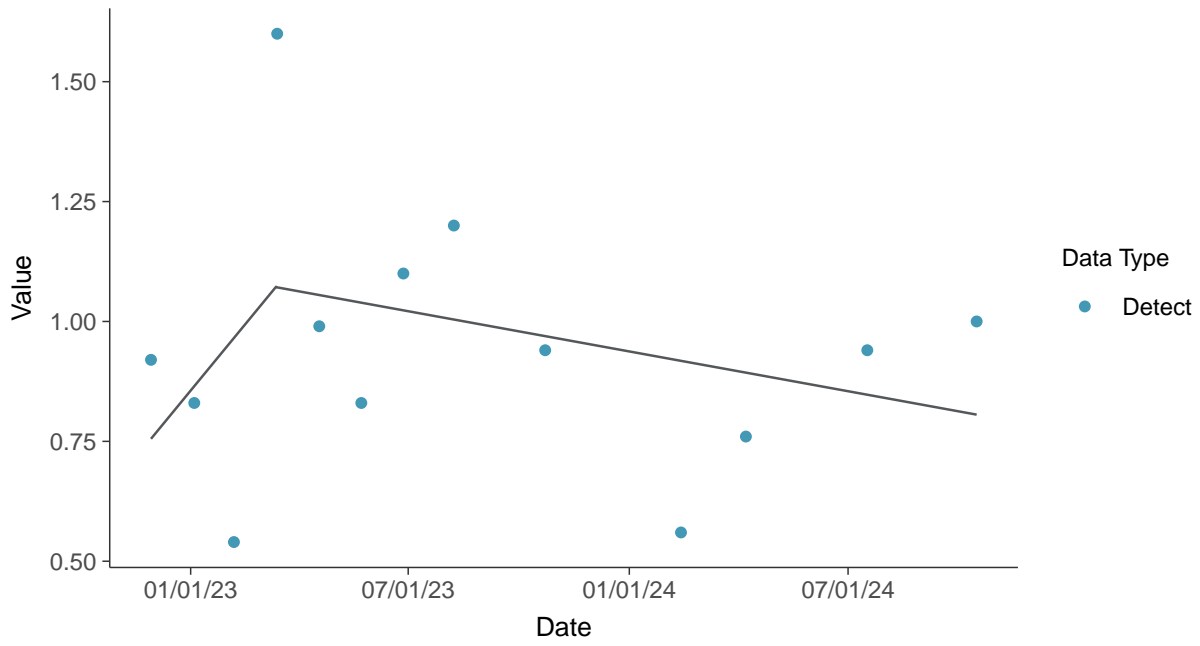
Trend Regression: Lognormal MLE
Lithium, MW-10 (mg/L)





Trend Regression: Piecewise Linear-Linear

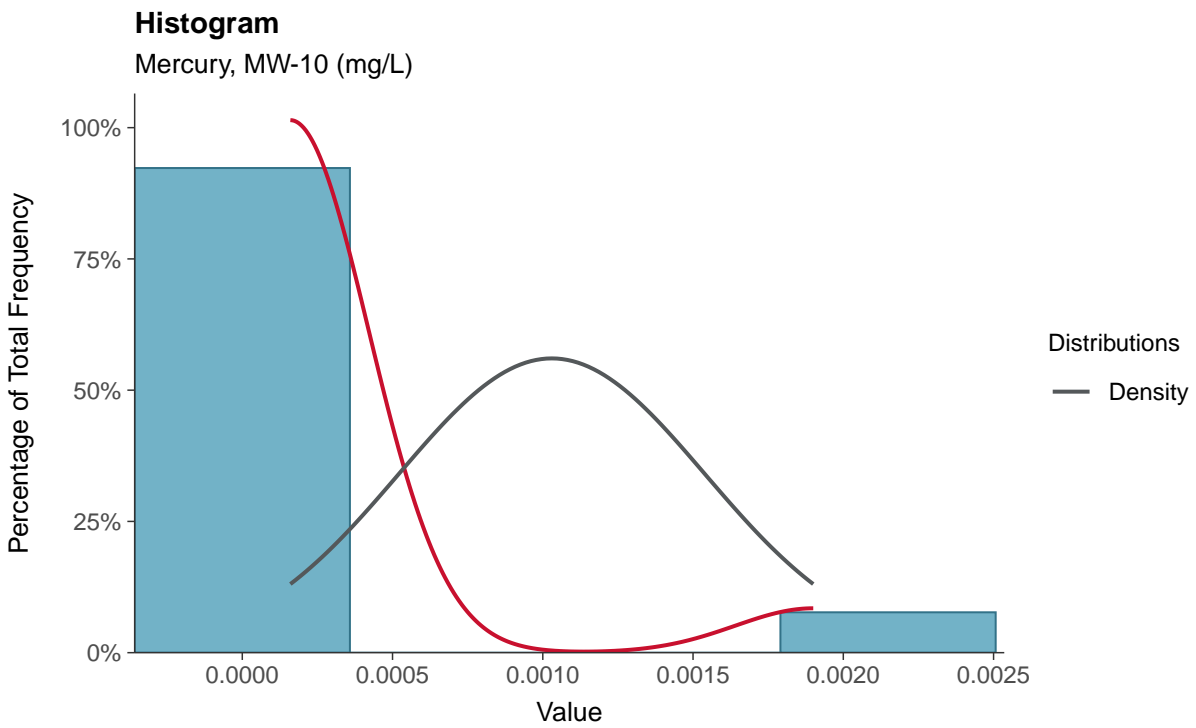
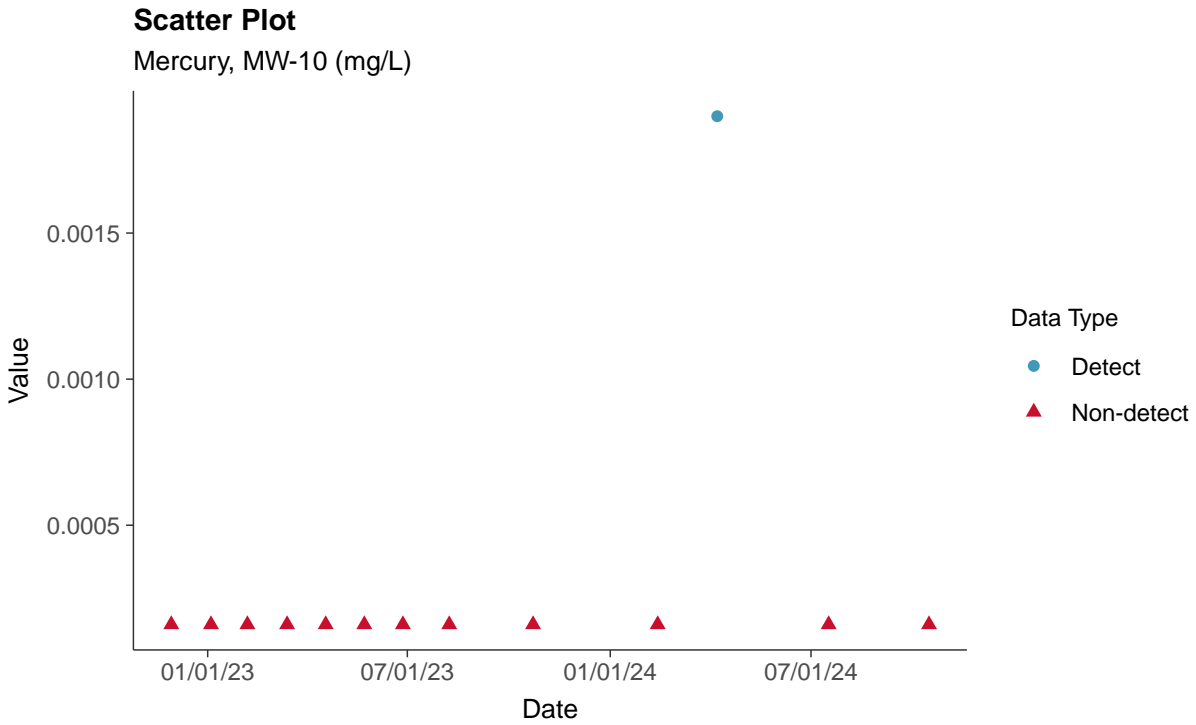
Lithium, MW-10 (mg/L)





Appendix IV: Mercury, MW-10

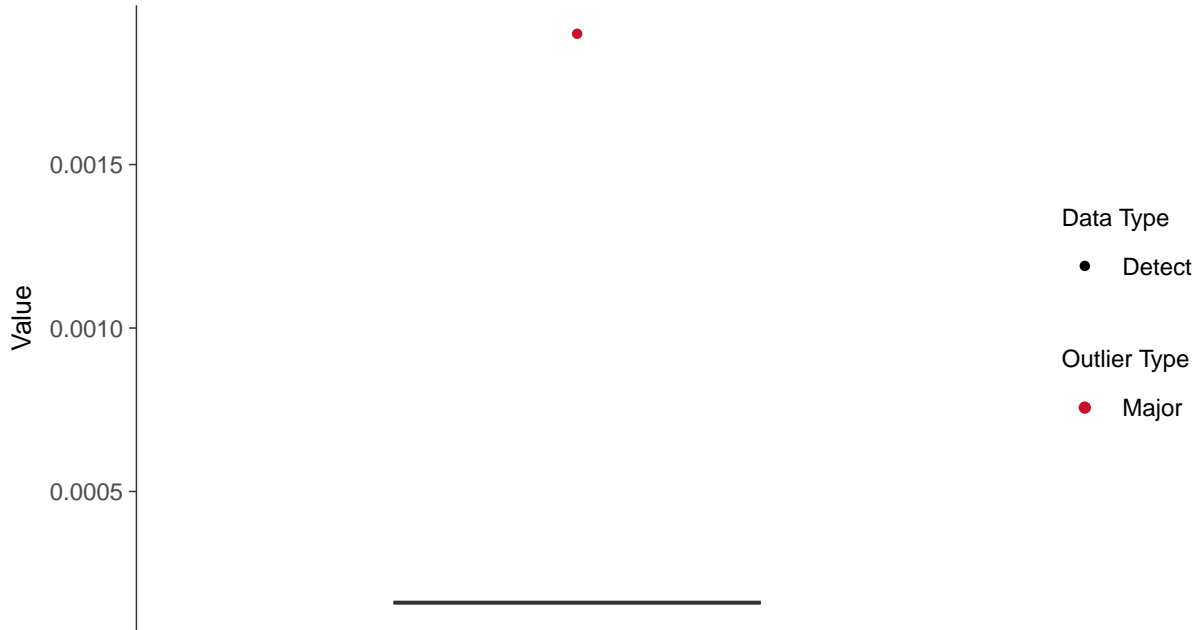
ID: 3_20_3_5_117





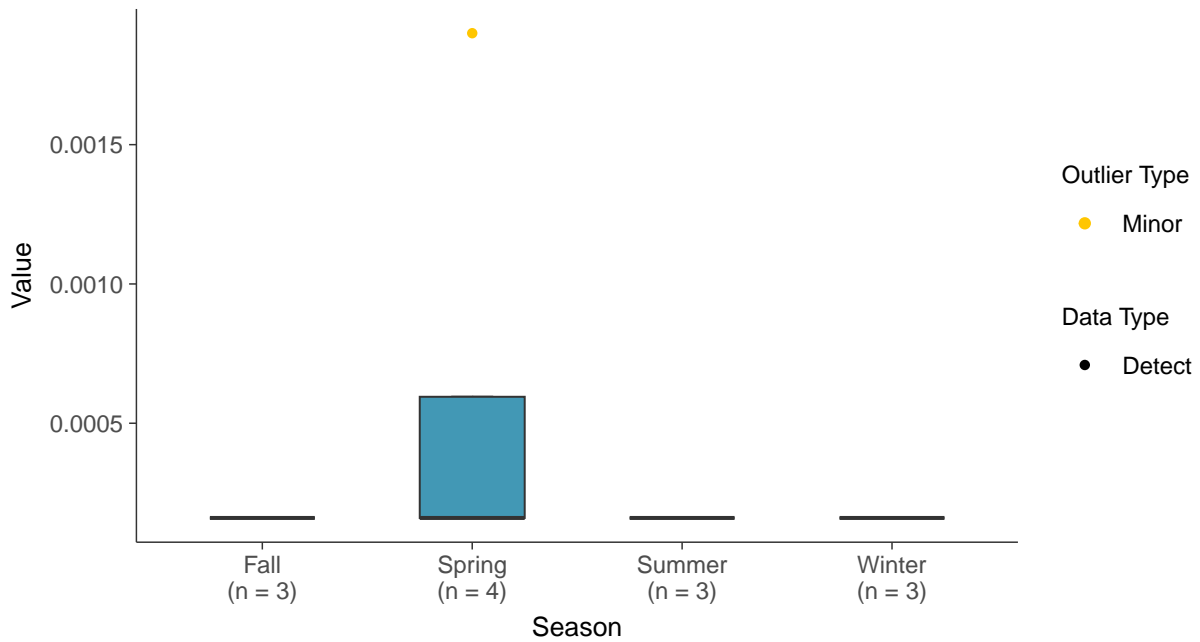
Boxplot

Mercury, MW-10 (mg/L)



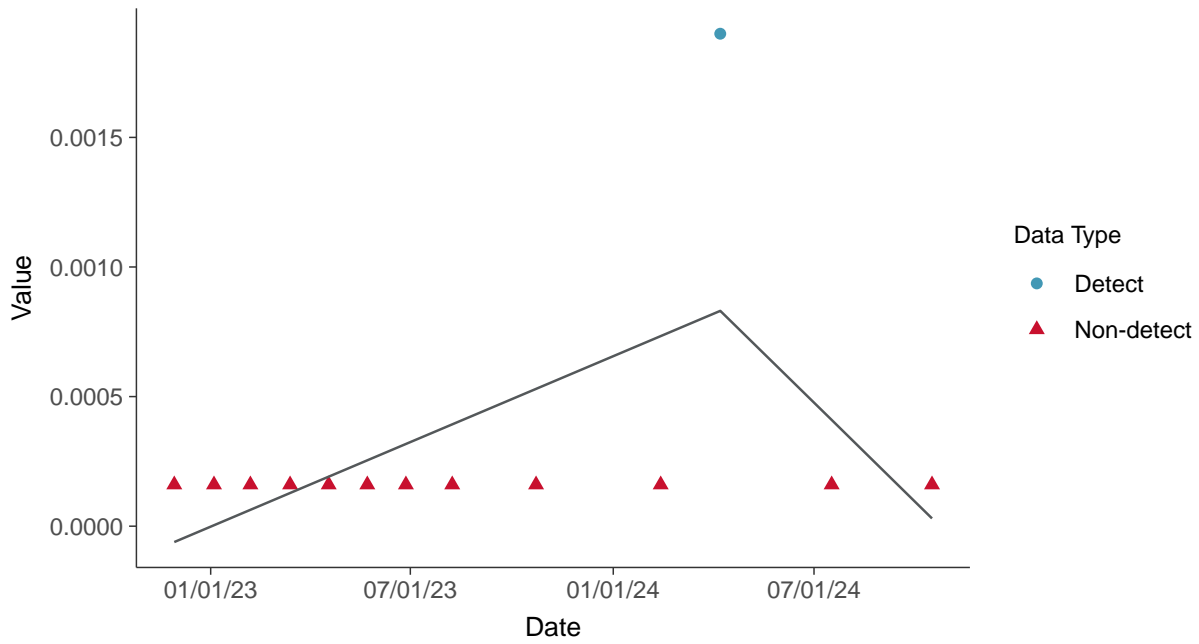
Boxplot by Season

Mercury, MW-10 (mg/L)

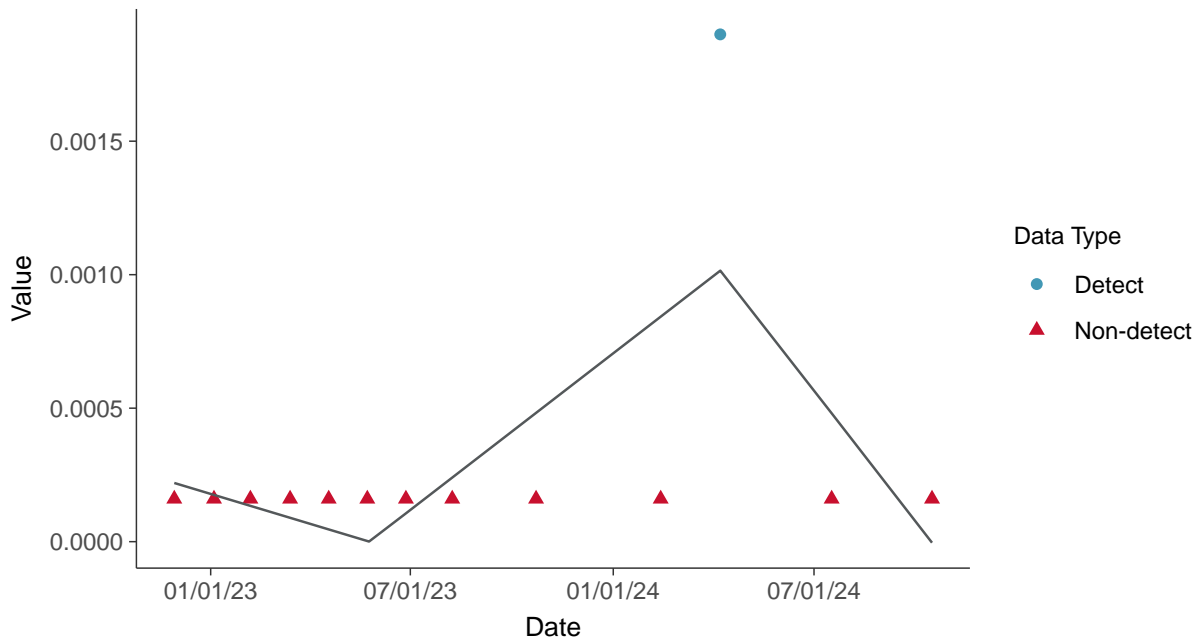




Trend Regression: Piecewise Linear-Linear
Mercury, MW-10 (mg/L)



