Prepared by

Renew Harbor Island

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2nd Quarter 2024 Groundwater Monitoring and Corrective Action Report

For Michigan Part 115 CCR Solid Waste Regulations

Former J.B. Sims Generating Station

July 30, 2024

Revised 8/19/2024

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1.0 Introduction

The U.S. Environmental Protection Agency's (EPA) final Coal Combustion Residuals (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) in surface impoundments by electric utilities. The facility is located at 1231 North 3rd Street, on Harbor Island, in Grand Haven, Michigan (**Figure 1**). The former J.B. Sims Generating Station was operated by the Grand Haven Board of Light and Power (GHBLP) and ceased operations in February 2020. The former plant was a coal-fired steam-generating power facility with a net capacity of approximately 70.5 megawatts. The 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 current groundwater monitoring network was established in 2022 for the CCR units, and includes additional background wells requested by EGLE. Background data collection occurred between November 2022 and August 2023 (HDR, 2024). The first sample event after background monitoring 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 report is scheduled to be published August 3, 2024, however additional data collection will continue into 2025 to further assess the remedy selection process.

This Quarterly Groundwater Monitoring Report presents the monitoring activities completed during the second quarter of 2024.

Figure 1 | Site Vicinity Map

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

2.0 Facility Description

2.0.1 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 former northern outlet channel from the Units 1/2 Impoundment would be evaluated for potential inclusion of the revised boundary. The northern outlet channel area is still under investigation and awaiting feedback from EGLE and EPA (**Figure 2**).

2.0.2 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 remained in place. Following the CCR removal, Golder conducted ash removal verification that was ultimately denied by EGLE (HDR, 2024). Further ash delineation will be conducted to define the extent of any remaining minor amount of CCR adjacent to the Unit 3A/B Impoundments.

2.1 Hydrogeology

The regional 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 sides of the Site, and the South Channel is located on the south side of Harbor Island. Internal to the Island there are several influences on groundwater flow and direction, specifically:

- Various fill materials
- Surface water features, such as the inactive Units 1/2 Impoundment and wetlands
- Former coal yard area, which may have lower infiltration rates due to compaction from heavy equipment and stockpiling.

During the water level monitoring events conducted between September 2022 and October 2023, it was determined that the groundwater elevation is highest around monitoring well MW-01R, consistent with observations made by Golder between October and December 2021 (HDR, 2024). Groundwater flow beneath Units 1/2 Impoundment is seasonably and spatially variable; flow is generally northward toward the north wetland shown on **Figure 2**, eastward from the ponds of Units 1/2 Impoundment toward the wetland, and potentially southward near MW-05. The wetland east of the Units 1/2 Impoundment appears to be 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 flow in the area east of the internal wetland is consistent with regional groundwater flow and the flow of the Grand River toward the west (HDR, 2024). Further hydrogeological information related to the Site is provided in the Hydrogeologic Monitoring Plan (HDR, 2024).

2.2 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. As of November 2022, the monitoring network is composed of the following:

Units 1/2 Impoundment

Due to the extent 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 utilized 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-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 wells, stilling wells, and staff gauges above 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, and the dates samples were collected. Any deviation in sample collection from the Hydrogeologic Monitoring Plan (HDR, 2024) are outlined in **Section 3.3**.

Table 1. Assessment Monitoring in the Second Quarter 2024

Monitoring Well I.D.	Date Monitored	Well Designation
Background Monitoring Wells (Unit 1/2 Impoundments and Units 3A/B Impoundment)		
MW-27	4/8/2024	Background
MW-33	4/9/2024	Background
MW-34	4/9/2024	Background
Unit 1/2 Impoundments		
MW-06	4/7/2024	Point of Compliance
MW-08	4/7/2024	Point of Compliance
MW-18	4/10/2024	Point of Compliance
MW-19	4/8/2024	Point of Compliance
MW-20	4/8/2024	Point of Compliance
MW-30	4/7/2024	Point of Compliance
MW-31	4/8/2024	Point of Compliance
MW-07	4/8/2024	Nature and Extent
MW-10	4/7/2024	Nature and Extent
MW-16	4/8/2024	Nature and Extent
MW-17	4/8/2024	Nature and Extent
MW-28	4/7/2024	Nature and Extent
MW-32	4/7/2024	Nature and Extent
MW-36	4/8/2024	Nature and Extent
MW-37	4/8/2024	Nature and Extent
Units 3A/B Impoundment		
MW-02	4/10/2024	Point of Compliance
MW-03	4/7/2024	Point of Compliance
MW-04	4/7/2024	Point of Compliance
MW-11	4/7/2024	Point of Compliance

Table 1. Assessment Monitoring in the Second Quarter 2024		
Monitoring Well I.D.	Date Monitored	Well Designation
MW-12	4/8/2024	Point of Compliance
MW-01R	4/10/2024	Nature and Extent
MW-09	4/7/2024	Nature and Extent
MW-10	4/7/2024	Nature and Extent
MW-38	4/8/2024	Nature and Extent
Water Level Only		
MW-05	4/7/2024	Water Level Only
PZ-13	4/7/2024	Water Level Only
PZ-14	4/7/2024	Water Level Only
PZ-15	4/7/2024	Water Level Only
PZ-16	4/7/2024	Water Level Only
PZ-17	4/7/2024	Water Level Only
PZ-21	4/7/2024[1]	Water Level Only
PZ-22	4/7/2024[1]	Water Level Only
PZ-23	4/7/2024	Water Level Only
PZ-24	4/7/2024	Water Level Only
PZ-25	4/7/2024	Water Level Only
PZ-26	4/7/2024	Water Level Only
PZ-28	4/7/2024	Water Level Only
PZ-29	4/7/2024	Water Level Only
MW-35	4/7/2024	Water Level Only
MW-37	4/7/2024	Water Level Only
MW-38	4/7/2024	Water Level Only
MW-39	4/7/2024	Water Level Only
MW-40	4/7/2024	Water Level Only

1 – Deep water prevented access to well

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-07, are monitored for water levels only. Staff gauges SG-02, SG-04R, SG-05, SG-06 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**.

Table 2. Dates of Surface Water Monitoring in Second Quarter 2024		
Well ID	Water Level Date	Sample Date
SG-01[1]	4/7/2024	Water Level Only
SG-02	4/7/2024	4/10/2024

Table 2. Dates of Surface Water Monitoring in Second Quarter 2024		
Well ID	Water Level Date	Sample Date
SG-03[1]	4/7/2024	Water Level Only
SG-04R	4/7/2024	4/8/2024
SG-05	4/7/2024	4/8/2024[2]
SG-06	4/7/2024[3]	--[3]
SG-07[1]	4/7/2024	Water Level Only
STW-1[1]	4/7/2024	Water Level Only
STW-2[1]	4/7/2024	Water Level Only
STW-3[1]	4/7/2024	Water Level Only

1 – Location is not sampled under the Hydrogeologic Monitoring Plan.
2 – Physical gauge location was dry, surface water sample collected at alternate location.
3 – Physical gauge location was dry, no surface water sample or water level was collected.

3.3 Water Level and Sample Collection

Water elevations are provided in **Table 4** pursuant to the Hydrologic Monitoring Plan (HDR, 2024). Transducer data collection is conducted during the quarterly groundwater sampling events. Monitoring wells were purged with a peristaltic pump until field parameters (pH, turbidity, conductivity, dissolved oxygen, temperature, and oxidation reduction potential) stabilized. The results of field measurements were recorded on a field data form, which is maintained as part of the field records and provided in **Appendix A**. After water quality parameters stabilized, samples were collected and tested for the parameters listed in **Table 3**. For quality control, one field duplicate sample was collected for each CCR unit per sampling event (two duplicate samples total per event). The following deviations from the Hydrogeologic Monitoring Plan for CCR Compliance were noted during the second quarter 2024 sampling event:

April 2024

- Water levels were not collected from PZ-21 or PZ-22, due to deep water limiting access.
- Water levels were not collected from SG-01 or SG-06 due to low surface water conditions leaving the staff gauges dry.
- A surface water sample was not collected at SG-06, due to low surface water conditions leaving the staff gauge dry.
- Due to the physical gauge location at SG-05 being dry, the surface water sample was collected approximately 20 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 for Assessment Monitoring	
Metals are Total Metals	
Antimony	Lithium
Arsenic	Mercury
Barium	Molybdenum
Beryllium	Nickel
Boron	Radium-226/228
Cadmium	Selenium
Calcium	Silver
Chloride	Sulfate
Chromium	Thallium
Cobalt	Total Dissolved Solids (TDS)
Copper	Vanadium
Fluoride	Zinc
Iron	Additional Parameters
Lead	Total Suspended Solids (TSS)

3.5 Data Validation and Management

Data validation and data management tasks were performed per the Hydrogeologic Monitoring Plan (HDR, 2024). 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 a data qualifier was designated for any data quality limitation discovered.

All 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 all data were usable, even when qualified. Data validation reports are contained in **Appendix B**.

4.0 Monitoring Results

4.1 Water Levels and Groundwater Flow Direction

A potentiometric contour map was developed for the second quarter 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 581.43 to 578.90 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 582.11 to 579.58 ft ASML.

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.

Note the groundwater elevation at MW-19 is anomalously low compared to historical measurements. The groundwater trends shown on **Figure 3** indicate that other monitoring wells near MW-19 are trending upwards while MW-19 decreased significantly. The groundwater elevation is provided for transparency; however, the value was not used in the creation of the potentiometric surface map in **Appendix C**. The low groundwater elevation could have been caused by a field measurement error, field documentation was reviewed and is consistent with the digitized records.

The physical staff gauge location for SG-05 is located approximately 15 feet further inland than the transducer location to ensure that the pressure transducer remains submerged, this is why Table 4 indicates that the SG-05 was dry on April 7, while there was water level data from the transducer on the same date.

Table 4. Groundwater and Surface Water Elevations in the second quarter 2024

Well ID	4/7/2024
MW-01R	582.11
MW-02	579.71
MW-03	579.73
MW-04	580.09
MW-05	580.86
MW-06	581.43
MW-07	579.62
MW-08	579.62
MW-09	579.58
MW-10	579.88
MW-11	581.40
MW-12	581.99
PZ-13	579.65
PZ-14	580.13
PZ-15	580.31

Table 4. Groundwater and Surface Water Elevations in the second quarter 2024	
Well ID	4/7/2024
MW-16	579.53
MW-17	580.91
MW-18	580.37
MW-19	578.90*
MW-20	579.91
PZ-21[1]	--[1]
PZ-22[1]	--[1]
PZ-23	580.06
PZ-24	580.44
PZ-25	579.58
PZ-26	580.78
MW-27	580.72
MW-28	579.69
PZ-29	579.90
MW-30	580.28
MW-31	580.55
MW-32	580.45
MW-33	582.06
MW-34	580.45
MW-35	582.50
MW-36	581.50
MW-37	580.99
MW-38	580.89
MW-39	581.00
MW-40	581.49
SG-01	DRY
SG-02	580.90
SG-03	580.87
SG-04R	580.83
SG-05	DRY
SG-06	DRY
SG-07	579.34
STW-1	580.95
STW-2	577.14
STW-3	579.28

Note: "- - "denotes no measurement was taken.
[1]Deep water prevented access to well to collect measurement.
*Considered an anomalous low value.

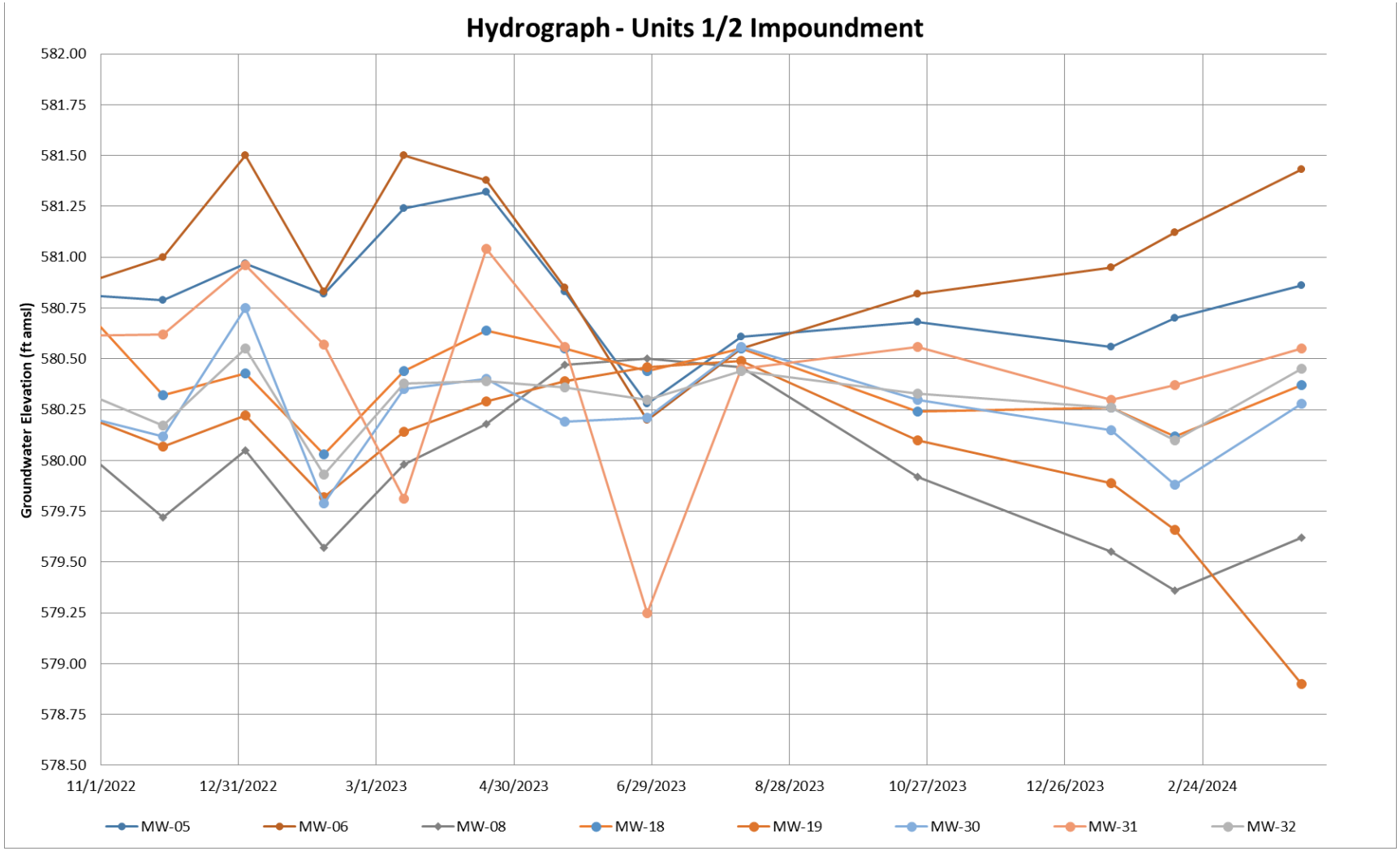


Figure 3. Hydrograph of Wells and Piezometers Near Units 1/2 Impoundment

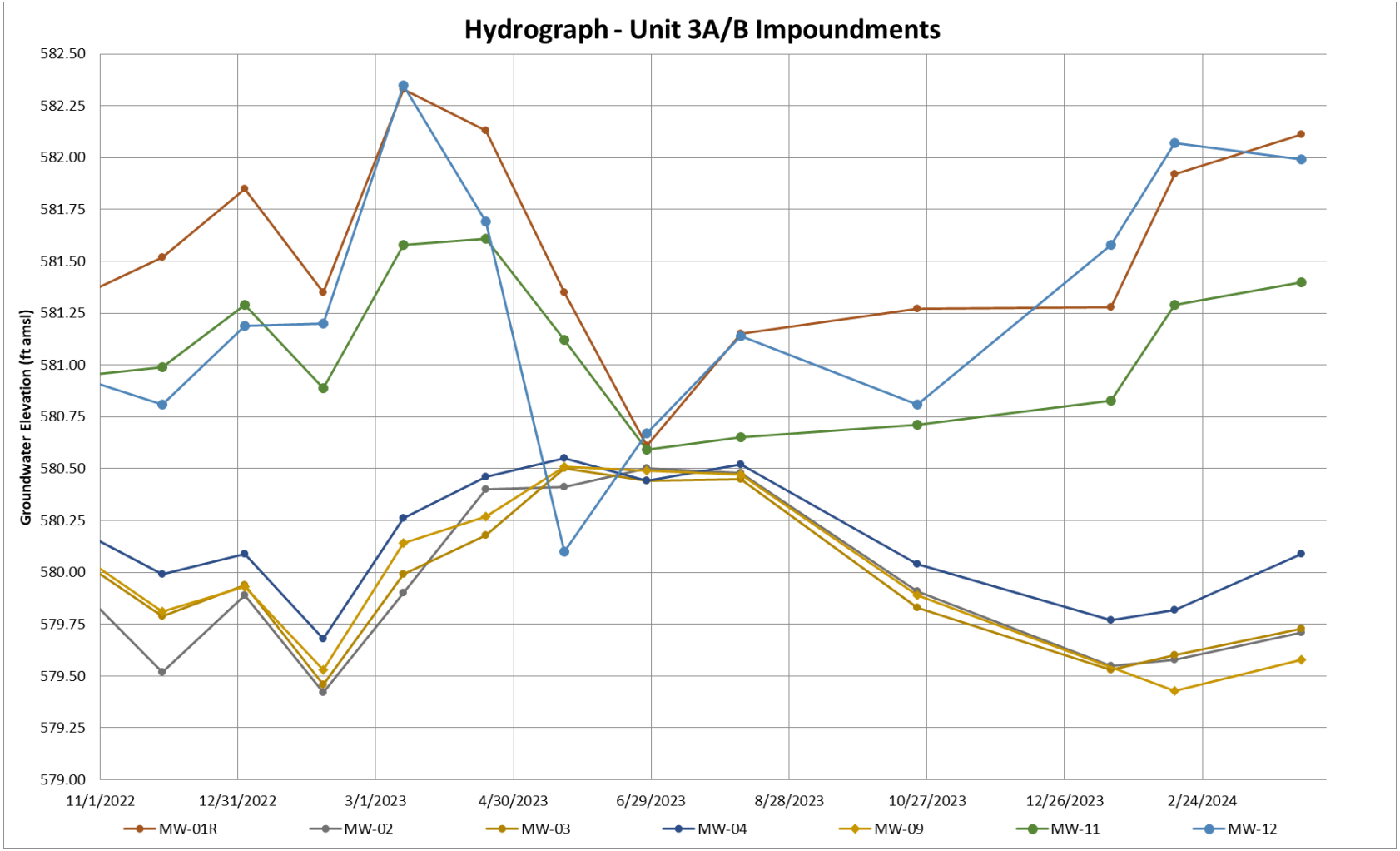


Figure 4. Hydrograph of Wells and Piezometers Near Unit 3A/B Impoundments

Pressure transducers are installed at the locations shown in **Figure 5**. The transducer data collected spans 110 days between December 21, 2023 through April 9, 2024. Trends observed from the limited dataset show as follows:

- SG-02 is generally higher in surface water elevation than MW-31, with the exception of four instances between March 5 and April 3. Precipitation events producing 0.5 inches or greater coincide with all four events. Of the 2,642 available measurements collected, surface water was contributing to groundwater 96% of the data collection period. A graph of measurements is shown on **Figure 6**.

- Between February 5 and March 4, SG-04R was higher in elevation than MW-05, which coincide with low precipitation values. From March 5 through March 20 groundwater elevations at MW-05 exceeded those at SG-04R. The spikes in groundwater elevation at MW-05 coincide with heavy precipitation in the month of March. Surface water is contributing to groundwater 57% of the time, and groundwater is contributing to surface water 43% of the recording period. A graph of measurements is shown on **Figure 7**.

- STW-2 was at a lower surface water elevation than MW-16 for the duration of the period (95% of measurements). This indicates groundwater is discharging to the South Channel on the south side of the Island. A graph of 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 measurements is shown on **Figure 9**.

- SG-07 was at a lower surface water elevation than PZ-24 for the duration of the period (99.98% of the measurements). This indicates groundwater from the eastern side of the Island is discharging into the internal wetland. A graph of 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. STW-3 was only higher than either piezometer 3% of the measurements. A graph of 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 than SG-07 96% of the reporting period. This indicates generally groundwater on the north side of the Island is discharging to the internal wetland a majority of the reporting period. A graph of measurements is shown on **Figure 12**.

Figure 5. Transducer Deployment Map

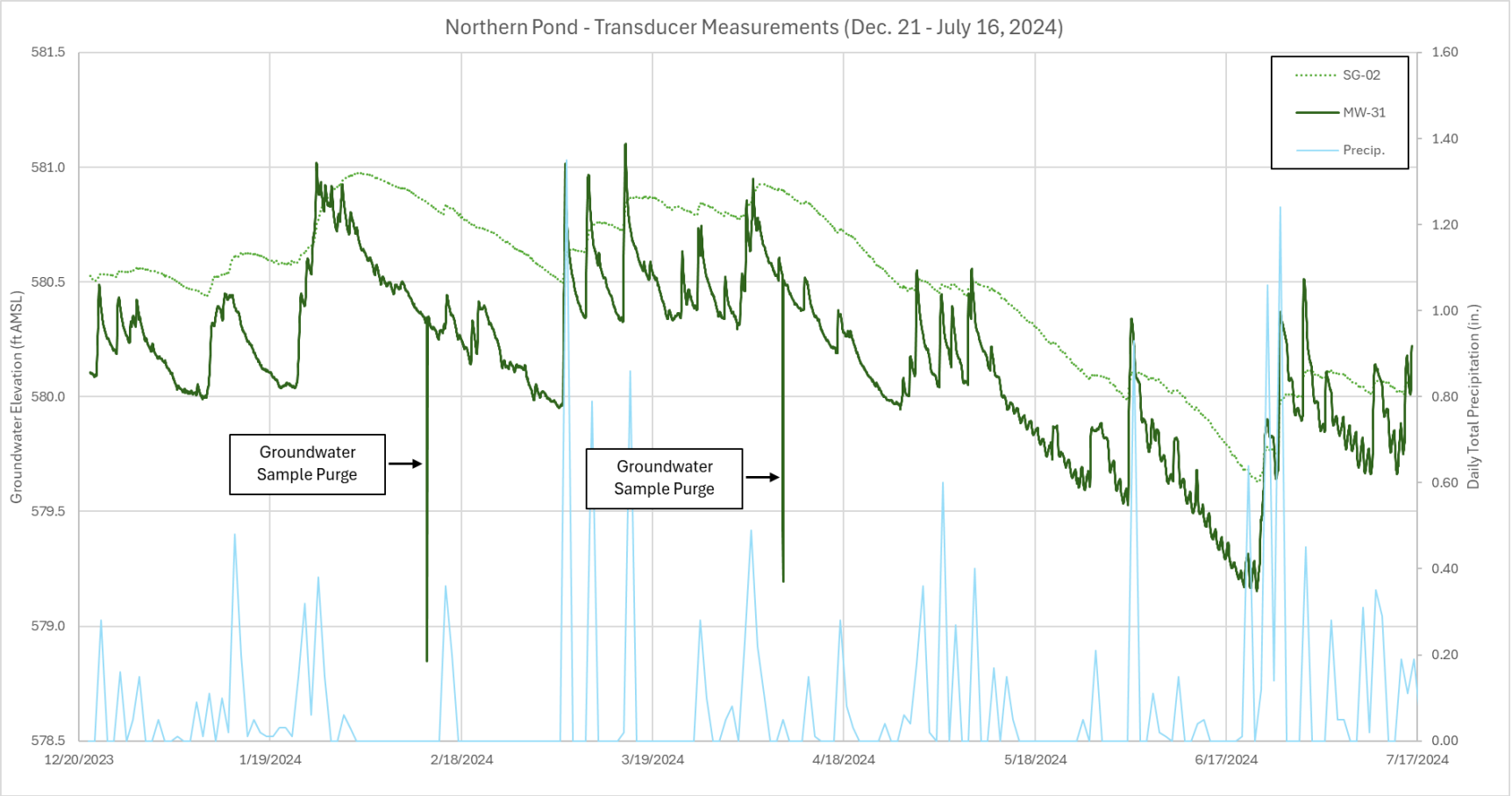


Figure 6 | Transducer Measurement Graph SG-02 and MW-31

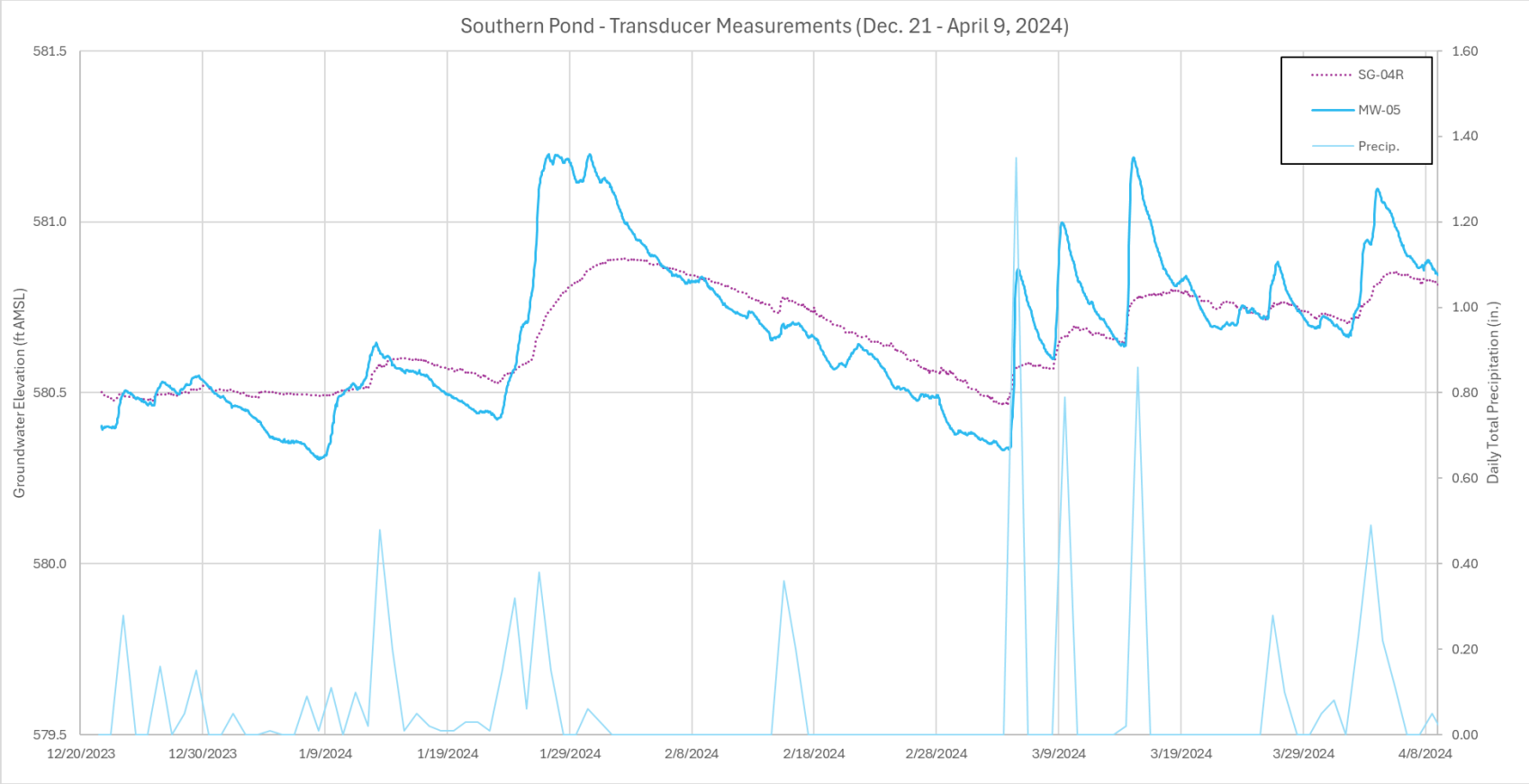


Figure 7 | Transducer Measurement Graph SG-04R and MW-05

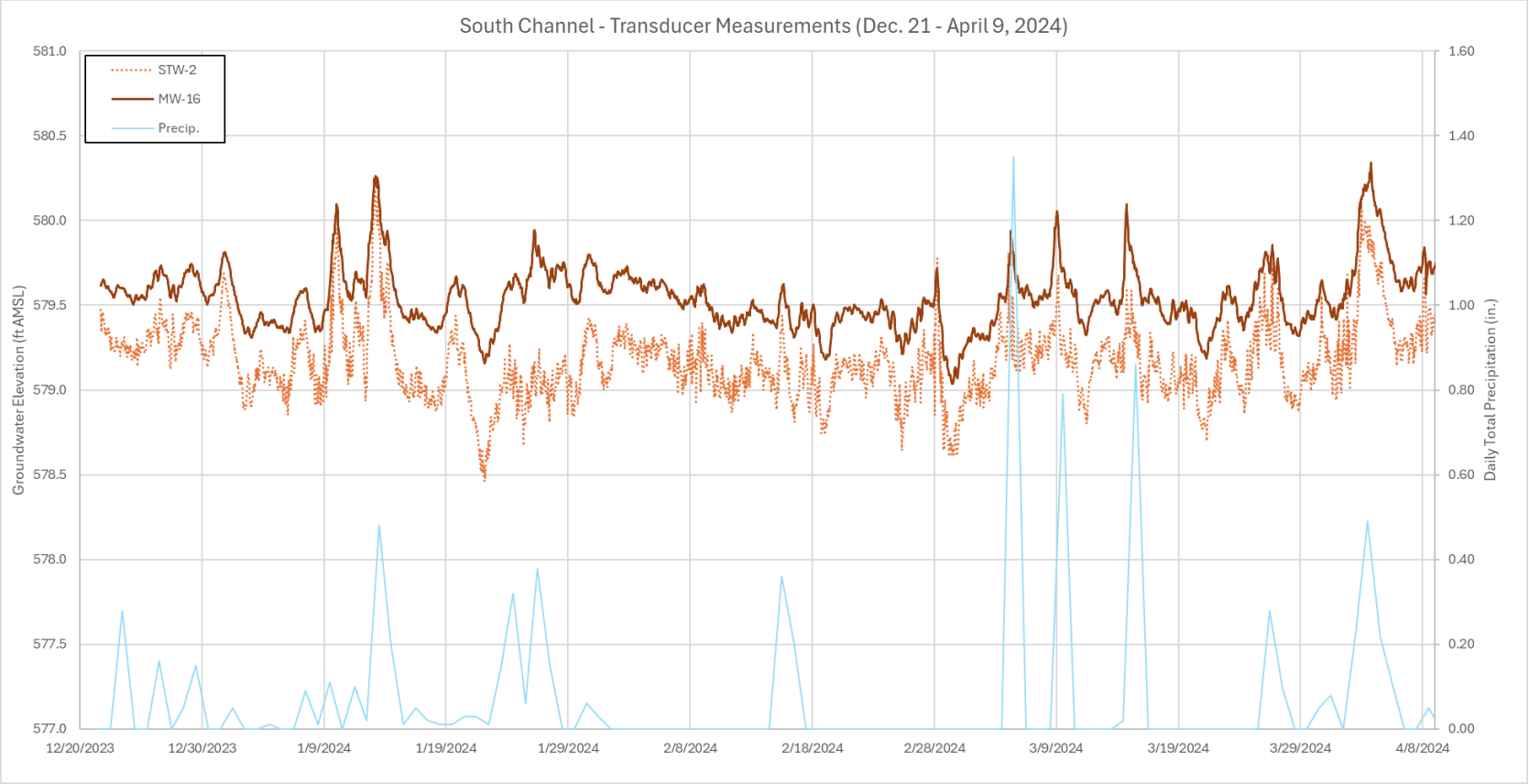


Figure 8 | Transducer Measurement Graph STW-2 and MW-16

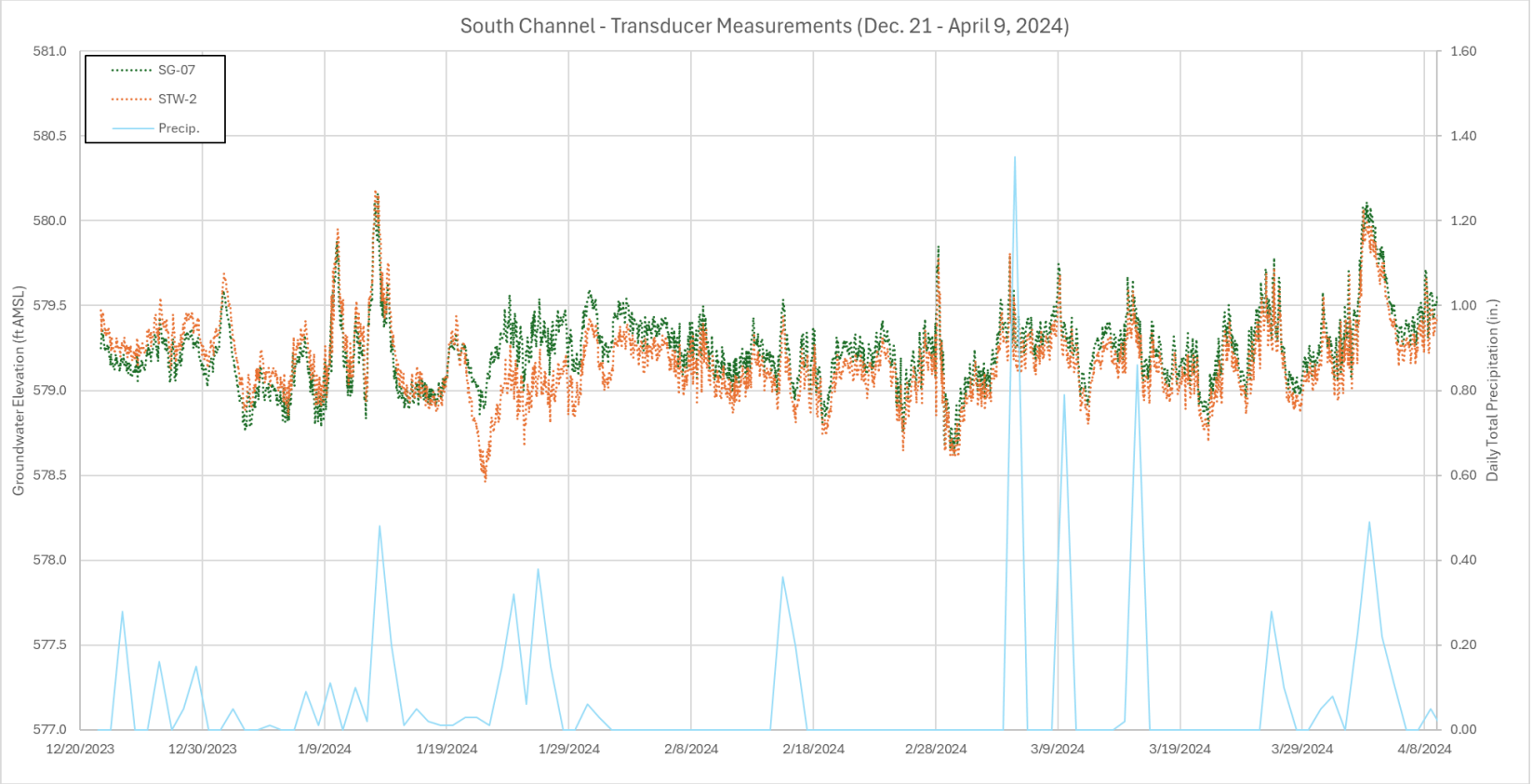


Figure 9 | Transducer Measurement Graph STW-2 and SG-07

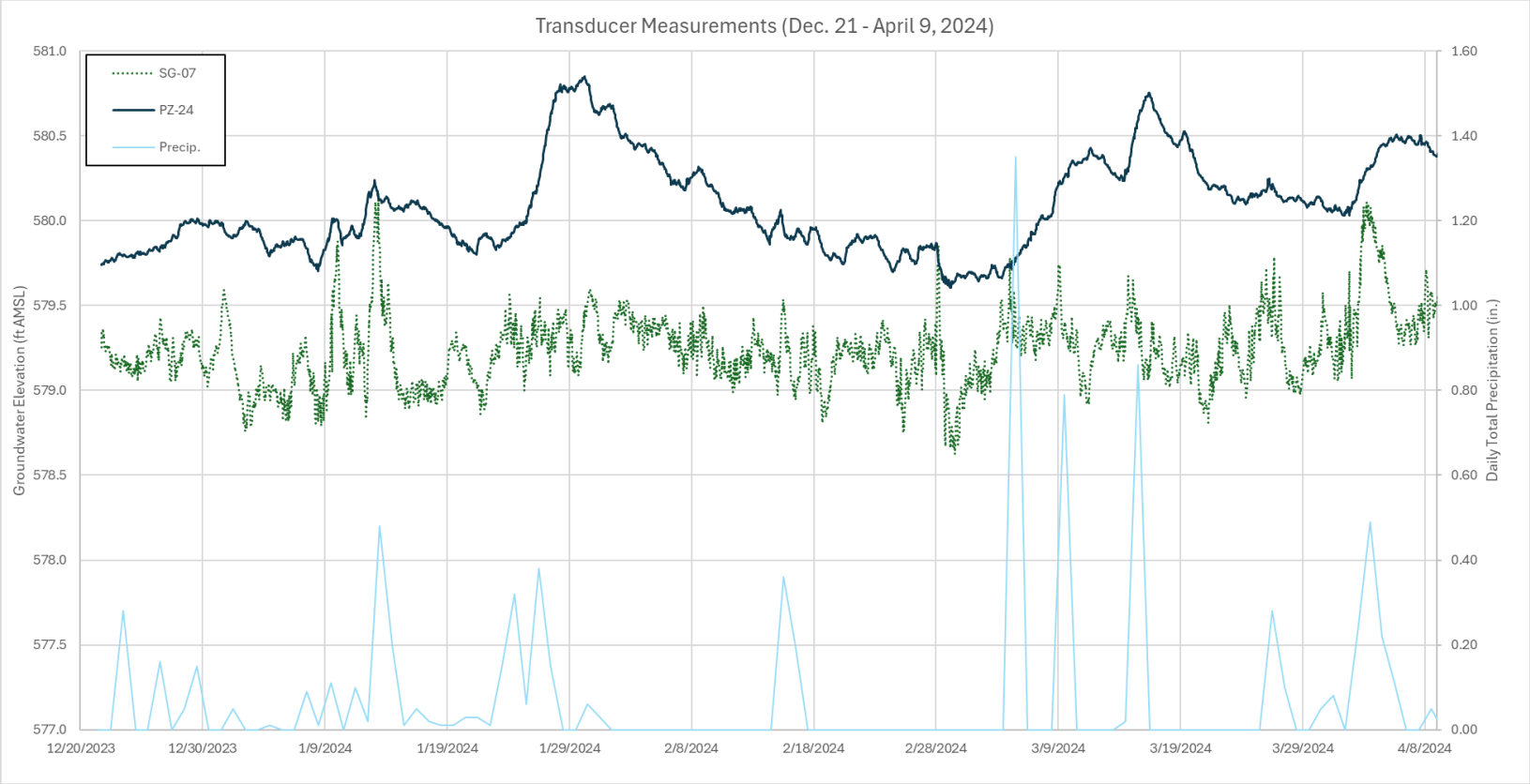


Figure 10 | Transducer Measurement Graph SG-07 and PZ-24

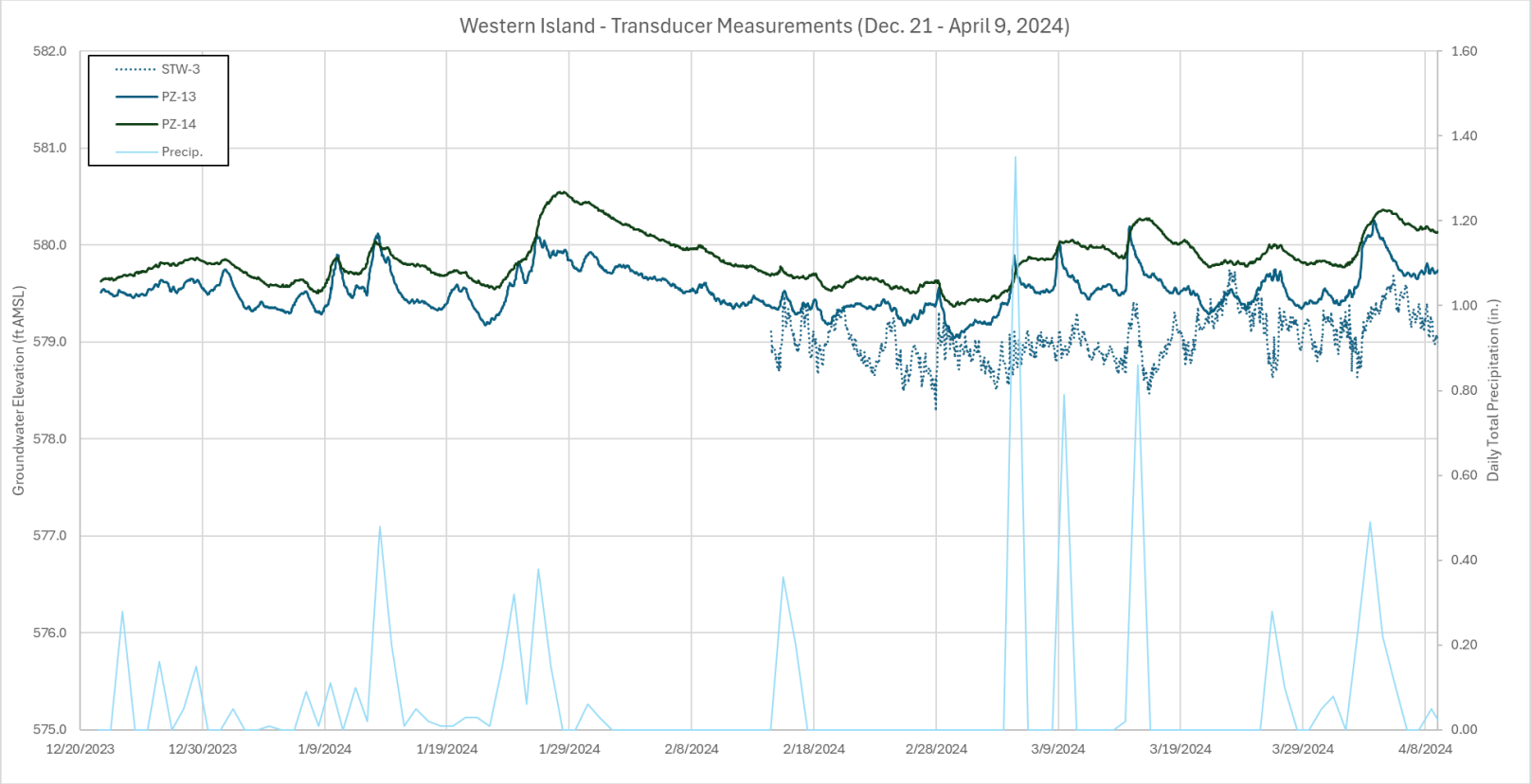


Figure 11 | Transducer Measurement Graph STW-3, PZ-13, and PZ-14

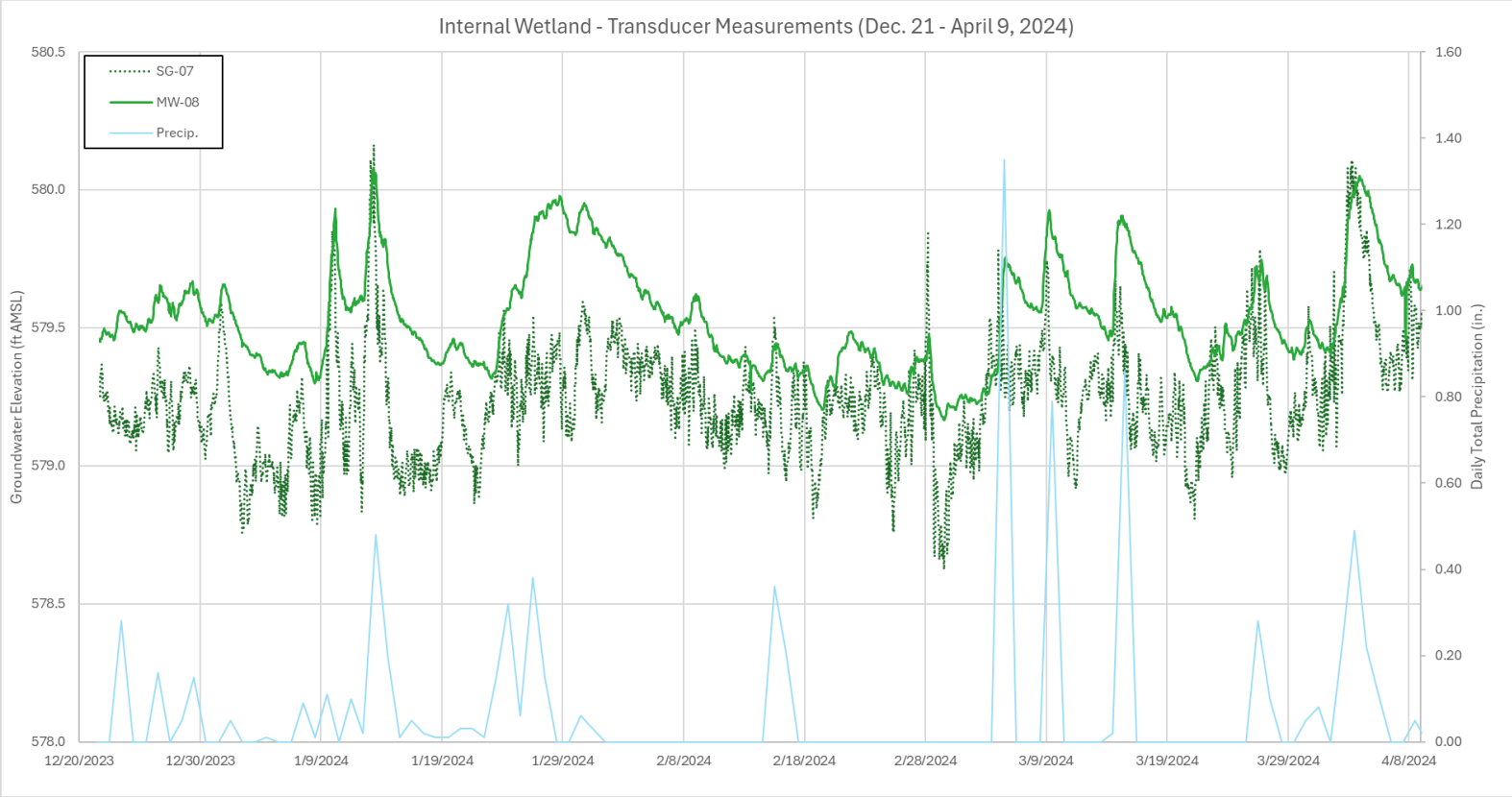


Figure 12 | Transducer Measurement Graph SG-07 and MW-08

4.2 Water Quality

In April 2024, the third 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 (UTL), maximum contaminant level (MCLs), applicable state cleanup criteria, and site groundwater protections standards (GPS) for both CCR units are provided in **Table 5**.

Table 5. 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
Unit	mg/L	mg/L	mg/L	mg/L	mg/L
Boron	4.0	NV	0.50	7.20	4.0
Calcium	250	NV	N/A	N/A	250
Chloride	120	NV	250	50	120
Fluoride	0.45	4.0	2.0	NV	2.0
Sulfate	100	250	250	NV	250
Total Dissolved Solids	950	500	500	500	950
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
Cadmium	0.00015	0.0050	0.0050	0.0025[1]	0.0025[1]
Chromium	0.042	0.10	0.10	0.12[1]	0.10
Cobalt	0.0021	0.0060	0.10	0.10	0.0060
Fluoride	0.45	4.0	2.0	NV	2.0
Lead	0.0016	0.0015	0.0040	0.014[1]	0.0016
Lithium	0.10	0.040	0.35	0.44	0.10
Mercury	0.00016	0.0020	0.0020	0.0000013	0.00016
Molybdenum	0.0093	0.10	0.210	3.2	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
Thallium	0.000075	0.0020	0.0020	0.0037	0.0020
Copper	0.020	1.30	1.0	0.021[1]	0.021[1]
Iron	83	0.30	0.30	NV	83
Nickel	0.023	NV	0.10	0.12[1]	0.10

Table 5. 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
Unit	mg/L	mg/L	mg/L	mg/L	mg/L
Silver	0.00011	0.10	0.098	0.00020	0.00020
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
[1]Per 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 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 April 2024 sampling data from downgradient wells was compared to the GPS values provided in **Table 5**, 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 COI at each of the downgradient wells. The statistical output files are in **Appendix F**.

Units 1/2 Impoundment

Constituents that exceeded GPS at statistically significant levels (SSLs) are provided in **Table 6** for the Units 1/2 Impoundment. The SSLs are generally consistent with the first quarter 2024 sample event, with the exception of MW-20 with an SSL of Lead, this is both a new well and new COI. An updated SSL memo will be published to reflect the changes.

Table 6. April 2024 LCLs that Exceed GPS for the Units 1/2 Impoundment			
Constituent	GPS (mg/L)	Well	95LCL (mg/L)
Arsenic	0.010	MW-08	0.025
		MW-18	0.022
Boron	4.0	MW-06	8.3
		MW-07	11
		MW-08	5.3
		MW-31	4.2
		MW-10	11
Calcium	250	MW-18	310
		MW-19	450
		MW-30	430
Chloride	120	MW-10	160

Table 6. April 2024 LCLs that Exceed GPS for the Units 1/2 Impoundment			
Constituent	GPS (mg/L)	Well	95LCL (mg/L)
Fluoride	2.0	MW-18	3.4
		MW-31	4.7
		MW-10	4.2
Lead	0.0016	MW-20	0.0017
Lithium	0.10	MW-06	0.16
		MW-30	0.11
		MW-10	0.77
		MW-32	0.11
Sulfate	250	MW-18	700
		MW-19	910
		MW-30	810
		MW-10	380
Total Dissolved Solids	950	MW-06	1,200
		MW-18	1,300
		MW-19	1,800
		MW-30	2,100
		MW-10	1,700

Unit 3A/B Impoundments

Concentrations that exceeded GPS at SSLs are provided in **Table 7** for Unit 3A/B Impoundments. In comparison to the first quarter 2024 sample event, the April 2024 resulting SSLs are generally consistent with the exception of MW-02 now having an SSL of lead. Lead is a new COI for MW-02 which has had SSLs previously. An update SSL memo will be published to reflect the changes.

Table 7. April 2024 LCLs that Exceed GPS for Unit 3A/B Impoundments			
Constituent	GPS (mg/L)	Well	95LCL (mg/L)
Boron	4.0	MW-01R	78
		MW-02	91
		MW-09	5.5
		MW-10	11
Calcium	250	MW-03	350
		MW-04	350
		MW-09	320
Chloride	120	MW-02	140
		MW-03	150
		MW-04	160
		MW-10	160
Fluoride	2.0	MW-01R	8.9
		MW-02	9.2
		MW-09	2.4

Table 7. April 2024 LCLs that Exceed GPS for Unit 3A/B Impoundments			
Constituent	GPS (mg/L)	Well	95LCL (mg/L)
		MW-10	4.2
Lithium	0.10	MW-01R	1.7
		MW-02	1.2
		MW-09	0.29
		MW-10	0.77
Sulfate	250	MW-01R	310
		MW-03	320
		MW-04	530
		MW-09	300
		MW-10	380
Total Dissolved Solids	950	MW-01R	2,300
		MW-02	1,700
		MW-03	2,000
		MW-04	1,800
		MW-09	1,200
		MW-10	1,700

5.0 Summary

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

- One groundwater sampling event was conducted in the second quarter 2024 between April 7 and April 10, 2024.
- Groundwater flow measured in the second 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 second quarter beneath Unit 3A/B Impoundments is primarily west northwest toward the Grand River.
- No monitoring locations were installed or abandoned or repaired in second quarter 2024.
- Transducer data collected indicates surface water from the ponds within Unit 1/2 Impoundments contributes to groundwater. Groundwater on the south and eastern sides of the Island appear to be discharging to surface water.
- A Response Action Plan was submitted to EGLE and the operating record March 8, 2024.
- The LCLs were calculated after the April 2024 assessment monitoring event and were compared to GPS values. The following SSLs were identified for Units 1/2 Impoundment:
    - Arsenic – MW-08, MW-18
    - Boron – MW-06, MW-07, MW-08, MW-10, MW-31
    - Calcium – MW-18, MW-19, MW-30
    - Chloride – MW-10
    - Fluoride – MW-10, MW-18, MW-31

- Lithium – MW-06, MW-10, MW-30, MW-32
- Lead – MW-20
- Sulfate – MW-10, MW-18, MW-19, MW-30
- TDS – MW-06, MW-10, MW-18, MW-19, MW-30

LCLs that exceeded GPS at SSLs in April 2024 are consistent with those observed in October 2023.

- The LCLs were calculated after the April 2024 assessment monitoring event and were compared to GPS values. The following SSLs were identified for the Unit 3A/B Impoundments:
  - Boron – MW-01R, MW-02, MW-09, MW-10
  - Calcium – MW-03, MW-04, MW-09
  - Chloride – MW-02, MW-03, MW-04, MW-10
  - Fluoride – MW-01R, MW-02, MW-09, MW-10
  - Lithium – MW-01R, MW-02, MW-09, MW-10
  - Sulfate – MW-01R, MW-03, MW-04, MW-09, MW-10
  - TDS – MW-01R, MW-02, MW-03, MW-04, MW-09, MW-10
- The Initiation of Assessment of Corrective Measures was submitted to EGLE on May 1, 2024.
- A Data Collection work plan is being drafted to assist in the remedy selection process. The list of data collection activities include:
  - Aquifer Test (Pump Test) - The test is conducted to provide aquifer characterization data, determine capture zones for potential extraction wells, and determining sustainable yield from the surficial aquifer.
  - Unit 3A/B Ash Delineation - The objective of the ash delineation is to determine the lateral and vertical extent of 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 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 determine the feasibility of different remedial alternatives such as In-Situ Stabilization, and provide leaching characteristics of the existing ash.

  The data collection process is anticipated to continue into 2025.

- The Hydrogeologic Monitoring Plan was submitted to EGLE on June 18, 2024.

6.0 References

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

Golder Associates, Inc., 2020. Unit 3 Impoundments – CCR Removal Documentation Report. December 11, 2020.

Golder Associates, Inc., 2022. Field Summary Report of Results from Approved Work Plan -Piezometer Installation and Additional Data Collection. February 15, 2022.HDR Inc, 2022. 2022 Harbor Island Work Plan for CCR Compliance. April 8, 2022. Amended June 23, 2022.

HDR, 2024., Hydrogeologic Monitoring Plan for Compliance with Michigan Part 115 Solid Waste Management Regulation – Former J.B. Sims Generating Station., June 18, 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: GHH1 Well ID.: MW-01R

Sample I.D.(match bottle and COC form exactly): MW-01R

Personnel: AB

Date: 4/10/24 Static Depth to Water (ft, btoc) 6.51

Date/Time Sample Collected (match bottle and COC form exactly): 4/10/24; 922

Sample Method: LF Peri

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

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

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

Well Purging Data (Fill In All Blanks)

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

Time Completed: 958 (EGLE Split) Total Purge _____ Units L

Field Measurements: start @ 834

Time (24 hour)	Amount purged (ml)	pH	COND (mS/cm)	TURB (NTU)	DO (mg/L)	TEMP (C°)	ORP (mV)	Water Depth (ft, btoc)
850		7.25	2.68	4.24	2.35	7.4	-80.8	6.68
854		7.30	2.74	4.48	1.91	7.4	-122.1	6.68
858		7.47	2.79	0.61	1.39	7.4	-151.8	6.69
902		7.51	2.81	0.49	1.35	7.4	-168.8	6.70
906		7.51	2.82	0.02	1.37	7.4	-177.3	6.69
910		7.56	2.84	0.02	1.38	7.4	-186.4	6.70
914		7.58	2.85	0.02	1.35	7.4	-192.5	6.70
918		7.58	2.86	0.02	1.36	7.5	-195.9	6.70
922		7.58	2.87	0.02	1.35	7.5	-197.8	6.70

Flow Rate ~200 mL/min

Pump controller setting 35%

General Comments:

EGLE split sampling + additional parameters

Water Sample Collection Field Data Sheet

Site Name: City of Grand Haven - Harbor Island Well ID.: MW-02

Sample I.D.(match bottle and COC form exactly): MW-02

Personnel: TJB

Date: 4.10.24 Static Depth to Water (ft, btoc) 15.92

Date/Time Sample Collected (match bottle and COC form exactly): 4.10.24

Sample Method: LF Pev:

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' above bott

Time Completed: Total Purge Units C

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)
7:58		7.17	3.20	42.8	0.22	9.8	101.2	16.89
8:22		7.19	3.26	56.8	0.17	10.4	55.8	16.58
8:26		7.20	3.27	65.4	0.42	10.4	44.5	16.68
8:30		7.20	3.29	70.1	0.27	10.5	20.4	16.82
8:34		7.21	3.30	93.9	0.22	10.5	-1.3	16.88
8:38		7.21	3.30	96.8	0.14	10.6	-24.8	16.92
8:42		7.21	3.31	98.6	0.15	10.7	-44.5	16.97
8:46		7.21	3.32	94.9	0.11	10.8	-61.1	17.00
8:50		7.22	3.33	93.7	0.10	10.8	-77.4	17.01
8:54		7.22	3.34	88.2	0.10	10.9	-81.7	17.04
8:58		7.22	3.37	80.3	0.07	10.9	-93.2	17.05
9:02		7.22	3.40	73.2	0.12	10.9	-99.2	17.08
9:06		7.22	3.43	66.0	0.07	10.9	-104.7	17.10
9:10		7.23	3.44	60.0	0.08	10.9	-108.7	17.10
9:14		7.23	3.47	51.1	0.10	11.0	-112.1	17.10
9:18		7.23	3.50	47.4	0.09	10.0	-113.1	17.11
9:22		7.23	3.51	44.2	0.07	11.1	-117.4	17.01

Replaced Tubing →

Flow Rate 100 mL/min

Pump controller setting 25%

General Comments:

7:23 Start Purge - Red particulate - Bubbles in waterline - Kent observed

Pg 1/3 →

Water Sample Collection Field Data Sheet

Site Name: City of Grand Haven - Harbor Island Well ID.: MW-2

Sample I.D.(match bottle and COC form exactly): _____

Personnel: _____

Date: _____ Static Depth to Water (ft, btoc) _____

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

Sample Method: _____

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

Sample QC: Duplicate Yes No Duplicate Sample ID: _____

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

Well Purging Data (Fill In All Blanks)

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

Time Completed: _____ Total Purge _____ Units _____

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)
9:26		7.24	3.54	43.1	0.08	11.0	-118.9	17.15
9:30		7.24	3.56	43.0	0.09	11.1	-120.8	17.15
9:34		7.24	3.58	38.3	0.09	11.2	-122.6	17.15
9:38		7.24	3.62	36.5	0.10	11.1	-124.2	17.16
9:42		7.25	3.65	33.9	0.10	11.0	-125.2	17.17
9:46		7.25	3.66	28.0	0.08	11.1	-126.7	17.19
9:50		7.25	3.67	27.5	0.12	11.0	-127.6	17.20
9:54		7.25	3.68	24.9	0.12	11.1	-128.8	17.20
9:58		7.24	3.68	23.1	0.12	11.2	-129.6	17.20
10:02		7.24	3.69	21.1	0.12	11.4	-130.6	17.22
10:06		7.25	3.71	19.7	0.13	11.4	-131.5	17.24
10:10		7.25	3.72	18.1	0.10	11.4	-132.2	17.24
10:14		7.25	3.73	17.9	0.13	11.3	-132.9	17.26
10:18		7.25	3.78	16.8	0.08	11.4	-133.7	17.27
10:22		7.25	3.78	15.8	0.09	11.4	-133.6	17.28
10:26		7.25	3.77	14.2	0.23	11.4	-135.4	17.28
10:30		7.25	3.77	12.9	0.16	11.3	-135.9	17.29

YSI Turned off

Flow Rate _____

Pump controller setting _____

General Comments:

_____

_____

Water Sample Collection Field Data Sheet

Site Name: City of Grand Haven - Harbor Island Well ID.: MW-02

Sample I.D.(match bottle and COC form exactly): _____

Personnel: _____

Date: _____ Static Depth to Water (ft, btoc) _____

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

Sample Method: _____

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

Sample QC: Duplicate Yes No Duplicate Sample ID: _____

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

Well Purging Data (Fill In All Blanks)

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

Time Completed: _____ Total Purge _____ Units _____

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)
10:34		7.25	3.78	11.8	0.15	11.3	-136.3	17.30
10:38		7.25	3.80	11.7	0.13	10.3	-136.9	17.31
10:42		7.25	3.81	13.1	0.15	10.3	-137.4	17.32
10:46		7.25	3.82	11.5	0.14	11.2	-137.8	17.33
10:50		7.25	3.82	12.8	0.14	11.3	-138.4	17.32
10:54		7.26	3.85	11.1	0.15	11.3	-139.0	17.32
10:58		7.26	3.86	10.9	0.15	11.4	-139.4	17.32
11:02		7.25	3.87	9.77	0.16	11.3	-139.9	17.32
11:06		7.26	3.89	9.03	0.15	11.4	-140.3	17.33

Flow Rate _____

Pump controller setting _____

General Comments:

_____

_____

Water Sample Collection Field Data Sheet

Site Name: GHH1 Well ID.: MW-03

Sample I.D.(match bottle and COC form exactly): MW-03

Personnel: AB

Date: 4/7/24 Static Depth to Water (ft, btoc) 13.30

Date/Time Sample Collected (match bottle and COC form exactly): 4/7/24; 1222

Sample Method: LF Peri

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

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

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

Well Purging Data (Fill In All Blanks)

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

Time Completed: 1244 Total Purge _____ Units L

Field Measurements:

Time (24 hour)	Amount purged (ml)	pH	COND (mS/cm)	TURB (NTU)	DO (mg/L)	TEMP (C°)	ORP (mV)	Water Depth (ft, btoc)
1202		7.44	2.80	8.26	0.31	10.1	-167.6	13.75
1206		7.45	2.80	6.73	0.12	10.1	-186.9	13.88
1210		7.46	2.80	3.23	0.07	10.3	-204.2	13.92
1214		7.46	2.80	0.02	0.02	10.1	-213.1	13.93
1218		7.45	2.81	0.02	0.03	10.2	-217.9	13.95
1222		7.46	2.81	0.02	0.02	10.1	-220.8	13.96

Flow Rate ~55mL

Pump controller setting ~250 mL/min

General Comments:

Water Sample Collection Field Data Sheet

Site Name: CHH1 Well ID.: MW-04

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

Personnel: AB

Date: 4/7/24 Static Depth to Water (ft, btoc) 11.40

Date/Time Sample Collected (match bottle and COC form exactly): 4/7/24, 1112

Sample Method: LF Peri

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

Sample QC: Duplicate (Yes) No Duplicate Sample ID: MWT-04

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

Well Purging Data (Fill In All Blanks)

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

Time Completed: 1152 Total Purge _____ Units L

Field Measurements:

Time (24 hour)	Amount purged (ml)	pH	COND (mS/cm)	TURB (NTU)	DO (mg/L)	TEMP (C°)	ORP (mV)	Water Depth (ft, btoc)
1040		7.26	2.64	2.68	0.59	8.5	-42.4	11.78
1044		7.35	2.67	2.67	0.29	8.7	-103.3	11.86
1048		7.38	2.74	1.24	0.18	8.6	-120.1	11.89
1052		7.40	2.78	1.54	0.23	8.7	-143.8	11.92
1056		7.41	2.78	1.91	0.12	8.7	-152.3	11.96
1100		7.41	2.78	1.03	0.05	8.6	-159.6	11.98
1104		7.42	2.78	0.69	0.04	8.8	-165.7	11.99
1108		7.42	2.78	0.37	0.06	8.7	-168.8	12.00
1112		7.43	2.78	0.38	0.06	8.8	-170.1	12.02

Flow Rate ~250 mL/min

Pump controller setting ~60%

General Comments:

—

Water Sample Collection Field Data Sheet

Site Name: City of Grand Haven - Harbor Island Well ID.: MW-06

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

Personnel: TB

Date: 4.7.24 Static Depth to Water (ft, btoc) 8.90

Date/Time Sample Collected (match bottle and COC form exactly): 4.7.24 14:00

Sample Method: LF Peri.

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

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

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

Well Purging Data (Fill In All Blanks)

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

Time Completed: _____ Total Purge _____ Units L

Field Measurements:

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)
13:26		7.27	1.98	5.09	0.64	9.7	-92.5	9.04
13:30		7.24	1.96	3.32	0.32	9.6	-116.5	9.04
13:34		7.21	1.96	2.73	0.20	9.5	-126.6	9.04
13:38		7.21	1.94	1.51	0.12	9.6	-132.0	9.04
13:42		7.19	1.93	0.61	0.09	9.6	-134.5	9.04
13:46		7.18	1.93	0.02	0.01	9.5	-136.2	9.04
13:50		7.18	1.93	0.02	0.08	9.5	-137.6	9.04
13:54		7.17	1.93	0.02	0.08	9.5	-138.8	9.04
13:54		7.18	1.92	0.02	0.07	9.5	-139.9	9.04

Flow Rate 200 mL/min

Pump controller setting 50 %

General Comments:

13:15 Start Purge – Black Particulate + Sulfuric odor

13:55 Start Fill 14:23 Stop 9:11

Water Sample Collection Field Data Sheet

Site Name: City of Grand Haven - Harbor Island Well ID.: MW-07

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

Personnel: TJB

Date: 4.8.24 Static Depth to Water (ft, btoc) 6.69

Date/Time Sample Collected (match bottle and COC form exactly): 4.8.24 10:15

Sample Method: LF Peri.

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

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

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

Well Purging Data (Fill In All Blanks)

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

Time Completed: _____ Total Purge _____ Units L

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)
9:18		7.08	1.26	11.8	0.25	9.9	20.9	6.81
9:22		7.00	1.26	9.62	0.10	10.0	5.7	6.81
9:26		7.03	1.26	10.0	0.08	10.0	-4.8	6.81
9:30		7.08	1.27	3.28	0.12	10.1	-25.6	6.81
9:34		7.08	1.27	4.93	0.10	10.1	-32.1	6.81
9:38		7.07	1.26	4.12	0.32	10.1	-37.7	6.81
9:42		7.07	1.27	3.07	0.37	10.2	-44.0	6.81
9:46		7.06	1.27	2.92	0.36	10.2	-48.5	6.81
9:50		7.06	1.27	0.75	0.27	10.2	-52.1	6.81
9:54		7.06	1.27	0.74	0.27	10.2	-55.6	6.81
9:58		7.05	1.27	0.72	0.21	10.2	-58.5	6.81
10:02		7.05	1.27	0.74	0.26	10.2	-60.1	6.81

Flow Rate 200 mL/mL

Pump controller setting 50%

General Comments:

Start Purge 9:01 — Red particulate

Start F.11 10:03 Stop F.11 10:25

Water Sample Collection Field Data Sheet

Site Name: GHH1 Well ID.: MW-08

Sample I.D.(match bottle and COC form exactly): MW-08

Personnel: AB

Date: ~~4/2~~ 4/7/24 Static Depth to Water (ft, btoc) 5.69

Date/Time Sample Collected (match bottle and COC form exactly): 4/7/24; 1522

Sample Method: LF Peri

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

Sample QC: Duplicate (Yes) No Duplicate Sample ID: MW7-08

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

Well Purging Data (Fill In All Blanks)

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

Time Completed: 1607 Total Purge _____ Units L

Field Measurements:

Time (24 hour)	Amount purged (ml)	pH	COND (mS/cm)	TURB (NTU)	DO (mg/L)	TEMP (C°)	ORP (mV)	Water Depth (ft, btoc)
1502		7.43	0.78	1.30	0.50	7.5	-150.3	5.84
1506		7.39	0.83	0.45	0.17	7.5	-153.2	5.84
1510		7.40	0.86	1.23	0.15	7.5	-158.9	5.85
1514		7.41	0.89	1.49	0.09	7.4	-163.0	5.85
1518		7.41	0.90	1.25	0.08	7.4	-163.7	5.85
1522		7.41	0.90	1.03	0.10	7.4	-164.6	5.85

Flow Rate_____

Pump controller setting_____

General Comments:

Water Sample Collection Field Data Sheet

Site Name: GHH1 Well ID.: MW-09

Sample I.D.(match bottle and COC form exactly): MW-09

Personnel: AB

Date: 4/7/24 Static Depth to Water (ft, btoc) 9.88

Date/Time Sample Collected (match bottle and COC form exactly): 4/7/24, 1336

Sample Method: LF Peri

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

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

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

Well Purging Data (Fill In All Blanks)

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

Time Completed: 1356 Total Purge _____ Units L

Field Measurements:

Time (24 hour)	Amount purged (ml)	pH	COND (mS/cm)	TURB (NTU)	DO (mg/L)	TEMP (C°)	ORP (mV)	Water Depth (ft, btoc)
1316		7.23	2.17	3.76	0.65	8.7	-158.6	10.46
1320		7.23	2.17	2.04	0.30	8.8	-158.4	10.56
1324		7.24	2.19	2.36	0.27	8.8	-159.2	10.57
1328		7.25	2.20	4.13	0.28	8.7	-160.1	10.58
1332		7.25	2.21	3.65	0.29	8.7	-160.0	10.59
1336		7.25	2.20	2.01	0.27	8.8	-160.4	10.60

Flow Rate ~55%

Pump controller setting ~250 mL/min

General Comments:

Water Sample Collection Field Data Sheet

Site Name: City of Grand Haven - Harbor Island Well ID.: MW-10

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

Personnel: TTB

Date: 4.7.24 Static Depth to Water (ft, btoc) 6.81

Date/Time Sample Collected (match bottle and COC form exactly): 4.27.24 13:00

Sample Method: LF Pu.

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

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

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

Well Purging Data (Fill In All Blanks)

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

Time Completed: _____ Total Purge _____ Units L

Field Measurements:

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		7.36	3.35	1.02	0.35	7.1	52.9	7.01
11:48		7.43	3.45	0.73	0.20	7.1	36.4	7.01
11:52		7.53	3.53	0.45	0.09	7.1	19.4	7.01
11:56		7.60	3.60	0.02	0.05	7.0	-12.9	7.01
12:00		7.67	3.63	0.02	0.05	7.0	-56.9	7.01
12:04		7.70	3.64	0.02	0.06	7.0	-91.9	7.01
12:08		7.74	3.64	0.02	0.03	7.1	-114.6	7.01
12:12		7.76	3.64	0.02	0.03	7.1	-127.1	7.01
12:16		7.77	3.63	0.02	0.03	7.0	-135.3	7.01
12:20		7.78	3.62	0.02	0.03	7.0	-148.5	7.01
12:24		7.78	3.62	0.02	0.03	7.1	-151.6	7.01
12:28		7.79	3.62	0.02	0.03	7.1	-154.5	7.01
12:32		7.80	3.62	0.02	0.03	7.1	-158.6	7.01
12:36		7.80	3.62	0.02	0.03	7.1	-161.7	7.61
12:40		7.80	3.62	0.02	0.03	7.1	-162.4	7.61

Flow Rate 225 mL/min

Pump controller setting 50%

General Comments:

Purge Start 11:30 - Black particulate + Sulfur Odor

12:41 - Start Fill Stop Fill 13:02

Water Sample Collection Field Data Sheet

Site Name: GHHI Well ID.: MW-11

Sample I.D.(match bottle and COC form exactly): MW-11

Personnel: AB

Date: 4/7/24 Static Depth to Water (ft, btoc) 13.85

Date/Time Sample Collected (match bottle and COC form exactly): 4/7/24; 1430

Sample Method: LF Peri

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

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

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

Well Purging Data (Fill In All Blanks)

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

Time Completed: 1452 Total Purge _____ Units L

Field Measurements:

Time (24 hour)	Amount purged (ml)	pH	COND (mS/cm)	TURB (NTU)	DO (mg/L)	TEMP (C°)	ORP (mV)	Water Depth (ft, btoc)
1406		7.34	1.61	9.30	0.34	9.5	-106.7	14.02
1410		7.32	1.62	4.45	0.37	9.4	-115.8	14.02
1414		7.36	1.62	2.44	0.28	9.5	-132.1	14.02
1418		7.36	1.62	2.42	0.27	9.5	-137.1	14.02
1422		7.37	1.62	2.44	0.26	9.5	-140.3	14.02
1426		7.37	1.62	1.63	0.25	9.5	-143.6	14.02
1430		7.38	1.63	1.60	0.25	9.4	-148.2	14.02

Flow Rate ~250 mL/min

Pump controller setting 55%

General Comments:

Water Sample Collection Field Data Sheet

Site Name: GHHI Well ID.: MW-12

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

Personnel: AB

Date: 4/8/24 Static Depth to Water (ft, btoc) 6.08

Date/Time Sample Collected (match bottle and COC form exactly): 4/8/24; 900

Sample Method: LF Peri

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

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

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

Well Purging Data (Fill In All Blanks)

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

Time Completed: 922 Total Purge ____ Units L

Field Measurements:

Time (24 hour)	Amount purged (ml)	pH	COND (mS/cm)	TURB (NTU)	DO (mg/L)	TEMP (C°)	ORP (mV)	Water Depth (ft, btoc)
838		7.72	0.349	8.02	8.66	6.5	149.6	6.18
842		7.77	0.345	0.81	8.32	6.4	140.4	6.19
846		7.89	0.344	0.14	8.24	6.4	134.2	6.21
850		7.90	0.343	0.02	8.28	6.4	131.4	6.22
854		7.89	0.348	0.02	8.26	6.5	129.3	6.22
858		7.91	0.345	0.02	8.25	6.5	125.9	6.22

Flow Rate ~250 mL/min

Pump controller setting 50%

General Comments:

Water Sample Collection Field Data Sheet

Site Name: City of Grand Haven - Harbor Island Well ID.: MW-16

Sample I.D.(match bottle and COC form exactly): MW-16

Personnel: TTD

Date: 4.8.24 Static Depth to Water (ft, btoc) 5.19

Date/Time Sample Collected (match bottle and COC form exactly): 4.8.24 8:30

Sample Method: LF Pump

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

Sample QC: Duplicate Yes No Duplicate Sample ID: -

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

Well Purging Data (Fill In All Blanks)

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

Time Completed: _____ Total Purge _____ Units L

Field Measurements:

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)
7:34		7.19	1.00	0.02	0.09	7.1	34.9	5.37
7:38		7.21	0.98	0.02	0.04	7.1	3.0	5.37
7:42		7.22	1.01	0.02	0.07	7.1	-13.5	5.37
7:46		7.24	1.02	0.02	0.07	7.1	-28.2	5.37
7:50		7.26	1.02	0.02	0.04	7.1	-46.3	5.37
7:54		7.26	1.05	0.02	0.06	7.1	-59.1	5.37
7:58		7.27	1.05	0.02	0.04	7.1	-68.1	5.37
8:02		7.27	1.07	0.02	0.05	7.1	-75.3	5.37
8:06		7.28	1.08	0.02	0.04	7.1	-79.3	5.37
8:10		7.28	1.09	0.02	0.05	7.1	-83.7	5.37
8:14		7.28	1.09	0.02	0.04	7.1	-86.6	5.37
8:18		7.29	1.10	0.02	0.04	7.1	-88.7	5.37
8:22		7.29	1.10	0.02	0.04	7.1	-90.4	5.37

Flow Rate 200 mL/min

Pump controller setting 50%

General Comments:

7:13 Purge Start - Black particulate

8:23 - Start Fill Stop Fill 8:50

Water Sample Collection Field Data Sheet

Site Name: City of Grand Haven - Harbor Island Well ID.: MW-17

Sample I.D.(match bottle and COC form exactly): mw-17

Personnel: TMB

Drawdown
16:45-6.20
16:50-6.20
16:55-6.20

Date: 4.8.24 Static Depth to Water (ft, btoc) 6.15

Date/Time Sample Collected (match bottle and COC form exactly): 4.8.24, 1745

Sample Method: LF Peri

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

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

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

Well Purging Data (Fill In All Blanks)

Depth of Sample Collection (pump depth) (ft, btoc) 2' above bott

Time Completed: — Total Purge — Units L

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)
16:58		7.92	0.98	7.37	0.35	9.2	-23.9	6.20
17:02		7.90	1.07	3.12	0.19	9.2	-84.7	6.20
17:06		7.89	1.10	1.05	0.09	9.3	-120.4	6.20
17:10		7.88	1.11	2.15	0.09	9.2	-134.6	6.20
17:14		7.88	1.11	1.97	0.06	9.2	-143.5	6.20
17:18		7.88	1.11	0.59	0.06	9.2	-150.0	6.20
17:22		7.88	1.12	0.02	0.06	9.2	-153.3	6.20
17:26		7.88	1.11	0.02	0.05	9.3	-155.4	6.20
17:30		7.88	1.12	0.02	0.06	9.1	-157.2	6.20

Flow Rate 150 ml/min

Pump controller setting 40%

General Comments:

16:35 Start purge - Black particulate - Replaced tubing

Start Fill @ 1731 ; Stop Fill 18:04

Water Sample Collection Field Data Sheet

Site Name: GHHI Well ID.: MW-18

Sample I.D.(match bottle and COC form exactly): MW-18

Personnel: AB

Date: 4/10/24 Static Depth to Water (ft, btoc) 6.96

Date/Time Sample Collected (match bottle and COC form exactly): 4/10/24; 1034

Sample Method: LF Peri

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

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

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

Well Purging Data (Fill In All Blanks)

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

Time Completed: 1108 Total Purge _____ Units L

Field Measurements:

Time (24 hour)	Amount purged (ml)	pH	COND (mS/cm)	TURB (NTU)	DO (mg/L)	TEMP (C°)	ORP (mV)	Water Depth (ft, btoc)
1010		7.30	1.71	13.3	2.00	7.3	-109.7	6.97
1014		7.26	1.70	10.9	0.71	7.2	-122.4	6.97
1018		7.22	1.70	7.05	0.42	7.1	-121.9	6.98
1022		7.21	1.70	0.76	0.40	7.1	-120.4	6.98
1026		7.19	1.70	0.02	0.40	7.0	-118.5	6.98
1030		7.19	1.70	0.04	0.39	7.0	-116.5	6.98
1034		7.18	1.69	0.02	0.40	7.0	-114.3	6.98

Flow Rate ~200 mL/min

Pump controller setting 35%

General Comments:

EGLE split sampling + additional parameters

Water Sample Collection Field Data Sheet

Site Name: City of Grand Haven - Harbor Island Well ID.: MW-19

Sample I.D.(match bottle and COC form exactly): MW-19

Personnel: TMB

Date: 4.8.24 Static Depth to Water (ft, btoc) 5.93

Date/Time Sample Collected (match bottle and COC form exactly): 4.8.24 15:00

Sample Method: LF Peri.

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

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

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

Well Purging Data (Fill In All Blanks)

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

Time Completed: _____ Total Purge _____ Units C

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)
13:54		6.93	2.11	0.02	0.47	8.5	50.1	5.95
13:58		6.84	2.11	0.02	0.36	8.5	46.8	5.95
14:02		6.86	2.12	0.02	0.19	8.4	41.4	5.95
14:06		6.85	2.11	0.02	0.13	8.5	36.8	5.95
14:10		6.84	2.11	0.02	0.10	8.4	33.2	5.95
14:14		6.84	2.11	0.02	0.08	8.5	29.6	5.95
14:18		6.85	2.11	0.02	0.08	8.5	26.1	5.95
14:22		6.85	2.11	0.02	0.07	8.5	21.7	5.95
14:26		6.85	2.11	0.02	0.06	8.5	20.2	5.95
14:30		6.85	2.11	0.02	0.06	8.5	19.4	5.95

Flow Rate 200 mL/min

Pump controller setting 50%

General Comments:

13:28 Start Purge

Start Fill 14:31 Stop Fill 15:00

Water Sample Collection Field Data Sheet

Site Name: City of Grand Haven - Harbor Island Well ID.: MW-20

Sample I.D.(match bottle and COC form exactly): MW-20

Personnel: TMJ

Date: 4.8.24 Static Depth to Water (ft, btoc) 5.79

Date/Time Sample Collected (match bottle and COC form exactly): 4.8.24 16:15

Sample Method: LF Pump

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

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

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

Well Purging Data (Fill In All Blanks)

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

Time Completed: _____ Total Purge _____ Units L

Field Measurements:

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)
15:18		7.46	1.81	29.0	0.67	8.4	31.5	5.79
15:22		7.48	1.58	10.2	0.13	8.2	-33.2	5.79
15:26		7.47	1.48	7.22	0.08	8.2	-62.8	5.79
15:30		7.46	1.46	4.80	0.03	8.1	-81.6	5.79
15:34		7.46	1.44	2.73	0.03	8.2	-92.9	5.79
15:38		7.46	1.43	1.73	0.03	8.2	-100.9	5.79
15:42		7.45	1.42	1.51	0.02	8.3	-106.5	5.79
15:46		7.45	1.42	1.00	0.03	8.2	-110.4	5.79
15:50		7.45	1.42	0.62	0.04	8.3	-113.3	5.79
15:54		7.45	1.42	0.62	0.04	8.3	-116.0	5.79
15:58		7.45	1.45	0.02	0.03	8.3	-117.8	5.79

Flow Rate 200 ml/min

Pump controller setting 50%

General Comments:

Start Purge 15:12 - Red particulate

Start Fill 15:59 16:30 Stop Fill

Water Sample Collection Field Data Sheet

Site Name: GHH1 Well ID.: MW-27

Sample I.D.(match bottle and COC form exactly): MW-27

Personnel: AB

Date: 4/8/24 Static Depth to Water (ft, btoc) 4.42

Date/Time Sample Collected (match bottle and COC form exactly): 4/8/24; 1714

Sample Method: LF Peri

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

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

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

Well Purging Data (Fill In All Blanks)

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

Time Completed: _____ Total Purge _____ Units L

Field Measurements:

Time (24 hour)	Amount purged (ml)	pH	COND (mS/cm)	TURB (NTU)	DO (mg/L)	TEMP (C°)	ORP (mV)	Water Depth (ft, btoc)
1638	start							~~4.75~~
1646		6.92	0.77	8.48	0.41	7.9	-119.2	4.75
1650		6.95	0.81	8.32	0.30	7.8	-123.8	4.76
1654		6.94	0.89	6.36	0.15	7.7	-127.6	4.78
1658		6.96	0.94	6.38	0.13	7.8	-131.7	4.79
1702		6.97	1.01	6.93	0.12	7.6	-134.3	4.79
1706		6.98	1.04	6.56	0.10	7.5	-137.0	4.79
1710		6.99	1.05	4.20	0.11	7.6	-139.6	4.79
1714		6.99	1.06	2.31	0.12	7.5	-140.2	4.79

Flow Rate ~200mL/min

Pump controller setting 40%

General Comments:

check MW-33 @ purge start - no 1642 reading

MW-33 still very wet due to low spot, let drain out as much as possible before sampling

Water Sample Collection Field Data Sheet

Site Name: GHH1 Well ID.: MW-28

Sample I.D.(match bottle and COC form exactly): MW-28

Personnel: AB

Date: 4/7/24 Static Depth to Water (ft, btoc) 8.29

Date/Time Sample Collected (match bottle and COC form exactly): 4/7/24, 1654

Sample Method: LF Peri

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

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

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

Well Purging Data (Fill In All Blanks)

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

Time Completed: 1715 Total Purge _____ Units L

Field Measurements:

Time (24 hour)	Amount purged (ml)	pH	COND (mS/cm)	TURB (NTU)	DO (mg/L)	TEMP (C°)	ORP (mV)	Water Depth (ft, btoc)
1622		6.99	1.19	6.11	1.40	8.5	-100.3	8.42
1626		6.96	1.19	3.84	0.71	8.5	-91.8	8.48
1630		6.93	1.14	4.32	0.15	8.2	-87.5	8.51
1634		6.93	1.13	3.27	0.14	8.1	-93.7	8.52
1638		6.99	1.15	3.24	0.13	8.1	-99.3	8.53
1642		7.01	1.16	4.08	0.08	8.0	-106.6	8.53
1646		7.02	1.17	3.48	0.08	8.0	-110.6	8.53
1650		7.02	1.18	3.30	0.07	8.1	-115.0	8.53
1654		7.02	1.18	3.17	0.08	8.1	-118.7	8.53

Flow Rate ~250 mL/min

Pump controller setting 55%

General Comments:

Water Sample Collection Field Data Sheet

Site Name: City of Grand Haven - Harbor Island Well ID.: MW-30

Sample I.D.(match bottle and COC form exactly): MW-30

Personnel: TBB

Date: 4.7.24 Static Depth to Water (ft, btoc) 5.44

Date/Time Sample Collected (match bottle and COC form exactly): 4.7.24 17:00

Sample Method: LF Peri.

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

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

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

Well Purging Data (Fill In All Blanks)

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

Time Completed: _____ Total Purge _____ Units C

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)
16:06		7.17	2.60	0.25	0.36	7.6	-2.6	5.51
16:10		7.15	2.61	0.15	0.16	7.4	-13.6	5.51
16:14		7.15	2.61	0.02	0.13	7.4	-24.2	5.51
16:18		7.14	2.61	0.02	0.10	7.5	-31.9	5.51
16:22		7.14	2.61	0.02	0.04	7.4	-40.4	5.51
16:26		7.15	2.61	0.02	0.05	7.4	-45.5	5.51
16:30		7.15	2.61	0.02	0.04	7.4	-50.9	5.51
16:34		7.15	2.61	0.02	0.03	7.4	-56.5	5.51
16:38		7.15	2.61	0.02	0.03	7.4	-60.7	5.51
16:42		7.15	2.61	0.02	0.03	7.3	-64.6	5.51
16:46		7.15	2.61	0.02	0.03	7.3	-67.7	5.51
16:50		7.15	2.61	0.02	0.03	7.3	-71.3	5.51

Flow Rate 200 ml/min

Pump controller setting 50%

General Comments:

15:50 Start Purge – Black particulate

Start Fill 16:51 Stop Fill 17:15

Water Sample Collection Field Data Sheet

Site Name: City of Grand Haven - Harbor Island Well ID.: MW-31

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

Personnel: TTB

Date: 4.8.24 Static Depth to Water (ft, btoc) 5.15

Date/Time Sample Collected (match bottle and COC form exactly): 4.8.24 13:00

Sample Method: LF Peri.

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

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

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

Well Purging Data (Fill In All Blanks)

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

Time Completed: Total Purge Units L

Field Measurements:

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)
11:00		8.03	1.31	0.40	0.24	10.3	28.9	5.97
11:04		7.99	1.31	0.02	0.14	10.5	22.0	5.99
11:08		7.96	1.30	0.02	0.14	11.4	14.6	5.99
11:12		8.00	1.31	0.15	0.07	10.0	9.7	6.05
11:16		7.99	1.31	0.06	0.04	10.0	3.5	6.12
11:20		8.00	1.29	0.10	0.04	10.2	-6.7	6.15
11:24		7.99	1.29	0.02	0.04	10.2	-15.6	6.16
11:28		7.99	1.27	0.02	0.05	10.2	-30.5	6.18
11:32		7.99	1.27	0.02	0.04	10.1	-36.3	6.21
10:36		8.00	1.28	0.02	0.04	10.0	-46.7	6.23
10:40		8.00	1.27	0.02	0.04	10.0	-58.7	6.25
10:44		8.01	1.27	0.02	0.03	10.1	-64.8	6.26
11:56		8.03	1.27	0.02	0.04	10.2	-86.9	6.26
12:00		8.03	1.26	0.02	0.04	10.2	-96.1	6.27
12:22		8.01	1.26	0.02	0.04	10.2	-126.6	6.29
12:26		8.01	1.26	0.02	0.04	10.2	-128.6	6.30
12:30		8.01	1.26	0.02	0.04	10.2	-130.1	6.30

Flow Rate 75mL/min

Pump controller setting 15%

General Comments:

10:41 Start Purge - Black particulate + Sulfuric odor

Start Fill 12:31 Stop fill - 13:17

Water Sample Collection Field Data Sheet

Site Name: City of Grand Haven - Harbor Island Well ID.: MW-32

Sample I.D.(match bottle and COC form exactly): MW-32

Personnel: TDB

Date: 4.7.24 Static Depth to Water (ft, btoc) 5.78

Date/Time Sample Collected (match bottle and COC form exactly): 4.7.24 15:30

Sample Method: LF Pump

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

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

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

Well Purging Data (Fill In All Blanks)

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

Time Completed: _____ Total Purge _____ Units L

Field Measurements:

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)
14:44		7.70	1.23	3.77	0.39	8.6	-71.7	5.82
14:48		7.64	1.21	1.63	0.15	8.4	-124.5	5.82
14:52		7.61	1.21	1.67	0.08	8.4	-149.2	5.82
14:56		7.62	1.21	0.56	0.05	8.5	-159.9	5.82
15:00		7.61	1.21	0.22	0.05	8.4	-165.8	5.82
15:04		7.62	1.21	0.02	0.04	8.3	-170.3	5.82
15:08		7.62	1.21	0.02	0.04	8.3	-174.0	5.82
15:12		7.63	1.21	0.02	0.04	8.3	-175.9	5.82
15:16		7.63	1.21	0.02	0.04	8.1	-178.6	5.82

Flow Rate 200 mL/min

Pump controller setting 50%

General Comments:

14:33 Start Purge

15:17 Start Fill Stop Fill 15:32

Water Sample Collection Field Data Sheet

Site Name: CHH Well ID.: MW-33

Sample I.D.(match bottle and COC form exactly): MW-33

Personnel: AB

Date: 4/9/24 Static Depth to Water (ft, btoc) 0.78

Date/Time Sample Collected (match bottle and COC form exactly): 4/9/24 / 948

Sample Method: LF Peri

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

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

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

Well Purging Data (Fill In All Blanks)

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

Time Completed: 1010 Total Purge ____ Units L

Field Measurements:

Time (24 hour)	Amount purged (ml)	pH	COND (mS/cm)	TURB (NTU)	DO (mg/L)	TEMP (C°)	ORP (mV)	Water Depth (ft, btoc)
0908		7.00	0.84	35.2	2.61	7.5	865	1.45
0912*		7.12	0.35	3.28	0.42	7.5	29.4	
0936*		7.12	0.84	7.77	0.22	7.5	-36.2	1.35
0940		7.14	0.84	6.27	0.23	7.6	-37.9	1.37
0944		7.16	0.84	4.41	0.24	7.6	-41.6	1.37
0948		7.16	0.85	4.13	0.23	7.5	-43.0	1.37

Flow Rate ~200 mL/min
Pump controller setting 40%
General Comments:

Had to remove ~1.5-2 L of H_2O from well box before purging, + ~1L* of bentonite due to being @ J-plug well appears intact, WL indicates no SW contam

1 inch of bentonite, up to J-plug

Water Sample Collection Field Data Sheet

Site Name: City of Grand Haven - Harbor Island Well ID.: MW-34

Sample I.D.(match bottle and COC form exactly): MW-34

Personnel: TTB

Date: 4.9.24 Static Depth to Water (ft, btoc) 3.74

Date/Time Sample Collected (match bottle and COC form exactly): 4.9.24 10:00

Sample Method: LF Pump

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

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

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

Well Purging Data (Fill In All Blanks)

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

Time Completed: _____ Total Purge _____ Units L

Field Measurements:

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)
9:10		6.67	1.80	12.5	0.39	8.9	82.7	3.80
9:14		6.63	1.80	6.03	0.25	8.9	58.0	3.80
9:18		6.62	1.80	3.30	0.17	8.9	28.6	3.80
9:22		6.62	1.79	2.30	0.26	8.9	5.1	3.80
9:26		6.62	1.79	1.70	0.19	8.9	-12.9	3.80
9:30		6.62	1.79	1.34	0.10	8.9	-31.3	3.80
9:34		6.62	1.78	1.51	0.07	8.9	-45.3	3.80
9:38		6.62	1.78	1.26	0.04	8.9	-53.4	3.80
9:42		6.62	1.78	1.53	0.03	8.9	-57.9	3.80
9:46		6.61	1.79	1.49	0.04	8.9	-63.9	3.80
9:50		6.61	1.80	1.58	0.04	8.9	-67.2	3.80
9:54		6.60	1.80	1.44	0.04	8.9	-70.4	3.80
9:58		6.61	1.80	1.39	0.05	8.9	-72.8	3.80

Flow Rate 225 mL/min

Pump controller setting 50%

General Comments:

Purge Start 9:00 - Red Particulate + Hydrocarbon odor.

Start Fill 9:59 Stop Fill 10:23

Water Sample Collection Field Data Sheet

Site Name: GHHI Well ID.: MW-36

Sample I.D.(match bottle and COC form exactly): MW-36

Personnel: AB

Date: 4/8/24 Static Depth to Water (ft, btoc) 8.16

Date/Time Sample Collected (match bottle and COC form exactly): 4/8/24, 1430

Sample Method: LF Peri

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

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

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

Well Purging Data (Fill In All Blanks)

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

Time Completed: 1452 Total Purge _____ Units L

Field Measurements:

Time (24 hour)	Amount purged (ml)	pH	COND (mS/cm)	TURB (NTU)	DO (mg/L)	TEMP (C°)	ORP (mV)	Water Depth (ft, btoc)
1330		11.90	1.41	16.4	1.12	8.7	-137.4	8.33
1334		11.87	1.33	11.5	0.41	8.5	-168.0	8.33
1338		11.81	1.14	16.8	0.15	8.5	-188.9	8.33
1342		11.65	0.93	13.0	0.13	8.4	-199.3	8.33
1346		11.53	0.84	12.4	0.05	8.4	-206.3	8.33
1350		11.08	0.73	13.6	0.04	8.4	-203.9	8.33
1354		10.99	0.715	10.9	0.08	8.3	-205.2	8.33
1358		10.90	0.689	11.3	0.07	8.4	-205.5	8.33
1402		10.82	0.684	7.96	0.08	8.4	-206.3	8.33
1406		10.68	0.681	6.79	0.07	8.4	-207.0	8.33
1410		10.69	0.681	5.90	0.09	8.5	-208.0	8.33
1414		10.70	0.684	4.40	0.08	8.7	-208.4	8.33
1418		10.67	0.664	4.20	0.08	8.4	-207.9	8.33
1422		10.44	0.656	7.80	0.07	8.3	-209.3	8.33
1426		10.42	0.657	6.86	0.08	8.3	-207.7	8.33
1430		10.42	0.658	5.41	0.08	8.4	-207.1	8.33
~~1434~~								

Flow Rate ~200 mL/min

Pump controller setting 40%

General Comments:

Water Sample Collection Field Data Sheet

Site Name: GHHI Well ID.: MW-37

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

Personnel: AB

Date: 4/8/24 Static Depth to Water (ft, btoc) 8.64

Date/Time Sample Collected (match bottle and COC form exactly): 4/8/24, 1600

Sample Method: LF Peri

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

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

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

Well Purging Data (Fill In All Blanks)

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

Time Completed: 1625 Total Purge ____ Units L

Field Measurements:

Time (24 hour)	Amount purged (ml)	pH	COND (mS/cm)	TURB (NTU)	DO (mg/L)	TEMP (C°)	ORP (mV)	Water Depth (ft, btoc)	
1512		7.52	1.15	26.9	5.45	8.7	30.6	8.74	
1516		7.49	1.15	27.6	4.29	8.7	44.9	8.74	
1520		7.50	1.15	11.2	3.19	8.7	49.0	8.74	
1524		7.51	[illegible]	4.91	2.56	8.8	50.5	8.74	1.15 cond
1528		7.51	1.15	1.90	2.45	8.7	50.9	8.74	
1532		7.48	1.15	1.97	2.02	8.8	46.5	8.74	
1536		7.47	1.15	3.62	1.71	8.8	35.5	8.74	
1540		7.47	1.15	2.12	1.59	8.8	24.8	8.74	
1544		7.48	1.16	0.16	1.15	8.8	16.6	8.74	
1548		7.47	1.16	0.34	0.97	8.9	2.3	8.79	
1552		7.47	1.16	0.16	1.01	9.0	-13.0	8.74	
1556		7.47	1.16	0.02	1.04	9.1	-15.7	8.74	
1600		7.47	1.16	0.02	1.04	9.0	-19.0	8.74	

Flow Rate ~200mL/min

Pump controller setting ~90%

General Comments:

Water Sample Collection Field Data Sheet

Site Name: GHH1 Well ID.: MW-38

Sample I.D.(match bottle and COC form exactly): MW-38

Personnel: AB

Date: 4/8/24 Static Depth to Water (ft, btoc) 9.65

Date/Time Sample Collected (match bottle and COC form exactly): 4/8/24; ~~1138~~ 1155

Sample Method: LF Peri

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

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

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

Well Purging Data (Fill In All Blanks)

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

Time Completed: _____ Total Purge 17.65 Units L

Field Measurements:

Time (24 hour)	Amount purged ~~(ml)~~ L	pH	COND (mS/cm)	TURB (NTU)	DO (mg/L)	TEMP (C°)	ORP (mV)	Water Depth (ft, btoc)
935	1.25	11.92	1.88	20.2	1.56	8.8	2.3	11.45
1002	1.45	11.68	1.61	25.2	1.66	10.4	-114.8	11.60
1006	1.85	11.80	1.56	22.1	0.91	10.3	-164.6	11.76
1010	2.25	11.85	1.52	20.5	0.66	10.4	-183.3	11.83
1014	2.65	11.84	1.50	14.2	0.49	10.3	-197.9	11.96
1018	3.05	11.83	1.42	11.0	0.38	10.5	-209.2	12.06
1022	3.45	11.80	1.36	7.89	0.46	10.6	-217.2	12.15
1026	3.85	11.74	1.32	8.83	0.45	10.6	-220.0	12.21
1030	4.25	11.67	1.28	7.00	0.48	10.8	-221.8	12.25
1034	4.65	11.61	1.25	4.63	0.52	10.8	-220.1	12.30
1038	5.05	11.48	1.21	6.18	0.51	10.8	-218.3	12.35
1042	5.45	11.33	1.18	3.59	0.49	10.8	-214.2	12.39
1046	5.85	11.25	1.17	3.63	0.50	11.4	-213.4	12.41
1050	6.25	11.06	1.16	3.70	0.52	11.3	-211.4	12.43
1054	6.65	10.70	1.17	2.79	0.54	11.2	-208.1	12.44
1058	7.05	10.63	1.17	4.00	0.52	11.7	-208.1	12.47
1102	7.45	10.50	1.19	5.34	0.50	11.7	-206.7	12.48

Flow Rate ~80-90mL/min

Pump controller setting as low as possible

General Comments:

TD = 13.38 - initial purge too high, stop @ 935, let well recover
re test pH bump, pH is accurate, start @ 1000
call MR - let well drain if necessary & resample recharge

bump

std	read
4	4.10
7	7.10
10	10.10

pump off 935

pump on 1000

Water Sample Collection Field Data Sheet

Site Name: GHH1 Well ID.: MW-38

Sample I.D.(match bottle and COC form exactly): MW-38

Personnel: AB

Date: 4/8/24 Static Depth to Water (ft, btoc) 9.65

Date/Time Sample Collected (match bottle and COC form exactly): 4/8/24 ; ~~1138~~ 1155

Sample Method: LF Peri

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

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

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

Well Purging Data (Fill In All Blanks)

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

Time Completed: 1254 Total Purge 17.65 Units L

Field Measurements:

Time (24 hour)	Amount purged (ml)	pH	COND (mS/cm)	TURB (NTU)	DO (mg/L)	TEMP (C°)	ORP (mV)	Water Depth (ft, btoc)
1106	7.85	10.33	1.20	3.17	0.52	11.8	-207.9	12.50
1110	8.25	10.32	1.20	4.57	0.50	11.9	-206.3	12.50
1114	8.65	10.25	1.21	3.28	0.50	11.8	-206.0	12.50
1118	9.05	10.16	1.23	2.22	0.44	11.9	-205.0	12.50
1122	9.45	10.07	1.24	2.23	0.45	11.8	-206.4	12.49
1126	9.85	10.03	1.24	1.16	0.42	11.6	-205.7	12.50
1130	10.25	10.04	1.25	2.04	0.40	11.5	-206.1	12.53
1134	10.65	10.03	1.24	2.49	0.42	11.5	-206.5	12.54
1138	11.05	10.02	1.26	2.42	0.41	11.8	-206.6	12.55
1140	— Water Level Monitoring Only —							12.55
1145	11.85	10.02	1.26	115.4	0.40	11.8	-207.1	12.51
1150	12.25	10.01	1.26	10.4	0.42	11.6	-207.3	12.53
1155	12.65	10.00	1.27	7.83	0.40	11.7	-207.4	12.54
1200	— WL ONLY —			↓	— WL	ONLY	—	12.54
1210								12.54
1220								12.55
1230								12.55

Flow Rate ~80-90 mL/min

Pump controller setting as low as possible

General Comments:

tubing disturbed @ 11:45 ; re check parameters as slugs of solid material caused turbidity issues re stable (turbidity only) @ 1155 , sample out of range

1240 - WL = 12.54

~~1250~~

1250 - WL = 12.53

Water Sample Collection Field Data Sheet

Site Name: City of Grand Haven - Harbor Island Well ID.: SG-02

Sample I.D.(match bottle and COC form exactly): SG-02

Personnel: TTB

Date: 4.10.24 Static Depth to Water (ft, btoc) N/A

Date/Time Sample Collected (match bottle and COC form exactly): 4.10.24 11:45

Sample Method: GRAB

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: —

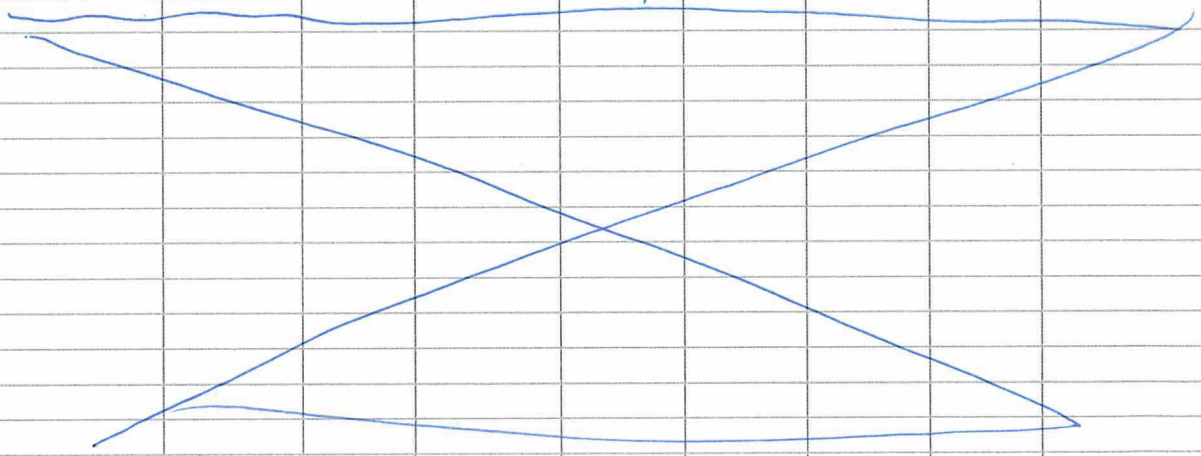
Well Purging Data (Fill In All Blanks)

Depth of Sample Collection (pump depth) (ft, btoc) ~6" below Surface

Time Completed: _____ 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)
11:45		8.38	0.49	3.59	9.31	14.8	-32.5	—
		Surface	Water	Only				



Flow Rate N/A

Pump controller setting N/A

General Comments:

~2' of surface water depth

Water Sample Collection Field Data Sheet

Site Name: GHH1 Well ID.: SG-04R

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

Personnel: AB / TB

Date: 4/8/24 Static Depth to Water (ft, btoc) —

Date/Time Sample Collected (match bottle and COC form exactly): 4/8/24, 1835

Sample Method: Grab

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: —

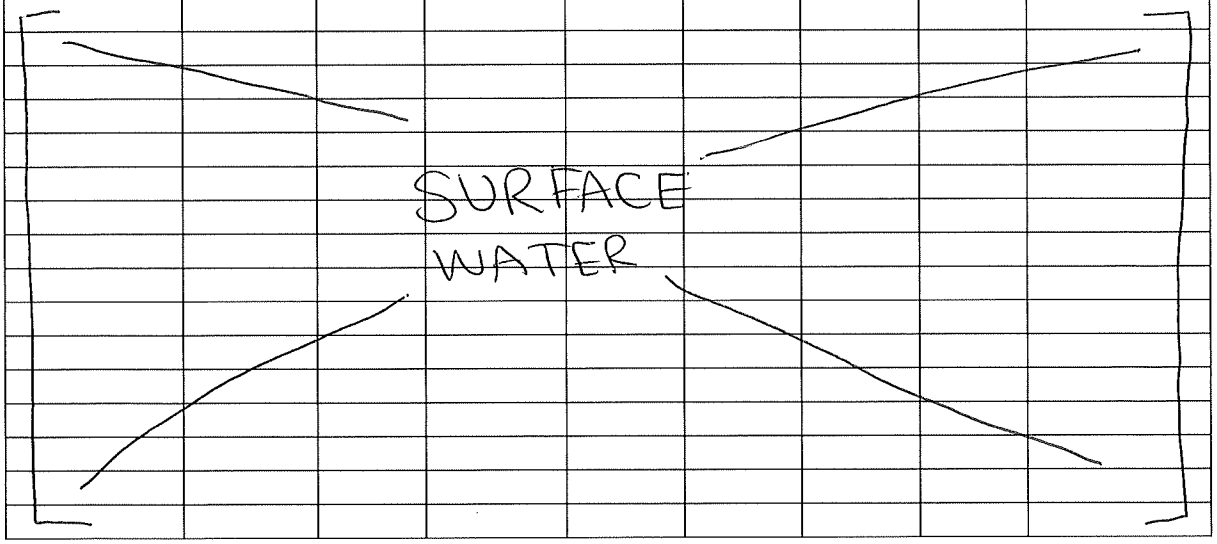
Well Purging Data (Fill In All Blanks)

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

Time Completed: _____ Total Purge 5 Units L

Field Measurements:

Time (24 hour)	Amount purged (ml)	pH	COND (mS/cm)	TURB (NTU)	DO (mg/L)	TEMP (C°)	ORP (mV)	Water Depth (ft, btoc)
		8.46	1.64	3.75	9.24	14.7	20.8	



Flow Rate —

Pump controller setting —

General Comments:

Water Sample Collection Field Data Sheet

Site Name: GHHI Well ID.: SG-05

Sample I.D.(match bottle and COC form exactly): SG-05

Personnel: AB/TB

Date: 4/8/24 Static Depth to Water (ft, btoc) ——

Date/Time Sample Collected (match bottle and COC form exactly): 4/8/24, 1820

Sample Method: Grab

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) SW Sample

Time Completed: _____ Total Purge 5 Units L

Field Measurements:

Time (24 hour)	Amount purged (ml)	pH	COND (mS/cm)	TURB (NTU)	DO (mg/L)	TEMP (C°)	ORP (mV)	Water Depth (ft, btoc)
1820		8.40	0.80	14.9	8.37	17.3	34.6	

SURFACE WATER

Flow Rate ——

Pump controller setting ——

General Comments:

only ~ 6" H_2O @ SG-05

Appendix B

Data Validation Reports

Data Verification & Validation Report

Grand Haven-Harbor Island

Sampling Event (dates and purpose): Quarterly Assessment Monitoring

Data Package Number: 24D0615, 24D0616
Data Validator: Andrew Byks

Lab Report Date: 5/23/2024
Data Validation Completion Date: 5/30/2024

General Overall Assessment:
_____ Data are usable without qualification.
__X__ 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	Anions	TDS TSS	Rad-226 Rad-228	Diss. Metals
MW-03	GW	24D0615-01	04/07/2024	X	X	X	X	X	X	
MW-04	GW	24D0615-02	04/07/2024	X	X	X	X	X	X	

Sample ID	Matrix	Lab ID	Date Collected	App III Metals	App IV Metals	Part 115 Metals	Anions	TDS TSS	Rad-226 Rad-228	Diss. Metals
MW-06	GW	24D0615-03	04/07/2024	X	X	X	X	X	X	
MW-08	GW	24D0615-04	04/07/2024	X	X	X	X	X	X	
MW-09	GW	24D0615-05	04/07/2024	X	X	X	X	X	X	
MW-10	GW	24D0615-06	04/07/2024	X	X	X	X	X	X	
MW-11	GW	24D0615-07	04/07/2024	X	X	X	X	X	X	
MW-28	GW	24D0615-08	04/07/2024	X	X	X	X	X	X	
MW-30	GW	24D0615-09	04/07/2024	X	X	X	X	X	X	
MW-32	GW	24D0615-10	04/07/2024	X	X	X	X	X	X	
MWT-04	GW	24D0615-11	04/07/2024	X	X	X	X	X	X	
MWT-08	GW	24D0615-12	04/07/2024	X	X	X	X	X	X	
MW-07	GW	24D0615-13	04/08/2024	X	X	X	X	X	X	
MW-12	GW	24D0615-14	04/08/2024	X	X	X	X	X	X	
MW-16	GW	24D0615-15	04/08/2024	X	X	X	X	X	X	
MW-17	GW	24D0615-16	04/08/2024	X	X	X	X	X	X	
MW-19	GW	24D0615-17	04/08/2024	X	X	X	X	X	X	
MW-20	GW	24D0615-18	04/08/2024	X	X	X	X	X	X	
MW-27	GW	24D0615-19	04/08/2024	X	X	X	X	X	X	
MW-31	GW	24D0615-20	04/08/2024	X	X	X	X	X	X	
MW-36	GW	24D0615-21	04/08/2024	X	X	X	X	X	X	
MW-37	GW	24D0615-22	04/08/2024	X	X	X	X	X	X	
MW-38	GW	24D0615-23	04/08/2024	X	X	X	X	X	X	
SG-04R	SW	24D0615-24	04/08/2024	X	X	X	X	X	X	
SG-05	SW	24D0615-25	04/08/2024	X	X	X	X	X	X	
MW-33	GW	24D0615-26	04/09/2024	X	X	X	X	X	X	
MW-34	GW	24D0615-27	04/09/2024	X	X	X	X	X	X	
MW-01R	GW	24D0615-28	04/10/2024	X	X	X	X	X	X	
MW-02	GW	24D0615-29	04/10/2024	X	X	X	X	X	X	
MW-18	GW	24D0615-30	04/10/2024	X	X	X	X	X	X	
SG-02	SW	24D0615-31	04/10/2024	X	X	X	X	X	X	

Other analytes requested for analysis: Na, Mg, K, HCO_3, CO_3, 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		N/A	-	-	-	
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 10 samples

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)
	Yes	No		Yes	No	N/A	
Method	X		Method as requested	X			
Reporting Limits	X		RLs as requested		X		RLs for the following were not met B – 8 samples (results > RL) Ca – 29 samples (results > RL) Carbonate alkalinity – 17 samples (results > RL) Fe – all samples (results > RL), except MW-12 Mg – all samples (results > RL) K – all samples (results > RL) Na – all samples (results > RL) SO4 – 15 samples (results > RL, or ND < RL) Total alkalinity – 3 samples (results > RL) TDS – 20 samples (results > RL)
			MDLs<RLs	X			
			MDLs<GPS	X			
QC Validation							
Evaluate Accuracy							
Matrix Spike (Recovery)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Laboratory Control Sample (Recovery)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Evaluate Precision							
Matrix Spike Duplicate (RPD)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Field Duplicate (RPD)	X		RPD ≤ 20%		X		MW-04/MWT-04: Hg detected in FD and non-detect in parent sample FD; Rad 226, Rad 228, and Rad 226-228 RPDs >20% MW-33/MWT-33: Hg detected in parent sample and non-detect in FD; Rad-226, Rad-228, and Rad 226+228 RPDs > 20%
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	-	-	-	

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)
	Yes	No		Yes	No	N/A	
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:

Sodium and calcium matrix spikes were outside of control limits in T149799-MS1 and T149799-MS2, respectively. Because the background concentration of these analytes is greater than 4x the spike amount, no qualification was needed.

Comments:

pH in 10 samples required qualification as estimated (J) due to analysis outside the EPA-established 24-hour hold time.

Iron in sample MW-12 required qualification as estimated but not detected (UJ) due to not being detected at detection limits greater than those requested.

Mercury was not detected in parent sample MW-04 but was detected in field duplicate MWT-04. Mercury in parent sample MW-04 required qualification as estimated but not detected (UJ) and in field duplicate MWT-04 as estimated with high bias (J+).

Rad-226, Rad-228, and Rad-226+228 had RPDs >20% in the MW-04/MWT-04 parent/field duplicate pair. Rad-226, Rad-228, and Rad-226+228 required qualification as estimated with low bias (J-) in parent sample MW-04 and as estimated with high bias (J+) in field duplicate MWT-04.

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

Rad-226, Rad-228, and Rad-226+228 had RPDs >20% in the MW-08/MWT-08 parent/field duplicate pair. Rad-226 and Rad-226+228 required qualification as estimated with low bias (J-) in parent sample MW-08 and in field duplicate MWT-08 as estimated with high bias (J+). Rad-228 required qualification as estimated with high bias (J+) in parent sample MW-08 and as estimated with low bias (J-) in field duplicate MWT-08.

Renew Harbor Island
Work today, protect tomorrow.

Appendix C

Potentiometric Surface Map

Renew Harbor Island
Work today, protect tomorrow.

Renew Harbor Island HDR

FORMER J.B. SIMS GENERATING STATION
CITY OF GRAND HAVEN

Appendix D

Analytical Data Tables

			Sample Location:	MW-01R										
			Compliance Phase:	Background Monitoring								Initial Assessment Monitoring	Assessment 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
			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:	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent
			Sample Matrix:	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Constituent	Unit	Fraction	Groundwater Protection Standard	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
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
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
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
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
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
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
Appendix III														
Boron	mg/L	T	4.0	**100**	**110**	**73**	**70**	**78**	**110**	**150 J+**	**140 D**	**160 D**	**38 D**	**64 D**
Calcium	mg/L	T	250	240	200	**290**	**310**	**280**	240	210 D	160 D	130 D	**400 D**	**350 D**
Chloride	mg/L	T	120	**150**	**160**	52	**120**	**130**	**150**	**170 D**	**180 D**	**210 D**	49 D	67 D
Fluoride	mg/L	T	2.0	**14**	**14**	**9.5**	**8.1**	**8.8**	**10**	**15 D**	**14 D**	**14 D**	**4.8 D**	**6.7 D**
Sulfate (as SO4)	mg/L	T	250	**590**	**400**	**350**	**780**	**780**	**540**	**290 D**	110 D	8.8 D	**980 D**	**810 D**
Total Dissolved Solids	mg/L	T	950	**2400 J-**	**2300**	**2200**	**2100**	**2400**	**2400**	**2400 D**	**2400 D**	**2600 D**	**2200 D**	**2300**
Appendix IV														
Antimony	mg/L	T	0.0060	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
Arsenic	mg/L	T	0.010	0.0020	0.0015	0.0013	0.0013	0.00077	0.00073	0.0019 J+	0.0017	0.0013	0.0041	0.0013
Barium	mg/L	T	1.3	0.30	0.30	0.25	0.22	0.21	0.29	0.29 D	0.38	0.56	0.54 D	0.2
Beryllium	mg/L	T	0.0040	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
Cadmium	mg/L	T	0.0025	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
Chromium, Total	mg/L	T	0.10	0.0013	0.0024	0.0016	0.0016	0.0013	0.0019	0.0043	0.0037	0.0022	0.022	0.0013
Cobalt	mg/L	T	0.0060	0.0011	0.0012	0.0011	0.0023	0.0017	0.00081	0.0045 J+	0.0016	0.0010	0.0040	0.00064
Fluoride	mg/L	T	2.0	**14**	**14**	**9.5**	**8.1**	**8.8**	**10**	**15 D**	**14 D**	**14 D**	**4.8 D**	**6.7 D**
Lead	mg/L	T	0.0016	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
Lithium	mg/L	T	0.10	**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**
Mercury	mg/L	T	0.00016	< 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	0.10	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
Radium 226 and 228	pCi/L	T	5.0	< 0.656 UJ	< 0.828 U	1.06	1.28	< 0.737 U	< 1.1 U	0.601	1.26	< 0.674 U	1.09	< 0.682 U
Radium-226	pCi/L	T	--	< 0.176 UJ	< 0.125 U	< 0.139 U	< 0.212 U	< 0.233 U	< 0.322 U	< 0.164 U	0.152	< 0.182 U	< 0.137 U	< 0.21 U
Radium-228	pCi/L	T	--	< 0.656 UJ	< 0.828 U	0.982	1.23	< 0.737 U	< 1.1 UJ	< 0.534 U	1.11	< 0.674 U	1.05	< 0.682 U
Selenium	mg/L	T	0.0050	0.00060	0.00059	0.00058	0.00097	0.00056	0.00030 J	0.00076 J+	0.00066	0.00073	0.0018	0.0005
Thallium	mg/L	T	0.0020	< 0.000075 U	< 0.000075 U	< 0.00038 U	< 0.000075 U	< 0.00038 U	< 0.00038 U	< 0.00038 UJ	< 0.00038 UD	< 0.000075 U	< 0.00038 UD	< 0.000075 U
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 UD	< 4 U
Michigan CCR Part 115														
Copper	mg/L	T	0.021	0.00027	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	0.0013 B	0.00045	0.00029	0.001	0.00029
Iron	mg/L	T	83	0.75	1.1	0.55	0.50	0.59	0.79	0.48	0.16	0.22	0.85 D	1
Nickel	mg/L	T	0.10	0.0015	0.0025	0.0016	0.0026	0.0018	0.0013	0.0053	0.0027	0.0021	0.022	0.0012
Silver	mg/L	T	0.00020	< 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**	**< 0.00005 U**
Vanadium	mg/L	T	0.0062	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
Zinc	mg/L	T	0.27	0.014	0.0012	0.0012	0.0018	0.013	< 0.0012 U	0.0085	0.0012	0.0013	0.0016	< 0.0012 U
Additional Parameters														
Bicarbonate Alkalinity	mg/L	T	--	1100	1200	870	830	920	1100	1300 D	1400	1700 D	560 D	820 D
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
Magnesium	mg/L	T	--	110	92	110	110	120	110	100 D	96 D	100 D	110 D	120 D
Potassium	mg/L	T	--	69	66	50	43	60 J	65	89 D	90 D	98 D	34 D	50
Sodium	mg/L	T	--	330	370	250	240	280	380	430 D	430 D	500 D	140 D	220 D
Total Alkalinity	mg/L	T	--	1100	1200	870	830	920	1100	1300 D	1400	1700 D	560 D	820 D

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)

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.

D Dilution greater than 1, flagged by Trace.

B constituent detected in blank and sample

			Sample Location:	MW-02										
			Compliance Phase:	Background Monitoring								Initial Assessment Monitoring	Assessment 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	4/7/2024
			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:	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B
			Sample Matrix:	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Constituent	Unit	Fraction	Groundwater Protection Standard	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Field Parameters														
Conductivity	mS/cm	N	--	3.36	4.1	3.07	2.616	3.66	3.524	4.17	4.07	4.21	3.40	3.89
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
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
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
Temperature	deg c	N	--	12.8	12	11.2	9.6	10.2	11.7	12.1	14	15	10.3	11.4
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
Appendix III														
Boron	mg/L	T	4.0	**88**	**86**	**100**	**98**	**73**	**95**	**110 J+**	**99 D**	**110 D**	**100 D**	**110 D**
Calcium	mg/L	T	250	210	180	210	240	190	210	210 D	180 D	190 D	220 D	210 D
Chloride	mg/L	T	120	**150**	**140**	67	**140**	**150**	**140**	**140 D**	**130 D**	**140 D**	**140 D**	**140 D**
Fluoride	mg/L	T	2.0	**9.2**	**10**	**4.5**	**9.4**	**8.7**	**9.2**	**10 D**	**9.7 D**	**9.7 D**	**9.5 D**	**10 D**
Sulfate (as SO4)	mg/L	T	250	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
Total Dissolved Solids	mg/L	T	950	**1700**	**1800**	**1900**	**1700**	**1700**	**1800**	**2100 J**	**1900 D**	**1600 D**	**1800 D**	**2000**
Appendix IV														
Antimony	mg/L	T	0.0060	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
Arsenic	mg/L	T	0.010	0.0082	0.0076	0.0086	0.0078	0.0083	**0.012**	0.0096 J+	0.0086	0.0074	0.00044 J	0.0075
Barium	mg/L	T	1.3	0.51	0.53	0.55	0.51	0.38	0.48	0.47	0.45	0.42	0.73	0.46
Beryllium	mg/L	T	0.0040	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
Cadmium	mg/L	T	0.0025	< 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
Chromium, Total	mg/L	T	0.10	0.022	**0.054**	**0.057**	**0.046**	0.019	0.030	**0.068**	**0.054**	0.032	0.00038	0.039
Cobalt	mg/L	T	0.0060	0.0038	**0.0060**	**0.0080**	**0.0066**	0.0031	0.0039	**0.0089 J+**	**0.0076**	**0.0063**	0.00024 J	0.0061
Fluoride	mg/L	T	2.0	**9.2**	**10**	**4.5**	**9.4**	**8.7**	**9.2**	**10 D**	**9.7 D**	**9.7 D**	**9.5 D**	**10 D**
Lead	mg/L	T	0.0016	0.0010	**0.0024**	**0.0030**	**0.0027**	**0.0018 J**	**0.0041**	**0.0039 J+**	**0.0017**	**0.0020**	< 0.00010 U	**0.0056**
Lithium	mg/L	T	0.10	**1.2**	**1.5**	**1.5**	**1.6**	**0.87**	**1.2**	**1.7**	**1.4**	**1.2 D**	**1.4 D**	**1.5**
Mercury	mg/L	T	0.00016	< 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	0.10	0.0052	0.0062	0.011	0.011	0.0088	0.0064	0.0062 J+	0.0052	0.0051	0.0038	0.0052
Radium 226 and 228	pCi/L	T	5.0	< 2.18 U	< 2.8 U	3.35	1.56	< 0.686 U	1.67	1.67	2.45	1.16	1.95	2.24
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
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
Selenium	mg/L	T	0.0050	0.0010	0.0012	0.0012	0.00095	0.00050	0.0010	0.0014 J+	0.0012	0.0018	0.00056	0.0014
Thallium	mg/L	T	0.0020	< 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
Total Suspended Solids	mg/L	T	--	67	58	58	56	100	90	20 D	16 D	6.1 D	59	40
Michigan CCR Part 115														
Copper	mg/L	T	0.021	0.00081	0.0018	0.0025	0.0020	0.0011	0.0014	0.0026 B	0.0018	0.0025	0.00023 J	0.0028
Iron	mg/L	T	83	23	22	24	30	27	27	24	20	18 D	31 D	25
Nickel	mg/L	T	0.10	0.015	0.023	0.042	0.035	0.017	0.014	0.025	0.022	0.018	0.00093 J	0.025
Silver	mg/L	T	0.00020	< 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	< 0.00005 U
Vanadium	mg/L	T	0.0062	0.0014	0.0036	0.0035	0.0032	0.0013	0.0026	**0.0067**	0.0049	0.0044	< 0.00062 U	**0.0062**
Zinc	mg/L	T	0.27	0.023	0.0030	0.0033	0.0022	0.025	0.0019	0.0027	0.0041	0.0036	0.0020	0.0033
Additional Parameters														
Bicarbonate Alkalinity	mg/L	T	--	1900	2000	1900	1800	1800	1900	460	2100	2300	1800 D	2000
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
Magnesium	mg/L	T	--	63	59	70	78	68	71	62	58 D	57 D	77 D	68
Potassium	mg/L	T	--	50	44	53	45	41	44	56 J	46 D	47 D	50 D	53
Sodium	mg/L	T	--	250	250	260	260	220	280	320 D	310 D	310 D	280 D	300 D
Total Alkalinity	mg/L	T	--	1900	2000	1900	1800	1800	1900	460	2100	2300	1800 D	2000

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)

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.

D Dilution greater than 1, flagged by Trace.

B constituent detected in blank and sample

Sample Location:				MW-03											
Compliance Phase:				Background Monitoring								Initial Assessment Monitoring	Assessment 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
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:				Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B
Sample Matrix:				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Constituent	Unit	Fraction	Groundwater Protection Standard	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
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
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
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
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
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
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
Appendix III														
Boron	mg/L	T	4.0	**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**
Calcium	mg/L	T	250	**390**	**290**	**400**	**410**	**360**	**400**	**430 D**	**350 D**	**380 D**	**360 D**	**350 D**
Chloride	mg/L	T	120	**300**	**190**	**240**	**190**	**150**	**140**	**160 D**	**170 D**	**180 D**	**140 D**	**99 D**
Fluoride	mg/L	T	2.0	0.65	1.6	0.62	0.52	0.60	0.54	0.54 D	0.61 D	0.60 D	0.61 D	0.6 D
Sulfate (as SO4)	mg/L	T	250	42	**460**	230	**550**	**760**	**690**	**510 D**	**480 D**	**380 D**	**310 D**	**360 D**
Total Dissolved Solids	mg/L	T	950	**2200 J-**	**1700**	**2300**	**2300**	**2300**	**2300**	**2300 D**	**2300 D**	**2200 D**	**2000 D**	**1900 D**
Appendix IV														
Antimony	mg/L	T	0.0060	0.000087 J	0.000092 J	< 0.00025 U	0.00011 J	0.00045 J	< 0.00050 U	< 0.00050 UD	< 0.00010 U	< 0.00010 U	< 0.00050 UD	0.00016 J
Arsenic	mg/L	T	0.010	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
Barium	mg/L	T	1.3	0.43	0.13	0.50	0.30	0.34	0.43	0.38 D	0.38	0.41	0.42 D	0.36
Beryllium	mg/L	T	0.0040	< 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	5.7E-05 J	0.00018 J
Cadmium	mg/L	T	0.0025	< 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
Chromium, Total	mg/L	T	0.10	0.0046	0.0061	0.0049	0.0073	0.0033	0.0037	0.0060	0.0053	0.0030	0.0037	0.0052
Cobalt	mg/L	T	0.0060	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
Fluoride	mg/L	T	2.0	0.65	1.6	0.62	0.52	0.60	0.54	0.54 D	0.61 D	0.6 D	0.61 D	0.6 D
Lead	mg/L	T	0.0016	< 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	< 0.0001 U
Lithium	mg/L	T	0.10	0.044	0.065	0.039	0.045	0.037	0.035	0.050	0.041	0.035	0.033 D	0.029
Mercury	mg/L	T	0.00016	< 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
Molybdenum	mg/L	T	0.10	< 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
Radium 226 and 228	pCi/L	T	5.0	1.92	< 1.32 U	0.75	1.76	0.81	1.38	1.26	0.996	1.34	1.48	1.5
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
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
Selenium	mg/L	T	0.0050	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
Thallium	mg/L	T	0.0020	< 0.000075 U	< 0.000075 U	< 0.00038 U	< 0.00038 U	< 0.00038 U	< 0.00038 U	< 0.00038 UJ	< 0.00038 UD	0.00018 J	0.00038 UD	< 0.000075 U
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	< 4.0 U	< 4.0 U	< 4 U
Michigan CCR Part 115														
Copper	mg/L	T	0.021	< 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	0.001
Iron	mg/L	T	83	3.7	5.9	2.5	1.6	2.0	0.78	0.31	0.28	0.43	1.4 D	0.48
Nickel	mg/L	T	0.10	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
Silver	mg/L	T	0.00020	< 0.000050 U	< 0.000050 U	**< 0.00025 U**	< 0.000050 U	**< 0.00025 U**	**< 0.00025 U**	< 0.000050 U	< 0.000050 U	< 0.00005 U	**< 0.00025 UD**	**< 0.00005 U**
Vanadium	mg/L	T	0.0062	< 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
Zinc	mg/L	T	0.27	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
Additional Parameters														
Bicarbonate Alkalinity	mg/L	T	--	1800	690	1600	1200	1100	1100	1300 D	1300	1400 D	1300	1200
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
Magnesium	mg/L	T	--	210	91	220	220	210	220	210 D	200 D	200 D	210 D	200 D
Potassium	mg/L	T	--	20	18	20	15	20	17	20	18 D	18 D	19 D	16
Sodium	mg/L	T	--	130	74	120	110	100	110	100 D	110 D	100 D	110 D	90
Total Alkalinity	mg/L	T	--	1800	690	1600	1200	1100	1100	1300 D	1300	1400 D	1300	1200

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)

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.

D Dilution greater than 1, flagged by Trace.

B constituent detected in blank and sample

			Sample Location:	MW-04											
			Compliance Phase:	Background Monitoring								Initial Assessment Monitoring	Assessment 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
			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:	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B
			Sample Matrix:	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Constituent	Unit	Fraction	Groundwater Protection Standard	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
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
Dissolved Oxygen	mg/L	N	--	0.15	0.1	0.07	0.79	0.15	0.06	0.05	0.16	0.14	0.30	0.06
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
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
Temperature	deg c	N	--	13.1	10.5	8.7	6.5	7.2	10.5	13.1	16.4	16.1	8.0	8.8
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
Appendix III														
Boron	mg/L	T	4.0	**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**
Calcium	mg/L	T	250	**310**	**360**	**350**	**390**	**340**	**400**	**410 D**	**330 D**	**360 D**	**350 D**	**430 D**
Chloride	mg/L	T	120	**180**	**300**	**200**	**220**	**220**	**200**	**190 D**	**160 D**	**150 D**	**130 D**	**120 D**
Fluoride	mg/L	T	2.0	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
Sulfate (as SO4)	mg/L	T	250	**410**	1.8 J	**530**	**580**	**700**	**690**	**610 D**	**610 D**	**630 D**	**640 D**	**810 D**
Total Dissolved Solids	mg/L	T	950	**1700**	**2100**	**1700**	**1800**	**1900**	**2100**	**2000 D**	**1900 D**	**1800 D**	**1800 D**	**2100 D**
Appendix IV														
Antimony	mg/L	T	0.0060	0.000071 J	< 0.000050 U	< 0.00025 U	< 0.000050 U	0.00041 J	< 0.00050 U	< 0.00050 UD	0.00012 J+	< 0.0001 U	< 0.0005 UD	< 0.0001 U
Arsenic	mg/L	T	0.010	0.0012	0.00078	0.0012	0.0012	0.00060	0.00047 J	0.00092 J+	0.00088	0.001	0.00058	0.0012
Barium	mg/L	T	1.3	0.11	0.46	0.13	0.12	0.10	0.12	0.15 D	0.12	0.12	0.11 D	0.12
Beryllium	mg/L	T	0.0040	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 UJ	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U
Cadmium	mg/L	T	0.0025	< 0.000032 U	< 0.000032 U	< 0.00016 U	< 0.000032 U	< 0.00016 U	< 0.00038 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	0.00038 UD	< 0.000075 U
Chromium, Total	mg/L	T	0.10	0.0027	0.0060	0.0047	0.0049	0.0026	0.0031	0.0046	0.0044	0.0027	0.0026	0.0041
Cobalt	mg/L	T	0.0060	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
Fluoride	mg/L	T	2.0	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
Lead	mg/L	T	0.0016	< 0.00022 U	< 0.00022 U	< 0.0011 U	< 0.00022 U	< 0.0011 U	< 0.00050 U	< 0.00050 UJ	< 0.00010 U	< 0.0001 U	0.0005 UD	< 0.0001 U
Lithium	mg/L	T	0.10	0.067	0.047	0.061	0.074	0.054	0.061	0.074	0.074	0.066 D	0.048 D	0.062
Mercury	mg/L	T	0.00016	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 UJ
Molybdenum	mg/L	T	0.10	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
Radium 226 and 228	pCi/L	T	5.0	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-
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-
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-
Selenium	mg/L	T	0.0050	< 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
Thallium	mg/L	T	0.0020	< 0.000075 U	< 0.000075 U	< 0.00038 U	< 0.000075 U	< 0.00038 U	< 0.00038 U	< 0.00038 UJ	< 0.000075 U	< 0.000075 U	< 0.00038 UD	< 0.000075 U
Total Suspended Solids	mg/L	T	--	10	8.0	11	10	11	12	8.1 D	< 4.0 UJ	8.0	4.0 U	15
Michigan CCR Part 115														
Copper	mg/L	T	0.021	< 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
Iron	mg/L	T	83	4.7	6.3	5.6	6.3	6.1	6.8	6.8	5.0	5.6 D	5.5 D	6.8
Nickel	mg/L	T	0.10	0.012	0.0019	0.018	0.019	0.011	0.013	0.022	0.019	0.013	0.010	0.016
Silver	mg/L	T	0.00020	< 0.000050 U	< 0.000050 U	**< 0.00025 U**	< 0.000050 U	**< 0.00025 U**	**< 0.00025 U**	< 0.000050 U	< 0.000050 U	< 0.00005 U	**< 0.00025 UD**	**< 0.00005 U**
Vanadium	mg/L	T	0.0062	< 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
Zinc	mg/L	T	0.27	0.0044	< 0.0012 U	< 0.0012 U	< 0.0012 U	0.0059	< 0.0012 U	< 0.0012 U	< 0.0012 UJ	0.0015	< 0.0012 U	< 0.0012 U
Additional Parameters														
Bicarbonate Alkalinity	mg/L	T	--	800	1800	720	690	720	740	730	750	780	680 D	700
Carbonate Alkalinity	mg/L	T	--	< 0.16 U	< 1.6 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	0.31 UD	< 0.16 U
Magnesium	mg/L	T	--	96	200	110	120	120	140	130 D	120 D	120 D	120 D	140 D
Potassium	mg/L	T	--	21	20	20	18	21	24	26	23 D	24 D	21 D	23
Sodium	mg/L	T	--	83	110	84	83	89	100	93 D	87 D	83 D	80 D	90
Total Alkalinity	mg/L	T	--	800	1800	720	690	720	740	730	750	780	680 D	700

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)

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.

D Dilution greater than 1, flagged by Trace.

B constituent detected in blank and sample

			Sample Location:	MW-06										
			Compliance Phase:	Background Monitoring								Initial Assessment Monitoring	Assessment 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
			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:	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2
			Sample Matrix:	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Constituent	Unit	Fraction	Groundwater Protection Standard	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
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
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
Oxidation Reduction Potential	mV	N	--	38.1	-139	-193.2	-148.9	-173.5	-184.3	-182.7	-80.3	-176.8	145.9	-139.9
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
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
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
Appendix III														
Boron	mg/L	T	4.0	**12**	**9.5**	**10**	**9.5**	**7.5**	**8.6**	**9.7 J+**	**9.9**	**11 D**	**7.3 D**	**6.4**
Calcium	mg/L	T	250	220	230	**250**	**310**	**250**	**270**	**290 D**	230 D	240 D	**280 D**	**310 D**
Chloride	mg/L	T	120	**160**	**120**	110	82	57	73	71 D	76 D	79 D	18 D	13 D
Fluoride	mg/L	T	2.0	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
Sulfate (as SO4)	mg/L	T	250	16	9.6	20	7.3	9.4	20	16 D	0.98 JD	< 0.41 UD	1.5 JD	9.2 D
Total Dissolved Solids	mg/L	T	950	**1300**	**1200**	**1300**	**1200**	**1200**	**1200**	**1300 D**	**1200 D**	**1100 D**	**1100 D**	**1200 D**
Appendix IV														
Antimony	mg/L	T	0.0060	0.000075 J	< 0.000050 U	< 0.00025 U	< 0.000050 U	0.00036 J	< 0.00050 U	< 0.00010 U	< 0.00010 U	< 0.00010 U	< 0.00050 UD	< 0.0001 U
Arsenic	mg/L	T	0.010	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
Barium	mg/L	T	1.3	**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**
Beryllium	mg/L	T	0.0040	< 0.000054 U	< 0.000052 U	0.000052 J	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 UJ	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U
Cadmium	mg/L	T	0.0025	< 0.000032 U	< 0.000032 U	< 0.00016 U	< 0.000032 U	< 0.00016 U	< 0.00038 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.00038 UD	< 0.000075 U
Chromium, Total	mg/L	T	0.10	0.0015	0.0021	0.0021	0.0030	0.0014	0.0012	0.0020	0.0023	0.0015	0.0012	0.0011
Cobalt	mg/L	T	0.0060	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
Fluoride	mg/L	T	2.0	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
Lead	mg/L	T	0.0016	0.00035 J	0.00025 J	< 0.0011 U	< 0.00022 U	< 0.0011 U	< 0.00050 U	0.00027 J+	< 0.00010 U	< 0.00010 U	< 0.00050 UD	< 0.0001 U
Lithium	mg/L	T	0.10	**0.23**	**0.22**	**0.20**	**0.23**	**0.15**	**0.15**	**0.19**	**0.22**	**0.19 D**	**0.13 D**	**0.11**
Mercury	mg/L	T	0.00016	< 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	0.10	< 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
Radium 226 and 228	pCi/L	T	5.0	0.864	0.637	< 0.715 U	1.91	< 0.646 U	0.92	0.824	0.938	1.58	0.965	2.23
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
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
Selenium	mg/L	T	0.0050	< 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
Thallium	mg/L	T	0.0020	< 0.000076 U	< 0.000075 U	< 0.00038 U	< 0.000075 U	< 0.00038 U	< 0.00038 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.00038 UD	< 0.000075 U
Total Suspended Solids	mg/L	T	--	36	45	42	65	53	43	41 D	37 D	48	73	54 D
Michigan CCR Part 115														
Copper	mg/L	T	0.021	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	0.00028	< 0.0002 U
Iron	mg/L	T	83	15	17	16	26	19	18	18	14	19 D	31 D	26
Nickel	mg/L	T	0.10	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
Silver	mg/L	T	0.00020	< 0.000051 U	< 0.000050 U	**< 0.00025 U**	< 0.000050 U	**< 0.00025 U**	**< 0.00025 U**	< 0.000050 U	< 0.000050 U	< 0.00005 U	**< 0.00025 UD**	**< 0.00005 U**
Vanadium	mg/L	T	0.0062	< 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
Zinc	mg/L	T	0.27	0.060	0.0019	0.0018	0.0012	0.094	< 0.0012 U	0.0018	0.0013	0.0018	< 0.0012 U	0.0012
Additional Parameters														
Bicarbonate Alkalinity	mg/L	T	--	1100	1100	1000	1100	1100	990	1100 D	1100	1000 D	980 D	1100
Carbonate Alkalinity	mg/L	T	--	< 1.6 U	< 1.6 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.31 U	< 0.31 UD	< 0.16 U	< 0.31 UD	< 0.31 UD	< 0.16 U
Magnesium	mg/L	T	--	110	95	100	96	90	100	100 D	90 D	89 D	81 D	78
Potassium	mg/L	T	--	32	24	23	20	20	23	26	24 D	26 D	20 D	18
Sodium	mg/L	T	--	110	78	84	69	63	82	87	77 D	71 D	49 D	49
Total Alkalinity	mg/L	T	--	1100	1100	1000	1100	1100	990	1100 D	1100	1000 D	980 D	1100

Notes:

ug/l - micrograms per liter.

mg/l = milligrams per liter.

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

pCi/L = picocuries per liter.

All metals were analyzed as total unless otherwise indicated.

Qualifiers:

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

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

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.

D Dilution greater than 1, flagged by Trace.

B constituent detected in blank and sample

			Sample Location:	MW-07										
			Compliance Phase:	Background Monitoring								Initial Assessment Monitoring	Assessment 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	4/7/2024
			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:	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent
			Sample Matrix:	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Constituent	Unit	Fraction	Groundwater Protection Standard	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
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
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
Oxidation Reduction Potential	mV	N	--	57.2	-88	-103.1	-143.9	-68	-109.4	-140.5	-15.7	-141	-74.7	-60.1
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
Temperature	deg c	N	--	12.2	11	10	8.6	9.6	11.3	13	14.8	14.6	9.7	10.2
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
Appendix III														
Boron	mg/L	T	4.0	**13**	**11**	**12**	**11**	**10**	**12**	**11 J+**	**11**	**12 D**	**11 D**	**13 D**
Calcium	mg/L	T	250	140	140	140	150	130	150	160 D	120 D	150 D	140 D	160 D
Chloride	mg/L	T	120	15	15	14	14	14	13	13 D	13 D	14 D	14 D	14 D
Fluoride	mg/L	T	2.0	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	0.08 JD
Sulfate (as SO4)	mg/L	T	250	29	30	33	20	17	15	18 D	19 D	26 D	32 D	36 D
Total Dissolved Solids	mg/L	T	950	660	470	650	500	620	660	720 D	620 D	620 D	680 D	710 D
Appendix IV														
Antimony	mg/L	T	0.0060	< 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	< 0.0001 U
Arsenic	mg/L	T	0.010	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
Barium	mg/L	T	1.3	0.33	0.34	0.36	0.30	0.25	0.34	0.35	0.34	0.38	0.35	0.34
Beryllium	mg/L	T	0.0040	< 0.000052 U	< 0.000052 U	0.000062 J	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 UJ	0.000066 J	0.000055 J	< 0.000052 U	< 0.000052 U
Cadmium	mg/L	T	0.0025	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000075 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Chromium, Total	mg/L	T	0.10	0.00038	0.00030	0.00037	0.00042	0.00028	0.00029	0.00033	0.00032	0.00036	0.00032	0.00034
Cobalt	mg/L	T	0.0060	0.00071	0.00088	0.00099	0.00099	0.00087	0.00095	0.0011 J+	0.00098	0.00098	0.00074	0.00083
Fluoride	mg/L	T	2.0	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	0.08 JD
Lead	mg/L	T	0.0016	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00010 U	< 0.00010 UJ	< 0.00010 U	< 0.00010 U	< 0.00010 U	< 0.0001 U
Lithium	mg/L	T	0.10	0.0054	0.0070	0.0052	0.0067	0.0083	0.0055	0.010	0.0042	0.0062	0.0031	0.0057
Mercury	mg/L	T	0.00016	< 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	0.10	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00025 U	< 0.00025 UJ	< 0.00025 U	< 0.00025 U	< 0.00025 U	< 0.00025 U
Radium 226 and 228	pCi/L	T	5.0	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
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
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
Selenium	mg/L	T	0.0050	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	0.00010 J	< 0.00010 UJ	< 0.00010 U	< 0.00010 U	< 0.00023 J	< 0.0001 U
Thallium	mg/L	T	0.0020	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	--	44	36	35	33	33	39	39	41 D	38	29	32 D
Michigan CCR Part 115														
Copper	mg/L	T	0.021	< 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
Iron	mg/L	T	83	16	13	13	15	14	19	17	14	18 D	15 D	15
Nickel	mg/L	T	0.10	< 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
Silver	mg/L	T	0.00020	< 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	< 0.00005 U
Vanadium	mg/L	T	0.0062	< 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	0.27	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
Additional Parameters														
Bicarbonate Alkalinity	mg/L	T	--	660	580	630	610	640	630	620	620	600 D	610 D	630
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
Magnesium	mg/L	T	--	37	37	37	38	38	40	36	35 D	38 D	38 D	40
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
Sodium	mg/L	T	--	53	47	47	47	59	57	56	48 D	51 D	52 D	57
Total Alkalinity	mg/L	T	--	660	580	630	610	640	630	620	620	600 D	610 D	630

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)

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.

D Dilution greater than 1, flagged by Trace.

B constituent detected in blank and sample

			Sample Location:	MW-08											
			Compliance Phase:	Background Monitoring								Initial Assessment Monitoring	Assessment 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
			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:	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2
			Sample Matrix:	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Constituent	Unit	Fraction	Groundwater Protection Standard	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
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
Dissolved Oxygen	mg/L	N	--	0.2	0.09	0.05	0.55	0.06	0.09	0.04	0.09	1.53	0.30	0.1
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
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
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
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
Appendix III														
Boron	mg/L	T	4.0	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**
Calcium	mg/L	T	250	150	160	150	150	130	140	150 D	120 D	130 D	120 D	130 D
Chloride	mg/L	T	120	17	23	35	30	28	25	29 D	30 D	17 D	25 D	24 D
Fluoride	mg/L	T	2.0	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
Sulfate (as SO4)	mg/L	T	250	13	25	5.3	26	2.0 J	< 0.41 U	< 0.41 UD	< 0.41 UD	1.7 JD	5.6 D	7 D
Total Dissolved Solids	mg/L	T	950	560	480	630	480	560	550	610 D	530 D	440 D	530 D	510 D
Appendix IV														
Antimony	mg/L	T	0.0060	0.000095 J	0.000054 J	0.00020 J	0.00016 J	0.00028	< 0.00010 U	0.00011 J	< 0.00010 U	< 0.00010 U	< 0.00010 U	< 0.0001 U
Arsenic	mg/L	T	0.010	0.0069	**0.021**	**0.049**	**0.045**	**0.050**	**0.041**	**0.038 J+**	**0.029**	**0.011**	**0.03**	**0.047**
Barium	mg/L	T	1.3	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
Beryllium	mg/L	T	0.0040	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 UJ	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U
Cadmium	mg/L	T	0.0025	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000075 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Chromium, Total	mg/L	T	0.10	0.00067	0.00093	0.0015	0.0011	0.00084	0.0011	0.00094	0.00087	0.00061	0.00070	0.00075
Cobalt	mg/L	T	0.0060	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
Fluoride	mg/L	T	2.0	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
Lead	mg/L	T	0.0016	< 0.00022 U	< 0.00022 U	0.00086	< 0.00022 U	0.00022 J	< 0.00010 U	< 0.00010 UJ	< 0.00010 U	< 0.0001 U	< 0.00011 J	< 0.0001 U
Lithium	mg/L	T	0.10	0.063	**0.11**	**0.14**	**0.14**	**0.11**	**0.11**	**0.13**	**0.12**	0.076 D	0.097 D	0.098
Mercury	mg/L	T	0.00016	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 UJ
Molybdenum	mg/L	T	0.10	0.0024	0.0018	0.0015	0.0028	0.00095 J	0.00068 J	0.00039 J+	0.00036 J	0.0016	0.0017	0.002
Radium 226 and 228	pCi/L	T	5.0	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-
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-
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+
Selenium	mg/L	T	0.0050	< 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
Thallium	mg/L	T	0.0020	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	--	62	55	49	42	36	31	30	20	43	46	36 D
Michigan CCR Part 115														
Copper	mg/L	T	0.021	< 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
Iron	mg/L	T	83	32	30	21	22	18	18	15	13	22 D	22 D	19
Nickel	mg/L	T	0.10	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
Silver	mg/L	T	0.00020	< 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	< 0.00005 U
Vanadium	mg/L	T	0.0062	< 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	0.27	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
Additional Parameters														
Bicarbonate Alkalinity	mg/L	T	--	540	510	560	470	510	490	480	480	460 D	440 D	440
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
Magnesium	mg/L	T	--	27	30	33	27	29	28	26	26 D	22 D	23 D	24
Potassium	mg/L	T	--	8.8	12	14	7.6 J	12	11	12	12	8.6 D	8.6 D	9
Sodium	mg/L	T	--	21	27	38	33	35	35	40	36 D	23 D	32 D	32
Total Alkalinity	mg/L	T	--	540	510	560	470	510	490	480	480	460 D	440 D	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.

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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.

D Dilution greater than 1, flagged by Trace.

B constituent detected in blank and sample

			Sample Location:	MW-09											
			Compliance Phase:	Background Monitoring								Initial Assessment Monitoring	Assessment 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
			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:	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent
			Sample Matrix:	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Constituent	Unit	Fraction	Groundwater Protection Standard	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
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
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
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
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
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
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
Appendix III														
Boron	mg/L	T	4.0	**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**
Calcium	mg/L	T	250	**270**	230	**300**	**400**	**390**	**410**	**430 D**	**330 D**	**310 D**	**420 D**	**500 D**
Chloride	mg/L	T	120	15	17	18	16	12	11	11 D	12 D	12 D	18 D	25 D
Fluoride	mg/L	T	2.0	**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**
Sulfate (as SO4)	mg/L	T	250	110	83	210	**480**	**650**	**580**	**500 D**	**450 D**	210 D	**610 D**	**720 D**
Total Dissolved Solids	mg/L	T	950	**960**	740	**1100**	**1400**	**1600**	**1600**	**1500 D**	**1400 D**	**1100 D**	**1600 D**	**1700 D**
Appendix IV														
Antimony	mg/L	T	0.0060	0.000073 J	< 0.000050 U	0.00023 J	0.000092 J	0.00037 J	< 0.00050 U	< 0.00010 U	< 0.00010 U	< 0.00010 U	< 0.00050 UD	< 0.0001 U
Arsenic	mg/L	T	0.010	0.0025	0.0023	0.0023	0.0023	0.0013	0.0013	0.0027 J+	0.0024	0.0023	0.0015	0.003
Barium	mg/L	T	1.3	0.59	**2.4**	0.36	0.38	0.18	0.20	0.17	0.20	0.28	0.31 D	0.2
Beryllium	mg/L	T	0.0040	< 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
Cadmium	mg/L	T	0.0025	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.00016 U	< 0.00038 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.00038 UD	< 0.000075 U
Chromium, Total	mg/L	T	0.10	0.0022	0.0028	0.0032	0.0030	0.0018	0.0019	0.0031	0.0027	0.0018	0.0016	0.0026
Cobalt	mg/L	T	0.0060	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
Fluoride	mg/L	T	2.0	**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**
Lead	mg/L	T	0.0016	< 0.00022 U	< 0.00022 U	< 0.0011 U	< 0.00022 U	< 0.0011 U	< 0.00050 U	< 0.00010 UJ	< 0.00010 U	< 0.00010 U	< 0.00050 UD	< 0.0001 U
Lithium	mg/L	T	0.10	**0.29**	**0.34**	**0.33**	**0.31**	**0.26**	**0.29**	**0.34**	**0.33**	**0.29 D**	**0.26 D**	**0.29**
Mercury	mg/L	T	0.00016	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	**0.0024**	< 0.00016 U	**0.0021**
Molybdenum	mg/L	T	0.10	0.028	0.033	0.029	0.021	0.020	0.012	0.019 J+	0.019	0.021	0.0097	0.021
Radium 226 and 228	pCi/L	T	5.0	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
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
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
Selenium	mg/L	T	0.0050	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
Thallium	mg/L	T	0.0020	< 0.000075 U	< 0.000075 U	< 0.00038 U	< 0.000075 U	< 0.00038 U	< 0.00038 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.00038 UD	< 0.000075 U
Total Suspended Solids	mg/L	T	--	45	51	52	50	56	52	46	48	39	47	50 D
Michigan CCR Part 115														
Copper	mg/L	T	0.021	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	0.00043	< 0.00020 U	< 0.00020 U	0.00029
Iron	mg/L	T	83	17	19	19	24	25	25	19	16	15 D	22 D	26
Nickel	mg/L	T	0.10	0.00088 J	0.0020	0.0020	0.0033	0.0018	0.0010 J	0.0012	0.0012	0.00072 J	0.006	0.0072
Silver	mg/L	T	0.00020	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	**< 0.00025 U**	**< 0.00025 U**	< 0.000050 U	< 0.000050 U	< 0.00005 U	**< 0.00025 UD**	**< 0.00005 U**
Vanadium	mg/L	T	0.0062	< 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	0.27	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
Additional Parameters														
Bicarbonate Alkalinity	mg/L	T	--	750	710	750	620	610	400	720	660	780 D	610 D	600
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
Magnesium	mg/L	T	--	38	36	44	50	53	53	47	46 D	41 D	55 D	64
Potassium	mg/L	T	--	13	16	16	10 J	15	14	16	17	15 D	13 D	14
Sodium	mg/L	T	--	29	28	26	26	26	29	30	27 D	27 D	26 D	31
Total Alkalinity	mg/L	T	--	750	710	750	620	610	400	720	660	780 D	610 D	600

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)

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.

D Dilution greater than 1, flagged by Trace.

B constituent detected in blank and sample

			Sample Location:	MW-10										
			Compliance Phase:	Background Monitoring								Initial Assessment Monitoring	Assessment 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
			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:	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent
			Sample Matrix:	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Constituent	Unit	Fraction	Groundwater Protection Standard	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
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
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
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
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
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
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
Appendix III														
Boron	mg/L	T	4.0	**25**	**14**	**9.7**	**4.5**	**9.2**	**17**	**26 J+**	**28 D**	**23 D**	**8.7 D**	**6.4**
Calcium	mg/L	T	250	220	220	**280**	**460**	**280**	210	210 D	160 D	190 D	**310 D**	**590 D**
Chloride	mg/L	T	120	**220**	**170**	**130**	92	**140**	**160**	**320 D**	**430 D**	**310 D**	**140 D**	**240 D**
Fluoride	mg/L	T	2.0	**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**
Sulfate (as SO4)	mg/L	T	250	**490**	**620**	**880**	**360**	**950**	**410**	200 D	140 D	**330 D**	**840 D**	**1700 D**
Total Dissolved Solids	mg/L	T	950	**1700**	**1800**	**1800**	**2400**	**1900**	**1500**	**1700 D**	**1900 D**	**1600 D**	**1800 D**	**3200 D**
Appendix IV														
Antimony	mg/L	T	0.0060	0.00013 J	< 0.000050 U	< 0.00025 U	< 0.000050 U	0.00034 J	< 0.00050 U	0.00011 J	0.00011 J	< 0.00010 UJ	< 0.00050 UD	< 0.0001 U
Arsenic	mg/L	T	0.010	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
Barium	mg/L	T	1.3	0.32	0.57	0.28	0.23	0.14	0.16	0.23	0.28	0.46	0.32 D	0.27
Beryllium	mg/L	T	0.0040	< 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
Cadmium	mg/L	T	0.0025	< 0.000032 U	< 0.000032 U	< 0.00016 U	< 0.000032 U	< 0.00016 U	< 0.00038 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.00038 UD	< 0.000075 U
Chromium, Total	mg/L	T	0.10	0.0040	0.0050	0.0026	0.0018	0.0019	0.0042	0.0070	0.0085	0.0042	0.0013	0.0016
Cobalt	mg/L	T	0.0060	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	0.0001 J
Fluoride	mg/L	T	2.0	**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**
Lead	mg/L	T	0.0016	< 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	0.0005 UD	< 0.0001 U
Lithium	mg/L	T	0.10	**0.92**	**0.83**	**0.54**	**1.6**	**0.99**	**0.83**	**1.1**	**1.2**	**0.94 D**	**0.56 D**	**0.76**
Mercury	mg/L	T	0.00016	< 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**
Molybdenum	mg/L	T	0.10	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
Radium 226 and 228	pCi/L	T	5.0	< 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
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
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
Selenium	mg/L	T	0.0050	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	0.0003 J
Thallium	mg/L	T	0.0020	< 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
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	< 4.0 U	< 4.0 U	6
Michigan CCR Part 115														
Copper	mg/L	T	0.021	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	< 0.0002 U
Iron	mg/L	T	83	3.7	3.7	3.9	7.2	7.3	6.2	4.5	3.2	2.4 D	3.7 D	6
Nickel	mg/L	T	0.10	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
Silver	mg/L	T	0.00020	< 0.000051 U	< 0.000050 U	**< 0.00025 U**	< 0.000050 U	**< 0.00025 U**	**< 0.00025 U**	< 0.000050 U	< 0.000050 U	< 0.00005 U	**< 0.00025 UD**	**< 0.00005 U**
Vanadium	mg/L	T	0.0062	< 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
Zinc	mg/L	T	0.27	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
Additional Parameters														
Bicarbonate Alkalinity	mg/L	T	--	680	580	320	140	340	540	720	770	700 D	240 D	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	< 0.31 UD	< 0.16 U
Magnesium	mg/L	T	--	85	86	91	95	76	63	59	58 D	61 D	86 D	120 D
Potassium	mg/L	T	--	44	33	31	40	42	36	46	48 D	45 D	41 D	60
Sodium	mg/L	T	--	220	160	120	140	160	190	310 D	390 D	300 D	120 D	130 D
Total Alkalinity	mg/L	T	--	680	580	320	140	340	540	720	770	700 D	240 D	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)

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.

D Dilution greater than 1, flagged by Trace.

B constituent detected in blank and sample

			Sample Location:	MW-11											
			Compliance Phase:	Background Monitoring								Initial Assessment Monitoring	Assessment 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
			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:	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B
			Sample Matrix:	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Constituent	Unit	Fraction	Groundwater Protection Standard	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
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
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
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
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
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
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
Appendix III														
Boron	mg/L	T	4.0	**8.5**	**13**	**4.8 B**	2.8	1.5	2.0	3.0 J+	**7.2**	**12 D**	**8.1 D**	**3.2**
Calcium	mg/L	T	250	240	130	**300**	**380**	**320**	**320**	**350 D**	240 D	150 D	230 D	290 D
Chloride	mg/L	T	120	95	84	78	62	52	53	72 D	73 D	88 D	62 D	38 D
Fluoride	mg/L	T	2.0	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
Sulfate (as SO4)	mg/L	T	250	13 J	10	42	180	210	87	17 D	1.8 JD	< 0.41 UD	< 0.41 UD	14 D
Total Dissolved Solids	mg/L	T	950	**970 J-**	680	**1200**	**1100**	**1200**	**1200**	**1100 D**	930 D	**1800 D**	880 D	960 D
Appendix IV														
Antimony	mg/L	T	0.0060	0.000082 J	0.00069	< 0.000050 U	< 0.000050 U	0.00028 J	< 0.00050 U	< 0.00010 U	< 0.00010 U	< 0.00010 U	< 0.00010 U	0.00028
Arsenic	mg/L	T	0.010	0.0017	0.0041	0.0016	0.0011	0.00061	0.0010	0.0012 J+	0.0019	0.0023	0.0012	0.0013
Barium	mg/L	T	1.3	0.74	1.2	0.59	0.60	0.36	0.41	0.50	0.57	0.87	0.83	0.53
Beryllium	mg/L	T	0.0040	< 0.000052 U	0.000091 J	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 UJ	< 0.000052 U	< 0.000052 U	< 0.000052 U	0.00044
Cadmium	mg/L	T	0.0025	< 0.000032 U	0.00073	< 0.000032 U	< 0.000032 U	< 0.00016 U	< 0.00038 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.000075 U	0.00016 J
Chromium, Total	mg/L	T	0.10	0.00080	0.0086	0.0010	0.00087	0.00045	0.00052	0.0012	0.0018	0.00063	0.00062	0.00078
Cobalt	mg/L	T	0.0060	0.00036 J	0.0012	0.00061	0.00072	0.00040 J	0.00040 J	0.00066 J+	0.00061	0.00023 J	0.00026 J	0.0024
Fluoride	mg/L	T	2.0	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
Lead	mg/L	T	0.0016	**0.0025**	**0.068**	**0.0018 J**	< 0.00022 U	< 0.0011 U	< 0.00050 U	**0.0038 J+**	0.00017 J	0.00036 J	0.00031 J	0.00043 J
Lithium	mg/L	T	0.10	**0.10**	**0.22**	0.052	0.028	0.0059	0.0084	0.022	0.095	**0.15 D**	0.077 D	0.028
Mercury	mg/L	T	0.00016	< 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**
Molybdenum	mg/L	T	0.10	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	0.003
Radium 226 and 228	pCi/L	T	5.0	1.19	1.32	< 0.91 U	1.07	1.67	0.812	< 1.0 U	1.76	0.764	1.13	< 0.775 U
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
Radium-228	pCi/L	T	--	0.75	0.903	< 0.91 U	< 0.84 U	1.26	< 0.721 U	< 1.0 U	1.35	< 0.624 U	< 0.765 U	< 0.775 U
Selenium	mg/L	T	0.0050	0.00022 J	0.00031 J	< 0.00022 U	< 0.00022 U	< 0.00022 U	0.00014 J	0.00016 J+	0.00021 J	0.00020 J	0.00071	0.00041 J
Thallium	mg/L	T	0.0020	< 0.000075 U	< 0.000075 U	< 0.00038 U	< 0.000075 U	< 0.00038 U	< 0.00038 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.000075 U	0.00021 J
Total Suspended Solids	mg/L	T	--	21	35	10	11	4.0	< 4.0 U	4.0	6.0	19	9.0	4.0
Michigan CCR Part 115														
Copper	mg/L	T	0.021	0.00043	0.019	0.00047	< 0.00020 U	< 0.00020 U	0.00024 J	0.00056 B	0.0016	< 0.00020 U	< 0.00020 J	0.0021
Iron	mg/L	T	83	8.7	10	4.9	6.1	3.6	3.8	4.2	6.7	11 D	8.5 D	5.6
Nickel	mg/L	T	0.10	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
Silver	mg/L	T	0.00020	< 0.000050 U	0.00014	< 0.000050 U	< 0.000050 U	**< 0.00025 U**	**< 0.00025 U**	< 0.000050 U	< 0.000050 U	< 0.00005 U	< 0.00005 U	0.00017
Vanadium	mg/L	T	0.0062	< 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
Zinc	mg/L	T	0.27	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
Additional Parameters														
Bicarbonate Alkalinity	mg/L	T	--	840	600	860	810	800	840	890	800	660 D	760 D	840
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
Magnesium	mg/L	T	--	60	55	63	67	60	55	55	56 D	52 D	61 D	55
Potassium	mg/L	T	--	15	19	11	8.5	5.7	5.5	8.1	14	18 D	14 D	7.2
Sodium	mg/L	T	--	57	70	37	25	21	26	38	50 D	67 D	51 D	28
Total Alkalinity	mg/L	T	--	840	600	860	810	800	840	890	800	660 D	760 D	840

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)

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.

D Dilution greater than 1, flagged by Trace.

B constituent detected in blank and sample

			Sample Location:	MW-12										
			Compliance Phase:	Background Monitoring								Initial Assessment Monitoring	Assessment 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	2/14/2024	4/7/2024
			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:	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B	Unit 3A/B
			Sample Matrix:	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Constituent	Unit	Fraction	Groundwater Protection Standard	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
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
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
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
pH	su	N	--	7.67	7	7.8	8.16	7.92	7.77	7.52	7.47	7.46	8.32	7.91
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
Turbidity	NTU	N	--	0.02	0.02	0.02	0.02	0.02	1.92	0.02	0.02	0.31	0.02	0.02
Appendix III														
Boron	mg/L	T	4.0	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
Calcium	mg/L	T	250	77	46	78	77	55	63	64	95 D	95 D	40 D	40
Chloride	mg/L	T	120	24	16	27	18	16	15	17 D	22 D	26 D	17 D	12 D
Fluoride	mg/L	T	2.0	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
Sulfate (as SO4)	mg/L	T	250	180	130	180	120	110	99	110 D	130 D	130 D	84 D	68 D
Total Dissolved Solids	mg/L	T	950	360	210	340	200	260	270	330 D	420	200	100 D	210
Appendix IV														
Antimony	mg/L	T	0.0060	0.00071	0.0011	0.00076	0.00053	0.00094	0.00092	0.00064	0.00040	0.00041	0.00035	0.00053
Arsenic	mg/L	T	0.010	0.0028	0.0019	0.0018	0.0014	0.0019	0.0024	0.0029 J+	0.0034	0.0031	0.0016	0.0017
Barium	mg/L	T	1.3	0.030	0.017	0.024	0.025	0.022	0.032	0.043	0.053	0.060	0.022	0.025
Beryllium	mg/L	T	0.0040	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 UJ	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U
Cadmium	mg/L	T	0.0025	0.00067	0.00078	0.0014	0.00062	0.0012	0.0016	0.0024 J+	0.0022	0.0011	0.00054	0.00082
Chromium, Total	mg/L	T	0.10	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
Cobalt	mg/L	T	0.0060	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	< 0.0001 U
Fluoride	mg/L	T	2.0	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
Lead	mg/L	T	0.0016	< 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
Lithium	mg/L	T	0.10	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
Mercury	mg/L	T	0.00016	< 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**
Molybdenum	mg/L	T	0.10	0.0087	0.0072	0.0067	0.0056	0.0057	0.0069	0.0082 J+	0.0088	0.0096	0.0051	0.0046
Radium 226 and 228	pCi/L	T	5.0	< 0.543 U	< 0.459 U	< 0.685 U	< 0.619 U	0.809	1.09	< 0.59 UJ	< 0.578 UJ	< 0.517 U	< 0.749 U	0.769
Radium-226	pCi/L	T	--	< 0.13 U	< 0.0702 U	< 0.0727 U	< 0.126 U	< 0.129 U	< 0.136 U	< 0.124 U	< 0.106 UJ	< 0.212 U	< 0.116 U	< 0.146 U
Radium-228	pCi/L	T	--	< 0.543 U	< 0.459 U	< 0.685 U	< 0.619 U	0.793	1.07	< 0.59 UJ	< 0.578 UJ	< 0.517 U	< 0.749 U	0.729
Selenium	mg/L	T	0.0050	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
Thallium	mg/L	T	0.0020	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	--	< 4.0 U	< 4.0 U	2.0 J	< 4.0 U	1.0 J	< 4.0 U	< 4.0 UJ	0.98 J+	< 4.0 U	< 4.0 U	< 4 UD
Michigan CCR Part 115														
Copper	mg/L	T	0.021	0.00055	0.00092	0.0010	0.0010	0.0015	0.0016	0.0012 B	0.00094	0.00071	0.0012	0.0013
Iron	mg/L	T	83	< 0.26 U	< 0.026 U	0.033 J	0.027 J	< 0.026 U	< 0.026 U	0.051	0.064	0.037 J	0.026 UJ	< 0.026 UJ
Nickel	mg/L	T	0.10	0.0025	0.0023	0.0035	0.0016	0.0021	0.0025	0.0031	0.0035	0.0026	0.0014	0.0014
Silver	mg/L	T	0.00020	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.00005 U	< 0.00005 U	< 0.00005 U
Vanadium	mg/L	T	0.0062	< 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
Zinc	mg/L	T	0.27	0.0068	0.0080	0.0095	0.0037	0.0090	0.0074	0.0085	0.010	0.0080	0.0027	0.005
Additional Parameters														
Bicarbonate Alkalinity	mg/L	T	--	86	55	52	46	85	95	140	140	190 D	47	86
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
Magnesium	mg/L	T	--	17	12	2.4	12	13	15	14	19	22 D	11 D	13
Potassium	mg/L	T	--	1.3	0.70	0.74	0.82	1.0	1.3	1.3	1.8	1.7	0.62	0.6
Sodium	mg/L	T	--	13	11	14	9.9	9.4	11	11	14	16 D	9.8 D	8.8
Total Alkalinity	mg/L	T	--	86	55	52	46	85	95	140	140	190 D	47	86

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)

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.

D Dilution greater than 1, flagged by Trace.

B constituent detected in blank and sample

			Sample Location:	MW-16
			Compliance Phase:	Assessment Monitoring
			Sample Date:	4/8/2024
			Sample Type:	Field Sample
			Unit:	Nature and Extent
			Sample Matrix:	Groundwater
Constituent	Unit	Fraction	Groundwater Protection Standard	Result
Field Parameters				
Conductivity	mS/cm	N	--	1.1
Dissolved Oxygen	mg/L	N	--	0.04
Oxidation Reduction Potential	mV	N	--	-90.4
pH	su	N	--	7.29
Temperature	deg c	N	--	7.1
Turbidity	NTU	N	--	0.02
Appendix III				
Boron	mg/L	T	4.0	0.22
Calcium	mg/L	T	250	190 D
Chloride	mg/L	T	120	14 D
Fluoride	mg/L	T	2.0	0.14 D
Sulfate (as SO4)	mg/L	T	250	60 D
Total Dissolved Solids	mg/L	T	950	680 D
Appendix IV				
Antimony	mg/L	T	0.0060	< 0.0001 U
Arsenic	mg/L	T	0.010	0.0052
Barium	mg/L	T	1.3	0.18
Beryllium	mg/L	T	0.0040	< 0.000052 U
Cadmium	mg/L	T	0.0025	< 0.000075 U
Chromium, Total	mg/L	T	0.10	0.00064
Cobalt	mg/L	T	0.0060	0.00021 J
Fluoride	mg/L	T	2.0	0.14 D
Lead	mg/L	T	0.0016	< 0.0001 U
Lithium	mg/L	T	0.10	0.016
Mercury	mg/L	T	0.00016	< 0.00016 U
Molybdenum	mg/L	T	0.10	< 0.00025 U
Radium 226 and 228	pCi/L	T	5.0	1.01
Radium-226	pCi/L	T	--	< 0.199 U
Radium-228	pCi/L	T	--	0.902
Selenium	mg/L	T	0.0050	0.00012 J
Thallium	mg/L	T	0.0020	< 0.000075 U
Total Suspended Solids	mg/L	T	--	16 D
Michigan CCR Part 115				
Copper	mg/L	T	0.021	0.00025
Iron	mg/L	T	83	7.1
Nickel	mg/L	T	0.10	0.00065 J
Silver	mg/L	T	0.00020	< 0.00005 U
Vanadium	mg/L	T	0.0062	< 0.00062 U
Zinc	mg/L	T	0.27	< 0.0012 U
Additional Parameters				
Bicarbonate Alkalinity	mg/L	T	--	550
Carbonate Alkalinity	mg/L	T	--	< 0.16 U
Magnesium	mg/L	T	--	23
Potassium	mg/L	T	--	3.9
Sodium	mg/L	T	--	17
Total Alkalinity	mg/L	T	--	550

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)

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.

D Dilution greater than 1, flagged by Trace.

B constituent detected in blank and sample

			Sample Location:	MW-17
			Compliance Phase:	Assessment Monitoring
			Sample Date:	4/8/2024
			Sample Type:	Field Sample
			Unit:	Nature and Extent
			Sample Matrix:	Groundwater
Constituent	Unit	Fraction	Groundwater Protection Standard	Result
Field Parameters				
Conductivity	mS/cm	N	--	1.12
Dissolved Oxygen	mg/L	N	--	0.06
Oxidation Reduction Potential	mV	N	--	-157.2
pH	su	N	--	7.88
Temperature	deg c	N	--	9.1
Turbidity	NTU	N	--	0.02
Appendix III				
Boron	mg/L	T	4.0	0.79
Calcium	mg/L	T	250	160 D
Chloride	mg/L	T	120	43 D
Fluoride	mg/L	T	2.0	0.48 D
Sulfate (as SO4)	mg/L	T	250	4.8 JD
Total Dissolved Solids	mg/L	T	950	620 D
Appendix IV				
Antimony	mg/L	T	0.0060	< 0.0001 U
Arsenic	mg/L	T	0.010	0.0018
Barium	mg/L	T	1.3	0.70
Beryllium	mg/L	T	0.0040	< 0.000052 U
Cadmium	mg/L	T	0.0025	< 0.000075 U
Chromium, Total	mg/L	T	0.10	0.00076
Cobalt	mg/L	T	0.0060	0.00033 J
Fluoride	mg/L	T	2.0	0.48 D
Lead	mg/L	T	0.0016	0.00019 J
Lithium	mg/L	T	0.10	0.035
Mercury	mg/L	T	0.00016	< 0.00016 U
Molybdenum	mg/L	T	0.10	0.00079 J
Radium 226 and 228	pCi/L	T	5.0	0.656
Radium-226	pCi/L	T	--	< 0.185 U
Radium-228	pCi/L	T	--	< 0.571 U
Selenium	mg/L	T	0.0050	0.00014 J
Thallium	mg/L	T	0.0020	< 0.000075 U
Total Suspended Solids	mg/L	T	--	9.0
Michigan CCR Part 115				
Copper	mg/L	T	0.021	0.00088
Iron	mg/L	T	83	6.6
Nickel	mg/L	T	0.10	0.0011 J
Silver	mg/L	T	0.00020	< 0.00005 U
Vanadium	mg/L	T	0.0062	0.00084 J
Zinc	mg/L	T	0.27	0.0026
Additional Parameters				
Bicarbonate Alkalinity	mg/L	T	--	530
Carbonate Alkalinity	mg/L	T	--	< 0.16 U
Magnesium	mg/L	T	--	30
Potassium	mg/L	T	--	15
Sodium	mg/L	T	--	59
Total Alkalinity	mg/L	T	--	530

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)

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.

D Dilution greater than 1, flagged by Trace.

B constituent detected in blank and sample

Sample Location:				MW-18										
Compliance Phase:				Background Monitoring								Initial Assessment Monitoring	Assessment 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
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:				Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2
Sample Matrix:				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Constituent	Unit	Fraction	Groundwater Protection Standard	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
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
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
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
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
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
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
Appendix III														
Boron	mg/L	T	4.0	2.2	2.0	2.3	1.9	1.8	2.6	2.7 J+	2.3	3.0 D	3.5 D	4 D
Calcium	mg/L	T	250	**450**	**410**	**380**	**330**	**270**	**340**	240 D	**250 D**	**360 D**	**370 D**	**350 D**
Chloride	mg/L	T	120	28	26	22	19	16	19	24 D	27 D	22 D	24 D	16 D
Fluoride	mg/L	T	2.0	**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**
Sulfate (as SO4)	mg/L	T	250	**1200**	**1200**	**480**	**740**	**660**	**780**	**760 D**	**620 D**	**800 D**	**980 D**	**790 D**
Total Dissolved Solids	mg/L	T	950	**1800**	**1700**	**1600**	**1200**	**1200**	**1400**	**1400 D**	**1100 D**	**1400 D**	**1400 D**	**1400**
Appendix IV														
Antimony	mg/L	T	0.0060	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
Arsenic	mg/L	T	0.010	**0.029**	**0.020**	**0.023**	**0.019**	**0.021**	**0.015**	**0.029 J+**	**0.030**	**0.041**	**0.024**	**0.029**
Barium	mg/L	T	1.3	0.021	0.018	0.015	0.012	0.013	0.023	0.024	0.023	0.025	0.015 D	0.014
Beryllium	mg/L	T	0.0040	< 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
Cadmium	mg/L	T	0.0025	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
Chromium, Total	mg/L	T	0.10	< 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	< 0.0002 U
Cobalt	mg/L	T	0.0060	**0.0060**	0.0054	0.0048	0.0032	0.0020	0.0019	0.0032 J+	0.0023	0.0017	0.0023	0.002
Fluoride	mg/L	T	2.0	**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**
Lead	mg/L	T	0.0016	< 0.00022 U	< 0.00022 U	< 0.0011 U	< 0.00022 U	< 0.00022 U	< 0.00050 U	0.00016 J+	0.00032 J	0.00014 J	< 0.00050 UD	< 0.0001 U
Lithium	mg/L	T	0.10	0.044	0.042	0.029	0.027	0.026	0.029	0.041	0.045	0.039 D	0.020 D	0.03
Mercury	mg/L	T	0.00016	< 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	0.10	0.013	0.012	0.011	0.013	0.014	0.0090	0.019 J+	0.021	0.02	0.011	0.013
Radium 226 and 228	pCi/L	T	5.0	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
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
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
Selenium	mg/L	T	0.0050	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	0.002
Thallium	mg/L	T	0.0020	< 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
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
Michigan CCR Part 115														
Copper	mg/L	T	0.021	0.00043	0.00043	0.00043	0.00043	0.00062	0.00055	0.00088 B	0.0015	0.00047	0.00033	0.00048
Iron	mg/L	T	83	10	8.6	6.8	5.4	4.3	5.3	5.8	4.9	7.0 D	7.7 D	7
Nickel	mg/L	T	0.10	0.011	0.011	0.0094	0.0074	0.0051	0.0050	0.0075	0.0049	0.0047	0.0056	0.0053
Silver	mg/L	T	0.00020	< 0.000050 U	< 0.000050 U	**< 0.00025 U**	< 0.000050 U	< 0.000050 U	**< 0.00025 U**	< 0.000050 U	< 0.000050 U	< 0.00005 U	**< 0.00025 UD**	**< 0.00005 U**
Vanadium	mg/L	T	0.0062	< 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	0.27	0.074	0.088	0.060	0.068	0.043	0.038	0.061	0.028	0.054	0.042	0.038
Additional Parameters														
Bicarbonate Alkalinity	mg/L	T	--	160	110	100	130	140	130	150	200	200 D	120	120
Carbonate Alkalinity	mg/L	T	--	< 1.6 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.31 UD	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	--	37	36	33	26	22	29	28	21	30 D	42 D	39
Potassium	mg/L	T	--	11	12	11	9.4	8.7	10	11	11	11 D	8.9 D	9.1
Sodium	mg/L	T	--	21	20	21	17	15	18	20	20	20 D	24 D	23
Total Alkalinity	mg/L	T	--	160	110	100	130	140	130	150	200	200 D	120	120

Notes:

ug/l - micrograms per liter.

mg/l = milligrams per liter.

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

pCi/L = picocuries per liter.

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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.

D Dilution greater than 1, flagged by Trace.

B constituent detected in blank and sample

			Sample Location:	MW-19										
			Compliance Phase:	Background Monitoring								Initial Assessment Monitoring	Assessment 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
			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:	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2
			Sample Matrix:	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Constituent	Unit	Fraction	Groundwater Protection Standard	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
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
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
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
pH	su	N	--	7	6.39	6.98	6.9	6.92	7.07	6.9	6.82	6.88	6.73	6.85
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
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
Appendix III														
Boron	mg/L	T	4.0	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
Calcium	mg/L	T	250	**530**	**510**	**550**	**510**	**450 E**	**480**	**460 D**	**360 D**	**470 D**	**490 D**	**480 D**
Chloride	mg/L	T	120	75	64	66	46	42	40	37 D	38 D	50 D	39 D	23 D
Fluoride	mg/L	T	2.0	**2.2**	**2.3**	1.9	1.7	1.8	1.9	1.9 D	**2.2 D**	**2.0 D**	1.6 D	1.5 D
Sulfate (as SO4)	mg/L	T	250	**1300**	**1300**	**600**	**1100**	**1200**	**1100**	**800 D**	**830 D**	**1100 D**	**1000 D**	**1000 D**
Total Dissolved Solids	mg/L	T	950	**2200 J-**	**2200**	**2200**	**2100**	**2000**	**2000**	**1600 D**	**1600 D**	**1900 D**	**1800 D**	**1700 D**
Appendix IV														
Antimony	mg/L	T	0.0060	< 0.000050 U	< 0.000050 U	< 0.00025 U	< 0.000050 U	0.00072 J	< 0.00050 U	< 0.00010 U	< 0.00010 U	< 0.00010 U	< 0.00050 UD	< 0.0001 U
Arsenic	mg/L	T	0.010	0.0061	0.0055	0.0055	0.0043	0.0032	0.0031	0.0069 J+	0.0073	0.0067	0.0026	0.0044
Barium	mg/L	T	1.3	0.046	0.050	0.047	0.036	0.030	0.040	0.040	0.037	0.044	0.037 D	0.034
Beryllium	mg/L	T	0.0040	< 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
Cadmium	mg/L	T	0.0025	< 0.000032 U	< 0.000032 U	< 0.00016 U	< 0.000032 U	< 0.00016 U	< 0.00038 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.00038 UD	< 0.000075 U
Chromium, Total	mg/L	T	0.10	0.00027	0.00053	< 0.00088 U	0.00037	< 0.00018 U	< 0.00020 U	0.00031	0.00029	< 0.00020 U	< 0.00020 U	0.00025
Cobalt	mg/L	T	0.0060	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
Fluoride	mg/L	T	2.0	**2.2**	**2.3**	1.9	1.7	1.8	1.9	1.9 D	**2.2 D**	**2.0 D**	1.6 D	1.5 D
Lead	mg/L	T	0.0016	< 0.00022 U	< 0.00022 U	< 0.0011 U	< 0.0011 U	< 0.0011 U	< 0.00050 U	< 0.00010 UJ	< 0.00010 U	< 0.00010 U	< 0.00050 UD	< 0.0001 U
Lithium	mg/L	T	0.10	0.099	**0.11**	0.099	0.090	**0.11**	0.085	0.090	0.098	0.089 D	0.073 D	0.074
Mercury	mg/L	T	0.00016	< 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	0.10	0.013	0.011	0.0095	0.011	0.0090	0.0051	0.012 J+	0.013	0.010	0.0039	0.0099
Radium 226 and 228	pCi/L	T	5.0	< 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
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
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
Selenium	mg/L	T	0.0050	< 0.00022 U	< 0.00022 U	< 0.0011 U	< 0.00022 U	< 0.00022 U	< 0.00010 U	< 0.00010 UJ	< 0.00010 U	< 0.00010 U	0.00012 J	< 0.0001 U
Thallium	mg/L	T	0.0020	< 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
Total Suspended Solids	mg/L	T	--	27	25	16	6.0	23	19	29	33	26	17	6
Michigan CCR Part 115														
Copper	mg/L	T	0.021	< 0.00020 U	< 0.00020 U	< 0.0010 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	0.00022 J
Iron	mg/L	T	83	15	18	16	13	12	13	16	15	24 D	20 D	17
Nickel	mg/L	T	0.10	0.0024	0.0028	< 0.0032 U	0.0024	0.0017	0.0011 J	0.0015	0.0015	0.0012	0.0012	0.0025
Silver	mg/L	T	0.00020	< 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**	**< 0.00005 U**
Vanadium	mg/L	T	0.0062	< 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
Zinc	mg/L	T	0.27	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
Additional Parameters														
Bicarbonate Alkalinity	mg/L	T	--	330	340	310	280	240	260	340	330	270 D	290	270
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
Magnesium	mg/L	T	--	49	42	45	38	43	45	32	30 D	39 D	39 D	35
Potassium	mg/L	T	--	18	22	16	20	16	16	15	17	16 D	15 D	14
Sodium	mg/L	T	--	48	40	44	37	38	38	36	31 D	37 D	33 D	30
Total Alkalinity	mg/L	T	--	330	340	310	280	240	260	340	330	270 D	290	270

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)

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.

D Dilution greater than 1, flagged by Trace.

B constituent detected in blank and sample

			Sample Location:	MW-20										
			Compliance Phase:	Background Monitoring								Initial Assessment Monitoring	Assessment 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
			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:	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2
			Sample Matrix:	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Constituent	Unit	Fraction	Groundwater Protection Standard	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
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
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
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
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
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
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
Appendix III														
Boron	mg/L	T	4.0	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
Calcium	mg/L	T	250	130	120	140	170	130	130	58	110 D	130 D	120 D	140 D
Chloride	mg/L	T	120	70	66	62	60	88	92	71 D	70 D	70 D	41 D	77 D
Fluoride	mg/L	T	2.0	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
Sulfate (as SO4)	mg/L	T	250	42	78	120	110	85	76	30 D	19 D	33 D	78 D	62 D
Total Dissolved Solids	mg/L	T	950	660	660	690	680	760	770	650 D	570 D	650 D	640 D	840 D
Appendix IV														
Antimony	mg/L	T	0.0060	0.000096 J	0.000054 J	0.000066 J	0.000062 J	0.00016 J	< 0.00010 U	0.00011 J	0.00014 J	< 0.00010 U	< 0.00010 U	< 0.0001 U
Arsenic	mg/L	T	0.010	0.0015	0.0012	0.0012	0.0012	0.0013	0.0015	0.0016 J+	0.0017	0.0017	0.0011	0.0013
Barium	mg/L	T	1.3	0.94	0.61	0.47	0.37	0.31	0.42	0.43	0.49	0.53	0.42	0.45
Beryllium	mg/L	T	0.0040	< 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 J	< 0.000052 U
Cadmium	mg/L	T	0.0025	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000075 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Chromium, Total	mg/L	T	0.10	0.00019 J	< 0.00018 U	0.00025	0.00029	0.00021 J	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	0.00022 J	0.00026
Cobalt	mg/L	T	0.0060	0.0013	0.0013	0.0016	0.0016	0.0014	0.0013	0.0014 J+	0.0011	0.00095	0.0011	0.0011
Fluoride	mg/L	T	2.0	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
Lead	mg/L	T	0.0016	**0.0023**	**0.0016**	**0.0016**	**0.0016**	**0.0028**	**0.0023**	**0.0028 J+**	**0.0023**	**0.0018**	0.0013	0.0014
Lithium	mg/L	T	0.10	0.074	0.065	0.049	0.055	0.060	0.062	0.083	0.079	0.071 D	0.029 D	0.053
Mercury	mg/L	T	0.00016	< 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	0.10	0.0041	0.0039	0.0041	0.0038	0.0036	0.0048	0.0048 J+	0.0051	0.0047	0.0045	0.0033
Radium 226 and 228	pCi/L	T	5.0	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
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
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
Selenium	mg/L	T	0.0050	< 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
Thallium	mg/L	T	0.0020	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	0.00011 J	< 0.000075 U
Total Suspended Solids	mg/L	T	--	40	42	33	37	44	42	37 D	37	38 D	33	43
Michigan CCR Part 115														
Copper	mg/L	T	0.021	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
Iron	mg/L	T	83	21	19	18	19	21	22	18	16	20 D	18 D	22
Nickel	mg/L	T	0.10	0.0091	0.0091	0.0095	0.0099	0.0092	0.0094	0.0098	0.0078	0.0066	0.0061	0.0077
Silver	mg/L	T	0.00020	< 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	< 0.00005 U
Vanadium	mg/L	T	0.0062	< 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	0.27	0.071	0.024	0.028	0.029	0.060	0.028	0.030	0.025	0.024	0.016	0.024
Additional Parameters														
Bicarbonate Alkalinity	mg/L	T	--	540	470	470	460	520	540	470	460	560 D	460	570
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
Magnesium	mg/L	T	--	57	53	52	56	57	62	47	48 D	53 D	45 D	55
Potassium	mg/L	T	--	13	13	11	12	13	12	13	13	12 D	8.5 D	11
Sodium	mg/L	T	--	65	59	57	56	63	79	67	57 D	61 D	48 D	80
Total Alkalinity	mg/L	T	--	540	470	470	460	520	540	470	460	560 D	460	570

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)

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.

D Dilution greater than 1, flagged by Trace.

B constituent detected in blank and sample

			Sample Location:	MW-27										
			Compliance Phase:	Background Monitoring								Initial Assessment Monitoring	Assessment 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
			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:	Background Well	Background Well	Background Well	Background Well	Background Well	Background Well	Background Well	Background Well	Background Well	Background Well	Background Well
			Sample Matrix:	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Constituent	Unit	Fraction	Groundwater Protection Standard	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
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
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
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
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
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
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
Appendix III														
Boron	mg/L	T	4.0	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
Calcium	mg/L	T	250	200	180	180	180	100	130	180 D	150 D	190 D	160 D	130 D
Chloride	mg/L	T	120	**120**	84	69	60	38	52	110 D	100 D	110 D	44 D	17 D
Fluoride	mg/L	T	2.0	0.37	0.29	0.31	0.41	0.42	0.35	0.36 D	0.41 D	0.43 D	0.4 D	0.71 D
Sulfate (as SO4)	mg/L	T	250	6.8	41	58	47	14	1.8 J	0.56 JD	3.0 D	2.4 JD	72 D	41 D
Total Dissolved Solids	mg/L	T	950	920	710	790	620	460	590	790 D	690 D	870 D	**1300 D**	**560 D**
Appendix IV														
Antimony	mg/L	T	0.0060	0.00013 J	0.000075 J	0.000099 J	0.000060 J	0.00028	< 0.00010 U	< 0.00010 U	< 0.00010 U	< 0.00010 U	< 0.00010 U	< 0.0001 U
Arsenic	mg/L	T	0.010	0.00086	0.00070	0.00069	0.00069	0.00095	0.00096	0.0010 J+	0.0012	0.0011	0.00082	0.0012
Barium	mg/L	T	1.3	0.21	0.17	0.16	0.12	0.074	0.15	0.25	0.25	0.31	0.16	0.1
Beryllium	mg/L	T	0.0040	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 UJ	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U
Cadmium	mg/L	T	0.0025	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000075 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Chromium, Total	mg/L	T	0.10	0.018	0.016	0.0097	0.0099	0.0083	0.025	0.027	0.034	0.028	0.0090	0.0073
Cobalt	mg/L	T	0.0060	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
Fluoride	mg/L	T	2.0	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
Lead	mg/L	T	0.0016	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00010 U	< 0.00010 UJ	< 0.00010 U	< 0.00010 U	< 0.00010 U	< 0.0001 U
Lithium	mg/L	T	0.10	0.0086	0.0088	0.0067	0.0073	0.0075	0.0073	0.017 D	0.0093	0.0099	0.0050	0.0058
Mercury	mg/L	T	0.00016	< 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	0.10	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	< 0.00062 U	0.00041 J	< 0.00025 UJ	< 0.00025 U	< 0.00025 U	< 0.00025 U	< 0.00025 U
Radium 226 and 228	pCi/L	T	5.0	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
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
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
Selenium	mg/L	T	0.0050	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
Thallium	mg/L	T	0.0020	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	--	34	27	22	14	5.0	11	19 D	11	22	23	9
Michigan CCR Part 115														
Copper	mg/L	T	0.021	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
Iron	mg/L	T	83	13	11	11	8.3	5.5	7.6	9.4	8.0	11 D	9.9 D	7.7
Nickel	mg/L	T	0.10	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
Silver	mg/L	T	0.00020	< 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	< 0.00005 U
Vanadium	mg/L	T	0.0062	< 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
Zinc	mg/L	T	0.27	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
Additional Parameters														
Bicarbonate Alkalinity	mg/L	T	--	1200	880	800	590	480	770	1100 D	1100	1400 D	790 D	520
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
Magnesium	mg/L	T	--	45	45	47	44	26	31	33	35 D	40 D	55 D	39
Potassium	mg/L	T	--	7.6	7.3	6.2	5.8	4.1	6.5	11	12	11 D	4.9 D	3.5
Sodium	mg/L	T	--	92	68	59	61	41	52	75	80 D	82 D	59 D	41
Total Alkalinity	mg/L	T	--	1200	880	800	590	480	770	1100 D	1100	1400 D	790 D	520

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)

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.

D Dilution greater than 1, flagged by Trace.

B constituent detected in blank and sample

			Sample Location:	MW-28
			Compliance Phase:	Assessment Monitoring
			Sample Date:	4/7/2024
			Sample Type:	Field Sample
			Unit:	Nature and Extent
			Sample Matrix:	Groundwater
Constituent	Unit	Fraction	Groundwater Protection Standard	Result
Field Parameters				
Conductivity	mS/cm	N	--	1.18
Dissolved Oxygen	mg/L	N	--	0.08
Oxidation Reduction Potential	mV	N	--	-118.7
pH	su	N	--	7.02
Temperature	deg c	N	--	8.1
Turbidity	NTU	N	--	3.17
Appendix III				
Boron	mg/L	T	4.0	2.2
Calcium	mg/L	T	250	170 D
Chloride	mg/L	T	120	18 D
Fluoride	mg/L	T	2.0	0.9 D
Sulfate (as SO4)	mg/L	T	250	11 D
Total Dissolved Solids	mg/L	T	950	610 D
Appendix IV				
Antimony	mg/L	T	0.0060	0.00028
Arsenic	mg/L	T	0.010	0.0011
Barium	mg/L	T	1.3	0.34
Beryllium	mg/L	T	0.0040	< 0.000052 U
Cadmium	mg/L	T	0.0025	< 0.000075 U
Chromium, Total	mg/L	T	0.10	0.017
Cobalt	mg/L	T	0.0060	0.00064
Fluoride	mg/L	T	2.0	0.9 D
Lead	mg/L	T	0.0016	0.0011
Lithium	mg/L	T	0.10	0.05
Mercury	mg/L	T	0.00016	**0.00024**
Molybdenum	mg/L	T	0.10	0.00087 J
Radium 226 and 228	pCi/L	T	5.0	0.909
Radium-226	pCi/L	T	--	0.282
Radium-228	pCi/L	T	--	< 0.842 U
Selenium	mg/L	T	0.0050	0.00032 J
Thallium	mg/L	T	0.0020	< 0.000075 U
Total Suspended Solids	mg/L	T	--	44 D
Michigan CCR Part 115				
Copper	mg/L	T	0.021	0.00052
Iron	mg/L	T	83	30
Nickel	mg/L	T	0.10	0.0036
Silver	mg/L	T	0.00020	< 0.00005 U
Vanadium	mg/L	T	0.0062	0.00063 J
Zinc	mg/L	T	0.27	0.009
Additional Parameters				
Bicarbonate Alkalinity	mg/L	T	--	560
Carbonate Alkalinity	mg/L	T	--	< 0.16 U
Magnesium	mg/L	T	--	27
Potassium	mg/L	T	--	12
Sodium	mg/L	T	--	29
Total Alkalinity	mg/L	T	--	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)

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.

D Dilution greater than 1, flagged by Trace.

B constituent detected in blank and sample

			Sample Location:	MW-30										
			Compliance Phase:	Background Monitoring								Initial Assessment Monitoring	Assessment 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
			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:	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2
			Sample Matrix:	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Constituent	Unit	Fraction	Groundwater Protection Standard	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
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
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
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
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
Temperature	deg c	N	--	10.1	7.2	6.4	4.8	6.6	10.7	13.6	17	15	6.2	7.3
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
Appendix III														
Boron	mg/L	T	4.0	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
Calcium	mg/L	T	250	**470**	**460 E**	**480**	**960**	**430**	**430**	**460 D**	**400 D**	**390 D**	**440 D**	**470 D**
Chloride	mg/L	T	120	**190**	**190**	**190**	**140**	**120**	98	110 D	98 D	97 D	110 DJ+	82 D
Fluoride	mg/L	T	2.0	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
Sulfate (as SO4)	mg/L	T	250	**780**	**1000**	**830**	**940**	**970**	**850**	**940 D**	**860 D**	**610 D**	**820 D**	**980 D**
Total Dissolved Solids	mg/L	T	950	**2200 J**	**2400**	**2000**	**2300**	**2200**	**2100**	**2800 J**	**2300 D**	**1800**	**2100 D**	**2200 D**
Appendix IV														
Antimony	mg/L	T	0.0060	< 0.000050 U	< 0.000050 U	< 0.00025 U	< 0.000050 U	0.00040 J	< 0.00050 U	< 0.00050 UD	< 0.00010 U	< 0.00010 U	< 0.00050 UD	< 0.0001 U
Arsenic	mg/L	T	0.010	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
Barium	mg/L	T	1.3	0.10	0.089	0.10	0.045	0.047	0.058	0.066 D	0.048	0.058	0.067 J-	0.051
Beryllium	mg/L	T	0.0040	< 0.000052 U	0.000053 J	< 0.00026 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 UJ	< 0.000052 U	< 0.000052 U	0.00011 J+	< 0.000052 U
Cadmium	mg/L	T	0.0025	< 0.000032 U	< 0.000032 U	< 0.00016 U	< 0.000032 U	< 0.00016 U	< 0.00038 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.00038 UD	< 0.000075 U
Chromium, Total	mg/L	T	0.10	0.014	0.012	0.0087	0.010	0.0058	0.0052	0.012	0.013	0.0081	0.0049 J-	0.0075
Cobalt	mg/L	T	0.0060	0.00091	0.0044	0.00096 J	0.0028	0.0011	0.00054	0.0013 J+	0.0011	0.00053	0.0011	0.0015
Fluoride	mg/L	T	2.0	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
Lead	mg/L	T	0.0016	< 0.00022 U	< 0.00022 U	< 0.0011 U	< 0.0011 U	< 0.0011 U	< 0.00050 U	< 0.00050 UJ	< 0.00050 UD	< 0.0001 U	0.0005 UJD	< 0.0001 U
Lithium	mg/L	T	0.10	**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**
Mercury	mg/L	T	0.00016	< 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**
Molybdenum	mg/L	T	0.10	< 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
Radium 226 and 228	pCi/L	T	5.0	< 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
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
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
Selenium	mg/L	T	0.0050	< 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-	0.0001 J
Thallium	mg/L	T	0.0020	< 0.000075 U	< 0.000075 U	< 0.00038 U	< 0.00038 U	< 0.00038 U	< 0.00038 U	< 0.00038 UJ	< 0.00038 UD	< 0.000075 U	0.00038 UD	< 0.000075 U
Total Suspended Solids	mg/L	T	--	4.0	11	< 4.0 UJ	5.0	6.0	4.0	< 4.0 UD	5.0	4.0 D	< 4.0 U	5.1 D
Michigan CCR Part 115														
Copper	mg/L	T	0.021	< 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
Iron	mg/L	T	83	0.87	3.6	0.99	8.8	4.1	2.4	2.9	2.9	1.4 D	2.0 D	4.9
Nickel	mg/L	T	0.10	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
Silver	mg/L	T	0.00020	< 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**	< 0.00005 U
Vanadium	mg/L	T	0.0062	< 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
Zinc	mg/L	T	0.27	0.0053	< 0.0012 U	< 0.0059 U	< 0.0012 U	0.0049	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 UJ	< 0.0012 U
Additional Parameters														
Bicarbonate Alkalinity	mg/L	T	--	930	760	880	660	630	640	< 0.16 U	690	780 D	690 D	570
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
Magnesium	mg/L	T	--	110	120	120	250	120	110	120 D	100 D	95 D	110 D	120 D
Potassium	mg/L	T	--	12	15	16	17	12	9.6	11	13	10 D	10 D	8.9
Sodium	mg/L	T	--	120	110	120	220	98	95	95 D	88 D	82 D	89 D	73
Total Alkalinity	mg/L	T	--	930	760	880	660	630	640	< 0.16 U	690	780 D	690 D	570

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.

D Dilution greater than 1, flagged by Trace.

B constituent detected in blank and sample

			Sample Location:	MW-31											
			Compliance Phase:	Background Monitoring								Initial Assessment Monitoring	Assessment 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
			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:	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2	Unit 1/2
			Sample Matrix:	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Constituent	Unit	Fraction	Groundwater Protection Standard	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Field Parameters														
Conductivity	mS/cm	N	--	1.35	1.4	1.327	1.23	1.28	1.21	1.24	1.41	1.23	1.10	1.26
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
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
pH	su	N	--	7.84	7.7	7.85	7.76	7.87	7.85	8	7.78	7.67	7.8	8.01
Temperature	deg c	N	--	8.7	7.6	6.3	4	6.5	13.2	14.4	17.8	14.9	7.0	10.2
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
Appendix III														
Boron	mg/L	T	4.0	**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**
Calcium	mg/L	T	250	180	190	170	200	170	160	130 D	150 D	170 D	170 D	200 D
Chloride	mg/L	T	120	**120**	100	110	97	94	92	110 D	110 D	100 D	99 DJ+	87 D
Fluoride	mg/L	T	2.0	**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	250	180	**250**	200	**250**	**250**	160	120 D	100 D	72 D	150 D	170 D
Total Dissolved Solids	mg/L	T	950	850	940 J	780	860	810	760	760 D	860 D	730 D	810 D	810 D
Appendix IV														
Antimony	mg/L	T	0.0060	0.000069 J	< 0.000050 U	0.000080 J	0.00012 J	0.00013 J	< 0.00010 U	< 0.00010 U	0.00012 J	< 0.00010 U	< 0.00010 U	< 0.0001 U
Arsenic	mg/L	T	0.010	0.0018	0.0013	0.0012	0.0010	0.0011	0.0014	0.0016 J+	0.0016	0.0012	0.0010	0.0012
Barium	mg/L	T	1.3	0.21	0.14	0.19	0.15	0.12	0.13	0.23	0.16	0.16	0.13	0.13
Beryllium	mg/L	T	0.0040	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 UJ	< 0.000052 U	< 0.000052 U	0.000054 J	< 0.000052 U
Cadmium	mg/L	T	0.0025	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000075 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	0.000084 J	< 0.000075 U
Chromium, Total	mg/L	T	0.10	0.0021	0.0018	0.0024	0.0019	0.0019	0.0029	0.0023	0.0023	0.0025	0.0022	0.0017
Cobalt	mg/L	T	0.0060	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	< 0.0001 U
Fluoride	mg/L	T	2.0	**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	0.0016	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	0.00031 J	< 0.00010 UJ	< 0.00010 U	< 0.00010 U	< 0.00010 U	< 0.0001 U
Lithium	mg/L	T	0.10	0.052	0.048	0.052	0.054	0.046	0.053	0.056 D	0.054	0.049	0.039 D	0.039
Mercury	mg/L	T	0.00016	< 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	0.10	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
Radium 226 and 228	pCi/L	T	5.0	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
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
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
Selenium	mg/L	T	0.0050	< 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
Thallium	mg/L	T	0.0020	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	0.000088 J	< 0.000075 U
Total Suspended Solids	mg/L	T	--	2.0 J	4.0	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	1.0 J	< 4.0 U	< 4.0 UD	< 3.9 UD
Michigan CCR Part 115														
Copper	mg/L	T	0.021	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	< 0.00020 U	0.00027	< 0.00020 U	< 0.00020 U	< 0.00020 U	0.00023 J	0.00044
Iron	mg/L	T	83	2.5	1.4	1.5	1.1	0.77	1.2	0.92	0.21	0.13	0.19	0.12
Nickel	mg/L	T	0.10	< 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
Silver	mg/L	T	0.00020	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.00005 U	< 0.00005 U	< 0.00005 U
Vanadium	mg/L	T	0.0062	< 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	0.27	0.0082	< 0.0012 U	< 0.0012 U	< 0.0012 U	0.010	0.0014	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U
Additional Parameters														
Bicarbonate Alkalinity	mg/L	T	--	410	340	350	320	290	320	340	410	440 D	340 D	350
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
Magnesium	mg/L	T	--	37	36	38	42	36	33	34	38 D	35 D	36 D	38
Potassium	mg/L	T	--	9.9	11	11	11	10	9.9	12	12	11 D	9.6 D	10
Sodium	mg/L	T	--	60	46	51	48	50	53	64	56 D	56 D	54 D	53
Total Alkalinity	mg/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.

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)

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.

D Dilution greater than 1, flagged by Trace.

B constituent detected in blank and sample

			Sample Location:	MW-32										
			Compliance Phase:	Background Monitoring								Initial Assessment Monitoring	Assessment 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
			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:	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent	Nature and Extent
			Sample Matrix:	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Constituent	Unit	Fraction	Groundwater Protection Standard	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
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
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
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
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
Temperature	deg c	N	--	10.2	8.3	6.6	6.3	7.4	11.1	13	15.9	14.9	7.0	8.1
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
Appendix III														
Boron	mg/L	T	4.0	3.8	3.0	3.0	2.9	2.6	3.1	3.9 J+	3.7	**5.0 D**	3.0 D	3.1
Calcium	mg/L	T	250	200	180	190	220	190	190	150 D	130 D	150 D	180 D	190 D
Chloride	mg/L	T	120	47	50	50	50	45	42	41 D	44 D	47 D	39 DJ+	38 D
Fluoride	mg/L	T	2.0	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
Sulfate (as SO4)	mg/L	T	250	100	110	54	170	190	140	48 D	17 D	17 D	83 D	130 D
Total Dissolved Solids	mg/L	T	950	790	700	730	770	800	790	600 D	550 D	640 D	680 D	770 D
Appendix IV														
Antimony	mg/L	T	0.0060	0.000067 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	< 0.0001 U
Arsenic	mg/L	T	0.010	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
Barium	mg/L	T	1.3	0.62	0.60	0.57	0.41	0.29	0.34	0.37	0.41	0.85	0.059	0.57
Beryllium	mg/L	T	0.0040	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 UJ	< 0.000052 U	< 0.000052 U	0.000070 J	< 0.000052 U
Cadmium	mg/L	T	0.0025	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.000075 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	0.00019 J	< 0.000075 U
Chromium, Total	mg/L	T	0.10	0.00046	0.00065	0.00057	0.00055	0.00039	0.00038	0.00032	0.00031	0.00031	0.0030	0.00038
Cobalt	mg/L	T	0.0060	0.00034 J	0.00036 J	0.00039 J	0.00041 J	0.00031 J	0.00037 J	0.00068 J+	0.00058	0.00038 J	0.0019	0.00021 J
Fluoride	mg/L	T	2.0	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
Lead	mg/L	T	0.0016	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	0.00012 J	0.00014 J+	< 0.00010 U	< 0.0001 U	0.00038 J	< 0.0001 U
Lithium	mg/L	T	0.10	**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**
Mercury	mg/L	T	0.00016	< 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**
Molybdenum	mg/L	T	0.10	0.0051	0.0043	0.0038	0.0032	0.0034	0.0045	0.0047 J+	0.0046	0.0045	0.0073	0.0034
Radium 226 and 228	pCi/L	T	5.0	0.614	< 0.497 U	< 0.601 U	< 0.732 U	0.877	0.847	< 0.607 U	0.985	< 0.589 U	< 0.53 U	< 0.545 U
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
Radium-228	pCi/L	T	--	0.492	< 0.497 U	< 0.601 U	< 0.732 U	0.773	0.641	< 0.607 U	< 0.848 U	< 0.589 U	< 0.53 U	< 0.545 U
Selenium	mg/L	T	0.0050	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00022 U	< 0.00010 U	< 0.00010 UJ	< 0.00010 U	< 0.00010 U	0.0010	0.00013 J
Thallium	mg/L	T	0.0020	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.000075 U	< 0.000075 U
Total Suspended Solids	mg/L	T	--	42	43	39	40	39	31	29 D	11	23	32 D	34 D
Michigan CCR Part 115														
Copper	mg/L	T	0.021	< 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	< 0.0002 U
Iron	mg/L	T	83	20	18	18	19	18	17	15	11	11 D	17 D	16
Nickel	mg/L	T	0.10	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
Silver	mg/L	T	0.00020	< 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	< 0.00005 U
Vanadium	mg/L	T	0.0062	< 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	0.27	0.031	0.0022	0.0026	0.0025	0.030	0.0037	0.0026	0.0030	0.0035	0.0049	0.0024
Additional Parameters														
Bicarbonate Alkalinity	mg/L	T	--	560	490	500	450	440	430	440	440	520 D	440 D	470
Carbonate Alkalinity	mg/L	T	--	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.31 UD	< 0.31 UD	< 0.16 U
Magnesium	mg/L	T	--	38	34	35	37	34	34	28	28 D	30 D	32 D	33
Potassium	mg/L	T	--	13	13	12	11	9.8	9.7	12	13	13 D	9.1 D	9.2
Sodium	mg/L	T	--	36	29	29	30	27	30	33	32 D	35 D	30 D	28
Total Alkalinity	mg/L	T	--	560	490	500	450	440	430	440	440	520 D	440 D	470

Notes:

ug/l - micrograms per liter.

mg/l = milligrams per liter.

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

pCi/L = picocuries per liter.

All metals were analyzed as total unless otherwise indicated.

Qualifiers:

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

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

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.

D Dilution greater than 1, flagged by Trace.

B constituent detected in blank and sample

			Sample Location:	MW-33										
			Compliance Phase:	Background Monitoring								Initial Assessment Monitoring	Assessment 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
			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:	Background Well	Background Well	Background Well	Background Well	Background Well	Background Well	Background Well	Background Well	Background Well	Background Well	Background Well
			Sample Matrix:	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Constituent	Unit	Fraction	Groundwater Protection Standard	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Field Parameters														
Conductivity	mS/cm	N	--	1.1	0.99	0.949	0.859	0.91	0.92	0.901	0.98	1.0	0.78	0.85
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
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
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
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
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
Appendix III														
Boron	mg/L	T	4.0	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
Calcium	mg/L	T	250	200	170	170	190	150	160	150 D	150 D	180 D	150 D	170 D
Chloride	mg/L	T	120	58	51	50	39	27	17	20 D	23 D	45 D	35 DJ+	20 D
Fluoride	mg/L	T	2.0	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
Sulfate (as SO4)	mg/L	T	250	100	58	65	42	23	1.9 J	4.3 D	1.6 JD	69 D	20 D	17 D
Total Dissolved Solids	mg/L	T	950	750 J	630	680	590	580	600	600 D	570 D	690 D	550 D	600
Appendix IV														
Antimony	mg/L	T	0.0060	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
Arsenic	mg/L	T	0.010	0.0031	0.0014	0.0016	0.0017	0.0040	0.0038	0.0032 J+	0.0027	0.0027	0.0012	0.003
Barium	mg/L	T	1.3	0.084	0.086	0.092	0.076	0.073	0.095	0.088	0.098	0.090	0.44 D	0.063
Beryllium	mg/L	T	0.0040	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.00026 U	< 0.000052 U	< 0.000052 UJ	< 0.000052 U	< 0.000052 U	< 0.000052 U	< 0.000052 U
Cadmium	mg/L	T	0.0025	0.000049 J	0.00010 J	0.00014 J	0.00015 J	< 0.00016 U	< 0.000075 U	< 0.000075 UJ	< 0.000075 U	0.00023 J	< 0.00038 UD	0.00023 J
Chromium, Total	mg/L	T	0.10	0.0021	0.0028	0.0029	0.0027	0.0029	0.0039	0.0050	0.0059	0.0029	0.019	0.0032
Cobalt	mg/L	T	0.0060	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
Fluoride	mg/L	T	2.0	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
Lead	mg/L	T	0.0016	< 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
Lithium	mg/L	T	0.10	0.0051	0.0069	0.0043	0.0047	0.0061	0.0052	< 0.0094 UD	0.0041	0.0054	0.0028	0.0046
Mercury	mg/L	T	0.00016	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 U	< 0.00016 UJ	< 0.00016 U	< 0.00016 U
Molybdenum	mg/L	T	0.10	0.0047	0.0037	0.0031	0.0031	0.0060 J	0.0026	0.00068 J+	0.00052 J	0.0032	0.00027 J	0.003
Radium 226 and 228	pCi/L	T	5.0	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
Radium-226	pCi/L	T	--	< 0.267 U	< 0.14 U	< 0.125 U	< 0.204 U	< 0.232 U	< 0.256 U	0.154	0.276 J+	< 0.282 UJ	< 0.162 U	< 0.328 U
Radium-228	pCi/L	T	--	0.794	< 0.587 U	0.833	< 0.852 U	< 0.815 U	1.48 J	< 0.768 U	0.875	< 0.621 UJ	< 0.892 U	< 0.846 U
Selenium	mg/L	T	0.0050	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
Thallium	mg/L	T	0.0020	< 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
Total Suspended Solids	mg/L	T	--	2.0 J	5.0	10	1.0 J	9.0	17	21	22	10	6.0	5
Michigan CCR Part 115														
Copper	mg/L	T	0.021	0.0079	0.016	0.016	0.020	0.0067	0.0017	0.0011 B	0.00079	0.0032	0.00099	0.013
Iron	mg/L	T	83	1.2	2.5	2.8	2.5	4.6	7.4	7.7	8.7	4.4 D	1.1 D	1.2
Nickel	mg/L	T	0.10	0.020	0.016	0.017	0.019	0.023	0.014	0.0081	0.0049	0.0077	0.0036	0.026
Silver	mg/L	T	0.00020	< 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	< 0.00005 U
Vanadium	mg/L	T	0.0062	< 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
Zinc	mg/L	T	0.27	0.0071	0.0036	0.0050	0.0053	0.012	0.0014	< 0.0012 U	< 0.0012 U	0.018	0.0035	0.0072
Additional Parameters														
Bicarbonate Alkalinity	mg/L	T	--	460	430	400	390	440	480	440	480	420 D	330 D	430 D
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
Magnesium	mg/L	T	--	22	19	18	17	16	18	16	16	19 D	16 D	19
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
Sodium	mg/L	T	--	38	25	24	26	22	22	23	22	30 D	25 D	17
Total Alkalinity	mg/L	T	--	460	430	400	390	440	480	440	480	420 D	330 D	430 D

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)

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.

D Dilution greater than 1, flagged by Trace.

B constituent detected in blank and sample

			Sample Location:	MW-34										
			Compliance Phase:	Background Monitoring								Initial Assessment Monitoring	Assessment 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
			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:	Background Well	Background Well	Background Well	Background Well	Background Well	Background Well	Background Well	Background Well	Background Well	Background Well	Background Well
			Sample Matrix:	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Constituent	Unit	Fraction	Groundwater Protection Standard	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
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
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
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
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
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
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
Appendix III														
Boron	mg/L	T	4.0	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
Calcium	mg/L	T	250	220	190	220	210	210	210	220 D	190 D	220 D	210 D	230 D
Chloride	mg/L	T	120	33	27	24	23	23	22	23 D	24 D	25 D	20 DJ+	16 D
Fluoride	mg/L	T	2.0	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
Sulfate (as SO4)	mg/L	T	250	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
Total Dissolved Solids	mg/L	T	950	820	750	800	790	700	760	820 D	770 D	800 D	730 D	730
Appendix IV														
Antimony	mg/L	T	0.0060	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
Arsenic	mg/L	T	0.010	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
Barium	mg/L	T	1.3	0.54	0.54	**0.58**	0.50	0.17	0.49	0.53	0.49	0.52	0.066 DJ-	0.46
Beryllium	mg/L	T	0.0040	< 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 U	< 0.000052 U
Cadmium	mg/L	T	0.0025	0.000036 J	< 0.000032 U	< 0.000032 U	< 0.000032 U	< 0.00016 U	< 0.000075 U	< 0.000075 UJ	< 0.000075 U	< 0.000075 U	< 0.00038 UD	< 0.000075 U
Chromium, Total	mg/L	T	0.10	0.024	0.022	0.025	0.029	< 0.00088 U	0.027	0.034	0.028	0.019	0.0050 J+	0.026
Cobalt	mg/L	T	0.0060	0.0015	0.0013	0.0013	0.0013	< 0.00050 U	0.0014	0.0018 J+	0.0016	0.0013	0.00061	0.0011
Fluoride	mg/L	T	2.0	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
Lead	mg/L	T	0.0016	**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
Lithium	mg/L	T	0.10	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
Mercury	mg/L	T	0.00016	< 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	0.10	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
Radium 226 and 228	pCi/L	T	5.0	2.02	1.15	1.28	1.34	1.99	1.81	2.79	1.24	2.4	1.86 J+	2.2
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
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
Selenium	mg/L	T	0.0050	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
Thallium	mg/L	T	0.0020	< 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
Total Suspended Solids	mg/L	T	--	110	52	83	44	160	160	170 D	130	150	120	160
Michigan CCR Part 115														
Copper	mg/L	T	0.021	0.0034	0.00075	0.00033	0.0085	< 0.0010 U	0.00069	0.00045 B	0.00043	0.00045	0.00024 J	0.0004
Iron	mg/L	T	83	73	70	83	78	75	77	77	64 D	70 D	72 D	76
Nickel	mg/L	T	0.10	0.0016	0.0013	0.0012	0.0013	< 0.0032 U	0.0016	0.0020	0.0018	0.0015	0.00089 J	0.011
Silver	mg/L	T	0.00020	< 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	< 0.00025 UD	< 0.00005 U
Vanadium	mg/L	T	0.0062	< 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	0.0009 J
Zinc	mg/L	T	0.27	0.031	0.0019	0.0023	0.0023	0.020	0.0015	0.0018	0.0017	0.0021	0.0012 UJ	0.0014
Additional Parameters														
Bicarbonate Alkalinity	mg/L	T	--	1100	950	920	890	880	950	970 D	970	1000 D	830 D	950 D
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
Magnesium	mg/L	T	--	30	23	22	21	20	24	27	26 D	29 D	23 D	25
Potassium	mg/L	T	--	11	13	9.5	8.5	8.4	8.9	12	13	13 D	8.8 D	8
Sodium	mg/L	T	--	34	30	28	22	23	30	38	33 D	38 D	26 D	25
Total Alkalinity	mg/L	T	--	1100	950	920	890	880	950	970 D	970	1000 D	830 D	950 D

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)

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.

D Dilution greater than 1, flagged by Trace.

B constituent detected in blank and sample

			Sample Location:	MW-36
			Compliance Phase:	Assessment Monitoring
			Sample Date:	4/8/2024
			Sample Type:	Field Sample
			Unit:	Nature and Extent
			Sample Matrix:	Groundwater
Constituent	Unit	Fraction	Groundwater Protection Standard	Result
Field Parameters				
Conductivity	mS/cm	N	--	0.658
Dissolved Oxygen	mg/L	N	--	0.08
Oxidation Reduction Potential	mV	N	--	-207.1
pH	su	N	--	10.42
Temperature	deg c	N	--	8.4
Turbidity	NTU	N	--	5.41
Appendix III				
Boron	mg/L	T	4.0	0.28
Calcium	mg/L	T	250	67
Chloride	mg/L	T	120	34 D
Fluoride	mg/L	T	2.0	0.61 D
Sulfate (as SO4)	mg/L	T	250	5.7 JD
Total Dissolved Solids	mg/L	T	950	330 D
Appendix IV				
Antimony	mg/L	T	0.0060	0.00076
Arsenic	mg/L	T	0.010	0.029
Barium	mg/L	T	1.3	0.15
Beryllium	mg/L	T	0.0040	5.9E-05 J
Cadmium	mg/L	T	0.0025	0.00032
Chromium, Total	mg/L	T	0.10	0.0013
Cobalt	mg/L	T	0.0060	0.00027 J
Fluoride	mg/L	T	2.0	0.61 D
Lead	mg/L	T	0.0016	**0.025**
Lithium	mg/L	T	0.10	0.0057
Mercury	mg/L	T	0.00016	< 0.00016 U
Molybdenum	mg/L	T	0.10	0.019
Radium 226 and 228	pCi/L	T	5.0	< 0.861 U
Radium-226	pCi/L	T	--	0.467
Radium-228	pCi/L	T	--	< 0.861 U
Selenium	mg/L	T	0.0050	0.0006
Thallium	mg/L	T	0.0020	< 0.000075 U
Total Suspended Solids	mg/L	T	--	38
Michigan CCR Part 115				
Copper	mg/L	T	0.021	0.0077
Iron	mg/L	T	83	0.4
Nickel	mg/L	T	0.10	0.011
Silver	mg/L	T	0.00020	0.00021
Vanadium	mg/L	T	0.0062	0.0024
Zinc	mg/L	T	0.27	0.0088
Additional Parameters				
Bicarbonate Alkalinity	mg/L	T	--	78
Carbonate Alkalinity	mg/L	T	--	120
Magnesium	mg/L	T	--	6.9
Potassium	mg/L	T	--	52
Sodium	mg/L	T	--	61
Total Alkalinity	mg/L	T	--	200

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)

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.

D Dilution greater than 1, flagged by Trace.

B constituent detected in blank and sample

			Sample Location:	MW-37
			Compliance Phase:	Assessment Monitoring
			Sample Date:	4/8/2024
			Sample Type:	Field Sample
			Unit:	Nature and Extent
			Sample Matrix:	Groundwater
Constituent	Unit	Fraction	Groundwater Protection Standard	Result
Field Parameters				
Conductivity	mS/cm	N	--	1.16
Dissolved Oxygen	mg/L	N	--	1.04
Oxidation Reduction Potential	mV	N	--	-19
pH	su	N	--	7.47
Temperature	deg c	N	--	9
Turbidity	NTU	N	--	0.02
Appendix III				
Boron	mg/L	T	4.0	5.2
Calcium	mg/L	T	250	160 D
Chloride	mg/L	T	120	22 D
Fluoride	mg/L	T	2.0	0.63 D
Sulfate (as SO4)	mg/L	T	250	210 D
Total Dissolved Solids	mg/L	T	950	790 D
Appendix IV				
Antimony	mg/L	T	0.0060	0.00064
Arsenic	mg/L	T	0.010	0.00055
Barium	mg/L	T	1.3	0.04
Beryllium	mg/L	T	0.0040	< 0.000052 U
Cadmium	mg/L	T	0.0025	0.00012 J
Chromium, Total	mg/L	T	0.10	0.00039
Cobalt	mg/L	T	0.0060	0.00075
Fluoride	mg/L	T	2.0	0.63 D
Lead	mg/L	T	0.0016	0.00017 J
Lithium	mg/L	T	0.10	0.02
Mercury	mg/L	T	0.00016	< 0.00016 U
Molybdenum	mg/L	T	0.10	0.015
Radium 226 and 228	pCi/L	T	5.0	< 0.569 U
Radium-226	pCi/L	T	--	< 0.142 U
Radium-228	pCi/L	T	--	< 0.569 U
Selenium	mg/L	T	0.0050	0.0046
Thallium	mg/L	T	0.0020	< 0.000075 U
Total Suspended Solids	mg/L	T	--	< 4 UD
Michigan CCR Part 115				
Copper	mg/L	T	0.021	0.013
Iron	mg/L	T	83	0.16
Nickel	mg/L	T	0.10	0.0046
Silver	mg/L	T	0.00020	< 0.00005 U
Vanadium	mg/L	T	0.0062	< 0.00062 U
Zinc	mg/L	T	0.27	0.017
Additional Parameters				
Bicarbonate Alkalinity	mg/L	T	--	310
Carbonate Alkalinity	mg/L	T	--	< 0.16 U
Magnesium	mg/L	T	--	13
Potassium	mg/L	T	--	18
Sodium	mg/L	T	--	100 D
Total Alkalinity	mg/L	T	--	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)

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 n The analyte might or might not be present in the sample.

D Dilution greater than 1, flagged by Trace.

B constituent detected in blank and sample

			Sample Location:	MW-38
			Compliance Phase:	Assessment Monitoring
			Sample Date:	4/8/2024
			Sample Type:	Field Sample
			Unit:	Nature and Extent
			Sample Matrix:	Groundwater
Constituent	Unit	Fraction	Groundwater Protection Standard	Result
Field Parameters				
Conductivity	mS/cm	N	--	1.27
Dissolved Oxygen	mg/L	N	--	0.4
Oxidation Reduction Potential	mV	N	--	-207.4
pH	su	N	--	10
Temperature	deg c	N	--	11.7
Turbidity	NTU	N	--	7.83
Appendix III				
Boron	mg/L	T	4.0	1.6 D
Calcium	mg/L	T	250	150 D
Chloride	mg/L	T	120	51 D
Fluoride	mg/L	T	2.0	0.79 D
Sulfate (as SO4)	mg/L	T	250	280 D
Total Dissolved Solids	mg/L	T	950	840 D
Appendix IV				
Antimony	mg/L	T	0.0060	0.00068
Arsenic	mg/L	T	0.010	0.005
Barium	mg/L	T	1.3	0.16
Beryllium	mg/L	T	0.0040	< 0.000052 U
Cadmium	mg/L	T	0.0025	9.6E-05 J
Chromium, Total	mg/L	T	0.10	0.004
Cobalt	mg/L	T	0.0060	0.00053
Fluoride	mg/L	T	2.0	0.79 D
Lead	mg/L	T	0.0016	**0.015**
Lithium	mg/L	T	0.10	0.12
Mercury	mg/L	T	0.00016	< 0.00016 U
Molybdenum	mg/L	T	0.10	0.0097
Radium 226 and 228	pCi/L	T	5.0	1.21
Radium-226	pCi/L	T	--	0.492
Radium-228	pCi/L	T	--	< 1.08 U
Selenium	mg/L	T	0.0050	0.00073
Thallium	mg/L	T	0.0020	< 0.000075 U
Total Suspended Solids	mg/L	T	--	160 D
Michigan CCR Part 115				
Copper	mg/L	T	0.021	0.0031
Iron	mg/L	T	83	0.39
Nickel	mg/L	T	0.10	0.0053
Silver	mg/L	T	0.00020	< 0.00005 U
Vanadium	mg/L	T	0.0062	**0.0066**
Zinc	mg/L	T	0.27	0.0066
Additional Parameters				
Bicarbonate Alkalinity	mg/L	T	--	270
Carbonate Alkalinity	mg/L	T	--	12
Magnesium	mg/L	T	--	18
Potassium	mg/L	T	--	91 D
Sodium	mg/L	T	--	97 D
Total Alkalinity	mg/L	T	--	280

Notes:

ug/l - micrograms per liter.

mg/l = milligrams per liter.

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

pCi/L = picocuries per liter.

All metals were analyzed as total unless otherwise indicated.

Qualifiers:

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

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

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 n The analyte might or might not be present in the sample.

D Dilution greater than 1, flagged by Trace.

B constituent detected in blank and sample

Sample Location:				SG-02										
Compliance Phase:				Background Monitoring								Initial Assessment Monitoring	Assessment Monitoring	Assessment Monitoring
Sample Date:				12/2/2022	1/5/2023	2/6/2023	3/14/2023	4/19/2023	5/23/2023	6/28/2023	8/8/2023	10/24/2023	2/14/2024	4/10/2024
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	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	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	Groundwater Protection Standard	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Field Parameters														
Conductivity	mS/cm	N	--	1.42	1.0	--	0.898	0.93	1.03	1.56	1.66	1.47	0.84	0.99
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
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
pH	su	N	--	8.02	8.38	--	8	8.23	9.14	8.52	8.7	8.15	8.01	8.38
Temperature	deg c	N	--	2.8	3.5	--	2.7	8.9	26.6	26.2	29.6	17.5	3.6	14.8
Turbidity	NTU	N	--	1.62	0.02	--	1.2	2.41	6.62	4.2	3.26	6.09	0.46	3.59
Appendix III														
Boron	mg/L	T	4.0	4.0	2.2	--	2.1	2.0	2.8	5.6 J+	6.9	7.0 D	3.5 D	3.1 D
Calcium	mg/L	T	250	210	140	--	140	130	150	210 D	170 D	180 D	140 D	140 D
Chloride	mg/L	T	120	75	46	--	41	37	40	86 D	120 D	99 D	52 D	36 D
Fluoride	mg/L	T	2.0	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
Sulfate (as SO4)	mg/L	T	250	620	360	--	350	400	430	620 D	640 D	530 D	380 D	340 D
Total Dissolved Solids	mg/L	T	950	1100	660	--	580	680	740	1200 D	1400 D	1100	690 D	690
Appendix IV														
Antimony	mg/L	T	0.0060	0.00051	0.00043	--	0.00066	0.00058 J	0.0012	0.00085	0.0011	0.00061	0.00038	0.00088
Arsenic	mg/L	T	0.010	0.0019	0.0012	--	0.0018	0.0017 J	0.0032	0.0037	0.0091	0.0023	0.0012	0.0017
Barium	mg/L	T	1.3	0.049	0.033	--	0.034	0.22	0.080	0.13	0.11	0.060	0.037	0.045
Beryllium	mg/L	T	0.0040	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
Cadmium	mg/L	T	0.0025	< 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
Chromium, Total	mg/L	T	0.10	0.00038	0.00024 J	--	0.00057	< 0.00091 U	0.00046	0.00091	0.00080	0.00036	0.00025	0.00045
Cobalt	mg/L	T	0.0060	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
Fluoride	mg/L	T	2.0	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
Lead	mg/L	T	0.0016	0.0013	0.00081	--	0.0012	**0.0020 J**	0.0011	0.00050 J	0.0012	0.00064	0.00061	0.0011
Lithium	mg/L	T	0.10	0.046	0.032	--	0.035	0.038	0.053	0.067	0.085	0.058	0.042 D	0.043
Mercury	mg/L	T	0.00016	< 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
Molybdenum	mg/L	T	0.10	0.0069	0.0060	--	0.011	0.0062 J	0.016	0.0072	0.012	0.0081	0.0069	0.013
Radium 226 and 228	pCi/L	T	5.0	< 0.342 U	0.712 J+	--	< 0.551 U	1.42	1.49	1.44	1.28	< 0.532 U	< 1.0 U	0.722
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
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	< 1.0 U	< 0.601 U
Selenium	mg/L	T	0.0050	0.00073	0.00059	--	0.0010	< 0.0011 U	0.0013	0.0013	0.0014	0.0008	0.0018	0.0014
Thallium	mg/L	T	0.0020	< 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
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 U
Michigan CCR Part 115														
Copper	mg/L	T	0.021	0.0010	0.00085	--	0.011	0.0011 J	0.0014	0.0012	0.0010	0.00047	0.00089	0.0016
Iron	mg/L	T	83	0.20	0.15	--	0.20	0.23	0.16	0.27	0.48	0.28	0.14	0.16
Nickel	mg/L	T	0.10	0.0023	0.0020	--	0.0023	< 0.0034 U	0.0027	0.0036	0.0040	0.0034	0.0020	0.0024
Silver	mg/L	T	0.00020	< 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	< 0.00005 U
Vanadium	mg/L	T	0.0062	< 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
Zinc	mg/L	T	0.27	0.0041	0.0031	--	0.0029	0.029	0.0014	0.0024	0.0028	0.0050	0.0013	0.002
Additional Parameters														
Bicarbonate Alkalinity	mg/L	T	--	96	76	--	62	71	35	73	65	130 D	93	79
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
Magnesium	mg/L	T	--	48	31	--	28	28	33	53	63 D	57 D	37 D	34
Potassium	mg/L	T	--	13	9.1	--	8.0	7.3	6.8	18	21 D	16 D	9.1 D	8.2
Sodium	mg/L	T	--	40	24	--	22	21	27	52	62 D	58 D	31 D	28
Total Alkalinity	mg/L	T	--	96	76	--	62	71	35	73	83	130 D	93	79

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)

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 inaccural 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.

D Dilution greater than 1, flagged by Trace.

B constituent detected in blank and sample

			Sample Location:	SG-03										
			Compliance Phase:	Background Monitoring									Initial Assessment Monitoring	Assessment Monitoring
			Sample Date:	12/2/2022	1/5/2023	2/6/2023	3/14/2023	4/19/2023	5/23/2023	6/28/2023	8/8/2023		10/24/2023	2/14/2024
			Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample		Field Sample	Field Sample
			Unit:	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water		Surface Water	Surface Water
			Sample Matrix:	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water		Surface Water	Surface Water
Constituent	Unit	Fraction	Groundwater Protection Standard	Result	Result	Result	Result	Result	Result	Result	Result		Result	Result
Field Parameters														
Conductivity	mS/cm	N	--	1.45	1.0	--	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	8	10	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	4.0	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	250	200	120	--	150	140	160	220 D	180 D		180 D	140 D
Chloride	mg/L	T	120	72	42	--	43	37	41	86 D	120 D		100 D	53 D
Fluoride	mg/L	T	2.0	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	250	600	350	--	350	400	450	620 D	640 D		550 D	370 D
Total Dissolved Solids	mg/L	T	950	1100	480	--	630	660	740	1200 D	1400 D		1100	1400 D
Boron	mg/L	D	4.0	--	--	--	--	--	2.7	--	--		--	--
Calcium	mg/L	D	250	--	--	--	--	--	150	--	--		--	--
Appendix IV														
Antimony	mg/L	T	0.0060	0.00049	0.00038	--	0.00067	0.0010 J	0.0013	0.00088	0.0012		0.00063	0.00050
Arsenic	mg/L	T	0.010	0.0018	0.0011	--	0.0020	0.0016 J	0.0041	0.0040	0.0094		0.0024	0.0012
Barium	mg/L	T	1.3	0.049	0.031	--	0.036	0.027	0.097	0.13	0.13		0.061	0.036
Beryllium	mg/L	T	0.0040	< 0.000052 U	< 0.000052 U	--	0.000078 J	< 0.00026 U	0.00056	0.00040	0.000091 J		< 0.000052 U	< 0.000052 U
Cadmium	mg/L	T	0.0025	< 0.000032 U	< 0.000032 U	--	0.000038 J	< 0.00016 U	< 0.000075 U	< 0.000075 U	< 0.000075 U		< 0.000075 U	< 0.000075 U
Chromium, Total	mg/L	T	0.10	0.00043	0.00025	--	0.00092	< 0.00088 U	0.0025	0.0012	0.00069		0.00049	0.00032
Cobalt	mg/L	T	0.0060	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	2.0	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	0.0016	0.0012	0.00060	--	**0.0020**	< 0.0011 U	**0.0033**	0.00076	0.00091		0.00066	0.00059
Lithium	mg/L	T	0.10	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	< 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	0.10	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	5.0	< 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	0.0050	0.00070	0.00056	--	0.0010	0.0021 J	0.0018	0.0012	0.0016		0.00081	0.0018
Thallium	mg/L	T	0.0020	< 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		< 4.0 U	< 4.0 U
Antimony	mg/L	D	0.0060	--	--	--	--	--	< 0.000038 U	--	--		--	--
Arsenic	mg/L	D	0.010	--	--	--	--	--	0.0035	--	--		--	--
Barium	mg/L	D	1.3	--	--	--	--	--	0.073	--	--		--	--
Beryllium	mg/L	D	0.0040	--	--	--	--	--	< 0.000078 U	--	--		--	--
Cadmium	mg/L	D	0.0025	--	--	--	--	--	< 0.000018 U	--	--		--	--
Chromium, Total	mg/L	D	0.10	--	--	--	--	--	< 0.00012 U	--	--		--	--
Cobalt	mg/L	D	0.0060	--	--	--	--	--	< 0.000028 U	--	--		--	--
Lead	mg/L	D	0.0016	--	--	--	--	--	< 0.00012 U	--	--		--	--
Lithium	mg/L	D	0.10	--	--	--	--	--	0.039	--	--		--	--
Molybdenum	mg/L	D	0.10	--	--	--	--	--	0.018	--	--		--	--
Selenium	mg/L	D	0.0050	--	--	--	--	--	0.0020	--	--		--	--
Thallium	mg/L	D	0.0020	--	--	--	--	--	< 0.000015 U	--	--		--	--
Michigan CCR Part 115														
Copper	mg/L	T	0.021	0.00093	0.00067	--	0.016	< 0.0010 U	0.0030	0.0013	0.0010		0.00051	0.00083
Iron	mg/L	T	83	0.18	0.15	--	0.35	0.20	0.66	0.31	0.48		0.29	0.13
Nickel	mg/L	T	0.10	0.0022	0.0017	--	0.0026	0.0032 J	0.0039	0.0036	0.0039		0.0035	0.0019
Silver	mg/L	T	0.00020	< 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	0.0062	< 0.00062 U	< 0.00062 U	--	0.00092 J	< 0.0031 U	0.0049	0.0020	0.0053		0.00070 J	< 0.00062 U
Zinc	mg/L	T	0.27	0.0042	0.0037	--	0.0047	< 0.0059 U	0.0060	0.0029	0.0024		0.0069	0.0012
Copper	mg/L	D	0.021	--	--	--	--	--	< 0.00012 U	--	--		--	--
Iron	mg/L	D	83	--	--	--	--	--	0.10	--	--		--	--
Nickel	mg/L	D	0.10	--	--	--	--	--	< 0.00018 U	--	--		--	--
Silver	mg/L	D	0.00020	--	--	--	--	--	< 0.000038 U	--	--		--	--
Vanadium	mg/L	D	0.0062	--	--	--	--	--	< 0.00024 U	--	--		--	--
Zinc	mg/L	D	0.27	--	--	--	--	--	< 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	85		120 D	92
Magnesium	mg/L	D	--	--	--	--	--	--	34	--	--		--	--
Potassium	mg/L	D	--	--	--	--	--	--	6.7	--	--		--	--
Sodium	mg/L	D	--	--	--	--	--	--	25	--	--		--	--

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)

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.

D Dilution greater than 1, flagged by Trace.

B constituent detected in blank and sample

			Sample Location:	SG-04R											
			Compliance Phase:	Background Monitoring								Initial Assessment Montioring	Assessment Montioring	Assessment Montioring
			Sample Date:	12/2/2022	1/5/2023	2/6/2023	3/14/2023	4/19/2023	5/23/2023	6/28/2023	8/8/2023	10/24/2023	2/14/2024	4/8/2024
			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	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	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	Groundwater Protection Standard	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Field Parameters														
Conductivity	mS/cm	N	--	1.0	1.64	--	1.404	1.96	1.79	2.56	2.56	2.12	1.41	1.64
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
Oxidation Reduction Potential	mV	N	--	125.3	-34.8	--	-34	91.5	29.9	368	58.7	-33.8	155.6	20.8
pH	su	N	--	8.03	8.44	--	8.05	8.21	8.3	8.24	8.68	8.36	7.2	8.46
Temperature	deg c	N	--	3.3	4	--	5.9	8.2	25.6	25.9	23.8	17.1	2.7	14.7
Turbidity	NTU	N	--	7.25	1.1	--	3.22	1.04	5.27	10.6	2.28	5.92	8.1	3.75
Appendix III														
Boron	mg/L	T	4.0	3.0	2.1	--	2.6	2.4	3.2	5.0 J+	5.4	5.4 D	4.5 D	4.4 D
Calcium	mg/L	T	250	430	300	--	370	310	390	600 D	580 DE	500 D	340 D	370 D
Chloride	mg/L	T	120	27	22	--	21	20	22	33 D	38 D	35 D	23 D	20 D
Fluoride	mg/L	T	2.0	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
Sulfate (as SO4)	mg/L	T	250	1200	890	--	750	880	1000	1600 D	1800 D	820 D	890 D	890 D
Total Dissolved Solids	mg/L	T	950	1800	1200	--	1200	1400	1600	2500 D	2700 D	2200	1400 D	1400 D
Appendix IV														
Antimony	mg/L	T	0.0060	0.00059	0.00052	--	0.00069	0.0011 J	0.00064 J	0.0013 D	0.0011	0.00089	< 0.00050 UD	0.001
Arsenic	mg/L	T	0.010	0.00099	0.00091	--	0.0016	0.0026 J	0.0012	0.0043	0.0058	0.0017	0.0019	0.0016
Barium	mg/L	T	1.3	0.022	0.019	--	0.023	0.040	0.039	0.040 D	0.029	0.029	0.027 D	0.025
Beryllium	mg/L	T	0.0040	< 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
Cadmium	mg/L	T	0.0025	< 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
Chromium, Total	mg/L	T	0.10	0.00019 J	0.00028	--	0.00035	< 0.00088 U	0.00040	0.0010	0.00028	0.00063	0.00060	0.00028
Cobalt	mg/L	T	0.0060	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
Fluoride	mg/L	T	2.0	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
Lead	mg/L	T	0.0016	0.00033 J	0.00027 J	--	0.00047 J	0.0011 J	0.0013 J	**0.0025 JD**	0.00054 JD	0.00022 J	0.0015 JD	0.00071
Lithium	mg/L	T	0.10	0.044	0.039	--	0.0089	0.043	0.056	0.072	0.084	0.064	0.049 D	0.059
Mercury	mg/L	T	0.00016	< 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	0.10	0.0078	0.0066	--	0.0073	0.010	0.0072	0.013	0.016	0.016	0.0091	0.015
Radium 226 and 228	pCi/L	T	5.0	< 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
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
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
Selenium	mg/L	T	0.0050	0.0015	0.0014	--	0.0016	0.0013 J	0.0012	0.0023	0.0028	0.0024	0.0023	0.0024
Thallium	mg/L	T	0.0020	< 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	7.5E-05 J
Total Suspended Solids	mg/L	T	--	5.0	< 4.0 U	--	3.0 J	1.0 J	5.0	23	9.0	< 4.0 U	14	< 4 U
Michigan CCR Part 115														
Copper	mg/L	T	0.021	0.00047	0.00048	--	0.012	0.0012	0.00056	0.0018	0.00071	0.00086	0.0013	0.0011
Iron	mg/L	T	83	0.055	0.11	--	0.11	0.13	0.19	0.31	0.089	0.05	0.36 D	0.1
Nickel	mg/L	T	0.10	0.0025	0.0028	--	0.0027	< 0.0032 U	0.0022	0.0055	0.0041	0.0035	0.0037	0.0038
Silver	mg/L	T	0.00020	< 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	< 0.00005 U
Vanadium	mg/L	T	0.0062	< 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
Zinc	mg/L	T	0.27	0.0037	0.0023	--	0.0033	0.0061 J	0.0012	0.0070	0.0019	0.0086	0.0062	0.002
Additional Parameters														
Bicarbonate Alkalinity	mg/L	T	--	110	87	--	98	100	62	50	30	61 D	100	93
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
Magnesium	mg/L	T	--	41	30	--	33	29	35	53	62 D	57 D	44 D	43
Potassium	mg/L	T	--	15	10	--	9.8	9.1	10	17	21	12 D	9.1 D	8.9
Sodium	mg/L	T	--	24	20	--	21	19	22	39	40 D	34 D	26 D	26
Total Alkalinity	mg/L	T	--	110	87	--	98	100	62	50	43	61 D	100	93

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)

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 inaccural 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.

D Dilution greater than 1, flagged by Trace.

B constituent detected in blank and sample

			Sample Location:	SG-05										
			Compliance Phase:	Background Monitoring								Initial Assessment Monitoring	Assessment Monitoring	Assessment Monitoring
			Sample Date:	12/2/2022	1/5/2023	2/6/2023	3/14/2023	4/19/2023	5/23/2023	6/28/2023	8/8/2023	10/24/2023	2/14/2024	4/8/2024
			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	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	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	Groundwater Protection Standard	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
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
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
Oxidation Reduction Potential	mV	N	--	142	-44.6	--	6.4	18.3	16.3	153.3	39.2	-28.7	134.6	34.6
pH	su	N	--	7.44	8.02	--	8.28	7.88	8.31	6.73	9.19	7.87	7.67	8.4
Temperature	deg c	N	--	4.1	4	--	9.8	7.6	27.8	23.4	28.9	19.5	5.2	17.3
Turbidity	NTU	N	--	9.38	8.02	--	9.83	26.6	6.8	7.84	4.36	29.3	41.6	14.9
Appendix III														
Boron	mg/L	T	4.0	0.59	0.60	--	0.48	0.57	0.36	0.46 J+	0.39	0.72 D	0.45 D	0.53
Calcium	mg/L	T	250	140	120	--	120	120	81	34	34	120 D	130 D	99 D
Chloride	mg/L	T	120	79	51	--	61	50	54	64 D	29 D	54 D	54 D	37 D
Fluoride	mg/L	T	2.0	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
Sulfate (as SO4)	mg/L	T	250	8.4 J	150	--	38 J	110	43	38 D	11 D	12 D	7.2 D	83 D
Total Dissolved Solids	mg/L	T	950	620	630	--	460	570	400	320 D	210 D	510 D	520 D	440 D
Boron	mg/L	D	4.0	--	--	--	--	0.68	--	--	--	--	--	--
Calcium	mg/L	D	250	--	--	--	--	120	--	--	--	--	--	--
Appendix IV														
Antimony	mg/L	T	0.0060	0.00018 J	0.000093 J	--	0.00030	0.0010 J	0.00029	0.0010	0.00044	0.00016 J	0.00011 J	0.00024 J
Arsenic	mg/L	T	0.010	0.00084	0.00056	--	0.00071	0.0026 J	0.0017	0.0024	0.0013	0.00088	0.0010	0.00094
Barium	mg/L	T	1.3	0.58	0.23	--	0.35	0.039	0.20	0.11	0.16	0.51	0.50	0.26
Beryllium	mg/L	T	0.0040	< 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
Cadmium	mg/L	T	0.0025	< 0.000032 U	< 0.000032 U	--	< 0.000032 U	< 0.00016 U	< 0.000075 U	0.00011 J	0.00075	0.000094 J	0.00041	0.00013 J
Chromium, Total	mg/L	T	0.10	0.00036	0.00024 J	--	0.00048	< 0.00088 U	0.00035	0.00049	0.0017	0.00039	0.0020	0.00056
Cobalt	mg/L	T	0.0060	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
Fluoride	mg/L	T	2.0	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
Lead	mg/L	T	0.0016	0.00023 J	0.00038 J	--	0.00045 J	0.0012 J	0.0022	0.0040	0.0095	0.0031	0.011	0.0031
Lithium	mg/L	T	0.10	0.038	0.033	--	0.0045	0.029	0.016	0.022	0.027	0.039	0.016 D	0.023
Mercury	mg/L	T	0.00016	< 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
Molybdenum	mg/L	T	0.10	0.00077 J	0.0029	--	0.0013	0.0090	0.0083	0.0087	0.0015	0.00085 J	0.00058 J	0.0024
Radium 226 and 228	pCi/L	T	5.0	0.851	< 0.537 U	--	< 0.776 U	0.858	< 0.758 U	< 0.818 U	< 0.82 U	< 0.771 U	< 0.889 U	0.971
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
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
Selenium	mg/L	T	0.0050	< 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
Thallium	mg/L	T	0.0020	< 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
Total Suspended Solids	mg/L	T		5.0	7.9	--	8.0	17	6.0	14	73	12	120	8
Antimony	mg/L	D	0.0060	--	--	--	--	0.00047 J	--	--	--	--	--	--
Arsenic	mg/L	D	0.010	--	--	--	--	0.00063 J	--	--	--	--	--	--
Barium	mg/L	D	1.3	--	--	--	--	0.37	--	--	--	--	--	--
Beryllium	mg/L	D	0.0040	--	--	--	--	< 0.00026 U	--	--	--	--	--	--
Cadmium	mg/L	D	0.0025	--	--	--	--	< 0.00016 U	--	--	--	--	--	--
Chromium, Total	mg/L	D	0.10	--	--	--	--	0.025	--	--	--	--	--	--
Cobalt	mg/L	D	0.0060	--	--	--	--	0.0012 J	--	--	--	--	--	--
Lead	mg/L	D	0.0016	--	--	--	--	< 0.0011 U	--	--	--	--	--	--
Lithium	mg/L	D	0.10	--	--	--	--	0.032	--	--	--	--	--	--
Mercury	mg/L	D	0.00016	--	--	--	--	< 0.00016 U	--	--	--	--	--	--
Molybdenum	mg/L	D	0.10	--	--	--	--	< 0.0031 U	--	--	--	--	--	--
Selenium	mg/L	D	0.0050	--	--	--	--	< 0.0011 U	--	--	--	--	--	--
Thallium	mg/L	D	0.0020	--	--	--	--	< 0.00038 U	--	--	--	--	--	--
Michigan CCR Part 115														
Copper	mg/L	T	0.021	0.00029	0.00036	--	0.0089	0.0011 J	0.00084	0.0028	0.0066	0.0012	0.0063	0.0021
Iron	mg/L	T	83	3.0	1.5	--	2.7	3.2	1.1	0.74	1.1	2.9 D	7.2 D	1.9
Nickel	mg/L	T	0.10	0.0013	0.0015	--	0.0012	< 0.0032 U	0.0026	0.0034	0.0026	0.0012	0.0024	0.0017
Silver	mg/L	T	0.00020	< 0.000050 U	< 0.000050 U	--	0.000053	< 0.00025 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.00005 U
Vanadium	mg/L	T	0.0062	< 0.00062 U	< 0.00062 U	--	< 0.00062 U	< 0.0031 U	< 0.00062 U	0.0012	0.00069 J	< 0.00062 U	< 0.00062 U	0.00071 J
Zinc	mg/L	T	0.27	0.030	0.0018	--	0.0022	0.0060 J	0.0024	0.0090	0.019	0.043	0.019	0.0065
Copper	mg/L	D	0.021	--	--	--	--	< 0.0010 U	--	--	--	--	--	--
Iron	mg/L	D	83	--	--	--	--	0.12	--	--	--	--	--	--
Nickel	mg/L	D	0.10	--	--	--	--	< 0.0032 U	--	--	--	--	--	--
Silver	mg/L	D	0.00020	--	--	--	--	< 0.00025 U	--	--	--	--	--	--
Vanadium	mg/L	D	0.0062	--	--	--	--	< 0.0031 U	--	--	--	--	--	--
Zinc	mg/L	D	0.27	--	--	--	--	0.043	--	--	--	--	--	--
Additional Parameters														
Bicarbonate Alkalinity	mg/L	T	--	490	270	--	290	290	240	65	96	400 D	400	240
Carbonate Alkalinity	mg/L	T	--	< 0.16 U	< 0.16 U	--	< 0.16 U	< 0.16 U	< 0.16 U	46	16	< 0.31 UD	< 0.16 U	< 0.16 U
Magnesium	mg/L	T	--	27	23	--	26	26	25	21	12	24 D	26 D	23
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
Sodium	mg/L	T	--	43	30	--	38	34	37	44	21	40 D	43 D	30
Total Alkalinity	mg/L	T	--	490	270	--	290	290	240	110	110	400 D	400	240
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)

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.

D Dilution greater than 1, flagged by Trace.

B constituent detected in blank and sample

			Sample Location:	SG-06										
			Compliance Phase:	Background Monitoring								Initial Assessment Monitoring	Assessment Monitoring	Assessment Monitoring
			Sample Date:	12/2/2022	1/5/2023	2/6/2023	3/13/2023	4/19/2023	5/23/2023	6/28/2023	8/8/2023	10/24/2023	2/14/2024	4/8/2024
			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	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	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	Groundwater Protection Standard	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Field Parameters														
Conductivity	mS/cm	N	--	--	--	--	--	--	--	--	0.69	0.74	--	--
Dissolved Oxygen	mg/L	N	--	--	--	--	--	--	--	--	4.93	6.01	--	--
Oxidation Reduction Potential	mV	N	--	--	--	--	--	--	--	--	60.2	-40.4	--	--
pH	su	N	--	--	--	--	--	--	--	--	7.37	7.98	--	--
Temperature	deg c	N	--	--	--	--	--	--	--	--	24.3	19.1	--	--
Turbidity	NTU	N	--	--	--	--	--	--	--	--	7.35	4.89	--	--
Appendix III														
Boron	mg/L	T	4.0	--	--	--	--	--	--	--	0.21	0.24 D	--	--
Calcium	mg/L	T	250	--	--	--	--	--	--	--	69 D	82 D	--	--
Chloride	mg/L	T	120	--	--	--	--	--	--	--	53 D	56 D	--	--
Fluoride	mg/L	T	2.0	--	--	--	--	--	--	--	0.18 D	0.18 D	--	--
Sulfate (as SO4)	mg/L	T	250	--	--	--	--	--	--	--	15 D	30 D	--	--
Total Dissolved Solids	mg/L	T	950	--	--	--	--	--	--	--	380 D	410 D	--	--
Appendix IV														
Antimony	mg/L	T	0.0060	--	--	--	--	--	--	--	< 0.00010 U	0.00014 J	--	--
Arsenic	mg/L	T	0.010	--	--	--	--	--	--	--	0.0016	0.0016	--	--
Barium	mg/L	T	1.3	--	--	--	--	--	--	--	0.10	0.092	--	--
Beryllium	mg/L	T	0.0040	--	--	--	--	--	--	--	< 0.000052 U	< 0.000052 U	--	--
Cadmium	mg/L	T	0.0025	--	--	--	--	--	--	--	< 0.000075 U	< 0.000075 U	--	--
Chromium, Total	mg/L	T	0.10	--	--	--	--	--	--	--	0.00088	0.00044	--	--
Cobalt	mg/L	T	0.0060	--	--	--	--	--	--	--	0.00019 J	0.00018 J	--	--
Fluoride	mg/L	T	2.0	--	--	--	--	--	--	--	0.18 D	0.18 D	--	--
Lead	mg/L	T	0.0016	--	--	--	--	--	--	--	0.00071	0.00053 J	--	--
Lithium	mg/L	T	0.10	--	--	--	--	--	--	--	0.0061	0.0087	--	--
Mercury	mg/L	T	0.00016	--	--	--	--	--	--	--	< 0.00016 U	0.0002	--	--
Molybdenum	mg/L	T	0.10	--	--	--	--	--	--	--	0.00039 J	0.0034	--	--
Radium 226 and 228	pCi/L	T	5.0	--	--	--	--	--	--	--	< 0.926 U	< 0.838 U	--	--
Radium-226	pCi/L	T	--	--	--	--	--	--	--	--	< 0.16 U	< 0.288 U	--	--
Radium-228	pCi/L	T	--	--	--	--	--	--	--	--	< 0.926 U	< 0.838 U	--	--
Selenium	mg/L	T	0.0050	--	--	--	--	--	--	--	0.00015 J	0.00012 J	--	--
Thallium	mg/L	T	0.0020	--	--	--	--	--	--	--	< 0.000075 U	< 0.000075 U	--	--
Total Suspended Solids	mg/L	T	--	--	--	--	--	--	--	--	120	< 4.0 UD	--	--
Michigan CCR Part 115														
Copper	mg/L	T	0.021	--	--	--	--	--	--	--	0.00089	0.00054	--	--
Iron	mg/L	T	83	--	--	--	--	--	--	--	0.55	0.23	--	--
Nickel	mg/L	T	0.10	--	--	--	--	--	--	--	0.00084 J	0.0011 J	--	--
Silver	mg/L	T	0.00020	--	--	--	--	--	--	--	< 0.000050 U	< 0.00005 U	--	--
Vanadium	mg/L	T	0.0062	--	--	--	--	--	--	--	< 0.00062 U	< 0.00062 U	--	--
Zinc	mg/L	T	0.27	--	--	--	--	--	--	--	0.0045	0.0080	--	--
Additional Parameters														
Bicarbonate Alkalinity	mg/L	T	--	--	--	--	--	--	--	--	230	270 D	--	--
Carbonate Alkalinity	mg/L	T	--	--	--	--	--	--	--	--	< 0.16 U	< 0.31 UD	--	--
Magnesium	mg/L	T	--	--	--	--	--	--	--	--	21	25 D	--	--
Potassium	mg/L	T	--	--	--	--	--	--	--	--	0.78	5 D	--	--
Sodium	mg/L	T	--	--	--	--	--	--	--	--	29 D	35 D	--	--
Total Alkalinity	mg/L	T	--	--	--	--	--	--	--	--	230	270 D	--	--

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mg/l = milligrams per liter.

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

pCi/L = picocuries per liter.

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

D Dilution greater than 1, flagged by Trace.

B constituent detected in blank and sample

Renew Harbor Island
Work today, protect tomorrow.

Appendix E

Laboratory Reports

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

TRACE ANALYTICAL LABORATORIES, INC.

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Phone: (734) 263-7138

RE: Trace Project 24B0629
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,

Jon Mink
Senior Project Manager
Enclosures

PJLA Testing Accreditation# 1031

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

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SAMPLE SUMMARY

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID	Sample ID	Matrix	Collected By	Date Collected	Date Received
24B0629-01	MW-30	Ground Water	AB/TB	02/12/24 16:18	02/13/24 08:06
24B0629-02	MW-31	Ground Water	AB/TB	02/12/24 15:00	02/13/24 08:06
24B0629-03	MW-32	Ground Water	AB/TB	02/12/24 16:30	02/13/24 08:06
24B0629-04	MW-33	Ground Water	AB/TB	02/12/24 15:18	02/13/24 08:06
24B0629-05	MW-34	Ground Water	AB/TB	02/12/24 14:00	02/13/24 08:06
24B0629-06	MWT- 30	Ground Water	AB/TB	02/12/24 16:18	02/13/24 08:06
24B0629-07	MWT- 34	Ground Water	AB/TB	02/12/24 14:00	02/13/24 08:06
24B0629-08	MW-01R	Ground Water	AB/TB	02/13/24 14:35	02/14/24 12:30
24B0629-09	MW-02	Ground Water	AB/TB	02/13/24 12:15	02/14/24 12:30
24B0629-10	MW-03	Ground Water	AB/TB	02/14/24 09:40	02/14/24 12:30
24B0629-11	MW-04	Ground Water	AB/TB	02/14/24 08:32	02/14/24 12:30
24B0629-12	MW-06	Ground Water	AB/TB	02/13/24 12:43	02/14/24 12:30
24B0629-13	MW-07	Ground Water	AB/TB	02/13/24 15:35	02/14/24 12:30
24B0629-14	MW-08	Ground Water	AB/TB	02/13/24 10:22	02/14/24 12:30
24B0629-15	MW-09	Ground Water	AB/TB	02/13/24 11:20	02/14/24 12:30
24B0629-16	MW-10	Ground Water	AB/TB	02/13/24 13:45	02/14/24 12:30
24B0629-17	MW-11	Ground Water	AB/TB	02/13/24 14:30	02/14/24 12:30
24B0629-18	MW-12	Ground Water	AB/TB	02/13/24 17:30	02/14/24 12:30
24B0629-19	MW-18	Ground Water	AB/TB	02/13/24 16:00	02/14/24 12:30
24B0629-20	MW-19	Ground Water	AB/TB	02/13/24 08:36	02/14/24 12:30
24B0629-21	MW-20	Ground Water	AB/TB	02/13/24 14:30	02/14/24 12:30
24B0629-22	MW-27	Ground Water	AB/TB	02/13/24 09:30	02/14/24 12:30
24B0629-23	SG-02	Surface Water	AB/TB	02/14/24 10:15	02/14/24 12:30
24B0629-24	SG-03	Surface Water	AB/TB	02/14/24 10:25	02/14/24 12:30
24B0629-25	SG-04R	Surface Water	AB/TB	02/14/24 09:40	02/14/24 12:30
24B0629-26	SG-05	Surface Water	AB/TB	02/14/24 10:45	02/14/24 12:30

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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: 24B0629-01

Analysis: EPA 200.8 Rev. 5.4	
Antimony	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Cadmium	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Lead	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Thallium	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Analysis: SM 4500-H+ B-11	
pH	Note PH01t : The pH was analyzed at 9:45

Trace ID: 24B0629-02

Analysis: SM 4500-H+ B-11	
pH	Note PH01u : The pH was analyzed at 9:47

Trace ID: 24B0629-03

Analysis: SM 4500-H+ B-11	
pH	Note PH01v : The pH was analyzed at 9:48

Trace ID: 24B0629-04

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Analysis: EPA 200.8 Rev. 5.4	
Antimony	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Cadmium	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Lead	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Thallium	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Analysis: EPA 300.0 Rev. 2.1	
Chloride	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.
Sulfate as SO4	Note MS07 : The MS recovery was out of control. The result for this analyte, in the non-spiked version of the sample, must be considered estimated.
Analysis: SM 4500-H+ B-11	
pH	Note PH01w : The pH was analyzed at 9:50

Trace ID: 24B0629-05

Analysis: EPA 200.8 Rev. 5.4	
Antimony	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Cadmium	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Lead	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Thallium	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Analysis: SM 4500-H+ B-11	
pH	Note PH01x : The pH was analyzed at 9:51

Trace ID: 24B0629-06

Analysis: EPA 200.8 Rev. 5.4	
Antimony	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Cadmium	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Lead	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Thallium	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Analysis: SM 4500-H+ B-11	
pH	Note PH01y : The pH was analyzed at 9:52

Trace ID: 24B0629-07

Analysis: EPA 200.8 Rev. 5.4

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Antimony	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Cadmium	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Lead	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Thallium	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Analysis: SM 4500-H+ B-11	
pH	Note PH01z : The pH was analyzed at 9:53

Trace ID: 24B0629-08

Analysis: EPA 200.8 Rev. 5.4	
Antimony	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Cadmium	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Lead	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Thallium	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Analysis: SM 4500-H+ B-11	
pH	Note PH01 : The pH was analyzed at 14:06

Trace ID: 24B0629-09

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.
pH	Note PH01b : The pH was analyzed at 14:08

Trace ID: 24B0629-10

Analysis: EPA 200.8 Rev. 5.4	
Antimony	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Cadmium	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Lead	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Thallium	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Analysis: SM 4500-H+ B-11	
pH	Note PH01c : The pH was analyzed at 14:09

Trace ID: 24B0629-11

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Analysis: EPA 200.8 Rev. 5.4	
Antimony	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Cadmium	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Lead	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Thallium	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Analysis: SM 4500-H+ B-11	
pH	Note PH01d : The pH was analyzed at 14:10

Trace ID: 24B0629-12

Analysis: EPA 200.8 Rev. 5.4	
Antimony	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Cadmium	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Lead	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Thallium	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
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 PH01e : The pH was analyzed at 14:11

Trace ID: 24B0629-13

Analysis: SM 4500-H+ B-11	
pH	Note PH01f : The pH was analyzed at 14:12

Trace ID: 24B0629-14

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 PH01g : The pH was analyzed at 14:13

Trace ID: 24B0629-15

Analysis: EPA 200.8 Rev. 5.4	
Antimony	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Cadmium	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.

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Lead	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Thallium	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
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 PH01h : The pH was analyzed at 14:14

Trace ID: 24B0629-16

Analysis: EPA 200.8 Rev. 5.4	
Antimony	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Cadmium	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Lead	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Thallium	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
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 14:15

Trace ID: 24B0629-17

Analysis: SM 4500-H+ B-11	
pH	Note PH01j : The pH was analyzed at 14:16

Trace ID: 24B0629-18

Analysis: SM 4500-H+ B-11	
pH	Note PH01k : The pH was analyzed at 14:17

Trace ID: 24B0629-19

Analysis: EPA 200.8 Rev. 5.4	
Antimony	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Cadmium	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Lead	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Thallium	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Analysis: SM 4500-H+ B-11	

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pH	Note PH01l : The pH was analyzed at 14:18

Trace ID: 24B0629-20

Analysis: EPA 200.8 Rev. 5.4

Antimony	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Cadmium	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Lead	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Thallium	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.

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 PH01m : The pH was analyzed at 14:19

Trace ID: 24B0629-21

Analysis: SM 4500-H+ B-11

pH	Note PH01n : The pH was analyzed at 14:20

Trace ID: 24B0629-22

Analysis: SM 4500-H+ B-11

pH	Note H04 : The sample was received and, therefore, analyzed beyond the established EPA hold time. The result must be considered estimated.
pH	Note PH01o : The pH was analyzed at 14:21

Trace ID: 24B0629-23

Analysis: SM 4500-H+ B-11

pH	Note PH01p : The pH was analyzed at 14:22

Trace ID: 24B0629-24

Analysis: SM 4500-H+ B-11

pH	Note PH01q : The pH was analyzed at 14:23

Trace ID: 24B0629-25

Analysis: EPA 200.8 Rev. 5.4

Antimony	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Cadmium	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Lead	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.

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Thallium	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.
Analysis: SM 4500-H+ B-11	
pH	Note PH01r : The pH was analyzed at 14:24

Trace ID: 24B0629-26

Analysis: SM 4500-H+ B-11	
pH	Note PH01s : The pH was analyzed at 14:25

Trace ID: T147176-MS1

Analysis: EPA 300.0 Rev. 2.1	
Chloride	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.
Sulfate as SO4	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: T147222-DUP1

Analysis: SM 4500-H+ B-11	
pH	Note PH01t : The pH was analyzed at 9:45

Trace ID: T147285-DUP1

Analysis: SM 4500-H+ B-11	
pH	Note PH01a : The pH was analyzed at 14:07

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-01 | Date Collected: 02/12/24 16:18 | Matrix: Ground Water
Sample ID: MW-30 | Date Received: 02/13/24 08:06

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 7470A										
Batch: T147299										
Mercury	<0.00016	mg/L	0.00020	1	02/20/24	fs	02/20/24	acs		0.00016
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Boron	**1.9**	**mg/L**	**0.044**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.0082**
Calcium	**440**	**mg/L**	**1.3**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.38**
Lithium	**0.10**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**	**N**	**0.0094**
Magnesium	**110**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.050**
Potassium	**10**	**mg/L**	**1.2**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.18**
Sodium	**89**	**mg/L**	**0.62**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.44**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Antimony	<0.00050	mg/L	0.0012	5	02/21/24	fs	02/23/24	acs	DL02	0.00050
Arsenic	**0.00021**	**mg/L**	**0.00055**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00010**
Barium	**0.067**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.0034**
Beryllium	**0.00011**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.000052**
Cadmium	<0.00038	mg/L	0.0012	5	02/21/24	fs	02/23/24	acs	DL02	0.00038
Cobalt	**0.0011**	**mg/L**	**0.00052**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Copper	**0.00024**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00020**
Lead	<0.00050	mg/L	0.0028	5	02/21/24	fs	02/23/24	acs	DL02	0.00050
Molybdenum	**0.00073**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00025**
Selenium	**0.00039**	**mg/L**	**0.00050**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00010**
Thallium	<0.00038	mg/L	0.0019	5	02/21/24	fs	02/23/24	acs	DL02	0.00038

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-01 | Date Collected: 02/12/24 16:18 | Matrix: Ground Water
Sample ID: MW-30 | Date Received: 02/13/24 08:06

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY										
Analysis Method: EPA 300.0 Rev. 2.1										
Batch: T147176										
Fluoride	**1.1**	**mg/L**	**0.10**	**5**	**02/13/24**	**ljs**	**02/14/24**	**ljs**	**N**	**0.055**
Chloride	**110**	**mg/L**	**7.5**	**50**	**02/13/24**	**ljs**	**02/14/24**	**ljs**		**6.0**
Sulfate as SO4	**820**	**mg/L**	**30**	**50**	**02/13/24**	**ljs**	**02/14/24**	**ljs**		**4.1**
Analysis Method: SM 2320 B-11										
Batch: T147345										
Bicarbonate Alkalinity as CaCO3 at pH 4.5	**690**	**mg/L**	**10**	**2**	**02/17/24**	**aeo**	**02/17/24**	**aeo**	**N**	**0.31**
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.31	mg/L	10	2	02/17/24	aeo	02/17/24	aeo	N	0.31
Total Alkalinity as CaCO3 at pH 4.5	**690**	**mg/L**	**10**	**2**	**02/17/24**	**aeo**	**02/17/24**	**aeo**		**0.31**
Analysis Method: SM 2540 C-15										
Batch: T147218										
Total Dissolved Solids	**2100**	**mg/L**	**38**	**3.846154**	**02/14/24**	**ch**	**02/14/24**	**ch**	**N**	
Analysis Method: SM 2540 D-15										
Batch: T147242										
Total Suspended Solids	<4.0	mg/L	4.0	1	02/14/24	ch	02/14/24	ch		4.0
Analysis Method: SM 4500-H+ B-11										
Batch: T147222										
pH	**7.04**	**pH Units**		**1**	**02/12/24**	**mj**	**02/13/24**	**mj**	**PH01t**	

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-02 | Date Collected: 02/12/24 15:00 | Matrix: Ground Water
Sample ID: MW-31 | Date Received: 02/13/24 08:06

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 7470A										
Batch: T147299										
Mercury	<0.00016	mg/L	0.00020	1	02/20/24	fs	02/20/24	acs		0.00016
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Boron	**4.4**	**mg/L**	**0.044**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.0082**
Calcium	**170**	**mg/L**	**1.3**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.38**
Lithium	**0.039**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**	**N**	**0.0094**
Magnesium	**36**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.050**
Potassium	**9.6**	**mg/L**	**1.2**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.18**
Sodium	**54**	**mg/L**	**0.62**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.44**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Antimony	<0.00010	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.00010
Arsenic	**0.0010**	**mg/L**	**0.00055**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Barium	**0.13**	**mg/L**	**0.0025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00068**
Beryllium	**0.000054**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.000052**
Cadmium	**0.000084**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.000075**
Cobalt	**0.00028**	**mg/L**	**0.00052**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00010**
Copper	**0.00023**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00020**
Lead	<0.00010	mg/L	0.00055	1	02/21/24	fs	02/23/24	acs		0.00010
Molybdenum	**0.0011**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00025**
Selenium	**0.00074**	**mg/L**	**0.00050**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Thallium	**0.000088**	**mg/L**	**0.00038**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.000075**

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-02 | Date Collected: 02/12/24 15:00 | Matrix: Ground Water
Sample ID: MW-31 | Date Received: 02/13/24 08:06

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY										
Analysis Method: EPA 300.0 Rev. 2.1										
Batch: T147176										
Fluoride	**4.5**	**mg/L**	**0.10**	**5**	**02/13/24**	**ljs**	**02/14/24**	**ljs**	**N**	**0.055**
Chloride	**99**	**mg/L**	**0.75**	**5**	**02/13/24**	**ljs**	**02/14/24**	**ljs**		**0.60**
Sulfate as SO4	**150**	**mg/L**	**6.0**	**10**	**02/13/24**	**ljs**	**02/14/24**	**ljs**		**0.82**
Analysis Method: SM 2320 B-11										
Batch: T147345										
Bicarbonate Alkalinity as CaCO3 at pH 4.5	**340**	**mg/L**	**10**	**2**	**02/17/24**	**aeo**	**02/17/24**	**aeo**	**N**	**0.31**
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.31	mg/L	10	2	02/17/24	aeo	02/17/24	aeo	N	0.31
Total Alkalinity as CaCO3 at pH 4.5	**340**	**mg/L**	**10**	**2**	**02/17/24**	**aeo**	**02/17/24**	**aeo**		**0.31**
Analysis Method: SM 2540 C-15										
Batch: T147218										
Total Dissolved Solids	**810**	**mg/L**	**20**	**2**	**02/14/24**	**ch**	**02/14/24**	**ch**	**N**	
Analysis Method: SM 2540 D-15										
Batch: T147242										
Total Suspended Solids	<4.0	mg/L	4.0	1.010101	02/14/24	ch	02/14/24	ch		4.0
Analysis Method: SM 4500-H+ B-11										
Batch: T147222										
pH	**7.79**	**pH Units**		**1**	**02/12/24**	**mj**	**02/13/24**	**mj**	**PH01u**	

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-03 | Date Collected: 02/12/24 16:30 | Matrix: Ground Water
Sample ID: MW-32 | Date Received: 02/13/24 08:06

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 7470A										
Batch: T147299										
Mercury	<0.00016	mg/L	0.00020	1	02/20/24	fs	02/20/24	acs		0.00016
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Boron	**3.0**	**mg/L**	**0.044**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.0082**
Calcium	**180**	**mg/L**	**1.3**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.38**
Lithium	**0.10**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**	**N**	**0.0094**
Magnesium	**32**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.050**
Potassium	**9.1**	**mg/L**	**1.2**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.18**
Sodium	**30**	**mg/L**	**0.62**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.44**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Antimony	**0.00070**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Arsenic	**0.0024**	**mg/L**	**0.00055**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Barium	**0.059**	**mg/L**	**0.0025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00068**
Beryllium	**0.000070**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.000052**
Cadmium	**0.00019**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.000075**
Cobalt	**0.0019**	**mg/L**	**0.00052**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Copper	**0.016**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00020**
Lead	**0.00038**	**mg/L**	**0.00055**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00010**
Molybdenum	**0.0073**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00025**
Selenium	**0.0010**	**mg/L**	**0.00050**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Thallium	<0.000075	mg/L	0.00038	1	02/21/24	fs	02/23/24	acs		0.000075

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-03 | Date Collected: 02/12/24 16:30 | Matrix: Ground Water
Sample ID: MW-32 | Date Received: 02/13/24 08:06

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY										
Analysis Method: EPA 300.0 Rev. 2.1										
Batch: T147176										
Fluoride	**1.5**	**mg/L**	**0.10**	**5**	**02/13/24**	**ljs**	**02/14/24**	**ljs**	**N**	**0.055**
Chloride	**39**	**mg/L**	**0.75**	**5**	**02/13/24**	**ljs**	**02/14/24**	**ljs**		**0.60**
Sulfate as SO4	**83**	**mg/L**	**3.0**	**5**	**02/13/24**	**ljs**	**02/14/24**	**ljs**		**0.41**
Analysis Method: SM 2320 B-11										
Batch: T147345										
Bicarbonate Alkalinity as CaCO3 at pH 4.5	**440**	**mg/L**	**10**	**2**	**02/17/24**	**aeo**	**02/17/24**	**aeo**	**N**	**0.31**
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.31	mg/L	10	2	02/17/24	aeo	02/17/24	aeo	N	0.31
Total Alkalinity as CaCO3 at pH 4.5	**440**	**mg/L**	**10**	**2**	**02/17/24**	**aeo**	**02/17/24**	**aeo**		**0.31**
Analysis Method: SM 2540 C-15										
Batch: T147218										
Total Dissolved Solids	**680**	**mg/L**	**20**	**2.040816**	**02/14/24**	**ch**	**02/14/24**	**ch**	**N**	
Analysis Method: SM 2540 D-15										
Batch: T147242										
Total Suspended Solids	**32**	**mg/L**	**4.0**	**1.010101**	**02/14/24**	**ch**	**02/14/24**	**ch**		**4.0**
Analysis Method: SM 4500-H+ B-11										
Batch: T147222										
pH	**7.35**	**pH Units**		**1**	**02/12/24**	**mj**	**02/13/24**	**mj**	**PH01v**	

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-04 | Date Collected: 02/12/24 15:18 | Matrix: Ground Water
Sample ID: MW-33 | Date Received: 02/13/24 08:06

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 7470A										
Batch: T147299										
Mercury	<0.00016	mg/L	0.00020	1	02/20/24	fs	02/20/24	acs		0.00016
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Boron	**0.078**	**mg/L**	**0.044**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.0082**
Calcium	**150**	**mg/L**	**1.3**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.38**
Lithium	**0.0028**	**mg/L**	**0.0025**	**1**	**02/21/24**	**fs**	**03/01/24**	**ckd**	**N**	**0.0019**
Magnesium	**16**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.050**
Potassium	**3.4**	**mg/L**	**1.2**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.18**
Sodium	**25**	**mg/L**	**0.62**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.44**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Antimony	<0.00050	mg/L	0.0012	5	02/21/24	fs	02/23/24	acs	DL02	0.00050
Arsenic	**0.0012**	**mg/L**	**0.00055**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Barium	**0.44**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.0034**
Beryllium	<0.000052	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.000052
Cadmium	<0.00038	mg/L	0.0012	5	02/21/24	fs	02/23/24	acs	DL02	0.00038
Cobalt	**0.0012**	**mg/L**	**0.00052**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Copper	**0.00099**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00020**
Lead	**0.0014**	**mg/L**	**0.0028**	**5**	**02/21/24**	**fs**	**02/23/24**	**acs**	**DL02, J**	**0.00050**
Molybdenum	**0.00027**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00025**
Selenium	**0.00054**	**mg/L**	**0.00050**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Thallium	<0.00038	mg/L	0.0019	5	02/21/24	fs	02/23/24	acs	DL02	0.00038

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-04 | Date Collected: 02/12/24 15:18 | Matrix: Ground Water
Sample ID: MW-33 | Date Received: 02/13/24 08:06

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY										
Analysis Method: EPA 300.0 Rev. 2.1										
Batch: T147176										
Fluoride	**0.27**	**mg/L**	**0.10**	**5**	**02/13/24**	**ljs**	**02/14/24**	**ljs**	**N**	**0.055**
Chloride	**35**	**mg/L**	**0.75**	**5**	**02/13/24**	**ljs**	**02/14/24**	**ljs**	**MS07**	**0.60**
Sulfate as SO4	**20**	**mg/L**	**3.0**	**5**	**02/13/24**	**ljs**	**02/14/24**	**ljs**	**MS07**	**0.41**
Analysis Method: SM 2320 B-11										
Batch: T147345										
Bicarbonate Alkalinity as CaCO3 at pH 4.5	**330**	**mg/L**	**10**	**2**	**02/17/24**	**aeo**	**02/17/24**	**aeo**	**N**	**0.31**
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.31	mg/L	10	2	02/17/24	aeo	02/17/24	aeo	N	0.31
Total Alkalinity as CaCO3 at pH 4.5	**330**	**mg/L**	**10**	**2**	**02/17/24**	**aeo**	**02/17/24**	**aeo**		**0.31**
Analysis Method: SM 2540 C-15										
Batch: T147218										
Total Dissolved Solids	**550**	**mg/L**	**20**	**2**	**02/14/24**	**ch**	**02/14/24**	**ch**	**N**	
Analysis Method: SM 2540 D-15										
Batch: T147242										
Total Suspended Solids	**6.0**	**mg/L**	**4.0**	**1**	**02/14/24**	**ch**	**02/14/24**	**ch**		**4.0**
Analysis Method: SM 4500-H+ B-11										
Batch: T147222										
pH	**7.14**	**pH Units**		**1**	**02/12/24**	**mj**	**02/13/24**	**mj**	**PH01w**	

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-05 | Date Collected: 02/12/24 14:00 | Matrix: Ground Water
Sample ID: MW-34 | Date Received: 02/13/24 08:06

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 7470A										
Batch: T147299										
Mercury	<0.00016	mg/L	0.00020	1	02/20/24	fs	02/20/24	acs		0.00016
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Boron	**1.9**	**mg/L**	**0.044**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.0082**
Calcium	**210**	**mg/L**	**1.3**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.38**
Lithium	**0.043**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**	**N**	**0.0094**
Magnesium	**23**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.050**
Potassium	**8.8**	**mg/L**	**1.2**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.18**
Sodium	**26**	**mg/L**	**0.62**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.44**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Antimony	<0.00050	mg/L	0.0012	5	02/21/24	fs	02/23/24	acs	DL02	0.00050
Arsenic	**0.00017**	**mg/L**	**0.00055**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00010**
Barium	**0.066**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.0034**
Beryllium	<0.000052	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.000052
Cadmium	<0.00038	mg/L	0.0012	5	02/21/24	fs	02/23/24	acs	DL02	0.00038
Cobalt	**0.00061**	**mg/L**	**0.00052**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Copper	**0.00024**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00020**
Lead	<0.00050	mg/L	0.0028	5	02/21/24	fs	02/23/24	acs	DL02	0.00050
Molybdenum	<0.00025	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.00025
Selenium	**0.00039**	**mg/L**	**0.00050**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00010**
Thallium	<0.00038	mg/L	0.0019	5	02/21/24	fs	02/23/24	acs	DL02	0.00038

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-05 | Date Collected: 02/12/24 14:00 | Matrix: Ground Water
Sample ID: MW-34 | Date Received: 02/13/24 08:06

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY										
Analysis Method: EPA 300.0 Rev. 2.1										
Batch: T147176										
Fluoride	**0.21**	**mg/L**	**0.10**	**5**	**02/13/24**	**ljs**	**02/14/24**	**ljs**	**N**	**0.055**
Chloride	**20**	**mg/L**	**0.75**	**5**	**02/13/24**	**ljs**	**02/14/24**	**ljs**		**0.60**
Sulfate as SO4	<0.41	mg/L	3.0	5	02/13/24	ljs	02/14/24	ljs		0.41
Analysis Method: SM 2320 B-11										
Batch: T147345										
Bicarbonate Alkalinity as CaCO3 at pH 4.5	**830**	**mg/L**	**10**	**2**	**02/17/24**	**aeo**	**02/17/24**	**aeo**	**N**	**0.31**
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.31	mg/L	10	2	02/17/24	aeo	02/17/24	aeo	N	0.31
Total Alkalinity as CaCO3 at pH 4.5	**830**	**mg/L**	**10**	**2**	**02/17/24**	**aeo**	**02/17/24**	**aeo**		**0.31**
Analysis Method: SM 2540 C-15										
Batch: T147218										
Total Dissolved Solids	**730**	**mg/L**	**20**	**2**	**02/14/24**	**ch**	**02/14/24**	**ch**	**N**	
Analysis Method: SM 2540 D-15										
Batch: T147242										
Total Suspended Solids	**120**	**mg/L**	**4.0**	**1**	**02/14/24**	**ch**	**02/14/24**	**ch**		**4.0**
Analysis Method: SM 4500-H+ B-11										
Batch: T147222										
pH	**6.58**	**pH Units**		**1**	**02/12/24**	**mj**	**02/13/24**	**mj**	**PH01x**	

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-06 | Date Collected: 02/12/24 16:18 | Matrix: Ground Water
Sample ID: MWT- 30 | Date Received: 02/13/24 08:06

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 7470A										
Batch: T147299										
Mercury	<0.00016	mg/L	0.00020	1	02/20/24	fs	02/20/24	acs		0.00016
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Boron	**1.8**	**mg/L**	**0.044**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.0082**
Calcium	**440**	**mg/L**	**1.3**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.38**
Lithium	**0.10**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**	**N**	**0.0094**
Magnesium	**110**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.050**
Potassium	**9.8**	**mg/L**	**1.2**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.18**
Sodium	**87**	**mg/L**	**0.62**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.44**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Antimony	<0.00050	mg/L	0.0012	5	02/21/24	fs	02/23/24	acs	DL02	0.00050
Arsenic	**0.0013**	**mg/L**	**0.00055**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Barium	**0.45**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.0034**
Beryllium	<0.000052	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.000052
Cadmium	<0.00038	mg/L	0.0012	5	02/21/24	fs	02/23/24	acs	DL02	0.00038
Cobalt	**0.0012**	**mg/L**	**0.00052**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Copper	**0.00092**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00020**
Lead	**0.0014**	**mg/L**	**0.0028**	**5**	**02/21/24**	**fs**	**02/23/24**	**acs**	**DL02, J**	**0.00050**
Molybdenum	<0.00025	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.00025
Selenium	**0.00063**	**mg/L**	**0.00050**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Thallium	<0.00038	mg/L	0.0019	5	02/21/24	fs	02/23/24	acs	DL02	0.00038

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-06 | Date Collected: 02/12/24 16:18 | Matrix: Ground Water
Sample ID: MWT- 30 | Date Received: 02/13/24 08:06

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY										
Analysis Method: EPA 300.0 Rev. 2.1										
Batch: T147176										
Fluoride	**1.1**	**mg/L**	**0.10**	**5**	**02/13/24**	**ljs**	**02/14/24**	**ljs**	**N**	**0.055**
Chloride	**110**	**mg/L**	**7.5**	**50**	**02/13/24**	**ljs**	**02/14/24**	**ljs**		**6.0**
Sulfate as SO4	**830**	**mg/L**	**30**	**50**	**02/13/24**	**ljs**	**02/14/24**	**ljs**		**4.1**
Analysis Method: SM 2320 B-11										
Batch: T147345										
Bicarbonate Alkalinity as CaCO3 at pH 4.5	**670**	**mg/L**	**10**	**2**	**02/17/24**	**aeo**	**02/17/24**	**aeo**	**N**	**0.31**
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.31	mg/L	10	2	02/17/24	aeo	02/17/24	aeo	N	0.31
Total Alkalinity as CaCO3 at pH 4.5	**670**	**mg/L**	**10**	**2**	**02/17/24**	**aeo**	**02/17/24**	**aeo**		**0.31**
Analysis Method: SM 2540 C-15										
Batch: T147218										
Total Dissolved Solids	**2100**	**mg/L**	**40**	**4**	**02/14/24**	**ch**	**02/14/24**	**ch**	**N**	
Analysis Method: SM 2540 D-15										
Batch: T147242										
Total Suspended Solids	<4.0	mg/L	4.0	1	02/14/24	ch	02/14/24	ch		4.0
Analysis Method: SM 4500-H+ B-11										
Batch: T147222										
pH	**7.05**	**pH Units**		**1**	**02/12/24**	**mj**	**02/13/24**	**mj**	**PH01y**	

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-07 | Date Collected: 02/12/24 14:00 | Matrix: Ground Water
Sample ID: MWT- 34 | Date Received: 02/13/24 08:06

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 7470A										
Batch: T147299										
Mercury	<0.00016	mg/L	0.00020	1	02/20/24	fs	02/20/24	acs		0.00016
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Boron	**2.0**	**mg/L**	**0.044**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.0082**
Calcium	**220**	**mg/L**	**1.3**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.38**
Lithium	**0.050**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**	**N**	**0.0094**
Magnesium	**24**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.050**
Potassium	**9.1**	**mg/L**	**1.2**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.18**
Sodium	**26**	**mg/L**	**0.62**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.44**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Antimony	<0.00050	mg/L	0.0012	5	02/21/24	fs	02/23/24	acs	DL02	0.00050
Arsenic	**0.00056**	**mg/L**	**0.00055**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Barium	**0.20**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.0034**
Beryllium	**0.000084**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.000052**
Cadmium	<0.00038	mg/L	0.0012	5	02/21/24	fs	02/23/24	acs	DL02	0.00038
Cobalt	**0.00087**	**mg/L**	**0.00052**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Copper	**0.00031**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00020**
Lead	**0.0019**	**mg/L**	**0.0028**	**5**	**02/21/24**	**fs**	**02/23/24**	**acs**	**DL02, J**	**0.00050**
Molybdenum	**0.0018**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00025**
Selenium	**0.00080**	**mg/L**	**0.00050**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Thallium	<0.00038	mg/L	0.0019	5	02/21/24	fs	02/23/24	acs	DL02	0.00038

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-07 | Date Collected: 02/12/24 14:00 | Matrix: Ground Water
Sample ID: MWT- 34 | Date Received: 02/13/24 08:06

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY										
Analysis Method: EPA 300.0 Rev. 2.1										
Batch: T147221										
Fluoride	**0.21**	**mg/L**	**0.10**	**5**	**02/14/24**	**ljs**	**02/14/24**	**ljs**	**N**	**0.055**
Chloride	**21**	**mg/L**	**0.75**	**5**	**02/14/24**	**ljs**	**02/14/24**	**ljs**		**0.60**
Sulfate as SO4	<0.41	mg/L	3.0	5	02/14/24	ljs	02/14/24	ljs		0.41
Analysis Method: SM 2320 B-11										
Batch: T147345										
Bicarbonate Alkalinity as CaCO3 at pH 4.5	**840**	**mg/L**	**10**	**2**	**02/17/24**	**aeo**	**02/17/24**	**aeo**	**N**	**0.31**
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.31	mg/L	10	2	02/17/24	aeo	02/17/24	aeo	N	0.31
Total Alkalinity as CaCO3 at pH 4.5	**840**	**mg/L**	**10**	**2**	**02/17/24**	**aeo**	**02/17/24**	**aeo**		**0.31**
Analysis Method: SM 2540 C-15										
Batch: T147218										
Total Dissolved Solids	**830**	**mg/L**	**42**	**4.166667**	**02/14/24**	**ch**	**02/14/24**	**ch**	**N**	
Analysis Method: SM 2540 D-15										
Batch: T147242										
Total Suspended Solids	**120**	**mg/L**	**4.0**	**1.010101**	**02/14/24**	**ch**	**02/14/24**	**ch**		**4.0**
Analysis Method: SM 4500-H+ B-11										
Batch: T147222										
pH	**6.60**	**pH Units**		**1**	**02/12/24**	**mj**	**02/13/24**	**mj**	**PH01z**	

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-08 | Date Collected: 02/13/24 14:35 | Matrix: Ground Water
Sample ID: MW-01R | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 7470A										
Batch: T147299										
Mercury	<0.00016	mg/L	0.00020	1	02/20/24	fs	02/20/24	acs		0.00016
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Boron	**38**	**mg/L**	**0.044**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.0082**
Calcium	**400**	**mg/L**	**1.3**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.38**
Lithium	**0.77**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**	**N**	**0.0094**
Magnesium	**110**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.050**
Potassium	**34**	**mg/L**	**1.2**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.18**
Sodium	**140**	**mg/L**	**0.62**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.44**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Antimony	<0.00050	mg/L	0.0012	5	02/21/24	fs	02/23/24	acs	DL02	0.00050
Arsenic	**0.0041**	**mg/L**	**0.00055**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Barium	**0.54**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.0034**
Beryllium	**0.00015**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.000052**
Cadmium	<0.00038	mg/L	0.0012	5	02/21/24	fs	02/23/24	acs	DL02	0.00038
Cobalt	**0.0040**	**mg/L**	**0.00052**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Copper	**0.0010**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00020**
Lead	**0.0017**	**mg/L**	**0.0028**	**5**	**02/21/24**	**fs**	**02/23/24**	**acs**	**DL02, J**	**0.00050**
Molybdenum	**0.0056**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00025**
Selenium	**0.0018**	**mg/L**	**0.00050**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Thallium	<0.00038	mg/L	0.0019	5	02/21/24	fs	02/23/24	acs	DL02	0.00038

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-08 | Date Collected: 02/13/24 14:35 | Matrix: Ground Water
Sample ID: MW-01R | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY										
Analysis Method: EPA 300.0 Rev. 2.1										
Batch: T147221										
Fluoride	**4.8**	**mg/L**	**0.10**	**5**	**02/14/24**	**ljs**	**02/14/24**	**ljs**	**N**	**0.055**
Chloride	**49**	**mg/L**	**0.75**	**5**	**02/14/24**	**ljs**	**02/14/24**	**ljs**		**0.60**
Sulfate as SO4	**980**	**mg/L**	**30**	**50**	**02/14/24**	**ljs**	**02/15/24**	**ljs**		**4.1**
Analysis Method: SM 2320 B-11										
Batch: T147345										
Bicarbonate Alkalinity as CaCO3 at pH 4.5	**560**	**mg/L**	**10**	**2**	**02/17/24**	**aeo**	**02/17/24**	**aeo**	**N**	**0.31**
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.31	mg/L	10	2	02/17/24	aeo	02/17/24	aeo	N	0.31
Total Alkalinity as CaCO3 at pH 4.5	**560**	**mg/L**	**10**	**2**	**02/17/24**	**aeo**	**02/17/24**	**aeo**		**0.31**
Analysis Method: SM 2540 C-15										
Batch: T147218										
Total Dissolved Solids	**2200**	**mg/L**	**38**	**3.846154**	**02/14/24**	**ch**	**02/14/24**	**ch**	**N**	
Analysis Method: SM 2540 D-15										
Batch: T147275										
Total Suspended Solids	<4.0	mg/L	4.0	1	02/15/24	ch	02/15/24	tjh		4.0
Analysis Method: SM 4500-H+ B-11										
Batch: T147285										
pH	**7.44**	**pH Units**		**1**	**02/13/24**	**mj**	**02/14/24**	**cem**	**PH01**	

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-09 | Date Collected: 02/13/24 12:15 | Matrix: Ground Water
Sample ID: MW-02 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 7470A										
Batch: T147299										
Mercury	<0.00016	mg/L	0.00020	1	02/20/24	fs	02/20/24	acs		0.00016
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Boron	**100**	**mg/L**	**0.044**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.0082**
Calcium	**220**	**mg/L**	**1.3**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.38**
Lithium	**1.4**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**	**N**	**0.0094**
Magnesium	**77**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.050**
Potassium	**50**	**mg/L**	**1.2**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.18**
Sodium	**280**	**mg/L**	**0.62**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.44**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Antimony	<0.00010	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.00010
Arsenic	**0.00044**	**mg/L**	**0.00055**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00010**
Barium	**0.73**	**mg/L**	**0.0025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00068**
Beryllium	<0.000052	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.000052
Cadmium	<0.000075	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.000075
Cobalt	**0.00024**	**mg/L**	**0.00052**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00010**
Copper	**0.00023**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00020**
Lead	<0.00010	mg/L	0.00055	1	02/21/24	fs	02/23/24	acs		0.00010
Molybdenum	**0.0038**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00025**
Selenium	**0.00056**	**mg/L**	**0.00050**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Thallium	<0.000075	mg/L	0.00038	1	02/21/24	fs	02/23/24	acs		0.000075

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-09 | Date Collected: 02/13/24 12:15 | Matrix: Ground Water
Sample ID: MW-02 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY										
Analysis Method: EPA 300.0 Rev. 2.1										
Batch: T147221										
Fluoride	**9.5**	**mg/L**	**0.10**	**5**	**02/14/24**	**ljs**	**02/14/24**	**ljs**	**N**	**0.055**
Chloride	**140**	**mg/L**	**3.8**	**25**	**02/14/24**	**ljs**	**02/15/24**	**ljs**		**3.0**
Sulfate as SO4	<0.41	mg/L	3.0	5	02/14/24	ljs	02/14/24	ljs		0.41
Analysis Method: SM 2320 B-11										
Batch: T147345										
Bicarbonate Alkalinity as CaCO3 at pH 4.5	**1800**	**mg/L**	**10**	**2**	**02/17/24**	**aeo**	**02/17/24**	**aeo**	**N**	**0.31**
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.31	mg/L	10	2	02/17/24	aeo	02/17/24	aeo	N	0.31
Total Alkalinity as CaCO3 at pH 4.5	**1800**	**mg/L**	**10**	**2**	**02/17/24**	**aeo**	**02/17/24**	**aeo**		**0.31**
Analysis Method: SM 2540 C-15										
Batch: T147218										
Total Dissolved Solids	**1800**	**mg/L**	**42**	**4.166667**	**02/14/24**	**ch**	**02/14/24**	**ch**	**N**	
Analysis Method: SM 2540 D-15										
Batch: T147275										
Total Suspended Solids	**59**	**mg/L**	**4.0**	**1**	**02/15/24**	**ch**	**02/15/24**	**tjh**		**4.0**
Analysis Method: SM 4500-H+ B-11										
Batch: T147285										
pH	**7.10**	**pH Units**		**1**	**02/13/24**	**mj**	**02/14/24**	**cem**	**H04, PH01b**	

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-10 | Date Collected: 02/14/24 09:40 | Matrix: Ground Water
Sample ID: MW-03 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 7470A										
Batch: T147299										
Mercury	<0.00016	mg/L	0.00020	1	02/20/24	fs	02/20/24	acs		0.00016
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Boron	**4.5**	**mg/L**	**0.044**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.0082**
Calcium	**360**	**mg/L**	**1.3**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.38**
Lithium	**0.033**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**	**N**	**0.0094**
Magnesium	**210**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.050**
Potassium	**19**	**mg/L**	**1.2**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.18**
Sodium	**110**	**mg/L**	**0.62**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.44**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Antimony	<0.00050	mg/L	0.0012	5	02/21/24	fs	02/23/24	acs	DL02	0.00050
Arsenic	**0.00097**	**mg/L**	**0.00055**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Barium	**0.42**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.0034**
Beryllium	**0.000057**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.000052**
Cadmium	<0.00038	mg/L	0.0012	5	02/21/24	fs	02/23/24	acs	DL02	0.00038
Cobalt	**0.00037**	**mg/L**	**0.00052**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00010**
Copper	**0.00025**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00020**
Lead	<0.00050	mg/L	0.0028	5	02/21/24	fs	02/23/24	acs	DL02	0.00050
Molybdenum	<0.00025	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.00025
Selenium	**0.00062**	**mg/L**	**0.00050**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Thallium	<0.00038	mg/L	0.0019	5	02/21/24	fs	02/23/24	acs	DL02	0.00038

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-10 | Date Collected: 02/14/24 09:40 | Matrix: Ground Water
Sample ID: MW-03 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY										
Analysis Method: EPA 300.0 Rev. 2.1										
Batch: T147221										
Fluoride	**0.61**	**mg/L**	**0.10**	**5**	**02/14/24**	**ljs**	**02/14/24**	**ljs**	**N**	**0.055**
Chloride	**140**	**mg/L**	**3.8**	**25**	**02/14/24**	**ljs**	**02/15/24**	**ljs**		**3.0**
Sulfate as SO4	**310**	**mg/L**	**15**	**25**	**02/14/24**	**ljs**	**02/15/24**	**ljs**		**2.1**
Analysis Method: SM 2320 B-11										
Batch: T147529										
Bicarbonate Alkalinity as CaCO3 at pH 4.5	**1300**	**mg/L**	**5.0**	**1**	**02/22/24**	**bm**	**02/22/24**	**bm**	**N**	**0.16**
Carbonate Alkalinity as CaCO3 at pH 8.2	**70**	**mg/L**	**5.0**	**1**	**02/22/24**	**bm**	**02/22/24**	**bm**	**N**	**0.16**
Total Alkalinity as CaCO3 at pH 4.5	**1300**	**mg/L**	**5.0**	**1**	**02/22/24**	**bm**	**02/22/24**	**bm**		**0.16**
Analysis Method: SM 2540 C-15										
Batch: T147424										
Total Dissolved Solids	**2000**	**mg/L**	**40**	**4**	**02/20/24**	**tjh**	**02/21/24**	**tjh/ean**	**N**	
Analysis Method: SM 2540 D-15										
Batch: T147275										
Total Suspended Solids	<4.0	mg/L	4.0	1	02/15/24	ch	02/15/24	tjh		4.0
Analysis Method: SM 4500-H+ B-11										
Batch: T147285										
pH	**7.25**	**pH Units**		**1**	**02/14/24**	**mj**	**02/14/24**	**cem**	**PH01c**	

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-11 | Date Collected: 02/14/24 08:32 | Matrix: Ground Water
Sample ID: MW-04 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 7470A										
Batch: T147299										
Mercury	<0.00016	mg/L	0.00020	1	02/20/24	fs	02/20/24	acs		0.00016
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Boron	**4.1**	**mg/L**	**0.044**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.0082**
Calcium	**350**	**mg/L**	**1.3**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.38**
Lithium	**0.048**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**	**N**	**0.0094**
Magnesium	**120**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.050**
Potassium	**21**	**mg/L**	**1.2**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.18**
Sodium	**80**	**mg/L**	**0.62**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.44**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Antimony	<0.00050	mg/L	0.0012	5	02/21/24	fs	02/23/24	acs	DL02	0.00050
Arsenic	**0.00058**	**mg/L**	**0.00055**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Barium	**0.11**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.0034**
Beryllium	<0.000052	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.000052
Cadmium	<0.00038	mg/L	0.0012	5	02/21/24	fs	02/23/24	acs	DL02	0.00038
Cobalt	**0.00018**	**mg/L**	**0.00052**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00010**
Copper	<0.00020	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.00020
Lead	<0.00050	mg/L	0.0028	5	02/21/24	fs	02/23/24	acs	DL02	0.00050
Molybdenum	**0.00037**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00025**
Selenium	**0.00043**	**mg/L**	**0.00050**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00010**
Thallium	<0.00038	mg/L	0.0019	5	02/21/24	fs	02/23/24	acs	DL02	0.00038

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-11 | Date Collected: 02/14/24 08:32 | Matrix: Ground Water
Sample ID: MW-04 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY										
Analysis Method: EPA 300.0 Rev. 2.1										
Batch: T147221										
Fluoride	**1.4**	**mg/L**	**0.10**	**5**	**02/14/24**	**ljs**	**02/14/24**	**ljs**	**N**	**0.055**
Chloride	**130**	**mg/L**	**7.5**	**50**	**02/14/24**	**ljs**	**02/15/24**	**ljs**		**6.0**
Sulfate as SO4	**640**	**mg/L**	**30**	**50**	**02/14/24**	**ljs**	**02/15/24**	**ljs**		**4.1**
Analysis Method: SM 2320 B-11										
Batch: T147372										
Bicarbonate Alkalinity as CaCO3 at pH 4.5	**680**	**mg/L**	**10**	**2**	**02/19/24**	**bm**	**02/22/24**	**bm**	**N**	**0.31**
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.31	mg/L	10	2	02/19/24	bm	02/22/24	bm	N	0.31
Total Alkalinity as CaCO3 at pH 4.5	**680**	**mg/L**	**10**	**2**	**02/19/24**	**bm**	**02/22/24**	**bm**		**0.31**
Analysis Method: SM 2540 C-15										
Batch: T147424										
Total Dissolved Solids	**1800**	**mg/L**	**40**	**4**	**02/20/24**	**tjh**	**02/21/24**	**tjh/ean**	**N**	
Analysis Method: SM 2540 D-15										
Batch: T147275										
Total Suspended Solids	<4.0	mg/L	4.0	1	02/15/24	ch	02/15/24	tjh		4.0
Analysis Method: SM 4500-H+ B-11										
Batch: T147285										
pH	**7.26**	**pH Units**		**1**	**02/14/24**	**mj**	**02/14/24**	**cem**	**PH01d**	

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-12 | Date Collected: 02/13/24 12:43 | Matrix: Ground Water
Sample ID: MW-06 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 7470A										
Batch: T147299										
Mercury	<0.00016	mg/L	0.00020	1	02/20/24	fs	02/20/24	acs		0.00016
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Boron	**7.3**	**mg/L**	**0.044**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.0082**
Calcium	**280**	**mg/L**	**1.3**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.38**
Lithium	**0.13**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**	**N**	**0.0094**
Magnesium	**81**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.050**
Potassium	**20**	**mg/L**	**1.2**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.18**
Sodium	**49**	**mg/L**	**0.62**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.44**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Antimony	<0.00050	mg/L	0.0012	5	02/21/24	fs	02/23/24	acs	DL02	0.00050
Arsenic	**0.00057**	**mg/L**	**0.00055**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Barium	**1.4**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.0034**
Beryllium	<0.000052	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.000052
Cadmium	<0.00038	mg/L	0.0012	5	02/21/24	fs	02/23/24	acs	DL02	0.00038
Cobalt	**0.00035**	**mg/L**	**0.00052**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00010**
Copper	**0.00028**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00020**
Lead	<0.00050	mg/L	0.0028	5	02/21/24	fs	02/23/24	acs	DL02	0.00050
Molybdenum	<0.00025	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.00025
Selenium	**0.00047**	**mg/L**	**0.00050**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00010**
Thallium	<0.00038	mg/L	0.0019	5	02/21/24	fs	02/23/24	acs	DL02	0.00038

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-12 | Date Collected: 02/13/24 12:43 | Matrix: Ground Water
Sample ID: MW-06 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY										
Analysis Method: EPA 300.0 Rev. 2.1										
Batch: T147221										
Fluoride	**0.98**	**mg/L**	**0.10**	**5**	**02/14/24**	**ljs**	**02/14/24**	**ljs**	**N**	**0.055**
Chloride	**18**	**mg/L**	**0.75**	**5**	**02/14/24**	**ljs**	**02/14/24**	**ljs**		**0.60**
Sulfate as SO4	**1.5**	**mg/L**	**3.0**	**5**	**02/14/24**	**ljs**	**02/14/24**	**ljs**	**J**	**0.41**
Analysis Method: SM 2320 B-11										
Batch: T147372										
Bicarbonate Alkalinity as CaCO3 at pH 4.5	**980**	**mg/L**	**10**	**2**	**02/19/24**	**bm**	**02/22/24**	**bm**	**N**	**0.31**
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.31	mg/L	10	2	02/19/24	bm	02/22/24	bm	N	0.31
Total Alkalinity as CaCO3 at pH 4.5	**980**	**mg/L**	**10**	**2**	**02/19/24**	**bm**	**02/22/24**	**bm**		**0.31**
Analysis Method: SM 2540 C-15										
Batch: T147218										
Total Dissolved Solids	**1100**	**mg/L**	**40**	**4**	**02/14/24**	**ch**	**02/14/24**	**ch**	**N**	
Analysis Method: SM 2540 D-15										
Batch: T147275										
Total Suspended Solids	**73**	**mg/L**	**4.0**	**1**	**02/15/24**	**ch**	**02/15/24**	**tjh**		**4.0**
Analysis Method: SM 4500-H+ B-11										
Batch: T147285										
pH	**7.07**	**pH Units**		**1**	**02/13/24**	**mj**	**02/14/24**	**cem**	**H02, PH01e**	

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-13 Date Collected: 02/13/24 15:35 Matrix: Ground Water
Sample ID: MW-07 Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 7470A										
Batch: T147299										
Mercury	<0.00016	mg/L	0.00020	1	02/20/24	fs	02/20/24	acs		0.00016
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Boron	**11**	**mg/L**	**0.044**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.0082**
Calcium	**140**	**mg/L**	**1.3**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.38**
Lithium	**0.0031**	**mg/L**	**0.0025**	**1**	**02/21/24**	**fs**	**03/01/24**	**ckd**	**N**	**0.0019**
Magnesium	**38**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.050**
Potassium	**4.7**	**mg/L**	**1.2**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.18**
Sodium	**52**	**mg/L**	**0.62**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.44**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Antimony	<0.00010	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.00010
Arsenic	**0.00021**	**mg/L**	**0.00055**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00010**
Barium	**0.35**	**mg/L**	**0.0025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00068**
Beryllium	<0.000052	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.000052
Cadmium	<0.000075	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.000075
Cobalt	**0.00074**	**mg/L**	**0.00052**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Copper	<0.00020	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.00020
Lead	<0.00010	mg/L	0.00055	1	02/21/24	fs	02/23/24	acs		0.00010
Molybdenum	<0.00025	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.00025
Selenium	**0.00023**	**mg/L**	**0.00050**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00010**
Thallium	<0.000075	mg/L	0.00038	1	02/21/24	fs	02/23/24	acs		0.000075

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-13 | Date Collected: 02/13/24 15:35 | Matrix: Ground Water
Sample ID: MW-07 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY										
Analysis Method: EPA 300.0 Rev. 2.1										
Batch: T147221										
Fluoride	**0.068**	**mg/L**	**0.10**	**5**	**02/14/24**	**ljs**	**02/15/24**	**ljs**	**J, N**	**0.055**
Chloride	**14**	**mg/L**	**0.75**	**5**	**02/14/24**	**ljs**	**02/15/24**	**ljs**		**0.60**
Sulfate as SO4	**32**	**mg/L**	**3.0**	**5**	**02/14/24**	**ljs**	**02/15/24**	**ljs**		**0.41**
Analysis Method: SM 2320 B-11										
Batch: T147372										
Bicarbonate Alkalinity as CaCO3 at pH 4.5	**610**	**mg/L**	**10**	**2**	**02/19/24**	**bm**	**02/22/24**	**bm**	**N**	**0.31**
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.31	mg/L	10	2	02/19/24	bm	02/22/24	bm	N	0.31
Total Alkalinity as CaCO3 at pH 4.5	**610**	**mg/L**	**10**	**2**	**02/19/24**	**bm**	**02/22/24**	**bm**		**0.31**
Analysis Method: SM 2540 C-15										
Batch: T147218										
Total Dissolved Solids	**680**	**mg/L**	**20**	**2**	**02/14/24**	**ch**	**02/14/24**	**ch**	**N**	
Analysis Method: SM 2540 D-15										
Batch: T147275										
Total Suspended Solids	**29**	**mg/L**	**4.0**	**1**	**02/15/24**	**ch**	**02/15/24**	**tjh**		**4.0**
Analysis Method: SM 4500-H+ B-11										
Batch: T147285										
pH	**6.95**	**pH Units**		**1**	**02/13/24**	**mj**	**02/14/24**	**cem**	**PH01f**	

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-14 | Date Collected: 02/13/24 10:22 | Matrix: Ground Water
Sample ID: MW-08 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 7470A										
Batch: T147299										
Mercury	<0.00016	mg/L	0.00020	1	02/20/24	fs	02/20/24	acs		0.00016
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Boron	**7.0**	**mg/L**	**0.044**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.0082**
Calcium	**120**	**mg/L**	**1.3**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.38**
Lithium	**0.097**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**	**N**	**0.0094**
Magnesium	**23**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.050**
Potassium	**8.6**	**mg/L**	**1.2**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.18**
Sodium	**32**	**mg/L**	**0.62**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.44**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Antimony	<0.00010	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.00010
Arsenic	**0.030**	**mg/L**	**0.00055**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Barium	**1.0**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.0034**
Beryllium	<0.000052	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.000052
Cadmium	<0.000075	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.000075
Cobalt	**0.00034**	**mg/L**	**0.00052**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00010**
Copper	**0.00035**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00020**
Lead	**0.00011**	**mg/L**	**0.00055**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00010**
Molybdenum	**0.0017**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00025**
Selenium	**0.00034**	**mg/L**	**0.00050**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00010**
Thallium	<0.000075	mg/L	0.00038	1	02/21/24	fs	02/23/24	acs		0.000075

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-14 | Date Collected: 02/13/24 10:22 | Matrix: Ground Water
Sample ID: MW-08 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY										
Analysis Method: EPA 300.0 Rev. 2.1										
Batch: T147221										
Fluoride	**1.0**	**mg/L**	**0.10**	**5**	**02/14/24**	**ljs**	**02/15/24**	**ljs**	**N**	**0.055**
Chloride	**25**	**mg/L**	**0.75**	**5**	**02/14/24**	**ljs**	**02/15/24**	**ljs**		**0.60**
Sulfate as SO4	**5.6**	**mg/L**	**3.0**	**5**	**02/14/24**	**ljs**	**02/15/24**	**ljs**		**0.41**
Analysis Method: SM 2320 B-11										
Batch: T147372										
Bicarbonate Alkalinity as CaCO3 at pH 4.5	**440**	**mg/L**	**10**	**2**	**02/19/24**	**bm**	**02/22/24**	**bm**	**N**	**0.31**
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.31	mg/L	10	2	02/19/24	bm	02/22/24	bm	N	0.31
Total Alkalinity as CaCO3 at pH 4.5	**440**	**mg/L**	**10**	**2**	**02/19/24**	**bm**	**02/22/24**	**bm**		**0.31**
Analysis Method: SM 2540 C-15										
Batch: T147218										
Total Dissolved Solids	**530**	**mg/L**	**20**	**2.040816**	**02/14/24**	**ch**	**02/14/24**	**ch**	**N**	
Analysis Method: SM 2540 D-15										
Batch: T147275										
Total Suspended Solids	**46**	**mg/L**	**4.0**	**1**	**02/15/24**	**ch**	**02/15/24**	**tjh**		**4.0**
Analysis Method: SM 4500-H+ B-11										
Batch: T147285										
pH	**7.01**	**pH Units**		**1**	**02/13/24**	**mj**	**02/14/24**	**cem**	**H04, PH01g**	

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-15 | Date Collected: 02/13/24 11:20 | Matrix: Ground Water
Sample ID: MW-09 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 7470A										
Batch: T147299										
Mercury	<0.00016	mg/L	0.00020	1	02/20/24	fs	02/20/24	acs		0.00016
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Boron	**5.3**	**mg/L**	**0.044**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.0082**
Calcium	**420**	**mg/L**	**1.3**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.38**
Lithium	**0.26**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**	**N**	**0.0094**
Magnesium	**55**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.050**
Potassium	**13**	**mg/L**	**1.2**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.18**
Sodium	**26**	**mg/L**	**0.62**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.44**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Antimony	<0.00050	mg/L	0.0012	5	02/21/24	fs	02/23/24	acs	DL02	0.00050
Arsenic	**0.0015**	**mg/L**	**0.00055**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Barium	**0.31**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.0034**
Beryllium	<0.000052	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.000052
Cadmium	<0.00038	mg/L	0.0012	5	02/21/24	fs	02/23/24	acs	DL02	0.00038
Cobalt	**0.00058**	**mg/L**	**0.00052**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Copper	<0.00020	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.00020
Lead	<0.00050	mg/L	0.0028	5	02/21/24	fs	02/23/24	acs	DL02	0.00050
Molybdenum	**0.0097**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00025**
Selenium	**0.00024**	**mg/L**	**0.00050**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00010**
Thallium	<0.00038	mg/L	0.0019	5	02/21/24	fs	02/23/24	acs	DL02	0.00038

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-15 | Date Collected: 02/13/24 11:20 | Matrix: Ground Water
Sample ID: MW-09 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY										
Analysis Method: EPA 300.0 Rev. 2.1										
Batch: T147221										
Fluoride	**2.2**	**mg/L**	**0.10**	**5**	**02/14/24**	**ljs**	**02/15/24**	**ljs**	**N**	**0.055**
Chloride	**18**	**mg/L**	**0.75**	**5**	**02/14/24**	**ljs**	**02/15/24**	**ljs**		**0.60**
Sulfate as SO4	**610**	**mg/L**	**30**	**50**	**02/14/24**	**ljs**	**02/15/24**	**ljs**		**4.1**
Analysis Method: SM 2320 B-11										
Batch: T147372										
Bicarbonate Alkalinity as CaCO3 at pH 4.5	**610**	**mg/L**	**10**	**2**	**02/19/24**	**bm**	**02/22/24**	**bm**	**N**	**0.31**
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.31	mg/L	10	2	02/19/24	bm	02/22/24	bm	N	0.31
Total Alkalinity as CaCO3 at pH 4.5	**610**	**mg/L**	**10**	**2**	**02/19/24**	**bm**	**02/22/24**	**bm**		**0.31**
Analysis Method: SM 2540 C-15										
Batch: T147218										
Total Dissolved Solids	**1600**	**mg/L**	**38**	**3.846154**	**02/14/24**	**ch**	**02/14/24**	**ch**	**N**	
Analysis Method: SM 2540 D-15										
Batch: T147275										
Total Suspended Solids	**47**	**mg/L**	**4.0**	**1**	**02/15/24**	**ch**	**02/15/24**	**tjh**		**4.0**
Analysis Method: SM 4500-H+ B-11										
Batch: T147285										
pH	**6.93**	**pH Units**		**1**	**02/13/24**	**mj**	**02/14/24**	**cem**	**H04, PH01h**	

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-16 | Date Collected: 02/13/24 13:45 | Matrix: Ground Water
Sample ID: MW-10 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 7470A										
Batch: T147299										
Mercury	<0.00016	mg/L	0.00020	1	02/20/24	fs	02/20/24	acs		0.00016
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Boron	**8.7**	**mg/L**	**0.044**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.0082**
Calcium	**310**	**mg/L**	**1.3**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.38**
Lithium	**0.56**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**	**N**	**0.0094**
Magnesium	**86**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.050**
Potassium	**41**	**mg/L**	**1.2**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.18**
Sodium	**120**	**mg/L**	**0.62**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.44**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Antimony	<0.00050	mg/L	0.0012	5	02/21/24	fs	02/23/24	acs	DL02	0.00050
Arsenic	**0.00025**	**mg/L**	**0.00055**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00010**
Barium	**0.32**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.0034**
Beryllium	<0.000052	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.000052
Cadmium	<0.00038	mg/L	0.0012	5	02/21/24	fs	02/23/24	acs	DL02	0.00038
Cobalt	<0.00010	mg/L	0.00052	1	02/21/24	fs	02/23/24	acs		0.00010
Copper	<0.00020	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.00020
Lead	<0.00050	mg/L	0.0028	5	02/21/24	fs	02/23/24	acs	DL02	0.00050
Molybdenum	**0.00080**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00025**
Selenium	**0.00083**	**mg/L**	**0.00050**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Thallium	<0.00038	mg/L	0.0019	5	02/21/24	fs	02/23/24	acs	DL02	0.00038

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-16 | Date Collected: 02/13/24 13:45 | Matrix: Ground Water
Sample ID: MW-10 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY										
Analysis Method: EPA 300.0 Rev. 2.1										
Batch: T147221										
Fluoride	**3.3**	**mg/L**	**0.10**	**5**	**02/14/24**	**ljs**	**02/15/24**	**ljs**	**N**	**0.055**
Chloride	**140**	**mg/L**	**7.5**	**50**	**02/14/24**	**ljs**	**02/15/24**	**ljs**		**6.0**
Sulfate as SO4	**840**	**mg/L**	**30**	**50**	**02/14/24**	**ljs**	**02/15/24**	**ljs**		**4.1**
Analysis Method: SM 2320 B-11										
Batch: T147372										
Bicarbonate Alkalinity as CaCO3 at pH 4.5	**240**	**mg/L**	**10**	**2**	**02/19/24**	**bm**	**02/22/24**	**bm**	**N**	**0.31**
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.31	mg/L	10	2	02/19/24	bm	02/22/24	bm	N	0.31
Total Alkalinity as CaCO3 at pH 4.5	**240**	**mg/L**	**10**	**2**	**02/19/24**	**bm**	**02/22/24**	**bm**		**0.31**
Analysis Method: SM 2540 C-15										
Batch: T147218										
Total Dissolved Solids	**1800**	**mg/L**	**38**	**3.846154**	**02/14/24**	**ch**	**02/14/24**	**ch**	**N**	
Analysis Method: SM 2540 D-15										
Batch: T147275										
Total Suspended Solids	<4.0	mg/L	4.0	1	02/15/24	ch	02/15/24	tjh		4.0
Analysis Method: SM 4500-H+ B-11										
Batch: T147285										
pH	**7.56**	**pH Units**		**1**	**02/13/24**	**mj**	**02/14/24**	**cem**	**H02, PH01i**	

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-17 | Date Collected: 02/13/24 14:30 | Matrix: Ground Water
Sample ID: MW-11 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 7470A										
Batch: T147299										
Mercury	<0.00016	mg/L	0.00020	1	02/20/24	fs	02/20/24	acs		0.00016
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Boron	**8.1**	**mg/L**	**0.044**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.0082**
Calcium	**230**	**mg/L**	**1.3**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.38**
Lithium	**0.077**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**	**N**	**0.0094**
Magnesium	**61**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.050**
Potassium	**14**	**mg/L**	**1.2**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.18**
Sodium	**51**	**mg/L**	**0.62**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.44**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Antimony	<0.00010	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.00010
Arsenic	**0.0012**	**mg/L**	**0.00055**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Barium	**0.83**	**mg/L**	**0.0025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00068**
Beryllium	<0.000052	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.000052
Cadmium	<0.000075	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.000075
Cobalt	**0.00026**	**mg/L**	**0.00052**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00010**
Copper	**0.00020**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00020**
Lead	**0.00031**	**mg/L**	**0.00055**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00010**
Molybdenum	**0.00066**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00025**
Selenium	**0.00071**	**mg/L**	**0.00050**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Thallium	<0.000075	mg/L	0.00038	1	02/21/24	fs	02/23/24	acs		0.000075

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-17 | Date Collected: 02/13/24 14:30 | Matrix: Ground Water
Sample ID: MW-11 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY										
Analysis Method: EPA 300.0 Rev. 2.1										
Batch: T147221										
Fluoride	**0.75**	**mg/L**	**0.10**	**5**	**02/14/24**	**ljs**	**02/15/24**	**ljs**	**N**	**0.055**
Chloride	**62**	**mg/L**	**0.75**	**5**	**02/14/24**	**ljs**	**02/15/24**	**ljs**		**0.60**
Sulfate as SO4	<0.41	mg/L	3.0	5	02/14/24	ljs	02/15/24	ljs		0.41
Analysis Method: SM 2320 B-11										
Batch: T147372										
Bicarbonate Alkalinity as CaCO3 at pH 4.5	**760**	**mg/L**	**10**	**2**	**02/19/24**	**bm**	**02/22/24**	**bm**	**N**	**0.31**
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.31	mg/L	10	2	02/19/24	bm	02/22/24	bm	N	0.31
Total Alkalinity as CaCO3 at pH 4.5	**760**	**mg/L**	**10**	**2**	**02/19/24**	**bm**	**02/22/24**	**bm**		**0.31**
Analysis Method: SM 2540 C-15										
Batch: T147424										
Total Dissolved Solids	**880**	**mg/L**	**40**	**4**	**02/20/24**	**tjh**	**02/21/24**	**tjh/ean**	**N**	
Analysis Method: SM 2540 D-15										
Batch: T147275										
Total Suspended Solids	**9.0**	**mg/L**	**4.0**	**1**	**02/15/24**	**ch**	**02/15/24**	**tjh**		**4.0**
Analysis Method: SM 4500-H+ B-11										
Batch: T147285										
pH	**7.29**	**pH Units**		**1**	**02/13/24**	**mj**	**02/14/24**	**cem**	**PH01j**	

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-18 | Date Collected: 02/13/24 17:30 | Matrix: Ground Water
Sample ID: MW-12 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 7470A										
Batch: T147299										
Mercury	<0.00016	mg/L	0.00020	1	02/20/24	fs	02/20/24	acs		0.00016
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Boron	**0.22**	**mg/L**	**0.044**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.0082**
Calcium	**40**	**mg/L**	**1.3**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.38**
Lithium	**0.0023**	**mg/L**	**0.0025**	**1**	**02/21/24**	**fs**	**03/01/24**	**ckd**	**J, N**	**0.0019**
Magnesium	**11**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.050**
Potassium	**0.62**	**mg/L**	**0.25**	**1**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.036**
Sodium	**9.8**	**mg/L**	**0.62**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.44**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Antimony	**0.00035**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Arsenic	**0.0016**	**mg/L**	**0.00055**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Barium	**0.022**	**mg/L**	**0.0025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00068**
Beryllium	<0.000052	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.000052
Cadmium	**0.00054**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.000075**
Cobalt	<0.00010	mg/L	0.00052	1	02/21/24	fs	02/23/24	acs		0.00010
Copper	**0.0012**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00020**
Lead	<0.00010	mg/L	0.00055	1	02/21/24	fs	02/23/24	acs		0.00010
Molybdenum	**0.0051**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00025**
Selenium	**0.00089**	**mg/L**	**0.00050**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Thallium	<0.000075	mg/L	0.00038	1	02/21/24	fs	02/23/24	acs		0.000075

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-18 | Date Collected: 02/13/24 17:30 | Matrix: Ground Water
Sample ID: MW-12 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY										
Analysis Method: EPA 300.0 Rev. 2.1										
Batch: T147283										
Fluoride	**0.46**	**mg/L**	**0.10**	**5**	**02/15/24**	**ljs**	**02/16/24**	**ljs**	**N**	**0.055**
Chloride	**17**	**mg/L**	**0.75**	**5**	**02/15/24**	**ljs**	**02/16/24**	**ljs**		**0.60**
Sulfate as SO4	**84**	**mg/L**	**3.0**	**5**	**02/15/24**	**ljs**	**02/16/24**	**ljs**		**0.41**
Analysis Method: SM 2320 B-11										
Batch: T147372										
Bicarbonate Alkalinity as CaCO3 at pH 4.5	**47**	**mg/L**	**5.0**	**1**	**02/19/24**	**bm**	**02/22/24**	**bm**	**N**	**0.16**
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16	mg/L	5.0	1	02/19/24	bm	02/22/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	**47**	**mg/L**	**5.0**	**1**	**02/19/24**	**bm**	**02/22/24**	**bm**		**0.16**
Analysis Method: SM 2540 C-15										
Batch: T147424										
Total Dissolved Solids	**100**	**mg/L**	**20**	**2**	**02/20/24**	**tjh**	**02/21/24**	**tjh/ean**	**N**	
Analysis Method: SM 2540 D-15										
Batch: T147275										
Total Suspended Solids	<4.0	mg/L	4.0	1	02/15/24	ch	02/15/24	tjh		4.0
Analysis Method: SM 4500-H+ B-11										
Batch: T147285										
pH	**7.88**	**pH Units**		**1**	**02/13/24**	**mj**	**02/14/24**	**cem**	**PH01k**	

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-19 Date Collected: 02/13/24 16:00 Matrix: Ground Water
Sample ID: MW-18 Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 7470A										
Batch: T147299										
Mercury	<0.00016	mg/L	0.00020	1	02/20/24	fs	02/20/24	acs		0.00016
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Boron	**3.5**	**mg/L**	**0.044**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.0082**
Calcium	**370**	**mg/L**	**1.3**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.38**
Lithium	**0.020**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**	**N**	**0.0094**
Magnesium	**42**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.050**
Potassium	**8.9**	**mg/L**	**1.2**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.18**
Sodium	**24**	**mg/L**	**0.62**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.44**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Antimony	<0.00050	mg/L	0.0012	5	02/21/24	fs	02/23/24	acs	DL02	0.00050
Arsenic	**0.024**	**mg/L**	**0.00055**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Barium	**0.015**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.0034**
Beryllium	<0.000052	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.000052
Cadmium	<0.00038	mg/L	0.0012	5	02/21/24	fs	02/23/24	acs	DL02	0.00038
Cobalt	**0.0023**	**mg/L**	**0.00052**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Copper	**0.00033**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00020**
Lead	<0.00050	mg/L	0.0028	5	02/21/24	fs	02/23/24	acs	DL02	0.00050
Molybdenum	**0.011**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00025**
Selenium	**0.0012**	**mg/L**	**0.00050**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Thallium	<0.00038	mg/L	0.0019	5	02/21/24	fs	02/23/24	acs	DL02	0.00038

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-19 | Date Collected: 02/13/24 16:00 | Matrix: Ground Water
Sample ID: MW-18 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY										
Analysis Method: EPA 300.0 Rev. 2.1										
Batch: T147283										
Fluoride	**3.4**	**mg/L**	**0.10**	**5**	**02/15/24**	**ljs**	**02/16/24**	**ljs**	**N**	**0.055**
Chloride	**24**	**mg/L**	**0.75**	**5**	**02/15/24**	**ljs**	**02/16/24**	**ljs**		**0.60**
Sulfate as SO4	**980**	**mg/L**	**30**	**50**	**02/15/24**	**ljs**	**02/16/24**	**ljs**		**4.1**
Analysis Method: SM 2320 B-11										
Batch: T147372										
Bicarbonate Alkalinity as CaCO3 at pH 4.5	**120**	**mg/L**	**5.0**	**1**	**02/19/24**	**bm**	**02/22/24**	**bm**	**N**	**0.16**
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16	mg/L	5.0	1	02/19/24	bm	02/22/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	**120**	**mg/L**	**5.0**	**1**	**02/19/24**	**bm**	**02/22/24**	**bm**		**0.16**
Analysis Method: SM 2540 C-15										
Batch: T147424										
Total Dissolved Solids	**1400**	**mg/L**	**40**	**4**	**02/20/24**	**tjh**	**02/21/24**	**tjh/ean**	**N**	
Analysis Method: SM 2540 D-15										
Batch: T147275										
Total Suspended Solids	<4.0	mg/L	4.0	1	02/15/24	ch	02/15/24	tjh		4.0
Analysis Method: SM 4500-H+ B-11										
Batch: T147285										
pH	**7.24**	**pH Units**		**1**	**02/13/24**	**mj**	**02/14/24**	**cem**	**PH01I**	

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-20 | Date Collected: 02/13/24 08:36 | Matrix: Ground Water
Sample ID: MW-19 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 7470A										
Batch: T147299										
Mercury	<0.00016	mg/L	0.00020	1	02/20/24	fs	02/20/24	acs		0.00016
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Boron	**1.8**	**mg/L**	**0.044**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.0082**
Calcium	**490**	**mg/L**	**1.3**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.38**
Lithium	**0.073**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**	**N**	**0.0094**
Magnesium	**39**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.050**
Potassium	**15**	**mg/L**	**1.2**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.18**
Sodium	**33**	**mg/L**	**0.62**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.44**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Antimony	<0.00050	mg/L	0.0012	5	02/21/24	fs	02/23/24	acs	DL02	0.00050
Arsenic	**0.0026**	**mg/L**	**0.00055**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Barium	**0.037**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.0034**
Beryllium	**0.000086**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.000052**
Cadmium	<0.00038	mg/L	0.0012	5	02/21/24	fs	02/23/24	acs	DL02	0.00038
Cobalt	**0.00023**	**mg/L**	**0.00052**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00010**
Copper	<0.00020	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.00020
Lead	<0.00050	mg/L	0.0028	5	02/21/24	fs	02/23/24	acs	DL02	0.00050
Molybdenum	**0.0039**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00025**
Selenium	**0.00012**	**mg/L**	**0.00050**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00010**
Thallium	<0.00038	mg/L	0.0019	5	02/21/24	fs	02/23/24	acs	DL02	0.00038

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-20 | Date Collected: 02/13/24 08:36 | Matrix: Ground Water
Sample ID: MW-19 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY										
Analysis Method: EPA 300.0 Rev. 2.1										
Batch: T147283										
Fluoride	**1.6**	**mg/L**	**0.10**	**5**	**02/15/24**	**ljs**	**02/16/24**	**ljs**	**N**	**0.055**
Chloride	**39**	**mg/L**	**0.75**	**5**	**02/15/24**	**ljs**	**02/16/24**	**ljs**		**0.60**
Sulfate as SO4	**1000**	**mg/L**	**60**	**100**	**02/15/24**	**ljs**	**02/16/24**	**ljs**		**8.2**
Analysis Method: SM 2320 B-11										
Batch: T147372										
Bicarbonate Alkalinity as CaCO3 at pH 4.5	**290**	**mg/L**	**5.0**	**1**	**02/19/24**	**bm**	**02/22/24**	**bm**	**N**	**0.16**
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16	mg/L	5.0	1	02/19/24	bm	02/22/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	**290**	**mg/L**	**5.0**	**1**	**02/19/24**	**bm**	**02/22/24**	**bm**		**0.16**
Analysis Method: SM 2540 C-15										
Batch: T147424										
Total Dissolved Solids	**1800**	**mg/L**	**40**	**4**	**02/20/24**	**tjh**	**02/21/24**	**tjh/ean**	**N**	
Analysis Method: SM 2540 D-15										
Batch: T147275										
Total Suspended Solids	**17**	**mg/L**	**4.0**	**1**	**02/15/24**	**ch**	**02/15/24**	**tjh**		**4.0**
Analysis Method: SM 4500-H+ B-11										
Batch: T147285										
pH	**6.88**	**pH Units**		**1**	**02/13/24**	**mj**	**02/14/24**	**cem**	**H04, PH01m**	

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-21 | Date Collected: 02/13/24 14:30 | Matrix: Ground Water
Sample ID: MW-20 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 7470A										
Batch: T147435										
Mercury	<0.00016	mg/L	0.00020	1	02/22/24	ckd	02/22/24	acs		0.00016
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147451										
Boron	**0.72**	**mg/L**	**0.044**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.0082**
Calcium	**120**	**mg/L**	**1.3**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.38**
Lithium	**0.029**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**	**N**	**0.0094**
Magnesium	**45**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.050**
Potassium	**8.5**	**mg/L**	**1.2**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.18**
Sodium	**48**	**mg/L**	**0.62**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.44**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147451										
Antimony	<0.00010	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.00010
Arsenic	**0.0011**	**mg/L**	**0.00055**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Barium	**0.42**	**mg/L**	**0.0025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00068**
Beryllium	**0.000059**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.000052**
Cadmium	<0.000075	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.000075
Cobalt	**0.0011**	**mg/L**	**0.00052**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Copper	**0.00040**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00020**
Lead	**0.0013**	**mg/L**	**0.00055**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Molybdenum	**0.0045**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00025**
Selenium	**0.00026**	**mg/L**	**0.00050**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00010**
Thallium	**0.00011**	**mg/L**	**0.00038**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.000075**

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-21 | Date Collected: 02/13/24 14:30 | Matrix: Ground Water
Sample ID: MW-20 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY										
Analysis Method: EPA 300.0 Rev. 2.1										
Batch: T147283										
Fluoride	**0.25**	**mg/L**	**0.10**	**5**	**02/15/24**	**ljs**	**02/16/24**	**ljs**	**N**	**0.055**
Chloride	**41**	**mg/L**	**0.75**	**5**	**02/15/24**	**ljs**	**02/16/24**	**ljs**		**0.60**
Sulfate as SO4	**78**	**mg/L**	**3.0**	**5**	**02/15/24**	**ljs**	**02/16/24**	**ljs**		**0.41**
Analysis Method: SM 2320 B-11										
Batch: T147372										
Bicarbonate Alkalinity as CaCO3 at pH 4.5	**460**	**mg/L**	**5.0**	**1**	**02/19/24**	**bm**	**02/22/24**	**bm**	**N**	**0.16**
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16	mg/L	5.0	1	02/19/24	bm	02/22/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	**460**	**mg/L**	**5.0**	**1**	**02/19/24**	**bm**	**02/22/24**	**bm**		**0.16**
Analysis Method: SM 2540 C-15										
Batch: T147424										
Total Dissolved Solids	**640**	**mg/L**	**40**	**4**	**02/20/24**	**tjh**	**02/21/24**	**tjh/ean**	**N**	
Analysis Method: SM 2540 D-15										
Batch: T147275										
Total Suspended Solids	**33**	**mg/L**	**4.0**	**1**	**02/15/24**	**ch**	**02/15/24**	**tjh**		**4.0**
Analysis Method: SM 4500-H+ B-11										
Batch: T147285										
pH	**7.11**	**pH Units**		**1**	**02/13/24**	**mj**	**02/14/24**	**cem**	**PH01n**	

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-22 | Date Collected: 02/13/24 09:30 | Matrix: Ground Water
Sample ID: MW-27 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 7470A										
Batch: T147435										
Mercury	<0.00016	mg/L	0.00020	1	02/22/24	ckd	02/22/24	acs		0.00016
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147451										
Boron	**0.16**	**mg/L**	**0.044**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.0082**
Calcium	**160**	**mg/L**	**1.3**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.38**
Lithium	**0.0050**	**mg/L**	**0.0025**	**1**	**02/21/24**	**fs**	**03/01/24**	**ckd**	**N**	**0.0019**
Magnesium	**55**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.050**
Potassium	**4.9**	**mg/L**	**1.2**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.18**
Sodium	**59**	**mg/L**	**0.62**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.44**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147451										
Antimony	<0.00010	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.00010
Arsenic	**0.00082**	**mg/L**	**0.00055**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Barium	**0.16**	**mg/L**	**0.0025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00068**
Beryllium	<0.000052	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.000052
Cadmium	<0.000075	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.000075
Cobalt	**0.00037**	**mg/L**	**0.00052**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00010**
Copper	<0.00020	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.00020
Lead	<0.00010	mg/L	0.00055	1	02/21/24	fs	02/23/24	acs		0.00010
Molybdenum	<0.00025	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.00025
Selenium	**0.00053**	**mg/L**	**0.00050**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Thallium	<0.000075	mg/L	0.00038	1	02/21/24	fs	02/23/24	acs		0.000075

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-22 | Date Collected: 02/13/24 09:30 | Matrix: Ground Water
Sample ID: MW-27 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY										
Analysis Method: EPA 300.0 Rev. 2.1										
Batch: T147283										
Fluoride	**0.40**	**mg/L**	**0.10**	**5**	**02/15/24**	**ljs**	**02/16/24**	**ljs**	**N**	**0.055**
Chloride	**44**	**mg/L**	**0.75**	**5**	**02/15/24**	**ljs**	**02/16/24**	**ljs**		**0.60**
Sulfate as SO4	**72**	**mg/L**	**3.0**	**5**	**02/15/24**	**ljs**	**02/16/24**	**ljs**		**0.41**
Analysis Method: SM 2320 B-11										
Batch: T147372										
Bicarbonate Alkalinity as CaCO3 at pH 4.5	**790**	**mg/L**	**10**	**2**	**02/19/24**	**bm**	**02/22/24**	**bm**	**N**	**0.31**
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.31	mg/L	10	2	02/19/24	bm	02/22/24	bm	N	0.31
Total Alkalinity as CaCO3 at pH 4.5	**790**	**mg/L**	**10**	**2**	**02/19/24**	**bm**	**02/22/24**	**bm**		**0.31**
Analysis Method: SM 2540 C-15										
Batch: T147424										
Total Dissolved Solids	**1300**	**mg/L**	**40**	**4**	**02/20/24**	**tjh**	**02/21/24**	**tjh/ean**	**N**	
Analysis Method: SM 2540 D-15										
Batch: T147275										
Total Suspended Solids	**23**	**mg/L**	**4.0**	**1**	**02/15/24**	**ch**	**02/15/24**	**tjh**		**4.0**
Analysis Method: SM 4500-H+ B-11										
Batch: T147285										
pH	**6.91**	**pH Units**		**1**	**02/13/24**	**mj**	**02/14/24**	**cem**	**H04, PH01o**	

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-23 | Date Collected: 02/14/24 10:15 | Matrix: Surface Water
Sample ID: SG-02 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 7470A										
Batch: T147435										
Mercury	<0.00016	mg/L	0.00020	1	02/22/24	ckd	02/22/24	acs		0.00016
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147451										
Boron	**3.5**	**mg/L**	**0.044**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.0082**
Calcium	**140**	**mg/L**	**1.3**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.38**
Lithium	**0.042**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**	**N**	**0.0094**
Magnesium	**37**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.050**
Potassium	**9.1**	**mg/L**	**1.2**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.18**
Sodium	**31**	**mg/L**	**0.62**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.44**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147451										
Antimony	**0.00038**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Arsenic	**0.0012**	**mg/L**	**0.00055**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Barium	**0.037**	**mg/L**	**0.0025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00068**
Beryllium	<0.000052	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.000052
Cadmium	<0.000075	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.000075
Cobalt	**0.00012**	**mg/L**	**0.00052**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00010**
Copper	**0.00089**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00020**
Lead	**0.00061**	**mg/L**	**0.00055**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Molybdenum	**0.0069**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00025**
Selenium	**0.0018**	**mg/L**	**0.00050**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Thallium	<0.000075	mg/L	0.00038	1	02/21/24	fs	02/23/24	acs		0.000075

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-23 | Date Collected: 02/14/24 10:15 | Matrix: Surface Water
Sample ID: SG-02 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY										
Analysis Method: EPA 300.0 Rev. 2.1										
Batch: T147283										
Fluoride	**2.2**	**mg/L**	**0.10**	**5**	**02/15/24**	**ljs**	**02/16/24**	**ljs**	**N**	**0.055**
Chloride	**52**	**mg/L**	**0.75**	**5**	**02/15/24**	**ljs**	**02/16/24**	**ljs**		**0.60**
Sulfate as SO4	**380**	**mg/L**	**15**	**25**	**02/15/24**	**ljs**	**02/16/24**	**ljs**		**2.1**
Analysis Method: SM 2320 B-11										
Batch: T147372										
Bicarbonate Alkalinity as CaCO3 at pH 4.5	**93**	**mg/L**	**5.0**	**1**	**02/19/24**	**bm**	**02/22/24**	**bm**	**N**	**0.16**
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16	mg/L	5.0	1	02/19/24	bm	02/22/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	**93**	**mg/L**	**5.0**	**1**	**02/19/24**	**bm**	**02/22/24**	**bm**		**0.16**
Analysis Method: SM 2540 C-15										
Batch: T147424										
Total Dissolved Solids	**690**	**mg/L**	**20**	**2**	**02/20/24**	**tjh**	**02/21/24**	**tjh/ean**	**N**	
Analysis Method: SM 2540 D-15										
Batch: T147275										
Total Suspended Solids	<4.0	mg/L	4.0	1	02/15/24	ch	02/15/24	tjh		4.0
Analysis Method: SM 4500-H+ B-11										
Batch: T147285										
pH	**8.02**	**pH Units**		**1**	**02/14/24**	**mj**	**02/14/24**	**cem**	**PH01p**	

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-24 | Date Collected: 02/14/24 10:25 | Matrix: Surface Water
Sample ID: SG-03 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 7470A										
Batch: T147435										
Mercury	<0.00016	mg/L	0.00020	1	02/22/24	ckd	02/22/24	acs		0.00016
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147451										
Boron	**3.4**	**mg/L**	**0.044**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.0082**
Calcium	**140**	**mg/L**	**1.3**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.38**
Lithium	**0.031**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**	**N**	**0.0094**
Magnesium	**35**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.050**
Potassium	**8.7**	**mg/L**	**1.2**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.18**
Sodium	**30**	**mg/L**	**0.62**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.44**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147451										
Antimony	**0.00050**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Arsenic	**0.0012**	**mg/L**	**0.00055**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Barium	**0.036**	**mg/L**	**0.0025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00068**
Beryllium	<0.000052	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.000052
Cadmium	<0.000075	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.000075
Cobalt	**0.00011**	**mg/L**	**0.00052**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00010**
Copper	**0.00083**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00020**
Lead	**0.00059**	**mg/L**	**0.00055**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Molybdenum	**0.0066**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00025**
Selenium	**0.0018**	**mg/L**	**0.00050**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Thallium	<0.000075	mg/L	0.00038	1	02/21/24	fs	02/23/24	acs		0.000075

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-24 | Date Collected: 02/14/24 10:25 | Matrix: Surface Water
Sample ID: SG-03 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY										
Analysis Method: EPA 300.0 Rev. 2.1										
Batch: T147283										
Fluoride	**2.2**	**mg/L**	**0.10**	**5**	**02/15/24**	**ljs**	**02/16/24**	**ljs**	**N**	**0.055**
Chloride	**53**	**mg/L**	**0.75**	**5**	**02/15/24**	**ljs**	**02/16/24**	**ljs**		**0.60**
Sulfate as SO4	**370**	**mg/L**	**15**	**25**	**02/15/24**	**ljs**	**02/16/24**	**ljs**		**2.1**
Analysis Method: SM 2320 B-11										
Batch: T147372										
Bicarbonate Alkalinity as CaCO3 at pH 4.5	**92**	**mg/L**	**5.0**	**1**	**02/19/24**	**bm**	**02/22/24**	**bm**	**N**	**0.16**
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16	mg/L	5.0	1	02/19/24	bm	02/22/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	**92**	**mg/L**	**5.0**	**1**	**02/19/24**	**bm**	**02/22/24**	**bm**		**0.16**
Analysis Method: SM 2540 C-15										
Batch: T147424										
Total Dissolved Solids	**1400**	**mg/L**	**40**	**4**	**02/20/24**	**tjh**	**02/21/24**	**tjh/ean**	**N**	
Analysis Method: SM 2540 D-15										
Batch: T147275										
Total Suspended Solids	<4.0	mg/L	4.0	1	02/15/24	ch	02/15/24	tjh		4.0
Analysis Method: SM 4500-H+ B-11										
Batch: T147285										
pH	**8.05**	**pH Units**		**1**	**02/14/24**	**mj**	**02/14/24**	**cem**	**PH01q**	

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-25 | Date Collected: 02/14/24 09:40 | Matrix: Surface Water
Sample ID: SG-04R | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 7470A										
Batch: T147435										
Mercury	<0.00016	mg/L	0.00020	1	02/22/24	ckd	02/22/24	acs		0.00016
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147451										
Boron	**4.5**	**mg/L**	**0.044**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.0082**
Calcium	**340**	**mg/L**	**1.3**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.38**
Lithium	**0.049**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**	**N**	**0.0094**
Magnesium	**44**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.050**
Potassium	**9.1**	**mg/L**	**1.2**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.18**
Sodium	**26**	**mg/L**	**0.62**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.44**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147451										
Antimony	<0.00050	mg/L	0.0012	5	02/21/24	fs	02/23/24	acs	DL02	0.00050
Arsenic	**0.0019**	**mg/L**	**0.00055**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Barium	**0.027**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.0034**
Beryllium	**0.000057**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.000052**
Cadmium	<0.00038	mg/L	0.0012	5	02/21/24	fs	02/23/24	acs	DL02	0.00038
Cobalt	**0.00029**	**mg/L**	**0.00052**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00010**
Copper	**0.0013**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00020**
Lead	**0.0015**	**mg/L**	**0.0028**	**5**	**02/21/24**	**fs**	**02/23/24**	**acs**	**DL02, J**	**0.00050**
Molybdenum	**0.0091**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00025**
Selenium	**0.0023**	**mg/L**	**0.00050**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Thallium	<0.00038	mg/L	0.0019	5	02/21/24	fs	02/23/24	acs	DL02	0.00038

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-25 | Date Collected: 02/14/24 09:40 | Matrix: Surface Water
Sample ID: SG-04R | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY										
Analysis Method: EPA 300.0 Rev. 2.1										
Batch: T147283										
Fluoride	**2.3**	**mg/L**	**0.10**	**5**	**02/15/24**	**ljs**	**02/16/24**	**ljs**	**N**	**0.055**
Chloride	**23**	**mg/L**	**0.75**	**5**	**02/15/24**	**ljs**	**02/16/24**	**ljs**		**0.60**
Sulfate as SO4	**890**	**mg/L**	**30**	**50**	**02/15/24**	**ljs**	**02/16/24**	**ljs**		**4.1**
Analysis Method: SM 2320 B-11										
Batch: T147372										
Bicarbonate Alkalinity as CaCO3 at pH 4.5	**100**	**mg/L**	**5.0**	**1**	**02/19/24**	**bm**	**02/22/24**	**bm**	**N**	**0.16**
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16	mg/L	5.0	1	02/19/24	bm	02/22/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	**100**	**mg/L**	**5.0**	**1**	**02/19/24**	**bm**	**02/22/24**	**bm**		**0.16**
Analysis Method: SM 2540 C-15										
Batch: T147424										
Total Dissolved Solids	**1400**	**mg/L**	**40**	**4**	**02/20/24**	**tjh**	**02/21/24**	**tjh/ean**	**N**	
Analysis Method: SM 2540 D-15										
Batch: T147275										
Total Suspended Solids	**14**	**mg/L**	**4.0**	**1**	**02/15/24**	**ch**	**02/15/24**	**tjh**		**4.0**
Analysis Method: SM 4500-H+ B-11										
Batch: T147285										
pH	**7.99**	**pH Units**		**1**	**02/14/24**	**mj**	**02/14/24**	**cem**	**PH01r**	

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-26 | Date Collected: 02/14/24 10:45 | Matrix: Surface Water
Sample ID: SG-05 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 7470A										
Batch: T147435										
Mercury	<0.00016	mg/L	0.00020	1	02/22/24	ckd	02/22/24	acs		0.00016
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147451										
Boron	**0.45**	**mg/L**	**0.044**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.0082**
Calcium	**130**	**mg/L**	**1.3**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.38**
Lithium	**0.016**	**mg/L**	**0.012**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**	**N**	**0.0094**
Magnesium	**26**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.050**
Potassium	**7.9**	**mg/L**	**1.2**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.18**
Sodium	**43**	**mg/L**	**0.62**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.44**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147451										
Antimony	**0.00011**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00010**
Arsenic	**0.0010**	**mg/L**	**0.00055**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Barium	**0.50**	**mg/L**	**0.0025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00068**
Beryllium	<0.000052	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.000052
Cadmium	**0.00041**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.000075**
Cobalt	**0.00046**	**mg/L**	**0.00052**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00010**
Copper	**0.0063**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00020**
Lead	**0.011**	**mg/L**	**0.00055**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Molybdenum	**0.00058**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00025**
Selenium	**0.00054**	**mg/L**	**0.00050**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00010**
Thallium	<0.000075	mg/L	0.00038	1	02/21/24	fs	02/23/24	acs		0.000075

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-26 | Date Collected: 02/14/24 10:45 | Matrix: Surface Water
Sample ID: SG-05 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY										
Analysis Method: EPA 300.0 Rev. 2.1										
Batch: T147283										
Fluoride	**0.68**	**mg/L**	**0.10**	**5**	**02/15/24**	**ljs**	**02/16/24**	**ljs**	**N**	**0.055**
Chloride	**54**	**mg/L**	**0.75**	**5**	**02/15/24**	**ljs**	**02/16/24**	**ljs**		**0.60**
Sulfate as SO4	**7.2**	**mg/L**	**3.0**	**5**	**02/15/24**	**ljs**	**02/16/24**	**ljs**		**0.41**
Analysis Method: SM 2320 B-11										
Batch: T147372										
Bicarbonate Alkalinity as CaCO3 at pH 4.5	**400**	**mg/L**	**5.0**	**1**	**02/19/24**	**bm**	**02/22/24**	**bm**	**N**	**0.16**
Carbonate Alkalinity as CaCO3 at pH 8.2	<0.16	mg/L	5.0	1	02/19/24	bm	02/22/24	bm	N	0.16
Total Alkalinity as CaCO3 at pH 4.5	**400**	**mg/L**	**5.0**	**1**	**02/19/24**	**bm**	**02/22/24**	**bm**		**0.16**
Analysis Method: SM 2540 C-15										
Batch: T147424										
Total Dissolved Solids	**520**	**mg/L**	**20**	**2**	**02/20/24**	**tjh**	**02/21/24**	**tjh/ean**	**N**	
Analysis Method: SM 2540 D-15										
Batch: T147275										
Total Suspended Solids	**120**	**mg/L**	**4.0**	**1**	**02/15/24**	**ch**	**02/15/24**	**tjh**		**4.0**
Analysis Method: SM 4500-H+ B-11										
Batch: T147285										
pH	**7.64**	**pH Units**		**1**	**02/14/24**	**mj**	**02/14/24**	**cem**	**PH01s**	

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QUALITY CONTROL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T147299
QC Batch Method: EPA 7470A Prep
Analysis Description: Mercury, Total, EPA 7470/7471
Analysis Method: EPA 7470A

METHOD BLANK: T147299-BLK1

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

LABORATORY CONTROL SAMPLE: T147299-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Mercury	mg/L	0.00200	0.00192	96	77-122	

MATRIX SPIKE / MATRIX SPIKE DUPLICATE: T147299-MSD1

Original: **24B0629-03**

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	0.00190	0.00194	95	97	76-123	2	20	

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T147435
QC Batch Method: EPA 7470A Prep
Analysis Description: Mercury, Total, EPA 7470/7471
Analysis Method: EPA 7470A

METHOD BLANK: T147435-BLK1

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

LABORATORY CONTROL SAMPLE: T147435-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Mercury	mg/L	0.00200	0.00184	92	77-122	

MATRIX SPIKE / MATRIX SPIKE DUPLICATE: T147435-MSD1

Original: **24B0629-21**

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	0.00236	0.00220	118	110	76-123	7	20	

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Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T147298
QC Batch Method: EPA 200.2
Analysis Description: Calcium, Total
Analysis Method: EPA 200.7 Rev. 4.4

METHOD BLANK: T147298-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Boron	mg/L	<0.0088	0.0088	
Calcium	mg/L	<0.26	0.26	
Potassium	mg/L	<0.25	0.25	
Lithium	mg/L	<0.0025	0.0025	
Magnesium	mg/L	<0.10	0.10	
Sodium	mg/L	<0.12	0.12	

LABORATORY CONTROL SAMPLE: T147298-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Boron	mg/L	3.20	3.19	100	85-115	
Calcium	mg/L	32.0	31.8	99	85-115	
Potassium	mg/L	32.0	31.5	99	85-115	
Lithium	mg/L	3.20	3.28	102	85-115	
Magnesium	mg/L	32.0	32.3	101	85-115	
Sodium	mg/L	32.0	32.1	100	85-115	

MATRIX SPIKE: T147298-MS1 Original: **24B0629-01**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Boron	mg/L	1.89	3.20	5.03	98	70-130	
Calcium	mg/L	441	32.0	471	95	70-130	
Potassium	mg/L	10.1	32.0	42.0	100	70-130	
Lithium	mg/L	0.101	3.20	3.38	103	70-130	
Magnesium	mg/L	108	32.0	142	105	70-130	
Sodium	mg/L	89.2	32.0	118	89	70-130	

MATRIX SPIKE: T147298-MS2 Original: **24B0629-02**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Boron	mg/L	4.40	3.20	7.22	88	70-130	
Calcium	mg/L	175	32.0	200	79	70-130	
Potassium	mg/L	9.58	32.0	42.0	101	70-130	
Lithium	mg/L	0.0388	3.20	3.43	106	70-130	

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MATRIX SPIKE: T147298-MS2 Original: **24B0629-02**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Magnesium	mg/L	36.4	32.0	68.0	99	70-130	
Sodium	mg/L	53.8	32.0	84.5	96	70-130	

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T147451
QC Batch Method: EPA 200.2
Analysis Description: Sodium, Total
Analysis Method: EPA 200.7 Rev. 4.4

METHOD BLANK: T147451-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Boron	**mg/L**	**0.00321**	**0.0088**	**J**
Calcium	mg/L	<0.26	0.26	
Potassium	**mg/L**	**0.0580**	**0.25**	**J**
Lithium	mg/L	<0.0025	0.0025	
Magnesium	mg/L	<0.10	0.10	
Sodium	mg/L	<0.12	0.12	

LABORATORY CONTROL SAMPLE: T147451-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Boron	mg/L	1.60	1.58	99	85-115	
Calcium	mg/L	16.0	16.0	100	85-115	
Potassium	mg/L	16.0	16.0	100	85-115	
Lithium	mg/L	1.60	1.67	105	85-115	
Magnesium	mg/L	16.0	16.4	102	85-115	
Sodium	mg/L	16.0	15.9	99	85-115	

MATRIX SPIKE: T147451-MS1 Original: **24B0629-21**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Boron	mg/L	0.721	1.60	2.29	98	70-130	
Calcium	mg/L	122	16.0	142	128	70-130	
Potassium	mg/L	8.48	16.0	25.5	106	70-130	
Lithium	mg/L	0	1.60	1.74	109	70-130	
Magnesium	mg/L	44.6	16.0	63.5	118	70-130	
Sodium	mg/L	48.0	16.0	65.9	112	70-130	

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

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QC Batch: T147298
QC Batch Method: EPA 200.2

Analysis Description: Thallium, Total
Analysis Method: EPA 200.8 Rev. 5.4

METHOD BLANK: T147298-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Arsenic	mg/L	<0.00055	0.00055	
Barium	mg/L	<0.0025	0.0025	
Beryllium	mg/L	<0.00025	0.00025	
Cadmium	mg/L	<0.00025	0.00025	
Cobalt	mg/L	<0.00052	0.00052	
Copper	mg/L	<0.00025	0.00025	
Molybdenum	mg/L	<0.0012	0.0012	
Lead	mg/L	<0.00055	0.00055	
Antimony	mg/L	<0.00025	0.00025	
Selenium	**mg/L**	**0.000115**	**0.00050**	**J**
Thallium	mg/L	<0.00038	0.00038	

LABORATORY CONTROL SAMPLE: T147298-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Arsenic	mg/L	0.200	0.195	97	85-115	
Barium	mg/L	3.20	3.25	102	85-115	
Beryllium	mg/L	0.400	0.381	95	85-115	
Cadmium	mg/L	0.100	0.101	101	85-115	
Cobalt	mg/L	3.20	3.16	99	85-115	
Copper	mg/L	3.20	3.03	95	85-115	
Molybdenum	mg/L	3.20	3.40	106	85-115	
Lead	mg/L	0.200	0.209	105	85-115	
Antimony	mg/L	0.200	0.214	107	85-115	
Selenium	mg/L	0.200	0.186	93	85-115	
Thallium	mg/L	0.200	0.212	106	85-115	

MATRIX SPIKE: T147298-MS1 Original: **24B0629-01**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Arsenic	mg/L	0	0.200	0.209	104	70-130	
Barium	mg/L	0.0669	3.20	3.42	105	70-130	
Beryllium	mg/L	0	0.400	0.335	84	70-130	
Cadmium	mg/L	0	0.100	0.0961	96	70-130	
Cobalt	mg/L	0.00108	3.20	3.11	97	70-130	
Copper	mg/L	0	3.20	2.89	90	70-130	

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MATRIX SPIKE: T147298-MS1 Original: **24B0629-01**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Molybdenum	mg/L	0	3.20	3.73	116	70-130	
Lead	mg/L	0	0.200	0.206	103	70-130	
Antimony	mg/L	0	0.200	0.216	108	70-130	
Selenium	mg/L	0	0.200	0.169	85	70-130	
Thallium	mg/L	0	0.200	0.210	105	70-130	

MATRIX SPIKE: T147298-MS2 Original: **24B0629-02**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Arsenic	mg/L	0.00105	0.200	0.192	95	70-130	
Barium	mg/L	0.133	3.20	3.46	104	70-130	
Beryllium	mg/L	0	0.400	0.349	87	70-130	
Cadmium	mg/L	0	0.100	0.0975	98	70-130	
Cobalt	mg/L	0	3.20	3.04	95	70-130	
Copper	mg/L	0	3.20	2.81	88	70-130	
Molybdenum	mg/L	0.00110	3.20	3.50	109	70-130	
Lead	mg/L	0	0.200	0.209	104	70-130	
Antimony	mg/L	0	0.200	0.221	111	70-130	
Selenium	mg/L	0.000739	0.200	0.169	84	70-130	
Thallium	mg/L	0	0.200	0.213	107	70-130	

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T147451
QC Batch Method: EPA 200.2
Analysis Description: Thallium, Total
Analysis Method: EPA 200.8 Rev. 5.4

METHOD BLANK: T147451-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Arsenic	mg/L	<0.00055	0.00055	
Barium	mg/L	<0.0025	0.0025	
Beryllium	mg/L	<0.00025	0.00025	
Cadmium	mg/L	<0.00025	0.00025	
Cobalt	mg/L	<0.00052	0.00052	
Copper	mg/L	<0.00025	0.00025	
Molybdenum	mg/L	<0.0012	0.0012	
Lead	mg/L	<0.00055	0.00055	
Antimony	mg/L	<0.00025	0.00025	
Selenium	mg/L	<0.00050	0.00050	

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METHOD BLANK: T147451-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Thallium	mg/L	<0.00038	0.00038	

LABORATORY CONTROL SAMPLE: T147451-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Arsenic	mg/L	0.100	0.0988	99	85-115	
Barium	mg/L	1.60	1.65	103	85-115	
Beryllium	mg/L	0.200	0.193	96	85-115	
Cadmium	mg/L	0.0500	0.0501	100	85-115	
Cobalt	mg/L	1.60	1.60	100	85-115	
Copper	mg/L	1.60	1.56	97	85-115	
Molybdenum	mg/L	1.60	1.64	103	85-115	
Lead	mg/L	0.100	0.105	105	85-115	
Antimony	mg/L	0.100	0.110	110	85-115	
Selenium	mg/L	0.100	0.0932	93	85-115	
Thallium	mg/L	0.100	0.104	104	85-115	

MATRIX SPIKE: T147451-MS1 Original: **24B0629-21**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Arsenic	mg/L	0.00114	0.100	0.101	99	70-130	
Barium	mg/L	0.416	1.60	2.10	105	70-130	
Beryllium	mg/L	0	0.200	0.185	92	70-130	
Cadmium	mg/L	0	0.0500	0.0502	100	70-130	
Cobalt	mg/L	0.00108	1.60	1.54	96	70-130	
Copper	mg/L	0	1.60	1.46	91	70-130	
Molybdenum	mg/L	0.00452	1.60	1.75	109	70-130	
Lead	mg/L	0.00127	0.100	0.102	100	70-130	
Antimony	mg/L	0	0.100	0.112	112	70-130	
Selenium	mg/L	0	0.100	0.0912	91	70-130	
Thallium	mg/L	0	0.100	0.101	101	70-130	

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T147176
QC Batch Method: IC Prep W

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

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METHOD BLANK: T147176-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: T147176-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Chloride	**mg/L**	**5.00**	**<10**	**99**	**90-110**	**J**
Fluoride	mg/L	1.00	1.01	101	90-110	
Sulfate as SO4	mg/L	5.00	4.97	99	90-110	

MATRIX SPIKE: T147176-MS1 Original: **24B0629-04**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Chloride	**mg/L**	**34.8**	**25.0**	67.5	**131**	**80-120**	**MS07**
Fluoride	mg/L	0.271	5.00	5.36	102	80-120	
Sulfate as SO4	**mg/L**	**20.3**	**25.0**	51.2	**124**	**80-120**	**MS07**

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T147221
QC Batch Method: IC Prep W
Analysis Description: Sulfate
Analysis Method: EPA 300.0 Rev. 2.1

METHOD BLANK: T147221-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Chloride	mg/L	<0.15	0.15	
Fluoride	mg/L	<0.020	0.020	
Sulfate as SO4	mg/L	<0.60	0.60	

LABORATORY CONTROL SAMPLE: T147221-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Chloride	mg/L	5.00	4.94	99	90-110	
Fluoride	mg/L	1.00	1.01	101	90-110	
Sulfate as SO4	mg/L	5.00	4.96	99	90-110	

MATRIX SPIKE: T147221-MS1 Original: **24B0629-07**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes

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MATRIX SPIKE: T147221-MS1 Original: **24B0629-07**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Chloride	mg/L	20.6	25.0	49.7	116	80-120	
Fluoride	mg/L	0.214	5.00	5.60	108	80-120	
Sulfate as SO4	mg/L	0	25.0	28.2	113	80-120	

MATRIX SPIKE: T147221-MS2 Original: **24B0629-12**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Chloride	mg/L	17.8	25.0	44.1	105	80-120	
Fluoride	mg/L	0.980	5.00	6.08	102	80-120	
Sulfate as SO4	mg/L	1.51	25.0	28.5	108	80-120	

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T147283
QC Batch Method: IC Prep W
Analysis Description: Chloride
Analysis Method: EPA 300.0 Rev. 2.1

METHOD BLANK: T147283-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: T147283-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Chloride	**mg/L**	**5.00**	**<10**	**98**	**90-110**	**J**
Fluoride	mg/L	1.00	1.01	101	90-110	
Sulfate as SO4	mg/L	5.00	4.98	100	90-110	

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T147345
QC Batch Method: SM 2320 B-11
Analysis Description: Alkalinity, Bicarbonate
Analysis Method: SM 2320 B-11

LABORATORY CONTROL SAMPLE: T147345-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Bicarbonate Alkalinity as CaCO3 at pH 4.5	mg/L	100	96.5	96	88-112	

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LABORATORY CONTROL SAMPLE: T147345-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Carbonate Alkalinity as CaCO3 at pH 8.2	mg/L	100	96.5	96	88-112	
Total Alkalinity as CaCO3 at pH 4.5	mg/L	100	96.5	96	88-112	

SAMPLE DUPLICATE: T147345-DUP1 Original: **24B0629-01**

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Notes
Bicarbonate Alkalinity as CaCO3 at pH 4.5	mg/L	692	674	3	20	
Carbonate Alkalinity as CaCO3 at pH 8.2	mg/L	0	<10		20	
Total Alkalinity as CaCO3 at pH 4.5	mg/L	692	674	3	20	

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T147372
QC Batch Method: SM 2320 B-11
Analysis Description: Alkalinity, Total
Analysis Method: SM 2320 B-11

LABORATORY CONTROL SAMPLE: T147372-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Bicarbonate Alkalinity as CaCO3 at pH 4.5	mg/L	100	94.4	94	88-112	
Carbonate Alkalinity as CaCO3 at pH 8.2	mg/L	100	94.4	94	88-112	
Total Alkalinity as CaCO3 at pH 4.5	mg/L	100	94.4	94	88-112	

SAMPLE DUPLICATE: T147372-DUP1 Original: **24B0629-23**

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Notes
Bicarbonate Alkalinity as CaCO3 at pH 4.5	mg/L	93.0	93.9	1	20	
Carbonate Alkalinity as CaCO3 at pH 8.2	mg/L	0	<5.0		20	
Total Alkalinity as CaCO3 at pH 4.5	mg/L	93.0	93.9	1	20	

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T147529
QC Batch Method: SM 2320 B-11
Analysis Description: Alkalinity, Carbonate
Analysis Method: SM 2320 B-11

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LABORATORY CONTROL SAMPLE: T147529-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Bicarbonate Alkalinity as CaCO3 at pH 4.5	mg/L	100	90.7	91	88-112	
Carbonate Alkalinity as CaCO3 at pH 8.2	mg/L	100	90.7	91	88-112	
Total Alkalinity as CaCO3 at pH 4.5	mg/L	100	90.7	91	88-112	

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T147218
QC Batch Method: SM 2540 C-15
Analysis Description: Total Dissolved Solids
Analysis Method: SM 2540 C-15

METHOD BLANK: T147218-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Total Dissolved Solids	**mg/L**	**9.00**	**10**	**J**

LABORATORY CONTROL SAMPLE: T147218-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Total Dissolved Solids	mg/L	500	514	103	80-120	

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T147424
QC Batch Method: SM 2540 C-15
Analysis Description: Total Dissolved Solids
Analysis Method: SM 2540 C-15

METHOD BLANK: T147424-BLK1

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

LABORATORY CONTROL SAMPLE: T147424-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Total Dissolved Solids	mg/L	500	450	90	80-120	

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

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QC Batch: T147242
QC Batch Method: SM 2540 D-15

Analysis Description: Total Suspended Solids
Analysis Method: SM 2540 D-15

METHOD BLANK: T147242-BLK1

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

LABORATORY CONTROL SAMPLE: T147242-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Total Suspended Solids	mg/L	100	93.0	93	85-115	

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T147275
QC Batch Method: SM 2540 D-15

Analysis Description: Total Suspended Solids
Analysis Method: SM 2540 D-15

METHOD BLANK: T147275-BLK1

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

LABORATORY CONTROL SAMPLE: T147275-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Total Suspended Solids	mg/L	100	88.0	88	85-115	

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T147222
QC Batch Method: *** DEFAULT PREP ***

Analysis Description: pH, SM 4500
Analysis Method: SM 4500-H+ B-11

SAMPLE DUPLICATE: T147222-DUP1 Original: **24B0629-01**

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Notes
pH	**pH Units**	**7.04**	**7.04**	**0**	**20**	**PH01t**

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T147285
QC Batch Method: *** DEFAULT PREP ***

Analysis Description: pH, SM 4500
Analysis Method: SM 4500-H+ B-11

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SAMPLE DUPLICATE: T147285-DUP1 Original: **24B0629-08**

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Notes
pH	**pH Units**	**7.44**	**7.48**	**0.5**	**20**	**PH01a**

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Page 1 of 1

Trace ID No. 24B0629

Report Results To:

Company Name:	HDR Inc.
Report To:	Molly Reeves
Mailing Address:	1000 Oakbrook Drive, Suite 200
City, State, Zip Code:	Ann Arbor, MI 48104
Office Phone:	Cell Phone: 734.263.7138
Email Address:	molly.reeves@hdrinc.com

Bill To:

PO #:	10337505
Contact Name:	Lara Zawaideh
Billing Address (if different):	1000 Oakbrook Drive, Suite 200
City, State, Zip Code:	Ann Arbor, MI 48104
Phone Number:	734.223.9074
Billing Email Address:	lara.zawaideh@hdrinc.com

Trace Use:

Logged By:	SK
Checked By:	MJ

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

Project Name: Grand Haven Harbor Island

Sampled By (print): Andrew Byks/Tanten Buszka

Trace No.	Sample Collection Date	Sample Collection Time	Sample ID/Name	Metals Field Filterd (Y or N)	Matrix - see above →	Number of Containers	Preservation: 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)	Possible Health Hazards?	Remarks/Notes
1	2/12/24	1618	MW-30	N	GW	6	6	5							1	X	X	X	X		
2	2/12/24	1500	MW-31	N	GW	6	6	5							1	X	X	X	X		
3	2/12/24	1630	MW-32	N	GW	6	6	5							1	X	X	X	X		
4	2/12/24	1518	MW-33	N	GW	6	6	5							1	X	X	X	X		
5	2/12/24	1400	MW-34	N	GW	6	6	5							1	X	X	X	X		
6	2/12/24	1618	MWT-30	N	GW	6	6	5							1	X	X	X	X		
7	2/12/24	1400	MWT-34	N	GW	6	6	5							1	X	X	X	X		

Analysis Requested

Please Sign	Released By	Received By	Date	Time
1)	Andrew Byks		2/13/24	8:06
2)				
3)				
4)				

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

☐ Check this box if you would not like your samples analyzed if received outside of the conditions outlined in the Trace Sample Acceptance Policy at www.trace-labs.com/downloads.

Form 70-Z.2

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Trace ID No. 24B0629

Report Results To:

Company Name:	HDR Inc.
Report To:	Molly Reeves
Mailing Address:	1000 Oakbrook Drive, Suite 200
City, State, Zip Code:	Ann Arbor, MI 48104
Office Phone:	Cell Phone: 734.263.7138
Email Address:	molly.reeves@hdrinc.com

Bill To:

PO #:	10337505
Contact Name:	Lara Zawaideh
Billing Address (if different):	1000 Oakbrook Drive, Suite 200
City, State, Zip Code:	Ann Arbor, MI 48104
Phone Number:	734.223.9074
Billing Email Address:	lara.zawaideh@hdrinc.com

Trace Use:

Logged By:	NG	
Checked By:	BV	
Soil Volatiles Preserved (circle if applicable):	MeOH	Low Level
Sample Collection Time (Hrs):		Lab

Requested Turnaround Times (TAT)

- ☒ Standard: 5-10 Business days
- ☐ 3 Business Days*
- ☐ 1 Business Day*

** Rush TAT Requires Prior Approval*

Matrix Key:

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

Project Name: Grand Haven Harbor Island

Sampled By (print): Andrew Byks/Tanten Buszka

Trace No.	Sample Collection Date	Sample Collection Time	Sample ID/Name	Metals Field Filterd (Y or N)	Matrix - see above →	Number of Containers	Preservation: 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)	Possible Health Hazards?	Remarks/Notes
8	2/13/24	1435	MW-01R	N	GW	6	6		5						1	X	X	X	X		
9	2/13/24	1215	MW-02	N	GW	6	6		5						1	X	X	X	X		
10	2/13/24	940	MW-03	N	GW	6	6		5						1	X	X	X	X		
11	2/14/24	832	MW-04	N	GW	6	6		5						1	X	X	X	X		
12	2/13/24	1243	MW-06	N	GW	6	6		5						1	X	X	X	X		
13	2/13/24	1535	MW-07	N	GW	6	6		5						1	X	X	X	X		
14	2/13/24	1022	MW-08	N	GW	6	6		5						1	X	X	X	X		
15	2/13/24	1120	MW-09	N	GW	6	6		5						1	X	X	X	X		
16	2/13/24	1345	MW-10	N	GW	6	6		5						1	X	X	X	X		
17	2/13/24	1430	MW-11	N	GW	6	6		5						1	X	X	X	X		

Analysis Requested

Please Sign	Released By	Date	Time	Received By	Released By	Received By	Date	Time
1)								
2)		2/14/24	1230					
3)								
4)								

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

☐ Check this box if you would not like your samples analyzed if received outside of the conditions outlined in the Trace Sample Acceptance Policy at www.trace-labs.com/downloads.

Form 70-Z.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

TRACE ANALYTICAL LABORATORIES, INC.

CHAIN-OF-CUSTODY RECORD

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

Phone 231.773.5998
Fax 888.979.4469
www.trace-labs.com

Trace ID No. 24B0629

Report Results To:

Company Name: HDR Inc.	
Report To: Molly Reeves	
Mailing Address: 1000 Oakbrook Drive, Suite 200	
City, State, Zip Code: Ann Arbor, MI 48104	
Office Phone:	Cell Phone: 734.263.7138
Email Address: molly.reeves@hdrinc.com	

Bill To:

PO #: 10337505	
Contact Name: Lara Zawaideh	
Billing Address (if different): 1000 Oakbrook Drive, Suite 200	
City, State, Zip Code: Ann Arbor, MI 48104	
Phone Number: 734.223.9074	
Billing Email Address: lara.zawaideh@hdrinc.com	

Trace Use:

Logged By: NG	
Checked By: BV	
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, DW = Drinking Water, GW = Groundwater, LW = Liquid Waste, O = Oil, WI = Wipes, S = Solid, SL = Sludge, A = Air, U = Unknown

Project Name: Grand Haven Harbor Island

Sampled By (print): Andrew Byks/Tanten Buszka

Trace No.	Sample Collection Date	Sample Collection Time	Sample ID/Name	Metals Field Filterd (Y or N)	Matrix - see above →	Number of Containers	Preservation: 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)									Remarks/Notes	Possible Health Hazards?
18	2/13/24	1730	MW-12	N	GW	6	6		5						1	X	X	X	X										
19	2/13/24	1600	MW-18	N	GW	6	6		5						1	X	X	X	X										
20	2/13/24	0836	MW-19	N	GW	6	6		5						1	X	X	X	X										
21	2/13/24	1430	MW-20	N	GW	6	6		5						1	X	X	X	X										
22	2/13/24	0930	MW-27	N	GW	6	6		5						1	X	X	X	X										
23	2/14/24	1015	SG-02	N	SW	6	6		5						1	X	X	X	X										
24	2/14/24	1025	SG-03	N	SW	6	6		5						1	X	X	X	X										
25	2/14/24	940	SG-04R	N	SW	6	6		5						1	X	X	X	X										
26	2/14/24	1045	SG-05	N	SW	6	6		5						1	X	X	X	X										

Analysis Requested

Please Sign	Released By	Date	Time	Received By	Released By	Date	Time	Received By	Date	Time
1)										
2)		2/14/24	1230							
3)										
4)										

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

☐ Check this box if you would not like your samples analyzed if received outside of the conditions outlined in the Trace Sample Acceptance Policy at www.trace-labs.com/downloads.

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www.trace-labs.com

24B0629
HDR Michigan Inc.
Project Manager: Jon Mink

Sample Log In Checklist

	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Date: 2.13.24									
Time: 845									
Initials: CM									
Package Description: Cooler									
Package Temp °C	1.4	1.4			/				
Representative Sample Temp °C	5.8	5.6				/		/	

Sample Receipt

Yes No
- [x] [ ] Received on ice or other coolant
- [x] [ ] Ice still present upon receipt
- [ ] [x] Custody seals present — [ ] Yes [ ] No Custody seals intact (if applicable)
- [x] Trace Courier [ ] Client Drop-off [ ] UPS [ ] Fed Ex [ ] US Mail [ ] Other

Sample Condition

Yes No N/A
- [x] [ ] [ ] All sample containers arrived unbroken and labeled
- [x] [ ] [ ] Sufficient sample to run requested analyses
- [x] [ ] [ ] Correct chemical preservative added to samples
- [ ] [x] [ ] Samples preserved at Trace _____
- [x] [ ] [ ] Chemical preservation verified, check EMD pH test strip used (if applicable)
  [x] pH 0-2.5 (Lot: HC311850) [ ] pH 11.0-13.0 (Lot: HC022540) [ ] Other
- [ ] [ ] [x] Air bubbles absent from VOAs _____

Chain of Custody (COC)

Yes No
- [x] [ ] All bottle labels agree with COC
- [x] [ ] COC filled out properly
- [ ] [ ] COC signed by client

Notes:

Cooler 2
pants 2, 3, and 6

Form 70-A.53
Effective 12/21/23

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www.trace-labs.com

24B0629

HDR Michigan Inc.
Project Manager: Jon Mink

Sample Log In Checklist

	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Date: 2.13.24									
Time: 840									
Initials: CM									
Package Description: Cooler									
Package Temp °C	2.0	2.0			/				
Representative Sample Temp °C	6.2	6.0				/		/	

Sample Receipt

Yes No

- [x] [ ] Received on ice or other coolant
- [x] [ ] Ice still present upon receipt
- [ ] [x] Custody seals present — [ ] Yes [ ] No Custody seals intact (if applicable)
- [x] Trace Courier [ ] Client Drop-off [ ] UPS [ ] Fed Ex [ ] US Mail [ ] Other

Sample Condition

Yes No N/A

- [x] [ ] [ ] All sample containers arrived unbroken and labeled
- [x] [ ] [ ] Sufficient sample to run requested analyses
- [x] [ ] [ ] Correct chemical preservative added to samples
- [ ] [x] [ ] Samples preserved at Trace _____
- [x] [ ] [ ] Chemical preservation verified, check EMD pH test strip used (if applicable)
  - [x] pH 0-2.5 (Lot: HC311850) [ ] pH 11.0-13.0 (Lot: HC022540) [ ] Other
- [ ] [ ] [x] Air bubbles absent from VOAs _____

Chain of Custody (COC)

Yes No

- [x] [ ] All bottle labels agree with COC
- [x] [ ] COC filled out properly
- [ ] [ ] COC signed by client

Notes:

Cooler 1
points 1, 4, 5, and 7

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24B0629
HDR Michigan Inc.
Project Manager: Jon Mink

Sample Log In Checklist

	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Date: 2.14.24									
Time: 1315									
Initials: CM									
Package Description: cooler									
Package Temp °C	0.1	0.1			/				
Representative Sample Temp °C	2.3	2.1				/		/	

Sample Receipt

Yes No

- [x] [ ] Received on ice or other coolant
- [x] [ ] Ice still present upon receipt
- [ ] [x] Custody seals present — [ ] Yes [ ] No Custody seals intact (if applicable)
- [x] ~~Trace Courier~~ CM 2.14.24 [x] Client Drop-off [ ] UPS [ ] Fed Ex [ ] US Mail [ ] Other

Sample Condition

Yes No N/A

- [x] [ ] [ ] All sample containers arrived unbroken and labeled
- [x] [ ] [ ] Sufficient sample to run requested analyses
- [x] [ ] [ ] Correct chemical preservative added to samples
- [ ] [x] [ ] Samples preserved at Trace _____
- [x] [ ] [ ] Chemical preservation verified, check EMD pH test strip used (if applicable)
  - [x] pH 0-2.5 (Lot: HC311850) [ ] pH 11.0-13.0 (Lot: HC022540) [ ] Other
- [ ] [ ] [x] Air bubbles absent from VOAs _____

Chain of Custody (COC)

Yes No

- [x] [ ] All bottle labels agree with COC
- [x] [ ] COC filled out properly
- [x] [ ] COC signed by client

Notes:

Cooler 1 of 5
points 14, 15, 20, and 22

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www.trace-labs.com

24B0629

HDR Michigan Inc.
Project Manager: Jon Mink

Sample Log In Checklist

	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Date: 2.14.24									
Time: 1317									
Initials: CM									
Package Description: Cooler									
Package Temp °C	1.9	1.9							
Representative Sample Temp °C	1.6	1.4							

Sample Receipt

Yes No

- [x] [ ] Received on ice or other coolant
- [x] [ ] Ice still present upon receipt
- [ ] [x] Custody seals present — [ ] Yes [ ] No Custody seals intact (if applicable)
- [ ] Trace Courier [x] Client Drop-off [ ] UPS [ ] Fed Ex [ ] US Mail [ ] Other

Sample Condition

Yes No N/A

- [x] [ ] [ ] All sample containers arrived unbroken and labeled
- [x] [ ] [ ] Sufficient sample to run requested analyses
- [x] [ ] [ ] Correct chemical preservative added to samples
- [ ] [x] [ ] Samples preserved at Trace _____
- [x] [ ] [ ] Chemical preservation verified, check EMD pH test strip used (if applicable)
  [x] pH 0-2.5 (Lot: HC311850) [ ] pH 11.0-13.0 (Lot: HC022540) [ ] Other
- [ ] [ ] [x] Air bubbles absent from VOAs _____

Chain of Custody (COC)

Yes No

- [x] [ ] All bottle labels agree with COC
- [x] [ ] COC filled out properly
- [x] [ ] COC signed by client

Notes:

Cooler 2 of 5
points 10, 11, and 21

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www.trace-labs.com

24B0629
HDR Michigan Inc.
Project Manager: Jon Mink

Sample Log In Checklist

	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Date: 2.14.24									
Time: 1319									
Initials: CM									
Package Description: Cooler									
Package Temp °C	0.2	0.2							
Representative Sample Temp °C	1.0	0.8							

Sample Receipt

Yes No
- [x] [ ] Received on ice or other coolant
- [x] [ ] Ice still present upon receipt
- [ ] [x] Custody seals present — [ ] Yes [ ] No Custody seals intact (if applicable)
- [ ] Trace Courier [x] Client Drop-off [ ] UPS [ ] Fed Ex [ ] US Mail [ ] Other

Sample Condition

Yes No N/A
- [x] [ ] [ ] All sample containers arrived unbroken and labeled
- [x] [ ] [ ] Sufficient sample to run requested analyses
- [x] [ ] [ ] Correct chemical preservative added to samples
- [ ] [x] [ ] Samples preserved at Trace _____
- [x] [ ] [ ] Chemical preservation verified, check EMD pH test strip used (if applicable)
  [x] pH 0-2.5 (Lot: HC311850) [ ] pH 11.0-13.0 (Lot: HC022540) [ ] Other
- [ ] [ ] [x] Air bubbles absent from VOAs _____

Chain of Custody (COC)

Yes No
- [x] [ ] All bottle labels agree with COC
- [x] [ ] COC filled out properly
- [x] [ ] COC signed by client

Notes:

Cooler 3 of 5
points 12, 17, 18, and 19

Form 7O-A.53
Effective 12/21/23

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888-979-4469 Fax
www.trace-labs.com

24B0629
HDR Michigan Inc.
Project Manager: Jon Mink

Sample Log In Checklist

	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Date: 2-14-24									
Time: 1323									
Initials: CM									
Package Description: Cooler									
Package Temp °C	1.7	1.7			✓				
Representative Sample Temp °C	2.4	2.2				✓		✓	

Sample Receipt

Yes No

- [x] [ ] Received on ice or other coolant
- [x] [ ] Ice still present upon receipt
- [ ] [x] Custody seals present — [ ] Yes [ ] No Custody seals intact (if applicable)
- [ ] Trace Courier [x] Client Drop-off [ ] UPS [ ] Fed Ex [ ] US Mail [ ] Other

Sample Condition

Yes No N/A

- [x] [ ] [ ] All sample containers arrived unbroken and labeled
- [x] [ ] [ ] Sufficient sample to run requested analyses
- [x] [ ] [ ] Correct chemical preservative added to samples
- [ ] [x] [ ] Samples preserved at Trace _____
- [x] [ ] [ ] Chemical preservation verified, check EMD pH test strip used (if applicable)
  [x] pH 0-2.5 (Lot: HC311850) [ ] pH 11.0-13.0 (Lot: HC022540) [ ] Other
- [ ] [ ] [x] Air bubbles absent from VOAs _____

Chain of Custody (COC)

Yes No

- [x] [ ] All bottle labels agree with COC
- [x] [ ] COC filled out properly
- [x] [ ] COC signed by client

Notes:

Cooler 5 of 5
points 23, 24, 25, and 26

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888-979-4469 Fax
www.trace-labs.com

24B0629
HDR Michigan Inc.
Project Manager: Jon Mink

Sample Log In Checklist

	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Date: 2.14.21									
Time: 1321									
Initials: CM									
Package Description: Cooler									
Package Temp °C	0.8	0.8							
Representative Sample Temp °C	2.3	2.1							

Sample Receipt

Yes No
- [x] [ ] Received on ice or other coolant
- [x] [ ] Ice still present upon receipt
- [ ] [x] Custody seals present — [ ] Yes [ ] No Custody seals intact (if applicable)
- [ ] Trace Courier [x] Client Drop-off [ ] UPS [ ] Fed Ex [ ] US Mail [ ] Other

Sample Condition

Yes No N/A
- [x] [ ] [ ] All sample containers arrived unbroken and labeled
- [x] [ ] [ ] Sufficient sample to run requested analyses
- [x] [ ] [ ] Correct chemical preservative added to samples
- [ ] [x] [ ] Samples preserved at Trace _____
- [x] [ ] [ ] Chemical preservation verified, check EMD pH test strip used (if applicable)
  [x] pH 0-2.5 (Lot: HC311850) [ ] pH 11.0-13.0 (Lot: HC022540) [ ] Other
- [ ] [ ] [x] Air bubbles absent from VOAs _____

Chain of Custody (COC)

Yes No
- [x] [ ] All bottle labels agree with COC
- [x] [ ] COC filled out properly
- [x] [ ] COC signed by client

Notes:

Cooler 4 of 5
points 8, 9, 13, and 16

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888-979-4469 Fax
www.trace-labs.com

April 02, 2024

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

Phone: (734) 263-7138

RE: Trace Project 24B0629
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,

Jon Mink
Senior Project Manager
Enclosures

PJLA Testing Accreditation# 1031

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

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SAMPLE SUMMARY

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID	Sample ID	Matrix	Collected By	Date Collected	Date Received
24B0629-01	MW-30	Ground Water	AB/TB	02/12/24 16:18	02/13/24 08:06
24B0629-02	MW-31	Ground Water	AB/TB	02/12/24 15:00	02/13/24 08:06
24B0629-03	MW-32	Ground Water	AB/TB	02/12/24 16:30	02/13/24 08:06
24B0629-04	MW-33	Ground Water	AB/TB	02/12/24 15:18	02/13/24 08:06
24B0629-05	MW-34	Ground Water	AB/TB	02/12/24 14:00	02/13/24 08:06
24B0629-06	MWT- 30	Ground Water	AB/TB	02/12/24 16:18	02/13/24 08:06
24B0629-07	MWT- 34	Ground Water	AB/TB	02/12/24 14:00	02/13/24 08:06
24B0629-08	MW-01R	Ground Water	AB/TB	02/13/24 14:35	02/14/24 12:30
24B0629-09	MW-02	Ground Water	AB/TB	02/13/24 12:15	02/14/24 12:30
24B0629-10	MW-03	Ground Water	AB/TB	02/14/24 09:40	02/14/24 12:30
24B0629-11	MW-04	Ground Water	AB/TB	02/14/24 08:32	02/14/24 12:30
24B0629-12	MW-06	Ground Water	AB/TB	02/13/24 12:43	02/14/24 12:30
24B0629-13	MW-07	Ground Water	AB/TB	02/13/24 15:35	02/14/24 12:30
24B0629-14	MW-08	Ground Water	AB/TB	02/13/24 10:22	02/14/24 12:30
24B0629-15	MW-09	Ground Water	AB/TB	02/13/24 11:20	02/14/24 12:30
24B0629-16	MW-10	Ground Water	AB/TB	02/13/24 13:45	02/14/24 12:30
24B0629-17	MW-11	Ground Water	AB/TB	02/13/24 14:30	02/14/24 12:30
24B0629-18	MW-12	Ground Water	AB/TB	02/13/24 17:30	02/14/24 12:30
24B0629-19	MW-18	Ground Water	AB/TB	02/13/24 16:00	02/14/24 12:30
24B0629-20	MW-19	Ground Water	AB/TB	02/13/24 08:36	02/14/24 12:30
24B0629-21	MW-20	Ground Water	AB/TB	02/13/24 14:30	02/14/24 12:30
24B0629-22	MW-27	Ground Water	AB/TB	02/13/24 09:30	02/14/24 12:30
24B0629-23	SG-02	Surface Water	AB/TB	02/14/24 10:15	02/14/24 12:30
24B0629-24	SG-03	Surface Water	AB/TB	02/14/24 10:25	02/14/24 12:30
24B0629-25	SG-04R	Surface Water	AB/TB	02/14/24 09:40	02/14/24 12:30
24B0629-26	SG-05	Surface Water	AB/TB	02/14/24 10:45	02/14/24 12:30

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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: 24B0629-01

Analysis: EPA 200.8 Rev. 5.4

Silver	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.

Trace ID: 24B0629-04

Analysis: EPA 200.8 Rev. 5.4

Silver	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.

Trace ID: 24B0629-05

Analysis: EPA 200.8 Rev. 5.4

Silver	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.

Trace ID: 24B0629-06

Analysis: EPA 200.8 Rev. 5.4

Silver	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.

Trace ID: 24B0629-07

Analysis: EPA 200.8 Rev. 5.4

Silver	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.

Trace ID: 24B0629-08

Analysis: EPA 200.8 Rev. 5.4

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Silver	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.

Trace ID: 24B0629-10

Analysis: EPA 200.8 Rev. 5.4

Silver	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.

Trace ID: 24B0629-11

Analysis: EPA 200.8 Rev. 5.4

Silver	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.

Trace ID: 24B0629-12

Analysis: EPA 200.8 Rev. 5.4

Silver	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.

Trace ID: 24B0629-15

Analysis: EPA 200.8 Rev. 5.4

Silver	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.

Trace ID: 24B0629-16

Analysis: EPA 200.8 Rev. 5.4

Silver	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.

Trace ID: 24B0629-19

Analysis: EPA 200.8 Rev. 5.4

Silver	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.

Trace ID: 24B0629-20

Analysis: EPA 200.8 Rev. 5.4

Silver	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.

Trace ID: 24B0629-25

Analysis: EPA 200.8 Rev. 5.4

Silver	Note DL02 : The reporting limit was raised due to a dilution required because of chromatographic/matrix interference with the internal standards.

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-01 Date Collected: 02/12/24 16:18 Matrix: Ground Water
Sample ID: MW-30 Date Received: 02/13/24 08:06

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Iron	**2.0**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.13**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Copper	**0.00024**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00020**
Nickel	**0.0018**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00065**
Silver	<0.00025	mg/L	0.00025	5	02/21/24	fs	02/23/24	acs	DL02	0.00025
Vanadium	<0.00062	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.00062
Zinc	<0.0012	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-02 | Date Collected: 02/12/24 15:00 | Matrix: Ground Water
Sample ID: MW-31 | Date Received: 02/13/24 08:06

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Iron	**0.19**	**mg/L**	**0.050**	**1**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.026**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Copper	**0.00023**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00020**
Nickel	**0.0023**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00065**
Silver	<0.000050	mg/L	0.000050	1	02/21/24	fs	02/23/24	acs		0.000050
Vanadium	<0.00062	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.00062
Zinc	<0.0012	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-03 | Date Collected: 02/12/24 16:30 | Matrix: Ground Water
Sample ID: MW-32 | Date Received: 02/13/24 08:06

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Iron	**17**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.13**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Copper	**0.016**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00020**
Nickel	**0.023**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00065**
Silver	<0.000050	mg/L	0.000050	1	02/21/24	fs	02/23/24	acs		0.000050
Vanadium	<0.00062	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.00062
Zinc	**0.0049**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.0012**

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-04 | Date Collected: 02/12/24 15:18 | Matrix: Ground Water
Sample ID: MW-33 | Date Received: 02/13/24 08:06

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Iron	**1.1**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.13**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Copper	**0.00099**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00020**
Nickel	**0.0036**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00065**
Silver	<0.00025	mg/L	0.00025	5	02/21/24	fs	02/23/24	acs	DL02	0.00025
Vanadium	<0.00062	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.00062
Zinc	**0.0035**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.0012**

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-05 Date Collected: 02/12/24 14:00 Matrix: Ground Water
Sample ID: MW-34 Date Received: 02/13/24 08:06

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Iron	**72**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.13**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Copper	**0.00024**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00020**
Nickel	**0.00089**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00065**
Silver	<0.00025	mg/L	0.00025	5	02/21/24	fs	02/23/24	acs	DL02	0.00025
Vanadium	<0.00062	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.00062
Zinc	<0.0012	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-06 Date Collected: 02/12/24 16:18 Matrix: Ground Water
Sample ID: MWT- 30 Date Received: 02/13/24 08:06

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Iron	**1.6**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.13**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Copper	**0.00092**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00020**
Nickel	**0.0036**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00065**
Silver	<0.00025	mg/L	0.00025	5	02/21/24	fs	02/23/24	acs	DL02	0.00025
Vanadium	<0.00062	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.00062
Zinc	**0.0033**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.0012**

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-07 | Date Collected: 02/12/24 14:00 | Matrix: Ground Water
Sample ID: MWT- 34 | Date Received: 02/13/24 08:06

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Iron	**76**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.13**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Copper	**0.00031**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00020**
Nickel	**0.0011**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00065**
Silver	<0.00025	mg/L	0.00025	5	02/21/24	fs	02/23/24	acs	DL02	0.00025
Vanadium	<0.00062	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.00062
Zinc	**0.0019**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.0012**

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-08 | Date Collected: 02/13/24 14:35 | Matrix: Ground Water
Sample ID: MW-01R | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Iron	**0.85**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.13**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Copper	**0.0010**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00020**
Nickel	**0.022**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00065**
Silver	<0.00025	mg/L	0.00025	5	02/21/24	fs	02/23/24	acs	DL02	0.00025
Vanadium	**0.0018**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00062**
Zinc	**0.0016**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.0012**

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-09 | Date Collected: 02/13/24 12:15 | Matrix: Ground Water
Sample ID: MW-02 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Iron	**31**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.13**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Copper	**0.00023**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00020**
Nickel	**0.00093**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00065**
Silver	<0.000050	mg/L	0.000050	1	02/21/24	fs	02/23/24	acs		0.000050
Vanadium	<0.00062	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.00062
Zinc	**0.0020**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.0012**

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-10 | Date Collected: 02/14/24 09:40 | Matrix: Ground Water
Sample ID: MW-03 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Iron	**1.4**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.13**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Copper	**0.00025**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00020**
Nickel	**0.00094**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00065**
Silver	<0.00025	mg/L	0.00025	5	02/21/24	fs	02/23/24	acs	DL02	0.00025
Vanadium	<0.00062	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.00062
Zinc	<0.0012	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-11 Date Collected: 02/14/24 08:32 Matrix: Ground Water
Sample ID: MW-04 Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Iron	**5.5**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.13**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Copper	<0.00020	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.00020
Nickel	**0.010**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00065**
Silver	<0.00025	mg/L	0.00025	5	02/21/24	fs	02/23/24	acs	DL02	0.00025
Vanadium	<0.00062	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.00062
Zinc	<0.0012	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-12 | Date Collected: 02/13/24 12:43 | Matrix: Ground Water
Sample ID: MW-06 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Iron	**31**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.13**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Copper	**0.00028**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00020**
Nickel	<0.00065	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.00065
Silver	<0.00025	mg/L	0.00025	5	02/21/24	fs	02/23/24	acs	DL02	0.00025
Vanadium	<0.00062	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.00062
Zinc	<0.0012	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-13 Date Collected: 02/13/24 15:35 Matrix: Ground Water
Sample ID: MW-07 Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Iron	**15**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.13**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Copper	<0.00020	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.00020
Nickel	<0.00065	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.00065
Silver	<0.000050	mg/L	0.000050	1	02/21/24	fs	02/23/24	acs		0.000050
Vanadium	<0.00062	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.00062
Zinc	<0.0012	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-14 Date Collected: 02/13/24 10:22 Matrix: Ground Water
Sample ID: MW-08 Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Iron	**22**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.13**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Copper	**0.00035**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00020**
Nickel	**0.0026**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00065**
Silver	<0.000050	mg/L	0.000050	1	02/21/24	fs	02/23/24	acs		0.000050
Vanadium	<0.00062	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.00062
Zinc	<0.0012	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-15 Date Collected: 02/13/24 11:20 Matrix: Ground Water
Sample ID: MW-09 Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Iron	**22**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.13**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Copper	<0.00020	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.00020
Nickel	**0.0060**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00065**
Silver	<0.00025	mg/L	0.00025	5	02/21/24	fs	02/23/24	acs	DL02	0.00025
Vanadium	<0.00062	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.00062
Zinc	<0.0012	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-16 | Date Collected: 02/13/24 13:45 | Matrix: Ground Water
Sample ID: MW-10 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Iron	**3.7**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.13**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Copper	<0.00020	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.00020
Nickel	<0.00065	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.00065
Silver	<0.00025	mg/L	0.00025	5	02/21/24	fs	02/23/24	acs	DL02	0.00025
Vanadium	<0.00062	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.00062
Zinc	<0.0012	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-17 Date Collected: 02/13/24 14:30 Matrix: Ground Water
Sample ID: MW-11 Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Iron	**8.5**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.13**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Copper	**0.00020**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00020**
Nickel	**0.0011**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00065**
Silver	<0.000050	mg/L	0.000050	1	02/21/24	fs	02/23/24	acs		0.000050
Vanadium	<0.00062	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.00062
Zinc	<0.0012	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-18 Date Collected: 02/13/24 17:30 Matrix: Ground Water
Sample ID: MW-12 Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Iron	<0.026	mg/L	0.050	1	02/21/24	fs	03/01/24	ckd		0.026
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Copper	**0.0012**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00020**
Nickel	**0.0014**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00065**
Silver	<0.000050	mg/L	0.000050	1	02/21/24	fs	02/23/24	acs		0.000050
Vanadium	<0.00062	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.00062
Zinc	**0.0027**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.0012**

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-19 Date Collected: 02/13/24 16:00 Matrix: Ground Water
Sample ID: MW-18 Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Iron	**7.7**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.13**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Copper	**0.00033**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00020**
Nickel	**0.0056**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00065**
Silver	<0.00025	mg/L	0.00025	5	02/21/24	fs	02/23/24	acs	DL02	0.00025
Vanadium	<0.00062	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.00062
Zinc	**0.042**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.0012**

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-20 | Date Collected: 02/13/24 08:36 | Matrix: Ground Water
Sample ID: MW-19 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147298										
Iron	**20**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.13**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147298										
Copper	<0.00020	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.00020
Nickel	**0.0012**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00065**
Silver	<0.00025	mg/L	0.00025	5	02/21/24	fs	02/23/24	acs	DL02	0.00025
Vanadium	<0.00062	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.00062
Zinc	<0.0012	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-21 | Date Collected: 02/13/24 14:30 | Matrix: Ground Water
Sample ID: MW-20 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147451										
Iron	**18**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.13**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147451										
Copper	**0.00040**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00020**
Nickel	**0.0061**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00065**
Silver	<0.000050	mg/L	0.000050	1	02/21/24	fs	02/23/24	acs		0.000050
Vanadium	<0.00062	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.00062
Zinc	**0.016**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.0012**

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-22 | Date Collected: 02/13/24 09:30 | Matrix: Ground Water
Sample ID: MW-27 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147451										
Iron	**9.9**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.13**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147451										
Copper	<0.00020	mg/L	0.00025	1	02/21/24	fs	02/23/24	acs		0.00020
Nickel	**0.00076**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00065**
Silver	<0.000050	mg/L	0.000050	1	02/21/24	fs	02/23/24	acs		0.000050
Vanadium	<0.00062	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.00062
Zinc	<0.0012	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.0012

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-23 | Date Collected: 02/14/24 10:15 | Matrix: Surface Water
Sample ID: SG-02 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147451										
Iron	**0.14**	**mg/L**	**0.050**	**1**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.026**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147451										
Copper	**0.00089**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00020**
Nickel	**0.0020**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00065**
Silver	<0.000050	mg/L	0.000050	1	02/21/24	fs	02/23/24	acs		0.000050
Vanadium	<0.00062	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.00062
Zinc	**0.0013**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.0012**

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-24 | Date Collected: 02/14/24 10:25 | Matrix: Surface Water
Sample ID: SG-03 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147451										
Iron	**0.13**	**mg/L**	**0.050**	**1**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.026**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147451										
Copper	**0.00083**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00020**
Nickel	**0.0019**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00065**
Silver	<0.000050	mg/L	0.000050	1	02/21/24	fs	02/23/24	acs		0.000050
Vanadium	<0.00062	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.00062
Zinc	**0.0012**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.0012**

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-25 | Date Collected: 02/14/24 09:40 | Matrix: Surface Water
Sample ID: SG-04R | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147451										
Iron	**0.36**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.13**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147451										
Copper	**0.0013**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00020**
Nickel	**0.0037**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00065**
Silver	<0.00025	mg/L	0.00025	5	02/21/24	fs	02/23/24	acs	DL02	0.00025
Vanadium	**0.00097**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**	**J**	**0.00062**
Zinc	**0.0062**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.0012**

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ANALYTICAL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

Trace ID: 24B0629-26 | Date Collected: 02/14/24 10:45 | Matrix: Surface Water
Sample ID: SG-05 | Date Received: 02/14/24 12:30

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
METALS, TOTAL										
Analysis Method: EPA 200.7 Rev. 4.4										
Batch: T147451										
Iron	**7.2**	**mg/L**	**0.25**	**5**	**02/21/24**	**fs**	**03/01/24**	**ckd**		**0.13**
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T147451										
Copper	**0.0063**	**mg/L**	**0.00025**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00020**
Nickel	**0.0024**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.00065**
Silver	<0.000050	mg/L	0.000050	1	02/21/24	fs	02/23/24	acs		0.000050
Vanadium	<0.00062	mg/L	0.0012	1	02/21/24	fs	02/23/24	acs		0.00062
Zinc	**0.019**	**mg/L**	**0.0012**	**1**	**02/21/24**	**fs**	**02/23/24**	**acs**		**0.0012**

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QUALITY CONTROL RESULTS

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T147298
QC Batch Method: EPA 200.2
Analysis Description: Iron, Total
Analysis Method: EPA 200.7 Rev. 4.4

METHOD BLANK: T147298-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Iron	mg/L	<0.050	0.050	

LABORATORY CONTROL SAMPLE: T147298-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Iron	mg/L	32.0	32.0	100	85-115	

MATRIX SPIKE: T147298-MS1 Original: **24B0629-01**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Iron	mg/L	2.03	32.0	34.4	101	70-130	

MATRIX SPIKE: T147298-MS2 Original: **24B0629-02**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Iron	mg/L	0.193	32.0	31.8	99	70-130	

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T147451
QC Batch Method: EPA 200.2
Analysis Description: Iron, Total
Analysis Method: EPA 200.7 Rev. 4.4

METHOD BLANK: T147451-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Iron	mg/L	<0.050	0.050	

LABORATORY CONTROL SAMPLE: T147451-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Iron	mg/L	16.0	16.2	101	85-115	

MATRIX SPIKE: T147451-MS1 Original: **24B0629-21**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes

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MATRIX SPIKE: T147451-MS1 Original: **24B0629-21**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Iron	mg/L	18.5	16.0	35.8	108	70-130	

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T147298
QC Batch Method: EPA 200.2
Analysis Description: Nickel, Total
Analysis Method: EPA 200.8 Rev. 5.4

METHOD BLANK: T147298-BLK1

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

LABORATORY CONTROL SAMPLE: T147298-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Silver	mg/L	0.100	0.105	105	85-115	
Copper	mg/L	3.20	3.03	95	85-115	
Nickel	mg/L	3.20	3.04	95	85-115	
Vanadium	mg/L	3.20	3.16	99	85-115	
Zinc	mg/L	3.20	2.96	93	85-115	

MATRIX SPIKE: T147298-MS1 Original: **24B0629-01**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Silver	mg/L	0	0.100	0.101	101	70-130	
Copper	mg/L	0	3.20	2.89	90	70-130	
Nickel	mg/L	0	3.20	2.93	91	70-130	
Vanadium	mg/L	0	3.20	3.26	102	70-130	
Zinc	mg/L	0	3.20	2.69	84	70-130	

MATRIX SPIKE: T147298-MS2 Original: **24B0629-02**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Silver	mg/L	0	0.100	0.103	103	70-130	
Copper	mg/L	0	3.20	2.81	88	70-130	
Nickel	mg/L	0	3.20	2.91	91	70-130	

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2241 Black Creek Road
Muskegon, MI 49444-2673

TRACE ANALYTICAL LABORATORIES, INC.

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

MATRIX SPIKE: T147298-MS2 Original: **24B0629-02**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Vanadium	mg/L	0	3.20	3.14	98	70-130	
Zinc	mg/L	0	3.20	2.69	84	70-130	

Trace Project ID: 24B0629
Client Project ID: City of Grand Haven - Harbor Island

QC Batch: T147451
QC Batch Method: EPA 200.2
Analysis Description: Copper, Total
Analysis Method: EPA 200.8 Rev. 5.4

METHOD BLANK: T147451-BLK1

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

LABORATORY CONTROL SAMPLE: T147451-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Silver	mg/L	0.0500	0.0524	105	85-115	
Copper	mg/L	1.60	1.56	97	85-115	
Nickel	mg/L	1.60	1.57	98	85-115	
Vanadium	mg/L	1.60	1.63	102	85-115	
Zinc	mg/L	1.60	1.55	97	85-115	

MATRIX SPIKE: T147451-MS1 Original: **24B0629-21**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Silver	mg/L	0	0.0500	0.0516	103	70-130	
Copper	mg/L	0	1.60	1.46	91	70-130	
Nickel	mg/L	0.00610	1.60	1.49	92	70-130	
Vanadium	mg/L	0	1.60	1.62	101	70-130	
Zinc	mg/L	0.0156	1.60	1.45	90	70-130	

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CHAIN-OF-CUSTODY RECORD

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

Phone 231.773.5998
Fax 888.979.4469
www.trace-labs.com

Page 1 of 1

Trace ID No. 24B0629

Report Results To:

Company Name:	HDR Inc.
Report To:	Molly Reeves
Mailing Address:	1000 Oakbrook Drive, Suite 200
City, State, Zip Code:	Ann Arbor, MI 48104
Office Phone:	Cell Phone: 734.263.7138
Email Address:	molly.reeves@hdrinc.com

Bill To:

PO #:	10337505
Contact Name:	Lara Zawaideh
Billing Address (if different):	1000 Oakbrook Drive, Suite 200
City, State, Zip Code:	Ann Arbor, MI 48104
Phone Number:	734.223.9074
Billing Email Address:	lara.zawaideh@hdrinc.com

Trace Use:

Logged By:	SK
Checked By:	MJ
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, DW = Drinking Water, GW = Groundwater, LW = Liquid Waste, O = Oil, WI = Wipes, S = Solid, SL = Sludge, A = Air, U = Unknown

Project Name: Grand Haven Harbor Island

Sampled By (print): Andrew Byks/Tanten Buszka

Trace No.	Sample Collection Date	Sample Collection Time	Sample ID/Name	Metals Field Filterd (Y or N)	Matrix - see above →	Number of Containers	Preservation: 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)	Possible Health Hazards?	Remarks/Notes
1	2/12/24	1618	MW-30	N	GW	6	6	5							1	X	X	X	X		
2	2/12/24	1500	MW-31	N	GW	6	6	5							1	X	X	X	X		
3	2/12/24	1630	MW-32	N	GW	6	6	5							1	X	X	X	X		
4	2/12/24	1518	MW-33	N	GW	6	6	5							1	X	X	X	X		
5	2/12/24	1400	MW-34	N	GW	6	6	5							1	X	X	X	X		
6	2/12/24	1618	MWT-30	N	GW	6	6	5							1	X	X	X	X		
7	2/12/24	1400	MWT-34	N	GW	6	6	5							1	X	X	X	X		

Analysis Requested

Please Sign	Released By	Received By	Date	Time
1)	Andrew Byks		2/13/24	8:06
2)				
3)				
4)				

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Muskegon, MI 49444-2673

Phone 231.773.5998
Fax 888.979.4469
www.trace-labs.com

Trace ID No. 24B0629

Report Results To:

Company Name:	HDR Inc.
Report To:	Molly Reeves
Mailing Address:	1000 Oakbrook Drive, Suite 200
City, State, Zip Code:	Ann Arbor, MI 48104
Office Phone:	Cell Phone: 734.263.7138
Email Address:	molly.reeves@hdrinc.com

Bill To:

PO #:	10337505
Contact Name:	Lara Zawaideh
Billing Address (if different):	1000 Oakbrook Drive, Suite 200
City, State, Zip Code:	Ann Arbor, MI 48104
Phone Number:	734.223.9074
Billing Email Address:	lara.zawaideh@hdrinc.com

Trace Use:

Logged By:	NG
Checked By:	BV
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, DW = Drinking Water, GW = Groundwater, LW = Liquid Waste, O = Oil, WI = Wipes, S = Solid, SL = Sludge, A = Air, U = Unknown

Project Name: Grand Haven Harbor Island

Sampled By (print): Andrew Byks/Tanten Buszka

Trace No.	Sample Collection Date	Sample Collection Time	Sample ID/Name	Metals Field Filterd (Y or N)	Matrix - see above →	Number of Containers	Preservation: 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)	Possible Health Hazards?	Remarks/Notes
8	2/13/24	1435	MW-01R	N	GW	6	6	5							1	X	X	X	X		
9	2/13/24	1215	MW-02	N	GW	6	6	5							1	X	X	X	X		
10	2/13/24	940	MW-03	N	GW	6	6	5							1	X	X	X	X		
11	2/14/24	832	MW-04	N	GW	6	6	5							1	X	X	X	X		
12	2/13/24	1243	MW-06	N	GW	6	6	5							1	X	X	X	X		
13	2/13/24	1535	MW-07	N	GW	6	6	5							1	X	X	X	X		
14	2/13/24	1022	MW-08	N	GW	6	6	5							1	X	X	X	X		
15	2/13/24	1120	MW-09	N	GW	6	6	5							1	X	X	X	X		
16	2/13/24	1345	MW-10	N	GW	6	6	5							1	X	X	X	X		
17	2/13/24	1430	MW-11	N	GW	6	6	5							1	X	X	X	X		

Analysis Requested

Please Sign	Released By	Received By	Date	Time
1)	[signature]	[signature]	2/14/24	1230
3)			2)	
			4)	

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Muskegon, MI 49444-2673

Phone 231.773.5998
Fax 888.979.4469
www.trace-labs.com

Trace ID No. 24B0629

Report Results To:

Company Name: HDR Inc.
Report To: Molly Reeves
Mailing Address: 1000 Oakbrook Drive, Suite 200
City, State, Zip Code: Ann Arbor, MI 48104
Office Phone: Cell Phone: 734.263.7138
Email Address: molly.reeves@hdrinc.com

Bill To:

PO #: 10337505
Contact Name: Lara Zawaideh
Billing Address (if different): 1000 Oakbrook Drive, Suite 200
City, State, Zip Code: Ann Arbor, MI 48104
Phone Number: 734.223.9074
Billing Email Address: lara.zawaideh@hdrinc.com

Trace Use:

Logged By: NG
Checked By: BV
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, DW = Drinking Water, GW = Groundwater, LW = Liquid Waste, O = Oil, WI = Wipes, S = Solid, SL = Sludge, A = Air, U = Unknown

Project Name: Grand Haven Harbor Island
Sampled By (print): Andrew Byks/Tanten Buszka

Trace No.	Sample Collection Date	Sample Collection Time	Sample ID/Name	Metals Field Filterd (Y or N)	Matrix - see above →	Number of Containers	Preservation: 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)	Possible Health Hazards?	Remarks/Notes
18	2/13/24	1730	MW-12	N	GW	6	6		5						1	X	X	X	X		
19	2/13/24	1600	MW-18	N	GW	6	6		5						1	X	X	X	X		
20	2/13/24	0836	MW-19	N	GW	6	6		5						1	X	X	X	X		
21	2/13/24	1430	MW-20	N	GW	6	6		5						1	X	X	X	X		
22	2/13/24	0930	MW-27	N	GW	6	6		5						1	X	X	X	X		
23	2/14/24	1015	SG-02	N	SW	6	5								1	X	X	X	X		
24	2/14/24	1025	SG-03	N	SW	6	5								1	X	X	X	X		
25	2/14/24	940	SG-04R	N	SW	6	5								1	X	X	X	X		
26	2/14/24	1045	SG-05	N	SW	6	5								1	X	X	X	X		

Please Sign

	Released By	Received By	Date	Time
1)	[signature]	[signature]	2/14/24	1230
2)				
3)				
4)				

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www.trace-labs.com

24B0629
HDR Michigan Inc.
Project Manager: Jon Mink

Sample Log In Checklist

	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Date: 2.13.24									
Time: 845									
Initials: CM									
Package Description: Cooler									
Package Temp °C	1.4	1.4			/				
Representative Sample Temp °C	5.8	5.6				/		/	

Sample Receipt

Yes / No

- [x] Received on ice or other coolant
- [x] Ice still present upon receipt
- [ ] Custody seals present — [ ] Yes [ ] No Custody seals intact (if applicable)
- [x] Trace Courier [ ] Client Drop-off [ ] UPS [ ] Fed Ex [ ] US Mail [ ] Other

Sample Condition

Yes / No / N/A

- [x] All sample containers arrived unbroken and labeled
- [x] Sufficient sample to run requested analyses
- [x] Correct chemical preservative added to samples
- [ ] Samples preserved at Trace _____
- [x] Chemical preservation verified, check EMD pH test strip used (if applicable)
  - [x] 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

- [x] All bottle labels agree with COC
- [x] COC filled out properly
- [ ] COC signed by client

Notes:

Cooler 2
pants 2, 3, and 6

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Effective 12/21/23

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www.trace-labs.com

24B0629

HDR Michigan Inc.
Project Manager: Jon Mink

Sample Log In Checklist

	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Date: 2.13.24									
Time: 840									
Initials: CM									
Package Description: Cooler									
Package Temp °C	2.0	2.0							
Representative Sample Temp °C	6.2	6.0							

Sample Receipt

Yes No
- [x] [ ] Received on ice or other coolant
- [x] [ ] Ice still present upon receipt
- [ ] [x] Custody seals present — [ ] Yes [ ] No Custody seals intact (if applicable)
- [x] Trace Courier [ ] Client Drop-off [ ] UPS [ ] Fed Ex [ ] US Mail [ ] Other

Sample Condition

Yes No N/A
- [x] [ ] [ ] All sample containers arrived unbroken and labeled
- [x] [ ] [ ] Sufficient sample to run requested analyses
- [x] [ ] [ ] Correct chemical preservative added to samples
- [ ] [x] [ ] Samples preserved at Trace _____
- [x] [ ] [ ] Chemical preservation verified, check EMD pH test strip used (if applicable)
  - [x] pH 0-2.5 (Lot: HC311850) [ ] pH 11.0-13.0 (Lot: HC022540) [ ] Other
- [ ] [ ] [x] Air bubbles absent from VOAs _____

Chain of Custody (COC)

Yes No
- [x] [ ] All bottle labels agree with COC
- [x] [ ] COC filled out properly
- [ ] [ ] COC signed by client

Notes:

Cooler 1
points 1, 4, 5, and 7

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888-979-4469 Fax
www.trace-labs.com

24B0629
HDR Michigan Inc.
Project Manager: Jon Mink

Sample Log In Checklist

	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Date: 2.14.24									
Time: 1315									
Initials: CM									
Package Description: cooler									
Package Temp °C	0.1	0.1			/				
Representative Sample Temp °C	2.3	2.1				/		/	

Sample Receipt

Yes No

- [x] [ ] Received on ice or other coolant
- [x] [ ] Ice still present upon receipt
- [ ] [x] Custody seals present — [ ] Yes [ ] No Custody seals intact (if applicable)
- [x] Trace Courier [x] Client Drop-off [ ] UPS [ ] Fed Ex [ ] US Mail [ ] Other

CM 2.14.24

Sample Condition

Yes No N/A

- [x] [ ] [ ] All sample containers arrived unbroken and labeled
- [x] [ ] [ ] Sufficient sample to run requested analyses
- [x] [ ] [ ] Correct chemical preservative added to samples
- [ ] [x] [ ] Samples preserved at Trace _____
- [x] [ ] [ ] Chemical preservation verified, check EMD pH test strip used (if applicable)
  [x] pH 0-2.5 (Lot: HC311850) [ ] pH 11.0-13.0 (Lot: HC022540) [ ] Other
- [ ] [ ] [x] Air bubbles absent from VOAs _____

Chain of Custody (COC)

Yes No

- [x] [ ] All bottle labels agree with COC
- [x] [ ] COC filled out properly
- [x] [ ] COC signed by client

Notes:

Cooler 1 of 5
points 14, 15, 20, and 22

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

24B0629

HDR Michigan Inc.
Project Manager: Jon Mink

Sample Log In Checklist

	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Date: 2.14.24									
Time: 1317									
Initials: CM									
Package Description: Cooler									
Package Temp °C	1.9	1.9							
Representative Sample Temp °C	1.6	1.4							

Sample Receipt

Yes No

- [x] [ ] Received on ice or other coolant
- [x] [ ] Ice still present upon receipt
- [ ] [x] Custody seals present — [ ] Yes [ ] No Custody seals intact (if applicable)
- [ ] Trace Courier [x] Client Drop-off [ ] UPS [ ] Fed Ex [ ] US Mail [ ] Other

Sample Condition

Yes No N/A

- [x] [ ] [ ] All sample containers arrived unbroken and labeled
- [x] [ ] [ ] Sufficient sample to run requested analyses
- [x] [ ] [ ] Correct chemical preservative added to samples
- [ ] [x] [ ] Samples preserved at Trace _____
- [x] [ ] [ ] Chemical preservation verified, check EMD pH test strip used (if applicable)
  [x] pH 0-2.5 (Lot: HC311850) [ ] pH 11.0-13.0 (Lot: HC022540) [ ] Other
- [ ] [ ] [x] Air bubbles absent from VOAs _____

Chain of Custody (COC)

Yes No

- [x] [ ] All bottle labels agree with COC
- [x] [ ] COC filled out properly
- [x] [ ] COC signed by client

Notes:

Cooler 2 of 5
points 10, 11, and 21

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Muskegon, MI 49444-2673

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

24B0629
HDR Michigan Inc.
Project Manager: Jon Mink

Sample Log In Checklist

	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Date: 2.14.24									
Time: 1319									
Initials: CM									
Package Description: Cooler									
Package Temp °C	0.2	0.2			/				
Representative Sample Temp °C	1.0	0.8				/		/	

Sample Receipt

Yes No
- [x] [ ] Received on ice or other coolant
- [x] [ ] Ice still present upon receipt
- [ ] [x] Custody seals present — [ ] Yes [ ] No Custody seals intact (if applicable)
- [ ] Trace Courier [x] Client Drop-off [ ] UPS [ ] Fed Ex [ ] US Mail [ ] Other

Sample Condition

Yes No N/A
- [x] [ ] [ ] All sample containers arrived unbroken and labeled
- [x] [ ] [ ] Sufficient sample to run requested analyses
- [x] [ ] [ ] Correct chemical preservative added to samples
- [ ] [x] [ ] Samples preserved at Trace _____
- [x] [ ] [ ] Chemical preservation verified, check EMD pH test strip used (if applicable)
  [x] pH 0-2.5 (Lot: HC311850) [ ] pH 11.0-13.0 (Lot: HC022540) [ ] Other
- [ ] [ ] [x] Air bubbles absent from VOAs _____

Chain of Custody (COC)

Yes No
- [x] [ ] All bottle labels agree with COC
- [x] [ ] COC filled out properly
- [x] [ ] COC signed by client

Notes:

Cooler 3 of 5
points 12, 17, 18, and 19

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

TRACE ANALYTICAL LABORATORIES, INC.