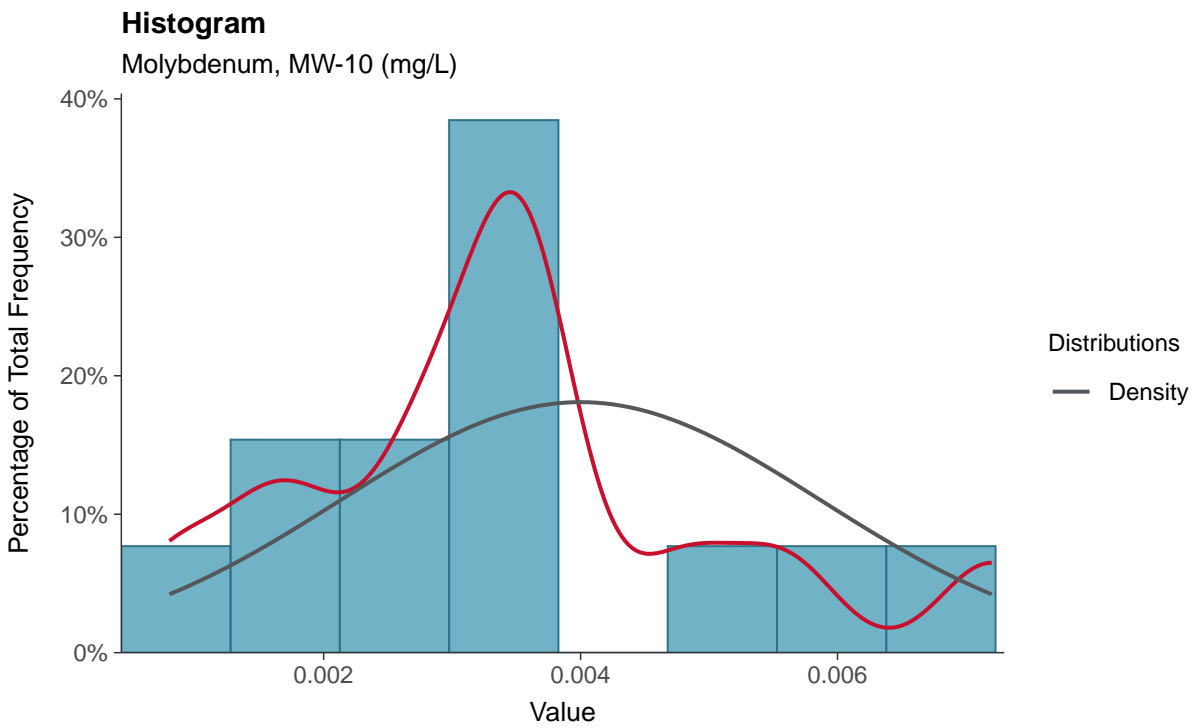
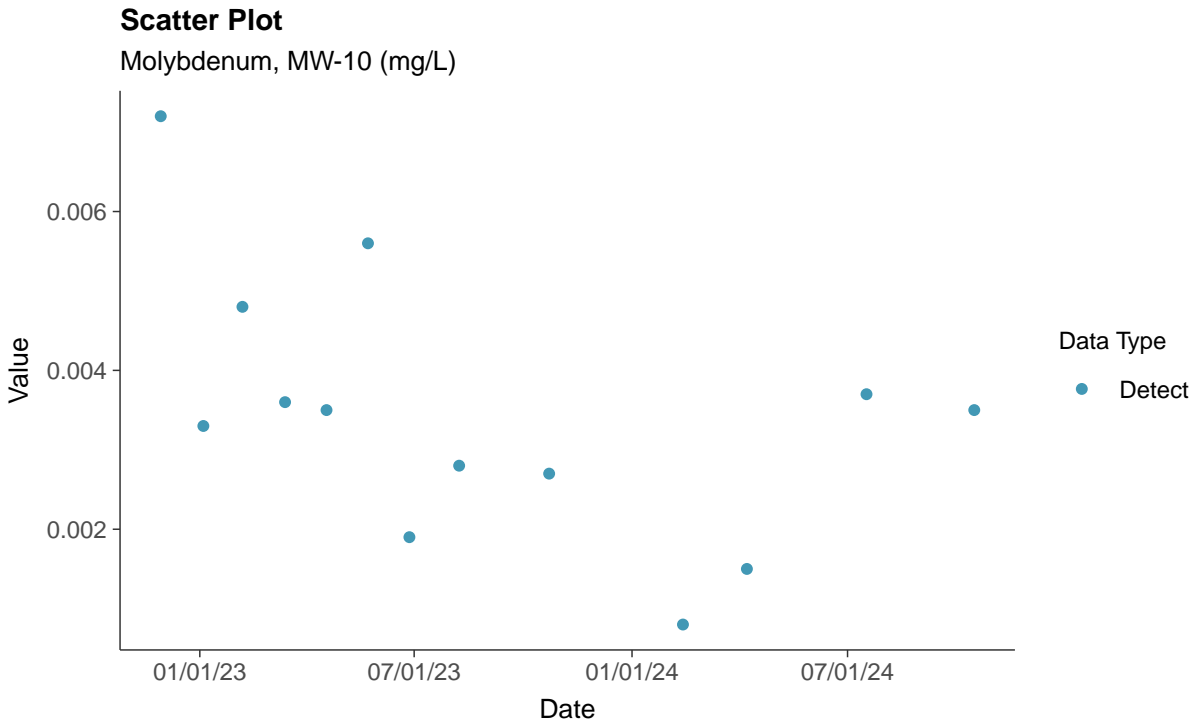
Trend Regression: Piecewise Linear-Linear-Linear
Mercury, MW-10 (mg/L)





Appendix IV: Molybdenum, MW-10

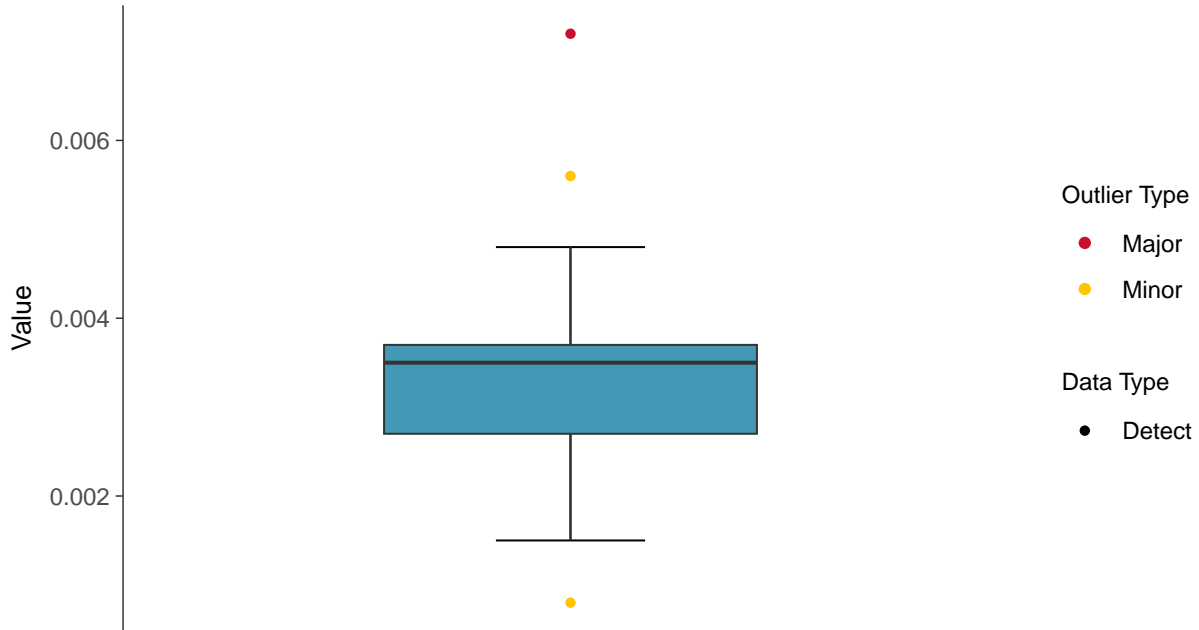
ID: 3_20_3_5_118





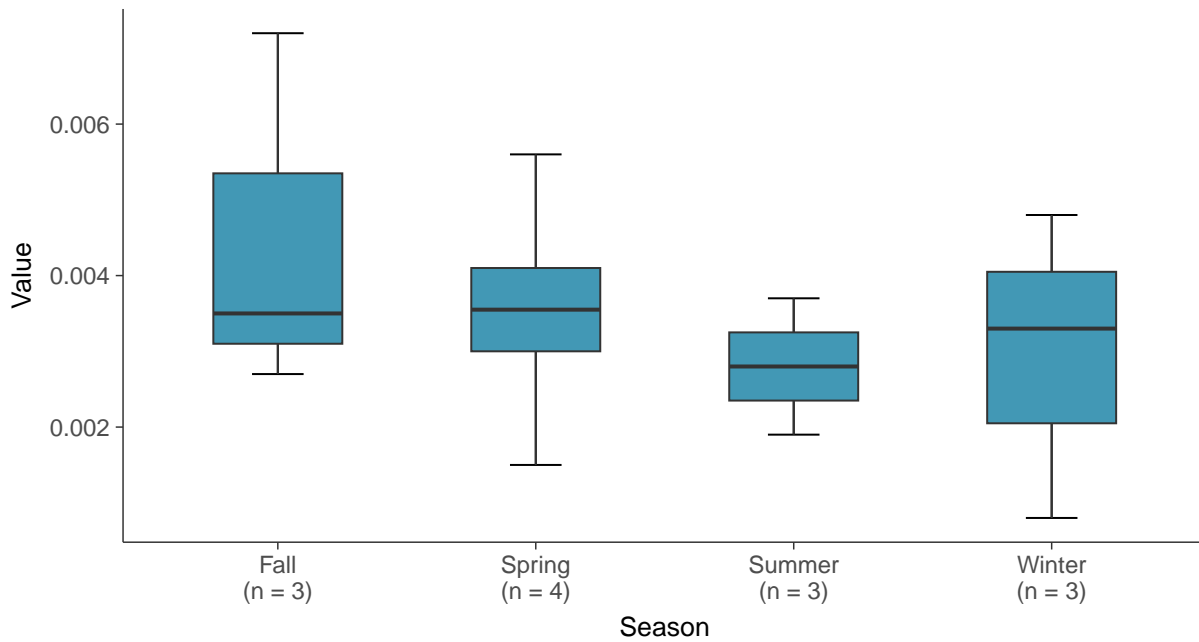
Boxplot

Molybdenum, MW-10 (mg/L)



Boxplot by Season

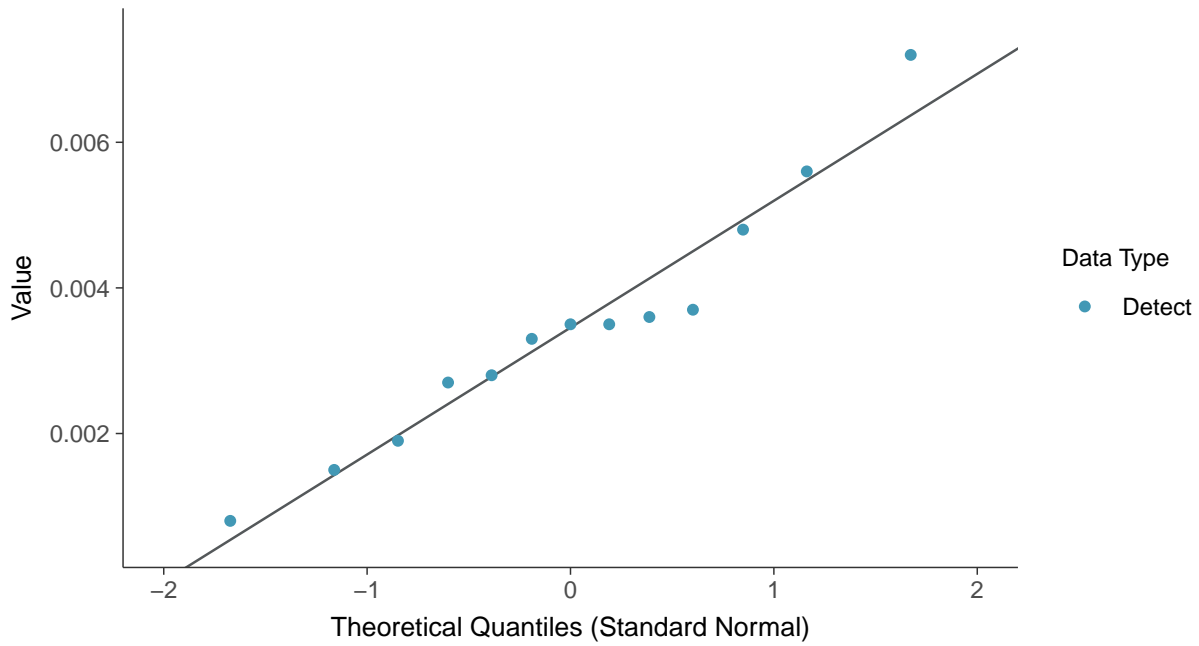
Molybdenum, MW-10 (mg/L)





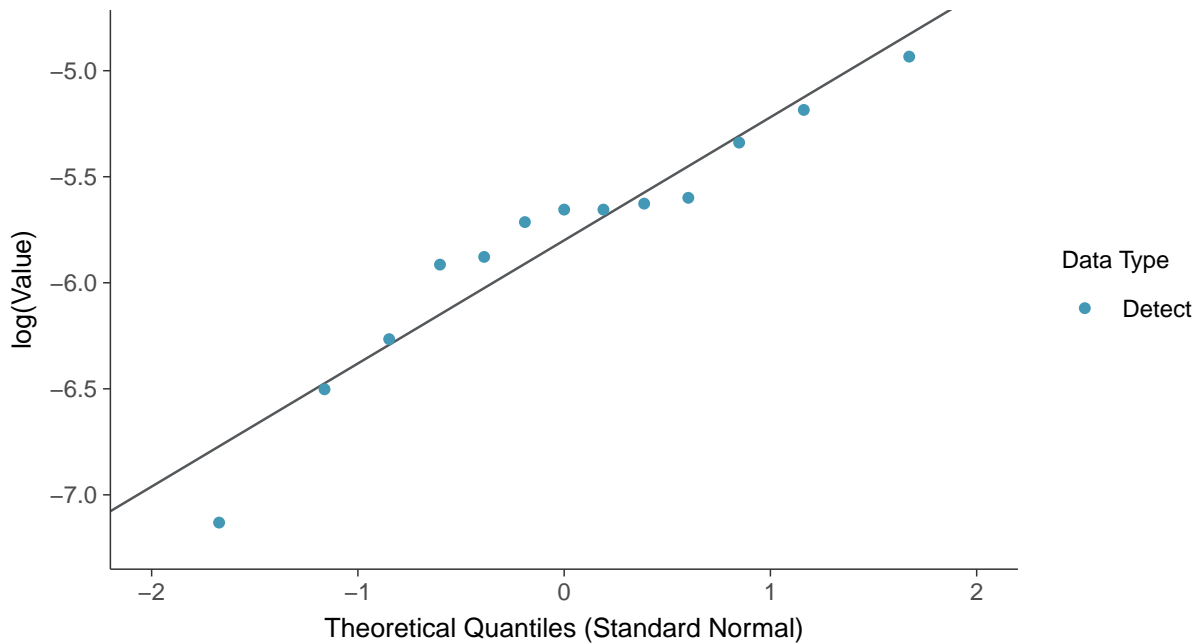
Normal Q-Q plot

Molybdenum, MW-10 (mg/L)



Lognormal Q-Q plot

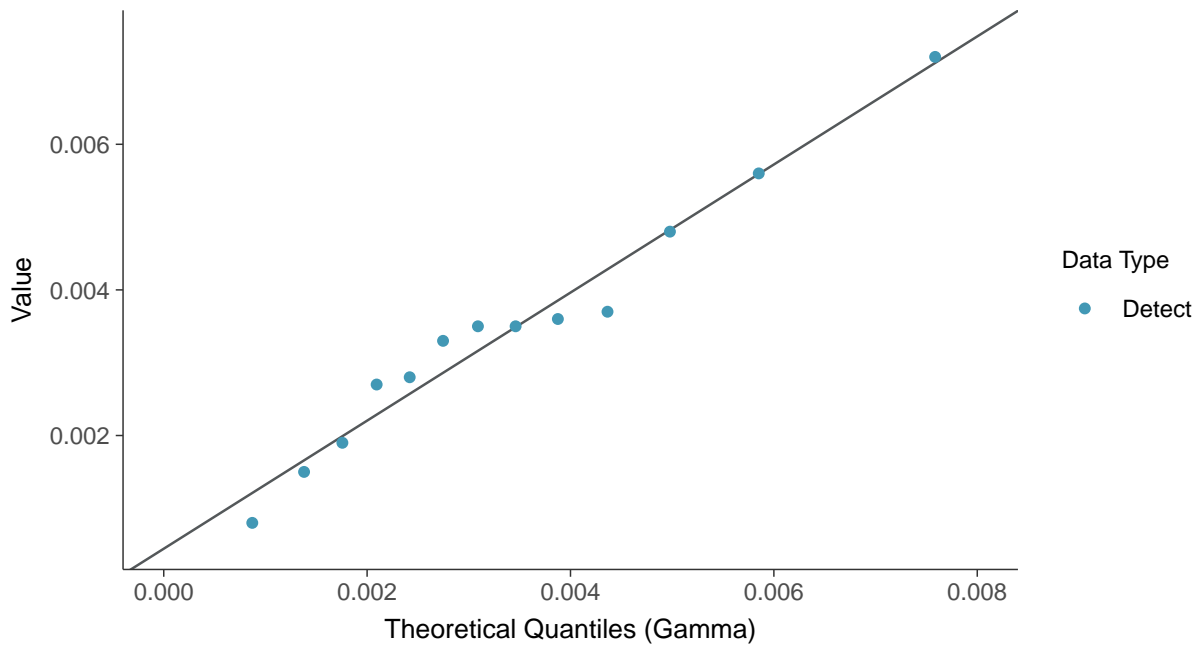
Molybdenum, MW-10 (mg/L)





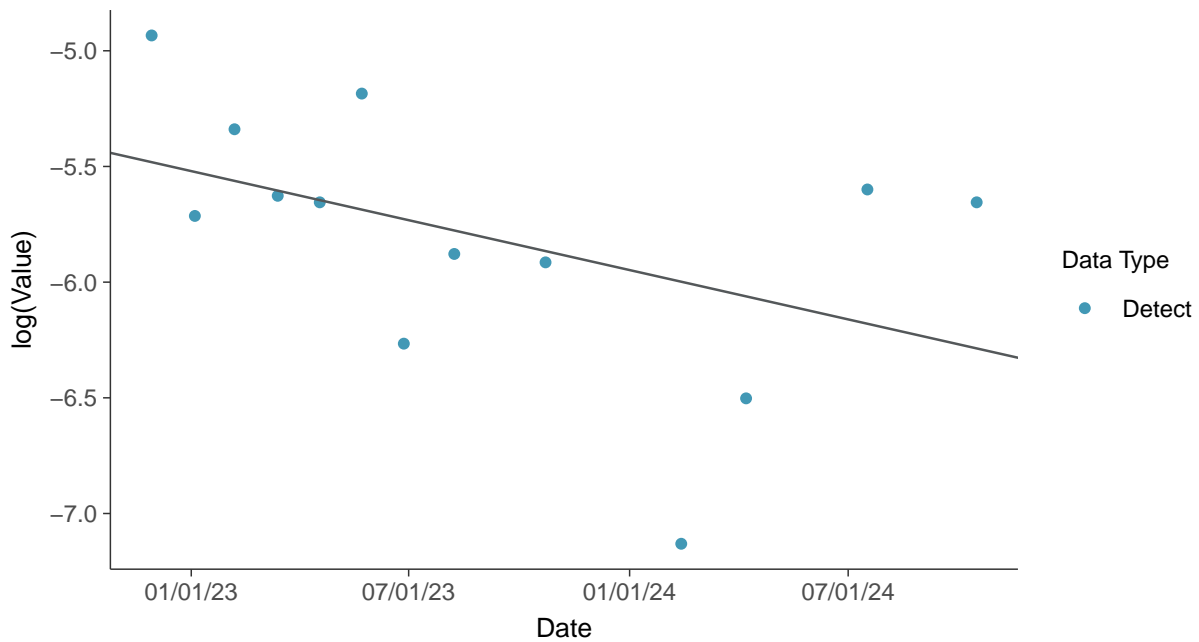
Gamma Q-Q plot

Molybdenum, MW-10 (mg/L)