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

24B0629
HDR Michigan Inc.
Project Manager: Jon Mink

Sample Log In Checklist

	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Date: 2-14-24									
Time: 1323									
Initials: CM									
Package Description: Cooler									
Package Temp °C	1.7	1.7			✓				
Representative Sample Temp °C	2.4	2.2				✓		✓	

Sample Receipt

Yes No

- [x] [ ] Received on ice or other coolant
- [x] [ ] Ice still present upon receipt
- [ ] [x] Custody seals present — [ ] Yes [ ] No Custody seals intact (if applicable)
- [ ] Trace Courier [x] Client Drop-off [ ] UPS [ ] Fed Ex [ ] US Mail [ ] Other

Sample Condition

Yes No N/A

- [x] [ ] [ ] All sample containers arrived unbroken and labeled
- [x] [ ] [ ] Sufficient sample to run requested analyses
- [x] [ ] [ ] Correct chemical preservative added to samples
- [ ] [x] [ ] Samples preserved at Trace _____
- [x] [ ] [ ] Chemical preservation verified, check EMD pH test strip used (if applicable)
  [x] pH 0-2.5 (Lot: HC311850) [ ] pH 11.0-13.0 (Lot: HC022540) [ ] Other
- [ ] [ ] [x] Air bubbles absent from VOAs _____

Chain of Custody (COC)

Yes No

- [x] [ ] All bottle labels agree with COC
- [x] [ ] COC filled out properly
- [x] [ ] COC signed by client

Notes:

Cooler 5 of 5
points 23, 24, 25, and 26

Form 70-A.53
Effective 12/21/23

TRACE Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

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24B0629

HDR Michigan Inc.
Project Manager: Jon Mink

Sample Log In Checklist

	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: +0.1°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Date: 2.14.21									
Time: 1321									
Initials: CM									
Package Description: Cooler									
Package Temp °C	0.8	0.8							
Representative Sample Temp °C	2.3	2.1							

Sample Receipt

Yes No

- [x] [ ] Received on ice or other coolant
- [x] [ ] Ice still present upon receipt
- [ ] [x] Custody seals present — [ ] Yes [ ] No Custody seals intact (if applicable)
- [ ] Trace Courier [x] Client Drop-off [ ] UPS [ ] Fed Ex [ ] US Mail [ ] Other

Sample Condition

Yes No N/A

- [x] [ ] [ ] All sample containers arrived unbroken and labeled
- [x] [ ] [ ] Sufficient sample to run requested analyses
- [x] [ ] [ ] Correct chemical preservative added to samples
- [ ] [x] [ ] Samples preserved at Trace _____
- [x] [ ] [ ] Chemical preservation verified, check EMD pH test strip used (if applicable)
  - [x] pH 0-2.5 (Lot: HC311850) [ ] pH 11.0-13.0 (Lot: HC022540) [ ] Other
- [ ] [ ] [x] Air bubbles absent from VOAs _____

Chain of Custody (COC)

Yes No

- [x] [ ] All bottle labels agree with COC
- [x] [ ] COC filled out properly
- [x] [ ] COC signed by client

Notes:

Cooler 4 of 5
points 8, 9, 13, and 16

Form 70-A.53
Effective 12/21/23

TRACE Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

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eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

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JOB DESCRIPTION

24B0630

JOB NUMBER

810-93944-1

Eurofins Eaton Analytical South Bend
110 S Hill Street
South Bend IN 46617

See page two for job notes and contact information.

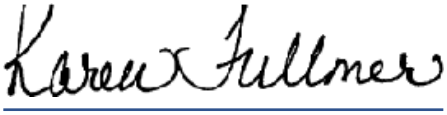
my EOL

Job Notes

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

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
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Table of Contents

Definitions/Glossary

Client: Trace Analytical Laboratories
Job ID: 810-93944-1
Project/Site: 24B0630

Qualifiers

Rad

Qualifier	Qualifier Description
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

Job ID: 810-93944-1 — Eurofins Eaton Analytical South Bend

Job Narrative
810-93944-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample 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 2/15/2024 9:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice.

Receipt Exceptions
The reference method requires samples to have a pH of less than 2. The following samplea were received with a pH of 7: MW-01R (810-93944-1), MW-02 (810-93944-2), MW-03 (810-93944-3), MW-04 (810-93944-4), MW-06 (810-93944-5), MW-07 (810-93944-6), MW-08 (810-93944-7), MW-09 (810-93944-8), MW-10 (810-93944-9), MW-11 (810-93944-10), MW-12 (810-93944-11), MW-18 (810-93944-12), MW-19 (810-93944-13) and MW-20 (810-93944-14). The samples were adjusted to the appropriate pH in the laboratory.

Affected Containers
810-93944-B-3
810-93944-A-2
810-93944-C-3
810-93944-C-2
810-93944-D-2

Gas Flow Proportional Counter
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.

Detection Summary

Client: Trace Analytical Laboratories
Project/Site: 24B0630

Job ID: 810-93944-1

Client Sample ID: MW-01R — Lab Sample ID: 810-93944-1

No Detections.

Client Sample ID: MW-03 — Lab Sample ID: 810-93944-3

No Detections.

Client Sample ID: MW-04 — Lab Sample ID: 810-93944-4

No Detections.

Client Sample ID: MW-06 — Lab Sample ID: 810-93944-5

No Detections.

Client Sample ID: MW-07 — Lab Sample ID: 810-93944-6

No Detections.

Client Sample ID: MW-08 — Lab Sample ID: 810-93944-7

No Detections.

Client Sample ID: MW-09 — Lab Sample ID: 810-93944-8

No Detections.

Client Sample ID: MW-10 — Lab Sample ID: 810-93944-9

No Detections.

Client Sample ID: MW-11 — Lab Sample ID: 810-93944-10

No Detections.

Client Sample ID: MW-12 — Lab Sample ID: 810-93944-11

No Detections.

Client Sample ID: MW-18 — Lab Sample ID: 810-93944-12

No Detections.

Client Sample ID: MW-19 — Lab Sample ID: 810-93944-13

No Detections.

Client Sample ID: MW-20 — Lab Sample ID: 810-93944-14

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-01R

Lab Sample ID: 810-93944-1

Date Collected: 02/13/24 14:05

Matrix: Drinking Water

Date Received: 02/15/24 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	0.0366	U	0.0758	0.0759	1.00	0.137	pCi/L	02/20/24 11:10	03/13/24 07:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.5*		*30 - 110*	*02/20/24 11:10*	*03/13/24 07:34*	*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	**1.05**		0.548	0.556	1.00	0.753	pCi/L	02/20/24 11:13	02/27/24 12:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.5*		*30 - 110*	*02/20/24 11:13*	*02/27/24 12:14*	*1*
Y Carrier	*77.0*		*30 - 110*	*02/20/24 11:13*	*02/27/24 12:14*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**1.09**		0.553	0.561	5.00	0.753	pCi/L		03/13/24 17:31	1

Client Sample ID: MW-03

Lab Sample ID: 810-93944-3

Date Collected: 02/14/24 09:40

Matrix: Drinking Water

Date Received: 02/15/24 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	**0.466**		0.172	0.177	1.00	0.181	pCi/L	02/20/24 11:10	03/13/24 07:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*67.3*		*30 - 110*	*02/20/24 11:10*	*03/13/24 07:35*	*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	**1.02**		0.649	0.655	1.00	0.959	pCi/L	02/20/24 11:13	02/27/24 12:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*67.3*		*30 - 110*	*02/20/24 11:13*	*02/27/24 12:14*	*1*
Y Carrier	*87.5*		*30 - 110*	*02/20/24 11:13*	*02/27/24 12:14*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**1.48**		0.671	0.678	5.00	0.959	pCi/L		03/13/24 17:31	1

Client Sample ID: MW-04

Lab Sample ID: 810-93944-4

Date Collected: 02/14/24 08:32

Matrix: Drinking Water

Date Received: 02/15/24 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	0.112	U	0.101	0.101	1.00	0.155	pCi/L	02/20/24 11:10	03/13/24 07:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.3*		*30 - 110*	*02/20/24 11:10*	*03/13/24 07:35*	*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	0.596	U	0.545	0.548	1.00	0.868	pCi/L	02/20/24 11:13	02/27/24 12:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.3*		*30 - 110*	*02/20/24 11:13*	*02/27/24 12:14*	*1*
Y Carrier	*78.1*		*30 - 110*	*02/20/24 11:13*	*02/27/24 12:14*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.708	U	0.554	0.557	5.00	0.868	pCi/L		03/13/24 17:31	1

Client Sample ID: MW-06

Lab Sample ID: 810-93944-5

Date Collected: 02/13/24 12:43

Matrix: Drinking Water

Date Received: 02/15/24 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	**0.358**		0.138	0.142	1.00	0.152	pCi/L	02/20/24 11:10	03/13/24 07:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.3*		*30 - 110*	*02/20/24 11:10*	*03/13/24 07:35*	*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	0.608	U	0.539	0.542	1.00	0.850	pCi/L	02/20/24 11:13	02/27/24 12:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.3*		*30 - 110*	*02/20/24 11:13*	*02/27/24 12:14*	*1*
Y Carrier	*70.7*		*30 - 110*	*02/20/24 11:13*	*02/27/24 12:14*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.965**		0.556	0.560	5.00	0.850	pCi/L		03/13/24 17:31	1

Client Sample ID: MW-07

Date Collected: 02/13/24 15:35
Date Received: 02/15/24 09:00

Lab Sample ID: 810-93944-6
Matrix: Drinking Water

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	0.495		0.156	0.162	1.00	0.156	pCi/L	02/20/24 11:10	03/13/24 07:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.8*		*30 - 110*	*02/20/24 11:10*	*03/13/24 07:35*	*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	0.442	U	0.484	0.486	1.00	0.789	pCi/L	02/20/24 11:13	02/27/24 12:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.8*		*30 - 110*	*02/20/24 11:13*	*02/27/24 12:14*	*1*
Y Carrier	*74.8*		*30 - 110*	*02/20/24 11:13*	*02/27/24 12:14*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.937		0.509	0.512	5.00	0.789	pCi/L		03/13/24 17:31	1

Client Sample ID: MW-08

Date Collected: 02/13/24 10:22
Date Received: 02/15/24 09:00

Lab Sample ID: 810-93944-7
Matrix: Drinking Water

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	0.0880	U	0.0827	0.0831	1.00	0.126	pCi/L	02/20/24 11:10	03/13/24 07:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.0*		*30 - 110*	*02/20/24 11:10*	*03/13/24 07:35*	*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	0.343	U	0.501	0.502	1.00	0.848	pCi/L	02/20/24 11:13	02/27/24 12:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.0*		*30 - 110*	*02/20/24 11:13*	*02/27/24 12:15*	*1*
Y Carrier	*67.7*		*30 - 110*	*02/20/24 11:13*	*02/27/24 12:15*	*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	0.431	U	0.508	0.509	5.00	0.848	pCi/L		03/13/24 17:31	1

Client Sample ID: MW-09

Date Collected: 02/13/24 11:20
Date Received: 02/15/24 09:00

Lab Sample ID: 810-93944-8
Matrix: Drinking Water

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	0.0109	U	0.0600	0.0600	1.00	0.120	pCi/L	02/20/24 11:10	03/13/24 07:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.8*		*30 - 110*	*02/20/24 11:10*	*03/13/24 07:35*	*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	0.339	U	0.574	0.575	1.00	0.980	pCi/L	02/20/24 11:13	02/27/24 12:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.8*		*30 - 110*	*02/20/24 11:13*	*02/27/24 12:15*	*1*
Y Carrier	*70.7*		*30 - 110*	*02/20/24 11:13*	*02/27/24 12:15*	*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	0.350	U	0.577	0.578	5.00	0.980	pCi/L		03/13/24 17:31	1

Client Sample ID: MW-10

Date Collected: 02/13/24 13:45
Date Received: 02/15/24 09:00

Lab Sample ID: 810-93944-9
Matrix: Drinking Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.206**		0.129	0.130	1.00	0.179	pCi/L	02/20/24 11:10	03/13/24 07:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.5*		*30 - 110*	*02/20/24 11:10*	*03/13/24 07:35*	*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	**1.01**		0.664	0.670	1.00	0.975	pCi/L	02/20/24 11:13	02/27/24 12:13	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.5*		*30 - 110*	*02/20/24 11:13*	*02/27/24 12:13*	*1*
Y Carrier	*60.9*		*30 - 110*	*02/20/24 11:13*	*02/27/24 12:13*	*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	**1.22**		0.676	0.682	5.00	0.975	pCi/L		03/13/24 17:31	1

Client Sample ID: MW-11

Date Collected: 02/13/24 14:30
Date Received: 02/15/24 09:00

Lab Sample ID: 810-93944-10
Matrix: Drinking Water

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	0.514		0.145	0.152	1.00	0.119	pCi/L	02/20/24 11:10	03/13/24 07:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.3*		*30 - 110*	*02/20/24 11:10*	*03/13/24 07:36*	*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	0.612	U	0.495	0.498	1.00	0.765	pCi/L	02/20/24 11:13	02/27/24 12:13	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.3*		*30 - 110*	*02/20/24 11:13*	*02/27/24 12:13*	*1*
Y Carrier	*73.6*		*30 - 110*	*02/20/24 11:13*	*02/27/24 12:13*	*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	1.13		0.516	0.521	5.00	0.765	pCi/L		03/13/24 17:31	1

Client Sample ID: MW-12

Date Collected: 02/13/24 17:30
Date Received: 02/15/24 09:00

Lab Sample ID: 810-93944-11
Matrix: Drinking Water

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	0.0276	U	0.0637	0.0637	1.00	0.116	pCi/L	02/20/24 11:10	03/13/24 07:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.8*		*30 - 110*	*02/20/24 11:10*	*03/13/24 07:36*	*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	0.611	U	0.481	0.484	1.00	0.749	pCi/L	02/20/24 11:13	02/27/24 12:13	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.8*		*30 - 110*	*02/20/24 11:13*	*02/27/24 12:13*	*1*
Y Carrier	*71.8*		*30 - 110*	*02/20/24 11:13*	*02/27/24 12:13*	*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	0.639	U	0.485	0.488	5.00	0.749	pCi/L		03/13/24 17:31	1

Client Sample ID: MW-18

Lab Sample ID: 810-93944-12

Date Collected: 02/13/24 16:00

Matrix: Drinking Water

Date Received: 02/15/24 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	0.0791	U	0.0739	0.0742	1.00	0.114	pCi/L	02/20/24 11:10	03/13/24 07:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.8*		*30 - 110*	*02/20/24 11:10*	*03/13/24 07:36*	*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	0.302	U	0.352	0.353	1.00	0.578	pCi/L	02/20/24 11:13	02/27/24 12:13	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.8*		*30 - 110*	*02/20/24 11:13*	*02/27/24 12:13*	*1*
Y Carrier	*74.0*		*30 - 110*	*02/20/24 11:13*	*02/27/24 12:13*	*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	0.381	U	0.360	0.361	5.00	0.578	pCi/L		03/13/24 17:31	1

Client Sample ID: MW-19

Lab Sample ID: 810-93944-13

Date Collected: 02/13/24 08:36

Matrix: Drinking Water

Date Received: 02/15/24 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	**0.219**		0.106	0.107	1.00	0.138	pCi/L	02/20/24 11:10	03/13/24 07:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.8*		*30 - 110*	*02/20/24 11:10*	*03/13/24 07:36*	*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	**0.561**		0.374	0.378	1.00	0.550	pCi/L	02/20/24 11:13	02/27/24 12:13	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.8*		*30 - 110*	*02/20/24 11:13*	*02/27/24 12:13*	*1*
Y Carrier	*74.8*		*30 - 110*	*02/20/24 11:13*	*02/27/24 12:13*	*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	**0.779**		0.389	0.393	5.00	0.550	pCi/L		03/13/24 17:31	1

Client Sample ID: MW-20

Date Collected: 02/13/24 14:30
Date Received: 02/15/24 09:00

Lab Sample ID: 810-93944-14

Matrix: Drinking Water

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	0.195		0.0983	0.0998	1.00	0.126	pCi/L	02/20/24 11:10	03/13/24 07:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.0*		*30 - 110*	*02/20/24 11:10*	*03/13/24 07:36*	*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	0.327	U	0.526	0.527	1.00	0.894	pCi/L	02/20/24 11:13	02/27/24 12:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.0*		*30 - 110*	*02/20/24 11:13*	*02/27/24 12:14*	*1*
Y Carrier	*53.5*		*30 - 110*	*02/20/24 11:13*	*02/27/24 12:14*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.522	U	0.535	0.536	5.00	0.894	pCi/L		03/13/24 17:31	1

Tracer/Carrier Summary

Client: Trace Analytical Laboratories
Project/Site: 24B0630

Job ID: 810-93944-1

Method: 903.0 - Radium-226 (GFPC)

Matrix: Drinking Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)
		Ba
Lab Sample ID	Client Sample ID	(30-110)
810-93944-1	MW-01R	89.5
810-93944-3	MW-03	67.3
810-93944-4	MW-04	89.3
810-93944-5	MW-06	90.3
810-93944-6	MW-07	89.8
810-93944-7	MW-08	90.0
810-93944-8	MW-09	90.8
810-93944-9	MW-10	85.5
810-93944-10	MW-11	93.3
810-93944-11	MW-12	87.8
810-93944-11 DU	MW-12	83.3
810-93944-12	MW-18	84.8
810-93944-13	MW-19	89.8
810-93944-14	MW-20	92.0
LCS 160-648898/2-A	Lab Control Sample	95.8
MB 160-648898/1-A	Method Blank	90.3

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Drinking Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
		Ba	Y
Lab Sample ID	Client Sample ID	(30-110)	(30-110)
810-93944-1	MW-01R	89.5	77.0
810-93944-3	MW-03	67.3	87.5
810-93944-4	MW-04	89.3	78.1
810-93944-5	MW-06	90.3	70.7
810-93944-6	MW-07	89.8	74.8
810-93944-7	MW-08	90.0	67.7
810-93944-8	MW-09	90.8	70.7
810-93944-9	MW-10	85.5	60.9
810-93944-10	MW-11	93.3	73.6
810-93944-11	MW-12	87.8	71.8
810-93944-11 DU	MW-12	83.3	78.9
810-93944-12	MW-18	84.8	74.0
810-93944-13	MW-19	89.8	74.8
810-93944-14	MW-20	92.0	53.5
LCS 160-648899/2-A	Lab Control Sample	95.8	87.9
MB 160-648899/1-A	Method Blank	90.3	86.7

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-648898/1-A
Matrix: Drinking Water
Analysis Batch: 652315

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 648898

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.02151	U	0.0461	0.0462	1.00	0.0849	pCi/L	02/20/24 11:10	03/13/24 07:21	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.3*		*30 - 110*	*02/20/24 11:10*	*03/13/24 07:21*	*1*

Lab Sample ID: LCS 160-648898/2-A
Matrix: Drinking Water
Analysis Batch: 652315

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 648898

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			11.3	11.17		1.14	1.00	0.0828	pCi/L	99	90 - 110		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*95.8*		*30 - 110*

Lab Sample ID: 810-93944-11 DU
Matrix: Drinking Water
Analysis Batch: 652334

Client Sample ID: MW-12
Prep Type: Total/NA
Prep Batch: 648898

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-226	0.0276	U		0.05503	U	0.0577	1.00	0.0897	pCi/L			0.23	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*83.3*		*30 - 110*

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-648899/1-A
Matrix: Drinking Water
Analysis Batch: 649967

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 648899

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.3786	U	0.324	0.325	1.00	0.506	pCi/L	02/20/24 11:13	02/27/24 12:13	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.3*		*30 - 110*	*02/20/24 11:13*	*02/27/24 12:13*	*1*
Y Carrier	*86.7*		*30 - 110*	*02/20/24 11:13*	*02/27/24 12:13*	*1*

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

Lab Sample ID: LCS 160-648899/2-A
Matrix: Drinking Water
Analysis Batch: 649967

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 648899

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.17	7.588		1.09	1.00	0.521	pCi/L	83	80 - 120		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*95.8*		*30 - 110*
Y Carrier	*87.9*		*30 - 110*

Lab Sample ID: 810-93944-11 DU
Matrix: Drinking Water
Analysis Batch: 650047

Client Sample ID: MW-12
Prep Type: Total/NA
Prep Batch: 648899

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	0.611	U		0.2067	U	0.340	1.00	0.582	pCi/L			0.49	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*83.3*		*30 - 110*
Y Carrier	*78.9*		*30 - 110*

QC Association Summary

Client: Trace Analytical Laboratories
Project/Site: 24B0630

Job ID: 810-93944-1

Rad

Prep Batch: 648898

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-93944-1	MW-01R	Total/NA	Drinking Water	PrecSep-21	
810-93944-3	MW-03	Total/NA	Drinking Water	PrecSep-21	
810-93944-4	MW-04	Total/NA	Drinking Water	PrecSep-21	
810-93944-5	MW-06	Total/NA	Drinking Water	PrecSep-21	
810-93944-6	MW-07	Total/NA	Drinking Water	PrecSep-21	
810-93944-7	MW-08	Total/NA	Drinking Water	PrecSep-21	
810-93944-8	MW-09	Total/NA	Drinking Water	PrecSep-21	
810-93944-9	MW-10	Total/NA	Drinking Water	PrecSep-21	
810-93944-10	MW-11	Total/NA	Drinking Water	PrecSep-21	
810-93944-11	MW-12	Total/NA	Drinking Water	PrecSep-21	
810-93944-12	MW-18	Total/NA	Drinking Water	PrecSep-21	
810-93944-13	MW-19	Total/NA	Drinking Water	PrecSep-21	
810-93944-14	MW-20	Total/NA	Drinking Water	PrecSep-21	
MB 160-648898/1-A	Method Blank	Total/NA	Drinking Water	PrecSep-21	
LCS 160-648898/2-A	Lab Control Sample	Total/NA	Drinking Water	PrecSep-21	
810-93944-11 DU	MW-12	Total/NA	Drinking Water	PrecSep-21	

Prep Batch: 648899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-93944-1	MW-01R	Total/NA	Drinking Water	PrecSep_0	
810-93944-3	MW-03	Total/NA	Drinking Water	PrecSep_0	
810-93944-4	MW-04	Total/NA	Drinking Water	PrecSep_0	
810-93944-5	MW-06	Total/NA	Drinking Water	PrecSep_0	
810-93944-6	MW-07	Total/NA	Drinking Water	PrecSep_0	
810-93944-7	MW-08	Total/NA	Drinking Water	PrecSep_0	
810-93944-8	MW-09	Total/NA	Drinking Water	PrecSep_0	
810-93944-9	MW-10	Total/NA	Drinking Water	PrecSep_0	
810-93944-10	MW-11	Total/NA	Drinking Water	PrecSep_0	
810-93944-11	MW-12	Total/NA	Drinking Water	PrecSep_0	
810-93944-12	MW-18	Total/NA	Drinking Water	PrecSep_0	
810-93944-13	MW-19	Total/NA	Drinking Water	PrecSep_0	
810-93944-14	MW-20	Total/NA	Drinking Water	PrecSep_0	
MB 160-648899/1-A	Method Blank	Total/NA	Drinking Water	PrecSep_0	
LCS 160-648899/2-A	Lab Control Sample	Total/NA	Drinking Water	PrecSep_0	
810-93944-11 DU	MW-12	Total/NA	Drinking Water	PrecSep_0	

Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 24B0630

Job ID: 810-93944-1

Client Sample ID: MW-01R

Lab Sample ID: 810-93944-1

Date Collected: 02/13/24 14:05

Matrix: Drinking Water

Date Received: 02/15/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			648898	KAC	EET SL	02/20/24 11:10
Total/NA	Analysis	903.0		1	652334	SWS	EET SL	03/13/24 07:34
Total/NA	Prep	PrecSep_0			648899	KAC	EET SL	02/20/24 11:13
Total/NA	Analysis	904.0		1	649967	CMM	EET SL	02/27/24 12:14
Total/NA	Analysis	Ra226_Ra228 Pos		1	652370	SCB	EET SL	03/13/24 17:31

Client Sample ID: MW-03

Lab Sample ID: 810-93944-3

Date Collected: 02/14/24 09:40

Matrix: Drinking Water

Date Received: 02/15/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			648898	KAC	EET SL	02/20/24 11:10
Total/NA	Analysis	903.0		1	652334	SWS	EET SL	03/13/24 07:35
Total/NA	Prep	PrecSep_0			648899	KAC	EET SL	02/20/24 11:13
Total/NA	Analysis	904.0		1	649967	CMM	EET SL	02/27/24 12:14
Total/NA	Analysis	Ra226_Ra228 Pos		1	652370	SCB	EET SL	03/13/24 17:31

Client Sample ID: MW-04

Lab Sample ID: 810-93944-4

Date Collected: 02/14/24 08:32

Matrix: Drinking Water

Date Received: 02/15/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			648898	KAC	EET SL	02/20/24 11:10
Total/NA	Analysis	903.0		1	652334	SWS	EET SL	03/13/24 07:35
Total/NA	Prep	PrecSep_0			648899	KAC	EET SL	02/20/24 11:13
Total/NA	Analysis	904.0		1	649967	CMM	EET SL	02/27/24 12:14
Total/NA	Analysis	Ra226_Ra228 Pos		1	652370	SCB	EET SL	03/13/24 17:31

Client Sample ID: MW-06

Lab Sample ID: 810-93944-5

Date Collected: 02/13/24 12:43

Matrix: Drinking Water

Date Received: 02/15/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			648898	KAC	EET SL	02/20/24 11:10
Total/NA	Analysis	903.0		1	652334	SWS	EET SL	03/13/24 07:35
Total/NA	Prep	PrecSep_0			648899	KAC	EET SL	02/20/24 11:13
Total/NA	Analysis	904.0		1	649967	CMM	EET SL	02/27/24 12:14
Total/NA	Analysis	Ra226_Ra228 Pos		1	652370	SCB	EET SL	03/13/24 17:31

Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 24B0630

Job ID: 810-93944-1

Client Sample ID: MW-07

Date Collected: 02/13/24 15:35
Date Received: 02/15/24 09:00

Lab Sample ID: 810-93944-6
Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			648898	KAC	EET SL	02/20/24 11:10
Total/NA	Analysis	903.0		1	652334	SWS	EET SL	03/13/24 07:35
Total/NA	Prep	PrecSep_0			648899	KAC	EET SL	02/20/24 11:13
Total/NA	Analysis	904.0		1	649967	CMM	EET SL	02/27/24 12:14
Total/NA	Analysis	Ra226_Ra228 Pos		1	652370	SCB	EET SL	03/13/24 17:31

Client Sample ID: MW-08

Date Collected: 02/13/24 10:22
Date Received: 02/15/24 09:00

Lab Sample ID: 810-93944-7
Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			648898	KAC	EET SL	02/20/24 11:10
Total/NA	Analysis	903.0		1	652334	SWS	EET SL	03/13/24 07:35
Total/NA	Prep	PrecSep_0			648899	KAC	EET SL	02/20/24 11:13
Total/NA	Analysis	904.0		1	649967	CMM	EET SL	02/27/24 12:15
Total/NA	Analysis	Ra226_Ra228 Pos		1	652370	SCB	EET SL	03/13/24 17:31

Client Sample ID: MW-09

Date Collected: 02/13/24 11:20
Date Received: 02/15/24 09:00

Lab Sample ID: 810-93944-8
Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			648898	KAC	EET SL	02/20/24 11:10
Total/NA	Analysis	903.0		1	652334	SWS	EET SL	03/13/24 07:35
Total/NA	Prep	PrecSep_0			648899	KAC	EET SL	02/20/24 11:13
Total/NA	Analysis	904.0		1	649967	CMM	EET SL	02/27/24 12:15
Total/NA	Analysis	Ra226_Ra228 Pos		1	652370	SCB	EET SL	03/13/24 17:31

Client Sample ID: MW-10

Date Collected: 02/13/24 13:45
Date Received: 02/15/24 09:00

Lab Sample ID: 810-93944-9
Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			648898	KAC	EET SL	02/20/24 11:10
Total/NA	Analysis	903.0		1	652334	SWS	EET SL	03/13/24 07:35
Total/NA	Prep	PrecSep_0			648899	KAC	EET SL	02/20/24 11:13
Total/NA	Analysis	904.0		1	650047	CMM	EET SL	02/27/24 12:13
Total/NA	Analysis	Ra226_Ra228 Pos		1	652370	SCB	EET SL	03/13/24 17:31

Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 24B0630

Job ID: 810-93944-1

Client Sample ID: MW-11

Date Collected: 02/13/24 14:30
Date Received: 02/15/24 09:00

Lab Sample ID: 810-93944-10

Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			648898	KAC	EET SL	02/20/24 11:10
Total/NA	Analysis	903.0		1	652334	SWS	EET SL	03/13/24 07:36
Total/NA	Prep	PrecSep_0			648899	KAC	EET SL	02/20/24 11:13
Total/NA	Analysis	904.0		1	650047	CMM	EET SL	02/27/24 12:13
Total/NA	Analysis	Ra226_Ra228 Pos		1	652370	SCB	EET SL	03/13/24 17:31

Client Sample ID: MW-12

Date Collected: 02/13/24 17:30
Date Received: 02/15/24 09:00

Lab Sample ID: 810-93944-11

Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			648898	KAC	EET SL	02/20/24 11:10
Total/NA	Analysis	903.0		1	652334	SWS	EET SL	03/13/24 07:36
Total/NA	Prep	PrecSep_0			648899	KAC	EET SL	02/20/24 11:13
Total/NA	Analysis	904.0		1	650047	CMM	EET SL	02/27/24 12:13
Total/NA	Analysis	Ra226_Ra228 Pos		1	652370	SCB	EET SL	03/13/24 17:31

Client Sample ID: MW-18

Date Collected: 02/13/24 16:00
Date Received: 02/15/24 09:00

Lab Sample ID: 810-93944-12

Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			648898	KAC	EET SL	02/20/24 11:10
Total/NA	Analysis	903.0		1	652334	SWS	EET SL	03/13/24 07:36
Total/NA	Prep	PrecSep_0			648899	KAC	EET SL	02/20/24 11:13
Total/NA	Analysis	904.0		1	650047	CMM	EET SL	02/27/24 12:13
Total/NA	Analysis	Ra226_Ra228 Pos		1	652370	SCB	EET SL	03/13/24 17:31

Client Sample ID: MW-19

Date Collected: 02/13/24 08:36
Date Received: 02/15/24 09:00

Lab Sample ID: 810-93944-13

Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			648898	KAC	EET SL	02/20/24 11:10
Total/NA	Analysis	903.0		1	652334	SWS	EET SL	03/13/24 07:36
Total/NA	Prep	PrecSep_0			648899	KAC	EET SL	02/20/24 11:13
Total/NA	Analysis	904.0		1	650047	CMM	EET SL	02/27/24 12:13
Total/NA	Analysis	Ra226_Ra228 Pos		1	652370	SCB	EET SL	03/13/24 17:31

Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 24B0630

Job ID: 810-93944-1

Client Sample ID: MW-20
Date Collected: 02/13/24 14:30
Date Received: 02/15/24 09:00

Lab Sample ID: 810-93944-14
Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			648898	KAC	EET SL	02/20/24 11:10
Total/NA	Analysis	903.0		1	652334	SWS	EET SL	03/13/24 07:36
Total/NA	Prep	PrecSep_0			648899	KAC	EET SL	02/20/24 11:13
Total/NA	Analysis	904.0		1	650047	CMM	EET SL	02/27/24 12:14
Total/NA	Analysis	Ra226_Ra228 Pos		1	652370	SCB	EET SL	03/13/24 17:31

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: 24B0630

Job ID: 810-93944-1

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	04-06-25
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	06-30-24
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-24
HI - RadChem Recognition	State	n/a	06-30-24
Illinois	NELAP	200023	11-30-24
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-24
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	03-31-24
Louisiana (DW)	State	LA011	12-31-24
Maryland	State	310	09-30-24
Massachusetts	State	M-MO054	06-30-24
MI - RadChem Recognition	State	9005	06-30-24
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-24
New Jersey	NELAP	MO002	06-30-24
New Mexico	State	MO00054	06-30-24
New York	NELAP	11616	03-31-24
North Carolina (DW)	State	29700	07-31-24
North Dakota	State	R-207	06-30-24
Oklahoma	NELAP	9997	08-31-24
Oregon	NELAP	4157	09-01-24
Pennsylvania	NELAP	68-00540	02-28-25
South Carolina	State	85002001	06-30-24
Texas	NELAP	T104704193	07-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO00054	07-31-24
Virginia	NELAP	10310	06-15-25
Washington	State	C592	08-30-24
West Virginia DEP	State	381	10-31-24

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

Method Summary

Client: Trace Analytical Laboratories
Project/Site: 24B0630

Job ID: 810-93944-1

Method	Method Description	Protocol	Laboratory
903.0	Radium-226 (GFPC)	EPA	EET SL
904.0	Radium-228 (GFPC)	EPA	EET SL
Ra226_Ra228 Pos	Combined Radium-226 and Radium-228	TAL-STL	EET SL
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: 24B0630

Job ID: 810-93944-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
810-93944-1	MW-01R	Drinking Water	02/13/24 14:05	02/15/24 09:00
810-93944-3	MW-03	Drinking Water	02/14/24 09:40	02/15/24 09:00
810-93944-4	MW-04	Drinking Water	02/14/24 08:32	02/15/24 09:00
810-93944-5	MW-06	Drinking Water	02/13/24 12:43	02/15/24 09:00
810-93944-6	MW-07	Drinking Water	02/13/24 15:35	02/15/24 09:00
810-93944-7	MW-08	Drinking Water	02/13/24 10:22	02/15/24 09:00
810-93944-8	MW-09	Drinking Water	02/13/24 11:20	02/15/24 09:00
810-93944-9	MW-10	Drinking Water	02/13/24 13:45	02/15/24 09:00
810-93944-10	MW-11	Drinking Water	02/13/24 14:30	02/15/24 09:00
810-93944-11	MW-12	Drinking Water	02/13/24 17:30	02/15/24 09:00
810-93944-12	MW-18	Drinking Water	02/13/24 16:00	02/15/24 09:00
810-93944-13	MW-19	Drinking Water	02/13/24 08:36	02/15/24 09:00
810-93944-14	MW-20	Drinking Water	02/13/24 14:30	02/15/24 09:00

n Analytical

www.Eurc

110 S. Hill Street
South Bend, IN 46617
T: 1.800.332.4345
F: 1.574.233.8207

Order #

Batch # _____

4/4/2024

CHAIN OF CUSTODY RECORD

Page _____ of _____

Shaded area for EEA use only

REPORT TO:	SAMPLER (Signature)	PWS ID #	STATE (sample origin)	PROJECT NAME	PO#
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	24B0630	24B0630
BILL TO: Accounts Payable, Trace Analytical Laboratories, Inc., 2241 Black Creek Rd., Muskegon, MI 49444	COMPLIANCE MONITORING: Yes = x; No =	POPULATION SERVED	SOURCE WATER		

LAB Number	COLLECTION DATE	TIME	AM	PM	SAMPLING SITE	TEST NAME	SAMPLE REMARKS	CHLORINATED YES	CHLORINATED NO	# OF CONTAINERS	MATRIX CODE	TURNAROUND TIME
1	02/13/24	14:35		x	MW-01R	Radium 226/228				4	GW	SW
2	02/13/24	12:15		x	MW-02	Radium 226/228				4	GW	SW
3	02/14/24	9:40		x	MW-03	Radium 226/228				4	GW	SW
4	02/14/24	8:32	X		MW-04	Radium 226/228				4	GW	SW
5	02/13/24	12:43		X	MW-06	Radium 226/228				4	GW	SW
6	02/13/24	15:35		X	MW-07	Radium 226/228				4	GW	SW
7	02/13/24	10:22	X		MW-08	Radium 226/228				4	GW	SW
8	02/13/24	11:20	X		MW-09	Radium 226/228				4	GW	SW
9	02/13/24	13:45		X	MW-10	Radium 226/228				4	GW	SW
10	02/13/24	14:30		X	MW-11	Radium 226/228				4	GW	SW
11	02/13/24	17:30		X	MW-12	Radium 226/228				4	GW	SW
12	02/13/24	16:00		X	MW-18	Radium 226/228				4	GW	SW
13	02/13/24	8:36	X		MW-19	Radium 226/228				4	GW	SW
14	02/13/24	14:30		X	MW-20	Radium 226/228				4	GW	SW

pH Acceptable (less than 2)

RELINQUISHED BY:(Signature)	DATE	TIME AM/PM	RECEIVED BY:(Signature)	DATE	TIME AM/PM
BVS	2/14/24		Fedex		
RELINQUISHED BY:(Signature)	DATE	TIME AM/PM	RECEIVED BY:(Signature)	DATE	TIME AM/PM
Fedex				2-15-24	0900
RELINQUISHED BY:(Signature)	DATE	TIME AM/PM	RECEIVED FOR LABORATORY BY:	DATE	TIME AM/PM

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT

LAB COMMENTS

CONDITIONS UPON RECEIPT (check one):

____ Iced: Wet/Blue ____ Ambient _____ °C Upon Receipt____ N/A

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%	IV* = Immediate Verbal: (3 working days)	100%
RV* = Rush Verbal: (5 working days)	50%	IW* =Immediate Written: (3 working days)	125%
RW* = Rush Written: (5 working days)	75%	SP* = Weekend, Holiday	CALL
		STAT* = Less than 48 hours	CALL

* Please call, expedited service not available for all testing

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.

Chain of Custody

ANALYTICAL SERVICES REQUEST AND CHAIN OF CUSTODY

LABORATORY: **Eurofins Eaton Analytical (Indiana)**
ADDRESS: **110 South Hill Street**
South Bend, IN 46617-2702

CONTACT: **Pamela Brown**
RECEIVED DATE: **14-February-2024**

SAMPLE INFORMATION

Sample ID: 3974212
Matrix: DRINKING WATER
Client ID: 1502-01-01
Folder #: 352140

EQLAB Rep: YRIOS
Date Collected: 14-Feb-2024
Collected Time: 09:00
Total Containers: 4

CONTAINER ID	TEST NAME	CONTAINER	METHOD
3974212-1	RADIUM 226	1000 ML	SM 7500-Ra B
3974212-1	URANIUM	250 ML	EPA 200.8
3974212-1	GROSS ALPHA / GROSS BETA	1000 ML	SM 7110B
3974212-1	RADIUM 228	1000 ML	SM 7500-Ra D

Comments:

Gumbent

RELINQUISHED BY / DATE
2.14.24 AM

APPROVED BY / DATE
Melaine 02/14/24

ENVIRONMENTAL QUALITY LABORATORIES, INC. P.O. BOX

TURN AROUND TIME:
10 days

P. O. #:
M22308

RECEIVED BY / DATE:
2-15-24 0815

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

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Fullmer, Karen	Carrier Tracking No(s):	COC No: 810-36739.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Karen.Fullmer@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Michigan		Job #: 810-93944-1
Address: 13715 Rider Trail North,	Due Date Requested: 3/19/2024			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: 24B0630	Project #: 81000263			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 EPA 903.0 - Radium 226 (St. Louis)	904.0/PrecSep_0 EPA 904.0 - Radium 228 (St. Louis)	Ra226_228GFPC_P/ Combined Ra226 & Ra228 Calc (St. Louis)	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-01R (810-93944-1)	2/13/24	14:05 Eastern		Drinking Wate			X	X	X	4	
MW-02 (810-93944-2)	2/13/24	12:15 Eastern		Drinking Wate			X	X	X	4	
MW-03 (810-93944-3)	2/13/24	09:40 Eastern		Drinking Wate			X	X	X	4	
MW-04 (810-93944-4)	2/13/24	08:32 Eastern		Drinking Wate			X	X	X	4	
MW-06 (810-93944-5)	2/13/24	12:43 Eastern		Drinking Wate			X	X	X	4	
MW-07 (810-93944-6)	2/13/24	15:35 Eastern		Drinking Wate			X	X	X	4	
MW-08 (810-93944-7)	2/13/24	10:22 Eastern		Drinking Wate			X	X	X	4	
MW-09 (810-93944-8)	2/13/24	11:20 Eastern		Drinking Wate			X	X	X	4	
MW-10 (810-93944-9)	2/13/24	13:45 Eastern		Drinking Wate			X	X	X	4	

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

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		2-15-24 1600		Richard Thornley	2/16/24 0900	
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 06/08/2021

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

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Fullmer, Karen	Carrier Tracking No(s):	COC No: 810-36739.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Karen.Fullmer@et.eurofinsus.com	State of Origin: Michigan	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Michigan		Job #: 810-93944-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 3/19/2024			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: 24B0630	Project #: 81000263			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 EPA 903.0 - Radium 226 (St. Louis)	904.0/PrecSep_0 EPA 904.0 - Radium 228 (St. Louis)	Ra226_228GFPC_P/ Combined Ra226 & Ra228 Calc (St. Louis)	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-11 (810-93944-10)	2/13/24	14:30 Eastern		Drinking Wate			X	X	X	4	
MW-12 (810-93944-11)	2/13/24	17:30 Eastern		Drinking Wate			X	X	X	4	
MW-18 (810-93944-12)	2/13/24	16:00 Eastern		Drinking Wate			X	X	X	4	
MW-19 (810-93944-13)	2/13/24	08:36 Eastern		Drinking Wate			X	X	X	4	
MW-20 (810-93944-14)	2/13/24	14:30 Eastern		Drinking Wate			X	X	X	4	

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

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

Relinquished by:	Date/Time:	Company	Received by: Richard Thornley	Date/Time: 2/16/24	Company
Relinquished by:	Date/Time:	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:

Login Sample Receipt Checklist

Client: Trace Analytical Laboratories

Job Number: 810-93944-1

Login Number: 93944
List Number: 1
Creator: Moore, Gary

List Source: Eurofins Eaton Analytical South Bend

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.	True	
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: 810-93944-1

Login Number: 93944
List Number: 2
Creator: Thornley, Richard W

List Source: Eurofins St. Louis
List Creation: 02/16/24 11:36 AM

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	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 3/15/2024 2:43:57 PM

JOB DESCRIPTION

24B0630

JOB NUMBER

810-93941-1

Eurofins Eaton Analytical South Bend
110 S Hill Street
South Bend IN 46617

See page two for job notes and contact information.

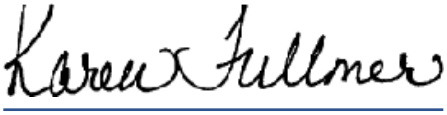
my EOL

Job Notes

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

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
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(574)233-4777

Table of Contents

Definitions/Glossary

Client: Trace Analytical Laboratories
Job ID: 810-93941-1
Project/Site: 24B0630

Qualifiers

Rad

Qualifier	Qualifier Description
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

Job ID: 810-93941-1 — Eurofins Eaton Analytical South Bend

Job Narrative
810-93941-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample 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 2/15/2024 9:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice.

Receipt Exceptions
The reference method requires samples to have a pH of less than 2. The following samplea were received with a pH of 7: MW-30 (810-93941-1), MW-31 (810-93941-2), MW-32 (810-93941-3), MW-33 (810-93941-4), MW-34 (810-93941-5), MWT-30 (810-93941-6) and MWT-34 (810-93941-7). The samples were adjusted to the appropriate pH in the laboratory.

Affected Containers
810-93941-A-5
810-93941-B-7
810-93941-C-5

Gas Flow Proportional Counter
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.

Detection Summary

Client: Trace Analytical Laboratories
Project/Site: 24B0630

Job ID: 810-93941-1

Client Sample ID: MW-30 — Lab Sample ID: 810-93941-1

No Detections.

Client Sample ID: MW-31 — Lab Sample ID: 810-93941-2

No Detections.

Client Sample ID: MW-32 — Lab Sample ID: 810-93941-3

No Detections.

Client Sample ID: MW-33 — Lab Sample ID: 810-93941-4

No Detections.

Client Sample ID: MW-34 — Lab Sample ID: 810-93941-5

No Detections.

Client Sample ID: MWT-30 — Lab Sample ID: 810-93941-6

No Detections.

Client Sample ID: MWT-34 — Lab Sample ID: 810-93941-7

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-30

Date Collected: 02/12/24 16:18
Date Received: 02/15/24 09:00

Lab Sample ID: 810-93941-1
Matrix: Drinking Water

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	0.0718	U	0.0749	0.0752	1.00	0.117	pCi/L	02/19/24 10:28	03/14/24 09:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.3*		*30 - 110*	*02/19/24 10:28*	*03/14/24 09:34*	*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	**0.721**		0.423	0.428	1.00	0.604	pCi/L	02/19/24 10:31	03/07/24 11:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.3*		*30 - 110*	*02/19/24 10:31*	*03/07/24 11:46*	*1*
Y Carrier	*82.2*		*30 - 110*	*02/19/24 10:31*	*03/07/24 11:46*	*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	**0.793**		0.430	0.435	5.00	0.604	pCi/L		03/15/24 13:32	1

Client Sample ID: MW-31

Date Collected: 02/12/24 15:00
Date Received: 02/15/24 09:00

Lab Sample ID: 810-93941-2
Matrix: Drinking Water

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	**0.171**		0.105	0.107	1.00	0.143	pCi/L	02/19/24 10:28	03/14/24 09:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.5*		*30 - 110*	*02/19/24 10:28*	*03/14/24 09:33*	*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	**0.842**		0.420	0.427	1.00	0.569	pCi/L	02/19/24 10:31	03/07/24 11:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.5*		*30 - 110*	*02/19/24 10:31*	*03/07/24 11:46*	*1*
Y Carrier	*80.4*		*30 - 110*	*02/19/24 10:31*	*03/07/24 11:46*	*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**		0.433	0.440	5.00	0.569	pCi/L		03/15/24 13:32	1

Client Sample ID: MW-32

Lab Sample ID: 810-93941-3

Date Collected: 02/12/24 16:30

Matrix: Drinking Water

Date Received: 02/15/24 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	0.0998	U	0.0989	0.0993	1.00	0.156	pCi/L	02/19/24 10:28	03/14/24 09:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.5*		*30 - 110*	*02/19/24 10:28*	*03/14/24 09:33*	*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	0.345	U	0.332	0.334	1.00	0.530	pCi/L	02/19/24 10:31	03/07/24 11:47	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.5*		*30 - 110*	*02/19/24 10:31*	*03/07/24 11:47*	*1*
Y Carrier	*83.0*		*30 - 110*	*02/19/24 10:31*	*03/07/24 11:47*	*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	0.445	U	0.346	0.348	5.00	0.530	pCi/L		03/15/24 13:32	1

Client Sample ID: MW-33

Lab Sample ID: 810-93941-4

Date Collected: 02/12/24 15:18

Matrix: Drinking Water

Date Received: 02/15/24 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	0.000	U	0.0772	0.0772	1.00	0.162	pCi/L	02/19/24 10:28	03/14/24 14:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.3*		*30 - 110*	*02/19/24 10:28*	*03/14/24 14:39*	*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	0.681	U	0.569	0.573	1.00	0.892	pCi/L	02/19/24 10:31	03/07/24 11:47	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.3*		*30 - 110*	*02/19/24 10:31*	*03/07/24 11:47*	*1*
Y Carrier	*78.9*		*30 - 110*	*02/19/24 10:31*	*03/07/24 11:47*	*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	0.681	U	0.574	0.578	5.00	0.892	pCi/L		03/15/24 13:32	1

Client Sample ID: MW-34

Lab Sample ID: 810-93941-5

Date Collected: 02/12/24 14:00

Matrix: Drinking Water

Date Received: 02/15/24 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	0.527		0.195	0.201	1.00	0.223	pCi/L	02/19/24 10:28	03/14/24 14:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.3*		*30 - 110*	*02/19/24 10:28*	*03/14/24 14:39*	*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	1.33		0.596	0.609	1.00	0.783	pCi/L	02/19/24 10:31	03/07/24 11:47	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.3*		*30 - 110*	*02/19/24 10:31*	*03/07/24 11:47*	*1*
Y Carrier	*80.4*		*30 - 110*	*02/19/24 10:31*	*03/07/24 11:47*	*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	1.86		0.627	0.641	5.00	0.783	pCi/L		03/15/24 13:32	1

Client Sample ID: MWT-30

Lab Sample ID: 810-93941-6

Date Collected: 02/12/24 16:18

Matrix: Drinking Water

Date Received: 02/15/24 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	0.0375	U	0.0733	0.0734	1.00	0.131	pCi/L	02/19/24 10:28	03/14/24 14:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.3*		*30 - 110*	*02/19/24 10:28*	*03/14/24 14:39*	*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	0.412	U	0.340	0.342	1.00	0.523	pCi/L	02/19/24 10:31	03/07/24 11:47	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.3*		*30 - 110*	*02/19/24 10:31*	*03/07/24 11:47*	*1*
Y Carrier	*78.5*		*30 - 110*	*02/19/24 10:31*	*03/07/24 11:47*	*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	0.450	U	0.348	0.350	5.00	0.523	pCi/L		03/15/24 13:32	1

Client Sample ID: MWT-34

Date Collected: 02/12/24 14:00
Date Received: 02/15/24 09:00

Lab Sample ID: 810-93941-7

Matrix: Drinking Water

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	**0.467**		0.160	0.165	1.00	0.137	pCi/L	02/19/24 10:28	03/14/24 14:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.0*		*30 - 110*	*02/19/24 10:28*	*03/14/24 14:39*	*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	0.548	U	0.508	0.510	1.00	0.806	pCi/L	02/19/24 10:31	03/07/24 11:47	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.0*		*30 - 110*	*02/19/24 10:31*	*03/07/24 11:47*	*1*
Y Carrier	*82.2*		*30 - 110*	*02/19/24 10:31*	*03/07/24 11:47*	*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	**1.02**		0.533	0.536	5.00	0.806	pCi/L		03/15/24 13:32	1

Tracer/Carrier Summary

Client: Trace Analytical Laboratories
Project/Site: 24B0630

Job ID: 810-93941-1

Method: 903.0 - Radium-226 (GFPC)

Matrix: Drinking Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)
		Ba
Lab Sample ID	Client Sample ID	(30-110)
810-93941-1	MW-30	76.3
810-93941-2	MW-31	80.5
810-93941-3	MW-32	89.5
810-93941-4	MW-33	80.3
810-93941-5	MW-34	79.3
810-93941-6	MWT-30	85.3
810-93941-7	MWT-34	81.0
LCS 160-648752/2-A	Lab Control Sample	89.0
MB 160-648752/1-A	Method Blank	101

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Drinking Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
		Ba	Y
Lab Sample ID	Client Sample ID	(30-110)	(30-110)
810-93941-1	MW-30	76.3	82.2
810-93941-2	MW-31	80.5	80.4
810-93941-3	MW-32	89.5	83.0
810-93941-4	MW-33	80.3	78.9
810-93941-5	MW-34	79.3	80.4
810-93941-6	MWT-30	85.3	78.5
810-93941-7	MWT-34	81.0	82.2
LCS 160-648753/2-A	Lab Control Sample	89.0	81.9
MB 160-648753/1-A	Method Blank	101	82.6

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-648752/1-A
Matrix: Drinking Water
Analysis Batch: 652384

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 648752

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.04516	U	0.0525	0.0527	1.00	0.0843	pCi/L	02/19/24 10:28	03/14/24 09:21	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*101*		*30 - 110*	*02/19/24 10:28*	*03/14/24 09:21*	*1*

Lab Sample ID: LCS 160-648752/2-A
Matrix: Drinking Water
Analysis Batch: 652384

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 648752

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			11.3	10.97		1.16	1.00	0.0907	pCi/L	97	90 - 110		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*89.0*		*30 - 110*

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-648753/1-A
Matrix: Drinking Water
Analysis Batch: 651439

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 648753

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.07909	U	0.237	0.237	1.00	0.427	pCi/L	02/19/24 10:31	03/07/24 11:48	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*101*		*30 - 110*	*02/19/24 10:31*	*03/07/24 11:48*	*1*
Y Carrier	*82.6*		*30 - 110*	*02/19/24 10:31*	*03/07/24 11:48*	*1*

Lab Sample ID: LCS 160-648753/2-A
Matrix: Drinking Water
Analysis Batch: 651439

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 648753

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.15	10.30		1.39	1.00	0.591	pCi/L	113	80 - 120		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*89.0*		*30 - 110*
Y Carrier	*81.9*		*30 - 110*

QC Association Summary

Client: Trace Analytical Laboratories
Project/Site: 24B0630

Job ID: 810-93941-1

Rad

Prep Batch: 648752

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-93941-1	MW-30	Total/NA	Drinking Water	PrecSep-21	
810-93941-2	MW-31	Total/NA	Drinking Water	PrecSep-21	
810-93941-3	MW-32	Total/NA	Drinking Water	PrecSep-21	
810-93941-4	MW-33	Total/NA	Drinking Water	PrecSep-21	
810-93941-5	MW-34	Total/NA	Drinking Water	PrecSep-21	
810-93941-6	MWT-30	Total/NA	Drinking Water	PrecSep-21	
810-93941-7	MWT-34	Total/NA	Drinking Water	PrecSep-21	
MB 160-648752/1-A	Method Blank	Total/NA	Drinking Water	PrecSep-21	
LCS 160-648752/2-A	Lab Control Sample	Total/NA	Drinking Water	PrecSep-21	

Prep Batch: 648753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-93941-1	MW-30	Total/NA	Drinking Water	PrecSep_0	
810-93941-2	MW-31	Total/NA	Drinking Water	PrecSep_0	
810-93941-3	MW-32	Total/NA	Drinking Water	PrecSep_0	
810-93941-4	MW-33	Total/NA	Drinking Water	PrecSep_0	
810-93941-5	MW-34	Total/NA	Drinking Water	PrecSep_0	
810-93941-6	MWT-30	Total/NA	Drinking Water	PrecSep_0	
810-93941-7	MWT-34	Total/NA	Drinking Water	PrecSep_0	
MB 160-648753/1-A	Method Blank	Total/NA	Drinking Water	PrecSep_0	
LCS 160-648753/2-A	Lab Control Sample	Total/NA	Drinking Water	PrecSep_0	

Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 24B0630

Job ID: 810-93941-1

Client Sample ID: MW-30

Lab Sample ID: 810-93941-1

Date Collected: 02/12/24 16:18

Matrix: Drinking Water

Date Received: 02/15/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			648752	KAC	EET SL	02/19/24 10:28
Total/NA	Analysis	903.0		1	652406	FLC	EET SL	03/14/24 09:34
Total/NA	Prep	PrecSep_0			648753	KAC	EET SL	02/19/24 10:31
Total/NA	Analysis	904.0		1	651337	FLC	EET SL	03/07/24 11:46
Total/NA	Analysis	Ra226_Ra228 Pos		1	652694	SCB	EET SL	03/15/24 13:32

Client Sample ID: MW-31

Lab Sample ID: 810-93941-2

Date Collected: 02/12/24 15:00

Matrix: Drinking Water

Date Received: 02/15/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			648752	KAC	EET SL	02/19/24 10:28
Total/NA	Analysis	903.0		1	652406	FLC	EET SL	03/14/24 09:33
Total/NA	Prep	PrecSep_0			648753	KAC	EET SL	02/19/24 10:31
Total/NA	Analysis	904.0		1	651337	FLC	EET SL	03/07/24 11:46
Total/NA	Analysis	Ra226_Ra228 Pos		1	652694	SCB	EET SL	03/15/24 13:32

Client Sample ID: MW-32

Lab Sample ID: 810-93941-3

Date Collected: 02/12/24 16:30

Matrix: Drinking Water

Date Received: 02/15/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			648752	KAC	EET SL	02/19/24 10:28
Total/NA	Analysis	903.0		1	652406	FLC	EET SL	03/14/24 09:33
Total/NA	Prep	PrecSep_0			648753	KAC	EET SL	02/19/24 10:31
Total/NA	Analysis	904.0		1	651337	FLC	EET SL	03/07/24 11:47
Total/NA	Analysis	Ra226_Ra228 Pos		1	652694	SCB	EET SL	03/15/24 13:32

Client Sample ID: MW-33

Lab Sample ID: 810-93941-4

Date Collected: 02/12/24 15:18

Matrix: Drinking Water

Date Received: 02/15/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			648752	KAC	EET SL	02/19/24 10:28
Total/NA	Analysis	903.0		1	652384	SWS	EET SL	03/14/24 14:39
Total/NA	Prep	PrecSep_0			648753	KAC	EET SL	02/19/24 10:31
Total/NA	Analysis	904.0		1	651337	FLC	EET SL	03/07/24 11:47
Total/NA	Analysis	Ra226_Ra228 Pos		1	652694	SCB	EET SL	03/15/24 13:32

Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 24B0630

Job ID: 810-93941-1

Client Sample ID: MW-34

Lab Sample ID: 810-93941-5

Date Collected: 02/12/24 14:00

Matrix: Drinking Water

Date Received: 02/15/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			648752	KAC	EET SL	02/19/24 10:28
Total/NA	Analysis	903.0		1	652384	SWS	EET SL	03/14/24 14:39
Total/NA	Prep	PrecSep_0			648753	KAC	EET SL	02/19/24 10:31
Total/NA	Analysis	904.0		1	651337	FLC	EET SL	03/07/24 11:47
Total/NA	Analysis	Ra226_Ra228 Pos		1	652694	SCB	EET SL	03/15/24 13:32

Client Sample ID: MWT-30

Lab Sample ID: 810-93941-6

Date Collected: 02/12/24 16:18

Matrix: Drinking Water

Date Received: 02/15/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			648752	KAC	EET SL	02/19/24 10:28
Total/NA	Analysis	903.0		1	652384	SWS	EET SL	03/14/24 14:39
Total/NA	Prep	PrecSep_0			648753	KAC	EET SL	02/19/24 10:31
Total/NA	Analysis	904.0		1	651337	FLC	EET SL	03/07/24 11:47
Total/NA	Analysis	Ra226_Ra228 Pos		1	652694	SCB	EET SL	03/15/24 13:32

Client Sample ID: MWT-34

Lab Sample ID: 810-93941-7

Date Collected: 02/12/24 14:00

Matrix: Drinking Water

Date Received: 02/15/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			648752	KAC	EET SL	02/19/24 10:28
Total/NA	Analysis	903.0		1	652384	SWS	EET SL	03/14/24 14:39
Total/NA	Prep	PrecSep_0			648753	KAC	EET SL	02/19/24 10:31
Total/NA	Analysis	904.0		1	651337	FLC	EET SL	03/07/24 11:47
Total/NA	Analysis	Ra226_Ra228 Pos		1	652694	SCB	EET SL	03/15/24 13:32

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: 24B0630

Job ID: 810-93941-1

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	04-06-25
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	06-30-24
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-24
HI - RadChem Recognition	State	n/a	06-30-24
Illinois	NELAP	200023	11-30-24
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-24
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	06-30-24
Louisiana (DW)	State	LA011	12-31-24
Maryland	State	310	09-30-24
Massachusetts	State	M-MO054	06-30-24
MI - RadChem Recognition	State	9005	06-30-24
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-24
New Jersey	NELAP	MO002	06-30-24
New Mexico	State	MO00054	06-30-24
New York	NELAP	11616	03-31-24
North Carolina (DW)	State	29700	07-31-24
North Dakota	State	R-207	06-30-24
Oklahoma	NELAP	9997	08-31-24
Oregon	NELAP	4157	09-01-24
Pennsylvania	NELAP	68-00540	02-28-25
South Carolina	State	85002001	06-30-24
Texas	NELAP	T104704193	07-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO00054	07-31-24
Virginia	NELAP	10310	06-15-25
Washington	State	C592	08-30-24
West Virginia DEP	State	381	10-31-24

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

Method Summary

Client: Trace Analytical Laboratories
Project/Site: 24B0630

Job ID: 810-93941-1

Method	Method Description	Protocol	Laboratory
903.0	Radium-226 (GFPC)	EPA	EET SL
904.0	Radium-228 (GFPC)	EPA	EET SL
Ra226_Ra228 Pos	Combined Radium-226 and Radium-228	TAL-STL	EET SL
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: 24B0630

Job ID: 810-93941-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
810-93941-1	MW-30	Drinking Water	02/12/24 16:18	02/15/24 09:00
810-93941-2	MW-31	Drinking Water	02/12/24 15:00	02/15/24 09:00
810-93941-3	MW-32	Drinking Water	02/12/24 16:30	02/15/24 09:00
810-93941-4	MW-33	Drinking Water	02/12/24 15:18	02/15/24 09:00
810-93941-5	MW-34	Drinking Water	02/12/24 14:00	02/15/24 09:00
810-93941-6	MWT-30	Drinking Water	02/12/24 16:18	02/15/24 09:00
810-93941-7	MWT-34	Drinking Water	02/12/24 14:00	02/15/24 09:00

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

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Fullmer, Karen	Carrier Tracking No(s):	COC No: 810-36739.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Karen.Fullmer@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Michigan		Job #: 810-93941-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 3/19/2024			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: 24B0630	Project #: 81000263			
Site:	SSOW#:			

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Y - Trizma
	Z - other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 EPA 903.0 - Radium 226 (St. Louis)	904.0/PrecSep_0 EPA 904.0 - Radium 228 (St. Louis)	Ra226_228GFPC_P/ Combined Ra226 & Ra228 Calc (St. Louis)	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-30 (810-93941-1)	2/12/24	16:18 Eastern		Drinking Wate			X	X	X	4	
MW-31 (810-93941-2)	2/12/24	15:00 Eastern		Drinking Wate			X	X	X	4	
MW-32 (810-93941-3)	2/12/24	16:30 Eastern		Drinking Wate			X	X	X	4	
MW-33 (810-93941-4)	2/12/24	15:18 Eastern		Drinking Wate			X	X	X	4	
MW-34 (810-93941-5)	2/12/24	14:00 Eastern		Drinking Wate			X	X	X	4	
MWT-30 (810-93941-6)	2/12/24	16:18 Eastern		Drinking Wate			X	X	X	4	
MWT-34 (810-93941-7)	2/12/24	14:00 Eastern		Drinking Wate			X	X	X	4	

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

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

Relinquished by:	Date/Time: 2-15-24 1600	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 06/08/2021

110 S Hill Street
South Bend, IN 46617
Phone: 574-233-4777 Fax: 574-233-8207

Chain of Custody Record

eurofins | Environment Testing

3/15/2024

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Fullmer, Karen	Carrier Tracking No(s):	COC No: 810-36739.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Karen.Fullmer@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Michigan		Job #: 810-93944-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 3/19/2024			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045	PO #:			
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	WO #:			
Email:	Project #: 81000263			
Project Name: 24B0630	SSOW#:			
Site:				

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 EPA 903.0 - Radium 226 (St. Louis)	904.0/PrecSep_0 EPA 904.0 - Radium 228 (St. Louis)	Ra226_228GFPC_P/ Combined Ra226 & Ra228 Calc (St. Louis)	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-01R (810-93944-1)	2/13/24	14:05 Eastern		Drinking Wate			X	X	X	4	
MW-02 (810-93944-2)	2/13/24	12:15 Eastern		Drinking Wate			X	X	X	4	
MW-03 (810-93944-3)	2/13/24	09:40 Eastern		Drinking Wate			X	X	X	4	
MW-04 (810-93944-4)	2/13/24	08:32 Eastern		Drinking Wate			X	X	X	4	
MW-06 (810-93944-5)	2/13/24	12:43 Eastern		Drinking Wate			X	X	X	4	
MW-07 (810-93944-6)	2/13/24	15:35 Eastern		Drinking Wate			X	X	X	4	
MW-08 (810-93944-7)	2/13/24	10:22 Eastern		Drinking Wate			X	X	X	4	
MW-09 (810-93944-8)	2/13/24	11:20 Eastern		Drinking Wate			X	X	X	4	
MW-10 (810-93944-9)	2/13/24	13:45 Eastern		Drinking Wate			X	X	X	4	

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

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	2-15-24 1600				
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 06/08/2021

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

eurofins | Environment Testing

Client Information (Sub Contract Lab)
Client Contact: Shipping/Receiving
Company: TestAmerica Laboratories, Inc.
Address: 13715 Rider Trail North, ,
City: Earth City
State, Zip: MO, 63045
Phone: 314-298-8566(Tel) 314-298-8757(Fax)
Email:
Project Name: 24B0630
Site:

Sampler:
Phone:
Due Date Requested: 3/19/2024
TAT Requested (days):
PO #:
WO #:
Project #: 81000263
SSOW#:

Lab PM: Fullmer, Karen
E-Mail: Karen.Fullmer@et.eurofinsus.com
Carrier Tracking No(s):
State of Origin: Michigan
Accreditations Required (See note): State - Michigan

COC No: 810-36739.2
Page: Page 2 of 2
Job #: 810-93944-1

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 EPA 903.0 - Radium 226 (St. Louis)	904.0/PrecSep_0 EPA 904.0 - Radium 228 (St. Louis)	Ra226_228GFPC_P/ Combined Ra226 & Ra228 Calc (St. Louis)	Total Number of containers	Special Instructions/Note:
Preservation Code:											
MW-11 (810-93944-10)	2/13/24	14:30 Eastern		Drinking Wate			X	X	X	4	
MW-12 (810-93944-11)	2/13/24	17:30 Eastern		Drinking Wate			X	X	X	4	
MW-18 (810-93944-12)	2/13/24	16:00 Eastern		Drinking Wate			X	X	X	4	
MW-19 (810-93944-13)	2/13/24	08:36 Eastern		Drinking Wate			X	X	X	4	
MW-20 (810-93944-14)	2/13/24	14:30 Eastern		Drinking Wate			X	X	X	4	

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/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Eaton Analytical, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Eaton Analytical, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Eaton Analytical, LLC.

Possible Hazard Identification
Unconfirmed
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Special Instructions/QC Requirements:

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

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

Custody Seals Intact: ☐ Yes ☐ No Custody Seal No.:

3/15/2024

Analytical
www.Eurofin 810-93941 Chain of Custody
Shaded area for EEA use only

110 S. Hill Street
South Bend, IN 46617
T: 1.800.332.4345
F: 1.574.233.8207

Order #
Batch # _____

3/15/2024

CHAIN OF CUSTODY RECORD

Page _____ of _____

REPORT TO:	SAMPLER (Signature)	PWS ID #	STATE (sample origin)	PROJECT NAME	PO#
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	24B0630	240630
BILL TO: Accounts Payable, Trace Analytical Laboratories, Inc., 2241 Black Creek Rd., Muskegon, MI 49444	COMPLIANCE MONITORING: Yes = x; No =	POPULATION SERVED	SOURCE WATER		

LAB Number	COLLECTION DATE	TIME	AM	PM	SAMPLING SITE	TEST NAME	SAMPLE REMARKS	CHLORINATED YES	CHLORINATED NO	# OF CONTAINERS	MATRIX CODE	TURNAROUND TIME
1	02/12/24	16:18		x	MW-30	Radium 226/228					GW	SW
2	02/12/24	15:00		x	MW-31	Radium 226/228					GW	SW
3	02/12/24	16:30		x	MW-32	Radium 226/228					GW	SW
4	02/12/24	15:18		x	MW-33	Radium 226/228					GW	SW
5	02/12/24	14:00		x	MW-34	Radium 226/228					GW	SW
6	02/12/24	16:18		x	MWT-30	Radium 226/228					GW	SW
7	02/12/24	14:00		x	MWT-34	Radium 226/228					GW	SW
8												
9												
10												
11												
12												
13												
14												

pH Acceptable
Less than 2

RELINQUISHED BY:(Signature)	DATE	TIME AM/PM	RECEIVED BY:(Signature)	DATE	TIME AM/PM
AB Bayer	2/13/24	1700	Fedex		
RELINQUISHED BY:(Signature)	DATE	TIME AM/PM	RECEIVED BY:(Signature)	DATE	TIME AM/PM
Fedex				2/15-24	0809
RELINQUISHED BY:(Signature)	DATE	TIME AM/PM	RECEIVED FOR LABORATORY BY:	DATE	TIME AM/PM

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT

LAB COMMENTS

Ambient

CONDITIONS UPON RECEIPT (check one):

____ Iced: Wet/Blue ____ Ambient ____ °C Upon Receipt____ N/A

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%	IV* = Immediate Verbal: (3 working days)	100%
RV* = Rush Verbal: (5 working days)	50%	IW* =Immediate Written: (3 working days)	125%
RW* = Rush Written: (5 working days)	75%	SP* = Weekend, Holiday	CALL
		STAT* = Less than 48 hours	CALL

* Please call, expedited service not available for all testing

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.

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

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Fullmer, Karen	Carrier Tracking No(s):	COC No: 810-36739.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Karen.Fullmer@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Michigan		Job #: 810-93941-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 3/19/2024			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: 24B0630	Project #: 81000263			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 EPA 903.0 - Radium 226 (St. Louis)	904.0/PrecSep_0 EPA 904.0 - Radium 228 (St. Louis)	Ra226_228GFPC_P/ Combined Ra226 & Ra228 Calc (St. Louis)	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-30 (810-93941-1)	2/12/24	16:18 Eastern		Drinking Wate			X	X	X	4	
MW-31 (810-93941-2)	2/12/24	15:00 Eastern		Drinking Wate			X	X	X	4	
MW-32 (810-93941-3)	2/12/24	16:30 Eastern		Drinking Wate			X	X	X	4	
MW-33 (810-93941-4)	2/12/24	15:18 Eastern		Drinking Wate			X	X	X	4	
MW-34 (810-93941-5)	2/12/24	14:00 Eastern		Drinking Wate			X	X	X	4	
MWT-30 (810-93941-6)	2/12/24	16:18 Eastern		Drinking Wate			X	X	X	4	
MWT-34 (810-93941-7)	2/12/24	14:00 Eastern		Drinking Wate			X	X	X	4	

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

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

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	2-15-24 1600		Richard Thornley	2/16/24 0900	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Trace Analytical Laboratories

Job Number: 810-93941-1

Login Number: 93941

List Source: Eurofins Eaton Analytical South Bend

List Number: 1

Creator: Moore, Gary

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.	True	
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: 810-93941-1

Login Number: 93941
List Number: 2
Creator: Thornley, Richard W

List Source: Eurofins St. Louis
List Creation: 02/16/24 12:04 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	

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 3/15/2024 2:44:05 PM

JOB DESCRIPTION

24B0630

JOB NUMBER

810-93914-1

Eurofins Eaton Analytical South Bend
110 S Hill Street
South Bend IN 46617

See page two for job notes and contact information.

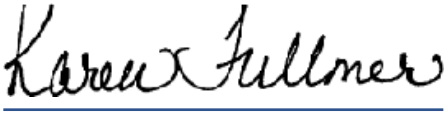
my EOL

Job Notes

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

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

Table of Contents

Definitions/Glossary

Client: Trace Analytical Laboratories
Job ID: 810-93914-1
Project/Site: 24B0630

Qualifiers

Rad

Qualifier	Qualifier Description
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

Job ID: 810-93914-1 — Eurofins Eaton Analytical South Bend

Job Narrative
810-93914-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample 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 2/15/2024 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
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.

Detection Summary

Client: Trace Analytical Laboratories
Project/Site: 24B0630

Job ID: 810-93914-1

Client Sample ID: MW-27 — Lab Sample ID: 810-93914-1

No Detections.

Client Sample ID: SG-02 — Lab Sample ID: 810-93914-2

No Detections.

Client Sample ID: SG-03 — Lab Sample ID: 810-93914-3

No Detections.

Client Sample ID: SG-04R — Lab Sample ID: 810-93914-4

No Detections.

Client Sample ID: SG-05 — Lab Sample ID: 810-93914-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-27

Lab Sample ID: 810-93914-1

Date Collected: 02/13/24 09:30

Matrix: Drinking Water

Date Received: 02/15/24 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	0.220		0.123	0.125	1.00	0.154	pCi/L	02/19/24 10:28	03/14/24 09:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.8*		*30 - 110*	*02/19/24 10:28*	*03/14/24 09:34*	*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	0.509	U	0.485	0.487	1.00	0.774	pCi/L	02/19/24 10:31	03/07/24 11:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.8*		*30 - 110*	*02/19/24 10:31*	*03/07/24 11:49*	*1*
Y Carrier	*78.1*		*30 - 110*	*02/19/24 10:31*	*03/07/24 11:49*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.729	U	0.500	0.503	5.00	0.774	pCi/L		03/15/24 13:32	1

Client Sample ID: SG-02

Lab Sample ID: 810-93914-2

Date Collected: 02/14/24 10:15

Matrix: Drinking Water

Date Received: 02/15/24 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	0.0641	U	0.103	0.103	1.00	0.180	pCi/L	02/19/24 10:28	03/14/24 09:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*52.0*		*30 - 110*	*02/19/24 10:28*	*03/14/24 09:34*	*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	-0.236	U	0.499	0.500	1.00	1.00	pCi/L	02/19/24 10:31	03/07/24 11:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*52.0*		*30 - 110*	*02/19/24 10:31*	*03/07/24 11:50*	*1*
Y Carrier	*79.6*		*30 - 110*	*02/19/24 10:31*	*03/07/24 11:50*	*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	0.0641	U	0.510	0.510	5.00	1.00	pCi/L		03/15/24 13:32	1

Client Sample ID: SG-03

Lab Sample ID: 810-93914-3

Date Collected: 02/14/24 10:25

Matrix: Drinking Water

Date Received: 02/15/24 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	0.123	U	0.0965	0.0971	1.00	0.139	pCi/L	02/19/24 10:28	03/14/24 09:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*73.5*		*30 - 110*	*02/19/24 10:28*	*03/14/24 09:34*	*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	0.461	U	0.420	0.422	1.00	0.661	pCi/L	02/19/24 10:31	03/07/24 11:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*73.5*		*30 - 110*	*02/19/24 10:31*	*03/07/24 11:50*	*1*
Y Carrier	*75.5*		*30 - 110*	*02/19/24 10:31*	*03/07/24 11:50*	*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	0.584	U	0.431	0.433	5.00	0.661	pCi/L		03/15/24 13:32	1

Client Sample ID: SG-04R

Lab Sample ID: 810-93914-4

Date Collected: 02/14/24 09:40

Matrix: Drinking Water

Date Received: 02/15/24 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	**0.186**		0.121	0.122	1.00	0.170	pCi/L	02/19/24 10:28	03/14/24 09:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.3*		*30 - 110*	*02/19/24 10:28*	*03/14/24 09:34*	*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	0.465	U	0.408	0.410	1.00	0.639	pCi/L	02/19/24 10:31	03/07/24 11:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.3*		*30 - 110*	*02/19/24 10:31*	*03/07/24 11:50*	*1*
Y Carrier	*72.9*		*30 - 110*	*02/19/24 10:31*	*03/07/24 11:50*	*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	**0.651**		0.426	0.428	5.00	0.639	pCi/L		03/15/24 13:32	1

Client Sample ID: SG-05
Date Collected: 02/14/24 10:45
Date Received: 02/15/24 09:00

Lab Sample ID: 810-93914-5
Matrix: Drinking Water

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	0.216		0.143	0.144	1.00	0.197	pCi/L	02/19/24 10:28	03/14/24 09:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.5*		*30 - 110*	*02/19/24 10:28*	*03/14/24 09:34*	*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	0.240	U	0.510	0.511	1.00	0.889	pCi/L	02/19/24 10:31	03/07/24 11:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.5*		*30 - 110*	*02/19/24 10:31*	*03/07/24 11:46*	*1*
Y Carrier	*77.8*		*30 - 110*	*02/19/24 10:31*	*03/07/24 11:46*	*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	0.456	U	0.530	0.531	5.00	0.889	pCi/L		03/15/24 13:32	1

Tracer/Carrier Summary

Client: Trace Analytical Laboratories
Project/Site: 24B0630

Job ID: 810-93914-1

Method: 903.0 - Radium-226 (GFPC)

Matrix: Drinking Water | **Prep Type: Total/NA**

		Percent Yield (Acceptance Limits)
		Ba
Lab Sample ID	Client Sample ID	(30-110)
810-93914-1	MW-27	88.8
810-93914-2	SG-02	52.0
810-93914-3	SG-03	73.5
810-93914-4	SG-04R	80.3
810-93914-5	SG-05	81.5
LCS 160-648752/2-A	Lab Control Sample	89.0
MB 160-648752/1-A	Method Blank	101

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Drinking Water | **Prep Type: Total/NA**

		Percent Yield (Acceptance Limits)	
		Ba	Y
Lab Sample ID	Client Sample ID	(30-110)	(30-110)
810-93914-1	MW-27	88.8	78.1
810-93914-2	SG-02	52.0	79.6
810-93914-3	SG-03	73.5	75.5
810-93914-4	SG-04R	80.3	72.9
810-93914-5	SG-05	81.5	77.8
LCS 160-648753/2-A	Lab Control Sample	89.0	81.9
MB 160-648753/1-A	Method Blank	101	82.6

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-648752/1-A
Matrix: Drinking Water
Analysis Batch: 652384

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 648752

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.04516	U	0.0525	0.0527	1.00	0.0843	pCi/L	02/19/24 10:28	03/14/24 09:21	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*101*		*30 - 110*	*02/19/24 10:28*	*03/14/24 09:21*	*1*

Lab Sample ID: LCS 160-648752/2-A
Matrix: Drinking Water
Analysis Batch: 652384

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 648752

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			11.3	10.97		1.16	1.00	0.0907	pCi/L	97	90 - 110		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*89.0*		*30 - 110*

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-648753/1-A
Matrix: Drinking Water
Analysis Batch: 651439

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 648753

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.07909	U	0.237	0.237	1.00	0.427	pCi/L	02/19/24 10:31	03/07/24 11:48	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*101*		*30 - 110*	*02/19/24 10:31*	*03/07/24 11:48*	*1*
Y Carrier	*82.6*		*30 - 110*	*02/19/24 10:31*	*03/07/24 11:48*	*1*

Lab Sample ID: LCS 160-648753/2-A
Matrix: Drinking Water
Analysis Batch: 651439

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 648753

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.15	10.30		1.39	1.00	0.591	pCi/L	113	80 - 120		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*89.0*		*30 - 110*
Y Carrier	*81.9*		*30 - 110*

QC Association Summary

Client: Trace Analytical Laboratories
Project/Site: 24B0630

Job ID: 810-93914-1

Rad

Prep Batch: 648752

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-93914-1	MW-27	Total/NA	Drinking Water	PrecSep-21	
810-93914-2	SG-02	Total/NA	Drinking Water	PrecSep-21	
810-93914-3	SG-03	Total/NA	Drinking Water	PrecSep-21	
810-93914-4	SG-04R	Total/NA	Drinking Water	PrecSep-21	
810-93914-5	SG-05	Total/NA	Drinking Water	PrecSep-21	
MB 160-648752/1-A	Method Blank	Total/NA	Drinking Water	PrecSep-21	
LCS 160-648752/2-A	Lab Control Sample	Total/NA	Drinking Water	PrecSep-21	

Prep Batch: 648753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-93914-1	MW-27	Total/NA	Drinking Water	PrecSep_0	
810-93914-2	SG-02	Total/NA	Drinking Water	PrecSep_0	
810-93914-3	SG-03	Total/NA	Drinking Water	PrecSep_0	
810-93914-4	SG-04R	Total/NA	Drinking Water	PrecSep_0	
810-93914-5	SG-05	Total/NA	Drinking Water	PrecSep_0	
MB 160-648753/1-A	Method Blank	Total/NA	Drinking Water	PrecSep_0	
LCS 160-648753/2-A	Lab Control Sample	Total/NA	Drinking Water	PrecSep_0	

Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 24B0630

Job ID: 810-93914-1

Client Sample ID: MW-27

Lab Sample ID: 810-93914-1

Date Collected: 02/13/24 09:30

Matrix: Drinking Water

Date Received: 02/15/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			648752	KAC	EET SL	02/19/24 10:28
Total/NA	Analysis	903.0		1	652406	FLC	EET SL	03/14/24 09:34
Total/NA	Prep	PrecSep_0			648753	KAC	EET SL	02/19/24 10:31
Total/NA	Analysis	904.0		1	651439	FLC	EET SL	03/07/24 11:49
Total/NA	Analysis	Ra226_Ra228 Pos		1	652694	SCB	EET SL	03/15/24 13:32

Client Sample ID: SG-02

Lab Sample ID: 810-93914-2

Date Collected: 02/14/24 10:15

Matrix: Drinking Water

Date Received: 02/15/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			648752	KAC	EET SL	02/19/24 10:28
Total/NA	Analysis	903.0		1	652406	FLC	EET SL	03/14/24 09:34
Total/NA	Prep	PrecSep_0			648753	KAC	EET SL	02/19/24 10:31
Total/NA	Analysis	904.0		1	651439	FLC	EET SL	03/07/24 11:50
Total/NA	Analysis	Ra226_Ra228 Pos		1	652694	SCB	EET SL	03/15/24 13:32

Client Sample ID: SG-03

Lab Sample ID: 810-93914-3

Date Collected: 02/14/24 10:25

Matrix: Drinking Water

Date Received: 02/15/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			648752	KAC	EET SL	02/19/24 10:28
Total/NA	Analysis	903.0		1	652406	FLC	EET SL	03/14/24 09:34
Total/NA	Prep	PrecSep_0			648753	KAC	EET SL	02/19/24 10:31
Total/NA	Analysis	904.0		1	651439	FLC	EET SL	03/07/24 11:50
Total/NA	Analysis	Ra226_Ra228 Pos		1	652694	SCB	EET SL	03/15/24 13:32

Client Sample ID: SG-04R

Lab Sample ID: 810-93914-4

Date Collected: 02/14/24 09:40

Matrix: Drinking Water

Date Received: 02/15/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			648752	KAC	EET SL	02/19/24 10:28
Total/NA	Analysis	903.0		1	652406	FLC	EET SL	03/14/24 09:34
Total/NA	Prep	PrecSep_0			648753	KAC	EET SL	02/19/24 10:31
Total/NA	Analysis	904.0		1	651439	FLC	EET SL	03/07/24 11:50
Total/NA	Analysis	Ra226_Ra228 Pos		1	652694	SCB	EET SL	03/15/24 13:32

Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 24B0630

Job ID: 810-93914-1

Client Sample ID: SG-05

Date Collected: 02/14/24 10:45
Date Received: 02/15/24 09:00

Lab Sample ID: 810-93914-5

Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			648752	KAC	EET SL	02/19/24 10:28
Total/NA	Analysis	903.0		1	652406	FLC	EET SL	03/14/24 09:34
Total/NA	Prep	PrecSep_0			648753	KAC	EET SL	02/19/24 10:31
Total/NA	Analysis	904.0		1	651337	FLC	EET SL	03/07/24 11:46
Total/NA	Analysis	Ra226_Ra228 Pos		1	652694	SCB	EET SL	03/15/24 13:32

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: 24B0630

Job ID: 810-93914-1

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	04-06-25
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	06-30-24
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-24
HI - RadChem Recognition	State	n/a	06-30-24
Illinois	NELAP	200023	11-30-24
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-24
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	06-30-24
Louisiana (DW)	State	LA011	12-31-24
Maryland	State	310	09-30-24
Massachusetts	State	M-MO054	06-30-24
MI - RadChem Recognition	State	9005	06-30-24
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-24
New Jersey	NELAP	MO002	06-30-24
New Mexico	State	MO00054	06-30-24
New York	NELAP	11616	03-31-24
North Carolina (DW)	State	29700	07-31-24
North Dakota	State	R-207	06-30-24
Oklahoma	NELAP	9997	08-31-24
Oregon	NELAP	4157	09-01-24
Pennsylvania	NELAP	68-00540	02-28-25
South Carolina	State	85002001	06-30-24
Texas	NELAP	T104704193	07-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO00054	07-31-24
Virginia	NELAP	10310	06-15-25
Washington	State	C592	08-30-24
West Virginia DEP	State	381	10-31-24

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

Method Summary

Client: Trace Analytical Laboratories
Project/Site: 24B0630

Job ID: 810-93914-1

Method	Method Description	Protocol	Laboratory
903.0	Radium-226 (GFPC)	EPA	EET SL
904.0	Radium-228 (GFPC)	EPA	EET SL
Ra226_Ra228 Pos	Combined Radium-226 and Radium-228	TAL-STL	EET SL
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: 24B0630

Job ID: 810-93914-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
810-93914-1	MW-27	Drinking Water	02/13/24 09:30	02/15/24 09:00
810-93914-2	SG-02	Drinking Water	02/14/24 10:15	02/15/24 09:00
810-93914-3	SG-03	Drinking Water	02/14/24 10:25	02/15/24 09:00
810-93914-4	SG-04R	Drinking Water	02/14/24 09:40	02/15/24 09:00
810-93914-5	SG-05	Drinking Water	02/14/24 10:45	02/15/24 09:00

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

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Fullmer, Karen	Carrier Tracking No(s):	COC No: 810-36739.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Karen.Fullmer@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Michigan		Job #: 810-93914-1
Address: 13715 Rider Trail North,	Due Date Requested: 3/19/2024			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: 24B0630	Project #: 81000263			
Site:	SSOW#:			

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 EPA 903.0 - Radium 226 (St. Louis)	904.0/PrecSep_0 EPA 904.0 - Radium 228 (St. Louis)	Ra226_228GFPC_P/ Combined Ra226 & Ra228 Calc (St. Louis)	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-27 (810-93914-1)	2/13/24	09:30 Eastern		Drinking Wate			X	X	X	4	
SG-02 (810-93914-2)	2/14/24	10:15 Eastern		Drinking Wate			X	X	X	4	
SG-03 (810-93914-3)	2/14/24	10:25 Eastern		Drinking Wate			X	X	X	4	
SG-04R (810-93914-4)	2/14/24	09:40 Eastern		Drinking Wate			X	X	X	4	
SG-05 (810-93914-5)	2/14/24	10:45 Eastern		Drinking Wate			X	X	X	4	

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

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	2-15-24 1600				
Relinquished by:	Date/Time:	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:

Ver: 06/08/2021

3/15/2024

Eurofins Analytical
110 S. Hill Street
South Bend, IN 46617
T: 1.800.332.4345
F: 1.574.233.8207

Order # 810-93914 Chain of Custody

Batch # _____

www.EurofinsUS

CHAIN OF CUSTODY RECORD

Page _____ of _____

Shaded area for EEA use only

REPORT TO:	SAMPLER (Signature)	PWS ID #	STATE (sample origin)	PROJECT NAME	PO#
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	24B0630	24B0630
BILL TO: Accounts Payable, Trace Analytical Laboratories, Inc., 2241 Black Creek Rd., Muskegon, MI 49444	COMPLIANCE MONITORING: Yes = x; No	POPULATION SERVED	SOURCE WATER		

LAB Number	COLLECTION DATE	TIME	AM	PM	SAMPLING SITE	TEST NAME	SAMPLE REMARKS	CHLORINATED YES	CHLORINATED NO	# OF CONTAINERS	MATRIX CODE	TURNAROUND TIME
1	02/13/24	9:30	x		MW-27	Radium 226/228				4	SW	SW
2	02/14/24	10:15	x		SG-02	Radium 226/228				4	SW	SW
3	02/14/24	10:25	x		SG-03	Radium 226/228				4	SW	SW
4	02/14/24	9:40	x		SG-04R	Radium 226/228				4	SW	SW
5	02/14/24	10:45	x		SG-05	Radium 226/228				4	SW	SW
6												
7												
8												
9												
10												
11												
12												
13												
14												

pH Acceptable
less than 2

Ambient

RELINQUISHED BY:(Signature)	DATE	TIME	RECEIVED BY:(Signature)	DATE	TIME
[signature]	2/14/24	17:00 AM (PM)	Fedex		AM PM
RELINQUISHED BY:(Signature) Fedex	DATE	TIME AM PM	RECEIVED BY:(Signature) [signature]	DATE 2-15-24	TIME 0900 AM PM
RELINQUISHED BY:(Signature)	DATE	TIME AM PM	RECEIVED FOR LABORATORY BY:	DATE	TIME AM PM

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT

LAB COMMENTS

CONDITIONS UPON RECEIPT (check one):

____ Iced: Wet/Blue ____ Ambient ____ °C Upon Receipt____ N/A

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%	IV* = Immediate Verbal: (3 working days)	100%
RV* = Rush Verbal: (5 working days)	50%	IW* =Immediate Written: (3 working days)	125%
RW* = Rush Written: (5 working days)	75%	SP* = Weekend, Holiday	CALL
		STAT* = Less than 48 hours	CALL

* Please call, expedited service not available for all testing

Samples received unannounced with less than 48 hours holding time remaining may be subject to additional charges.

3/15/2024

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

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Fullmer, Karen	Carrier Tracking No(s):	COC No: 810-36739.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Karen.Fullmer@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Michigan		Job #: 810-93914-1
Address: 13715 Rider Trail North,	Due Date Requested: 3/19/2024			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: 24B0630	Project #: 81000263			
Site:	SSOW#:			

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 EPA 903.0 - Radium 226 (St. Louis)	904.0/PrecSep_0 EPA 904.0 - Radium 228 (St. Louis)	Ra226_228GFPC_P/ Combined Ra226 & Ra228 Calc (St. Louis)	Total Number of containers	Special Instructions/Note:
Preservation Code:											
MW-27 (810-93914-1)	2/13/24	09:30 Eastern		Drinking Wate			X	X	X	4	
SG-02 (810-93914-2)	2/14/24	10:15 Eastern		Drinking Wate			X	X	X	4	
SG-03 (810-93914-3)	2/14/24	10:25 Eastern		Drinking Wate			X	X	X	4	
SG-04R (810-93914-4)	2/14/24	09:40 Eastern		Drinking Wate			X	X	X	4	
SG-05 (810-93914-5)	2/14/24	10:45 Eastern		Drinking Wate			X	X	X	4	

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

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	2-15-24 1600		Richard Thornley	2/16/24 0900	
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Trace Analytical Laboratories

Job Number: 810-93914-1

Login Number: 93914

List Source: Eurofins Eaton Analytical South Bend

List Number: 1

Creator: Moore, Gary

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.	True	
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: 810-93914-1

Login Number: 93914
List Number: 2
Creator: Thornley, Richard W

List Source: Eurofins St. Louis
List Creation: 02/16/24 11:48 AM

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	

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 4/11/2024 2:58:12 PM

JOB DESCRIPTION

24B0630

JOB NUMBER

810-93944-2

Eurofins Eaton Analytical South Bend
110 S Hill Street
South Bend IN 46617

See page two for job notes and contact information.

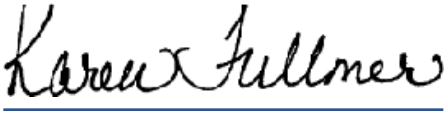
my EOL

Job Notes

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

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
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(574)233-4777

Table of Contents

Definitions/Glossary

Client: Trace Analytical Laboratories
Job ID: 810-93944-2
Project/Site: 24B0630

Qualifiers

Rad

Qualifier	Qualifier Description
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

Job ID: 810-93944-2 — Eurofins Eaton Analytical South Bend

Job Narrative
810-93944-2

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample 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 2/15/2024 9:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice.

Receipt Exceptions
The reference method requires samples to have a pH of less than 2. The following samplea were received with a pH of 7: MW-01R (810-93944-1), MW-02 (810-93944-2), MW-03 (810-93944-3), MW-04 (810-93944-4), MW-06 (810-93944-5), MW-07 (810-93944-6), MW-08 (810-93944-7), MW-09 (810-93944-8), MW-10 (810-93944-9), MW-11 (810-93944-10), MW-12 (810-93944-11), MW-18 (810-93944-12), MW-19 (810-93944-13) and MW-20 (810-93944-14). The samples were adjusted to the appropriate pH in the laboratory.

Affected Containers
810-93944-B-3
810-93944-A-2
810-93944-C-3
810-93944-C-2
810-93944-D-2

Gas Flow Proportional Counter
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.

Detection Summary

Client: Trace Analytical Laboratories
Project/Site: 24B0630

Job ID: 810-93944-2

Client Sample ID: MW-02 **Lab Sample ID: 810-93944-2**

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-02

Date Collected: 02/13/24 12:15
Date Received: 02/15/24 09:00

Lab Sample ID: 810-93944-2

Matrix: Drinking Water

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	1.07		0.459	0.469	1.00	0.534	pCi/L	03/20/24 09:53	04/11/24 07:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*68.0*		*30 - 110*	*03/20/24 09:53*	*04/11/24 07:35*	*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	0.882		0.499	0.505	1.00	0.708	pCi/L	02/21/24 09:04	03/08/24 11:47	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.3*		*30 - 110*	*02/21/24 09:04*	*03/08/24 11:47*	*1*
Y Carrier	*87.1*		*30 - 110*	*02/21/24 09:04*	*03/08/24 11:47*	*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	1.95		0.678	0.689	5.00	0.708	pCi/L		04/11/24 07:23	1

Tracer/Carrier Summary

Client: Trace Analytical Laboratories
Project/Site: 24B0630

Job ID: 810-93944-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Drinking Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)
		Ba
Lab Sample ID	Client Sample ID	(30-110)
810-93944-2	MW-02	68.0
LCS 160-653260/2-A	Lab Control Sample	75.3
LCSD 160-653260/3-A	Lab Control Sample Dup	83.0
MB 160-653260/1-A	Method Blank	74.0

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Drinking Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
		Ba	Y
Lab Sample ID	Client Sample ID	(30-110)	(30-110)
810-93944-2	MW-02	85.3	87.1
LCS 160-649000/2-A	Lab Control Sample	107	80.0
MB 160-649000/1-A	Method Blank	102	89.0

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-653260/1-A
Matrix: Drinking Water
Analysis Batch: 656476

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653260

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.09122	U	0.0675	0.0680	1.00	0.0922	pCi/L	03/20/24 09:53	04/11/24 07:20	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*74.0*		*30 - 110*	*03/20/24 09:53*	*04/11/24 07:20*	*1*

Lab Sample ID: LCS 160-653260/2-A
Matrix: Drinking Water
Analysis Batch: 656476

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653260

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			11.3	11.92		1.23	1.00	0.103	pCi/L	105	90 - 110		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*75.3*		*30 - 110*

Lab Sample ID: LCSD 160-653260/3-A
Matrix: Drinking Water
Analysis Batch: 656476

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653260

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
Radium-226			11.3	11.57		1.18	1.00	0.105	pCi/L	102	90 - 110	0.15	1

Carrier	*LCSD %Yield*	*LCSD Qualifier*	*Limits*
Ba Carrier	*83.0*		*30 - 110*

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-649000/1-A
Matrix: Drinking Water
Analysis Batch: 651637

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 649000

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.2880	U	0.272	0.273	1.00	0.431	pCi/L	02/21/24 09:04	03/08/24 11:55	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*102*		*30 - 110*	*02/21/24 09:04*	*03/08/24 11:55*	*1*
Y Carrier	*89.0*		*30 - 110*	*02/21/24 09:04*	*03/08/24 11:55*	*1*

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

Lab Sample ID: LCS 160-649000/2-A
Matrix: Drinking Water
Analysis Batch: 651637

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 649000

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.14	9.831		1.29	1.00	0.488	pCi/L	108	80 - 120		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*107*		*30 - 110*
Y Carrier	*80.0*		*30 - 110*

QC Association Summary

Client: Trace Analytical Laboratories
Project/Site: 24B0630

Job ID: 810-93944-2

Rad

Prep Batch: 649000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-93944-2	MW-02	Total/NA	Drinking Water	PrecSep_0	
MB 160-649000/1-A	Method Blank	Total/NA	Drinking Water	PrecSep_0	
LCS 160-649000/2-A	Lab Control Sample	Total/NA	Drinking Water	PrecSep_0	

Prep Batch: 653260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-93944-2	MW-02	Total/NA	Drinking Water	PrecSep-21	
MB 160-653260/1-A	Method Blank	Total/NA	Drinking Water	PrecSep-21	
LCS 160-653260/2-A	Lab Control Sample	Total/NA	Drinking Water	PrecSep-21	
LCSD 160-653260/3-A	Lab Control Sample Dup	Total/NA	Drinking Water	PrecSep-21	

Lab Chronicle

Client: Trace Analytical Laboratories
Job ID: 810-93944-2
Project/Site: 24B0630

Client Sample ID: MW-02
Lab Sample ID: 810-93944-2

Date Collected: 02/13/24 12:15
Matrix: Drinking Water

Date Received: 02/15/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			653260	KAK	EET SL	03/20/24 09:53
Total/NA	Analysis	903.0		1	656486	SWS	EET SL	04/11/24 07:35
Total/NA	Prep	PrecSep_0			649000	KAC	EET SL	02/21/24 09:04
Total/NA	Analysis	904.0		1	651625	FLC	EET SL	03/08/24 11:47
Total/NA	Analysis	Ra226_Ra228 Pos		1	656454	FLC	EET SL	04/11/24 07:23

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: 24B0630

Job ID: 810-93944-2

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	04-06-25
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	06-30-24
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-24
HI - RadChem Recognition	State	n/a	06-30-24
Illinois	NELAP	200023	11-30-24
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-24
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	06-30-24
Louisiana (DW)	State	LA011	12-31-24
Maryland	State	310	09-30-24
Massachusetts	State	M-MO054	06-30-24
MI - RadChem Recognition	State	9005	06-30-24
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-24
New Jersey	NELAP	MO002	06-30-24
New Mexico	State	MO00054	06-30-24
New York	NELAP	11616	03-31-25
North Carolina (DW)	State	29700	07-31-24
North Dakota	State	R-207	06-30-24
Oklahoma	NELAP	9997	08-31-24
Oregon	NELAP	4157	09-01-24
Pennsylvania	NELAP	68-00540	02-28-25
South Carolina	State	85002001	06-30-24
Texas	NELAP	T104704193	07-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO00054	07-31-24
Virginia	NELAP	10310	06-15-25
Washington	State	C592	08-30-24
West Virginia DEP	State	381	10-31-24

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

Method Summary

Client: Trace Analytical Laboratories
Project/Site: 24B0630

Job ID: 810-93944-2

Method	Method Description	Protocol	Laboratory
903.0	Radium-226 (GFPC)	EPA	EET SL
904.0	Radium-228 (GFPC)	EPA	EET SL
Ra226_Ra228 Pos	Combined Radium-226 and Radium-228	TAL-STL	EET SL
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: 24B0630

Job ID: 810-93944-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
810-93944-2	MW-02	Drinking Water	02/13/24 12:15	02/15/24 09:00

n Analytical

110 S. Hill Street
South Bend, IN 46617
T: 1.800.332.4345
F: 1.574.233.8207

Order #

Batch # _____

4/11/2024

www.Eurc

Shaded area for EEA use only

CHAIN OF CUSTODY RECORD

Page _____ of _____

REPORT TO:	SAMPLER (Signature)	PWS ID #	STATE (sample origin)	PROJECT NAME	PO#
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	24B0630	24B0630
BILL TO: Accounts Payable, Trace Analytical Laboratories, Inc., 2241 Black Creek Rd., Muskegon, MI 49444	COMPLIANCE MONITORING: Yes = x; No =	POPULATION SERVED	SOURCE WATER		

LAB Number	COLLECTION DATE	TIME	AM	PM	SAMPLING SITE	TEST NAME	SAMPLE REMARKS	CHLORINATED YES	CHLORINATED NO	# OF CONTAINERS	MATRIX CODE	TURNAROUND TIME
1	02/13/24	14:35		x	MW-01R	Radium 226/228				4	GW	SW
2	02/13/24	12:15		x	MW-02	Radium 226/228				4	GW	SW
3	02/14/24	9:40		x	MW-03	Radium 226/228				4	GW	SW
4	02/14/24	8:32	X		MW-04	Radium 226/228				4	GW	SW
5	02/13/24	12:43		X	MW-06	Radium 226/228				4	GW	SW
6	02/13/24	15:35		X	MW-07	Radium 226/228				4	GW	SW
7	02/13/24	10:22	X		MW-08	Radium 226/228				4	GW	SW
8	02/13/24	11:20	X		MW-09	Radium 226/228				4	GW	SW
9	02/13/24	13:45		X	MW-10	Radium 226/228				4	GW	SW
10	02/13/24	14:30		X	MW-11	Radium 226/228				4	GW	SW
11	02/13/24	17:30		X	MW-12	Radium 226/228				4	GW	SW
12	02/13/24	16:00		X	MW-18	Radium 226/228				4	GW	SW
13	02/13/24	8:36	X		MW-19	Radium 226/228				4	GW	SW
14	02/13/24	14:30		X	MW-20	Radium 226/228				4	GW	SW

pH Acceptable (<5 or >2)

RELINQUISHED BY:(Signature)	DATE	TIME AM/PM	RECEIVED BY:(Signature)	DATE	TIME AM/PM
BVS	2/14/24		Fedex		
RELINQUISHED BY:(Signature)	DATE	TIME AM/PM	RECEIVED BY:(Signature)	DATE	TIME AM/PM
Fedex				2-15-24	0900
RELINQUISHED BY:(Signature)	DATE	TIME AM/PM	RECEIVED FOR LABORATORY BY:	DATE	TIME AM/PM

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT

LAB COMMENTS

CONDITIONS UPON RECEIPT (check one):

____ Iced: Wet/Blue ____ Ambient _____ °C Upon Receipt____ N/A

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%	IV* = Immediate Verbal: (3 working days)	100%
RV* = Rush Verbal: (5 working days)	50%	IW* =Immediate Written: (3 working days)	125%
RW* = Rush Written: (5 working days)	75%	SP* = Weekend, Holiday	CALL
		STAT* = Less than 48 hours	CALL

* Please call, expedited service not available for all testing

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.

Chain of Custody

ANALYTICAL SERVICES REQUEST AND CHAIN OF CUSTODY

LABORATORY: **Eurofins Eaton Analytical (Indiana)**
ADDRESS: **110 South Hill Street**
South Bend, IN 46617-2702

CONTACT: **Pamela Brown**
RECEIVED DATE: **14-February-2024**

SAMPLE INFORMATION

Sample ID: 3974212
Matrix: DRINKING WATER
Client ID: 1502-01-01
Folder #: 352140

EQLAB Rep: YRIOS
Date Collected: 14-Feb-2024
Collected Time: 09:00
Total Containers: 4

CONTAINER ID	TEST NAME	CONTAINER	METHOD
3974212-1	RADIUM 226	1000 ML	SM 7500-Ra B
3974212-1	URANIUM	250 ML	EPA 200.8
3974212-1	GROSS ALPHA / GROSS BETA	1000 ML	SM 7110B
3974212-1	RADIUM 228	1000 ML	SM 7500-Ra D

Comments:

Gumbent

RELINQUISHED BY / DATE
2.14.24 AM

APPROVED BY / DATE
Melaine 02/14/24

ENVIRONMENTAL QUALITY LABORATORIES, INC. P.O. BOX

TURN AROUND TIME:
10 days

P. O. #:
M22308

RECEIVED BY / DATE:
2-15-24 0815

Login Sample Receipt Checklist

Client: Trace Analytical Laboratories

Job Number: 810-93944-2

Login Number: 93944
List Number: 1
Creator: Moore, Gary

List Source: Eurofins Eaton Analytical South Bend

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.	True	
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: 810-93944-2

Login Number: 93944
List Number: 2
Creator: Thornley, Richard W

List Source: Eurofins St. Louis
List Creation: 02/16/24 11:36 AM

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	

Renew Harbor Island
Work today, protect tomorrow.

Appendix F

LCL Statistical Tables, Plots, and LCL Values

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_4_105	MW-06	Appendix III	Boron	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	9.22	9.50	6.40	12.0	1.65	0.179	-0.179	-0.337
1_16_4_107	MW-06	Appendix III	Calcium	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	262	250	220	310	32.2	0.123	0.371	-1.28
1_16_4_108	MW-06	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Normal	Normal	78.1	76.0	13.0	160	42.3	0.541	0.248	0.443
1_16_4_112	MW-06	Appendix III	Fluoride	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	1.15	1.10	0.980	1.40	0.153	0.133	0.707	-0.826
1_16_4_120	MW-06	Appendix III	pH (field)	su	11	0	0%	2022-11-29 to 2024-04-07	Nonparametric	Nonparametric	7.18	7.26	6.42	7.36	0.258	0.0359	-2.99	9.50
1_16_4_124	MW-06	Appendix III	Sulfate (as SO4)	mg/L	11	1	9%	2022-11-29 to 2024-04-07	Gamma; Normal	Gamma	10.0	9.40	0.410	20.0	7.25	0.723	0.0402	-1.32
1_16_4_126	MW-06	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-11-29 to 2024-04-07		Nonparametric	1209	1200	1100	1300	70.1	0.0579	-0.123	-0.453
1_16_5_101	MW-06	Appendix IV	Antimony	mg/L	11	9	82%	2022-11-29 to 2024-04-07		Nonparametric	0.000199	0.000100	0.0000500	0.000500	0.000176	0.885	1.05	-0.556
1_16_5_102	MW-06	Appendix IV	Arsenic	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000671	0.000650	0.000470	0.00100	0.000151	0.224	1.03	1.04
1_16_5_103	MW-06	Appendix IV	Barium	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Nonparametric	Nonparametric	1.39	1.40	0.990	1.60	0.160	0.115	-1.55	3.64
1_16_5_104	MW-06	Appendix IV	Beryllium	mg/L	11	10	91%	2022-11-29 to 2024-04-07		Nonparametric	0.0000522	0.0000520	0.0000520	0.0000540	0	0.0116	3.32	11
1_16_5_106	MW-06	Appendix IV	Cadmium	mg/L	11	11	100%	2022-11-29 to 2024-04-07		Nonparametric	0.000134	0.0000750	0.0000320	0.000380	0.000129	0.965	1.45	0.850
1_16_5_109	MW-06	Appendix IV	Chromium, Total	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.00176	0.00150	0.00110	0.00300	0.000587	0.333	0.845	0.267
1_16_5_110	MW-06	Appendix IV	Cobalt	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000556	0.000500	0.000350	0.000800	0.000142	0.256	0.388	-0.986
1_16_5_113	MW-06	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	1.15	1.10	0.980	1.40	0.153	0.133	0.707	-0.826
1_16_5_115	MW-06	Appendix IV	Lead	mg/L	11	8	73%	2022-11-29 to 2024-04-07		Nonparametric	0.000417	0.000270	0.000100	0.00110	0.000366	0.878	1.31	0.602
1_16_5_116	MW-06	Appendix IV	Lithium	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.184	0.190	0.110	0.230	0.0423	0.230	-0.533	-1.12
1_16_5_117	MW-06	Appendix IV	Mercury	mg/L	11	11	100%	2022-11-29 to 2024-04-07		Nonparametric	0.000160	0.000160	0.000160	0.000160	0	0	NA	NA
1_16_5_118	MW-06	Appendix IV	Molybdenum	mg/L	11	8	73%	2022-11-29 to 2024-04-07		Nonparametric	0.000648	0.000270	0.000250	0.00310	0.000833	1.29	3.04	9.64
1_16_5_121	MW-06	Appendix IV	Radium 226 and 228	pCi/L	11	2	18%	2022-11-29 to 2024-04-07	Nonparametric	Nonparametric	0.873	0.824	0.625	1.91	0.363	0.416	2.71	8.15
1_16_5_122	MW-06	Appendix IV	Selenium	mg/L	11	5	45%	2022-11-29 to 2024-04-07	Nonparametric	Nonparametric	0.000237	0.000220	0.000190	0.000470	0.0000781	0.329	3.17	10.3
1_16_5_125	MW-06	Appendix IV	Thallium	mg/L	11	11	100%	2022-11-29 to 2024-04-07		Nonparametric	0.000186	0.0000750	0.0000750	0.000380	0.000154	0.827	0.661	-1.96
1_16_6_111	MW-06	Part 115	Copper	mg/L	11	10	91%	2022-11-29 to 2024-04-07		Nonparametric	0.000207	0.000200	0.000200	0.000280	0.0000241	0.116	3.32	11.0
1_16_6_114	MW-06	Part 115	Iron	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	19.9	18.0	14.0	31.0	5.38	0.270	1.10	0.230
1_16_6_119	MW-06	Part 115	Nickel	mg/L	11	4	36%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000874	0.000900	0.000650	0.00120	0.000209	0.239	0.199	-1.56
1_16_6_123	MW-06	Part 115	Silver	mg/L	11	11	100%	2022-11-29 to 2024-04-07		Nonparametric	0.000123	0.0000500	0.0000500	0.000250	0.000101	0.821	0.661	-1.96
1_16_6_129	MW-06	Part 115	Vanadium	mg/L	11	11	100%	2022-11-29 to 2024-04-07		Nonparametric	0.000622	0.000620	0.000620	0.000640	0.00000603	0.00970	3.32	11.0
1_16_6_130	MW-06	Part 115	Zinc	mg/L	11	2	18%	2022-11-29 to 2024-04-07	Nonparametric	Nonparametric	0.0152	0.00180	0.00120	0.0940	0.0315	2.07	2.18	3.84
1_17_4_105	MW-07	Appendix III	Boron	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	11.5	11.0	10.0	13.0	0.934	0.0809	0.290	-0.501
1_17_4_107	MW-07	Appendix III	Calcium	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	144	140	120	160	12.1	0.0840	-0.446	0.129
1_17_4_108	MW-07	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-11-30 to 2024-04-08		Nonparametric	13.9	14.0	13.0	15.0	0.701	0.0504	0.123	-0.453
1_17_4_112	MW-07	Appendix III	Fluoride	mg/L	11	1	9%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.0987	0.0830	0.0550	0.140	0.0321	0.325	0.253	-1.68
1_17_4_120	MW-07	Appendix III	pH (field)	su	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	6.88	6.88	6.58	7.05	0.149	0.0217	-1.05	0.649
1_17_4_124	MW-07	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	25.0	26.0	15.0	36.0	7.42	0.297	0.0539	-1.72
1_17_4_126	MW-07	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Normal	Normal	628	650	470	720	78.7	0.125	-1.14	0.711
1_17_5_101	MW-07	Appendix IV	Antimony	mg/L	11	10	91%	2022-11-30 to 2024-04-08		Nonparametric	0.0000792	0.000100	0.0000500	0.000100	0.0000246	0.311	-0.374	-2.16
1_17_5_102	MW-07	Appendix IV	Arsenic	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.000214	0.000210	0.000130	0.000290	0.0000398	0.186	-0.293	2.03
1_17_5_103	MW-07	Appendix IV	Barium	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Nonparametric	Nonparametric	0.335	0.340	0.250	0.380	0.0342	0.102	-1.62	3.55
1_17_5_104	MW-07	Appendix IV	Beryllium	mg/L	11	8	73%	2022-11-30 to 2024-04-08		Nonparametric	0.0000545	0.0000520	0.0000520	0.0000660	0.00000489	0.0897	1.94	2.69
1_17_5_106	MW-07	Appendix IV	Cadmium	mg/L	11	11	100%	2022-11-30 to 2024-04-08		Nonparametric	0.0000555	0.0000750	0.0000320	0.0000750	0.0000225	0.405	-0.213	-2.44
1_17_5_109	MW-07	Appendix IV	Chromium, Total	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.000337	0.000330	0.000280	0.000420	0.0000422	0.125	0.544	-0.156
1_17_5_110	MW-07	Appendix IV	Cobalt	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.000911	0.000950	0.000710	0.00110	0.000118	0.129	-0.396	-0.385

(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_5_113	MW-07	Appendix IV	Fluoride (App IV)	mg/L	11	1	9%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.0987	0.0830	0.0550	0.140	0.0321	0.325	0.253	-1.68
1_17_5_115	MW-07	Appendix IV	Lead	mg/L	11	11	100%	2022-11-30 to 2024-04-08		Nonparametric	0.000155	0.000100	0.000100	0.000220	0.0000627	0.405	0.213	-2.44
1_17_5_116	MW-07	Appendix IV	Lithium	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00612	0.00570	0.00310	0.0100	0.00189	0.309	0.613	0.853
1_17_5_117	MW-07	Appendix IV	Mercury	mg/L	11	11	100%	2022-11-30 to 2024-04-08		Nonparametric	0.000160	0.000160	0.000160	0.000160	0	0	NA	NA
1_17_5_118	MW-07	Appendix IV	Molybdenum	mg/L	11	11	100%	2022-11-30 to 2024-04-08		Nonparametric	0.000418	0.000250	0.000250	0.000620	0.000193	0.462	0.213	-2.44
1_17_5_121	MW-07	Appendix IV	Radium 226 and 228	pCi/L	11	2	18%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	1.04	0.928	0.670	2.36	0.485	0.468	2.31	6.23
1_17_5_122	MW-07	Appendix IV	Selenium	mg/L	11	9	82%	2022-11-30 to 2024-04-08		Nonparametric	0.000166	0.000220	0.000100	0.000230	0.0000636	0.382	-0.205	-2.43
1_17_5_125	MW-07	Appendix IV	Thallium	mg/L	11	11	100%	2022-11-30 to 2024-04-08		Nonparametric	0.0000750	0.0000750	0.0000750	0.0000750	0	0	NA	NA
1_17_6_111	MW-07	Part 115	Copper	mg/L	11	9	82%	2022-11-30 to 2024-04-08		Nonparametric	0.000210	0.000200	0.000200	0.000270	0.0000232	0.111	2.28	4.55
1_17_6_114	MW-07	Part 115	Iron	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	15.4	15.0	13.0	19.0	1.96	0.128	0.637	-0.466
1_17_6_119	MW-07	Part 115	Nickel	mg/L	11	11	100%	2022-11-30 to 2024-04-08		Nonparametric	0.000650	0.000650	0.000650	0.000650	0	0	NA	NA
1_17_6_123	MW-07	Part 115	Silver	mg/L	11	11	100%	2022-11-30 to 2024-04-08		Nonparametric	0.0000500	0.0000500	0.0000500	0.0000500	0	0	NA	NA
1_17_6_129	MW-07	Part 115	Vanadium	mg/L	11	11	100%	2022-11-30 to 2024-04-08		Nonparametric	0.000620	0.000620	0.000620	0.000620	0	0	NA	NA
1_17_6_130	MW-07	Part 115	Zinc	mg/L	11	8	73%	2022-11-30 to 2024-04-08		Nonparametric	0.00492	0.00120	0.00120	0.0250	0.00799	1.62	2.17	3.89
1_18_4_105	MW-08	Appendix III	Boron	mg/L	11	0	0%	2022-12-01 to 2024-04-07	Normal	Normal	6.31	7.00	2.50	9.30	1.91	0.303	-0.722	0.420
1_18_4_107	MW-08	Appendix III	Calcium	mg/L	11	0	0%	2022-12-01 to 2024-04-07	Gamma; Lognormal; Normal	Normal	139	140	120	160	13.8	0.0989	-0.0862	-1.43
1_18_4_108	MW-08	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-12-01 to 2024-04-07	Gamma; Lognormal; Normal	Normal	25.7	25.0	17.0	35.0	5.50	0.214	-0.262	-0.178
1_18_4_112	MW-08	Appendix III	Fluoride	mg/L	11	0	0%	2022-12-01 to 2024-04-07	Normal	Normal	0.921	1.00	0.400	1.30	0.290	0.315	-0.749	-0.602
1_18_4_120	MW-08	Appendix III	pH (field)	su	11	0	0%	2022-12-01 to 2024-04-07	Nonparametric	Nonparametric	7.20	7.26	6.21	7.51	0.342	0.0476	-2.77	8.60
1_18_4_124	MW-08	Appendix III	Sulfate (as SO4)	mg/L	11	3	27%	2022-12-01 to 2024-04-07	Gamma; Lognormal; Normal	Gamma	7.89	5.30	0.410	26.0	9.49	1.20	1.34	0.490
1_18_4_126	MW-08	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-12-01 to 2024-04-07	Gamma; Lognormal; Normal	Normal	535	530	440	630	56.5	0.106	0.103	-0.299
1_18_5_101	MW-08	Appendix IV	Antimony	mg/L	11	5	45%	2022-12-01 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000127	0.000100	0.0000540	0.000280	0.0000633	0.498	1.66	2.75
1_18_5_102	MW-08	Appendix IV	Arsenic	mg/L	11	0	0%	2022-12-01 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.0334	0.0380	0.00690	0.0500	0.0152	0.454	-0.671	-0.844
1_18_5_103	MW-08	Appendix IV	Barium	mg/L	11	0	0%	2022-12-01 to 2024-04-07	Gamma; Lognormal; Normal	Normal	1.22	1.20	0.980	1.50	0.169	0.139	0.235	-0.910
1_18_5_104	MW-08	Appendix IV	Beryllium	mg/L	11	11	100%	2022-12-01 to 2024-04-07		Nonparametric	0.0000520	0.0000520	0.0000520	0.0000520	0	0	NA	NA
1_18_5_106	MW-08	Appendix IV	Cadmium	mg/L	11	11	100%	2022-12-01 to 2024-04-07		Nonparametric	0.0000555	0.0000750	0.0000320	0.0000750	0.0000225	0.405	-0.213	-2.44
1_18_5_109	MW-08	Appendix IV	Chromium, Total	mg/L	11	0	0%	2022-12-01 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000910	0.000870	0.000610	0.00150	0.000254	0.279	1.23	1.90
1_18_5_110	MW-08	Appendix IV	Cobalt	mg/L	11	0	0%	2022-12-01 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000495	0.000510	0.000340	0.000700	0.000132	0.267	0.0118	-1.62
1_18_5_113	MW-08	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	2022-12-01 to 2024-04-07	Normal	Normal	0.921	1.00	0.400	1.30	0.290	0.315	-0.749	-0.602
1_18_5_115	MW-08	Appendix IV	Lead	mg/L	11	8	73%	2022-12-01 to 2024-04-07		Nonparametric	0.000214	0.000110	0.000100	0.000860	0.000222	1.04	2.92	9.06
1_18_5_116	MW-08	Appendix IV	Lithium	mg/L	11	0	0%	2022-12-01 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.109	0.110	0.0630	0.140	0.0244	0.225	-0.488	-0.215
1_18_5_117	MW-08	Appendix IV	Mercury	mg/L	11	11	100%	2022-12-01 to 2024-04-07		Nonparametric	0.000160	0.000160	0.000160	0.000160	0	0	NA	NA
1_18_5_118	MW-08	Appendix IV	Molybdenum	mg/L	11	0	0%	2022-12-01 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.00147	0.00160	0.000360	0.00280	0.000799	0.543	0.0186	-0.881
1_18_5_121	MW-08	Appendix IV	Radium 226 and 228	pCi/L	11	3	27%	2022-12-01 to 2024-04-07	Gamma; Lognormal; Normal	Normal	1.15	1.13	0.606	2.10	0.434	0.378	1.06	1.07
1_18_5_122	MW-08	Appendix IV	Selenium	mg/L	11	5	45%	2022-12-01 to 2024-04-07	Nonparametric	Nonparametric	0.000195	0.000220	0.000120	0.000340	0.0000625	0.320	1.09	1.78
1_18_5_125	MW-08	Appendix IV	Thallium	mg/L	11	11	100%	2022-12-01 to 2024-04-07		Nonparametric	0.0000750	0.0000750	0.0000750	0.0000750	0	0	NA	NA
1_18_6_111	MW-08	Part 115	Copper	mg/L	11	5	45%	2022-12-01 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000275	0.000210	0.000200	0.000450	0.0000987	0.358	0.920	-0.833
1_18_6_114	MW-08	Part 115	Iron	mg/L	11	0	0%	2022-12-01 to 2024-04-07	Gamma; Lognormal; Normal	Normal	21.1	21.0	13.0	32.0	5.72	0.271	0.774	0.350
1_18_6_119	MW-08	Part 115	Nickel	mg/L	11	0	0%	2022-12-01 to 2024-04-07	Lognormal	Lognormal	0.00145	0.00110	0.000850	0.00320	0.000751	0.517	1.81	2.39
1_18_6_123	MW-08	Part 115	Silver	mg/L	11	11	100%	2022-12-01 to 2024-04-07		Nonparametric	0.0000500	0.0000500	0.0000500	0.0000500	0	0	NA	NA
1_18_6_129	MW-08	Part 115	Vanadium	mg/L	11	11	100%	2022-12-01 to 2024-04-07		Nonparametric	0.000620	0.000620	0.000620	0.000620	0	0	NA	NA
1_18_6_130	MW-08	Part 115	Zinc	mg/L	11	3	27%	2022-12-01 to 2024-04-07	Nonparametric	Nonparametric	0.0173	0.00170	0.00120	0.120	0.0375	2.17	2.55	6.37

(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_26_4_105	MW-16	Appendix III	Boron	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.220	0.220	0.220	0.220	NA	NA	NA	NA
1_26_4_107	MW-16	Appendix III	Calcium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	190	190	190	190	NA	NA	NA	NA
1_26_4_108	MW-16	Appendix III	Chloride (as Cl)	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	14.0	14.0	14.0	14.0	NA	NA	NA	NA
1_26_4_112	MW-16	Appendix III	Fluoride	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.140	0.140	0.140	0.140	NA	NA	NA	NA
1_26_4_120	MW-16	Appendix III	pH (field)	su	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	7.29	7.29	7.29	7.29	NA	NA	NA	NA
1_26_4_124	MW-16	Appendix III	Sulfate (as SO4)	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	60.0	60.0	60.0	60.0	NA	NA	NA	NA
1_26_4_126	MW-16	Appendix III	Total Dissolved Solids	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	680	680	680	680	NA	NA	NA	NA
1_26_5_101	MW-16	Appendix IV	Antimony	mg/L	1	1	100%	2024-04-08 to 2024-04-08		Nonparametric	0.000100	0.000100	0.000100	0.000100	NA	NA	NA	NA
1_26_5_102	MW-16	Appendix IV	Arsenic	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00520	0.00520	0.00520	0.00520	NA	NA	NA	NA
1_26_5_103	MW-16	Appendix IV	Barium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.180	0.180	0.180	0.180	NA	NA	NA	NA
1_26_5_104	MW-16	Appendix IV	Beryllium	mg/L	1	1	100%	2024-04-08 to 2024-04-08		Nonparametric	0.0000520	0.0000520	0.0000520	0.0000520	NA	NA	NA	NA
1_26_5_106	MW-16	Appendix IV	Cadmium	mg/L	1	1	100%	2024-04-08 to 2024-04-08		Nonparametric	0.0000750	0.0000750	0.0000750	0.0000750	NA	NA	NA	NA
1_26_5_109	MW-16	Appendix IV	Chromium, Total	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000640	0.000640	0.000640	0.000640	NA	NA	NA	NA
1_26_5_110	MW-16	Appendix IV	Cobalt	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000210	0.000210	0.000210	0.000210	NA	NA	NA	NA
1_26_5_113	MW-16	Appendix IV	Fluoride (App IV)	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.140	0.140	0.140	0.140	NA	NA	NA	NA
1_26_5_115	MW-16	Appendix IV	Lead	mg/L	1	1	100%	2024-04-08 to 2024-04-08		Nonparametric	0.000100	0.000100	0.000100	0.000100	NA	NA	NA	NA
1_26_5_116	MW-16	Appendix IV	Lithium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.0160	0.0160	0.0160	0.0160	NA	NA	NA	NA
1_26_5_117	MW-16	Appendix IV	Mercury	mg/L	1	1	100%	2024-04-08 to 2024-04-08		Nonparametric	0.000160	0.000160	0.000160	0.000160	NA	NA	NA	NA
1_26_5_118	MW-16	Appendix IV	Molybdenum	mg/L	1	1	100%	2024-04-08 to 2024-04-08		Nonparametric	0.000250	0.000250	0.000250	0.000250	NA	NA	NA	NA
1_26_5_121	MW-16	Appendix IV	Radium 226 and 228	pCi/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.644	0.644	0.644	0.644	NA	NA	NA	NA
1_26_5_122	MW-16	Appendix IV	Selenium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000120	0.000120	0.000120	0.000120	NA	NA	NA	NA
1_26_5_125	MW-16	Appendix IV	Thallium	mg/L	1	1	100%	2024-04-08 to 2024-04-08		Nonparametric	0.0000750	0.0000750	0.0000750	0.0000750	NA	NA	NA	NA
1_26_6_111	MW-16	Part 115	Copper	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000250	0.000250	0.000250	0.000250	NA	NA	NA	NA
1_26_6_114	MW-16	Part 115	Iron	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	7.10	7.10	7.10	7.10	NA	NA	NA	NA
1_26_6_119	MW-16	Part 115	Nickel	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000650	0.000650	0.000650	0.000650	NA	NA	NA	NA
1_26_6_123	MW-16	Part 115	Silver	mg/L	1	1	100%	2024-04-08 to 2024-04-08		Nonparametric	0.0000500	0.0000500	0.0000500	0.0000500	NA	NA	NA	NA
1_26_6_129	MW-16	Part 115	Vanadium	mg/L	1	1	100%	2024-04-08 to 2024-04-08		Nonparametric	0.000620	0.000620	0.000620	0.000620	NA	NA	NA	NA
1_26_6_130	MW-16	Part 115	Zinc	mg/L	1	1	100%	2024-04-08 to 2024-04-08		Nonparametric	0.00120	0.00120	0.00120	0.00120	NA	NA	NA	NA
1_27_4_105	MW-17	Appendix III	Boron	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.790	0.790	0.790	0.790	NA	NA	NA	NA
1_27_4_107	MW-17	Appendix III	Calcium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	160	160	160	160	NA	NA	NA	NA
1_27_4_108	MW-17	Appendix III	Chloride (as Cl)	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	43.0	43.0	43.0	43.0	NA	NA	NA	NA
1_27_4_112	MW-17	Appendix III	Fluoride	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.480	0.480	0.480	0.480	NA	NA	NA	NA
1_27_4_120	MW-17	Appendix III	pH (field)	su	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	7.88	7.88	7.88	7.88	NA	NA	NA	NA
1_27_4_124	MW-17	Appendix III	Sulfate (as SO4)	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	4.80	4.80	4.80	4.80	NA	NA	NA	NA
1_27_4_126	MW-17	Appendix III	Total Dissolved Solids	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	620	620	620	620	NA	NA	NA	NA
1_27_5_101	MW-17	Appendix IV	Antimony	mg/L	1	1	100%	2024-04-08 to 2024-04-08		Nonparametric	0.000100	0.000100	0.000100	0.000100	NA	NA	NA	NA
1_27_5_102	MW-17	Appendix IV	Arsenic	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00180	0.00180	0.00180	0.00180	NA	NA	NA	NA
1_27_5_103	MW-17	Appendix IV	Barium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.700	0.700	0.700	0.700	NA	NA	NA	NA
1_27_5_104	MW-17	Appendix IV	Beryllium	mg/L	1	1	100%	2024-04-08 to 2024-04-08		Nonparametric	0.0000520	0.0000520	0.0000520	0.0000520	NA	NA	NA	NA
1_27_5_106	MW-17	Appendix IV	Cadmium	mg/L	1	1	100%	2024-04-08 to 2024-04-08		Nonparametric	0.0000750	0.0000750	0.0000750	0.0000750	NA	NA	NA	NA
1_27_5_109	MW-17	Appendix IV	Chromium, Total	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000760	0.000760	0.000760	0.000760	NA	NA	NA	NA
1_27_5_110	MW-17	Appendix IV	Cobalt	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000330	0.000330	0.000330	0.000330	NA	NA	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_27_5_113	MW-17	Appendix IV	Fluoride (App IV)	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.480	0.480	0.480	0.480	NA	NA	NA	NA
1_27_5_115	MW-17	Appendix IV	Lead	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000190	0.000190	0.000190	0.000190	NA	NA	NA	NA
1_27_5_116	MW-17	Appendix IV	Lithium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.0350	0.0350	0.0350	0.0350	NA	NA	NA	NA
1_27_5_117	MW-17	Appendix IV	Mercury	mg/L	1	1	100%	2024-04-08 to 2024-04-08		Nonparametric	0.000160	0.000160	0.000160	0.000160	NA	NA	NA	NA
1_27_5_118	MW-17	Appendix IV	Molybdenum	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000790	0.000790	0.000790	0.000790	NA	NA	NA	NA
1_27_5_121	MW-17	Appendix IV	Radium 226 and 228	pCi/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.571	0.571	0.571	0.571	NA	NA	NA	NA
1_27_5_122	MW-17	Appendix IV	Selenium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000140	0.000140	0.000140	0.000140	NA	NA	NA	NA
1_27_5_125	MW-17	Appendix IV	Thallium	mg/L	1	1	100%	2024-04-08 to 2024-04-08		Nonparametric	0.0000750	0.0000750	0.0000750	0.0000750	NA	NA	NA	NA
1_27_6_111	MW-17	Part 115	Copper	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000880	0.000880	0.000880	0.000880	NA	NA	NA	NA
1_27_6_114	MW-17	Part 115	Iron	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	6.60	6.60	6.60	6.60	NA	NA	NA	NA
1_27_6_119	MW-17	Part 115	Nickel	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00110	0.00110	0.00110	0.00110	NA	NA	NA	NA
1_27_6_123	MW-17	Part 115	Silver	mg/L	1	1	100%	2024-04-08 to 2024-04-08		Nonparametric	0.0000500	0.0000500	0.0000500	0.0000500	NA	NA	NA	NA
1_27_6_129	MW-17	Part 115	Vanadium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000840	0.000840	0.000840	0.000840	NA	NA	NA	NA
1_27_6_130	MW-17	Part 115	Zinc	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00260	0.00260	0.00260	0.00260	NA	NA	NA	NA
1_28_4_105	MW-18	Appendix III	Boron	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal; Normal	Normal	2.57	2.30	1.80	4.00	0.690	0.268	1.02	0.379
1_28_4_107	MW-18	Appendix III	Calcium	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal; Normal	Normal	341	350	240	450	65.6	0.193	-0.180	-0.564
1_28_4_108	MW-18	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal; Normal	Normal	22.1	22.0	16.0	28.0	4.18	0.189	-0.188	-1.17
1_28_4_112	MW-18	Appendix III	Fluoride	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal; Normal	Normal	3.81	3.80	2.70	5.10	0.659	0.173	0.454	0.441
1_28_4_120	MW-18	Appendix III	pH (field)	su	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal; Normal	Normal	7.16	7.16	7.02	7.27	0.0751	0.0105	-0.571	0.148
1_28_4_124	MW-18	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal; Normal	Normal	819	780	480	1200	225	0.275	0.672	-0.0357
1_28_4_126	MW-18	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal; Normal	Normal	1418	1400	1100	1800	214	0.151	0.389	-0.343
1_28_5_101	MW-18	Appendix IV	Antimony	mg/L	11	3	27%	2022-11-30 to 2024-04-10	Nonparametric	Nonparametric	0.000231	0.000140	0.000100	0.000500	0.000152	0.657	1.12	-0.215
1_28_5_102	MW-18	Appendix IV	Arsenic	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.0255	0.0240	0.0150	0.0410	0.00713	0.280	0.776	1.10
1_28_5_103	MW-18	Appendix IV	Barium	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.0185	0.0180	0.0120	0.0250	0.00487	0.264	0.0564	-1.88
1_28_5_104	MW-18	Appendix IV	Beryllium	mg/L	11	10	91%	2022-11-30 to 2024-04-10		Nonparametric	0.0000526	0.0000520	0.0000520	0.0000590	0.00000211	0.0401	3.32	11.0
1_28_5_106	MW-18	Appendix IV	Cadmium	mg/L	11	4	36%	2022-11-30 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.000218	0.000180	0.0000750	0.000440	0.000124	0.567	0.515	-0.762
1_28_5_109	MW-18	Appendix IV	Chromium, Total	mg/L	11	10	91%	2022-11-30 to 2024-04-10		Nonparametric	0.000195	0.000200	0.000180	0.000250	0.0000207	0.106	2.0	5.01
1_28_5_110	MW-18	Appendix IV	Cobalt	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal	Gamma	0.00316	0.00230	0.00170	0.00600	0.00154	0.486	0.967	-0.604
1_28_5_113	MW-18	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal; Normal	Normal	3.81	3.80	2.70	5.10	0.659	0.173	0.454	0.441
1_28_5_115	MW-18	Appendix IV	Lead	mg/L	11	8	73%	2022-11-30 to 2024-04-10		Nonparametric	0.000336	0.000220	0.000100	0.00110	0.000286	0.850	2.21	5.39
1_28_5_116	MW-18	Appendix IV	Lithium	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.0338	0.0300	0.0200	0.0450	0.00857	0.253	-0.0392	-1.51
1_28_5_117	MW-18	Appendix IV	Mercury	mg/L	11	11	100%	2022-11-30 to 2024-04-10		Nonparametric	0.000160	0.000160	0.000160	0.000160	0	0	NA	NA
1_28_5_118	MW-18	Appendix IV	Molybdenum	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.0142	0.0130	0.00900	0.0210	0.00400	0.282	0.780	-0.713
1_28_5_121	MW-18	Appendix IV	Radium 226 and 228	pCi/L	11	7	64%	2022-11-30 to 2024-04-10		Nonparametric	0.675	0.618	0.462	1.27	0.231	0.342	1.92	4.31
1_28_5_122	MW-18	Appendix IV	Selenium	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.000657	0.000410	0.000160	0.00200	0.000565	0.859	1.46	2.23
1_28_5_125	MW-18	Appendix IV	Thallium	mg/L	11	11	100%	2022-11-30 to 2024-04-10		Nonparametric	0.000158	0.0000750	0.0000750	0.000380	0.000142	0.901	1.19	-0.764
1_28_6_111	MW-18	Part 115	Copper	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Lognormal	Lognormal	0.000595	0.000470	0.000330	0.00150	0.000333	0.560	2.39	6.00
1_28_6_114	MW-18	Part 115	Iron	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal; Normal	Normal	6.62	6.80	4.30	10.0	1.71	0.258	0.633	-0.0269
1_28_6_119	MW-18	Part 115	Nickel	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal	Gamma	0.00699	0.00560	0.00470	0.0110	0.00246	0.351	0.822	-0.955
1_28_6_123	MW-18	Part 115	Silver	mg/L	11	11	100%	2022-11-30 to 2024-04-10		Nonparametric	0.000105	0.0000500	0.0000500	0.000250	0.0000934	0.894	1.19	-0.764
1_28_6_129	MW-18	Part 115	Vanadium	mg/L	11	11	100%	2022-11-30 to 2024-04-10		Nonparametric	0.000620	0.000620	0.000620	0.000620	0	0	NA	NA
1_28_6_130	MW-18	Part 115	Zinc	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.0540	0.0540	0.0280	0.0880	0.0181	0.336	0.446	-0.505

(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_29_4_105	MW-19	Appendix III	Boron	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	1.98	1.90	1.50	2.60	0.400	0.202	0.428	-1.03
1_29_4_107	MW-19	Appendix III	Calcium	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	481	480	360	550	50.1	0.104	-1.27	2.96
1_29_4_108	MW-19	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	47.3	42.0	23.0	75.0	15.3	0.323	0.523	-0.256
1_29_4_112	MW-19	Appendix III	Fluoride	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	1.91	1.90	1.50	2.30	0.255	0.133	0.00953	-0.819
1_29_4_120	MW-19	Appendix III	pH (field)	su	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	6.86	6.90	6.39	7.07	0.180	0.0263	-1.88	4.69
1_29_4_124	MW-19	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	1030	1100	600	1300	217	0.210	-0.655	0.0111
1_29_4_126	MW-19	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	1936	2000	1600	2200	234	0.121	-0.307	-1.44
1_29_5_101	MW-19	Appendix IV	Antimony	mg/L	11	10	91%	2022-11-30 to 2024-04-08		Nonparametric	0.000229	0.000100	0.0000500	0.000720	0.000235	1.02	1.25	0.243
1_29_5_102	MW-19	Appendix IV	Arsenic	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00505	0.00550	0.00260	0.00730	0.00164	0.325	-0.165	-1.41
1_29_5_103	MW-19	Appendix IV	Barium	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.0401	0.0400	0.0300	0.0500	0.00609	0.152	0.102	-0.758
1_29_5_104	MW-19	Appendix IV	Beryllium	mg/L	11	3	27%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.0000851	0.0000710	0.0000520	0.000260	0.0000592	0.696	3.07	9.83
1_29_5_106	MW-19	Appendix IV	Cadmium	mg/L	11	11	100%	2022-11-30 to 2024-04-08		Nonparametric	0.000134	0.0000750	0.0000320	0.000380	0.000129	0.965	1.45	0.850
1_29_5_109	MW-19	Appendix IV	Chromium, Total	mg/L	11	5	45%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.000335	0.000270	0.000180	0.000880	0.000207	0.619	2.17	4.96
1_29_5_110	MW-19	Appendix IV	Cobalt	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.000524	0.000460	0.000130	0.000960	0.000241	0.460	0.181	-0.134
1_29_5_113	MW-19	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	1.91	1.90	1.50	2.30	0.255	0.133	0.00953	-0.819
1_29_5_115	MW-19	Appendix IV	Lead	mg/L	11	11	100%	2022-11-30 to 2024-04-08		Nonparametric	0.000467	0.000220	0.000100	0.00110	0.000432	0.924	0.807	-1.21
1_29_5_116	MW-19	Appendix IV	Lithium	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.0925	0.0900	0.0730	0.110	0.0124	0.134	-0.168	-0.593
1_29_5_117	MW-19	Appendix IV	Mercury	mg/L	11	11	100%	2022-11-30 to 2024-04-08		Nonparametric	0.000160	0.000160	0.000160	0.000160	0	0	NA	NA
1_29_5_118	MW-19	Appendix IV	Molybdenum	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Normal	Normal	0.00976	0.0100	0.00390	0.0130	0.00293	0.300	-1.07	0.569
1_29_5_121	MW-19	Appendix IV	Radium 226 and 228	pCi/L	11	3	27%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.826	0.904	0.514	1.17	0.260	0.314	0.0271	-2.01
1_29_5_122	MW-19	Appendix IV	Selenium	mg/L	11	10	91%	2022-11-30 to 2024-04-08		Nonparametric	0.000236	0.000120	0.000100	0.00110	0.000292	1.24	3.09	9.88
1_29_5_125	MW-19	Appendix IV	Thallium	mg/L	11	11	100%	2022-11-30 to 2024-04-08		Nonparametric	0.000214	0.0000750	0.0000750	0.000380	0.000159	0.746	0.213	-2.44
1_29_6_111	MW-19	Part 115	Copper	mg/L	11	10	91%	2022-11-30 to 2024-04-08		Nonparametric	0.000275	0.000200	0.000200	0.00100	0.000241	0.877	3.31	11
1_29_6_114	MW-19	Part 115	Iron	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	16.3	16.0	12.0	24.0	3.47	0.213	1.07	1.34
1_29_6_119	MW-19	Part 115	Nickel	mg/L	11	1	9%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00195	0.00170	0.00110	0.00320	0.000729	0.373	0.375	-1.33
1_29_6_123	MW-19	Part 115	Silver	mg/L	11	11	100%	2022-11-30 to 2024-04-08		Nonparametric	0.000123	0.0000500	0.0000500	0.000250	0.000101	0.822	0.661	-1.96
1_29_6_129	MW-19	Part 115	Vanadium	mg/L	11	11	100%	2022-11-30 to 2024-04-08		Nonparametric	0.000845	0.000620	0.000620	0.00310	0.000748	0.884	3.32	11.0
1_29_6_130	MW-19	Part 115	Zinc	mg/L	11	9	82%	2022-11-30 to 2024-04-08		Nonparametric	0.00200	0.00120	0.00120	0.00590	0.00159	0.795	2.01	3.25
1_30_4_105	MW-20	Appendix III	Boron	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.920	0.870	0.720	1.10	0.152	0.165	0.268	-1.80
1_30_4_107	MW-20	Appendix III	Calcium	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Normal	Normal	125	130	58.0	170	27.1	0.216	-1.30	4.22
1_30_4_108	MW-20	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	69.7	70.0	41.0	92.0	13.7	0.197	-0.361	1.31
1_30_4_112	MW-20	Appendix III	Fluoride	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Nonparametric	Nonparametric	0.266	0.240	0.210	0.550	0.0963	0.361	3.05	9.72
1_30_4_120	MW-20	Appendix III	pH (field)	su	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	7.34	7.33	7.14	7.50	0.122	0.0165	-0.326	-1.31
1_30_4_124	MW-20	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	66.6	76.0	19.0	120	32.8	0.493	0.114	-0.950
1_30_4_126	MW-20	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	688	660	570	840	74.7	0.109	0.733	0.601
1_30_5_101	MW-20	Appendix IV	Antimony	mg/L	11	4	36%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.0000989	0.000100	0.0000540	0.000160	0.0000317	0.320	0.471	0.197
1_30_5_102	MW-20	Appendix IV	Arsenic	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00139	0.00130	0.00110	0.00170	0.000217	0.156	0.286	-1.52
1_30_5_103	MW-20	Appendix IV	Barium	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.495	0.450	0.310	0.940	0.167	0.339	2.10	5.40
1_30_5_104	MW-20	Appendix IV	Beryllium	mg/L	11	10	91%	2022-11-30 to 2024-04-08		Nonparametric	0.0000526	0.0000520	0.0000520	0.0000590	0.00000211	0.0401	3.32	11.0
1_30_5_106	MW-20	Appendix IV	Cadmium	mg/L	11	11	100%	2022-11-30 to 2024-04-08		Nonparametric	0.0000555	0.0000750	0.0000320	0.0000750	0.0000225	0.405	-0.213	-2.44
1_30_5_109	MW-20	Appendix IV	Chromium, Total	mg/L	11	5	45%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.000218	0.000200	0.000180	0.000290	0.0000340	0.156	1.16	0.479
1_30_5_110	MW-20	Appendix IV	Cobalt	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00129	0.00130	0.000950	0.00160	0.000210	0.163	0.0948	-0.755

(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_5_113	MW-20	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Nonparametric	Nonparametric	0.266	0.240	0.210	0.550	0.0963	0.361	3.05	9.72
1_30_5_115	MW-20	Appendix IV	Lead	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00198	0.00180	0.00130	0.00280	0.000540	0.272	0.392	-1.32
1_30_5_116	MW-20	Appendix IV	Lithium	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.0618	0.0620	0.0290	0.0830	0.0153	0.248	-0.719	0.832
1_30_5_117	MW-20	Appendix IV	Mercury	mg/L	11	11	100%	2022-11-30 to 2024-04-08		Nonparametric	0.000160	0.000160	0.000160	0.000160	0	0	NA	NA
1_30_5_118	MW-20	Appendix IV	Molybdenum	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00425	0.00410	0.00330	0.00510	0.000573	0.135	-0.113	-1.12
1_30_5_121	MW-20	Appendix IV	Radium 226 and 228	pCi/L	11	6	55%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Nonparametric	0.742	0.591	0.467	1.47	0.306	0.412	1.59	2.28
1_30_5_122	MW-20	Appendix IV	Selenium	mg/L	11	5	45%	2022-11-30 to 2024-04-08	Nonparametric	Nonparametric	0.000176	0.000220	0.000100	0.000260	0.0000595	0.338	-0.132	-1.99
1_30_5_125	MW-20	Appendix IV	Thallium	mg/L	11	10	91%	2022-11-30 to 2024-04-08		Nonparametric	0.0000782	0.0000750	0.0000750	0.000110	0.0000106	0.135	3.32	11.0
1_30_6_111	MW-20	Part 115	Copper	mg/L	11	1	9%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.000310	0.000290	0.000200	0.000530	0.0000973	0.314	1.15	1.33
1_30_6_114	MW-20	Part 115	Iron	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	19.5	19.0	16.0	22.0	1.92	0.0985	-0.176	-0.750
1_30_6_119	MW-20	Part 115	Nickel	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Normal	Normal	0.00856	0.00910	0.00610	0.00990	0.00131	0.153	-0.947	-0.434
1_30_6_123	MW-20	Part 115	Silver	mg/L	11	11	100%	2022-11-30 to 2024-04-08		Nonparametric	0.0000500	0.0000500	0.0000500	0.0000500	0	0	NA	NA
1_30_6_129	MW-20	Part 115	Vanadium	mg/L	11	11	100%	2022-11-30 to 2024-04-08		Nonparametric	0.000620	0.000620	0.000620	0.000620	0	0	NA	NA
1_30_6_130	MW-20	Part 115	Zinc	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Nonparametric	Nonparametric	0.0326	0.0280	0.0160	0.0710	0.0169	0.517	1.78	2.24
1_38_4_105	MW-28	Appendix III	Boron	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	2.20	2.20	2.20	2.20	NA	NA	NA	NA
1_38_4_107	MW-28	Appendix III	Calcium	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	170	170	170	170	NA	NA	NA	NA
1_38_4_108	MW-28	Appendix III	Chloride (as Cl)	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	18.0	18.0	18.0	18.0	NA	NA	NA	NA
1_38_4_112	MW-28	Appendix III	Fluoride	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.900	0.900	0.900	0.900	NA	NA	NA	NA
1_38_4_120	MW-28	Appendix III	pH (field)	su	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	7.02	7.02	7.02	7.02	NA	NA	NA	NA
1_38_4_124	MW-28	Appendix III	Sulfate (as SO4)	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	11.0	11.0	11.0	11.0	NA	NA	NA	NA
1_38_4_126	MW-28	Appendix III	Total Dissolved Solids	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	610	610	610	610	NA	NA	NA	NA
1_38_5_101	MW-28	Appendix IV	Antimony	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.000280	0.000280	0.000280	0.000280	NA	NA	NA	NA
1_38_5_102	MW-28	Appendix IV	Arsenic	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.00110	0.00110	0.00110	0.00110	NA	NA	NA	NA
1_38_5_103	MW-28	Appendix IV	Barium	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.340	0.340	0.340	0.340	NA	NA	NA	NA
1_38_5_104	MW-28	Appendix IV	Beryllium	mg/L	1	1	100%	2024-04-07 to 2024-04-07		Nonparametric	0.0000520	0.0000520	0.0000520	0.0000520	NA	NA	NA	NA
1_38_5_106	MW-28	Appendix IV	Cadmium	mg/L	1	1	100%	2024-04-07 to 2024-04-07		Nonparametric	0.0000750	0.0000750	0.0000750	0.0000750	NA	NA	NA	NA
1_38_5_109	MW-28	Appendix IV	Chromium, Total	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.0170	0.0170	0.0170	0.0170	NA	NA	NA	NA
1_38_5_110	MW-28	Appendix IV	Cobalt	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.000640	0.000640	0.000640	0.000640	NA	NA	NA	NA
1_38_5_113	MW-28	Appendix IV	Fluoride (App IV)	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.900	0.900	0.900	0.900	NA	NA	NA	NA
1_38_5_115	MW-28	Appendix IV	Lead	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.00110	0.00110	0.00110	0.00110	NA	NA	NA	NA
1_38_5_116	MW-28	Appendix IV	Lithium	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.0500	0.0500	0.0500	0.0500	NA	NA	NA	NA
1_38_5_117	MW-28	Appendix IV	Mercury	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.000240	0.000240	0.000240	0.000240	NA	NA	NA	NA
1_38_5_118	MW-28	Appendix IV	Molybdenum	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.000870	0.000870	0.000870	0.000870	NA	NA	NA	NA
1_38_5_121	MW-28	Appendix IV	Radium 226 and 228	pCi/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.842	0.842	0.842	0.842	NA	NA	NA	NA
1_38_5_122	MW-28	Appendix IV	Selenium	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.000320	0.000320	0.000320	0.000320	NA	NA	NA	NA
1_38_5_125	MW-28	Appendix IV	Thallium	mg/L	1	1	100%	2024-04-07 to 2024-04-07		Nonparametric	0.0000750	0.0000750	0.0000750	0.0000750	NA	NA	NA	NA
1_38_6_111	MW-28	Part 115	Copper	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.000520	0.000520	0.000520	0.000520	NA	NA	NA	NA
1_38_6_114	MW-28	Part 115	Iron	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	30.0	30.0	30.0	30.0	NA	NA	NA	NA
1_38_6_119	MW-28	Part 115	Nickel	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.00360	0.00360	0.00360	0.00360	NA	NA	NA	NA
1_38_6_123	MW-28	Part 115	Silver	mg/L	1	1	100%	2024-04-07 to 2024-04-07		Nonparametric	0.0000500	0.0000500	0.0000500	0.0000500	NA	NA	NA	NA
1_38_6_129	MW-28	Part 115	Vanadium	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.000630	0.000630	0.000630	0.000630	NA	NA	NA	NA
1_38_6_130	MW-28	Part 115	Zinc	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.00900	0.00900	0.00900	0.00900	NA	NA	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_40_4_105	MW-30	Appendix III	Boron	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal	Gamma	2.04	1.90	1.60	3.50	0.520	0.255	2.57	7.50
1_40_4_107	MW-30	Appendix III	Calcium	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Nonparametric	Nonparametric	490	460	390	960	159	0.324	3.11	10.0
1_40_4_108	MW-30	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	130	110	82.0	190	41.5	0.321	0.757	-1.17
1_40_4_112	MW-30	Appendix III	Fluoride	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	1.12	1.10	0.910	1.40	0.131	0.117	0.607	1.20
1_40_4_120	MW-30	Appendix III	pH (field)	su	11	0	0%	2022-11-30 to 2024-04-07	Nonparametric	Nonparametric	7.07	7.16	6.48	7.25	0.215	0.0304	-2.48	6.74
1_40_4_124	MW-30	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	871	860	610	1000	114	0.130	-1.14	1.63
1_40_4_126	MW-30	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	2218	2200	1800	2800	252	0.114	0.892	2.58
1_40_5_101	MW-30	Appendix IV	Antimony	mg/L	11	10	91%	2022-11-30 to 2024-04-07		Nonparametric	0.000236	0.000100	0.0000500	0.000500	0.000199	0.841	0.502	-1.84
1_40_5_102	MW-30	Appendix IV	Arsenic	mg/L	11	2	18%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000386	0.000430	0.000100	0.000700	0.000195	0.504	-0.0336	-0.798
1_40_5_103	MW-30	Appendix IV	Barium	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.0663	0.0580	0.0450	0.100	0.0208	0.314	0.829	-0.854
1_40_5_104	MW-30	Appendix IV	Beryllium	mg/L	11	9	82%	2022-11-30 to 2024-04-07		Nonparametric	0.0000763	0.0000520	0.0000520	0.000260	0.0000634	0.831	2.94	8.84
1_40_5_106	MW-30	Appendix IV	Cadmium	mg/L	11	11	100%	2022-11-30 to 2024-04-07		Nonparametric	0.000134	0.0000750	0.0000320	0.000380	0.000129	0.965	1.45	0.850
1_40_5_109	MW-30	Appendix IV	Chromium, Total	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.00920	0.00870	0.00490	0.0140	0.00323	0.351	0.0752	-1.46
1_40_5_110	MW-30	Appendix IV	Cobalt	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal	Gamma	0.00148	0.00110	0.000530	0.00440	0.00115	0.776	2.05	4.14
1_40_5_113	MW-30	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	1.12	1.10	0.910	1.40	0.131	0.117	0.607	1.20
1_40_5_115	MW-30	Appendix IV	Lead	mg/L	11	11	100%	2022-11-30 to 2024-04-07		Nonparametric	0.000540	0.000500	0.000100	0.00110	0.000392	0.727	0.588	-1.14
1_40_5_116	MW-30	Appendix IV	Lithium	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal	Gamma	0.135	0.120	0.100	0.270	0.0472	0.351	2.78	8.37
1_40_5_117	MW-30	Appendix IV	Mercury	mg/L	11	10	91%	2022-11-30 to 2024-04-07		Nonparametric	0.000181	0.000160	0.000160	0.000390	0.0000693	0.383	3.32	11.0
1_40_5_118	MW-30	Appendix IV	Molybdenum	mg/L	11	3	27%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.00155	0.00110	0.000320	0.00360	0.00117	0.759	0.887	-0.874
1_40_5_121	MW-30	Appendix IV	Radium 226 and 228	pCi/L	11	6	55%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Nonparametric	0.677	0.624	0.445	0.911	0.158	0.234	0.325	-1.30
1_40_5_122	MW-30	Appendix IV	Selenium	mg/L	11	6	55%	2022-11-30 to 2024-04-07	Nonparametric	Nonparametric	0.000266	0.000220	0.000100	0.00110	0.000290	1.09	2.83	8.51
1_40_5_125	MW-30	Appendix IV	Thallium	mg/L	11	11	100%	2022-11-30 to 2024-04-07		Nonparametric	0.000269	0.000380	0.0000750	0.000380	0.000154	0.572	-0.661	-1.96
1_40_6_111	MW-30	Part 115	Copper	mg/L	11	7	64%	2022-11-30 to 2024-04-07		Nonparametric	0.000330	0.000200	0.000200	0.00100	0.000246	0.746	2.42	6.06
1_40_6_114	MW-30	Part 115	Iron	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	3.17	2.90	0.870	8.80	2.26	0.713	1.64	3.42
1_40_6_119	MW-30	Part 115	Nickel	mg/L	11	2	18%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.00206	0.00180	0.000650	0.00450	0.00134	0.650	0.830	-0.442
1_40_6_123	MW-30	Part 115	Silver	mg/L	11	11	100%	2022-11-30 to 2024-04-07		Nonparametric	0.000123	0.0000500	0.0000500	0.000250	0.000101	0.822	0.661	-1.96
1_40_6_129	MW-30	Part 115	Vanadium	mg/L	11	11	100%	2022-11-30 to 2024-04-07		Nonparametric	0.000845	0.000620	0.000620	0.00310	0.000748	0.884	3.32	11.0
1_40_6_130	MW-30	Part 115	Zinc	mg/L	11	9	82%	2022-11-30 to 2024-04-07		Nonparametric	0.00234	0.00120	0.00120	0.00590	0.00196	0.839	1.24	-0.497
1_41_4_105	MW-31	Appendix III	Boron	mg/L	11	0	0%	2022-12-01 to 2024-04-08	Gamma; Lognormal; Normal	Normal	4.46	4.50	3.60	5.40	0.546	0.122	0.0751	-0.547
1_41_4_107	MW-31	Appendix III	Calcium	mg/L	11	0	0%	2022-12-01 to 2024-04-08	Gamma; Lognormal; Normal	Normal	172	170	130	200	20.9	0.122	-0.454	0.339
1_41_4_108	MW-31	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-12-01 to 2024-04-08	Gamma; Lognormal; Normal	Normal	102	100	87.0	120	9.73	0.0956	0.410	-0.365
1_41_4_112	MW-31	Appendix III	Fluoride	mg/L	11	0	0%	2022-12-01 to 2024-04-08	Lognormal; Normal	Normal	4.79	4.70	4.50	5.20	0.243	0.0507	0.693	-1.12
1_41_4_120	MW-31	Appendix III	pH (field)	su	11	0	0%	2022-12-01 to 2024-04-08	Gamma; Lognormal; Normal	Normal	7.83	7.84	7.67	8.01	0.107	0.0137	0.402	-0.174
1_41_4_124	MW-31	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	2022-12-01 to 2024-04-08	Gamma; Lognormal; Normal	Normal	173	170	72.0	250	61.3	0.355	-0.0968	-0.971
1_41_4_126	MW-31	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-12-01 to 2024-04-08	Gamma; Lognormal; Normal	Normal	815	810	730	940	59.6	0.0730	0.659	0.550
1_41_5_101	MW-31	Appendix IV	Antimony	mg/L	11	6	55%	2022-12-01 to 2024-04-08	Gamma; Lognormal; Normal	Nonparametric	0.0000972	0.000100	0.0000500	0.000130	0.0000234	0.241	-0.699	0.347
1_41_5_102	MW-31	Appendix IV	Arsenic	mg/L	11	0	0%	2022-12-01 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00131	0.00120	0.00100	0.00180	0.000263	0.201	0.650	-0.574
1_41_5_103	MW-31	Appendix IV	Barium	mg/L	11	0	0%	2022-12-01 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.159	0.150	0.120	0.230	0.0362	0.227	0.972	-0.151
1_41_5_104	MW-31	Appendix IV	Beryllium	mg/L	11	10	91%	2022-12-01 to 2024-04-08		Nonparametric	0.0000522	0.0000520	0.0000520	0.0000540	0	0.0116	3.32	11
1_41_5_106	MW-31	Appendix IV	Cadmium	mg/L	11	10	91%	2022-12-01 to 2024-04-08		Nonparametric	0.0000563	0.0000750	0.0000320	0.0000840	0.0000234	0.416	-0.166	-2.36
1_41_5_109	MW-31	Appendix IV	Chromium, Total	mg/L	11	0	0%	2022-12-01 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00218	0.00220	0.00170	0.00290	0.000352	0.161	0.572	0.232
1_41_5_110	MW-31	Appendix IV	Cobalt	mg/L	11	1	9%	2022-12-01 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.000175	0.000180	0.000100	0.000280	0.0000470	0.269	0.824	1.90

(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_5_113	MW-31	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	2022-12-01 to 2024-04-08	Lognormal; Normal	Normal	4.79	4.70	4.50	5.20	0.243	0.0507	0.693	-1.12
1_41_5_115	MW-31	Appendix IV	Lead	mg/L	11	10	91%	2022-12-01 to 2024-04-08		Nonparametric	0.000174	0.000220	0.000100	0.000310	0.0000751	0.433	0.299	-1.20
1_41_5_116	MW-31	Appendix IV	Lithium	mg/L	11	0	0%	2022-12-01 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.0493	0.0520	0.0390	0.0560	0.00585	0.119	-0.975	-0.136
1_41_5_117	MW-31	Appendix IV	Mercury	mg/L	11	11	100%	2022-12-01 to 2024-04-08		Nonparametric	0.000160	0.000160	0.000160	0.000160	0	0	NA	NA
1_41_5_118	MW-31	Appendix IV	Molybdenum	mg/L	11	0	0%	2022-12-01 to 2024-04-08	Normal	Normal	0.00127	0.00120	0.000520	0.00210	0.000407	0.322	0.547	1.71
1_41_5_121	MW-31	Appendix IV	Radium 226 and 228	pCi/L	11	3	27%	2022-12-01 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.722	0.641	0.497	1.23	0.245	0.339	1.43	1.08
1_41_5_122	MW-31	Appendix IV	Selenium	mg/L	11	5	45%	2022-12-01 to 2024-04-08	Nonparametric	Nonparametric	0.000226	0.000220	0.000110	0.000740	0.000176	0.780	2.91	9.08
1_41_5_125	MW-31	Appendix IV	Thallium	mg/L	11	10	91%	2022-12-01 to 2024-04-08		Nonparametric	0.0000762	0.0000750	0.0000750	0.0000880	0.00000392	0.0515	3.32	11.0
1_41_6_111	MW-31	Part 115	Copper	mg/L	11	8	73%	2022-12-01 to 2024-04-08		Nonparametric	0.000231	0.000200	0.000200	0.000440	0.0000727	0.315	2.85	8.42
1_41_6_114	MW-31	Part 115	Iron	mg/L	11	0	0%	2022-12-01 to 2024-04-08	Gamma; Lognormal; Normal	Gamma	0.913	0.920	0.120	2.50	0.741	0.812	0.792	0.577
1_41_6_119	MW-31	Part 115	Nickel	mg/L	11	10	91%	2022-12-01 to 2024-04-08		Nonparametric	0.000800	0.000650	0.000650	0.00230	0.000497	0.622	3.32	11.0
1_41_6_123	MW-31	Part 115	Silver	mg/L	11	11	100%	2022-12-01 to 2024-04-08		Nonparametric	0.0000500	0.0000500	0.0000500	0.0000500	0	0	NA	NA
1_41_6_129	MW-31	Part 115	Vanadium	mg/L	11	11	100%	2022-12-01 to 2024-04-08		Nonparametric	0.000620	0.000620	0.000620	0.000620	0	0	NA	NA
1_41_6_130	MW-31	Part 115	Zinc	mg/L	11	8	73%	2022-12-01 to 2024-04-08		Nonparametric	0.00265	0.00120	0.00120	0.0100	0.00321	1.21	1.99	2.54
1_42_4_105	MW-32	Appendix III	Boron	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal	Gamma	3.37	3.10	2.60	5.00	0.678	0.201	1.49	2.42
1_42_4_107	MW-32	Appendix III	Calcium	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	179	190	130	220	25.9	0.144	-0.598	0.0467
1_42_4_108	MW-32	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	44.8	45.0	38.0	50.0	4.40	0.0982	-0.221	-1.33
1_42_4_112	MW-32	Appendix III	Fluoride	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	1.53	1.50	1.40	1.80	0.119	0.0780	1.10	1.67
1_42_4_120	MW-32	Appendix III	pH (field)	su	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	7.61	7.63	7.50	7.75	0.0819	0.0108	0.216	-1.12
1_42_4_124	MW-32	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	96.3	100	17.0	190	58.6	0.609	0.0985	-1.07
1_42_4_126	MW-32	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	711	730	550	800	84.9	0.119	-0.759	-0.591
1_42_5_101	MW-32	Appendix IV	Antimony	mg/L	11	7	64%	2022-11-30 to 2024-04-07		Nonparametric	0.000144	0.000100	0.0000500	0.000700	0.000186	1.30	3.20	10.4
1_42_5_102	MW-32	Appendix IV	Arsenic	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Nonparametric	Nonparametric	0.000698	0.000550	0.000440	0.00240	0.000568	0.814	3.24	10.6
1_42_5_103	MW-32	Appendix IV	Barium	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.463	0.410	0.0590	0.850	0.209	0.453	-0.0898	0.741
1_42_5_104	MW-32	Appendix IV	Beryllium	mg/L	11	10	91%	2022-11-30 to 2024-04-07		Nonparametric	0.0000536	0.0000520	0.0000520	0.0000700	0.00000543	0.101	3.32	11.0
1_42_5_106	MW-32	Appendix IV	Cadmium	mg/L	11	10	91%	2022-11-30 to 2024-04-07		Nonparametric	0.0000659	0.0000750	0.0000320	0.000190	0.0000464	0.705	2.10	5.45
1_42_5_109	MW-32	Appendix IV	Chromium, Total	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Lognormal	Lognormal	0.000665	0.000390	0.000310	0.00300	0.000783	1.18	3.19	10.4
1_42_5_110	MW-32	Appendix IV	Cobalt	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Nonparametric	Nonparametric	0.000539	0.000380	0.000210	0.00190	0.000469	0.870	2.90	8.91
1_42_5_113	MW-32	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	1.53	1.50	1.40	1.80	0.119	0.0780	1.10	1.67
1_42_5_115	MW-32	Appendix IV	Lead	mg/L	11	8	73%	2022-11-30 to 2024-04-07		Nonparametric	0.000185	0.000220	0.000100	0.000380	0.0000849	0.458	1.06	1.56
1_42_5_116	MW-32	Appendix IV	Lithium	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.125	0.120	0.0940	0.190	0.0292	0.234	1.08	1.11
1_42_5_117	MW-32	Appendix IV	Mercury	mg/L	11	10	91%	2022-11-30 to 2024-04-07		Nonparametric	0.000318	0.000160	0.000160	0.00190	0.000525	1.65	3.32	11.0
1_42_5_118	MW-32	Appendix IV	Molybdenum	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.00444	0.00450	0.00320	0.00730	0.00113	0.255	1.63	3.86
1_42_5_121	MW-32	Appendix IV	Radium 226 and 228	pCi/L	11	7	64%	2022-11-30 to 2024-04-07		Nonparametric	0.675	0.607	0.497	0.985	0.161	0.239	0.898	-0.481
1_42_5_122	MW-32	Appendix IV	Selenium	mg/L	11	9	82%	2022-11-30 to 2024-04-07		Nonparametric	0.000239	0.000220	0.000100	0.00100	0.000259	1.08	3.02	9.59
1_42_5_125	MW-32	Appendix IV	Thallium	mg/L	11	11	100%	2022-11-30 to 2024-04-07		Nonparametric	0.0000750	0.0000750	0.0000750	0.0000750	0	0	NA	NA
1_42_6_111	MW-32	Part 115	Copper	mg/L	11	8	73%	2022-11-30 to 2024-04-07		Nonparametric	0.00166	0.000200	0.000200	0.0160	0.00476	2.87	3.32	11
1_42_6_114	MW-32	Part 115	Iron	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	16.4	17.0	11.0	20.0	2.98	0.182	-1.07	0.285
1_42_6_119	MW-32	Part 115	Nickel	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Nonparametric	Nonparametric	0.00308	0.00120	0.000770	0.0230	0.00661	2.14	3.31	11
1_42_6_123	MW-32	Part 115	Silver	mg/L	11	11	100%	2022-11-30 to 2024-04-07		Nonparametric	0.0000500	0.0000500	0.0000500	0.0000500	0	0	NA	NA
1_42_6_129	MW-32	Part 115	Vanadium	mg/L	11	11	100%	2022-11-30 to 2024-04-07		Nonparametric	0.000620	0.000620	0.000620	0.000620	0	0	NA	NA
1_42_6_130	MW-32	Part 115	Zinc	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Nonparametric	Nonparametric	0.00804	0.00300	0.00220	0.0310	0.0111	1.39	1.90	2.00

(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_46_4_105	MW-36	Appendix III	Boron	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.280	0.280	0.280	0.280	NA	NA	NA	NA
1_46_4_107	MW-36	Appendix III	Calcium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	67.0	67.0	67.0	67.0	NA	NA	NA	NA
1_46_4_108	MW-36	Appendix III	Chloride (as Cl)	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	34.0	34.0	34.0	34.0	NA	NA	NA	NA
1_46_4_112	MW-36	Appendix III	Fluoride	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.610	0.610	0.610	0.610	NA	NA	NA	NA
1_46_4_120	MW-36	Appendix III	pH (field)	su	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	10.4	10.4	10.4	10.4	NA	NA	NA	NA
1_46_4_124	MW-36	Appendix III	Sulfate (as SO4)	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	5.70	5.70	5.70	5.70	NA	NA	NA	NA
1_46_4_126	MW-36	Appendix III	Total Dissolved Solids	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	330	330	330	330	NA	NA	NA	NA
1_46_5_101	MW-36	Appendix IV	Antimony	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000760	0.000760	0.000760	0.000760	NA	NA	NA	NA
1_46_5_102	MW-36	Appendix IV	Arsenic	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.0290	0.0290	0.0290	0.0290	NA	NA	NA	NA
1_46_5_103	MW-36	Appendix IV	Barium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.150	0.150	0.150	0.150	NA	NA	NA	NA
1_46_5_104	MW-36	Appendix IV	Beryllium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.0000590	0.0000590	0.0000590	0.0000590	NA	NA	NA	NA
1_46_5_106	MW-36	Appendix IV	Cadmium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000320	0.000320	0.000320	0.000320	NA	NA	NA	NA
1_46_5_109	MW-36	Appendix IV	Chromium, Total	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00130	0.00130	0.00130	0.00130	NA	NA	NA	NA
1_46_5_110	MW-36	Appendix IV	Cobalt	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000270	0.000270	0.000270	0.000270	NA	NA	NA	NA
1_46_5_113	MW-36	Appendix IV	Fluoride (App IV)	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.610	0.610	0.610	0.610	NA	NA	NA	NA
1_46_5_115	MW-36	Appendix IV	Lead	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.0250	0.0250	0.0250	0.0250	NA	NA	NA	NA
1_46_5_116	MW-36	Appendix IV	Lithium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00570	0.00570	0.00570	0.00570	NA	NA	NA	NA
1_46_5_117	MW-36	Appendix IV	Mercury	mg/L	1	1	100%	2024-04-08 to 2024-04-08		Nonparametric	0.000160	0.000160	0.000160	0.000160	NA	NA	NA	NA
1_46_5_118	MW-36	Appendix IV	Molybdenum	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.0190	0.0190	0.0190	0.0190	NA	NA	NA	NA
1_46_5_121	MW-36	Appendix IV	Radium 226 and 228	pCi/L	1	1	100%	2024-04-08 to 2024-04-08		Nonparametric	0.861	0.861	0.861	0.861	NA	NA	NA	NA
1_46_5_122	MW-36	Appendix IV	Selenium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000600	0.000600	0.000600	0.000600	NA	NA	NA	NA
1_46_5_125	MW-36	Appendix IV	Thallium	mg/L	1	1	100%	2024-04-08 to 2024-04-08		Nonparametric	0.0000750	0.0000750	0.0000750	0.0000750	NA	NA	NA	NA
1_46_6_111	MW-36	Part 115	Copper	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00770	0.00770	0.00770	0.00770	NA	NA	NA	NA
1_46_6_114	MW-36	Part 115	Iron	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.400	0.400	0.400	0.400	NA	NA	NA	NA
1_46_6_119	MW-36	Part 115	Nickel	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.0110	0.0110	0.0110	0.0110	NA	NA	NA	NA
1_46_6_123	MW-36	Part 115	Silver	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000210	0.000210	0.000210	0.000210	NA	NA	NA	NA
1_46_6_129	MW-36	Part 115	Vanadium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00240	0.00240	0.00240	0.00240	NA	NA	NA	NA
1_46_6_130	MW-36	Part 115	Zinc	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00880	0.00880	0.00880	0.00880	NA	NA	NA	NA
1_47_4_105	MW-37	Appendix III	Boron	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	5.20	5.20	5.20	5.20	NA	NA	NA	NA
1_47_4_107	MW-37	Appendix III	Calcium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	160	160	160	160	NA	NA	NA	NA
1_47_4_108	MW-37	Appendix III	Chloride (as Cl)	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	22.0	22.0	22.0	22.0	NA	NA	NA	NA
1_47_4_112	MW-37	Appendix III	Fluoride	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.630	0.630	0.630	0.630	NA	NA	NA	NA
1_47_4_120	MW-37	Appendix III	pH (field)	su	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	7.47	7.47	7.47	7.47	NA	NA	NA	NA
1_47_4_124	MW-37	Appendix III	Sulfate (as SO4)	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	210	210	210	210	NA	NA	NA	NA
1_47_4_126	MW-37	Appendix III	Total Dissolved Solids	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	790	790	790	790	NA	NA	NA	NA
1_47_5_101	MW-37	Appendix IV	Antimony	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000640	0.000640	0.000640	0.000640	NA	NA	NA	NA
1_47_5_102	MW-37	Appendix IV	Arsenic	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000550	0.000550	0.000550	0.000550	NA	NA	NA	NA
1_47_5_103	MW-37	Appendix IV	Barium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.0400	0.0400	0.0400	0.0400	NA	NA	NA	NA
1_47_5_104	MW-37	Appendix IV	Beryllium	mg/L	1	1	100%	2024-04-08 to 2024-04-08		Nonparametric	0.0000520	0.0000520	0.0000520	0.0000520	NA	NA	NA	NA
1_47_5_106	MW-37	Appendix IV	Cadmium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000120	0.000120	0.000120	0.000120	NA	NA	NA	NA
1_47_5_109	MW-37	Appendix IV	Chromium, Total	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000390	0.000390	0.000390	0.000390	NA	NA	NA	NA
1_47_5_110	MW-37	Appendix IV	Cobalt	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000750	0.000750	0.000750	0.000750	NA	NA	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_47_5_113	MW-37	Appendix IV	Fluoride (App IV)	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.630	0.630	0.630	0.630	NA	NA	NA	NA
1_47_5_115	MW-37	Appendix IV	Lead	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000170	0.000170	0.000170	0.000170	NA	NA	NA	NA
1_47_5_116	MW-37	Appendix IV	Lithium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.0200	0.0200	0.0200	0.0200	NA	NA	NA	NA
1_47_5_117	MW-37	Appendix IV	Mercury	mg/L	1	1	100%	2024-04-08 to 2024-04-08		Nonparametric	0.000160	0.000160	0.000160	0.000160	NA	NA	NA	NA
1_47_5_118	MW-37	Appendix IV	Molybdenum	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.0150	0.0150	0.0150	0.0150	NA	NA	NA	NA
1_47_5_121	MW-37	Appendix IV	Radium 226 and 228	pCi/L	1	1	100%	2024-04-08 to 2024-04-08		Nonparametric	0.569	0.569	0.569	0.569	NA	NA	NA	NA
1_47_5_122	MW-37	Appendix IV	Selenium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00460	0.00460	0.00460	0.00460	NA	NA	NA	NA
1_47_5_125	MW-37	Appendix IV	Thallium	mg/L	1	1	100%	2024-04-08 to 2024-04-08		Nonparametric	0.0000750	0.0000750	0.0000750	0.0000750	NA	NA	NA	NA
1_47_6_111	MW-37	Part 115	Copper	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.0130	0.0130	0.0130	0.0130	NA	NA	NA	NA
1_47_6_114	MW-37	Part 115	Iron	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.160	0.160	0.160	0.160	NA	NA	NA	NA
1_47_6_119	MW-37	Part 115	Nickel	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00460	0.00460	0.00460	0.00460	NA	NA	NA	NA
1_47_6_123	MW-37	Part 115	Silver	mg/L	1	1	100%	2024-04-08 to 2024-04-08		Nonparametric	0.0000500	0.0000500	0.0000500	0.0000500	NA	NA	NA	NA
1_47_6_129	MW-37	Part 115	Vanadium	mg/L	1	1	100%	2024-04-08 to 2024-04-08		Nonparametric	0.000620	0.000620	0.000620	0.000620	NA	NA	NA	NA
1_47_6_130	MW-37	Part 115	Zinc	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.0170	0.0170	0.0170	0.0170	NA	NA	NA	NA
2_11_4_105	MW-01R	Appendix III	Boron	mg/L	11	0	0%	2022-11-29 to 2024-04-10	Gamma; Lognormal; Normal	Normal	99.4	100	38.0	160	38.9	0.392	0.194	-0.969
2_11_4_107	MW-01R	Appendix III	Calcium	mg/L	11	0	0%	2022-11-29 to 2024-04-10	Gamma; Lognormal; Normal	Normal	255	240	130	400	80.7	0.316	0.225	-0.393
2_11_4_108	MW-01R	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-11-29 to 2024-04-10	Gamma; Lognormal; Normal	Normal	131	150	49.0	210	53.8	0.411	-0.453	-0.913
2_11_4_112	MW-01R	Appendix III	Fluoride	mg/L	11	0	0%	2022-11-29 to 2024-04-10	Gamma; Lognormal; Normal	Normal	10.8	10.0	4.80	15.0	3.54	0.327	-0.314	-1.37
2_11_4_120	MW-01R	Appendix III	pH (field)	su	11	0	0%	2022-11-29 to 2024-04-10	Nonparametric	Nonparametric	7.56	7.74	6.02	7.81	0.517	0.0684	-3.15	10.1
2_11_4_124	MW-01R	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	2022-11-29 to 2024-04-10	Gamma; Normal	Gamma	513	540	8.80	980	310	0.605	-0.176	-0.995
2_11_4_126	MW-01R	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-11-29 to 2024-04-10	Gamma; Lognormal; Normal	Normal	2336	2400	2100	2600	136	0.0583	0.0600	0.486
2_11_5_101	MW-01R	Appendix IV	Antimony	mg/L	11	3	27%	2022-11-29 to 2024-04-10	Gamma; Lognormal	Gamma	0.000427	0.000330	0.000170	0.00120	0.000303	0.708	1.93	3.99
2_11_5_102	MW-01R	Appendix IV	Arsenic	mg/L	11	0	0%	2022-11-29 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.00163	0.00130	0.000730	0.00410	0.000912	0.560	2.21	6.07
2_11_5_103	MW-01R	Appendix IV	Barium	mg/L	11	0	0%	2022-11-29 to 2024-04-10	Gamma; Lognormal	Gamma	0.322	0.290	0.200	0.560	0.124	0.385	1.24	0.505
2_11_5_104	MW-01R	Appendix IV	Beryllium	mg/L	11	1	9%	2022-11-29 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.000220	0.000200	0.0000520	0.000360	0.0000962	0.437	-0.0213	-0.540
2_11_5_106	MW-01R	Appendix IV	Cadmium	mg/L	11	8	73%	2022-11-29 to 2024-04-10		Nonparametric	0.000168	0.000110	0.0000320	0.000380	0.000134	0.795	0.910	-0.942
2_11_5_109	MW-01R	Appendix IV	Chromium, Total	mg/L	11	0	0%	2022-11-29 to 2024-04-10	Lognormal	Lognormal	0.00396	0.00190	0.00130	0.0220	0.00606	1.53	3.16	10.2
2_11_5_110	MW-01R	Appendix IV	Cobalt	mg/L	11	0	0%	2022-11-29 to 2024-04-10	Gamma; Lognormal	Gamma	0.00181	0.00120	0.000640	0.00450	0.00129	0.713	1.46	1.01
2_11_5_113	MW-01R	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	2022-11-29 to 2024-04-10	Gamma; Lognormal; Normal	Normal	10.8	10.0	4.80	15.0	3.54	0.327	-0.314	-1.37
2_11_5_115	MW-01R	Appendix IV	Lead	mg/L	11	2	18%	2022-11-29 to 2024-04-10	Gamma; Lognormal	Gamma	0.00134	0.00100	0.000350	0.00530	0.00137	1.02	2.85	8.74
2_11_5_116	MW-01R	Appendix IV	Lithium	mg/L	11	0	0%	2022-11-29 to 2024-04-10	Gamma; Lognormal; Normal	Normal	2.21	2.20	0.770	3.40	0.875	0.397	0.0326	-1.19
2_11_5_117	MW-01R	Appendix IV	Mercury	mg/L	11	11	100%	2022-11-29 to 2024-04-10		Nonparametric	0.000160	0.000160	0.000160	0.000160	0	0	NA	NA
2_11_5_118	MW-01R	Appendix IV	Molybdenum	mg/L	11	1	9%	2022-11-29 to 2024-04-10	Gamma; Lognormal	Gamma	0.00159	0.000820	0.000330	0.00560	0.00155	0.977	2.08	4.45
2_11_5_121	MW-01R	Appendix IV	Radium 226 and 228	pCi/L	11	6	55%	2022-11-29 to 2024-04-10	Gamma; Lognormal; Normal	Nonparametric	0.876	0.753	0.601	1.28	0.252	0.288	0.683	-1.25
2_11_5_122	MW-01R	Appendix IV	Selenium	mg/L	11	0	0%	2022-11-29 to 2024-04-10	Gamma; Lognormal	Gamma	0.000732	0.000600	0.000300	0.00180	0.000392	0.535	2.29	6.31
2_11_5_125	MW-01R	Appendix IV	Thallium	mg/L	11	11	100%	2022-11-29 to 2024-04-10		Nonparametric	0.000241	0.000380	0.0000750	0.000380	0.000159	0.660	-0.213	-2.44
2_11_6_111	MW-01R	Part 115	Copper	mg/L	11	5	45%	2022-11-29 to 2024-04-10	Gamma; Lognormal; Normal	Nonparametric	0.000418	0.000270	0.000200	0.00130	0.000375	0.898	1.90	2.58
2_11_6_114	MW-01R	Part 115	Iron	mg/L	11	0	0%	2022-11-29 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.635	0.590	0.160	1.10	0.297	0.467	-0.104	-0.658
2_11_6_119	MW-01R	Part 115	Nickel	mg/L	11	0	0%	2022-11-29 to 2024-04-10	Nonparametric	Nonparametric	0.00405	0.00210	0.00120	0.0220	0.00606	1.49	3.12	9.97
2_11_6_123	MW-01R	Part 115	Silver	mg/L	11	11	100%	2022-11-29 to 2024-04-10		Nonparametric	0.000123	0.0000500	0.0000500	0.000250	0.000101	0.822	0.661	-1.96
2_11_6_129	MW-01R	Part 115	Vanadium	mg/L	11	2	18%	2022-11-29 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.00169	0.00140	0.000620	0.00460	0.00128	0.756	1.52	1.81
2_11_6_130	MW-01R	Part 115	Zinc	mg/L	11	2	18%	2022-11-29 to 2024-04-10	Nonparametric	Nonparametric	0.00420	0.00130	0.00120	0.0140	0.00508	1.21	1.41	0.276

(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_4_105	MW-02	Appendix III	Boron	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Gamma; Lognormal; Normal	Normal	97.2	99.0	73.0	110	11.5	0.118	-0.810	0.584
2_12_4_107	MW-02	Appendix III	Calcium	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Gamma; Lognormal; Normal	Normal	205	210	180	240	18.1	0.0884	0.275	0.0390
2_12_4_108	MW-02	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Nonparametric	Nonparametric	134	140	67.0	150	23	0.171	-2.99	9.45
2_12_4_112	MW-02	Appendix III	Fluoride	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Nonparametric	Nonparametric	9.08	9.50	4.50	10.0	1.57	0.173	-2.93	9.11
2_12_4_120	MW-02	Appendix III	pH (field)	su	11	0	0%	2022-11-28 to 2024-04-10	Gamma; Lognormal; Normal	Normal	7.23	7.25	7.06	7.45	0.121	0.0167	0.240	-0.727
2_12_4_124	MW-02	Appendix III	Sulfate (as SO4)	mg/L	11	7	64%	2022-11-28 to 2024-04-10		Nonparametric	1.19	0.410	0.410	5.50	1.53	1.29	2.67	7.50
2_12_4_126	MW-02	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Gamma; Lognormal; Normal	Normal	1818	1800	1600	2100	147	0.0809	0.543	-0.117
2_12_5_101	MW-02	Appendix IV	Antimony	mg/L	11	3	27%	2022-11-28 to 2024-04-10	Gamma; Lognormal	Gamma	0.000266	0.000240	0.000100	0.000630	0.000160	0.599	1.57	1.94
2_12_5_102	MW-02	Appendix IV	Arsenic	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Nonparametric	Nonparametric	0.00782	0.00820	0.000440	0.0120	0.00278	0.355	-1.85	5.98
2_12_5_103	MW-02	Appendix IV	Barium	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.499	0.480	0.380	0.730	0.0909	0.182	1.64	4.14
2_12_5_104	MW-02	Appendix IV	Beryllium	mg/L	11	1	9%	2022-11-28 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.000285	0.000290	0.0000520	0.000520	0.000143	0.502	-0.0486	-0.697
2_12_5_106	MW-02	Appendix IV	Cadmium	mg/L	11	8	73%	2022-11-28 to 2024-04-10		Nonparametric	0.000146	0.0000750	0.0000320	0.000490	0.000151	1.03	1.72	2.00
2_12_5_109	MW-02	Appendix IV	Chromium, Total	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Gamma; Normal	Gamma	0.0383	0.0390	0.000380	0.0680	0.0199	0.520	-0.402	-0.316
2_12_5_110	MW-02	Appendix IV	Cobalt	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Normal	Normal	0.00550	0.00610	0.000240	0.00890	0.00252	0.458	-0.783	0.414
2_12_5_113	MW-02	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Nonparametric	Nonparametric	9.08	9.50	4.50	10.0	1.57	0.173	-2.93	9.11
2_12_5_115	MW-02	Appendix IV	Lead	mg/L	11	1	9%	2022-11-28 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.00257	0.00240	0.000100	0.00560	0.00154	0.599	0.447	0.285
2_12_5_116	MW-02	Appendix IV	Lithium	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Gamma; Lognormal; Normal	Normal	1.37	1.40	0.870	1.70	0.235	0.171	-0.803	0.696
2_12_5_117	MW-02	Appendix IV	Mercury	mg/L	11	11	100%	2022-11-28 to 2024-04-10		Nonparametric	0.000160	0.000160	0.000160	0.000160	0	0	NA	NA
2_12_5_118	MW-02	Appendix IV	Molybdenum	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Gamma; Lognormal	Gamma	0.00674	0.00620	0.00380	0.0110	0.00244	0.363	1.03	-0.166
2_12_5_121	MW-02	Appendix IV	Radium 226 and 228	pCi/L	11	3	27%	2022-11-28 to 2024-04-10	Gamma; Lognormal; Normal	Normal	1.73	1.67	0.686	3.35	0.882	0.509	0.505	-0.703
2_12_5_122	MW-02	Appendix IV	Selenium	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.00111	0.00120	0.000500	0.00180	0.000373	0.336	-0.0485	0.292
2_12_5_125	MW-02	Appendix IV	Thallium	mg/L	11	10	91%	2022-11-28 to 2024-04-10		Nonparametric	0.000208	0.0000750	0.0000750	0.000620	0.000196	0.941	1.13	0.0607
2_12_6_111	MW-02	Part 115	Copper	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.00178	0.00180	0.000230	0.00280	0.000822	0.462	-0.565	-0.573
2_12_6_114	MW-02	Part 115	Iron	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Gamma; Lognormal; Normal	Normal	24.6	24.0	18.0	31.0	3.96	0.161	0.0460	-0.436
2_12_6_119	MW-02	Part 115	Nickel	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Normal	Normal	0.0215	0.0220	0.000930	0.0420	0.0109	0.505	0.142	0.995
2_12_6_123	MW-02	Part 115	Silver	mg/L	11	11	100%	2022-11-28 to 2024-04-10		Nonparametric	0.000105	0.0000500	0.0000500	0.000250	0.0000934	0.894	1.19	-0.764
2_12_6_129	MW-02	Part 115	Vanadium	mg/L	11	1	9%	2022-11-28 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.00349	0.00350	0.000620	0.00670	0.00197	0.564	0.196	-0.808
2_12_6_130	MW-02	Part 115	Zinc	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Nonparametric	Nonparametric	0.00674	0.00330	0.00190	0.0250	0.00857	1.27	1.91	2.06
2_13_4_105	MW-03	Appendix III	Boron	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	4.12	4.20	3.30	4.50	0.331	0.0804	-1.59	3.21
2_13_4_107	MW-03	Appendix III	Calcium	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	375	380	290	430	38.3	0.102	-0.844	1.27
2_13_4_108	MW-03	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	178	170	99.0	300	54.1	0.304	1.09	1.80
2_13_4_112	MW-03	Appendix III	Fluoride	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Nonparametric	Nonparametric	0.681	0.600	0.520	1.60	0.307	0.451	3.22	10.5
2_13_4_120	MW-03	Appendix III	pH (field)	su	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	7.37	7.32	7.20	7.59	0.115	0.0156	0.438	-0.354
2_13_4_124	MW-03	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	434	460	42.0	760	203	0.468	-0.254	0.287
2_13_4_126	MW-03	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Nonparametric	Nonparametric	2164	2300	1700	2300	206	0.0953	-1.49	1.29
2_13_5_101	MW-03	Appendix IV	Antimony	mg/L	11	6	55%	2022-11-28 to 2024-04-07	Gamma; Lognormal	Nonparametric	0.000259	0.000160	0.0000870	0.000500	0.000187	0.723	0.500	-1.94
2_13_5_102	MW-03	Appendix IV	Arsenic	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000943	0.000970	0.000490	0.00140	0.000282	0.299	-0.340	-0.361
2_13_5_103	MW-03	Appendix IV	Barium	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Normal	Normal	0.371	0.380	0.130	0.500	0.0959	0.258	-1.61	3.88
2_13_5_104	MW-03	Appendix IV	Beryllium	mg/L	11	7	64%	2022-11-28 to 2024-04-07		Nonparametric	0.0000920	0.0000520	0.0000520	0.000260	0.0000719	0.781	1.69	1.92
2_13_5_106	MW-03	Appendix IV	Cadmium	mg/L	11	10	91%	2022-11-28 to 2024-04-07		Nonparametric	0.000137	0.0000750	0.0000320	0.000380	0.000128	0.934	1.41	0.812
2_13_5_109	MW-03	Appendix IV	Chromium, Total	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.00483	0.00490	0.00300	0.00730	0.00133	0.276	0.332	-0.568
2_13_5_110	MW-03	Appendix IV	Cobalt	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000846	0.000880	0.000370	0.00130	0.000360	0.425	-0.0910	-1.71

(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_13_5_113	MW-03	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Nonparametric	Nonparametric	0.681	0.600	0.520	1.60	0.307	0.451	3.22	10.5
2_13_5_115	MW-03	Appendix IV	Lead	mg/L	11	10	91%	2022-11-28 to 2024-04-07		Nonparametric	0.000551	0.000500	0.000100	0.00110	0.000380	0.690	0.657	-1.10
2_13_5_116	MW-03	Appendix IV	Lithium	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.0412	0.0390	0.0290	0.0650	0.00991	0.241	1.43	2.64
2_13_5_117	MW-03	Appendix IV	Mercury	mg/L	11	10	91%	2022-11-28 to 2024-04-07		Nonparametric	0.000167	0.000160	0.000160	0.000240	0.0000241	0.144	3.32	11.0
2_13_5_118	MW-03	Appendix IV	Molybdenum	mg/L	11	8	73%	2022-11-28 to 2024-04-07		Nonparametric	0.00101	0.000620	0.000250	0.00310	0.00107	1.06	1.63	1.35
2_13_5_121	MW-03	Appendix IV	Radium 226 and 228	pCi/L	11	1	9%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	1.20	1.13	0.750	1.92	0.377	0.314	0.821	-0.141
2_13_5_122	MW-03	Appendix IV	Selenium	mg/L	11	3	27%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000448	0.000420	0.000170	0.00110	0.000257	0.573	1.70	3.96
2_13_5_125	MW-03	Appendix IV	Thallium	mg/L	11	10	91%	2022-11-28 to 2024-04-07		Nonparametric	0.000279	0.000380	0.0000750	0.000380	0.000144	0.515	-0.785	-1.58
2_13_6_111	MW-03	Part 115	Copper	mg/L	11	5	45%	2022-11-28 to 2024-04-07	Nonparametric	Nonparametric	0.000432	0.000250	0.000200	0.00100	0.000348	0.805	1.18	-0.707
2_13_6_114	MW-03	Part 115	Iron	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Gamma	1.76	1.40	0.280	5.90	1.74	0.988	1.55	2.29
2_13_6_119	MW-03	Part 115	Nickel	mg/L	11	1	9%	2022-11-28 to 2024-04-07	Nonparametric	Nonparametric	0.00284	0.00160	0.000850	0.0150	0.00409	1.44	3.16	10.2
2_13_6_123	MW-03	Part 115	Silver	mg/L	11	11	100%	2022-11-28 to 2024-04-07		Nonparametric	0.000123	0.0000500	0.0000500	0.000250	0.000101	0.822	0.661	-1.96
2_13_6_129	MW-03	Part 115	Vanadium	mg/L	11	9	82%	2022-11-28 to 2024-04-07		Nonparametric	0.00104	0.000620	0.000620	0.00310	0.000838	0.805	2.01	3.26
2_13_6_130	MW-03	Part 115	Zinc	mg/L	11	6	55%	2022-11-28 to 2024-04-07	Lognormal	Nonparametric	0.00492	0.00130	0.00120	0.0190	0.00686	1.39	1.77	1.63
2_14_4_105	MW-04	Appendix III	Boron	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	4.04	4.00	3.50	4.70	0.311	0.0770	0.538	1.52
2_14_4_107	MW-04	Appendix III	Calcium	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	366	360	310	430	36.7	0.100	0.340	-0.714
2_14_4_108	MW-04	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	188	190	120	300	50.2	0.267	0.846	1.46
2_14_4_112	MW-04	Appendix III	Fluoride	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Nonparametric	Nonparametric	1.31	1.30	0.760	1.90	0.264	0.201	0.192	3.80
2_14_4_120	MW-04	Appendix III	pH (field)	su	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	7.39	7.39	7.23	7.66	0.114	0.0154	1.15	2.83
2_14_4_124	MW-04	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Nonparametric	Nonparametric	565	610	1.80	810	212	0.376	-2.07	5.34
2_14_4_126	MW-04	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	1900	1900	1700	2100	155	0.0815	0.197	-1.49
2_14_5_101	MW-04	Appendix IV	Antimony	mg/L	11	8	73%	2022-11-28 to 2024-04-07		Nonparametric	0.000241	0.000120	0.0000500	0.000500	0.000197	0.815	0.495	-1.85
2_14_5_102	MW-04	Appendix IV	Arsenic	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000912	0.000920	0.000470	0.00120	0.000276	0.303	-0.344	-1.39
2_14_5_103	MW-04	Appendix IV	Barium	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Nonparametric	Nonparametric	0.151	0.120	0.100	0.460	0.103	0.684	3.23	10.6
2_14_5_104	MW-04	Appendix IV	Beryllium	mg/L	11	11	100%	2022-11-28 to 2024-04-07		Nonparametric	0.0000520	0.0000520	0.0000520	0.0000520	0	0	NA	NA
2_14_5_106	MW-04	Appendix IV	Cadmium	mg/L	11	11	100%	2022-11-28 to 2024-04-07		Nonparametric	0.000134	0.0000750	0.0000320	0.000380	0.000129	0.965	1.45	0.850
2_14_5_109	MW-04	Appendix IV	Chromium, Total	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.00385	0.00410	0.00260	0.00600	0.00117	0.304	0.362	-1.03
2_14_5_110	MW-04	Appendix IV	Cobalt	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000505	0.000450	0.000180	0.000930	0.000224	0.444	0.471	-0.466
2_14_5_113	MW-04	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Nonparametric	Nonparametric	1.31	1.30	0.760	1.90	0.264	0.201	0.192	3.80
2_14_5_115	MW-04	Appendix IV	Lead	mg/L	11	11	100%	2022-11-28 to 2024-04-07		Nonparametric	0.000424	0.000220	0.000100	0.00110	0.000370	0.874	1.19	0.288
2_14_5_116	MW-04	Appendix IV	Lithium	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.0625	0.0620	0.0470	0.0740	0.00978	0.156	-0.369	-0.948
2_14_5_117	MW-04	Appendix IV	Mercury	mg/L	11	11	100%	2022-11-28 to 2024-04-07		Nonparametric	0.000160	0.000160	0.000160	0.000160	0	0	NA	NA
2_14_5_118	MW-04	Appendix IV	Molybdenum	mg/L	11	2	18%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.00105	0.000860	0.000370	0.00310	0.000778	0.744	2.04	5.02
2_14_5_121	MW-04	Appendix IV	Radium 226 and 228	pCi/L	11	2	18%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	1.12	1.20	0.664	1.55	0.318	0.285	-0.155	-1.52
2_14_5_122	MW-04	Appendix IV	Selenium	mg/L	11	5	45%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000241	0.000220	0.000100	0.000430	0.0000964	0.400	1.14	1.18
2_14_5_125	MW-04	Appendix IV	Thallium	mg/L	11	11	100%	2022-11-28 to 2024-04-07		Nonparametric	0.000214	0.0000750	0.0000750	0.000380	0.000159	0.746	0.213	-2.44
2_14_6_111	MW-04	Part 115	Copper	mg/L	11	9	82%	2022-11-28 to 2024-04-07		Nonparametric	0.000217	0.000200	0.000200	0.000320	0.0000400	0.184	2.26	4.40
2_14_6_114	MW-04	Part 115	Iron	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	5.95	6.10	4.70	6.80	0.731	0.123	-0.353	-0.997
2_14_6_119	MW-04	Part 115	Nickel	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Normal	Normal	0.0141	0.0130	0.00190	0.0220	0.00558	0.396	-0.784	1.08
2_14_6_123	MW-04	Part 115	Silver	mg/L	11	11	100%	2022-11-28 to 2024-04-07		Nonparametric	0.000123	0.0000500	0.0000500	0.000250	0.000101	0.822	0.661	-1.96
2_14_6_129	MW-04	Part 115	Vanadium	mg/L	11	10	91%	2022-11-28 to 2024-04-07		Nonparametric	0.000652	0.000620	0.000620	0.000970	0.000106	0.162	3.32	11.0
2_14_6_130	MW-04	Part 115	Zinc	mg/L	11	8	73%	2022-11-28 to 2024-04-07		Nonparametric	0.00195	0.00120	0.00120	0.00590	0.00162	0.834	2.10	3.34

(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_19_4_105	MW-09	Appendix III	Boron	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	5.77	5.80	4.90	6.90	0.569	0.0986	0.353	0.276
2_19_4_107	MW-09	Appendix III	Calcium	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	363	390	230	500	80.6	0.222	-0.0716	-0.687
2_19_4_108	MW-09	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	15.2	15.0	11.0	25.0	4.26	0.281	1.19	1.58
2_19_4_112	MW-09	Appendix III	Fluoride	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	2.54	2.50	2.10	2.90	0.273	0.108	-0.107	-1.10
2_19_4_120	MW-09	Appendix III	pH (field)	su	11	0	0%	2022-11-28 to 2024-04-07	Nonparametric	Nonparametric	7.26	7.22	7.14	7.52	0.111	0.0153	1.65	2.57
2_19_4_124	MW-09	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Normal	Normal	418	480	83.0	720	227	0.541	-0.350	-1.47
2_19_4_126	MW-09	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	1336	1400	740	1700	314	0.235	-0.727	-0.659
2_19_5_101	MW-09	Appendix IV	Antimony	mg/L	11	7	64%	2022-11-28 to 2024-04-07		Nonparametric	0.000201	0.000100	0.0000500	0.000500	0.000173	0.860	1.11	-0.486
2_19_5_102	MW-09	Appendix IV	Arsenic	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Normal	Normal	0.00217	0.00230	0.00130	0.00300	0.000562	0.259	-0.595	-0.635
2_19_5_103	MW-09	Appendix IV	Barium	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Lognormal	Lognormal	0.479	0.280	0.170	2.40	0.649	1.35	3.11	9.94
2_19_5_104	MW-09	Appendix IV	Beryllium	mg/L	11	10	91%	2022-11-28 to 2024-04-07		Nonparametric	0.0000525	0.0000520	0.0000520	0.0000580	0.00000181	0.0344	3.32	11.0
2_19_5_106	MW-09	Appendix IV	Cadmium	mg/L	11	11	100%	2022-11-28 to 2024-04-07		Nonparametric	0.000123	0.0000750	0.0000320	0.000380	0.000133	1.08	1.61	1.22
2_19_5_109	MW-09	Appendix IV	Chromium, Total	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.00243	0.00260	0.00160	0.00320	0.000585	0.241	-0.114	-1.74
2_19_5_110	MW-09	Appendix IV	Cobalt	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000573	0.000580	0.000240	0.000990	0.000217	0.379	0.344	-0.0828
2_19_5_113	MW-09	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	2.54	2.50	2.10	2.90	0.273	0.108	-0.107	-1.10
2_19_5_115	MW-09	Appendix IV	Lead	mg/L	11	11	100%	2022-11-28 to 2024-04-07		Nonparametric	0.000387	0.000220	0.000100	0.00110	0.000381	0.985	1.36	0.559
2_19_5_116	MW-09	Appendix IV	Lithium	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.303	0.290	0.260	0.340	0.0294	0.0970	-0.0953	-1.27
2_19_5_117	MW-09	Appendix IV	Mercury	mg/L	11	9	82%	2022-11-28 to 2024-04-07		Nonparametric	0.000540	0.000160	0.000160	0.00240	0.000848	1.57	1.95	2.24
2_19_5_118	MW-09	Appendix IV	Molybdenum	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.0212	0.0210	0.00970	0.0330	0.00689	0.326	0.0651	-0.0976
2_19_5_121	MW-09	Appendix IV	Radium 226 and 228	pCi/L	11	10	91%	2022-11-28 to 2024-04-07		Nonparametric	0.771	0.743	0.642	0.980	0.104	0.135	0.874	0.201
2_19_5_122	MW-09	Appendix IV	Selenium	mg/L	11	2	18%	2022-11-28 to 2024-04-07	Normal	Normal	0.000243	0.000240	0.000120	0.000330	0.0000516	0.213	-1.00	3.29
2_19_5_125	MW-09	Appendix IV	Thallium	mg/L	11	11	100%	2022-11-28 to 2024-04-07		Nonparametric	0.000186	0.0000750	0.0000750	0.000380	0.000154	0.828	0.661	-1.96
2_19_6_111	MW-09	Part 115	Copper	mg/L	11	9	82%	2022-11-28 to 2024-04-07		Nonparametric	0.000229	0.000200	0.000200	0.000430	0.0000719	0.314	2.67	7.15
2_19_6_114	MW-09	Part 115	Iron	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	20.6	19.0	15.0	26.0	3.93	0.190	0.0425	-1.59
2_19_6_119	MW-09	Part 115	Nickel	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal	Gamma	0.00248	0.00180	0.000720	0.00720	0.00218	0.877	1.56	1.35
2_19_6_123	MW-09	Part 115	Silver	mg/L	11	11	100%	2022-11-28 to 2024-04-07		Nonparametric	0.000105	0.0000500	0.0000500	0.000250	0.0000934	0.894	1.19	-0.764
2_19_6_129	MW-09	Part 115	Vanadium	mg/L	11	11	100%	2022-11-28 to 2024-04-07		Nonparametric	0.000620	0.000620	0.000620	0.000620	0	0	NA	NA
2_19_6_130	MW-09	Part 115	Zinc	mg/L	11	8	73%	2022-11-28 to 2024-04-07		Nonparametric	0.00492	0.00120	0.00120	0.0250	0.00835	1.70	2.08	3.15
2_21_4_105	MW-11	Appendix III	Boron	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	6.01	4.80	1.50	13.0	4.02	0.670	0.643	-0.906
2_21_4_107	MW-11	Appendix III	Calcium	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	268	290	130	380	78.8	0.294	-0.529	-0.467
2_21_4_108	MW-11	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	68.8	72.0	38.0	95.0	17.2	0.250	-0.220	-0.606
2_21_4_112	MW-11	Appendix III	Fluoride	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.621	0.610	0.210	1.40	0.403	0.648	0.840	-0.201
2_21_4_120	MW-11	Appendix III	pH (field)	su	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	7.35	7.33	7.22	7.47	0.0714	0.00972	0.127	0.0257
2_21_4_124	MW-11	Appendix III	Sulfate (as SO4)	mg/L	11	2	18%	2022-11-29 to 2024-04-07	Gamma; Lognormal	Gamma	52.3	14.0	0.410	210	75.1	1.44	1.55	1.10
2_21_4_126	MW-11	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	1093	1100	680	1800	285	0.260	1.43	3.75
2_21_5_101	MW-11	Appendix IV	Antimony	mg/L	11	7	64%	2022-11-29 to 2024-04-07		Nonparametric	0.000212	0.000100	0.0000500	0.000690	0.000210	0.990	1.55	1.64
2_21_5_102	MW-11	Appendix IV	Arsenic	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.00164	0.00130	0.000610	0.00410	0.000939	0.574	2.0	4.88
2_21_5_103	MW-11	Appendix IV	Barium	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.655	0.590	0.360	1.20	0.241	0.369	1.14	1.44
2_21_5_104	MW-11	Appendix IV	Beryllium	mg/L	11	9	82%	2022-11-29 to 2024-04-07		Nonparametric	0.0000908	0.0000520	0.0000520	0.000440	0.000116	1.28	3.26	10.7
2_21_5_106	MW-11	Appendix IV	Cadmium	mg/L	11	9	82%	2022-11-29 to 2024-04-07		Nonparametric	0.000166	0.0000750	0.0000320	0.000730	0.000212	1.28	2.28	5.26
2_21_5_109	MW-11	Appendix IV	Chromium, Total	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Lognormal	Lognormal	0.00157	0.000800	0.000450	0.00860	0.00236	1.50	3.17	10.3
2_21_5_110	MW-11	Appendix IV	Cobalt	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal	Gamma	0.000714	0.000610	0.000230	0.00240	0.000622	0.871	2.34	5.98

(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_5_113	MW-11	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.621	0.610	0.210	1.40	0.403	0.648	0.840	-0.201
2_21_5_115	MW-11	Appendix IV	Lead	mg/L	11	3	27%	2022-11-29 to 2024-04-07	Lognormal	Nonparametric	0.00720	0.000500	0.000170	0.0680	0.0202	2.81	3.30	10.9
2_21_5_116	MW-11	Appendix IV	Lithium	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Gamma	0.0715	0.0520	0.00590	0.220	0.0667	0.933	1.22	1.14
2_21_5_117	MW-11	Appendix IV	Mercury	mg/L	11	10	91%	2022-11-29 to 2024-04-07		Nonparametric	0.000245	0.000160	0.000160	0.00110	0.000283	1.15	3.32	11.0
2_21_5_118	MW-11	Appendix IV	Molybdenum	mg/L	11	2	18%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.00135	0.00130	0.000430	0.00300	0.000903	0.667	0.989	-0.0771
2_21_5_121	MW-11	Appendix IV	Radium 226 and 228	pCi/L	11	3	27%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	1.08	1.00	0.624	1.76	0.373	0.344	0.827	-0.318
2_21_5_122	MW-11	Appendix IV	Selenium	mg/L	11	3	27%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000275	0.000220	0.000140	0.000710	0.000162	0.590	2.30	5.68
2_21_5_125	MW-11	Appendix IV	Thallium	mg/L	11	10	91%	2022-11-29 to 2024-04-07		Nonparametric	0.000170	0.0000750	0.0000750	0.000380	0.000140	0.824	0.953	-1.16
2_21_6_111	MW-11	Part 115	Copper	mg/L	11	3	27%	2022-11-29 to 2024-04-07	Gamma; Lognormal	Gamma	0.00229	0.000430	0.000200	0.0190	0.00558	2.43	3.24	10.6
2_21_6_114	MW-11	Part 115	Iron	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	6.65	6.10	3.60	11.0	2.56	0.386	0.456	-1.13
2_21_6_119	MW-11	Part 115	Nickel	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Lognormal	Lognormal	0.00211	0.00130	0.000650	0.00940	0.00249	1.18	3.01	9.44
2_21_6_123	MW-11	Part 115	Silver	mg/L	11	9	82%	2022-11-29 to 2024-04-07		Nonparametric	0.000105	0.0000500	0.0000500	0.000250	0.0000829	0.786	1.11	-0.442
2_21_6_129	MW-11	Part 115	Vanadium	mg/L	11	9	82%	2022-11-29 to 2024-04-07		Nonparametric	0.000836	0.000620	0.000620	0.00300	0.000718	0.858	3.32	11.0
2_21_6_130	MW-11	Part 115	Zinc	mg/L	11	3	27%	2022-11-29 to 2024-04-07	Gamma; Lognormal	Gamma	0.0173	0.00350	0.00120	0.100	0.0299	1.73	2.50	6.66
2_22_4_105	MW-12	Appendix III	Boron	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.285	0.260	0.190	0.420	0.0784	0.276	0.587	-1.01
2_22_4_107	MW-12	Appendix III	Calcium	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	66.4	64.0	40.0	95.0	19.9	0.300	0.0675	-1.18
2_22_4_108	MW-12	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	19.1	17.0	12.0	27.0	4.89	0.256	0.485	-0.995
2_22_4_112	MW-12	Appendix III	Fluoride	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.345	0.280	0.220	0.540	0.119	0.345	0.405	-1.67
2_22_4_120	MW-12	Appendix III	pH (field)	su	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	7.73	7.77	7.00	8.32	0.365	0.0472	-0.320	0.526
2_22_4_124	MW-12	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	122	120	68.0	180	34.8	0.285	0.485	0.0419
2_22_4_126	MW-12	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	264	260	100	420	92.0	0.349	0.0392	-0.320
2_22_5_101	MW-12	Appendix IV	Antimony	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.000663	0.000640	0.000350	0.00110	0.000247	0.373	0.431	-0.942
2_22_5_102	MW-12	Appendix IV	Arsenic	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00226	0.00190	0.00140	0.00340	0.000685	0.302	0.440	-1.38
2_22_5_103	MW-12	Appendix IV	Barium	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.0321	0.0250	0.0170	0.0600	0.0139	0.434	1.15	0.202
2_22_5_104	MW-12	Appendix IV	Beryllium	mg/L	11	11	100%	2022-11-28 to 2024-04-08		Nonparametric	0.0000520	0.0000520	0.0000520	0.0000520	0	0	NA	NA
2_22_5_106	MW-12	Appendix IV	Cadmium	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00121	0.00110	0.000540	0.00240	0.000634	0.523	0.908	-0.266
2_22_5_109	MW-12	Appendix IV	Chromium, Total	mg/L	11	4	36%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.000475	0.000460	0.000200	0.000990	0.000292	0.615	0.806	-0.507
2_22_5_110	MW-12	Appendix IV	Cobalt	mg/L	11	5	45%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Nonparametric	0.000227	0.000140	0.000100	0.000530	0.000167	0.737	1.06	-0.472
2_22_5_113	MW-12	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.345	0.280	0.220	0.540	0.119	0.345	0.405	-1.67
2_22_5_115	MW-12	Appendix IV	Lead	mg/L	11	6	55%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Nonparametric	0.000209	0.000220	0.000100	0.000390	0.0000731	0.350	1.28	3.83
2_22_5_116	MW-12	Appendix IV	Lithium	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00357	0.00370	0.00190	0.00640	0.00134	0.375	0.735	0.479
2_22_5_117	MW-12	Appendix IV	Mercury	mg/L	11	9	82%	2022-11-28 to 2024-04-08		Nonparametric	0.000166	0.000160	0.000160	0.000230	0.0000211	0.127	3.32	11.0
2_22_5_118	MW-12	Appendix IV	Molybdenum	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00701	0.00690	0.00460	0.00960	0.00166	0.237	0.0980	-1.27
2_22_5_121	MW-12	Appendix IV	Radium 226 and 228	pCi/L	11	8	73%	2022-11-28 to 2024-04-08		Nonparametric	0.651	0.590	0.459	1.09	0.179	0.275	1.61	2.92
2_22_5_122	MW-12	Appendix IV	Selenium	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00110	0.000930	0.000130	0.00230	0.000759	0.689	0.314	-1.04
2_22_5_125	MW-12	Appendix IV	Thallium	mg/L	11	11	100%	2022-11-28 to 2024-04-08		Nonparametric	0.0000750	0.0000750	0.0000750	0.0000750	0	0	NA	NA
2_22_6_111	MW-12	Part 115	Copper	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00108	0.00100	0.000550	0.00160	0.000316	0.292	0.0406	-0.396
2_22_6_114	MW-12	Part 115	Iron	mg/L	11	6	55%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Nonparametric	0.0547	0.0270	0.0260	0.260	0.0692	1.26	3.13	10.0
2_22_6_119	MW-12	Part 115	Nickel	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00241	0.00250	0.00140	0.00350	0.000756	0.314	0.0905	-1.03
2_22_6_123	MW-12	Part 115	Silver	mg/L	11	11	100%	2022-11-28 to 2024-04-08		Nonparametric	0.0000500	0.0000500	0.0000500	0.0000500	0	0	NA	NA
2_22_6_129	MW-12	Part 115	Vanadium	mg/L	11	6	55%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Nonparametric	0.000808	0.000620	0.000620	0.00130	0.000252	0.311	1.09	-0.0550
2_22_6_130	MW-12	Part 115	Zinc	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00715	0.00800	0.00270	0.0100	0.00238	0.334	-0.832	-0.388

(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_48_4_105	MW-38	Appendix III	Boron	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	1.60	1.60	1.60	1.60	NA	NA	NA	NA
2_48_4_107	MW-38	Appendix III	Calcium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	150	150	150	150	NA	NA	NA	NA
2_48_4_108	MW-38	Appendix III	Chloride (as Cl)	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	51.0	51.0	51.0	51.0	NA	NA	NA	NA
2_48_4_112	MW-38	Appendix III	Fluoride	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.790	0.790	0.790	0.790	NA	NA	NA	NA
2_48_4_120	MW-38	Appendix III	pH (field)	su	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	10.0	10.0	10.0	10.0	NA	NA	NA	NA
2_48_4_124	MW-38	Appendix III	Sulfate (as SO4)	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	280	280	280	280	NA	NA	NA	NA
2_48_4_126	MW-38	Appendix III	Total Dissolved Solids	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	840	840	840	840	NA	NA	NA	NA
2_48_5_101	MW-38	Appendix IV	Antimony	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000680	0.000680	0.000680	0.000680	NA	NA	NA	NA
2_48_5_102	MW-38	Appendix IV	Arsenic	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00500	0.00500	0.00500	0.00500	NA	NA	NA	NA
2_48_5_103	MW-38	Appendix IV	Barium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.160	0.160	0.160	0.160	NA	NA	NA	NA
2_48_5_104	MW-38	Appendix IV	Beryllium	mg/L	1	1	100%	2024-04-08 to 2024-04-08		Nonparametric	0.0000520	0.0000520	0.0000520	0.0000520	NA	NA	NA	NA
2_48_5_106	MW-38	Appendix IV	Cadmium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.0000960	0.0000960	0.0000960	0.0000960	NA	NA	NA	NA
2_48_5_109	MW-38	Appendix IV	Chromium, Total	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00400	0.00400	0.00400	0.00400	NA	NA	NA	NA
2_48_5_110	MW-38	Appendix IV	Cobalt	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000530	0.000530	0.000530	0.000530	NA	NA	NA	NA
2_48_5_113	MW-38	Appendix IV	Fluoride (App IV)	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.790	0.790	0.790	0.790	NA	NA	NA	NA
2_48_5_115	MW-38	Appendix IV	Lead	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.0150	0.0150	0.0150	0.0150	NA	NA	NA	NA
2_48_5_116	MW-38	Appendix IV	Lithium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.120	0.120	0.120	0.120	NA	NA	NA	NA
2_48_5_117	MW-38	Appendix IV	Mercury	mg/L	1	1	100%	2024-04-08 to 2024-04-08		Nonparametric	0.000160	0.000160	0.000160	0.000160	NA	NA	NA	NA
2_48_5_118	MW-38	Appendix IV	Molybdenum	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00970	0.00970	0.00970	0.00970	NA	NA	NA	NA
2_48_5_121	MW-38	Appendix IV	Radium 226 and 228	pCi/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	1.08	1.08	1.08	1.08	NA	NA	NA	NA
2_48_5_122	MW-38	Appendix IV	Selenium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000730	0.000730	0.000730	0.000730	NA	NA	NA	NA
2_48_5_125	MW-38	Appendix IV	Thallium	mg/L	1	1	100%	2024-04-08 to 2024-04-08		Nonparametric	0.0000750	0.0000750	0.0000750	0.0000750	NA	NA	NA	NA
2_48_6_111	MW-38	Part 115	Copper	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00310	0.00310	0.00310	0.00310	NA	NA	NA	NA
2_48_6_114	MW-38	Part 115	Iron	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.390	0.390	0.390	0.390	NA	NA	NA	NA
2_48_6_119	MW-38	Part 115	Nickel	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00530	0.00530	0.00530	0.00530	NA	NA	NA	NA
2_48_6_123	MW-38	Part 115	Silver	mg/L	1	1	100%	2024-04-08 to 2024-04-08		Nonparametric	0.0000500	0.0000500	0.0000500	0.0000500	NA	NA	NA	NA
2_48_6_129	MW-38	Part 115	Vanadium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00660	0.00660	0.00660	0.00660	NA	NA	NA	NA
2_48_6_130	MW-38	Part 115	Zinc	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00660	0.00660	0.00660	0.00660	NA	NA	NA	NA
3_20_4_105	MW-10	Appendix III	Boron	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	15.6	14.0	4.50	28.0	8.61	0.552	0.258	-1.70
3_20_4_107	MW-10	Appendix III	Calcium	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	285	220	160	590	130	0.456	1.66	2.32
3_20_4_108	MW-10	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	214	170	92.0	430	103	0.481	0.988	0.338
3_20_4_112	MW-10	Appendix III	Fluoride	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	5.24	5.70	2.70	7.70	1.86	0.356	-0.175	-1.60
3_20_4_120	MW-10	Appendix III	pH (field)	su	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	7.85	7.80	7.05	8.81	0.431	0.0549	0.577	2.76
3_20_4_124	MW-10	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	629	490	140	1700	448	0.713	1.40	2.36
3_20_4_126	MW-10	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Nonparametric	Nonparametric	1936	1800	1500	3200	478	0.247	2.19	5.14
3_20_5_101	MW-10	Appendix IV	Antimony	mg/L	11	7	64%	2022-11-29 to 2024-04-07		Nonparametric	0.000204	0.000110	0.0000500	0.000500	0.000170	0.833	1.08	-0.343
3_20_5_102	MW-10	Appendix IV	Arsenic	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000564	0.000490	0.000200	0.00110	0.000299	0.531	0.600	-0.915
3_20_5_103	MW-10	Appendix IV	Barium	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.296	0.280	0.140	0.570	0.125	0.421	1.13	1.35
3_20_5_104	MW-10	Appendix IV	Beryllium	mg/L	11	5	45%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.0000819	0.0000540	0.0000520	0.000220	0.0000547	0.668	2.07	3.81
3_20_5_106	MW-10	Appendix IV	Cadmium	mg/L	11	11	100%	2022-11-29 to 2024-04-07		Nonparametric	0.000134	0.0000750	0.0000320	0.000380	0.000129	0.965	1.45	0.850
3_20_5_109	MW-10	Appendix IV	Chromium, Total	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.00383	0.00400	0.00130	0.00850	0.00233	0.609	0.881	0.0572
3_20_5_110	MW-10	Appendix IV	Cobalt	mg/L	11	1	9%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000544	0.000400	0.000100	0.00180	0.000476	0.876	2.07	5.06

(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_5_113	MW-10	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	5.24	5.70	2.70	7.70	1.86	0.356	-0.175	-1.60
3_20_5_115	MW-10	Appendix IV	Lead	mg/L	11	9	82%	2022-11-29 to 2024-04-07		Nonparametric	0.000476	0.000230	0.000100	0.00110	0.000424	0.890	0.826	-1.18
3_20_5_116	MW-10	Appendix IV	Lithium	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.934	0.920	0.540	1.60	0.299	0.320	0.912	1.54
3_20_5_117	MW-10	Appendix IV	Mercury	mg/L	11	10	91%	2022-11-29 to 2024-04-07		Nonparametric	0.000318	0.000160	0.000160	0.00190	0.000525	1.65	3.32	11.0
3_20_5_118	MW-10	Appendix IV	Molybdenum	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.00343	0.00330	0.000800	0.00720	0.00186	0.544	0.699	0.320
3_20_5_121	MW-10	Appendix IV	Radium 226 and 228	pCi/L	11	9	82%	2022-11-29 to 2024-04-07		Nonparametric	0.839	0.775	0.590	1.36	0.231	0.276	1.21	1.39
3_20_5_122	MW-10	Appendix IV	Selenium	mg/L	11	1	9%	2022-11-29 to 2024-04-07	Gamma; Lognormal	Gamma	0.000385	0.000360	0.000220	0.000830	0.000162	0.421	2.35	6.59
3_20_5_125	MW-10	Appendix IV	Thallium	mg/L	11	11	100%	2022-11-29 to 2024-04-07		Nonparametric	0.000214	0.0000760	0.0000750	0.000380	0.000159	0.745	0.213	-2.44
3_20_6_111	MW-10	Part 115	Copper	mg/L	11	8	73%	2022-11-29 to 2024-04-07		Nonparametric	0.000343	0.000200	0.000200	0.00130	0.000332	0.969	2.86	8.56
3_20_6_114	MW-10	Part 115	Iron	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	4.71	3.90	2.40	7.30	1.68	0.356	0.490	-1.20
3_20_6_119	MW-10	Part 115	Nickel	mg/L	11	5	45%	2022-11-29 to 2024-04-07	Gamma; Lognormal	Gamma	0.000877	0.000760	0.000650	0.00180	0.000350	0.399	2.16	4.95
3_20_6_123	MW-10	Part 115	Silver	mg/L	11	11	100%	2022-11-29 to 2024-04-07		Nonparametric	0.000123	0.0000500	0.0000500	0.000250	0.000101	0.821	0.661	-1.96
3_20_6_129	MW-10	Part 115	Vanadium	mg/L	11	10	91%	2022-11-29 to 2024-04-07		Nonparametric	0.000684	0.000620	0.000620	0.00130	0.000205	0.299	3.31	11
3_20_6_130	MW-10	Part 115	Zinc	mg/L	11	4	36%	2022-11-29 to 2024-04-07	Lognormal	Nonparametric	0.00363	0.00120	0.00120	0.0140	0.00490	1.35	1.90	2.03

[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	MAD/0.675	Skewness	Kurtosis
1_16_4_105	MW-06	Appendix III	Boron	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	9.22	9.50	6.40	12.0	1.65	0.179	1.33	-0.179	-0.337
1_16_4_107	MW-06	Appendix III	Calcium	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	262	250	220	310	32.2	0.123	29.6	0.371	-1.28
1_16_4_108	MW-06	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Normal	Normal	78.1	76.0	13.0	160	42.3	0.541	28.1	0.248	0.443
1_16_4_112	MW-06	Appendix III	Fluoride	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	1.15	1.10	0.980	1.40	0.153	0.133	0.148	0.707	-0.826
1_16_4_120	MW-06	Appendix III	pH (field)	su	11	0	0%	2022-11-29 to 2024-04-07	Nonparametric	Nonparametric	7.18	7.26	6.42	7.36	0.258	0.0359	0.0889	-2.99	9.50
1_16_4_124	MW-06	Appendix III	Sulfate (as SO4)	mg/L	11	1	9%	2022-11-29 to 2024-04-07	Gamma; Normal	Gamma	11	9.50	0.980	20.0	6.86	0.624	9.63	-0.0928	-1.11
1_16_4_126	MW-06	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-11-29 to 2024-04-07		Nonparametric	1209	1200	1100	1300	70.1	0.0579	0	-0.123	-0.453
1_16_5_101	MW-06	Appendix IV	Antimony	mg/L	11	9	82%	2022-11-29 to 2024-04-07		Nonparametric	0.000218	0.000218	0.0000750	0.000360	0.000202	0.927	0.000211	NA	NA
1_16_5_102	MW-06	Appendix IV	Arsenic	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000671	0.000650	0.000470	0.00100	0.000151	0.224	0.000119	1.03	1.04
1_16_5_103	MW-06	Appendix IV	Barium	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Nonparametric	Nonparametric	1.39	1.40	0.990	1.60	0.160	0.115	0.148	-1.55	3.64
1_16_5_104	MW-06	Appendix IV	Beryllium	mg/L	11	10	91%	2022-11-29 to 2024-04-07		Nonparametric	0.0000520	0.0000520	0.0000520	0.0000520	NA	NA	0	NA	NA
1_16_5_109	MW-06	Appendix IV	Chromium, Total	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.00176	0.00150	0.00110	0.00300	0.000587	0.333	0.000593	0.845	0.267
1_16_5_110	MW-06	Appendix IV	Cobalt	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000556	0.000500	0.000350	0.000800	0.000142	0.256	0.000119	0.388	-0.986
1_16_5_113	MW-06	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	1.15	1.10	0.980	1.40	0.153	0.133	0.148	0.707	-0.826
1_16_5_115	MW-06	Appendix IV	Lead	mg/L	11	8	73%	2022-11-29 to 2024-04-07		Nonparametric	0.000290	0.000270	0.000250	0.000350	0.0000529	0.182	0.0000296	1.46	NA
1_16_5_116	MW-06	Appendix IV	Lithium	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.184	0.190	0.110	0.230	0.0423	0.230	0.0593	-0.533	-1.12
1_16_5_118	MW-06	Appendix IV	Molybdenum	mg/L	11	8	73%	2022-11-29 to 2024-04-07		Nonparametric	0.000260	0.000260	0.000250	0.000270	0.0000100	0.0385	0.0000148	0	NA
1_16_5_121	MW-06	Appendix IV	Radium 226 and 228	pCi/L	11	2	18%	2022-11-29 to 2024-04-07	Nonparametric	Nonparametric	0.915	0.850	0.625	1.91	0.392	0.428	0.130	2.47	6.76
1_16_5_122	MW-06	Appendix IV	Selenium	mg/L	11	5	45%	2022-11-29 to 2024-04-07	Nonparametric	Nonparametric	0.000252	0.000210	0.000190	0.000470	0.000108	0.429	0.0000222	2.35	5.61
1_16_6_111	MW-06	Part 115	Copper	mg/L	11	10	91%	2022-11-29 to 2024-04-07		Nonparametric	0.000280	0.000280	0.000280	0.000280	NA	NA	0	NA	NA
1_16_6_114	MW-06	Part 115	Iron	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	19.9	18.0	14.0	31.0	5.38	0.270	2.96	1.10	0.230
1_16_6_119	MW-06	Part 115	Nickel	mg/L	11	4	36%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.00100	0.00100	0.000790	0.00120	0.000142	0.142	0.000148	-0.106	-0.896
1_16_6_130	MW-06	Part 115	Zinc	mg/L	11	2	18%	2022-11-29 to 2024-04-07	Nonparametric	Nonparametric	0.0183	0.00180	0.00120	0.0940	0.0343	1.87	0.000741	1.88	2.44
1_17_4_105	MW-07	Appendix III	Boron	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	11.5	11.0	10.0	13.0	0.934	0.0809	1.48	0.290	-0.501
1_17_4_107	MW-07	Appendix III	Calcium	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	144	140	120	160	12.1	0.0840	14.8	-0.446	0.129
1_17_4_108	MW-07	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-11-30 to 2024-04-08		Nonparametric	13.9	14.0	13.0	15.0	0.701	0.0504	0	0.123	-0.453
1_17_4_112	MW-07	Appendix III	Fluoride	mg/L	11	1	9%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.103	0.0965	0.0680	0.140	0.0302	0.293	0.0370	0.220	-1.96
1_17_4_120	MW-07	Appendix III	pH (field)	su	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	6.88	6.88	6.58	7.05	0.149	0.0217	0.0741	-1.05	0.649
1_17_4_124	MW-07	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	25.0	26.0	15.0	36.0	7.42	0.297	10.4	0.0539	-1.72
1_17_4_126	MW-07	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Normal	Normal	628	650	470	720	78.7	0.125	44.4	-1.14	0.711
1_17_5_101	MW-07	Appendix IV	Antimony	mg/L	11	10	91%	2022-11-30 to 2024-04-08		Nonparametric	0.0000710	0.0000710	0.0000710	0.0000710	NA	NA	0	NA	NA
1_17_5_102	MW-07	Appendix IV	Arsenic	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.000214	0.000210	0.000130	0.000290	0.0000398	0.186	0.0000296	-0.293	2.03
1_17_5_103	MW-07	Appendix IV	Barium	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Nonparametric	Nonparametric	0.335	0.340	0.250	0.380	0.0342	0.102	0.0148	-1.62	3.55
1_17_5_104	MW-07	Appendix IV	Beryllium	mg/L	11	8	73%	2022-11-30 to 2024-04-08		Nonparametric	0.0000610	0.0000620	0.0000550	0.0000660	0.00000557	0.0913	0.00000593	-0.782	NA
1_17_5_109	MW-07	Appendix IV	Chromium, Total	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.000337	0.000330	0.000280	0.000420	0.0000422	0.125	0.0000444	0.544	-0.156
1_17_5_110	MW-07	Appendix IV	Cobalt	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.000911	0.000950	0.000710	0.00110	0.000118	0.129	0.000104	-0.396	-0.385
1_17_5_113	MW-07	Appendix IV	Fluoride (App IV)	mg/L	11	1	9%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.103	0.0965	0.0680	0.140	0.0302	0.293	0.0370	0.220	-1.96
1_17_5_116	MW-07	Appendix IV	Lithium	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00612	0.00570	0.00310	0.0100	0.00189	0.309	0.00148	0.613	0.853
1_17_5_121	MW-07	Appendix IV	Radium 226 and 228	pCi/L	11	2	18%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	1.09	1.03	0.670	2.36	0.524	0.483	0.357	2.08	5.03
1_17_5_122	MW-07	Appendix IV	Selenium	mg/L	11	9	82%	2022-11-30 to 2024-04-08		Nonparametric	0.000165	0.000165	0.000100	0.000230	0.0000919	0.557	0.0000963	NA	NA
1_17_6_111	MW-07	Part 115	Copper	mg/L	11	9	82%	2022-11-30 to 2024-04-08		Nonparametric	0.000255	0.000255	0.000240	0.000270	0.0000212	0.0832	0.0000222	NA	NA
1_17_6_114	MW-07	Part 115	Iron	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	15.4	15.0	13.0	19.0	1.96	0.128	1.48	0.637	-0.466
1_17_6_130	MW-07	Part 115	Zinc	mg/L	11	8	73%	2022-11-30 to 2024-04-08		Nonparametric	0.0148	0.0160	0.00350	0.0250	0.0108	0.728	0.0133	-0.481	NA

(Table continues on next page)

Table 2: Summary Statistics, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	MAD/0.675	Skewness	Kurtosis
1_18_4_105	MW-08	Appendix III	Boron	mg/L	11	0	0%	2022-12-01 to 2024-04-07	Normal	Normal	6.31	7.00	2.50	9.30	1.91	0.303	0.741	-0.722	0.420
1_18_4_107	MW-08	Appendix III	Calcium	mg/L	11	0	0%	2022-12-01 to 2024-04-07	Gamma; Lognormal; Normal	Normal	139	140	120	160	13.8	0.0989	14.8	-0.0862	-1.43
1_18_4_108	MW-08	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-12-01 to 2024-04-07	Gamma; Lognormal; Normal	Normal	25.7	25.0	17.0	35.0	5.50	0.214	5.93	-0.262	-0.178
1_18_4_112	MW-08	Appendix III	Fluoride	mg/L	11	0	0%	2022-12-01 to 2024-04-07	Normal	Normal	0.921	1.00	0.400	1.30	0.290	0.315	0.148	-0.749	-0.602
1_18_4_120	MW-08	Appendix III	pH (field)	su	11	0	0%	2022-12-01 to 2024-04-07	Nonparametric	Nonparametric	7.20	7.26	6.21	7.51	0.342	0.0476	0.119	-2.77	8.60
1_18_4_124	MW-08	Appendix III	Sulfate (as SO4)	mg/L	11	3	27%	2022-12-01 to 2024-04-07	Gamma; Lognormal; Normal	Gamma	10.7	6.30	1.70	26.0	9.78	0.914	6.59	0.976	-0.752
1_18_4_126	MW-08	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-12-01 to 2024-04-07	Gamma; Lognormal; Normal	Normal	535	530	440	630	56.5	0.106	44.4	0.103	-0.299
1_18_5_101	MW-08	Appendix IV	Antimony	mg/L	11	5	45%	2022-12-01 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000150	0.000135	0.0000540	0.000280	0.0000817	0.545	0.0000778	0.675	-0.121
1_18_5_102	MW-08	Appendix IV	Arsenic	mg/L	11	0	0%	2022-12-01 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.0334	0.0380	0.00690	0.0500	0.0152	0.454	0.0133	-0.671	-0.844
1_18_5_103	MW-08	Appendix IV	Barium	mg/L	11	0	0%	2022-12-01 to 2024-04-07	Gamma; Lognormal; Normal	Normal	1.22	1.20	0.980	1.50	0.169	0.139	0.148	0.235	-0.910
1_18_5_109	MW-08	Appendix IV	Chromium, Total	mg/L	11	0	0%	2022-12-01 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000910	0.000870	0.000610	0.00150	0.000254	0.279	0.000252	1.23	1.90
1_18_5_110	MW-08	Appendix IV	Cobalt	mg/L	11	0	0%	2022-12-01 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000495	0.000510	0.000340	0.000700	0.000132	0.267	0.000163	0.0118	-1.62
1_18_5_113	MW-08	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	2022-12-01 to 2024-04-07	Normal	Normal	0.921	1.00	0.400	1.30	0.290	0.315	0.148	-0.749	-0.602
1_18_5_115	MW-08	Appendix IV	Lead	mg/L	11	8	73%	2022-12-01 to 2024-04-07		Nonparametric	0.000397	0.000220	0.000110	0.000860	0.000405	1.02	0.000163	1.59	NA
1_18_5_116	MW-08	Appendix IV	Lithium	mg/L	11	0	0%	2022-12-01 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.109	0.110	0.0630	0.140	0.0244	0.225	0.0193	-0.488	-0.215
1_18_5_118	MW-08	Appendix IV	Molybdenum	mg/L	11	0	0%	2022-12-01 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.00147	0.00160	0.000360	0.00280	0.000799	0.543	0.000963	0.0186	-0.881
1_18_5_121	MW-08	Appendix IV	Radium 226 and 228	pCi/L	11	3	27%	2022-12-01 to 2024-04-07	Gamma; Lognormal; Normal	Normal	1.29	1.16	0.744	2.10	0.420	0.326	0.330	0.939	1.04
1_18_5_122	MW-08	Appendix IV	Selenium	mg/L	11	5	45%	2022-12-01 to 2024-04-07	Nonparametric	Nonparametric	0.000175	0.000145	0.000120	0.000340	0.0000819	0.468	0.0000148	2.30	5.47
1_18_6_111	MW-08	Part 115	Copper	mg/L	11	5	45%	2022-12-01 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000338	0.000345	0.000210	0.000450	0.0000952	0.281	0.000133	-0.222	-1.49
1_18_6_114	MW-08	Part 115	Iron	mg/L	11	0	0%	2022-12-01 to 2024-04-07	Gamma; Lognormal; Normal	Normal	21.1	21.0	13.0	32.0	5.72	0.271	4.44	0.774	0.350
1_18_6_119	MW-08	Part 115	Nickel	mg/L	11	0	0%	2022-12-01 to 2024-04-07	Lognormal	Lognormal	0.00145	0.00110	0.000850	0.00320	0.000751	0.517	0.000296	1.81	2.39
1_18_6_130	MW-08	Part 115	Zinc	mg/L	11	3	27%	2022-12-01 to 2024-04-07	Nonparametric	Nonparametric	0.0233	0.00215	0.00130	0.120	0.0431	1.85	0.00119	2.08	4.00
1_26_4_105	MW-16	Appendix III	Boron	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.220	0.220	0.220	0.220	NA	NA	0	NA	NA
1_26_4_107	MW-16	Appendix III	Calcium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	190	190	190	190	NA	NA	0	NA	NA
1_26_4_108	MW-16	Appendix III	Chloride (as Cl)	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	14.0	14.0	14.0	14.0	NA	NA	0	NA	NA
1_26_4_112	MW-16	Appendix III	Fluoride	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.140	0.140	0.140	0.140	NA	NA	0	NA	NA
1_26_4_120	MW-16	Appendix III	pH (field)	su	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	7.29	7.29	7.29	7.29	NA	NA	0	NA	NA
1_26_4_124	MW-16	Appendix III	Sulfate (as SO4)	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	60.0	60.0	60.0	60.0	NA	NA	0	NA	NA
1_26_4_126	MW-16	Appendix III	Total Dissolved Solids	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	680	680	680	680	NA	NA	0	NA	NA
1_26_5_102	MW-16	Appendix IV	Arsenic	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00520	0.00520	0.00520	0.00520	NA	NA	0	NA	NA
1_26_5_103	MW-16	Appendix IV	Barium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.180	0.180	0.180	0.180	NA	NA	0	NA	NA
1_26_5_109	MW-16	Appendix IV	Chromium, Total	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000640	0.000640	0.000640	0.000640	NA	NA	0	NA	NA
1_26_5_110	MW-16	Appendix IV	Cobalt	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000210	0.000210	0.000210	0.000210	NA	NA	0	NA	NA
1_26_5_113	MW-16	Appendix IV	Fluoride (App IV)	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.140	0.140	0.140	0.140	NA	NA	0	NA	NA
1_26_5_116	MW-16	Appendix IV	Lithium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.0160	0.0160	0.0160	0.0160	NA	NA	0	NA	NA
1_26_5_121	MW-16	Appendix IV	Radium 226 and 228	pCi/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.644	0.644	0.644	0.644	NA	NA	0	NA	NA
1_26_5_122	MW-16	Appendix IV	Selenium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000120	0.000120	0.000120	0.000120	NA	NA	0	NA	NA
1_26_6_111	MW-16	Part 115	Copper	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000250	0.000250	0.000250	0.000250	NA	NA	0	NA	NA
1_26_6_114	MW-16	Part 115	Iron	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	7.10	7.10	7.10	7.10	NA	NA	0	NA	NA
1_26_6_119	MW-16	Part 115	Nickel	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000650	0.000650	0.000650	0.000650	NA	NA	0	NA	NA
1_27_4_105	MW-17	Appendix III	Boron	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.790	0.790	0.790	0.790	NA	NA	0	NA	NA
1_27_4_107	MW-17	Appendix III	Calcium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	160	160	160	160	NA	NA	0	NA	NA
1_27_4_108	MW-17	Appendix III	Chloride (as Cl)	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	43.0	43.0	43.0	43.0	NA	NA	0	NA	NA

(Table continues on next page)

Table 2: Summary Statistics, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	MAD/0.675	Skewness	Kurtosis
1_27_4_112	MW-17	Appendix III	Fluoride	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.480	0.480	0.480	0.480	NA	NA	0	NA	NA
1_27_4_120	MW-17	Appendix III	pH (field)	su	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	7.88	7.88	7.88	7.88	NA	NA	0	NA	NA
1_27_4_124	MW-17	Appendix III	Sulfate (as SO4)	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	4.80	4.80	4.80	4.80	NA	NA	0	NA	NA
1_27_4_126	MW-17	Appendix III	Total Dissolved Solids	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	620	620	620	620	NA	NA	0	NA	NA
1_27_5_102	MW-17	Appendix IV	Arsenic	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00180	0.00180	0.00180	0.00180	NA	NA	0	NA	NA
1_27_5_103	MW-17	Appendix IV	Barium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.700	0.700	0.700	0.700	NA	NA	0	NA	NA
1_27_5_109	MW-17	Appendix IV	Chromium, Total	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000760	0.000760	0.000760	0.000760	NA	NA	0	NA	NA
1_27_5_110	MW-17	Appendix IV	Cobalt	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000330	0.000330	0.000330	0.000330	NA	NA	0	NA	NA
1_27_5_113	MW-17	Appendix IV	Fluoride (App IV)	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.480	0.480	0.480	0.480	NA	NA	0	NA	NA
1_27_5_115	MW-17	Appendix IV	Lead	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000190	0.000190	0.000190	0.000190	NA	NA	0	NA	NA
1_27_5_116	MW-17	Appendix IV	Lithium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.0350	0.0350	0.0350	0.0350	NA	NA	0	NA	NA
1_27_5_118	MW-17	Appendix IV	Molybdenum	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000790	0.000790	0.000790	0.000790	NA	NA	0	NA	NA
1_27_5_121	MW-17	Appendix IV	Radium 226 and 228	pCi/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.571	0.571	0.571	0.571	NA	NA	0	NA	NA
1_27_5_122	MW-17	Appendix IV	Selenium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000140	0.000140	0.000140	0.000140	NA	NA	0	NA	NA
1_27_6_111	MW-17	Part 115	Copper	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000880	0.000880	0.000880	0.000880	NA	NA	0	NA	NA
1_27_6_114	MW-17	Part 115	Iron	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	6.60	6.60	6.60	6.60	NA	NA	0	NA	NA
1_27_6_119	MW-17	Part 115	Nickel	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00110	0.00110	0.00110	0.00110	NA	NA	0	NA	NA
1_27_6_129	MW-17	Part 115	Vanadium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000840	0.000840	0.000840	0.000840	NA	NA	0	NA	NA
1_27_6_130	MW-17	Part 115	Zinc	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00260	0.00260	0.00260	0.00260	NA	NA	0	NA	NA
1_28_4_105	MW-18	Appendix III	Boron	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal; Normal	Normal	2.57	2.30	1.80	4.00	0.690	0.268	0.593	1.02	0.379
1_28_4_107	MW-18	Appendix III	Calcium	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal; Normal	Normal	341	350	240	450	65.6	0.193	44.4	-0.180	-0.564
1_28_4_108	MW-18	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal; Normal	Normal	22.1	22.0	16.0	28.0	4.18	0.189	4.44	-0.188	-1.17
1_28_4_112	MW-18	Appendix III	Fluoride	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal; Normal	Normal	3.81	3.80	2.70	5.10	0.659	0.173	0.593	0.454	0.441
1_28_4_120	MW-18	Appendix III	pH (field)	su	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal; Normal	Normal	7.16	7.16	7.02	7.27	0.0751	0.0105	0.0593	-0.571	0.148
1_28_4_124	MW-18	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal; Normal	Normal	819	780	480	1200	225	0.275	178	0.672	-0.0357
1_28_4_126	MW-18	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal; Normal	Normal	1418	1400	1100	1800	214	0.151	296	0.389	-0.343
1_28_5_101	MW-18	Appendix IV	Antimony	mg/L	11	3	27%	2022-11-30 to 2024-04-10	Nonparametric	Nonparametric	0.000180	0.000135	0.000120	0.000320	0.0000826	0.459	0.0000222	1.26	-0.249
1_28_5_102	MW-18	Appendix IV	Arsenic	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.0255	0.0240	0.0150	0.0410	0.00713	0.280	0.00741	0.776	1.10
1_28_5_103	MW-18	Appendix IV	Barium	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.0185	0.0180	0.0120	0.0250	0.00487	0.264	0.00741	0.0564	-1.88
1_28_5_104	MW-18	Appendix IV	Beryllium	mg/L	11	10	91%	2022-11-30 to 2024-04-10		Nonparametric	0.0000590	0.0000590	0.0000590	0.0000590	NA	NA	0	NA	NA
1_28_5_106	MW-18	Appendix IV	Cadmium	mg/L	11	4	36%	2022-11-30 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.000244	0.000220	0.0000890	0.000440	0.000114	0.465	0.000119	0.570	0.489
1_28_5_109	MW-18	Appendix IV	Chromium, Total	mg/L	11	10	91%	2022-11-30 to 2024-04-10		Nonparametric	0.000250	0.000250	0.000250	0.000250	NA	NA	0	NA	NA
1_28_5_110	MW-18	Appendix IV	Cobalt	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal	Gamma	0.00316	0.00230	0.00170	0.00600	0.00154	0.486	0.000889	0.967	-0.604
1_28_5_113	MW-18	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal; Normal	Normal	3.81	3.80	2.70	5.10	0.659	0.173	0.593	0.454	0.441
1_28_5_115	MW-18	Appendix IV	Lead	mg/L	11	8	73%	2022-11-30 to 2024-04-10		Nonparametric	0.000207	0.000160	0.000140	0.000320	0.0000987	0.477	0.0000296	1.65	NA
1_28_5_116	MW-18	Appendix IV	Lithium	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.0338	0.0300	0.0200	0.0450	0.00857	0.253	0.0133	-0.0392	-1.51
1_28_5_118	MW-18	Appendix IV	Molybdenum	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.0142	0.0130	0.00900	0.0210	0.00400	0.282	0.00296	0.780	-0.713
1_28_5_121	MW-18	Appendix IV	Radium 226 and 228	pCi/L	11	7	64%	2022-11-30 to 2024-04-10		Nonparametric	0.770	0.674	0.462	1.27	0.351	0.456	0.199	1.42	2.32
1_28_5_122	MW-18	Appendix IV	Selenium	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.000657	0.000410	0.000160	0.00200	0.000565	0.859	0.000370	1.46	2.23
1_28_6_111	MW-18	Part 115	Copper	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Lognormal	Lognormal	0.000595	0.000470	0.000330	0.00150	0.000333	0.560	0.0000593	2.39	6.00
1_28_6_114	MW-18	Part 115	Iron	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal; Normal	Normal	6.62	6.80	4.30	10.0	1.71	0.258	2.07	0.633	-0.0269
1_28_6_119	MW-18	Part 115	Nickel	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal	Gamma	0.00699	0.00560	0.00470	0.0110	0.00246	0.351	0.00133	0.822	-0.955
1_28_6_130	MW-18	Part 115	Zinc	mg/L	11	0	0%	2022-11-30 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.0540	0.0540	0.0280	0.0880	0.0181	0.336	0.0207	0.446	-0.505

(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	MAD/0.675	Skewness	Kurtosis
1_29_4_105	MW-19	Appendix III	Boron	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	1.98	1.90	1.50	2.60	0.400	0.202	0.444	0.428	-1.03
1_29_4_107	MW-19	Appendix III	Calcium	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	481	480	360	550	50.1	0.104	44.4	-1.27	2.96
1_29_4_108	MW-19	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	47.3	42.0	23.0	75.0	15.3	0.323	7.41	0.523	-0.256
1_29_4_112	MW-19	Appendix III	Fluoride	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	1.91	1.90	1.50	2.30	0.255	0.133	0.296	0.00953	-0.819
1_29_4_120	MW-19	Appendix III	pH (field)	su	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	6.86	6.90	6.39	7.07	0.180	0.0263	0.119	-1.88	4.69
1_29_4_124	MW-19	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	1030	1100	600	1300	217	0.210	148	-0.655	0.0111
1_29_4_126	MW-19	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	1936	2000	1600	2200	234	0.121	296	-0.307	-1.44
1_29_5_101	MW-19	Appendix IV	Antimony	mg/L	11	10	91%	2022-11-30 to 2024-04-08		Nonparametric	0.000720	0.000720	0.000720	0.000720	NA	NA	0	NA	NA
1_29_5_102	MW-19	Appendix IV	Arsenic	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00505	0.00550	0.00260	0.00730	0.00164	0.325	0.00178	-0.165	-1.41
1_29_5_103	MW-19	Appendix IV	Barium	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.0401	0.0400	0.0300	0.0500	0.00609	0.152	0.00593	0.102	-0.758
1_29_5_104	MW-19	Appendix IV	Beryllium	mg/L	11	3	27%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.0000715	0.0000715	0.0000570	0.0000860	0.0000108	0.151	0.0000141	0.129	-1.37
1_29_5_109	MW-19	Appendix IV	Chromium, Total	mg/L	11	5	45%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.000337	0.000300	0.000250	0.000530	0.000103	0.307	0.0000593	1.69	2.85
1_29_5_110	MW-19	Appendix IV	Cobalt	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.000524	0.000460	0.000130	0.000960	0.000241	0.460	0.000341	0.181	-0.134
1_29_5_113	MW-19	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	1.91	1.90	1.50	2.30	0.255	0.133	0.296	0.00953	-0.819
1_29_5_116	MW-19	Appendix IV	Lithium	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.0925	0.0900	0.0730	0.110	0.0124	0.134	0.0133	-0.168	-0.593
1_29_5_118	MW-19	Appendix IV	Molybdenum	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Normal	Normal	0.00976	0.0100	0.00390	0.0130	0.00293	0.300	0.00148	-1.07	0.569
1_29_5_121	MW-19	Appendix IV	Radium 226 and 228	pCi/L	11	3	27%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.851	0.918	0.514	1.17	0.254	0.298	0.306	-0.302	-1.77
1_29_5_122	MW-19	Appendix IV	Selenium	mg/L	11	10	91%	2022-11-30 to 2024-04-08		Nonparametric	0.000120	0.000120	0.000120	0.000120	NA	NA	0	NA	NA
1_29_6_111	MW-19	Part 115	Copper	mg/L	11	10	91%	2022-11-30 to 2024-04-08		Nonparametric	0.000220	0.000220	0.000220	0.000220	NA	NA	0	NA	NA
1_29_6_114	MW-19	Part 115	Iron	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	16.3	16.0	12.0	24.0	3.47	0.213	2.96	1.07	1.34
1_29_6_119	MW-19	Part 115	Nickel	mg/L	11	1	9%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00183	0.00160	0.00110	0.00280	0.000633	0.346	0.000667	0.341	-1.72
1_29_6_130	MW-19	Part 115	Zinc	mg/L	11	9	82%	2022-11-30 to 2024-04-08		Nonparametric	0.00325	0.00325	0.00230	0.00420	0.00134	0.413	0.00141	NA	NA
1_30_4_105	MW-20	Appendix III	Boron	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.920	0.870	0.720	1.10	0.152	0.165	0.163	0.268	-1.80
1_30_4_107	MW-20	Appendix III	Calcium	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Normal	Normal	125	130	58.0	170	27.1	0.216	14.8	-1.30	4.22
1_30_4_108	MW-20	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	69.7	70.0	41.0	92.0	13.7	0.197	10.4	-0.361	1.31
1_30_4_112	MW-20	Appendix III	Fluoride	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Nonparametric	Nonparametric	0.266	0.240	0.210	0.550	0.0963	0.361	0.0296	3.05	9.72
1_30_4_120	MW-20	Appendix III	pH (field)	su	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	7.34	7.33	7.14	7.50	0.122	0.0165	0.178	-0.326	-1.31
1_30_4_124	MW-20	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	66.6	76.0	19.0	120	32.8	0.493	50.4	0.114	-0.950
1_30_4_126	MW-20	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	688	660	570	840	74.7	0.109	29.6	0.733	0.601
1_30_5_101	MW-20	Appendix IV	Antimony	mg/L	11	4	36%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.0000983	0.0000960	0.0000540	0.000160	0.0000408	0.416	0.0000504	0.483	-1.34
1_30_5_102	MW-20	Appendix IV	Arsenic	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00139	0.00130	0.00110	0.00170	0.000217	0.156	0.000296	0.286	-1.52
1_30_5_103	MW-20	Appendix IV	Barium	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.495	0.450	0.310	0.940	0.167	0.339	0.0593	2.10	5.40
1_30_5_104	MW-20	Appendix IV	Beryllium	mg/L	11	10	91%	2022-11-30 to 2024-04-08		Nonparametric	0.0000590	0.0000590	0.0000590	0.0000590	NA	NA	0	NA	NA
1_30_5_109	MW-20	Appendix IV	Chromium, Total	mg/L	11	5	45%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.000237	0.000235	0.000190	0.000290	0.0000367	0.155	0.0000370	0.252	-0.945
1_30_5_110	MW-20	Appendix IV	Cobalt	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00129	0.00130	0.000950	0.00160	0.000210	0.163	0.000296	0.0948	-0.755
1_30_5_113	MW-20	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Nonparametric	Nonparametric	0.266	0.240	0.210	0.550	0.0963	0.361	0.0296	3.05	9.72
1_30_5_115	MW-20	Appendix IV	Lead	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00198	0.00180	0.00130	0.00280	0.000540	0.272	0.000741	0.392	-1.32
1_30_5_116	MW-20	Appendix IV	Lithium	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.0618	0.0620	0.0290	0.0830	0.0153	0.248	0.0133	-0.719	0.832
1_30_5_118	MW-20	Appendix IV	Molybdenum	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00425	0.00410	0.00330	0.00510	0.000573	0.135	0.000741	-0.113	-1.12
1_30_5_121	MW-20	Appendix IV	Radium 226 and 228	pCi/L	11	6	55%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Nonparametric	0.918	0.822	0.591	1.47	0.364	0.397	0.342	0.963	-0.0589
1_30_5_122	MW-20	Appendix IV	Selenium	mg/L	11	5	45%	2022-11-30 to 2024-04-08	Nonparametric	Nonparametric	0.000140	0.000120	0.000100	0.000260	0.0000600	0.429	0.0000148	2.23	5.18
1_30_5_125	MW-20	Appendix IV	Thallium	mg/L	11	10	91%	2022-11-30 to 2024-04-08		Nonparametric	0.000110	0.000110	0.000110	0.000110	NA	NA	0	NA	NA
1_30_6_111	MW-20	Part 115	Copper	mg/L	11	1	9%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.000321	0.000315	0.000230	0.000530	0.0000950	0.296	0.000104	1.18	1.43

(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	MAD/0.675	Skewness	Kurtosis
1_30_6_114	MW-20	Part 115	Iron	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Gamma; Lognormal; Normal	Normal	19.5	19.0	16.0	22.0	1.92	0.0985	1.48	-0.176	-0.750
1_30_6_119	MW-20	Part 115	Nickel	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Normal	Normal	0.00856	0.00910	0.00610	0.00990	0.00131	0.153	0.00104	-0.947	-0.434
1_30_6_130	MW-20	Part 115	Zinc	mg/L	11	0	0%	2022-11-30 to 2024-04-08	Nonparametric	Nonparametric	0.0326	0.0280	0.0160	0.0710	0.0169	0.517	0.00593	1.78	2.24
1_38_4_105	MW-28	Appendix III	Boron	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	2.20	2.20	2.20	2.20	NA	NA	0	NA	NA
1_38_4_107	MW-28	Appendix III	Calcium	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	170	170	170	170	NA	NA	0	NA	NA
1_38_4_108	MW-28	Appendix III	Chloride (as Cl)	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	18.0	18.0	18.0	18.0	NA	NA	0	NA	NA
1_38_4_112	MW-28	Appendix III	Fluoride	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.900	0.900	0.900	0.900	NA	NA	0	NA	NA
1_38_4_120	MW-28	Appendix III	pH (field)	su	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	7.02	7.02	7.02	7.02	NA	NA	0	NA	NA
1_38_4_124	MW-28	Appendix III	Sulfate (as SO4)	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	11.0	11.0	11.0	11.0	NA	NA	0	NA	NA
1_38_4_126	MW-28	Appendix III	Total Dissolved Solids	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	610	610	610	610	NA	NA	0	NA	NA
1_38_5_101	MW-28	Appendix IV	Antimony	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.000280	0.000280	0.000280	0.000280	NA	NA	0	NA	NA
1_38_5_102	MW-28	Appendix IV	Arsenic	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.00110	0.00110	0.00110	0.00110	NA	NA	0	NA	NA
1_38_5_103	MW-28	Appendix IV	Barium	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.340	0.340	0.340	0.340	NA	NA	0	NA	NA
1_38_5_109	MW-28	Appendix IV	Chromium, Total	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.0170	0.0170	0.0170	0.0170	NA	NA	0	NA	NA
1_38_5_110	MW-28	Appendix IV	Cobalt	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.000640	0.000640	0.000640	0.000640	NA	NA	0	NA	NA
1_38_5_113	MW-28	Appendix IV	Fluoride (App IV)	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.900	0.900	0.900	0.900	NA	NA	0	NA	NA
1_38_5_115	MW-28	Appendix IV	Lead	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.00110	0.00110	0.00110	0.00110	NA	NA	0	NA	NA
1_38_5_116	MW-28	Appendix IV	Lithium	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.0500	0.0500	0.0500	0.0500	NA	NA	0	NA	NA
1_38_5_117	MW-28	Appendix IV	Mercury	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.000240	0.000240	0.000240	0.000240	NA	NA	0	NA	NA
1_38_5_118	MW-28	Appendix IV	Molybdenum	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.000870	0.000870	0.000870	0.000870	NA	NA	0	NA	NA
1_38_5_121	MW-28	Appendix IV	Radium 226 and 228	pCi/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.842	0.842	0.842	0.842	NA	NA	0	NA	NA
1_38_5_122	MW-28	Appendix IV	Selenium	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.000320	0.000320	0.000320	0.000320	NA	NA	0	NA	NA
1_38_6_111	MW-28	Part 115	Copper	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.000520	0.000520	0.000520	0.000520	NA	NA	0	NA	NA
1_38_6_114	MW-28	Part 115	Iron	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	30.0	30.0	30.0	30.0	NA	NA	0	NA	NA
1_38_6_119	MW-28	Part 115	Nickel	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.00360	0.00360	0.00360	0.00360	NA	NA	0	NA	NA
1_38_6_129	MW-28	Part 115	Vanadium	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.000630	0.000630	0.000630	0.000630	NA	NA	0	NA	NA
1_38_6_130	MW-28	Part 115	Zinc	mg/L	1	0	0%	2024-04-07 to 2024-04-07		Nonparametric	0.00900	0.00900	0.00900	0.00900	NA	NA	0	NA	NA
1_40_4_105	MW-30	Appendix III	Boron	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal	Gamma	2.04	1.90	1.60	3.50	0.520	0.255	0.296	2.57	7.50
1_40_4_107	MW-30	Appendix III	Calcium	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Nonparametric	Nonparametric	490	460	390	960	159	0.324	29.6	3.11	10.0
1_40_4_108	MW-30	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	130	110	82.0	190	41.5	0.321	19.3	0.757	-1.17
1_40_4_112	MW-30	Appendix III	Fluoride	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	1.12	1.10	0.910	1.40	0.131	0.117	0.148	0.607	1.20
1_40_4_120	MW-30	Appendix III	pH (field)	su	11	0	0%	2022-11-30 to 2024-04-07	Nonparametric	Nonparametric	7.07	7.16	6.48	7.25	0.215	0.0304	0.0741	-2.48	6.74
1_40_4_124	MW-30	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	871	860	610	1000	114	0.130	119	-1.14	1.63
1_40_4_126	MW-30	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	2218	2200	1800	2800	252	0.114	148	0.892	2.58
1_40_5_101	MW-30	Appendix IV	Antimony	mg/L	11	10	91%	2022-11-30 to 2024-04-07		Nonparametric	0.000400	0.000400	0.000400	0.000400	NA	NA	0	NA	NA
1_40_5_102	MW-30	Appendix IV	Arsenic	mg/L	11	2	18%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000406	0.000430	0.000120	0.000700	0.000187	0.461	0.000237	0.0930	-0.530
1_40_5_103	MW-30	Appendix IV	Barium	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.0663	0.0580	0.0450	0.100	0.0208	0.314	0.0148	0.829	-0.854
1_40_5_104	MW-30	Appendix IV	Beryllium	mg/L	11	9	82%	2022-11-30 to 2024-04-07		Nonparametric	0.0000815	0.0000815	0.0000530	0.000110	0.0000403	0.495	0.0000422	NA	NA
1_40_5_109	MW-30	Appendix IV	Chromium, Total	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.00920	0.00870	0.00490	0.0140	0.00323	0.351	0.00489	0.0752	-1.46
1_40_5_110	MW-30	Appendix IV	Cobalt	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal	Gamma	0.00148	0.00110	0.000530	0.00440	0.00115	0.776	0.000296	2.05	4.14
1_40_5_113	MW-30	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	1.12	1.10	0.910	1.40	0.131	0.117	0.148	0.607	1.20
1_40_5_116	MW-30	Appendix IV	Lithium	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal	Gamma	0.135	0.120	0.100	0.270	0.0472	0.351	0.0148	2.78	8.37
1_40_5_117	MW-30	Appendix IV	Mercury	mg/L	11	10	91%	2022-11-30 to 2024-04-07		Nonparametric	0.000390	0.000390	0.000390	0.000390	NA	NA	0	NA	NA

(Table continues on next page)

Table 2: Summary Statistics, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	MAD/0.675	Skewness	Kurtosis
1_40_5_118	MW-30	Appendix IV	Molybdenum	mg/L	11	3	27%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.00127	0.000960	0.000320	0.00360	0.00103	0.812	0.000511	1.95	4.28
1_40_5_121	MW-30	Appendix IV	Radium 226 and 228	pCi/L	11	6	55%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Nonparametric	0.684	0.604	0.445	0.911	0.201	0.293	0.236	0.178	-2.32
1_40_5_122	MW-30	Appendix IV	Selenium	mg/L	11	6	55%	2022-11-30 to 2024-04-07	Nonparametric	Nonparametric	0.000170	0.000120	0.000100	0.000390	0.000123	0.726	0.0000148	2.19	4.84
1_40_6_111	MW-30	Part 115	Copper	mg/L	11	7	64%	2022-11-30 to 2024-04-07		Nonparametric	0.000358	0.000325	0.000240	0.000540	0.000133	0.373	0.0000963	1.12	0.622
1_40_6_114	MW-30	Part 115	Iron	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	3.17	2.90	0.870	8.80	2.26	0.713	1.78	1.64	3.42
1_40_6_119	MW-30	Part 115	Nickel	mg/L	11	2	18%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.00209	0.00180	0.000700	0.00450	0.00135	0.647	0.00104	1.06	0.0432
1_40_6_130	MW-30	Part 115	Zinc	mg/L	11	9	82%	2022-11-30 to 2024-04-07		Nonparametric	0.00510	0.00510	0.00490	0.00530	0.000283	0.0555	0.000296	NA	NA
1_41_4_105	MW-31	Appendix III	Boron	mg/L	11	0	0%	2022-12-01 to 2024-04-08	Gamma; Lognormal; Normal	Normal	4.46	4.50	3.60	5.40	0.546	0.122	0.444	0.0751	-0.547
1_41_4_107	MW-31	Appendix III	Calcium	mg/L	11	0	0%	2022-12-01 to 2024-04-08	Gamma; Lognormal; Normal	Normal	172	170	130	200	20.9	0.122	14.8	-0.454	0.339
1_41_4_108	MW-31	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-12-01 to 2024-04-08	Gamma; Lognormal; Normal	Normal	102	100	87.0	120	9.73	0.0956	11.9	0.410	-0.365
1_41_4_112	MW-31	Appendix III	Fluoride	mg/L	11	0	0%	2022-12-01 to 2024-04-08	Lognormal; Normal	Normal	4.79	4.70	4.50	5.20	0.243	0.0507	0.148	0.693	-1.12
1_41_4_120	MW-31	Appendix III	pH (field)	su	11	0	0%	2022-12-01 to 2024-04-08	Gamma; Lognormal; Normal	Normal	7.83	7.84	7.67	8.01	0.107	0.0137	0.0889	0.402	-0.174
1_41_4_124	MW-31	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	2022-12-01 to 2024-04-08	Gamma; Lognormal; Normal	Normal	173	170	72.0	250	61.3	0.355	74.1	-0.0968	-0.971
1_41_4_126	MW-31	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-12-01 to 2024-04-08	Gamma; Lognormal; Normal	Normal	815	810	730	940	59.6	0.0730	74.1	0.659	0.550
1_41_5_101	MW-31	Appendix IV	Antimony	mg/L	11	6	55%	2022-12-01 to 2024-04-08	Gamma; Lognormal; Normal	Nonparametric	0.000104	0.000120	0.0000690	0.000130	0.0000273	0.263	0.0000148	-0.594	-2.63
1_41_5_102	MW-31	Appendix IV	Arsenic	mg/L	11	0	0%	2022-12-01 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00131	0.00120	0.00100	0.00180	0.000263	0.201	0.000296	0.650	-0.574
1_41_5_103	MW-31	Appendix IV	Barium	mg/L	11	0	0%	2022-12-01 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.159	0.150	0.120	0.230	0.0362	0.227	0.0296	0.972	-0.151
1_41_5_104	MW-31	Appendix IV	Beryllium	mg/L	11	10	91%	2022-12-01 to 2024-04-08		Nonparametric	0.0000540	0.0000540	0.0000540	0.0000540	NA	NA	0	NA	NA
1_41_5_106	MW-31	Appendix IV	Cadmium	mg/L	11	10	91%	2022-12-01 to 2024-04-08		Nonparametric	0.0000840	0.0000840	0.0000840	0.0000840	NA	NA	0	NA	NA
1_41_5_109	MW-31	Appendix IV	Chromium, Total	mg/L	11	0	0%	2022-12-01 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00218	0.00220	0.00170	0.00290	0.000352	0.161	0.000444	0.572	0.232
1_41_5_110	MW-31	Appendix IV	Cobalt	mg/L	11	1	9%	2022-12-01 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.000182	0.000180	0.000130	0.000280	0.0000421	0.231	0.0000370	1.40	2.78
1_41_5_113	MW-31	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	2022-12-01 to 2024-04-08	Lognormal; Normal	Normal	4.79	4.70	4.50	5.20	0.243	0.0507	0.148	0.693	-1.12
1_41_5_115	MW-31	Appendix IV	Lead	mg/L	11	10	91%	2022-12-01 to 2024-04-08		Nonparametric	0.000310	0.000310	0.000310	0.000310	NA	NA	0	NA	NA
1_41_5_116	MW-31	Appendix IV	Lithium	mg/L	11	0	0%	2022-12-01 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.0493	0.0520	0.0390	0.0560	0.00585	0.119	0.00444	-0.975	-0.136
1_41_5_118	MW-31	Appendix IV	Molybdenum	mg/L	11	0	0%	2022-12-01 to 2024-04-08	Normal	Normal	0.00127	0.00120	0.000520	0.00210	0.000407	0.322	0.000148	0.547	1.71
1_41_5_121	MW-31	Appendix IV	Radium 226 and 228	pCi/L	11	3	27%	2022-12-01 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.760	0.654	0.502	1.23	0.275	0.362	0.136	1.12	-0.305
1_41_5_122	MW-31	Appendix IV	Selenium	mg/L	11	5	45%	2022-12-01 to 2024-04-08	Nonparametric	Nonparametric	0.000232	0.000135	0.000110	0.000740	0.000249	1.08	0.0000222	2.43	5.93
1_41_5_125	MW-31	Appendix IV	Thallium	mg/L	11	10	91%	2022-12-01 to 2024-04-08		Nonparametric	0.0000880	0.0000880	0.0000880	0.0000880	NA	NA	0	NA	NA
1_41_6_111	MW-31	Part 115	Copper	mg/L	11	8	73%	2022-12-01 to 2024-04-08		Nonparametric	0.000313	0.000270	0.000230	0.000440	0.000112	0.356	0.0000593	1.48	NA
1_41_6_114	MW-31	Part 115	Iron	mg/L	11	0	0%	2022-12-01 to 2024-04-08	Gamma; Lognormal; Normal	Gamma	0.913	0.920	0.120	2.50	0.741	0.812	0.859	0.792	0.577
1_41_6_119	MW-31	Part 115	Nickel	mg/L	11	10	91%	2022-12-01 to 2024-04-08		Nonparametric	0.00230	0.00230	0.00230	0.00230	NA	NA	0	NA	NA
1_41_6_130	MW-31	Part 115	Zinc	mg/L	11	8	73%	2022-12-01 to 2024-04-08		Nonparametric	0.00653	0.00820	0.00140	0.0100	0.00454	0.694	0.00267	-1.43	NA
1_42_4_105	MW-32	Appendix III	Boron	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal	Gamma	3.37	3.10	2.60	5.00	0.678	0.201	0.296	1.49	2.42
1_42_4_107	MW-32	Appendix III	Calcium	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	179	190	130	220	25.9	0.144	14.8	-0.598	0.0467
1_42_4_108	MW-32	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	44.8	45.0	38.0	50.0	4.40	0.0982	5.93	-0.221	-1.33
1_42_4_112	MW-32	Appendix III	Fluoride	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	1.53	1.50	1.40	1.80	0.119	0.0780	0.148	1.10	1.67
1_42_4_120	MW-32	Appendix III	pH (field)	su	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	7.61	7.63	7.50	7.75	0.0819	0.0108	0.0889	0.216	-1.12
1_42_4_124	MW-32	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	96.3	100	17.0	190	58.6	0.609	68.1	0.0985	-1.07
1_42_4_126	MW-32	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	711	730	550	800	84.9	0.119	88.9	-0.759	-0.591
1_42_5_101	MW-32	Appendix IV	Antimony	mg/L	11	7	64%	2022-11-30 to 2024-04-07		Nonparametric	0.000245	0.000106	0.0000670	0.000700	0.000305	1.25	0.0000541	1.93	3.75
1_42_5_102	MW-32	Appendix IV	Arsenic	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Nonparametric	Nonparametric	0.000698	0.000550	0.000440	0.00240	0.000568	0.814	0.000104	3.24	10.6
1_42_5_103	MW-32	Appendix IV	Barium	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.463	0.410	0.0590	0.850	0.209	0.453	0.237	-0.0898	0.741
1_42_5_104	MW-32	Appendix IV	Beryllium	mg/L	11	10	91%	2022-11-30 to 2024-04-07		Nonparametric	0.0000700	0.0000700	0.0000700	0.0000700	NA	NA	0	NA	NA

(Table continues on next page)

Table 2: Summary Statistics, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	MAD/0.675	Skewness	Kurtosis
1_42_5_106	MW-32	Appendix IV	Cadmium	mg/L	11	10	91%	2022-11-30 to 2024-04-07		Nonparametric	0.000190	0.000190	0.000190	0.000190	NA	NA	0	NA	NA
1_42_5_109	MW-32	Appendix IV	Chromium, Total	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Lognormal	Lognormal	0.000665	0.000390	0.000310	0.00300	0.000783	1.18	0.000119	3.19	10.4
1_42_5_110	MW-32	Appendix IV	Cobalt	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Nonparametric	Nonparametric	0.000539	0.000380	0.000210	0.00190	0.000469	0.870	0.0000593	2.90	8.91
1_42_5_113	MW-32	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	1.53	1.50	1.40	1.80	0.119	0.0780	0.148	1.10	1.67
1_42_5_115	MW-32	Appendix IV	Lead	mg/L	11	8	73%	2022-11-30 to 2024-04-07		Nonparametric	0.000213	0.000140	0.000120	0.000380	0.000145	0.678	0.0000296	1.69	NA
1_42_5_116	MW-32	Appendix IV	Lithium	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.125	0.120	0.0940	0.190	0.0292	0.234	0.0296	1.08	1.11
1_42_5_117	MW-32	Appendix IV	Mercury	mg/L	11	10	91%	2022-11-30 to 2024-04-07		Nonparametric	0.00190	0.00190	0.00190	0.00190	NA	NA	0	NA	NA
1_42_5_118	MW-32	Appendix IV	Molybdenum	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.00444	0.00450	0.00320	0.00730	0.00113	0.255	0.000889	1.63	3.86
1_42_5_121	MW-32	Appendix IV	Radium 226 and 228	pCi/L	11	7	64%	2022-11-30 to 2024-04-07		Nonparametric	0.831	0.862	0.614	0.985	0.156	0.188	0.102	-1.12	2.06
1_42_5_122	MW-32	Appendix IV	Selenium	mg/L	11	9	82%	2022-11-30 to 2024-04-07		Nonparametric	0.000565	0.000565	0.000130	0.00100	0.000615	1.09	0.000644	NA	NA
1_42_6_111	MW-32	Part 115	Copper	mg/L	11	8	73%	2022-11-30 to 2024-04-07		Nonparametric	0.00554	0.000410	0.000200	0.0160	0.00906	1.64	0.000311	1.73	NA
1_42_6_114	MW-32	Part 115	Iron	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Gamma; Lognormal; Normal	Normal	16.4	17.0	11.0	20.0	2.98	0.182	1.48	-1.07	0.285
1_42_6_119	MW-32	Part 115	Nickel	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Nonparametric	Nonparametric	0.00308	0.00120	0.000770	0.0230	0.00661	2.14	0.000370	3.31	11
1_42_6_130	MW-32	Part 115	Zinc	mg/L	11	0	0%	2022-11-30 to 2024-04-07	Nonparametric	Nonparametric	0.00804	0.00300	0.00220	0.0310	0.0111	1.39	0.000889	1.90	2.00
1_46_4_105	MW-36	Appendix III	Boron	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.280	0.280	0.280	0.280	NA	NA	0	NA	NA
1_46_4_107	MW-36	Appendix III	Calcium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	67.0	67.0	67.0	67.0	NA	NA	0	NA	NA
1_46_4_108	MW-36	Appendix III	Chloride (as Cl)	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	34.0	34.0	34.0	34.0	NA	NA	0	NA	NA
1_46_4_112	MW-36	Appendix III	Fluoride	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.610	0.610	0.610	0.610	NA	NA	0	NA	NA
1_46_4_120	MW-36	Appendix III	pH (field)	su	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	10.4	10.4	10.4	10.4	NA	NA	0	NA	NA
1_46_4_124	MW-36	Appendix III	Sulfate (as SO4)	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	5.70	5.70	5.70	5.70	NA	NA	0	NA	NA
1_46_4_126	MW-36	Appendix III	Total Dissolved Solids	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	330	330	330	330	NA	NA	0	NA	NA
1_46_5_101	MW-36	Appendix IV	Antimony	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000760	0.000760	0.000760	0.000760	NA	NA	0	NA	NA
1_46_5_102	MW-36	Appendix IV	Arsenic	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.0290	0.0290	0.0290	0.0290	NA	NA	0	NA	NA
1_46_5_103	MW-36	Appendix IV	Barium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.150	0.150	0.150	0.150	NA	NA	0	NA	NA
1_46_5_104	MW-36	Appendix IV	Beryllium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.0000590	0.0000590	0.0000590	0.0000590	NA	NA	0	NA	NA
1_46_5_106	MW-36	Appendix IV	Cadmium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000320	0.000320	0.000320	0.000320	NA	NA	0	NA	NA
1_46_5_109	MW-36	Appendix IV	Chromium, Total	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00130	0.00130	0.00130	0.00130	NA	NA	0	NA	NA
1_46_5_110	MW-36	Appendix IV	Cobalt	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000270	0.000270	0.000270	0.000270	NA	NA	0	NA	NA
1_46_5_113	MW-36	Appendix IV	Fluoride (App IV)	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.610	0.610	0.610	0.610	NA	NA	0	NA	NA
1_46_5_115	MW-36	Appendix IV	Lead	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.0250	0.0250	0.0250	0.0250	NA	NA	0	NA	NA
1_46_5_116	MW-36	Appendix IV	Lithium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00570	0.00570	0.00570	0.00570	NA	NA	0	NA	NA
1_46_5_118	MW-36	Appendix IV	Molybdenum	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.0190	0.0190	0.0190	0.0190	NA	NA	0	NA	NA
1_46_5_122	MW-36	Appendix IV	Selenium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000600	0.000600	0.000600	0.000600	NA	NA	0	NA	NA
1_46_6_111	MW-36	Part 115	Copper	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00770	0.00770	0.00770	0.00770	NA	NA	0	NA	NA
1_46_6_114	MW-36	Part 115	Iron	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.400	0.400	0.400	0.400	NA	NA	0	NA	NA
1_46_6_119	MW-36	Part 115	Nickel	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.0110	0.0110	0.0110	0.0110	NA	NA	0	NA	NA
1_46_6_123	MW-36	Part 115	Silver	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000210	0.000210	0.000210	0.000210	NA	NA	0	NA	NA
1_46_6_129	MW-36	Part 115	Vanadium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00240	0.00240	0.00240	0.00240	NA	NA	0	NA	NA
1_46_6_130	MW-36	Part 115	Zinc	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00880	0.00880	0.00880	0.00880	NA	NA	0	NA	NA
1_47_4_105	MW-37	Appendix III	Boron	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	5.20	5.20	5.20	5.20	NA	NA	0	NA	NA
1_47_4_107	MW-37	Appendix III	Calcium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	160	160	160	160	NA	NA	0	NA	NA
1_47_4_108	MW-37	Appendix III	Chloride (as Cl)	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	22.0	22.0	22.0	22.0	NA	NA	0	NA	NA
1_47_4_112	MW-37	Appendix III	Fluoride	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.630	0.630	0.630	0.630	NA	NA	0	NA	NA

(Table continues on next page)

Table 2: Summary Statistics, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	MAD/0.675	Skewness	Kurtosis
1_47_4_120	MW-37	Appendix III	pH (field)	su	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	7.47	7.47	7.47	7.47	NA	NA	0	NA	NA
1_47_4_124	MW-37	Appendix III	Sulfate (as SO4)	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	210	210	210	210	NA	NA	0	NA	NA
1_47_4_126	MW-37	Appendix III	Total Dissolved Solids	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	790	790	790	790	NA	NA	0	NA	NA
1_47_5_101	MW-37	Appendix IV	Antimony	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000640	0.000640	0.000640	0.000640	NA	NA	0	NA	NA
1_47_5_102	MW-37	Appendix IV	Arsenic	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000550	0.000550	0.000550	0.000550	NA	NA	0	NA	NA
1_47_5_103	MW-37	Appendix IV	Barium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.0400	0.0400	0.0400	0.0400	NA	NA	0	NA	NA
1_47_5_106	MW-37	Appendix IV	Cadmium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000120	0.000120	0.000120	0.000120	NA	NA	0	NA	NA
1_47_5_109	MW-37	Appendix IV	Chromium, Total	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000390	0.000390	0.000390	0.000390	NA	NA	0	NA	NA
1_47_5_110	MW-37	Appendix IV	Cobalt	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000750	0.000750	0.000750	0.000750	NA	NA	0	NA	NA
1_47_5_113	MW-37	Appendix IV	Fluoride (App IV)	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.630	0.630	0.630	0.630	NA	NA	0	NA	NA
1_47_5_115	MW-37	Appendix IV	Lead	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000170	0.000170	0.000170	0.000170	NA	NA	0	NA	NA
1_47_5_116	MW-37	Appendix IV	Lithium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.0200	0.0200	0.0200	0.0200	NA	NA	0	NA	NA
1_47_5_118	MW-37	Appendix IV	Molybdenum	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.0150	0.0150	0.0150	0.0150	NA	NA	0	NA	NA
1_47_5_122	MW-37	Appendix IV	Selenium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00460	0.00460	0.00460	0.00460	NA	NA	0	NA	NA
1_47_6_111	MW-37	Part 115	Copper	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.0130	0.0130	0.0130	0.0130	NA	NA	0	NA	NA
1_47_6_114	MW-37	Part 115	Iron	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.160	0.160	0.160	0.160	NA	NA	0	NA	NA
1_47_6_119	MW-37	Part 115	Nickel	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00460	0.00460	0.00460	0.00460	NA	NA	0	NA	NA
1_47_6_130	MW-37	Part 115	Zinc	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.0170	0.0170	0.0170	0.0170	NA	NA	0	NA	NA
2_11_4_105	MW-01R	Appendix III	Boron	mg/L	11	0	0%	2022-11-29 to 2024-04-10	Gamma; Lognormal; Normal	Normal	99.4	100	38.0	160	38.9	0.392	44.4	0.194	-0.969
2_11_4_107	MW-01R	Appendix III	Calcium	mg/L	11	0	0%	2022-11-29 to 2024-04-10	Gamma; Lognormal; Normal	Normal	255	240	130	400	80.7	0.316	74.1	0.225	-0.393
2_11_4_108	MW-01R	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-11-29 to 2024-04-10	Gamma; Lognormal; Normal	Normal	131	150	49.0	210	53.8	0.411	44.4	-0.453	-0.913
2_11_4_112	MW-01R	Appendix III	Fluoride	mg/L	11	0	0%	2022-11-29 to 2024-04-10	Gamma; Lognormal; Normal	Normal	10.8	10.0	4.80	15.0	3.54	0.327	5.93	-0.314	-1.37
2_11_4_120	MW-01R	Appendix III	pH (field)	su	11	0	0%	2022-11-29 to 2024-04-10	Nonparametric	Nonparametric	7.56	7.74	6.02	7.81	0.517	0.0684	0.0889	-3.15	10.1
2_11_4_124	MW-01R	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	2022-11-29 to 2024-04-10	Gamma; Normal	Gamma	513	540	8.80	980	310	0.605	356	-0.176	-0.995
2_11_4_126	MW-01R	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-11-29 to 2024-04-10	Gamma; Lognormal; Normal	Normal	2336	2400	2100	2600	136	0.0583	148	0.0600	0.486
2_11_5_101	MW-01R	Appendix IV	Antimony	mg/L	11	3	27%	2022-11-29 to 2024-04-10	Gamma; Lognormal	Gamma	0.000431	0.000290	0.000170	0.00120	0.000353	0.819	0.0000963	1.87	3.13
2_11_5_102	MW-01R	Appendix IV	Arsenic	mg/L	11	0	0%	2022-11-29 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.00163	0.00130	0.000730	0.00410	0.000912	0.560	0.000593	2.21	6.07
2_11_5_103	MW-01R	Appendix IV	Barium	mg/L	11	0	0%	2022-11-29 to 2024-04-10	Gamma; Lognormal	Gamma	0.322	0.290	0.200	0.560	0.124	0.385	0.104	1.24	0.505
2_11_5_104	MW-01R	Appendix IV	Beryllium	mg/L	11	1	9%	2022-11-29 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.000237	0.000205	0.000120	0.000360	0.0000826	0.349	0.0000815	0.359	-1.10
2_11_5_106	MW-01R	Appendix IV	Cadmium	mg/L	11	8	73%	2022-11-29 to 2024-04-10		Nonparametric	0.000171	0.000110	0.0000620	0.000340	0.000149	0.871	0.0000711	1.53	NA
2_11_5_109	MW-01R	Appendix IV	Chromium, Total	mg/L	11	0	0%	2022-11-29 to 2024-04-10	Lognormal	Lognormal	0.00396	0.00190	0.00130	0.0220	0.00606	1.53	0.000889	3.16	10.2
2_11_5_110	MW-01R	Appendix IV	Cobalt	mg/L	11	0	0%	2022-11-29 to 2024-04-10	Gamma; Lognormal	Gamma	0.00181	0.00120	0.000640	0.00450	0.00129	0.713	0.000593	1.46	1.01
2_11_5_113	MW-01R	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	2022-11-29 to 2024-04-10	Gamma; Lognormal; Normal	Normal	10.8	10.0	4.80	15.0	3.54	0.327	5.93	-0.314	-1.37
2_11_5_115	MW-01R	Appendix IV	Lead	mg/L	11	2	18%	2022-11-29 to 2024-04-10	Gamma; Lognormal	Gamma	0.00139	0.000820	0.000350	0.00530	0.00153	1.09	0.000563	2.57	7.06
2_11_5_116	MW-01R	Appendix IV	Lithium	mg/L	11	0	0%	2022-11-29 to 2024-04-10	Gamma; Lognormal; Normal	Normal	2.21	2.20	0.770	3.40	0.875	0.397	1.04	0.0326	-1.19
2_11_5_118	MW-01R	Appendix IV	Molybdenum	mg/L	11	1	9%	2022-11-29 to 2024-04-10	Gamma; Lognormal	Gamma	0.00143	0.000795	0.000330	0.00560	0.00154	1.08	0.000356	2.62	7.34
2_11_5_121	MW-01R	Appendix IV	Radium 226 and 228	pCi/L	11	6	55%	2022-11-29 to 2024-04-10	Gamma; Lognormal; Normal	Nonparametric	0.991	1.06	0.601	1.28	0.304	0.307	0.326	-0.425	-2.35
2_11_5_122	MW-01R	Appendix IV	Selenium	mg/L	11	0	0%	2022-11-29 to 2024-04-10	Gamma; Lognormal	Gamma	0.000732	0.000600	0.000300	0.00180	0.000392	0.535	0.000148	2.29	6.31
2_11_6_111	MW-01R	Part 115	Copper	mg/L	11	5	45%	2022-11-29 to 2024-04-10	Gamma; Lognormal; Normal	Nonparametric	0.000600	0.000370	0.000270	0.00130	0.000441	0.735	0.000133	1.08	-0.775
2_11_6_114	MW-01R	Part 115	Iron	mg/L	11	0	0%	2022-11-29 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.635	0.590	0.160	1.10	0.297	0.467	0.296	-0.104	-0.658
2_11_6_119	MW-01R	Part 115	Nickel	mg/L	11	0	0%	2022-11-29 to 2024-04-10	Nonparametric	Nonparametric	0.00405	0.00210	0.00120	0.0220	0.00606	1.49	0.000889	3.12	9.97
2_11_6_129	MW-01R	Part 115	Vanadium	mg/L	11	2	18%	2022-11-29 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.00193	0.00160	0.000670	0.00460	0.00130	0.674	0.000444	1.36	1.24
2_11_6_130	MW-01R	Part 115	Zinc	mg/L	11	2	18%	2022-11-29 to 2024-04-10	Nonparametric	Nonparametric	0.00487	0.00160	0.00120	0.0140	0.00543	1.12	0.000593	1.09	-0.747

(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	MAD/0.675	Skewness	Kurtosis
2_12_4_105	MW-02	Appendix III	Boron	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Gamma; Lognormal; Normal	Normal	97.2	99.0	73.0	110	11.5	0.118	16.3	-0.810	0.584
2_12_4_107	MW-02	Appendix III	Calcium	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Gamma; Lognormal; Normal	Normal	205	210	180	240	18.1	0.0884	14.8	0.275	0.0390
2_12_4_108	MW-02	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Nonparametric	Nonparametric	134	140	67.0	150	23	0.171	0	-2.99	9.45
2_12_4_112	MW-02	Appendix III	Fluoride	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Nonparametric	Nonparametric	9.08	9.50	4.50	10.0	1.57	0.173	0.444	-2.93	9.11
2_12_4_120	MW-02	Appendix III	pH (field)	su	11	0	0%	2022-11-28 to 2024-04-10	Gamma; Lognormal; Normal	Normal	7.23	7.25	7.06	7.45	0.121	0.0167	0.148	0.240	-0.727
2_12_4_124	MW-02	Appendix III	Sulfate (as SO4)	mg/L	11	7	64%	2022-11-28 to 2024-04-10		Nonparametric	1.27	1.01	0.860	2.20	0.626	0.492	0.178	1.85	3.46
2_12_4_126	MW-02	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Gamma; Lognormal; Normal	Normal	1818	1800	1600	2100	147	0.0809	148	0.543	-0.117
2_12_5_101	MW-02	Appendix IV	Antimony	mg/L	11	3	27%	2022-11-28 to 2024-04-10	Gamma; Lognormal	Gamma	0.000260	0.000215	0.000150	0.000630	0.000157	0.603	0.0000667	2.35	5.92
2_12_5_102	MW-02	Appendix IV	Arsenic	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Nonparametric	Nonparametric	0.00782	0.00820	0.000440	0.0120	0.00278	0.355	0.000889	-1.85	5.98
2_12_5_103	MW-02	Appendix IV	Barium	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.499	0.480	0.380	0.730	0.0909	0.182	0.0444	1.64	4.14
2_12_5_104	MW-02	Appendix IV	Beryllium	mg/L	11	1	9%	2022-11-28 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.000308	0.000305	0.000120	0.000520	0.000127	0.411	0.000156	0.0836	-0.646
2_12_5_106	MW-02	Appendix IV	Cadmium	mg/L	11	8	73%	2022-11-28 to 2024-04-10		Nonparametric	0.000192	0.0000460	0.0000410	0.000490	0.000258	1.34	0.00000741	1.73	NA
2_12_5_109	MW-02	Appendix IV	Chromium, Total	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Gamma; Normal	Gamma	0.0383	0.0390	0.000380	0.0680	0.0199	0.520	0.0222	-0.402	-0.316
2_12_5_110	MW-02	Appendix IV	Cobalt	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Normal	Normal	0.00550	0.00610	0.000240	0.00890	0.00252	0.458	0.00281	-0.783	0.414
2_12_5_113	MW-02	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Nonparametric	Nonparametric	9.08	9.50	4.50	10.0	1.57	0.173	0.444	-2.93	9.11
2_12_5_115	MW-02	Appendix IV	Lead	mg/L	11	1	9%	2022-11-28 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.00282	0.00255	0.00100	0.00560	0.00138	0.488	0.00119	0.839	0.405
2_12_5_116	MW-02	Appendix IV	Lithium	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Gamma; Lognormal; Normal	Normal	1.37	1.40	0.870	1.70	0.235	0.171	0.296	-0.803	0.696
2_12_5_118	MW-02	Appendix IV	Molybdenum	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Gamma; Lognormal	Gamma	0.00674	0.00620	0.00380	0.0110	0.00244	0.363	0.00148	1.03	-0.166
2_12_5_121	MW-02	Appendix IV	Radium 226 and 228	pCi/L	11	3	27%	2022-11-28 to 2024-04-10	Gamma; Lognormal; Normal	Normal	1.67	1.61	0.708	3.35	0.871	0.521	0.928	1.04	0.827
2_12_5_122	MW-02	Appendix IV	Selenium	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.00111	0.00120	0.000500	0.00180	0.000373	0.336	0.000296	-0.0485	0.292
2_12_5_125	MW-02	Appendix IV	Thallium	mg/L	11	10	91%	2022-11-28 to 2024-04-10		Nonparametric	0.000620	0.000620	0.000620	0.000620	NA	NA	0	NA	NA
2_12_6_111	MW-02	Part 115	Copper	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.00178	0.00180	0.000230	0.00280	0.000822	0.462	0.00104	-0.565	-0.573
2_12_6_114	MW-02	Part 115	Iron	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Gamma; Lognormal; Normal	Normal	24.6	24.0	18.0	31.0	3.96	0.161	4.44	0.0460	-0.436
2_12_6_119	MW-02	Part 115	Nickel	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Normal	Normal	0.0215	0.0220	0.000930	0.0420	0.0109	0.505	0.00741	0.142	0.995
2_12_6_129	MW-02	Part 115	Vanadium	mg/L	11	1	9%	2022-11-28 to 2024-04-10	Gamma; Lognormal; Normal	Normal	0.00378	0.00355	0.00130	0.00670	0.00182	0.480	0.00170	0.235	-0.712
2_12_6_130	MW-02	Part 115	Zinc	mg/L	11	0	0%	2022-11-28 to 2024-04-10	Nonparametric	Nonparametric	0.00674	0.00330	0.00190	0.0250	0.00857	1.27	0.00119	1.91	2.06
2_13_4_105	MW-03	Appendix III	Boron	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	4.12	4.20	3.30	4.50	0.331	0.0804	0.148	-1.59	3.21
2_13_4_107	MW-03	Appendix III	Calcium	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	375	380	290	430	38.3	0.102	29.6	-0.844	1.27
2_13_4_108	MW-03	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	178	170	99.0	300	54.1	0.304	29.6	1.09	1.80
2_13_4_112	MW-03	Appendix III	Fluoride	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Nonparametric	Nonparametric	0.681	0.600	0.520	1.60	0.307	0.451	0.0296	3.22	10.5
2_13_4_120	MW-03	Appendix III	pH (field)	su	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	7.37	7.32	7.20	7.59	0.115	0.0156	0.178	0.438	-0.354
2_13_4_124	MW-03	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	434	460	42.0	760	203	0.468	148	-0.254	0.287
2_13_4_126	MW-03	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Nonparametric	Nonparametric	2164	2300	1700	2300	206	0.0953	0	-1.49	1.29
2_13_5_101	MW-03	Appendix IV	Antimony	mg/L	11	6	55%	2022-11-28 to 2024-04-07	Gamma; Lognormal	Nonparametric	0.000180	0.000110	0.0000870	0.000450	0.000154	0.855	0.0000341	2.05	4.27
2_13_5_102	MW-03	Appendix IV	Arsenic	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000943	0.000970	0.000490	0.00140	0.000282	0.299	0.000193	-0.340	-0.361
2_13_5_103	MW-03	Appendix IV	Barium	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Normal	Normal	0.371	0.380	0.130	0.500	0.0959	0.258	0.0593	-1.61	3.88
2_13_5_104	MW-03	Appendix IV	Beryllium	mg/L	11	7	64%	2022-11-28 to 2024-04-07		Nonparametric	0.000110	0.000103	0.0000530	0.000180	0.0000647	0.588	0.0000719	0.180	-4.94
2_13_5_106	MW-03	Appendix IV	Cadmium	mg/L	11	10	91%	2022-11-28 to 2024-04-07		Nonparametric	0.000110	0.000110	0.000110	0.000110	NA	NA	0	NA	NA
2_13_5_109	MW-03	Appendix IV	Chromium, Total	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.00483	0.00490	0.00300	0.00730	0.00133	0.276	0.00178	0.332	-0.568
2_13_5_110	MW-03	Appendix IV	Cobalt	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000846	0.000880	0.000370	0.00130	0.000360	0.425	0.000563	-0.0910	-1.71
2_13_5_113	MW-03	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Nonparametric	Nonparametric	0.681	0.600	0.520	1.60	0.307	0.451	0.0296	3.22	10.5
2_13_5_115	MW-03	Appendix IV	Lead	mg/L	11	10	91%	2022-11-28 to 2024-04-07		Nonparametric	0.000220	0.000220	0.000220	0.000220	NA	NA	0	NA	NA
2_13_5_116	MW-03	Appendix IV	Lithium	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.0412	0.0390	0.0290	0.0650	0.00991	0.241	0.00741	1.43	2.64

(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	MAD/0.675	Skewness	Kurtosis
2_13_5_117	MW-03	Appendix IV	Mercury	mg/L	11	10	91%	2022-11-28 to 2024-04-07		Nonparametric	0.000240	0.000240	0.000240	0.000240	NA	NA	0	NA	NA
2_13_5_118	MW-03	Appendix IV	Molybdenum	mg/L	11	8	73%	2022-11-28 to 2024-04-07		Nonparametric	0.000890	0.000850	0.000720	0.00110	0.000193	0.217	0.000193	0.892	NA
2_13_5_121	MW-03	Appendix IV	Radium 226 and 228	pCi/L	11	1	9%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	1.19	1.06	0.750	1.92	0.395	0.333	0.333	0.920	-0.208
2_13_5_122	MW-03	Appendix IV	Selenium	mg/L	11	3	27%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000424	0.000420	0.000170	0.000620	0.000134	0.317	0.000111	-0.621	1.25
2_13_5_125	MW-03	Appendix IV	Thallium	mg/L	11	10	91%	2022-11-28 to 2024-04-07		Nonparametric	0.000180	0.000180	0.000180	0.000180	NA	NA	0	NA	NA
2_13_6_111	MW-03	Part 115	Copper	mg/L	11	5	45%	2022-11-28 to 2024-04-07	Nonparametric	Nonparametric	0.000492	0.000275	0.000240	0.00100	0.000361	0.733	0.0000444	0.981	-1.72
2_13_6_114	MW-03	Part 115	Iron	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Gamma	1.76	1.40	0.280	5.90	1.74	0.988	1.44	1.55	2.29
2_13_6_119	MW-03	Part 115	Nickel	mg/L	11	1	9%	2022-11-28 to 2024-04-07	Nonparametric	Nonparametric	0.00281	0.00160	0.000850	0.0150	0.00431	1.53	0.000593	3.10	9.71
2_13_6_129	MW-03	Part 115	Vanadium	mg/L	11	9	82%	2022-11-28 to 2024-04-07		Nonparametric	0.00170	0.00170	0.00120	0.00220	0.000707	0.416	0.000741	NA	NA
2_13_6_130	MW-03	Part 115	Zinc	mg/L	11	6	55%	2022-11-28 to 2024-04-07	Lognormal	Nonparametric	0.00844	0.00200	0.00130	0.0190	0.00919	1.09	0.00104	0.611	-3.29
2_14_4_105	MW-04	Appendix III	Boron	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	4.04	4.00	3.50	4.70	0.311	0.0770	0.296	0.538	1.52
2_14_4_107	MW-04	Appendix III	Calcium	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	366	360	310	430	36.7	0.100	44.4	0.340	-0.714
2_14_4_108	MW-04	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	188	190	120	300	50.2	0.267	44.4	0.846	1.46
2_14_4_112	MW-04	Appendix III	Fluoride	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Nonparametric	Nonparametric	1.31	1.30	0.760	1.90	0.264	0.201	0.148	0.192	3.80
2_14_4_120	MW-04	Appendix III	pH (field)	su	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	7.39	7.39	7.23	7.66	0.114	0.0154	0.0741	1.15	2.83
2_14_4_124	MW-04	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Nonparametric	Nonparametric	565	610	1.80	810	212	0.376	119	-2.07	5.34
2_14_4_126	MW-04	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	1900	1900	1700	2100	155	0.0815	148	0.197	-1.49
2_14_5_101	MW-04	Appendix IV	Antimony	mg/L	11	8	73%	2022-11-28 to 2024-04-07		Nonparametric	0.000200	0.000120	0.0000710	0.000410	0.000183	0.915	0.0000726	1.59	NA
2_14_5_102	MW-04	Appendix IV	Arsenic	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000912	0.000920	0.000470	0.00120	0.000276	0.303	0.000415	-0.344	-1.39
2_14_5_103	MW-04	Appendix IV	Barium	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Nonparametric	Nonparametric	0.151	0.120	0.100	0.460	0.103	0.684	0.0148	3.23	10.6
2_14_5_109	MW-04	Appendix IV	Chromium, Total	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.00385	0.00410	0.00260	0.00600	0.00117	0.304	0.00148	0.362	-1.03
2_14_5_110	MW-04	Appendix IV	Cobalt	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000505	0.000450	0.000180	0.000930	0.000224	0.444	0.000252	0.471	-0.466
2_14_5_113	MW-04	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Nonparametric	Nonparametric	1.31	1.30	0.760	1.90	0.264	0.201	0.148	0.192	3.80
2_14_5_116	MW-04	Appendix IV	Lithium	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.0625	0.0620	0.0470	0.0740	0.00978	0.156	0.0119	-0.369	-0.948
2_14_5_118	MW-04	Appendix IV	Molybdenum	mg/L	11	2	18%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000866	0.000860	0.000370	0.00150	0.000413	0.477	0.000622	0.184	-1.38
2_14_5_121	MW-04	Appendix IV	Radium 226 and 228	pCi/L	11	2	18%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	1.19	1.23	0.664	1.55	0.311	0.262	0.296	-0.736	-0.516
2_14_5_122	MW-04	Appendix IV	Selenium	mg/L	11	5	45%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000278	0.000225	0.000170	0.000430	0.000112	0.403	0.0000519	0.809	-1.77
2_14_6_111	MW-04	Part 115	Copper	mg/L	11	9	82%	2022-11-28 to 2024-04-07		Nonparametric	0.000295	0.000295	0.000270	0.000320	0.0000354	0.120	0.0000370	NA	NA
2_14_6_114	MW-04	Part 115	Iron	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	5.95	6.10	4.70	6.80	0.731	0.123	0.889	-0.353	-0.997
2_14_6_119	MW-04	Part 115	Nickel	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Normal	Normal	0.0141	0.0130	0.00190	0.0220	0.00558	0.396	0.00444	-0.784	1.08
2_14_6_129	MW-04	Part 115	Vanadium	mg/L	11	10	91%	2022-11-28 to 2024-04-07		Nonparametric	0.000970	0.000970	0.000970	0.000970	NA	NA	0	NA	NA
2_14_6_130	MW-04	Part 115	Zinc	mg/L	11	8	73%	2022-11-28 to 2024-04-07		Nonparametric	0.00393	0.00440	0.00150	0.00590	0.00224	0.569	0.00222	-0.898	NA
2_19_4_105	MW-09	Appendix III	Boron	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	5.77	5.80	4.90	6.90	0.569	0.0986	0.444	0.353	0.276
2_19_4_107	MW-09	Appendix III	Calcium	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	363	390	230	500	80.6	0.222	88.9	-0.0716	-0.687
2_19_4_108	MW-09	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	15.2	15.0	11.0	25.0	4.26	0.281	4.44	1.19	1.58
2_19_4_112	MW-09	Appendix III	Fluoride	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	2.54	2.50	2.10	2.90	0.273	0.108	0.296	-0.107	-1.10
2_19_4_120	MW-09	Appendix III	pH (field)	su	11	0	0%	2022-11-28 to 2024-04-07	Nonparametric	Nonparametric	7.26	7.22	7.14	7.52	0.111	0.0153	0.0444	1.65	2.57
2_19_4_124	MW-09	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Normal	Normal	418	480	83.0	720	227	0.541	252	-0.350	-1.47
2_19_4_126	MW-09	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	1336	1400	740	1700	314	0.235	296	-0.727	-0.659
2_19_5_101	MW-09	Appendix IV	Antimony	mg/L	11	7	64%	2022-11-28 to 2024-04-07		Nonparametric	0.000191	0.000161	0.0000730	0.000370	0.000138	0.723	0.000116	0.793	-1.47
2_19_5_102	MW-09	Appendix IV	Arsenic	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Normal	Normal	0.00217	0.00230	0.00130	0.00300	0.000562	0.259	0.000296	-0.595	-0.635
2_19_5_103	MW-09	Appendix IV	Barium	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Lognormal	Lognormal	0.479	0.280	0.170	2.40	0.649	1.35	0.119	3.11	9.94
2_19_5_104	MW-09	Appendix IV	Beryllium	mg/L	11	10	91%	2022-11-28 to 2024-04-07		Nonparametric	0.0000580	0.0000580	0.0000580	0.0000580	NA	NA	0	NA	NA

(Table continues on next page)

Table 2: Summary Statistics, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	MAD/0.675	Skewness	Kurtosis
2_19_5_109	MW-09	Appendix IV	Chromium, Total	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.00243	0.00260	0.00160	0.00320	0.000585	0.241	0.000741	-0.114	-1.74
2_19_5_110	MW-09	Appendix IV	Cobalt	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000573	0.000580	0.000240	0.000990	0.000217	0.379	0.000252	0.344	-0.0828
2_19_5_113	MW-09	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	2.54	2.50	2.10	2.90	0.273	0.108	0.296	-0.107	-1.10
2_19_5_116	MW-09	Appendix IV	Lithium	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.303	0.290	0.260	0.340	0.0294	0.0970	0.0444	-0.0953	-1.27
2_19_5_117	MW-09	Appendix IV	Mercury	mg/L	11	9	82%	2022-11-28 to 2024-04-07		Nonparametric	0.00225	0.00225	0.00210	0.00240	0.000212	0.0943	0.000222	NA	NA
2_19_5_118	MW-09	Appendix IV	Molybdenum	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.0212	0.0210	0.00970	0.0330	0.00689	0.326	0.00296	0.0651	-0.0976
2_19_5_121	MW-09	Appendix IV	Radium 226 and 228	pCi/L	11	10	91%	2022-11-28 to 2024-04-07		Nonparametric	0.789	0.789	0.789	0.789	NA	NA	0	NA	NA
2_19_5_122	MW-09	Appendix IV	Selenium	mg/L	11	2	18%	2022-11-28 to 2024-04-07	Normal	Normal	0.000248	0.000260	0.000120	0.000330	0.0000563	0.227	0.0000296	-1.34	3.79
2_19_6_111	MW-09	Part 115	Copper	mg/L	11	9	82%	2022-11-28 to 2024-04-07		Nonparametric	0.000360	0.000360	0.000290	0.000430	0.0000990	0.275	0.000104	NA	NA
2_19_6_114	MW-09	Part 115	Iron	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal; Normal	Normal	20.6	19.0	15.0	26.0	3.93	0.190	4.44	0.0425	-1.59
2_19_6_119	MW-09	Part 115	Nickel	mg/L	11	0	0%	2022-11-28 to 2024-04-07	Gamma; Lognormal	Gamma	0.00248	0.00180	0.000720	0.00720	0.00218	0.877	0.00119	1.56	1.35
2_19_6_130	MW-09	Part 115	Zinc	mg/L	11	8	73%	2022-11-28 to 2024-04-07		Nonparametric	0.0148	0.0180	0.00150	0.0250	0.0121	0.813	0.0104	-1.10	NA
2_21_4_105	MW-11	Appendix III	Boron	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	6.01	4.80	1.50	13.0	4.02	0.670	4.15	0.643	-0.906
2_21_4_107	MW-11	Appendix III	Calcium	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	268	290	130	380	78.8	0.294	74.1	-0.529	-0.467
2_21_4_108	MW-11	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	68.8	72.0	38.0	95.0	17.2	0.250	17.8	-0.220	-0.606
2_21_4_112	MW-11	Appendix III	Fluoride	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.621	0.610	0.210	1.40	0.403	0.648	0.430	0.840	-0.201
2_21_4_120	MW-11	Appendix III	pH (field)	su	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	7.35	7.33	7.22	7.47	0.0714	0.00972	0.0741	0.127	0.0257
2_21_4_124	MW-11	Appendix III	Sulfate (as SO4)	mg/L	11	2	18%	2022-11-29 to 2024-04-07	Gamma; Lognormal	Gamma	63.9	17.0	1.80	210	79	1.24	22.5	1.28	0.110
2_21_4_126	MW-11	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	1093	1100	680	1800	285	0.260	193	1.43	3.75
2_21_5_101	MW-11	Appendix IV	Antimony	mg/L	11	7	64%	2022-11-29 to 2024-04-07		Nonparametric	0.000333	0.000280	0.0000820	0.000690	0.000256	0.768	0.000147	1.17	2.29
2_21_5_102	MW-11	Appendix IV	Arsenic	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.00164	0.00130	0.000610	0.00410	0.000939	0.574	0.000444	2.0	4.88
2_21_5_103	MW-11	Appendix IV	Barium	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.655	0.590	0.360	1.20	0.241	0.369	0.222	1.14	1.44
2_21_5_104	MW-11	Appendix IV	Beryllium	mg/L	11	9	82%	2022-11-29 to 2024-04-07		Nonparametric	0.000266	0.000266	0.0000910	0.000440	0.000247	0.929	0.000259	NA	NA
2_21_5_106	MW-11	Appendix IV	Cadmium	mg/L	11	9	82%	2022-11-29 to 2024-04-07		Nonparametric	0.000445	0.000445	0.000160	0.000730	0.000403	0.906	0.000422	NA	NA
2_21_5_109	MW-11	Appendix IV	Chromium, Total	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Lognormal	Lognormal	0.00157	0.000800	0.000450	0.00860	0.00236	1.50	0.000296	3.17	10.3
2_21_5_110	MW-11	Appendix IV	Cobalt	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal	Gamma	0.000714	0.000610	0.000230	0.00240	0.000622	0.871	0.000311	2.34	5.98
2_21_5_113	MW-11	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.621	0.610	0.210	1.40	0.403	0.648	0.430	0.840	-0.201
2_21_5_115	MW-11	Appendix IV	Lead	mg/L	11	3	27%	2022-11-29 to 2024-04-07	Lognormal	Nonparametric	0.00967	0.00112	0.000170	0.0680	0.0236	2.44	0.00130	2.81	7.93
2_21_5_116	MW-11	Appendix IV	Lithium	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Gamma	0.0715	0.0520	0.00590	0.220	0.0667	0.933	0.0637	1.22	1.14
2_21_5_117	MW-11	Appendix IV	Mercury	mg/L	11	10	91%	2022-11-29 to 2024-04-07		Nonparametric	0.00110	0.00110	0.00110	0.00110	NA	NA	0	NA	NA
2_21_5_118	MW-11	Appendix IV	Molybdenum	mg/L	11	2	18%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.00152	0.00150	0.000430	0.00300	0.000925	0.610	0.00124	0.684	-0.553
2_21_5_121	MW-11	Appendix IV	Radium 226 and 228	pCi/L	11	3	27%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	1.15	1.13	0.624	1.76	0.417	0.362	0.506	0.330	-1.24
2_21_5_122	MW-11	Appendix IV	Selenium	mg/L	11	3	27%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000295	0.000215	0.000140	0.000710	0.000189	0.640	0.0000963	1.83	3.42
2_21_5_125	MW-11	Appendix IV	Thallium	mg/L	11	10	91%	2022-11-29 to 2024-04-07		Nonparametric	0.000210	0.000210	0.000210	0.000210	NA	NA	0	NA	NA
2_21_6_111	MW-11	Part 115	Copper	mg/L	11	3	27%	2022-11-29 to 2024-04-07	Gamma; Lognormal	Gamma	0.00308	0.000515	0.000200	0.0190	0.00647	2.10	0.000437	2.77	7.73
2_21_6_114	MW-11	Part 115	Iron	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	6.65	6.10	3.60	11.0	2.56	0.386	3.41	0.456	-1.13
2_21_6_119	MW-11	Part 115	Nickel	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Lognormal	Lognormal	0.00211	0.00130	0.000650	0.00940	0.00249	1.18	0.000296	3.01	9.44
2_21_6_123	MW-11	Part 115	Silver	mg/L	11	9	82%	2022-11-29 to 2024-04-07		Nonparametric	0.000155	0.000155	0.000140	0.000170	0.0000212	0.137	0.0000222	NA	NA
2_21_6_129	MW-11	Part 115	Vanadium	mg/L	11	9	82%	2022-11-29 to 2024-04-07		Nonparametric	0.00181	0.00181	0.000620	0.00300	0.00168	0.930	0.00176	NA	NA
2_21_6_130	MW-11	Part 115	Zinc	mg/L	11	3	27%	2022-11-29 to 2024-04-07	Gamma; Lognormal	Gamma	0.0233	0.00670	0.00180	0.100	0.0335	1.44	0.00630	2.10	4.65
2_22_4_105	MW-12	Appendix III	Boron	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.285	0.260	0.190	0.420	0.0784	0.276	0.0889	0.587	-1.01
2_22_4_107	MW-12	Appendix III	Calcium	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	66.4	64.0	40.0	95.0	19.9	0.300	20.7	0.0675	-1.18
2_22_4_108	MW-12	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	19.1	17.0	12.0	27.0	4.89	0.256	2.96	0.485	-0.995

(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	MAD/0.675	Skewness	Kurtosis
2_22_4_112	MW-12	Appendix III	Fluoride	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.345	0.280	0.220	0.540	0.119	0.345	0.0889	0.405	-1.67
2_22_4_120	MW-12	Appendix III	pH (field)	su	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	7.73	7.77	7.00	8.32	0.365	0.0472	0.370	-0.320	0.526
2_22_4_124	MW-12	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	122	120	68.0	180	34.8	0.285	14.8	0.485	0.0419
2_22_4_126	MW-12	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	264	260	100	420	92.0	0.349	88.9	0.0392	-0.320
2_22_5_101	MW-12	Appendix IV	Antimony	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.000663	0.000640	0.000350	0.00110	0.000247	0.373	0.000341	0.431	-0.942
2_22_5_102	MW-12	Appendix IV	Arsenic	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00226	0.00190	0.00140	0.00340	0.000685	0.302	0.000741	0.440	-1.38
2_22_5_103	MW-12	Appendix IV	Barium	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.0321	0.0250	0.0170	0.0600	0.0139	0.434	0.00741	1.15	0.202
2_22_5_106	MW-12	Appendix IV	Cadmium	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00121	0.00110	0.000540	0.00240	0.000634	0.523	0.000637	0.908	-0.266
2_22_5_109	MW-12	Appendix IV	Chromium, Total	mg/L	11	4	36%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.000633	0.000540	0.000340	0.000990	0.000251	0.396	0.000193	0.634	-1.24
2_22_5_110	MW-12	Appendix IV	Cobalt	mg/L	11	5	45%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Nonparametric	0.000333	0.000320	0.000140	0.000530	0.000162	0.487	0.000230	0.124	-2.11
2_22_5_113	MW-12	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.345	0.280	0.220	0.540	0.119	0.345	0.0889	0.405	-1.67
2_22_5_115	MW-12	Appendix IV	Lead	mg/L	11	6	55%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Nonparametric	0.000220	0.000210	0.000140	0.000390	0.000100	0.457	0.0000889	1.66	3.03
2_22_5_116	MW-12	Appendix IV	Lithium	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00357	0.00370	0.00190	0.00640	0.00134	0.375	0.00163	0.735	0.479
2_22_5_117	MW-12	Appendix IV	Mercury	mg/L	11	9	82%	2022-11-28 to 2024-04-08		Nonparametric	0.000195	0.000195	0.000160	0.000230	0.0000495	0.254	0.0000519	NA	NA
2_22_5_118	MW-12	Appendix IV	Molybdenum	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00701	0.00690	0.00460	0.00960	0.00166	0.237	0.00193	0.0980	-1.27
2_22_5_121	MW-12	Appendix IV	Radium 226 and 228	pCi/L	11	8	73%	2022-11-28 to 2024-04-08		Nonparametric	0.807	0.809	0.522	1.09	0.284	0.352	0.416	-0.0317	NA
2_22_5_122	MW-12	Appendix IV	Selenium	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00110	0.000930	0.000130	0.00230	0.000759	0.689	0.000948	0.314	-1.04
2_22_6_111	MW-12	Part 115	Copper	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00108	0.00100	0.000550	0.00160	0.000316	0.292	0.000296	0.0406	-0.396
2_22_6_114	MW-12	Part 115	Iron	mg/L	11	6	55%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Nonparametric	0.0424	0.0370	0.0270	0.0640	0.0150	0.353	0.0148	0.756	-0.811
2_22_6_119	MW-12	Part 115	Nickel	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00241	0.00250	0.00140	0.00350	0.000756	0.314	0.000889	0.0905	-1.03
2_22_6_129	MW-12	Part 115	Vanadium	mg/L	11	6	55%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Nonparametric	0.00103	0.000950	0.000850	0.00130	0.000204	0.197	0.000148	0.599	-2.43
2_22_6_130	MW-12	Part 115	Zinc	mg/L	11	0	0%	2022-11-28 to 2024-04-08	Gamma; Lognormal; Normal	Normal	0.00715	0.00800	0.00270	0.0100	0.00238	0.334	0.00178	-0.832	-0.388
2_48_4_105	MW-38	Appendix III	Boron	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	1.60	1.60	1.60	1.60	NA	NA	0	NA	NA
2_48_4_107	MW-38	Appendix III	Calcium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	150	150	150	150	NA	NA	0	NA	NA
2_48_4_108	MW-38	Appendix III	Chloride (as Cl)	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	51.0	51.0	51.0	51.0	NA	NA	0	NA	NA
2_48_4_112	MW-38	Appendix III	Fluoride	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.790	0.790	0.790	0.790	NA	NA	0	NA	NA
2_48_4_120	MW-38	Appendix III	pH (field)	su	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	10.0	10.0	10.0	10.0	NA	NA	0	NA	NA
2_48_4_124	MW-38	Appendix III	Sulfate (as SO4)	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	280	280	280	280	NA	NA	0	NA	NA
2_48_4_126	MW-38	Appendix III	Total Dissolved Solids	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	840	840	840	840	NA	NA	0	NA	NA
2_48_5_101	MW-38	Appendix IV	Antimony	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000680	0.000680	0.000680	0.000680	NA	NA	0	NA	NA
2_48_5_102	MW-38	Appendix IV	Arsenic	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00500	0.00500	0.00500	0.00500	NA	NA	0	NA	NA
2_48_5_103	MW-38	Appendix IV	Barium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.160	0.160	0.160	0.160	NA	NA	0	NA	NA
2_48_5_106	MW-38	Appendix IV	Cadmium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.0000960	0.0000960	0.0000960	0.0000960	NA	NA	0	NA	NA
2_48_5_109	MW-38	Appendix IV	Chromium, Total	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00400	0.00400	0.00400	0.00400	NA	NA	0	NA	NA
2_48_5_110	MW-38	Appendix IV	Cobalt	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000530	0.000530	0.000530	0.000530	NA	NA	0	NA	NA
2_48_5_113	MW-38	Appendix IV	Fluoride (App IV)	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.790	0.790	0.790	0.790	NA	NA	0	NA	NA
2_48_5_115	MW-38	Appendix IV	Lead	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.0150	0.0150	0.0150	0.0150	NA	NA	0	NA	NA
2_48_5_116	MW-38	Appendix IV	Lithium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.120	0.120	0.120	0.120	NA	NA	0	NA	NA
2_48_5_118	MW-38	Appendix IV	Molybdenum	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00970	0.00970	0.00970	0.00970	NA	NA	0	NA	NA
2_48_5_121	MW-38	Appendix IV	Radium 226 and 228	pCi/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	1.08	1.08	1.08	1.08	NA	NA	0	NA	NA
2_48_5_122	MW-38	Appendix IV	Selenium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.000730	0.000730	0.000730	0.000730	NA	NA	0	NA	NA
2_48_6_111	MW-38	Part 115	Copper	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00310	0.00310	0.00310	0.00310	NA	NA	0	NA	NA
2_48_6_114	MW-38	Part 115	Iron	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.390	0.390	0.390	0.390	NA	NA	0	NA	NA

(Table continues on next page)

Table 2: Summary Statistics, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	MAD/0.675	Skewness	Kurtosis
2_48_6_119	MW-38	Part 115	Nickel	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00530	0.00530	0.00530	0.00530	NA	NA	0	NA	NA
2_48_6_129	MW-38	Part 115	Vanadium	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00660	0.00660	0.00660	0.00660	NA	NA	0	NA	NA
2_48_6_130	MW-38	Part 115	Zinc	mg/L	1	0	0%	2024-04-08 to 2024-04-08		Nonparametric	0.00660	0.00660	0.00660	0.00660	NA	NA	0	NA	NA
3_20_4_105	MW-10	Appendix III	Boron	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	15.6	14.0	4.50	28.0	8.61	0.552	11.3	0.258	-1.70
3_20_4_107	MW-10	Appendix III	Calcium	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	285	220	160	590	130	0.456	88.9	1.66	2.32
3_20_4_108	MW-10	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	214	170	92.0	430	103	0.481	74.1	0.988	0.338
3_20_4_112	MW-10	Appendix III	Fluoride	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	5.24	5.70	2.70	7.70	1.86	0.356	2.37	-0.175	-1.60
3_20_4_120	MW-10	Appendix III	pH (field)	su	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	7.85	7.80	7.05	8.81	0.431	0.0549	0.0889	0.577	2.76
3_20_4_124	MW-10	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	629	490	140	1700	448	0.713	430	1.40	2.36
3_20_4_126	MW-10	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Nonparametric	Nonparametric	1936	1800	1500	3200	478	0.247	148	2.19	5.14
3_20_5_101	MW-10	Appendix IV	Antimony	mg/L	11	7	64%	2022-11-29 to 2024-04-07		Nonparametric	0.000172	0.000120	0.000110	0.000340	0.000112	0.650	0.0000148	1.96	3.85
3_20_5_102	MW-10	Appendix IV	Arsenic	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000564	0.000490	0.000200	0.00110	0.000299	0.531	0.000356	0.600	-0.915
3_20_5_103	MW-10	Appendix IV	Barium	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.296	0.280	0.140	0.570	0.125	0.421	0.0741	1.13	1.35
3_20_5_104	MW-10	Appendix IV	Beryllium	mg/L	11	5	45%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000106	0.0000815	0.0000520	0.000220	0.0000663	0.622	0.0000422	1.23	0.550
3_20_5_109	MW-10	Appendix IV	Chromium, Total	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.00383	0.00400	0.00130	0.00850	0.00233	0.609	0.00311	0.881	0.0572
3_20_5_110	MW-10	Appendix IV	Cobalt	mg/L	11	1	9%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.000588	0.000405	0.000100	0.00180	0.000478	0.812	0.000170	2.09	5.05
3_20_5_113	MW-10	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	5.24	5.70	2.70	7.70	1.86	0.356	2.37	-0.175	-1.60
3_20_5_115	MW-10	Appendix IV	Lead	mg/L	11	9	82%	2022-11-29 to 2024-04-07		Nonparametric	0.000145	0.000145	0.000120	0.000170	0.0000354	0.244	0.0000370	NA	NA
3_20_5_116	MW-10	Appendix IV	Lithium	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.934	0.920	0.540	1.60	0.299	0.320	0.237	0.912	1.54
3_20_5_117	MW-10	Appendix IV	Mercury	mg/L	11	10	91%	2022-11-29 to 2024-04-07		Nonparametric	0.00190	0.00190	0.00190	0.00190	NA	NA	0	NA	NA
3_20_5_118	MW-10	Appendix IV	Molybdenum	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	0.00343	0.00330	0.000800	0.00720	0.00186	0.544	0.00207	0.699	0.320
3_20_5_121	MW-10	Appendix IV	Radium 226 and 228	pCi/L	11	9	82%	2022-11-29 to 2024-04-07		Nonparametric	1.17	1.17	0.975	1.36	0.272	0.233	0.285	NA	NA
3_20_5_122	MW-10	Appendix IV	Selenium	mg/L	11	1	9%	2022-11-29 to 2024-04-07	Gamma; Lognormal	Gamma	0.000401	0.000360	0.000280	0.000830	0.000161	0.401	0.0000741	2.50	6.89
3_20_6_111	MW-10	Part 115	Copper	mg/L	11	8	73%	2022-11-29 to 2024-04-07		Nonparametric	0.000723	0.000490	0.000380	0.00130	0.000502	0.695	0.000163	1.64	NA
3_20_6_114	MW-10	Part 115	Iron	mg/L	11	0	0%	2022-11-29 to 2024-04-07	Gamma; Lognormal; Normal	Normal	4.71	3.90	2.40	7.30	1.68	0.356	1.04	0.490	-1.20
3_20_6_119	MW-10	Part 115	Nickel	mg/L	11	5	45%	2022-11-29 to 2024-04-07	Gamma; Lognormal	Gamma	0.00107	0.000885	0.000760	0.00180	0.000388	0.364	0.000104	1.78	3.04
3_20_6_129	MW-10	Part 115	Vanadium	mg/L	11	10	91%	2022-11-29 to 2024-04-07		Nonparametric	0.00130	0.00130	0.00130	0.00130	NA	NA	0	NA	NA
3_20_6_130	MW-10	Part 115	Zinc	mg/L	11	4	36%	2022-11-29 to 2024-04-07	Lognormal	Nonparametric	0.00501	0.00180	0.00120	0.0140	0.00582	1.16	0.000889	1.22	-0.797

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
1_16_4_105	MW-06	Appendix III	Boron	mg/L	11	0	0%	0.962	0.796	0.204	0.226	0.945	0.586	0.233	0.099	0.228	>= 0.10	0.356	>= 0.10	0.187	Gamma; Lognormal; Normal	Normal
1_16_4_107	MW-06	Appendix III	Calcium	mg/L	11	0	0%	0.919	0.313	0.189	0.335	0.928	0.393	0.172	0.479	0.183	>= 0.10	0.356	>= 0.10	0.122	Gamma; Lognormal; Normal	Normal
1_16_4_108	MW-06	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.947	0.608	0.190	0.321	0.834	0.026	0.282	0.014	0.250	0.05 <= p < 0.10	0.636	0.05 <= p < 0.10	0.765	Gamma; Normal	Normal
1_16_4_112	MW-06	Appendix III	Fluoride	mg/L	11	0	0%	0.866	0.069	0.271	0.023	0.881	0.108	0.255	0.043	0.264	0.01 <= p < 0.05	0.604	>= 0.10	0.129	Gamma; Lognormal; Normal	Normal
1_16_4_120	MW-06	Appendix III	pH (field)	su	11	0	0%	0.570	0.000	0.399	0.000	0.557	0.000	0.406	0.000	0.403	< 0.01	2.060	< 0.01	0.038	Nonparametric	Nonparametric
1_16_4_124	MW-06	Appendix III	Sulfate (as SO4)	mg/L	11	1	9%	0.916	0.322	0.181	0.468	0.800	0.015	0.271	0.035	0.218	>= 0.10	0.658	0.05 <= p < 0.10	1.051	Gamma; Normal	Gamma
1_16_4_126	MW-06	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.058		Nonparametric
1_16_5_101	MW-06	Appendix IV	Antimony	mg/L	11	9	82%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		1.109		Nonparametric
1_16_5_102	MW-06	Appendix IV	Arsenic	mg/L	11	0	0%	0.925	0.367	0.203	0.231	0.968	0.865	0.163	0.575	0.174	>= 0.10	0.295	>= 0.10	0.213	Gamma; Lognormal; Normal	Normal
1_16_5_103	MW-06	Appendix IV	Barium	mg/L	11	0	0%	0.850	0.043	0.252	0.049	0.798	0.009	0.271	0.023	0.268	0.01 <= p < 0.05	0.828	0.01 <= p < 0.05	0.127	Nonparametric	Nonparametric
1_16_5_104	MW-06	Appendix IV	Beryllium	mg/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_16_5_106	MW-06	Appendix IV	Cadmium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_16_5_109	MW-06	Appendix IV	Chromium, Total	mg/L	11	0	0%	0.907	0.222	0.219	0.149	0.937	0.486	0.184	0.370	0.205	>= 0.10	0.399	>= 0.10	0.321	Gamma; Lognormal; Normal	Normal
1_16_5_110	MW-06	Appendix IV	Cobalt	mg/L	11	0	0%	0.944	0.569	0.199	0.256	0.959	0.760	0.164	0.564	0.183	>= 0.10	0.320	>= 0.10	0.256	Gamma; Lognormal; Normal	Normal
1_16_5_113	MW-06	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.866	0.069	0.271	0.023	0.881	0.108	0.255	0.043	0.264	0.01 <= p < 0.05	0.604	>= 0.10	0.129	Gamma; Lognormal; Normal	Normal
1_16_5_115	MW-06	Appendix IV	Lead	mg/L	11	8	73%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.176		Nonparametric
1_16_5_116	MW-06	Appendix IV	Lithium	mg/L	11	0	0%	0.902	0.195	0.196	0.278	0.883	0.115	0.232	0.099	0.225	>= 0.10	0.548	>= 0.10	0.251	Gamma; Lognormal; Normal	Normal
1_16_5_117	MW-06	Appendix IV	Mercury	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_16_5_118	MW-06	Appendix IV	Molybdenum	mg/L	11	8	73%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.038		Nonparametric
1_16_5_121	MW-06	Appendix IV	Radium 226 and 228	pCi/L	11	2	18%	0.671	0.001	0.366	0.001	0.799	0.020	0.291	0.027	0.315	0.01 <= p < 0.05	0.912	0.01 <= p < 0.05	0.336	Nonparametric	Nonparametric
1_16_5_122	MW-06	Appendix IV	Selenium	mg/L	11	5	45%	0.621	0.001	0.413	0.002	0.682	0.004	0.372	0.009	0.394	< 0.01	1.083	< 0.01	0.341	Nonparametric	Nonparametric
1_16_5_125	MW-06	Appendix IV	Thallium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_16_6_111	MW-06	Part 115	Copper	mg/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_16_6_114	MW-06	Part 115	Iron	mg/L	11	0	0%	0.862	0.062	0.294	0.008	0.909	0.238	0.254	0.046	0.270	0.01 <= p < 0.05	0.608	>= 0.10	0.251	Gamma; Lognormal; Normal	Normal
1_16_6_119	MW-06	Part 115	Nickel	mg/L	11	4	36%	0.968	0.882	0.185	0.662	0.963	0.846	0.190	0.619	0.208	>= 0.10	0.245	>= 0.10	0.144	Gamma; Lognormal; Normal	Normal
1_16_6_123	MW-06	Part 115	Silver	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_16_6_129	MW-06	Part 115	Vanadium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_16_6_130	MW-06	Part 115	Zinc	mg/L	11	2	18%	0.578	0.000	0.462	0.000	0.641	0.000	0.425	0.000	0.471	< 0.01	1.859	< 0.01	1.727	Nonparametric	Nonparametric
1_17_4_105	MW-07	Appendix III	Boron	mg/L	11	0	0%	0.887	0.127	0.266	0.029	0.891	0.144	0.259	0.038	0.270	0.01 <= p < 0.05	0.689	0.05 <= p < 0.10	0.081	Gamma; Lognormal; Normal	Normal
1_17_4_107	MW-07	Appendix III	Calcium	mg/L	11	0	0%	0.928	0.389	0.200	0.254	0.919	0.309	0.216	0.164	0.203	>= 0.10	0.452	>= 0.10	0.086	Gamma; Lognormal; Normal	Normal
1_17_4_108	MW-07	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.050		Nonparametric
1_17_4_112	MW-07	Appendix III	Fluoride	mg/L	11	1	9%	0.842	0.047	0.247	0.085	0.857	0.069	0.225	0.160	0.244	>= 0.10	0.683	0.05 <= p < 0.10	0.297	Gamma; Lognormal; Normal	Normal
1_17_4_120	MW-07	Appendix III	pH (field)	su	11	0	0%	0.868	0.073	0.260	0.036	0.863	0.063	0.264	0.030	0.260	0.01 <= p < 0.05	0.689	0.05 <= p < 0.10	0.022	Gamma; Lognormal; Normal	Normal
1_17_4_124	MW-07	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	0.915	0.279	0.204	0.223	0.913	0.262	0.186	0.355	0.196	>= 0.10	0.495	>= 0.10	0.308	Gamma; Lognormal; Normal	Normal
1_17_4_126	MW-07	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	0.866	0.070	0.277	0.018	0.833	0.025	0.303	0.006	0.290	0.01 <= p < 0.05	0.833	0.01 <= p < 0.05	0.135	Normal	Normal
1_17_5_101	MW-07	Appendix IV	Antimony	mg/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_17_5_102	MW-07	Appendix IV	Arsenic	mg/L	11	0	0%	0.938	0.501	0.184	0.372	0.896	0.165	0.223	0.132	0.205	>= 0.10	0.493	>= 0.10	0.201	Gamma; Lognormal; Normal	Normal
1_17_5_103	MW-07	Appendix IV	Barium	mg/L	11	0	0%	0.834	0.026	0.291	0.010	0.791	0.007	0.304	0.005	0.306	< 0.01	0.998	< 0.01	0.111	Nonparametric	Nonparametric
1_17_5_104	MW-07	Appendix IV	Beryllium	mg/L	11	8	73%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.093		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)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
1_17_5_106	MW-07	Appendix IV	Cadmium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_17_5_109	MW-07	Appendix IV	Chromium, Total	mg/L	11	0	0%	0.966	0.842	0.114	0.956	0.977	0.947	0.099	0.992	0.111	>= 0.10	0.175	>= 0.10	0.123	Gamma; Lognormal; Normal	Normal
1_17_5_110	MW-07	Appendix IV	Cobalt	mg/L	11	0	0%	0.939	0.514	0.176	0.442	0.924	0.355	0.191	0.315	0.195	>= 0.10	0.459	>= 0.10	0.134	Gamma; Lognormal; Normal	Normal
1_17_5_113	MW-07	Appendix IV	Fluoride (App IV)	mg/L	11	1	9%	0.842	0.047	0.247	0.085	0.857	0.069	0.225	0.160	0.244	>= 0.10	0.683	0.05 <= p < 0.10	0.297	Gamma; Lognormal; Normal	Normal
1_17_5_115	MW-07	Appendix IV	Lead	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_17_5_116	MW-07	Appendix IV	Lithium	mg/L	11	0	0%	0.965	0.830	0.138	0.804	0.975	0.931	0.172	0.480	0.149	>= 0.10	0.202	>= 0.10	0.316	Gamma; Lognormal; Normal	Normal
1_17_5_117	MW-07	Appendix IV	Mercury	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_17_5_118	MW-07	Appendix IV	Molybdenum	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_17_5_121	MW-07	Appendix IV	Radium 226 and 228	pCi/L	11	2	18%	0.755	0.006	0.259	0.082	0.878	0.151	0.173	0.612	0.195	>= 0.10	0.576	>= 0.10	0.398	Gamma; Lognormal; Normal	Normal
1_17_5_122	MW-07	Appendix IV	Selenium	mg/L	11	9	82%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.589		Nonparametric
1_17_5_125	MW-07	Appendix IV	Thallium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_17_6_111	MW-07	Part 115	Copper	mg/L	11	9	82%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.083		Nonparametric
1_17_6_114	MW-07	Part 115	Iron	mg/L	11	0	0%	0.928	0.395	0.210	0.192	0.940	0.524	0.190	0.327	0.198	>= 0.10	0.320	>= 0.10	0.125	Gamma; Lognormal; Normal	Normal
1_17_6_119	MW-07	Part 115	Nickel	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_17_6_123	MW-07	Part 115	Silver	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_17_6_129	MW-07	Part 115	Vanadium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_17_6_130	MW-07	Part 115	Zinc	mg/L	11	8	73%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		1.031		Nonparametric
1_18_4_105	MW-08	Appendix III	Boron	mg/L	11	0	0%	0.908	0.230	0.267	0.027	0.831	0.024	0.317	0.003	0.307	< 0.01	0.830	0.01 <= p < 0.05	0.373	Normal	Normal
1_18_4_107	MW-08	Appendix III	Calcium	mg/L	11	0	0%	0.895	0.158	0.241	0.074	0.892	0.146	0.243	0.068	0.254	0.05 <= p < 0.10	0.630	0.05 <= p < 0.10	0.100	Gamma; Lognormal; Normal	Normal
1_18_4_108	MW-08	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.945	0.580	0.128	0.882	0.909	0.239	0.166	0.545	0.145	>= 0.10	0.417	>= 0.10	0.228	Gamma; Lognormal; Normal	Normal
1_18_4_112	MW-08	Appendix III	Fluoride	mg/L	11	0	0%	0.892	0.146	0.244	0.067	0.833	0.026	0.287	0.012	0.277	0.01 <= p < 0.05	0.848	0.01 <= p < 0.05	0.380	Normal	Normal
1_18_4_120	MW-08	Appendix III	pH (field)	su	11	0	0%	0.637	0.000	0.368	0.000	0.615	0.000	0.379	0.000	0.372	< 0.01	1.744	< 0.01	0.050	Nonparametric	Nonparametric
1_18_4_124	MW-08	Appendix III	Sulfate (as SO4)	mg/L	11	3	27%	0.818	0.045	0.272	0.082	0.924	0.461	0.142	0.906	0.187	>= 0.10	0.365	>= 0.10	1.030	Gamma; Lognormal; Normal	Gamma
1_18_4_126	MW-08	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	0.973	0.919	0.144	0.754	0.974	0.923	0.132	0.858	0.127	>= 0.10	0.205	>= 0.10	0.106	Gamma; Lognormal; Normal	Normal
1_18_5_101	MW-08	Appendix IV	Antimony	mg/L	11	5	45%	0.963	0.844	0.187	0.734	0.986	0.976	0.134	0.983	0.157	>= 0.10	0.160	>= 0.10	0.586	Gamma; Lognormal; Normal	Normal
1_18_5_102	MW-08	Appendix IV	Arsenic	mg/L	11	0	0%	0.904	0.210	0.163	0.567	0.815	0.015	0.232	0.100	0.209	>= 0.10	0.701	0.05 <= p < 0.10	0.656	Gamma; Lognormal; Normal	Normal
1_18_5_103	MW-08	Appendix IV	Barium	mg/L	11	0	0%	0.948	0.622	0.175	0.455	0.951	0.662	0.150	0.698	0.159	>= 0.10	0.290	>= 0.10	0.139	Gamma; Lognormal; Normal	Normal
1_18_5_104	MW-08	Appendix IV	Beryllium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_18_5_106	MW-08	Appendix IV	Cadmium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_18_5_109	MW-08	Appendix IV	Chromium, Total	mg/L	11	0	0%	0.906	0.221	0.180	0.406	0.964	0.823	0.129	0.873	0.143	>= 0.10	0.255	>= 0.10	0.261	Gamma; Lognormal; Normal	Normal
1_18_5_110	MW-08	Appendix IV	Cobalt	mg/L	11	0	0%	0.887	0.127	0.195	0.283	0.868	0.073	0.212	0.181	0.218	>= 0.10	0.647	0.05 <= p < 0.10	0.277	Gamma; Lognormal; Normal	Normal
1_18_5_113	MW-08	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.892	0.146	0.244	0.067	0.833	0.026	0.287	0.012	0.277	0.01 <= p < 0.05	0.848	0.01 <= p < 0.05	0.380	Normal	Normal
1_18_5_115	MW-08	Appendix IV	Lead	mg/L	11	8	73%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		1.046		Nonparametric
1_18_5_116	MW-08	Appendix IV	Lithium	mg/L	11	0	0%	0.943	0.560	0.160	0.599	0.908	0.229	0.199	0.255	0.190	>= 0.10	0.380	>= 0.10	0.247	Gamma; Lognormal; Normal	Normal
1_18_5_117	MW-08	Appendix IV	Mercury	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_18_5_118	MW-08	Appendix IV	Molybdenum	mg/L	11	0	0%	0.953	0.679	0.151	0.690	0.884	0.118	0.251	0.050	0.228	>= 0.10	0.451	>= 0.10	0.705	Gamma; Lognormal; Normal	Normal
1_18_5_121	MW-08	Appendix IV	Radium 226 and 228	pCi/L	11	3	27%	0.937	0.582	0.229	0.248	0.979	0.956	0.182	0.604	0.204	>= 0.10	0.237	>= 0.10	0.317	Gamma; Lognormal; Normal	Normal
1_18_5_122	MW-08	Appendix IV	Selenium	mg/L	11	5	45%	0.652	0.002	0.406	0.003	0.740	0.016	0.357	0.016	0.382	< 0.01	0.959	< 0.01	0.371	Nonparametric	Nonparametric
1_18_5_125	MW-08	Appendix IV	Thallium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
1_18_6_111	MW-08	Part 115	Copper	mg/L	11	5	45%	0.935	0.616	0.174	0.826	0.921	0.516	0.221	0.476	0.209	>= 0.10	0.311	>= 0.10	0.300	Gamma; Lognormal; Normal	Normal
1_18_6_114	MW-08	Part 115	Iron	mg/L	11	0	0%	0.915	0.283	0.255	0.044	0.953	0.679	0.208	0.204	0.219	>= 0.10	0.360	>= 0.10	0.265	Gamma; Lognormal; Normal	Normal
1_18_6_119	MW-08	Part 115	Nickel	mg/L	11	0	0%	0.728	0.001	0.308	0.004	0.836	0.028	0.246	0.062	0.273	0.01 <= p < 0.05	1.028	< 0.01	0.419	Lognormal	Lognormal
1_18_6_123	MW-08	Part 115	Silver	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_18_6_129	MW-08	Part 115	Vanadium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_18_6_130	MW-08	Part 115	Zinc	mg/L	11	3	27%	0.608	0.000	0.423	0.000	0.752	0.009	0.298	0.035	0.385	< 0.01	1.240	< 0.01	1.770	Nonparametric	Nonparametric
1_26_4_105	MW-16	Appendix III	Boron	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_26_4_107	MW-16	Appendix III	Calcium	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_26_4_108	MW-16	Appendix III	Chloride (as Cl)	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_26_4_112	MW-16	Appendix III	Fluoride	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_26_4_120	MW-16	Appendix III	pH (field)	su	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_26_4_124	MW-16	Appendix III	Sulfate (as SO4)	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_26_4_126	MW-16	Appendix III	Total Dissolved Solids	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_26_5_101	MW-16	Appendix IV	Antimony	mg/L	1	1	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_26_5_102	MW-16	Appendix IV	Arsenic	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_26_5_103	MW-16	Appendix IV	Barium	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_26_5_104	MW-16	Appendix IV	Beryllium	mg/L	1	1	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_26_5_106	MW-16	Appendix IV	Cadmium	mg/L	1	1	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_26_5_109	MW-16	Appendix IV	Chromium, Total	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_26_5_110	MW-16	Appendix IV	Cobalt	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_26_5_113	MW-16	Appendix IV	Fluoride (App IV)	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_26_5_115	MW-16	Appendix IV	Lead	mg/L	1	1	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_26_5_116	MW-16	Appendix IV	Lithium	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_26_5_117	MW-16	Appendix IV	Mercury	mg/L	1	1	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_26_5_118	MW-16	Appendix IV	Molybdenum	mg/L	1	1	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_26_5_121	MW-16	Appendix IV	Radium 226 and 228	pCi/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_26_5_122	MW-16	Appendix IV	Selenium	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_26_5_125	MW-16	Appendix IV	Thallium	mg/L	1	1	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_26_6_111	MW-16	Part 115	Copper	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_26_6_114	MW-16	Part 115	Iron	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_26_6_119	MW-16	Part 115	Nickel	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_26_6_123	MW-16	Part 115	Silver	mg/L	1	1	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_26_6_129	MW-16	Part 115	Vanadium	mg/L	1	1	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_26_6_130	MW-16	Part 115	Zinc	mg/L	1	1	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_27_4_105	MW-17	Appendix III	Boron	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_27_4_107	MW-17	Appendix III	Calcium	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_27_4_108	MW-17	Appendix III	Chloride (as Cl)	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_27_4_112	MW-17	Appendix III	Fluoride	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_27_4_120	MW-17	Appendix III	pH (field)	su	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
1_27_4_124	MW-17	Appendix III	Sulfate (as SO4)	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_27_4_126	MW-17	Appendix III	Total Dissolved Solids	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_27_5_101	MW-17	Appendix IV	Antimony	mg/L	1	1	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_27_5_102	MW-17	Appendix IV	Arsenic	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_27_5_103	MW-17	Appendix IV	Barium	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_27_5_104	MW-17	Appendix IV	Beryllium	mg/L	1	1	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_27_5_106	MW-17	Appendix IV	Cadmium	mg/L	1	1	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_27_5_109	MW-17	Appendix IV	Chromium, Total	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_27_5_110	MW-17	Appendix IV	Cobalt	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_27_5_113	MW-17	Appendix IV	Fluoride (App IV)	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_27_5_115	MW-17	Appendix IV	Lead	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_27_5_116	MW-17	Appendix IV	Lithium	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_27_5_117	MW-17	Appendix IV	Mercury	mg/L	1	1	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_27_5_118	MW-17	Appendix IV	Molybdenum	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_27_5_121	MW-17	Appendix IV	Radium 226 and 228	pCi/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_27_5_122	MW-17	Appendix IV	Selenium	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_27_5_125	MW-17	Appendix IV	Thallium	mg/L	1	1	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_27_6_111	MW-17	Part 115	Copper	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_27_6_114	MW-17	Part 115	Iron	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_27_6_119	MW-17	Part 115	Nickel	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_27_6_123	MW-17	Part 115	Silver	mg/L	1	1	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_27_6_129	MW-17	Part 115	Vanadium	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_27_6_130	MW-17	Part 115	Zinc	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_28_4_105	MW-18	Appendix III	Boron	mg/L	11	0	0%	0.909	0.240	0.199	0.258	0.952	0.665	0.173	0.476	0.189	>= 0.10	0.310	>= 0.10	0.253	Gamma; Lognormal; Normal	Normal
1_28_4_107	MW-18	Appendix III	Calcium	mg/L	11	0	0%	0.953	0.681	0.161	0.587	0.931	0.418	0.198	0.264	0.184	>= 0.10	0.376	>= 0.10	0.201	Gamma; Lognormal; Normal	Normal
1_28_4_108	MW-18	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.937	0.491	0.134	0.842	0.922	0.332	0.163	0.573	0.155	>= 0.10	0.373	>= 0.10	0.197	Gamma; Lognormal; Normal	Normal
1_28_4_112	MW-18	Appendix III	Fluoride	mg/L	11	0	0%	0.963	0.804	0.172	0.478	0.971	0.899	0.142	0.772	0.149	>= 0.10	0.258	>= 0.10	0.173	Gamma; Lognormal; Normal	Normal
1_28_4_120	MW-18	Appendix III	pH (field)	su	11	0	0%	0.939	0.504	0.227	0.116	0.937	0.486	0.229	0.109	0.229	>= 0.10	0.387	>= 0.10	0.011	Gamma; Lognormal; Normal	Normal
1_28_4_124	MW-18	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	0.905	0.215	0.261	0.035	0.941	0.534	0.212	0.179	0.229	>= 0.10	0.415	>= 0.10	0.272	Gamma; Lognormal; Normal	Normal
1_28_4_126	MW-18	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	0.921	0.324	0.261	0.035	0.928	0.393	0.234	0.093	0.244	0.05 <= p < 0.10	0.508	>= 0.10	0.150	Gamma; Lognormal; Normal	Normal
1_28_5_101	MW-18	Appendix IV	Antimony	mg/L	11	3	27%	0.734	0.005	0.311	0.022	0.778	0.017	0.290	0.046	0.311	0.01 <= p < 0.05	0.956	0.01 <= p < 0.05	0.405	Nonparametric	Nonparametric
1_28_5_102	MW-18	Appendix IV	Arsenic	mg/L	11	0	0%	0.935	0.460	0.171	0.491	0.968	0.861	0.179	0.415	0.179	>= 0.10	0.292	>= 0.10	0.277	Gamma; Lognormal; Normal	Normal
1_28_5_103	MW-18	Appendix IV	Barium	mg/L	11	0	0%	0.891	0.144	0.216	0.163	0.897	0.168	0.195	0.288	0.213	>= 0.10	0.561	>= 0.10	0.271	Gamma; Lognormal; Normal	Normal
1_28_5_104	MW-18	Appendix IV	Beryllium	mg/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_28_5_106	MW-18	Appendix IV	Cadmium	mg/L	11	4	36%	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_5_109	MW-18	Appendix IV	Chromium, Total	mg/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_28_5_110	MW-18	Appendix IV	Cobalt	mg/L	11	0	0%	0.831	0.024	0.258	0.039	0.883	0.115	0.234	0.095	0.253	0.05 <= p < 0.10	0.691	0.05 <= p < 0.10	0.451	Gamma; Lognormal	Gamma
1_28_5_113	MW-18	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.963	0.804	0.172	0.478	0.971	0.899	0.142	0.772	0.149	>= 0.10	0.258	>= 0.10	0.173	Gamma; Lognormal; Normal	Normal
1_28_5_115	MW-18	Appendix IV	Lead	mg/L	11	8	73%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.444		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)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
1_28_5_116	MW-18	Appendix IV	Lithium	mg/L	11	0	0%	0.906	0.216	0.218	0.154	0.909	0.235	0.198	0.264	0.204	>= 0.10	0.529	>= 0.10	0.265	Gamma; Lognormal; Normal	Normal
1_28_5_117	MW-18	Appendix IV	Mercury	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_28_5_118	MW-18	Appendix IV	Molybdenum	mg/L	11	0	0%	0.872	0.082	0.253	0.048	0.915	0.280	0.214	0.171	0.232	>= 0.10	0.592	>= 0.10	0.271	Gamma; Lognormal; Normal	Normal
1_28_5_121	MW-18	Appendix IV	Radium 226 and 228	pCi/L	11	7	64%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.425		Nonparametric
1_28_5_122	MW-18	Appendix IV	Selenium	mg/L	11	0	0%	0.837	0.029	0.215	0.167	0.930	0.412	0.178	0.426	0.162	>= 0.10	0.380	>= 0.10	0.864	Gamma; Lognormal; Normal	Normal
1_28_5_125	MW-18	Appendix IV	Thallium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_28_6_111	MW-18	Part 115	Copper	mg/L	11	0	0%	0.678	0.000	0.289	0.011	0.822	0.018	0.247	0.060	0.266	0.01 <= p < 0.05	1.111	< 0.01	0.422	Lognormal	Lognormal
1_28_6_114	MW-18	Part 115	Iron	mg/L	11	0	0%	0.957	0.729	0.139	0.801	0.979	0.959	0.134	0.843	0.132	>= 0.10	0.203	>= 0.10	0.254	Gamma; Lognormal; Normal	Normal
1_28_6_119	MW-18	Part 115	Nickel	mg/L	11	0	0%	0.820	0.017	0.260	0.036	0.848	0.041	0.241	0.073	0.258	0.05 <= p < 0.10	0.788	0.01 <= p < 0.05	0.331	Gamma; Lognormal	Gamma
1_28_6_123	MW-18	Part 115	Silver	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_28_6_129	MW-18	Part 115	Vanadium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_28_6_130	MW-18	Part 115	Zinc	mg/L	11	0	0%	0.961	0.782	0.182	0.387	0.971	0.898	0.150	0.702	0.171	>= 0.10	0.231	>= 0.10	0.343	Gamma; Lognormal; Normal	Normal
1_29_4_105	MW-19	Appendix III	Boron	mg/L	11	0	0%	0.917	0.297	0.130	0.869	0.930	0.409	0.109	0.971	0.120	>= 0.10	0.303	>= 0.10	0.200	Gamma; Lognormal; Normal	Normal
1_29_4_107	MW-19	Appendix III	Calcium	mg/L	11	0	0%	0.905	0.210	0.178	0.429	0.860	0.057	0.202	0.240	0.174	>= 0.10	0.518	>= 0.10	0.112	Gamma; Lognormal; Normal	Normal
1_29_4_108	MW-19	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.929	0.401	0.180	0.406	0.940	0.525	0.186	0.358	0.165	>= 0.10	0.388	>= 0.10	0.332	Gamma; Lognormal; Normal	Normal
1_29_4_112	MW-19	Appendix III	Fluoride	mg/L	11	0	0%	0.958	0.747	0.151	0.693	0.958	0.744	0.147	0.732	0.154	>= 0.10	0.266	>= 0.10	0.135	Gamma; Lognormal; Normal	Normal
1_29_4_120	MW-19	Appendix III	pH (field)	su	11	0	0%	0.826	0.021	0.234	0.093	0.814	0.014	0.241	0.075	0.233	>= 0.10	0.784	0.01 <= p < 0.05	0.027	Gamma; Lognormal; Normal	Normal
1_29_4_124	MW-19	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	0.936	0.479	0.172	0.481	0.896	0.165	0.216	0.162	0.201	>= 0.10	0.431	>= 0.10	0.233	Gamma; Lognormal; Normal	Normal
1_29_4_126	MW-19	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	0.893	0.151	0.153	0.671	0.887	0.129	0.170	0.503	0.171	>= 0.10	0.497	>= 0.10	0.123	Gamma; Lognormal; Normal	Normal
1_29_5_101	MW-19	Appendix IV	Antimony	mg/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_29_5_102	MW-19	Appendix IV	Arsenic	mg/L	11	0	0%	0.935	0.463	0.152	0.675	0.916	0.286	0.197	0.273	0.190	>= 0.10	0.391	>= 0.10	0.356	Gamma; Lognormal; Normal	Normal
1_29_5_103	MW-19	Appendix IV	Barium	mg/L	11	0	0%	0.971	0.901	0.149	0.712	0.972	0.908	0.129	0.874	0.145	>= 0.10	0.220	>= 0.10	0.154	Gamma; Lognormal; Normal	Normal
1_29_5_104	MW-19	Appendix IV	Beryllium	mg/L	11	3	27%	0.937	0.578	0.159	0.795	0.941	0.622	0.154	0.837	0.172	>= 0.10	0.275	>= 0.10	0.152	Gamma; Lognormal; Normal	Normal
1_29_5_106	MW-19	Appendix IV	Cadmium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_29_5_109	MW-19	Appendix IV	Chromium, Total	mg/L	11	5	45%	0.826	0.099	0.269	0.191	0.891	0.322	0.238	0.359	0.257	>= 0.10	0.450	>= 0.10	0.274	Gamma; Lognormal; Normal	Normal
1_29_5_110	MW-19	Appendix IV	Cobalt	mg/L	11	0	0%	0.963	0.810	0.175	0.450	0.899	0.177	0.251	0.052	0.212	>= 0.10	0.387	>= 0.10	0.569	Gamma; Lognormal; Normal	Normal
1_29_5_113	MW-19	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.958	0.747	0.151	0.693	0.958	0.744	0.147	0.732	0.154	>= 0.10	0.266	>= 0.10	0.135	Gamma; Lognormal; Normal	Normal
1_29_5_115	MW-19	Appendix IV	Lead	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_29_5_116	MW-19	Appendix IV	Lithium	mg/L	11	0	0%	0.934	0.452	0.128	0.886	0.925	0.362	0.141	0.779	0.147	>= 0.10	0.365	>= 0.10	0.137	Gamma; Lognormal; Normal	Normal
1_29_5_117	MW-19	Appendix IV	Mercury	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_29_5_118	MW-19	Appendix IV	Molybdenum	mg/L	11	0	0%	0.878	0.099	0.215	0.164	0.789	0.007	0.292	0.009	0.267	0.01 <= p < 0.05	0.880	0.01 <= p < 0.05	0.384	Normal	Normal
1_29_5_121	MW-19	Appendix IV	Radium 226 and 228	pCi/L	11	3	27%	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_5_122	MW-19	Appendix IV	Selenium	mg/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_29_5_125	MW-19	Appendix IV	Thallium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_29_6_111	MW-19	Part 115	Copper	mg/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_29_6_114	MW-19	Part 115	Iron	mg/L	11	0	0%	0.922	0.337	0.168	0.524	0.961	0.785	0.132	0.856	0.145	>= 0.10	0.269	>= 0.10	0.202	Gamma; Lognormal; Normal	Normal
1_29_6_119	MW-19	Part 115	Nickel	mg/L	11	1	9%	0.879	0.126	0.216	0.205	0.893	0.181	0.225	0.163	0.235	>= 0.10	0.568	>= 0.10	0.349	Gamma; Lognormal; Normal	Normal
1_29_6_123	MW-19	Part 115	Silver	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_29_6_129	MW-19	Part 115	Vanadium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
1_29_6_130	MW-19	Part 115	Zinc	mg/L	11	9	82%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.426		Nonparametric
1_30_4_105	MW-20	Appendix III	Boron	mg/L	11	0	0%	0.840	0.032	0.246	0.062	0.860	0.058	0.241	0.073	0.253	0.05 <= p < 0.10	0.746	0.01 <= p < 0.05	0.164	Gamma; Lognormal; Normal	Normal
1_30_4_107	MW-20	Appendix III	Calcium	mg/L	11	0	0%	0.842	0.034	0.241	0.074	0.729	0.001	0.296	0.008	0.278	0.01 <= p < 0.05	1.123	< 0.01	0.270	Normal	Normal
1_30_4_108	MW-20	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.937	0.486	0.190	0.322	0.891	0.142	0.180	0.409	0.170	>= 0.10	0.477	>= 0.10	0.214	Gamma; Lognormal; Normal	Normal
1_30_4_112	MW-20	Appendix III	Fluoride	mg/L	11	0	0%	0.547	0.000	0.394	0.000	0.652	0.000	0.330	0.001	0.353	< 0.01	1.694	< 0.01	0.268	Nonparametric	Nonparametric
1_30_4_120	MW-20	Appendix III	pH (field)	su	11	0	0%	0.912	0.255	0.241	0.075	0.911	0.254	0.241	0.074	0.252	0.05 <= p < 0.10	0.519	>= 0.10	0.017	Gamma; Lognormal; Normal	Normal
1_30_4_124	MW-20	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	0.948	0.620	0.158	0.623	0.923	0.341	0.222	0.135	0.213	>= 0.10	0.372	>= 0.10	0.586	Gamma; Lognormal; Normal	Normal
1_30_4_126	MW-20	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	0.918	0.305	0.218	0.154	0.933	0.439	0.198	0.266	0.203	>= 0.10	0.504	>= 0.10	0.106	Gamma; Lognormal; Normal	Normal
1_30_5_101	MW-20	Appendix IV	Antimony	mg/L	11	4	36%	0.919	0.458	0.214	0.431	0.930	0.554	0.207	0.486	0.228	>= 0.10	0.314	>= 0.10	0.421	Gamma; Lognormal; Normal	Normal
1_30_5_102	MW-20	Appendix IV	Arsenic	mg/L	11	0	0%	0.898	0.176	0.208	0.202	0.906	0.221	0.188	0.339	0.201	>= 0.10	0.513	>= 0.10	0.155	Gamma; Lognormal; Normal	Normal
1_30_5_103	MW-20	Appendix IV	Barium	mg/L	11	0	0%	0.788	0.006	0.238	0.082	0.908	0.233	0.183	0.386	0.202	>= 0.10	0.608	>= 0.10	0.288	Gamma; Lognormal; Normal	Normal
1_30_5_104	MW-20	Appendix IV	Beryllium	mg/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_30_5_106	MW-20	Appendix IV	Cadmium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_30_5_109	MW-20	Appendix IV	Chromium, Total	mg/L	11	5	45%	0.974	0.918	0.175	0.816	0.978	0.940	0.162	0.891	0.178	>= 0.10	0.200	>= 0.10	0.155	Gamma; Lognormal; Normal	Normal
1_30_5_110	MW-20	Appendix IV	Cobalt	mg/L	11	0	0%	0.932	0.427	0.176	0.442	0.933	0.442	0.191	0.314	0.187	>= 0.10	0.404	>= 0.10	0.165	Gamma; Lognormal; Normal	Normal
1_30_5_113	MW-20	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.547	0.000	0.394	0.000	0.652	0.000	0.330	0.001	0.353	< 0.01	1.694	< 0.01	0.268	Nonparametric	Nonparametric
1_30_5_115	MW-20	Appendix IV	Lead	mg/L	11	0	0%	0.890	0.141	0.215	0.167	0.908	0.232	0.204	0.228	0.217	>= 0.10	0.536	>= 0.10	0.272	Gamma; Lognormal; Normal	Normal
1_30_5_116	MW-20	Appendix IV	Lithium	mg/L	11	0	0%	0.961	0.782	0.111	0.966	0.877	0.094	0.159	0.606	0.131	>= 0.10	0.356	>= 0.10	0.292	Gamma; Lognormal; Normal	Normal
1_30_5_117	MW-20	Appendix IV	Mercury	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_30_5_118	MW-20	Appendix IV	Molybdenum	mg/L	11	0	0%	0.958	0.744	0.150	0.702	0.955	0.708	0.152	0.679	0.165	>= 0.10	0.294	>= 0.10	0.138	Gamma; Lognormal; Normal	Normal
1_30_5_121	MW-20	Appendix IV	Radium 226 and 228	pCi/L	11	6	55%	0.905	0.438	0.204	0.706	0.934	0.624	0.200	0.737	0.223	>= 0.10	0.296	>= 0.10	0.381	Gamma; Lognormal; Normal	Nonparametric
1_30_5_122	MW-20	Appendix IV	Selenium	mg/L	11	5	45%	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_5_125	MW-20	Appendix IV	Thallium	mg/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_30_6_111	MW-20	Part 115	Copper	mg/L	11	1	9%	0.876	0.117	0.172	0.544	0.914	0.309	0.181	0.466	0.192	>= 0.10	0.408	>= 0.10	0.276	Gamma; Lognormal; Normal	Normal
1_30_6_114	MW-20	Part 115	Iron	mg/L	11	0	0%	0.936	0.477	0.154	0.663	0.933	0.445	0.155	0.654	0.167	>= 0.10	0.364	>= 0.10	0.100	Gamma; Lognormal; Normal	Normal
1_30_6_119	MW-20	Part 115	Nickel	mg/L	11	0	0%	0.857	0.053	0.295	0.008	0.835	0.027	0.306	0.005	0.317	< 0.01	0.883	0.01 <= p < 0.05	0.165	Normal	Normal
1_30_6_123	MW-20	Part 115	Silver	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_30_6_129	MW-20	Part 115	Vanadium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_30_6_130	MW-20	Part 115	Zinc	mg/L	11	0	0%	0.713	0.001	0.380	0.000	0.827	0.021	0.310	0.004	0.339	< 0.01	1.217	< 0.01	0.425	Nonparametric	Nonparametric
1_38_4_105	MW-28	Appendix III	Boron	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_38_4_107	MW-28	Appendix III	Calcium	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_38_4_108	MW-28	Appendix III	Chloride (as Cl)	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_38_4_112	MW-28	Appendix III	Fluoride	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_38_4_120	MW-28	Appendix III	pH (field)	su	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_38_4_124	MW-28	Appendix III	Sulfate (as SO4)	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_38_4_126	MW-28	Appendix III	Total Dissolved Solids	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_38_5_101	MW-28	Appendix IV	Antimony	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_38_5_102	MW-28	Appendix IV	Arsenic	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_38_5_103	MW-28	Appendix IV	Barium	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
1_38_5_104	MW-28	Appendix IV	Beryllium	mg/L	1	1	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_38_5_106	MW-28	Appendix IV	Cadmium	mg/L	1	1	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_38_5_109	MW-28	Appendix IV	Chromium, Total	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_38_5_110	MW-28	Appendix IV	Cobalt	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_38_5_113	MW-28	Appendix IV	Fluoride (App IV)	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_38_5_115	MW-28	Appendix IV	Lead	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_38_5_116	MW-28	Appendix IV	Lithium	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_38_5_117	MW-28	Appendix IV	Mercury	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_38_5_118	MW-28	Appendix IV	Molybdenum	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_38_5_121	MW-28	Appendix IV	Radium 226 and 228	pCi/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_38_5_122	MW-28	Appendix IV	Selenium	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_38_5_125	MW-28	Appendix IV	Thallium	mg/L	1	1	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_38_6_111	MW-28	Part 115	Copper	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_38_6_114	MW-28	Part 115	Iron	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_38_6_119	MW-28	Part 115	Nickel	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_38_6_123	MW-28	Part 115	Silver	mg/L	1	1	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_38_6_129	MW-28	Part 115	Vanadium	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_38_6_130	MW-28	Part 115	Zinc	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_40_4_105	MW-30	Appendix III	Boron	mg/L	11	0	0%	0.687	0.000	0.286	0.012	0.786	0.006	0.227	0.117	0.240	0.05 <= p < 0.10	1.018	< 0.01	0.212	Gamma; Lognormal	Gamma
1_40_4_107	MW-30	Appendix III	Calcium	mg/L	11	0	0%	0.521	0.000	0.434	0.000	0.610	0.000	0.390	0.000	0.408	< 0.01	1.970	< 0.01	0.243	Nonparametric	Nonparametric
1_40_4_108	MW-30	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.819	0.017	0.227	0.116	0.869	0.075	0.198	0.266	0.216	>= 0.10	0.770	0.01 <= p < 0.05	0.305	Gamma; Lognormal; Normal	Normal
1_40_4_112	MW-30	Appendix III	Fluoride	mg/L	11	0	0%	0.931	0.420	0.194	0.292	0.945	0.580	0.189	0.332	0.183	>= 0.10	0.409	>= 0.10	0.116	Gamma; Lognormal; Normal	Normal
1_40_4_120	MW-30	Appendix III	pH (field)	su	11	0	0%	0.691	0.000	0.274	0.021	0.679	0.000	0.280	0.016	0.283	0.01 <= p < 0.05	1.413	< 0.01	0.031	Nonparametric	Nonparametric
1_40_4_124	MW-30	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	0.899	0.179	0.183	0.382	0.858	0.054	0.180	0.409	0.201	>= 0.10	0.532	>= 0.10	0.142	Gamma; Lognormal; Normal	Normal
1_40_4_126	MW-30	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	0.923	0.346	0.191	0.317	0.946	0.590	0.171	0.491	0.171	>= 0.10	0.386	>= 0.10	0.111	Gamma; Lognormal; Normal	Normal
1_40_5_101	MW-30	Appendix IV	Antimony	mg/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_40_5_102	MW-30	Appendix IV	Arsenic	mg/L	11	2	18%	0.965	0.850	0.163	0.698	0.923	0.422	0.224	0.217	0.198	>= 0.10	0.288	>= 0.10	0.556	Gamma; Lognormal; Normal	Normal
1_40_5_103	MW-30	Appendix IV	Barium	mg/L	11	0	0%	0.847	0.039	0.213	0.174	0.888	0.130	0.167	0.534	0.186	>= 0.10	0.589	>= 0.10	0.297	Gamma; Lognormal; Normal	Normal
1_40_5_104	MW-30	Appendix IV	Beryllium	mg/L	11	9	82%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.516		Nonparametric
1_40_5_106	MW-30	Appendix IV	Cadmium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_40_5_109	MW-30	Appendix IV	Chromium, Total	mg/L	11	0	0%	0.933	0.443	0.171	0.494	0.925	0.366	0.172	0.480	0.184	>= 0.10	0.336	>= 0.10	0.374	Gamma; Lognormal; Normal	Normal
1_40_5_110	MW-30	Appendix IV	Cobalt	mg/L	11	0	0%	0.732	0.001	0.310	0.004	0.909	0.241	0.196	0.281	0.233	>= 0.10	0.722	0.05 <= p < 0.10	0.626	Gamma; Lognormal	Gamma
1_40_5_113	MW-30	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.931	0.420	0.194	0.292	0.945	0.580	0.189	0.332	0.183	>= 0.10	0.409	>= 0.10	0.116	Gamma; Lognormal; Normal	Normal
1_40_5_115	MW-30	Appendix IV	Lead	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_40_5_116	MW-30	Appendix IV	Lithium	mg/L	11	0	0%	0.626	0.000	0.281	0.015	0.743	0.002	0.246	0.063	0.257	0.05 <= p < 0.10	1.283	< 0.01	0.270	Gamma; Lognormal	Gamma
1_40_5_117	MW-30	Appendix IV	Mercury	mg/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_40_5_118	MW-30	Appendix IV	Molybdenum	mg/L	11	3	27%	0.800	0.028	0.239	0.194	0.987	0.989	0.122	0.979	0.149	>= 0.10	0.269	>= 0.10	0.725	Gamma; Lognormal; Normal	Normal
1_40_5_121	MW-30	Appendix IV	Radium 226 and 228	pCi/L	11	6	55%	0.894	0.376	0.255	0.351	0.910	0.467	0.226	0.550	0.254	>= 0.10	0.381	>= 0.10	0.300	Gamma; Lognormal; Normal	Nonparametric
1_40_5_122	MW-30	Appendix IV	Selenium	mg/L	11	6	55%	0.640	0.002	0.427	0.003	0.720	0.015	0.384	0.015	0.416	< 0.01	0.914	< 0.01	0.557	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)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
1_40_5_125	MW-30	Appendix IV	Thallium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_40_6_111	MW-30	Part 115	Copper	mg/L	11	7	64%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.356		Nonparametric
1_40_6_114	MW-30	Part 115	Iron	mg/L	11	0	0%	0.857	0.052	0.184	0.376	0.975	0.934	0.117	0.944	0.106	>= 0.10	0.189	>= 0.10	0.694	Gamma; Lognormal; Normal	Normal
1_40_6_119	MW-30	Part 115	Nickel	mg/L	11	2	18%	0.844	0.065	0.274	0.049	0.930	0.479	0.187	0.482	0.196	>= 0.10	0.407	>= 0.10	0.645	Gamma; Lognormal; Normal	Normal
1_40_6_123	MW-30	Part 115	Silver	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_40_6_129	MW-30	Part 115	Vanadium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_40_6_130	MW-30	Part 115	Zinc	mg/L	11	9	82%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.055		Nonparametric
1_41_4_105	MW-31	Appendix III	Boron	mg/L	11	0	0%	0.983	0.979	0.110	0.970	0.981	0.972	0.112	0.962	0.112	>= 0.10	0.158	>= 0.10	0.123	Gamma; Lognormal; Normal	Normal
1_41_4_107	MW-31	Appendix III	Calcium	mg/L	11	0	0%	0.938	0.502	0.193	0.305	0.922	0.336	0.216	0.162	0.206	>= 0.10	0.391	>= 0.10	0.126	Gamma; Lognormal; Normal	Normal
1_41_4_108	MW-31	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.951	0.656	0.207	0.209	0.959	0.765	0.191	0.317	0.199	>= 0.10	0.326	>= 0.10	0.095	Gamma; Lognormal; Normal	Normal
1_41_4_112	MW-31	Appendix III	Fluoride	mg/L	11	0	0%	0.865	0.066	0.282	0.014	0.870	0.079	0.277	0.018	0.284	0.01 <= p < 0.05	0.739	0.01 <= p < 0.05	0.050	Lognormal; Normal	Normal
1_41_4_120	MW-31	Appendix III	pH (field)	su	11	0	0%	0.940	0.522	0.173	0.478	0.942	0.543	0.170	0.499	0.164	>= 0.10	0.325	>= 0.10	0.014	Gamma; Lognormal; Normal	Normal
1_41_4_124	MW-31	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	0.933	0.445	0.168	0.518	0.919	0.313	0.153	0.672	0.158	>= 0.10	0.311	>= 0.10	0.401	Gamma; Lognormal; Normal	Normal
1_41_4_126	MW-31	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	0.948	0.619	0.173	0.474	0.958	0.752	0.160	0.596	0.165	>= 0.10	0.282	>= 0.10	0.072	Gamma; Lognormal; Normal	Normal
1_41_5_101	MW-31	Appendix IV	Antimony	mg/L	11	6	55%	0.843	0.174	0.323	0.095	0.835	0.150	0.332	0.075	0.353	0.05 <= p < 0.10	0.565	>= 0.10	0.284	Gamma; Lognormal; Normal	Nonparametric
1_41_5_102	MW-31	Appendix IV	Arsenic	mg/L	11	0	0%	0.918	0.306	0.207	0.211	0.936	0.476	0.184	0.371	0.199	>= 0.10	0.371	>= 0.10	0.195	Gamma; Lognormal; Normal	Normal
1_41_5_103	MW-31	Appendix IV	Barium	mg/L	11	0	0%	0.881	0.106	0.217	0.156	0.911	0.253	0.176	0.441	0.189	>= 0.10	0.510	>= 0.10	0.215	Gamma; Lognormal; Normal	Normal
1_41_5_104	MW-31	Appendix IV	Beryllium	mg/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_41_5_106	MW-31	Appendix IV	Cadmium	mg/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_41_5_109	MW-31	Appendix IV	Chromium, Total	mg/L	11	0	0%	0.958	0.747	0.152	0.677	0.971	0.901	0.151	0.684	0.160	>= 0.10	0.212	>= 0.10	0.159	Gamma; Lognormal; Normal	Normal
1_41_5_110	MW-31	Appendix IV	Cobalt	mg/L	11	1	9%	0.887	0.156	0.219	0.190	0.947	0.631	0.180	0.472	0.194	>= 0.10	0.353	>= 0.10	0.215	Gamma; Lognormal; Normal	Normal
1_41_5_113	MW-31	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.865	0.066	0.282	0.014	0.870	0.079	0.277	0.018	0.284	0.01 <= p < 0.05	0.739	0.01 <= p < 0.05	0.050	Lognormal; Normal	Normal
1_41_5_115	MW-31	Appendix IV	Lead	mg/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_41_5_116	MW-31	Appendix IV	Lithium	mg/L	11	0	0%	0.867	0.071	0.225	0.124	0.841	0.032	0.231	0.104	0.243	0.05 <= p < 0.10	0.768	0.01 <= p < 0.05	0.126	Gamma; Lognormal; Normal	Normal
1_41_5_117	MW-31	Appendix IV	Mercury	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_41_5_118	MW-31	Appendix IV	Molybdenum	mg/L	11	0	0%	0.877	0.095	0.284	0.013	0.846	0.037	0.309	0.004	0.282	0.01 <= p < 0.05	0.774	0.01 <= p < 0.05	0.350	Normal	Normal
1_41_5_121	MW-31	Appendix IV	Radium 226 and 228	pCi/L	11	3	27%	0.817	0.043	0.261	0.113	0.870	0.150	0.226	0.267	0.242	>= 0.10	0.625	0.05 <= p < 0.10	0.332	Gamma; Lognormal; Normal	Normal
1_41_5_122	MW-31	Appendix IV	Selenium	mg/L	11	5	45%	0.552	0.000	0.462	0.000	0.645	0.002	0.411	0.002	0.450	< 0.01	1.296	< 0.01	0.721	Nonparametric	Nonparametric
1_41_5_125	MW-31	Appendix IV	Thallium	mg/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_41_6_111	MW-31	Part 115	Copper	mg/L	11	8	73%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.338		Nonparametric
1_41_6_114	MW-31	Part 115	Iron	mg/L	11	0	0%	0.901	0.190	0.192	0.309	0.871	0.079	0.232	0.101	0.211	>= 0.10	0.560	>= 0.10	1.097	Gamma; Lognormal; Normal	Gamma
1_41_6_119	MW-31	Part 115	Nickel	mg/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_41_6_123	MW-31	Part 115	Silver	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_41_6_129	MW-31	Part 115	Vanadium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_41_6_130	MW-31	Part 115	Zinc	mg/L	11	8	73%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		1.082		Nonparametric
1_42_4_105	MW-32	Appendix III	Boron	mg/L	11	0	0%	0.838	0.030	0.293	0.009	0.886	0.122	0.280	0.016	0.292	0.01 <= p < 0.05	0.710	0.05 <= p < 0.10	0.185	Gamma; Lognormal	Gamma
1_42_4_107	MW-32	Appendix III	Calcium	mg/L	11	0	0%	0.913	0.263	0.241	0.073	0.889	0.134	0.267	0.027	0.260	0.01 <= p < 0.05	0.714	0.05 <= p < 0.10	0.153	Gamma; Lognormal; Normal	Normal
1_42_4_108	MW-32	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.917	0.296	0.153	0.667	0.916	0.290	0.154	0.663	0.162	>= 0.10	0.382	>= 0.10	0.100	Gamma; Lognormal; Normal	Normal
1_42_4_112	MW-32	Appendix III	Fluoride	mg/L	11	0	0%	0.863	0.063	0.227	0.117	0.877	0.096	0.217	0.158	0.222	>= 0.10	0.591	>= 0.10	0.076	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)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
1_42_4_120	MW-32	Appendix III	pH (field)	su	11	0	0%	0.933	0.444	0.191	0.317	0.933	0.444	0.191	0.315	0.203	>= 0.10	0.398	>= 0.10	0.011	Gamma; Lognormal; Normal	Normal
1_42_4_124	MW-32	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	0.956	0.721	0.128	0.881	0.872	0.083	0.186	0.356	0.158	>= 0.10	0.388	>= 0.10	0.847	Gamma; Lognormal; Normal	Normal
1_42_4_126	MW-32	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	0.900	0.183	0.211	0.185	0.887	0.126	0.210	0.191	0.227	>= 0.10	0.549	>= 0.10	0.125	Gamma; Lognormal; Normal	Normal
1_42_5_101	MW-32	Appendix IV	Antimony	mg/L	11	7	64%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		1.090		Nonparametric
1_42_5_102	MW-32	Appendix IV	Arsenic	mg/L	11	0	0%	0.452	0.000	0.464	0.000	0.592	0.000	0.384	0.000	0.424	< 0.01	2.202	< 0.01	0.476	Nonparametric	Nonparametric
1_42_5_103	MW-32	Appendix IV	Barium	mg/L	11	0	0%	0.966	0.844	0.150	0.695	0.772	0.004	0.239	0.079	0.182	>= 0.10	0.619	>= 0.10	0.705	Gamma; Lognormal; Normal	Normal
1_42_5_104	MW-32	Appendix IV	Beryllium	mg/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_42_5_106	MW-32	Appendix IV	Cadmium	mg/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_42_5_109	MW-32	Appendix IV	Chromium, Total	mg/L	11	0	0%	0.475	0.000	0.417	0.000	0.702	0.000	0.251	0.050	0.325	< 0.01	1.750	< 0.01	0.647	Lognormal	Lognormal
1_42_5_110	MW-32	Appendix IV	Cobalt	mg/L	11	0	0%	0.583	0.000	0.336	0.001	0.824	0.019	0.284	0.014	0.317	< 0.01	1.237	< 0.01	0.570	Nonparametric	Nonparametric
1_42_5_113	MW-32	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.863	0.063	0.227	0.117	0.877	0.096	0.217	0.158	0.222	>= 0.10	0.591	>= 0.10	0.076	Gamma; Lognormal; Normal	Normal
1_42_5_115	MW-32	Appendix IV	Lead	mg/L	11	8	73%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.626		Nonparametric
1_42_5_116	MW-32	Appendix IV	Lithium	mg/L	11	0	0%	0.892	0.149	0.165	0.548	0.925	0.363	0.179	0.419	0.186	>= 0.10	0.396	>= 0.10	0.221	Gamma; Lognormal; Normal	Normal
1_42_5_117	MW-32	Appendix IV	Mercury	mg/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_42_5_118	MW-32	Appendix IV	Molybdenum	mg/L	11	0	0%	0.839	0.030	0.226	0.119	0.910	0.245	0.177	0.432	0.188	>= 0.10	0.490	>= 0.10	0.232	Gamma; Lognormal; Normal	Normal
1_42_5_121	MW-32	Appendix IV	Radium 226 and 228	pCi/L	11	7	64%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.202		Nonparametric
1_42_5_122	MW-32	Appendix IV	Selenium	mg/L	11	9	82%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		1.443		Nonparametric
1_42_5_125	MW-32	Appendix IV	Thallium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_42_6_111	MW-32	Part 115	Copper	mg/L	11	8	73%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		2.350		Nonparametric
1_42_6_114	MW-32	Part 115	Iron	mg/L	11	0	0%	0.860	0.058	0.221	0.139	0.809	0.012	0.244	0.066	0.242	0.05 <= p < 0.10	0.880	0.01 <= p < 0.05	0.203	Gamma; Lognormal; Normal	Normal
1_42_6_119	MW-32	Part 115	Nickel	mg/L	11	0	0%	0.377	0.000	0.498	0.000	0.558	0.000	0.356	0.000	0.456	< 0.01	2.808	< 0.01	0.950	Nonparametric	Nonparametric
1_42_6_123	MW-32	Part 115	Silver	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_42_6_129	MW-32	Part 115	Vanadium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_42_6_130	MW-32	Part 115	Zinc	mg/L	11	0	0%	0.547	0.000	0.429	0.000	0.684	0.000	0.308	0.004	0.362	< 0.01	2.031	< 0.01	0.972	Nonparametric	Nonparametric
1_46_4_105	MW-36	Appendix III	Boron	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_46_4_107	MW-36	Appendix III	Calcium	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_46_4_108	MW-36	Appendix III	Chloride (as Cl)	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_46_4_112	MW-36	Appendix III	Fluoride	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_46_4_120	MW-36	Appendix III	pH (field)	su	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_46_4_124	MW-36	Appendix III	Sulfate (as SO4)	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_46_4_126	MW-36	Appendix III	Total Dissolved Solids	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_46_5_101	MW-36	Appendix IV	Antimony	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_46_5_102	MW-36	Appendix IV	Arsenic	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_46_5_103	MW-36	Appendix IV	Barium	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_46_5_104	MW-36	Appendix IV	Beryllium	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_46_5_106	MW-36	Appendix IV	Cadmium	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_46_5_109	MW-36	Appendix IV	Chromium, Total	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_46_5_110	MW-36	Appendix IV	Cobalt	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_46_5_113	MW-36	Appendix IV	Fluoride (App IV)	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
1_46_5_115	MW-36	Appendix IV	Lead	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_46_5_116	MW-36	Appendix IV	Lithium	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_46_5_117	MW-36	Appendix IV	Mercury	mg/L	1	1	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_46_5_118	MW-36	Appendix IV	Molybdenum	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_46_5_121	MW-36	Appendix IV	Radium 226 and 228	pCi/L	1	1	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_46_5_122	MW-36	Appendix IV	Selenium	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_46_5_125	MW-36	Appendix IV	Thallium	mg/L	1	1	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_46_6_111	MW-36	Part 115	Copper	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_46_6_114	MW-36	Part 115	Iron	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_46_6_119	MW-36	Part 115	Nickel	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_46_6_123	MW-36	Part 115	Silver	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_46_6_129	MW-36	Part 115	Vanadium	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_46_6_130	MW-36	Part 115	Zinc	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_47_4_105	MW-37	Appendix III	Boron	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_47_4_107	MW-37	Appendix III	Calcium	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_47_4_108	MW-37	Appendix III	Chloride (as Cl)	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_47_4_112	MW-37	Appendix III	Fluoride	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_47_4_120	MW-37	Appendix III	pH (field)	su	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_47_4_124	MW-37	Appendix III	Sulfate (as SO4)	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_47_4_126	MW-37	Appendix III	Total Dissolved Solids	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_47_5_101	MW-37	Appendix IV	Antimony	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_47_5_102	MW-37	Appendix IV	Arsenic	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_47_5_103	MW-37	Appendix IV	Barium	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_47_5_104	MW-37	Appendix IV	Beryllium	mg/L	1	1	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_47_5_106	MW-37	Appendix IV	Cadmium	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_47_5_109	MW-37	Appendix IV	Chromium, Total	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_47_5_110	MW-37	Appendix IV	Cobalt	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_47_5_113	MW-37	Appendix IV	Fluoride (App IV)	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_47_5_115	MW-37	Appendix IV	Lead	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_47_5_116	MW-37	Appendix IV	Lithium	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_47_5_117	MW-37	Appendix IV	Mercury	mg/L	1	1	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_47_5_118	MW-37	Appendix IV	Molybdenum	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_47_5_121	MW-37	Appendix IV	Radium 226 and 228	pCi/L	1	1	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_47_5_122	MW-37	Appendix IV	Selenium	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_47_5_125	MW-37	Appendix IV	Thallium	mg/L	1	1	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_47_6_111	MW-37	Part 115	Copper	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_47_6_114	MW-37	Part 115	Iron	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_47_6_119	MW-37	Part 115	Nickel	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_47_6_123	MW-37	Part 115	Silver	mg/L	1	1	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
1_47_6_129	MW-37	Part 115	Vanadium	mg/L	1	1	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
1_47_6_130	MW-37	Part 115	Zinc	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_11_4_105	MW-01R	Appendix III	Boron	mg/L	11	0	0%	0.954	0.690	0.163	0.570	0.946	0.592	0.123	0.912	0.133	>= 0.10	0.253	>= 0.10	0.431	Gamma; Lognormal; Normal	Normal
2_11_4_107	MW-01R	Appendix III	Calcium	mg/L	11	0	0%	0.986	0.990	0.121	0.922	0.977	0.948	0.120	0.930	0.111	>= 0.10	0.137	>= 0.10	0.334	Gamma; Lognormal; Normal	Normal
2_11_4_108	MW-01R	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.919	0.311	0.185	0.361	0.844	0.035	0.241	0.075	0.224	>= 0.10	0.707	0.05 <= p < 0.10	0.512	Gamma; Lognormal; Normal	Normal
2_11_4_112	MW-01R	Appendix III	Fluoride	mg/L	11	0	0%	0.886	0.124	0.271	0.023	0.879	0.102	0.257	0.040	0.275	0.01 <= p < 0.05	0.607	>= 0.10	0.371	Gamma; Lognormal; Normal	Normal
2_11_4_120	MW-01R	Appendix III	pH (field)	su	11	0	0%	0.493	0.000	0.381	0.000	0.477	0.000	0.396	0.000	0.388	< 0.01	2.600	< 0.01	0.075	Nonparametric	Nonparametric
2_11_4_124	MW-01R	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	0.962	0.795	0.169	0.507	0.729	0.001	0.276	0.019	0.203	>= 0.10	0.701	0.05 <= p < 0.10	1.358	Gamma; Normal	Gamma
2_11_4_126	MW-01R	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	0.919	0.310	0.229	0.109	0.920	0.320	0.232	0.100	0.238	0.05 <= p < 0.10	0.566	>= 0.10	0.058	Gamma; Lognormal; Normal	Normal
2_11_5_101	MW-01R	Appendix IV	Antimony	mg/L	11	3	27%	0.736	0.006	0.352	0.004	0.879	0.185	0.261	0.113	0.304	0.01 <= p < 0.05	0.693	0.05 <= p < 0.10	0.660	Gamma; Lognormal	Gamma
2_11_5_102	MW-01R	Appendix IV	Arsenic	mg/L	11	0	0%	0.753	0.002	0.250	0.052	0.912	0.256	0.221	0.139	0.195	>= 0.10	0.605	>= 0.10	0.469	Gamma; Lognormal; Normal	Normal
2_11_5_103	MW-01R	Appendix IV	Barium	mg/L	11	0	0%	0.821	0.018	0.297	0.007	0.895	0.159	0.240	0.075	0.263	0.01 <= p < 0.05	0.626	0.05 <= p < 0.10	0.348	Gamma; Lognormal	Gamma
2_11_5_104	MW-01R	Appendix IV	Beryllium	mg/L	11	1	9%	0.914	0.313	0.228	0.148	0.934	0.489	0.177	0.504	0.196	>= 0.10	0.384	>= 0.10	0.360	Gamma; Lognormal; Normal	Normal
2_11_5_106	MW-01R	Appendix IV	Cadmium	mg/L	11	8	73%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.866		Nonparametric
2_11_5_109	MW-01R	Appendix IV	Chromium, Total	mg/L	11	0	0%	0.480	0.000	0.387	0.000	0.760	0.003	0.239	0.080	0.300	0.01 <= p < 0.05	1.565	< 0.01	0.834	Lognormal	Lognormal
2_11_5_110	MW-01R	Appendix IV	Cobalt	mg/L	11	0	0%	0.789	0.007	0.262	0.033	0.928	0.392	0.184	0.372	0.213	>= 0.10	0.589	>= 0.10	0.623	Gamma; Lognormal	Gamma
2_11_5_113	MW-01R	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.886	0.124	0.271	0.023	0.879	0.102	0.257	0.040	0.275	0.01 <= p < 0.05	0.607	>= 0.10	0.371	Gamma; Lognormal; Normal	Normal
2_11_5_115	MW-01R	Appendix IV	Lead	mg/L	11	2	18%	0.648	0.000	0.310	0.013	0.931	0.490	0.163	0.698	0.219	>= 0.10	0.615	>= 0.10	0.801	Gamma; Lognormal	Gamma
2_11_5_116	MW-01R	Appendix IV	Lithium	mg/L	11	0	0%	0.930	0.407	0.173	0.471	0.912	0.255	0.161	0.588	0.140	>= 0.10	0.362	>= 0.10	0.452	Gamma; Lognormal; Normal	Normal
2_11_5_117	MW-01R	Appendix IV	Mercury	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_11_5_118	MW-01R	Appendix IV	Molybdenum	mg/L	11	1	9%	0.640	0.000	0.286	0.020	0.916	0.322	0.219	0.190	0.254	0.05 <= p < 0.10	0.776	0.01 <= p < 0.05	0.774	Gamma; Lognormal	Gamma
2_11_5_121	MW-01R	Appendix IV	Radium 226 and 228	pCi/L	11	6	55%	0.891	0.362	0.212	0.648	0.884	0.328	0.229	0.527	0.232	>= 0.10	0.394	>= 0.10	0.333	Gamma; Lognormal; Normal	Nonparametric
2_11_5_122	MW-01R	Appendix IV	Selenium	mg/L	11	0	0%	0.743	0.002	0.290	0.011	0.912	0.256	0.198	0.267	0.226	>= 0.10	0.696	0.05 <= p < 0.10	0.441	Gamma; Lognormal	Gamma
2_11_5_125	MW-01R	Appendix IV	Thallium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_11_6_111	MW-01R	Part 115	Copper	mg/L	11	5	45%	0.788	0.045	0.300	0.099	0.822	0.092	0.274	0.170	0.292	>= 0.10	0.649	0.05 <= p < 0.10	0.689	Gamma; Lognormal; Normal	Nonparametric
2_11_6_114	MW-01R	Part 115	Iron	mg/L	11	0	0%	0.968	0.865	0.119	0.936	0.885	0.122	0.224	0.128	0.182	>= 0.10	0.382	>= 0.10	0.604	Gamma; Lognormal; Normal	Normal
2_11_6_119	MW-01R	Part 115	Nickel	mg/L	11	0	0%	0.492	0.000	0.407	0.000	0.784	0.006	0.290	0.010	0.360	< 0.01	1.520	< 0.01	0.828	Nonparametric	Nonparametric
2_11_6_123	MW-01R	Part 115	Silver	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_11_6_129	MW-01R	Part 115	Vanadium	mg/L	11	2	18%	0.835	0.050	0.317	0.009	0.932	0.502	0.206	0.328	0.244	>= 0.10	0.412	>= 0.10	0.640	Gamma; Lognormal; Normal	Normal
2_11_6_130	MW-01R	Part 115	Zinc	mg/L	11	2	18%	0.701	0.001	0.381	0.000	0.738	0.004	0.323	0.008	0.364	< 0.01	1.256	< 0.01	1.086	Nonparametric	Nonparametric
2_12_4_105	MW-02	Appendix III	Boron	mg/L	11	0	0%	0.908	0.229	0.165	0.552	0.886	0.126	0.185	0.366	0.181	>= 0.10	0.493	>= 0.10	0.124	Gamma; Lognormal; Normal	Normal
2_12_4_107	MW-02	Appendix III	Calcium	mg/L	11	0	0%	0.899	0.181	0.255	0.044	0.900	0.187	0.269	0.025	0.270	0.01 <= p < 0.05	0.631	0.05 <= p < 0.10	0.088	Gamma; Lognormal; Normal	Normal
2_12_4_108	MW-02	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.535	0.000	0.417	0.000	0.481	0.000	0.424	0.000	0.428	< 0.01	2.553	< 0.01	0.227	Nonparametric	Nonparametric
2_12_4_112	MW-02	Appendix III	Fluoride	mg/L	11	0	0%	0.579	0.000	0.348	0.001	0.513	0.000	0.375	0.000	0.370	< 0.01	2.184	< 0.01	0.230	Nonparametric	Nonparametric
2_12_4_120	MW-02	Appendix III	pH (field)	su	11	0	0%	0.960	0.774	0.164	0.559	0.961	0.778	0.164	0.560	0.175	>= 0.10	0.258	>= 0.10	0.017	Gamma; Lognormal; Normal	Normal
2_12_4_124	MW-02	Appendix III	Sulfate (as SO4)	mg/L	11	7	64%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.428		Nonparametric
2_12_4_126	MW-02	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	0.950	0.641	0.186	0.361	0.958	0.743	0.172	0.483	0.178	>= 0.10	0.315	>= 0.10	0.080	Gamma; Lognormal; Normal	Normal
2_12_5_101	MW-02	Appendix IV	Antimony	mg/L	11	3	27%	0.692	0.002	0.301	0.032	0.846	0.087	0.224	0.280	0.256	>= 0.10	0.722	0.01 <= p < 0.05	0.460	Gamma; Lognormal	Gamma
2_12_5_102	MW-02	Appendix IV	Arsenic	mg/L	11	0	0%	0.756	0.002	0.349	0.001	0.487	0.000	0.468	0.000	0.453	< 0.01	2.260	< 0.01	0.902	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)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
2_12_5_103	MW-02	Appendix IV	Barium	mg/L	11	0	0%	0.863	0.063	0.197	0.273	0.928	0.387	0.165	0.555	0.165	>= 0.10	0.429	>= 0.10	0.168	Gamma; Lognormal; Normal	Normal
2_12_5_104	MW-02	Appendix IV	Beryllium	mg/L	11	1	9%	0.974	0.923	0.113	0.975	0.941	0.559	0.195	0.346	0.166	>= 0.10	0.243	>= 0.10	0.469	Gamma; Lognormal; Normal	Normal
2_12_5_106	MW-02	Appendix IV	Cadmium	mg/L	11	8	73%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		1.400		Nonparametric
2_12_5_109	MW-02	Appendix IV	Chromium, Total	mg/L	11	0	0%	0.972	0.906	0.148	0.716	0.607	0.000	0.328	0.002	0.239	>= 0.10	1.081	< 0.01	1.454	Gamma; Normal	Gamma
2_12_5_110	MW-02	Appendix IV	Cobalt	mg/L	11	0	0%	0.943	0.554	0.214	0.169	0.645	0.000	0.283	0.014	0.275	0.01 <= p < 0.05	1.051	< 0.01	1.013	Normal	Normal
2_12_5_113	MW-02	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.579	0.000	0.348	0.001	0.513	0.000	0.375	0.000	0.370	< 0.01	2.184	< 0.01	0.230	Nonparametric	Nonparametric
2_12_5_115	MW-02	Appendix IV	Lead	mg/L	11	1	9%	0.946	0.616	0.148	0.774	0.985	0.987	0.115	0.967	0.115	>= 0.10	0.156	>= 0.10	0.503	Gamma; Lognormal; Normal	Normal
2_12_5_116	MW-02	Appendix IV	Lithium	mg/L	11	0	0%	0.928	0.394	0.187	0.347	0.882	0.111	0.214	0.172	0.209	>= 0.10	0.514	>= 0.10	0.188	Gamma; Lognormal; Normal	Normal
2_12_5_117	MW-02	Appendix IV	Mercury	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_12_5_118	MW-02	Appendix IV	Molybdenum	mg/L	11	0	0%	0.831	0.024	0.282	0.015	0.895	0.158	0.224	0.129	0.246	0.05 <= p < 0.10	0.713	0.05 <= p < 0.10	0.338	Gamma; Lognormal	Gamma
2_12_5_121	MW-02	Appendix IV	Radium 226 and 228	pCi/L	11	3	27%	0.910	0.356	0.251	0.143	0.970	0.899	0.163	0.769	0.189	>= 0.10	0.242	>= 0.10	0.514	Gamma; Lognormal; Normal	Normal
2_12_5_122	MW-02	Appendix IV	Selenium	mg/L	11	0	0%	0.951	0.653	0.152	0.677	0.896	0.166	0.220	0.143	0.191	>= 0.10	0.478	>= 0.10	0.383	Gamma; Lognormal; Normal	Normal
2_12_5_125	MW-02	Appendix IV	Thallium	mg/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_12_6_111	MW-02	Part 115	Copper	mg/L	11	0	0%	0.941	0.538	0.174	0.459	0.793	0.008	0.236	0.088	0.221	>= 0.10	0.599	>= 0.10	0.732	Gamma; Lognormal; Normal	Normal
2_12_6_114	MW-02	Part 115	Iron	mg/L	11	0	0%	0.977	0.949	0.109	0.971	0.975	0.929	0.102	0.988	0.108	>= 0.10	0.174	>= 0.10	0.164	Gamma; Lognormal; Normal	Normal
2_12_6_119	MW-02	Part 115	Nickel	mg/L	11	0	0%	0.960	0.778	0.193	0.299	0.670	0.000	0.341	0.001	0.274	0.01 <= p < 0.05	0.889	0.01 <= p < 0.05	1.014	Normal	Normal
2_12_6_123	MW-02	Part 115	Silver	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_12_6_129	MW-02	Part 115	Vanadium	mg/L	11	1	9%	0.954	0.719	0.139	0.840	0.919	0.346	0.170	0.566	0.141	>= 0.10	0.272	>= 0.10	0.559	Gamma; Lognormal; Normal	Normal
2_12_6_130	MW-02	Part 115	Zinc	mg/L	11	0	0%	0.570	0.000	0.439	0.000	0.734	0.001	0.323	0.002	0.387	< 0.01	1.801	< 0.01	0.901	Nonparametric	Nonparametric
2_13_4_105	MW-03	Appendix III	Boron	mg/L	11	0	0%	0.860	0.057	0.205	0.218	0.827	0.021	0.222	0.137	0.214	>= 0.10	0.690	0.05 <= p < 0.10	0.086	Gamma; Lognormal; Normal	Normal
2_13_4_107	MW-03	Appendix III	Calcium	mg/L	11	0	0%	0.940	0.516	0.170	0.502	0.911	0.247	0.189	0.336	0.165	>= 0.10	0.382	>= 0.10	0.107	Gamma; Lognormal; Normal	Normal
2_13_4_108	MW-03	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.919	0.310	0.231	0.103	0.969	0.874	0.179	0.417	0.190	>= 0.10	0.293	>= 0.10	0.293	Gamma; Lognormal; Normal	Normal
2_13_4_112	MW-03	Appendix III	Fluoride	mg/L	11	0	0%	0.463	0.000	0.449	0.000	0.549	0.000	0.396	0.000	0.420	< 0.01	2.376	< 0.01	0.310	Nonparametric	Nonparametric
2_13_4_120	MW-03	Appendix III	pH (field)	su	11	0	0%	0.936	0.475	0.211	0.185	0.938	0.492	0.210	0.194	0.217	>= 0.10	0.444	>= 0.10	0.016	Gamma; Lognormal; Normal	Normal
2_13_4_124	MW-03	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	0.984	0.983	0.102	0.988	0.759	0.003	0.243	0.069	0.188	>= 0.10	0.591	>= 0.10	0.792	Gamma; Lognormal; Normal	Normal
2_13_4_126	MW-03	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	0.731	0.001	0.297	0.007	0.720	0.001	0.310	0.004	0.309	< 0.01	1.400	< 0.01	0.102	Nonparametric	Nonparametric
2_13_5_101	MW-03	Appendix IV	Antimony	mg/L	11	6	55%	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_5_102	MW-03	Appendix IV	Arsenic	mg/L	11	0	0%	0.948	0.625	0.166	0.542	0.891	0.143	0.179	0.420	0.186	>= 0.10	0.463	>= 0.10	0.340	Gamma; Lognormal; Normal	Normal
2_13_5_103	MW-03	Appendix IV	Barium	mg/L	11	0	0%	0.861	0.060	0.192	0.311	0.707	0.001	0.273	0.021	0.246	0.05 <= p < 0.10	1.051	< 0.01	0.359	Gamma; Normal	Normal
2_13_5_104	MW-03	Appendix IV	Beryllium	mg/L	11	7	64%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.637		Nonparametric
2_13_5_106	MW-03	Appendix IV	Cadmium	mg/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_13_5_109	MW-03	Appendix IV	Chromium, Total	mg/L	11	0	0%	0.960	0.773	0.165	0.551	0.962	0.796	0.158	0.621	0.173	>= 0.10	0.246	>= 0.10	0.281	Gamma; Lognormal; Normal	Normal
2_13_5_110	MW-03	Appendix IV	Cobalt	mg/L	11	0	0%	0.891	0.145	0.196	0.282	0.872	0.083	0.180	0.408	0.197	>= 0.10	0.589	>= 0.10	0.479	Gamma; Lognormal; Normal	Normal
2_13_5_113	MW-03	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.463	0.000	0.449	0.000	0.549	0.000	0.396	0.000	0.420	< 0.01	2.376	< 0.01	0.310	Nonparametric	Nonparametric
2_13_5_115	MW-03	Appendix IV	Lead	mg/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_13_5_116	MW-03	Appendix IV	Lithium	mg/L	11	0	0%	0.894	0.156	0.168	0.519	0.959	0.756	0.125	0.903	0.131	>= 0.10	0.301	>= 0.10	0.222	Gamma; Lognormal; Normal	Normal
2_13_5_117	MW-03	Appendix IV	Mercury	mg/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_13_5_118	MW-03	Appendix IV	Molybdenum	mg/L	11	8	73%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.214		Nonparametric
2_13_5_121	MW-03	Appendix IV	Radium 226 and 228	pCi/L	11	1	9%	0.901	0.223	0.187	0.416	0.948	0.645	0.160	0.661	0.179	>= 0.10	0.320	>= 0.10	0.315	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)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
2_13_5_122	MW-03	Appendix IV	Selenium	mg/L	11	3	27%	0.960	0.814	0.180	0.626	0.855	0.106	0.250	0.150	0.227	>= 0.10	0.435	>= 0.10	0.392	Gamma; Lognormal; Normal	Normal
2_13_5_125	MW-03	Appendix IV	Thallium	mg/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_13_6_111	MW-03	Part 115	Copper	mg/L	11	5	45%	0.708	0.007	0.369	0.010	0.730	0.013	0.331	0.039	0.364	0.01 <= p < 0.05	0.952	< 0.01	0.678	Nonparametric	Nonparametric
2_13_6_114	MW-03	Part 115	Iron	mg/L	11	0	0%	0.829	0.023	0.197	0.270	0.947	0.610	0.157	0.630	0.171	>= 0.10	0.295	>= 0.10	1.034	Gamma; Lognormal; Normal	Gamma
2_13_6_119	MW-03	Part 115	Nickel	mg/L	11	1	9%	0.460	0.000	0.456	0.000	0.727	0.002	0.291	0.017	0.377	< 0.01	1.711	< 0.01	0.824	Nonparametric	Nonparametric
2_13_6_123	MW-03	Part 115	Silver	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_13_6_129	MW-03	Part 115	Vanadium	mg/L	11	9	82%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.429		Nonparametric
2_13_6_130	MW-03	Part 115	Zinc	mg/L	11	6	55%	0.724	0.017	0.358	0.035	0.779	0.054	0.327	0.087	0.367	0.01 <= p < 0.05	0.747	0.01 <= p < 0.05	1.317	Lognormal	Nonparametric
2_14_4_105	MW-04	Appendix III	Boron	mg/L	11	0	0%	0.962	0.799	0.146	0.736	0.971	0.898	0.134	0.842	0.133	>= 0.10	0.242	>= 0.10	0.076	Gamma; Lognormal; Normal	Normal
2_14_4_107	MW-04	Appendix III	Calcium	mg/L	11	0	0%	0.961	0.785	0.205	0.219	0.968	0.864	0.188	0.337	0.196	>= 0.10	0.267	>= 0.10	0.099	Gamma; Lognormal; Normal	Normal
2_14_4_108	MW-04	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.937	0.491	0.172	0.482	0.970	0.887	0.146	0.741	0.143	>= 0.10	0.228	>= 0.10	0.261	Gamma; Lognormal; Normal	Normal
2_14_4_112	MW-04	Appendix III	Fluoride	mg/L	11	0	0%	0.835	0.027	0.282	0.014	0.807	0.012	0.279	0.017	0.259	0.01 <= p < 0.05	1.009	< 0.01	0.215	Nonparametric	Nonparametric
2_14_4_120	MW-04	Appendix III	pH (field)	su	11	0	0%	0.900	0.183	0.205	0.221	0.905	0.210	0.202	0.239	0.195	>= 0.10	0.456	>= 0.10	0.015	Gamma; Lognormal; Normal	Normal
2_14_4_124	MW-04	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	0.786	0.006	0.256	0.042	0.433	0.000	0.438	0.000	0.410	< 0.01	2.641	< 0.01	1.766	Nonparametric	Nonparametric
2_14_4_126	MW-04	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	0.882	0.110	0.195	0.285	0.887	0.127	0.190	0.328	0.201	>= 0.10	0.536	>= 0.10	0.081	Gamma; Lognormal; Normal	Normal
2_14_5_101	MW-04	Appendix IV	Antimony	mg/L	11	8	73%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.900		Nonparametric
2_14_5_102	MW-04	Appendix IV	Arsenic	mg/L	11	0	0%	0.880	0.105	0.216	0.164	0.873	0.085	0.195	0.287	0.214	>= 0.10	0.573	>= 0.10	0.336	Gamma; Lognormal; Normal	Normal
2_14_5_103	MW-04	Appendix IV	Barium	mg/L	11	0	0%	0.451	0.000	0.413	0.000	0.563	0.000	0.354	0.000	0.380	< 0.01	2.401	< 0.01	0.419	Nonparametric	Nonparametric
2_14_5_104	MW-04	Appendix IV	Beryllium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_14_5_106	MW-04	Appendix IV	Cadmium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_14_5_109	MW-04	Appendix IV	Chromium, Total	mg/L	11	0	0%	0.884	0.118	0.202	0.241	0.873	0.086	0.211	0.187	0.220	>= 0.10	0.660	0.05 <= p < 0.10	0.306	Gamma; Lognormal; Normal	Normal
2_14_5_110	MW-04	Appendix IV	Cobalt	mg/L	11	0	0%	0.946	0.598	0.195	0.286	0.953	0.679	0.192	0.310	0.192	>= 0.10	0.316	>= 0.10	0.478	Gamma; Lognormal; Normal	Normal
2_14_5_113	MW-04	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.835	0.027	0.282	0.014	0.807	0.012	0.279	0.017	0.259	0.01 <= p < 0.05	1.009	< 0.01	0.215	Nonparametric	Nonparametric
2_14_5_115	MW-04	Appendix IV	Lead	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_14_5_116	MW-04	Appendix IV	Lithium	mg/L	11	0	0%	0.908	0.229	0.165	0.555	0.896	0.166	0.195	0.288	0.181	>= 0.10	0.469	>= 0.10	0.163	Gamma; Lognormal; Normal	Normal
2_14_5_117	MW-04	Appendix IV	Mercury	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_14_5_118	MW-04	Appendix IV	Molybdenum	mg/L	11	2	18%	0.930	0.481	0.182	0.529	0.908	0.299	0.189	0.464	0.203	>= 0.10	0.365	>= 0.10	0.528	Gamma; Lognormal; Normal	Normal
2_14_5_121	MW-04	Appendix IV	Radium 226 and 228	pCi/L	11	2	18%	0.912	0.333	0.184	0.513	0.863	0.103	0.230	0.186	0.219	>= 0.10	0.522	>= 0.10	0.299	Gamma; Lognormal; Normal	Normal
2_14_5_122	MW-04	Appendix IV	Selenium	mg/L	11	5	45%	0.812	0.075	0.300	0.097	0.858	0.184	0.254	0.263	0.281	>= 0.10	0.590	>= 0.10	0.384	Gamma; Lognormal; Normal	Normal
2_14_5_125	MW-04	Appendix IV	Thallium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_14_6_111	MW-04	Part 115	Copper	mg/L	11	9	82%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.120		Nonparametric
2_14_6_114	MW-04	Part 115	Iron	mg/L	11	0	0%	0.918	0.303	0.149	0.709	0.913	0.268	0.147	0.728	0.157	>= 0.10	0.421	>= 0.10	0.126	Gamma; Lognormal; Normal	Normal
2_14_6_119	MW-04	Part 115	Nickel	mg/L	11	0	0%	0.941	0.533	0.141	0.780	0.707	0.001	0.288	0.011	0.232	>= 0.10	0.824	0.01 <= p < 0.05	0.669	Gamma; Normal	Normal
2_14_6_123	MW-04	Part 115	Silver	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_14_6_129	MW-04	Part 115	Vanadium	mg/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_14_6_130	MW-04	Part 115	Zinc	mg/L	11	8	73%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.721		Nonparametric
2_19_4_105	MW-09	Appendix III	Boron	mg/L	11	0	0%	0.982	0.976	0.101	0.990	0.988	0.994	0.103	0.987	0.095	>= 0.10	0.135	>= 0.10	0.098	Gamma; Lognormal; Normal	Normal
2_19_4_107	MW-09	Appendix III	Calcium	mg/L	11	0	0%	0.966	0.841	0.178	0.428	0.954	0.695	0.206	0.214	0.204	>= 0.10	0.309	>= 0.10	0.233	Gamma; Lognormal; Normal	Normal
2_19_4_108	MW-09	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.862	0.061	0.227	0.117	0.900	0.182	0.235	0.090	0.245	0.05 <= p < 0.10	0.524	>= 0.10	0.262	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)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
2_19_4_112	MW-09	Appendix III	Fluoride	mg/L	11	0	0%	0.953	0.688	0.106	0.981	0.953	0.676	0.103	0.986	0.116	>= 0.10	0.222	>= 0.10	0.109	Gamma; Lognormal; Normal	Normal
2_19_4_120	MW-09	Appendix III	pH (field)	su	11	0	0%	0.814	0.014	0.265	0.030	0.818	0.016	0.264	0.031	0.269	0.01 <= p < 0.05	0.929	0.01 <= p < 0.05	0.015	Nonparametric	Nonparametric
2_19_4_124	MW-09	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	0.908	0.230	0.192	0.311	0.846	0.038	0.280	0.016	0.264	0.01 <= p < 0.05	0.691	0.05 <= p < 0.10	0.754	Gamma; Normal	Normal
2_19_4_126	MW-09	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	0.900	0.185	0.217	0.158	0.868	0.073	0.249	0.055	0.245	0.05 <= p < 0.10	0.622	0.05 <= p < 0.10	0.264	Gamma; Lognormal; Normal	Normal
2_19_5_101	MW-09	Appendix IV	Antimony	mg/L	11	7	64%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.764		Nonparametric
2_19_5_102	MW-09	Appendix IV	Arsenic	mg/L	11	0	0%	0.868	0.073	0.317	0.003	0.820	0.017	0.352	0.000	0.347	< 0.01	0.969	0.01 <= p < 0.05	0.291	Normal	Normal
2_19_5_103	MW-09	Appendix IV	Barium	mg/L	11	0	0%	0.503	0.000	0.379	0.000	0.775	0.004	0.236	0.089	0.310	< 0.01	1.456	< 0.01	0.767	Lognormal	Lognormal
2_19_5_104	MW-09	Appendix IV	Beryllium	mg/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_19_5_106	MW-09	Appendix IV	Cadmium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_19_5_109	MW-09	Appendix IV	Chromium, Total	mg/L	11	0	0%	0.907	0.227	0.180	0.409	0.900	0.185	0.195	0.285	0.191	>= 0.10	0.515	>= 0.10	0.251	Gamma; Lognormal; Normal	Normal
2_19_5_110	MW-09	Appendix IV	Cobalt	mg/L	11	0	0%	0.978	0.954	0.123	0.913	0.970	0.885	0.130	0.867	0.108	>= 0.10	0.175	>= 0.10	0.409	Gamma; Lognormal; Normal	Normal
2_19_5_113	MW-09	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.953	0.688	0.106	0.981	0.953	0.676	0.103	0.986	0.116	>= 0.10	0.222	>= 0.10	0.109	Gamma; Lognormal; Normal	Normal
2_19_5_115	MW-09	Appendix IV	Lead	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_19_5_116	MW-09	Appendix IV	Lithium	mg/L	11	0	0%	0.888	0.132	0.213	0.175	0.886	0.125	0.199	0.260	0.212	>= 0.10	0.580	>= 0.10	0.098	Gamma; Lognormal; Normal	Normal
2_19_5_117	MW-09	Appendix IV	Mercury	mg/L	11	9	82%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.094		Nonparametric
2_19_5_118	MW-09	Appendix IV	Molybdenum	mg/L	11	0	0%	0.936	0.476	0.236	0.087	0.904	0.206	0.260	0.037	0.234	>= 0.10	0.501	>= 0.10	0.360	Gamma; Lognormal; Normal	Normal
2_19_5_121	MW-09	Appendix IV	Radium 226 and 228	pCi/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_19_5_122	MW-09	Appendix IV	Selenium	mg/L	11	2	18%	0.860	0.096	0.265	0.068	0.751	0.006	0.327	0.006	0.303	0.01 <= p < 0.05	0.888	0.01 <= p < 0.05	0.282	Normal	Normal
2_19_5_125	MW-09	Appendix IV	Thallium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_19_6_111	MW-09	Part 115	Copper	mg/L	11	9	82%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.279		Nonparametric
2_19_6_114	MW-09	Part 115	Iron	mg/L	11	0	0%	0.913	0.264	0.207	0.209	0.918	0.299	0.178	0.424	0.195	>= 0.10	0.450	>= 0.10	0.194	Gamma; Lognormal; Normal	Normal
2_19_6_119	MW-09	Part 115	Nickel	mg/L	11	0	0%	0.764	0.003	0.315	0.003	0.920	0.317	0.190	0.325	0.242	0.05 <= p < 0.10	0.628	0.05 <= p < 0.10	0.760	Gamma; Lognormal	Gamma
2_19_6_123	MW-09	Part 115	Silver	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_19_6_129	MW-09	Part 115	Vanadium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_19_6_130	MW-09	Part 115	Zinc	mg/L	11	8	73%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		1.538		Nonparametric
2_21_4_105	MW-11	Appendix III	Boron	mg/L	11	0	0%	0.898	0.172	0.212	0.181	0.942	0.539	0.166	0.542	0.195	>= 0.10	0.348	>= 0.10	0.734	Gamma; Lognormal; Normal	Normal
2_21_4_107	MW-11	Appendix III	Calcium	mg/L	11	0	0%	0.944	0.574	0.154	0.655	0.886	0.122	0.196	0.281	0.186	>= 0.10	0.479	>= 0.10	0.340	Gamma; Lognormal; Normal	Normal
2_21_4_108	MW-11	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.978	0.957	0.119	0.936	0.950	0.643	0.157	0.631	0.150	>= 0.10	0.222	>= 0.10	0.271	Gamma; Lognormal; Normal	Normal
2_21_4_112	MW-11	Appendix III	Fluoride	mg/L	11	0	0%	0.891	0.145	0.188	0.340	0.927	0.380	0.152	0.682	0.168	>= 0.10	0.361	>= 0.10	0.675	Gamma; Lognormal; Normal	Normal
2_21_4_120	MW-11	Appendix III	pH (field)	su	11	0	0%	0.972	0.906	0.177	0.436	0.972	0.909	0.175	0.452	0.178	>= 0.10	0.248	>= 0.10	0.010	Gamma; Lognormal; Normal	Normal
2_21_4_124	MW-11	Appendix III	Sulfate (as SO4)	mg/L	11	2	18%	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_4_126	MW-11	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	0.867	0.071	0.262	0.033	0.935	0.463	0.218	0.151	0.224	>= 0.10	0.450	>= 0.10	0.244	Gamma; Lognormal; Normal	Normal
2_21_5_101	MW-11	Appendix IV	Antimony	mg/L	11	7	64%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.875		Nonparametric
2_21_5_102	MW-11	Appendix IV	Arsenic	mg/L	11	0	0%	0.805	0.011	0.208	0.202	0.964	0.823	0.135	0.834	0.164	>= 0.10	0.392	>= 0.10	0.495	Gamma; Lognormal; Normal	Normal
2_21_5_103	MW-11	Appendix IV	Barium	mg/L	11	0	0%	0.914	0.275	0.226	0.121	0.977	0.947	0.171	0.492	0.194	>= 0.10	0.244	>= 0.10	0.349	Gamma; Lognormal; Normal	Normal
2_21_5_104	MW-11	Appendix IV	Beryllium	mg/L	11	9	82%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		1.114		Nonparametric
2_21_5_106	MW-11	Appendix IV	Cadmium	mg/L	11	9	82%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		1.073		Nonparametric
2_21_5_109	MW-11	Appendix IV	Chromium, Total	mg/L	11	0	0%	0.481	0.000	0.380	0.000	0.787	0.006	0.226	0.120	0.309	< 0.01	1.542	< 0.01	0.815	Lognormal	Lognormal
2_21_5_110	MW-11	Appendix IV	Cobalt	mg/L	11	0	0%	0.713	0.001	0.314	0.003	0.938	0.494	0.175	0.451	0.224	>= 0.10	0.560	>= 0.10	0.679	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)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
2_21_5_113	MW-11	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.891	0.145	0.188	0.340	0.927	0.380	0.152	0.682	0.168	>= 0.10	0.361	>= 0.10	0.675	Gamma; Lognormal; Normal	Normal
2_21_5_115	MW-11	Appendix IV	Lead	mg/L	11	3	27%	0.465	0.000	0.473	0.000	0.886	0.217	0.219	0.313	0.328	0.01 <= p < 0.05	1.039	0.01 <= p < 0.05	1.942	Lognormal	Nonparametric
2_21_5_116	MW-11	Appendix IV	Lithium	mg/L	11	0	0%	0.876	0.093	0.197	0.271	0.953	0.686	0.143	0.762	0.159	>= 0.10	0.200	>= 0.10	1.156	Gamma; Lognormal; Normal	Gamma
2_21_5_117	MW-11	Appendix IV	Mercury	mg/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_21_5_118	MW-11	Appendix IV	Molybdenum	mg/L	11	2	18%	0.887	0.188	0.199	0.382	0.927	0.455	0.184	0.507	0.182	>= 0.10	0.358	>= 0.10	0.670	Gamma; Lognormal; Normal	Normal
2_21_5_121	MW-11	Appendix IV	Radium 226 and 228	pCi/L	11	3	27%	0.938	0.596	0.167	0.735	0.952	0.729	0.156	0.823	0.176	>= 0.10	0.242	>= 0.10	0.374	Gamma; Lognormal; Normal	Normal
2_21_5_122	MW-11	Appendix IV	Selenium	mg/L	11	3	27%	0.788	0.021	0.279	0.066	0.921	0.435	0.238	0.203	0.266	>= 0.10	0.480	>= 0.10	0.535	Gamma; Lognormal; Normal	Normal
2_21_5_125	MW-11	Appendix IV	Thallium	mg/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_21_6_111	MW-11	Part 115	Copper	mg/L	11	3	27%	0.506	0.000	0.435	0.000	0.872	0.157	0.243	0.177	0.297	0.05 <= p < 0.10	0.997	0.01 <= p < 0.05	1.490	Gamma; Lognormal	Gamma
2_21_6_114	MW-11	Part 115	Iron	mg/L	11	0	0%	0.929	0.397	0.130	0.871	0.945	0.575	0.153	0.668	0.158	>= 0.10	0.283	>= 0.10	0.391	Gamma; Lognormal; Normal	Normal
2_21_6_119	MW-11	Part 115	Nickel	mg/L	11	0	0%	0.548	0.000	0.368	0.000	0.847	0.039	0.237	0.085	0.294	0.01 <= p < 0.05	1.177	< 0.01	0.728	Lognormal	Lognormal
2_21_6_123	MW-11	Part 115	Silver	mg/L	11	9	82%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.137		Nonparametric
2_21_6_129	MW-11	Part 115	Vanadium	mg/L	11	9	82%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		1.115		Nonparametric
2_21_6_130	MW-11	Part 115	Zinc	mg/L	11	3	27%	0.697	0.002	0.296	0.038	0.923	0.452	0.188	0.554	0.243	>= 0.10	0.535	>= 0.10	1.416	Gamma; Lognormal	Gamma
2_22_4_105	MW-12	Appendix III	Boron	mg/L	11	0	0%	0.919	0.313	0.210	0.192	0.944	0.567	0.164	0.555	0.183	>= 0.10	0.342	>= 0.10	0.269	Gamma; Lognormal; Normal	Normal
2_22_4_107	MW-12	Appendix III	Calcium	mg/L	11	0	0%	0.923	0.343	0.158	0.618	0.914	0.272	0.184	0.377	0.186	>= 0.10	0.372	>= 0.10	0.315	Gamma; Lognormal; Normal	Normal
2_22_4_108	MW-12	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.915	0.278	0.225	0.125	0.938	0.494	0.183	0.387	0.200	>= 0.10	0.440	>= 0.10	0.254	Gamma; Lognormal; Normal	Normal
2_22_4_112	MW-12	Appendix III	Fluoride	mg/L	11	0	0%	0.859	0.056	0.254	0.045	0.863	0.063	0.221	0.138	0.242	0.05 <= p < 0.10	0.756	0.01 <= p < 0.05	0.343	Gamma; Lognormal; Normal	Normal
2_22_4_120	MW-12	Appendix III	pH (field)	su	11	0	0%	0.974	0.927	0.141	0.785	0.969	0.876	0.145	0.743	0.132	>= 0.10	0.208	>= 0.10	0.048	Gamma; Lognormal; Normal	Normal
2_22_4_124	MW-12	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	0.925	0.365	0.226	0.119	0.948	0.620	0.181	0.398	0.189	>= 0.10	0.324	>= 0.10	0.291	Gamma; Lognormal; Normal	Normal
2_22_4_126	MW-12	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	0.961	0.788	0.175	0.458	0.913	0.263	0.206	0.212	0.176	>= 0.10	0.343	>= 0.10	0.397	Gamma; Lognormal; Normal	Normal
2_22_5_101	MW-12	Appendix IV	Antimony	mg/L	11	0	0%	0.943	0.552	0.159	0.613	0.954	0.695	0.134	0.838	0.142	>= 0.10	0.256	>= 0.10	0.382	Gamma; Lognormal; Normal	Normal
2_22_5_102	MW-12	Appendix IV	Arsenic	mg/L	11	0	0%	0.912	0.255	0.248	0.058	0.930	0.414	0.218	0.154	0.237	0.05 <= p < 0.10	0.453	>= 0.10	0.300	Gamma; Lognormal; Normal	Normal
2_22_5_103	MW-12	Appendix IV	Barium	mg/L	11	0	0%	0.851	0.044	0.240	0.076	0.923	0.343	0.215	0.164	0.235	>= 0.10	0.568	>= 0.10	0.396	Gamma; Lognormal; Normal	Normal
2_22_5_104	MW-12	Appendix IV	Beryllium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_22_5_106	MW-12	Appendix IV	Cadmium	mg/L	11	0	0%	0.889	0.135	0.186	0.355	0.948	0.617	0.158	0.616	0.181	>= 0.10	0.318	>= 0.10	0.507	Gamma; Lognormal; Normal	Normal
2_22_5_109	MW-12	Appendix IV	Chromium, Total	mg/L	11	4	36%	0.893	0.290	0.216	0.416	0.939	0.626	0.171	0.774	0.193	>= 0.10	0.337	>= 0.10	0.393	Gamma; Lognormal; Normal	Normal
2_22_5_110	MW-12	Appendix IV	Cobalt	mg/L	11	5	45%	0.920	0.504	0.181	0.779	0.929	0.576	0.175	0.819	0.194	>= 0.10	0.290	>= 0.10	0.539	Gamma; Lognormal; Normal	Nonparametric
2_22_5_113	MW-12	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.859	0.056	0.254	0.045	0.863	0.063	0.221	0.138	0.242	0.05 <= p < 0.10	0.756	0.01 <= p < 0.05	0.343	Gamma; Lognormal; Normal	Normal
2_22_5_115	MW-12	Appendix IV	Lead	mg/L	11	6	55%	0.808	0.094	0.340	0.060	0.883	0.323	0.276	0.240	0.299	>= 0.10	0.464	>= 0.10	0.406	Gamma; Lognormal; Normal	Nonparametric
2_22_5_116	MW-12	Appendix IV	Lithium	mg/L	11	0	0%	0.937	0.490	0.152	0.682	0.960	0.775	0.149	0.709	0.162	>= 0.10	0.267	>= 0.10	0.375	Gamma; Lognormal; Normal	Normal
2_22_5_117	MW-12	Appendix IV	Mercury	mg/L	11	9	82%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.257		Nonparametric
2_22_5_118	MW-12	Appendix IV	Molybdenum	mg/L	11	0	0%	0.954	0.693	0.149	0.711	0.954	0.693	0.138	0.804	0.151	>= 0.10	0.265	>= 0.10	0.243	Gamma; Lognormal; Normal	Normal
2_22_5_121	MW-12	Appendix IV	Radium 226 and 228	pCi/L	11	8	73%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.370		Nonparametric
2_22_5_122	MW-12	Appendix IV	Selenium	mg/L	11	0	0%	0.936	0.473	0.135	0.836	0.896	0.166	0.210	0.190	0.155	>= 0.10	0.348	>= 0.10	0.971	Gamma; Lognormal; Normal	Normal
2_22_5_125	MW-12	Appendix IV	Thallium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_22_6_111	MW-12	Part 115	Copper	mg/L	11	0	0%	0.975	0.928	0.150	0.701	0.954	0.691	0.168	0.520	0.143	>= 0.10	0.224	>= 0.10	0.315	Gamma; Lognormal; Normal	Normal
2_22_6_114	MW-12	Part 115	Iron	mg/L	11	6	55%	0.935	0.633	0.241	0.443	0.966	0.847	0.200	0.731	0.228	>= 0.10	0.253	>= 0.10	0.345	Gamma; Lognormal; Normal	Nonparametric
2_22_6_119	MW-12	Part 115	Nickel	mg/L	11	0	0%	0.924	0.354	0.131	0.865	0.911	0.253	0.147	0.732	0.145	>= 0.10	0.367	>= 0.10	0.332	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)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
2_22_6_123	MW-12	Part 115	Silver	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_22_6_129	MW-12	Part 115	Vanadium	mg/L	11	6	55%	0.863	0.241	0.260	0.324	0.871	0.270	0.241	0.443	0.264	>= 0.10	0.450	>= 0.10	0.193	Gamma; Lognormal; Normal	Nonparametric
2_22_6_130	MW-12	Part 115	Zinc	mg/L	11	0	0%	0.912	0.258	0.185	0.362	0.839	0.030	0.245	0.064	0.223	>= 0.10	0.688	0.05 <= p < 0.10	0.420	Gamma; Lognormal; Normal	Normal
2_48_4_105	MW-38	Appendix III	Boron	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_48_4_107	MW-38	Appendix III	Calcium	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_48_4_108	MW-38	Appendix III	Chloride (as Cl)	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_48_4_112	MW-38	Appendix III	Fluoride	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_48_4_120	MW-38	Appendix III	pH (field)	su	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_48_4_124	MW-38	Appendix III	Sulfate (as SO4)	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_48_4_126	MW-38	Appendix III	Total Dissolved Solids	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_48_5_101	MW-38	Appendix IV	Antimony	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_48_5_102	MW-38	Appendix IV	Arsenic	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_48_5_103	MW-38	Appendix IV	Barium	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_48_5_104	MW-38	Appendix IV	Beryllium	mg/L	1	1	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_48_5_106	MW-38	Appendix IV	Cadmium	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_48_5_109	MW-38	Appendix IV	Chromium, Total	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_48_5_110	MW-38	Appendix IV	Cobalt	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_48_5_113	MW-38	Appendix IV	Fluoride (App IV)	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_48_5_115	MW-38	Appendix IV	Lead	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_48_5_116	MW-38	Appendix IV	Lithium	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_48_5_117	MW-38	Appendix IV	Mercury	mg/L	1	1	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_48_5_118	MW-38	Appendix IV	Molybdenum	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_48_5_121	MW-38	Appendix IV	Radium 226 and 228	pCi/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_48_5_122	MW-38	Appendix IV	Selenium	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_48_5_125	MW-38	Appendix IV	Thallium	mg/L	1	1	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_48_6_111	MW-38	Part 115	Copper	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_48_6_114	MW-38	Part 115	Iron	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_48_6_119	MW-38	Part 115	Nickel	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_48_6_123	MW-38	Part 115	Silver	mg/L	1	1	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_48_6_129	MW-38	Part 115	Vanadium	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
2_48_6_130	MW-38	Part 115	Zinc	mg/L	1	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
3_20_4_105	MW-10	Appendix III	Boron	mg/L	11	0	0%	0.901	0.188	0.208	0.204	0.926	0.369	0.175	0.454	0.187	>= 0.10	0.404	>= 0.10	0.624	Gamma; Lognormal; Normal	Normal
3_20_4_107	MW-10	Appendix III	Calcium	mg/L	11	0	0%	0.799	0.009	0.241	0.073	0.902	0.194	0.224	0.126	0.240	0.05 <= p < 0.10	0.681	0.05 <= p < 0.10	0.390	Gamma; Lognormal; Normal	Normal
3_20_4_108	MW-10	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.906	0.217	0.211	0.188	0.967	0.851	0.156	0.639	0.184	>= 0.10	0.316	>= 0.10	0.464	Gamma; Lognormal; Normal	Normal
3_20_4_112	MW-10	Appendix III	Fluoride	mg/L	11	0	0%	0.915	0.282	0.144	0.759	0.891	0.145	0.194	0.291	0.186	>= 0.10	0.457	>= 0.10	0.395	Gamma; Lognormal; Normal	Normal
3_20_4_120	MW-10	Appendix III	pH (field)	su	11	0	0%	0.892	0.148	0.224	0.128	0.899	0.180	0.229	0.111	0.222	>= 0.10	0.680	0.05 <= p < 0.10	0.054	Gamma; Lognormal; Normal	Normal
3_20_4_124	MW-10	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	0.880	0.104	0.167	0.528	0.982	0.976	0.125	0.904	0.115	>= 0.10	0.180	>= 0.10	0.730	Gamma; Lognormal; Normal	Normal
3_20_4_126	MW-10	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	0.729	0.001	0.348	0.001	0.808	0.012	0.312	0.004	0.326	< 0.01	1.056	< 0.01	0.211	Nonparametric	Nonparametric
3_20_5_101	MW-10	Appendix IV	Antimony	mg/L	11	7	64%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.542		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)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
3_20_5_102	MW-10	Appendix IV	Arsenic	mg/L	11	0	0%	0.927	0.379	0.185	0.368	0.963	0.807	0.134	0.839	0.164	>= 0.10	0.248	>= 0.10	0.556	Gamma; Lognormal; Normal	Normal
3_20_5_103	MW-10	Appendix IV	Barium	mg/L	11	0	0%	0.898	0.177	0.243	0.068	0.960	0.773	0.172	0.481	0.189	>= 0.10	0.327	>= 0.10	0.407	Gamma; Lognormal; Normal	Normal
3_20_5_104	MW-10	Appendix IV	Beryllium	mg/L	11	5	45%	0.852	0.163	0.253	0.265	0.913	0.458	0.173	0.832	0.204	>= 0.10	0.374	>= 0.10	0.579	Gamma; Lognormal; Normal	Normal
3_20_5_106	MW-10	Appendix IV	Cadmium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
3_20_5_109	MW-10	Appendix IV	Chromium, Total	mg/L	11	0	0%	0.900	0.183	0.164	0.563	0.944	0.566	0.181	0.400	0.179	>= 0.10	0.339	>= 0.10	0.625	Gamma; Lognormal; Normal	Normal
3_20_5_110	MW-10	Appendix IV	Cobalt	mg/L	11	1	9%	0.768	0.006	0.248	0.081	0.937	0.518	0.201	0.302	0.205	>= 0.10	0.475	>= 0.10	0.753	Gamma; Lognormal; Normal	Normal
3_20_5_113	MW-10	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.915	0.282	0.144	0.759	0.891	0.145	0.194	0.291	0.186	>= 0.10	0.457	>= 0.10	0.395	Gamma; Lognormal; Normal	Normal
3_20_5_115	MW-10	Appendix IV	Lead	mg/L	11	9	82%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.246		Nonparametric
3_20_5_116	MW-10	Appendix IV	Lithium	mg/L	11	0	0%	0.935	0.460	0.152	0.675	0.965	0.827	0.136	0.823	0.114	>= 0.10	0.233	>= 0.10	0.315	Gamma; Lognormal; Normal	Normal
3_20_5_117	MW-10	Appendix IV	Mercury	mg/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
3_20_5_118	MW-10	Appendix IV	Molybdenum	mg/L	11	0	0%	0.960	0.771	0.190	0.322	0.961	0.785	0.174	0.461	0.134	>= 0.10	0.160	>= 0.10	0.624	Gamma; Lognormal; Normal	Normal
3_20_5_121	MW-10	Appendix IV	Radium 226 and 228	pCi/L	11	9	82%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.235		Nonparametric
3_20_5_122	MW-10	Appendix IV	Selenium	mg/L	11	1	9%	0.686	0.001	0.278	0.028	0.815	0.022	0.207	0.262	0.230	>= 0.10	0.884	0.01 <= p < 0.05	0.315	Gamma; Lognormal	Gamma
3_20_5_125	MW-10	Appendix IV	Thallium	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
3_20_6_111	MW-10	Part 115	Copper	mg/L	11	8	73%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.649		Nonparametric
3_20_6_114	MW-10	Part 115	Iron	mg/L	11	0	0%	0.895	0.160	0.231	0.105	0.927	0.377	0.188	0.344	0.211	>= 0.10	0.495	>= 0.10	0.359	Gamma; Lognormal; Normal	Normal
3_20_6_119	MW-10	Part 115	Nickel	mg/L	11	5	45%	0.770	0.031	0.342	0.027	0.832	0.111	0.332	0.038	0.352	0.01 <= p < 0.05	0.662	0.05 <= p < 0.10	0.317	Gamma; Lognormal	Gamma
3_20_6_123	MW-10	Part 115	Silver	mg/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
3_20_6_129	MW-10	Part 115	Vanadium	mg/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
3_20_6_130	MW-10	Part 115	Zinc	mg/L	11	4	36%	0.674	0.002	0.381	0.003	0.771	0.021	0.266	0.139	0.329	0.01 <= p < 0.05	0.975	0.01 <= p < 0.05	1.085	Lognormal	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_4_105	MW-06	Appendix III	Boron	mg/L	11	0	0%	0.184	0.486	
1_16_4_107	MW-06	Appendix III	Calcium	mg/L	11	0	0%	0.094	0.721	
1_16_4_108	MW-06	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.494	0.062	
1_16_4_112	MW-06	Appendix III	Fluoride	mg/L	11	0	0%	0.236	0.372	
1_16_4_120	MW-06	Appendix III	pH (field)	su	11	0	0%	-0.053	0.841	
1_16_4_124	MW-06	Appendix III	Sulfate (as SO4)	mg/L	11	1	9%	0.108	0.693	
1_16_4_126	MW-06	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	0.202	0.445	
1_16_5_101	MW-06	Appendix IV	Antimony	mg/L	11	9	82%	-0.500	0.157	
1_16_5_102	MW-06	Appendix IV	Arsenic	mg/L	11	0	0%	0.221	0.404	
1_16_5_103	MW-06	Appendix IV	Barium	mg/L	11	0	0%	0.272	0.304	
1_16_5_104	MW-06	Appendix IV	Beryllium	mg/L	11	10	91%	NA	NA	
1_16_5_109	MW-06	Appendix IV	Chromium, Total	mg/L	11	0	0%	0.166	0.531	
1_16_5_110	MW-06	Appendix IV	Cobalt	mg/L	11	0	0%	0.278	0.293	
1_16_5_113	MW-06	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.236	0.372	
1_16_5_115	MW-06	Appendix IV	Lead	mg/L	11	8	73%	-0.286	0.434	
1_16_5_116	MW-06	Appendix IV	Lithium	mg/L	11	0	0%	0.362	0.171	
1_16_5_118	MW-06	Appendix IV	Molybdenum	mg/L	11	8	73%	-0.500	0.171	
1_16_5_121	MW-06	Appendix IV	Radium 226 and 228	pCi/L	11	2	18%	-0.189	0.506	
1_16_5_122	MW-06	Appendix IV	Selenium	mg/L	11	5	45%	-0.158	0.623	
1_16_6_111	MW-06	Part 115	Copper	mg/L	11	10	91%	NA	NA	
1_16_6_114	MW-06	Part 115	Iron	mg/L	11	0	0%	0.262	0.321	
1_16_6_119	MW-06	Part 115	Nickel	mg/L	11	4	36%	0.289	0.349	
1_16_6_130	MW-06	Part 115	Zinc	mg/L	11	2	18%	-0.194	0.495	
1_17_4_105	MW-07	Appendix III	Boron	mg/L	11	0	0%	-0.274	0.301	
1_17_4_107	MW-07	Appendix III	Calcium	mg/L	11	0	0%	-0.472	0.075	
1_17_4_108	MW-07	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.572	0.030	*
1_17_4_112	MW-07	Appendix III	Fluoride	mg/L	11	1	9%	-0.222	0.418	
1_17_4_120	MW-07	Appendix III	pH (field)	su	11	0	0%	0.099	0.707	
1_17_4_124	MW-07	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	0.600	0.023	*
1_17_4_126	MW-07	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	-0.072	0.786	
1_17_5_101	MW-07	Appendix IV	Antimony	mg/L	11	10	91%	NA	NA	
1_17_5_102	MW-07	Appendix IV	Arsenic	mg/L	11	0	0%	-0.043	0.872	
1_17_5_103	MW-07	Appendix IV	Barium	mg/L	11	0	0%	0.248	0.348	
1_17_5_104	MW-07	Appendix IV	Beryllium	mg/L	11	8	73%	-0.403	0.269	
1_17_5_109	MW-07	Appendix IV	Chromium, Total	mg/L	11	0	0%	-0.140	0.596	
1_17_5_110	MW-07	Appendix IV	Cobalt	mg/L	11	0	0%	0.235	0.374	
1_17_5_113	MW-07	Appendix IV	Fluoride (App IV)	mg/L	11	1	9%	-0.222	0.418	
1_17_5_116	MW-07	Appendix IV	Lithium	mg/L	11	0	0%	-0.310	0.241	
1_17_5_121	MW-07	Appendix IV	Radium 226 and 228	pCi/L	11	2	18%	-0.388	0.173	
1_17_5_122	MW-07	Appendix IV	Selenium	mg/L	11	9	82%	-0.500	0.157	
1_17_6_111	MW-07	Part 115	Copper	mg/L	11	9	82%	-0.500	0.157	
1_17_6_114	MW-07	Part 115	Iron	mg/L	11	0	0%	-0.006	0.983	

(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_17_6_130	MW-07	Part 115	Zinc	mg/L	11	8	73%	-0.443	0.225	
1_18_4_105	MW-08	Appendix III	Boron	mg/L	11	0	0%	0.094	0.723	
1_18_4_107	MW-08	Appendix III	Calcium	mg/L	11	0	0%	0.418	0.114	
1_18_4_108	MW-08	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.093	0.725	
1_18_4_112	MW-08	Appendix III	Fluoride	mg/L	11	0	0%	0.271	0.306	
1_18_4_120	MW-08	Appendix III	pH (field)	su	11	0	0%	0.110	0.678	
1_18_4_124	MW-08	Appendix III	Sulfate (as SO4)	mg/L	11	3	27%	-0.175	0.555	
1_18_4_126	MW-08	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	-0.345	0.192	
1_18_5_101	MW-08	Appendix IV	Antimony	mg/L	11	5	45%	-0.087	0.787	
1_18_5_102	MW-08	Appendix IV	Arsenic	mg/L	11	0	0%	0.337	0.202	
1_18_5_103	MW-08	Appendix IV	Barium	mg/L	11	0	0%	0.452	0.087	
1_18_5_109	MW-08	Appendix IV	Chromium, Total	mg/L	11	0	0%	0.319	0.228	
1_18_5_110	MW-08	Appendix IV	Cobalt	mg/L	11	0	0%	0.430	0.104	
1_18_5_113	MW-08	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.271	0.306	
1_18_5_115	MW-08	Appendix IV	Lead	mg/L	11	8	73%	-0.095	0.794	
1_18_5_116	MW-08	Appendix IV	Lithium	mg/L	11	0	0%	0.238	0.368	
1_18_5_118	MW-08	Appendix IV	Molybdenum	mg/L	11	0	0%	0.335	0.206	
1_18_5_121	MW-08	Appendix IV	Radium 226 and 228	pCi/L	11	3	27%	-0.299	0.313	
1_18_5_122	MW-08	Appendix IV	Selenium	mg/L	11	5	45%	-0.315	0.329	
1_18_6_111	MW-08	Part 115	Copper	mg/L	11	5	45%	0.170	0.599	
1_18_6_114	MW-08	Part 115	Iron	mg/L	11	0	0%	0.498	0.060	
1_18_6_119	MW-08	Part 115	Nickel	mg/L	11	0	0%	0.375	0.156	
1_18_6_130	MW-08	Part 115	Zinc	mg/L	11	3	27%	-0.234	0.428	
1_26_4_105	MW-16	Appendix III	Boron	mg/L	1	0	0%	NA	NA	
1_26_4_107	MW-16	Appendix III	Calcium	mg/L	1	0	0%	NA	NA	
1_26_4_108	MW-16	Appendix III	Chloride (as Cl)	mg/L	1	0	0%	NA	NA	
1_26_4_112	MW-16	Appendix III	Fluoride	mg/L	1	0	0%	NA	NA	
1_26_4_120	MW-16	Appendix III	pH (field)	su	1	0	0%	NA	NA	
1_26_4_124	MW-16	Appendix III	Sulfate (as SO4)	mg/L	1	0	0%	NA	NA	
1_26_4_126	MW-16	Appendix III	Total Dissolved Solids	mg/L	1	0	0%	NA	NA	
1_26_5_102	MW-16	Appendix IV	Arsenic	mg/L	1	0	0%	NA	NA	
1_26_5_103	MW-16	Appendix IV	Barium	mg/L	1	0	0%	NA	NA	
1_26_5_109	MW-16	Appendix IV	Chromium, Total	mg/L	1	0	0%	NA	NA	
1_26_5_110	MW-16	Appendix IV	Cobalt	mg/L	1	0	0%	NA	NA	
1_26_5_113	MW-16	Appendix IV	Fluoride (App IV)	mg/L	1	0	0%	NA	NA	
1_26_5_116	MW-16	Appendix IV	Lithium	mg/L	1	0	0%	NA	NA	
1_26_5_121	MW-16	Appendix IV	Radium 226 and 228	pCi/L	1	0	0%	NA	NA	
1_26_5_122	MW-16	Appendix IV	Selenium	mg/L	1	0	0%	NA	NA	
1_26_6_111	MW-16	Part 115	Copper	mg/L	1	0	0%	NA	NA	
1_26_6_114	MW-16	Part 115	Iron	mg/L	1	0	0%	NA	NA	
1_26_6_119	MW-16	Part 115	Nickel	mg/L	1	0	0%	NA	NA	
1_27_4_105	MW-17	Appendix III	Boron	mg/L	1	0	0%	NA	NA	

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 4: Autocorrelation Tests, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Autocorrelation	Box-Ljung p-value	Sig.
1_27_4_107	MW-17	Appendix III	Calcium	mg/L	1	0	0%	NA	NA	
1_27_4_108	MW-17	Appendix III	Chloride (as Cl)	mg/L	1	0	0%	NA	NA	
1_27_4_112	MW-17	Appendix III	Fluoride	mg/L	1	0	0%	NA	NA	
1_27_4_120	MW-17	Appendix III	pH (field)	su	1	0	0%	NA	NA	
1_27_4_124	MW-17	Appendix III	Sulfate (as SO4)	mg/L	1	0	0%	NA	NA	
1_27_4_126	MW-17	Appendix III	Total Dissolved Solids	mg/L	1	0	0%	NA	NA	
1_27_5_102	MW-17	Appendix IV	Arsenic	mg/L	1	0	0%	NA	NA	
1_27_5_103	MW-17	Appendix IV	Barium	mg/L	1	0	0%	NA	NA	
1_27_5_109	MW-17	Appendix IV	Chromium, Total	mg/L	1	0	0%	NA	NA	
1_27_5_110	MW-17	Appendix IV	Cobalt	mg/L	1	0	0%	NA	NA	
1_27_5_113	MW-17	Appendix IV	Fluoride (App IV)	mg/L	1	0	0%	NA	NA	
1_27_5_115	MW-17	Appendix IV	Lead	mg/L	1	0	0%	NA	NA	
1_27_5_116	MW-17	Appendix IV	Lithium	mg/L	1	0	0%	NA	NA	
1_27_5_118	MW-17	Appendix IV	Molybdenum	mg/L	1	0	0%	NA	NA	
1_27_5_121	MW-17	Appendix IV	Radium 226 and 228	pCi/L	1	0	0%	NA	NA	
1_27_5_122	MW-17	Appendix IV	Selenium	mg/L	1	0	0%	NA	NA	
1_27_6_111	MW-17	Part 115	Copper	mg/L	1	0	0%	NA	NA	
1_27_6_114	MW-17	Part 115	Iron	mg/L	1	0	0%	NA	NA	
1_27_6_119	MW-17	Part 115	Nickel	mg/L	1	0	0%	NA	NA	
1_27_6_129	MW-17	Part 115	Vanadium	mg/L	1	0	0%	NA	NA	
1_27_6_130	MW-17	Part 115	Zinc	mg/L	1	0	0%	NA	NA	
1_28_4_105	MW-18	Appendix III	Boron	mg/L	11	0	0%	0.551	0.037	*
1_28_4_107	MW-18	Appendix III	Calcium	mg/L	11	0	0%	0.441	0.095	
1_28_4_108	MW-18	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.297	0.262	
1_28_4_112	MW-18	Appendix III	Fluoride	mg/L	11	0	0%	0.505	0.056	
1_28_4_120	MW-18	Appendix III	pH (field)	su	11	0	0%	0.163	0.537	
1_28_4_124	MW-18	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	0.141	0.594	
1_28_4_126	MW-18	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	0.402	0.129	
1_28_5_101	MW-18	Appendix IV	Antimony	mg/L	11	3	27%	-0.389	0.188	
1_28_5_102	MW-18	Appendix IV	Arsenic	mg/L	11	0	0%	0.211	0.426	
1_28_5_103	MW-18	Appendix IV	Barium	mg/L	11	0	0%	0.448	0.090	
1_28_5_104	MW-18	Appendix IV	Beryllium	mg/L	11	10	91%	NA	NA	
1_28_5_106	MW-18	Appendix IV	Cadmium	mg/L	11	4	36%	-0.143	0.642	
1_28_5_109	MW-18	Appendix IV	Chromium, Total	mg/L	11	10	91%	NA	NA	
1_28_5_110	MW-18	Appendix IV	Cobalt	mg/L	11	0	0%	0.632	0.017	*
1_28_5_113	MW-18	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.505	0.056	
1_28_5_115	MW-18	Appendix IV	Lead	mg/L	11	8	73%	-0.660	0.071	
1_28_5_116	MW-18	Appendix IV	Lithium	mg/L	11	0	0%	0.344	0.193	
1_28_5_118	MW-18	Appendix IV	Molybdenum	mg/L	11	0	0%	0.296	0.263	
1_28_5_121	MW-18	Appendix IV	Radium 226 and 228	pCi/L	11	7	64%	-0.226	0.522	
1_28_5_122	MW-18	Appendix IV	Selenium	mg/L	11	0	0%	0.399	0.131	
1_28_6_111	MW-18	Part 115	Copper	mg/L	11	0	0%	0.245	0.355	

(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_28_6_114	MW-18	Part 115	Iron	mg/L	11	0	0%	0.529	0.046	*
1_28_6_119	MW-18	Part 115	Nickel	mg/L	11	0	0%	0.629	0.017	*
1_28_6_130	MW-18	Part 115	Zinc	mg/L	11	0	0%	0.270	0.307	
1_29_4_105	MW-19	Appendix III	Boron	mg/L	11	0	0%	0.003	0.992	
1_29_4_107	MW-19	Appendix III	Calcium	mg/L	11	0	0%	0.332	0.209	
1_29_4_108	MW-19	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.480	0.070	
1_29_4_112	MW-19	Appendix III	Fluoride	mg/L	11	0	0%	0.398	0.133	
1_29_4_120	MW-19	Appendix III	pH (field)	su	11	0	0%	-0.302	0.254	
1_29_4_124	MW-19	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	-0.074	0.779	
1_29_4_126	MW-19	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	0.619	0.019	*
1_29_5_101	MW-19	Appendix IV	Antimony	mg/L	11	10	91%	NA	NA	
1_29_5_102	MW-19	Appendix IV	Arsenic	mg/L	11	0	0%	0.266	0.315	
1_29_5_103	MW-19	Appendix IV	Barium	mg/L	11	0	0%	0.366	0.166	
1_29_5_104	MW-19	Appendix IV	Beryllium	mg/L	11	3	27%	0.554	0.061	
1_29_5_109	MW-19	Appendix IV	Chromium, Total	mg/L	11	5	45%	-0.038	0.905	
1_29_5_110	MW-19	Appendix IV	Cobalt	mg/L	11	0	0%	0.641	0.015	*
1_29_5_113	MW-19	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.398	0.133	
1_29_5_116	MW-19	Appendix IV	Lithium	mg/L	11	0	0%	0.295	0.265	
1_29_5_118	MW-19	Appendix IV	Molybdenum	mg/L	11	0	0%	0.016	0.952	
1_29_5_121	MW-19	Appendix IV	Radium 226 and 228	pCi/L	11	3	27%	0.103	0.729	
1_29_5_122	MW-19	Appendix IV	Selenium	mg/L	11	10	91%	NA	NA	
1_29_6_111	MW-19	Part 115	Copper	mg/L	11	10	91%	NA	NA	
1_29_6_114	MW-19	Part 115	Iron	mg/L	11	0	0%	0.409	0.122	
1_29_6_119	MW-19	Part 115	Nickel	mg/L	11	1	9%	0.461	0.092	
1_29_6_130	MW-19	Part 115	Zinc	mg/L	11	9	82%	-0.500	0.157	
1_30_4_105	MW-20	Appendix III	Boron	mg/L	11	0	0%	0.287	0.278	
1_30_4_107	MW-20	Appendix III	Calcium	mg/L	11	0	0%	0.181	0.495	
1_30_4_108	MW-20	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.077	0.772	
1_30_4_112	MW-20	Appendix III	Fluoride	mg/L	11	0	0%	0.089	0.737	
1_30_4_120	MW-20	Appendix III	pH (field)	su	11	0	0%	-0.035	0.895	
1_30_4_124	MW-20	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	0.573	0.030	*
1_30_4_126	MW-20	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	0.116	0.662	
1_30_5_101	MW-20	Appendix IV	Antimony	mg/L	11	4	36%	0.167	0.588	
1_30_5_102	MW-20	Appendix IV	Arsenic	mg/L	11	0	0%	0.382	0.149	
1_30_5_103	MW-20	Appendix IV	Barium	mg/L	11	0	0%	0.335	0.205	
1_30_5_104	MW-20	Appendix IV	Beryllium	mg/L	11	10	91%	NA	NA	
1_30_5_109	MW-20	Appendix IV	Chromium, Total	mg/L	11	5	45%	-0.190	0.557	
1_30_5_110	MW-20	Appendix IV	Cobalt	mg/L	11	0	0%	0.637	0.016	*
1_30_5_113	MW-20	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.089	0.737	
1_30_5_115	MW-20	Appendix IV	Lead	mg/L	11	0	0%	0.378	0.153	
1_30_5_116	MW-20	Appendix IV	Lithium	mg/L	11	0	0%	0.259	0.327	
1_30_5_118	MW-20	Appendix IV	Molybdenum	mg/L	11	0	0%	0.347	0.190	

(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_30_5_121	MW-20	Appendix IV	Radium 226 and 228	pCi/L	11	6	55%	-0.229	0.499	
1_30_5_122	MW-20	Appendix IV	Selenium	mg/L	11	5	45%	-0.117	0.718	
1_30_5_125	MW-20	Appendix IV	Thallium	mg/L	11	10	91%	NA	NA	
1_30_6_111	MW-20	Part 115	Copper	mg/L	11	1	9%	0.054	0.842	
1_30_6_114	MW-20	Part 115	Iron	mg/L	11	0	0%	-0.033	0.901	
1_30_6_119	MW-20	Part 115	Nickel	mg/L	11	0	0%	0.699	0.008	**
1_30_6_130	MW-20	Part 115	Zinc	mg/L	11	0	0%	-0.041	0.878	
1_38_4_105	MW-28	Appendix III	Boron	mg/L	1	0	0%	NA	NA	
1_38_4_107	MW-28	Appendix III	Calcium	mg/L	1	0	0%	NA	NA	
1_38_4_108	MW-28	Appendix III	Chloride (as Cl)	mg/L	1	0	0%	NA	NA	
1_38_4_112	MW-28	Appendix III	Fluoride	mg/L	1	0	0%	NA	NA	
1_38_4_120	MW-28	Appendix III	pH (field)	su	1	0	0%	NA	NA	
1_38_4_124	MW-28	Appendix III	Sulfate (as SO4)	mg/L	1	0	0%	NA	NA	
1_38_4_126	MW-28	Appendix III	Total Dissolved Solids	mg/L	1	0	0%	NA	NA	
1_38_5_101	MW-28	Appendix IV	Antimony	mg/L	1	0	0%	NA	NA	
1_38_5_102	MW-28	Appendix IV	Arsenic	mg/L	1	0	0%	NA	NA	
1_38_5_103	MW-28	Appendix IV	Barium	mg/L	1	0	0%	NA	NA	
1_38_5_109	MW-28	Appendix IV	Chromium, Total	mg/L	1	0	0%	NA	NA	
1_38_5_110	MW-28	Appendix IV	Cobalt	mg/L	1	0	0%	NA	NA	
1_38_5_113	MW-28	Appendix IV	Fluoride (App IV)	mg/L	1	0	0%	NA	NA	
1_38_5_115	MW-28	Appendix IV	Lead	mg/L	1	0	0%	NA	NA	
1_38_5_116	MW-28	Appendix IV	Lithium	mg/L	1	0	0%	NA	NA	
1_38_5_117	MW-28	Appendix IV	Mercury	mg/L	1	0	0%	NA	NA	
1_38_5_118	MW-28	Appendix IV	Molybdenum	mg/L	1	0	0%	NA	NA	
1_38_5_121	MW-28	Appendix IV	Radium 226 and 228	pCi/L	1	0	0%	NA	NA	
1_38_5_122	MW-28	Appendix IV	Selenium	mg/L	1	0	0%	NA	NA	
1_38_6_111	MW-28	Part 115	Copper	mg/L	1	0	0%	NA	NA	
1_38_6_114	MW-28	Part 115	Iron	mg/L	1	0	0%	NA	NA	
1_38_6_119	MW-28	Part 115	Nickel	mg/L	1	0	0%	NA	NA	
1_38_6_129	MW-28	Part 115	Vanadium	mg/L	1	0	0%	NA	NA	
1_38_6_130	MW-28	Part 115	Zinc	mg/L	1	0	0%	NA	NA	
1_40_4_105	MW-30	Appendix III	Boron	mg/L	11	0	0%	-0.127	0.631	
1_40_4_107	MW-30	Appendix III	Calcium	mg/L	11	0	0%	-0.035	0.894	
1_40_4_108	MW-30	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.694	0.009	**
1_40_4_112	MW-30	Appendix III	Fluoride	mg/L	11	0	0%	-0.432	0.102	
1_40_4_120	MW-30	Appendix III	pH (field)	su	11	0	0%	-0.013	0.960	
1_40_4_124	MW-30	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	-0.052	0.845	
1_40_4_126	MW-30	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	-0.101	0.704	
1_40_5_101	MW-30	Appendix IV	Antimony	mg/L	11	10	91%	NA	NA	
1_40_5_102	MW-30	Appendix IV	Arsenic	mg/L	11	2	18%	0.022	0.938	
1_40_5_103	MW-30	Appendix IV	Barium	mg/L	11	0	0%	0.353	0.182	
1_40_5_104	MW-30	Appendix IV	Beryllium	mg/L	11	9	82%	-0.500	0.157	

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 4: Autocorrelation Tests, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Autocorrelation	Box-Ljung p-value	Sig.
1_40_5_109	MW-30	Appendix IV	Chromium, Total	mg/L	11	0	0%	0.286	0.279	
1_40_5_110	MW-30	Appendix IV	Cobalt	mg/L	11	0	0%	-0.233	0.378	
1_40_5_113	MW-30	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	-0.432	0.102	
1_40_5_116	MW-30	Appendix IV	Lithium	mg/L	11	0	0%	-0.154	0.559	
1_40_5_117	MW-30	Appendix IV	Mercury	mg/L	11	10	91%	NA	NA	
1_40_5_118	MW-30	Appendix IV	Molybdenum	mg/L	11	3	27%	0.208	0.482	
1_40_5_121	MW-30	Appendix IV	Radium 226 and 228	pCi/L	11	6	55%	-0.651	0.054	
1_40_5_122	MW-30	Appendix IV	Selenium	mg/L	11	6	55%	-0.315	0.352	
1_40_6_111	MW-30	Part 115	Copper	mg/L	11	7	64%	-0.189	0.593	
1_40_6_114	MW-30	Part 115	Iron	mg/L	11	0	0%	-0.174	0.511	
1_40_6_119	MW-30	Part 115	Nickel	mg/L	11	2	18%	0.128	0.652	
1_40_6_130	MW-30	Part 115	Zinc	mg/L	11	9	82%	-0.500	0.157	
1_41_4_105	MW-31	Appendix III	Boron	mg/L	11	0	0%	0.323	0.222	
1_41_4_107	MW-31	Appendix III	Calcium	mg/L	11	0	0%	0.328	0.214	
1_41_4_108	MW-31	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.048	0.856	
1_41_4_112	MW-31	Appendix III	Fluoride	mg/L	11	0	0%	0.020	0.940	
1_41_4_120	MW-31	Appendix III	pH (field)	su	11	0	0%	-0.044	0.869	
1_41_4_124	MW-31	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	0.637	0.016	*
1_41_4_126	MW-31	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	-0.122	0.644	
1_41_5_101	MW-31	Appendix IV	Antimony	mg/L	11	6	55%	0.432	0.201	
1_41_5_102	MW-31	Appendix IV	Arsenic	mg/L	11	0	0%	0.323	0.222	
1_41_5_103	MW-31	Appendix IV	Barium	mg/L	11	0	0%	-0.117	0.659	
1_41_5_104	MW-31	Appendix IV	Beryllium	mg/L	11	10	91%	NA	NA	
1_41_5_106	MW-31	Appendix IV	Cadmium	mg/L	11	10	91%	NA	NA	
1_41_5_109	MW-31	Appendix IV	Chromium, Total	mg/L	11	0	0%	-0.083	0.753	
1_41_5_110	MW-31	Appendix IV	Cobalt	mg/L	11	1	9%	-0.326	0.234	
1_41_5_113	MW-31	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.020	0.940	
1_41_5_115	MW-31	Appendix IV	Lead	mg/L	11	10	91%	NA	NA	
1_41_5_116	MW-31	Appendix IV	Lithium	mg/L	11	0	0%	0.416	0.116	
1_41_5_118	MW-31	Appendix IV	Molybdenum	mg/L	11	0	0%	0.031	0.907	
1_41_5_121	MW-31	Appendix IV	Radium 226 and 228	pCi/L	11	3	27%	-0.471	0.112	
1_41_5_122	MW-31	Appendix IV	Selenium	mg/L	11	5	45%	-0.219	0.498	
1_41_5_125	MW-31	Appendix IV	Thallium	mg/L	11	10	91%	NA	NA	
1_41_6_111	MW-31	Part 115	Copper	mg/L	11	8	73%	-0.279	0.444	
1_41_6_114	MW-31	Part 115	Iron	mg/L	11	0	0%	0.507	0.055	
1_41_6_119	MW-31	Part 115	Nickel	mg/L	11	10	91%	NA	NA	
1_41_6_130	MW-31	Part 115	Zinc	mg/L	11	8	73%	-0.292	0.424	
1_42_4_105	MW-32	Appendix III	Boron	mg/L	11	0	0%	0.171	0.517	
1_42_4_107	MW-32	Appendix III	Calcium	mg/L	11	0	0%	0.532	0.044	*
1_42_4_108	MW-32	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.540	0.041	*
1_42_4_112	MW-32	Appendix III	Fluoride	mg/L	11	0	0%	-0.044	0.869	
1_42_4_120	MW-32	Appendix III	pH (field)	su	11	0	0%	0.141	0.594	

(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_4_124	MW-32	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	0.465	0.079	
1_42_4_126	MW-32	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	0.461	0.081	
1_42_5_101	MW-32	Appendix IV	Antimony	mg/L	11	7	64%	0.004	0.991	
1_42_5_102	MW-32	Appendix IV	Arsenic	mg/L	11	0	0%	-0.114	0.668	
1_42_5_103	MW-32	Appendix IV	Barium	mg/L	11	0	0%	-0.326	0.218	
1_42_5_104	MW-32	Appendix IV	Beryllium	mg/L	11	10	91%	NA	NA	
1_42_5_106	MW-32	Appendix IV	Cadmium	mg/L	11	10	91%	NA	NA	
1_42_5_109	MW-32	Appendix IV	Chromium, Total	mg/L	11	0	0%	-0.167	0.528	
1_42_5_110	MW-32	Appendix IV	Cobalt	mg/L	11	0	0%	-0.245	0.354	
1_42_5_113	MW-32	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	-0.044	0.869	
1_42_5_115	MW-32	Appendix IV	Lead	mg/L	11	8	73%	-0.128	0.725	
1_42_5_116	MW-32	Appendix IV	Lithium	mg/L	11	0	0%	0.187	0.480	
1_42_5_117	MW-32	Appendix IV	Mercury	mg/L	11	10	91%	NA	NA	
1_42_5_118	MW-32	Appendix IV	Molybdenum	mg/L	11	0	0%	-0.056	0.833	
1_42_5_121	MW-32	Appendix IV	Radium 226 and 228	pCi/L	11	7	64%	-0.092	0.794	
1_42_5_122	MW-32	Appendix IV	Selenium	mg/L	11	9	82%	-0.500	0.157	
1_42_6_111	MW-32	Part 115	Copper	mg/L	11	8	73%	-0.160	0.661	
1_42_6_114	MW-32	Part 115	Iron	mg/L	11	0	0%	0.563	0.033	*
1_42_6_119	MW-32	Part 115	Nickel	mg/L	11	0	0%	-0.131	0.619	
1_42_6_130	MW-32	Part 115	Zinc	mg/L	11	0	0%	-0.148	0.576	
1_46_4_105	MW-36	Appendix III	Boron	mg/L	1	0	0%	NA	NA	
1_46_4_107	MW-36	Appendix III	Calcium	mg/L	1	0	0%	NA	NA	
1_46_4_108	MW-36	Appendix III	Chloride (as Cl)	mg/L	1	0	0%	NA	NA	
1_46_4_112	MW-36	Appendix III	Fluoride	mg/L	1	0	0%	NA	NA	
1_46_4_120	MW-36	Appendix III	pH (field)	su	1	0	0%	NA	NA	
1_46_4_124	MW-36	Appendix III	Sulfate (as SO4)	mg/L	1	0	0%	NA	NA	
1_46_4_126	MW-36	Appendix III	Total Dissolved Solids	mg/L	1	0	0%	NA	NA	
1_46_5_101	MW-36	Appendix IV	Antimony	mg/L	1	0	0%	NA	NA	
1_46_5_102	MW-36	Appendix IV	Arsenic	mg/L	1	0	0%	NA	NA	
1_46_5_103	MW-36	Appendix IV	Barium	mg/L	1	0	0%	NA	NA	
1_46_5_104	MW-36	Appendix IV	Beryllium	mg/L	1	0	0%	NA	NA	
1_46_5_106	MW-36	Appendix IV	Cadmium	mg/L	1	0	0%	NA	NA	
1_46_5_109	MW-36	Appendix IV	Chromium, Total	mg/L	1	0	0%	NA	NA	
1_46_5_110	MW-36	Appendix IV	Cobalt	mg/L	1	0	0%	NA	NA	
1_46_5_113	MW-36	Appendix IV	Fluoride (App IV)	mg/L	1	0	0%	NA	NA	
1_46_5_115	MW-36	Appendix IV	Lead	mg/L	1	0	0%	NA	NA	
1_46_5_116	MW-36	Appendix IV	Lithium	mg/L	1	0	0%	NA	NA	
1_46_5_118	MW-36	Appendix IV	Molybdenum	mg/L	1	0	0%	NA	NA	
1_46_5_122	MW-36	Appendix IV	Selenium	mg/L	1	0	0%	NA	NA	
1_46_6_111	MW-36	Part 115	Copper	mg/L	1	0	0%	NA	NA	
1_46_6_114	MW-36	Part 115	Iron	mg/L	1	0	0%	NA	NA	
1_46_6_119	MW-36	Part 115	Nickel	mg/L	1	0	0%	NA	NA	

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 4: Autocorrelation Tests, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Autocorrelation	Box-Ljung p-value	Sig.
1_46_6_123	MW-36	Part 115	Silver	mg/L	1	0	0%	NA	NA	
1_46_6_129	MW-36	Part 115	Vanadium	mg/L	1	0	0%	NA	NA	
1_46_6_130	MW-36	Part 115	Zinc	mg/L	1	0	0%	NA	NA	
1_47_4_105	MW-37	Appendix III	Boron	mg/L	1	0	0%	NA	NA	
1_47_4_107	MW-37	Appendix III	Calcium	mg/L	1	0	0%	NA	NA	
1_47_4_108	MW-37	Appendix III	Chloride (as Cl)	mg/L	1	0	0%	NA	NA	
1_47_4_112	MW-37	Appendix III	Fluoride	mg/L	1	0	0%	NA	NA	
1_47_4_120	MW-37	Appendix III	pH (field)	su	1	0	0%	NA	NA	
1_47_4_124	MW-37	Appendix III	Sulfate (as SO4)	mg/L	1	0	0%	NA	NA	
1_47_4_126	MW-37	Appendix III	Total Dissolved Solids	mg/L	1	0	0%	NA	NA	
1_47_5_101	MW-37	Appendix IV	Antimony	mg/L	1	0	0%	NA	NA	
1_47_5_102	MW-37	Appendix IV	Arsenic	mg/L	1	0	0%	NA	NA	
1_47_5_103	MW-37	Appendix IV	Barium	mg/L	1	0	0%	NA	NA	
1_47_5_106	MW-37	Appendix IV	Cadmium	mg/L	1	0	0%	NA	NA	
1_47_5_109	MW-37	Appendix IV	Chromium, Total	mg/L	1	0	0%	NA	NA	
1_47_5_110	MW-37	Appendix IV	Cobalt	mg/L	1	0	0%	NA	NA	
1_47_5_113	MW-37	Appendix IV	Fluoride (App IV)	mg/L	1	0	0%	NA	NA	
1_47_5_115	MW-37	Appendix IV	Lead	mg/L	1	0	0%	NA	NA	
1_47_5_116	MW-37	Appendix IV	Lithium	mg/L	1	0	0%	NA	NA	
1_47_5_122	MW-37	Appendix IV	Selenium	mg/L	1	0	0%	NA	NA	
1_47_6_111	MW-37	Part 115	Copper	mg/L	1	0	0%	NA	NA	
1_47_6_114	MW-37	Part 115	Iron	mg/L	1	0	0%	NA	NA	
1_47_6_119	MW-37	Part 115	Nickel	mg/L	1	0	0%	NA	NA	
1_47_6_130	MW-37	Part 115	Zinc	mg/L	1	0	0%	NA	NA	
2_11_4_105	MW-01R	Appendix III	Boron	mg/L	11	0	0%	0.291	0.271	
2_11_4_107	MW-01R	Appendix III	Calcium	mg/L	11	0	0%	0.220	0.405	
2_11_4_108	MW-01R	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.153	0.563	
2_11_4_112	MW-01R	Appendix III	Fluoride	mg/L	11	0	0%	0.338	0.201	
2_11_4_120	MW-01R	Appendix III	pH (field)	su	11	0	0%	-0.130	0.623	
2_11_4_124	MW-01R	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	0.244	0.356	
2_11_4_126	MW-01R	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	0.096	0.717	
2_11_5_101	MW-01R	Appendix IV	Antimony	mg/L	11	3	27%	0.259	0.382	
2_11_5_102	MW-01R	Appendix IV	Arsenic	mg/L	11	0	0%	-0.086	0.745	
2_11_5_103	MW-01R	Appendix IV	Barium	mg/L	11	0	0%	0.408	0.123	
2_11_5_104	MW-01R	Appendix IV	Beryllium	mg/L	11	1	9%	0.239	0.383	
2_11_5_106	MW-01R	Appendix IV	Cadmium	mg/L	11	8	73%	-0.267	0.464	
2_11_5_109	MW-01R	Appendix IV	Chromium, Total	mg/L	11	0	0%	-0.149	0.572	
2_11_5_110	MW-01R	Appendix IV	Cobalt	mg/L	11	0	0%	-0.410	0.121	
2_11_5_113	MW-01R	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.338	0.201	
2_11_5_115	MW-01R	Appendix IV	Lead	mg/L	11	2	18%	-0.162	0.569	
2_11_5_116	MW-01R	Appendix IV	Lithium	mg/L	11	0	0%	0.264	0.318	

(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_11_5_118	MW-01R	Appendix IV	Molybdenum	mg/L	11	1	9%	-0.038	0.889	
2_11_5_121	MW-01R	Appendix IV	Radium 226 and 228	pCi/L	11	6	55%	-0.708	0.036	*
2_11_5_122	MW-01R	Appendix IV	Selenium	mg/L	11	0	0%	-0.148	0.577	
2_11_6_111	MW-01R	Part 115	Copper	mg/L	11	5	45%	-0.552	0.087	
2_11_6_114	MW-01R	Part 115	Iron	mg/L	11	0	0%	0.296	0.264	
2_11_6_119	MW-01R	Part 115	Nickel	mg/L	11	0	0%	-0.185	0.484	
2_11_6_129	MW-01R	Part 115	Vanadium	mg/L	11	2	18%	0.425	0.135	
2_11_6_130	MW-01R	Part 115	Zinc	mg/L	11	2	18%	0.031	0.914	
2_12_4_105	MW-02	Appendix III	Boron	mg/L	11	0	0%	0.150	0.569	
2_12_4_107	MW-02	Appendix III	Calcium	mg/L	11	0	0%	-0.170	0.520	
2_12_4_108	MW-02	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	-0.086	0.746	
2_12_4_112	MW-02	Appendix III	Fluoride	mg/L	11	0	0%	-0.163	0.539	
2_12_4_120	MW-02	Appendix III	pH (field)	su	11	0	0%	-0.043	0.872	
2_12_4_124	MW-02	Appendix III	Sulfate (as SO4)	mg/L	11	7	64%	-0.411	0.245	
2_12_4_126	MW-02	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	0.036	0.891	
2_12_5_101	MW-02	Appendix IV	Antimony	mg/L	11	3	27%	-0.097	0.743	
2_12_5_102	MW-02	Appendix IV	Arsenic	mg/L	11	0	0%	0.204	0.441	
2_12_5_103	MW-02	Appendix IV	Barium	mg/L	11	0	0%	-0.217	0.411	
2_12_5_104	MW-02	Appendix IV	Beryllium	mg/L	11	1	9%	0.037	0.894	
2_12_5_106	MW-02	Appendix IV	Cadmium	mg/L	11	8	73%	-0.172	0.637	
2_12_5_109	MW-02	Appendix IV	Chromium, Total	mg/L	11	0	0%	0.133	0.616	
2_12_5_110	MW-02	Appendix IV	Cobalt	mg/L	11	0	0%	0.006	0.983	
2_12_5_113	MW-02	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	-0.163	0.539	
2_12_5_115	MW-02	Appendix IV	Lead	mg/L	11	1	9%	-0.100	0.715	
2_12_5_116	MW-02	Appendix IV	Lithium	mg/L	11	0	0%	-0.105	0.692	
2_12_5_118	MW-02	Appendix IV	Molybdenum	mg/L	11	0	0%	0.631	0.017	*
2_12_5_121	MW-02	Appendix IV	Radium 226 and 228	pCi/L	11	3	27%	0.099	0.738	
2_12_5_122	MW-02	Appendix IV	Selenium	mg/L	11	0	0%	-0.240	0.364	
2_12_5_125	MW-02	Appendix IV	Thallium	mg/L	11	10	91%	NA	NA	
2_12_6_111	MW-02	Part 115	Copper	mg/L	11	0	0%	-0.402	0.128	
2_12_6_114	MW-02	Part 115	Iron	mg/L	11	0	0%	0.084	0.751	
2_12_6_119	MW-02	Part 115	Nickel	mg/L	11	0	0%	0.206	0.435	
2_12_6_129	MW-02	Part 115	Vanadium	mg/L	11	1	9%	0.237	0.387	
2_12_6_130	MW-02	Part 115	Zinc	mg/L	11	0	0%	-0.182	0.491	
2_13_4_105	MW-03	Appendix III	Boron	mg/L	11	0	0%	-0.312	0.238	
2_13_4_107	MW-03	Appendix III	Calcium	mg/L	11	0	0%	-0.221	0.403	
2_13_4_108	MW-03	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.253	0.338	
2_13_4_112	MW-03	Appendix III	Fluoride	mg/L	11	0	0%	-0.003	0.990	
2_13_4_120	MW-03	Appendix III	pH (field)	su	11	0	0%	-0.141	0.594	
2_13_4_124	MW-03	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	0.287	0.278	
2_13_4_126	MW-03	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	0.129	0.625	
2_13_5_101	MW-03	Appendix IV	Antimony	mg/L	11	6	55%	-0.105	0.756	

(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_13_5_102	MW-03	Appendix IV	Arsenic	mg/L	11	0	0%	0.257	0.332	
2_13_5_103	MW-03	Appendix IV	Barium	mg/L	11	0	0%	-0.563	0.033	*
2_13_5_104	MW-03	Appendix IV	Beryllium	mg/L	11	7	64%	-0.646	0.068	
2_13_5_106	MW-03	Appendix IV	Cadmium	mg/L	11	10	91%	NA	NA	
2_13_5_109	MW-03	Appendix IV	Chromium, Total	mg/L	11	0	0%	-0.116	0.660	
2_13_5_110	MW-03	Appendix IV	Cobalt	mg/L	11	0	0%	-0.203	0.443	
2_13_5_113	MW-03	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	-0.003	0.990	
2_13_5_115	MW-03	Appendix IV	Lead	mg/L	11	10	91%	NA	NA	
2_13_5_116	MW-03	Appendix IV	Lithium	mg/L	11	0	0%	0.114	0.666	
2_13_5_117	MW-03	Appendix IV	Mercury	mg/L	11	10	91%	NA	NA	
2_13_5_118	MW-03	Appendix IV	Molybdenum	mg/L	11	8	73%	-0.021	0.953	
2_13_5_121	MW-03	Appendix IV	Radium 226 and 228	pCi/L	11	1	9%	-0.521	0.057	
2_13_5_122	MW-03	Appendix IV	Selenium	mg/L	11	3	27%	0.256	0.386	
2_13_5_125	MW-03	Appendix IV	Thallium	mg/L	11	10	91%	NA	NA	
2_13_6_111	MW-03	Part 115	Copper	mg/L	11	5	45%	-0.361	0.264	
2_13_6_114	MW-03	Part 115	Iron	mg/L	11	0	0%	0.567	0.032	*
2_13_6_119	MW-03	Part 115	Nickel	mg/L	11	1	9%	-0.076	0.782	
2_13_6_129	MW-03	Part 115	Vanadium	mg/L	11	9	82%	-0.500	0.157	
2_13_6_130	MW-03	Part 115	Zinc	mg/L	11	6	55%	0.374	0.268	
2_14_4_105	MW-04	Appendix III	Boron	mg/L	11	0	0%	0.126	0.634	
2_14_4_107	MW-04	Appendix III	Calcium	mg/L	11	0	0%	-0.168	0.526	
2_14_4_108	MW-04	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.374	0.158	
2_14_4_112	MW-04	Appendix III	Fluoride	mg/L	11	0	0%	0.229	0.387	
2_14_4_120	MW-04	Appendix III	pH (field)	su	11	0	0%	-0.065	0.805	
2_14_4_124	MW-04	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	0.353	0.181	
2_14_4_126	MW-04	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	-0.208	0.431	
2_14_5_101	MW-04	Appendix IV	Antimony	mg/L	11	8	73%	-0.655	0.073	
2_14_5_102	MW-04	Appendix IV	Arsenic	mg/L	11	0	0%	-0.101	0.704	
2_14_5_103	MW-04	Appendix IV	Barium	mg/L	11	0	0%	-0.110	0.676	
2_14_5_109	MW-04	Appendix IV	Chromium, Total	mg/L	11	0	0%	0.015	0.954	
2_14_5_110	MW-04	Appendix IV	Cobalt	mg/L	11	0	0%	0.115	0.663	
2_14_5_113	MW-04	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.229	0.387	
2_14_5_116	MW-04	Appendix IV	Lithium	mg/L	11	0	0%	-0.039	0.884	
2_14_5_118	MW-04	Appendix IV	Molybdenum	mg/L	11	2	18%	-0.113	0.692	
2_14_5_121	MW-04	Appendix IV	Radium 226 and 228	pCi/L	11	2	18%	0.188	0.508	
2_14_5_122	MW-04	Appendix IV	Selenium	mg/L	11	5	45%	-0.325	0.314	
2_14_6_111	MW-04	Part 115	Copper	mg/L	11	9	82%	-0.500	0.157	
2_14_6_114	MW-04	Part 115	Iron	mg/L	11	0	0%	-0.090	0.733	
2_14_6_119	MW-04	Part 115	Nickel	mg/L	11	0	0%	0.022	0.935	
2_14_6_129	MW-04	Part 115	Vanadium	mg/L	11	10	91%	NA	NA	
2_14_6_130	MW-04	Part 115	Zinc	mg/L	11	8	73%	-0.387	0.290	
2_19_4_105	MW-09	Appendix III	Boron	mg/L	11	0	0%	-0.057	0.828	

(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_19_4_107	MW-09	Appendix III	Calcium	mg/L	11	0	0%	0.433	0.102	
2_19_4_108	MW-09	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.426	0.107	
2_19_4_112	MW-09	Appendix III	Fluoride	mg/L	11	0	0%	0.432	0.102	
2_19_4_120	MW-09	Appendix III	pH (field)	su	11	0	0%	0.040	0.880	
2_19_4_124	MW-09	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	0.466	0.078	
2_19_4_126	MW-09	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	0.517	0.051	
2_19_5_101	MW-09	Appendix IV	Antimony	mg/L	11	7	64%	-0.457	0.196	
2_19_5_102	MW-09	Appendix IV	Arsenic	mg/L	11	0	0%	-0.072	0.784	
2_19_5_103	MW-09	Appendix IV	Barium	mg/L	11	0	0%	0.099	0.707	
2_19_5_104	MW-09	Appendix IV	Beryllium	mg/L	11	10	91%	NA	NA	
2_19_5_109	MW-09	Appendix IV	Chromium, Total	mg/L	11	0	0%	0.190	0.472	
2_19_5_110	MW-09	Appendix IV	Cobalt	mg/L	11	0	0%	-0.095	0.718	
2_19_5_113	MW-09	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.432	0.102	
2_19_5_116	MW-09	Appendix IV	Lithium	mg/L	11	0	0%	0.262	0.322	
2_19_5_117	MW-09	Appendix IV	Mercury	mg/L	11	9	82%	-0.500	0.157	
2_19_5_118	MW-09	Appendix IV	Molybdenum	mg/L	11	0	0%	0.446	0.091	
2_19_5_121	MW-09	Appendix IV	Radium 226 and 228	pCi/L	11	10	91%	NA	NA	
2_19_5_122	MW-09	Appendix IV	Selenium	mg/L	11	2	18%	-0.085	0.766	
2_19_6_111	MW-09	Part 115	Copper	mg/L	11	9	82%	-0.500	0.157	
2_19_6_114	MW-09	Part 115	Iron	mg/L	11	0	0%	0.408	0.123	
2_19_6_119	MW-09	Part 115	Nickel	mg/L	11	0	0%	0.364	0.168	
2_19_6_130	MW-09	Part 115	Zinc	mg/L	11	8	73%	-0.611	0.095	
2_21_4_105	MW-11	Appendix III	Boron	mg/L	11	0	0%	0.418	0.114	
2_21_4_107	MW-11	Appendix III	Calcium	mg/L	11	0	0%	0.329	0.213	
2_21_4_108	MW-11	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.329	0.214	
2_21_4_112	MW-11	Appendix III	Fluoride	mg/L	11	0	0%	0.341	0.198	
2_21_4_120	MW-11	Appendix III	pH (field)	su	11	0	0%	-0.080	0.762	
2_21_4_124	MW-11	Appendix III	Sulfate (as SO4)	mg/L	11	2	18%	0.534	0.060	
2_21_4_126	MW-11	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	-0.270	0.308	
2_21_5_101	MW-11	Appendix IV	Antimony	mg/L	11	7	64%	-0.539	0.127	
2_21_5_102	MW-11	Appendix IV	Arsenic	mg/L	11	0	0%	0.168	0.525	
2_21_5_103	MW-11	Appendix IV	Barium	mg/L	11	0	0%	0.260	0.325	
2_21_5_104	MW-11	Appendix IV	Beryllium	mg/L	11	9	82%	-0.500	0.157	
2_21_5_106	MW-11	Appendix IV	Cadmium	mg/L	11	9	82%	-0.500	0.157	
2_21_5_109	MW-11	Appendix IV	Chromium, Total	mg/L	11	0	0%	-0.096	0.718	
2_21_5_110	MW-11	Appendix IV	Cobalt	mg/L	11	0	0%	-0.155	0.557	
2_21_5_113	MW-11	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.341	0.198	
2_21_5_115	MW-11	Appendix IV	Lead	mg/L	11	3	27%	-0.132	0.656	
2_21_5_116	MW-11	Appendix IV	Lithium	mg/L	11	0	0%	0.296	0.263	
2_21_5_117	MW-11	Appendix IV	Mercury	mg/L	11	10	91%	NA	NA	
2_21_5_118	MW-11	Appendix IV	Molybdenum	mg/L	11	2	18%	0.016	0.954	
2_21_5_121	MW-11	Appendix IV	Radium 226 and 228	pCi/L	11	3	27%	-0.451	0.128	

(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_5_122	MW-11	Appendix IV	Selenium	mg/L	11	3	27%	0.181	0.540	
2_21_5_125	MW-11	Appendix IV	Thallium	mg/L	11	10	91%	NA	NA	
2_21_6_111	MW-11	Part 115	Copper	mg/L	11	3	27%	-0.199	0.501	
2_21_6_114	MW-11	Part 115	Iron	mg/L	11	0	0%	0.389	0.142	
2_21_6_119	MW-11	Part 115	Nickel	mg/L	11	0	0%	-0.079	0.766	
2_21_6_123	MW-11	Part 115	Silver	mg/L	11	9	82%	-0.500	0.157	
2_21_6_129	MW-11	Part 115	Vanadium	mg/L	11	9	82%	-0.500	0.157	
2_21_6_130	MW-11	Part 115	Zinc	mg/L	11	3	27%	0.056	0.850	
2_22_4_105	MW-12	Appendix III	Boron	mg/L	11	0	0%	0.235	0.375	
2_22_4_107	MW-12	Appendix III	Calcium	mg/L	11	0	0%	0.073	0.783	
2_22_4_108	MW-12	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	-0.039	0.883	
2_22_4_112	MW-12	Appendix III	Fluoride	mg/L	11	0	0%	0.068	0.797	
2_22_4_120	MW-12	Appendix III	pH (field)	su	11	0	0%	0.132	0.619	
2_22_4_124	MW-12	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	0.256	0.332	
2_22_4_126	MW-12	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	0.072	0.784	
2_22_5_101	MW-12	Appendix IV	Antimony	mg/L	11	0	0%	0.444	0.093	
2_22_5_102	MW-12	Appendix IV	Arsenic	mg/L	11	0	0%	0.473	0.073	
2_22_5_103	MW-12	Appendix IV	Barium	mg/L	11	0	0%	0.456	0.084	
2_22_5_106	MW-12	Appendix IV	Cadmium	mg/L	11	0	0%	0.474	0.073	
2_22_5_109	MW-12	Appendix IV	Chromium, Total	mg/L	11	4	36%	0.375	0.224	
2_22_5_110	MW-12	Appendix IV	Cobalt	mg/L	11	5	45%	0.543	0.093	
2_22_5_113	MW-12	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.068	0.797	
2_22_5_115	MW-12	Appendix IV	Lead	mg/L	11	6	55%	0.119	0.725	
2_22_5_116	MW-12	Appendix IV	Lithium	mg/L	11	0	0%	0.386	0.145	
2_22_5_117	MW-12	Appendix IV	Mercury	mg/L	11	9	82%	-0.500	0.157	
2_22_5_118	MW-12	Appendix IV	Molybdenum	mg/L	11	0	0%	0.327	0.217	
2_22_5_121	MW-12	Appendix IV	Radium 226 and 228	pCi/L	11	8	73%	-0.496	0.174	
2_22_5_122	MW-12	Appendix IV	Selenium	mg/L	11	0	0%	0.582	0.028	*
2_22_6_111	MW-12	Part 115	Copper	mg/L	11	0	0%	0.367	0.165	
2_22_6_114	MW-12	Part 115	Iron	mg/L	11	6	55%	0.091	0.788	
2_22_6_119	MW-12	Part 115	Nickel	mg/L	11	0	0%	0.186	0.482	
2_22_6_129	MW-12	Part 115	Vanadium	mg/L	11	6	55%	-0.030	0.930	
2_22_6_130	MW-12	Part 115	Zinc	mg/L	11	0	0%	0.001	0.996	
2_48_4_105	MW-38	Appendix III	Boron	mg/L	1	0	0%	NA	NA	
2_48_4_107	MW-38	Appendix III	Calcium	mg/L	1	0	0%	NA	NA	
2_48_4_108	MW-38	Appendix III	Chloride (as Cl)	mg/L	1	0	0%	NA	NA	
2_48_4_112	MW-38	Appendix III	Fluoride	mg/L	1	0	0%	NA	NA	
2_48_4_120	MW-38	Appendix III	pH (field)	su	1	0	0%	NA	NA	
2_48_4_124	MW-38	Appendix III	Sulfate (as SO4)	mg/L	1	0	0%	NA	NA	
2_48_4_126	MW-38	Appendix III	Total Dissolved Solids	mg/L	1	0	0%	NA	NA	
2_48_5_101	MW-38	Appendix IV	Antimony	mg/L	1	0	0%	NA	NA	
2_48_5_102	MW-38	Appendix IV	Arsenic	mg/L	1	0	0%	NA	NA	

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 4: Autocorrelation Tests, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Autocorrelation	Box-Ljung p-value	Sig.
2_48_5_103	MW-38	Appendix IV	Barium	mg/L	1	0	0%	NA	NA	
2_48_5_106	MW-38	Appendix IV	Cadmium	mg/L	1	0	0%	NA	NA	
2_48_5_109	MW-38	Appendix IV	Chromium, Total	mg/L	1	0	0%	NA	NA	
2_48_5_110	MW-38	Appendix IV	Cobalt	mg/L	1	0	0%	NA	NA	
2_48_5_113	MW-38	Appendix IV	Fluoride (App IV)	mg/L	1	0	0%	NA	NA	
2_48_5_115	MW-38	Appendix IV	Lead	mg/L	1	0	0%	NA	NA	
2_48_5_116	MW-38	Appendix IV	Lithium	mg/L	1	0	0%	NA	NA	
2_48_5_118	MW-38	Appendix IV	Molybdenum	mg/L	1	0	0%	NA	NA	
2_48_5_121	MW-38	Appendix IV	Radium 226 and 228	pCi/L	1	0	0%	NA	NA	
2_48_5_122	MW-38	Appendix IV	Selenium	mg/L	1	0	0%	NA	NA	
2_48_6_111	MW-38	Part 115	Copper	mg/L	1	0	0%	NA	NA	
2_48_6_114	MW-38	Part 115	Iron	mg/L	1	0	0%	NA	NA	
2_48_6_119	MW-38	Part 115	Nickel	mg/L	1	0	0%	NA	NA	
2_48_6_129	MW-38	Part 115	Vanadium	mg/L	1	0	0%	NA	NA	
2_48_6_130	MW-38	Part 115	Zinc	mg/L	1	0	0%	NA	NA	
3_20_4_105	MW-10	Appendix III	Boron	mg/L	11	0	0%	0.499	0.059	
3_20_4_107	MW-10	Appendix III	Calcium	mg/L	11	0	0%	0.209	0.430	
3_20_4_108	MW-10	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.526	0.046	*
3_20_4_112	MW-10	Appendix III	Fluoride	mg/L	11	0	0%	0.496	0.061	
3_20_4_120	MW-10	Appendix III	pH (field)	su	11	0	0%	-0.010	0.971	
3_20_4_124	MW-10	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	0.193	0.466	
3_20_4_126	MW-10	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	-0.007	0.979	
3_20_5_101	MW-10	Appendix IV	Antimony	mg/L	11	7	64%	-0.363	0.304	
3_20_5_102	MW-10	Appendix IV	Arsenic	mg/L	11	0	0%	0.278	0.293	
3_20_5_103	MW-10	Appendix IV	Barium	mg/L	11	0	0%	0.292	0.270	
3_20_5_104	MW-10	Appendix IV	Beryllium	mg/L	11	5	45%	-0.398	0.218	
3_20_5_109	MW-10	Appendix IV	Chromium, Total	mg/L	11	0	0%	0.495	0.061	
3_20_5_110	MW-10	Appendix IV	Cobalt	mg/L	11	1	9%	-0.035	0.897	
3_20_5_113	MW-10	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.496	0.061	
3_20_5_115	MW-10	Appendix IV	Lead	mg/L	11	9	82%	-0.500	0.157	
3_20_5_116	MW-10	Appendix IV	Lithium	mg/L	11	0	0%	-0.109	0.681	
3_20_5_117	MW-10	Appendix IV	Mercury	mg/L	11	10	91%	NA	NA	
3_20_5_118	MW-10	Appendix IV	Molybdenum	mg/L	11	0	0%	0.139	0.600	
3_20_5_121	MW-10	Appendix IV	Radium 226 and 228	pCi/L	11	9	82%	-0.500	0.157	
3_20_5_122	MW-10	Appendix IV	Selenium	mg/L	11	1	9%	-0.194	0.478	
3_20_6_111	MW-10	Part 115	Copper	mg/L	11	8	73%	-0.659	0.071	
3_20_6_114	MW-10	Part 115	Iron	mg/L	11	0	0%	0.520	0.049	*
3_20_6_119	MW-10	Part 115	Nickel	mg/L	11	5	45%	-0.414	0.200	
3_20_6_129	MW-10	Part 115	Vanadium	mg/L	11	10	91%	NA	NA	
3_20_6_130	MW-10	Part 115	Zinc	mg/L	11	4	36%	-0.272	0.378	

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 5: Outlier Counts by Date

Date	Count
2022-11-28	1
2022-11-30	5
2022-12-01	1
2023-01-03	10
2023-01-04	7
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
2023-06-28	2
2023-08-07	1
2023-08-08	1
2023-10-24	3
2024-02-12	6
2024-02-13	9
2024-04-07	4

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_4_120	MW-06	Appendix III	pH (field)	su	11	0	0%	11	2023-02-06	NA	6.42
1_16_5_121	MW-06	Appendix IV	Radium 226 and 228	pCi/L	11	2	18%	9	2023-03-14	NA	1.91
1_16_5_122	MW-06	Appendix IV	Selenium	mg/L	11	5	45%	6	2024-02-13	1	0.000470
1_17_5_103	MW-07	Appendix IV	Barium	mg/L	11	0	0%	11	2023-04-18	10	0.250
1_17_5_121	MW-07	Appendix IV	Radium 226 and 228	pCi/L	11	2	18%	9	2023-08-07	1	2.36
1_18_4_120	MW-08	Appendix III	pH (field)	su	11	0	0%	11	2023-01-05	NA	6.21
1_18_5_122	MW-08	Appendix IV	Selenium	mg/L	11	5	45%	6	2024-02-13	1	0.000340
1_18_6_119	MW-08	Part 115	Nickel	mg/L	11	0	0%	11	2024-04-07	1	0.00320
1_28_6_111	MW-18	Part 115	Copper	mg/L	11	0	0%	11	2023-08-08	1	0.00150
1_29_4_120	MW-19	Appendix III	pH (field)	su	11	0	0%	11	2023-01-03	NA	6.39
1_30_4_107	MW-20	Appendix III	Calcium	mg/L	11	0	0%	11	2023-06-28	1	58.0
1_30_4_112	MW-20	Appendix III	Fluoride	mg/L	11	0	0%	11	2022-11-30	25	0.550
1_30_5_103	MW-20	Appendix IV	Barium	mg/L	11	0	0%	11	2022-11-30	1	0.940
1_30_5_113	MW-20	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	11	2022-11-30	25	0.550
1_30_5_122	MW-20	Appendix IV	Selenium	mg/L	11	5	45%	6	2024-02-13	1	0.000260
1_30_6_130	MW-20	Part 115	Zinc	mg/L	11	0	0%	11	2022-11-30	1	0.0710
1_40_4_105	MW-30	Appendix III	Boron	mg/L	11	0	0%	11	2023-03-13	50	3.50
1_40_4_107	MW-30	Appendix III	Calcium	mg/L	11	0	0%	11	2023-03-13	50	960

(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_40_4_120	MW-30	Appendix III	pH (field)	su	11	0	0%	11	2023-01-03	NA	6.48
1_40_5_110	MW-30	Appendix IV	Cobalt	mg/L	11	0	0%	11	2023-01-03	1	0.00440
1_40_5_116	MW-30	Appendix IV	Lithium	mg/L	11	0	0%	11	2023-03-13	50	0.270
1_40_5_122	MW-30	Appendix IV	Selenium	mg/L	11	6	55%	5	2024-02-12	1	0.000390
1_41_5_118	MW-31	Appendix IV	Molybdenum	mg/L	11	0	0%	11	2022-12-01	1	0.00210
1_41_5_122	MW-31	Appendix IV	Selenium	mg/L	11	5	45%	6	2024-02-12	1	0.000740
1_42_5_102	MW-32	Appendix IV	Arsenic	mg/L	11	0	0%	11	2024-02-12	1	0.00240
1_42_5_109	MW-32	Appendix IV	Chromium, Total	mg/L	11	0	0%	11	2024-02-12	1	0.00300
1_42_5_110	MW-32	Appendix IV	Cobalt	mg/L	11	0	0%	11	2024-02-12	1	0.00190
1_42_6_119	MW-32	Part 115	Nickel	mg/L	11	0	0%	11	2024-02-12	1	0.0230
1_42_6_130	MW-32	Part 115	Zinc	mg/L	11	0	0%	11	2022-11-30	1	0.0310
2_11_4_120	MW-01R	Appendix III	pH (field)	su	11	0	0%	11	2023-01-03	NA	6.02
2_11_5_109	MW-01R	Appendix IV	Chromium, Total	mg/L	11	0	0%	11	2024-02-13	1	0.0220
2_11_5_115	MW-01R	Appendix IV	Lead	mg/L	11	2	18%	9	2023-06-28	5	0.00530
2_11_5_118	MW-01R	Appendix IV	Molybdenum	mg/L	11	1	9%	10	2024-02-13	1	0.00560
2_11_5_122	MW-01R	Appendix IV	Selenium	mg/L	11	0	0%	11	2024-02-13	1	0.00180
2_11_6_119	MW-01R	Part 115	Nickel	mg/L	11	0	0%	11	2024-02-13	1	0.0220
2_12_4_108	MW-02	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	11	2023-02-08	50	67.0
2_12_4_112	MW-02	Appendix III	Fluoride	mg/L	11	0	0%	11	2023-02-08	50	4.50
2_12_5_101	MW-02	Appendix IV	Antimony	mg/L	11	3	27%	8	2023-04-18	5	0.000630
2_12_5_102	MW-02	Appendix IV	Arsenic	mg/L	11	0	0%	11	2024-02-13	1	0.000440
2_12_5_106	MW-02	Appendix IV	Cadmium	mg/L	11	8	73%	3	2023-10-24	1	0.000490
2_12_5_113	MW-02	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	11	2023-02-08	50	4.50
2_12_6_130	MW-02	Part 115	Zinc	mg/L	11	0	0%	11	2023-04-18	1	0.0250
2_13_4_108	MW-03	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	11	2022-11-28	100	300
2_13_4_112	MW-03	Appendix III	Fluoride	mg/L	11	0	0%	11	2023-01-04	5	1.60
2_13_5_101	MW-03	Appendix IV	Antimony	mg/L	11	6	55%	5	2023-04-18	5	0.000450
2_13_5_103	MW-03	Appendix IV	Barium	mg/L	11	0	0%	11	2023-01-04	1	0.130
2_13_5_113	MW-03	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	11	2023-01-04	5	1.60
2_13_6_119	MW-03	Part 115	Nickel	mg/L	11	1	9%	10	2023-01-04	1	0.0150
2_14_4_112	MW-04	Appendix III	Fluoride	mg/L	11	0	0%	11	2023-10-24	5	1.90
2_14_4_124	MW-04	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	11	2023-01-04	5	1.80
2_14_5_103	MW-04	Appendix IV	Barium	mg/L	11	0	0%	11	2023-01-04	1	0.460
2_14_5_113	MW-04	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	11	2023-10-24	5	1.90
2_19_5_103	MW-09	Appendix IV	Barium	mg/L	11	0	0%	11	2023-01-04	5	2.40
2_19_5_122	MW-09	Appendix IV	Selenium	mg/L	11	2	18%	9	2023-05-23	1	0.000120
2_21_5_102	MW-11	Appendix IV	Arsenic	mg/L	11	0	0%	11	2023-01-03	1	0.00410
2_21_5_109	MW-11	Appendix IV	Chromium, Total	mg/L	11	0	0%	11	2023-01-03	1	0.00860
2_21_5_110	MW-11	Appendix IV	Cobalt	mg/L	11	0	0%	11	2024-04-07	1	0.00240
2_21_5_115	MW-11	Appendix IV	Lead	mg/L	11	3	27%	8	2023-01-03	1	0.0680
2_21_6_111	MW-11	Part 115	Copper	mg/L	11	3	27%	8	2023-01-03	1	0.0190
2_21_6_119	MW-11	Part 115	Nickel	mg/L	11	0	0%	11	2023-01-03	1	0.00940
2_21_6_130	MW-11	Part 115	Zinc	mg/L	11	3	27%	8	2023-01-03	1	0.100

(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
3_20_4_107	MW-10	Appendix III	Calcium	mg/L	11	0	0%	11	2024-04-07	10	590
3_20_4_126	MW-10	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	11	2024-04-07	4166	3200
3_20_5_101	MW-10	Appendix IV	Antimony	mg/L	11	7	64%	4	2023-04-18	5	0.000340
3_20_5_110	MW-10	Appendix IV	Cobalt	mg/L	11	1	9%	10	2023-05-23	1	0.00180
3_20_5_122	MW-10	Appendix IV	Selenium	mg/L	11	1	9%	10	2024-02-13	1	0.000830

Table 7: Trend Tests: Lognormal MLE and MK

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Type	Method	Slope	p-value	Trend
1_16_4_105	MW-06	Appendix III	Boron	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000737	0.006	↓
1_16_4_107	MW-06	Appendix III	Calcium	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000373	0.058	↔
1_16_4_108	MW-06	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00426	0.000	↓
1_16_4_112	MW-06	Appendix III	Fluoride	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000259	0.254	↔
1_16_4_120	MW-06	Appendix III	pH (field)	su	11	0	0%	Nonparametric	MK	-0.000174	0.310	↔
1_16_4_124	MW-06	Appendix III	Sulfate (as SO4)	mg/L	11	1	9%	Parametric	Lognormal MLE	-0.00460	0.047	↔
1_16_4_126	MW-06	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	Nonparametric	MK	-0.235	0.068	↔
1_16_5_102	MW-06	Appendix IV	Arsenic	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000224	0.567	↔
1_16_5_103	MW-06	Appendix IV	Barium	mg/L	11	0	0%	Nonparametric	MK	-0.000256	0.256	↔
1_16_5_109	MW-06	Appendix IV	Chromium, Total	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00107	0.032	↔
1_16_5_110	MW-06	Appendix IV	Cobalt	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000819	0.045	↔
1_16_5_113	MW-06	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000259	0.254	↔
1_16_5_116	MW-06	Appendix IV	Lithium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00118	0.000	↓
1_16_5_122	MW-06	Appendix IV	Selenium	mg/L	11	5	45%	Nonparametric	MK	0	1.000	↔
1_16_6_114	MW-06	Part 115	Iron	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000965	0.008	↑
1_16_6_119	MW-06	Part 115	Nickel	mg/L	11	4	36%	Parametric	Lognormal MLE	-0.00159	0.007	↓
1_16_6_130	MW-06	Part 115	Zinc	mg/L	11	2	18%	Nonparametric	MK	0	0.063	↔
1_17_4_105	MW-07	Appendix III	Boron	mg/L	11	0	0%	Parametric	Lognormal MLE	0.0000659	0.658	↔
1_17_4_107	MW-07	Appendix III	Calcium	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000141	0.362	↔
1_17_4_108	MW-07	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	Nonparametric	MK	0	0.139	↔
1_17_4_112	MW-07	Appendix III	Fluoride	mg/L	11	1	9%	Parametric	Lognormal MLE	-0.000410	0.534	↔
1_17_4_120	MW-07	Appendix III	pH (field)	su	11	0	0%	Parametric	Lognormal MLE	0.0000379	0.334	↔
1_17_4_124	MW-07	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000456	0.414	↔
1_17_4_126	MW-07	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000419	0.054	↔
1_17_5_102	MW-07	Appendix IV	Arsenic	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000342	0.343	↔
1_17_5_103	MW-07	Appendix IV	Barium	mg/L	11	0	0%	Nonparametric	MK	0.0000400	0.297	↔
1_17_5_109	MW-07	Appendix IV	Chromium, Total	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000104	0.649	↔
1_17_5_110	MW-07	Appendix IV	Cobalt	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.0000918	0.711	↔
1_17_5_113	MW-07	Appendix IV	Fluoride (App IV)	mg/L	11	1	9%	Parametric	Lognormal MLE	-0.000410	0.534	↔
1_17_5_116	MW-07	Appendix IV	Lithium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000747	0.171	↔
1_17_5_121	MW-07	Appendix IV	Radium 226 and 228	pCi/L	11	2	18%	Parametric	Lognormal MLE	-0.000732	0.330	↔
1_17_6_114	MW-07	Part 115	Iron	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000183	0.420	↔
1_18_4_105	MW-08	Appendix III	Boron	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000633	0.345	↔
1_18_4_107	MW-08	Appendix III	Calcium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000468	0.000	↓
1_18_4_108	MW-08	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000112	0.793	↔
1_18_4_112	MW-08	Appendix III	Fluoride	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000844	0.203	↔
1_18_4_120	MW-08	Appendix III	pH (field)	su	11	0	0%	Nonparametric	MK	0.000451	0.029	↔
1_18_4_124	MW-08	Appendix III	Sulfate (as SO4)	mg/L	11	3	27%	Parametric	Lognormal MLE	-0.00256	0.500	↔
1_18_4_126	MW-08	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000177	0.353	↔
1_18_5_101	MW-08	Appendix IV	Antimony	mg/L	11	5	45%	Parametric	Lognormal MLE	-0.00297	0.165	↔
1_18_5_102	MW-08	Appendix IV	Arsenic	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000824	0.492	↔
1_18_5_103	MW-08	Appendix IV	Barium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000561	0.004	↓
1_18_5_109	MW-08	Appendix IV	Chromium, Total	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000761	0.077	↔

(Table continues on next page)

Table 7: 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_5_110	MW-08	Appendix IV	Cobalt	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000738	0.115	↔
1_18_5_113	MW-08	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000844	0.203	↔
1_18_5_116	MW-08	Appendix IV	Lithium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000183	0.690	↔
1_18_5_118	MW-08	Appendix IV	Molybdenum	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000337	0.797	↔
1_18_5_121	MW-08	Appendix IV	Radium 226 and 228	pCi/L	11	3	27%	Parametric	Lognormal MLE	-0.000986	0.249	↔
1_18_5_122	MW-08	Appendix IV	Selenium	mg/L	11	5	45%	Nonparametric	MK	0	0.084	↔
1_18_6_111	MW-08	Part 115	Copper	mg/L	11	5	45%	Parametric	Lognormal MLE	0.000840	0.462	↔
1_18_6_114	MW-08	Part 115	Iron	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000661	0.146	↔
1_18_6_119	MW-08	Part 115	Nickel	mg/L	11	0	0%	Parametric	Lognormal MLE	0.00163	0.008	↑
1_18_6_130	MW-08	Part 115	Zinc	mg/L	11	3	27%	Nonparametric	MK	0	0.479	↔
1_28_4_105	MW-18	Appendix III	Boron	mg/L	11	0	0%	Parametric	Lognormal MLE	0.00137	0.000	↑
1_28_4_107	MW-18	Appendix III	Calcium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000252	0.492	↔
1_28_4_108	MW-18	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000381	0.274	↔
1_28_4_112	MW-18	Appendix III	Fluoride	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000153	0.631	↔
1_28_4_120	MW-18	Appendix III	pH (field)	su	11	0	0%	Parametric	Lognormal MLE	0.0000420	0.005	↑
1_28_4_124	MW-18	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000111	0.826	↔
1_28_4_126	MW-18	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000334	0.199	↔
1_28_5_102	MW-18	Appendix IV	Arsenic	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000678	0.152	↔
1_28_5_103	MW-18	Appendix IV	Barium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.0000589	0.907	↔
1_28_5_106	MW-18	Appendix IV	Cadmium	mg/L	11	4	36%	Parametric	Lognormal MLE	-0.00398	0.016	↔
1_28_5_110	MW-18	Appendix IV	Cobalt	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00203	0.000	↓
1_28_5_113	MW-18	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000153	0.631	↔
1_28_5_116	MW-18	Appendix IV	Lithium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000579	0.210	↔
1_28_5_118	MW-18	Appendix IV	Molybdenum	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000308	0.534	↔
1_28_5_122	MW-18	Appendix IV	Selenium	mg/L	11	0	0%	Parametric	Lognormal MLE	0.00285	0.036	↔
1_28_6_111	MW-18	Part 115	Copper	mg/L	11	0	0%	Parametric	Lognormal MLE	0.0000428	0.957	↔
1_28_6_114	MW-18	Part 115	Iron	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000122	0.796	↔
1_28_6_119	MW-18	Part 115	Nickel	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00146	0.001	↓
1_28_6_130	MW-18	Part 115	Zinc	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00134	0.007	↓
1_29_4_105	MW-19	Appendix III	Boron	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000371	0.296	↔
1_29_4_107	MW-19	Appendix III	Calcium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000237	0.227	↔
1_29_4_108	MW-19	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00166	0.000	↓
1_29_4_112	MW-19	Appendix III	Fluoride	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000550	0.004	↓
1_29_4_120	MW-19	Appendix III	pH (field)	su	11	0	0%	Parametric	Lognormal MLE	0	0.922	↔
1_29_4_124	MW-19	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000199	0.643	↔
1_29_4_126	MW-19	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000548	0.001	↓
1_29_5_102	MW-19	Appendix IV	Arsenic	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000560	0.383	↔
1_29_5_103	MW-19	Appendix IV	Barium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000444	0.080	↔
1_29_5_104	MW-19	Appendix IV	Beryllium	mg/L	11	3	27%	Parametric	Lognormal MLE	0.000825	0.015	↔
1_29_5_109	MW-19	Appendix IV	Chromium, Total	mg/L	11	5	45%	Parametric	Lognormal MLE	-0.00136	0.140	↔
1_29_5_110	MW-19	Appendix IV	Cobalt	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00214	0.011	↔
1_29_5_113	MW-19	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000550	0.004	↓
1_29_5_116	MW-19	Appendix IV	Lithium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000693	0.000	↓

(Table continues on next page)

Table 7: Trend Tests: Lognormal MLE and MK *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Type	Method	Slope	p-value	Trend
1_29_5_118	MW-19	Appendix IV	Molybdenum	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000981	0.132	↔
1_29_5_121	MW-19	Appendix IV	Radium 226 and 228	pCi/L	11	3	27%	Parametric	Lognormal MLE	-0.000645	0.345	↔
1_29_6_114	MW-19	Part 115	Iron	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000599	0.070	↔
1_29_6_119	MW-19	Part 115	Nickel	mg/L	11	1	9%	Parametric	Lognormal MLE	-0.000801	0.189	↔
1_30_4_105	MW-20	Appendix III	Boron	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000278	0.344	↔
1_30_4_107	MW-20	Appendix III	Calcium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000128	0.799	↔
1_30_4_108	MW-20	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000304	0.433	↔
1_30_4_112	MW-20	Appendix III	Fluoride	mg/L	11	0	0%	Nonparametric	MK	-0.0000247	0.814	↔
1_30_4_120	MW-20	Appendix III	pH (field)	su	11	0	0%	Parametric	Lognormal MLE	0.0000281	0.345	↔
1_30_4_124	MW-20	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000825	0.438	↔
1_30_4_126	MW-20	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000120	0.537	↔
1_30_5_101	MW-20	Appendix IV	Antimony	mg/L	11	4	36%	Parametric	Lognormal MLE	-0.000250	0.807	↔
1_30_5_102	MW-20	Appendix IV	Arsenic	mg/L	11	0	0%	Parametric	Lognormal MLE	0.0000245	0.932	↔
1_30_5_103	MW-20	Appendix IV	Barium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000588	0.246	↔
1_30_5_109	MW-20	Appendix IV	Chromium, Total	mg/L	11	5	45%	Parametric	Lognormal MLE	0.000221	0.614	↔
1_30_5_110	MW-20	Appendix IV	Cobalt	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000719	0.001	↓
1_30_5_113	MW-20	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	Nonparametric	MK	-0.0000247	0.814	↔
1_30_5_115	MW-20	Appendix IV	Lead	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000666	0.152	↔
1_30_5_116	MW-20	Appendix IV	Lithium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000739	0.137	↔
1_30_5_118	MW-20	Appendix IV	Molybdenum	mg/L	11	0	0%	Parametric	Lognormal MLE	0.0000252	0.922	↔
1_30_5_122	MW-20	Appendix IV	Selenium	mg/L	11	5	45%	Nonparametric	MK	0	0.186	↔
1_30_6_111	MW-20	Part 115	Copper	mg/L	11	1	9%	Parametric	Lognormal MLE	0.000896	0.088	↔
1_30_6_114	MW-20	Part 115	Iron	mg/L	11	0	0%	Parametric	Lognormal MLE	0.0000154	0.934	↔
1_30_6_119	MW-20	Part 115	Nickel	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000786	0.000	↓
1_30_6_130	MW-20	Part 115	Zinc	mg/L	11	0	0%	Nonparametric	MK	-0.0000222	0.058	↔
1_40_4_105	MW-30	Appendix III	Boron	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000455	0.219	↔
1_40_4_107	MW-30	Appendix III	Calcium	mg/L	11	0	0%	Nonparametric	MK	-0.132	0.239	↔
1_40_4_108	MW-30	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00157	0.000	↓
1_40_4_112	MW-30	Appendix III	Fluoride	mg/L	11	0	0%	Parametric	Lognormal MLE	0.0000677	0.752	↔
1_40_4_120	MW-30	Appendix III	pH (field)	su	11	0	0%	Nonparametric	MK	0.0000539	0.815	↔
1_40_4_124	MW-30	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000124	0.635	↔
1_40_4_126	MW-30	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000142	0.482	↔
1_40_5_102	MW-30	Appendix IV	Arsenic	mg/L	11	2	18%	Parametric	Lognormal MLE	0.000127	0.926	↔
1_40_5_103	MW-30	Appendix IV	Barium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000880	0.071	↔
1_40_5_109	MW-30	Appendix IV	Chromium, Total	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00111	0.070	↔
1_40_5_110	MW-30	Appendix IV	Cobalt	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000954	0.399	↔
1_40_5_113	MW-30	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	Parametric	Lognormal MLE	0.0000677	0.752	↔
1_40_5_116	MW-30	Appendix IV	Lithium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000721	0.114	↔
1_40_5_118	MW-30	Appendix IV	Molybdenum	mg/L	11	3	27%	Parametric	Lognormal MLE	-0.000311	0.833	↔
1_40_6_114	MW-30	Part 115	Iron	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000768	0.546	↔
1_40_6_119	MW-30	Part 115	Nickel	mg/L	11	2	18%	Parametric	Lognormal MLE	-0.000691	0.618	↔
1_41_4_105	MW-31	Appendix III	Boron	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000250	0.251	↔
1_41_4_107	MW-31	Appendix III	Calcium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.0000180	0.939	↔

(Table continues on next page)

Table 7: 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_4_108	MW-31	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000300	0.049	↔
1_41_4_112	MW-31	Appendix III	Fluoride	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.0000690	0.449	↔
1_41_4_120	MW-31	Appendix III	pH (field)	su	11	0	0%	Parametric	Lognormal MLE	0.0000219	0.375	↔
1_41_4_124	MW-31	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00124	0.057	↔
1_41_4_126	MW-31	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000169	0.173	↔
1_41_5_102	MW-31	Appendix IV	Arsenic	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000401	0.244	↔
1_41_5_103	MW-31	Appendix IV	Barium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000506	0.173	↔
1_41_5_109	MW-31	Appendix IV	Chromium, Total	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.0000376	0.899	↔
1_41_5_110	MW-31	Appendix IV	Cobalt	mg/L	11	1	9%	Parametric	Lognormal MLE	-0.000331	0.554	↔
1_41_5_113	MW-31	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.0000690	0.449	↔
1_41_5_116	MW-31	Appendix IV	Lithium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000536	0.002	↓
1_41_5_118	MW-31	Appendix IV	Molybdenum	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00146	0.003	↓
1_41_5_121	MW-31	Appendix IV	Radium 226 and 228	pCi/L	11	3	27%	Parametric	Lognormal MLE	-0.000497	0.463	↔
1_41_5_122	MW-31	Appendix IV	Selenium	mg/L	11	5	45%	Nonparametric	MK	0	0.324	↔
1_41_6_114	MW-31	Part 115	Iron	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00625	0.000	↓
1_42_4_105	MW-32	Appendix III	Boron	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000182	0.594	↔
1_42_4_107	MW-32	Appendix III	Calcium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000296	0.275	↔
1_42_4_108	MW-32	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000492	0.000	↓
1_42_4_112	MW-32	Appendix III	Fluoride	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000197	0.126	↔
1_42_4_120	MW-32	Appendix III	pH (field)	su	11	0	0%	Parametric	Lognormal MLE	0	0.868	↔
1_42_4_124	MW-32	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00120	0.436	↔
1_42_4_126	MW-32	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000210	0.353	↔
1_42_5_102	MW-32	Appendix IV	Arsenic	mg/L	11	0	0%	Nonparametric	MK	0	0.310	↔
1_42_5_103	MW-32	Appendix IV	Barium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00168	0.169	↔
1_42_5_109	MW-32	Appendix IV	Chromium, Total	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000878	0.457	↔
1_42_5_110	MW-32	Appendix IV	Cobalt	mg/L	11	0	0%	Nonparametric	MK	0	0.350	↔
1_42_5_113	MW-32	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000197	0.126	↔
1_42_5_116	MW-32	Appendix IV	Lithium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000303	0.452	↔
1_42_5_118	MW-32	Appendix IV	Molybdenum	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000349	0.408	↔
1_42_6_114	MW-32	Part 115	Iron	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000606	0.069	↔
1_42_6_119	MW-32	Part 115	Nickel	mg/L	11	0	0%	Nonparametric	MK	0	0.098	↔
1_42_6_130	MW-32	Part 115	Zinc	mg/L	11	0	0%	Nonparametric	MK	0	1.000	↔
2_11_4_105	MW-01R	Appendix III	Boron	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000788	0.303	↔
2_11_4_107	MW-01R	Appendix III	Calcium	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000400	0.512	↔
2_11_4_108	MW-01R	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00109	0.224	↔
2_11_4_112	MW-01R	Appendix III	Fluoride	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00122	0.037	↔
2_11_4_120	MW-01R	Appendix III	pH (field)	su	11	0	0%	Nonparametric	MK	-0.000212	0.696	↔
2_11_4_124	MW-01R	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00113	0.650	↔
2_11_4_126	MW-01R	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	Parametric	Lognormal MLE	0.0000351	0.746	↔
2_11_5_101	MW-01R	Appendix IV	Antimony	mg/L	11	3	27%	Parametric	Lognormal MLE	-0.00112	0.384	↔
2_11_5_102	MW-01R	Appendix IV	Arsenic	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000853	0.306	↔
2_11_5_103	MW-01R	Appendix IV	Barium	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000714	0.242	↔
2_11_5_104	MW-01R	Appendix IV	Beryllium	mg/L	11	1	9%	Parametric	Lognormal MLE	-0.00198	0.048	↔

(Table continues on next page)

Table 7: Trend Tests: Lognormal MLE and MK *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Type	Method	Slope	p-value	Trend
2_11_5_109	MW-01R	Appendix IV	Chromium, Total	mg/L	11	0	0%	Parametric	Lognormal MLE	0.00237	0.085	↔
2_11_5_110	MW-01R	Appendix IV	Cobalt	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000197	0.864	↔
2_11_5_113	MW-01R	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00122	0.037	↔
2_11_5_115	MW-01R	Appendix IV	Lead	mg/L	11	2	18%	Parametric	Lognormal MLE	-0.000159	0.915	↔
2_11_5_116	MW-01R	Appendix IV	Lithium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000887	0.266	↔
2_11_5_118	MW-01R	Appendix IV	Molybdenum	mg/L	11	1	9%	Parametric	Lognormal MLE	0.00216	0.088	↔
2_11_5_122	MW-01R	Appendix IV	Selenium	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000838	0.283	↔
2_11_6_111	MW-01R	Part 115	Copper	mg/L	11	5	45%	Nonparametric	MK	0	0.118	↔
2_11_6_114	MW-01R	Part 115	Iron	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000311	0.781	↔
2_11_6_119	MW-01R	Part 115	Nickel	mg/L	11	0	0%	Nonparametric	MK	0	0.533	↔
2_11_6_129	MW-01R	Part 115	Vanadium	mg/L	11	2	18%	Parametric	Lognormal MLE	0.00264	0.040	↔
2_11_6_130	MW-01R	Part 115	Zinc	mg/L	11	2	18%	Nonparametric	MK	0	0.511	↔
2_12_4_105	MW-02	Appendix III	Boron	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000439	0.020	↔
2_12_4_107	MW-02	Appendix III	Calcium	mg/L	11	0	0%	Parametric	Lognormal MLE	0.0000401	0.806	↔
2_12_4_108	MW-02	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	Nonparametric	MK	0	0.583	↔
2_12_4_112	MW-02	Appendix III	Fluoride	mg/L	11	0	0%	Nonparametric	MK	0.00153	0.178	↔
2_12_4_120	MW-02	Appendix III	pH (field)	su	11	0	0%	Parametric	Lognormal MLE	0.0000140	0.648	↔
2_12_4_126	MW-02	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000127	0.374	↔
2_12_5_101	MW-02	Appendix IV	Antimony	mg/L	11	3	27%	Parametric	Lognormal MLE	-0.000238	0.823	↔
2_12_5_102	MW-02	Appendix IV	Arsenic	mg/L	11	0	0%	Nonparametric	MK	0	0.482	↔
2_12_5_103	MW-02	Appendix IV	Barium	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000108	0.729	↔
2_12_5_104	MW-02	Appendix IV	Beryllium	mg/L	11	1	9%	Parametric	Lognormal MLE	-0.00247	0.036	↔
2_12_5_109	MW-02	Appendix IV	Chromium, Total	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00398	0.100	↔
2_12_5_110	MW-02	Appendix IV	Cobalt	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00241	0.166	↔
2_12_5_113	MW-02	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	Nonparametric	MK	0.00153	0.178	↔
2_12_5_115	MW-02	Appendix IV	Lead	mg/L	11	1	9%	Parametric	Lognormal MLE	-0.00185	0.395	↔
2_12_5_116	MW-02	Appendix IV	Lithium	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000134	0.700	↔
2_12_5_118	MW-02	Appendix IV	Molybdenum	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00122	0.017	↔
2_12_5_121	MW-02	Appendix IV	Radium 226 and 228	pCi/L	11	3	27%	Parametric	Lognormal MLE	-0.00130	0.217	↔
2_12_5_122	MW-02	Appendix IV	Selenium	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000151	0.832	↔
2_12_6_111	MW-02	Part 115	Copper	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000622	0.644	↔
2_12_6_114	MW-02	Part 115	Iron	mg/L	11	0	0%	Parametric	Lognormal MLE	0.0000687	0.821	↔
2_12_6_119	MW-02	Part 115	Nickel	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00290	0.082	↔
2_12_6_129	MW-02	Part 115	Vanadium	mg/L	11	1	9%	Parametric	Lognormal MLE	0.0000202	0.989	↔
2_12_6_130	MW-02	Part 115	Zinc	mg/L	11	0	0%	Nonparametric	MK	0	0.585	↔
2_13_4_105	MW-03	Appendix III	Boron	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000119	0.444	↔
2_13_4_107	MW-03	Appendix III	Calcium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.0000456	0.819	↔
2_13_4_108	MW-03	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00143	0.000	↓
2_13_4_112	MW-03	Appendix III	Fluoride	mg/L	11	0	0%	Nonparametric	MK	-0.0000552	0.384	↔
2_13_4_120	MW-03	Appendix III	pH (field)	su	11	0	0%	Parametric	Lognormal MLE	0.0000340	0.208	↔
2_13_4_124	MW-03	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	Parametric	Lognormal MLE	0.00129	0.365	↔
2_13_4_126	MW-03	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	Nonparametric	MK	0	0.492	↔
2_13_5_102	MW-03	Appendix IV	Arsenic	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000537	0.379	↔

(Table continues on next page)

Table 7: Trend Tests: Lognormal MLE and MK *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Type	Method	Slope	p-value	Trend
2_13_5_103	MW-03	Appendix IV	Barium	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000623	0.332	↔
2_13_5_109	MW-03	Appendix IV	Chromium, Total	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000516	0.302	↔
2_13_5_110	MW-03	Appendix IV	Cobalt	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000567	0.517	↔
2_13_5_113	MW-03	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	Nonparametric	MK	-0.0000552	0.384	↔
2_13_5_116	MW-03	Appendix IV	Lithium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000969	0.001	↓
2_13_5_121	MW-03	Appendix IV	Radium 226 and 228	pCi/L	11	1	9%	Parametric	Lognormal MLE	-0.000519	0.356	↔
2_13_5_122	MW-03	Appendix IV	Selenium	mg/L	11	3	27%	Parametric	Lognormal MLE	0.00178	0.032	↔
2_13_6_114	MW-03	Part 115	Iron	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00412	0.005	↓
2_13_6_119	MW-03	Part 115	Nickel	mg/L	11	1	9%	Nonparametric	MK	0	0.585	↔
2_14_4_105	MW-04	Appendix III	Boron	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000240	0.050	↔
2_14_4_107	MW-04	Appendix III	Calcium	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000262	0.117	↔
2_14_4_108	MW-04	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00137	0.000	↓
2_14_4_112	MW-04	Appendix III	Fluoride	mg/L	11	0	0%	Nonparametric	MK	0.000451	0.104	↔
2_14_4_120	MW-04	Appendix III	pH (field)	su	11	0	0%	Parametric	Lognormal MLE	0	0.765	↔
2_14_4_124	MW-04	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	Nonparametric	MK	0.590	0.010	↑
2_14_4_126	MW-04	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000127	0.387	↔
2_14_5_102	MW-04	Appendix IV	Arsenic	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000251	0.686	↔
2_14_5_103	MW-04	Appendix IV	Barium	mg/L	11	0	0%	Nonparametric	MK	0	0.564	↔
2_14_5_109	MW-04	Appendix IV	Chromium, Total	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000507	0.356	↔
2_14_5_110	MW-04	Appendix IV	Cobalt	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00153	0.044	↔
2_14_5_113	MW-04	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	Nonparametric	MK	0.000451	0.104	↔
2_14_5_116	MW-04	Appendix IV	Lithium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.0000727	0.810	↔
2_14_5_118	MW-04	Appendix IV	Molybdenum	mg/L	11	2	18%	Parametric	Lognormal MLE	0	0.995	↔
2_14_5_121	MW-04	Appendix IV	Radium 226 and 228	pCi/L	11	2	18%	Parametric	Lognormal MLE	-0.00143	0.006	↓
2_14_5_122	MW-04	Appendix IV	Selenium	mg/L	11	5	45%	Parametric	Lognormal MLE	0.00154	0.213	↔
2_14_6_114	MW-04	Part 115	Iron	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000157	0.496	↔
2_14_6_119	MW-04	Part 115	Nickel	mg/L	11	0	0%	Parametric	Lognormal MLE	0.00110	0.359	↔
2_19_4_105	MW-09	Appendix III	Boron	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.0000233	0.898	↔
2_19_4_107	MW-09	Appendix III	Calcium	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000954	0.003	↑
2_19_4_108	MW-09	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000469	0.315	↔
2_19_4_112	MW-09	Appendix III	Fluoride	mg/L	11	0	0%	Parametric	Lognormal MLE	0.0000100	0.961	↔
2_19_4_120	MW-09	Appendix III	pH (field)	su	11	0	0%	Nonparametric	MK	-0.0000546	0.694	↔
2_19_4_124	MW-09	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	Parametric	Lognormal MLE	0.00288	0.009	↑
2_19_4_126	MW-09	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	Parametric	Lognormal MLE	0.00101	0.009	↑
2_19_5_102	MW-09	Appendix IV	Arsenic	mg/L	11	0	0%	Parametric	Lognormal MLE	0.0000597	0.912	↔
2_19_5_103	MW-09	Appendix IV	Barium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00242	0.049	↔
2_19_5_109	MW-09	Appendix IV	Chromium, Total	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000554	0.205	↔
2_19_5_110	MW-09	Appendix IV	Cobalt	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000346	0.647	↔
2_19_5_113	MW-09	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	Parametric	Lognormal MLE	0.0000100	0.961	↔
2_19_5_116	MW-09	Appendix IV	Lithium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000240	0.153	↔
2_19_5_118	MW-09	Appendix IV	Molybdenum	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00133	0.014	↔
2_19_5_122	MW-09	Appendix IV	Selenium	mg/L	11	2	18%	Parametric	Lognormal MLE	0.000567	0.287	↔
2_19_6_114	MW-09	Part 115	Iron	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000236	0.504	↔

(Table continues on next page)

Table 7: Trend Tests: Lognormal MLE and MK *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Type	Method	Slope	p-value	Trend
2_19_6_119	MW-09	Part 115	Nickel	mg/L	11	0	0%	Parametric	Lognormal MLE	0.00238	0.051	↔
2_21_4_105	MW-11	Appendix III	Boron	mg/L	11	0	0%	Parametric	Lognormal MLE	0.0000191	0.989	↔
2_21_4_107	MW-11	Appendix III	Calcium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.0000385	0.952	↔
2_21_4_108	MW-11	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000932	0.027	↔
2_21_4_112	MW-11	Appendix III	Fluoride	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000631	0.612	↔
2_21_4_120	MW-11	Appendix III	pH (field)	su	11	0	0%	Parametric	Lognormal MLE	0	0.747	↔
2_21_4_124	MW-11	Appendix III	Sulfate (as SO4)	mg/L	11	2	18%	Parametric	Lognormal MLE	-0.00907	0.032	↔
2_21_4_126	MW-11	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000186	0.680	↔
2_21_5_102	MW-11	Appendix IV	Arsenic	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000516	0.570	↔
2_21_5_103	MW-11	Appendix IV	Barium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000118	0.856	↔
2_21_5_109	MW-11	Appendix IV	Chromium, Total	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00171	0.231	↔
2_21_5_110	MW-11	Appendix IV	Cobalt	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000352	0.780	↔
2_21_5_113	MW-11	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000631	0.612	↔
2_21_5_116	MW-11	Appendix IV	Lithium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000206	0.924	↔
2_21_5_118	MW-11	Appendix IV	Molybdenum	mg/L	11	2	18%	Parametric	Lognormal MLE	0.000440	0.763	↔
2_21_5_121	MW-11	Appendix IV	Radium 226 and 228	pCi/L	11	3	27%	Parametric	Lognormal MLE	-0.00133	0.063	↔
2_21_5_122	MW-11	Appendix IV	Selenium	mg/L	11	3	27%	Parametric	Lognormal MLE	0.00201	0.019	↔
2_21_6_111	MW-11	Part 115	Copper	mg/L	11	3	27%	Parametric	Lognormal MLE	-0.000862	0.801	↔
2_21_6_114	MW-11	Part 115	Iron	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000191	0.793	↔
2_21_6_119	MW-11	Part 115	Nickel	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000255	0.851	↔
2_21_6_130	MW-11	Part 115	Zinc	mg/L	11	3	27%	Parametric	Lognormal MLE	-0.00650	0.037	↔
2_22_4_105	MW-12	Appendix III	Boron	mg/L	11	0	0%	Parametric	Lognormal MLE	0	0.988	↔
2_22_4_107	MW-12	Appendix III	Calcium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000755	0.162	↔
2_22_4_108	MW-12	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000603	0.167	↔
2_22_4_112	MW-12	Appendix III	Fluoride	mg/L	11	0	0%	Parametric	Lognormal MLE	0.0000120	0.985	↔
2_22_4_120	MW-12	Appendix III	pH (field)	su	11	0	0%	Parametric	Lognormal MLE	0.000107	0.195	↔
2_22_4_124	MW-12	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00144	0.000	↓
2_22_4_126	MW-12	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00129	0.040	↔
2_22_5_101	MW-12	Appendix IV	Antimony	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00163	0.002	↓
2_22_5_102	MW-12	Appendix IV	Arsenic	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000122	0.828	↔
2_22_5_103	MW-12	Appendix IV	Barium	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000571	0.425	↔
2_22_5_106	MW-12	Appendix IV	Cadmium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000185	0.844	↔
2_22_5_109	MW-12	Appendix IV	Chromium, Total	mg/L	11	4	36%	Parametric	Lognormal MLE	0.000778	0.646	↔
2_22_5_110	MW-12	Appendix IV	Cobalt	mg/L	11	5	45%	Nonparametric	MK	0	0.743	↔
2_22_5_113	MW-12	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	Parametric	Lognormal MLE	0.0000120	0.985	↔
2_22_5_116	MW-12	Appendix IV	Lithium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000539	0.428	↔
2_22_5_118	MW-12	Appendix IV	Molybdenum	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000588	0.157	↔
2_22_5_122	MW-12	Appendix IV	Selenium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00220	0.190	↔
2_22_6_111	MW-12	Part 115	Copper	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000658	0.232	↔
2_22_6_119	MW-12	Part 115	Nickel	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000989	0.068	↔
2_22_6_130	MW-12	Part 115	Zinc	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00115	0.102	↔
3_20_4_105	MW-10	Appendix III	Boron	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000676	0.555	↔
3_20_4_107	MW-10	Appendix III	Calcium	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000818	0.232	↔

(Table continues on next page)

Table 7: Trend Tests: Lognormal MLE and MK *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Type	Method	Slope	p-value	Trend
3_20_4_108	MW-10	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000899	0.274	↔
3_20_4_112	MW-10	Appendix III	Fluoride	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000906	0.185	↔
3_20_4_120	MW-10	Appendix III	pH (field)	su	11	0	0%	Parametric	Lognormal MLE	-0.0000108	0.915	↔
3_20_4_124	MW-10	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	Parametric	Lognormal MLE	0.000956	0.472	↔
3_20_4_126	MW-10	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	Nonparametric	MK	0.433	0.579	↔
3_20_5_102	MW-10	Appendix IV	Arsenic	mg/L	11	0	0%	Parametric	Lognormal MLE	0.00115	0.239	↔
3_20_5_103	MW-10	Appendix IV	Barium	mg/L	11	0	0%	Parametric	Lognormal MLE	0.0000573	0.940	↔
3_20_5_104	MW-10	Appendix IV	Beryllium	mg/L	11	5	45%	Parametric	Lognormal MLE	-0.000656	0.712	↔
3_20_5_109	MW-10	Appendix IV	Chromium, Total	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00130	0.236	↔
3_20_5_110	MW-10	Appendix IV	Cobalt	mg/L	11	1	9%	Parametric	Lognormal MLE	-0.00322	0.030	↔
3_20_5_113	MW-10	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000906	0.185	↔
3_20_5_116	MW-10	Appendix IV	Lithium	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000474	0.406	↔
3_20_5_118	MW-10	Appendix IV	Molybdenum	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.00321	0.000	↓
3_20_5_122	MW-10	Appendix IV	Selenium	mg/L	11	1	9%	Parametric	Lognormal MLE	0.000989	0.109	↔
3_20_6_114	MW-10	Part 115	Iron	mg/L	11	0	0%	Parametric	Lognormal MLE	-0.000197	0.767	↔
3_20_6_119	MW-10	Part 115	Nickel	mg/L	11	5	45%	Parametric	Lognormal MLE	-0.000899	0.435	↔
3_20_6_130	MW-10	Part 115	Zinc	mg/L	11	4	36%	Nonparametric	MK	0	0.549	↔

Table 8: Trend Tests: Piecewise Linear-Linear

								Line 1			Line 2					
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	R-Squared	Overall Trend
1_16_4_105	MW-06	Appendix III	Boron	mg/L	11	0	0%	-0.00102	0.828	↔	-0.0194	0.606	↔	2023-10-24	0.519	↔
1_16_4_107	MW-06	Appendix III	Calcium	mg/L	11	0	0%	0.471	0.473	↔	0.0336	0.690	↔	2023-03-13	0.380	↔
1_16_4_108	MW-06	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	-0.727	0.076	↔	-0.157	0.011	↔	2023-03-04	0.886	↔
1_16_4_112	MW-06	Appendix III	Fluoride	mg/L	11	0	0%	-0.00287	0.386	↔	0.0000435	0.917	↔	2023-02-28	0.314	↔
1_16_4_120	MW-06	Appendix III	pH (field)	su	11	0	0%	-0.00458	0.700	↔	0.000620	0.388	↔	2023-02-05	0.160	↔
1_16_4_124	MW-06	Appendix III	Sulfate (as SO4)	mg/L	11	1	9%	-0.00163	0.996	↔	-0.0260	0.178	↔	2023-02-05	0.294	↔
1_16_5_101	MW-06	Appendix IV	Antimony	mg/L	11	9	82%	0	0.560	↔	0	0.831	↔	2023-04-17	0.157	↔
1_16_5_102	MW-06	Appendix IV	Arsenic	mg/L	11	0	0%	0	0.350	↔	0	0.412	↔	2023-10-23	0.210	↔
1_16_5_103	MW-06	Appendix IV	Barium	mg/L	11	0	0%	-0.00214	0.320	↔	0.000374	0.453	↔	2023-04-17	0.337	↔
1_16_5_104	MW-06	Appendix IV	Beryllium	mg/L	11	10	91%	0	0.018	↔	0	0.541	↔	2023-01-25	0.867	↔
1_16_5_106	MW-06	Appendix IV	Cadmium	mg/L	11	11	100%	0	0.511	↔	0	0.941	↔	2023-05-22	0.180	↔
1_16_5_109	MW-06	Appendix IV	Chromium, Total	mg/L	11	0	0%	0	0.499	↔	0	0.096	↔	2023-02-16	0.387	↔
1_16_5_110	MW-06	Appendix IV	Cobalt	mg/L	11	0	0%	0	0.425	↔	0	0.144	↔	2023-06-28	0.456	↔
1_16_5_113	MW-06	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	-0.00287	0.386	↔	0.0000435	0.917	↔	2023-02-28	0.314	↔
1_16_5_115	MW-06	Appendix IV	Lead	mg/L	11	8	73%	0	0.448	↔	0	0.218	↔	2023-02-06	0.266	↔
1_16_5_116	MW-06	Appendix IV	Lithium	mg/L	11	0	0%	-0.000104	0.467	↔	-0.000421	0.150	↔	2023-10-23	0.619	↔
1_16_5_118	MW-06	Appendix IV	Molybdenum	mg/L	11	8	73%	0	0.679	↔	0	0.232	↔	2023-04-17	0.217	↔
1_16_5_121	MW-06	Appendix IV	Radium 226 and 228	pCi/L	11	2	18%	0.00410	0.621	↔	-0.00123	0.271	↔	2023-03-13	0.205	↔
1_16_5_122	MW-06	Appendix IV	Selenium	mg/L	11	5	45%	0	0.809	↔	0	0.407	↔	2023-08-08	0.336	↔

(Table continues on next page)

Table 8: Trend Tests: Piecewise Linear-Linear *(continued)*

								Line 1			Line 2					
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	R-Squared	Overall Trend
1_16_5_125	MW-06	Appendix IV	Thallium	mg/L	11	11	100%	0	0.411	↔	0	0.609	↔	2023-02-06	0.155	↔
1_16_6_111	MW-06	Part 115	Copper	mg/L	11	10	91%	0	1.000	↔	0	0.318	↔	2023-07-20	0.292	↔
1_16_6_114	MW-06	Part 115	Iron	mg/L	11	0	0%	-0.00145	0.940	↔	0.0520	0.190	↔	2023-08-29	0.555	↔
1_16_6_119	MW-06	Part 115	Nickel	mg/L	11	4	36%	0	0.104	↔	0	0.448	↔	2023-04-18	0.628	↔
1_16_6_123	MW-06	Part 115	Silver	mg/L	11	11	100%	0	0.413	↔	0	0.609	↔	2023-02-06	0.155	↔
1_16_6_129	MW-06	Part 115	Vanadium	mg/L	11	11	100%	0	0.018	↔	0	0.541	↔	2023-01-25	0.867	↔
1_17_4_105	MW-07	Appendix III	Boron	mg/L	11	0	0%	-0.0147	0.229	↔	0.00436	0.134	↔	2023-04-02	0.415	↔
1_17_4_108	MW-07	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	-0.0107	0.002	↓	0.00387	0.022	↔	2023-06-12	0.851	↔
1_17_4_120	MW-07	Appendix III	pH (field)	su	11	0	0%	-0.000677	0.305	↔	0.00127	0.311	↔	2023-08-07	0.382	↔
1_17_4_124	MW-07	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	-0.100	0.003	↓	0.0644	0.002	↑	2023-05-23	0.859	↔
1_17_5_101	MW-07	Appendix IV	Antimony	mg/L	11	10	91%	0	0.001	↑	0	1.000	↔	2023-07-09	0.883	↔
1_17_5_102	MW-07	Appendix IV	Arsenic	mg/L	11	0	0%	0	0.494	↔	0	0.176	↔	2023-04-05	0.285	↔
1_17_5_103	MW-07	Appendix IV	Barium	mg/L	11	0	0%	-0.000209	0.671	↔	0.000143	0.231	↔	2023-04-17	0.217	↔
1_17_5_104	MW-07	Appendix IV	Beryllium	mg/L	11	8	73%	0	0.366	↔	0	0.563	↔	2023-08-07	0.180	↔
1_17_5_106	MW-07	Appendix IV	Cadmium	mg/L	11	11	100%	0	0.011	↔	0	1.000	↔	2023-07-30	0.806	↔
1_17_5_109	MW-07	Appendix IV	Chromium, Total	mg/L	11	0	0%	0	0.501	↔	0	0.654	↔	2023-05-22	0.154	↔
1_17_5_110	MW-07	Appendix IV	Cobalt	mg/L	11	0	0%	0	0.044	↔	0	0.077	↔	2023-06-27	0.606	↔
1_17_5_115	MW-07	Appendix IV	Lead	mg/L	11	11	100%	0	0.011	↔	0	1.000	↔	2023-07-30	0.806	↔
1_17_5_116	MW-07	Appendix IV	Lithium	mg/L	11	0	0%	0.0000136	0.607	↔	0	0.181	↔	2023-04-17	0.263	↔
1_17_5_118	MW-07	Appendix IV	Molybdenum	mg/L	11	11	100%	0	0.011	↔	0	1.000	↔	2023-07-30	0.806	↔
1_17_5_121	MW-07	Appendix IV	Radium 226 and 228	pCi/L	11	2	18%	0.00119	0.693	↔	-0.00257	0.389	↔	2023-08-06	0.150	↔
1_17_5_122	MW-07	Appendix IV	Selenium	mg/L	11	9	82%	0	0.063	↔	0	0.441	↔	2023-07-27	0.542	↔
1_17_6_111	MW-07	Part 115	Copper	mg/L	11	9	82%	0	1.000	↔	0	0.202	↔	2023-04-08	0.311	↔
1_17_6_114	MW-07	Part 115	Iron	mg/L	11	0	0%	0.0165	0.285	↔	-0.00380	0.669	↔	2023-05-23	0.217	↔
1_18_4_105	MW-08	Appendix III	Boron	mg/L	11	0	0%	0.0797	0.173	↔	-0.00408	0.230	↔	2023-02-06	0.676	↔
1_18_4_107	MW-08	Appendix III	Calcium	mg/L	11	0	0%	-0.0897	0.026	↔	0.185	0.481	↔	2024-01-28	0.665	↔
1_18_4_108	MW-08	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.208	0.258	↔	-0.0213	0.070	↔	2023-02-06	0.597	↔
1_18_4_112	MW-08	Appendix III	Fluoride	mg/L	11	0	0%	0.0102	0.068	↔	-0.000259	0.684	↔	2023-02-09	0.567	↔
1_18_4_120	MW-08	Appendix III	pH (field)	su	11	0	0%	0.00515	0.272	↔	0.000243	0.814	↔	2023-03-14	0.348	↔
1_18_4_124	MW-08	Appendix III	Sulfate (as SO4)	mg/L	11	3	27%	-0.0930	0.076	↔	0.0283	0.533	↔	2023-07-11	0.479	↔
1_18_4_126	MW-08	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	0.0523	0.909	↔	-0.201	0.469	↔	2023-06-26	0.113	↔
1_18_5_101	MW-08	Appendix IV	Antimony	mg/L	11	5	45%	0	0.273	↔	0	0.188	↔	2023-02-13	0.344	↔
1_18_5_102	MW-08	Appendix IV	Arsenic	mg/L	11	0	0%	0.000562	0.302	↔	-0.0000324	0.313	↔	2023-02-06	0.528	↔
1_18_5_103	MW-08	Appendix IV	Barium	mg/L	11	0	0%	0.00286	0.623	↔	-0.000911	0.027	↔	2023-01-31	0.537	↔
1_18_5_106	MW-08	Appendix IV	Cadmium	mg/L	11	11	100%	0	0.011	↔	0	1.000	↔	2023-07-30	0.806	↔
1_18_5_109	MW-08	Appendix IV	Chromium, Total	mg/L	11	0	0%	0	0.352	↔	0	0.017	↔	2023-02-06	0.623	↔
1_18_5_110	MW-08	Appendix IV	Cobalt	mg/L	11	0	0%	0	0.017	↔	0	0.006	↓	2023-02-07	0.778	↔
1_18_5_113	MW-08	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.0102	0.068	↔	-0.000259	0.684	↔	2023-02-09	0.567	↔
1_18_5_115	MW-08	Appendix IV	Lead	mg/L	11	8	73%	0	0.328	↔	0	0.989	↔	2023-07-28	0.272	↔
1_18_5_116	MW-08	Appendix IV	Lithium	mg/L	11	0	0%	0.00134	0.071	↔	-0.000106	0.025	↔	2023-01-22	0.714	↔
1_18_5_118	MW-08	Appendix IV	Molybdenum	mg/L	11	0	0%	0	0.023	↔	0	0.097	↔	2023-07-05	0.633	↔
1_18_5_121	MW-08	Appendix IV	Radium 226 and 228	pCi/L	11	3	27%	-0.00594	0.767	↔	-0.000440	0.711	↔	2023-02-06	0.154	↔

(Table continues on next page)

Table 8: Trend Tests: Piecewise Linear-Linear *(continued)*

								Line 1			Line 2					
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	R-Squared	Overall Trend
1_18_5_122	MW-08	Appendix IV	Selenium	mg/L	11	5	45%	0	0.342	↔	0	0.478	↔	2023-07-26	0.194	↔
1_18_6_111	MW-08	Part 115	Copper	mg/L	11	5	45%	0	0.639	↔	0	0.522	↔	2023-02-06	0.180	↔
1_18_6_114	MW-08	Part 115	Iron	mg/L	11	0	0%	-0.104	0.007	↓	0.0165	0.157	↔	2023-05-05	0.808	↔
1_18_6_119	MW-08	Part 115	Nickel	mg/L	11	0	0%	0	0.278	↔	0.0000139	0.000	↑	2023-10-23	0.956	↔
1_28_4_105	MW-18	Appendix III	Boron	mg/L	11	0	0%	-0.00173	0.633	↔	0.00505	0.000	↑	2023-03-30	0.896	↔
1_28_4_107	MW-18	Appendix III	Calcium	mg/L	11	0	0%	-0.868	0.004	↓	0.428	0.069	↔	2023-06-27	0.763	↔
1_28_4_108	MW-18	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	-0.0854	0.327	↔	0.00222	0.840	↔	2023-03-02	0.354	↔
1_28_4_112	MW-18	Appendix III	Fluoride	mg/L	11	0	0%	0.00610	0.001	↑	-0.0105	0.001	↓	2023-09-15	0.897	↔
1_28_4_120	MW-18	Appendix III	pH (field)	su	11	0	0%	0.00114	0.170	↔	0.000111	0.538	↔	2023-04-01	0.595	↔
1_28_4_124	MW-18	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	-9.37	0.015	↔	0.529	0.212	↔	2023-02-08	0.709	↔
1_28_4_126	MW-18	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	-5.50	0.011	↔	0.381	0.339	↔	2023-03-19	0.764	↔
1_28_5_101	MW-18	Appendix IV	Antimony	mg/L	11	3	27%	0	0.570	↔	0	0.915	↔	2023-02-08	0.109	↔
1_28_5_102	MW-18	Appendix IV	Arsenic	mg/L	11	0	0%	0.0000396	0.141	↔	-0.0000362	0.844	↔	2023-10-24	0.296	↔
1_28_5_103	MW-18	Appendix IV	Barium	mg/L	11	0	0%	0.0000256	0.228	↔	-0.0000652	0.117	↔	2023-10-23	0.418	↔
1_28_5_104	MW-18	Appendix IV	Beryllium	mg/L	11	10	91%	0	0.122	↔	0	0.000	↑	2024-02-12	1.000	↔
1_28_5_106	MW-18	Appendix IV	Cadmium	mg/L	11	4	36%	0	0.847	↔	0	0.553	↔	2023-05-21	0.062	↔
1_28_5_109	MW-18	Appendix IV	Chromium, Total	mg/L	11	10	91%	0	0.122	↔	0	0.631	↔	2023-05-22	0.400	↔
1_28_5_110	MW-18	Appendix IV	Cobalt	mg/L	11	0	0%	-0.0000284	0.003	↓	0	0.614	↔	2023-04-17	0.924	↔
1_28_5_113	MW-18	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.00610	0.001	↑	-0.0105	0.001	↓	2023-09-15	0.897	↔
1_28_5_115	MW-18	Appendix IV	Lead	mg/L	11	8	73%	0	0.705	↔	0	0.304	↔	2023-02-07	0.184	↔
1_28_5_116	MW-18	Appendix IV	Lithium	mg/L	11	0	0%	-0.000184	0.334	↔	0	0.869	↔	2023-02-08	0.268	↔
1_28_5_118	MW-18	Appendix IV	Molybdenum	mg/L	11	0	0%	0.0000296	0.086	↔	-0.0000468	0.137	↔	2023-10-10	0.497	↔
1_28_5_121	MW-18	Appendix IV	Radium 226 and 228	pCi/L	11	7	64%	0.00336	0.233	↔	-0.00122	0.079	↔	2023-04-17	0.488	↔
1_28_5_122	MW-18	Appendix IV	Selenium	mg/L	11	0	0%	0	0.467	↔	0	0.030	↔	2023-08-13	0.814	↔
1_28_5_125	MW-18	Appendix IV	Thallium	mg/L	11	11	100%	0	0.775	↔	0	0.864	↔	2023-02-07	0.077	↔
1_28_6_111	MW-18	Part 115	Copper	mg/L	11	0	0%	0	0.040	↔	0	0.225	↔	2023-08-08	0.551	↔
1_28_6_114	MW-18	Part 115	Iron	mg/L	11	0	0%	-0.0455	0.001	↓	0.00806	0.002	↑	2023-03-29	0.920	↔
1_28_6_119	MW-18	Part 115	Nickel	mg/L	11	0	0%	-0.0000440	0.002	↓	0	0.691	↔	2023-04-18	0.881	↔
1_28_6_123	MW-18	Part 115	Silver	mg/L	11	11	100%	0	0.775	↔	0	0.864	↔	2023-02-07	0.077	↔
1_28_6_130	MW-18	Part 115	Zinc	mg/L	11	0	0%	-0.000238	0.083	↔	-0.0000134	0.769	↔	2023-05-06	0.651	↔
1_29_4_107	MW-19	Appendix III	Calcium	mg/L	11	0	0%	-0.528	0.027	↔	0.330	0.114	↔	2023-08-06	0.660	↔
1_29_4_108	MW-19	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	-0.244	0.038	↔	-0.0292	0.230	↔	2023-04-11	0.836	↔
1_29_4_112	MW-19	Appendix III	Fluoride	mg/L	11	0	0%	-0.000343	0.645	↔	-0.00266	0.644	↔	2023-10-24	0.506	↔
1_29_4_120	MW-19	Appendix III	pH (field)	su	11	0	0%	0.00112	0.559	↔	-0.000574	0.433	↔	2023-05-21	0.141	↔
1_29_4_124	MW-19	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	-1.35	0.323	↔	0.461	0.719	↔	2023-07-03	0.179	↔
1_29_4_126	MW-19	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	-2.47	0.010	↓	0.246	0.728	↔	2023-07-24	0.785	↔
1_29_5_101	MW-19	Appendix IV	Antimony	mg/L	11	10	91%	0	0.432	↔	0	0.483	↔	2023-04-17	0.237	↔
1_29_5_102	MW-19	Appendix IV	Arsenic	mg/L	11	0	0%	0	0.662	↔	-0.0000159	0.311	↔	2023-10-23	0.206	↔
1_29_5_103	MW-19	Appendix IV	Barium	mg/L	11	0	0%	-0.0000950	0.192	↔	0	0.948	↔	2023-04-09	0.513	↔
1_29_5_104	MW-19	Appendix IV	Beryllium	mg/L	11	3	27%	0	0.721	↔	0	0.404	↔	2023-02-07	0.152	↔
1_29_5_106	MW-19	Appendix IV	Cadmium	mg/L	11	11	100%	0	0.505	↔	0	0.936	↔	2023-05-21	0.183	↔
1_29_5_109	MW-19	Appendix IV	Chromium, Total	mg/L	11	5	45%	0	0.342	↔	0	0.819	↔	2023-05-22	0.281	↔

(Table continues on next page)

Table 8: Trend Tests: Piecewise Linear-Linear *(continued)*

								Line 1			Line 2					
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	R-Squared	Overall Trend
1_29_5_110	MW-19	Appendix IV	Cobalt	mg/L	11	0	0%	0	0.431	↔	0	0.030	↔	2023-01-14	0.542	↔
1_29_5_113	MW-19	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	-0.000343	0.645	↔	-0.00266	0.644	↔	2023-10-24	0.506	↔
1_29_5_115	MW-19	Appendix IV	Lead	mg/L	11	11	100%	0.0000110	0.193	↔	0	0.085	↔	2023-02-08	0.466	↔
1_29_5_118	MW-19	Appendix IV	Molybdenum	mg/L	11	0	0%	-0.0000588	0.662	↔	0	0.528	↔	2023-01-15	0.215	↔
1_29_5_121	MW-19	Appendix IV	Radium 226 and 228	pCi/L	11	3	27%	0.00111	0.294	↔	-0.00388	0.076	↔	2023-10-23	0.476	↔
1_29_5_122	MW-19	Appendix IV	Selenium	mg/L	11	10	91%	0	0.782	↔	0	0.166	↔	2023-02-07	0.261	↔
1_29_5_125	MW-19	Appendix IV	Thallium	mg/L	11	11	100%	0	0.221	↔	0	0.289	↔	2023-02-08	0.327	↔
1_29_6_111	MW-19	Part 115	Copper	mg/L	11	10	91%	0	0.527	↔	0	0.965	↔	2023-08-17	0.091	↔
1_29_6_114	MW-19	Part 115	Iron	mg/L	11	0	0%	-0.0231	0.599	↔	0.0190	0.092	↔	2023-04-09	0.390	↔
1_29_6_119	MW-19	Part 115	Nickel	mg/L	11	1	9%	0	0.009	↓	0.0000236	0.094	↔	2024-01-13	0.704	↔
1_29_6_123	MW-19	Part 115	Silver	mg/L	11	11	100%	0	0.683	↔	0	0.564	↔	2023-02-07	0.158	↔
1_29_6_129	MW-19	Part 115	Vanadium	mg/L	11	11	100%	0.0000115	0.739	↔	0	0.258	↔	2023-02-07	0.199	↔
1_29_6_130	MW-19	Part 115	Zinc	mg/L	11	9	82%	0.0000190	0.789	↔	0	0.173	↔	2023-02-07	0.254	↔
1_30_4_105	MW-20	Appendix III	Boron	mg/L	11	0	0%	0.000556	0.378	↔	-0.00217	0.096	↔	2023-10-23	0.439	↔
1_30_4_107	MW-20	Appendix III	Calcium	mg/L	11	0	0%	-0.198	0.234	↔	0.110	0.481	↔	2023-06-28	0.245	↔
1_30_4_108	MW-20	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.0953	0.486	↔	-0.0655	0.224	↔	2023-05-22	0.249	↔
1_30_4_112	MW-20	Appendix III	Fluoride	mg/L	11	0	0%	-0.00829	0.000	↓	0.0000667	0.207	↔	2023-01-08	0.969	↔
1_30_4_120	MW-20	Appendix III	pH (field)	su	11	0	0%	-0.000319	0.587	↔	0.000771	0.494	↔	2023-08-07	0.218	↔
1_30_4_124	MW-20	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	-0.193	0.228	↔	0.207	0.481	↔	2023-10-03	0.270	↔
1_30_4_126	MW-20	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	-0.139	0.528	↔	3.64	0.059	↔	2024-02-11	0.507	↔
1_30_5_101	MW-20	Appendix IV	Antimony	mg/L	11	4	36%	0	0.119	↔	0	0.608	↔	2023-08-07	0.336	↔
1_30_5_102	MW-20	Appendix IV	Arsenic	mg/L	11	0	0%	0	0.100	↔	0	0.103	↔	2023-10-05	0.505	↔
1_30_5_103	MW-20	Appendix IV	Barium	mg/L	11	0	0%	-0.00682	0.001	↓	0.000241	0.206	↔	2023-02-15	0.895	↔
1_30_5_104	MW-20	Appendix IV	Beryllium	mg/L	11	10	91%	0	1.000	↔	0	0.322	↔	2023-07-18	0.290	↔
1_30_5_106	MW-20	Appendix IV	Cadmium	mg/L	11	11	100%	0	0.011	↔	0	1.000	↔	2023-07-31	0.806	↔
1_30_5_109	MW-20	Appendix IV	Chromium, Total	mg/L	11	5	45%	0	0.725	↔	0	0.466	↔	2024-01-18	0.185	↔
1_30_5_110	MW-20	Appendix IV	Cobalt	mg/L	11	0	0%	0	0.577	↔	0	0.009	↓	2023-02-06	0.654	↔
1_30_5_113	MW-20	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	-0.00829	0.000	↓	0.0000667	0.207	↔	2023-01-08	0.969	↔
1_30_5_115	MW-20	Appendix IV	Lead	mg/L	11	0	0%	0	0.152	↔	0	0.080	↔	2023-06-28	0.557	↔
1_30_5_116	MW-20	Appendix IV	Lithium	mg/L	11	0	0%	0.0000582	0.373	↔	-0.000147	0.248	↔	2023-08-20	0.414	↔
1_30_5_118	MW-20	Appendix IV	Molybdenum	mg/L	11	0	0%	0	0.036	↔	-0.0000218	0.075	↔	2024-01-10	0.648	↔
1_30_5_121	MW-20	Appendix IV	Radium 226 and 228	pCi/L	11	6	55%	-0.0185	0.053	↔	0.000558	0.273	↔	2023-01-19	0.710	↔
1_30_5_122	MW-20	Appendix IV	Selenium	mg/L	11	5	45%	0	0.037	↔	0	0.451	↔	2023-08-07	0.514	↔
1_30_5_125	MW-20	Appendix IV	Thallium	mg/L	11	10	91%	0	1.000	↔	0	0.322	↔	2023-07-18	0.290	↔
1_30_6_111	MW-20	Part 115	Copper	mg/L	11	1	9%	0	0.205	↔	0	0.895	↔	2023-08-07	0.279	↔
1_30_6_119	MW-20	Part 115	Nickel	mg/L	11	0	0%	0	0.732	↔	0	0.009	↓	2023-03-12	0.687	↔
1_40_4_107	MW-30	Appendix III	Calcium	mg/L	11	0	0%	1.36	0.716	↔	-0.520	0.296	↔	2023-03-12	0.169	↔
1_40_4_108	MW-30	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	-0.578	0.001	↓	-0.0377	0.531	↔	2023-05-22	0.922	↔
1_40_4_112	MW-30	Appendix III	Fluoride	mg/L	11	0	0%	-0.000587	0.579	↔	0.000498	0.437	↔	2023-06-26	0.127	↔
1_40_4_120	MW-30	Appendix III	pH (field)	su	11	0	0%	0.00318	0.308	↔	-0.0000760	0.913	↔	2023-03-13	0.255	↔
1_40_4_124	MW-30	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	-0.513	0.217	↔	2.91	0.353	↔	2024-01-11	0.299	↔
1_40_4_126	MW-30	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	0.744	0.713	↔	-1.03	0.404	↔	2023-06-26	0.127	↔

(Table continues on next page)

Table 8: Trend Tests: Piecewise Linear-Linear *(continued)*

								Line 1			Line 2					
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	R-Squared	Overall Trend
1_40_5_101	MW-30	Appendix IV	Antimony	mg/L	11	10	91%	0	0.157	↔	0	0.486	↔	2023-05-22	0.337	↔
1_40_5_102	MW-30	Appendix IV	Arsenic	mg/L	11	2	18%	0	0.291	↔	0	0.356	↔	2023-04-17	0.372	↔
1_40_5_103	MW-30	Appendix IV	Barium	mg/L	11	0	0%	-0.000452	0.035	↔	0.0000120	0.773	↔	2023-03-25	0.713	↔
1_40_5_104	MW-30	Appendix IV	Beryllium	mg/L	11	9	82%	0	0.596	↔	0	0.805	↔	2023-07-24	0.065	↔
1_40_5_106	MW-30	Appendix IV	Cadmium	mg/L	11	11	100%	0	0.508	↔	0	0.937	↔	2023-05-21	0.181	↔
1_40_5_109	MW-30	Appendix IV	Chromium, Total	mg/L	11	0	0%	-0.0000728	0.579	↔	0	0.530	↔	2023-02-05	0.392	↔
1_40_5_110	MW-30	Appendix IV	Cobalt	mg/L	11	0	0%	0	0.309	↔	0	0.586	↔	2023-10-18	0.228	↔
1_40_5_113	MW-30	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	-0.000587	0.579	↔	0.000498	0.437	↔	2023-06-26	0.127	↔
1_40_5_115	MW-30	Appendix IV	Lead	mg/L	11	11	100%	0.0000129	0.062	↔	0	0.028	↔	2023-02-06	0.642	↔
1_40_5_116	MW-30	Appendix IV	Lithium	mg/L	11	0	0%	-0.0000991	0.677	↔	-0.000115	0.799	↔	2023-08-08	0.134	↔
1_40_5_117	MW-30	Appendix IV	Mercury	mg/L	11	10	91%	0	0.113	↔	0	0.000	↑	2024-02-11	1.000	↔
1_40_5_122	MW-30	Appendix IV	Selenium	mg/L	11	6	55%	0	0.413	↔	0	0.827	↔	2023-07-14	0.148	↔
1_40_5_125	MW-30	Appendix IV	Thallium	mg/L	11	11	100%	0	0.115	↔	0	0.092	↔	2023-02-25	0.576	↔
1_40_6_111	MW-30	Part 115	Copper	mg/L	11	7	64%	0	0.589	↔	0	0.888	↔	2023-05-23	0.067	↔
1_40_6_123	MW-30	Part 115	Silver	mg/L	11	11	100%	0	0.674	↔	0	0.566	↔	2023-02-05	0.157	↔
1_40_6_129	MW-30	Part 115	Vanadium	mg/L	11	11	100%	0	0.589	↔	0	1.000	↔	2023-07-27	0.098	↔
1_40_6_130	MW-30	Part 115	Zinc	mg/L	11	9	82%	-0.0000136	0.218	↔	0	1.000	↔	2023-07-23	0.375	↔
1_41_4_105	MW-31	Appendix III	Boron	mg/L	11	0	0%	0.00301	0.148	↔	-0.00376	0.796	↔	2023-10-23	0.280	↔
1_41_4_107	MW-31	Appendix III	Calcium	mg/L	11	0	0%	-0.217	0.040	↔	0.167	0.085	↔	2023-07-08	0.596	↔
1_41_4_112	MW-31	Appendix III	Fluoride	mg/L	11	0	0%	0.00215	0.334	↔	-0.00145	0.106	↔	2023-05-21	0.393	↔
1_41_4_120	MW-31	Appendix III	pH (field)	su	11	0	0%	-0.000100	0.785	↔	0.00375	0.202	↔	2024-02-07	0.320	↔
1_41_4_124	MW-31	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	-0.499	0.013	↔	0.526	0.660	↔	2023-10-23	0.617	↔
1_41_4_126	MW-31	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	-0.613	0.280	↔	0.0702	0.733	↔	2023-05-21	0.356	↔
1_41_5_101	MW-31	Appendix IV	Antimony	mg/L	11	6	55%	0	0.031	↔	0	0.326	↔	2023-03-28	0.704	↔
1_41_5_102	MW-31	Appendix IV	Arsenic	mg/L	11	0	0%	-0.0000147	0.191	↔	0	0.804	↔	2023-01-04	0.393	↔
1_41_5_104	MW-31	Appendix IV	Beryllium	mg/L	11	10	91%	0	1.000	↔	0	0.326	↔	2023-07-17	0.288	↔
1_41_5_106	MW-31	Appendix IV	Cadmium	mg/L	11	10	91%	0	0.012	↔	0	0.819	↔	2023-07-31	0.810	↔
1_41_5_109	MW-31	Appendix IV	Chromium, Total	mg/L	11	0	0%	0	0.170	↔	0	0.311	↔	2023-12-24	0.406	↔
1_41_5_110	MW-31	Appendix IV	Cobalt	mg/L	11	1	9%	0	0.588	↔	0	0.791	↔	2023-02-07	0.072	↔
1_41_5_113	MW-31	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.00215	0.334	↔	-0.00145	0.106	↔	2023-05-21	0.393	↔
1_41_5_115	MW-31	Appendix IV	Lead	mg/L	11	10	91%	0	0.065	↔	0	1.000	↔	2023-11-13	0.545	↔
1_41_5_116	MW-31	Appendix IV	Lithium	mg/L	11	0	0%	0.0000165	0.369	↔	-0.0000668	0.005	↓	2023-08-04	0.796	↔
1_41_5_118	MW-31	Appendix IV	Molybdenum	mg/L	11	0	0%	-0.0000196	0.173	↔	0	0.225	↔	2023-01-07	0.593	↔
1_41_5_121	MW-31	Appendix IV	Radium 226 and 228	pCi/L	11	3	27%	0.00101	0.372	↔	-0.00191	0.371	↔	2023-08-08	0.315	↔
1_41_5_122	MW-31	Appendix IV	Selenium	mg/L	11	5	45%	0	0.615	↔	0	0.368	↔	2023-06-29	0.216	↔
1_41_5_125	MW-31	Appendix IV	Thallium	mg/L	11	10	91%	0	1.000	↔	0	0.326	↔	2023-07-17	0.288	↔
1_41_6_111	MW-31	Part 115	Copper	mg/L	11	8	73%	0	0.802	↔	0	0.001	↑	2024-02-07	0.918	↔
1_41_6_114	MW-31	Part 115	Iron	mg/L	11	0	0%	-0.0119	0.026	↔	-0.00257	0.034	↔	2023-03-16	0.865	↔
1_41_6_119	MW-31	Part 115	Nickel	mg/L	11	10	91%	0	1.000	↔	0	0.326	↔	2023-07-17	0.288	↔
1_42_4_105	MW-32	Appendix III	Boron	mg/L	11	0	0%	0.00411	0.093	↔	-0.00773	0.650	↔	2023-10-23	0.388	↔
1_42_4_107	MW-32	Appendix III	Calcium	mg/L	11	0	0%	-0.229	0.037	↔	0.244	0.194	↔	2023-09-18	0.563	↔
1_42_4_112	MW-32	Appendix III	Fluoride	mg/L	11	0	0%	0.000648	0.150	↔	-0.000533	0.868	↔	2023-10-23	0.290	↔

(Table continues on next page)

Table 8: Trend Tests: Piecewise Linear-Linear *(continued)*

								Line 1			Line 2					
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	R-Squared	Overall Trend
1_42_4_124	MW-32	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	-0.303	0.171	↔	0.855	0.594	↔	2023-12-06	0.279	↔
1_42_4_126	MW-32	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	-0.678	0.078	↔	0.717	0.290	↔	2023-09-15	0.450	↔
1_42_5_101	MW-32	Appendix IV	Antimony	mg/L	11	7	64%	0	0.788	↔	0	0.332	↔	2023-08-07	0.322	↔
1_42_5_102	MW-32	Appendix IV	Arsenic	mg/L	11	0	0%	0	0.866	↔	0	0.259	↔	2023-04-19	0.274	↔
1_42_5_103	MW-32	Appendix IV	Barium	mg/L	11	0	0%	-0.00196	0.525	↔	0.000232	0.746	↔	2023-04-17	0.173	↔
1_42_5_104	MW-32	Appendix IV	Beryllium	mg/L	11	10	91%	0	1.000	↔	0	0.322	↔	2023-07-19	0.290	↔
1_42_5_106	MW-32	Appendix IV	Cadmium	mg/L	11	10	91%	0	0.012	↔	0	0.193	↔	2024-02-04	0.735	↔
1_42_5_109	MW-32	Appendix IV	Chromium, Total	mg/L	11	0	0%	0	0.797	↔	0	0.295	↔	2023-07-24	0.258	↔
1_42_5_110	MW-32	Appendix IV	Cobalt	mg/L	11	0	0%	0	0.953	↔	0	0.346	↔	2023-04-17	0.199	↔
1_42_5_113	MW-32	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.000648	0.150	↔	-0.000533	0.868	↔	2023-10-23	0.290	↔
1_42_5_115	MW-32	Appendix IV	Lead	mg/L	11	8	73%	0	0.234	↔	0	0.577	↔	2023-08-08	0.227	↔
1_42_5_116	MW-32	Appendix IV	Lithium	mg/L	11	0	0%	-0.000429	0.536	↔	0.0000122	0.893	↔	2023-02-16	0.124	↔
1_42_5_117	MW-32	Appendix IV	Mercury	mg/L	11	10	91%	0	0.115	↔	0.0000316	0.000	↑	2024-02-11	1.000	↔
1_42_5_118	MW-32	Appendix IV	Molybdenum	mg/L	11	0	0%	-0.0000186	0.460	↔	0	0.235	↔	2023-02-12	0.248	↔
1_42_5_121	MW-32	Appendix IV	Radium 226 and 228	pCi/L	11	7	64%	0.00219	0.117	↔	-0.000956	0.079	↔	2023-04-29	0.516	↔
1_42_5_122	MW-32	Appendix IV	Selenium	mg/L	11	9	82%	0	0.686	↔	0	0.288	↔	2023-07-25	0.244	↔
1_42_6_111	MW-32	Part 115	Copper	mg/L	11	8	73%	0	1.000	↔	0.0000267	0.326	↔	2023-07-15	0.293	↔
1_42_6_114	MW-32	Part 115	Iron	mg/L	11	0	0%	-0.0280	0.006	↓	0.0334	0.046	↔	2023-10-18	0.782	↔
1_42_6_119	MW-32	Part 115	Nickel	mg/L	11	0	0%	0	0.957	↔	0.0000382	0.317	↔	2023-07-22	0.278	↔
2_11_4_105	MW-01R	Appendix III	Boron	mg/L	11	0	0%	0.206	0.158	↔	-0.634	0.037	↔	2023-10-23	0.583	↔
2_11_4_107	MW-01R	Appendix III	Calcium	mg/L	11	0	0%	-0.311	0.165	↔	1.34	0.402	↔	2023-10-24	0.607	↔
2_11_4_108	MW-01R	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.227	0.254	↔	-0.868	0.041	↔	2023-10-23	0.571	↔
2_11_4_112	MW-01R	Appendix III	Fluoride	mg/L	11	0	0%	0.00442	0.753	↔	-0.0458	0.118	↔	2023-10-23	0.455	↔
2_11_4_120	MW-01R	Appendix III	pH (field)	su	11	0	0%	0.00506	0.340	↔	-0.000815	0.679	↔	2023-04-30	0.217	↔
2_11_4_124	MW-01R	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	-1.44	0.133	↔	4.83	0.471	↔	2023-10-24	0.524	↔
2_11_4_126	MW-01R	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	0.750	0.127	↔	-1.57	0.643	↔	2023-10-24	0.356	↔
2_11_5_101	MW-01R	Appendix IV	Antimony	mg/L	11	3	27%	0	0.339	↔	0	0.156	↔	2023-04-17	0.364	↔
2_11_5_102	MW-01R	Appendix IV	Arsenic	mg/L	11	0	0%	0	0.587	↔	0	0.142	↔	2023-04-13	0.310	↔
2_11_5_103	MW-01R	Appendix IV	Barium	mg/L	11	0	0%	-0.000707	0.795	↔	0.000416	0.274	↔	2023-02-11	0.208	↔
2_11_5_104	MW-01R	Appendix IV	Beryllium	mg/L	11	1	9%	0	0.318	↔	0	0.115	↔	2023-09-18	0.506	↔
2_11_5_106	MW-01R	Appendix IV	Cadmium	mg/L	11	8	73%	0	0.309	↔	0	0.701	↔	2023-05-23	0.200	↔
2_11_5_109	MW-01R	Appendix IV	Chromium, Total	mg/L	11	0	0%	0	0.987	↔	0.0000242	0.236	↔	2023-04-17	0.264	↔
2_11_5_113	MW-01R	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.00442	0.753	↔	-0.0458	0.118	↔	2023-10-23	0.455	↔
2_11_5_115	MW-01R	Appendix IV	Lead	mg/L	11	2	18%	0	0.328	↔	0	0.453	↔	2023-06-28	0.201	↔
2_11_5_116	MW-01R	Appendix IV	Lithium	mg/L	11	0	0%	0.00394	0.265	↔	-0.0129	0.074	↔	2023-10-22	0.486	↔
2_11_5_118	MW-01R	Appendix IV	Molybdenum	mg/L	11	1	9%	0	0.942	↔	0.0000104	0.452	↔	2023-08-30	0.261	↔
2_11_5_121	MW-01R	Appendix IV	Radium 226 and 228	pCi/L	11	6	55%	0.00569	0.279	↔	-0.000972	0.177	↔	2023-02-12	0.345	↔
2_11_5_122	MW-01R	Appendix IV	Selenium	mg/L	11	0	0%	0	0.921	↔	0	0.311	↔	2023-05-22	0.198	↔
2_11_5_125	MW-01R	Appendix IV	Thallium	mg/L	11	11	100%	0	0.235	↔	0	0.220	↔	2023-05-21	0.381	↔
2_11_6_111	MW-01R	Part 115	Copper	mg/L	11	5	45%	0	0.264	↔	0	0.887	↔	2023-06-28	0.248	↔
2_11_6_114	MW-01R	Part 115	Iron	mg/L	11	0	0%	-0.00217	0.042	↔	0.00476	0.024	↔	2023-10-13	0.678	↔
2_11_6_119	MW-01R	Part 115	Nickel	mg/L	11	0	0%	0	0.973	↔	0.0000241	0.305	↔	2023-05-17	0.239	↔

(Table continues on next page)

Table 8: Trend Tests: Piecewise Linear-Linear *(continued)*

								Line 1			Line 2					
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	R-Squared	Overall Trend
2_11_6_123	MW-01R	Part 115	Silver	mg/L	11	11	100%	0	0.409	↔	0	0.603	↔	2023-02-08	0.158	↔
2_11_6_129	MW-01R	Part 115	Vanadium	mg/L	11	2	18%	0.0000146	0.022	↔	0	0.177	↔	2023-07-14	0.637	↔
2_12_4_105	MW-02	Appendix III	Boron	mg/L	11	0	0%	0.0596	0.137	↔	-0.000654	0.998	↔	2023-10-24	0.391	↔
2_12_4_107	MW-02	Appendix III	Calcium	mg/L	11	0	0%	-0.0438	0.634	↔	0.132	0.454	↔	2023-10-23	0.118	↔
2_12_4_108	MW-02	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	-0.433	0.657	↔	0.0643	0.306	↔	2023-02-07	0.206	↔
2_12_4_112	MW-02	Appendix III	Fluoride	mg/L	11	0	0%	-0.0242	0.707	↔	0.00579	0.176	↔	2023-02-07	0.260	↔
2_12_4_120	MW-02	Appendix III	pH (field)	su	11	0	0%	0.00301	0.239	↔	-0.000194	0.559	↔	2023-02-14	0.318	↔
2_12_4_124	MW-02	Appendix III	Sulfate (as SO4)	mg/L	11	7	64%	-0.00262	0.203	↔	0.0893	0.000	↑	2024-02-08	0.906	↔
2_12_5_101	MW-02	Appendix IV	Antimony	mg/L	11	3	27%	0	0.115	↔	0	0.144	↔	2023-04-18	0.460	↔
2_12_5_102	MW-02	Appendix IV	Arsenic	mg/L	11	0	0%	0.0000150	0.396	↔	-0.0000188	0.100	↔	2023-05-23	0.465	↔
2_12_5_103	MW-02	Appendix IV	Barium	mg/L	11	0	0%	-0.000396	0.472	↔	0.000540	0.319	↔	2023-07-24	0.213	↔
2_12_5_104	MW-02	Appendix IV	Beryllium	mg/L	11	1	9%	0	0.351	↔	0	0.511	↔	2023-10-24	0.494	↔
2_12_5_106	MW-02	Appendix IV	Cadmium	mg/L	11	8	73%	0	0.281	↔	0	0.609	↔	2023-05-23	0.216	↔
2_12_5_110	MW-02	Appendix IV	Cobalt	mg/L	11	0	0%	0	0.555	↔	-0.0000145	0.539	↔	2023-08-08	0.175	↔
2_12_5_113	MW-02	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	-0.0242	0.707	↔	0.00579	0.176	↔	2023-02-07	0.260	↔
2_12_5_118	MW-02	Appendix IV	Molybdenum	mg/L	11	0	0%	0.0000654	0.080	↔	-0.0000144	0.013	↔	2023-02-08	0.688	↔
2_12_5_122	MW-02	Appendix IV	Selenium	mg/L	11	0	0%	0	0.469	↔	0	0.562	↔	2023-10-23	0.131	↔
2_12_5_125	MW-02	Appendix IV	Thallium	mg/L	11	10	91%	0	0.225	↔	0	0.669	↔	2023-10-24	0.291	↔
2_12_6_114	MW-02	Part 115	Iron	mg/L	11	0	0%	-0.0113	0.449	↔	0.0370	0.736	↔	2023-10-24	0.189	↔
2_12_6_119	MW-02	Part 115	Nickel	mg/L	11	0	0%	0.000216	0.607	↔	-0.0000455	0.111	↔	2023-02-06	0.349	↔
2_12_6_123	MW-02	Part 115	Silver	mg/L	11	11	100%	0	0.545	↔	0	0.121	↔	2023-02-07	0.366	↔
2_12_6_129	MW-02	Part 115	Vanadium	mg/L	11	1	9%	0.0000119	0.334	↔	0	0.839	↔	2023-06-27	0.179	↔
2_13_4_107	MW-03	Appendix III	Calcium	mg/L	11	0	0%	0.215	0.469	↔	-0.175	0.337	↔	2023-06-17	0.191	↔
2_13_4_108	MW-03	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	-0.808	0.087	↔	-0.102	0.327	↔	2023-04-11	0.755	↔
2_13_4_112	MW-03	Appendix III	Fluoride	mg/L	11	0	0%	-0.00372	0.380	↔	0.000118	0.904	↔	2023-04-06	0.277	↔
2_13_4_120	MW-03	Appendix III	pH (field)	su	11	0	0%	0.000776	0.506	↔	0	0.990	↔	2023-05-22	0.197	↔
2_13_4_124	MW-03	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	3.89	0.011	↔	-1.10	0.038	↔	2023-04-18	0.736	↔
2_13_4_126	MW-03	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	1.85	0.169	↔	-1.48	0.082	↔	2023-06-06	0.487	↔
2_13_5_101	MW-03	Appendix IV	Antimony	mg/L	11	6	55%	0	0.249	↔	0	0.495	↔	2023-05-06	0.306	↔
2_13_5_102	MW-03	Appendix IV	Arsenic	mg/L	11	0	0%	0	0.307	↔	0	0.062	↔	2023-05-22	0.468	↔
2_13_5_104	MW-03	Appendix IV	Beryllium	mg/L	11	7	64%	0	0.650	↔	0	0.514	↔	2023-06-28	0.124	↔
2_13_5_106	MW-03	Appendix IV	Cadmium	mg/L	11	10	91%	0	0.488	↔	0	0.963	↔	2023-05-22	0.201	↔
2_13_5_109	MW-03	Appendix IV	Chromium, Total	mg/L	11	0	0%	0	0.332	↔	0.0000283	0.479	↔	2024-02-06	0.206	↔
2_13_5_110	MW-03	Appendix IV	Cobalt	mg/L	11	0	0%	0	0.318	↔	0	0.918	↔	2023-10-24	0.154	↔
2_13_5_113	MW-03	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	-0.00372	0.380	↔	0.000118	0.904	↔	2023-04-06	0.277	↔
2_13_5_115	MW-03	Appendix IV	Lead	mg/L	11	10	91%	0.0000122	0.055	↔	0	0.025	↔	2023-02-08	0.657	↔
2_13_5_116	MW-03	Appendix IV	Lithium	mg/L	11	0	0%	-0.0000707	0.549	↔	-0.0000307	0.287	↔	2023-04-17	0.443	↔
2_13_5_117	MW-03	Appendix IV	Mercury	mg/L	11	10	91%	0	0.072	↔	0	0.677	↔	2023-10-24	0.410	↔
2_13_5_118	MW-03	Appendix IV	Molybdenum	mg/L	11	8	73%	0.0000166	0.717	↔	0	0.280	↔	2023-02-06	0.189	↔
2_13_5_121	MW-03	Appendix IV	Radium 226 and 228	pCi/L	11	1	9%	-0.0162	0.247	↔	-0.000353	0.672	↔	2023-01-12	0.445	↔
2_13_5_122	MW-03	Appendix IV	Selenium	mg/L	11	3	27%	0	0.537	↔	0	0.508	↔	2023-05-23	0.118	↔
2_13_5_125	MW-03	Appendix IV	Thallium	mg/L	11	10	91%	0	0.073	↔	0	0.069	↔	2023-03-01	0.655	↔

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Table 8: Trend Tests: Piecewise Linear-Linear *(continued)*

								Line 1			Line 2					
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	R-Squared	Overall Trend
2_13_6_111	MW-03	Part 115	Copper	mg/L	11	5	45%	0	0.863	↔	0	0.321	↔	2023-06-10	0.220	↔
2_13_6_114	MW-03	Part 115	Iron	mg/L	11	0	0%	-0.0220	0.013	↔	0.00223	0.600	↔	2023-06-17	0.776	↔
2_13_6_119	MW-03	Part 115	Nickel	mg/L	11	1	9%	-0.0000407	0.315	↔	0	0.913	↔	2023-04-28	0.272	↔
2_13_6_123	MW-03	Part 115	Silver	mg/L	11	11	100%	0	0.413	↔	0	0.615	↔	2023-02-07	0.154	↔
2_13_6_129	MW-03	Part 115	Vanadium	mg/L	11	9	82%	0	0.630	↔	0	0.415	↔	2023-08-05	0.136	↔
2_14_4_105	MW-04	Appendix III	Boron	mg/L	11	0	0%	-0.00270	0.826	↔	0.00124	0.136	↔	2023-01-30	0.305	↔
2_14_4_112	MW-04	Appendix III	Fluoride	mg/L	11	0	0%	0.00202	0.025	↔	-0.00231	0.697	↔	2023-10-24	0.543	↔
2_14_4_120	MW-04	Appendix III	pH (field)	su	11	0	0%	0.000790	0.504	↔	-0.000276	0.544	↔	2023-05-22	0.150	↔
2_14_4_124	MW-04	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	2.90	0.199	↔	0.212	0.676	↔	2023-04-18	0.597	↔
2_14_4_126	MW-04	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	0.916	0.573	↔	-0.0846	0.892	↔	2023-05-22	0.126	↔
2_14_5_101	MW-04	Appendix IV	Antimony	mg/L	11	8	73%	0	0.273	↔	0	0.410	↔	2023-05-22	0.331	↔
2_14_5_102	MW-04	Appendix IV	Arsenic	mg/L	11	0	0%	0	0.357	↔	0	0.418	↔	2023-05-22	0.256	↔
2_14_5_103	MW-04	Appendix IV	Barium	mg/L	11	0	0%	-0.000896	0.541	↔	-0.0000184	0.957	↔	2023-04-18	0.208	↔
2_14_5_106	MW-04	Appendix IV	Cadmium	mg/L	11	11	100%	0	0.508	↔	0	0.947	↔	2023-05-22	0.181	↔
2_14_5_110	MW-04	Appendix IV	Cobalt	mg/L	11	0	0%	0	0.909	↔	0	0.515	↔	2023-08-07	0.290	↔
2_14_5_113	MW-04	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.00202	0.025	↔	-0.00231	0.697	↔	2023-10-24	0.543	↔
2_14_5_115	MW-04	Appendix IV	Lead	mg/L	11	11	100%	0	0.575	↔	0	0.152	↔	2023-02-06	0.323	↔
2_14_5_116	MW-04	Appendix IV	Lithium	mg/L	11	0	0%	0.0000508	0.284	↔	-0.0000647	0.467	↔	2023-08-07	0.254	↔
2_14_5_118	MW-04	Appendix IV	Molybdenum	mg/L	11	2	18%	0	0.736	↔	0	0.491	↔	2023-04-18	0.086	↔
2_14_5_121	MW-04	Appendix IV	Radium 226 and 228	pCi/L	11	2	18%	-0.000726	0.654	↔	-0.00164	0.316	↔	2023-06-28	0.425	↔
2_14_5_122	MW-04	Appendix IV	Selenium	mg/L	11	5	45%	0	0.225	↔	0	0.232	↔	2023-05-23	0.335	↔
2_14_5_125	MW-04	Appendix IV	Thallium	mg/L	11	11	100%	0	0.304	↔	0	0.441	↔	2023-04-19	0.223	↔
2_14_6_111	MW-04	Part 115	Copper	mg/L	11	9	82%	0	1.000	↔	0	0.136	↔	2023-06-29	0.544	↔
2_14_6_114	MW-04	Part 115	Iron	mg/L	11	0	0%	0.0131	0.419	↔	-0.000676	0.751	↔	2023-02-25	0.230	↔
2_14_6_119	MW-04	Part 115	Nickel	mg/L	11	0	0%	0.0000428	0.206	↔	-0.0000209	0.509	↔	2023-06-28	0.263	↔
2_14_6_123	MW-04	Part 115	Silver	mg/L	11	11	100%	0	0.664	↔	0	0.577	↔	2023-02-06	0.153	↔
2_14_6_129	MW-04	Part 115	Vanadium	mg/L	11	10	91%	0	0.113	↔	0	0.000	↑	2024-02-13	1.000	↔
2_19_4_105	MW-09	Appendix III	Boron	mg/L	11	0	0%	0.00208	0.333	↔	-0.00559	0.734	↔	2023-10-24	0.215	↔
2_19_4_107	MW-09	Appendix III	Calcium	mg/L	11	0	0%	1.26	0.148	↔	0.180	0.359	↔	2023-03-14	0.600	↔
2_19_4_108	MW-09	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	-0.0252	0.021	↔	0.0746	0.003	↑	2023-09-27	0.851	↔
2_19_4_112	MW-09	Appendix III	Fluoride	mg/L	11	0	0%	0.00295	0.004	↑	-0.00300	0.004	↓	2023-08-02	0.837	↔
2_19_4_120	MW-09	Appendix III	pH (field)	su	11	0	0%	0.000819	0.433	↔	-0.000608	0.153	↔	2023-05-22	0.317	↔
2_19_4_124	MW-09	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	3.51	0.137	↔	0.184	0.721	↔	2023-04-10	0.634	↔
2_19_4_126	MW-09	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	4.81	0.125	↔	0.170	0.802	↔	2023-04-17	0.666	↔
2_19_5_101	MW-09	Appendix IV	Antimony	mg/L	11	7	64%	0	0.526	↔	0	0.783	↔	2023-04-17	0.175	↔
2_19_5_102	MW-09	Appendix IV	Arsenic	mg/L	11	0	0%	0	0.347	↔	0	0.374	↔	2023-04-18	0.216	↔
2_19_5_103	MW-09	Appendix IV	Barium	mg/L	11	0	0%	-0.00789	0.194	↔	0.000214	0.922	↔	2023-04-22	0.382	↔
2_19_5_104	MW-09	Appendix IV	Beryllium	mg/L	11	10	91%	0	0.318	↔	0	0.372	↔	2023-05-23	0.228	↔
2_19_5_106	MW-09	Appendix IV	Cadmium	mg/L	11	11	100%	0	0.311	↔	0	0.990	↔	2023-05-23	0.249	↔
2_19_5_109	MW-09	Appendix IV	Chromium, Total	mg/L	11	0	0%	0	0.784	↔	0	0.635	↔	2023-04-18	0.122	↔
2_19_5_110	MW-09	Appendix IV	Cobalt	mg/L	11	0	0%	0	0.513	↔	0	0.744	↔	2023-03-01	0.175	↔
2_19_5_113	MW-09	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.00295	0.004	↑	-0.00300	0.004	↓	2023-08-02	0.837	↔

(Table continues on next page)

Table 8: Trend Tests: Piecewise Linear-Linear *(continued)*

								Line 1			Line 2					
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	R-Squared	Overall Trend
2_19_5_115	MW-09	Appendix IV	Lead	mg/L	11	11	100%	0	0.637	↔	0	0.198	↔	2023-02-05	0.262	↔
2_19_5_117	MW-09	Appendix IV	Mercury	mg/L	11	9	82%	0	1.000	↔	0	0.139	↔	2023-05-09	0.416	↔
2_19_5_118	MW-09	Appendix IV	Molybdenum	mg/L	11	0	0%	-0.0000866	0.034	↔	0	0.953	↔	2023-05-23	0.654	↔
2_19_5_122	MW-09	Appendix IV	Selenium	mg/L	11	2	18%	0	0.447	↔	0	0.119	↔	2023-05-22	0.355	↔
2_19_5_125	MW-09	Appendix IV	Thallium	mg/L	11	11	100%	0	0.412	↔	0	0.615	↔	2023-02-06	0.153	↔
2_19_6_111	MW-09	Part 115	Copper	mg/L	11	9	82%	0	0.235	↔	0	0.794	↔	2023-08-08	0.223	↔
2_19_6_114	MW-09	Part 115	Iron	mg/L	11	0	0%	-0.00905	0.516	↔	0.0741	0.501	↔	2023-12-17	0.279	↔
2_19_6_119	MW-09	Part 115	Nickel	mg/L	11	0	0%	0	0.460	↔	0.0000391	0.001	↑	2023-10-23	0.900	↔
2_19_6_123	MW-09	Part 115	Silver	mg/L	11	11	100%	0	0.500	↔	0	0.685	↔	2023-04-17	0.186	↔
2_21_4_105	MW-11	Appendix III	Boron	mg/L	11	0	0%	-0.0723	0.184	↔	0.0120	0.338	↔	2023-03-19	0.358	↔
2_21_4_107	MW-11	Appendix III	Calcium	mg/L	11	0	0%	1.42	0.378	↔	-0.282	0.205	↔	2023-03-13	0.357	↔
2_21_4_108	MW-11	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	-0.278	0.389	↔	-0.0194	0.647	↔	2023-03-13	0.456	↔
2_21_4_112	MW-11	Appendix III	Fluoride	mg/L	11	0	0%	-0.00716	0.172	↔	0.00160	0.196	↔	2023-03-24	0.409	↔
2_21_4_120	MW-11	Appendix III	pH (field)	su	11	0	0%	0.00127	0.704	↔	-0.0000627	0.751	↔	2023-02-07	0.137	↔
2_21_4_124	MW-11	Appendix III	Sulfate (as SO4)	mg/L	11	2	18%	1.34	0.138	↔	-0.405	0.069	↔	2023-03-14	0.515	↔
2_21_4_126	MW-11	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2.53	0.395	↔	-0.567	0.614	↔	2023-04-30	0.174	↔
2_21_5_101	MW-11	Appendix IV	Antimony	mg/L	11	7	64%	0	0.859	↔	0	0.885	↔	2023-03-13	0.039	↔
2_21_5_102	MW-11	Appendix IV	Arsenic	mg/L	11	0	0%	-0.0000123	0.339	↔	0	0.653	↔	2023-04-10	0.297	↔
2_21_5_103	MW-11	Appendix IV	Barium	mg/L	11	0	0%	-0.00356	0.117	↔	0.000834	0.313	↔	2023-04-18	0.414	↔
2_21_5_104	MW-11	Appendix IV	Beryllium	mg/L	11	9	82%	0	0.296	↔	0	0.000	↑	2024-02-11	0.992	↔
2_21_5_106	MW-11	Appendix IV	Cadmium	mg/L	11	9	82%	0	0.487	↔	0	0.811	↔	2024-01-10	0.091	↔
2_21_5_109	MW-11	Appendix IV	Chromium, Total	mg/L	11	0	0%	-0.0000218	0.513	↔	0	0.973	↔	2023-04-17	0.225	↔
2_21_5_110	MW-11	Appendix IV	Cobalt	mg/L	11	0	0%	0	0.247	↔	0.0000396	0.001	↑	2024-02-12	0.864	↔
2_21_5_113	MW-11	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	-0.00716	0.172	↔	0.00160	0.196	↔	2023-03-24	0.409	↔
2_21_5_115	MW-11	Appendix IV	Lead	mg/L	11	3	27%	-0.000210	0.456	↔	0	0.956	↔	2023-04-09	0.251	↔
2_21_5_116	MW-11	Appendix IV	Lithium	mg/L	11	0	0%	-0.00110	0.228	↔	0.000139	0.502	↔	2023-03-24	0.330	↔
2_21_5_117	MW-11	Appendix IV	Mercury	mg/L	11	10	91%	0	0.114	↔	0.0000174	0.000	↑	2024-02-12	1.000	↔
2_21_5_118	MW-11	Appendix IV	Molybdenum	mg/L	11	2	18%	-0.0000127	0.105	↔	0	0.096	↔	2023-04-30	0.514	↔
2_21_5_121	MW-11	Appendix IV	Radium 226 and 228	pCi/L	11	3	27%	0.000270	0.874	↔	-0.00236	0.481	↔	2023-08-08	0.272	↔
2_21_5_122	MW-11	Appendix IV	Selenium	mg/L	11	3	27%	0	0.430	↔	0	0.044	↔	2023-07-12	0.632	↔
2_21_5_125	MW-11	Appendix IV	Thallium	mg/L	11	10	91%	0	0.621	↔	0	0.302	↔	2023-02-07	0.239	↔
2_21_6_111	MW-11	Part 115	Copper	mg/L	11	3	27%	-0.0000553	0.486	↔	0	0.884	↔	2023-04-15	0.214	↔
2_21_6_114	MW-11	Part 115	Iron	mg/L	11	0	0%	-0.0371	0.263	↔	0.0111	0.168	↔	2023-04-11	0.392	↔
2_21_6_119	MW-11	Part 115	Nickel	mg/L	11	0	0%	-0.0000272	0.283	↔	0	0.700	↔	2023-04-18	0.237	↔
2_21_6_123	MW-11	Part 115	Silver	mg/L	11	9	82%	0	0.614	↔	0	0.540	↔	2023-04-17	0.115	↔
2_21_6_129	MW-11	Part 115	Vanadium	mg/L	11	9	82%	0	0.115	↔	0.0000441	0.000	↑	2024-02-12	1.000	↔
2_21_6_130	MW-11	Part 115	Zinc	mg/L	11	3	27%	-0.000475	0.403	↔	-0.0000325	0.663	↔	2023-03-13	0.440	↔
2_22_4_107	MW-12	Appendix III	Calcium	mg/L	11	0	0%	0.0749	0.203	↔	-0.312	0.475	↔	2023-10-23	0.543	↔
2_22_4_108	MW-12	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.00434	0.800	↔	-0.0909	0.500	↔	2023-12-28	0.275	↔
2_22_4_112	MW-12	Appendix III	Fluoride	mg/L	11	0	0%	-0.00163	0.086	↔	0.000671	0.072	↔	2023-05-18	0.587	↔
2_22_4_120	MW-12	Appendix III	pH (field)	su	11	0	0%	-0.0000324	0.981	↔	0.00293	0.777	↔	2023-10-23	0.212	↔
2_22_4_124	MW-12	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	-0.371	0.276	↔	-0.102	0.209	↔	2023-04-17	0.651	↔

(Table continues on next page)

Table 8: Trend Tests: Piecewise Linear-Linear *(continued)*

								Line 1			Line 2					
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	R-Squared	Overall Trend
2_22_4_126	MW-12	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	0.166	0.671	↔	-0.729	0.340	↔	2023-08-07	0.384	↔
2_22_5_101	MW-12	Appendix IV	Antimony	mg/L	11	0	0%	0	0.069	↔	0	0.753	↔	2024-01-01	0.504	↔
2_22_5_102	MW-12	Appendix IV	Arsenic	mg/L	11	0	0%	0	0.183	↔	0	0.114	↔	2023-10-13	0.445	↔
2_22_5_103	MW-12	Appendix IV	Barium	mg/L	11	0	0%	0.000115	0.006	↑	-0.000211	0.386	↔	2023-10-23	0.716	↔
2_22_5_106	MW-12	Appendix IV	Cadmium	mg/L	11	0	0%	0	0.021	↔	0	0.036	↔	2023-07-11	0.690	↔
2_22_5_109	MW-12	Appendix IV	Chromium, Total	mg/L	11	4	36%	0	0.187	↔	0	0.012	↔	2023-10-06	0.752	↔
2_22_5_110	MW-12	Appendix IV	Cobalt	mg/L	11	5	45%	0	0.016	↔	0	0.104	↔	2023-08-23	0.665	↔
2_22_5_113	MW-12	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	-0.00163	0.086	↔	0.000671	0.072	↔	2023-05-18	0.587	↔
2_22_5_115	MW-12	Appendix IV	Lead	mg/L	11	6	55%	0	0.387	↔	0	0.348	↔	2023-06-27	0.239	↔
2_22_5_116	MW-12	Appendix IV	Lithium	mg/L	11	0	0%	0	0.096	↔	-0.0000180	0.078	↔	2023-09-19	0.567	↔
2_22_5_117	MW-12	Appendix IV	Mercury	mg/L	11	9	82%	0	0.108	↔	0	0.000	↑	2024-02-12	1.000	↔
2_22_5_118	MW-12	Appendix IV	Molybdenum	mg/L	11	0	0%	0	0.246	↔	-0.0000255	0.492	↔	2023-10-23	0.526	↔
2_22_5_121	MW-12	Appendix IV	Radium 226 and 228	pCi/L	11	8	73%	0.00197	0.254	↔	-0.000759	0.254	↔	2023-05-05	0.322	↔
2_22_5_122	MW-12	Appendix IV	Selenium	mg/L	11	0	0%	0	0.008	↓	0	0.226	↔	2023-09-02	0.705	↔
2_22_6_111	MW-12	Part 115	Copper	mg/L	11	0	0%	0	0.101	↔	0	0.520	↔	2023-04-19	0.450	↔
2_22_6_119	MW-12	Part 115	Nickel	mg/L	11	0	0%	0	0.330	↔	0	0.191	↔	2023-08-16	0.497	↔
2_22_6_129	MW-12	Part 115	Vanadium	mg/L	11	6	55%	0	0.048	↔	0	0.188	↔	2023-05-23	0.542	↔
2_22_6_130	MW-12	Part 115	Zinc	mg/L	11	0	0%	0	0.397	↔	-0.0000222	0.242	↔	2023-08-10	0.455	↔
3_20_4_105	MW-10	Appendix III	Boron	mg/L	11	0	0%	0.0370	0.336	↔	-0.104	0.175	↔	2023-10-09	0.355	↔
3_20_4_107	MW-10	Appendix III	Calcium	mg/L	11	0	0%	-0.305	0.331	↔	5.19	0.059	↔	2024-01-16	0.679	↔
3_20_4_108	MW-10	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.807	0.095	↔	-0.585	0.488	↔	2023-08-20	0.385	↔
3_20_4_112	MW-10	Appendix III	Fluoride	mg/L	11	0	0%	0.00741	0.340	↔	-0.0204	0.184	↔	2023-09-05	0.439	↔
3_20_4_120	MW-10	Appendix III	pH (field)	su	11	0	0%	0.00300	0.500	↔	-0.00156	0.367	↔	2023-05-22	0.181	↔
3_20_4_124	MW-10	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	-1.43	0.136	↔	15.9	0.048	↔	2023-12-30	0.775	↔
3_20_4_126	MW-10	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	-0.570	0.542	↔	25.9	0.008	↑	2024-02-07	0.781	↔
3_20_5_101	MW-10	Appendix IV	Antimony	mg/L	11	7	64%	0	0.514	↔	0	0.878	↔	2023-04-24	0.113	↔
3_20_5_102	MW-10	Appendix IV	Arsenic	mg/L	11	0	0%	0	0.108	↔	0	0.568	↔	2023-09-06	0.390	↔
3_20_5_103	MW-10	Appendix IV	Barium	mg/L	11	0	0%	-0.00169	0.308	↔	0.000442	0.261	↔	2023-04-17	0.356	↔
3_20_5_104	MW-10	Appendix IV	Beryllium	mg/L	11	5	45%	0	0.250	↔	0	0.144	↔	2023-05-22	0.401	↔
3_20_5_106	MW-10	Appendix IV	Cadmium	mg/L	11	11	100%	0	0.512	↔	0	0.945	↔	2023-05-22	0.180	↔
3_20_5_109	MW-10	Appendix IV	Chromium, Total	mg/L	11	0	0%	0.0000149	0.214	↔	-0.0000220	0.076	↔	2023-08-07	0.478	↔
3_20_5_110	MW-10	Appendix IV	Cobalt	mg/L	11	1	9%	0	0.117	↔	0	0.086	↔	2023-05-23	0.517	↔
3_20_5_113	MW-10	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.00741	0.340	↔	-0.0204	0.184	↔	2023-09-05	0.439	↔
3_20_5_115	MW-10	Appendix IV	Lead	mg/L	11	9	82%	0.0000111	0.189	↔	0	0.090	↔	2023-02-06	0.461	↔
3_20_5_116	MW-10	Appendix IV	Lithium	mg/L	11	0	0%	0.00407	0.529	↔	-0.00122	0.173	↔	2023-03-13	0.294	↔
3_20_5_117	MW-10	Appendix IV	Mercury	mg/L	11	10	91%	0	0.114	↔	0.0000322	0.000	↑	2024-02-12	1.000	↔
3_20_5_121	MW-10	Appendix IV	Radium 226 and 228	pCi/L	11	9	82%	0.00411	0.689	↔	-0.000632	0.325	↔	2023-02-05	0.181	↔
3_20_5_122	MW-10	Appendix IV	Selenium	mg/L	11	1	9%	0	0.930	↔	0	0.311	↔	2023-04-17	0.233	↔
3_20_5_125	MW-10	Appendix IV	Thallium	mg/L	11	11	100%	0	0.226	↔	0	0.303	↔	2023-02-06	0.316	↔
3_20_6_111	MW-10	Part 115	Copper	mg/L	11	8	73%	0	0.519	↔	0	0.460	↔	2023-05-23	0.139	↔
3_20_6_114	MW-10	Part 115	Iron	mg/L	11	0	0%	0.0256	0.492	↔	-0.00523	0.293	↔	2023-03-13	0.261	↔
3_20_6_119	MW-10	Part 115	Nickel	mg/L	11	5	45%	0	0.291	↔	0	0.275	↔	2023-05-23	0.283	↔

(Table continues on next page)

Table 8: Trend Tests: Piecewise Linear-Linear *(continued)*

								Line 1			Line 2					
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	R-Squared	Overall Trend
3_20_6_123	MW-10	Part 115	Silver	mg/L	11	11	100%	0	0.415	↔	0	0.615	↔	2023-02-06	0.152	↔
3_20_6_129	MW-10	Part 115	Vanadium	mg/L	11	10	91%	0	0.340	↔	0	0.378	↔	2023-05-23	0.217	↔

Table 9: Trend Tests: Piecewise Linear-Linear-Linear

								Line 1			Line 2			Line 3						
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	Break 2	R-Squared	Overall Trend
1_16_4_105	MW-06	Appendix III	Boron	mg/L	11	0	0%	-0.0249	0.013	↔	0.0188	0.216	↔	-0.0288	0.005	↓	2023-04-18	2023-10-11	0.904	↔
1_16_4_107	MW-06	Appendix III	Calcium	mg/L	11	0	0%	0.698	0.073	↔	-0.226	0.229	↔	0.570	0.408	↔	2023-03-14	2023-11-17	0.720	↔
1_16_4_108	MW-06	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	-0.700	0.002	↓	0.146	0.224	↔	-0.420	0.002	↓	2023-04-12	2023-09-30	0.978	↔
1_16_4_112	MW-06	Appendix III	Fluoride	mg/L	11	0	0%	-0.00263	0.065	↔	0.00370	0.165	↔	-0.00125	0.282	↔	2023-04-30	2023-08-08	0.672	↔
1_16_4_120	MW-06	Appendix III	pH (field)	su	11	0	0%	-0.0107	0.054	↔	0.00739	0.421	↔	-0.000657	0.407	↔	2023-02-06	2023-05-08	0.672	↔
1_16_4_124	MW-06	Appendix III	Sulfate (as SO4)	mg/L	11	1	9%	0.00517	0.914	↔	-0.116	0.198	↔	0.143	0.449	↔	2023-06-08	2023-12-12	0.582	↔
1_16_4_126	MW-06	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	-0.101	0.758	↔	-1.30	0.277	↔	1.85	0.277	↔	2023-07-15	2023-12-28	0.658	↔
1_16_5_101	MW-06	Appendix IV	Antimony	mg/L	11	9	82%	0	0.259	↔	0	0.484	↔	0	0.400	↔	2023-05-22	2023-07-23	0.426	↔
1_16_5_102	MW-06	Appendix IV	Arsenic	mg/L	11	0	0%	0	0.093	↔	0	0.054	↔	0	0.034	↔	2023-04-06	2023-10-12	0.816	↔
1_16_5_103	MW-06	Appendix IV	Barium	mg/L	11	0	0%	-0.00297	0.075	↔	0.00210	0.472	↔	-0.00121	0.368	↔	2023-04-18	2023-09-30	0.580	↔
1_16_5_104	MW-06	Appendix IV	Beryllium	mg/L	11	10	91%	0	0.000	↓	0	0.295	↔	0	0.890	↔	2023-01-03	2023-10-27	1.000	↔
1_16_5_106	MW-06	Appendix IV	Cadmium	mg/L	11	11	100%	0	0.207	↔	0	0.636	↔	0	0.607	↔	2023-05-23	2023-08-08	0.369	↔
1_16_5_109	MW-06	Appendix IV	Chromium, Total	mg/L	11	0	0%	0.0000181	0.502	↔	0	0.519	↔	0	0.412	↔	2023-01-27	2023-04-18	0.443	↔
1_16_5_110	MW-06	Appendix IV	Cobalt	mg/L	11	0	0%	0	0.469	↔	0	0.352	↔	0	0.734	↔	2023-08-02	2023-12-31	0.531	↔
1_16_5_113	MW-06	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	-0.00263	0.065	↔	0.00370	0.165	↔	-0.00125	0.282	↔	2023-04-30	2023-08-08	0.672	↔
1_16_5_115	MW-06	Appendix IV	Lead	mg/L	11	8	73%	0	0.306	↔	0	0.589	↔	0	0.721	↔	2023-04-18	2023-07-18	0.458	↔
1_16_5_118	MW-06	Appendix IV	Molybdenum	mg/L	11	8	73%	0.0000114	0.185	↔	-0.0000217	0.529	↔	0	0.756	↔	2023-04-18	2023-07-13	0.518	↔
1_16_5_121	MW-06	Appendix IV	Radium 226 and 228	pCi/L	11	2	18%	0.00610	0.318	↔	-0.00412	0.650	↔	0.0000464	0.984	↔	2023-03-14	2023-07-21	0.300	↔
1_16_5_122	MW-06	Appendix IV	Selenium	mg/L	11	5	45%	0	0.709	↔	0	0.238	↔	0	0.268	↔	2023-03-09	2024-02-12	0.506	↔
1_16_5_125	MW-06	Appendix IV	Thallium	mg/L	11	11	100%	0	0.319	↔	0	0.351	↔	0	0.469	↔	2023-05-22	2023-07-11	0.411	↔
1_16_6_111	MW-06	Part 115	Copper	mg/L	11	10	91%	0	1.000	↔	0	1.000	↔	0	0.406	↔	2023-02-21	2023-07-20	0.292	↔
1_16_6_114	MW-06	Part 115	Iron	mg/L	11	0	0%	0.0815	0.142	↔	-0.0538	0.492	↔	0.0603	0.026	↔	2023-03-14	2023-08-05	0.770	↔
1_16_6_119	MW-06	Part 115	Nickel	mg/L	11	4	36%	0	0.237	↔	0	0.840	↔	0	0.679	↔	2023-04-17	2023-12-06	0.667	↔
1_16_6_123	MW-06	Part 115	Silver	mg/L	11	11	100%	0	0.320	↔	0	0.351	↔	0	0.469	↔	2023-05-22	2023-07-11	0.411	↔
1_16_6_130	MW-06	Part 115	Zinc	mg/L	11	2	18%	-0.00143	0.346	↔	0.000578	0.433	↔	-0.000122	0.350	↔	2023-01-20	2023-04-18	0.414	↔
1_17_4_108	MW-07	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	-0.0102	0.001	↓	0.0128	0.061	↔	0	1.000	↔	2023-07-16	2023-10-24	0.912	↔
1_17_4_120	MW-07	Appendix III	pH (field)	su	11	0	0%	-0.00177	0.614	↔	0	1.000	↔	0.00119	0.412	↔	2023-03-12	2023-08-27	0.423	↔
1_17_4_124	MW-07	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	0.0312	0.720	↔	-0.223	0.003	↓	0.0652	0.000	↑	2023-02-06	2023-04-27	0.962	↔
1_17_5_101	MW-07	Appendix IV	Antimony	mg/L	11	10	91%	0	0.550	↔	0	0.000	↑	0	0.936	↔	2023-03-15	2023-05-25	0.998	↔
1_17_5_102	MW-07	Appendix IV	Arsenic	mg/L	11	0	0%	0	0.349	↔	0	0.193	↔	0	0.640	↔	2023-05-04	2023-12-03	0.464	↔
1_17_5_103	MW-07	Appendix IV	Barium	mg/L	11	0	0%	-0.000505	0.274	↔	0.000977	0.186	↔	-0.0000720	0.682	↔	2023-04-17	2023-07-11	0.573	↔
1_17_5_104	MW-07	Appendix IV	Beryllium	mg/L	11	8	73%	0	0.842	↔	0	0.546	↔	0	0.535	↔	2023-03-17	2023-08-07	0.238	↔
1_17_5_106	MW-07	Appendix IV	Cadmium	mg/L	11	11	100%	0	0.574	↔	0	0.000	↑	0	0.316	↔	2023-04-17	2023-05-23	1.000	↔

(Table continues on next page)

Table 9: Trend Tests: Piecewise Linear-Linear-Linear *(continued)*

								Line 1			Line 2			Line 3						
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	Break 2	R-Squared	Overall Trend
1_17_5_109	MW-07	Appendix IV	Chromium, Total	mg/L	11	0	0%	0	0.910	↔	0	0.792	↔	0	0.705	↔	2023-01-12	2023-05-22	0.154	↔
1_17_5_110	MW-07	Appendix IV	Cobalt	mg/L	11	0	0%	0	0.292	↔	0	0.828	↔	0	0.121	↔	2023-01-20	2023-05-19	0.647	↔
1_17_5_115	MW-07	Appendix IV	Lead	mg/L	11	11	100%	0	0.574	↔	0	0.000	↓	0	0.316	↔	2023-04-17	2023-05-23	1.000	↔
1_17_5_118	MW-07	Appendix IV	Molybdenum	mg/L	11	11	100%	0	0.574	↔	-0.0000106	0.000	↓	0	0.316	↔	2023-04-17	2023-05-23	1.000	↔
1_17_5_121	MW-07	Appendix IV	Radium 226 and 228	pCi/L	11	2	18%	-0.00437	0.409	↔	0.00852	0.708	↔	-0.00421	0.191	↔	2023-04-20	2023-08-06	0.399	↔
1_17_5_122	MW-07	Appendix IV	Selenium	mg/L	11	9	82%	0	1.000	↔	0	0.129	↔	0	0.325	↔	2023-04-17	2023-05-25	0.730	↔
1_17_6_111	MW-07	Part 115	Copper	mg/L	11	9	82%	0	0.767	↔	0	0.222	↔	0	0.845	↔	2023-02-25	2023-11-20	0.421	↔
1_17_6_114	MW-07	Part 115	Iron	mg/L	11	0	0%	-0.0875	0.301	↔	0.0396	0.344	↔	-0.00656	0.359	↔	2023-01-14	2023-05-22	0.543	↔
1_18_4_105	MW-08	Appendix III	Boron	mg/L	11	0	0%	0.0938	0.025	↔	-0.0207	0.734	↔	-0.00146	0.781	↔	2023-02-07	2023-04-29	0.721	↔
1_18_4_108	MW-08	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.259	0.039	↔	-0.0867	0.653	↔	-0.0126	0.455	↔	2023-02-07	2023-04-22	0.666	↔
1_18_4_112	MW-08	Appendix III	Fluoride	mg/L	11	0	0%	0.0102	0.012	↔	-0.00276	0.012	↔	0.00370	0.323	↔	2023-03-02	2023-10-30	0.901	↔
1_18_4_120	MW-08	Appendix III	pH (field)	su	11	0	0%	0.00555	0.325	↔	-0.000215	0.965	↔	0.000863	0.801	↔	2023-03-14	2023-10-13	0.355	↔
1_18_5_101	MW-08	Appendix IV	Antimony	mg/L	11	5	45%	0	0.145	↔	0	0.116	↔	0	0.838	↔	2023-04-17	2023-06-29	0.651	↔
1_18_5_102	MW-08	Appendix IV	Arsenic	mg/L	11	0	0%	0.000617	0.002	↑	-0.000165	0.002	↓	0.000315	0.065	↔	2023-02-21	2023-12-04	0.944	↔
1_18_5_103	MW-08	Appendix IV	Barium	mg/L	11	0	0%	0.00346	0.571	↔	-0.00153	0.065	↔	0.00141	0.719	↔	2023-02-06	2023-12-21	0.651	↔
1_18_5_106	MW-08	Appendix IV	Cadmium	mg/L	11	11	100%	0	0.573	↔	0	0.000	↑	0	0.315	↔	2023-04-17	2023-05-23	1.000	↔
1_18_5_109	MW-08	Appendix IV	Chromium, Total	mg/L	11	0	0%	0.0000113	0.017	↔	0	0.281	↔	0	0.233	↔	2023-02-10	2023-04-18	0.813	↔
1_18_5_110	MW-08	Appendix IV	Cobalt	mg/L	11	0	0%	0	0.033	↔	0	0.102	↔	0	0.833	↔	2023-02-07	2024-01-27	0.800	↔
1_18_5_113	MW-08	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.0102	0.012	↔	-0.00276	0.012	↔	0.00370	0.323	↔	2023-03-02	2023-10-30	0.901	↔
1_18_5_115	MW-08	Appendix IV	Lead	mg/L	11	8	73%	0	0.312	↔	0	0.128	↔	0	0.798	↔	2023-02-06	2023-05-13	0.731	↔
1_18_5_116	MW-08	Appendix IV	Lithium	mg/L	11	0	0%	0.00101	0.029	↔	-0.000227	0.161	↔	0.0000680	0.631	↔	2023-02-14	2023-10-20	0.786	↔
1_18_5_118	MW-08	Appendix IV	Molybdenum	mg/L	11	0	0%	0	0.887	↔	-0.0000129	0.174	↔	0	0.075	↔	2023-03-13	2023-07-21	0.683	↔
1_18_5_122	MW-08	Appendix IV	Selenium	mg/L	11	5	45%	0	0.991	↔	0	0.707	↔	0	0.405	↔	2023-04-12	2023-06-20	0.255	↔
1_18_6_111	MW-08	Part 115	Copper	mg/L	11	5	45%	0	0.186	↔	0	0.379	↔	0	0.489	↔	2023-05-03	2023-06-30	0.459	↔
1_18_6_114	MW-08	Part 115	Iron	mg/L	11	0	0%	-0.0802	0.002	↓	0.117	0.047	↔	-0.0556	0.421	↔	2023-07-26	2023-11-29	0.910	↔
1_18_6_119	MW-08	Part 115	Nickel	mg/L	11	0	0%	0	0.147	↔	0	0.013	↔	0.0000143	0.000	↑	2023-02-02	2023-10-13	0.990	↔
1_28_4_107	MW-18	Appendix III	Calcium	mg/L	11	0	0%	-0.908	0.004	↓	1.43	0.069	↔	-0.351	0.692	↔	2023-07-22	2023-11-20	0.868	↔
1_28_4_108	MW-18	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	-0.0898	0.007	↓	0.139	0.172	↔	-0.0335	0.034	↔	2023-04-25	2023-07-19	0.859	↔
1_28_4_112	MW-18	Appendix III	Fluoride	mg/L	11	0	0%	0.00313	0.014	↔	0.0167	0.010	↑	-0.0105	0.000	↓	2023-05-29	2023-08-16	0.983	↔
1_28_4_126	MW-18	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	-1.49	0.792	↔	-7.42	0.260	↔	0.462	0.310	↔	2023-01-12	2023-03-19	0.796	↔
1_28_5_101	MW-18	Appendix IV	Antimony	mg/L	11	3	27%	0	0.322	↔	0	0.528	↔	0	0.259	↔	2023-05-21	2023-08-02	0.432	↔
1_28_5_102	MW-18	Appendix IV	Arsenic	mg/L	11	0	0%	-0.0000800	0.301	↔	0.000112	0.027	↔	-0.0000817	0.563	↔	2023-04-08	2023-10-24	0.722	↔
1_28_5_103	MW-18	Appendix IV	Barium	mg/L	11	0	0%	-0.0000874	0.047	↔	0.000156	0.030	↔	-0.0000451	0.020	↔	2023-03-25	2023-07-04	0.862	↔
1_28_5_104	MW-18	Appendix IV	Beryllium	mg/L	11	10	91%	0	0.566	↔	0	0.224	↔	0	0.000	↑	2023-04-25	2024-02-12	1.000	↔
1_28_5_109	MW-18	Appendix IV	Chromium, Total	mg/L	11	10	91%	0	0.727	↔	0	0.275	↔	0	0.464	↔	2023-02-19	2023-05-22	0.540	↔
1_28_5_113	MW-18	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.00313	0.014	↔	0.0167	0.010	↑	-0.0105	0.000	↓	2023-05-29	2023-08-16	0.983	↔
1_28_5_115	MW-18	Appendix IV	Lead	mg/L	11	8	73%	0	0.495	↔	0	0.410	↔	0	0.939	↔	2023-02-07	2023-05-07	0.397	↔
1_28_5_116	MW-18	Appendix IV	Lithium	mg/L	11	0	0%	-0.000186	0.048	↔	0.000215	0.109	↔	-0.0000816	0.036	↔	2023-04-05	2023-07-23	0.795	↔
1_28_5_121	MW-18	Appendix IV	Radium 226 and 228	pCi/L	11	7	64%	0.00361	0.150	↔	-0.00178	0.690	↔	-0.000880	0.664	↔	2023-04-18	2023-08-31	0.496	↔
1_28_5_122	MW-18	Appendix IV	Selenium	mg/L	11	0	0%	0	0.183	↔	0	0.118	↔	0	0.002	↑	2023-04-02	2023-07-08	0.920	↔
1_28_6_111	MW-18	Part 115	Copper	mg/L	11	0	0%	0	0.965	↔	0	0.146	↔	0	0.176	↔	2023-04-08	2023-08-08	0.651	↔
1_28_6_114	MW-18	Part 115	Iron	mg/L	11	0	0%	-0.0455	0.001	↓	0.0115	0.024	↔	-0.0123	0.390	↔	2023-04-04	2024-02-01	0.952	↔

(Table continues on next page)

Table 9: Trend Tests: Piecewise Linear-Linear-Linear *(continued)*

								Line 1			Line 2			Line 3						
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	Break 2	R-Squared	Overall Trend
1_28_6_119	MW-18	Part 115	Nickel	mg/L	11	0	0%	0	0.985	↔	-0.0000624	0.220	↔	0	0.834	↔	2023-01-14	2023-04-11	0.911	↔
1_29_4_105	MW-19	Appendix III	Boron	mg/L	11	0	0%	-0.00896	0.045	↔	0.00462	0.048	↔	-0.00633	0.386	↔	2023-03-21	2023-10-24	0.789	↔
1_29_4_107	MW-19	Appendix III	Calcium	mg/L	11	0	0%	0.293	0.857	↔	-0.703	0.036	↔	0.384	0.267	↔	2023-01-29	2023-08-07	0.727	↔
1_29_4_108	MW-19	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	-0.217	0.001	↓	0.0967	0.154	↔	-0.328	0.048	↔	2023-06-03	2023-12-31	0.949	↔
1_29_4_112	MW-19	Appendix III	Fluoride	mg/L	11	0	0%	-0.00552	0.013	↔	0.00328	0.063	↔	-0.00308	0.023	↔	2023-03-22	2023-08-21	0.900	↔
1_29_4_124	MW-19	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	-7.94	0.153	↔	2.44	0.801	↔	-0.211	0.805	↔	2023-02-08	2023-05-04	0.419	↔
1_29_5_101	MW-19	Appendix IV	Antimony	mg/L	11	10	91%	0	0.129	↔	0	0.369	↔	0	0.488	↔	2023-05-12	2023-07-12	0.518	↔
1_29_5_102	MW-19	Appendix IV	Arsenic	mg/L	11	0	0%	-0.0000201	0.072	↔	0.000103	0.040	↔	-0.0000164	0.023	↔	2023-05-19	2023-07-07	0.824	↔
1_29_5_103	MW-19	Appendix IV	Barium	mg/L	11	0	0%	-0.000115	0.115	↔	0.0000515	0.400	↔	-0.0000573	0.198	↔	2023-04-17	2023-10-18	0.709	↔
1_29_5_104	MW-19	Appendix IV	Beryllium	mg/L	11	3	27%	0	0.361	↔	0	0.202	↔	0	0.541	↔	2023-02-07	2023-05-05	0.577	↔
1_29_5_109	MW-19	Appendix IV	Chromium, Total	mg/L	11	5	45%	0	0.343	↔	0	0.126	↔	0	0.826	↔	2023-01-19	2023-06-29	0.586	↔
1_29_5_110	MW-19	Appendix IV	Cobalt	mg/L	11	0	0%	0	0.119	↔	0	0.024	↔	0	0.127	↔	2023-02-26	2023-10-21	0.876	↔
1_29_5_113	MW-19	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	-0.00552	0.013	↔	0.00328	0.063	↔	-0.00308	0.023	↔	2023-03-22	2023-08-21	0.900	↔
1_29_5_115	MW-19	Appendix IV	Lead	mg/L	11	11	100%	0.0000103	0.016	↔	-0.0000176	0.116	↔	0	0.513	↔	2023-04-01	2023-06-14	0.866	↔
1_29_5_121	MW-19	Appendix IV	Radium 226 and 228	pCi/L	11	3	27%	0.00516	0.329	↔	0.000231	0.867	↔	-0.00325	0.616	↔	2023-02-14	2023-10-24	0.585	↔
1_29_5_122	MW-19	Appendix IV	Selenium	mg/L	11	10	91%	0	0.084	↔	0	0.399	↔	0	0.764	↔	2023-02-08	2023-05-10	0.702	↔
1_29_5_125	MW-19	Appendix IV	Thallium	mg/L	11	11	100%	0	0.080	↔	0	0.164	↔	0	0.489	↔	2023-05-07	2023-06-29	0.655	↔
1_29_6_111	MW-19	Part 115	Copper	mg/L	11	10	91%	0	0.104	↔	0	0.479	↔	0	0.677	↔	2023-02-08	2023-05-08	0.596	↔
1_29_6_114	MW-19	Part 115	Iron	mg/L	11	0	0%	-0.0317	0.145	↔	0.0676	0.012	↔	-0.0545	0.341	↔	2023-05-12	2023-11-19	0.831	↔
1_29_6_119	MW-19	Part 115	Nickel	mg/L	11	1	9%	0.0000118	0.532	↔	-0.0000217	0.054	↔	0	0.170	↔	2023-02-06	2023-05-12	0.833	↔
1_29_6_123	MW-19	Part 115	Silver	mg/L	11	11	100%	0	0.304	↔	0	0.332	↔	0	0.474	↔	2023-05-21	2023-07-10	0.422	↔
1_29_6_129	MW-19	Part 115	Vanadium	mg/L	11	11	100%	0.0000280	0.346	↔	-0.0000227	0.148	↔	0	0.726	↔	2023-02-07	2023-04-30	0.626	↔
1_29_6_130	MW-19	Part 115	Zinc	mg/L	11	9	82%	0.0000380	0.313	↔	-0.0000230	0.527	↔	0	0.963	↔	2023-02-08	2023-06-19	0.444	↔
1_30_4_105	MW-20	Appendix III	Boron	mg/L	11	0	0%	-0.00771	0.089	↔	0.00168	0.038	↔	-0.00224	0.031	↔	2023-01-14	2023-09-14	0.822	↔
1_30_4_107	MW-20	Appendix III	Calcium	mg/L	11	0	0%	0.361	0.266	↔	-0.791	0.417	↔	0.192	0.088	↔	2023-03-25	2023-06-27	0.667	↔
1_30_4_124	MW-20	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	1.13	0.005	↑	-0.700	0.005	↓	0.219	0.016	↔	2023-02-16	2023-07-26	0.937	↔
1_30_4_126	MW-20	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	0.655	0.137	↔	-2.56	0.236	↔	0.984	0.079	↔	2023-05-23	2023-08-13	0.740	↔
1_30_5_101	MW-20	Appendix IV	Antimony	mg/L	11	4	36%	0	0.327	↔	0	0.357	↔	0	0.310	↔	2023-01-22	2023-04-17	0.669	↔
1_30_5_102	MW-20	Appendix IV	Arsenic	mg/L	11	0	0%	0	0.157	↔	0	0.015	↔	0	0.044	↔	2023-01-17	2023-08-31	0.827	↔
1_30_5_103	MW-20	Appendix IV	Barium	mg/L	11	0	0%	-0.00682	0.001	↓	0.000988	0.075	↔	-0.000553	0.247	↔	2023-02-24	2023-09-30	0.954	↔
1_30_5_106	MW-20	Appendix IV	Cadmium	mg/L	11	11	100%	0	0.569	↔	0	0.000	↑	0	0.316	↔	2023-04-17	2023-05-23	1.000	↔
1_30_5_109	MW-20	Appendix IV	Chromium, Total	mg/L	11	5	45%	0	0.209	↔	0	0.136	↔	0	0.111	↔	2023-03-12	2023-07-27	0.671	↔
1_30_5_110	MW-20	Appendix IV	Cobalt	mg/L	11	0	0%	0	0.083	↔	0	0.022	↔	0	0.288	↔	2023-02-21	2023-10-18	0.892	↔
1_30_5_115	MW-20	Appendix IV	Lead	mg/L	11	0	0%	-0.0000200	0.184	↔	0.0000173	0.045	↔	0	0.014	↔	2023-01-25	2023-04-22	0.823	↔
1_30_5_116	MW-20	Appendix IV	Lithium	mg/L	11	0	0%	-0.000213	0.235	↔	0.000325	0.235	↔	-0.000157	0.056	↔	2023-03-21	2023-07-07	0.689	↔
1_30_5_118	MW-20	Appendix IV	Molybdenum	mg/L	11	0	0%	0	0.687	↔	0.0000168	0.070	↔	0	0.023	↔	2023-04-17	2023-07-17	0.795	↔
1_30_5_122	MW-20	Appendix IV	Selenium	mg/L	11	5	45%	0	1.000	↔	0	0.255	↔	0	0.189	↔	2023-04-17	2023-06-06	0.655	↔
1_30_5_125	MW-20	Appendix IV	Thallium	mg/L	11	10	91%	0	1.000	↔	0	1.000	↔	0	0.409	↔	2023-02-05	2023-07-18	0.290	↔
1_30_6_111	MW-20	Part 115	Copper	mg/L	11	1	9%	0	0.324	↔	0	0.339	↔	0	0.382	↔	2023-03-19	2023-08-06	0.610	↔
1_30_6_119	MW-20	Part 115	Nickel	mg/L	11	0	0%	0	0.372	↔	-0.0000213	0.014	↔	0.0000297	0.064	↔	2023-05-28	2024-01-06	0.931	↔
1_30_6_130	MW-20	Part 115	Zinc	mg/L	11	0	0%	-0.00117	0.065	↔	0.000345	0.529	↔	-0.0000677	0.126	↔	2023-01-16	2023-04-03	0.736	↔
1_40_4_105	MW-30	Appendix III	Boron	mg/L	11	0	0%	0.00733	0.395	↔	-0.00660	0.612	↔	0.000327	0.922	↔	2023-03-13	2023-07-23	0.325	↔

(Table continues on next page)

Table 9: Trend Tests: Piecewise Linear-Linear-Linear *(continued)*

								Line 1			Line 2			Line 3						
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	Break 2	R-Squared	Overall Trend
1_40_4_107	MW-30	Appendix III	Calcium	mg/L	11	0	0%	3.50	0.308	↔	-4.33	0.208	↔	0.315	0.629	↔	2023-03-12	2023-06-08	0.563	↔
1_40_4_108	MW-30	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0	1.000	↔	-0.984	0.007	↓	-0.0321	0.441	↔	2023-01-31	2023-04-28	0.965	↔
1_40_4_124	MW-30	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	0.328	0.509	↔	-3.29	0.092	↔	2.91	0.241	↔	2023-07-14	2023-11-10	0.719	↔
1_40_5_101	MW-30	Appendix IV	Antimony	mg/L	11	10	91%	0	0.227	↔	0	0.515	↔	0	0.834	↔	2023-06-11	2023-12-02	0.363	↔
1_40_5_102	MW-30	Appendix IV	Arsenic	mg/L	11	2	18%	0	0.103	↔	0	0.242	↔	0	0.318	↔	2023-05-21	2023-09-22	0.640	↔
1_40_5_104	MW-30	Appendix IV	Beryllium	mg/L	11	9	82%	0	0.118	↔	0	0.507	↔	0	0.476	↔	2023-02-06	2023-05-09	0.559	↔
1_40_5_106	MW-30	Appendix IV	Cadmium	mg/L	11	11	100%	0	0.321	↔	0	0.673	↔	0	0.427	↔	2023-05-21	2023-08-06	0.370	↔
1_40_5_109	MW-30	Appendix IV	Chromium, Total	mg/L	11	0	0%	-0.0000530	0.027	↔	0.000189	0.051	↔	-0.0000247	0.056	↔	2023-05-19	2023-06-29	0.829	↔
1_40_5_115	MW-30	Appendix IV	Lead	mg/L	11	11	100%	0.0000102	0.024	↔	-0.0000176	0.144	↔	0	0.411	↔	2023-04-01	2023-05-22	0.805	↔
1_40_5_116	MW-30	Appendix IV	Lithium	mg/L	11	0	0%	0.000617	0.610	↔	-0.000549	0.464	↔	0	0.994	↔	2023-03-12	2023-07-30	0.332	↔
1_40_5_117	MW-30	Appendix IV	Mercury	mg/L	11	10	91%	0	0.710	↔	0	0.190	↔	0	0.000	↑	2023-01-17	2024-02-11	1.000	↔
1_40_5_118	MW-30	Appendix IV	Molybdenum	mg/L	11	3	27%	0.0000739	0.117	↔	-0.0000104	0.061	↔	0.0000126	0.623	↔	2023-01-03	2023-11-29	0.680	↔
1_40_5_121	MW-30	Appendix IV	Radium 226 and 228	pCi/L	11	6	55%	-0.0121	0.088	↔	0.00383	0.520	↔	-0.000739	0.134	↔	2023-01-03	2023-04-07	0.625	↔
1_40_5_122	MW-30	Appendix IV	Selenium	mg/L	11	6	55%	0.0000102	0.105	↔	0	0.449	↔	0	0.499	↔	2023-02-06	2023-05-11	0.637	↔
1_40_6_111	MW-30	Part 115	Copper	mg/L	11	7	64%	0	0.106	↔	0	0.421	↔	0	0.479	↔	2023-02-06	2023-04-27	0.588	↔
1_40_6_114	MW-30	Part 115	Iron	mg/L	11	0	0%	0.0448	0.382	↔	-0.0187	0.192	↔	0.0654	0.309	↔	2023-03-12	2024-01-14	0.506	↔
1_40_6_119	MW-30	Part 115	Nickel	mg/L	11	2	18%	0.000101	0.042	↔	-0.0000237	0.091	↔	0	0.506	↔	2023-01-06	2023-06-09	0.778	↔
1_40_6_129	MW-30	Part 115	Vanadium	mg/L	11	11	100%	0.0000277	0.366	↔	-0.0000195	0.205	↔	0	0.714	↔	2023-02-05	2023-05-09	0.597	↔
1_41_4_107	MW-31	Appendix III	Calcium	mg/L	11	0	0%	0.0975	0.584	↔	-0.534	0.362	↔	0.198	0.013	↔	2023-03-20	2023-06-26	0.813	↔
1_41_4_108	MW-31	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	-0.159	0.039	↔	0.500	0.097	↔	-0.0789	0.062	↔	2023-05-15	2023-07-01	0.794	↔
1_41_4_112	MW-31	Appendix III	Fluoride	mg/L	11	0	0%	0.00254	0.193	↔	-0.00249	0.427	↔	0.00376	0.567	↔	2023-05-22	2024-01-27	0.497	↔
1_41_4_120	MW-31	Appendix III	pH (field)	su	11	0	0%	0.000760	0.147	↔	-0.00231	0.188	↔	0.00295	0.211	↔	2023-06-27	2023-11-19	0.711	↔
1_41_4_124	MW-31	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	0.467	0.274	↔	-1.29	0.014	↔	0.599	0.056	↔	2023-03-30	2023-09-05	0.887	↔
1_41_5_101	MW-31	Appendix IV	Antimony	mg/L	11	6	55%	0	0.069	↔	0	0.519	↔	0	1.000	↔	2023-04-02	2023-11-03	0.711	↔
1_41_5_102	MW-31	Appendix IV	Arsenic	mg/L	11	0	0%	0	0.015	↔	0	0.225	↔	0	0.031	↔	2023-03-23	2023-06-13	0.830	↔
1_41_5_103	MW-31	Appendix IV	Barium	mg/L	11	0	0%	-0.000585	0.230	↔	0.00104	0.480	↔	-0.000255	0.118	↔	2023-04-16	2023-06-26	0.588	↔
1_41_5_104	MW-31	Appendix IV	Beryllium	mg/L	11	10	91%	0	0.549	↔	0	0.223	↔	0	0.053	↔	2023-06-03	2024-02-11	0.746	↔
1_41_5_106	MW-31	Appendix IV	Cadmium	mg/L	11	10	91%	0	0.858	↔	0	0.079	↔	0	0.920	↔	2023-04-05	2023-06-14	0.947	↔
1_41_5_110	MW-31	Appendix IV	Cobalt	mg/L	11	1	9%	0	0.827	↔	0	0.983	↔	0	0.863	↔	2023-02-06	2023-06-19	0.072	↔
1_41_5_113	MW-31	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	0.00254	0.193	↔	-0.00249	0.427	↔	0.00376	0.567	↔	2023-05-22	2024-01-27	0.497	↔
1_41_5_115	MW-31	Appendix IV	Lead	mg/L	11	10	91%	0	0.442	↔	0	0.170	↔	0	0.663	↔	2023-05-16	2023-07-24	0.844	↔
1_41_5_116	MW-31	Appendix IV	Lithium	mg/L	11	0	0%	-0.0000138	0.753	↔	0.0000753	0.295	↔	-0.0000712	0.008	↓	2023-04-16	2023-07-14	0.852	↔
1_41_5_118	MW-31	Appendix IV	Molybdenum	mg/L	11	0	0%	-0.0000235	0.089	↔	0	0.690	↔	-0.0000104	0.188	↔	2023-01-08	2024-01-14	0.782	↔
1_41_5_122	MW-31	Appendix IV	Selenium	mg/L	11	5	45%	0	0.983	↔	0	0.858	↔	0	0.312	↔	2023-04-03	2023-06-14	0.231	↔
1_41_5_125	MW-31	Appendix IV	Thallium	mg/L	11	10	91%	0	1.000	↔	0	1.000	↔	0	0.413	↔	2023-02-11	2023-07-17	0.288	↔
1_41_6_111	MW-31	Part 115	Copper	mg/L	11	8	73%	0	0.404	↔	0	0.378	↔	0	0.002	↑	2023-05-21	2024-01-28	0.943	↔
1_41_6_130	MW-31	Part 115	Zinc	mg/L	11	8	73%	-0.000174	0.251	↔	0.0000596	0.667	↔	-0.0000118	0.278	↔	2023-01-20	2023-04-17	0.495	↔
1_42_4_105	MW-32	Appendix III	Boron	mg/L	11	0	0%	-0.00948	0.123	↔	0.0103	0.013	↔	-0.0118	0.300	↔	2023-03-22	2023-10-23	0.828	↔
1_42_4_107	MW-32	Appendix III	Calcium	mg/L	11	0	0%	0.0566	0.661	↔	-1.11	0.087	↔	0.251	0.016	↔	2023-05-11	2023-07-18	0.867	↔
1_42_4_120	MW-32	Appendix III	pH (field)	su	11	0	0%	-0.00543	0.193	↔	0.00146	0.461	↔	-0.000145	0.660	↔	2023-01-05	2023-04-21	0.404	↔
1_42_4_124	MW-32	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	0.688	0.106	↔	-2.56	0.150	↔	0.478	0.064	↔	2023-05-04	2023-07-19	0.787	↔
1_42_5_101	MW-32	Appendix IV	Antimony	mg/L	11	7	64%	0	0.824	↔	0	0.993	↔	0	0.407	↔	2023-04-18	2023-07-21	0.323	↔

(Table continues on next page)

Table 9: Trend Tests: Piecewise Linear-Linear-Linear *(continued)*

								Line 1			Line 2			Line 3						
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	Break 2	R-Squared	Overall Trend
1_42_5_102	MW-32	Appendix IV	Arsenic	mg/L	11	0	0%	0	0.913	↔	0	0.891	↔	0	0.508	↔	2023-04-08	2023-07-19	0.274	↔
1_42_5_103	MW-32	Appendix IV	Barium	mg/L	11	0	0%	-0.00231	0.312	↔	0.00263	0.239	↔	-0.00221	0.718	↔	2023-05-18	2023-10-23	0.421	↔
1_42_5_106	MW-32	Appendix IV	Cadmium	mg/L	11	10	91%	0	0.942	↔	0	0.662	↔	0	0.375	↔	2023-04-05	2023-05-30	0.596	↔
1_42_5_115	MW-32	Appendix IV	Lead	mg/L	11	8	73%	0	1.000	↔	0	0.518	↔	0	0.429	↔	2023-04-17	2023-05-27	0.280	↔
1_42_5_116	MW-32	Appendix IV	Lithium	mg/L	11	0	0%	-0.000411	0.010	↓	0.000517	0.051	↔	-0.000585	0.001	↓	2023-04-26	2023-10-22	0.927	↔
1_42_5_117	MW-32	Appendix IV	Mercury	mg/L	11	10	91%	0	0.590	↔	0	0.218	↔	0.0000316	0.000	↑	2023-03-21	2024-02-11	1.000	↔
1_42_5_118	MW-32	Appendix IV	Molybdenum	mg/L	11	0	0%	-0.0000204	0.170	↔	0.0000103	0.032	↔	-0.0000601	0.014	↔	2023-03-04	2024-02-11	0.846	↔
1_42_5_121	MW-32	Appendix IV	Radium 226 and 228	pCi/L	11	7	64%	-0.00329	0.589	↔	0.00402	0.524	↔	-0.000988	0.068	↔	2023-01-09	2023-04-15	0.617	↔
1_42_6_114	MW-32	Part 115	Iron	mg/L	11	0	0%	-0.00870	0.462	↔	-0.0774	0.016	↔	0.0334	0.020	↔	2023-05-15	2023-08-27	0.919	↔
1_42_6_130	MW-32	Part 115	Zinc	mg/L	11	0	0%	-0.000738	0.128	↔	0.000205	0.643	↔	-0.0000344	0.307	↔	2023-01-17	2023-04-14	0.595	↔
2_11_4_105	MW-01R	Appendix III	Boron	mg/L	11	0	0%	-0.363	0.333	↔	1.01	0.114	↔	-0.443	0.024	↔	2023-04-03	2023-07-16	0.766	↔
2_11_4_107	MW-01R	Appendix III	Calcium	mg/L	11	0	0%	0.857	0.242	↔	-1.05	0.145	↔	1.46	0.017	↔	2023-03-20	2023-09-23	0.803	↔
2_11_4_108	MW-01R	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	-1.19	0.432	↔	0.629	0.041	↔	-0.838	0.032	↔	2023-02-07	2023-09-12	0.794	↔
2_11_4_112	MW-01R	Appendix III	Fluoride	mg/L	11	0	0%	-0.0634	0.056	↔	0.0876	0.080	↔	-0.0388	0.014	↔	2023-04-02	2023-07-14	0.838	↔
2_11_4_124	MW-01R	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	2.11	0.480	↔	-5.61	0.084	↔	5.34	0.030	↔	2023-04-17	2023-09-14	0.755	↔
2_11_4_126	MW-01R	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	-2.82	0.265	↔	1.61	0.160	↔	-2.02	0.081	↔	2023-02-14	2023-10-15	0.658	↔
2_11_5_101	MW-01R	Appendix IV	Antimony	mg/L	11	3	27%	0	0.780	↔	0	0.561	↔	0	0.136	↔	2023-01-28	2023-04-17	0.483	↔
2_11_5_103	MW-01R	Appendix IV	Barium	mg/L	11	0	0%	-0.000743	0.026	↔	0.00187	0.000	↑	-0.00596	0.000	↓	2023-04-23	2024-01-16	0.977	↔
2_11_5_104	MW-01R	Appendix IV	Beryllium	mg/L	11	1	9%	0	0.109	↔	0	0.068	↔	0	0.006	↓	2023-05-07	2023-07-05	0.871	↔
2_11_5_113	MW-01R	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	-0.0634	0.056	↔	0.0876	0.080	↔	-0.0388	0.014	↔	2023-04-02	2023-07-14	0.838	↔
2_11_5_116	MW-01R	Appendix IV	Lithium	mg/L	11	0	0%	-0.00775	0.374	↔	0.0239	0.112	↔	-0.0102	0.026	↔	2023-04-15	2023-07-20	0.746	↔
2_11_5_118	MW-01R	Appendix IV	Molybdenum	mg/L	11	1	9%	0.0000121	0.472	↔	-0.0000243	0.733	↔	0.0000116	0.251	↔	2023-04-18	2023-07-07	0.386	↔
2_11_5_125	MW-01R	Appendix IV	Thallium	mg/L	11	11	100%	0	0.735	↔	0	0.692	↔	0	0.319	↔	2023-01-18	2023-05-22	0.384	↔
2_11_6_111	MW-01R	Part 115	Copper	mg/L	11	5	45%	0	0.830	↔	0	0.580	↔	0	0.520	↔	2023-04-17	2023-06-27	0.429	↔
2_11_6_129	MW-01R	Part 115	Vanadium	mg/L	11	2	18%	0	0.864	↔	0.0000394	0.032	↔	0	0.047	↔	2023-04-06	2023-06-28	0.862	↔
2_11_6_130	MW-01R	Part 115	Zinc	mg/L	11	2	18%	-0.000354	0.098	↔	0.0001000	0.602	↔	-0.0000200	0.184	↔	2023-01-14	2023-04-17	0.638	↔
2_12_4_107	MW-02	Appendix III	Calcium	mg/L	11	0	0%	0.0536	0.728	↔	-0.620	0.428	↔	0.161	0.401	↔	2023-06-19	2023-08-13	0.302	↔
2_12_4_108	MW-02	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	-0.910	0.070	↔	0.659	0.455	↔	-0.0322	0.663	↔	2023-02-08	2023-05-02	0.615	↔
2_12_4_112	MW-02	Appendix III	Fluoride	mg/L	11	0	0%	-0.0533	0.125	↔	0.0455	0.480	↔	0.000663	0.901	↔	2023-02-08	2023-04-21	0.561	↔
2_12_4_120	MW-02	Appendix III	pH (field)	su	11	0	0%	0.00157	0.212	↔	-0.00222	0.363	↔	0.000920	0.399	↔	2023-05-22	2023-09-25	0.495	↔
2_12_4_124	MW-02	Appendix III	Sulfate (as SO4)	mg/L	11	7	64%	-0.00606	0.492	↔	-0.00118	0.799	↔	0.0891	0.003	↑	2023-03-17	2024-02-11	0.911	↔
2_12_4_126	MW-02	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	1.03	0.221	↔	-3.90	0.180	↔	3.51	0.346	↔	2023-07-25	2023-11-19	0.573	↔
2_12_5_101	MW-02	Appendix IV	Antimony	mg/L	11	3	27%	0	0.062	↔	0	0.218	↔	0	0.897	↔	2023-05-16	2023-06-29	0.666	↔
2_12_5_104	MW-02	Appendix IV	Beryllium	mg/L	11	1	9%	0	0.390	↔	0	0.249	↔	0	0.091	↔	2023-06-11	2023-08-15	0.661	↔
2_12_5_106	MW-02	Appendix IV	Cadmium	mg/L	11	8	73%	0	0.869	↔	0	0.289	↔	0	0.668	↔	2023-03-08	2023-10-24	0.416	↔
2_12_5_113	MW-02	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	-0.0533	0.125	↔	0.0455	0.480	↔	0.000663	0.901	↔	2023-02-08	2023-04-21	0.561	↔
2_12_5_115	MW-02	Appendix IV	Lead	mg/L	11	1	9%	0.0000445	0.589	↔	0	0.846	↔	0	0.783	↔	2023-01-14	2023-07-28	0.144	↔
2_12_5_116	MW-02	Appendix IV	Lithium	mg/L	11	0	0%	0.00807	0.484	↔	-0.00529	0.668	↔	0.000709	0.436	↔	2023-01-25	2023-04-17	0.293	↔
2_12_5_118	MW-02	Appendix IV	Molybdenum	mg/L	11	0	0%	0.0000800	0.007	↑	-0.0000657	0.017	↔	0	0.294	↔	2023-02-28	2023-06-01	0.927	↔
2_12_5_121	MW-02	Appendix IV	Radium 226 and 228	pCi/L	11	3	27%	-0.0114	0.193	↔	0.00553	0.735	↔	-0.00520	0.487	↔	2023-04-18	2023-08-08	0.543	↔
2_12_5_122	MW-02	Appendix IV	Selenium	mg/L	11	0	0%	0	0.511	↔	0	0.585	↔	0	0.321	↔	2023-04-18	2023-10-18	0.361	↔
2_12_5_125	MW-02	Appendix IV	Thallium	mg/L	11	10	91%	0	0.720	↔	0	0.624	↔	0	0.737	↔	2023-02-17	2023-10-24	0.301	↔

(Table continues on next page)

Table 9: Trend Tests: Piecewise Linear-Linear-Linear *(continued)*

								Line 1			Line 2			Line 3						
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	Break 2	R-Squared	Overall Trend
2_12_6_114	MW-02	Part 115	Iron	mg/L	11	0	0%	0.0643	0.207	↔	-0.0655	0.182	↔	0.0518	0.132	↔	2023-03-31	2023-09-18	0.608	↔
2_12_6_123	MW-02	Part 115	Silver	mg/L	11	11	100%	0	0.147	↔	0	0.359	↔	0	0.850	↔	2023-05-10	2023-07-13	0.590	↔
2_12_6_130	MW-02	Part 115	Zinc	mg/L	11	0	0%	-0.000465	0.204	↔	0.000148	0.686	↔	-0.0000283	0.309	↔	2023-01-20	2023-04-17	0.527	↔
2_13_4_107	MW-03	Appendix III	Calcium	mg/L	11	0	0%	0.216	0.542	↔	-0.269	0.658	↔	-0.0261	0.985	↔	2023-06-27	2023-12-14	0.198	↔
2_13_4_108	MW-03	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	-0.861	0.023	↔	0.392	0.507	↔	-0.467	0.116	↔	2023-05-08	2023-10-01	0.852	↔
2_13_4_120	MW-03	Appendix III	pH (field)	su	11	0	0%	0.00120	0.200	↔	-0.00325	0.474	↔	0.00114	0.304	↔	2023-06-13	2023-09-01	0.463	↔
2_13_4_124	MW-03	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	4.37	0.013	↔	-5.00	0.366	↔	-0.538	0.460	↔	2023-05-04	2023-07-06	0.801	↔
2_13_4_126	MW-03	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	2.46	0.388	↔	0	1.000	↔	-1.80	0.340	↔	2023-04-01	2023-08-29	0.506	↔
2_13_5_101	MW-03	Appendix IV	Antimony	mg/L	11	6	55%	0	0.215	↔	0	0.450	↔	0	0.750	↔	2023-06-09	2023-12-04	0.376	↔
2_13_5_102	MW-03	Appendix IV	Arsenic	mg/L	11	0	0%	0	0.240	↔	0	0.814	↔	0	0.590	↔	2023-05-23	2023-10-06	0.475	↔
2_13_5_104	MW-03	Appendix IV	Beryllium	mg/L	11	7	64%	0	0.180	↔	0	0.589	↔	0	0.201	↔	2023-02-07	2023-05-11	0.505	↔
2_13_5_109	MW-03	Appendix IV	Chromium, Total	mg/L	11	0	0%	0	0.837	↔	-0.0000101	0.307	↔	0.0000207	0.649	↔	2023-03-13	2023-12-22	0.270	↔
2_13_5_115	MW-03	Appendix IV	Lead	mg/L	11	10	91%	0.0000101	0.023	↔	0	0.406	↔	0	0.519	↔	2023-03-19	2023-06-17	0.790	↔
2_13_5_117	MW-03	Appendix IV	Mercury	mg/L	11	10	91%	0	0.672	↔	0	0.223	↔	0	0.131	↔	2023-03-04	2023-10-23	0.569	↔
2_13_5_118	MW-03	Appendix IV	Molybdenum	mg/L	11	8	73%	0.0000109	0.334	↔	-0.0000309	0.520	↔	0	0.605	↔	2023-04-18	2023-07-01	0.436	↔
2_13_5_121	MW-03	Appendix IV	Radium 226 and 228	pCi/L	11	1	9%	-0.0164	0.322	↔	0.00135	0.871	↔	-0.000739	0.608	↔	2023-01-20	2023-05-22	0.465	↔
2_13_5_122	MW-03	Appendix IV	Selenium	mg/L	11	3	27%	0	0.501	↔	0	0.314	↔	0	0.220	↔	2023-02-06	2023-05-15	0.486	↔
2_13_5_125	MW-03	Appendix IV	Thallium	mg/L	11	10	91%	0	0.177	↔	0	0.944	↔	0	0.213	↔	2023-03-05	2023-06-14	0.661	↔
2_13_6_111	MW-03	Part 115	Copper	mg/L	11	5	45%	0	0.498	↔	0	0.574	↔	0	0.152	↔	2023-02-04	2023-04-16	0.478	↔
2_13_6_123	MW-03	Part 115	Silver	mg/L	11	11	100%	0	0.314	↔	0	0.348	↔	0	0.465	↔	2023-05-22	2023-07-11	0.415	↔
2_13_6_129	MW-03	Part 115	Vanadium	mg/L	11	9	82%	0.0000266	0.427	↔	-0.0000206	0.261	↔	0	0.191	↔	2023-02-06	2023-05-11	0.538	↔
2_13_6_130	MW-03	Part 115	Zinc	mg/L	11	6	55%	-0.000368	0.205	↔	0.0000869	0.758	↔	-0.0000220	0.320	↔	2023-01-17	2023-04-15	0.535	↔
2_14_4_105	MW-04	Appendix III	Boron	mg/L	11	0	0%	-0.00276	0.443	↔	0.00412	0.252	↔	-0.00284	0.249	↔	2023-03-23	2023-10-23	0.648	↔
2_14_4_120	MW-04	Appendix III	pH (field)	su	11	0	0%	0.00136	0.139	↔	-0.00239	0.578	↔	0.00107	0.309	↔	2023-05-23	2023-09-22	0.499	↔
2_14_4_124	MW-04	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	3.20	0.103	↔	-0.331	0.841	↔	3.19	0.535	↔	2023-04-19	2024-01-24	0.643	↔
2_14_4_126	MW-04	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	1.23	0.322	↔	-1.64	0.438	↔	5.66	0.255	↔	2023-06-10	2024-01-18	0.433	↔
2_14_5_101	MW-04	Appendix IV	Antimony	mg/L	11	8	73%	0	0.257	↔	0	0.491	↔	0	0.837	↔	2023-06-20	2023-12-02	0.350	↔
2_14_5_102	MW-04	Appendix IV	Arsenic	mg/L	11	0	0%	0	0.989	↔	0	0.631	↔	0	0.459	↔	2023-01-20	2023-05-19	0.270	↔
2_14_5_109	MW-04	Appendix IV	Chromium, Total	mg/L	11	0	0%	0.0000798	0.107	↔	-0.0000303	0.513	↔	0	0.946	↔	2023-01-10	2023-04-08	0.585	↔
2_14_5_115	MW-04	Appendix IV	Lead	mg/L	11	11	100%	0	0.394	↔	0	0.417	↔	0	0.772	↔	2023-04-18	2023-08-06	0.447	↔
2_14_5_116	MW-04	Appendix IV	Lithium	mg/L	11	0	0%	0	0.995	↔	0.000361	0.445	↔	-0.0000721	0.270	↔	2023-05-22	2023-06-29	0.357	↔
2_14_5_118	MW-04	Appendix IV	Molybdenum	mg/L	11	2	18%	0	0.414	↔	-0.0000137	0.738	↔	0	0.900	↔	2023-04-19	2023-07-05	0.205	↔
2_14_5_122	MW-04	Appendix IV	Selenium	mg/L	11	5	45%	0	0.731	↔	0	0.506	↔	0	0.167	↔	2023-01-19	2023-05-22	0.421	↔
2_14_5_125	MW-04	Appendix IV	Thallium	mg/L	11	11	100%	0	0.268	↔	0	0.504	↔	0	0.637	↔	2023-05-12	2023-09-24	0.373	↔
2_14_6_111	MW-04	Part 115	Copper	mg/L	11	9	82%	0	1.000	↔	0	1.000	↔	0	0.214	↔	2023-03-26	2023-06-29	0.544	↔
2_14_6_114	MW-04	Part 115	Iron	mg/L	11	0	0%	0.00822	0.137	↔	-0.00942	0.295	↔	0.0237	0.251	↔	2023-05-23	2024-01-03	0.564	↔
2_14_6_119	MW-04	Part 115	Nickel	mg/L	11	0	0%	0.0000455	0.231	↔	-0.0000769	0.525	↔	0.000113	0.525	↔	2023-07-25	2024-01-15	0.379	↔
2_14_6_123	MW-04	Part 115	Silver	mg/L	11	11	100%	0	0.310	↔	0	0.344	↔	0	0.467	↔	2023-05-22	2023-07-11	0.417	↔
2_14_6_129	MW-04	Part 115	Vanadium	mg/L	11	10	91%	0	0.622	↔	0	0.181	↔	0	0.000	↑	2023-04-05	2024-02-13	1.000	↔
2_14_6_130	MW-04	Part 115	Zinc	mg/L	11	8	73%	-0.0000751	0.306	↔	0.0000300	0.684	↔	0	0.295	↔	2023-01-21	2023-04-18	0.436	↔
2_19_4_105	MW-09	Appendix III	Boron	mg/L	11	0	0%	-0.00847	0.253	↔	0.00685	0.109	↔	-0.00877	0.544	↔	2023-03-21	2023-10-24	0.591	↔
2_19_4_107	MW-09	Appendix III	Calcium	mg/L	11	0	0%	1.16	0.024	↔	-0.775	0.078	↔	1.48	0.219	↔	2023-05-13	2023-11-14	0.875	↔

(Table continues on next page)

Table 9: Trend Tests: Piecewise Linear-Linear-Linear *(continued)*

								Line 1			Line 2			Line 3						
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	Break 2	R-Squared	Overall Trend
2_19_4_108	MW-09	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	0.0541	0.500	↔	-0.0358	0.039	↔	0.0746	0.006	↑	2023-01-11	2023-09-16	0.896	↔
2_19_4_120	MW-09	Appendix III	pH (field)	su	11	0	0%	0.00119	0.144	↔	-0.00170	0.209	↔	0.00222	0.438	↔	2023-05-23	2023-12-25	0.590	↔
2_19_4_124	MW-09	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	4.22	0.002	↑	-2.27	0.184	↔	3.04	0.006	↑	2023-04-27	2023-10-23	0.937	↔
2_19_4_126	MW-09	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	5.41	0.009	↑	-3.18	0.287	↔	3.68	0.029	↔	2023-05-10	2023-10-23	0.892	↔
2_19_5_101	MW-09	Appendix IV	Antimony	mg/L	11	7	64%	0	0.225	↔	0	0.448	↔	0	0.374	↔	2023-05-22	2023-07-21	0.466	↔
2_19_5_104	MW-09	Appendix IV	Beryllium	mg/L	11	10	91%	0	0.231	↔	0	0.447	↔	0	0.842	↔	2023-05-22	2023-07-16	0.449	↔
2_19_5_106	MW-09	Appendix IV	Cadmium	mg/L	11	11	100%	0	0.934	↔	0	0.763	↔	0	0.888	↔	2023-02-17	2023-05-15	0.286	↔
2_19_5_109	MW-09	Appendix IV	Chromium, Total	mg/L	11	0	0%	0.0000179	0.489	↔	0	0.302	↔	0.0000179	0.327	↔	2023-01-09	2024-02-12	0.423	↔
2_19_5_110	MW-09	Appendix IV	Cobalt	mg/L	11	0	0%	0	0.386	↔	0	0.193	↔	0	0.538	↔	2023-03-13	2023-12-02	0.478	↔
2_19_5_115	MW-09	Appendix IV	Lead	mg/L	11	11	100%	0	0.212	↔	-0.0000116	0.485	↔	0	0.736	↔	2023-04-18	2023-06-29	0.499	↔
2_19_5_118	MW-09	Appendix IV	Molybdenum	mg/L	11	0	0%	0.000135	0.512	↔	-0.000222	0.310	↔	0	0.890	↔	2023-01-13	2023-03-28	0.735	↔
2_19_5_122	MW-09	Appendix IV	Selenium	mg/L	11	2	18%	0	0.898	↔	0	0.641	↔	0	0.166	↔	2023-01-20	2023-05-19	0.377	↔
2_19_5_125	MW-09	Appendix IV	Thallium	mg/L	11	11	100%	0	0.320	↔	0	0.357	↔	0	0.467	↔	2023-05-22	2023-07-11	0.410	↔
2_19_6_111	MW-09	Part 115	Copper	mg/L	11	9	82%	0	0.765	↔	0	0.561	↔	0	0.481	↔	2023-03-27	2023-08-07	0.350	↔
2_19_6_114	MW-09	Part 115	Iron	mg/L	11	0	0%	0.0600	0.002	↑	-0.115	0.003	↓	0.0657	0.001	↑	2023-05-07	2023-09-07	0.954	↔
2_19_6_119	MW-09	Part 115	Nickel	mg/L	11	0	0%	0.0000163	0.264	↔	-0.0000129	0.068	↔	0.0000403	0.001	↑	2023-03-08	2023-10-01	0.957	↔
2_19_6_123	MW-09	Part 115	Silver	mg/L	11	11	100%	0	0.209	↔	0	0.388	↔	0	0.399	↔	2023-05-22	2023-07-16	0.480	↔
2_21_4_105	MW-11	Appendix III	Boron	mg/L	11	0	0%	-0.0692	0.026	↔	0.0682	0.024	↔	-0.0907	0.215	↔	2023-05-03	2023-12-02	0.816	↔
2_21_4_107	MW-11	Appendix III	Calcium	mg/L	11	0	0%	1.68	0.101	↔	-0.984	0.080	↔	1.11	0.548	↔	2023-03-29	2023-11-23	0.652	↔
2_21_4_108	MW-11	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	-0.308	0.001	↓	0.204	0.003	↑	-0.444	0.011	↔	2023-04-21	2023-11-27	0.969	↔
2_21_4_112	MW-11	Appendix III	Fluoride	mg/L	11	0	0%	-0.00660	0.063	↔	0.00669	0.287	↔	-0.00352	0.228	↔	2023-05-06	2023-10-23	0.711	↔
2_21_4_120	MW-11	Appendix III	pH (field)	su	11	0	0%	0.00169	0.283	↔	-0.00186	0.250	↔	0.000318	0.326	↔	2023-03-12	2023-06-07	0.510	↔
2_21_4_124	MW-11	Appendix III	Sulfate (as SO4)	mg/L	11	2	18%	1.56	0.017	↔	-2.66	0.012	↔	0.0410	0.831	↔	2023-04-17	2023-07-02	0.894	↔
2_21_4_126	MW-11	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	1.32	0.646	↔	2.11	0.457	↔	-3.82	0.648	↔	2023-04-20	2023-10-24	0.444	↔
2_21_5_103	MW-11	Appendix IV	Barium	mg/L	11	0	0%	-0.00389	0.088	↔	0.00297	0.155	↔	-0.00556	0.345	↔	2023-05-08	2024-01-02	0.645	↔
2_21_5_104	MW-11	Appendix IV	Beryllium	mg/L	11	9	82%	0	0.572	↔	0	1.000	↔	0	0.000	↑	2023-04-17	2024-02-12	0.992	↔
2_21_5_109	MW-11	Appendix IV	Chromium, Total	mg/L	11	0	0%	-0.0000247	0.390	↔	0.0000146	0.904	↔	0	0.823	↔	2023-04-29	2023-07-19	0.240	↔
2_21_5_110	MW-11	Appendix IV	Cobalt	mg/L	11	0	0%	0.0000145	0.205	↔	0	0.137	↔	0.0000402	0.002	↑	2023-01-03	2024-02-08	0.922	↔
2_21_5_113	MW-11	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	-0.00660	0.063	↔	0.00669	0.287	↔	-0.00352	0.228	↔	2023-05-06	2023-10-23	0.711	↔
2_21_5_116	MW-11	Appendix IV	Lithium	mg/L	11	0	0%	-0.00109	0.079	↔	0.000978	0.097	↔	-0.000907	0.555	↔	2023-05-05	2023-11-05	0.662	↔
2_21_5_117	MW-11	Appendix IV	Mercury	mg/L	11	10	91%	0	0.581	↔	0	0.168	↔	0.0000174	0.000	↑	2023-07-31	2024-02-12	1.000	↔
2_21_5_122	MW-11	Appendix IV	Selenium	mg/L	11	3	27%	0	0.583	↔	0	0.891	↔	0	0.199	↔	2023-06-15	2023-09-19	0.636	↔
2_21_5_125	MW-11	Appendix IV	Thallium	mg/L	11	10	91%	0	0.182	↔	0	0.259	↔	0	0.443	↔	2023-05-19	2023-07-14	0.571	↔
2_21_6_114	MW-11	Part 115	Iron	mg/L	11	0	0%	-0.0348	0.013	↔	0.0574	0.015	↔	-0.0537	0.187	↔	2023-06-02	2023-11-24	0.863	↔
2_21_6_123	MW-11	Part 115	Silver	mg/L	11	9	82%	0	0.209	↔	0	0.300	↔	0	0.295	↔	2023-05-22	2023-07-22	0.555	↔
2_21_6_130	MW-11	Part 115	Zinc	mg/L	11	3	27%	-0.000430	0.332	↔	-0.0000972	0.883	↔	0	0.983	↔	2023-03-14	2023-07-21	0.447	↔
2_22_4_105	MW-12	Appendix III	Boron	mg/L	11	0	0%	-0.00184	0.100	↔	0.00129	0.023	↔	-0.00112	0.031	↔	2023-03-10	2023-09-26	0.829	↔
2_22_4_107	MW-12	Appendix III	Calcium	mg/L	11	0	0%	-0.0370	0.728	↔	0.756	0.198	↔	-0.351	0.035	↔	2023-06-23	2023-08-28	0.723	↔
2_22_4_108	MW-12	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	-0.0439	0.171	↔	0.122	0.422	↔	-0.0828	0.056	↔	2023-06-08	2023-09-27	0.658	↔
2_22_4_112	MW-12	Appendix III	Fluoride	mg/L	11	0	0%	-0.00320	0.463	↔	-0.000352	0.629	↔	0.00101	0.286	↔	2023-02-06	2023-09-10	0.628	↔
2_22_4_120	MW-12	Appendix III	pH (field)	su	11	0	0%	0.00640	0.227	↔	-0.00580	0.472	↔	0.00287	0.193	↔	2023-03-26	2023-07-23	0.502	↔
2_22_4_124	MW-12	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	-0.426	0.032	↔	0.488	0.537	↔	-0.375	0.087	↔	2023-05-29	2023-09-08	0.811	↔

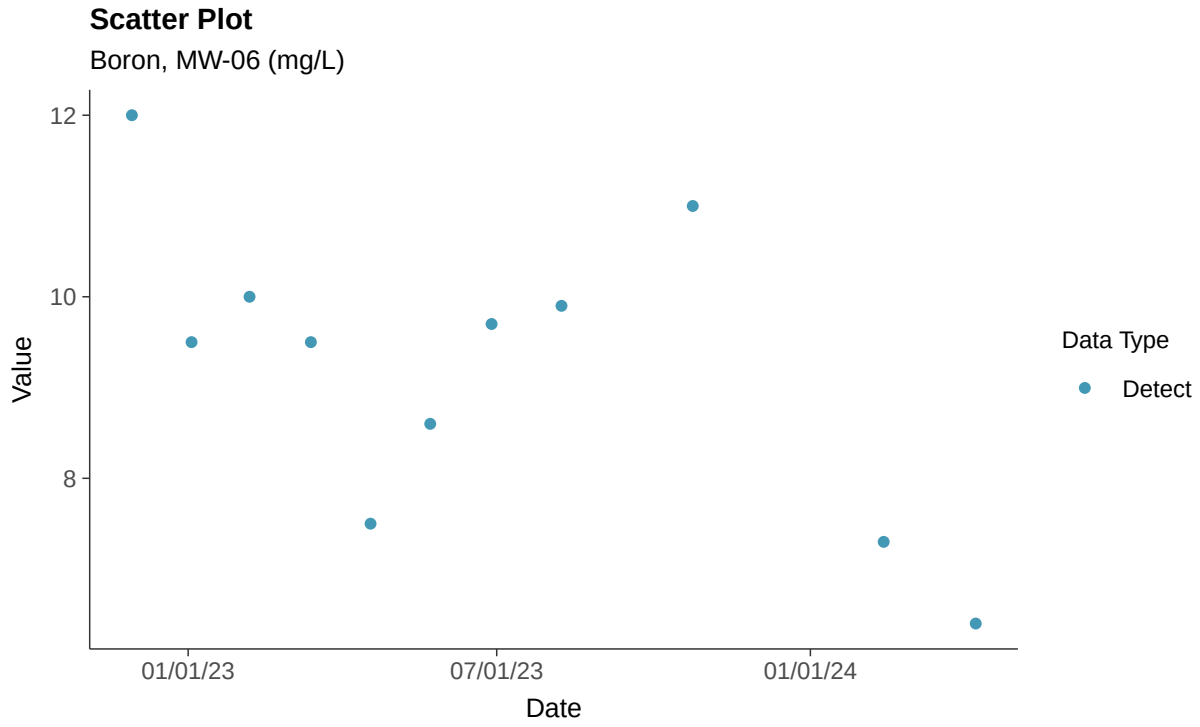
(Table continues on next page)

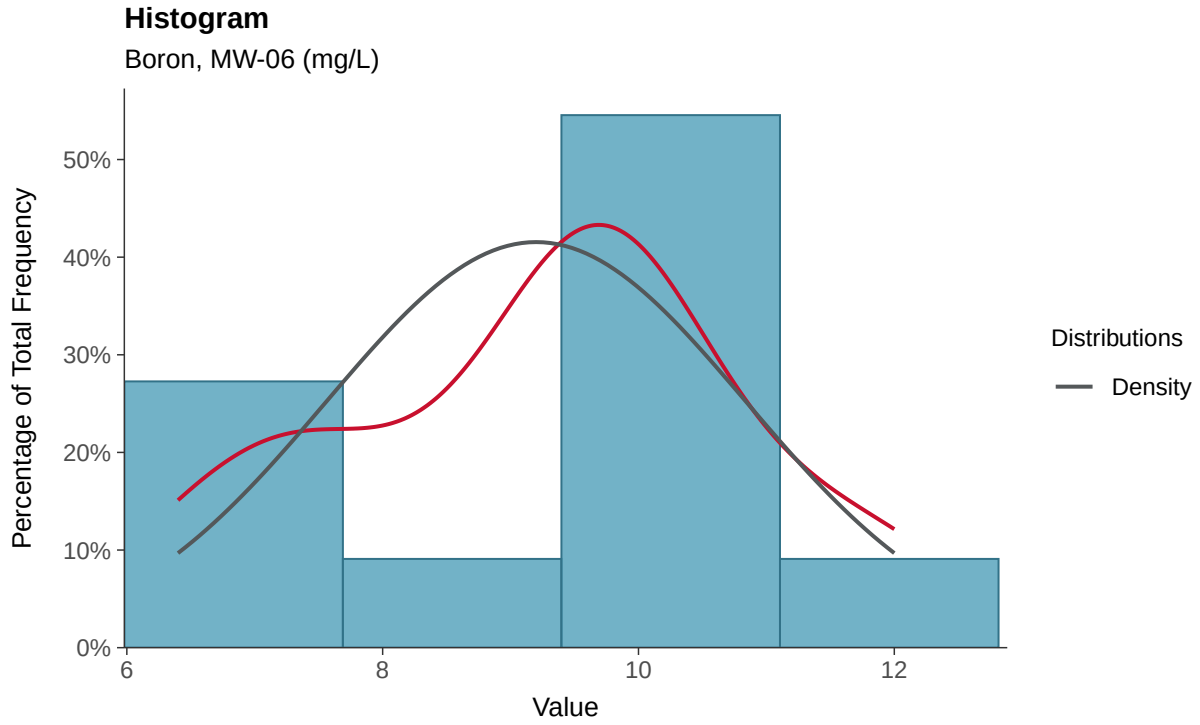
Table 9: Trend Tests: Piecewise Linear-Linear-Linear *(continued)*

								Line 1			Line 2			Line 3						
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	Break 2	R-Squared	Overall Trend
2_22_5_101	MW-12	Appendix IV	Antimony	mg/L	11	0	0%	0	0.878	↔	0	0.260	↔	0	0.432	↔	2023-05-22	2024-01-20	0.586	↔
2_22_5_102	MW-12	Appendix IV	Arsenic	mg/L	11	0	0%	-0.0000141	0.035	↔	0.0000138	0.001	↑	0	0.007	↓	2023-03-05	2023-08-18	0.935	↔
2_22_5_103	MW-12	Appendix IV	Barium	mg/L	11	0	0%	-0.0000240	0.788	↔	0.000284	0.017	↔	-0.000227	0.009	↓	2023-04-17	2023-09-16	0.887	↔
2_22_5_106	MW-12	Appendix IV	Cadmium	mg/L	11	0	0%	0	0.813	↔	0.0000156	0.397	↔	0	0.014	↔	2023-04-06	2023-06-26	0.795	↔
2_22_5_109	MW-12	Appendix IV	Chromium, Total	mg/L	11	4	36%	0	0.205	↔	0	0.169	↔	0	0.005	↑	2023-03-17	2023-07-19	0.870	↔
2_22_5_110	MW-12	Appendix IV	Cobalt	mg/L	11	5	45%	0	0.231	↔	0	0.010	↑	0	0.000	↓	2023-04-27	2023-07-08	0.969	↔
2_22_5_113	MW-12	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	-0.00320	0.463	↔	-0.000352	0.629	↔	0.00101	0.286	↔	2023-02-06	2023-09-10	0.628	↔
2_22_5_115	MW-12	Appendix IV	Lead	mg/L	11	6	55%	0	1.000	↔	0	0.595	↔	0	0.274	↔	2023-04-18	2023-05-28	0.291	↔
2_22_5_116	MW-12	Appendix IV	Lithium	mg/L	11	0	0%	-0.0000258	0.117	↔	0.0000276	0.098	↔	-0.0000133	0.005	↓	2023-02-12	2023-06-26	0.870	↔
2_22_5_117	MW-12	Appendix IV	Mercury	mg/L	11	9	82%	0	0.550	↔	0	0.232	↔	0	0.000	↑	2023-06-01	2024-02-12	1.000	↔
2_22_5_118	MW-12	Appendix IV	Molybdenum	mg/L	11	0	0%	-0.0000280	0.006	↓	0.0000288	0.005	↑	-0.0000313	0.001	↓	2023-03-26	2023-09-21	0.957	↔
2_22_5_121	MW-12	Appendix IV	Radium 226 and 228	pCi/L	11	8	73%	0.00269	0.049	↔	-0.00532	0.362	↔	0.000444	0.741	↔	2023-05-23	2023-08-07	0.632	↔
2_22_5_122	MW-12	Appendix IV	Selenium	mg/L	11	0	0%	0.0000179	0.326	↔	-0.0000118	0.026	↔	0	0.079	↔	2023-01-12	2023-08-01	0.848	↔
2_22_6_111	MW-12	Part 115	Copper	mg/L	11	0	0%	0	0.004	↑	0	0.013	↔	0	0.015	↔	2023-05-21	2023-09-13	0.925	↔
2_22_6_114	MW-12	Part 115	Iron	mg/L	11	6	55%	-0.00649	0.000	↓	0.000166	0.152	↔	-0.000124	0.082	↔	2023-01-04	2023-08-06	0.988	↔
2_22_6_119	MW-12	Part 115	Nickel	mg/L	11	0	0%	0	0.468	↔	0.0000147	0.579	↔	0	0.037	↔	2023-04-21	2023-07-25	0.669	↔
2_22_6_129	MW-12	Part 115	Vanadium	mg/L	11	6	55%	0	0.031	↔	0	0.057	↔	0	0.379	↔	2023-06-25	2023-12-10	0.778	↔
2_22_6_130	MW-12	Part 115	Zinc	mg/L	11	0	0%	-0.0000143	0.767	↔	0.0000219	0.487	↔	-0.0000253	0.090	↔	2023-03-12	2023-08-05	0.535	↔
3_20_4_105	MW-10	Appendix III	Boron	mg/L	11	0	0%	-0.189	0.001	↓	0.240	0.002	↑	-0.0957	0.000	↓	2023-03-20	2023-07-17	0.975	↔
3_20_4_107	MW-10	Appendix III	Calcium	mg/L	11	0	0%	1.45	0.200	↔	-1.07	0.099	↔	3.99	0.103	↔	2023-03-14	2023-12-03	0.826	↔
3_20_4_108	MW-10	Appendix III	Chloride (as Cl)	mg/L	11	0	0%	-1.22	0.155	↔	2.57	0.074	↔	-0.941	0.025	↔	2023-03-30	2023-08-06	0.848	↔
3_20_4_112	MW-10	Appendix III	Fluoride	mg/L	11	0	0%	-0.0448	0.001	↓	0.0449	0.000	↑	-0.0213	0.000	↓	2023-03-08	2023-07-10	0.984	↔
3_20_4_120	MW-10	Appendix III	pH (field)	su	11	0	0%	0.00481	0.308	↔	-0.00840	0.373	↔	0.00239	0.565	↔	2023-05-22	2023-09-15	0.409	↔
3_20_4_124	MW-10	Appendix III	Sulfate (as SO4)	mg/L	11	0	0%	1.09	0.767	↔	-5.49	0.152	↔	8.08	0.016	↔	2023-04-17	2023-09-15	0.818	↔
3_20_4_126	MW-10	Appendix III	Total Dissolved Solids	mg/L	11	0	0%	3.35	0.367	↔	-2.02	0.314	↔	26.6	0.012	↔	2023-03-14	2024-01-29	0.849	↔
3_20_5_102	MW-10	Appendix IV	Arsenic	mg/L	11	0	0%	0	0.534	↔	0	0.164	↔	0	0.344	↔	2023-04-18	2023-08-08	0.688	↔
3_20_5_103	MW-10	Appendix IV	Barium	mg/L	11	0	0%	-0.00199	0.094	↔	0.00192	0.370	↔	-0.00109	0.271	↔	2023-05-08	2023-10-22	0.637	↔
3_20_5_104	MW-10	Appendix IV	Beryllium	mg/L	11	5	45%	0	0.691	↔	0	0.237	↔	0	0.144	↔	2023-02-25	2023-05-23	0.564	↔
3_20_5_106	MW-10	Appendix IV	Cadmium	mg/L	11	11	100%	0	0.327	↔	0	0.391	↔	0	0.605	↔	2023-05-22	2023-08-08	0.366	↔
3_20_5_109	MW-10	Appendix IV	Chromium, Total	mg/L	11	0	0%	-0.0000256	0.133	↔	0.0000729	0.023	↔	-0.0000285	0.005	↓	2023-04-10	2023-07-14	0.886	↔
3_20_5_110	MW-10	Appendix IV	Cobalt	mg/L	11	1	9%	0	0.941	↔	0	0.381	↔	0	0.086	↔	2023-03-02	2023-06-03	0.564	↔
3_20_5_113	MW-10	Appendix IV	Fluoride (App IV)	mg/L	11	0	0%	-0.0448	0.001	↓	0.0449	0.000	↑	-0.0213	0.000	↓	2023-03-08	2023-07-10	0.984	↔
3_20_5_115	MW-10	Appendix IV	Lead	mg/L	11	9	82%	0	0.020	↔	-0.0000171	0.124	↔	0	0.555	↔	2023-04-02	2023-06-14	0.853	↔
3_20_5_117	MW-10	Appendix IV	Mercury	mg/L	11	10	91%	0	0.763	↔	0	0.175	↔	0.0000322	0.000	↑	2023-01-30	2024-02-12	1.000	↔
3_20_5_125	MW-10	Appendix IV	Thallium	mg/L	11	11	100%	0	0.084	↔	0	0.167	↔	0	0.489	↔	2023-05-09	2023-06-28	0.649	↔
3_20_6_111	MW-10	Part 115	Copper	mg/L	11	8	73%	0	0.546	↔	0	0.679	↔	0	0.267	↔	2023-02-22	2023-05-22	0.326	↔
3_20_6_114	MW-10	Part 115	Iron	mg/L	11	0	0%	0.0307	0.013	↔	-0.0387	0.065	↔	0.0200	0.043	↔	2023-04-19	2023-09-18	0.858	↔
3_20_6_119	MW-10	Part 115	Nickel	mg/L	11	5	45%	0	0.558	↔	0	0.314	↔	0	0.246	↔	2023-01-13	2023-05-23	0.420	↔
3_20_6_123	MW-10	Part 115	Silver	mg/L	11	11	100%	0	0.323	↔	0	0.357	↔	0	0.466	↔	2023-05-22	2023-07-11	0.409	↔
3_20_6_129	MW-10	Part 115	Vanadium	mg/L	11	10	91%	0	0.250	↔	0	0.729	↔	0	0.760	↔	2023-05-23	2023-09-29	0.337	↔
3_20_6_130	MW-10	Part 115	Zinc	mg/L	11	4	36%	-0.000304	0.130	↔	0.0000876	0.624	↔	-0.0000160	0.269	↔	2023-01-19	2023-04-17	0.621	↔

Appendix III: Boron, MW-06

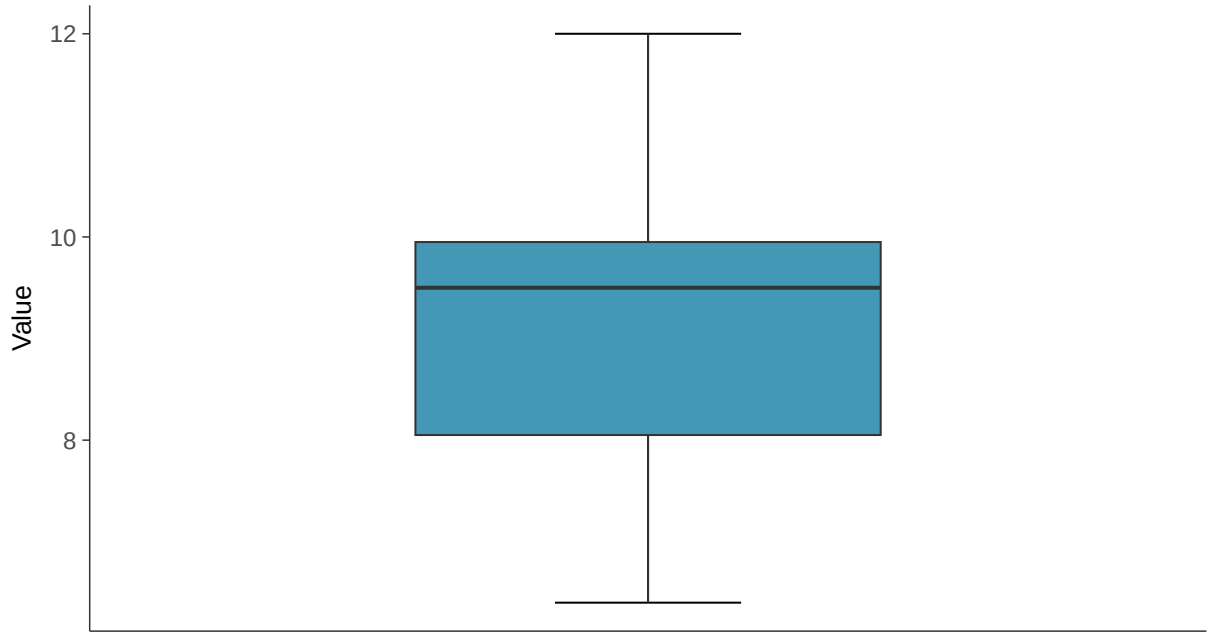
ID: 1_16_4_105





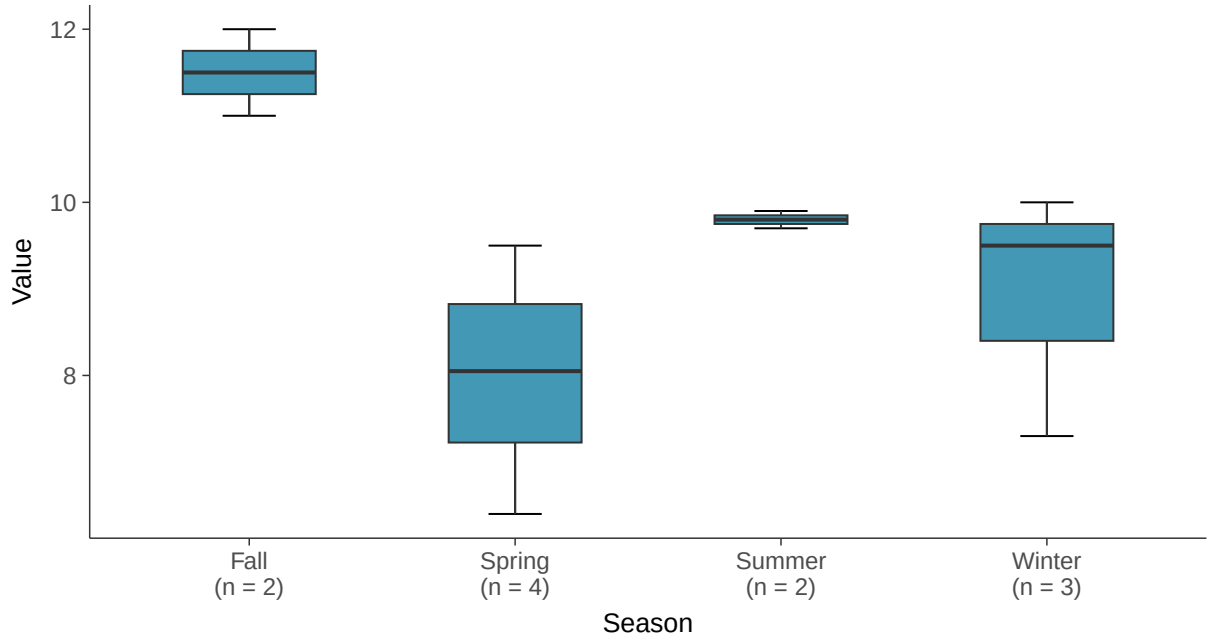
Boxplot

Boron, MW-06 (mg/L)



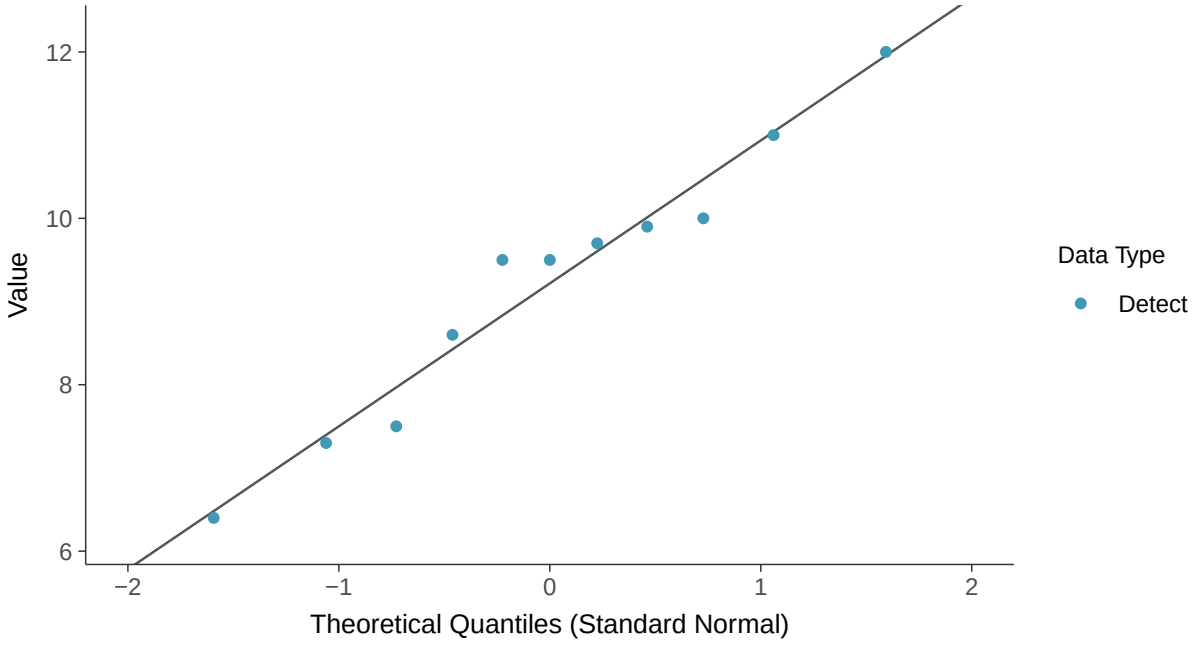
Boxplot by Season

Boron, MW-06 (mg/L)



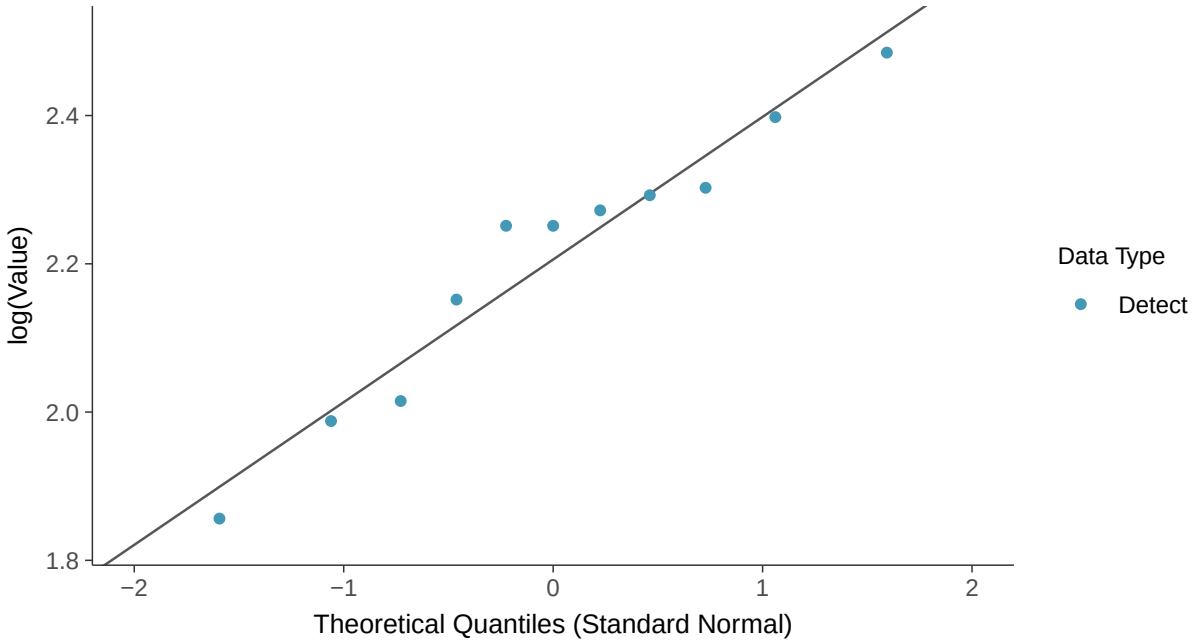
Normal Q-Q plot

Boron, MW-06 (mg/L)



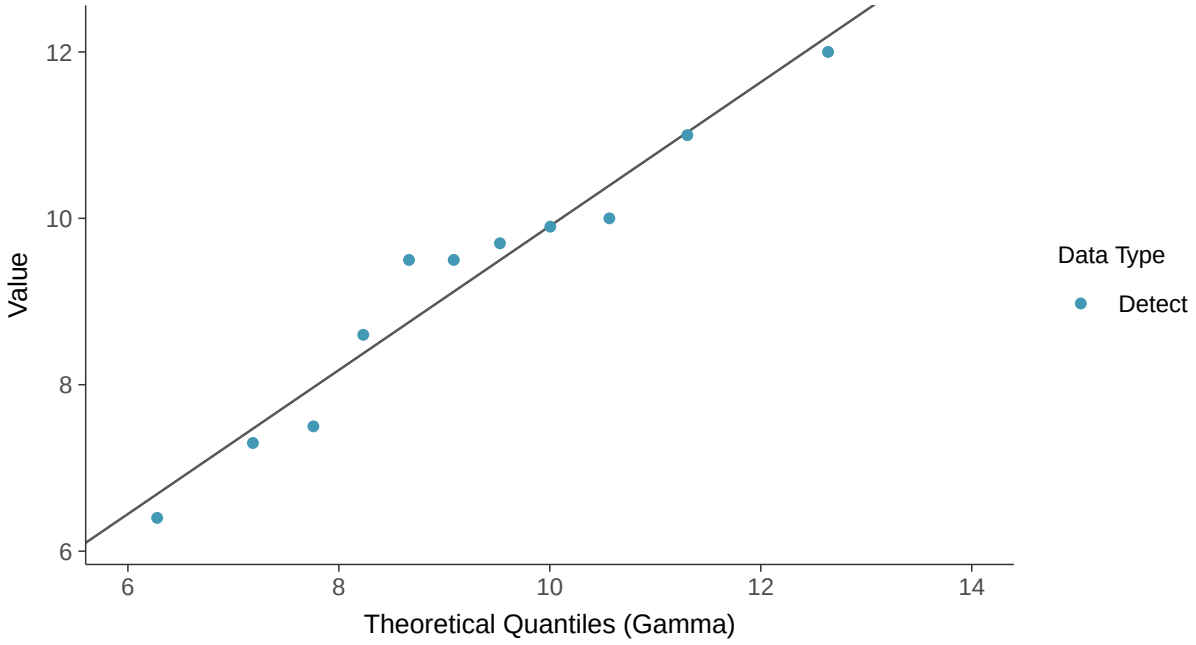
Lognormal Q-Q plot

Boron, MW-06 (mg/L)



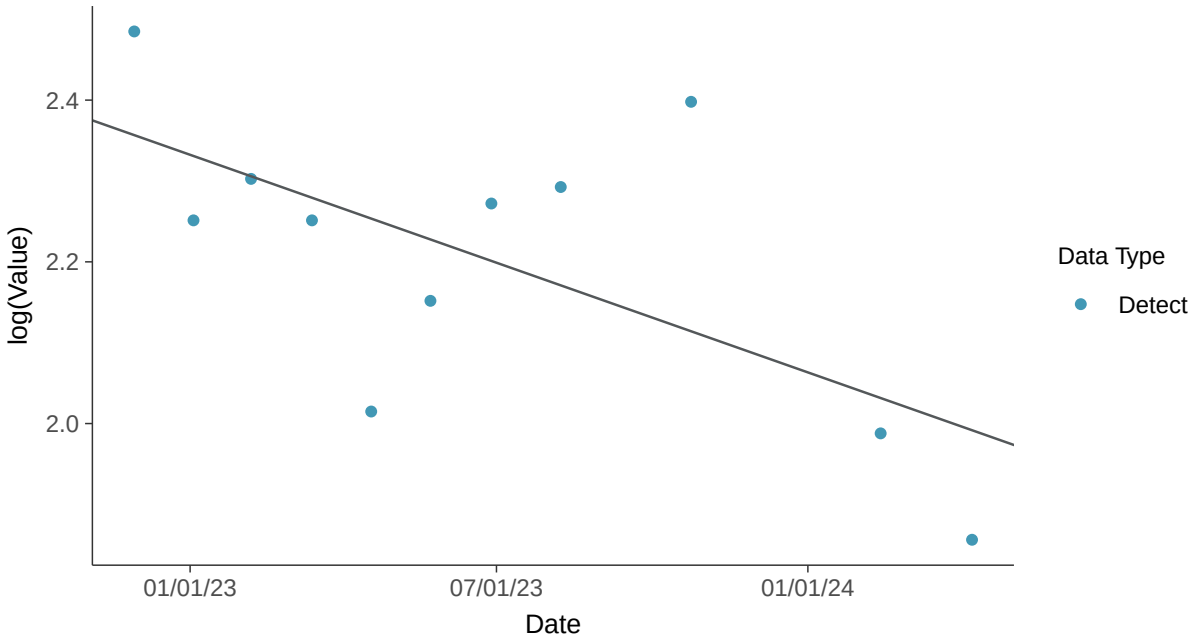
Gamma Q-Q plot

Boron, MW-06 (mg/L)



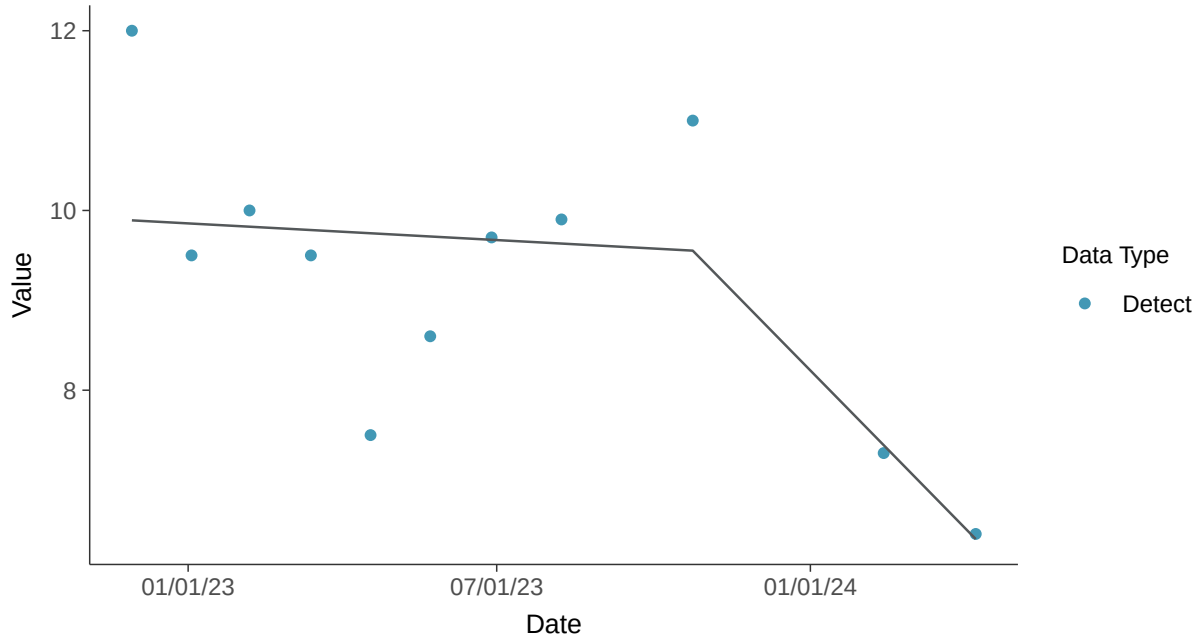
Trend Regression: Lognormal MLE

Boron, MW-06 (mg/L)



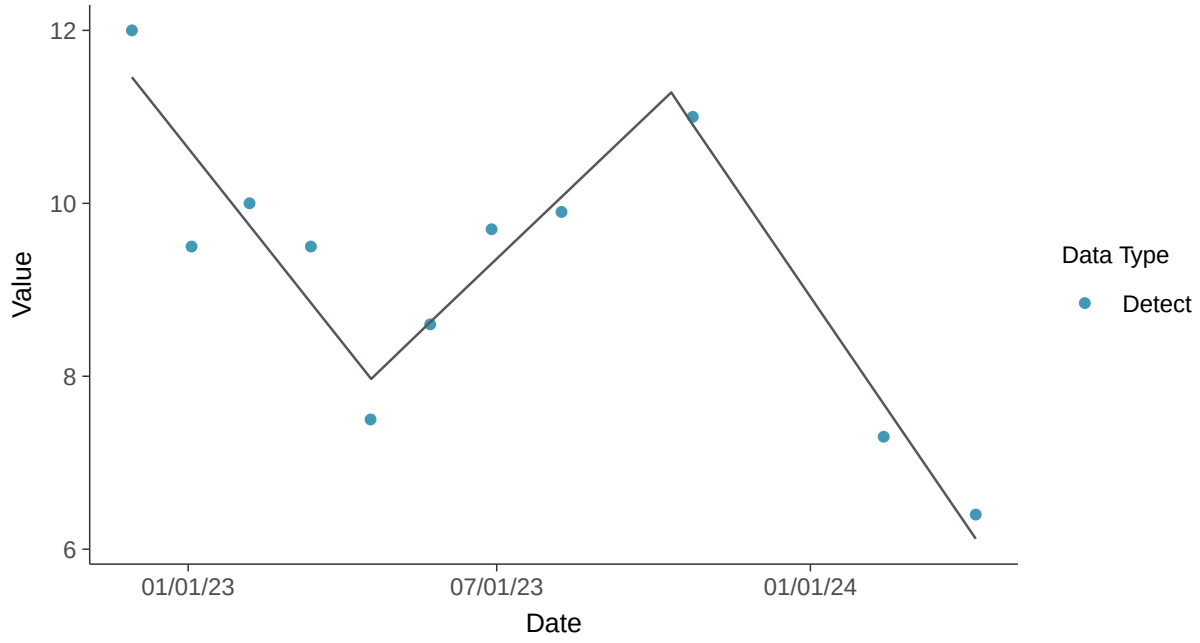
Trend Regression: Piecewise Linear-Linear

Boron, MW-06 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Boron, MW-06 (mg/L)

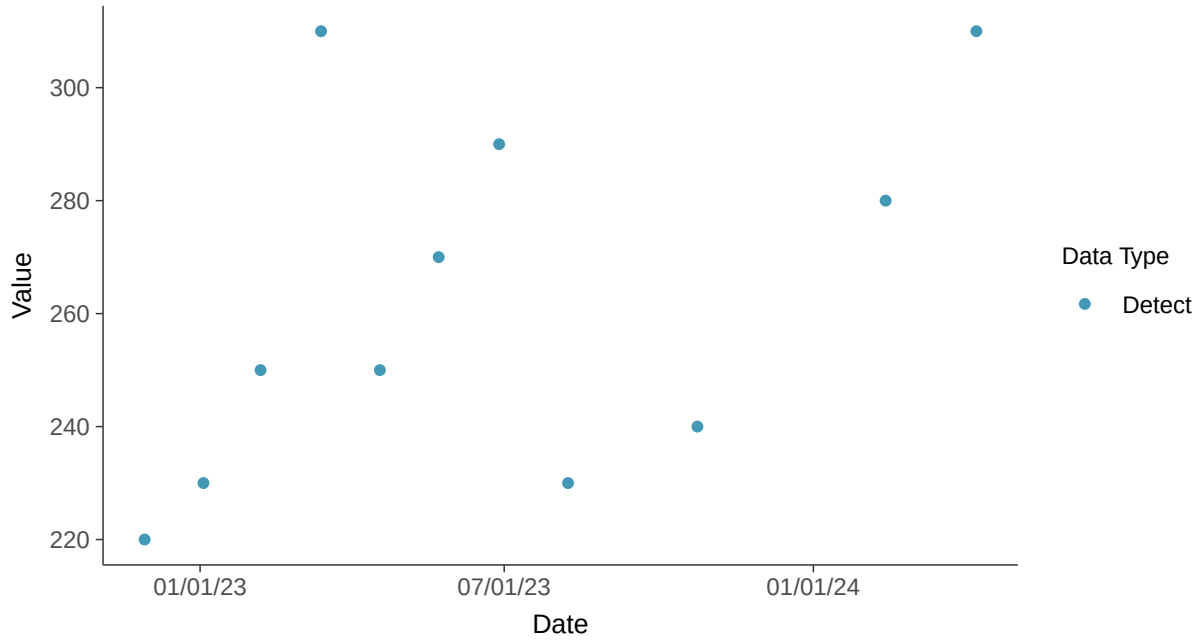


Appendix III: Calcium, MW-06

ID: 1_16_4_107

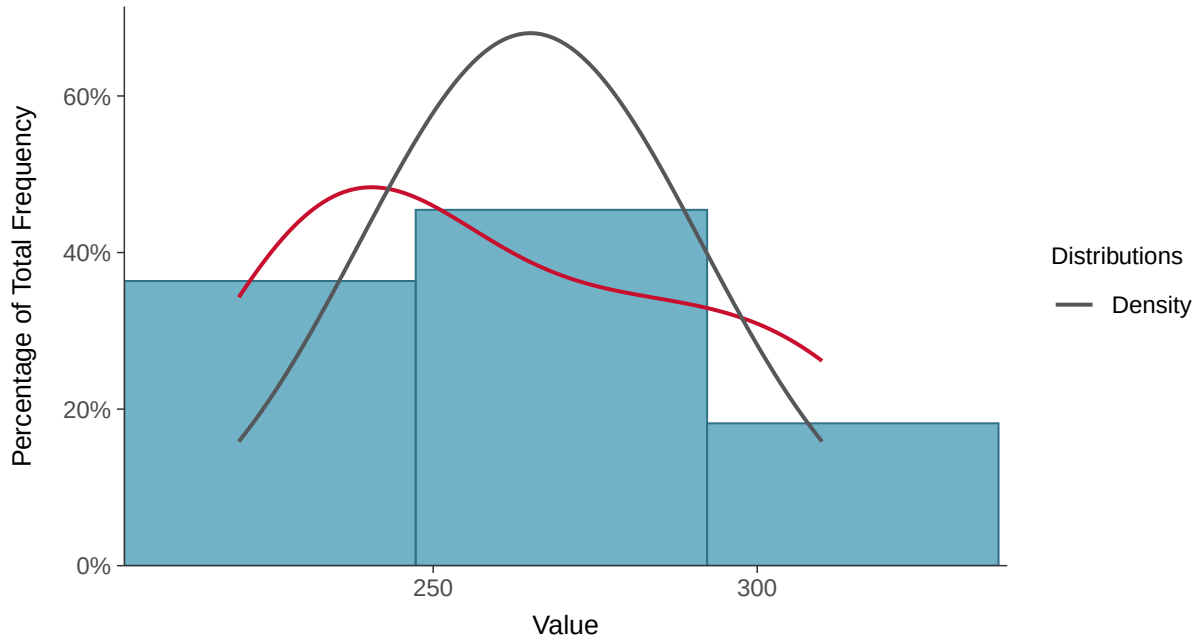
Scatter Plot

Calcium, MW-06 (mg/L)



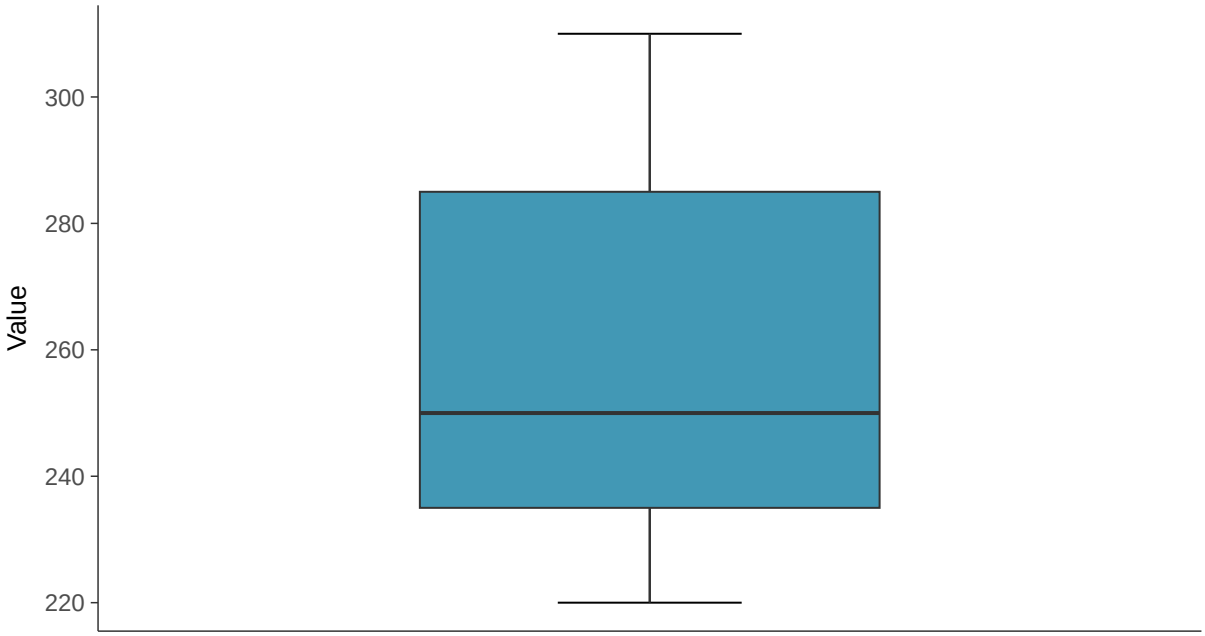
Histogram

Calcium, MW-06 (mg/L)



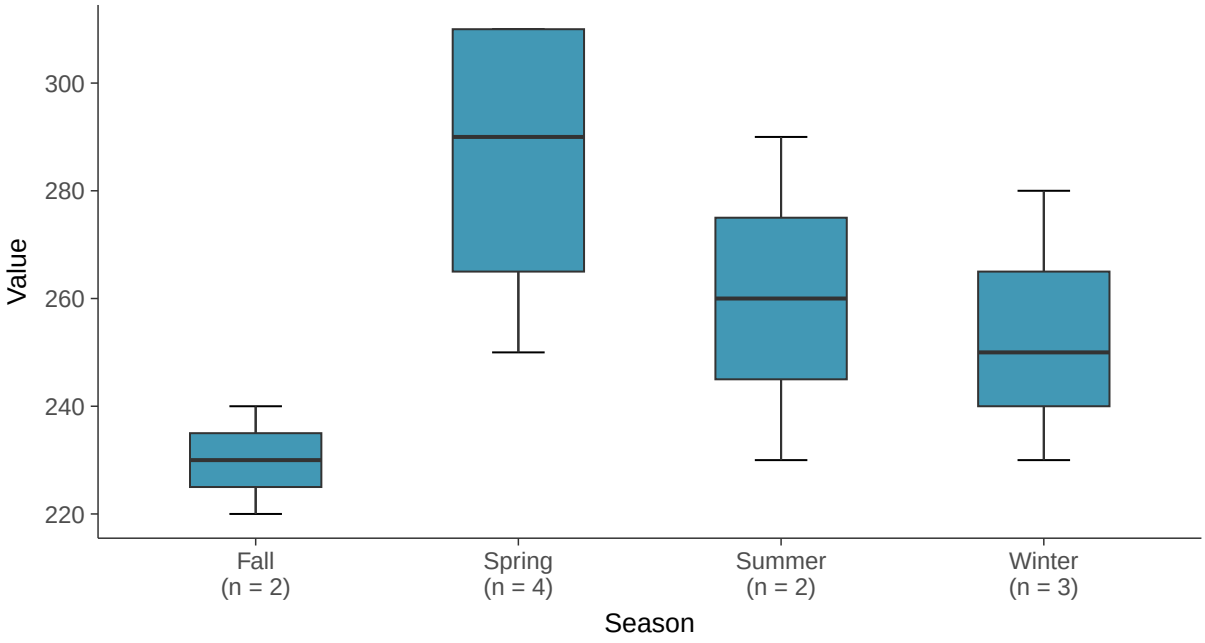
Boxplot

Calcium, MW-06 (mg/L)



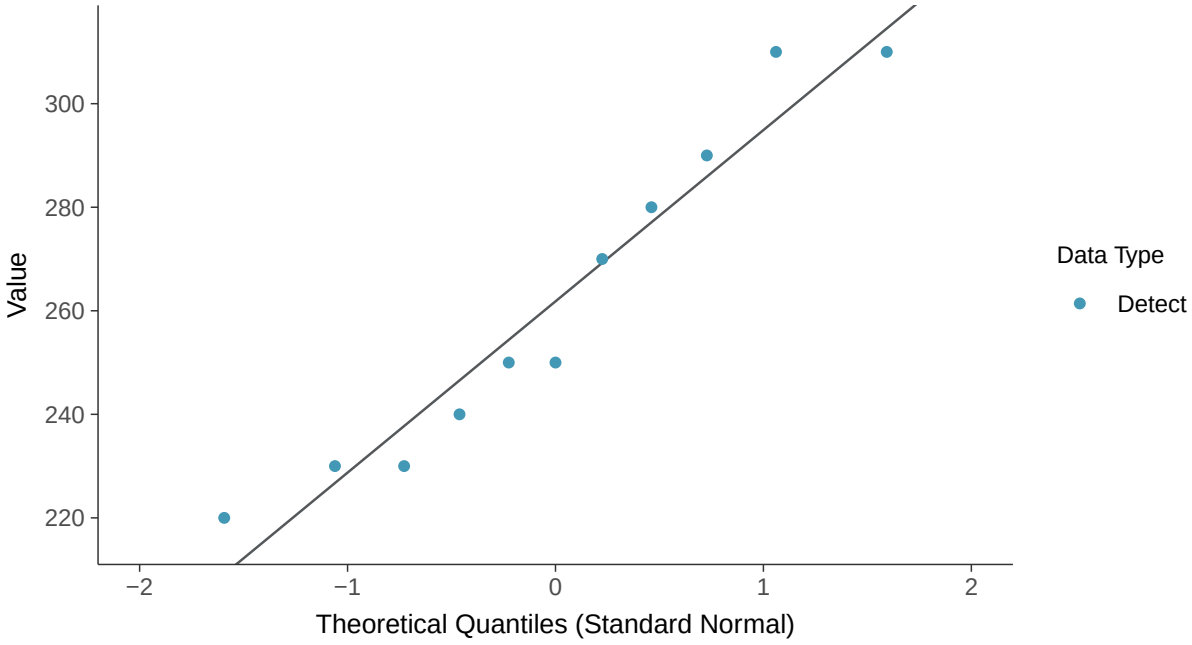
Boxplot by Season

Calcium, MW-06 (mg/L)



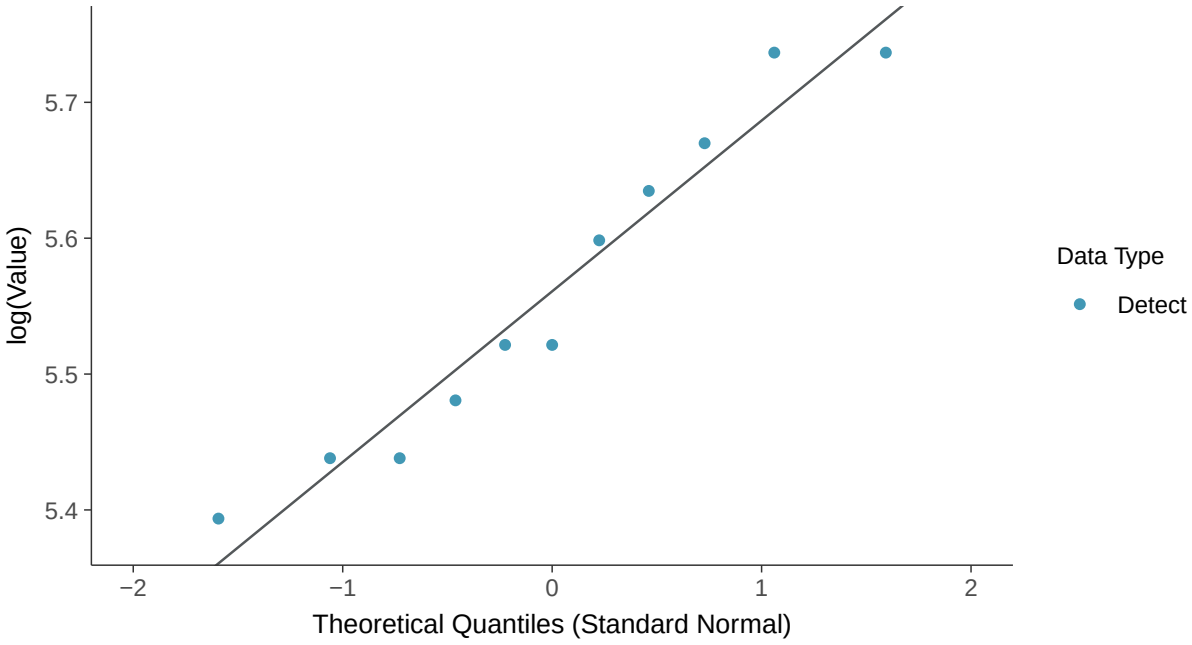
Normal Q-Q plot

Calcium, MW-06 (mg/L)



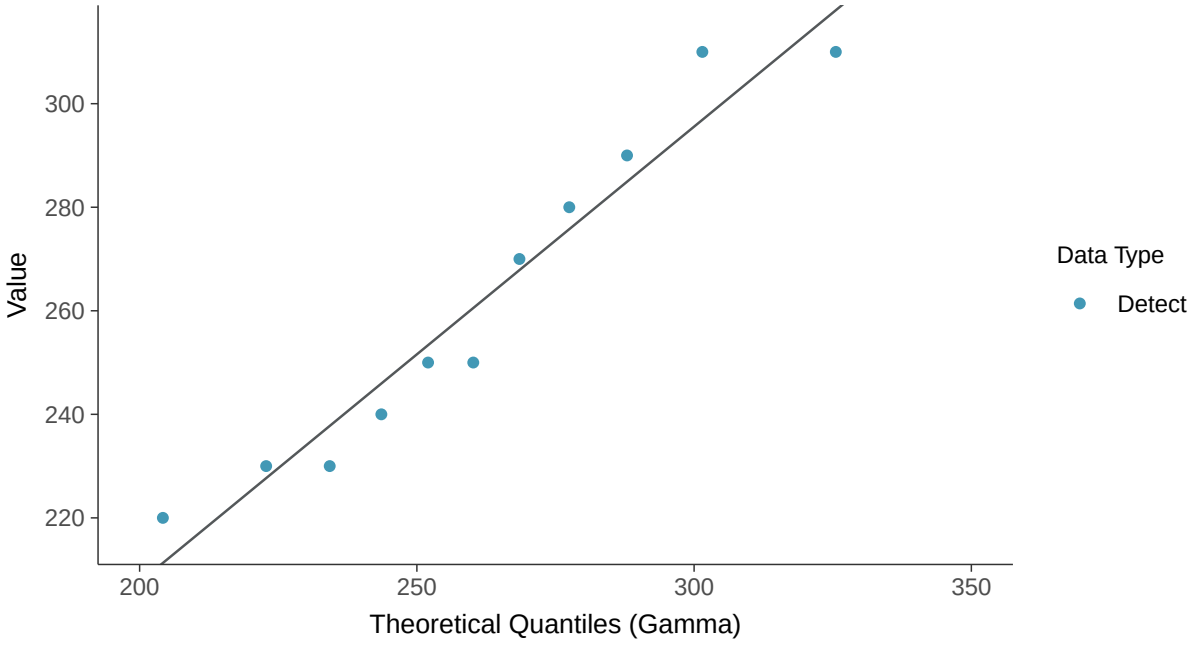
Lognormal Q-Q plot

Calcium, MW-06 (mg/L)



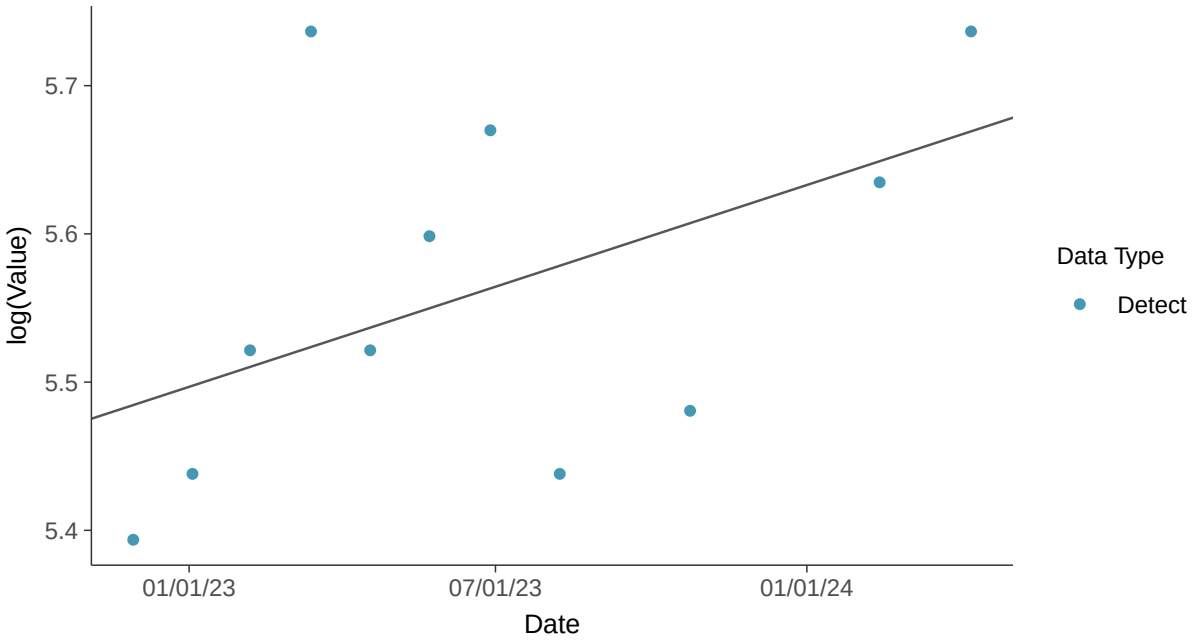
Gamma Q-Q plot

Calcium, MW-06 (mg/L)



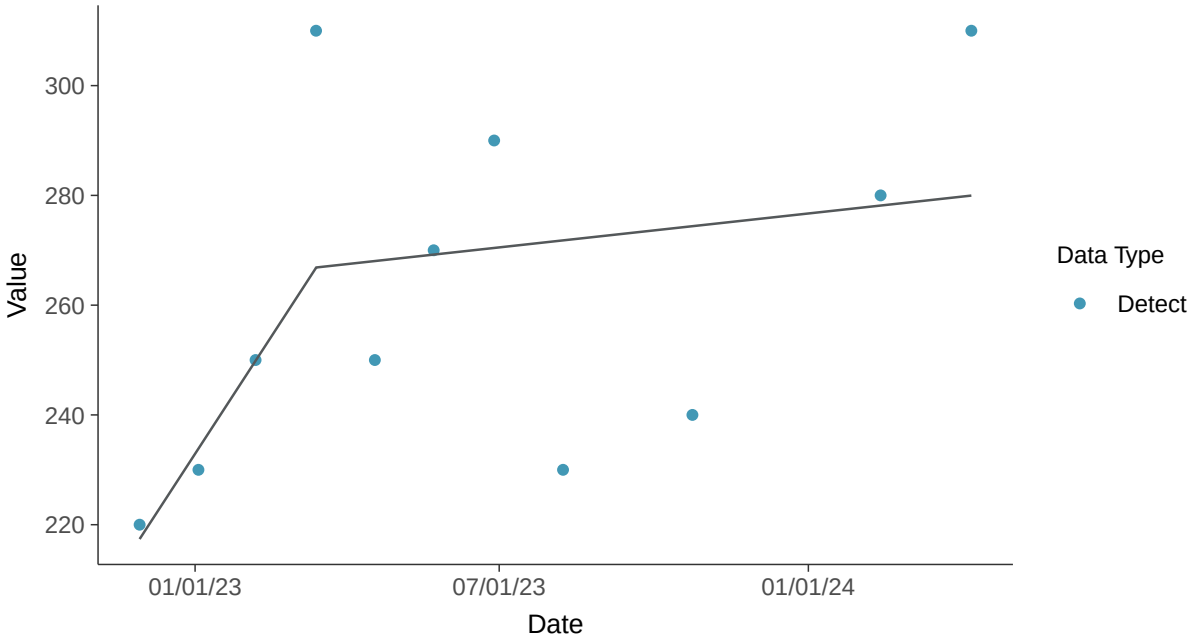
Trend Regression: Lognormal MLE

Calcium, MW-06 (mg/L)



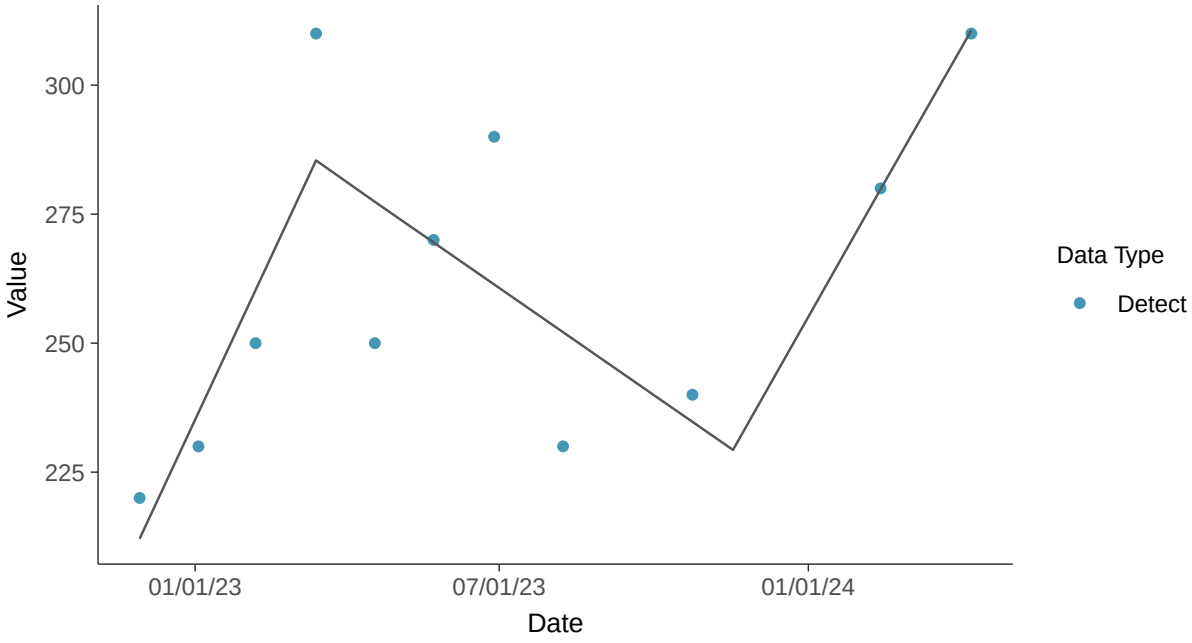
Trend Regression: Piecewise Linear-Linear

Calcium, MW-06 (mg/L)



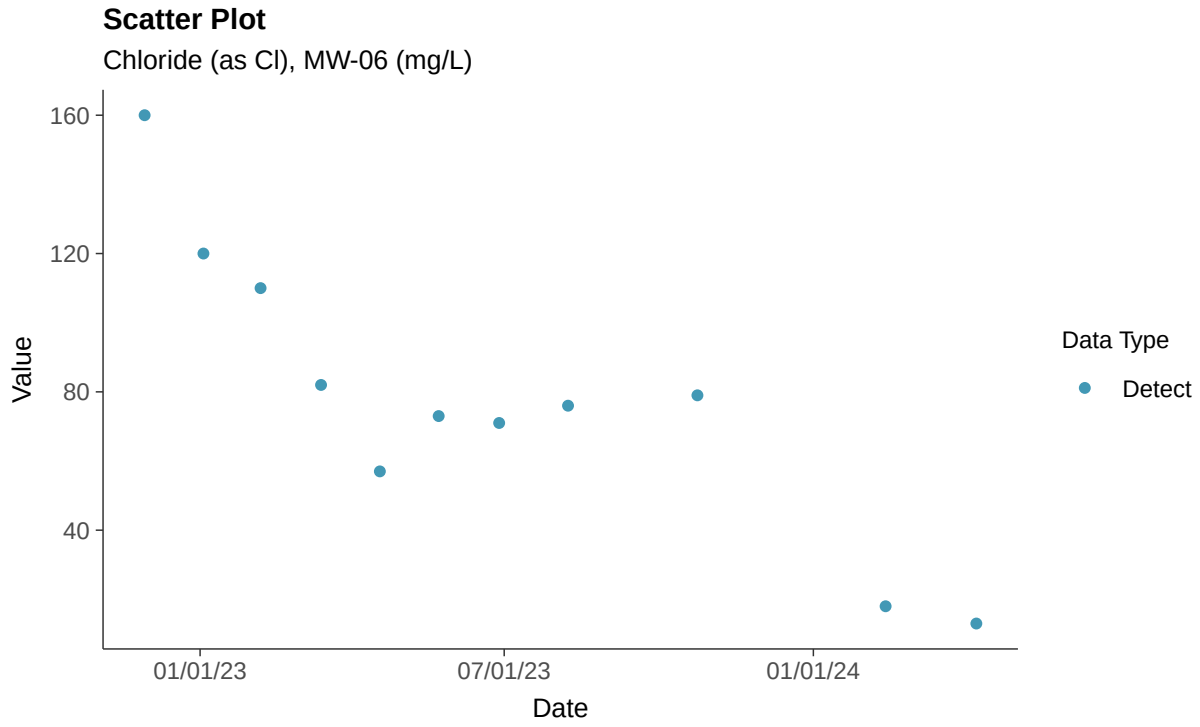
Trend Regression: Piecewise Linear-Linear-Linear

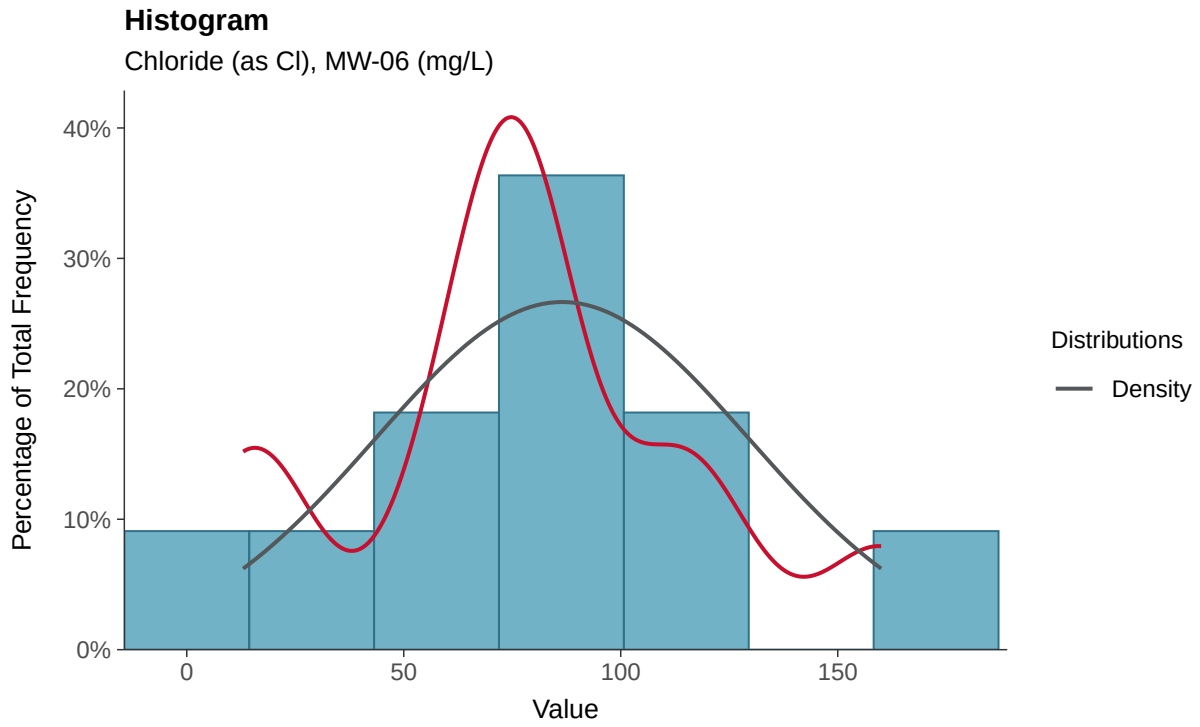
Calcium, MW-06 (mg/L)



Appendix III: Chloride (as Cl), MW-06

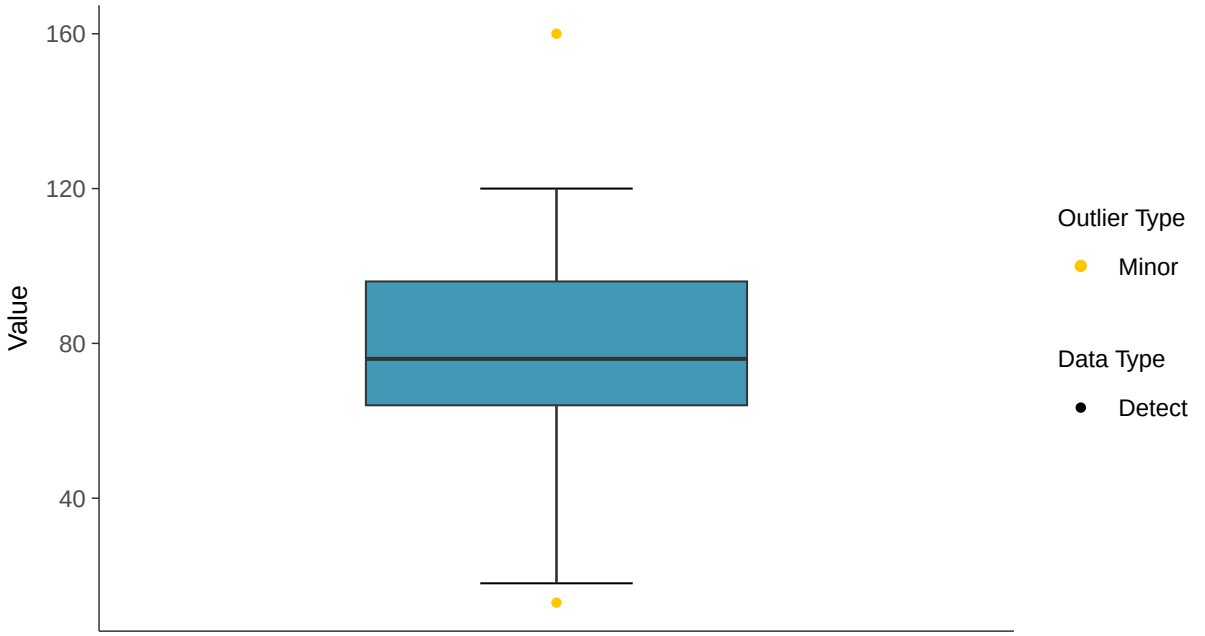
ID: 1_16_4_108





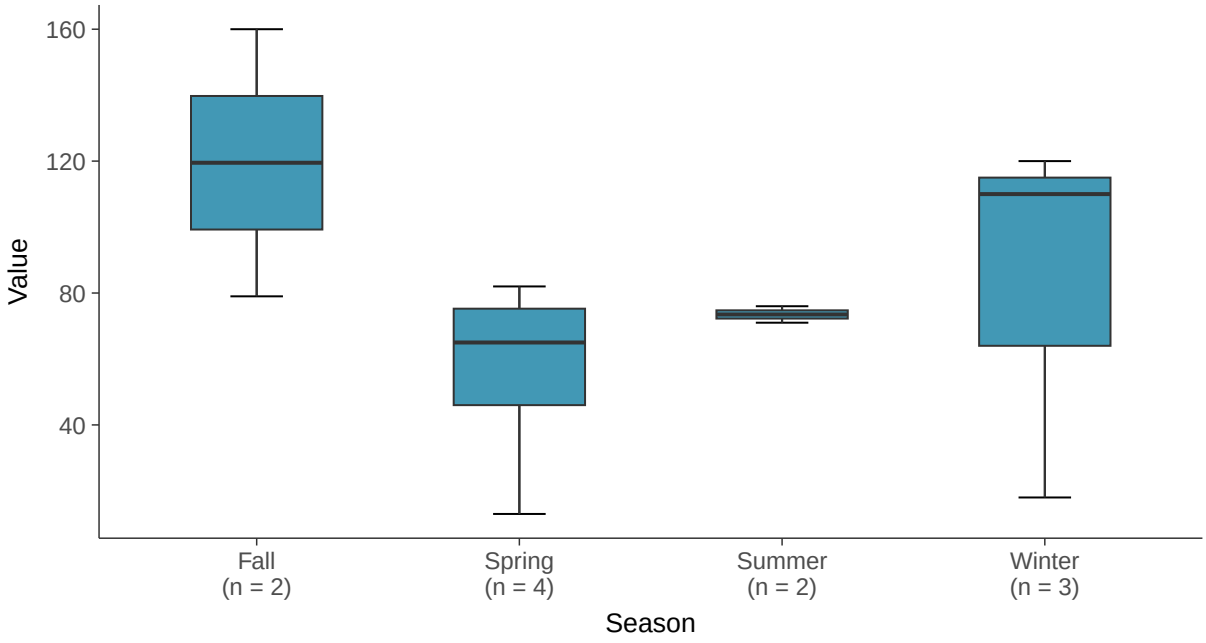
Boxplot

Chloride (as Cl), MW-06 (mg/L)



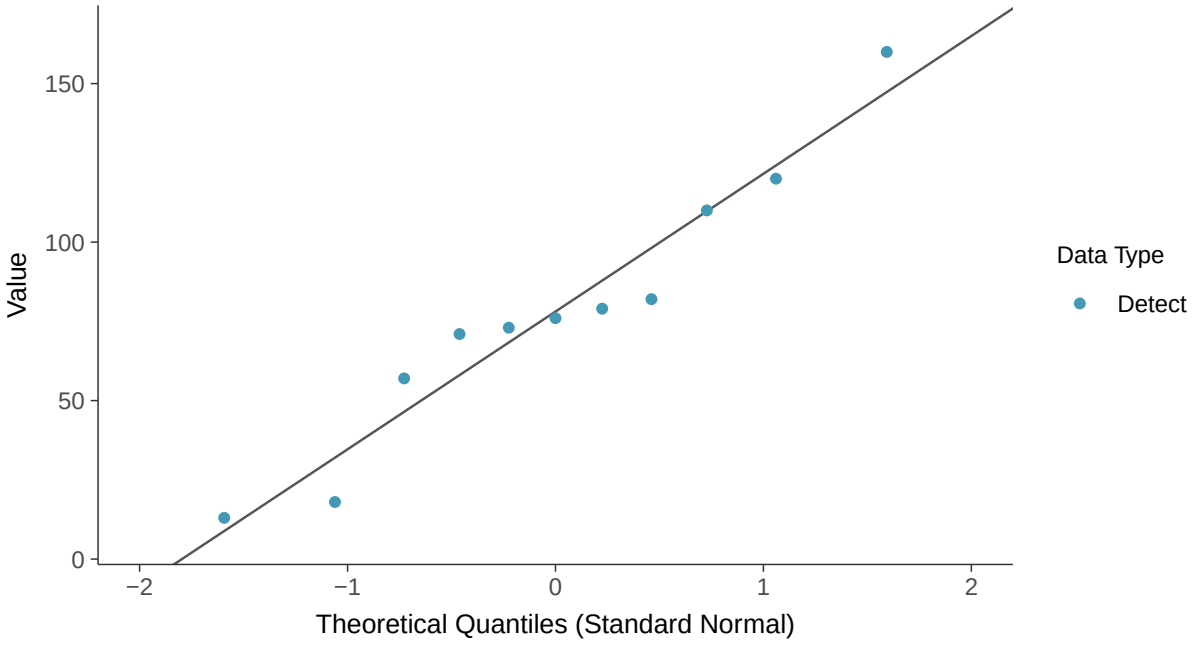
Boxplot by Season

Chloride (as Cl), MW-06 (mg/L)



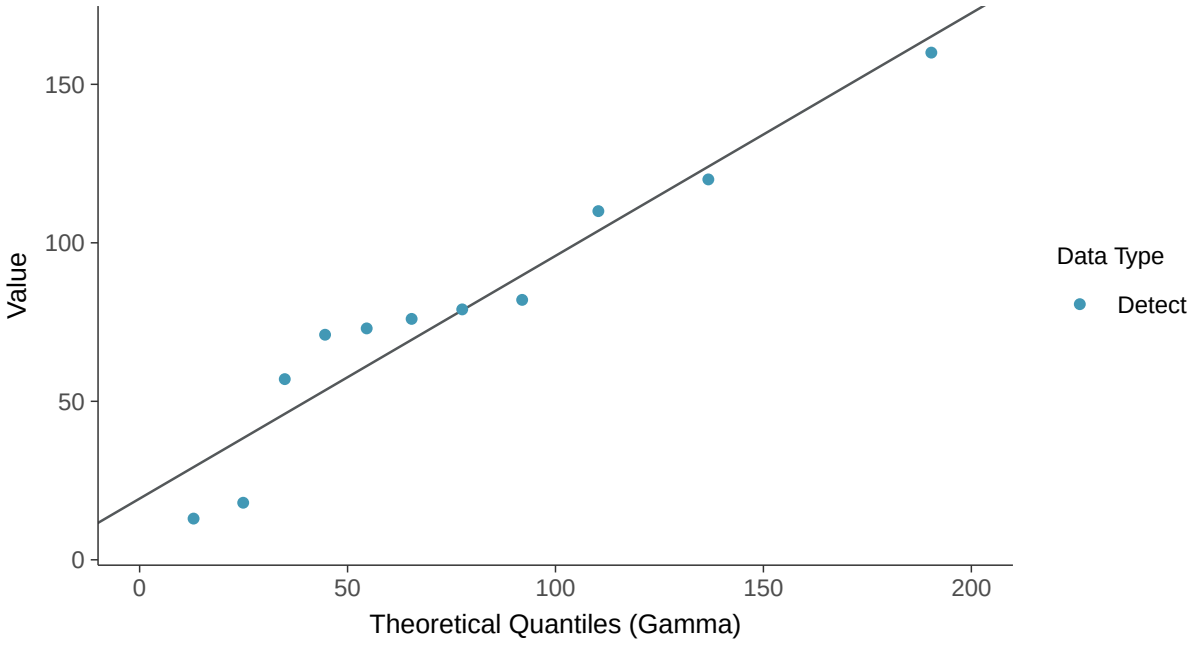
Normal Q-Q plot

Chloride (as Cl), MW-06 (mg/L)



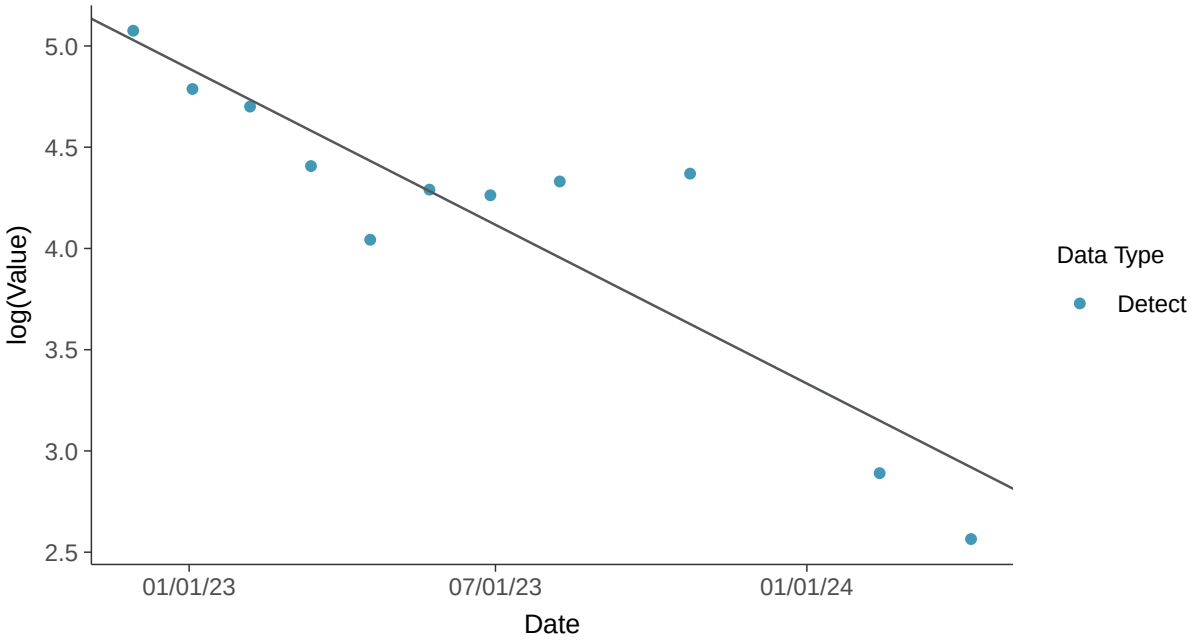
Gamma Q-Q plot

Chloride (as Cl), MW-06 (mg/L)



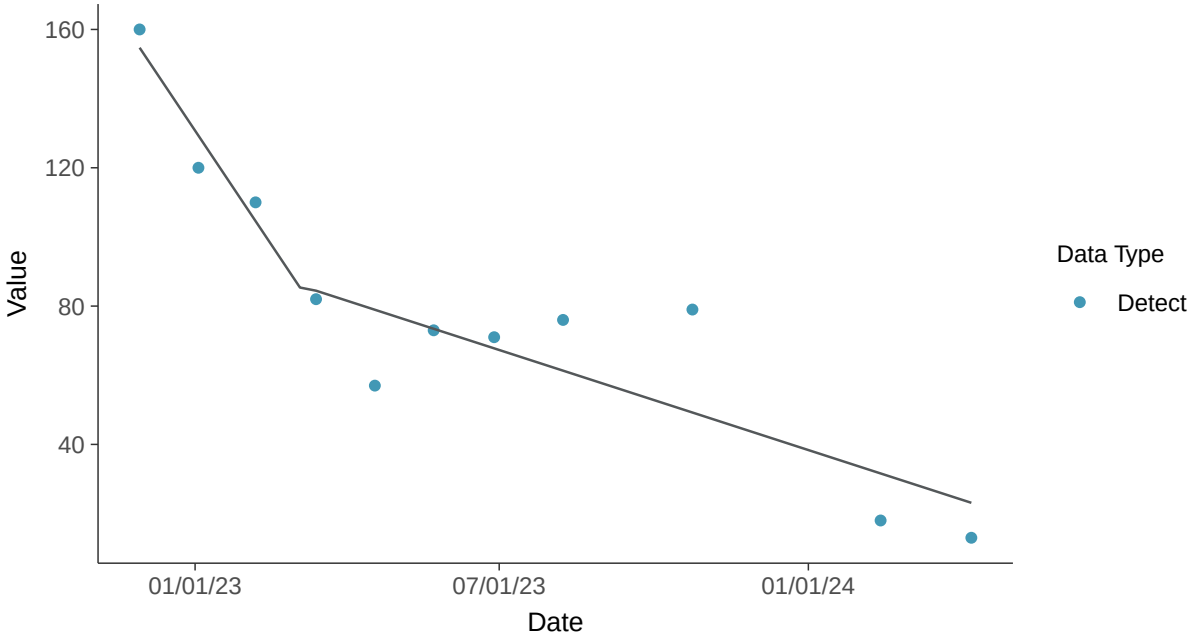
Trend Regression: Lognormal MLE

Chloride (as Cl), MW-06 (mg/L)



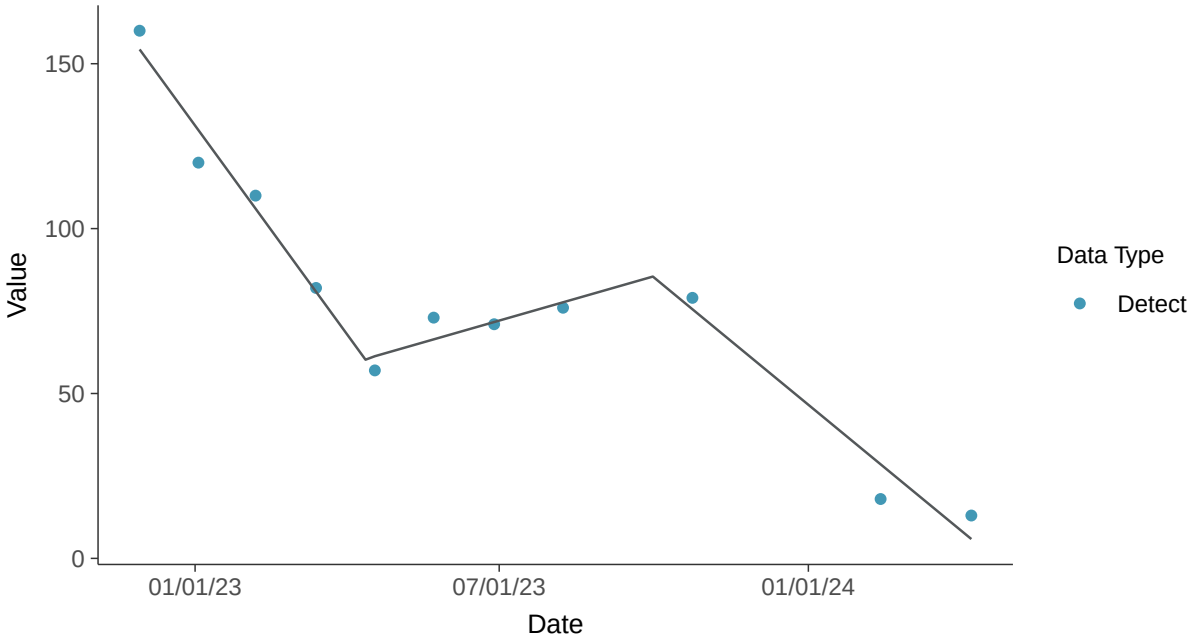
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-06 (mg/L)



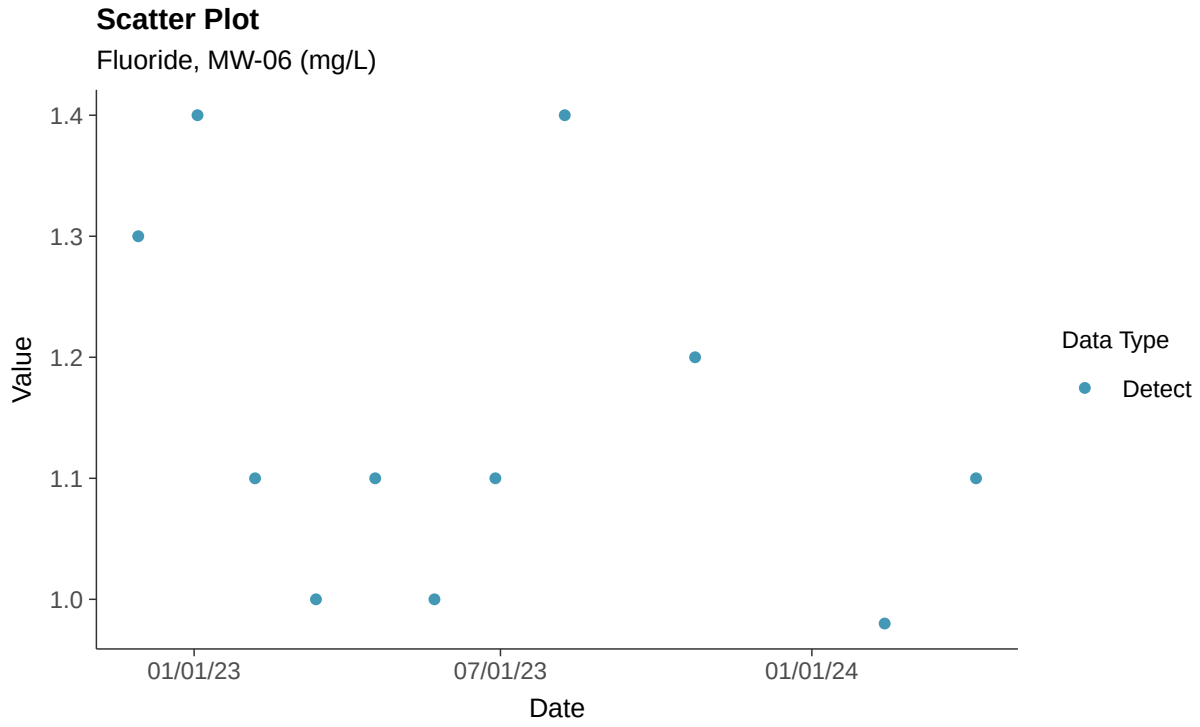
Trend Regression: Piecewise Linear-Linear-Linear

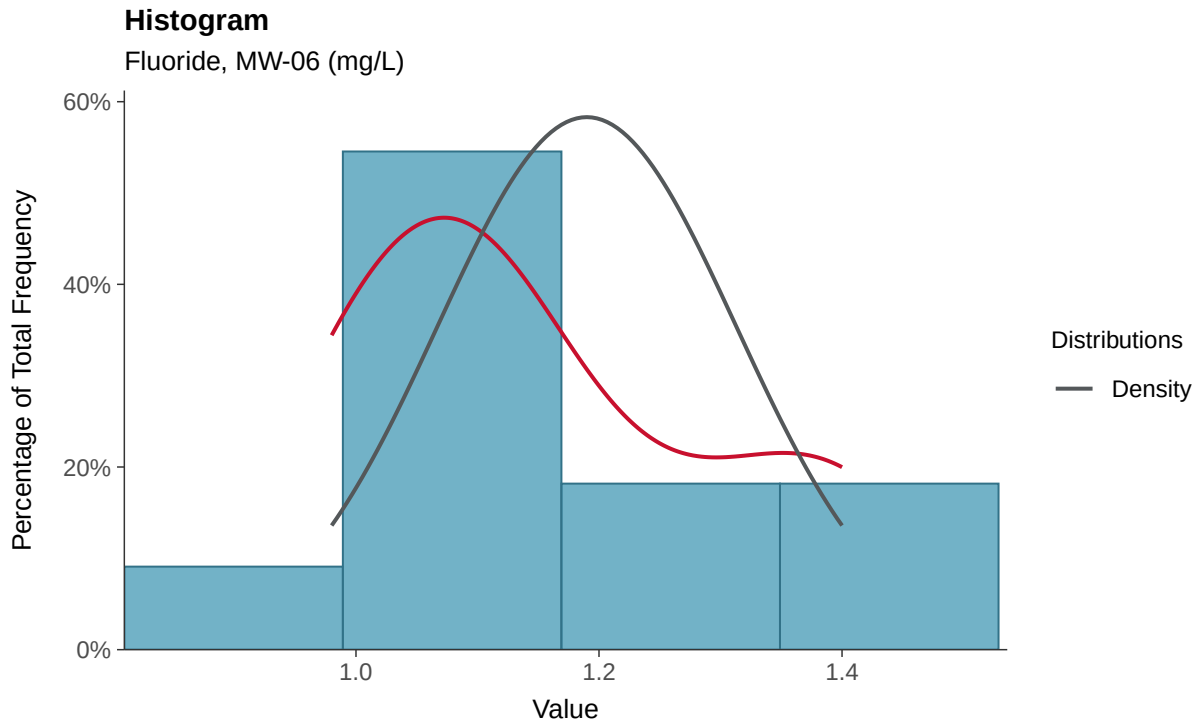
Chloride (as Cl), MW-06 (mg/L)



Appendix III: Fluoride, MW-06

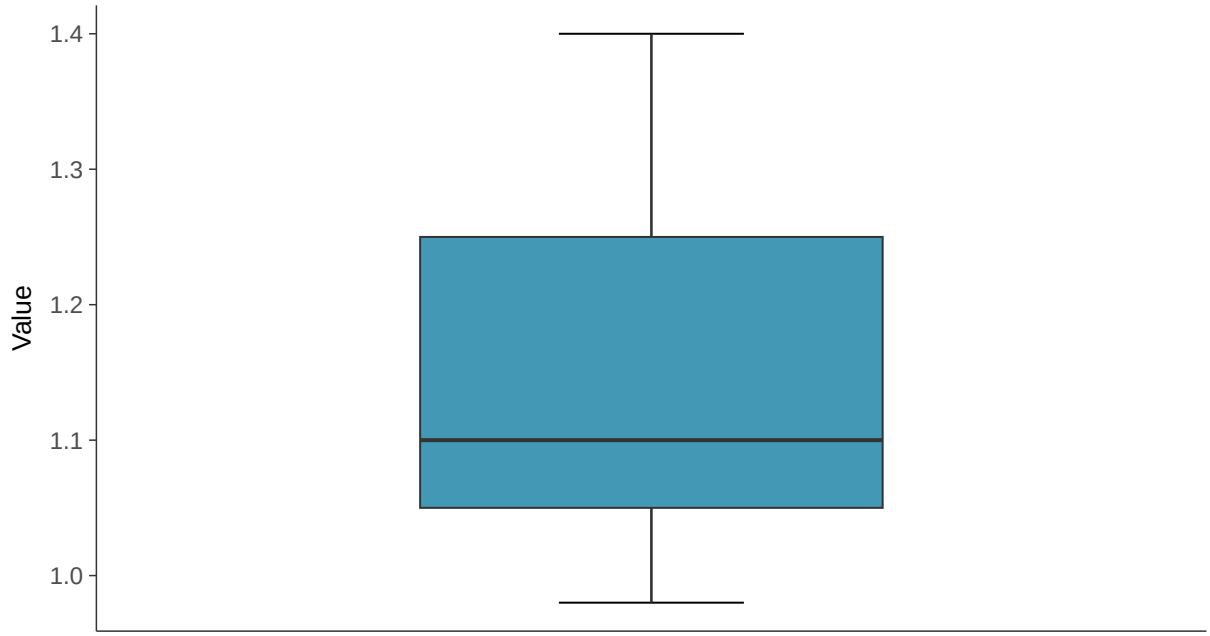
ID: 1_16_4_112





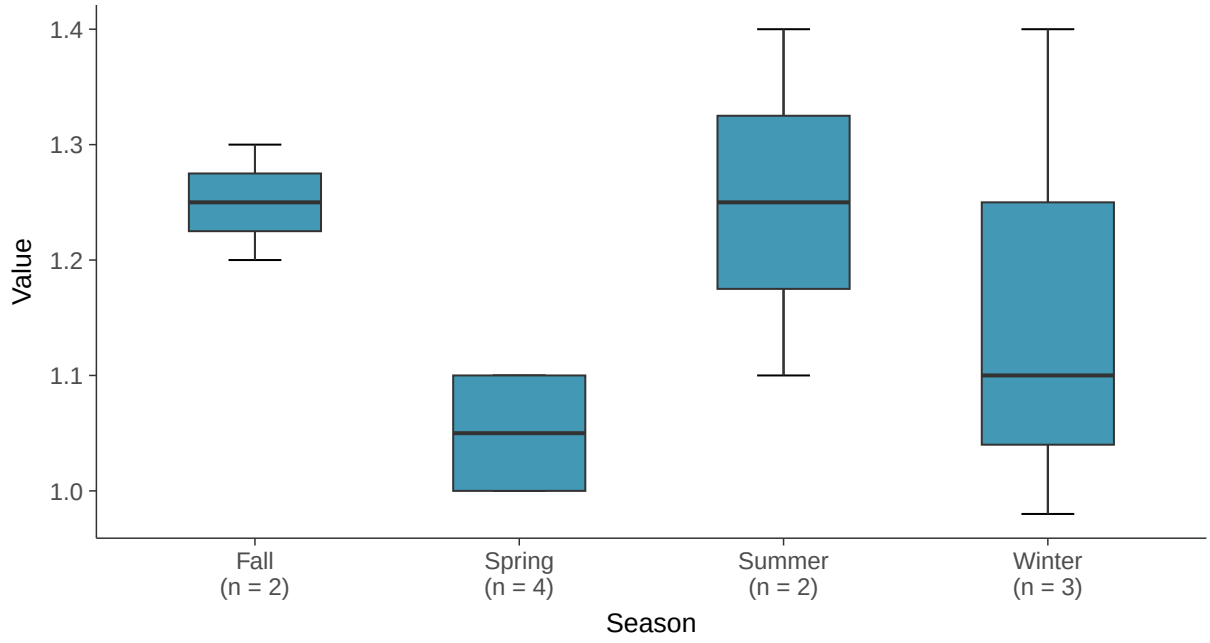
Boxplot

Fluoride, MW-06 (mg/L)



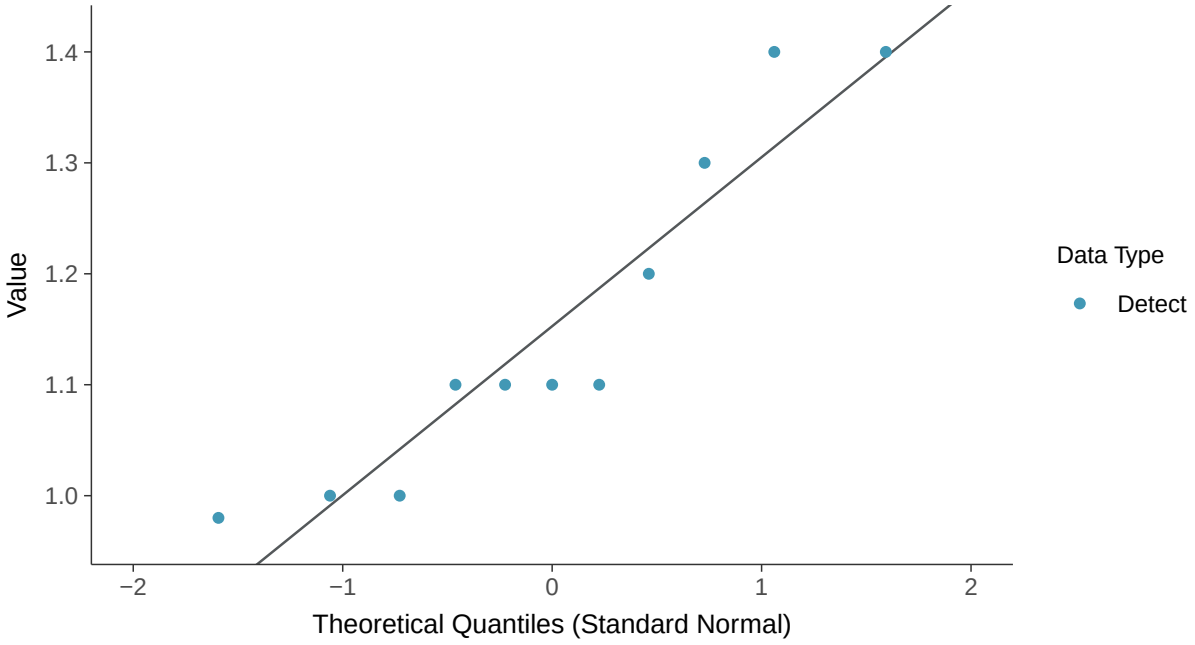
Boxplot by Season

Fluoride, MW-06 (mg/L)



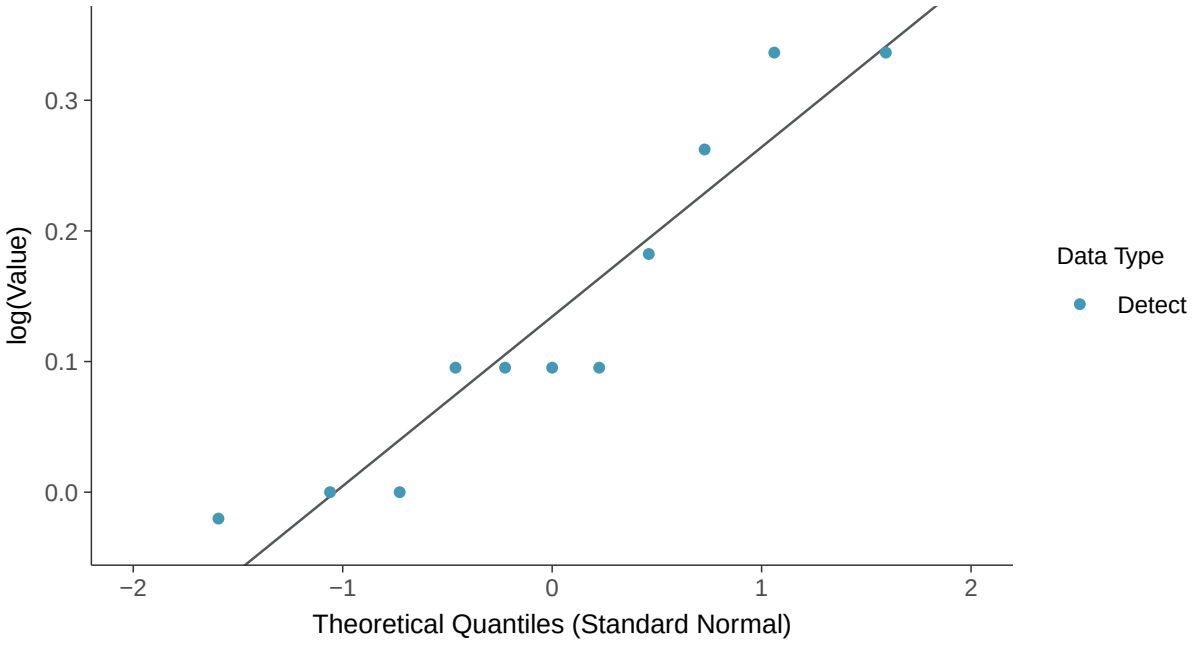
Normal Q-Q plot

Fluoride, MW-06 (mg/L)



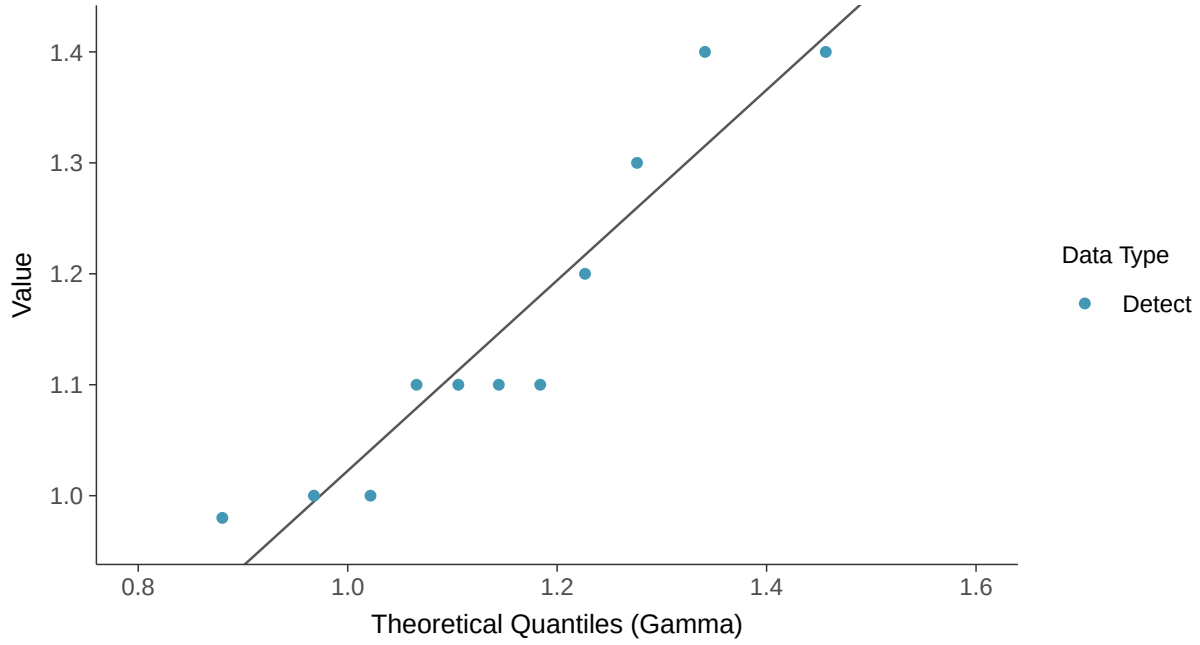
Lognormal Q-Q plot

Fluoride, MW-06 (mg/L)



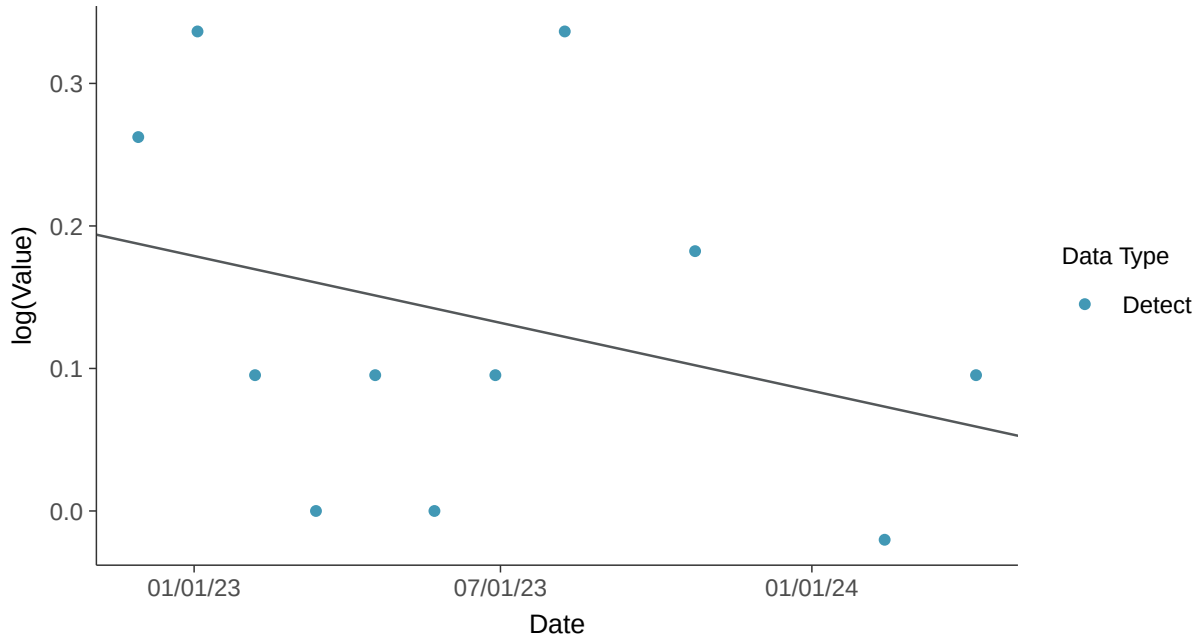
Gamma Q-Q plot

Fluoride, MW-06 (mg/L)



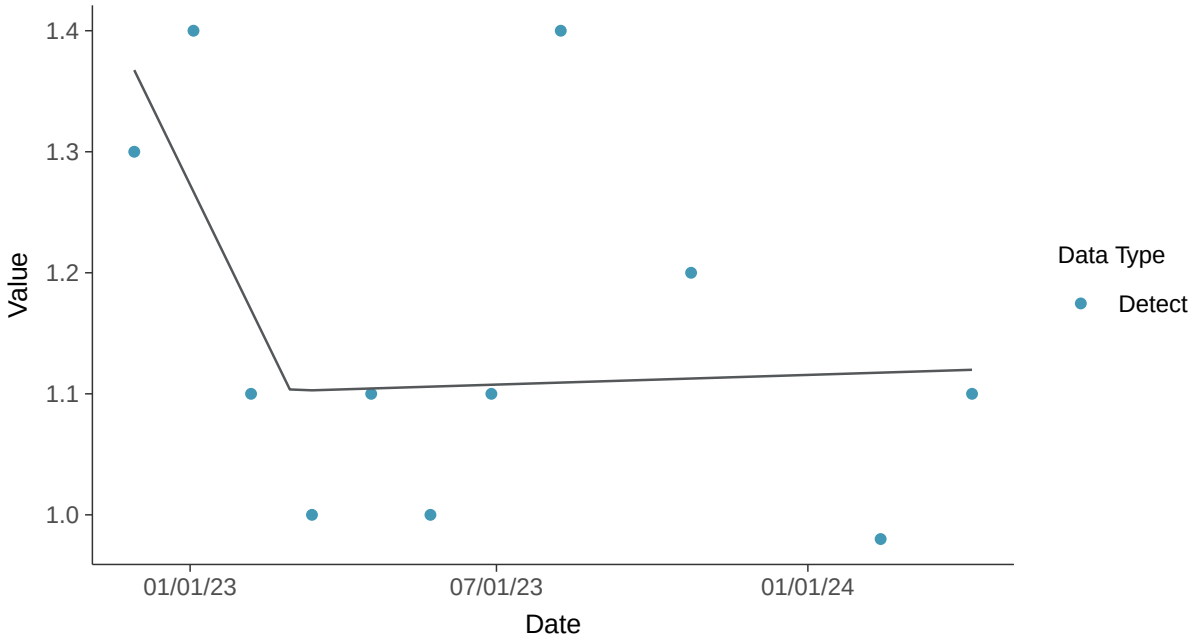
Trend Regression: Lognormal MLE

Fluoride, MW-06 (mg/L)



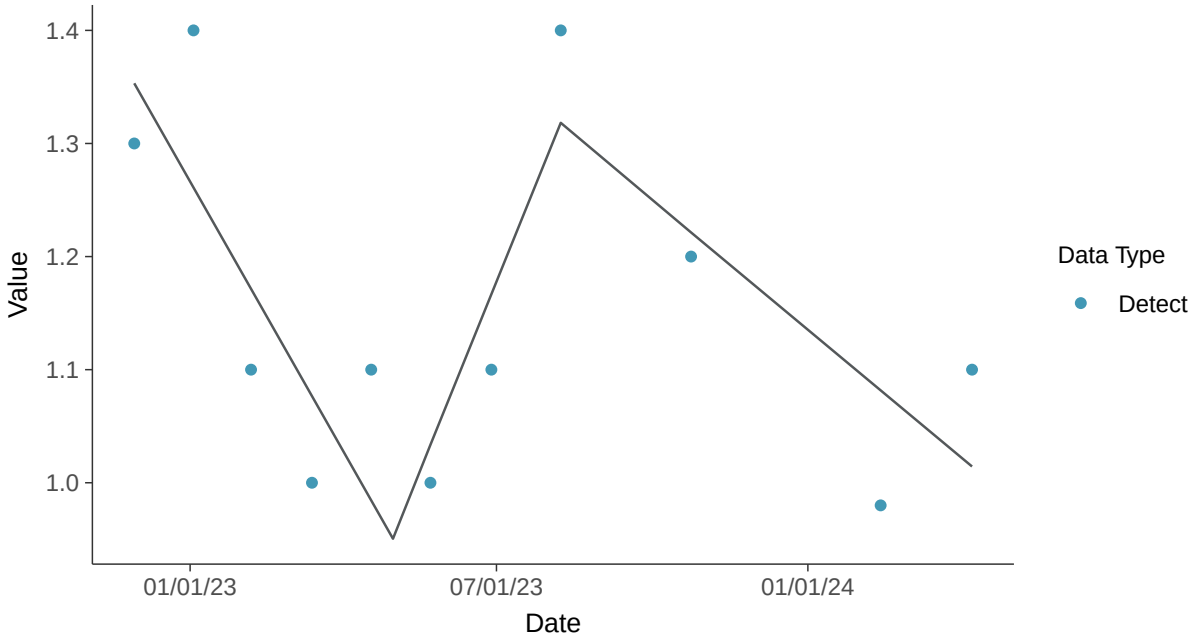
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-06 (mg/L)



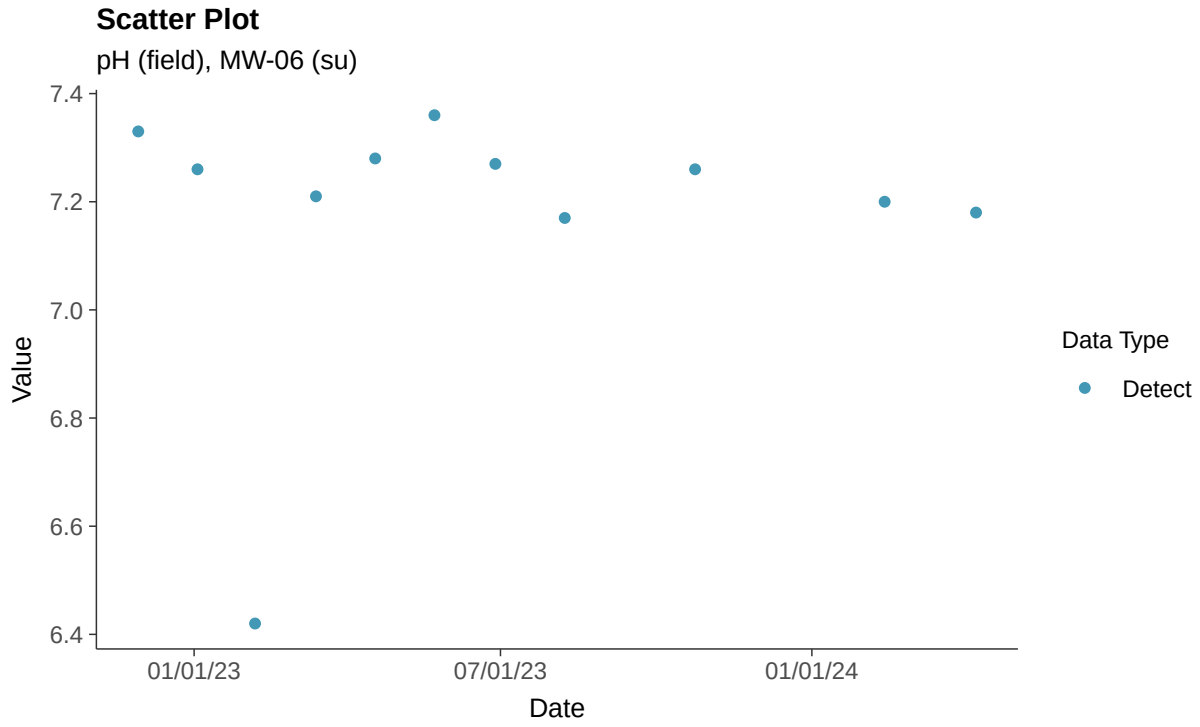
Trend Regression: Piecewise Linear-Linear-Linear

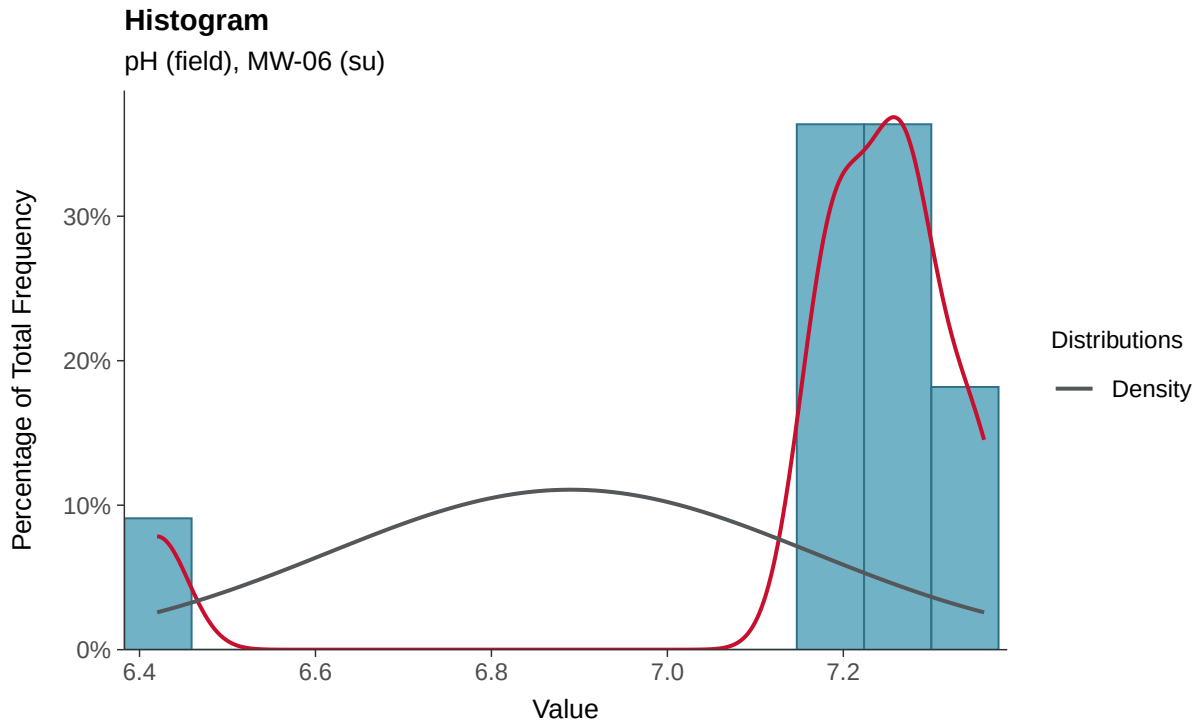
Fluoride, MW-06 (mg/L)



Appendix III: pH (field), MW-06

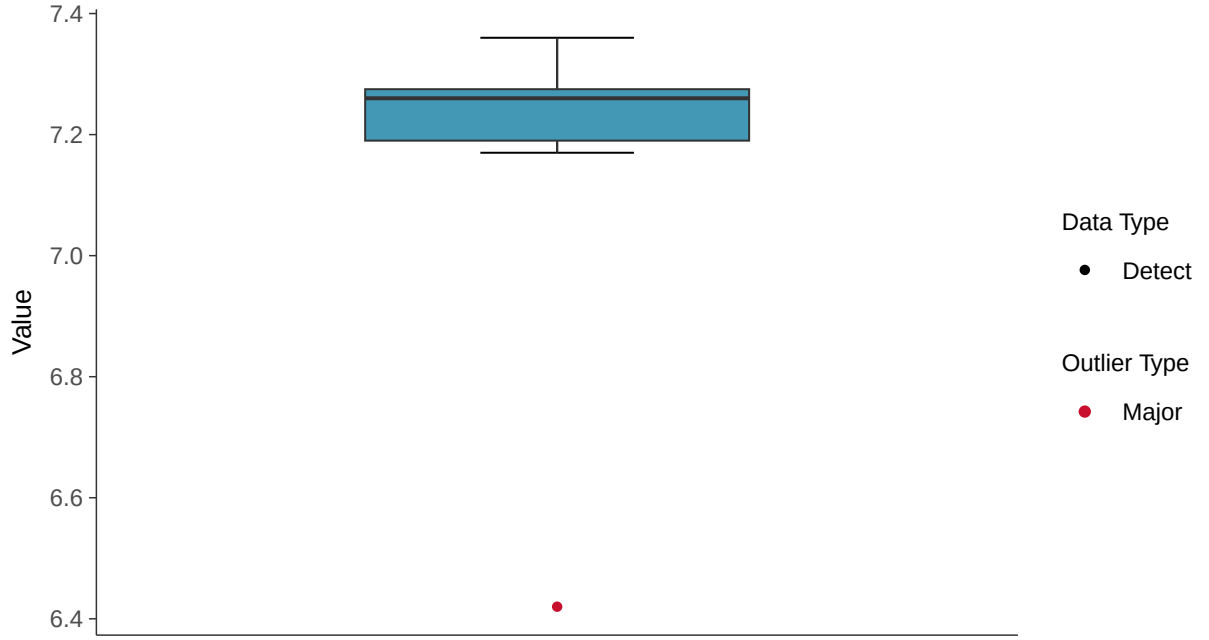
ID: 1_16_4_120





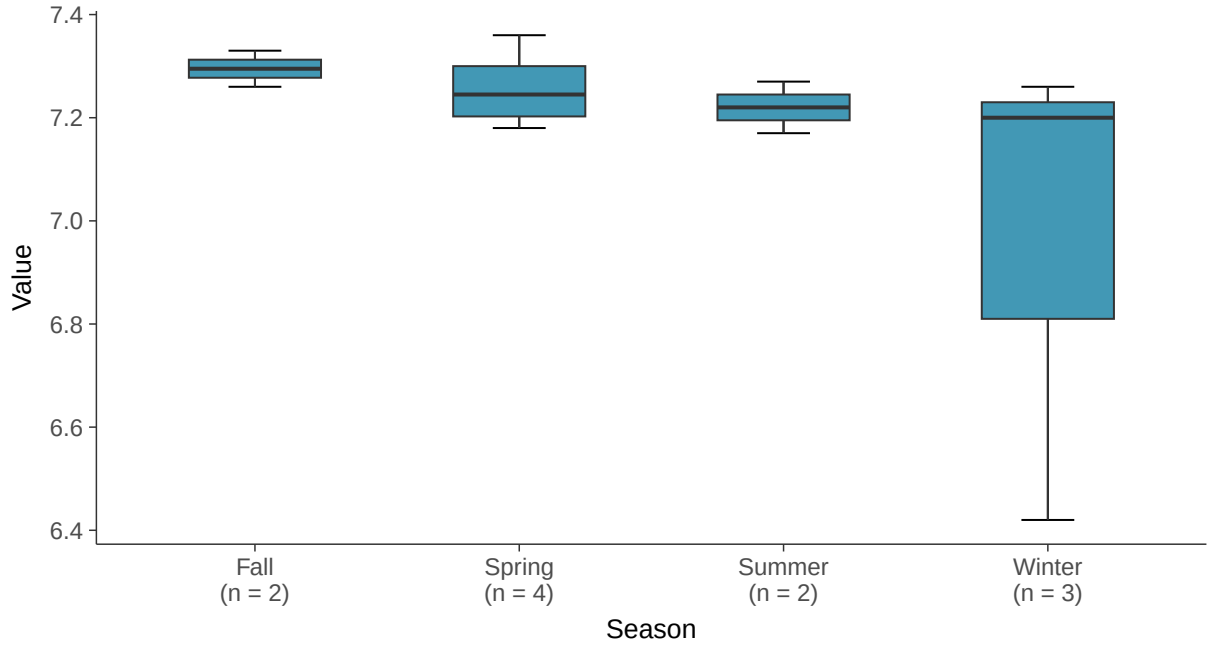
Boxplot

pH (field), MW-06 (su)



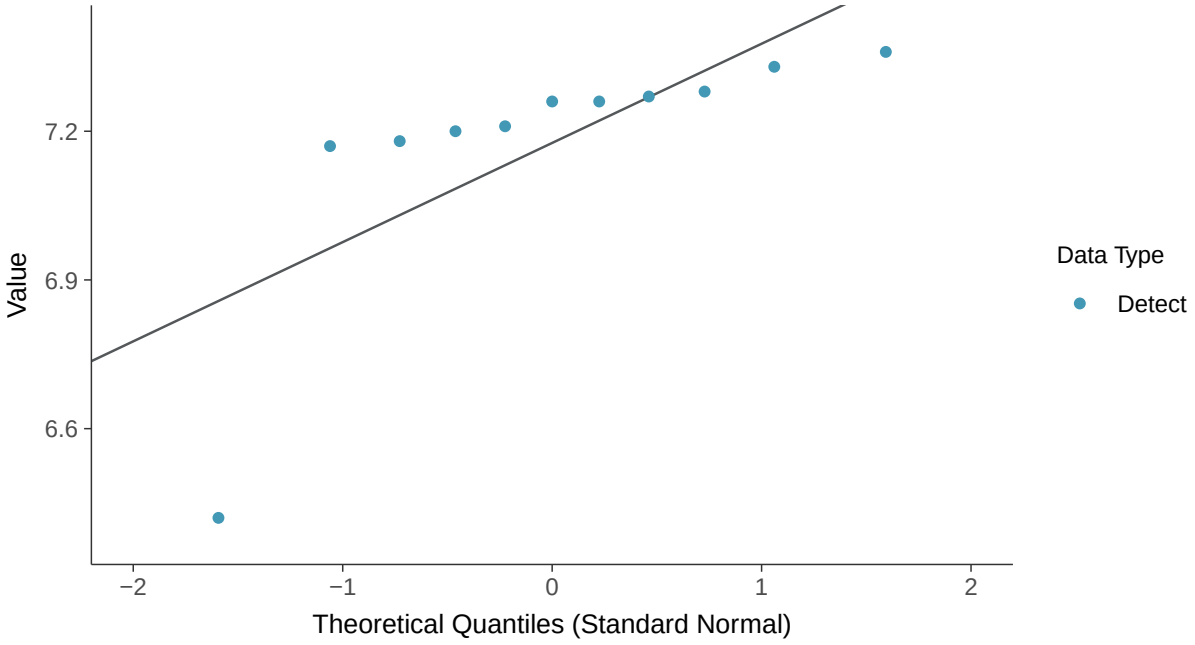
Boxplot by Season

pH (field), MW-06 (su)



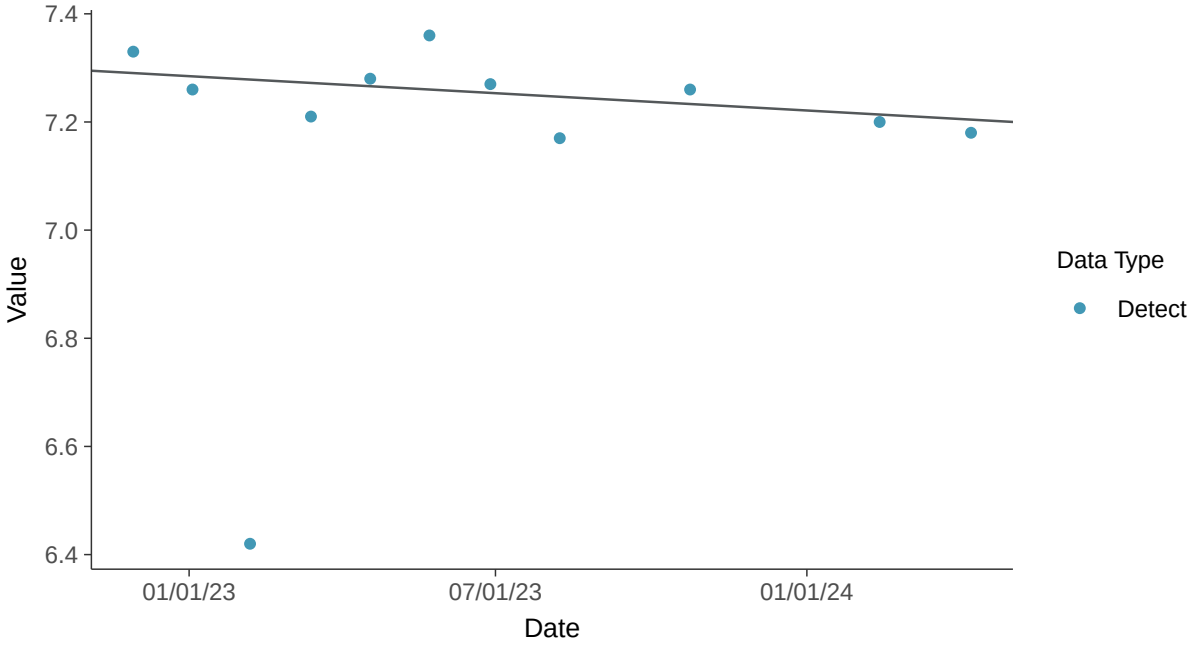
Normal Q-Q plot

pH (field), MW-06 (su)



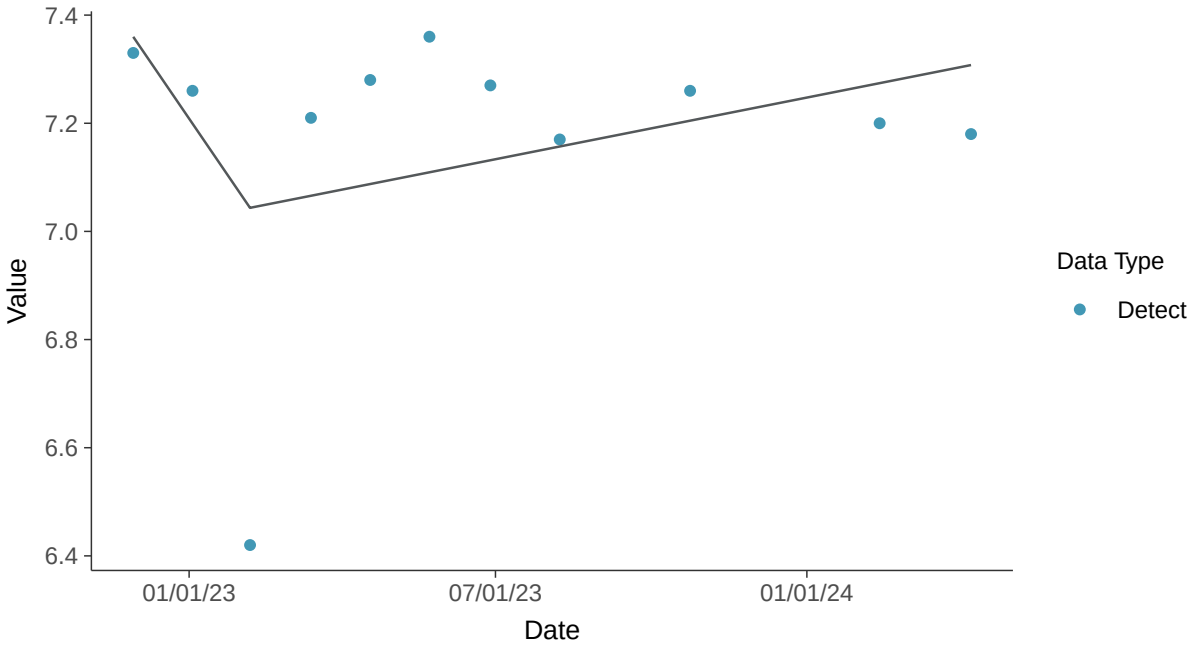
Trend Regression: Mann-Kendall/Theil-Sen Estimate

pH (field), MW-06 (su)



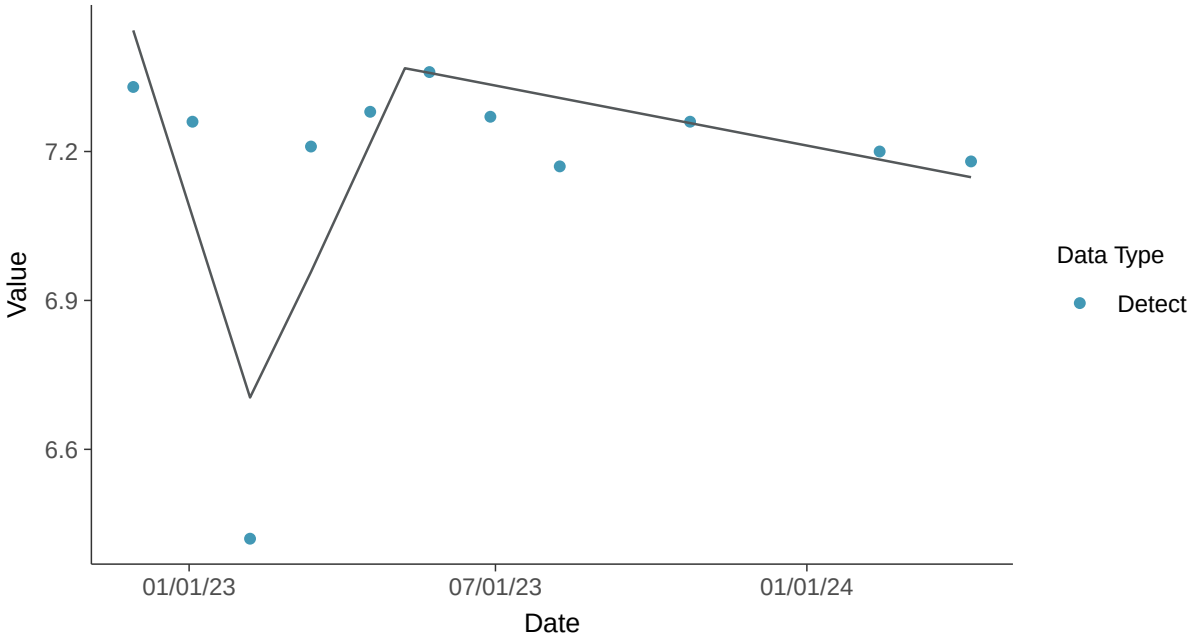
Trend Regression: Piecewise Linear-Linear

pH (field), MW-06 (su)



Trend Regression: Piecewise Linear-Linear-Linear

pH (field), MW-06 (su)

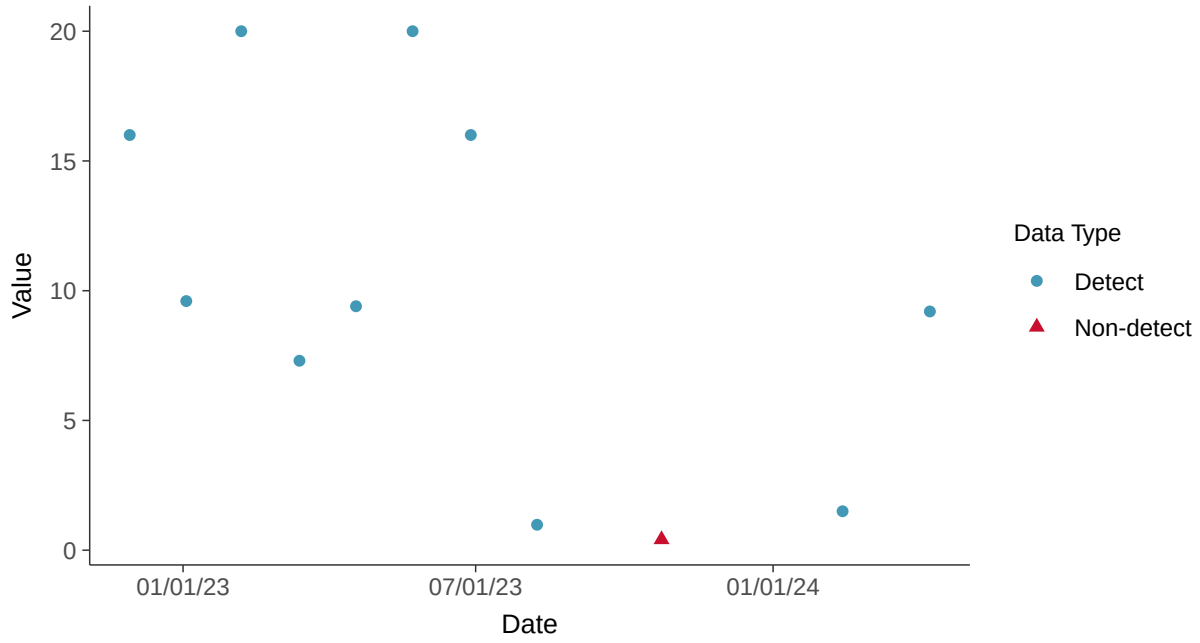


Appendix III: Sulfate (as SO4), MW-06

ID: 1_16_4_124

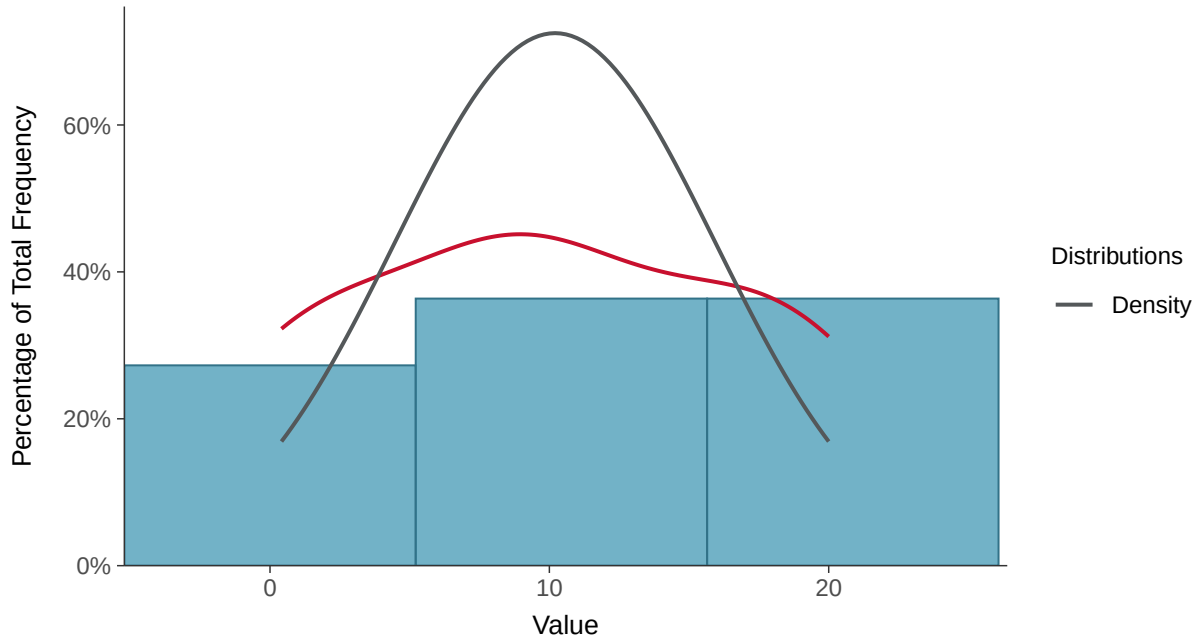
Scatter Plot

Sulfate (as SO4), MW-06 (mg/L)



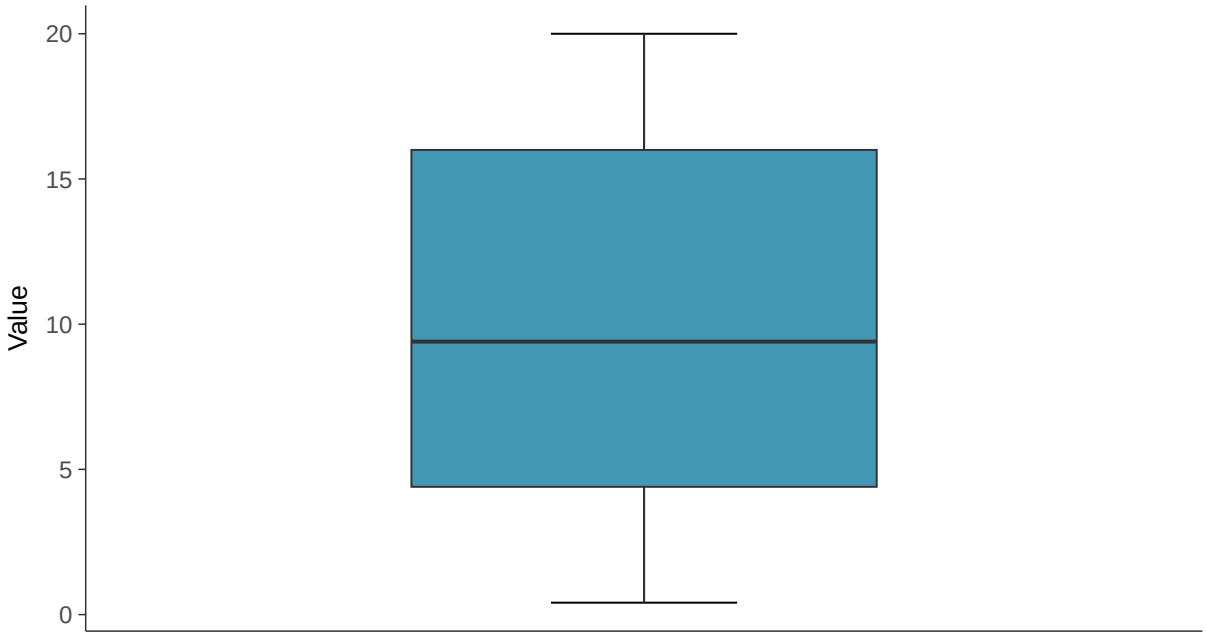
Histogram

Sulfate (as SO4), MW-06 (mg/L)



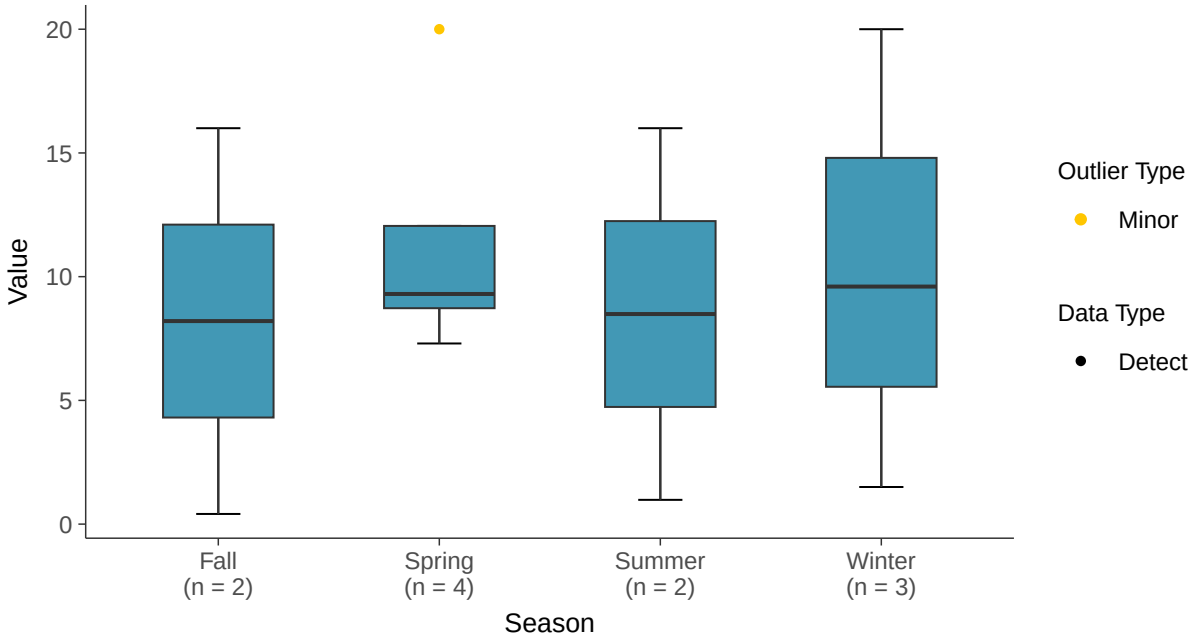
Boxplot

Sulfate (as SO4), MW-06 (mg/L)



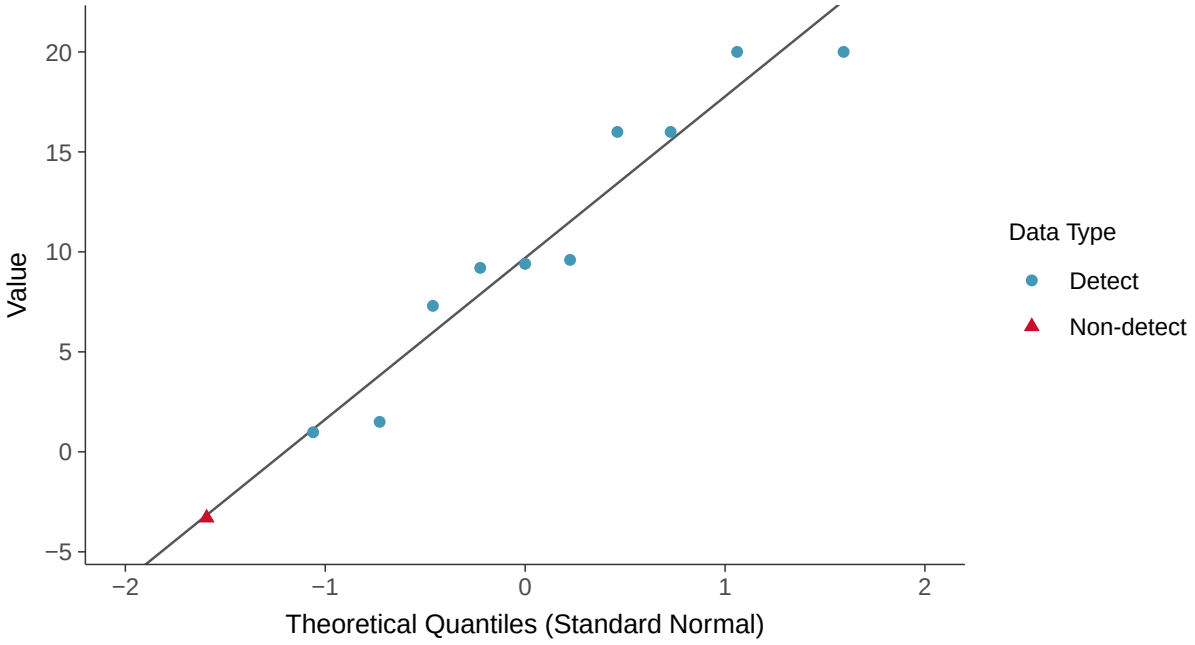
Boxplot by Season

Sulfate (as SO4), MW-06 (mg/L)



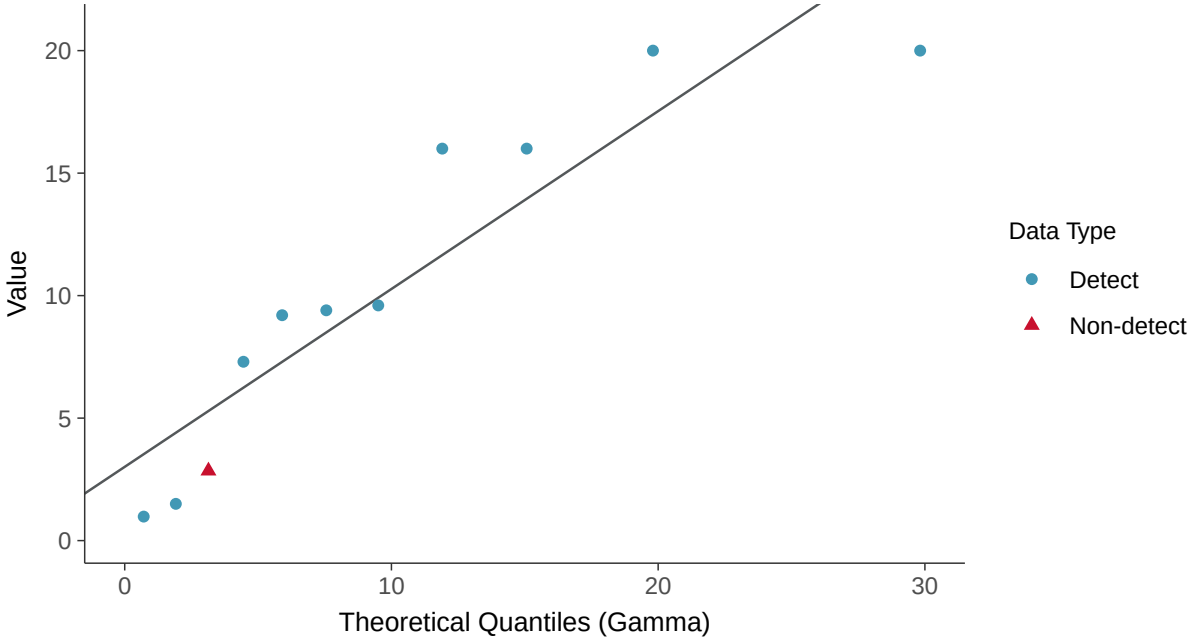
Normal Q-Q plot using ROS Imputed Estimates

Sulfate (as SO4), MW-06 (mg/L)



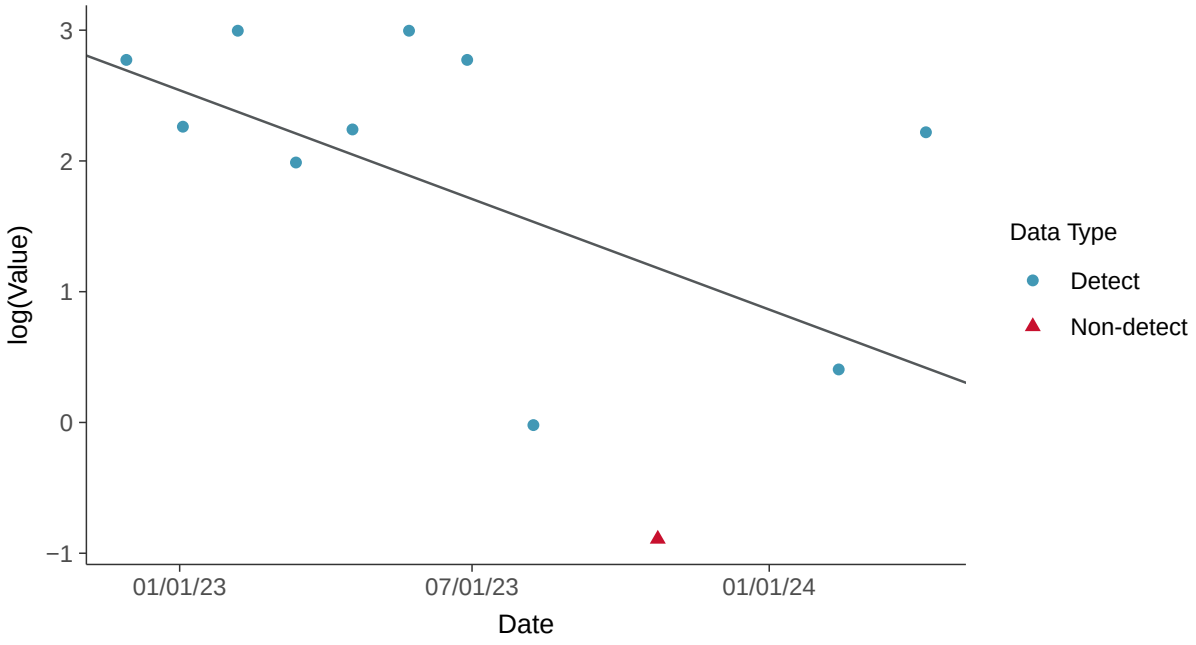
Gamma Q-Q plot using ROS Imputed Estimates

Sulfate (as SO4), MW-06 (mg/L)



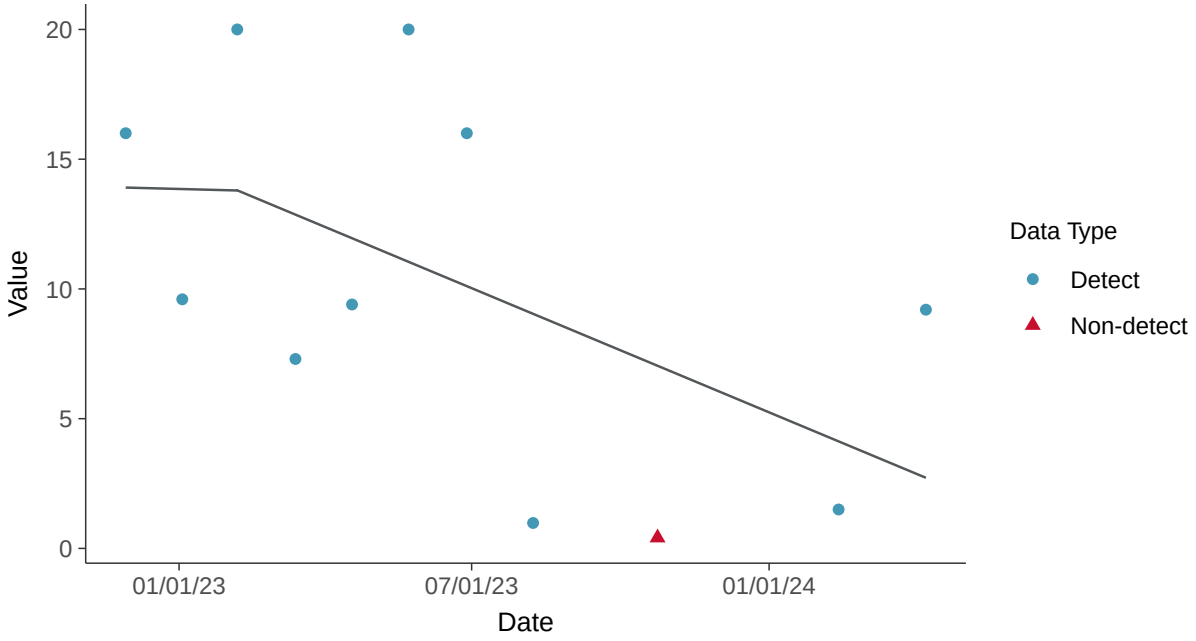
Trend Regression: Lognormal MLE

Sulfate (as SO4), MW-06 (mg/L)



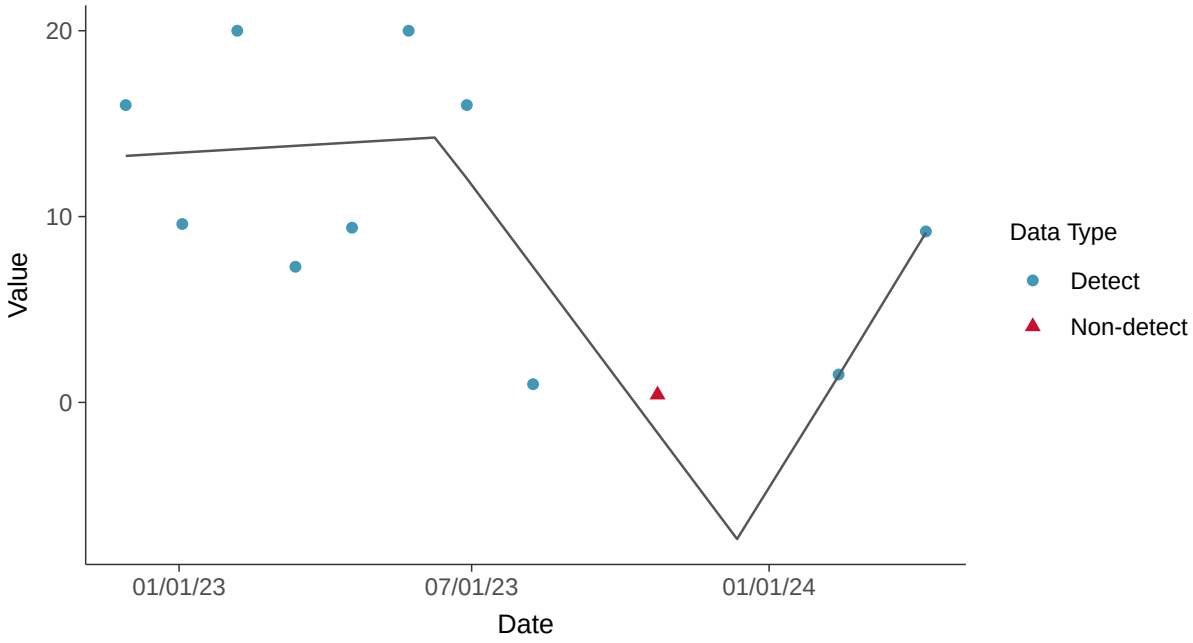
Trend Regression: Piecewise Linear-Linear

Sulfate (as SO4), MW-06 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Sulfate (as SO4), MW-06 (mg/L)

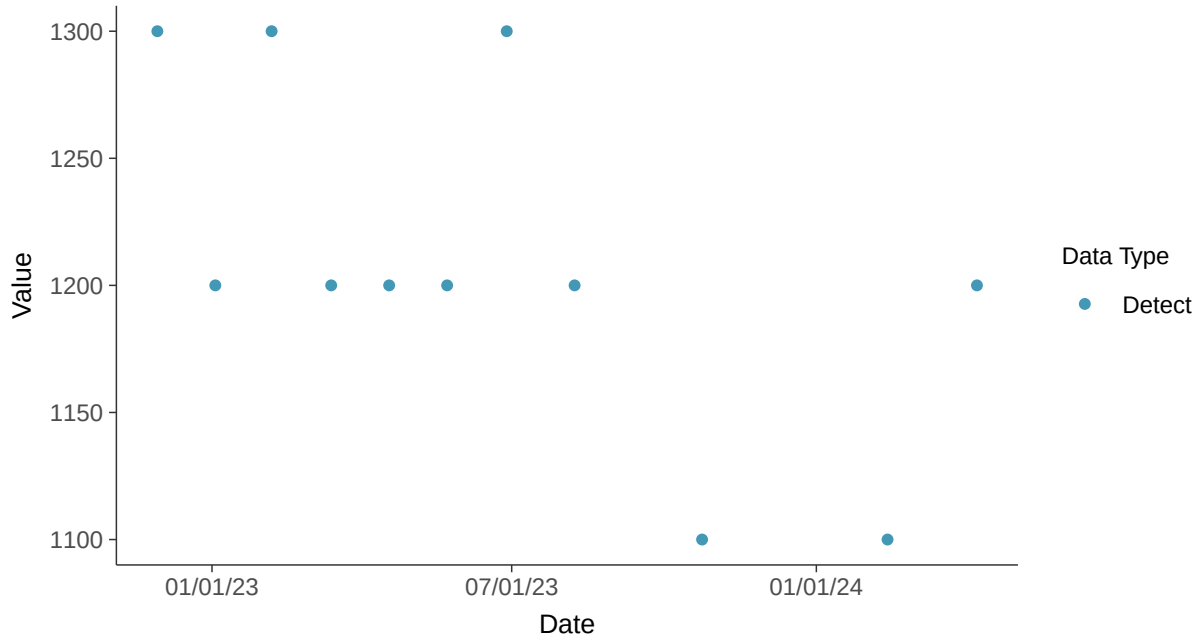


Appendix III: Total Dissolved Solids, MW-06

ID: 1_16_4_126

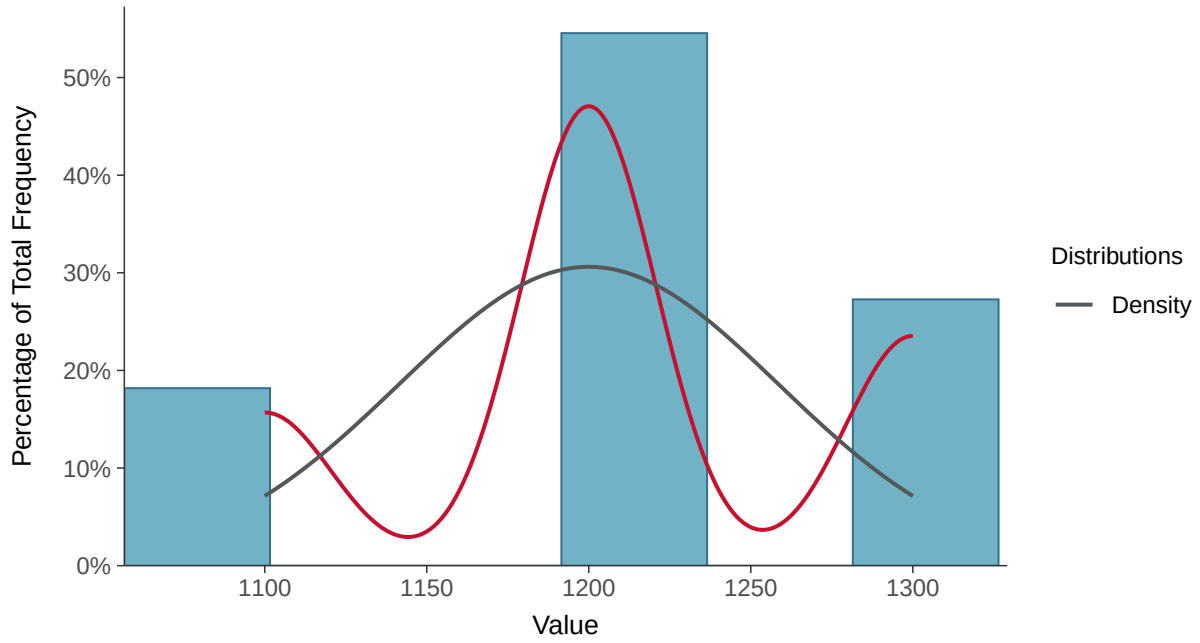
Scatter Plot

Total Dissolved Solids, MW-06 (mg/L)