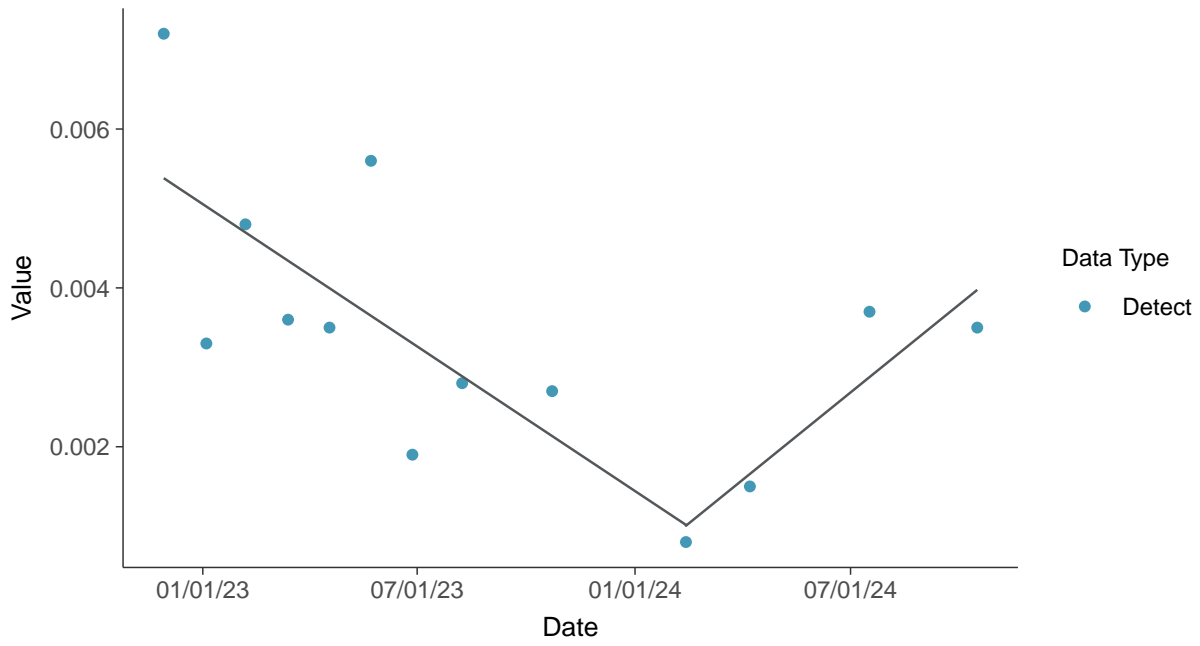
Trend Regression: Lognormal MLE

Molybdenum, MW-10 (mg/L)





Trend Regression: Piecewise Linear-Linear
Molybdenum, MW-10 (mg/L)



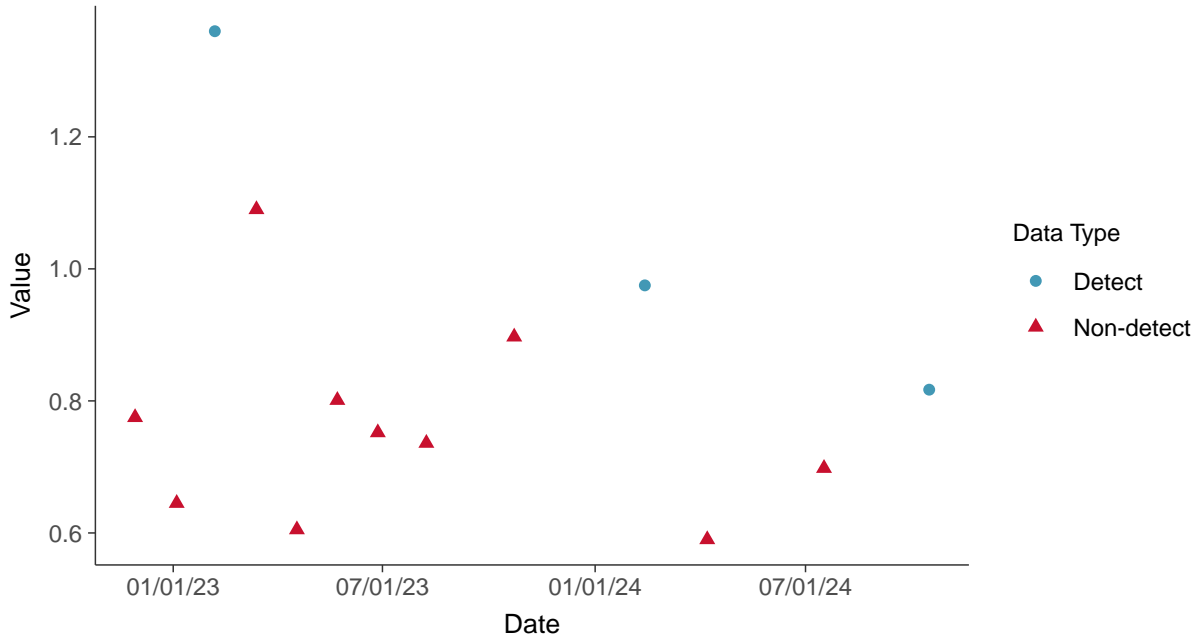


Appendix IV: Radium 226 and 228, MW-10

ID: 3_20_3_5_121

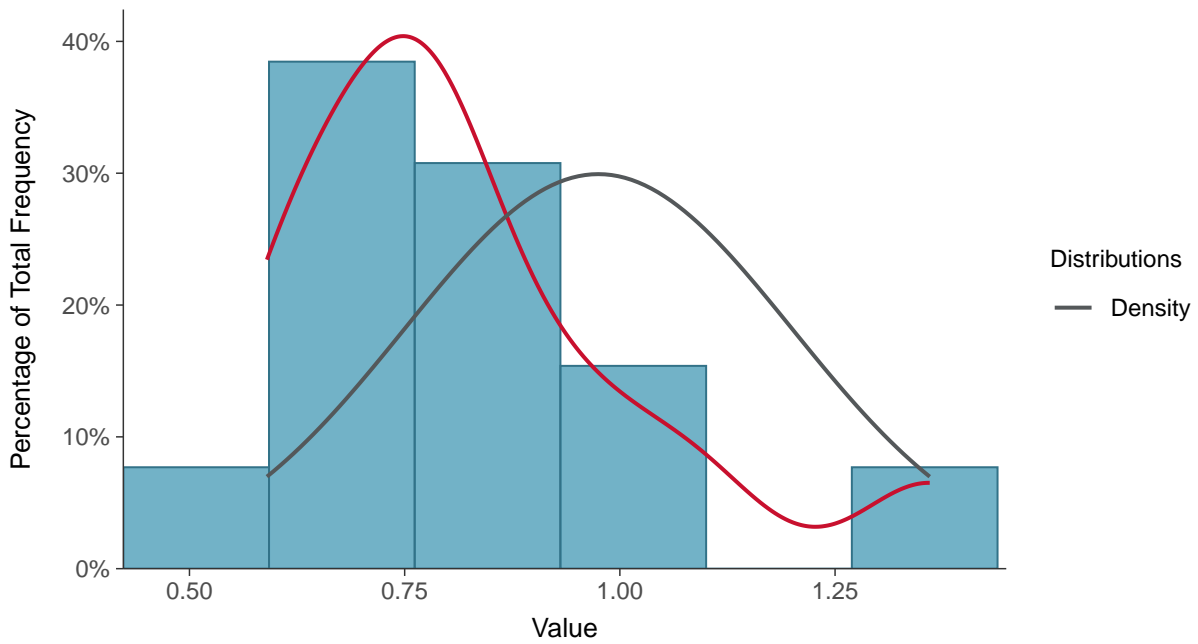
Scatter Plot

Radium 226 and 228, MW-10 (pCi/L)



Histogram

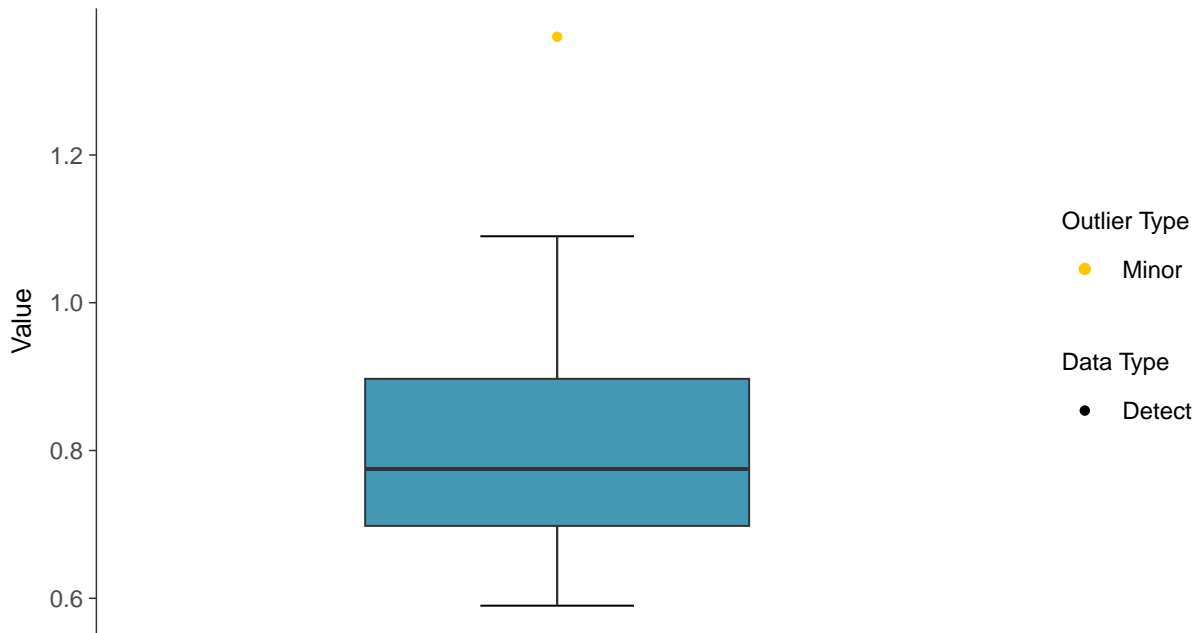
Radium 226 and 228, MW-10 (pCi/L)





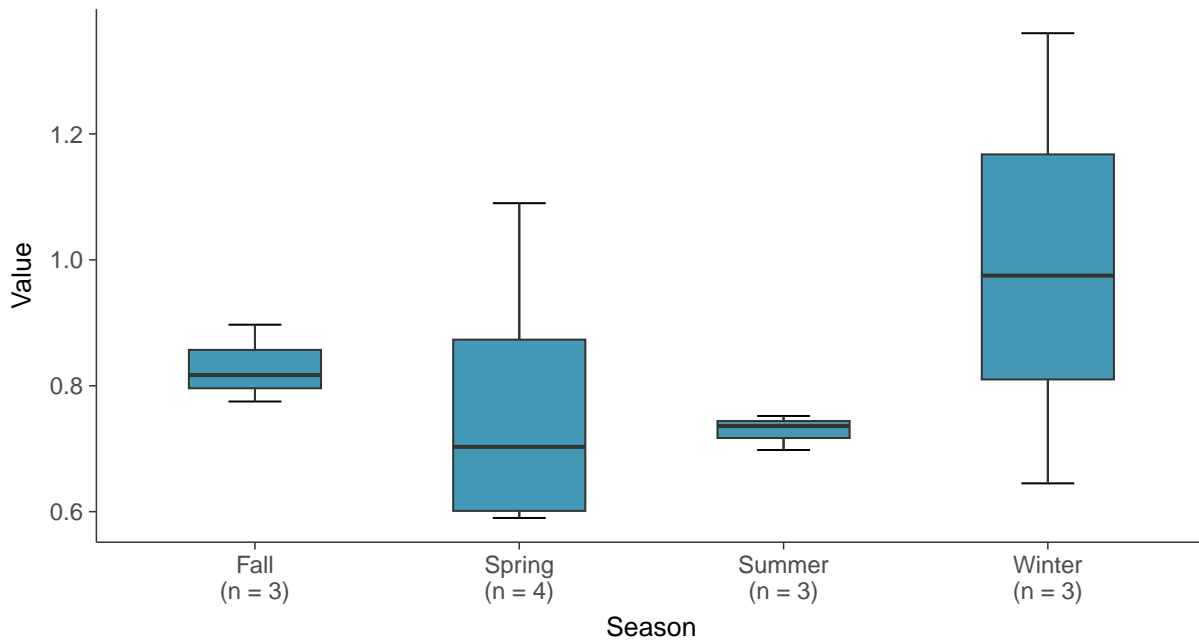
Boxplot

Radium 226 and 228, MW-10 (pCi/L)



Boxplot by Season

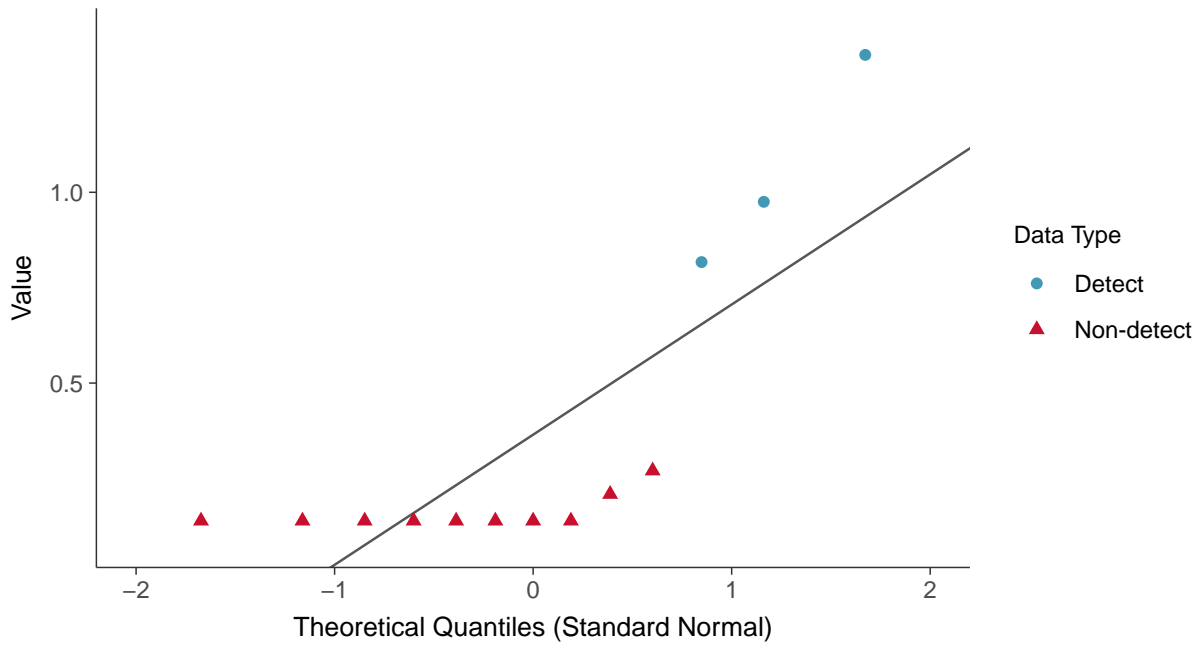
Radium 226 and 228, MW-10 (pCi/L)





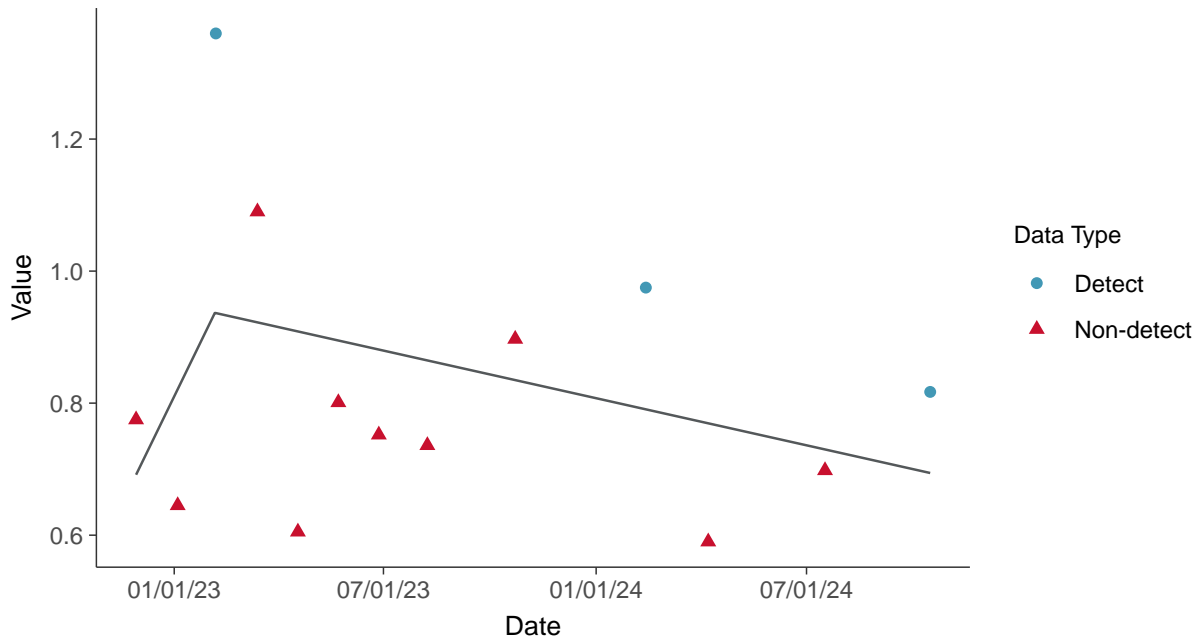
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-10 (pCi/L)



Trend Regression: Piecewise Linear-Linear

Radium 226 and 228, MW-10 (pCi/L)



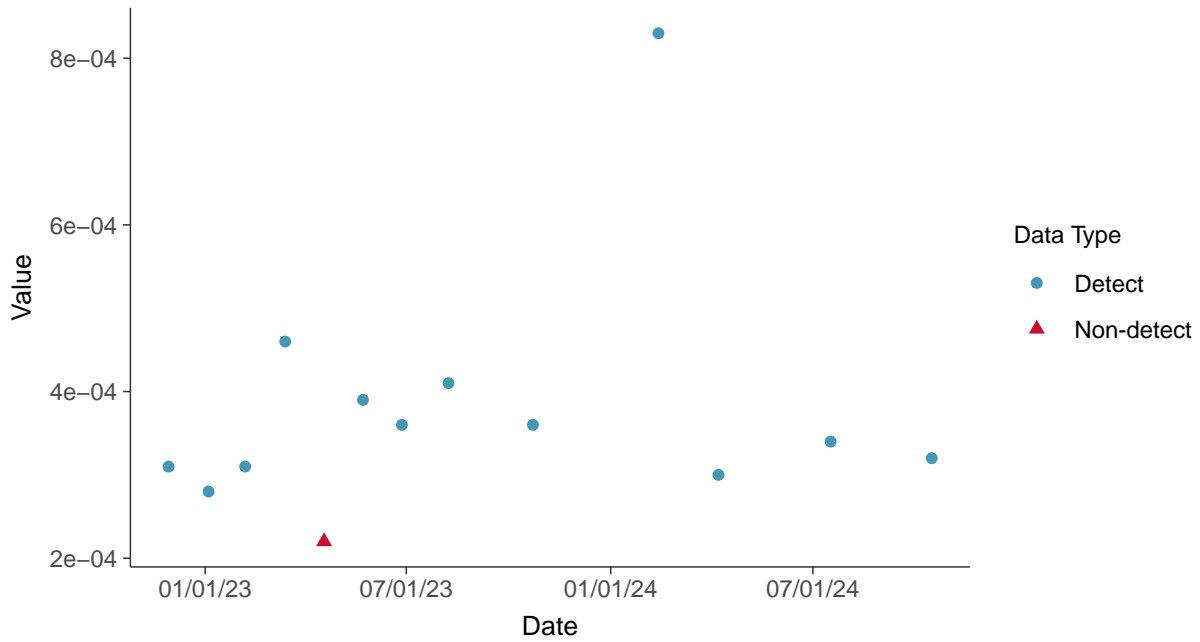


Appendix IV: Selenium, MW-10

ID: 3_20_3_5_122

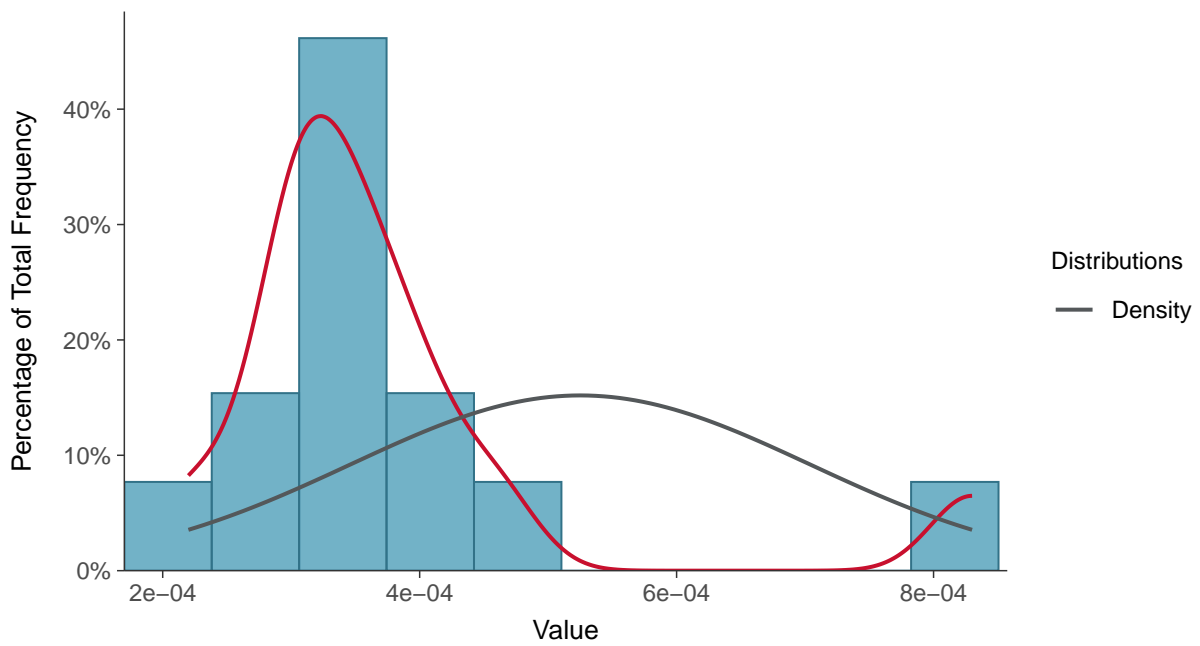
Scatter Plot

Selenium, MW-10 (mg/L)