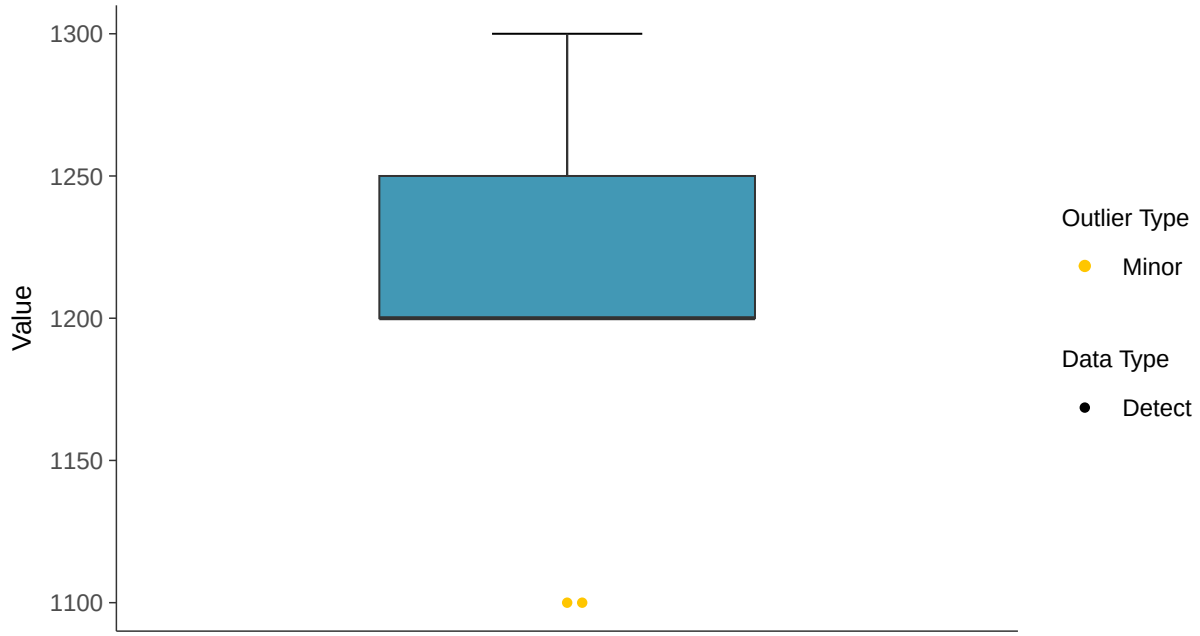
Histogram

Total Dissolved Solids, MW-06 (mg/L)



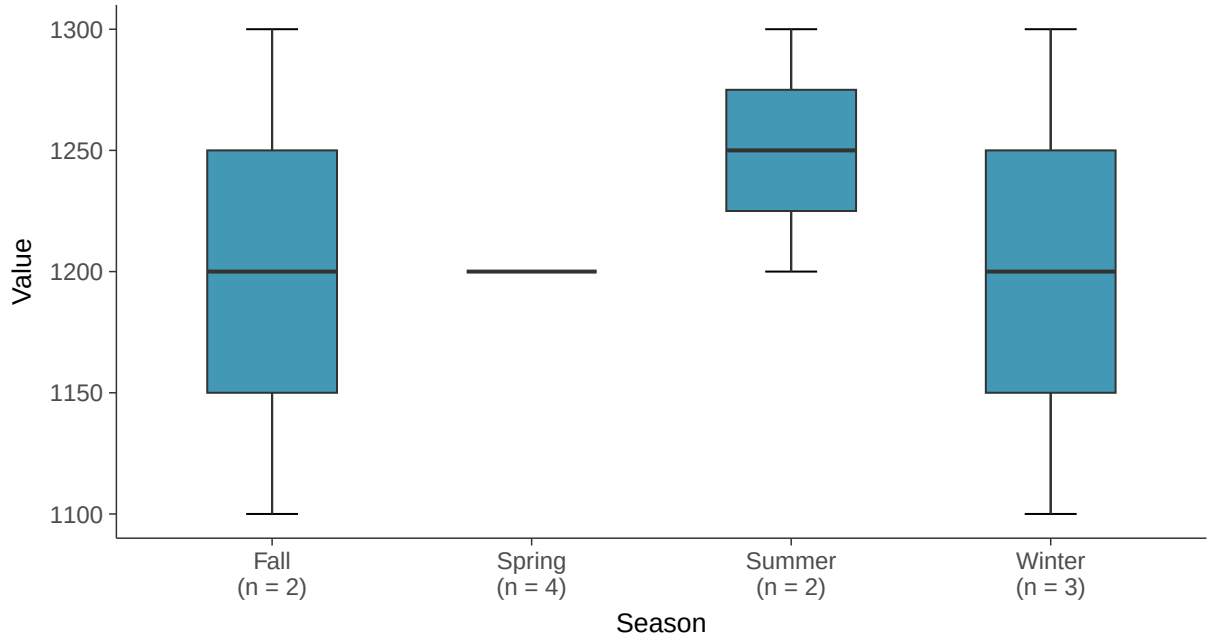
Boxplot

Total Dissolved Solids, MW-06 (mg/L)



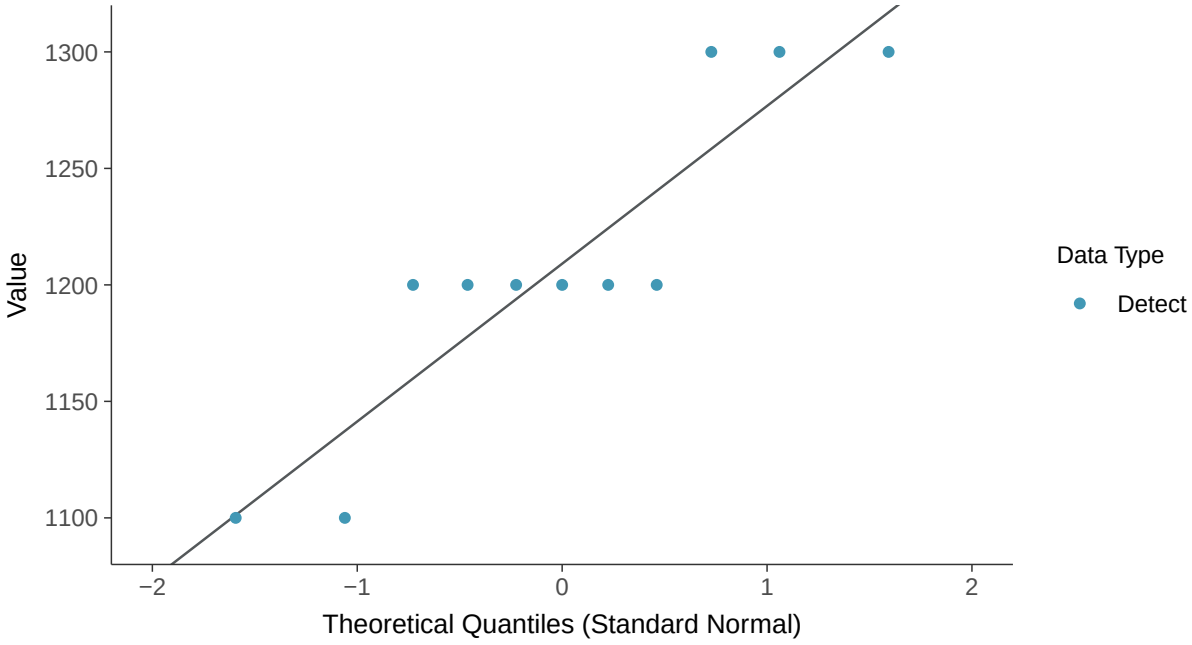
Boxplot by Season

Total Dissolved Solids, MW-06 (mg/L)



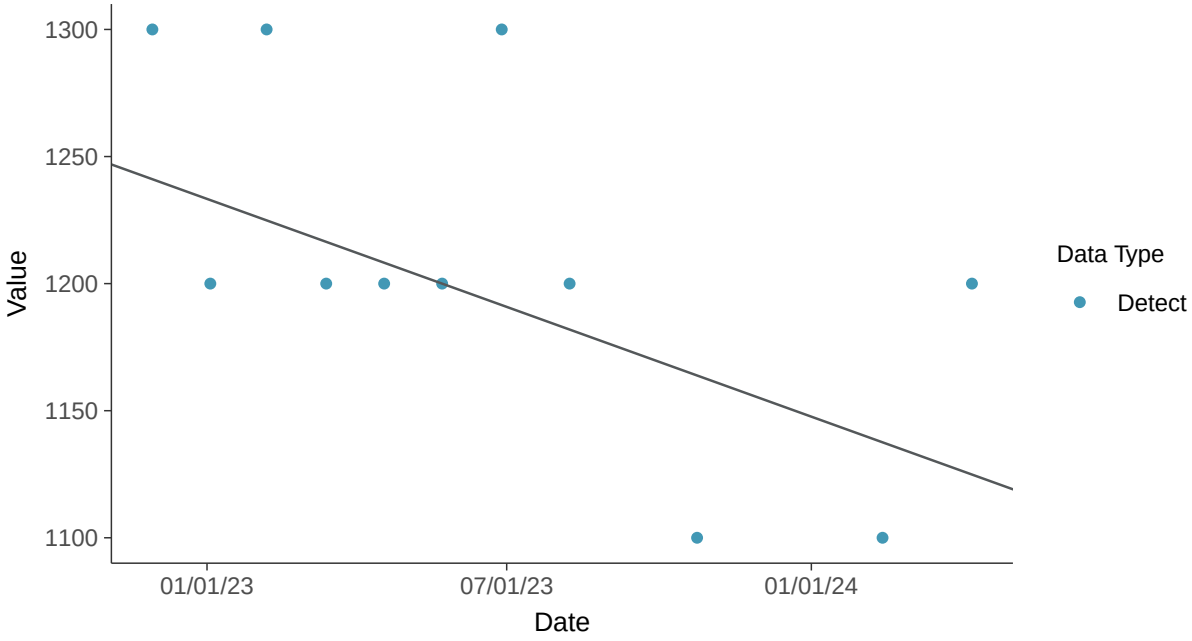
Normal Q-Q plot

Total Dissolved Solids, MW-06 (mg/L)



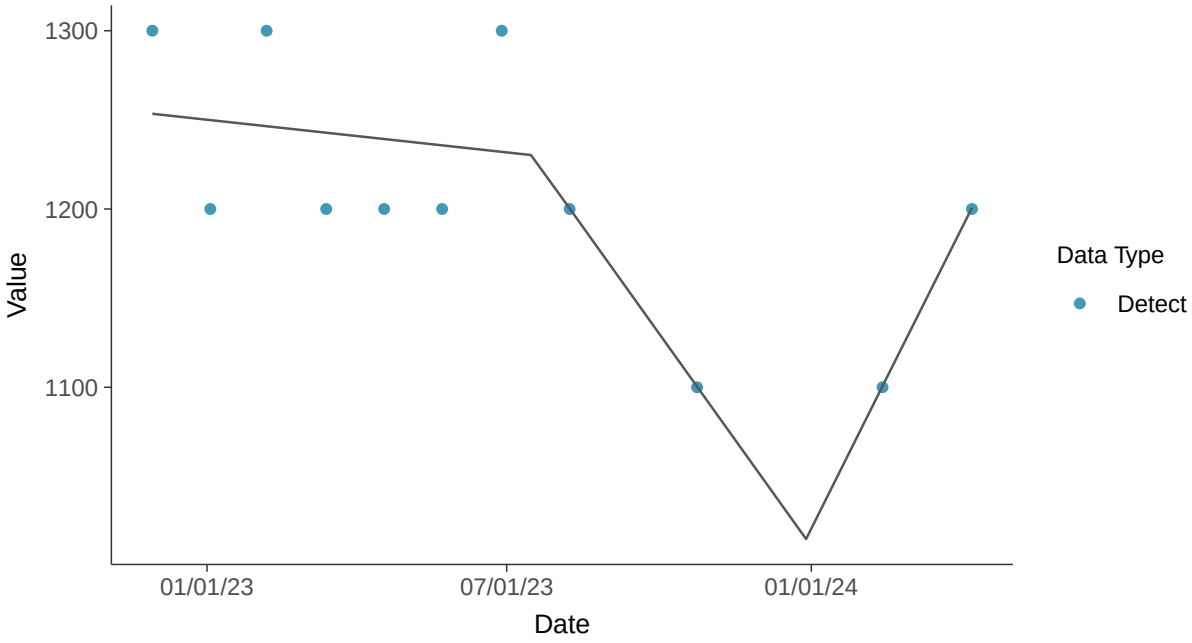
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Total Dissolved Solids, MW-06 (mg/L)



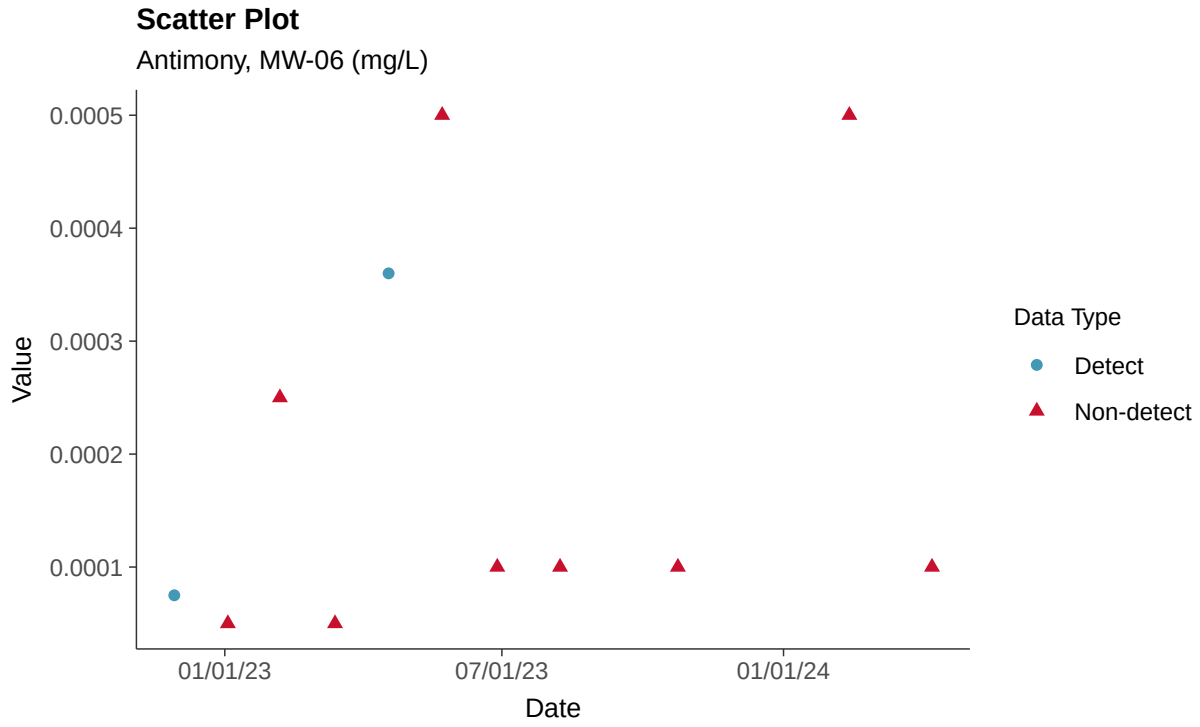
Trend Regression: Piecewise Linear-Linear-Linear

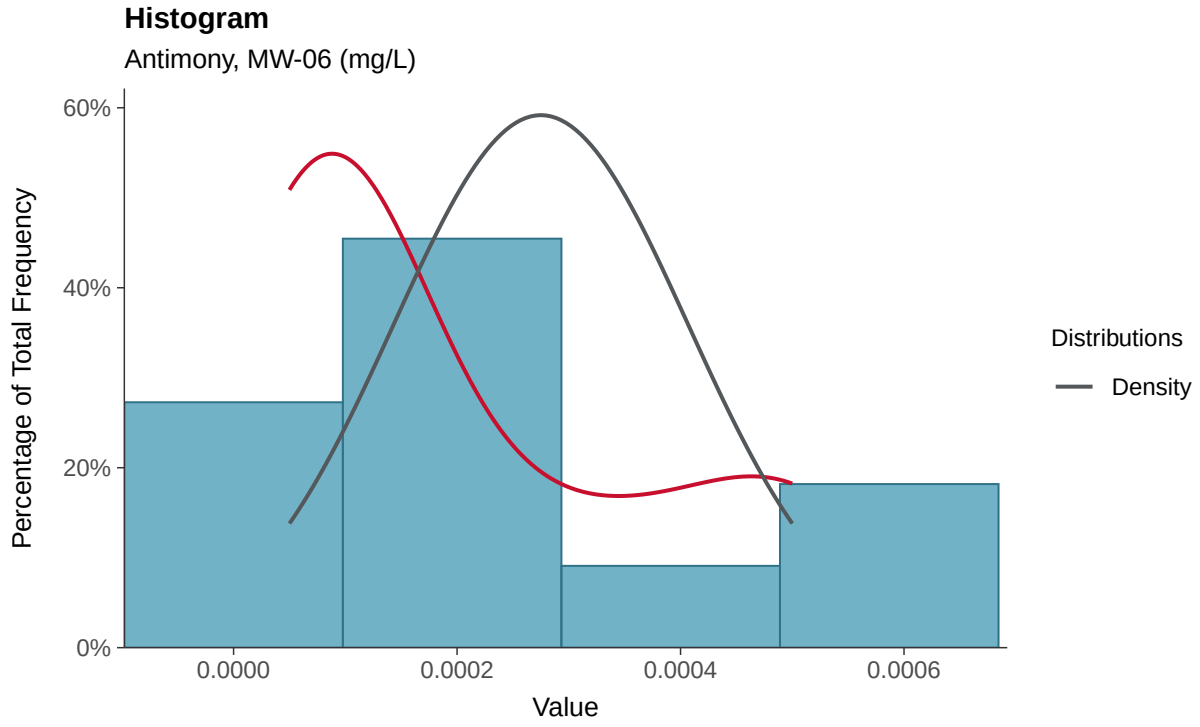
Total Dissolved Solids, MW-06 (mg/L)



Appendix IV: Antimony, MW-06

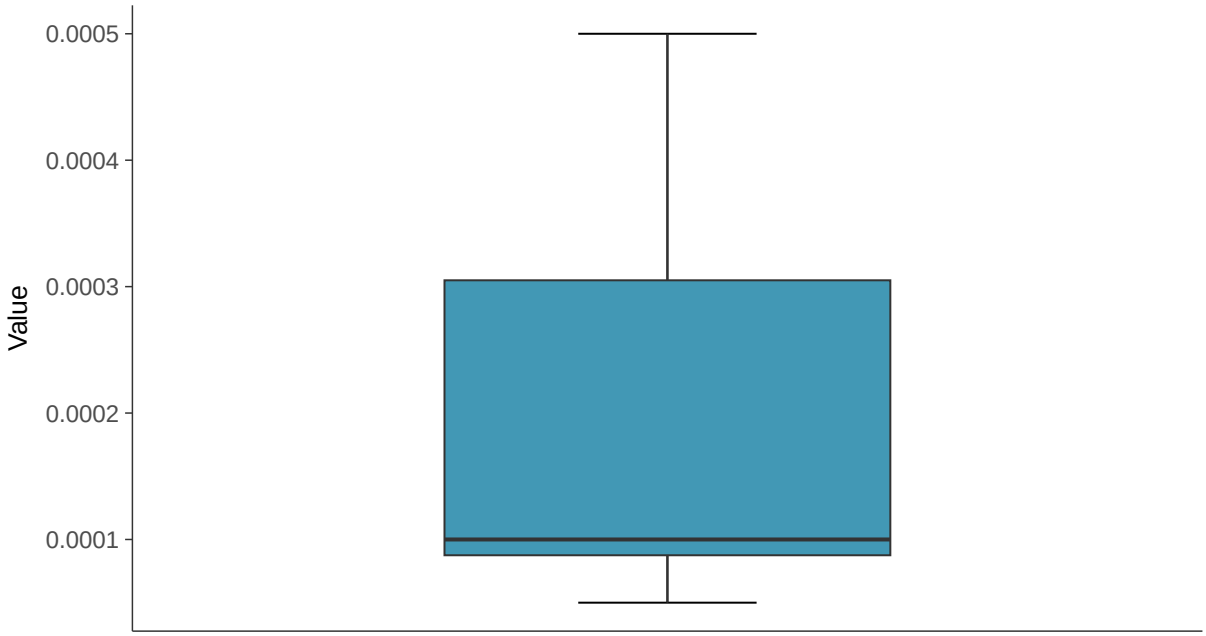
ID: 1_16_5_101





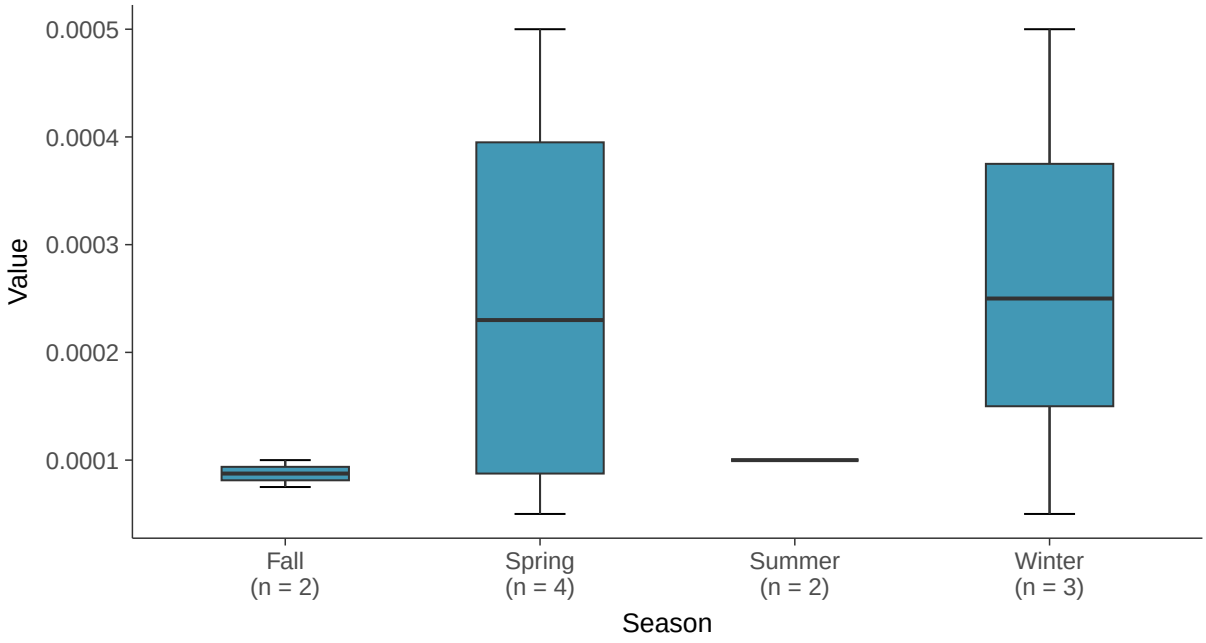
Boxplot

Antimony, MW-06 (mg/L)



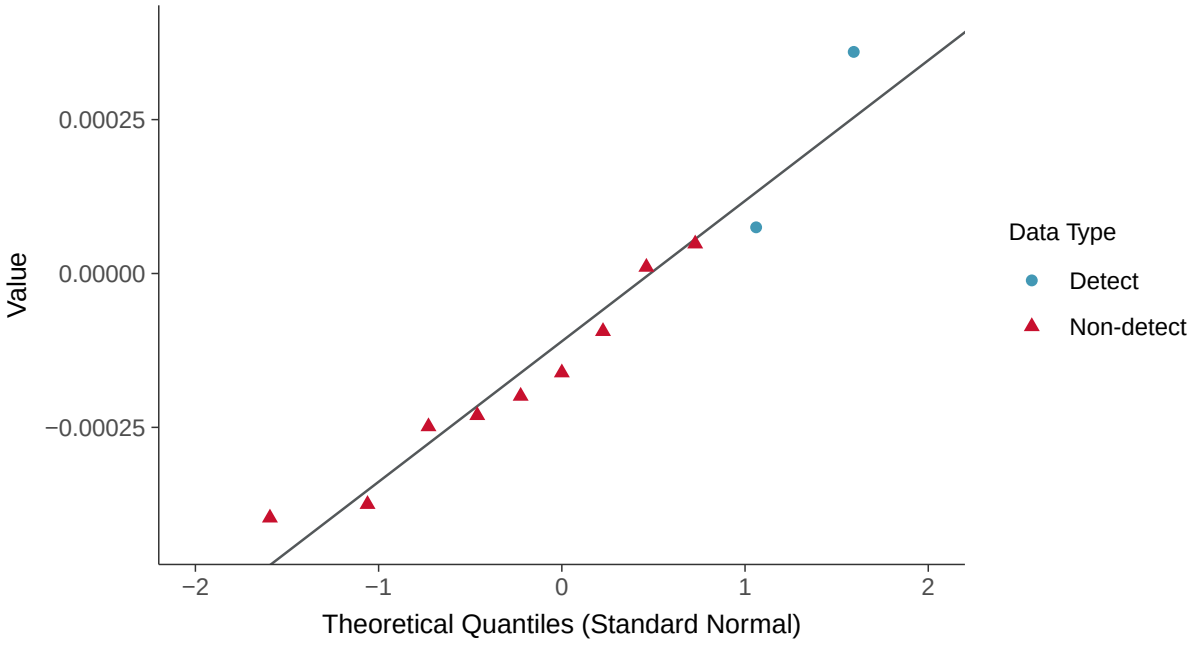
Boxplot by Season

Antimony, MW-06 (mg/L)



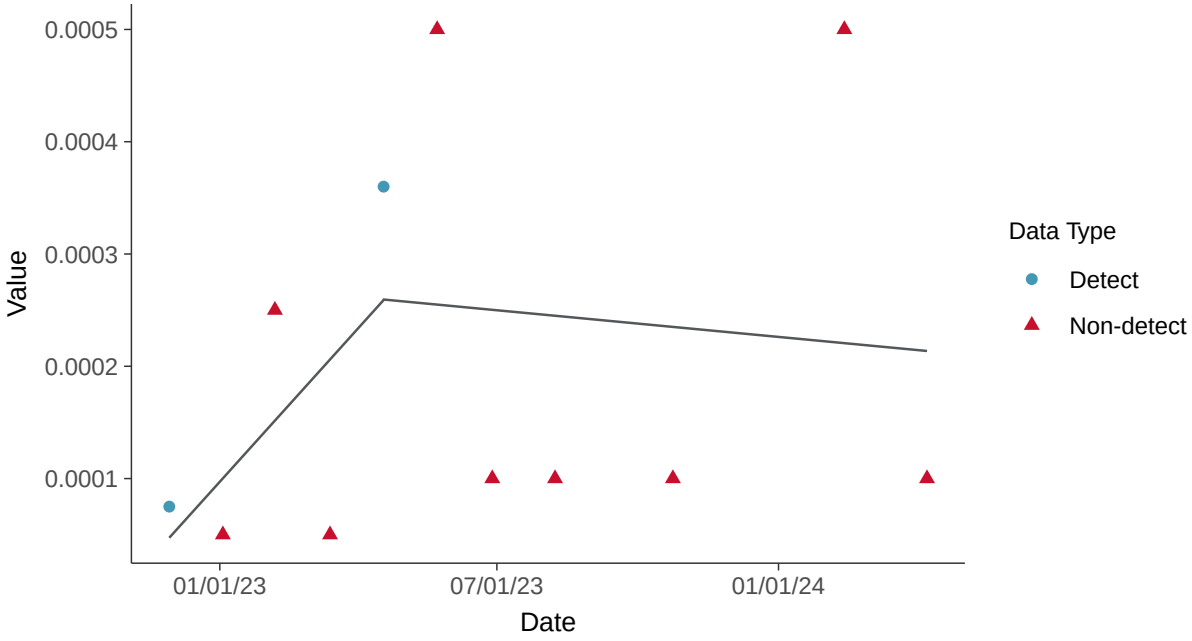
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-06 (mg/L)



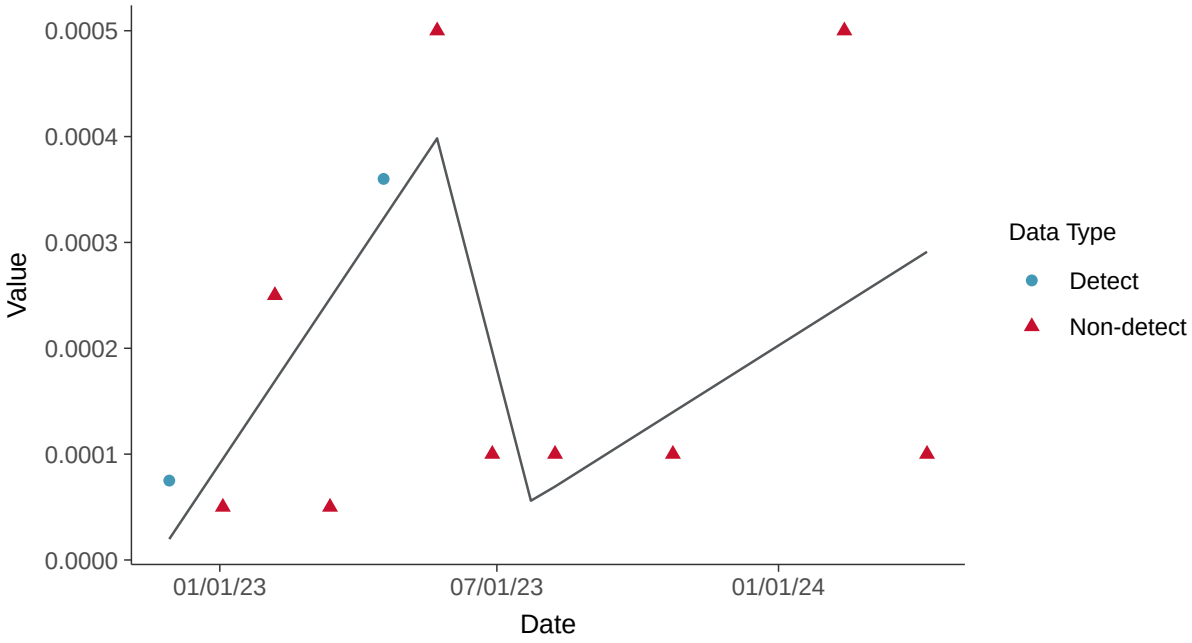
Trend Regression: Piecewise Linear-Linear

Antimony, MW-06 (mg/L)



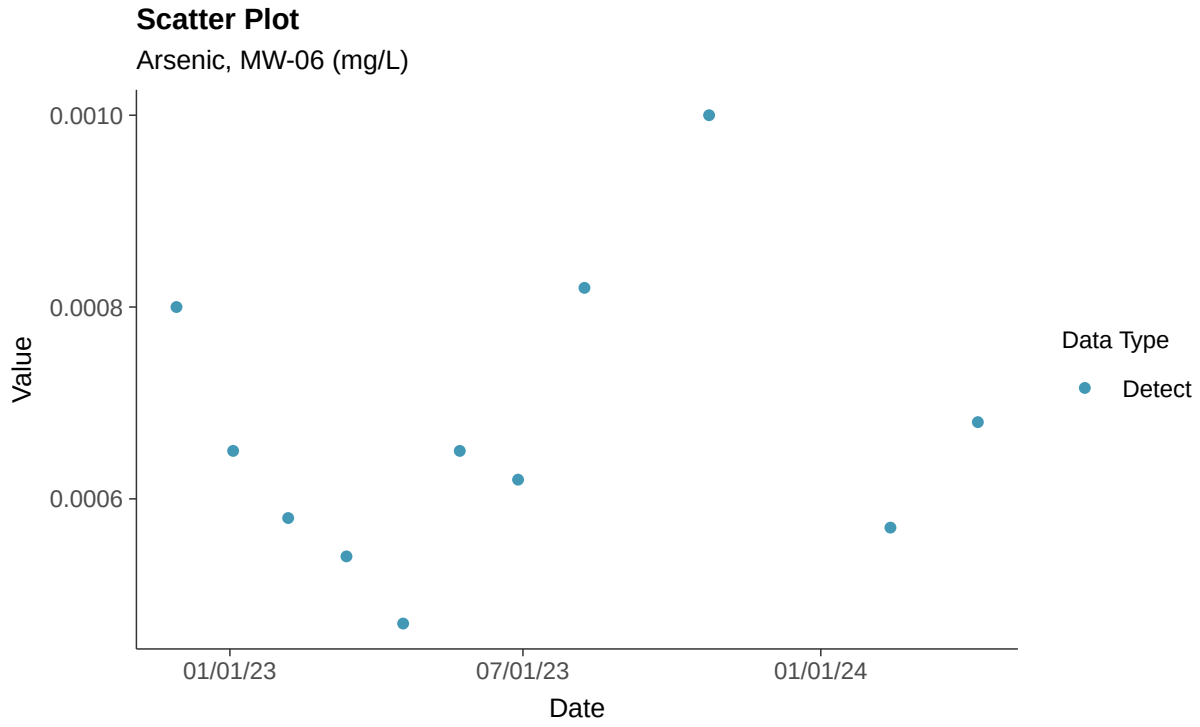
Trend Regression: Piecewise Linear-Linear-Linear

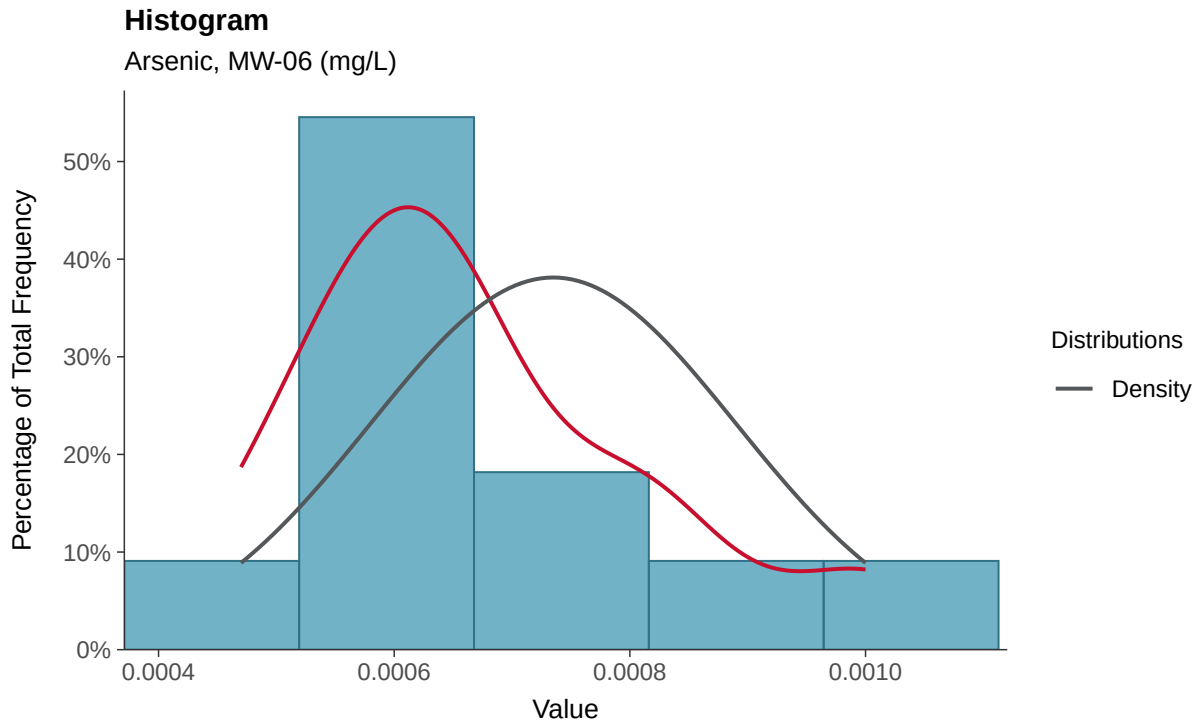
Antimony, MW-06 (mg/L)



Appendix IV: Arsenic, MW-06

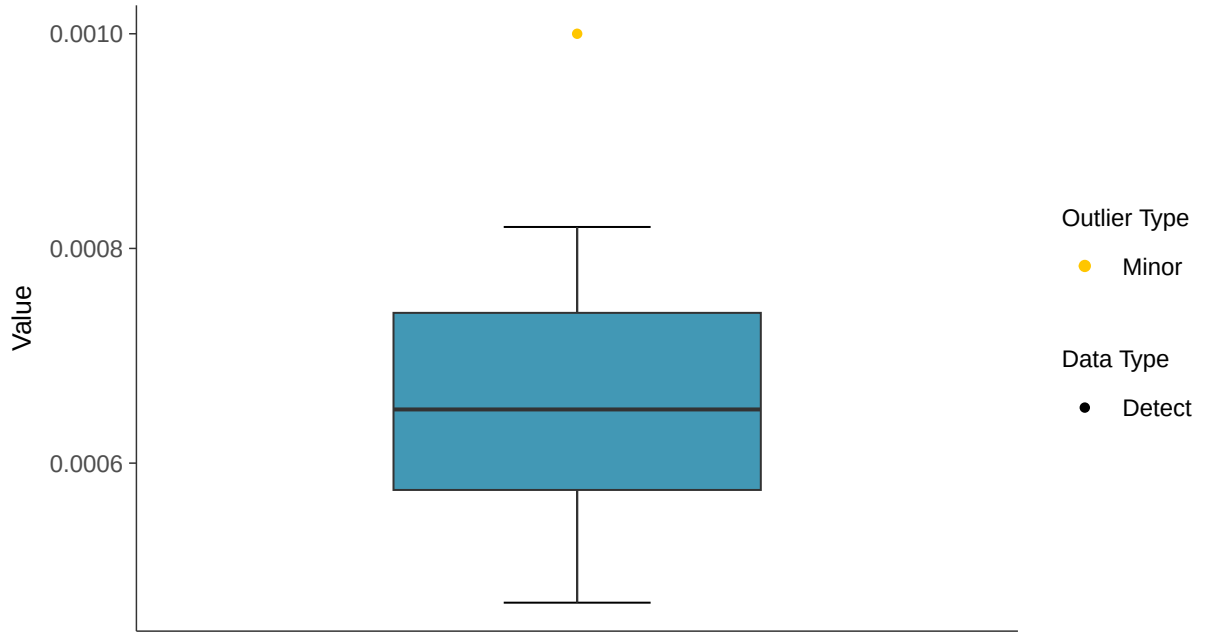
ID: 1_16_5_102





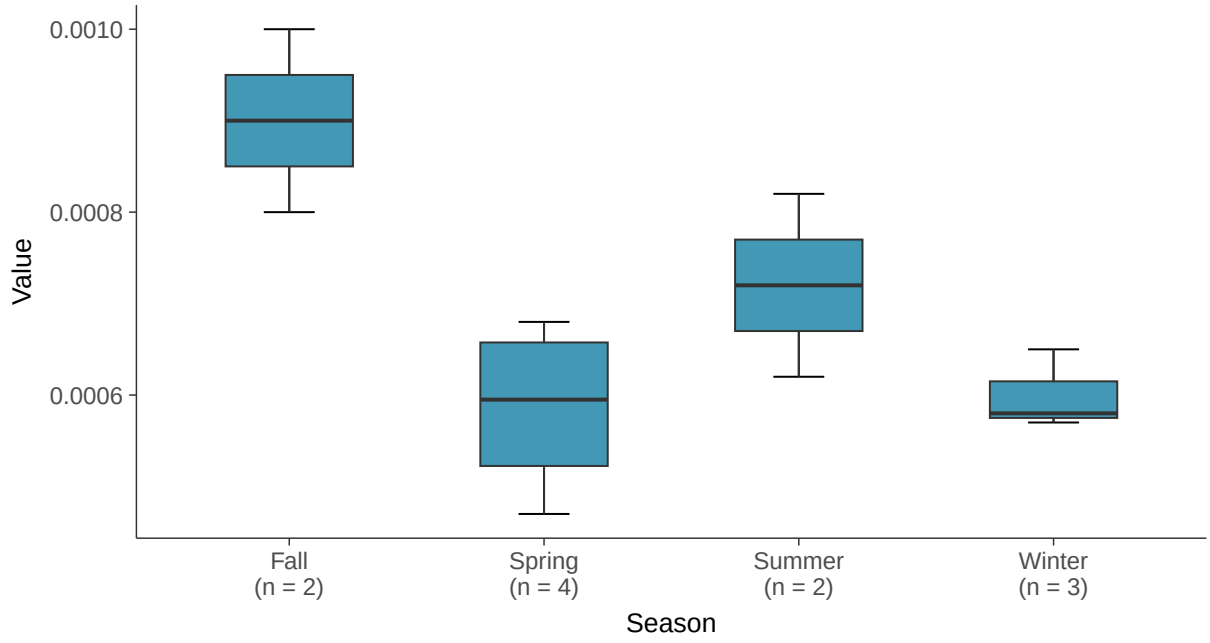
Boxplot

Arsenic, MW-06 (mg/L)



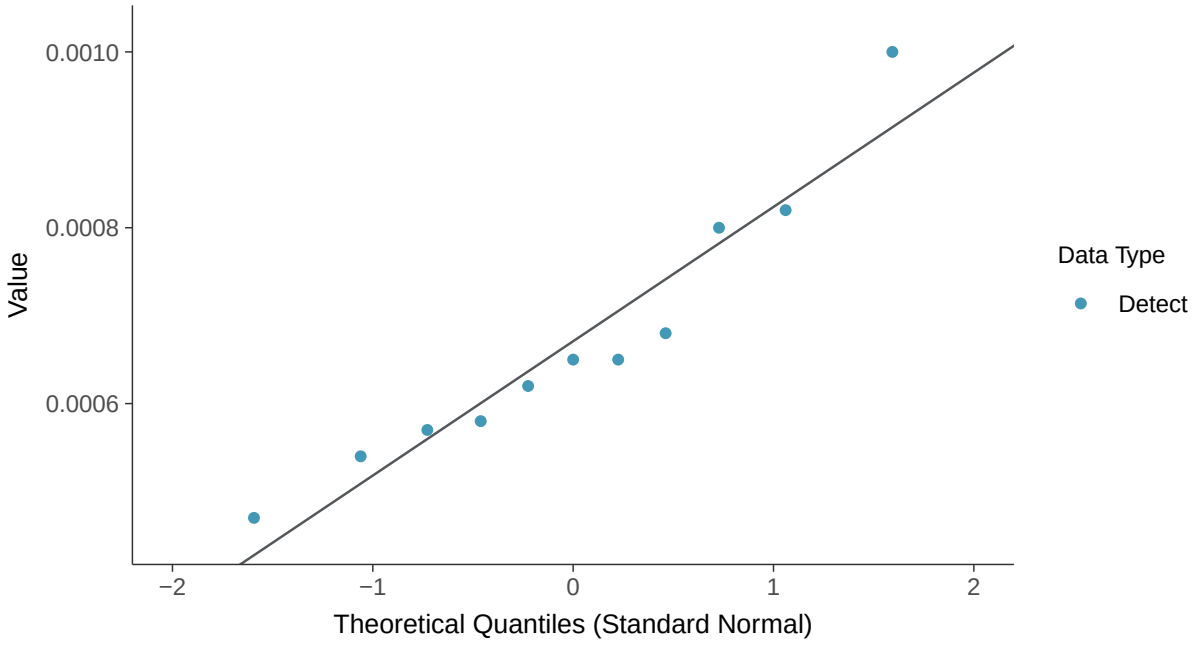
Boxplot by Season

Arsenic, MW-06 (mg/L)



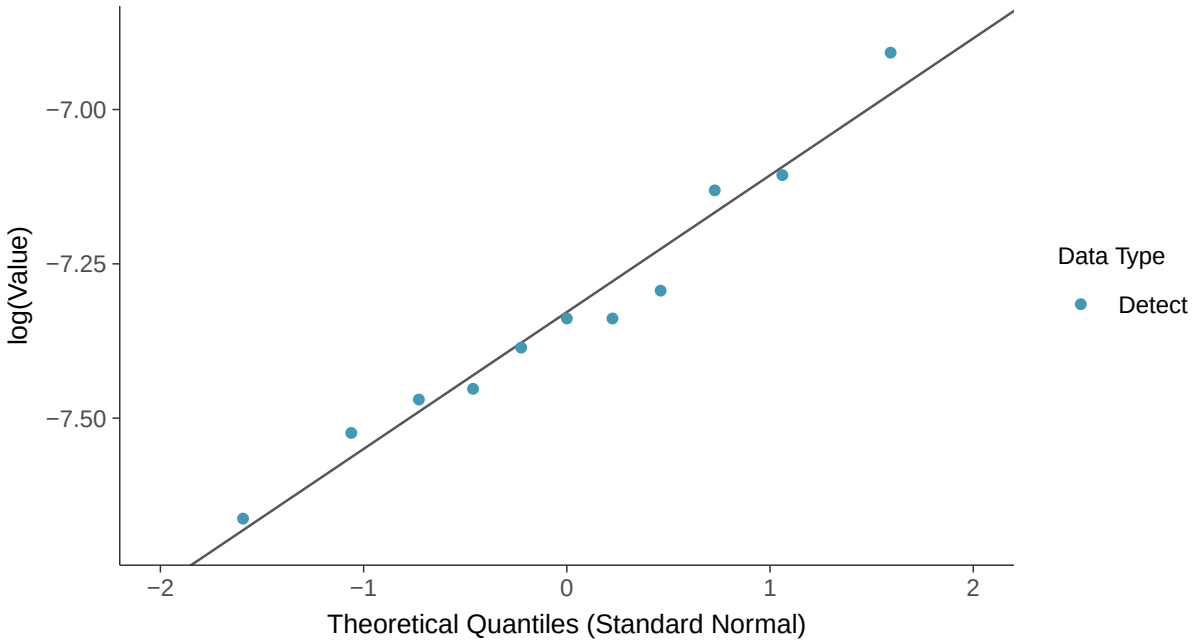
Normal Q-Q plot

Arsenic, MW-06 (mg/L)



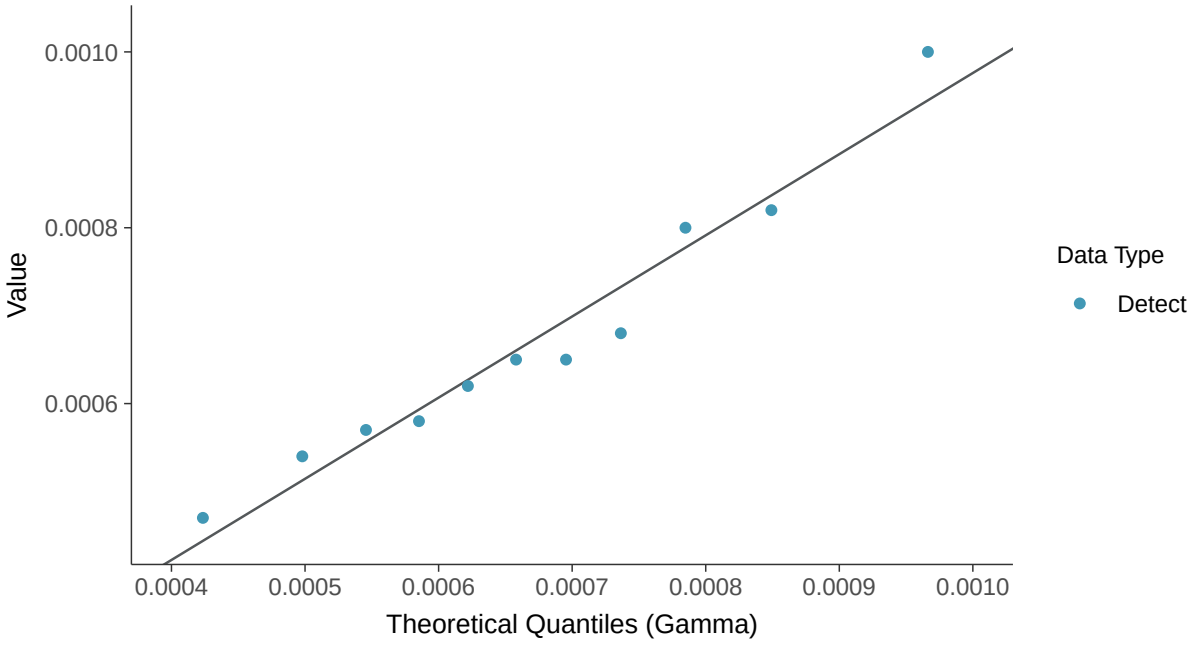
Lognormal Q-Q plot

Arsenic, MW-06 (mg/L)



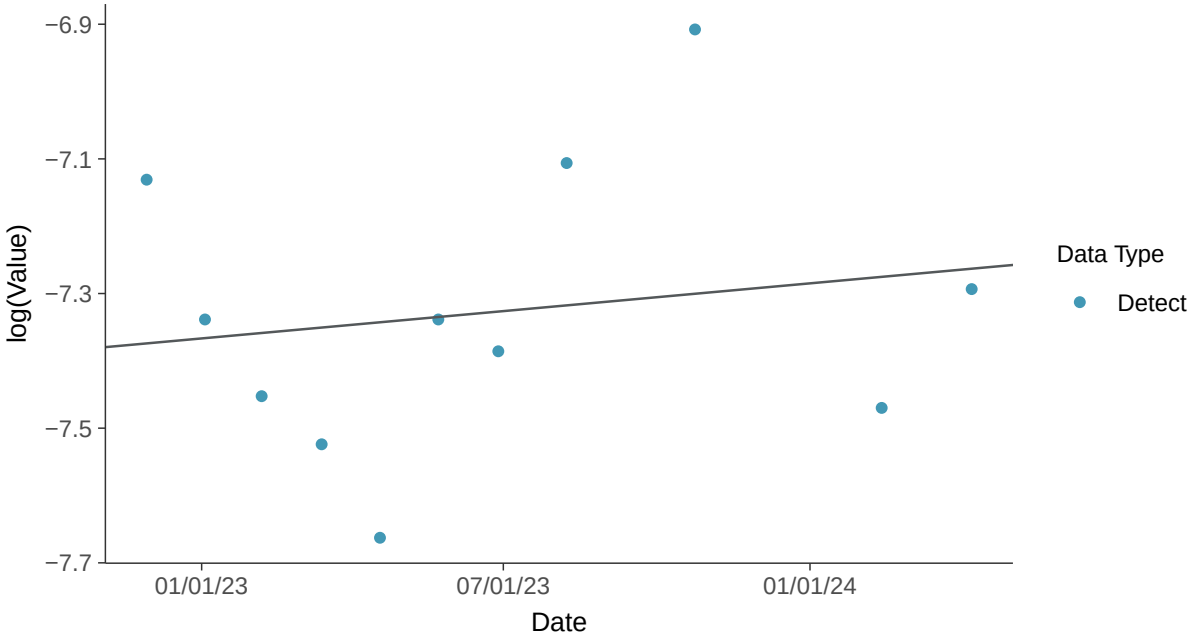
Gamma Q-Q plot

Arsenic, MW-06 (mg/L)



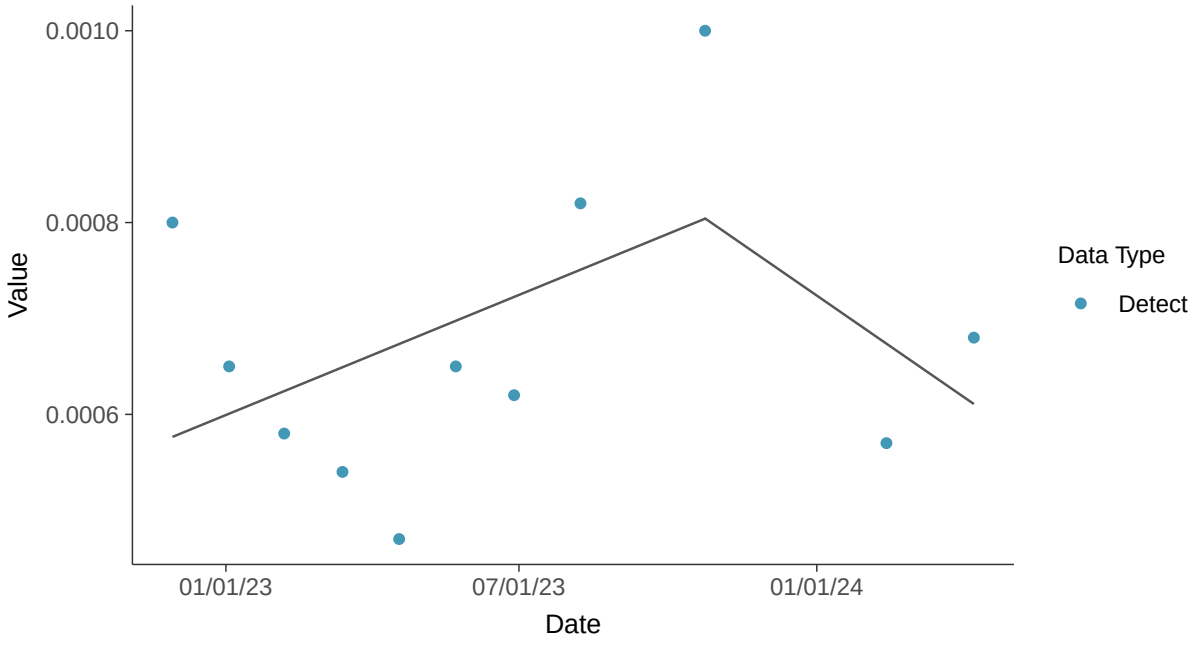
Trend Regression: Lognormal MLE

Arsenic, MW-06 (mg/L)



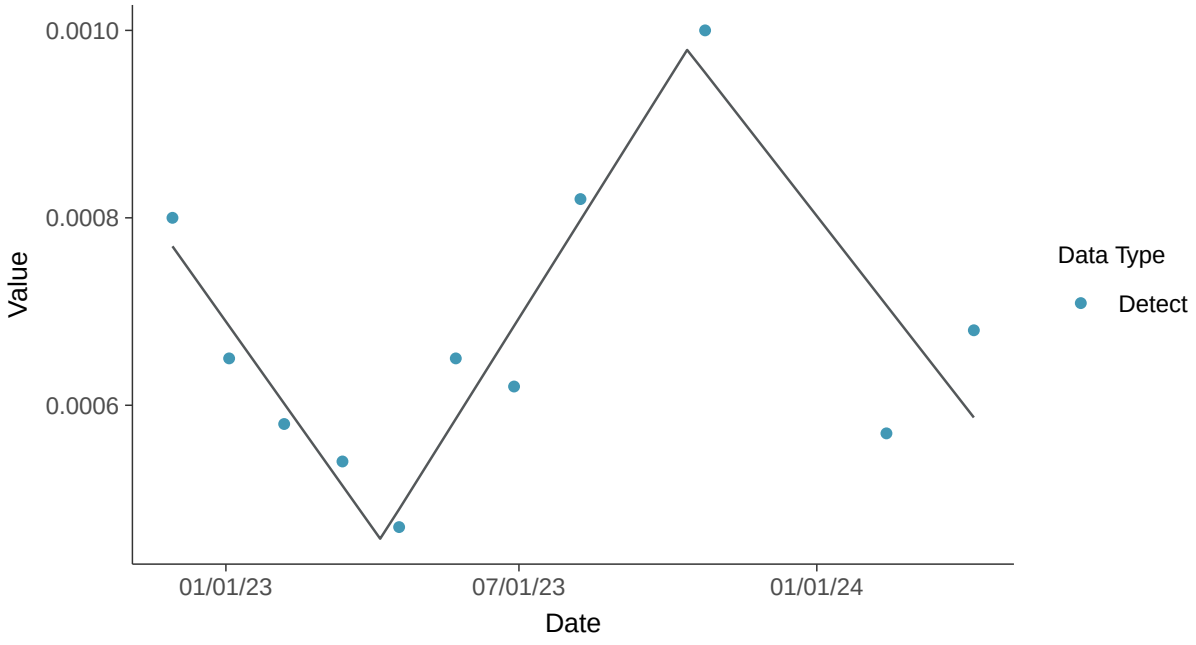
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-06 (mg/L)



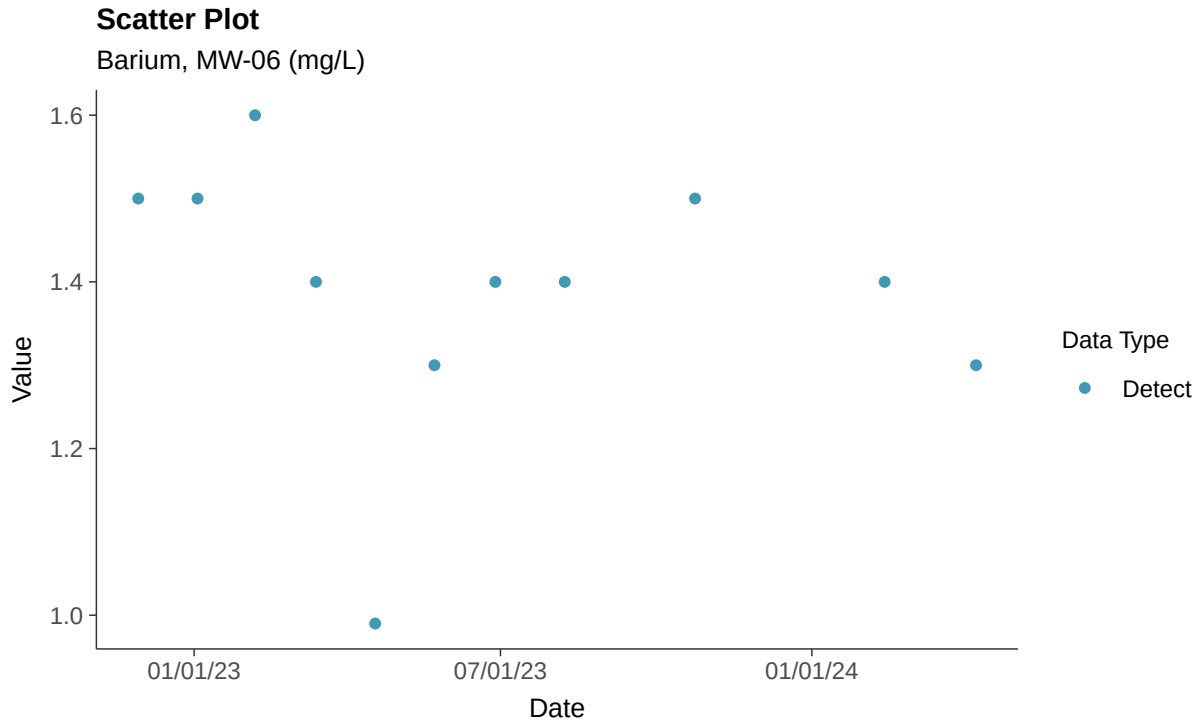
Trend Regression: Piecewise Linear-Linear-Linear

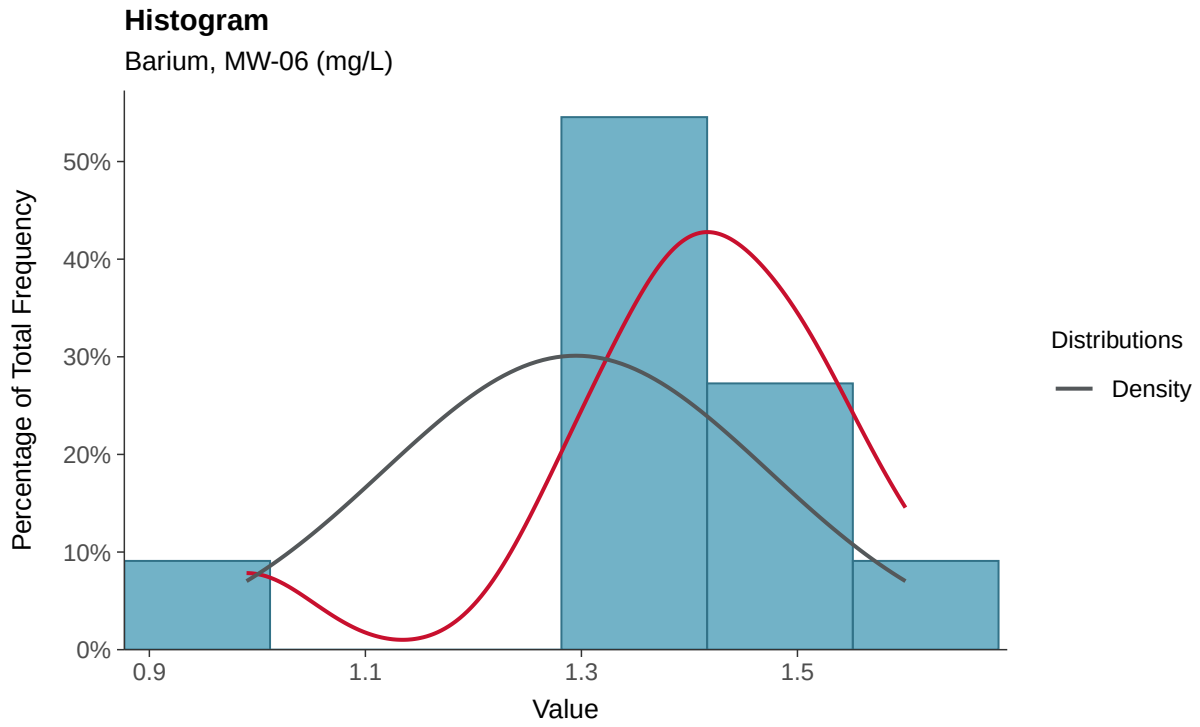
Arsenic, MW-06 (mg/L)



Appendix IV: Barium, MW-06

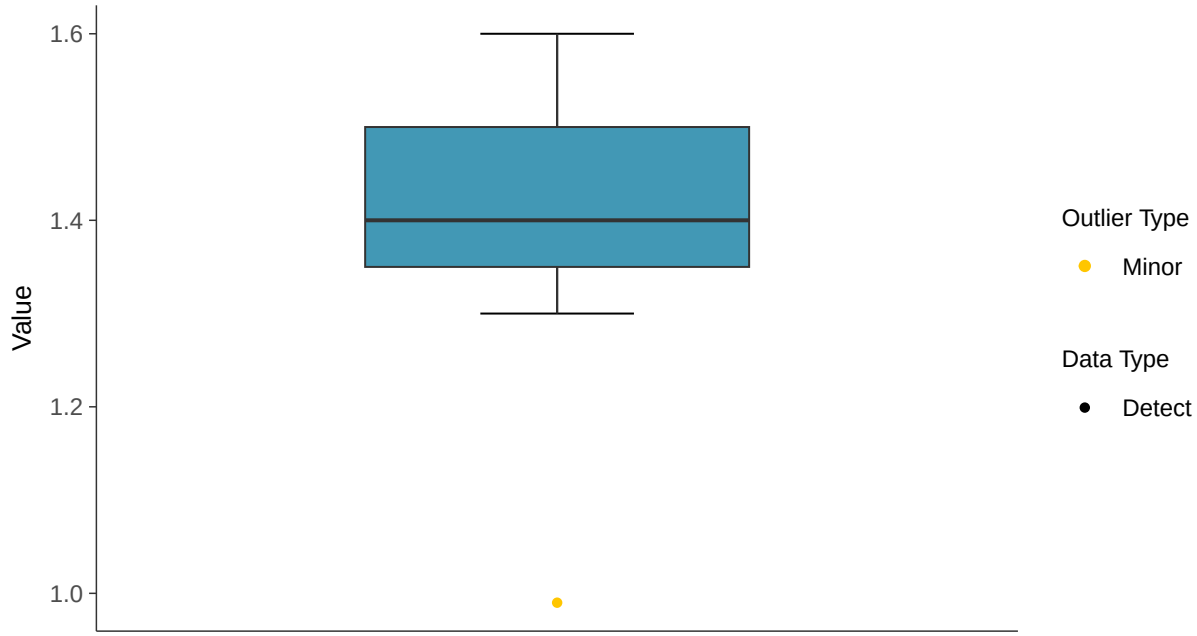
ID: 1_16_5_103





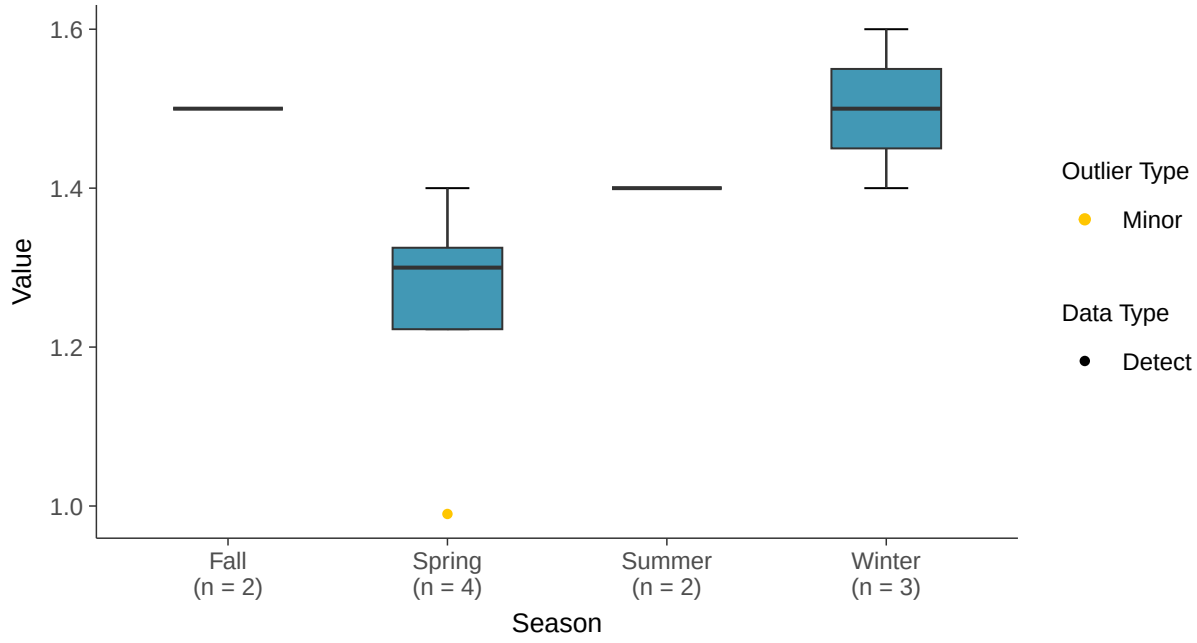
Boxplot

Barium, MW-06 (mg/L)



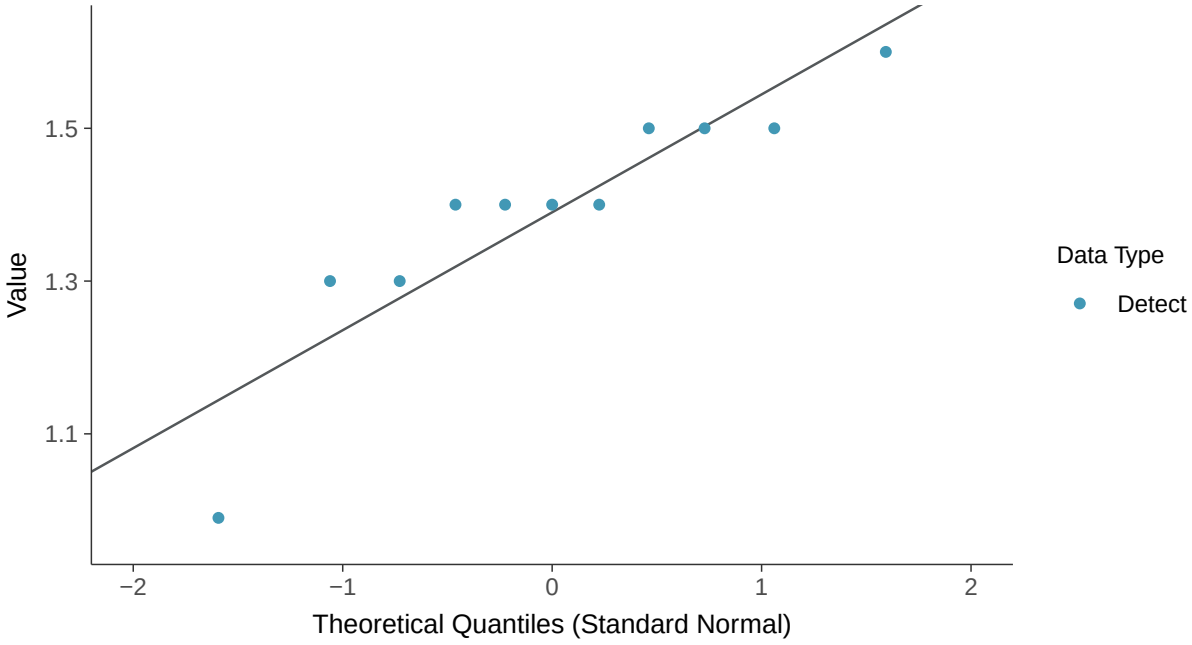
Boxplot by Season

Barium, MW-06 (mg/L)



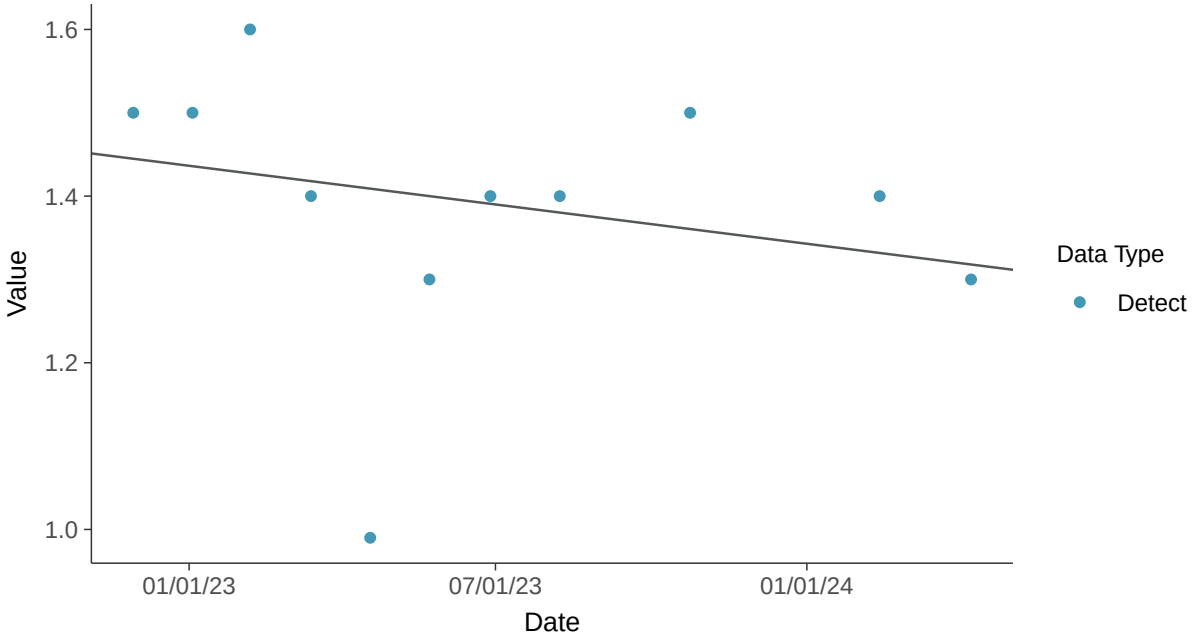
Normal Q-Q plot

Barium, MW-06 (mg/L)



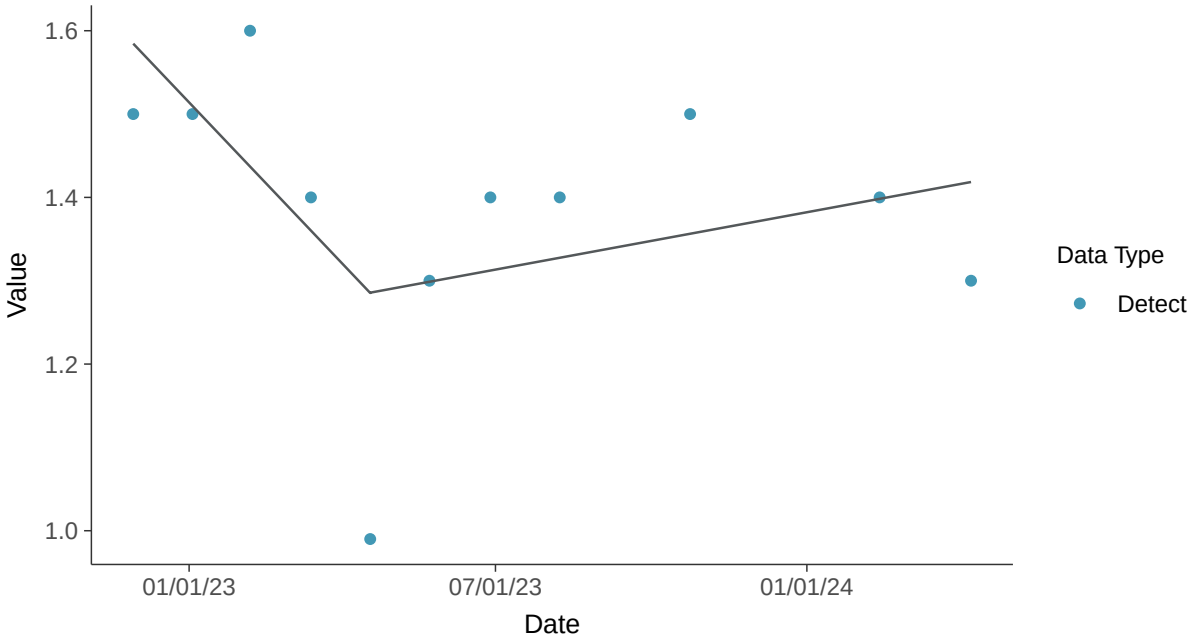
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Barium, MW-06 (mg/L)



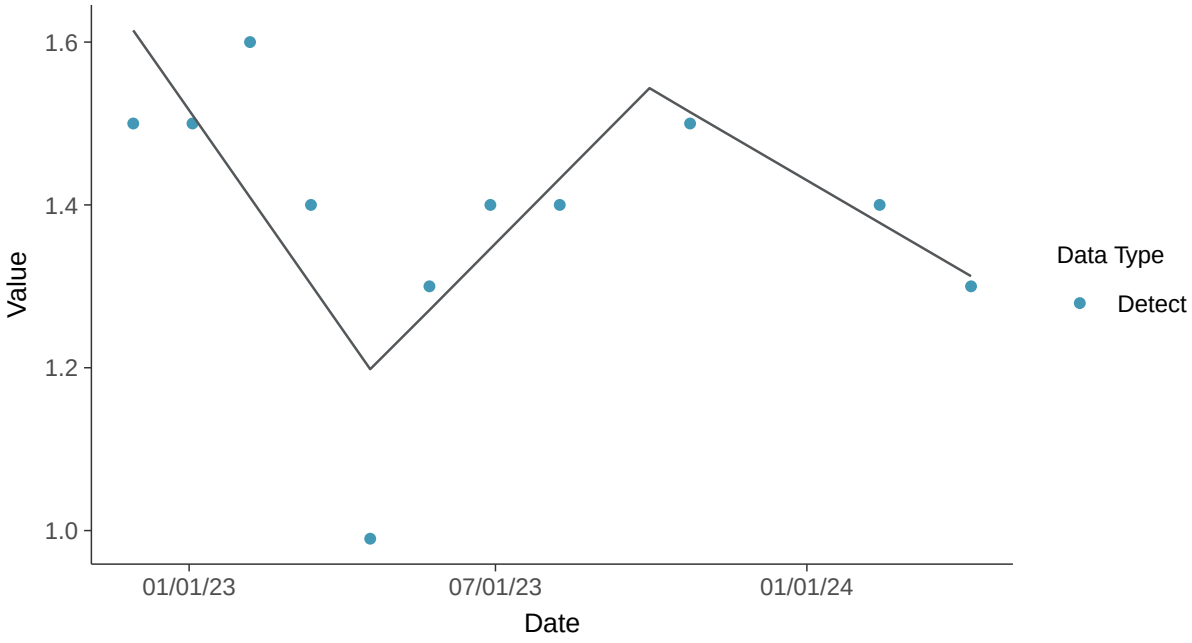
Trend Regression: Piecewise Linear-Linear

Barium, MW-06 (mg/L)



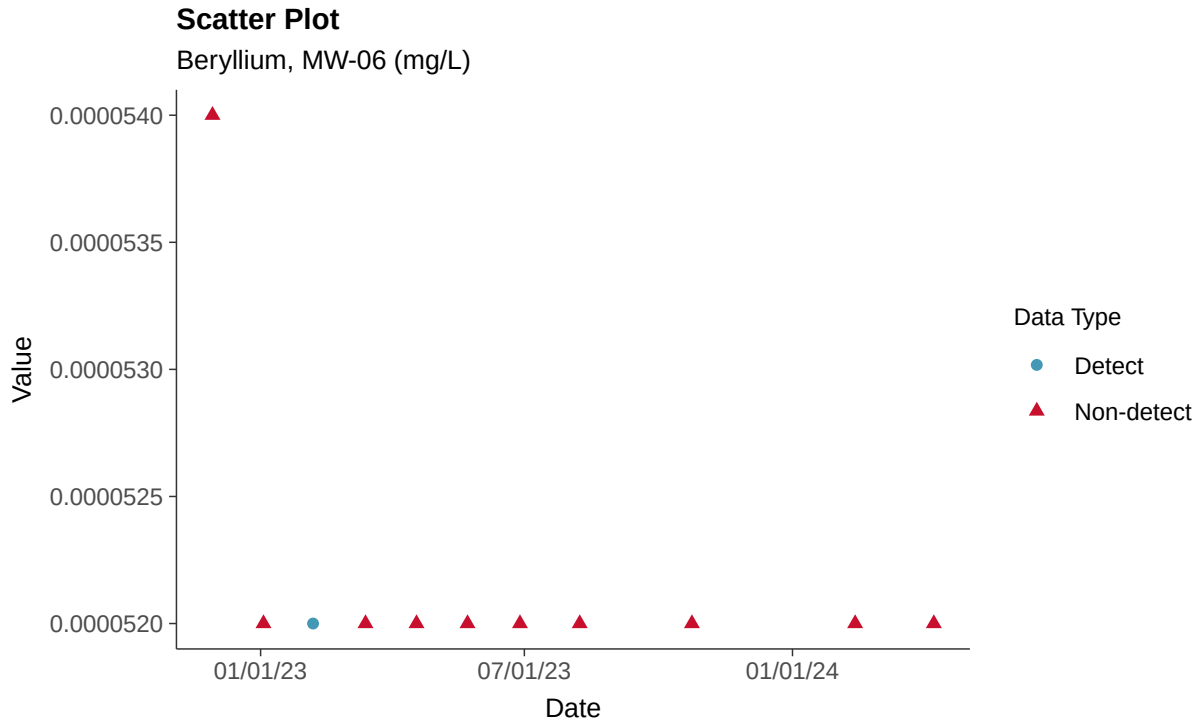
Trend Regression: Piecewise Linear-Linear-Linear

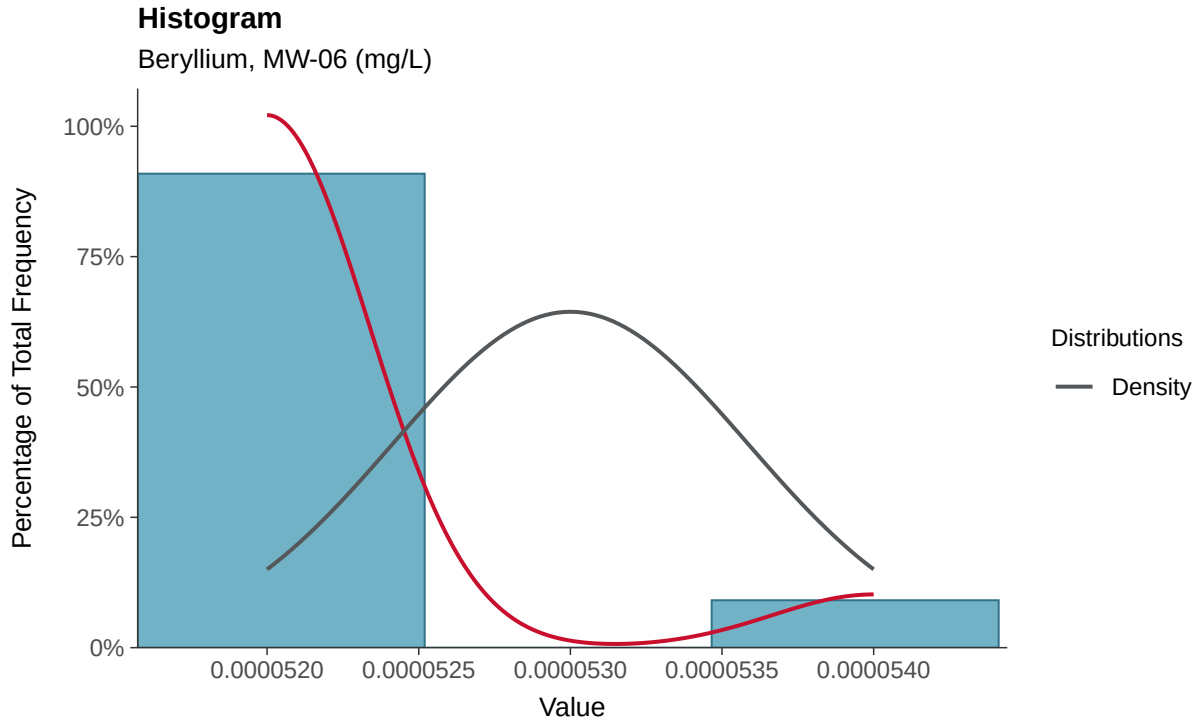
Barium, MW-06 (mg/L)

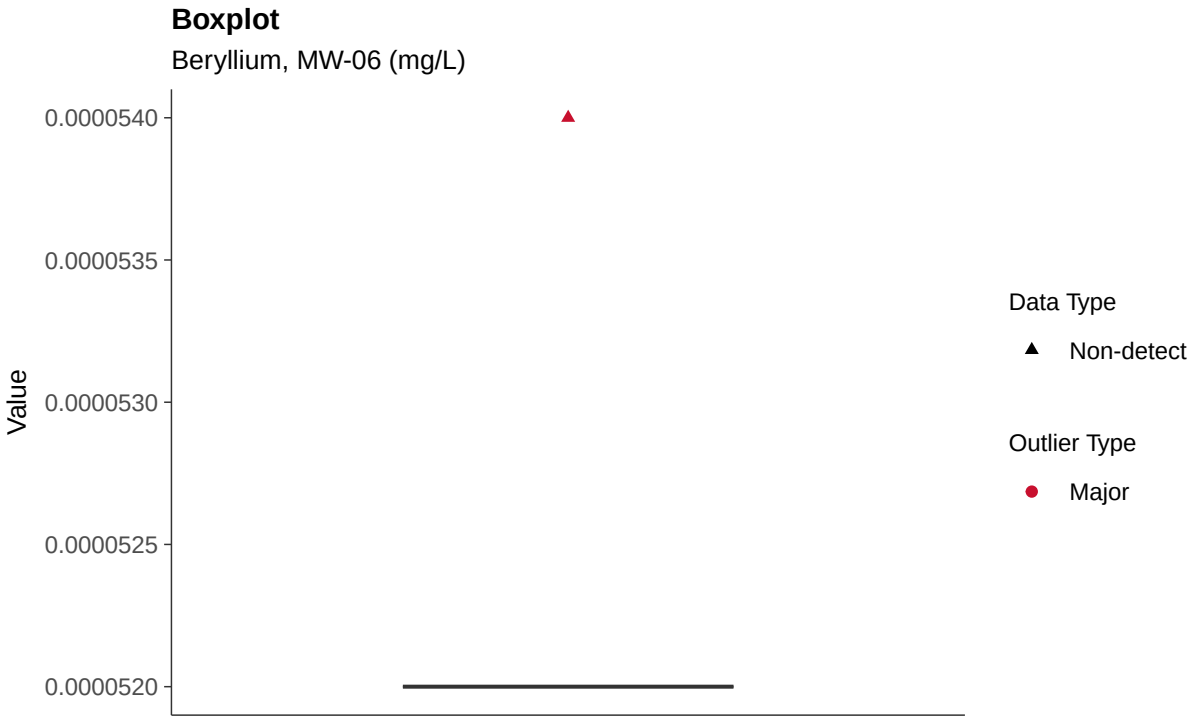


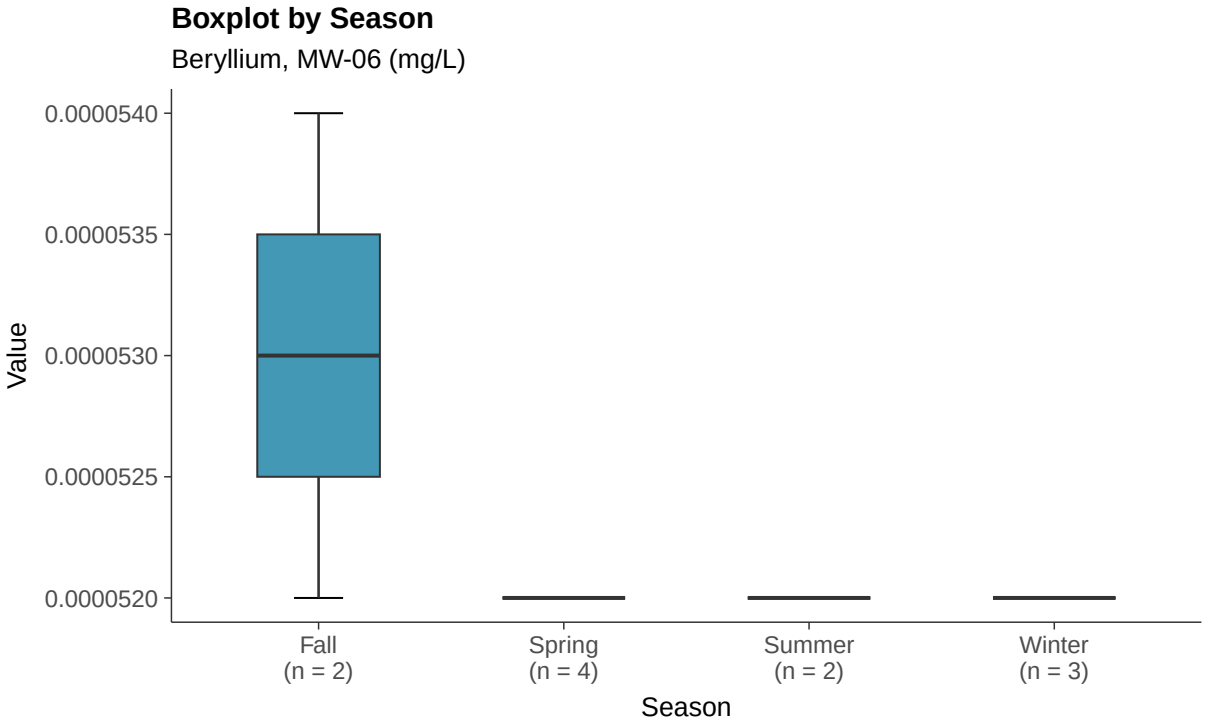
Appendix IV: Beryllium, MW-06

ID: 1_16_5_104



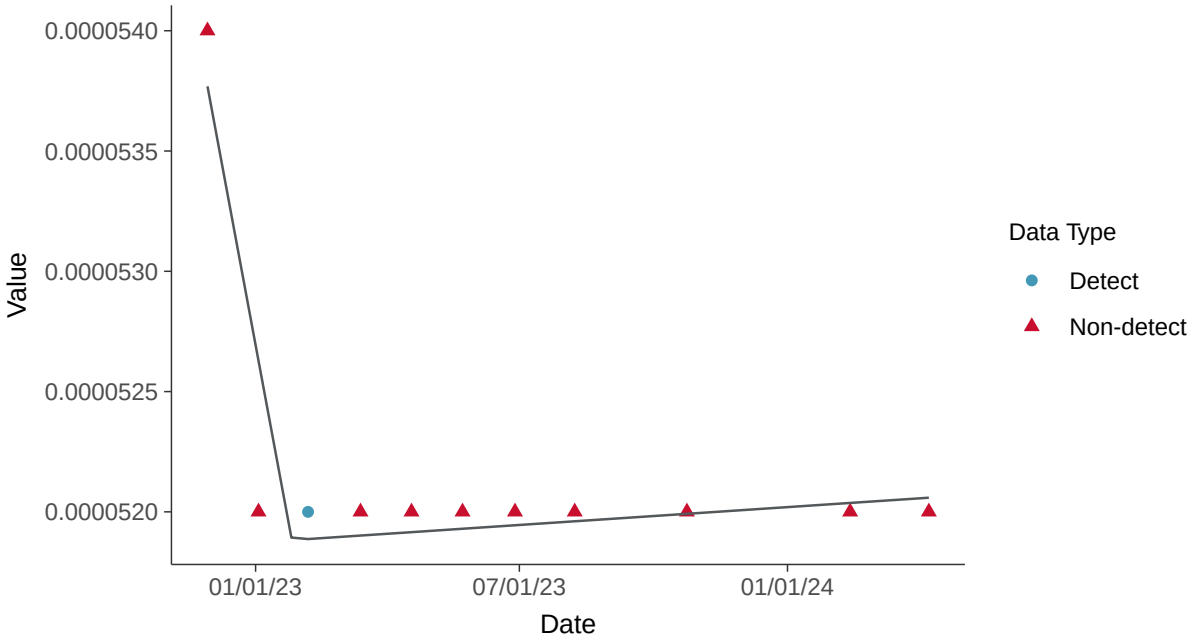



Boxplot
Beryllium, MW-06 (mg/L)
0.0000540
0.0000535
0.0000530
0.0000525
0.0000520
Value
Data Type
Non-detect
Outlier Type
Major


Boxplot by Season
Beryllium, MW-06 (mg/L)
0.0000540
0.0000535
0.0000530
0.0000525
0.0000520
Value
Fall
(n = 2)
Spring
(n = 4)
Summer
(n = 2)
Winter
(n = 3)
Season

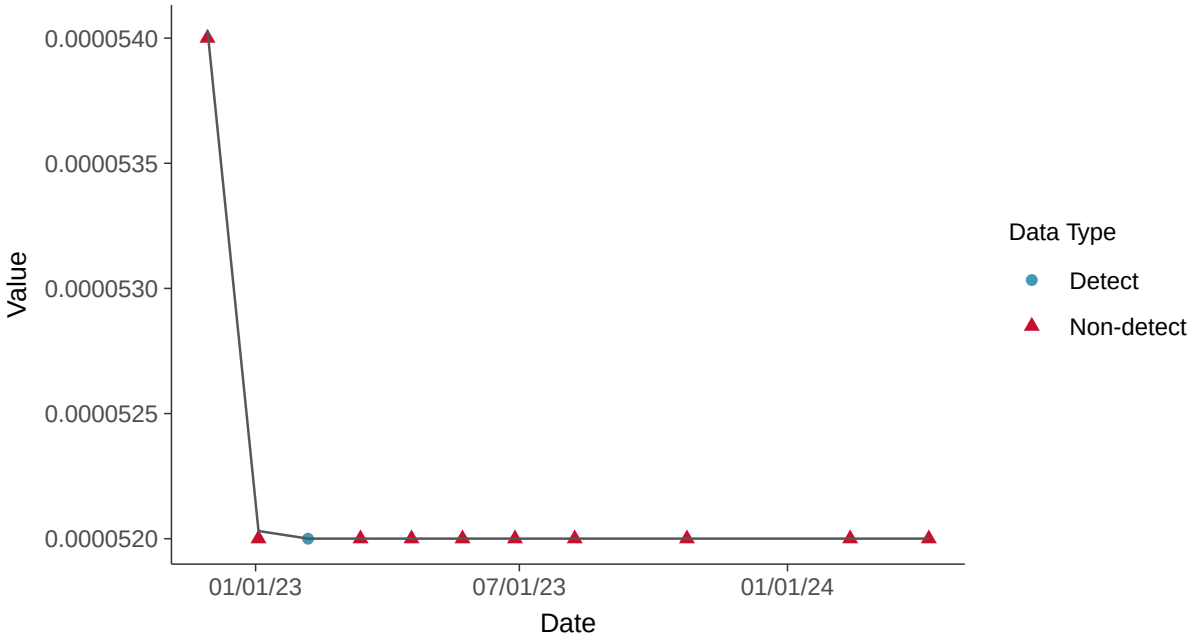
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-06 (mg/L)



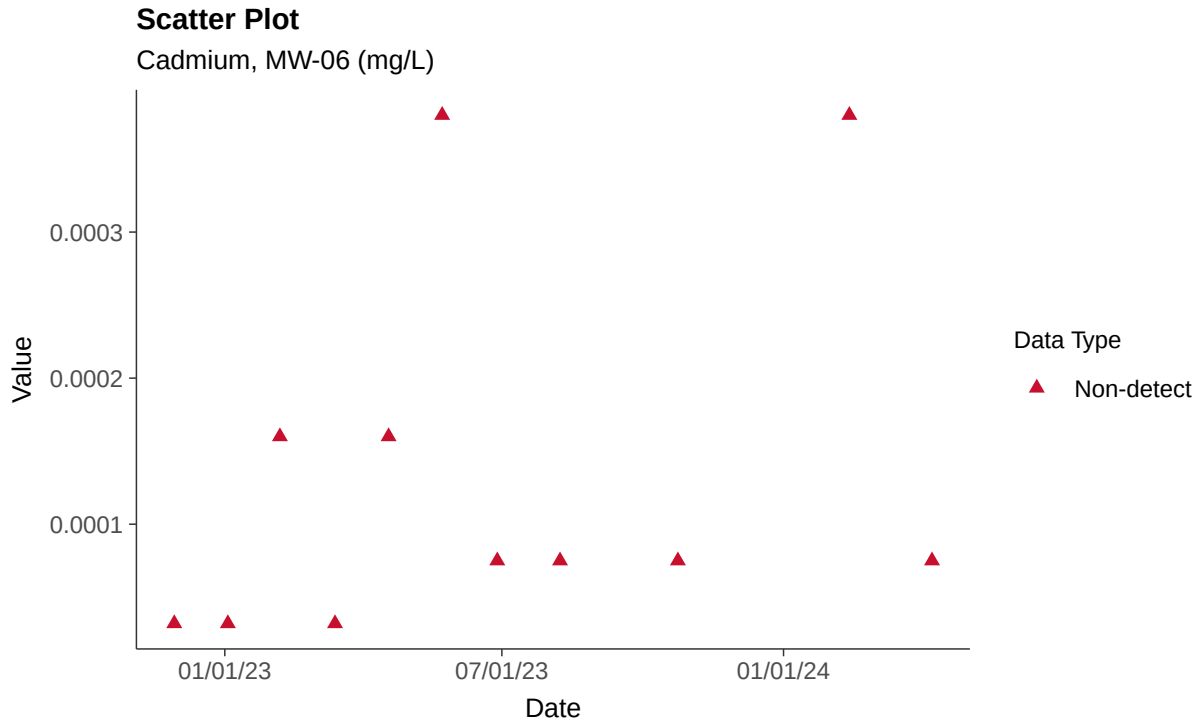
Trend Regression: Piecewise Linear-Linear-Linear

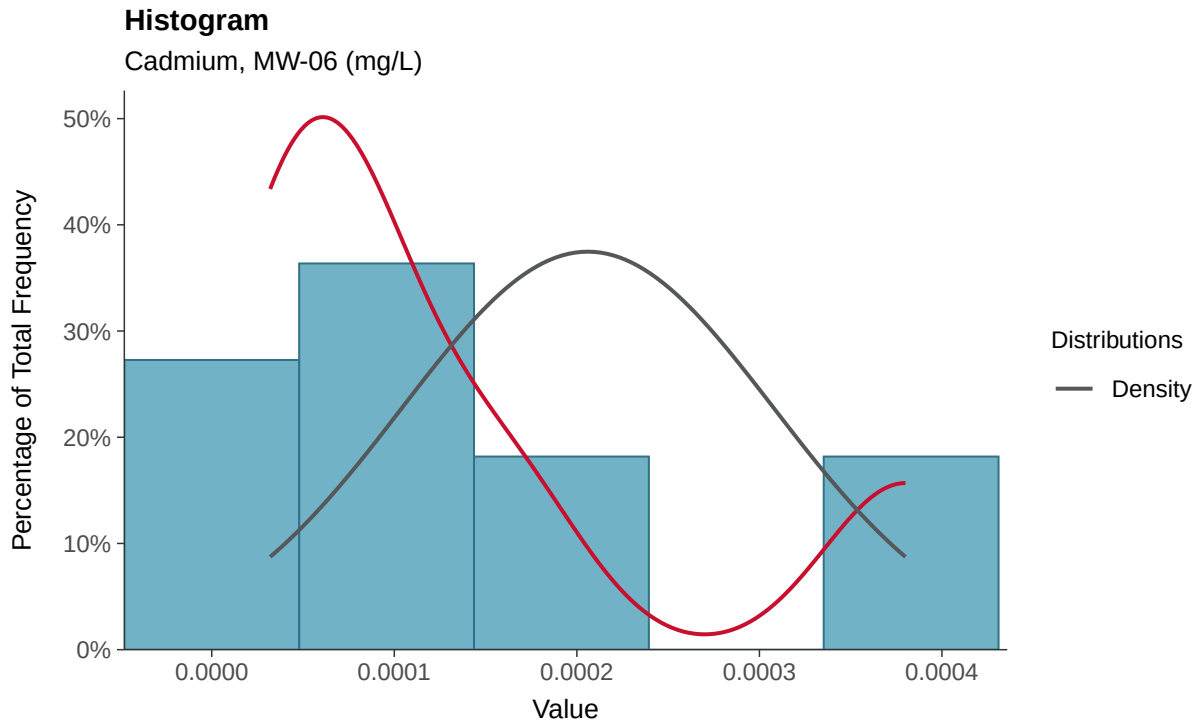
Beryllium, MW-06 (mg/L)



Appendix IV: Cadmium, MW-06

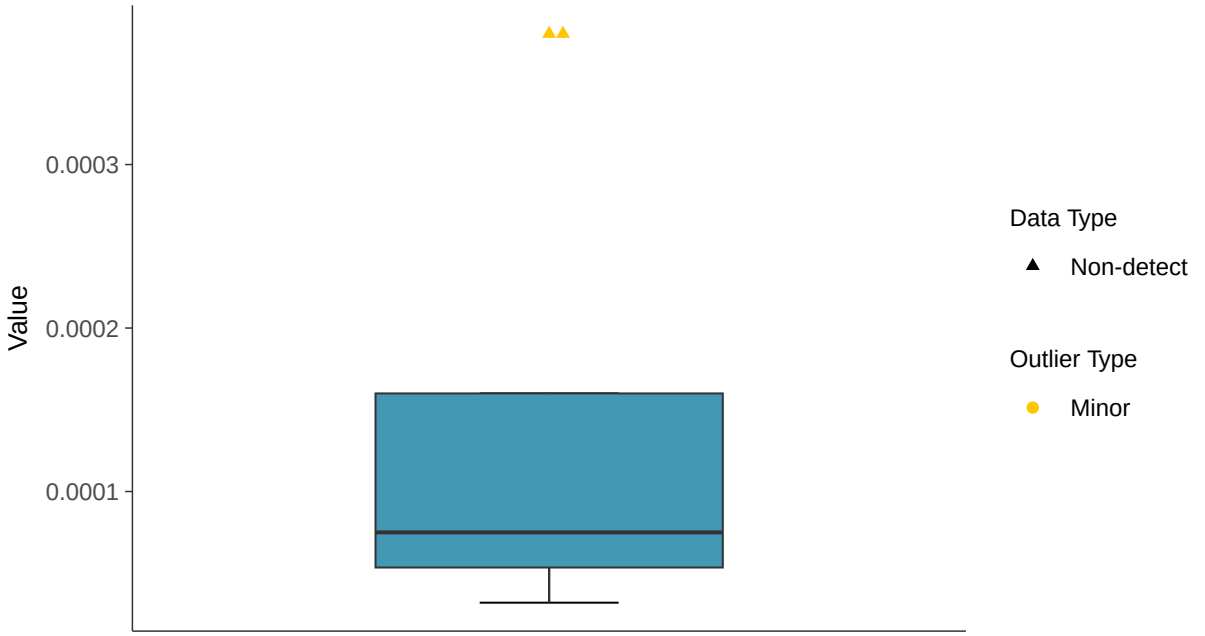
ID: 1_16_5_106





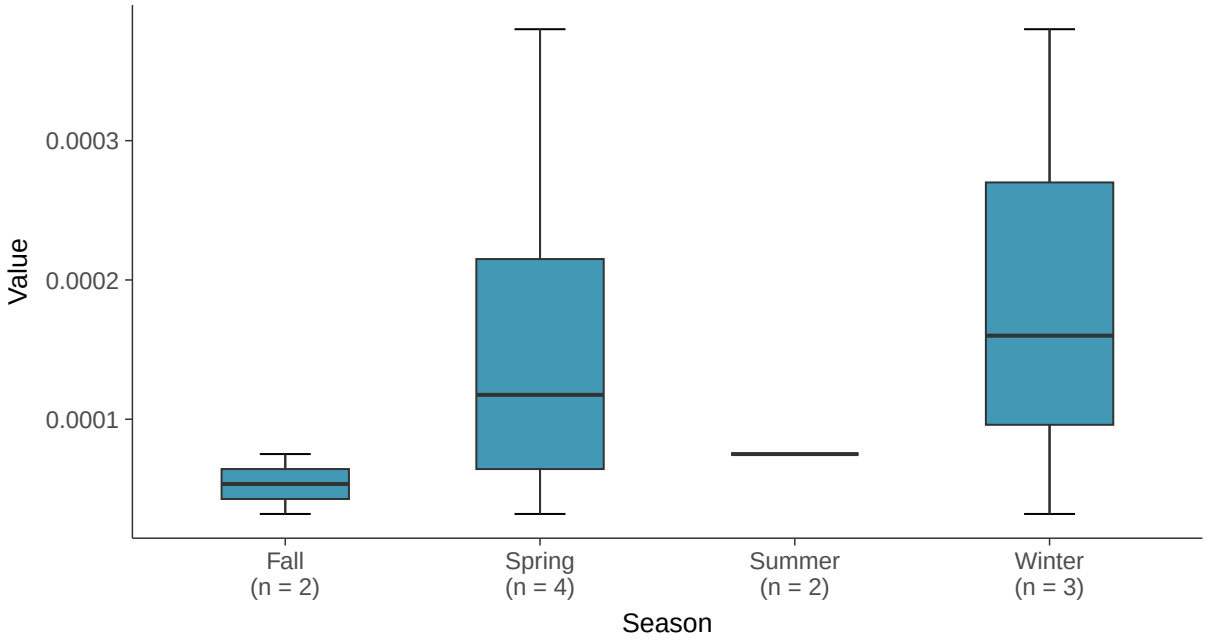
Boxplot

Cadmium, MW-06 (mg/L)



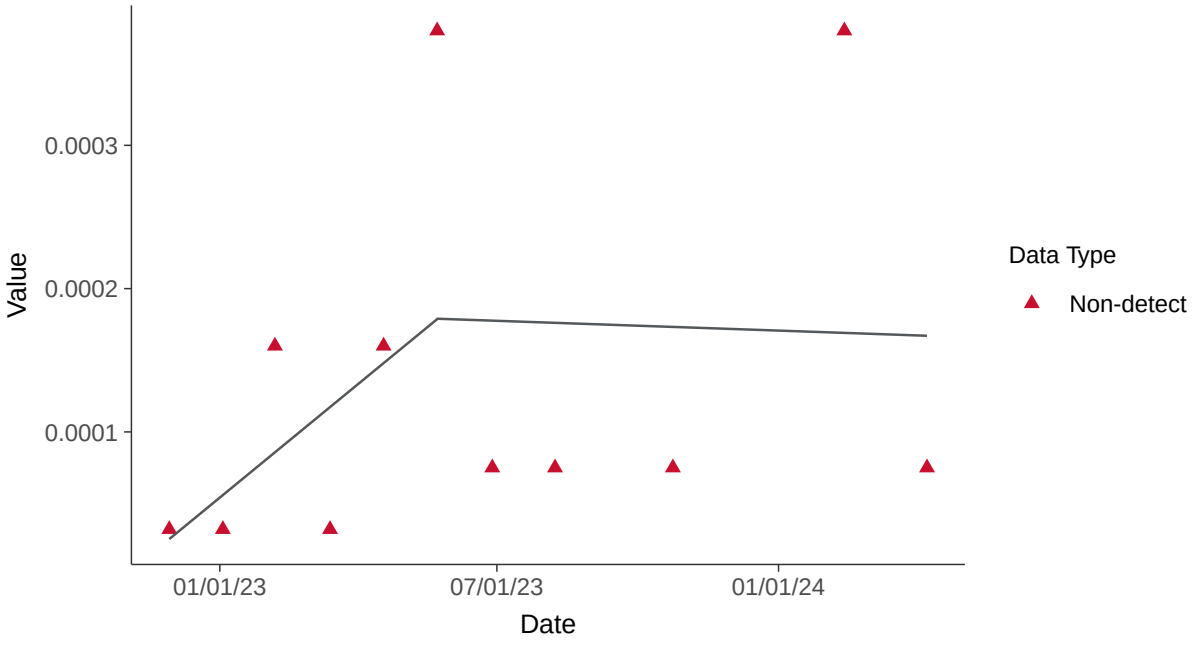
Boxplot by Season

Cadmium, MW-06 (mg/L)



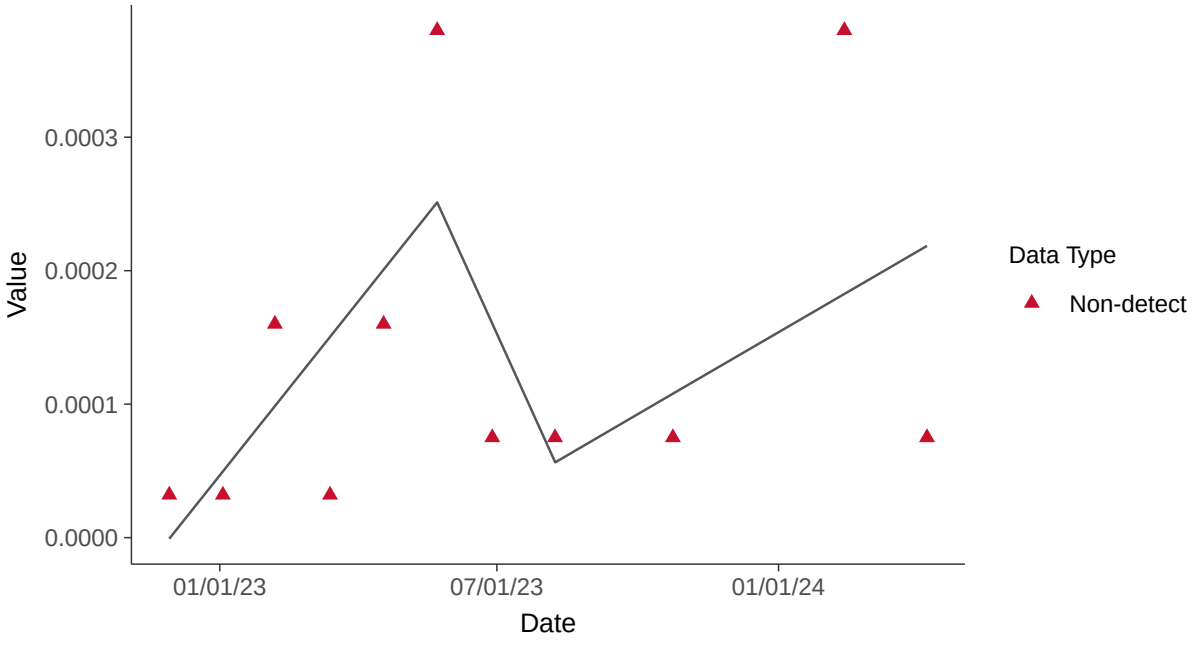
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-06 (mg/L)



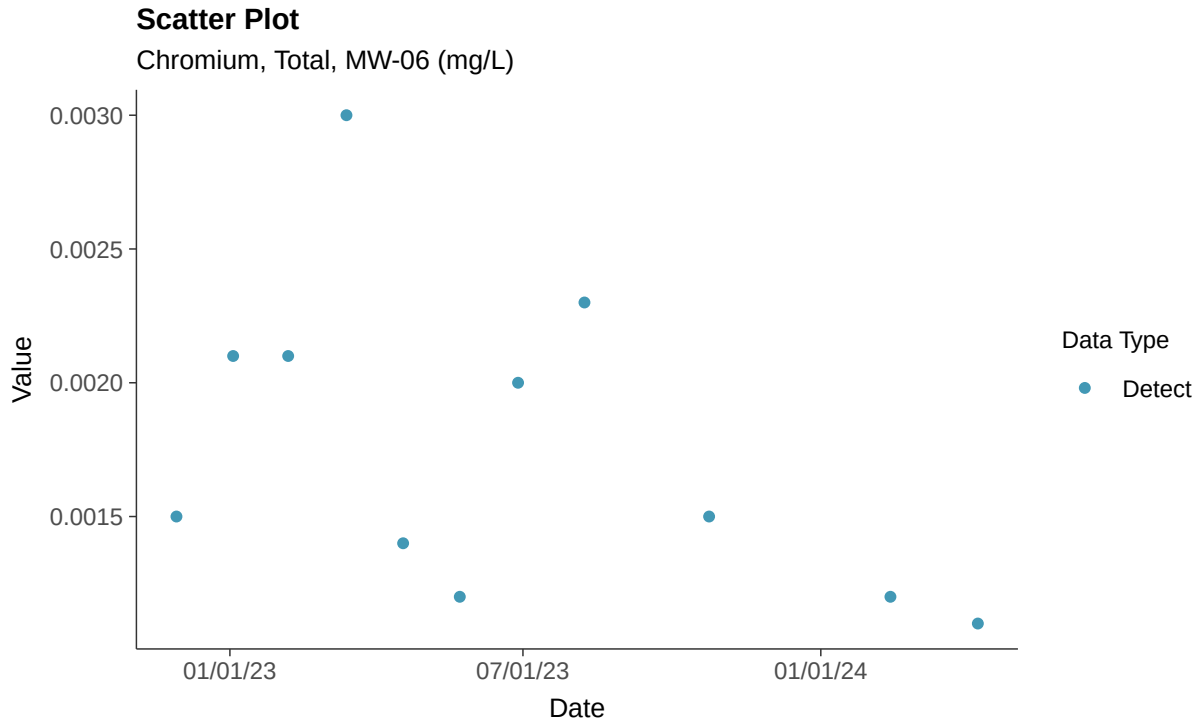
Trend Regression: Piecewise Linear-Linear-Linear

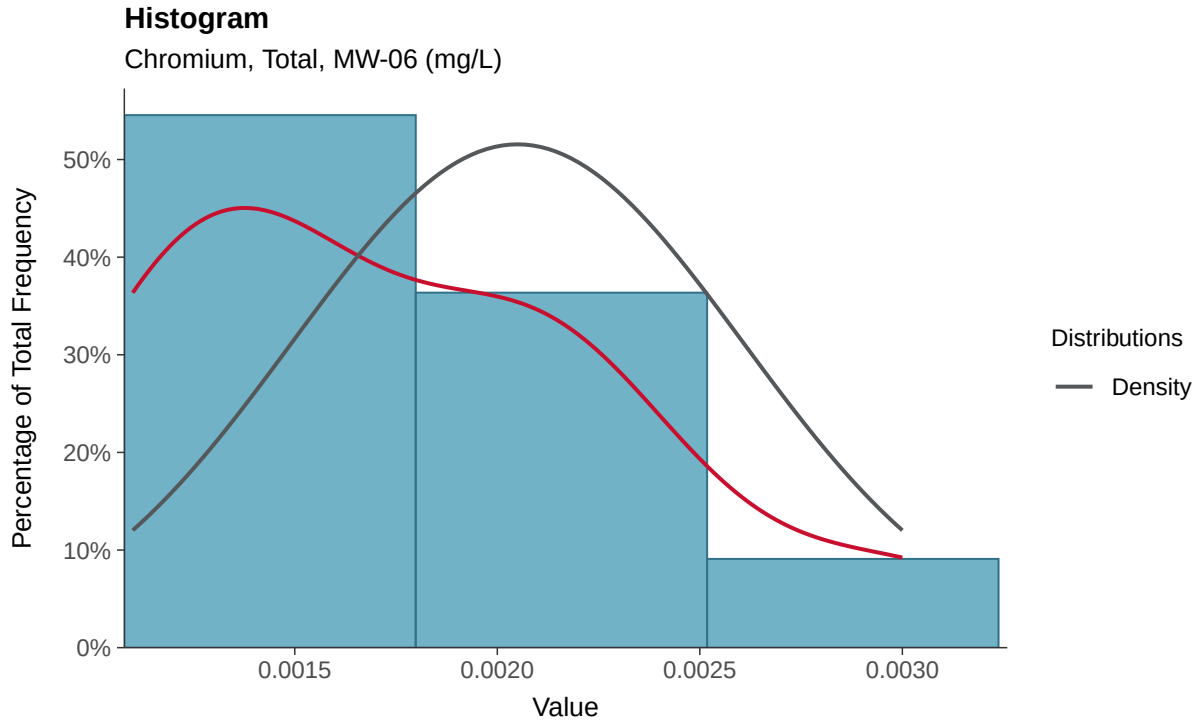
Cadmium, MW-06 (mg/L)



Appendix IV: Chromium, Total, MW-06

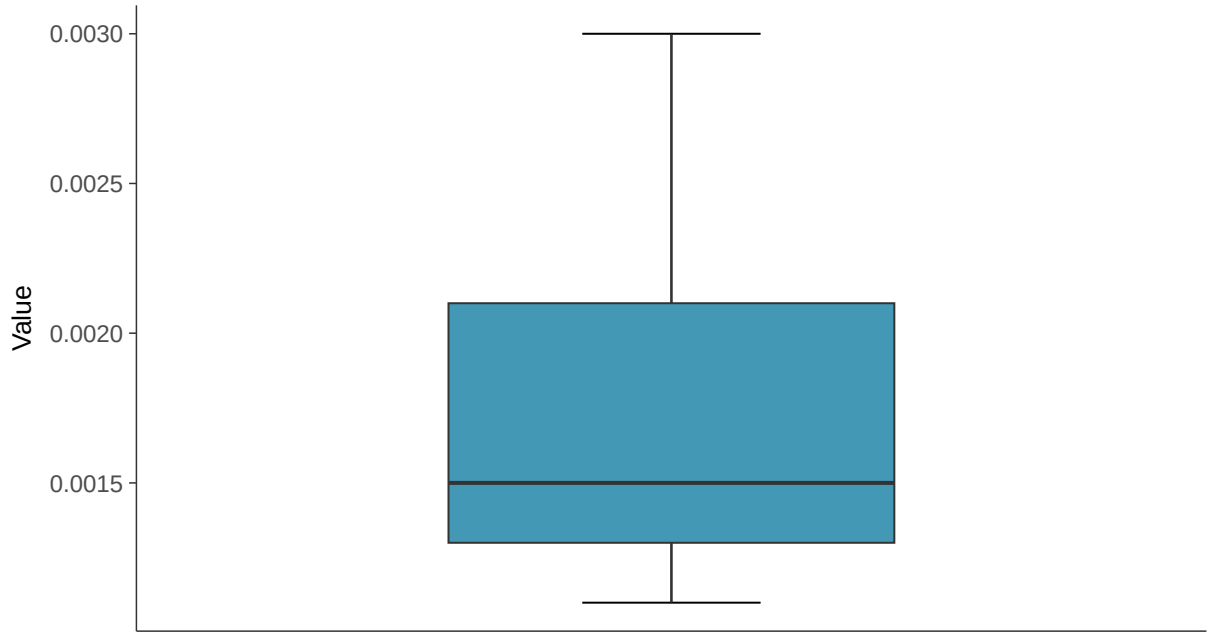
ID: 1_16_5_109





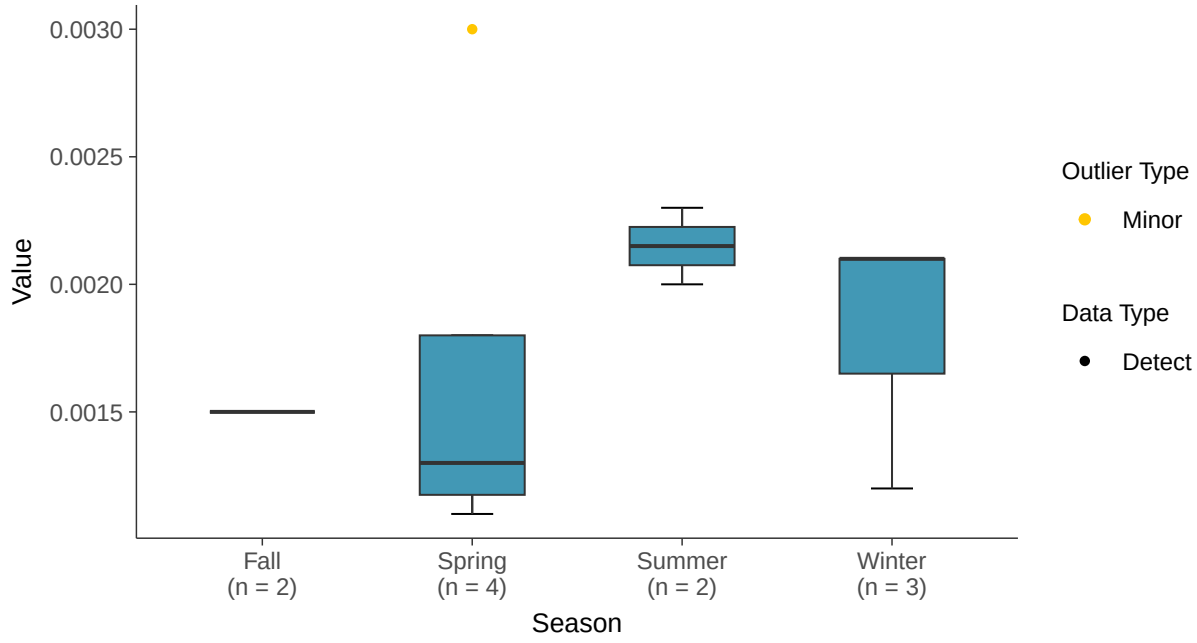
Boxplot

Chromium, Total, MW-06 (mg/L)



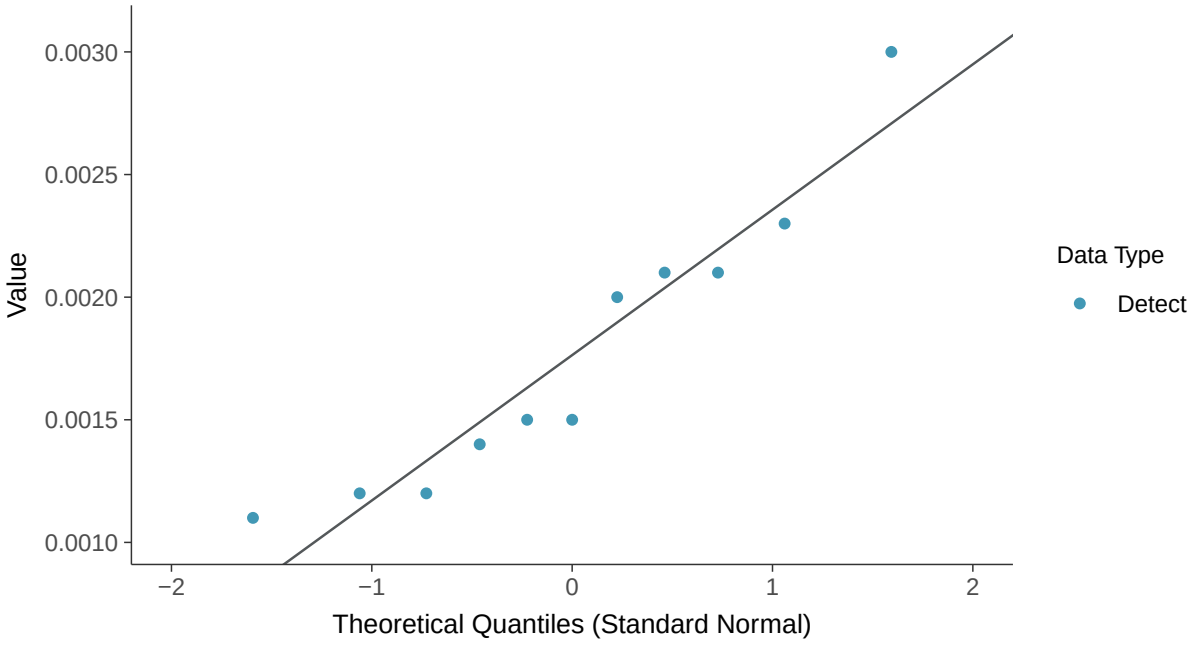
Boxplot by Season

Chromium, Total, MW-06 (mg/L)



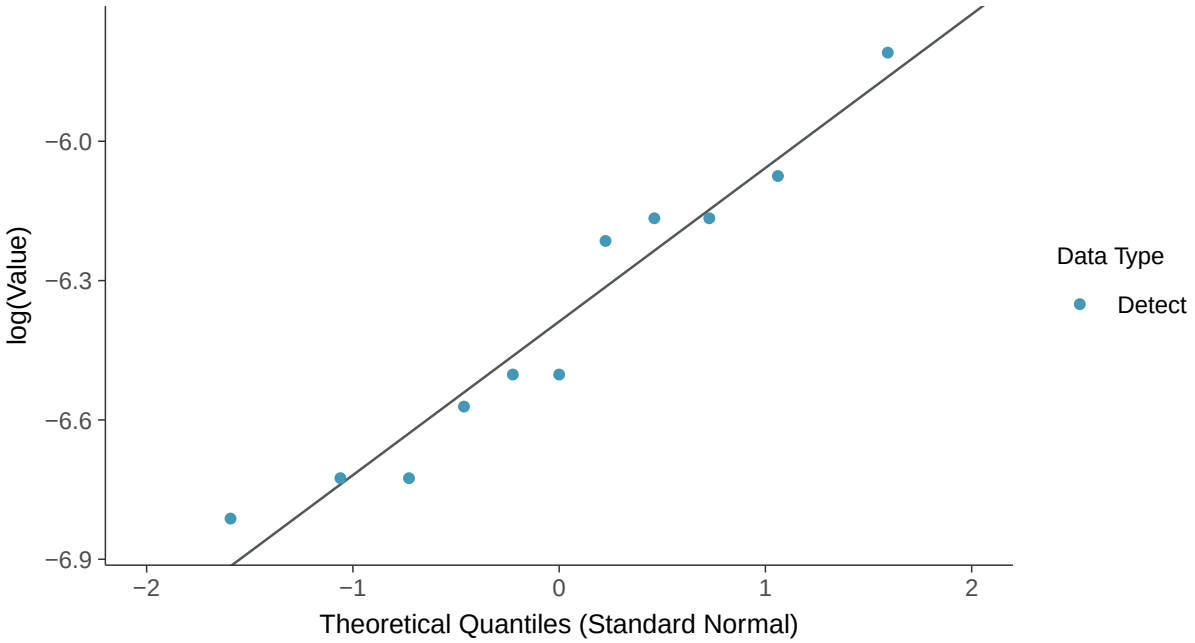
Normal Q-Q plot

Chromium, Total, MW-06 (mg/L)



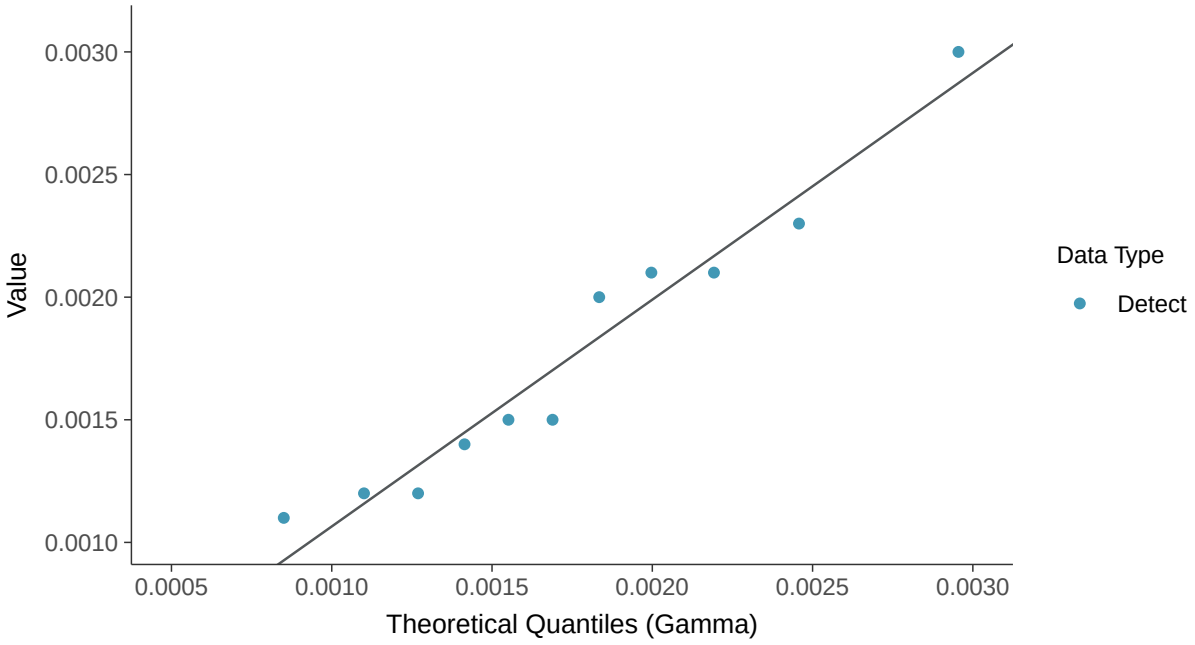
Lognormal Q-Q plot

Chromium, Total, MW-06 (mg/L)



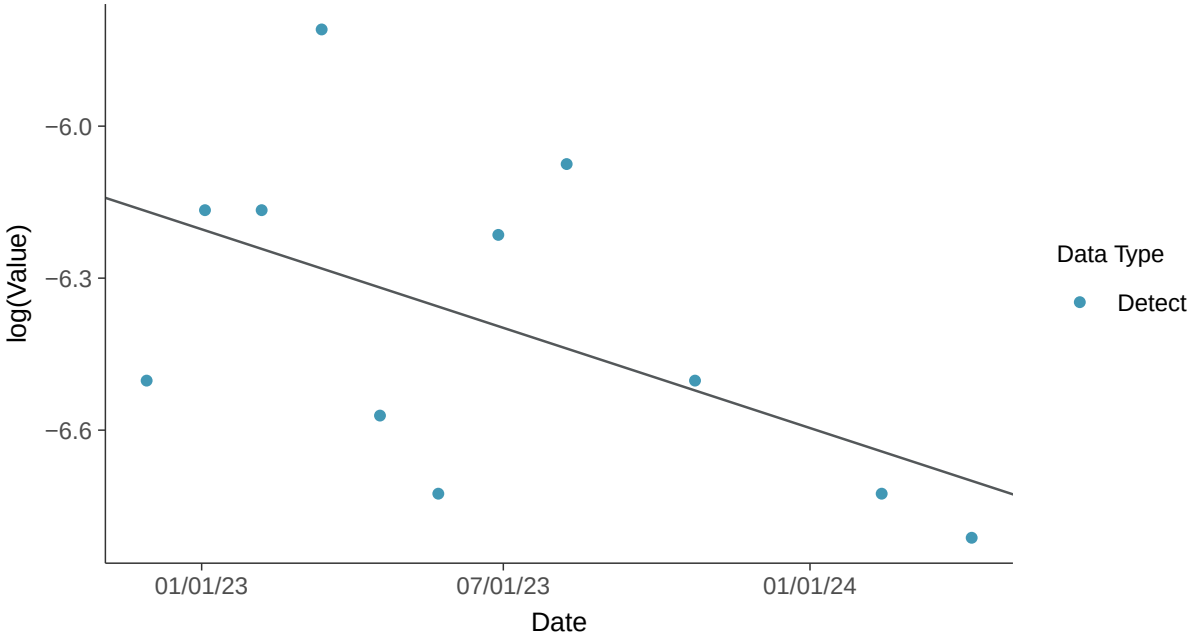
Gamma Q-Q plot

Chromium, Total, MW-06 (mg/L)



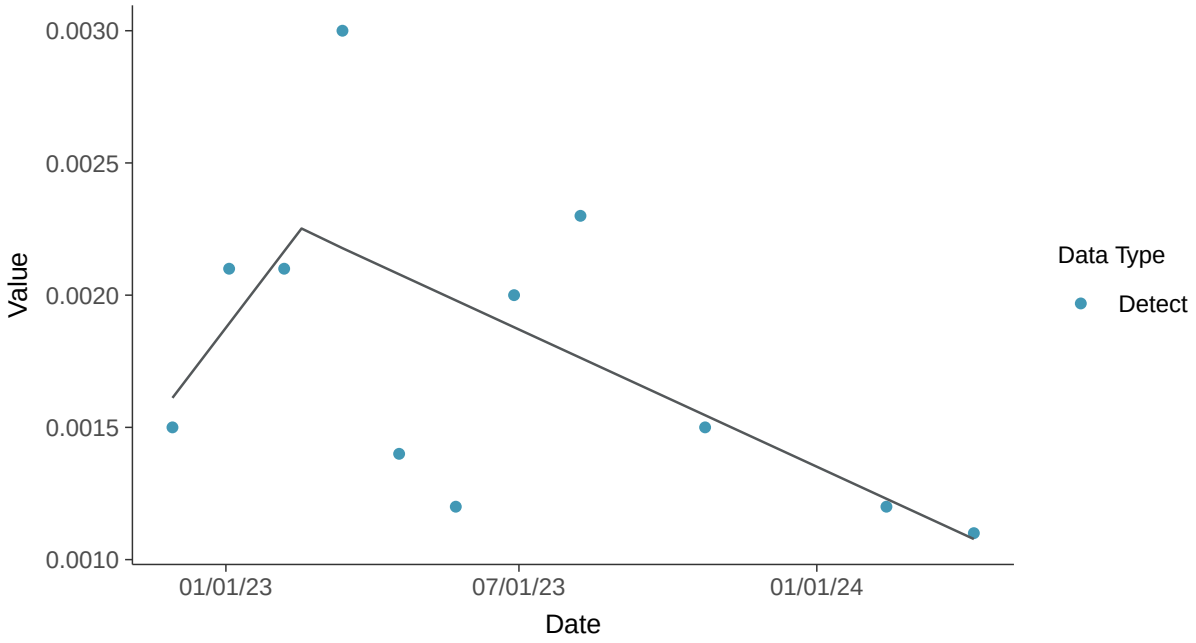
Trend Regression: Lognormal MLE

Chromium, Total, MW-06 (mg/L)



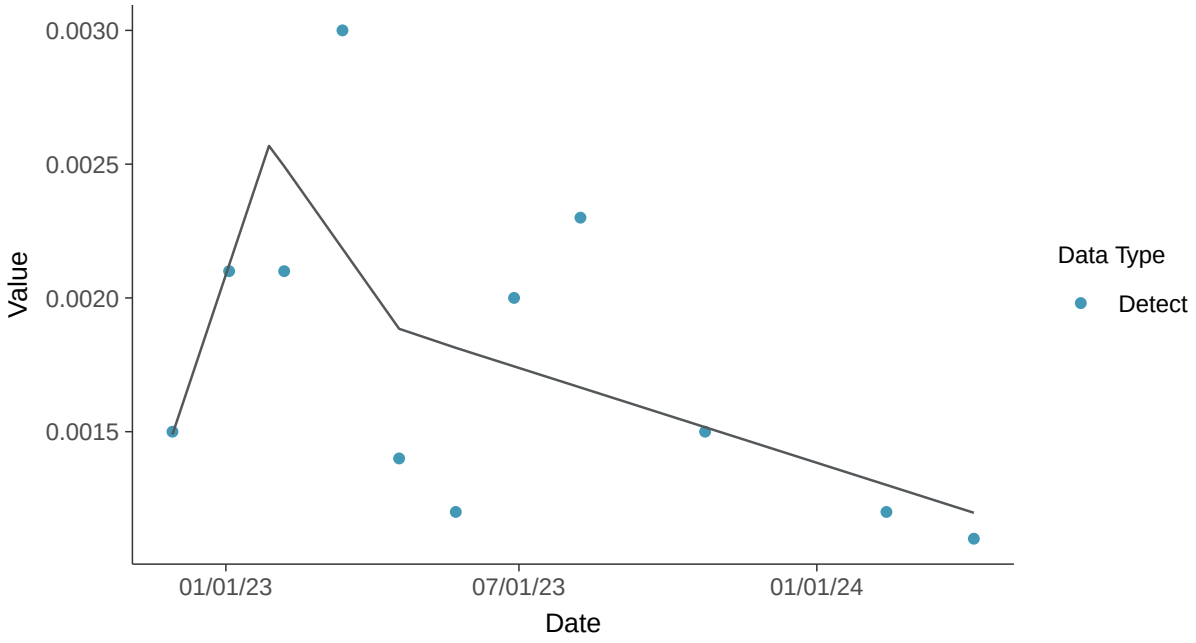
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-06 (mg/L)



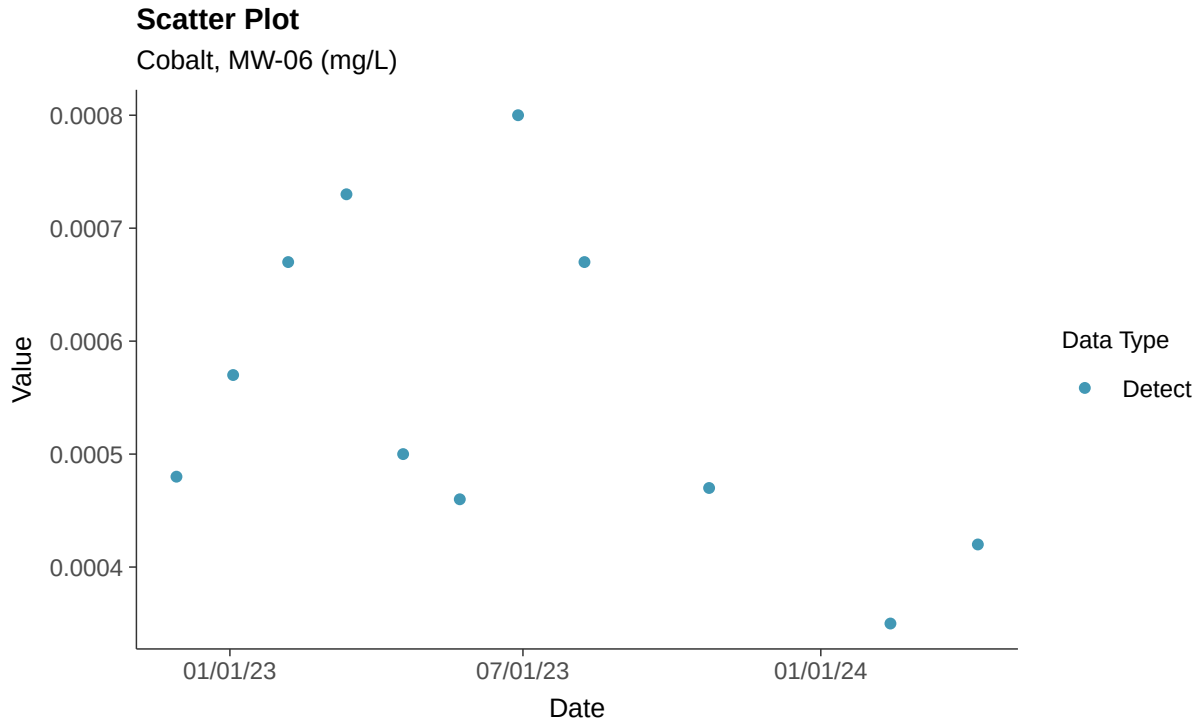
Trend Regression: Piecewise Linear-Linear-Linear

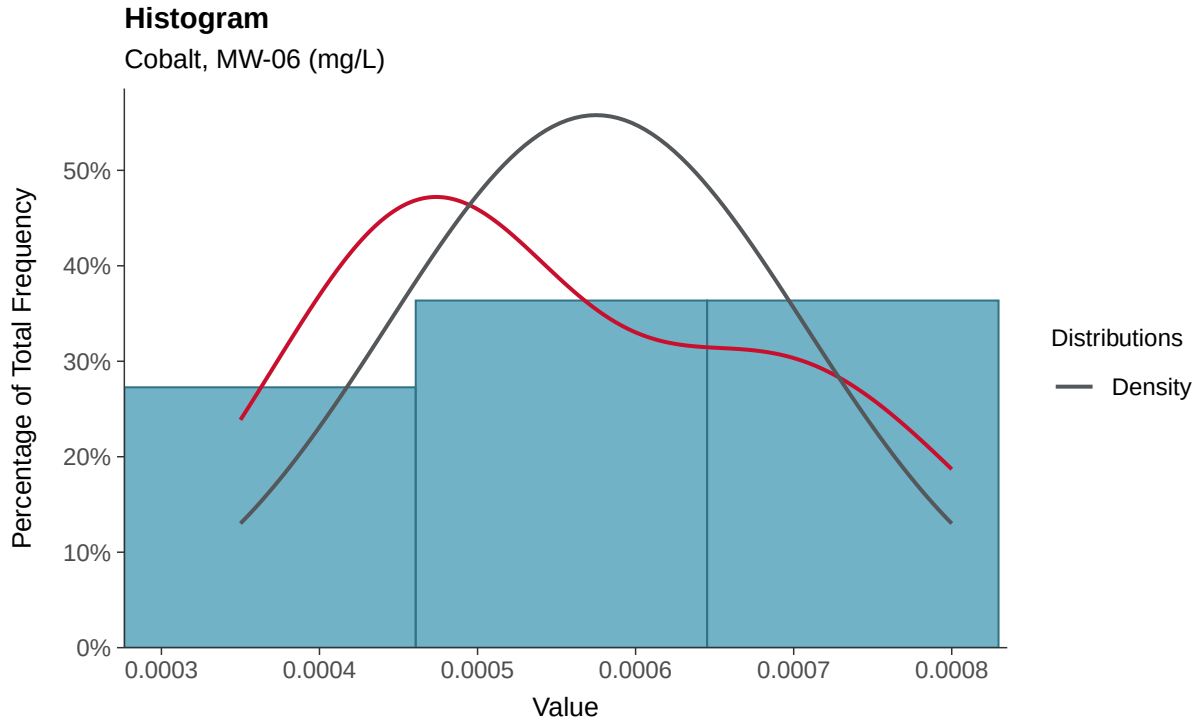
Chromium, Total, MW-06 (mg/L)



Appendix IV: Cobalt, MW-06

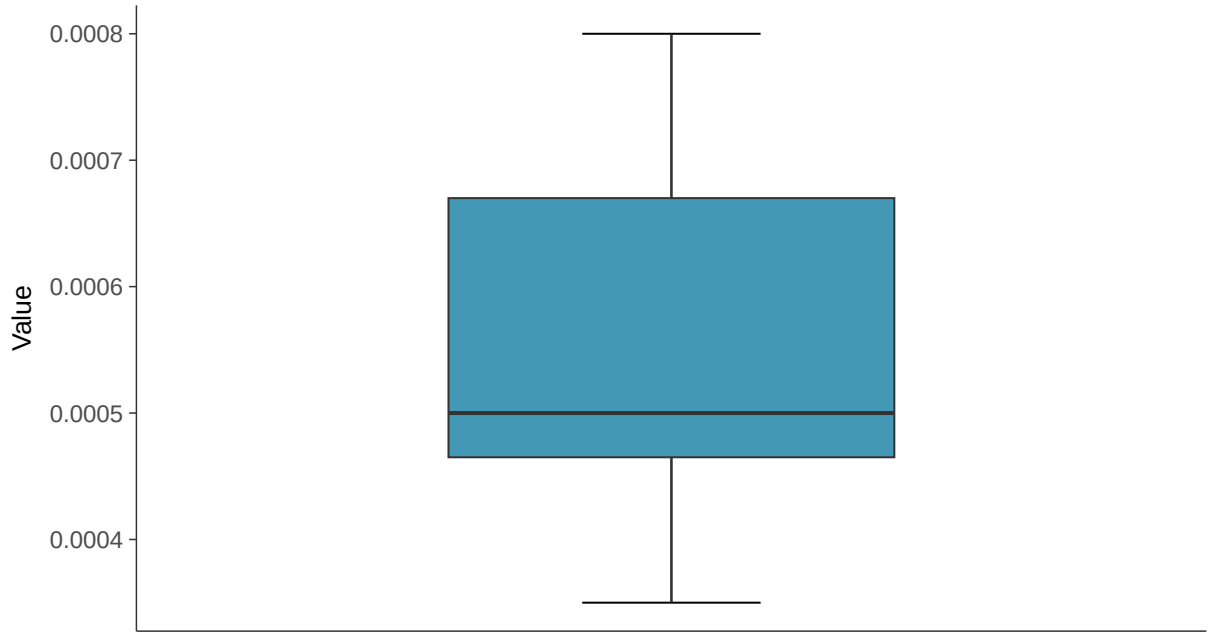
ID: 1_16_5_110





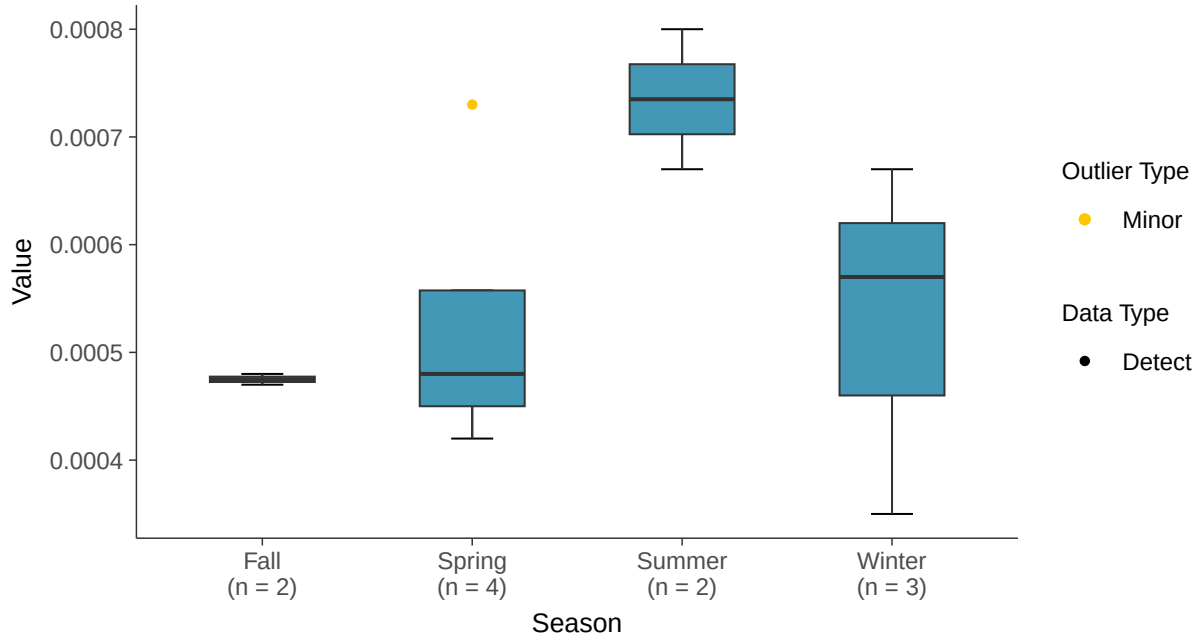
Boxplot

Cobalt, MW-06 (mg/L)



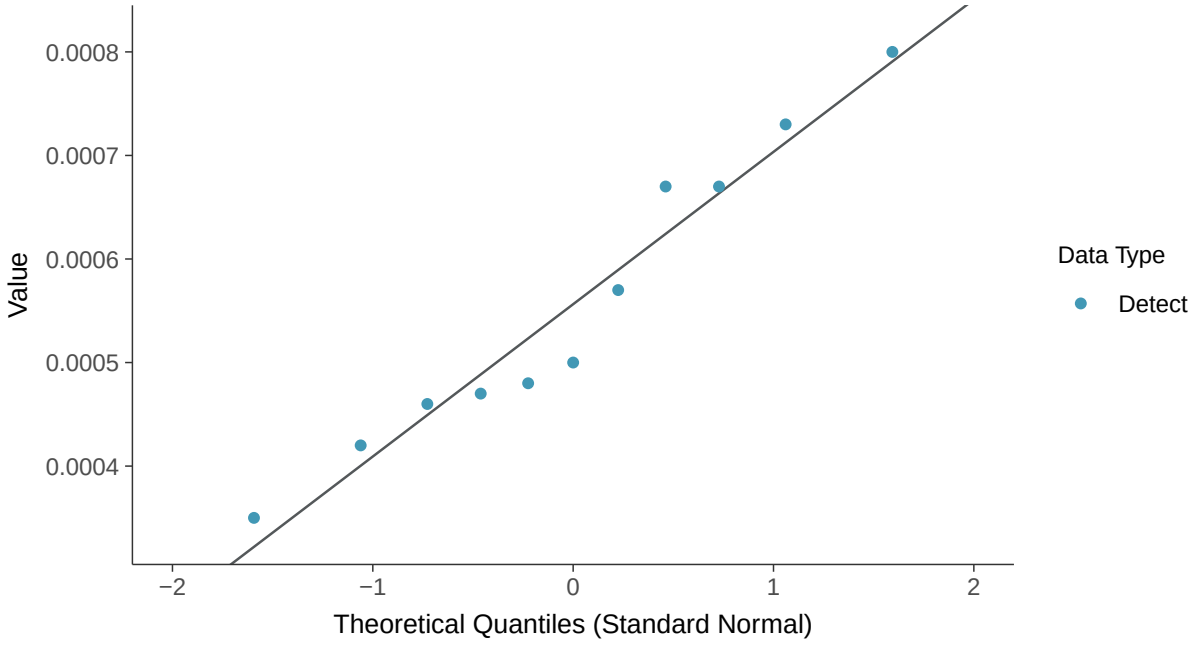
Boxplot by Season

Cobalt, MW-06 (mg/L)



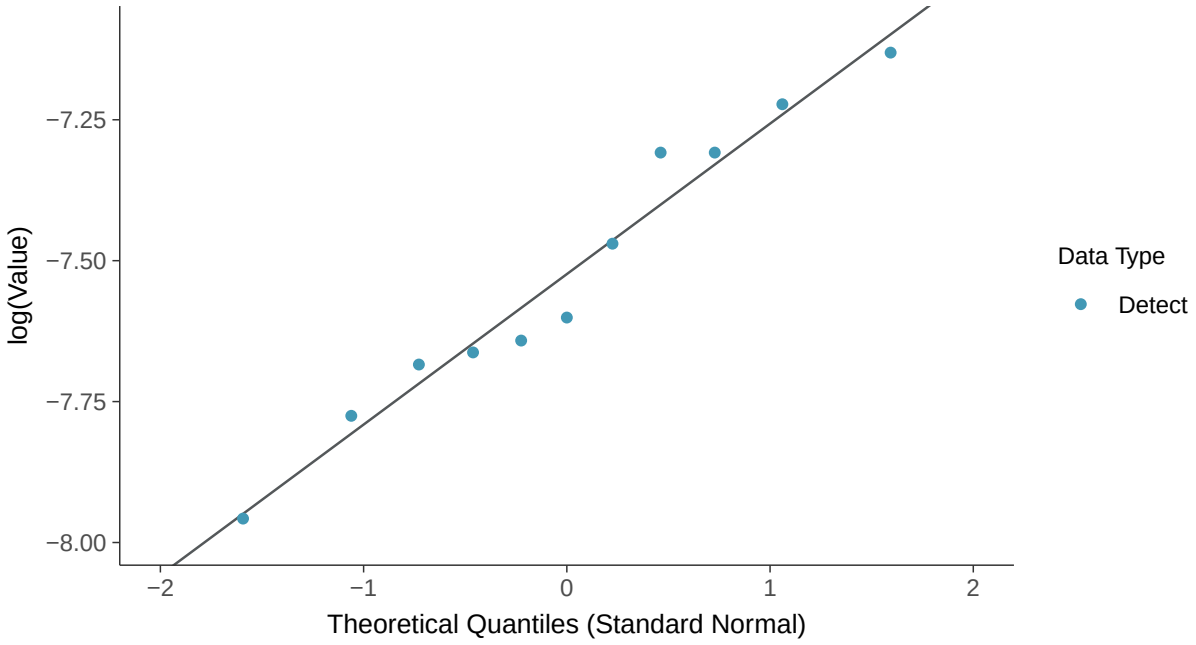
Normal Q-Q plot

Cobalt, MW-06 (mg/L)



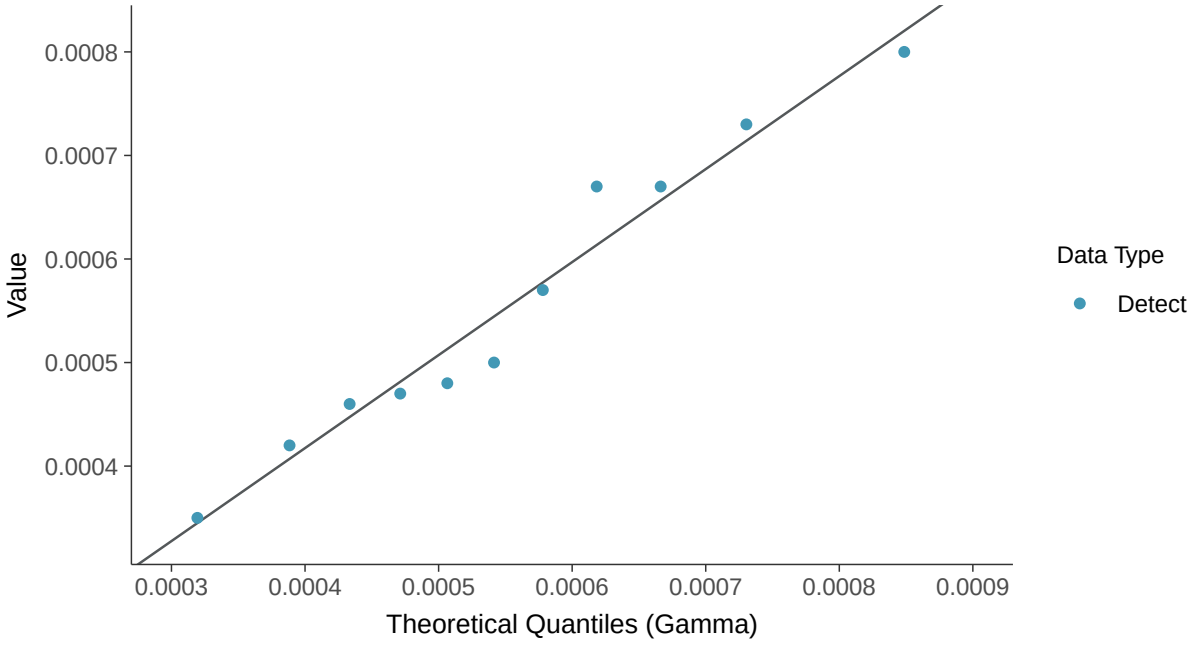
Lognormal Q-Q plot

Cobalt, MW-06 (mg/L)



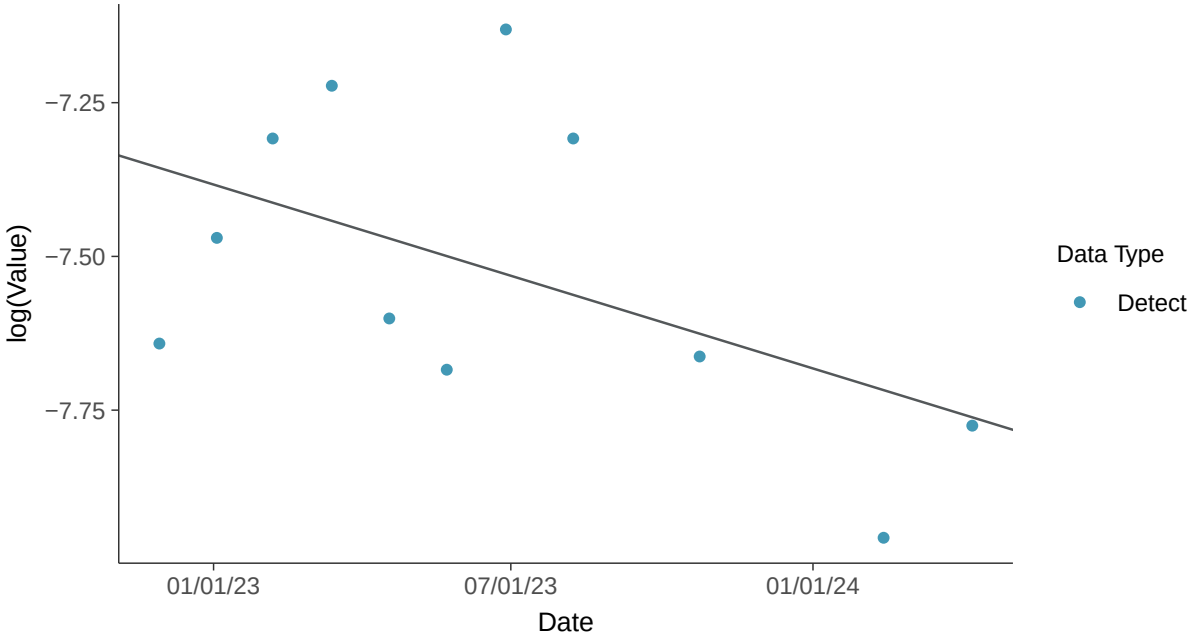
Gamma Q-Q plot

Cobalt, MW-06 (mg/L)



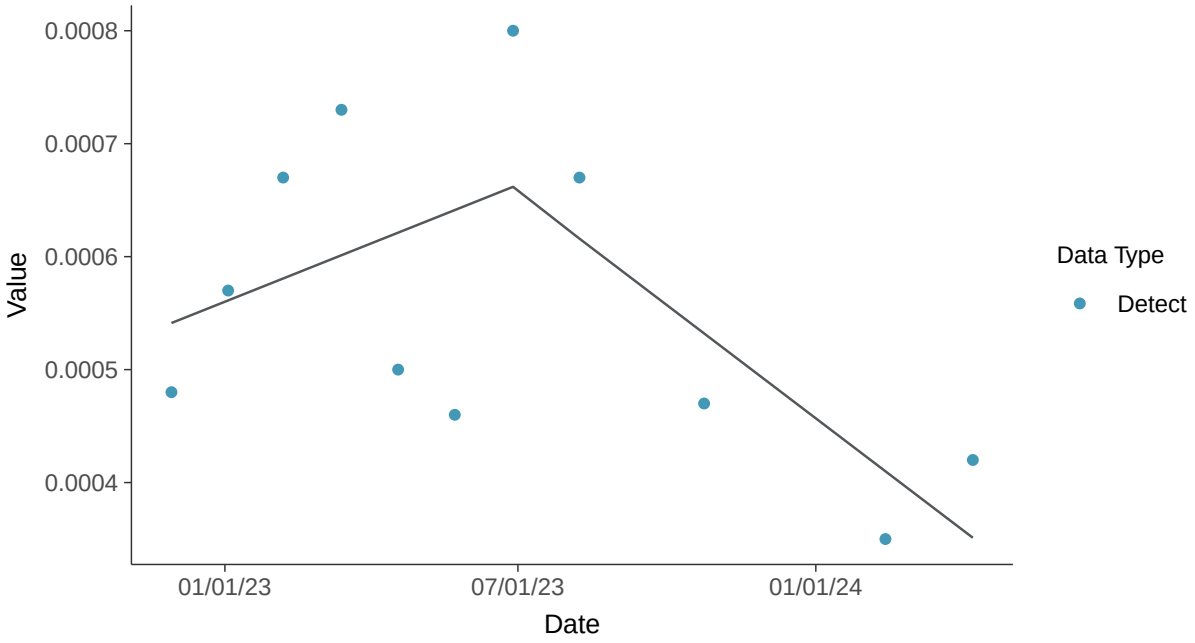
Trend Regression: Lognormal MLE

Cobalt, MW-06 (mg/L)



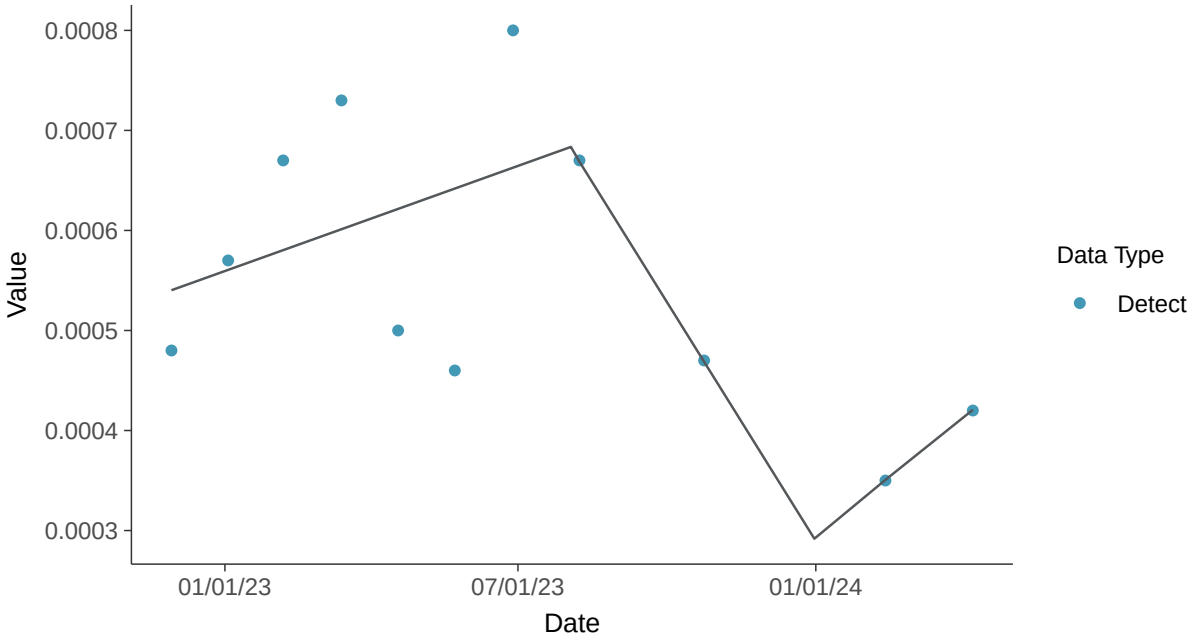
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-06 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cobalt, MW-06 (mg/L)

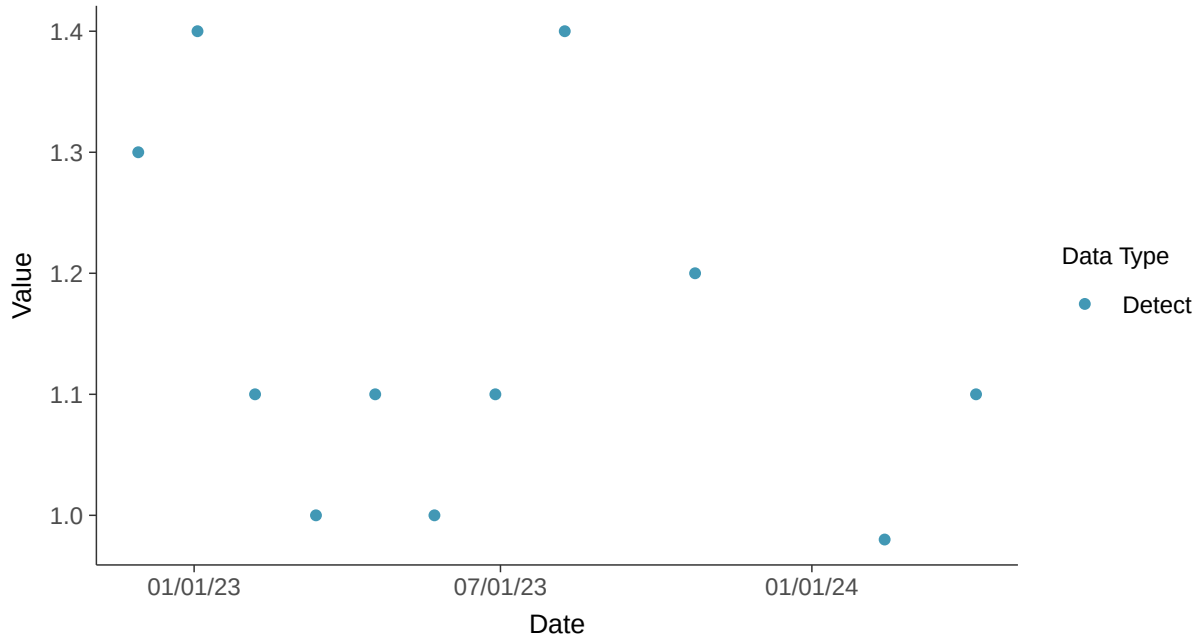


Appendix IV: Fluoride (App IV), MW-06

ID: 1_16_5_113

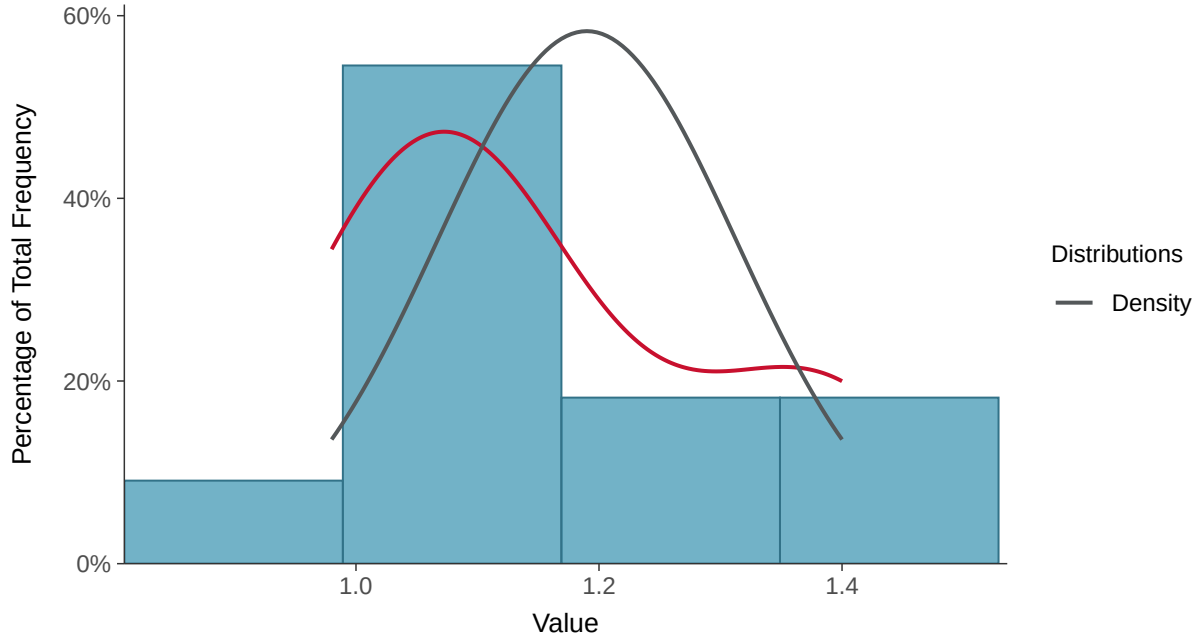
Scatter Plot

Fluoride (App IV), MW-06 (mg/L)



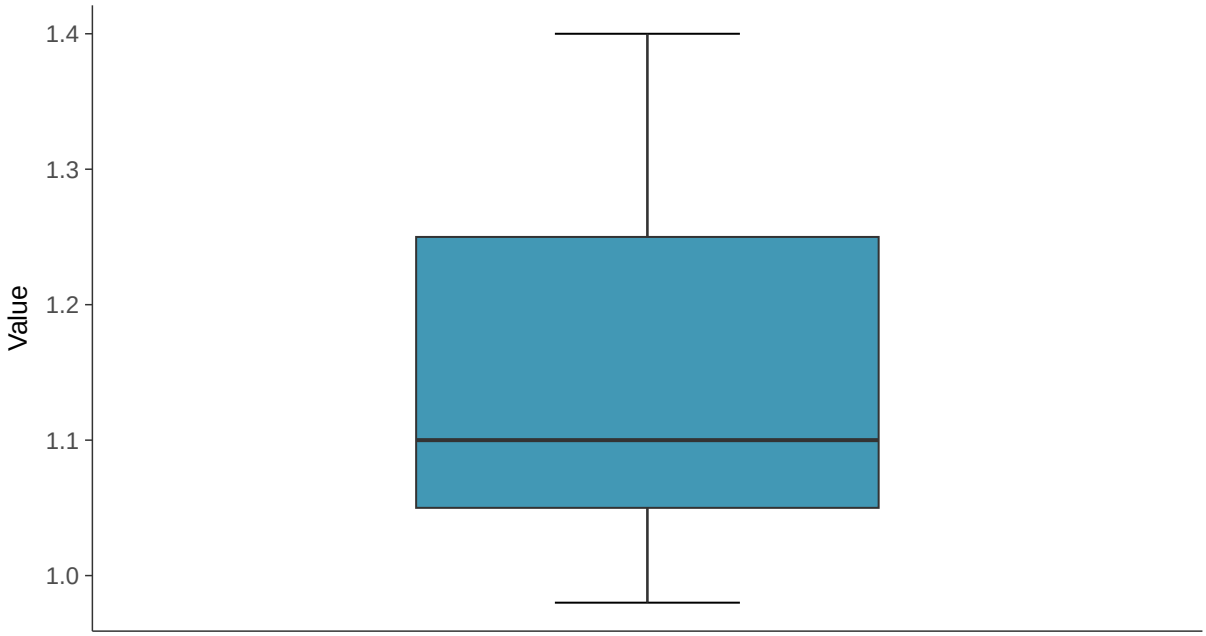
Histogram

Fluoride (App IV), MW-06 (mg/L)



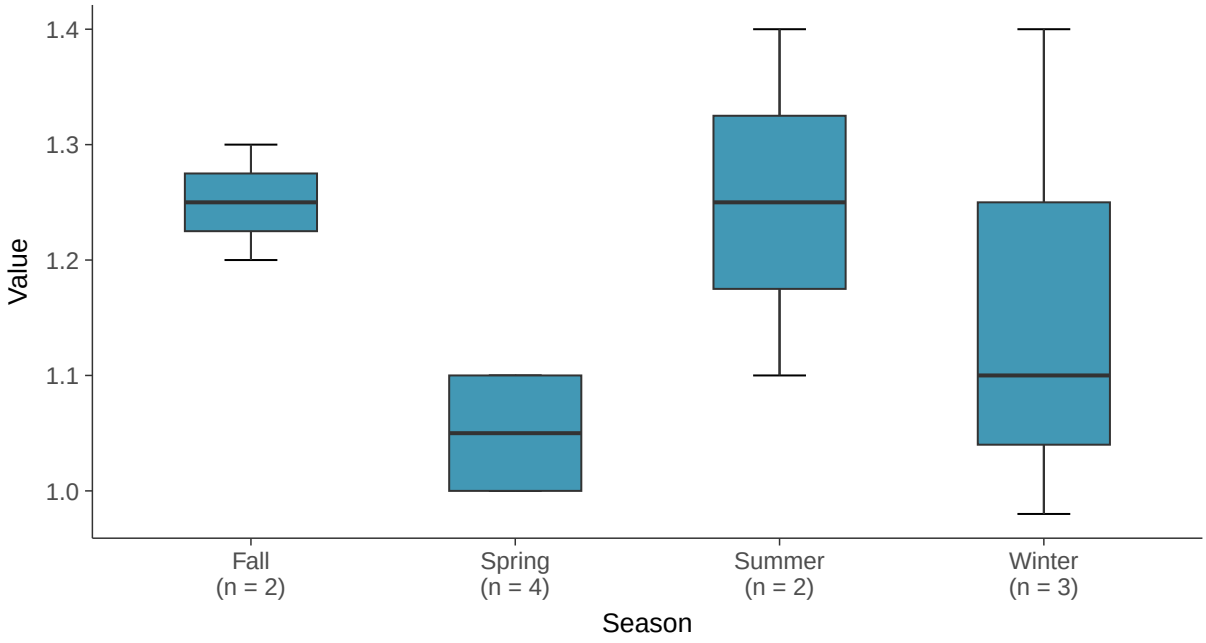
Boxplot

Fluoride (App IV), MW-06 (mg/L)



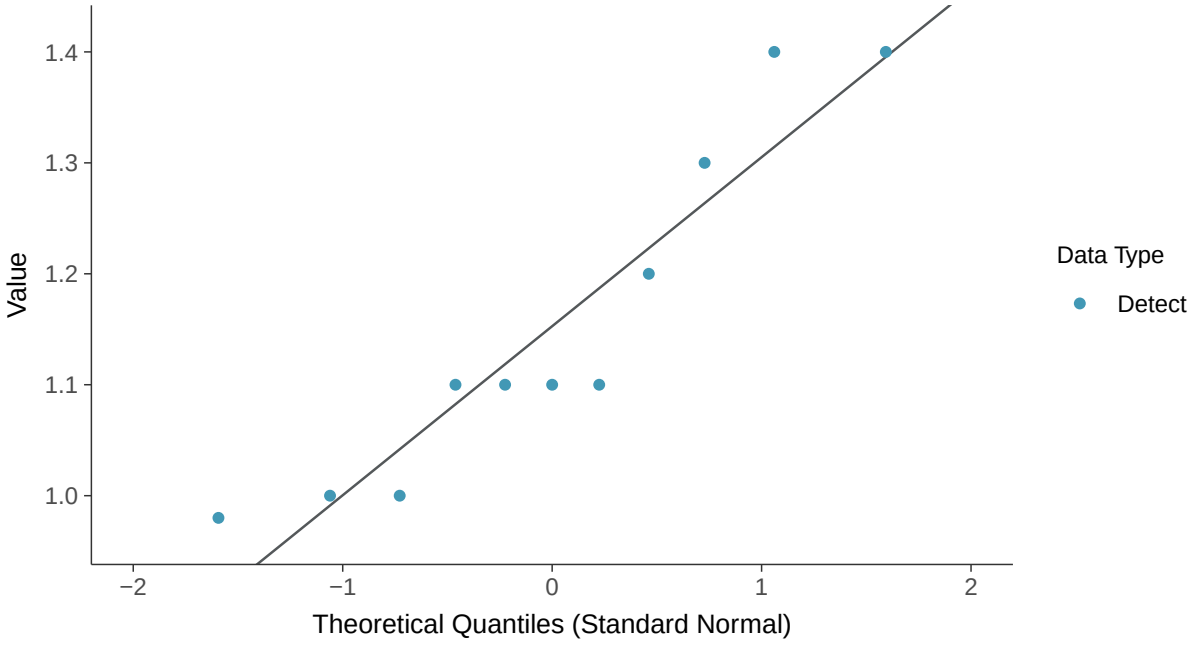
Boxplot by Season

Fluoride (App IV), MW-06 (mg/L)



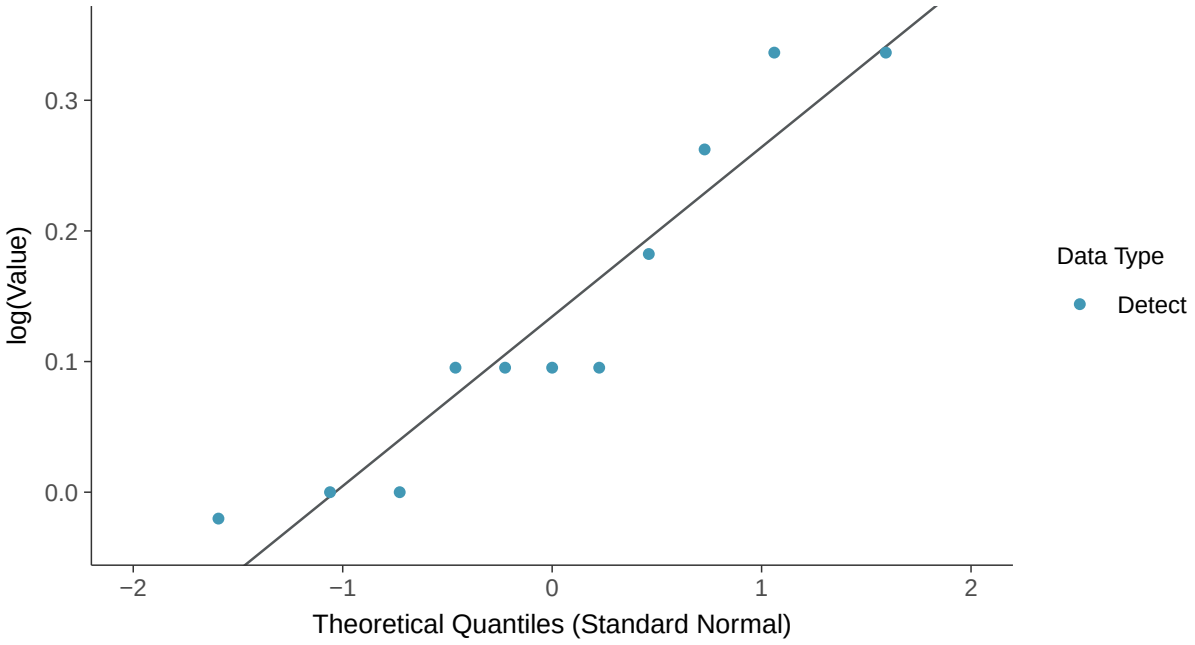
Normal Q-Q plot

Fluoride (App IV), MW-06 (mg/L)



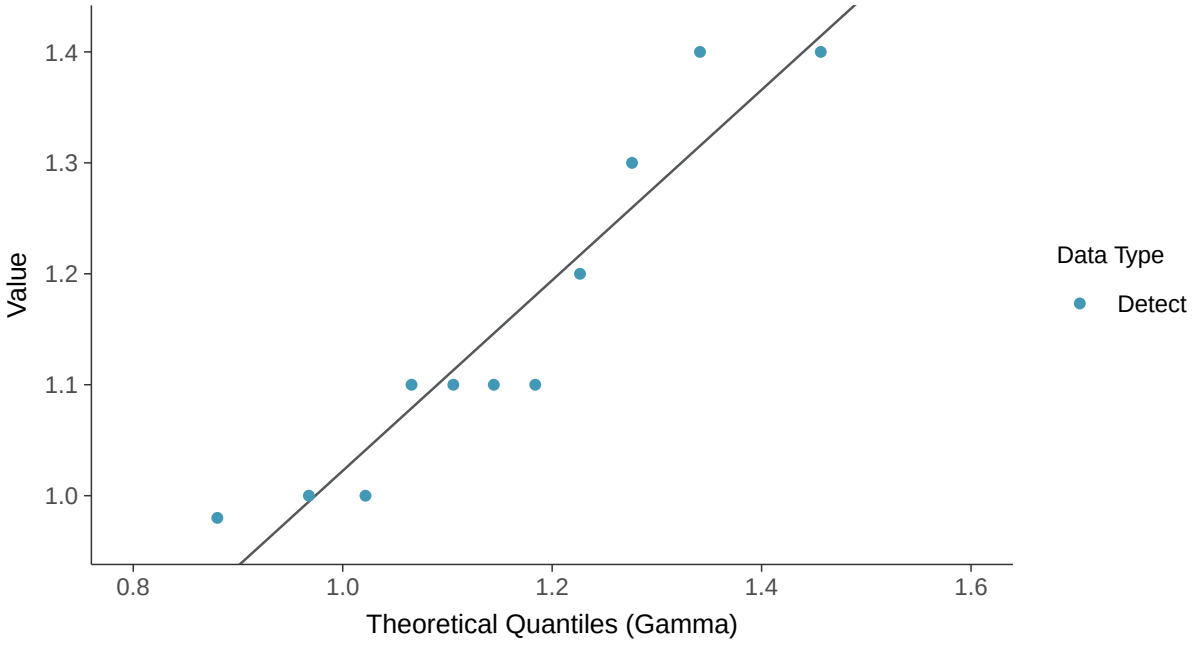
Lognormal Q-Q plot

Fluoride (App IV), MW-06 (mg/L)



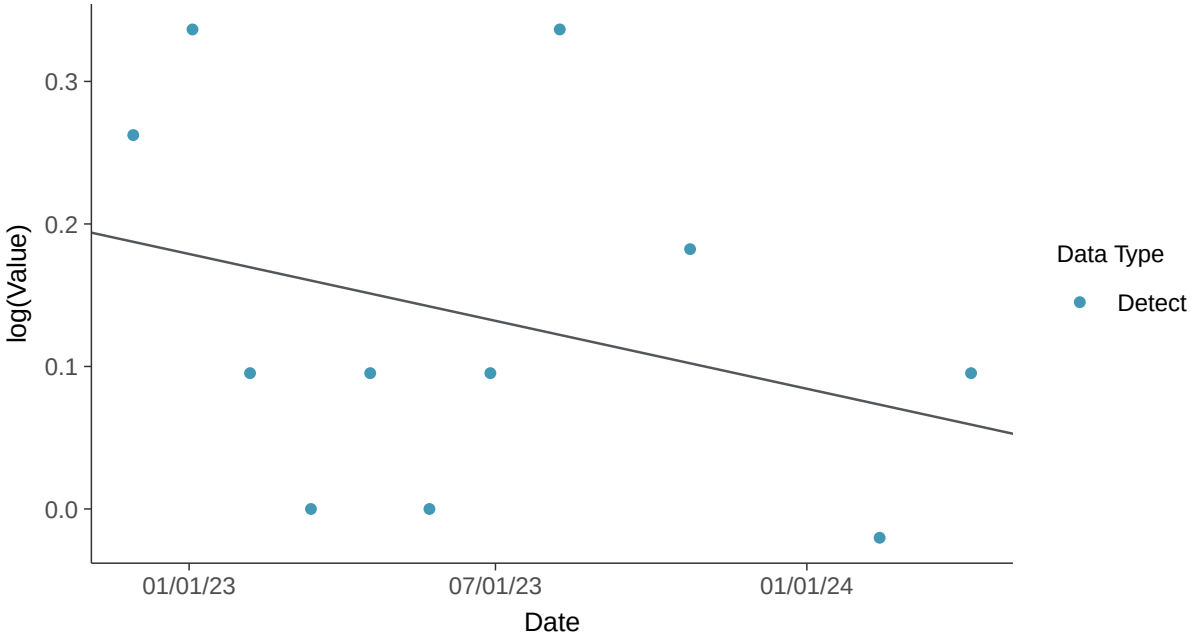
Gamma Q-Q plot

Fluoride (App IV), MW-06 (mg/L)



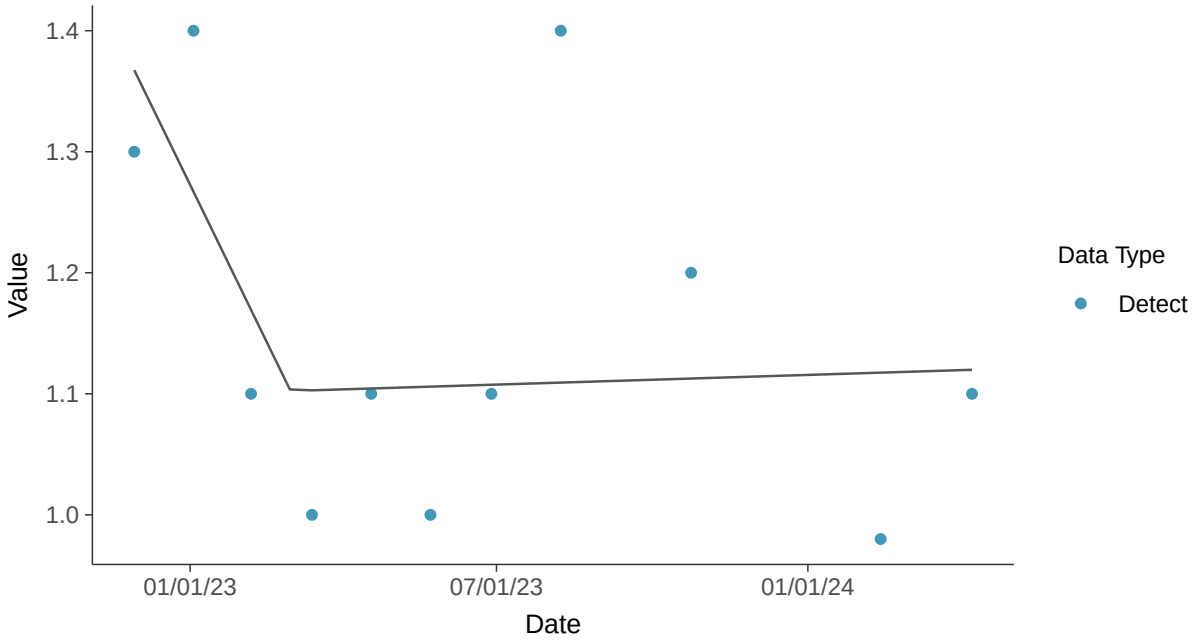
Trend Regression: Lognormal MLE

Fluoride (App IV), MW-06 (mg/L)



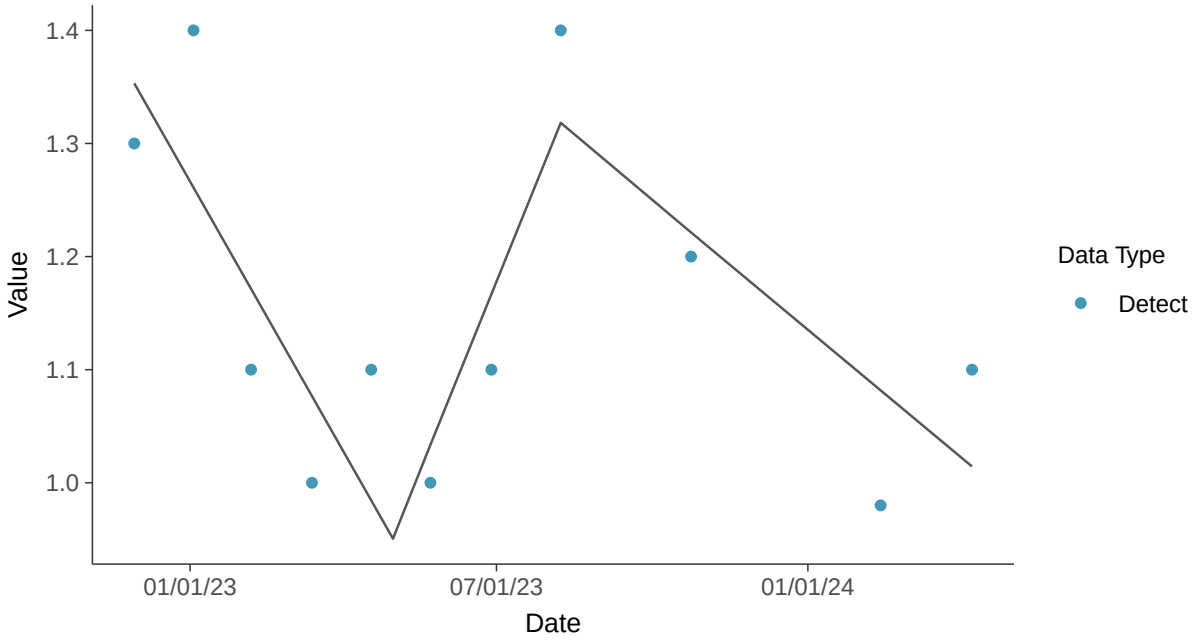
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-06 (mg/L)



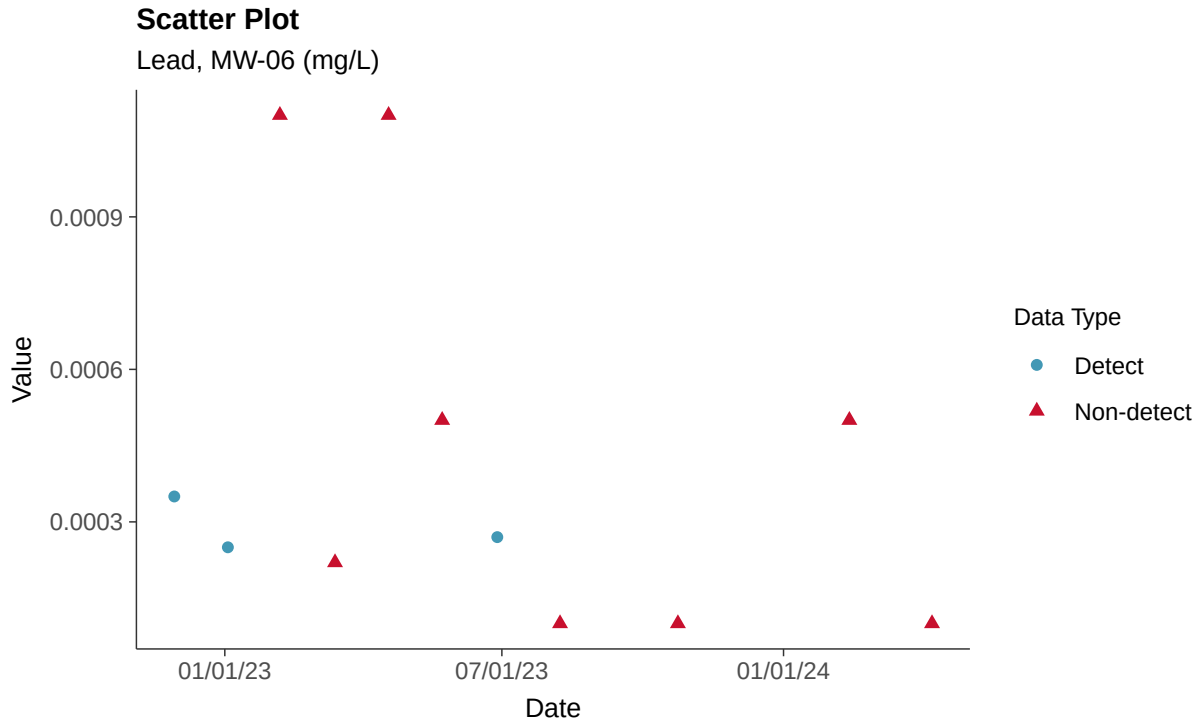
Trend Regression: Piecewise Linear-Linear-Linear

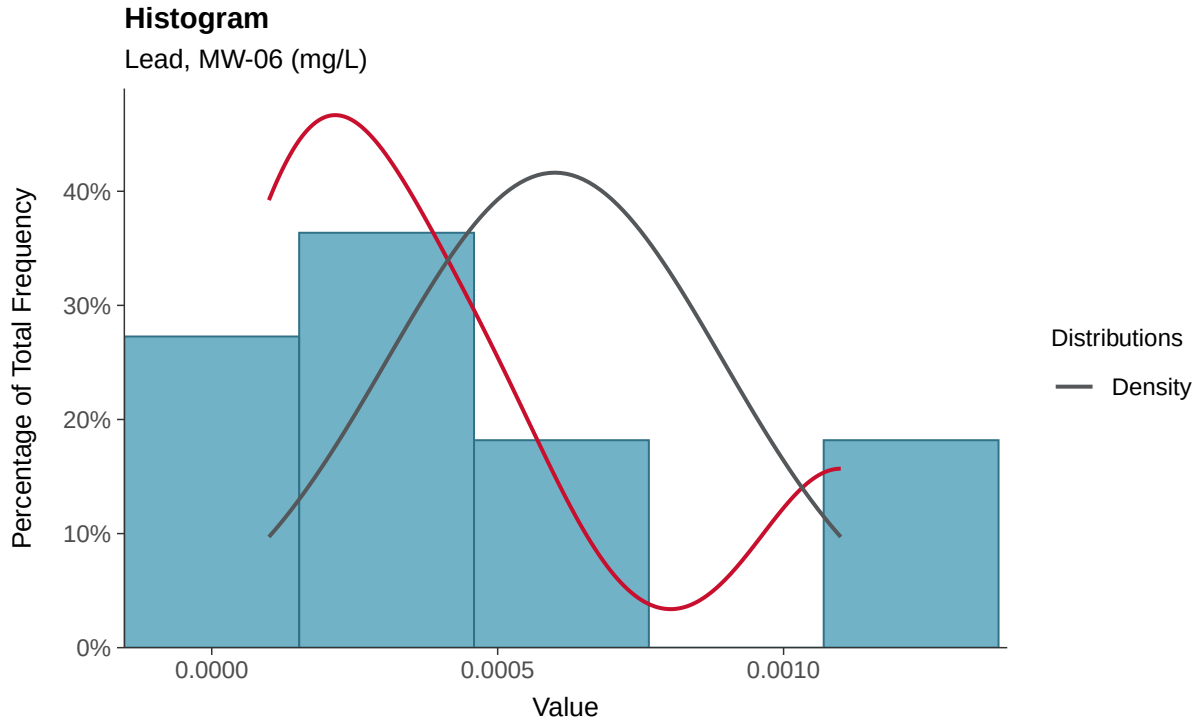
Fluoride (App IV), MW-06 (mg/L)



Appendix IV: Lead, MW-06

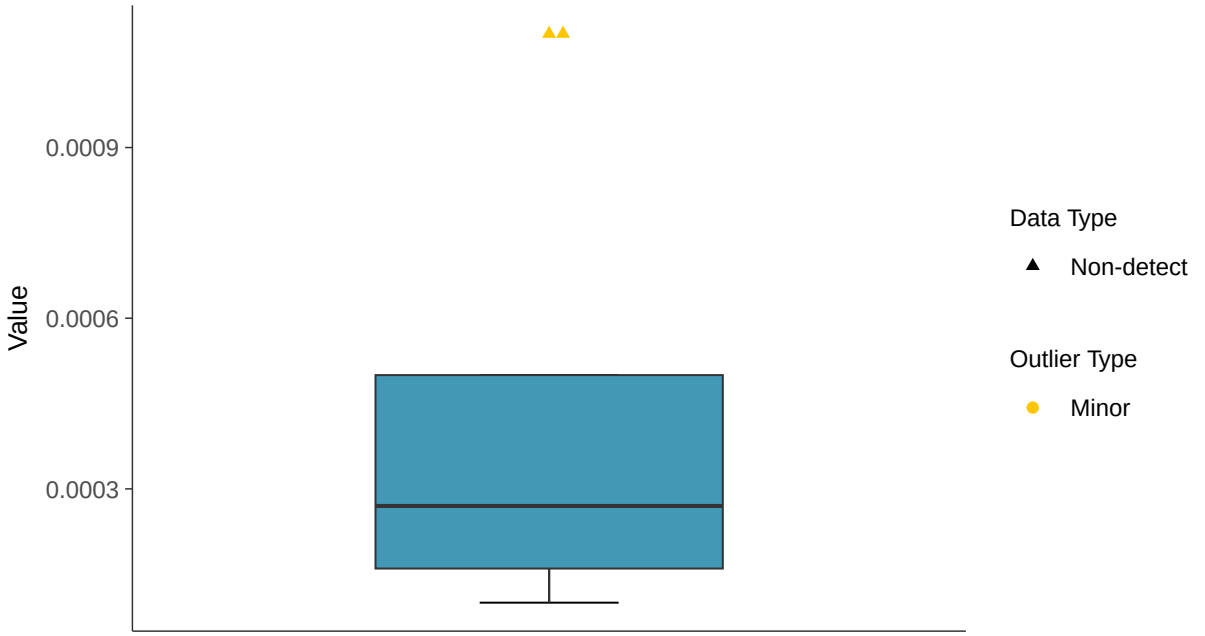
ID: 1_16_5_115





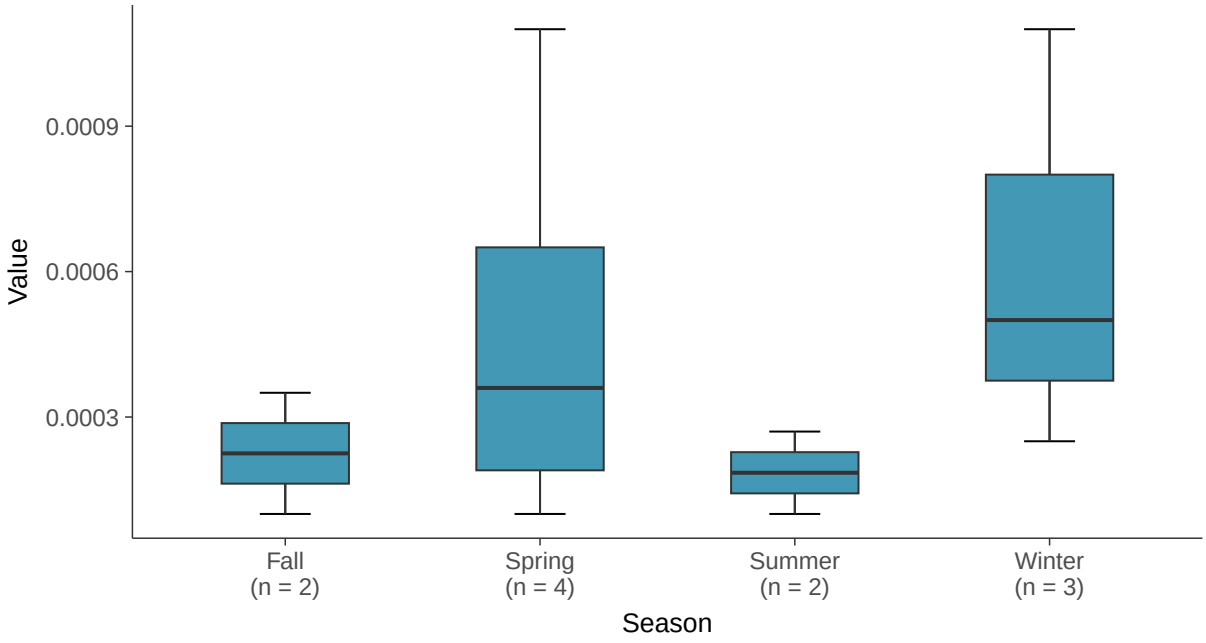
Boxplot

Lead, MW-06 (mg/L)



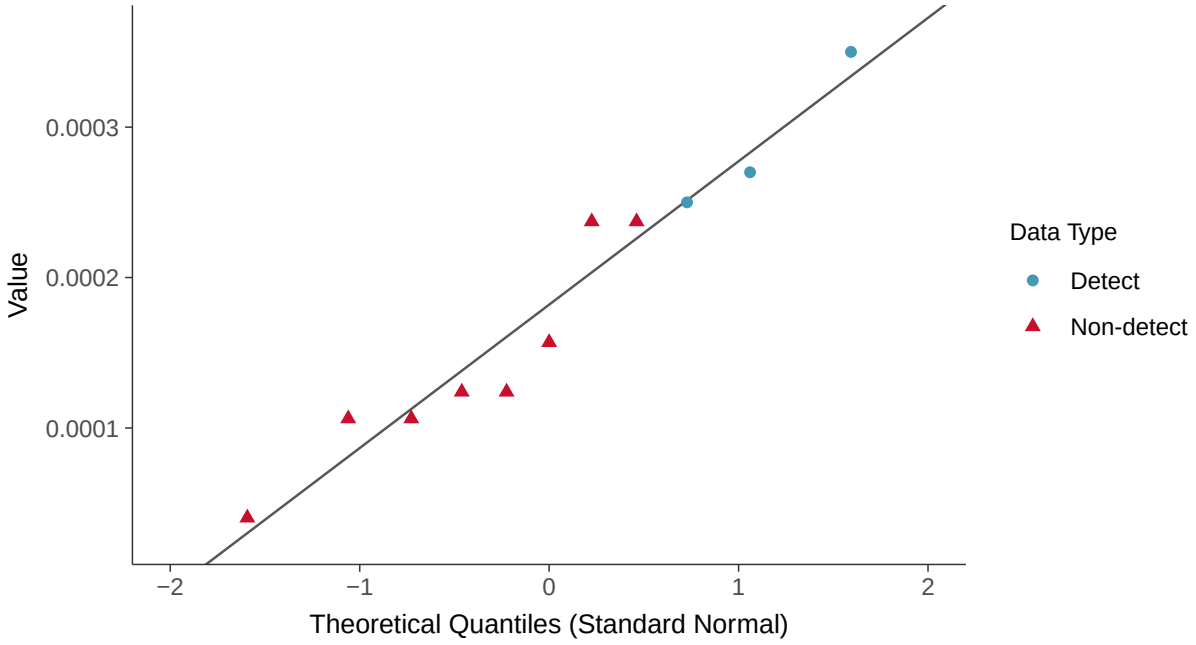
Boxplot by Season

Lead, MW-06 (mg/L)



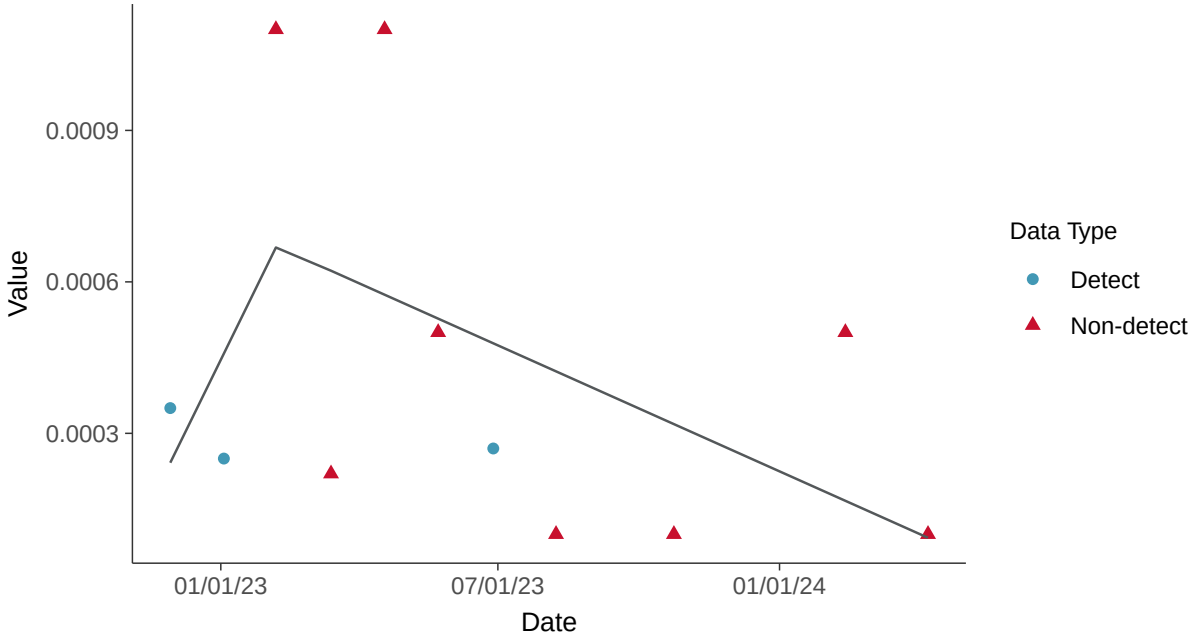
Normal Q-Q plot using ROS Imputed Estimates

Lead, MW-06 (mg/L)



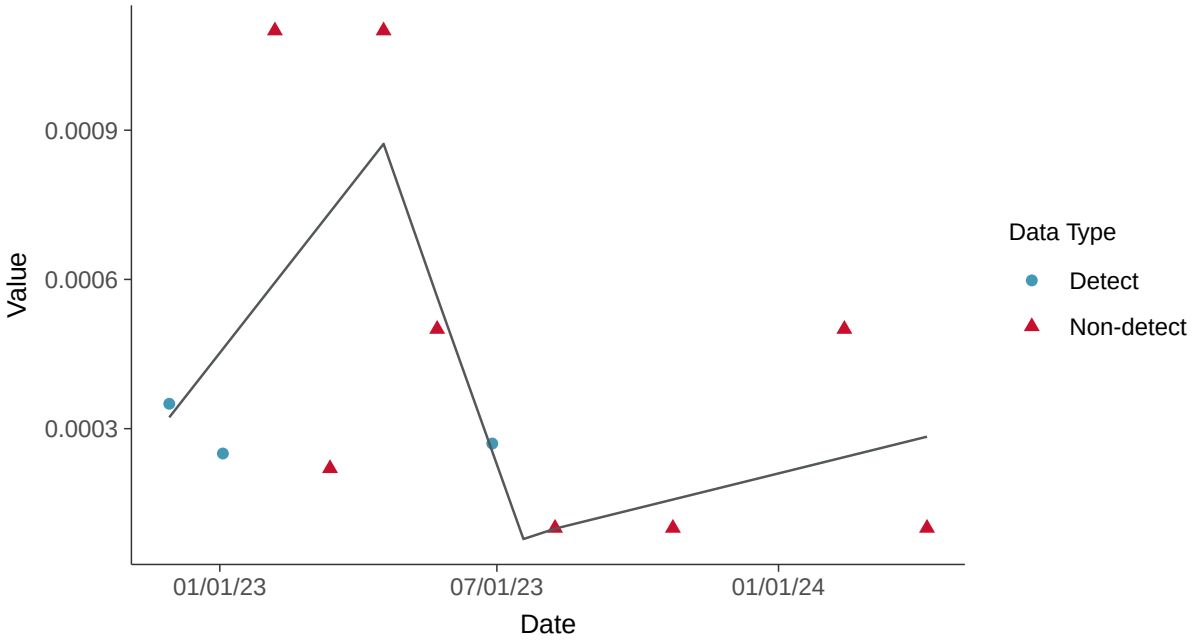
Trend Regression: Piecewise Linear-Linear

Lead, MW-06 (mg/L)



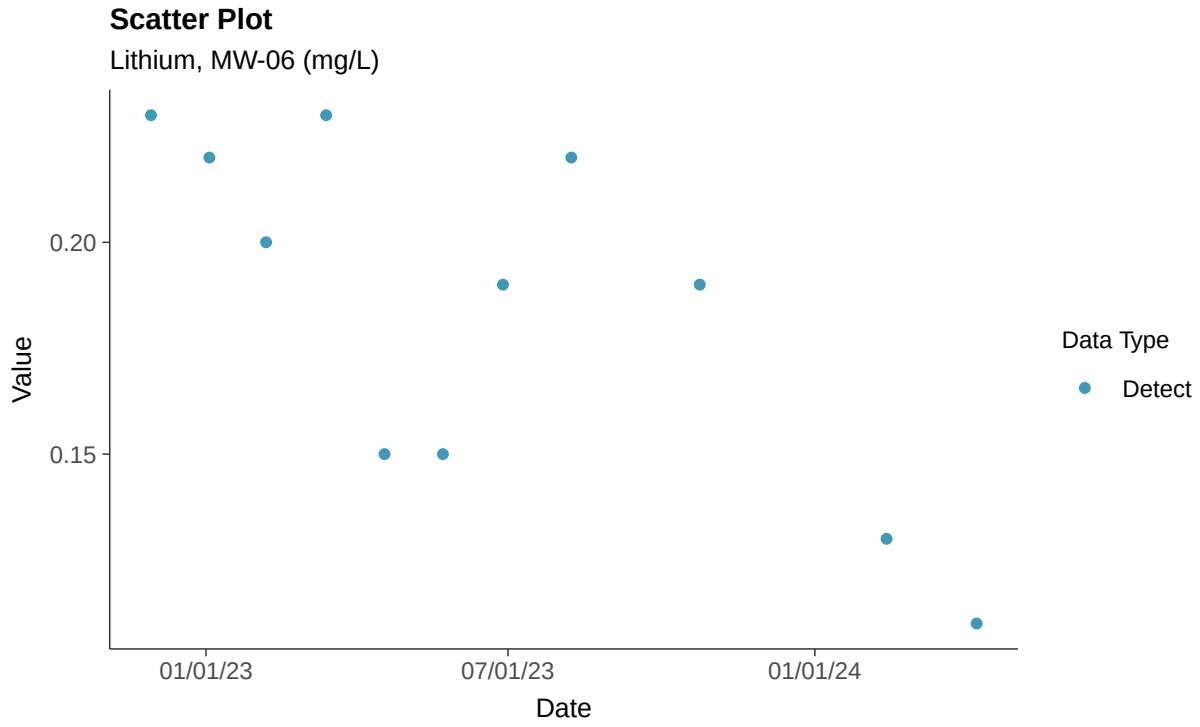
Trend Regression: Piecewise Linear-Linear-Linear

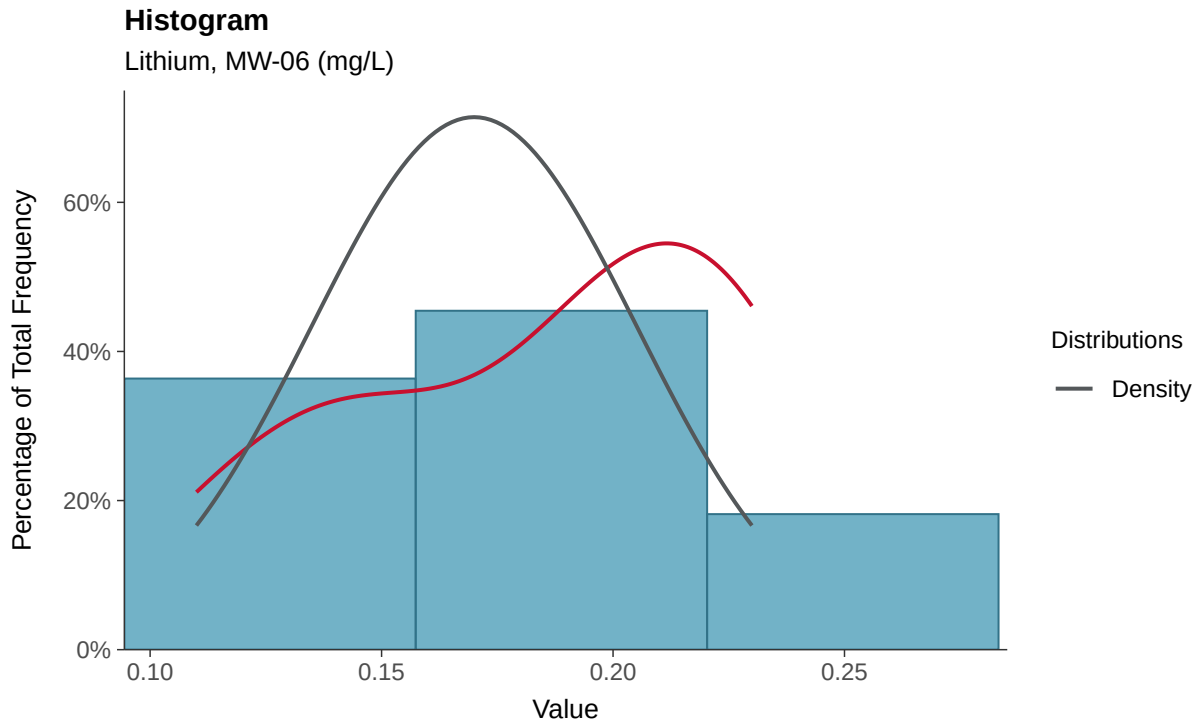
Lead, MW-06 (mg/L)



Appendix IV: Lithium, MW-06

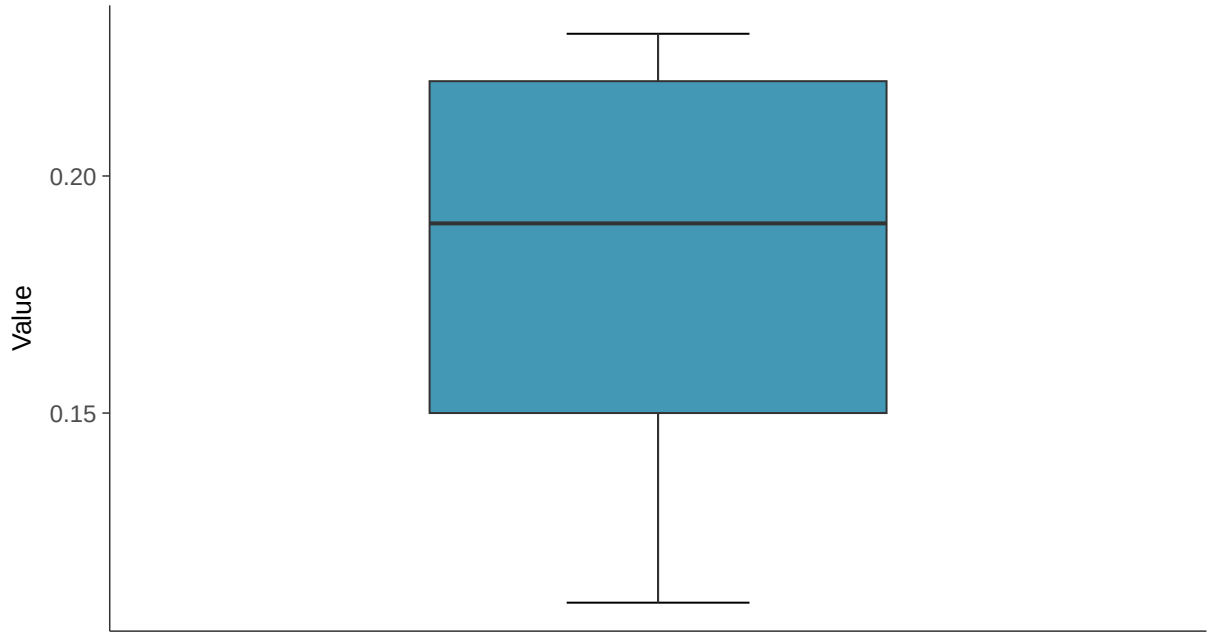
ID: 1_16_5_116





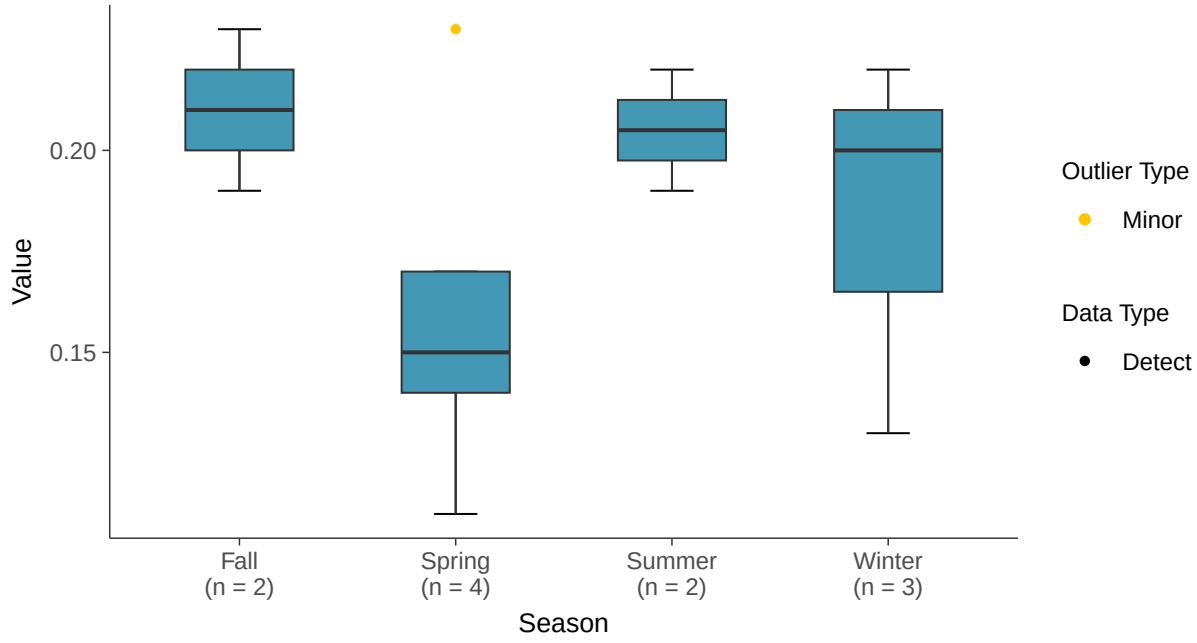
Boxplot

Lithium, MW-06 (mg/L)



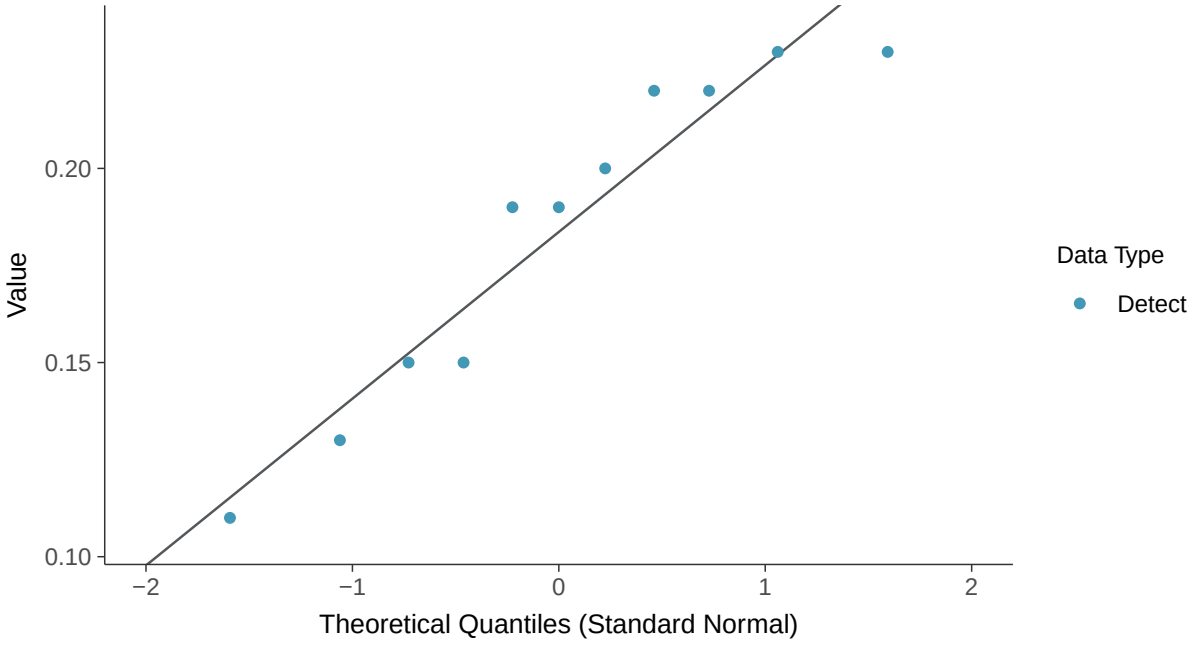
Boxplot by Season

Lithium, MW-06 (mg/L)



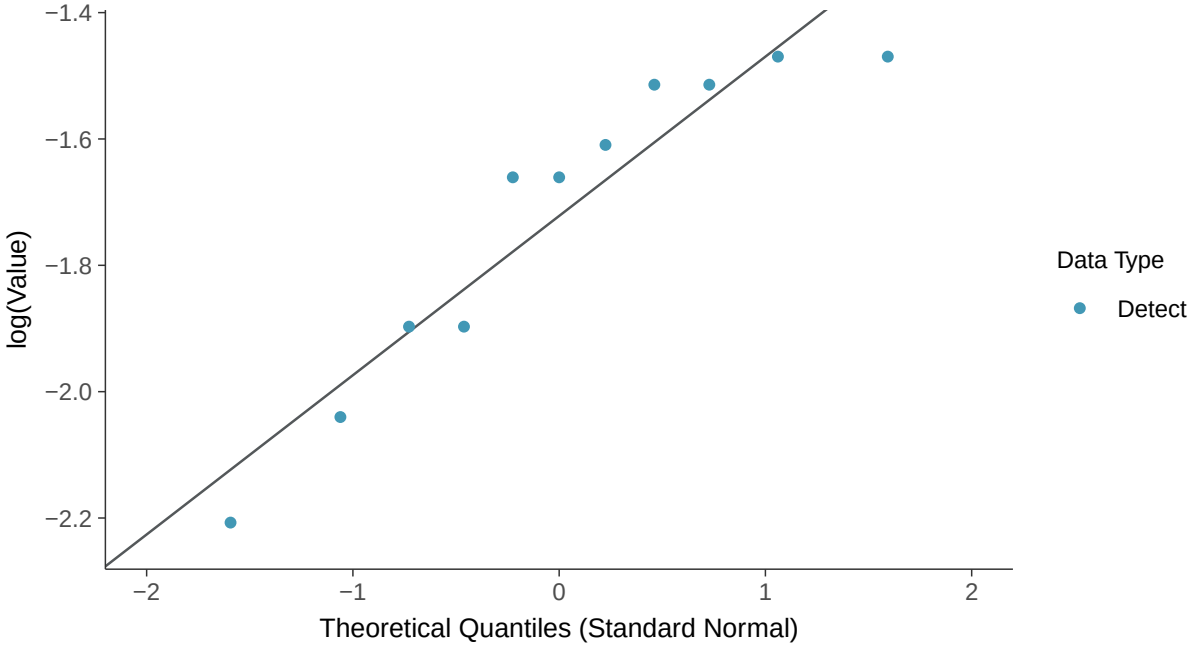
Normal Q-Q plot

Lithium, MW-06 (mg/L)



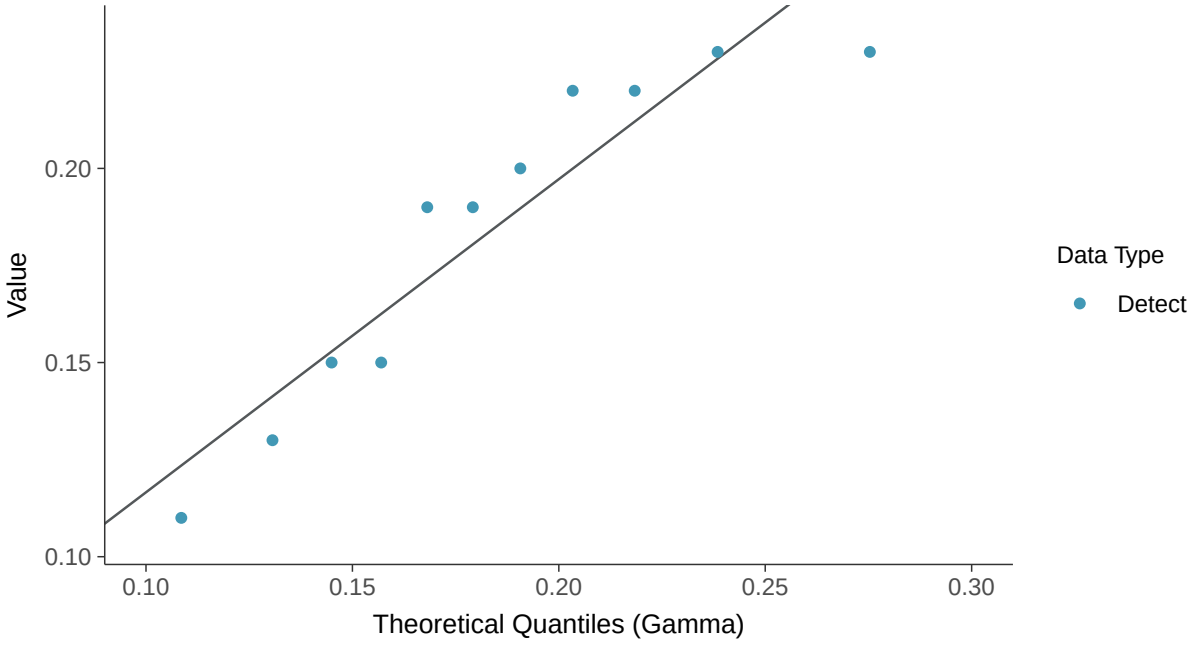
Lognormal Q-Q plot

Lithium, MW-06 (mg/L)



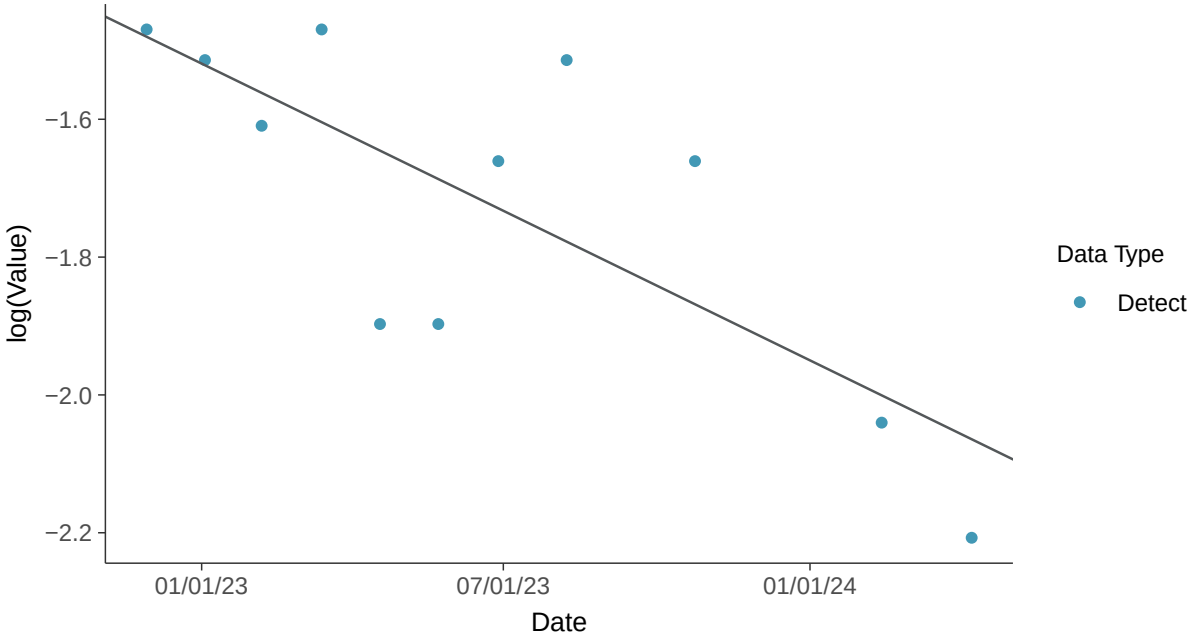
Gamma Q-Q plot

Lithium, MW-06 (mg/L)



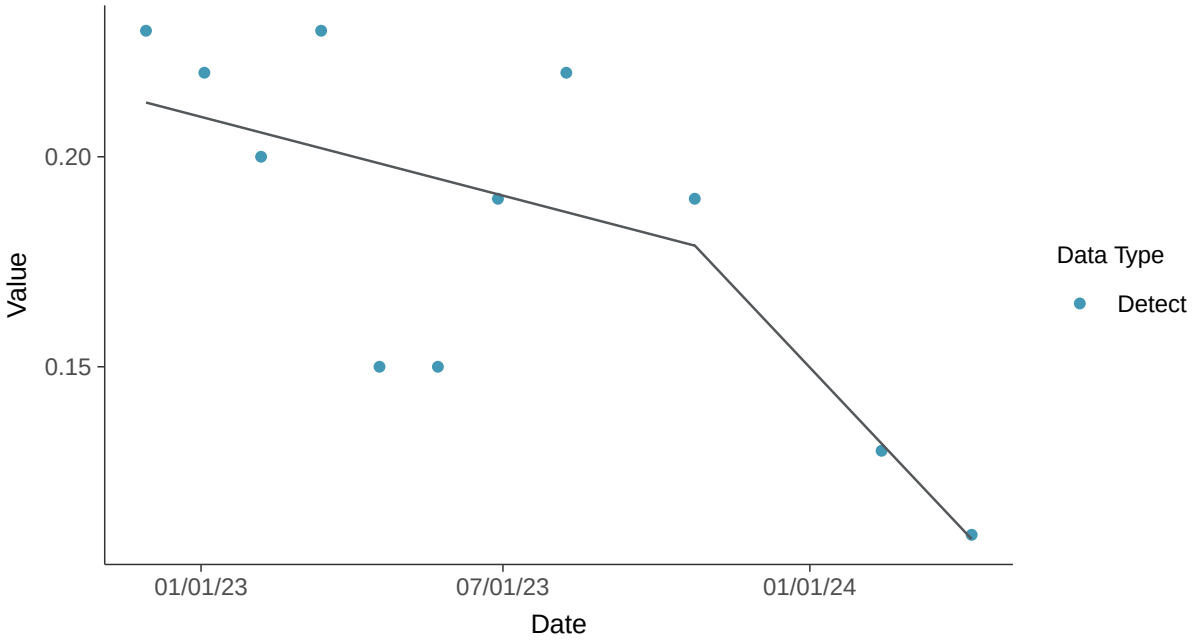
Trend Regression: Lognormal MLE

Lithium, MW-06 (mg/L)



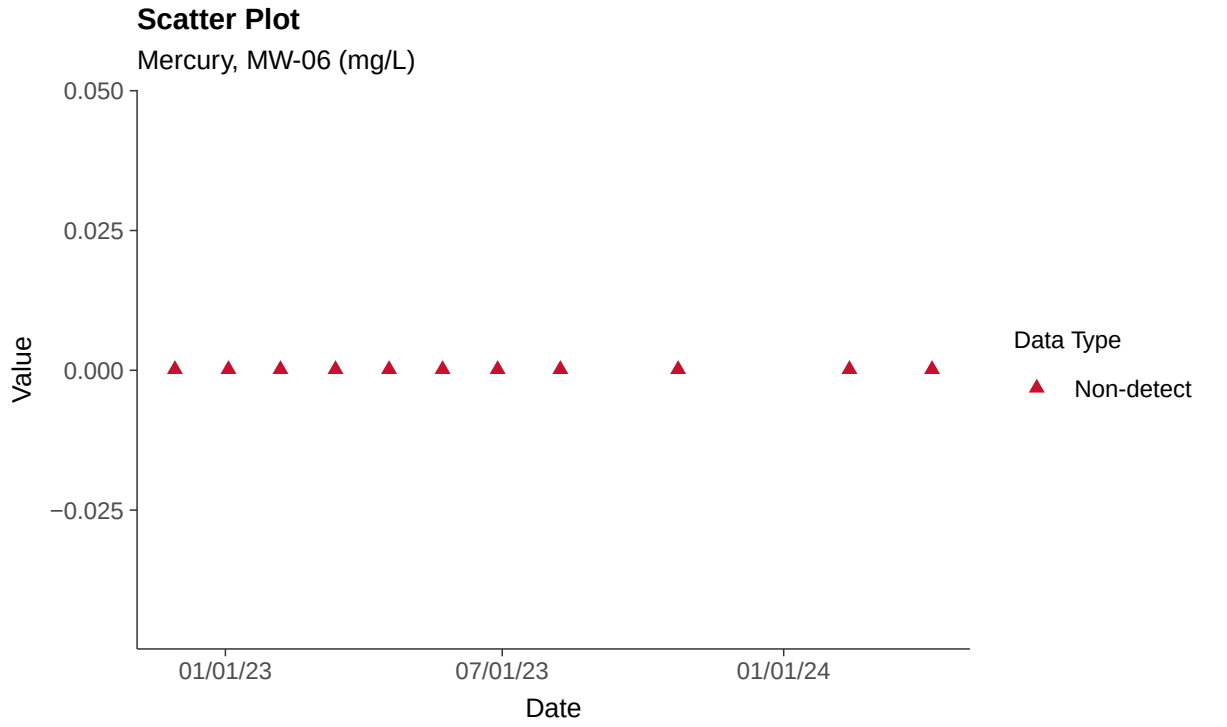
Trend Regression: Piecewise Linear-Linear

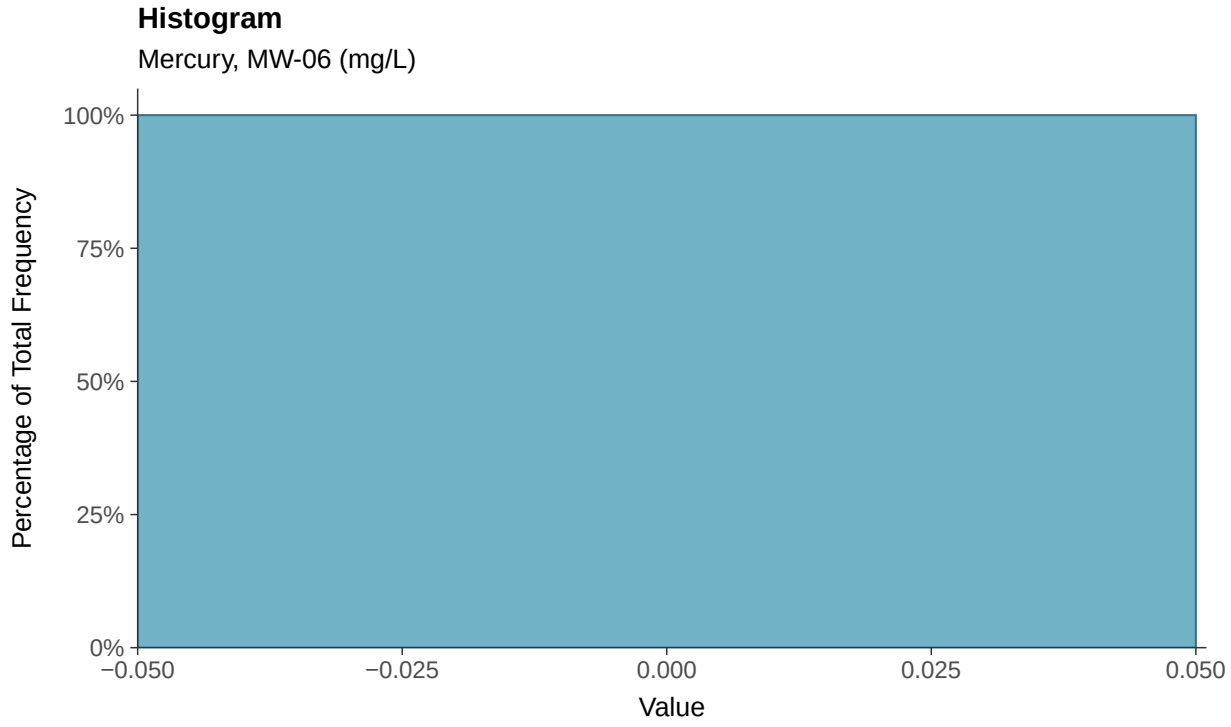
Lithium, MW-06 (mg/L)

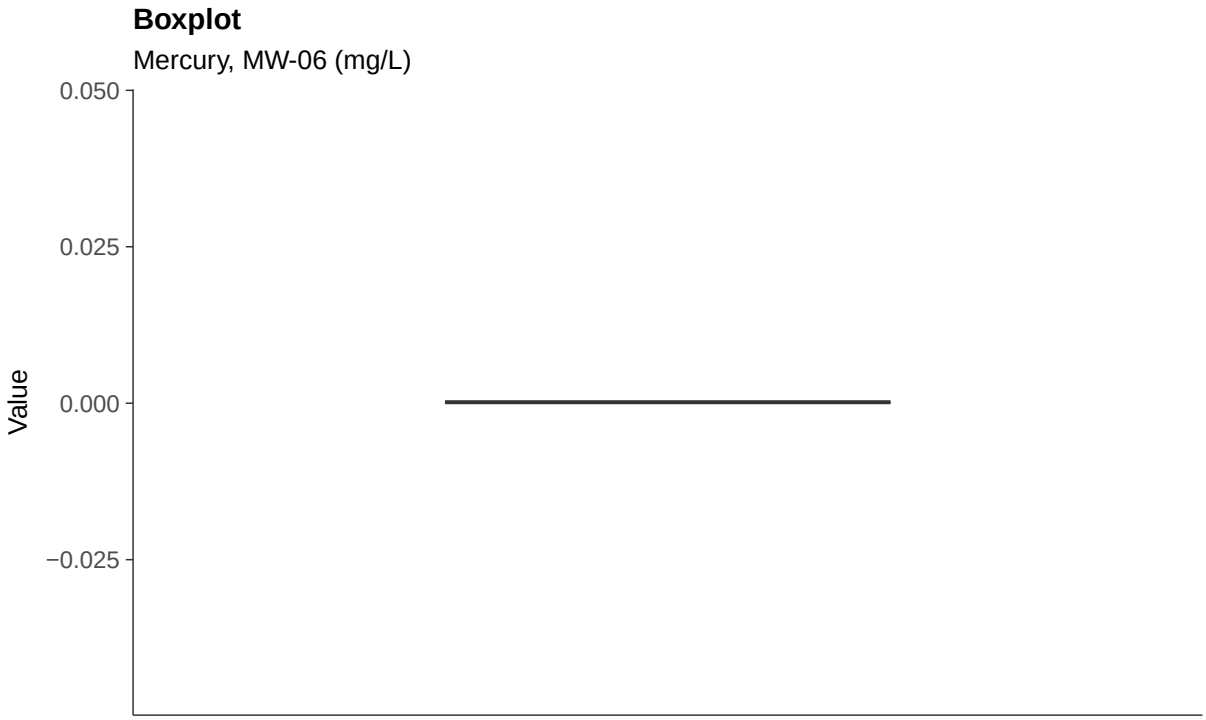


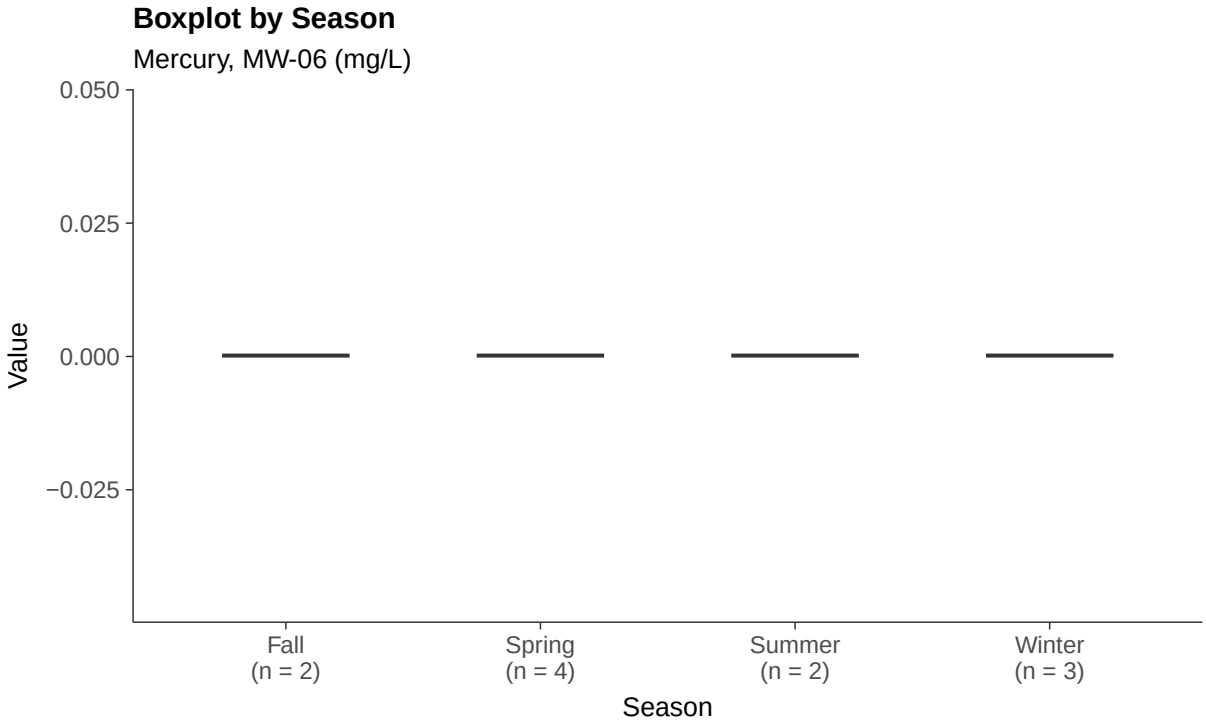
Appendix IV: Mercury, MW-06

ID: 1_16_5_117



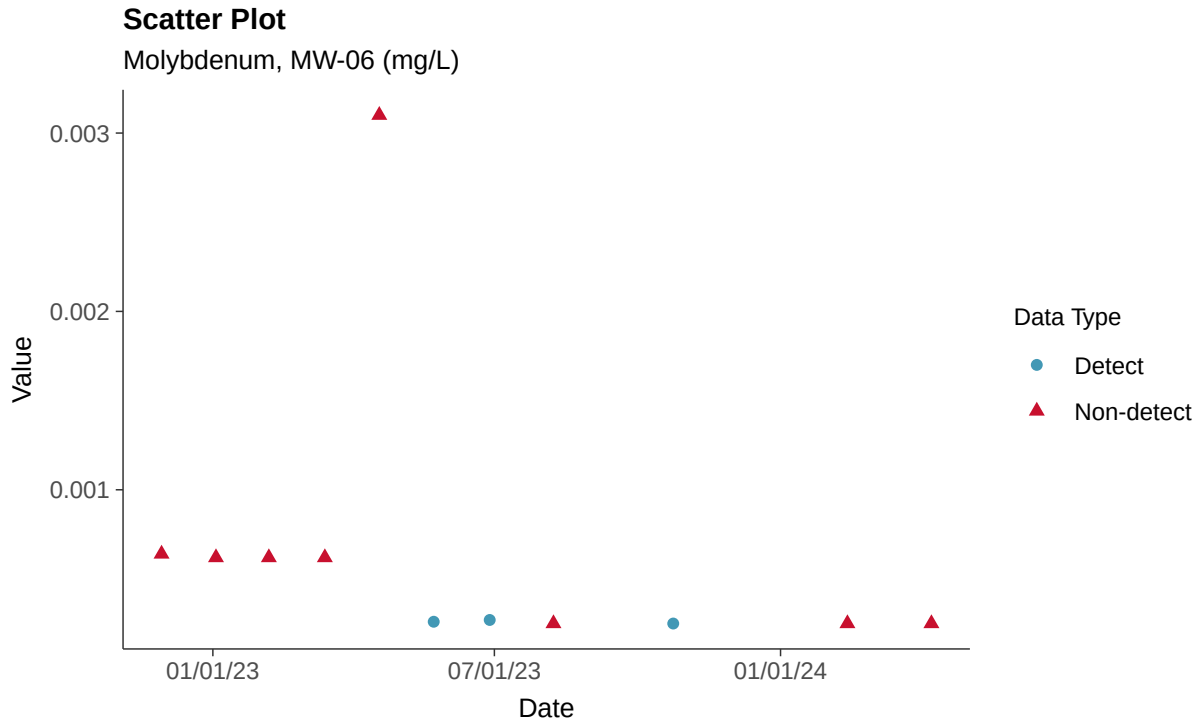


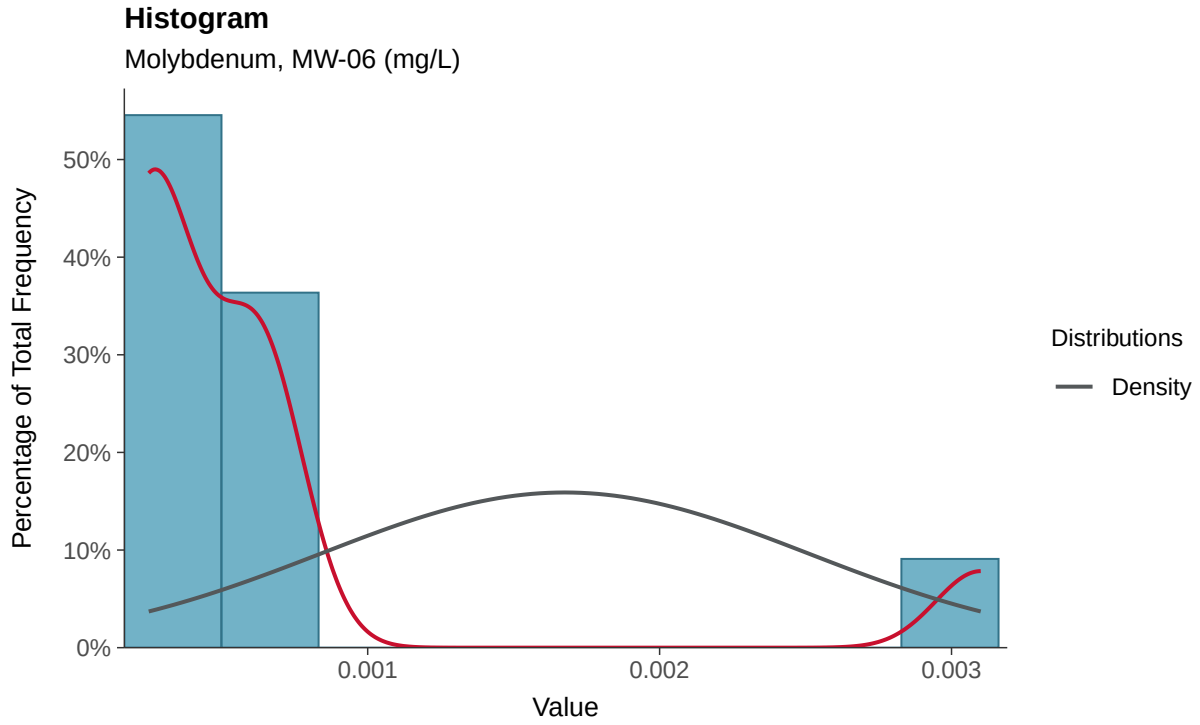

Boxplot
Mercury, MW-06 (mg/L)
0.050
0.025
0.000
−0.025
Value


Boxplot by Season
Mercury, MW-06 (mg/L)
0.050
0.025
0.000
−0.025
Value
Fall
(n = 2)
Spring
(n = 4)
Summer
(n = 2)
Winter
(n = 3)
Season

Appendix IV: Molybdenum, MW-06

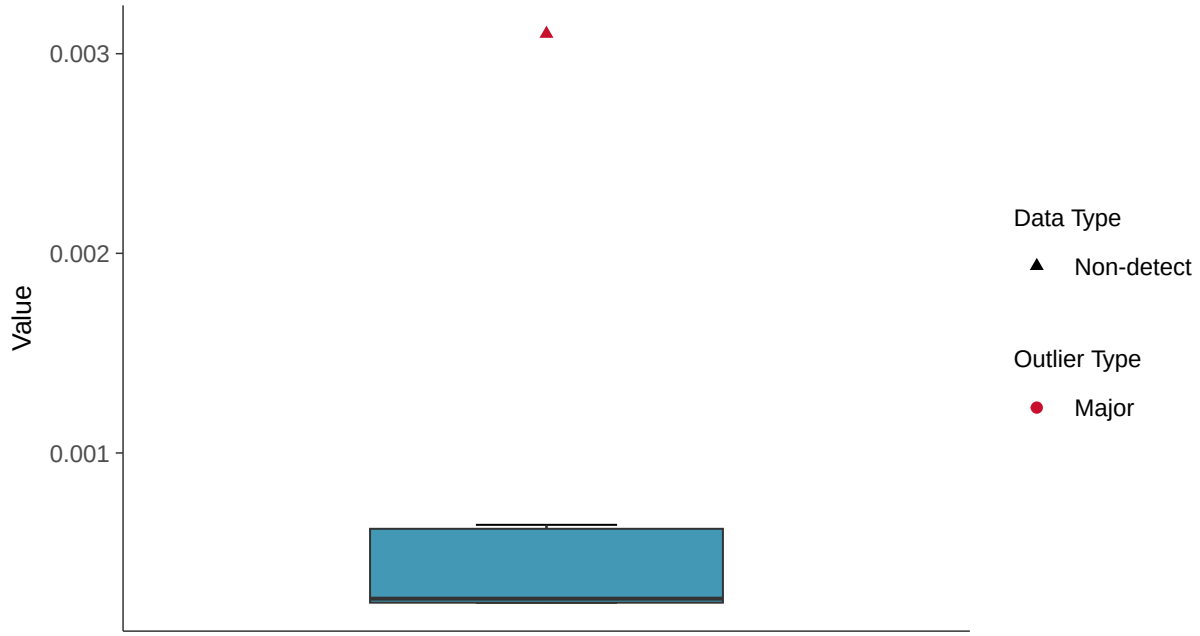
ID: 1_16_5_118





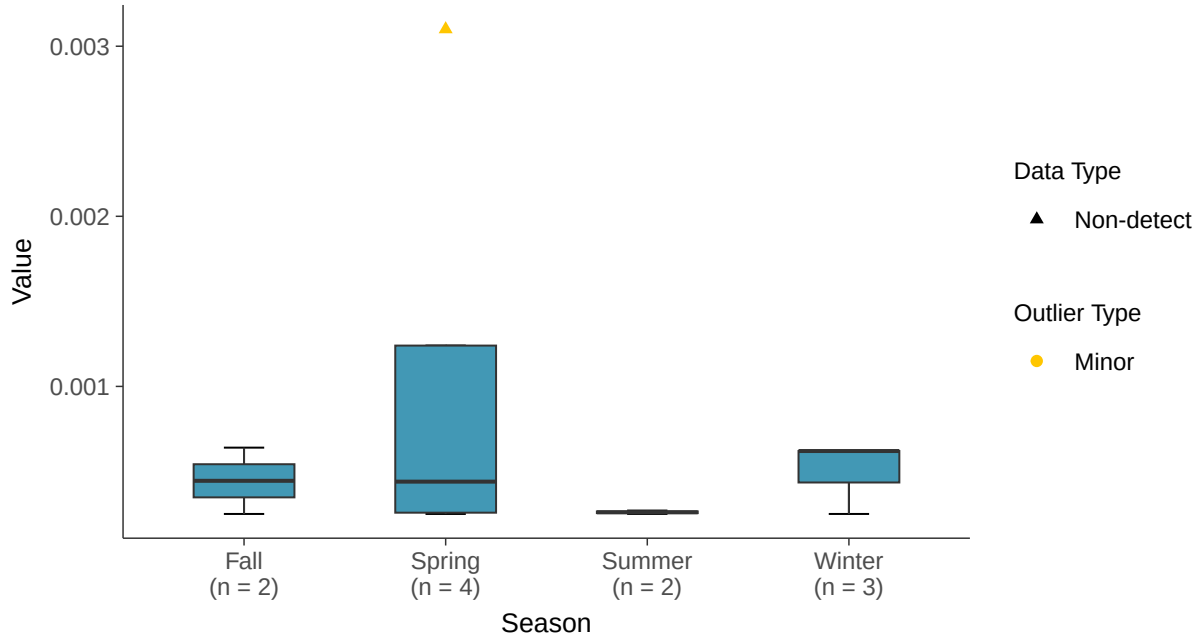
Boxplot

Molybdenum, MW-06 (mg/L)



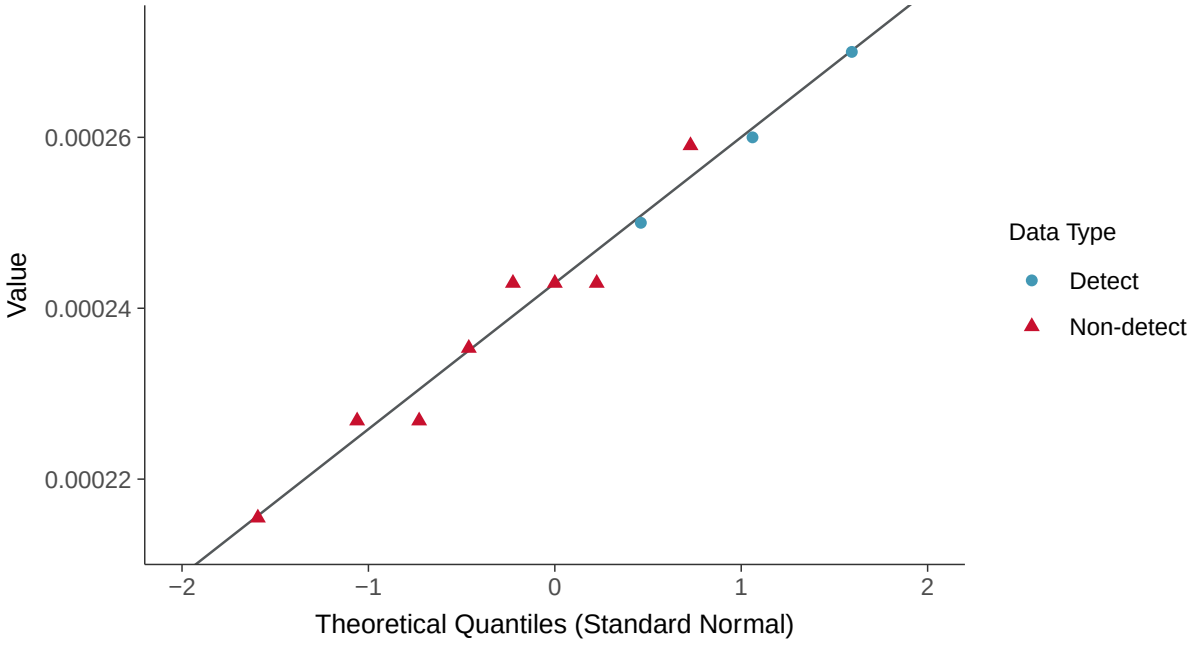
Boxplot by Season

Molybdenum, MW-06 (mg/L)



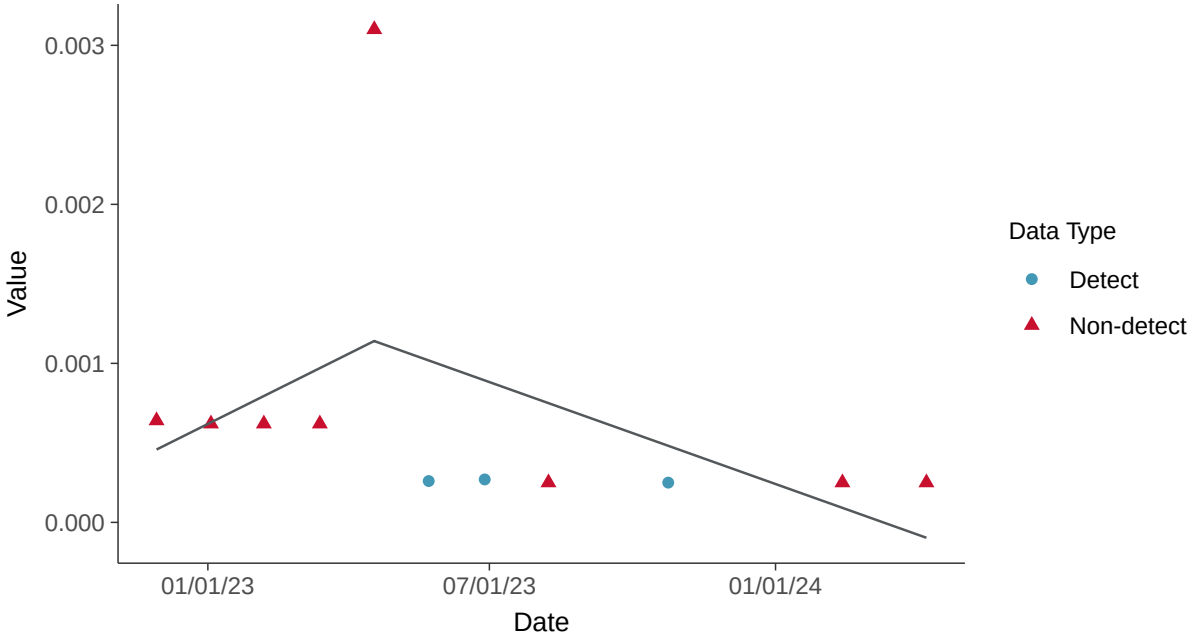
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-06 (mg/L)



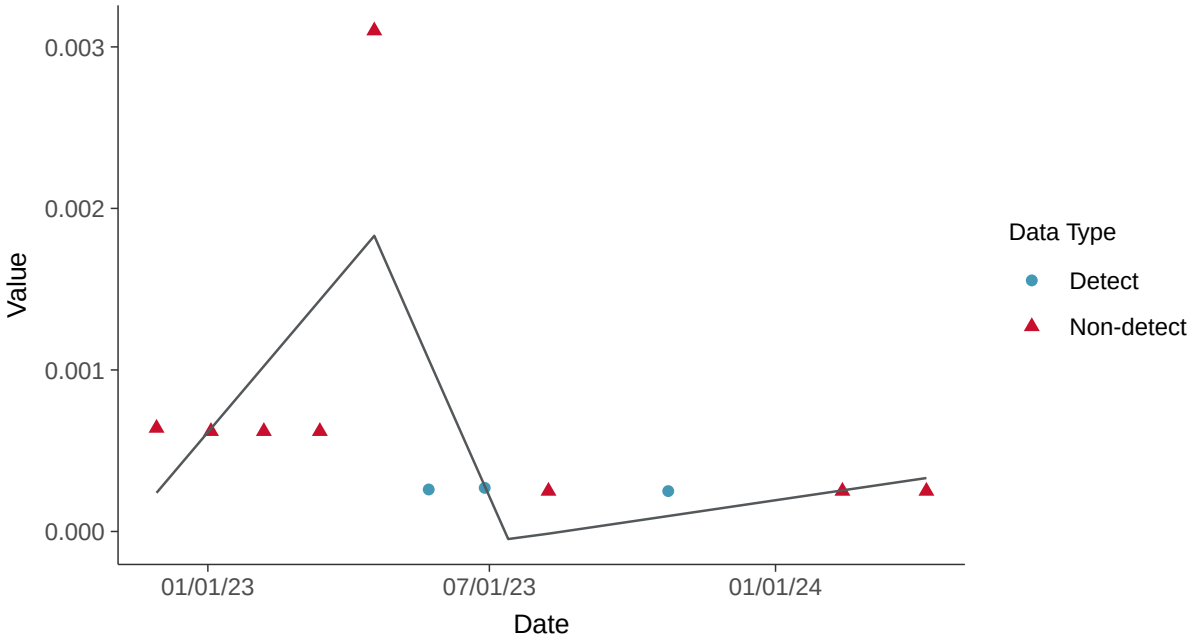
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-06 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-06 (mg/L)

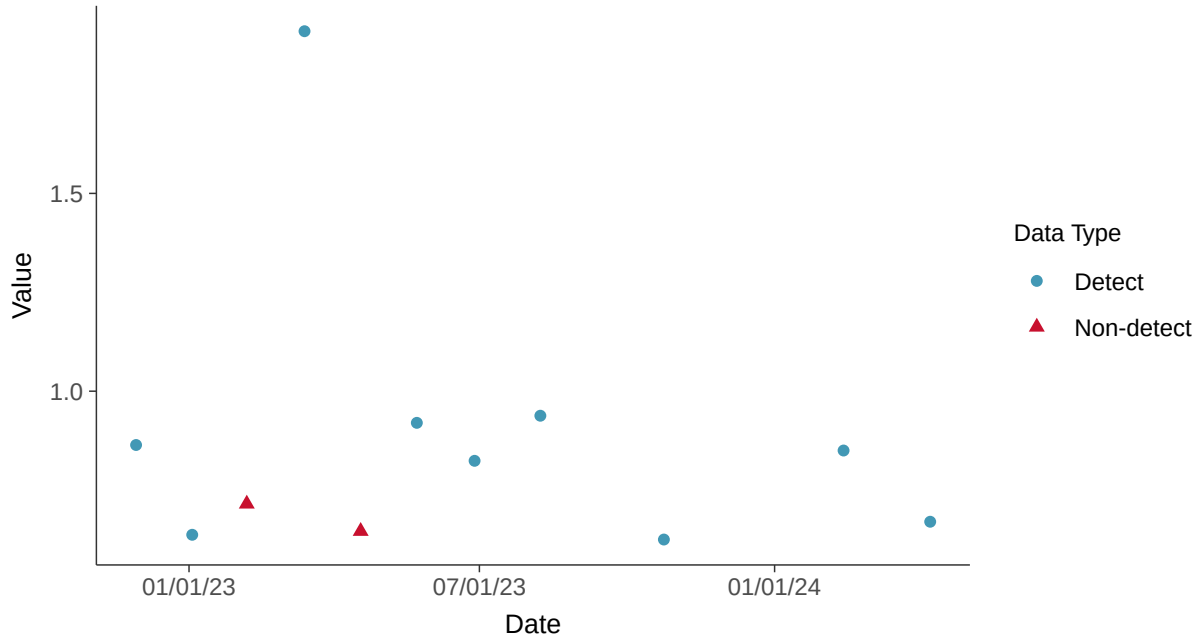


Appendix IV: Radium 226 and 228, MW-06

ID: 1_16_5_121

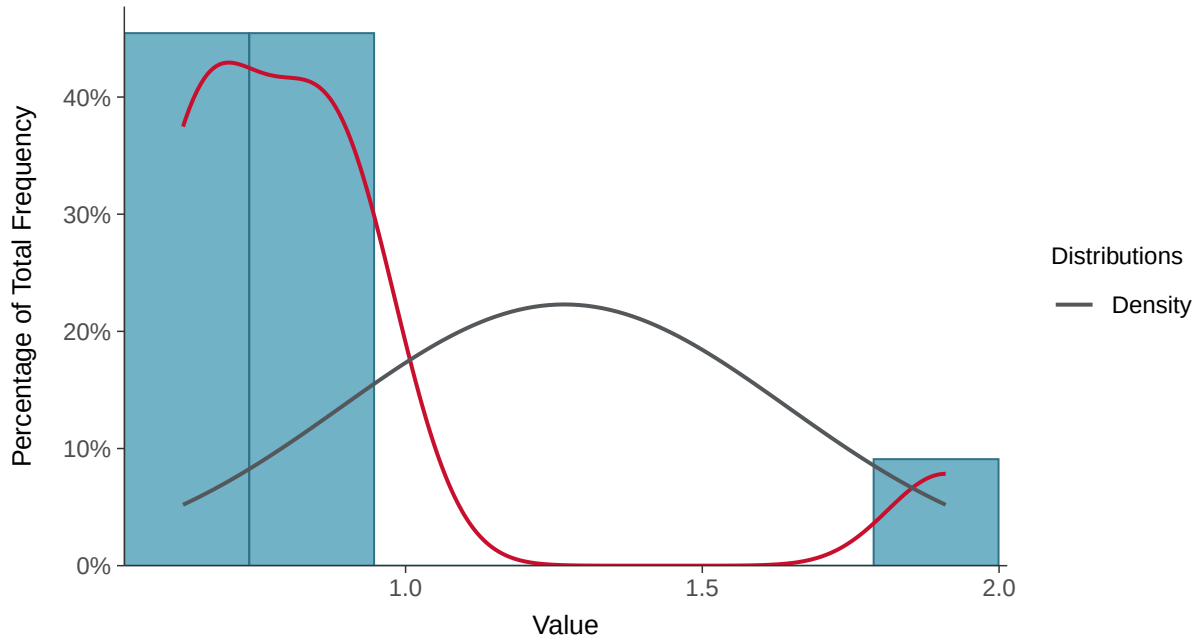
Scatter Plot

Radium 226 and 228, MW-06 (pCi/L)



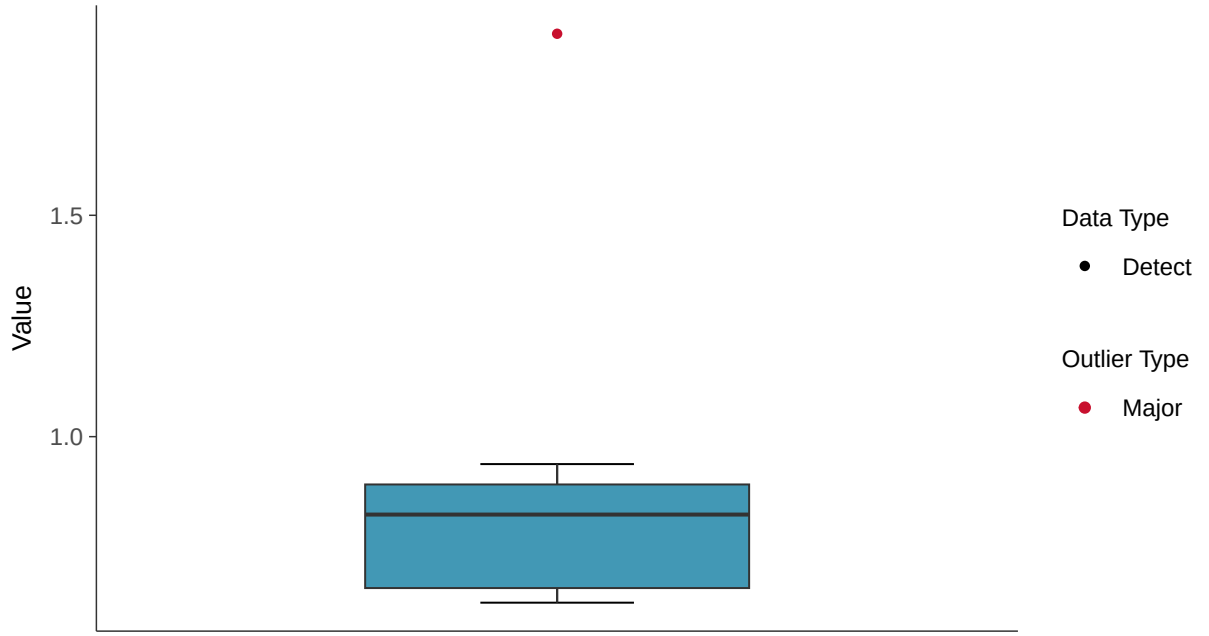
Histogram

Radium 226 and 228, MW-06 (pCi/L)



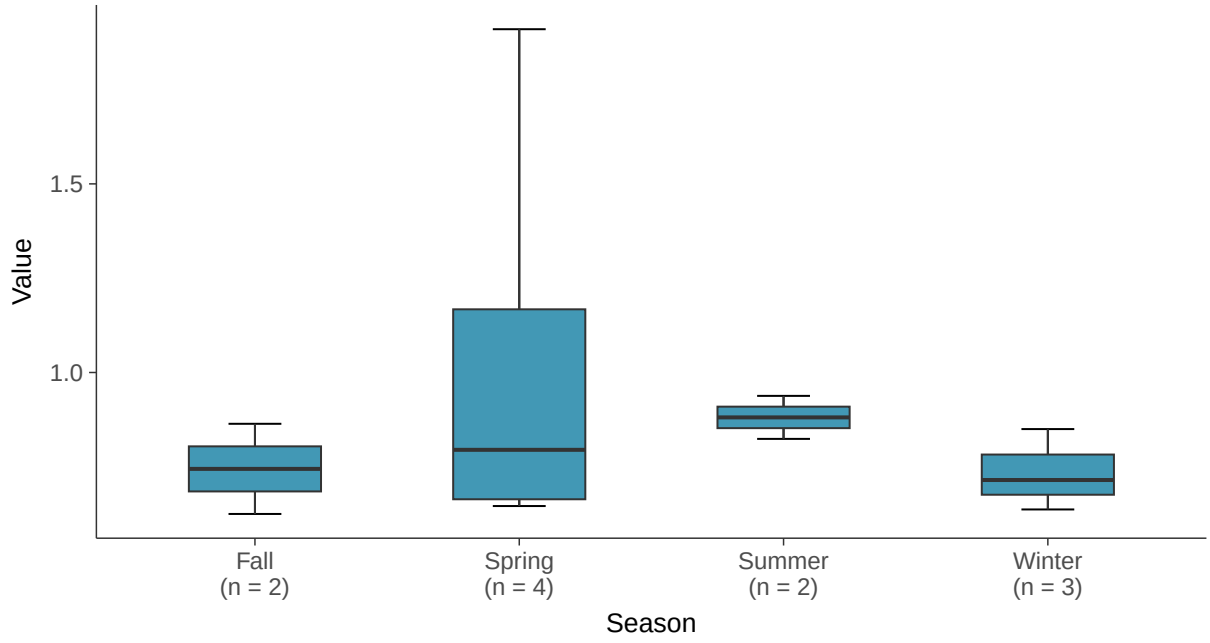
Boxplot

Radium 226 and 228, MW-06 (pCi/L)



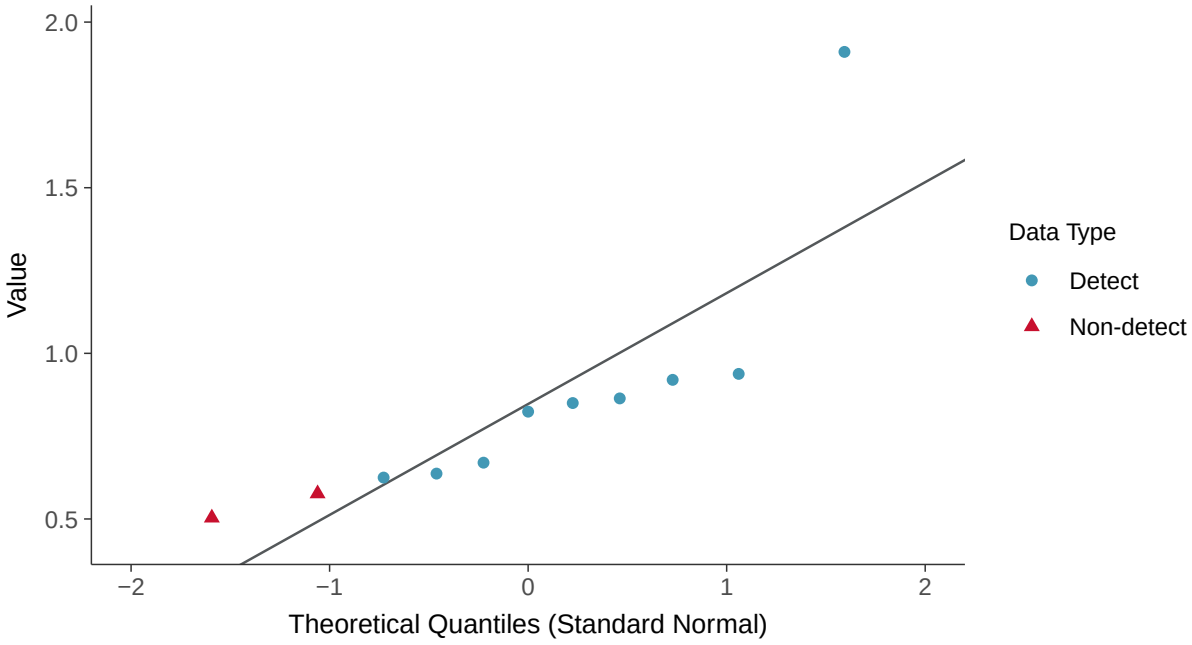
Boxplot by Season

Radium 226 and 228, MW-06 (pCi/L)



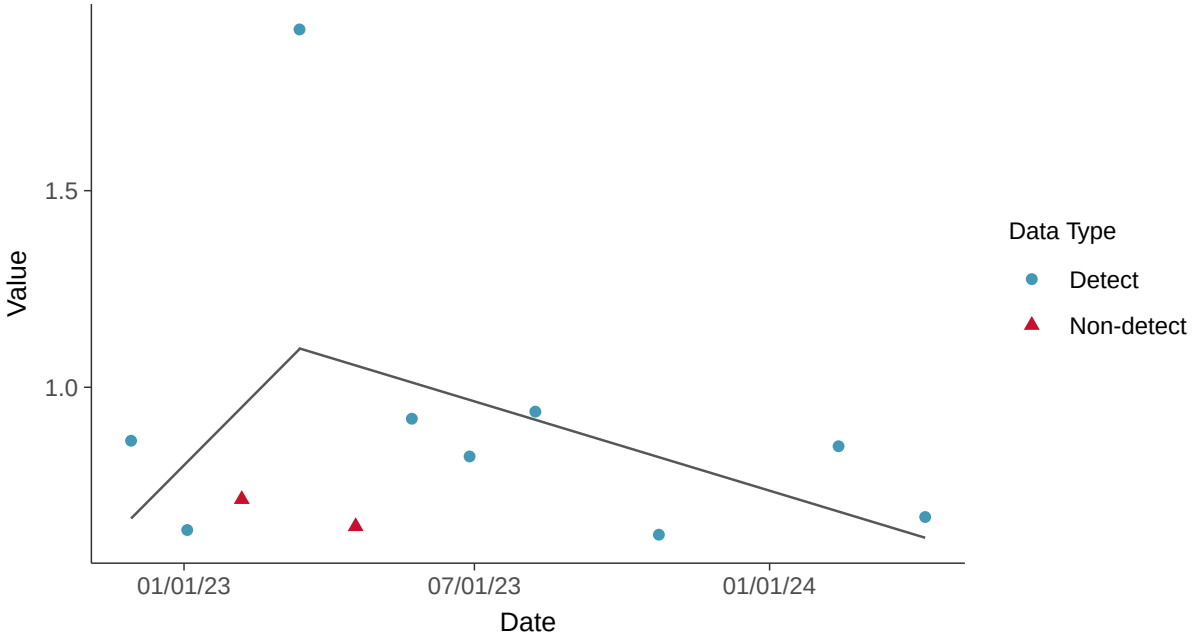
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-06 (pCi/L)



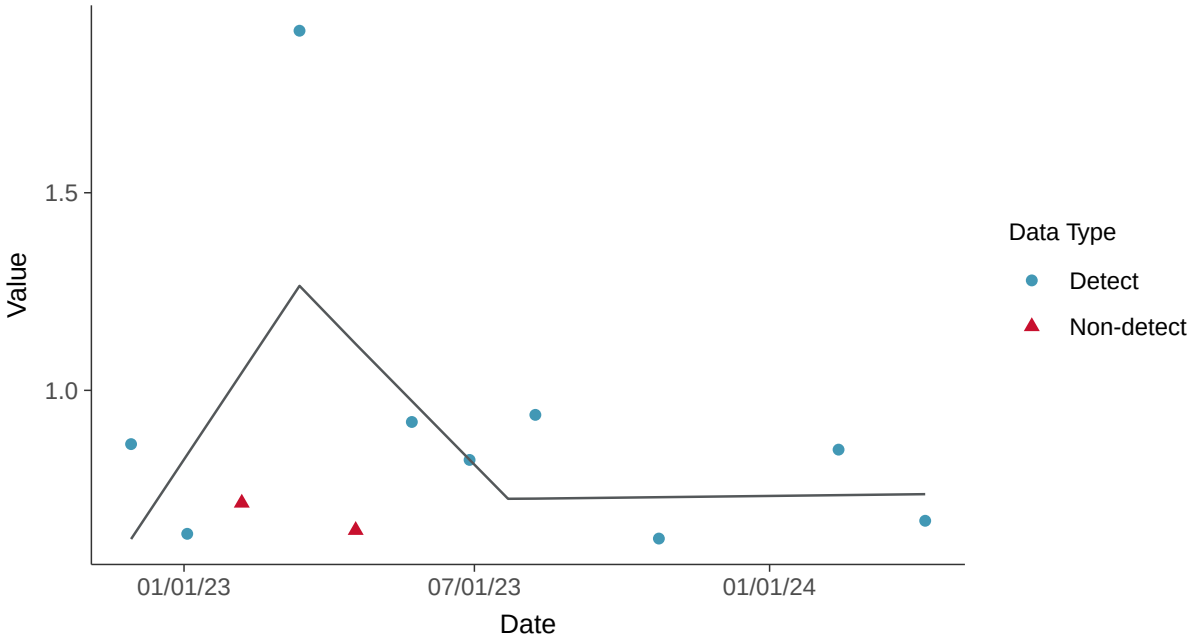
Trend Regression: Piecewise Linear-Linear

Radium 226 and 228, MW-06 (pCi/L)



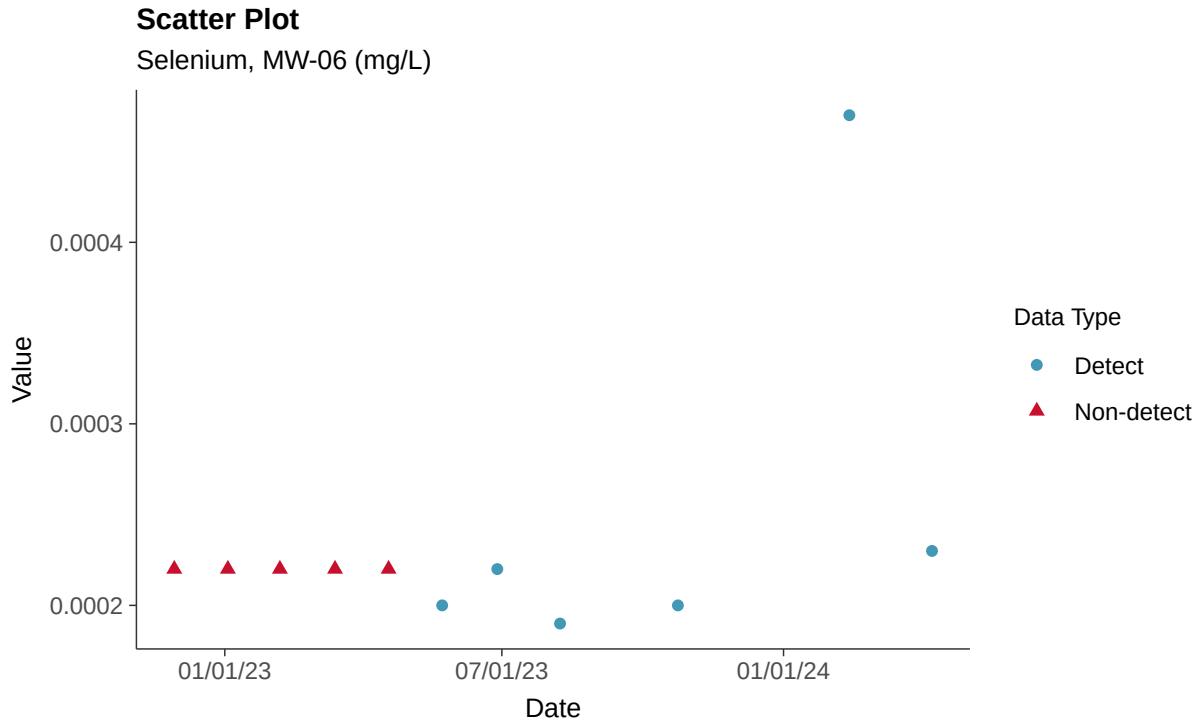
Trend Regression: Piecewise Linear-Linear-Linear

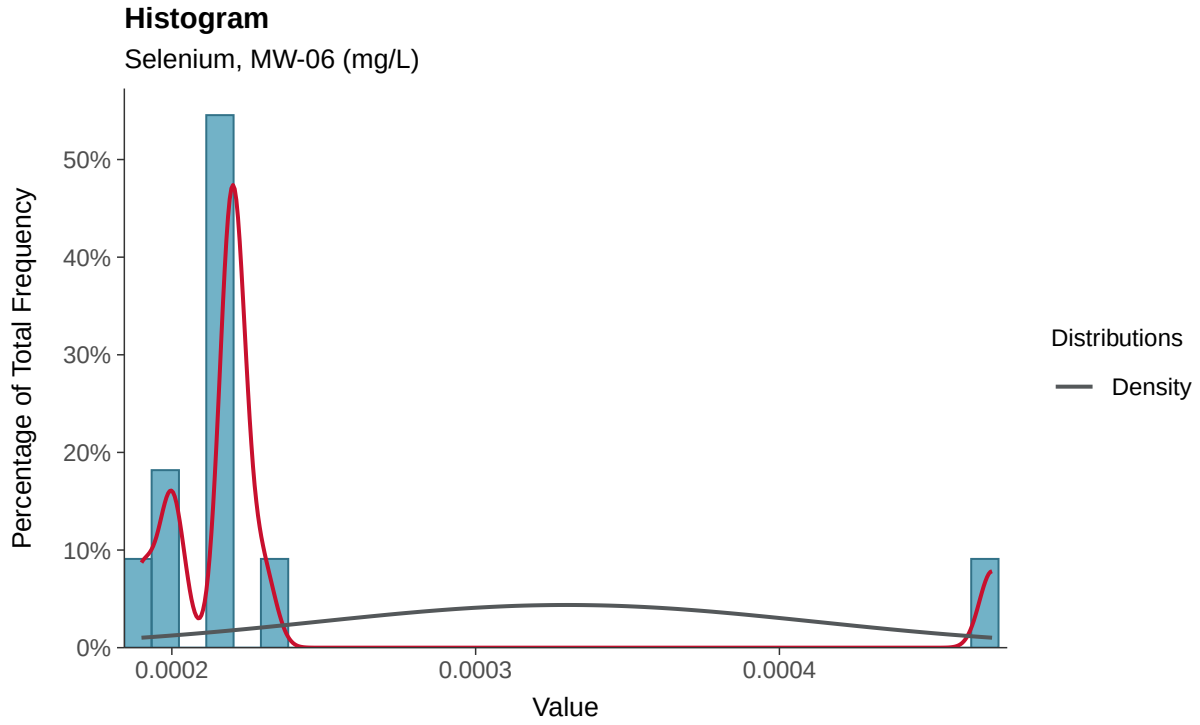
Radium 226 and 228, MW-06 (pCi/L)



Appendix IV: Selenium, MW-06

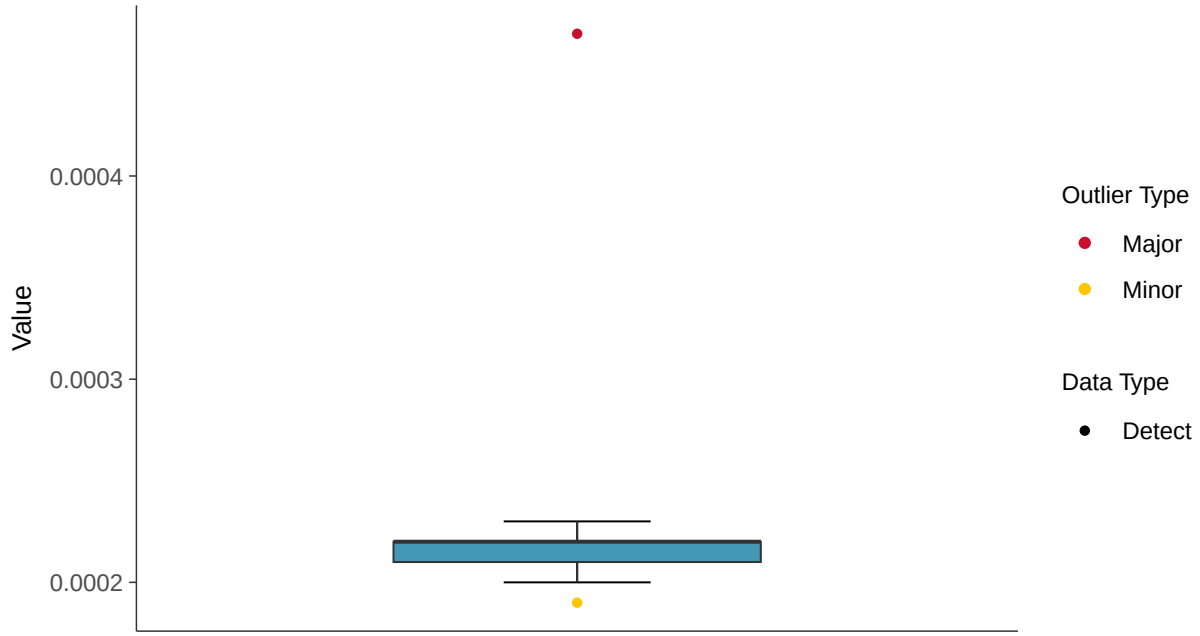
ID: 1_16_5_122





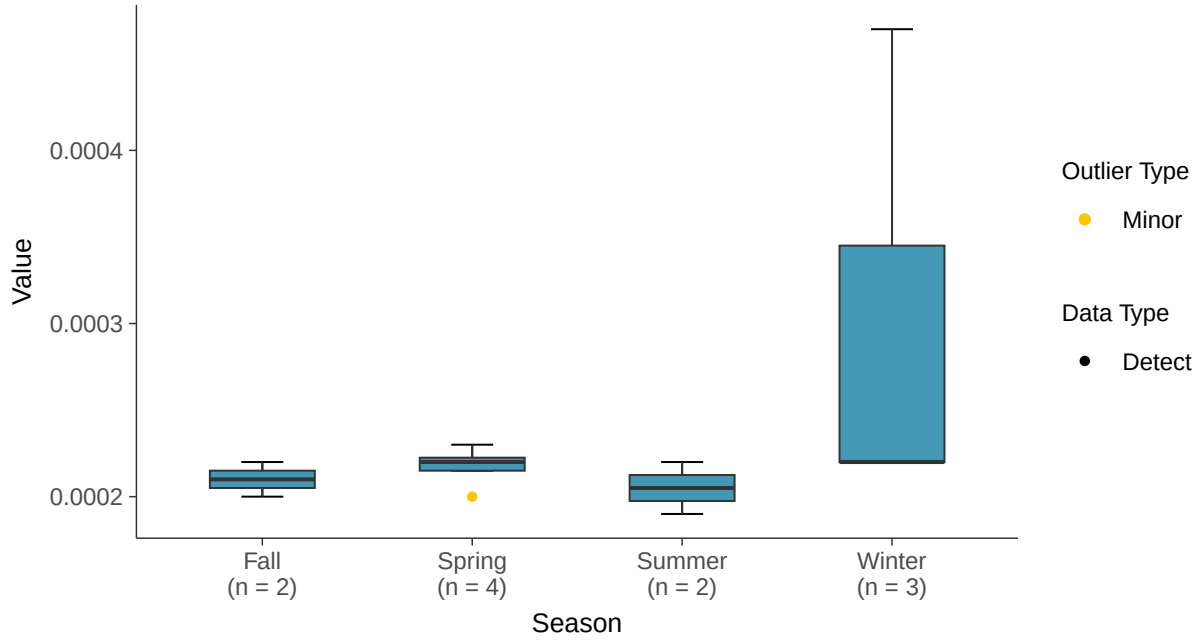
Boxplot

Selenium, MW-06 (mg/L)



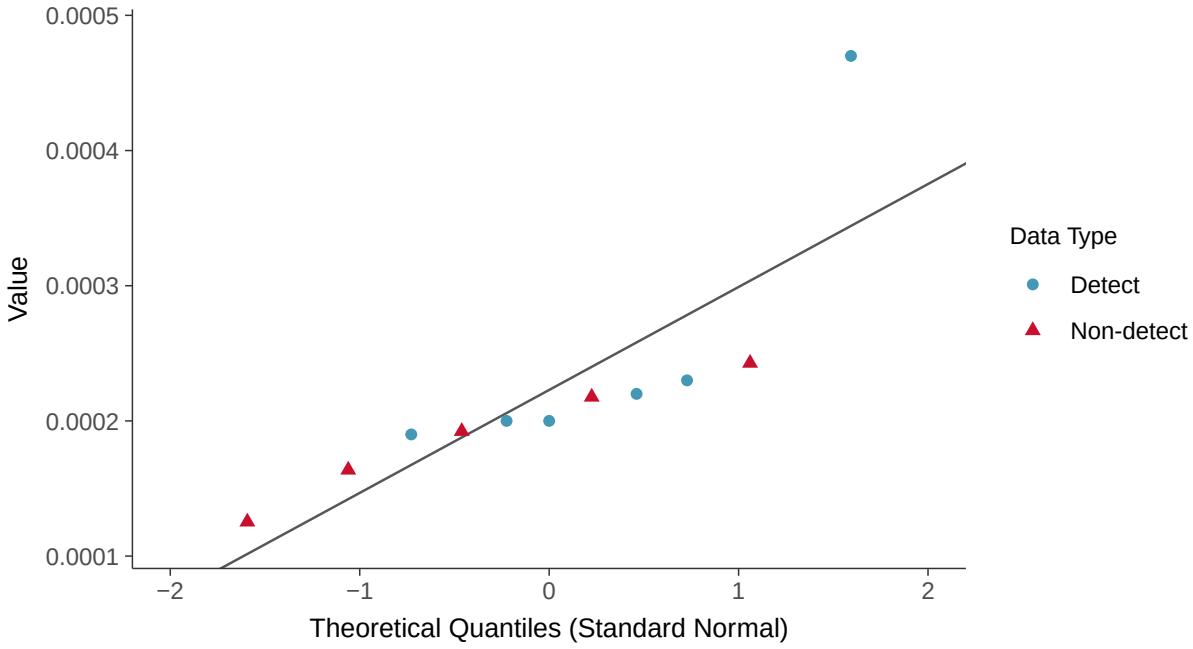
Boxplot by Season

Selenium, MW-06 (mg/L)



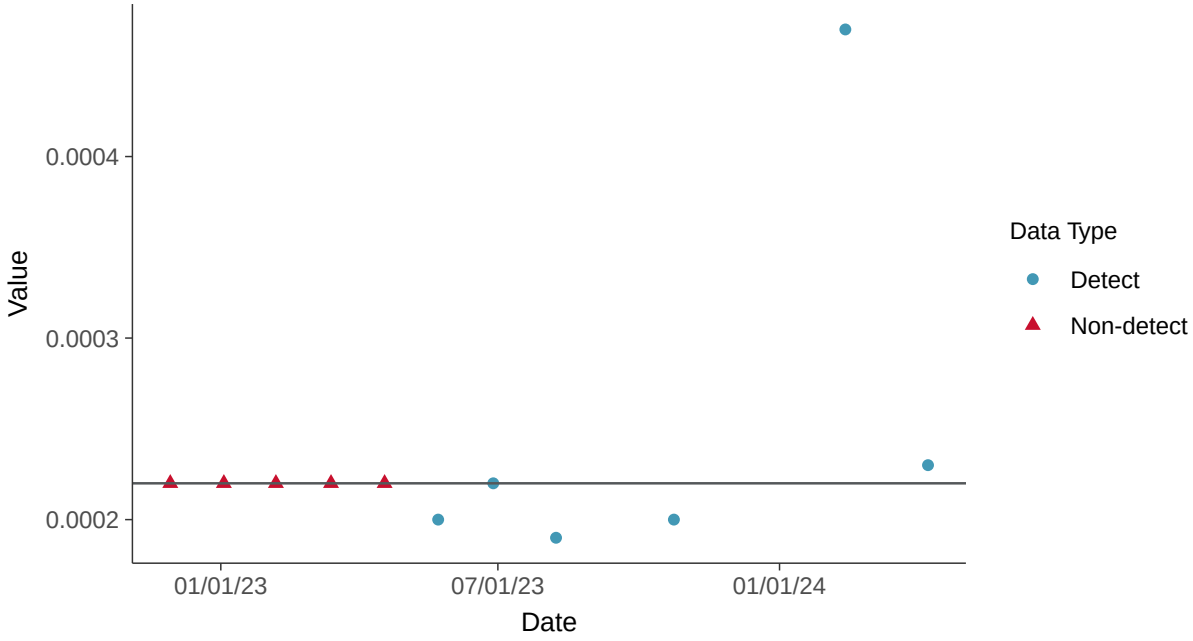
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-06 (mg/L)



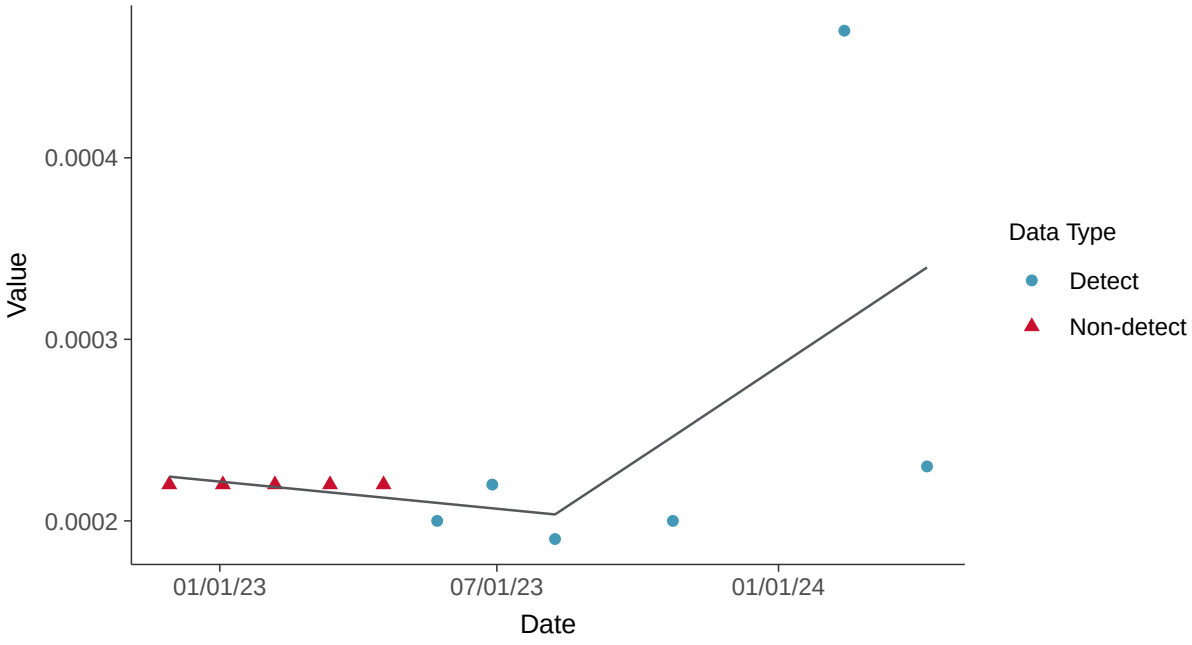
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Selenium, MW-06 (mg/L)



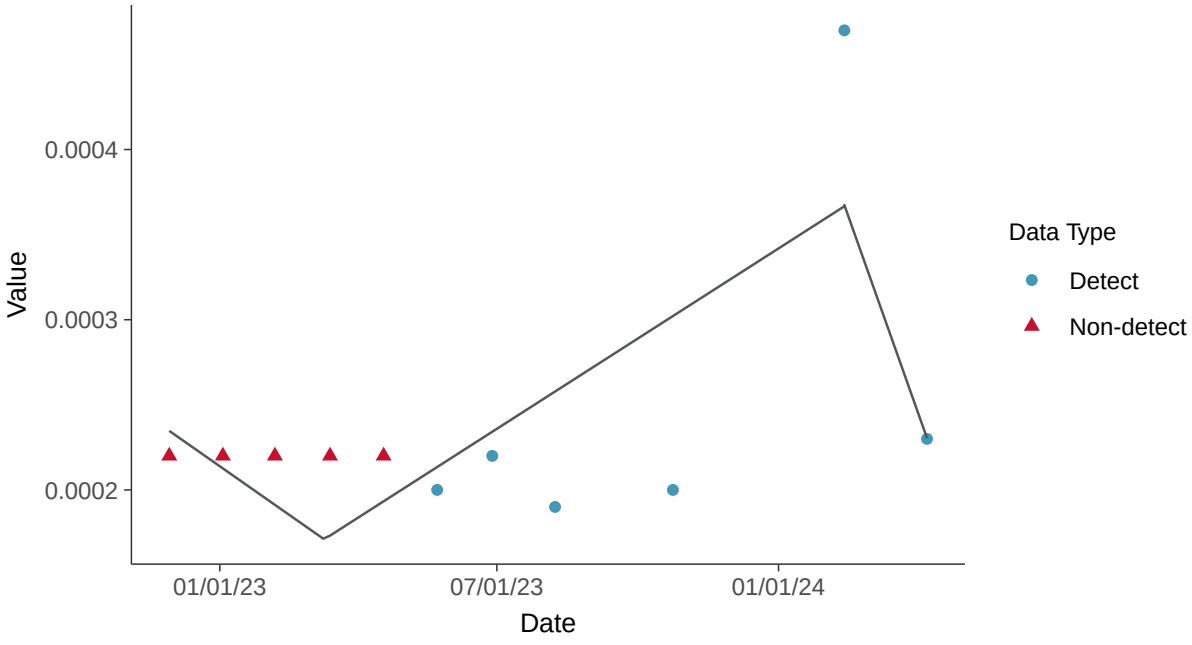
Trend Regression: Piecewise Linear-Linear

Selenium, MW-06 (mg/L)



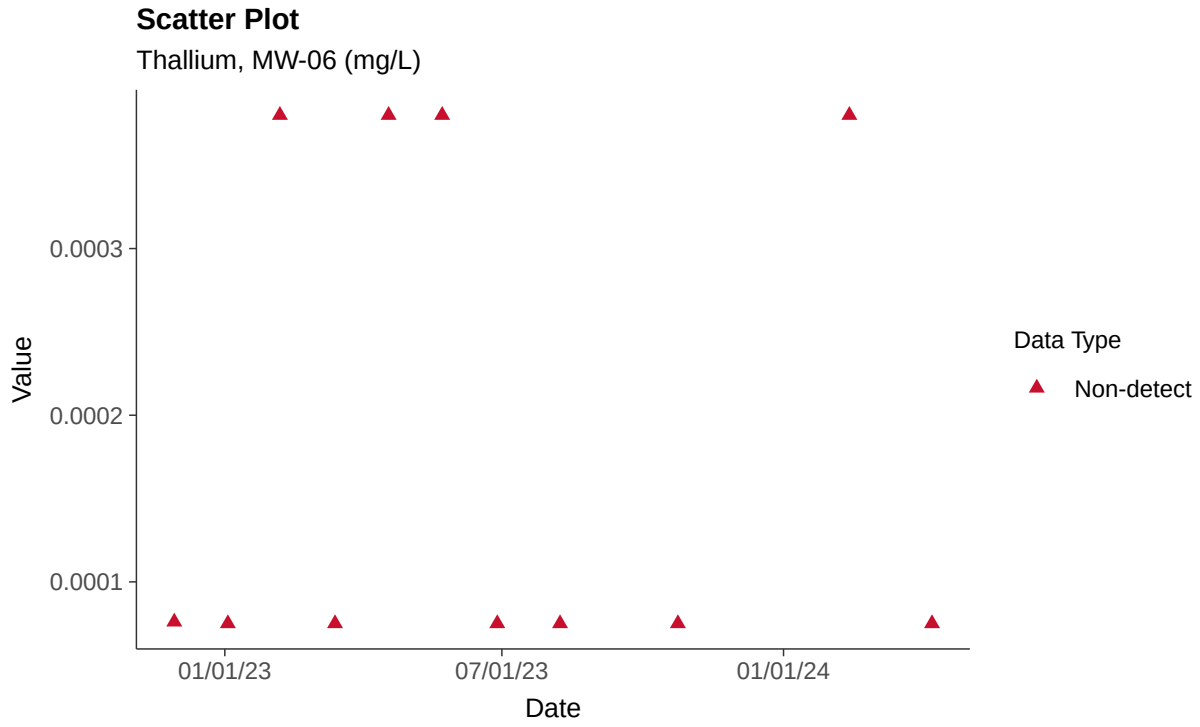
Trend Regression: Piecewise Linear-Linear-Linear

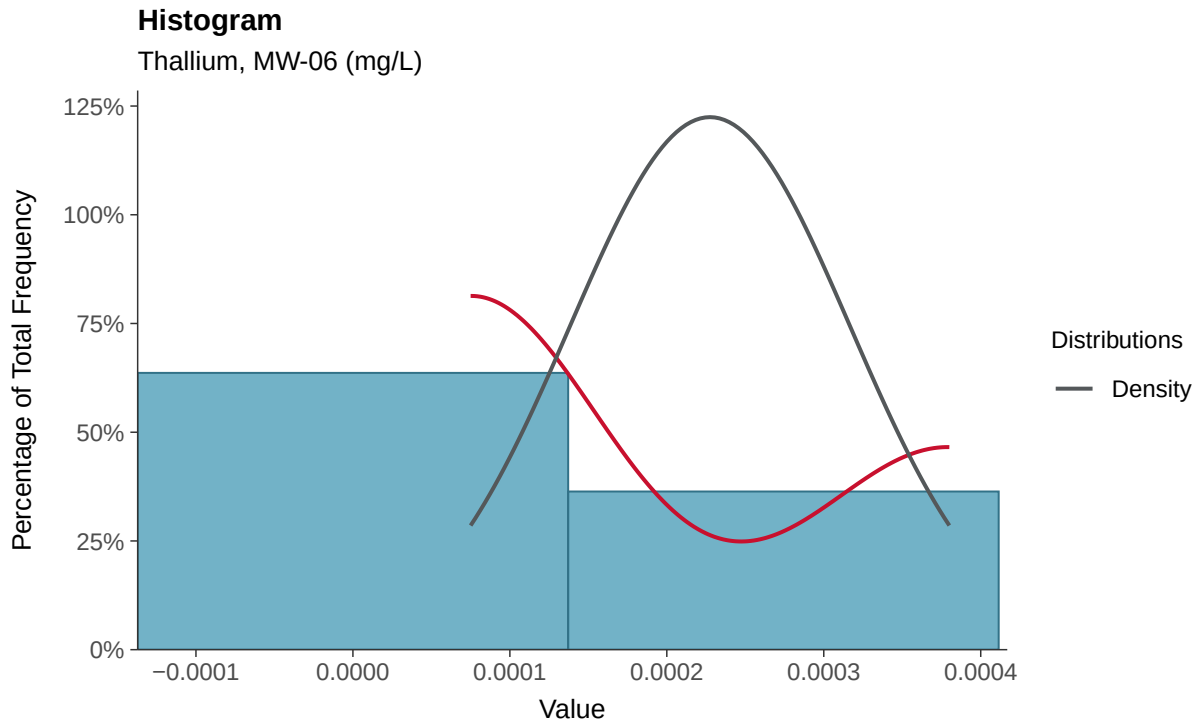
Selenium, MW-06 (mg/L)



Appendix IV: Thallium, MW-06

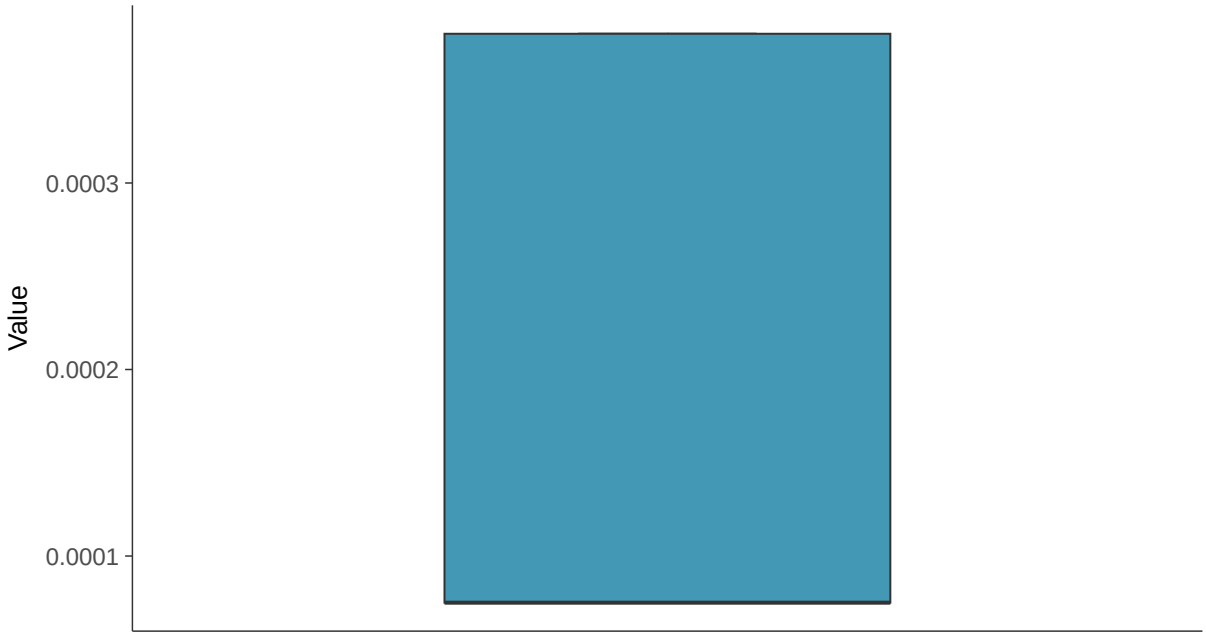
ID: 1_16_5_125





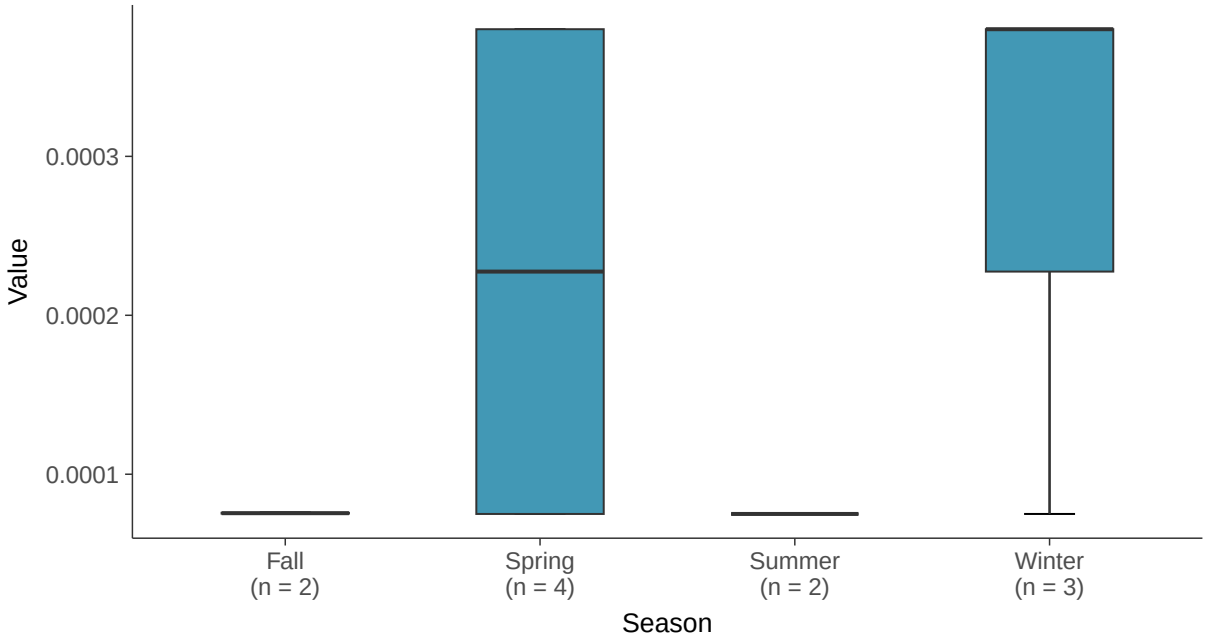
Boxplot

Thallium, MW-06 (mg/L)



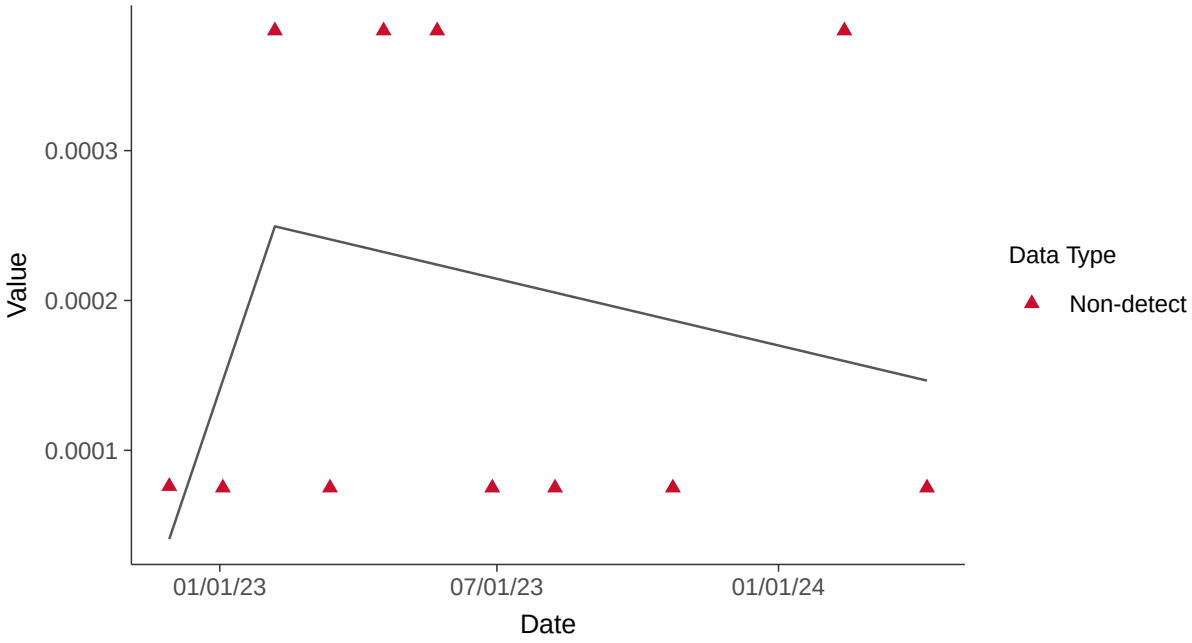
Boxplot by Season

Thallium, MW-06 (mg/L)



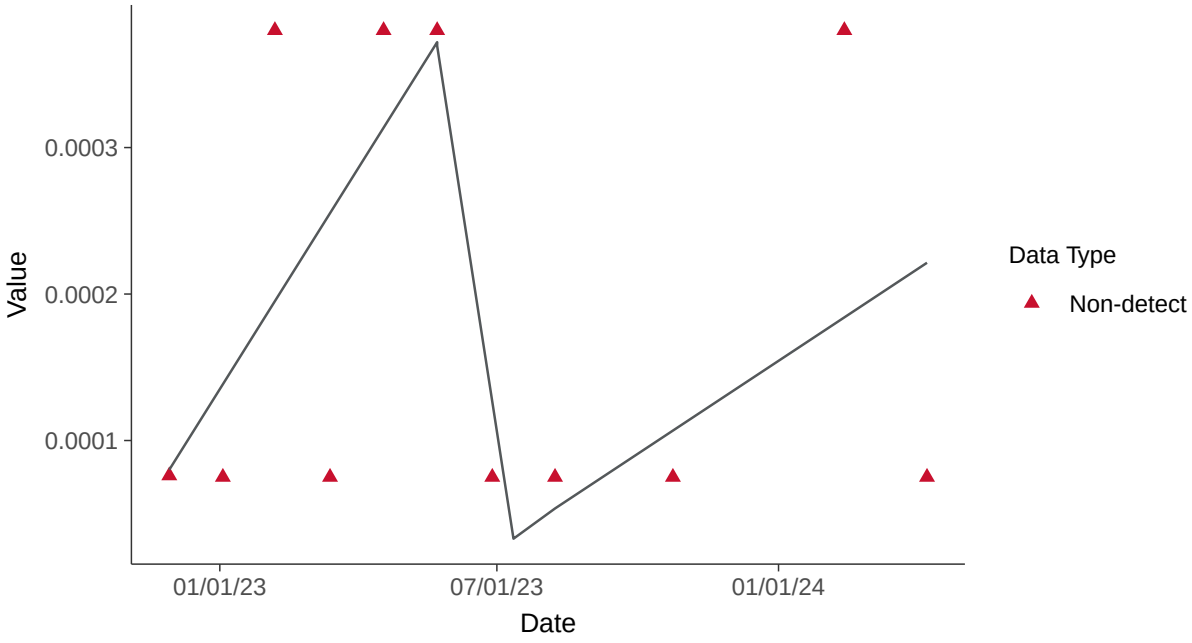
Trend Regression: Piecewise Linear-Linear

Thallium, MW-06 (mg/L)



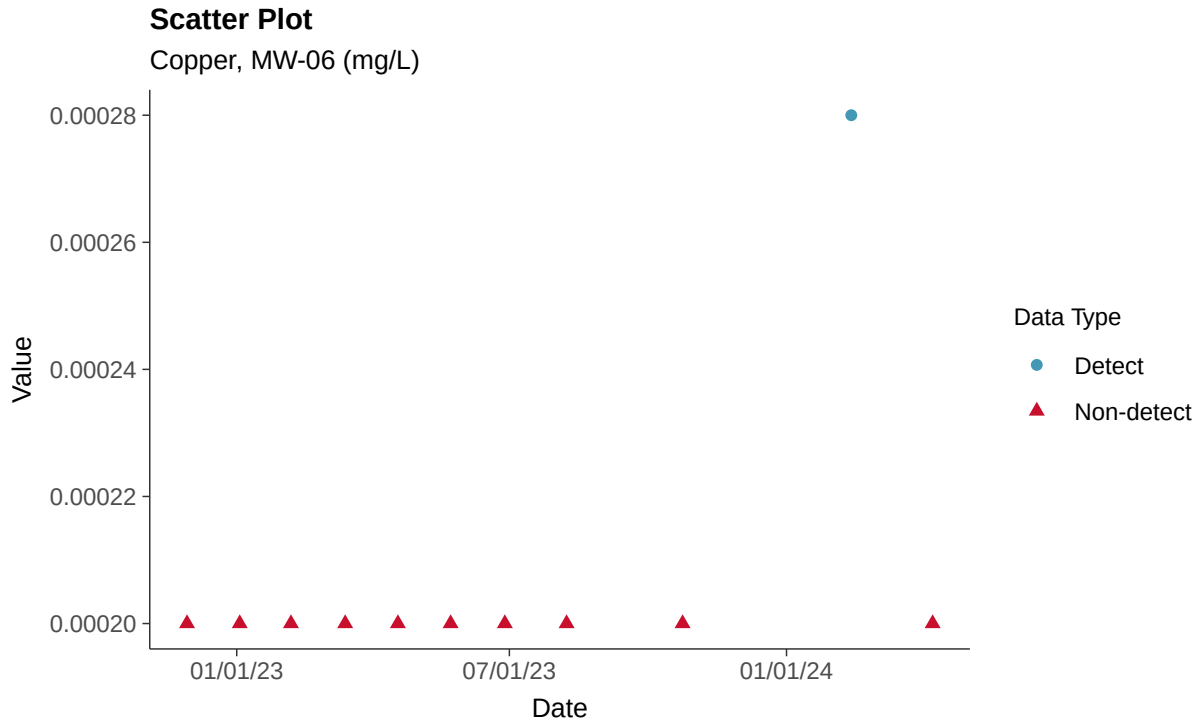
Trend Regression: Piecewise Linear-Linear-Linear

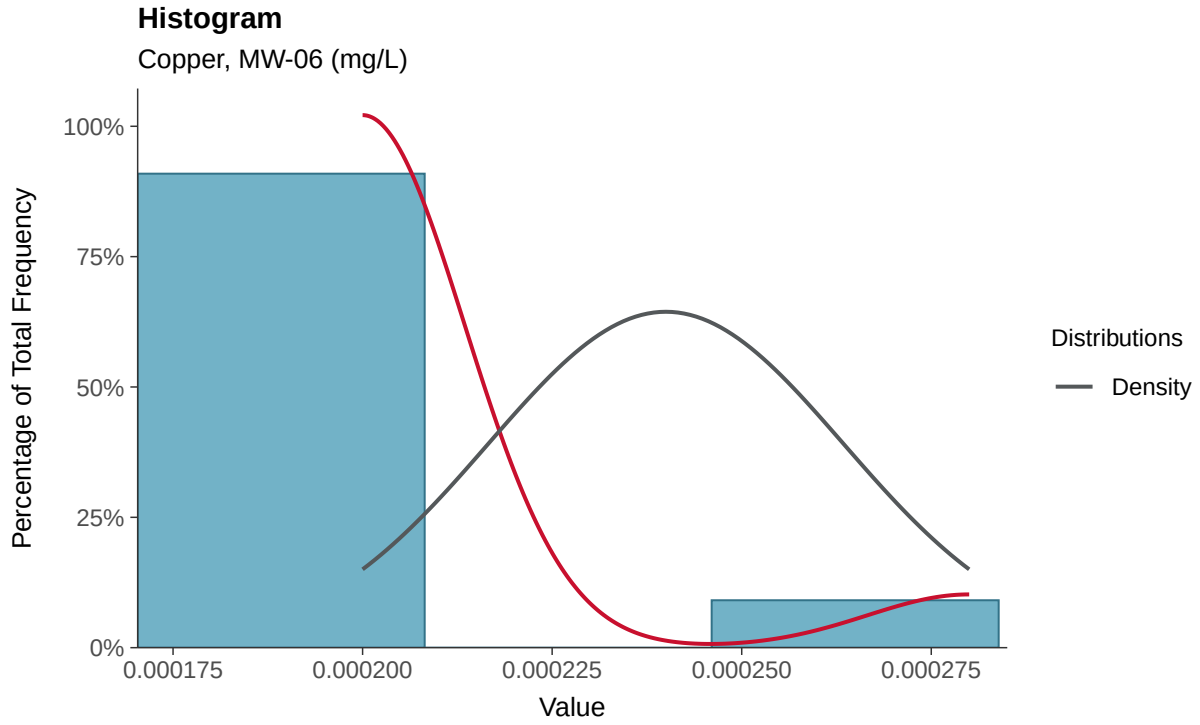
Thallium, MW-06 (mg/L)

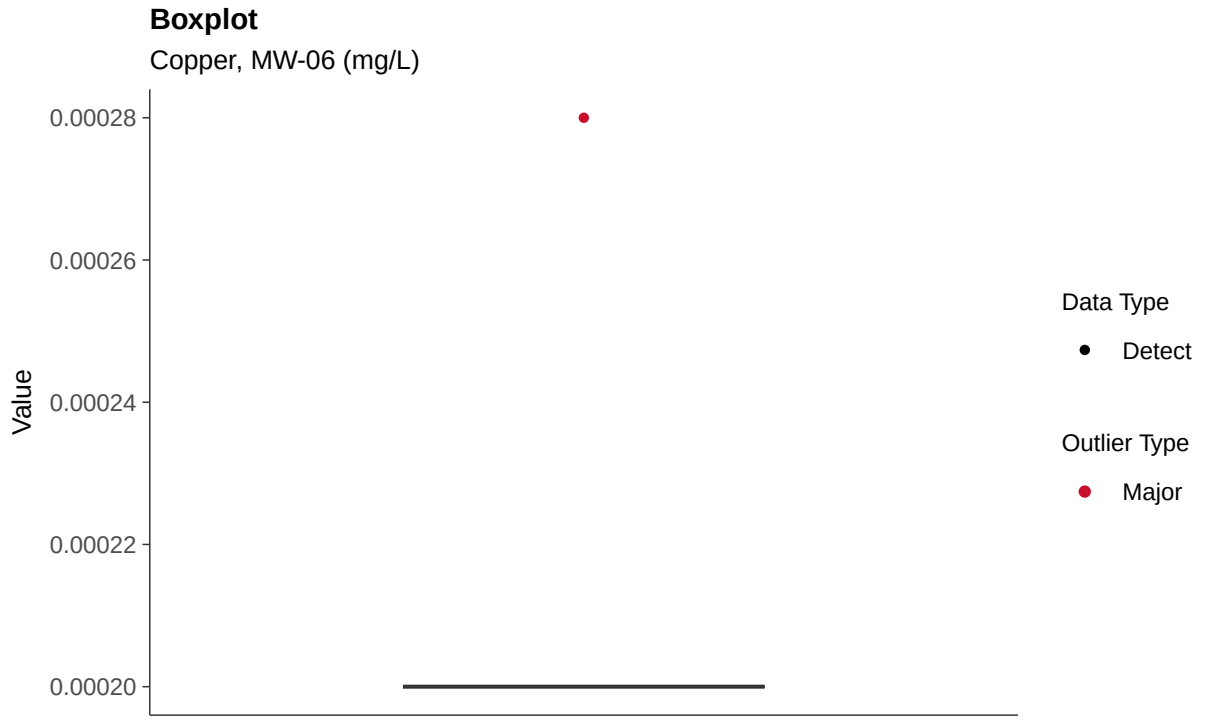


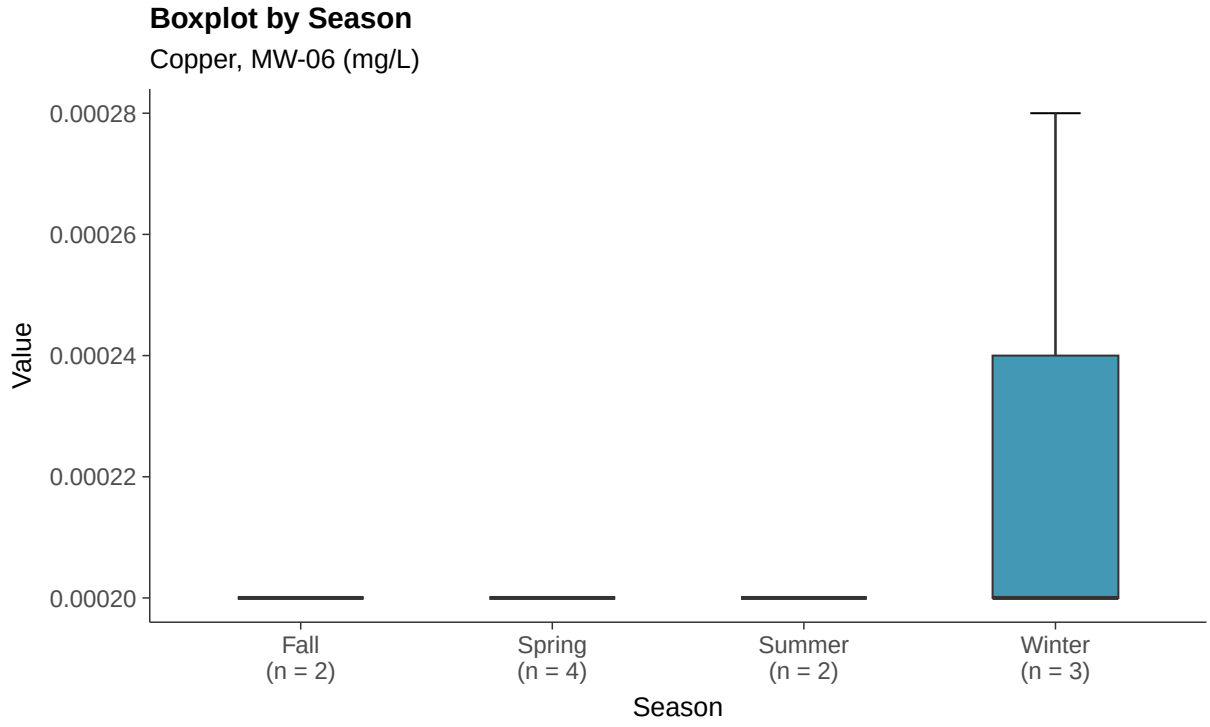
Part 115: Copper, MW-06

ID: 1_16_6_111



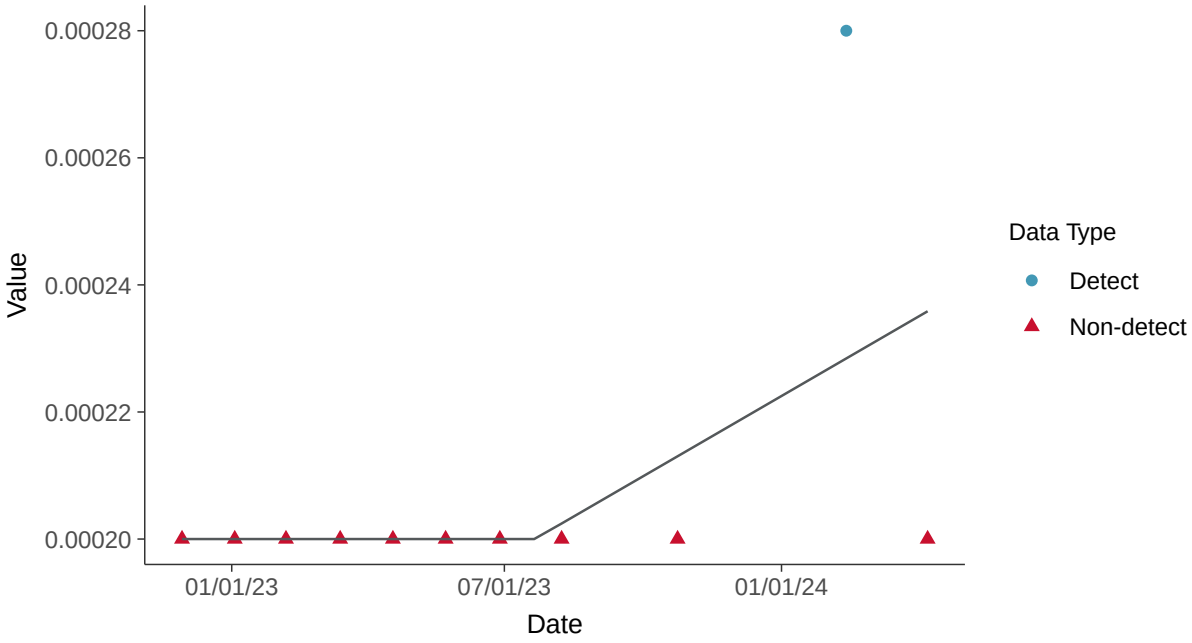



Boxplot
Copper, MW-06 (mg/L)
0.00028
0.00026
0.00024
0.00022
0.00020
Value
Data Type
Detect
Outlier Type
Major


Boxplot by Season
Copper, MW-06 (mg/L)
0.00028
0.00026
0.00024
0.00022
0.00020
Value
Fall
(n = 2)
Spring
(n = 4)
Summer
(n = 2)
Winter
(n = 3)
Season

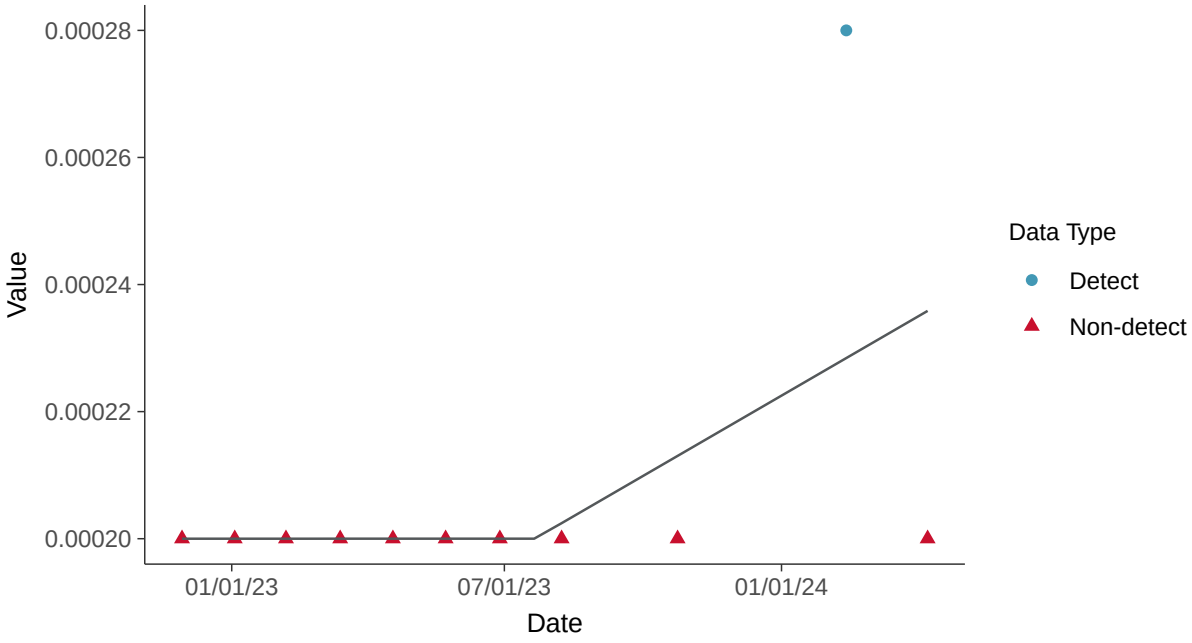
Trend Regression: Piecewise Linear-Linear

Copper, MW-06 (mg/L)



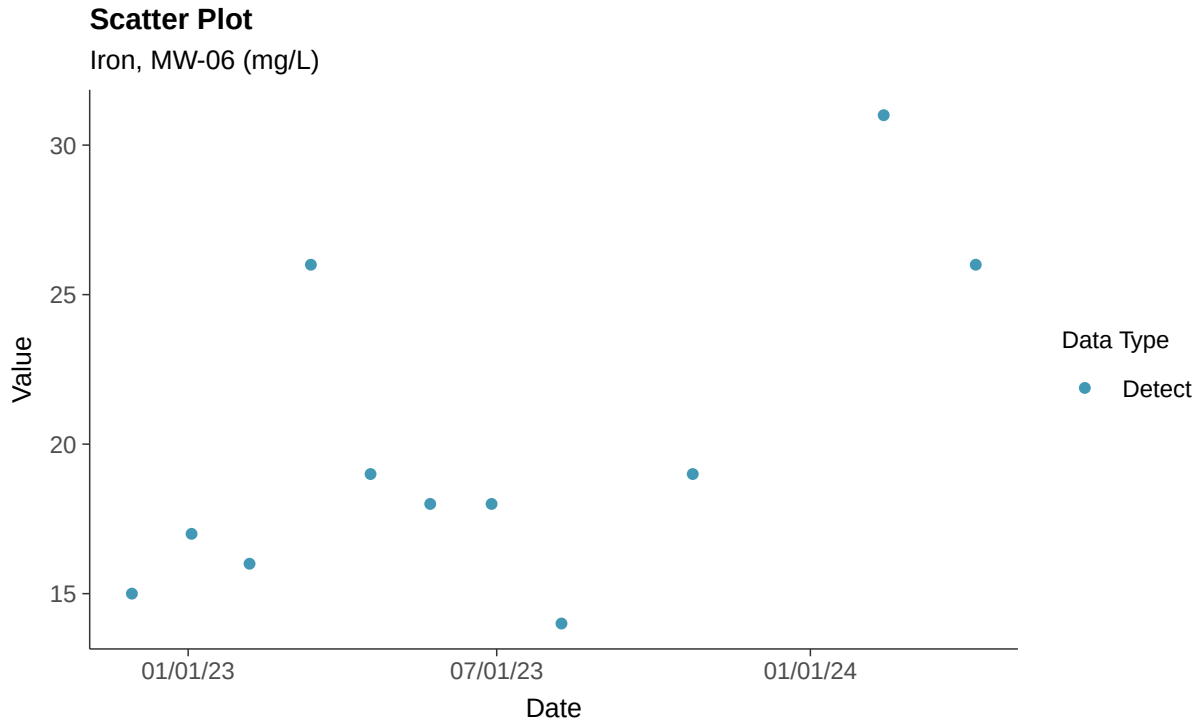
Trend Regression: Piecewise Linear-Linear-Linear

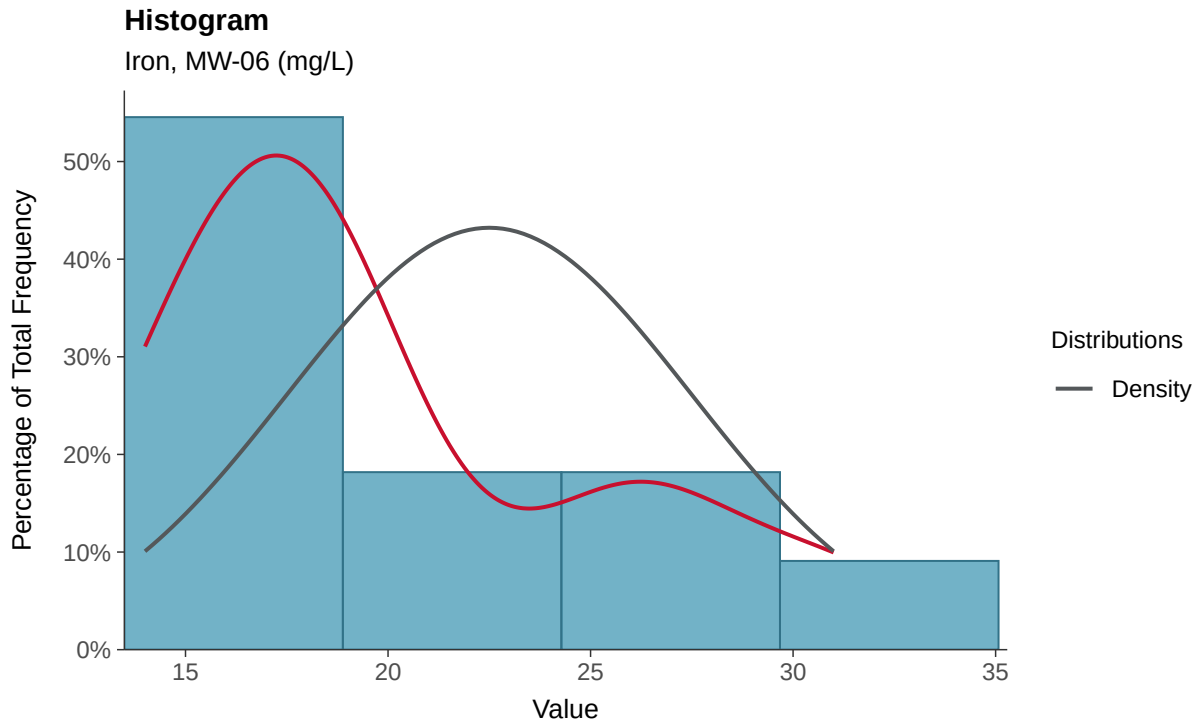
Copper, MW-06 (mg/L)



Part 115: Iron, MW-06

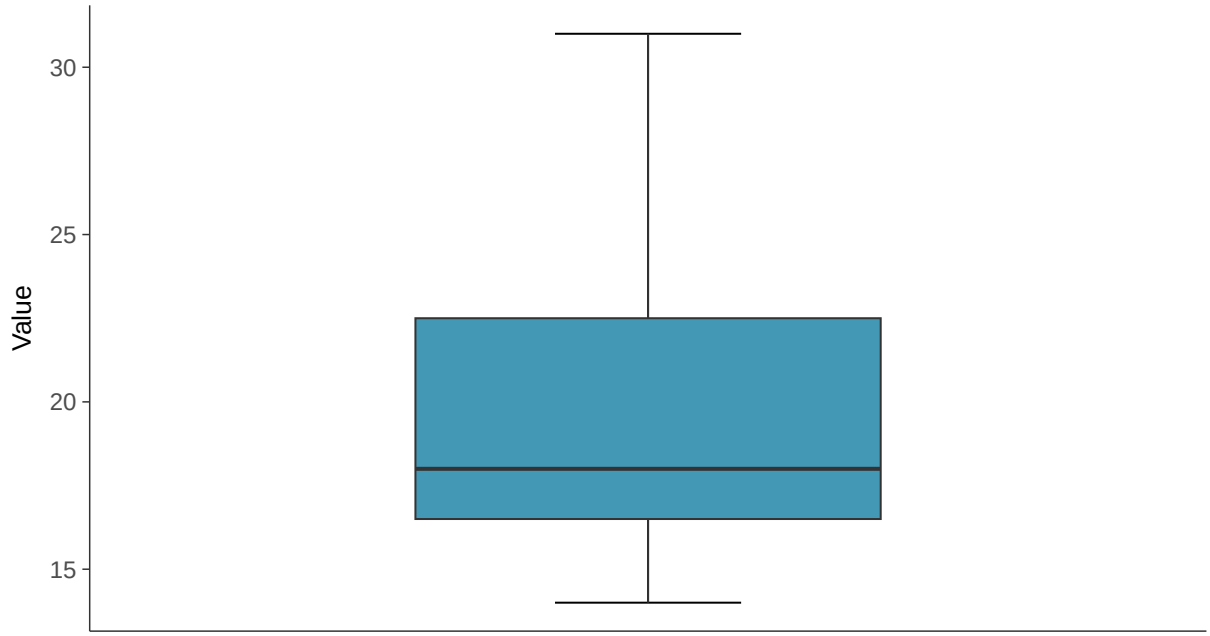
ID: 1_16_6_114





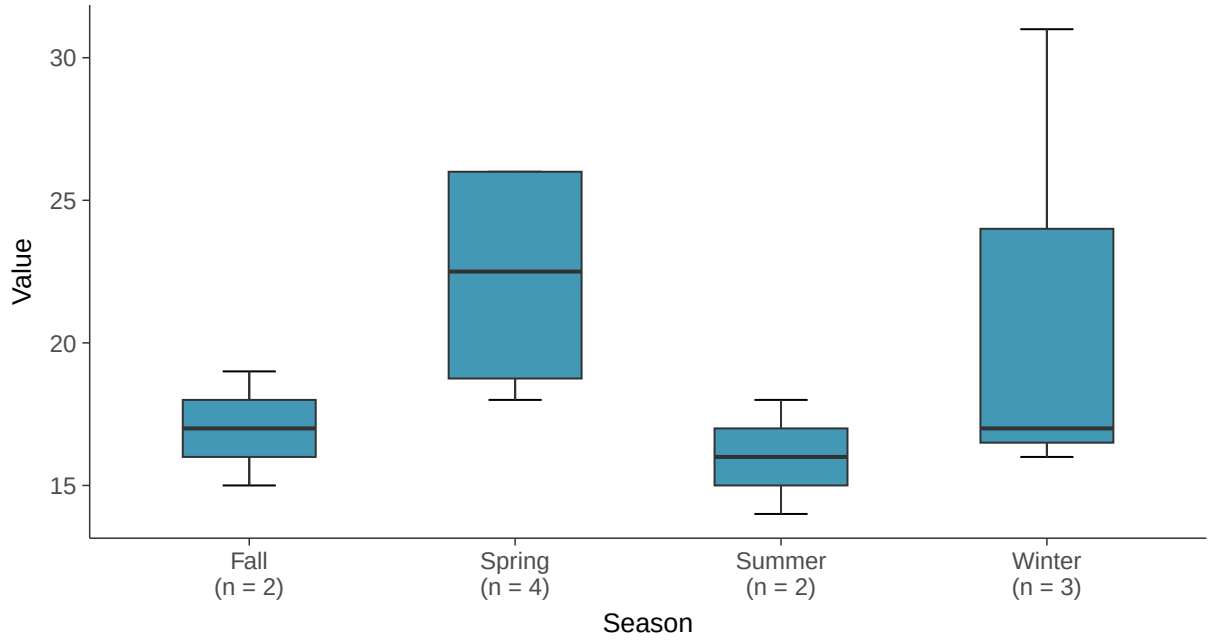
Boxplot

Iron, MW-06 (mg/L)



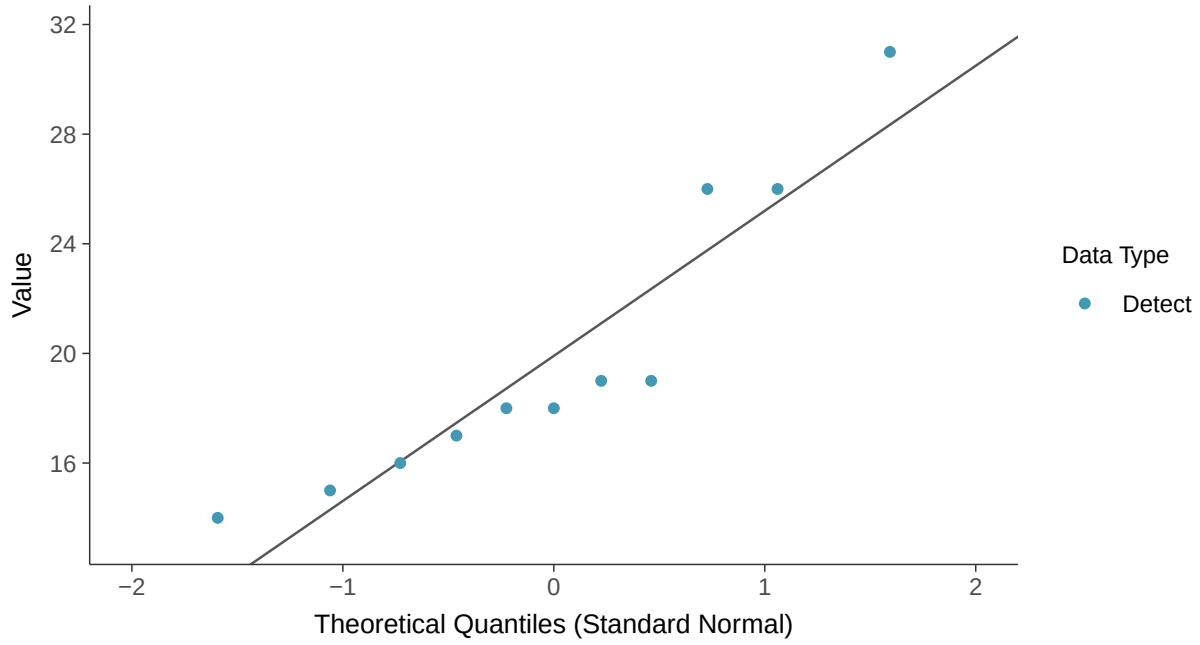
Boxplot by Season

Iron, MW-06 (mg/L)



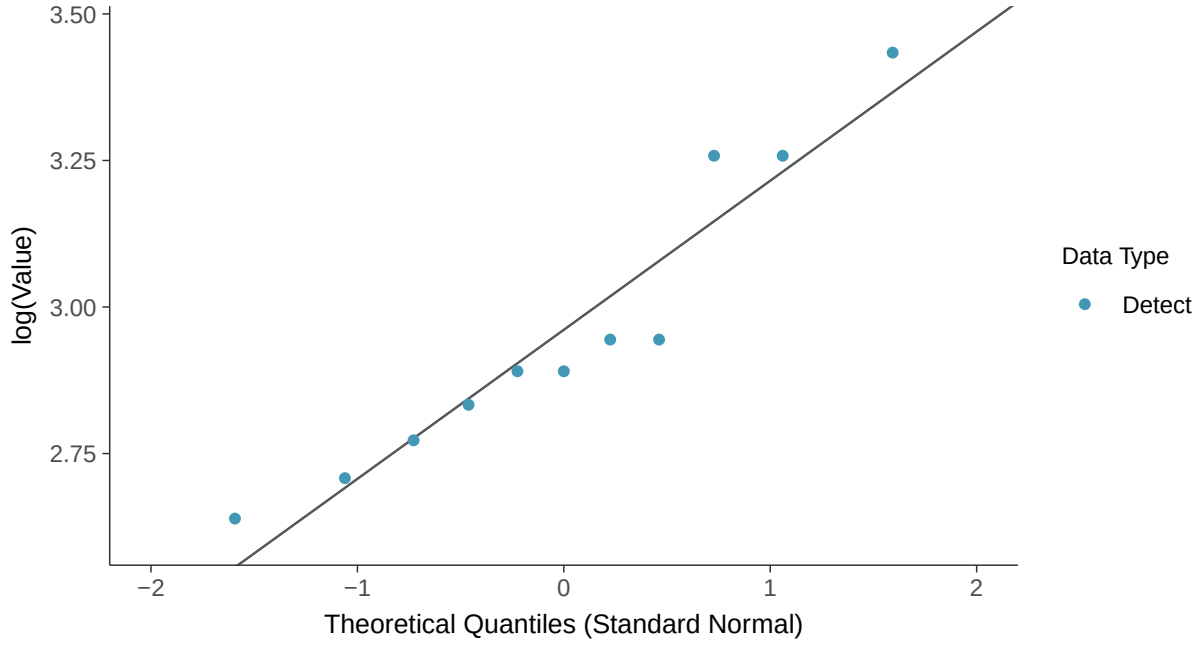
Normal Q-Q plot

Iron, MW-06 (mg/L)



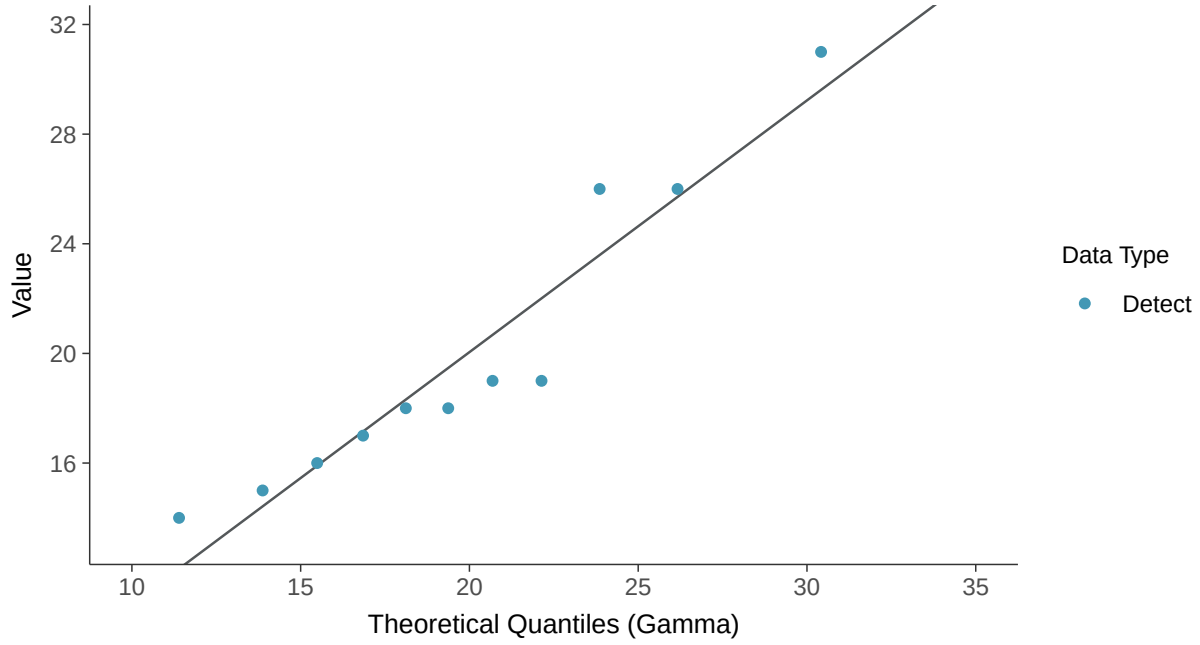
Lognormal Q-Q plot

Iron, MW-06 (mg/L)



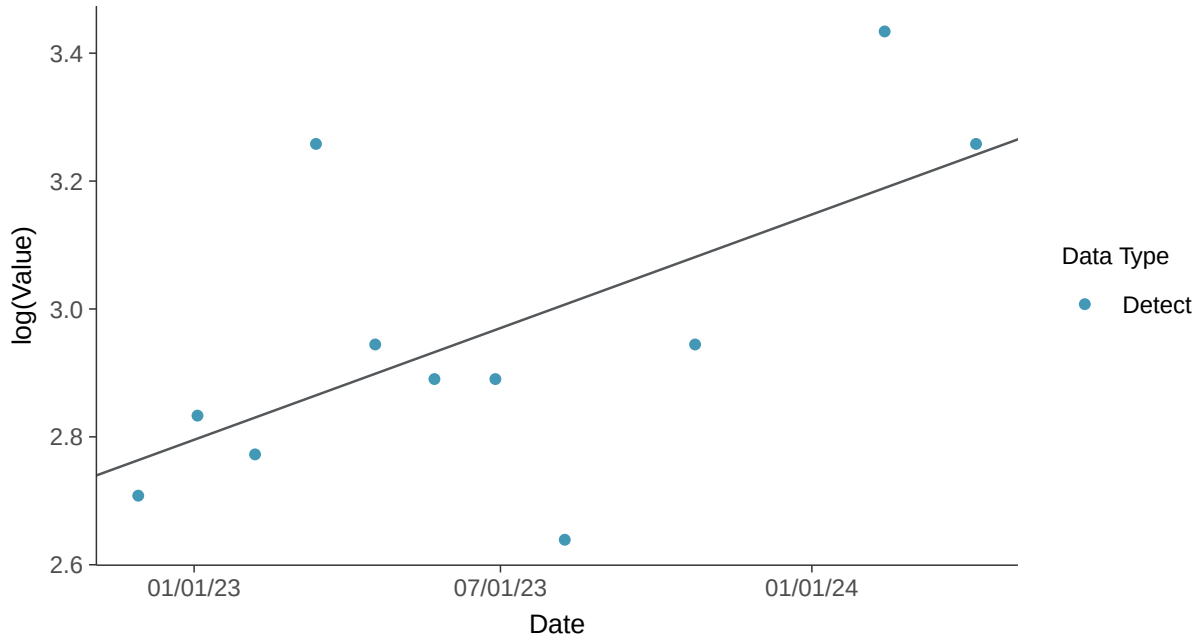
Gamma Q-Q plot

Iron, MW-06 (mg/L)



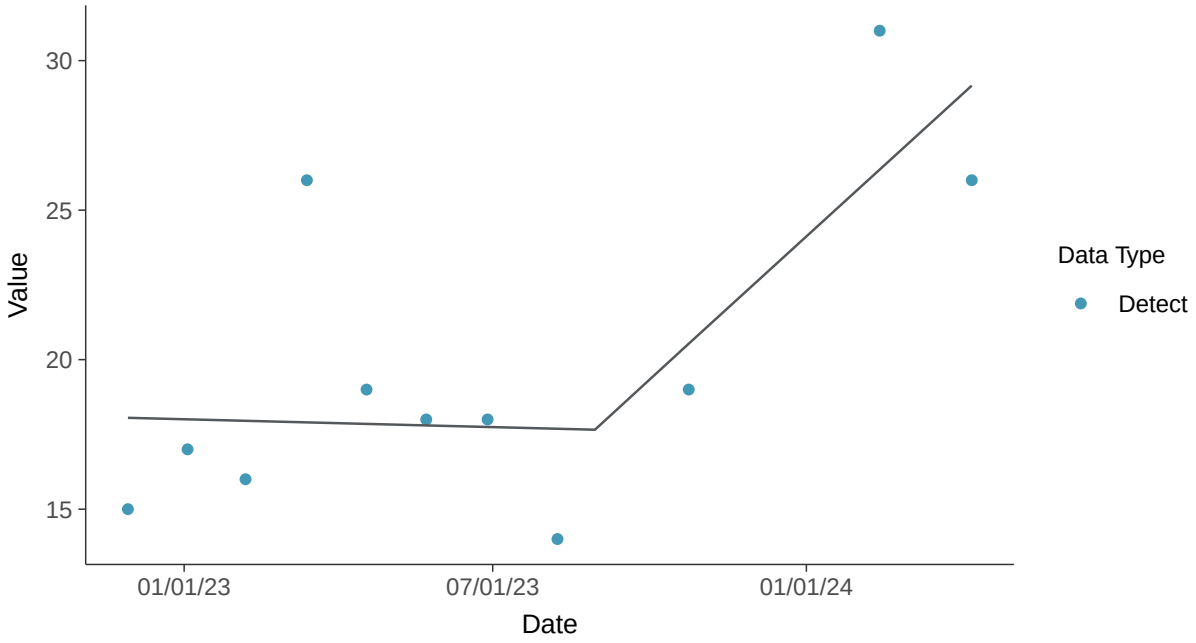
Trend Regression: Lognormal MLE

Iron, MW-06 (mg/L)



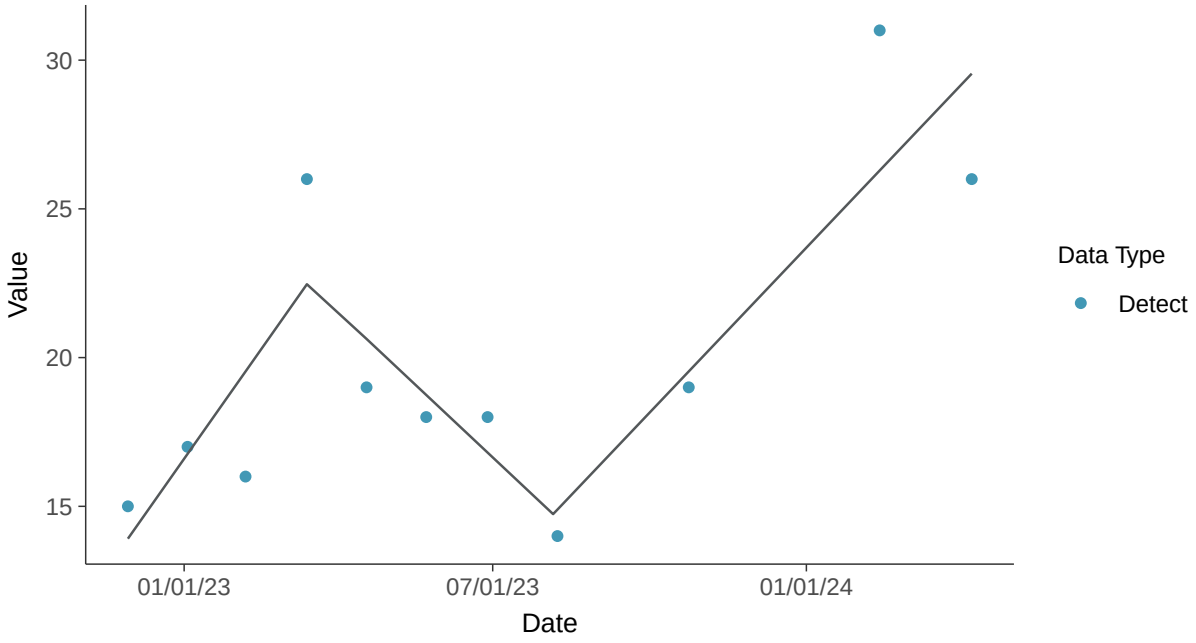
Trend Regression: Piecewise Linear-Linear

Iron, MW-06 (mg/L)



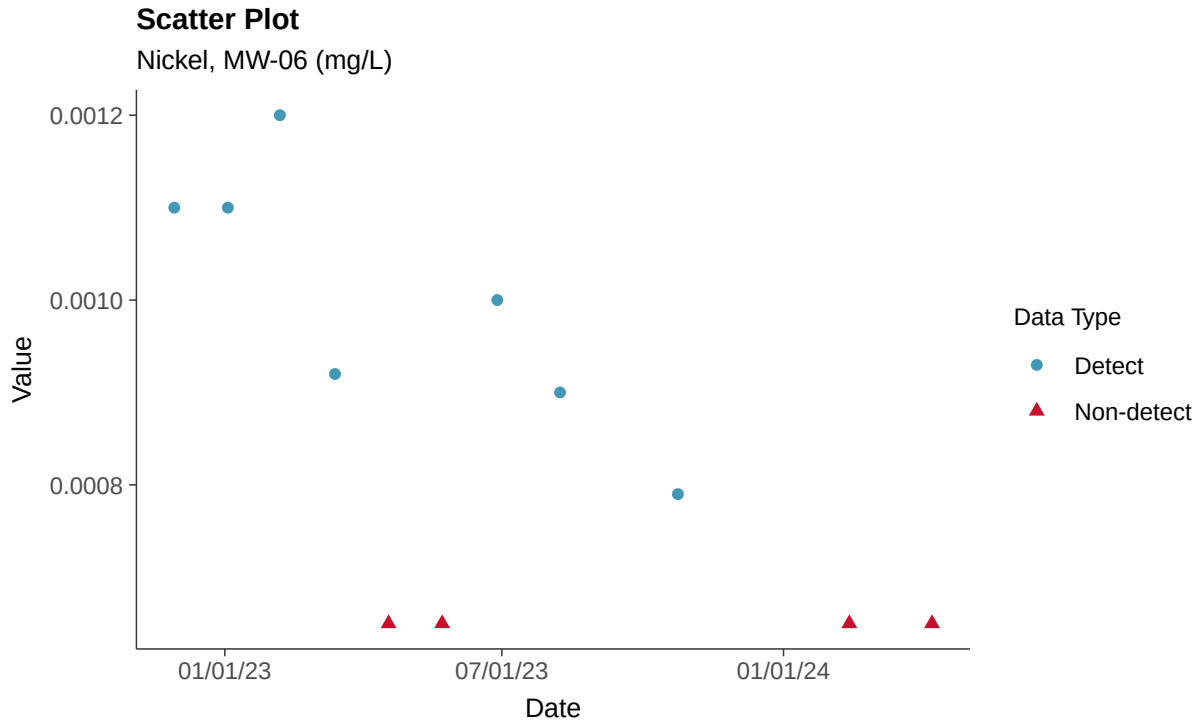
Trend Regression: Piecewise Linear-Linear-Linear

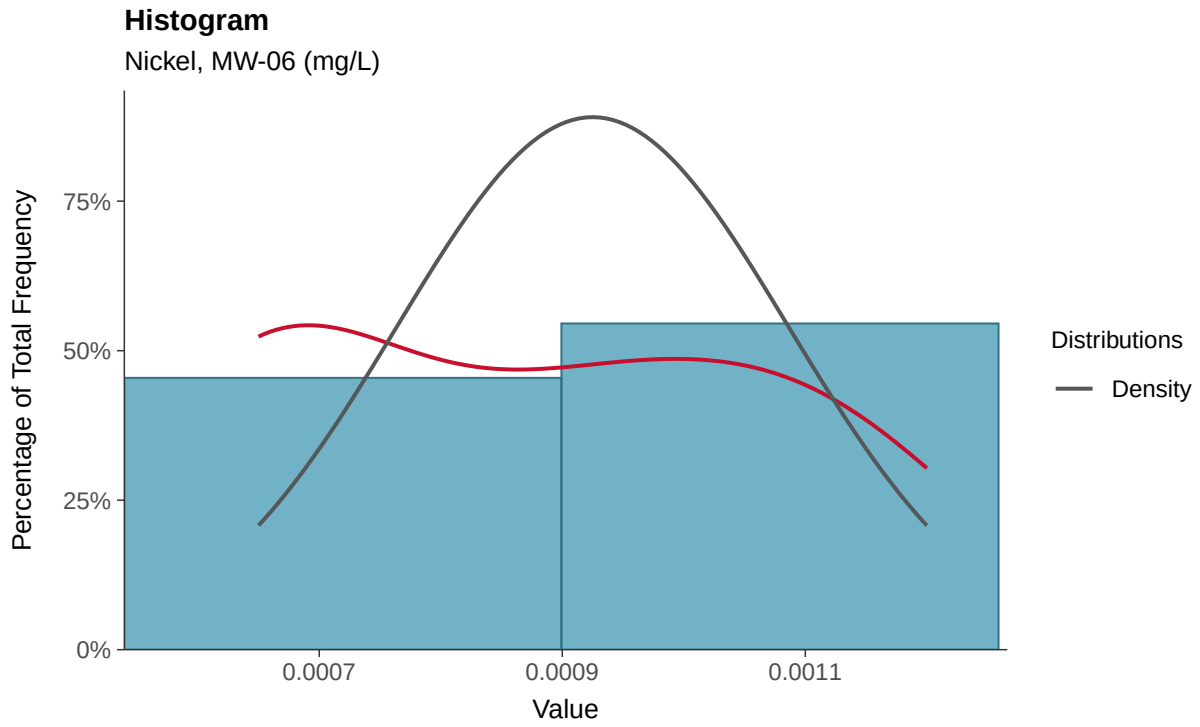
Iron, MW-06 (mg/L)



Part 115: Nickel, MW-06

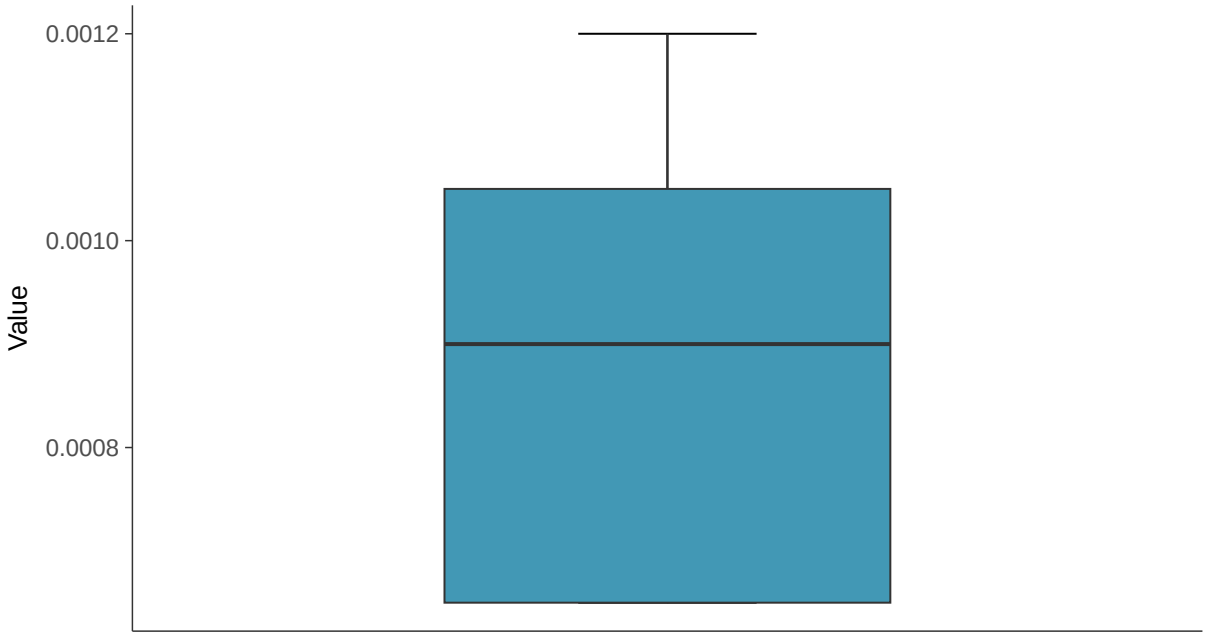
ID: 1_16_6_119





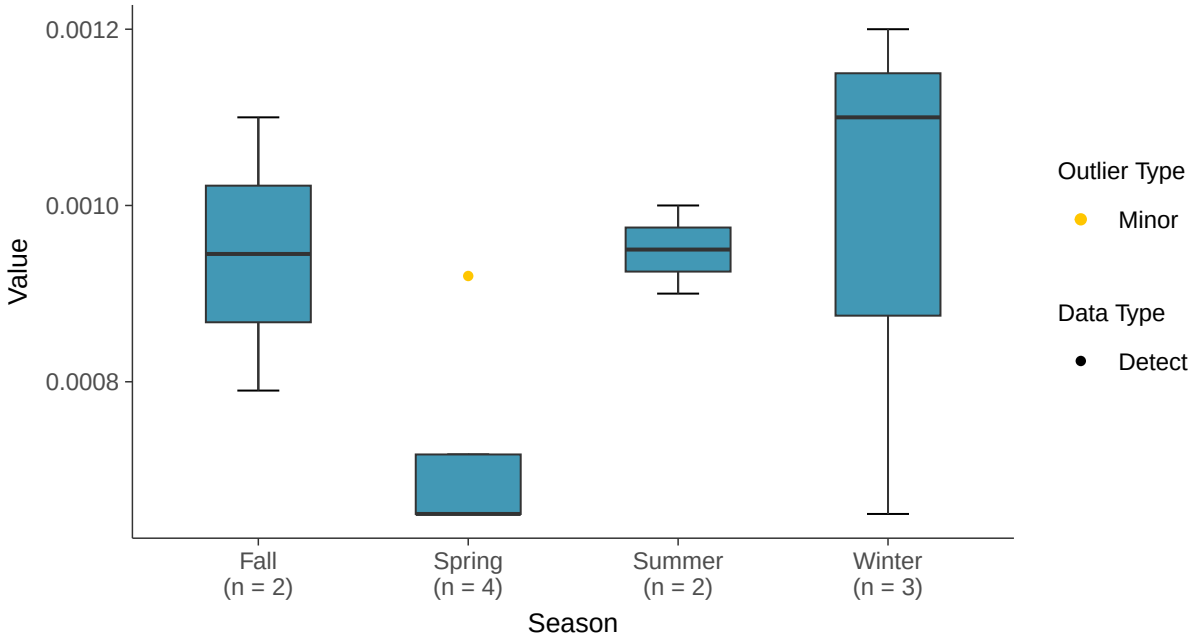
Boxplot

Nickel, MW-06 (mg/L)



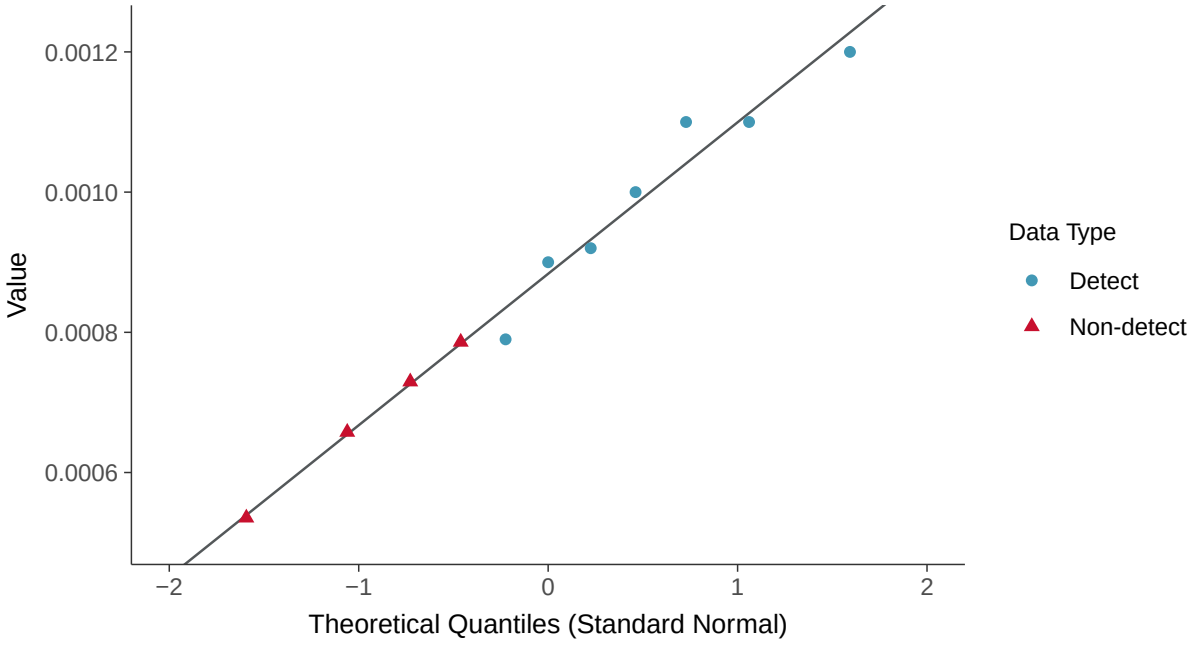
Boxplot by Season

Nickel, MW-06 (mg/L)



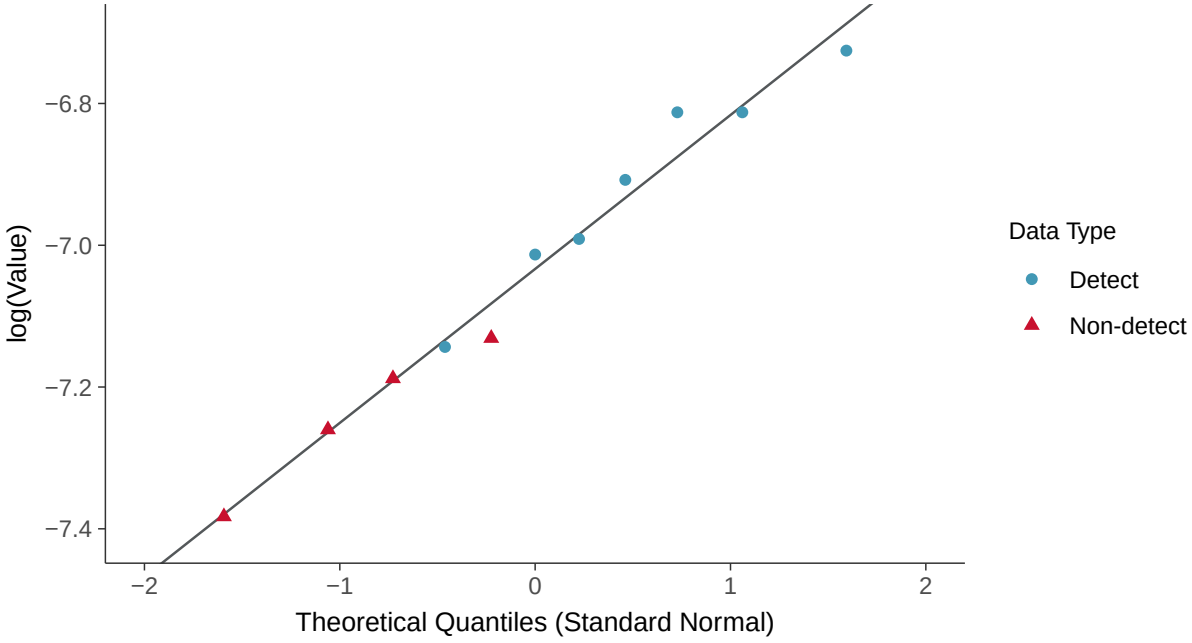
Normal Q-Q plot using ROS Imputed Estimates

Nickel, MW-06 (mg/L)



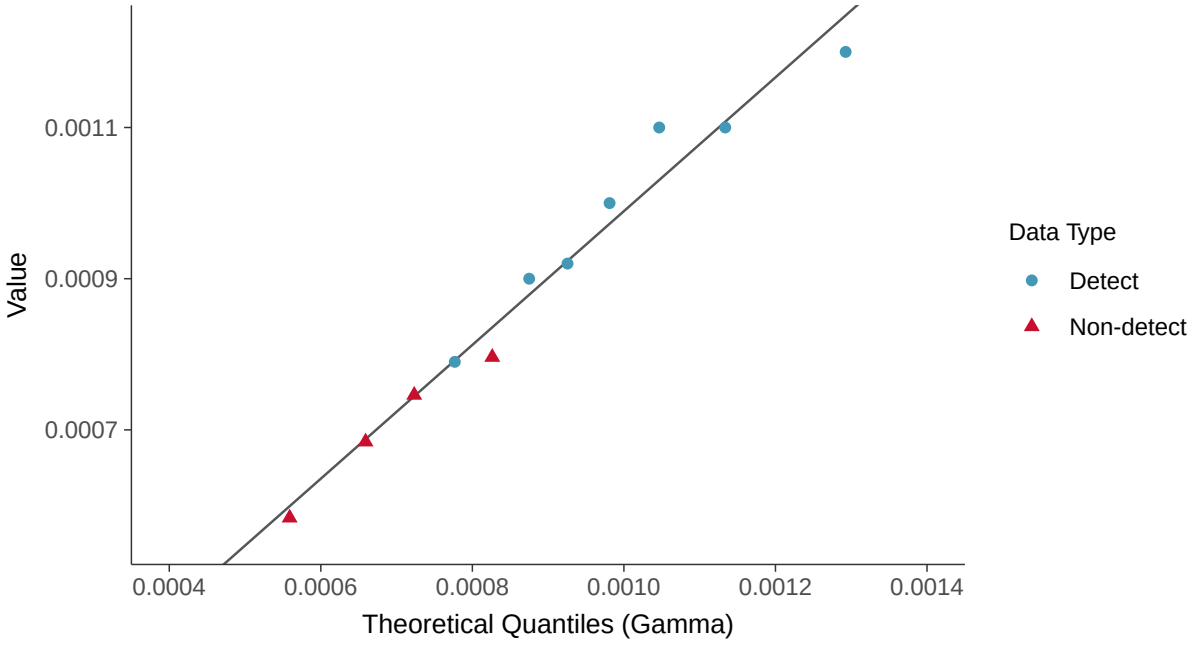
Lognormal Q-Q plot using ROS Imputed Estimates

Nickel, MW-06 (mg/L)



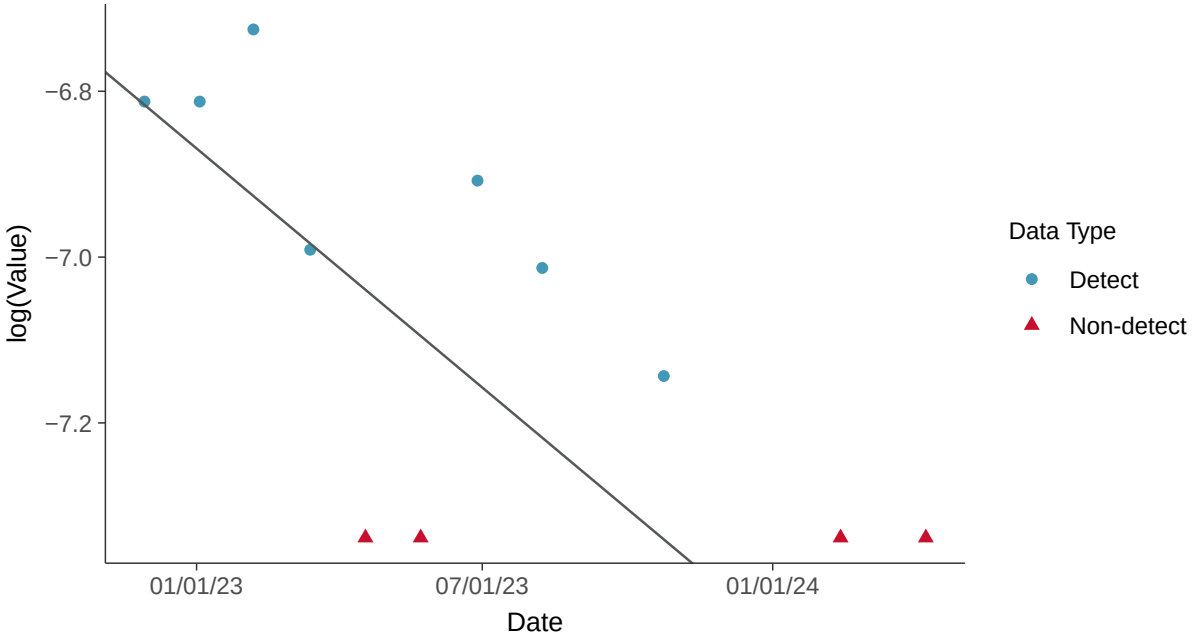
Gamma Q-Q plot using ROS Imputed Estimates

Nickel, MW-06 (mg/L)



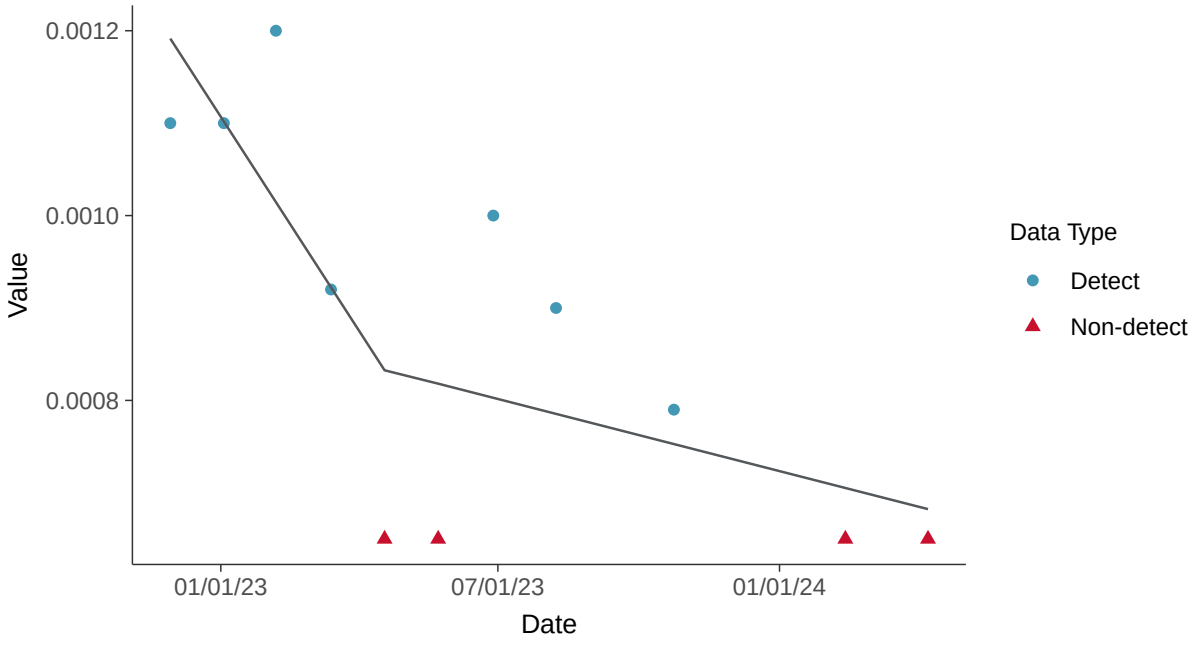
Trend Regression: Lognormal MLE

Nickel, MW-06 (mg/L)



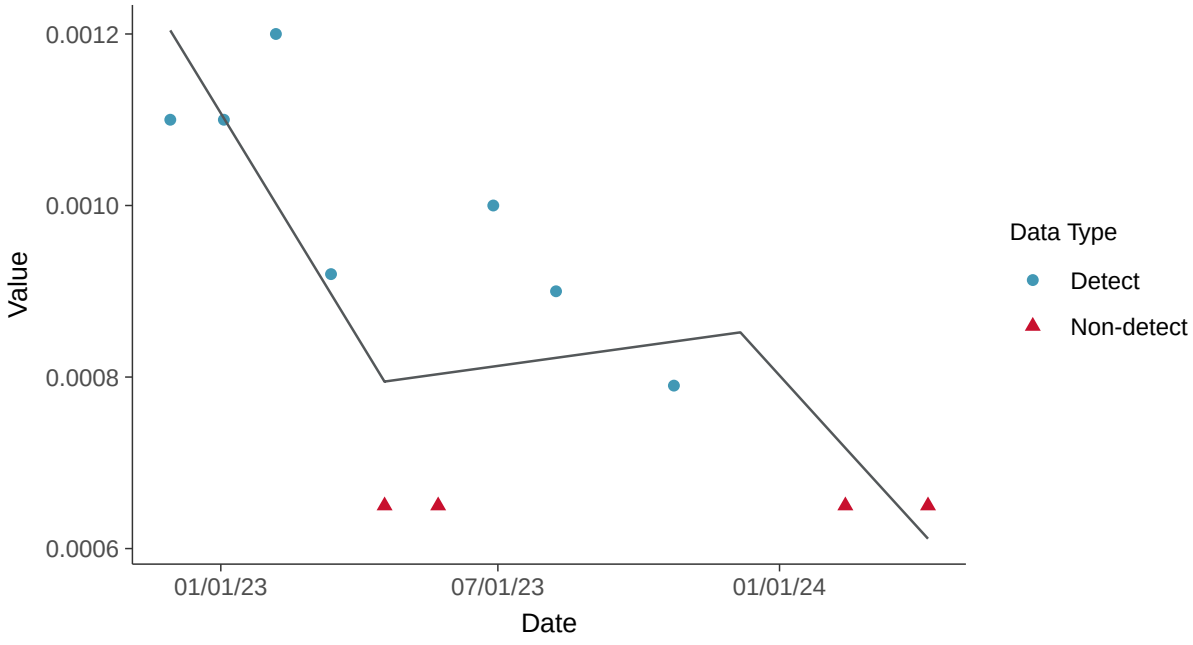
Trend Regression: Piecewise Linear-Linear

Nickel, MW-06 (mg/L)



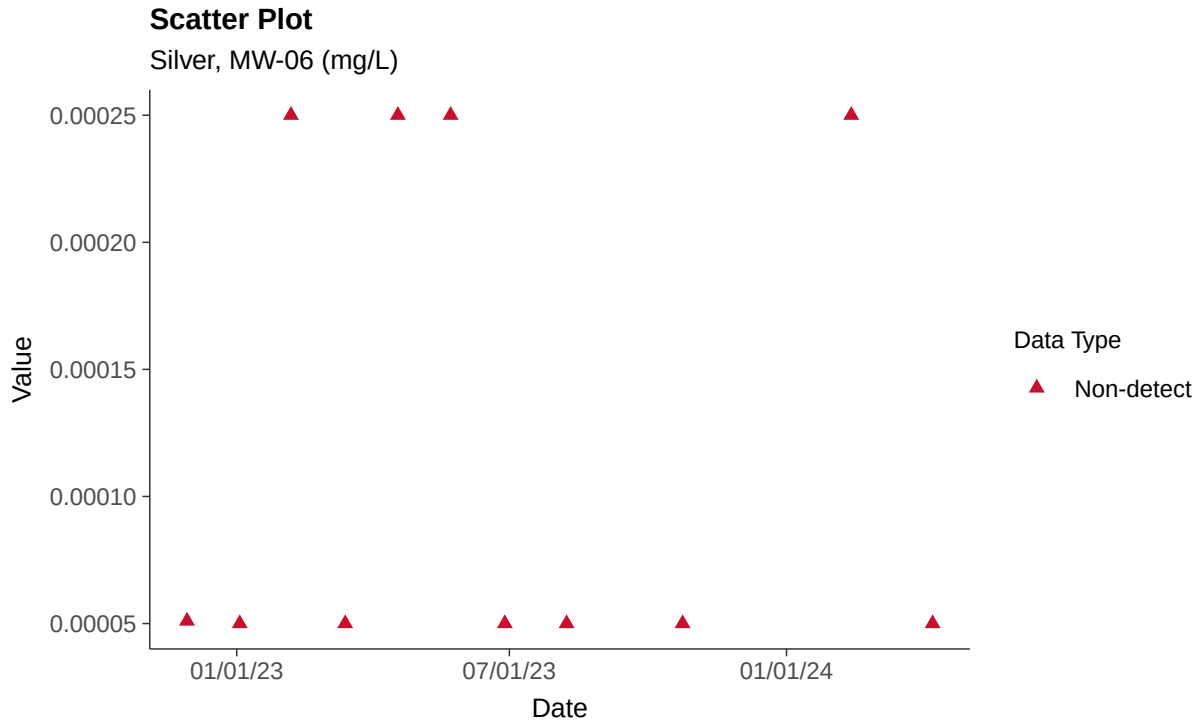
Trend Regression: Piecewise Linear-Linear-Linear

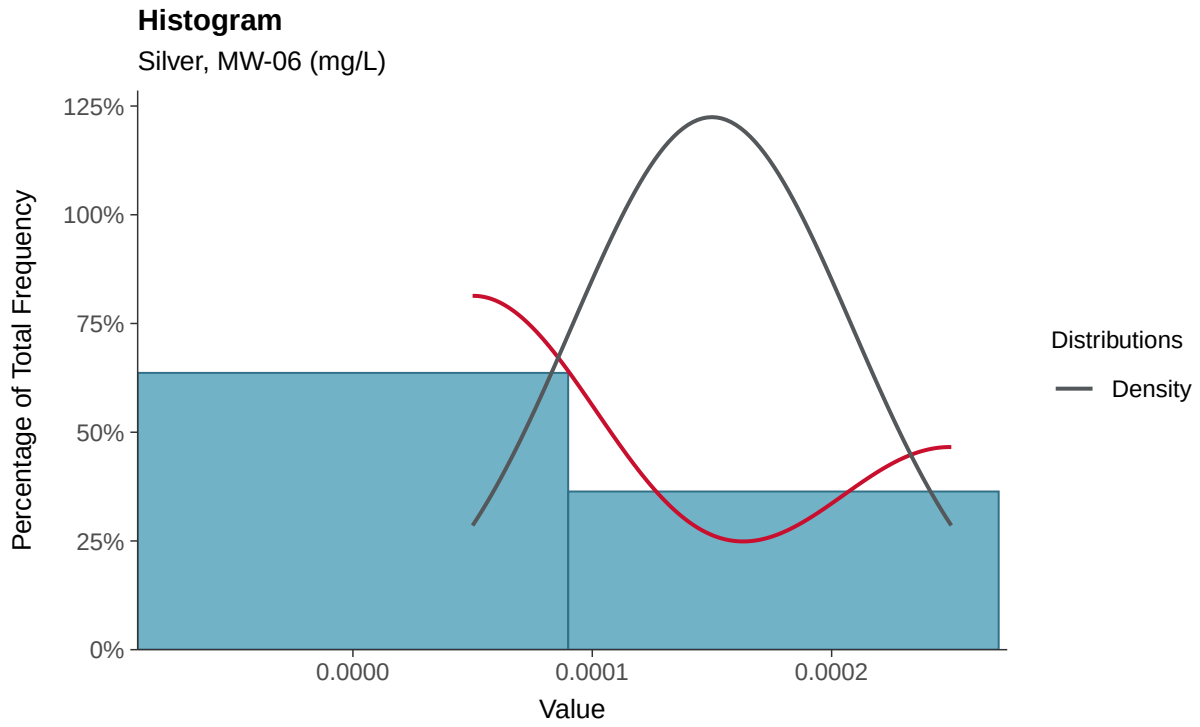
Nickel, MW-06 (mg/L)



Part 115: Silver, MW-06

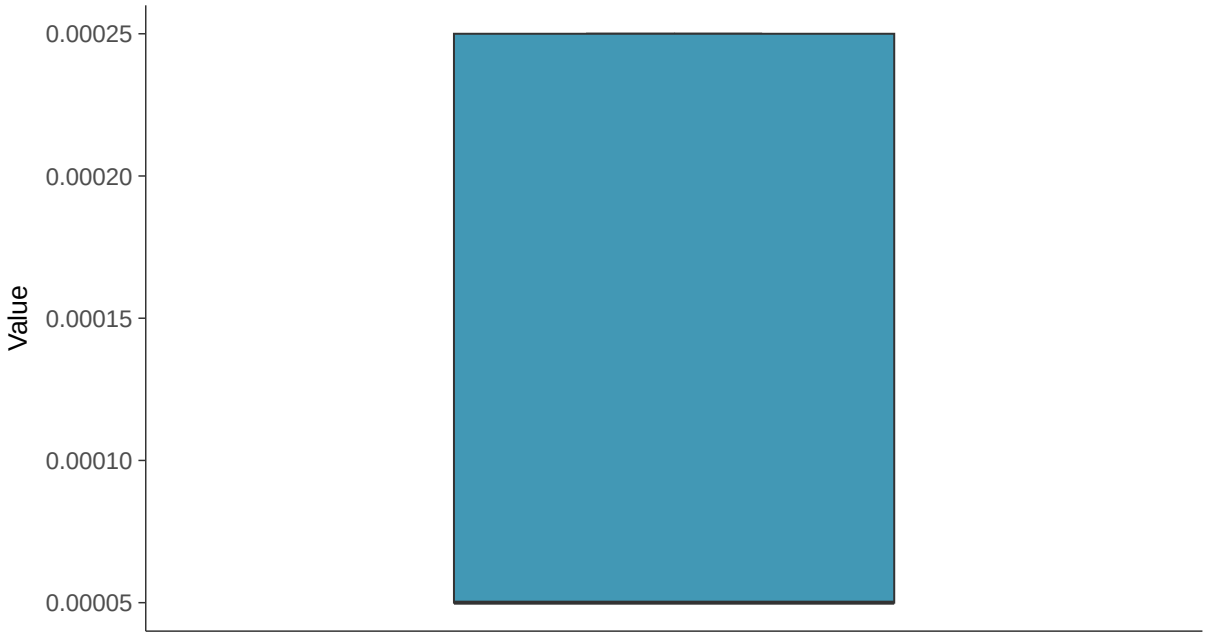
ID: 1_16_6_123





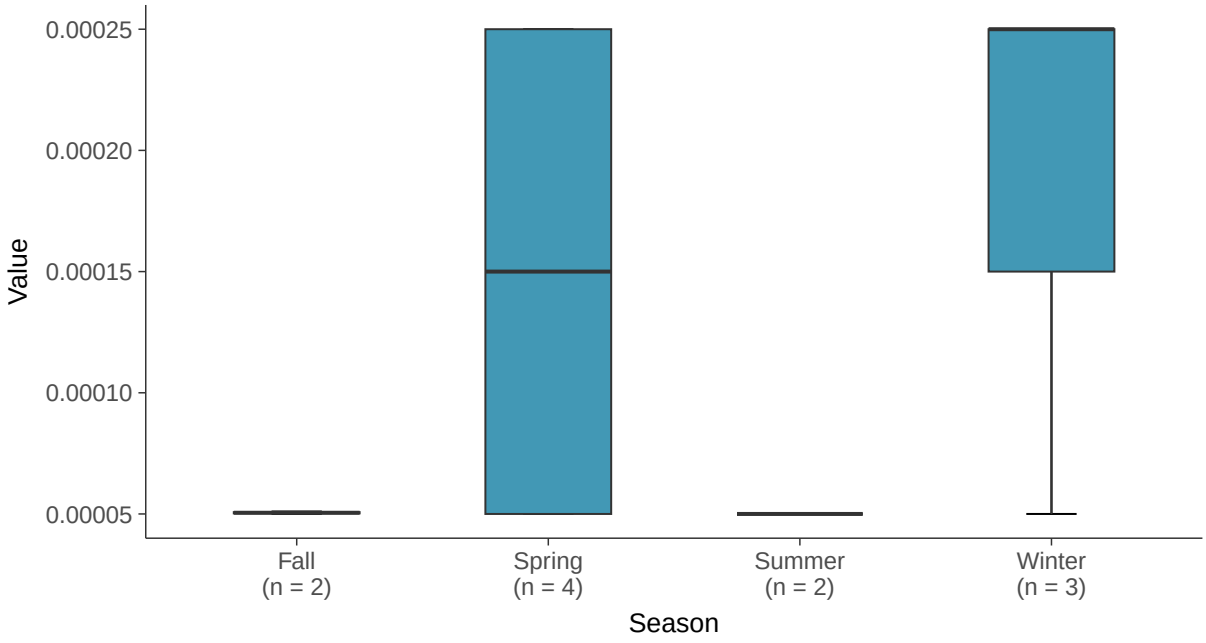
Boxplot

Silver, MW-06 (mg/L)



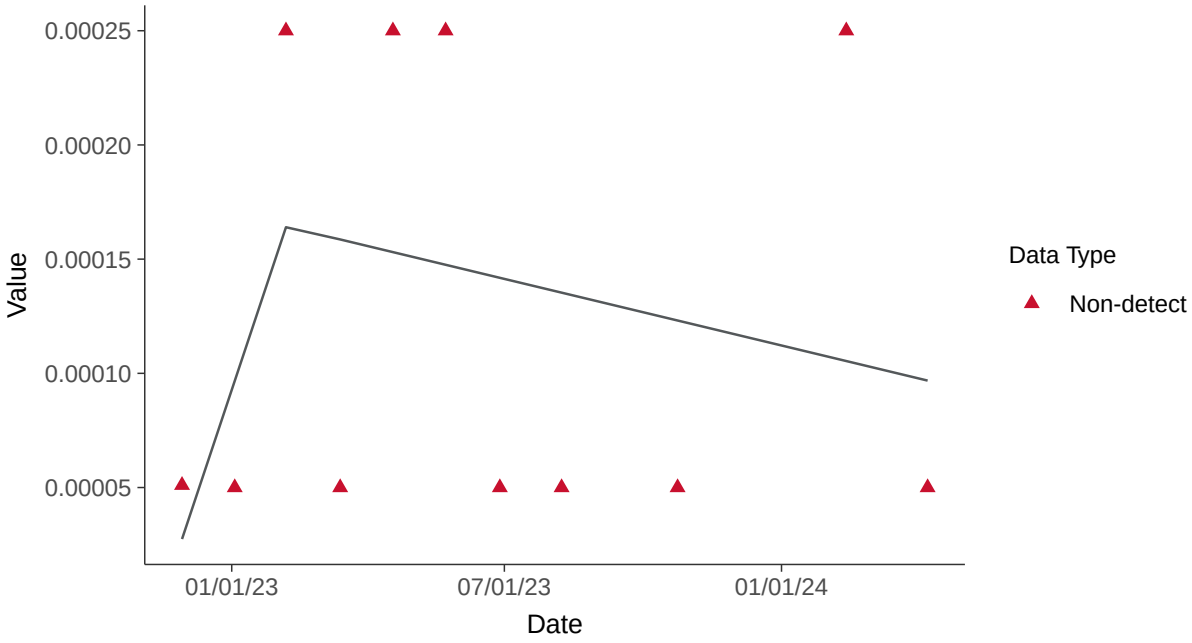
Boxplot by Season

Silver, MW-06 (mg/L)



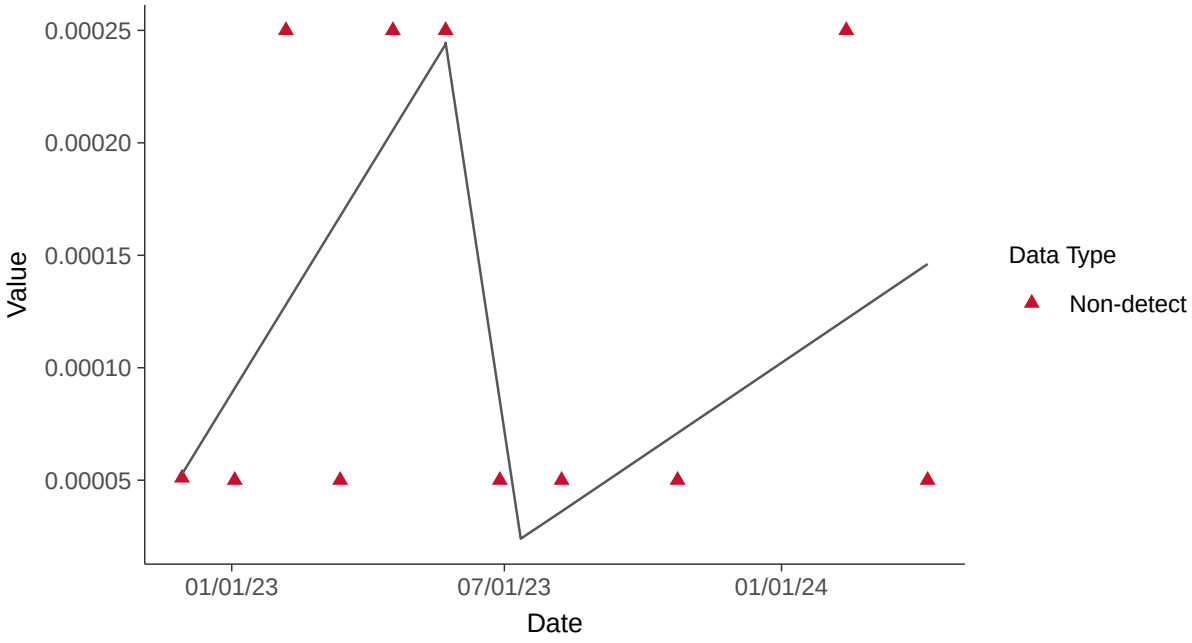
Trend Regression: Piecewise Linear-Linear

Silver, MW-06 (mg/L)



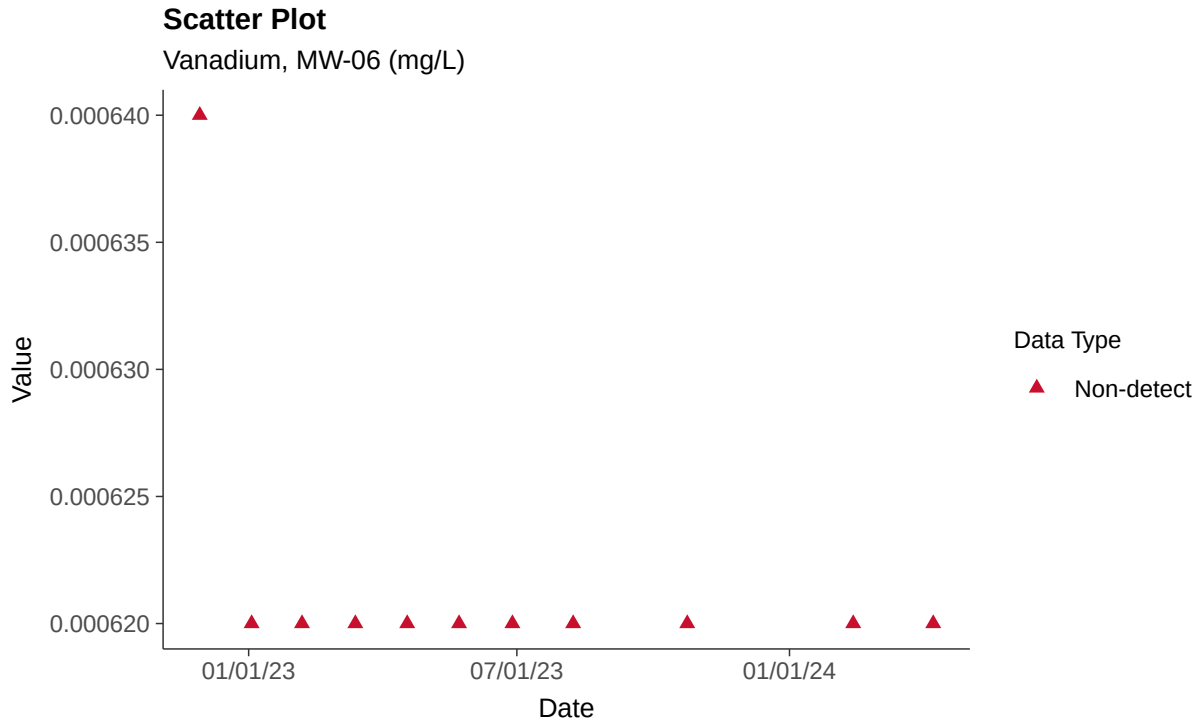
Trend Regression: Piecewise Linear-Linear-Linear

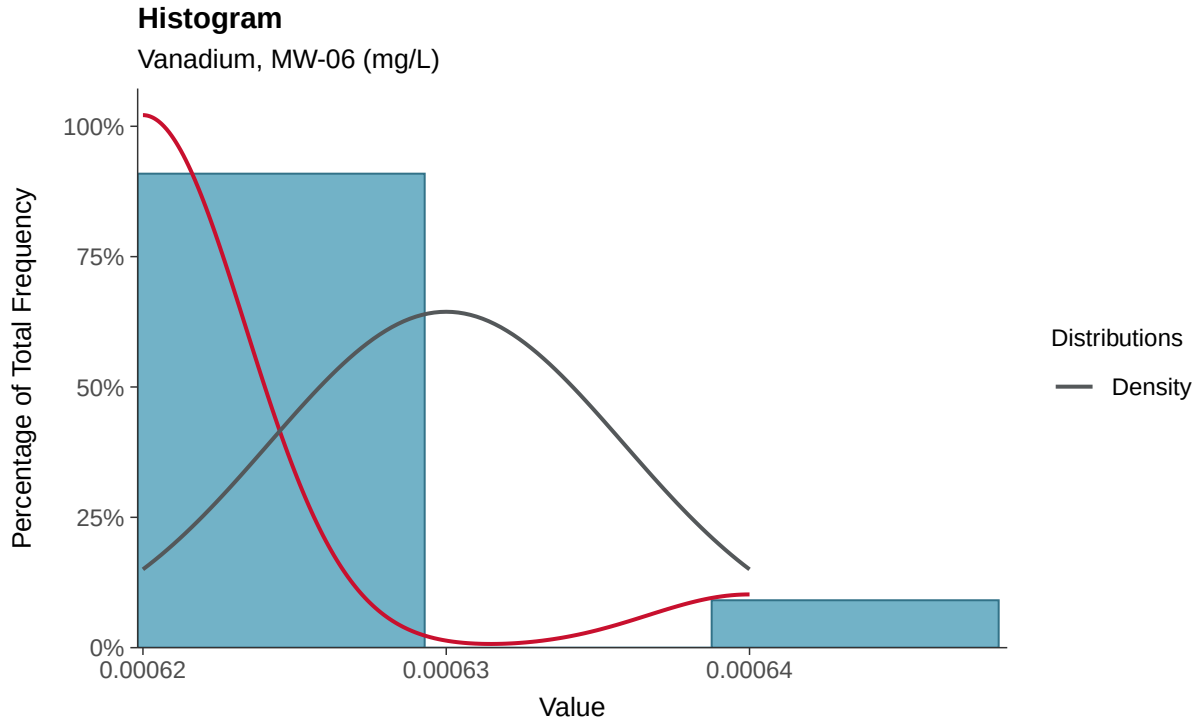
Silver, MW-06 (mg/L)

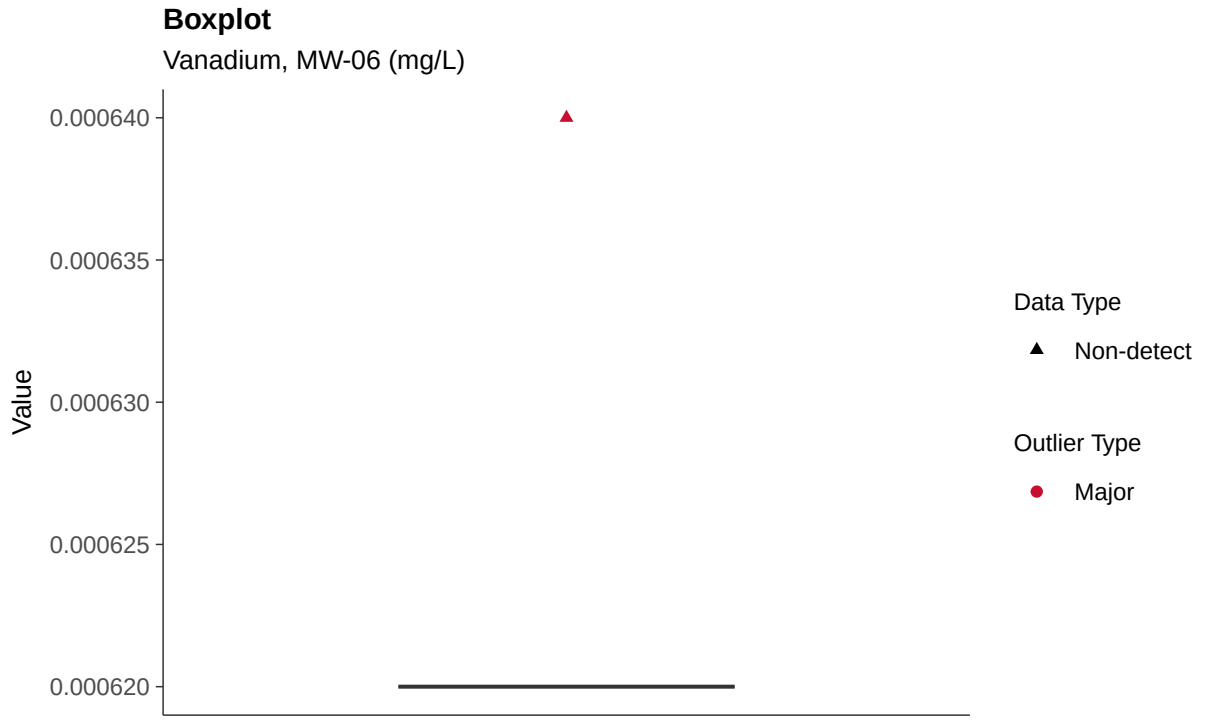


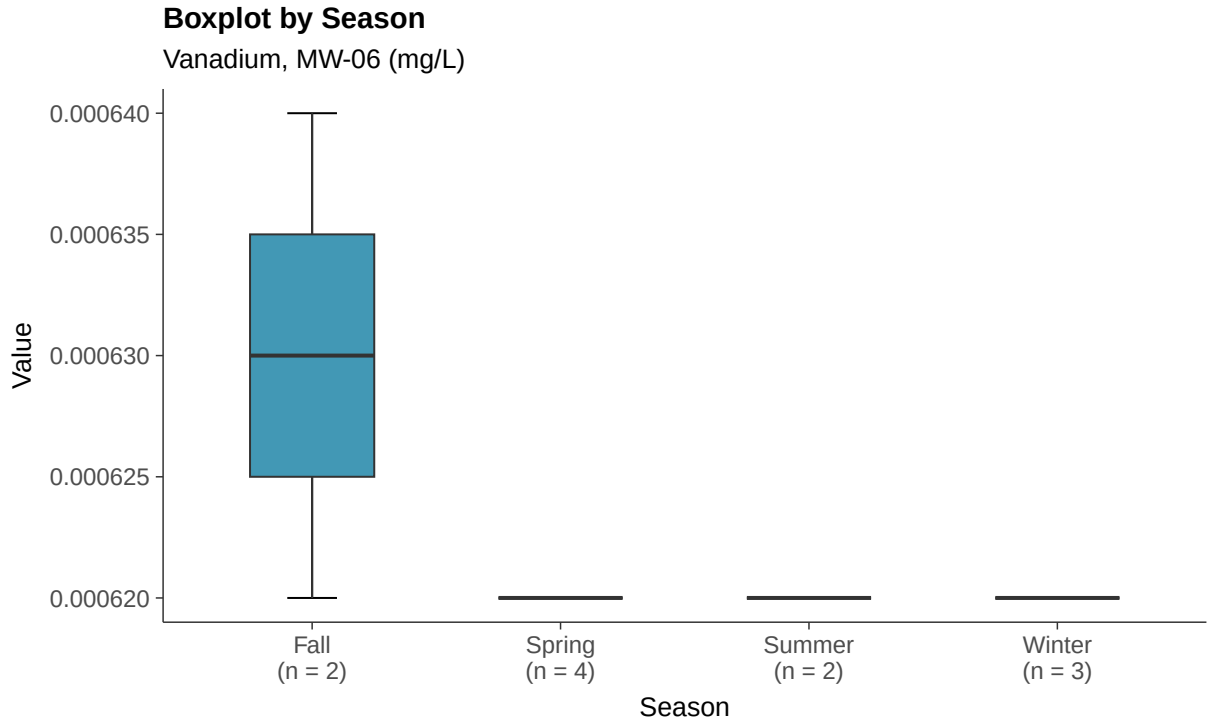
Part 115: Vanadium, MW-06

ID: 1_16_6_129



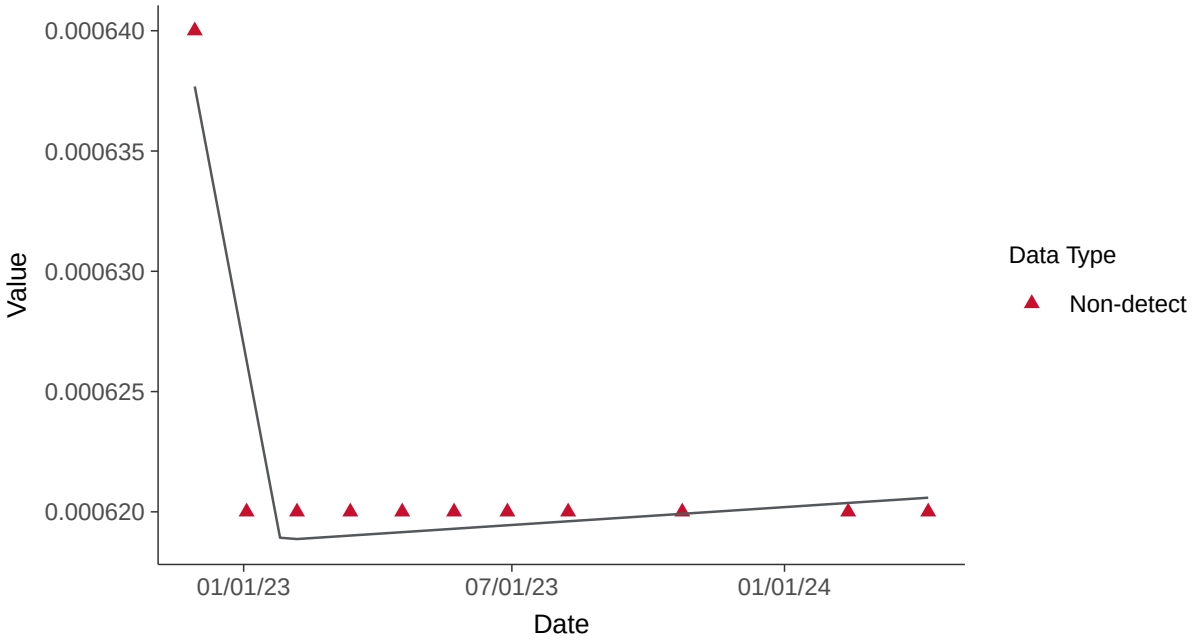



Boxplot
Vanadium, MW-06 (mg/L)
0.000640
0.000635
0.000630
0.000625
0.000620
Value
Data Type
Non-detect
Outlier Type
Major


Boxplot by Season
Vanadium, MW-06 (mg/L)
0.000640
0.000635
0.000630
0.000625
0.000620
Value
Fall
(n = 2)
Spring
(n = 4)
Summer
(n = 2)
Winter
(n = 3)
Season

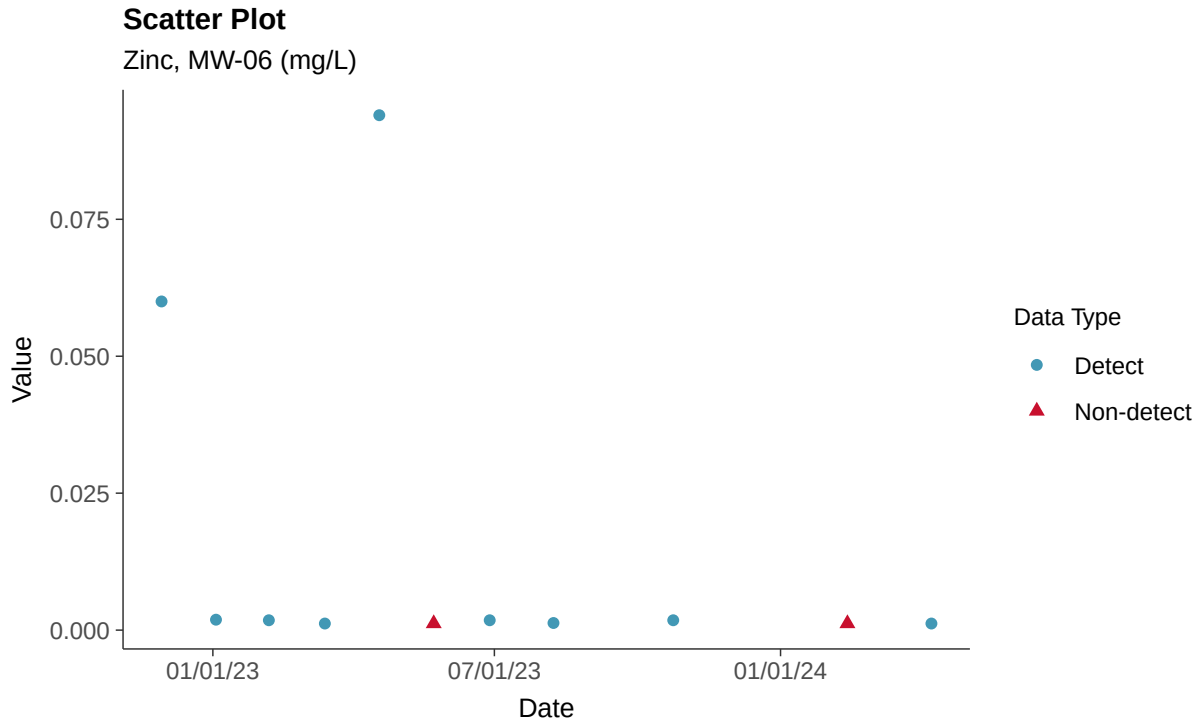
Trend Regression: Piecewise Linear-Linear