Histogram

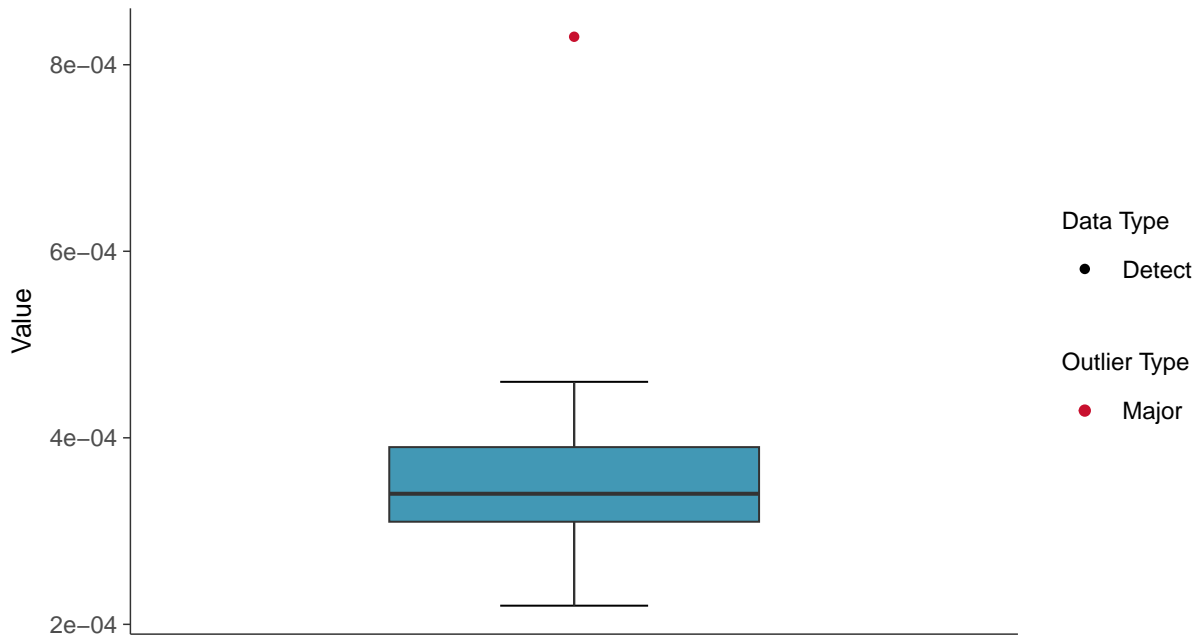
Selenium, MW-10 (mg/L)





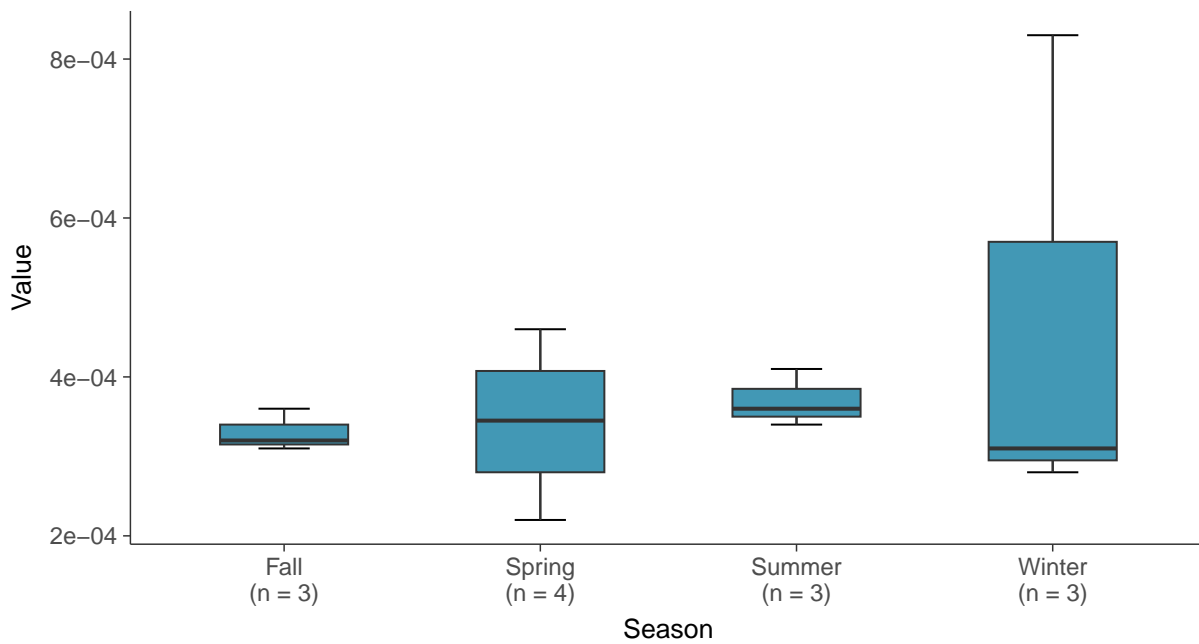
Boxplot

Selenium, MW-10 (mg/L)



Boxplot by Season

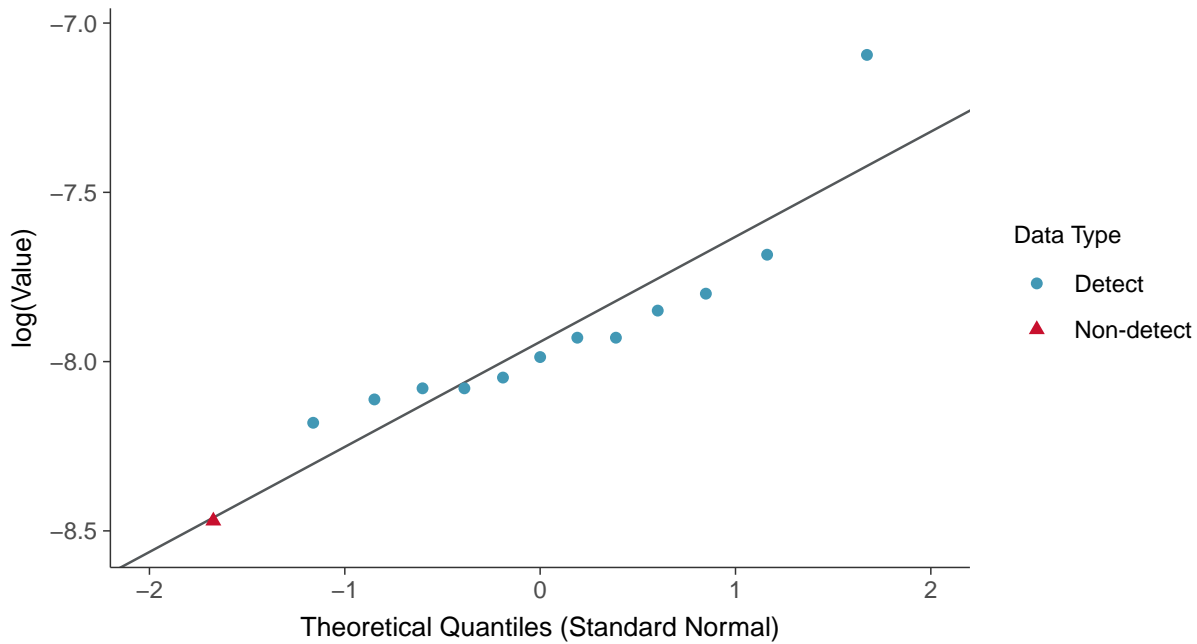
Selenium, MW-10 (mg/L)





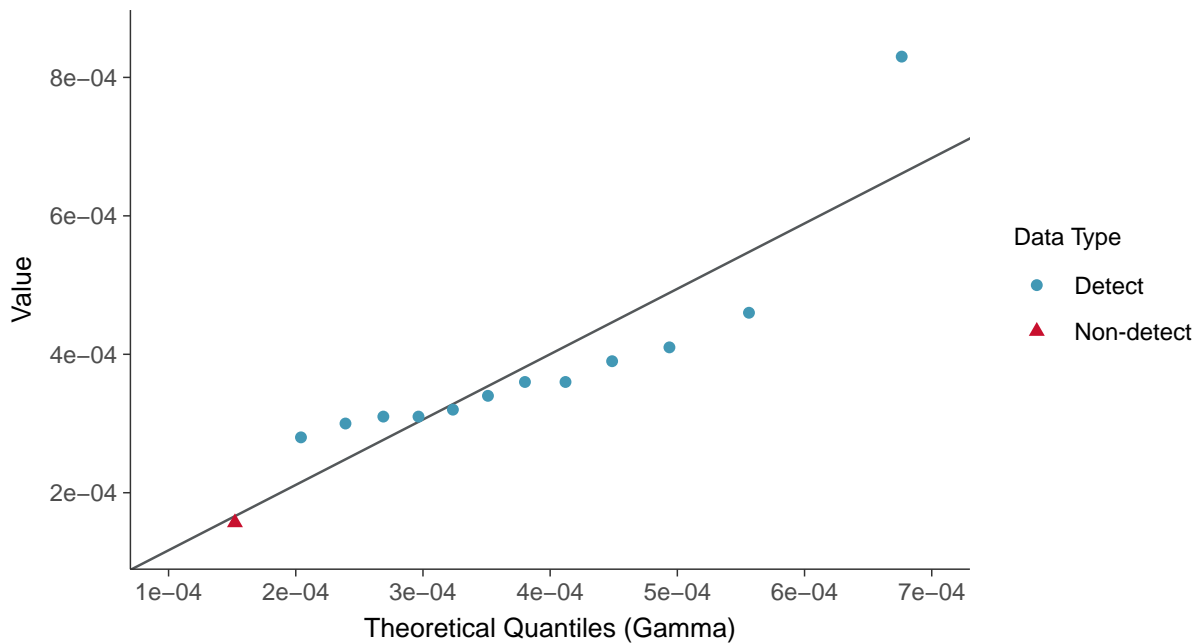
Lognormal Q-Q plot using ROS Imputed Estimates

Selenium, MW-10 (mg/L)



Gamma Q-Q plot using ROS Imputed Estimates

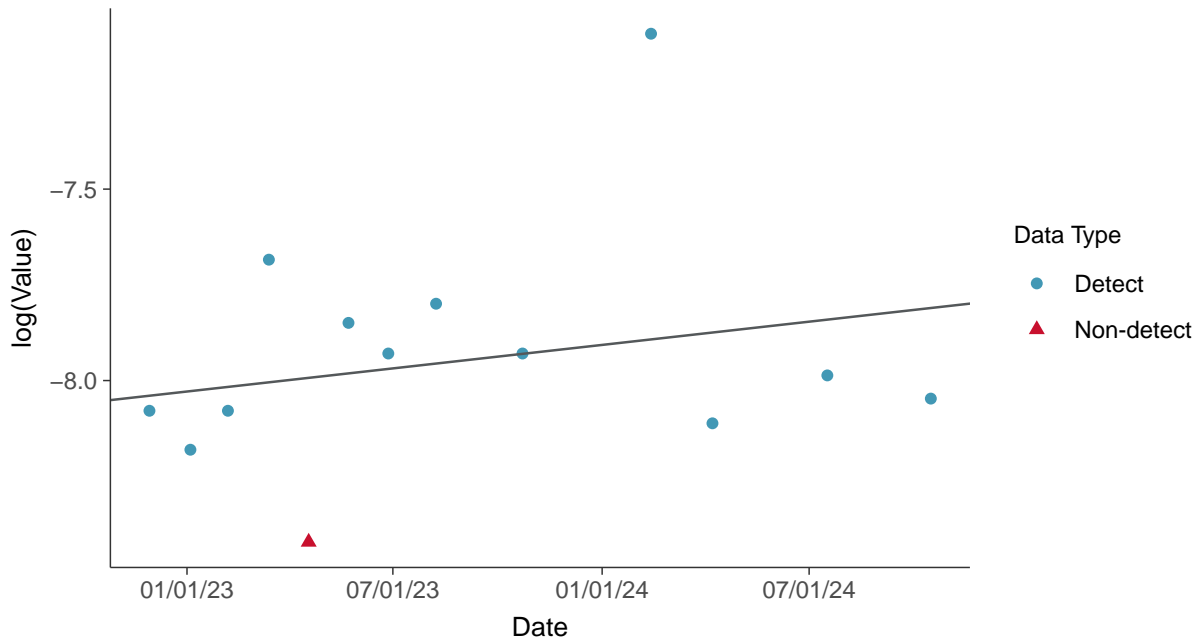
Selenium, MW-10 (mg/L)





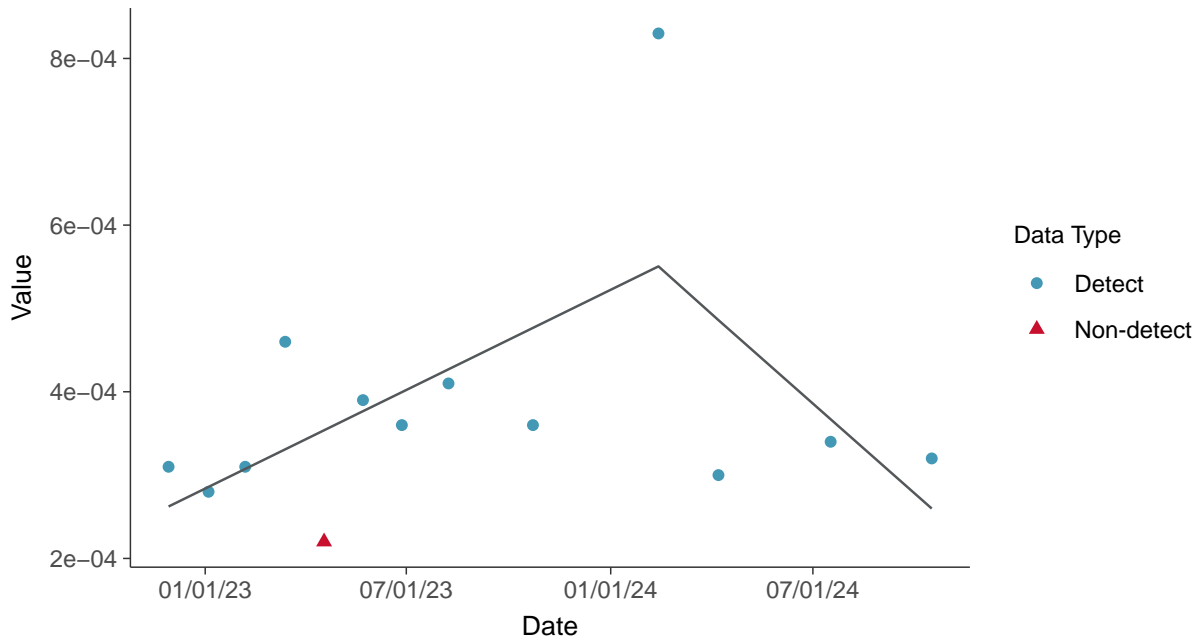
Trend Regression: Lognormal MLE

Selenium, MW-10 (mg/L)



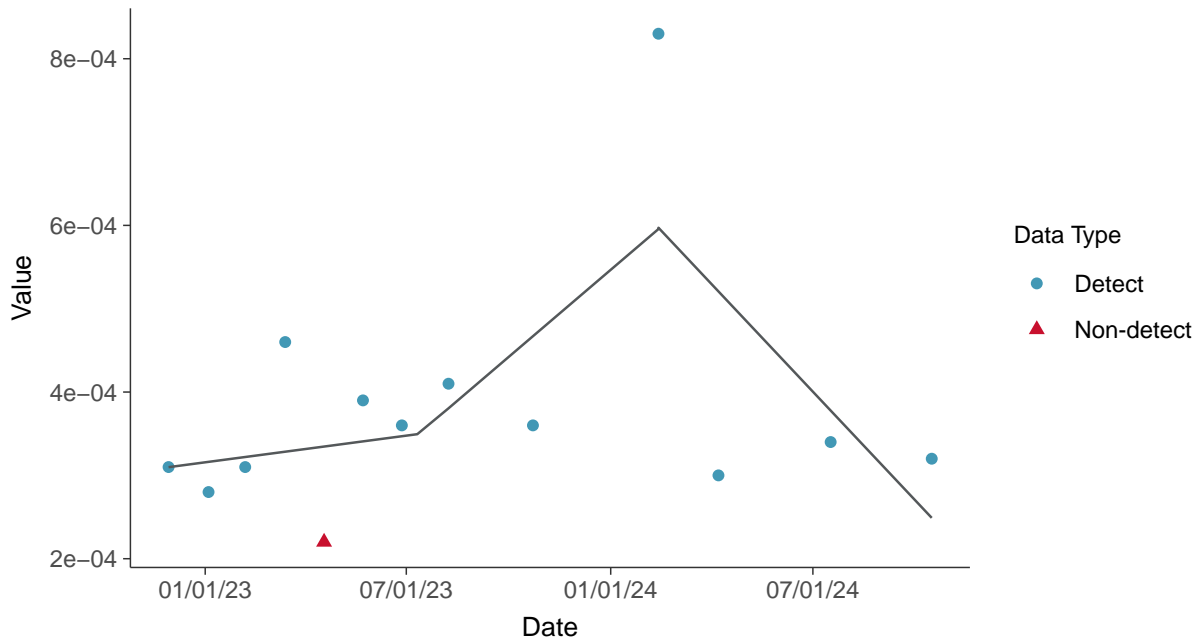
Trend Regression: Piecewise Linear-Linear

Selenium, MW-10 (mg/L)





Trend Regression: Piecewise Linear-Linear-Linear
Selenium, MW-10 (mg/L)



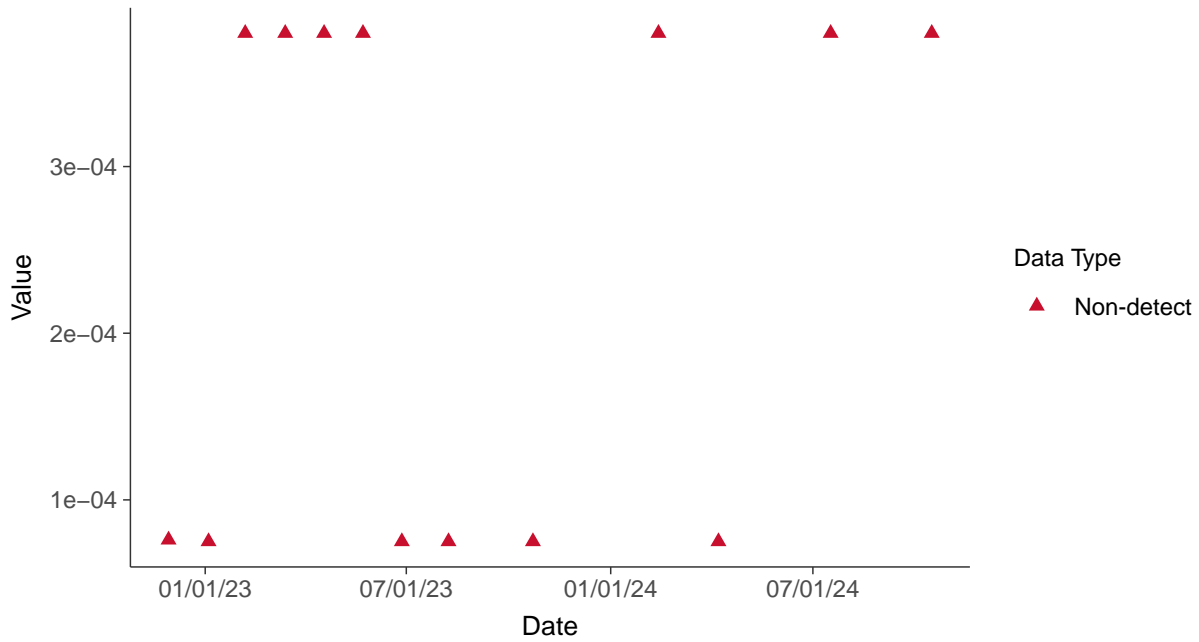


Appendix IV: Thallium, MW-10

ID: 3_20_3_5_125

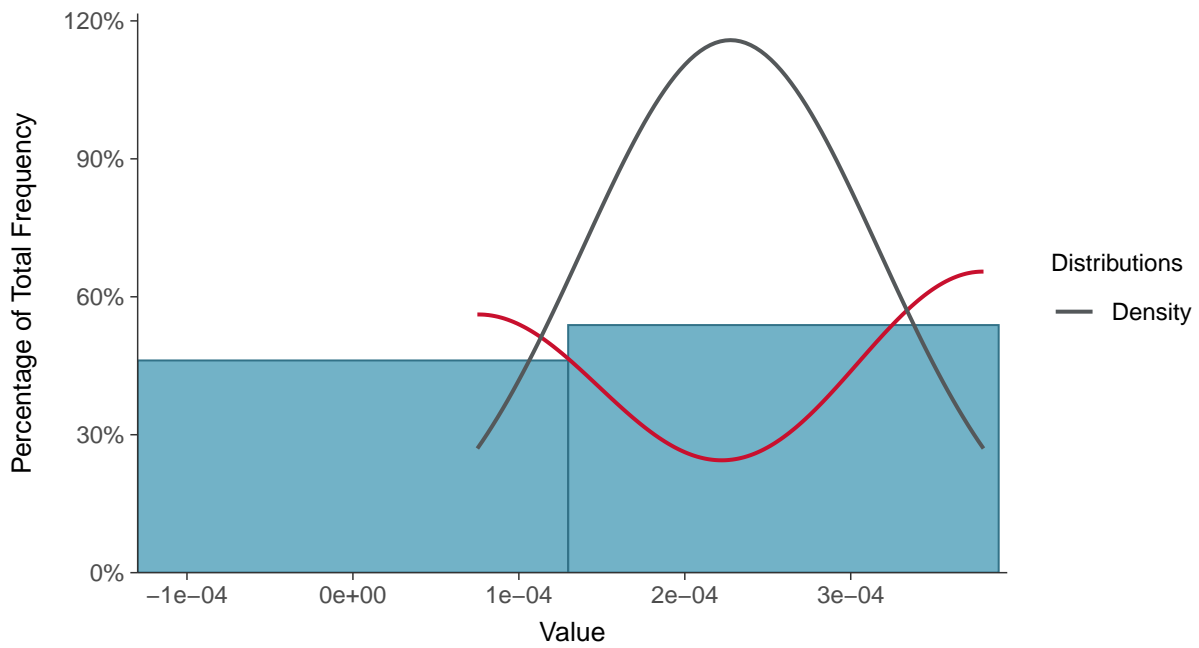
Scatter Plot

Thallium, MW-10 (mg/L)



Histogram

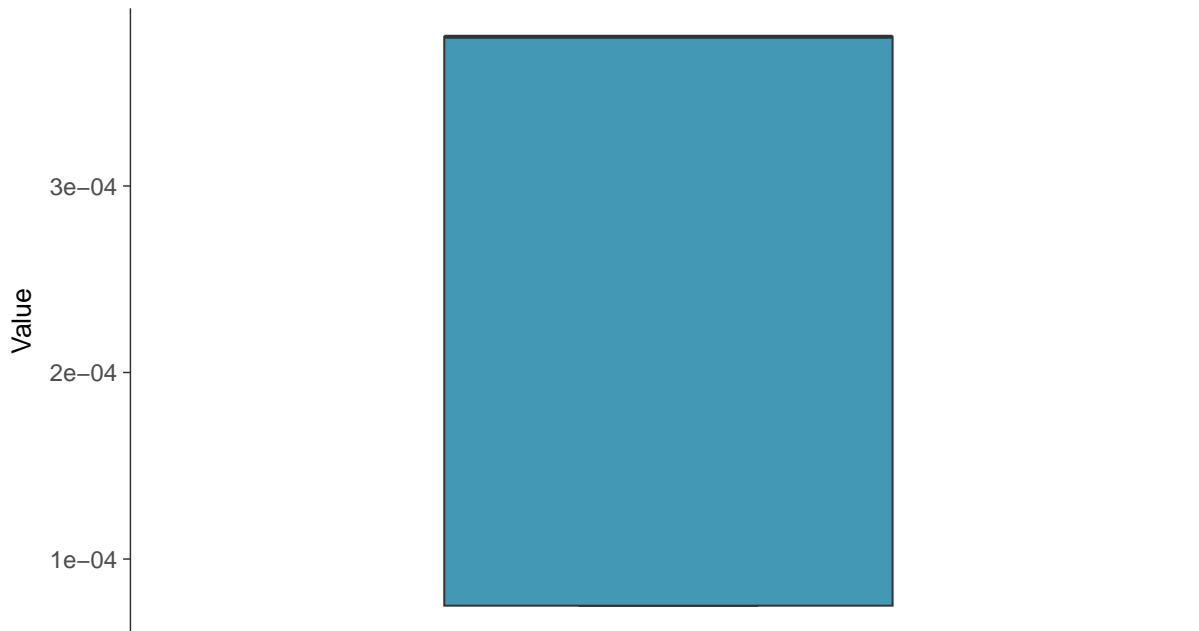
Thallium, MW-10 (mg/L)





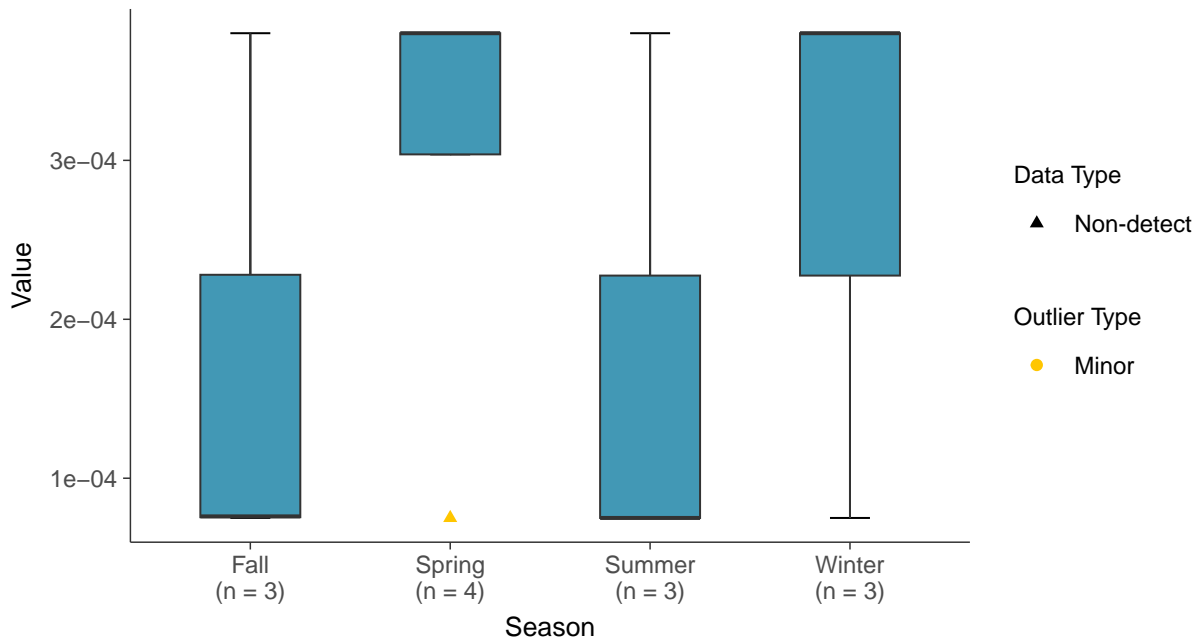
Boxplot

Thallium, MW-10 (mg/L)



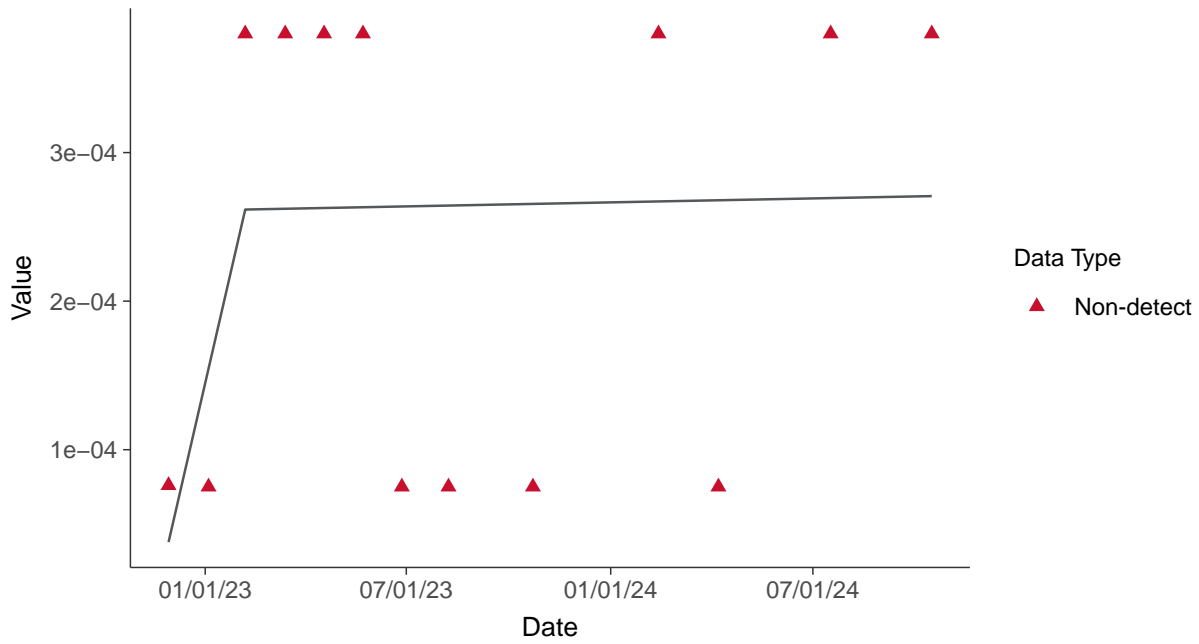
Boxplot by Season

Thallium, MW-10 (mg/L)

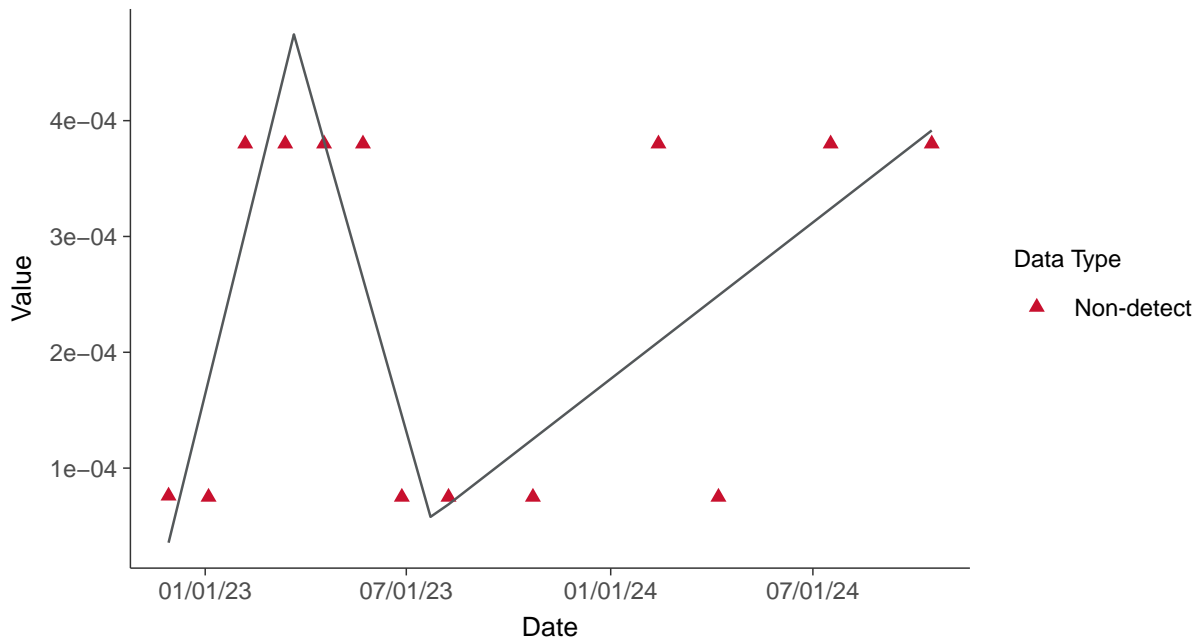




Trend Regression: Piecewise Linear-Linear
Thallium, MW-10 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear
Thallium, MW-10 (mg/L)



Grand Haven: Unit 3A/B and Unit 1/2 as of October, 2024
 95% Lower Confidence Limits for Assessment Monitoring