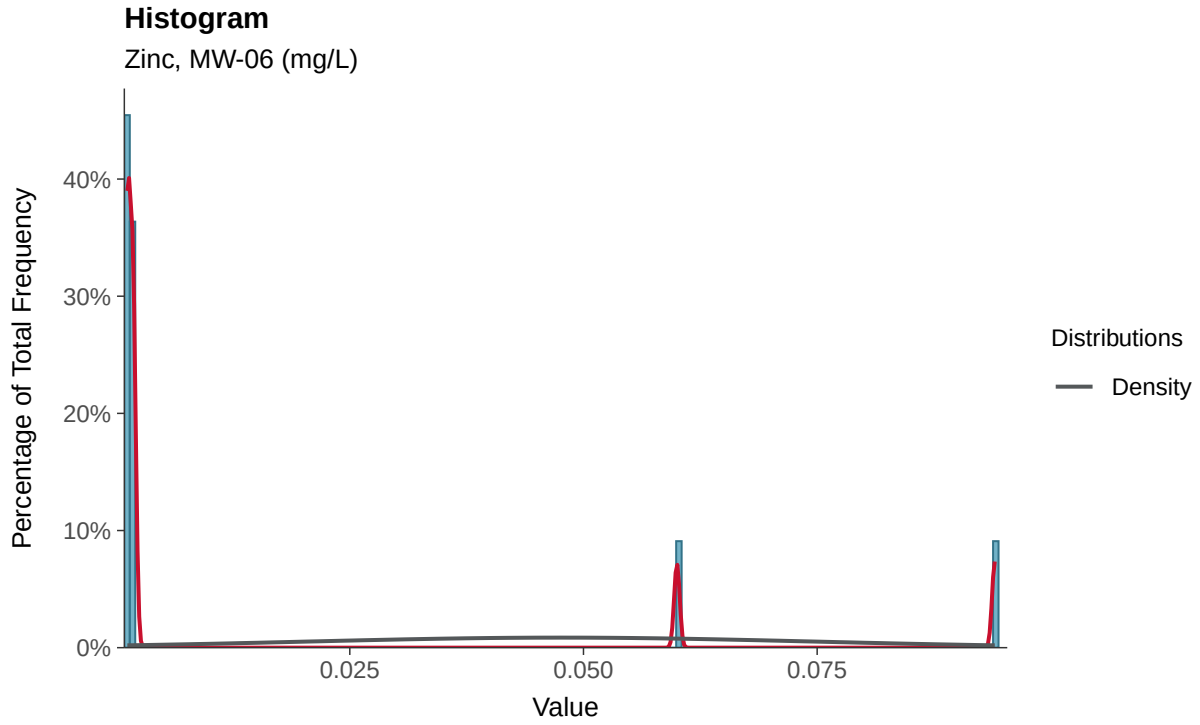
Vanadium, MW-06 (mg/L)



Part 115: Zinc, MW-06

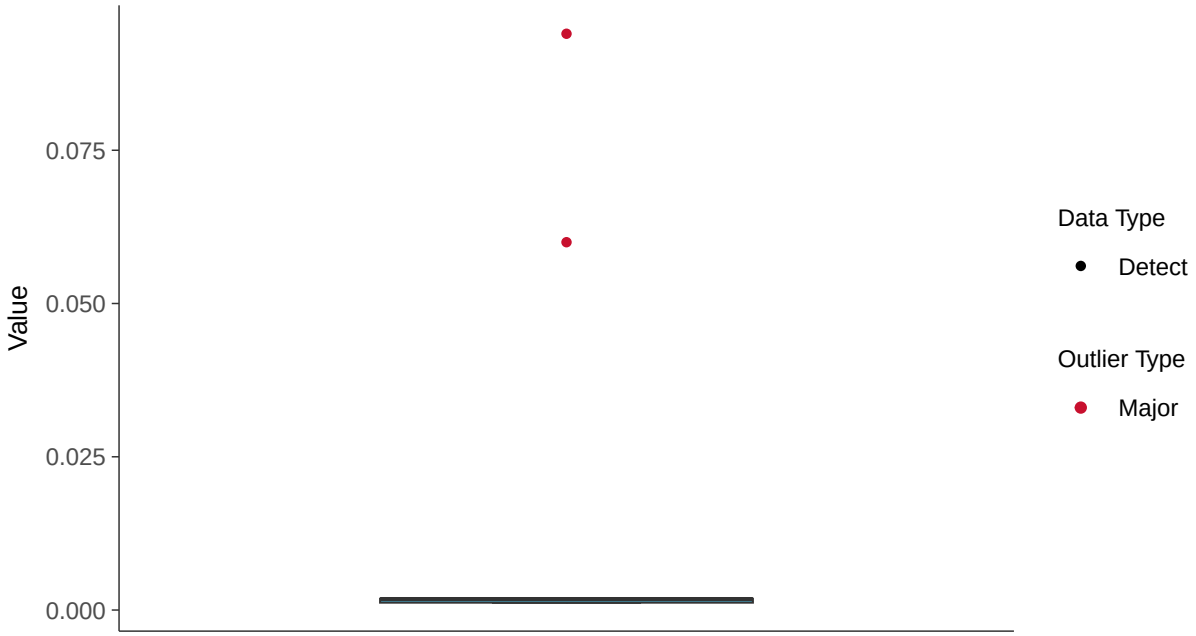
ID: 1_16_6_130





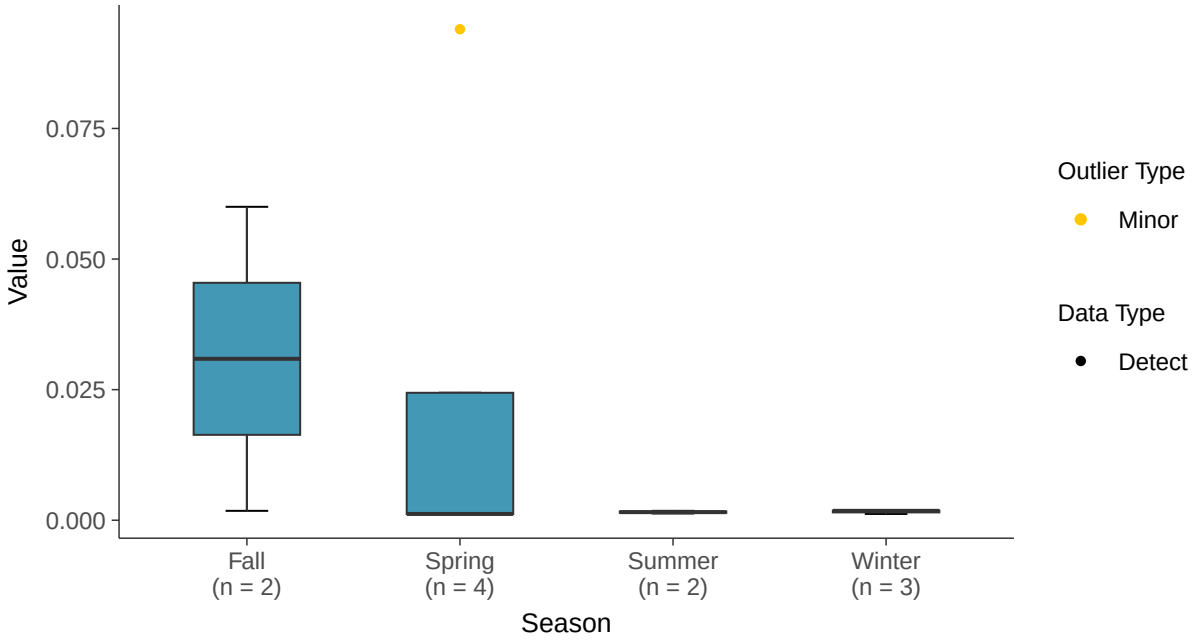
Boxplot

Zinc, MW-06 (mg/L)



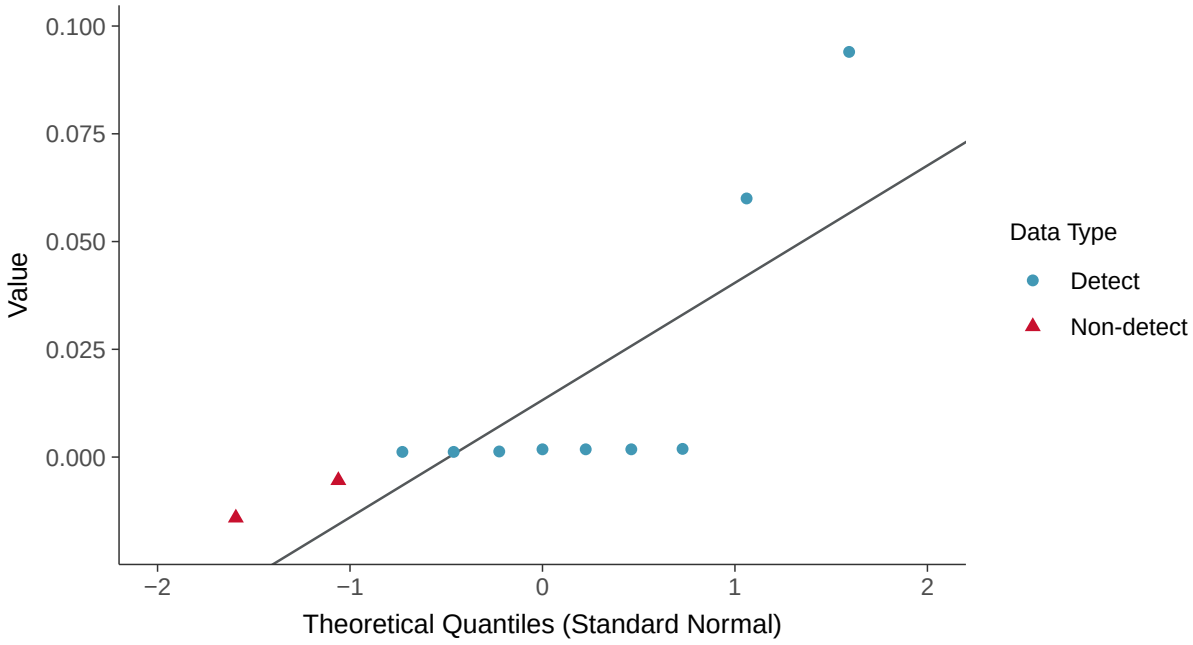
Boxplot by Season

Zinc, MW-06 (mg/L)



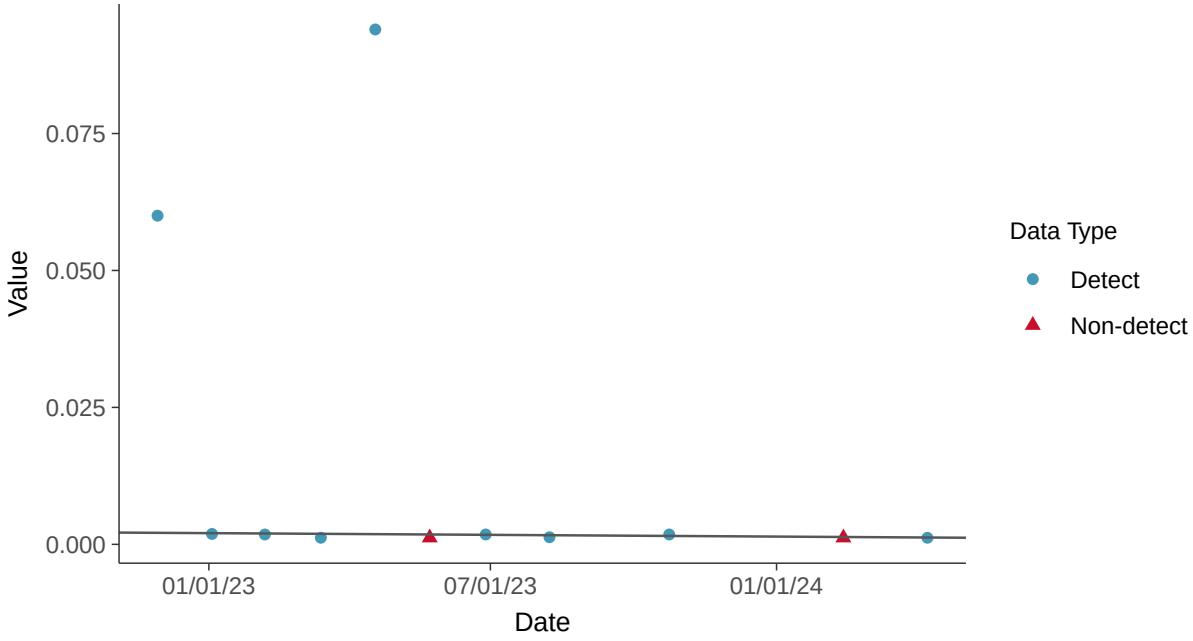
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-06 (mg/L)



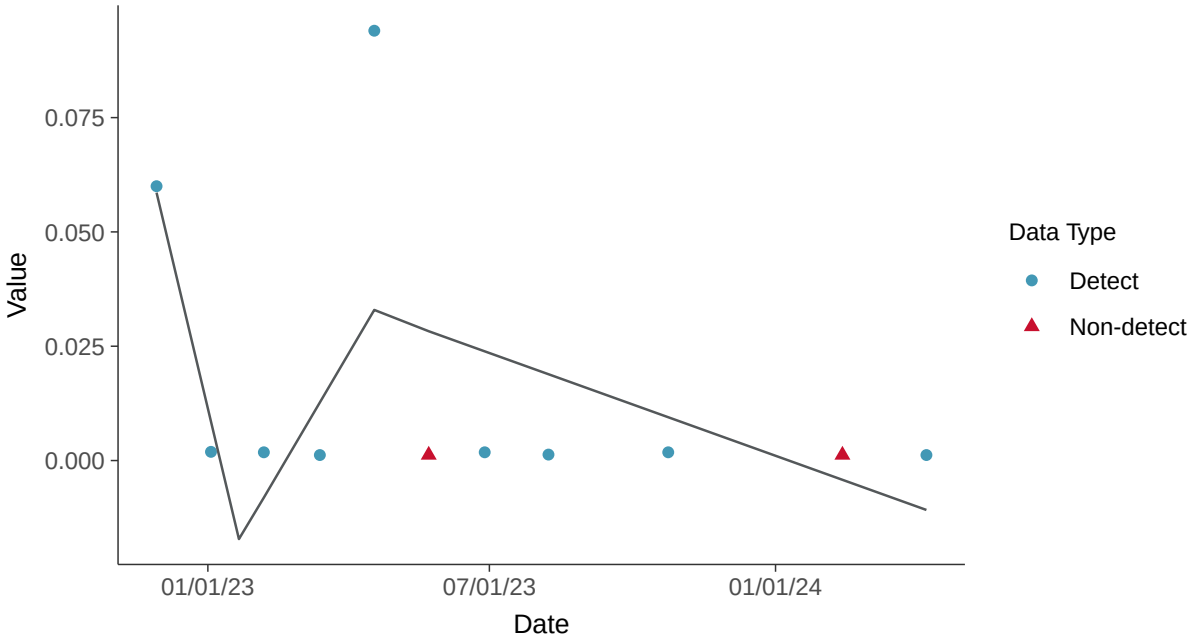
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Zinc, MW-06 (mg/L)



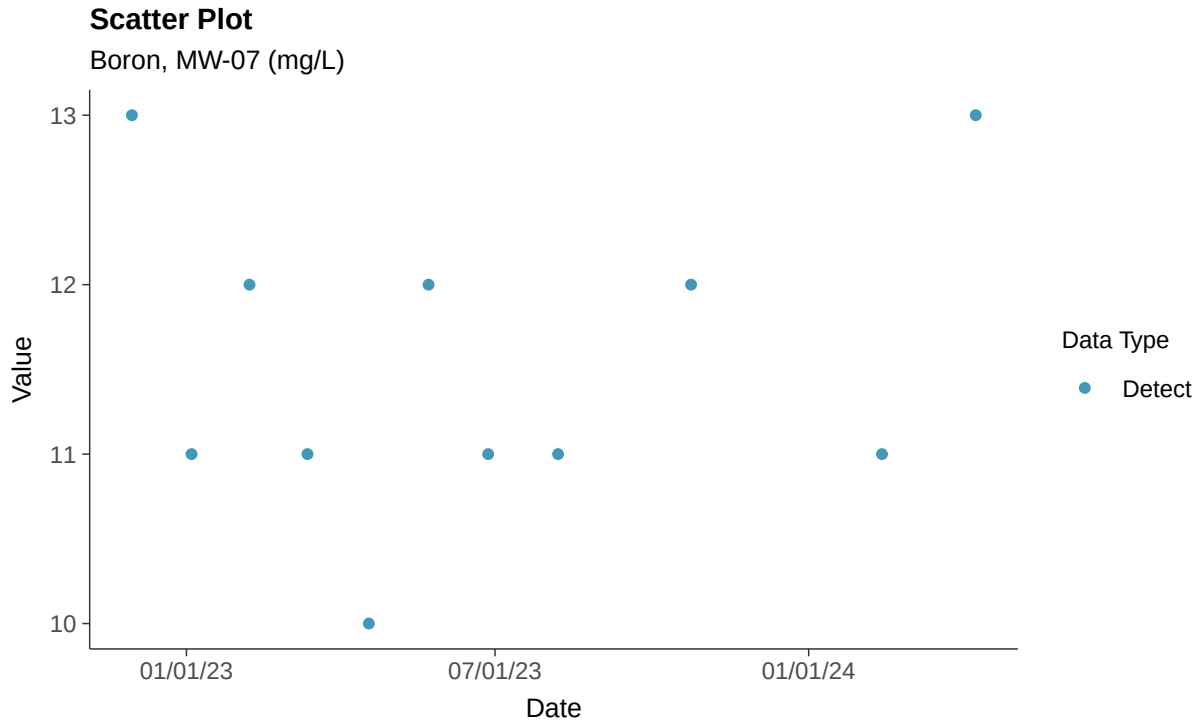
Trend Regression: Piecewise Linear-Linear-Linear

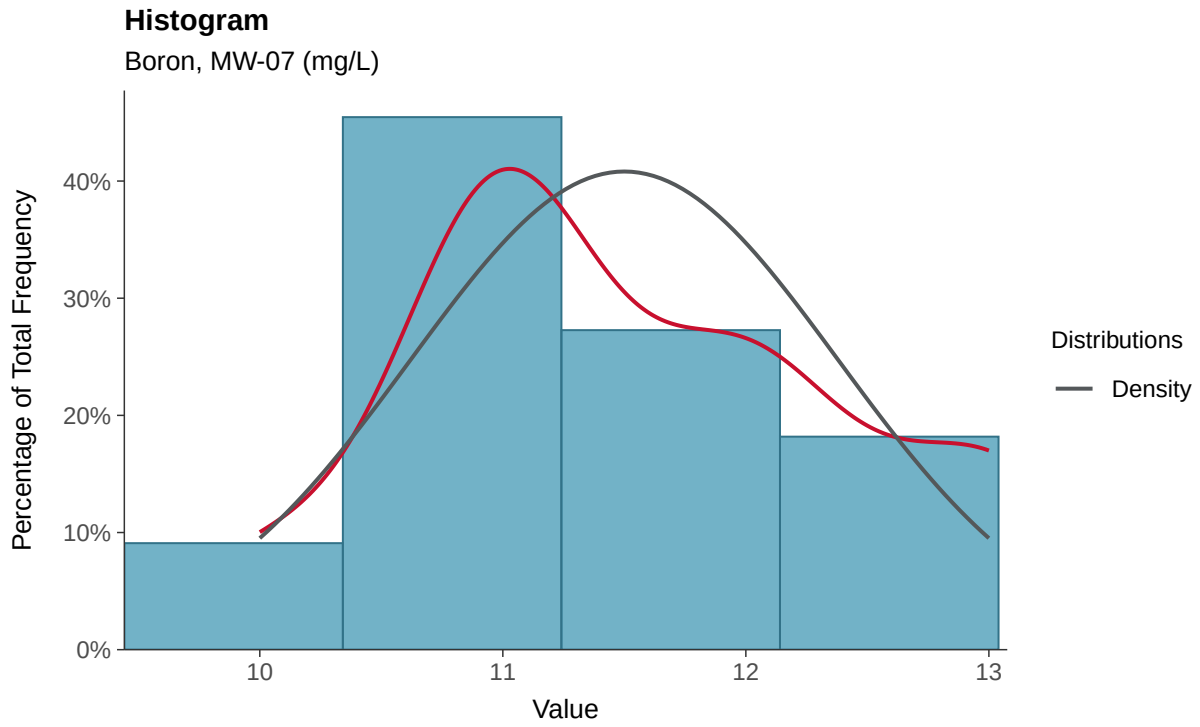
Zinc, MW-06 (mg/L)



Appendix III: Boron, MW-07

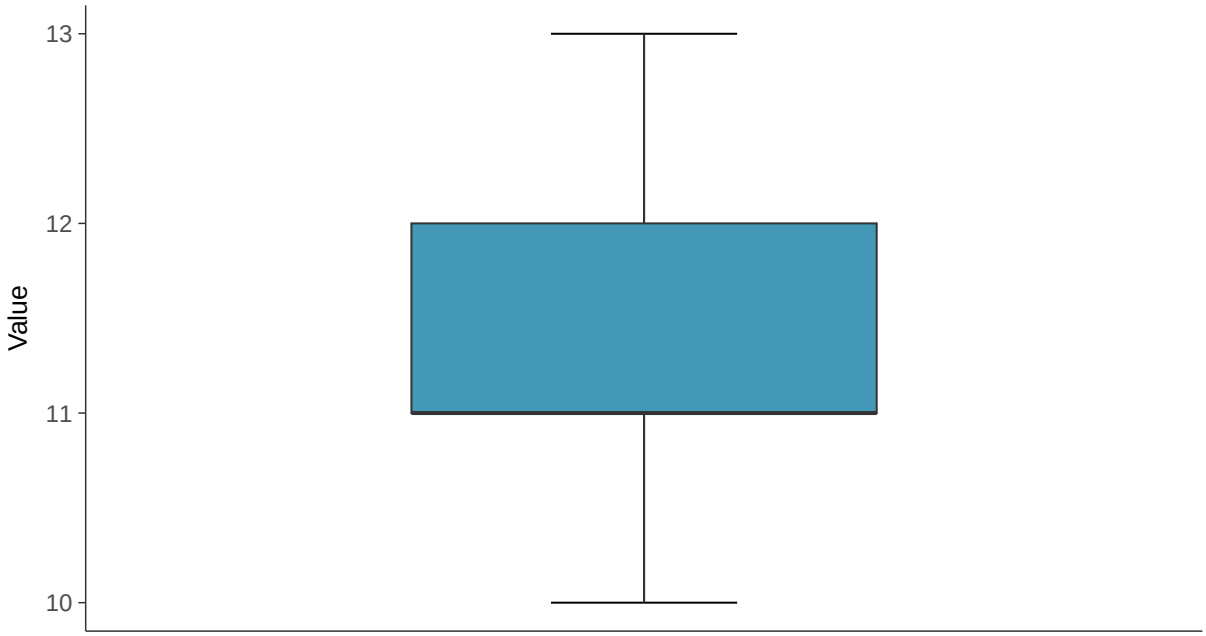
ID: 1_17_4_105





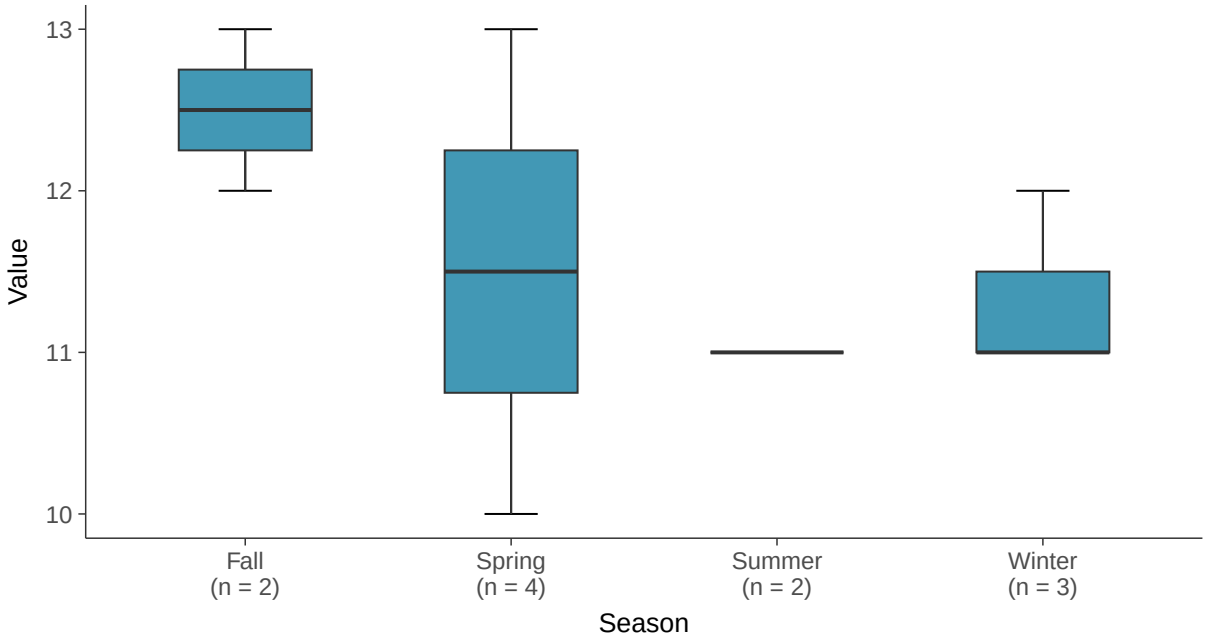
Boxplot

Boron, MW-07 (mg/L)



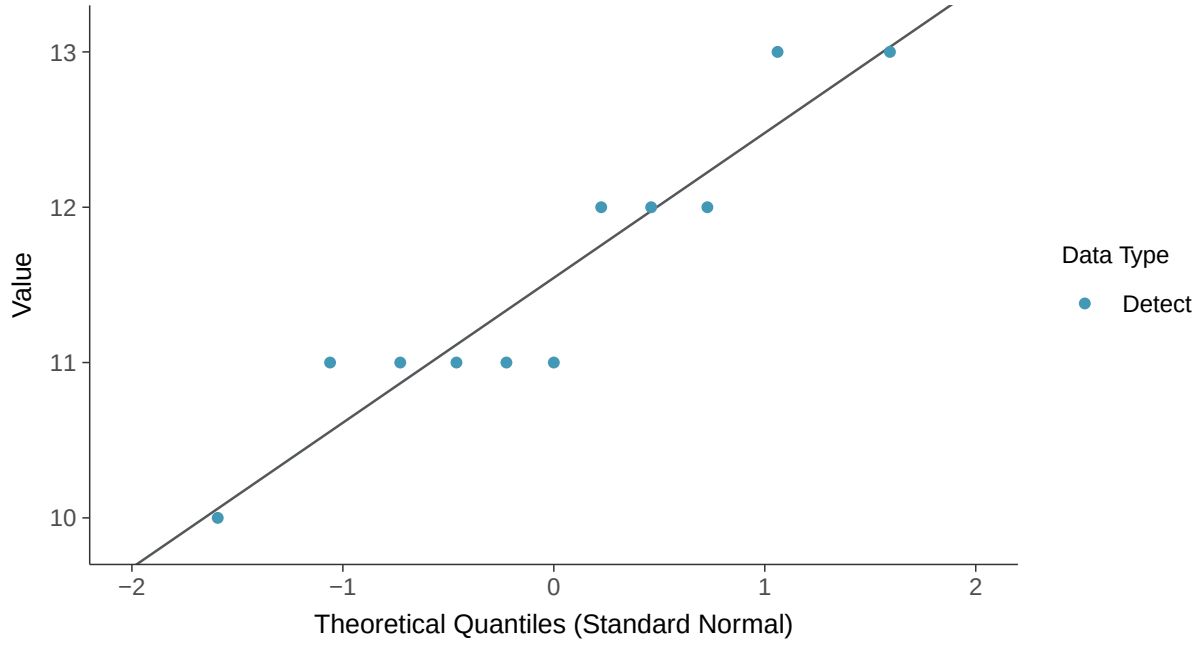
Boxplot by Season

Boron, MW-07 (mg/L)



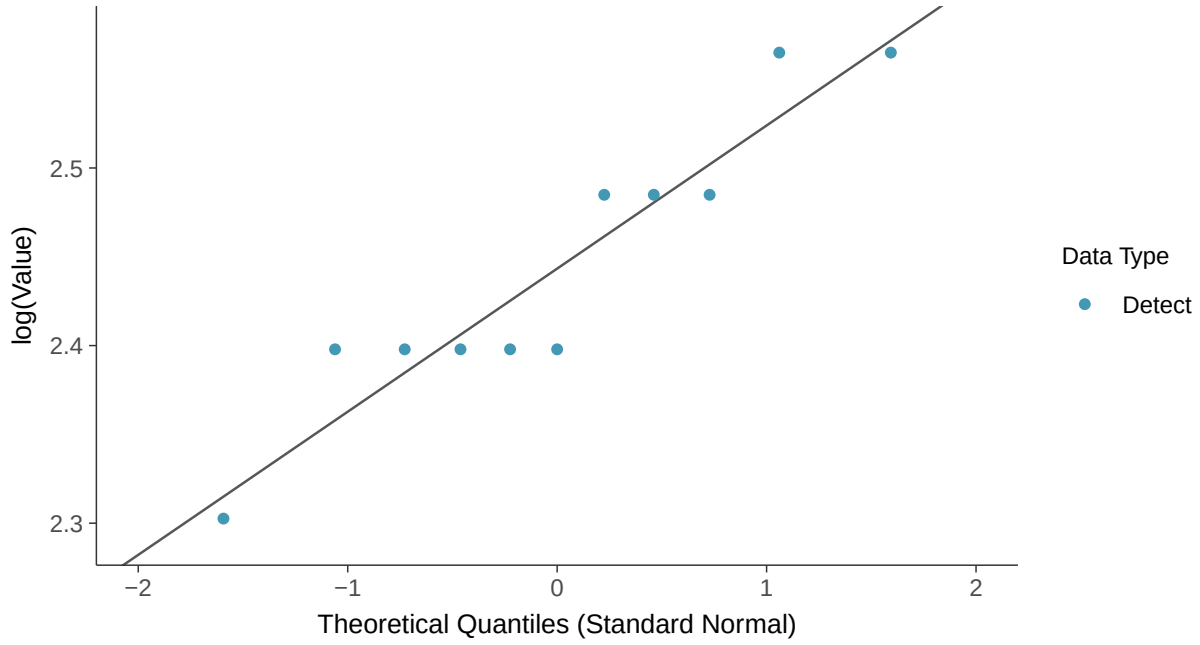
Normal Q-Q plot

Boron, MW-07 (mg/L)



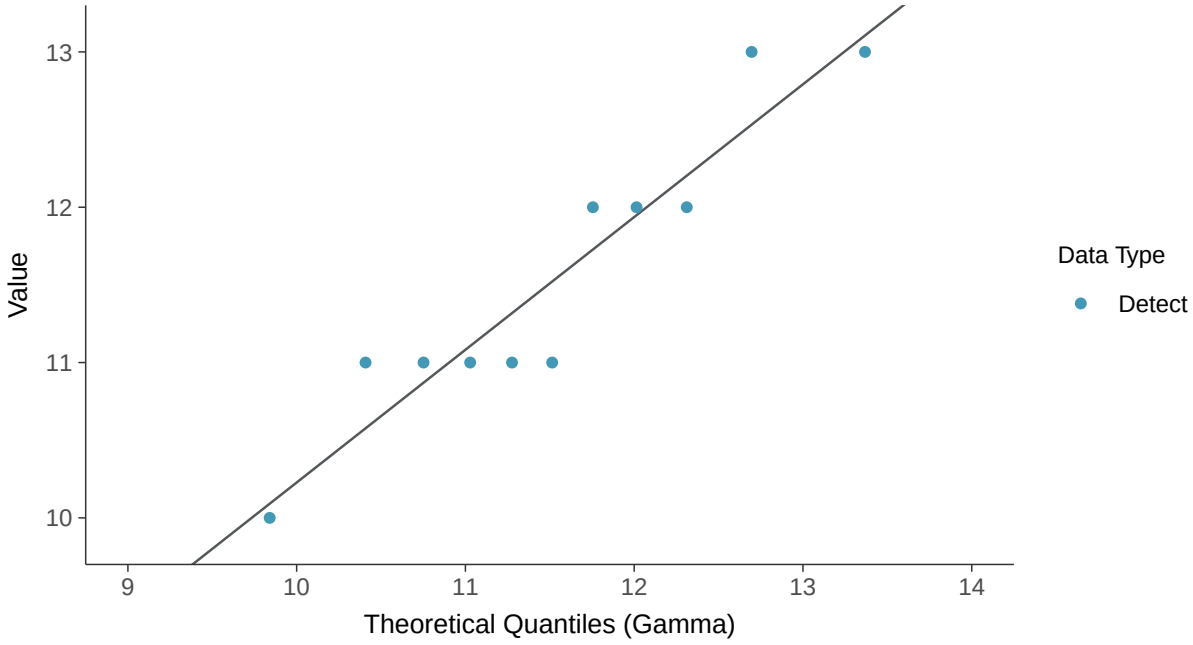
Lognormal Q-Q plot

Boron, MW-07 (mg/L)



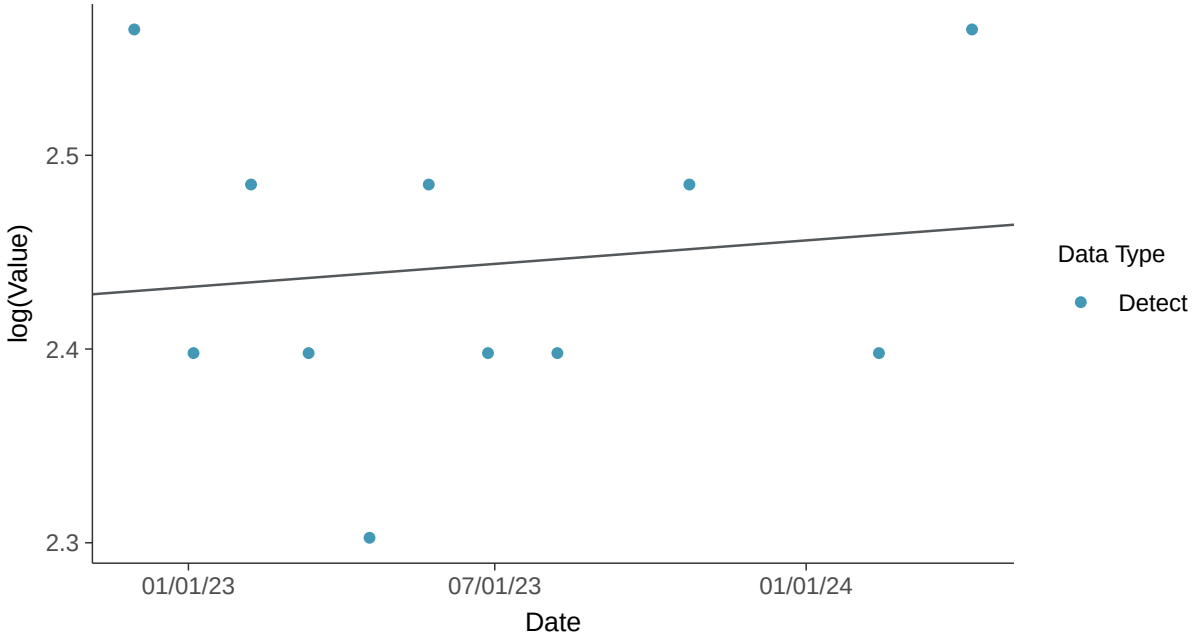
Gamma Q-Q plot

Boron, MW-07 (mg/L)



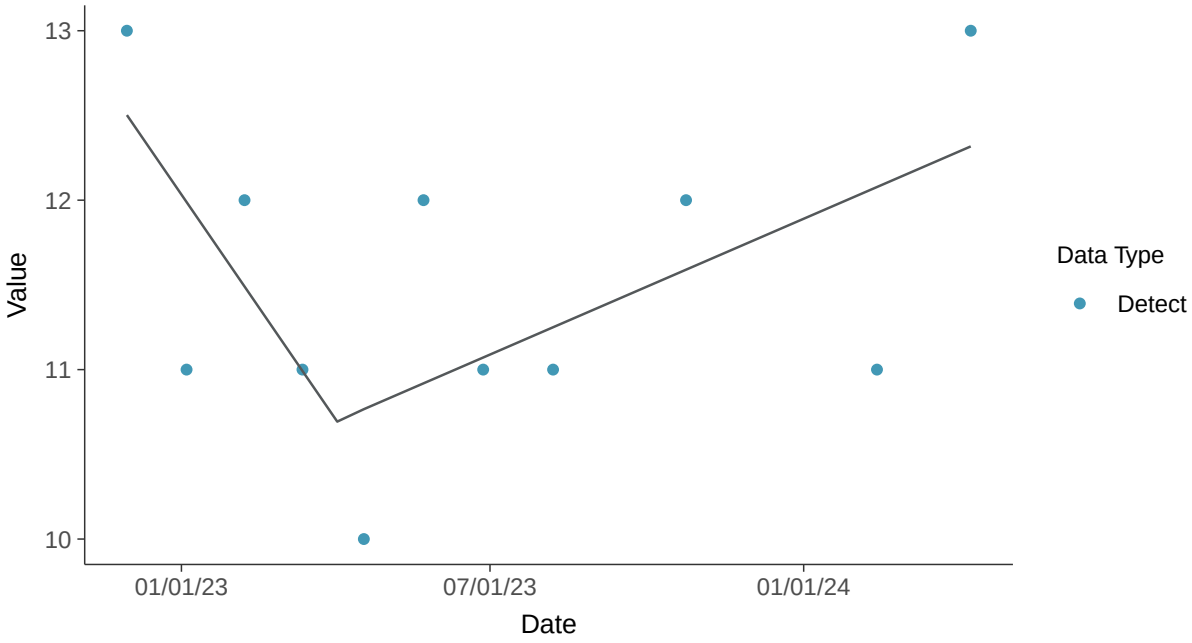
Trend Regression: Lognormal MLE

Boron, MW-07 (mg/L)



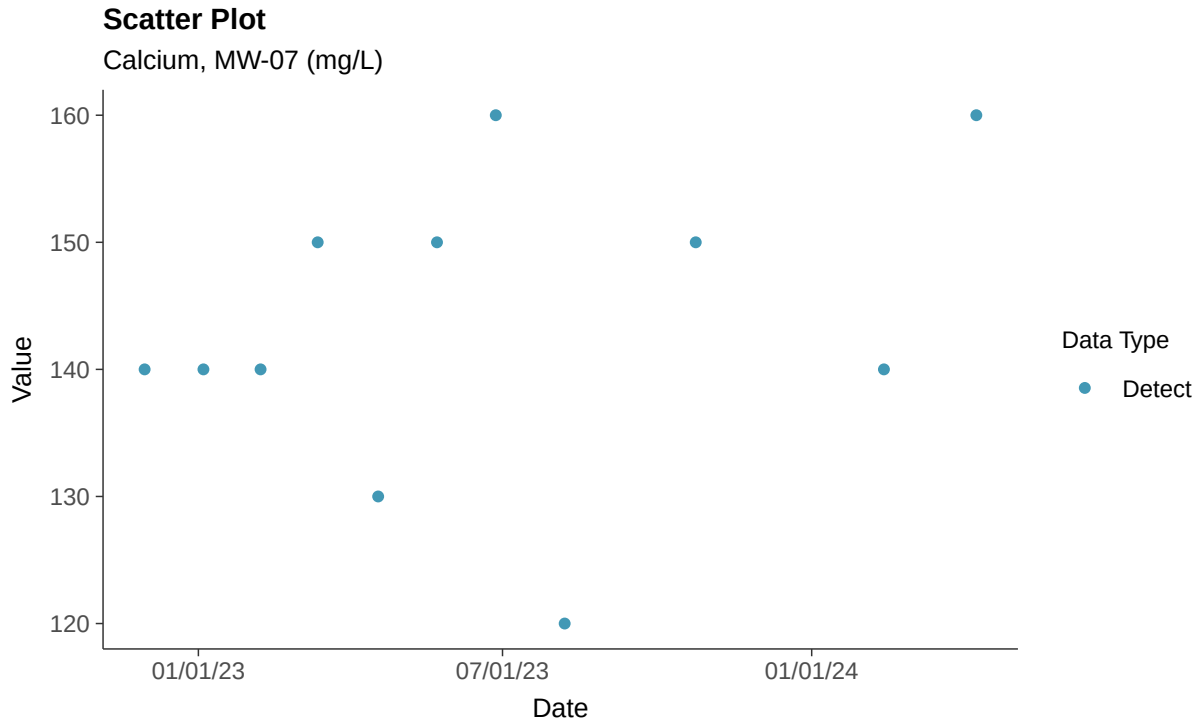
Trend Regression: Piecewise Linear-Linear

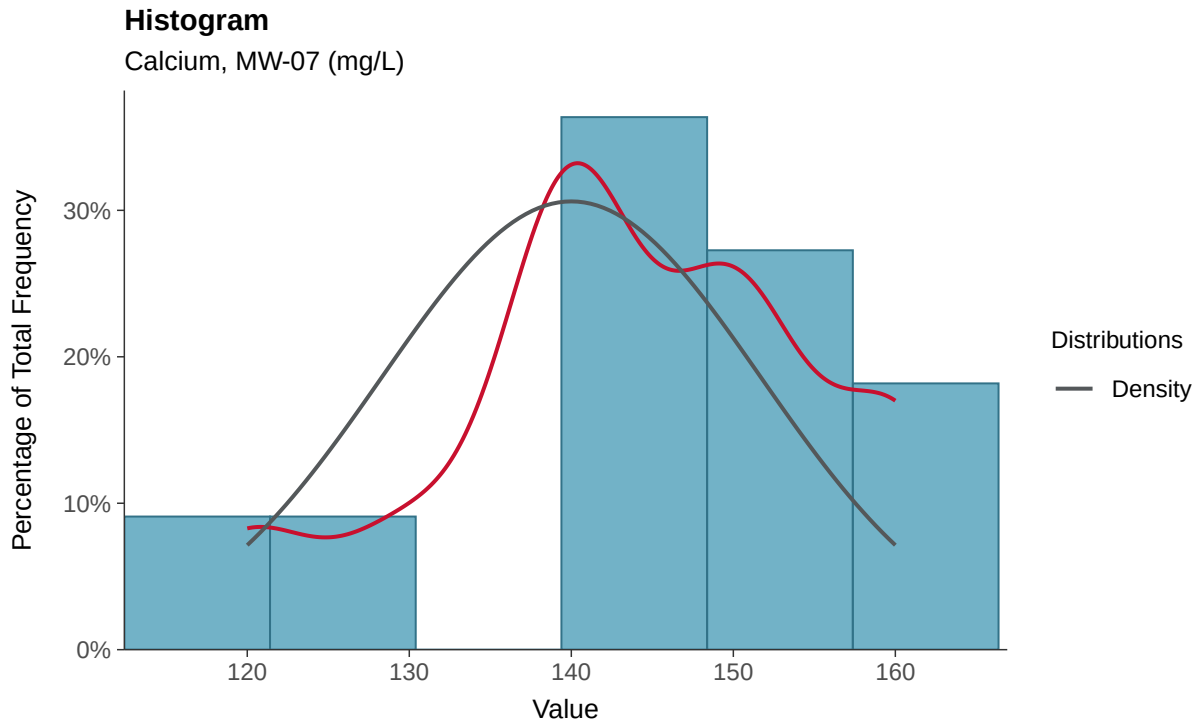
Boron, MW-07 (mg/L)



Appendix III: Calcium, MW-07

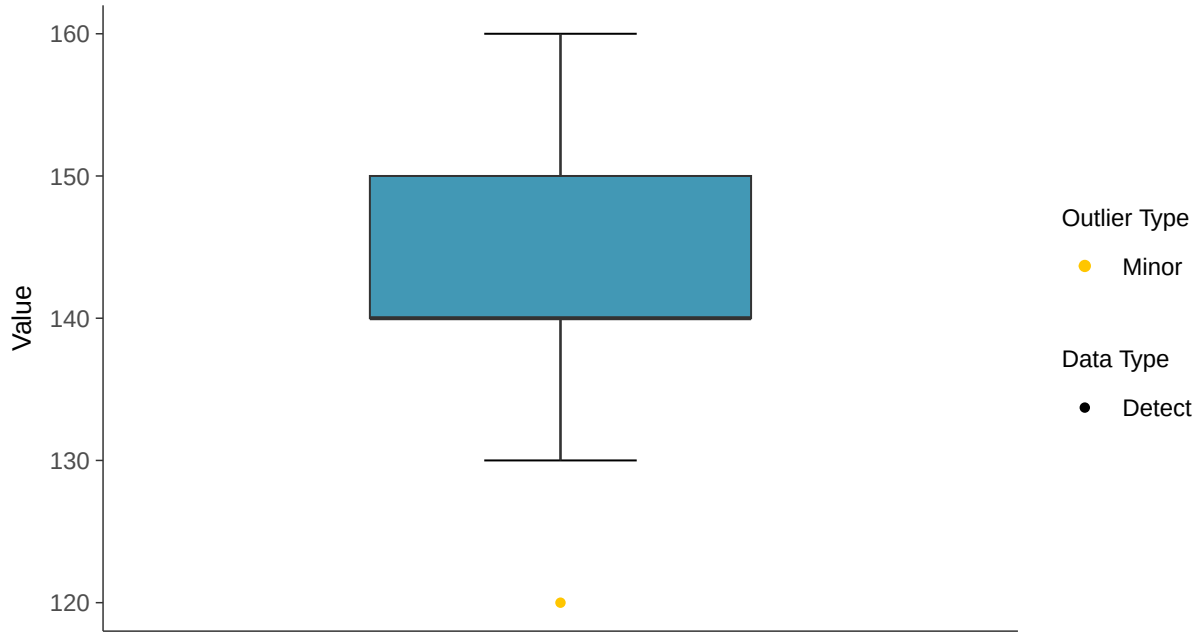
ID: 1_17_4_107





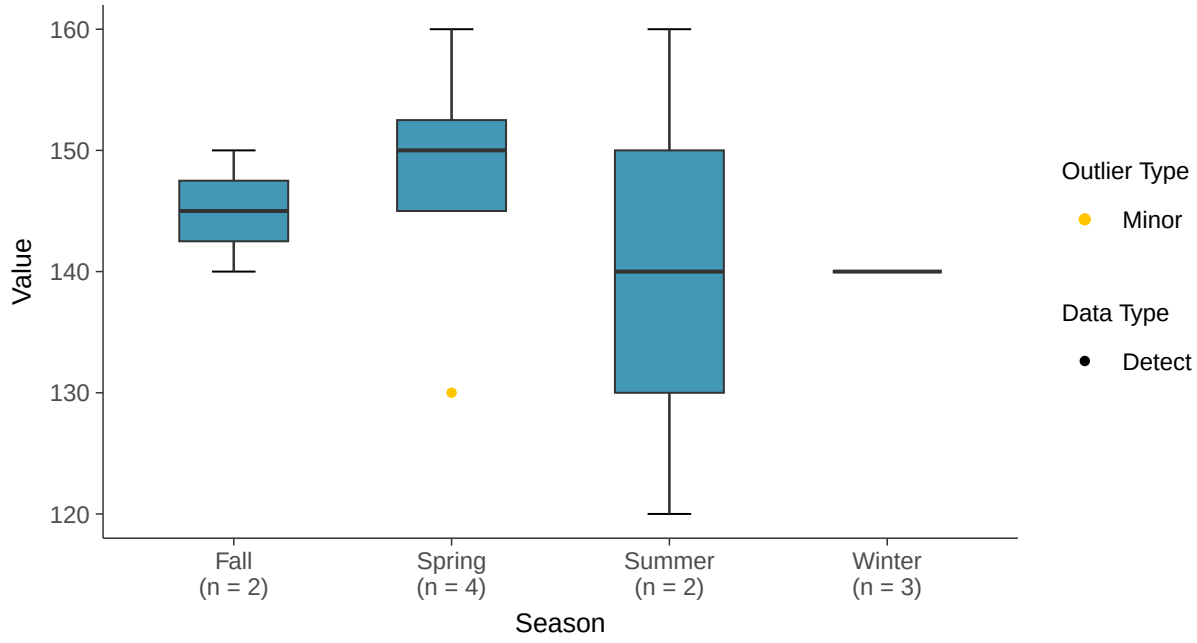
Boxplot

Calcium, MW-07 (mg/L)



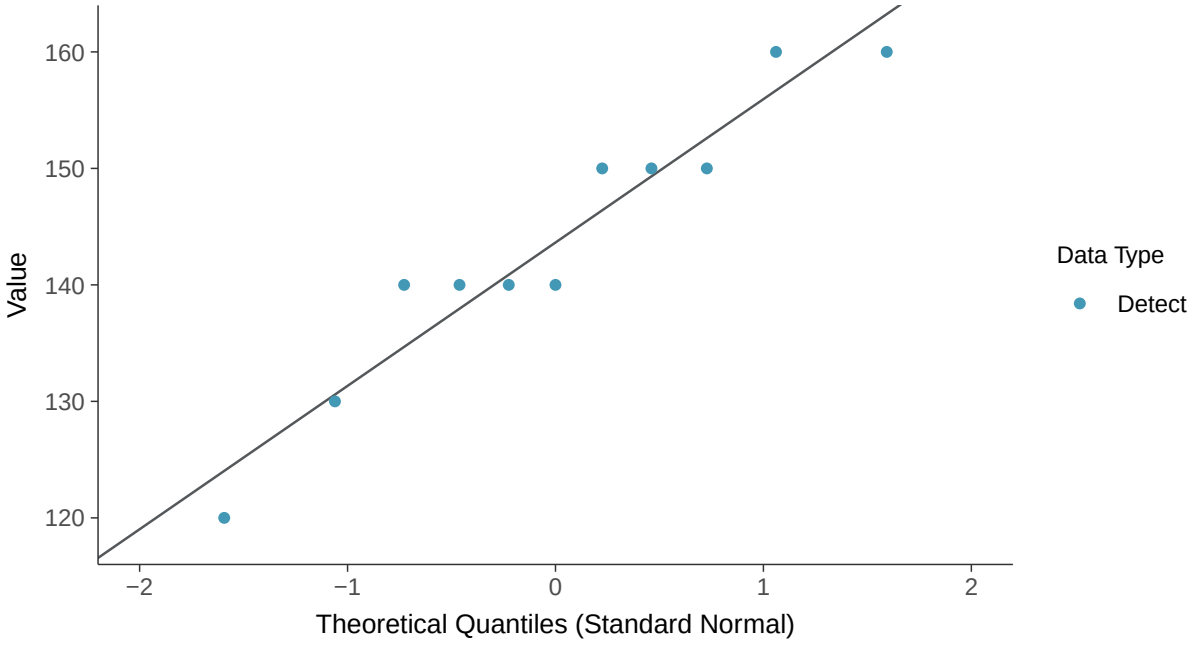
Boxplot by Season

Calcium, MW-07 (mg/L)



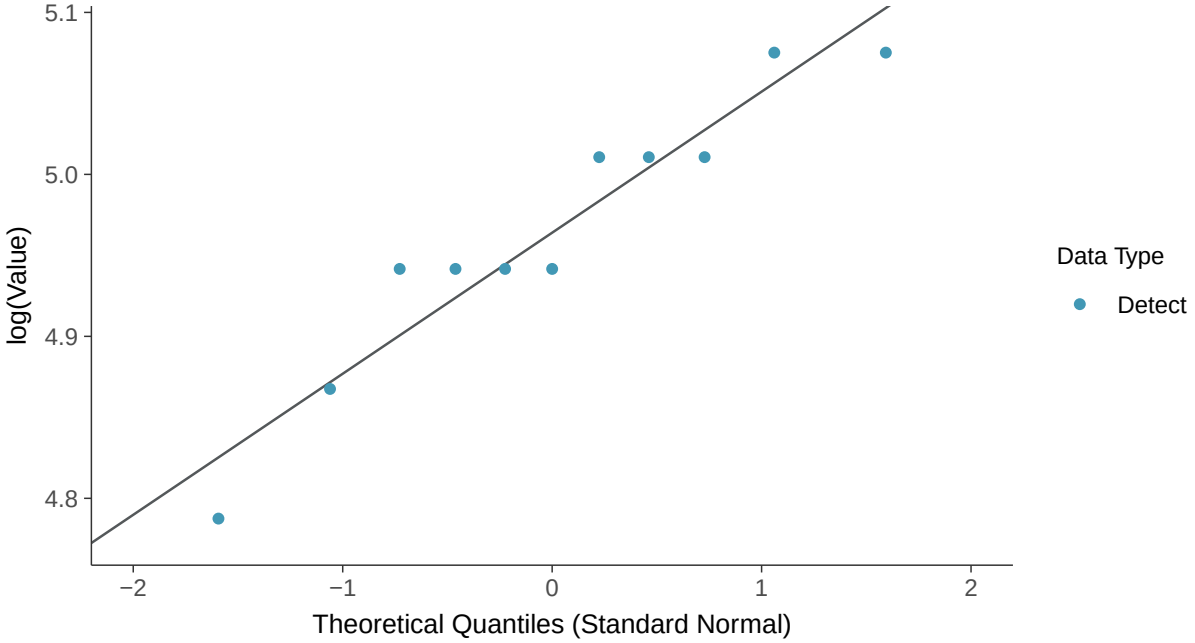
Normal Q-Q plot

Calcium, MW-07 (mg/L)



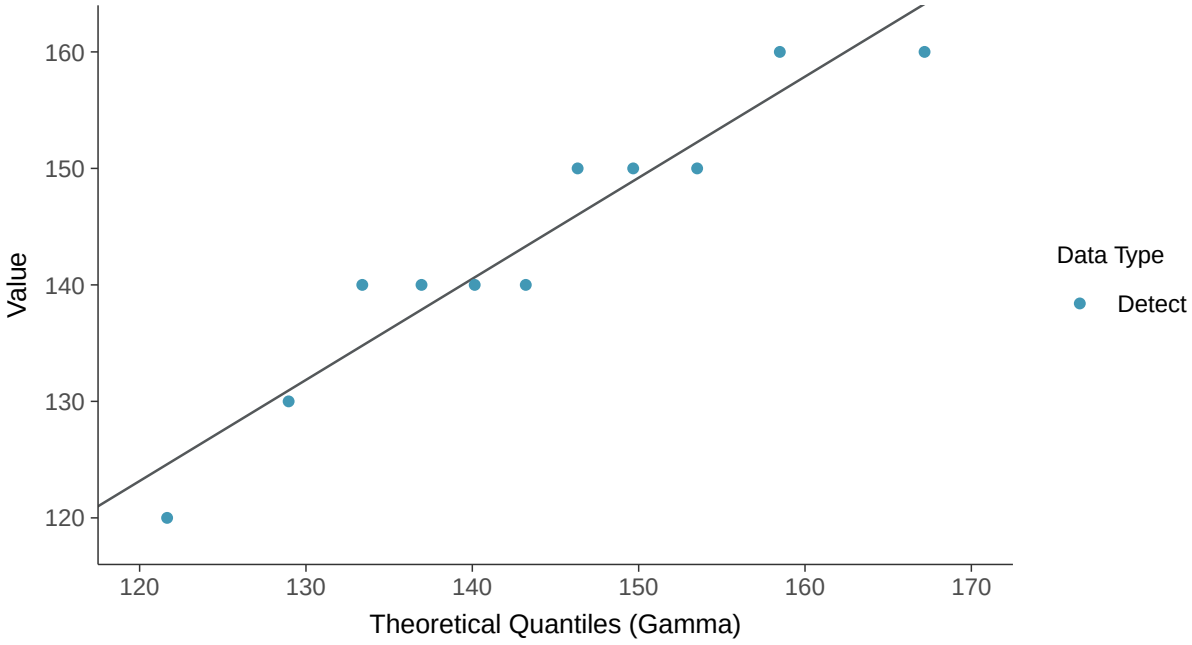
Lognormal Q-Q plot

Calcium, MW-07 (mg/L)



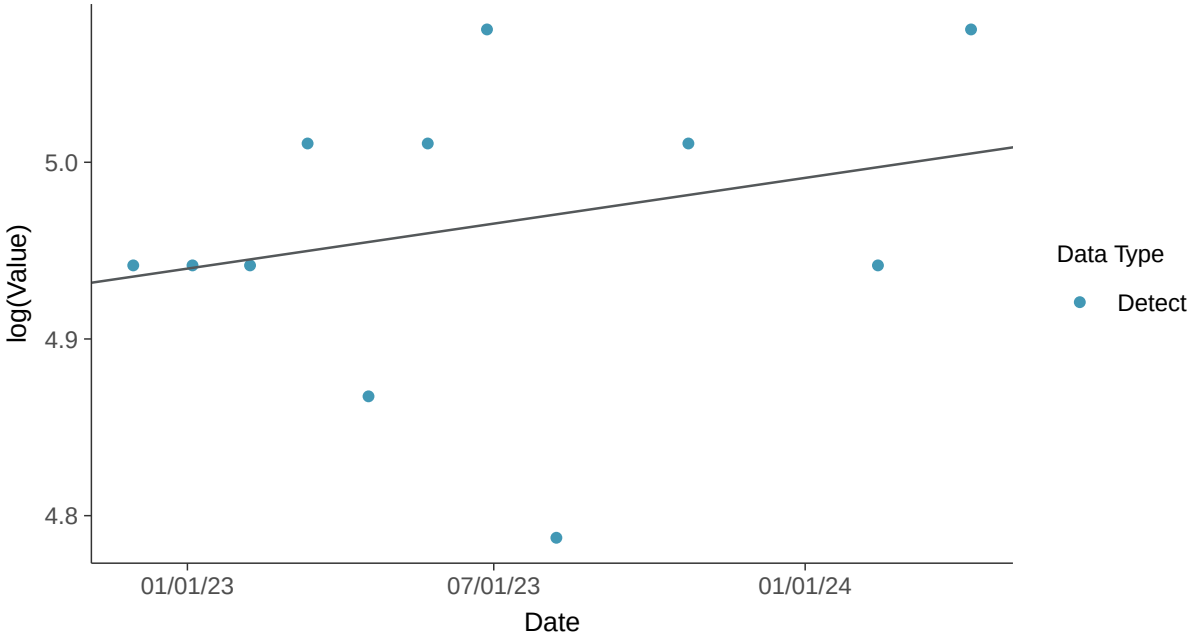
Gamma Q-Q plot

Calcium, MW-07 (mg/L)



Trend Regression: Lognormal MLE

Calcium, MW-07 (mg/L)

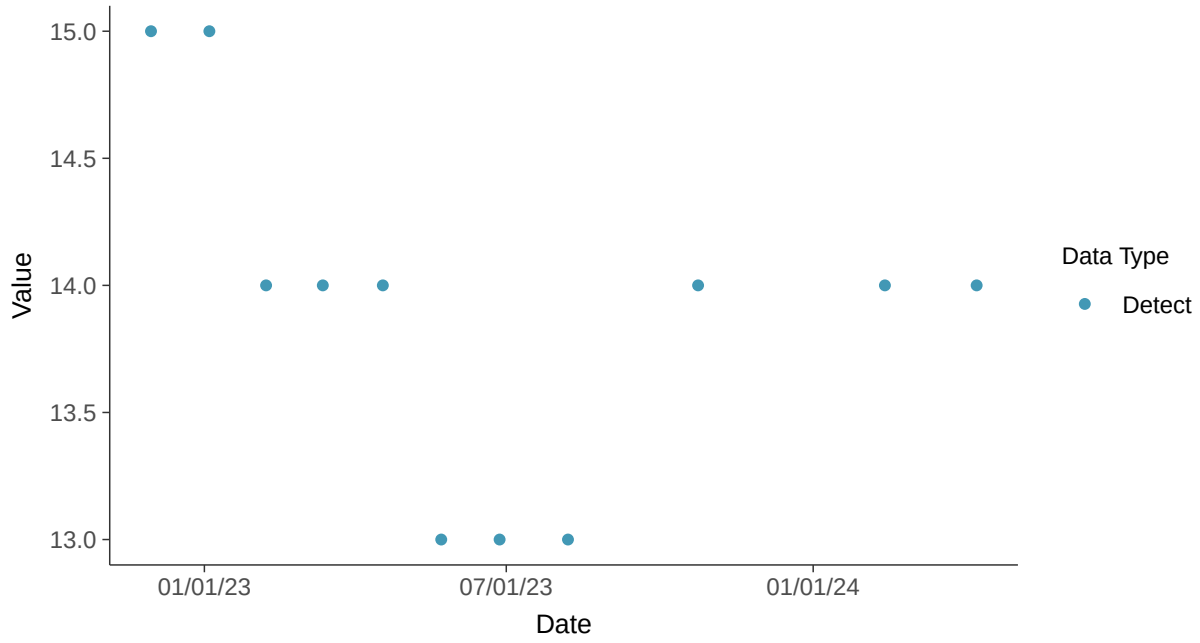


Appendix III: Chloride (as Cl), MW-07

ID: 1_17_4_108

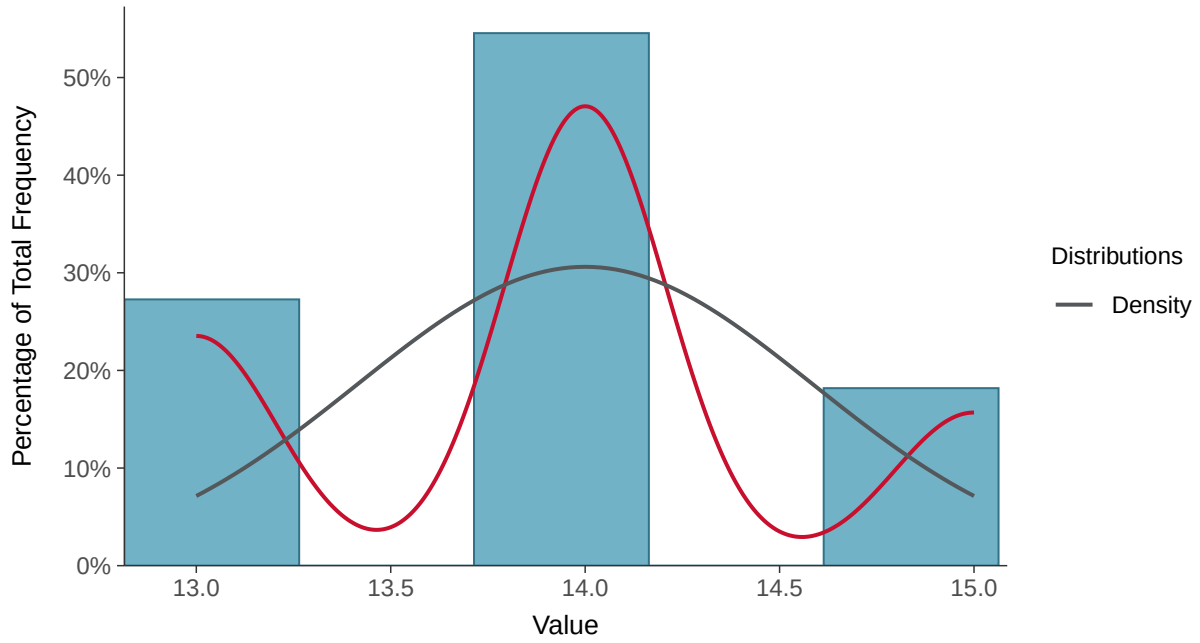
Scatter Plot

Chloride (as Cl), MW-07 (mg/L)



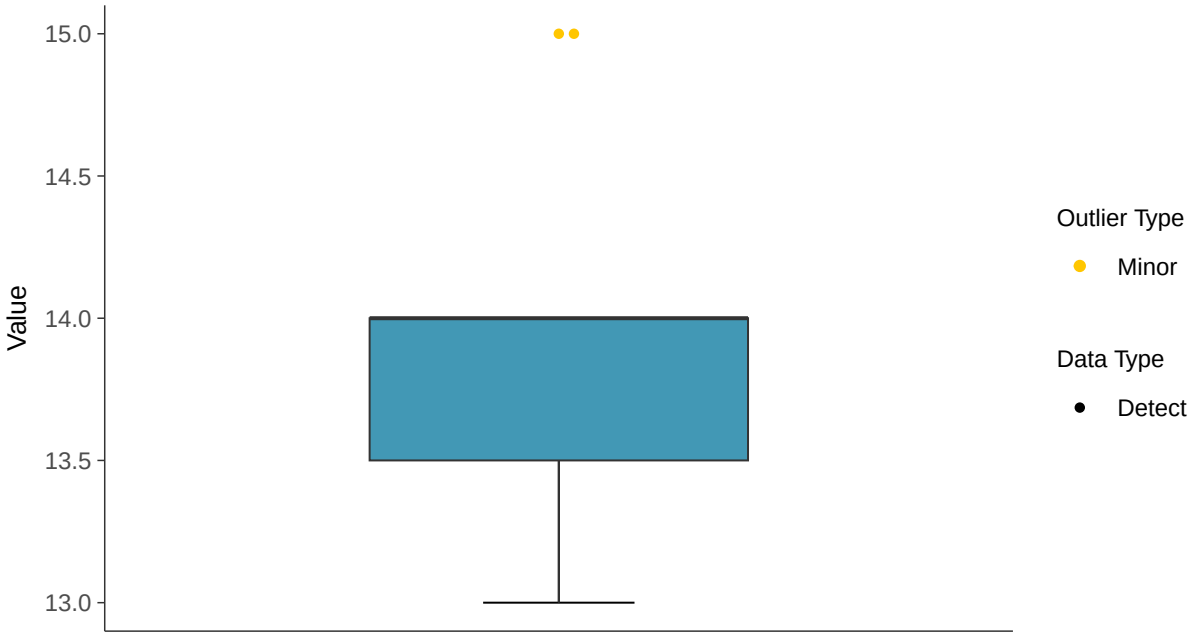
Histogram

Chloride (as Cl), MW-07 (mg/L)



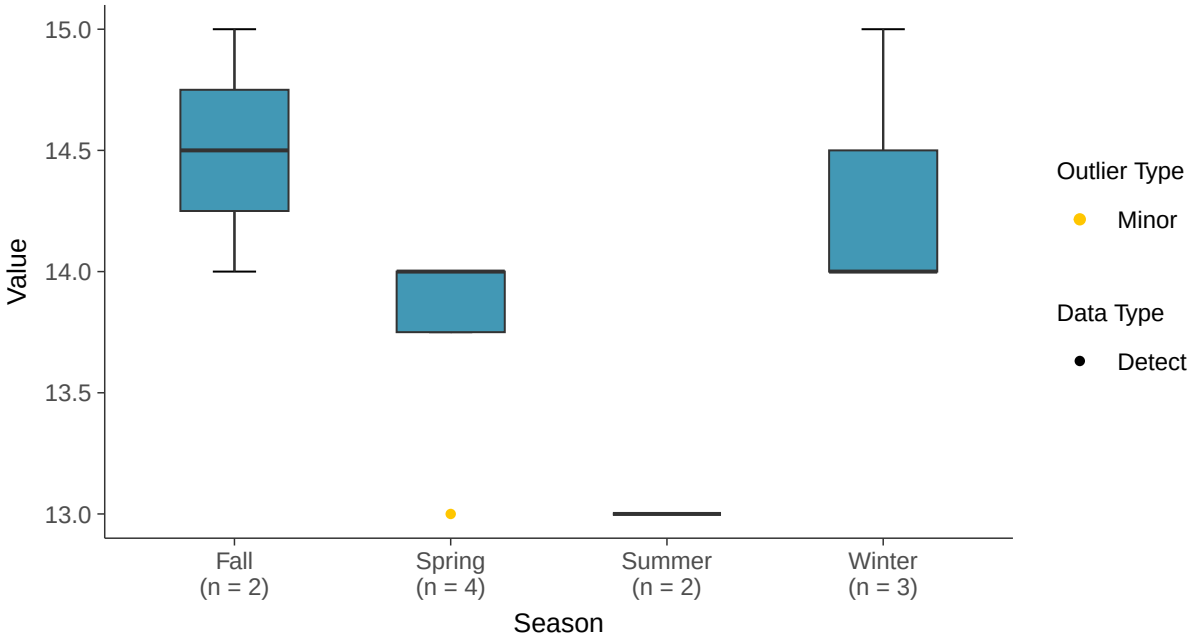
Boxplot

Chloride (as Cl), MW-07 (mg/L)



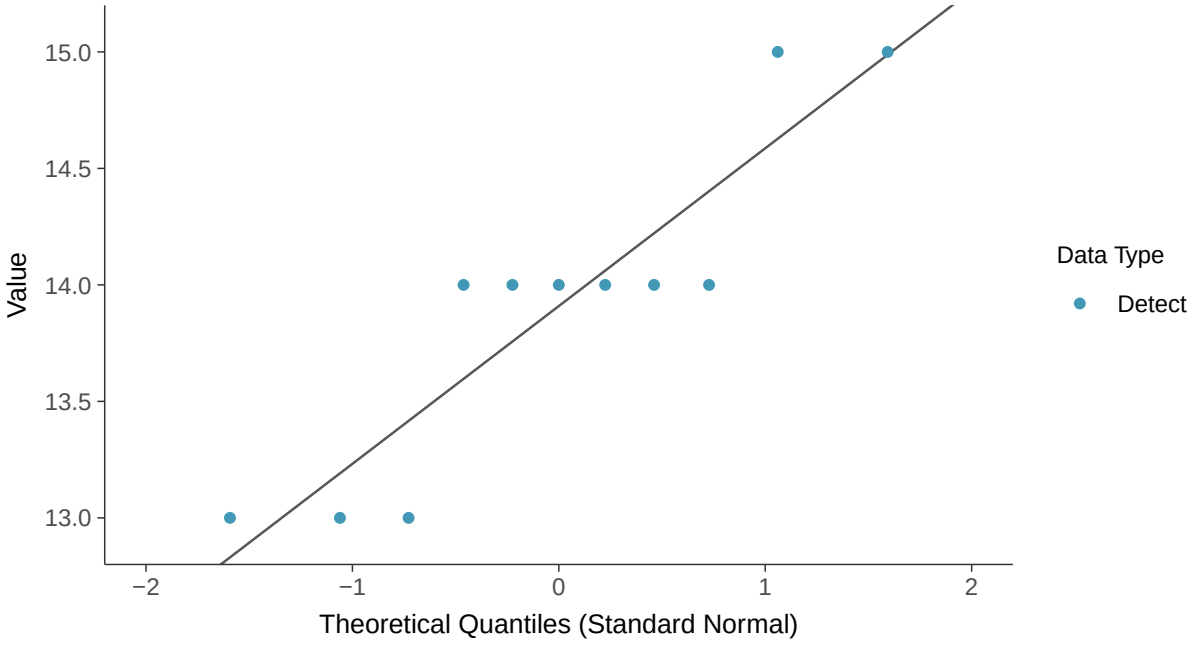
Boxplot by Season

Chloride (as Cl), MW-07 (mg/L)



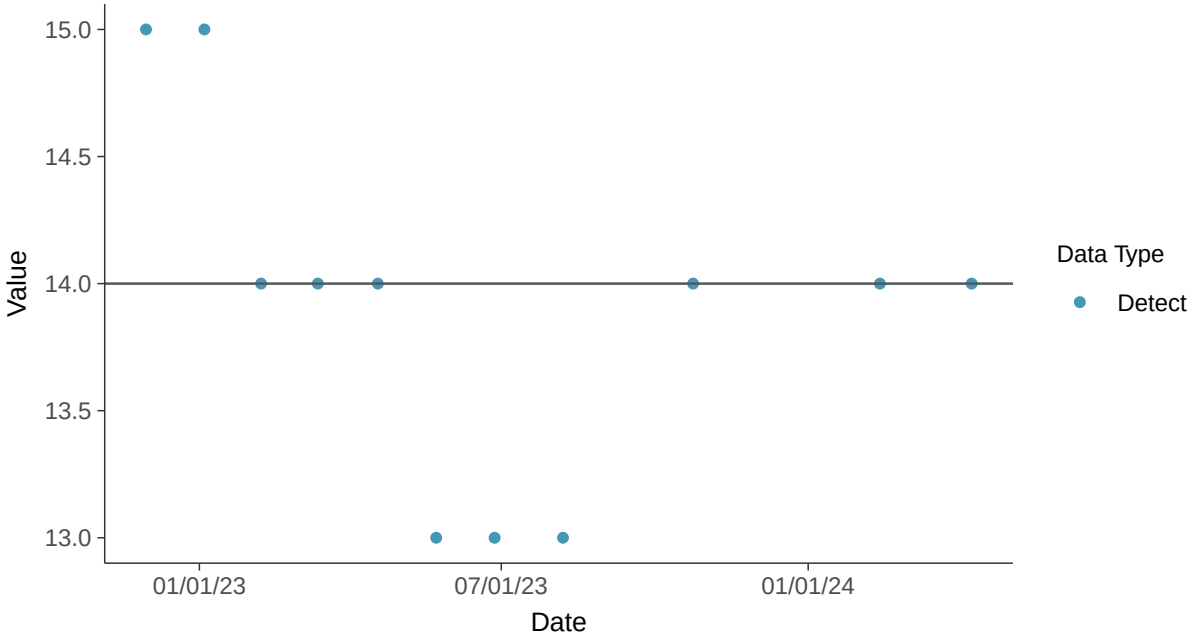
Normal Q-Q plot

Chloride (as Cl), MW-07 (mg/L)



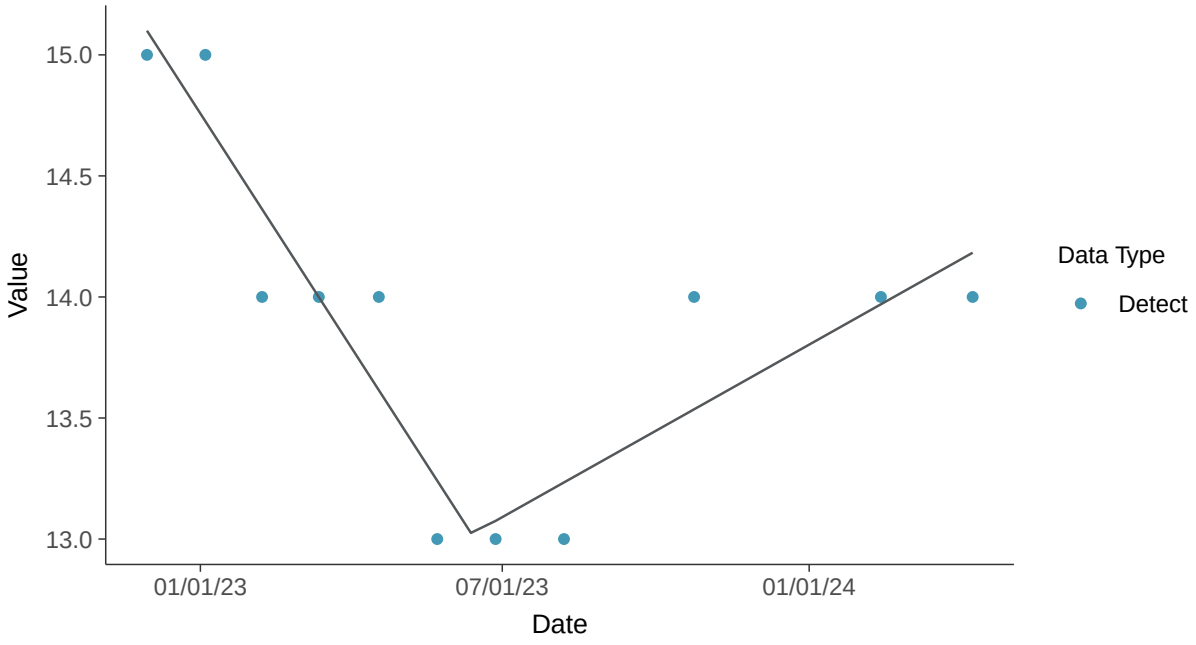
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Chloride (as Cl), MW-07 (mg/L)



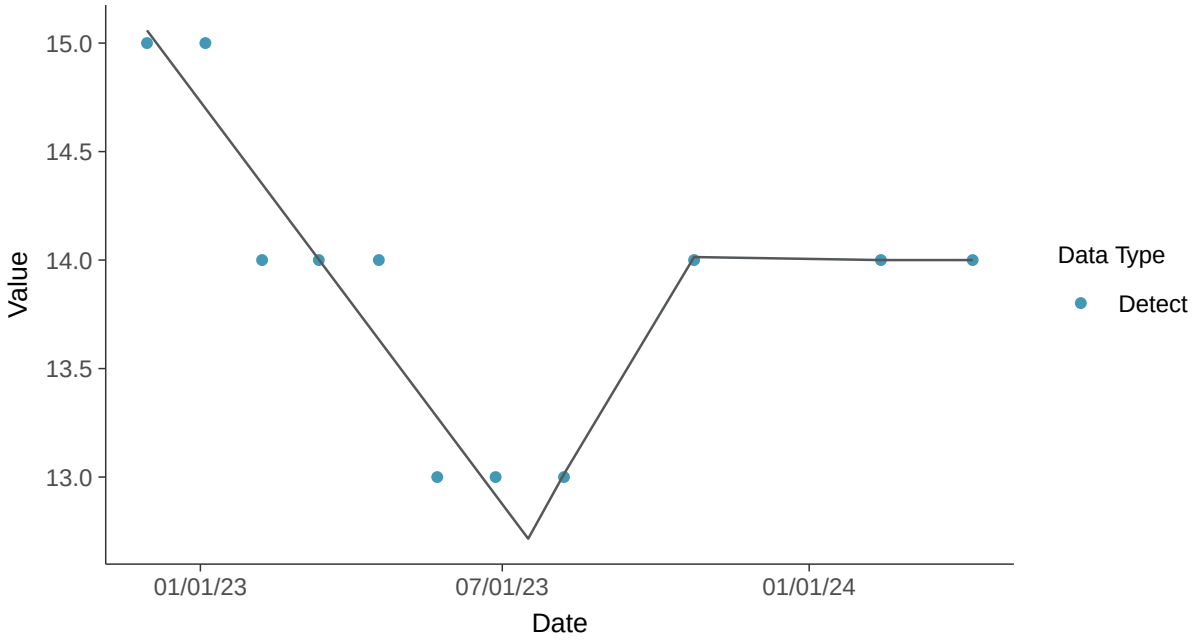
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-07 (mg/L)



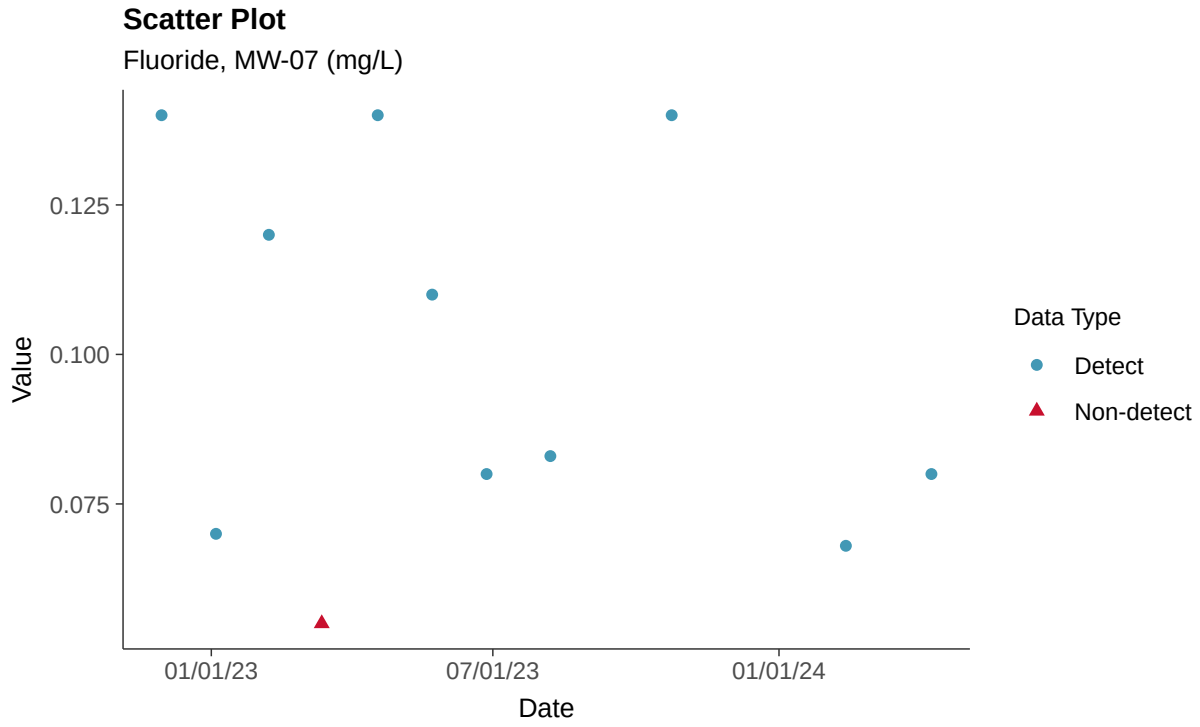
Trend Regression: Piecewise Linear-Linear-Linear

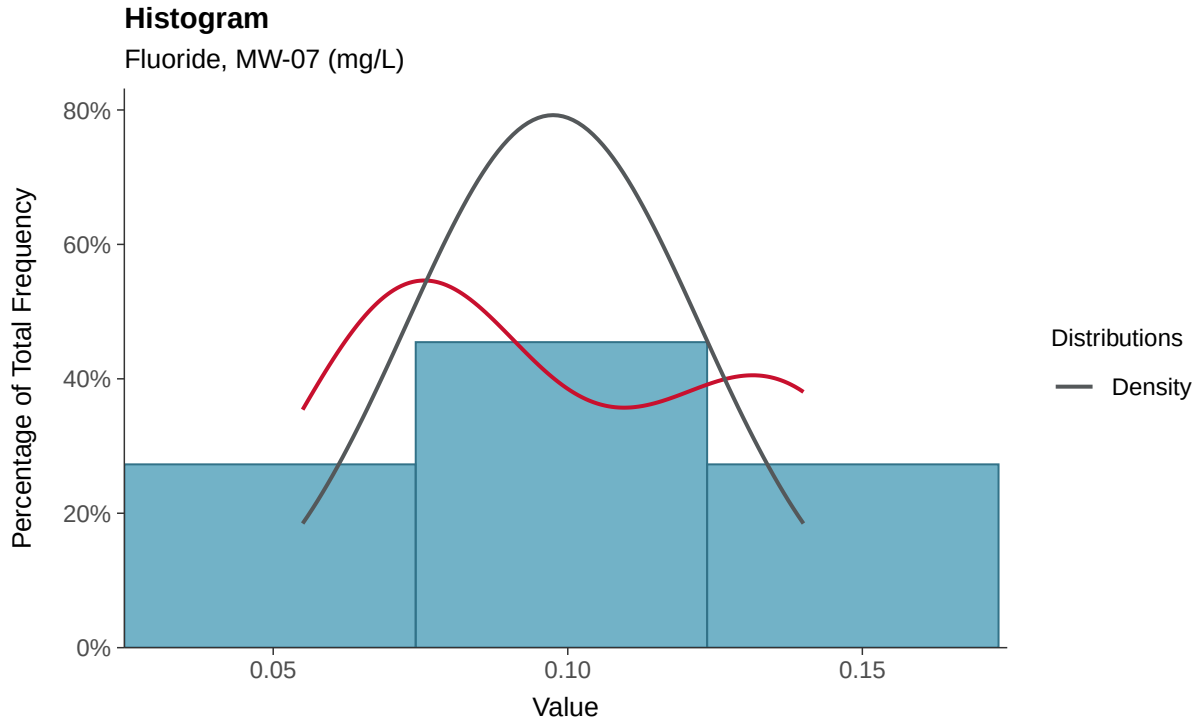
Chloride (as Cl), MW-07 (mg/L)



Appendix III: Fluoride, MW-07

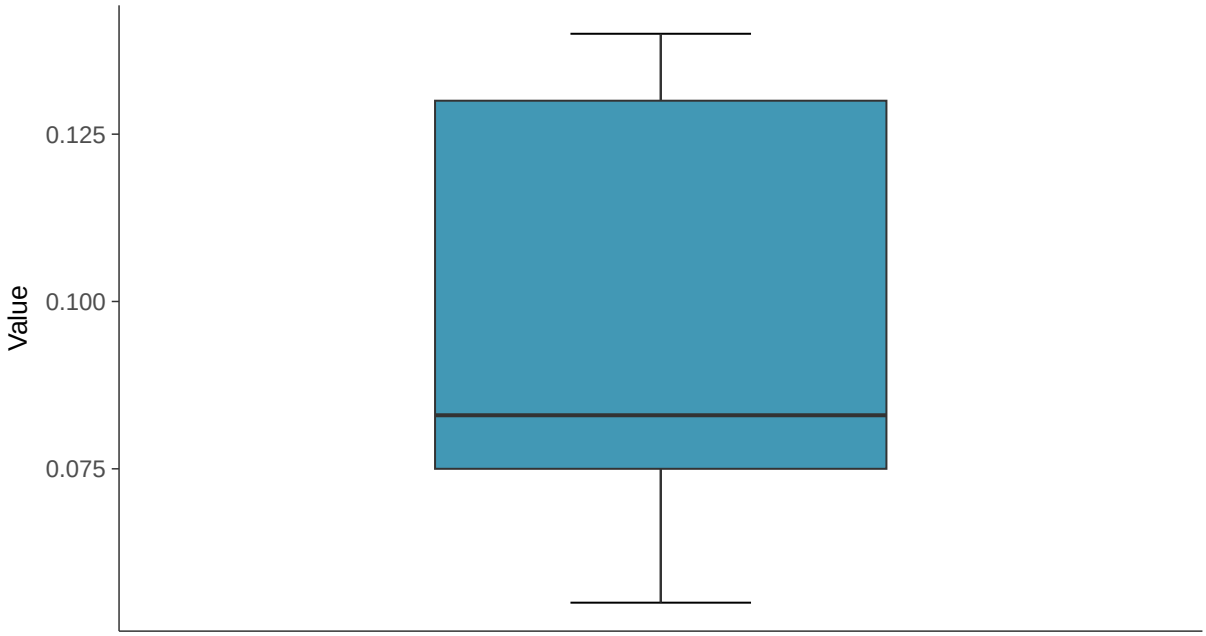
ID: 1_17_4_112





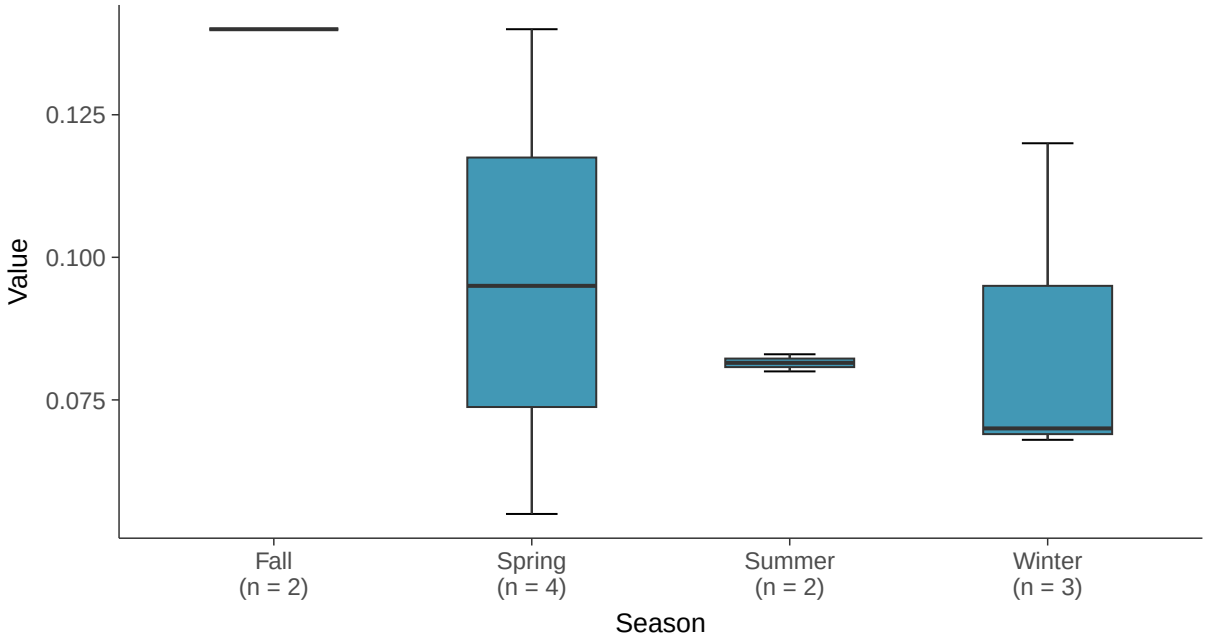
Boxplot

Fluoride, MW-07 (mg/L)



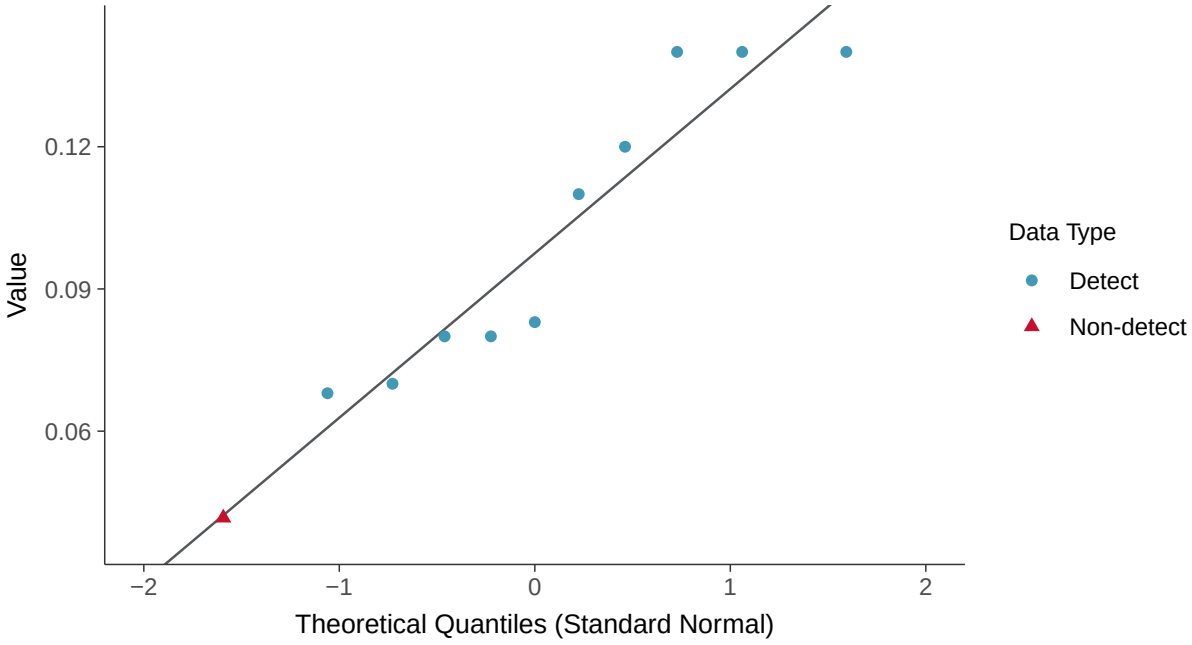
Boxplot by Season

Fluoride, MW-07 (mg/L)



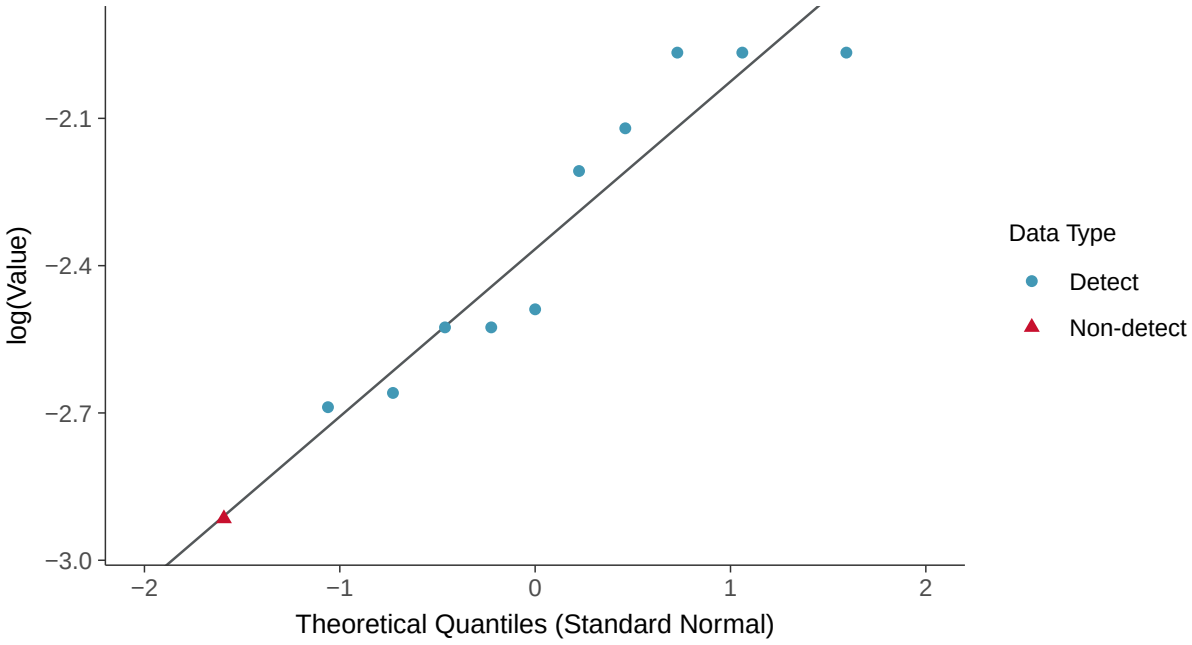
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-07 (mg/L)



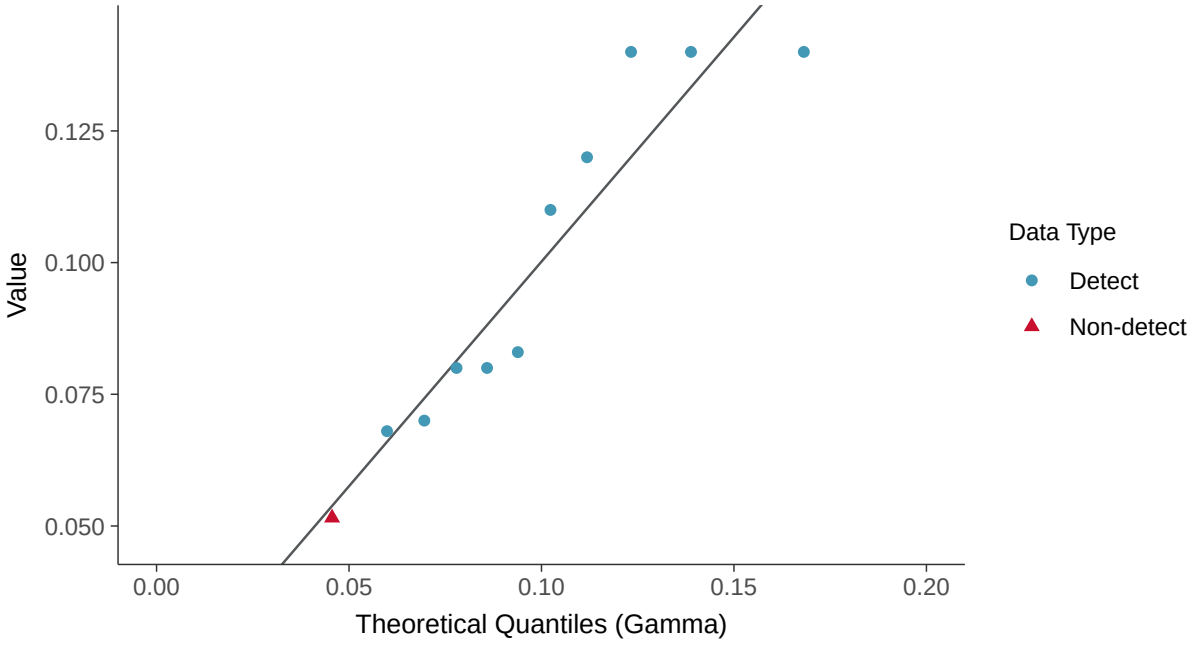
Lognormal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-07 (mg/L)



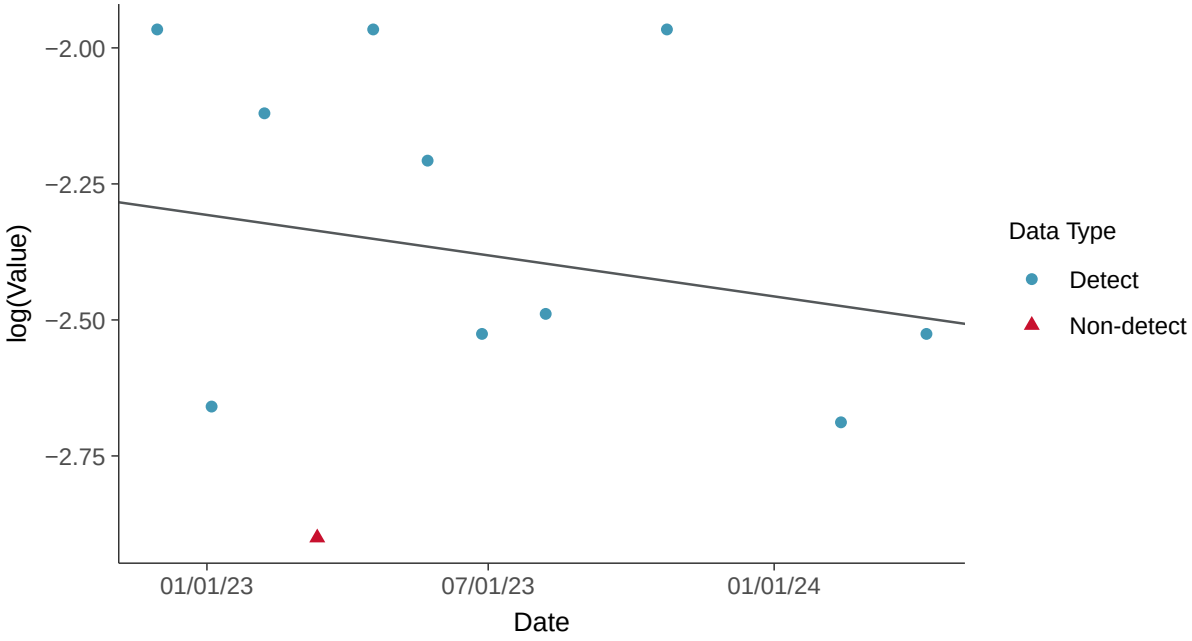
Gamma Q-Q plot using ROS Imputed Estimates

Fluoride, MW-07 (mg/L)



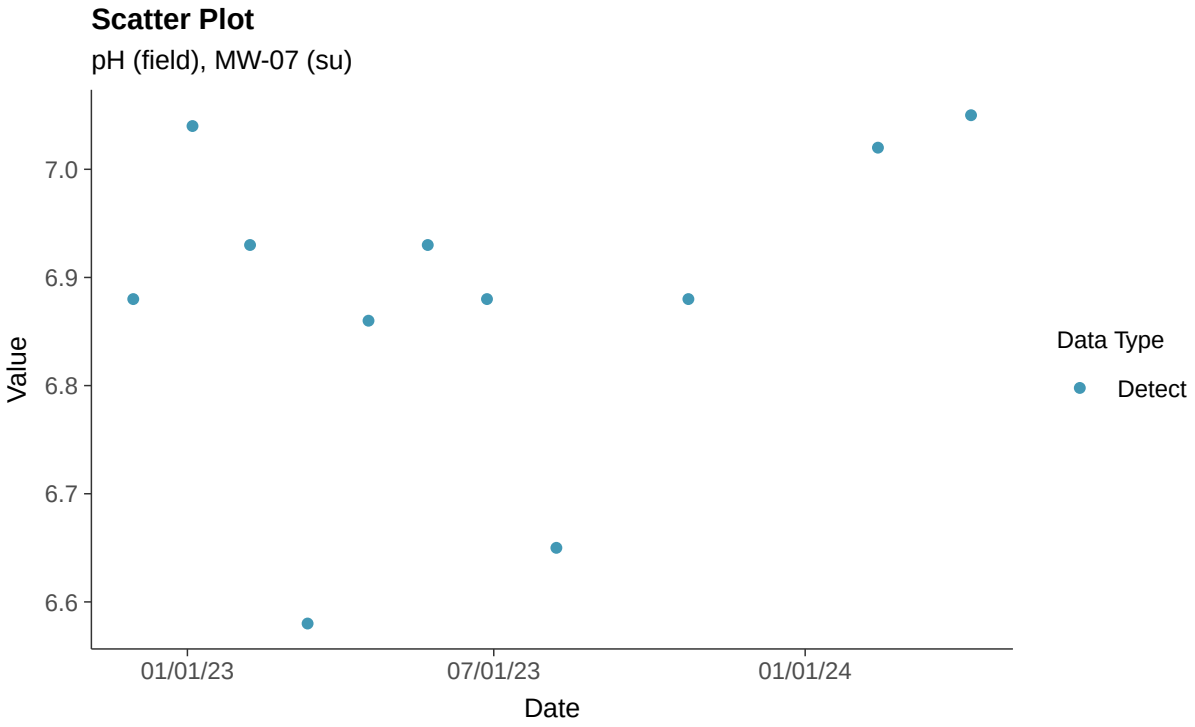
Trend Regression: Lognormal MLE

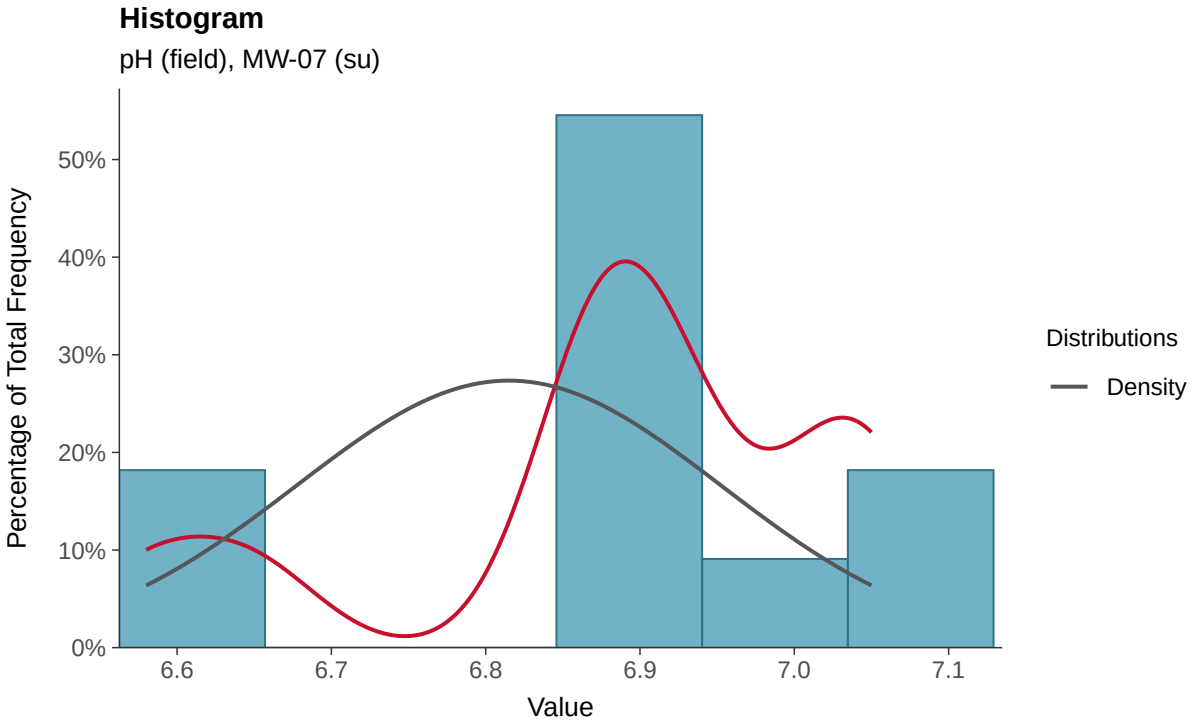
Fluoride, MW-07 (mg/L)



Appendix III: pH (field), MW-07

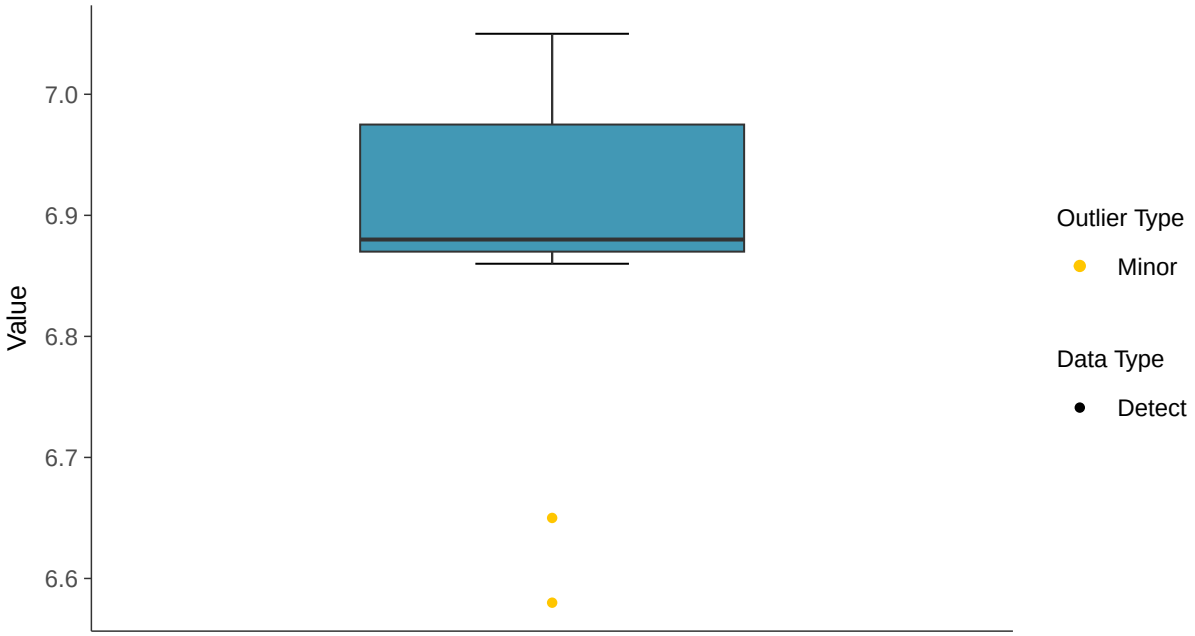
ID: 1_17_4_120





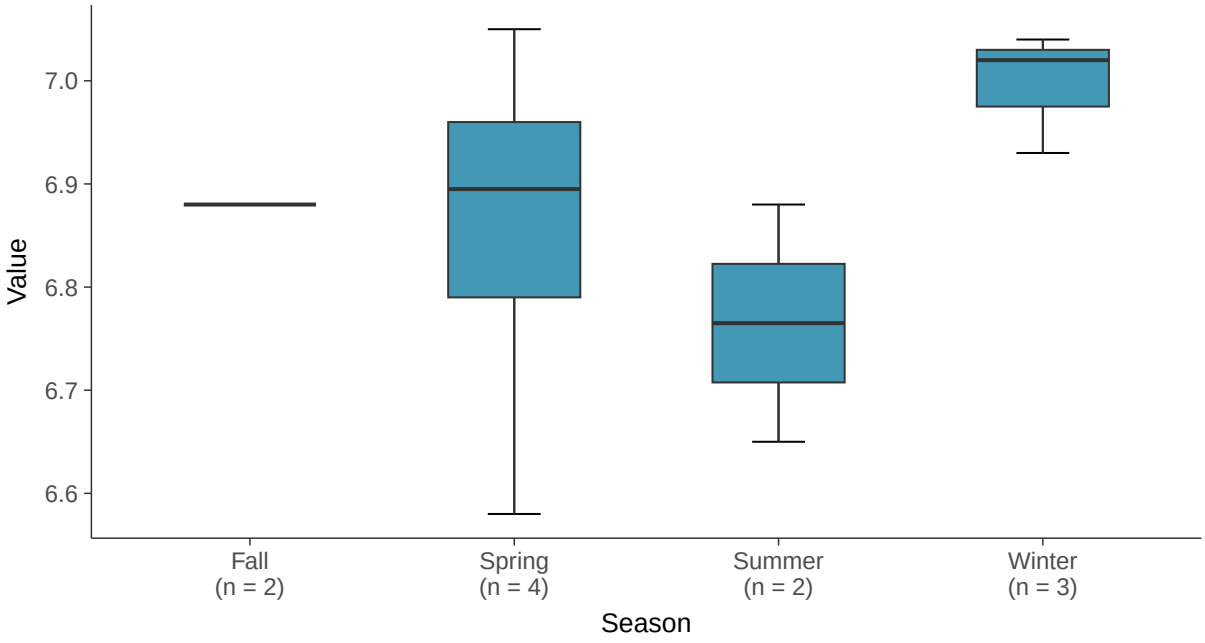
Boxplot

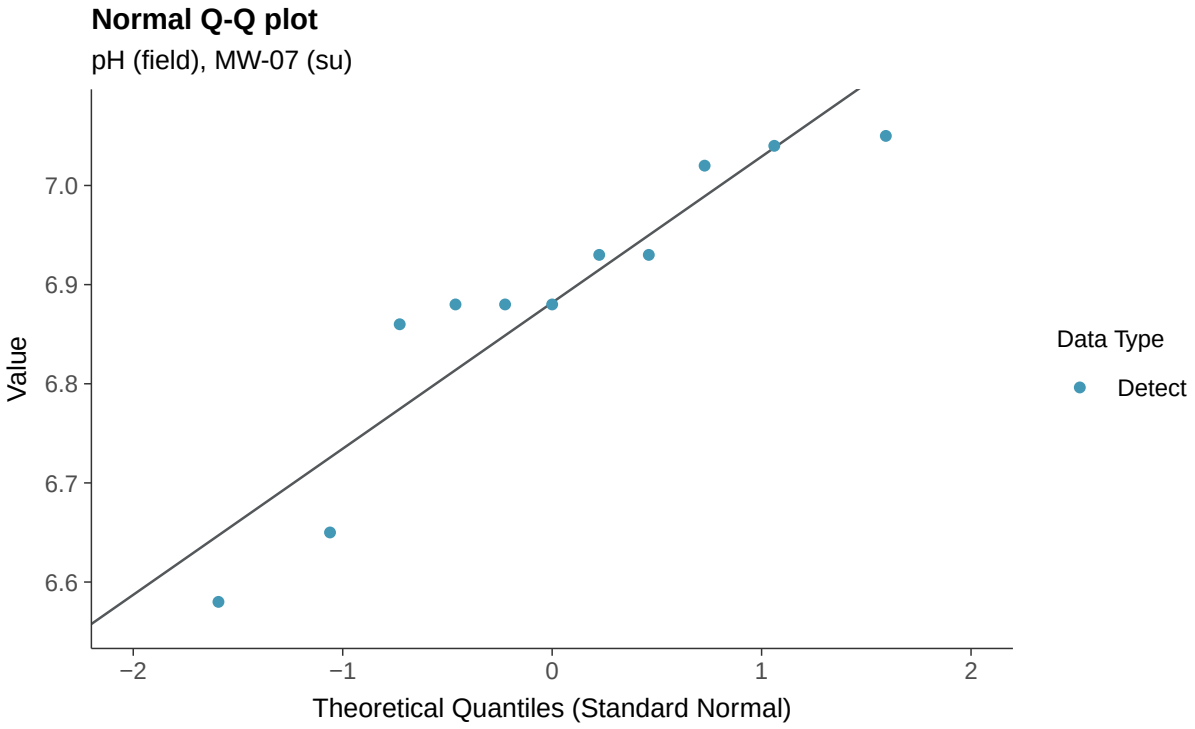
pH (field), MW-07 (su)

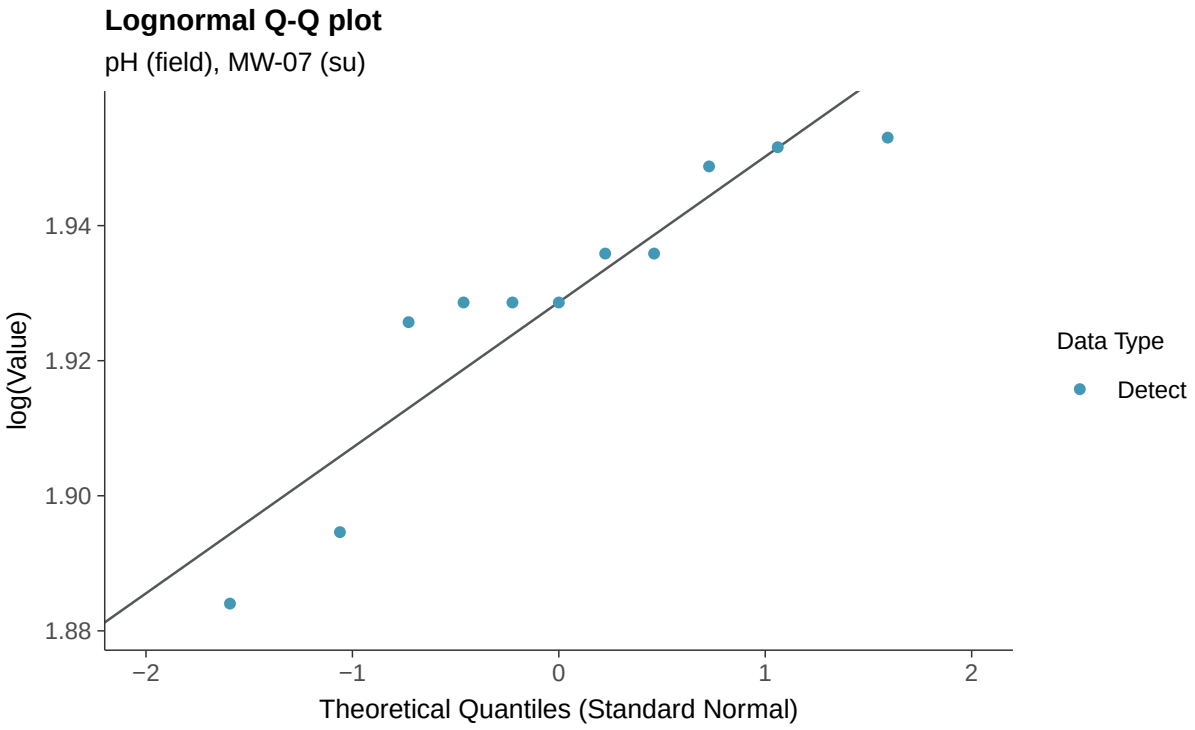


Boxplot by Season

pH (field), MW-07 (su)

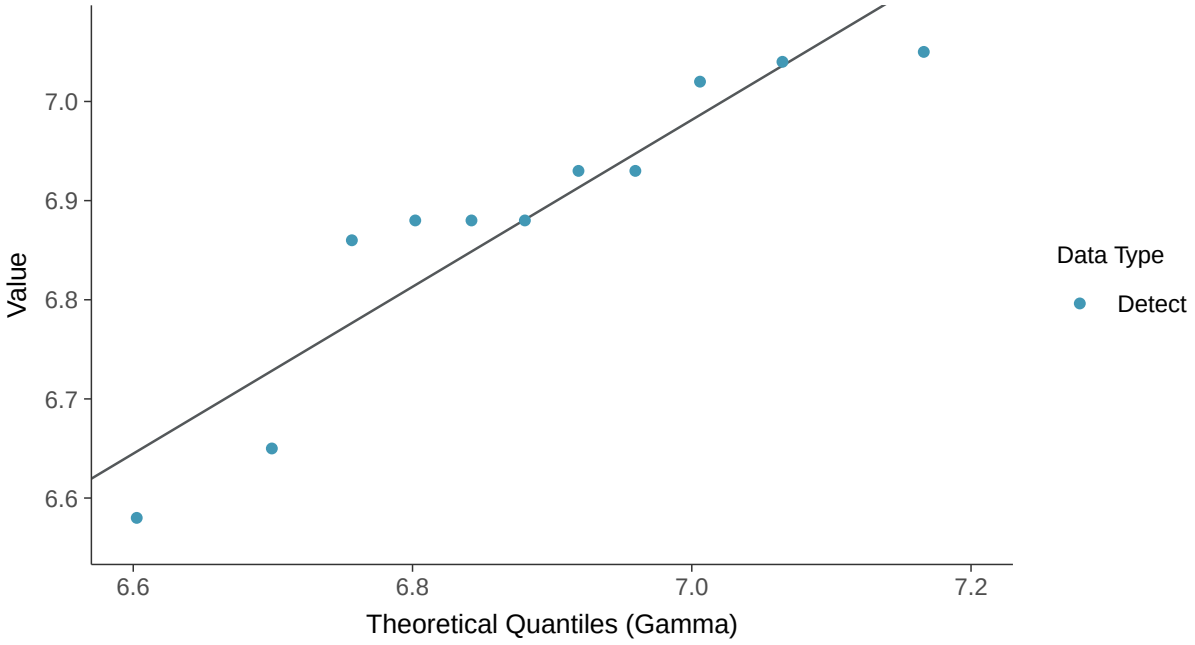



Normal Q-Q plot
pH (field), MW-07 (su)
Value
7.0
6.9
6.8
6.7
6.6
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect


Lognormal Q-Q plot
pH (field), MW-07 (su)
log(Value)
1.94
1.92
1.90
1.88
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect

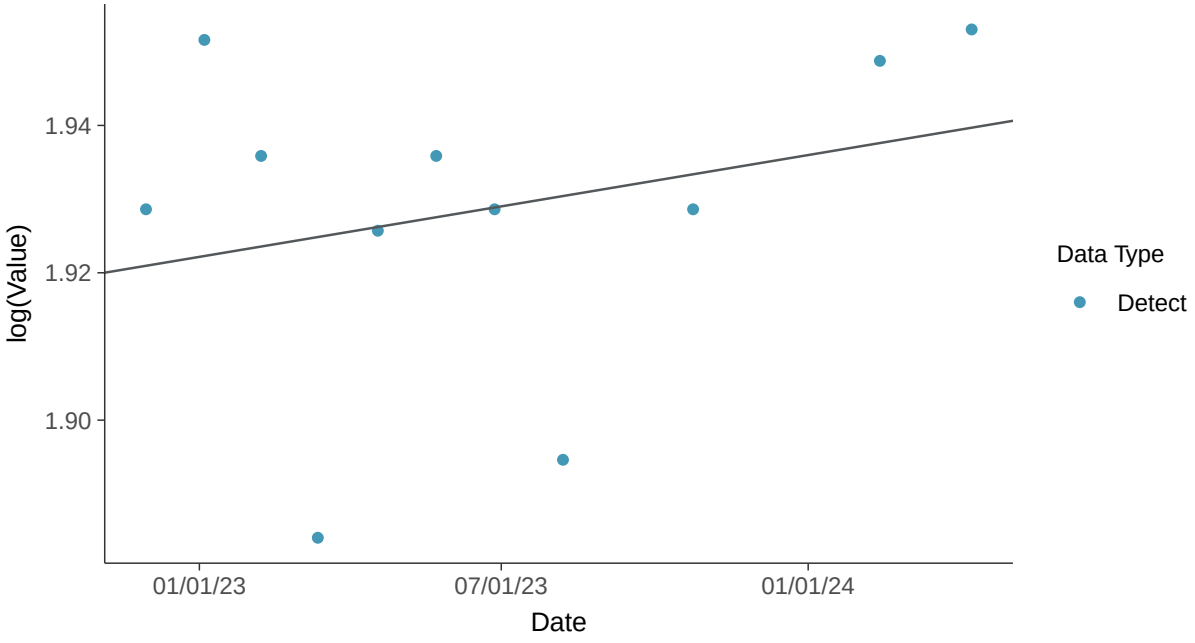
Gamma Q-Q plot

pH (field), MW-07 (su)



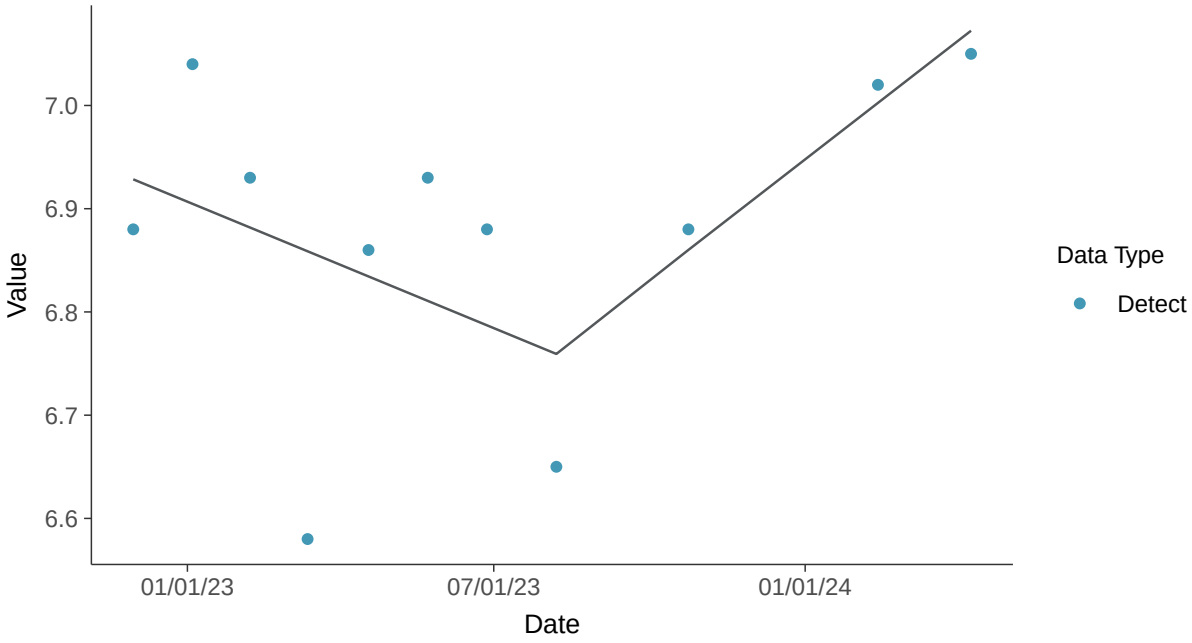
Trend Regression: Lognormal MLE

pH (field), MW-07 (su)



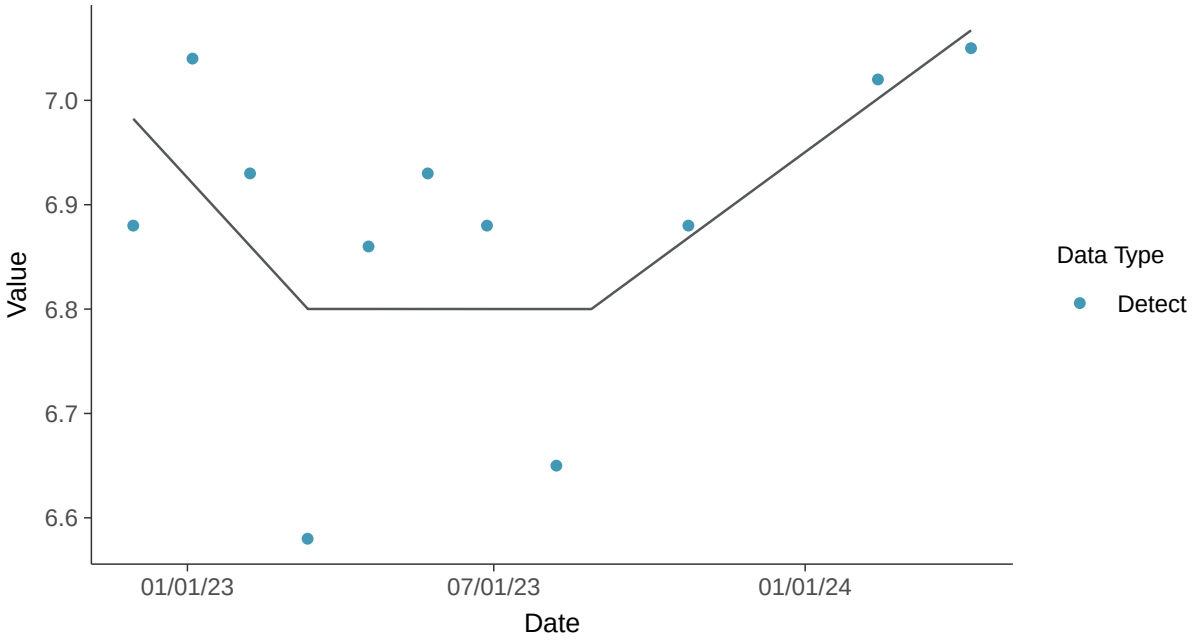
Trend Regression: Piecewise Linear-Linear

pH (field), MW-07 (su)



Trend Regression: Piecewise Linear-Linear-Linear

pH (field), MW-07 (su)

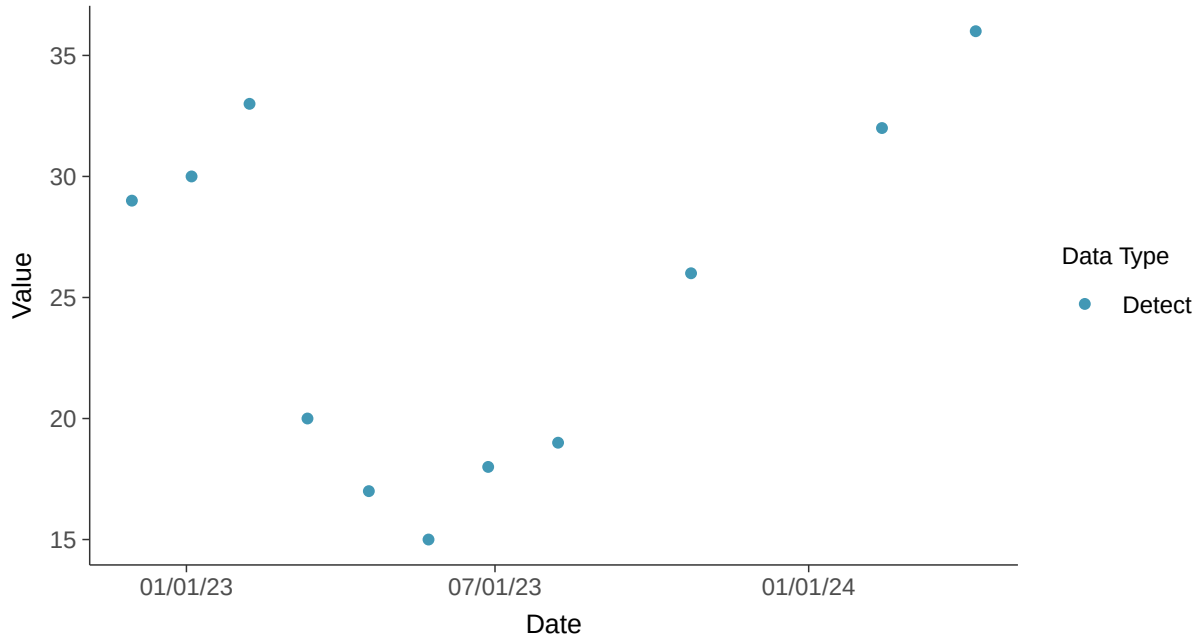


Appendix III: Sulfate (as SO4), MW-07

ID: 1_17_4_124

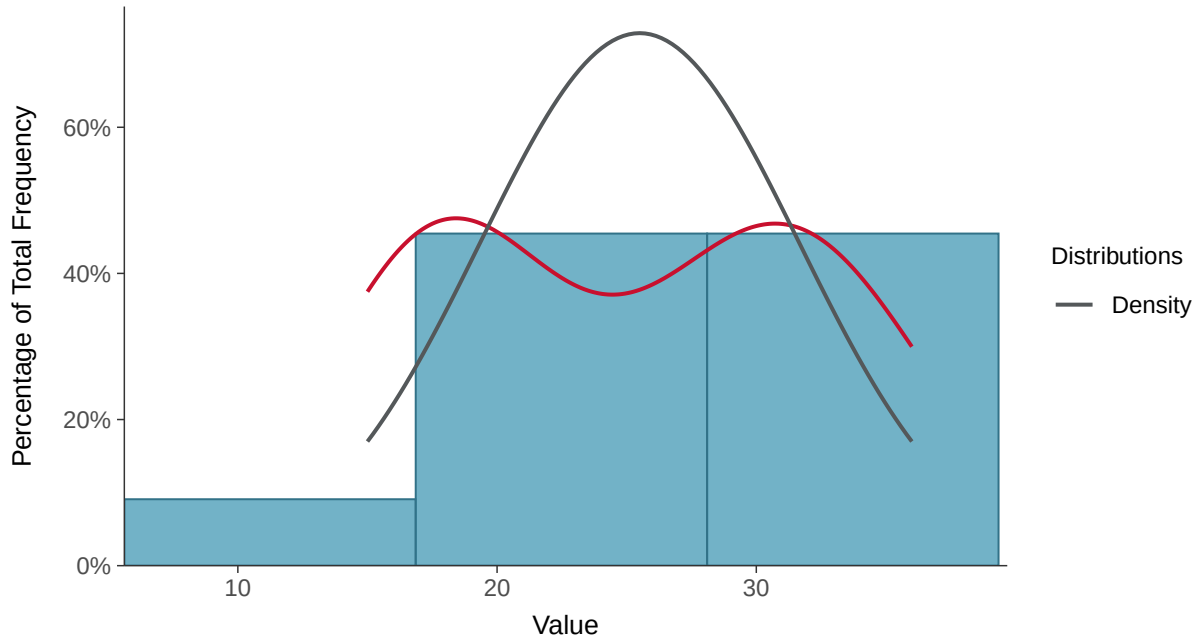
Scatter Plot

Sulfate (as SO4), MW-07 (mg/L)



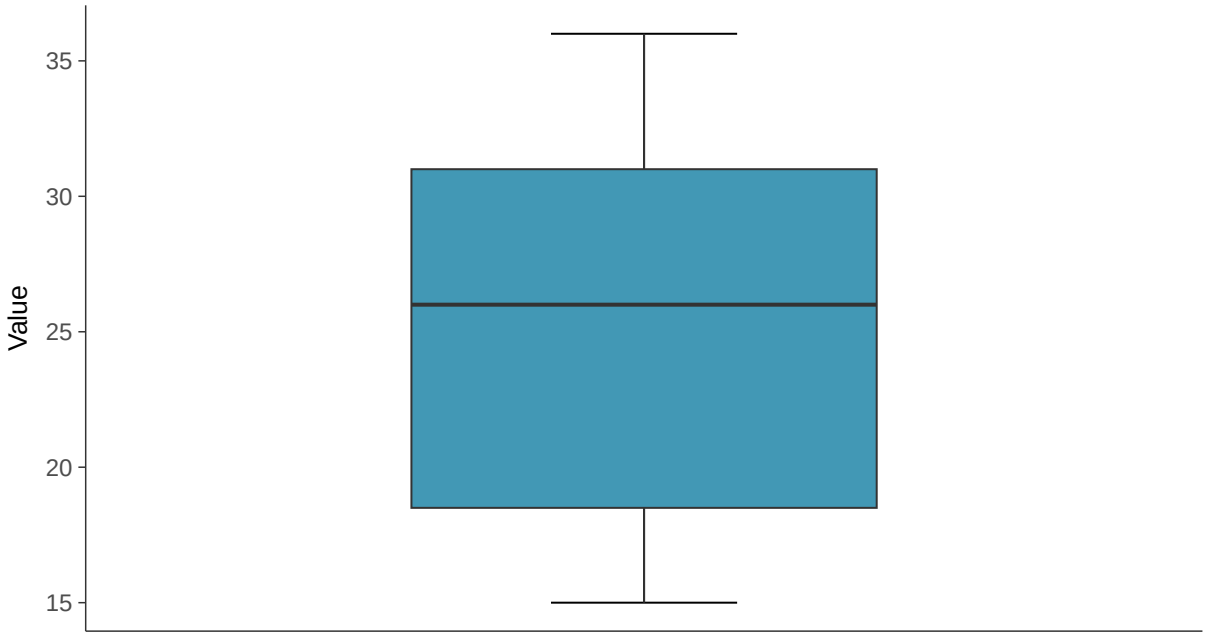
Histogram

Sulfate (as SO4), MW-07 (mg/L)



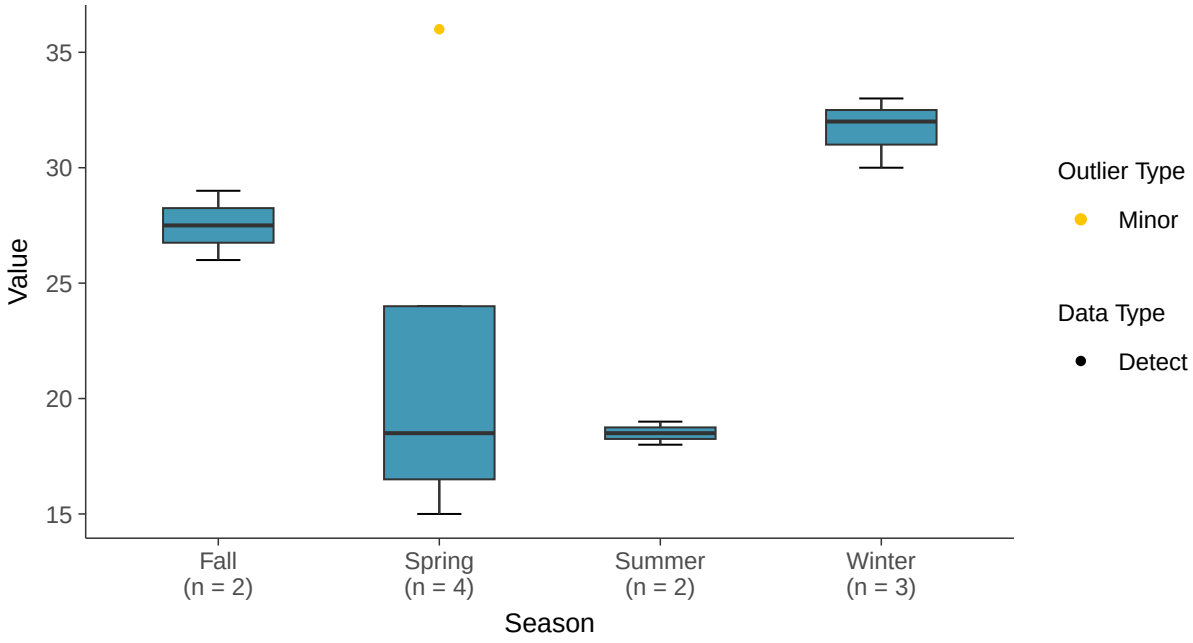
Boxplot

Sulfate (as SO4), MW-07 (mg/L)



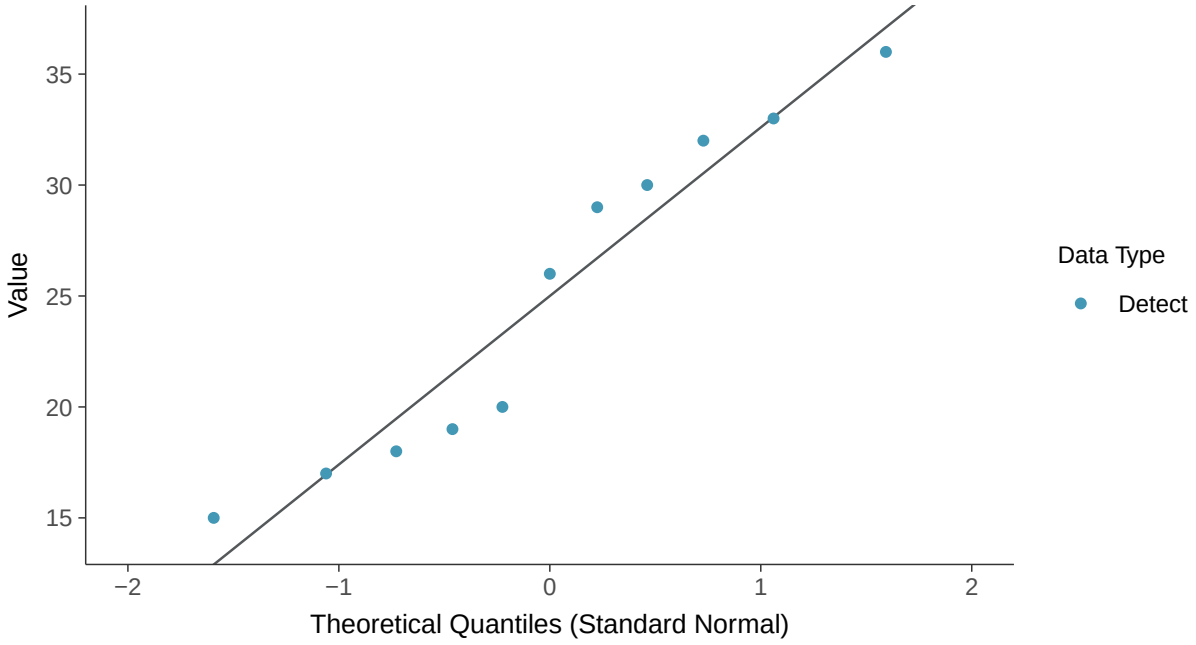
Boxplot by Season

Sulfate (as SO4), MW-07 (mg/L)



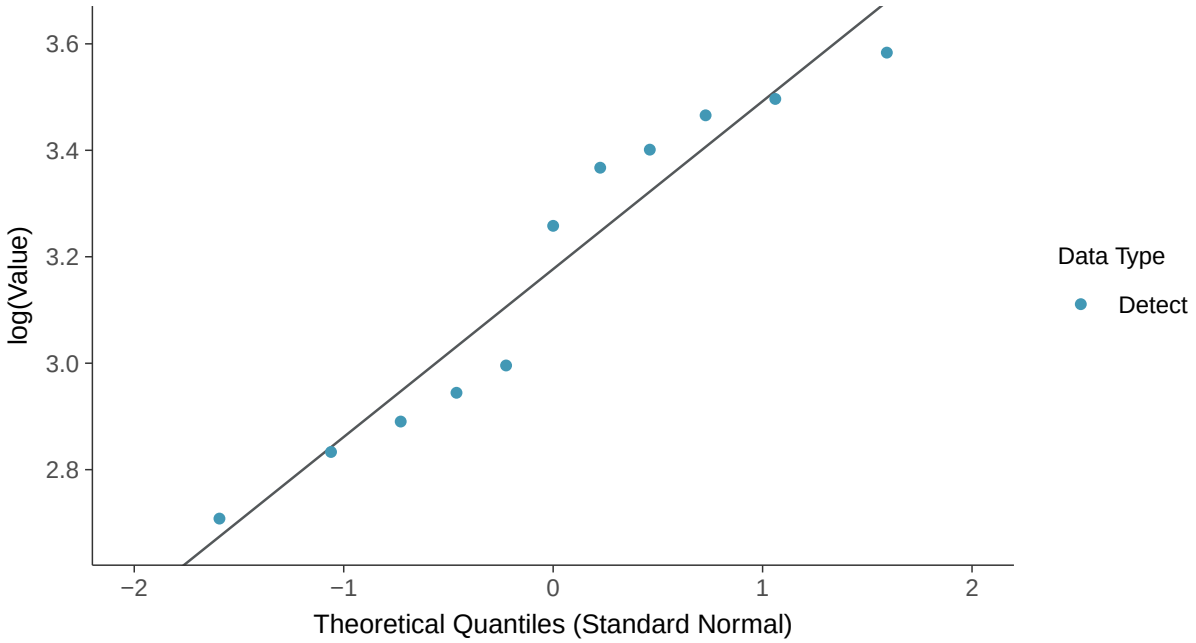
Normal Q-Q plot

Sulfate (as SO4), MW-07 (mg/L)



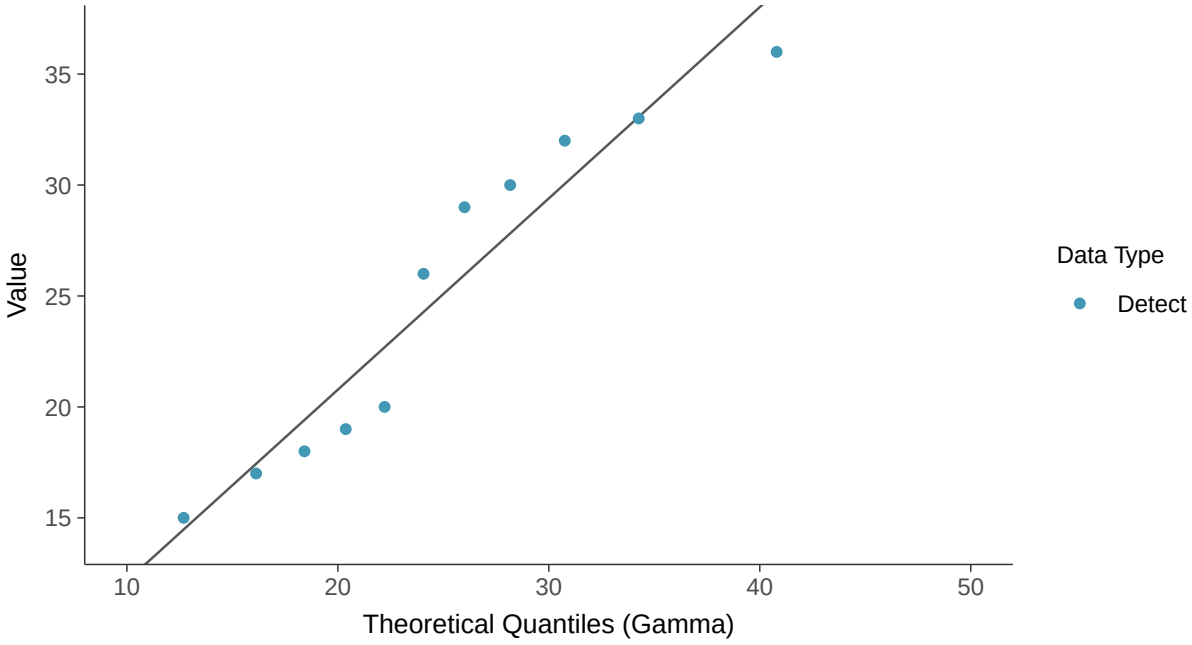
Lognormal Q-Q plot

Sulfate (as SO4), MW-07 (mg/L)



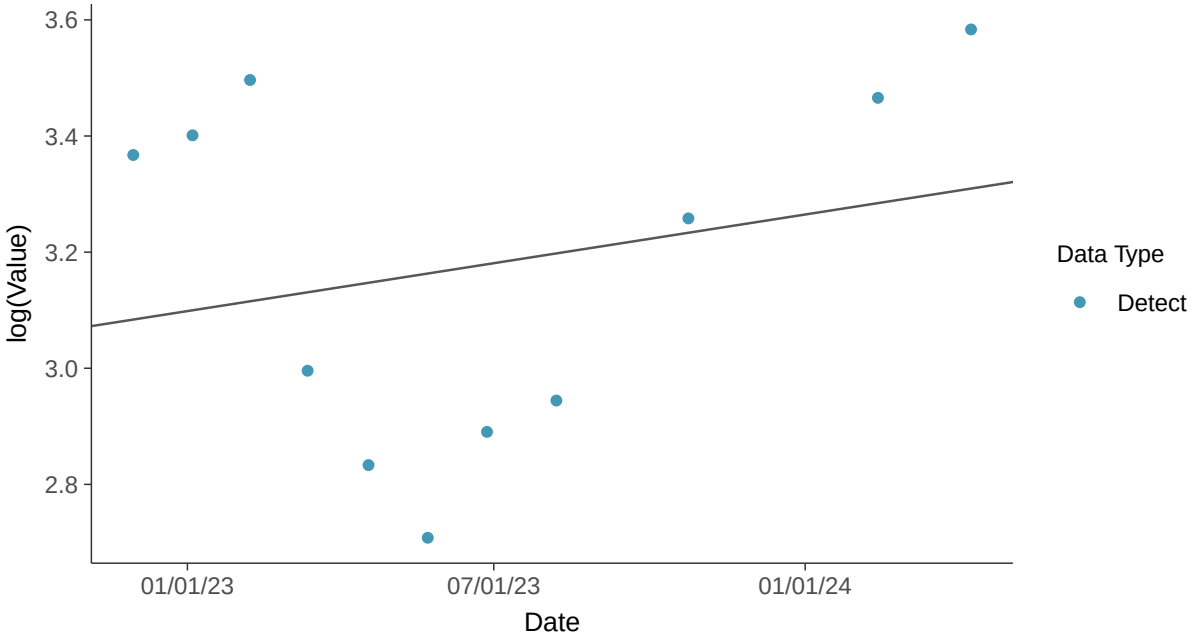
Gamma Q-Q plot

Sulfate (as SO4), MW-07 (mg/L)



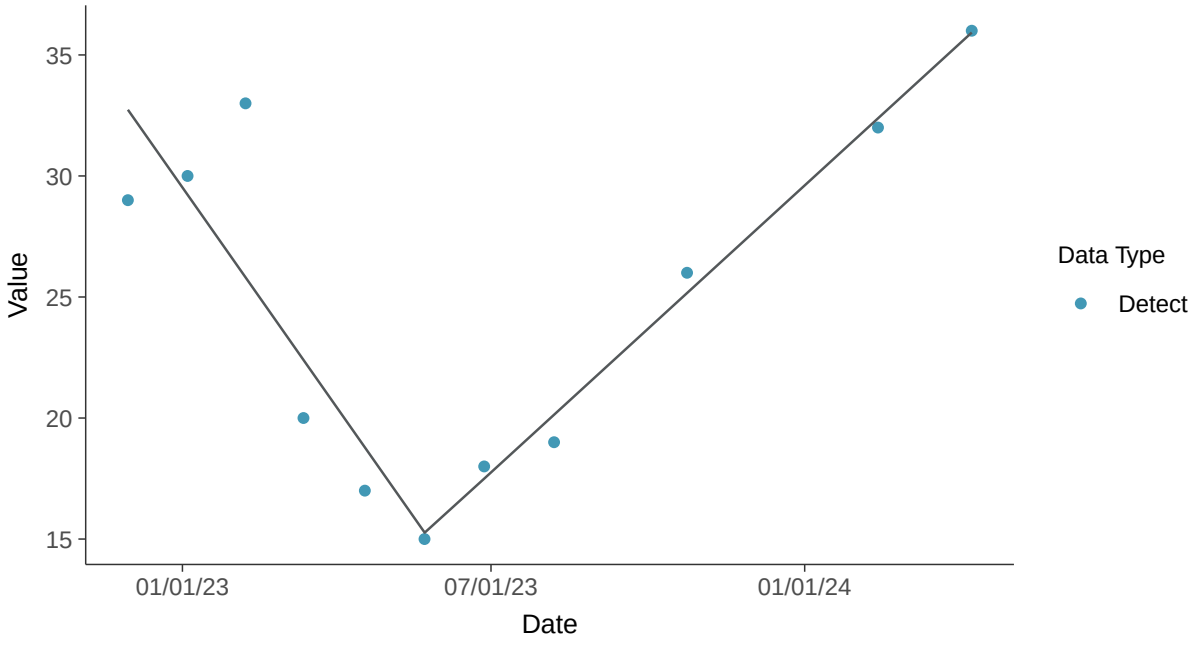
Trend Regression: Lognormal MLE

Sulfate (as SO4), MW-07 (mg/L)



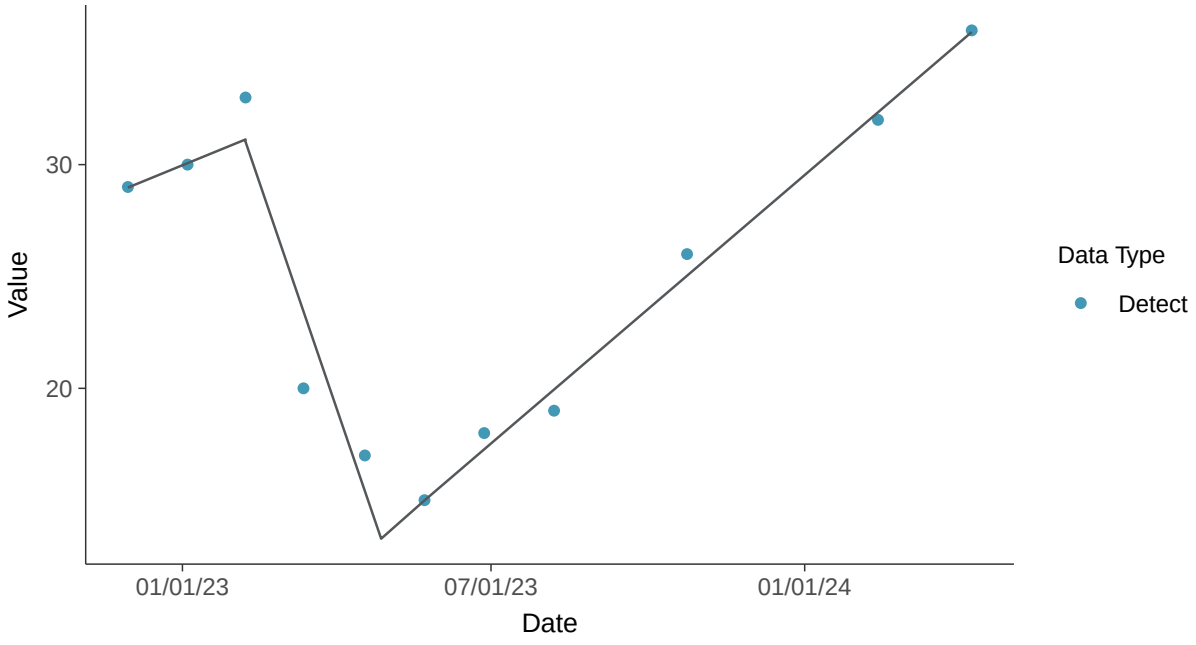
Trend Regression: Piecewise Linear-Linear

Sulfate (as SO4), MW-07 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Sulfate (as SO4), MW-07 (mg/L)

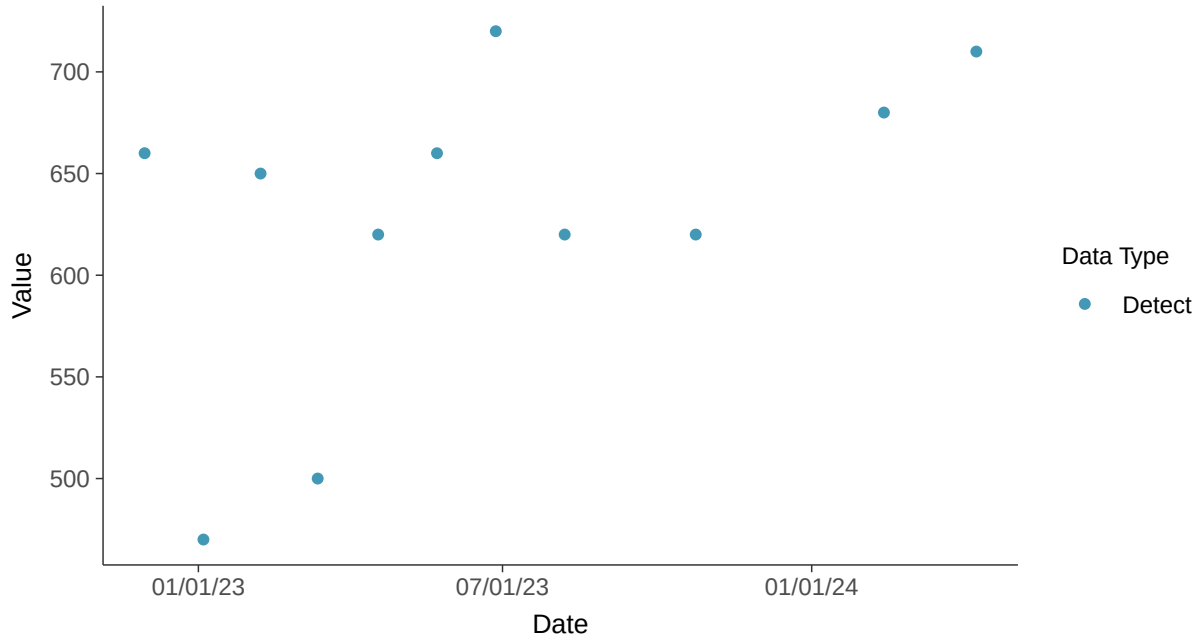


Appendix III: Total Dissolved Solids, MW-07

ID: 1_17_4_126

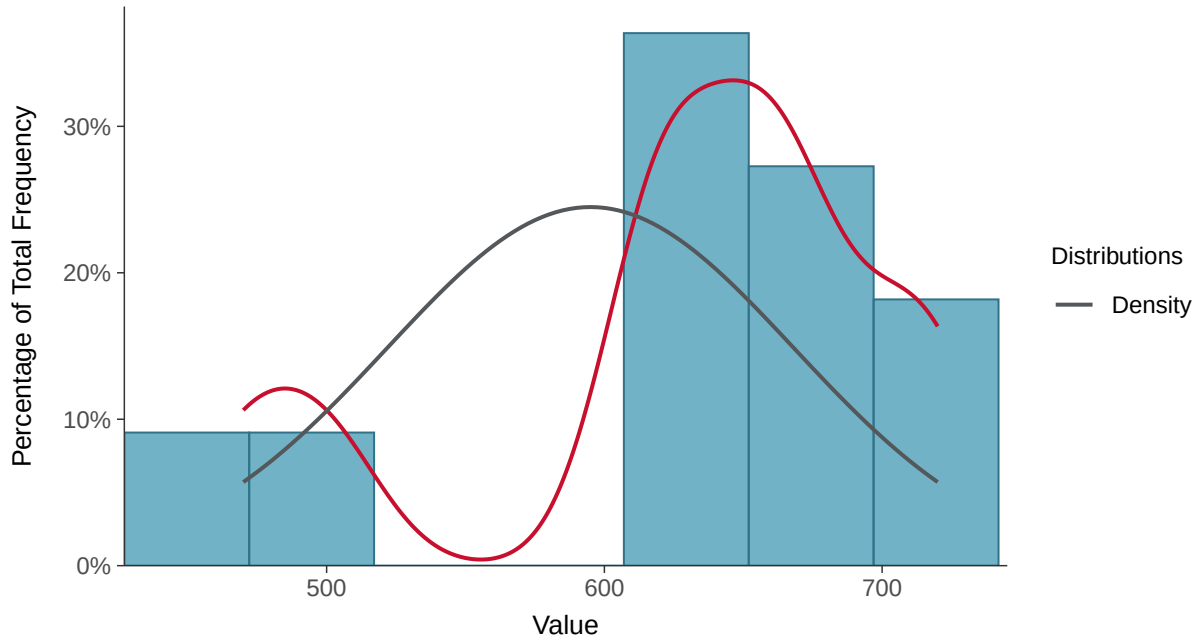
Scatter Plot

Total Dissolved Solids, MW-07 (mg/L)



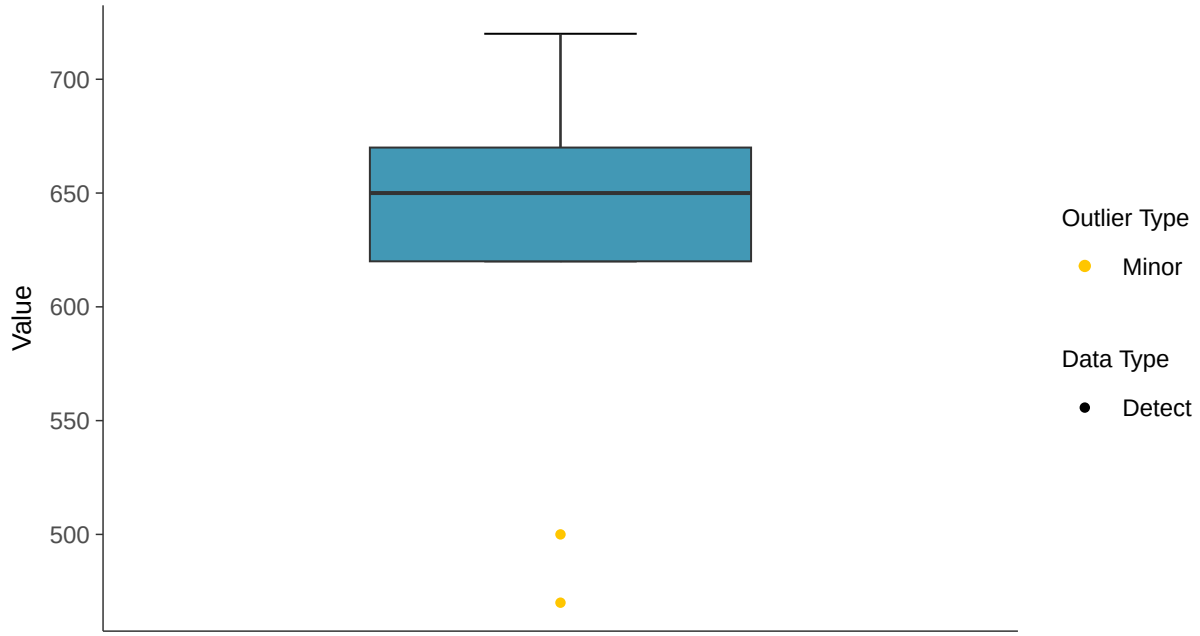
Histogram

Total Dissolved Solids, MW-07 (mg/L)



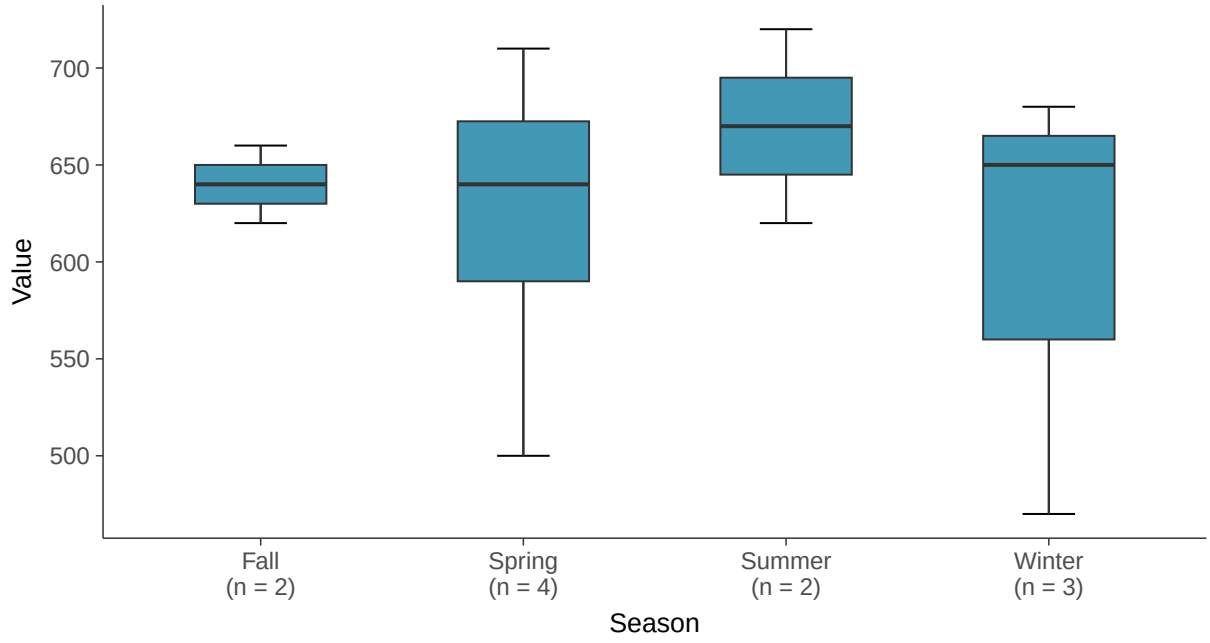
Boxplot

Total Dissolved Solids, MW-07 (mg/L)



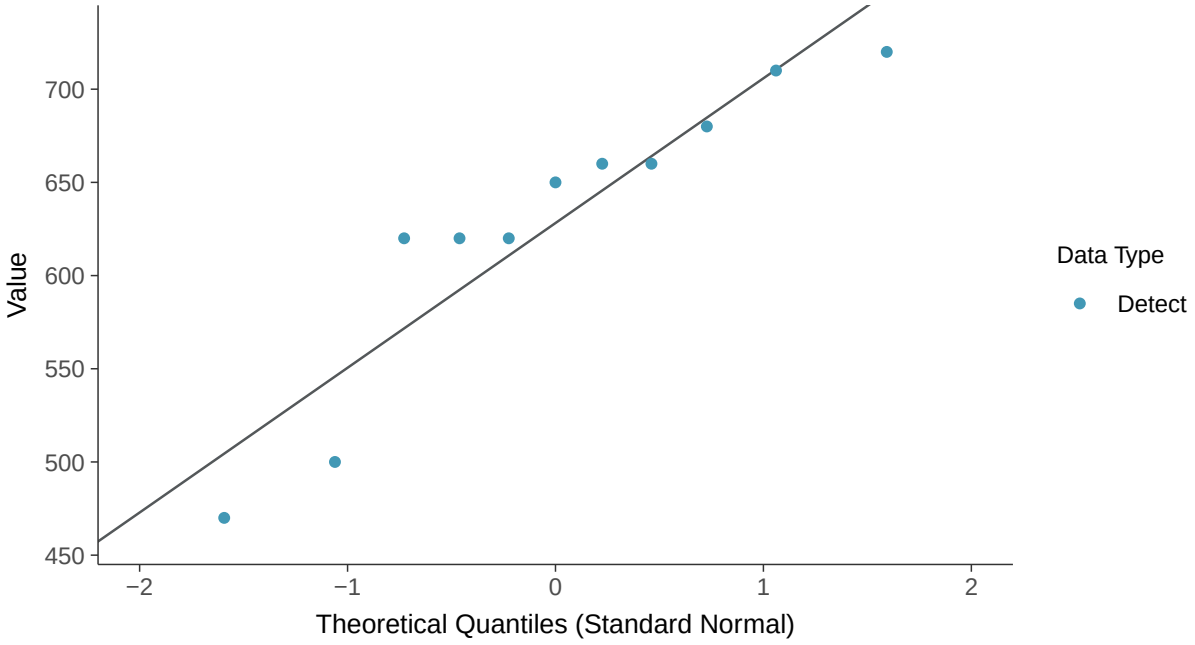
Boxplot by Season

Total Dissolved Solids, MW-07 (mg/L)



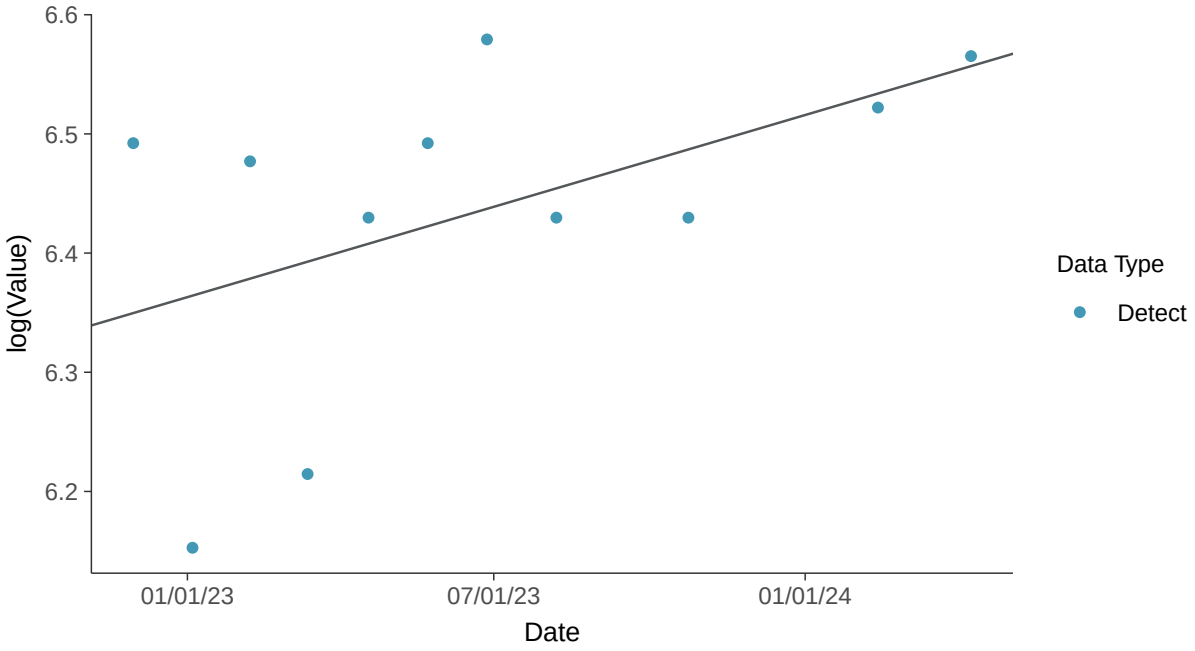
Normal Q-Q plot

Total Dissolved Solids, MW-07 (mg/L)



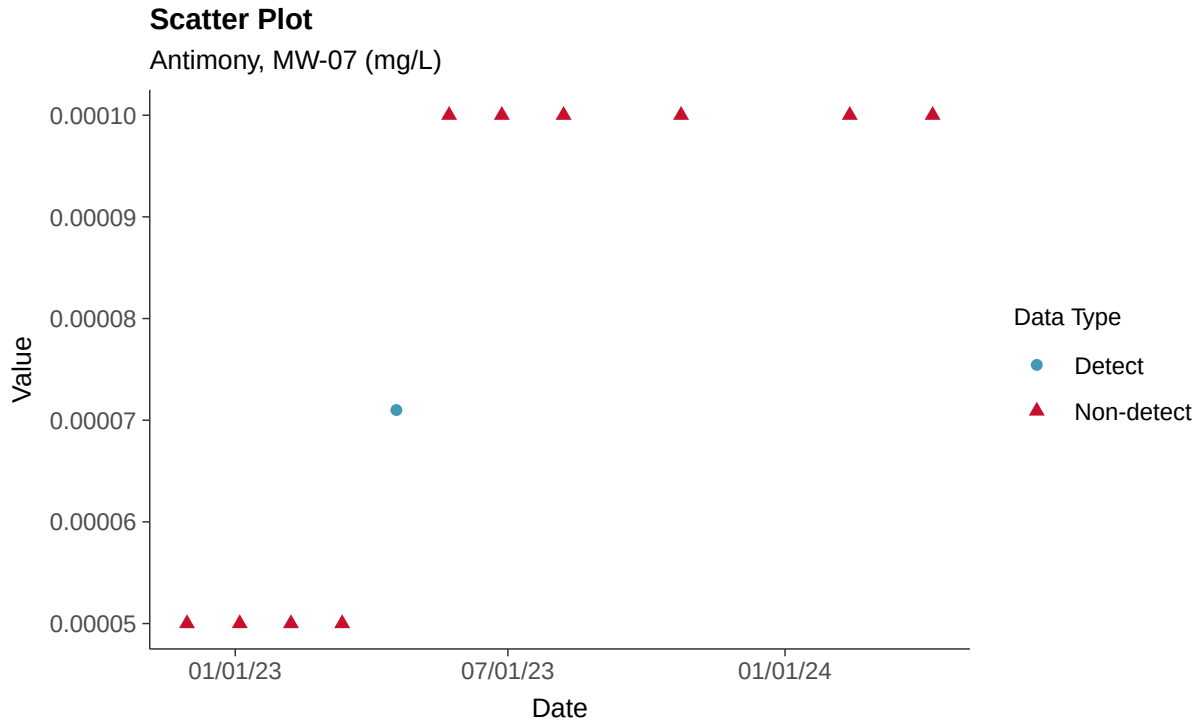
Trend Regression: Lognormal MLE

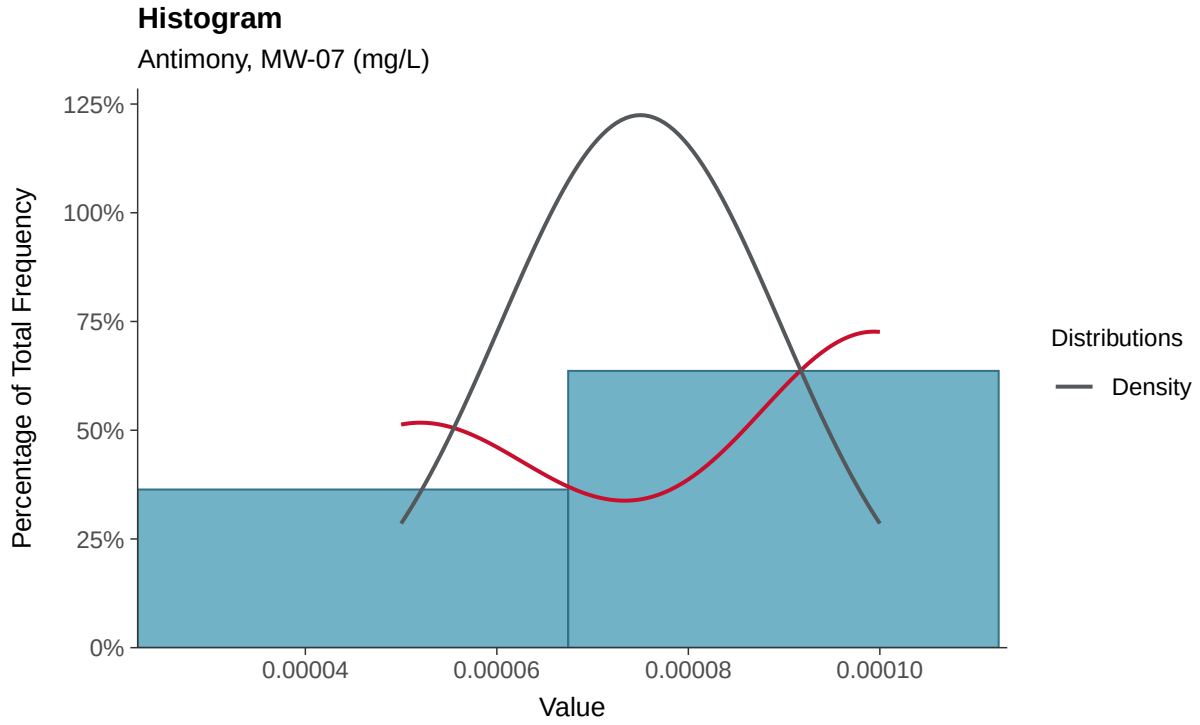
Total Dissolved Solids, MW-07 (mg/L)



Appendix IV: Antimony, MW-07

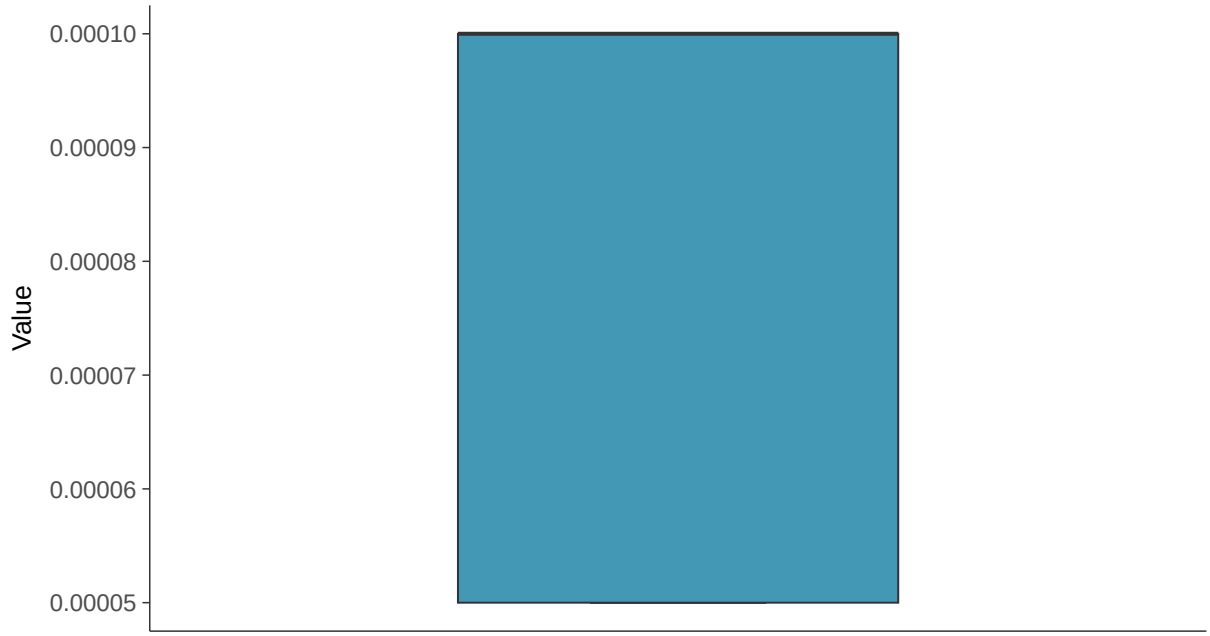
ID: 1_17_5_101





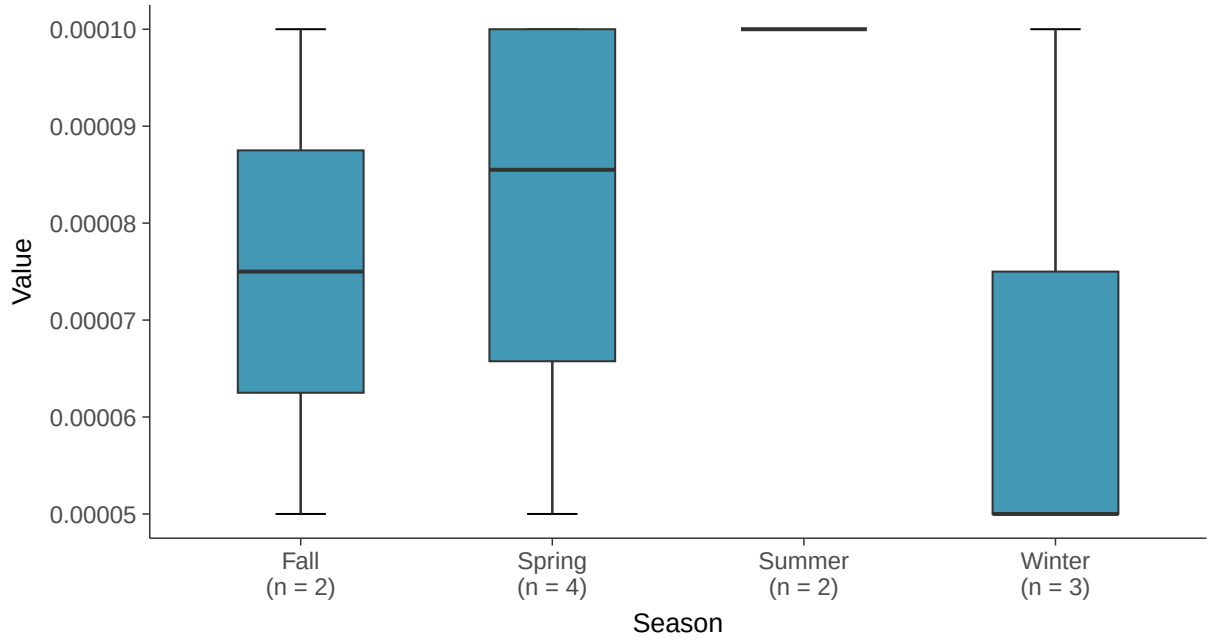
Boxplot

Antimony, MW-07 (mg/L)



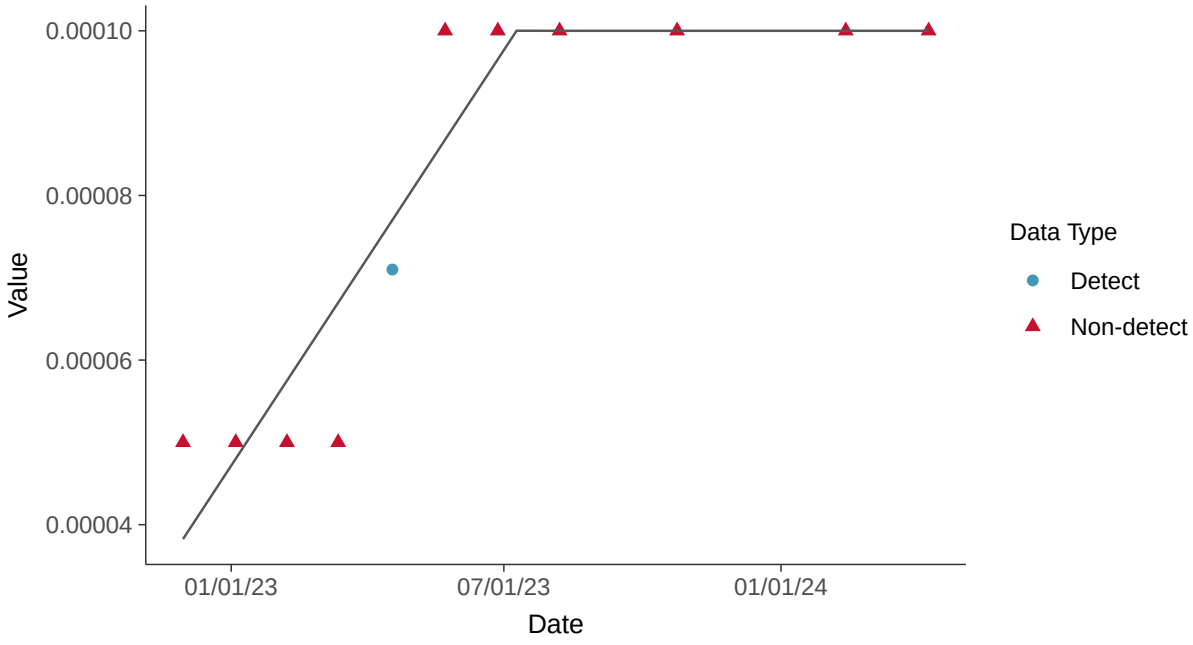
Boxplot by Season

Antimony, MW-07 (mg/L)



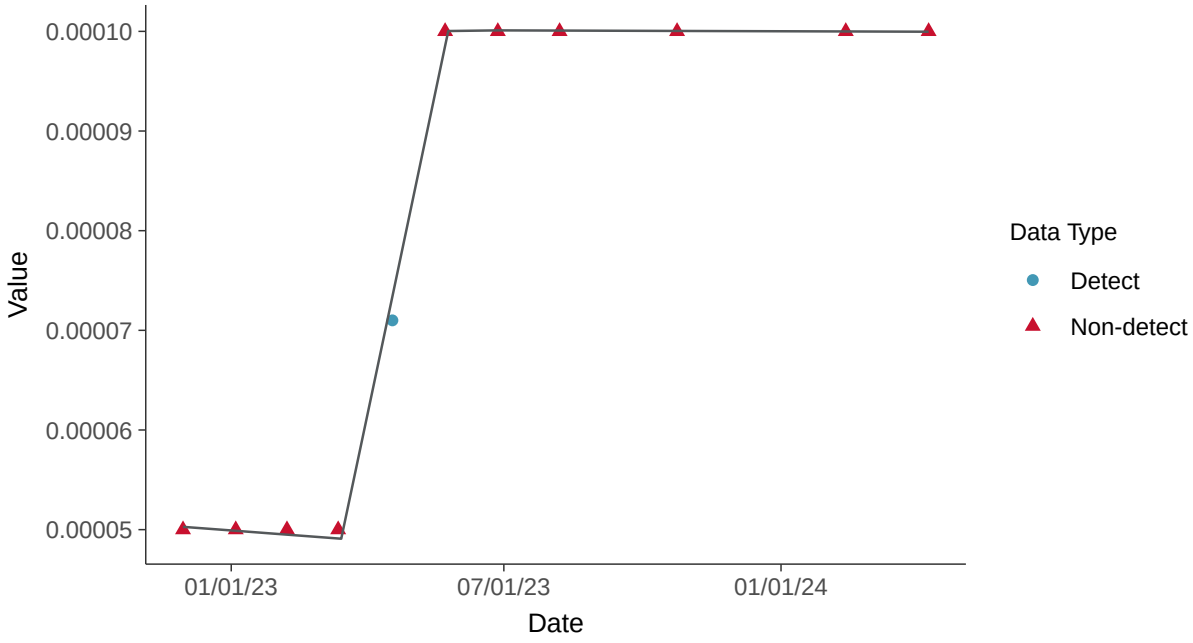
Trend Regression: Piecewise Linear-Linear

Antimony, MW-07 (mg/L)



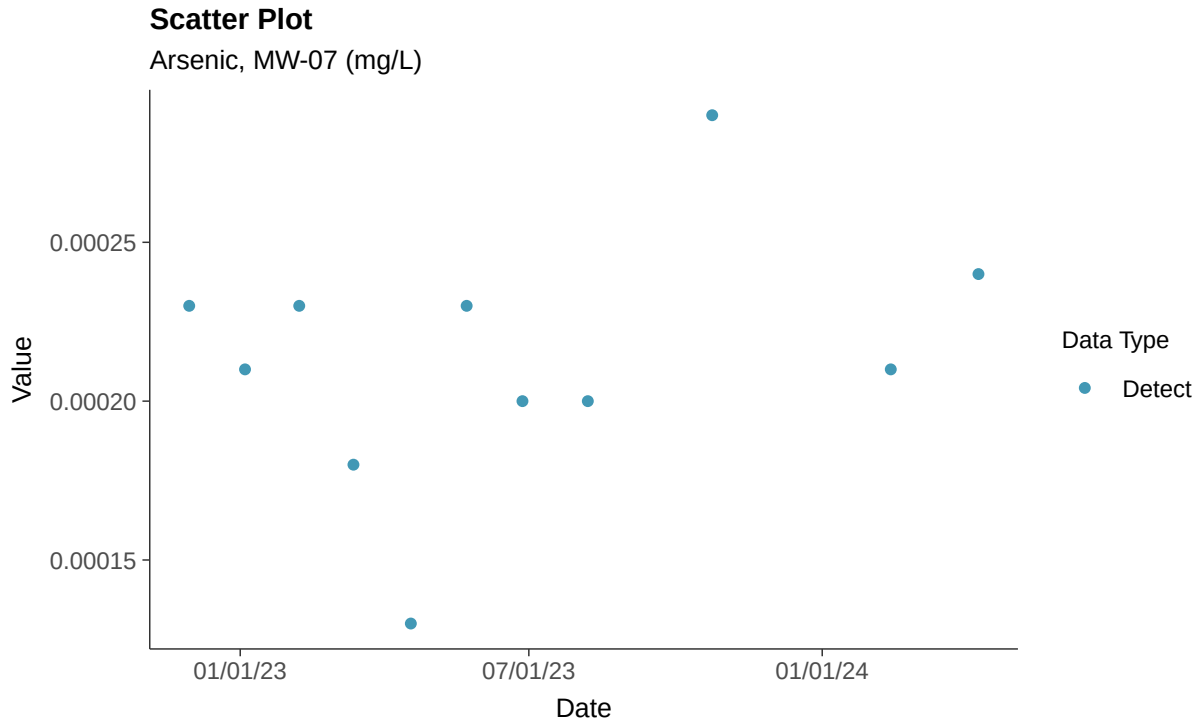
Trend Regression: Piecewise Linear-Linear-Linear

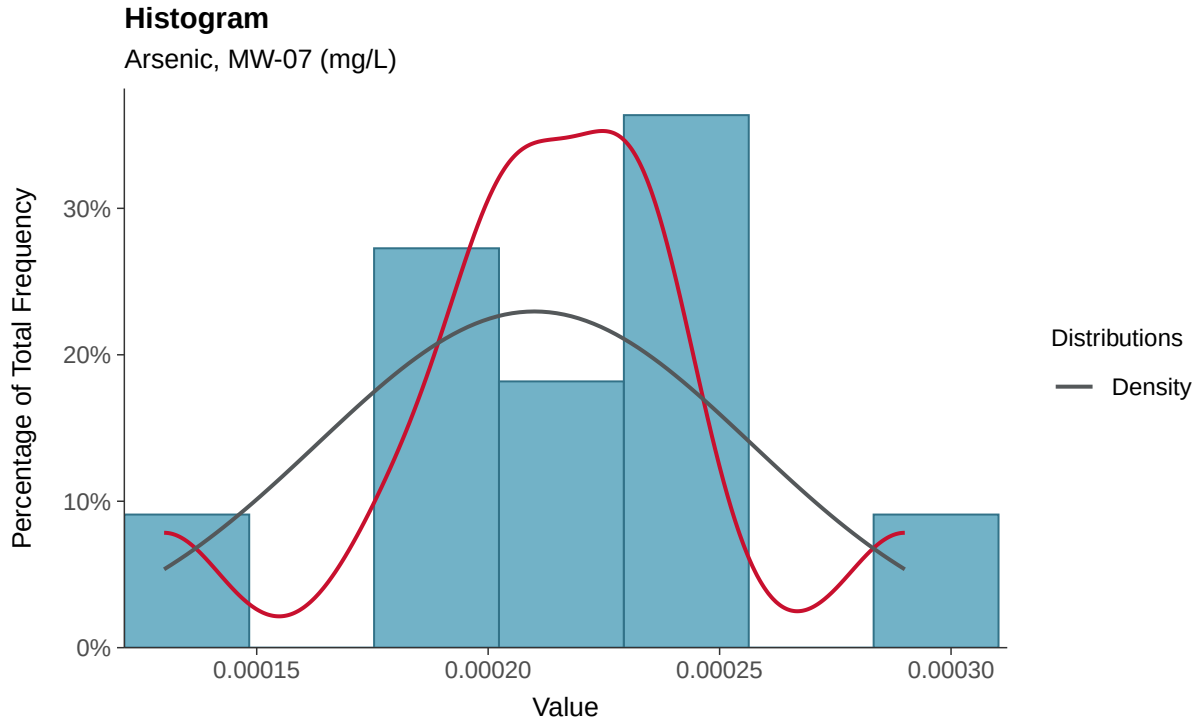
Antimony, MW-07 (mg/L)



Appendix IV: Arsenic, MW-07

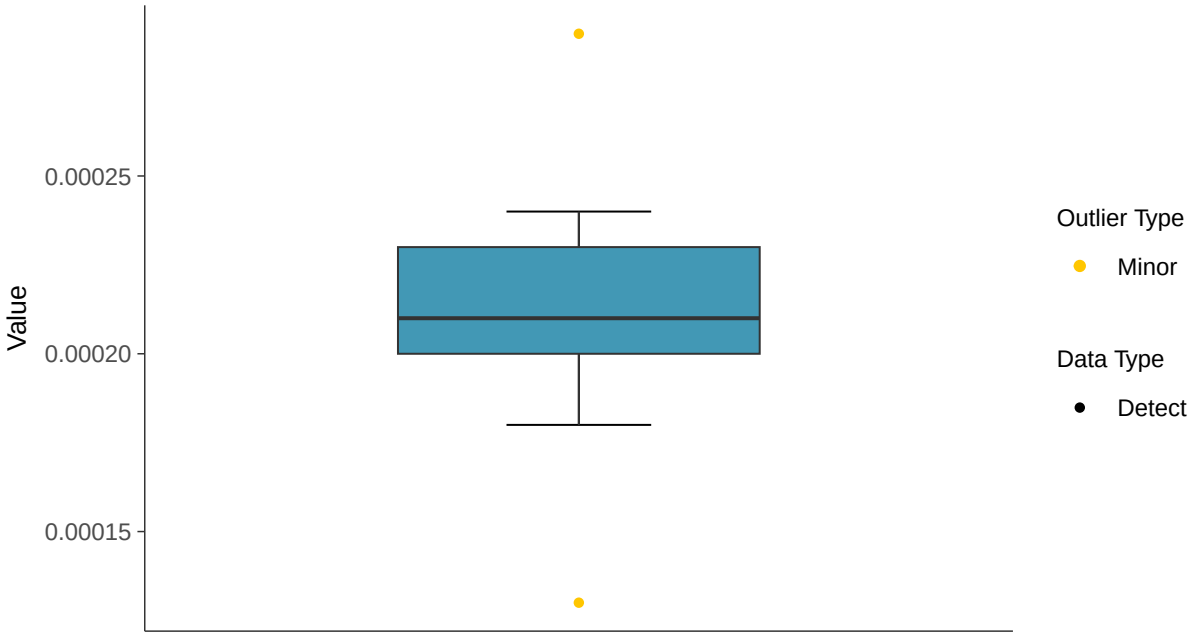
ID: 1_17_5_102





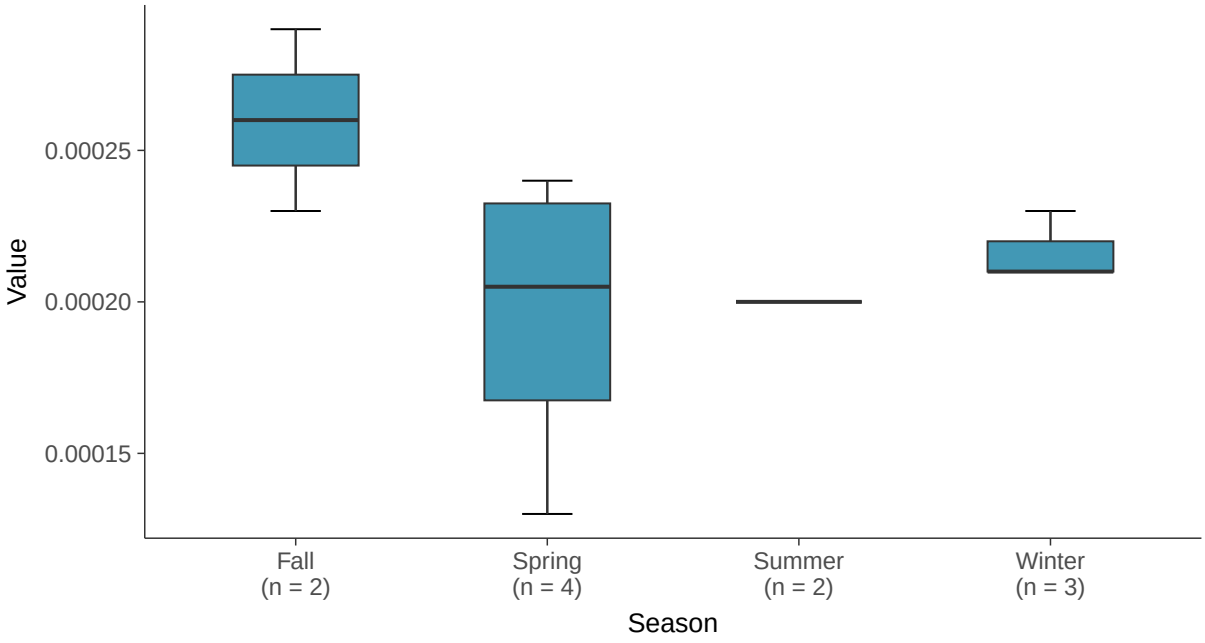
Boxplot

Arsenic, MW-07 (mg/L)



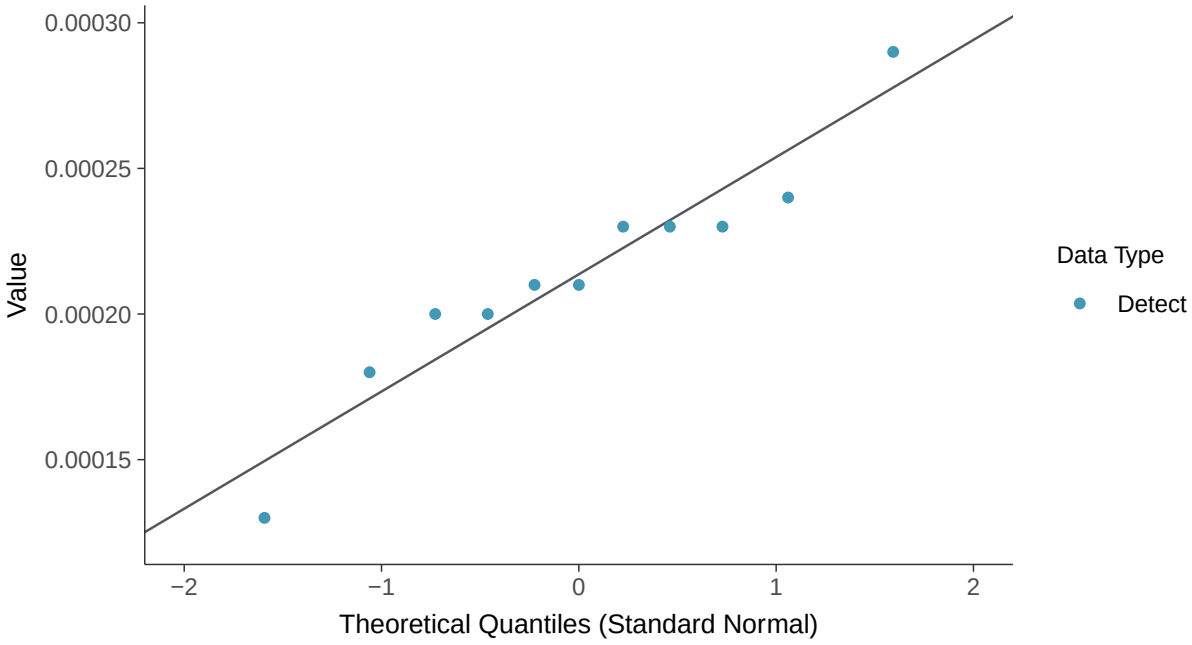
Boxplot by Season

Arsenic, MW-07 (mg/L)



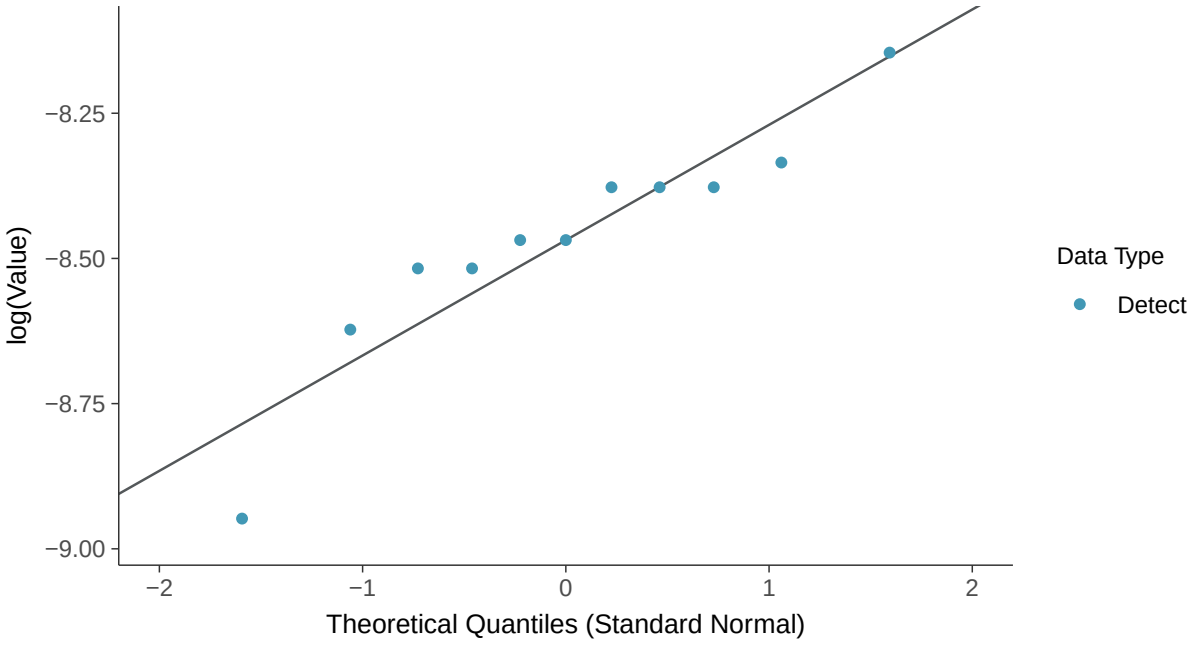
Normal Q-Q plot

Arsenic, MW-07 (mg/L)



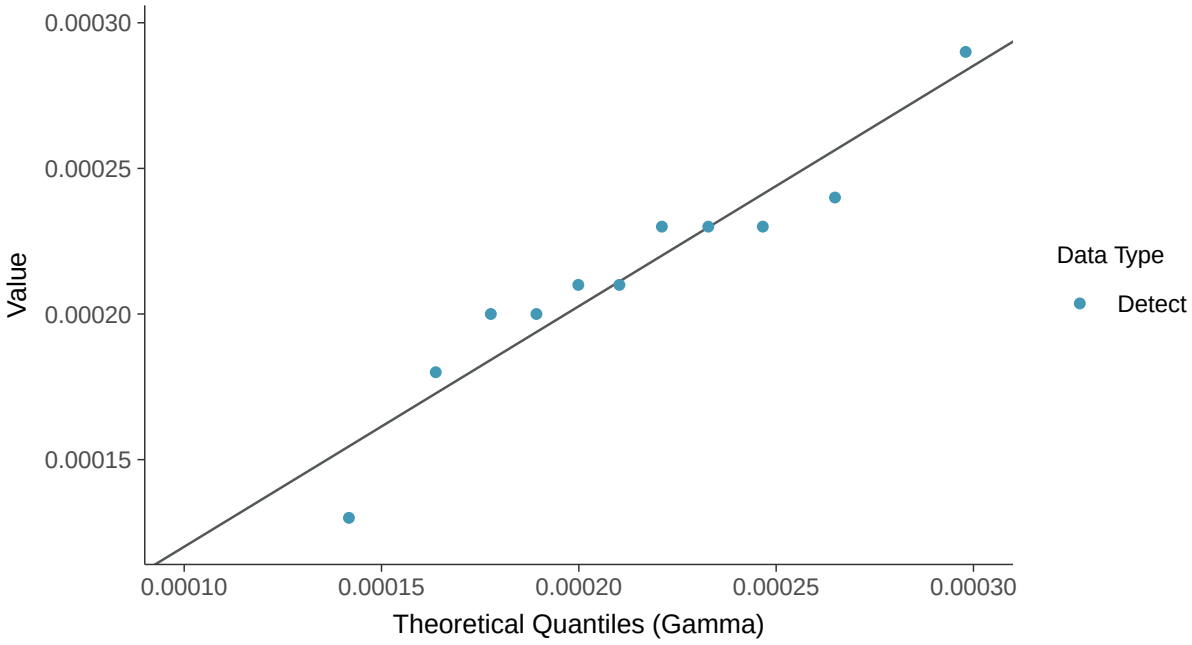
Lognormal Q-Q plot

Arsenic, MW-07 (mg/L)



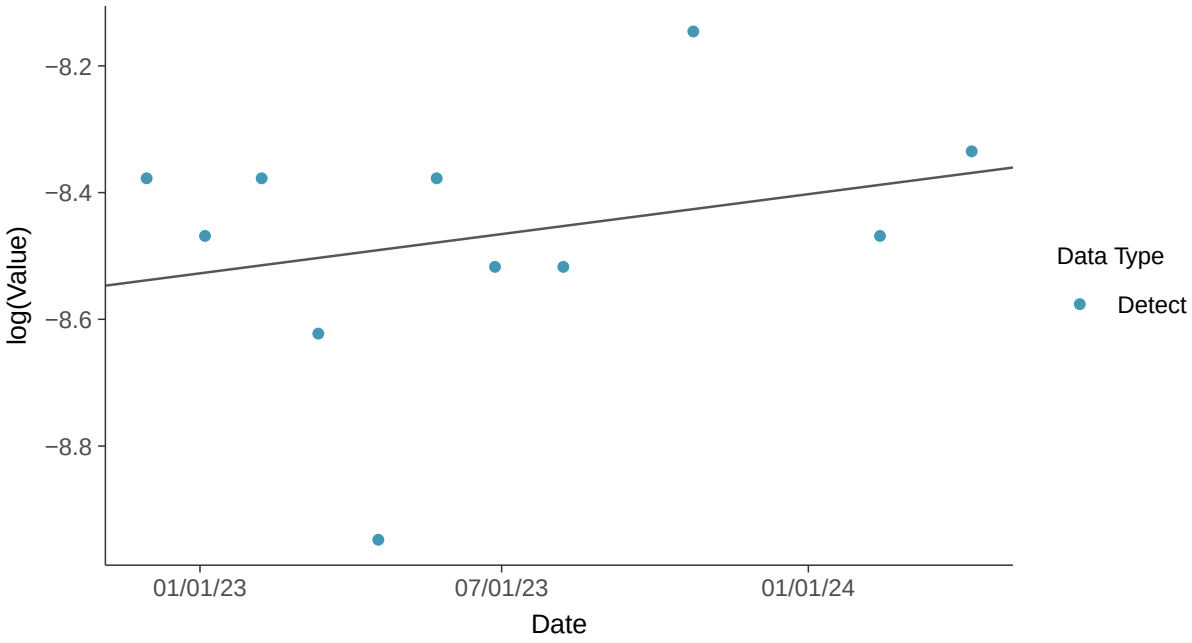
Gamma Q-Q plot

Arsenic, MW-07 (mg/L)



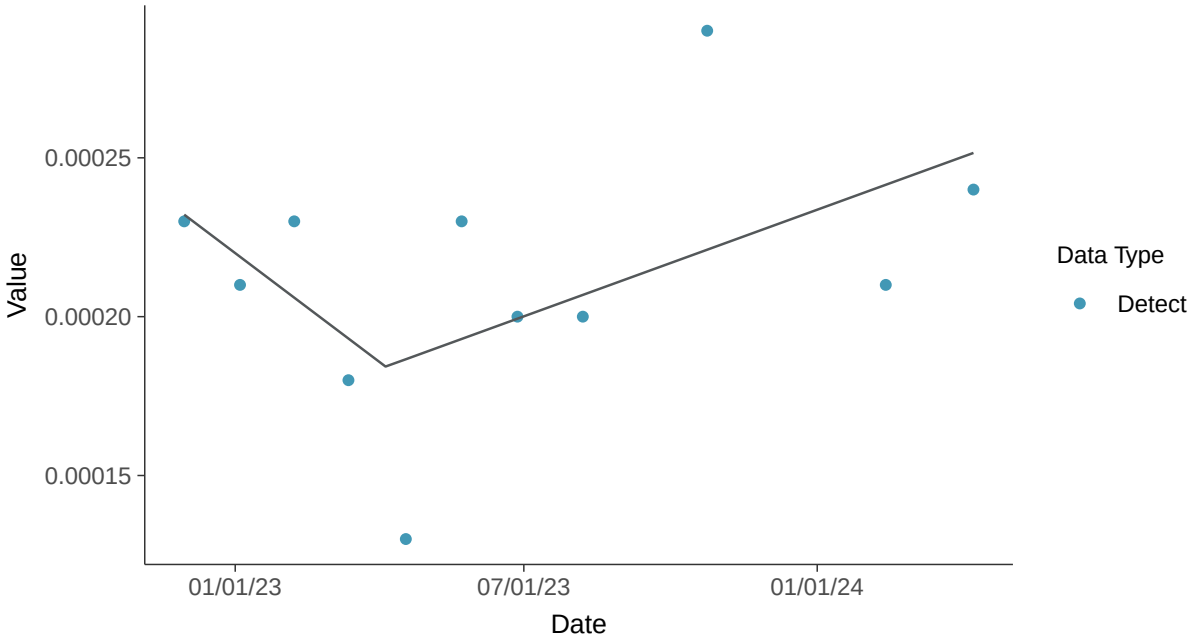
Trend Regression: Lognormal MLE

Arsenic, MW-07 (mg/L)



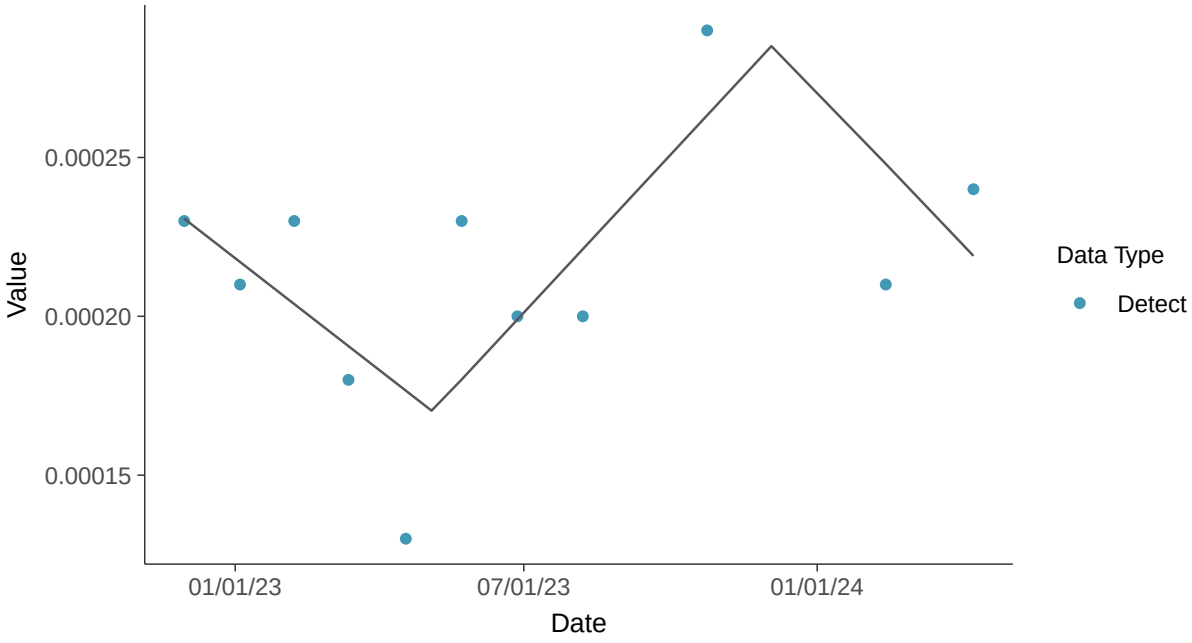
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-07 (mg/L)



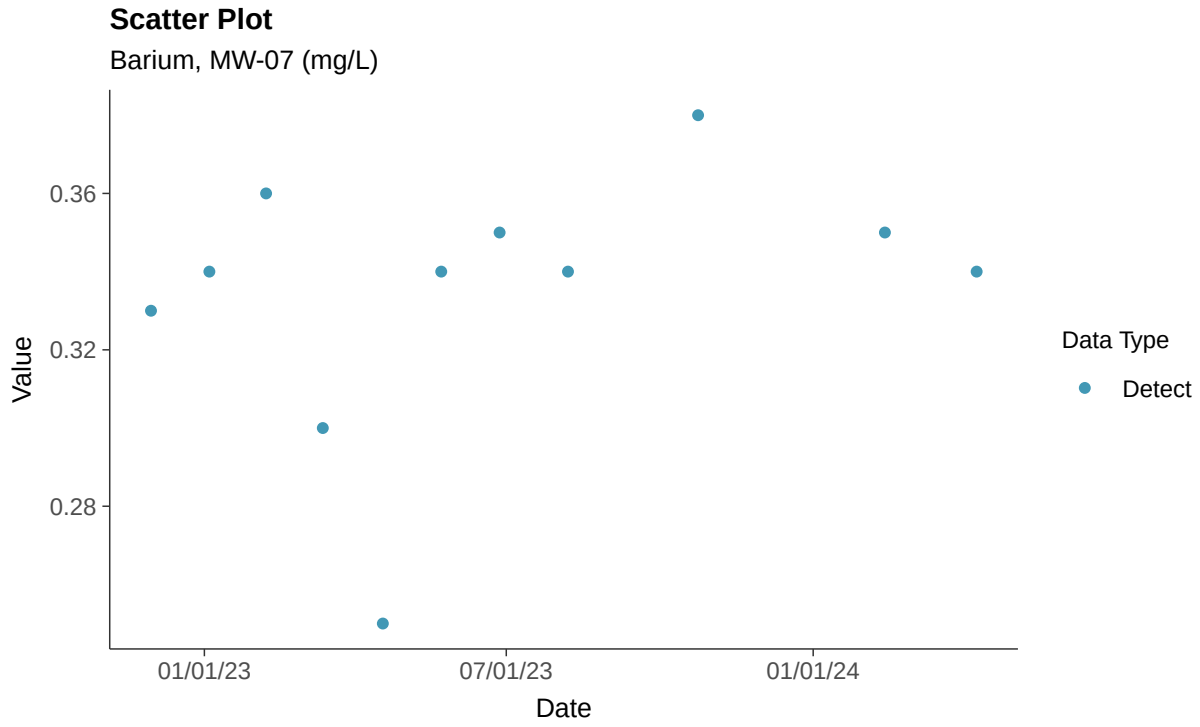
Trend Regression: Piecewise Linear-Linear-Linear

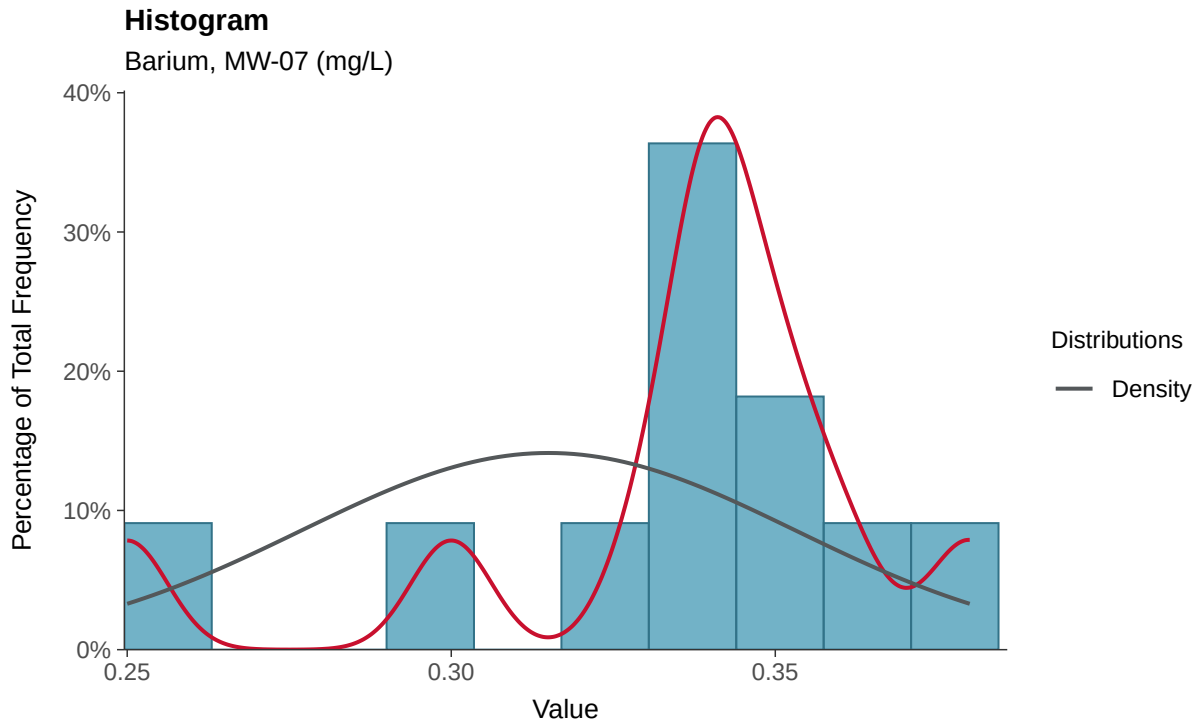
Arsenic, MW-07 (mg/L)



Appendix IV: Barium, MW-07

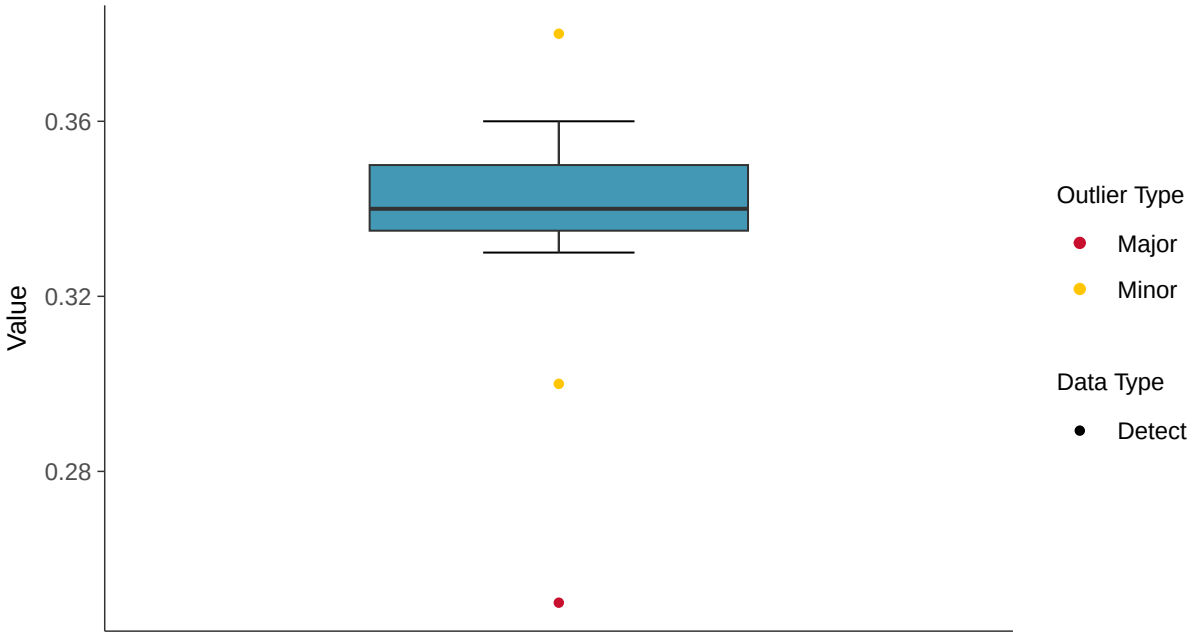
ID: 1_17_5_103





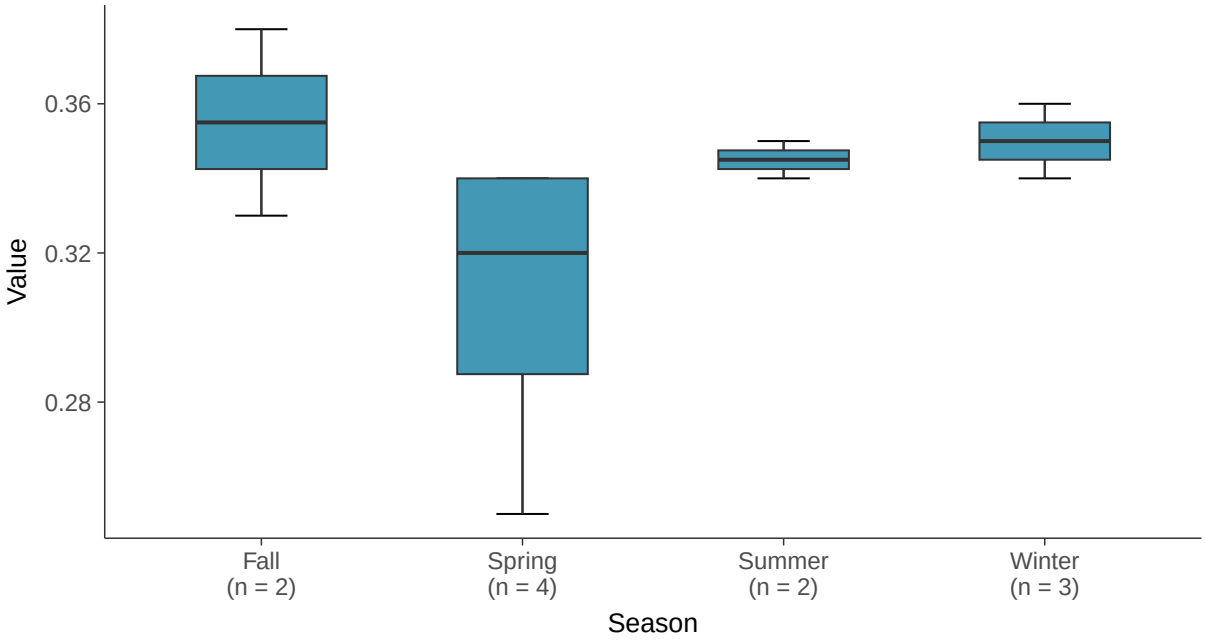
Boxplot

Barium, MW-07 (mg/L)



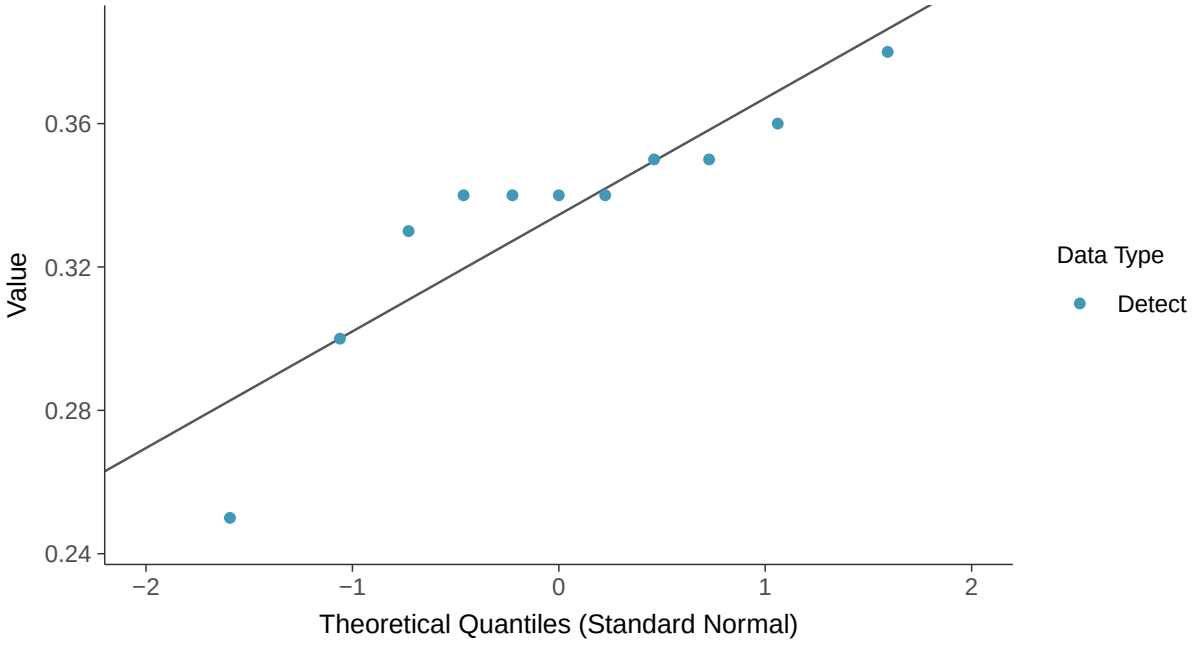
Boxplot by Season

Barium, MW-07 (mg/L)



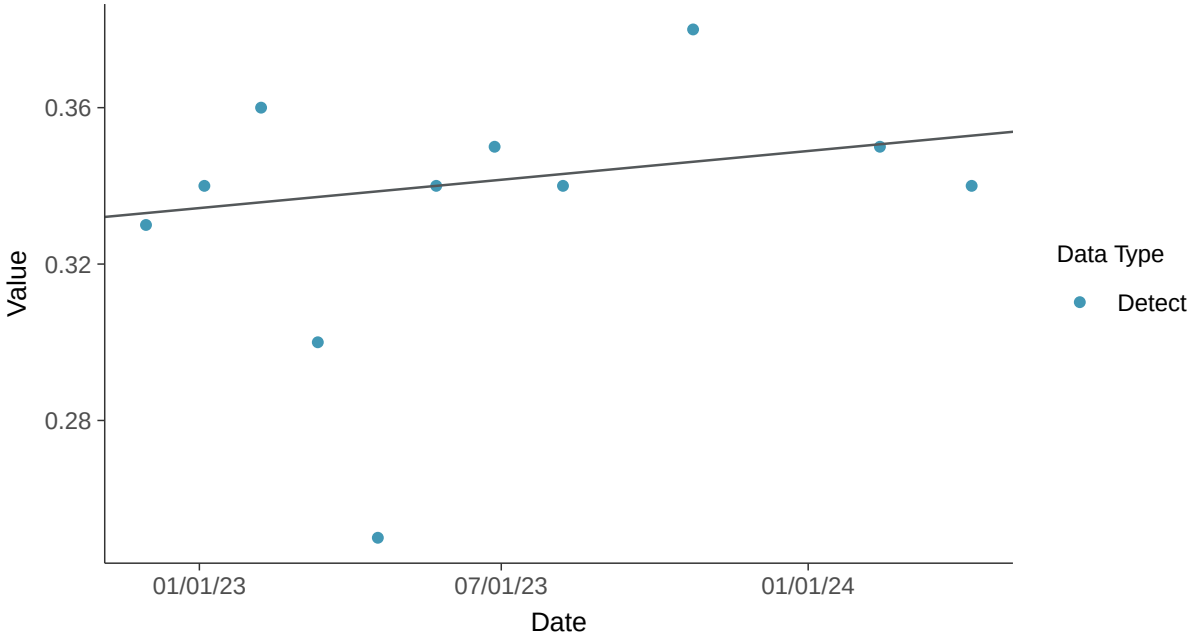
Normal Q-Q plot

Barium, MW-07 (mg/L)



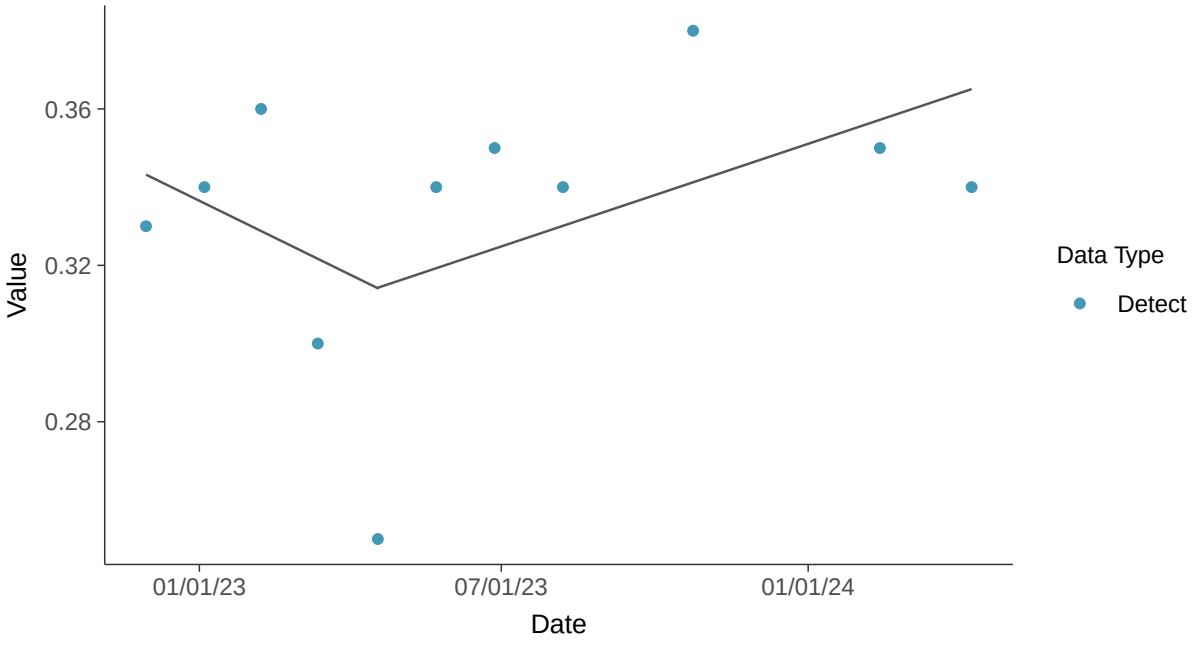
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Barium, MW-07 (mg/L)



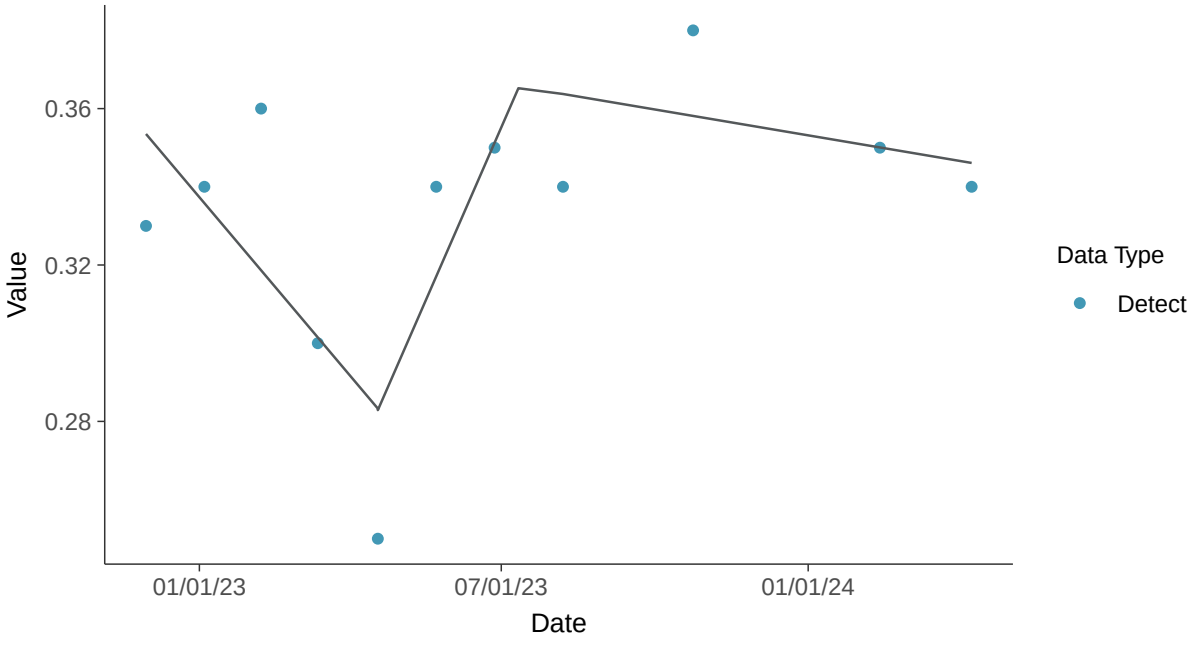
Trend Regression: Piecewise Linear-Linear

Barium, MW-07 (mg/L)



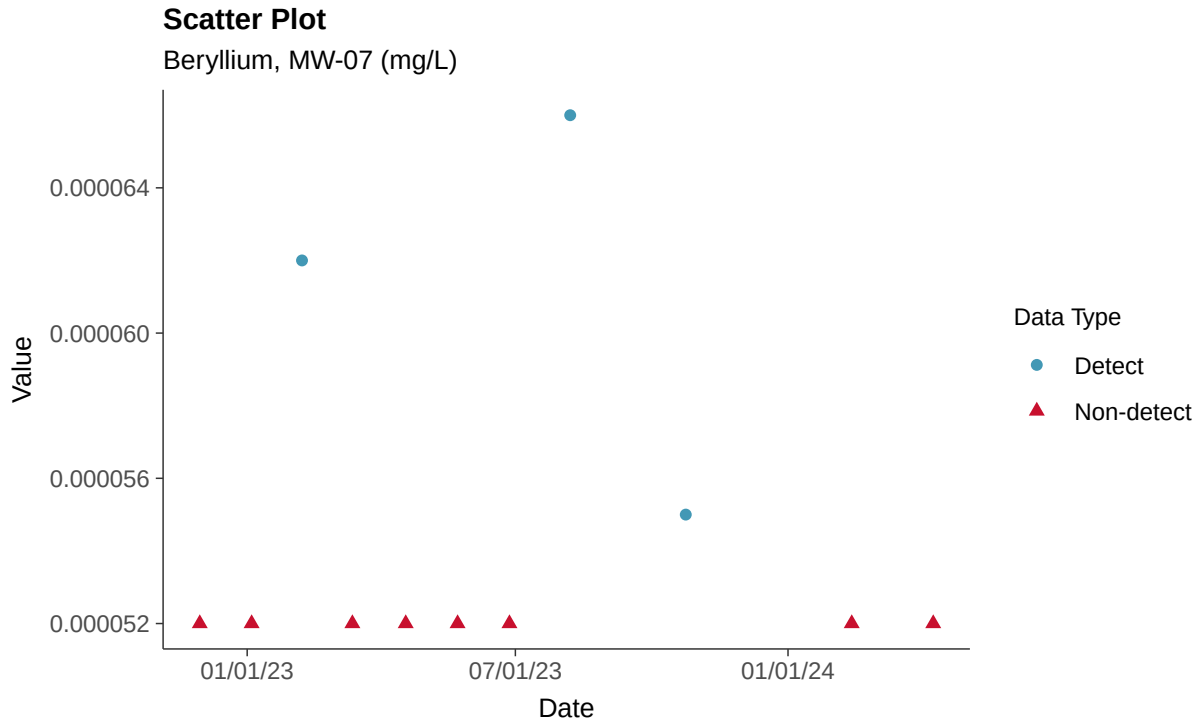
Trend Regression: Piecewise Linear-Linear-Linear

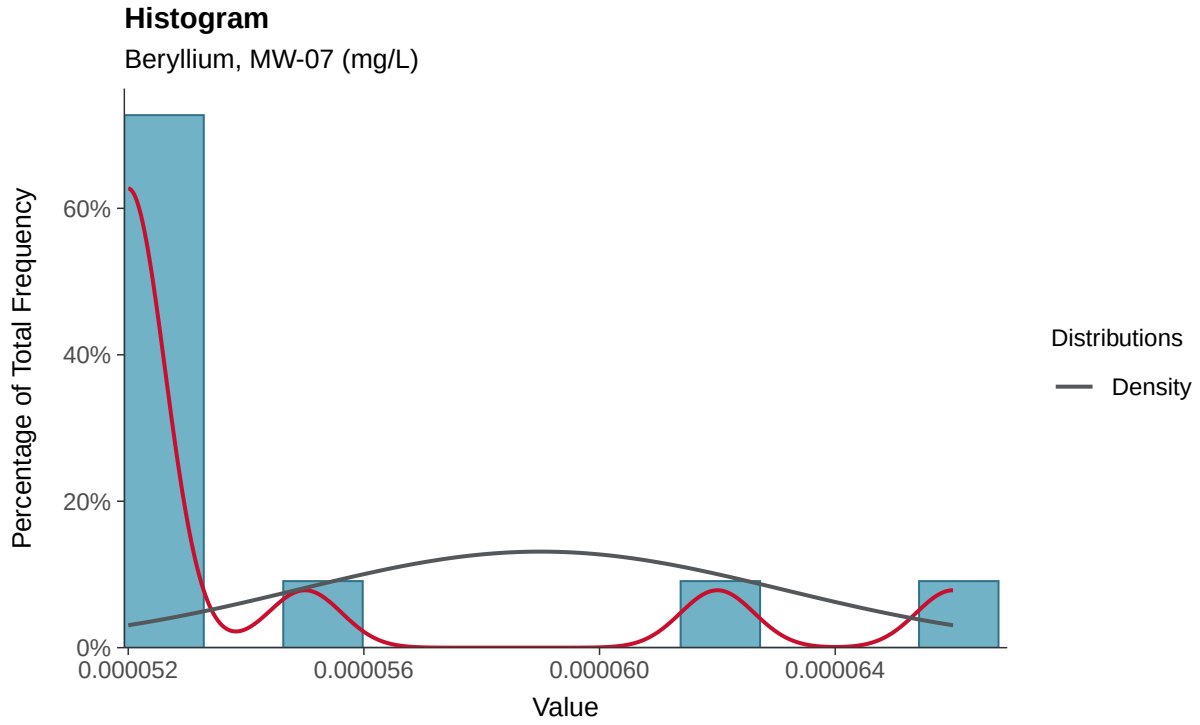
Barium, MW-07 (mg/L)



Appendix IV: Beryllium, MW-07

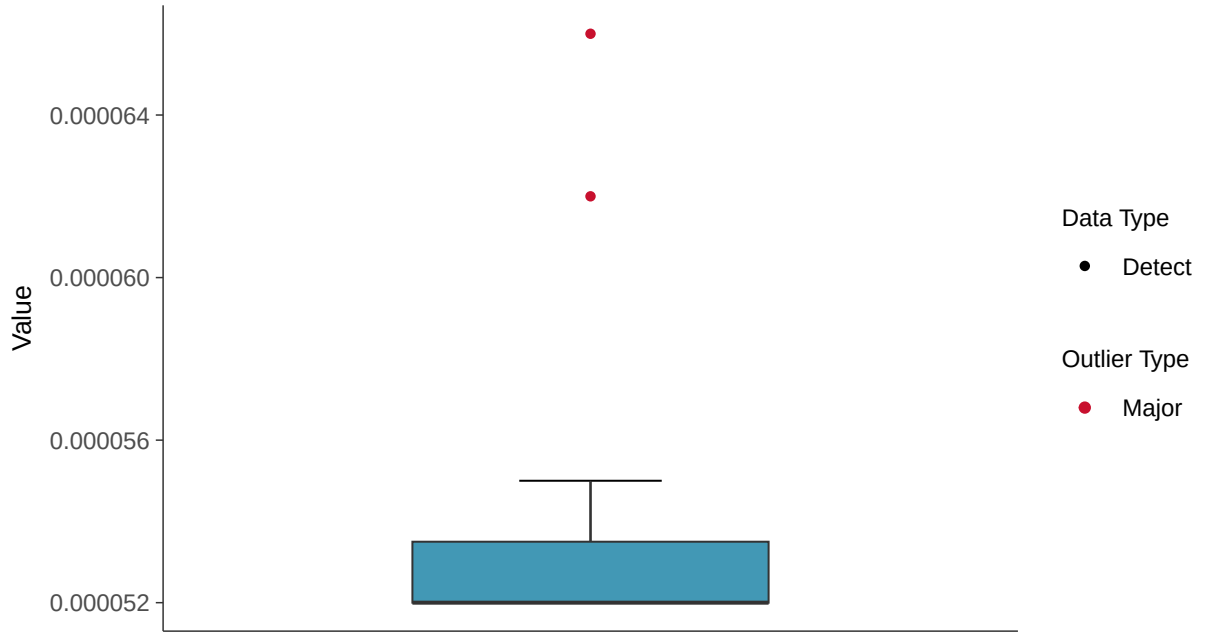
ID: 1_17_5_104





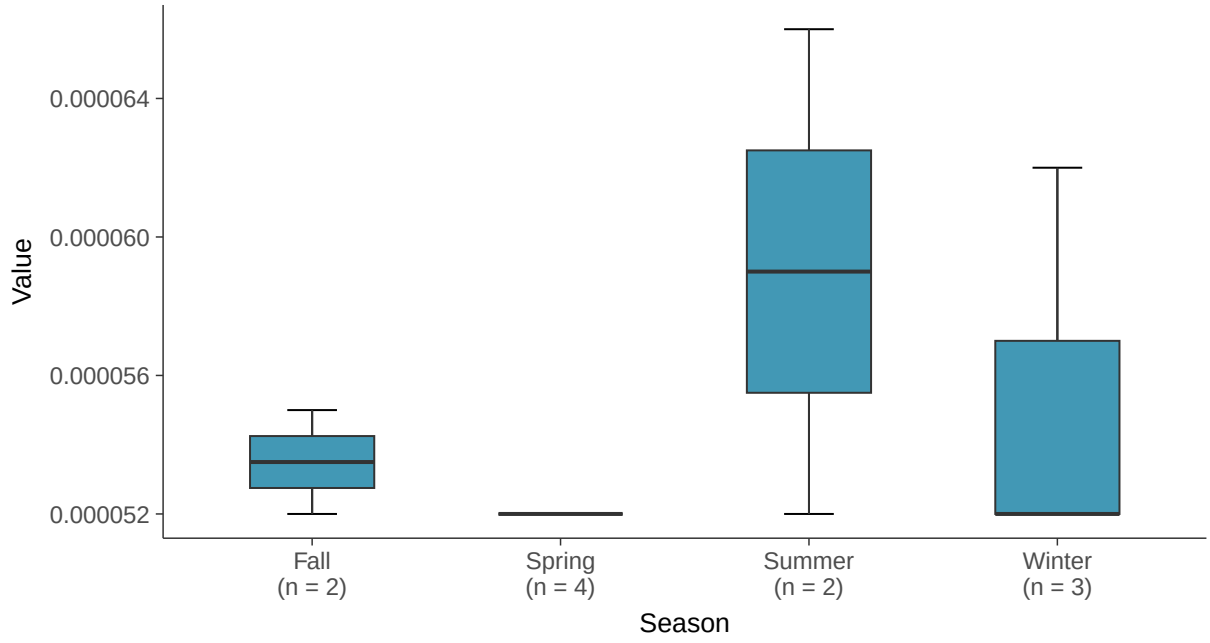
Boxplot

Beryllium, MW-07 (mg/L)



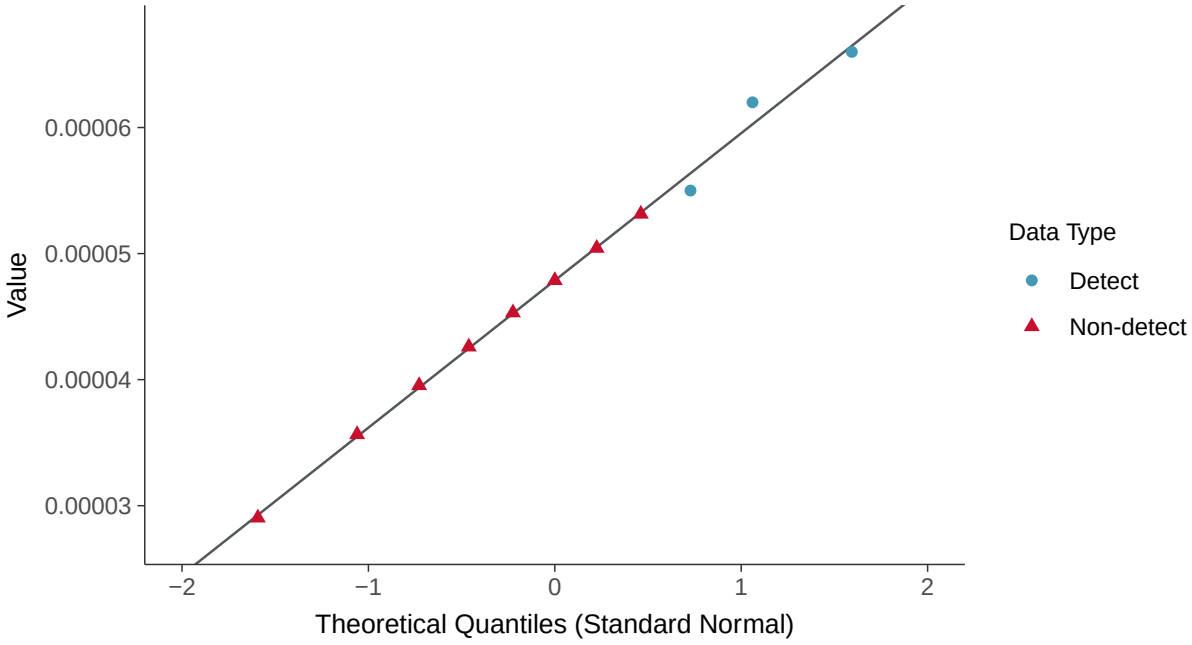
Boxplot by Season

Beryllium, MW-07 (mg/L)



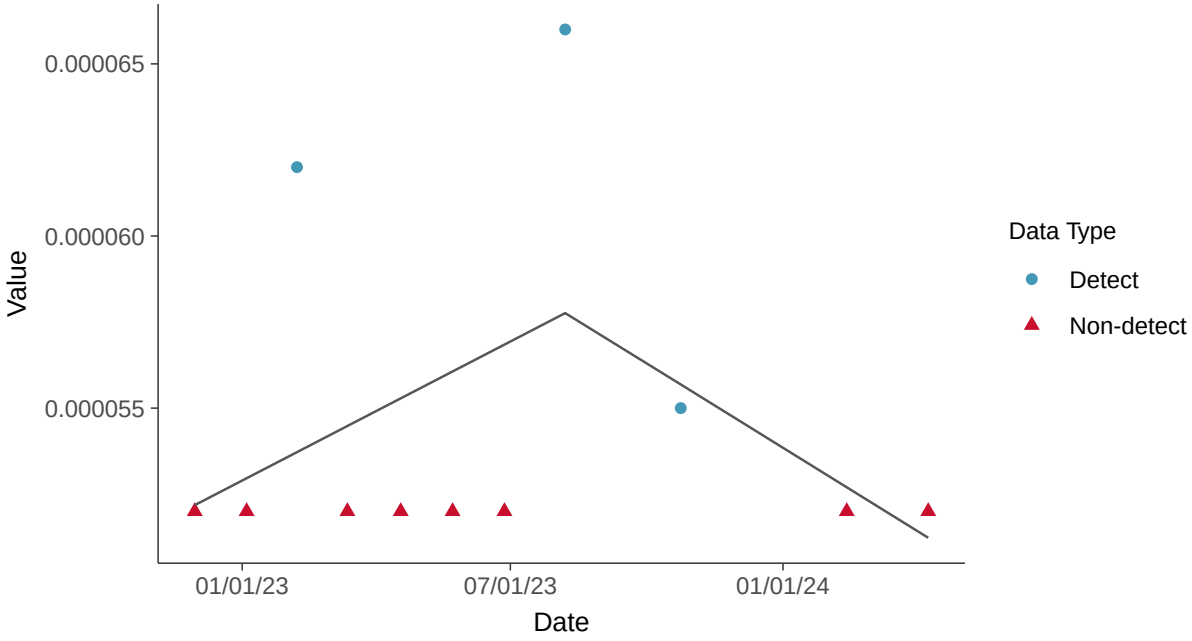
Normal Q-Q plot using ROS Imputed Estimates

Beryllium, MW-07 (mg/L)



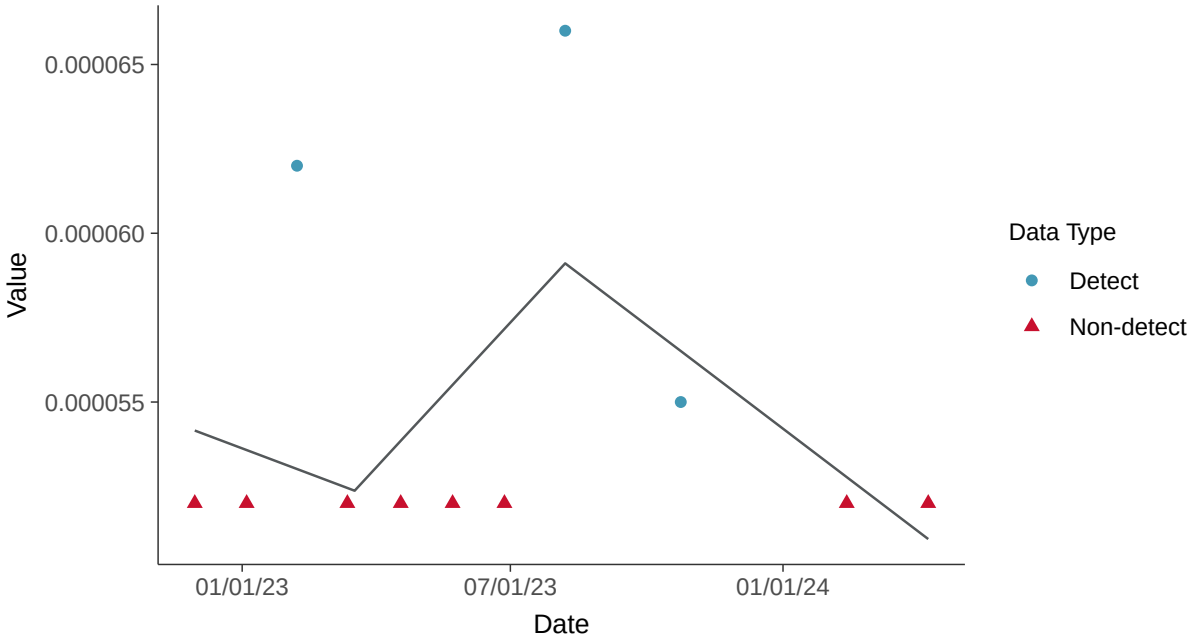
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-07 (mg/L)



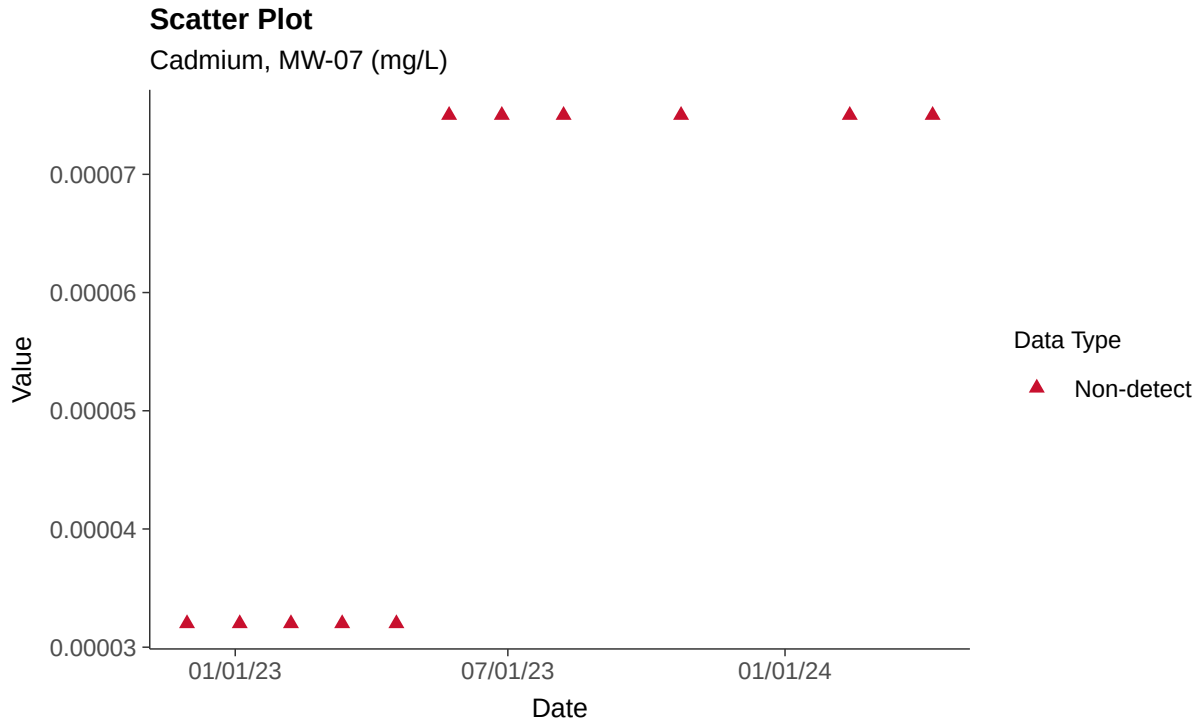
Trend Regression: Piecewise Linear-Linear-Linear

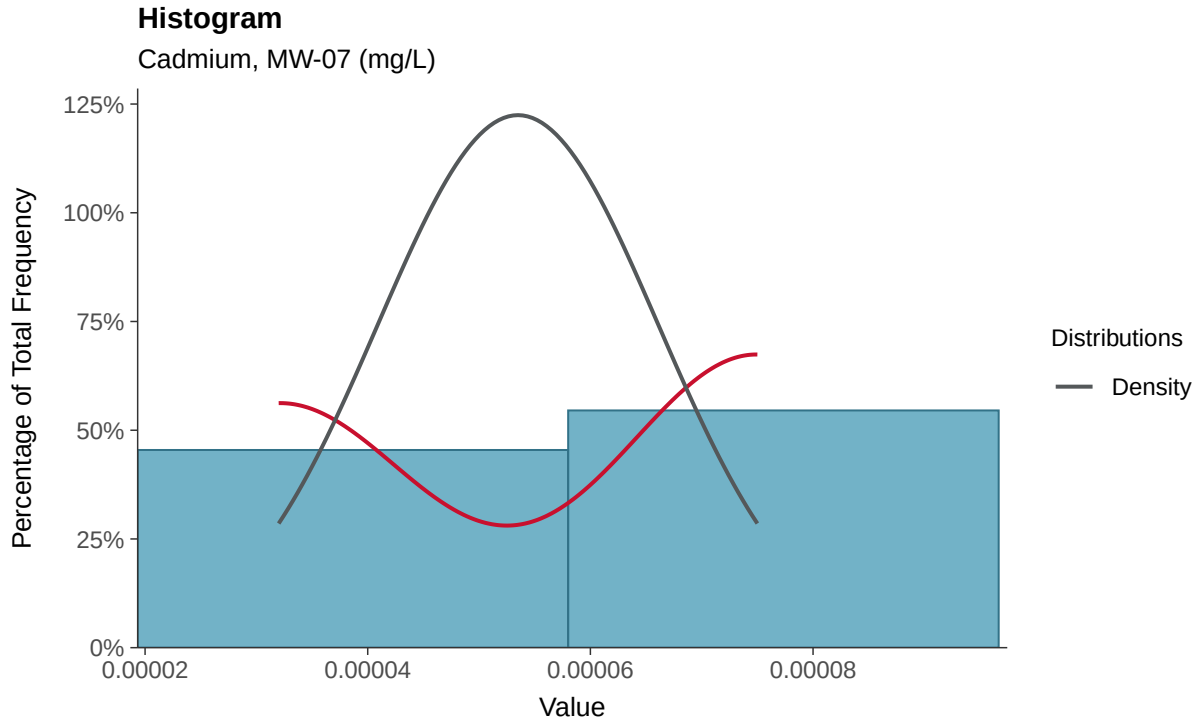
Beryllium, MW-07 (mg/L)



Appendix IV: Cadmium, MW-07

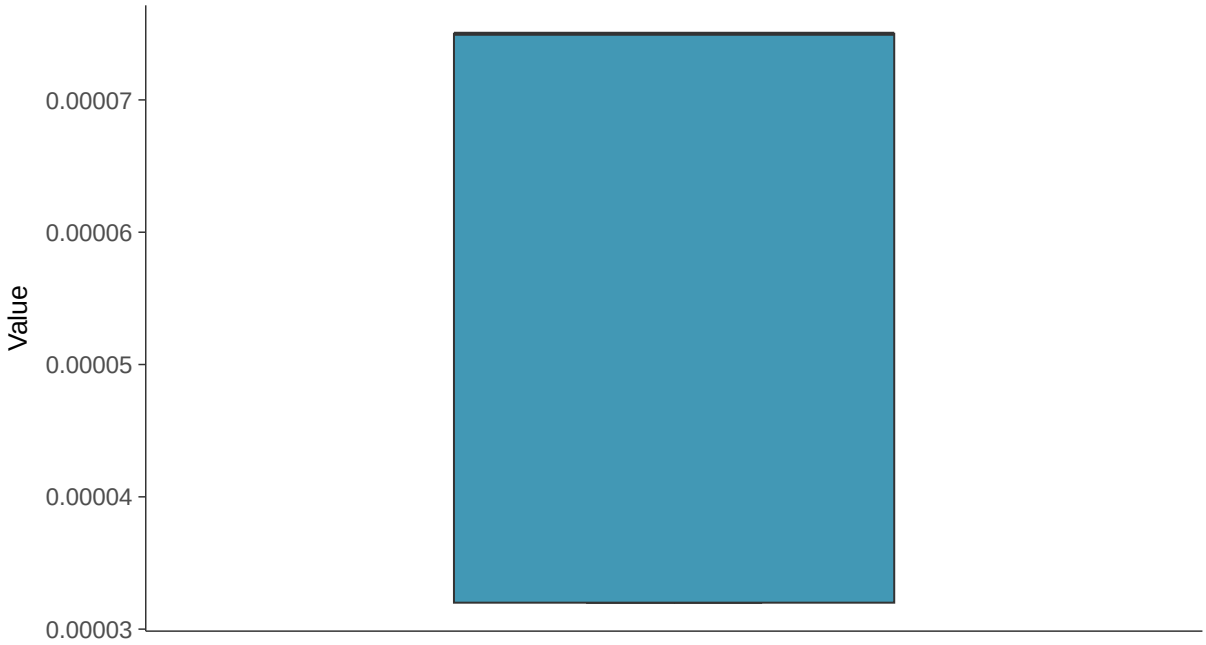
ID: 1_17_5_106





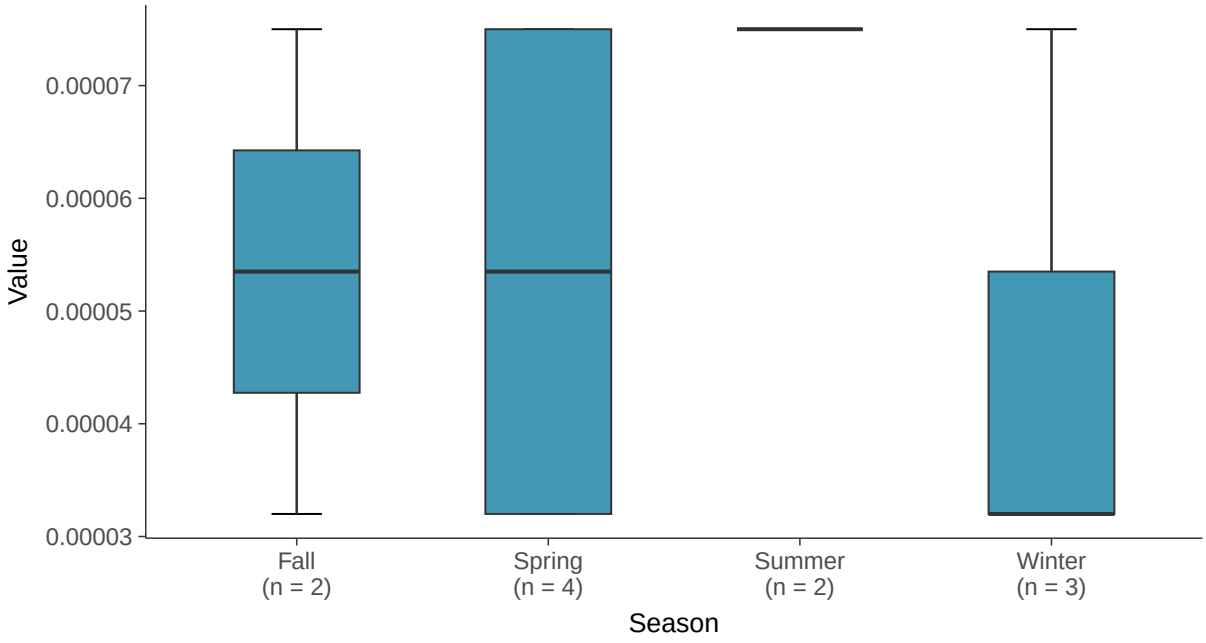
Boxplot

Cadmium, MW-07 (mg/L)



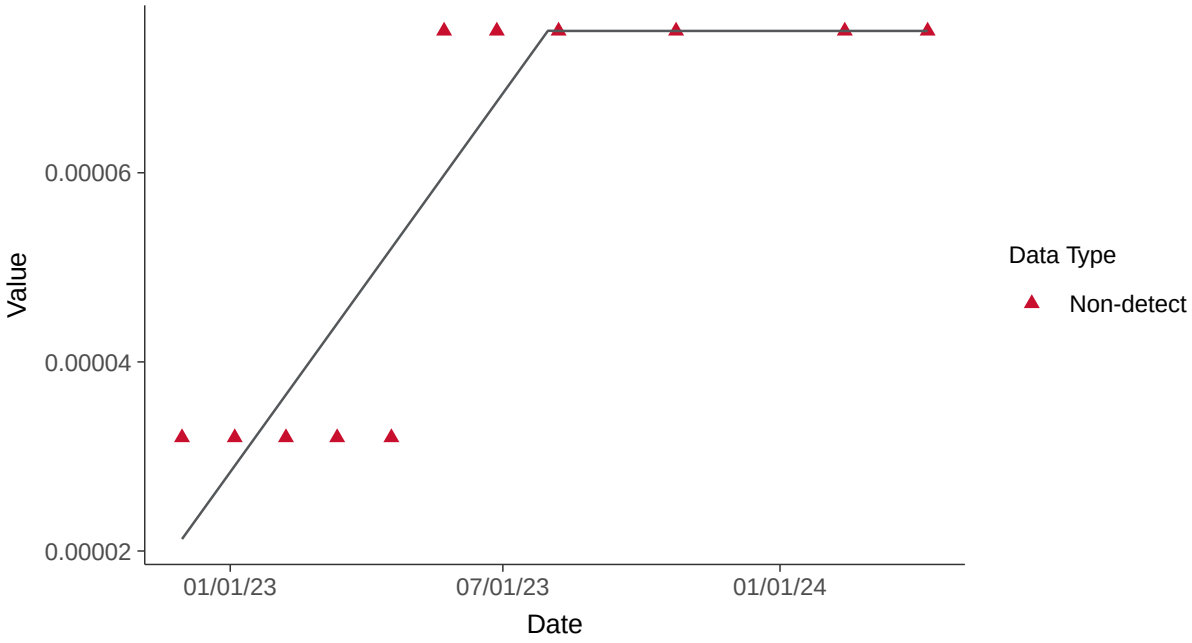
Boxplot by Season

Cadmium, MW-07 (mg/L)



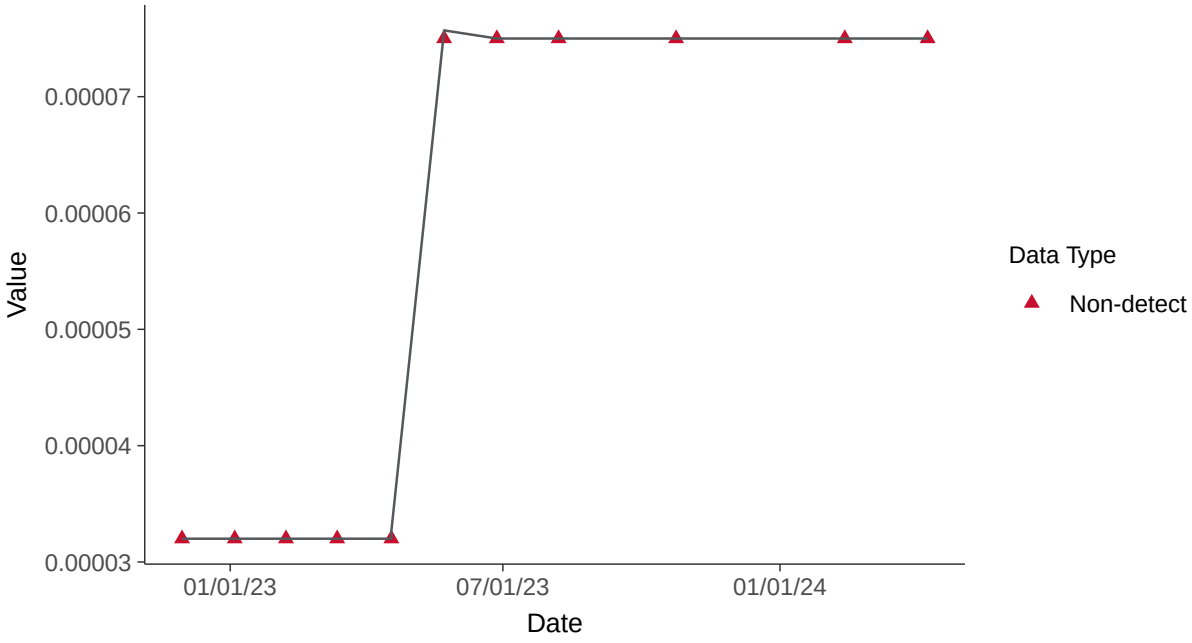
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-07 (mg/L)



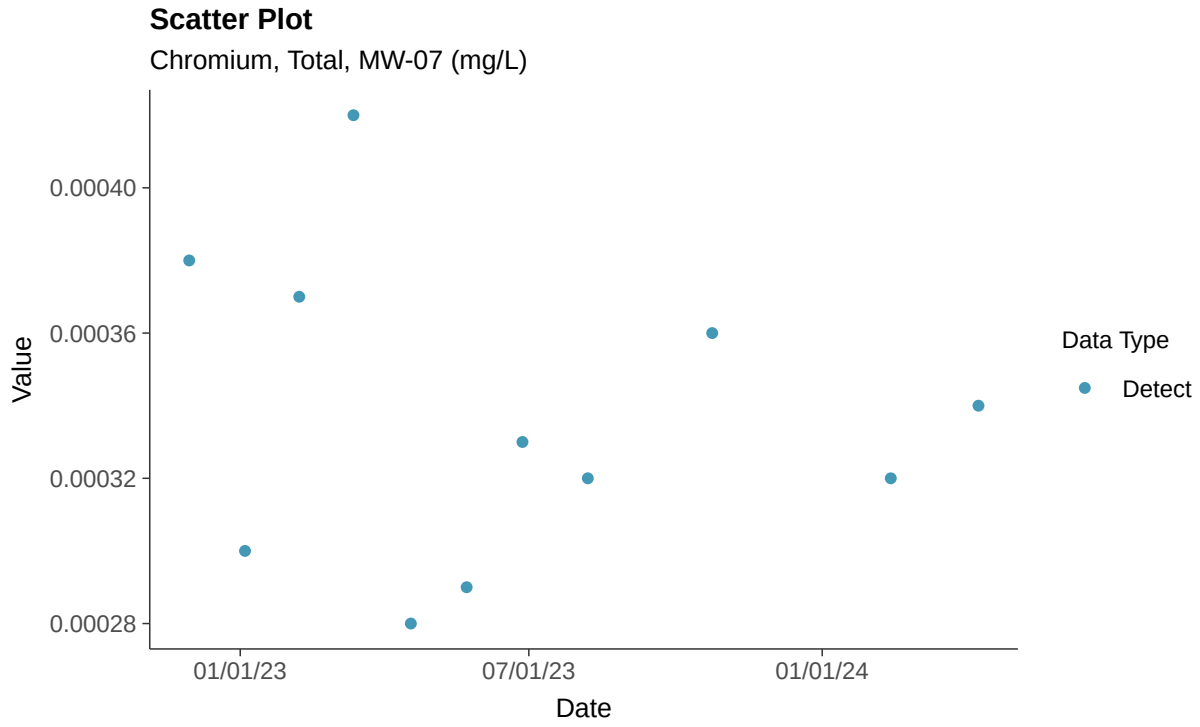
Trend Regression: Piecewise Linear-Linear-Linear

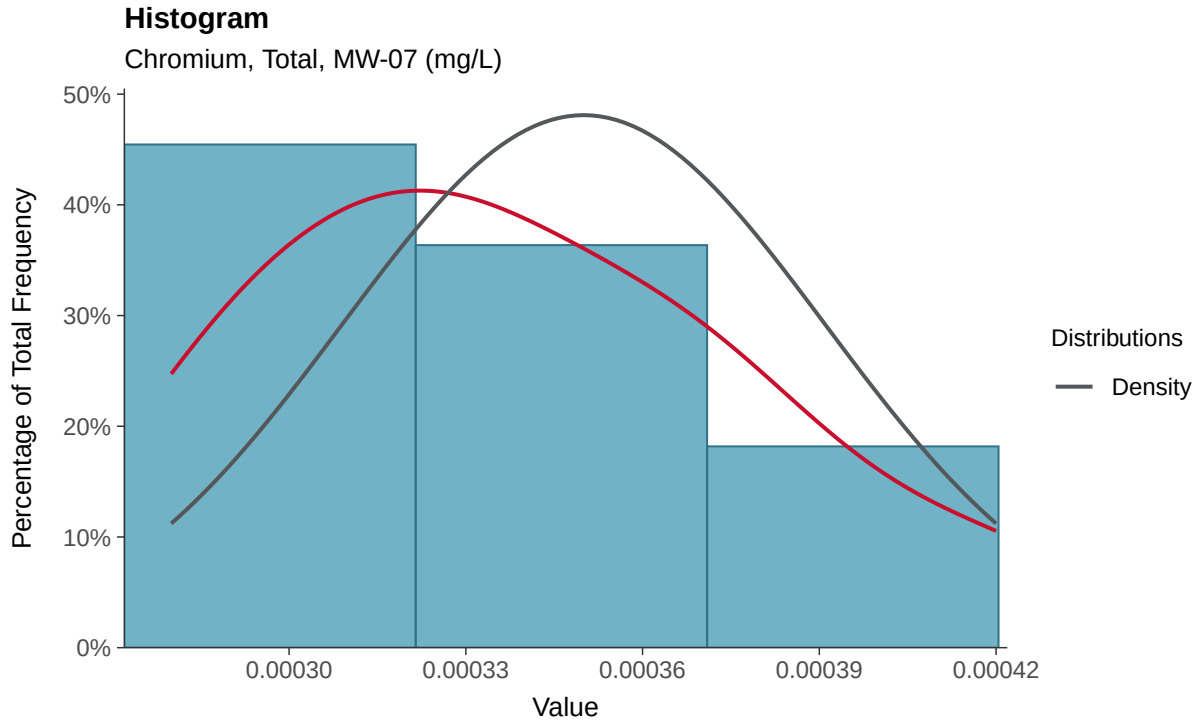
Cadmium, MW-07 (mg/L)



Appendix IV: Chromium, Total, MW-07

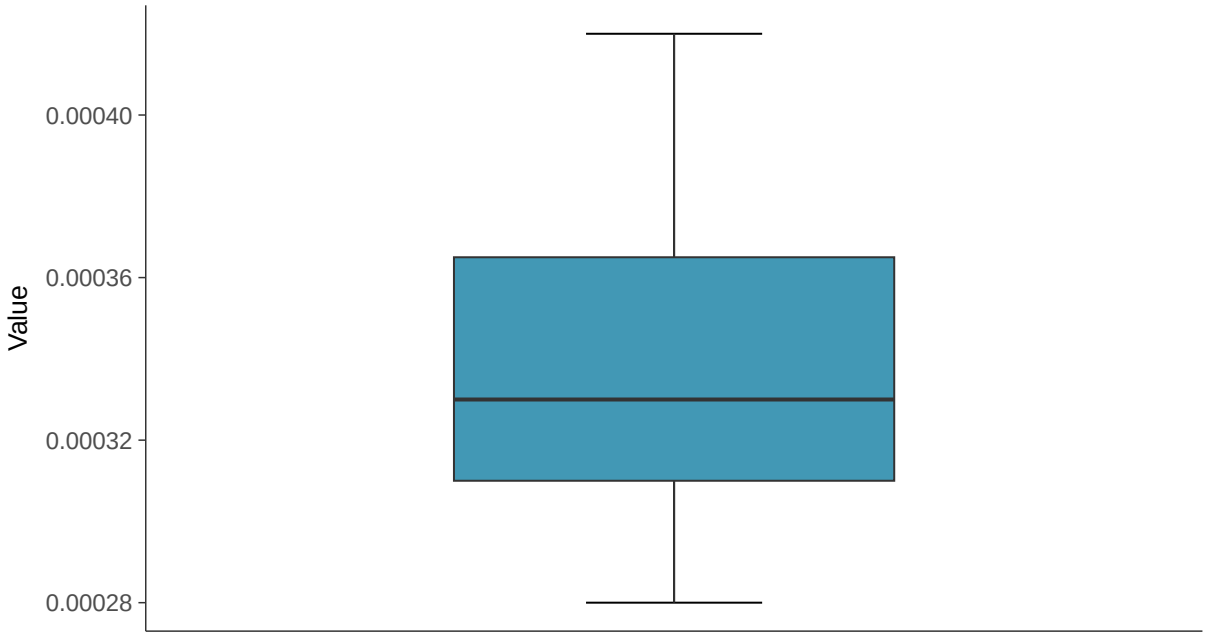
ID: 1_17_5_109





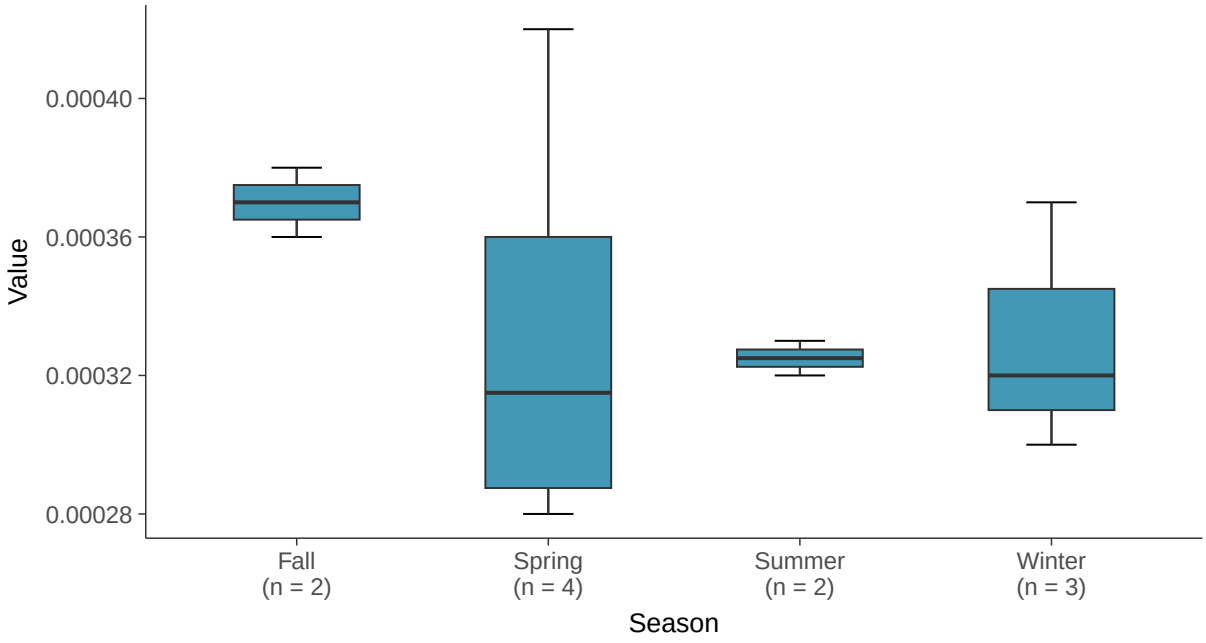
Boxplot

Chromium, Total, MW-07 (mg/L)



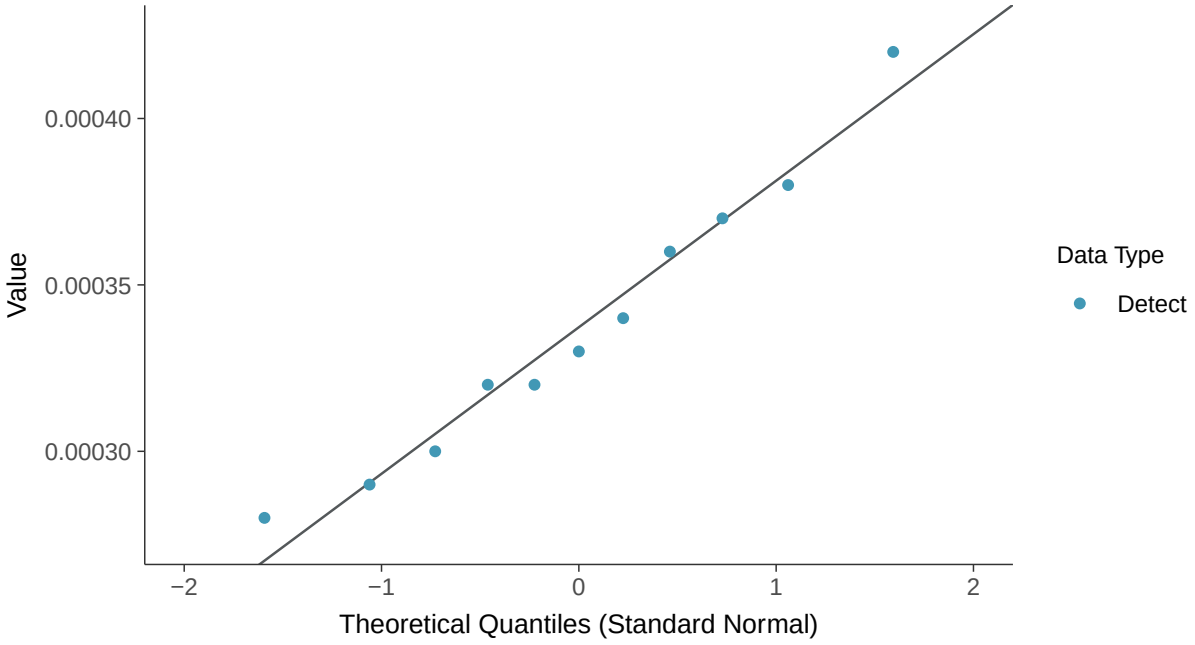
Boxplot by Season

Chromium, Total, MW-07 (mg/L)



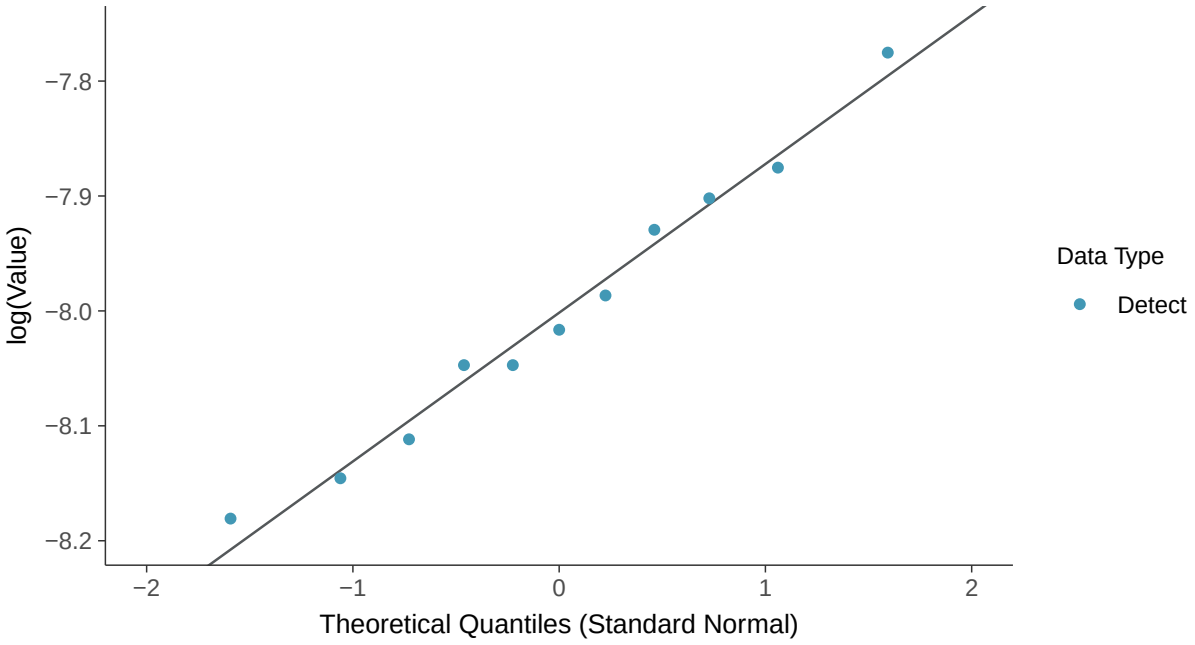
Normal Q-Q plot

Chromium, Total, MW-07 (mg/L)



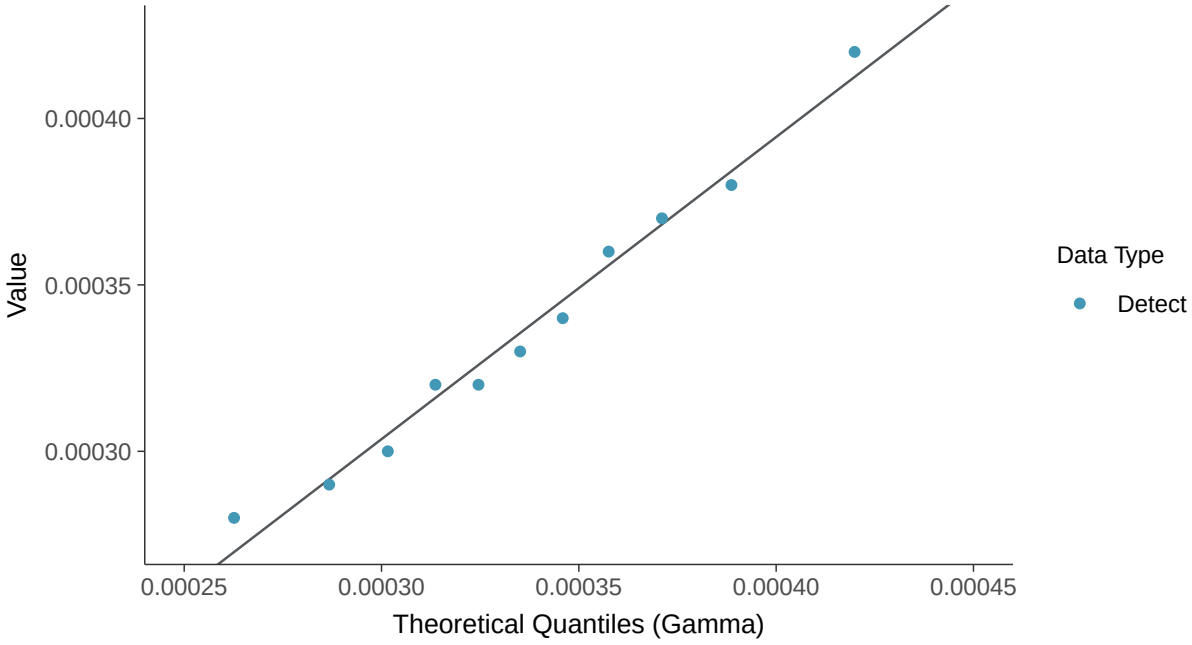
Lognormal Q-Q plot

Chromium, Total, MW-07 (mg/L)



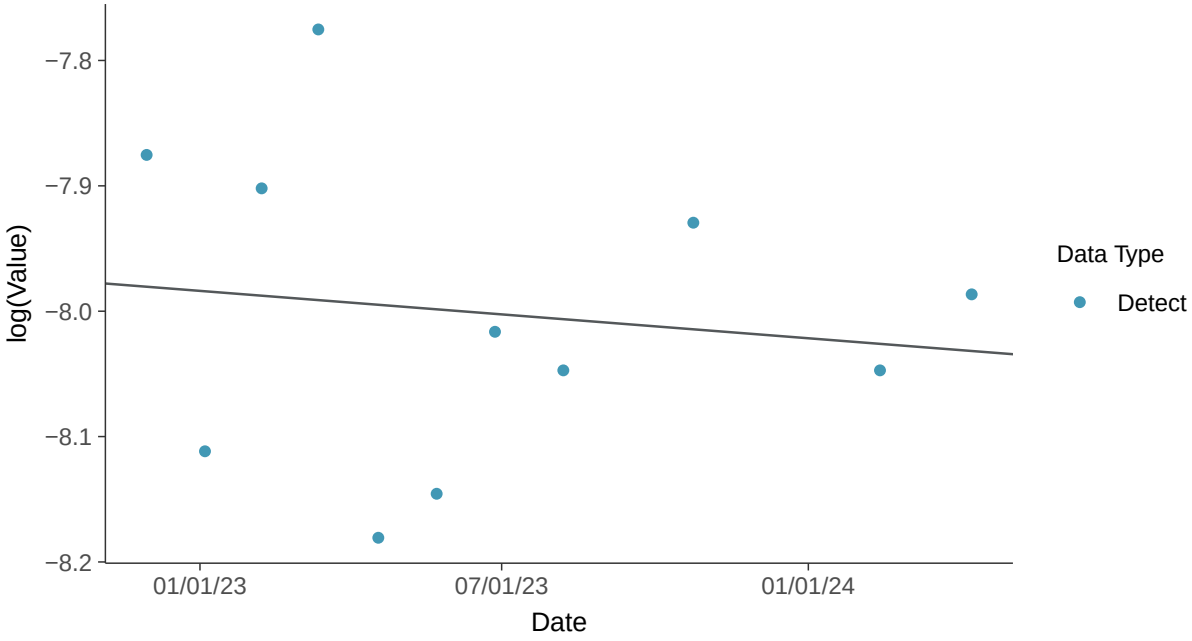
Gamma Q-Q plot

Chromium, Total, MW-07 (mg/L)



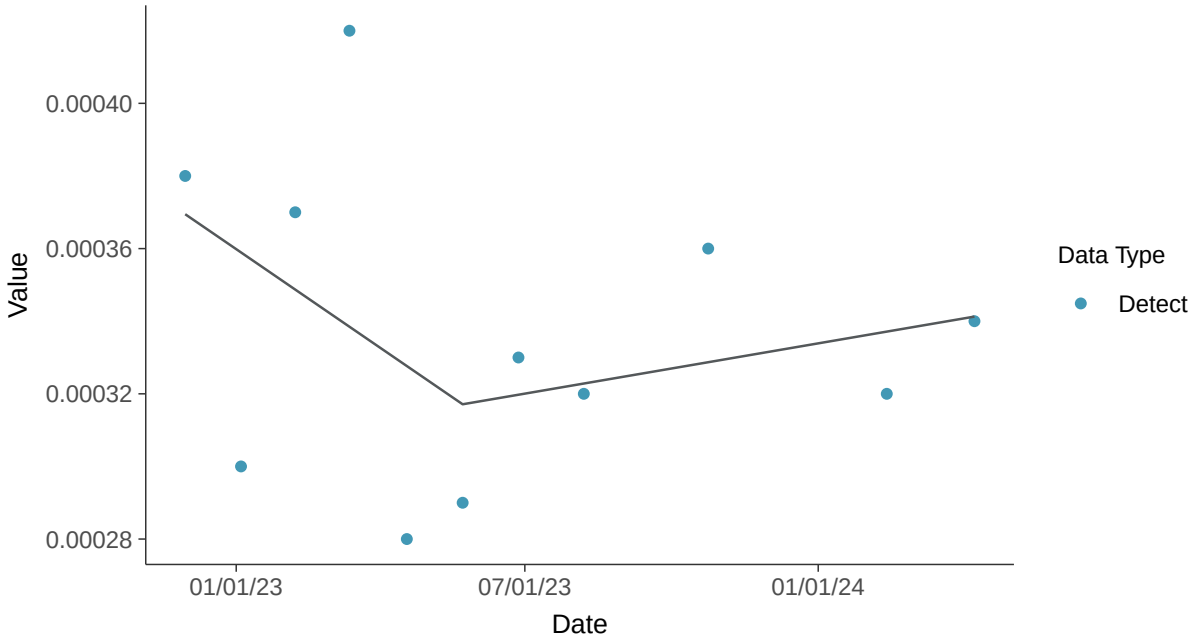
Trend Regression: Lognormal MLE

Chromium, Total, MW-07 (mg/L)



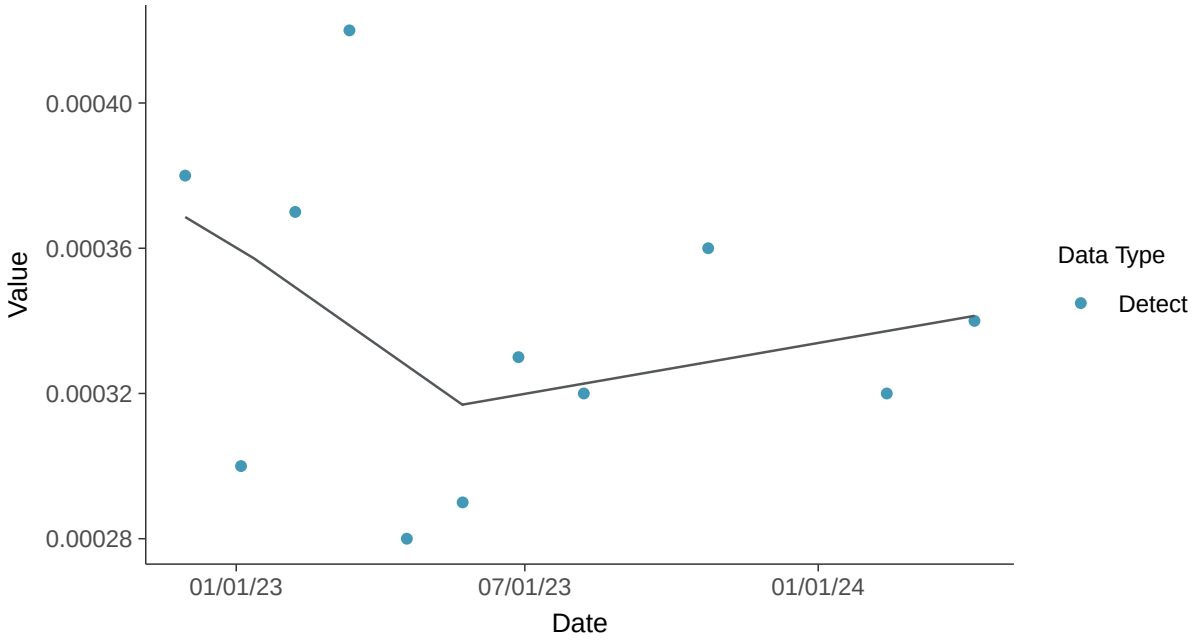
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-07 (mg/L)



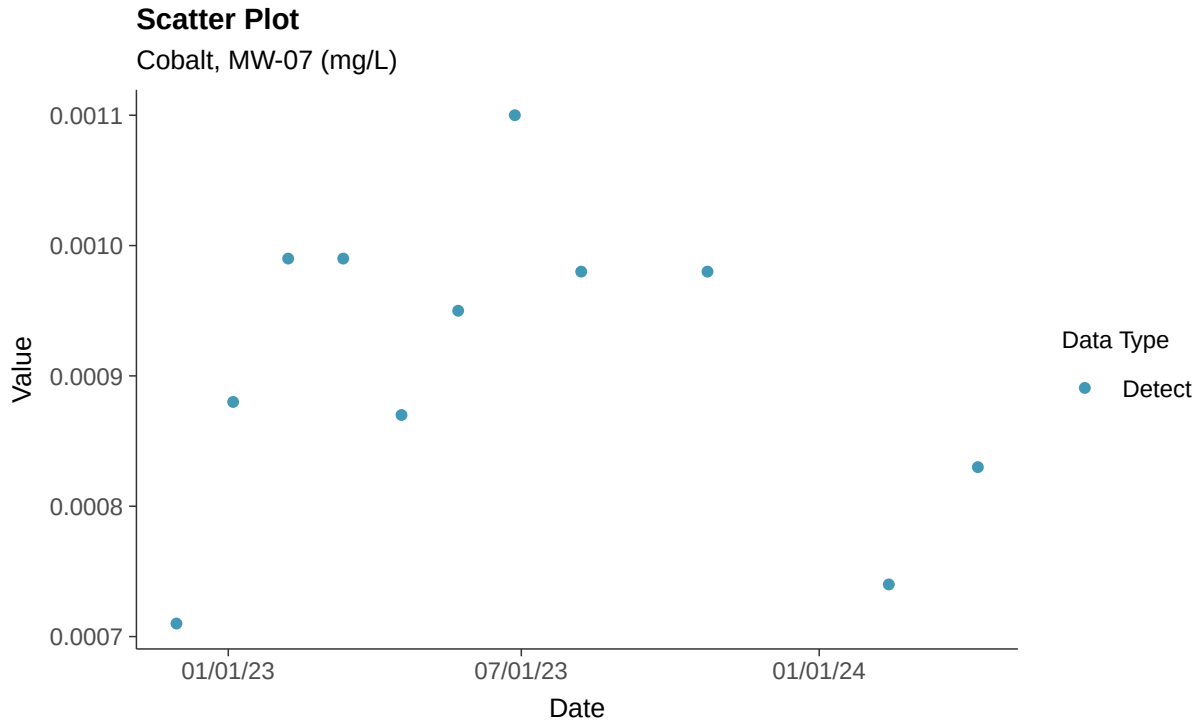
Trend Regression: Piecewise Linear-Linear-Linear

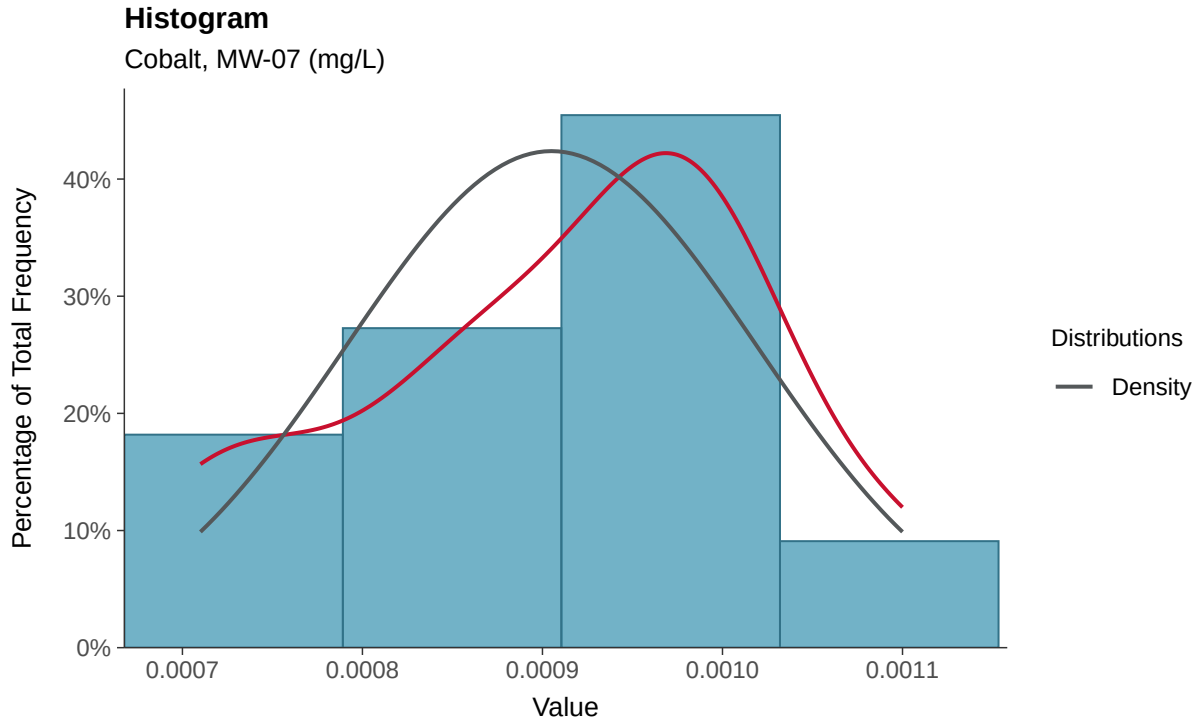
Chromium, Total, MW-07 (mg/L)



Appendix IV: Cobalt, MW-07

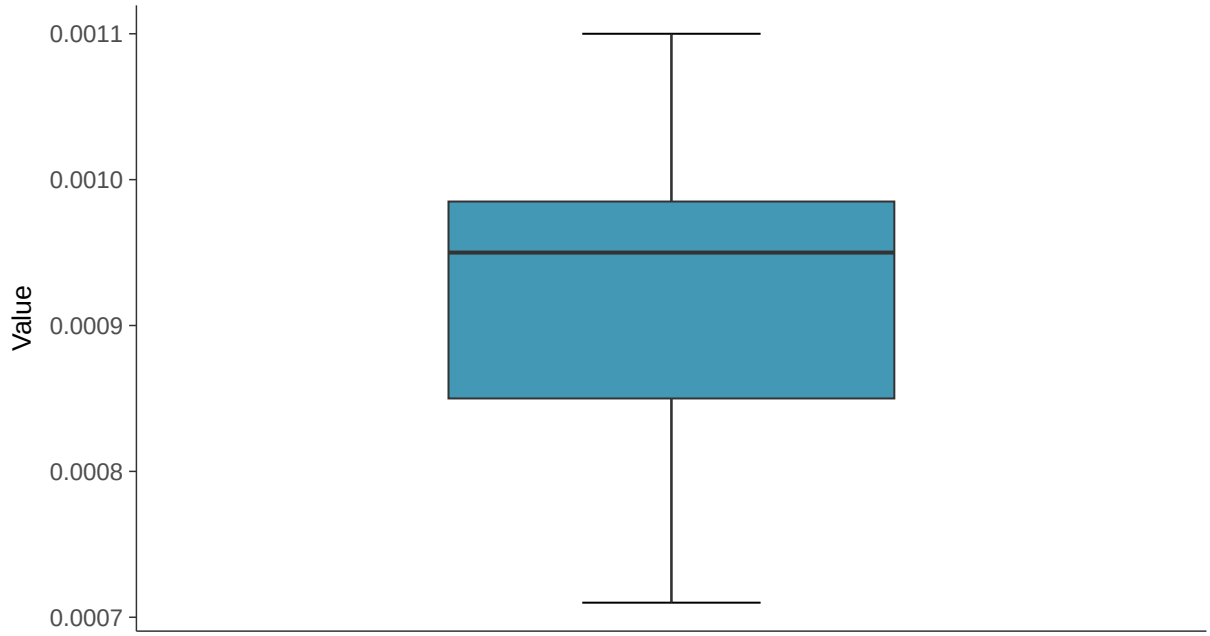
ID: 1_17_5_110





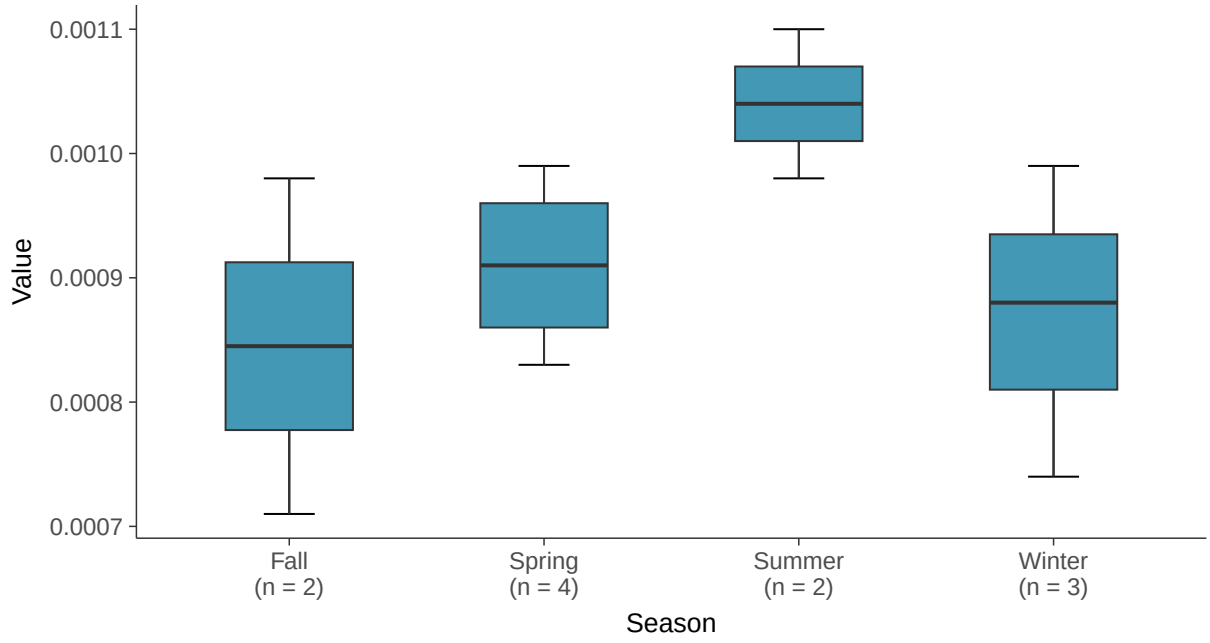
Boxplot

Cobalt, MW-07 (mg/L)



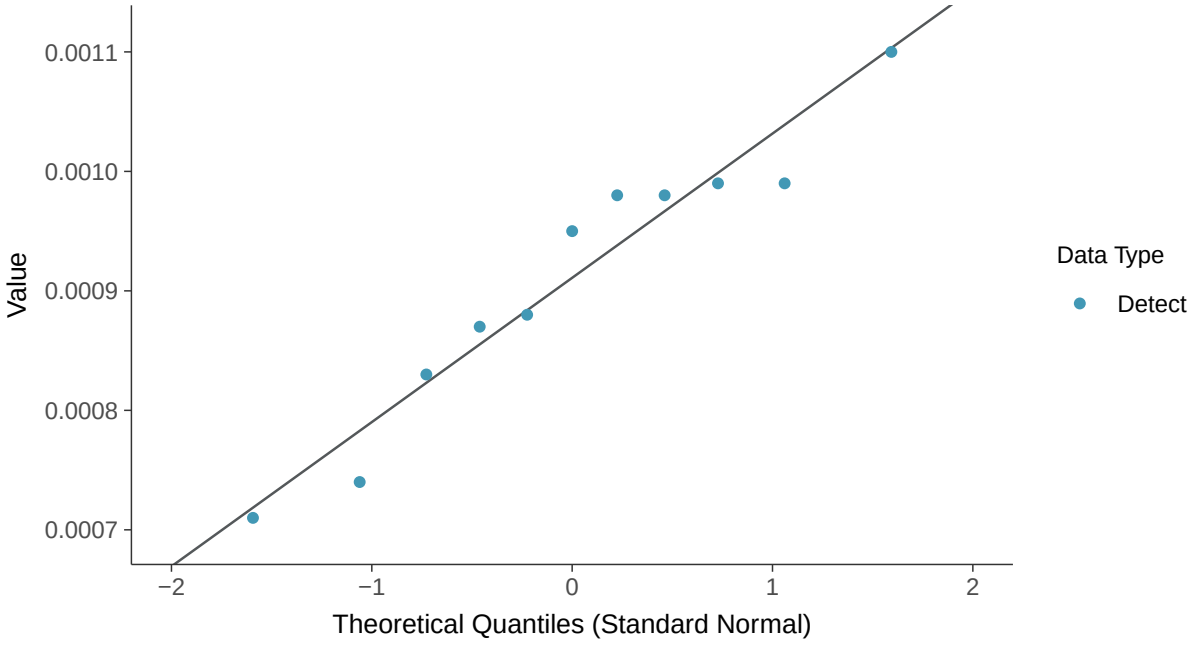
Boxplot by Season

Cobalt, MW-07 (mg/L)



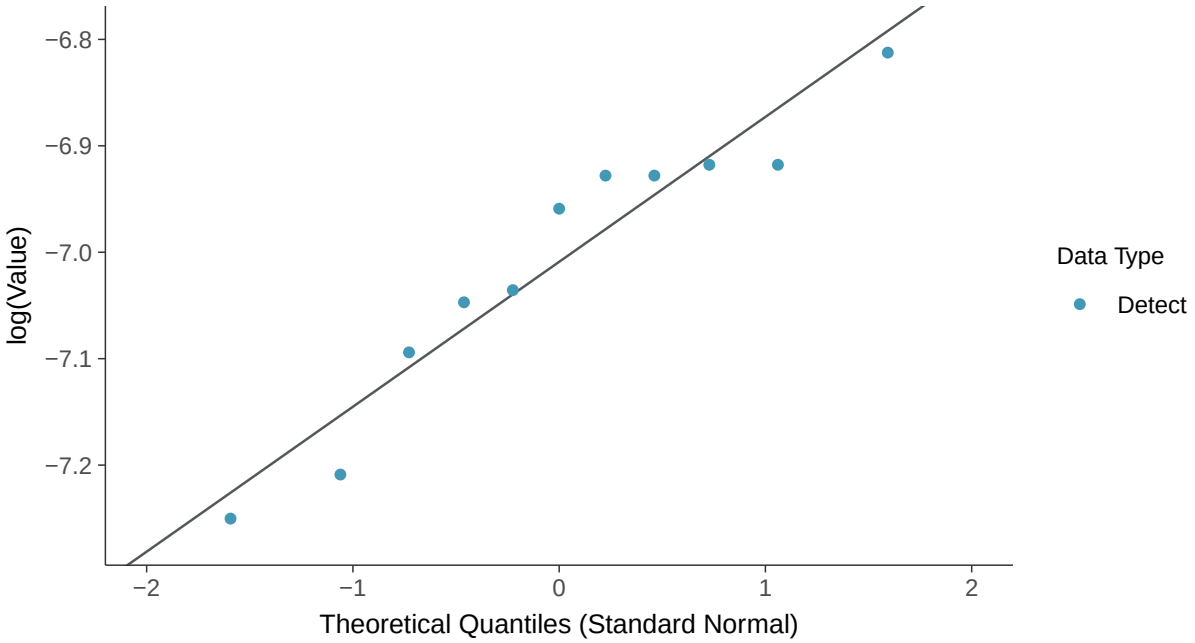
Normal Q-Q plot

Cobalt, MW-07 (mg/L)



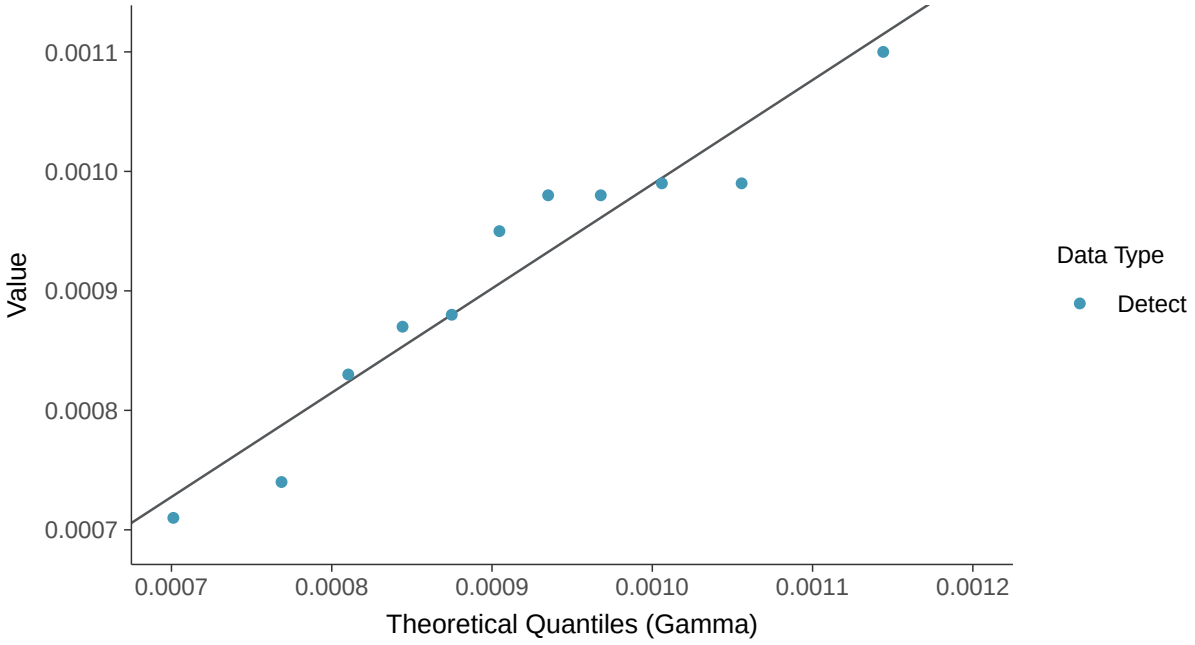
Lognormal Q-Q plot

Cobalt, MW-07 (mg/L)



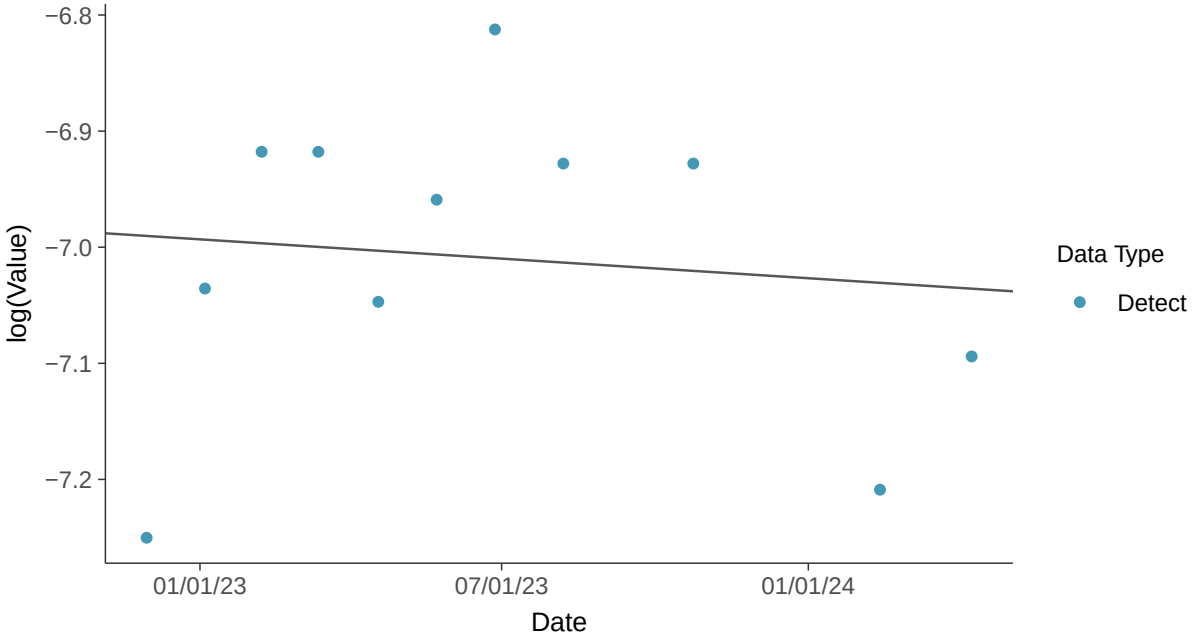
Gamma Q-Q plot

Cobalt, MW-07 (mg/L)



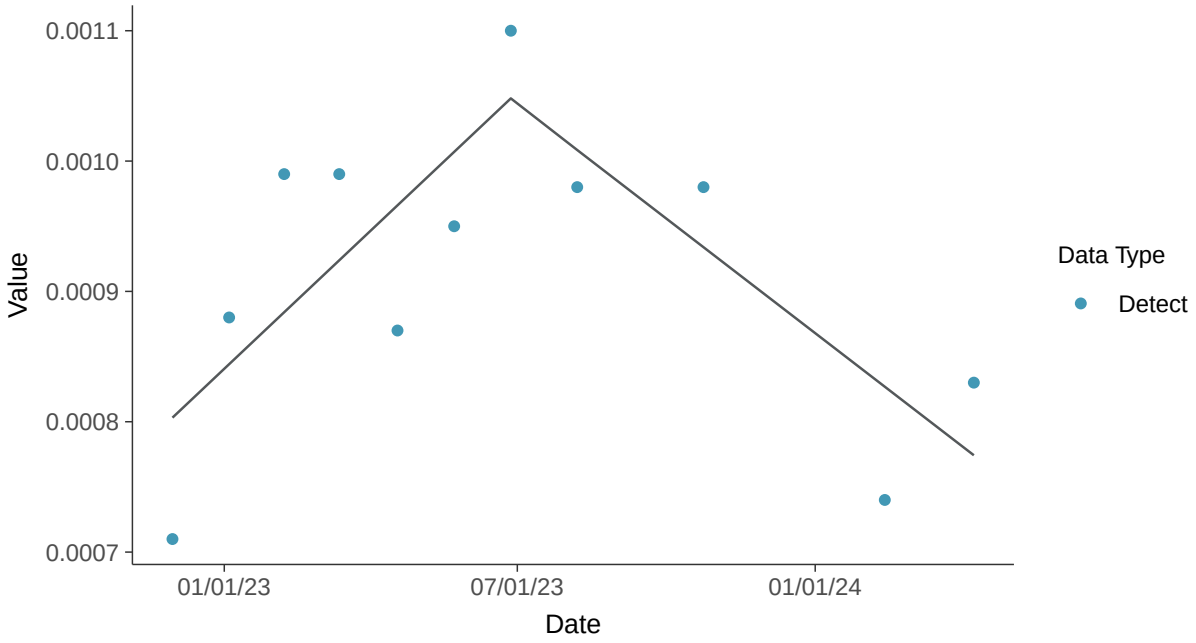
Trend Regression: Lognormal MLE

Cobalt, MW-07 (mg/L)



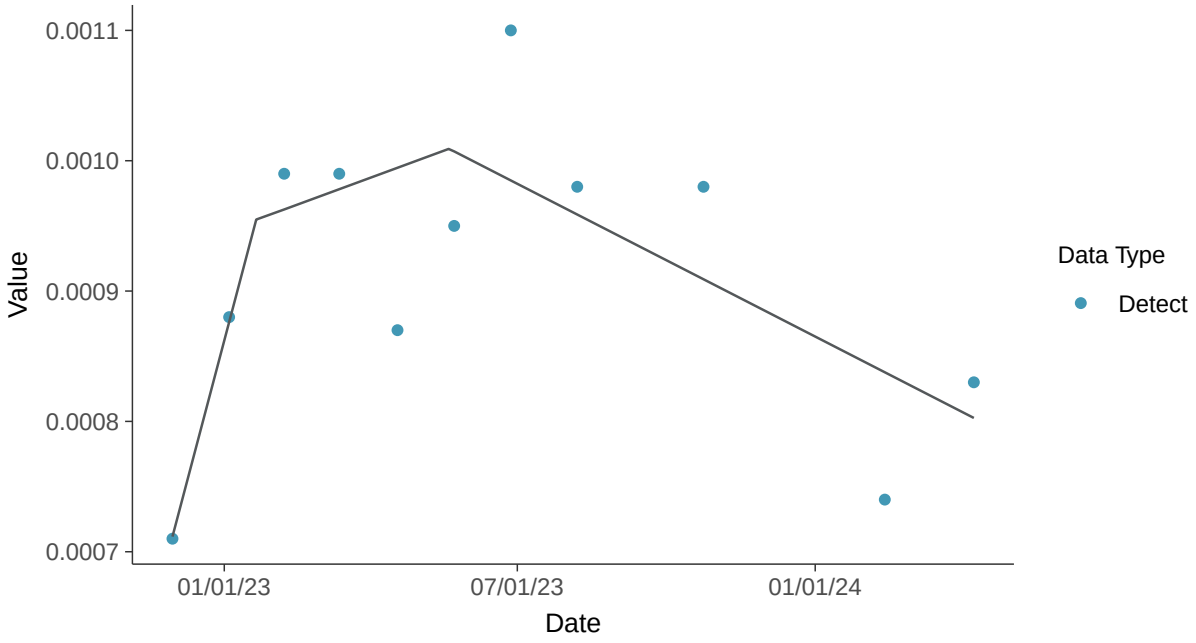
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-07 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cobalt, MW-07 (mg/L)

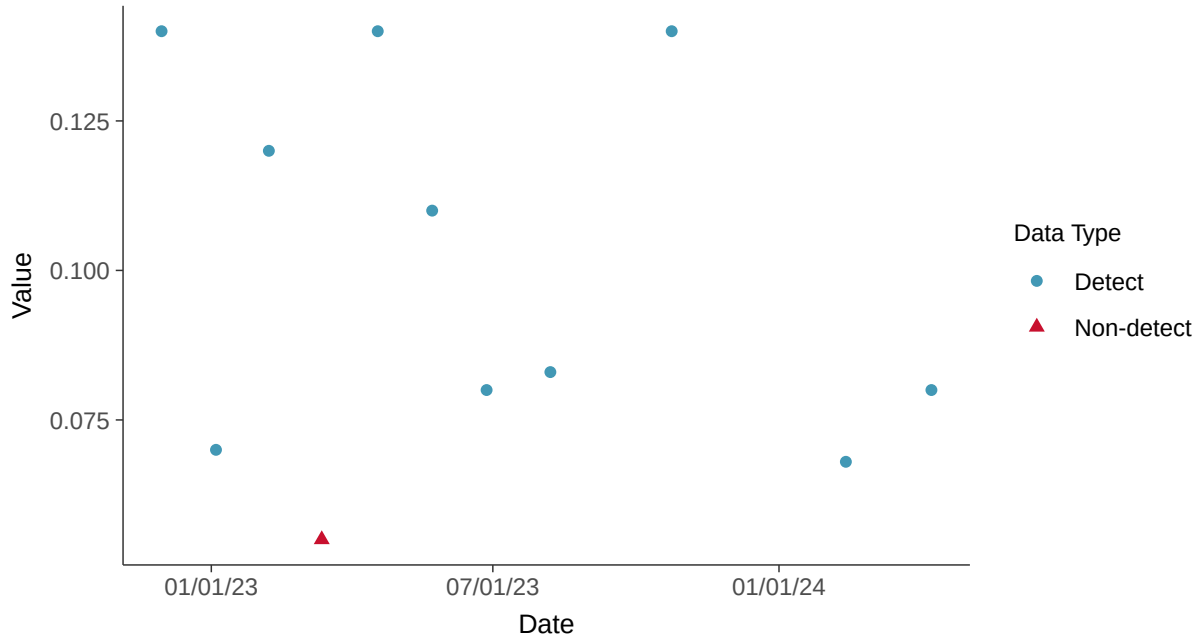


Appendix IV: Fluoride (App IV), MW-07

ID: 1_17_5_113

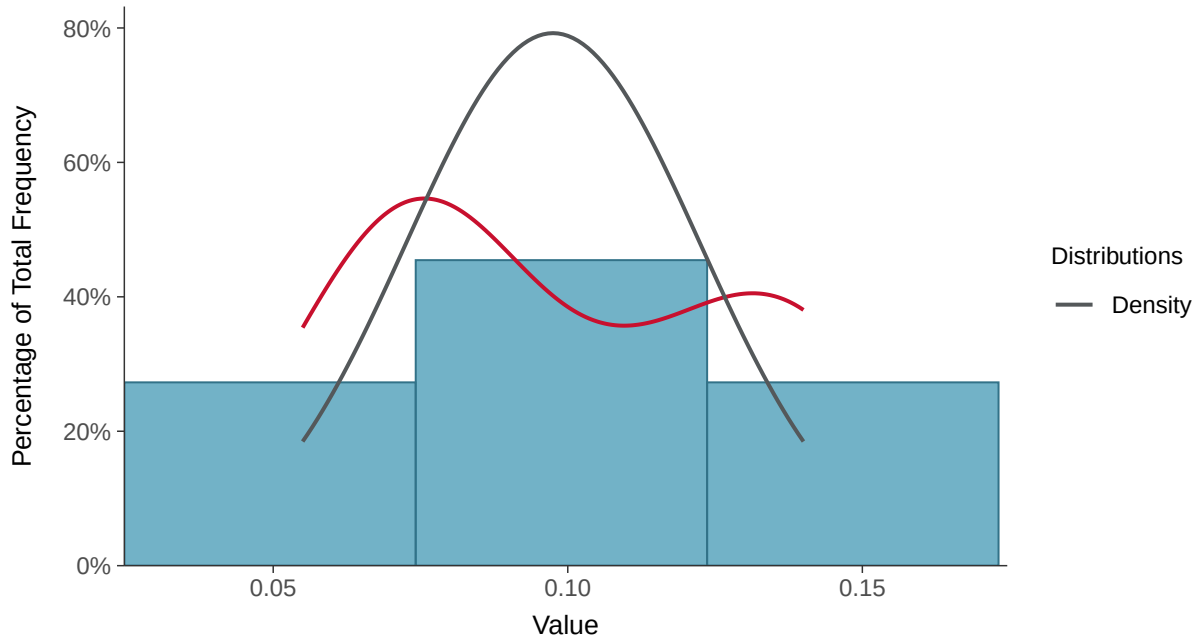
Scatter Plot

Fluoride (App IV), MW-07 (mg/L)



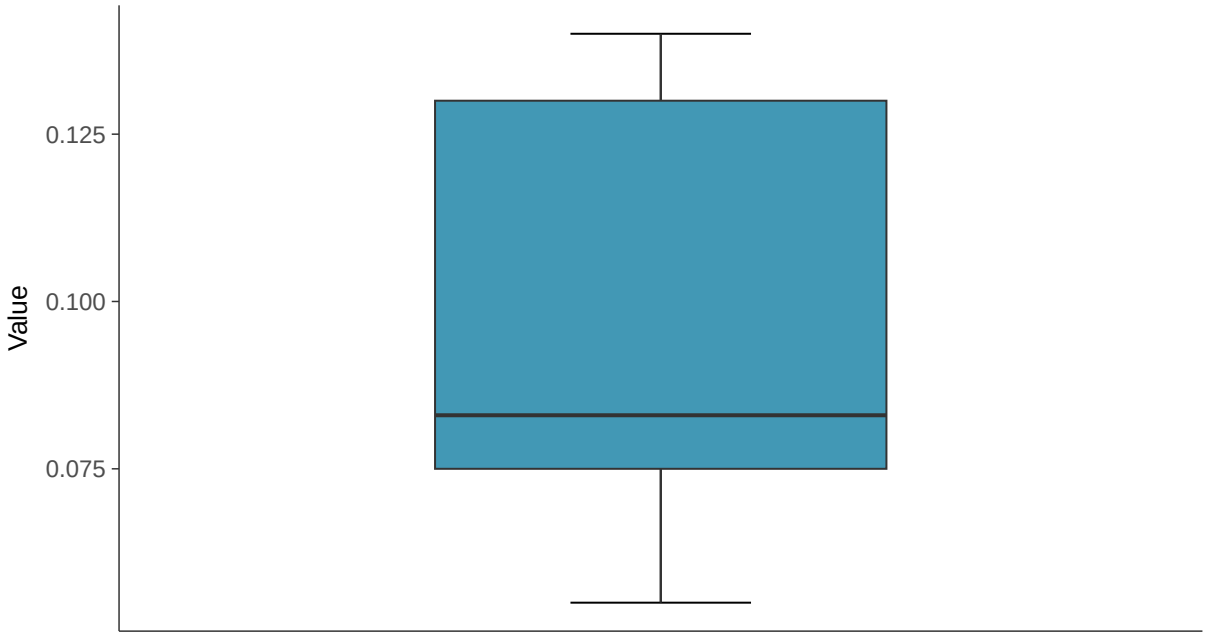
Histogram

Fluoride (App IV), MW-07 (mg/L)



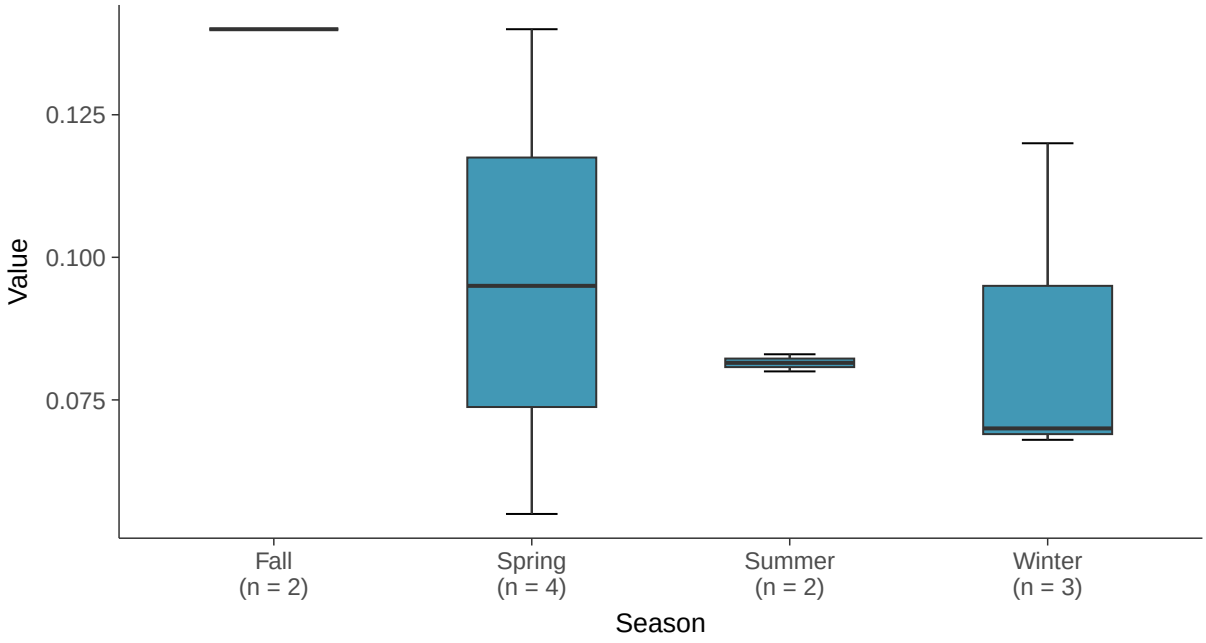
Boxplot

Fluoride (App IV), MW-07 (mg/L)



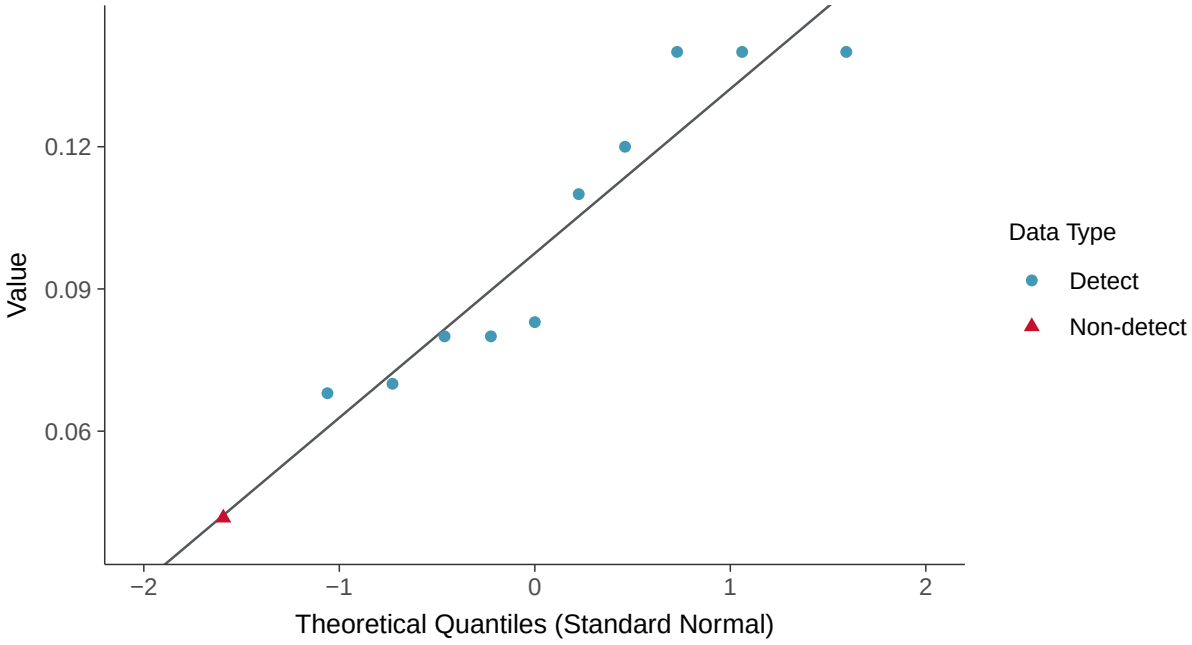
Boxplot by Season

Fluoride (App IV), MW-07 (mg/L)



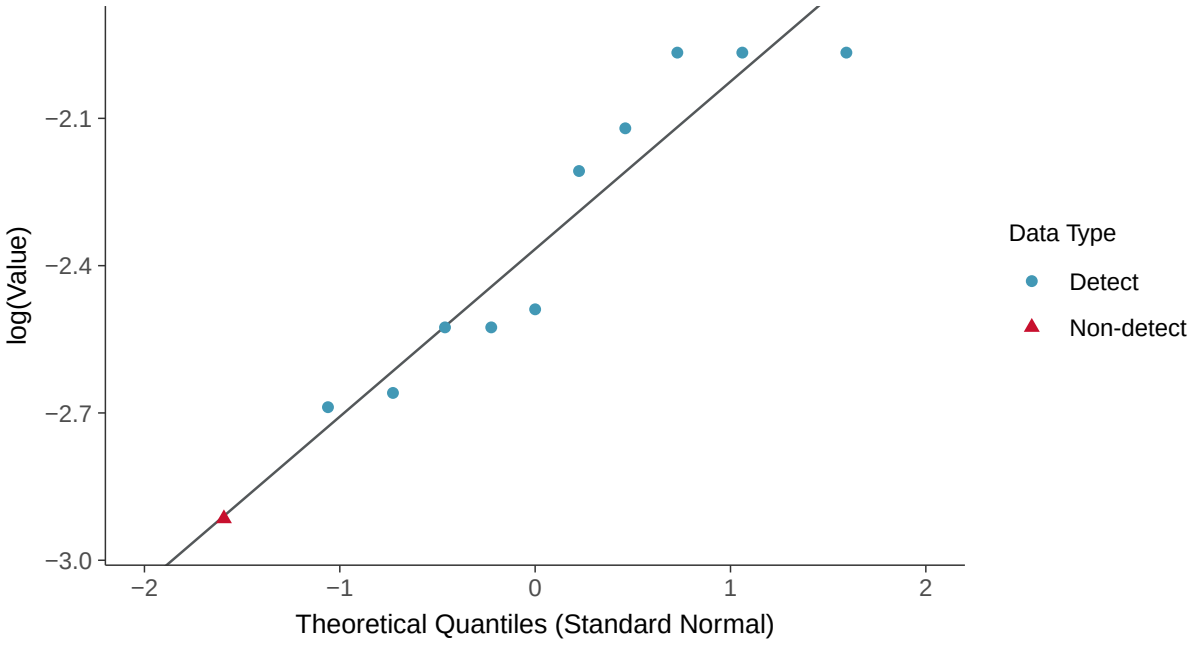
Normal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-07 (mg/L)



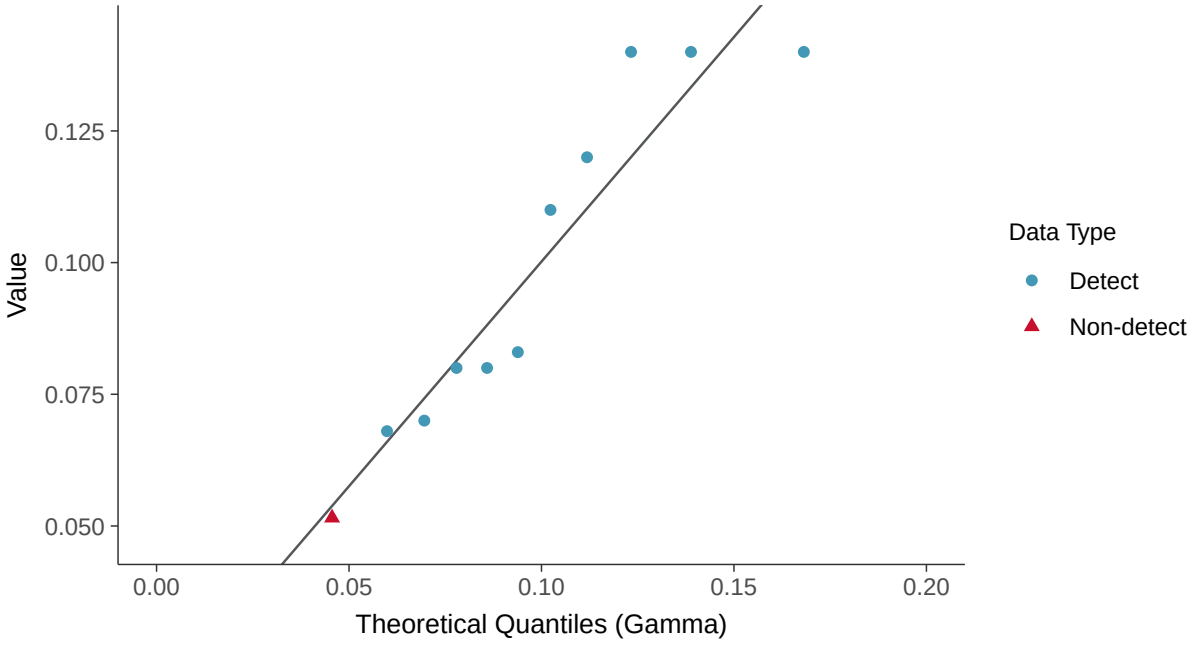
Lognormal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-07 (mg/L)



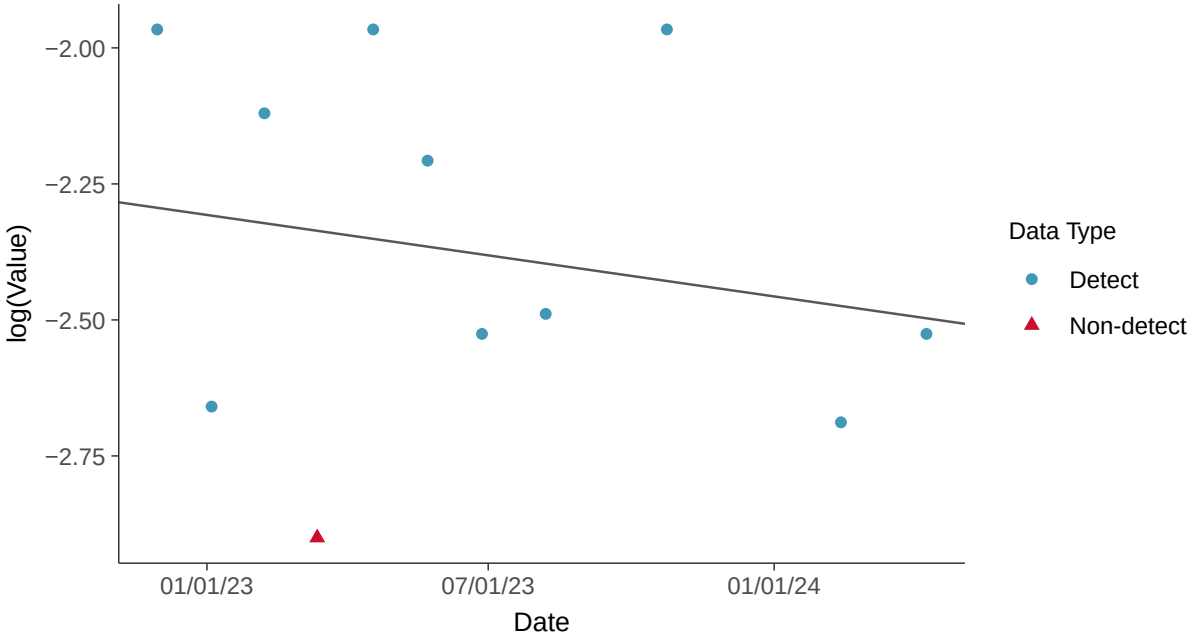
Gamma Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-07 (mg/L)



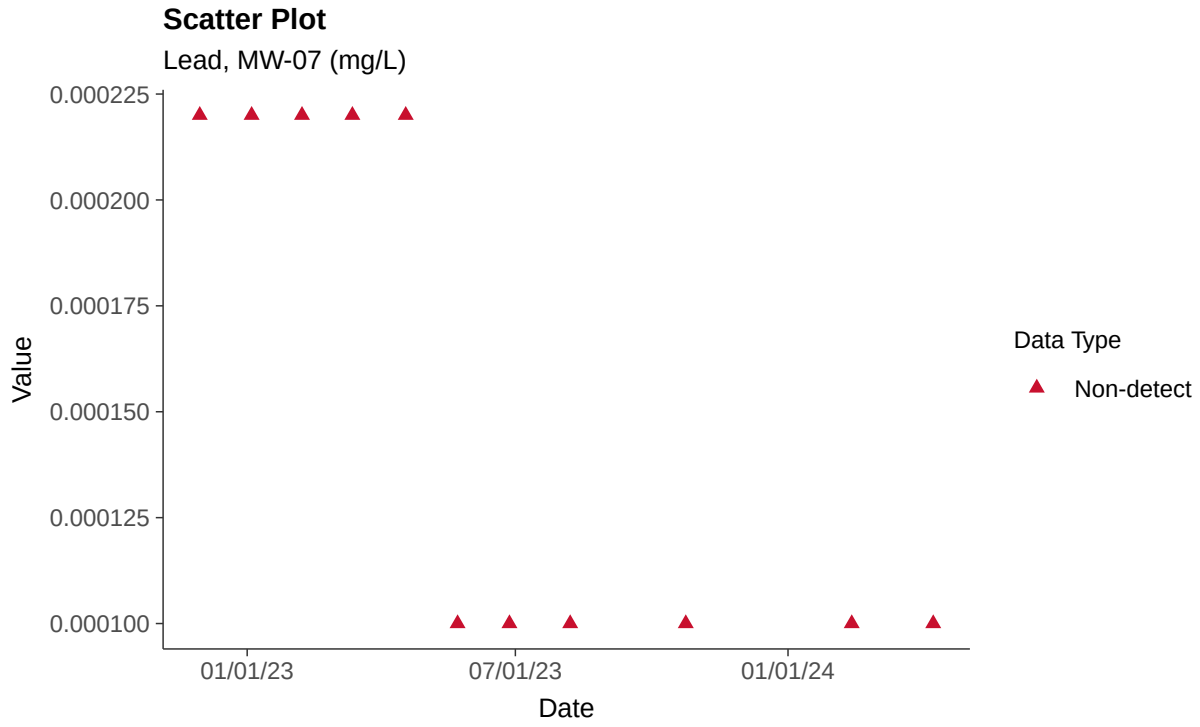
Trend Regression: Lognormal MLE

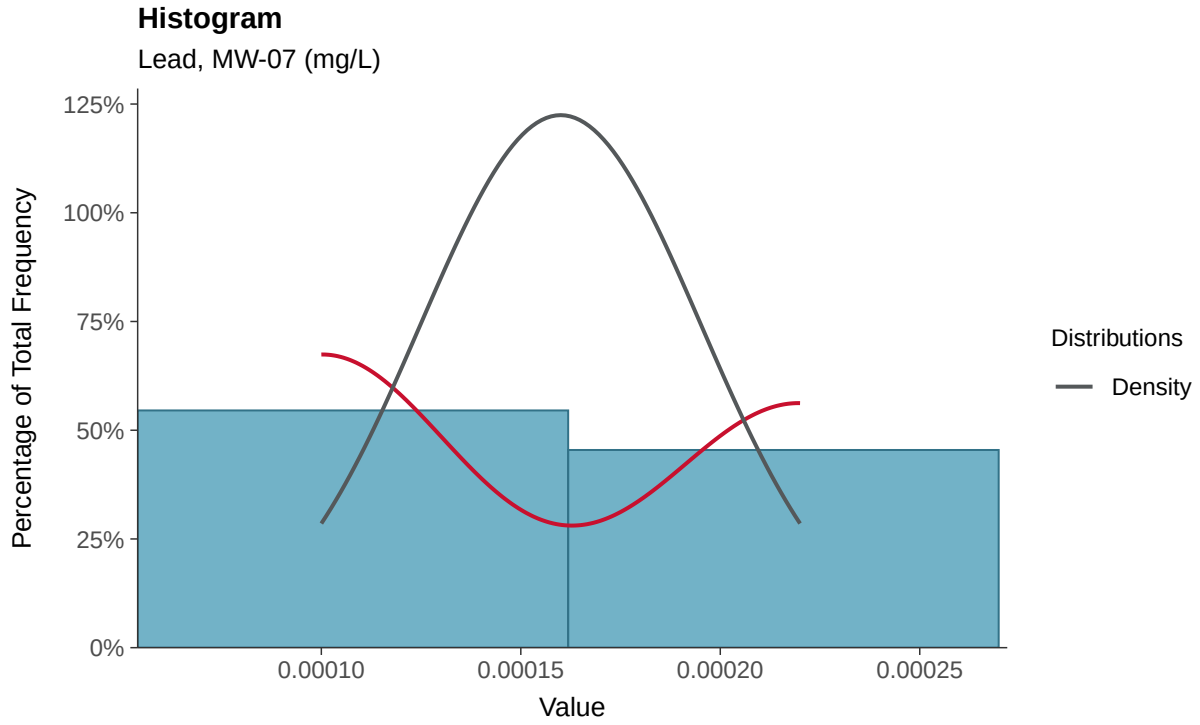
Fluoride (App IV), MW-07 (mg/L)



Appendix IV: Lead, MW-07

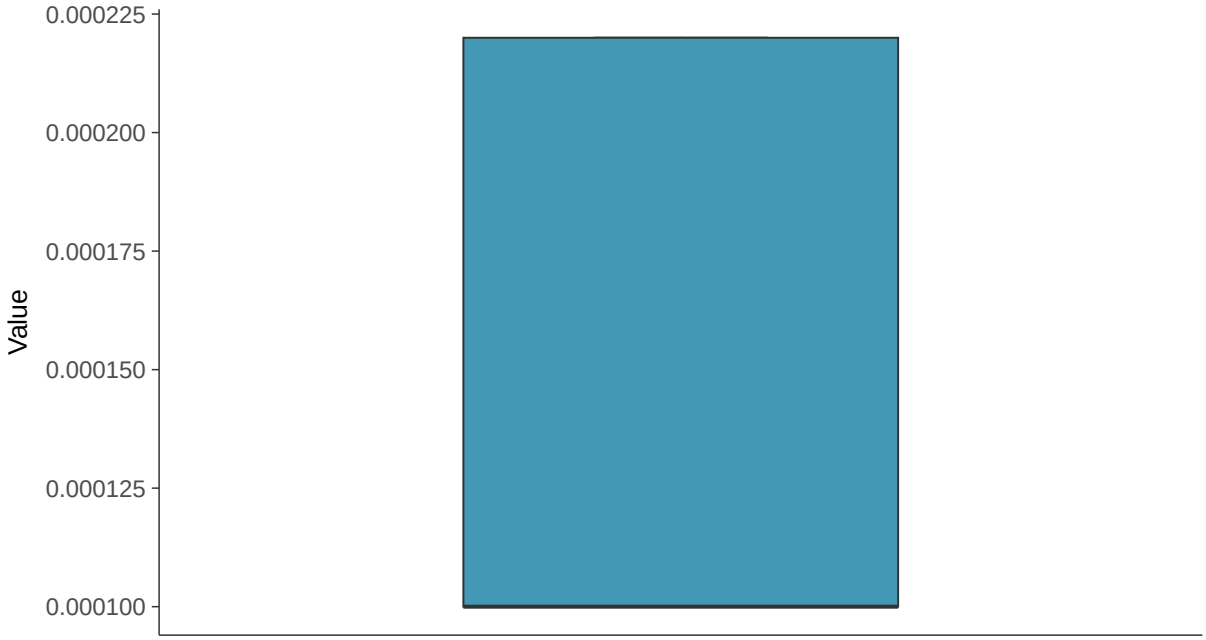
ID: 1_17_5_115





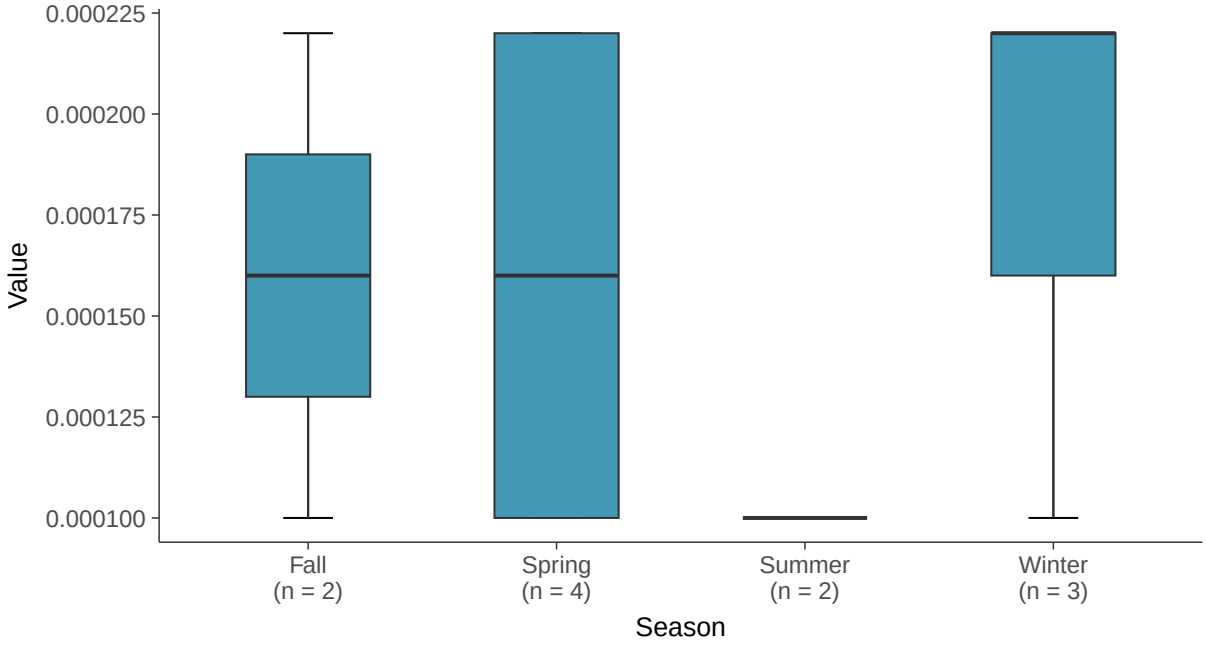
Boxplot

Lead, MW-07 (mg/L)



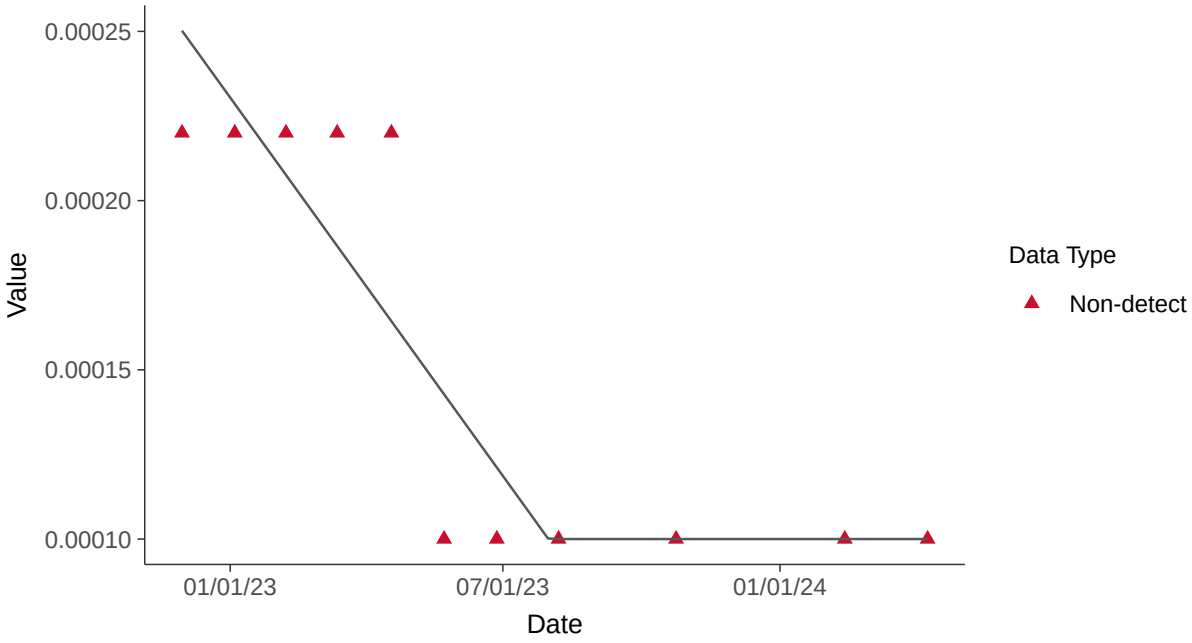
Boxplot by Season

Lead, MW-07 (mg/L)



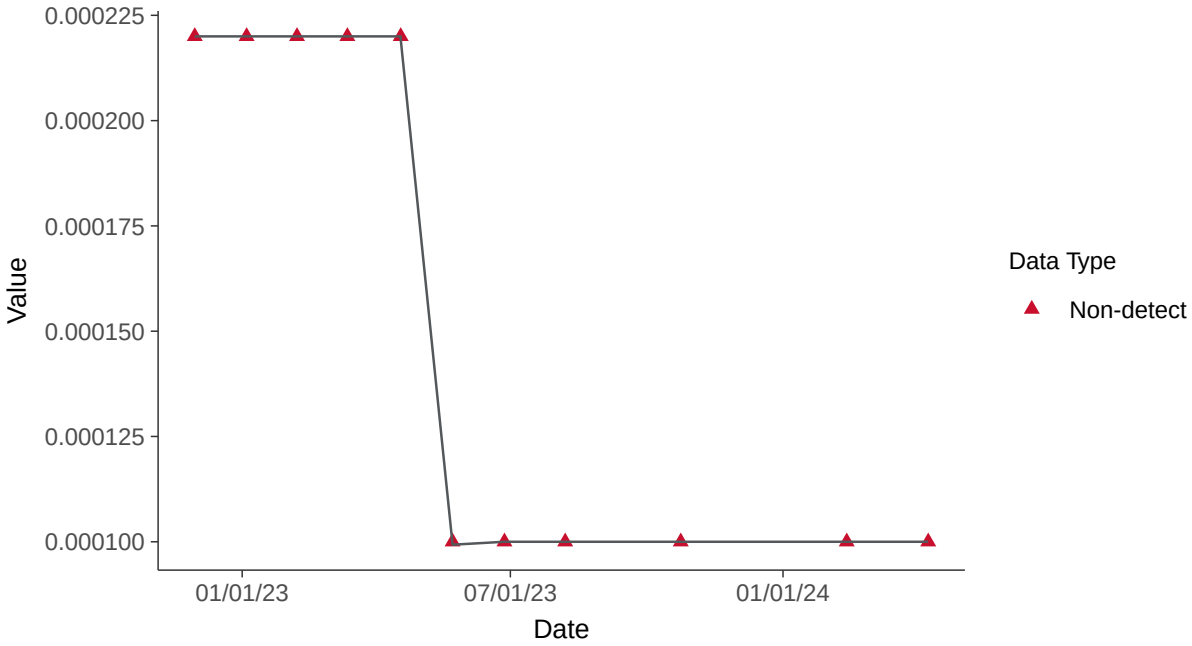
Trend Regression: Piecewise Linear-Linear

Lead, MW-07 (mg/L)



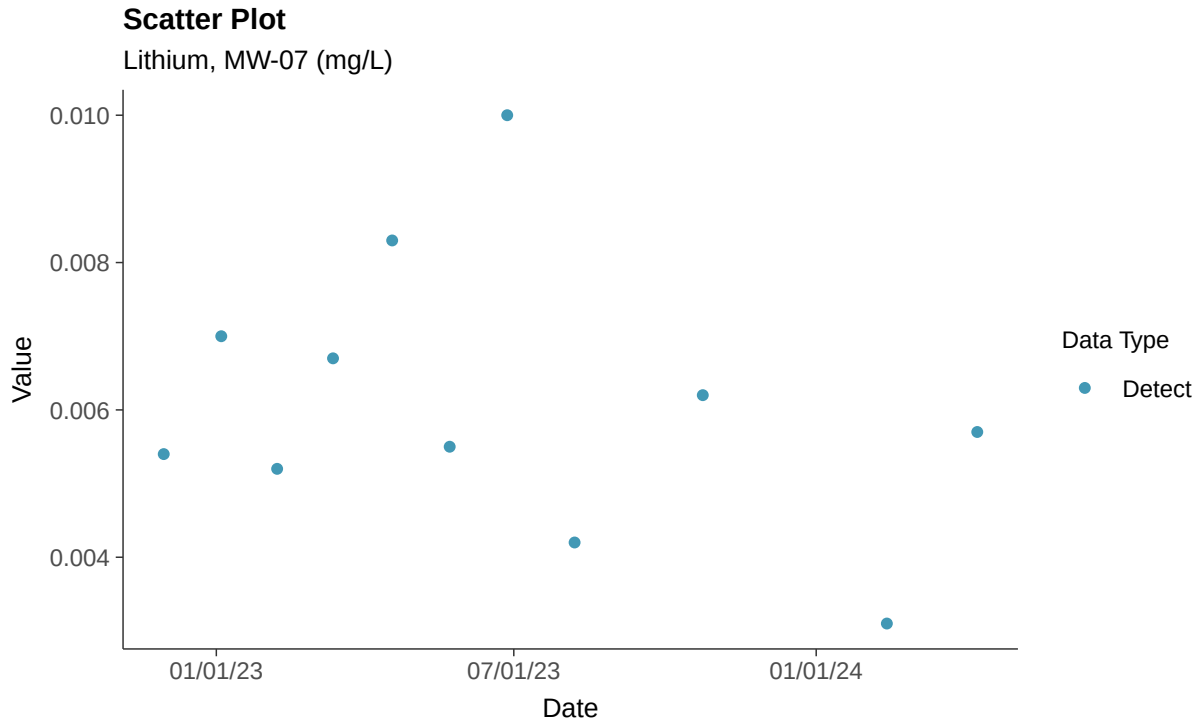
Trend Regression: Piecewise Linear-Linear-Linear

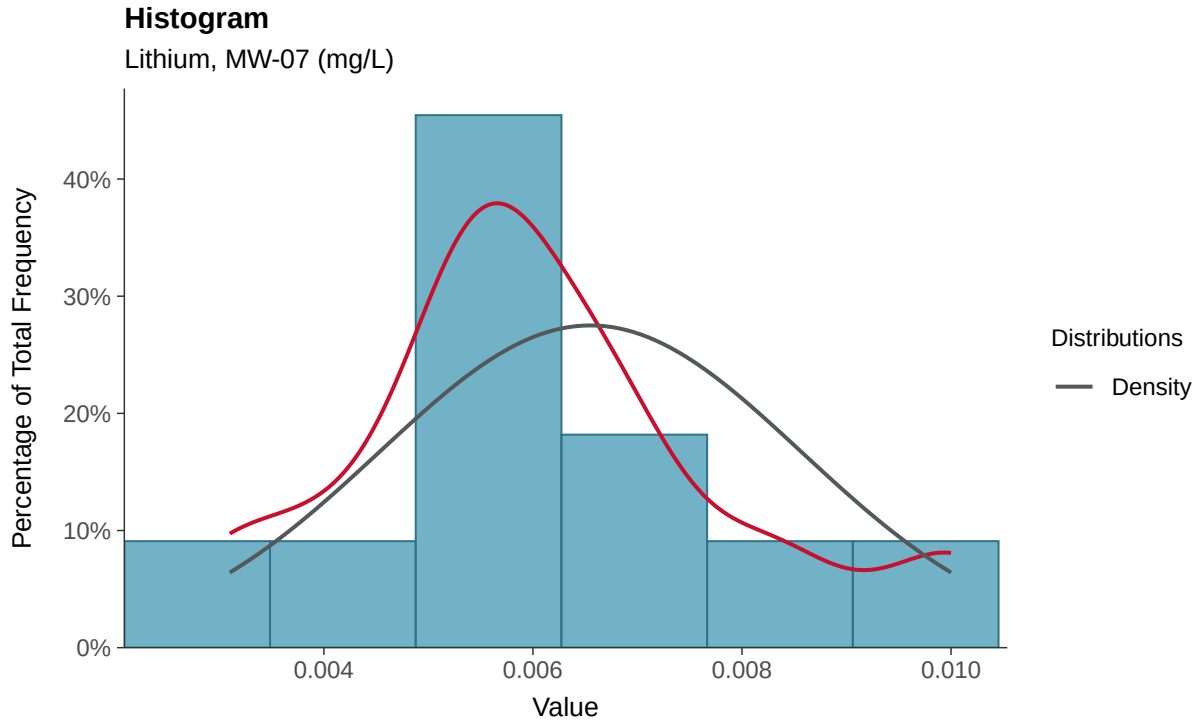
Lead, MW-07 (mg/L)



Appendix IV: Lithium, MW-07

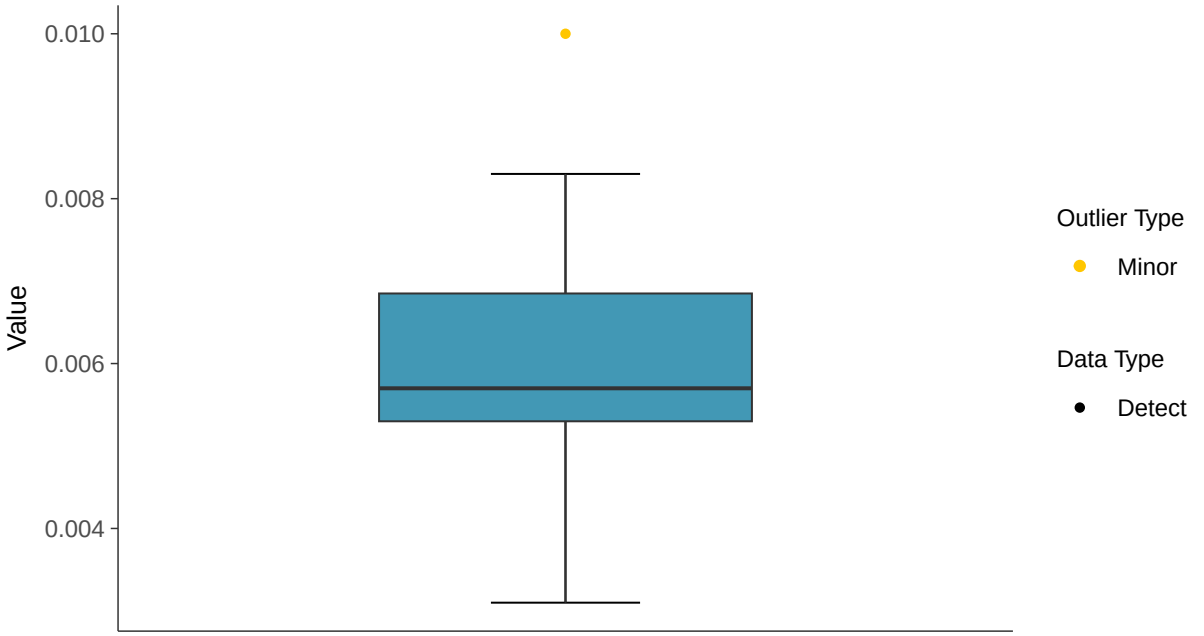
ID: 1_17_5_116





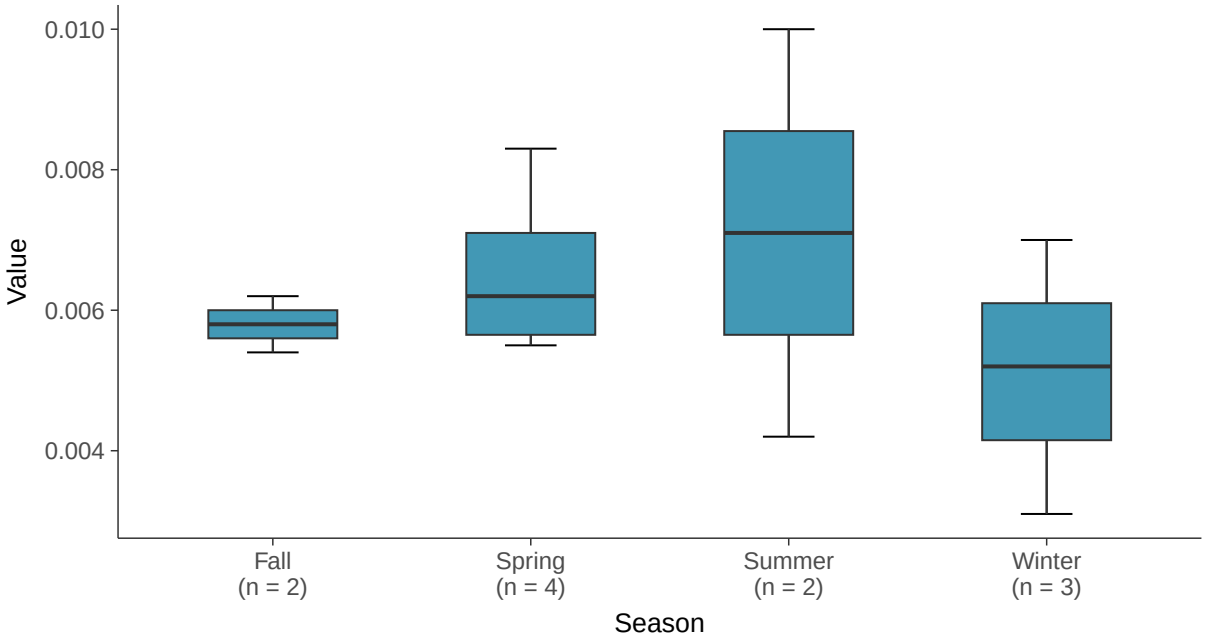
Boxplot

Lithium, MW-07 (mg/L)



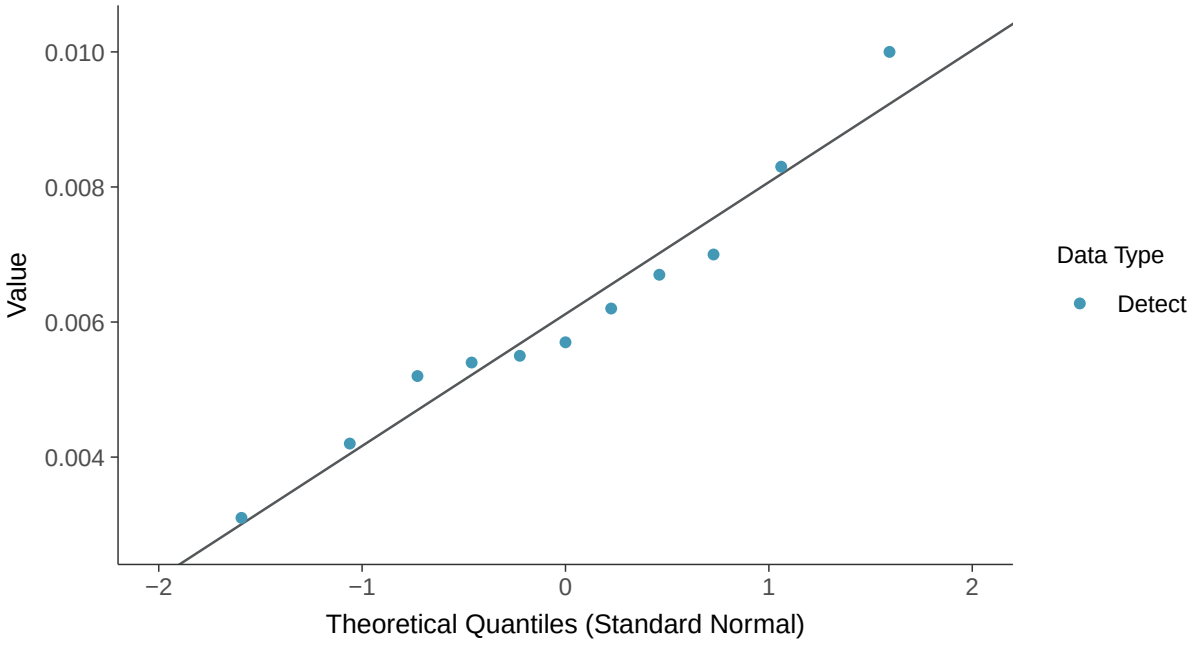
Boxplot by Season

Lithium, MW-07 (mg/L)



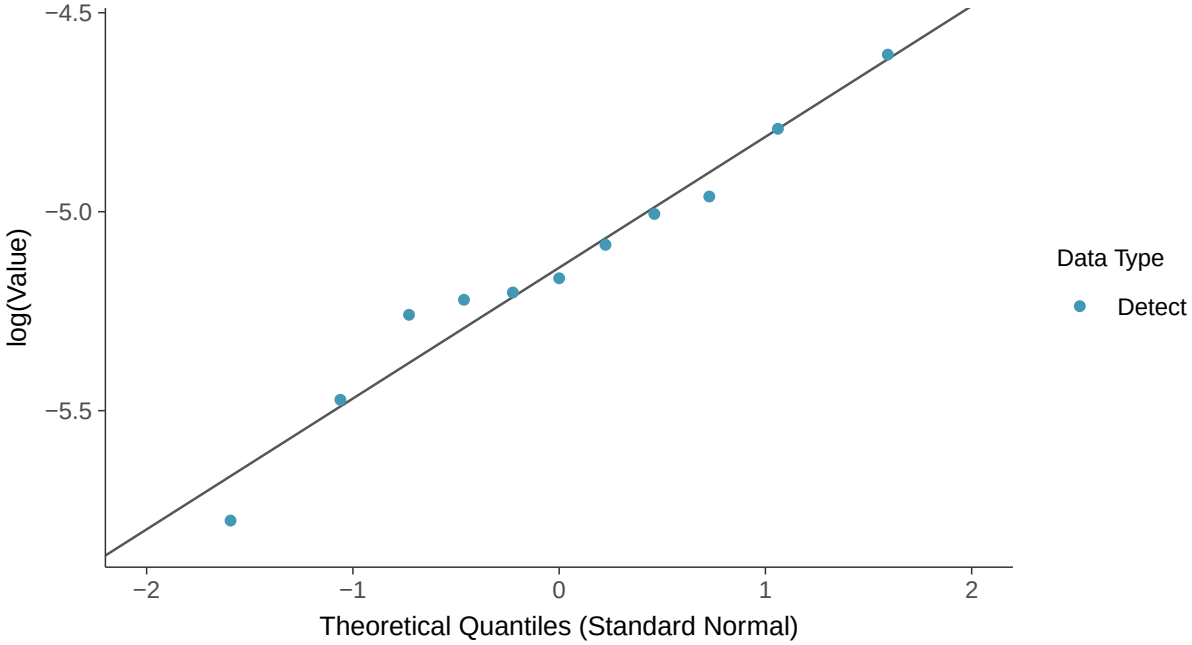
Normal Q-Q plot

Lithium, MW-07 (mg/L)



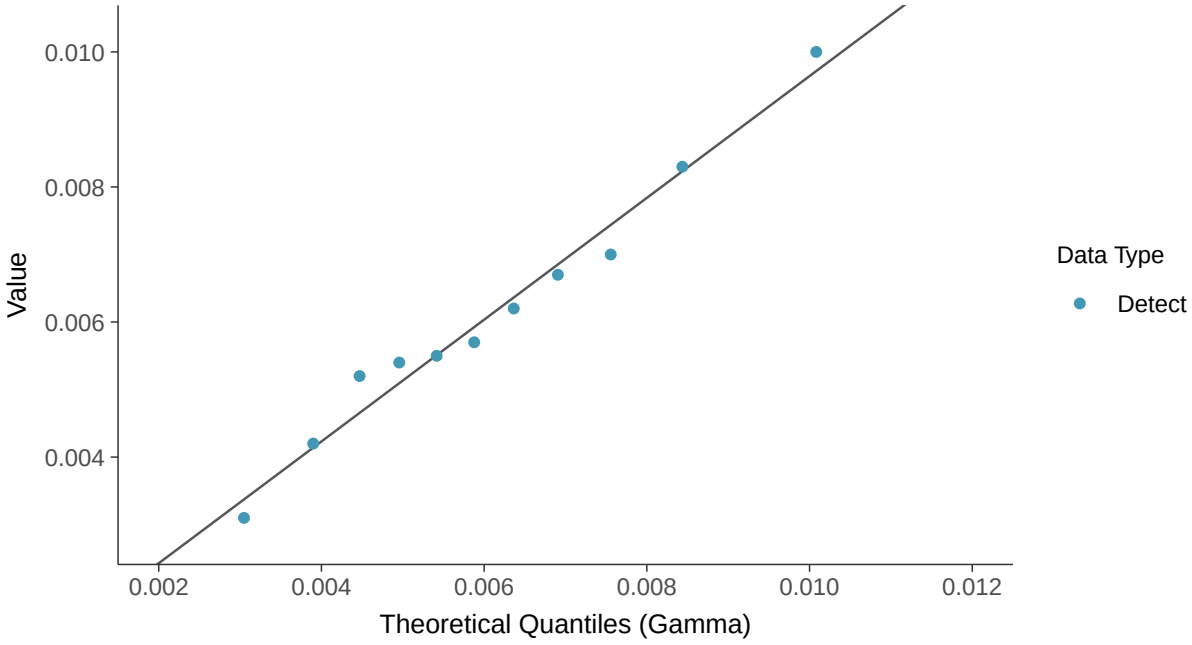
Lognormal Q-Q plot

Lithium, MW-07 (mg/L)



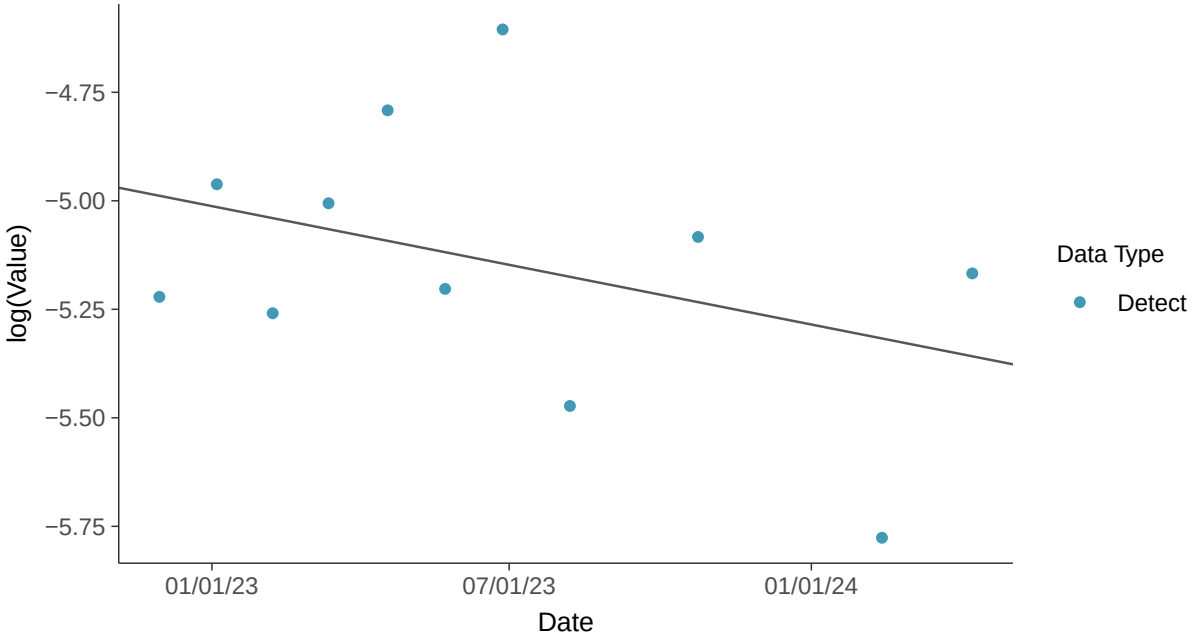
Gamma Q-Q plot

Lithium, MW-07 (mg/L)



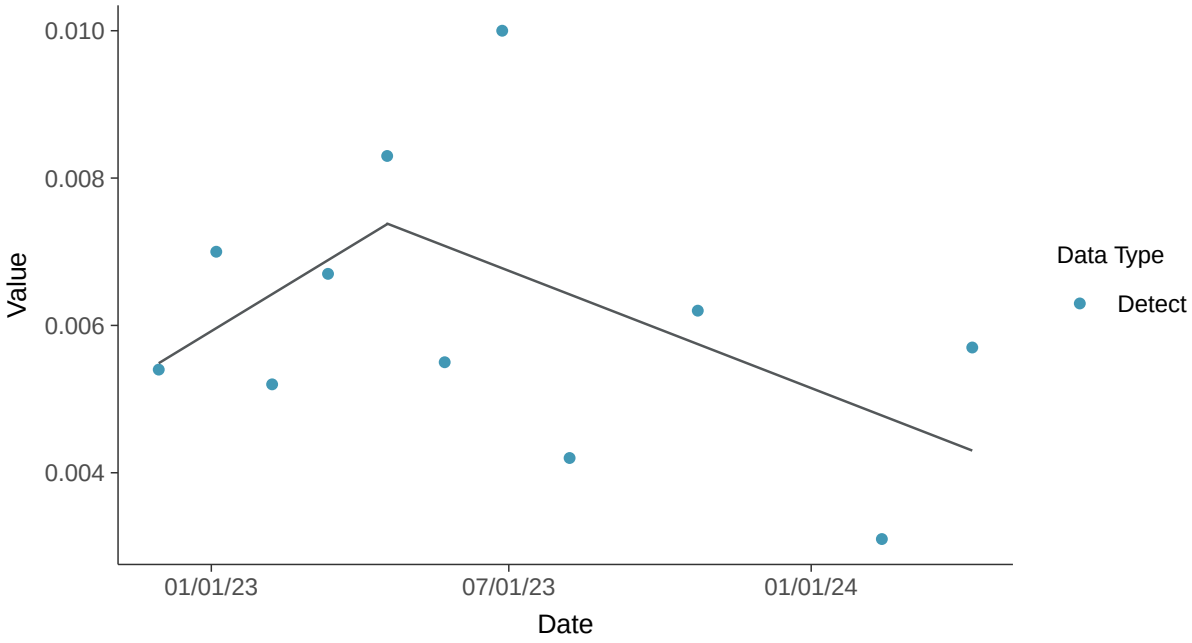
Trend Regression: Lognormal MLE

Lithium, MW-07 (mg/L)



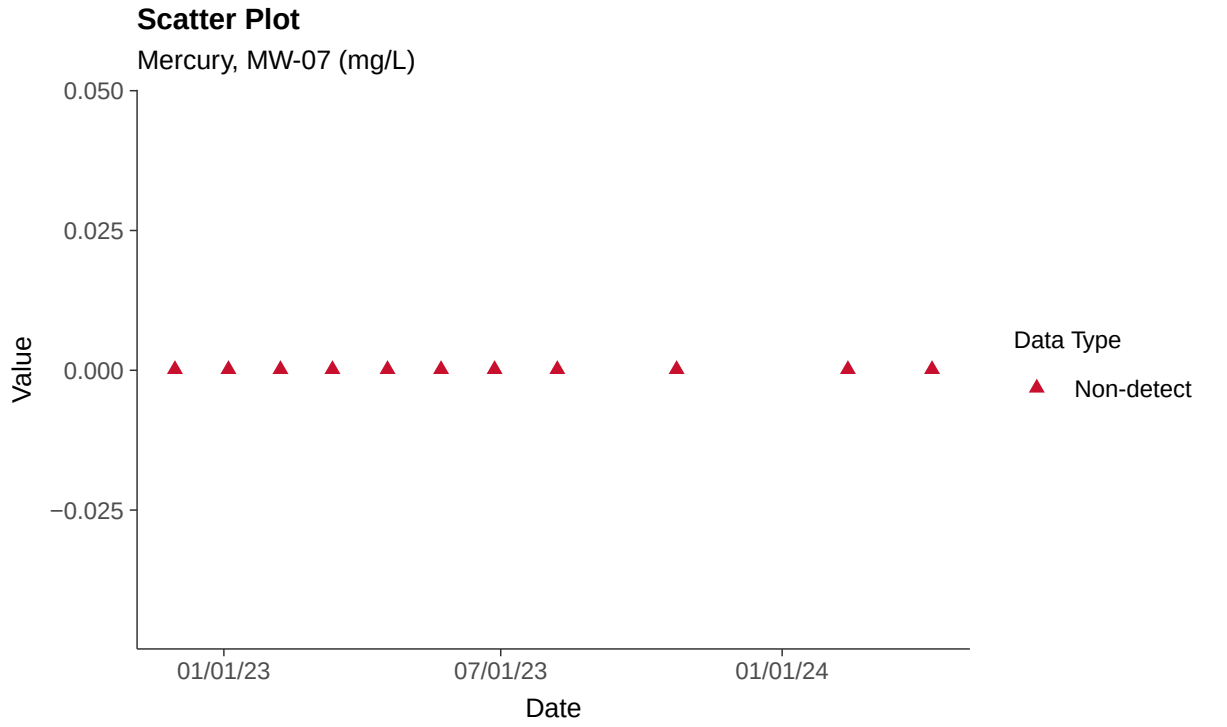
Trend Regression: Piecewise Linear-Linear

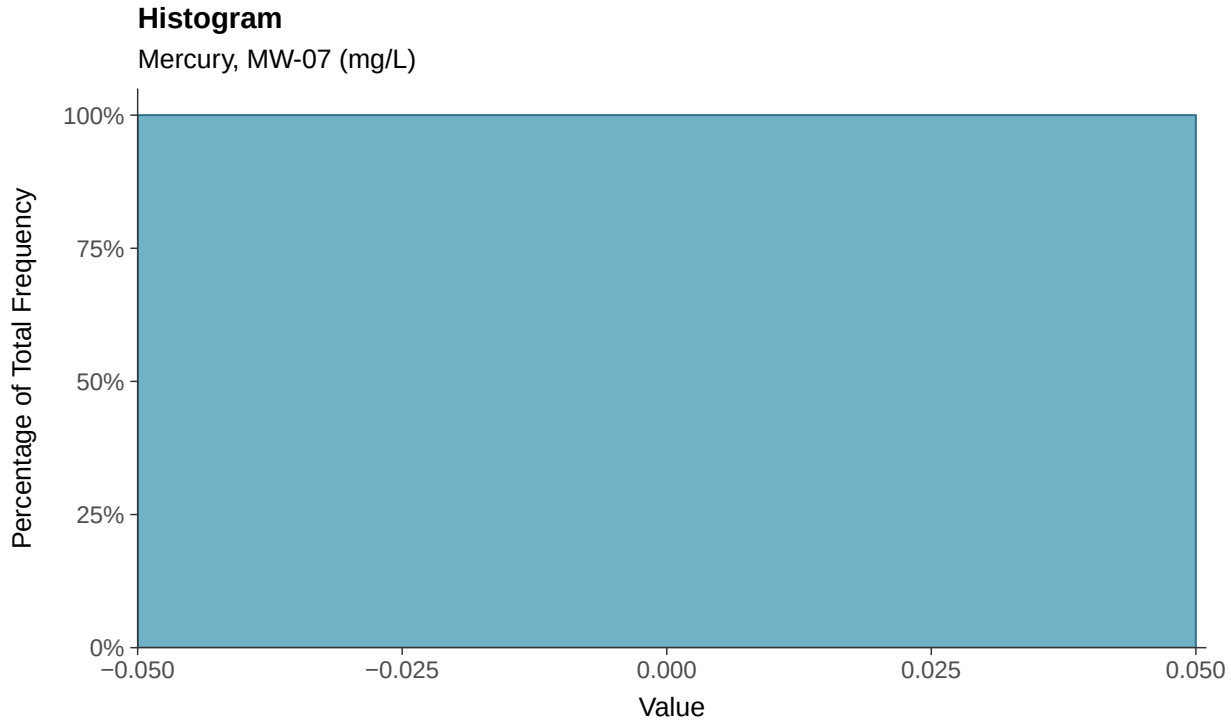
Lithium, MW-07 (mg/L)



Appendix IV: Mercury, MW-07

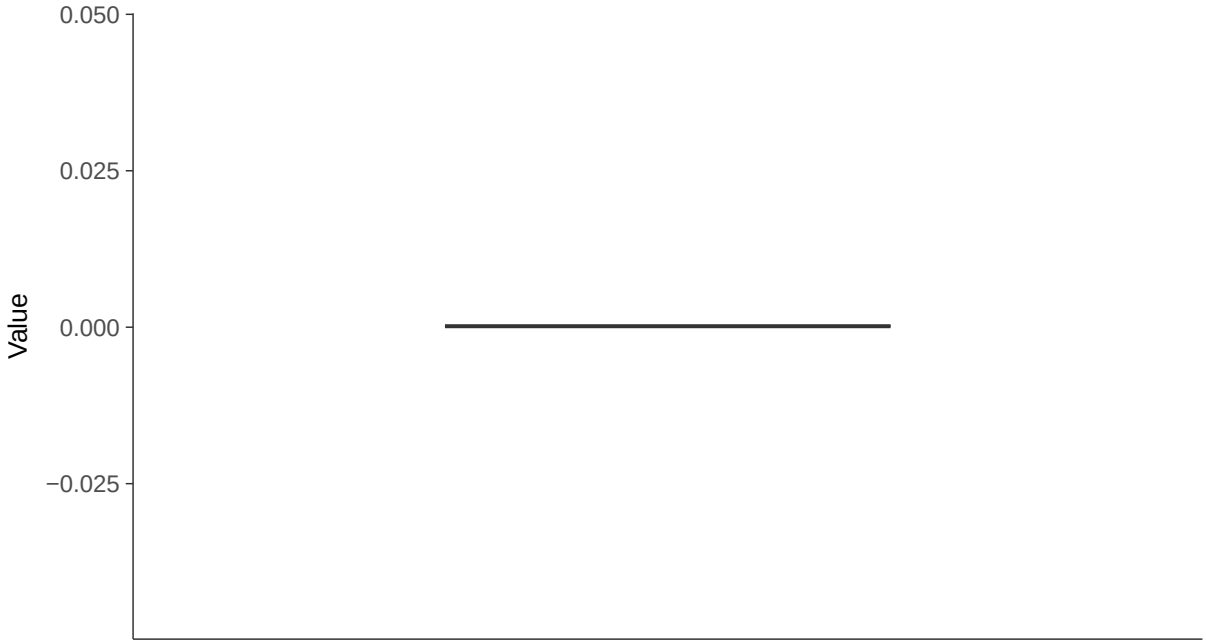
ID: 1_17_5_117





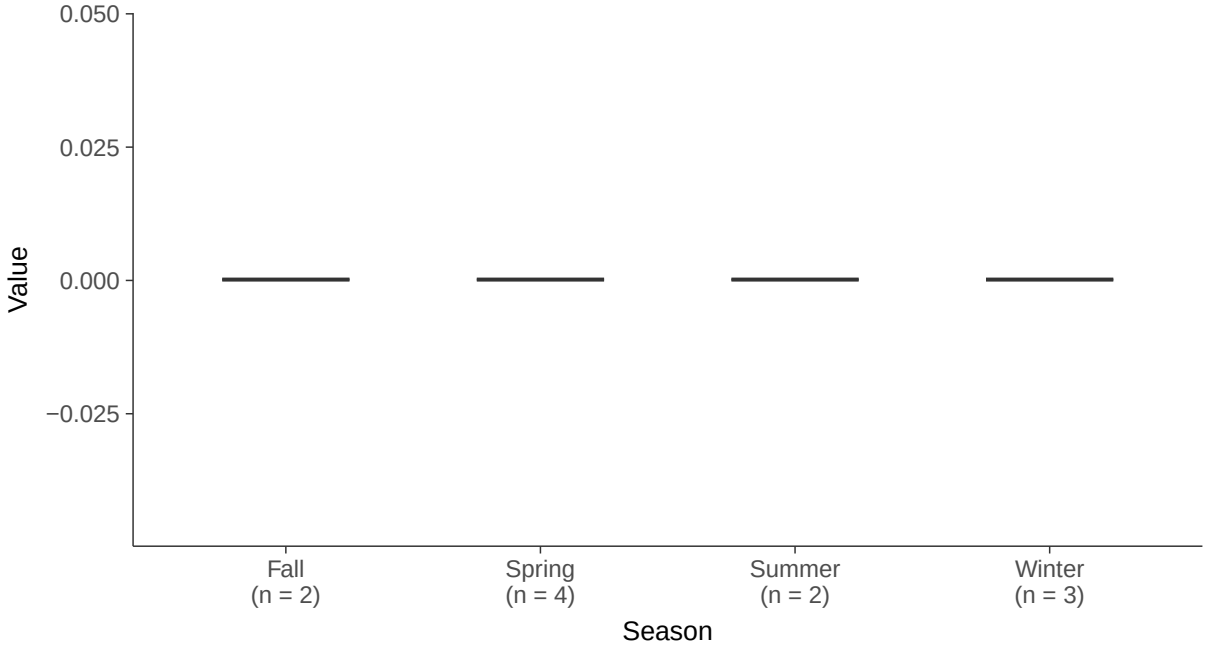
Boxplot

Mercury, MW-07 (mg/L)



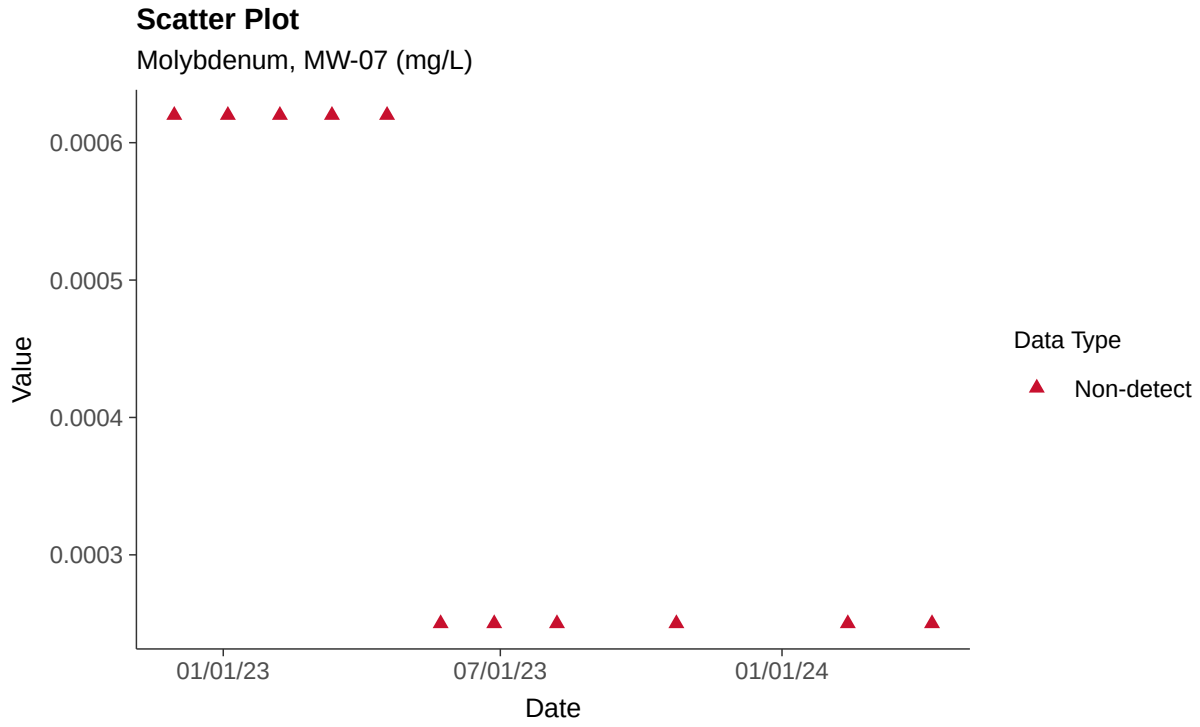
Boxplot by Season

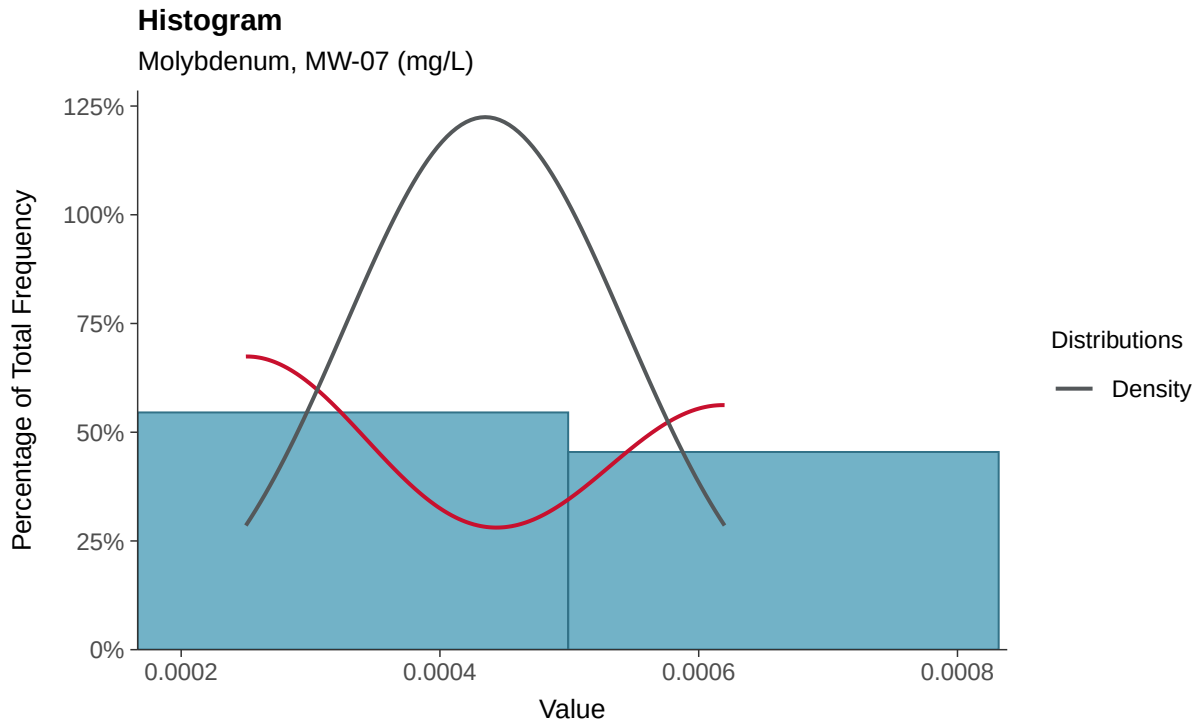
Mercury, MW-07 (mg/L)



Appendix IV: Molybdenum, MW-07

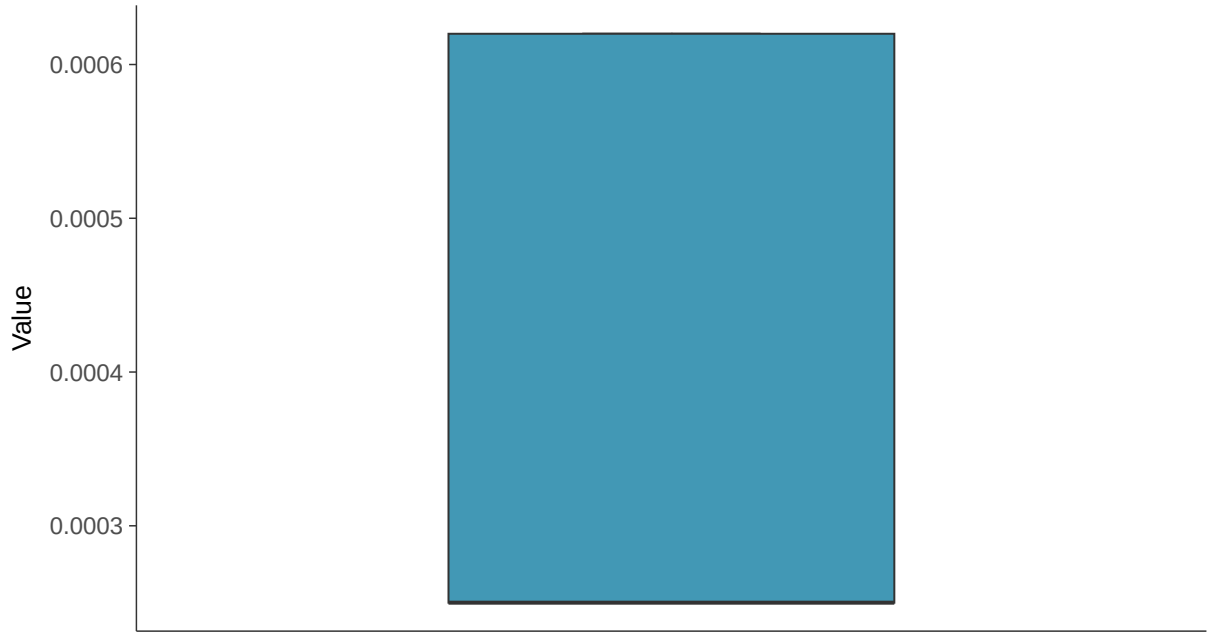
ID: 1_17_5_118





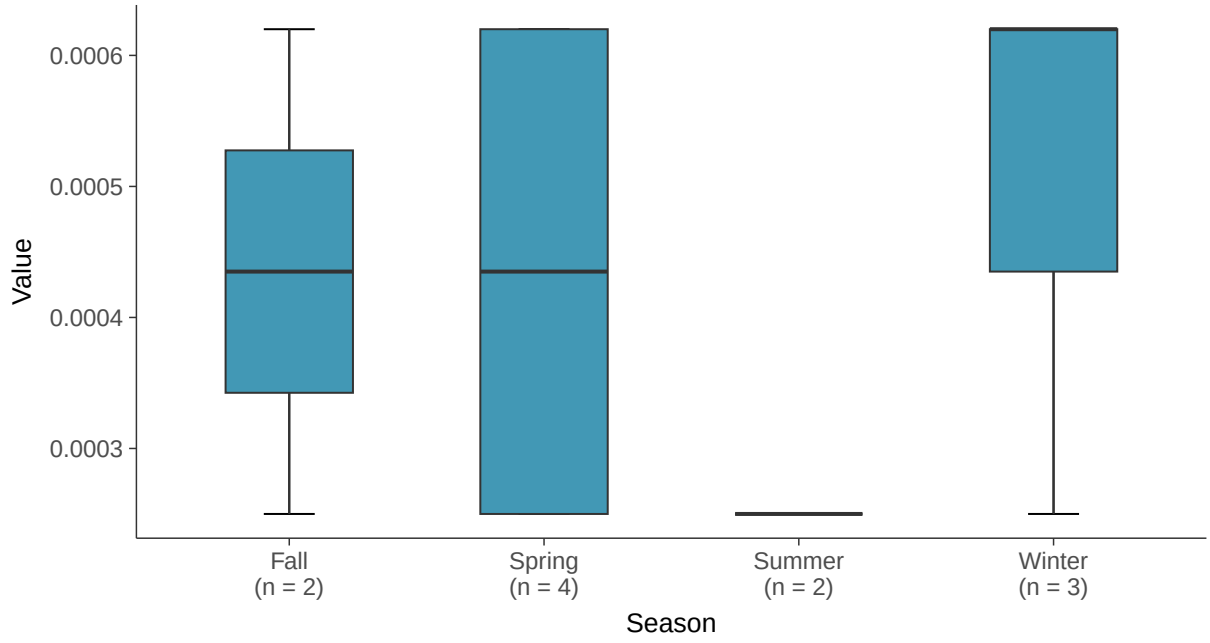
Boxplot

Molybdenum, MW-07 (mg/L)



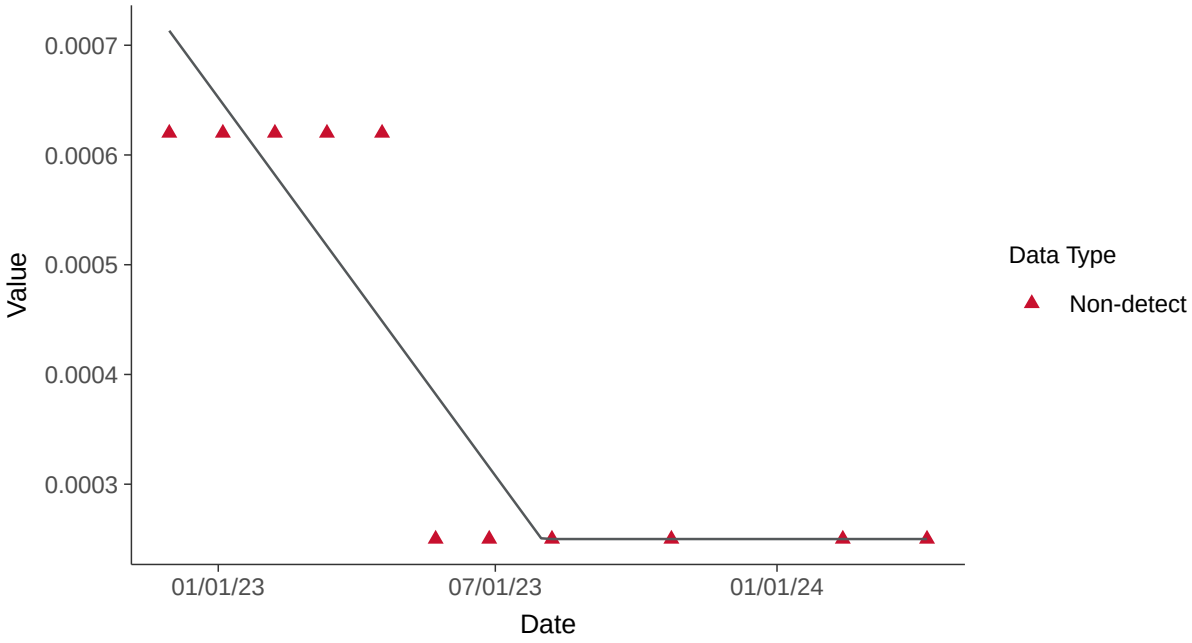
Boxplot by Season

Molybdenum, MW-07 (mg/L)



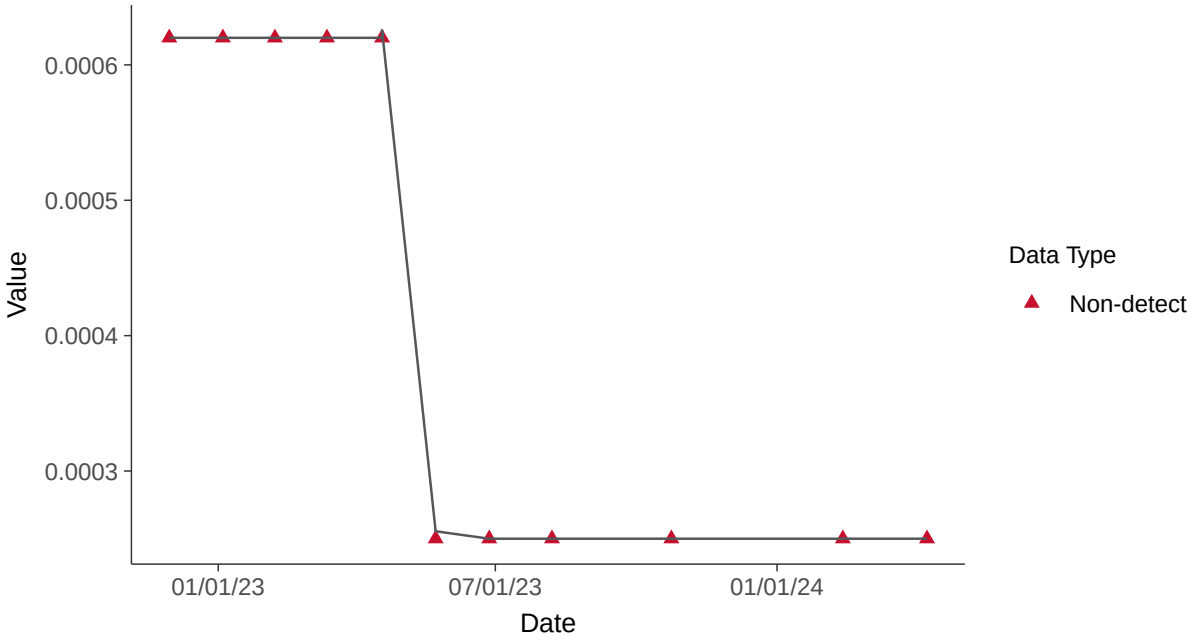
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-07 (mg/L)



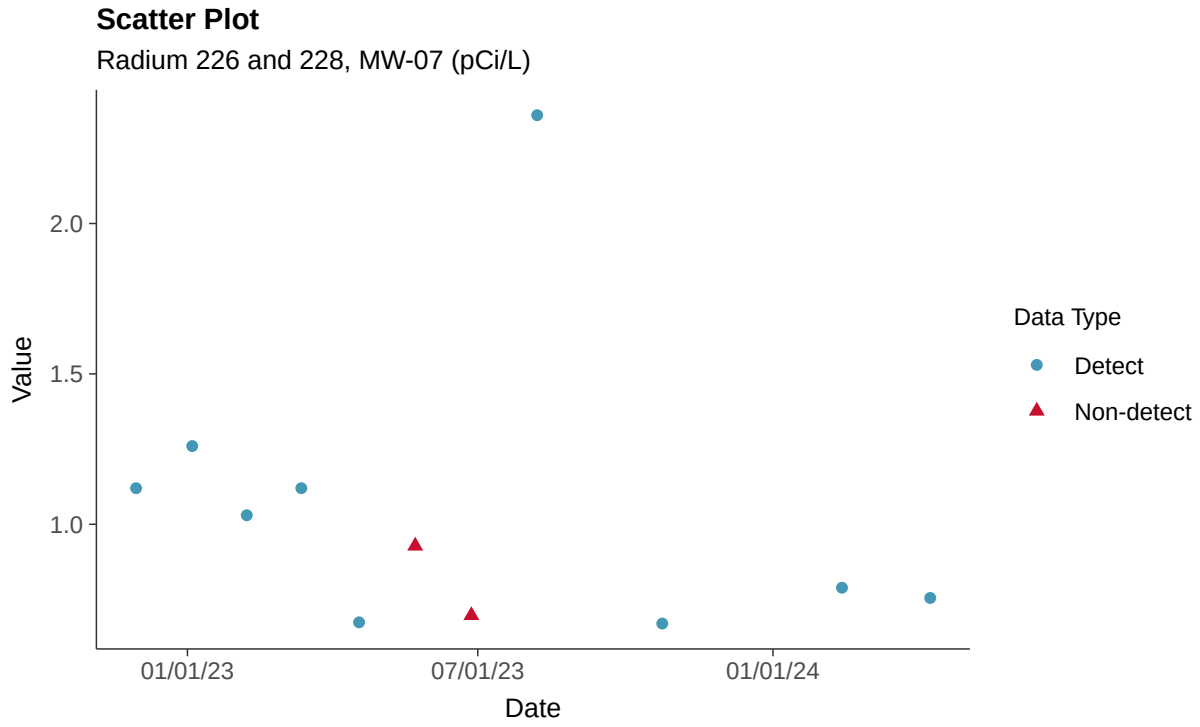
Trend Regression: Piecewise Linear-Linear-Linear

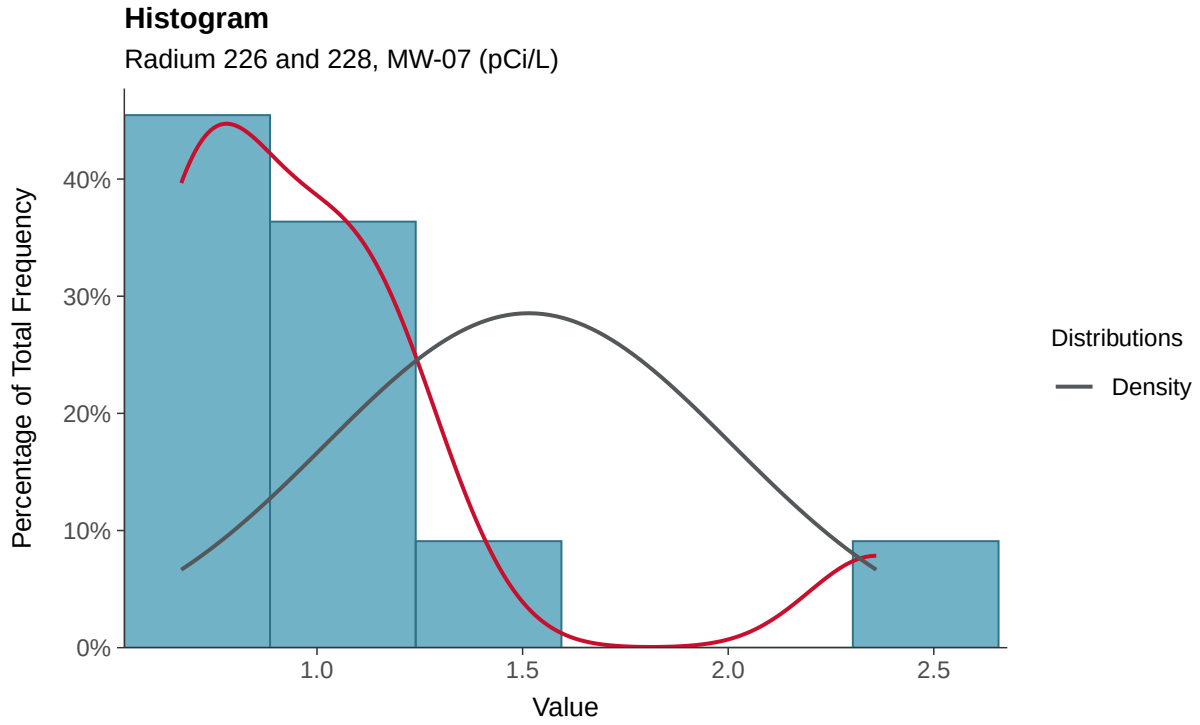
Molybdenum, MW-07 (mg/L)



Appendix IV: Radium 226 and 228, MW-07

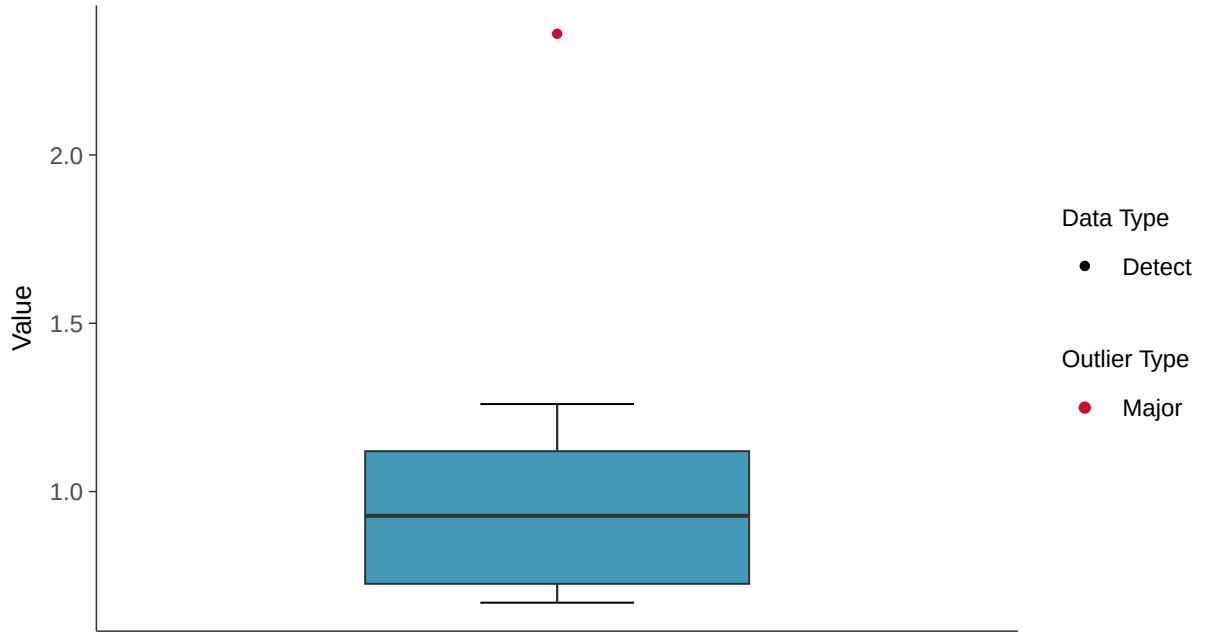
ID: 1_17_5_121





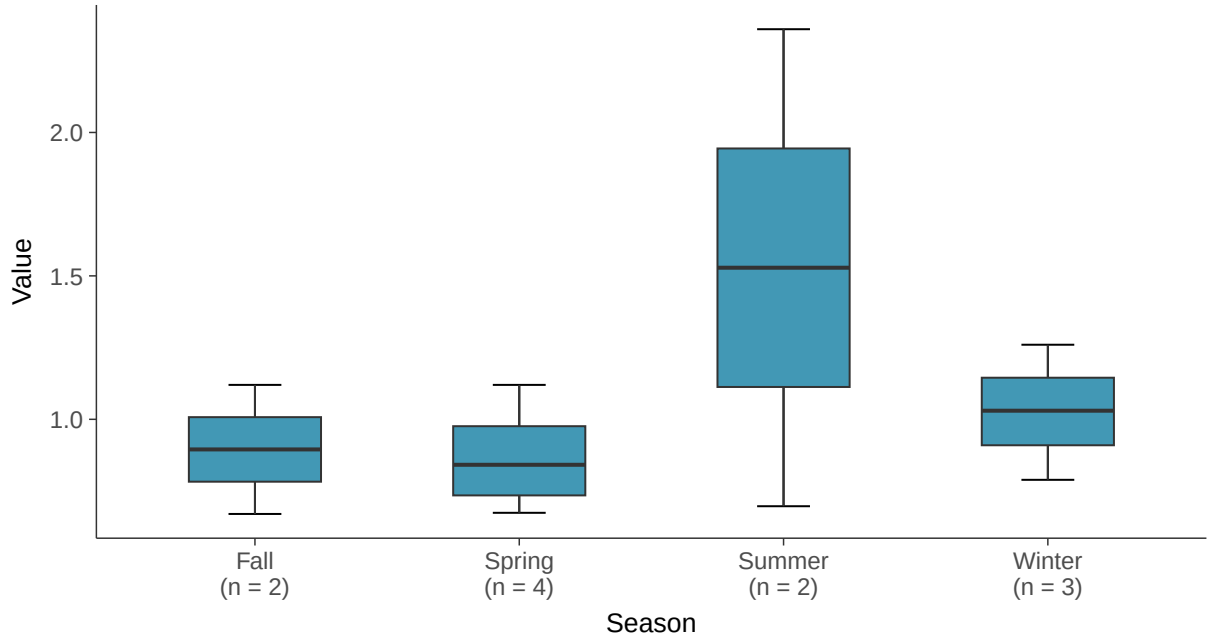
Boxplot

Radium 226 and 228, MW-07 (pCi/L)