ID	Site	Well	Type	Constituent	Unit	n	% NDs	Range of Sampling Period	Method	LCL
1_16_1_3_127	Unit 1/2	MW-06	Additional Parameters	Total Suspended Solids	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	40
1_16_1_4_105	Unit 1/2	MW-06	Appendix III	Boron	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	8.5
1_16_1_4_107	Unit 1/2	MW-06	Appendix III	Calcium	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	240
1_16_1_4_108	Unit 1/2	MW-06	Appendix III	Chloride (as Cl)	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	53
1_16_1_4_112	Unit 1/2	MW-06	Appendix III	Fluoride	mg/L	13	0%	2022-11-29 to 2024-10-16	Adjusted Gamma LCL	1.1
1_16_1_4_120	Unit 1/2	MW-06	Appendix III	pH (field)	su	13	0%	2022-11-29 to 2024-10-16	Nonparametric LCL around the Median	7.2
1_16_1_4_124	Unit 1/2	MW-06	Appendix III	Sulfate (as SO4)	mg/L	13	15%	2022-11-29 to 2024-10-16	Gamma MLE Bootstrap LCL	5.5
1_16_1_4_126	Unit 1/2	MW-06	Appendix III	Total Dissolved Solids	mg/L	13	0%	2022-11-29 to 2024-10-16	Nonparametric LCL around the Median	1200
1_16_1_5_101	Unit 1/2	MW-06	Appendix IV	Antimony	mg/L	13	85%	2022-11-29 to 2024-10-16	Nonparametric LCL around the Median	0.00010
1_16_1_5_102	Unit 1/2	MW-06	Appendix IV	Arsenic	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	0.00062
1_16_1_5_103	Unit 1/2	MW-06	Appendix IV	Barium	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	1.3
1_16_1_5_104	Unit 1/2	MW-06	Appendix IV	Beryllium	mg/L	13	92%	2022-11-29 to 2024-10-16	Nonparametric LCL around the Median	0.000052
1_16_1_5_106	Unit 1/2	MW-06	Appendix IV	Cadmium	mg/L	13	100%	2022-11-29 to 2024-10-16	Nonparametric LCL around the Median	0.000075
1_16_1_5_109	Unit 1/2	MW-06	Appendix IV	Chromium, Total	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	0.0014
1_16_1_5_110	Unit 1/2	MW-06	Appendix IV	Cobalt	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	0.00046
1_16_1_5_113	Unit 1/2	MW-06	Appendix IV	Fluoride (App IV)	mg/L	13	0%	2022-11-29 to 2024-10-16	Adjusted Gamma LCL	1.1
1_16_1_5_115	Unit 1/2	MW-06	Appendix IV	Lead	mg/L	13	69%	2022-11-29 to 2024-10-16	Nonparametric LCL around the Median	0.00010
1_16_1_5_116	Unit 1/2	MW-06	Appendix IV	Lithium	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	0.16
1_16_1_5_117	Unit 1/2	MW-06	Appendix IV	Mercury	mg/L	13	100%	2022-11-29 to 2024-10-16	Nonparametric LCL around the Median	0.00016
1_16_1_5_118	Unit 1/2	MW-06	Appendix IV	Molybdenum	mg/L	13	62%	2022-11-29 to 2024-10-16	Nonparametric LCL around the Median	0.00025
1_16_1_5_121	Unit 1/2	MW-06	Appendix IV	Radium 226 and 228	pCi/L	13	23%	2022-11-29 to 2024-10-16	Lognormal MLE Likelihood Profile LCL	0.70
1_16_1_5_122	Unit 1/2	MW-06	Appendix IV	Selenium	mg/L	13	38%	2022-11-29 to 2024-10-16	Nonparametric LCL around the Median	0.00020
1_16_1_5_125	Unit 1/2	MW-06	Appendix IV	Thallium	mg/L	13	100%	2022-11-29 to 2024-10-16	Nonparametric LCL around the Median	0.000075
1_17_1_3_127	Unit 1/2	MW-07	Additional Parameters	Total Suspended Solids	mg/L	13	0%	2022-11-30 to 2024-10-15	Normal LCL	35
1_17_1_4_105	Unit 1/2	MW-07	Appendix III	Boron	mg/L	13	0%	2022-11-30 to 2024-10-15	Normal LCL	11
1_17_1_4_107	Unit 1/2	MW-07	Appendix III	Calcium	mg/L	13	0%	2022-11-30 to 2024-10-15	Normal LCL	140
1_17_1_4_108	Unit 1/2	MW-07	Appendix III	Chloride (as Cl)	mg/L	13	0%	2022-11-30 to 2024-10-15	Nonparametric LCL around the Median	14
1_17_1_4_112	Unit 1/2	MW-07	Appendix III	Fluoride	mg/L	13	15%	2022-11-30 to 2024-10-15	Normal MLE LCL	0.075
1_17_1_4_120	Unit 1/2	MW-07	Appendix III	pH (field)	su	13	0%	2022-11-30 to 2024-10-15	Nonparametric LCL around the Median	6.9
1_17_1_4_124	Unit 1/2	MW-07	Appendix III	Sulfate (as SO4)	mg/L	13	0%	2022-11-30 to 2024-10-15	Normal LCL	21
1_17_1_4_126	Unit 1/2	MW-07	Appendix III	Total Dissolved Solids	mg/L	13	0%	2022-11-30 to 2024-10-15	Nonparametric LCL around the Median	620
1_17_1_5_101	Unit 1/2	MW-07	Appendix IV	Antimony	mg/L	13	92%	2022-11-30 to 2024-10-15	Nonparametric LCL around the Median	0.000050
1_17_1_5_102	Unit 1/2	MW-07	Appendix IV	Arsenic	mg/L	13	0%	2022-11-30 to 2024-10-15	Normal LCL	0.00020
1_17_1_5_103	Unit 1/2	MW-07	Appendix IV	Barium	mg/L	13	0%	2022-11-30 to 2024-10-15	Nonparametric LCL around the Median	0.34
1_17_1_5_104	Unit 1/2	MW-07	Appendix IV	Beryllium	mg/L	13	77%	2022-11-30 to 2024-10-15	Nonparametric LCL around the Median	0.000052
1_17_1_5_106	Unit 1/2	MW-07	Appendix IV	Cadmium	mg/L	13	100%	2022-11-30 to 2024-10-15	Nonparametric LCL around the Median	0.000032
1_17_1_5_109	Unit 1/2	MW-07	Appendix IV	Chromium, Total	mg/L	13	0%	2022-11-30 to 2024-10-15	Adjusted Gamma LCL	0.00032
1_17_1_5_110	Unit 1/2	MW-07	Appendix IV	Cobalt	mg/L	13	0%	2022-11-30 to 2024-10-15	Normal LCL	0.00085
1_17_1_5_113	Unit 1/2	MW-07	Appendix IV	Fluoride (App IV)	mg/L	13	15%	2022-11-30 to 2024-10-15	Normal MLE LCL	0.075
1_17_1_5_115	Unit 1/2	MW-07	Appendix IV	Lead	mg/L	13	100%	2022-11-30 to 2024-10-15	Nonparametric LCL around the Median	0.00010
1_17_1_5_116	Unit 1/2	MW-07	Appendix IV	Lithium	mg/L	13	0%	2022-11-30 to 2024-10-15	Normal LCL	0.0052
1_17_1_5_117	Unit 1/2	MW-07	Appendix IV	Mercury	mg/L	13	100%	2022-11-30 to 2024-10-15	Nonparametric LCL around the Median	0.00016
1_17_1_5_118	Unit 1/2	MW-07	Appendix IV	Molybdenum	mg/L	13	100%	2022-11-30 to 2024-10-15	Nonparametric LCL around the Median	0.00025
1_17_1_5_121	Unit 1/2	MW-07	Appendix IV	Radium 226 and 228	pCi/L	13	15%	2022-11-30 to 2024-10-15	Gamma MLE Bootstrap LCL	0.81
1_17_1_5_122	Unit 1/2	MW-07	Appendix IV	Selenium	mg/L	13	69%	2022-11-30 to 2024-10-15	Nonparametric LCL around the Median	0.00010
1_17_1_5_125	Unit 1/2	MW-07	Appendix IV	Thallium	mg/L	13	100%	2022-11-30 to 2024-10-15	Nonparametric LCL around the Median	0.000075
1_18_1_3_127	Unit 1/2	MW-08	Additional Parameters	Total Suspended Solids	mg/L	13	0%	2022-12-01 to 2024-10-16	Normal LCL	32
1_18_1_4_105	Unit 1/2	MW-08	Appendix III	Boron	mg/L	13	0%	2022-12-01 to 2024-10-16	Normal LCL	5.4
1_18_1_4_107	Unit 1/2	MW-08	Appendix III	Calcium	mg/L	13	0%	2022-12-01 to 2024-10-16	Normal LCL	130
1_18_1_4_108	Unit 1/2	MW-08	Appendix III	Chloride (as Cl)	mg/L	13	0%	2022-12-01 to 2024-10-16	Nonparametric LCL around the Median	24
1_18_1_4_112	Unit 1/2	MW-08	Appendix III	Fluoride	mg/L	13	0%	2022-12-01 to 2024-10-16	Normal LCL	0.80
1_18_1_4_120	Unit 1/2	MW-08	Appendix III	pH (field)	su	13	0%	2022-12-01 to 2024-10-16	Nonparametric LCL around the Median	7.2
1_18_1_4_124	Unit 1/2	MW-08	Appendix III	Sulfate (as SO4)	mg/L	13	31%	2022-12-01 to 2024-10-16	Gamma MLE Bootstrap LCL	4.3
1_18_1_4_126	Unit 1/2	MW-08	Appendix III	Total Dissolved Solids	mg/L	13	0%	2022-12-01 to 2024-10-16	Normal LCL	510
1_18_1_5_101	Unit 1/2	MW-08	Appendix IV	Antimony	mg/L	13	46%	2022-12-01 to 2024-10-16	Normal MLE LCL	0.000027
1_18_1_5_102	Unit 1/2	MW-08	Appendix IV	Arsenic	mg/L	13	0%	2022-12-01 to 2024-10-16	Normal LCL	0.027
1_18_1_5_103	Unit 1/2	MW-08	Appendix IV	Barium	mg/L	13	0%	2022-12-01 to 2024-10-16	Normal LCL	1.2
1_18_1_5_104	Unit 1/2	MW-08	Appendix IV	Beryllium	mg/L	13	100%	2022-12-01 to 2024-10-16	Nonparametric LCL around the Median	0.000052
1_18_1_5_106	Unit 1/2	MW-08	Appendix IV	Cadmium	mg/L	13	100%	2022-12-01 to 2024-10-16	Nonparametric LCL around the Median	0.000032
1_18_1_5_109	Unit 1/2	MW-08	Appendix IV	Chromium, Total	mg/L	13	0%	2022-12-01 to 2024-10-16	Normal LCL	0.00075
1_18_1_5_110	Unit 1/2	MW-08	Appendix IV	Cobalt	mg/L	13	0%	2022-12-01 to 2024-10-16	Nonparametric LCL around the Median	0.00034
1_18_1_5_113	Unit 1/2	MW-08	Appendix IV	Fluoride (App IV)	mg/L	13	0%	2022-12-01 to 2024-10-16	Normal LCL	0.80
1_18_1_5_115	Unit 1/2	MW-08	Appendix IV	Lead	mg/L	13	69%	2022-12-01 to 2024-10-16	Nonparametric LCL around the Median	0.00010
1_18_1_5_116	Unit 1/2	MW-08	Appendix IV	Lithium	mg/L	13	0%	2022-12-01 to 2024-10-16	Normal LCL	0.095
1_18_1_5_117	Unit 1/2	MW-08	Appendix IV	Mercury	mg/L	13	100%	2022-12-01 to 2024-10-16	Nonparametric LCL around the Median	0.00016
1_18_1_5_118	Unit 1/2	MW-08	Appendix IV	Molybdenum	mg/L	13	0%	2022-12-01 to 2024-10-16	Normal LCL	0.00094
1_18_1_5_121	Unit 1/2	MW-08	Appendix IV	Radium 226 and 228	pCi/L	13	23%	2022-12-01 to 2024-10-16	Normal MLE LCL	0.73
1_18_1_5_122	Unit 1/2	MW-08	Appendix IV	Selenium	mg/L	13	38%	2022-12-01 to 2024-10-16	Gamma MLE Bootstrap LCL	0.00014
1_18_1_5_125	Unit 1/2	MW-08	Appendix IV	Thallium	mg/L	13	100%	2022-12-01 to 2024-10-16	Nonparametric LCL around the Median	0.000075
1_28_1_3_127	Unit 1/2	MW-18	Additional Parameters	Total Suspended Solids	mg/L	13	8%	2022-11-30 to 2024-10-16	Lognormal MLE Likelihood Profile LCL	8.9
1_28_1_4_105	Unit 1/2	MW-18	Appendix III	Boron	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	2.4
1_28_1_4_107	Unit 1/2	MW-18	Appendix III	Calcium	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	310
1_28_1_4_108	Unit 1/2	MW-18	Appendix III	Chloride (as Cl)	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	21
1_28_1_4_112	Unit 1/2	MW-18	Appendix III	Fluoride	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	3.6
1_28_1_4_120	Unit 1/2	MW-18	Appendix III	pH (field)	su	13	0%	2022-11-30 to 2024-10-16	Normal LCL	7.1
1_28_1_4_124	Unit 1/2	MW-18	Appendix III	Sulfate (as SO4)	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	710
1_28_1_4_126	Unit 1/2	MW-18	Appendix III	Total Dissolved Solids	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	1300
1_28_1_5_101	Unit 1/2	MW-18	Appendix IV	Antimony	mg/L	13	23%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.00012

1_28_1_5_102	Unit 1/2	MW-18	Appendix IV	Arsenic	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	0.023
1_28_1_5_103	Unit 1/2	MW-18	Appendix IV	Barium	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	0.017
1_28_1_5_104	Unit 1/2	MW-18	Appendix IV	Beryllium	mg/L	13	92%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.000052
1_28_1_5_106	Unit 1/2	MW-18	Appendix IV	Cadmium	mg/L	13	46%	2022-11-30 to 2024-10-16	Normal MLE LCL	0.0000061
1_28_1_5_109	Unit 1/2	MW-18	Appendix IV	Chromium, Total	mg/L	13	92%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.000018
1_28_1_5_110	Unit 1/2	MW-18	Appendix IV	Cobalt	mg/L	13	0%	2022-11-30 to 2024-10-16	Adjusted Gamma LCL	0.0022
1_28_1_5_113	Unit 1/2	MW-18	Appendix IV	Fluoride (App IV)	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	3.6
1_28_1_5_115	Unit 1/2	MW-18	Appendix IV	Lead	mg/L	13	62%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.00015
1_28_1_5_116	Unit 1/2	MW-18	Appendix IV	Lithium	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	0.031
1_28_1_5_117	Unit 1/2	MW-18	Appendix IV	Mercury	mg/L	13	100%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.00016
1_28_1_5_118	Unit 1/2	MW-18	Appendix IV	Molybdenum	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	0.013
1_28_1_5_121	Unit 1/2	MW-18	Appendix IV	Radium 226 and 228	pCi/L	13	62%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.57
1_28_1_5_122	Unit 1/2	MW-18	Appendix IV	Selenium	mg/L	13	0%	2022-11-30 to 2024-10-16	Adjusted Gamma LCL	0.00038
1_28_1_5_125	Unit 1/2	MW-18	Appendix IV	Thallium	mg/L	13	100%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.000075
1_29_1_3_127	Unit 1/2	MW-19	Additional Parameters	Total Suspended Solids	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	18
1_29_1_4_105	Unit 1/2	MW-19	Appendix III	Boron	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	1.8
1_29_1_4_107	Unit 1/2	MW-19	Appendix III	Calcium	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	450
1_29_1_4_108	Unit 1/2	MW-19	Appendix III	Chloride (as Cl)	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	39
1_29_1_4_112	Unit 1/2	MW-19	Appendix III	Fluoride	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	1.8
1_29_1_4_120	Unit 1/2	MW-19	Appendix III	pH (field)	su	13	0%	2022-11-30 to 2024-10-16	Normal LCL	6.8
1_29_1_4_124	Unit 1/2	MW-19	Appendix III	Sulfate (as SO4)	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	910
1_29_1_4_126	Unit 1/2	MW-19	Appendix III	Total Dissolved Solids	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	1800
1_29_1_5_101	Unit 1/2	MW-19	Appendix IV	Antimony	mg/L	13	92%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.00010
1_29_1_5_102	Unit 1/2	MW-19	Appendix IV	Arsenic	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	0.0045
1_29_1_5_103	Unit 1/2	MW-19	Appendix IV	Barium	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	0.037
1_29_1_5_104	Unit 1/2	MW-19	Appendix IV	Beryllium	mg/L	13	23%	2022-11-30 to 2024-10-16	Normal MLE LCL	0.000061
1_29_1_5_106	Unit 1/2	MW-19	Appendix IV	Cadmium	mg/L	13	100%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.000075
1_29_1_5_109	Unit 1/2	MW-19	Appendix IV	Chromium, Total	mg/L	13	38%	2022-11-30 to 2024-10-16	Gamma MLE Bootstrap LCL	0.00020
1_29_1_5_110	Unit 1/2	MW-19	Appendix IV	Cobalt	mg/L	13	8%	2022-11-30 to 2024-10-16	Normal MLE LCL	0.00032
1_29_1_5_113	Unit 1/2	MW-19	Appendix IV	Fluoride (App IV)	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	1.8
1_29_1_5_115	Unit 1/2	MW-19	Appendix IV	Lead	mg/L	13	100%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.00010
1_29_1_5_116	Unit 1/2	MW-19	Appendix IV	Lithium	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	0.086
1_29_1_5_117	Unit 1/2	MW-19	Appendix IV	Mercury	mg/L	13	100%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.00016
1_29_1_5_118	Unit 1/2	MW-19	Appendix IV	Molybdenum	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	0.0085
1_29_1_5_121	Unit 1/2	MW-19	Appendix IV	Radium 226 and 228	pCi/L	13	38%	2022-11-30 to 2024-10-16	Normal MLE LCL	0.48
1_29_1_5_122	Unit 1/2	MW-19	Appendix IV	Selenium	mg/L	13	77%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.00010
1_29_1_5_125	Unit 1/2	MW-19	Appendix IV	Thallium	mg/L	13	100%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.000075
1_30_1_3_127	Unit 1/2	MW-20	Additional Parameters	Total Suspended Solids	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	36
1_30_1_4_105	Unit 1/2	MW-20	Appendix III	Boron	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	0.87
1_30_1_4_107	Unit 1/2	MW-20	Appendix III	Calcium	mg/L	13	0%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	120
1_30_1_4_108	Unit 1/2	MW-20	Appendix III	Chloride (as Cl)	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	60
1_30_1_4_112	Unit 1/2	MW-20	Appendix III	Fluoride	mg/L	13	0%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.22
1_30_1_4_120	Unit 1/2	MW-20	Appendix III	pH (field)	su	13	0%	2022-11-30 to 2024-10-16	Normal LCL	7.3
1_30_1_4_124	Unit 1/2	MW-20	Appendix III	Sulfate (as SO4)	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	43
1_30_1_4_126	Unit 1/2	MW-20	Appendix III	Total Dissolved Solids	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	640
1_30_1_5_101	Unit 1/2	MW-20	Appendix IV	Antimony	mg/L	13	31%	2022-11-30 to 2024-10-16	Normal MLE LCL	0.000071
1_30_1_5_102	Unit 1/2	MW-20	Appendix IV	Arsenic	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	0.0013
1_30_1_5_103	Unit 1/2	MW-20	Appendix IV	Barium	mg/L	13	0%	2022-11-30 to 2024-10-16	Adjusted Gamma LCL	0.44
1_30_1_5_104	Unit 1/2	MW-20	Appendix IV	Beryllium	mg/L	13	92%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.000052
1_30_1_5_106	Unit 1/2	MW-20	Appendix IV	Cadmium	mg/L	13	100%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.000032
1_30_1_5_109	Unit 1/2	MW-20	Appendix IV	Chromium, Total	mg/L	13	38%	2022-11-30 to 2024-10-16	Normal MLE LCL	0.00018
1_30_1_5_110	Unit 1/2	MW-20	Appendix IV	Cobalt	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	0.0011
1_30_1_5_113	Unit 1/2	MW-20	Appendix IV	Fluoride (App IV)	mg/L	13	0%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.22
1_30_1_5_115	Unit 1/2	MW-20	Appendix IV	Lead	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	0.0017
1_30_1_5_116	Unit 1/2	MW-20	Appendix IV	Lithium	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	0.055
1_30_1_5_117	Unit 1/2	MW-20	Appendix IV	Mercury	mg/L	13	100%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.00016
1_30_1_5_118	Unit 1/2	MW-20	Appendix IV	Molybdenum	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	0.0041
1_30_1_5_121	Unit 1/2	MW-20	Appendix IV	Radium 226 and 228	pCi/L	13	54%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.54
1_30_1_5_122	Unit 1/2	MW-20	Appendix IV	Selenium	mg/L	13	54%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.00011
1_30_1_5_125	Unit 1/2	MW-20	Appendix IV	Thallium	mg/L	13	92%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.000075
1_40_1_3_127	Unit 1/2	MW-30	Additional Parameters	Total Suspended Solids	mg/L	11	9%	2022-11-30 to 2024-10-16	Gamma MLE Bootstrap LCL	4.8
1_40_1_4_105	Unit 1/2	MW-30	Appendix III	Boron	mg/L	13	0%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	1.8
1_40_1_4_107	Unit 1/2	MW-30	Appendix III	Calcium	mg/L	13	0%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	430
1_40_1_4_108	Unit 1/2	MW-30	Appendix III	Chloride (as Cl)	mg/L	13	0%	2022-11-30 to 2024-10-16	Adjusted Gamma LCL	120
1_40_1_4_112	Unit 1/2	MW-30	Appendix III	Fluoride	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	1.1
1_40_1_4_120	Unit 1/2	MW-30	Appendix III	pH (field)	su	13	0%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	7.1
1_40_1_4_124	Unit 1/2	MW-30	Appendix III	Sulfate (as SO4)	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	760
1_40_1_4_126	Unit 1/2	MW-30	Appendix III	Total Dissolved Solids	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	2100
1_40_1_5_101	Unit 1/2	MW-30	Appendix IV	Antimony	mg/L	13	92%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.00010
1_40_1_5_102	Unit 1/2	MW-30	Appendix IV	Arsenic	mg/L	13	15%	2022-11-30 to 2024-10-16	Normal MLE LCL	0.00028
1_40_1_5_103	Unit 1/2	MW-30	Appendix IV	Barium	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	0.055
1_40_1_5_104	Unit 1/2	MW-30	Appendix IV	Beryllium	mg/L	13	85%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.000052
1_40_1_5_106	Unit 1/2	MW-30	Appendix IV	Cadmium	mg/L	13	100%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.000075
1_40_1_5_109	Unit 1/2	MW-30	Appendix IV	Chromium, Total	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	0.0080
1_40_1_5_110	Unit 1/2	MW-30	Appendix IV	Cobalt	mg/L	13	0%	2022-11-30 to 2024-10-16	Adjusted Gamma LCL	0.00096
1_40_1_5_113	Unit 1/2	MW-30	Appendix IV	Fluoride (App IV)	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	1.1
1_40_1_5_115	Unit 1/2	MW-30	Appendix IV	Lead	mg/L	13	92%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.00022
1_40_1_5_116	Unit 1/2	MW-30	Appendix IV	Lithium	mg/L	13	0%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.11
1_40_1_5_117	Unit 1/2	MW-30	Appendix IV	Mercury	mg/L	13	92%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.00016
1_40_1_5_118	Unit 1/2	MW-30	Appendix IV	Molybdenum	mg/L	13	23%	2022-11-30 to 2024-10-16	Normal MLE LCL	0.00054
1_40_1_5_121	Unit 1/2	MW-30	Appendix IV	Radium 226 and 228	pCi/L	13	54%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.56
1_40_1_5_122	Unit 1/2	MW-30	Appendix IV	Selenium	mg/L	13	46%	2022-11-30 to 2024-10-16	Normal MLE LCL	0.000074