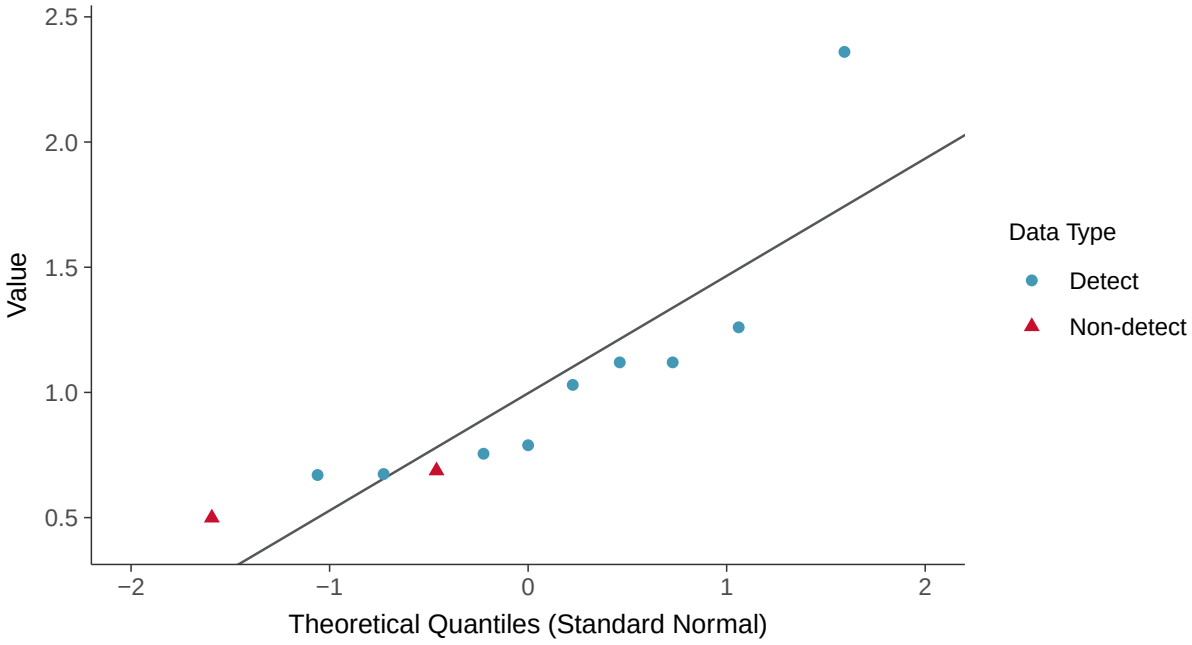
Boxplot by Season

Radium 226 and 228, MW-07 (pCi/L)



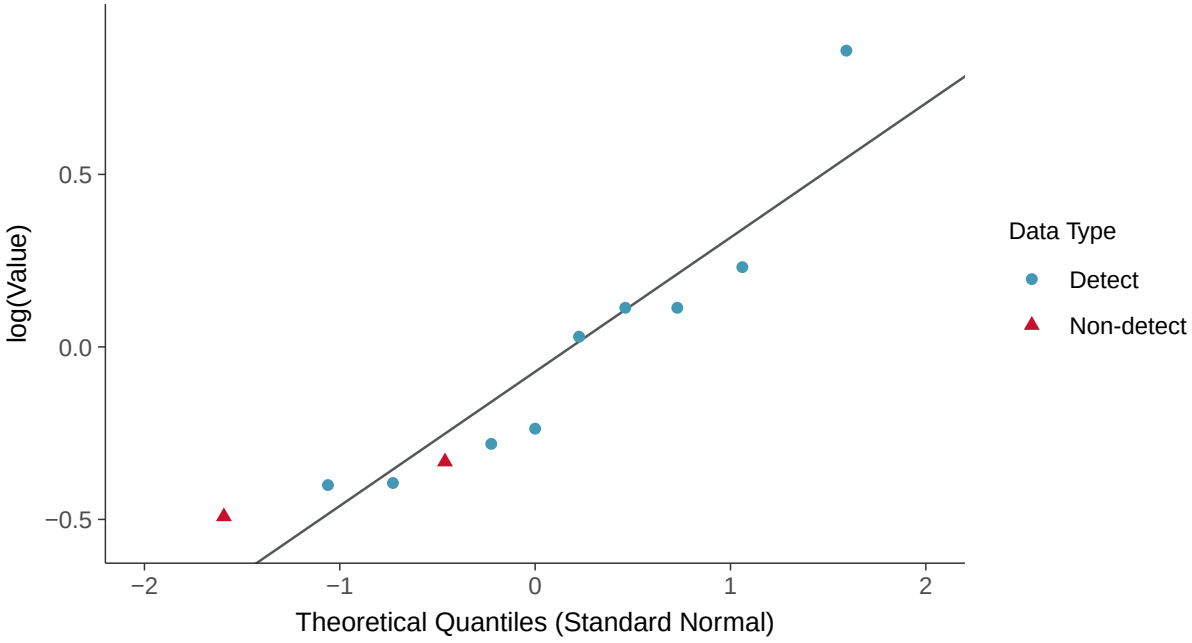
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-07 (pCi/L)



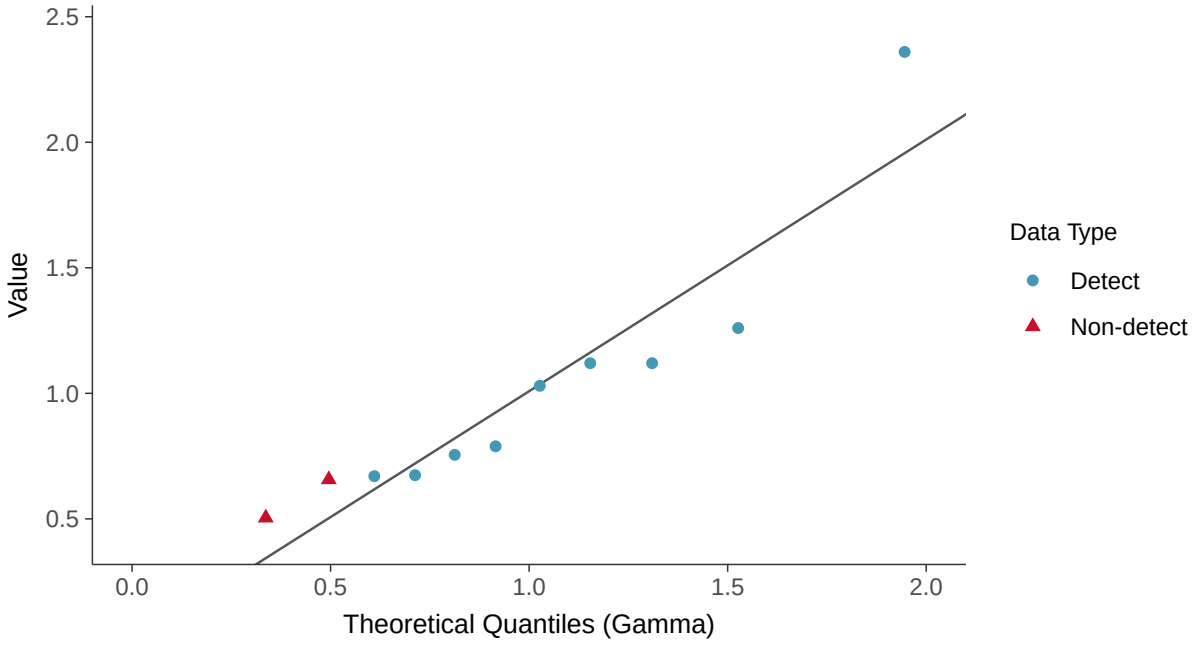
Lognormal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-07 (pCi/L)



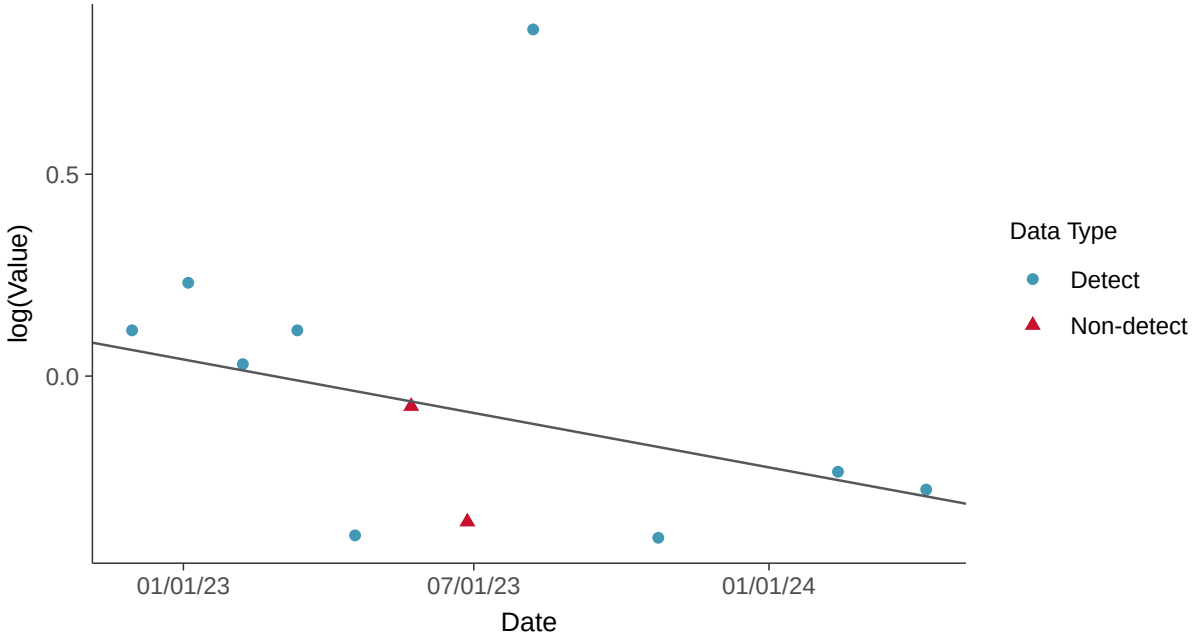
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-07 (pCi/L)



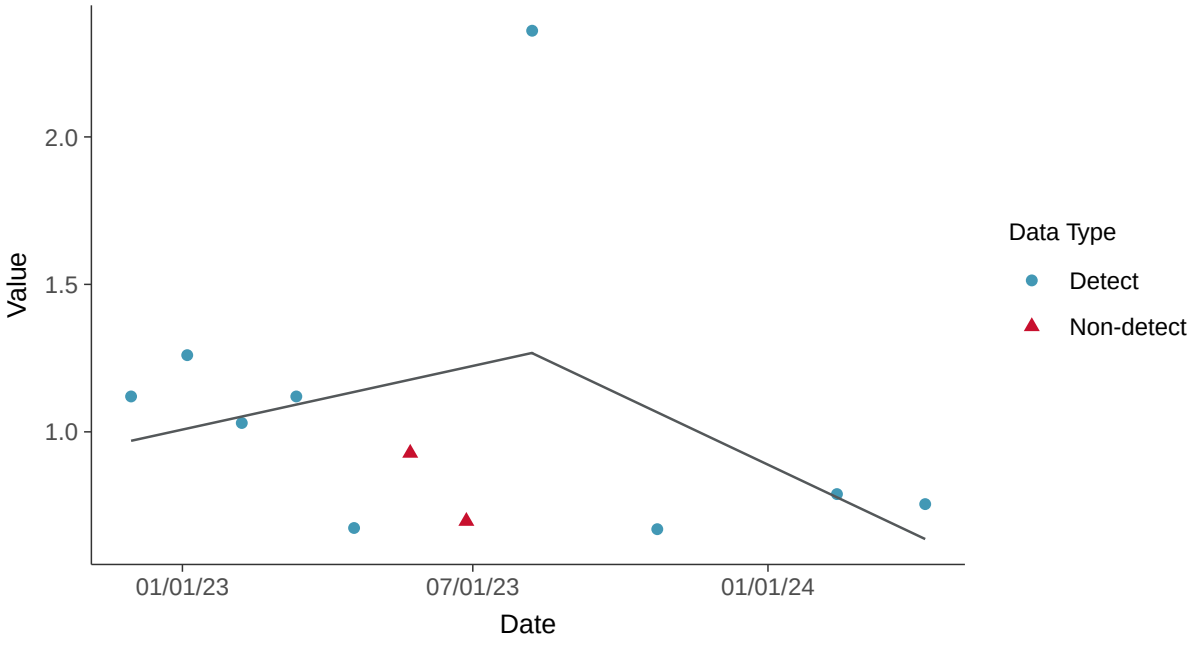
Trend Regression: Lognormal MLE

Radium 226 and 228, MW-07 (pCi/L)



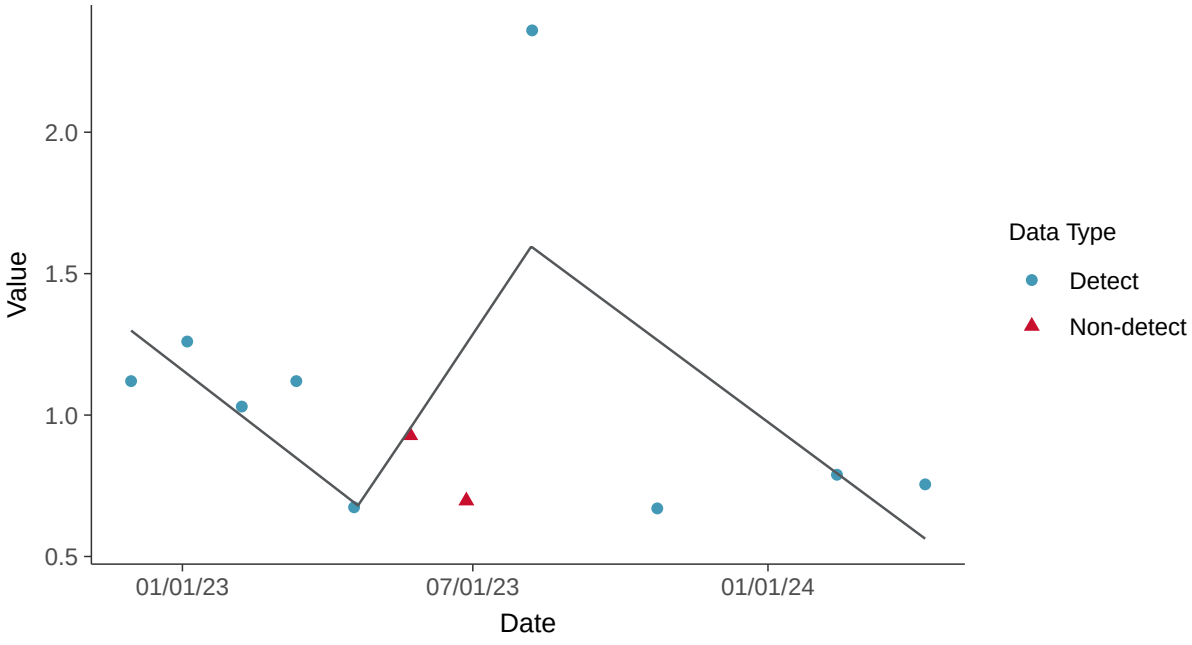
Trend Regression: Piecewise Linear-Linear

Radium 226 and 228, MW-07 (pCi/L)



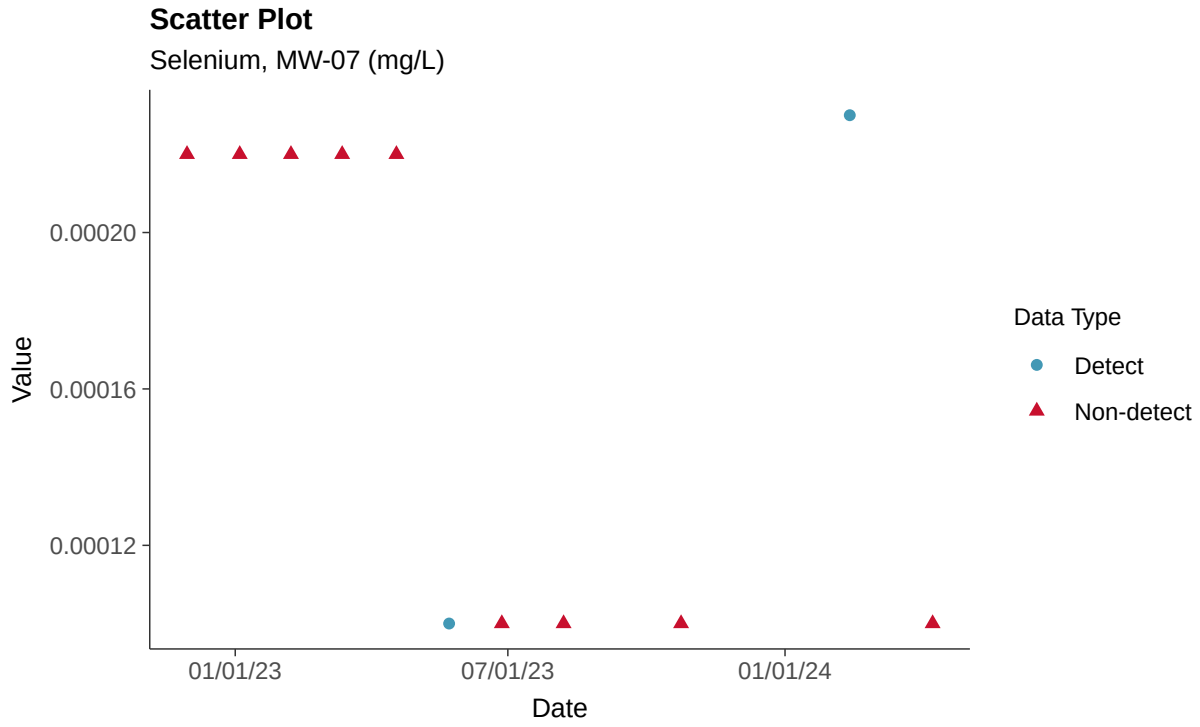
Trend Regression: Piecewise Linear-Linear-Linear

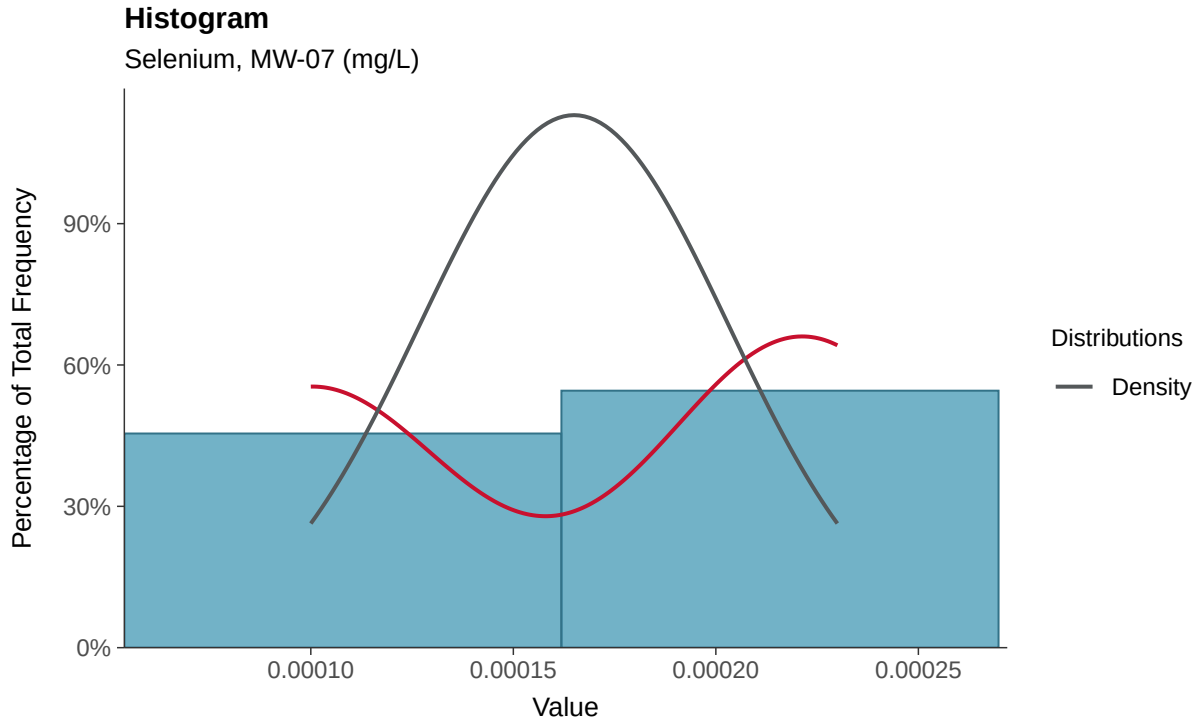
Radium 226 and 228, MW-07 (pCi/L)



Appendix IV: Selenium, MW-07

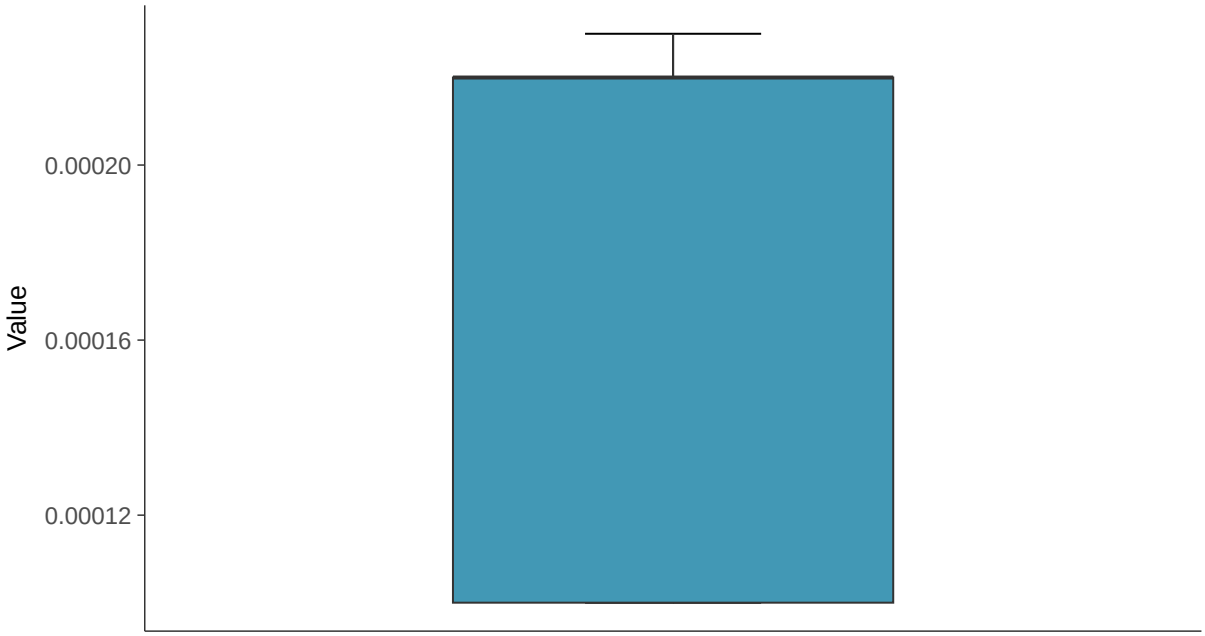
ID: 1_17_5_122





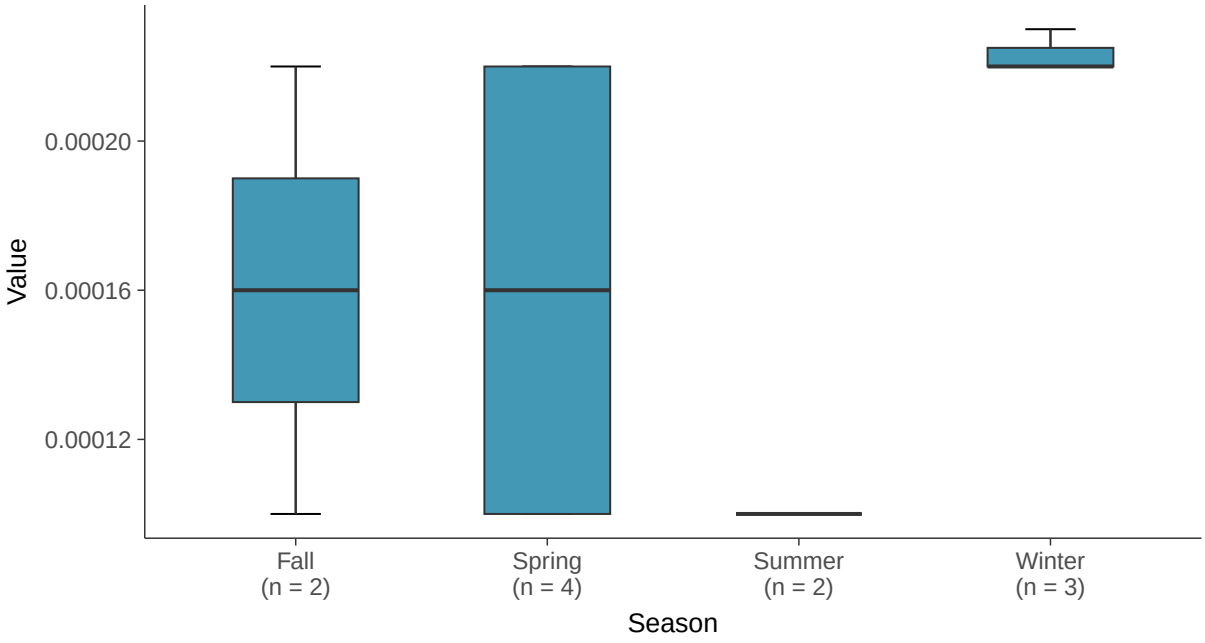
Boxplot

Selenium, MW-07 (mg/L)



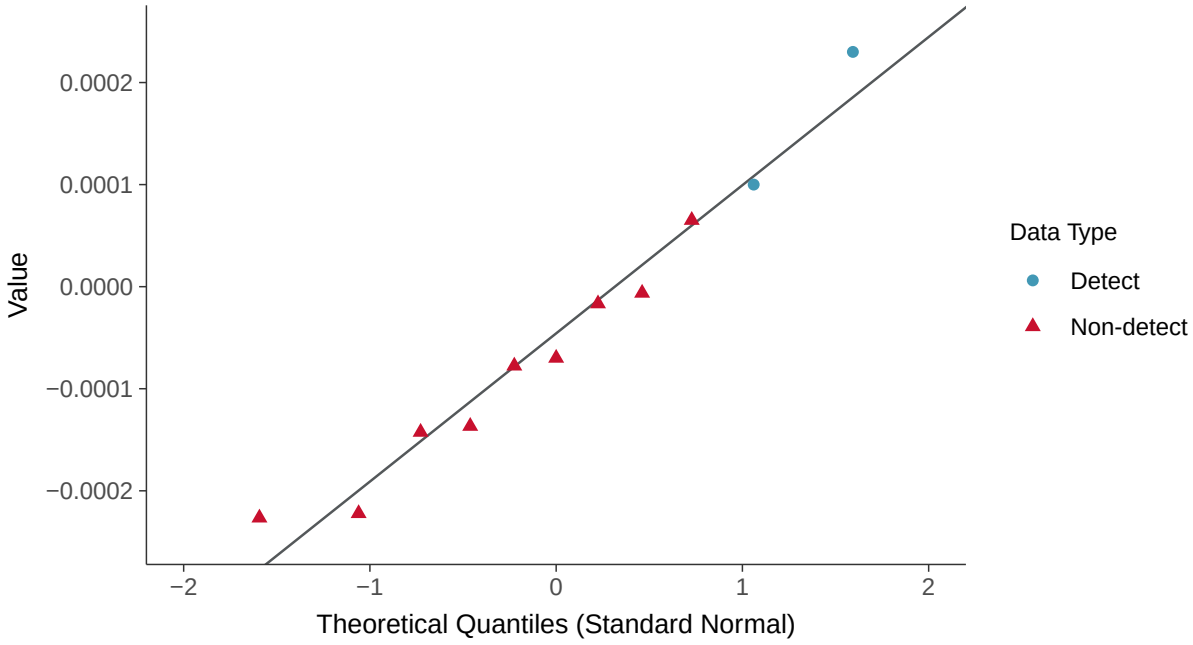
Boxplot by Season

Selenium, MW-07 (mg/L)



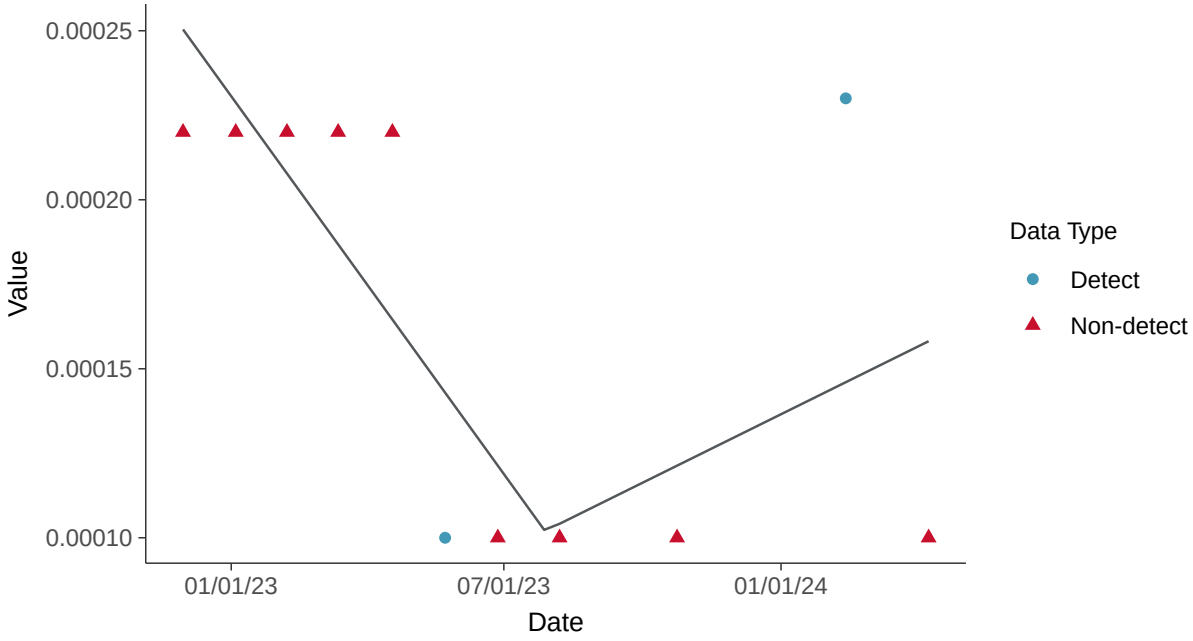
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-07 (mg/L)



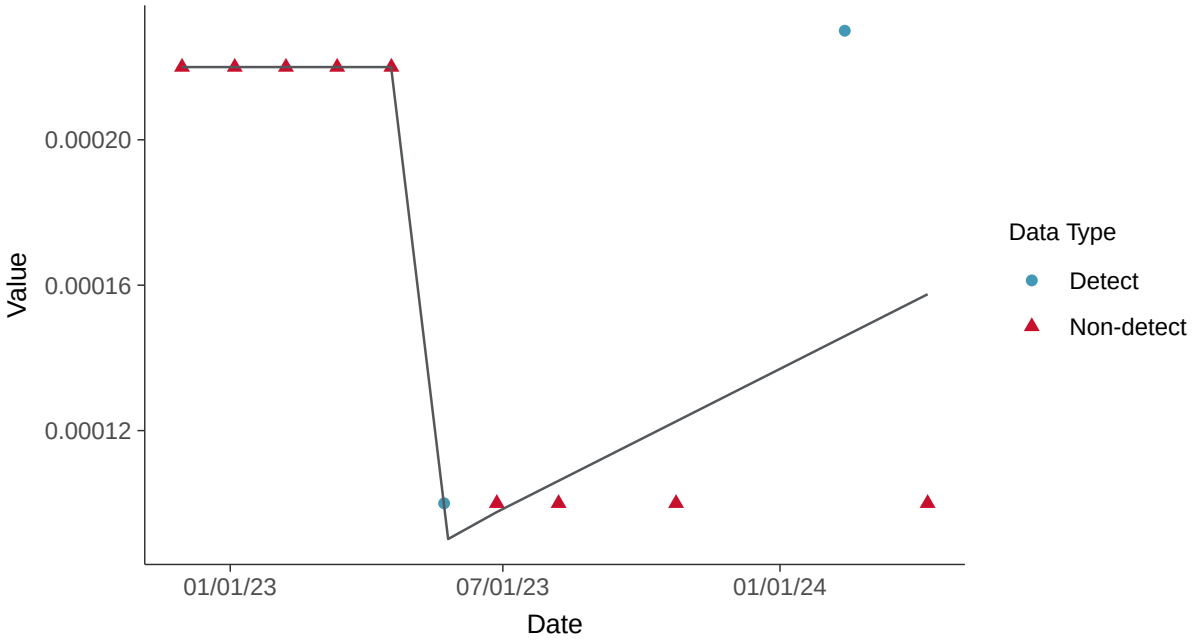
Trend Regression: Piecewise Linear-Linear

Selenium, MW-07 (mg/L)



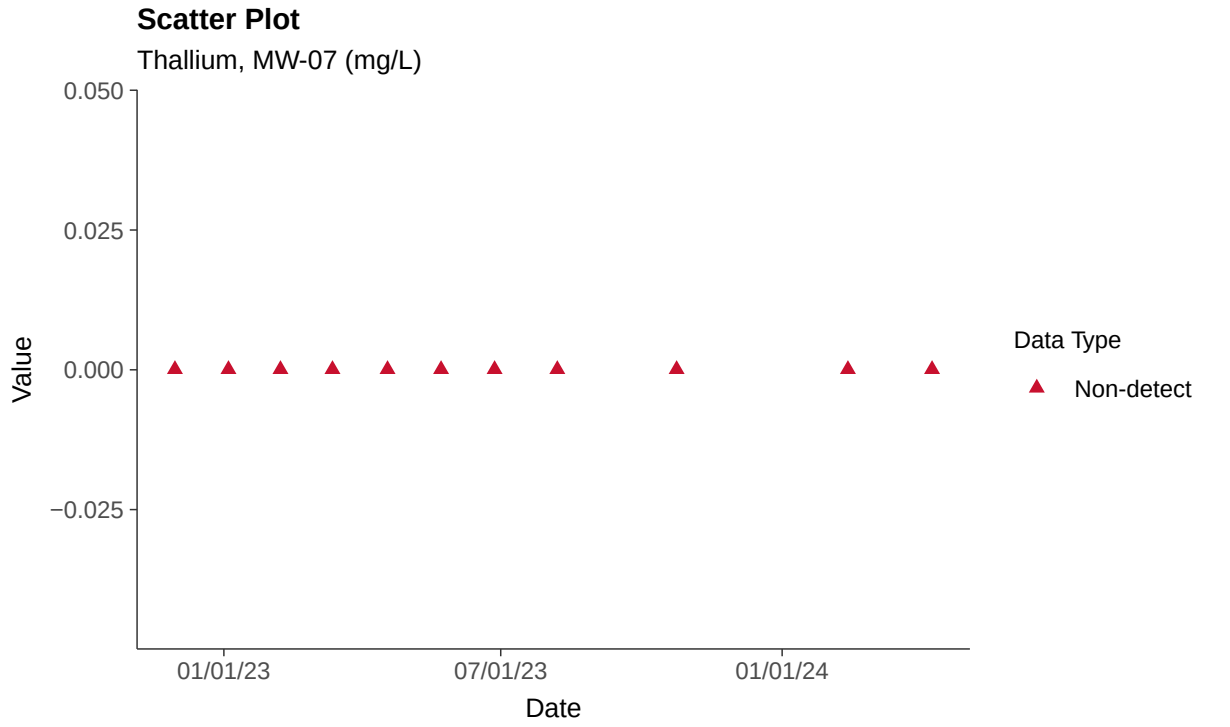
Trend Regression: Piecewise Linear-Linear-Linear

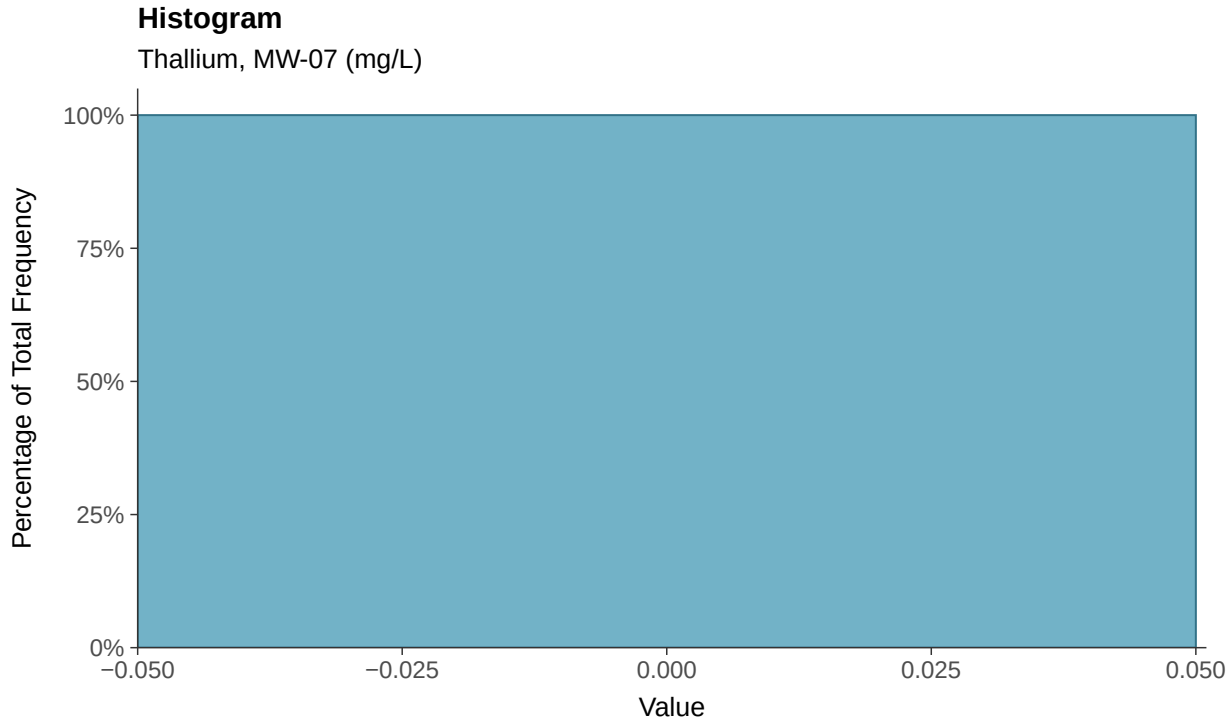
Selenium, MW-07 (mg/L)



Appendix IV: Thallium, MW-07

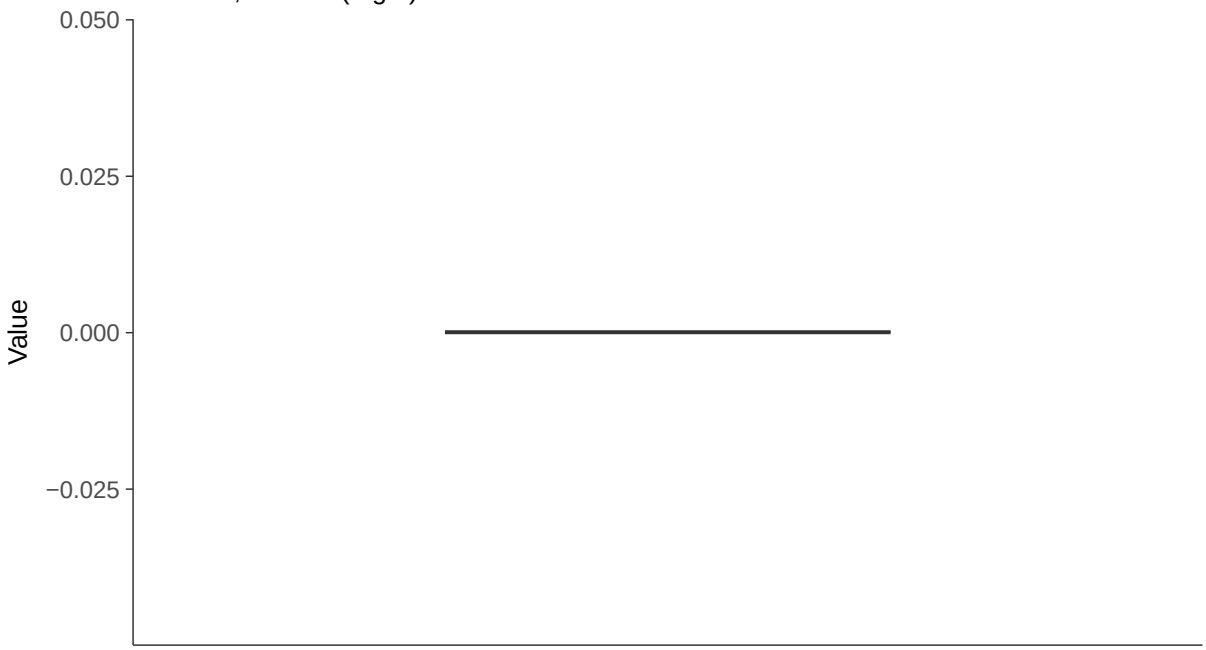
ID: 1_17_5_125





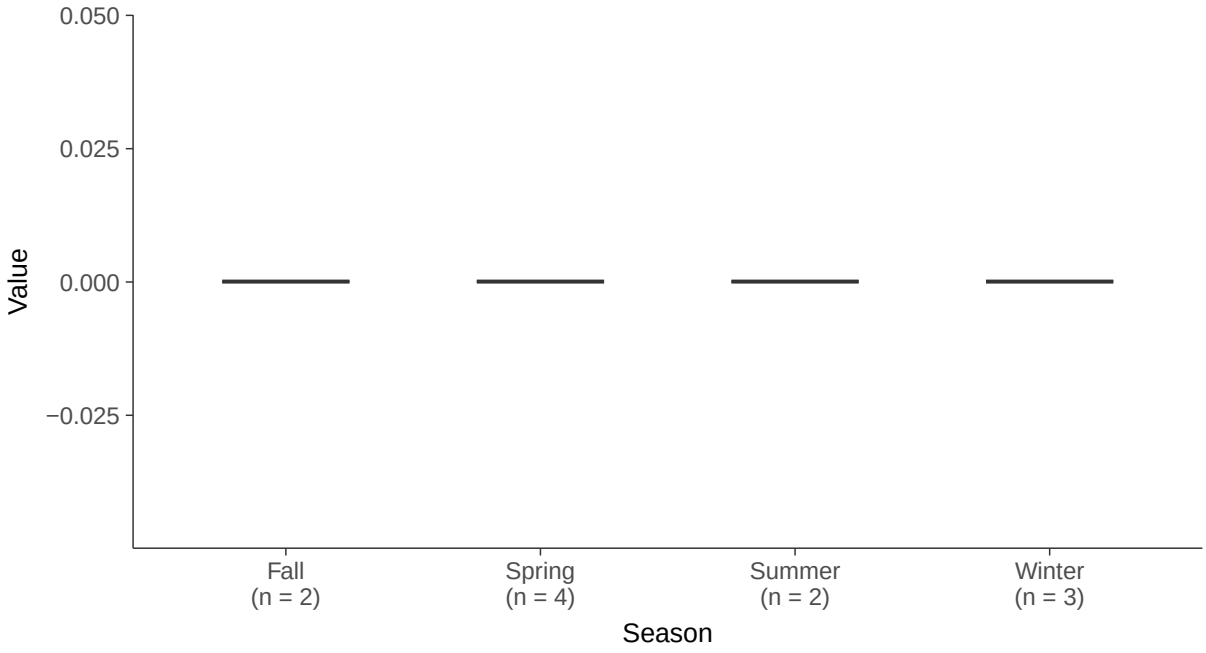
Boxplot

Thallium, MW-07 (mg/L)



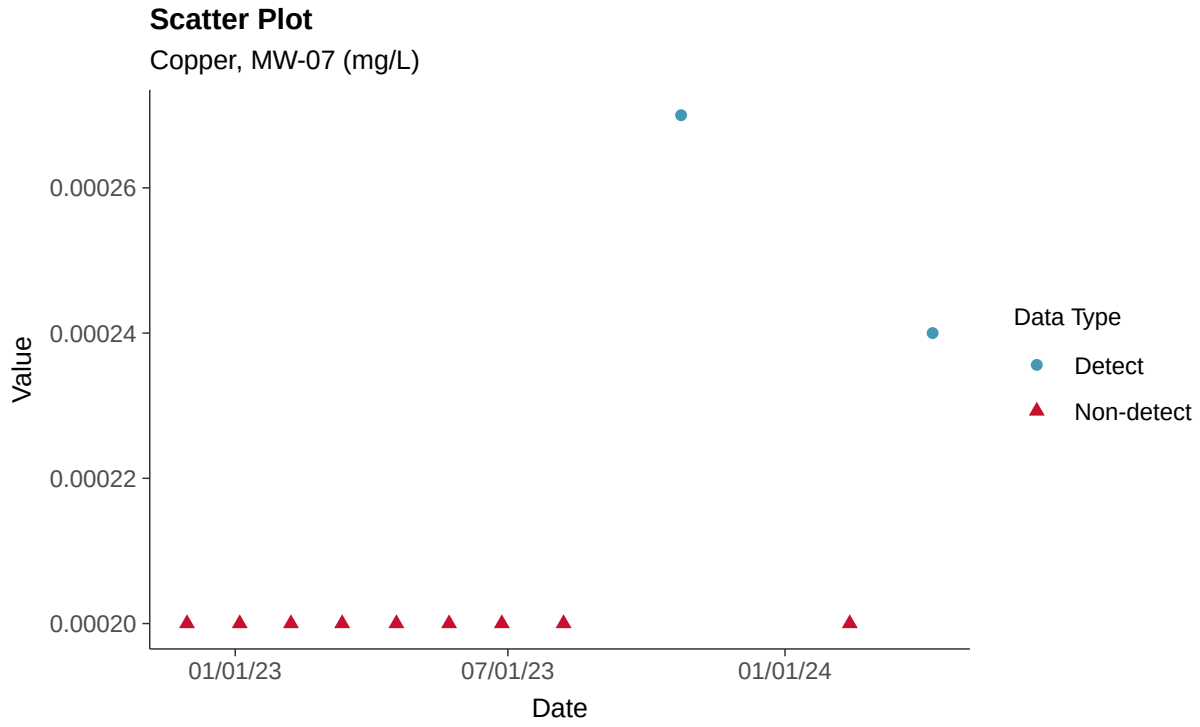
Boxplot by Season

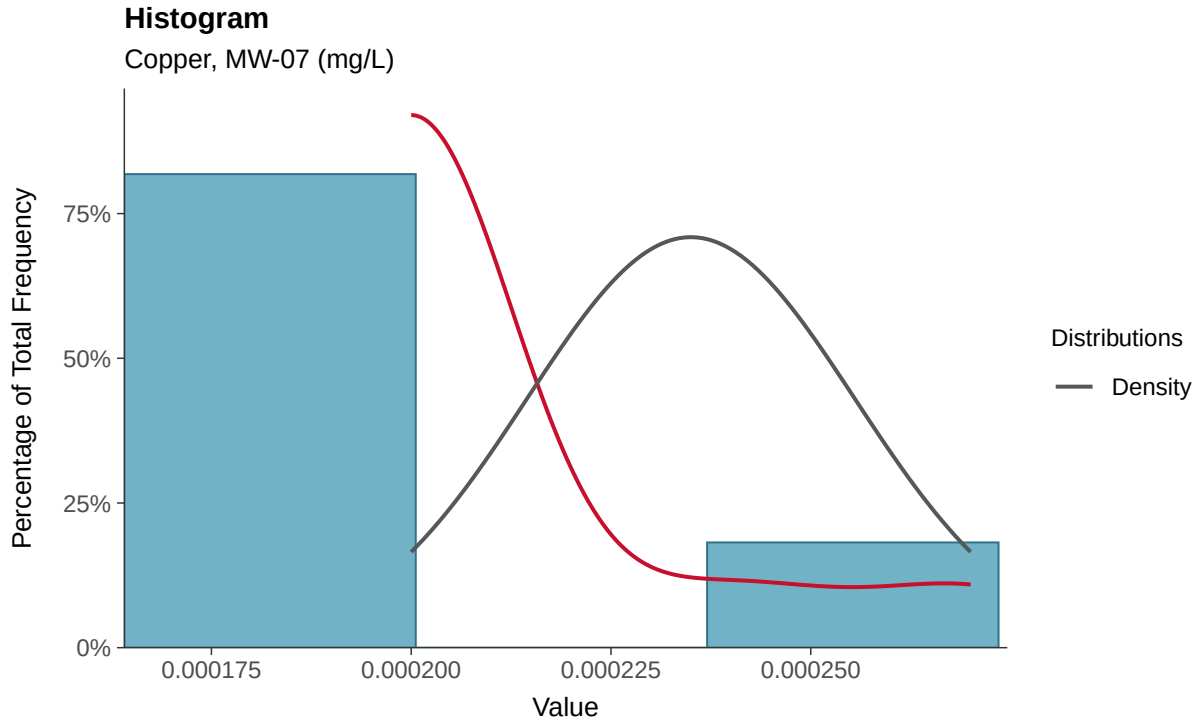
Thallium, MW-07 (mg/L)



Part 115: Copper, MW-07

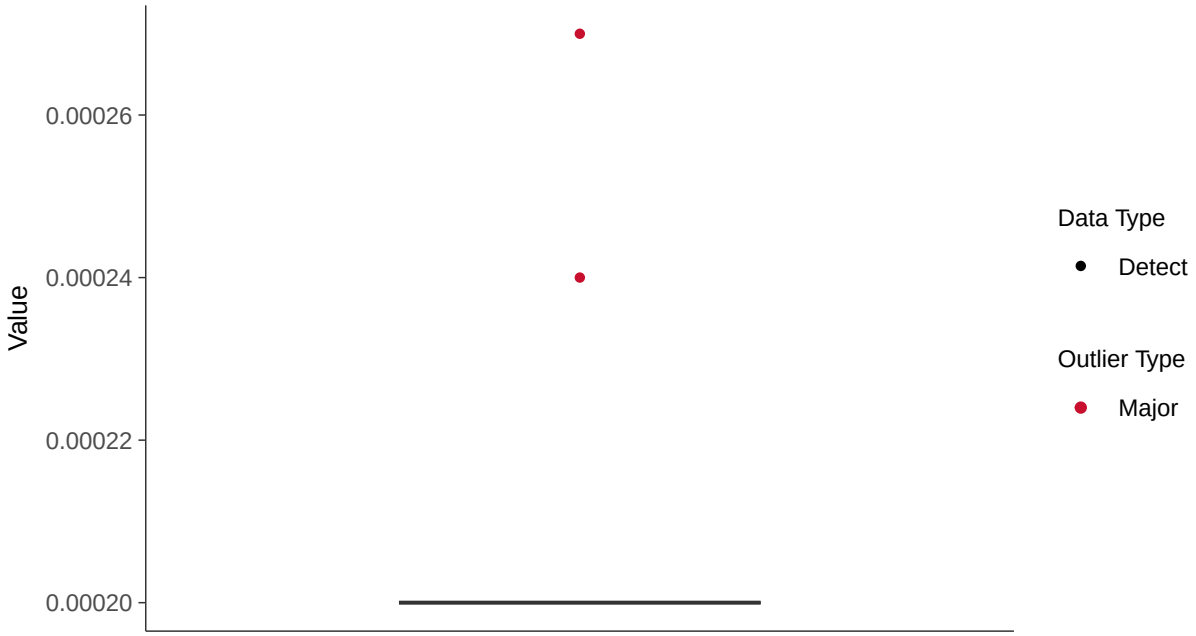
ID: 1_17_6_111





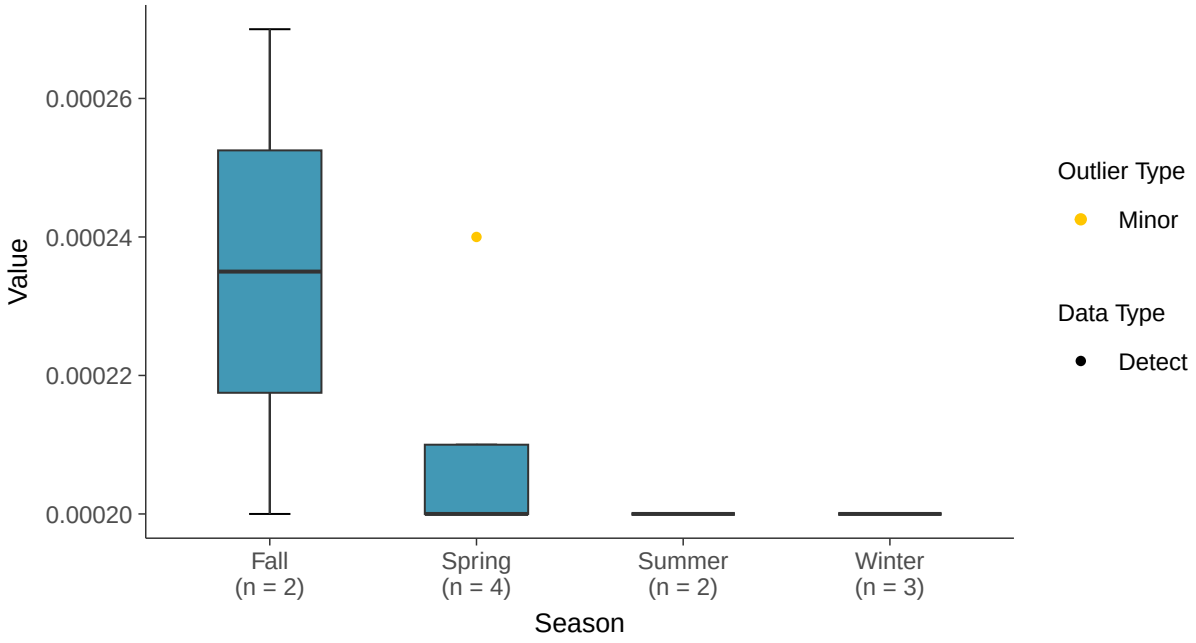
Boxplot

Copper, MW-07 (mg/L)



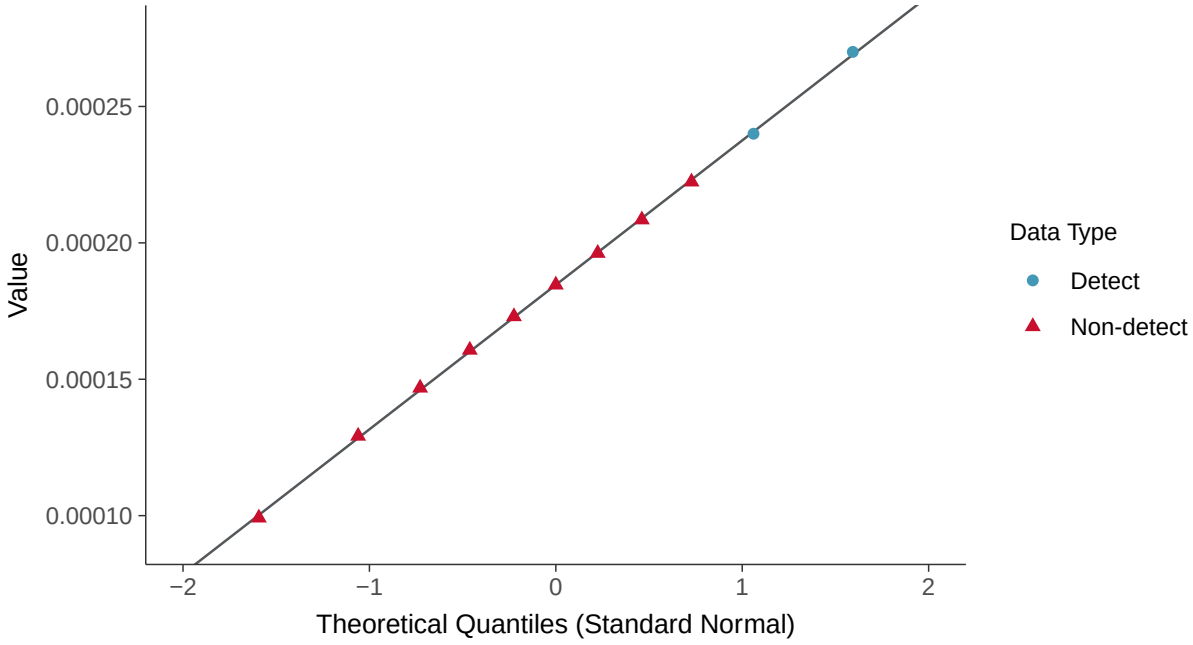
Boxplot by Season

Copper, MW-07 (mg/L)



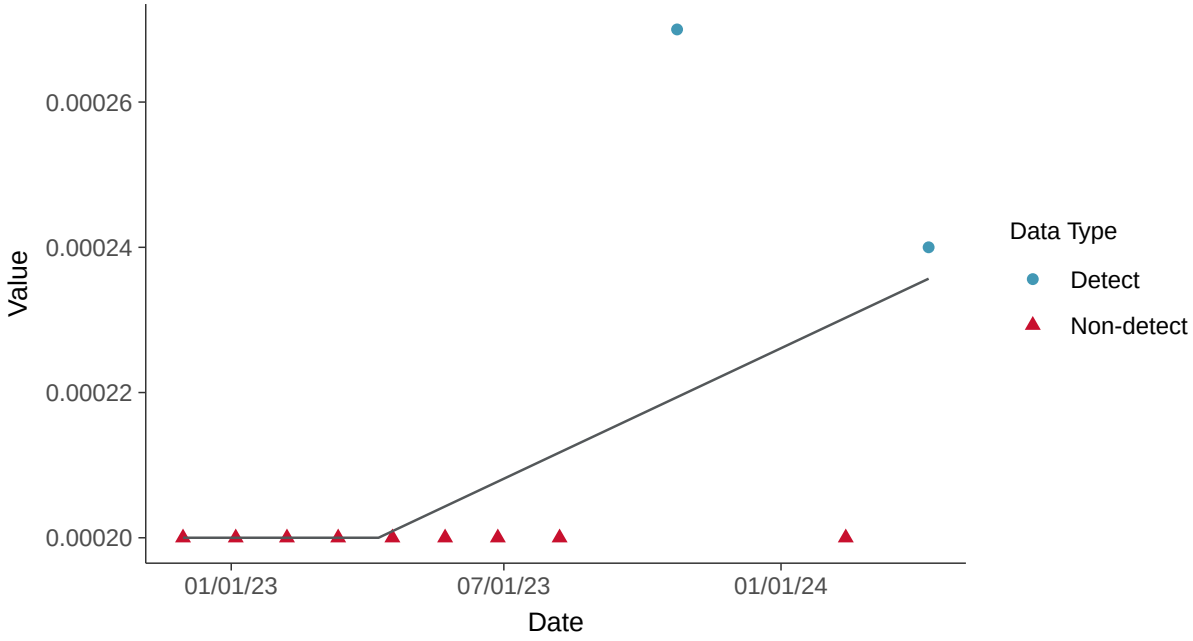
Normal Q-Q plot using ROS Imputed Estimates

Copper, MW-07 (mg/L)



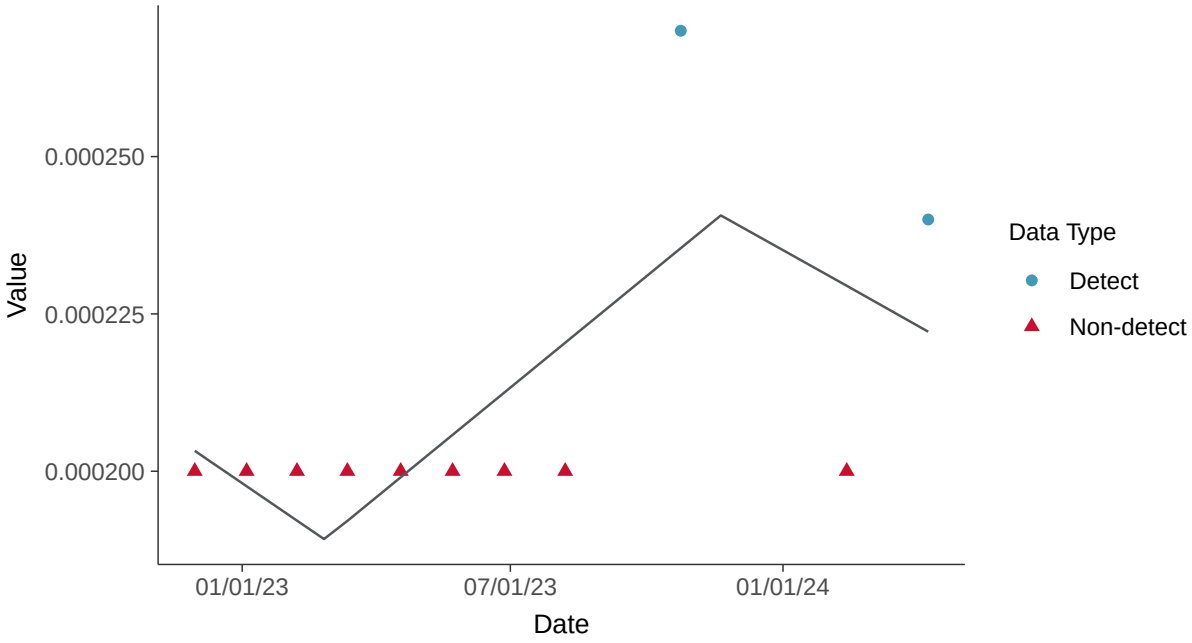
Trend Regression: Piecewise Linear-Linear

Copper, MW-07 (mg/L)



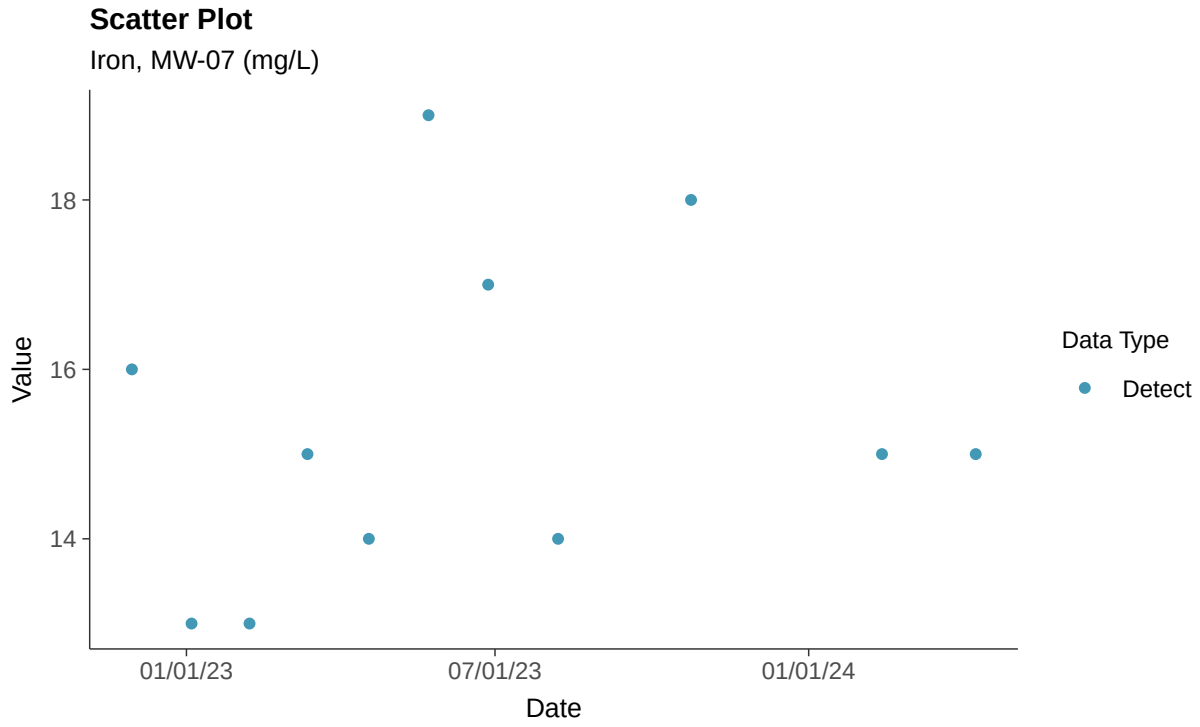
Trend Regression: Piecewise Linear-Linear-Linear

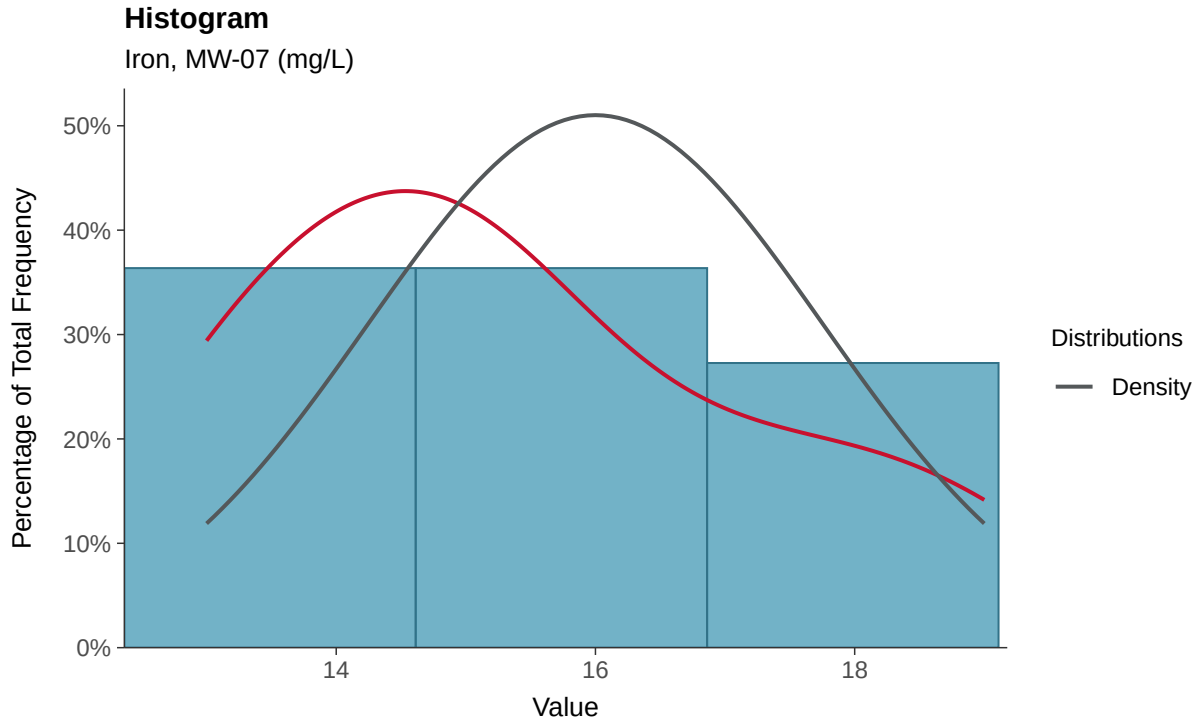
Copper, MW-07 (mg/L)



Part 115: Iron, MW-07

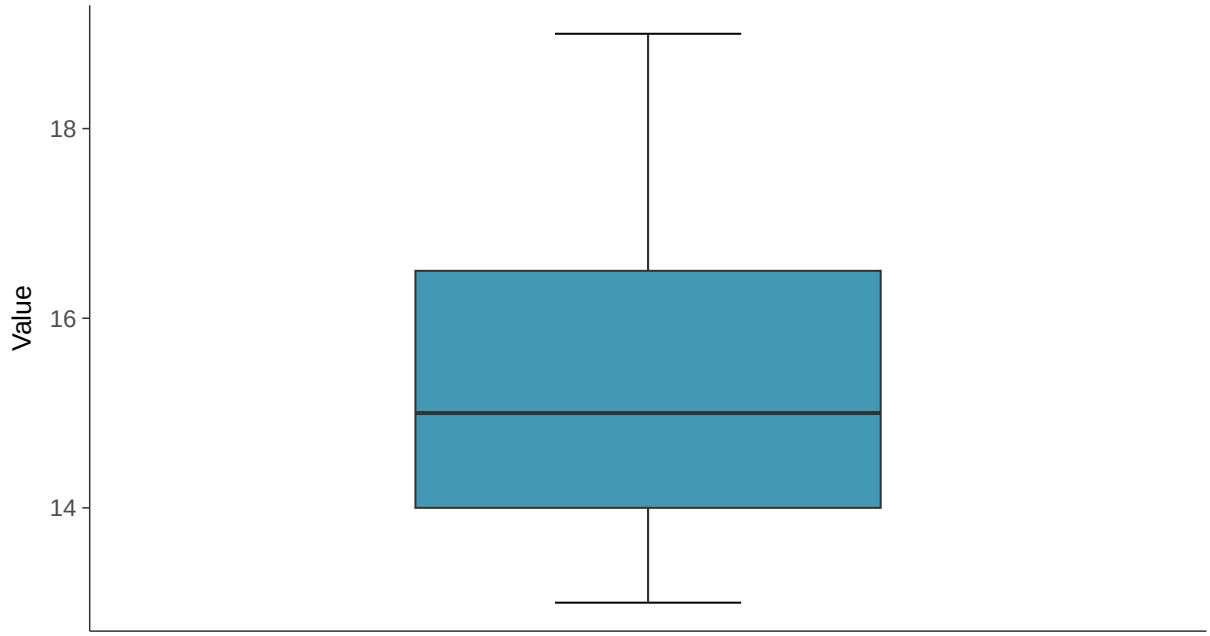
ID: 1_17_6_114





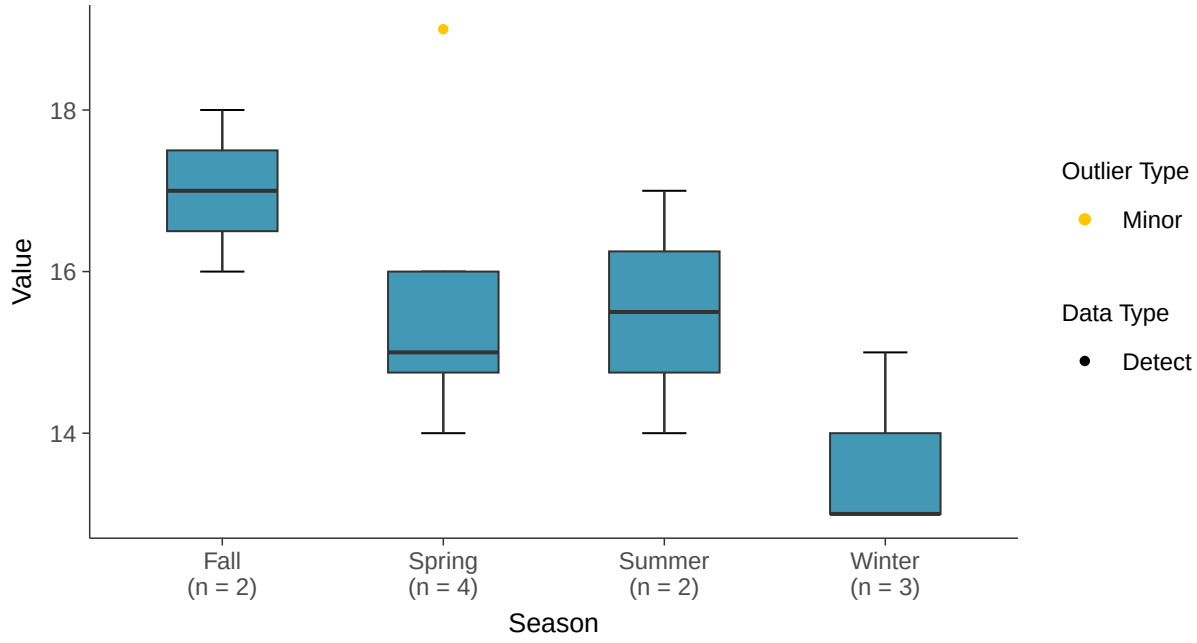
Boxplot

Iron, MW-07 (mg/L)



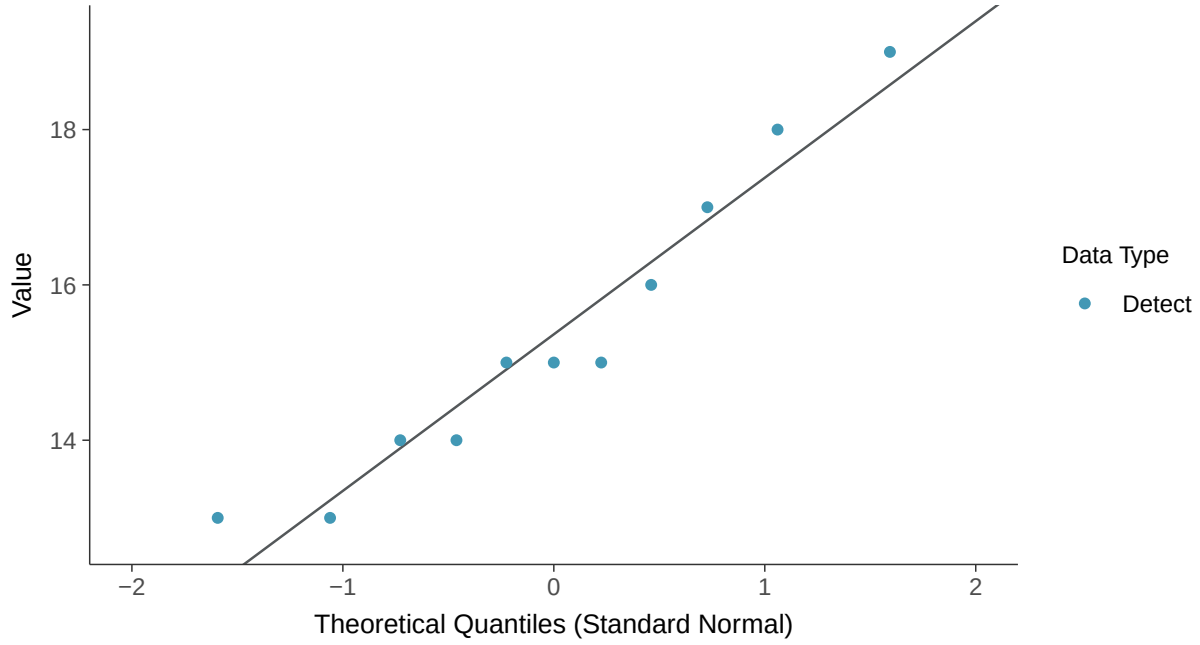
Boxplot by Season

Iron, MW-07 (mg/L)



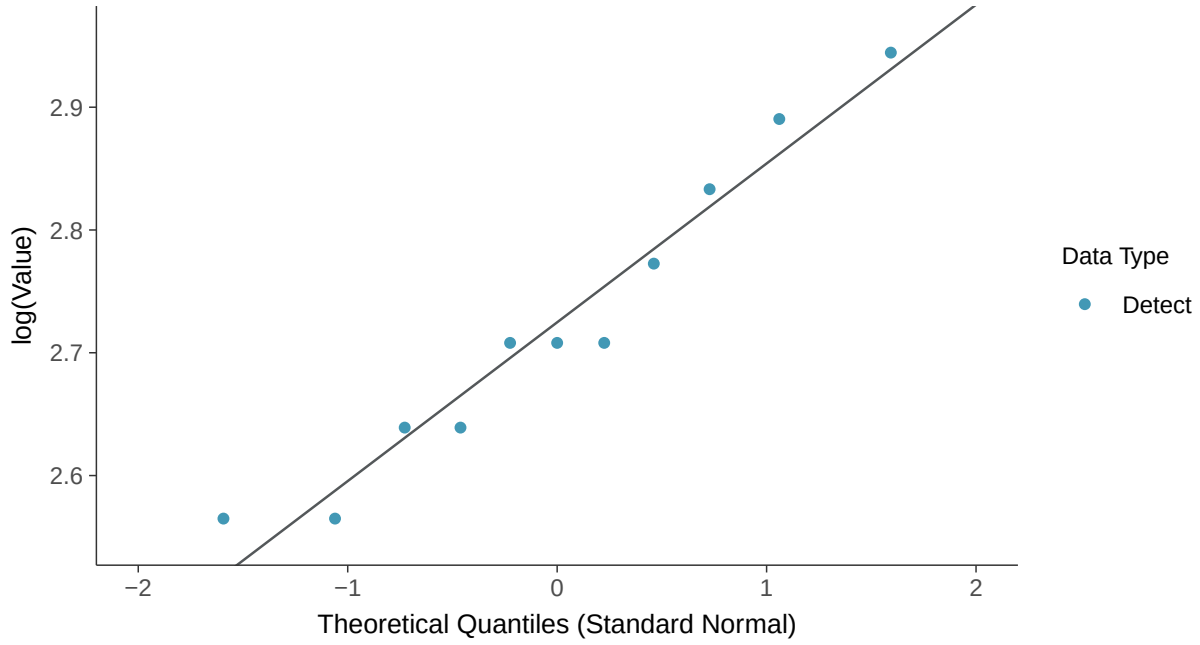
Normal Q-Q plot

Iron, MW-07 (mg/L)



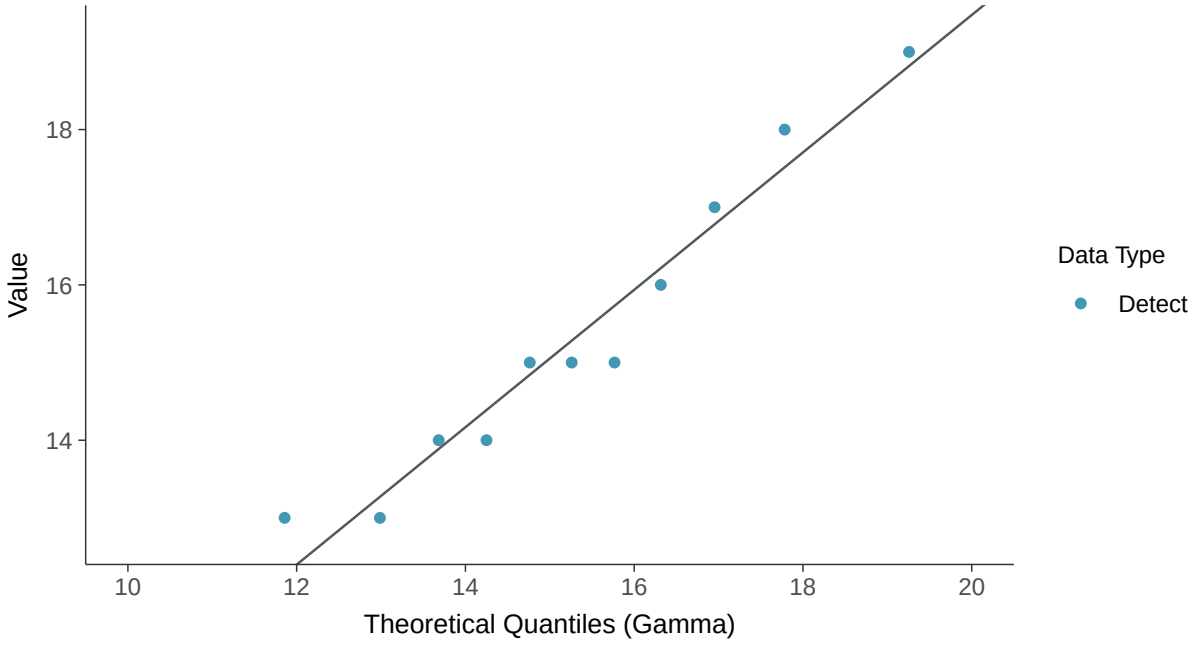
Lognormal Q-Q plot

Iron, MW-07 (mg/L)



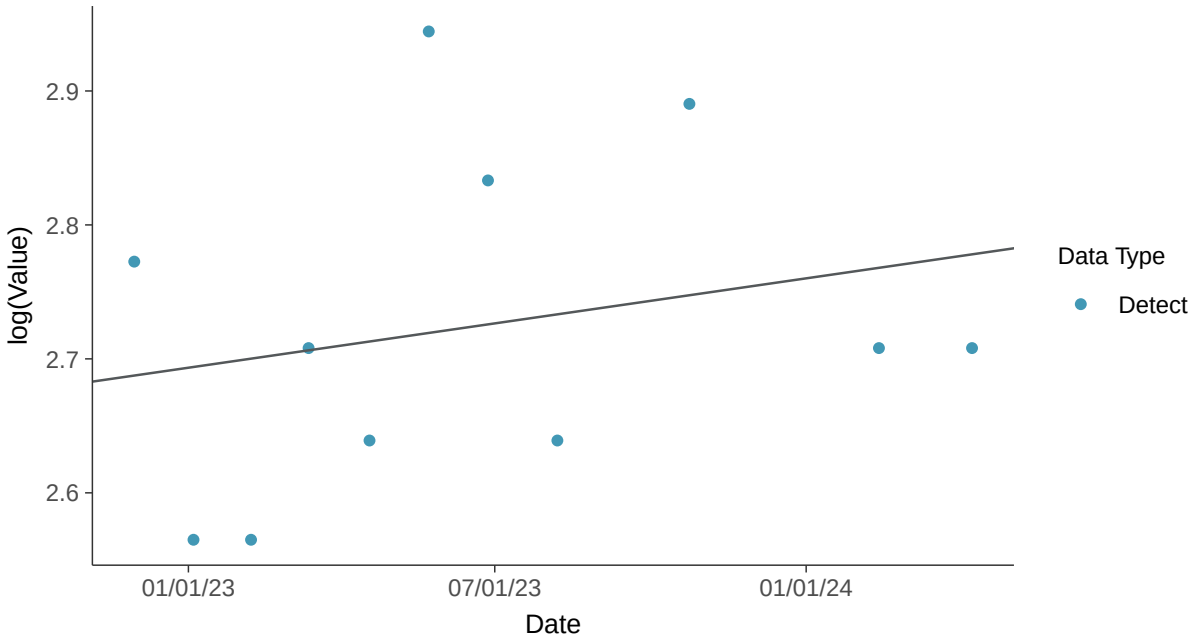
Gamma Q-Q plot

Iron, MW-07 (mg/L)



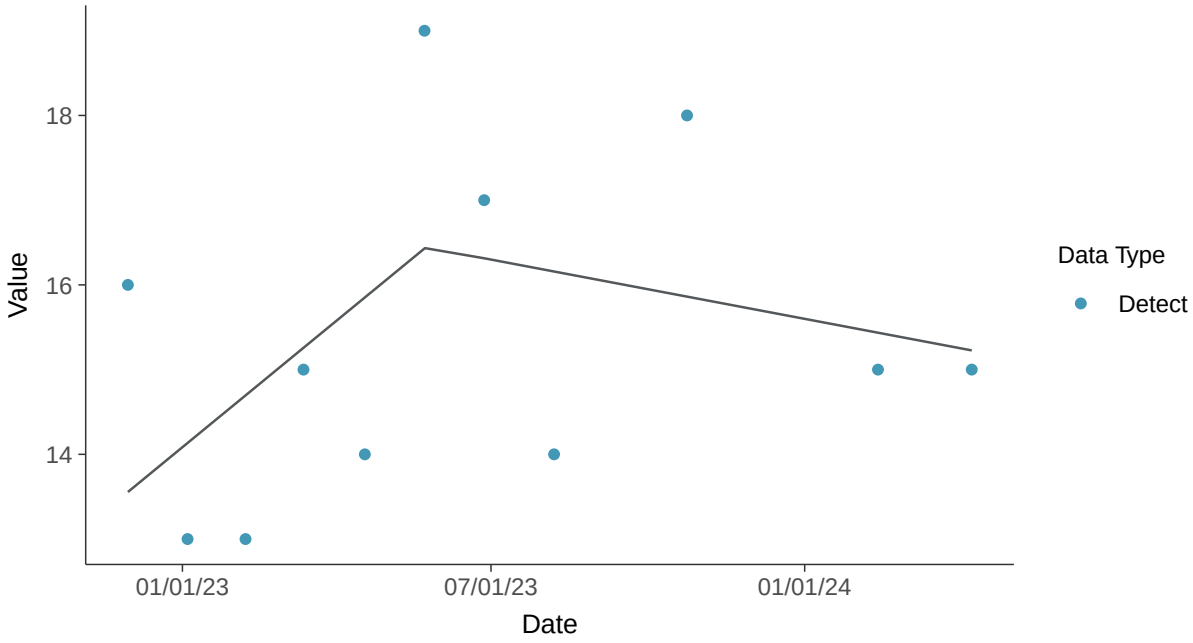
Trend Regression: Lognormal MLE

Iron, MW-07 (mg/L)



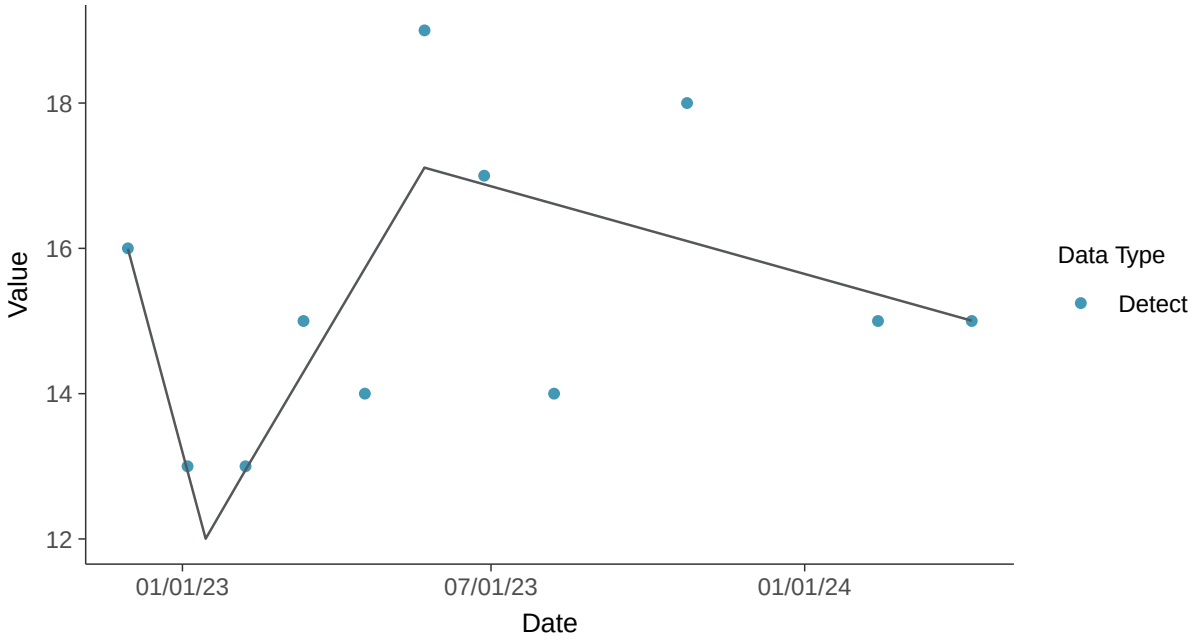
Trend Regression: Piecewise Linear-Linear

Iron, MW-07 (mg/L)



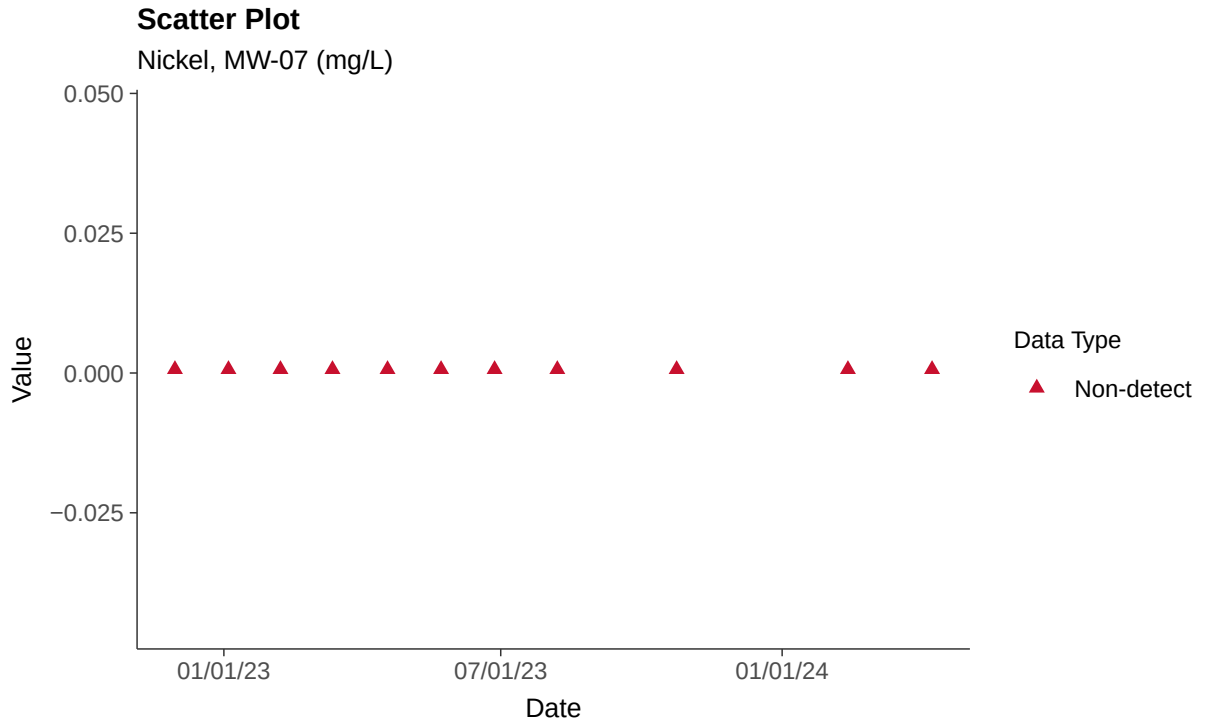
Trend Regression: Piecewise Linear-Linear-Linear

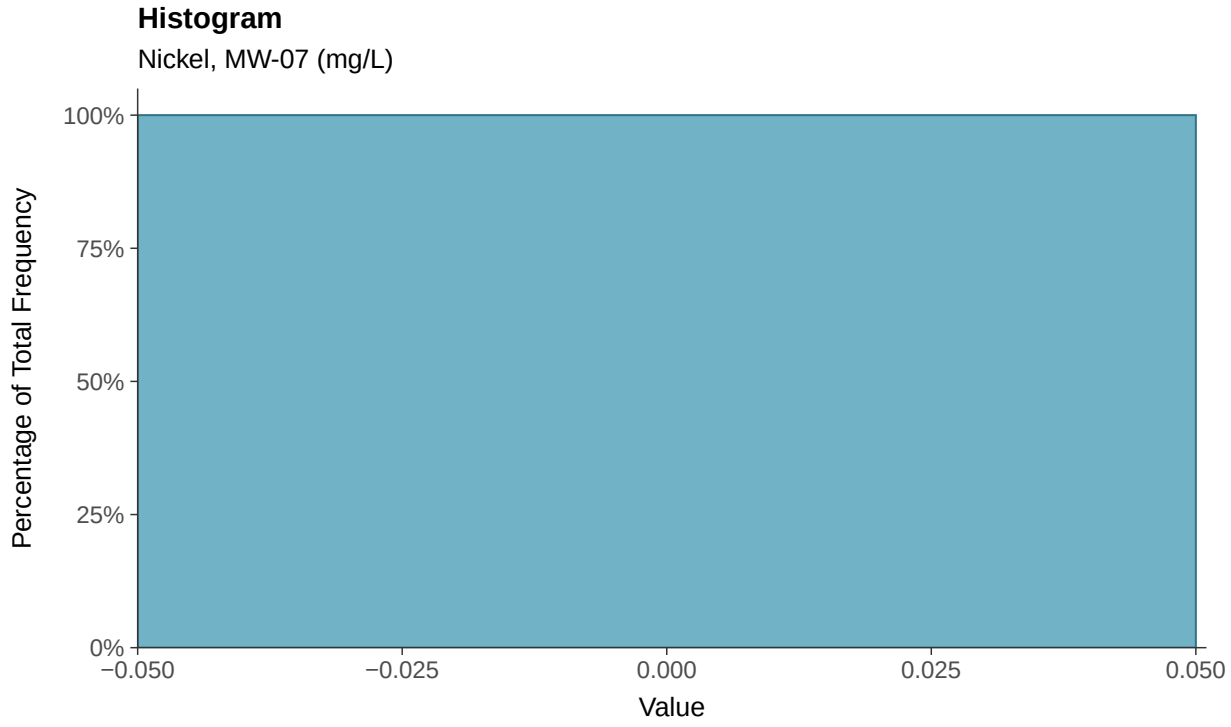
Iron, MW-07 (mg/L)



Part 115: Nickel, MW-07

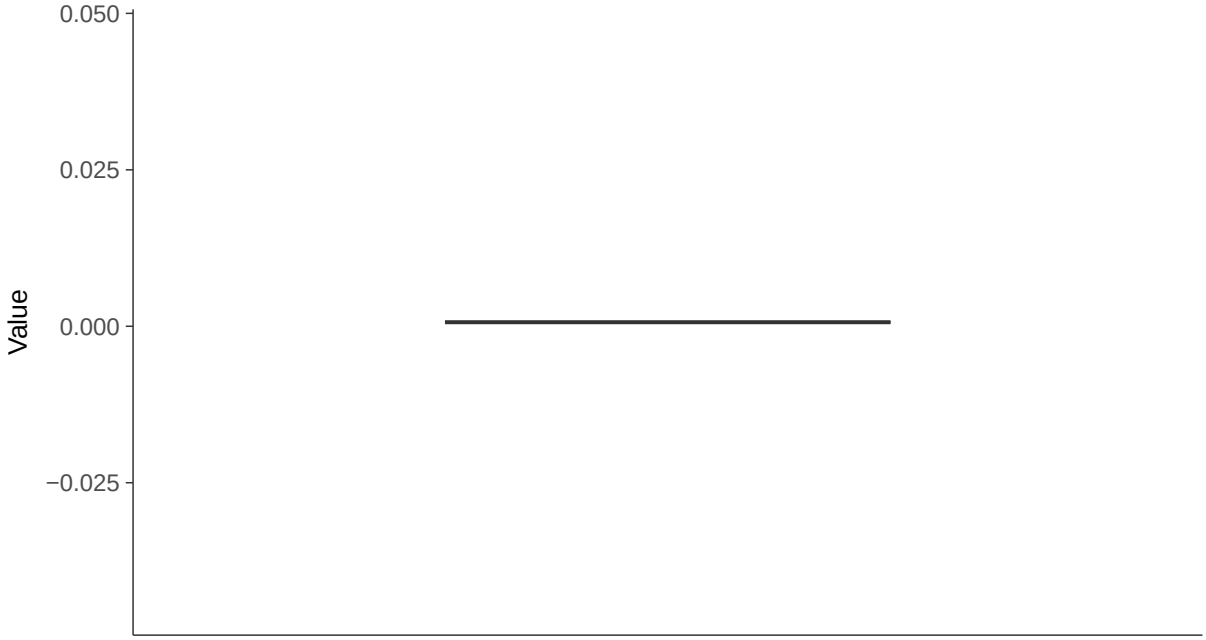
ID: 1_17_6_119





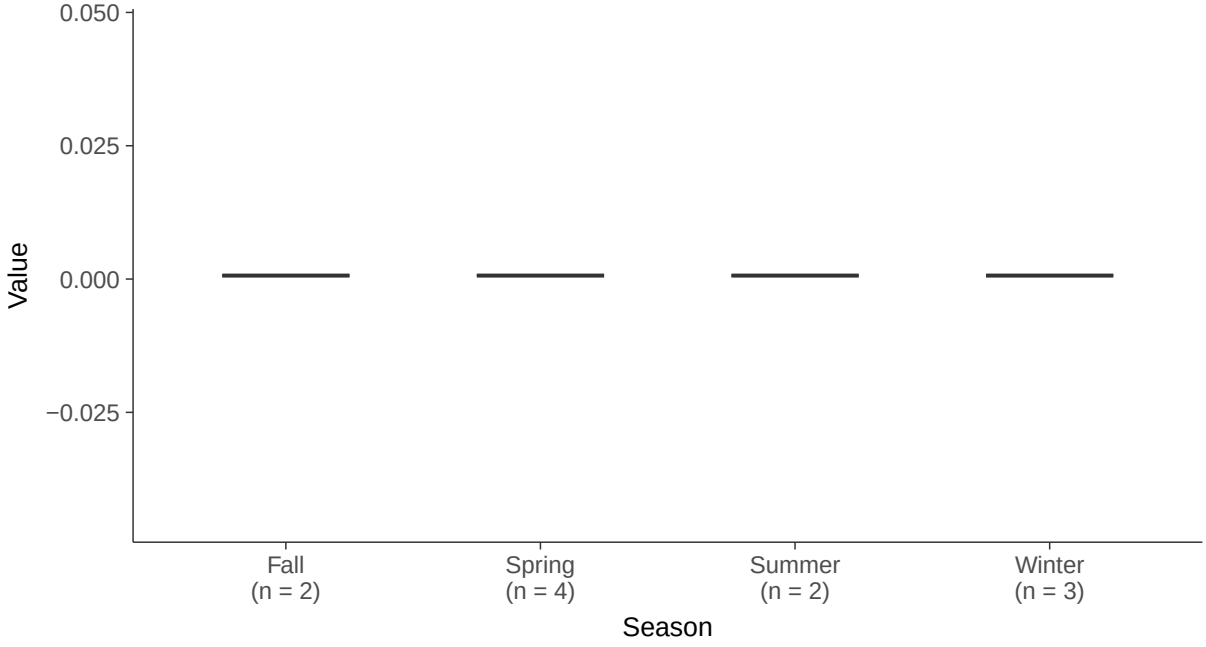
Boxplot

Nickel, MW-07 (mg/L)



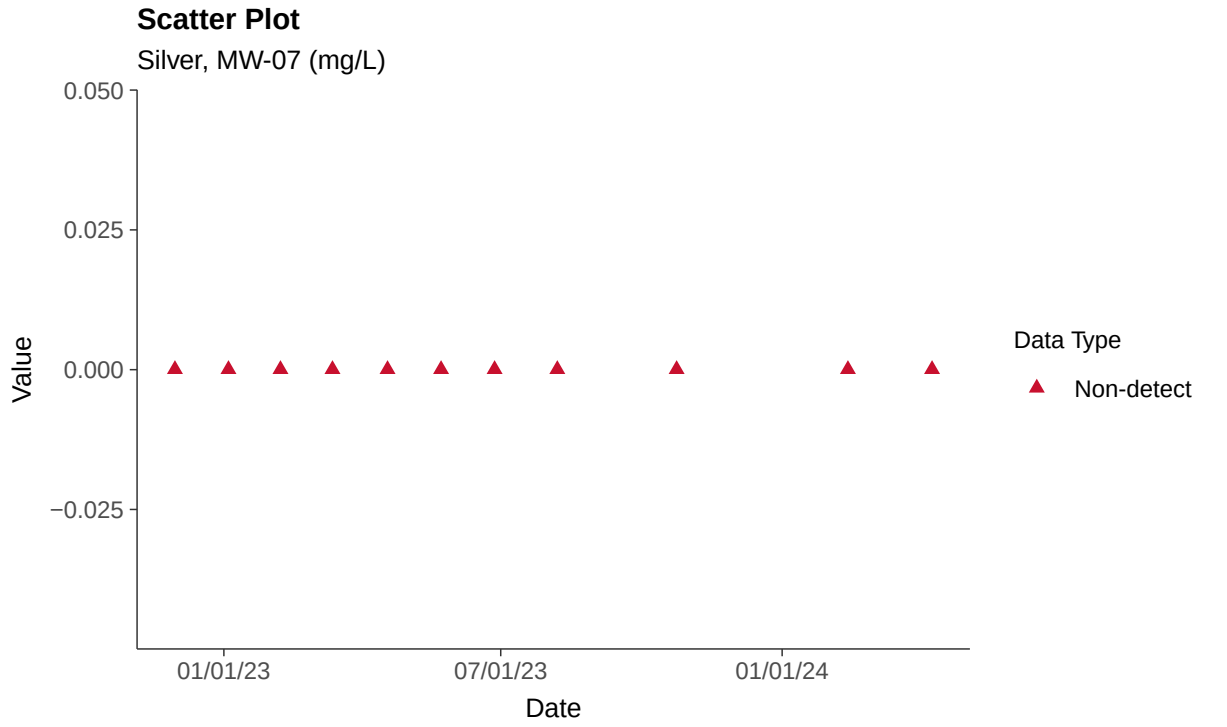
Boxplot by Season

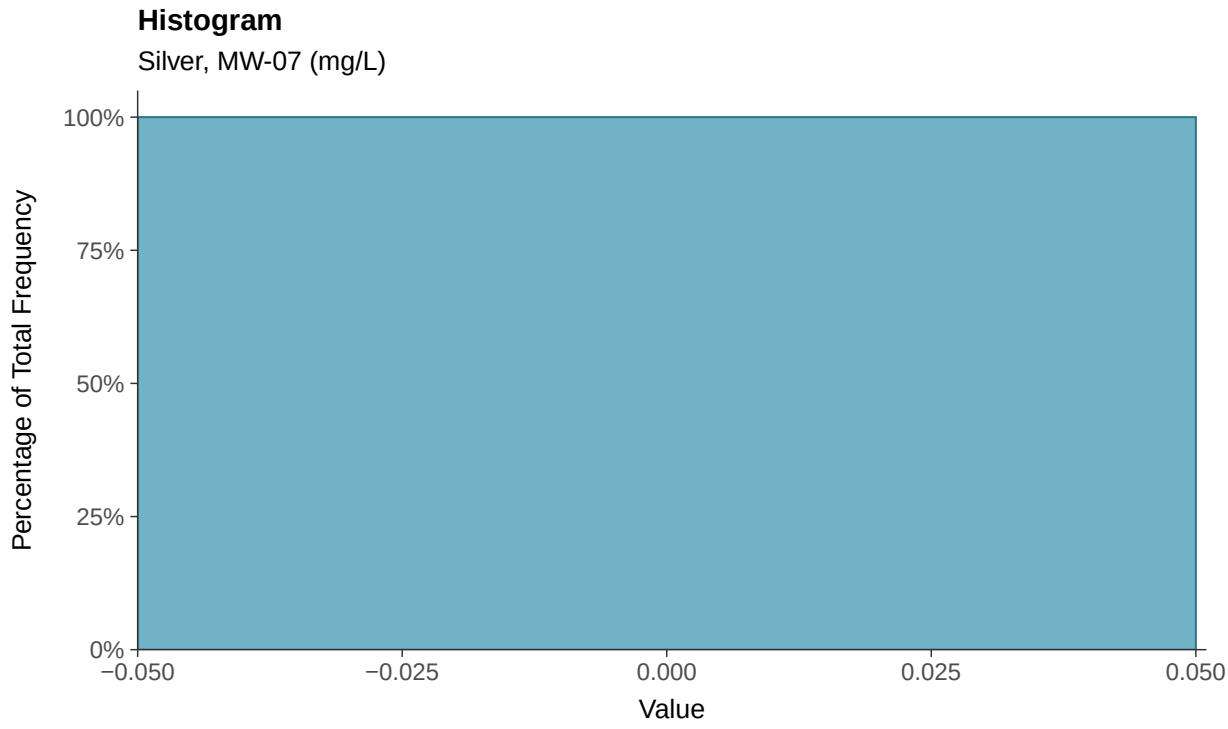
Nickel, MW-07 (mg/L)



Part 115: Silver, MW-07

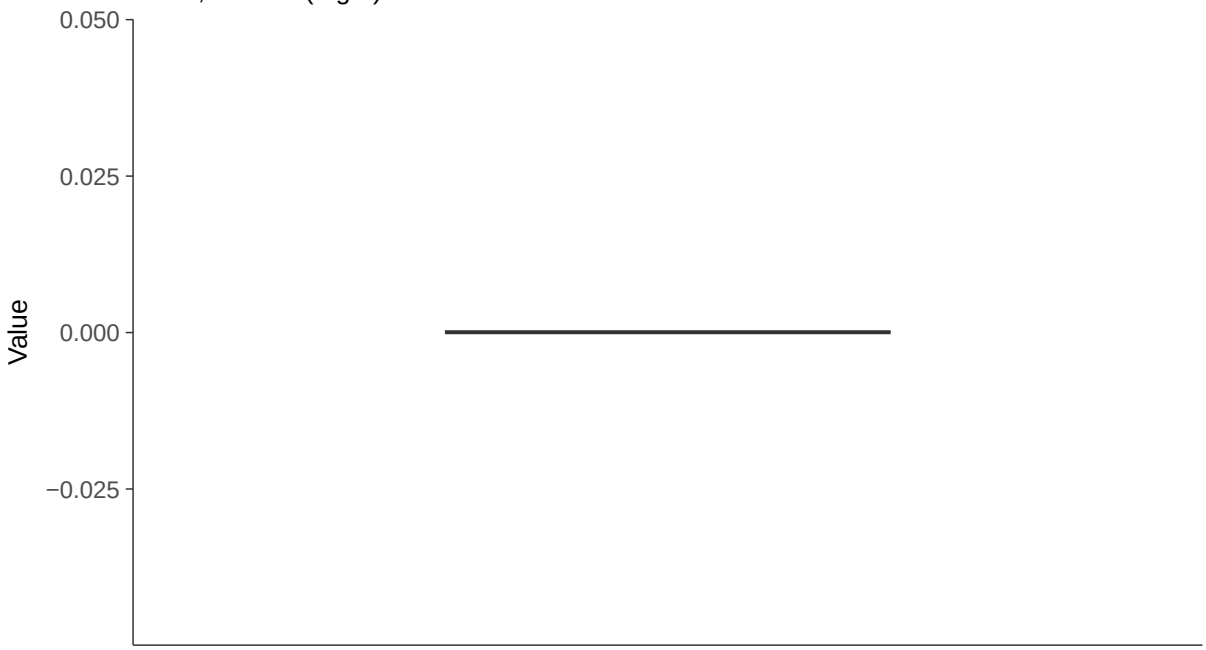
ID: 1_17_6_123





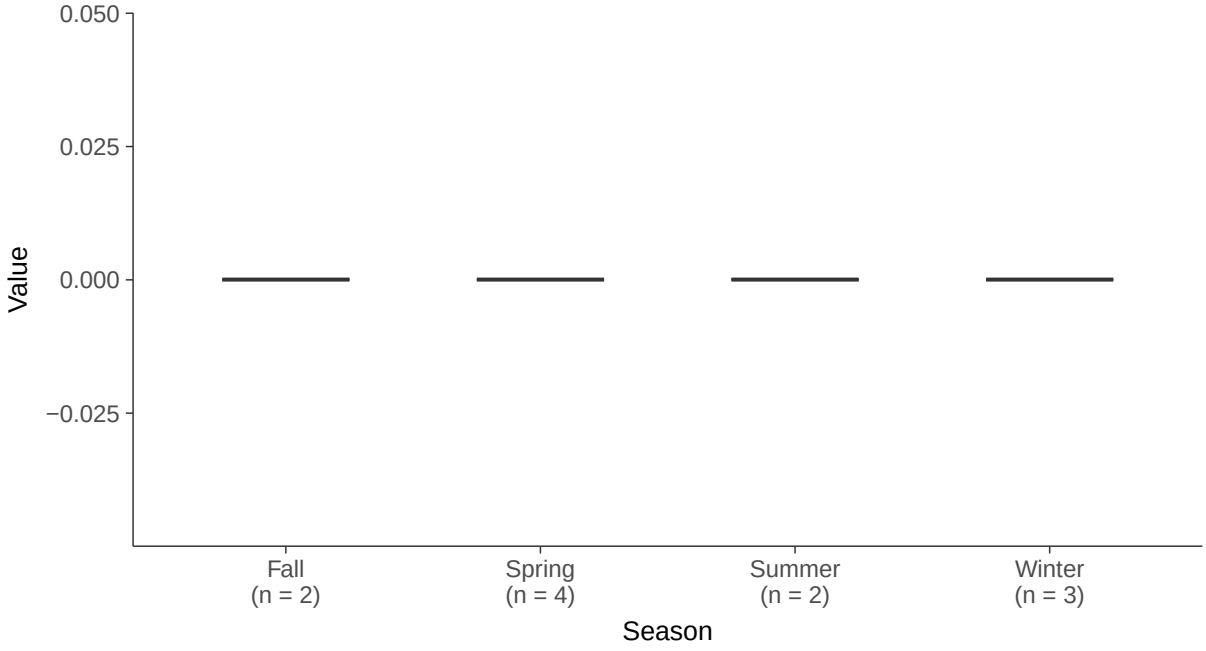
Boxplot

Silver, MW-07 (mg/L)



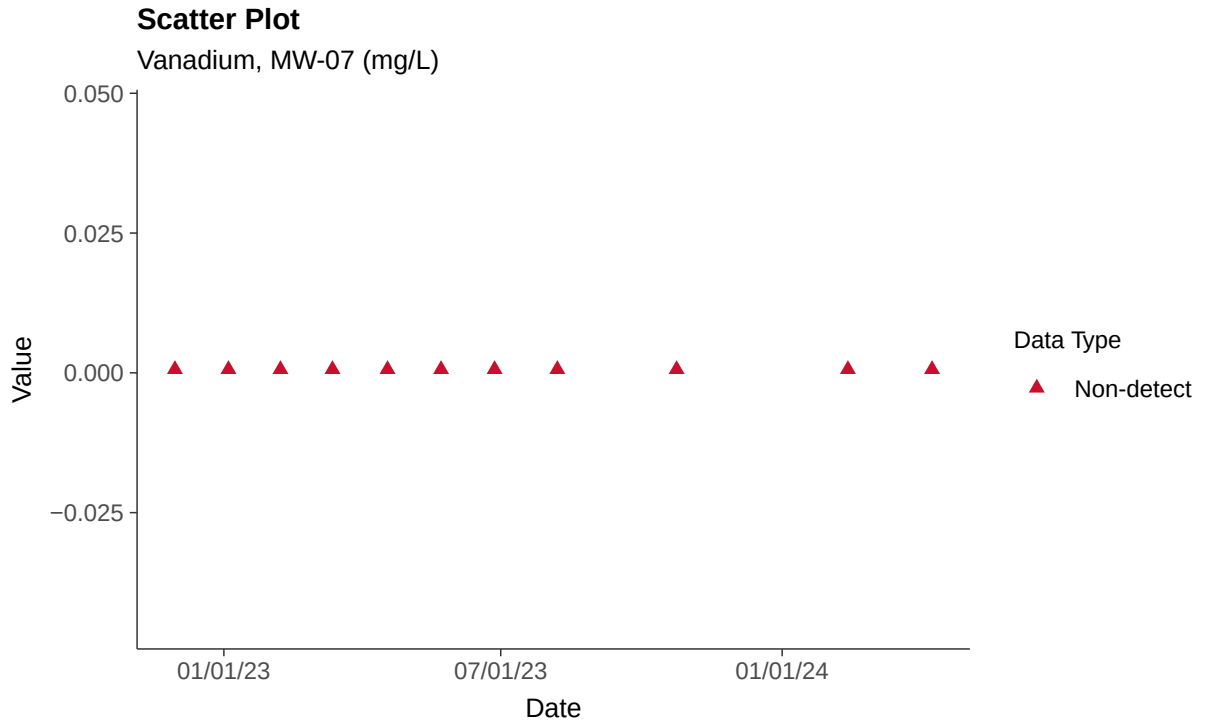
Boxplot by Season

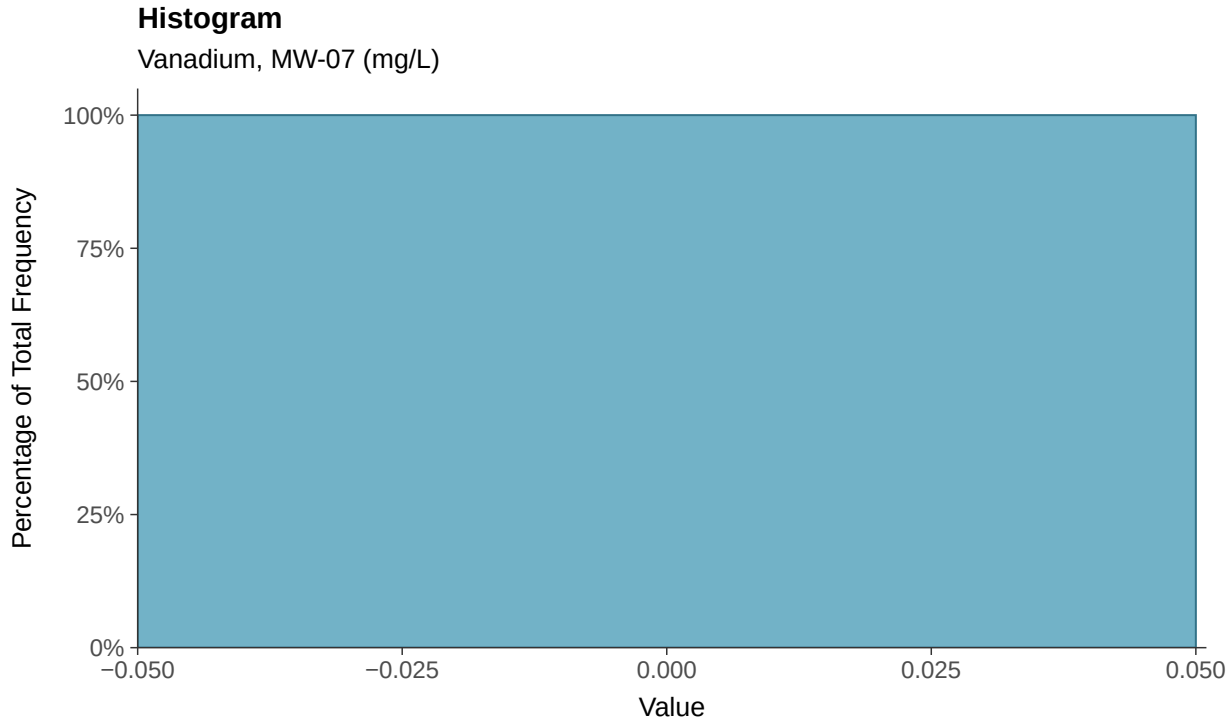
Silver, MW-07 (mg/L)



Part 115: Vanadium, MW-07

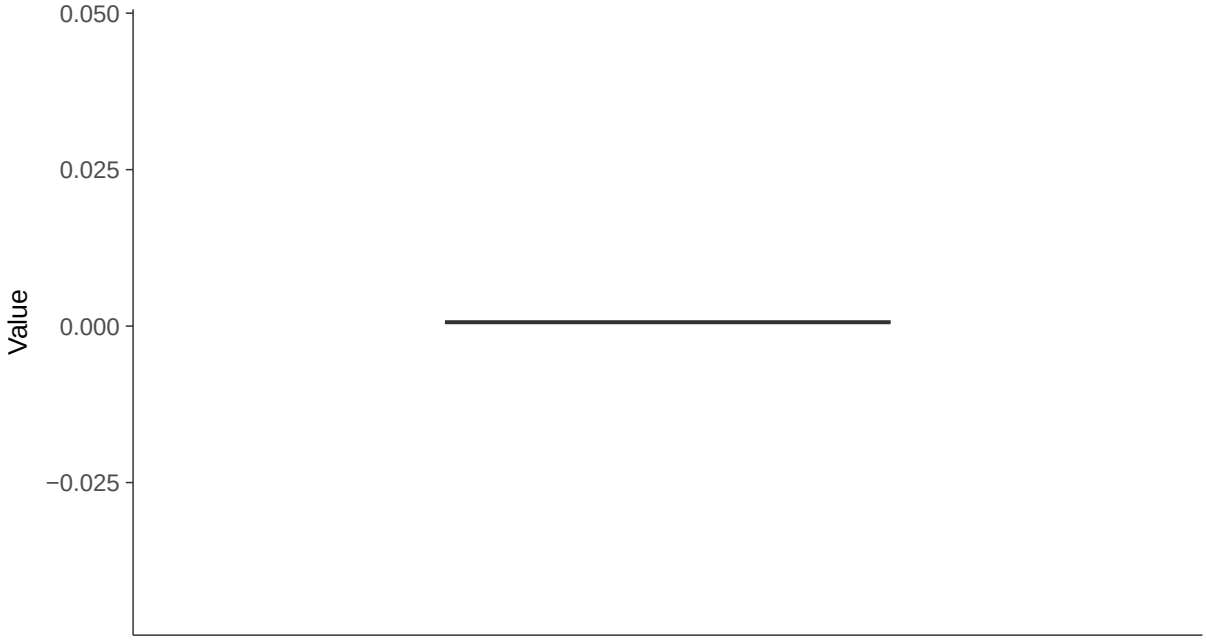
ID: 1_17_6_129





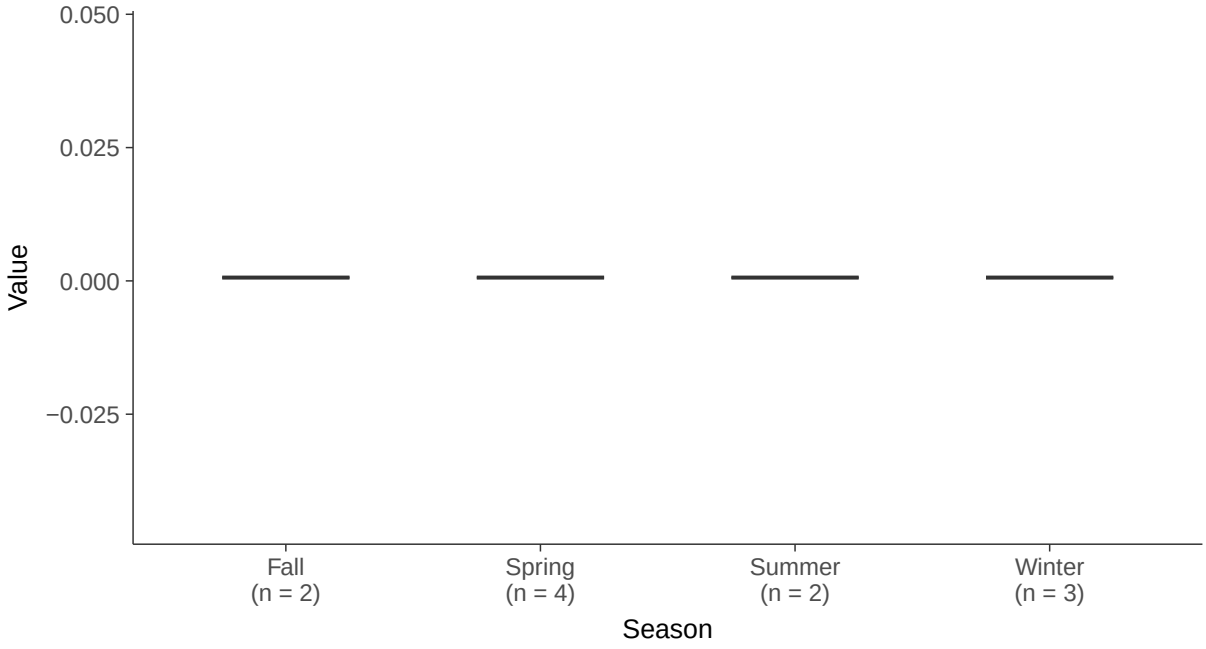
Boxplot

Vanadium, MW-07 (mg/L)



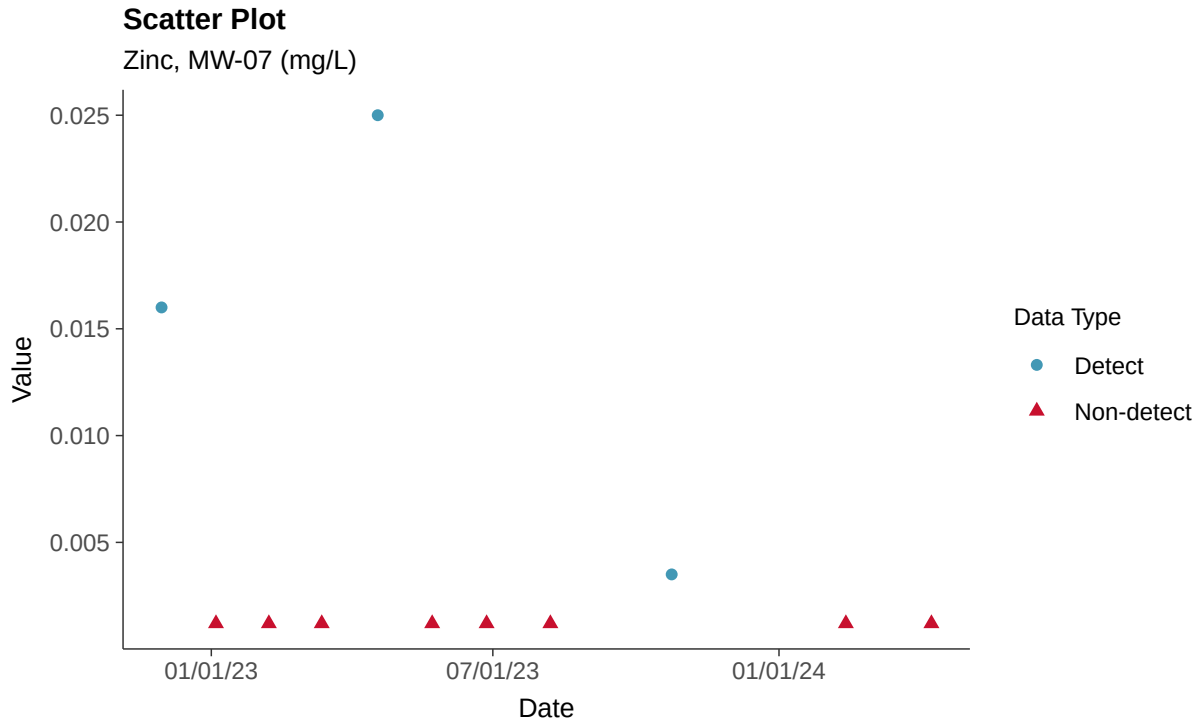
Boxplot by Season

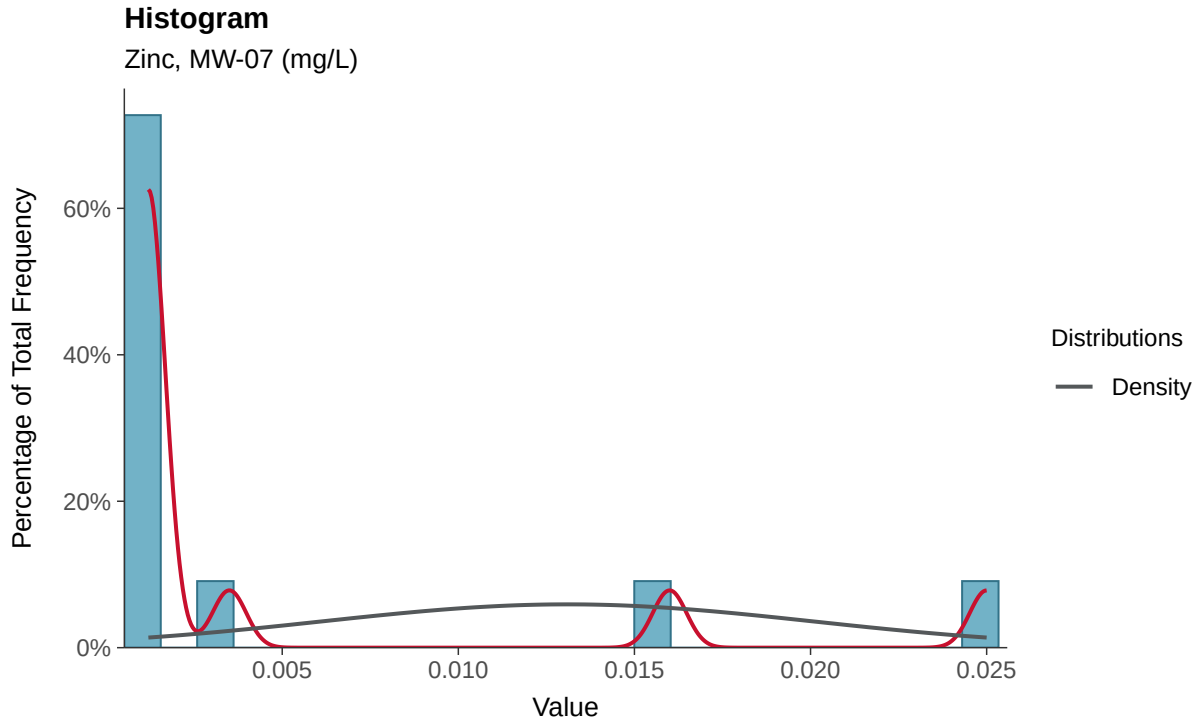
Vanadium, MW-07 (mg/L)



Part 115: Zinc, MW-07

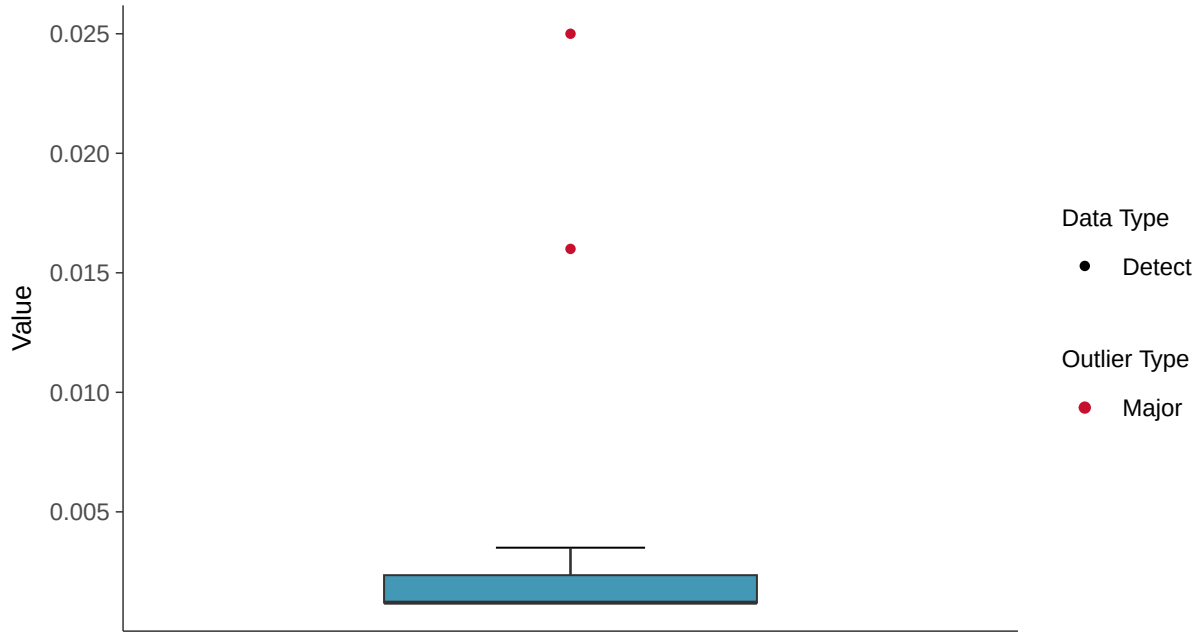
ID: 1_17_6_130





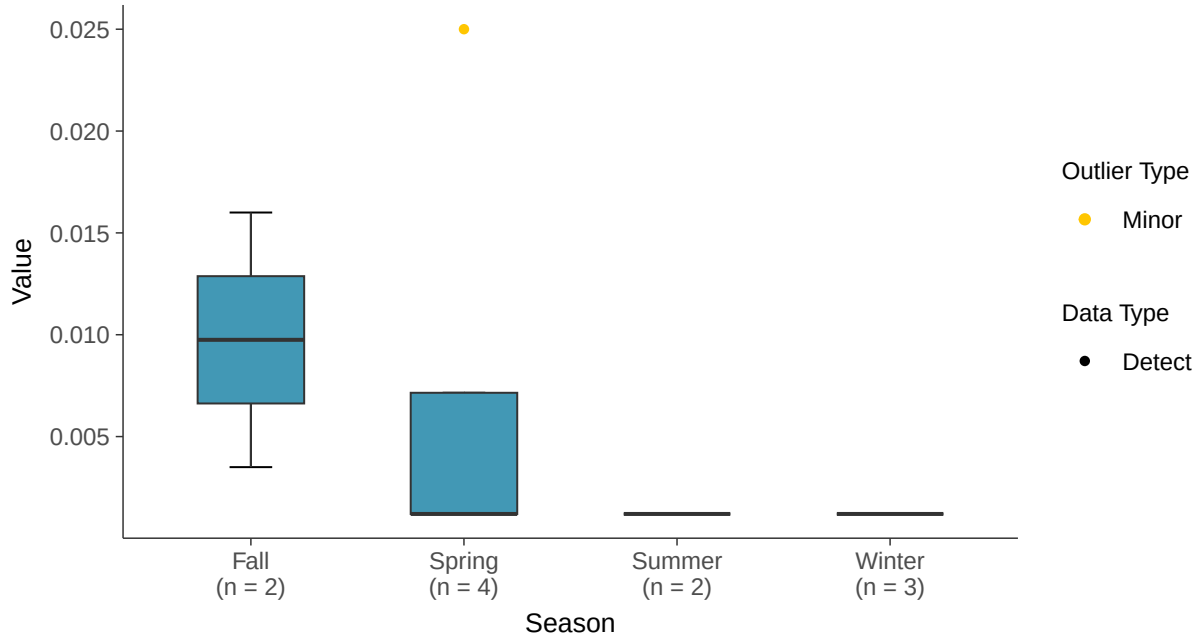
Boxplot

Zinc, MW-07 (mg/L)



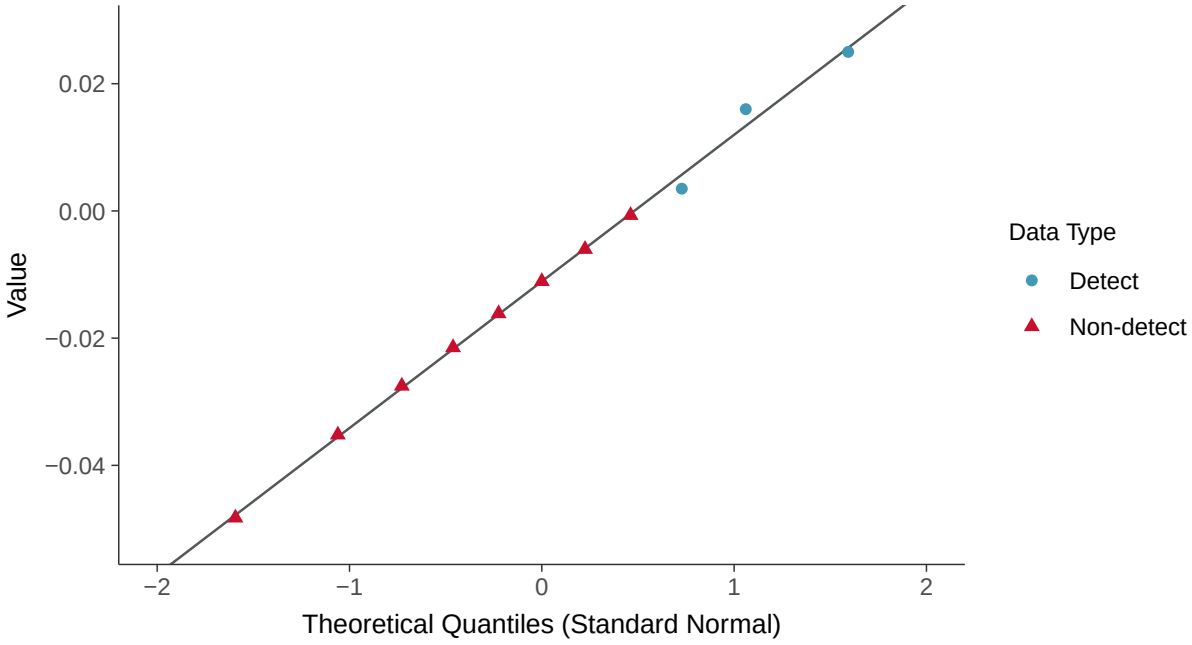
Boxplot by Season

Zinc, MW-07 (mg/L)



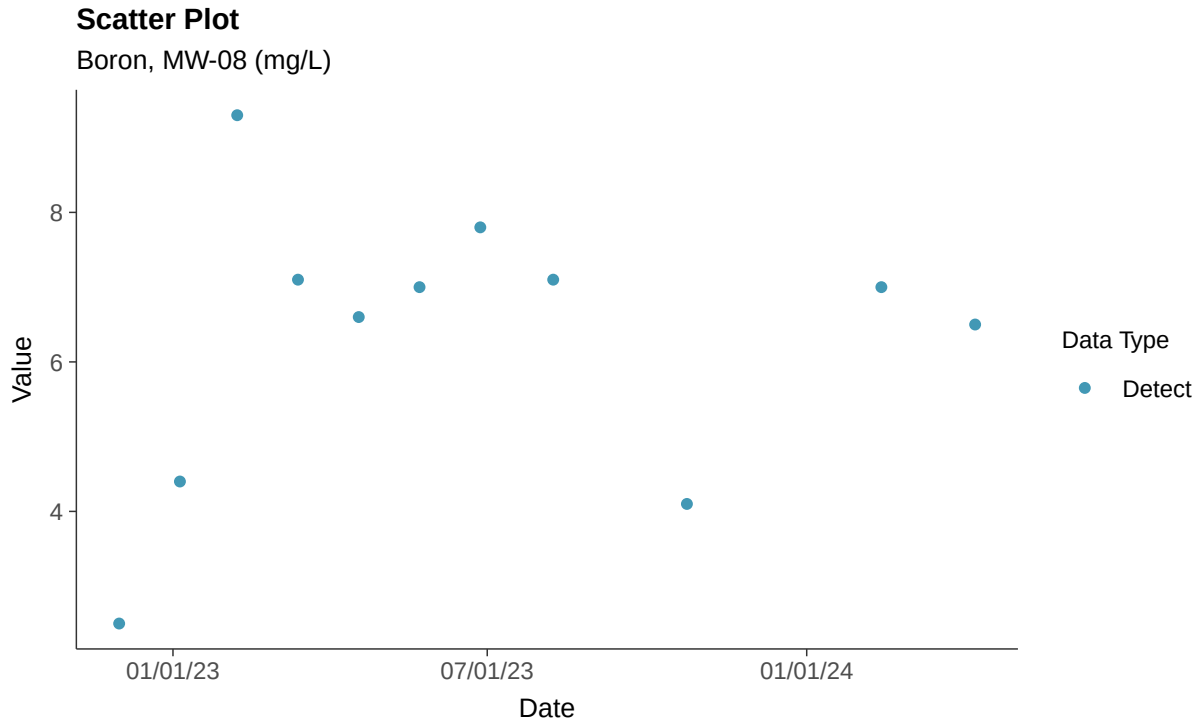
Normal Q-Q plot using ROS Imputed Estimates

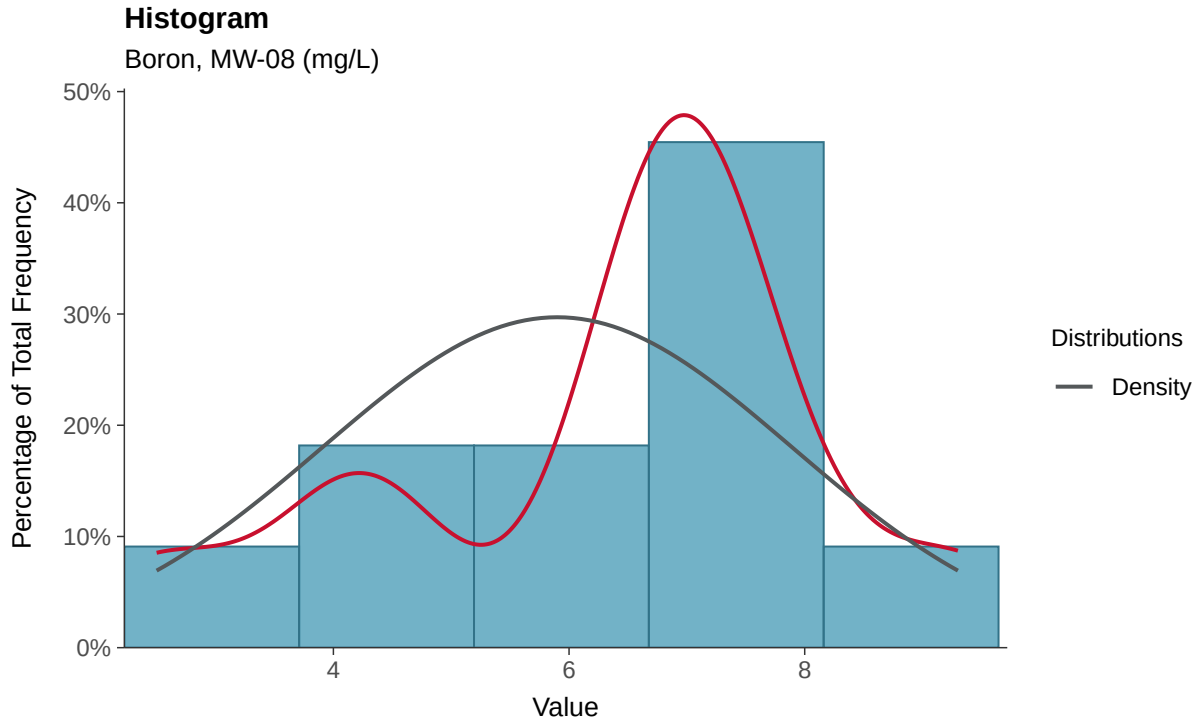
Zinc, MW-07 (mg/L)



Appendix III: Boron, MW-08

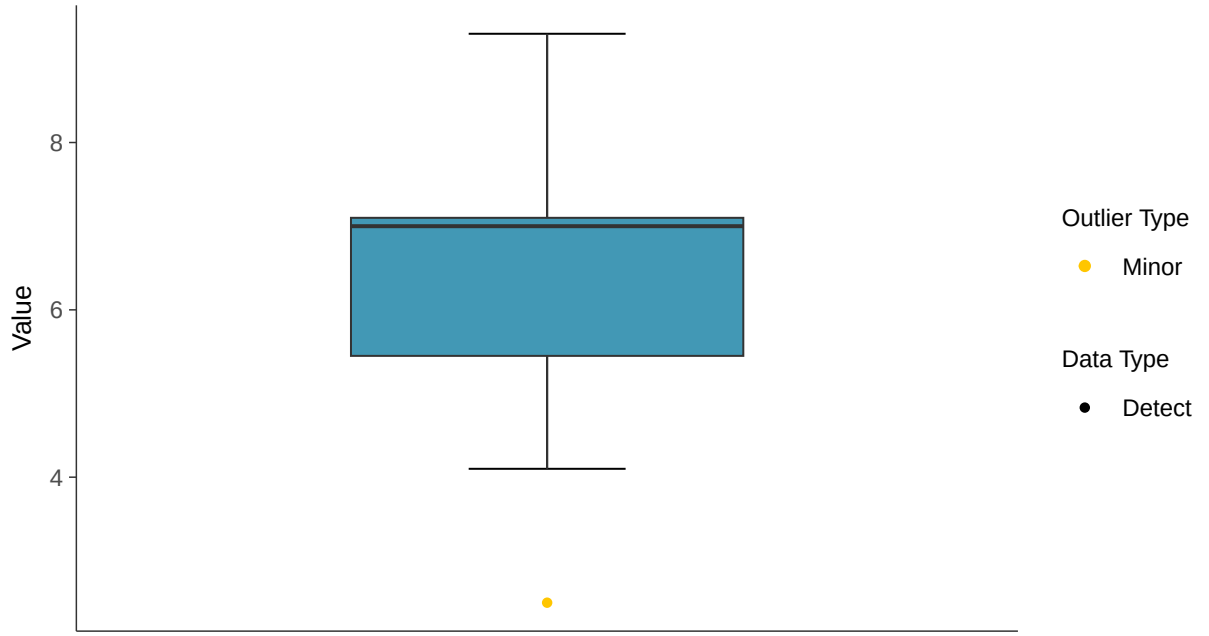
ID: 1_18_4_105





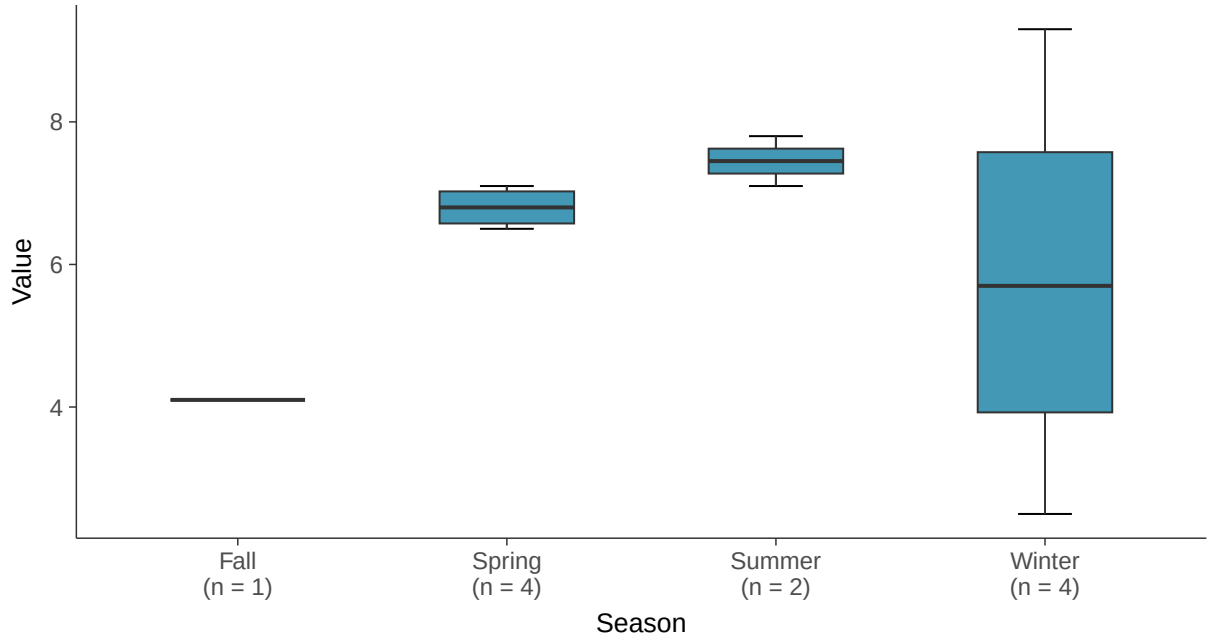
Boxplot

Boron, MW-08 (mg/L)



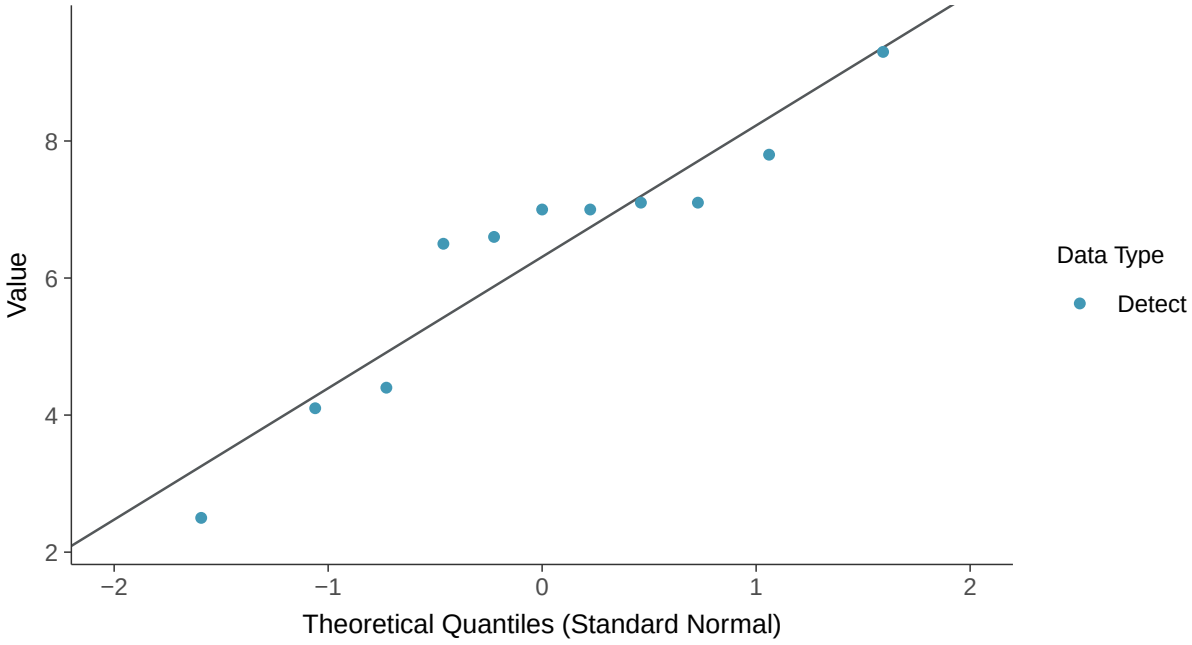
Boxplot by Season

Boron, MW-08 (mg/L)



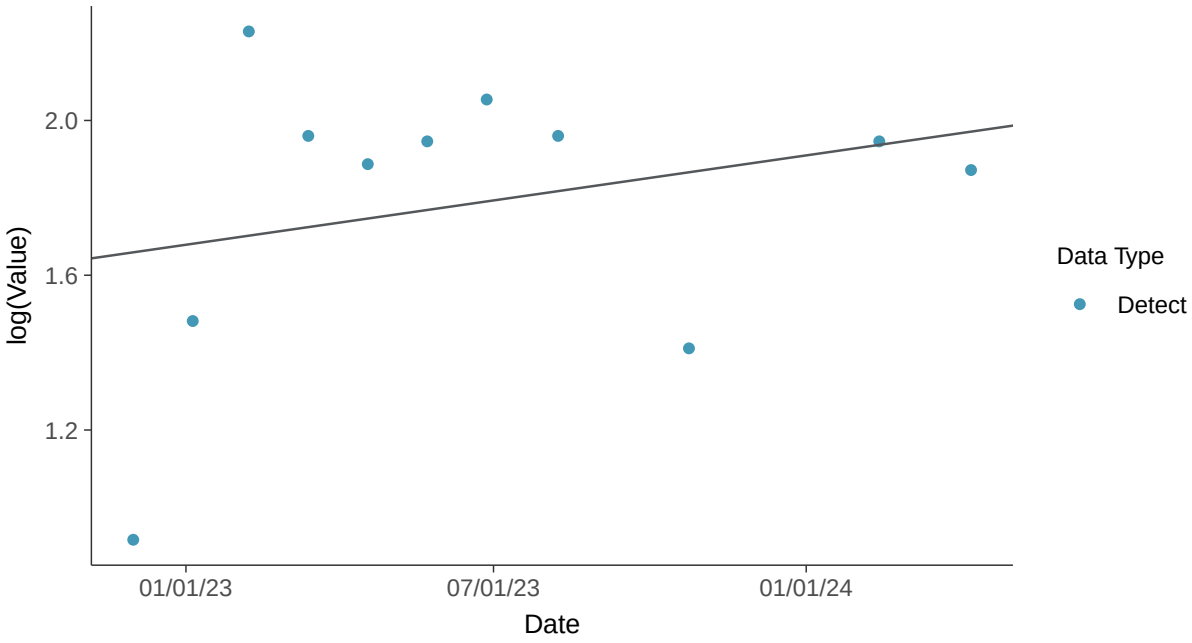
Normal Q-Q plot

Boron, MW-08 (mg/L)



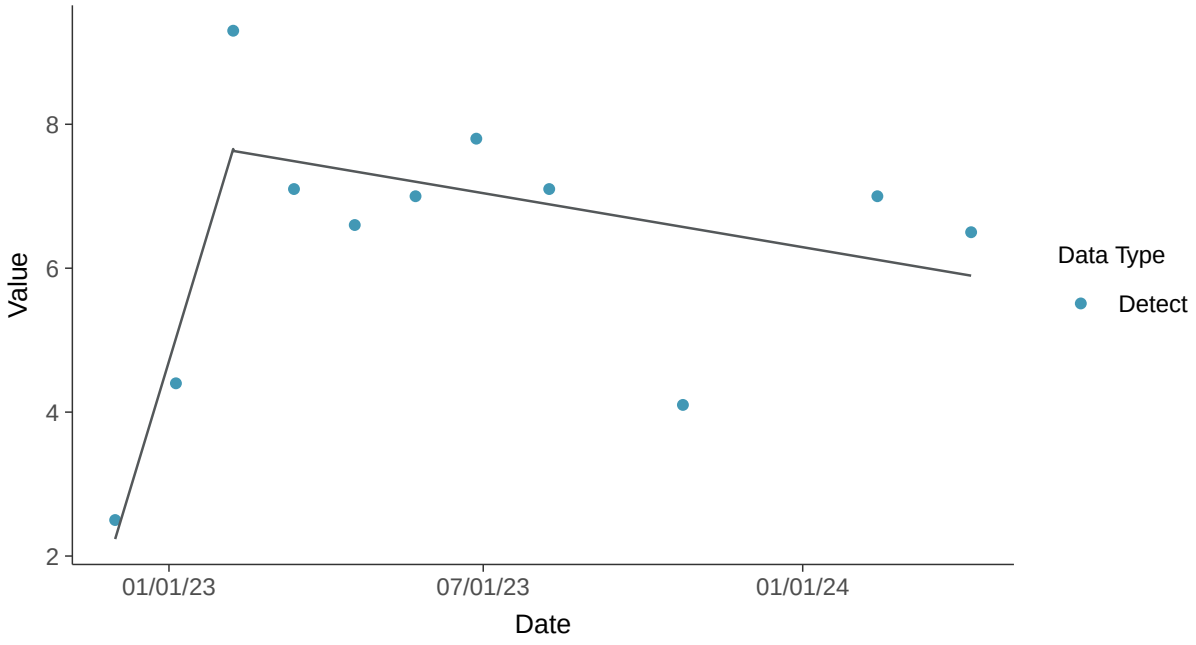
Trend Regression: Lognormal MLE

Boron, MW-08 (mg/L)



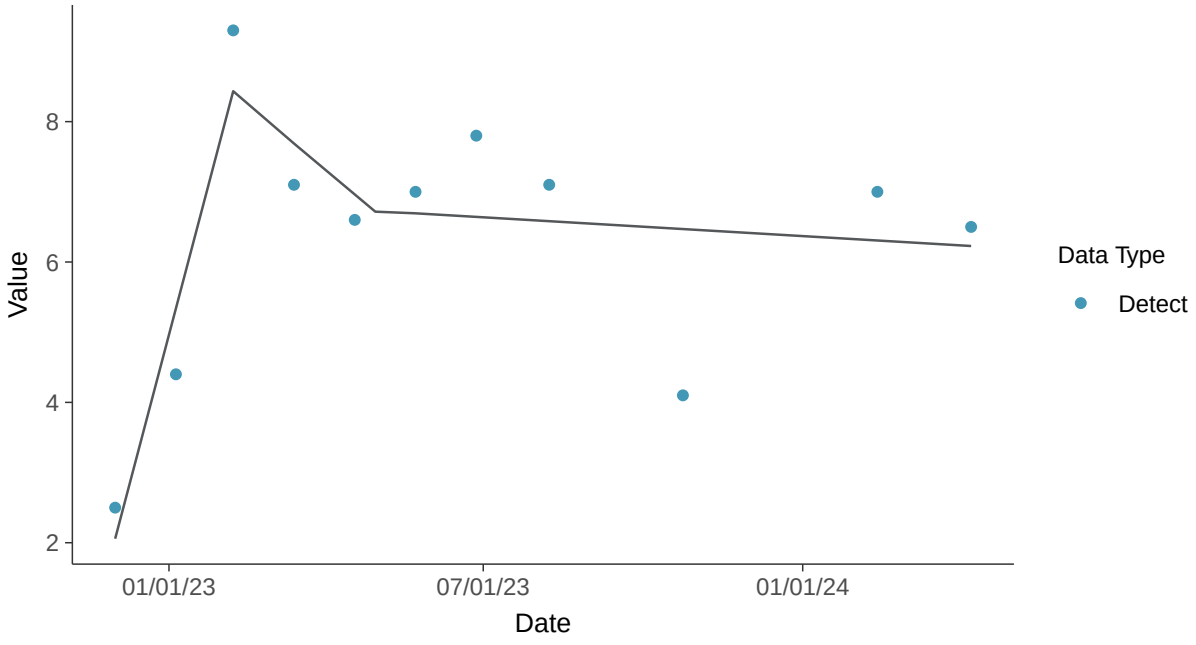
Trend Regression: Piecewise Linear-Linear

Boron, MW-08 (mg/L)



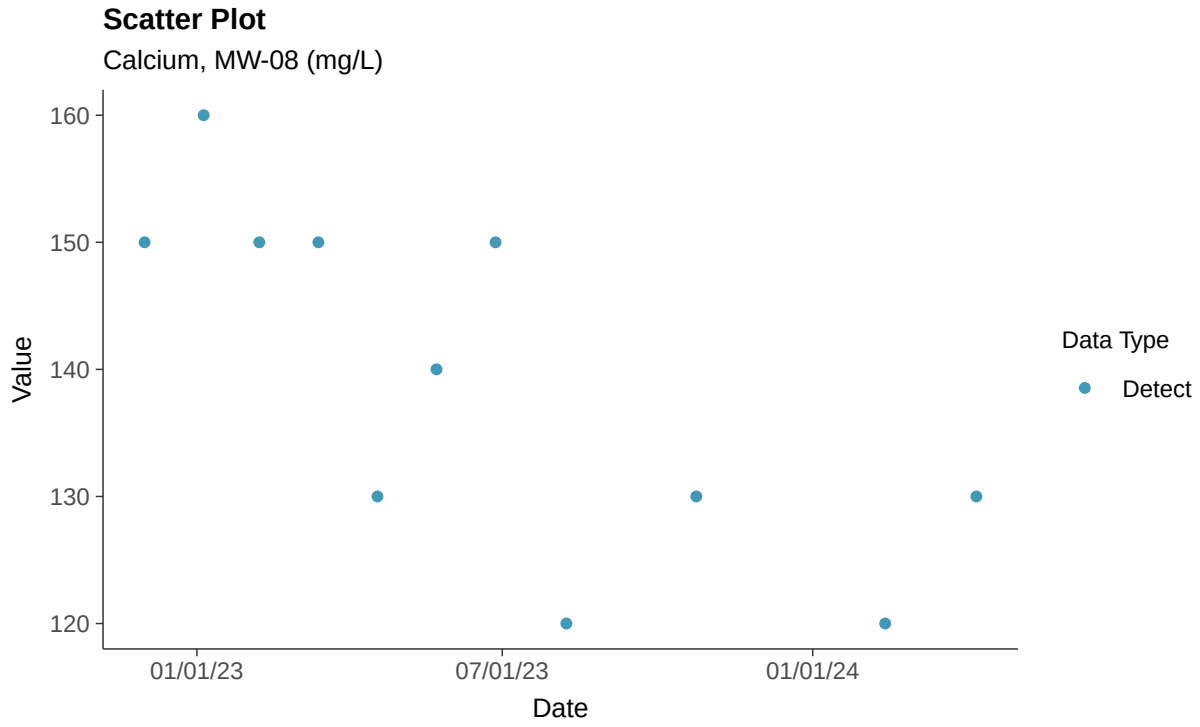
Trend Regression: Piecewise Linear-Linear-Linear

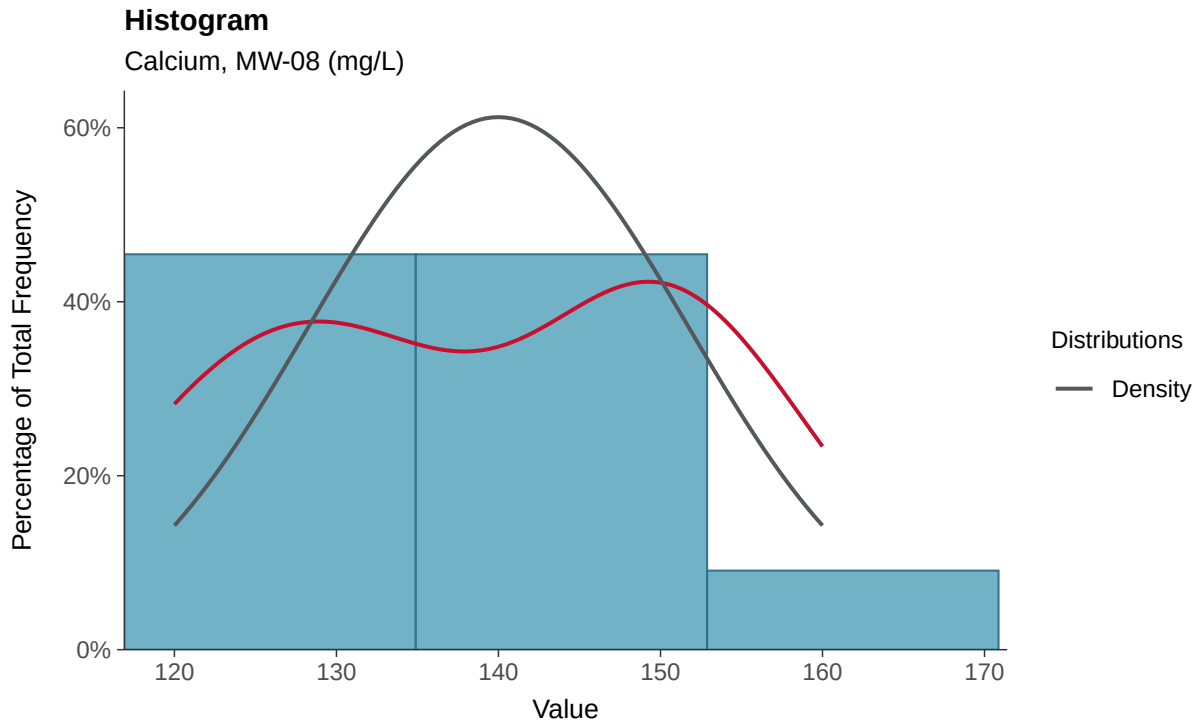
Boron, MW-08 (mg/L)



Appendix III: Calcium, MW-08

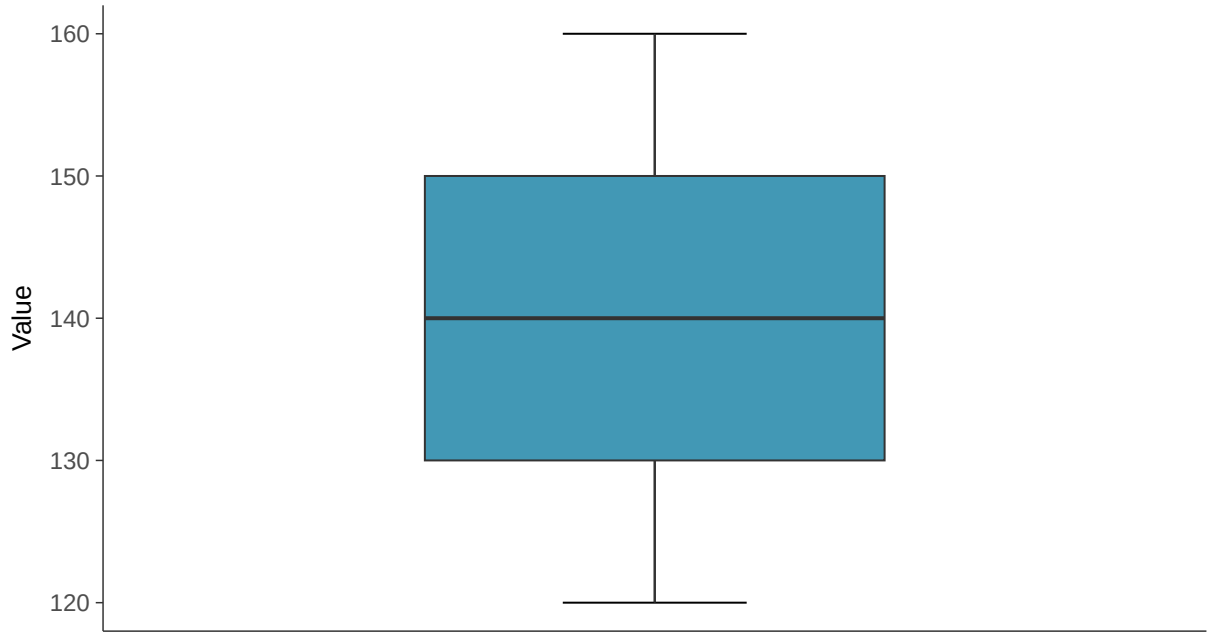
ID: 1_18_4_107





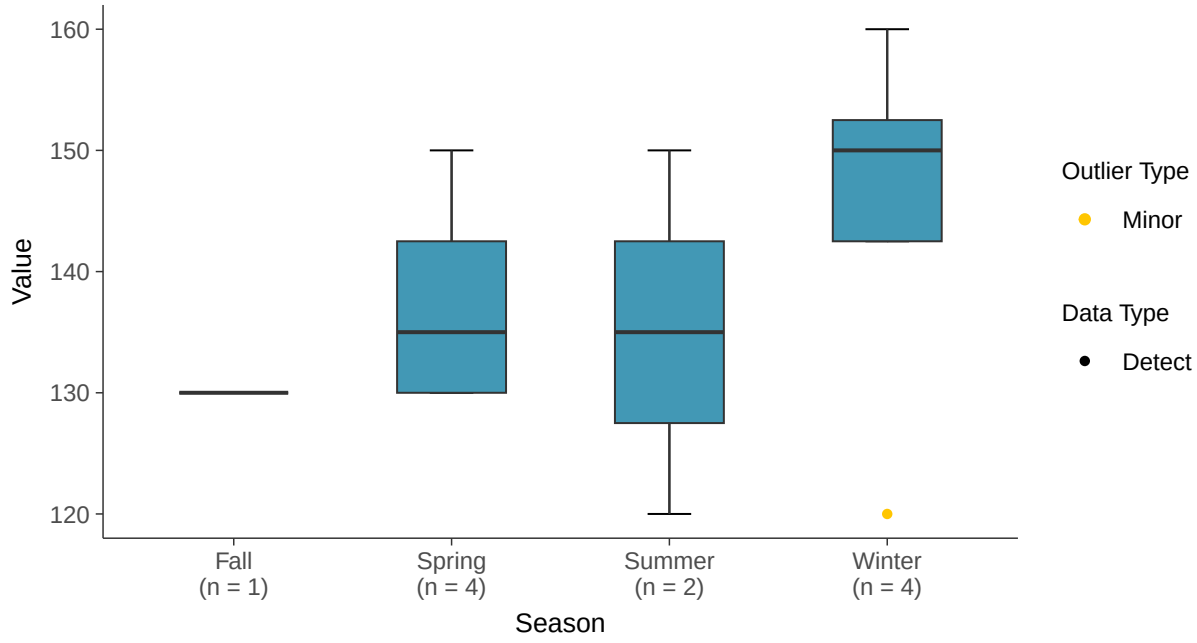
Boxplot

Calcium, MW-08 (mg/L)



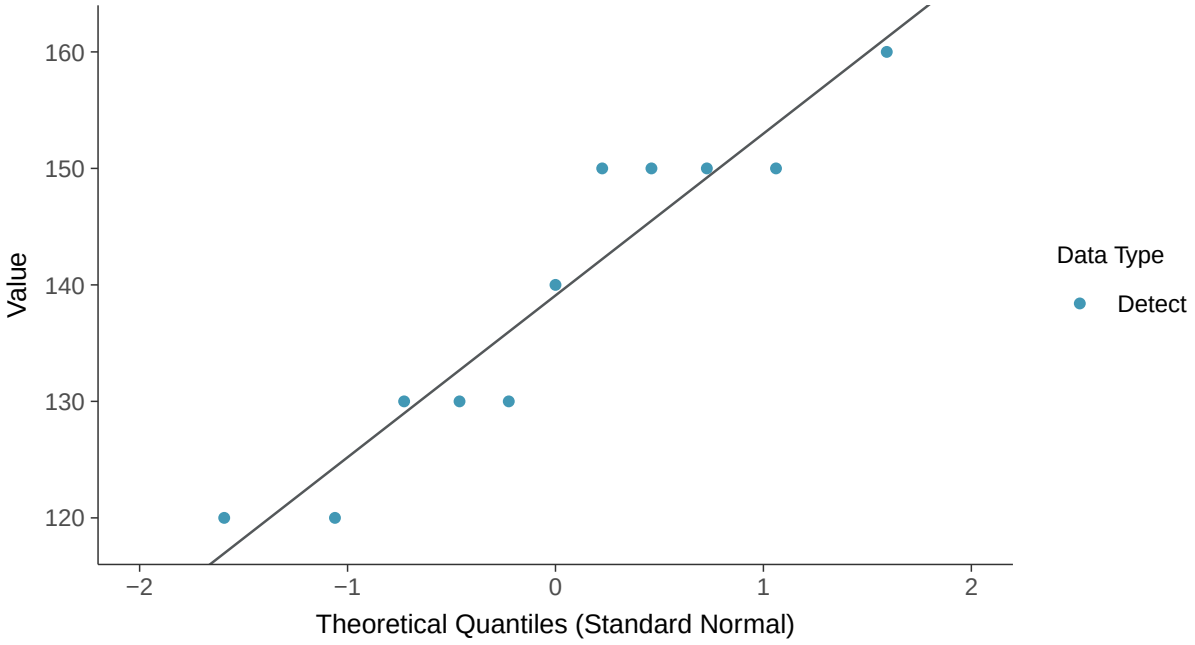
Boxplot by Season

Calcium, MW-08 (mg/L)



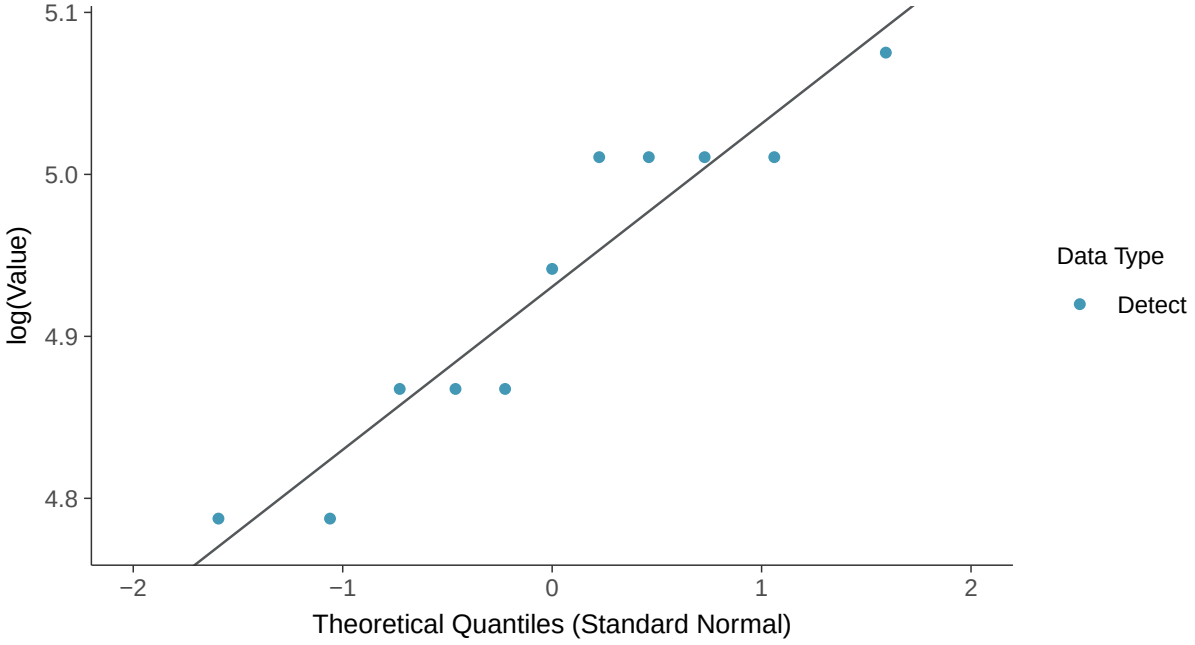
Normal Q-Q plot

Calcium, MW-08 (mg/L)



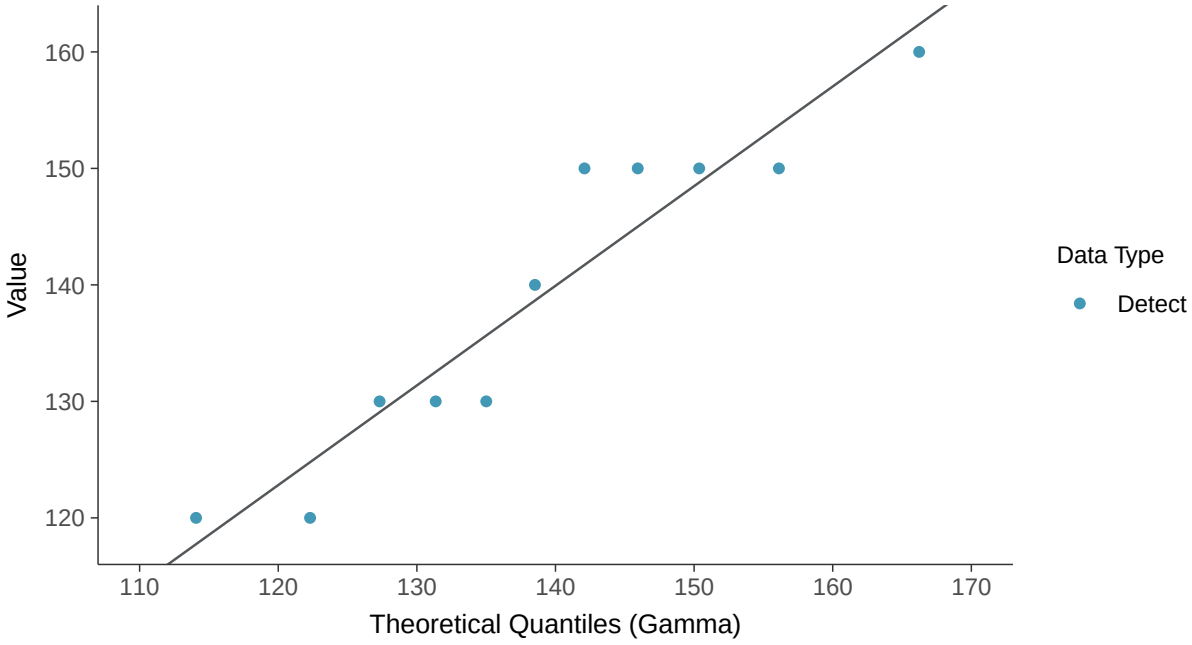
Lognormal Q-Q plot

Calcium, MW-08 (mg/L)



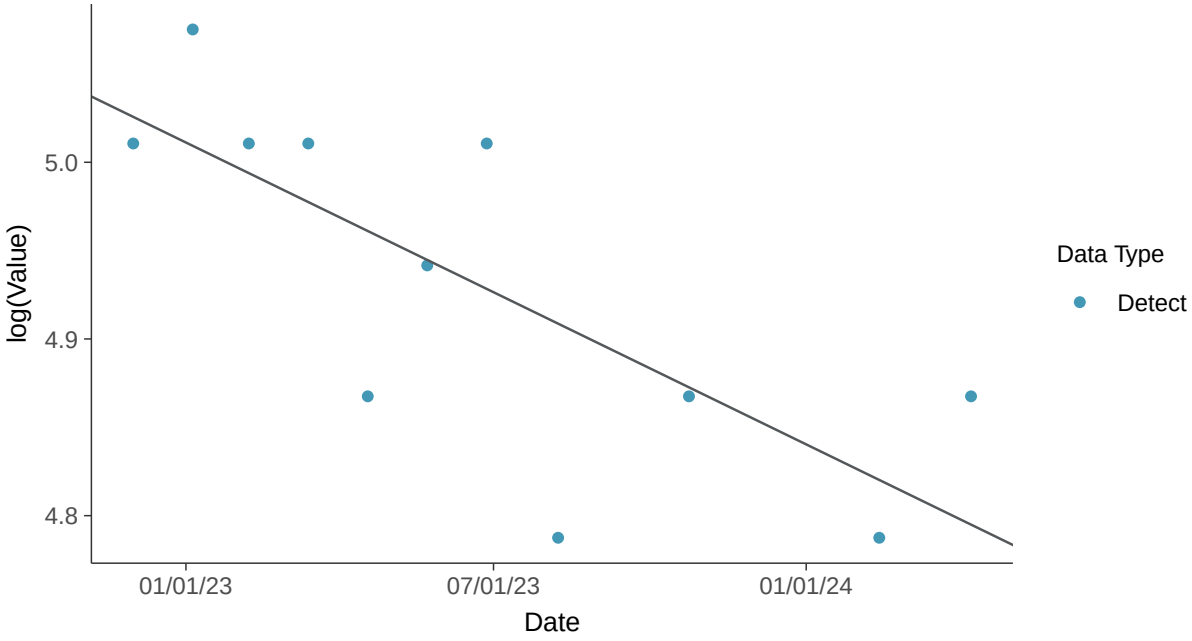
Gamma Q-Q plot

Calcium, MW-08 (mg/L)



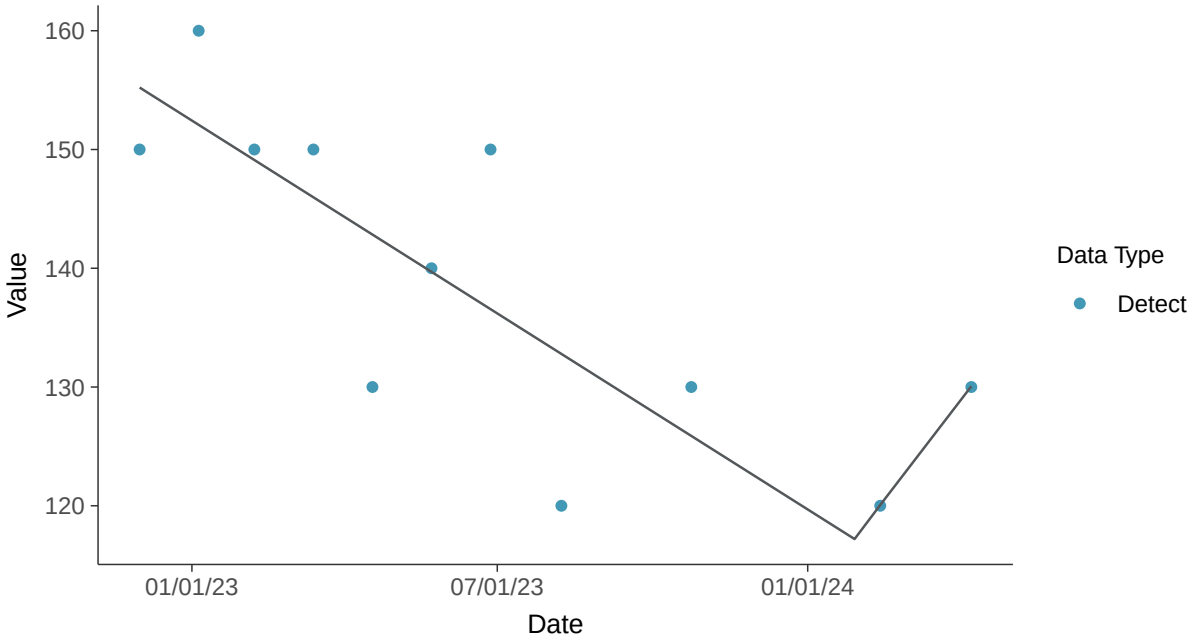
Trend Regression: Lognormal MLE

Calcium, MW-08 (mg/L)



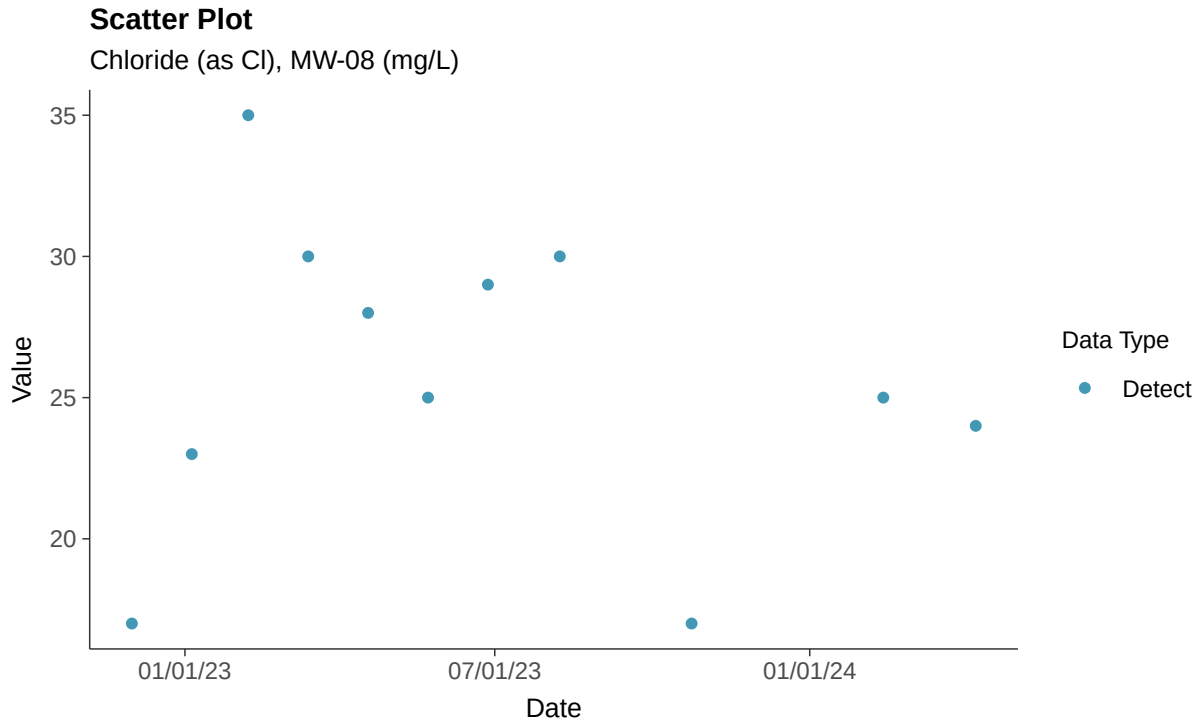
Trend Regression: Piecewise Linear-Linear

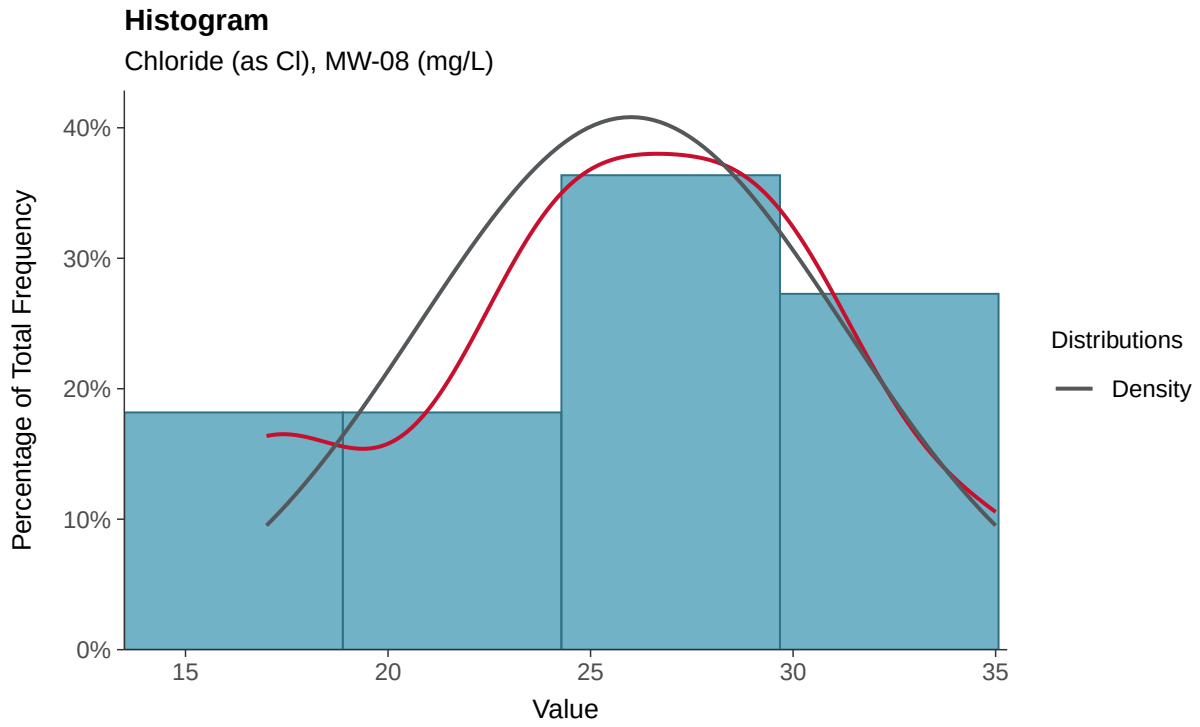
Calcium, MW-08 (mg/L)



Appendix III: Chloride (as Cl), MW-08

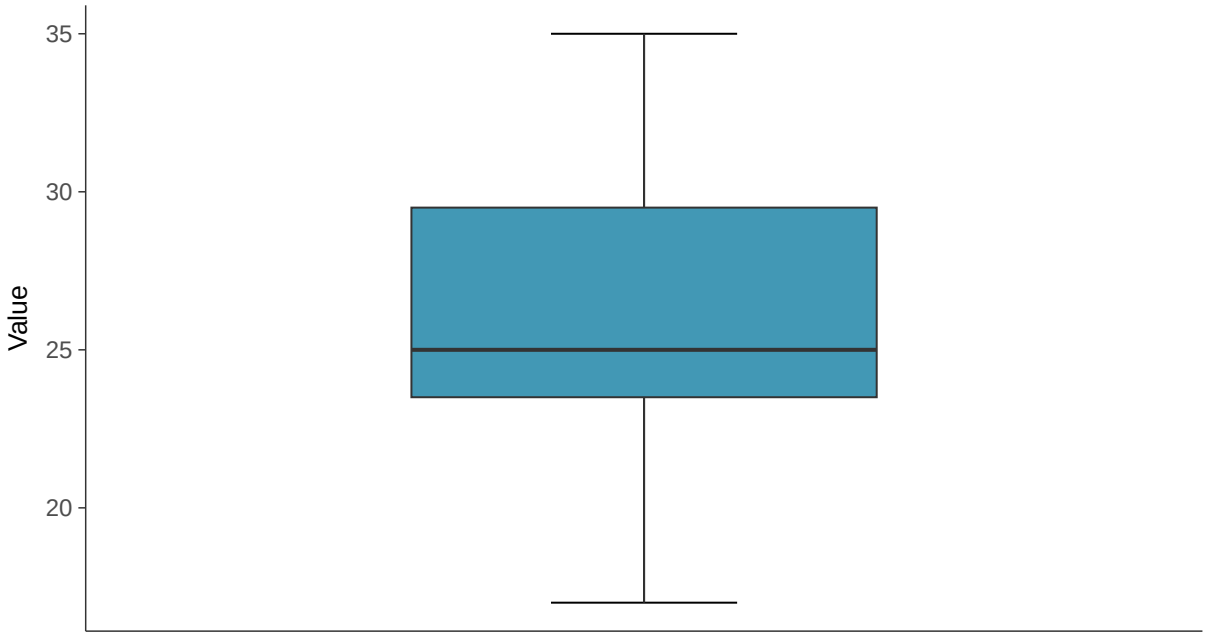
ID: 1_18_4_108





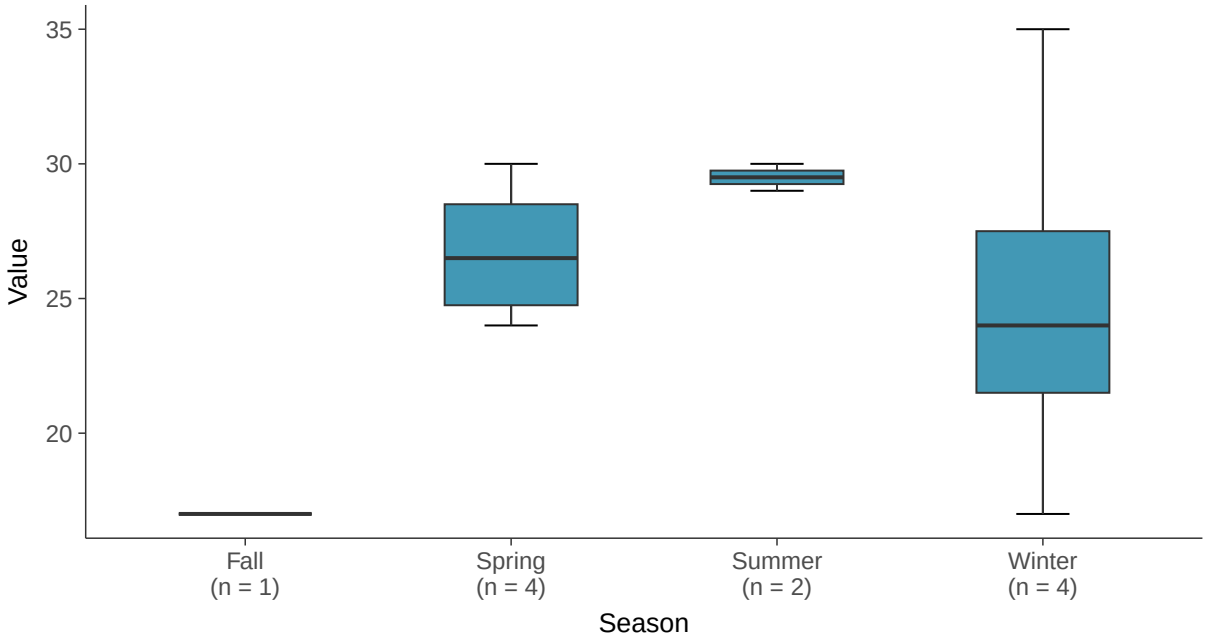
Boxplot

Chloride (as Cl), MW-08 (mg/L)



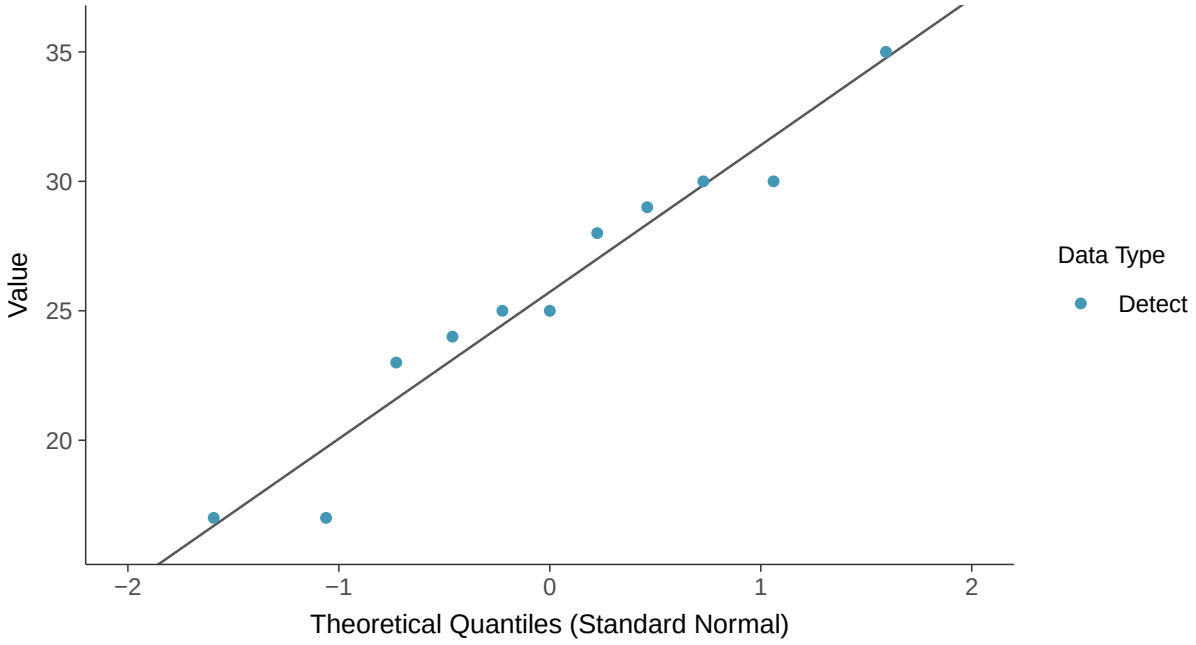
Boxplot by Season

Chloride (as Cl), MW-08 (mg/L)



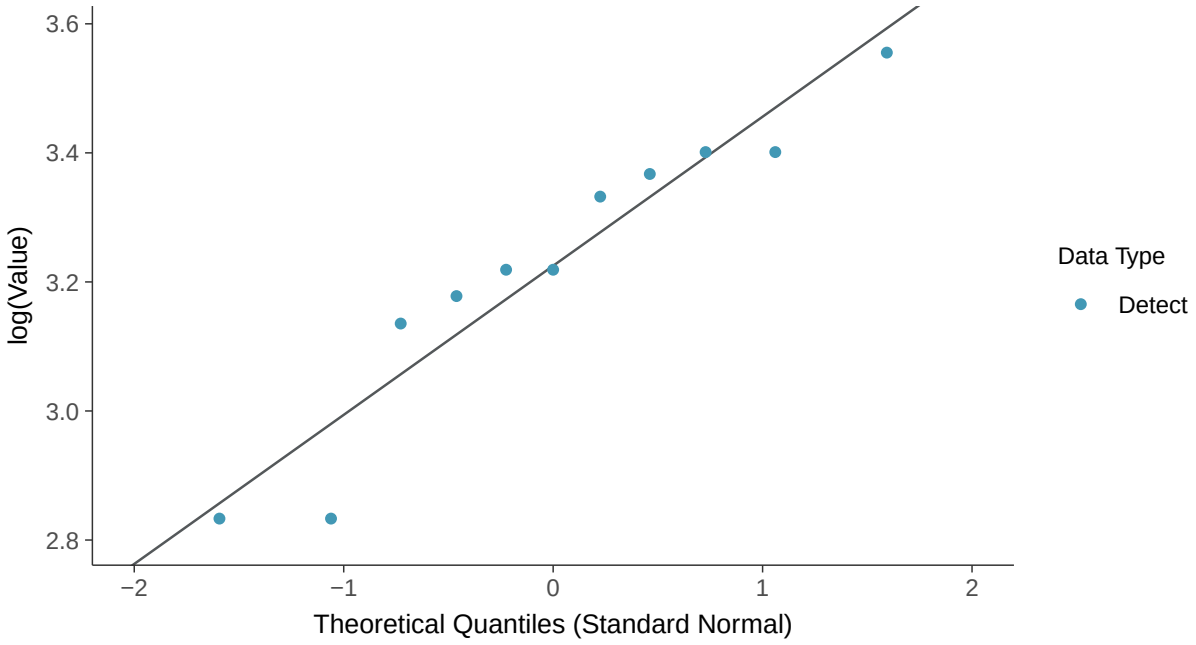
Normal Q-Q plot

Chloride (as Cl), MW-08 (mg/L)



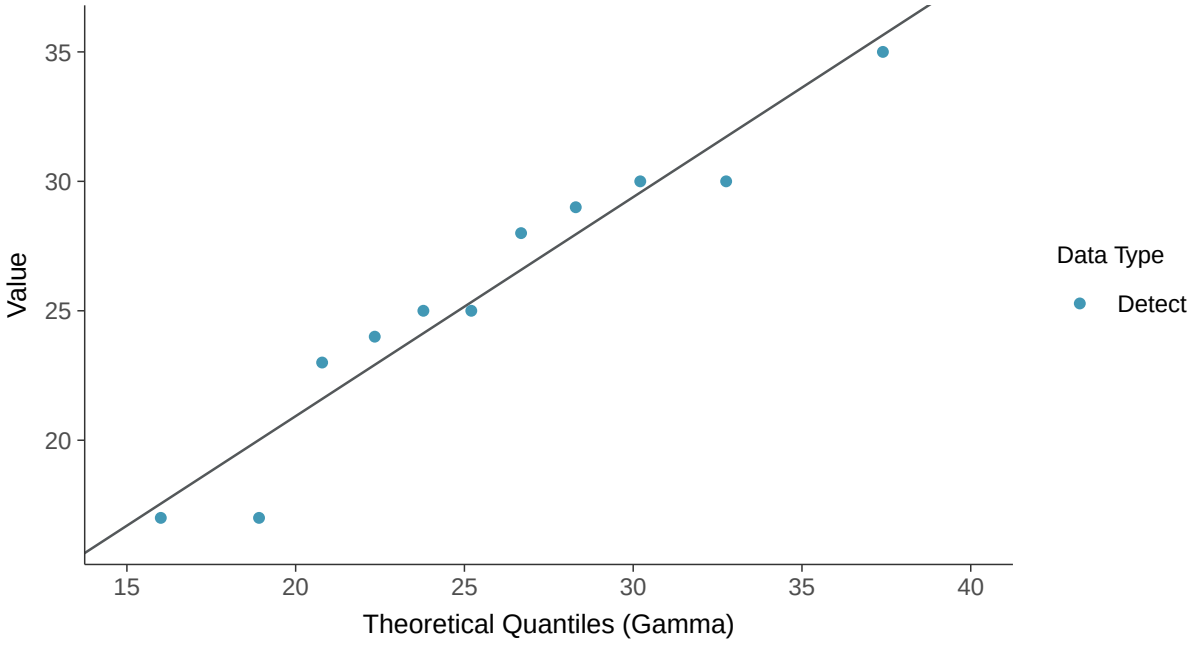
Lognormal Q-Q plot

Chloride (as Cl), MW-08 (mg/L)



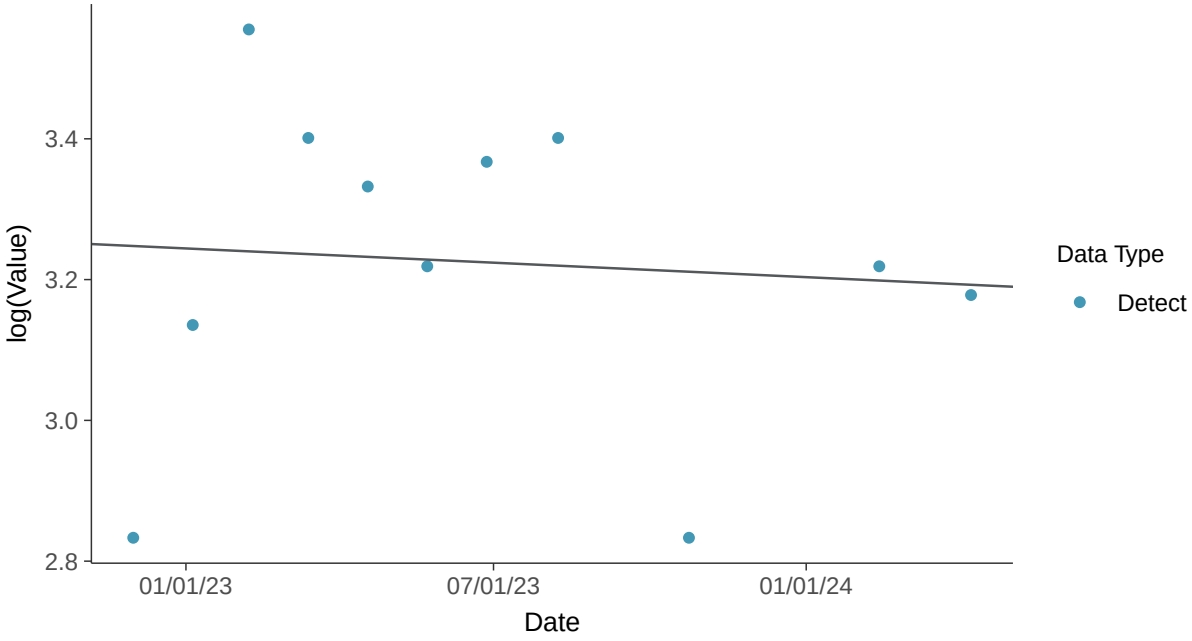
Gamma Q-Q plot

Chloride (as Cl), MW-08 (mg/L)



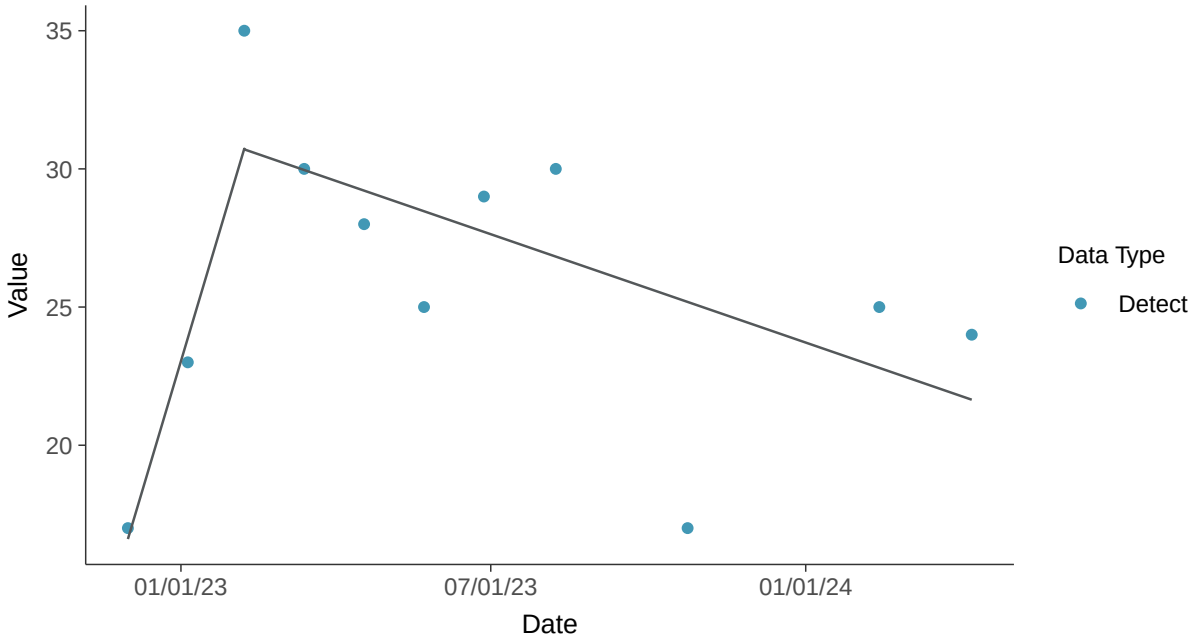
Trend Regression: Lognormal MLE

Chloride (as Cl), MW-08 (mg/L)



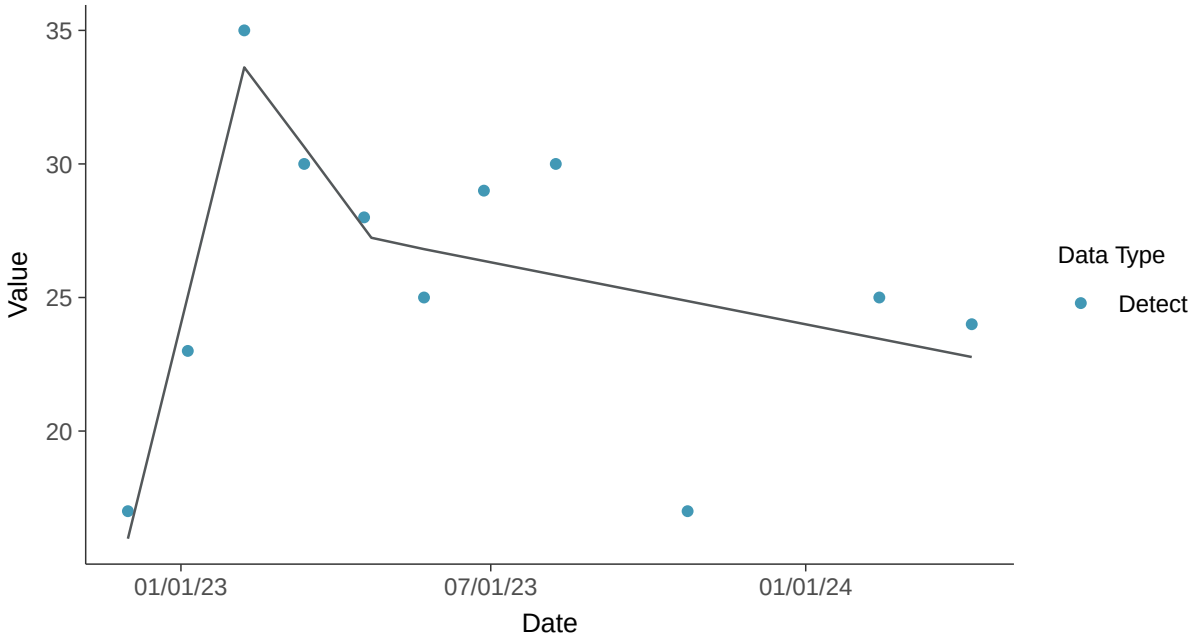
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-08 (mg/L)



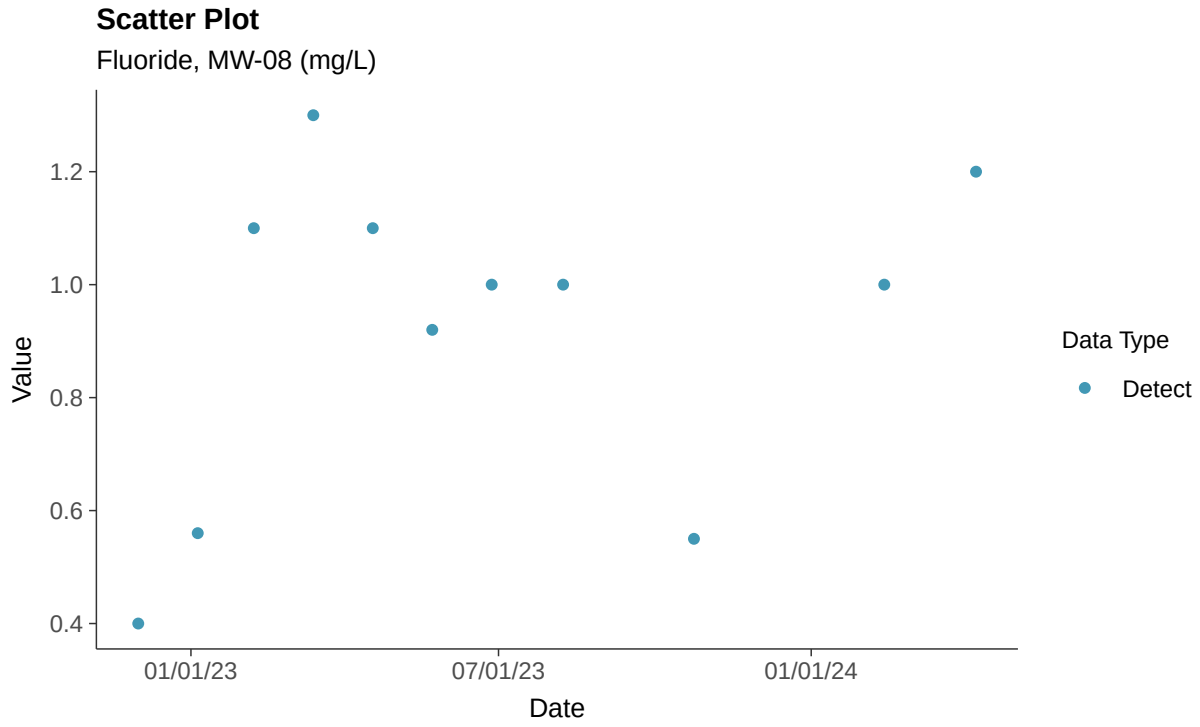
Trend Regression: Piecewise Linear-Linear-Linear

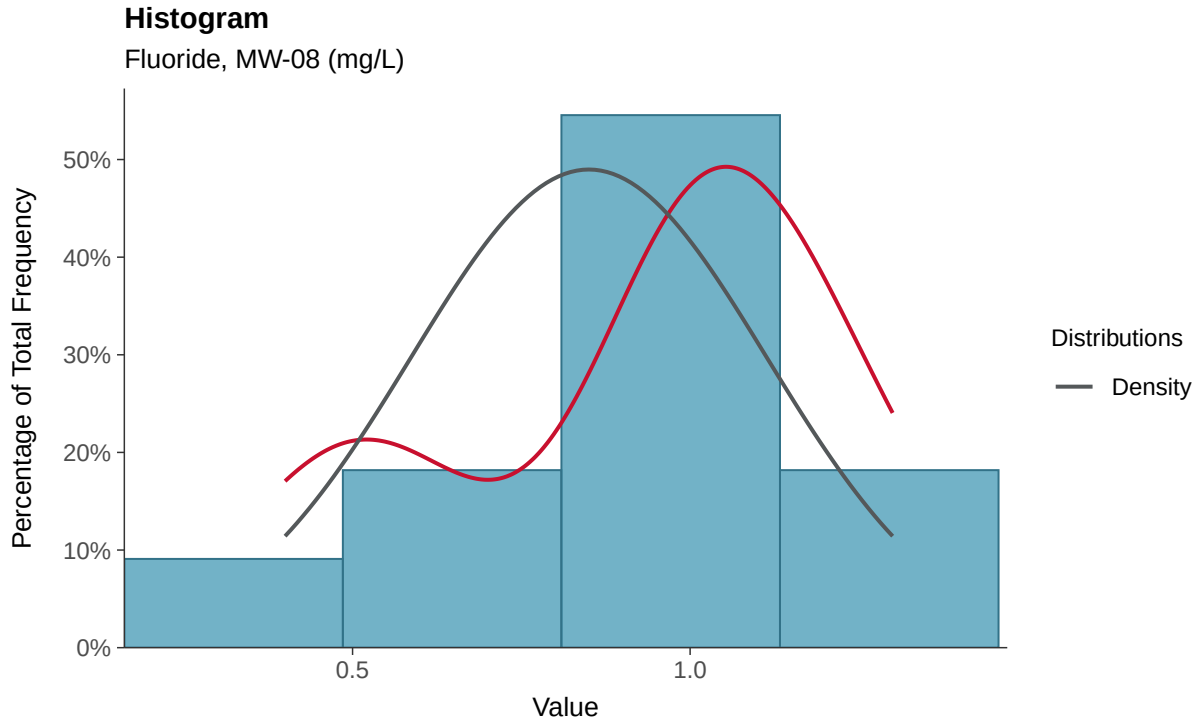
Chloride (as Cl), MW-08 (mg/L)



Appendix III: Fluoride, MW-08

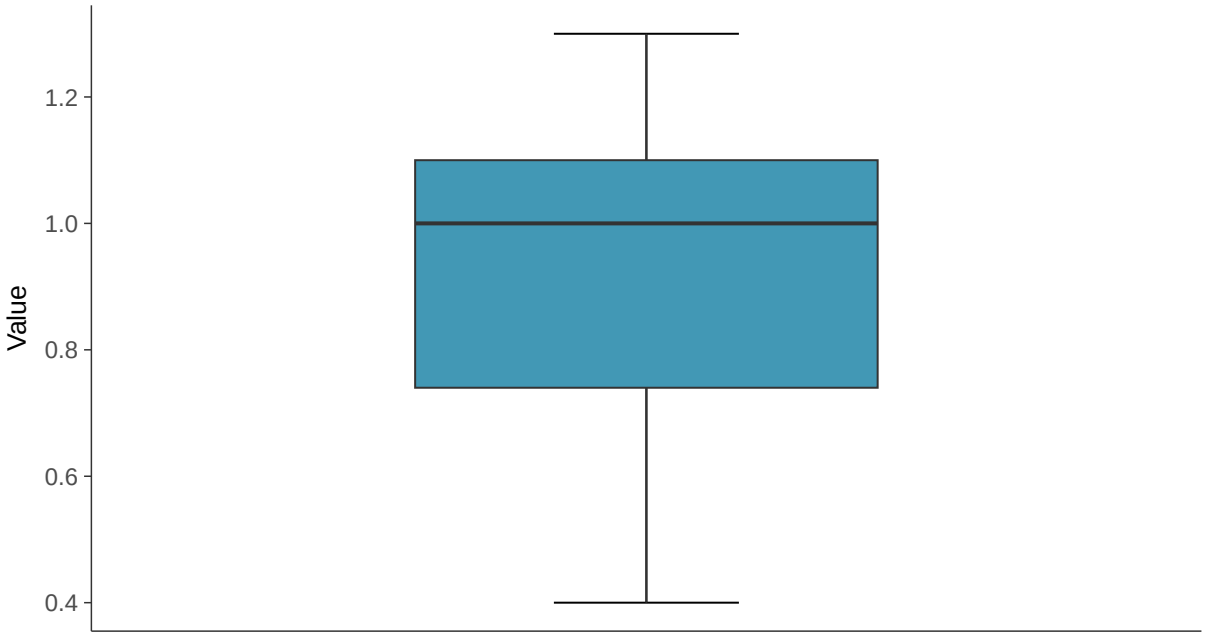
ID: 1_18_4_112





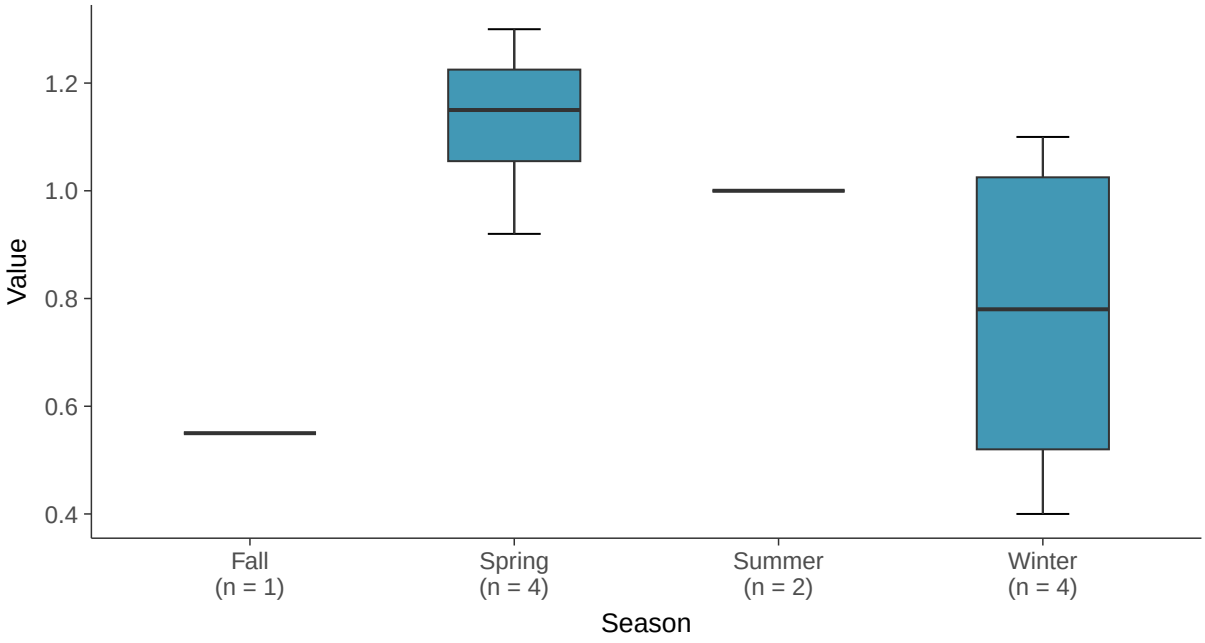
Boxplot

Fluoride, MW-08 (mg/L)



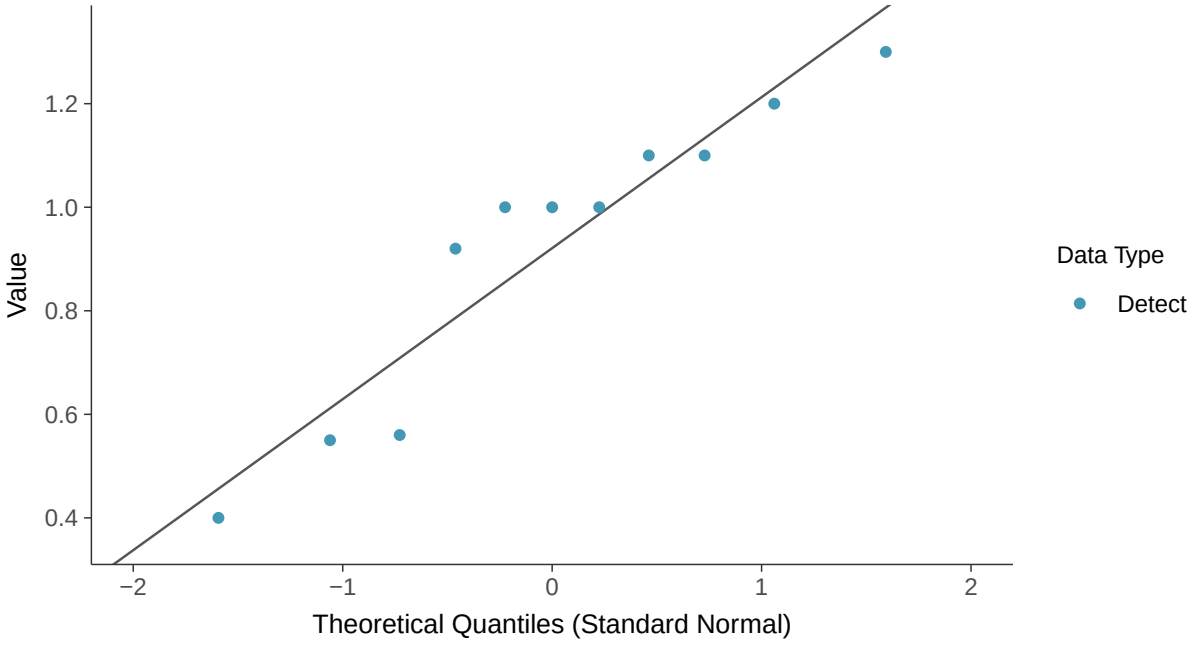
Boxplot by Season

Fluoride, MW-08 (mg/L)



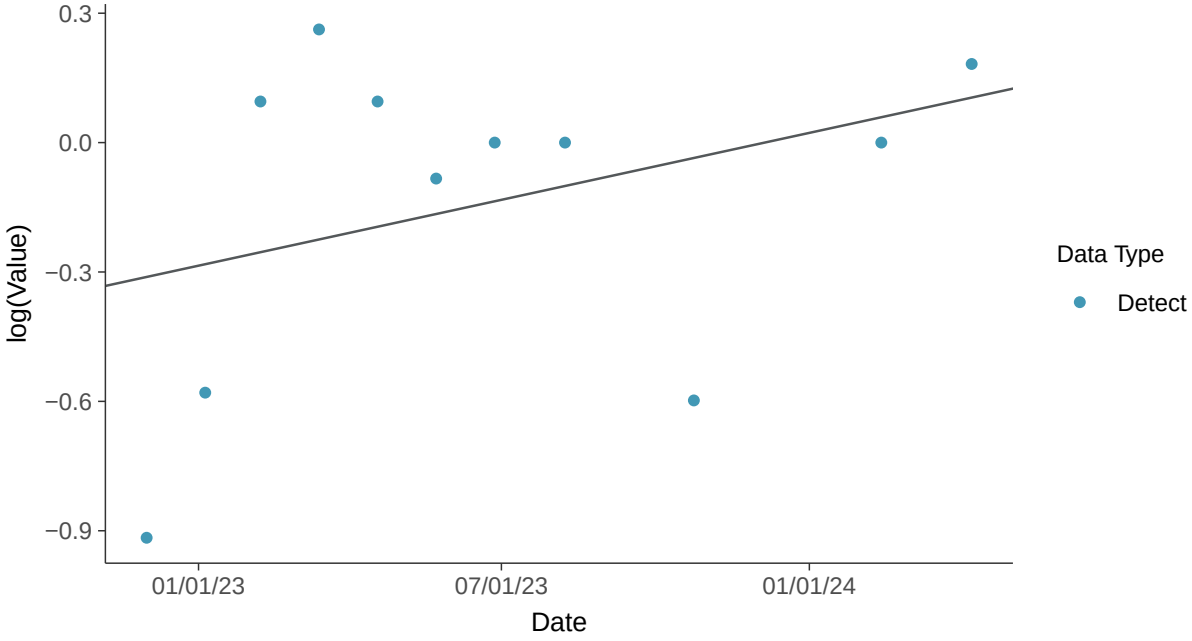
Normal Q-Q plot

Fluoride, MW-08 (mg/L)



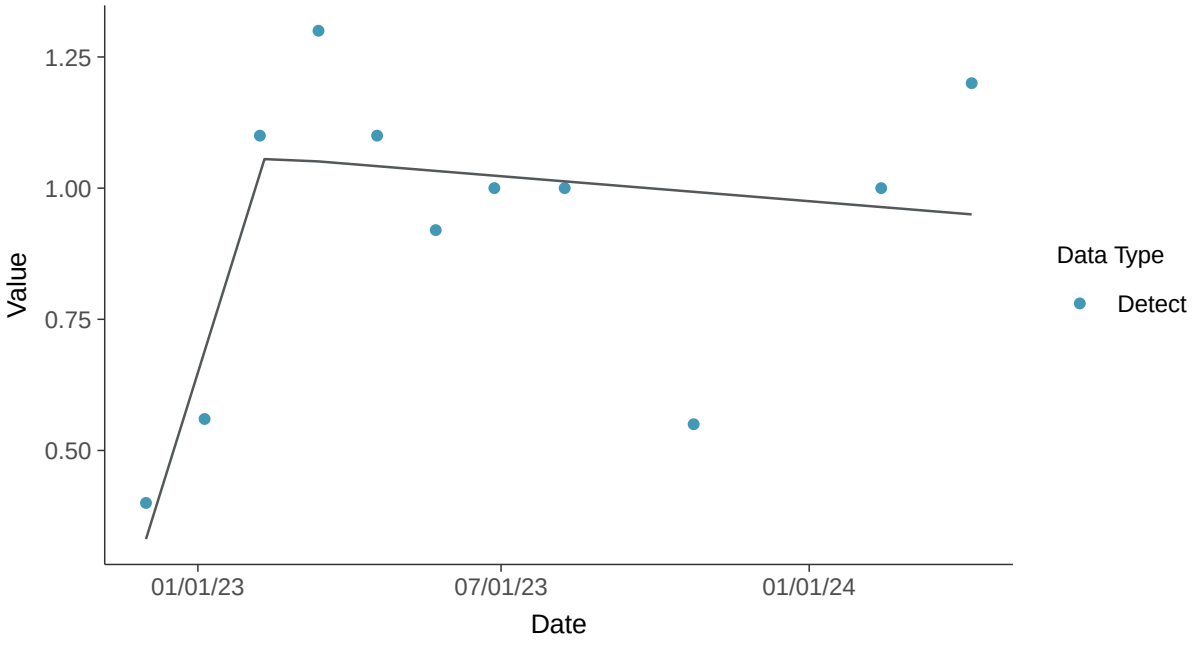
Trend Regression: Lognormal MLE

Fluoride, MW-08 (mg/L)



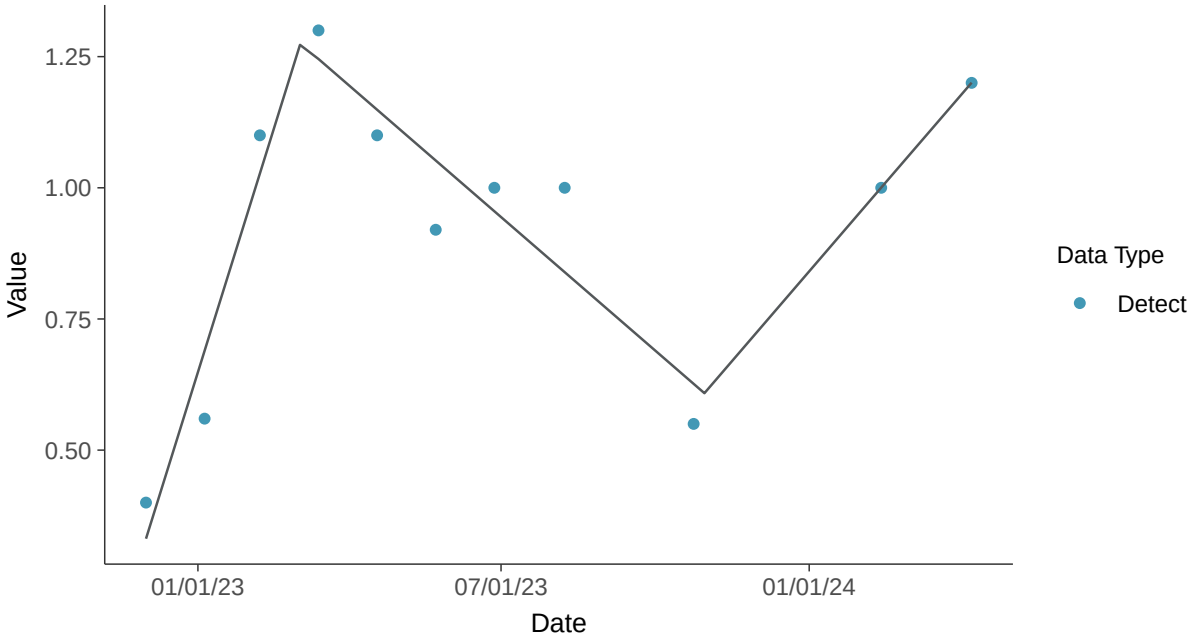
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-08 (mg/L)



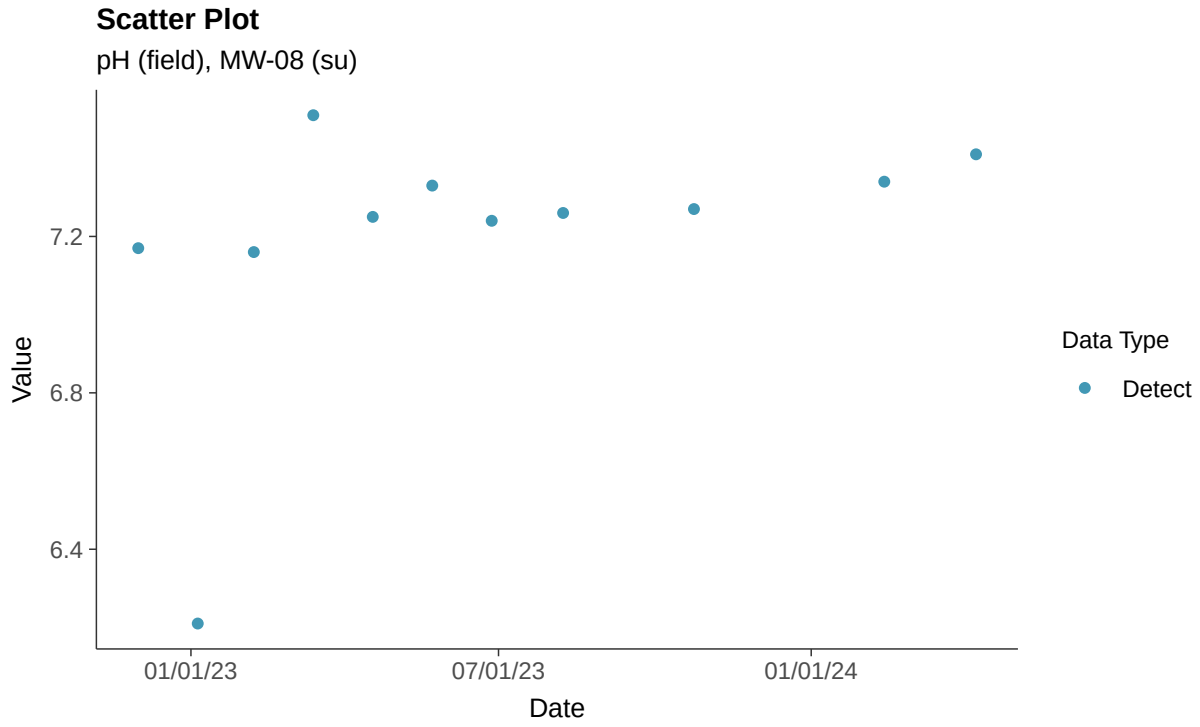
Trend Regression: Piecewise Linear-Linear-Linear

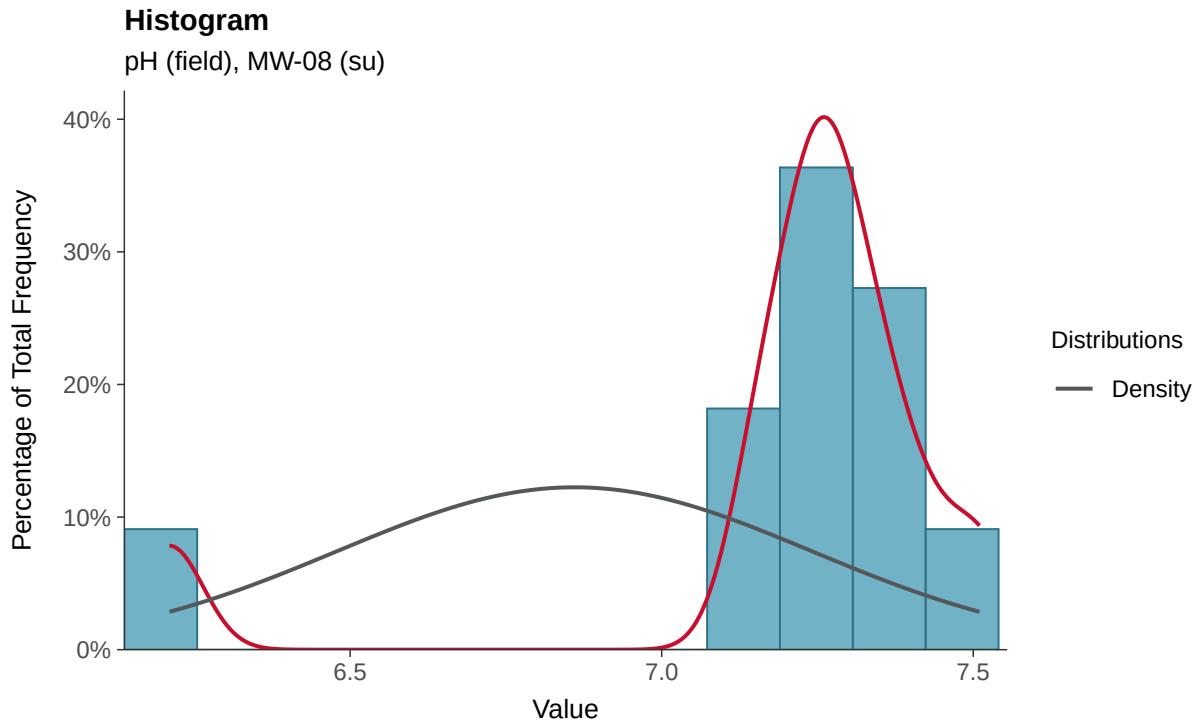
Fluoride, MW-08 (mg/L)



Appendix III: pH (field), MW-08

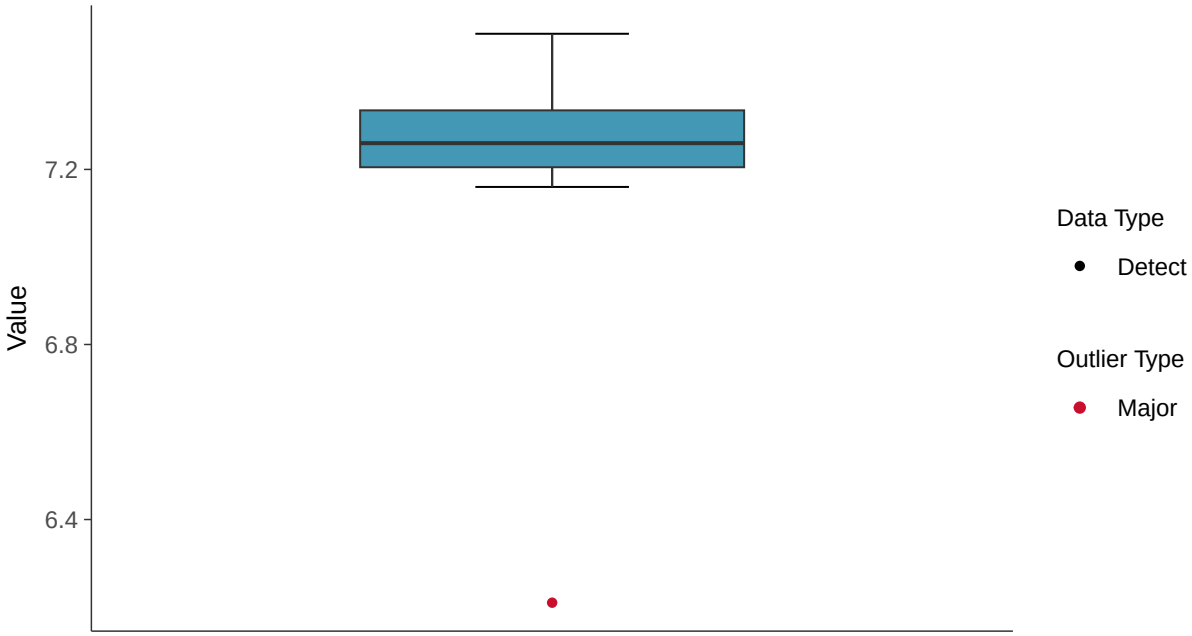
ID: 1_18_4_120





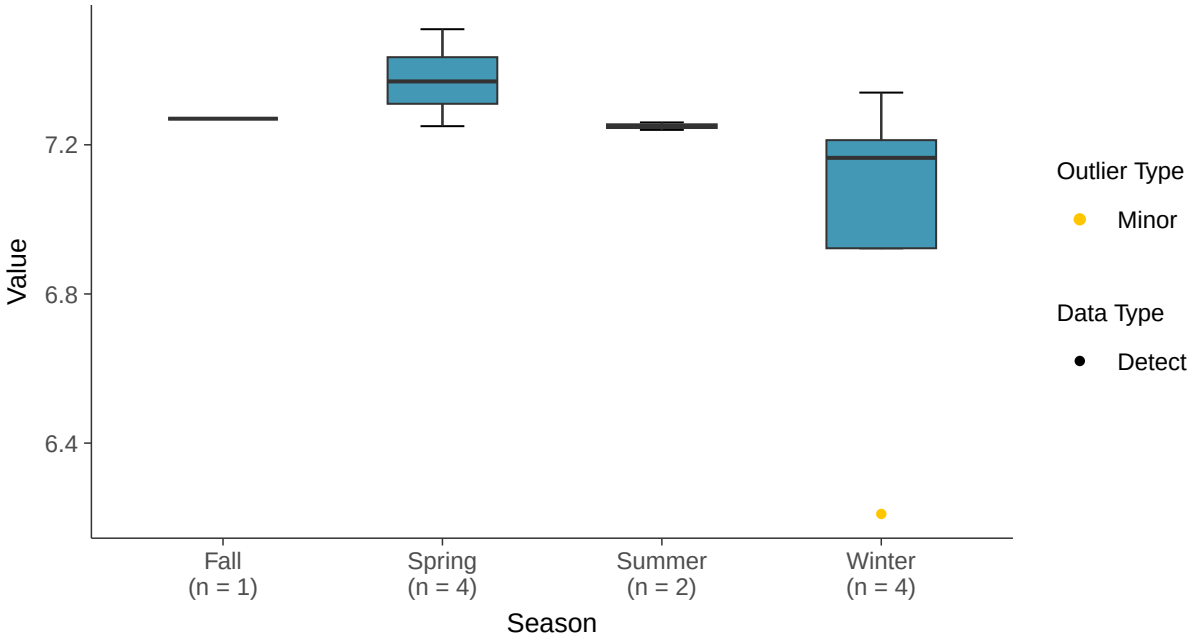
Boxplot

pH (field), MW-08 (su)



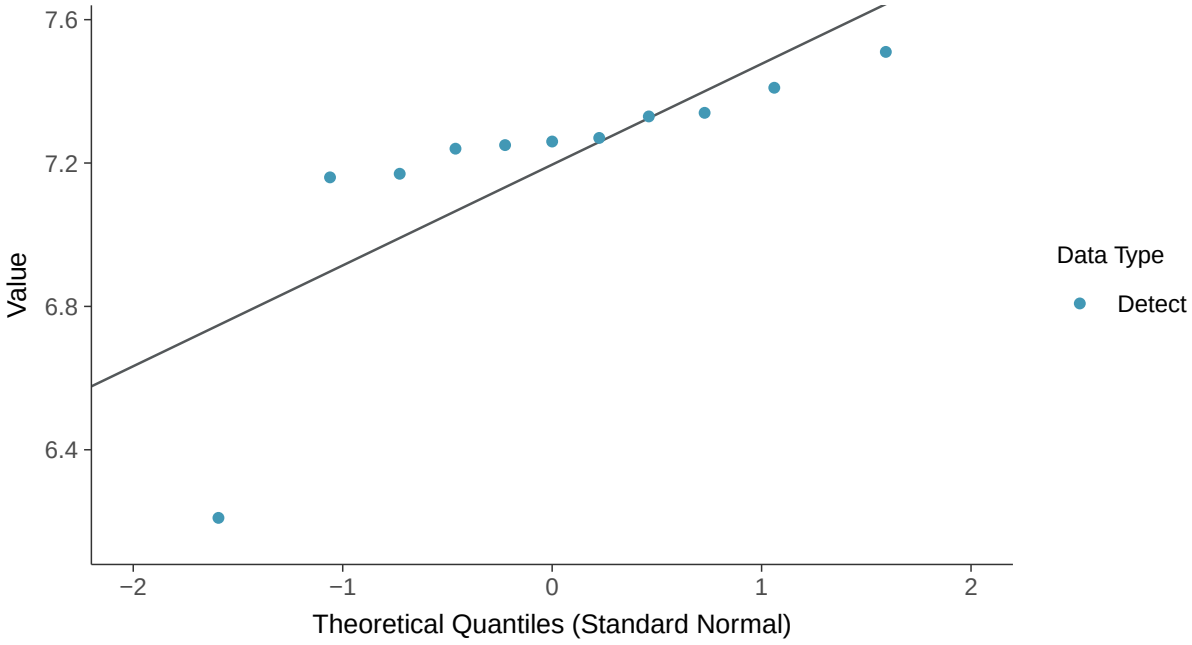
Boxplot by Season

pH (field), MW-08 (su)



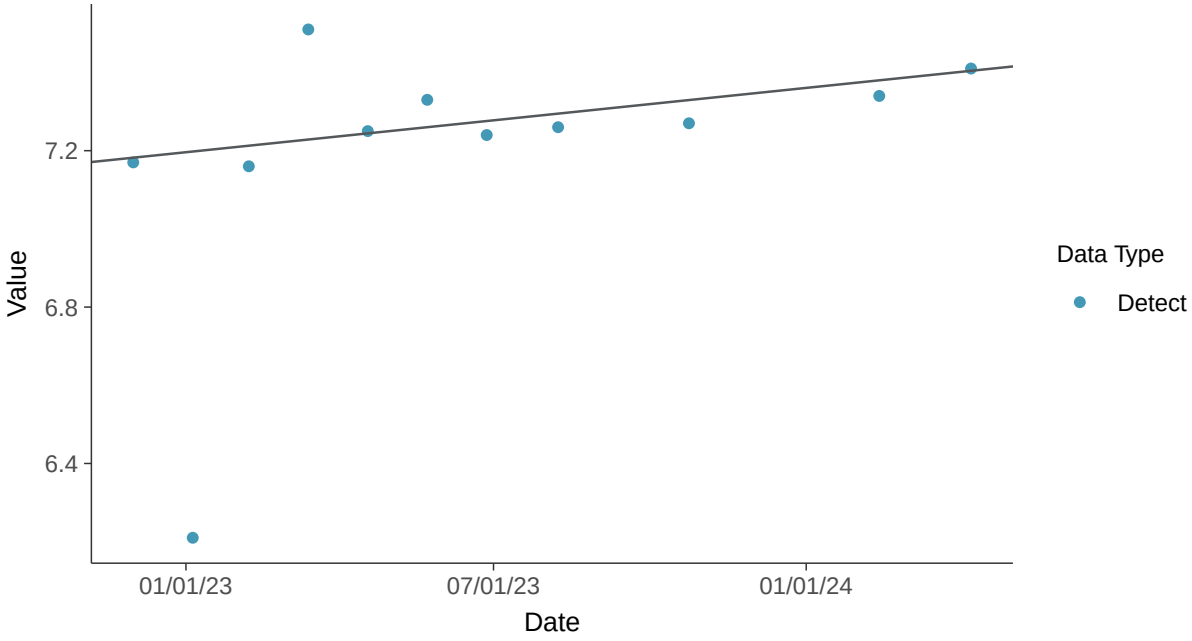
Normal Q-Q plot

pH (field), MW-08 (su)



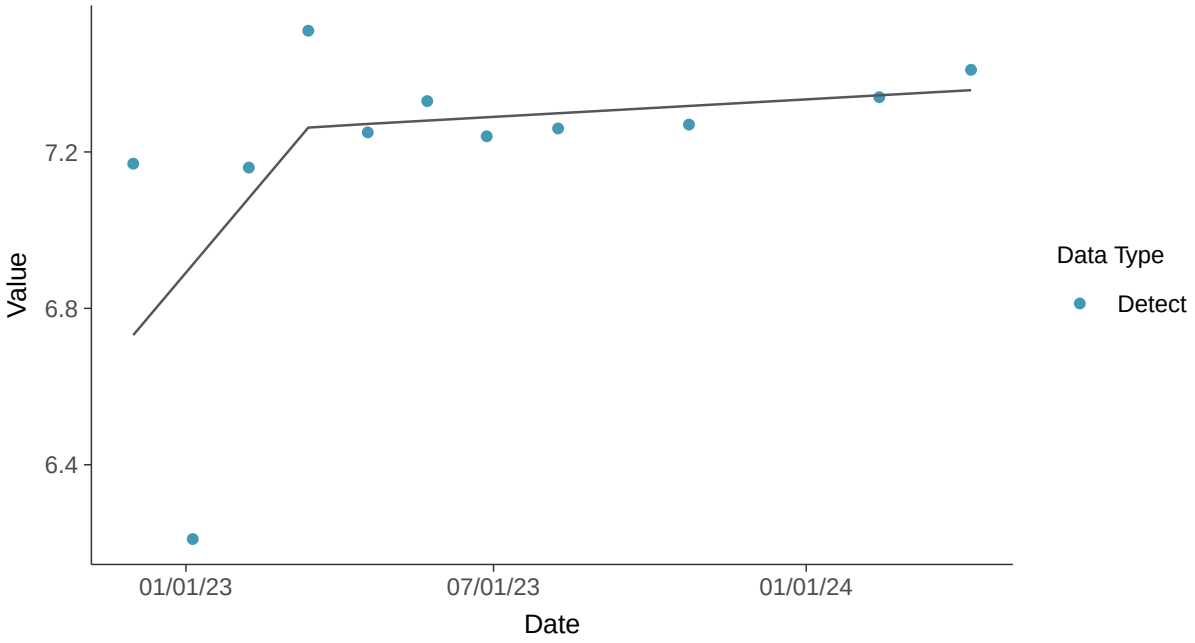
Trend Regression: Mann-Kendall/Theil-Sen Estimate

pH (field), MW-08 (su)



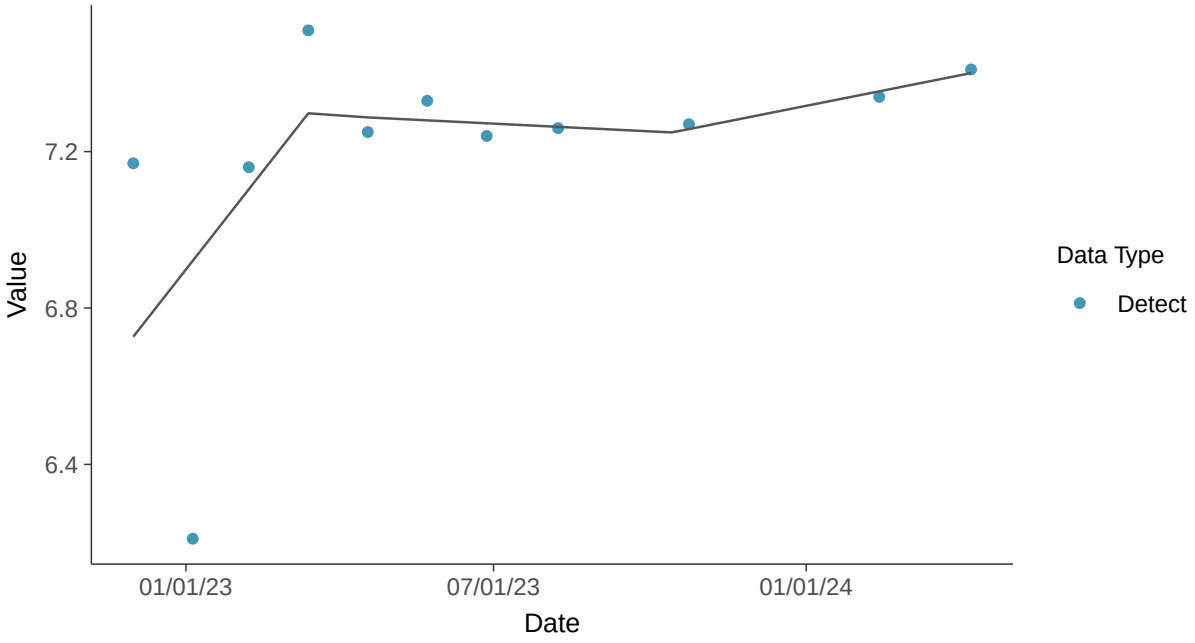
Trend Regression: Piecewise Linear-Linear

pH (field), MW-08 (su)



Trend Regression: Piecewise Linear-Linear-Linear

pH (field), MW-08 (su)

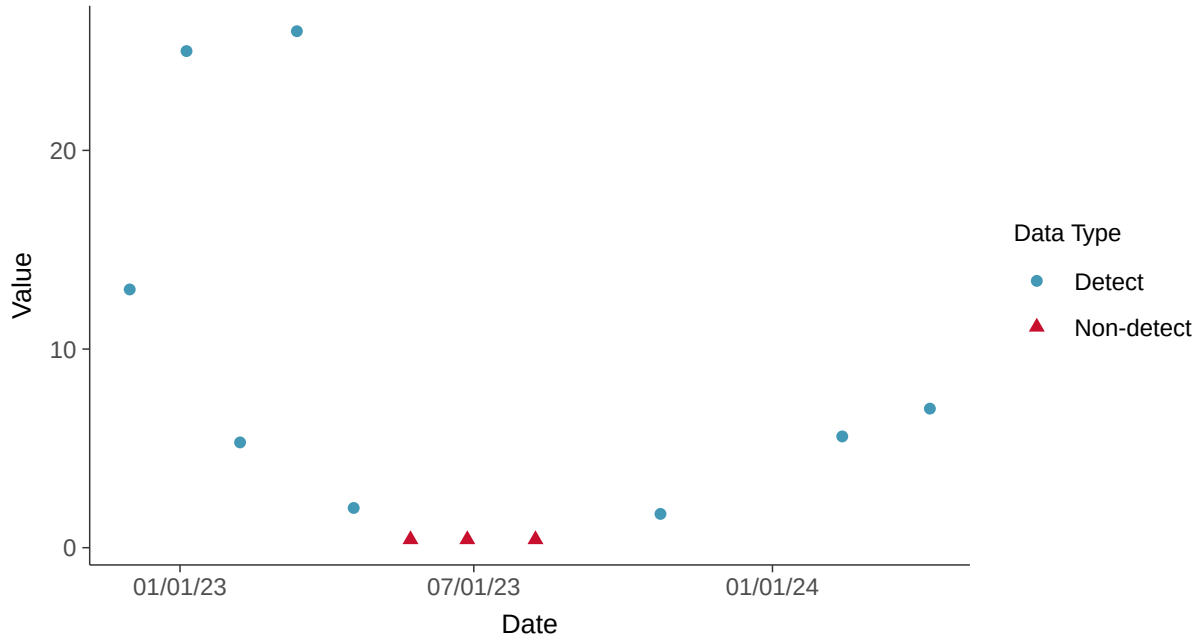


Appendix III: Sulfate (as SO4), MW-08

ID: 1_18_4_124

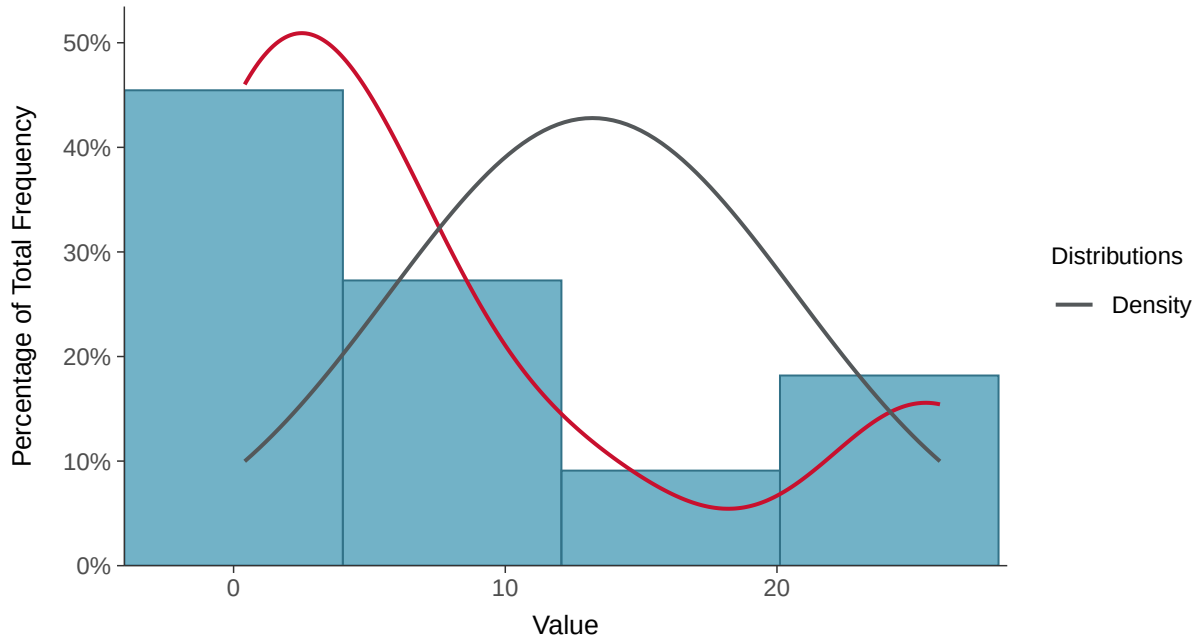
Scatter Plot

Sulfate (as SO4), MW-08 (mg/L)



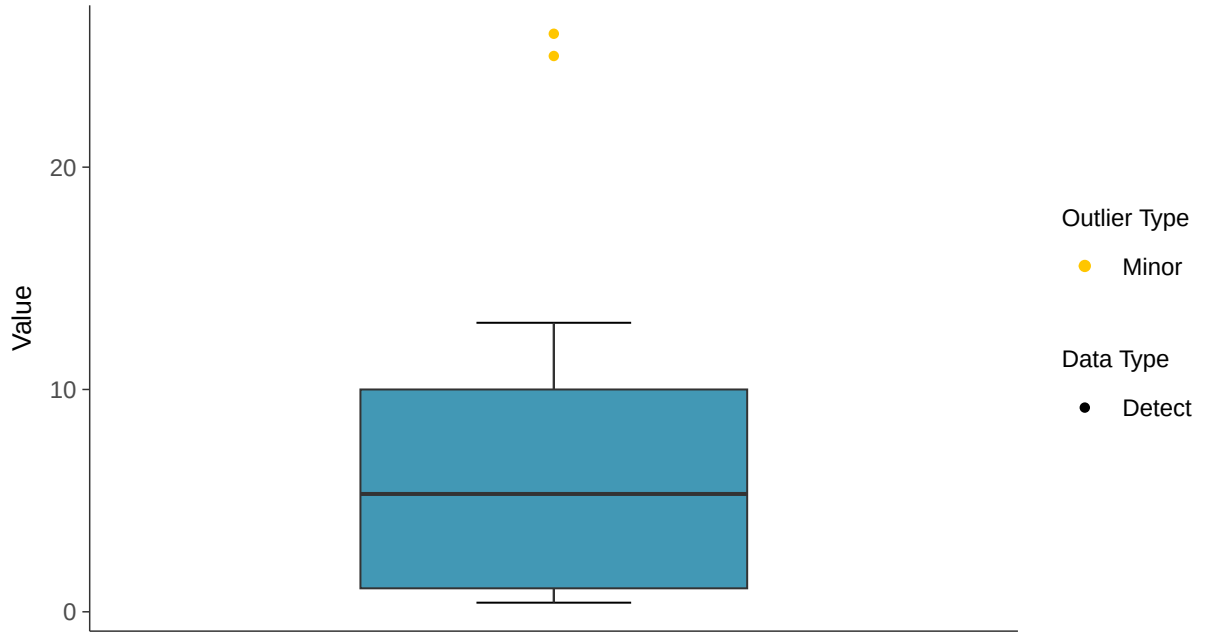
Histogram

Sulfate (as SO4), MW-08 (mg/L)



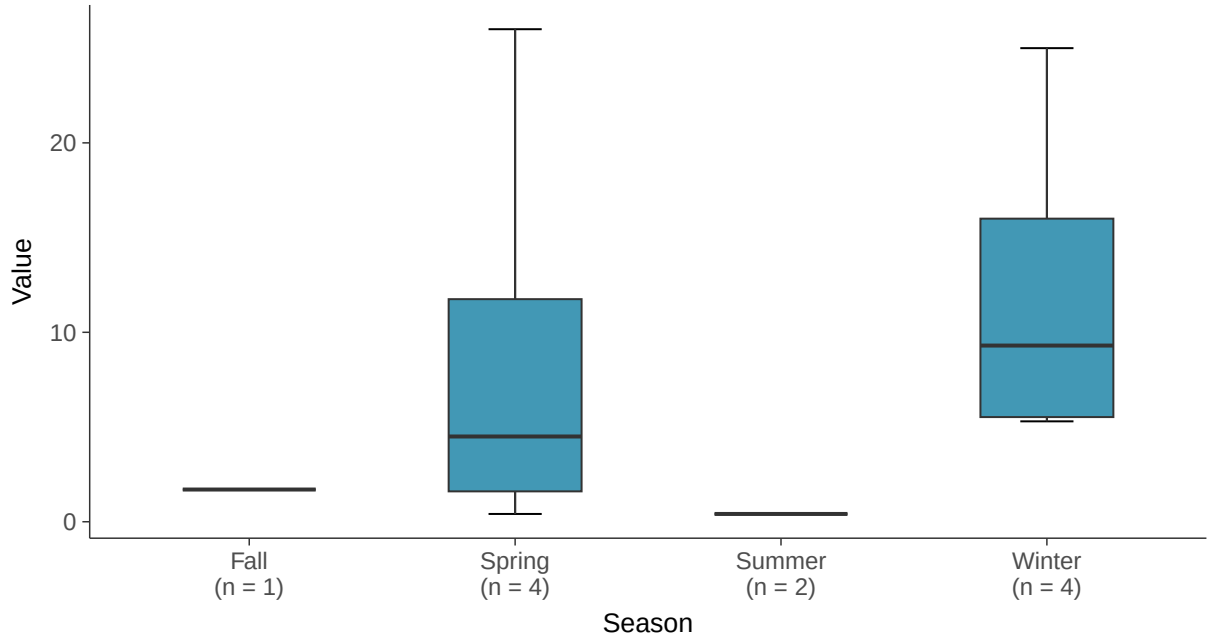
Boxplot

Sulfate (as SO4), MW-08 (mg/L)



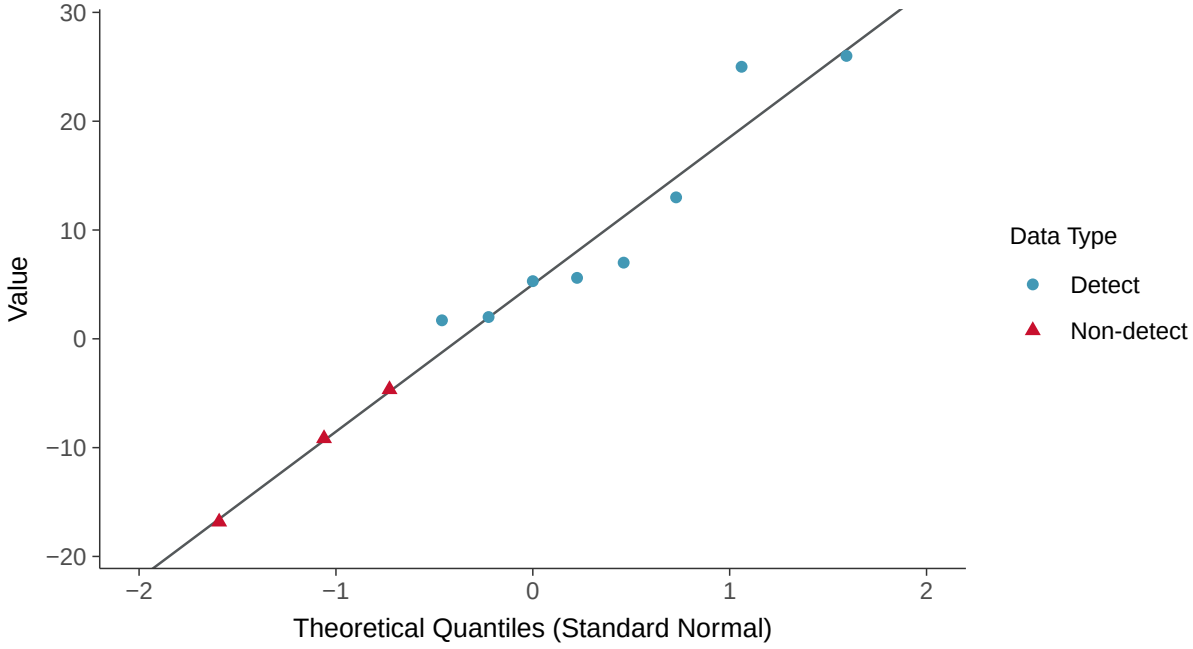
Boxplot by Season

Sulfate (as SO4), MW-08 (mg/L)



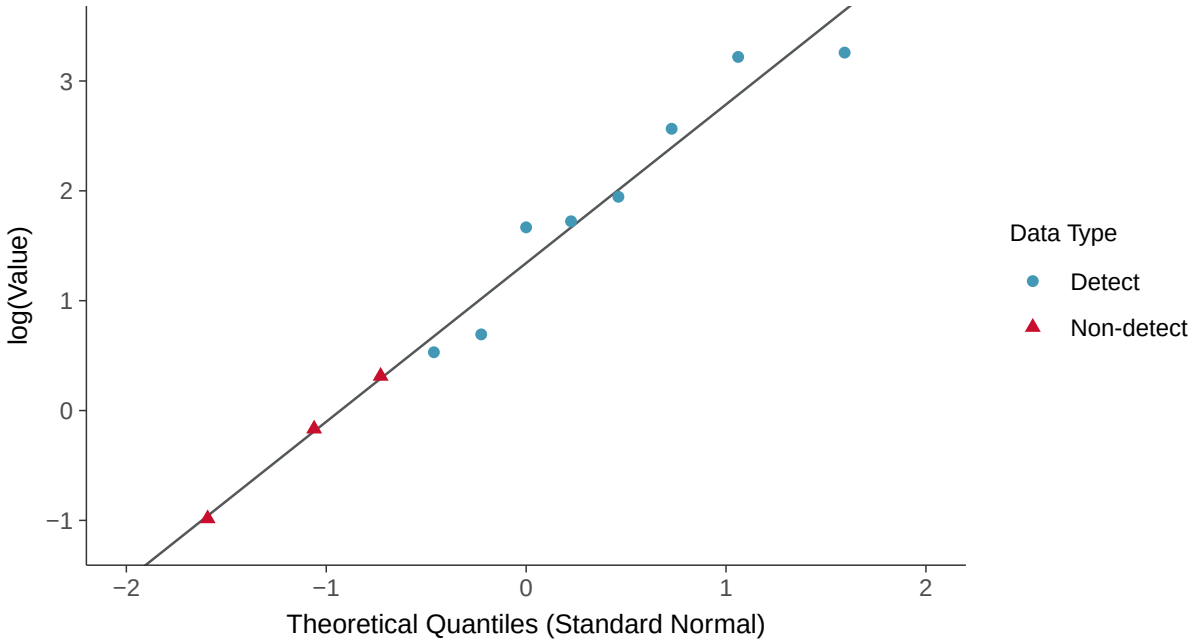
Normal Q-Q plot using ROS Imputed Estimates

Sulfate (as SO4), MW-08 (mg/L)



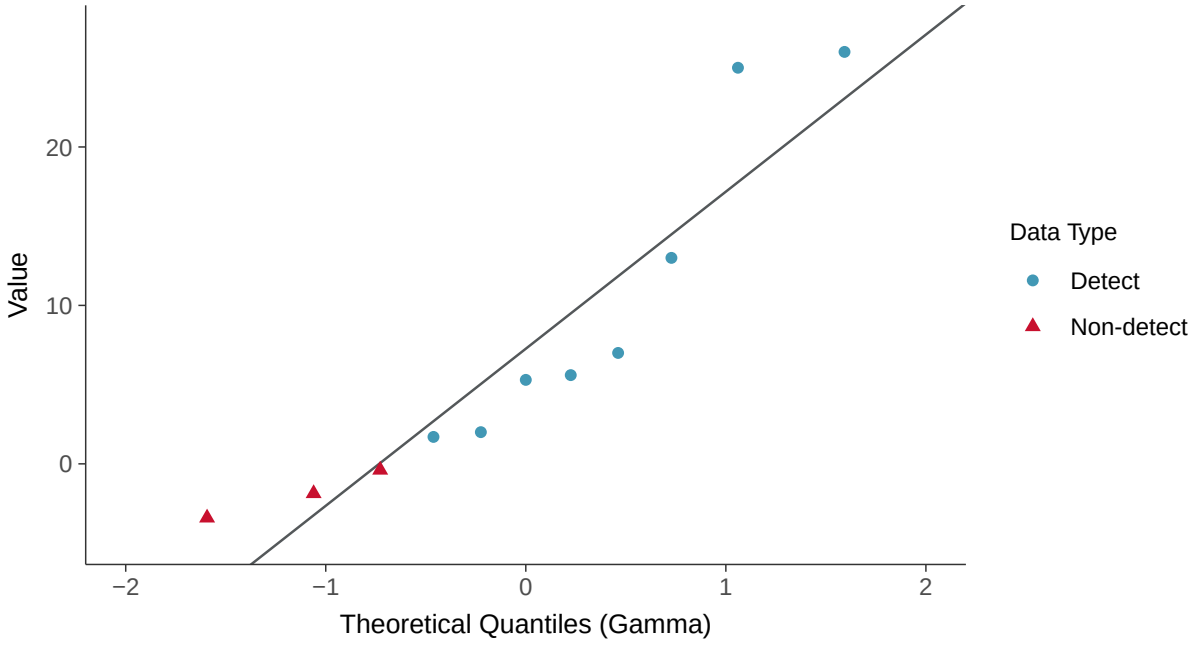
Lognormal Q-Q plot using ROS Imputed Estimates

Sulfate (as SO4), MW-08 (mg/L)



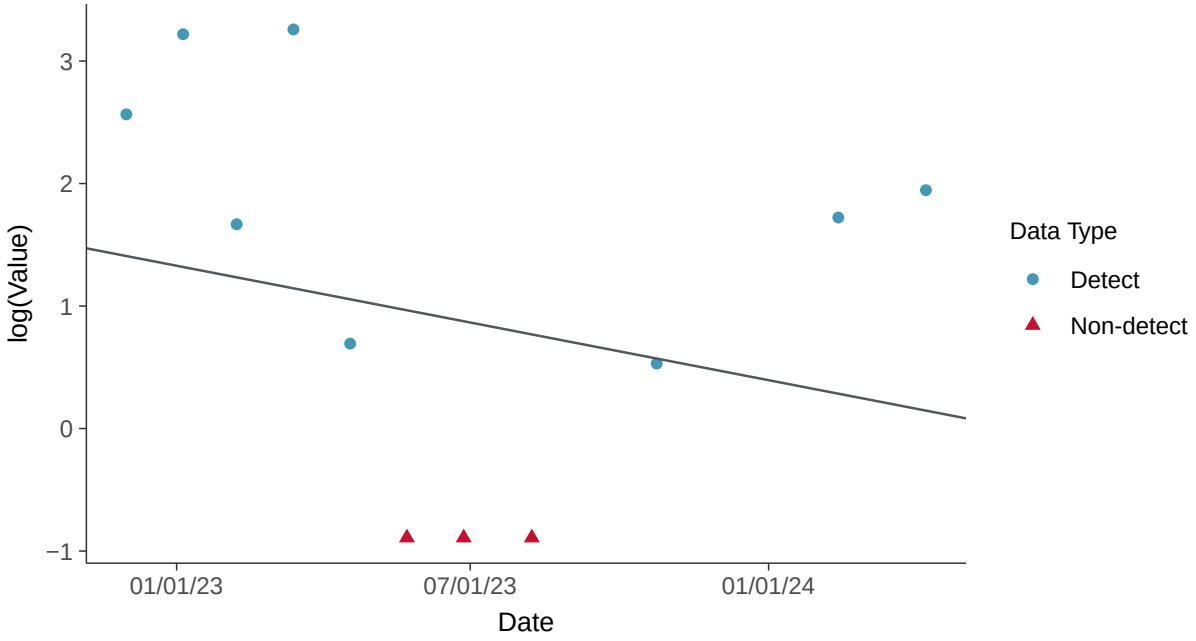
Gamma Q-Q plot using ROS Imputed Estimates

Sulfate (as SO4), MW-08 (mg/L)



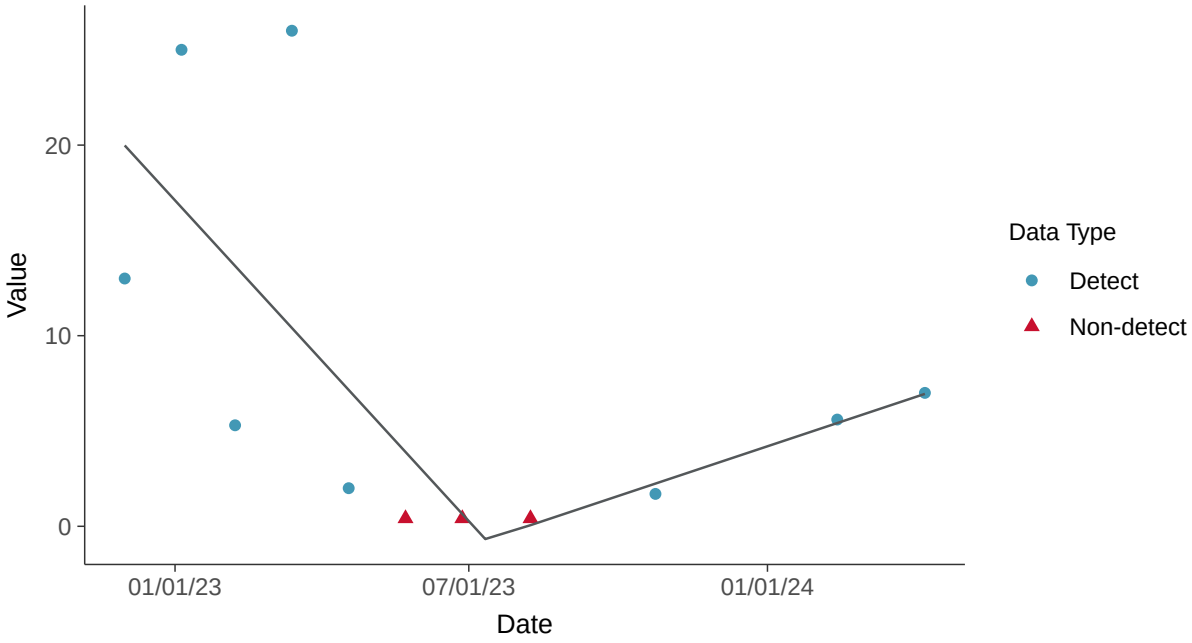
Trend Regression: Lognormal MLE

Sulfate (as SO4), MW-08 (mg/L)



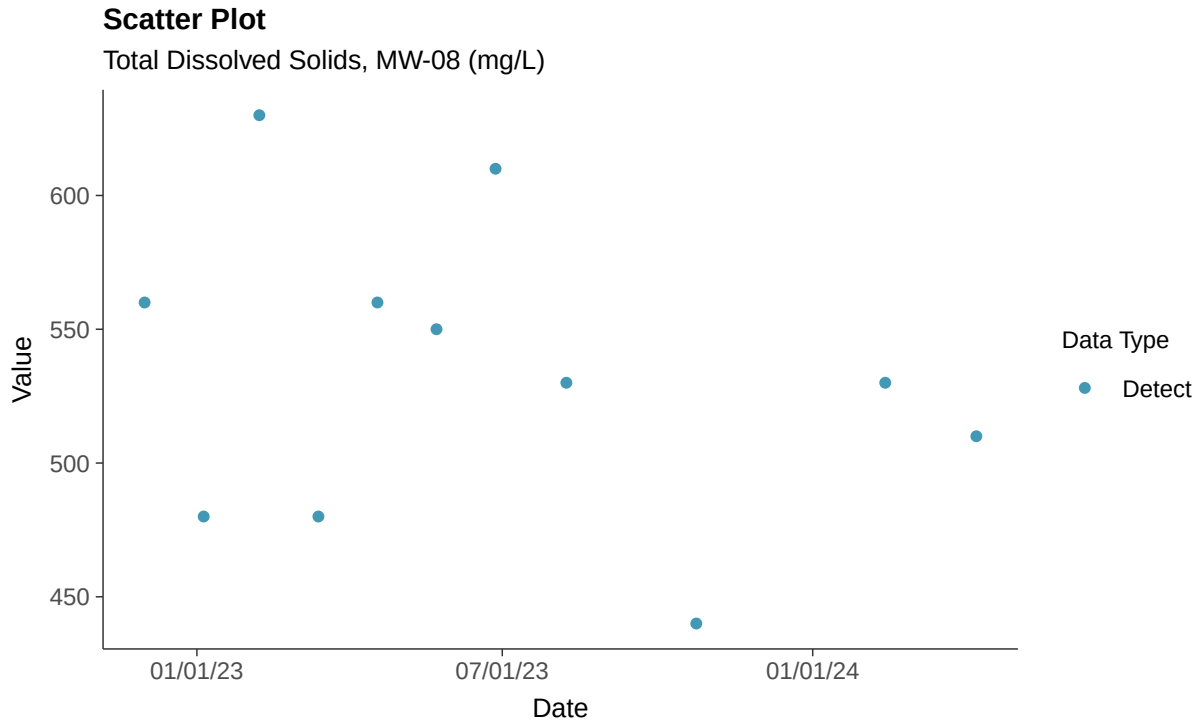
Trend Regression: Piecewise Linear-Linear

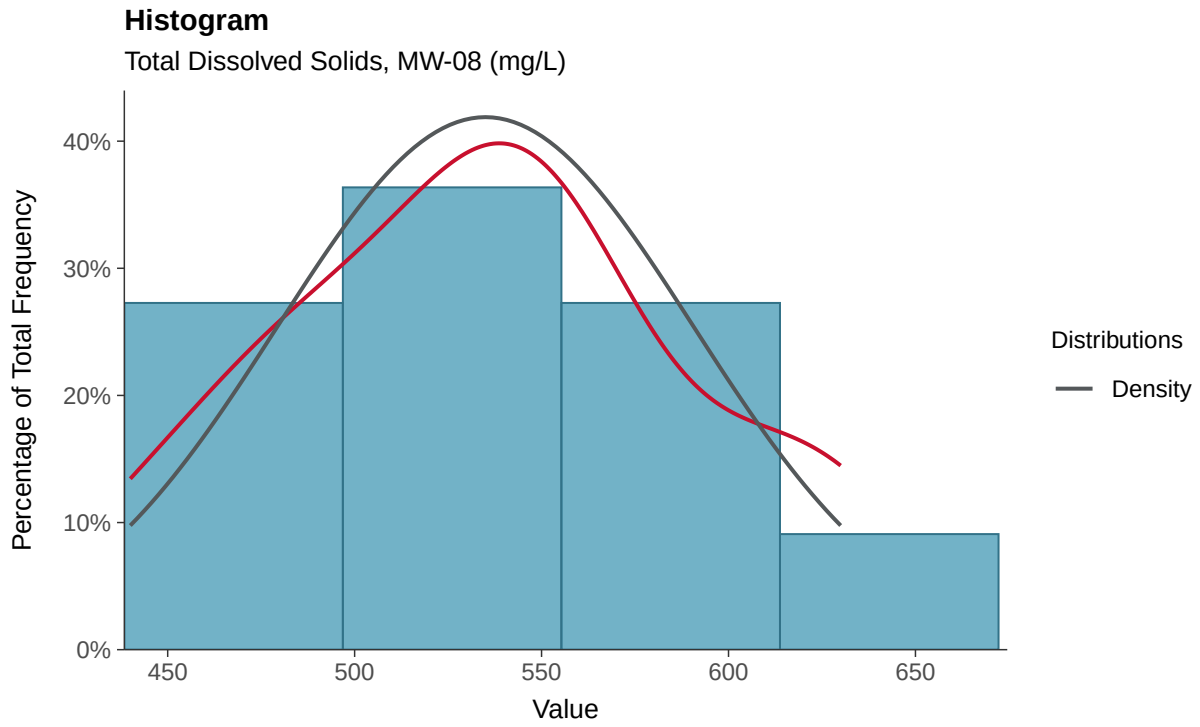
Sulfate (as SO4), MW-08 (mg/L)



Appendix III: Total Dissolved Solids, MW-08

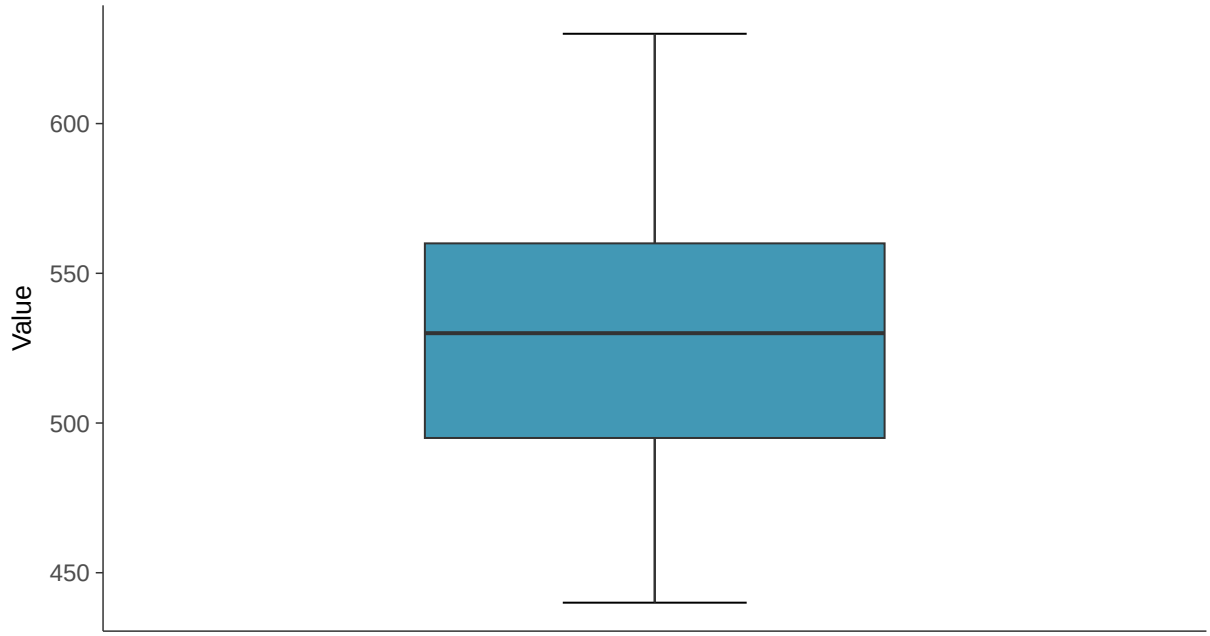
ID: 1_18_4_126





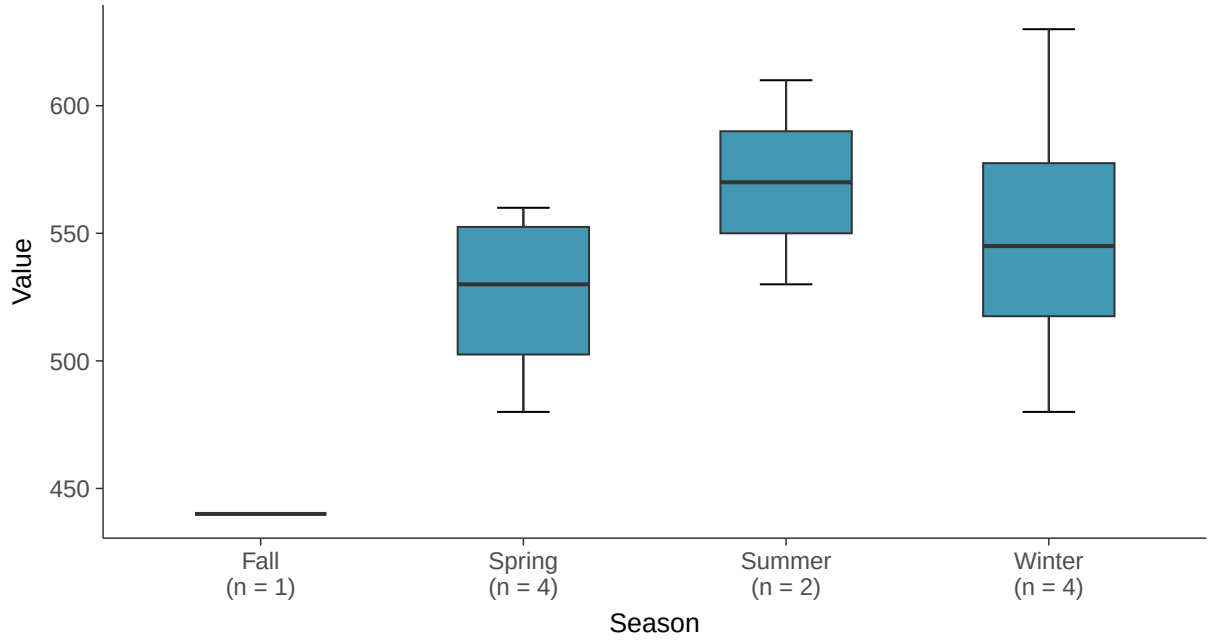
Boxplot

Total Dissolved Solids, MW-08 (mg/L)



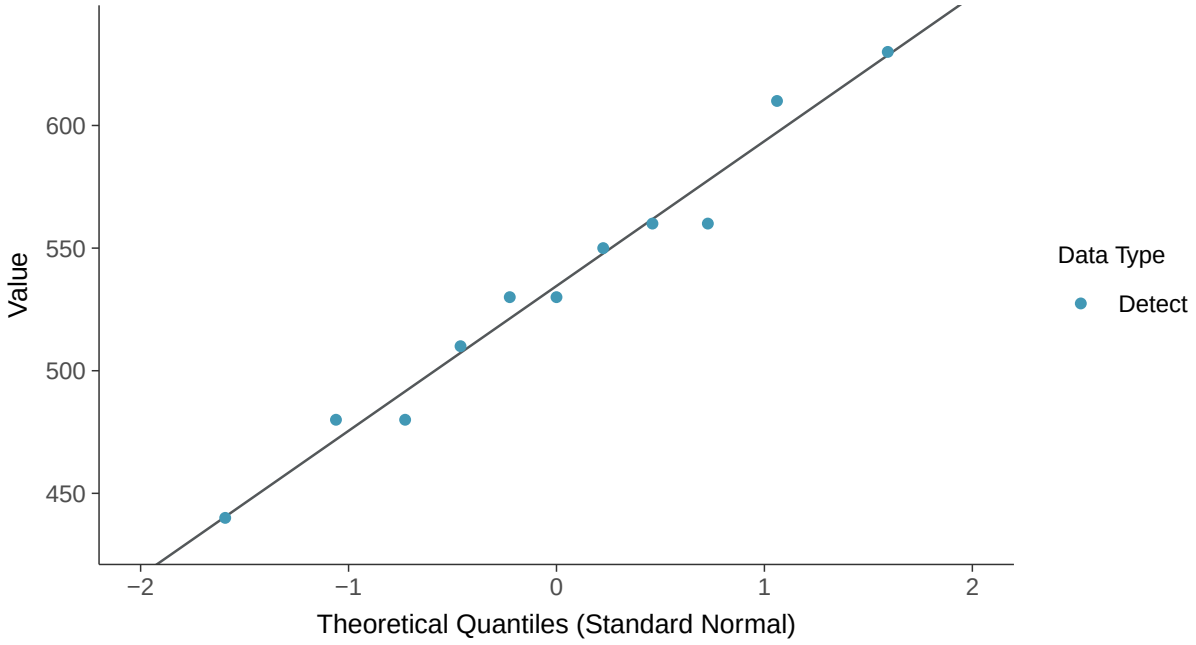
Boxplot by Season

Total Dissolved Solids, MW-08 (mg/L)



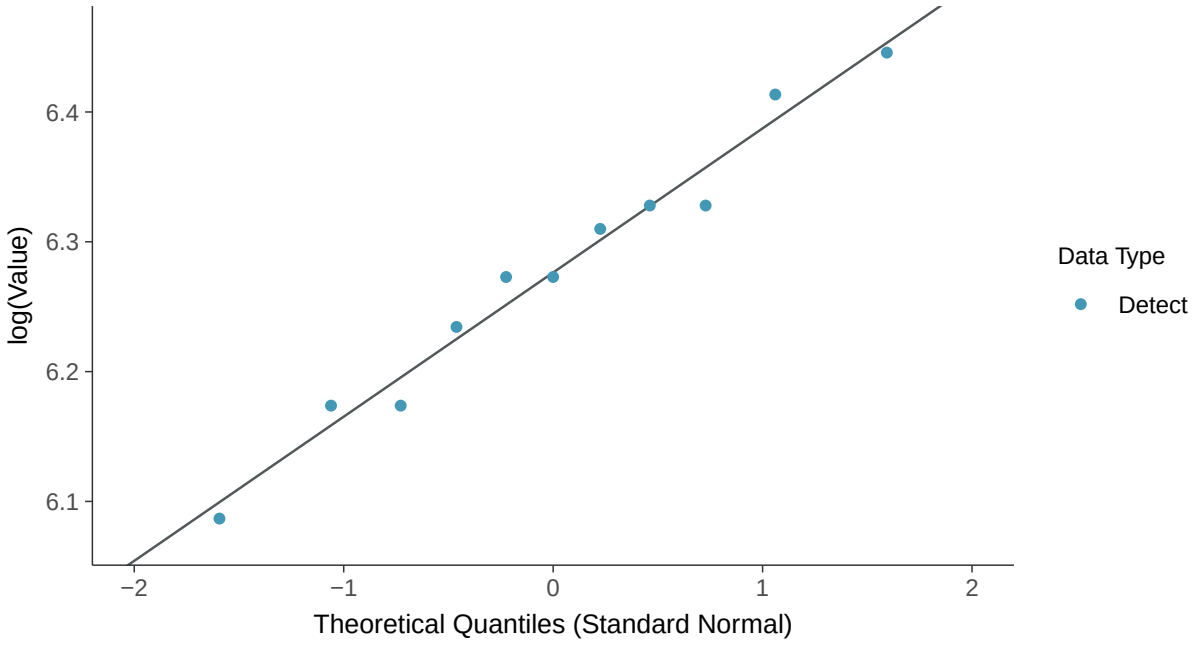
Normal Q-Q plot

Total Dissolved Solids, MW-08 (mg/L)



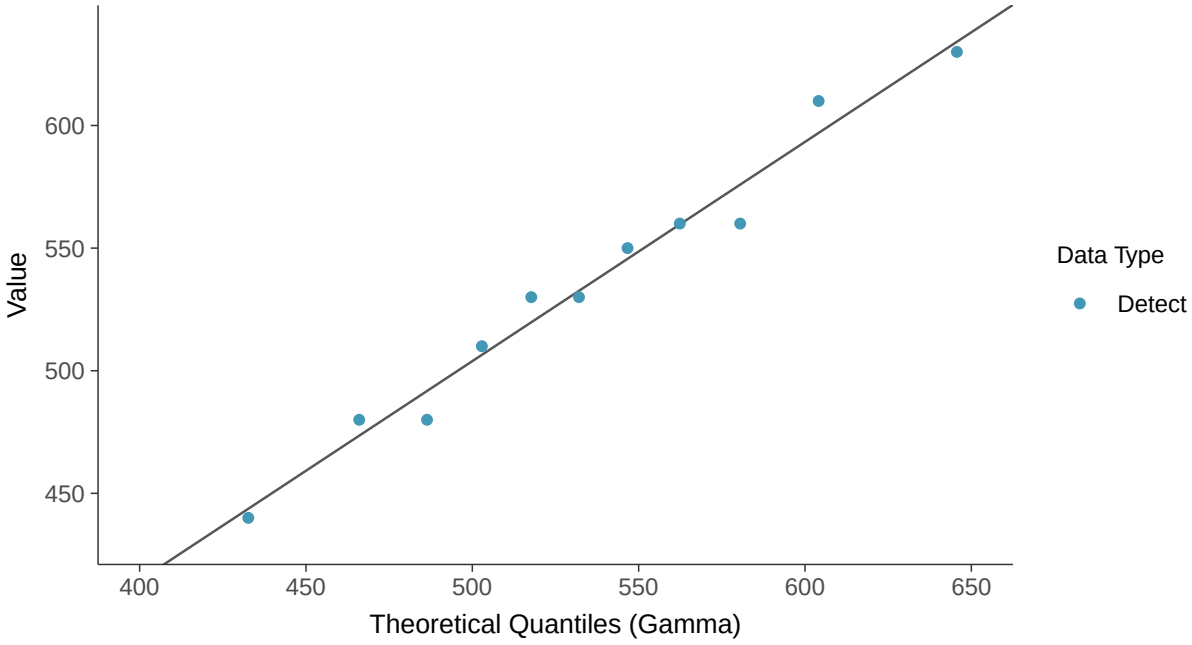
Lognormal Q-Q plot

Total Dissolved Solids, MW-08 (mg/L)



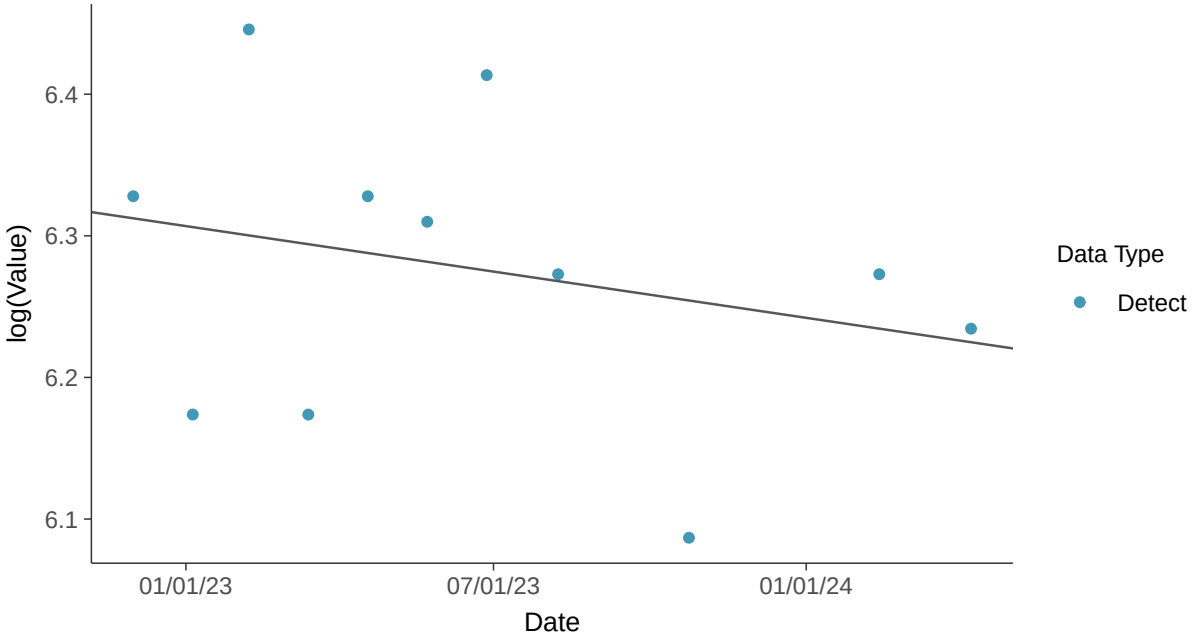
Gamma Q-Q plot

Total Dissolved Solids, MW-08 (mg/L)



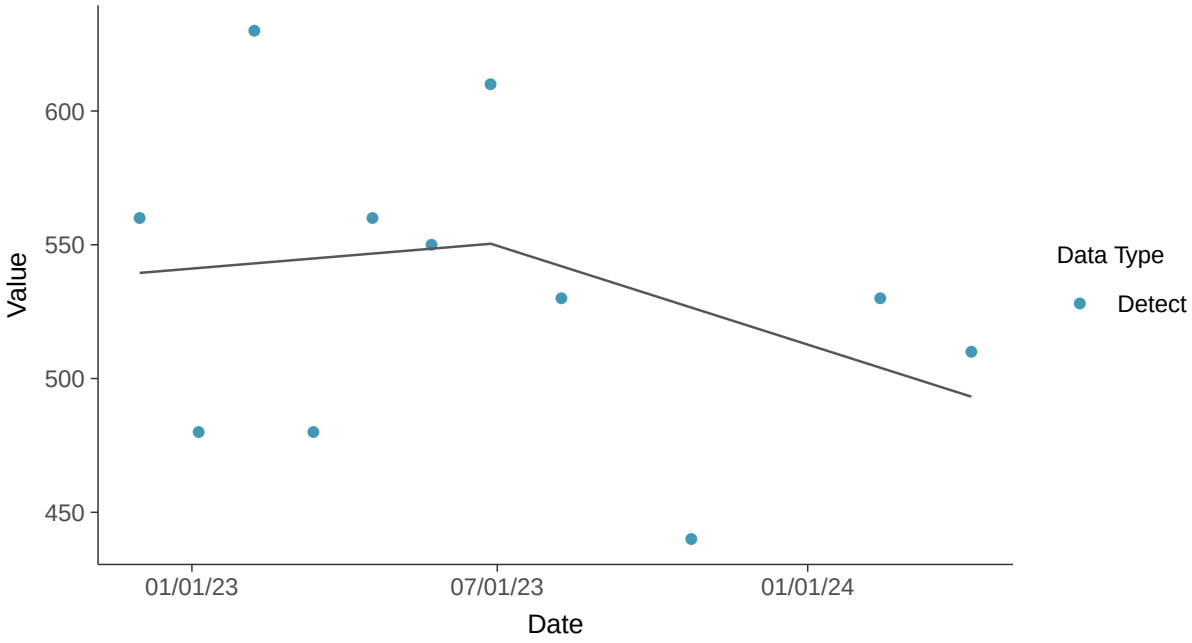
Trend Regression: Lognormal MLE

Total Dissolved Solids, MW-08 (mg/L)



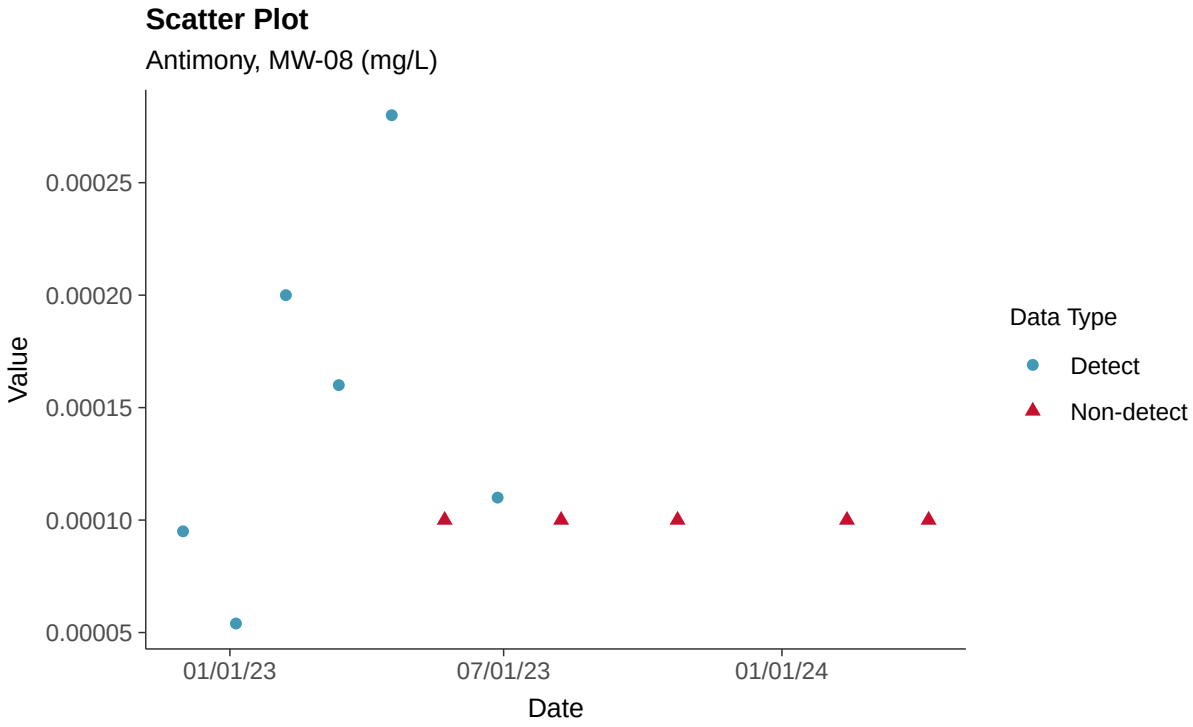
Trend Regression: Piecewise Linear-Linear

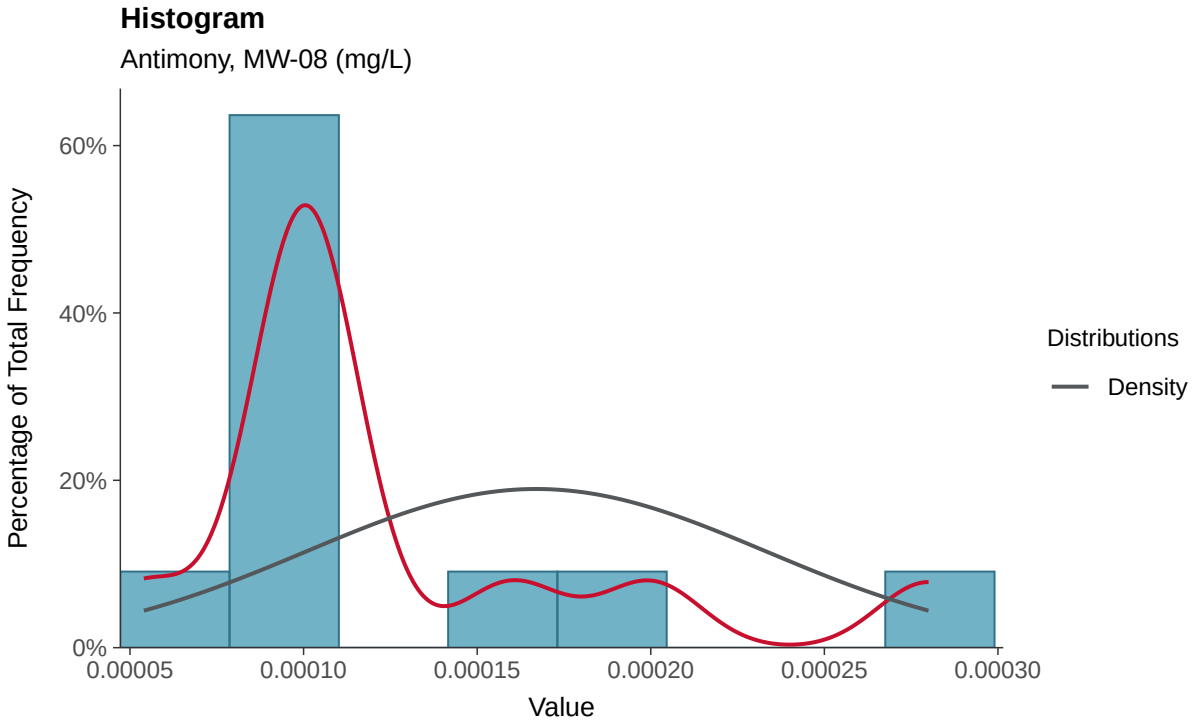
Total Dissolved Solids, MW-08 (mg/L)



Appendix IV: Antimony, MW-08

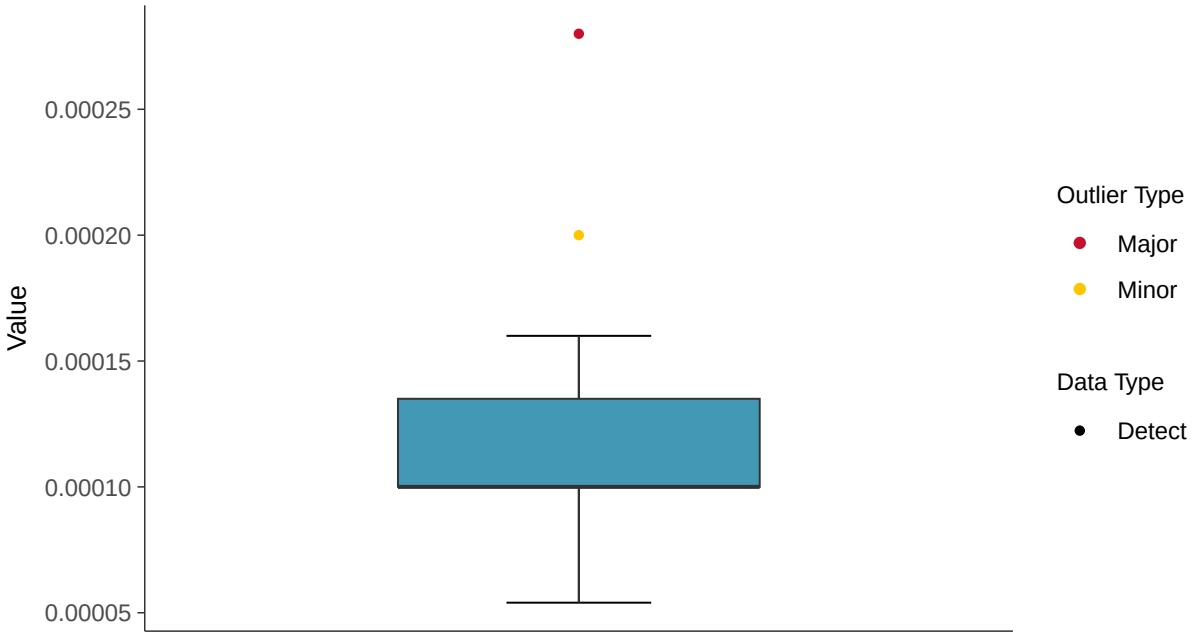
ID: 1_18_5_101





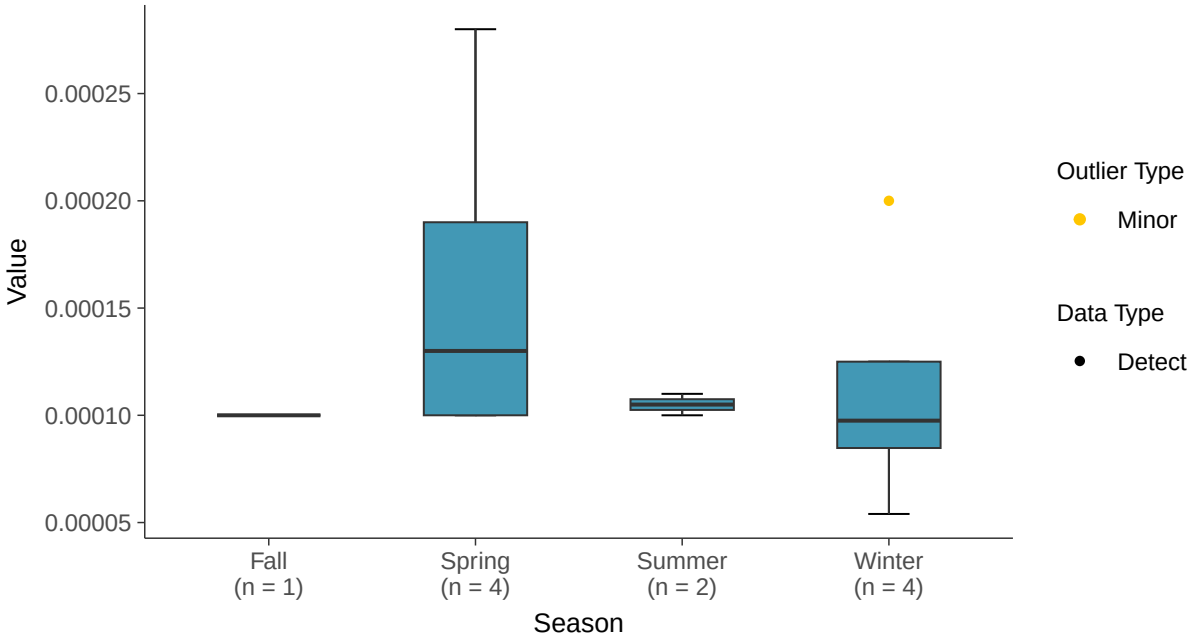
Boxplot

Antimony, MW-08 (mg/L)



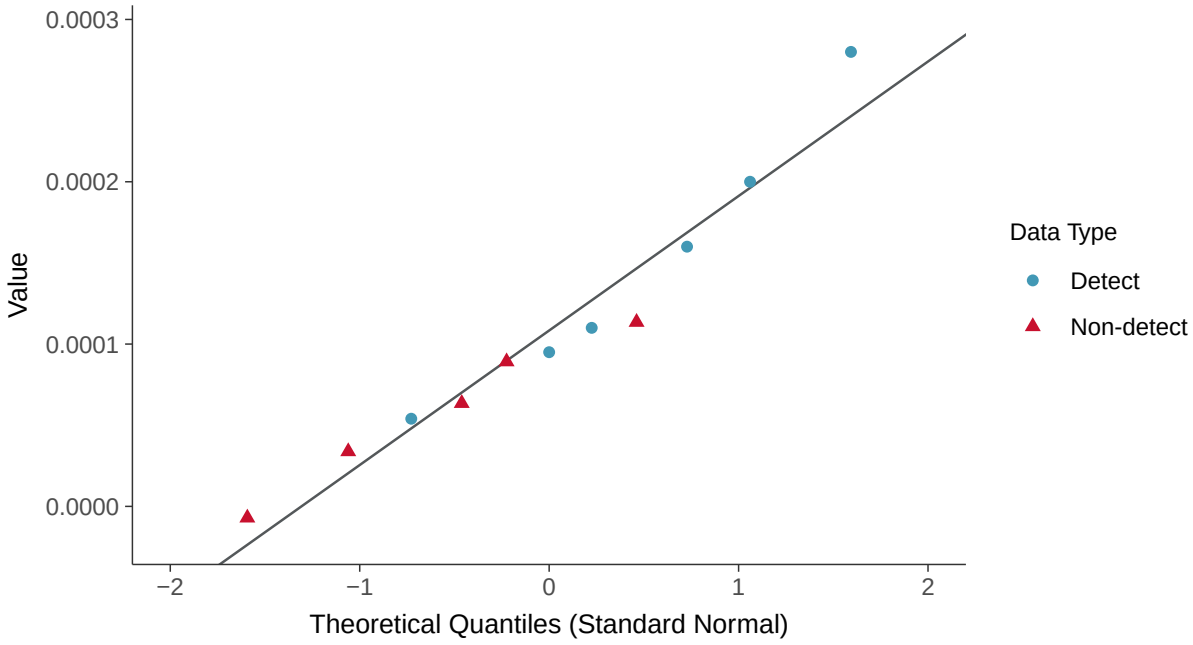
Boxplot by Season

Antimony, MW-08 (mg/L)



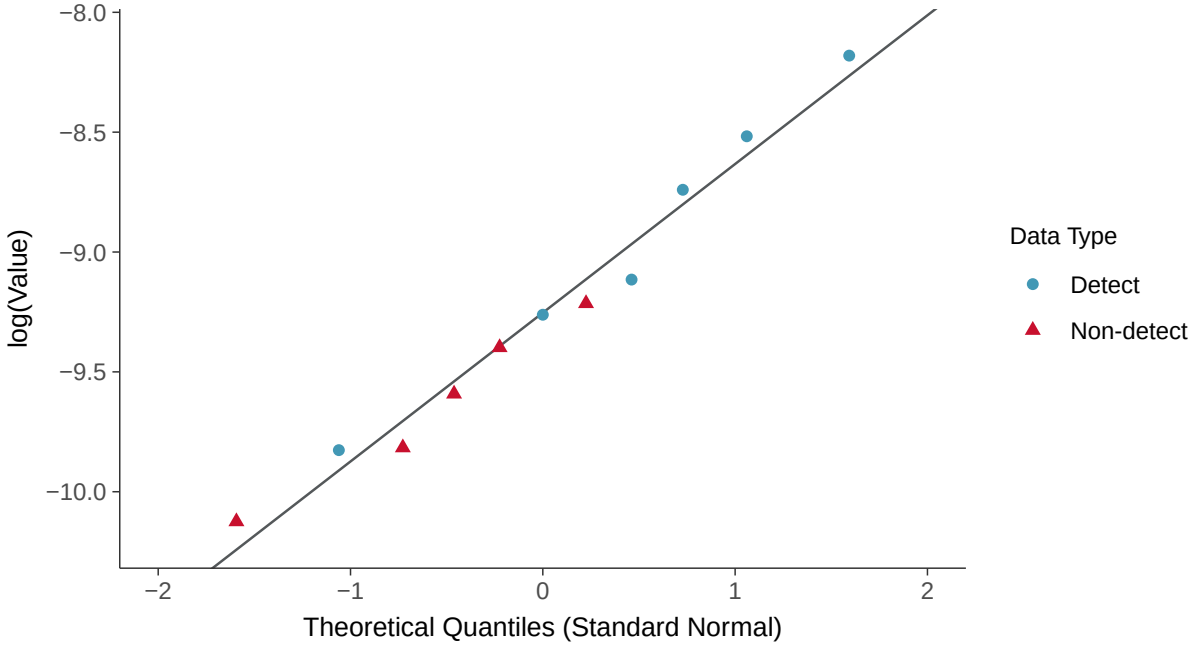
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-08 (mg/L)



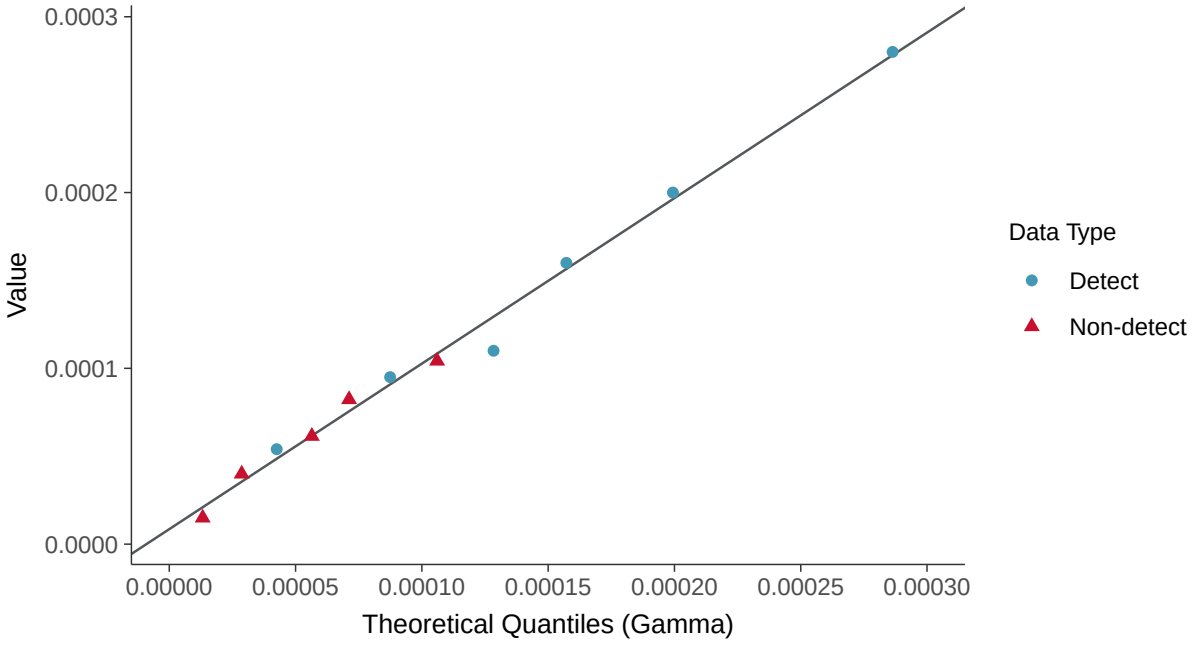
Lognormal Q-Q plot using ROS Imputed Estimates

Antimony, MW-08 (mg/L)



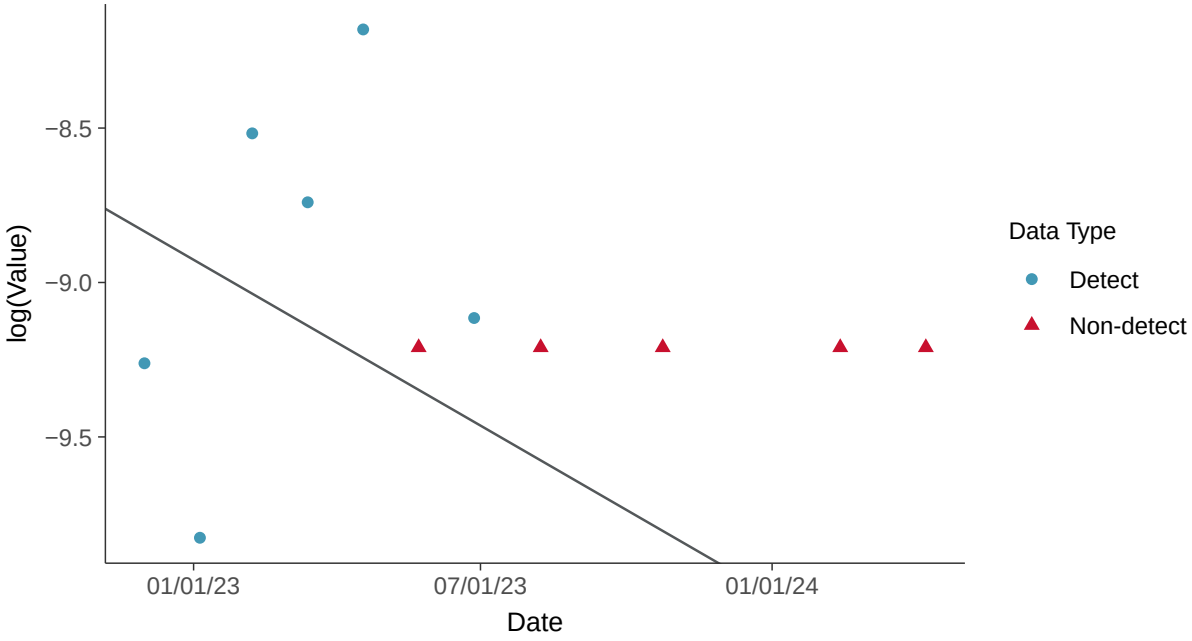
Gamma Q-Q plot using ROS Imputed Estimates

Antimony, MW-08 (mg/L)



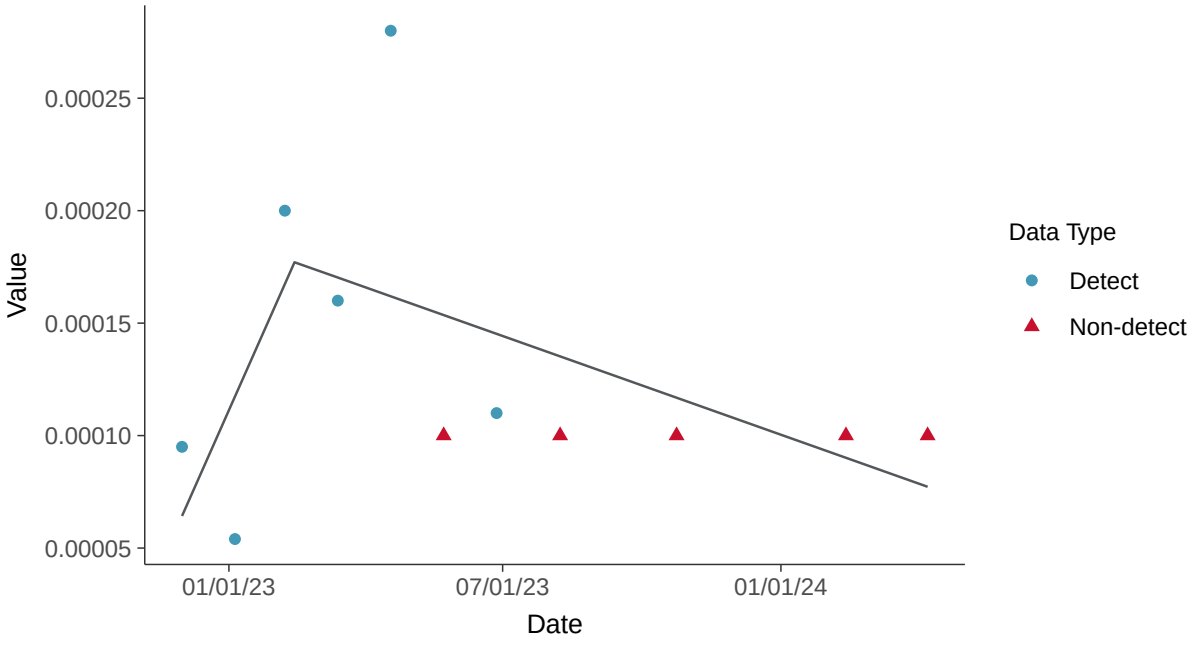
Trend Regression: Lognormal MLE

Antimony, MW-08 (mg/L)



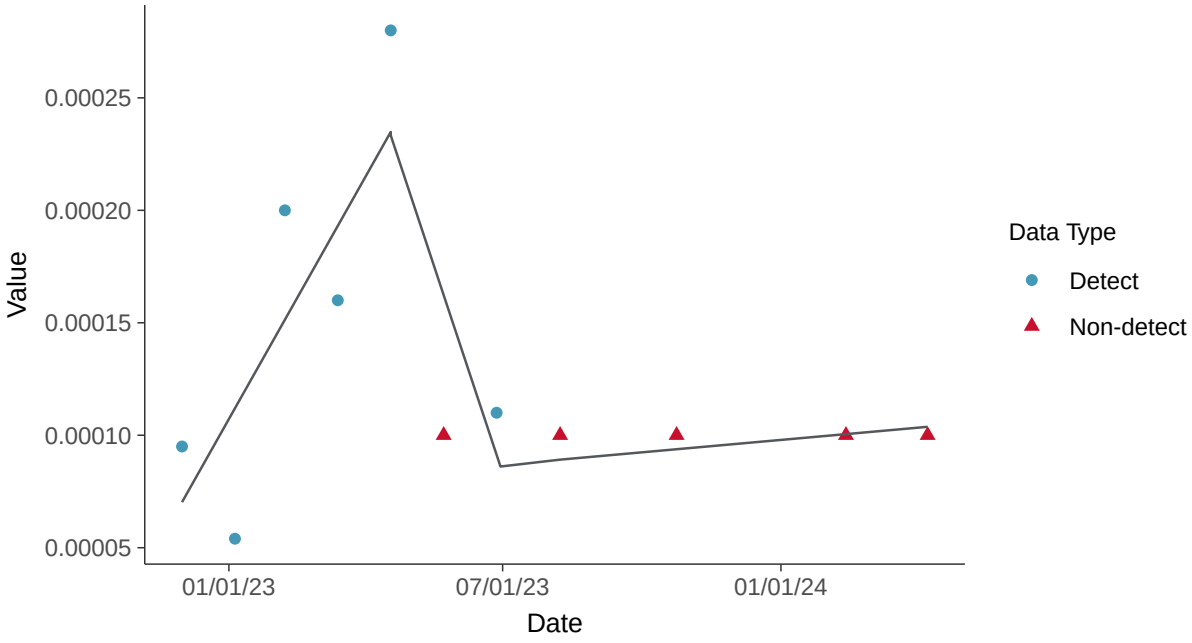
Trend Regression: Piecewise Linear-Linear

Antimony, MW-08 (mg/L)



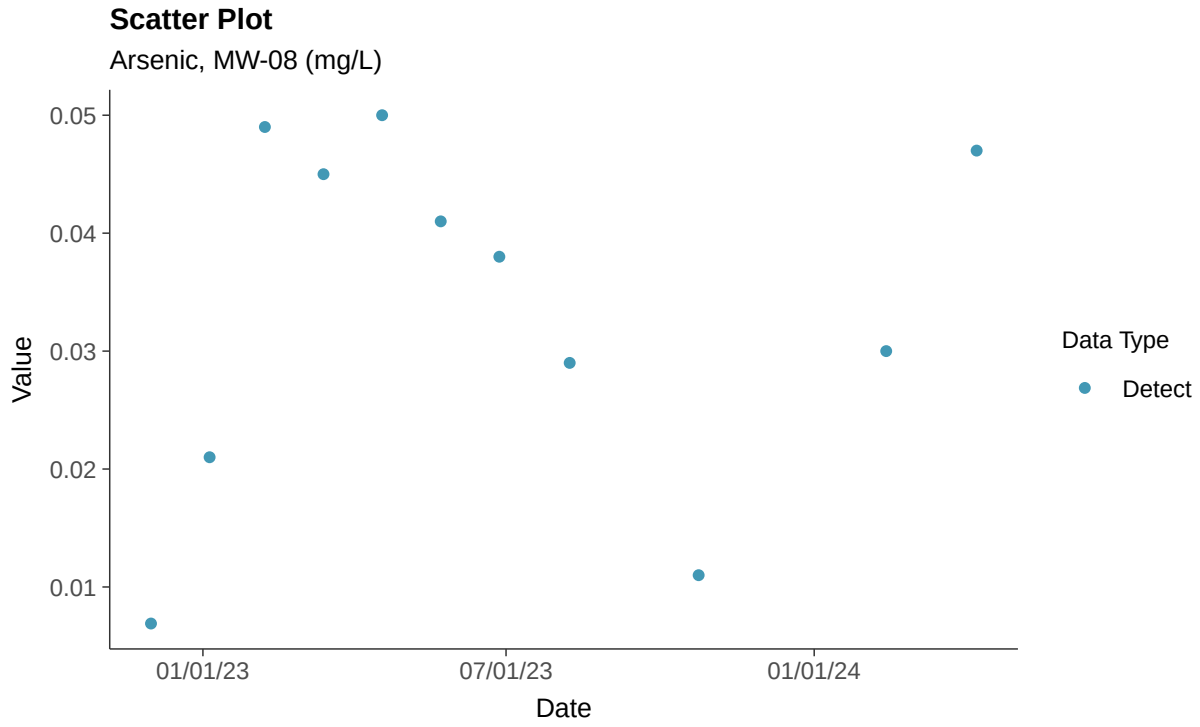
Trend Regression: Piecewise Linear-Linear-Linear

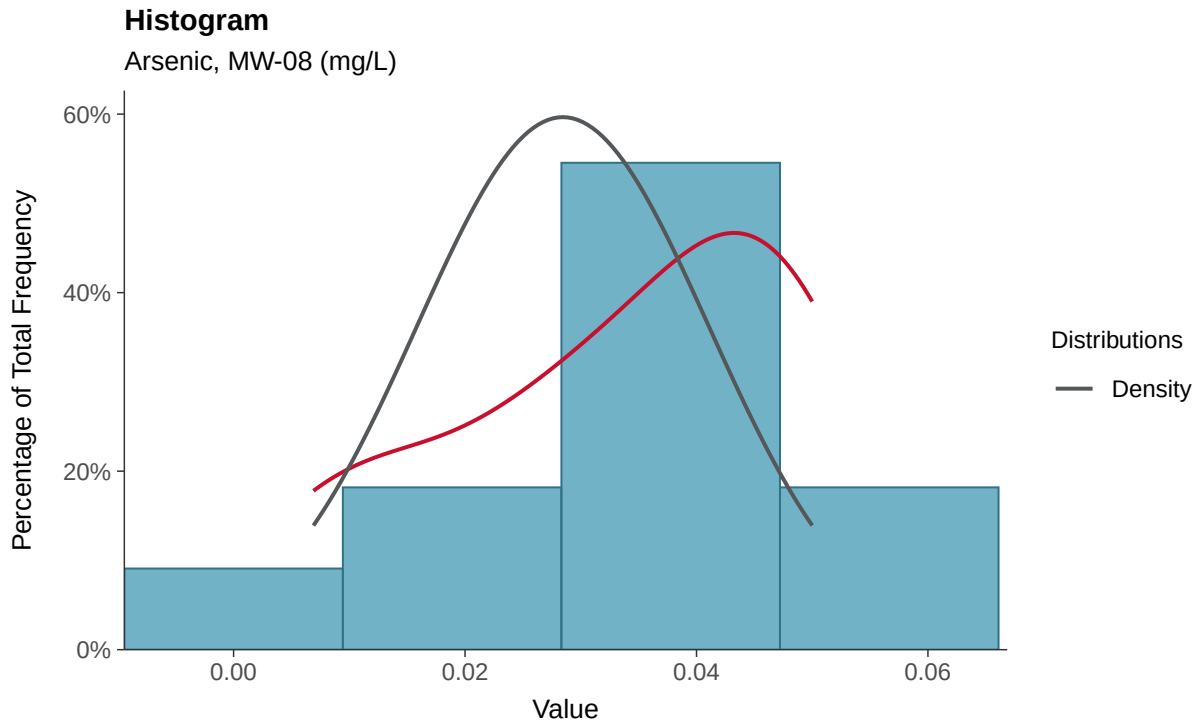
Antimony, MW-08 (mg/L)



Appendix IV: Arsenic, MW-08

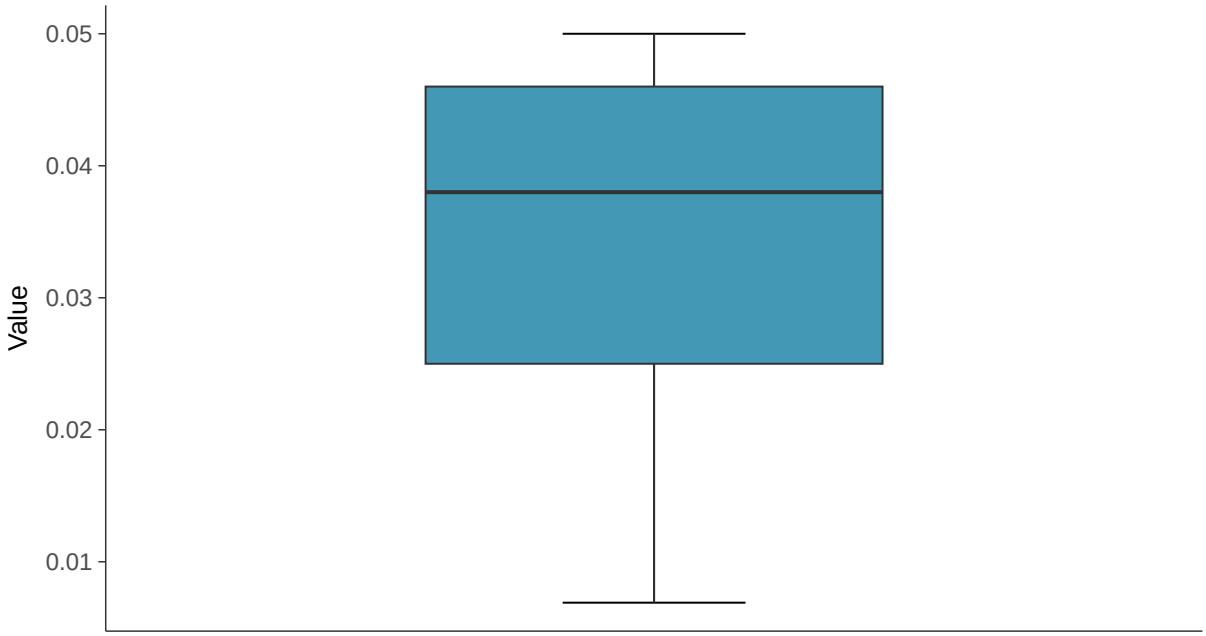
ID: 1_18_5_102





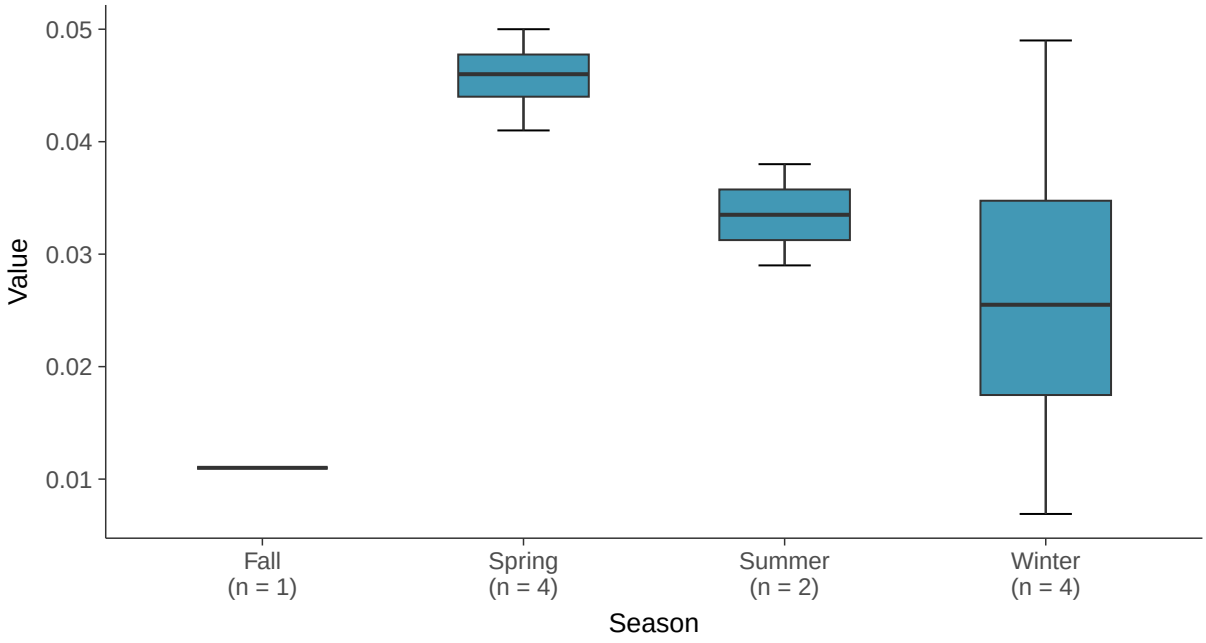
Boxplot

Arsenic, MW-08 (mg/L)



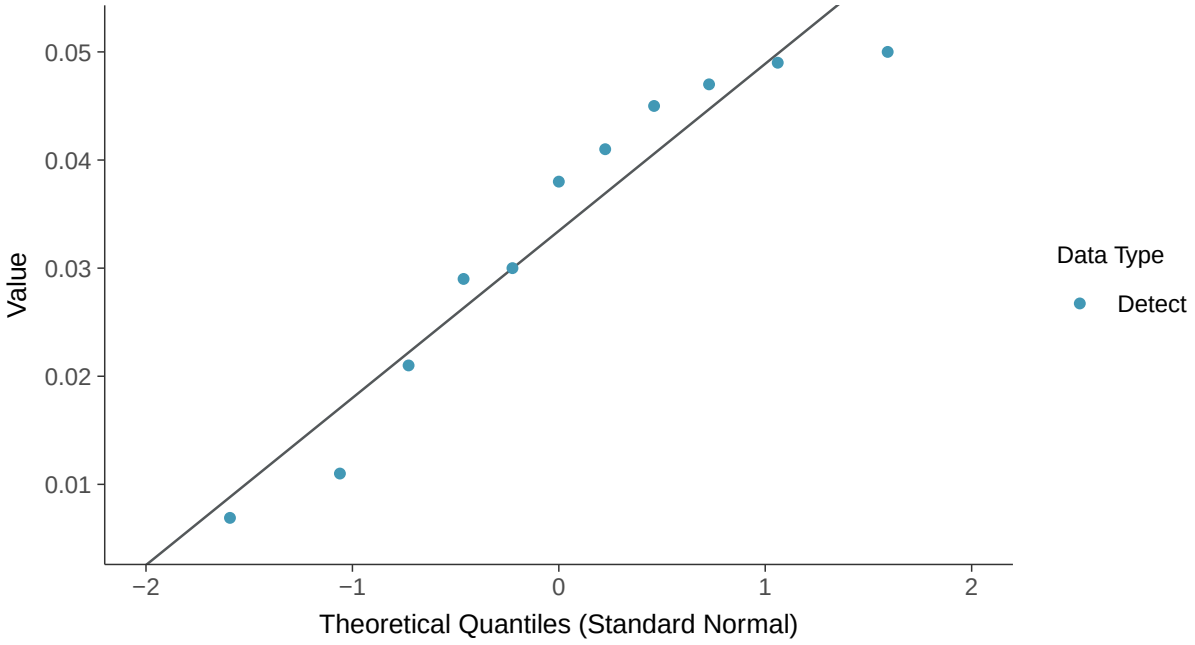
Boxplot by Season

Arsenic, MW-08 (mg/L)



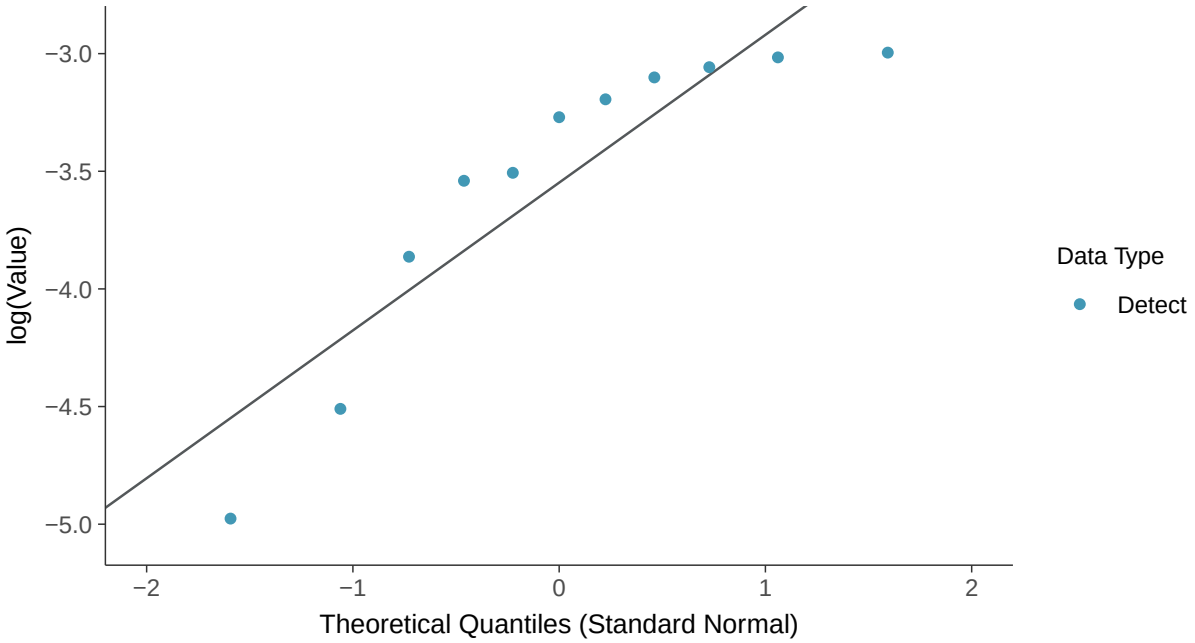
Normal Q-Q plot

Arsenic, MW-08 (mg/L)



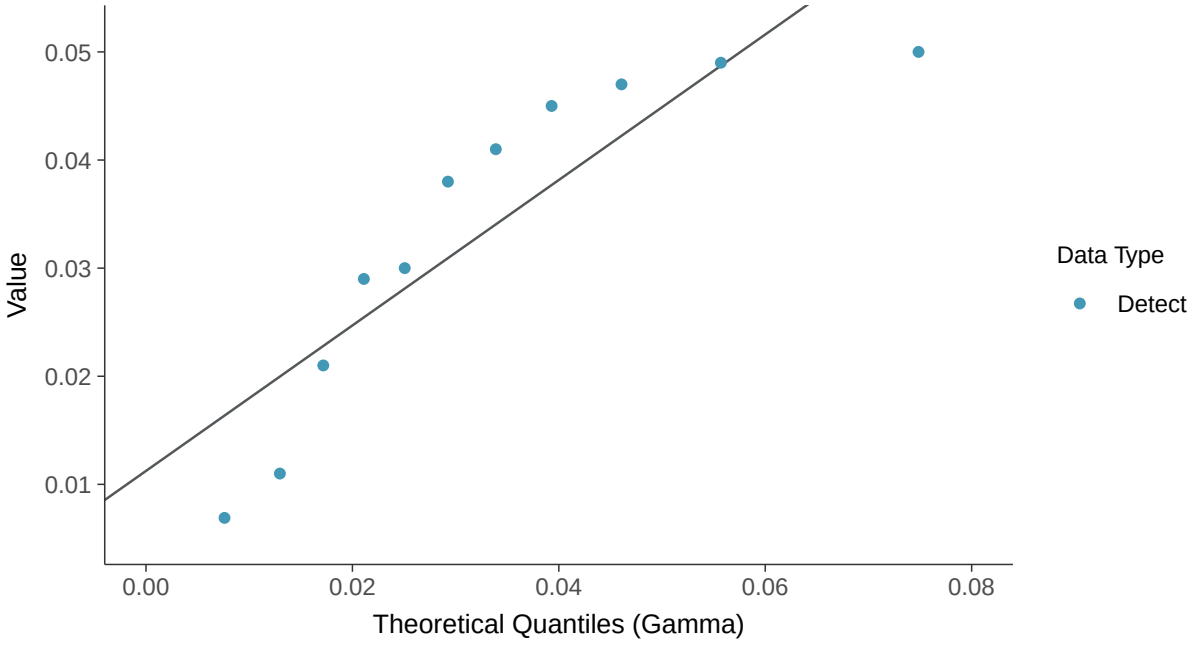
Lognormal Q-Q plot

Arsenic, MW-08 (mg/L)



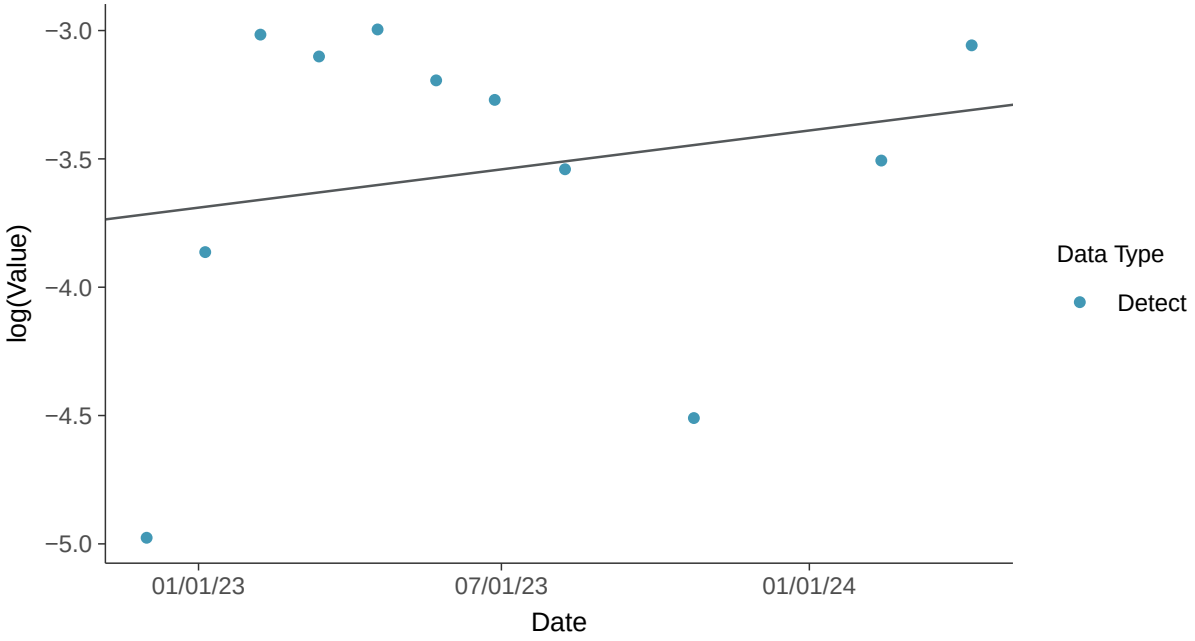
Gamma Q-Q plot

Arsenic, MW-08 (mg/L)



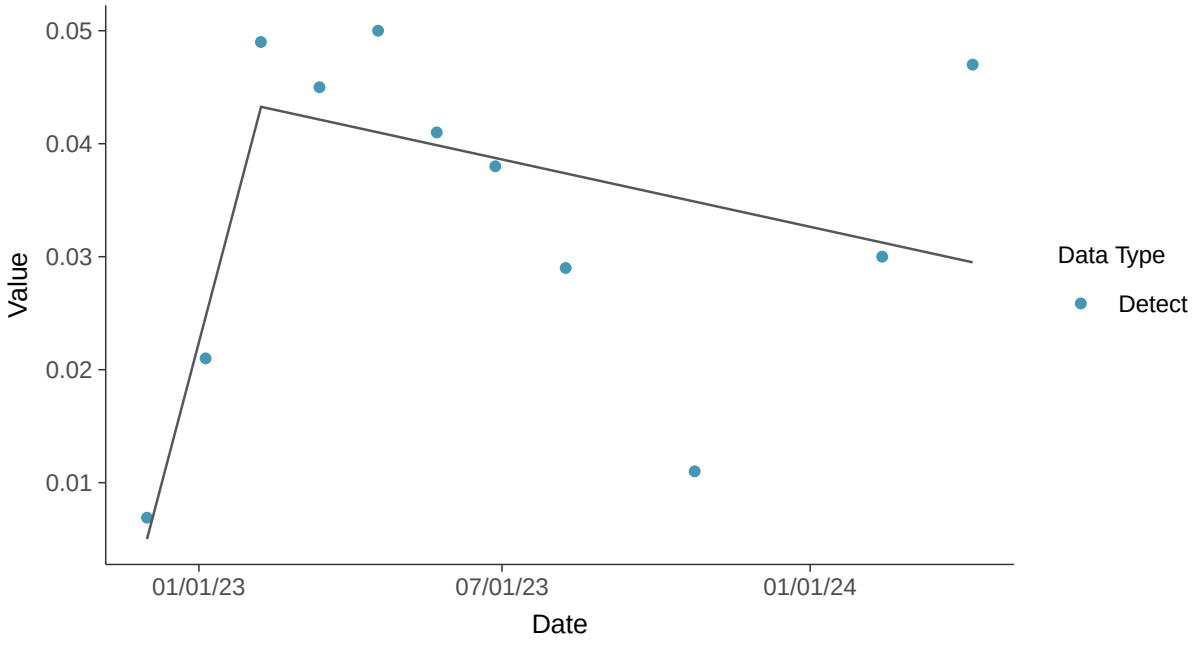
Trend Regression: Lognormal MLE

Arsenic, MW-08 (mg/L)



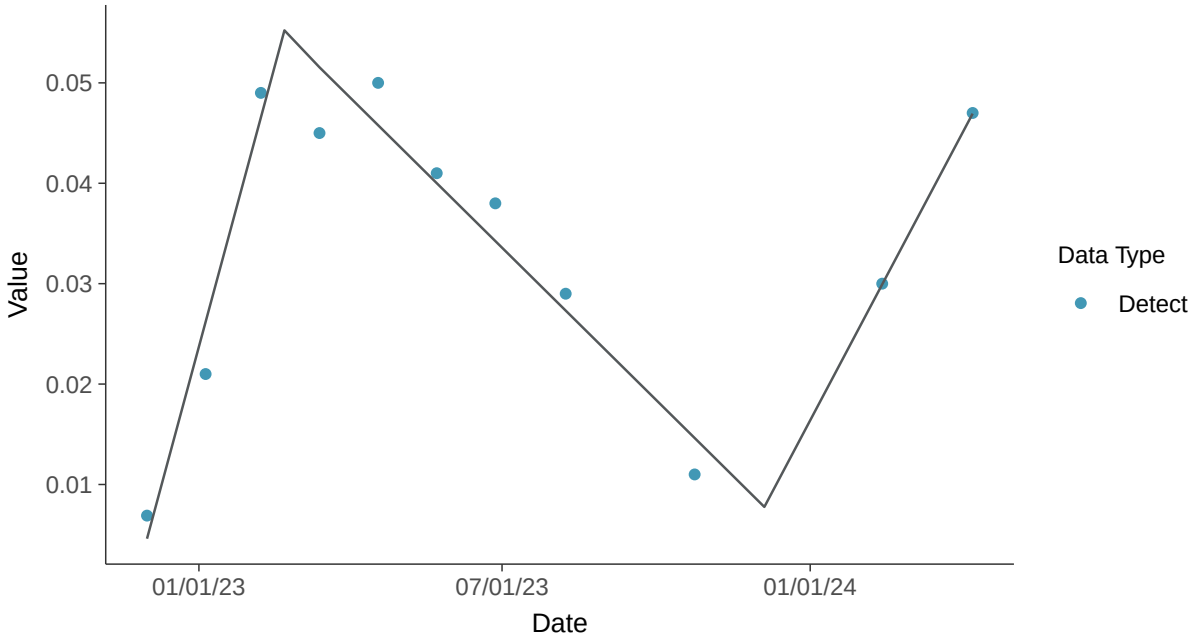
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-08 (mg/L)



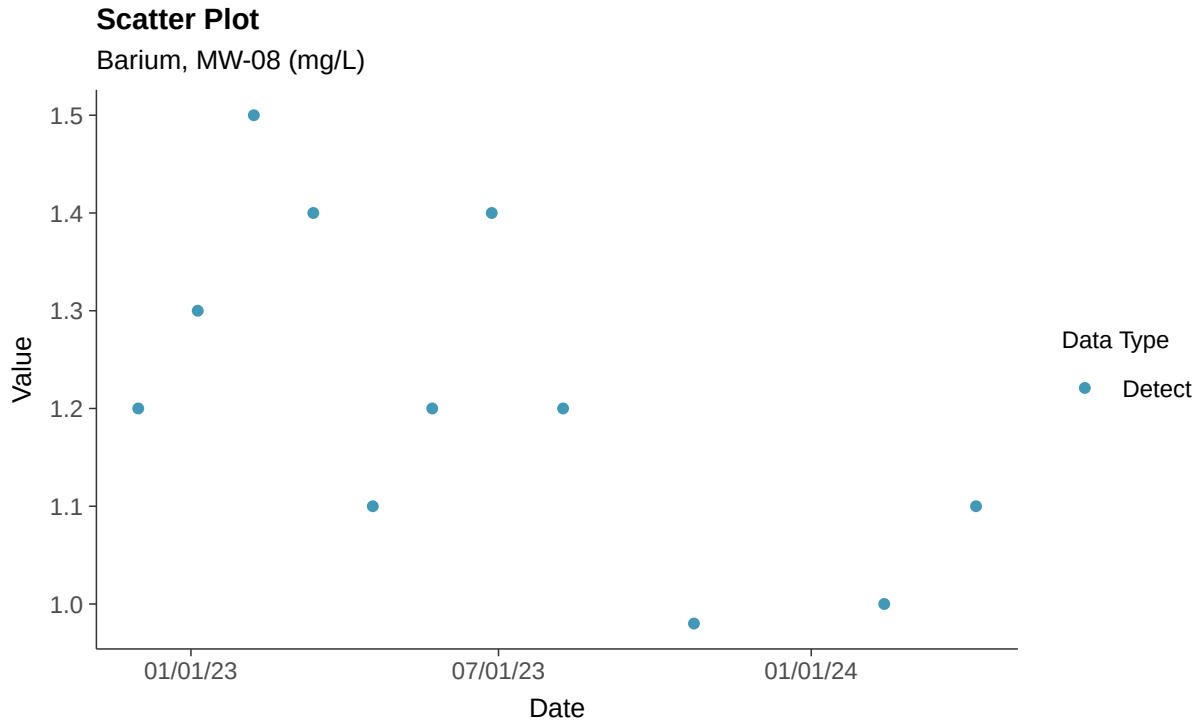
Trend Regression: Piecewise Linear-Linear-Linear

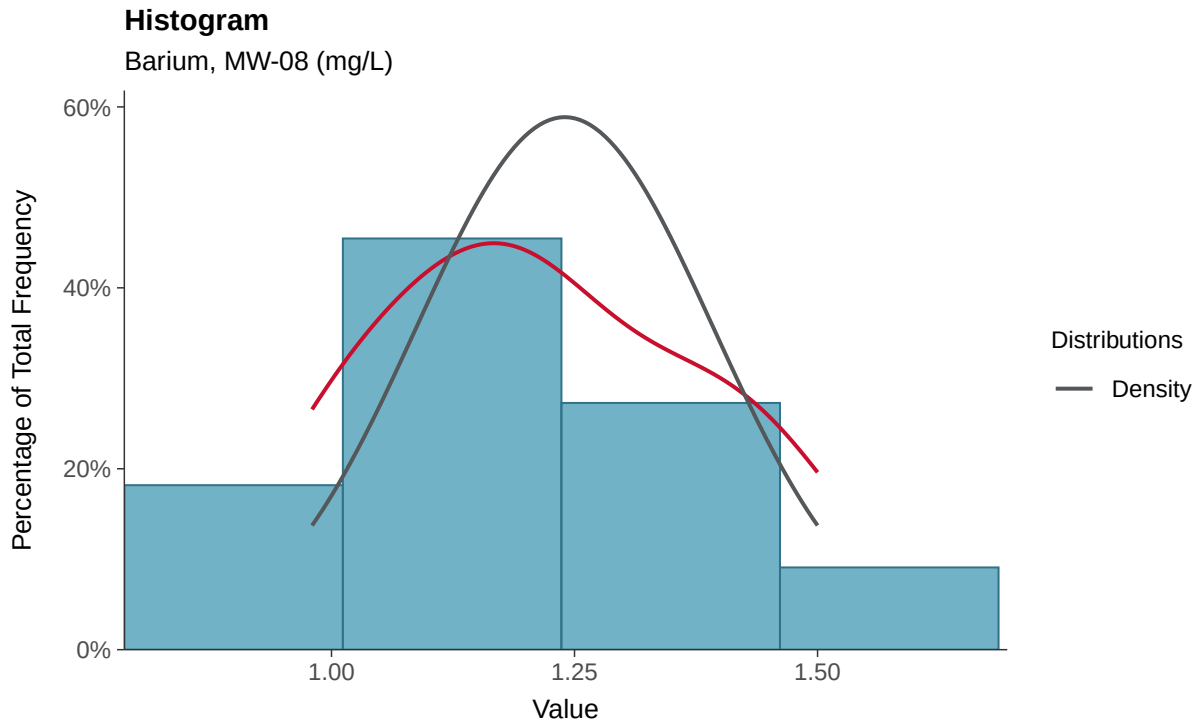
Arsenic, MW-08 (mg/L)



Appendix IV: Barium, MW-08

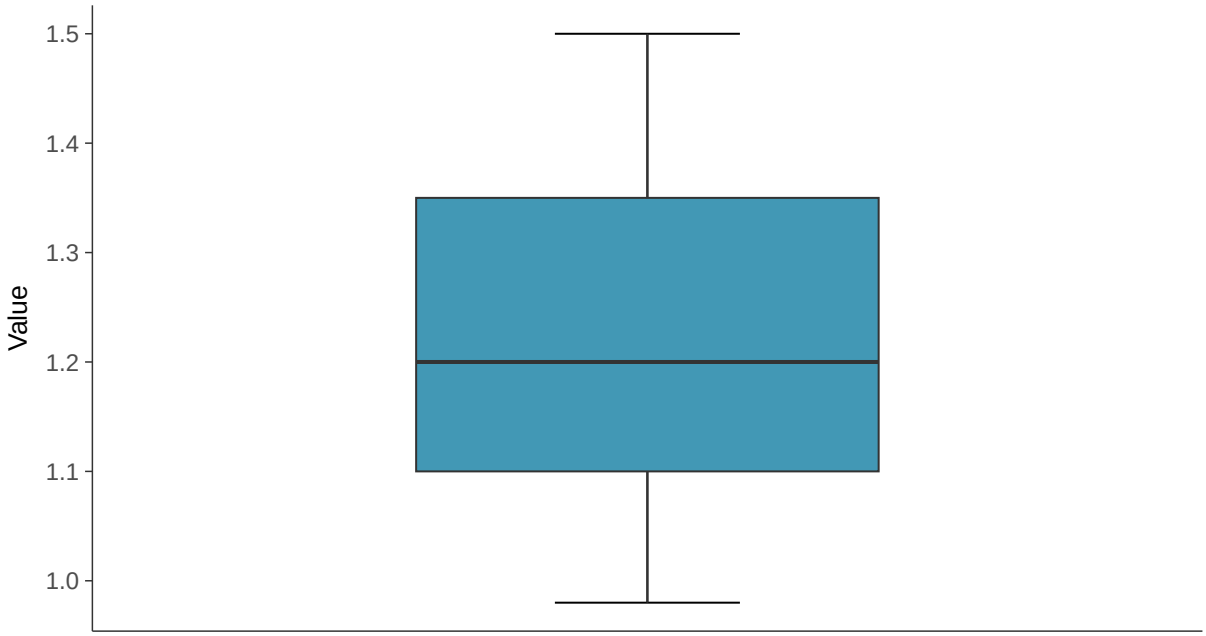
ID: 1_18_5_103





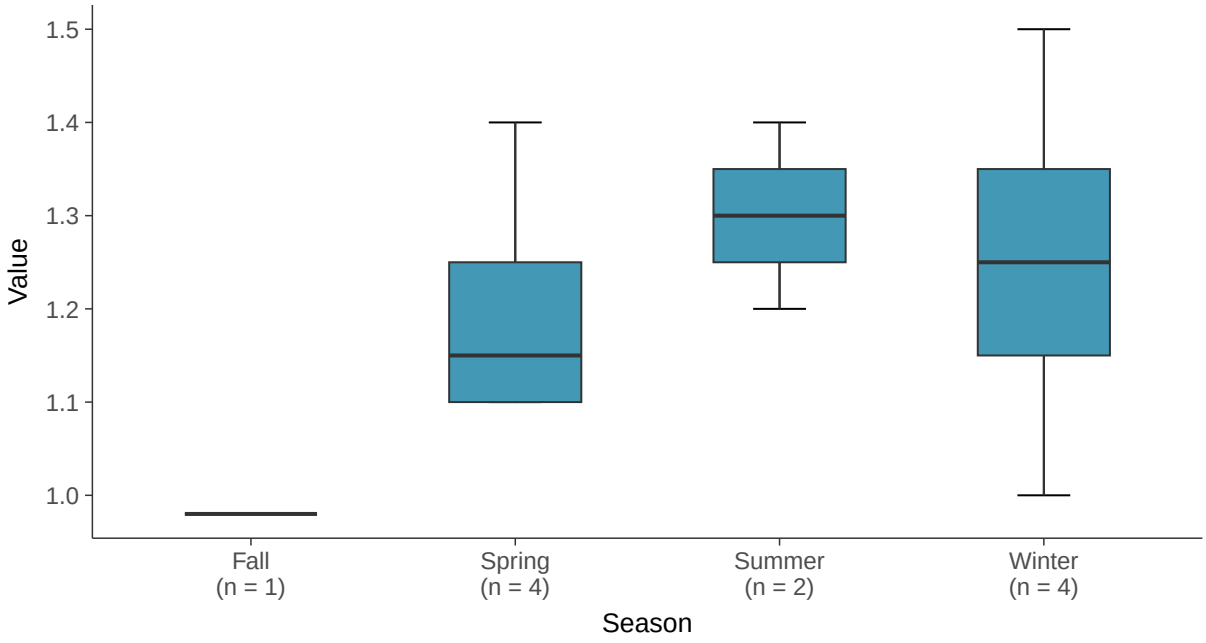
Boxplot

Barium, MW-08 (mg/L)



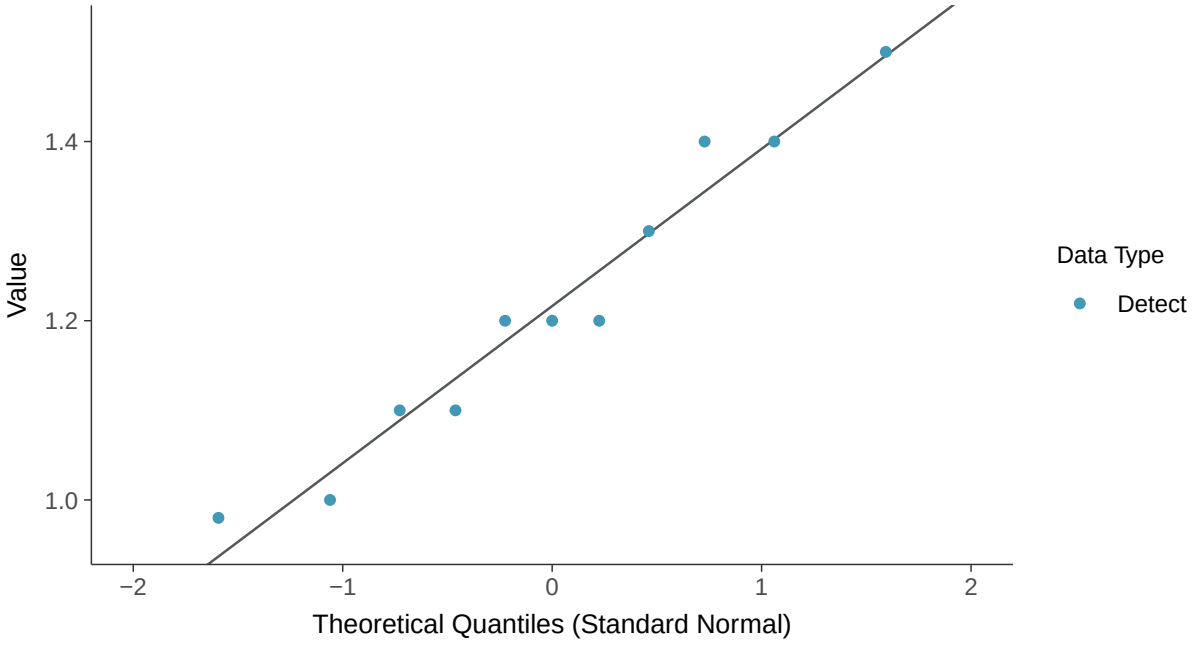
Boxplot by Season

Barium, MW-08 (mg/L)



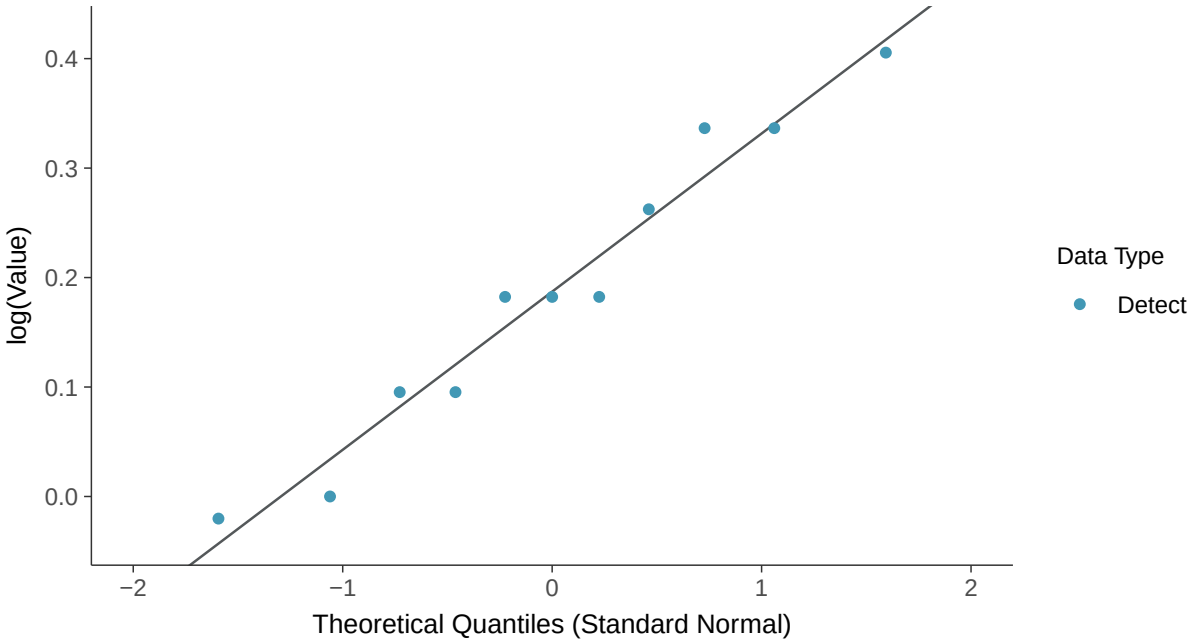
Normal Q-Q plot

Barium, MW-08 (mg/L)



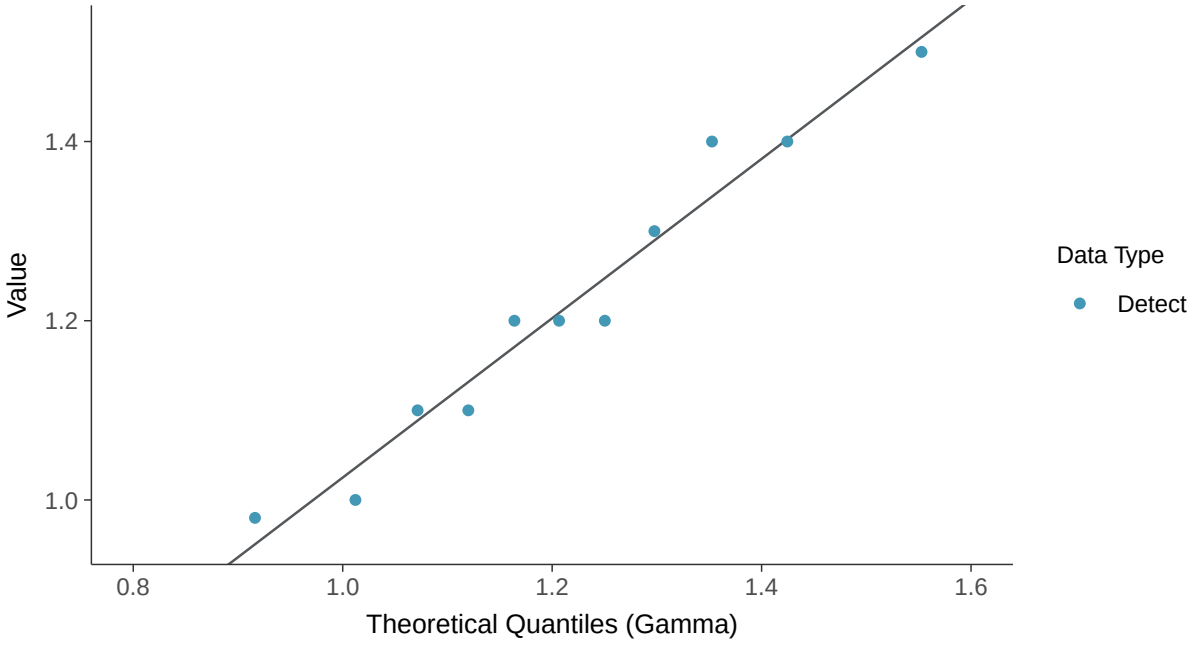
Lognormal Q-Q plot

Barium, MW-08 (mg/L)



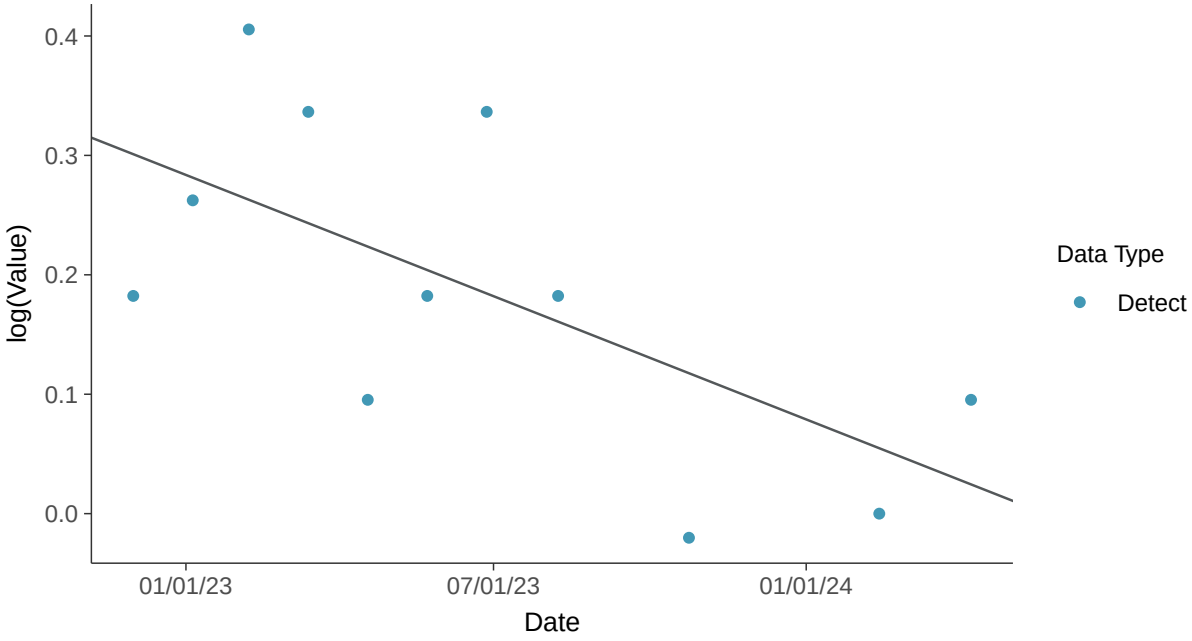
Gamma Q-Q plot

Barium, MW-08 (mg/L)



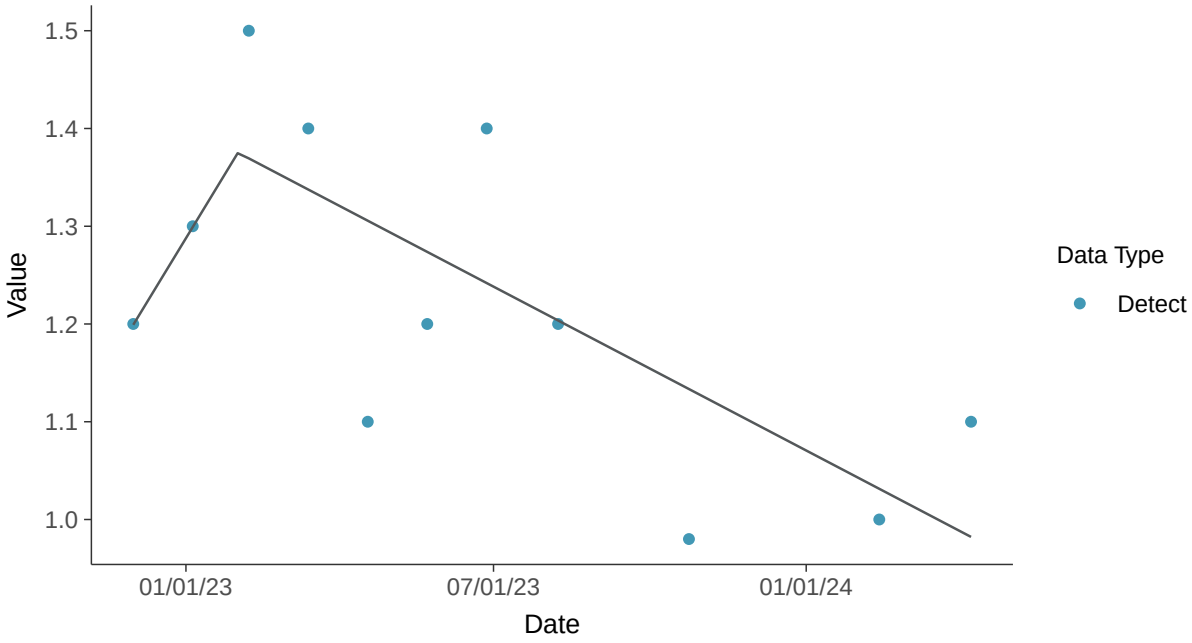
Trend Regression: Lognormal MLE

Barium, MW-08 (mg/L)



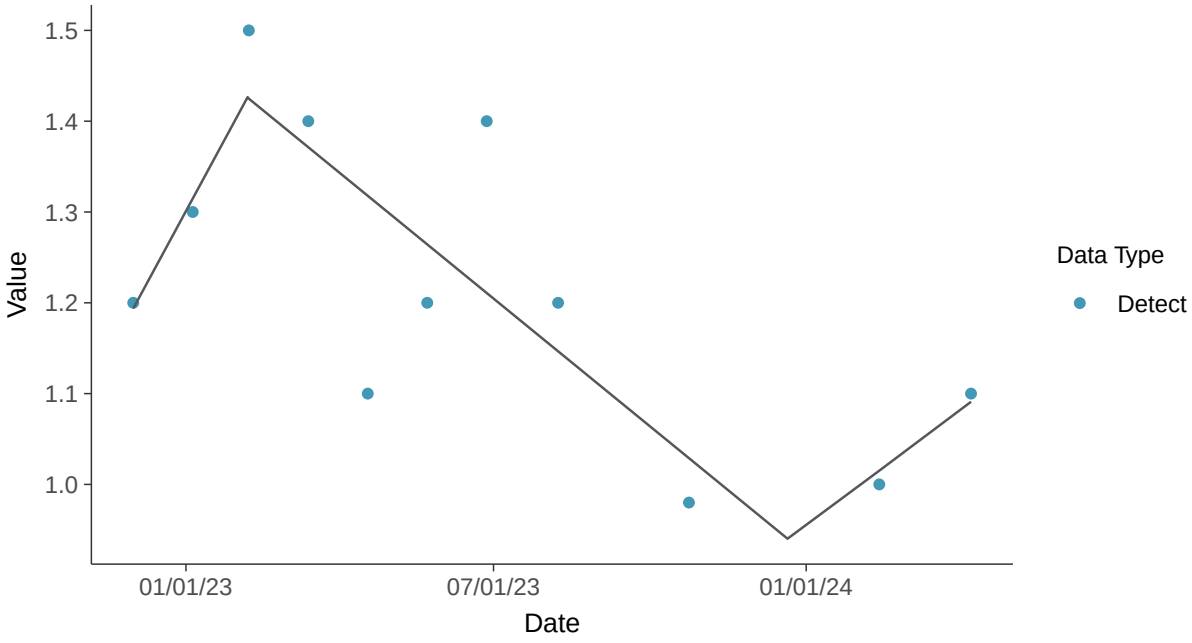
Trend Regression: Piecewise Linear-Linear

Barium, MW-08 (mg/L)



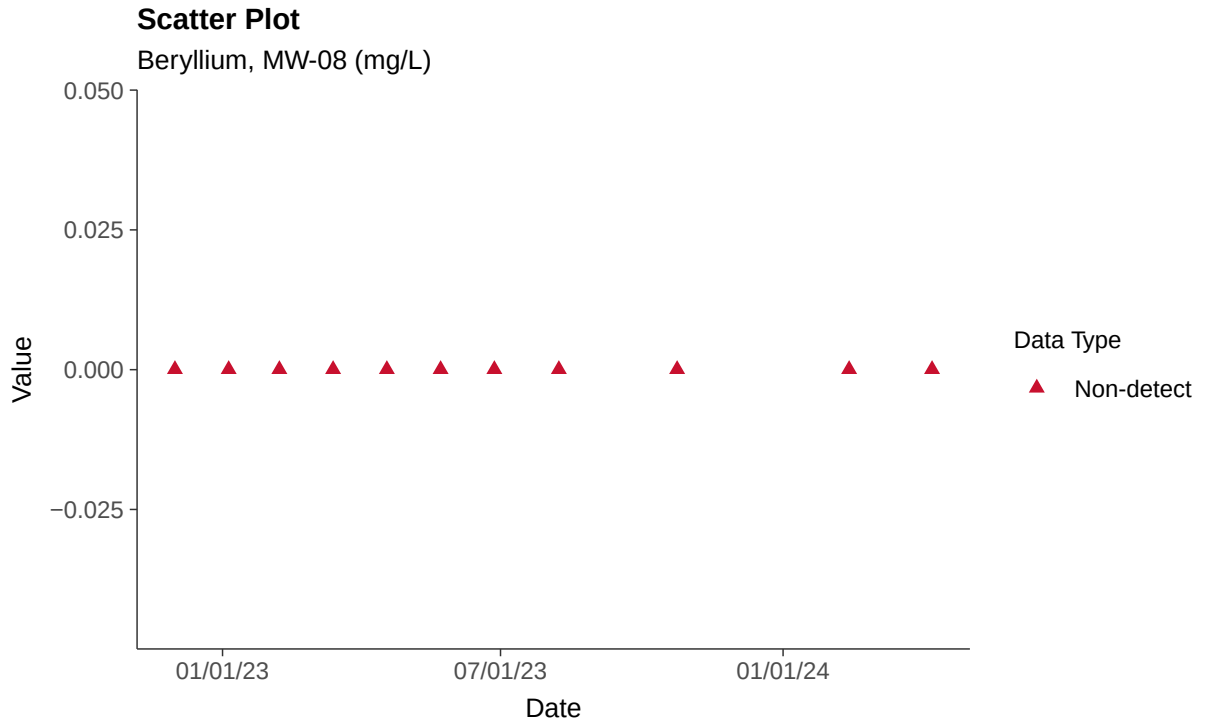
Trend Regression: Piecewise Linear-Linear-Linear

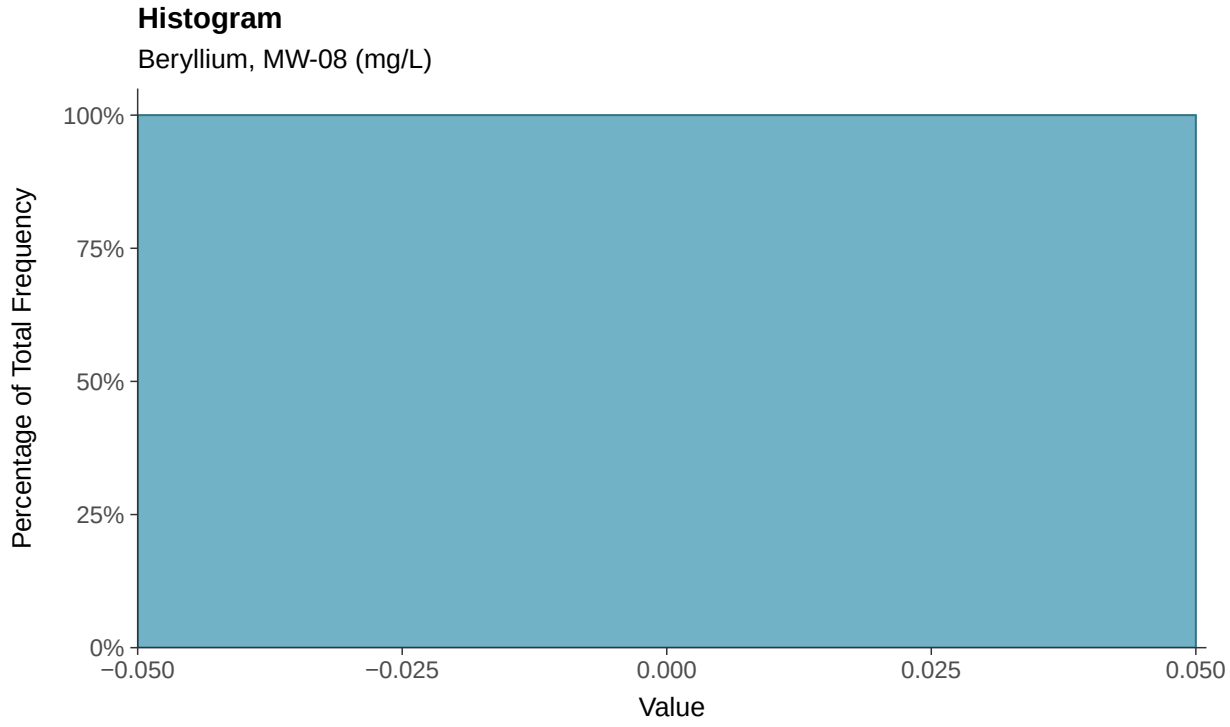
Barium, MW-08 (mg/L)



Appendix IV: Beryllium, MW-08

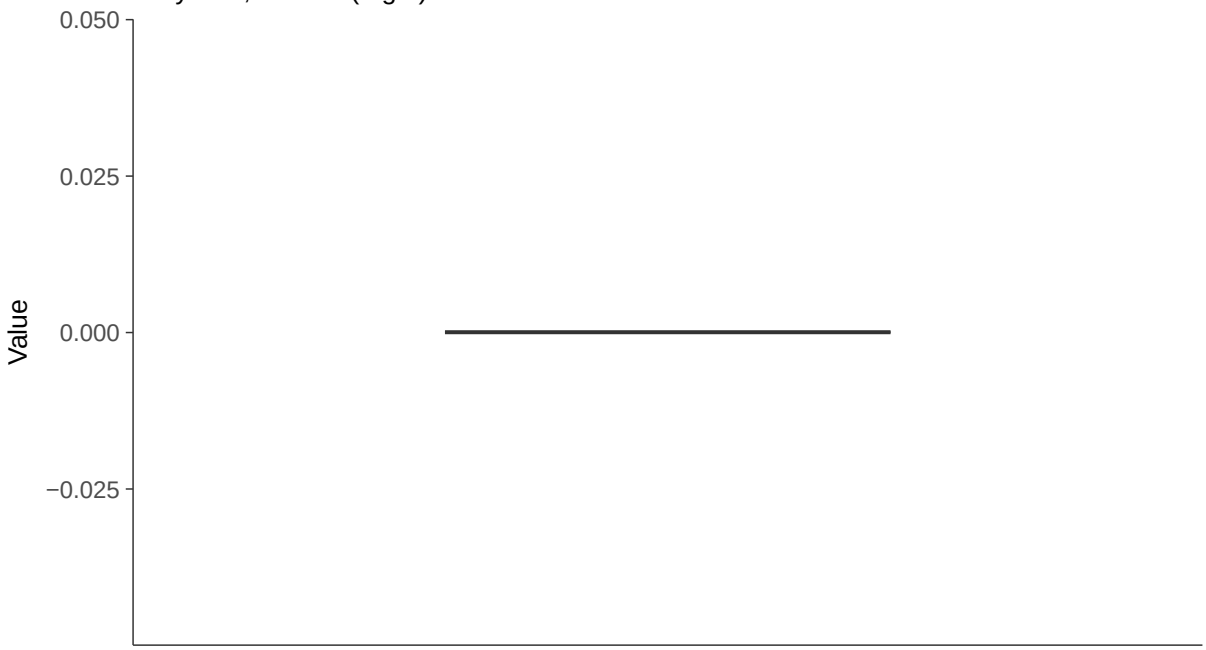
ID: 1_18_5_104





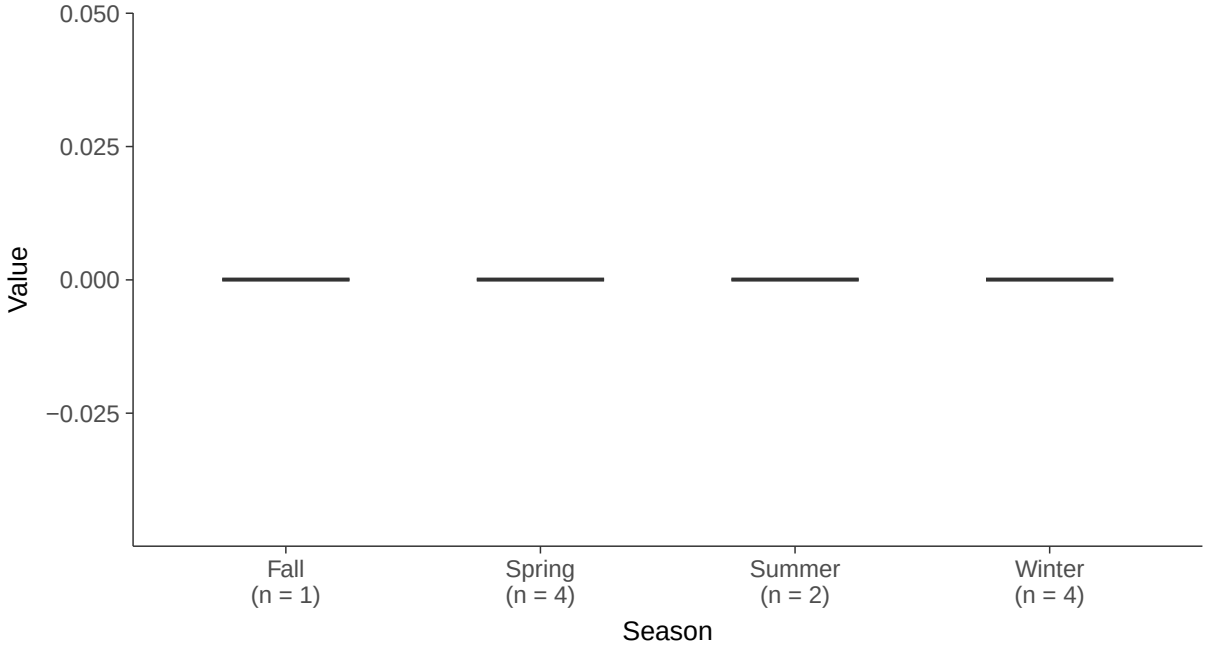
Boxplot

Beryllium, MW-08 (mg/L)



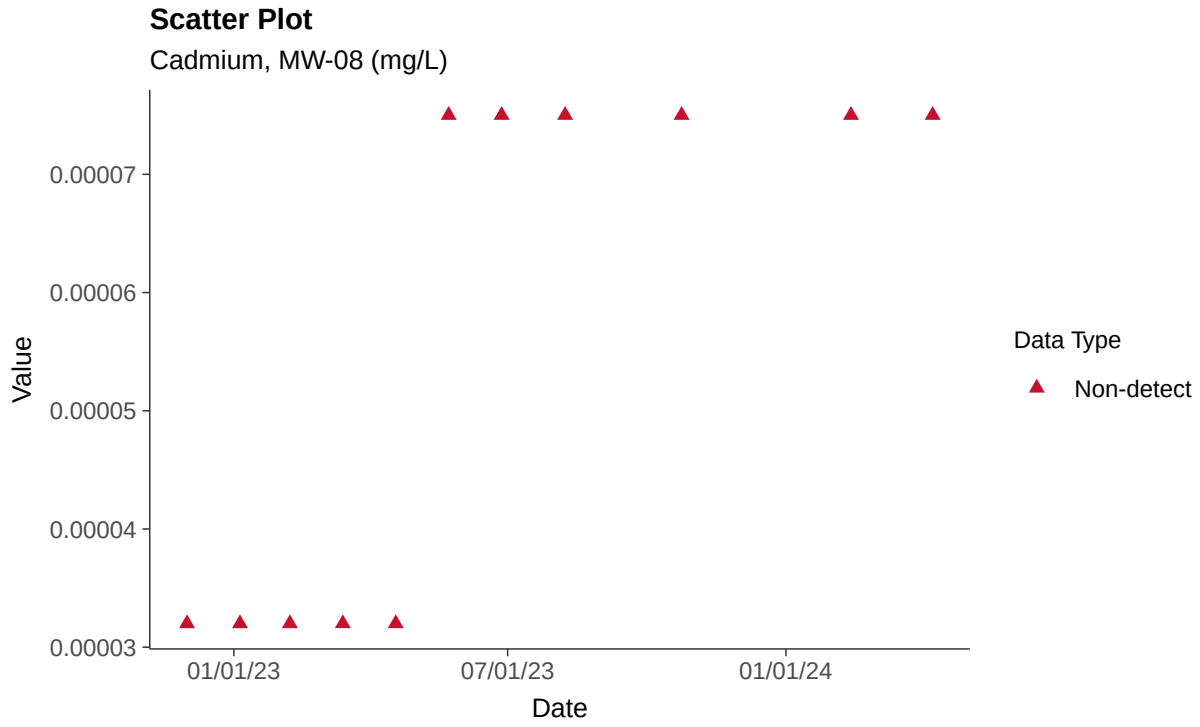
Boxplot by Season

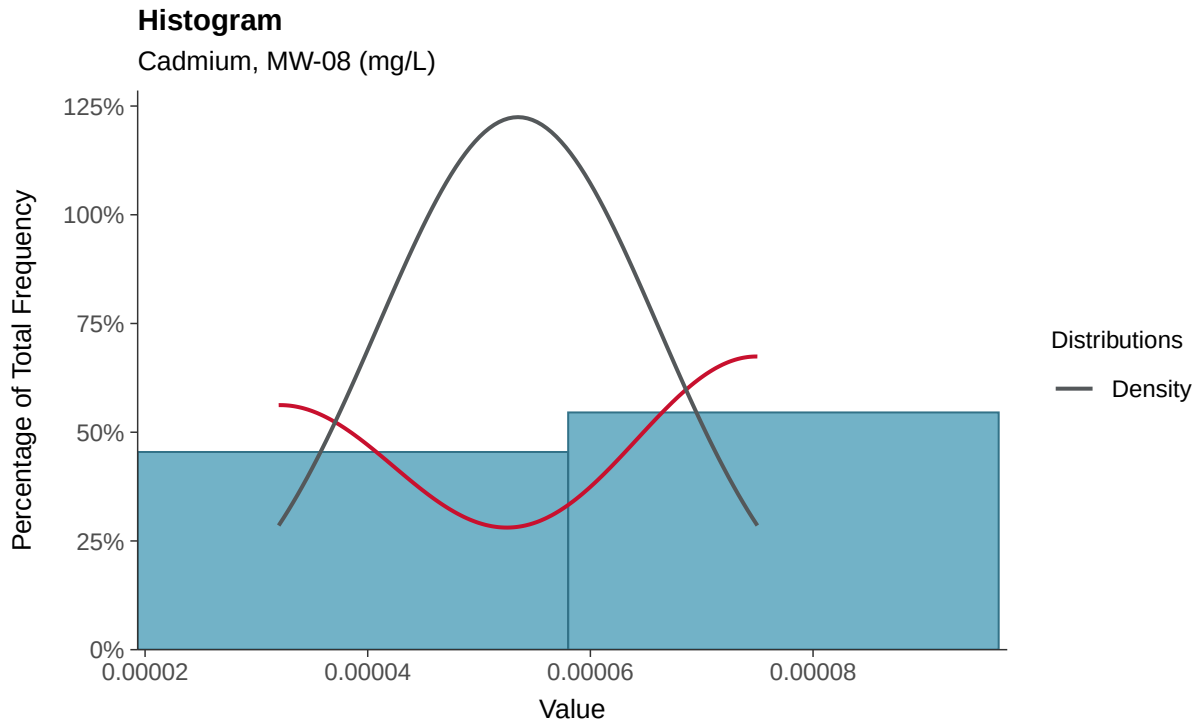
Beryllium, MW-08 (mg/L)



Appendix IV: Cadmium, MW-08

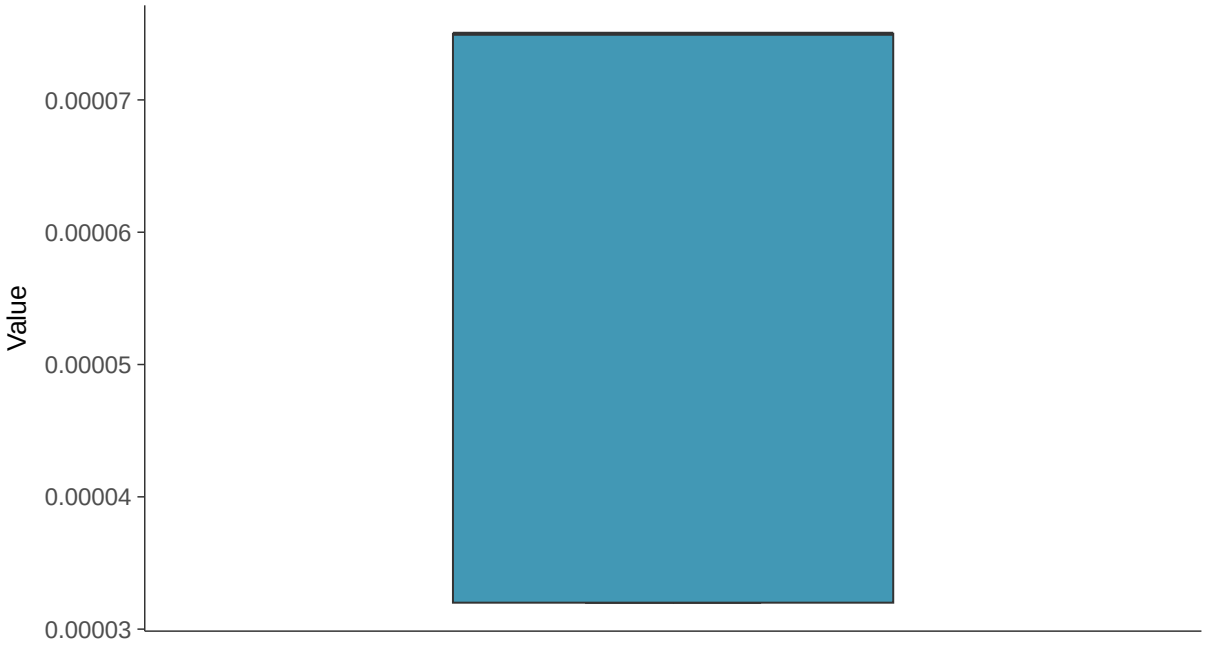
ID: 1_18_5_106





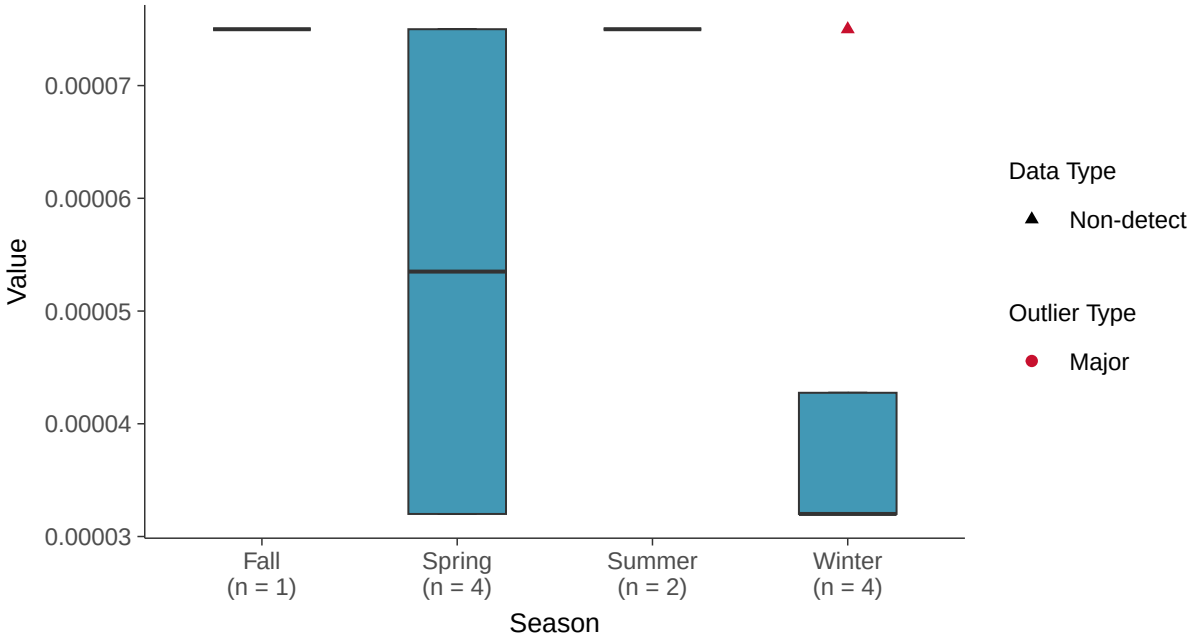
Boxplot

Cadmium, MW-08 (mg/L)



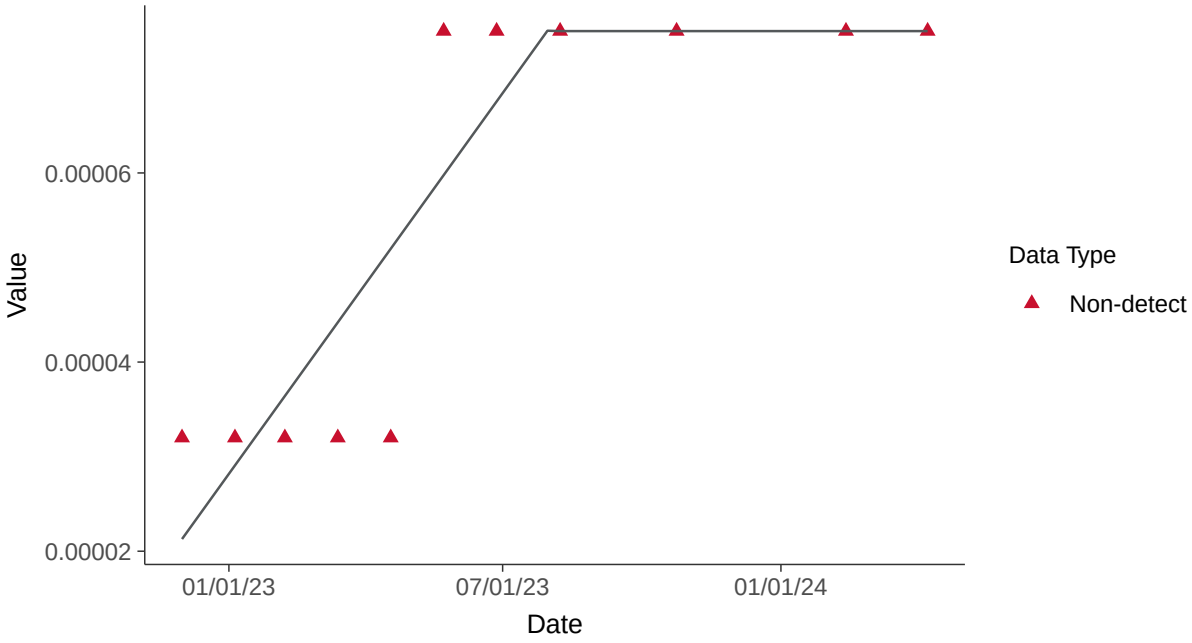
Boxplot by Season

Cadmium, MW-08 (mg/L)



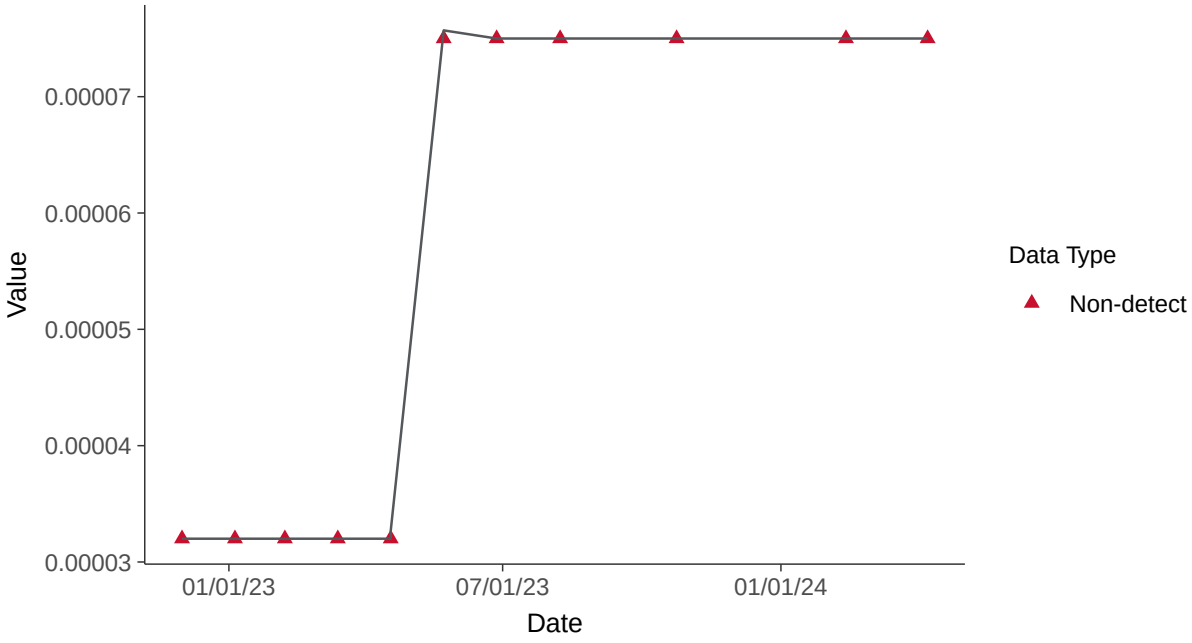
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-08 (mg/L)



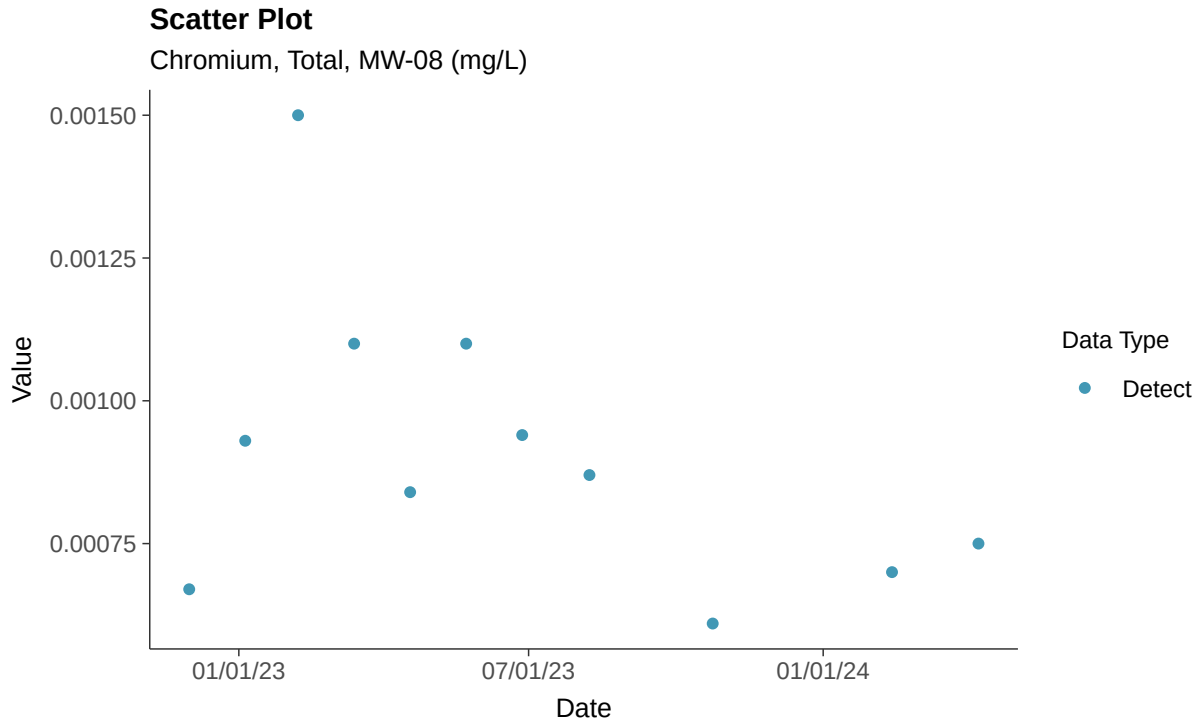
Trend Regression: Piecewise Linear-Linear-Linear

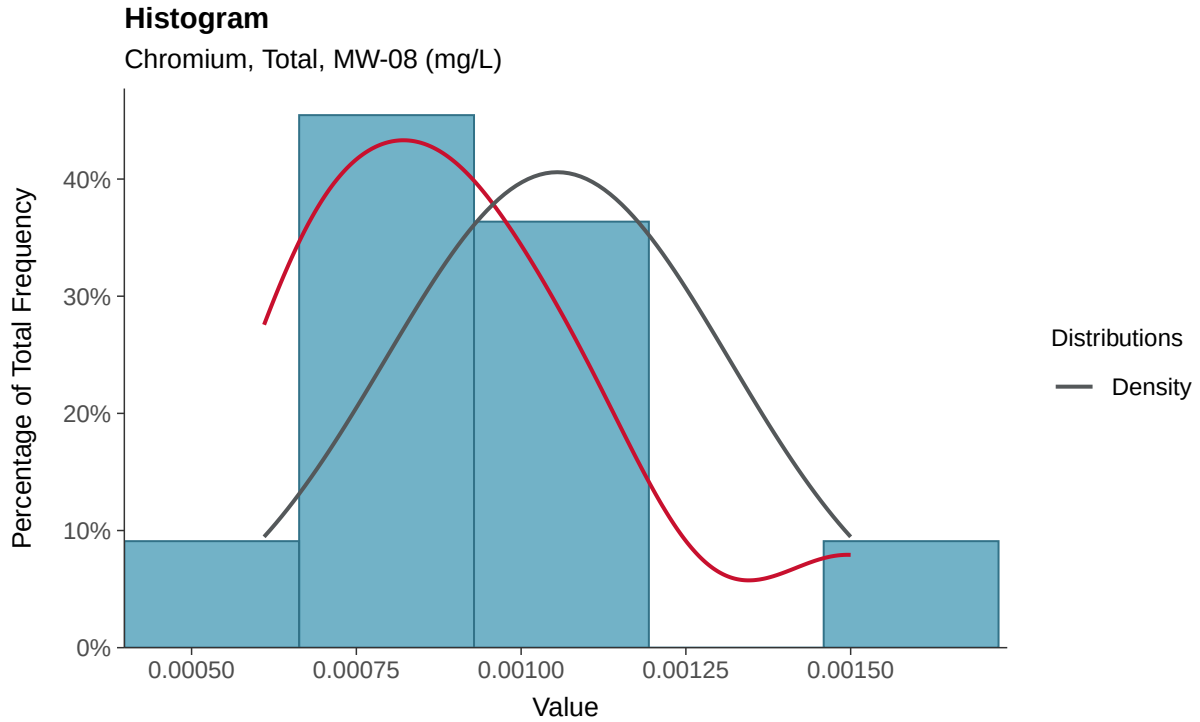
Cadmium, MW-08 (mg/L)



Appendix IV: Chromium, Total, MW-08

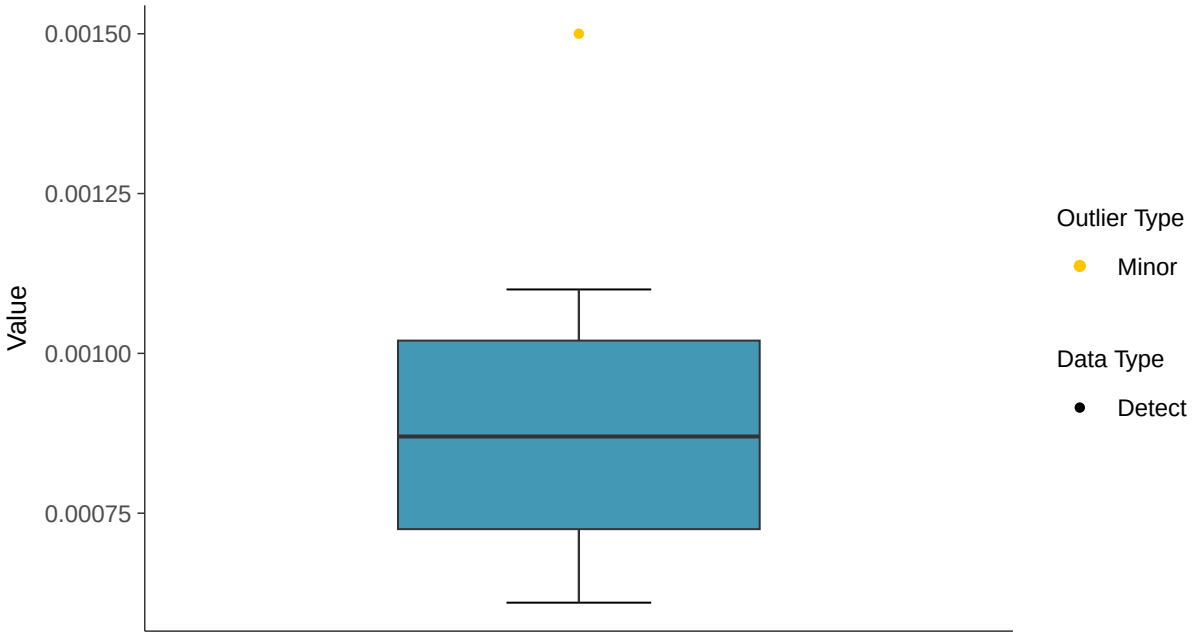
ID: 1_18_5_109





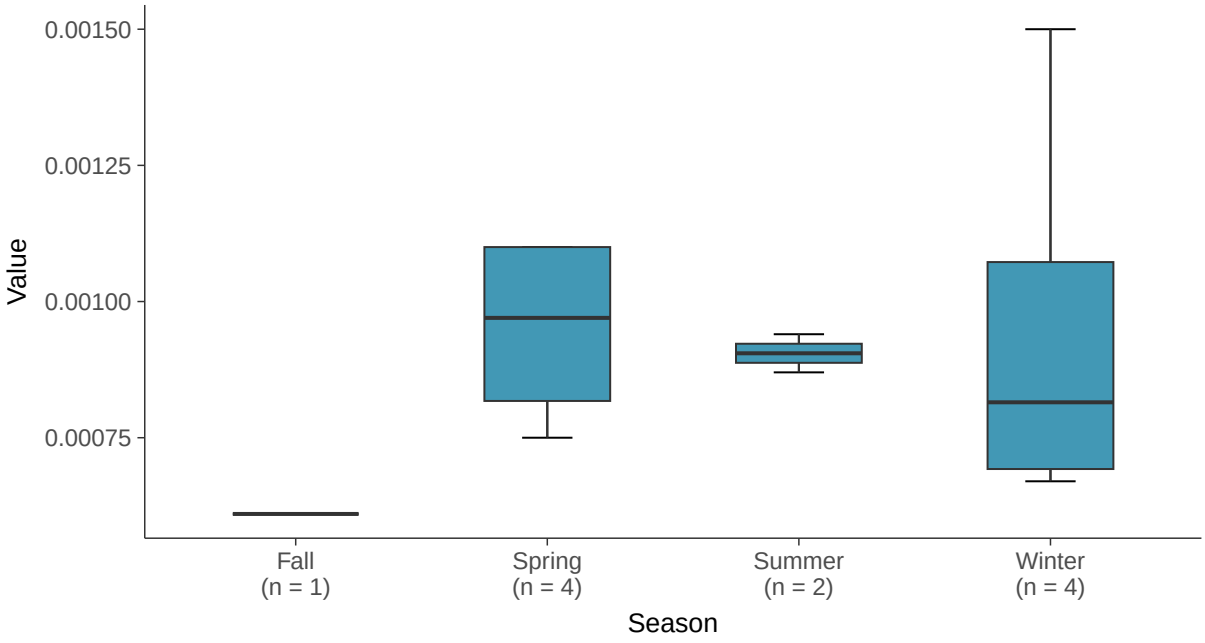
Boxplot

Chromium, Total, MW-08 (mg/L)



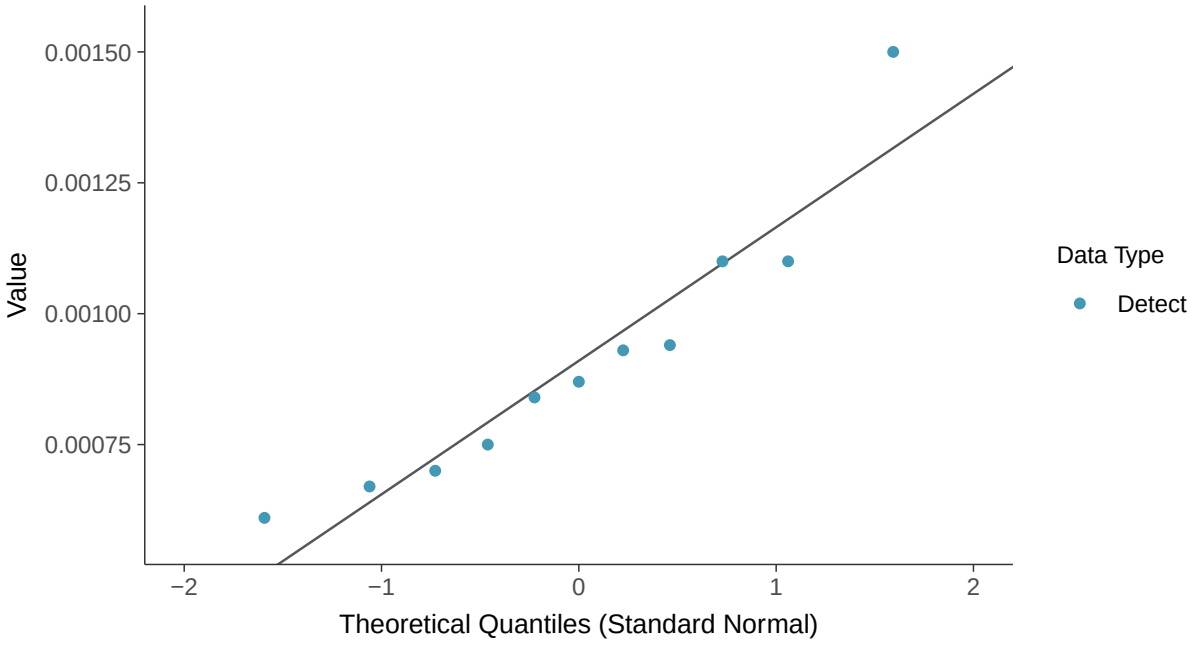
Boxplot by Season

Chromium, Total, MW-08 (mg/L)



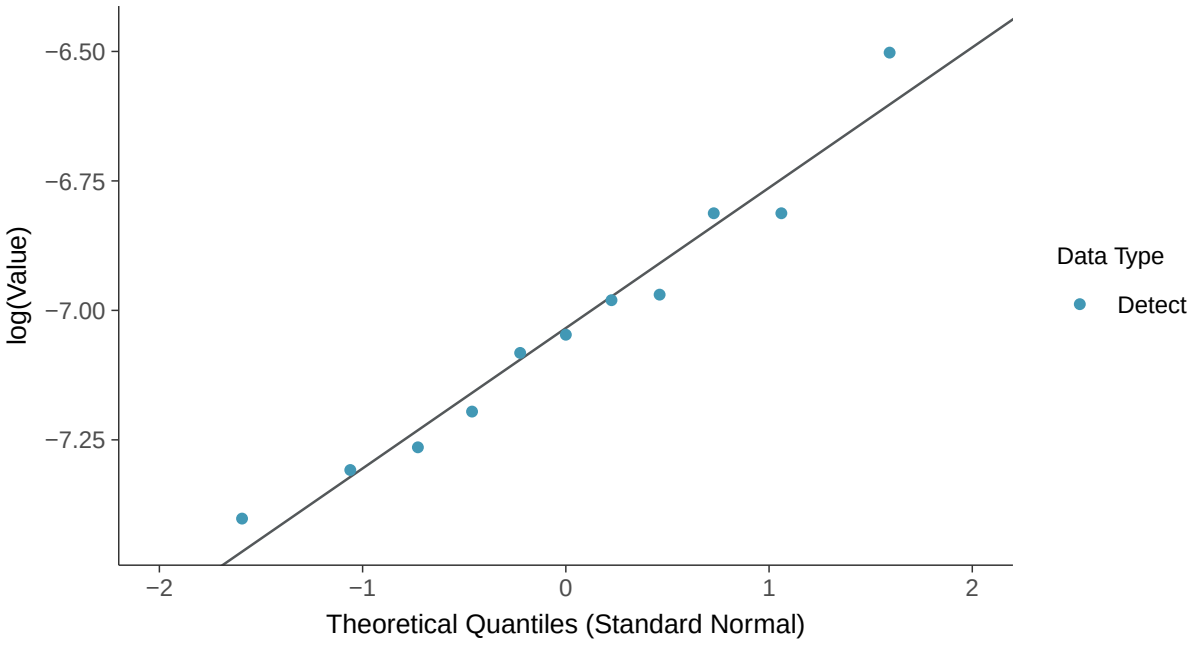
Normal Q-Q plot

Chromium, Total, MW-08 (mg/L)



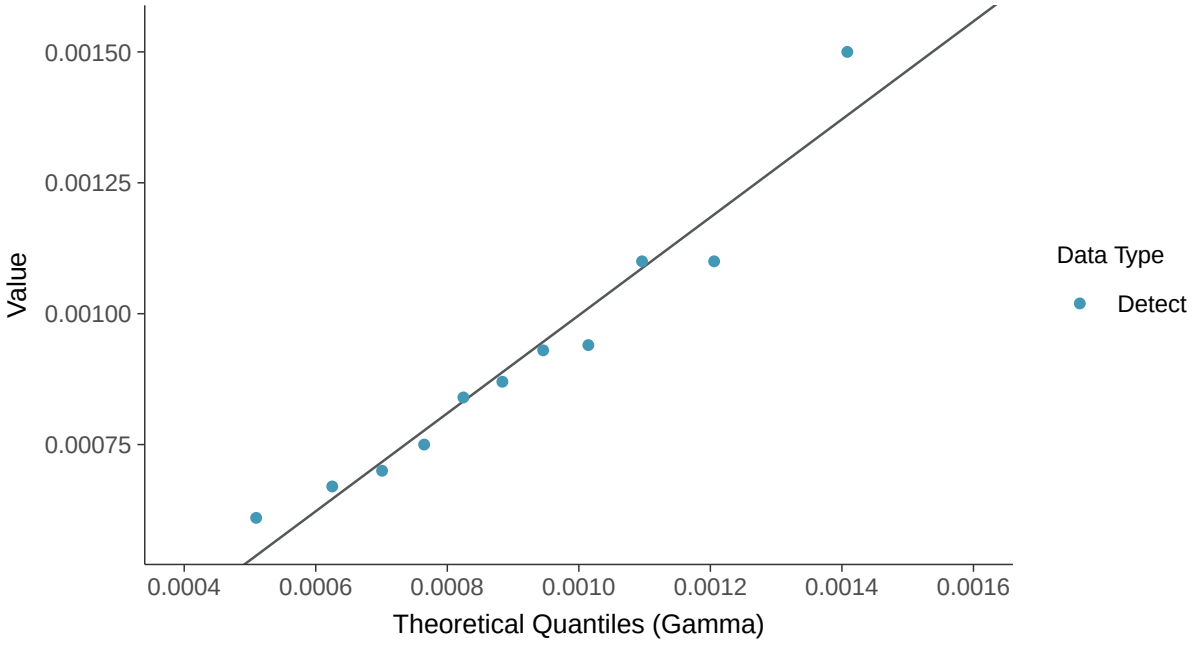
Lognormal Q-Q plot

Chromium, Total, MW-08 (mg/L)



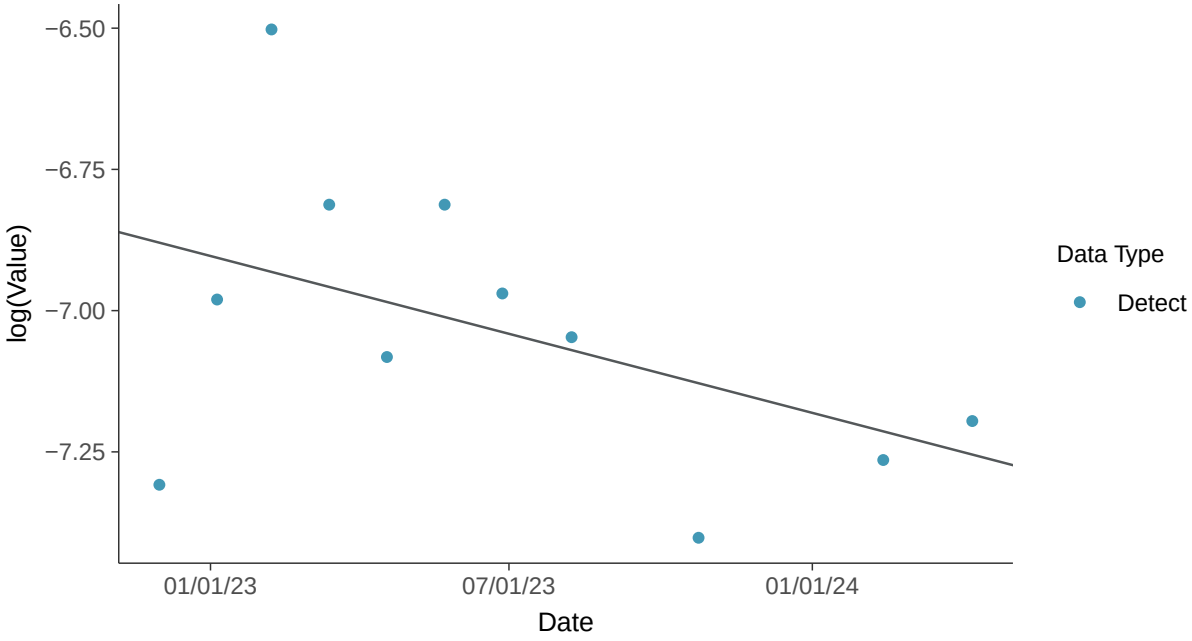
Gamma Q-Q plot

Chromium, Total, MW-08 (mg/L)



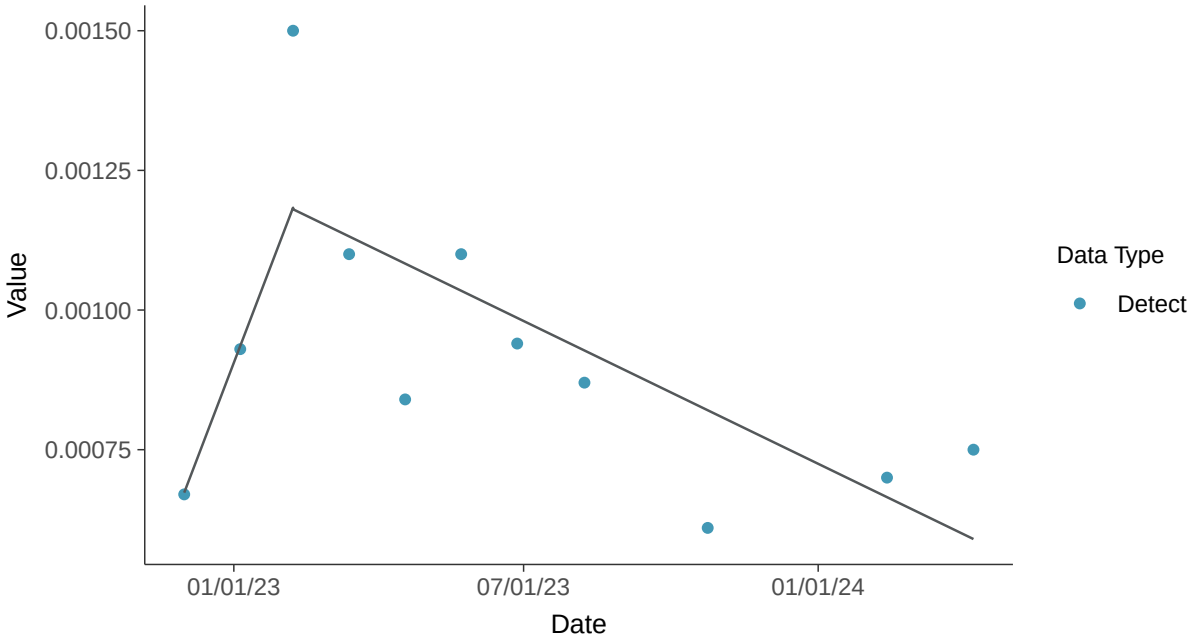
Trend Regression: Lognormal MLE

Chromium, Total, MW-08 (mg/L)



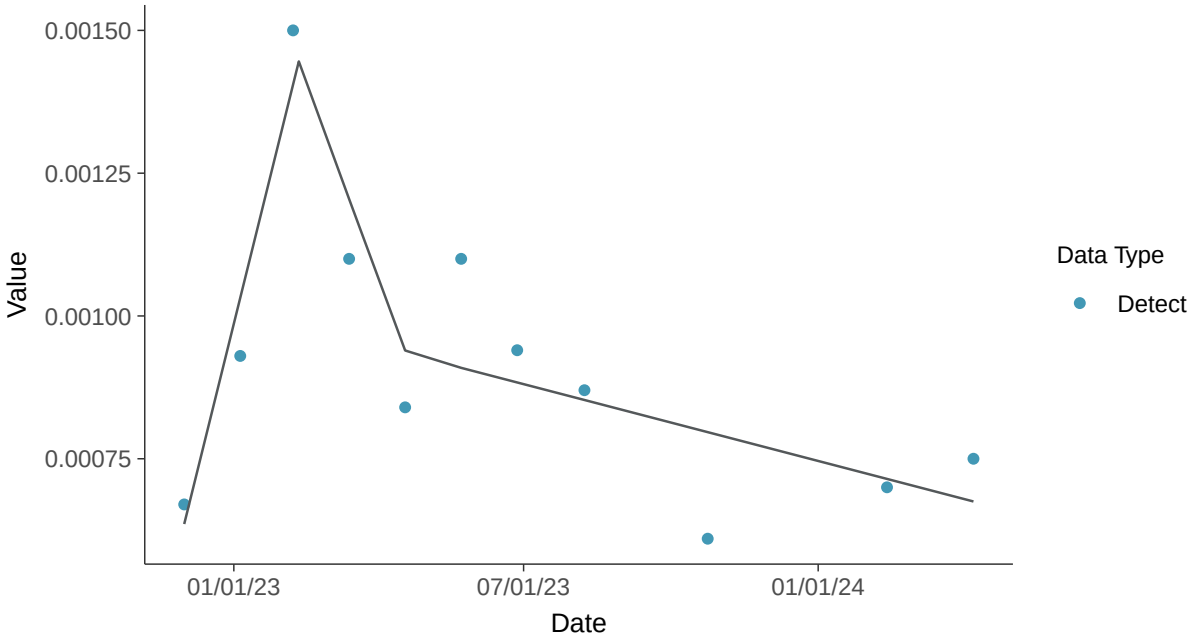
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-08 (mg/L)



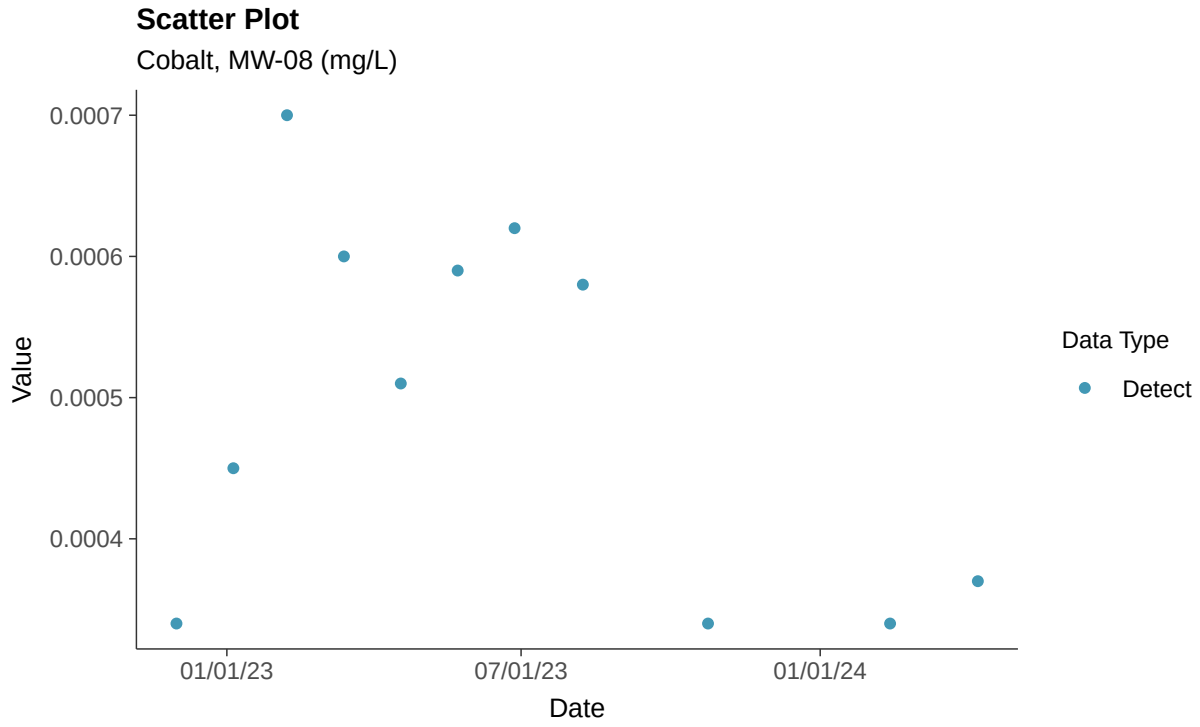
Trend Regression: Piecewise Linear-Linear-Linear

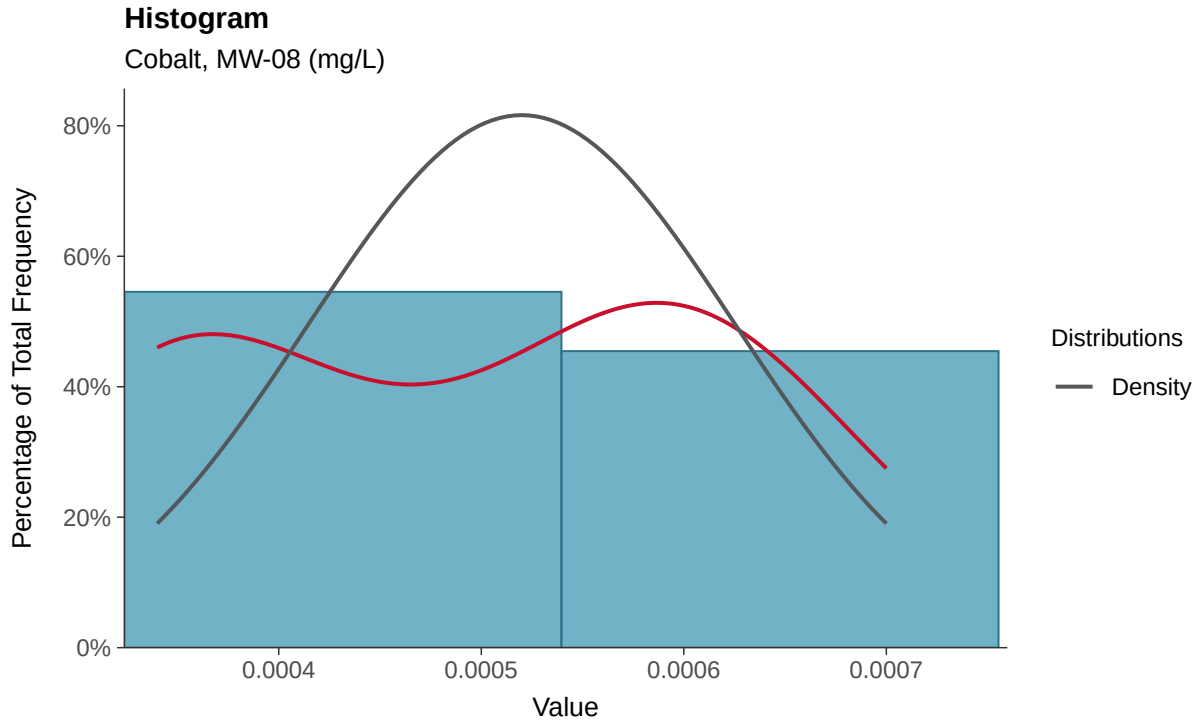
Chromium, Total, MW-08 (mg/L)



Appendix IV: Cobalt, MW-08

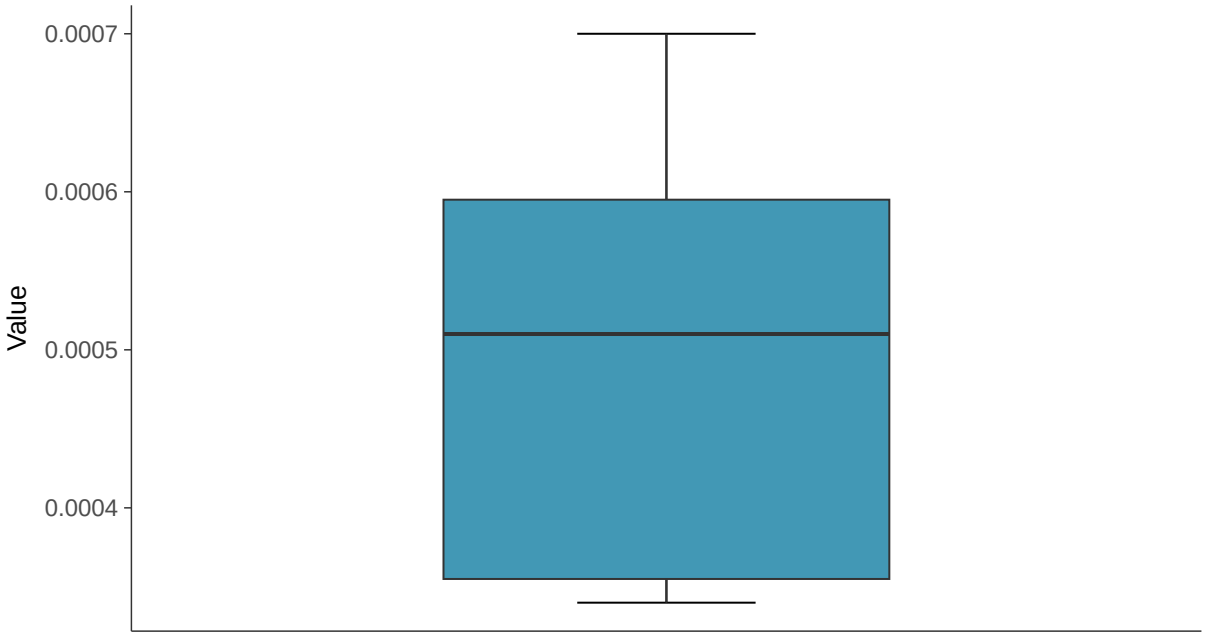
ID: 1_18_5_110





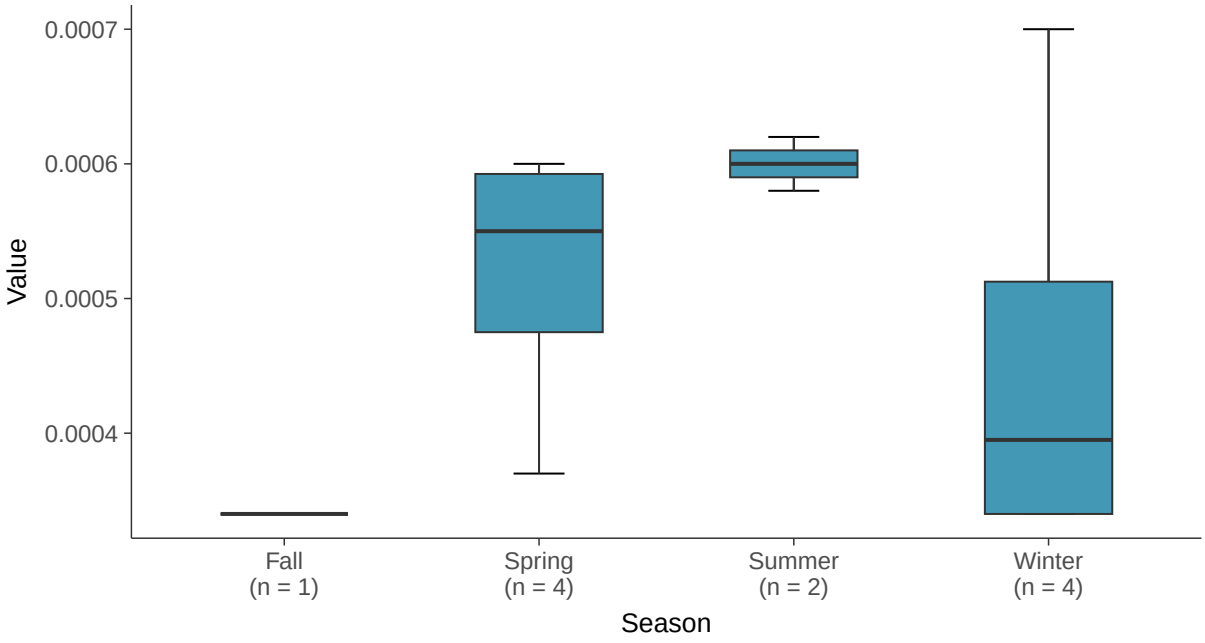
Boxplot

Cobalt, MW-08 (mg/L)



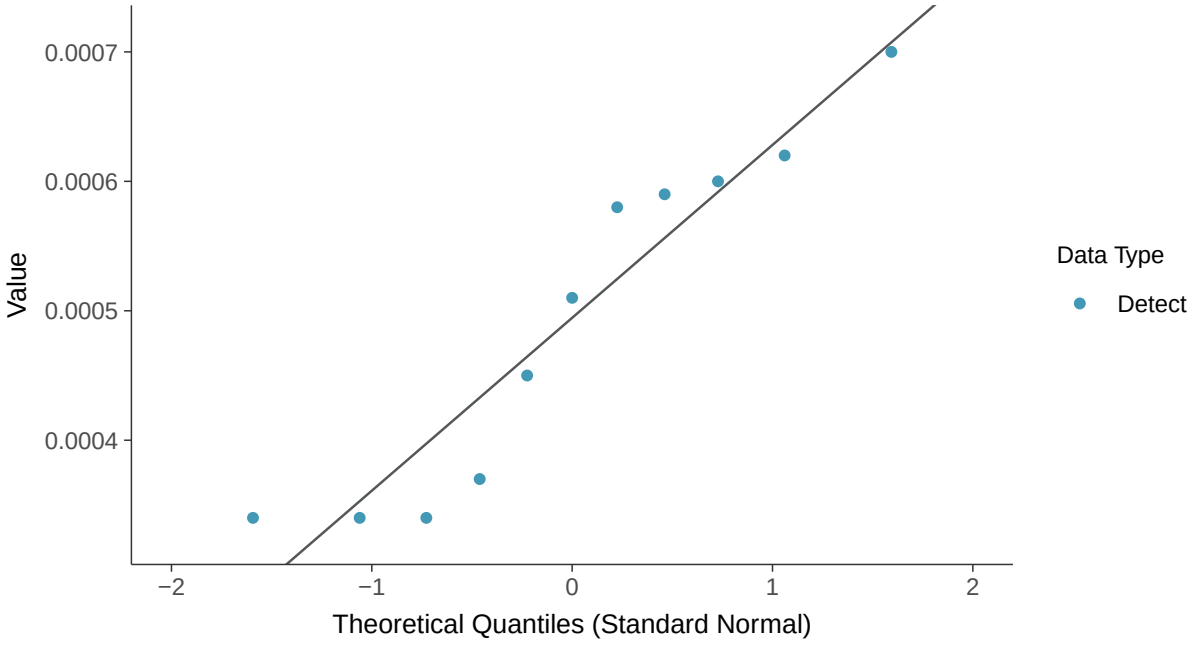
Boxplot by Season

Cobalt, MW-08 (mg/L)



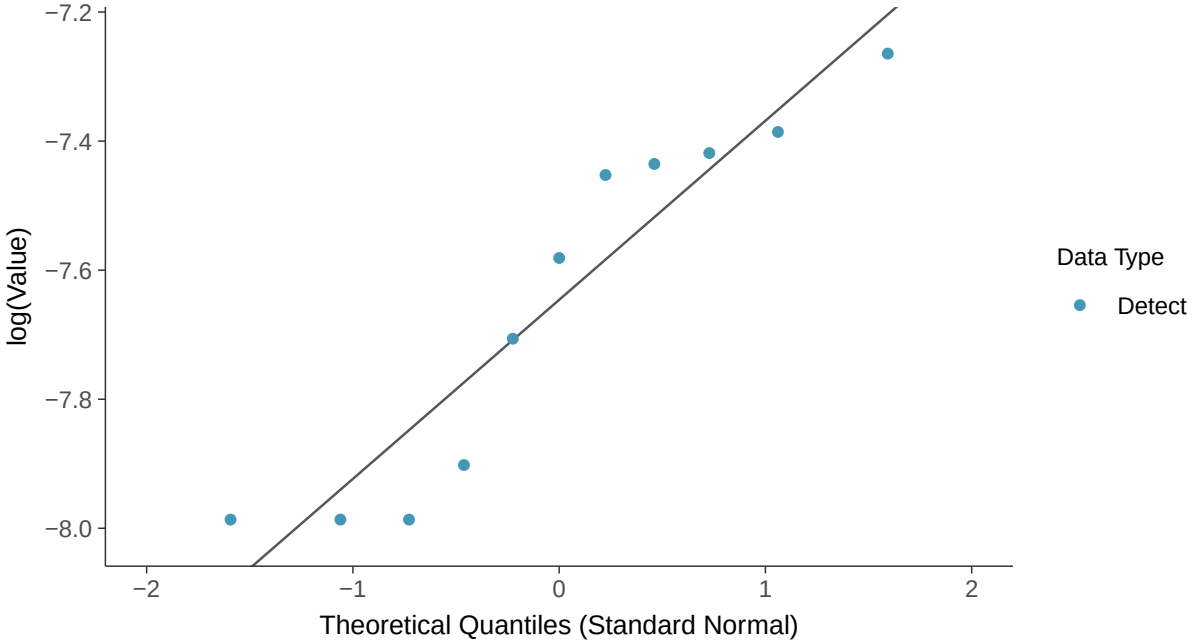
Normal Q-Q plot

Cobalt, MW-08 (mg/L)



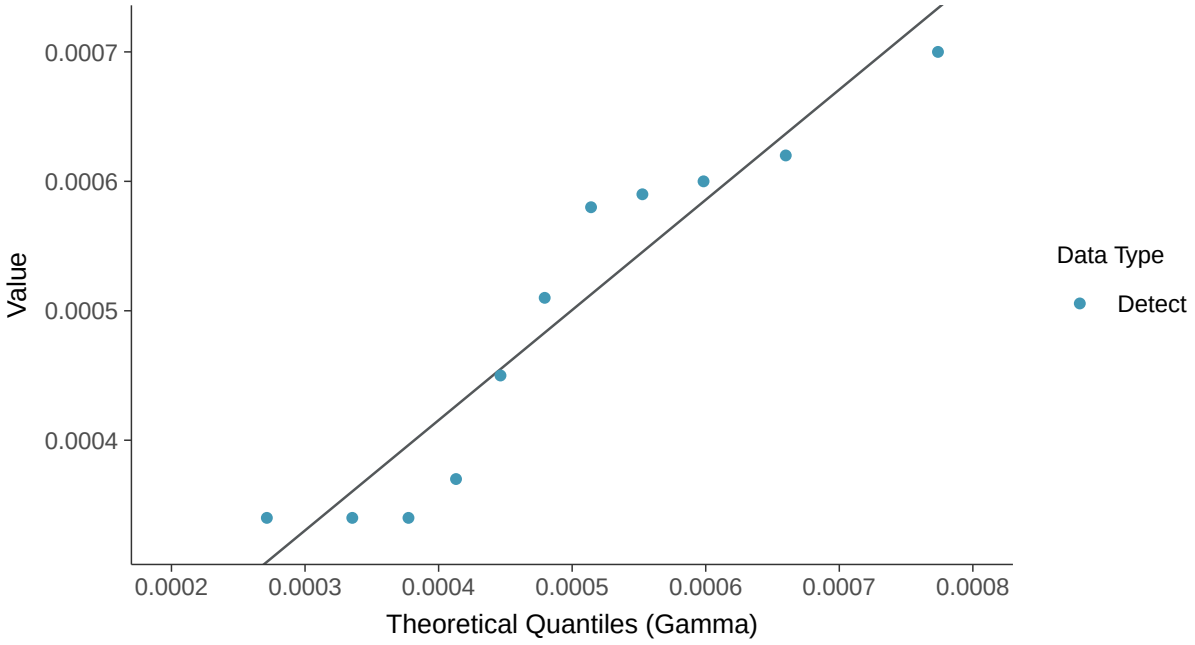
Lognormal Q-Q plot

Cobalt, MW-08 (mg/L)



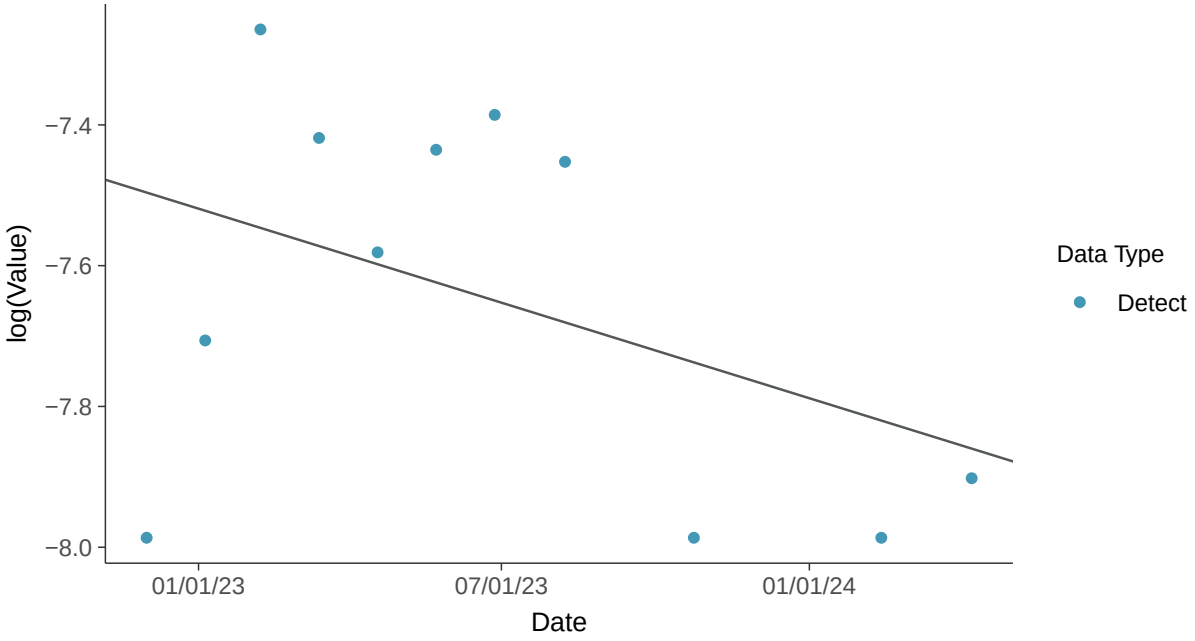
Gamma Q-Q plot

Cobalt, MW-08 (mg/L)



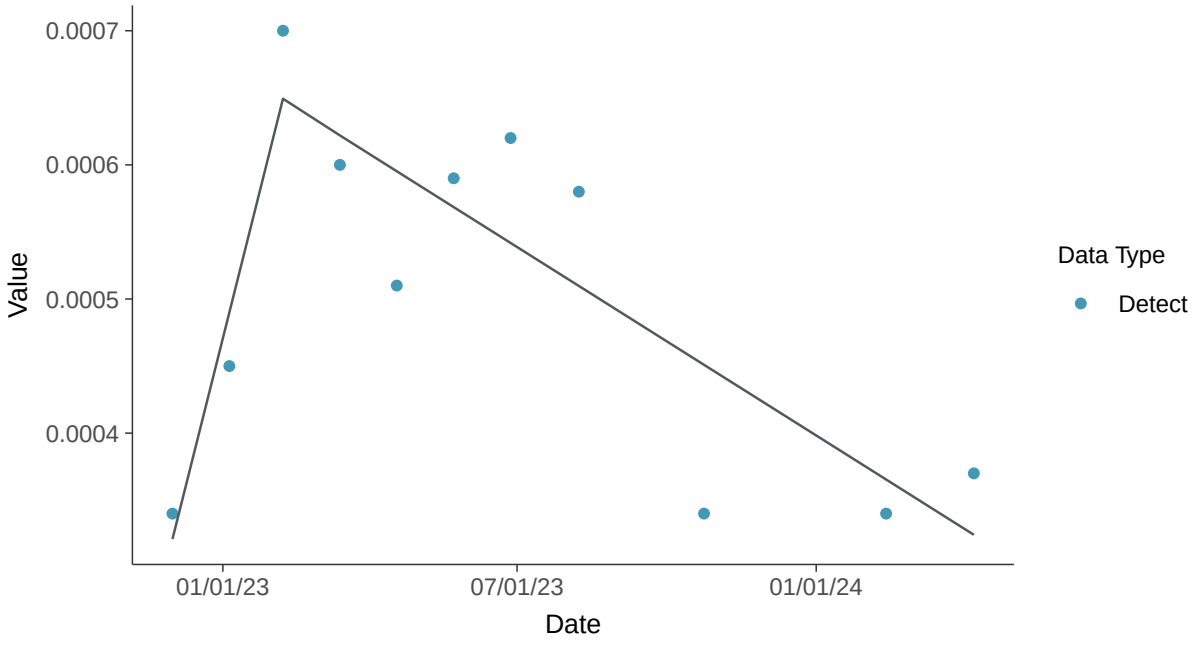
Trend Regression: Lognormal MLE

Cobalt, MW-08 (mg/L)



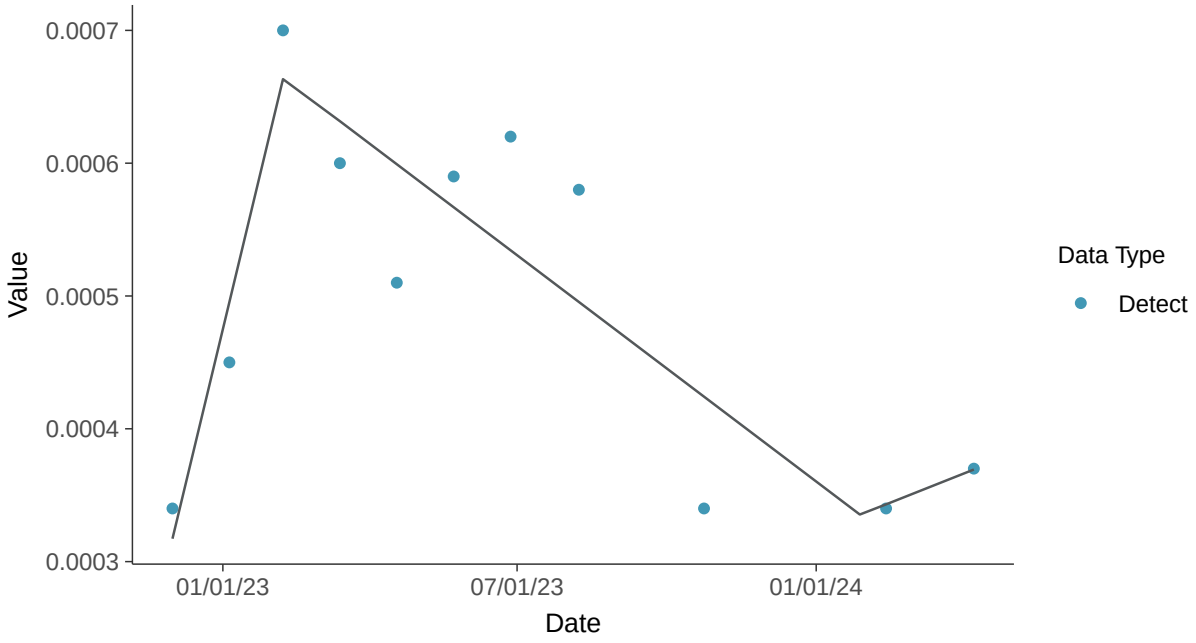
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-08 (mg/L)



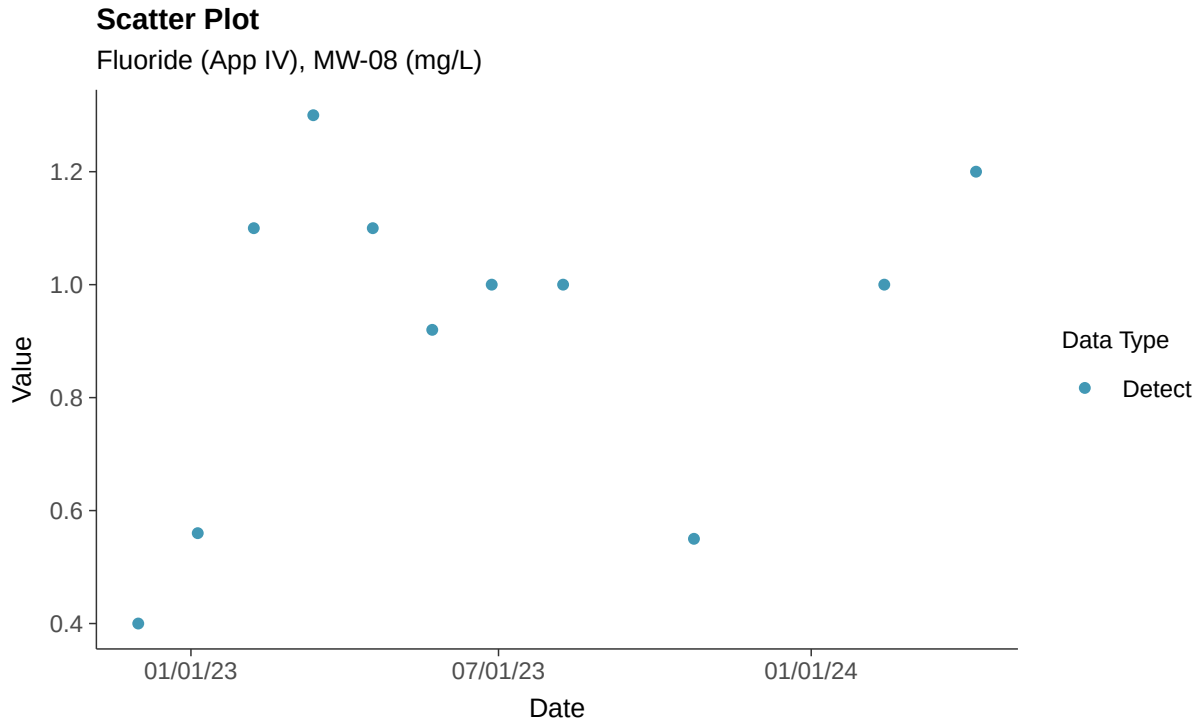
Trend Regression: Piecewise Linear-Linear-Linear

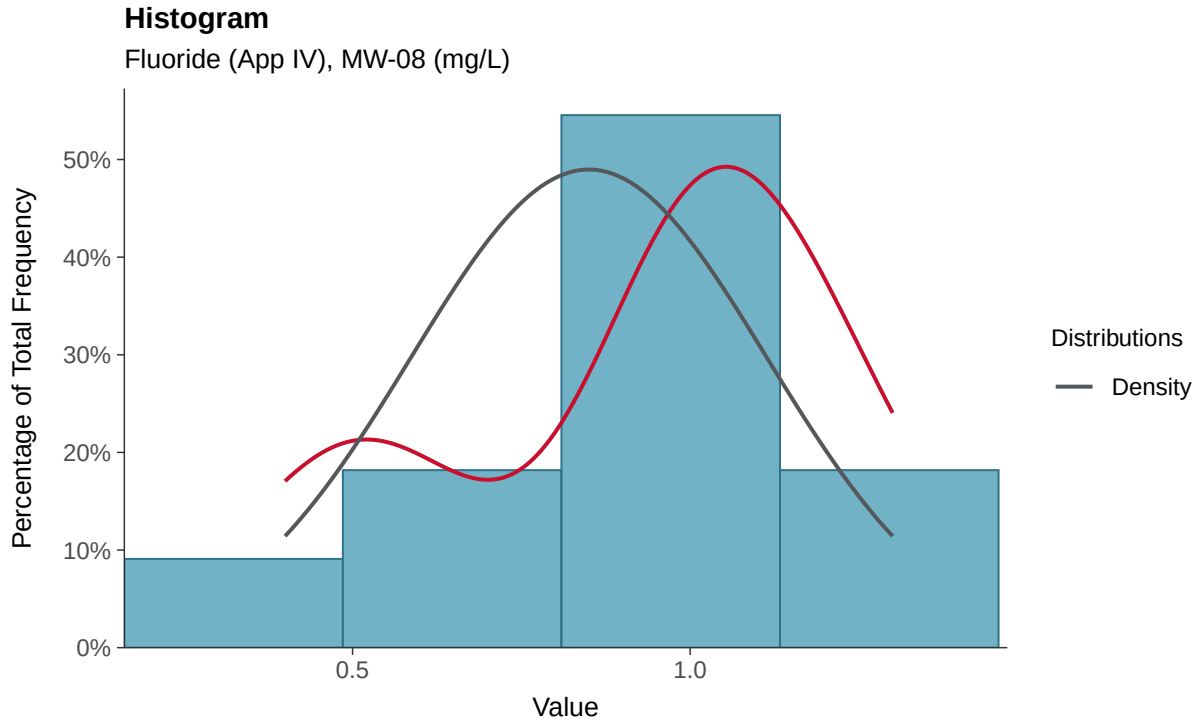
Cobalt, MW-08 (mg/L)



Appendix IV: Fluoride (App IV), MW-08

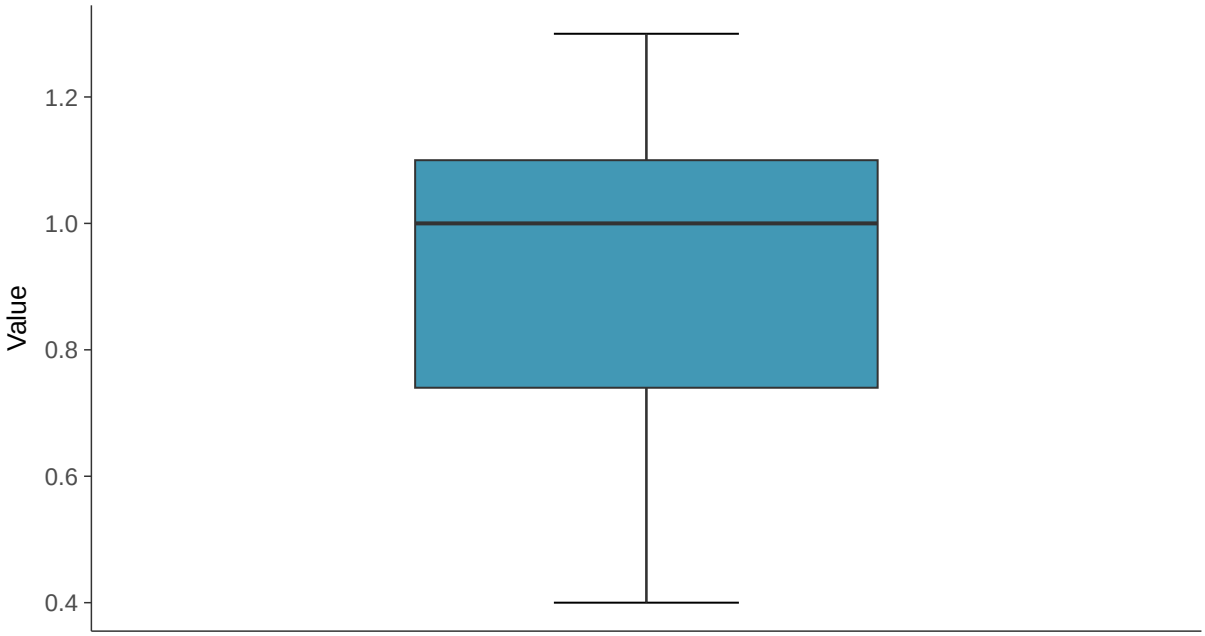
ID: 1_18_5_113





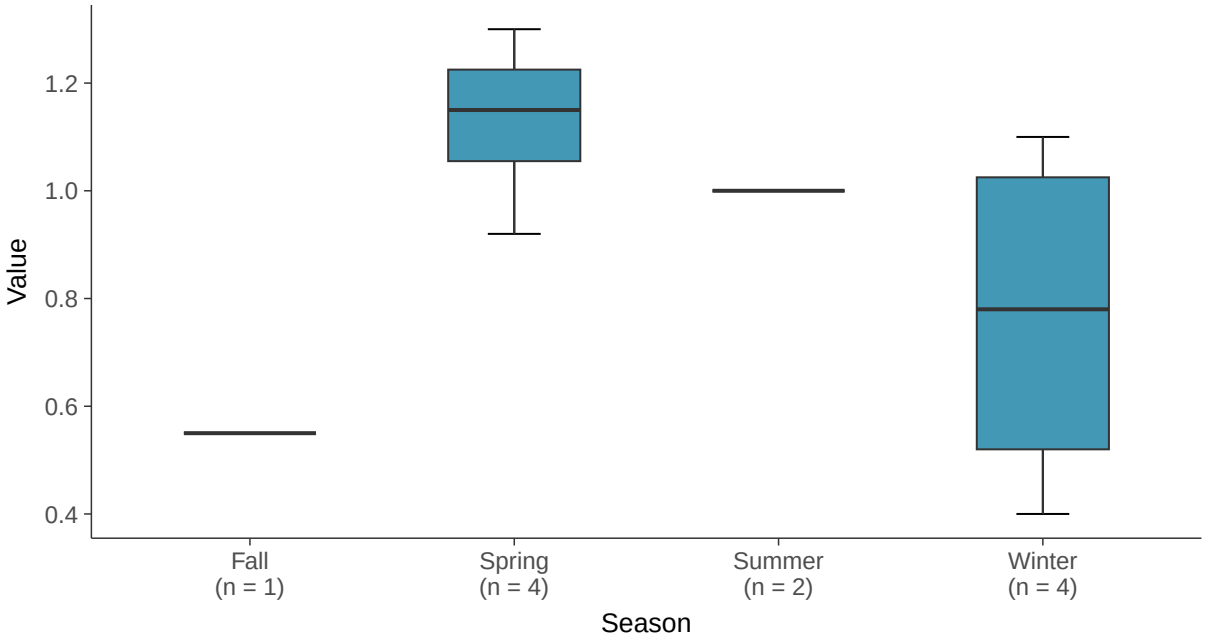
Boxplot

Fluoride (App IV), MW-08 (mg/L)



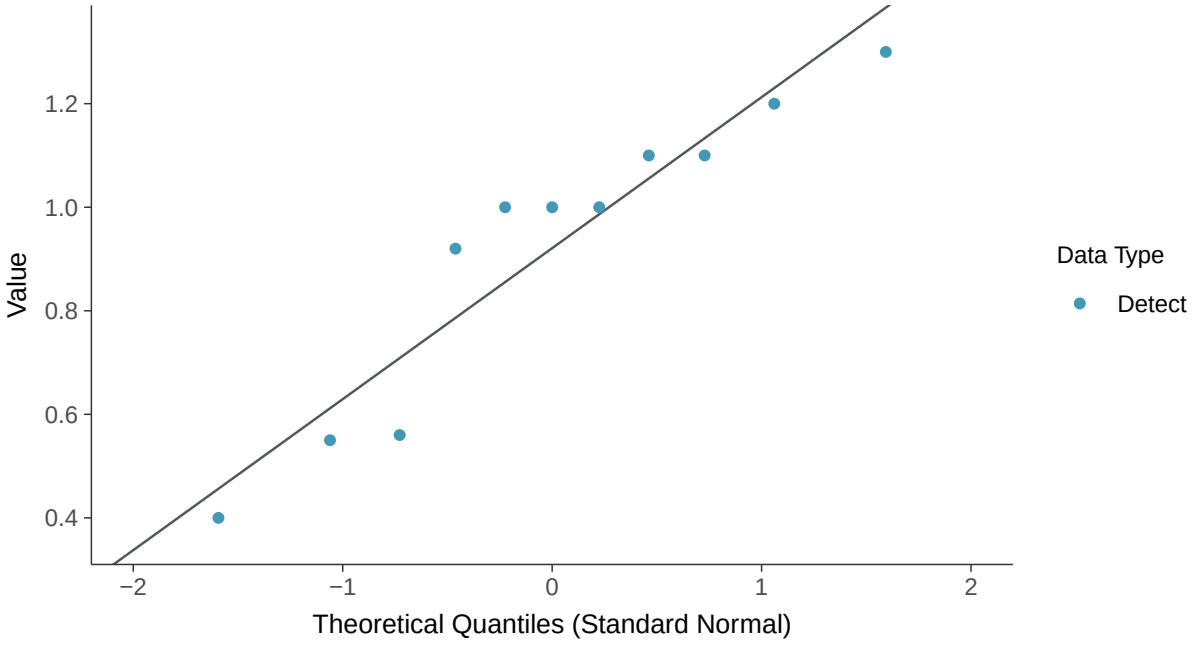
Boxplot by Season

Fluoride (App IV), MW-08 (mg/L)



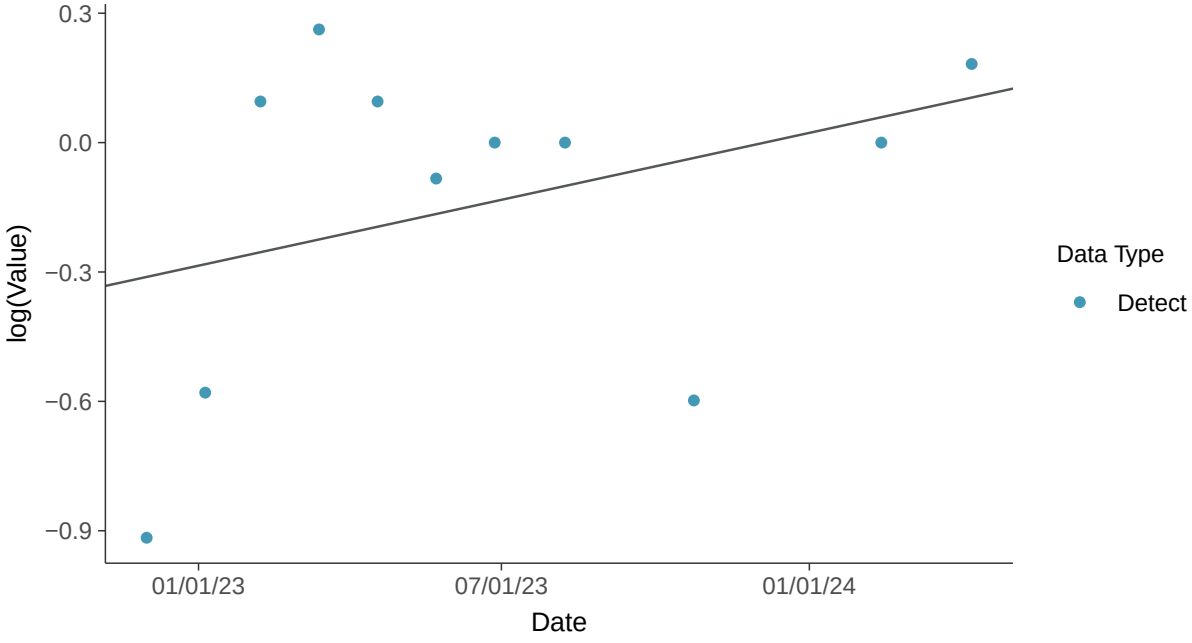
Normal Q-Q plot

Fluoride (App IV), MW-08 (mg/L)



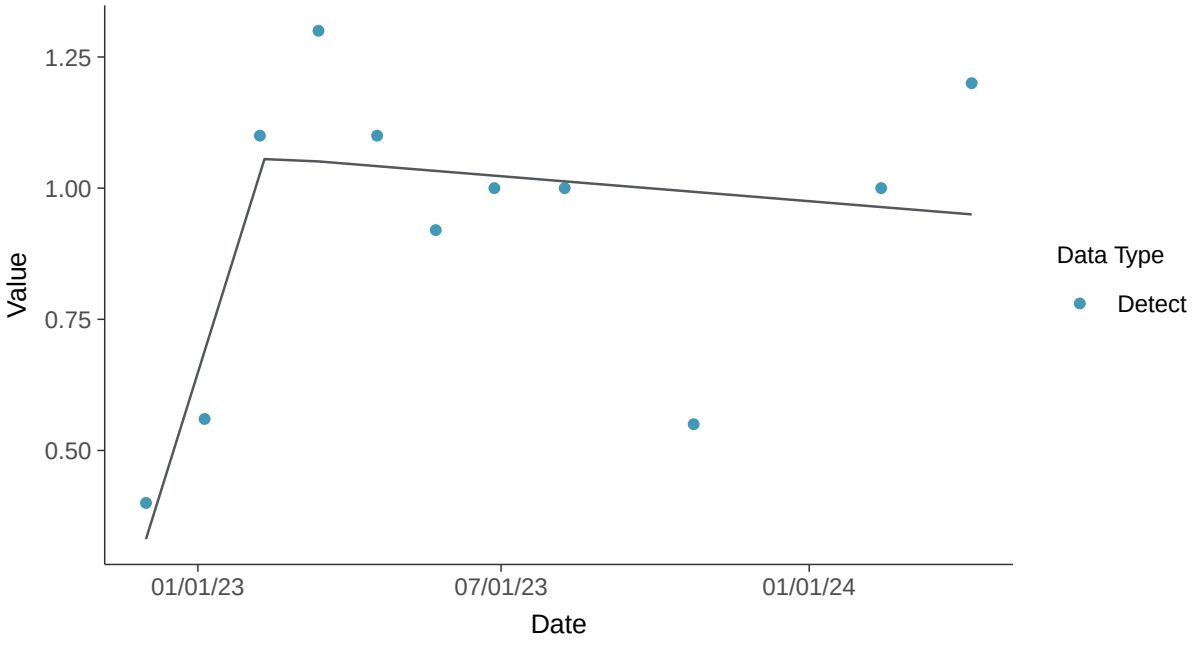
Trend Regression: Lognormal MLE

Fluoride (App IV), MW-08 (mg/L)



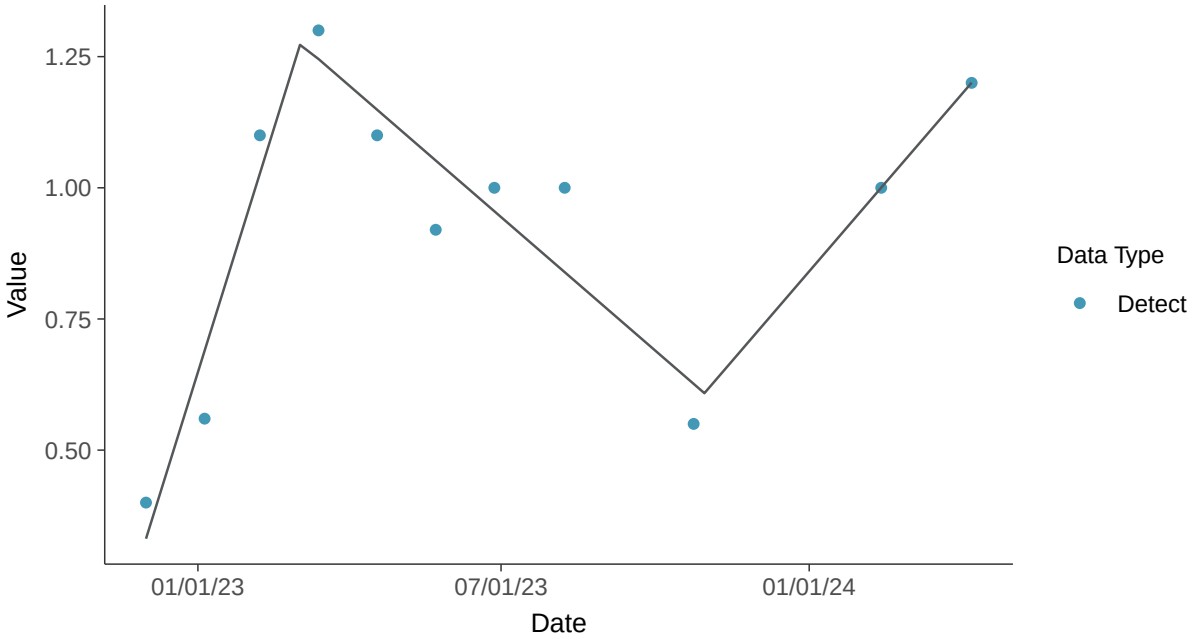
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-08 (mg/L)



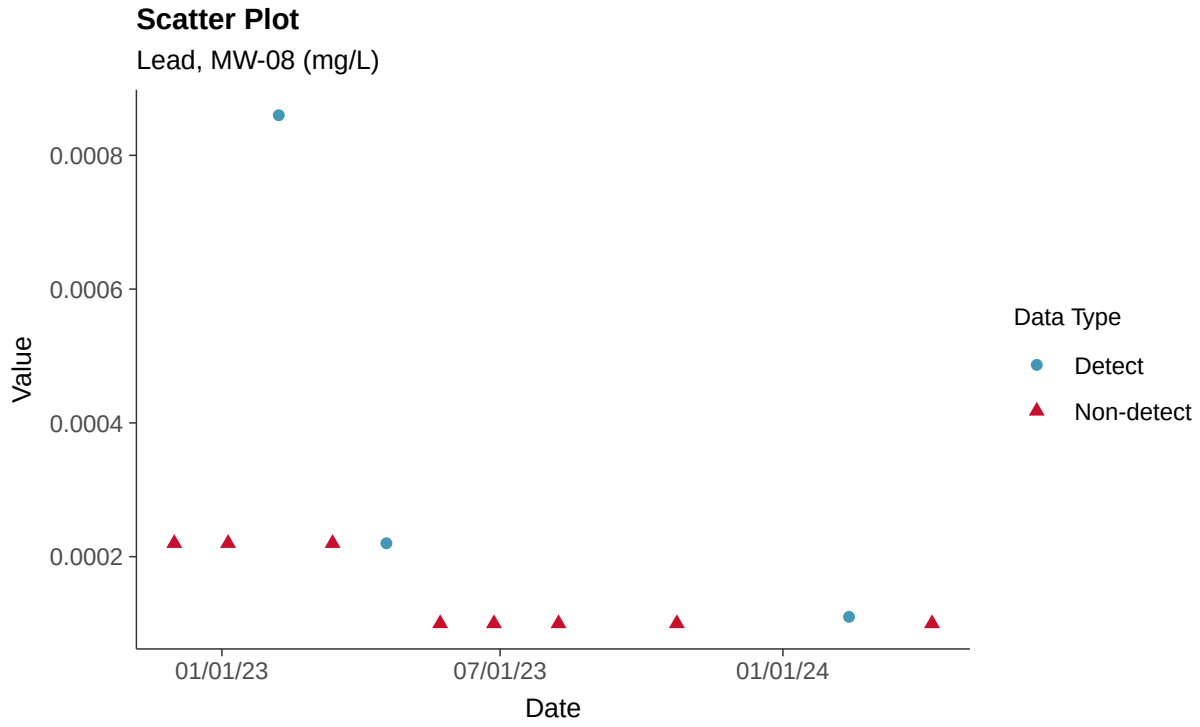
Trend Regression: Piecewise Linear-Linear-Linear

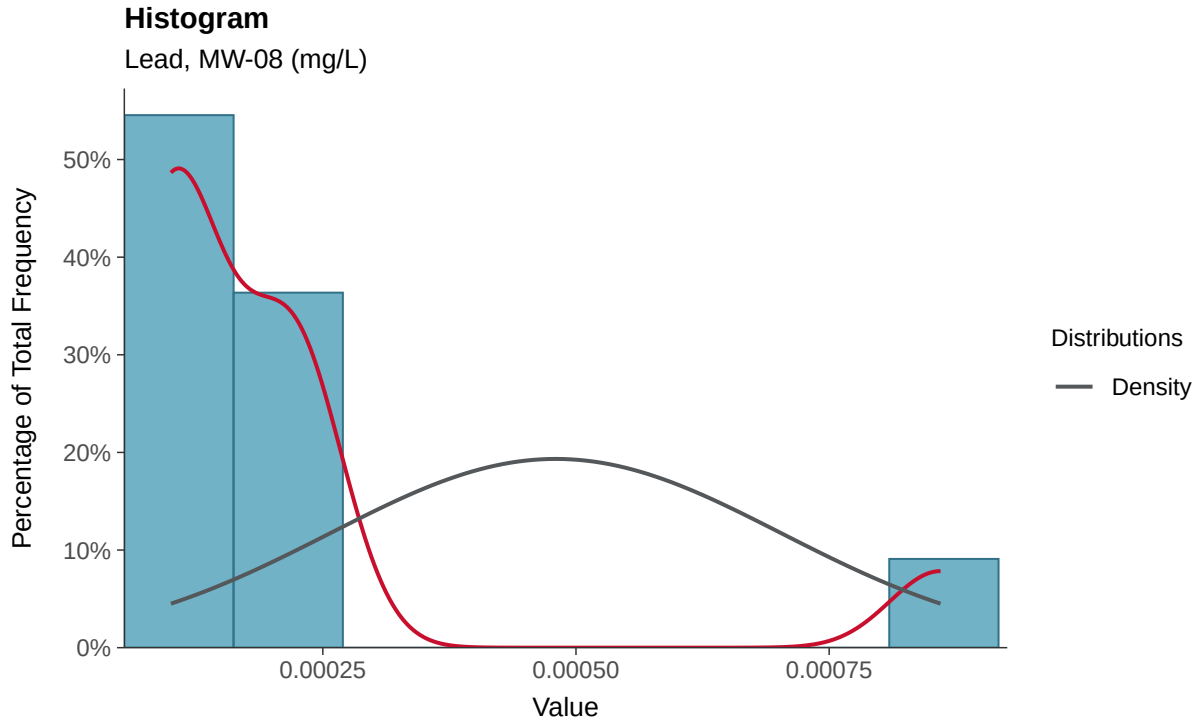
Fluoride (App IV), MW-08 (mg/L)



Appendix IV: Lead, MW-08

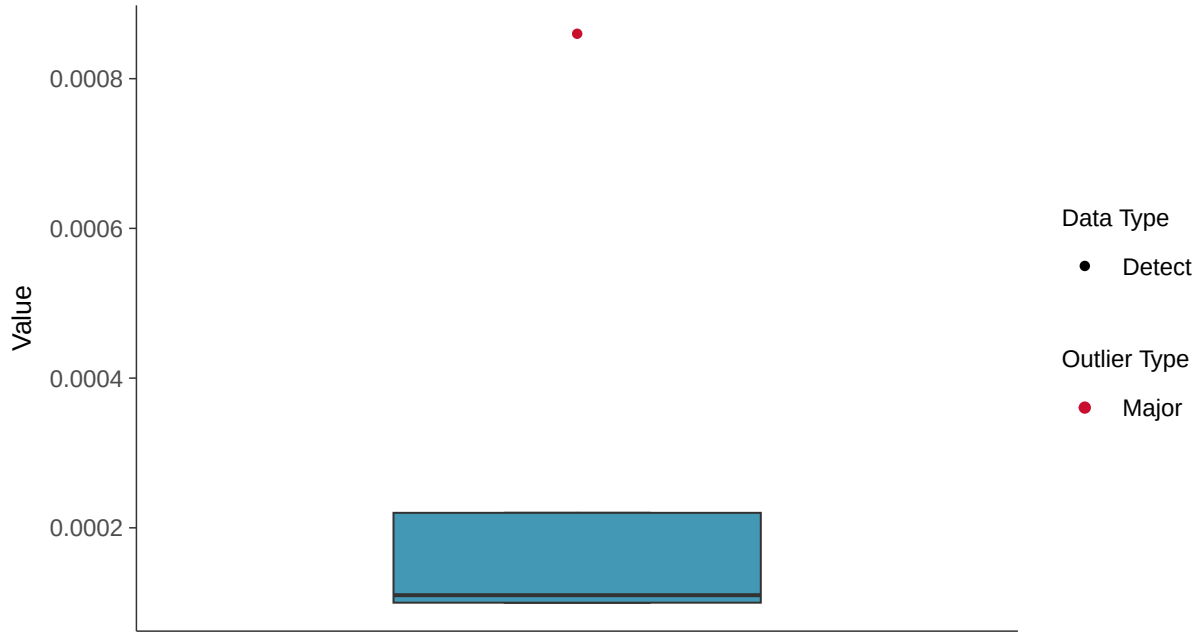
ID: 1_18_5_115





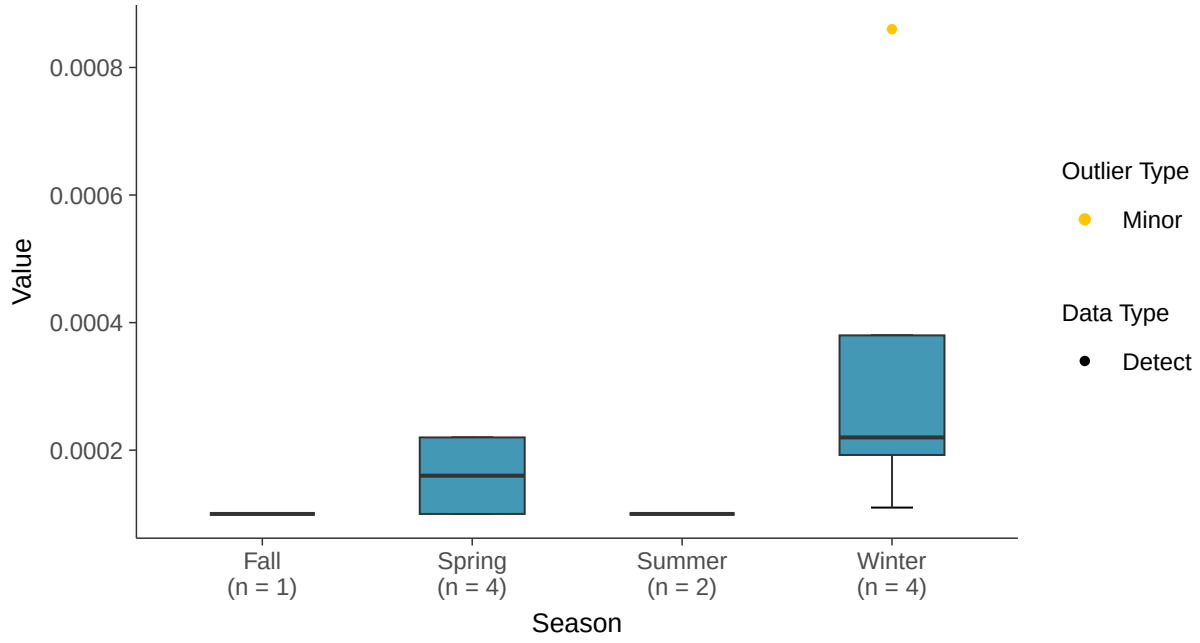
Boxplot

Lead, MW-08 (mg/L)



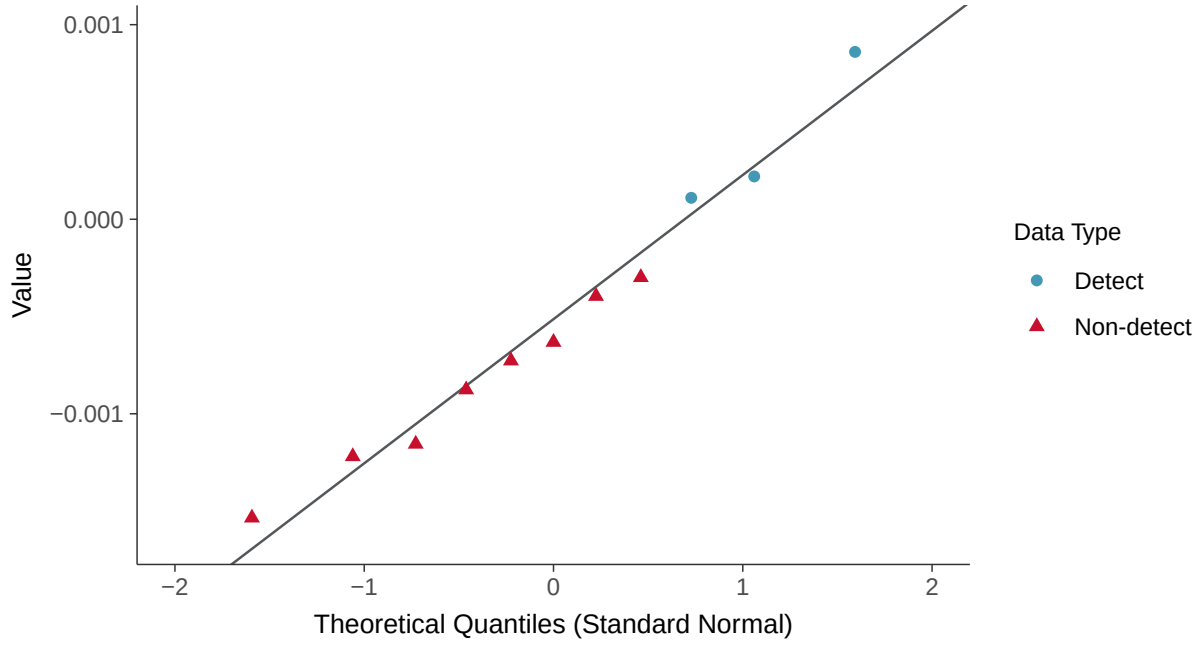
Boxplot by Season

Lead, MW-08 (mg/L)



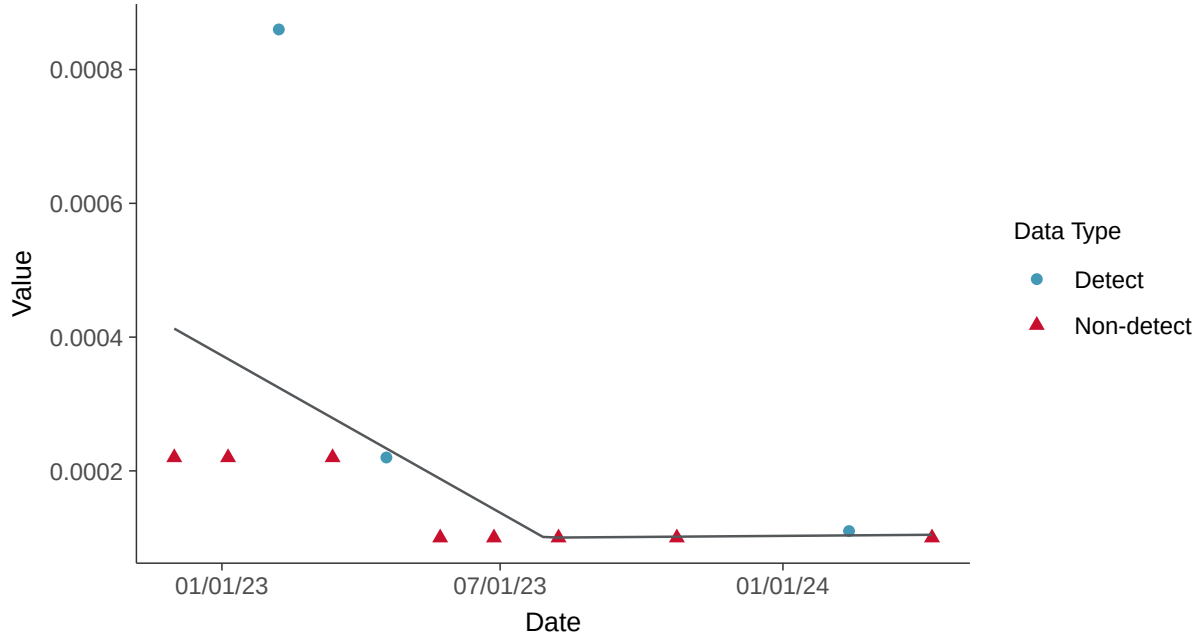
Normal Q-Q plot using ROS Imputed Estimates

Lead, MW-08 (mg/L)



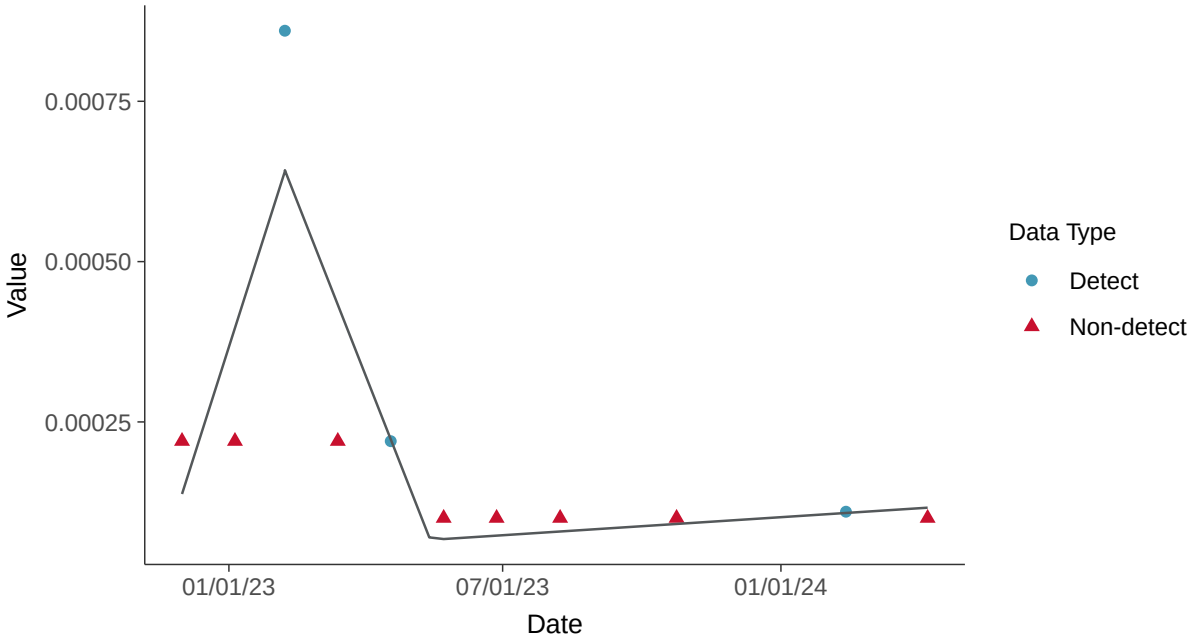
Trend Regression: Piecewise Linear-Linear

Lead, MW-08 (mg/L)



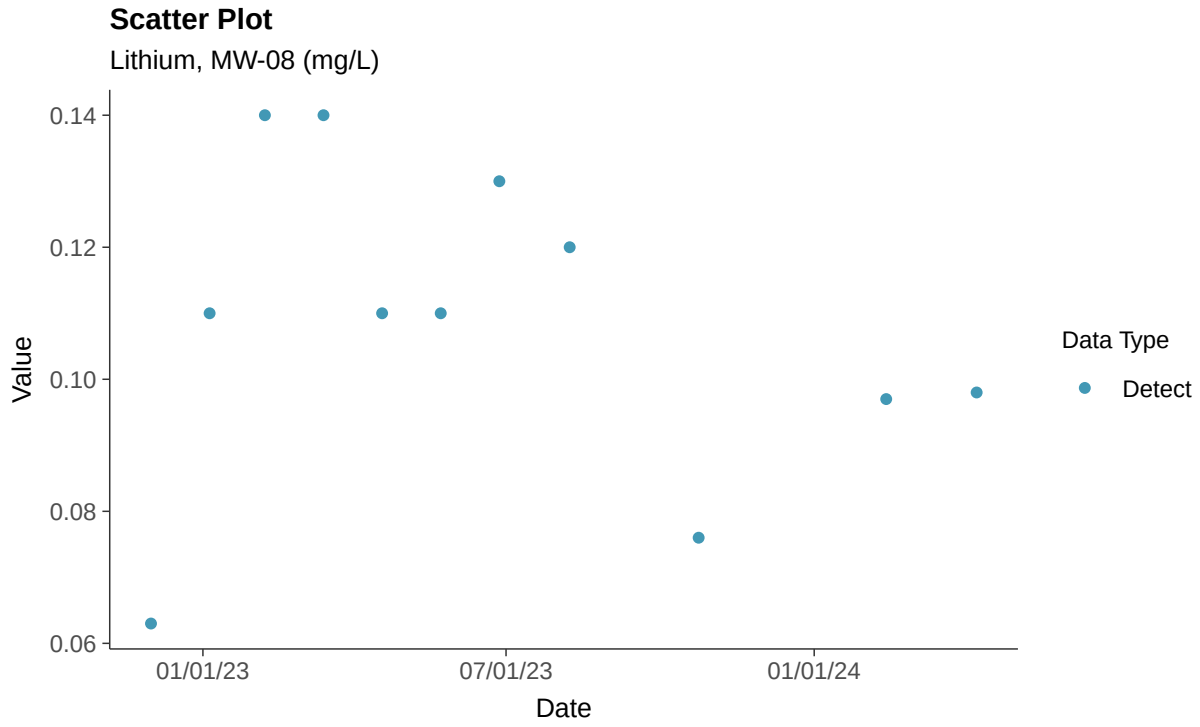
Trend Regression: Piecewise Linear-Linear-Linear

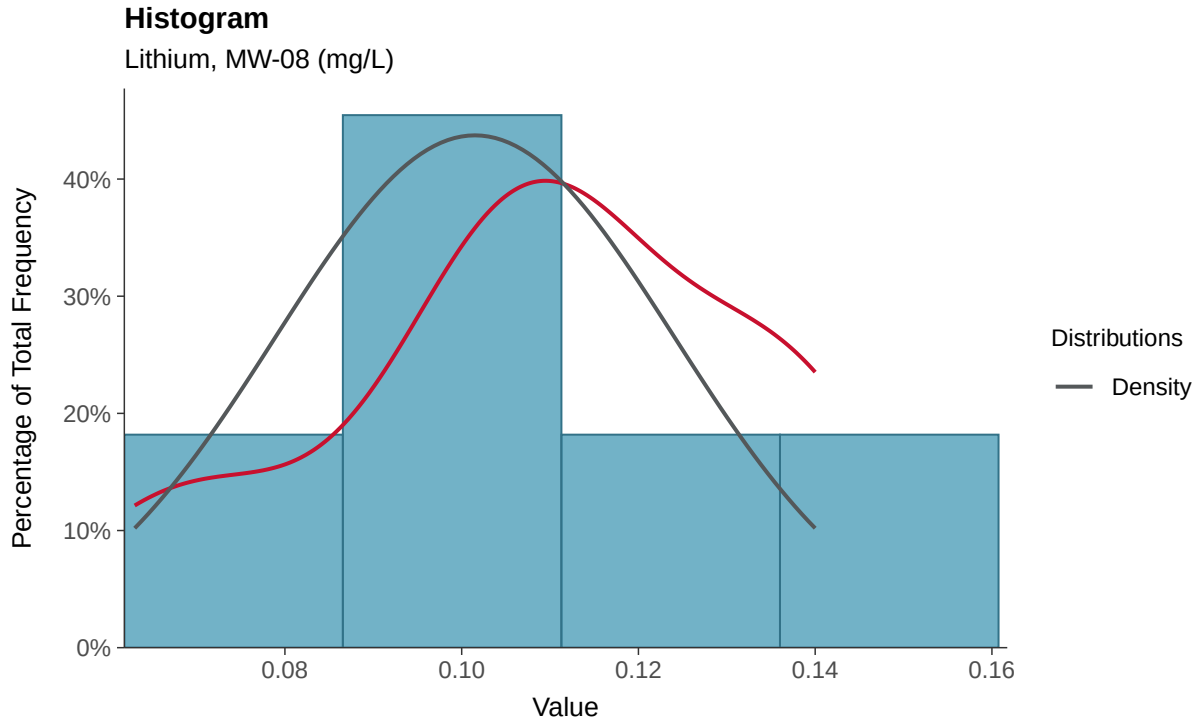
Lead, MW-08 (mg/L)



Appendix IV: Lithium, MW-08

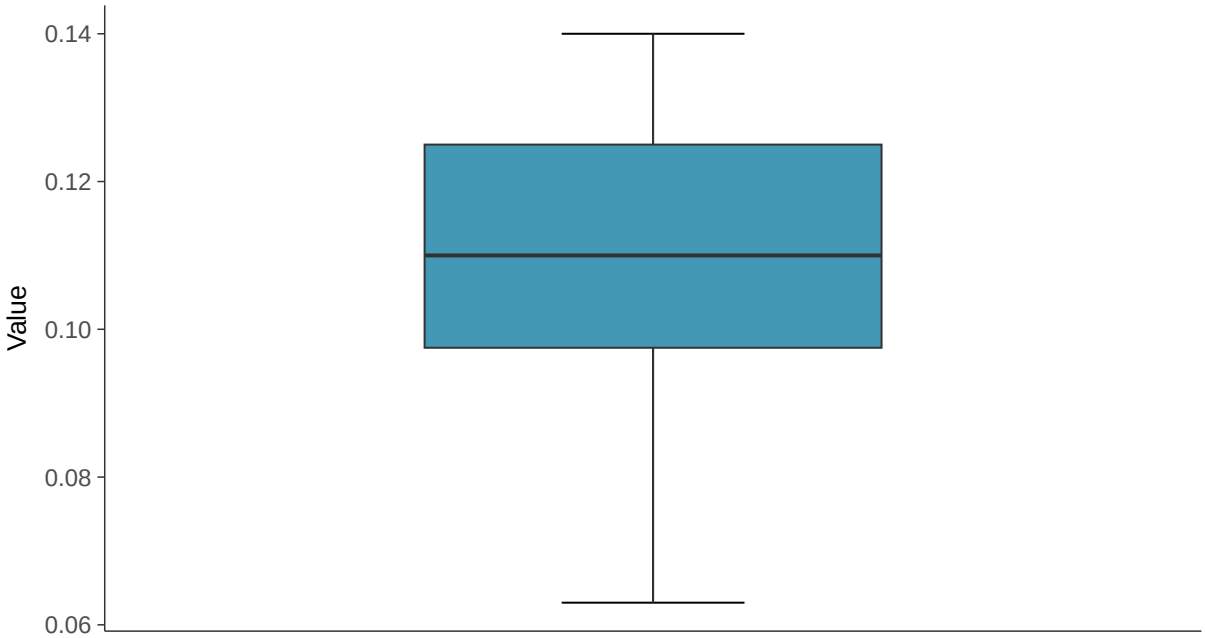
ID: 1_18_5_116





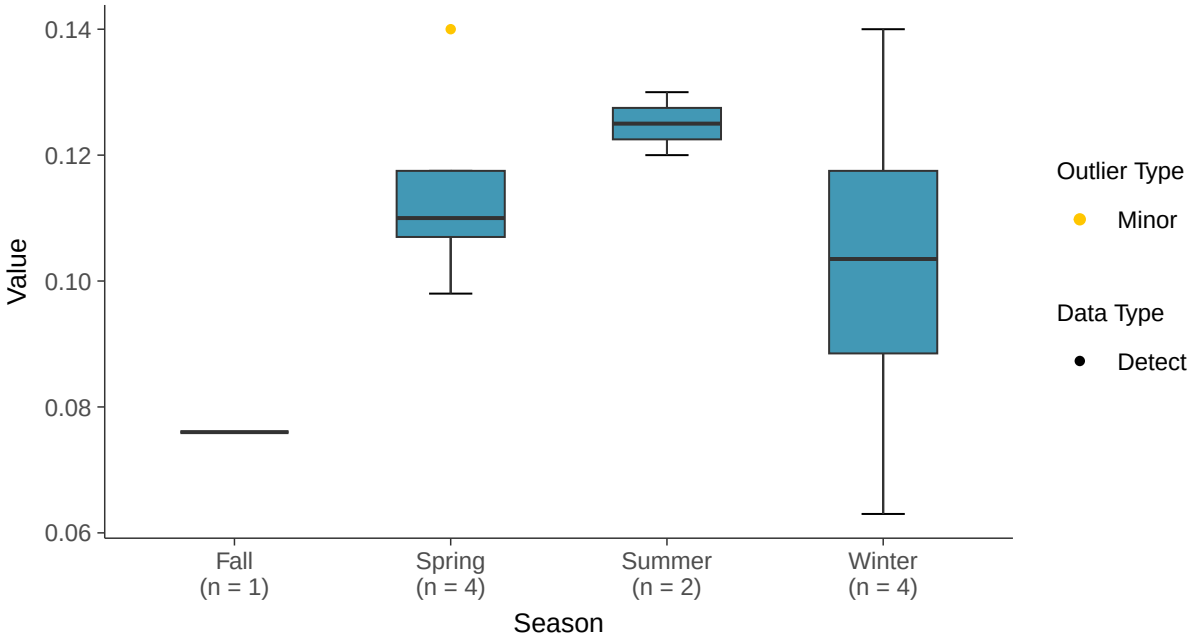
Boxplot

Lithium, MW-08 (mg/L)



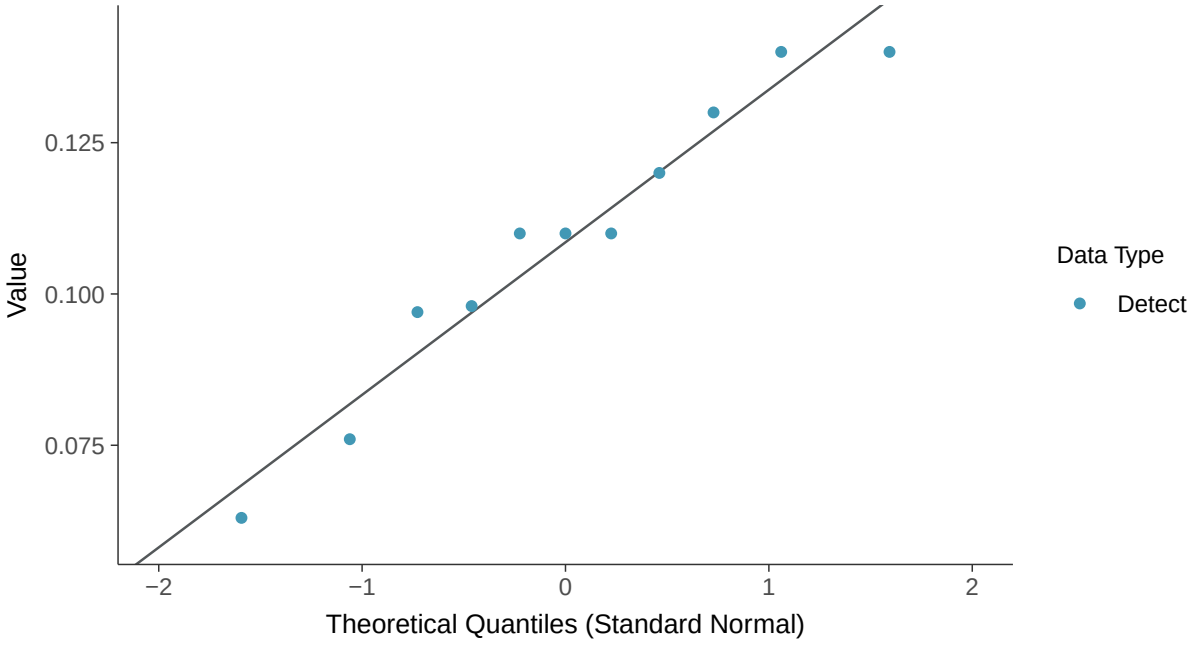
Boxplot by Season

Lithium, MW-08 (mg/L)



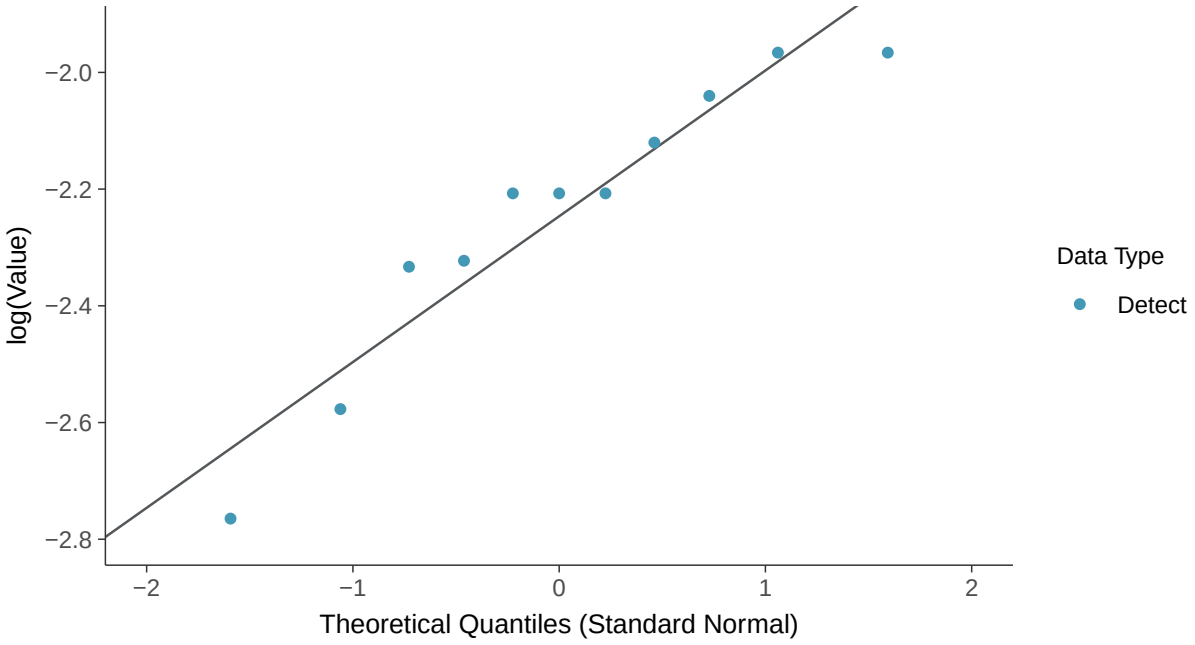
Normal Q-Q plot

Lithium, MW-08 (mg/L)



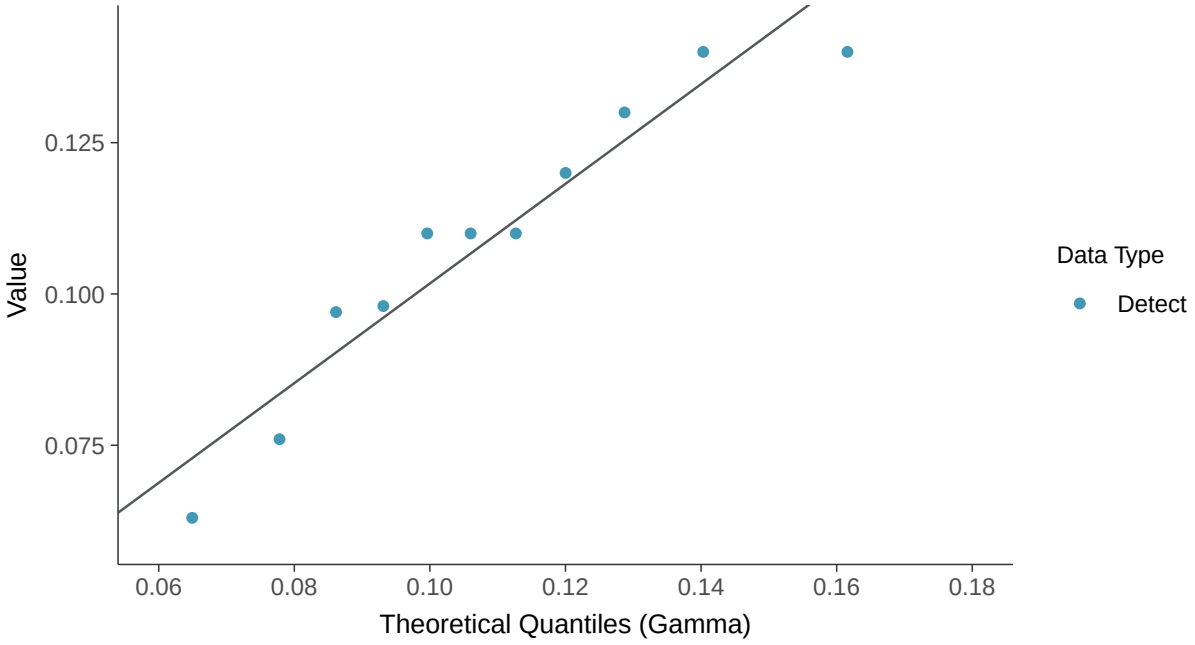
Lognormal Q-Q plot

Lithium, MW-08 (mg/L)



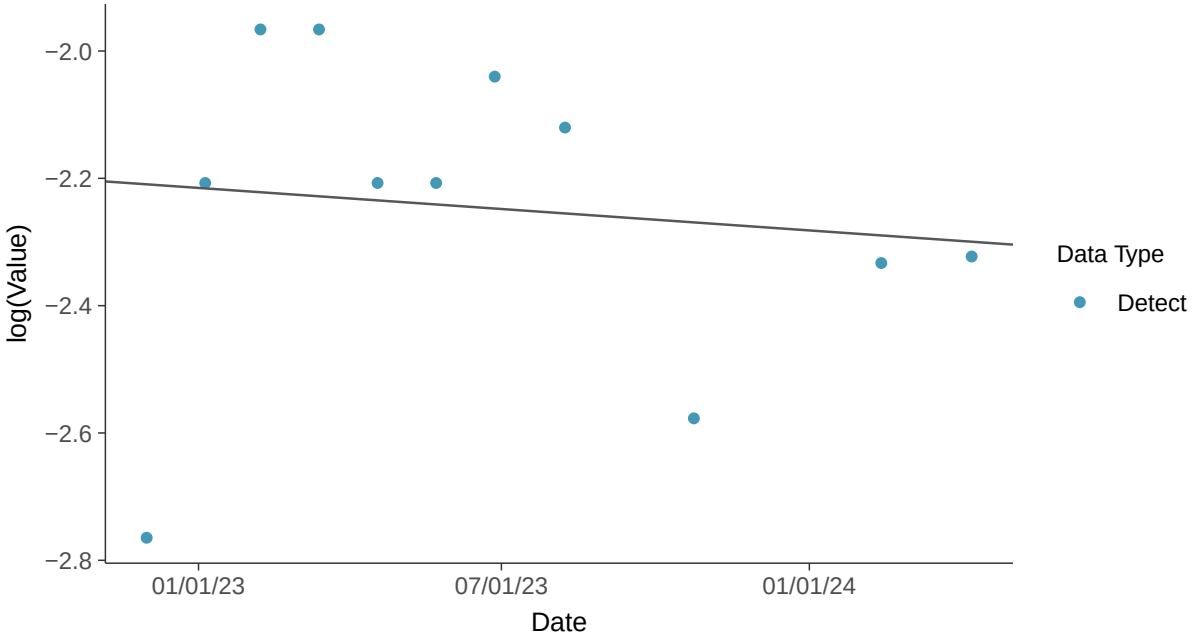
Gamma Q-Q plot

Lithium, MW-08 (mg/L)



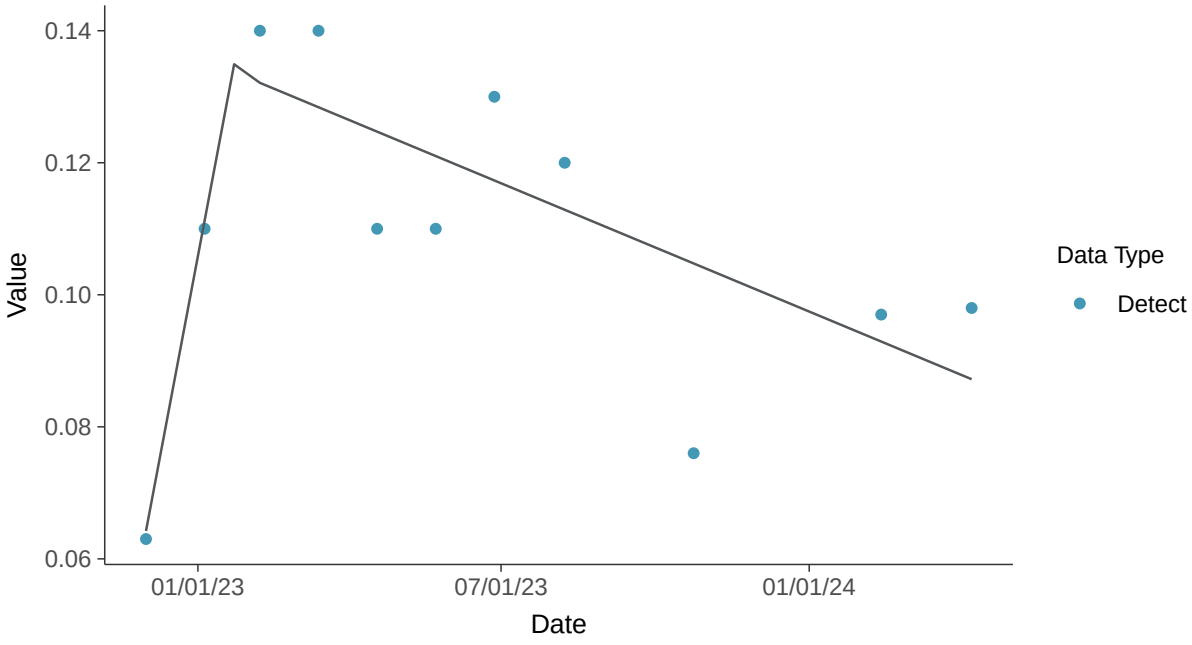
Trend Regression: Lognormal MLE

Lithium, MW-08 (mg/L)



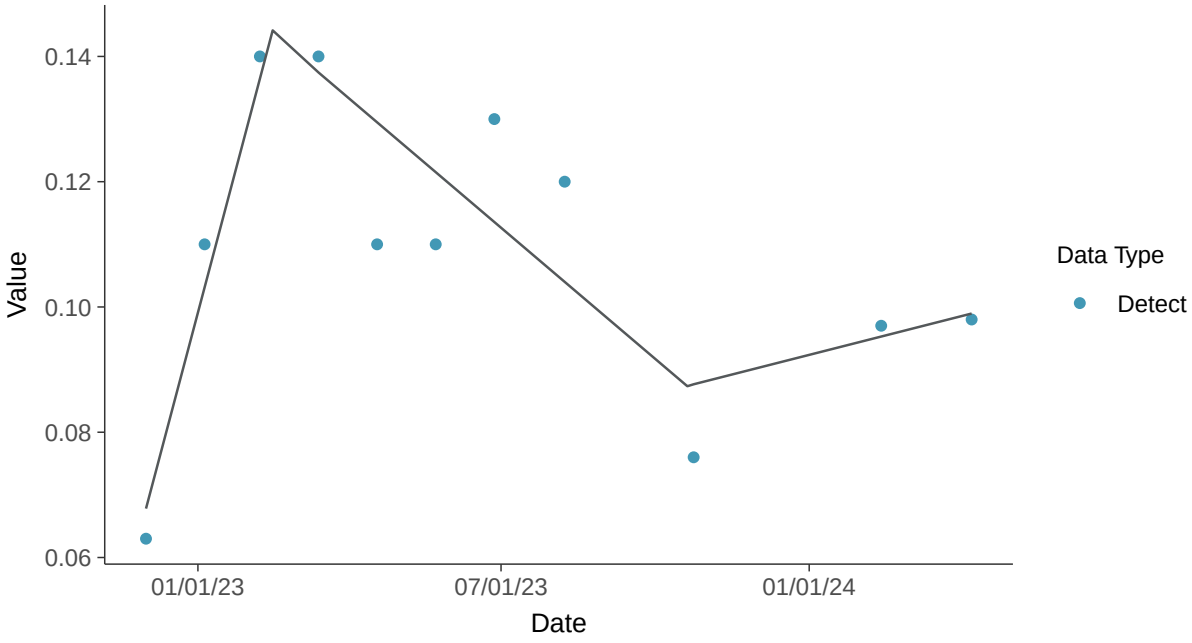
Trend Regression: Piecewise Linear-Linear

Lithium, MW-08 (mg/L)



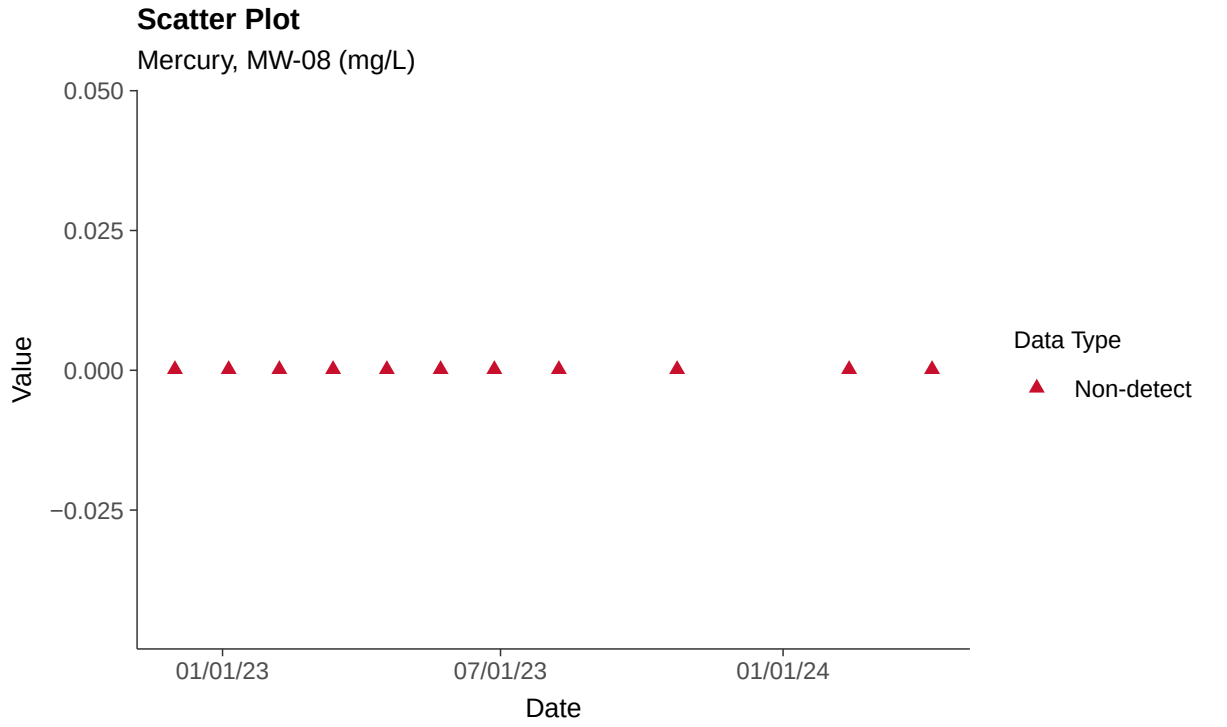
Trend Regression: Piecewise Linear-Linear-Linear

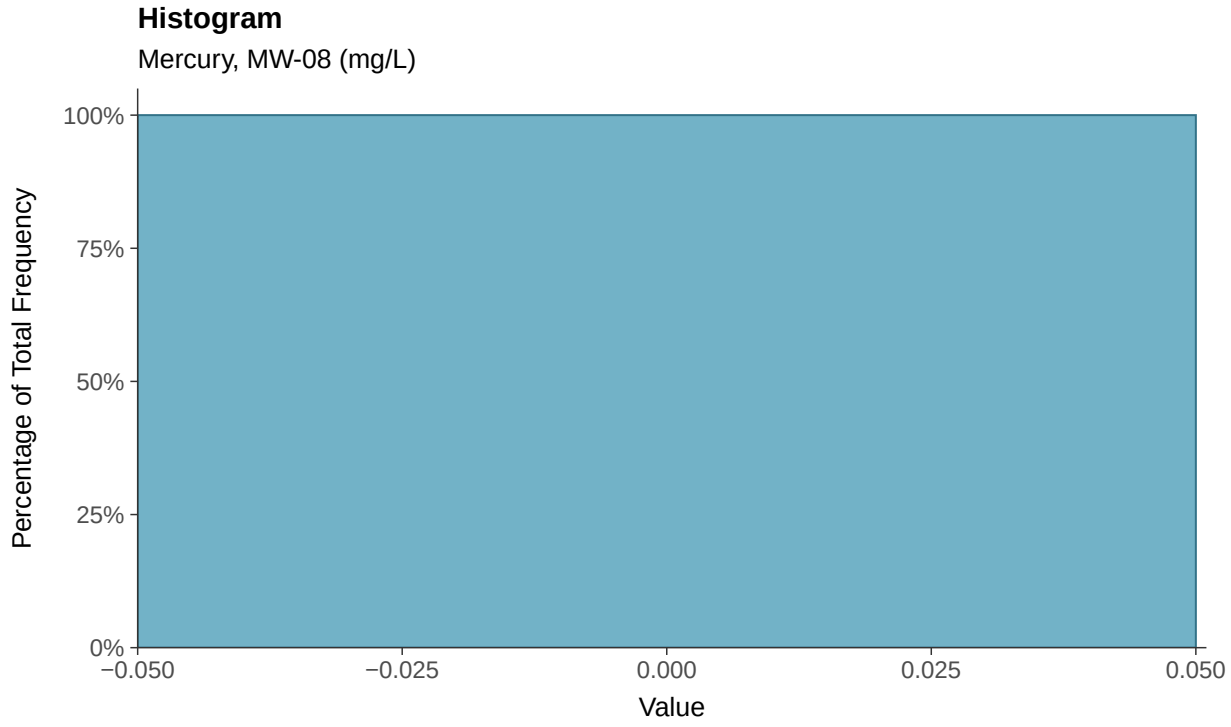
Lithium, MW-08 (mg/L)



Appendix IV: Mercury, MW-08

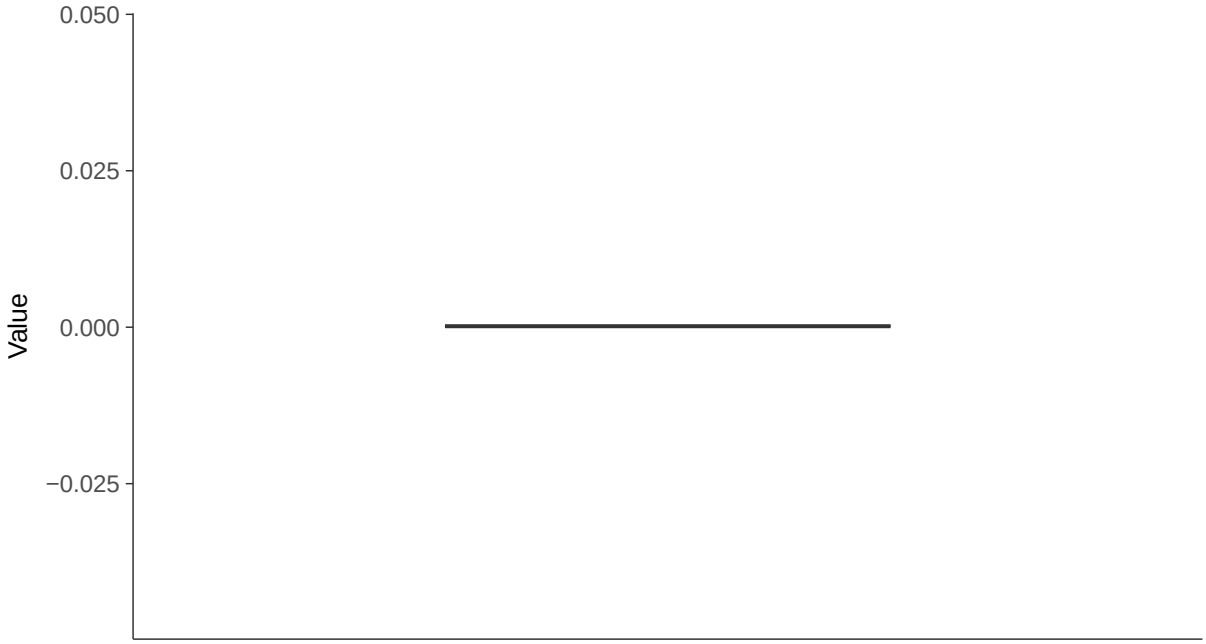
ID: 1_18_5_117





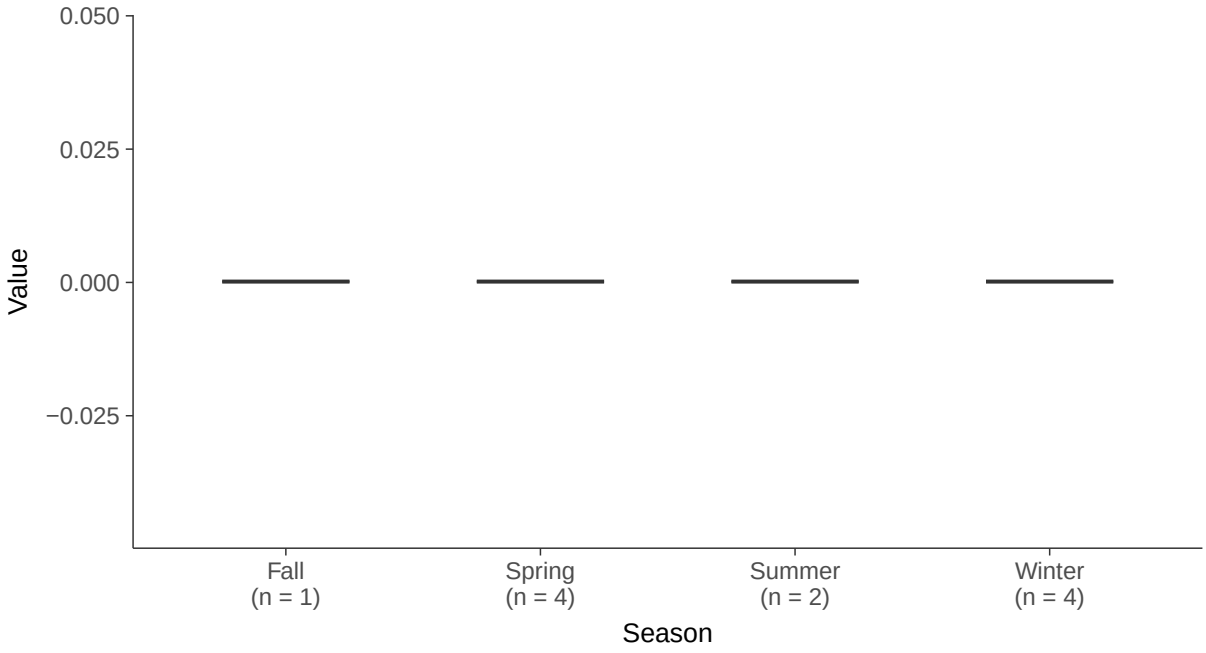
Boxplot

Mercury, MW-08 (mg/L)



Boxplot by Season

Mercury, MW-08 (mg/L)

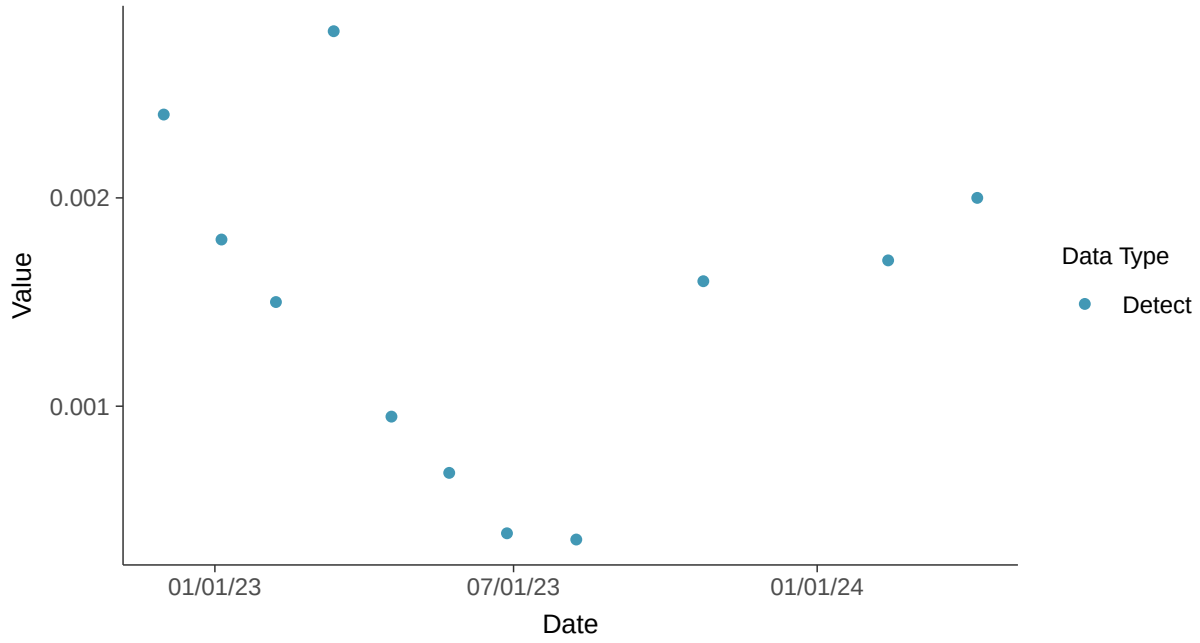


Appendix IV: Molybdenum, MW-08

ID: 1_18_5_118

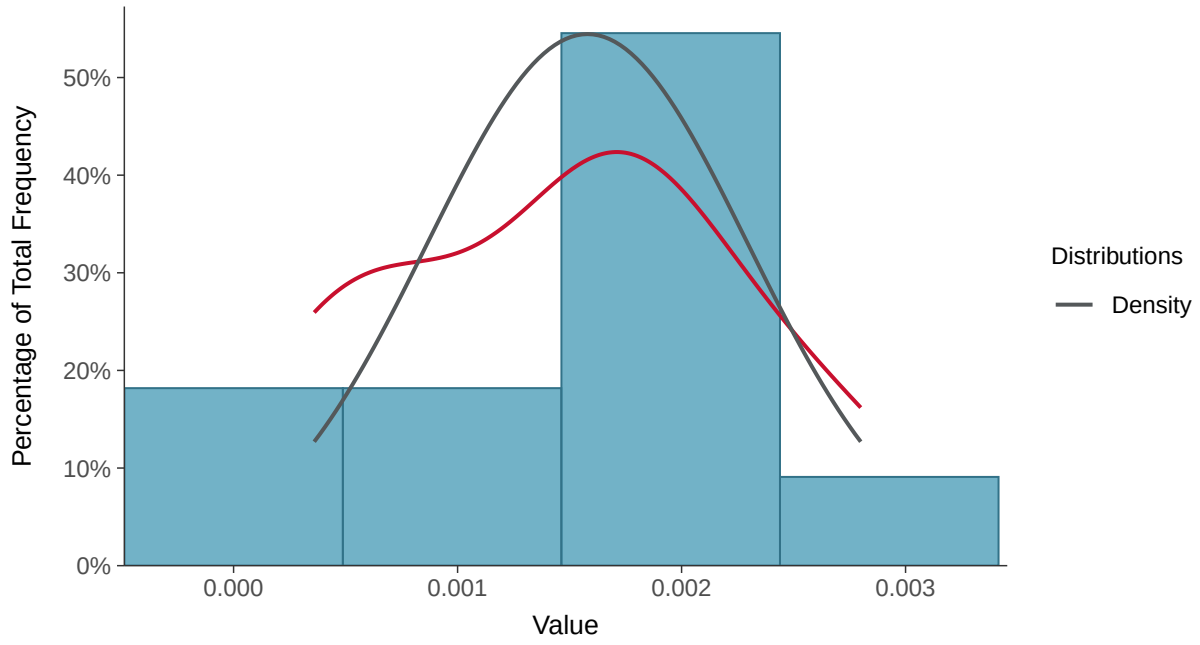
Scatter Plot

Molybdenum, MW-08 (mg/L)



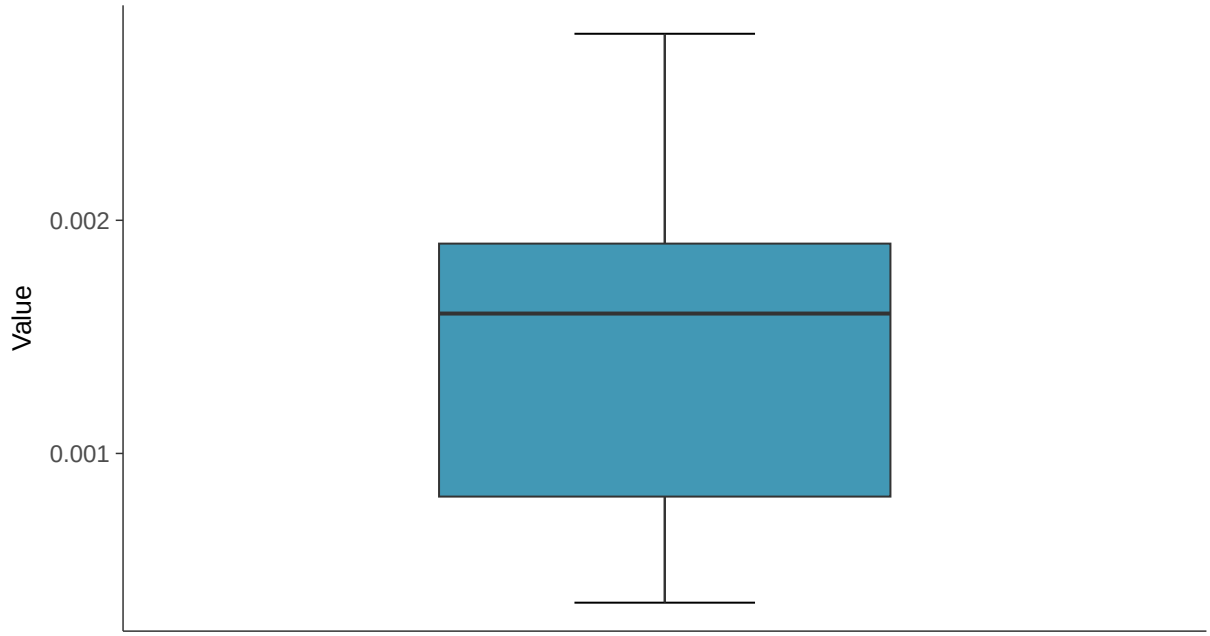
Histogram

Molybdenum, MW-08 (mg/L)



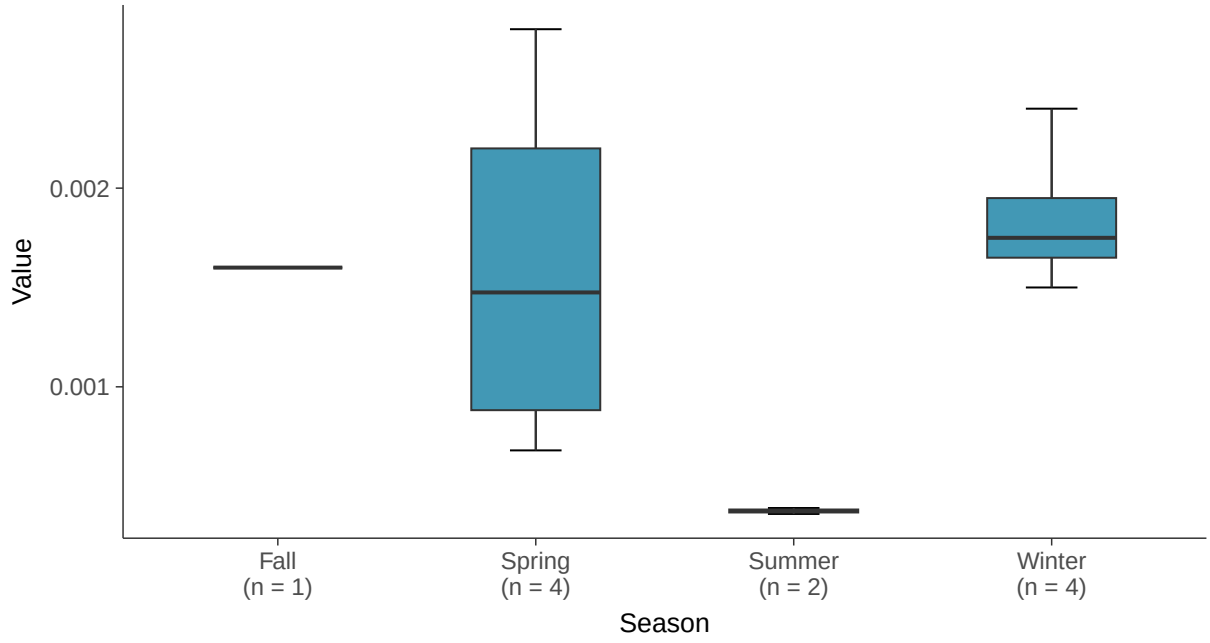
Boxplot

Molybdenum, MW-08 (mg/L)



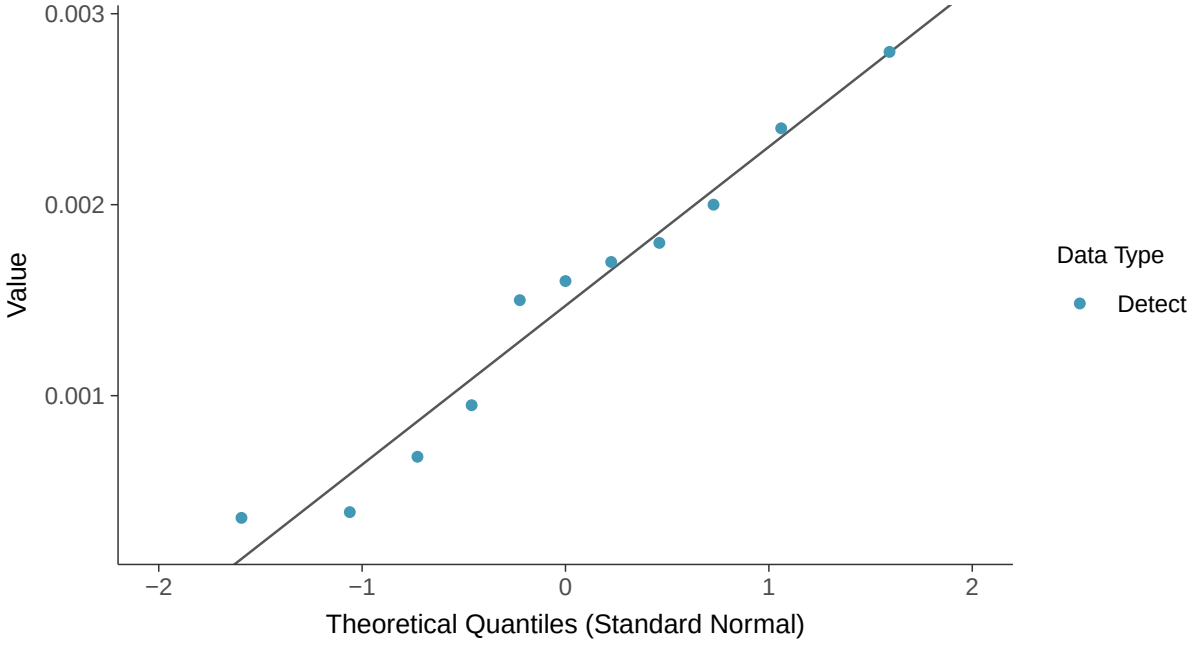
Boxplot by Season

Molybdenum, MW-08 (mg/L)



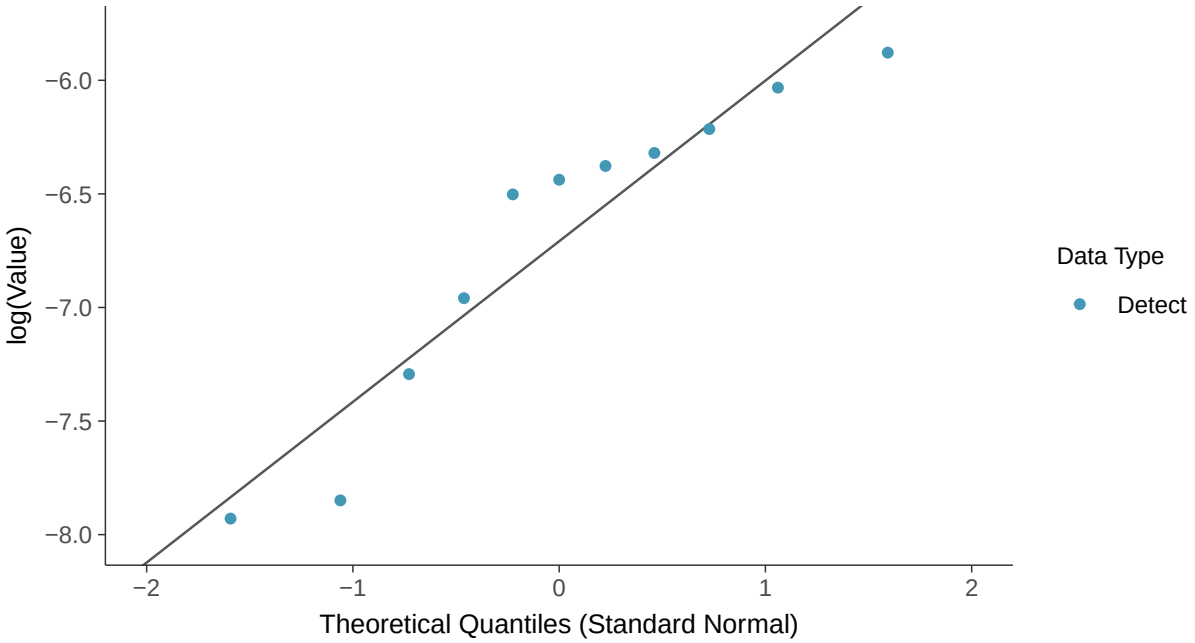
Normal Q-Q plot

Molybdenum, MW-08 (mg/L)



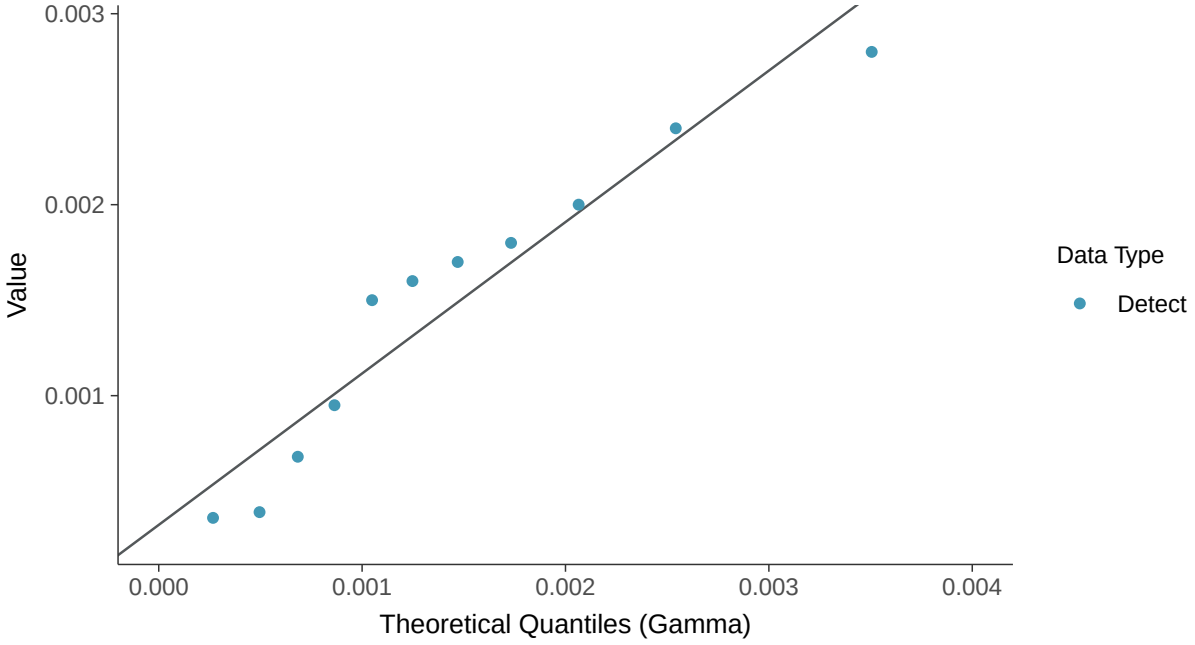
Lognormal Q-Q plot

Molybdenum, MW-08 (mg/L)



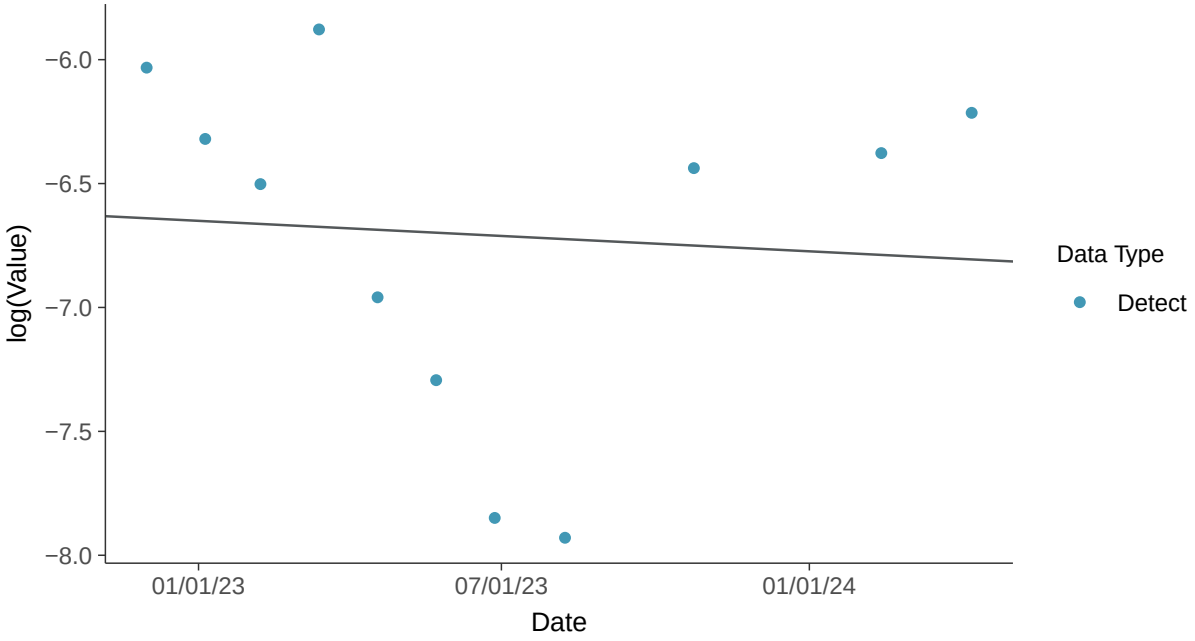
Gamma Q-Q plot

Molybdenum, MW-08 (mg/L)



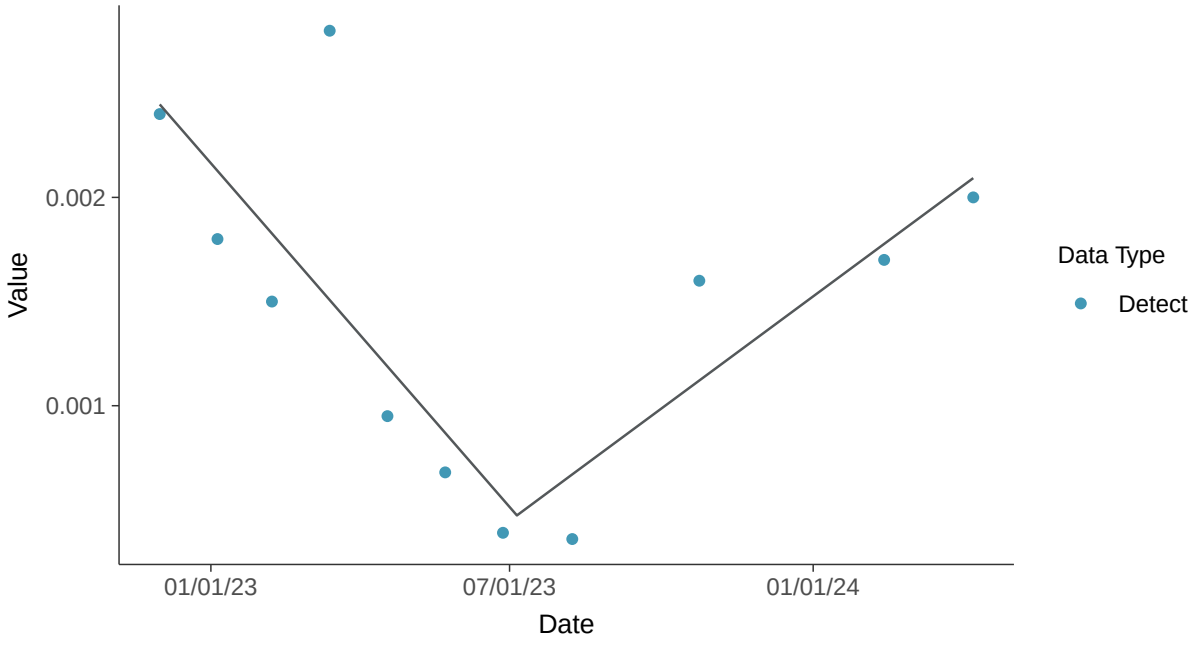
Trend Regression: Lognormal MLE

Molybdenum, MW-08 (mg/L)



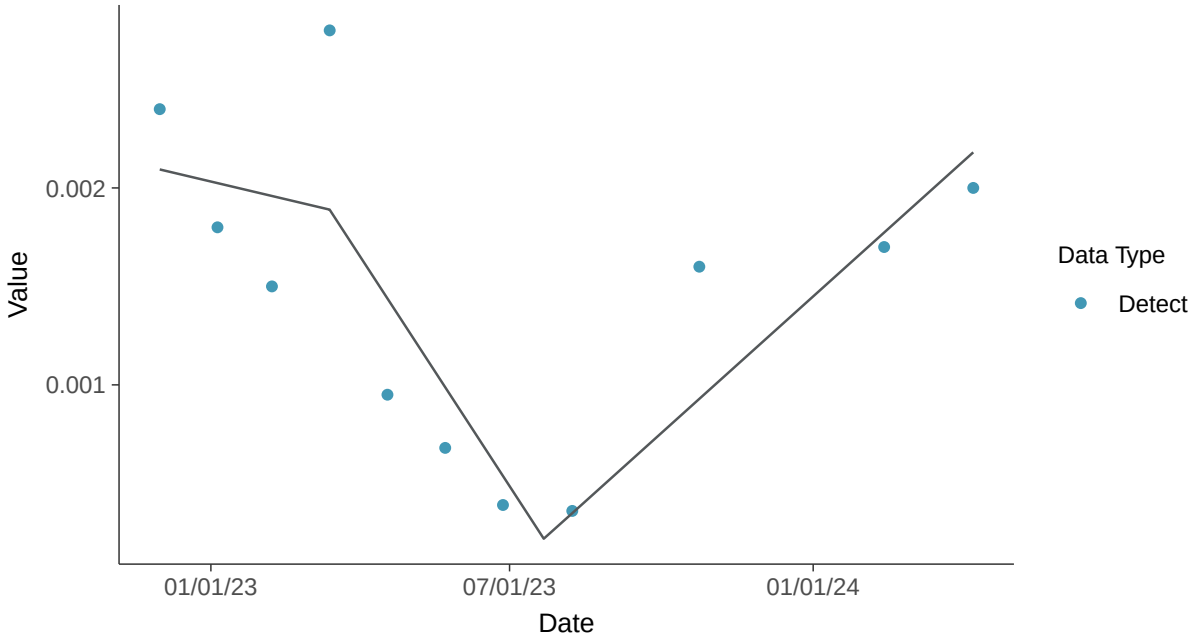
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-08 (mg/L)



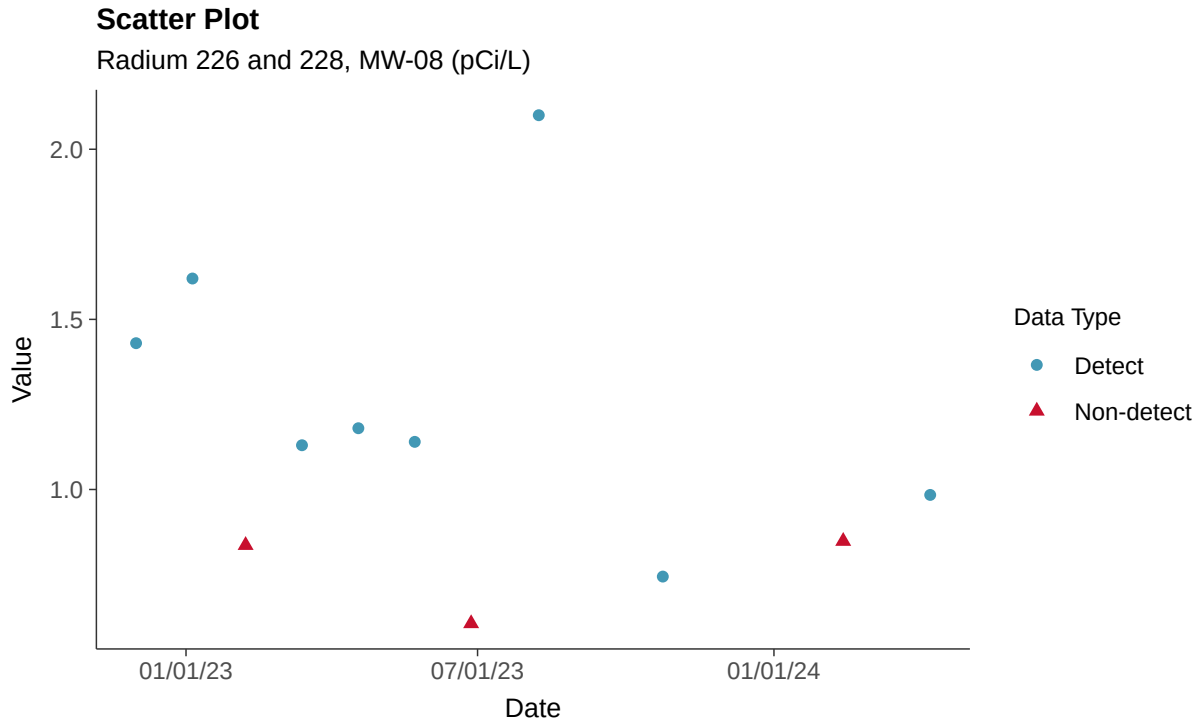
Trend Regression: Piecewise Linear-Linear-Linear

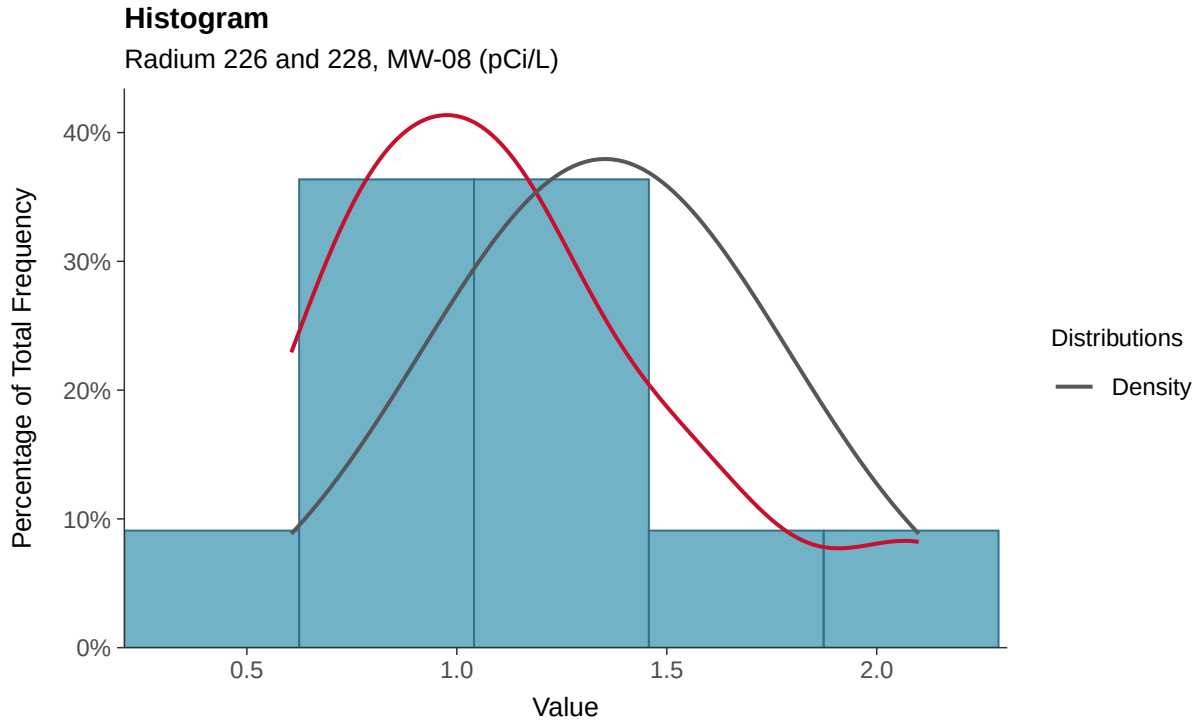
Molybdenum, MW-08 (mg/L)



Appendix IV: Radium 226 and 228, MW-08

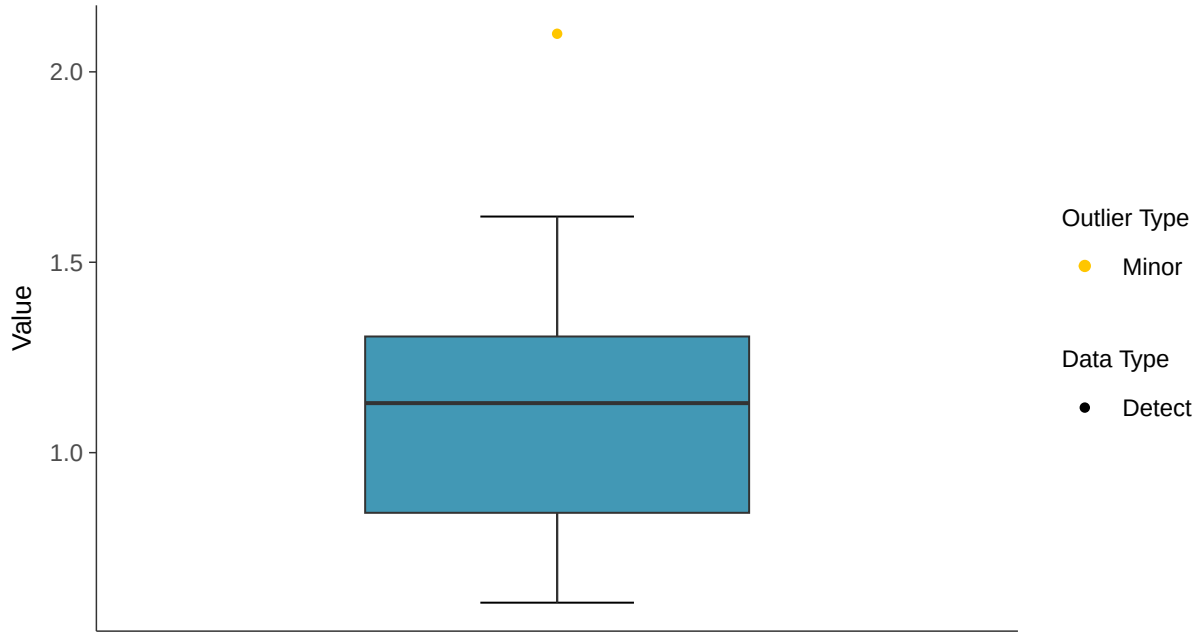
ID: 1_18_5_121





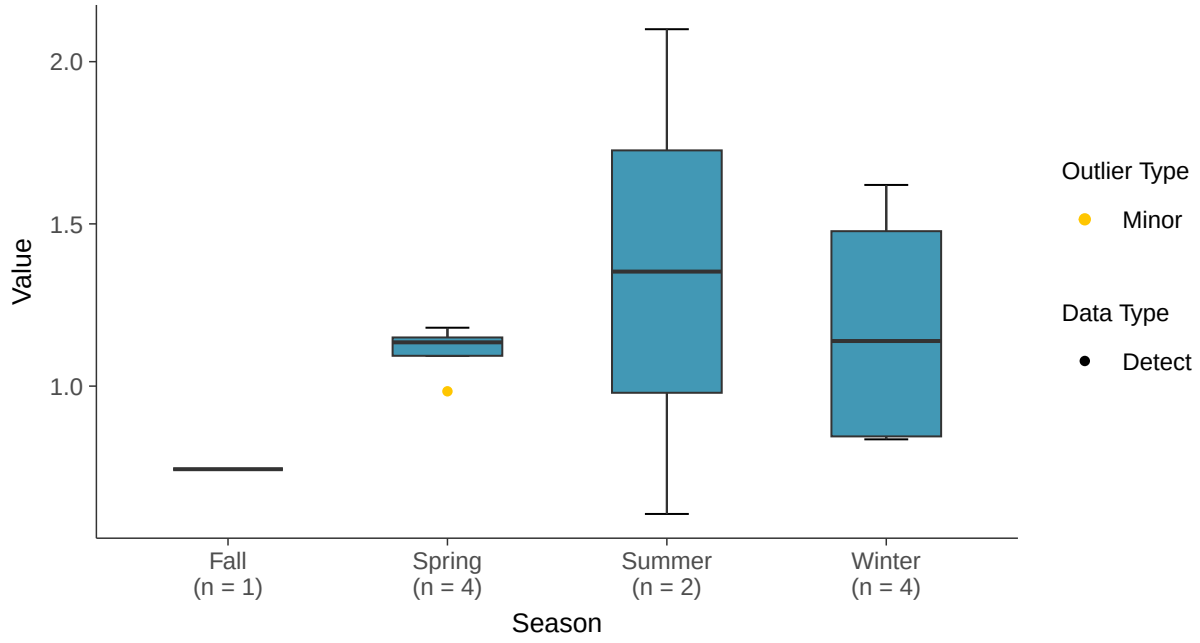
Boxplot

Radium 226 and 228, MW-08 (pCi/L)



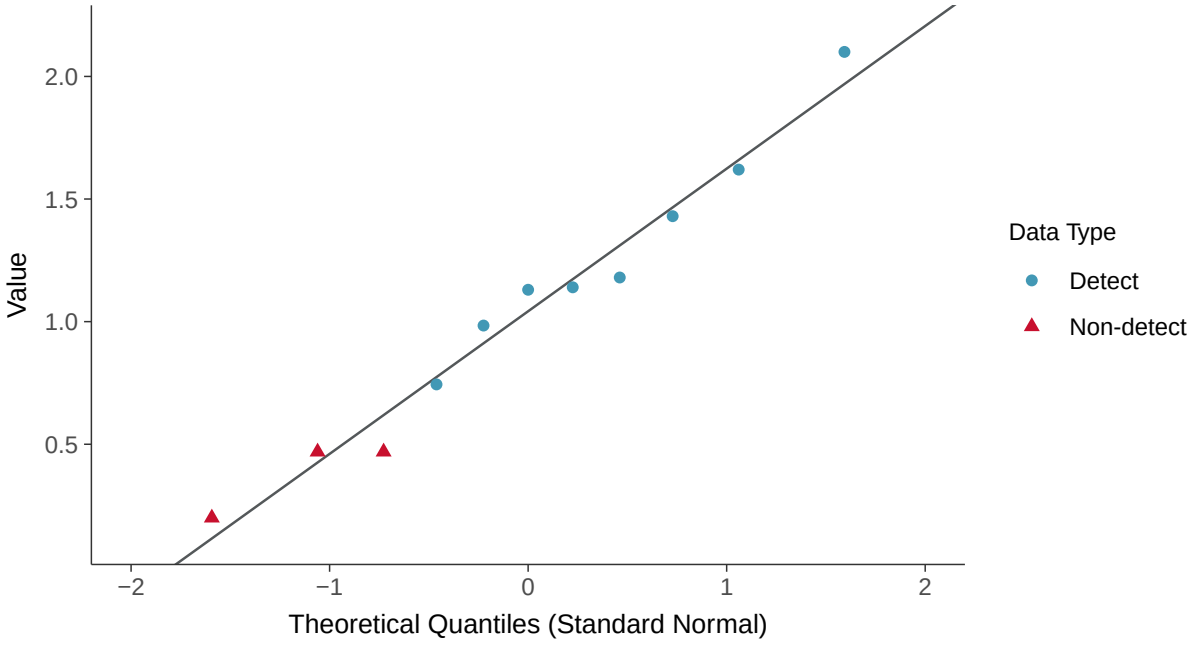
Boxplot by Season

Radium 226 and 228, MW-08 (pCi/L)



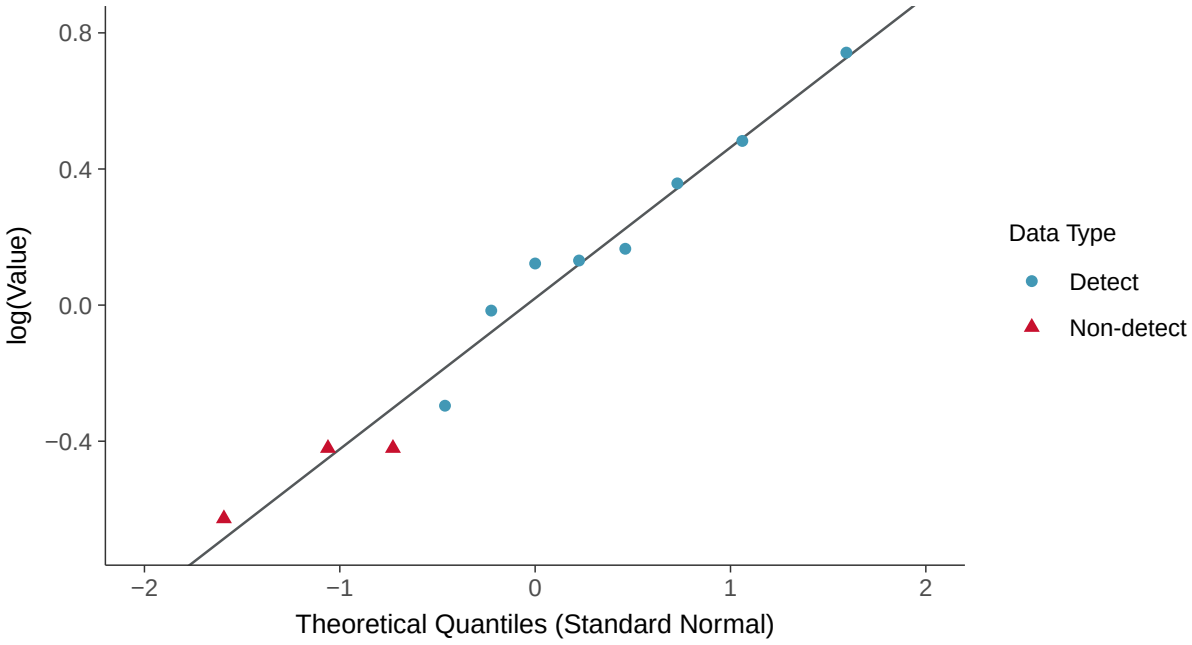
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-08 (pCi/L)



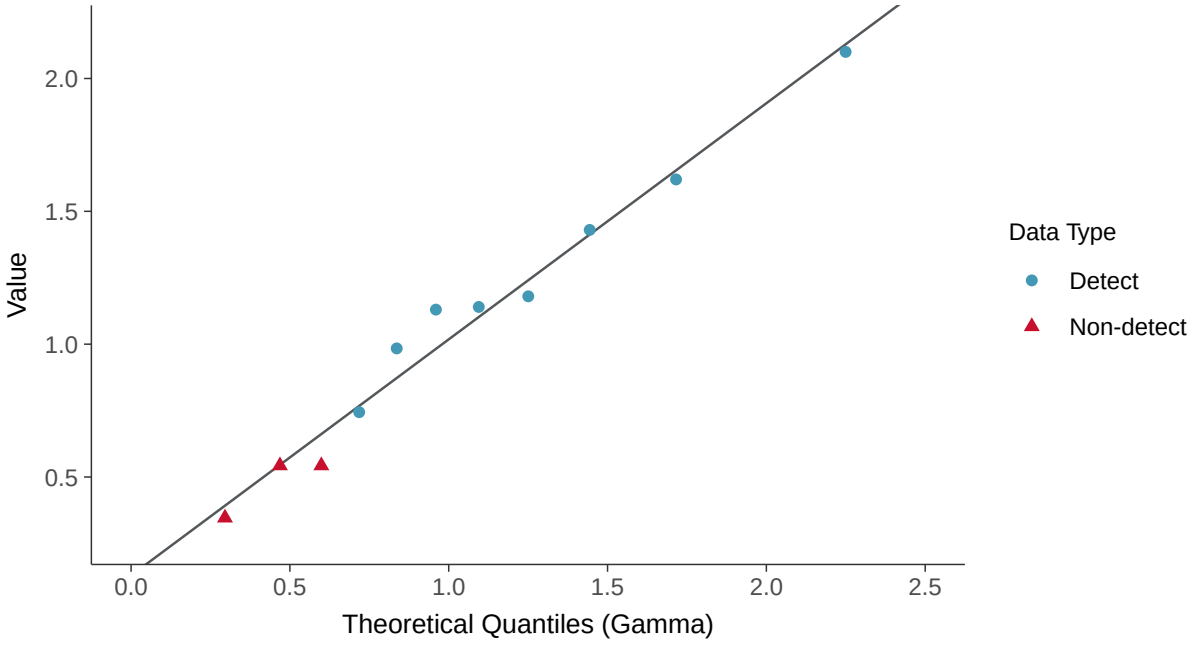
Lognormal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-08 (pCi/L)



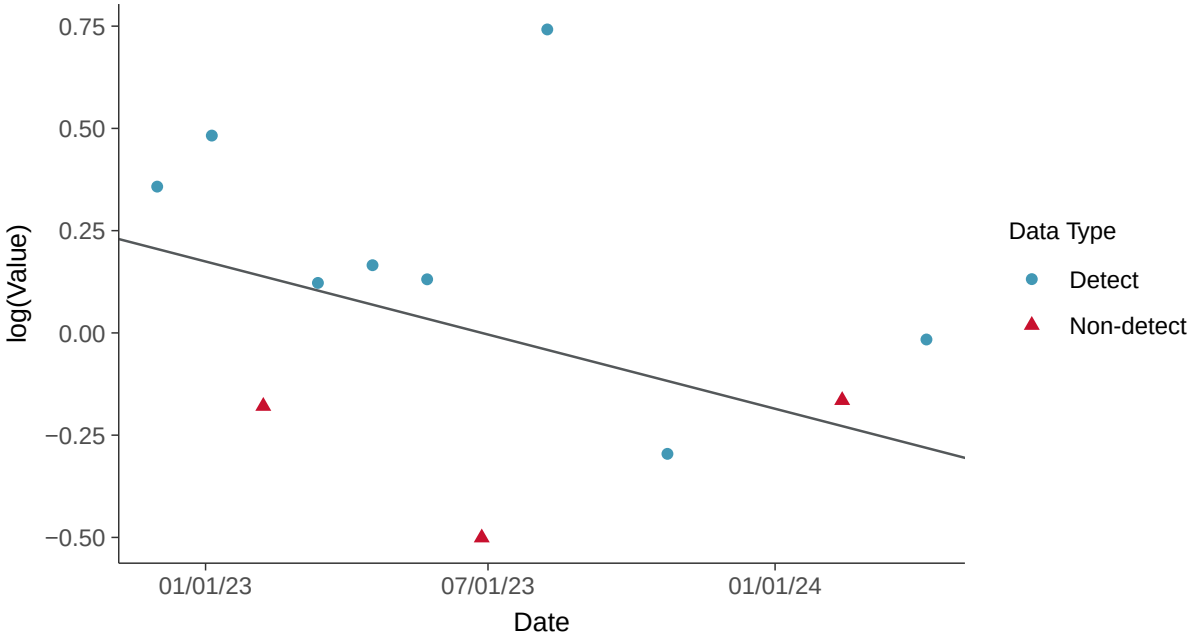
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-08 (pCi/L)



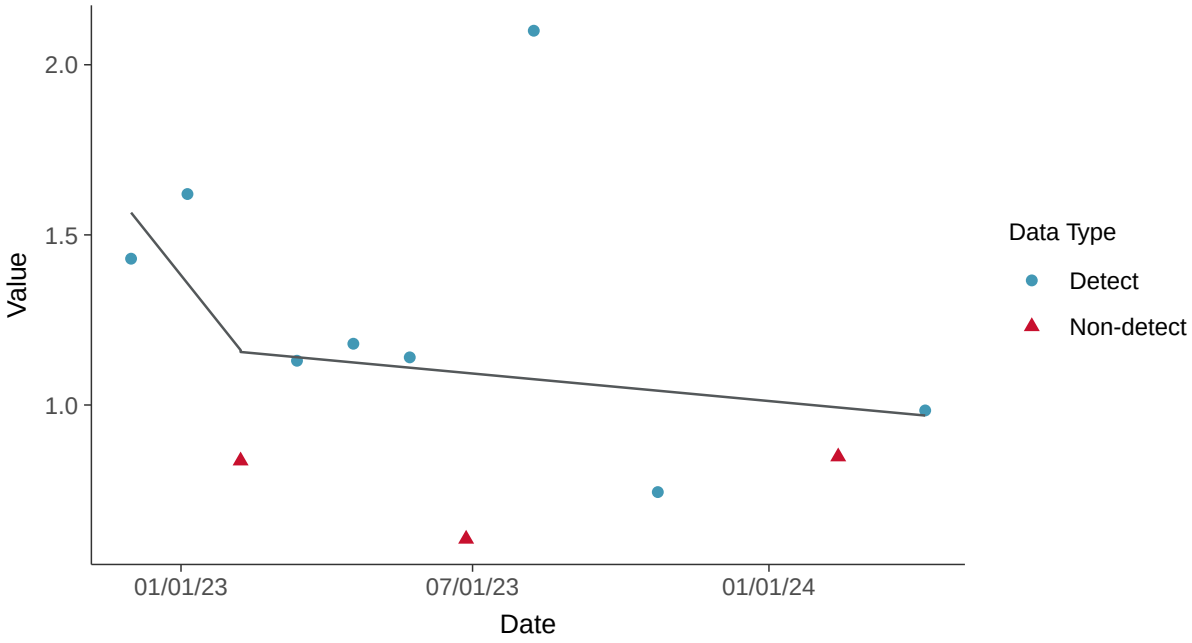
Trend Regression: Lognormal MLE

Radium 226 and 228, MW-08 (pCi/L)



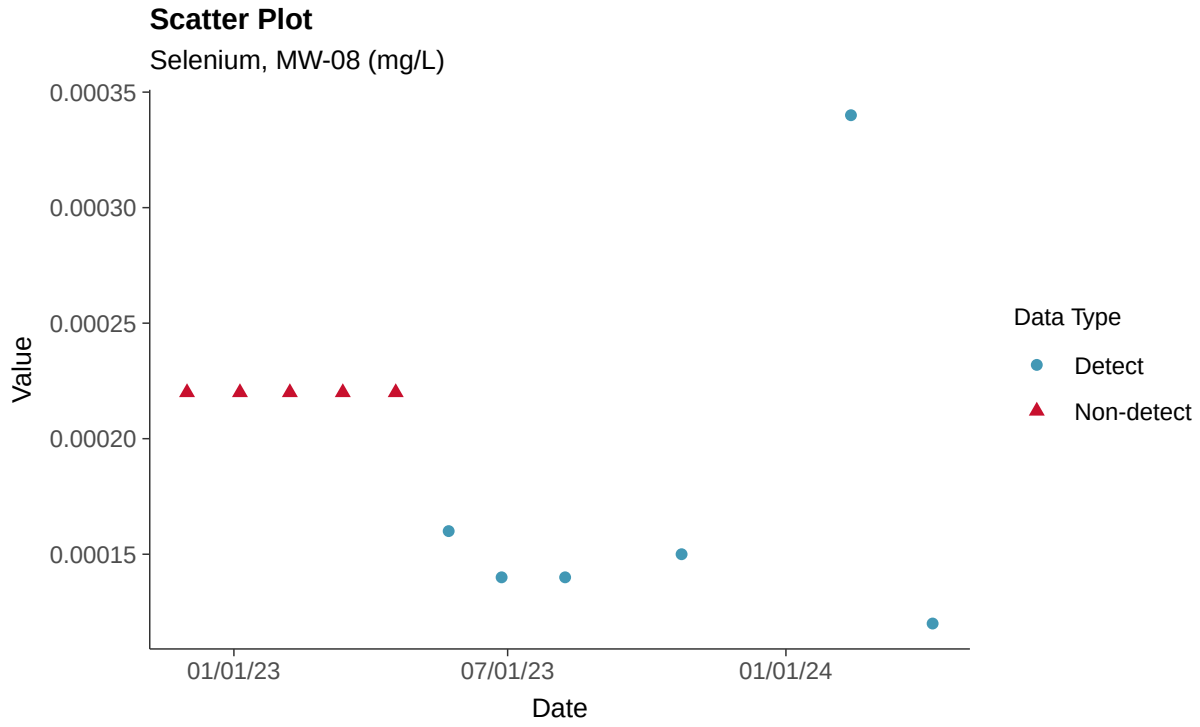
Trend Regression: Piecewise Linear-Linear

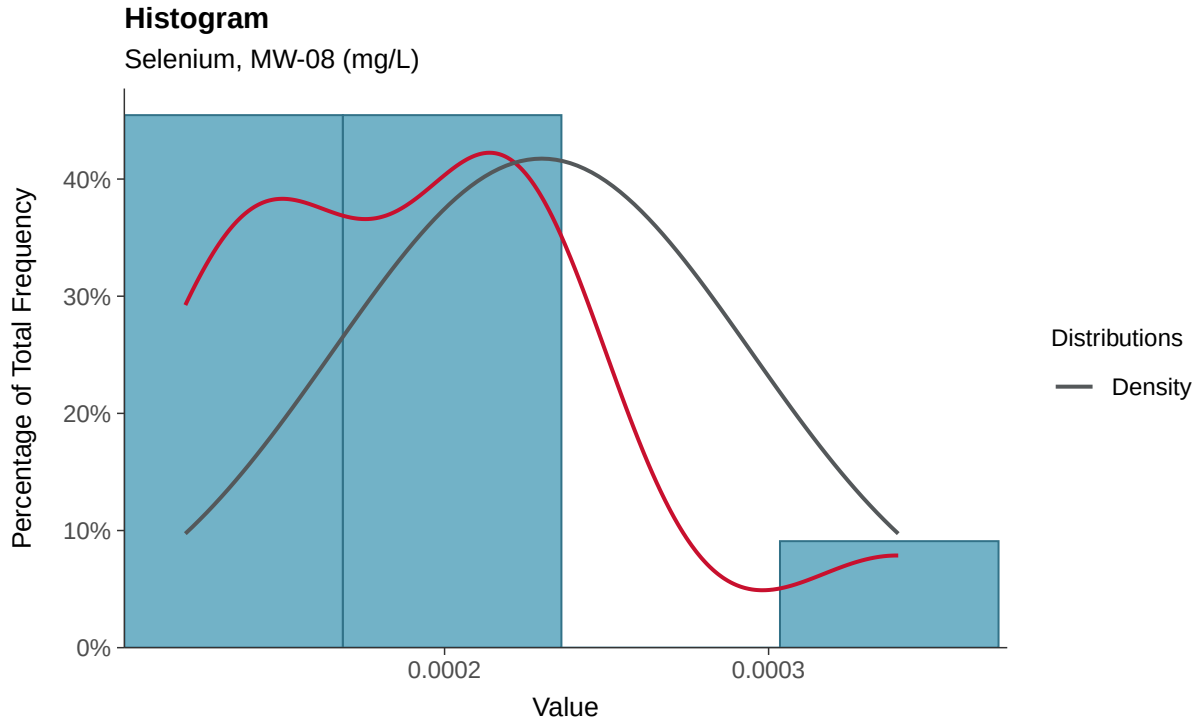
Radium 226 and 228, MW-08 (pCi/L)



Appendix IV: Selenium, MW-08

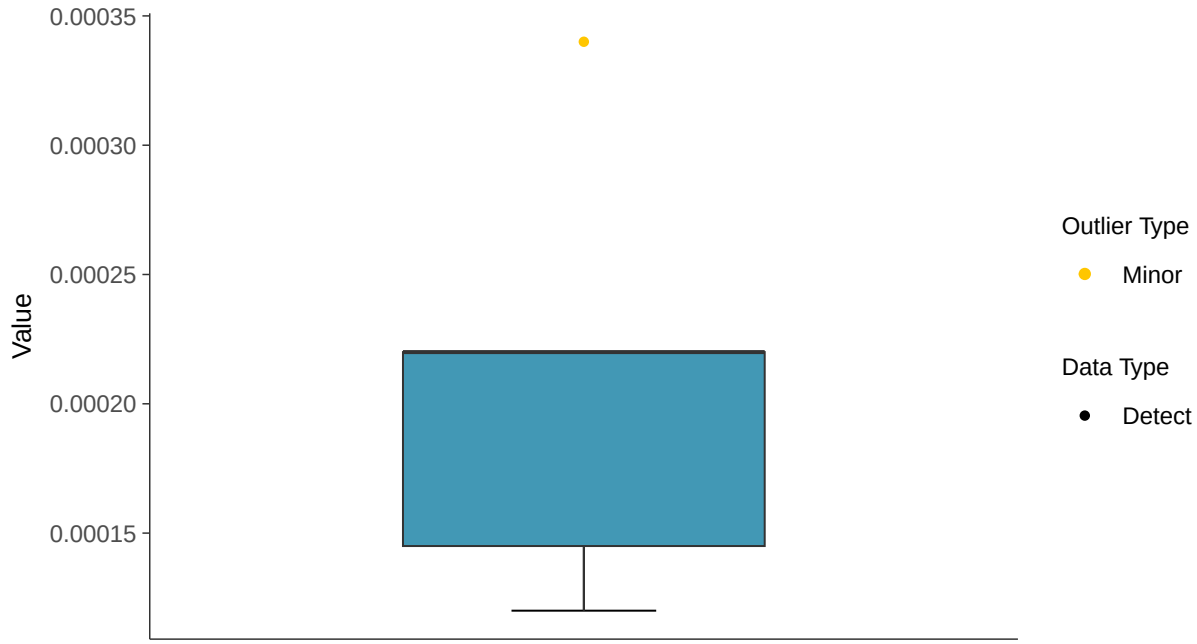
ID: 1_18_5_122





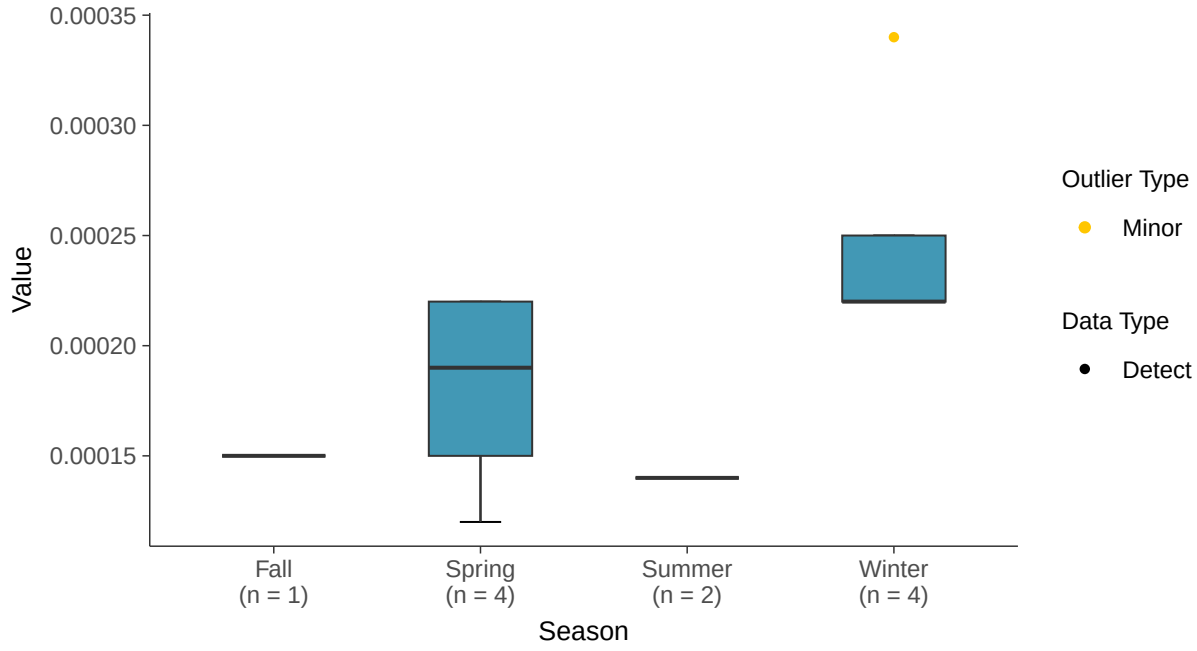
Boxplot

Selenium, MW-08 (mg/L)



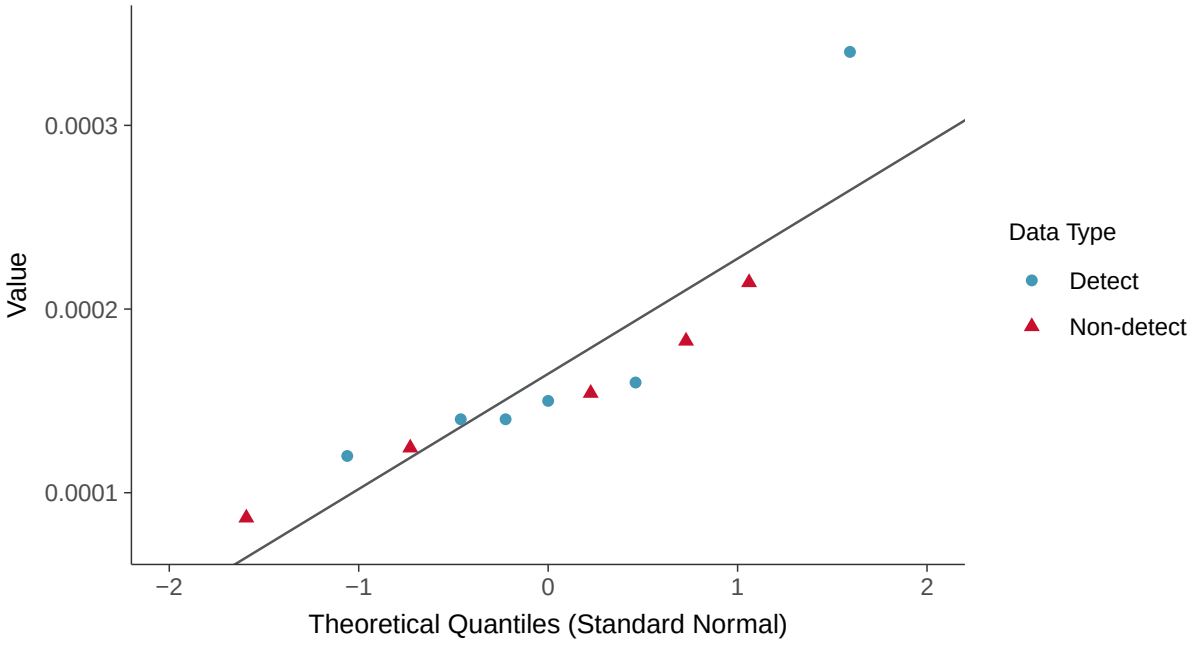
Boxplot by Season

Selenium, MW-08 (mg/L)



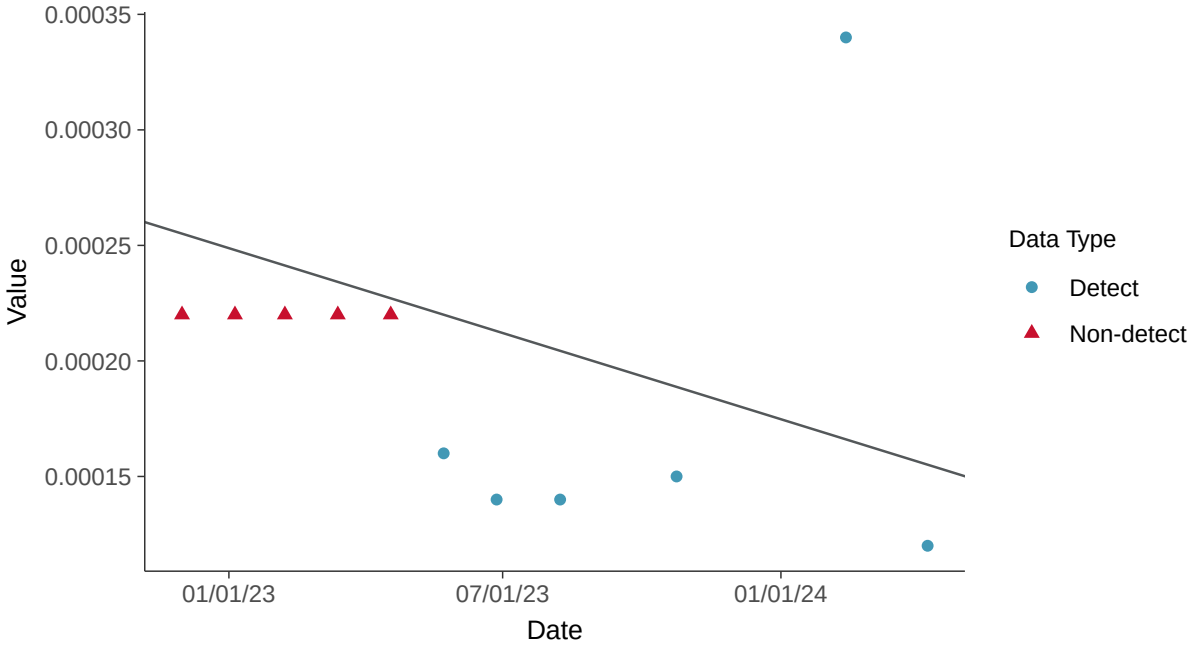
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-08 (mg/L)



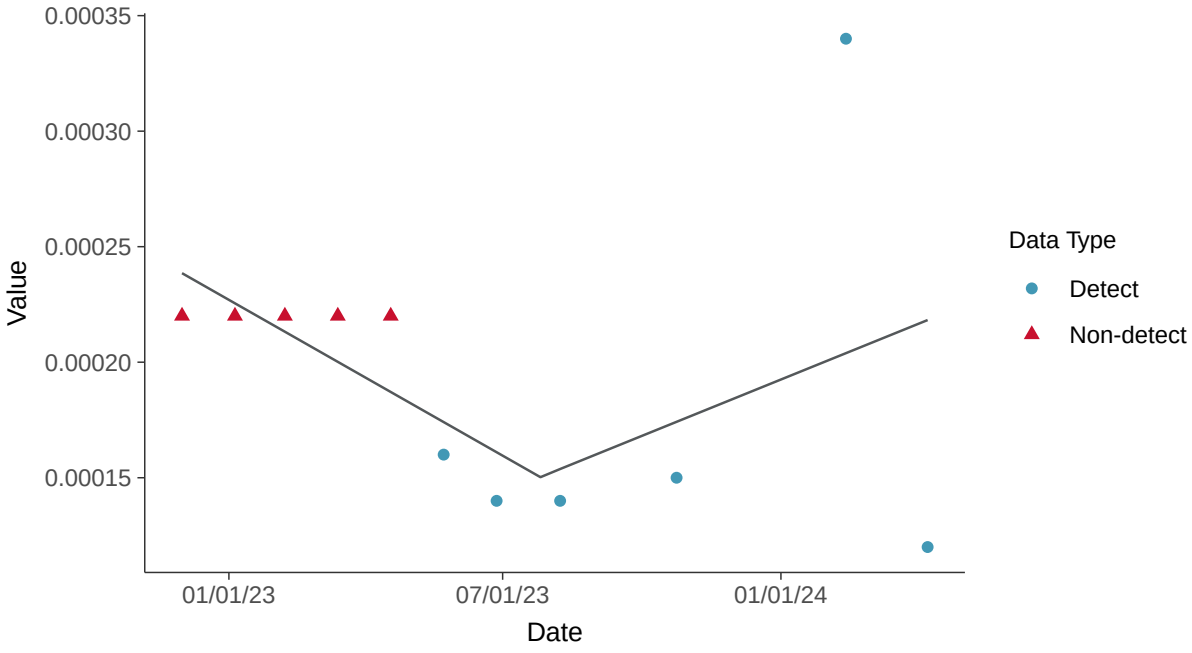
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Selenium, MW-08 (mg/L)



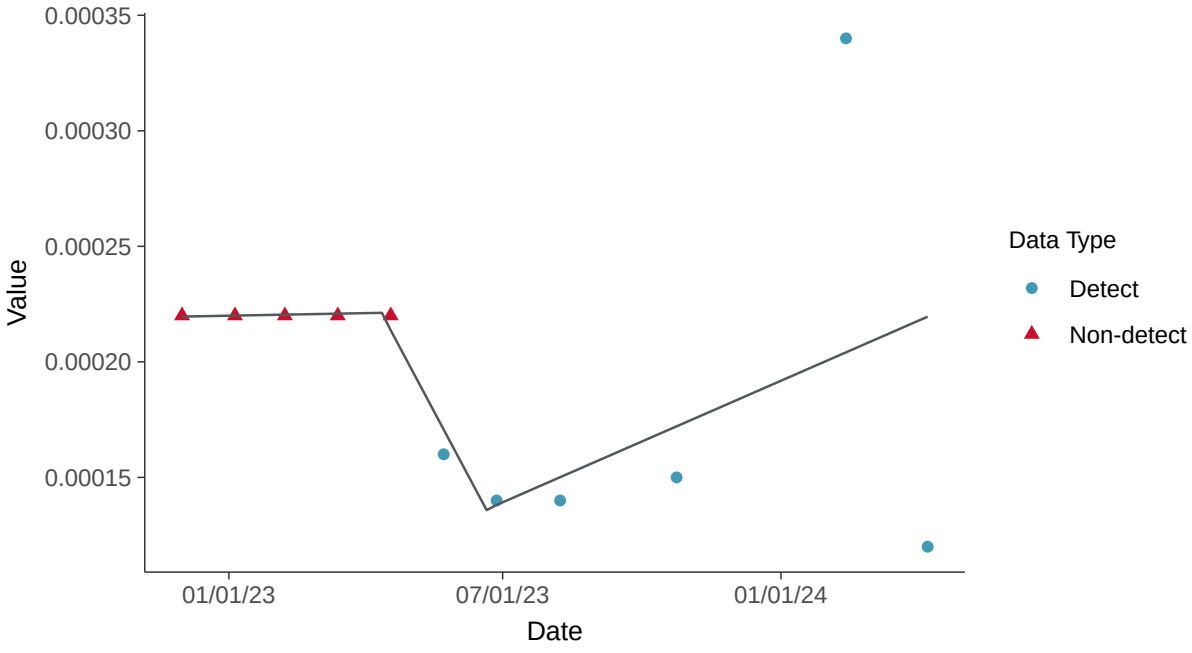
Trend Regression: Piecewise Linear-Linear

Selenium, MW-08 (mg/L)



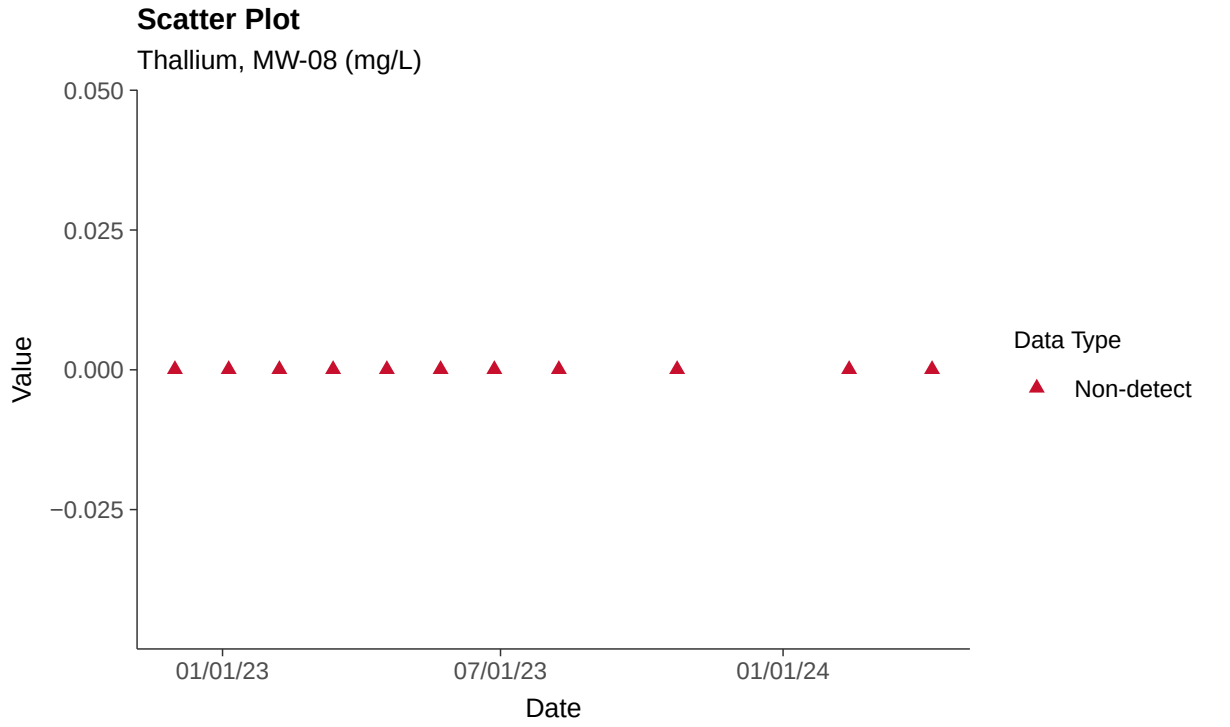
Trend Regression: Piecewise Linear-Linear-Linear

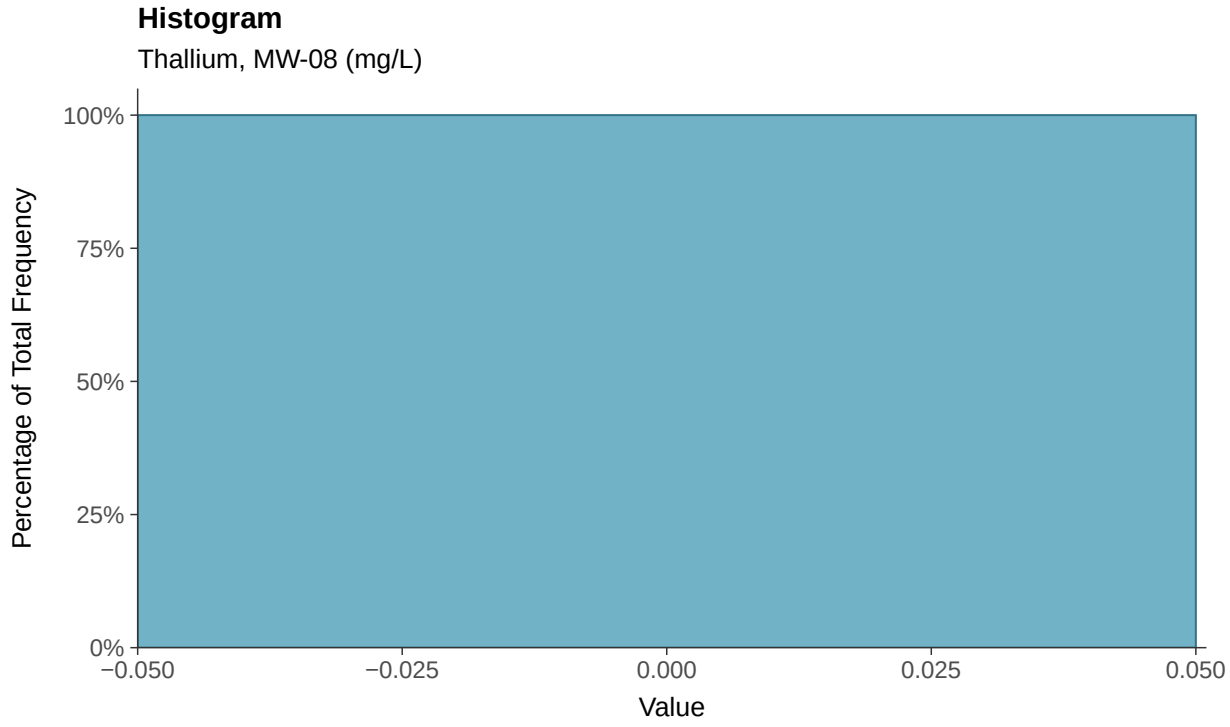
Selenium, MW-08 (mg/L)



Appendix IV: Thallium, MW-08

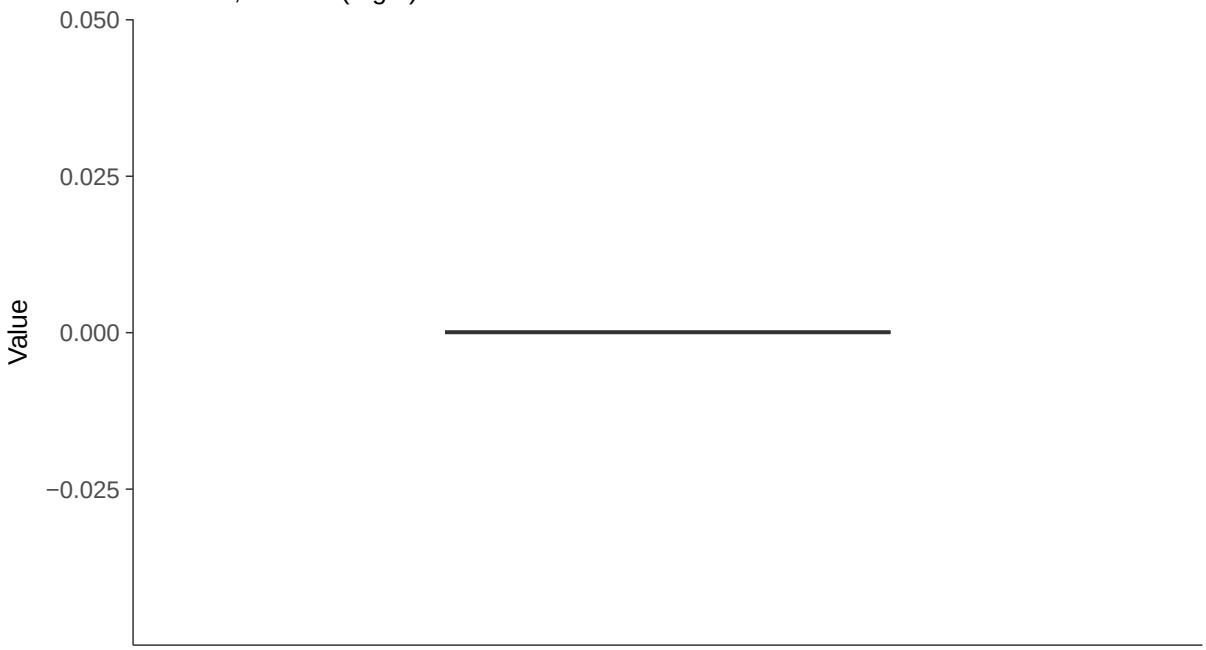
ID: 1_18_5_125





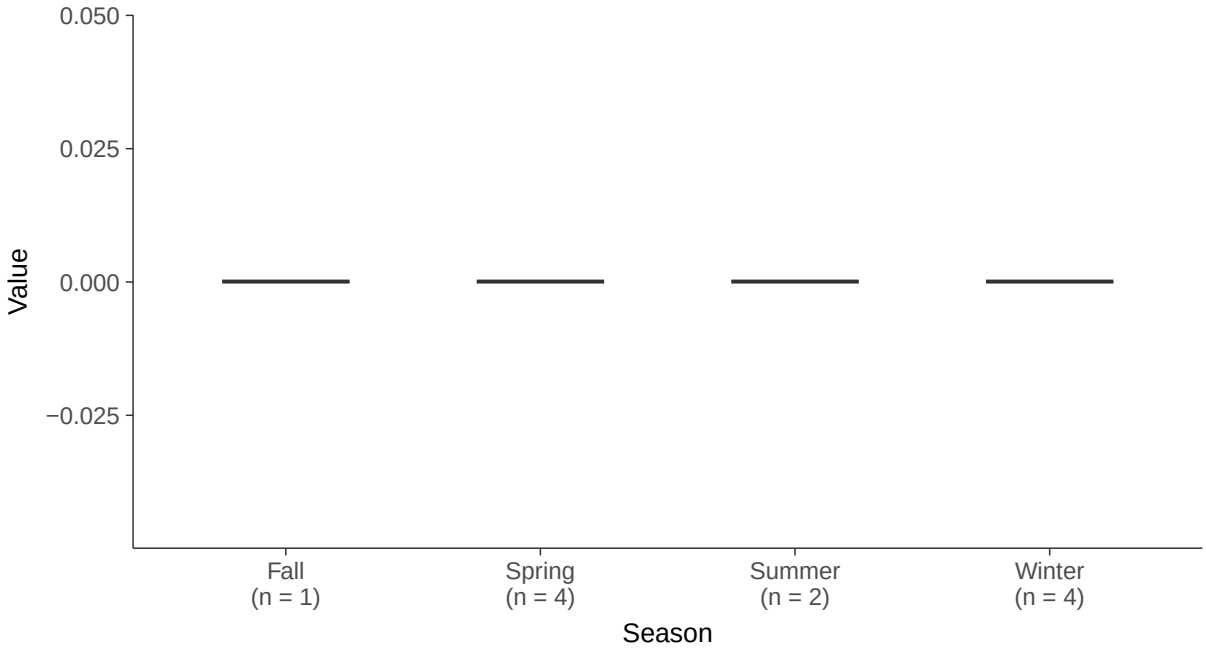
Boxplot

Thallium, MW-08 (mg/L)



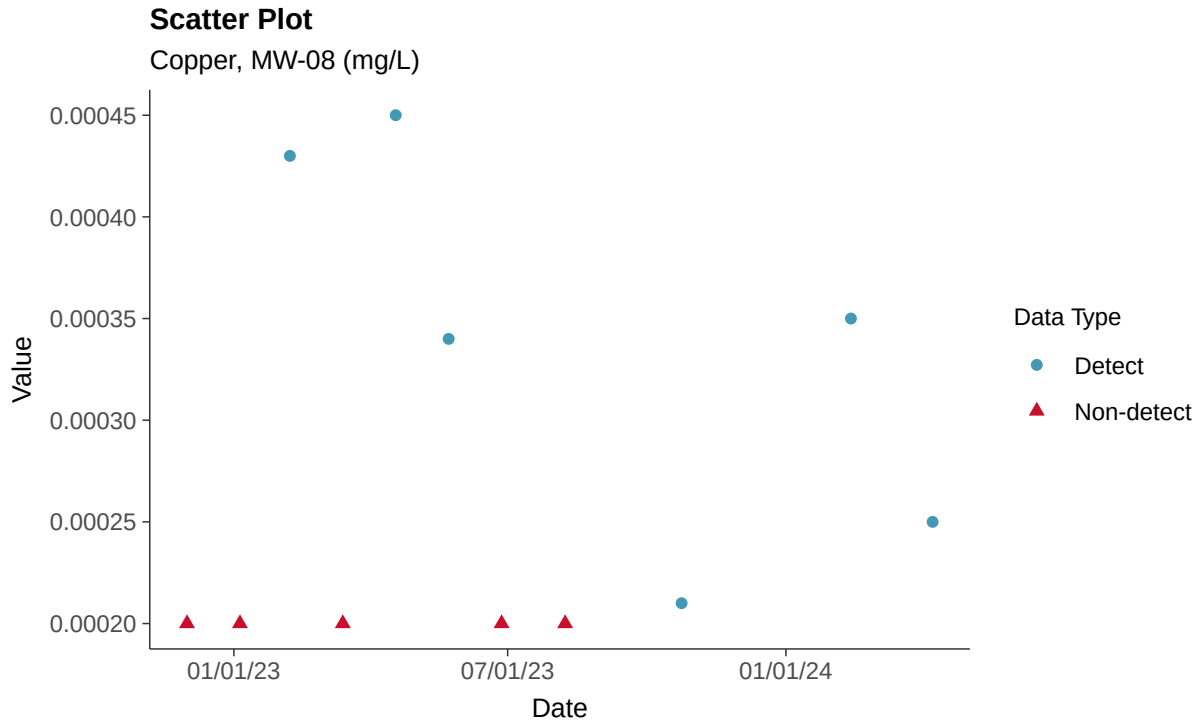
Boxplot by Season

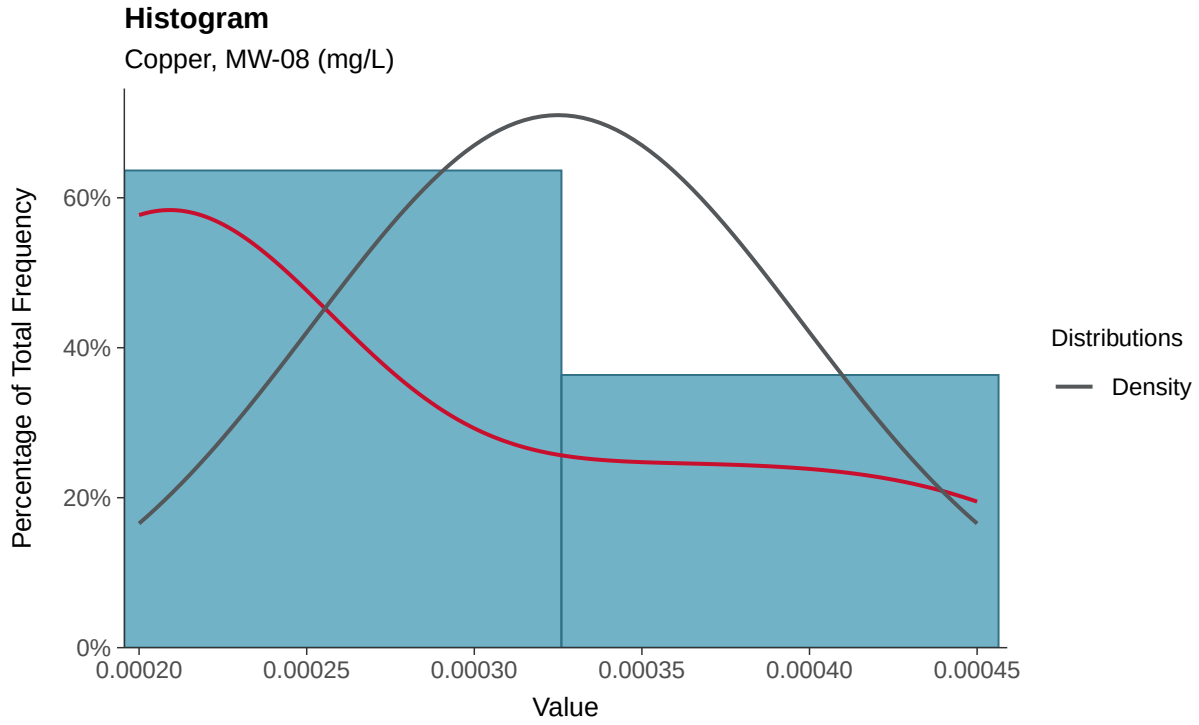
Thallium, MW-08 (mg/L)



Part 115: Copper, MW-08

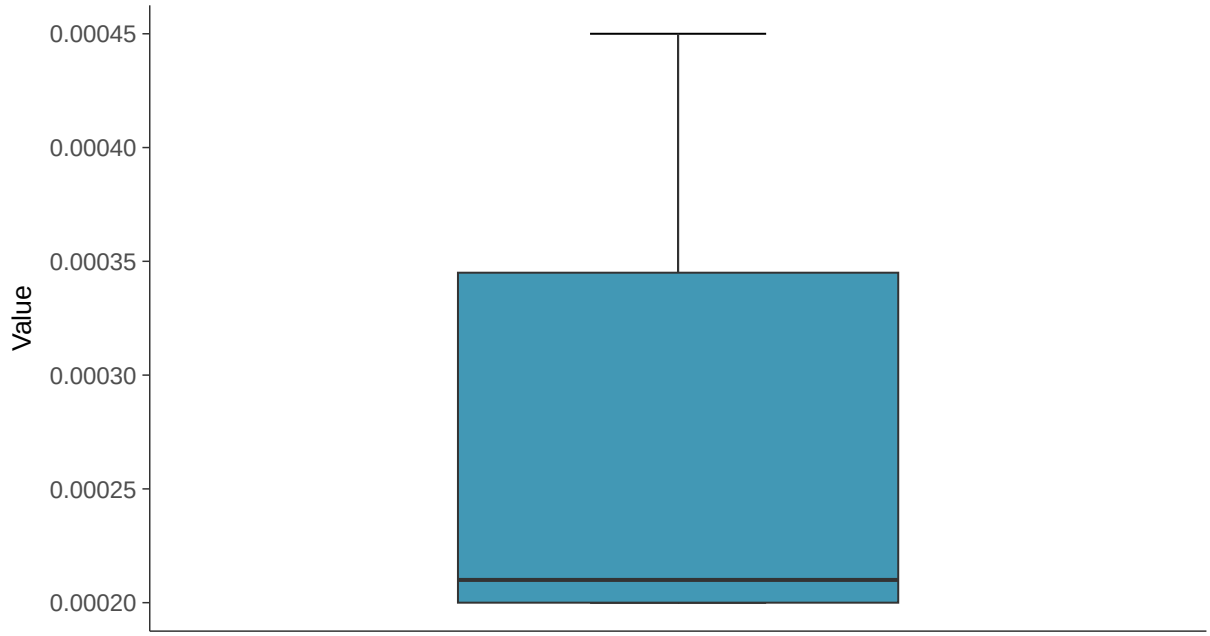
ID: 1_18_6_111





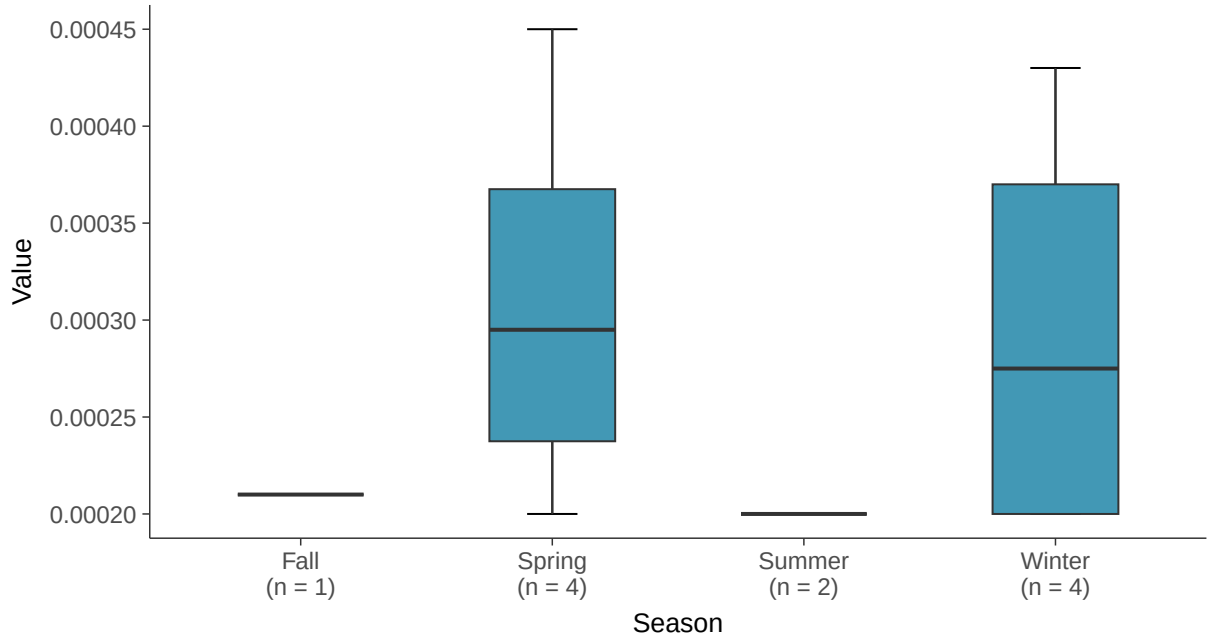
Boxplot

Copper, MW-08 (mg/L)



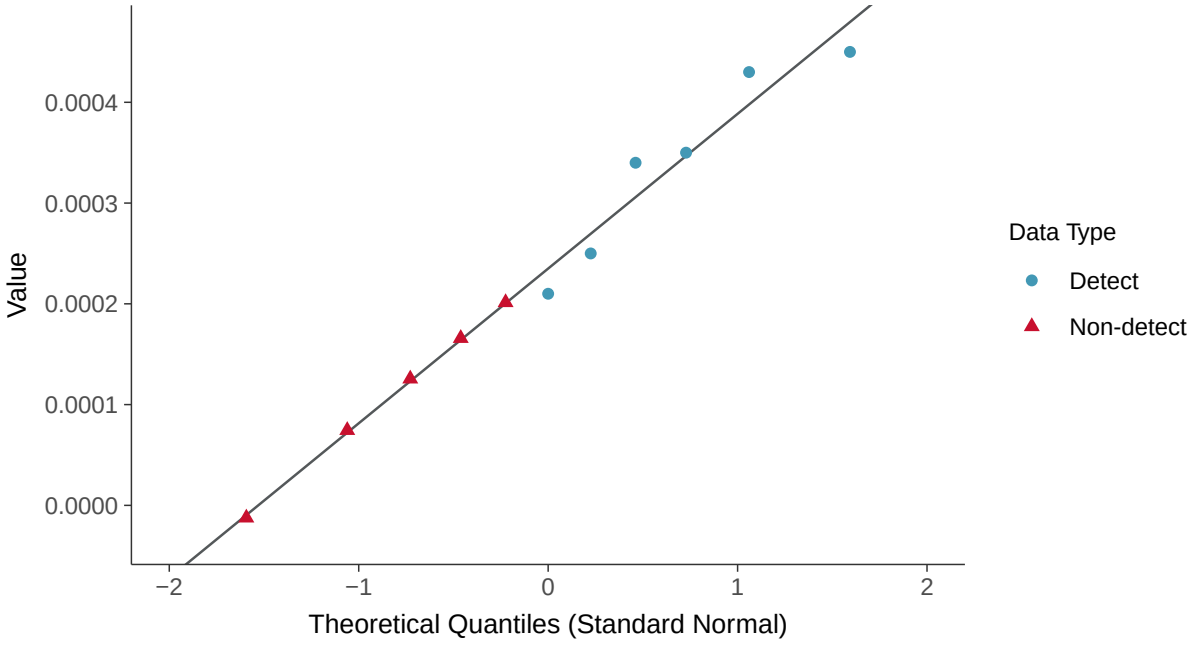
Boxplot by Season

Copper, MW-08 (mg/L)



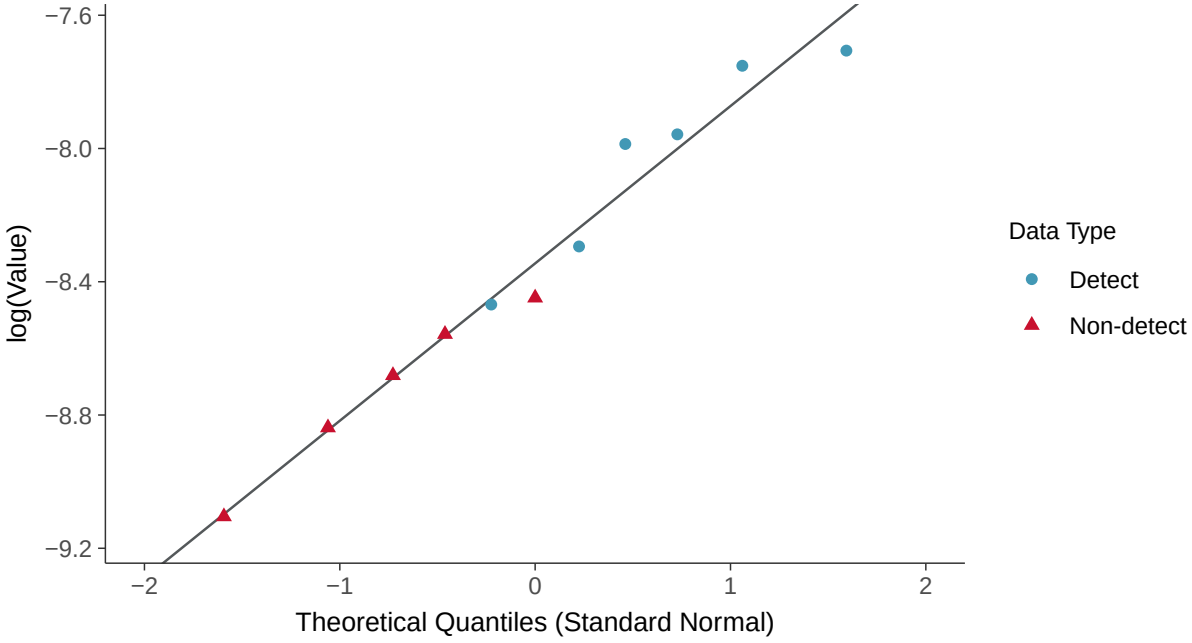
Normal Q-Q plot using ROS Imputed Estimates

Copper, MW-08 (mg/L)



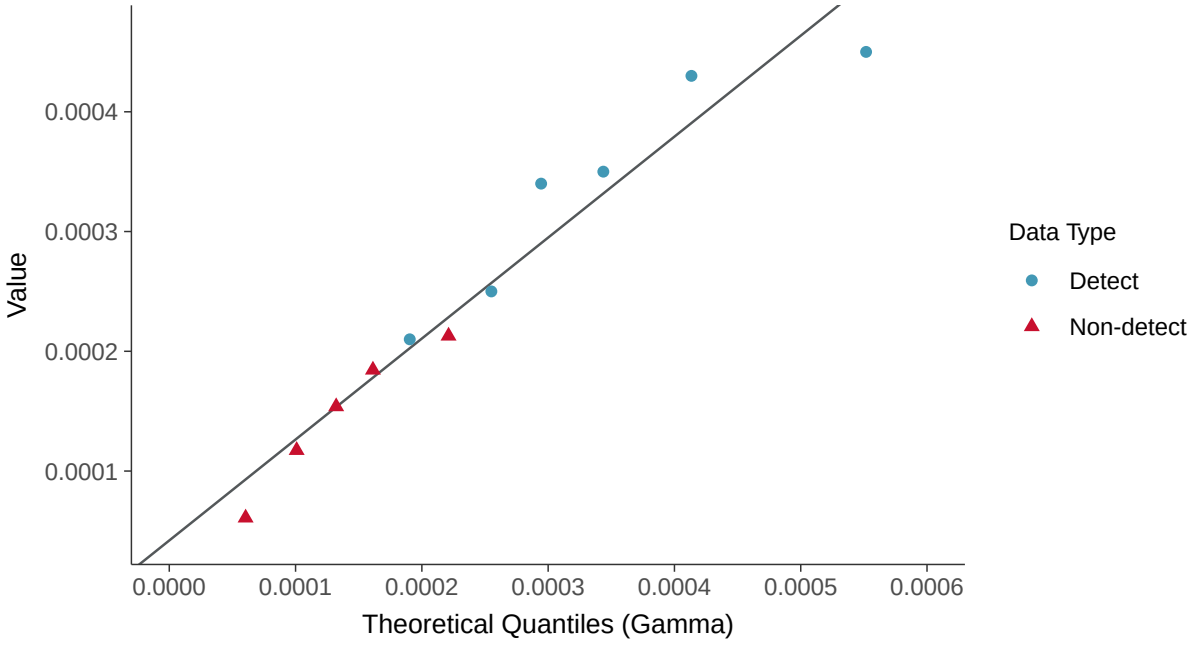
Lognormal Q-Q plot using ROS Imputed Estimates

Copper, MW-08 (mg/L)



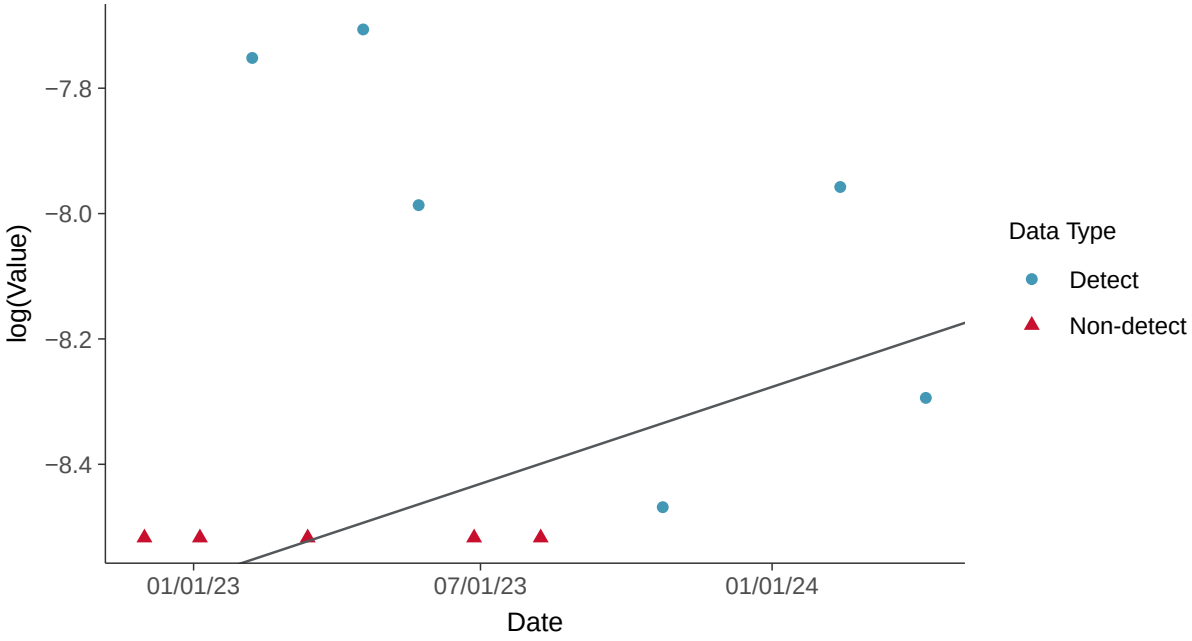
Gamma Q-Q plot using ROS Imputed Estimates

Copper, MW-08 (mg/L)



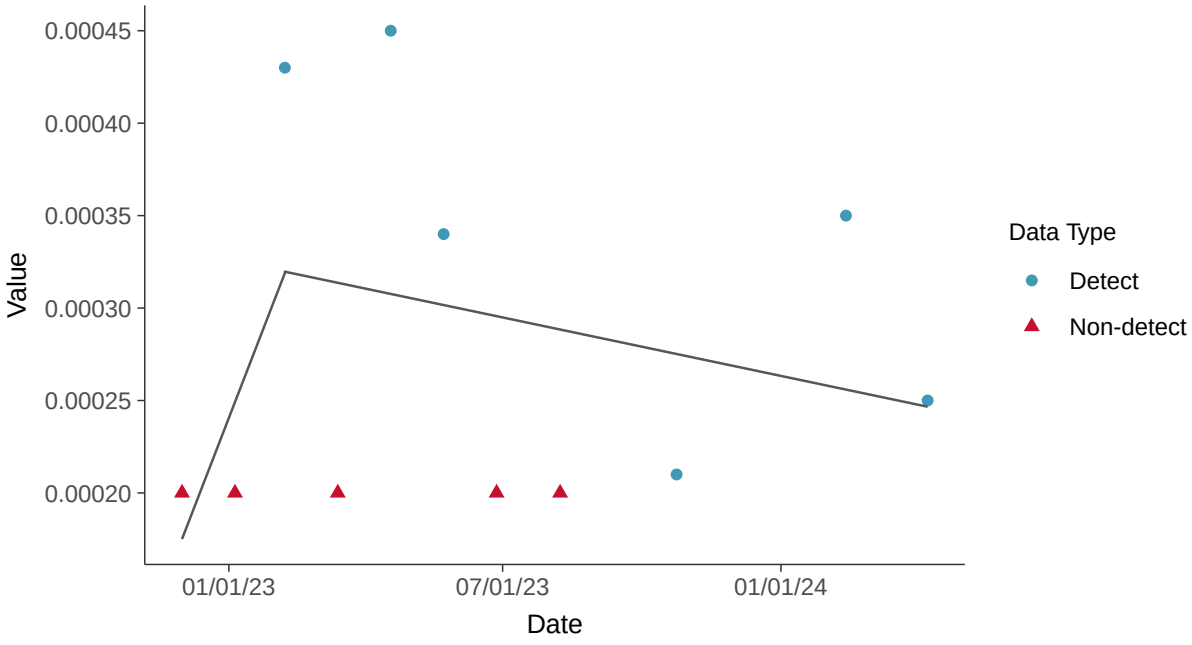
Trend Regression: Lognormal MLE

Copper, MW-08 (mg/L)



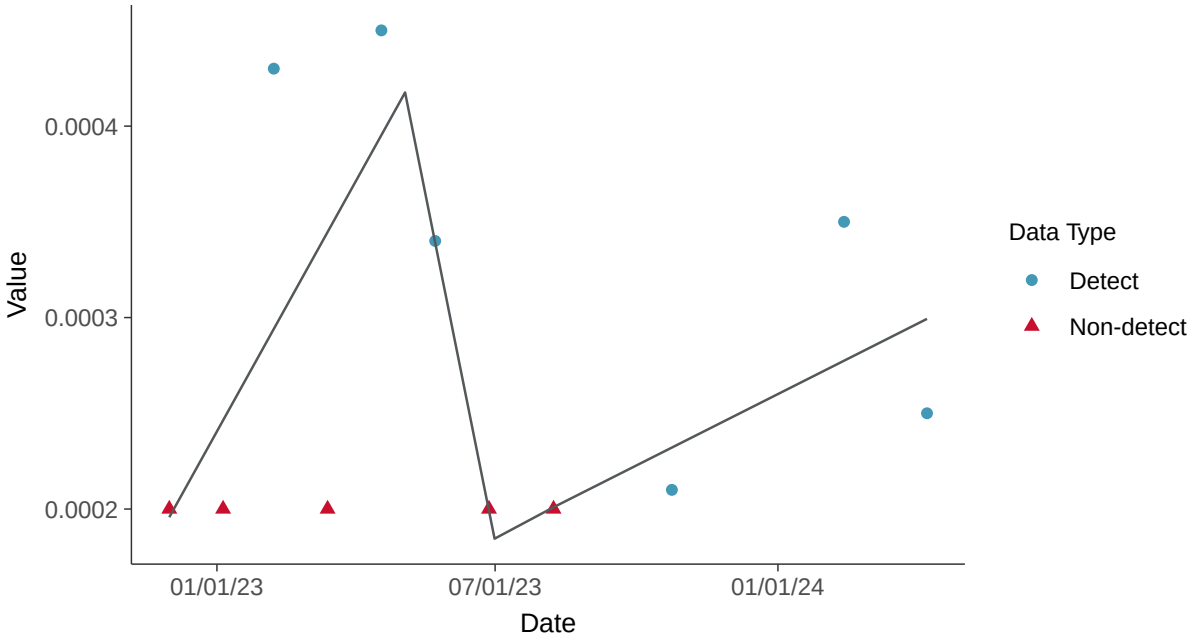
Trend Regression: Piecewise Linear-Linear

Copper, MW-08 (mg/L)



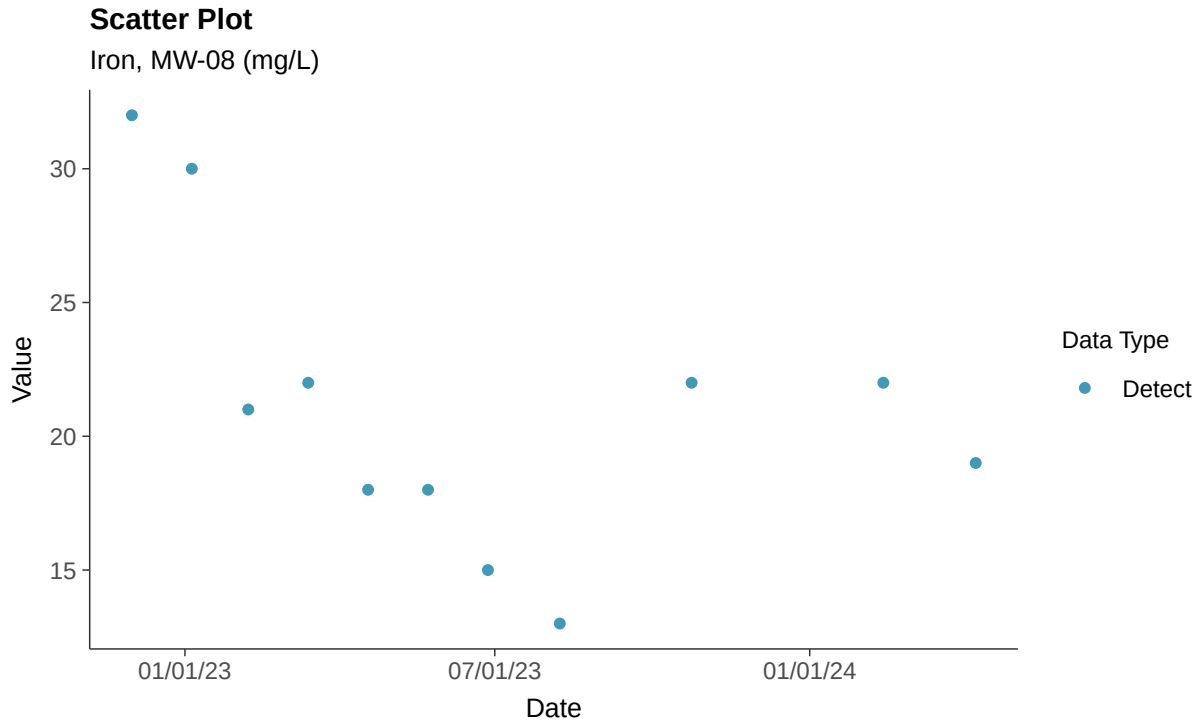
Trend Regression: Piecewise Linear-Linear-Linear

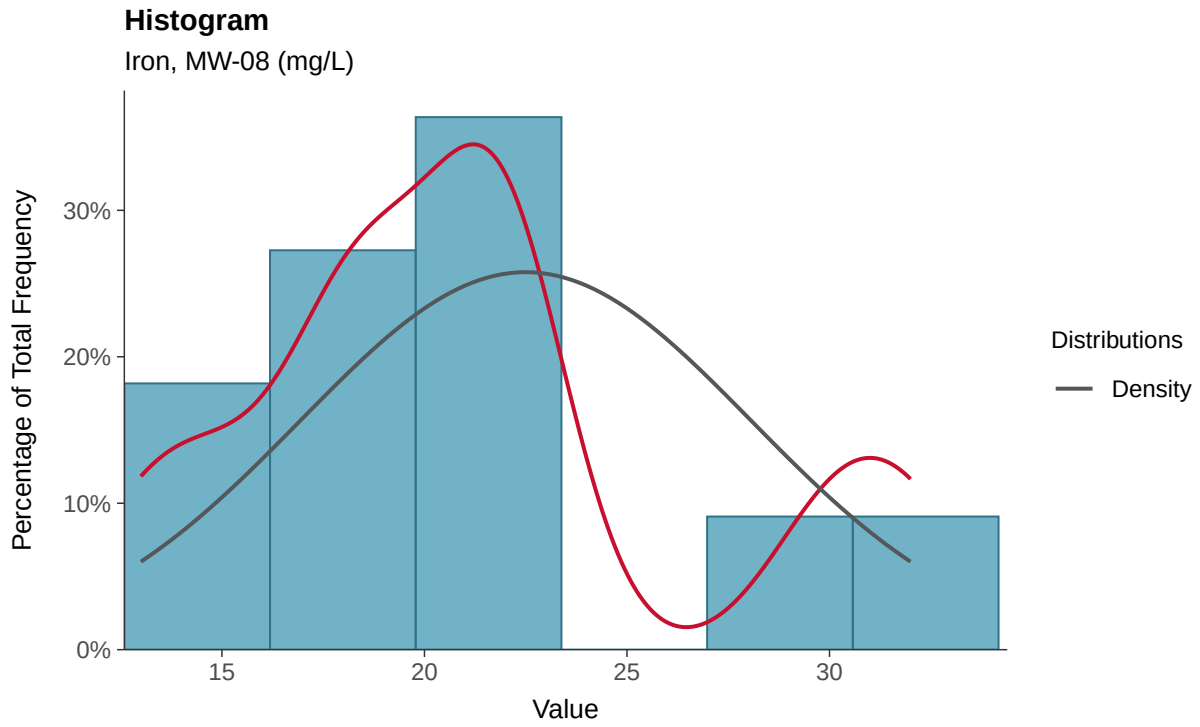
Copper, MW-08 (mg/L)



Part 115: Iron, MW-08

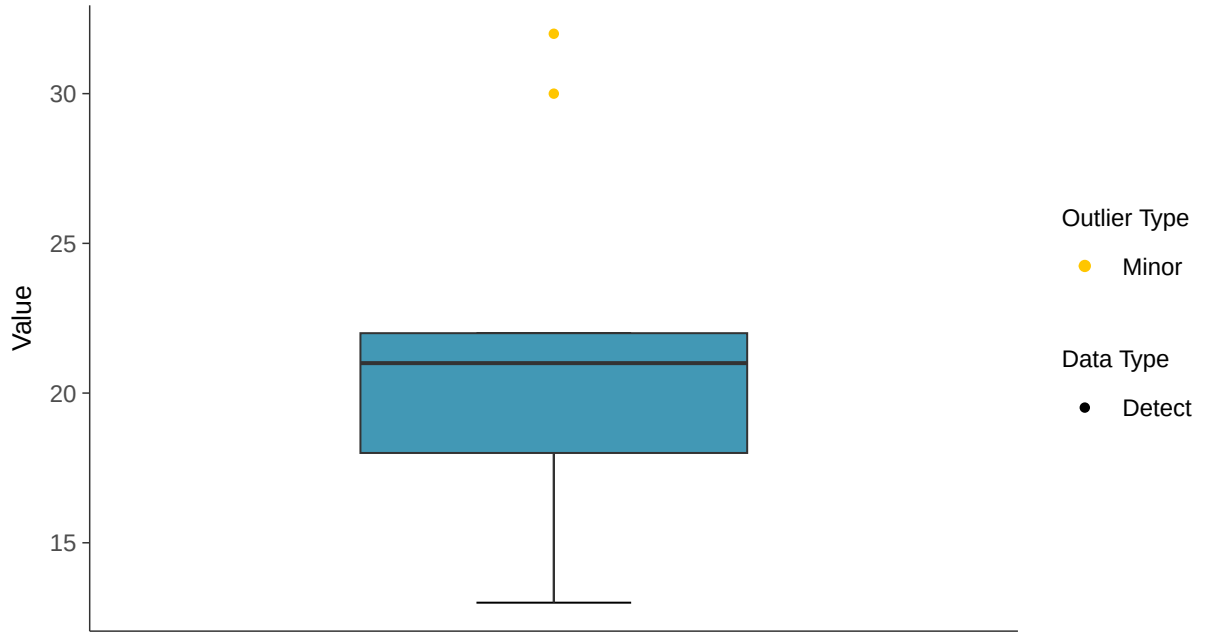
ID: 1_18_6_114





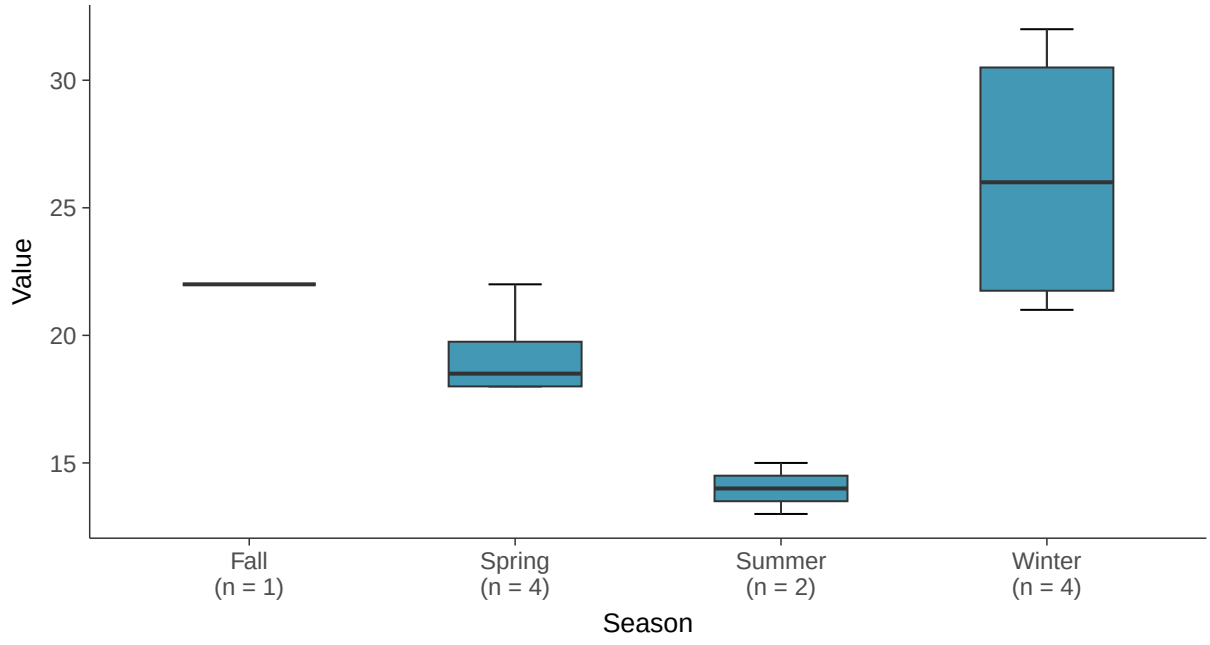
Boxplot

Iron, MW-08 (mg/L)



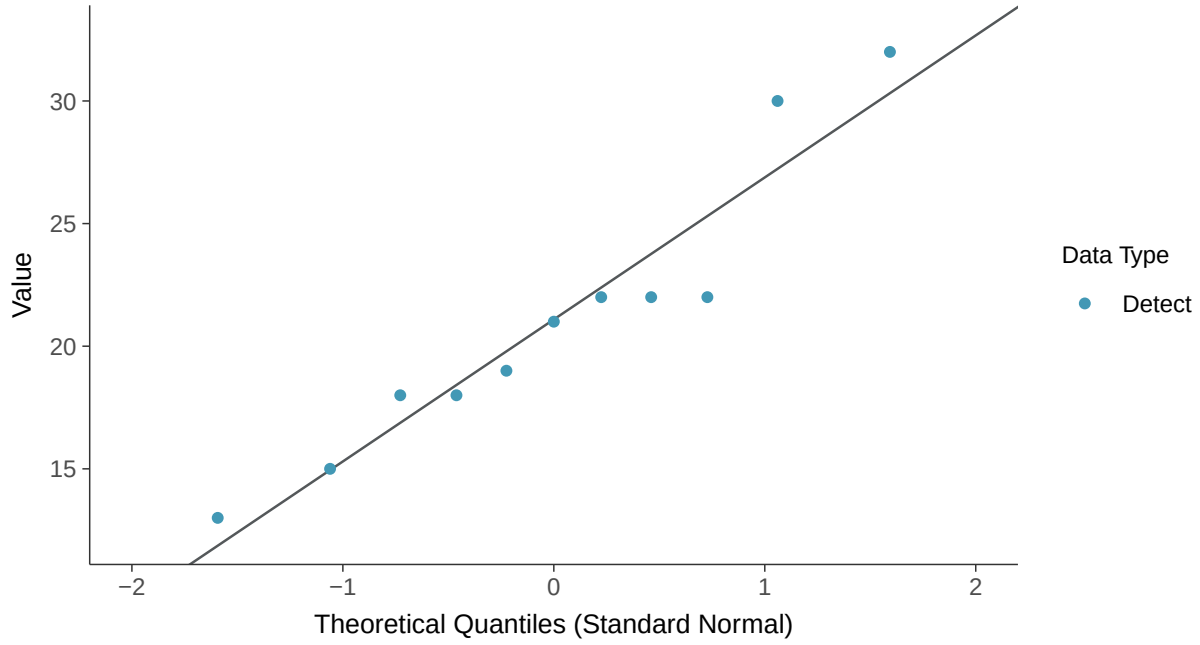
Boxplot by Season

Iron, MW-08 (mg/L)



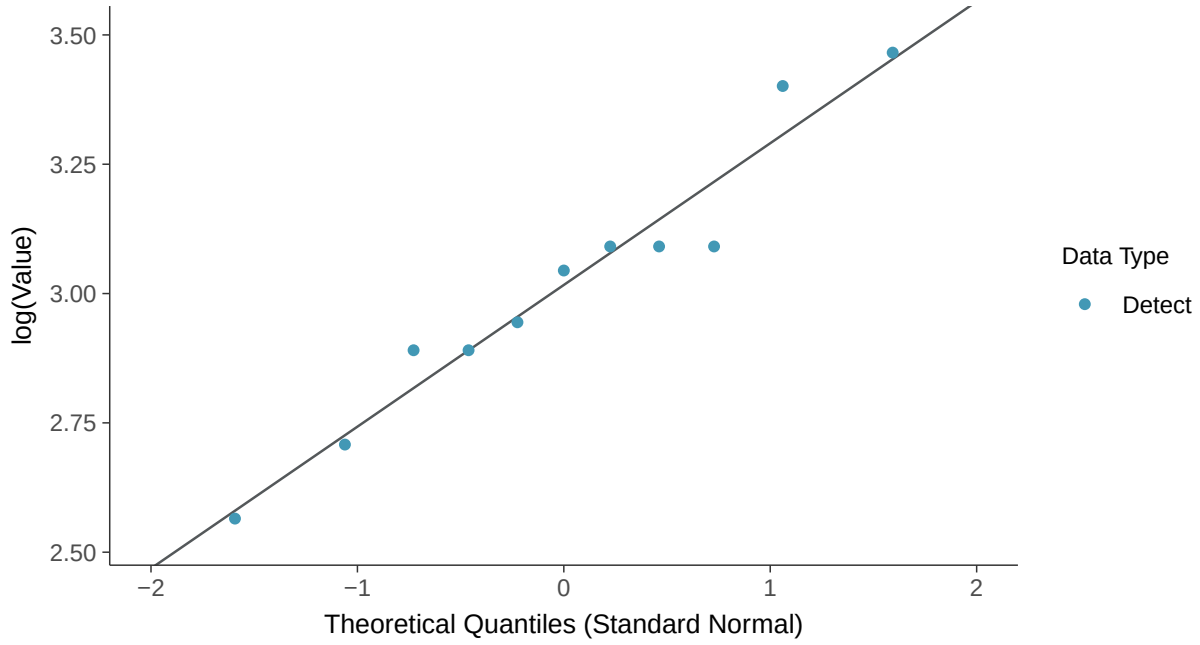
Normal Q-Q plot

Iron, MW-08 (mg/L)



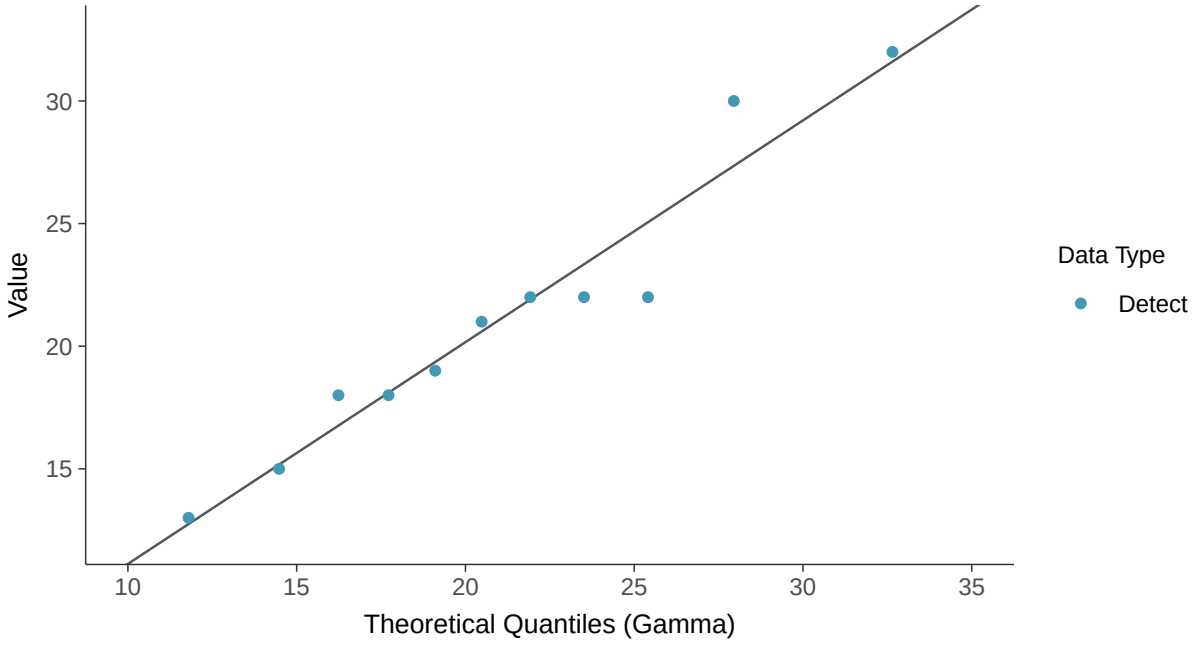
Lognormal Q-Q plot

Iron, MW-08 (mg/L)



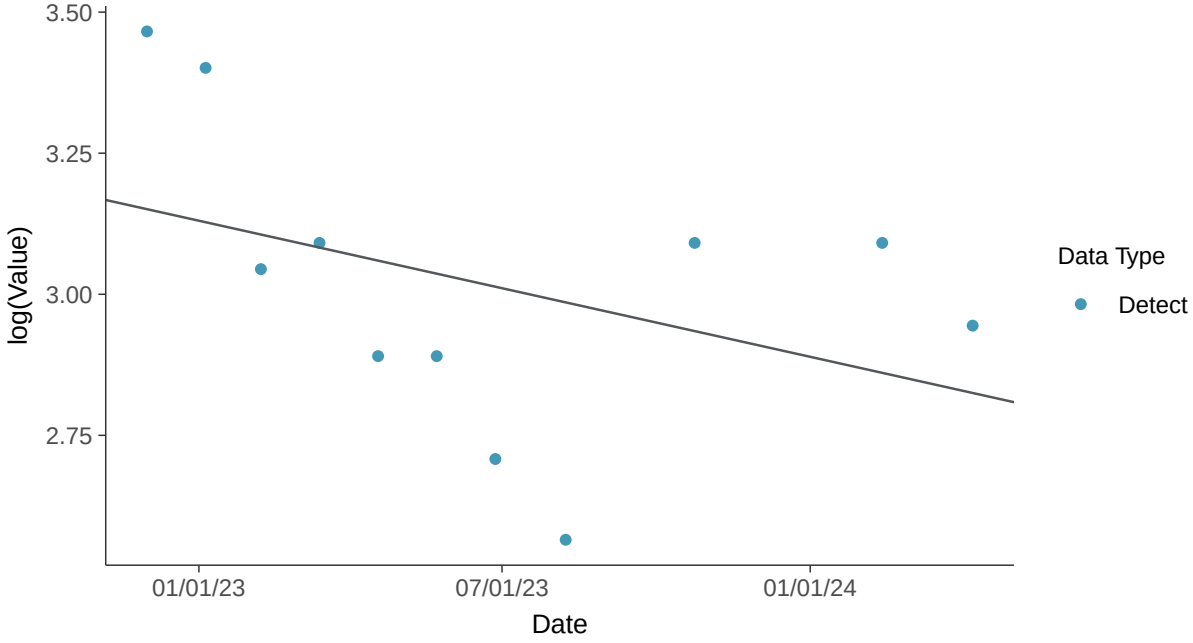
Gamma Q-Q plot

Iron, MW-08 (mg/L)



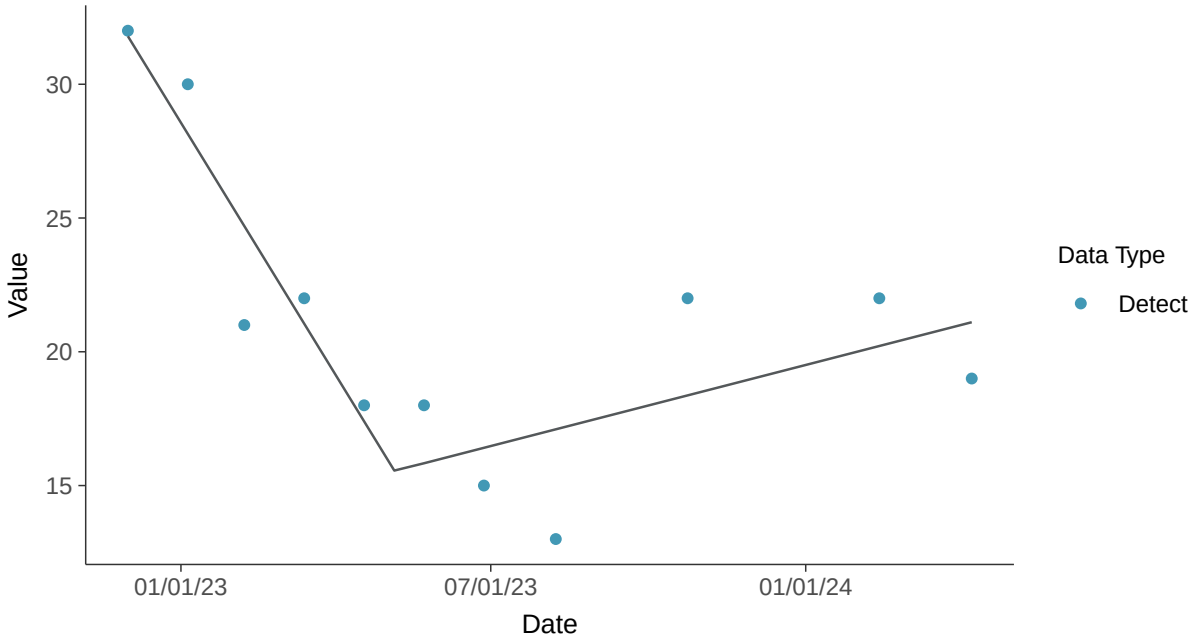
Trend Regression: Lognormal MLE

Iron, MW-08 (mg/L)



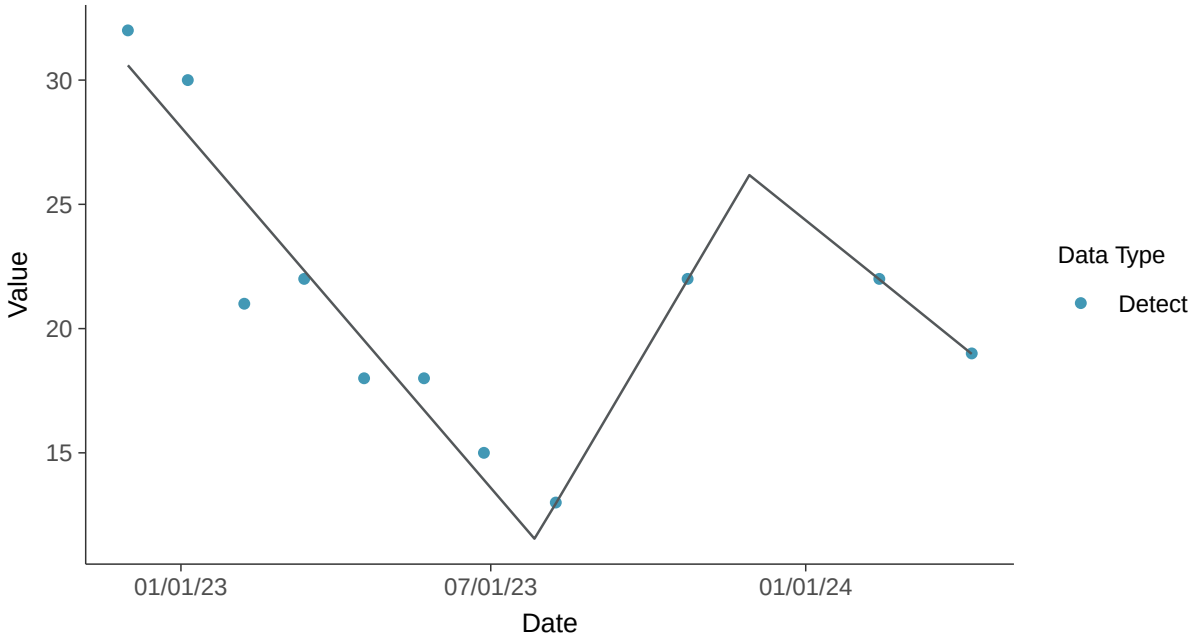
Trend Regression: Piecewise Linear-Linear

Iron, MW-08 (mg/L)



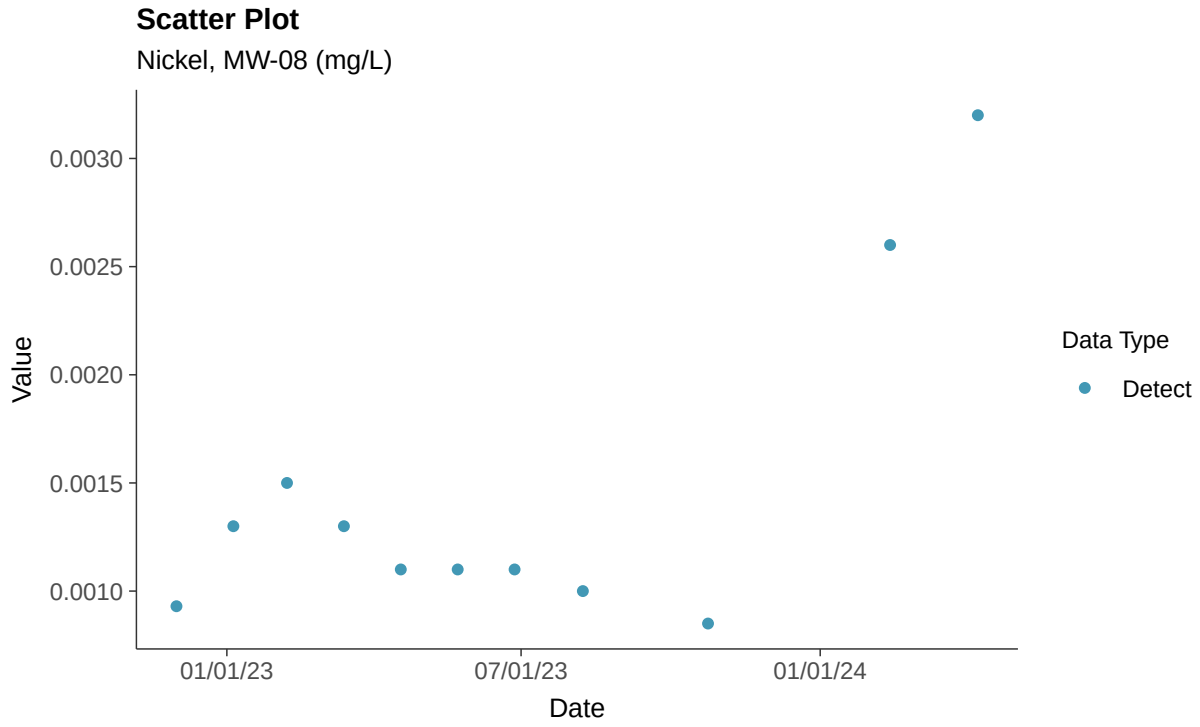
Trend Regression: Piecewise Linear-Linear-Linear

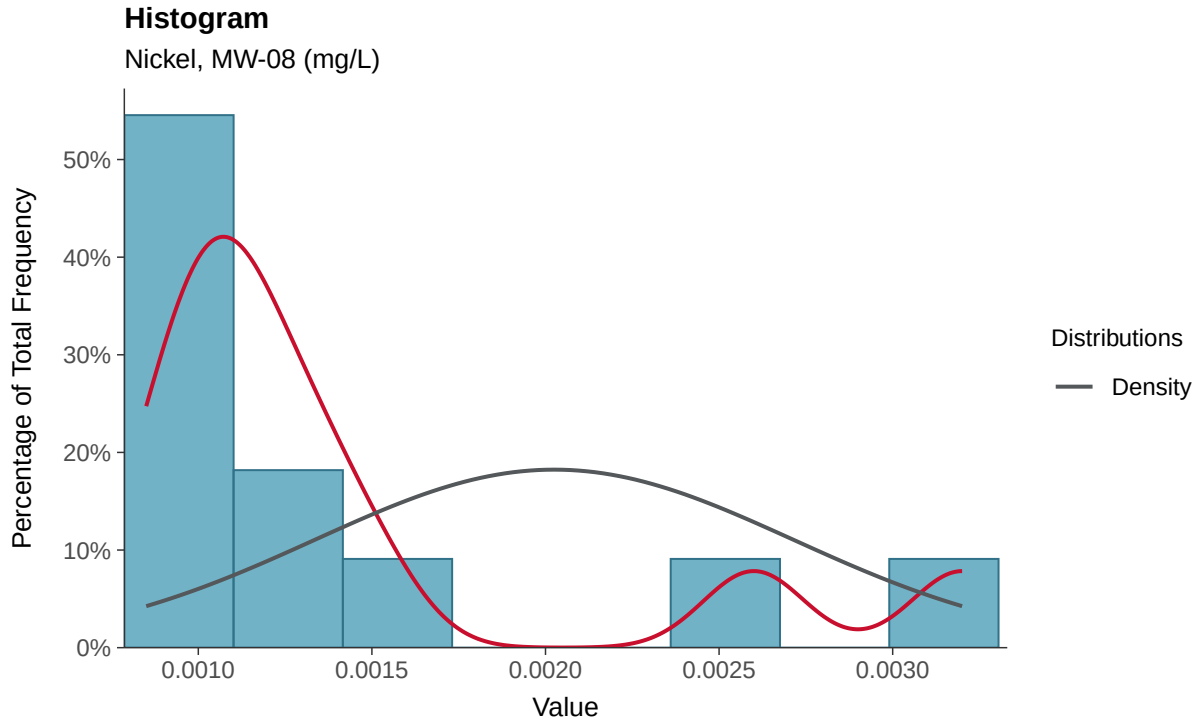
Iron, MW-08 (mg/L)



Part 115: Nickel, MW-08

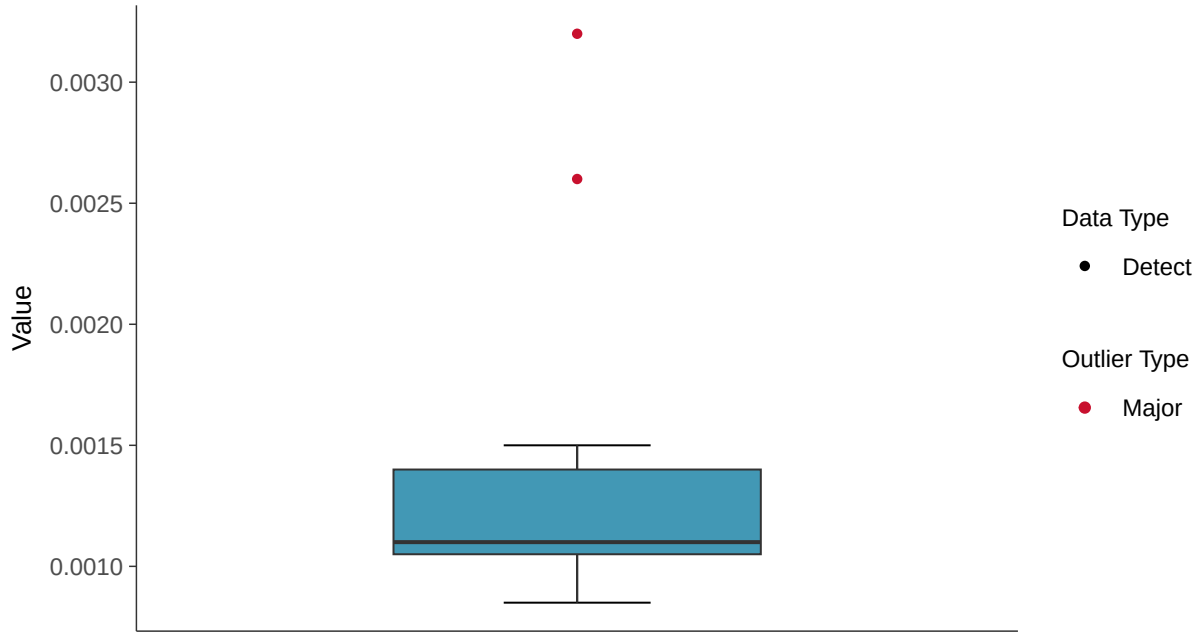
ID: 1_18_6_119





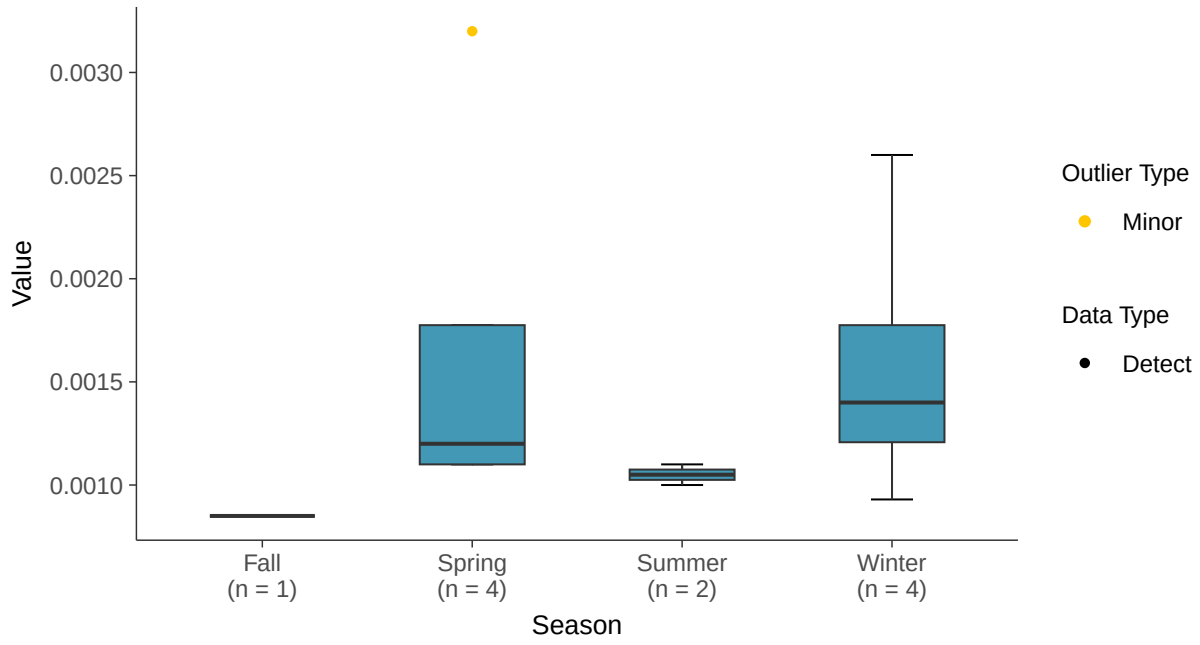
Boxplot

Nickel, MW-08 (mg/L)



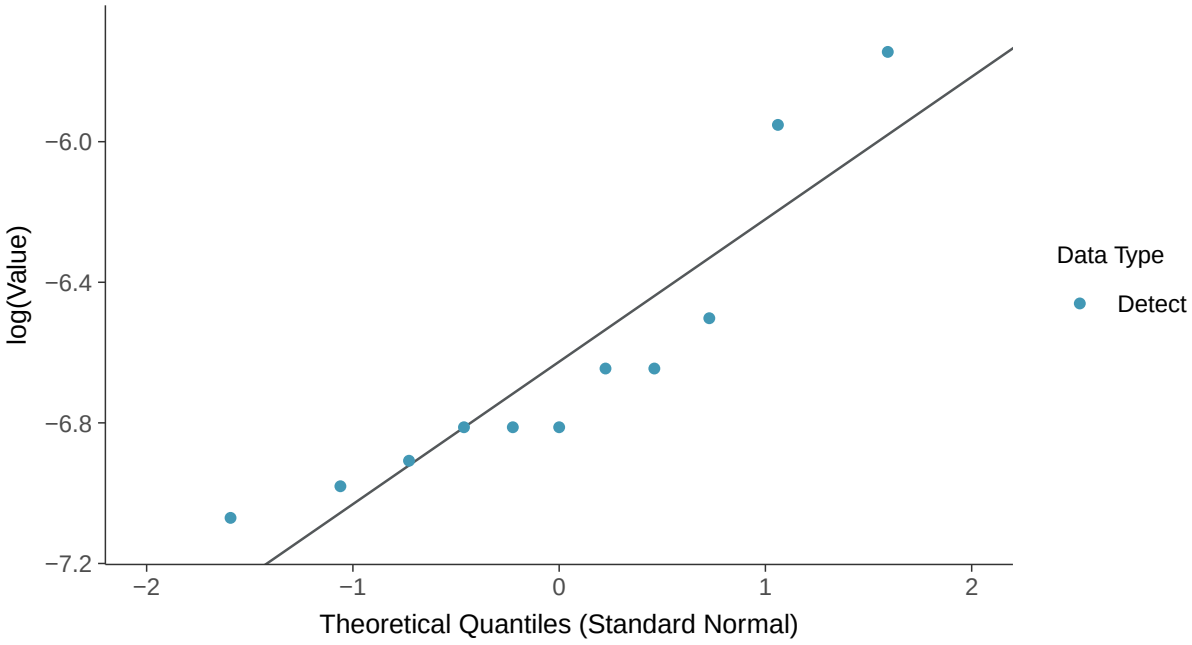
Boxplot by Season

Nickel, MW-08 (mg/L)



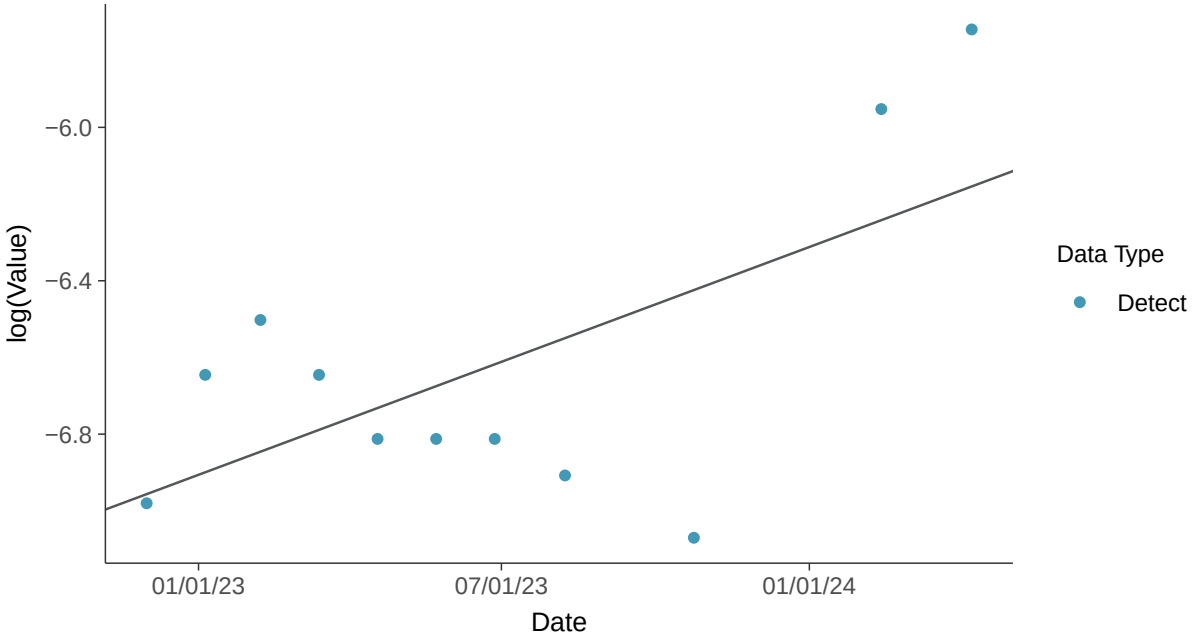
Lognormal Q-Q plot

Nickel, MW-08 (mg/L)



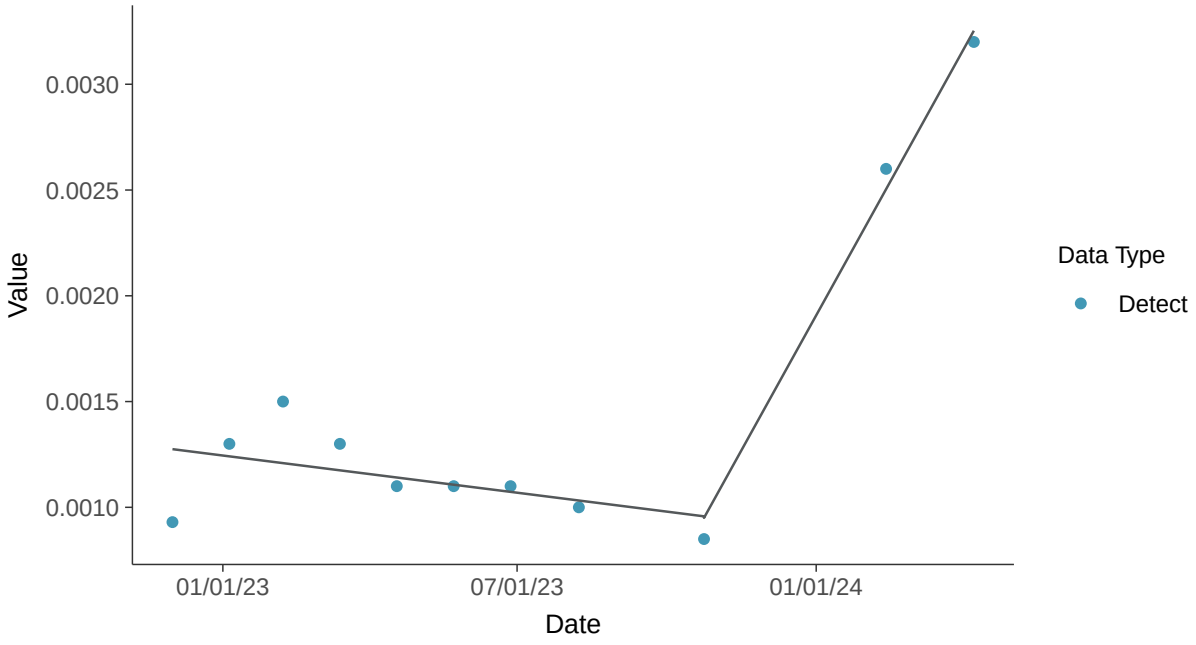
Trend Regression: Lognormal MLE

Nickel, MW-08 (mg/L)



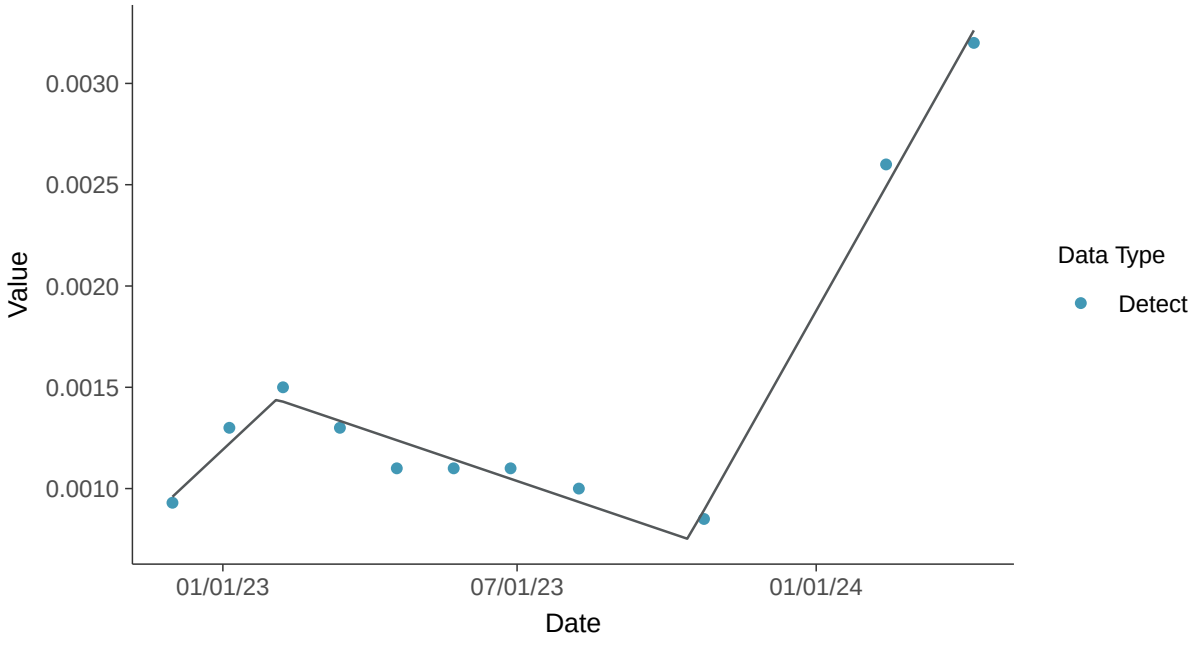
Trend Regression: Piecewise Linear-Linear

Nickel, MW-08 (mg/L)



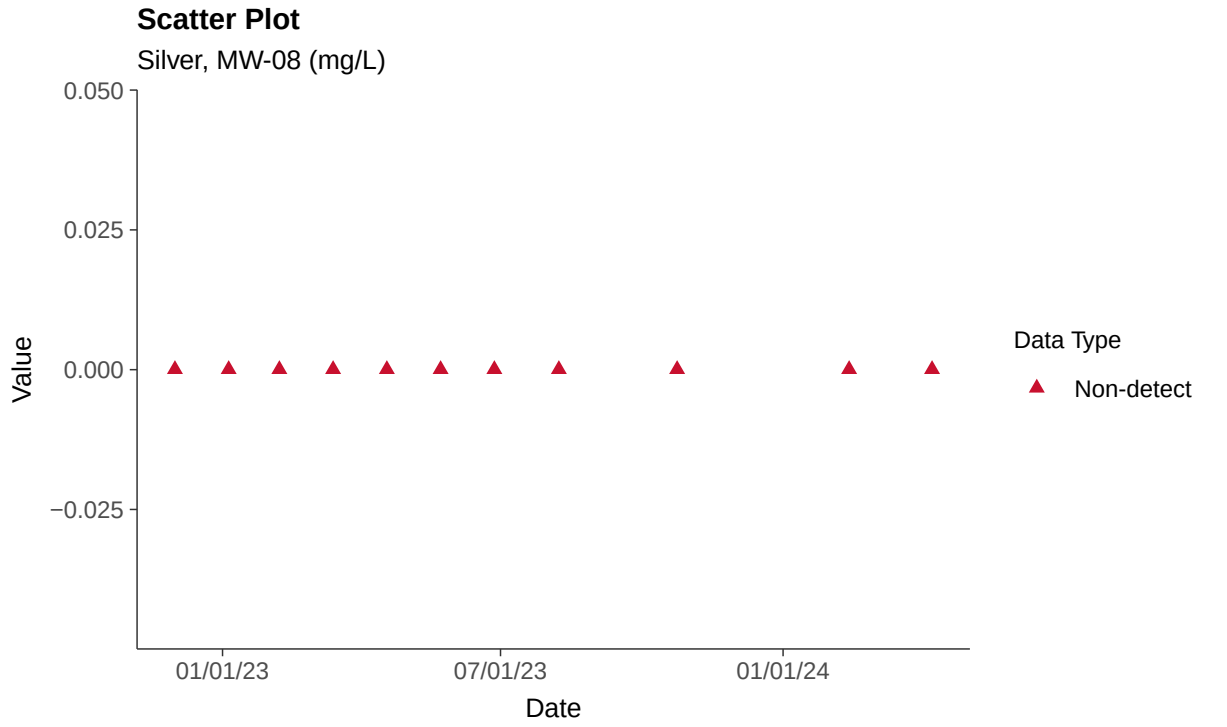
Trend Regression: Piecewise Linear-Linear-Linear

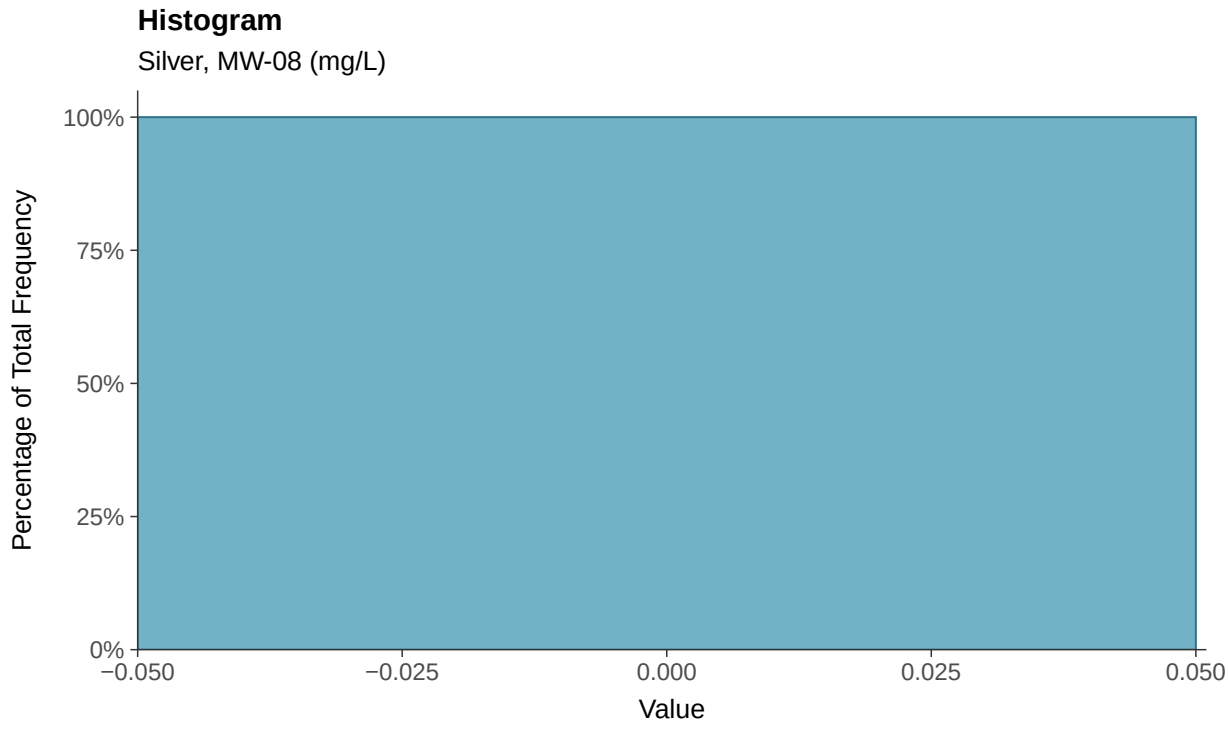
Nickel, MW-08 (mg/L)



Part 115: Silver, MW-08

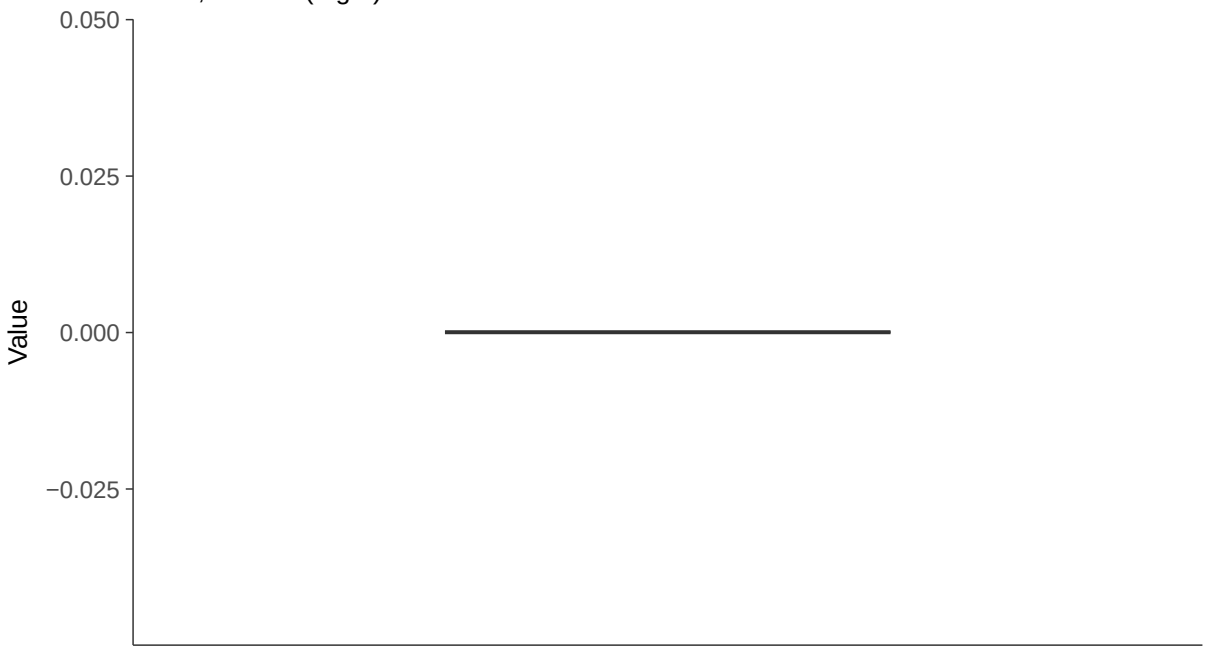
ID: 1_18_6_123





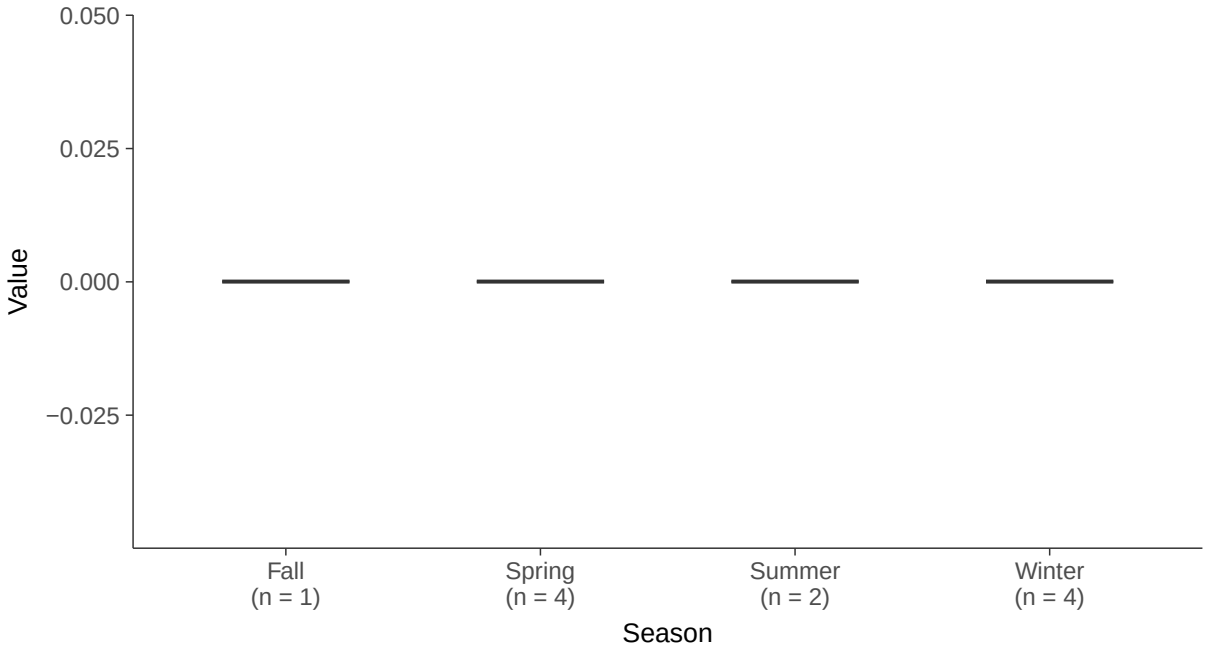
Boxplot

Silver, MW-08 (mg/L)



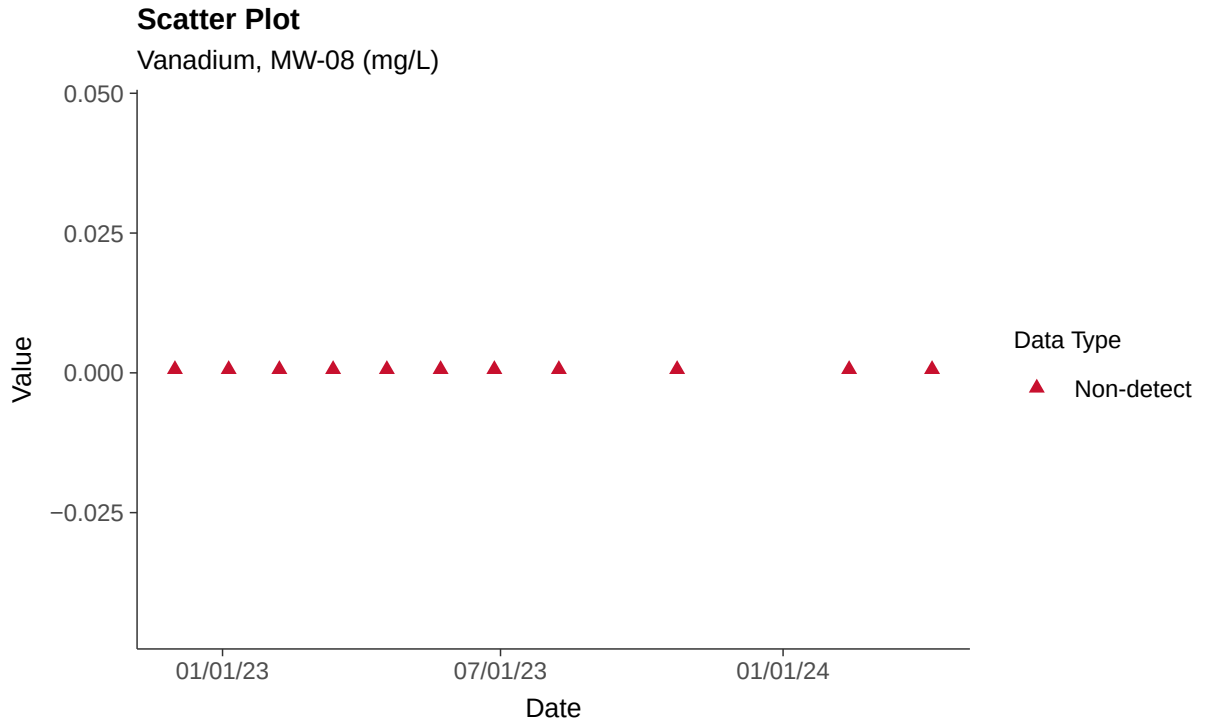
Boxplot by Season

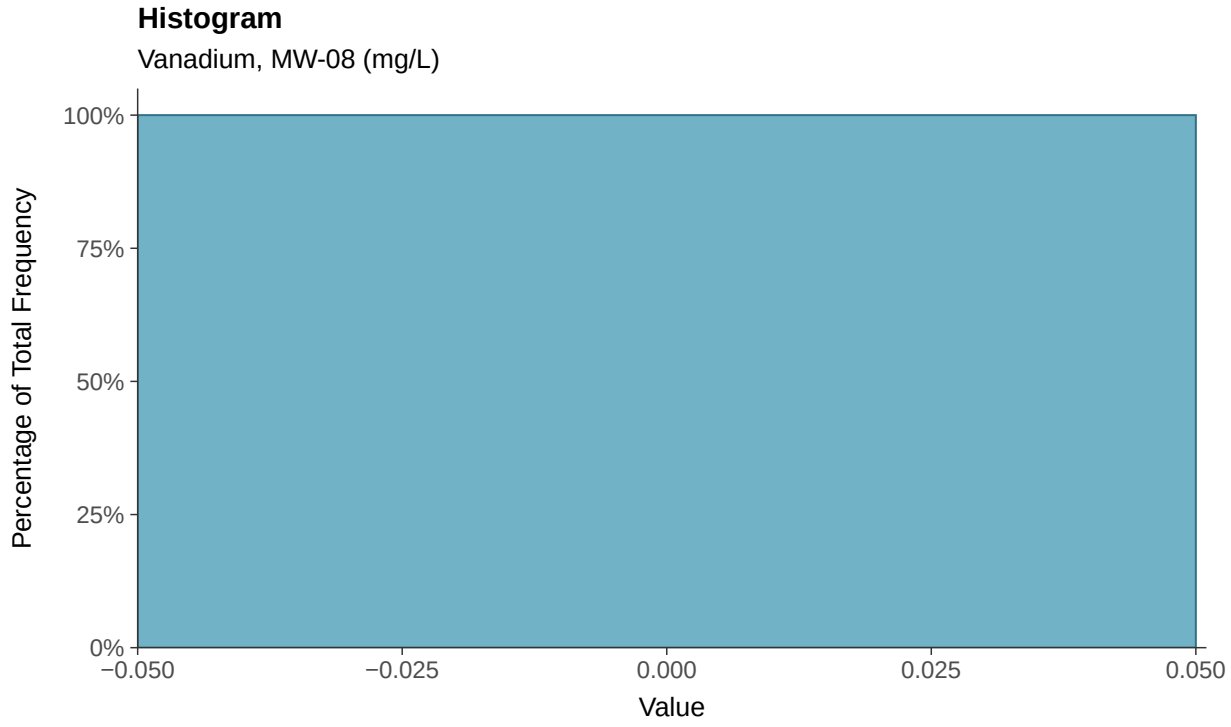
Silver, MW-08 (mg/L)



Part 115: Vanadium, MW-08

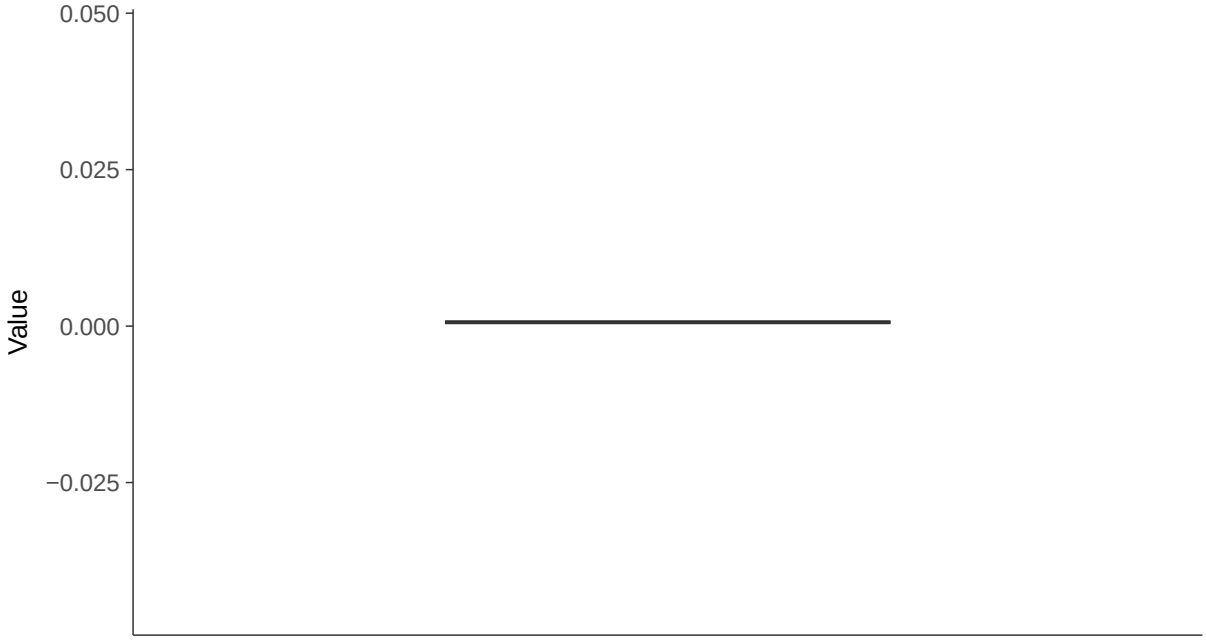
ID: 1_18_6_129





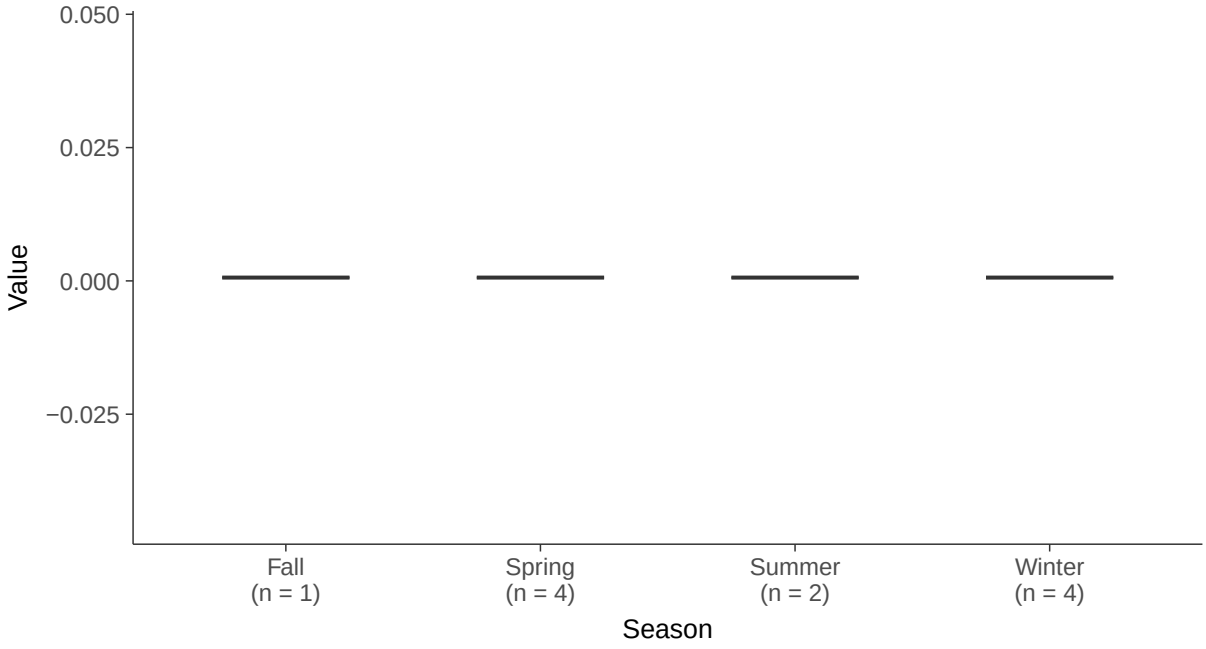
Boxplot

Vanadium, MW-08 (mg/L)



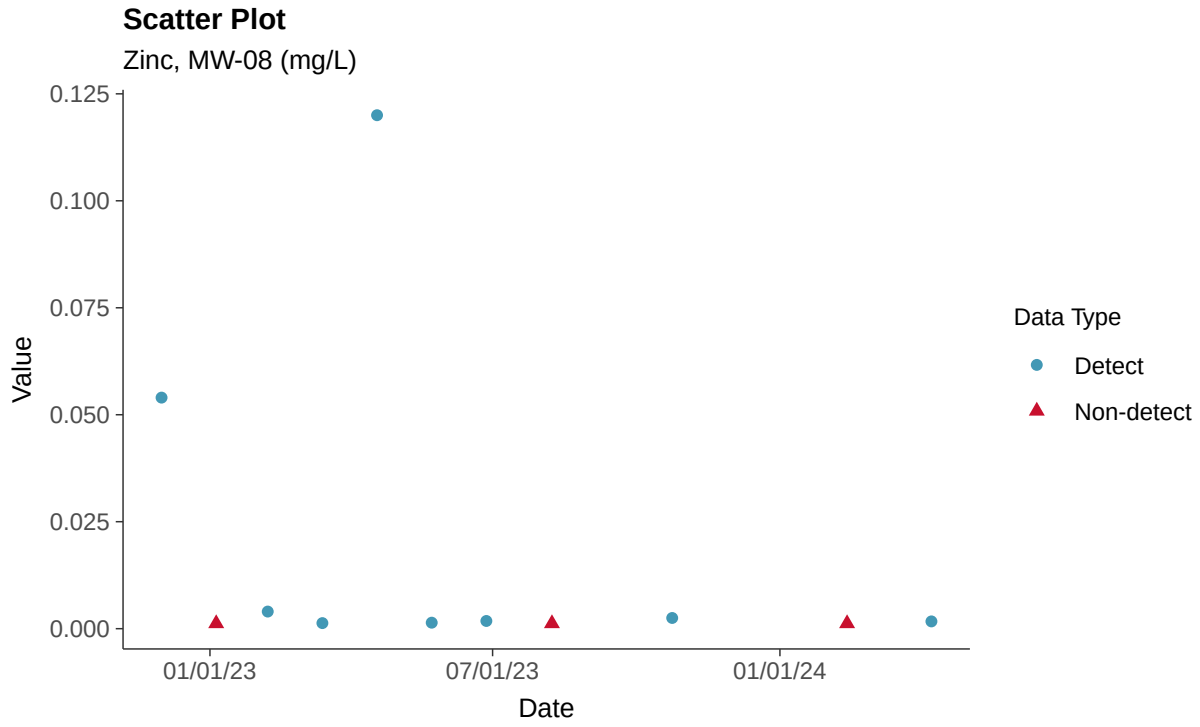
Boxplot by Season

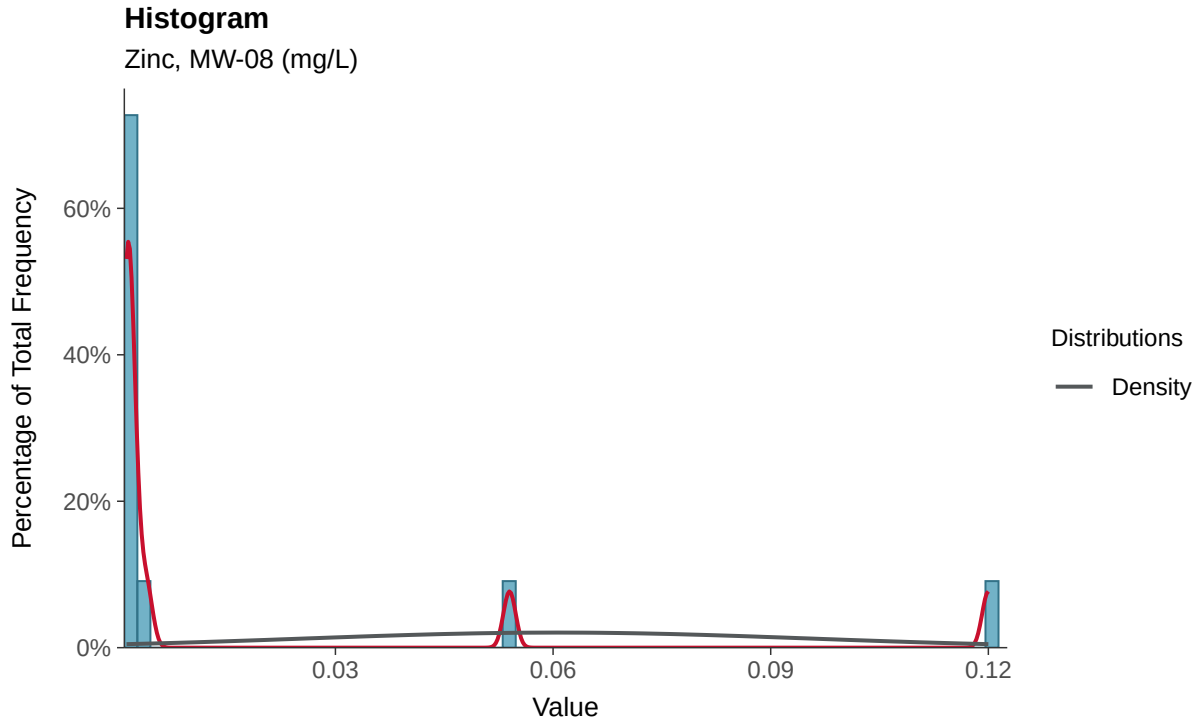
Vanadium, MW-08 (mg/L)



Part 115: Zinc, MW-08

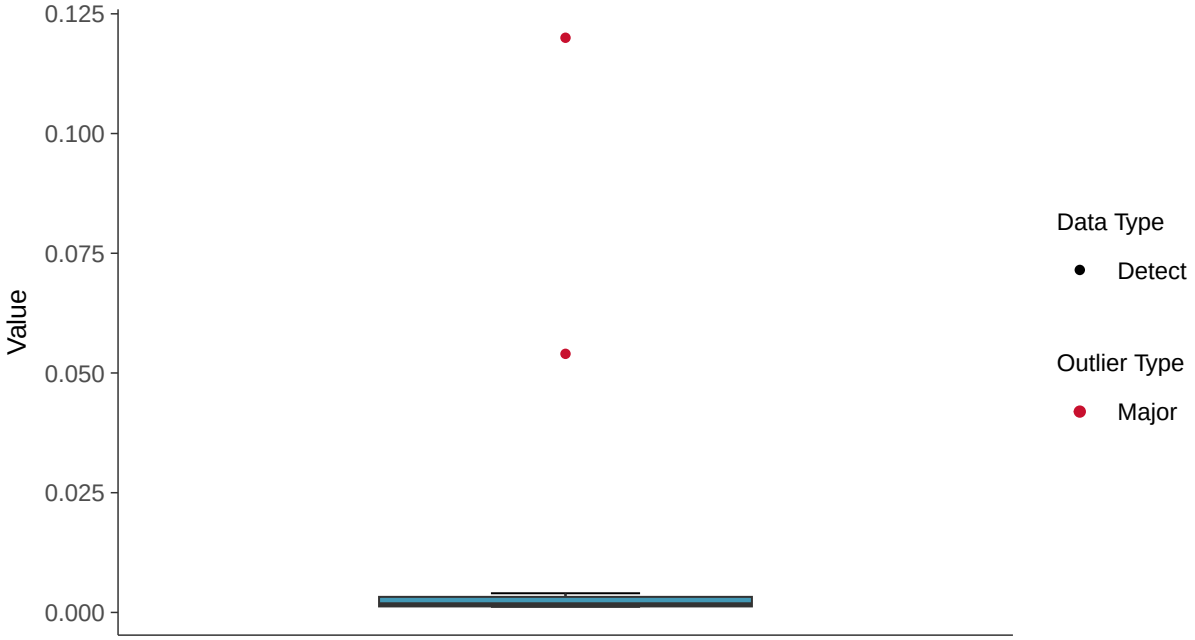
ID: 1_18_6_130





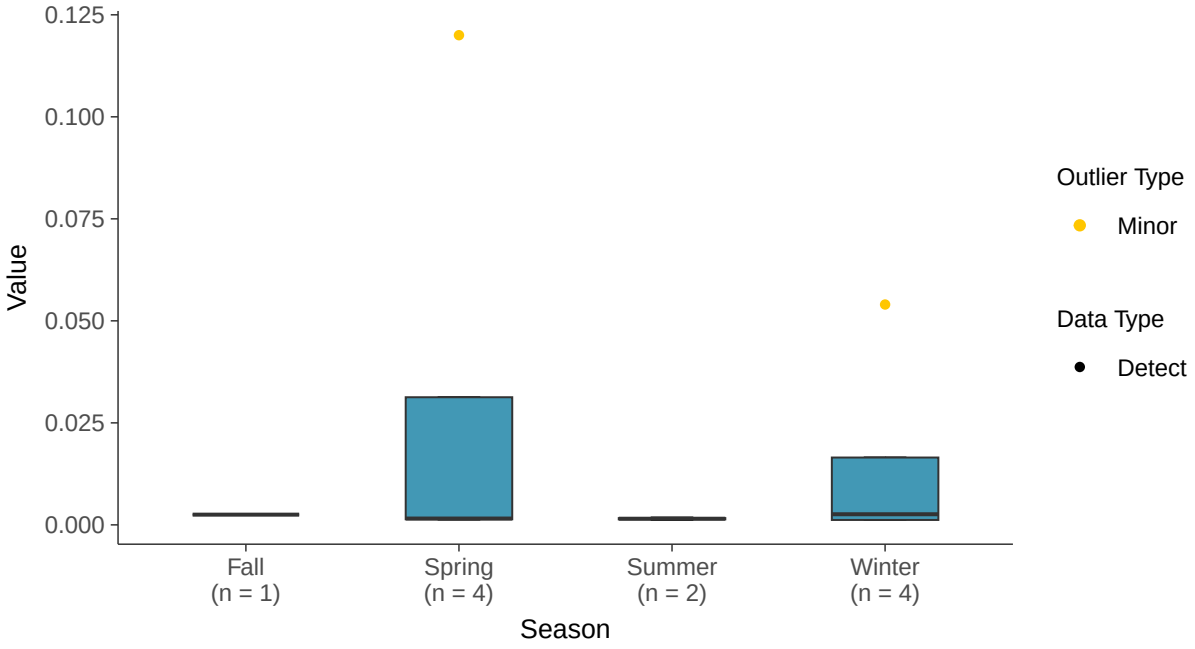
Boxplot

Zinc, MW-08 (mg/L)



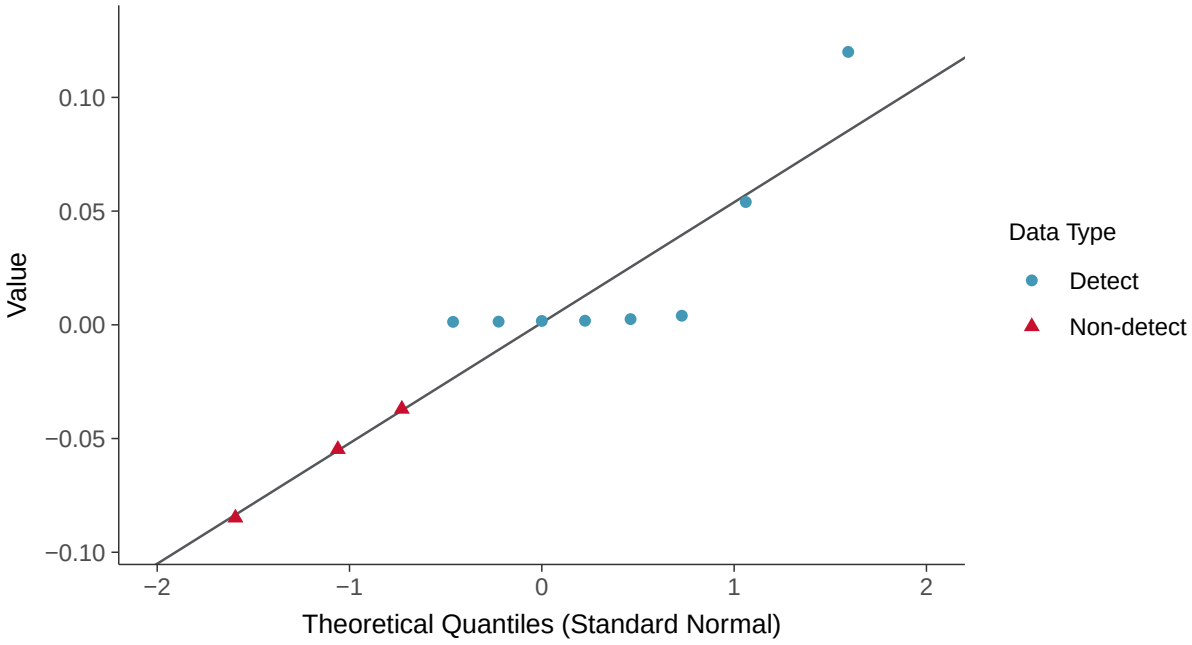
Boxplot by Season

Zinc, MW-08 (mg/L)



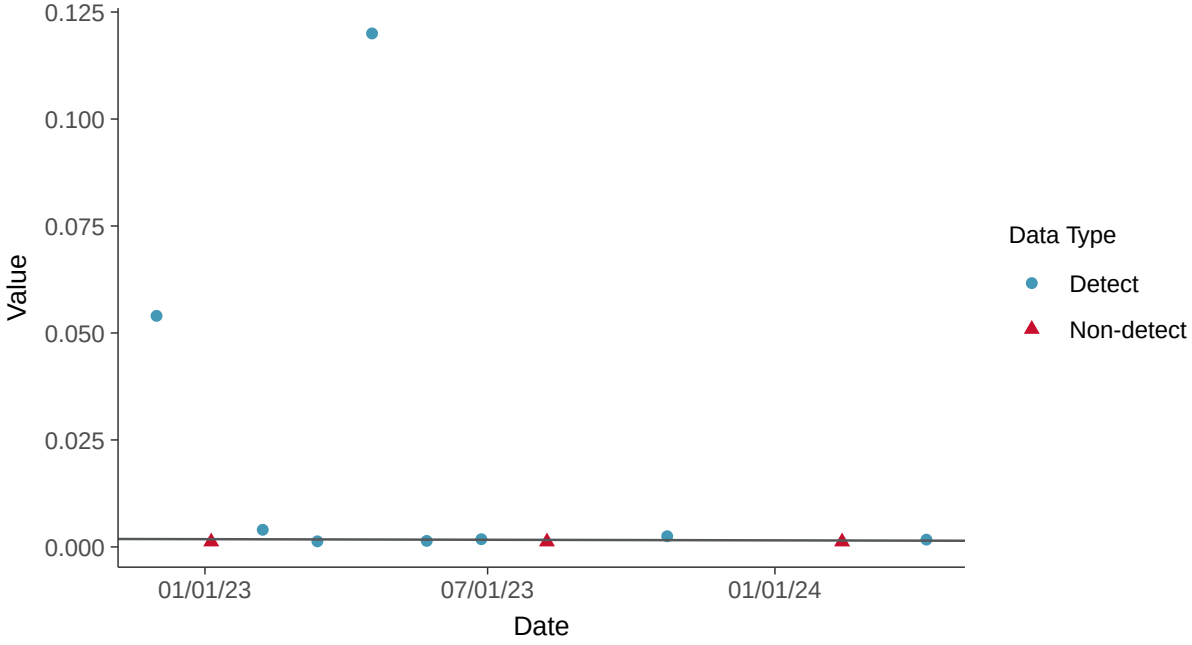
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-08 (mg/L)



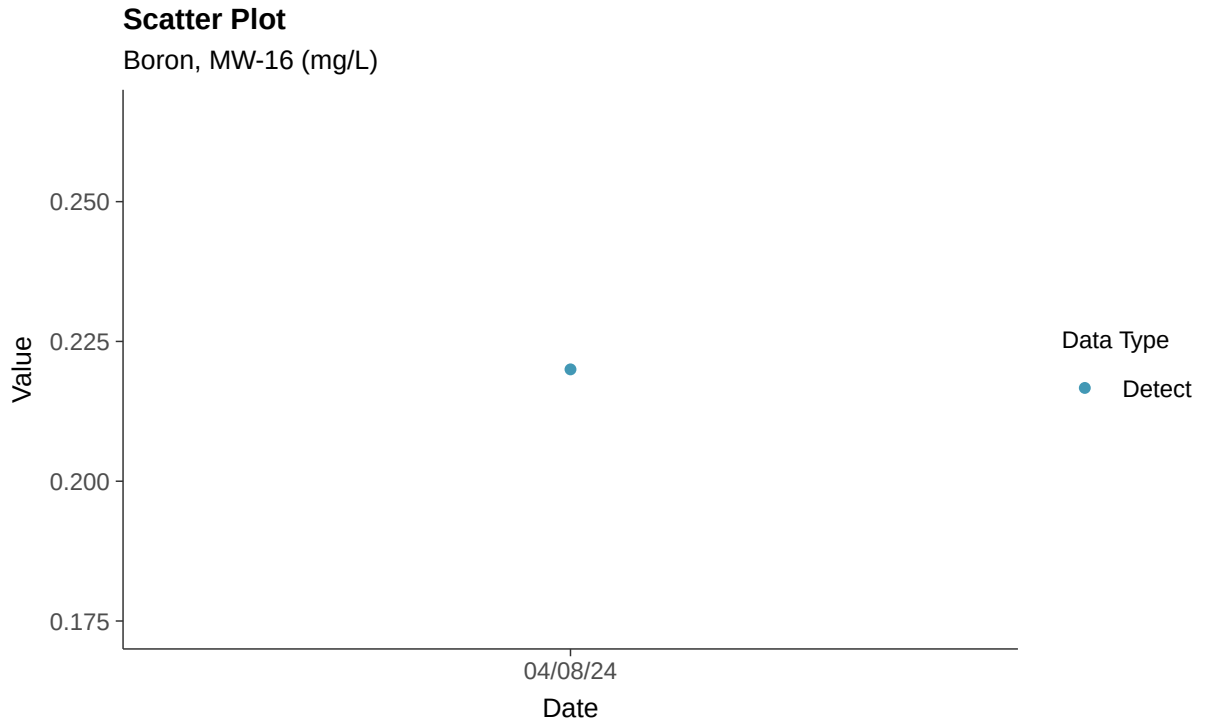
Trend Regression: Mann-Kendall/Theil-Sen Estimate

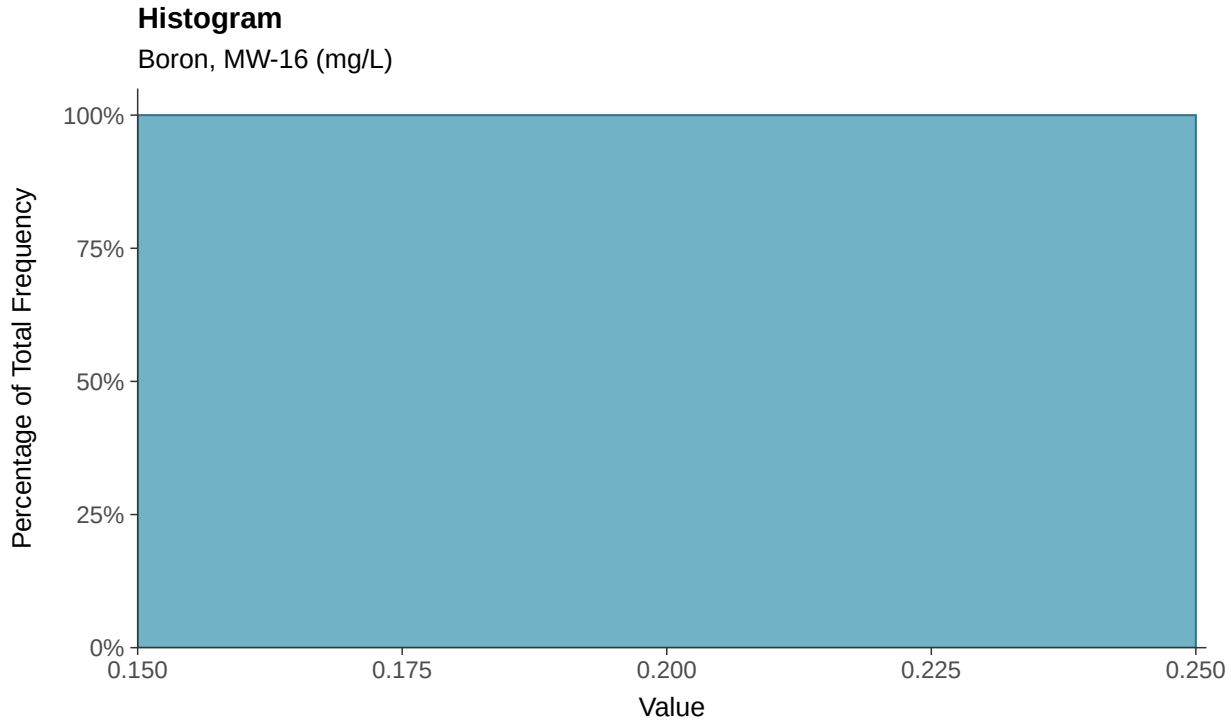
Zinc, MW-08 (mg/L)



Appendix III: Boron, MW-16

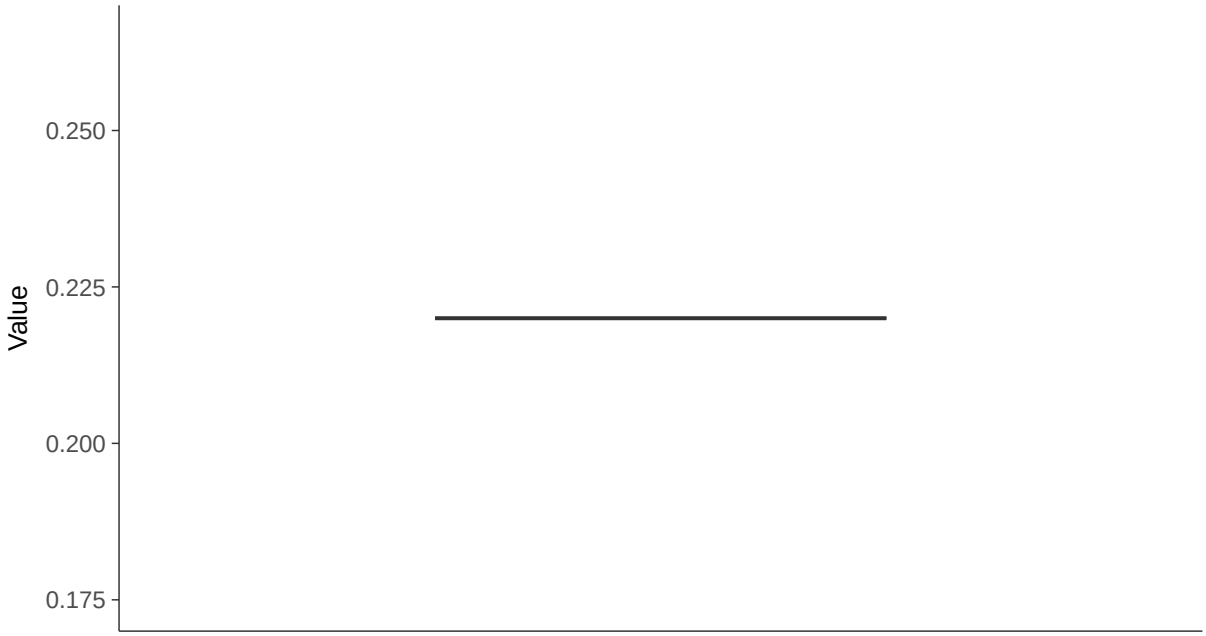
ID: 1_26_4_105





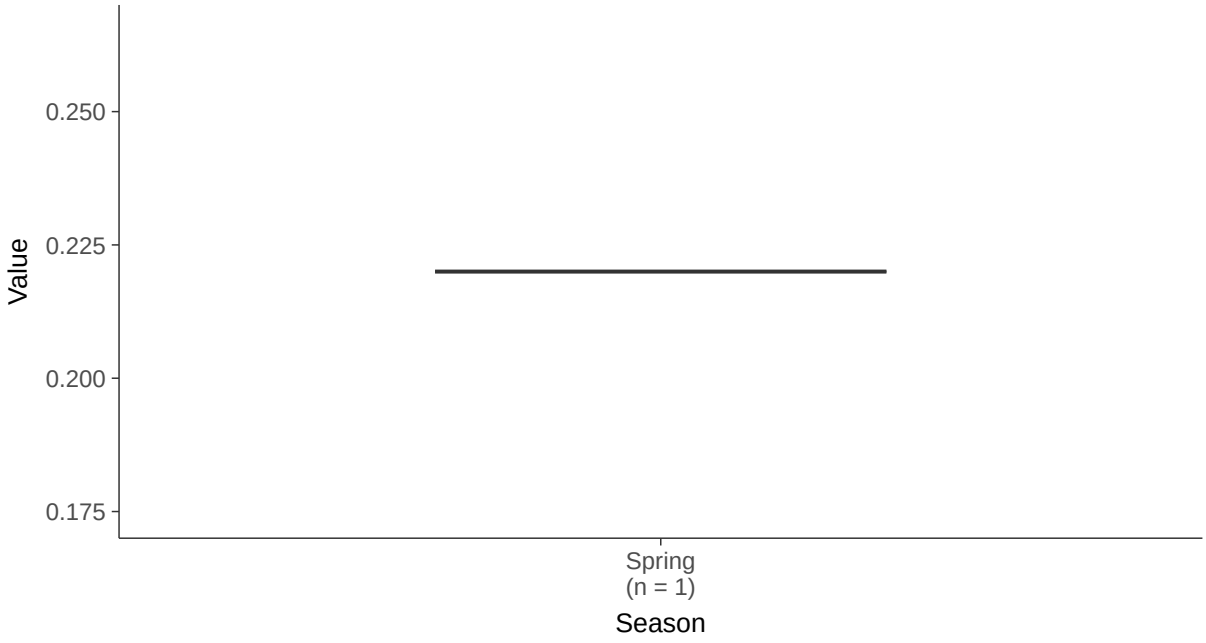
Boxplot

Boron, MW-16 (mg/L)



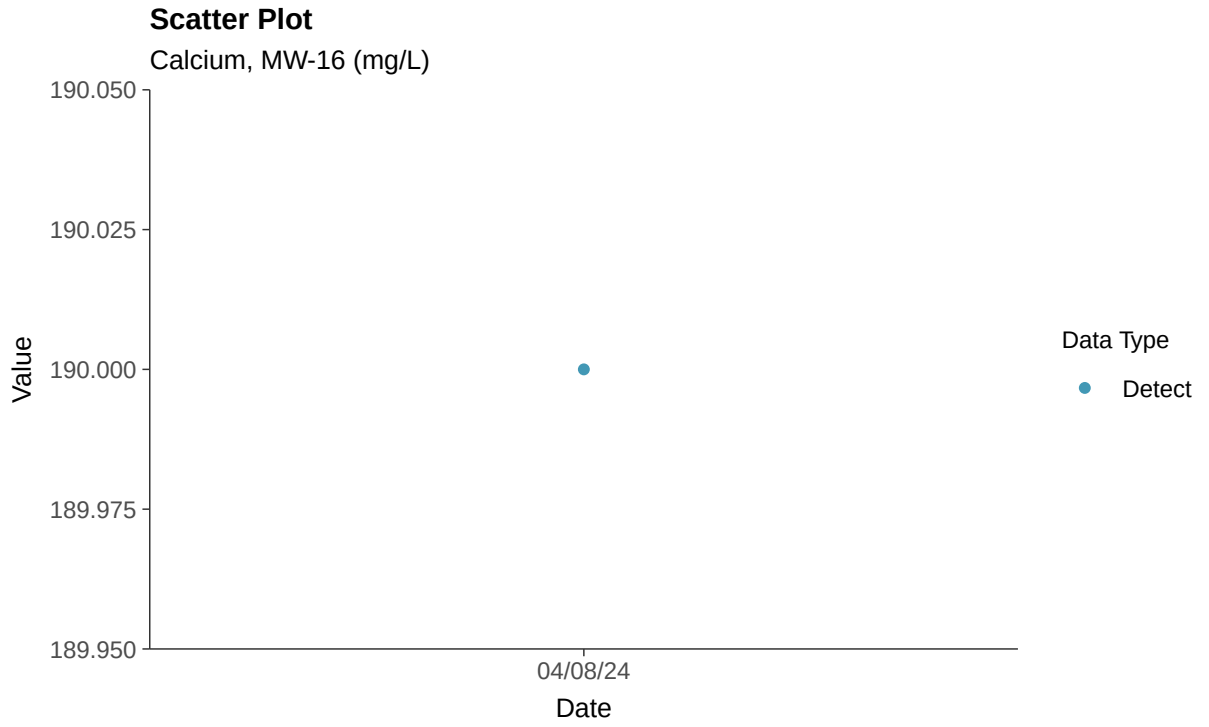
Boxplot by Season

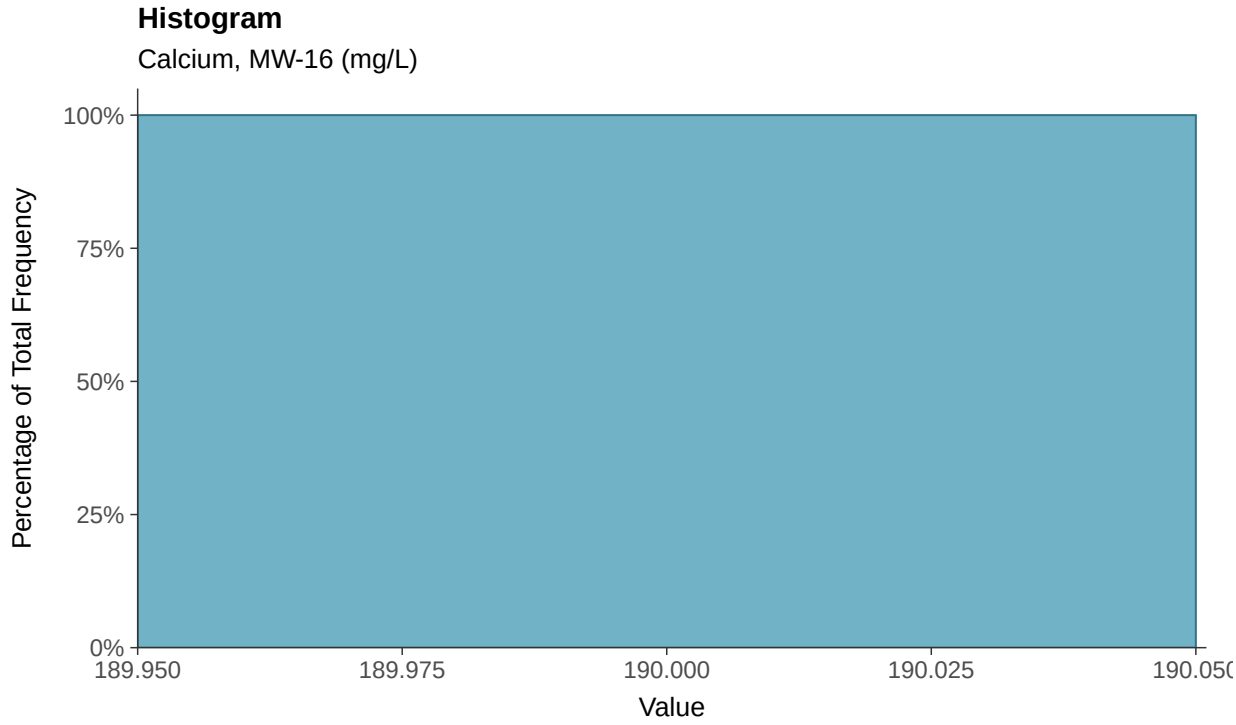
Boron, MW-16 (mg/L)

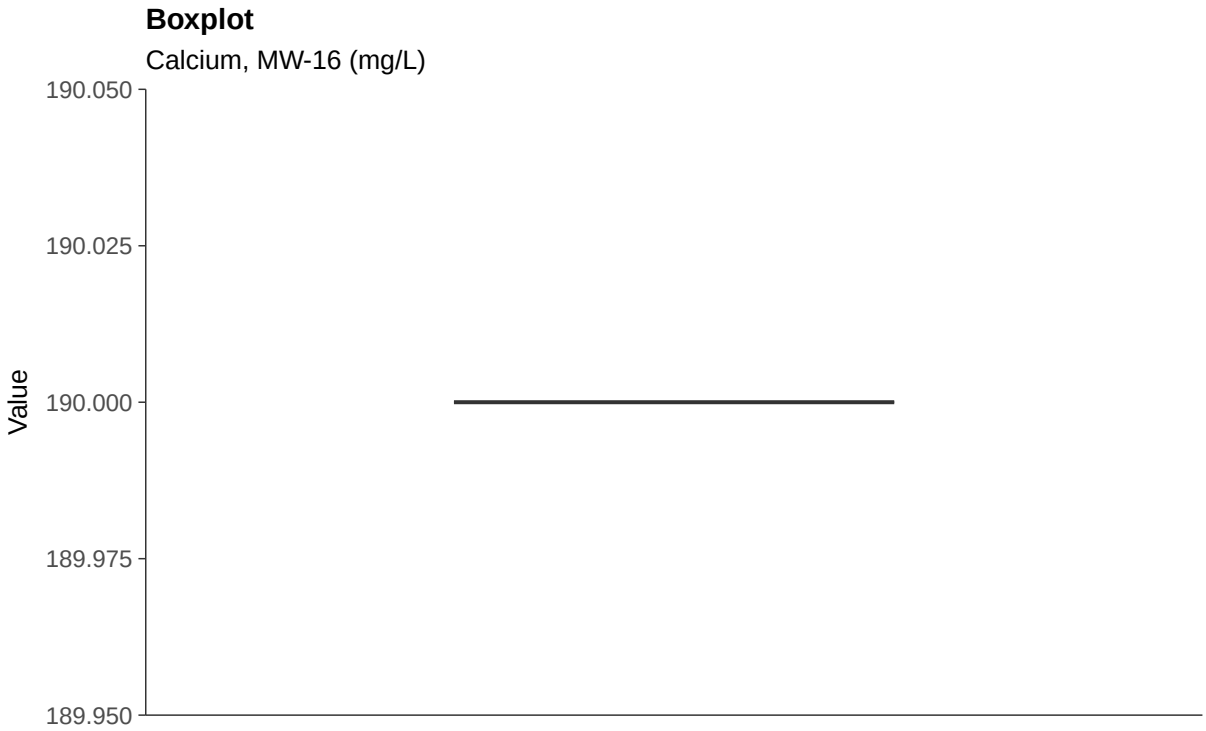


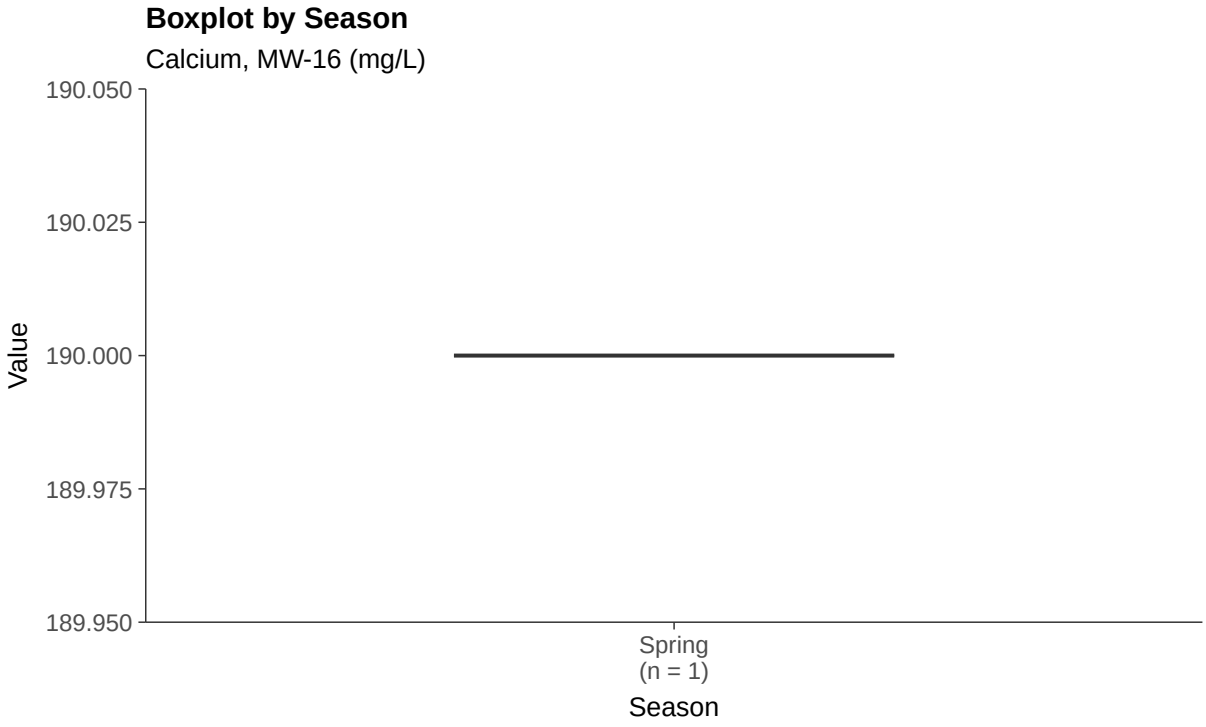
Appendix III: Calcium, MW-16

ID: 1_26_4_107



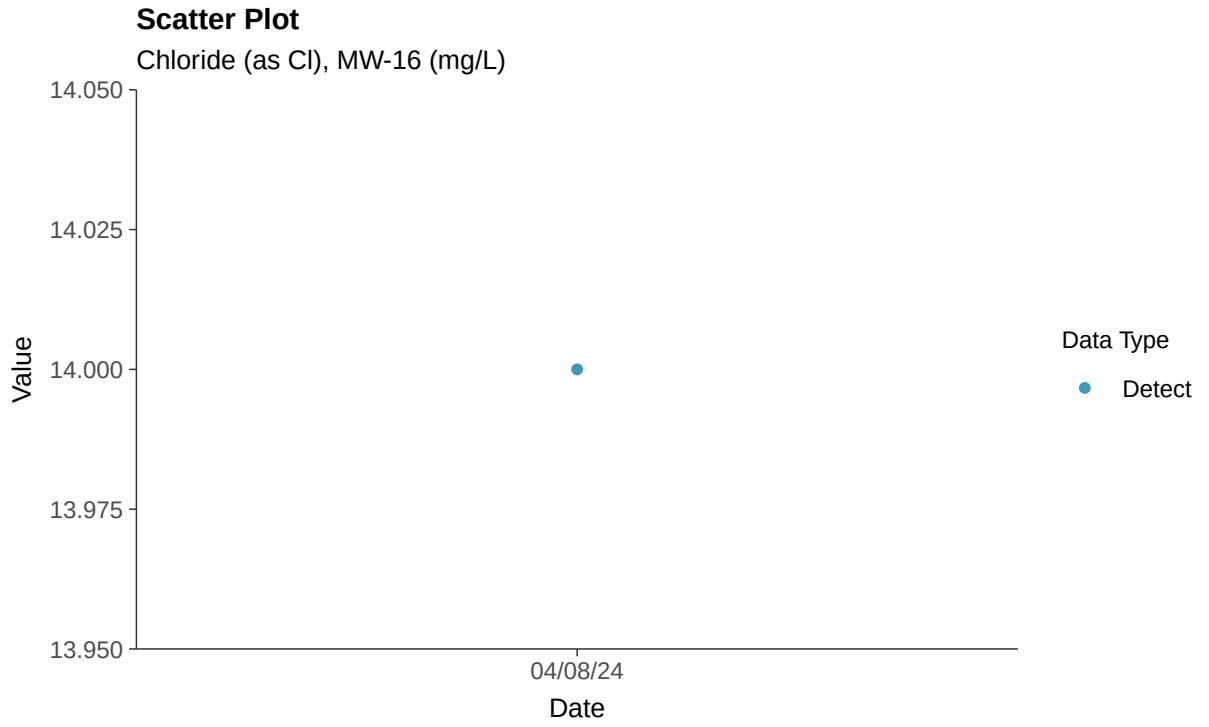


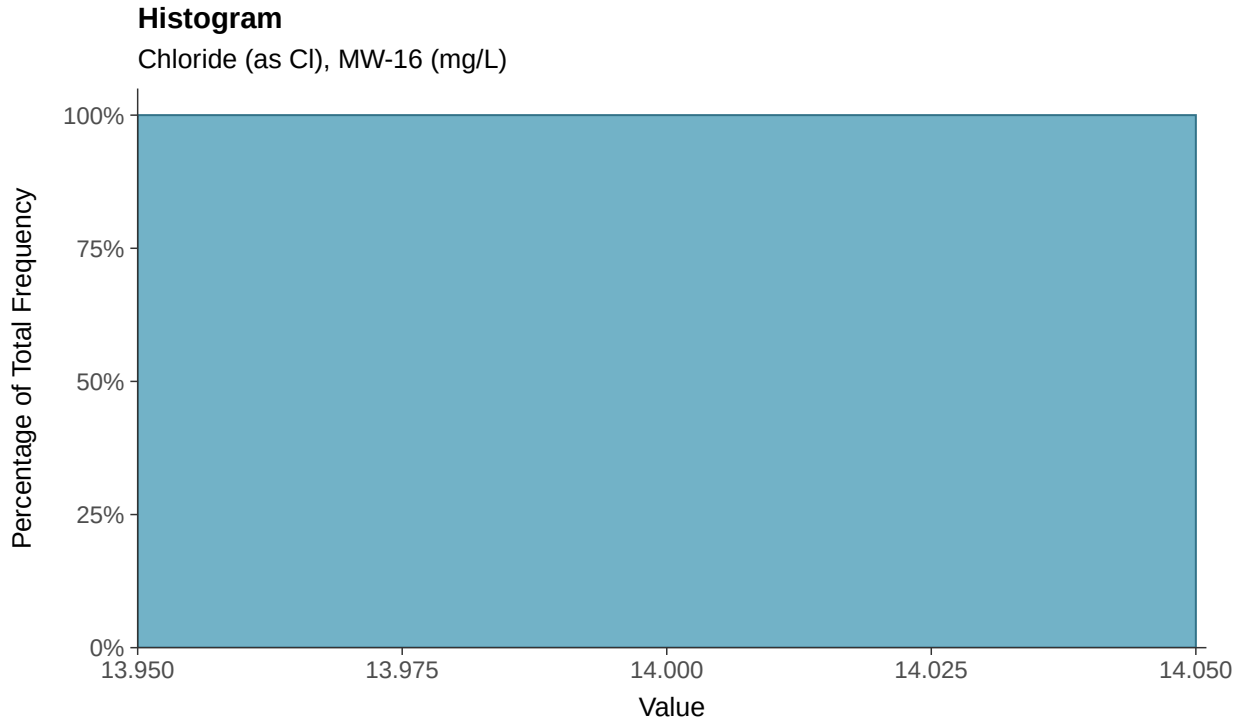

Boxplot
Calcium, MW-16 (mg/L)
190.050
190.025
190.000
189.975
189.950
Value


Boxplot by Season
Calcium, MW-16 (mg/L)
190.050
190.025
190.000
189.975
189.950
Value
Spring
(n = 1)
Season

Appendix III: Chloride (as Cl), MW-16

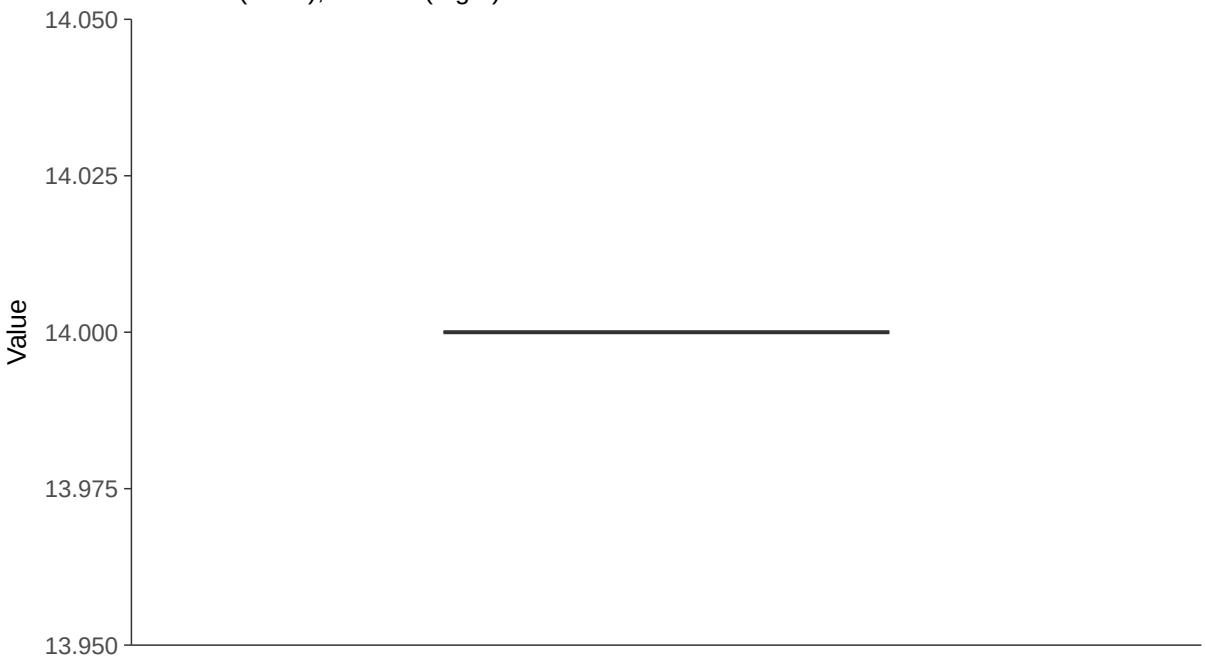
ID: 1_26_4_108





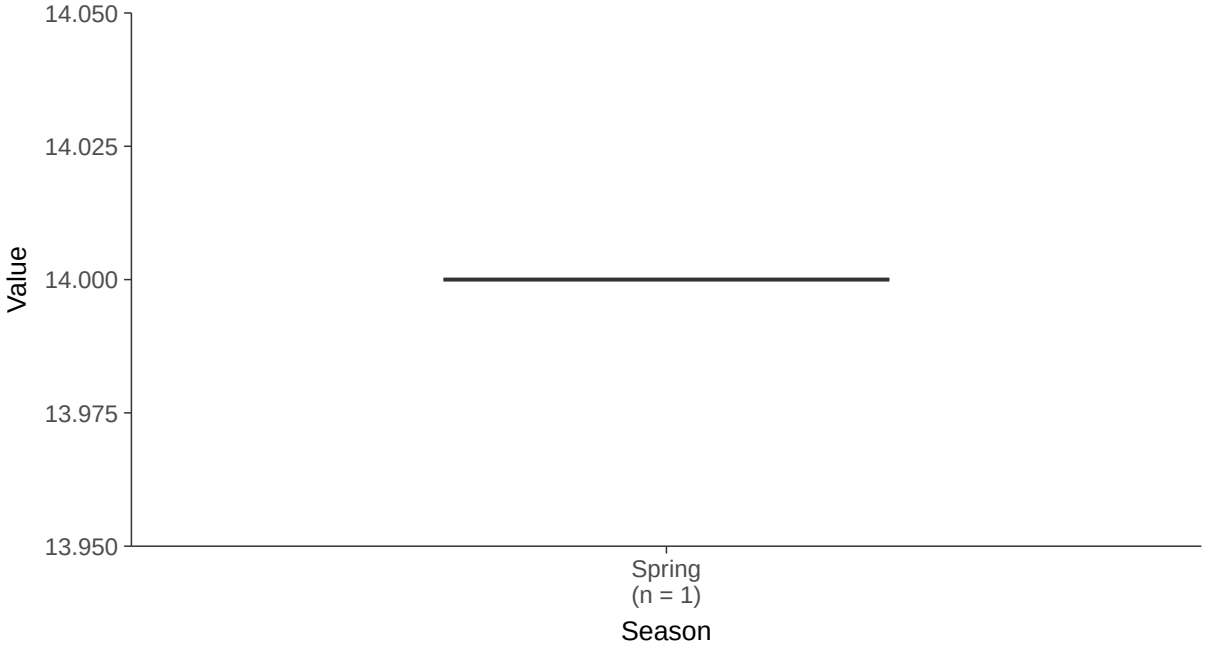
Boxplot

Chloride (as Cl), MW-16 (mg/L)



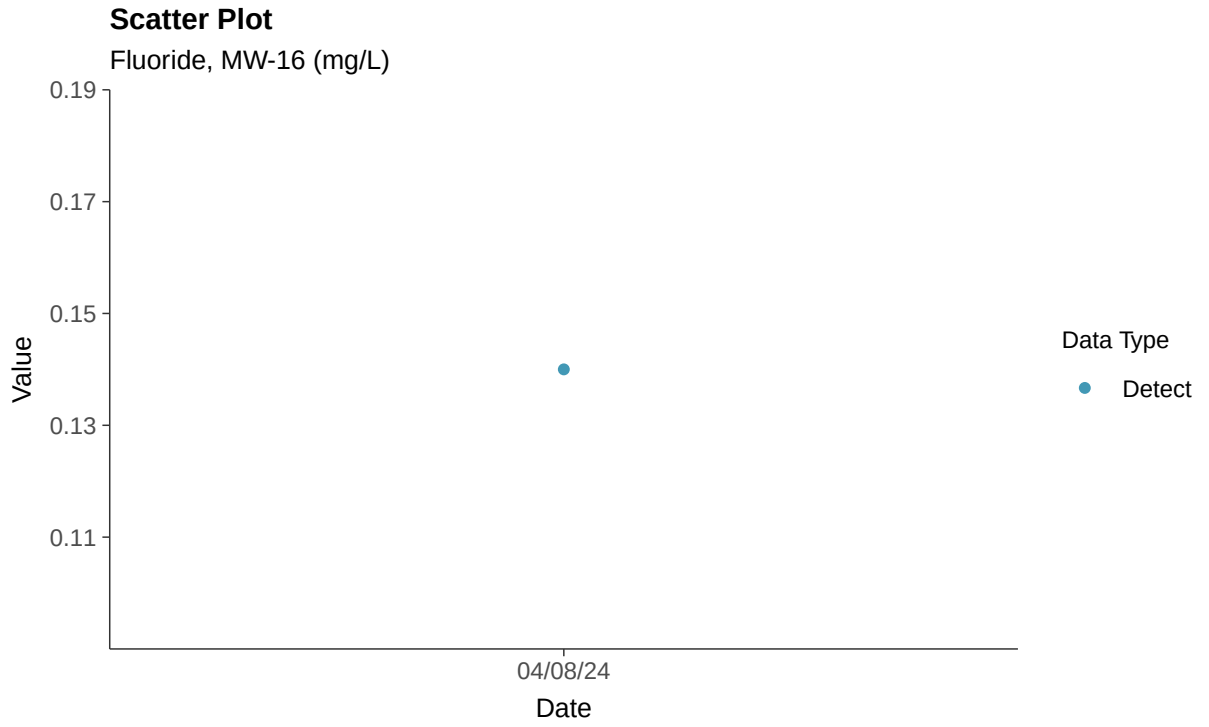
Boxplot by Season

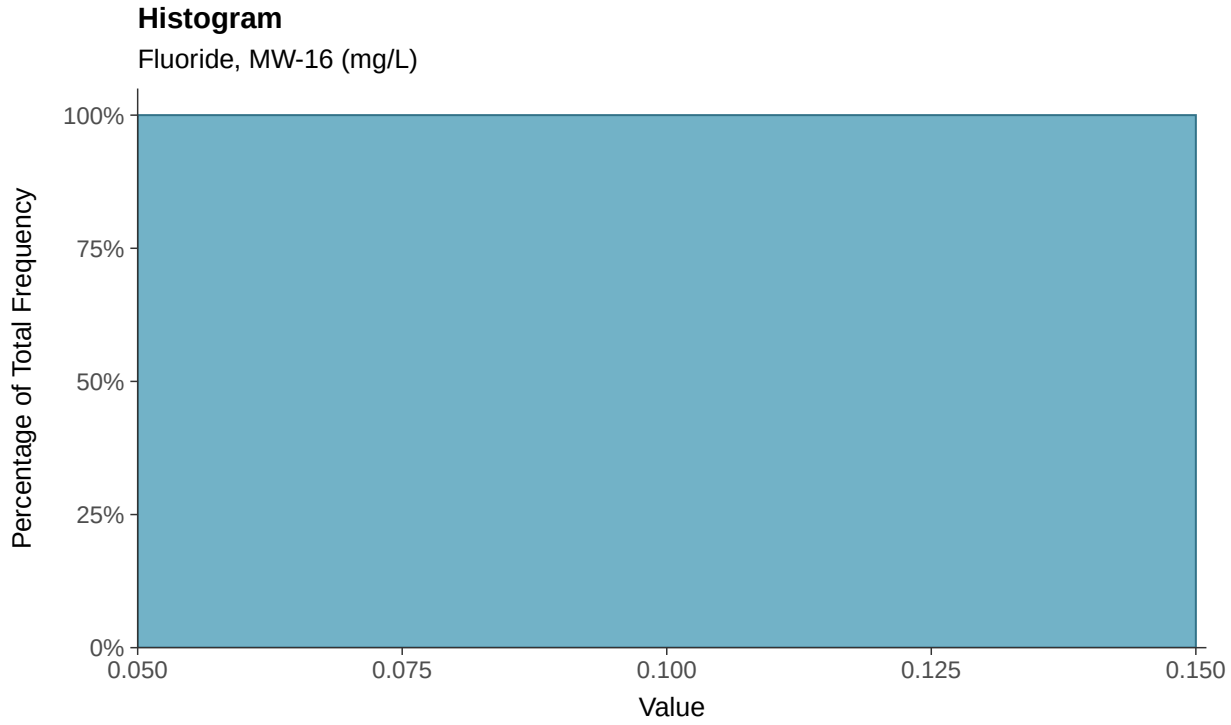
Chloride (as Cl), MW-16 (mg/L)



Appendix III: Fluoride, MW-16

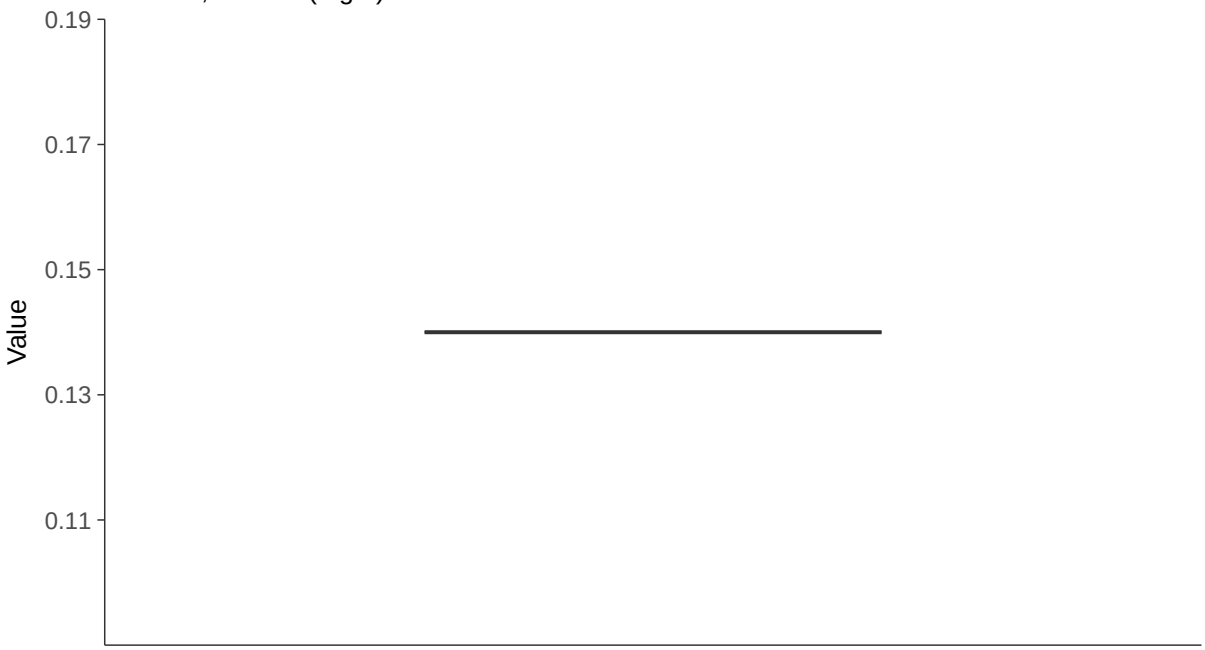
ID: 1_26_4_112





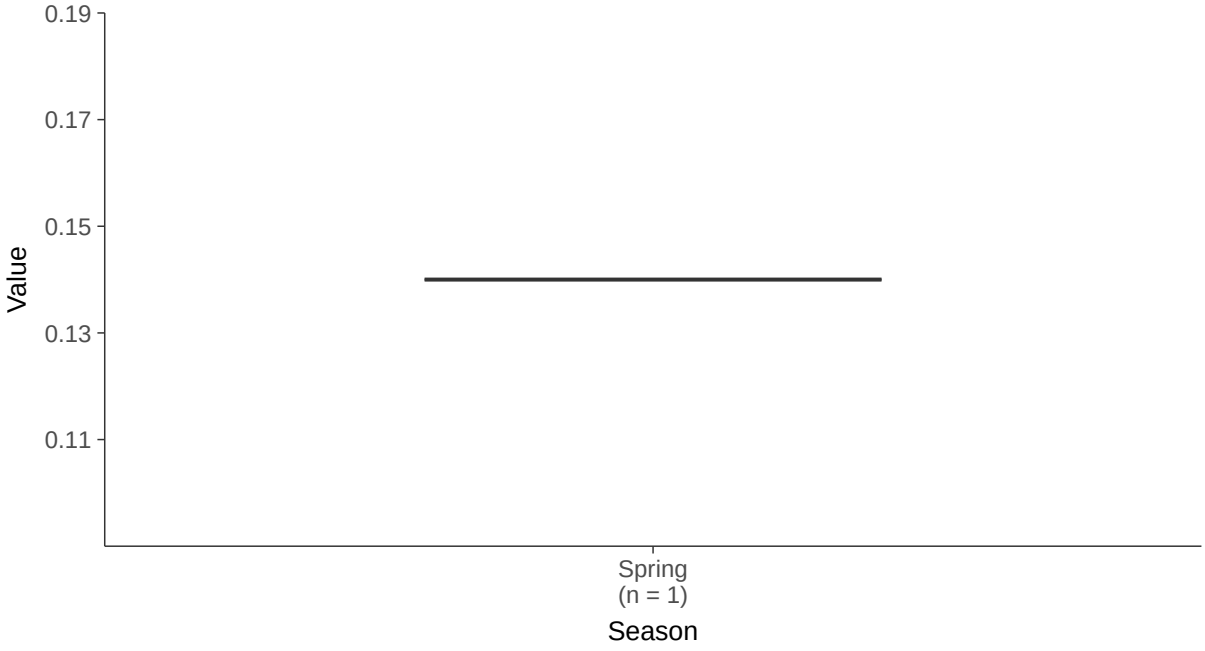
Boxplot

Fluoride, MW-16 (mg/L)



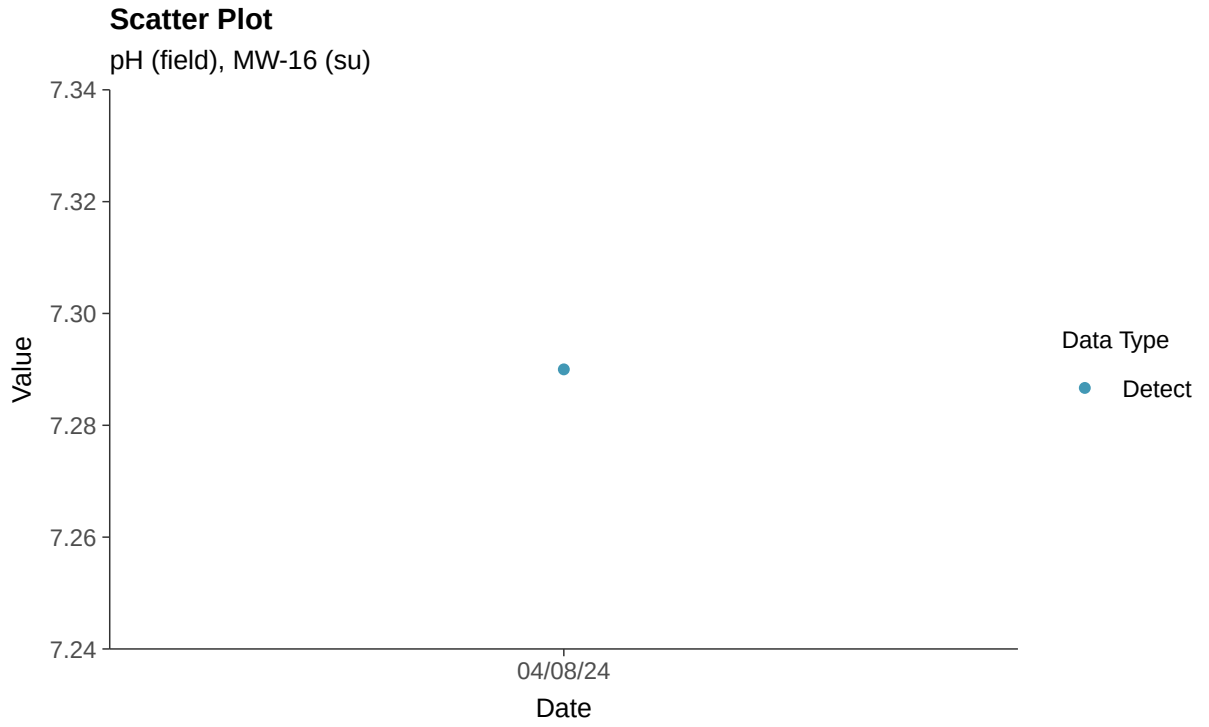
Boxplot by Season

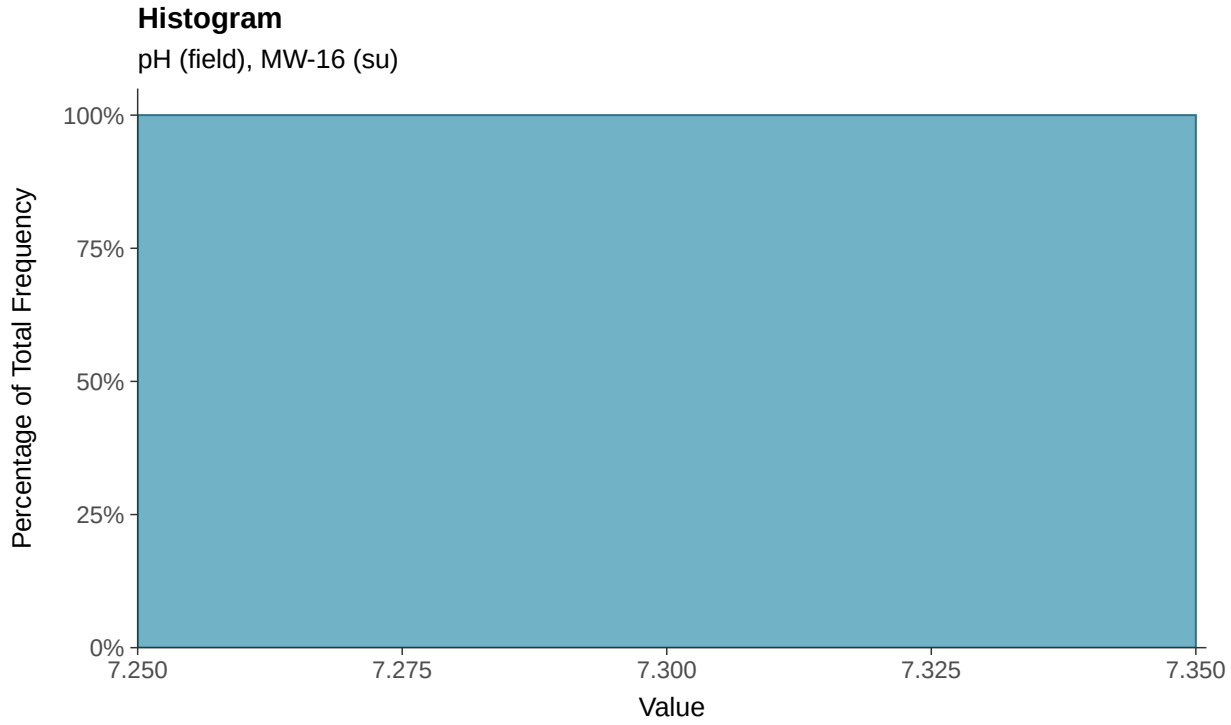
Fluoride, MW-16 (mg/L)



Appendix III: pH (field), MW-16

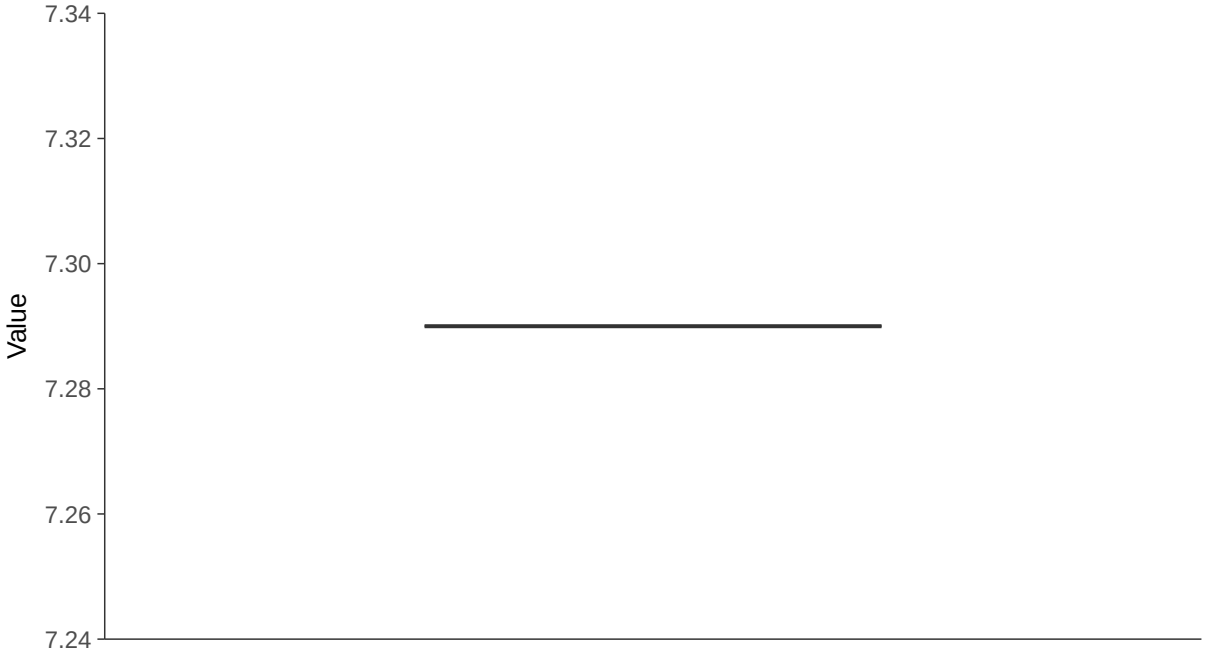
ID: 1_26_4_120





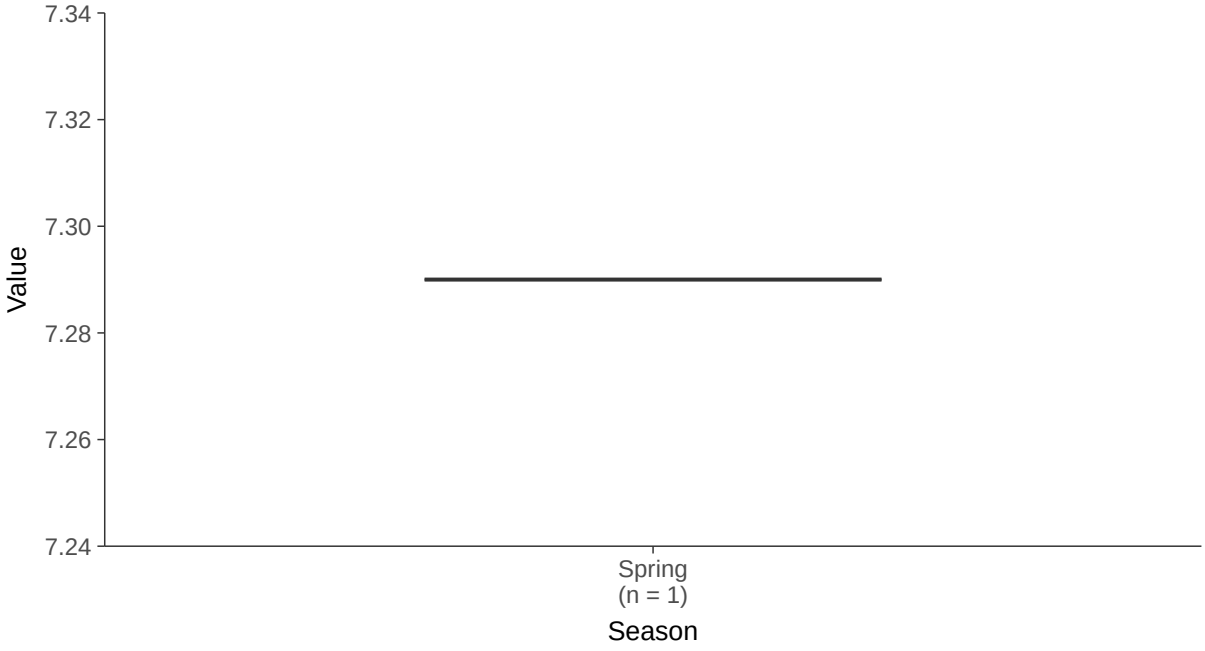
Boxplot

pH (field), MW-16 (su)



Boxplot by Season

pH (field), MW-16 (su)

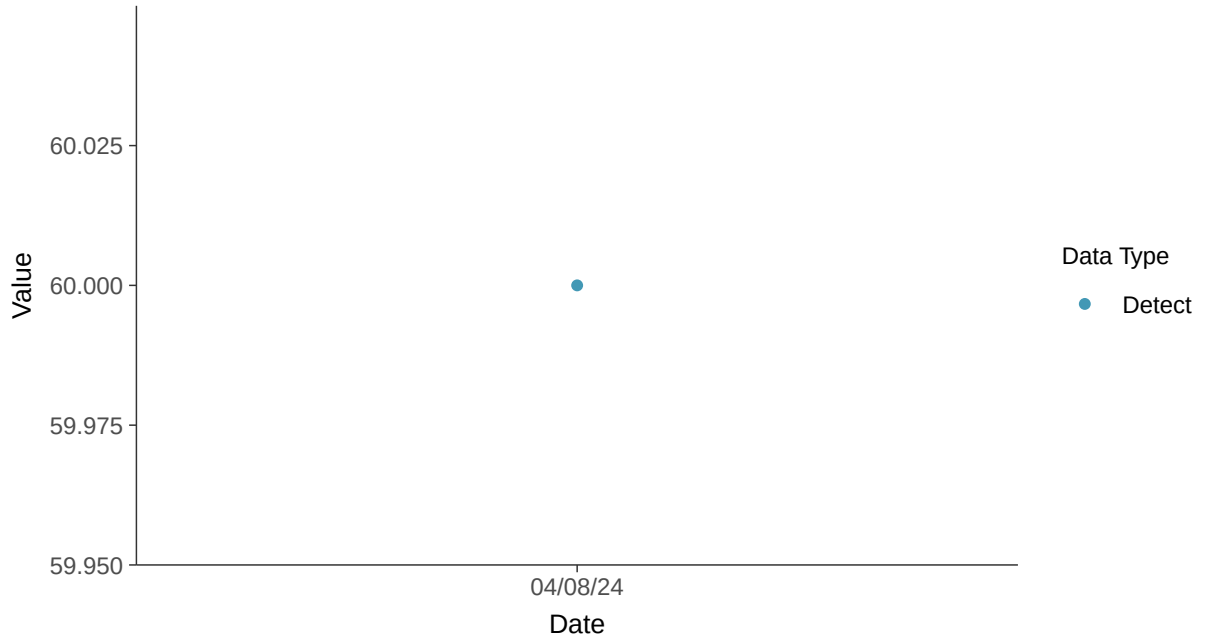


Appendix III: Sulfate (as SO4), MW-16

ID: 1_26_4_124

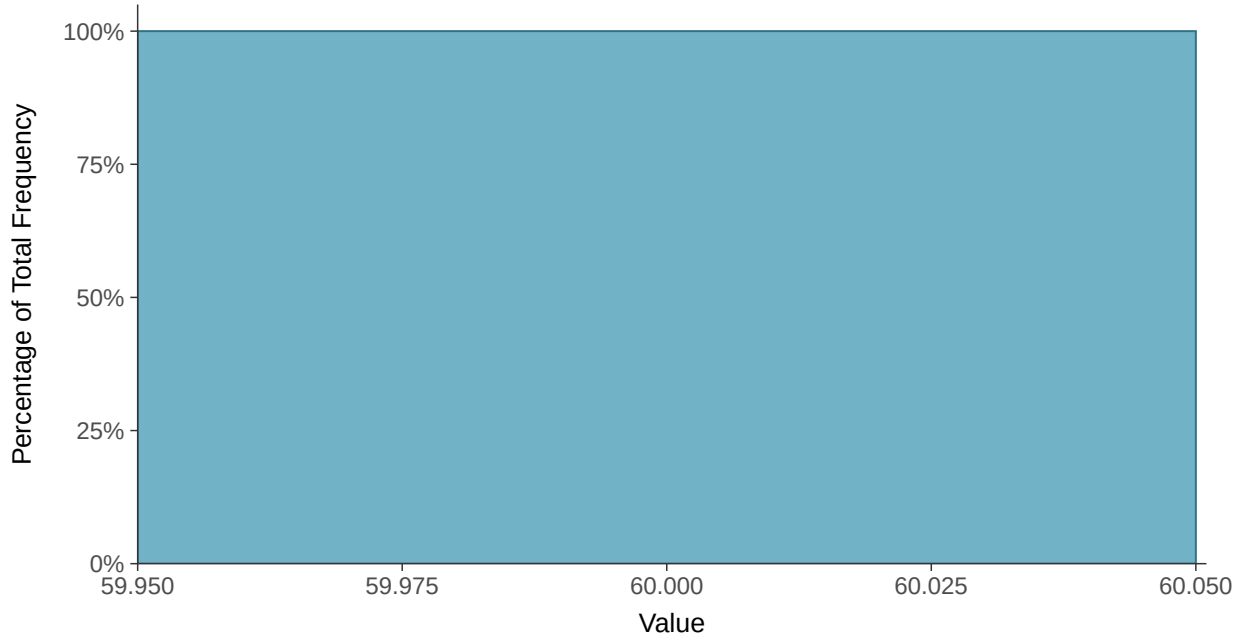
Scatter Plot

Sulfate (as SO4), MW-16 (mg/L)



Histogram

Sulfate (as SO4), MW-16 (mg/L)

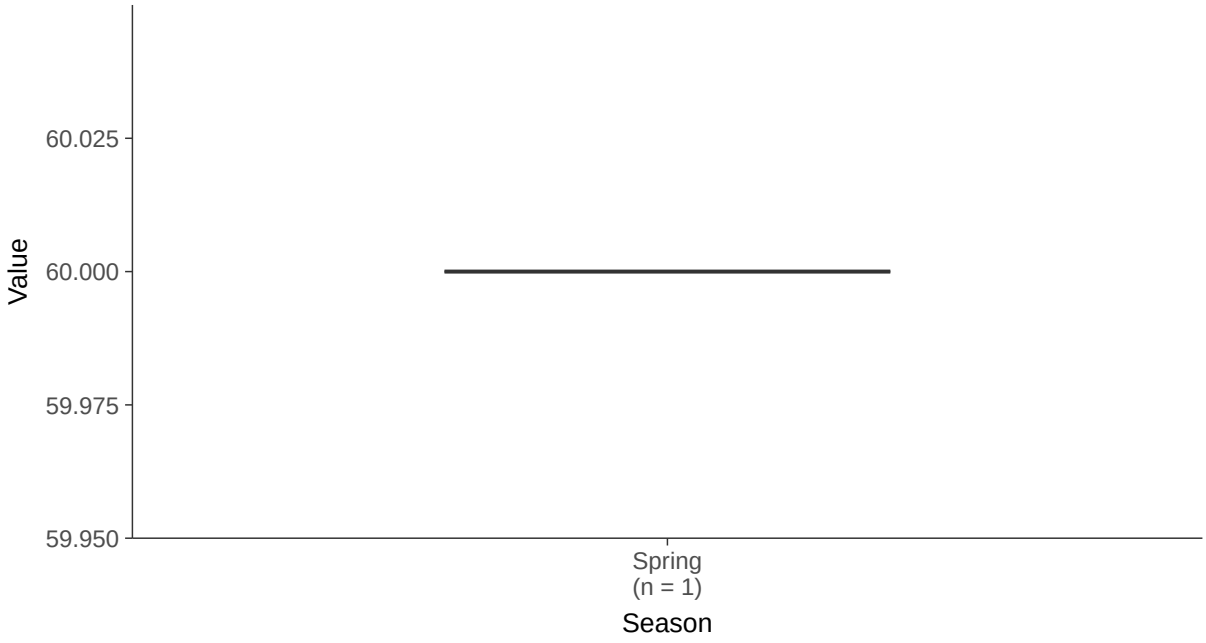


Boxplot

Sulfate (as SO4), MW-16 (mg/L)

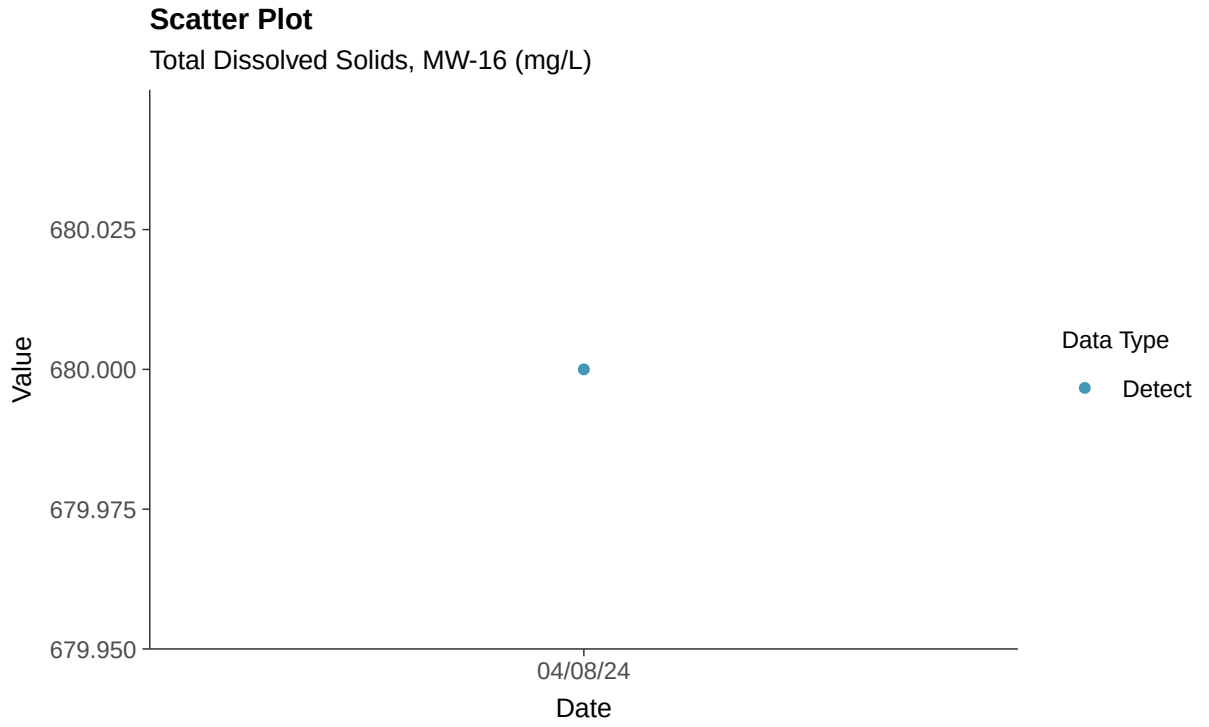
Boxplot by Season

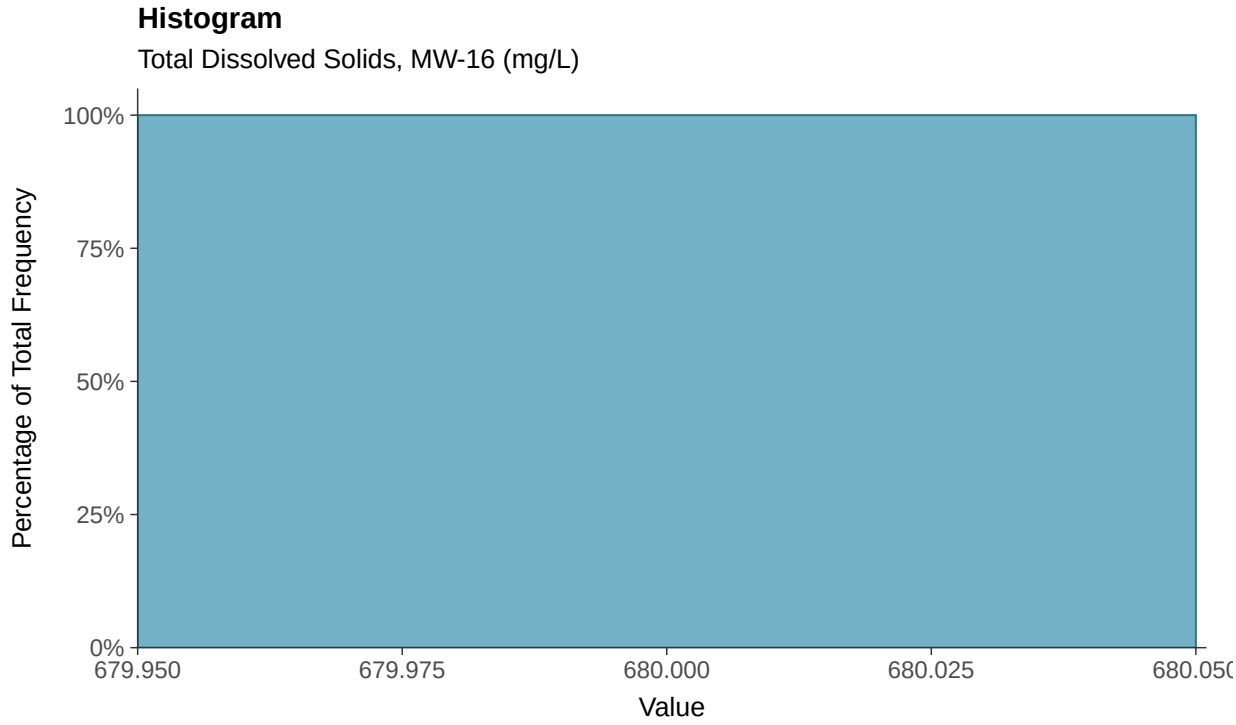
Sulfate (as SO4), MW-16 (mg/L)



Appendix III: Total Dissolved Solids, MW-16

ID: 1_26_4_126



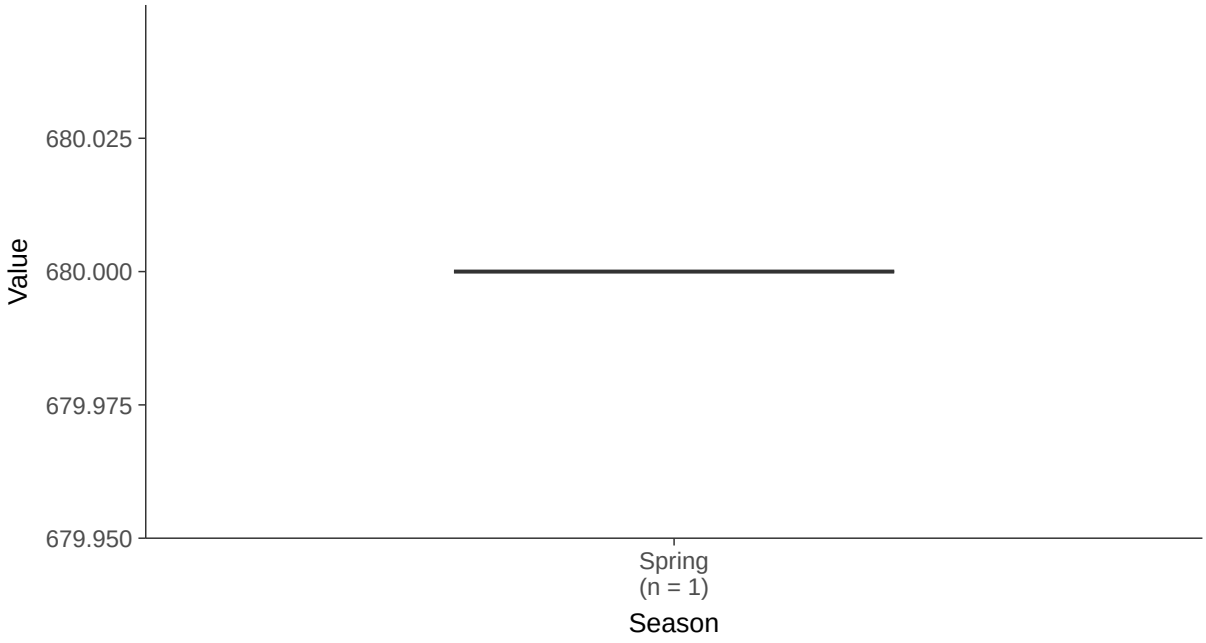


Boxplot

Total Dissolved Solids, MW-16 (mg/L)

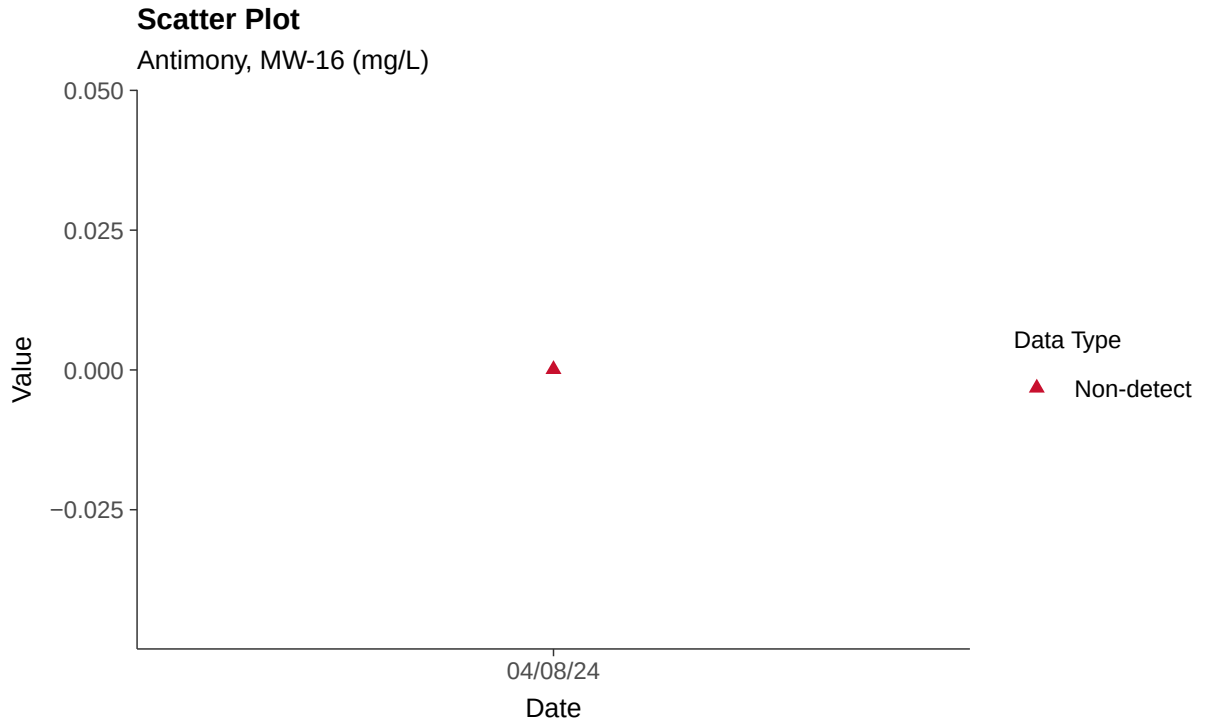
Boxplot by Season

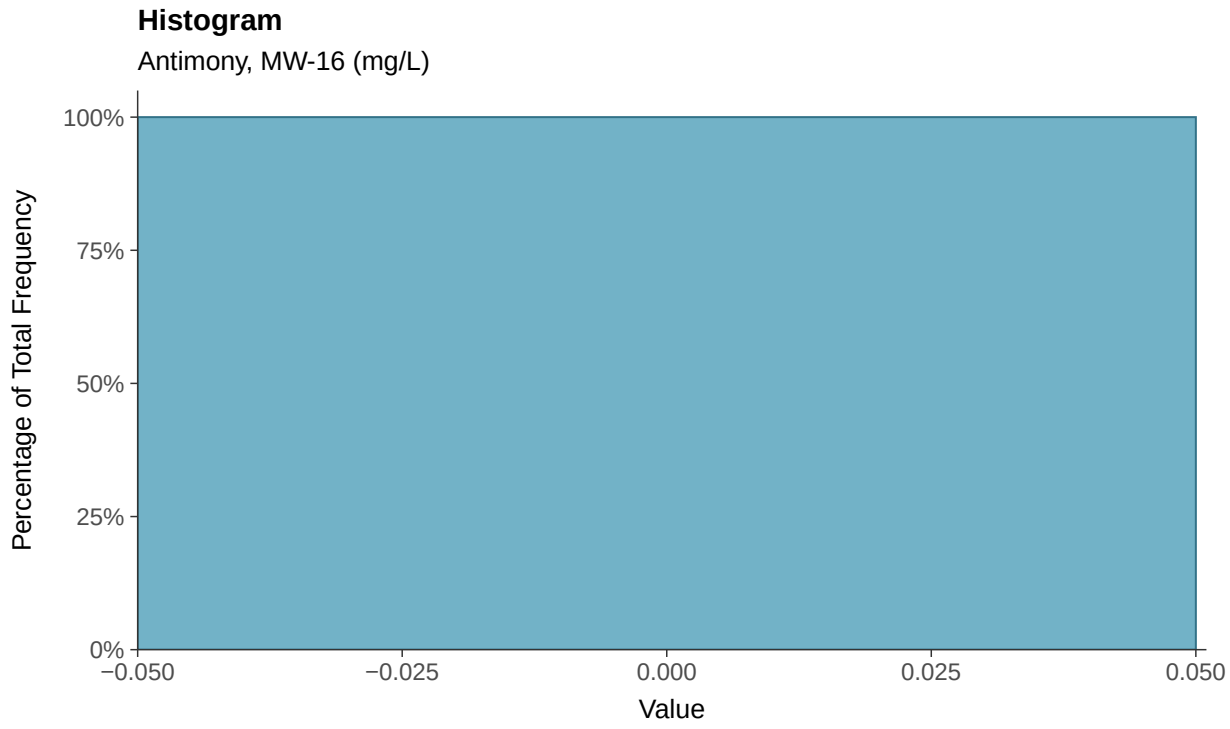
Total Dissolved Solids, MW-16 (mg/L)



Appendix IV: Antimony, MW-16

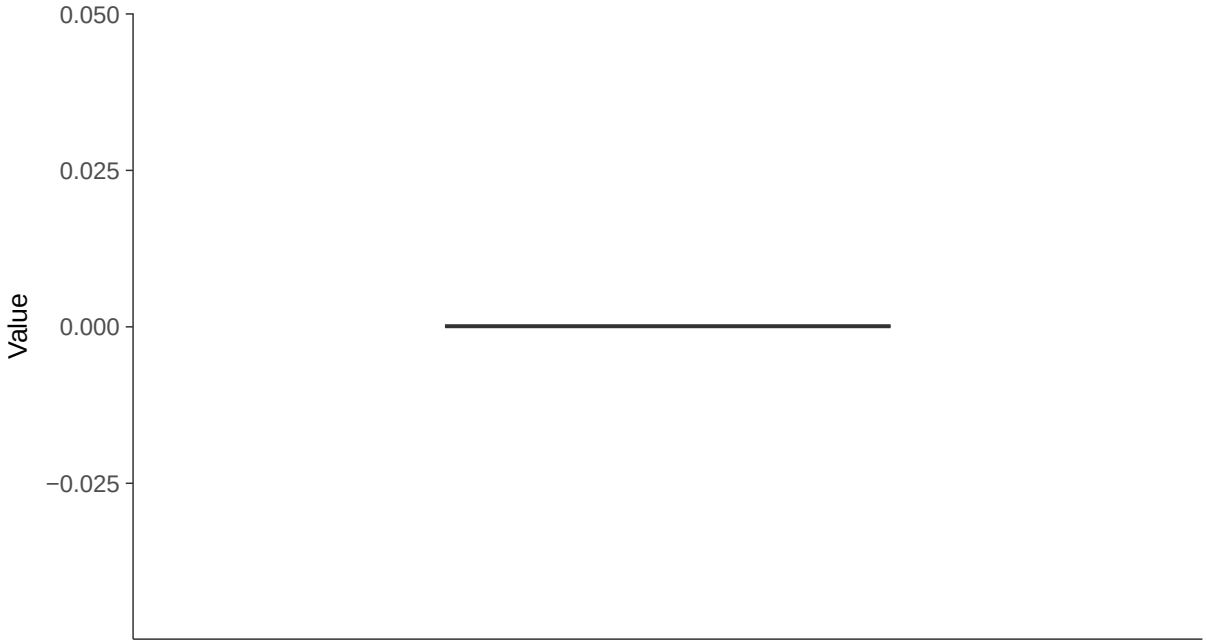
ID: 1_26_5_101





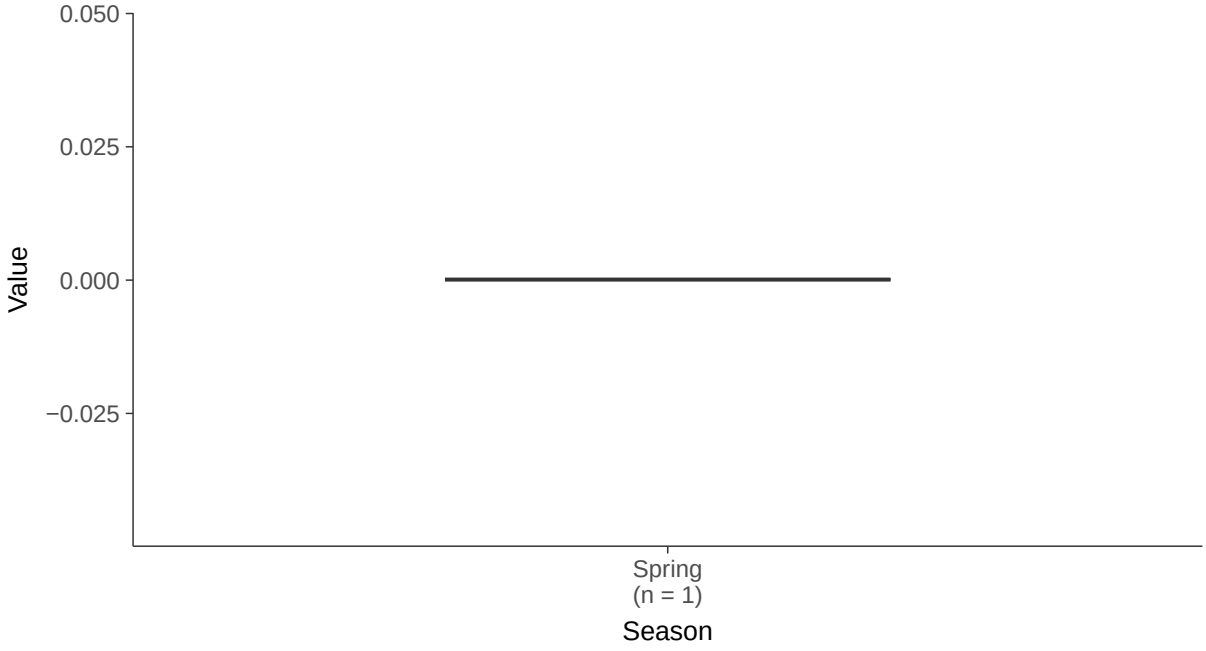
Boxplot

Antimony, MW-16 (mg/L)



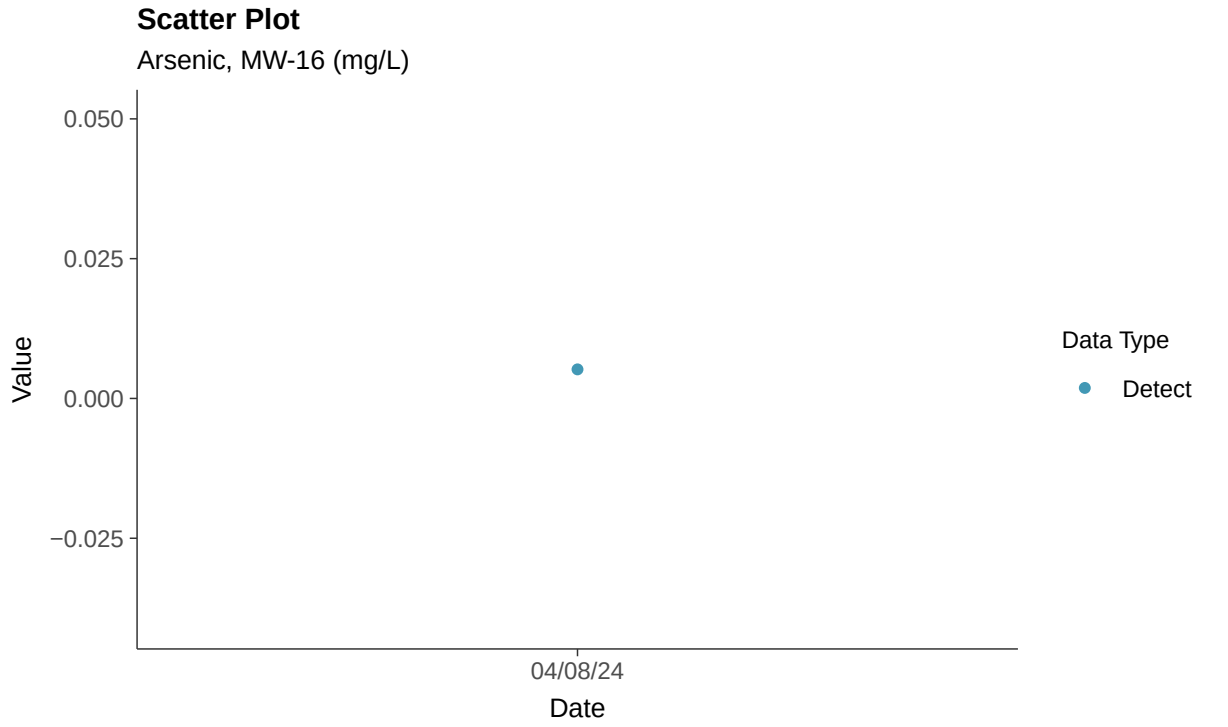
Boxplot by Season

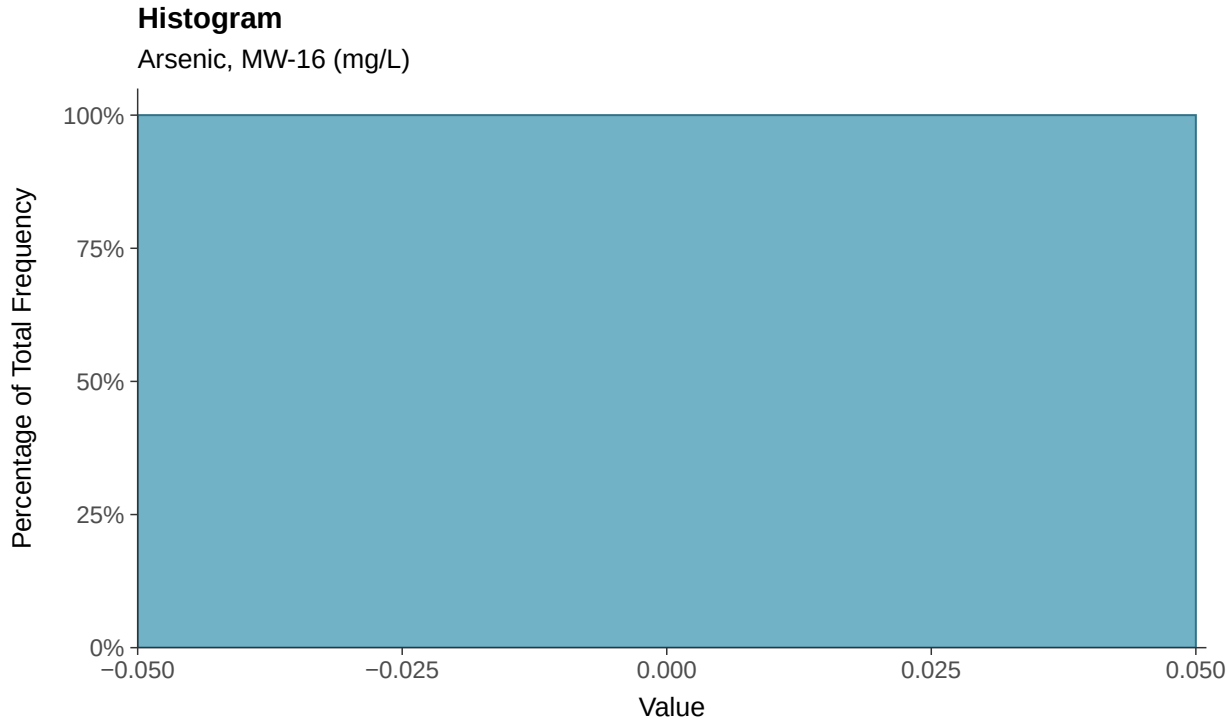
Antimony, MW-16 (mg/L)



Appendix IV: Arsenic, MW-16

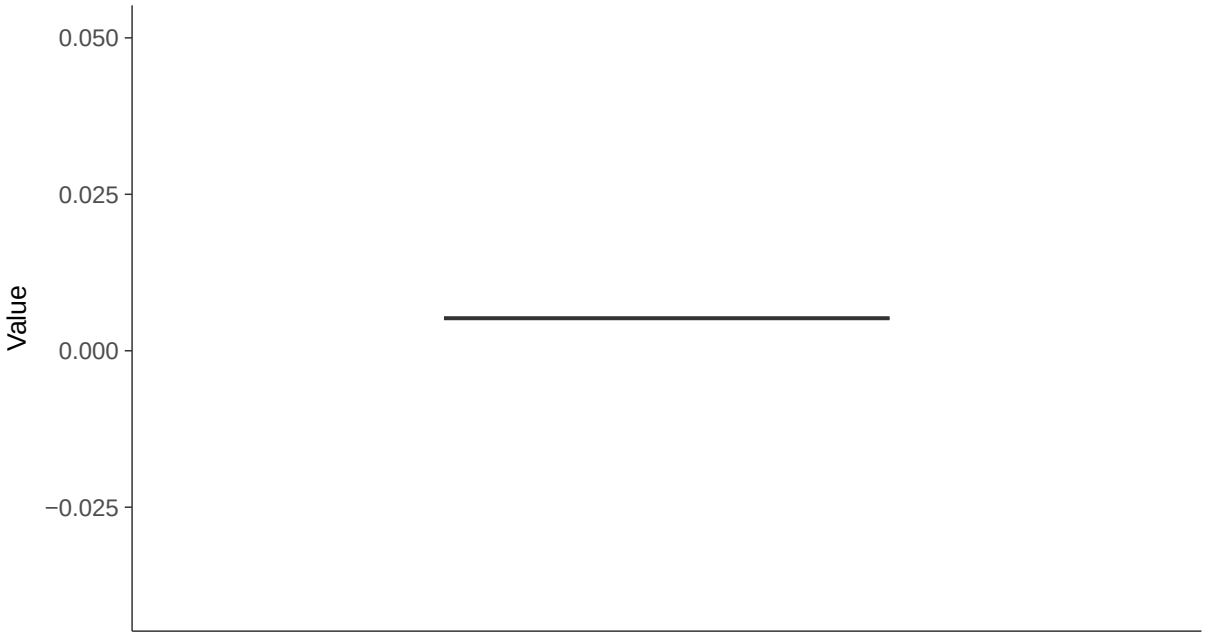
ID: 1_26_5_102





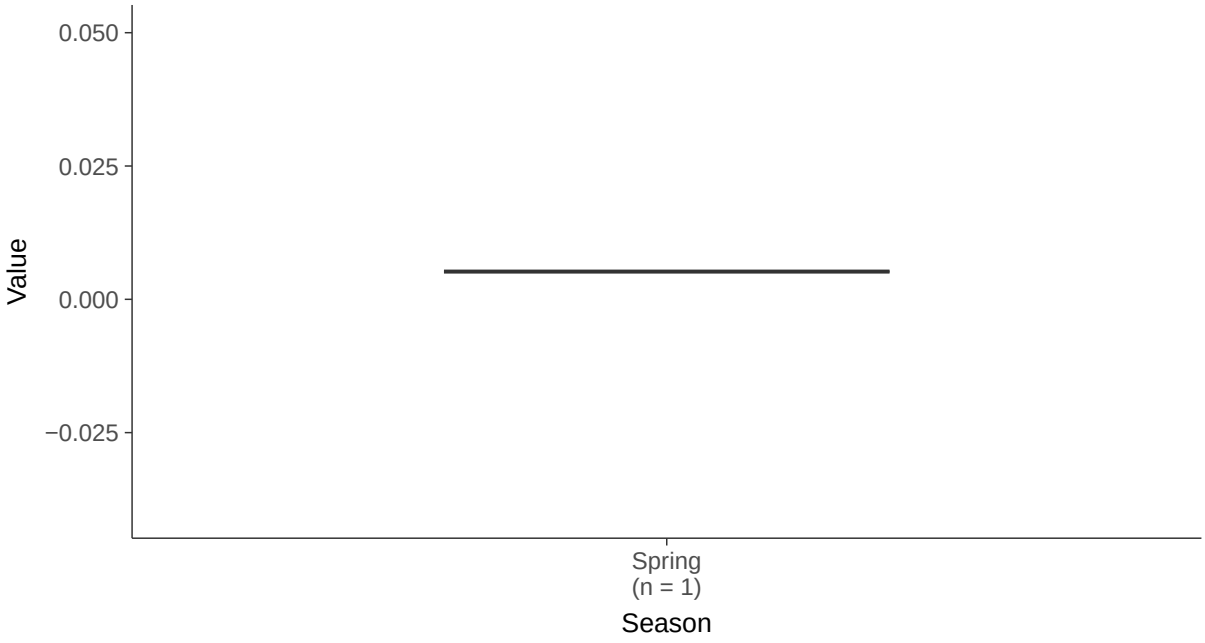
Boxplot

Arsenic, MW-16 (mg/L)



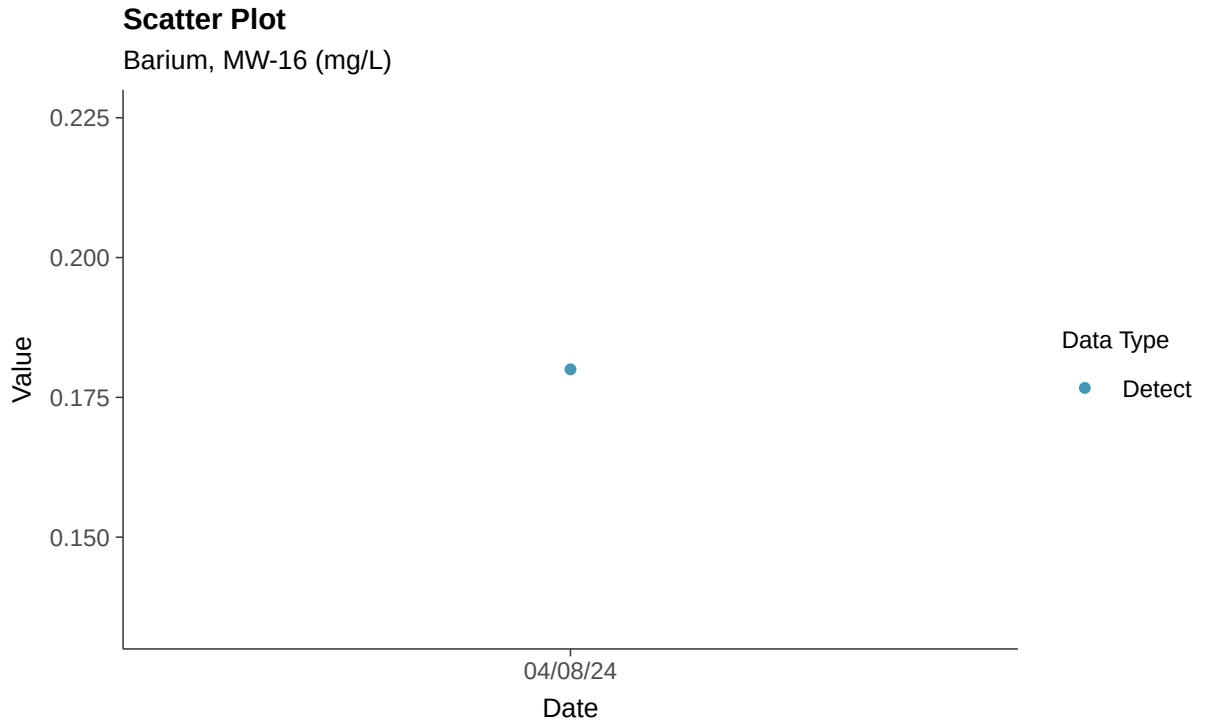
Boxplot by Season

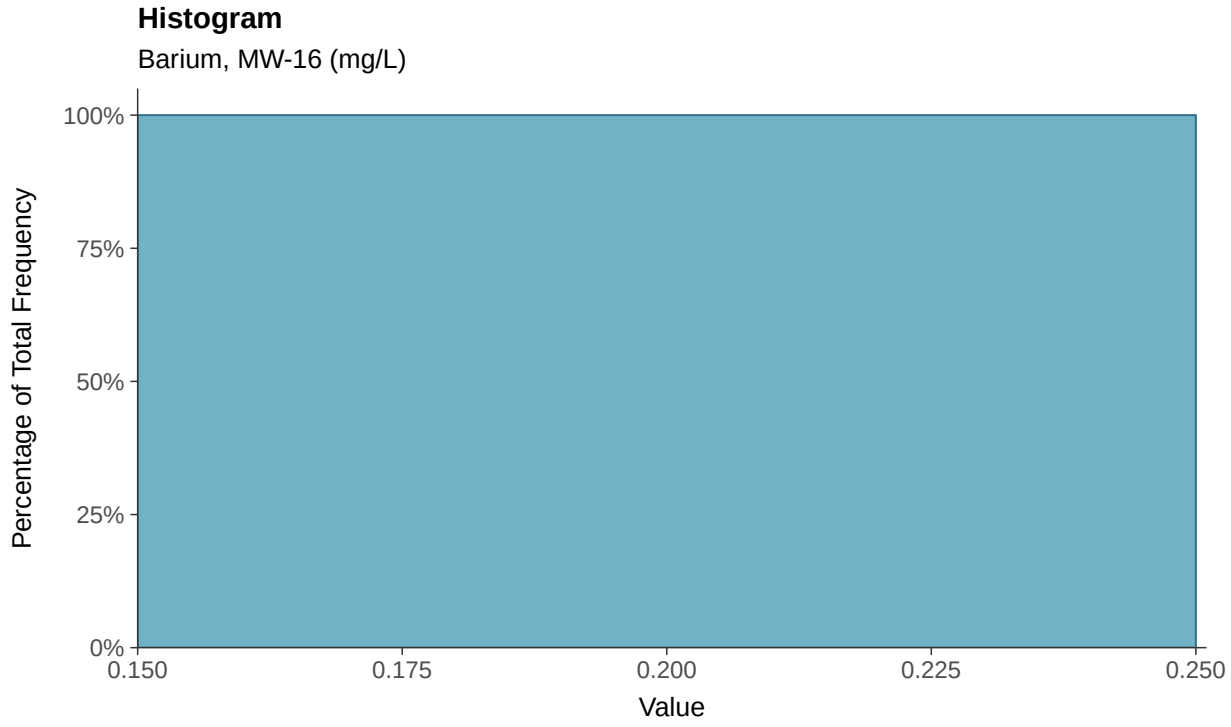
Arsenic, MW-16 (mg/L)



Appendix IV: Barium, MW-16

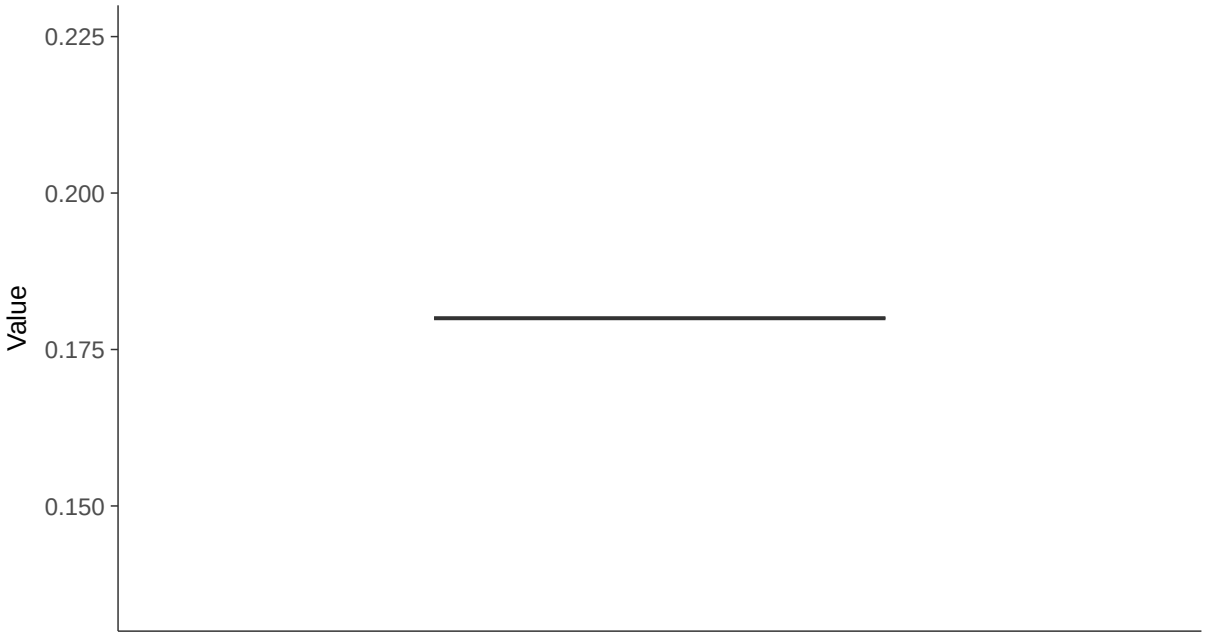
ID: 1_26_5_103





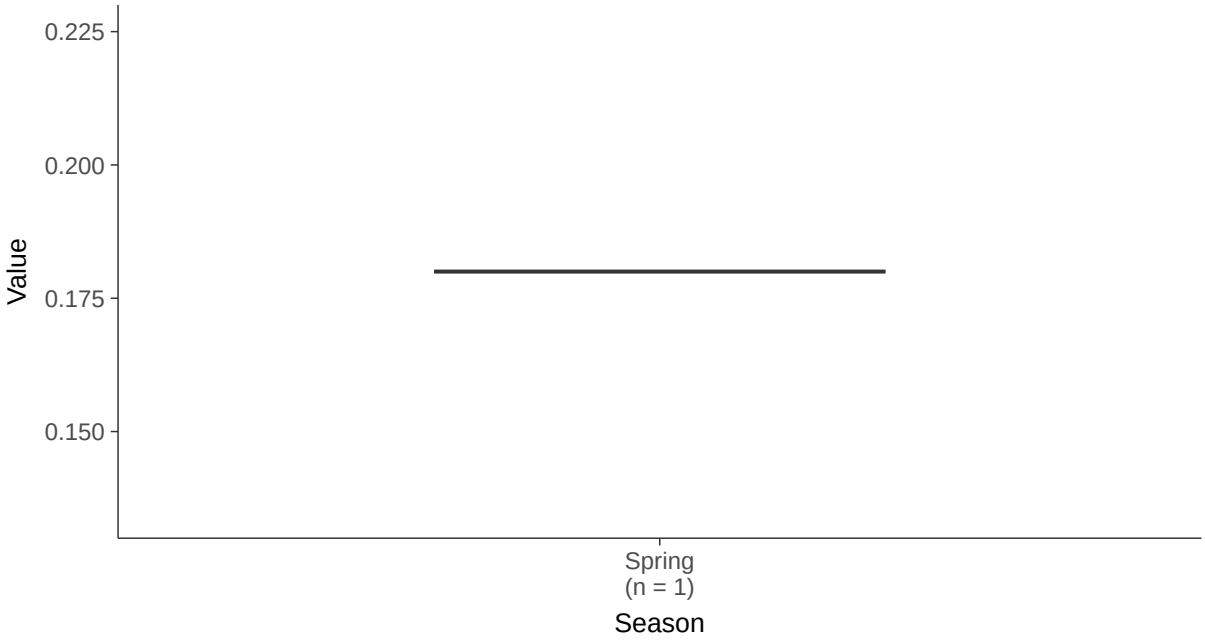
Boxplot

Barium, MW-16 (mg/L)



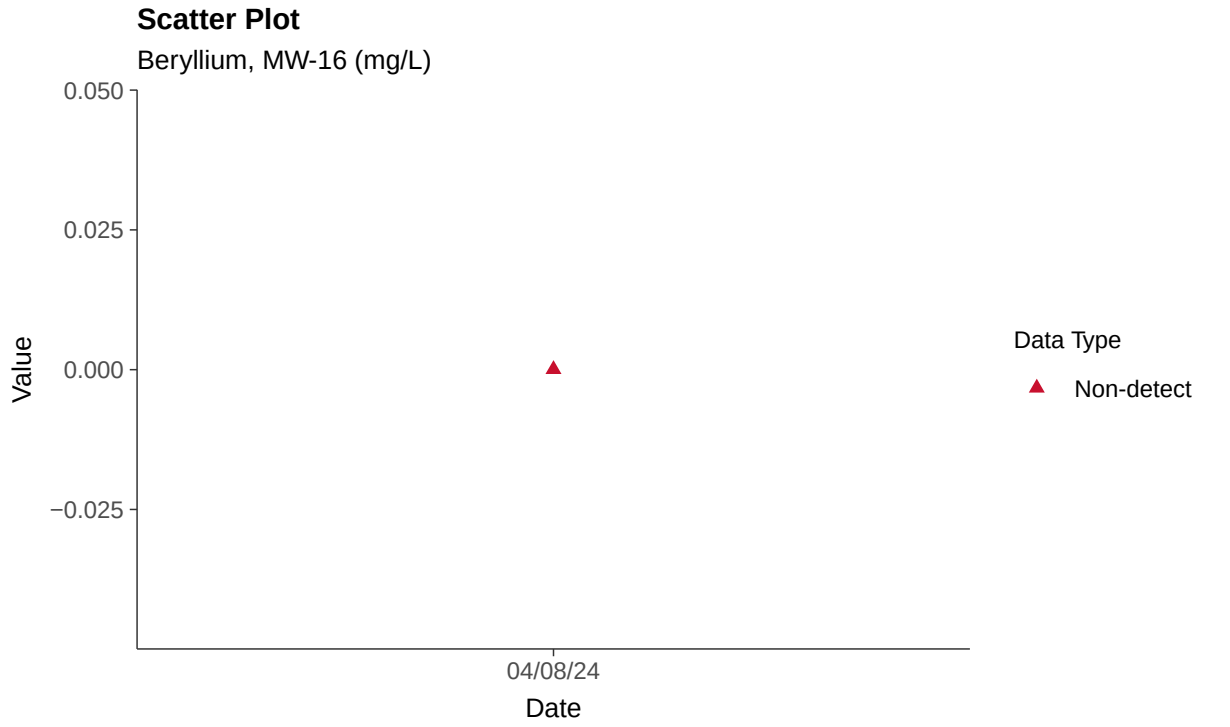
Boxplot by Season

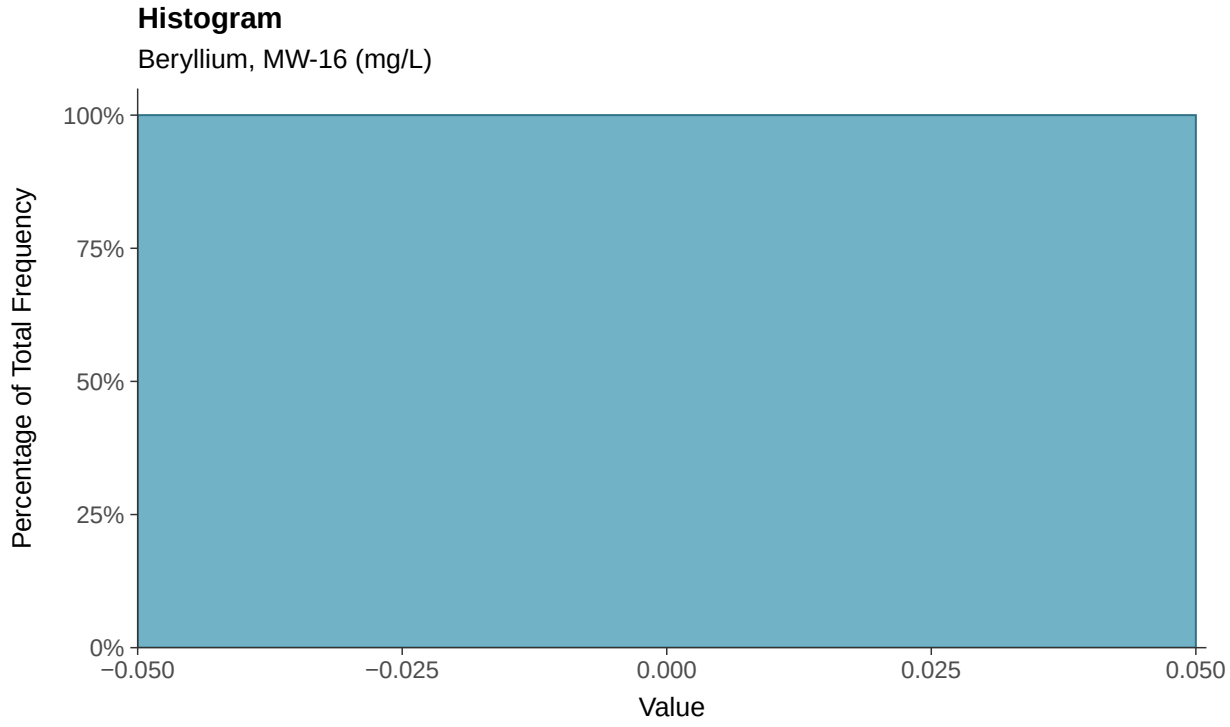
Barium, MW-16 (mg/L)



Appendix IV: Beryllium, MW-16

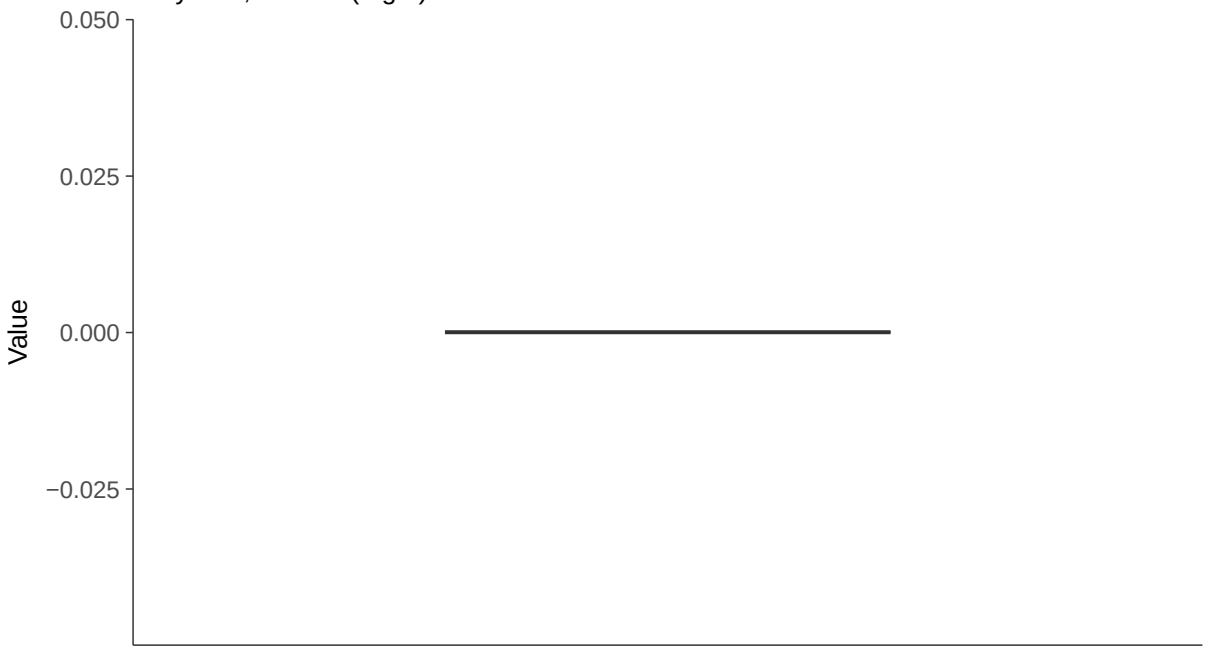
ID: 1_26_5_104





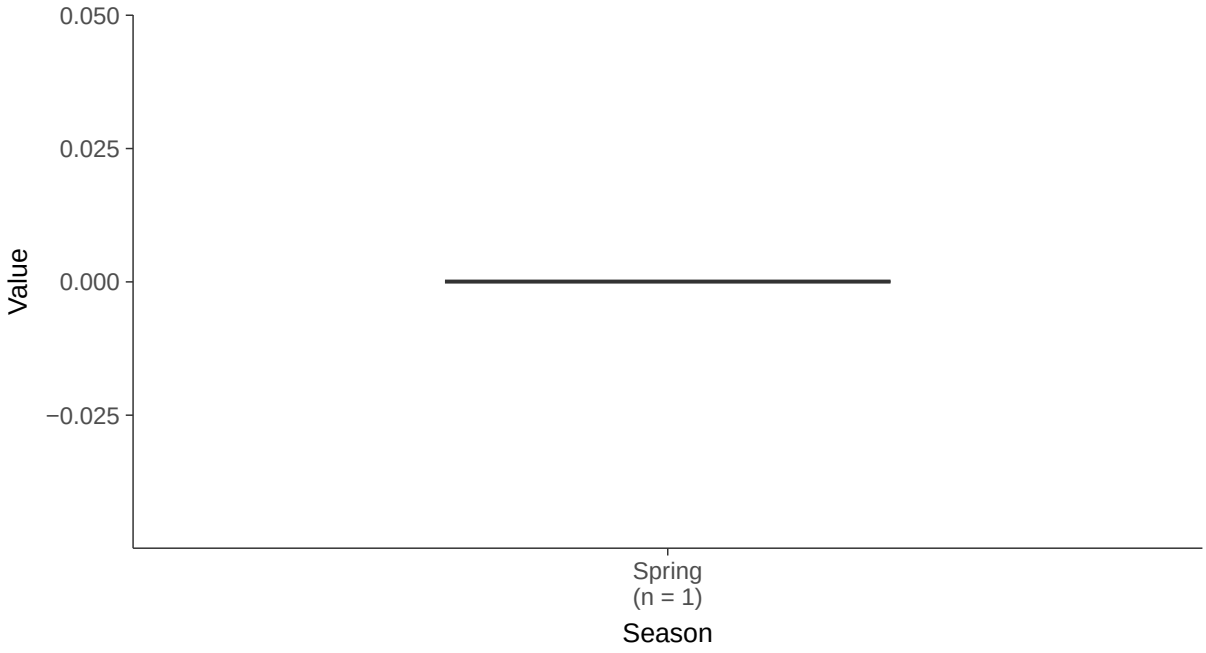
Boxplot

Beryllium, MW-16 (mg/L)