1_40_1_5_125	Unit 1/2	MW-30	Appendix IV	Thallium	mg/L	13	100%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.000075
1_41_1_3_127	Unit 1/2	MW-31	Additional Parameters	Total Suspended Solids	mg/L	8	62%	2022-12-01 to 2024-10-15	Nonparametric LCL around the Median	2.0
1_41_1_4_105	Unit 1/2	MW-31	Appendix III	Boron	mg/L	13	0%	2022-12-01 to 2024-10-15	Normal LCL	4.3
1_41_1_4_107	Unit 1/2	MW-31	Appendix III	Calcium	mg/L	13	0%	2022-12-01 to 2024-10-15	Normal LCL	160
1_41_1_4_108	Unit 1/2	MW-31	Appendix III	Chloride (as Cl)	mg/L	13	0%	2022-12-01 to 2024-10-15	Normal LCL	98
1_41_1_4_112	Unit 1/2	MW-31	Appendix III	Fluoride	mg/L	13	0%	2022-12-01 to 2024-10-15	Nonparametric LCL around the Median	4.6
1_41_1_4_120	Unit 1/2	MW-31	Appendix III	pH (field)	su	13	0%	2022-12-01 to 2024-10-15	Normal LCL	7.8
1_41_1_4_124	Unit 1/2	MW-31	Appendix III	Sulfate (as SO4)	mg/L	13	0%	2022-12-01 to 2024-10-15	Normal LCL	130
1_41_1_4_126	Unit 1/2	MW-31	Appendix III	Total Dissolved Solids	mg/L	13	0%	2022-12-01 to 2024-10-15	Normal LCL	780
1_41_1_5_101	Unit 1/2	MW-31	Appendix IV	Antimony	mg/L	13	46%	2022-12-01 to 2024-10-15	Lognormal MLE Likelihood Profile LCL	0.000078
1_41_1_5_102	Unit 1/2	MW-31	Appendix IV	Arsenic	mg/L	13	0%	2022-12-01 to 2024-10-15	Normal LCL	0.0011
1_41_1_5_103	Unit 1/2	MW-31	Appendix IV	Barium	mg/L	13	0%	2022-12-01 to 2024-10-15	Normal LCL	0.15
1_41_1_5_104	Unit 1/2	MW-31	Appendix IV	Beryllium	mg/L	13	85%	2022-12-01 to 2024-10-15	Nonparametric LCL around the Median	0.000052
1_41_1_5_106	Unit 1/2	MW-31	Appendix IV	Cadmium	mg/L	13	92%	2022-12-01 to 2024-10-15	Nonparametric LCL around the Median	0.000032
1_41_1_5_109	Unit 1/2	MW-31	Appendix IV	Chromium, Total	mg/L	13	0%	2022-12-01 to 2024-10-15	Normal LCL	0.0021
1_41_1_5_110	Unit 1/2	MW-31	Appendix IV	Cobalt	mg/L	13	8%	2022-12-01 to 2024-10-15	Normal MLE LCL	0.00014
1_41_1_5_113	Unit 1/2	MW-31	Appendix IV	Fluoride (App IV)	mg/L	13	0%	2022-12-01 to 2024-10-15	Nonparametric LCL around the Median	4.6
1_41_1_5_115	Unit 1/2	MW-31	Appendix IV	Lead	mg/L	13	85%	2022-12-01 to 2024-10-15	Nonparametric LCL around the Median	0.00010
1_41_1_5_116	Unit 1/2	MW-31	Appendix IV	Lithium	mg/L	13	0%	2022-12-01 to 2024-10-15	Normal LCL	0.047
1_41_1_5_117	Unit 1/2	MW-31	Appendix IV	Mercury	mg/L	13	100%	2022-12-01 to 2024-10-15	Nonparametric LCL around the Median	0.00016
1_41_1_5_118	Unit 1/2	MW-31	Appendix IV	Molybdenum	mg/L	13	0%	2022-12-01 to 2024-10-15	Normal LCL	0.0010
1_41_1_5_121	Unit 1/2	MW-31	Appendix IV	Radium 226 and 228	pCi/L	13	31%	2022-12-01 to 2024-10-15	Gamma MLE Bootstrap LCL	0.58
1_41_1_5_122	Unit 1/2	MW-31	Appendix IV	Selenium	mg/L	13	38%	2022-12-01 to 2024-10-15	Nonparametric LCL around the Median	0.00013
1_41_1_5_125	Unit 1/2	MW-31	Appendix IV	Thallium	mg/L	13	92%	2022-12-01 to 2024-10-15	Nonparametric LCL around the Median	0.000075
1_42_1_3_127	Unit 1/2	MW-32	Additional Parameters	Total Suspended Solids	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	26
1_42_1_4_105	Unit 1/2	MW-32	Appendix III	Boron	mg/L	13	0%	2022-11-30 to 2024-10-16	Adjusted Gamma LCL	3.2
1_42_1_4_107	Unit 1/2	MW-32	Appendix III	Calcium	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	160
1_42_1_4_108	Unit 1/2	MW-32	Appendix III	Chloride (as Cl)	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	43
1_42_1_4_112	Unit 1/2	MW-32	Appendix III	Fluoride	mg/L	13	0%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	1.5
1_42_1_4_120	Unit 1/2	MW-32	Appendix III	pH (field)	su	13	0%	2022-11-30 to 2024-10-16	Normal LCL	7.6
1_42_1_4_124	Unit 1/2	MW-32	Appendix III	Sulfate (as SO4)	mg/L	13	0%	2022-11-30 to 2024-10-16	Adjusted Gamma LCL	52
1_42_1_4_126	Unit 1/2	MW-32	Appendix III	Total Dissolved Solids	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	640
1_42_1_5_101	Unit 1/2	MW-32	Appendix IV	Antimony	mg/L	13	69%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.000072
1_42_1_5_102	Unit 1/2	MW-32	Appendix IV	Arsenic	mg/L	13	0%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.00047
1_42_1_5_103	Unit 1/2	MW-32	Appendix IV	Barium	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	0.39
1_42_1_5_104	Unit 1/2	MW-32	Appendix IV	Beryllium	mg/L	13	92%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.000052
1_42_1_5_106	Unit 1/2	MW-32	Appendix IV	Cadmium	mg/L	13	92%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.000032
1_42_1_5_109	Unit 1/2	MW-32	Appendix IV	Chromium, Total	mg/L	13	0%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.00036
1_42_1_5_110	Unit 1/2	MW-32	Appendix IV	Cobalt	mg/L	13	0%	2022-11-30 to 2024-10-16	Adjusted Gamma LCL	0.00040
1_42_1_5_113	Unit 1/2	MW-32	Appendix IV	Fluoride (App IV)	mg/L	13	0%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	1.5
1_42_1_5_115	Unit 1/2	MW-32	Appendix IV	Lead	mg/L	13	69%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.00010
1_42_1_5_116	Unit 1/2	MW-32	Appendix IV	Lithium	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	0.11
1_42_1_5_117	Unit 1/2	MW-32	Appendix IV	Mercury	mg/L	13	92%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.00016
1_42_1_5_118	Unit 1/2	MW-32	Appendix IV	Molybdenum	mg/L	13	0%	2022-11-30 to 2024-10-16	Normal LCL	0.0039
1_42_1_5_121	Unit 1/2	MW-32	Appendix IV	Radium 226 and 228	pCi/L	13	62%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.57
1_42_1_5_122	Unit 1/2	MW-32	Appendix IV	Selenium	mg/L	13	77%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.00010
1_42_1_5_125	Unit 1/2	MW-32	Appendix IV	Thallium	mg/L	13	100%	2022-11-30 to 2024-10-16	Nonparametric LCL around the Median	0.000075
2_11_2_3_127	Unit 3A/B	MW-01R	Additional Parameters	Total Suspended Solids	mg/L	12	33%	2022-11-29 to 2024-10-16	Nonparametric LCL around the Median	2.0
2_11_2_4_105	Unit 3A/B	MW-01R	Appendix III	Boron	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	86
2_11_2_4_107	Unit 3A/B	MW-01R	Appendix III	Calcium	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	200
2_11_2_4_108	Unit 3A/B	MW-01R	Appendix III	Chloride (as Cl)	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	110
2_11_2_4_112	Unit 3A/B	MW-01R	Appendix III	Fluoride	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	9.7
2_11_2_4_120	Unit 3A/B	MW-01R	Appendix III	pH (field)	su	13	0%	2022-11-29 to 2024-10-16	Nonparametric LCL around the Median	7.7
2_11_2_4_124	Unit 3A/B	MW-01R	Appendix III	Sulfate (as SO4)	mg/L	13	0%	2022-11-29 to 2024-10-16	Adjusted Gamma LCL	280
2_11_2_4_126	Unit 3A/B	MW-01R	Appendix III	Total Dissolved Solids	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	2300
2_11_2_5_101	Unit 3A/B	MW-01R	Appendix IV	Antimony	mg/L	13	23%	2022-11-29 to 2024-10-16	Lognormal MLE Likelihood Profile LCL	0.00025
2_11_2_5_102	Unit 3A/B	MW-01R	Appendix IV	Arsenic	mg/L	13	0%	2022-11-29 to 2024-10-16	Adjusted Gamma LCL	0.0013
2_11_2_5_103	Unit 3A/B	MW-01R	Appendix IV	Barium	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	0.27
2_11_2_5_104	Unit 3A/B	MW-01R	Appendix IV	Beryllium	mg/L	13	15%	2022-11-29 to 2024-10-16	Normal MLE LCL	0.00013
2_11_2_5_106	Unit 3A/B	MW-01R	Appendix IV	Cadmium	mg/L	13	77%	2022-11-29 to 2024-10-16	Nonparametric LCL around the Median	0.000075
2_11_2_5_109	Unit 3A/B	MW-01R	Appendix IV	Chromium, Total	mg/L	13	0%	2022-11-29 to 2024-10-16	Lognormal H-LCL	0.0023
2_11_2_5_110	Unit 3A/B	MW-01R	Appendix IV	Cobalt	mg/L	13	0%	2022-11-29 to 2024-10-16	Lognormal H-LCL	0.0013
2_11_2_5_113	Unit 3A/B	MW-01R	Appendix IV	Fluoride (App IV)	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	9.7
2_11_2_5_115	Unit 3A/B	MW-01R	Appendix IV	Lead	mg/L	13	15%	2022-11-29 to 2024-10-16	Gamma MLE Bootstrap LCL	0.00071
2_11_2_5_116	Unit 3A/B	MW-01R	Appendix IV	Lithium	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	1.9
2_11_2_5_117	Unit 3A/B	MW-01R	Appendix IV	Mercury	mg/L	13	100%	2022-11-29 to 2024-10-16	Nonparametric LCL around the Median	0.00016
2_11_2_5_118	Unit 3A/B	MW-01R	Appendix IV	Molybdenum	mg/L	13	8%	2022-11-29 to 2024-10-16	Gamma MLE Bootstrap LCL	0.00069
2_11_2_5_121	Unit 3A/B	MW-01R	Appendix IV	Radium 226 and 228	pCi/L	13	54%	2022-11-29 to 2024-10-16	Nonparametric LCL around the Median	0.68
2_11_2_5_122	Unit 3A/B	MW-01R	Appendix IV	Selenium	mg/L	13	0%	2022-11-29 to 2024-10-16	Adjusted Gamma LCL	0.00059
2_11_2_5_125	Unit 3A/B	MW-01R	Appendix IV	Thallium	mg/L	13	100%	2022-11-29 to 2024-10-16	Nonparametric LCL around the Median	0.000075
2_12_2_3_127	Unit 3A/B	MW-02	Additional Parameters	Total Suspended Solids	mg/L	13	0%	2022-11-28 to 2024-10-15	Normal LCL	34
2_12_2_4_105	Unit 3A/B	MW-02	Appendix III	Boron	mg/L	13	0%	2022-11-28 to 2024-10-15	Normal LCL	93
2_12_2_4_107	Unit 3A/B	MW-02	Appendix III	Calcium	mg/L	13	0%	2022-11-28 to 2024-10-15	Normal LCL	190
2_12_2_4_108	Unit 3A/B	MW-02	Appendix III	Chloride (as Cl)	mg/L	13	0%	2022-11-28 to 2024-10-15	Nonparametric LCL around the Median	140
2_12_2_4_112	Unit 3A/B	MW-02	Appendix III	Fluoride	mg/L	13	0%	2022-11-28 to 2024-10-15	Nonparametric LCL around the Median	9.2
2_12_2_4_120	Unit 3A/B	MW-02	Appendix III	pH (field)	su	13	0%	2022-11-28 to 2024-10-15	Normal LCL	7.2
2_12_2_4_124	Unit 3A/B	MW-02	Appendix III	Sulfate (as SO4)	mg/L	13	62%	2022-11-28 to 2024-10-15	Nonparametric LCL around the Median	0.41
2_12_2_4_126	Unit 3A/B	MW-02	Appendix III	Total Dissolved Solids	mg/L	13	0%	2022-11-28 to 2024-10-15	Normal LCL	1800
2_12_2_5_101	Unit 3A/B	MW-02	Appendix IV	Antimony	mg/L	13	23%	2022-11-28 to 2024-10-15	Gamma MLE Bootstrap LCL	0.00017
2_12_2_5_102	Unit 3A/B	MW-02	Appendix IV	Arsenic	mg/L	13	0%	2022-11-28 to 2024-10-15	Nonparametric LCL around the Median	0.0074
2_12_2_5_103	Unit 3A/B	MW-02	Appendix IV	Barium	mg/L	13	0%	2022-11-28 to 2024-10-15	Normal LCL	0.42
2_12_2_5_104	Unit 3A/B	MW-02	Appendix IV	Beryllium	mg/L	13	8%	2022-11-28 to 2024-10-15	Normal MLE LCL	0.00019

2_12_2_5_106	Unit 3A/B	MW-02	Appendix IV	Cadmium	mg/L	13	77%	2022-11-28 to 2024-10-15	Nonparametric LCL around the Median	0.000075
2_12_2_5_109	Unit 3A/B	MW-02	Appendix IV	Chromium, Total	mg/L	13	0%	2022-11-28 to 2024-10-15	Normal LCL	0.029
2_12_2_5_110	Unit 3A/B	MW-02	Appendix IV	Cobalt	mg/L	13	0%	2022-11-28 to 2024-10-15	Normal LCL	0.0044
2_12_2_5_113	Unit 3A/B	MW-02	Appendix IV	Fluoride (App IV)	mg/L	13	0%	2022-11-28 to 2024-10-15	Nonparametric LCL around the Median	9.2
2_12_2_5_115	Unit 3A/B	MW-02	Appendix IV	Lead	mg/L	13	8%	2022-11-28 to 2024-10-15	Normal MLE LCL	0.0017
2_12_2_5_116	Unit 3A/B	MW-02	Appendix IV	Lithium	mg/L	13	0%	2022-11-28 to 2024-10-15	Normal LCL	1.3
2_12_2_5_117	Unit 3A/B	MW-02	Appendix IV	Mercury	mg/L	13	100%	2022-11-28 to 2024-10-15	Nonparametric LCL around the Median	0.00016
2_12_2_5_118	Unit 3A/B	MW-02	Appendix IV	Molybdenum	mg/L	13	0%	2022-11-28 to 2024-10-15	Adjusted Gamma LCL	0.0053
2_12_2_5_121	Unit 3A/B	MW-02	Appendix IV	Radium 226 and 228	pCi/L	13	31%	2022-11-28 to 2024-10-15	Normal MLE LCL	0.85
2_12_2_5_122	Unit 3A/B	MW-02	Appendix IV	Selenium	mg/L	13	0%	2022-11-28 to 2024-10-15	Normal LCL	0.00098
2_12_2_5_125	Unit 3A/B	MW-02	Appendix IV	Thallium	mg/L	13	92%	2022-11-28 to 2024-10-15	Nonparametric LCL around the Median	0.000075
2_13_2_3_127	Unit 3A/B	MW-03	Additional Parameters	Total Suspended Solids	mg/L	10	50%	2022-11-28 to 2024-10-15	Nonparametric LCL around the Median	3.0
2_13_2_4_105	Unit 3A/B	MW-03	Appendix III	Boron	mg/L	13	0%	2022-11-28 to 2024-10-15	Normal LCL	4.0
2_13_2_4_107	Unit 3A/B	MW-03	Appendix III	Calcium	mg/L	13	0%	2022-11-28 to 2024-10-15	Normal LCL	350
2_13_2_4_108	Unit 3A/B	MW-03	Appendix III	Chloride (as Cl)	mg/L	13	0%	2022-11-28 to 2024-10-15	Normal LCL	140
2_13_2_4_112	Unit 3A/B	MW-03	Appendix III	Fluoride	mg/L	13	0%	2022-11-28 to 2024-10-15	Nonparametric LCL around the Median	0.60
2_13_2_4_120	Unit 3A/B	MW-03	Appendix III	pH (field)	su	13	0%	2022-11-28 to 2024-10-15	Normal LCL	7.3
2_13_2_4_124	Unit 3A/B	MW-03	Appendix III	Sulfate (as SO4)	mg/L	13	0%	2022-11-28 to 2024-10-15	Normal LCL	300
2_13_2_4_126	Unit 3A/B	MW-03	Appendix III	Total Dissolved Solids	mg/L	13	0%	2022-11-28 to 2024-10-15	Nonparametric LCL around the Median	1900
2_13_2_5_101	Unit 3A/B	MW-03	Appendix IV	Antimony	mg/L	13	62%	2022-11-28 to 2024-10-15	Nonparametric LCL around the Median	0.00010
2_13_2_5_102	Unit 3A/B	MW-03	Appendix IV	Arsenic	mg/L	13	0%	2022-11-28 to 2024-10-15	Normal LCL	0.00079
2_13_2_5_103	Unit 3A/B	MW-03	Appendix IV	Barium	mg/L	13	0%	2022-11-28 to 2024-10-15	Normal LCL	0.31
2_13_2_5_104	Unit 3A/B	MW-03	Appendix IV	Beryllium	mg/L	13	62%	2022-11-28 to 2024-10-15	Nonparametric LCL around the Median	0.000052
2_13_2_5_106	Unit 3A/B	MW-03	Appendix IV	Cadmium	mg/L	13	92%	2022-11-28 to 2024-10-15	Nonparametric LCL around the Median	0.000075
2_13_2_5_109	Unit 3A/B	MW-03	Appendix IV	Chromium, Total	mg/L	13	0%	2022-11-28 to 2024-10-15	Normal LCL	0.0041
2_13_2_5_110	Unit 3A/B	MW-03	Appendix IV	Cobalt	mg/L	13	0%	2022-11-28 to 2024-10-15	Normal LCL	0.00064
2_13_2_5_113	Unit 3A/B	MW-03	Appendix IV	Fluoride (App IV)	mg/L	13	0%	2022-11-28 to 2024-10-15	Nonparametric LCL around the Median	0.60
2_13_2_5_115	Unit 3A/B	MW-03	Appendix IV	Lead	mg/L	13	92%	2022-11-28 to 2024-10-15	Nonparametric LCL around the Median	0.00022
2_13_2_5_116	Unit 3A/B	MW-03	Appendix IV	Lithium	mg/L	13	0%	2022-11-28 to 2024-10-15	Normal LCL	0.035
2_13_2_5_117	Unit 3A/B	MW-03	Appendix IV	Mercury	mg/L	13	92%	2022-11-28 to 2024-10-15	Nonparametric LCL around the Median	0.00016
2_13_2_5_118	Unit 3A/B	MW-03	Appendix IV	Molybdenum	mg/L	13	69%	2022-11-28 to 2024-10-15	Nonparametric LCL around the Median	0.00025
2_13_2_5_121	Unit 3A/B	MW-03	Appendix IV	Radium 226 and 228	pCi/L	13	8%	2022-11-28 to 2024-10-15	Normal MLE LCL	0.90
2_13_2_5_122	Unit 3A/B	MW-03	Appendix IV	Selenium	mg/L	13	23%	2022-11-28 to 2024-10-15	Normal MLE LCL	0.00030
2_13_2_5_125	Unit 3A/B	MW-03	Appendix IV	Thallium	mg/L	13	92%	2022-11-28 to 2024-10-15	Nonparametric LCL around the Median	0.00018
2_14_2_3_127	Unit 3A/B	MW-04	Additional Parameters	Total Suspended Solids	mg/L	12	8%	2022-11-28 to 2024-10-15	Normal MLE LCL	6.9
2_14_2_4_105	Unit 3A/B	MW-04	Appendix III	Boron	mg/L	13	0%	2022-11-28 to 2024-10-15	Normal LCL	3.9
2_14_2_4_107	Unit 3A/B	MW-04	Appendix III	Calcium	mg/L	13	0%	2022-11-28 to 2024-10-15	Normal LCL	350
2_14_2_4_108	Unit 3A/B	MW-04	Appendix III	Chloride (as Cl)	mg/L	13	0%	2022-11-28 to 2024-10-15	Normal LCL	150
2_14_2_4_112	Unit 3A/B	MW-04	Appendix III	Fluoride	mg/L	13	0%	2022-11-28 to 2024-10-15	Adjusted Gamma LCL	1.2
2_14_2_4_120	Unit 3A/B	MW-04	Appendix III	pH (field)	su	13	0%	2022-11-28 to 2024-10-15	Normal LCL	7.3
2_14_2_4_124	Unit 3A/B	MW-04	Appendix III	Sulfate (as SO4)	mg/L	13	0%	2022-11-28 to 2024-10-15	Nonparametric LCL around the Median	580
2_14_2_4_126	Unit 3A/B	MW-04	Appendix III	Total Dissolved Solids	mg/L	13	0%	2022-11-28 to 2024-10-15	Normal LCL	1800
2_14_2_5_101	Unit 3A/B	MW-04	Appendix IV	Antimony	mg/L	13	77%	2022-11-28 to 2024-10-15	Nonparametric LCL around the Median	0.00010
2_14_2_5_102	Unit 3A/B	MW-04	Appendix IV	Arsenic	mg/L	13	0%	2022-11-28 to 2024-10-15	Normal LCL	0.00078
2_14_2_5_103	Unit 3A/B	MW-04	Appendix IV	Barium	mg/L	13	0%	2022-11-28 to 2024-10-15	Nonparametric LCL around the Median	0.11
2_14_2_5_104	Unit 3A/B	MW-04	Appendix IV	Beryllium	mg/L	13	85%	2022-11-28 to 2024-10-15	Nonparametric LCL around the Median	0.000052
2_14_2_5_106	Unit 3A/B	MW-04	Appendix IV	Cadmium	mg/L	13	100%	2022-11-28 to 2024-10-15	Nonparametric LCL around the Median	0.000075
2_14_2_5_109	Unit 3A/B	MW-04	Appendix IV	Chromium, Total	mg/L	13	0%	2022-11-28 to 2024-10-15	Normal LCL	0.0035
2_14_2_5_110	Unit 3A/B	MW-04	Appendix IV	Cobalt	mg/L	13	0%	2022-11-28 to 2024-10-15	Normal LCL	0.00036
2_14_2_5_113	Unit 3A/B	MW-04	Appendix IV	Fluoride (App IV)	mg/L	13	0%	2022-11-28 to 2024-10-15	Adjusted Gamma LCL	1.2
2_14_2_5_115	Unit 3A/B	MW-04	Appendix IV	Lead	mg/L	13	100%	2022-11-28 to 2024-10-15	Nonparametric LCL around the Median	0.00022
2_14_2_5_116	Unit 3A/B	MW-04	Appendix IV	Lithium	mg/L	13	0%	2022-11-28 to 2024-10-15	Normal LCL	0.059
2_14_2_5_117	Unit 3A/B	MW-04	Appendix IV	Mercury	mg/L	13	100%	2022-11-28 to 2024-10-15	Nonparametric LCL around the Median	0.00016
2_14_2_5_118	Unit 3A/B	MW-04	Appendix IV	Molybdenum	mg/L	13	15%	2022-11-28 to 2024-10-15	Normal MLE LCL	0.00069
2_14_2_5_121	Unit 3A/B	MW-04	Appendix IV	Radium 226 and 228	pCi/L	13	23%	2022-11-28 to 2024-10-15	Normal MLE LCL	0.77
2_14_2_5_122	Unit 3A/B	MW-04	Appendix IV	Selenium	mg/L	13	38%	2022-11-28 to 2024-10-15	Normal MLE LCL	0.00013
2_14_2_5_125	Unit 3A/B	MW-04	Appendix IV	Thallium	mg/L	13	100%	2022-11-28 to 2024-10-15	Nonparametric LCL around the Median	0.000075
2_19_2_3_127	Unit 3A/B	MW-09	Additional Parameters	Total Suspended Solids	mg/L	13	0%	2022-11-28 to 2024-10-17	Normal LCL	47
2_19_2_4_105	Unit 3A/B	MW-09	Appendix III	Boron	mg/L	13	0%	2022-11-28 to 2024-10-17	Normal LCL	5.6
2_19_2_4_107	Unit 3A/B	MW-09	Appendix III	Calcium	mg/L	13	0%	2022-11-28 to 2024-10-17	Normal LCL	330
2_19_2_4_108	Unit 3A/B	MW-09	Appendix III	Chloride (as Cl)	mg/L	13	0%	2022-11-28 to 2024-10-17	Normal LCL	14
2_19_2_4_112	Unit 3A/B	MW-09	Appendix III	Fluoride	mg/L	13	0%	2022-11-28 to 2024-10-17	Normal LCL	2.4
2_19_2_4_120	Unit 3A/B	MW-09	Appendix III	pH (field)	su	13	0%	2022-11-28 to 2024-10-17	Nonparametric LCL around the Median	7.2
2_19_2_4_124	Unit 3A/B	MW-09	Appendix III	Sulfate (as SO4)	mg/L	13	0%	2022-11-28 to 2024-10-17	Normal LCL	310
2_19_2_4_126	Unit 3A/B	MW-09	Appendix III	Total Dissolved Solids	mg/L	13	0%	2022-11-28 to 2024-10-17	Normal LCL	1200
2_19_2_5_101	Unit 3A/B	MW-09	Appendix IV	Antimony	mg/L	13	62%	2022-11-28 to 2024-10-17	Nonparametric LCL around the Median	0.00010
2_19_2_5_102	Unit 3A/B	MW-09	Appendix IV	Arsenic	mg/L	13	0%	2022-11-28 to 2024-10-17	Nonparametric LCL around the Median	0.0023
2_19_2_5_103	Unit 3A/B	MW-09	Appendix IV	Barium	mg/L	13	0%	2022-11-28 to 2024-10-17	Lognormal H-LCL	0.28
2_19_2_5_104	Unit 3A/B	MW-09	Appendix IV	Beryllium	mg/L	13	85%	2022-11-28 to 2024-10-17	Nonparametric LCL around the Median	0.000052
2_19_2_5_106	Unit 3A/B	MW-09	Appendix IV	Cadmium	mg/L	13	100%	2022-11-28 to 2024-10-17	Nonparametric LCL around the Median	0.000032
2_19_2_5_109	Unit 3A/B	MW-09	Appendix IV	Chromium, Total	mg/L	13	0%	2022-11-28 to 2024-10-17	Normal LCL	0.0022
2_19_2_5_110	Unit 3A/B	MW-09	Appendix IV	Cobalt	mg/L	13	0%	2022-11-28 to 2024-10-17	Normal LCL	0.00040
2_19_2_5_113	Unit 3A/B	MW-09	Appendix IV	Fluoride (App IV)	mg/L	13	0%	2022-11-28 to 2024-10-17	Normal LCL	2.4
2_19_2_5_115	Unit 3A/B	MW-09	Appendix IV	Lead	mg/L	13	100%	2022-11-28 to 2024-10-17	Nonparametric LCL around the Median	0.00010
2_19_2_5_116	Unit 3A/B	MW-09	Appendix IV	Lithium	mg/L	13	0%	2022-11-28 to 2024-10-17	Normal LCL	0.29
2_19_2_5_117	Unit 3A/B	MW-09	Appendix IV	Mercury	mg/L	13	85%	2022-11-28 to 2024-10-17	Nonparametric LCL around the Median	0.00016
2_19_2_5_118	Unit 3A/B	MW-09	Appendix IV	Molybdenum	mg/L	13	0%	2022-11-28 to 2024-10-17	Normal LCL	0.018
2_19_2_5_121	Unit 3A/B	MW-09	Appendix IV	Radium 226 and 228	pCi/L	13	92%	2022-11-28 to 2024-10-17	Nonparametric LCL around the Median	0.69
2_19_2_5_122	Unit 3A/B	MW-09	Appendix IV	Selenium	mg/L	13	15%	2022-11-28 to 2024-10-17	Normal MLE LCL	0.00021
2_19_2_5_125	Unit 3A/B	MW-09	Appendix IV	Thallium	mg/L	13	100%	2022-11-28 to 2024-10-17	Nonparametric LCL around the Median	0.000075
2_21_2_3_127	Unit 3A/B	MW-11	Additional Parameters	Total Suspended Solids	mg/L	12	0%	2022-11-29 to 2024-10-16	Normal LCL	7.5
2_21_2_4_105	Unit 3A/B	MW-11	Appendix III	Boron	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	4.2

2_21_2_4_107	Unit 3A/B	MW-11	Appendix III	Calcium	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	230
2_21_2_4_108	Unit 3A/B	MW-11	Appendix III	Chloride (as Cl)	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	60
2_21_2_4_112	Unit 3A/B	MW-11	Appendix III	Fluoride	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	0.44
2_21_2_4_120	Unit 3A/B	MW-11	Appendix III	pH (field)	su	13	0%	2022-11-29 to 2024-10-16	Normal LCL	7.3
2_21_2_4_124	Unit 3A/B	MW-11	Appendix III	Sulfate (as SO4)	mg/L	13	31%	2022-11-29 to 2024-10-16	Gamma MLE Bootstrap LCL	13
2_21_2_4_126	Unit 3A/B	MW-11	Appendix III	Total Dissolved Solids	mg/L	13	0%	2022-11-29 to 2024-10-16	Adjusted Gamma LCL	940
2_21_2_5_101	Unit 3A/B	MW-11	Appendix IV	Antimony	mg/L	13	69%	2022-11-29 to 2024-10-16	Nonparametric LCL around the Median	0.00010
2_21_2_5_102	Unit 3A/B	MW-11	Appendix IV	Arsenic	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	0.0012
2_21_2_5_103	Unit 3A/B	MW-11	Appendix IV	Barium	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	0.55
2_21_2_5_104	Unit 3A/B	MW-11	Appendix IV	Beryllium	mg/L	13	77%	2022-11-29 to 2024-10-16	Nonparametric LCL around the Median	0.000052
2_21_2_5_106	Unit 3A/B	MW-11	Appendix IV	Cadmium	mg/L	13	85%	2022-11-29 to 2024-10-16	Nonparametric LCL around the Median	0.000075
2_21_2_5_109	Unit 3A/B	MW-11	Appendix IV	Chromium, Total	mg/L	13	0%	2022-11-29 to 2024-10-16	Nonparametric LCL around the Median	0.00063
2_21_2_5_110	Unit 3A/B	MW-11	Appendix IV	Cobalt	mg/L	13	0%	2022-11-29 to 2024-10-16	Adjusted Gamma LCL	0.00045
2_21_2_5_113	Unit 3A/B	MW-11	Appendix IV	Fluoride (App IV)	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	0.44
2_21_2_5_115	Unit 3A/B	MW-11	Appendix IV	Lead	mg/L	13	23%	2022-11-29 to 2024-10-16	Nonparametric LCL around the Median	0.00031
2_21_2_5_116	Unit 3A/B	MW-11	Appendix IV	Lithium	mg/L	13	0%	2022-11-29 to 2024-10-16	Adjusted Gamma LCL	0.044
2_21_2_5_117	Unit 3A/B	MW-11	Appendix IV	Mercury	mg/L	13	92%	2022-11-29 to 2024-10-16	Nonparametric LCL around the Median	0.00016
2_21_2_5_118	Unit 3A/B	MW-11	Appendix IV	Molybdenum	mg/L	13	15%	2022-11-29 to 2024-10-16	Normal MLE LCL	0.00070
2_21_2_5_121	Unit 3A/B	MW-11	Appendix IV	Radium 226 and 228	pCi/L	13	31%	2022-11-29 to 2024-10-16	Normal MLE LCL	0.65
2_21_2_5_122	Unit 3A/B	MW-11	Appendix IV	Selenium	mg/L	13	23%	2022-11-29 to 2024-10-16	Lognormal MLE Likelihood Profile LCL	0.00019
2_21_2_5_125	Unit 3A/B	MW-11	Appendix IV	Thallium	mg/L	13	92%	2022-11-29 to 2024-10-16	Nonparametric LCL around the Median	0.000075
2_22_2_3_127	Unit 3A/B	MW-12	Additional Parameters	Total Suspended Solids	mg/L	8	62%	2023-02-07 to 2024-10-16	Nonparametric LCL around the Median	1.0
2_22_2_4_105	Unit 3A/B	MW-12	Appendix III	Boron	mg/L	13	0%	2022-11-28 to 2024-10-16	Normal LCL	0.26
2_22_2_4_107	Unit 3A/B	MW-12	Appendix III	Calcium	mg/L	13	0%	2022-11-28 to 2024-10-16	Normal LCL	59
2_22_2_4_108	Unit 3A/B	MW-12	Appendix III	Chloride (as Cl)	mg/L	13	0%	2022-11-28 to 2024-10-16	Normal LCL	17
2_22_2_4_112	Unit 3A/B	MW-12	Appendix III	Fluoride	mg/L	13	0%	2022-11-28 to 2024-10-16	Normal LCL	0.28
2_22_2_4_120	Unit 3A/B	MW-12	Appendix III	pH (field)	su	13	0%	2022-11-28 to 2024-10-16	Normal LCL	7.5
2_22_2_4_124	Unit 3A/B	MW-12	Appendix III	Sulfate (as SO4)	mg/L	13	0%	2022-11-28 to 2024-10-16	Normal LCL	92
2_22_2_4_126	Unit 3A/B	MW-12	Appendix III	Total Dissolved Solids	mg/L	13	0%	2022-11-28 to 2024-10-16	Normal LCL	230
2_22_2_5_101	Unit 3A/B	MW-12	Appendix IV	Antimony	mg/L	13	0%	2022-11-28 to 2024-10-16	Normal LCL	0.00054
2_22_2_5_102	Unit 3A/B	MW-12	Appendix IV	Arsenic	mg/L	13	0%	2022-11-28 to 2024-10-16	Normal LCL	0.0020
2_22_2_5_103	Unit 3A/B	MW-12	Appendix IV	Barium	mg/L	13	0%	2022-11-28 to 2024-10-16	Adjusted Gamma LCL	0.030
2_22_2_5_104	Unit 3A/B	MW-12	Appendix IV	Beryllium	mg/L	13	100%	2022-11-28 to 2024-10-16	Nonparametric LCL around the Median	0.000052
2_22_2_5_106	Unit 3A/B	MW-12	Appendix IV	Cadmium	mg/L	13	0%	2022-11-28 to 2024-10-16	Normal LCL	0.0010
2_22_2_5_109	Unit 3A/B	MW-12	Appendix IV	Chromium, Total	mg/L	13	38%	2022-11-28 to 2024-10-16	Normal MLE LCL	0.000070
2_22_2_5_110	Unit 3A/B	MW-12	Appendix IV	Cobalt	mg/L	13	38%	2022-11-28 to 2024-10-16	Normal MLE LCL	-0.000027
2_22_2_5_113	Unit 3A/B	MW-12	Appendix IV	Fluoride (App IV)	mg/L	13	0%	2022-11-28 to 2024-10-16	Normal LCL	0.28
2_22_2_5_115	Unit 3A/B	MW-12	Appendix IV	Lead	mg/L	13	46%	2022-11-28 to 2024-10-16	Normal MLE LCL	0.000068
2_22_2_5_116	Unit 3A/B	MW-12	Appendix IV	Lithium	mg/L	13	0%	2022-11-28 to 2024-10-16	Normal LCL	0.0031
2_22_2_5_117	Unit 3A/B	MW-12	Appendix IV	Mercury	mg/L	13	85%	2022-11-28 to 2024-10-16	Nonparametric LCL around the Median	0.00016
2_22_2_5_118	Unit 3A/B	MW-12	Appendix IV	Molybdenum	mg/L	13	0%	2022-11-28 to 2024-10-16	Normal LCL	0.0061
2_22_2_5_121	Unit 3A/B	MW-12	Appendix IV	Radium 226 and 228	pCi/L	13	69%	2022-11-28 to 2024-10-16	Nonparametric LCL around the Median	0.54
2_22_2_5_122	Unit 3A/B	MW-12	Appendix IV	Selenium	mg/L	13	0%	2022-11-28 to 2024-10-16	Adjusted Gamma LCL	0.00063
2_22_2_5_125	Unit 3A/B	MW-12	Appendix IV	Thallium	mg/L	13	100%	2022-11-28 to 2024-10-16	Nonparametric LCL around the Median	0.000075
3_20_3_3_127	Unit 1/2 & 3A/B	MW-10	Additional Parameters	Total Suspended Solids	mg/L	12	17%	2022-11-29 to 2024-10-16	Normal MLE LCL	2.5
3_20_3_4_105	Unit 1/2 & 3A/B	MW-10	Appendix III	Boron	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	12
3_20_3_4_107	Unit 1/2 & 3A/B	MW-10	Appendix III	Calcium	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	240
3_20_3_4_108	Unit 1/2 & 3A/B	MW-10	Appendix III	Chloride (as Cl)	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	180
3_20_3_4_112	Unit 1/2 & 3A/B	MW-10	Appendix III	Fluoride	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	4.3
3_20_3_4_120	Unit 1/2 & 3A/B	MW-10	Appendix III	pH (field)	su	13	0%	2022-11-29 to 2024-10-16	Normal LCL	7.6
3_20_3_4_124	Unit 1/2 & 3A/B	MW-10	Appendix III	Sulfate (as SO4)	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	450
3_20_3_4_126	Unit 1/2 & 3A/B	MW-10	Appendix III	Total Dissolved Solids	mg/L	13	0%	2022-11-29 to 2024-10-16	Lognormal H-LCL	1800
3_20_3_5_101	Unit 1/2 & 3A/B	MW-10	Appendix IV	Antimony	mg/L	13	69%	2022-11-29 to 2024-10-16	Nonparametric LCL around the Median	0.00010
3_20_3_5_102	Unit 1/2 & 3A/B	MW-10	Appendix IV	Arsenic	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	0.00047
3_20_3_5_103	Unit 1/2 & 3A/B	MW-10	Appendix IV	Barium	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	0.22
3_20_3_5_104	Unit 1/2 & 3A/B	MW-10	Appendix IV	Beryllium	mg/L	13	46%	2022-11-29 to 2024-10-16	Normal MLE LCL	-0.000021
3_20_3_5_106	Unit 1/2 & 3A/B	MW-10	Appendix IV	Cadmium	mg/L	13	100%	2022-11-29 to 2024-10-16	Nonparametric LCL around the Median	0.000075
3_20_3_5_109	Unit 1/2 & 3A/B	MW-10	Appendix IV	Chromium, Total	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	0.0026
3_20_3_5_110	Unit 1/2 & 3A/B	MW-10	Appendix IV	Cobalt	mg/L	13	8%	2022-11-29 to 2024-10-16	Gamma MLE Bootstrap LCL	0.00034
3_20_3_5_113	Unit 1/2 & 3A/B	MW-10	Appendix IV	Fluoride (App IV)	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	4.3
3_20_3_5_115	Unit 1/2 & 3A/B	MW-10	Appendix IV	Lead	mg/L	13	85%	2022-11-29 to 2024-10-16	Nonparametric LCL around the Median	0.00017
3_20_3_5_116	Unit 1/2 & 3A/B	MW-10	Appendix IV	Lithium	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	0.80
3_20_3_5_117	Unit 1/2 & 3A/B	MW-10	Appendix IV	Mercury	mg/L	13	92%	2022-11-29 to 2024-10-16	Nonparametric LCL around the Median	0.00016
3_20_3_5_118	Unit 1/2 & 3A/B	MW-10	Appendix IV	Molybdenum	mg/L	13	0%	2022-11-29 to 2024-10-16	Normal LCL	0.0026
3_20_3_5_121	Unit 1/2 & 3A/B	MW-10	Appendix IV	Radium 226 and 228	pCi/L	13	77%	2022-11-29 to 2024-10-16	Nonparametric LCL around the Median	0.70
3_20_3_5_122	Unit 1/2 & 3A/B	MW-10	Appendix IV	Selenium	mg/L	13	8%	2022-11-29 to 2024-10-16	Gamma MLE Bootstrap LCL	0.00032
3_20_3_5_125	Unit 1/2 & 3A/B	MW-10	Appendix IV	Thallium	mg/L	13	100%	2022-11-29 to 2024-10-16	Nonparametric LCL around the Median	0.000075