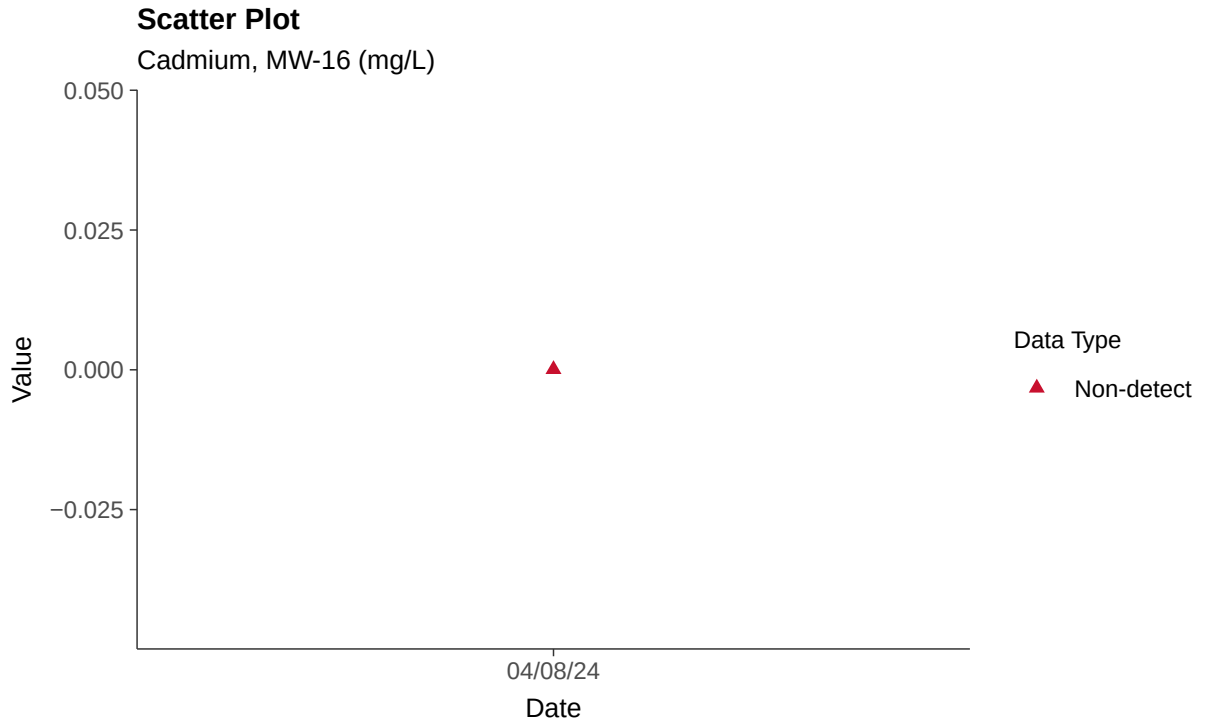
Boxplot by Season

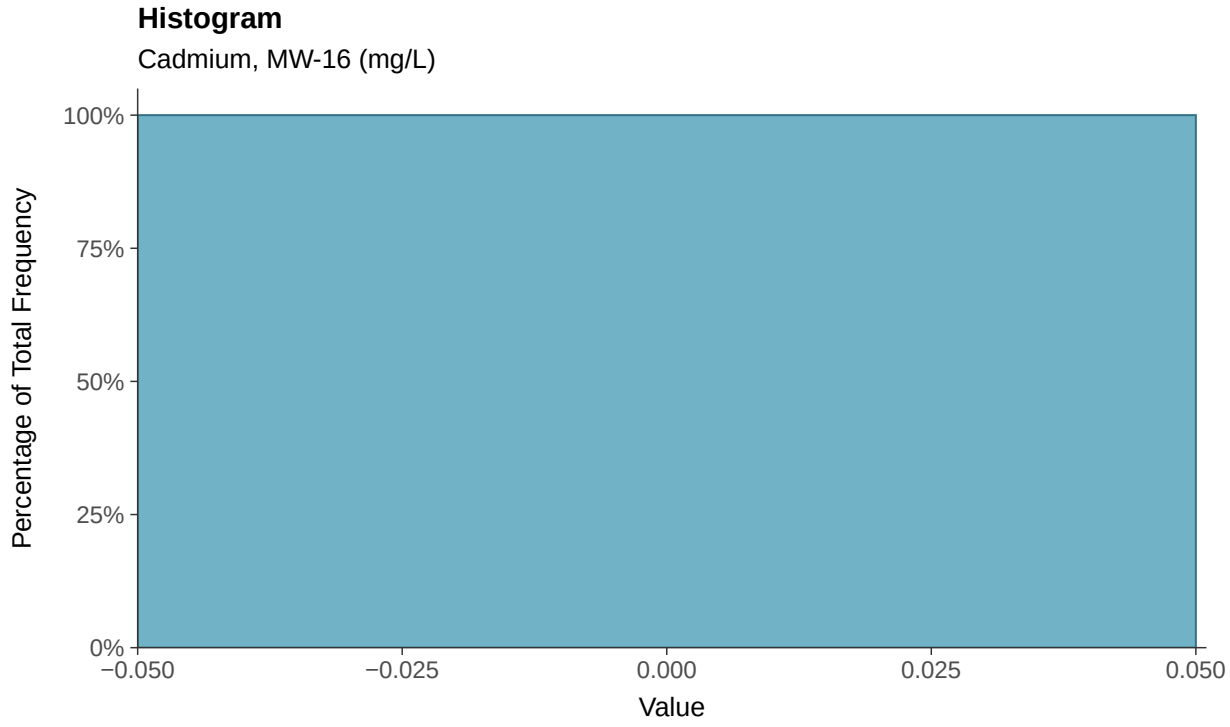
Beryllium, MW-16 (mg/L)



Appendix IV: Cadmium, MW-16

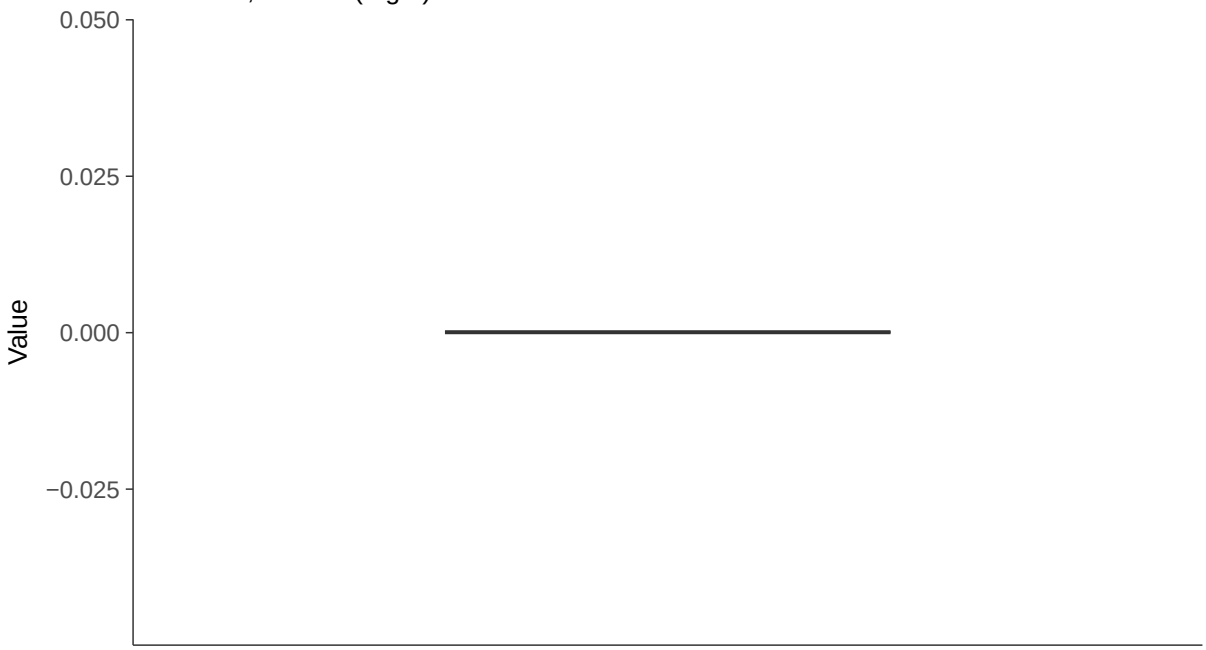
ID: 1_26_5_106





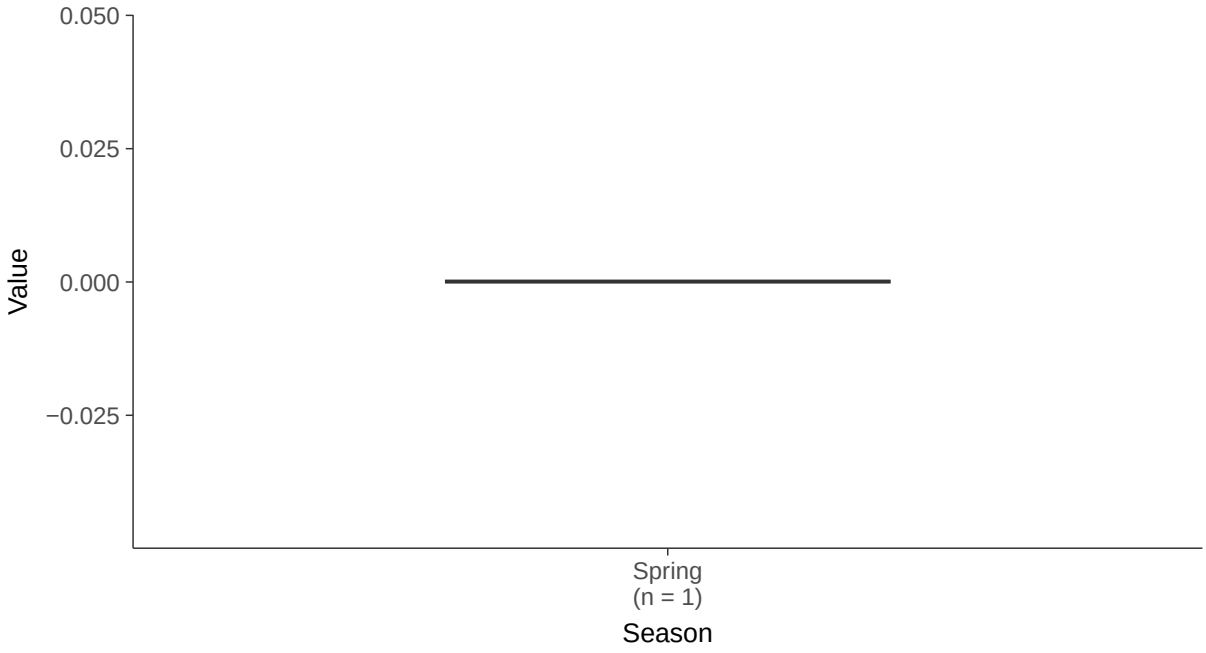
Boxplot

Cadmium, MW-16 (mg/L)



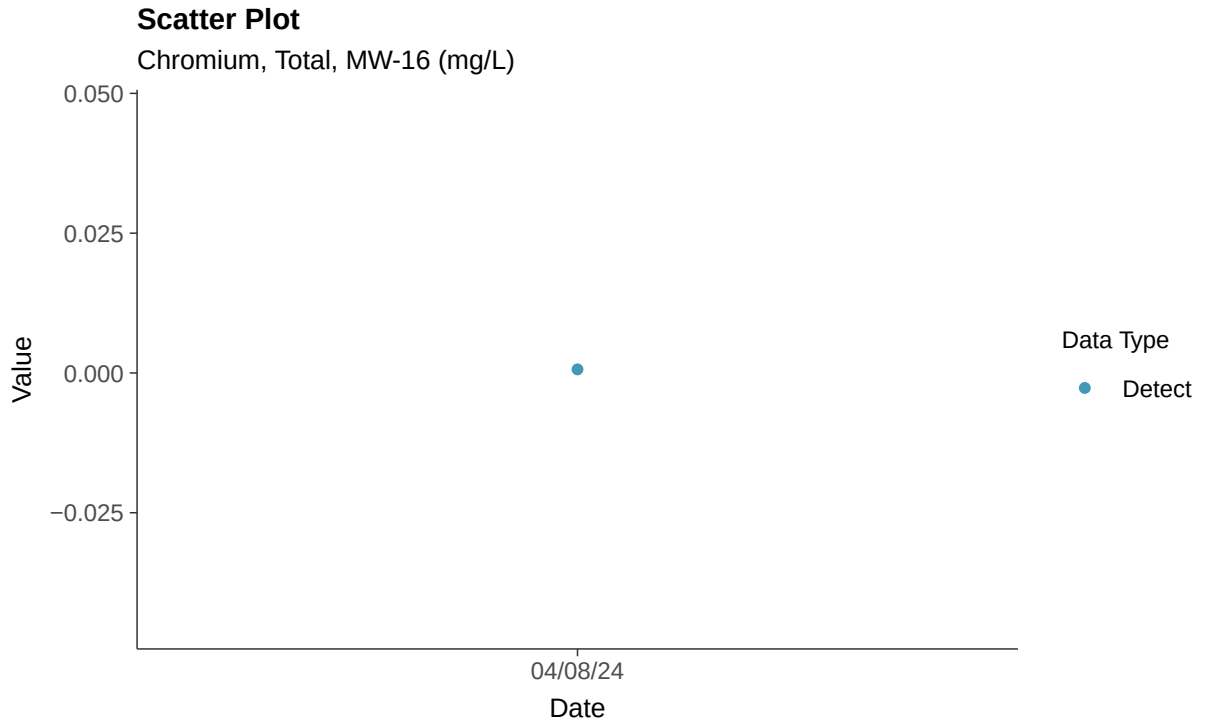
Boxplot by Season

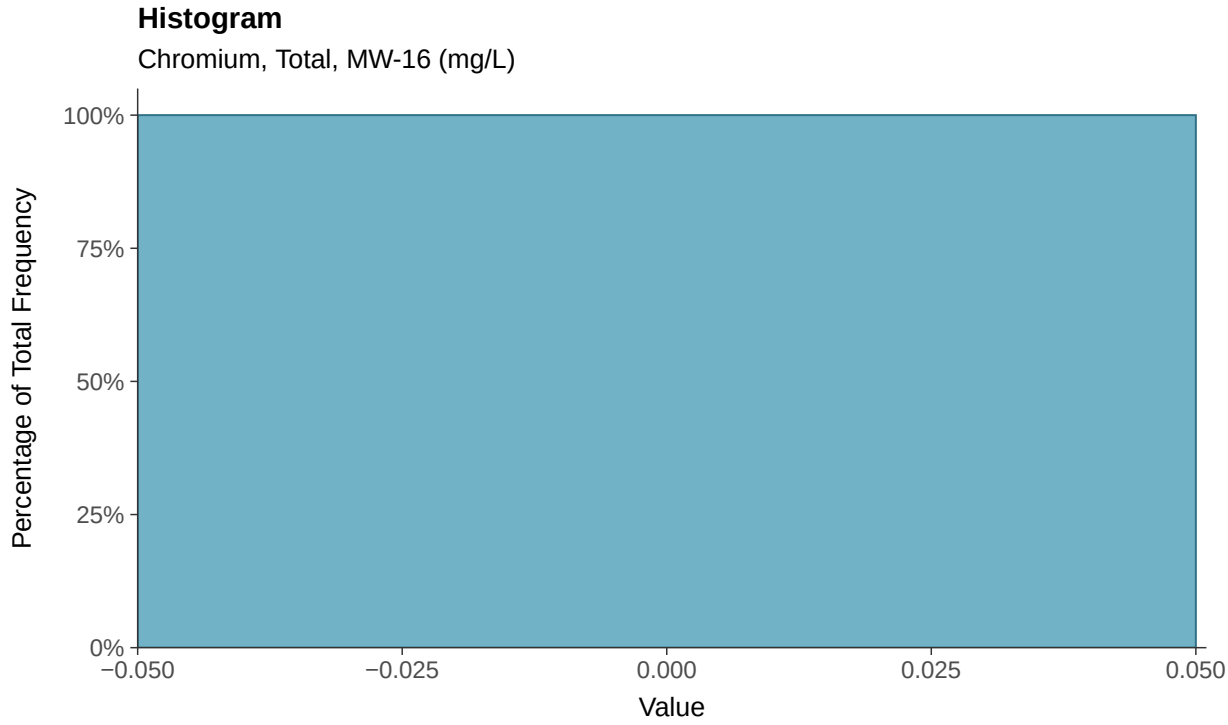
Cadmium, MW-16 (mg/L)



Appendix IV: Chromium, Total, MW-16

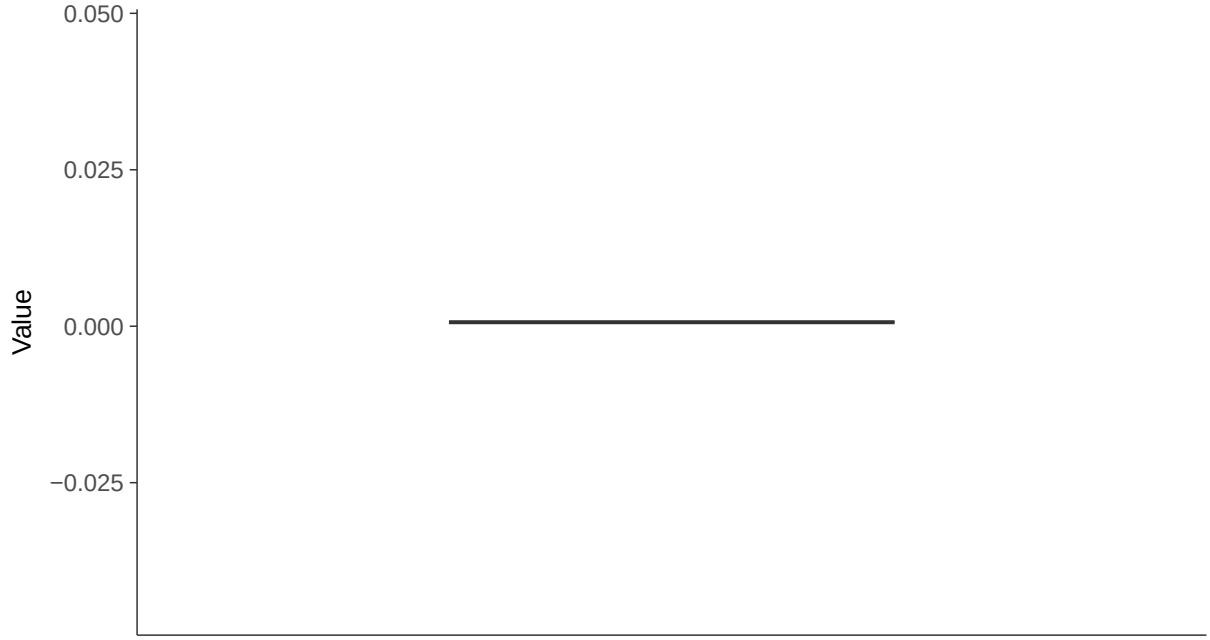
ID: 1_26_5_109





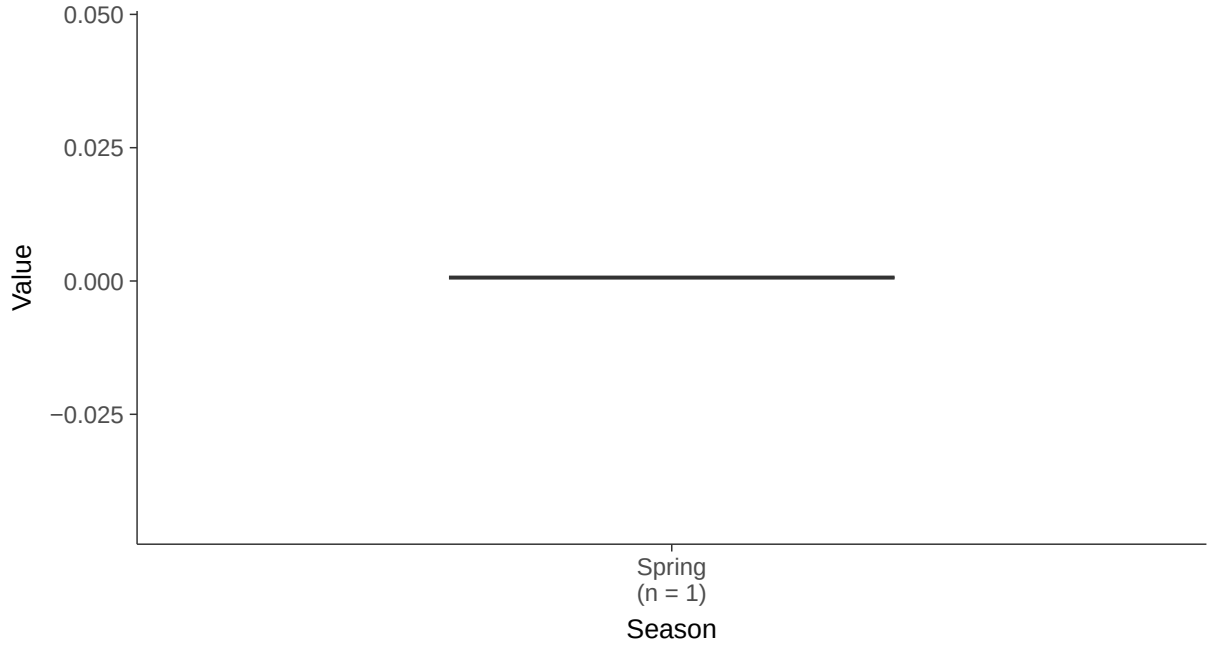
Boxplot

Chromium, Total, MW-16 (mg/L)



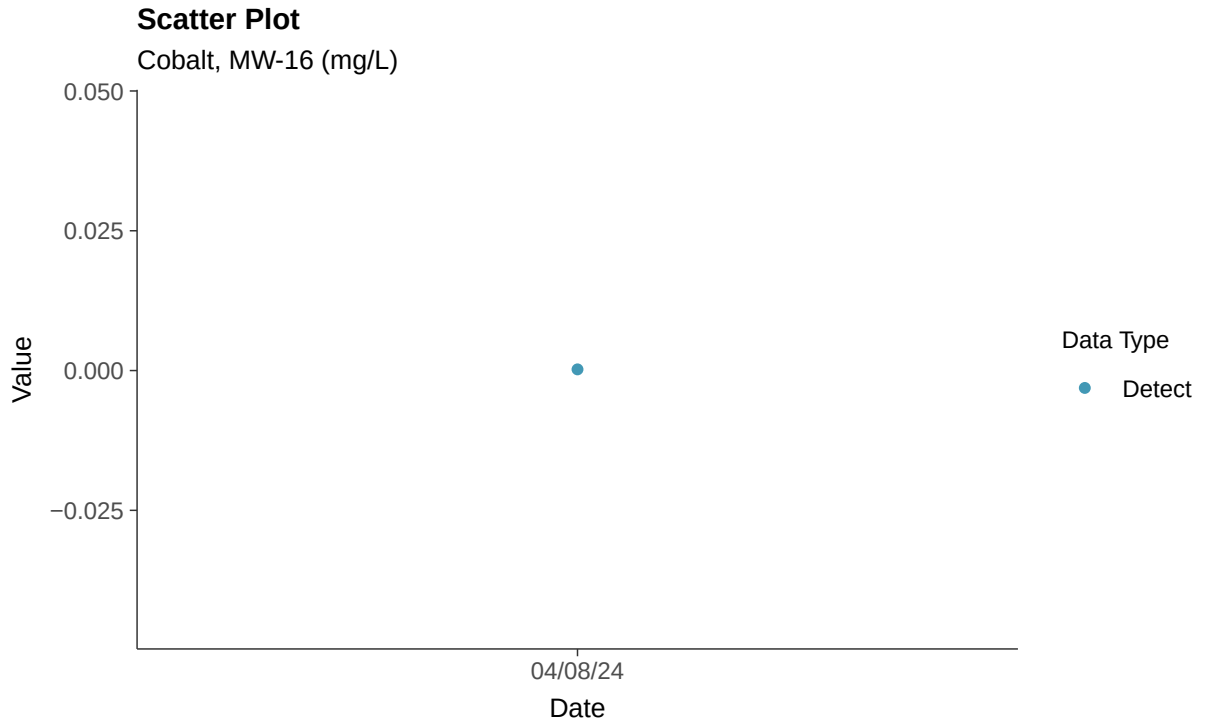
Boxplot by Season

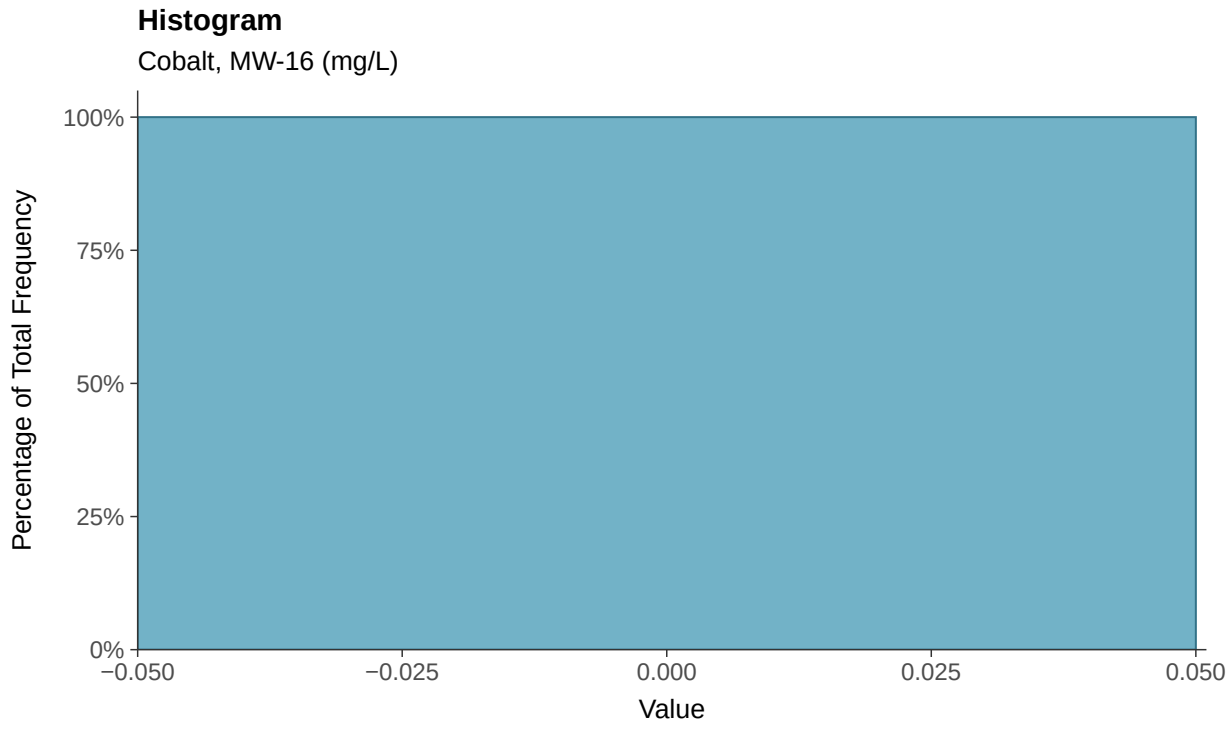
Chromium, Total, MW-16 (mg/L)



Appendix IV: Cobalt, MW-16

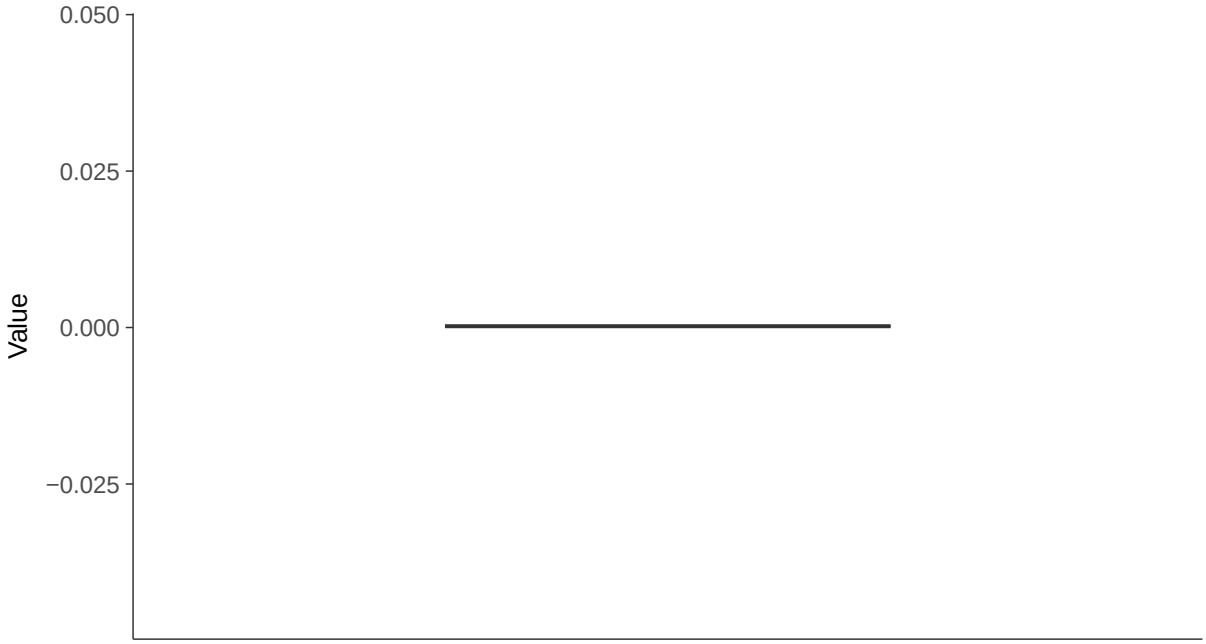
ID: 1_26_5_110





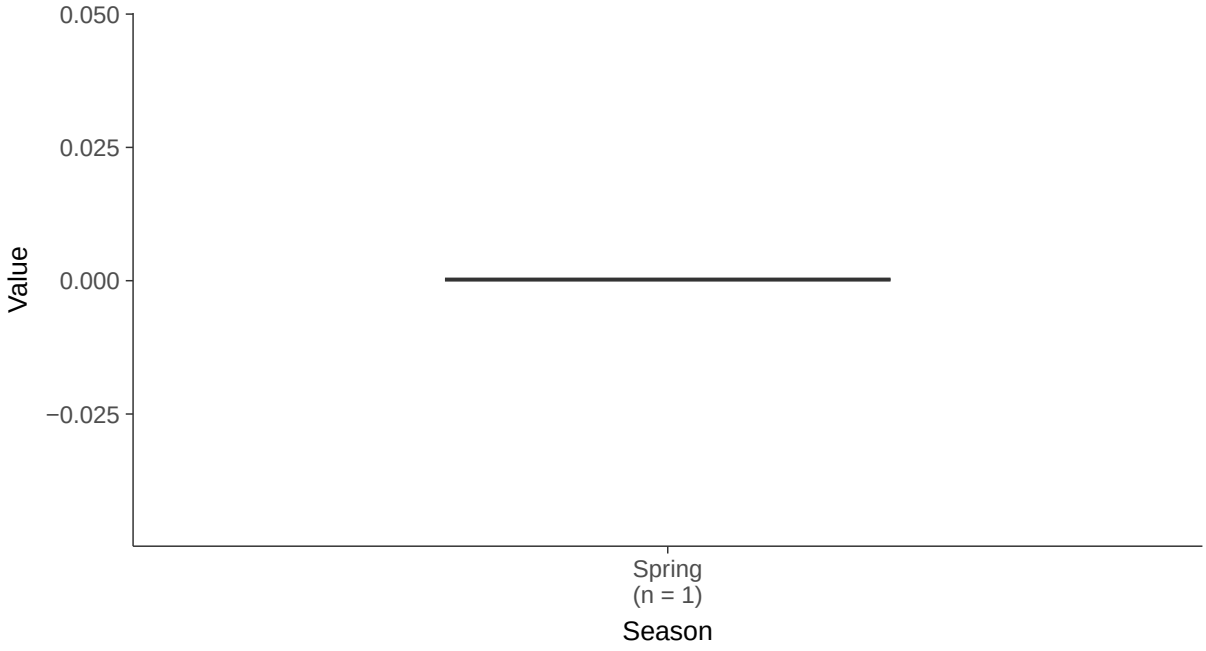
Boxplot

Cobalt, MW-16 (mg/L)



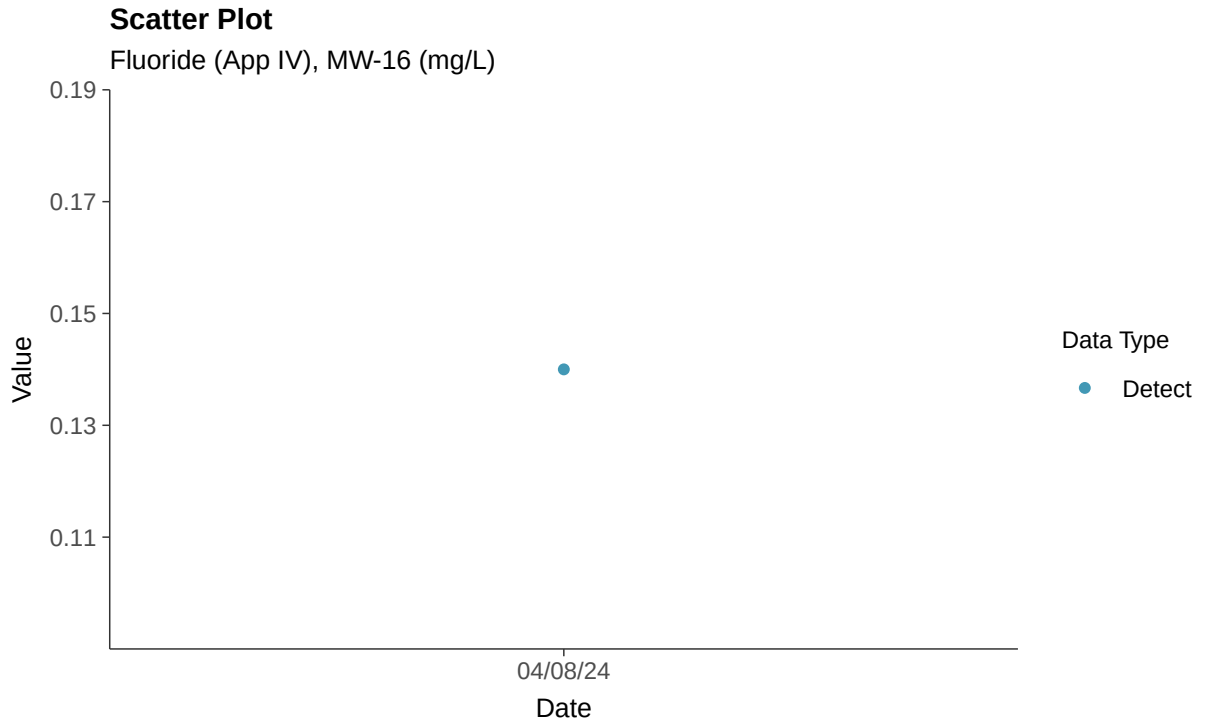
Boxplot by Season

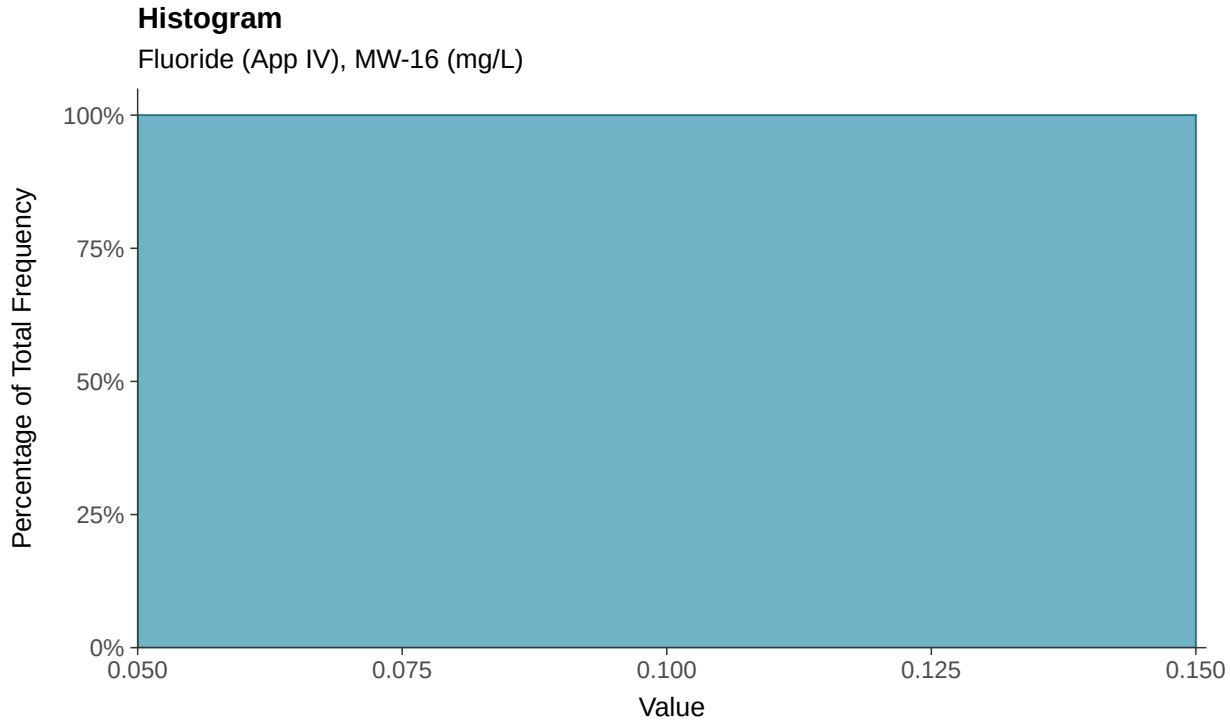
Cobalt, MW-16 (mg/L)



Appendix IV: Fluoride (App IV), MW-16

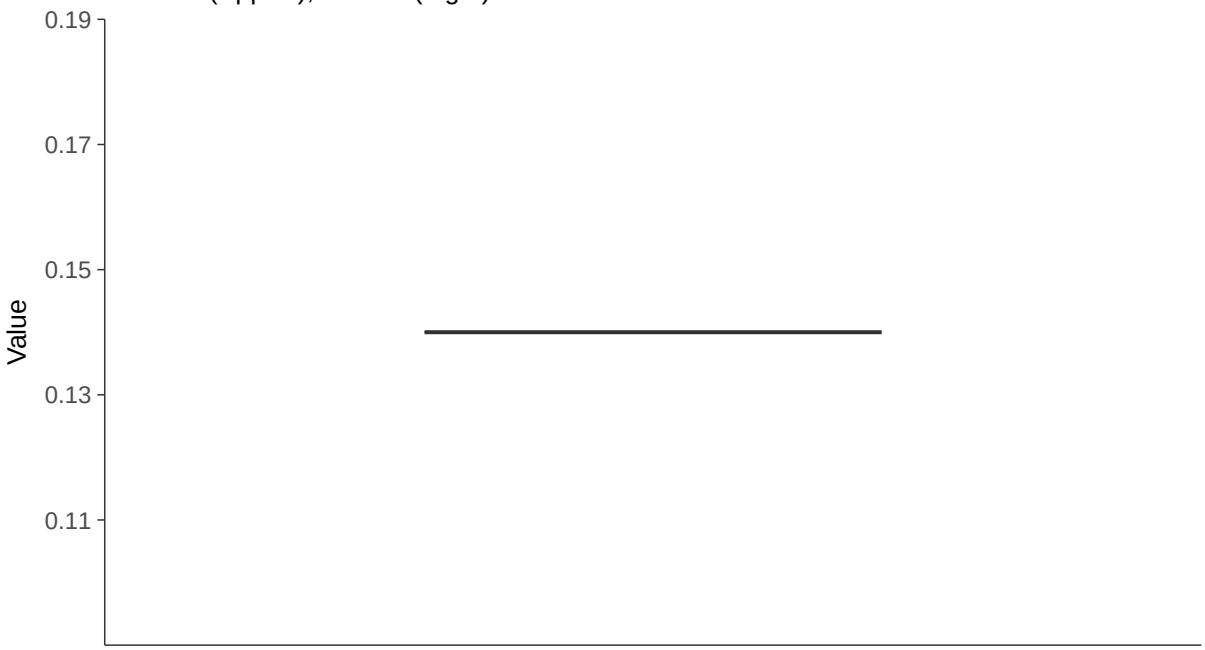
ID: 1_26_5_113





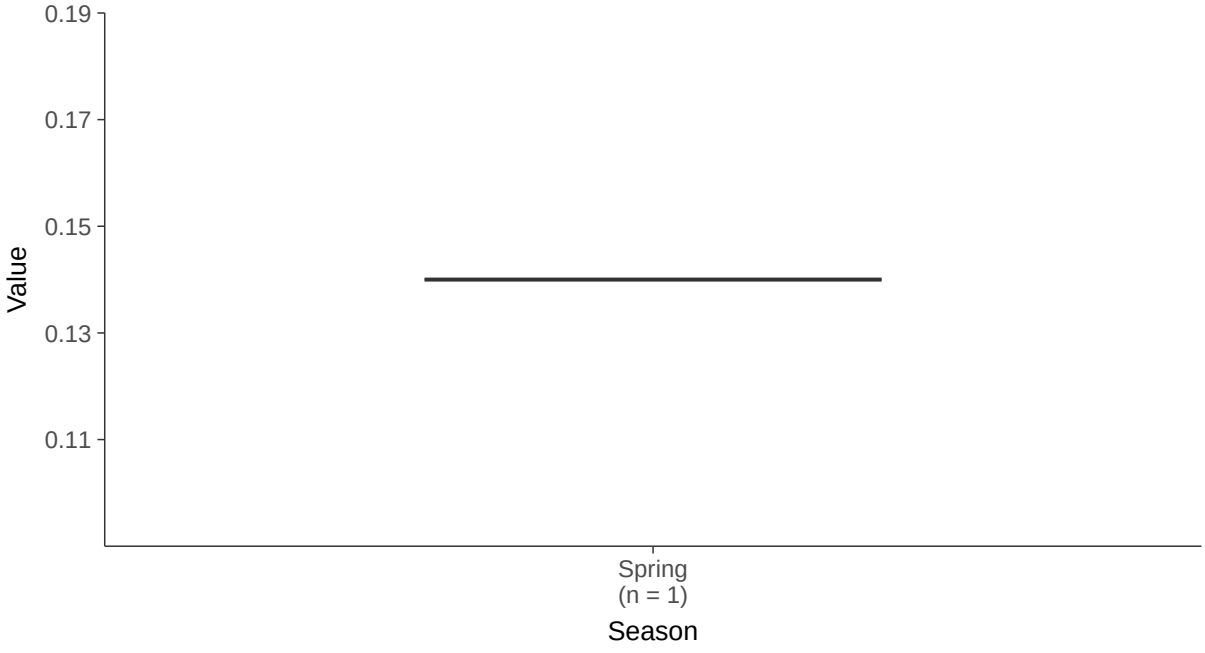
Boxplot

Fluoride (App IV), MW-16 (mg/L)



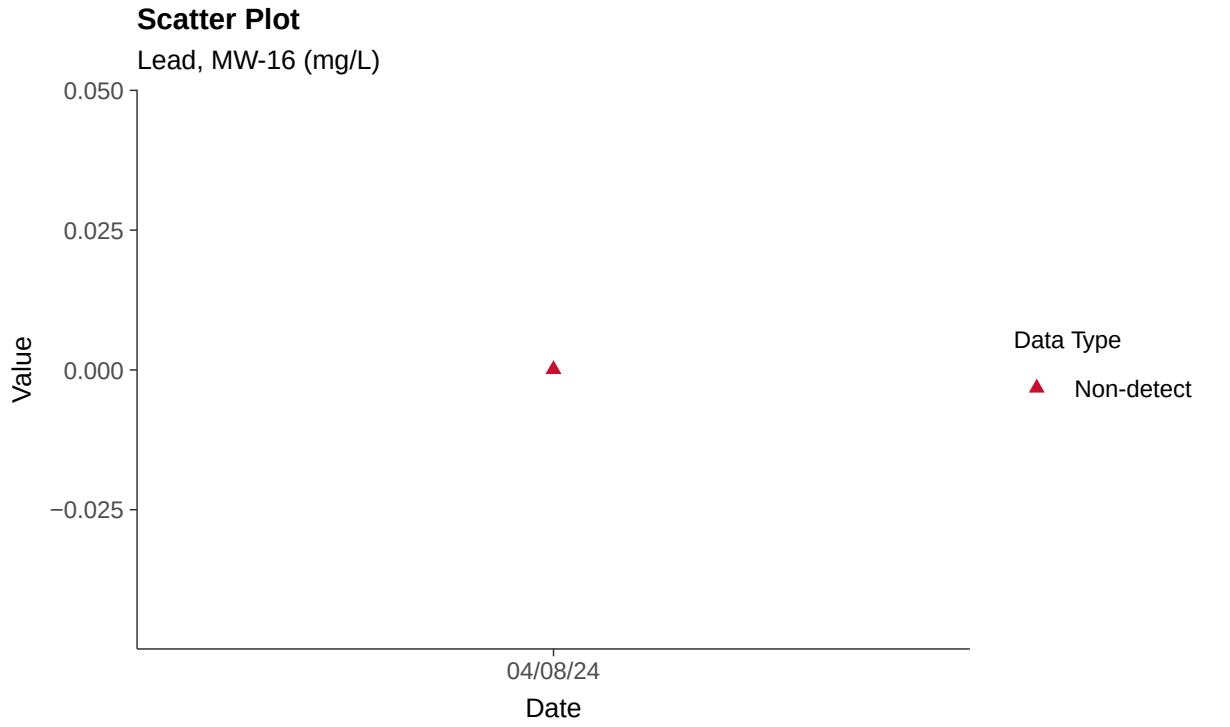
Boxplot by Season

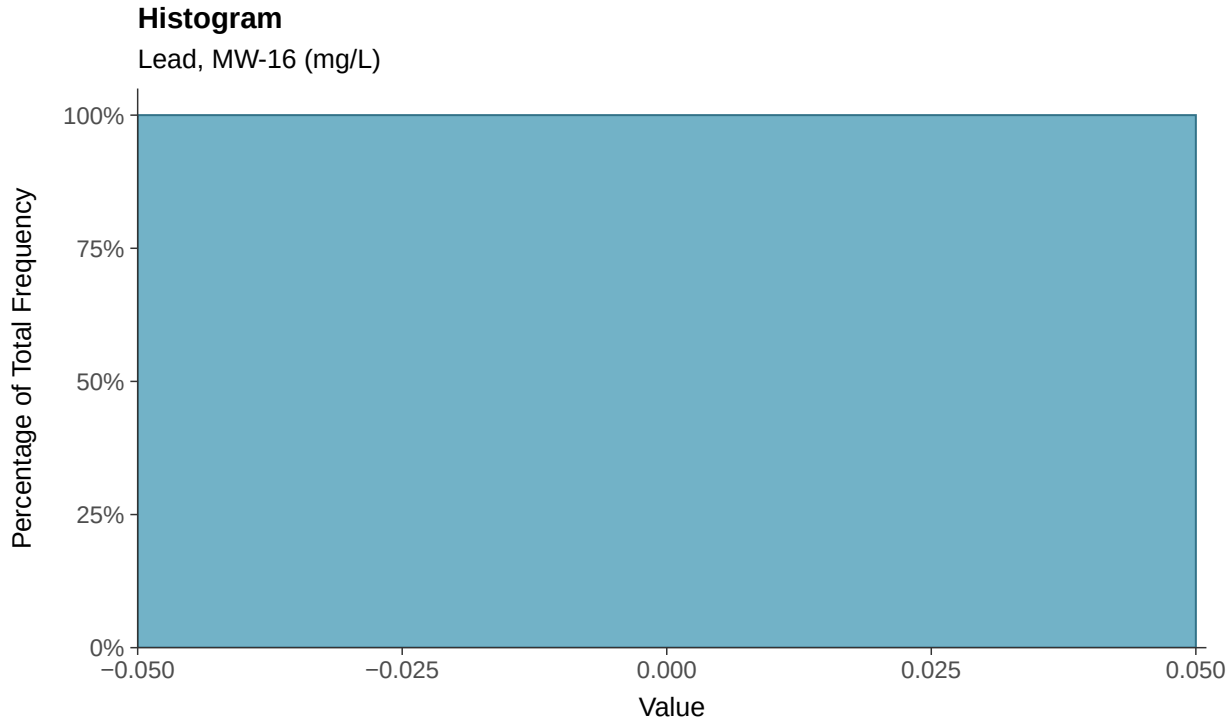
Fluoride (App IV), MW-16 (mg/L)



Appendix IV: Lead, MW-16

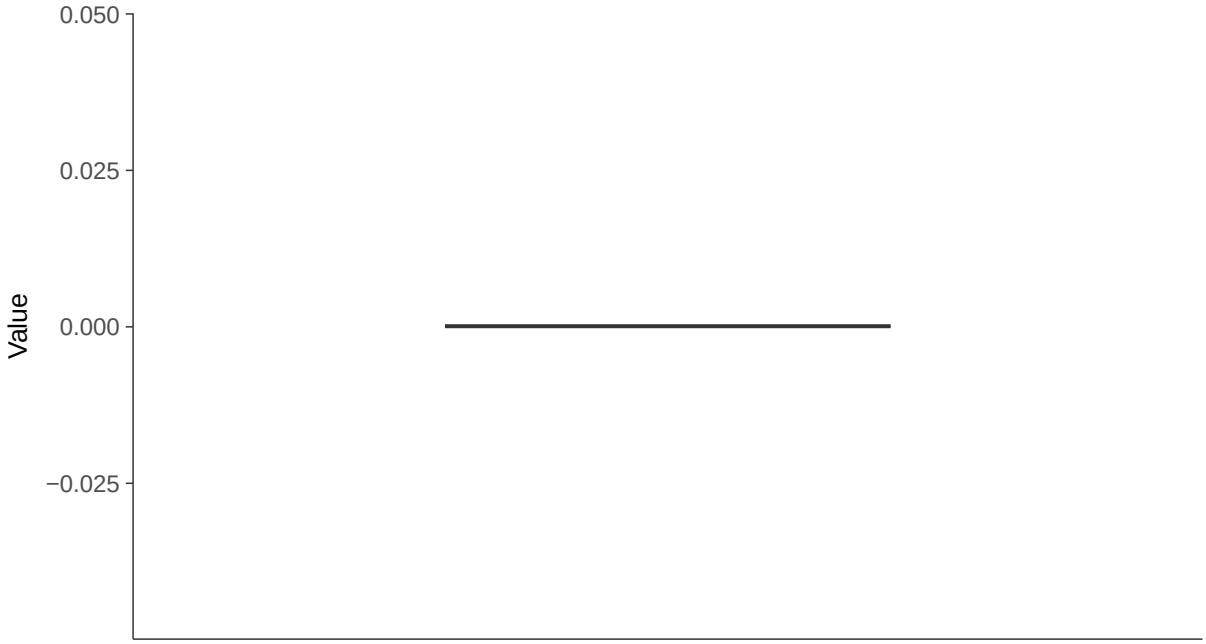
ID: 1_26_5_115





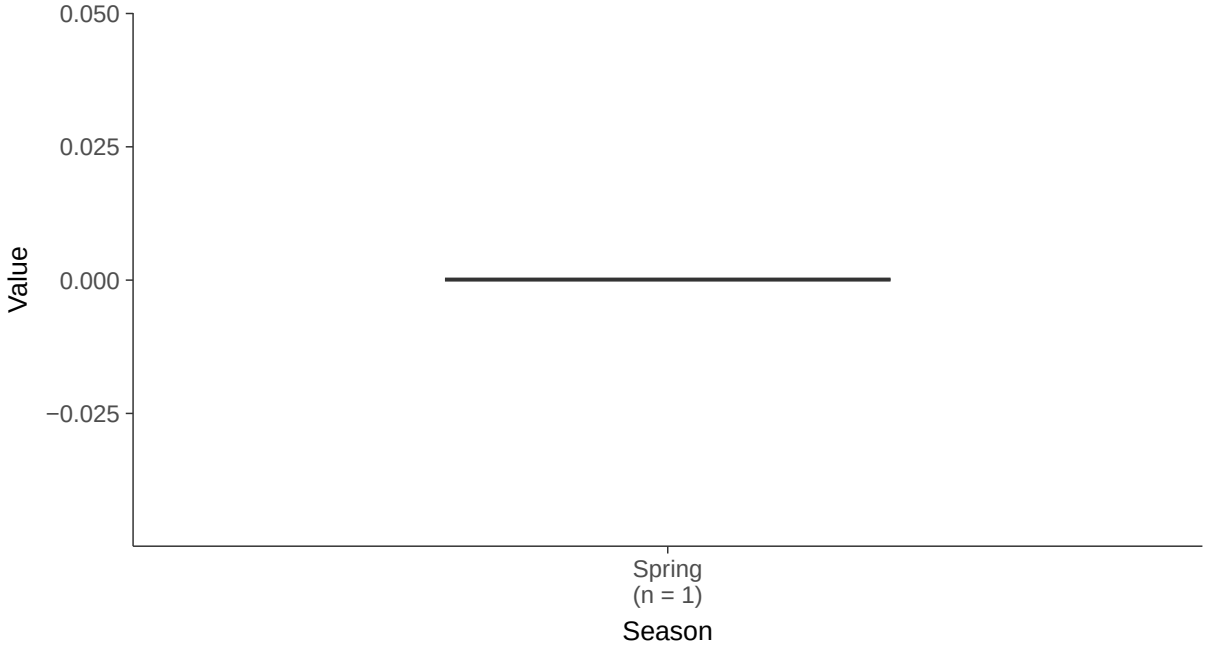
Boxplot

Lead, MW-16 (mg/L)



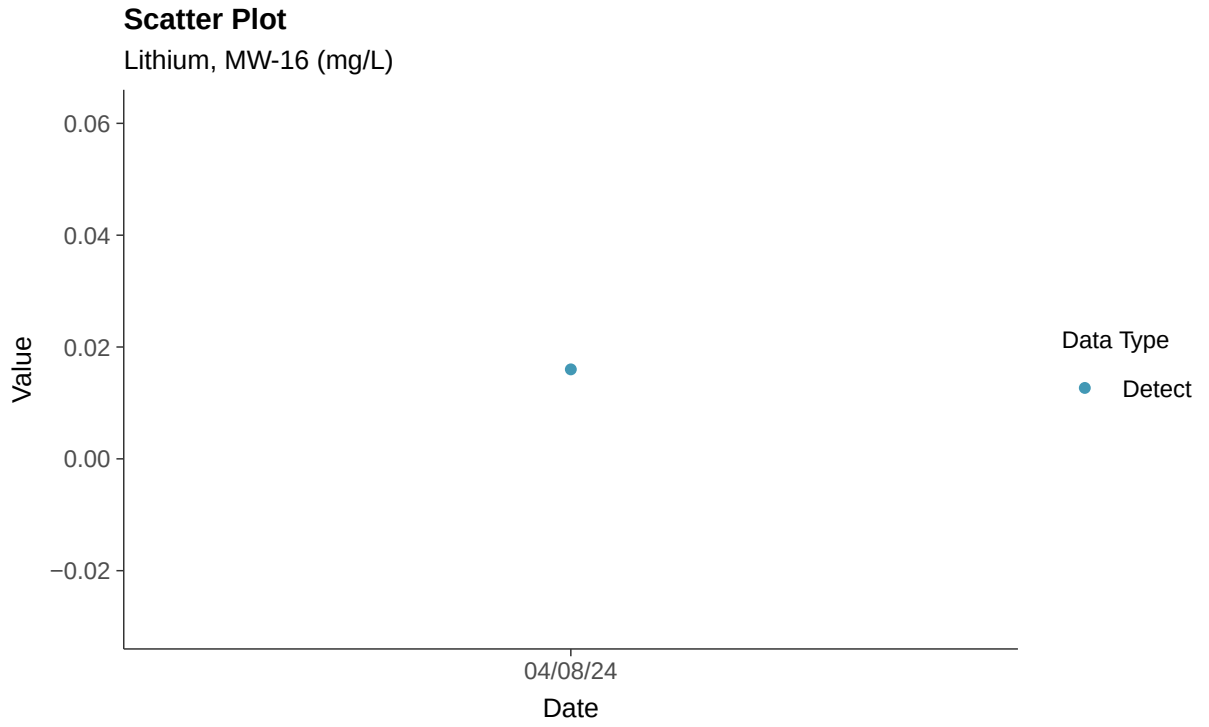
Boxplot by Season

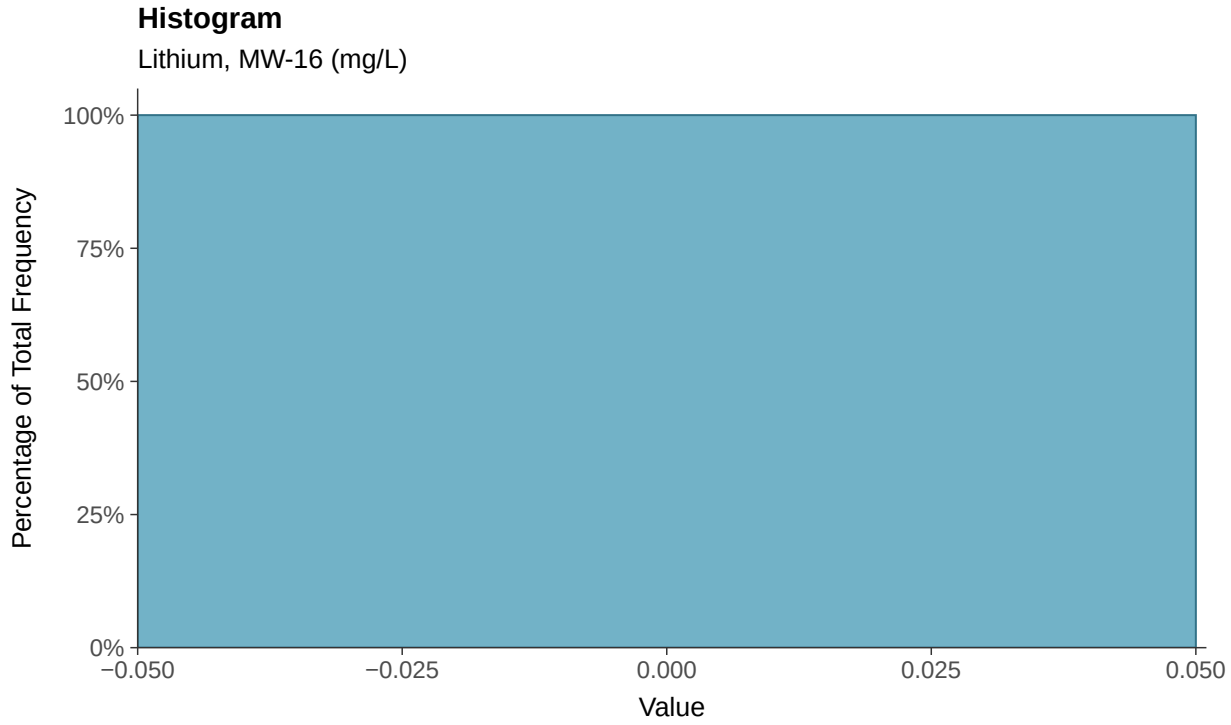
Lead, MW-16 (mg/L)



Appendix IV: Lithium, MW-16

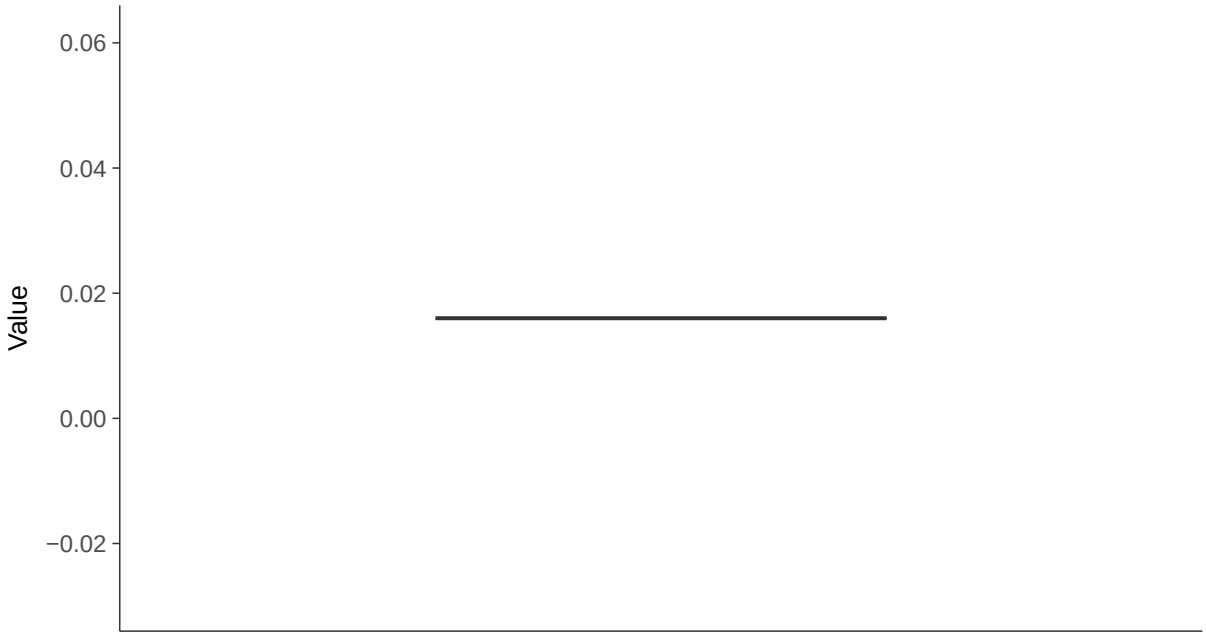
ID: 1_26_5_116





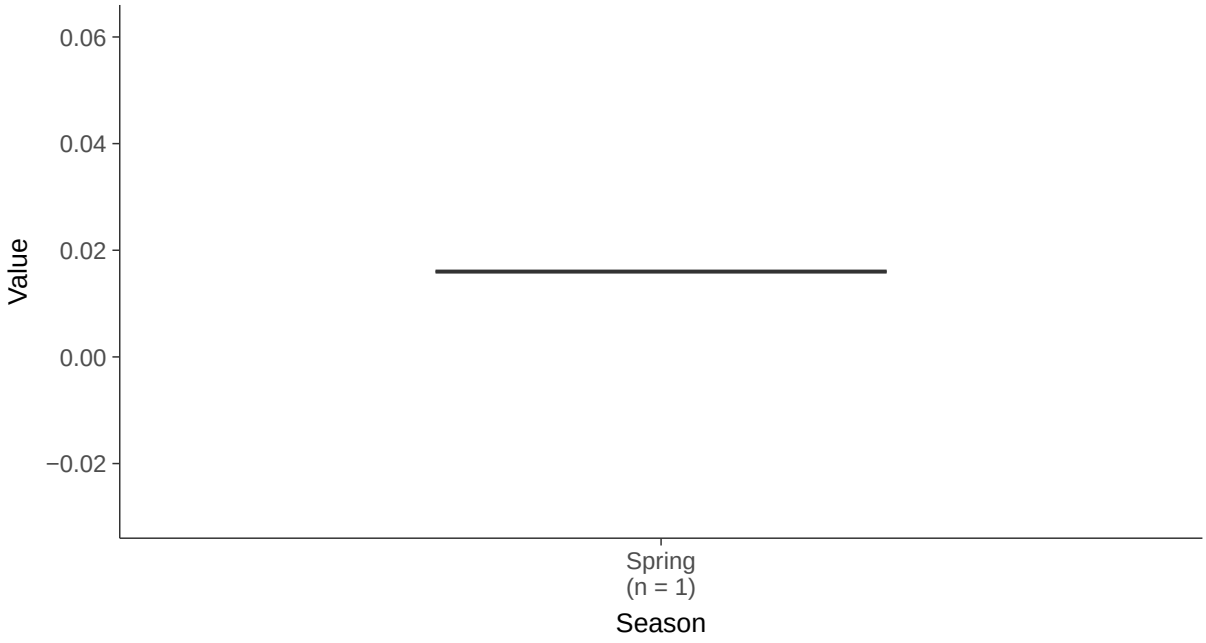
Boxplot

Lithium, MW-16 (mg/L)



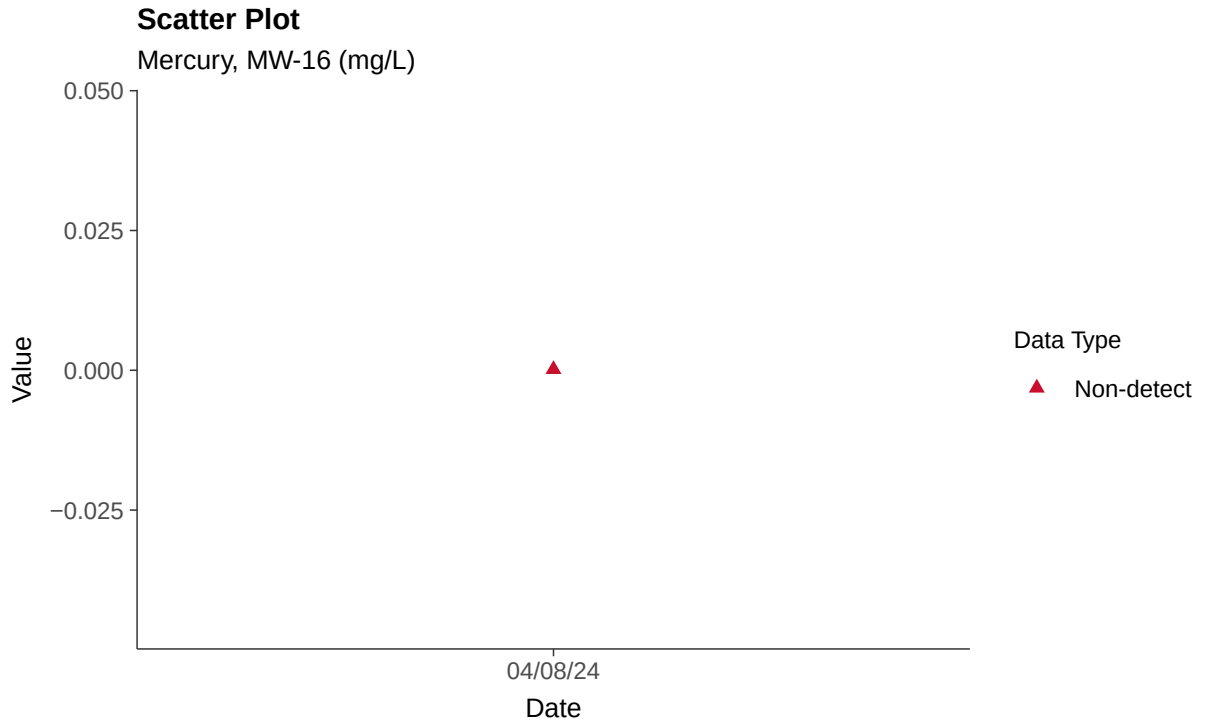
Boxplot by Season

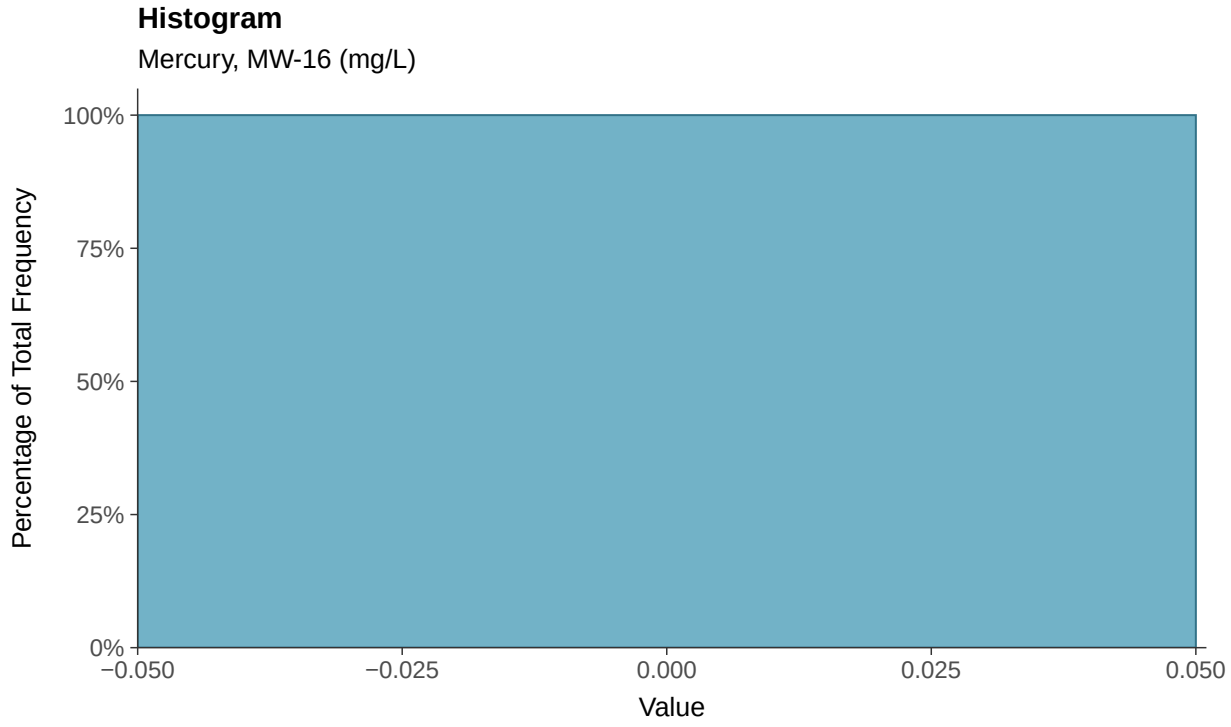
Lithium, MW-16 (mg/L)



Appendix IV: Mercury, MW-16

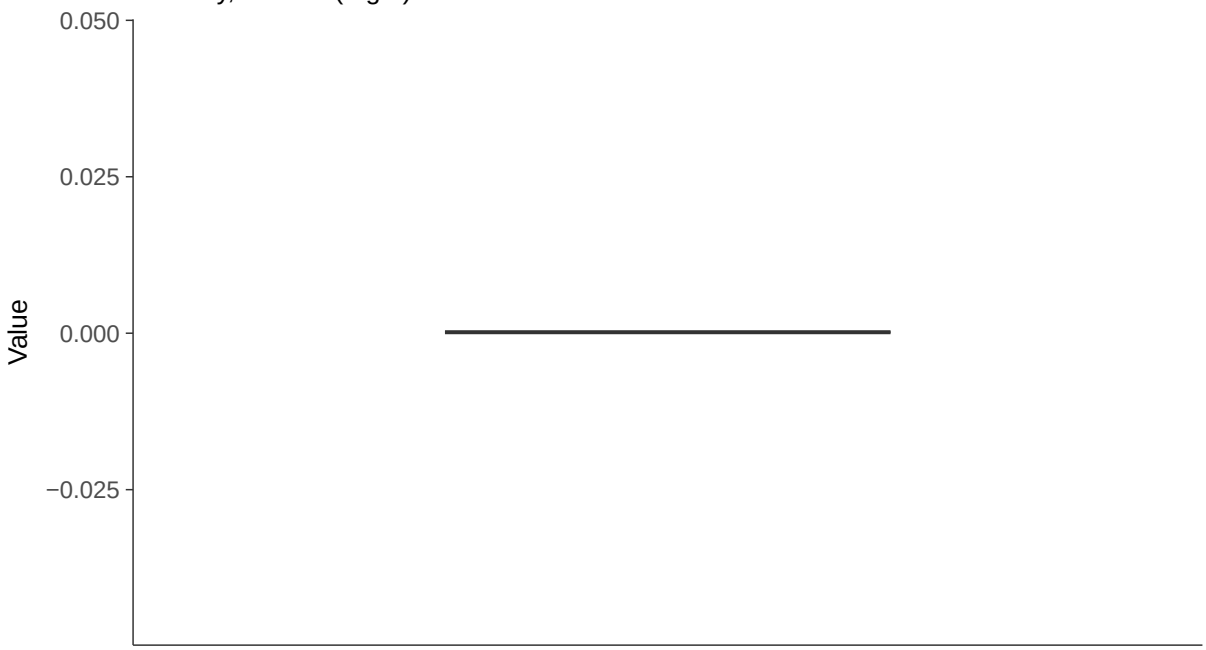
ID: 1_26_5_117





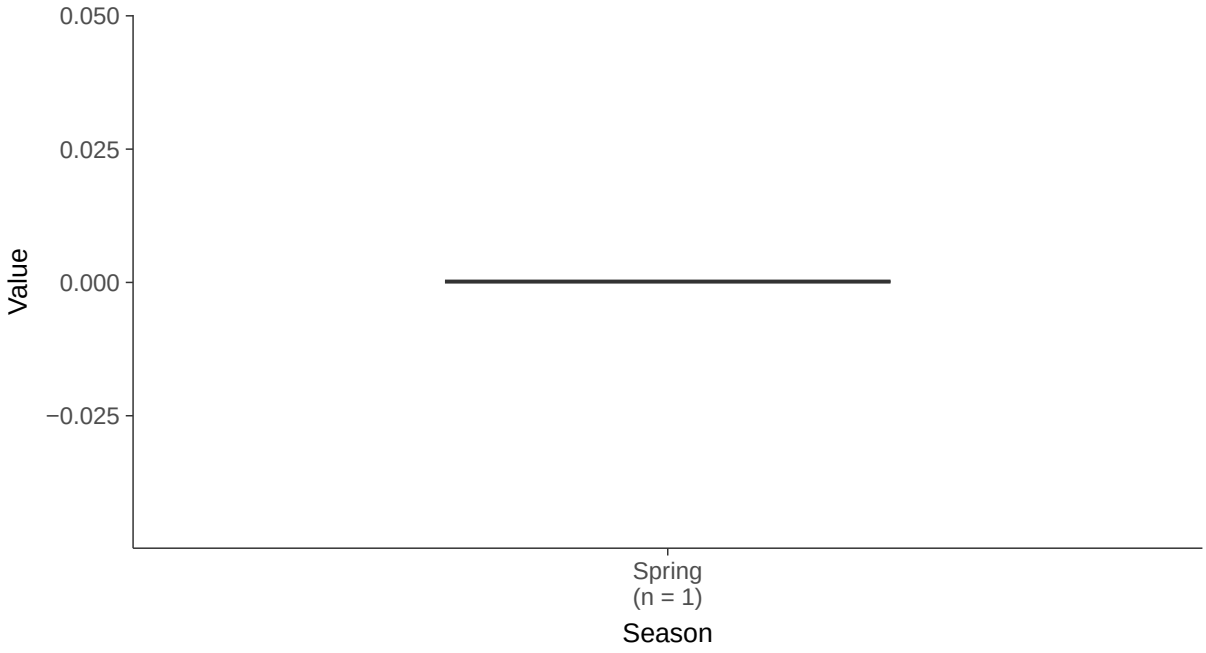
Boxplot

Mercury, MW-16 (mg/L)



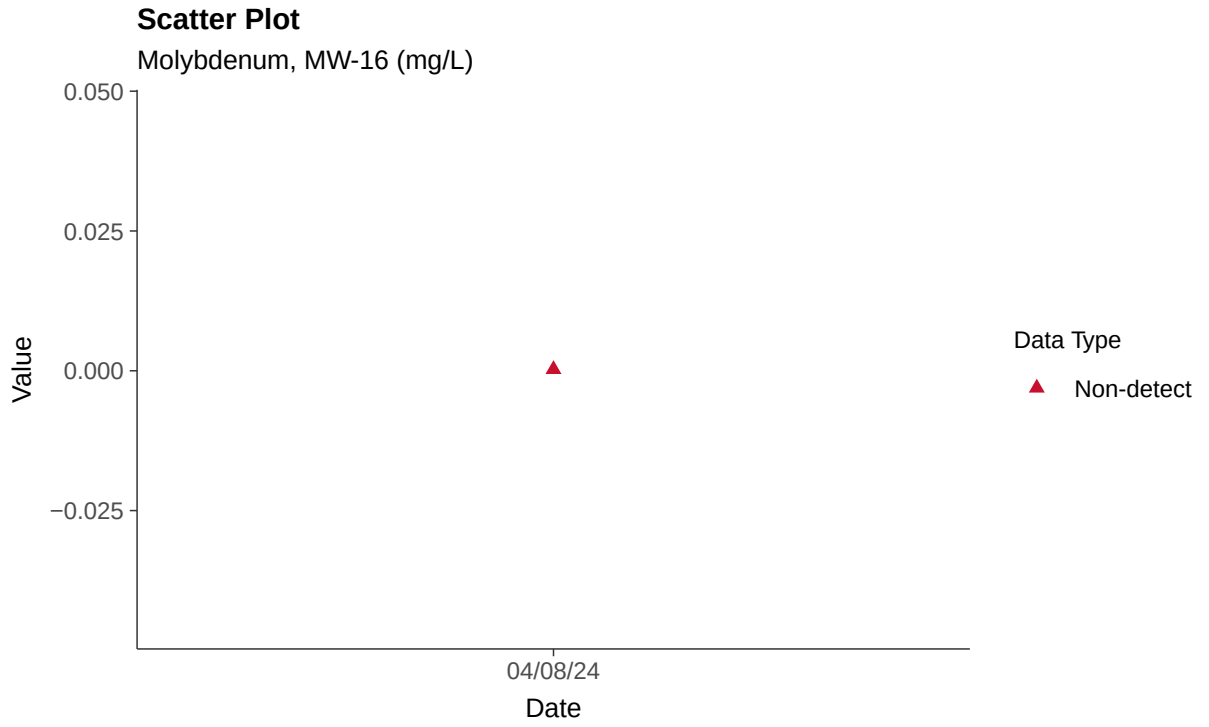
Boxplot by Season

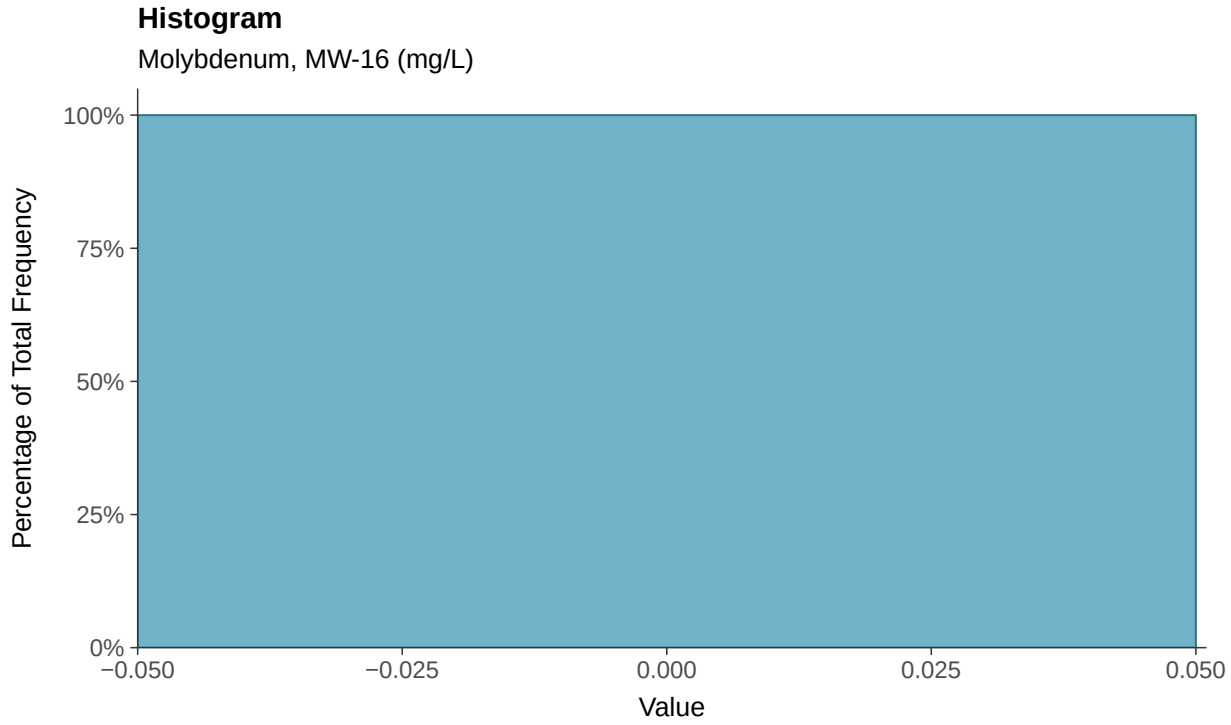
Mercury, MW-16 (mg/L)



Appendix IV: Molybdenum, MW-16

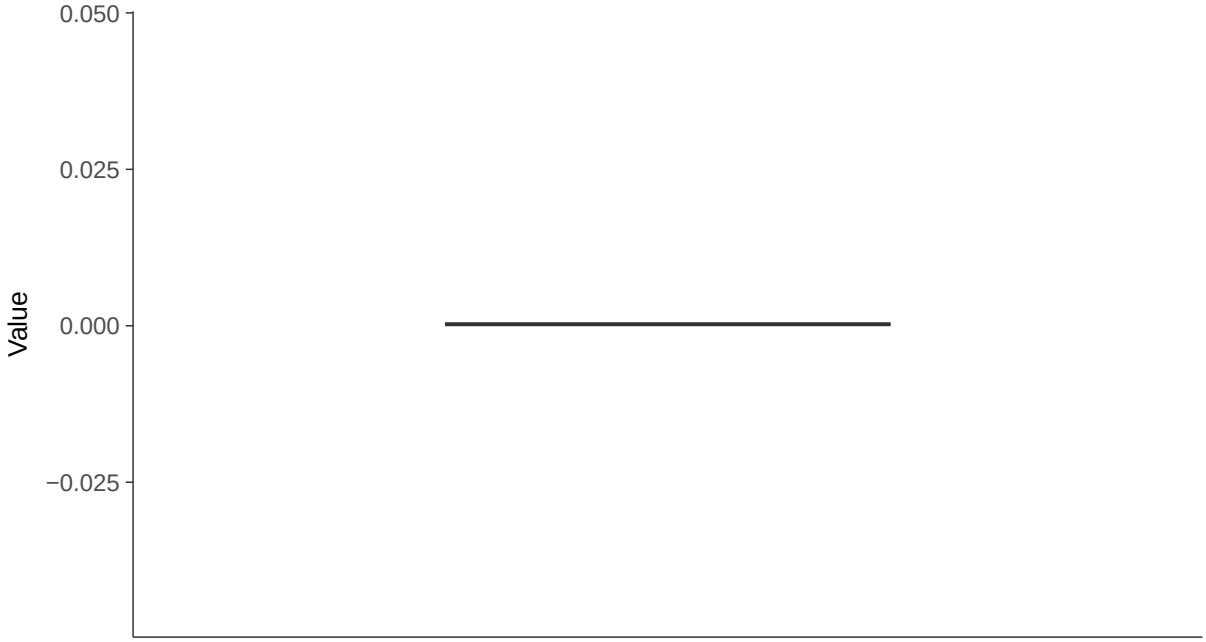
ID: 1_26_5_118





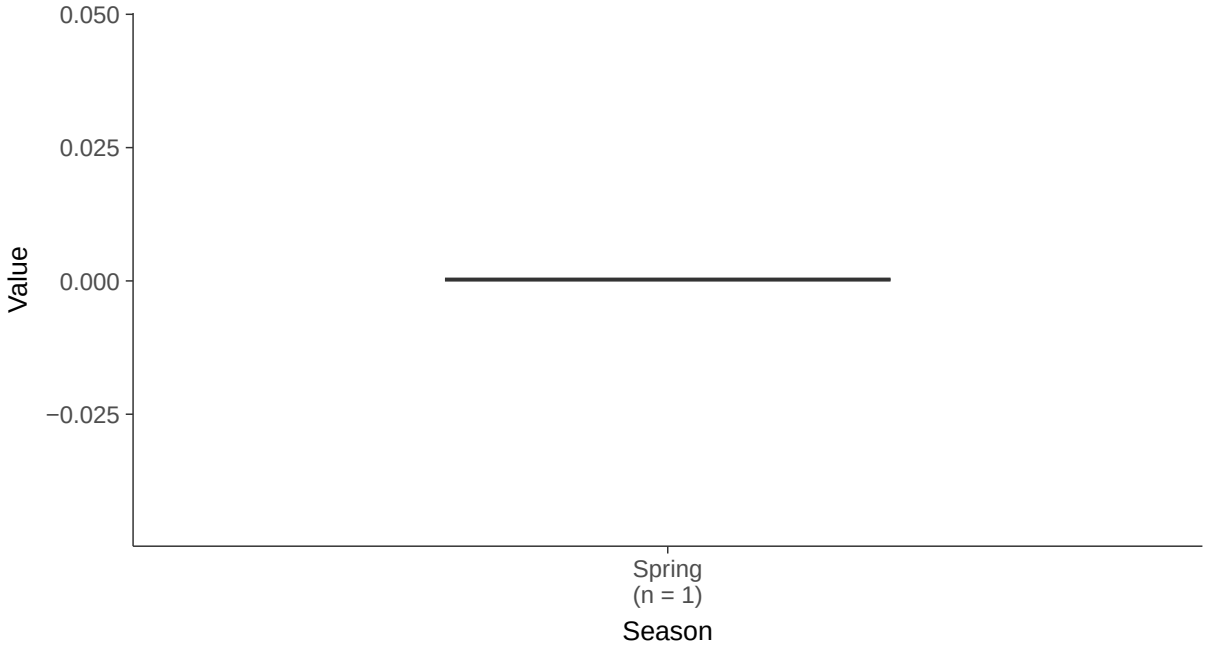
Boxplot

Molybdenum, MW-16 (mg/L)



Boxplot by Season

Molybdenum, MW-16 (mg/L)

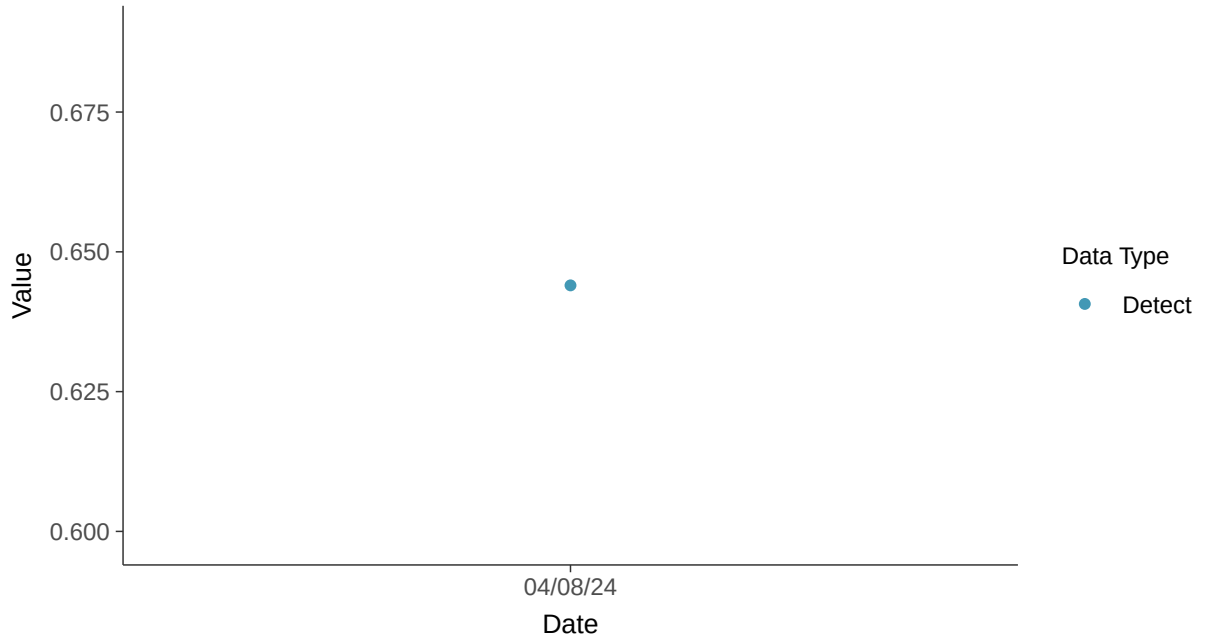


Appendix IV: Radium 226 and 228, MW-16

ID: 1_26_5_121

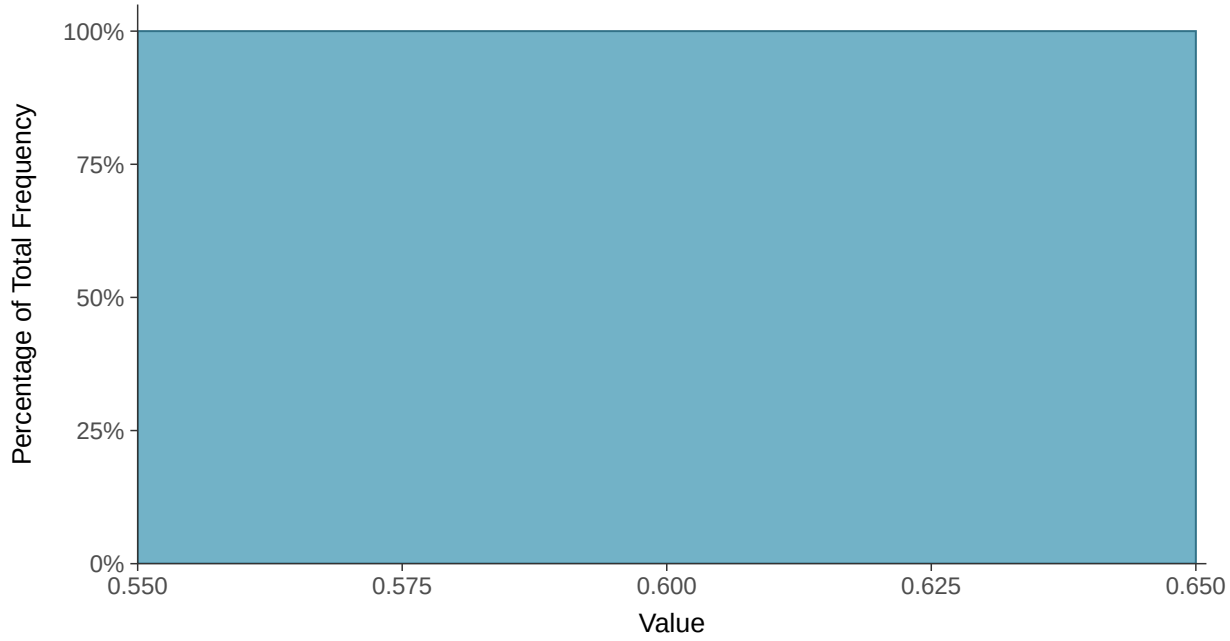
Scatter Plot

Radium 226 and 228, MW-16 (pCi/L)



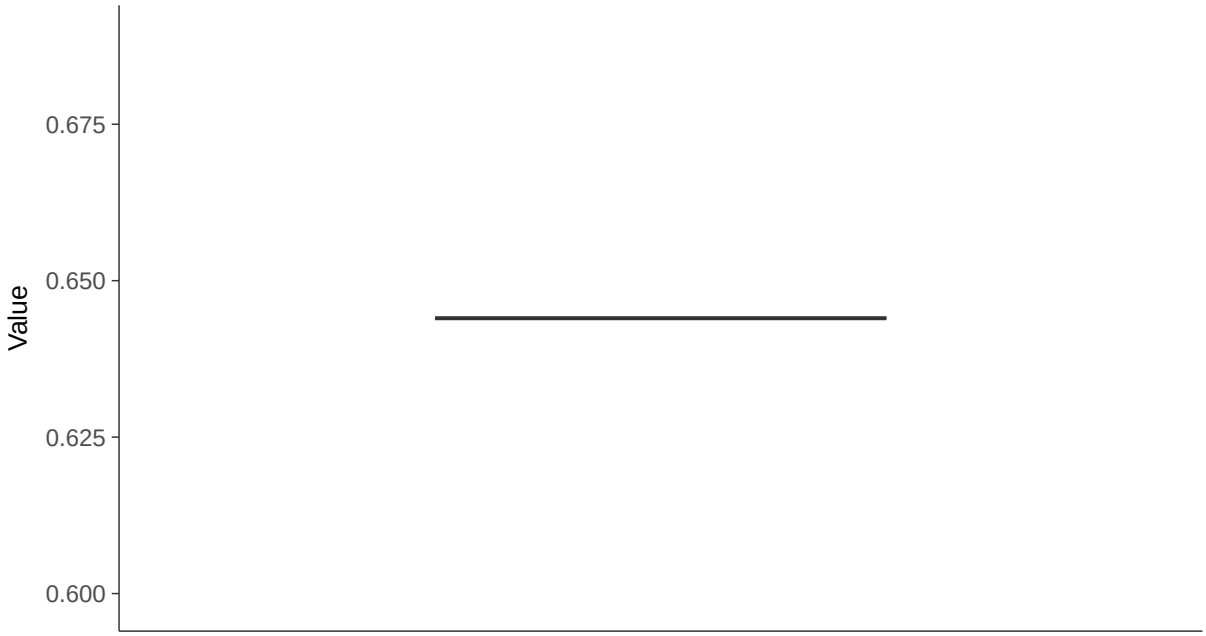
Histogram

Radium 226 and 228, MW-16 (pCi/L)



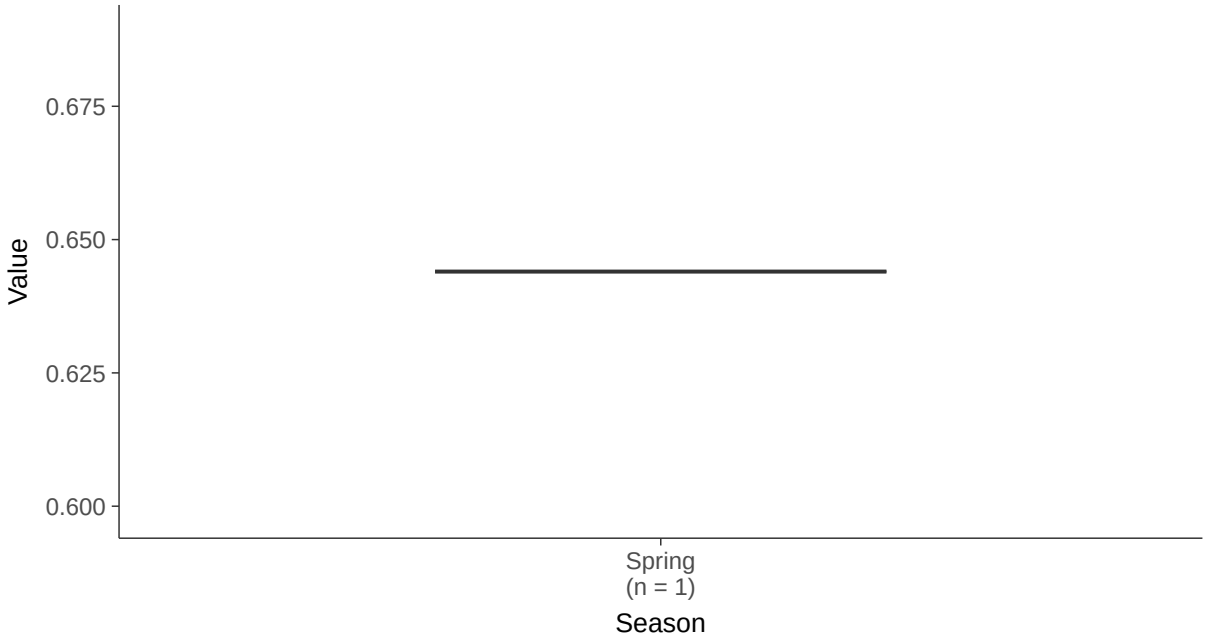
Boxplot

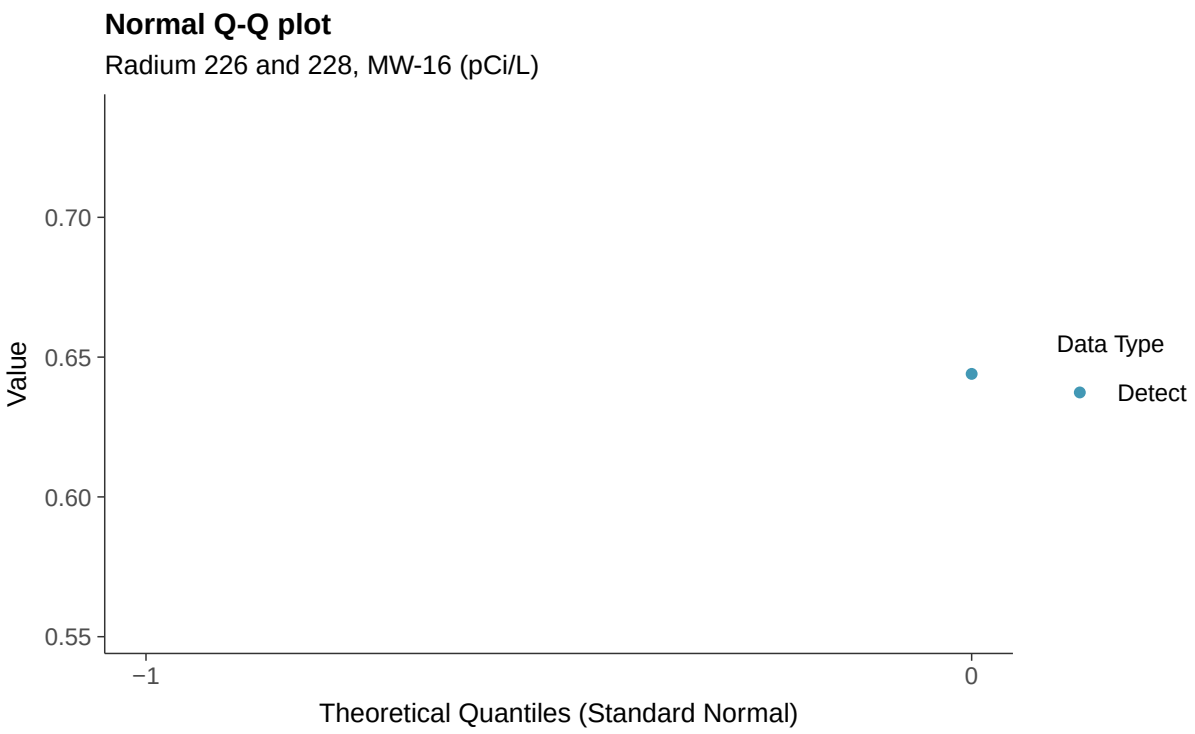
Radium 226 and 228, MW-16 (pCi/L)



Boxplot by Season

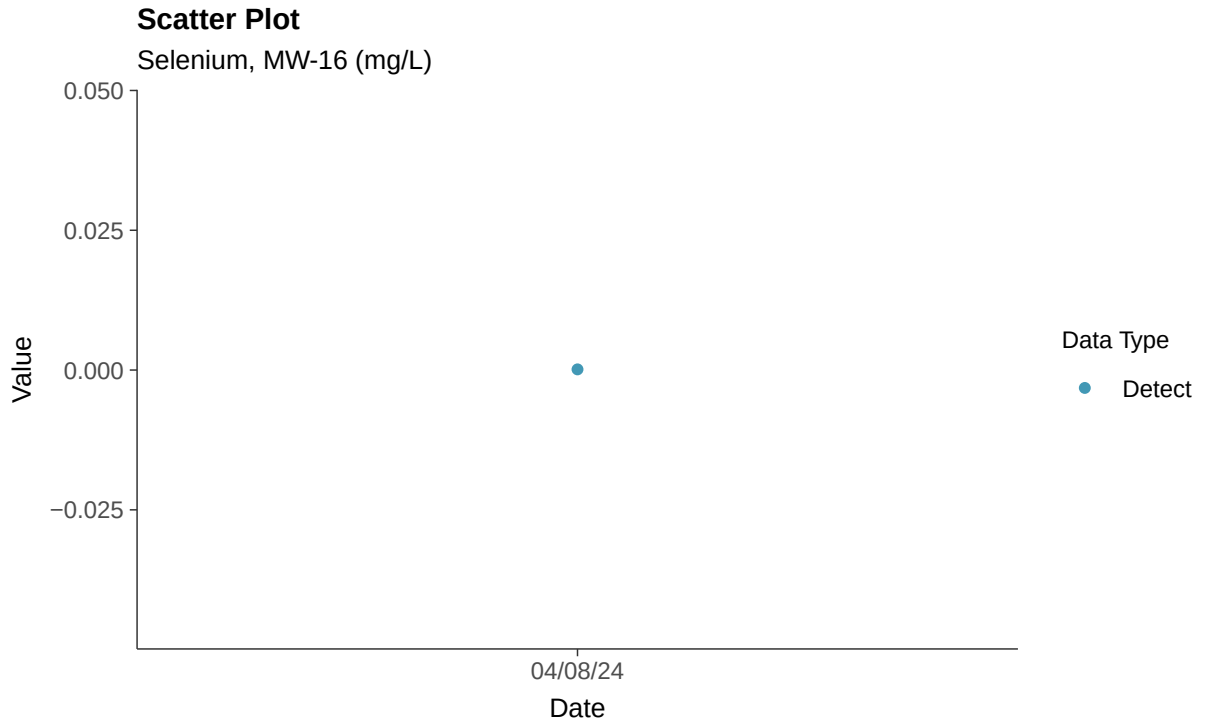
Radium 226 and 228, MW-16 (pCi/L)

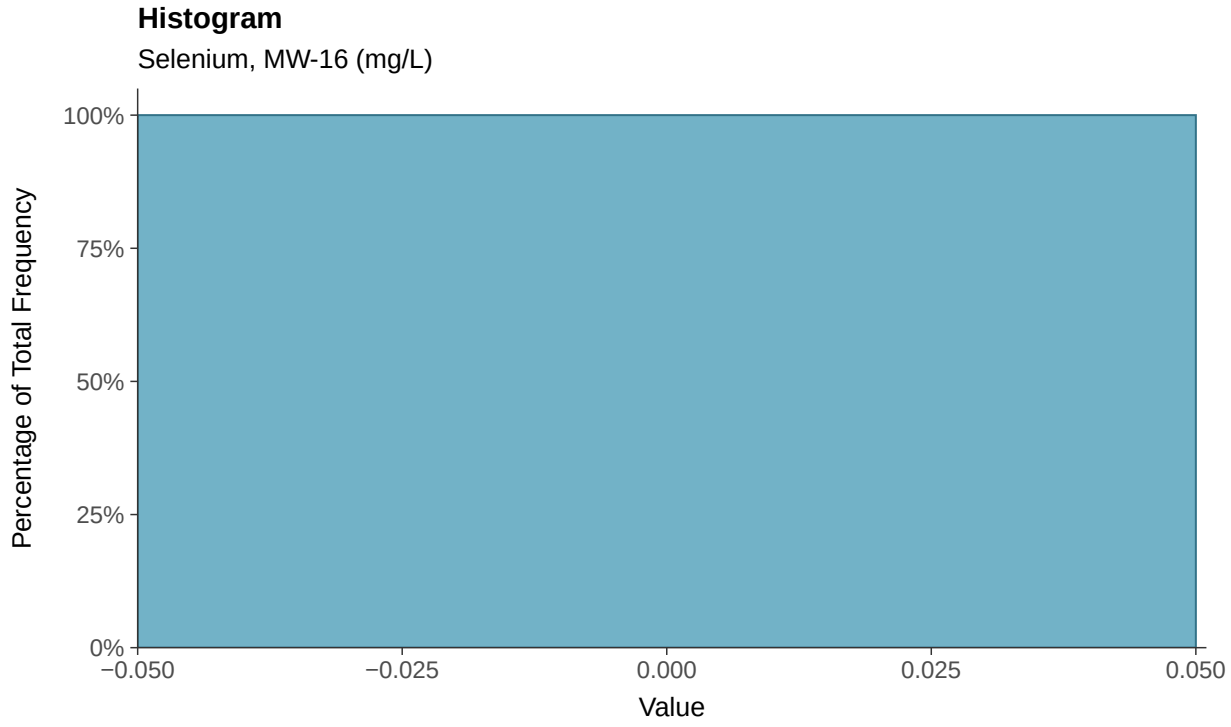



Normal Q-Q plot
Radium 226 and 228, MW-16 (pCi/L)
Value
0.70
0.65
0.60
0.55
−1
0
Theoretical Quantiles (Standard Normal)
Data Type
Detect

Appendix IV: Selenium, MW-16

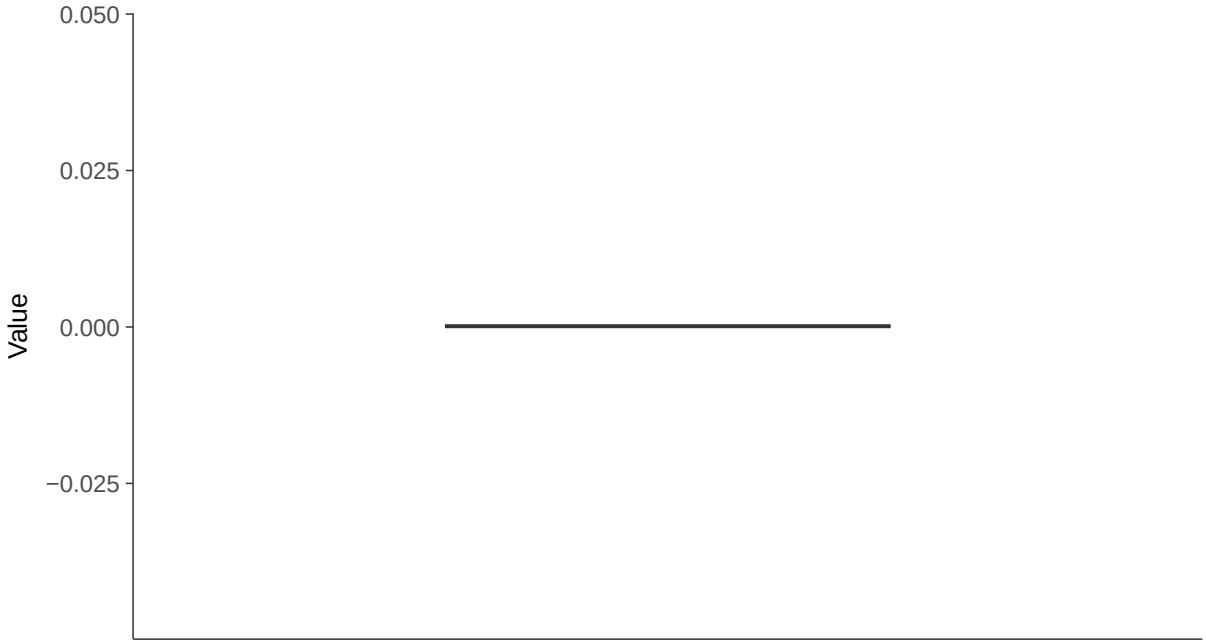
ID: 1_26_5_122





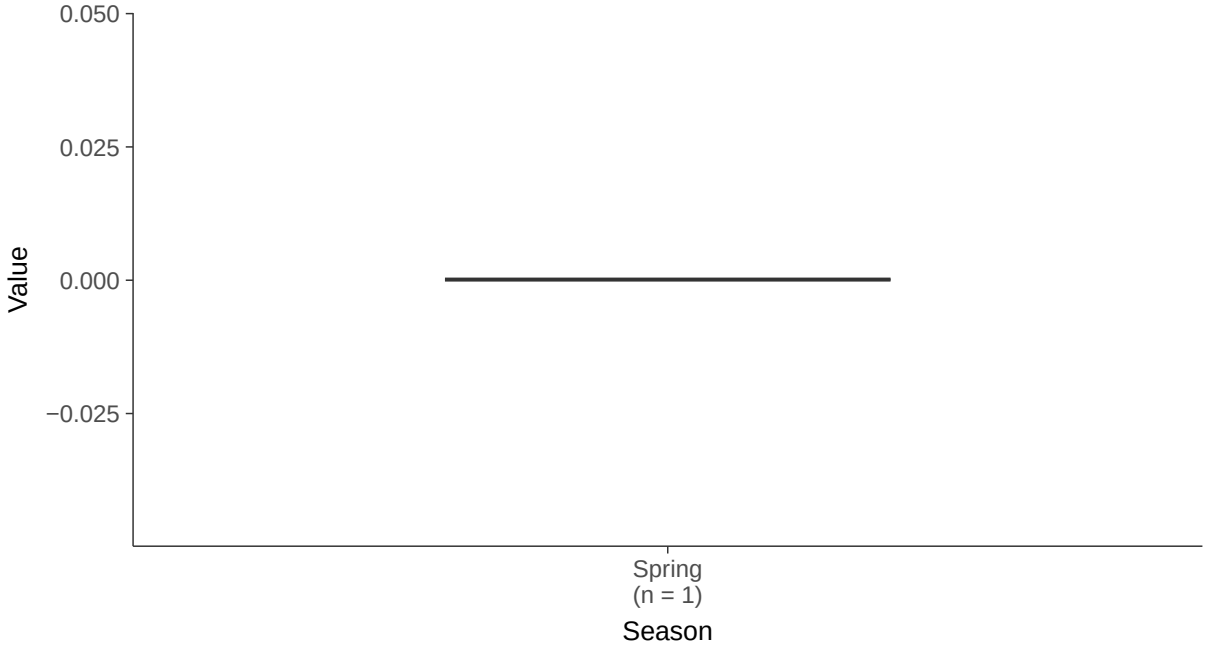
Boxplot

Selenium, MW-16 (mg/L)



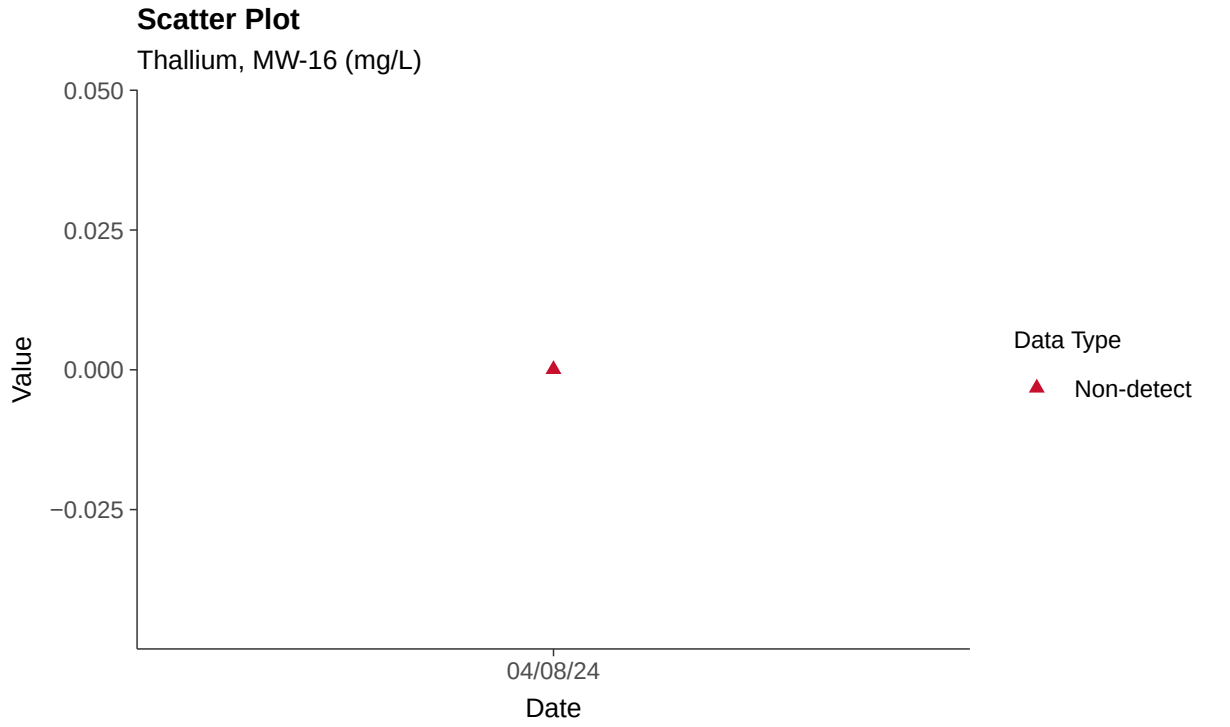
Boxplot by Season

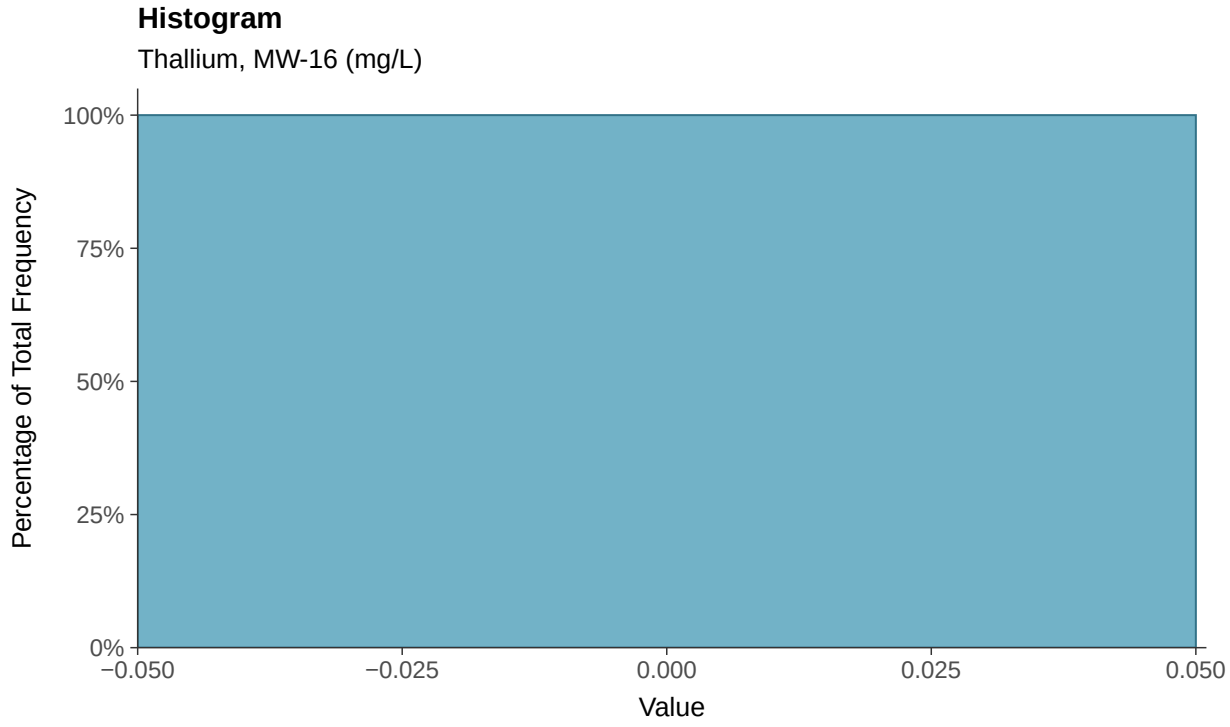
Selenium, MW-16 (mg/L)



Appendix IV: Thallium, MW-16

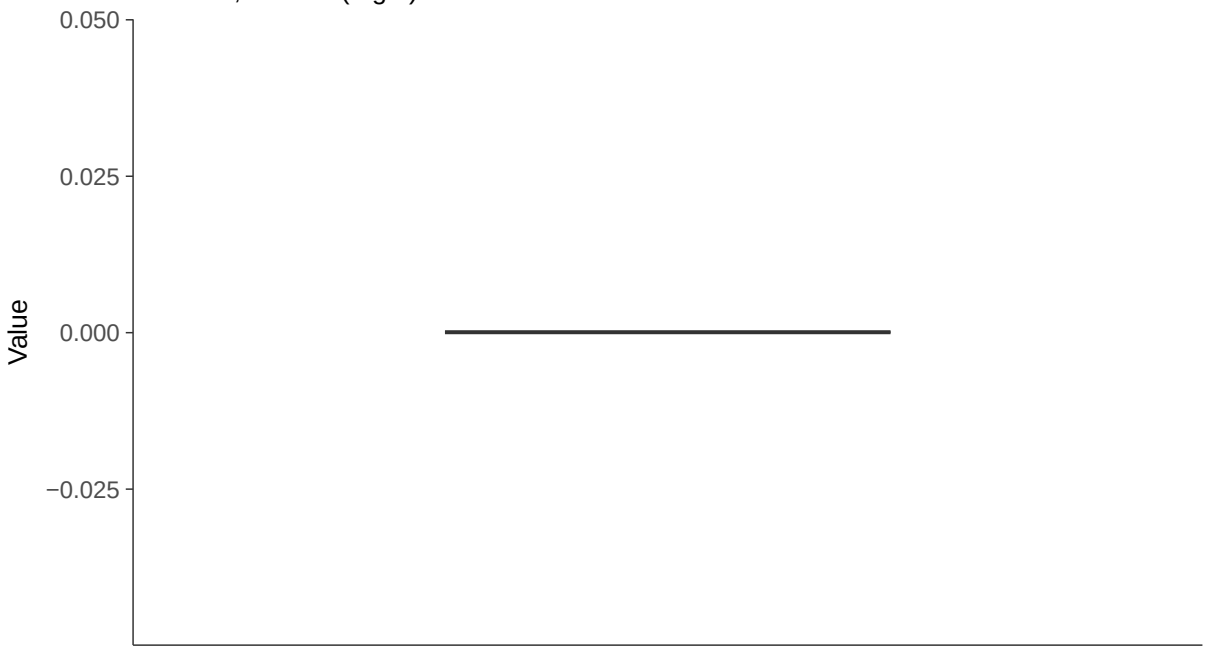
ID: 1_26_5_125





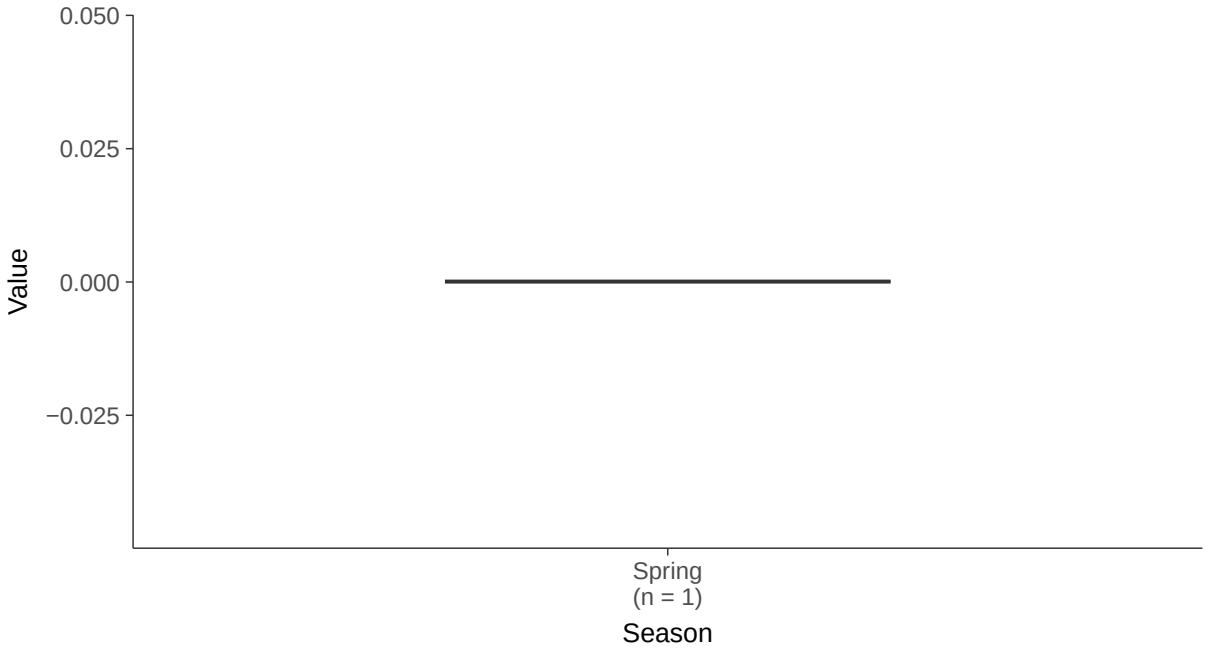
Boxplot

Thallium, MW-16 (mg/L)



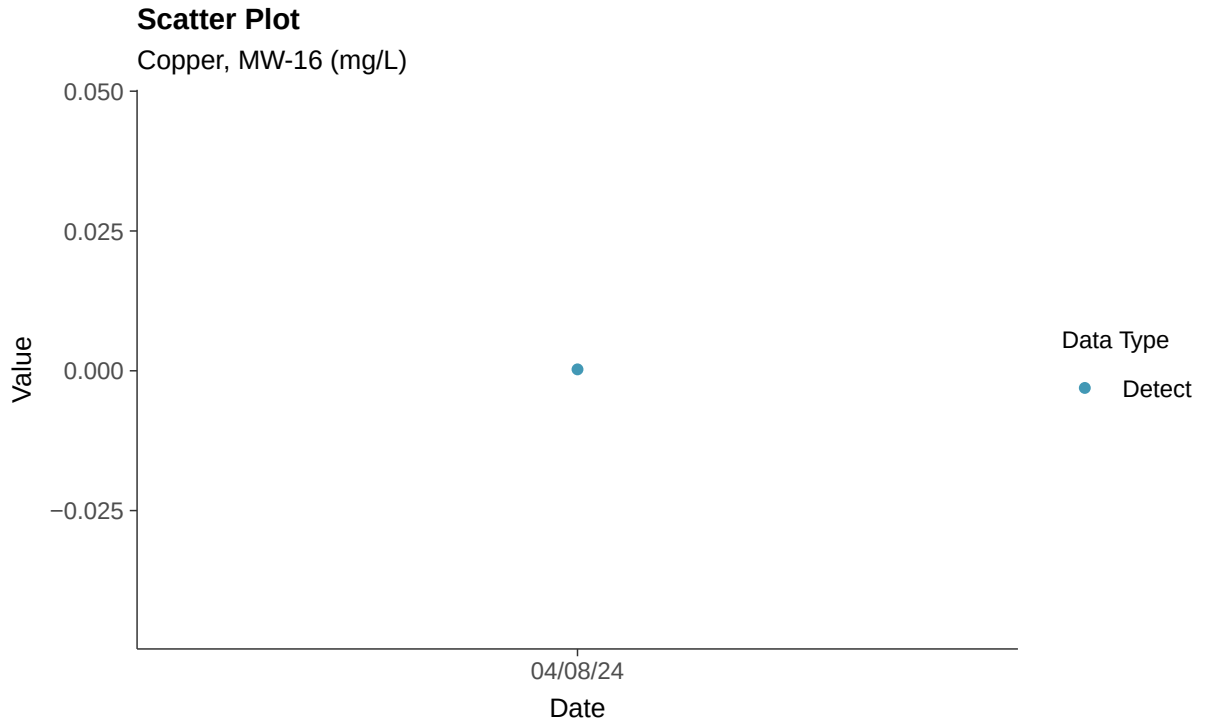
Boxplot by Season

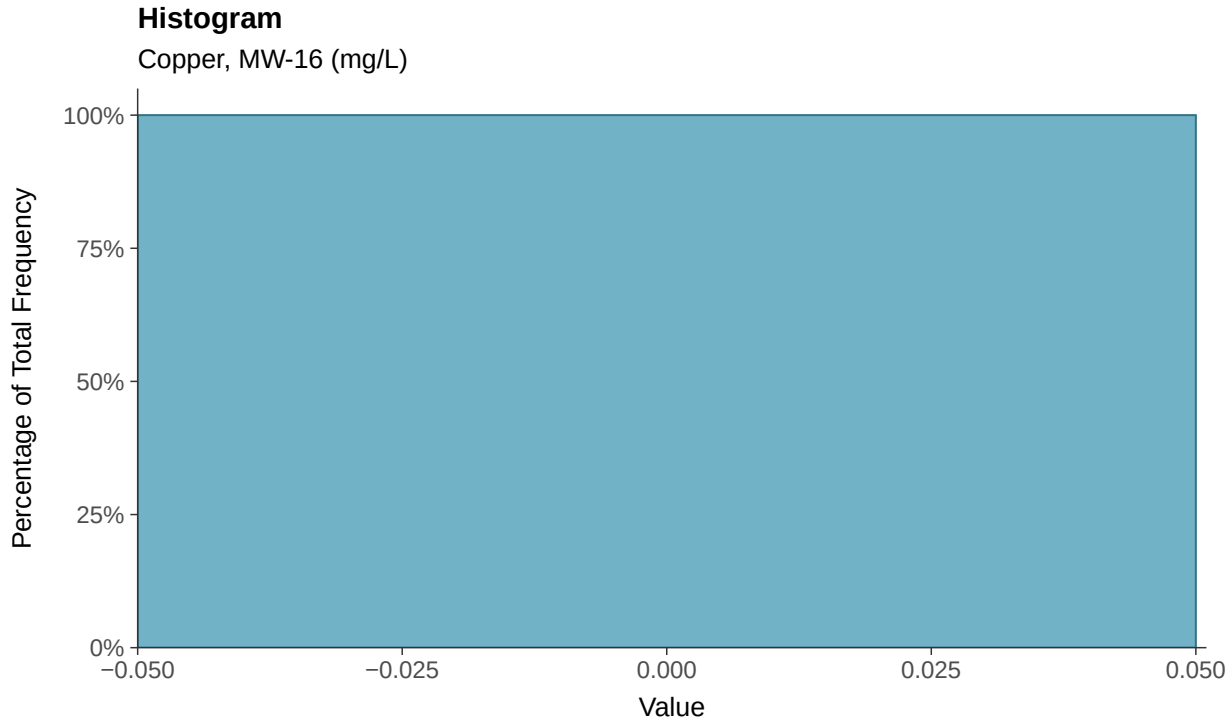
Thallium, MW-16 (mg/L)



Part 115: Copper, MW-16

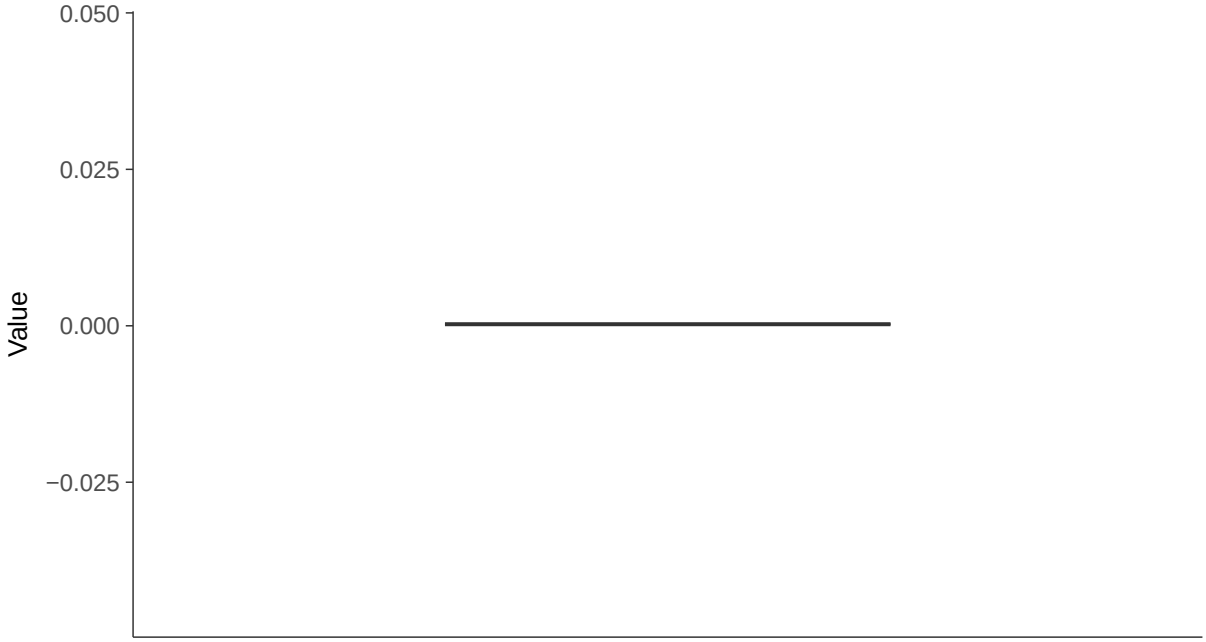
ID: 1_26_6_111





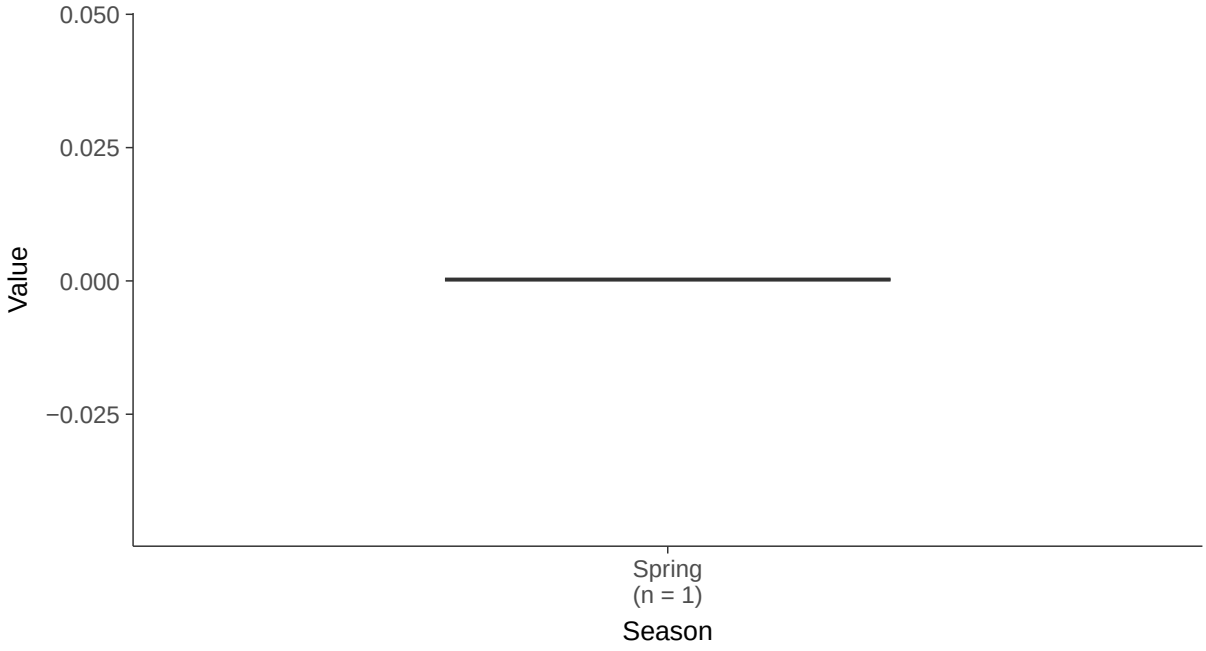
Boxplot

Copper, MW-16 (mg/L)



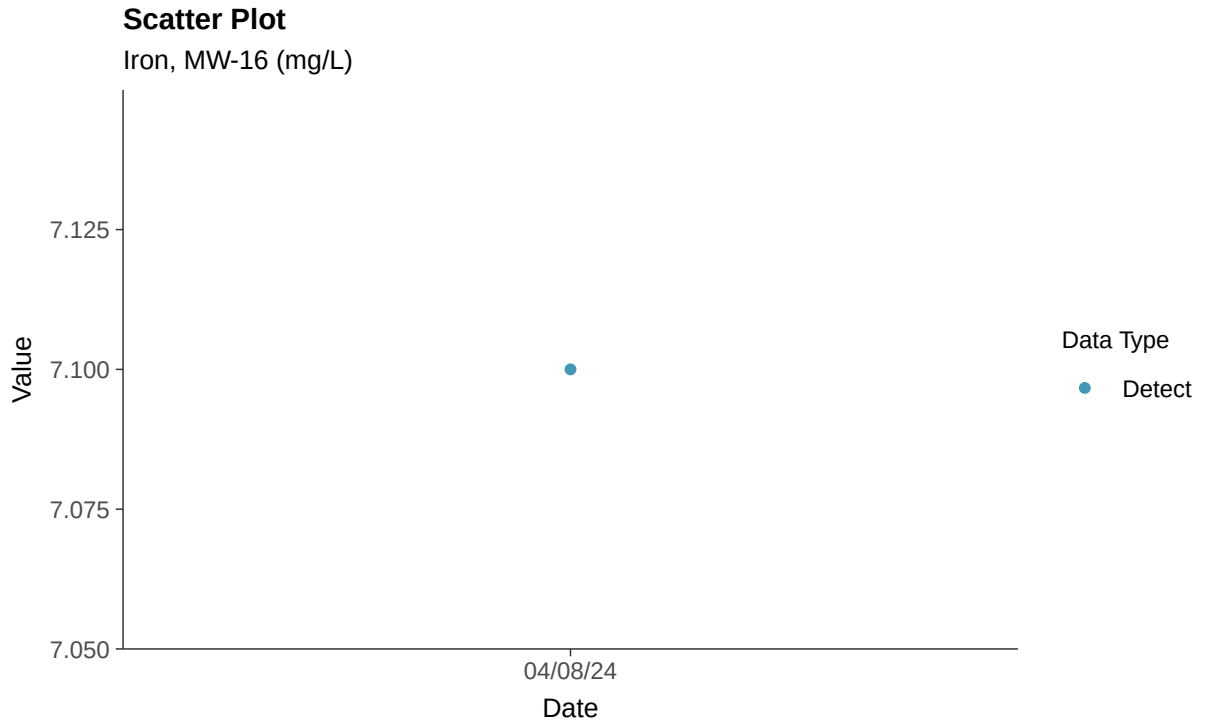
Boxplot by Season

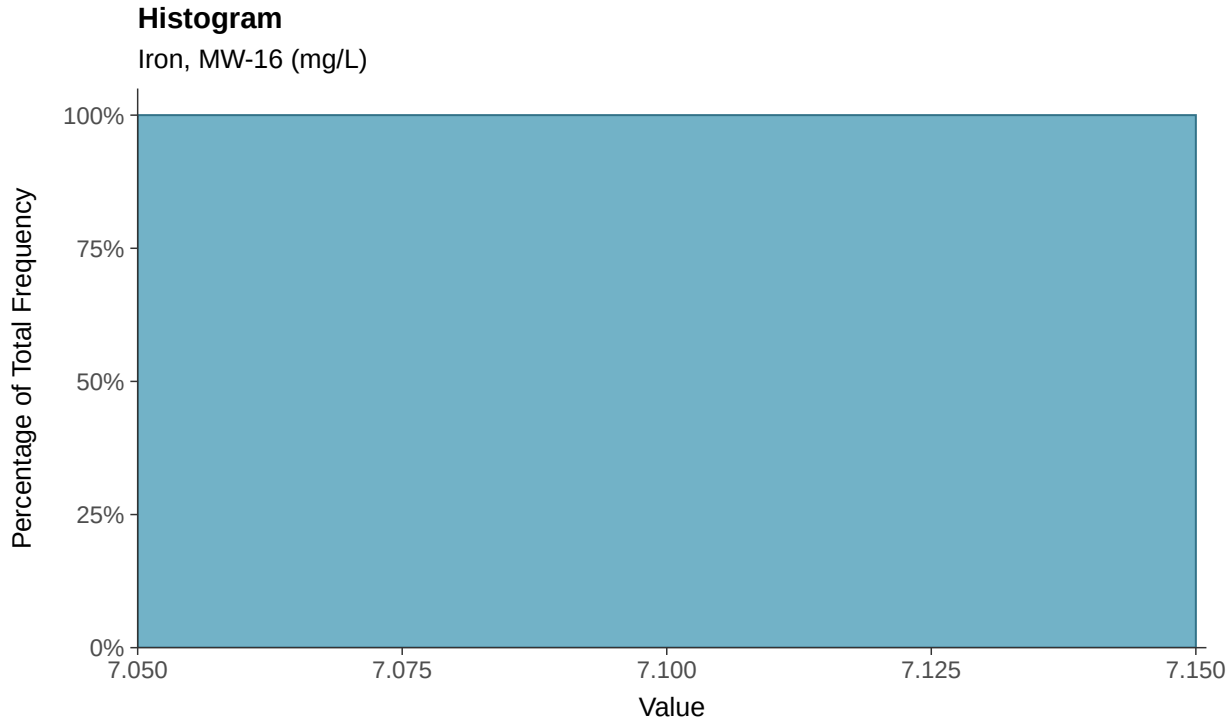
Copper, MW-16 (mg/L)



Part 115: Iron, MW-16

ID: 1_26_6_114



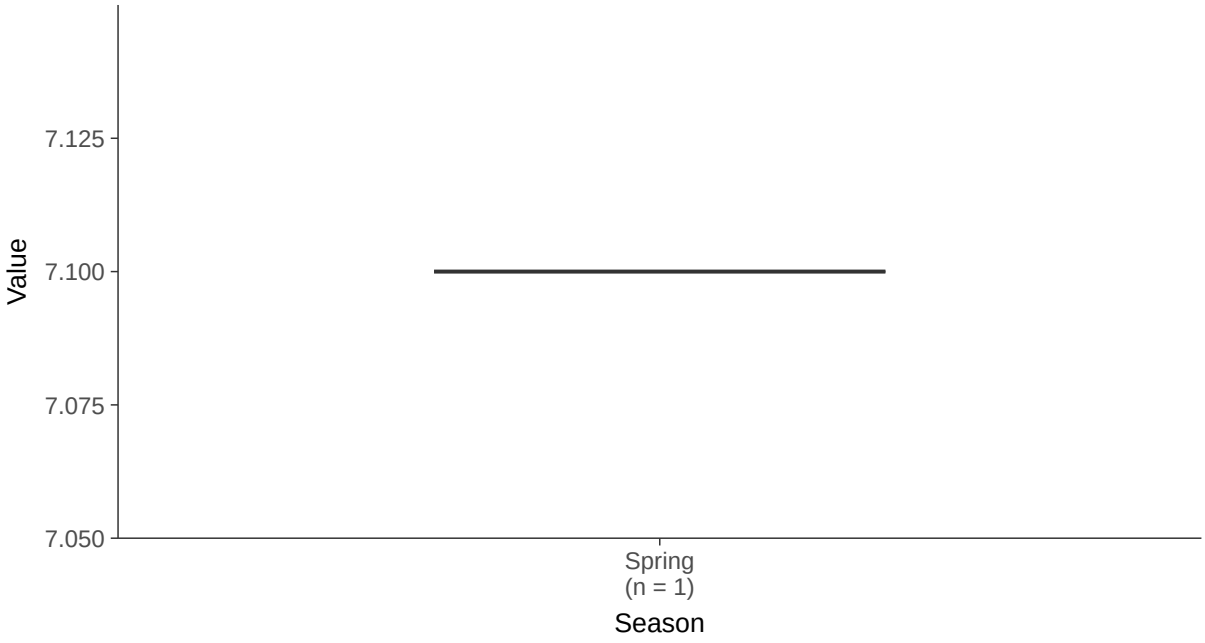


Boxplot

Iron, MW-16 (mg/L)

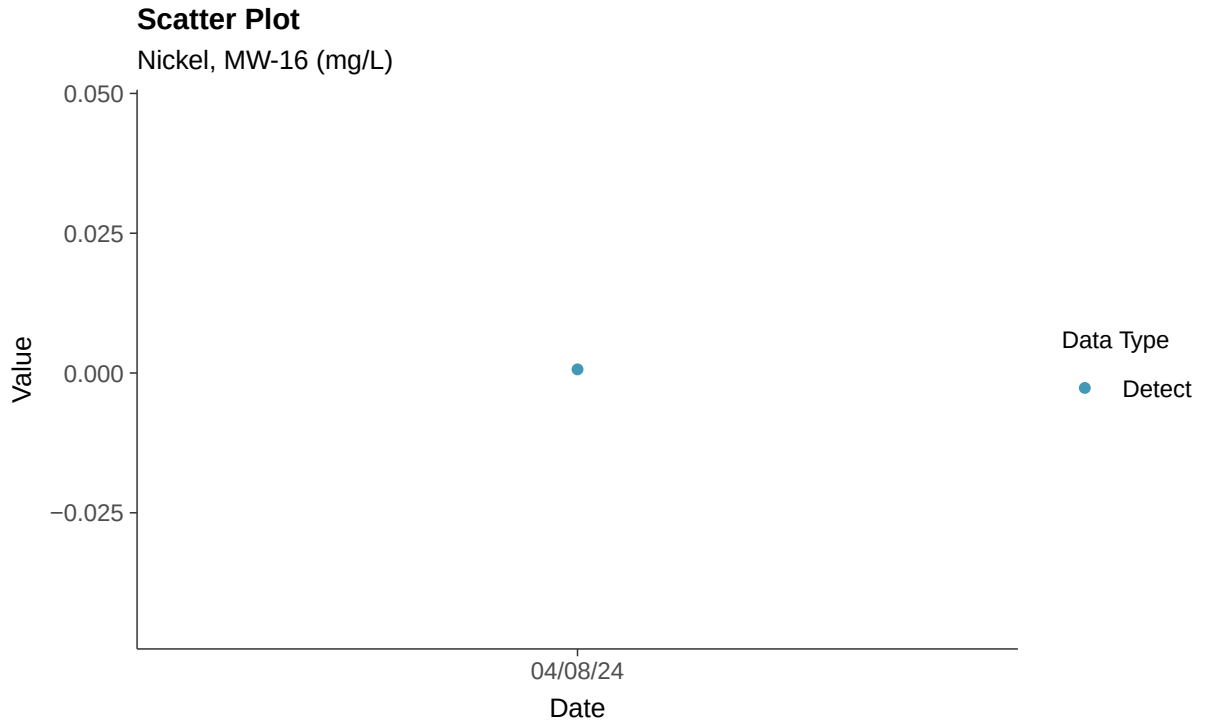
Boxplot by Season

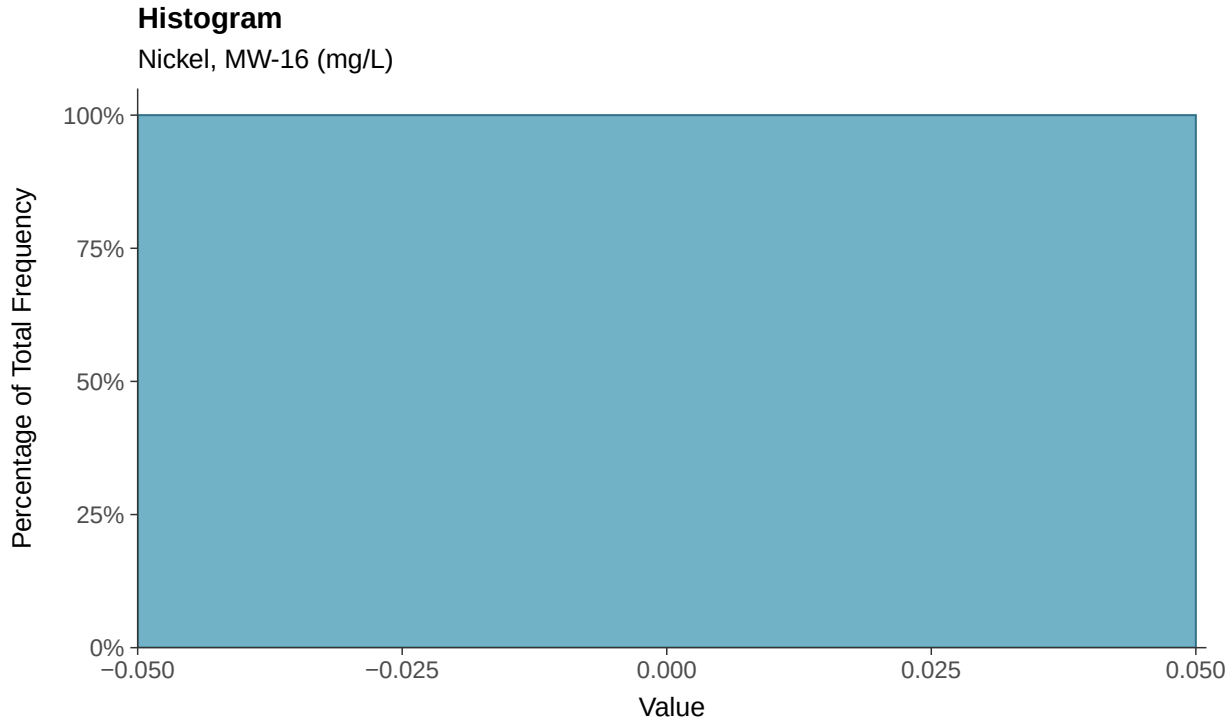
Iron, MW-16 (mg/L)



Part 115: Nickel, MW-16

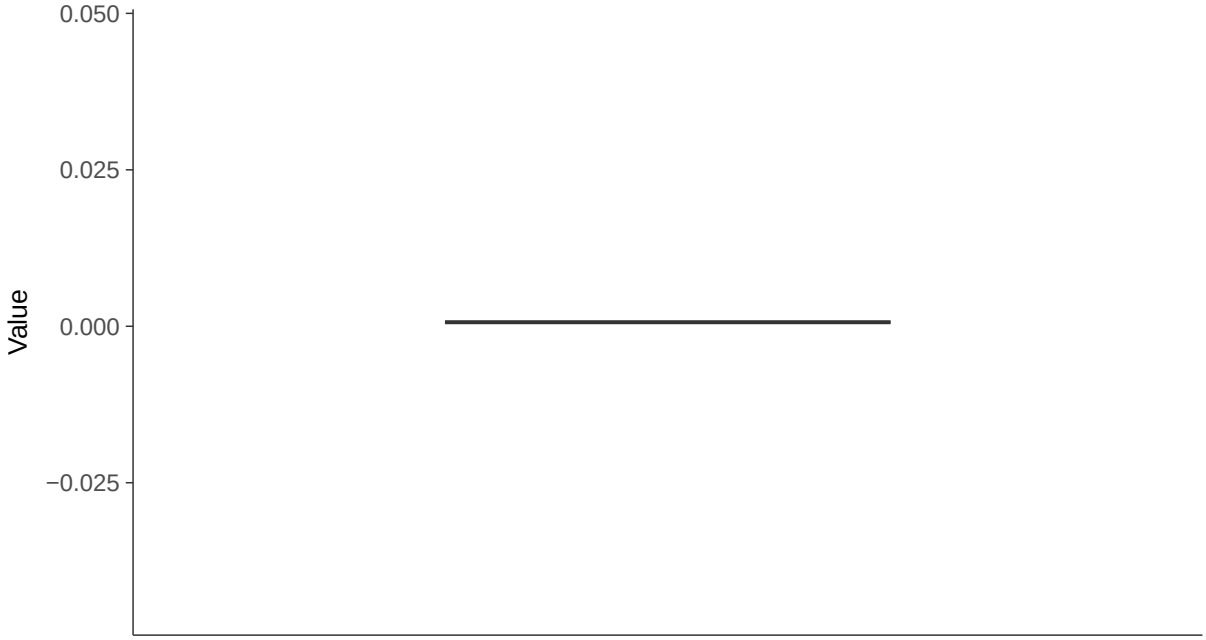
ID: 1_26_6_119





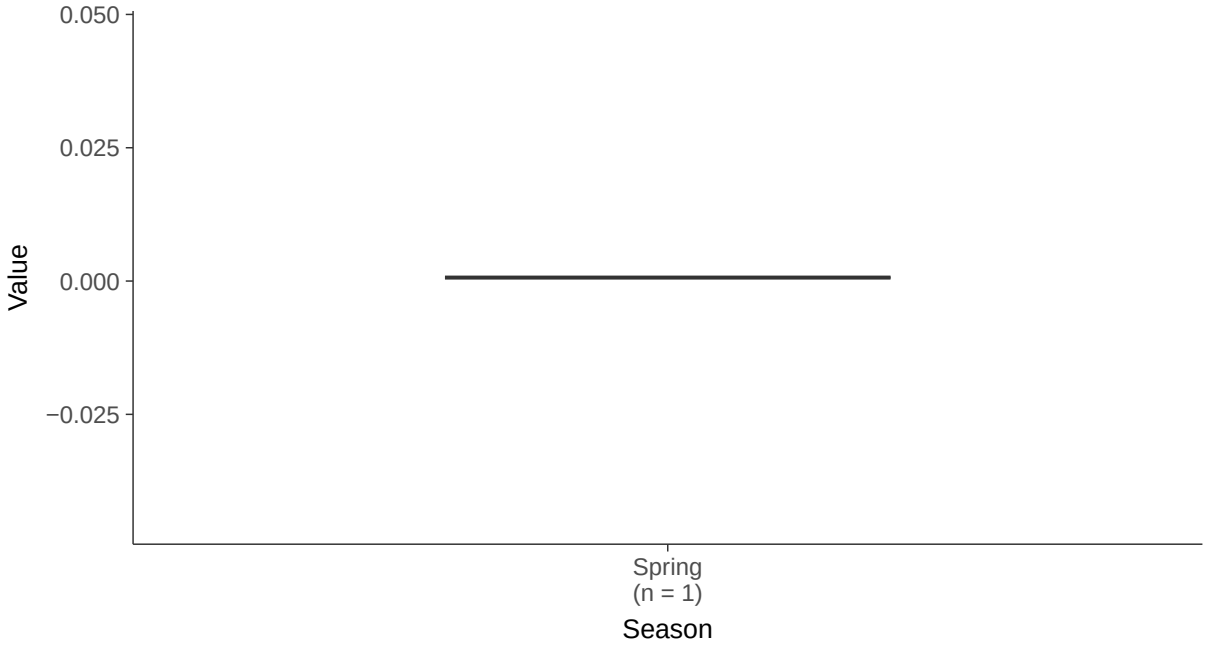
Boxplot

Nickel, MW-16 (mg/L)



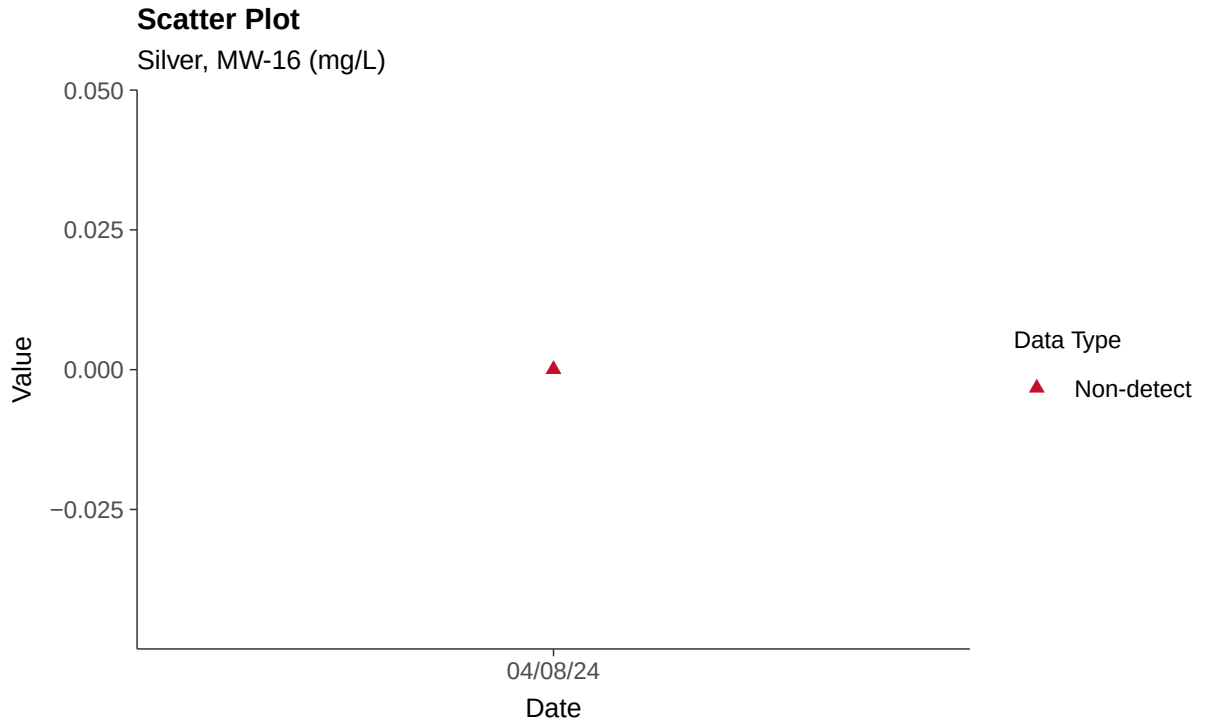
Boxplot by Season

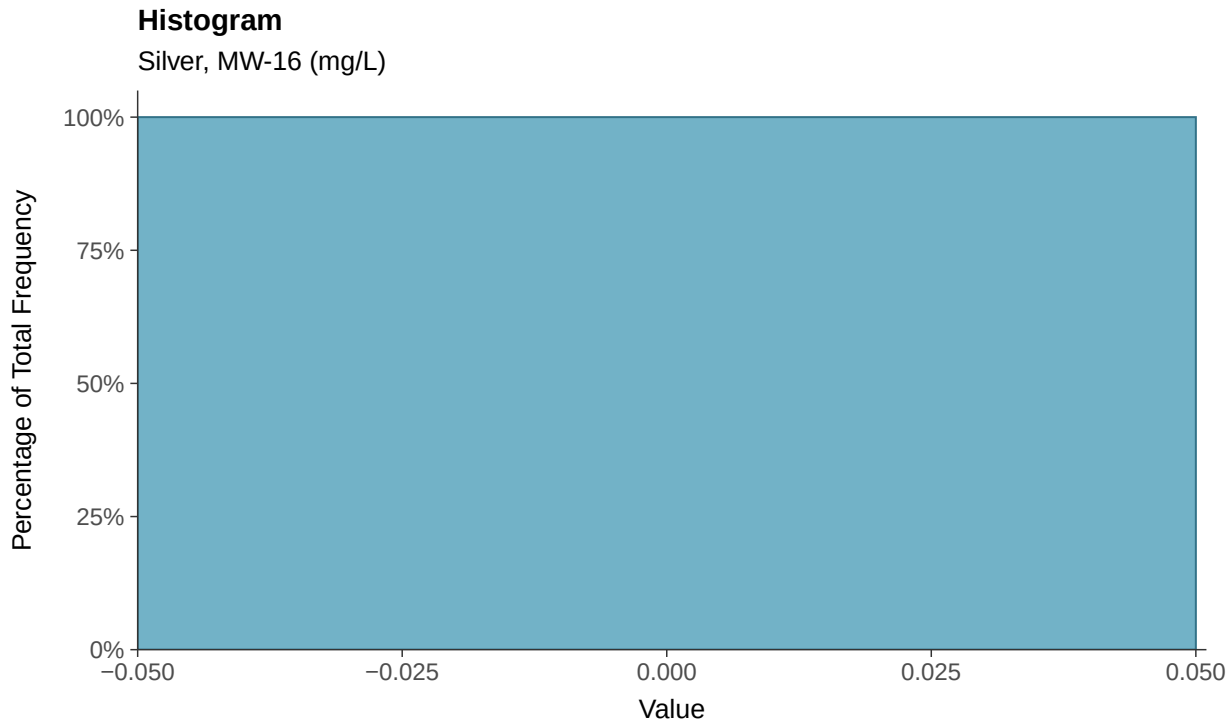
Nickel, MW-16 (mg/L)



Part 115: Silver, MW-16

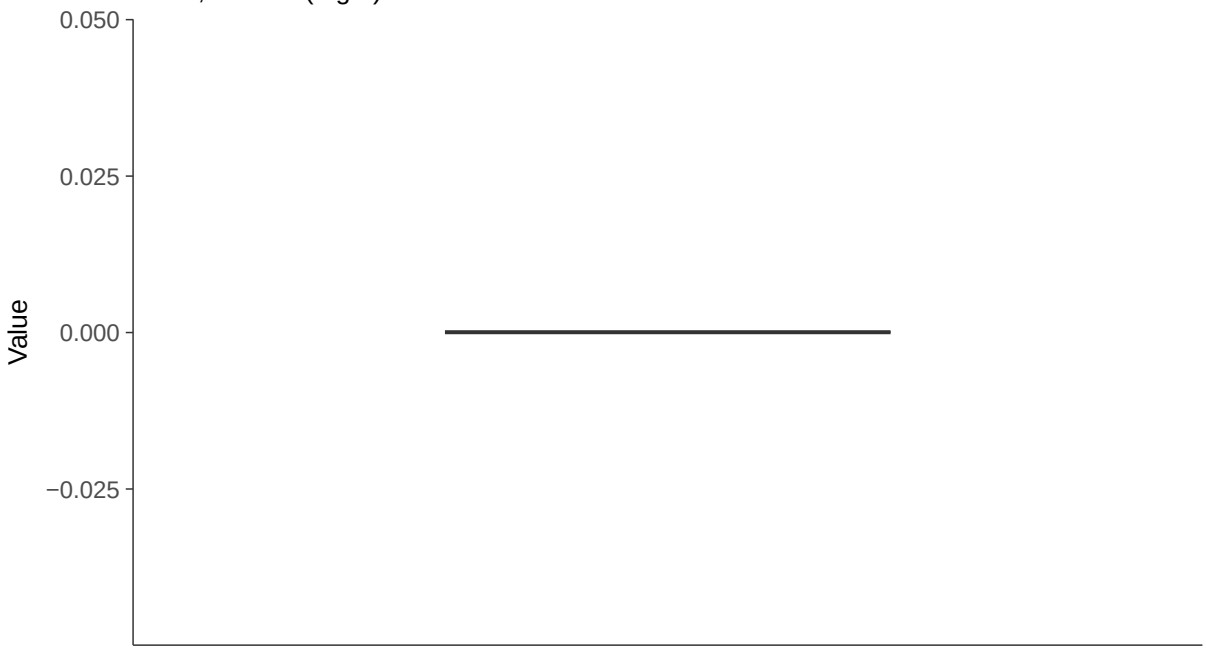
ID: 1_26_6_123





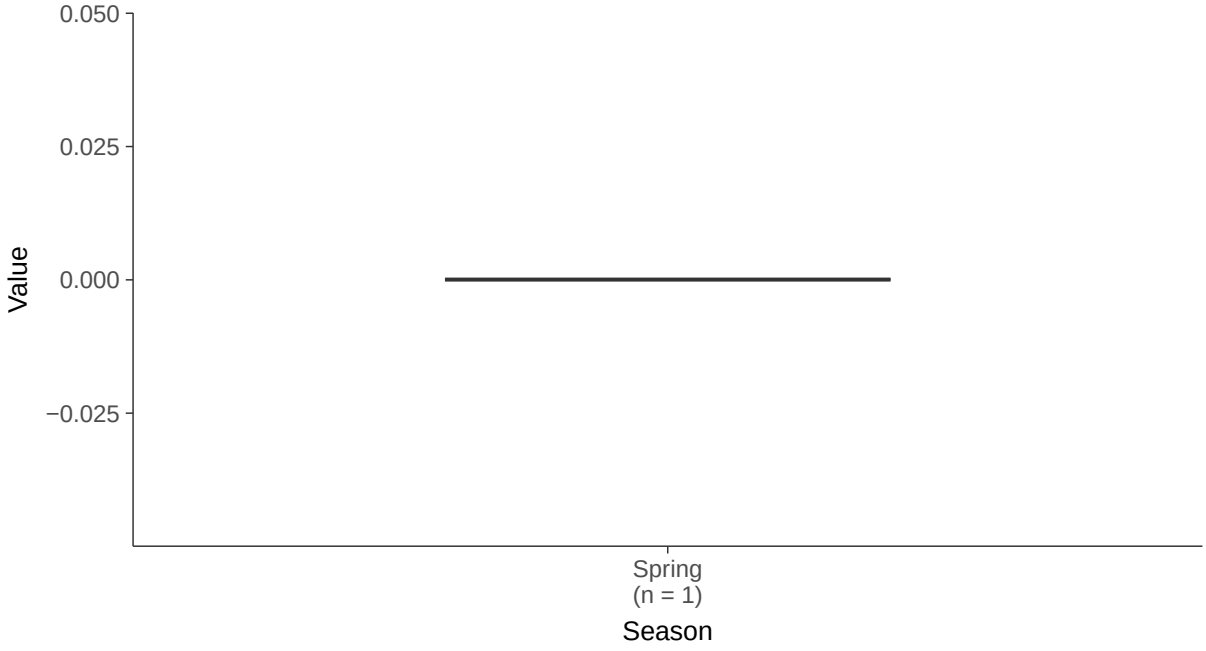
Boxplot

Silver, MW-16 (mg/L)



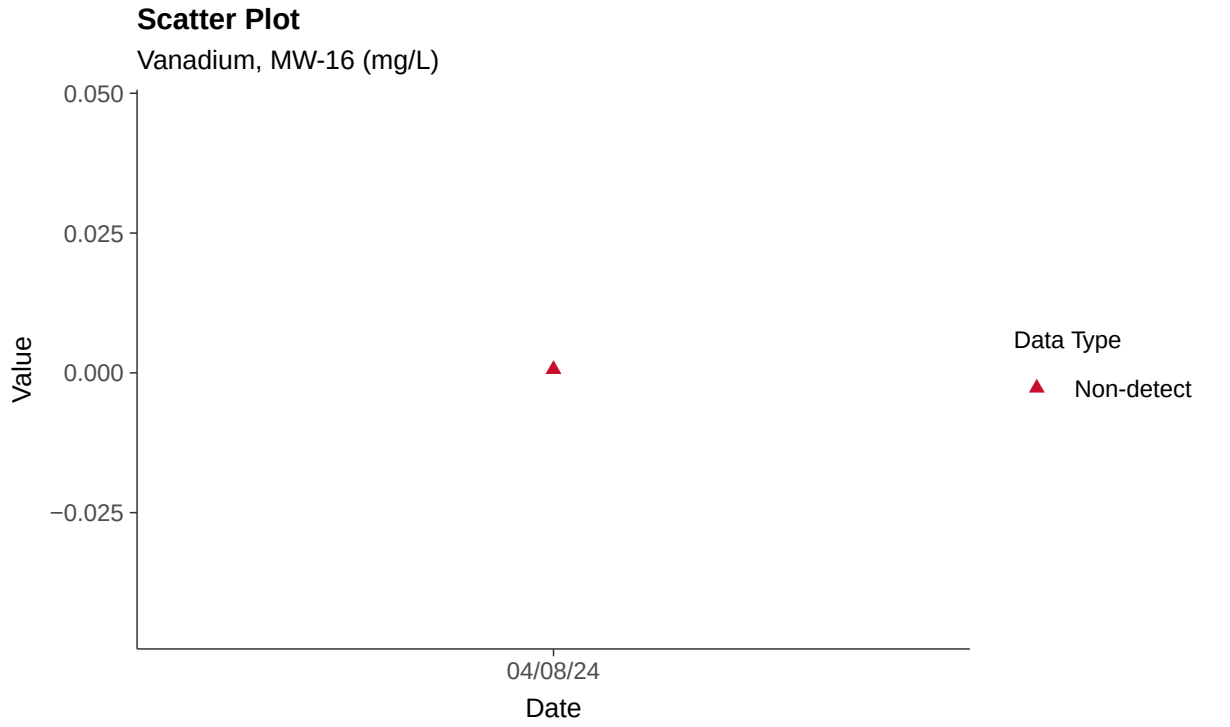
Boxplot by Season

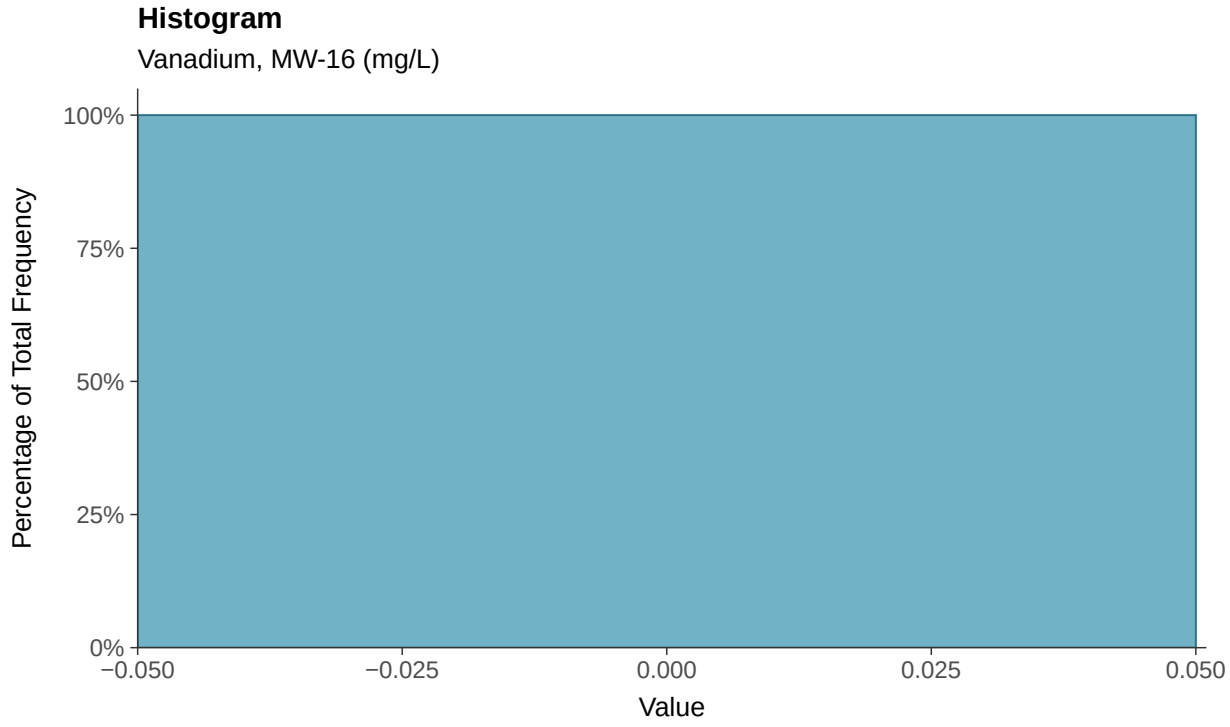
Silver, MW-16 (mg/L)



Part 115: Vanadium, MW-16

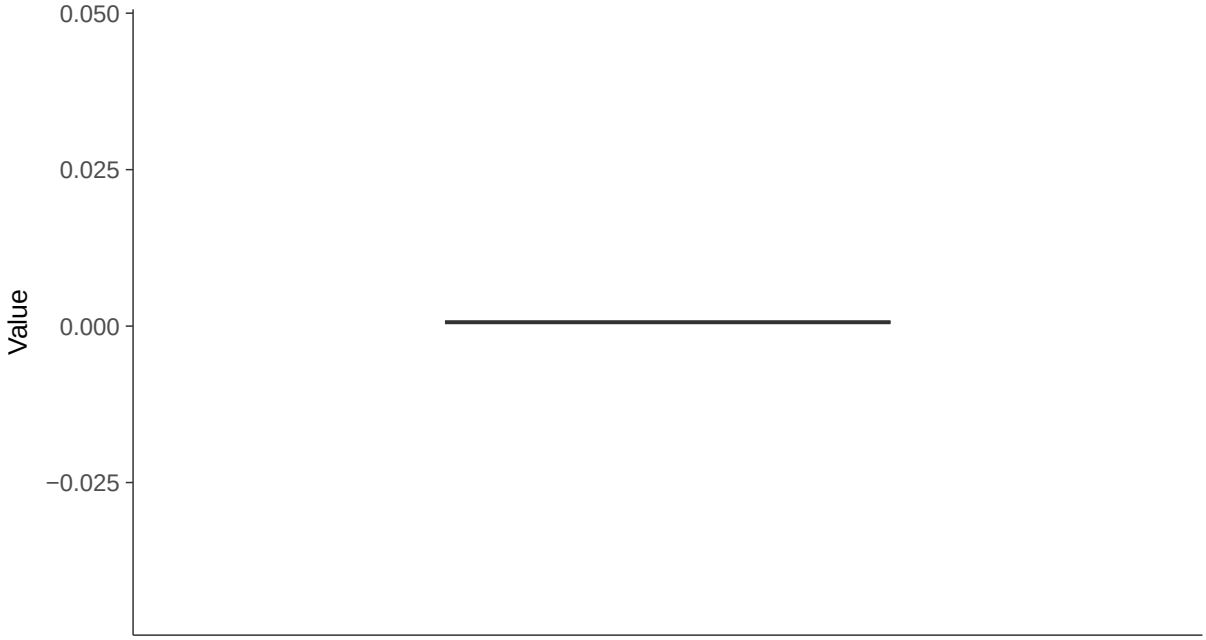
ID: 1_26_6_129





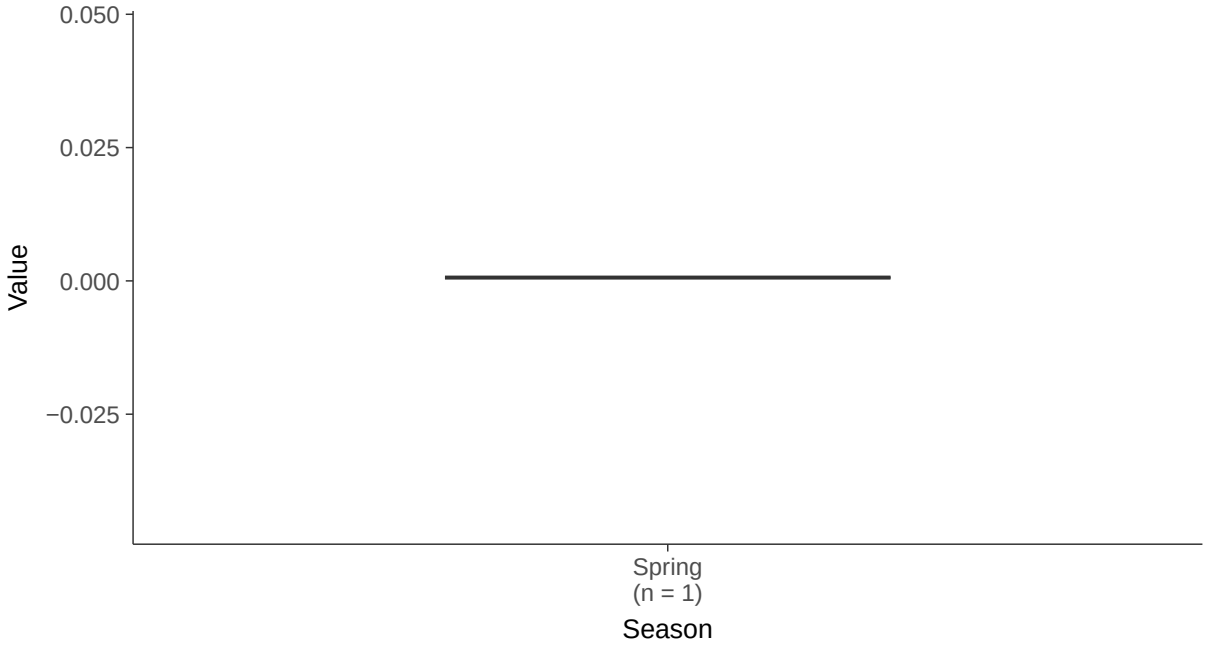
Boxplot

Vanadium, MW-16 (mg/L)



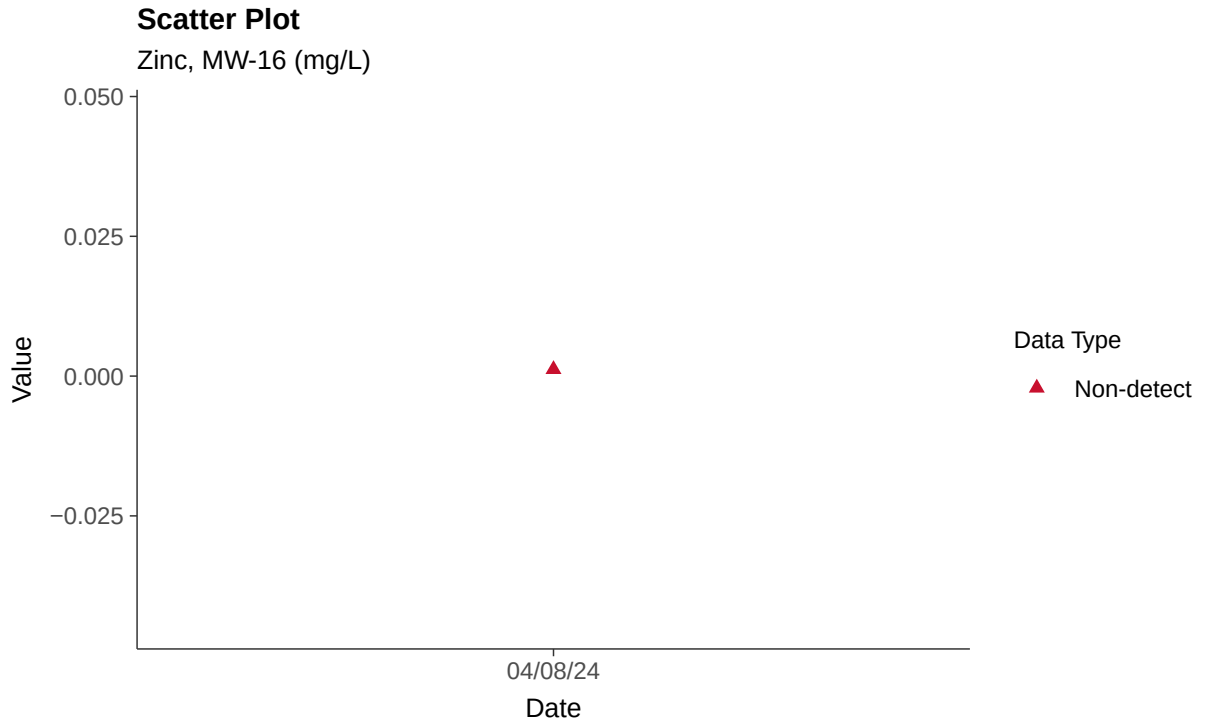
Boxplot by Season

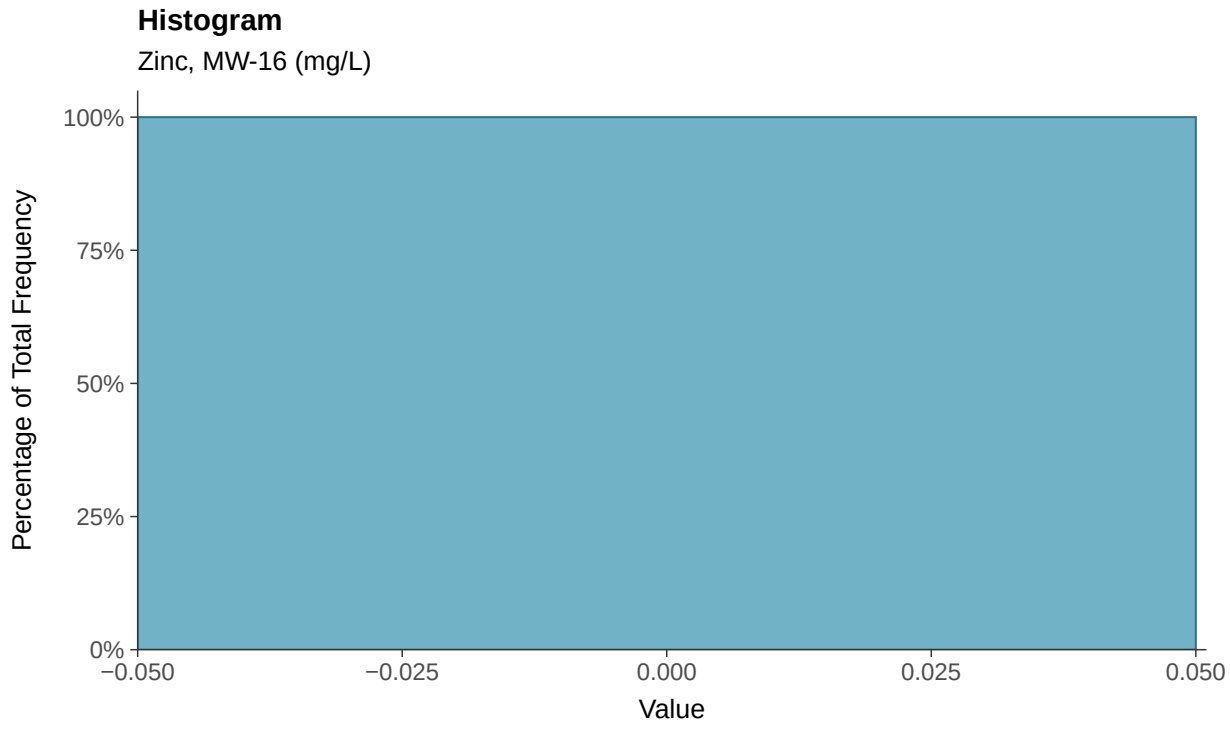
Vanadium, MW-16 (mg/L)



Part 115: Zinc, MW-16

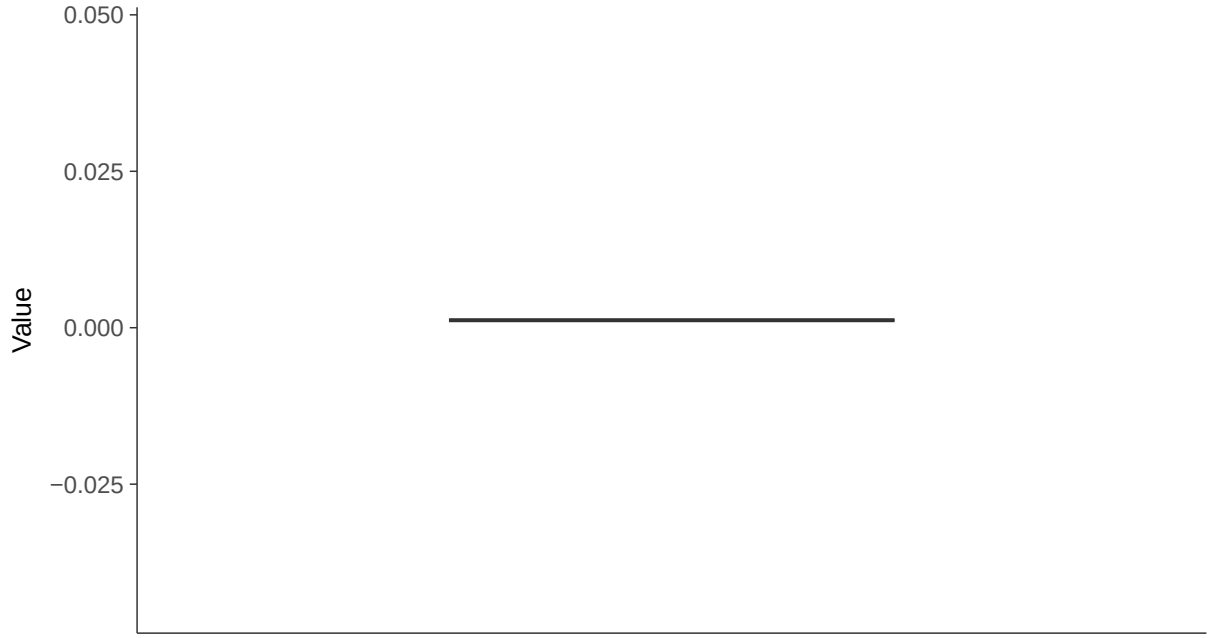
ID: 1_26_6_130





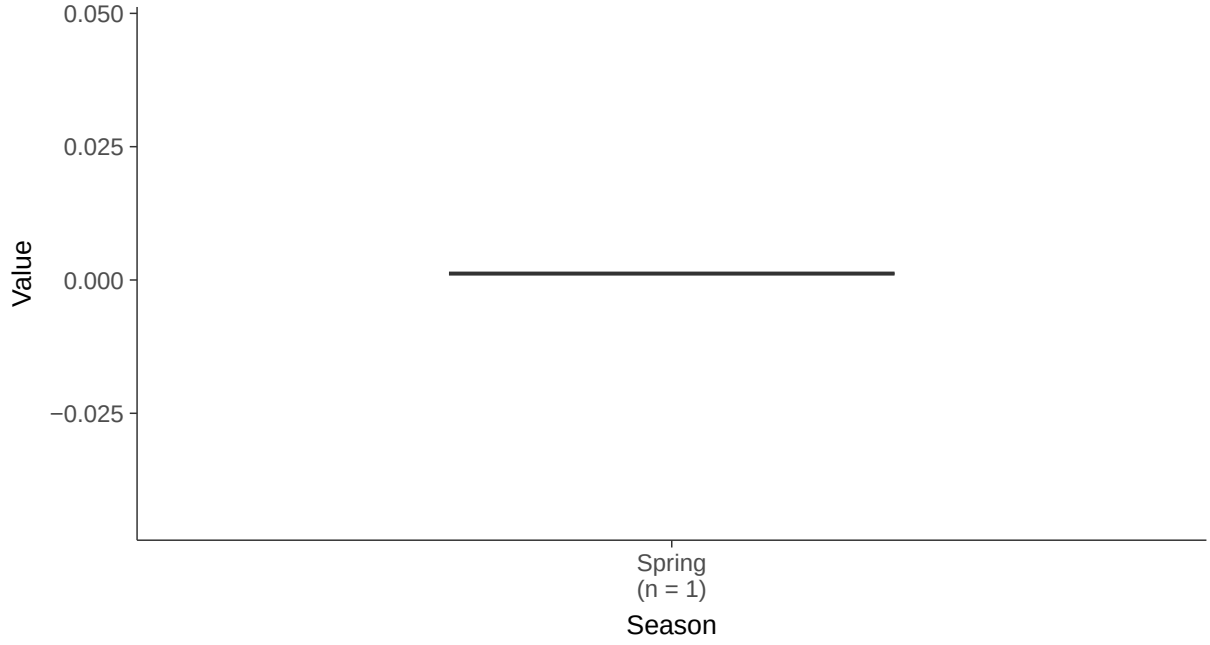
Boxplot

Zinc, MW-16 (mg/L)



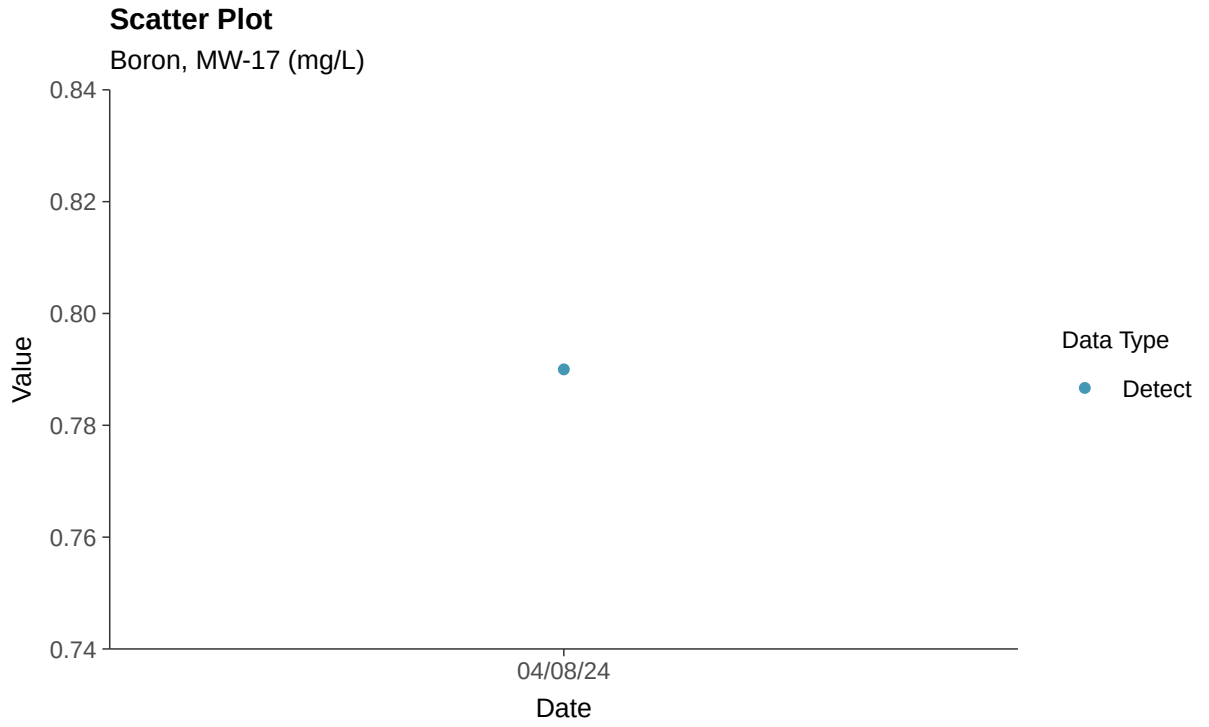
Boxplot by Season

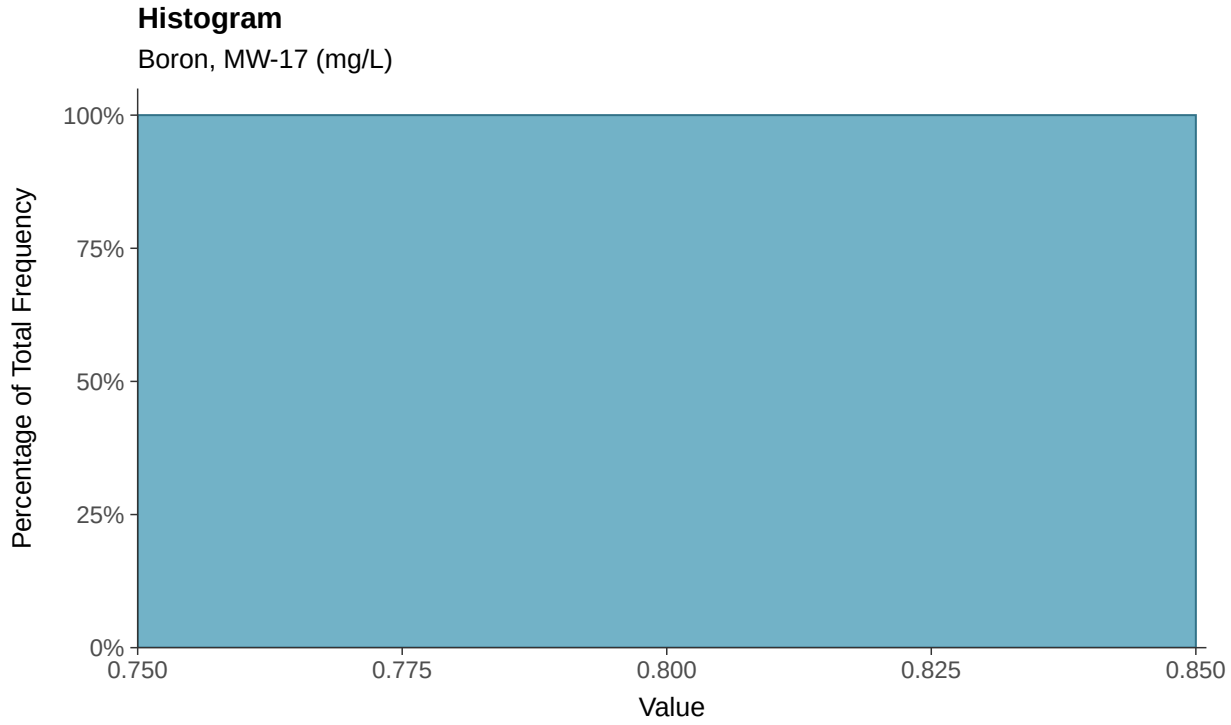
Zinc, MW-16 (mg/L)



Appendix III: Boron, MW-17

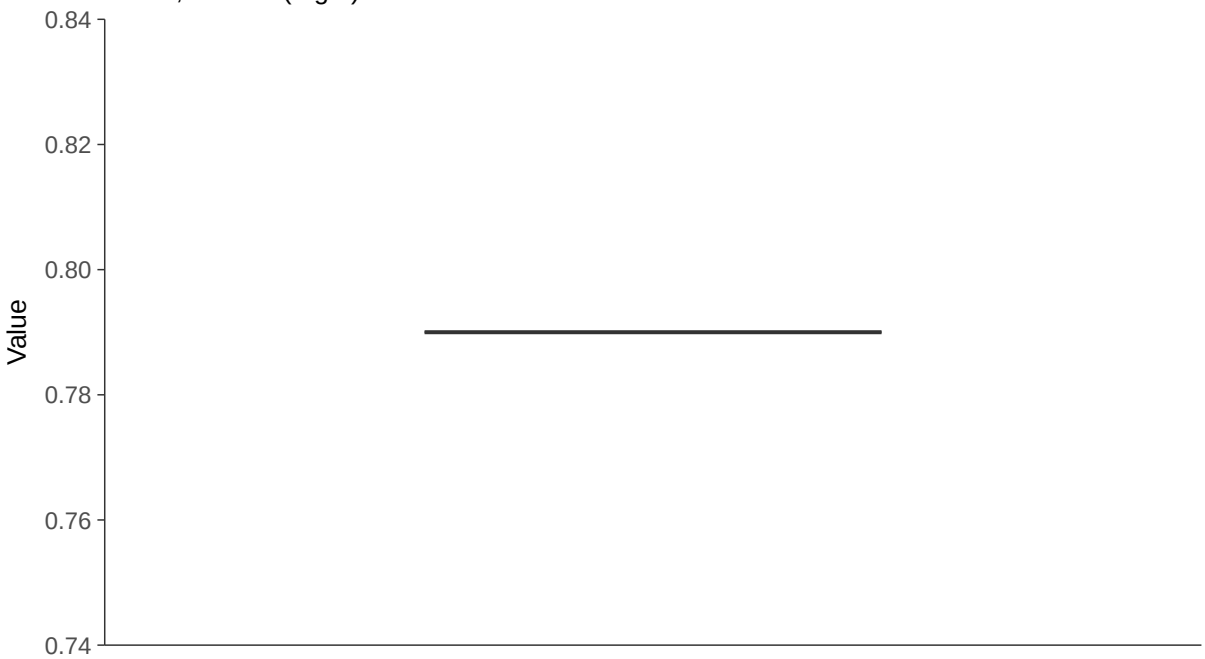
ID: 1_27_4_105





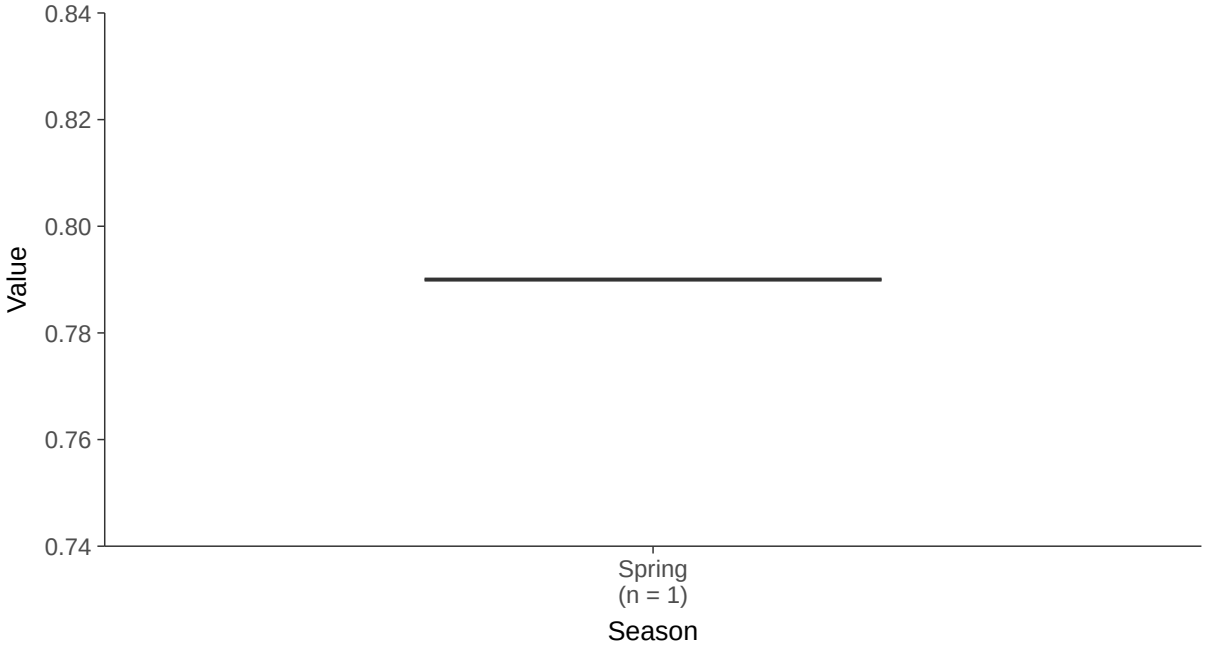
Boxplot

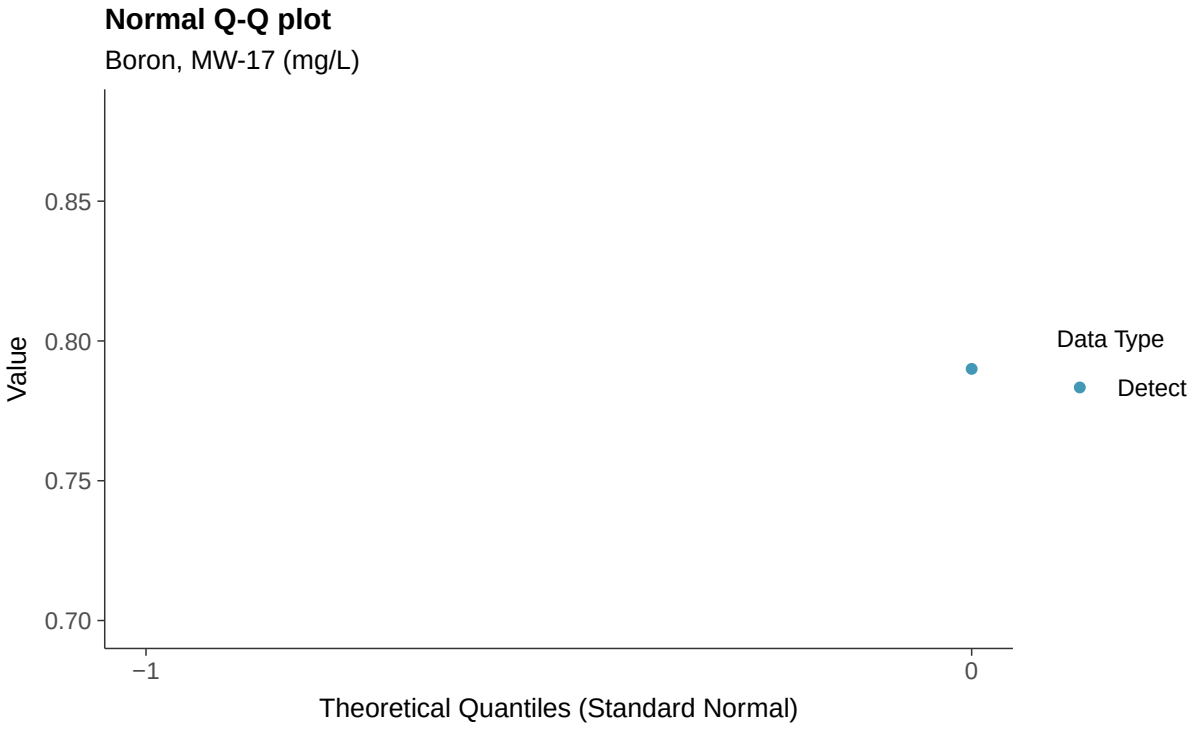
Boron, MW-17 (mg/L)



Boxplot by Season

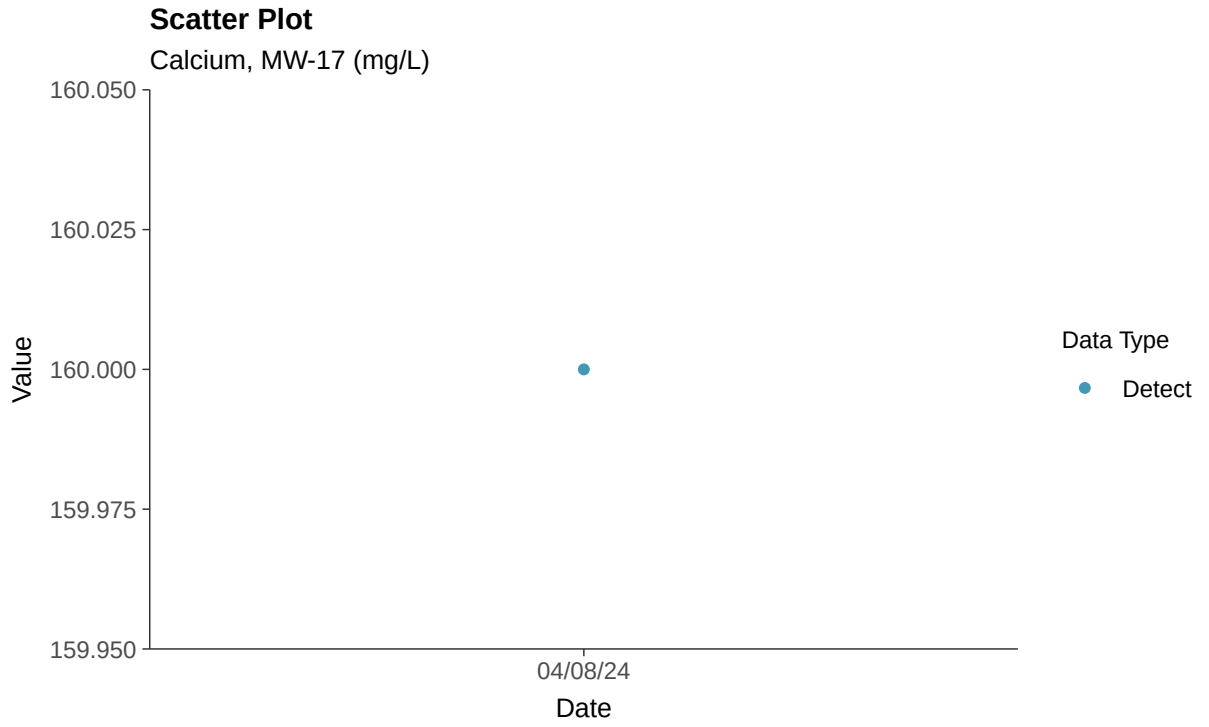
Boron, MW-17 (mg/L)

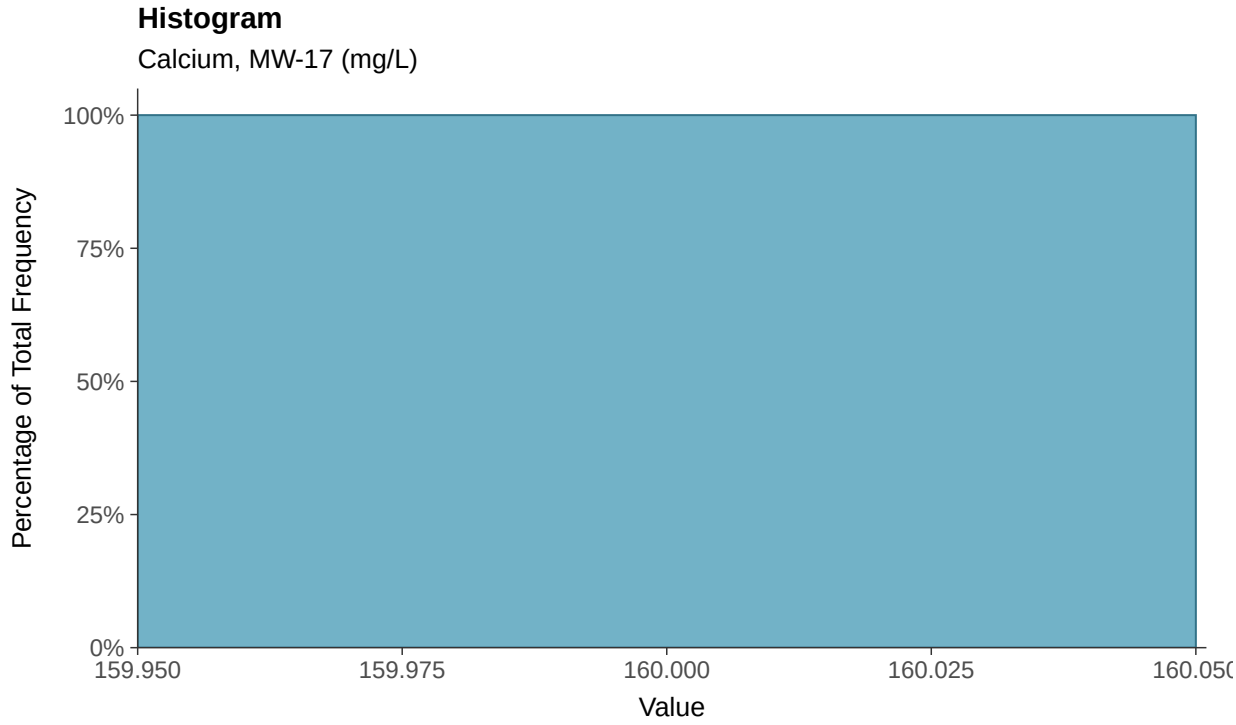


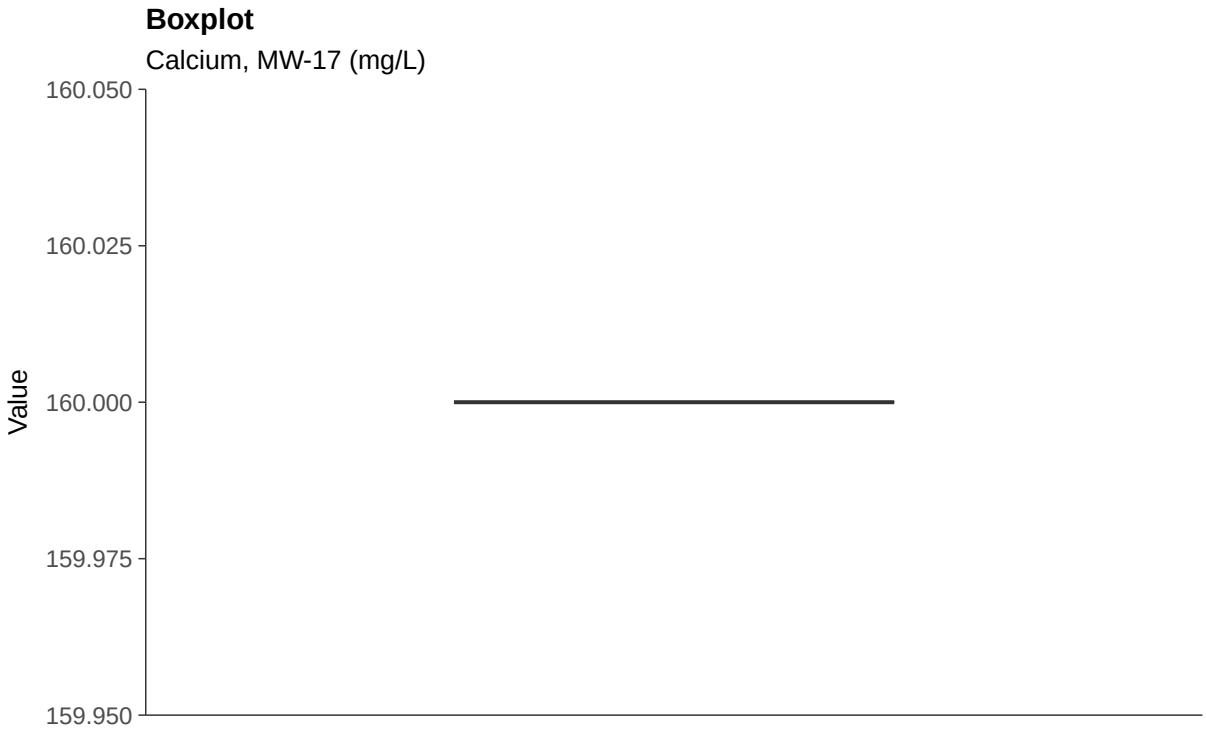

Normal Q-Q plot
Boron, MW-17 (mg/L)
Value
0.85
0.80
0.75
0.70
−1
0
Theoretical Quantiles (Standard Normal)
Data Type
Detect

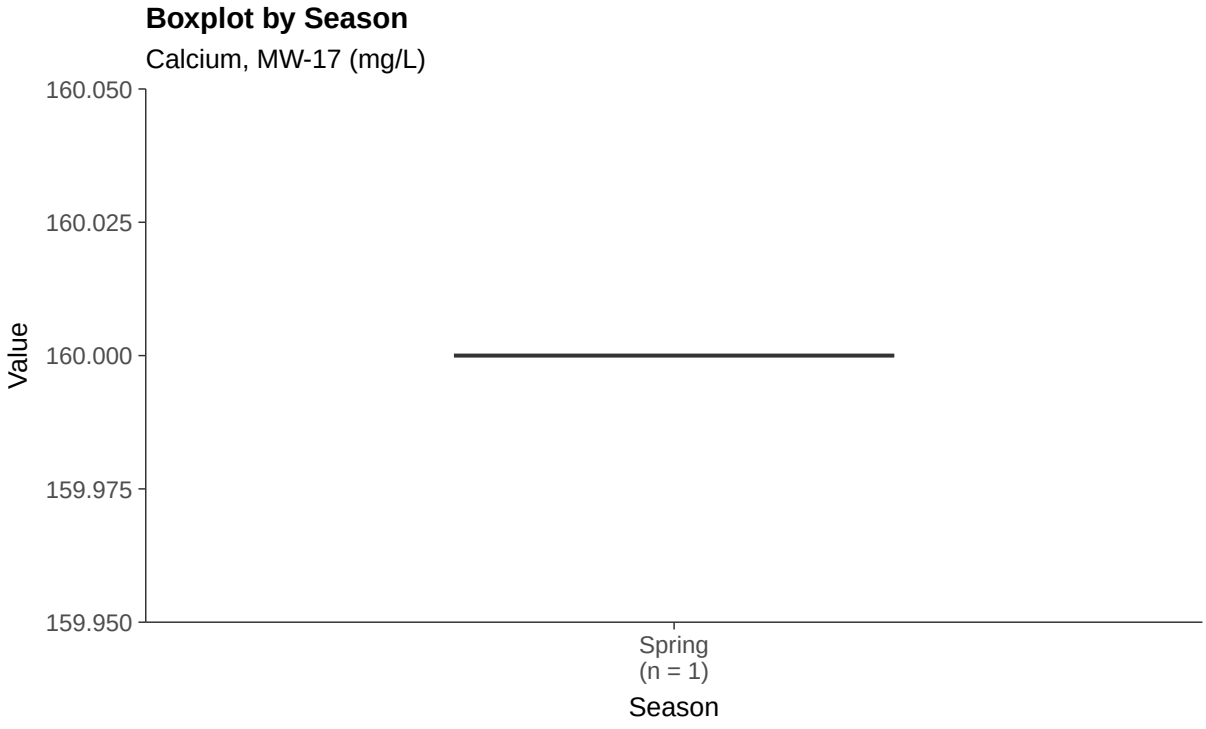
Appendix III: Calcium, MW-17

ID: 1_27_4_107



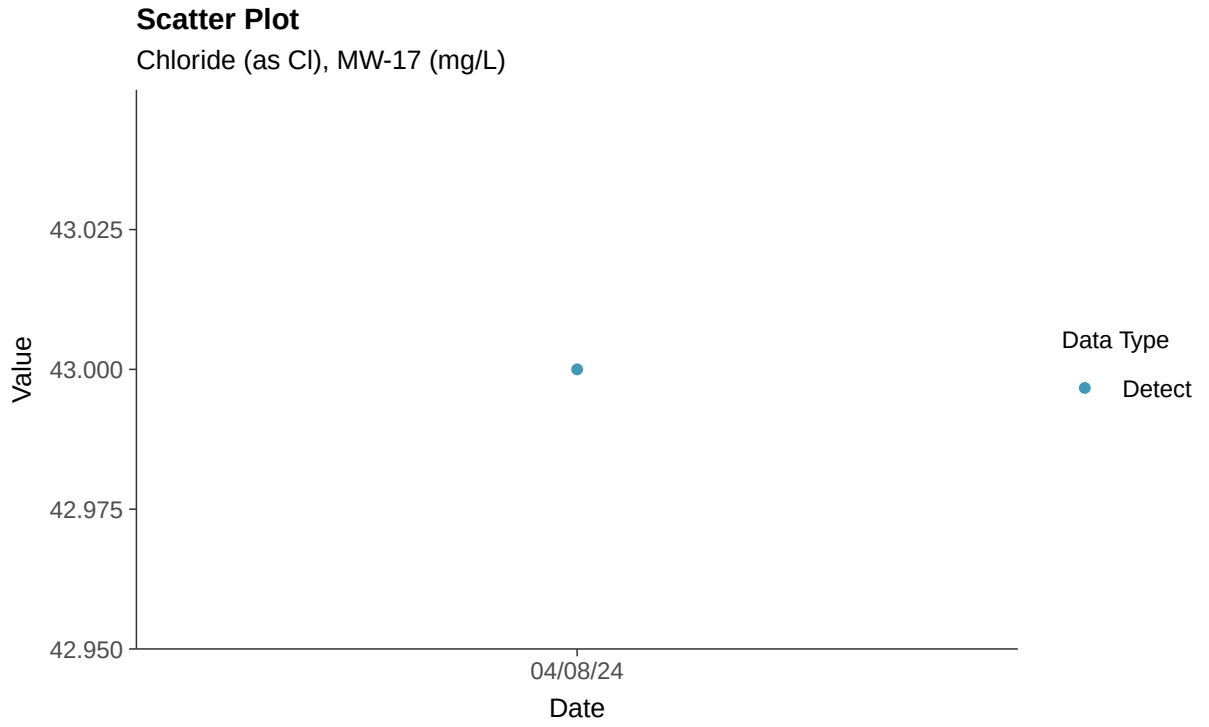


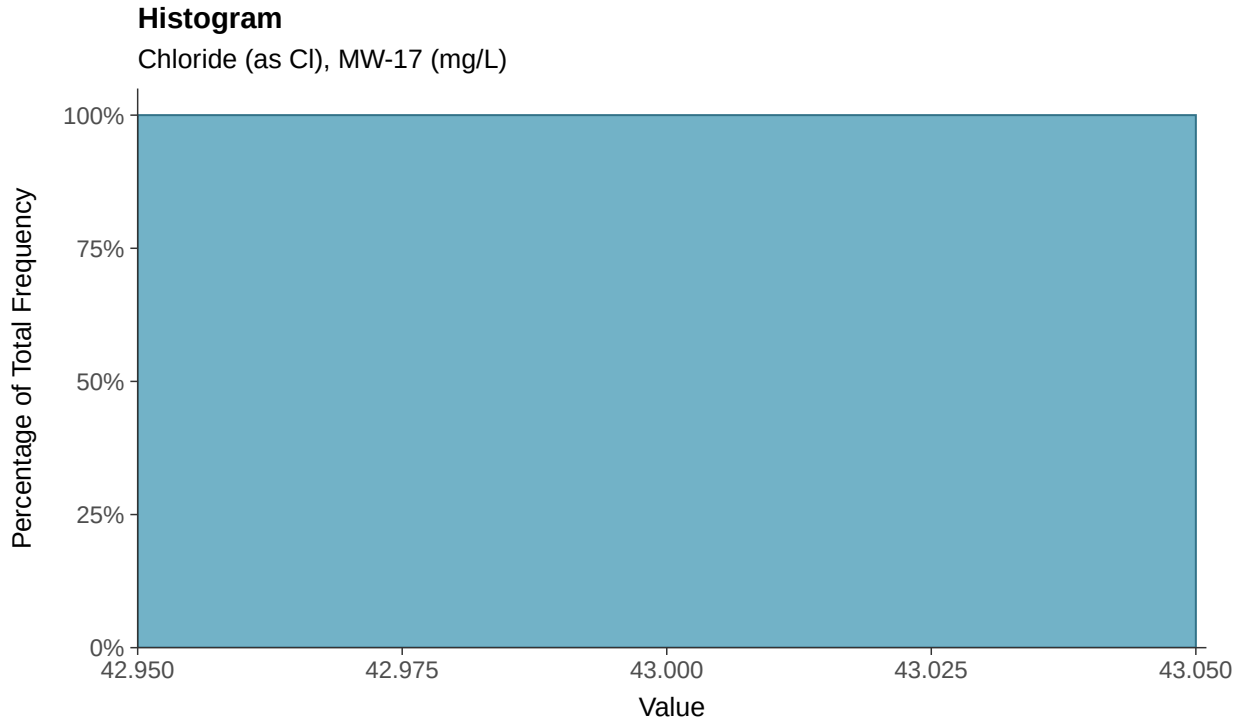

Boxplot
Calcium, MW-17 (mg/L)
160.050
160.025
160.000
159.975
159.950
Value


Boxplot by Season
Calcium, MW-17 (mg/L)
160.050
160.025
160.000
159.975
159.950
Value
Spring
(n = 1)
Season

Appendix III: Chloride (as Cl), MW-17

ID: 1_27_4_108



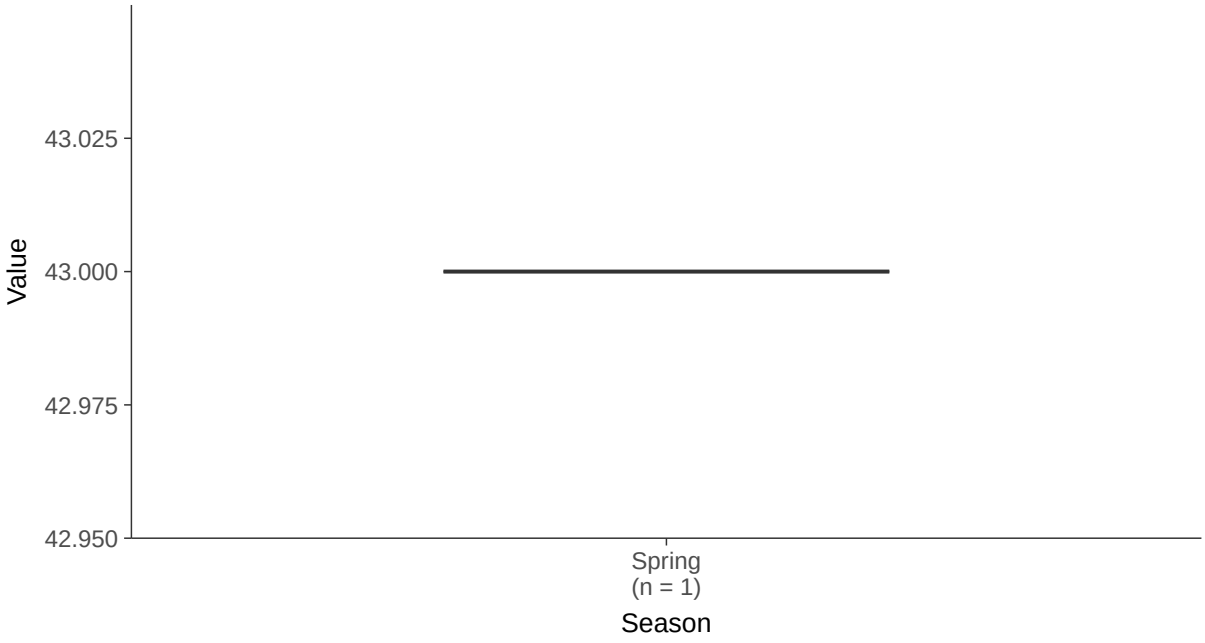


Boxplot

Chloride (as Cl), MW-17 (mg/L)

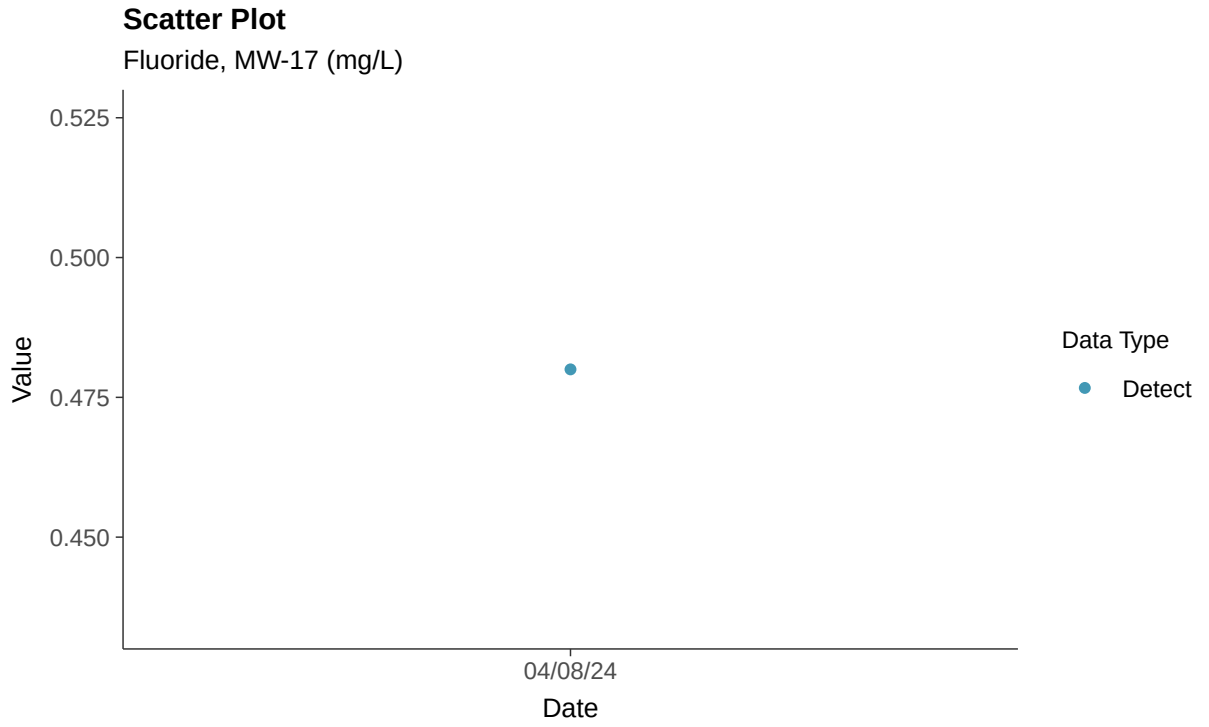
Boxplot by Season

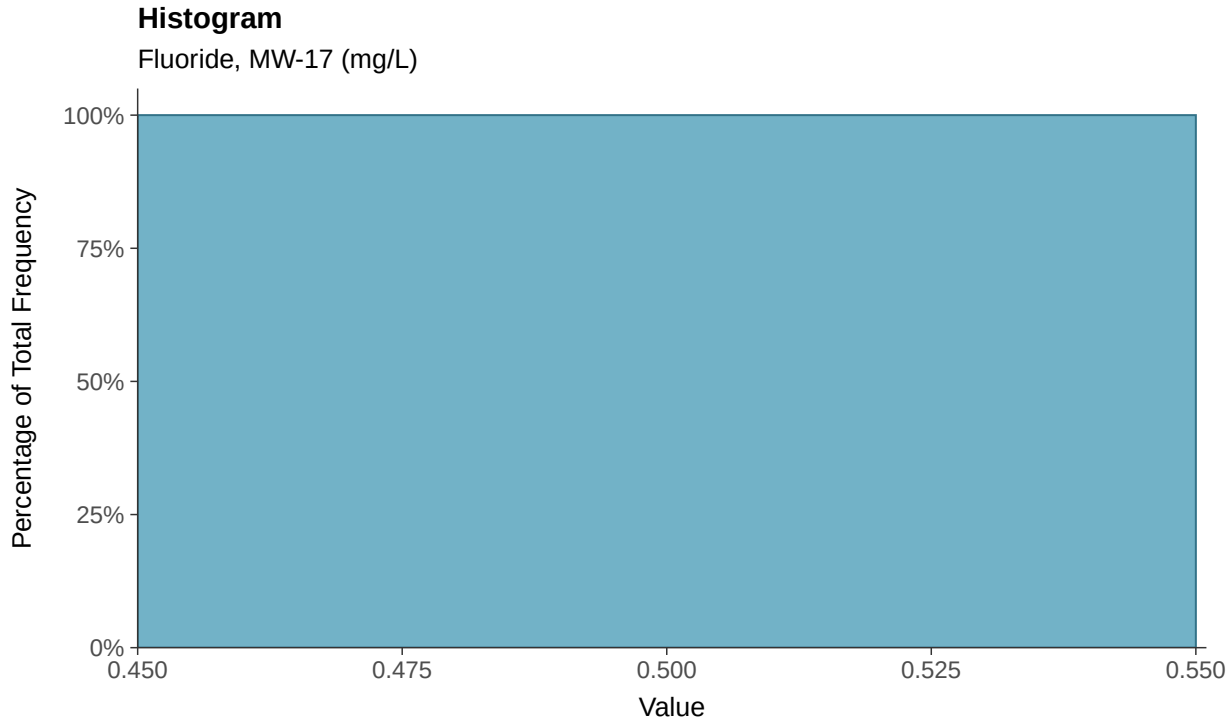
Chloride (as Cl), MW-17 (mg/L)



Appendix III: Fluoride, MW-17

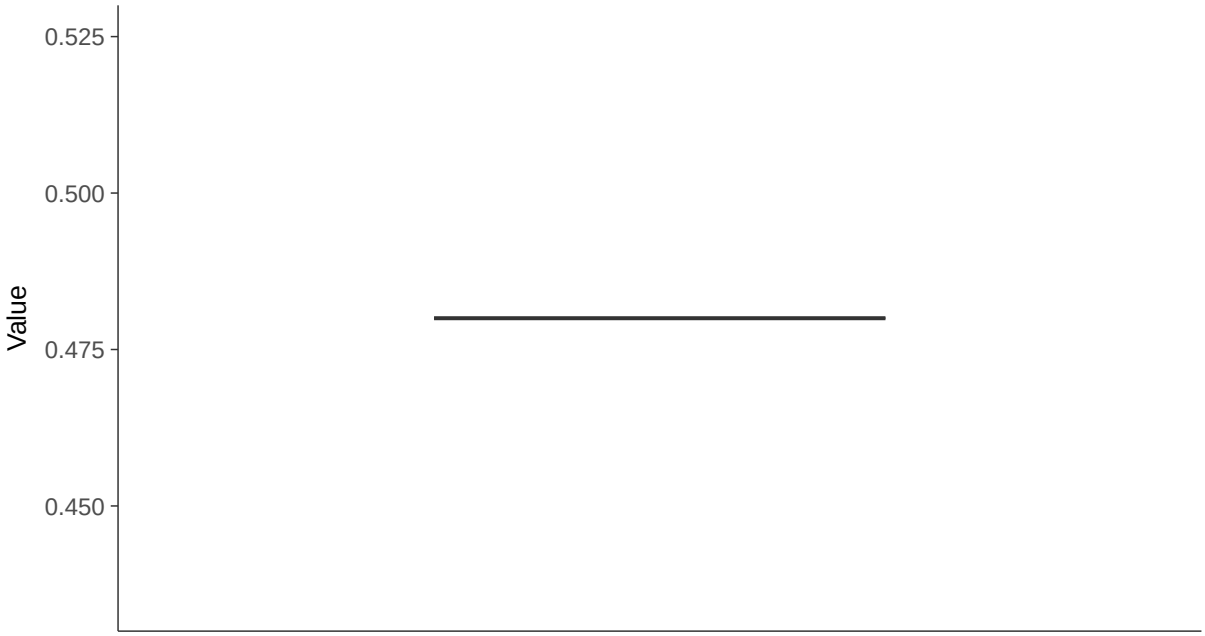
ID: 1_27_4_112





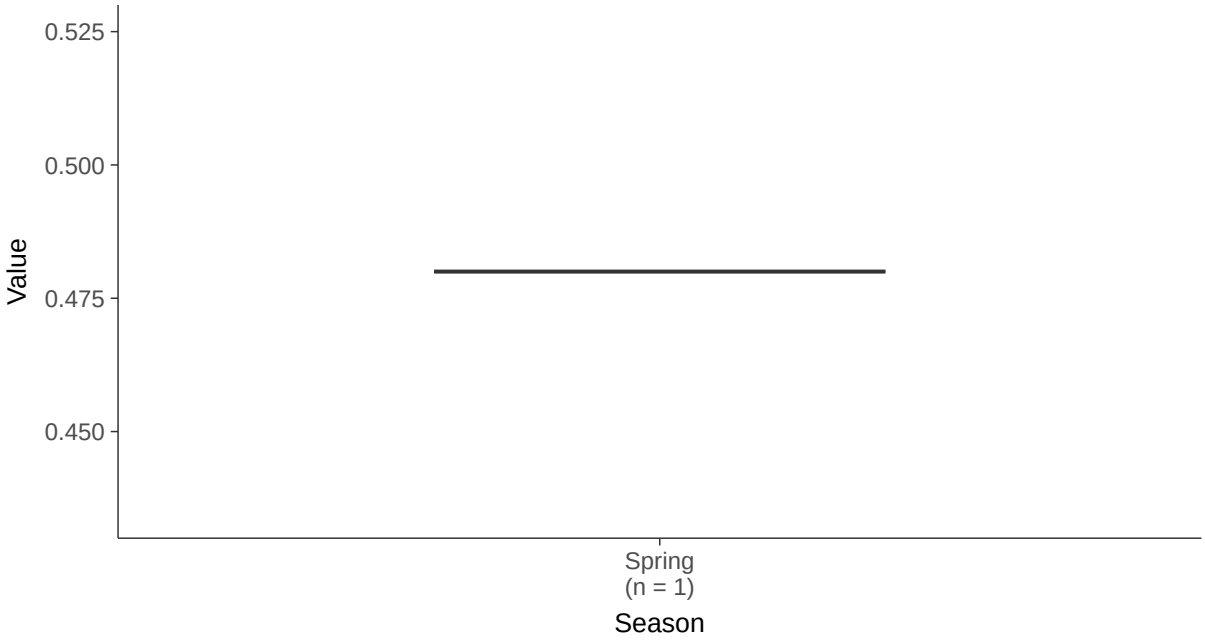
Boxplot

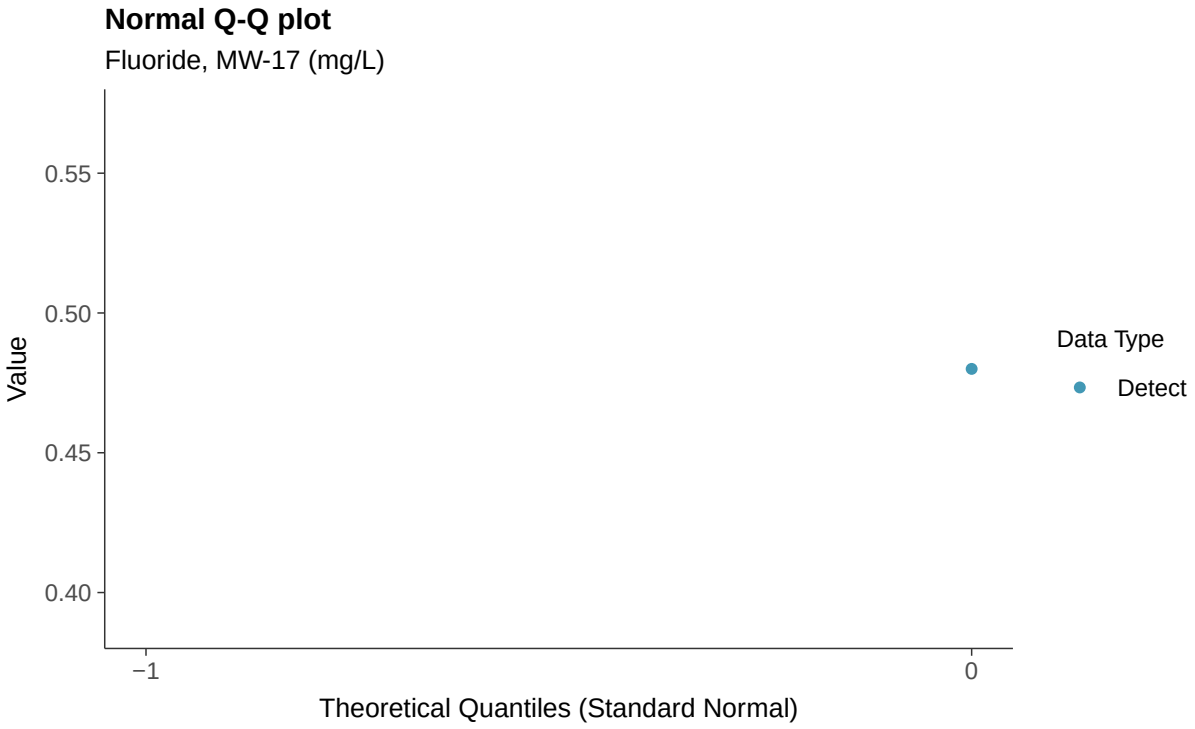
Fluoride, MW-17 (mg/L)



Boxplot by Season

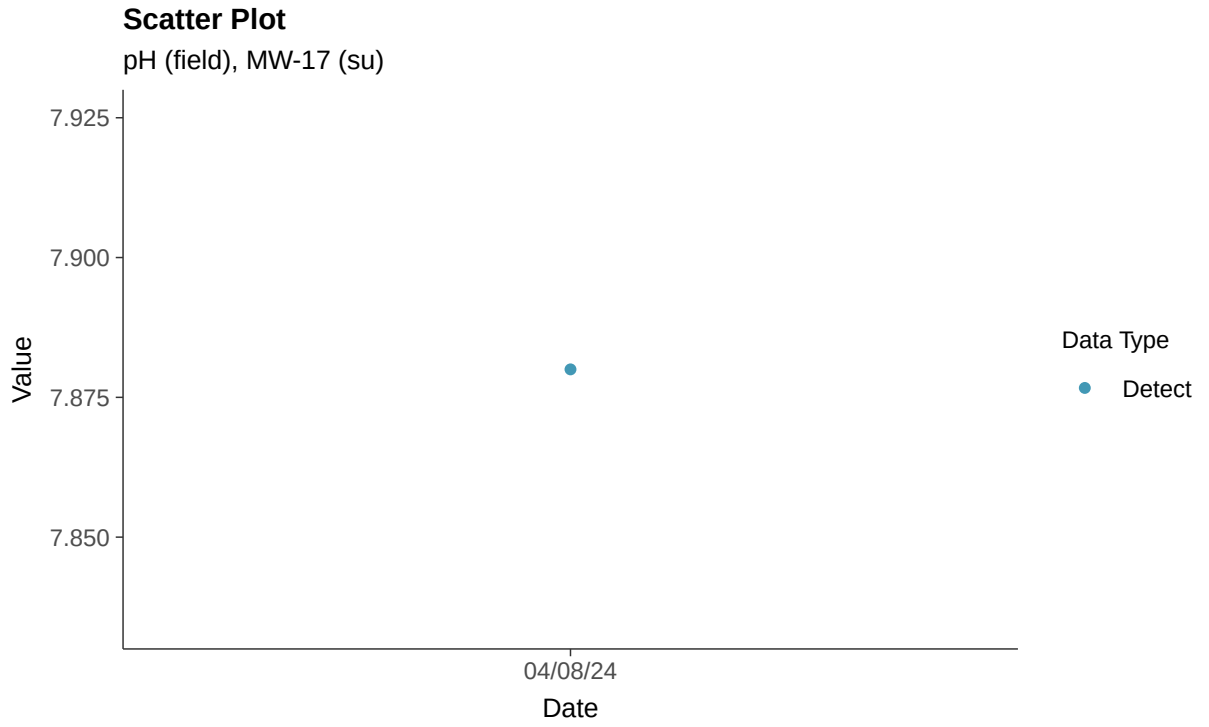
Fluoride, MW-17 (mg/L)

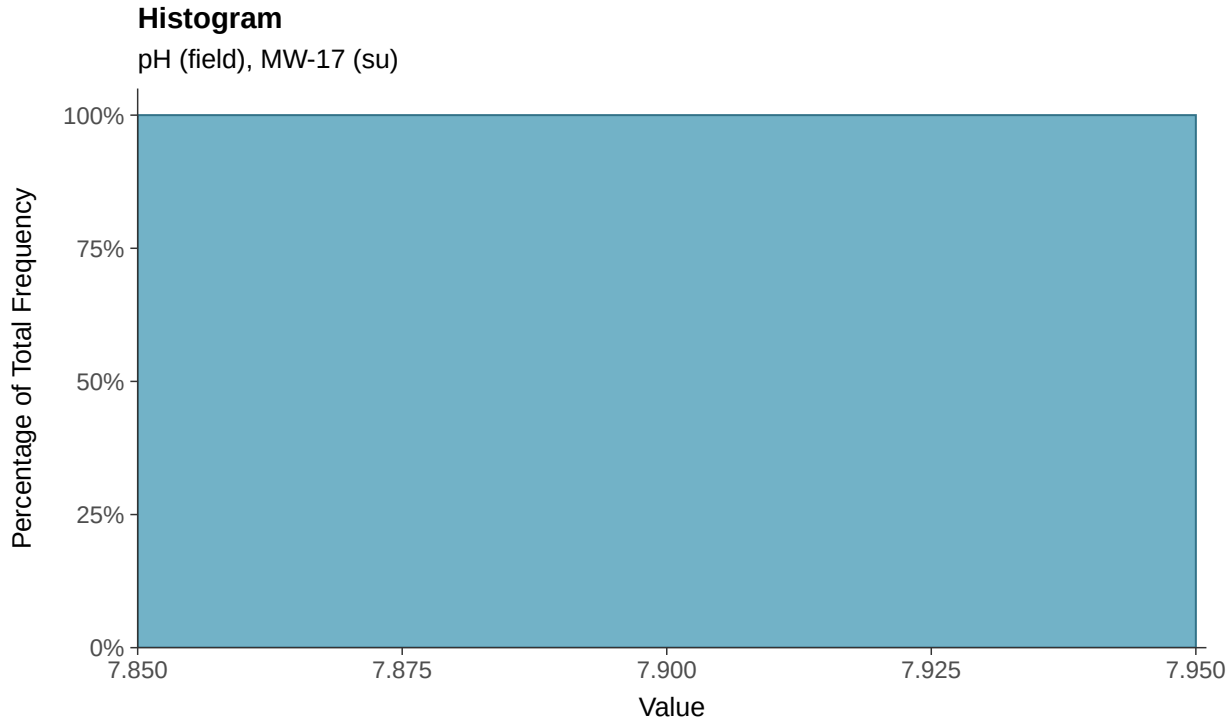



Normal Q-Q plot
Fluoride, MW-17 (mg/L)
Value
0.55
0.50
0.45
0.40
−1
0
Theoretical Quantiles (Standard Normal)
Data Type
Detect

Appendix III: pH (field), MW-17

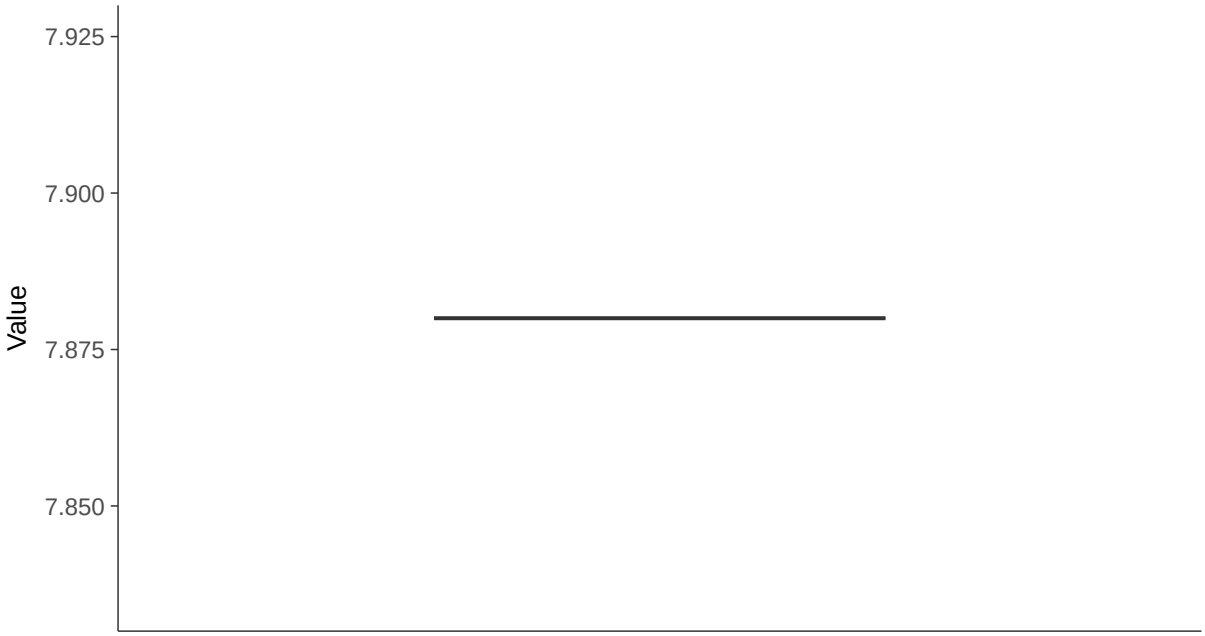
ID: 1_27_4_120





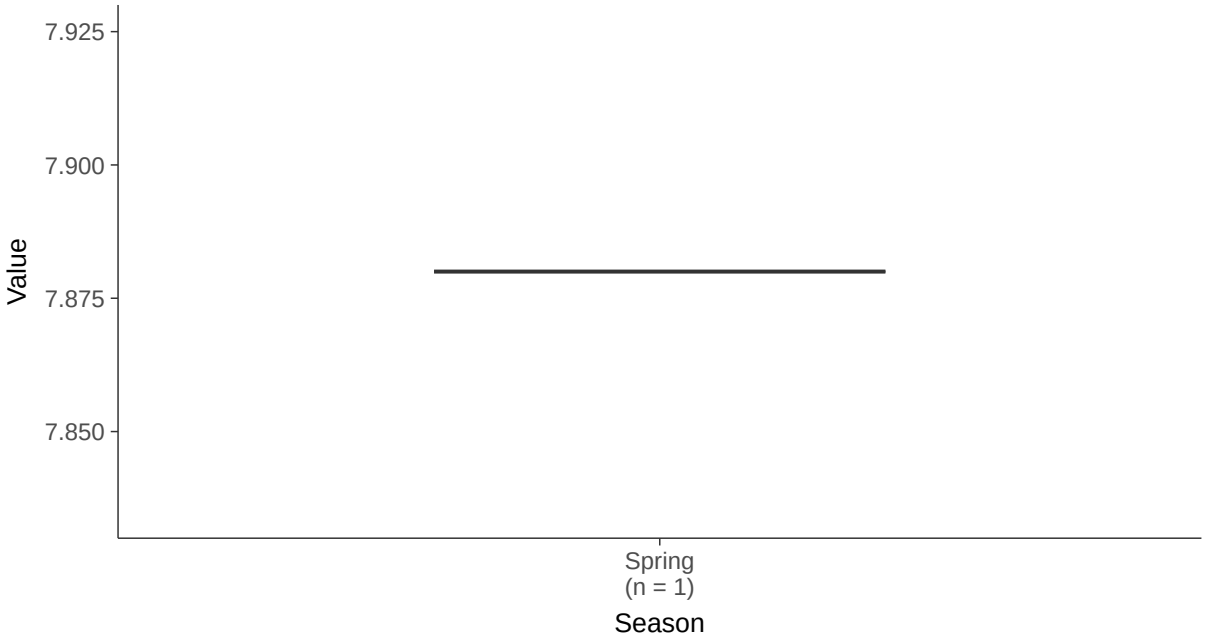
Boxplot

pH (field), MW-17 (su)



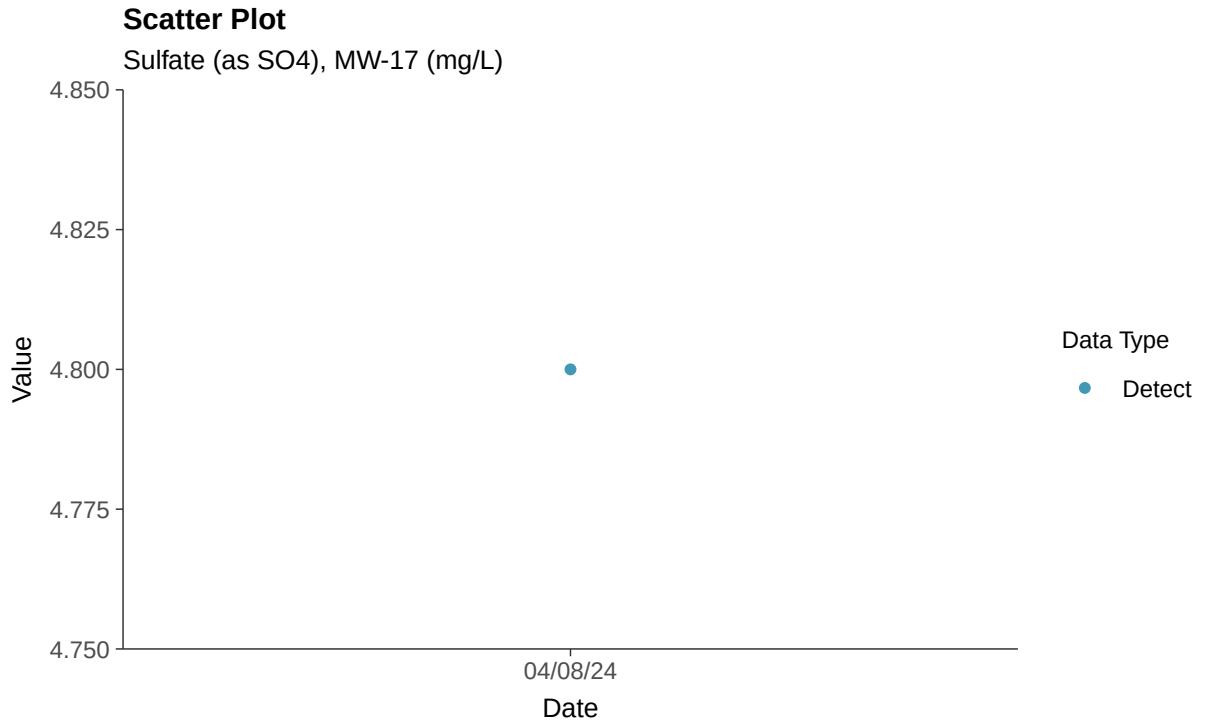
Boxplot by Season

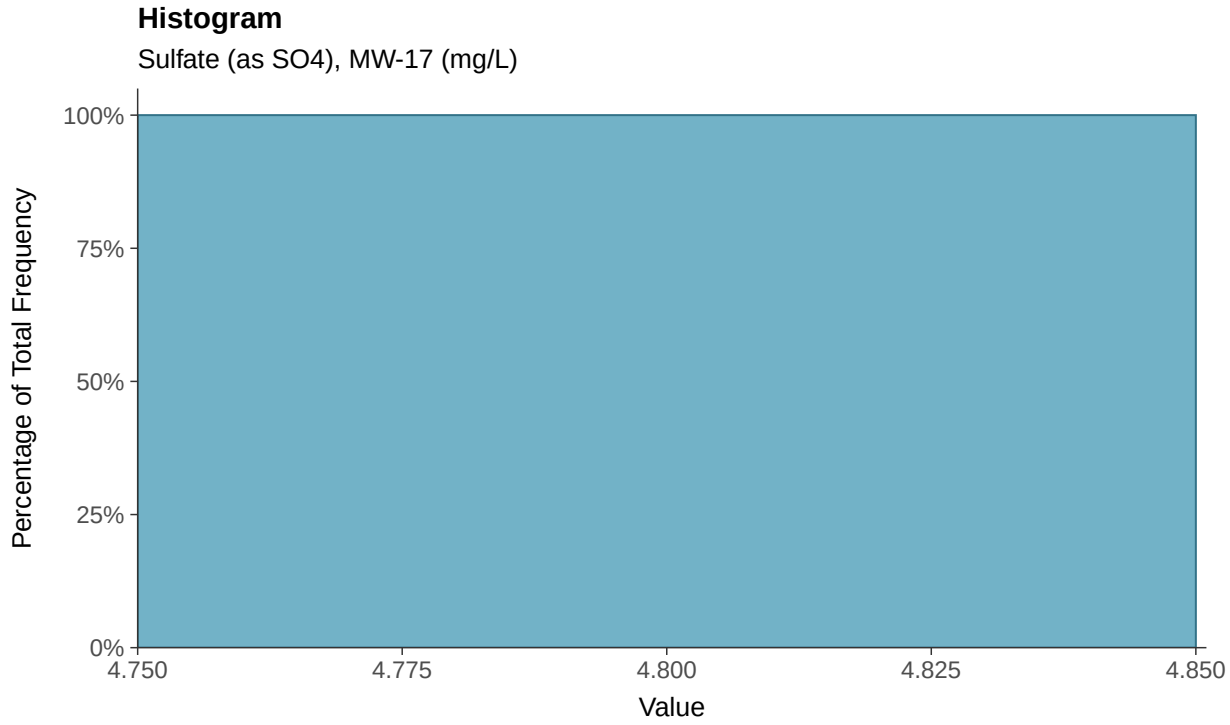
pH (field), MW-17 (su)



Appendix III: Sulfate (as SO4), MW-17

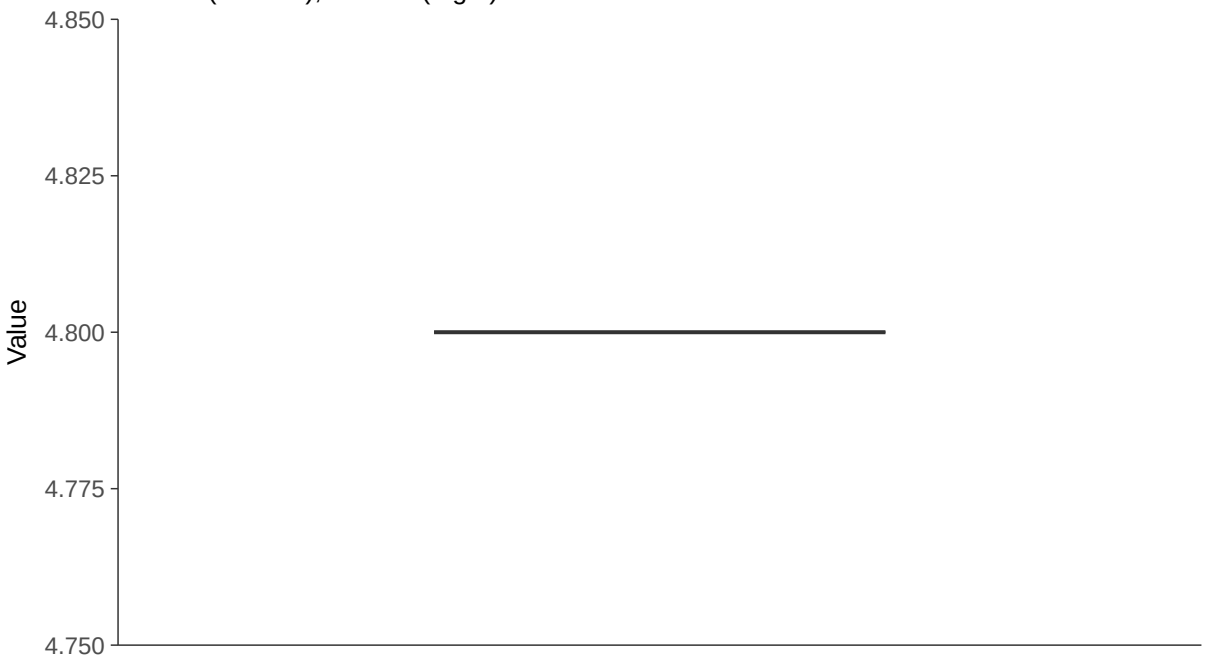
ID: 1_27_4_124





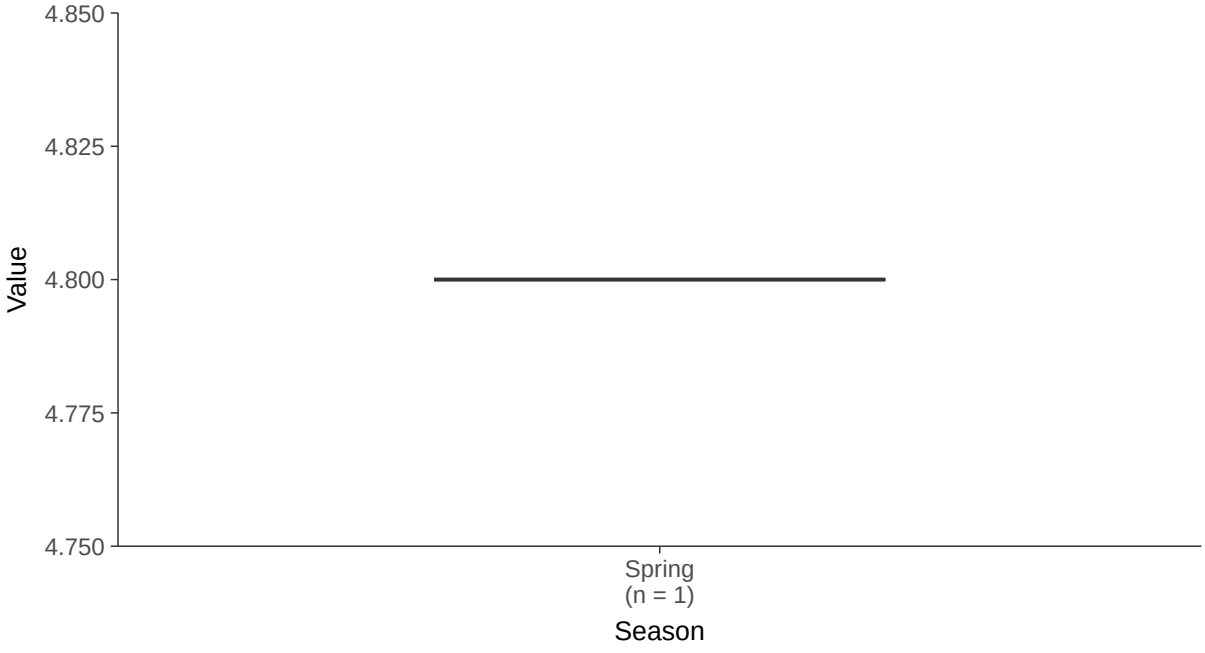
Boxplot

Sulfate (as SO4), MW-17 (mg/L)



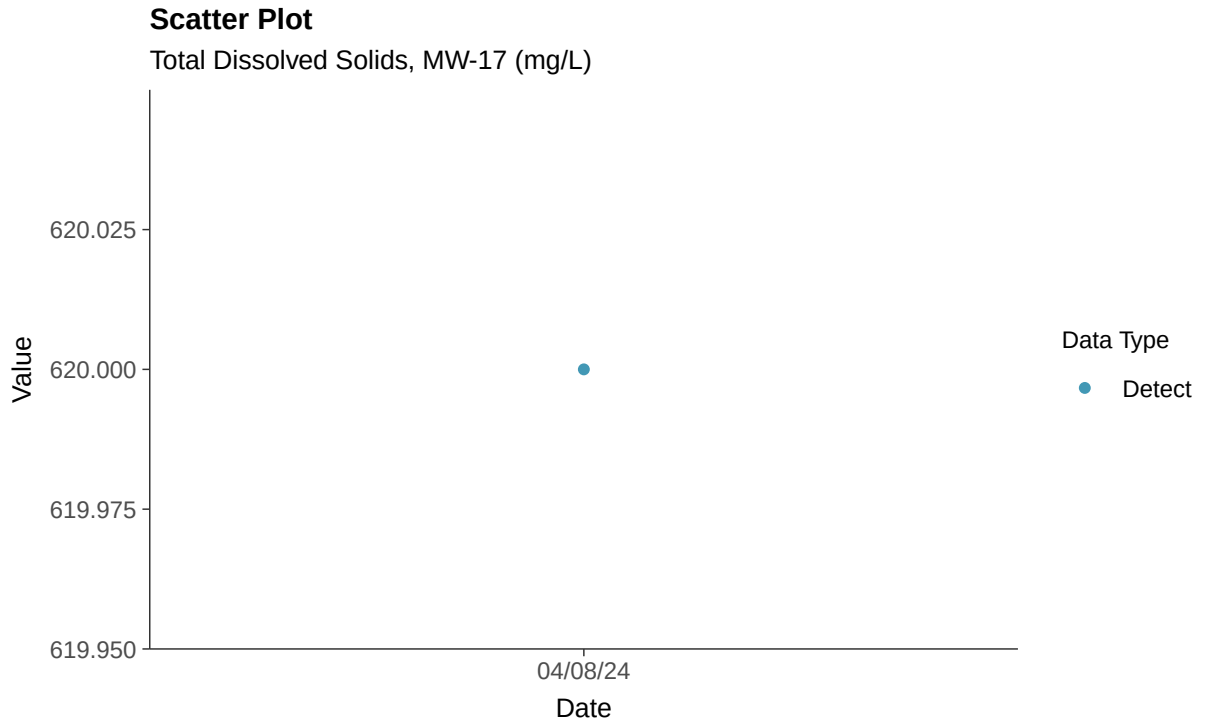
Boxplot by Season

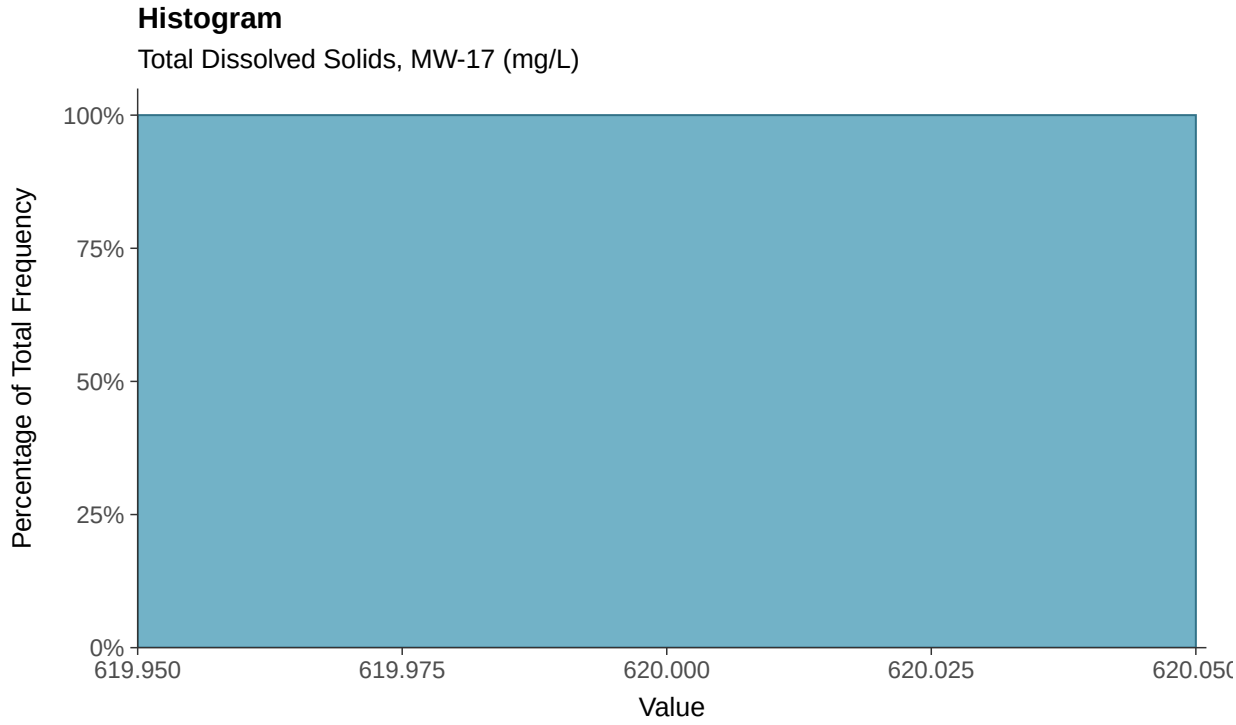
Sulfate (as SO4), MW-17 (mg/L)



Appendix III: Total Dissolved Solids, MW-17

ID: 1_27_4_126



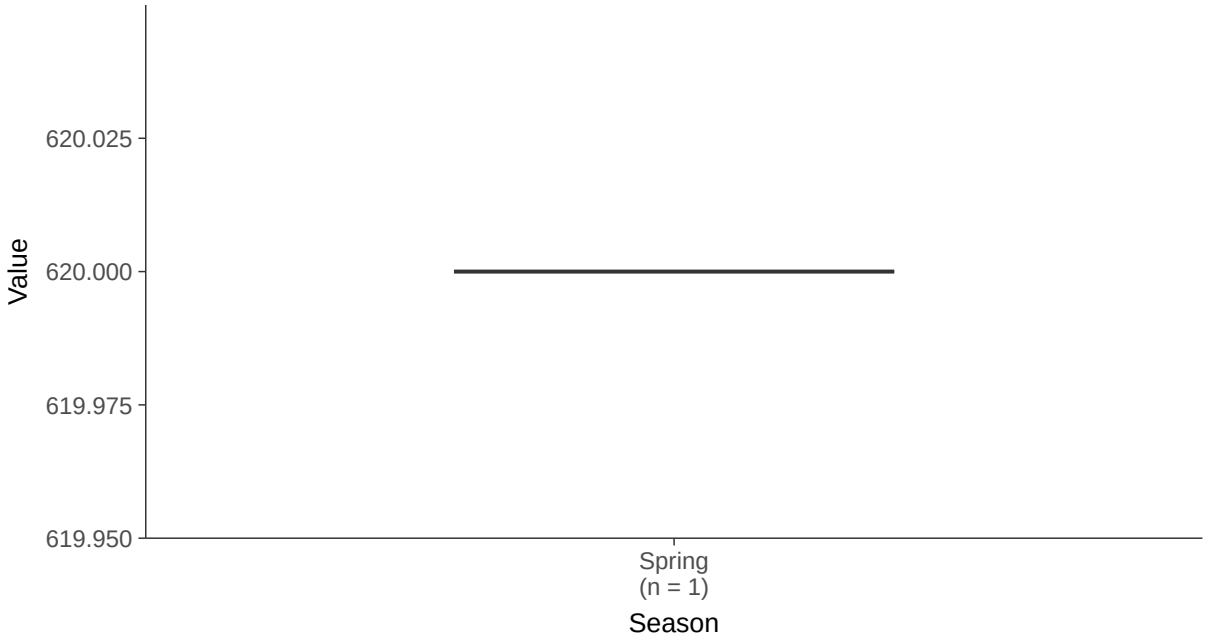


Boxplot

Total Dissolved Solids, MW-17 (mg/L)

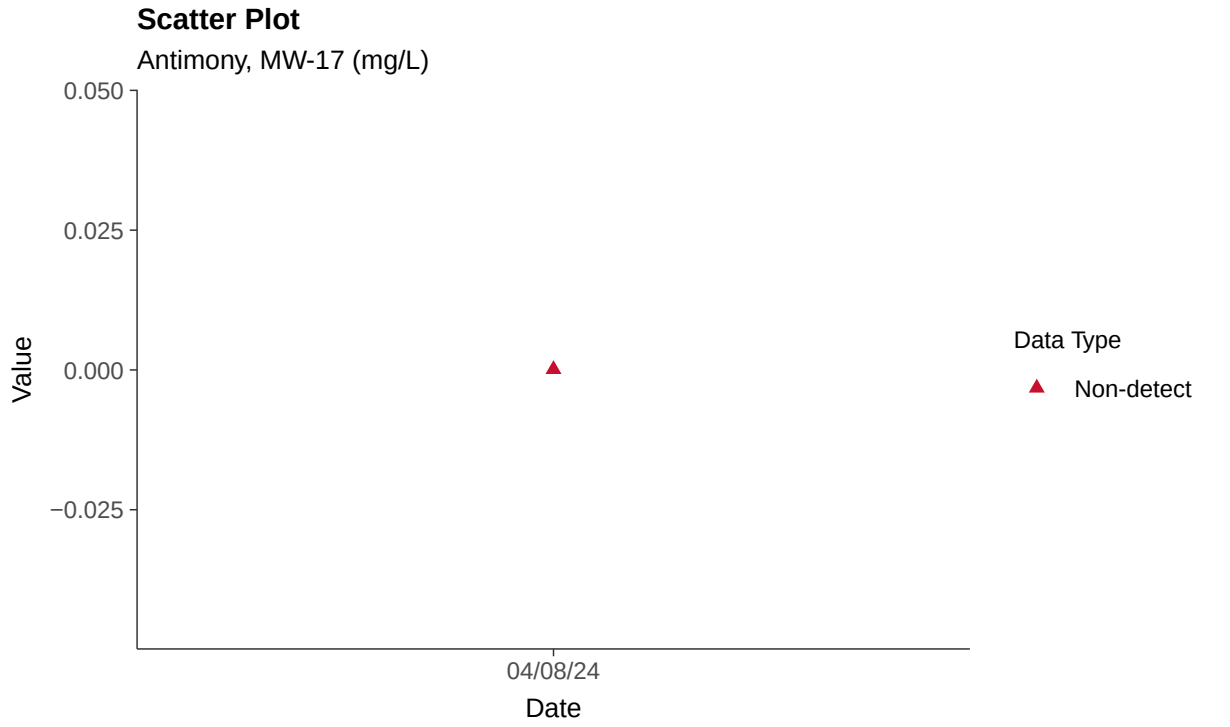
Boxplot by Season

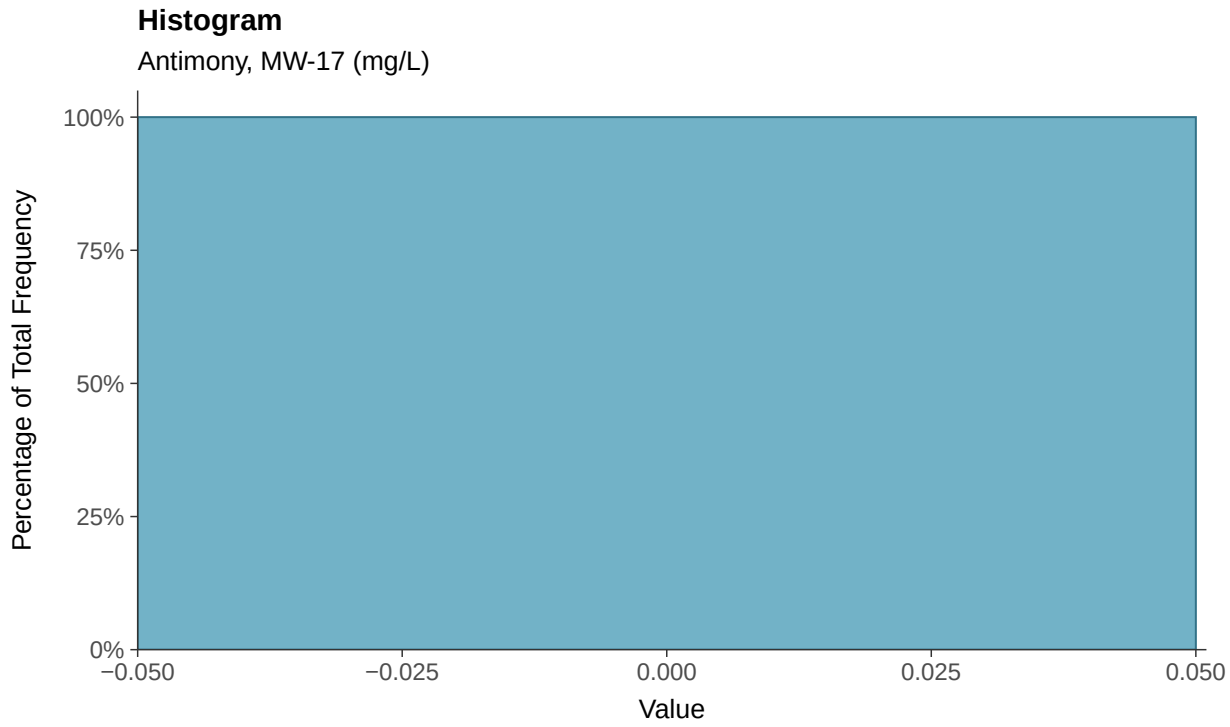
Total Dissolved Solids, MW-17 (mg/L)



Appendix IV: Antimony, MW-17

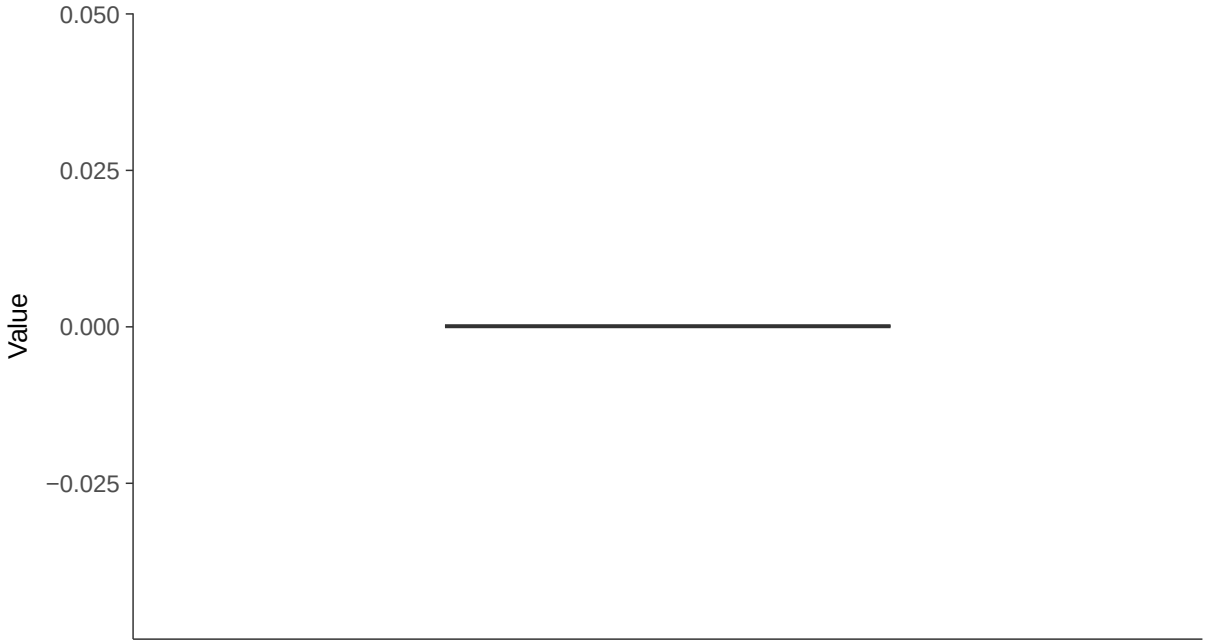
ID: 1_27_5_101





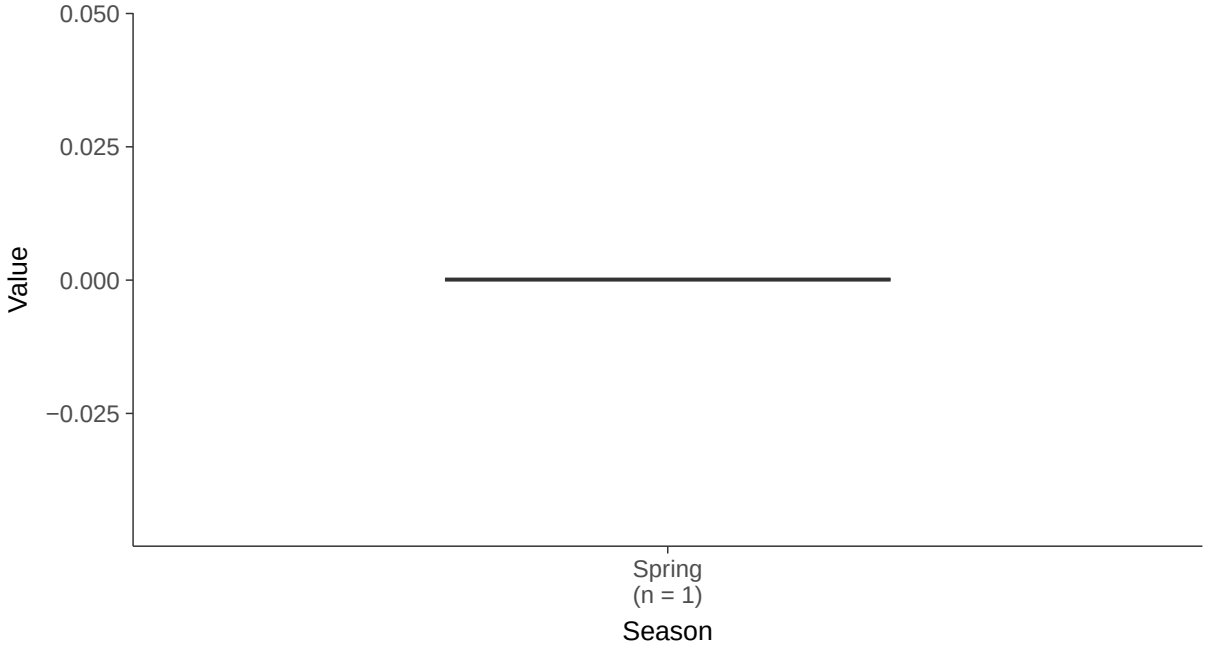
Boxplot

Antimony, MW-17 (mg/L)



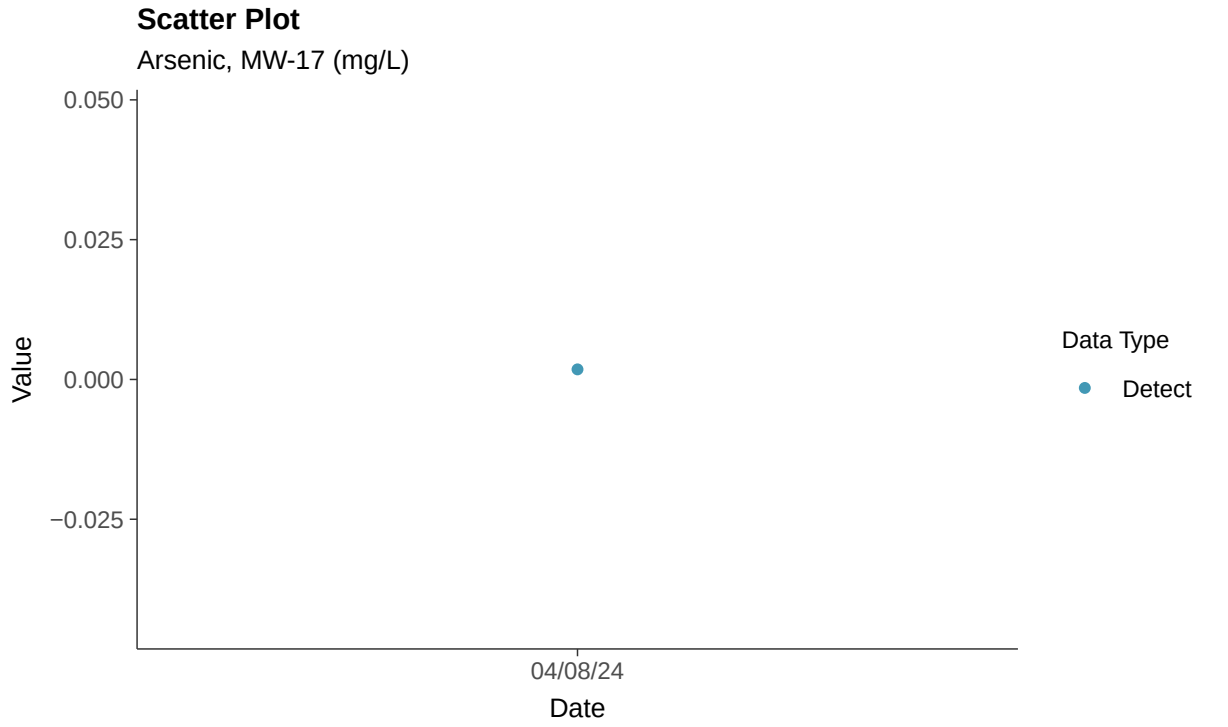
Boxplot by Season

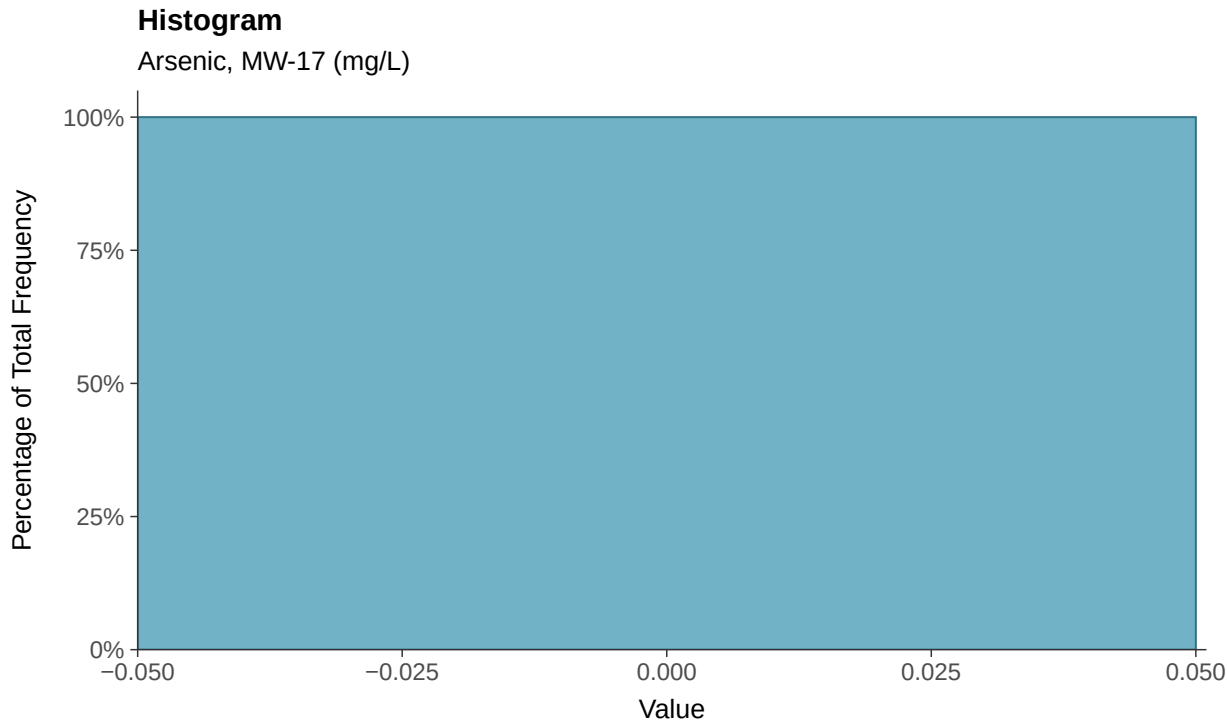
Antimony, MW-17 (mg/L)



Appendix IV: Arsenic, MW-17

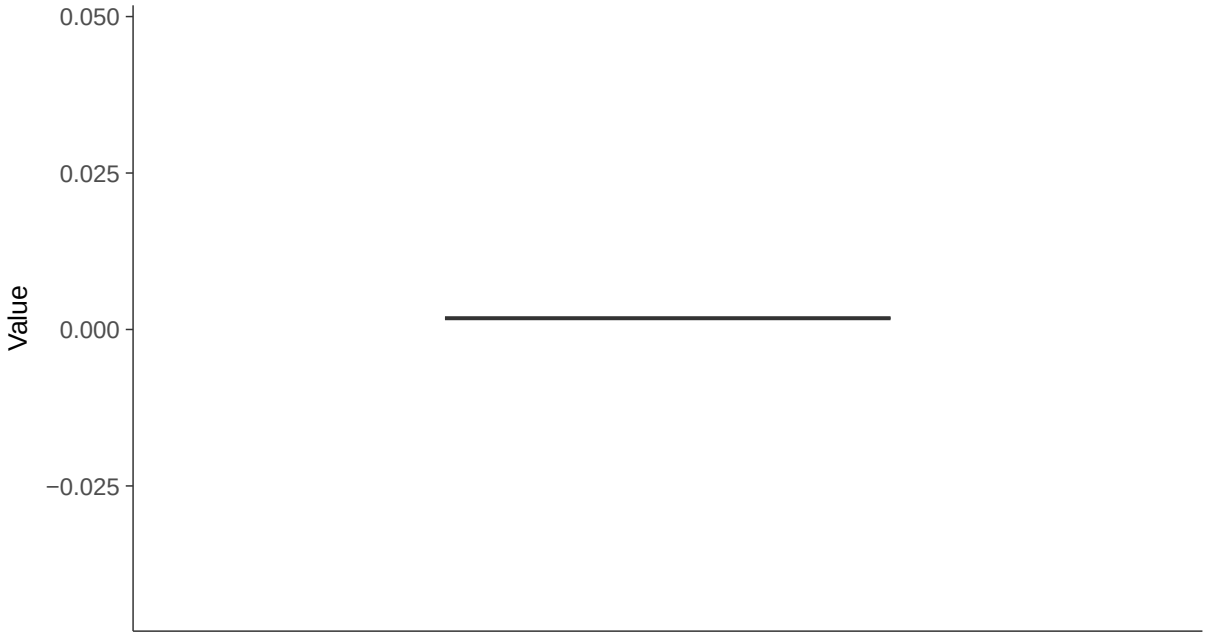
ID: 1_27_5_102





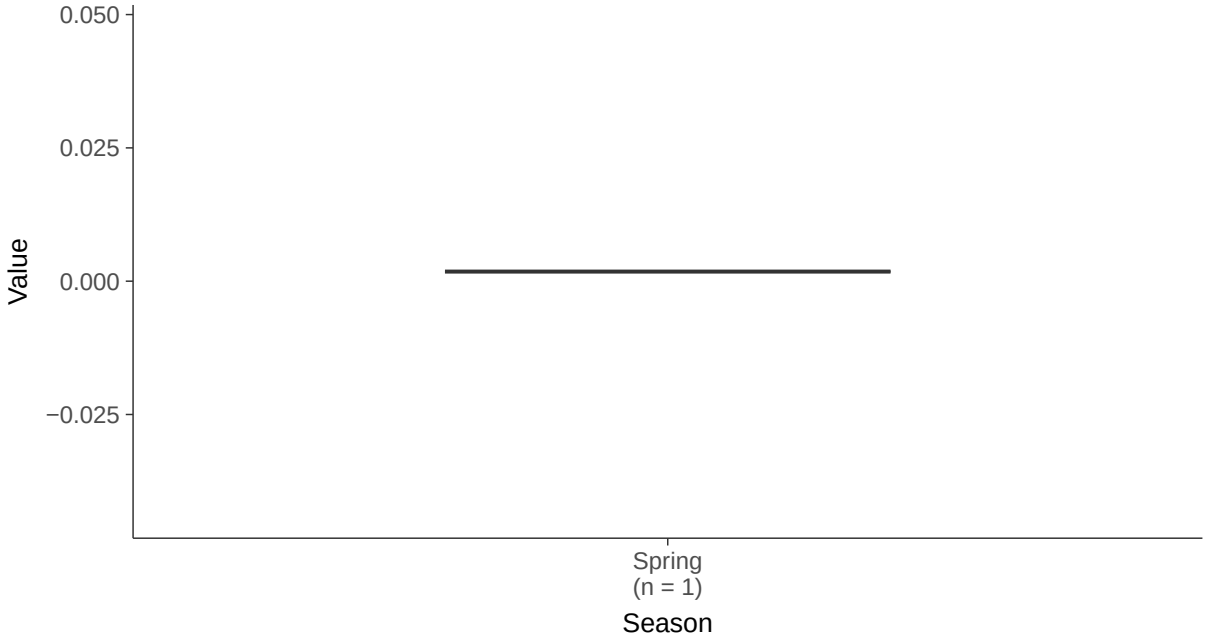
Boxplot

Arsenic, MW-17 (mg/L)



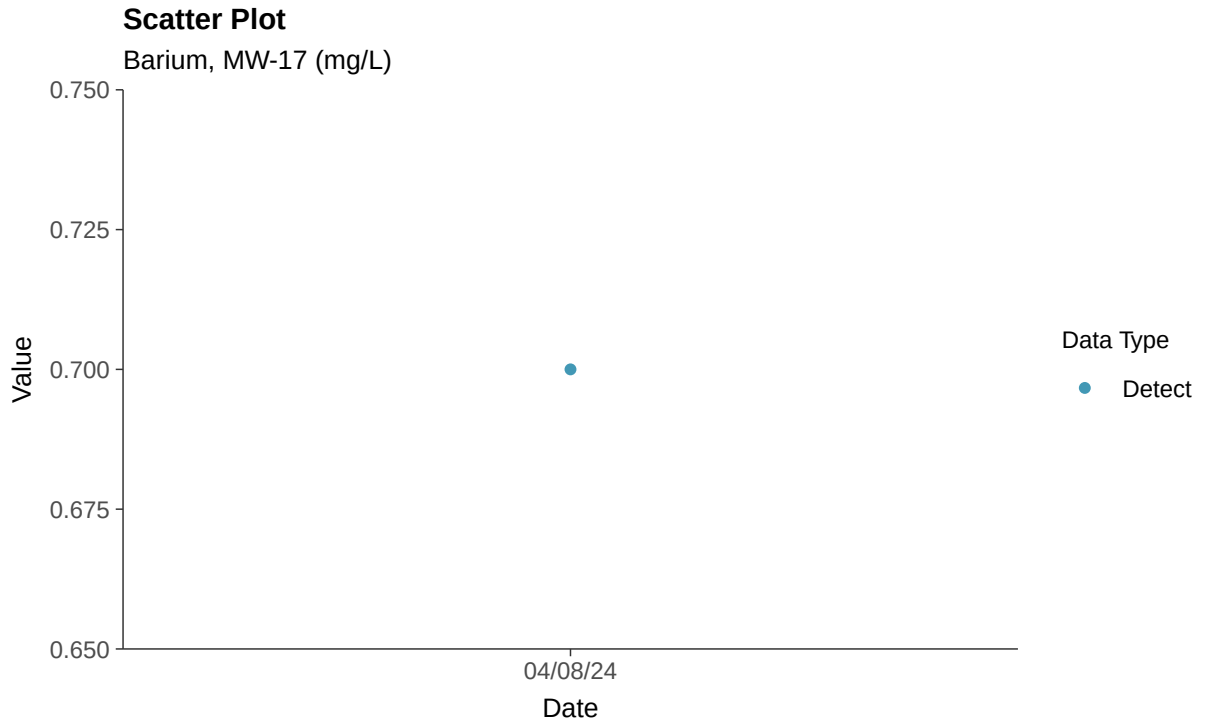
Boxplot by Season

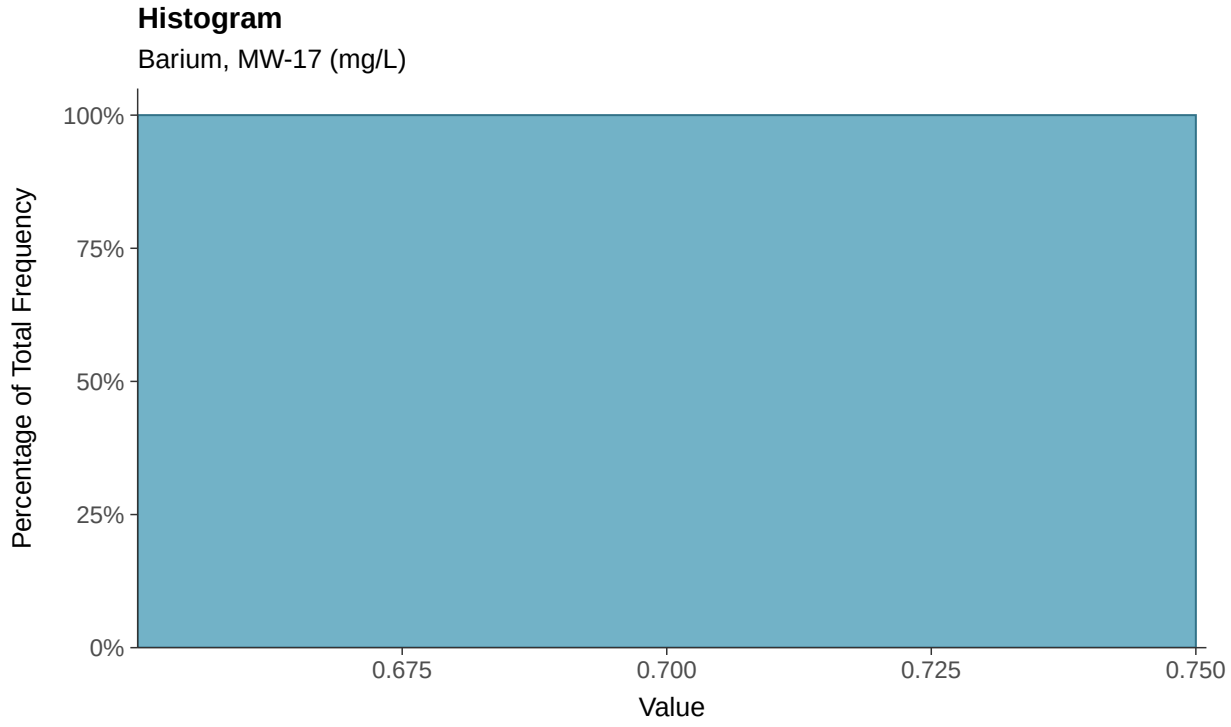
Arsenic, MW-17 (mg/L)



Appendix IV: Barium, MW-17

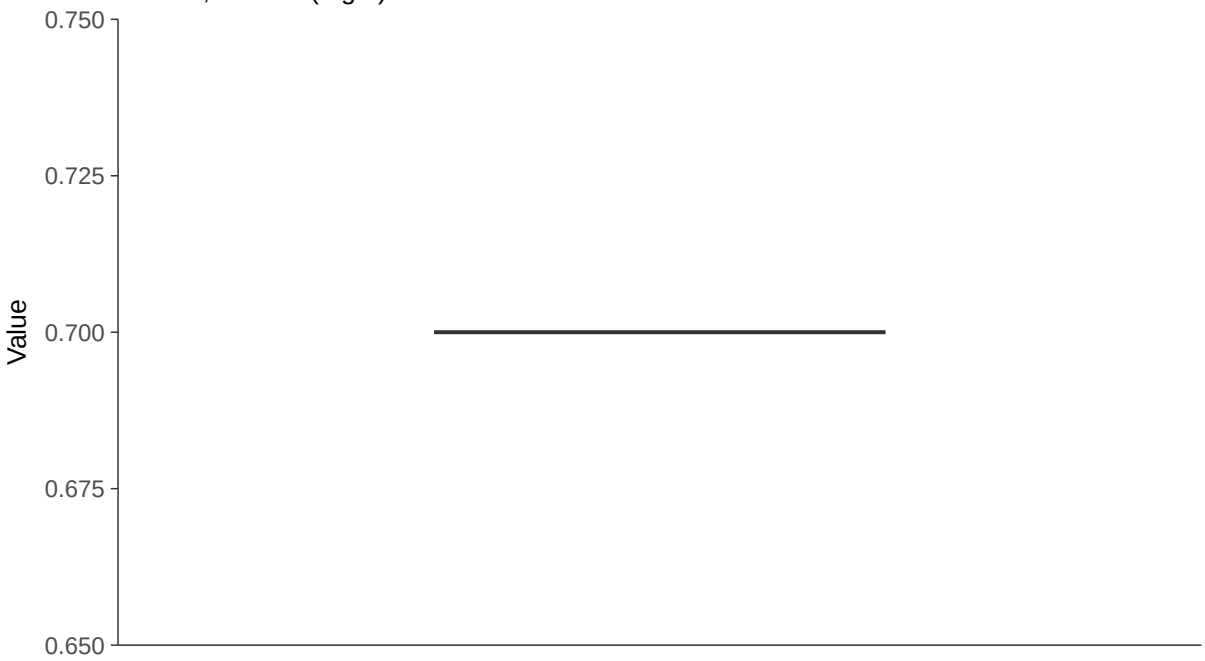
ID: 1_27_5_103





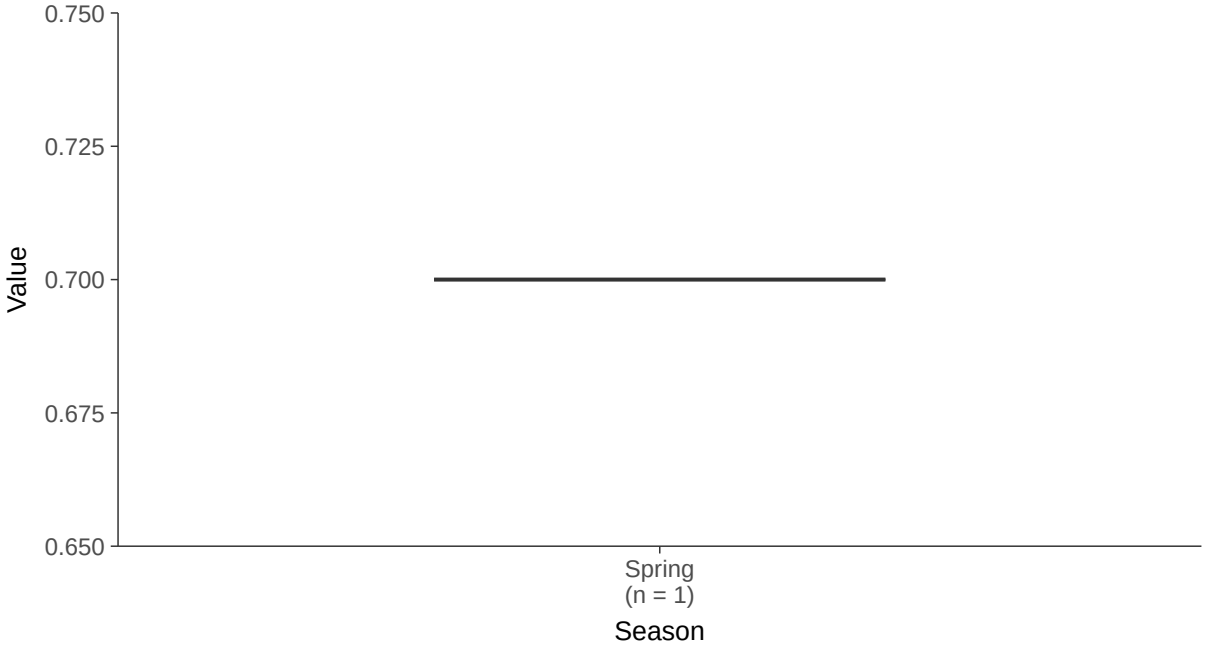
Boxplot

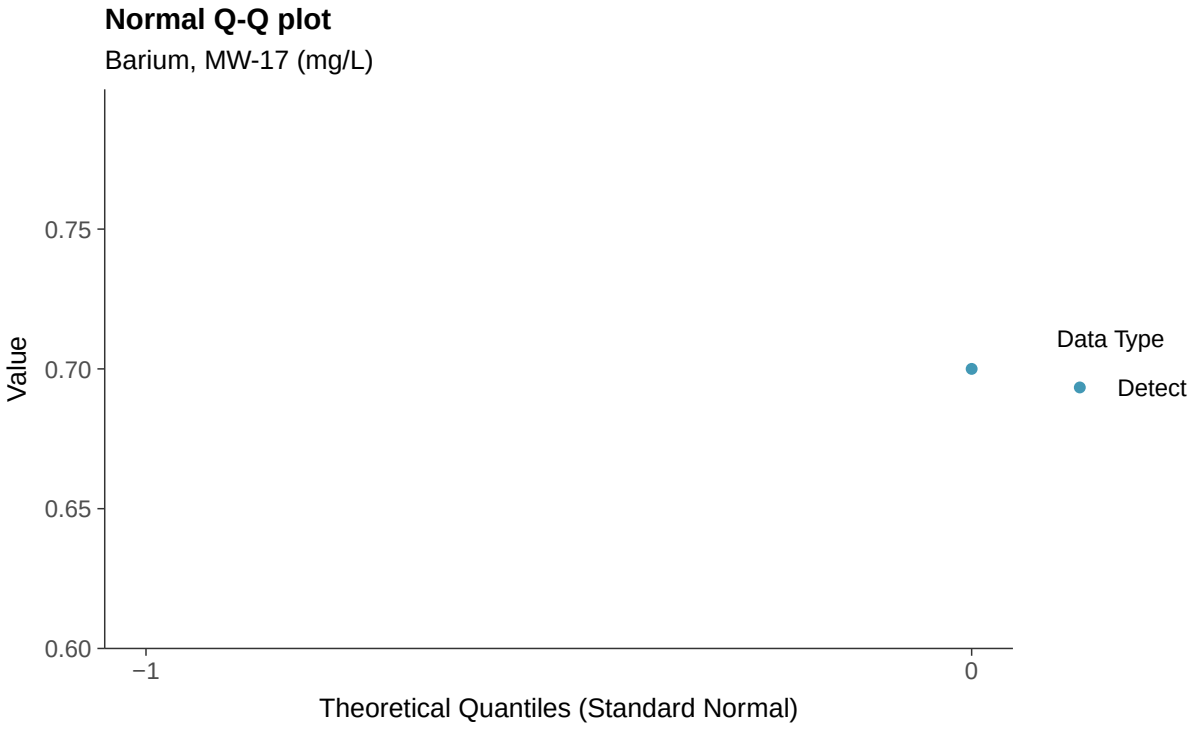
Barium, MW-17 (mg/L)



Boxplot by Season

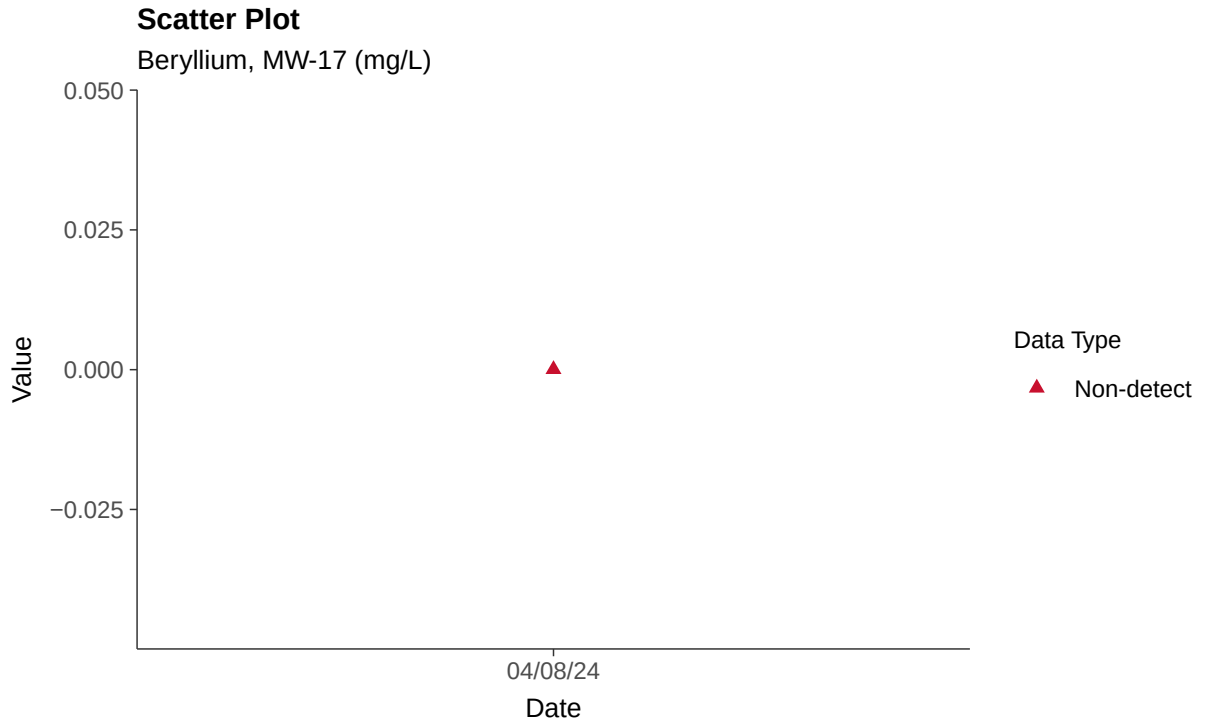
Barium, MW-17 (mg/L)

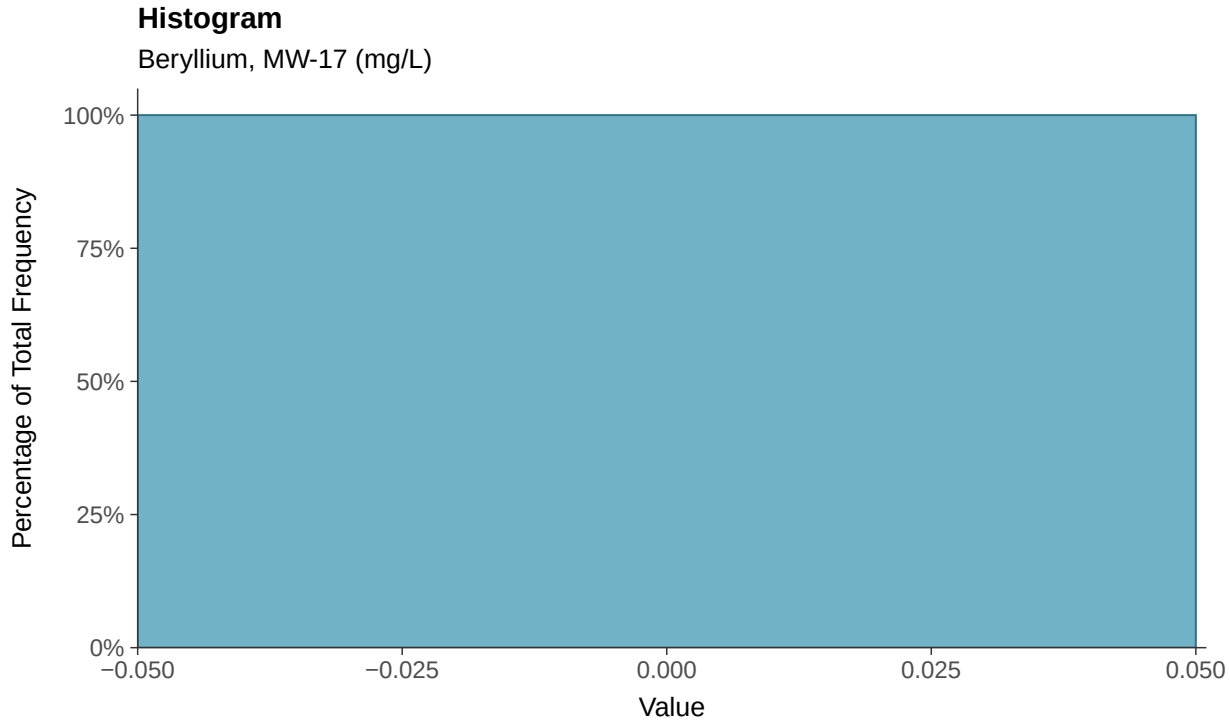



Normal Q-Q plot
Barium, MW-17 (mg/L)
Value
0.75
0.70
0.65
0.60
−1
0
Theoretical Quantiles (Standard Normal)
Data Type
Detect

Appendix IV: Beryllium, MW-17

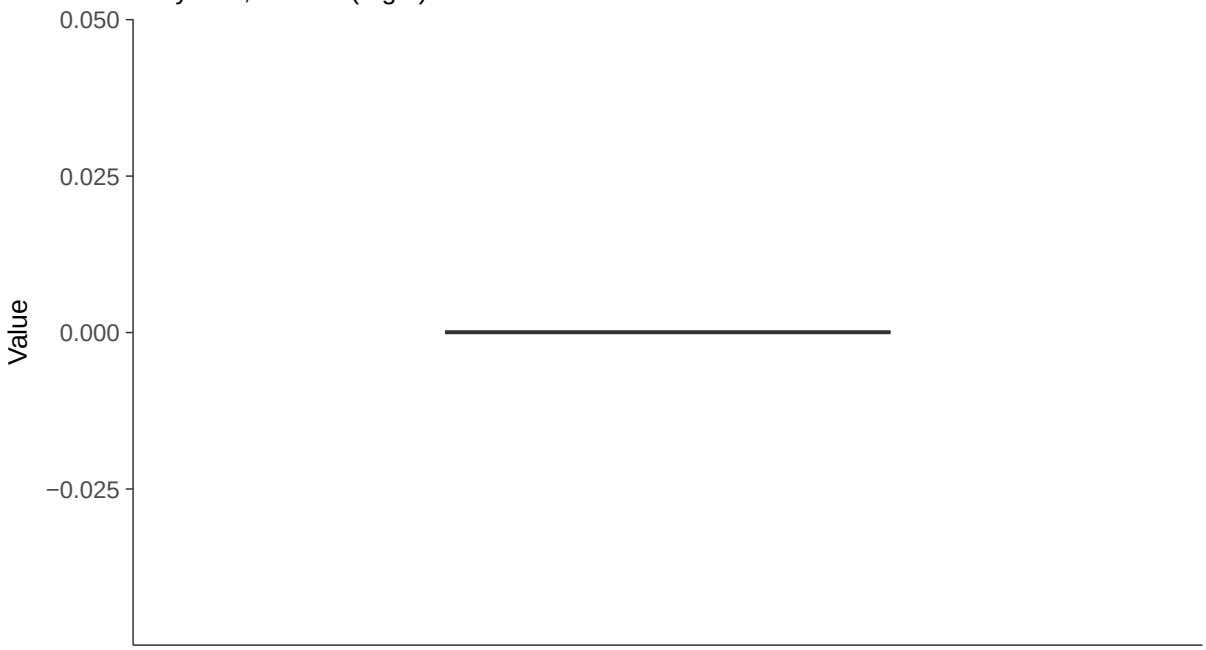
ID: 1_27_5_104





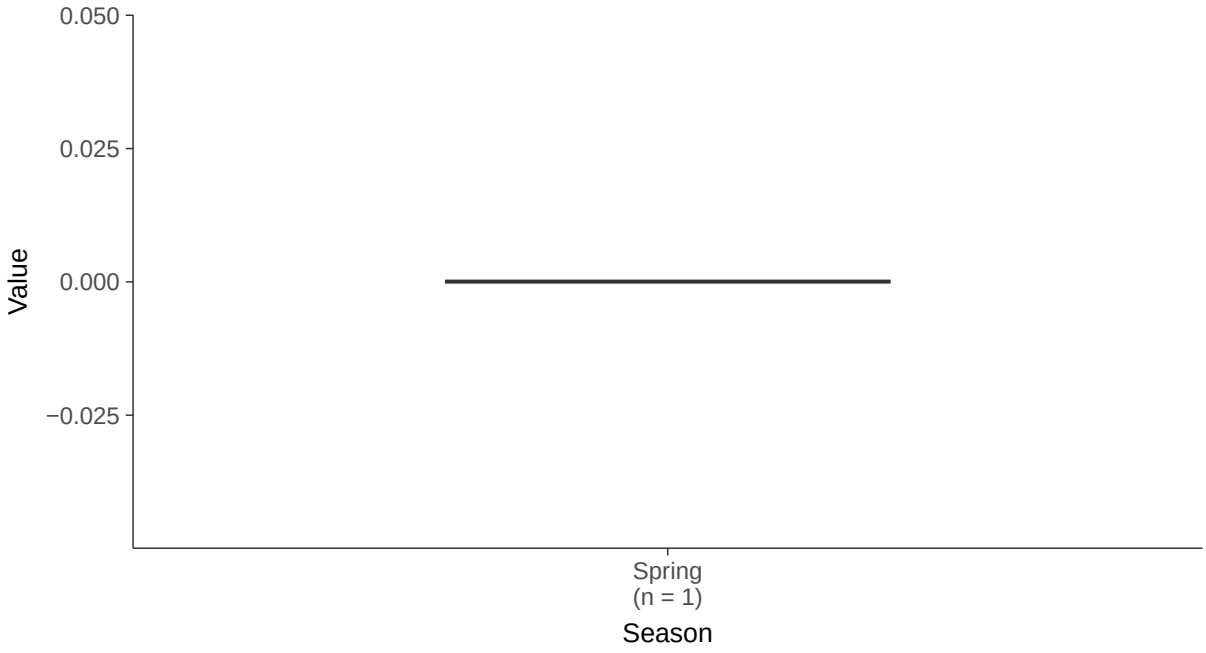
Boxplot

Beryllium, MW-17 (mg/L)



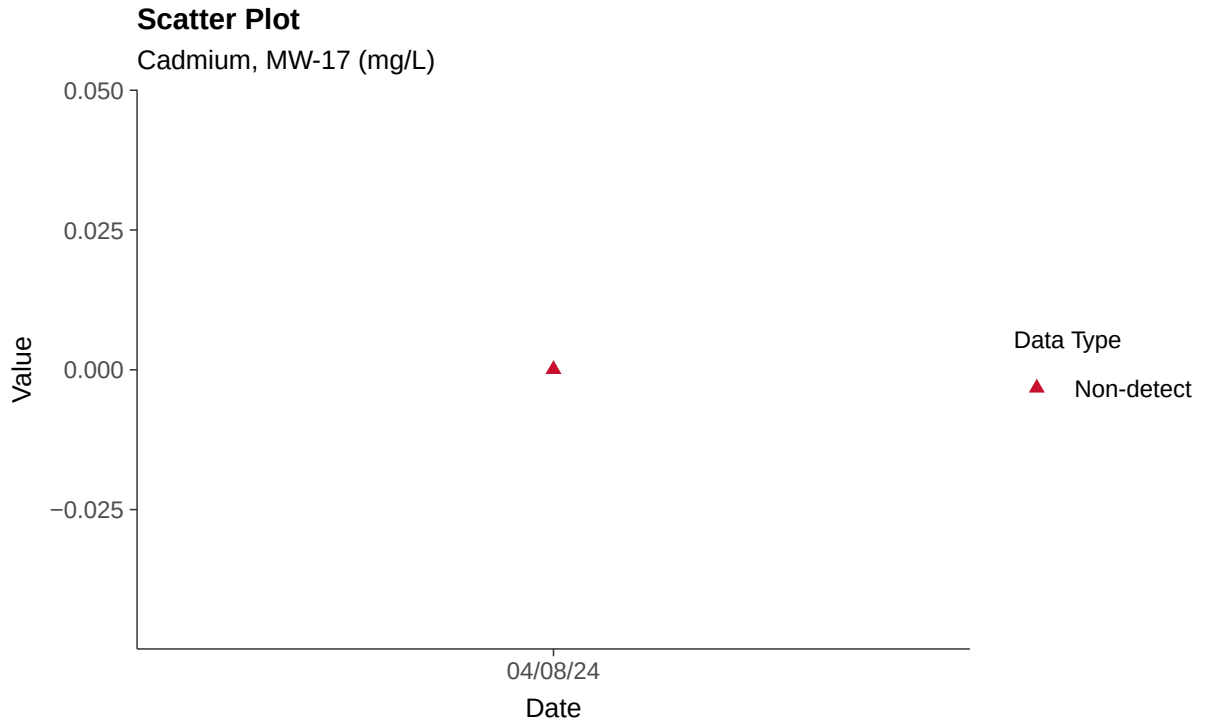
Boxplot by Season

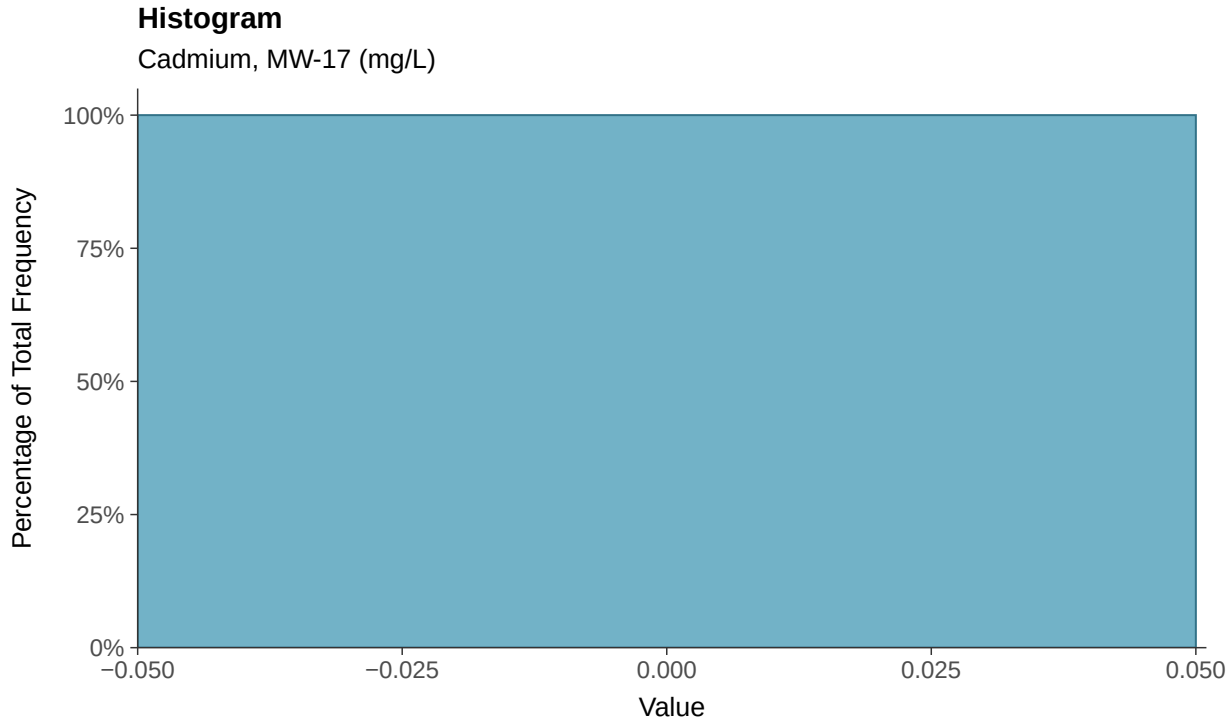
Beryllium, MW-17 (mg/L)



Appendix IV: Cadmium, MW-17

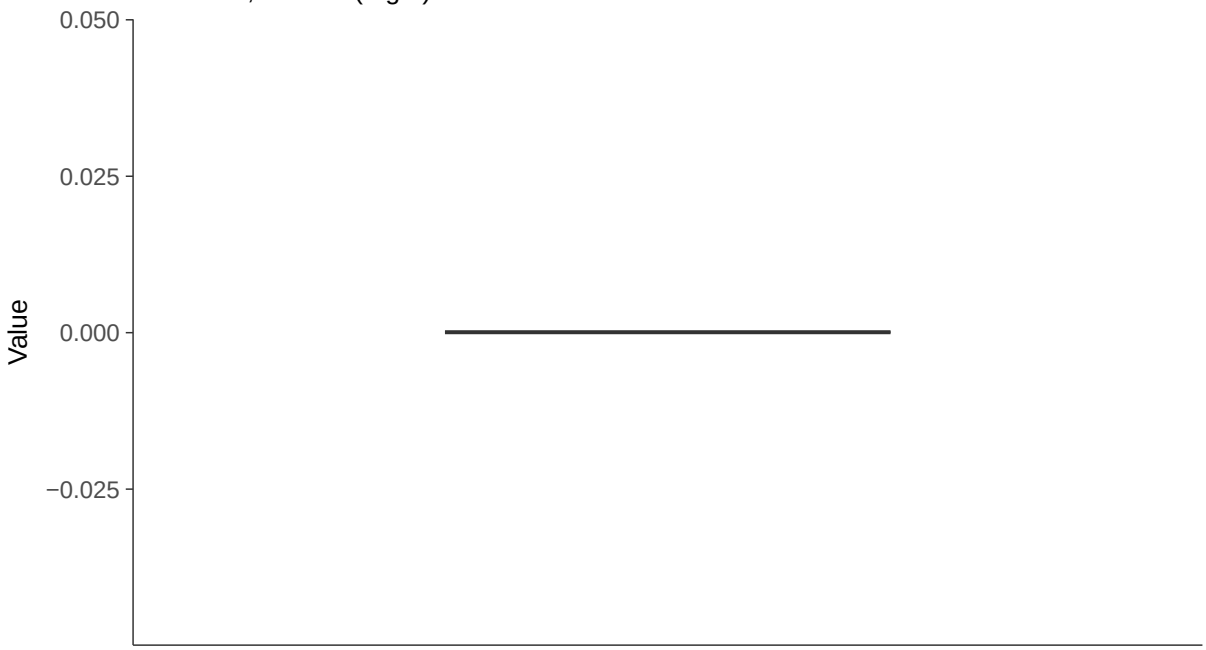
ID: 1_27_5_106





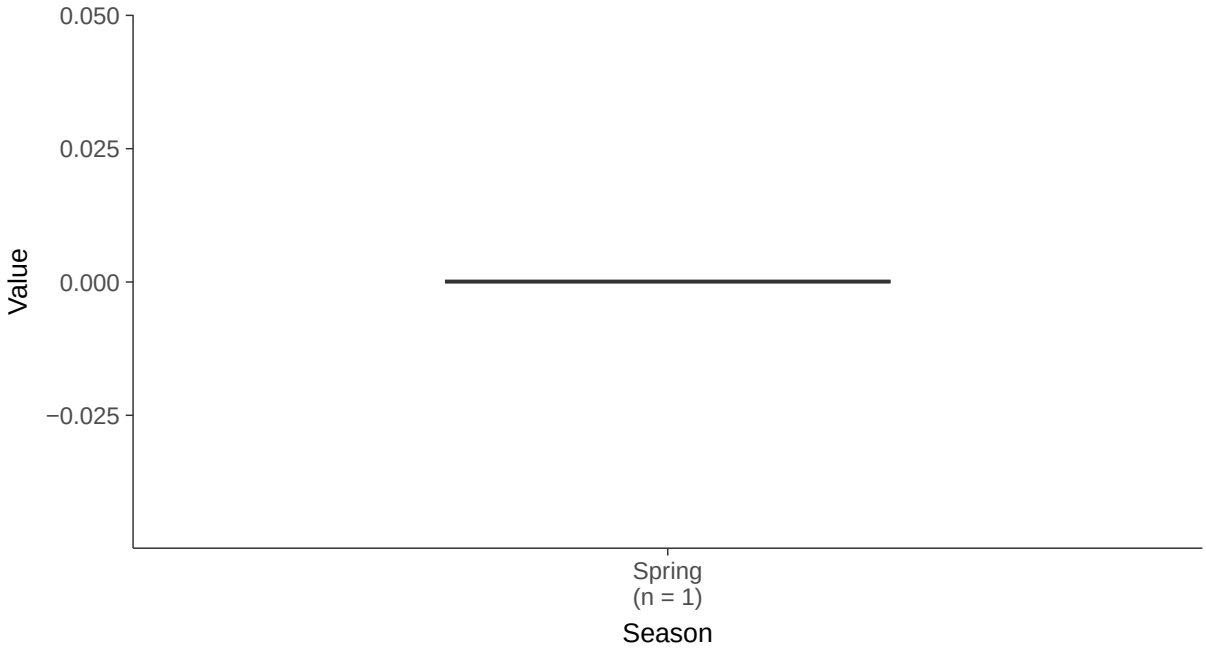
Boxplot

Cadmium, MW-17 (mg/L)



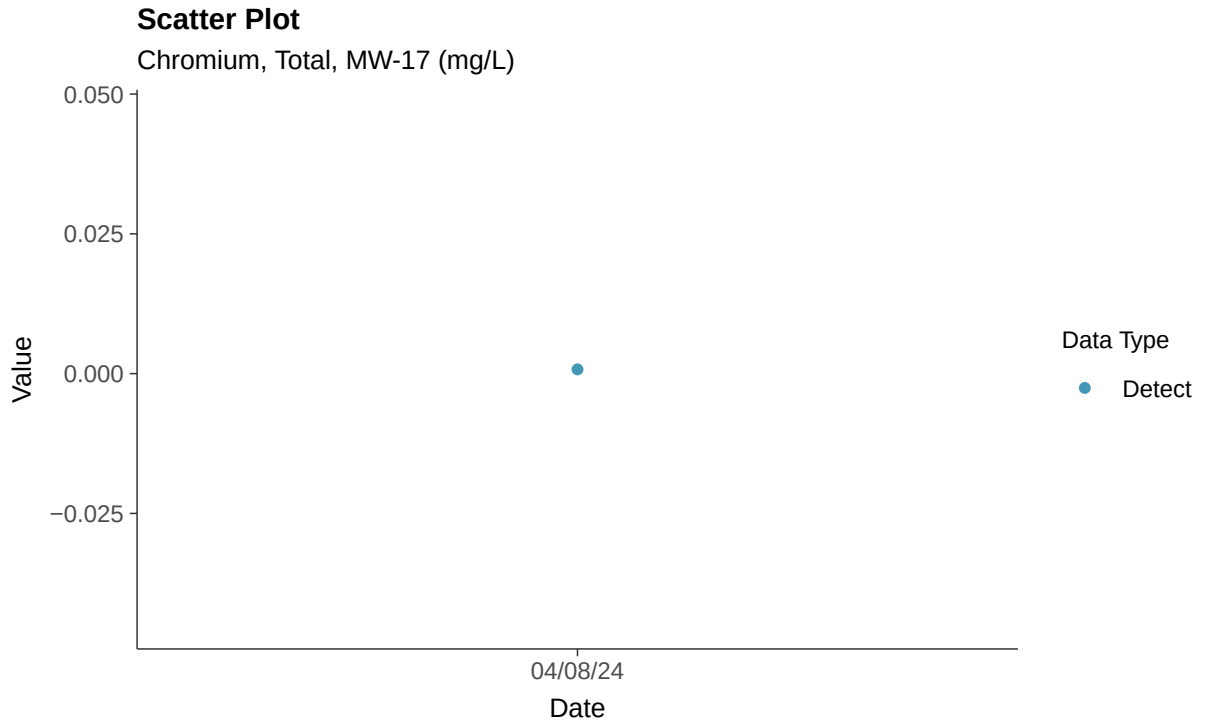
Boxplot by Season

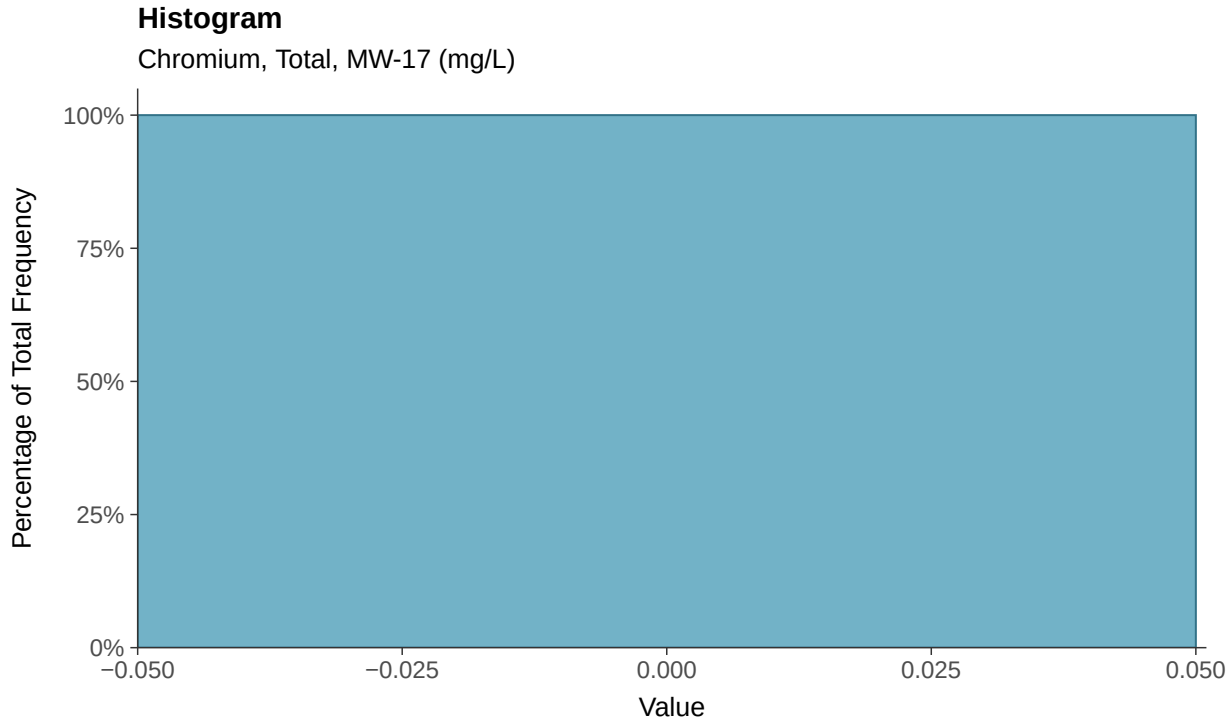
Cadmium, MW-17 (mg/L)



Appendix IV: Chromium, Total, MW-17

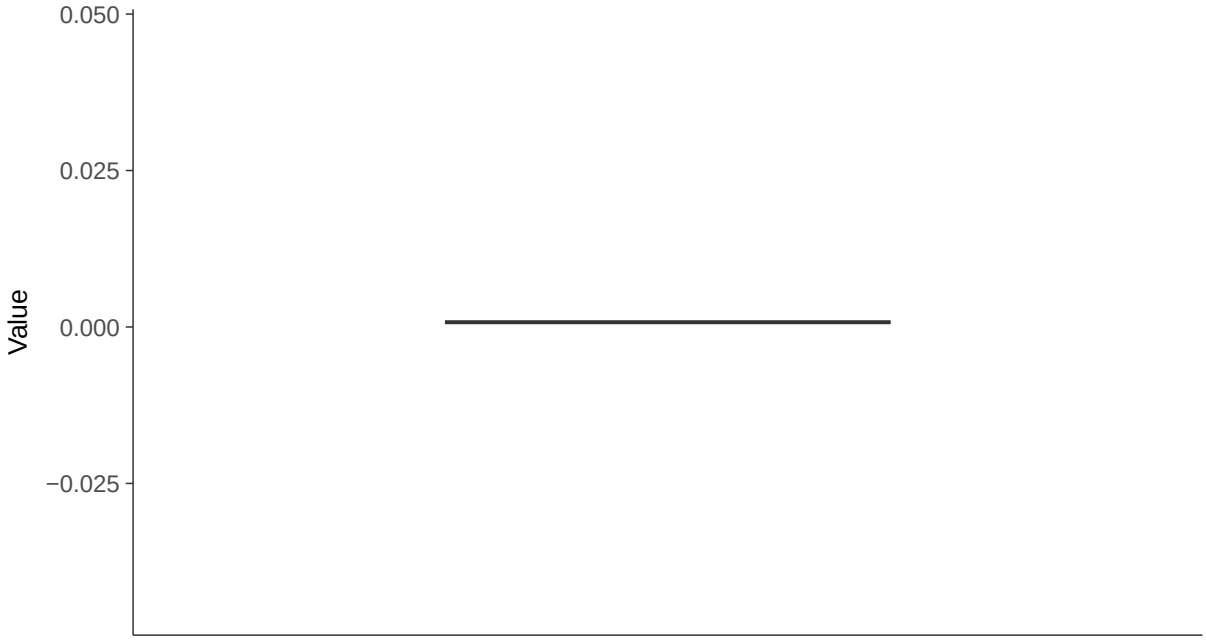
ID: 1_27_5_109





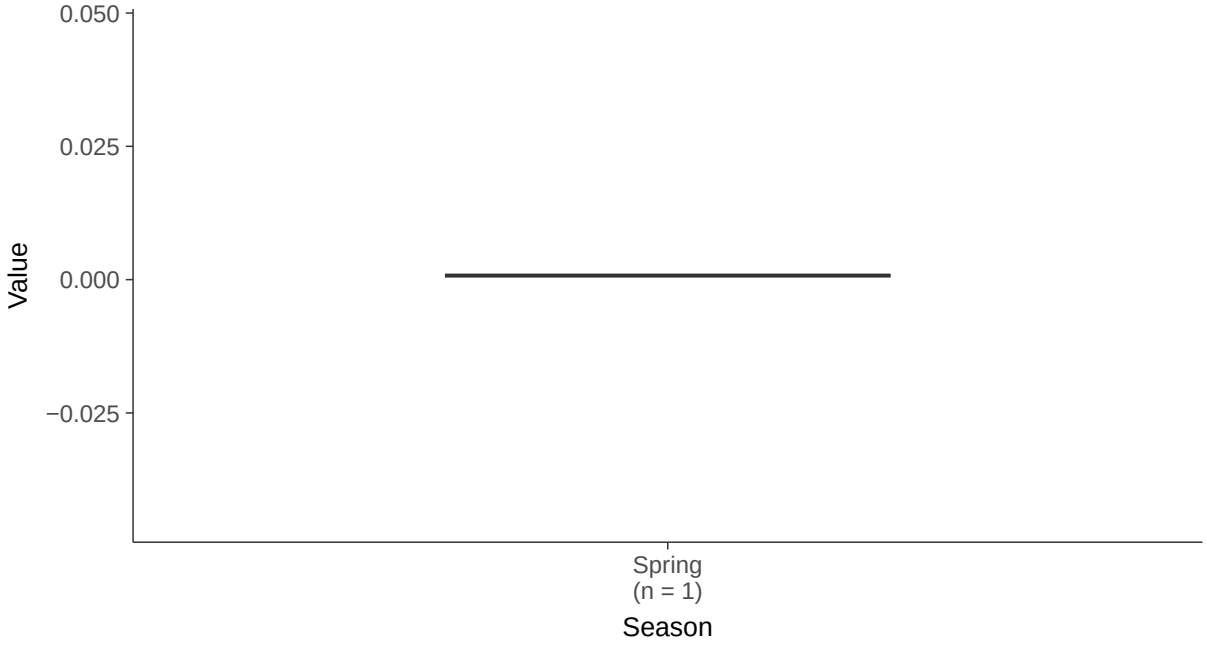
Boxplot

Chromium, Total, MW-17 (mg/L)



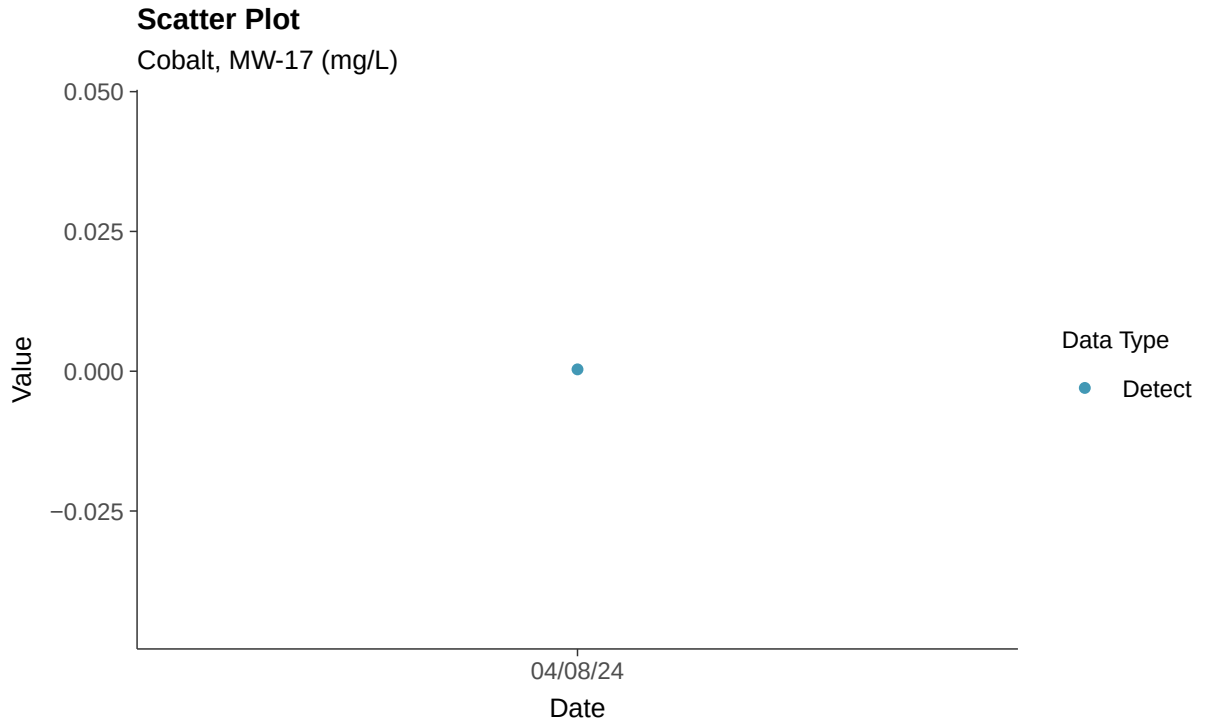
Boxplot by Season

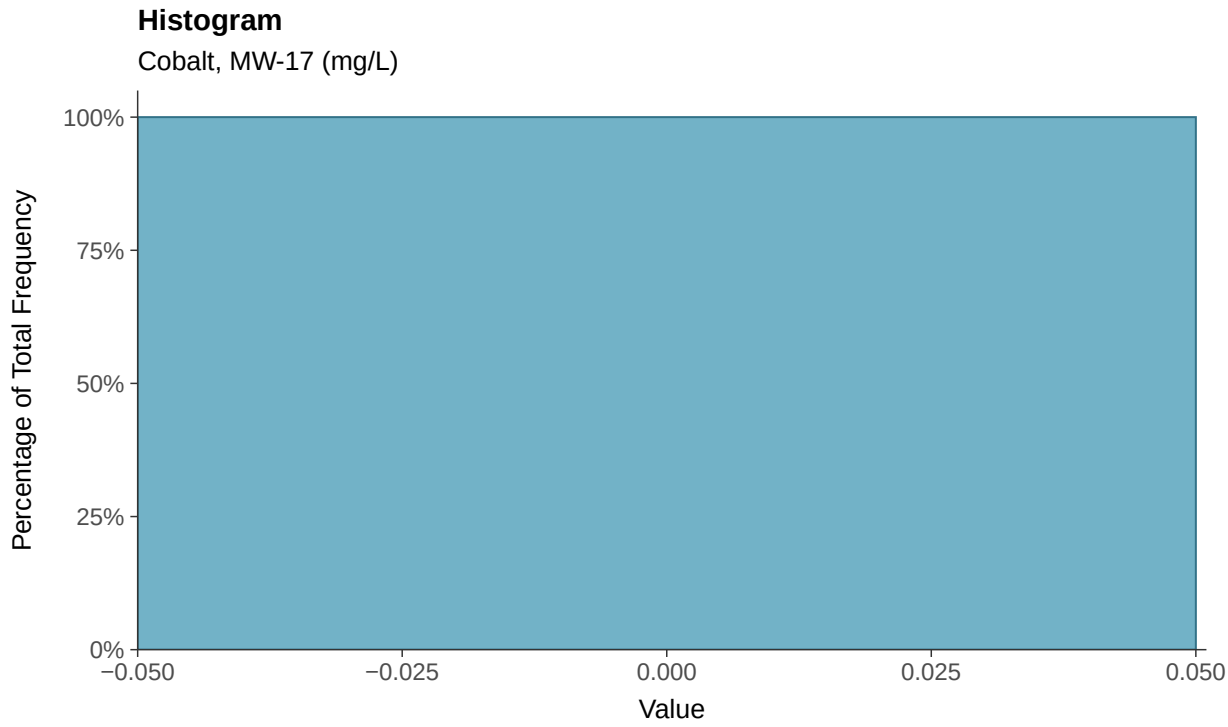
Chromium, Total, MW-17 (mg/L)



Appendix IV: Cobalt, MW-17

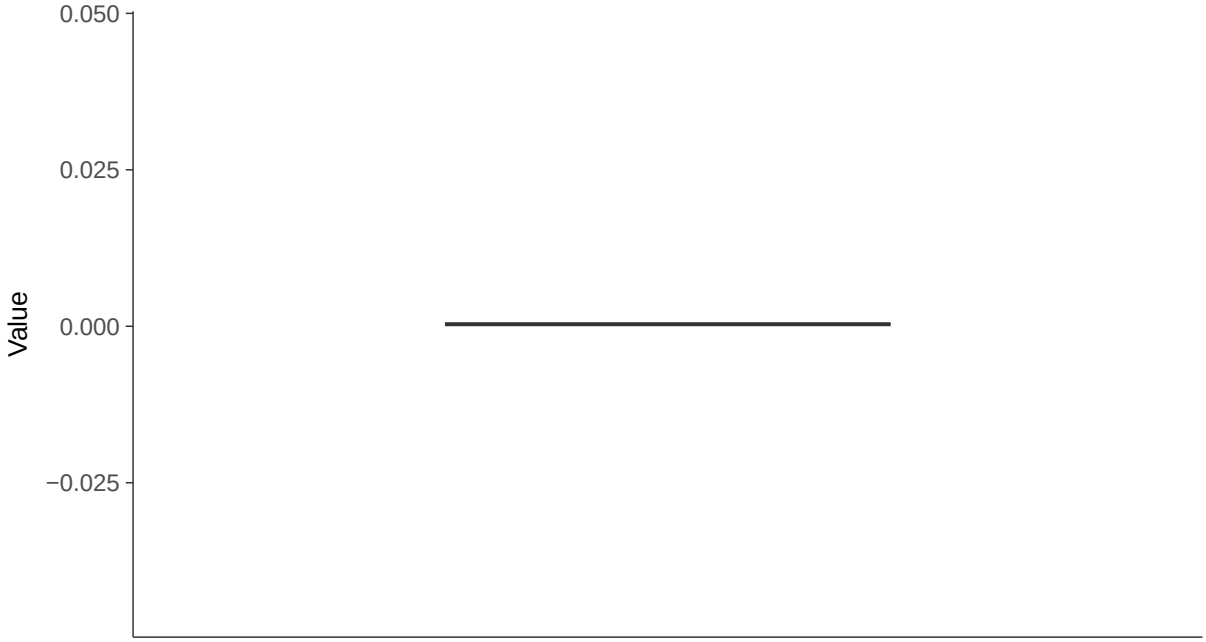
ID: 1_27_5_110





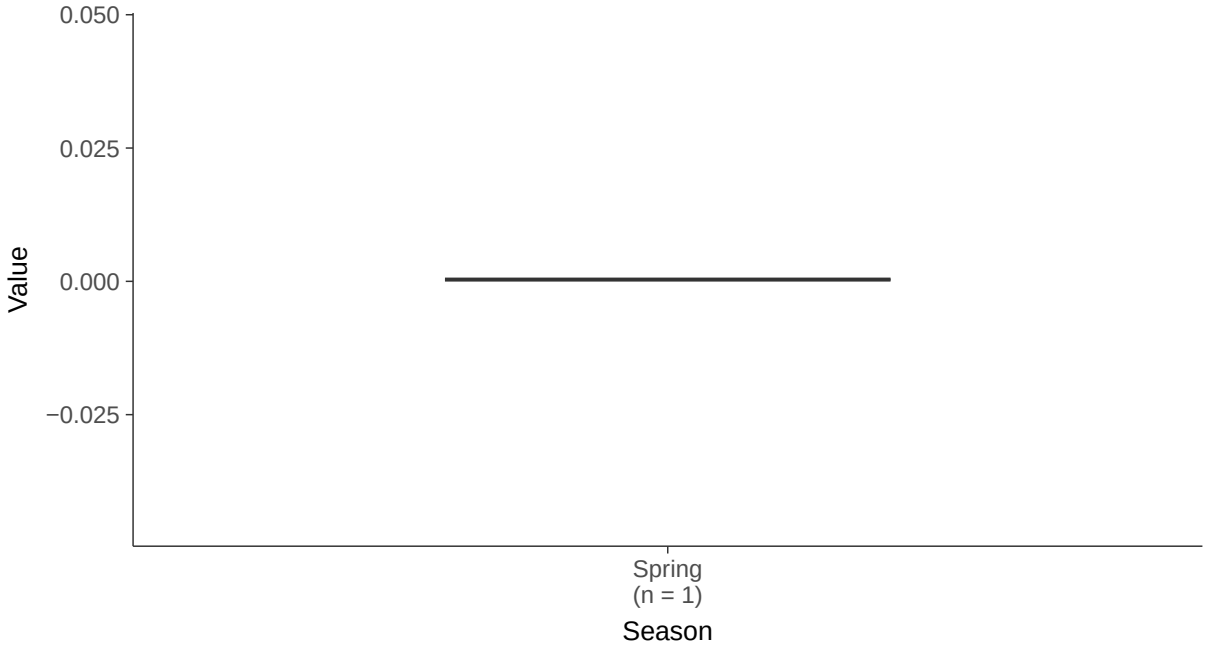
Boxplot

Cobalt, MW-17 (mg/L)



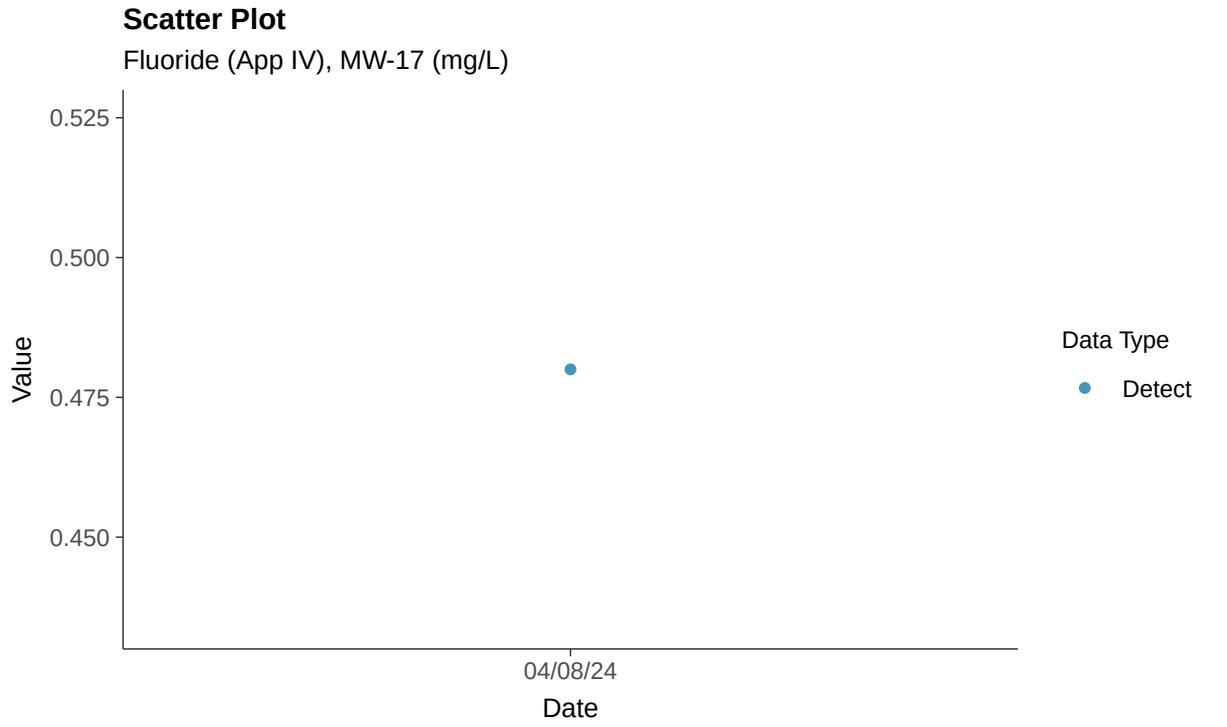
Boxplot by Season

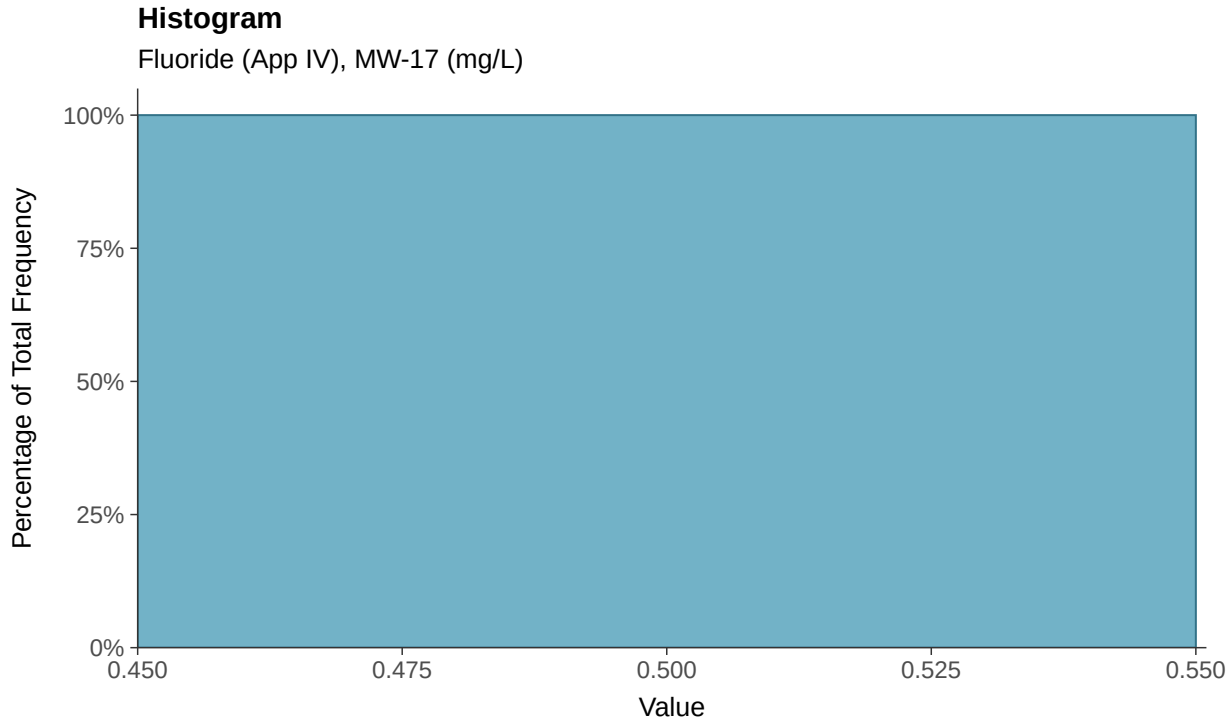
Cobalt, MW-17 (mg/L)



Appendix IV: Fluoride (App IV), MW-17

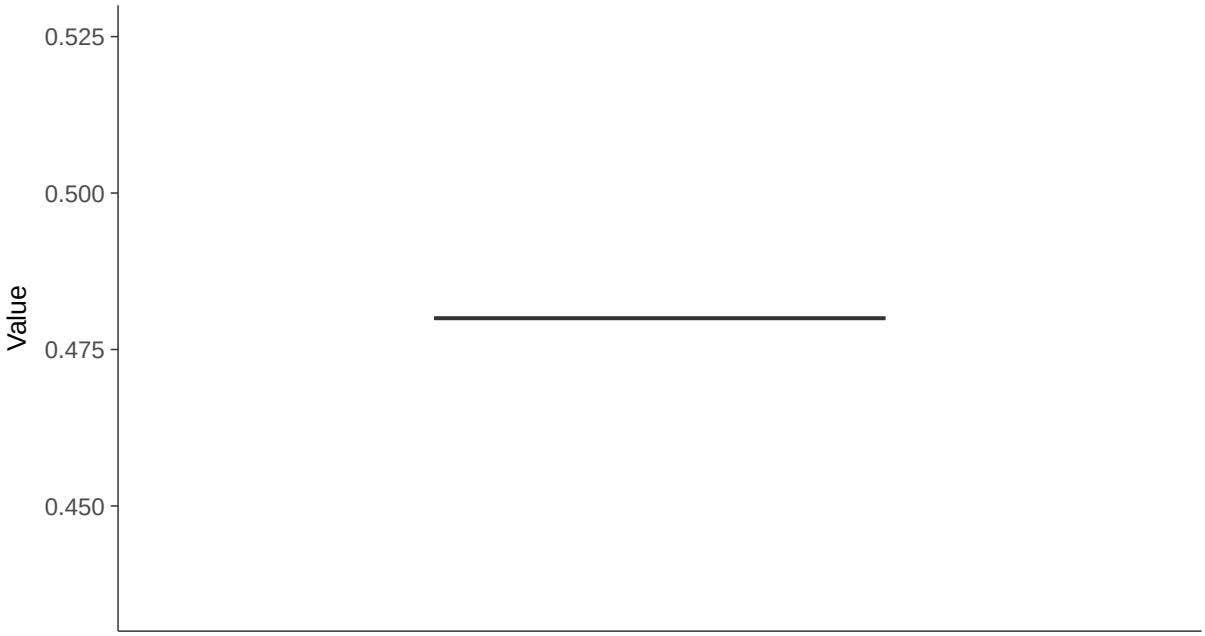
ID: 1_27_5_113





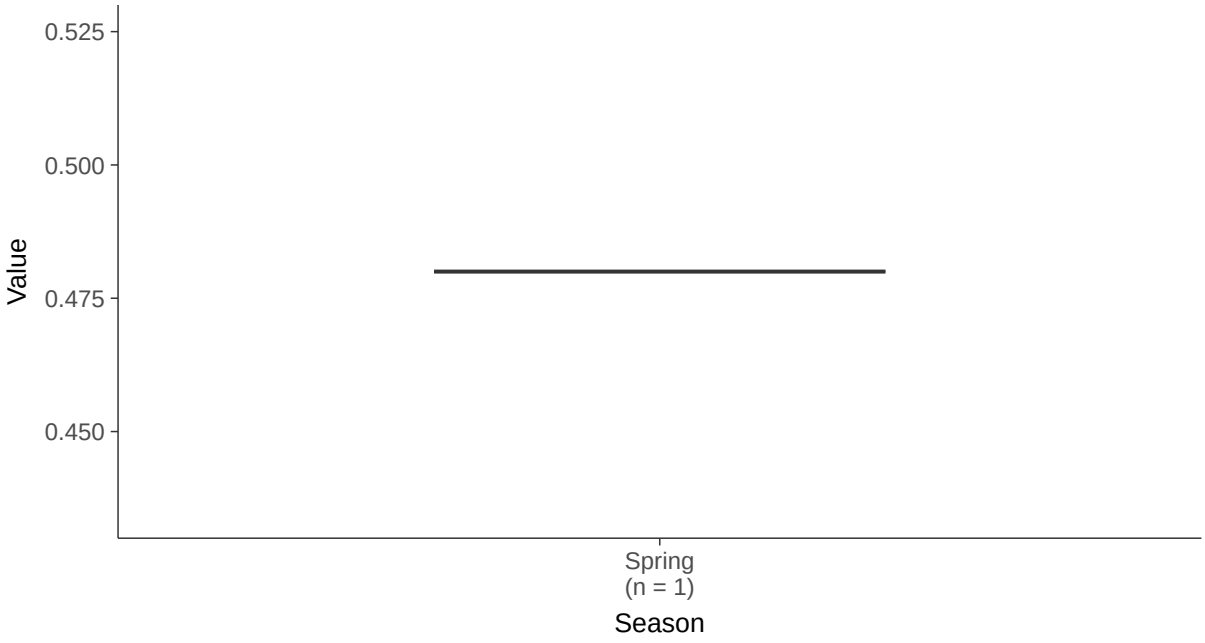
Boxplot

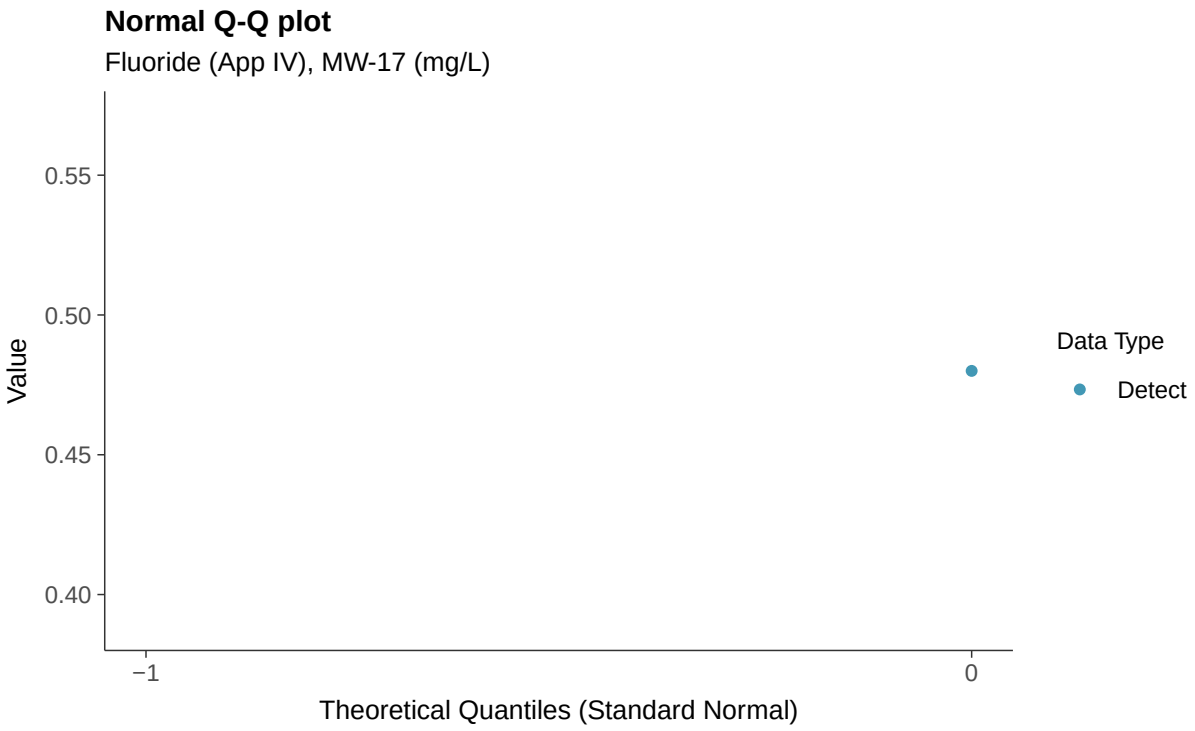
Fluoride (App IV), MW-17 (mg/L)



Boxplot by Season

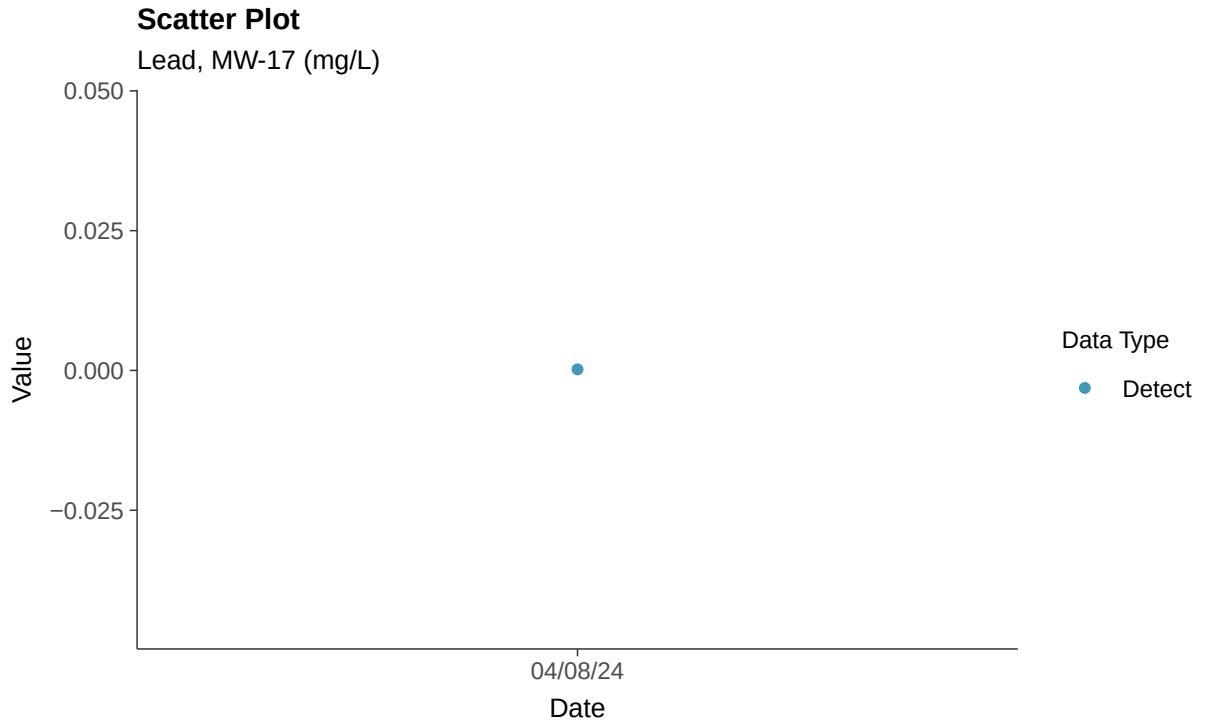
Fluoride (App IV), MW-17 (mg/L)

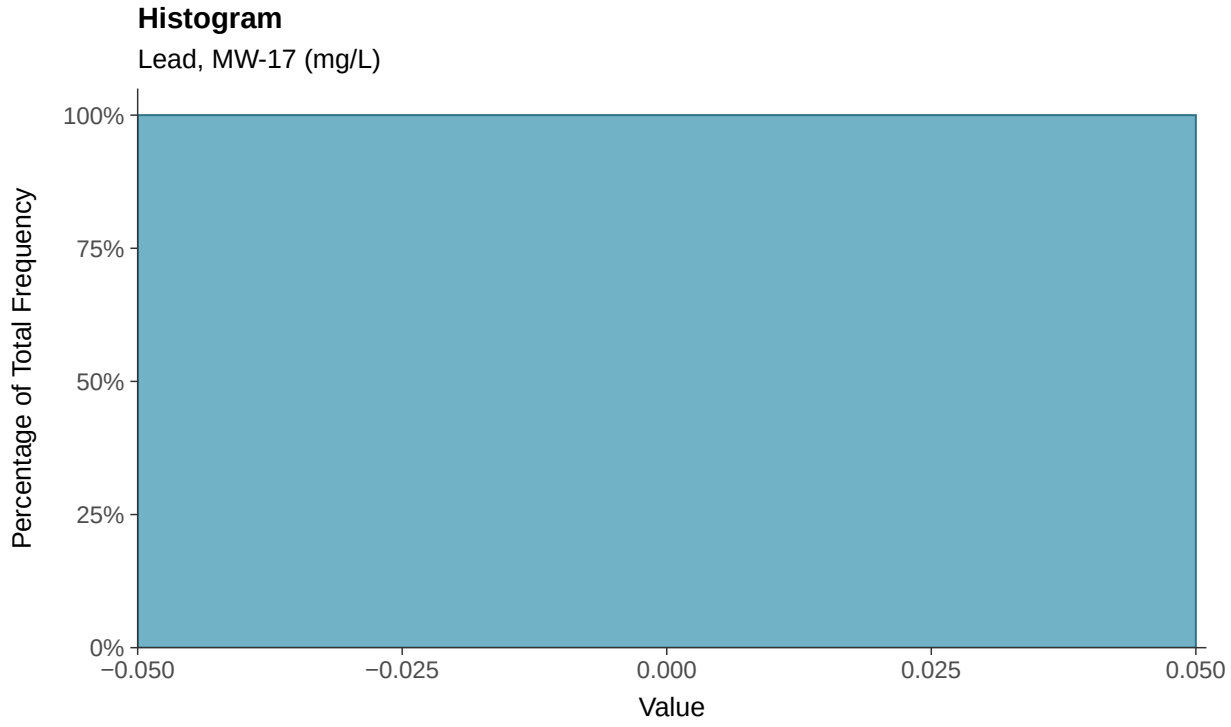



Normal Q-Q plot
Fluoride (App IV), MW-17 (mg/L)
Value
0.55
0.50
0.45
0.40
−1
0
Theoretical Quantiles (Standard Normal)
Data Type
Detect

Appendix IV: Lead, MW-17

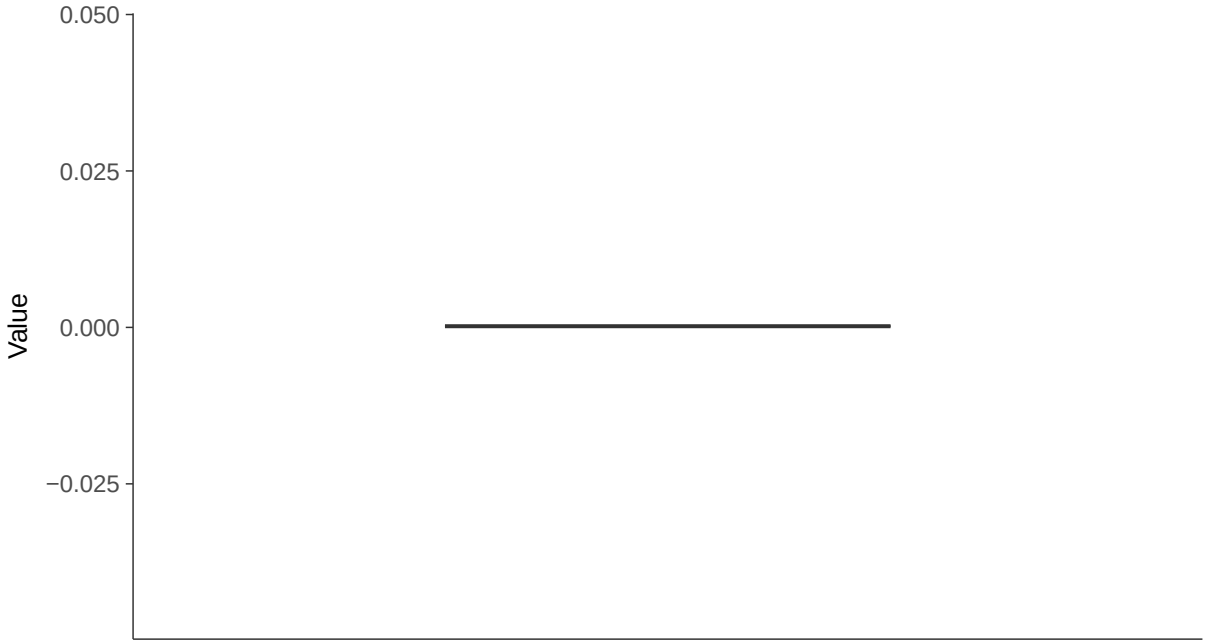
ID: 1_27_5_115





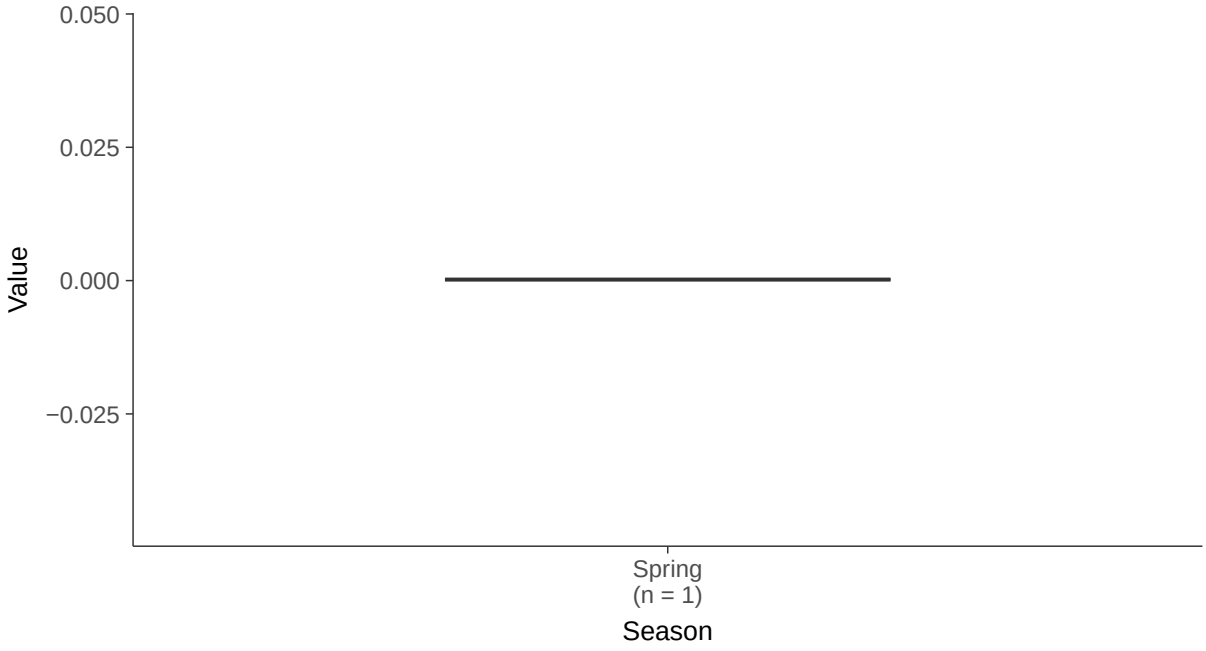
Boxplot

Lead, MW-17 (mg/L)



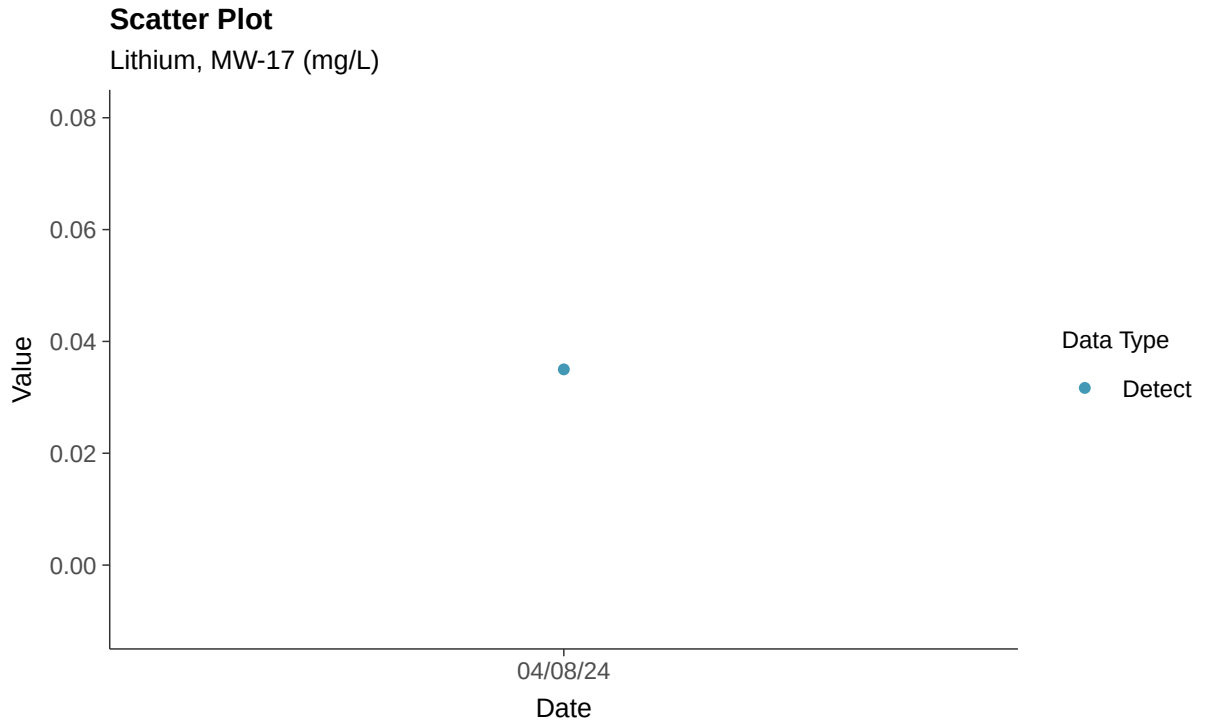
Boxplot by Season

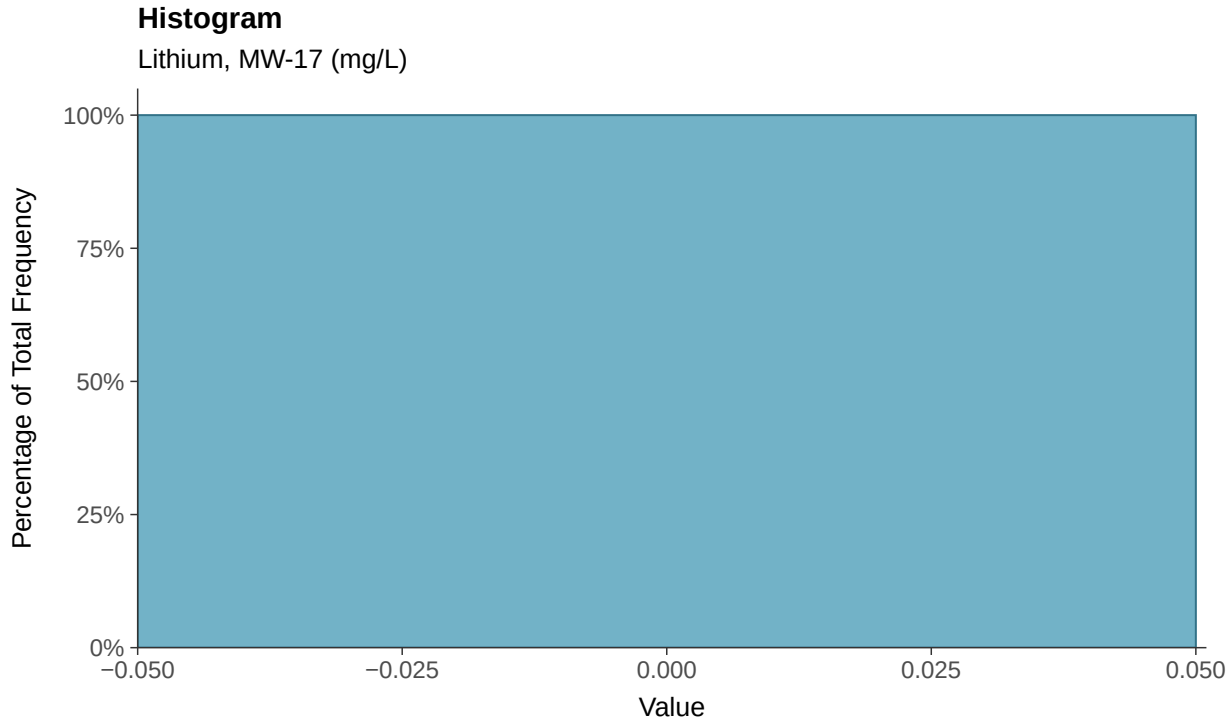
Lead, MW-17 (mg/L)



Appendix IV: Lithium, MW-17

ID: 1_27_5_116



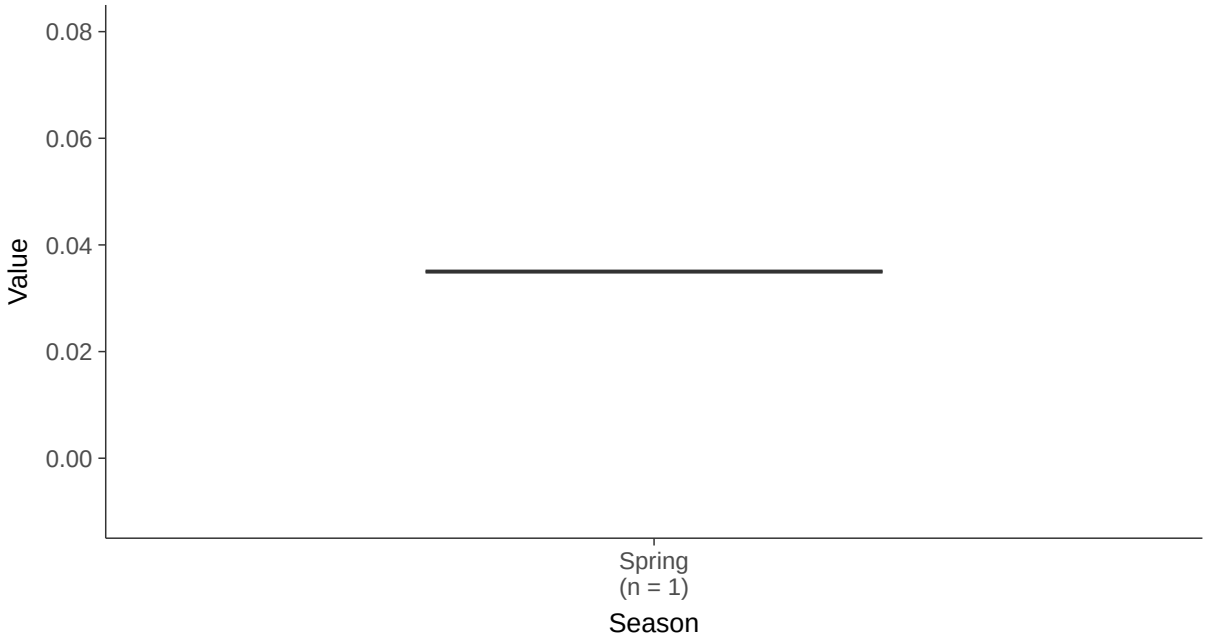


Boxplot

Lithium, MW-17 (mg/L)

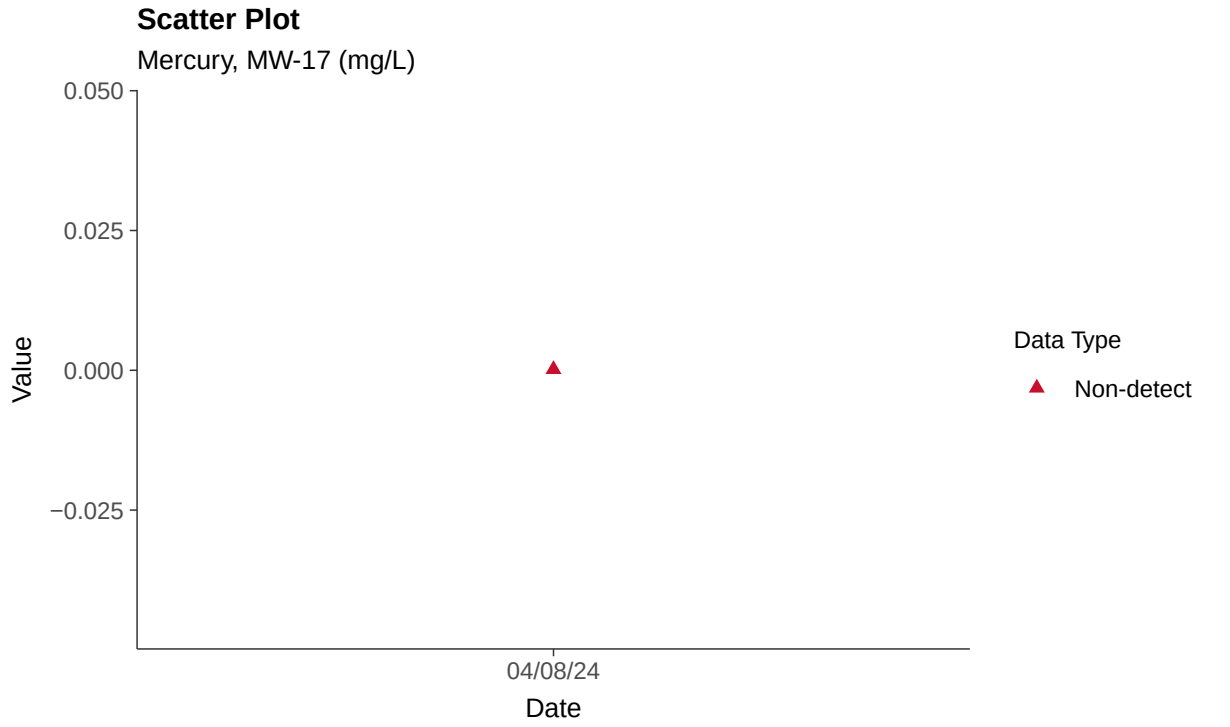
Boxplot by Season

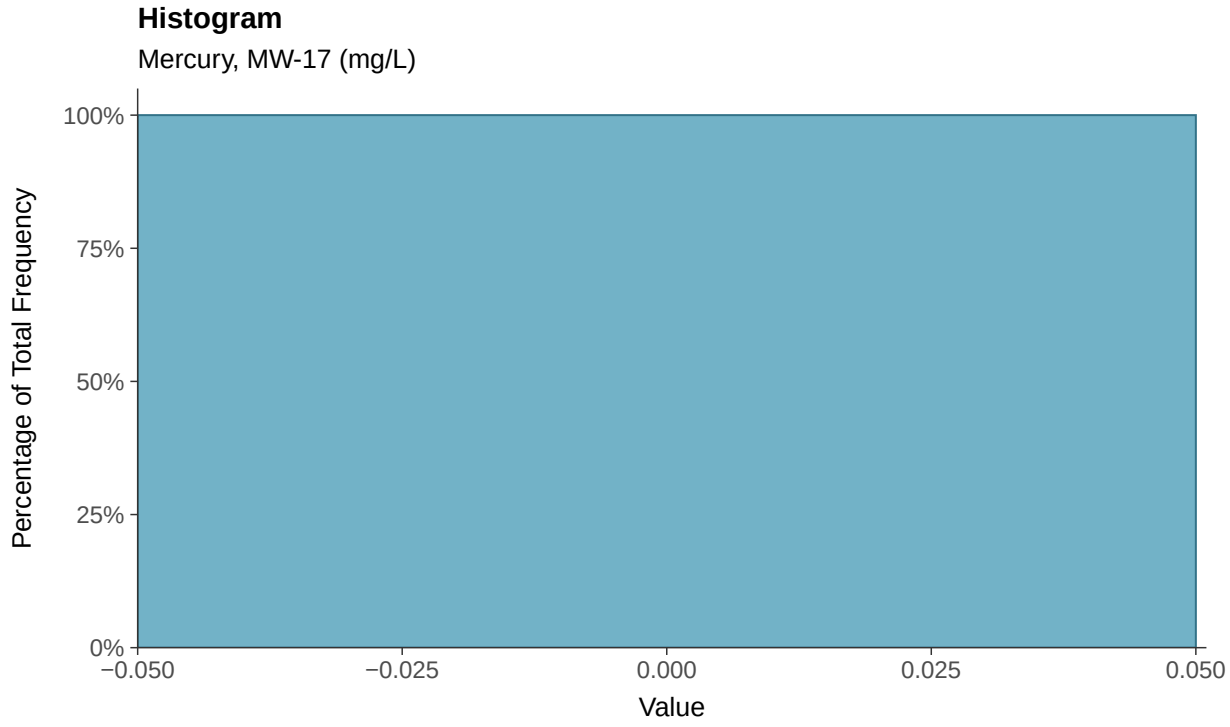
Lithium, MW-17 (mg/L)



Appendix IV: Mercury, MW-17

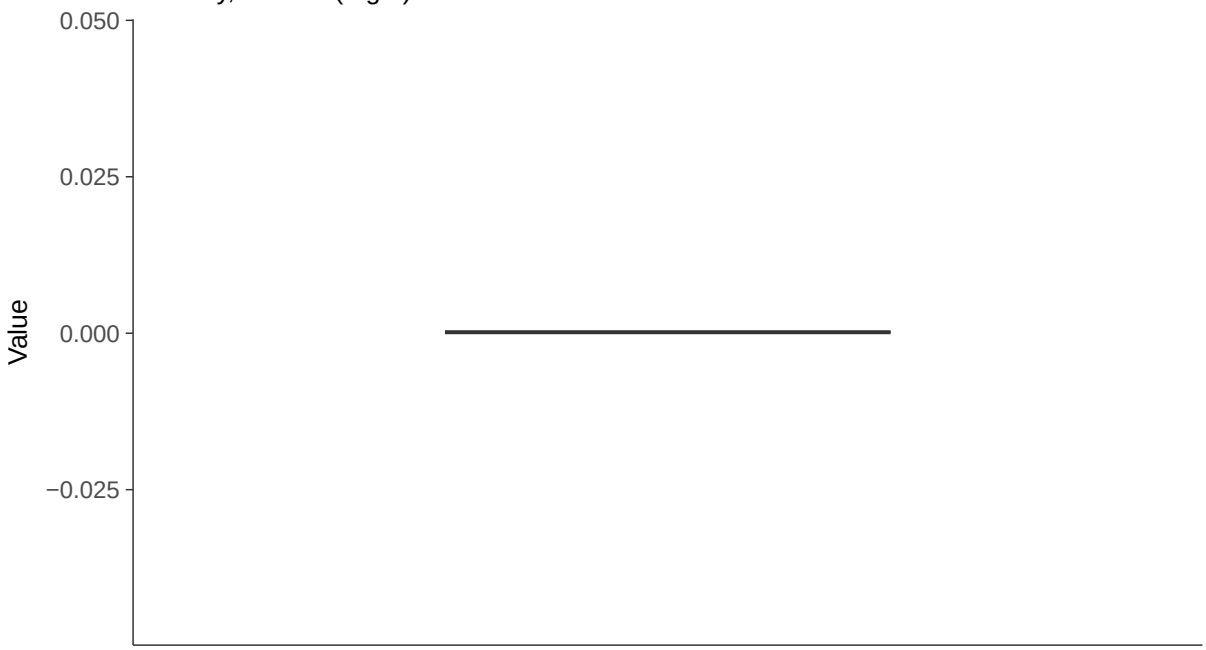
ID: 1_27_5_117





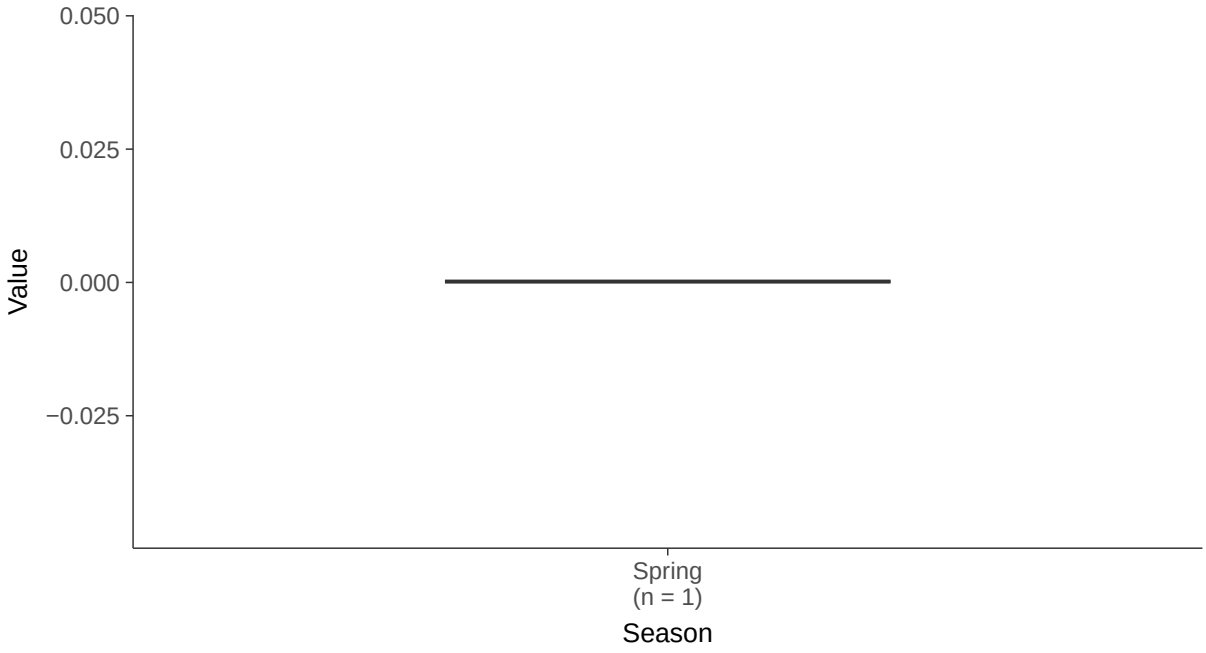
Boxplot

Mercury, MW-17 (mg/L)



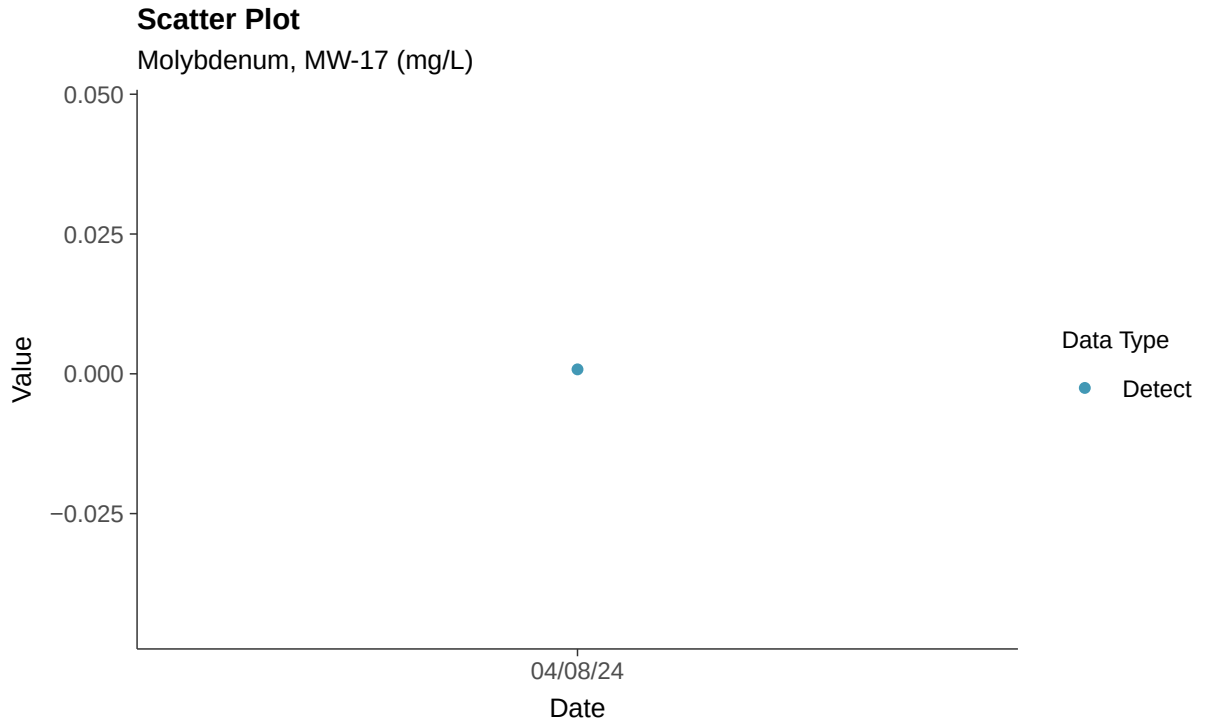
Boxplot by Season

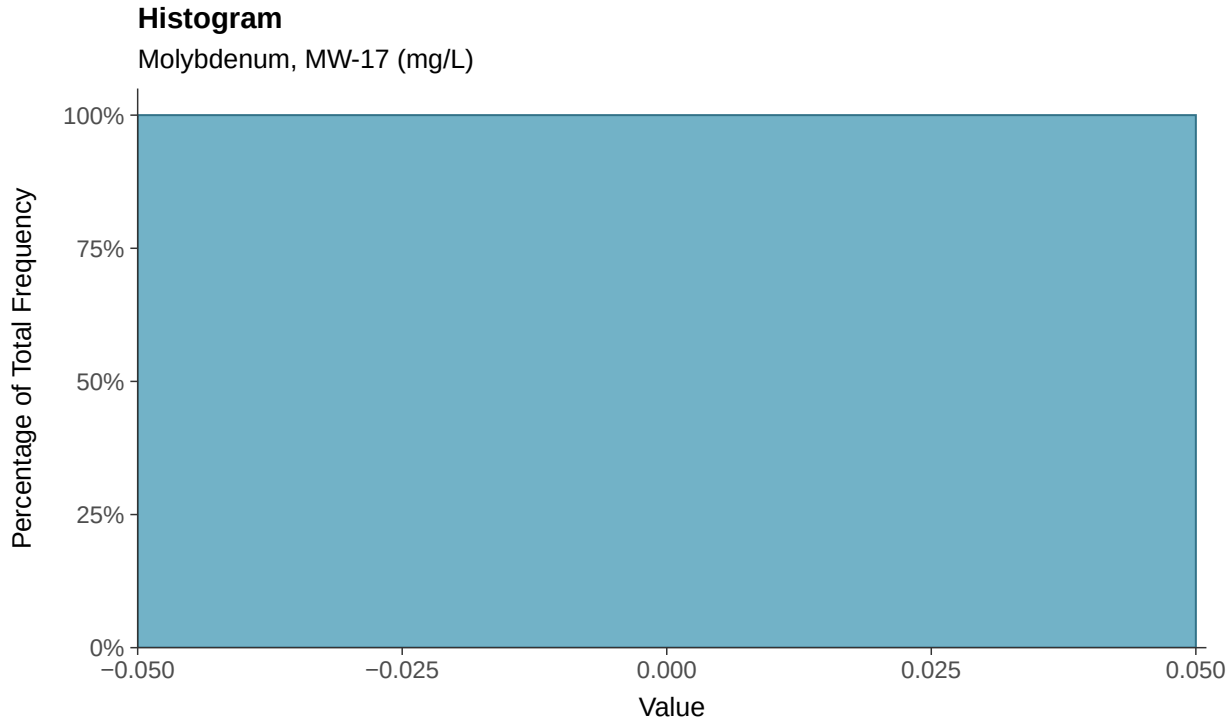
Mercury, MW-17 (mg/L)



Appendix IV: Molybdenum, MW-17

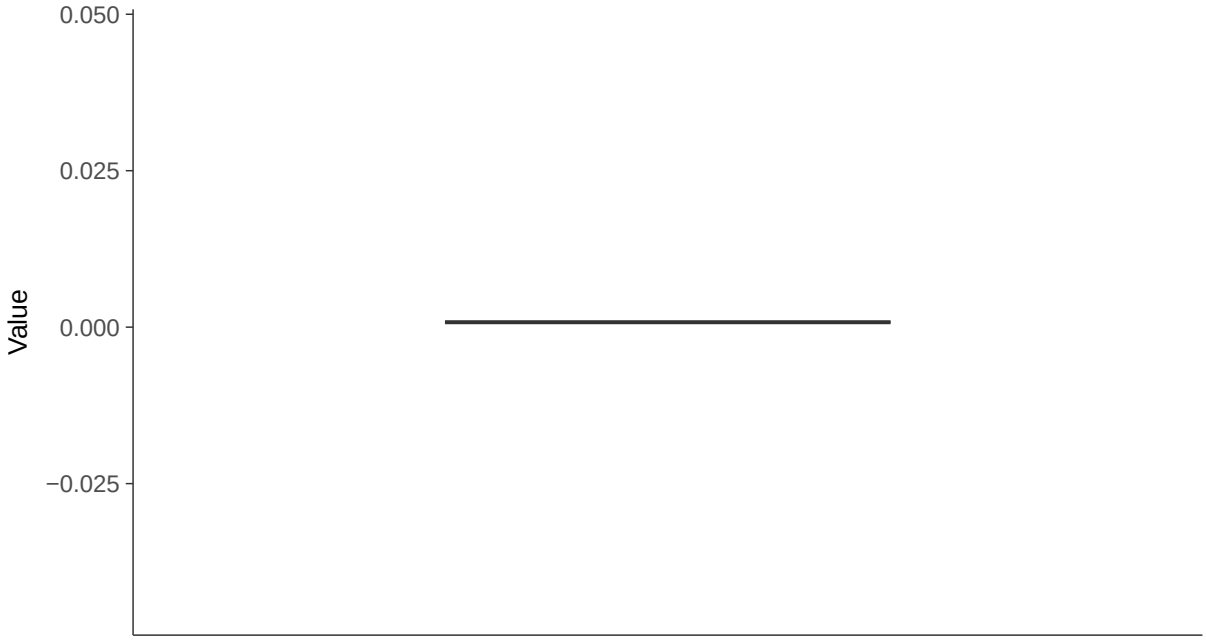
ID: 1_27_5_118





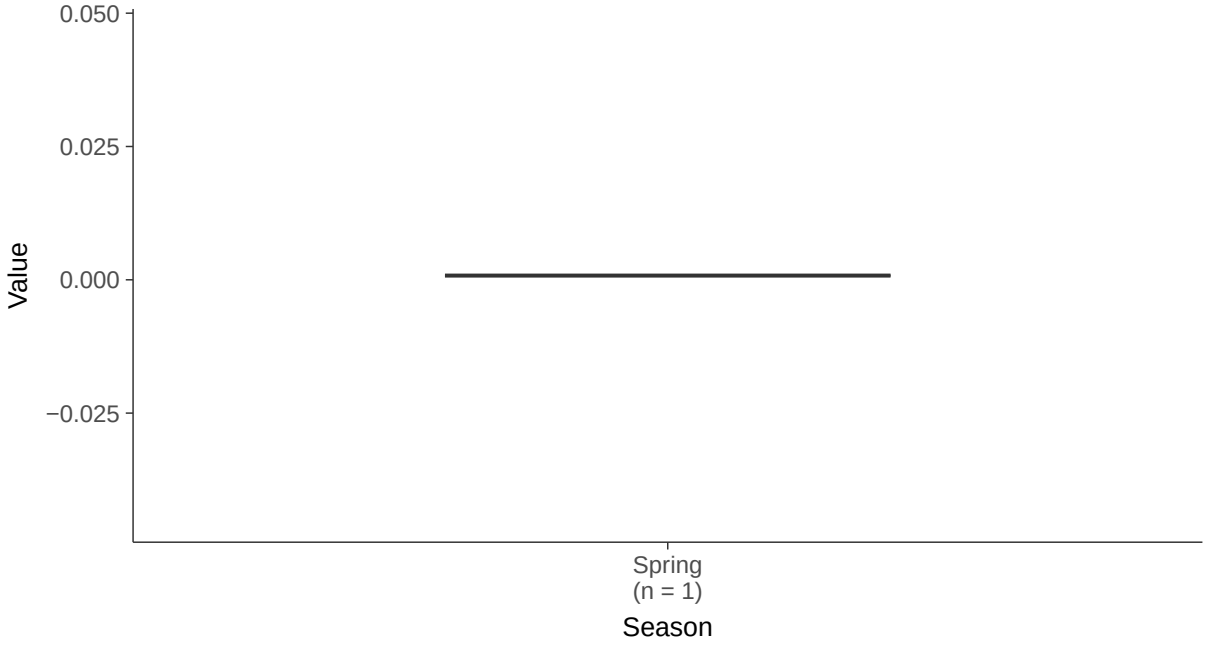
Boxplot

Molybdenum, MW-17 (mg/L)



Boxplot by Season

Molybdenum, MW-17 (mg/L)

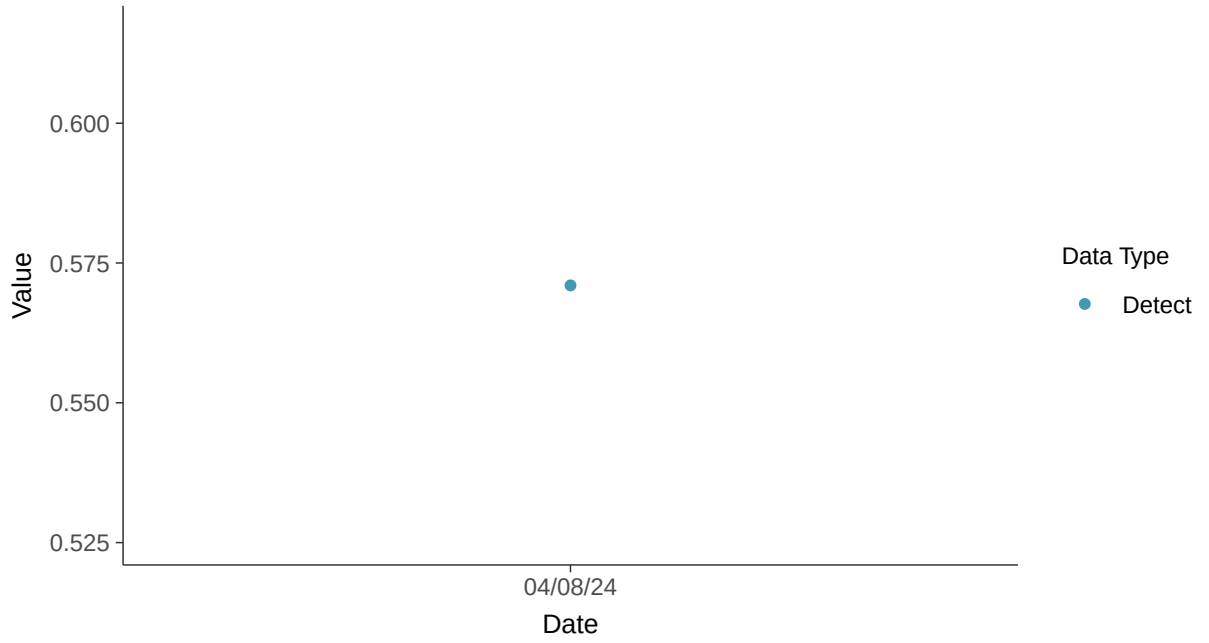


Appendix IV: Radium 226 and 228, MW-17

ID: 1_27_5_121

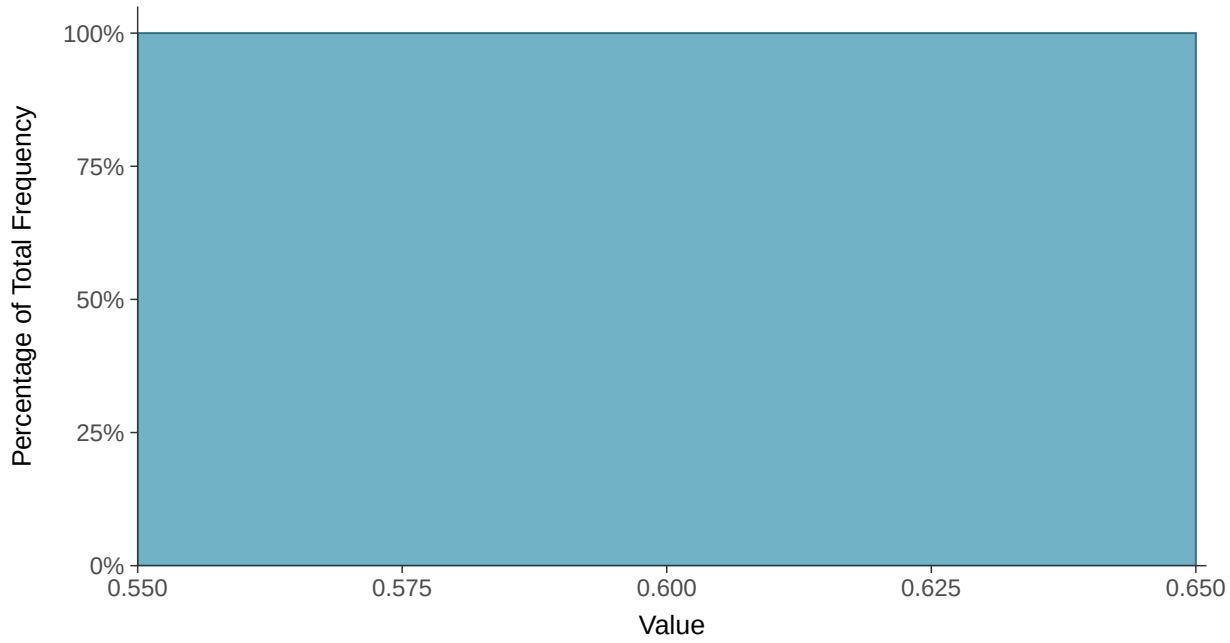
Scatter Plot

Radium 226 and 228, MW-17 (pCi/L)



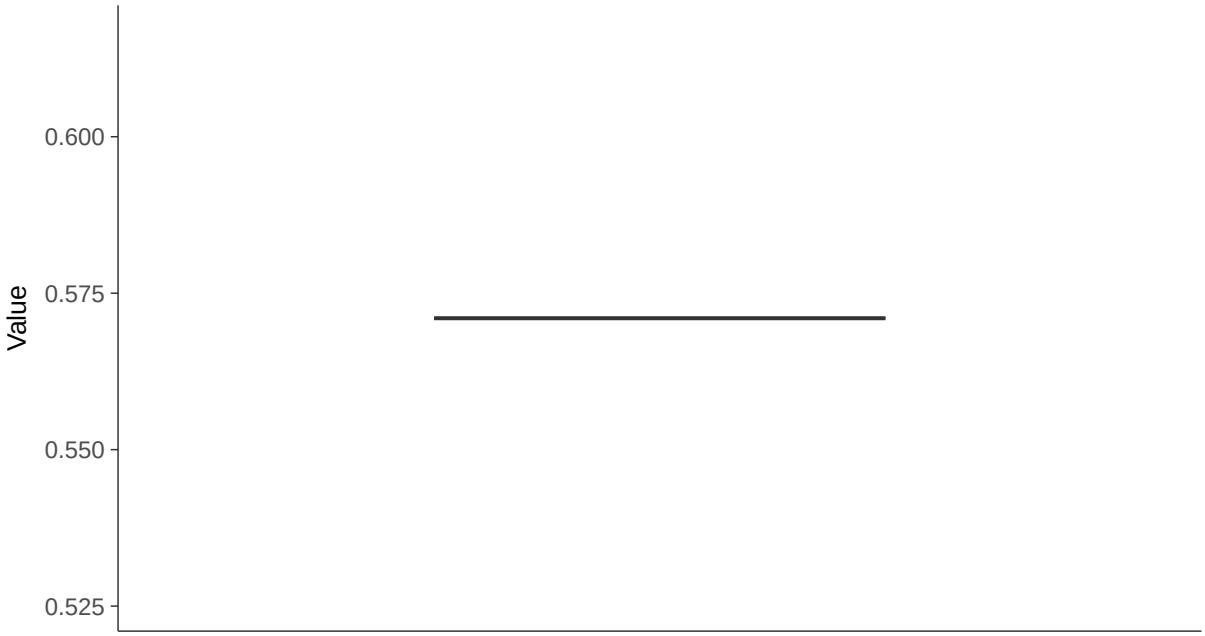
Histogram

Radium 226 and 228, MW-17 (pCi/L)



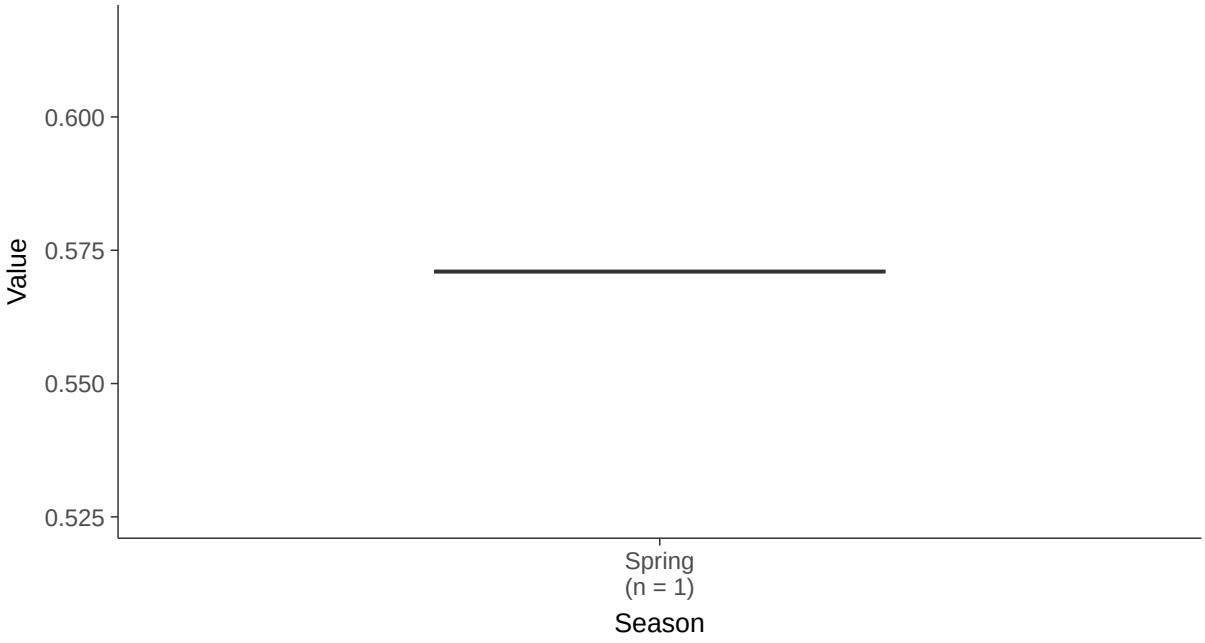
Boxplot

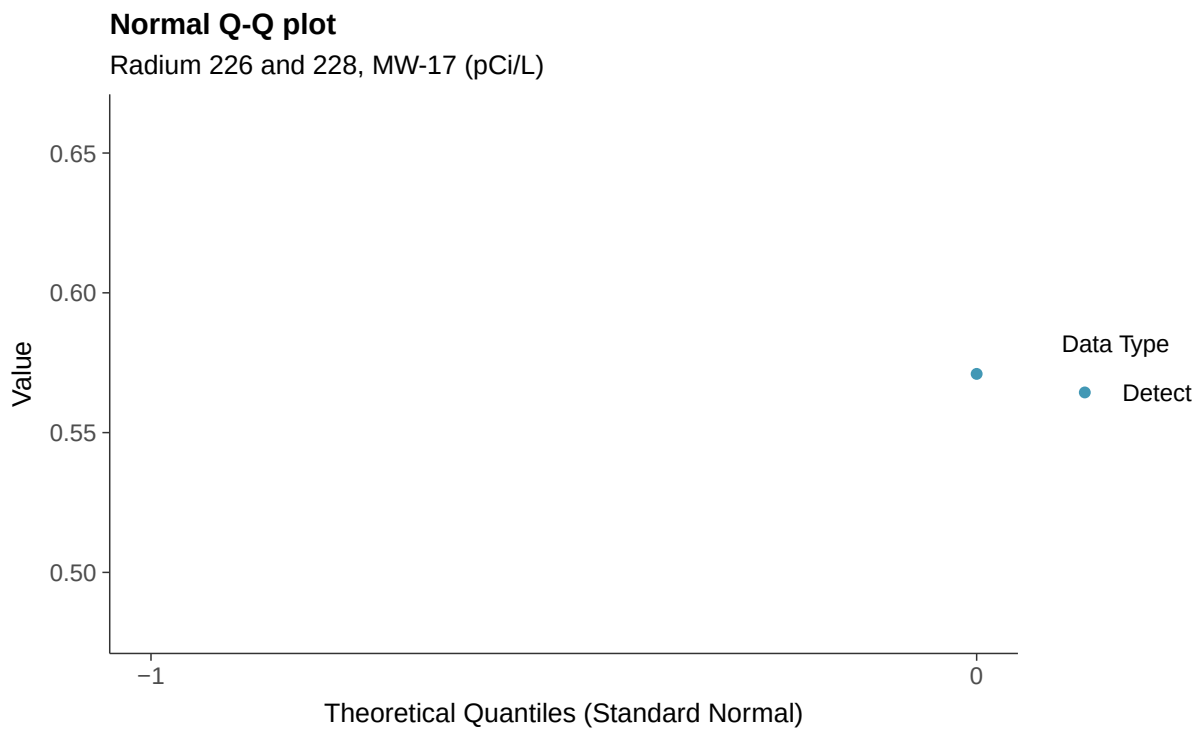
Radium 226 and 228, MW-17 (pCi/L)



Boxplot by Season

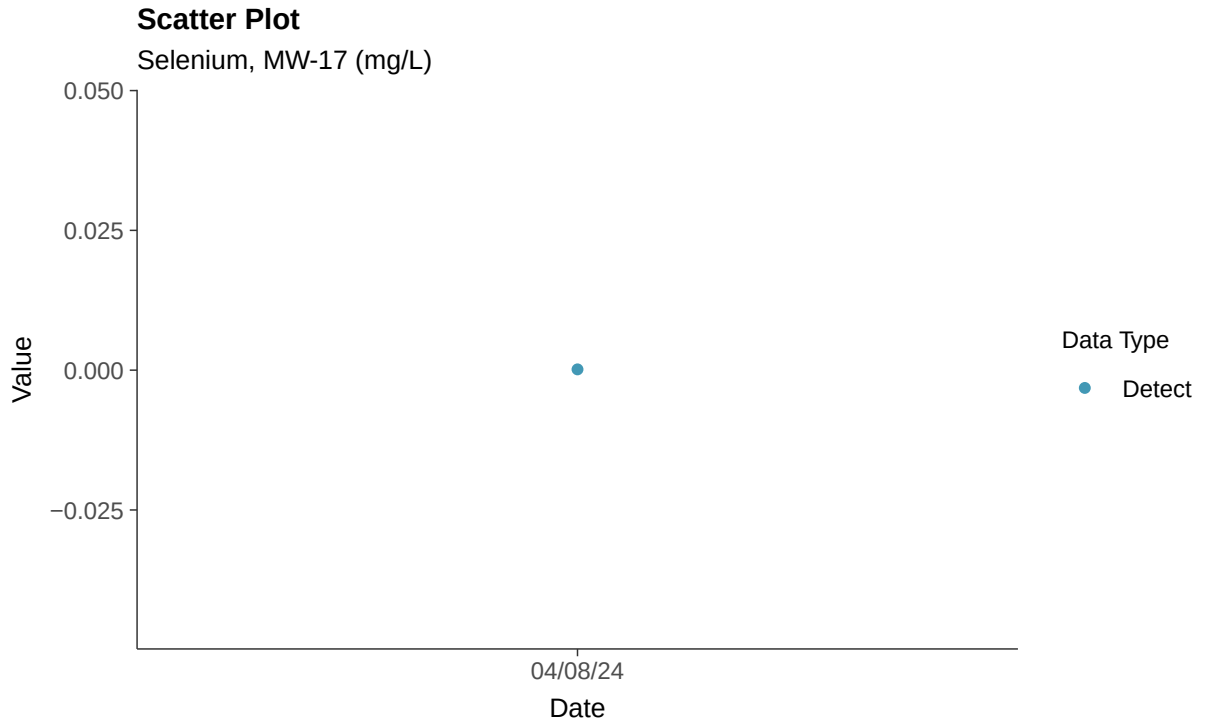
Radium 226 and 228, MW-17 (pCi/L)

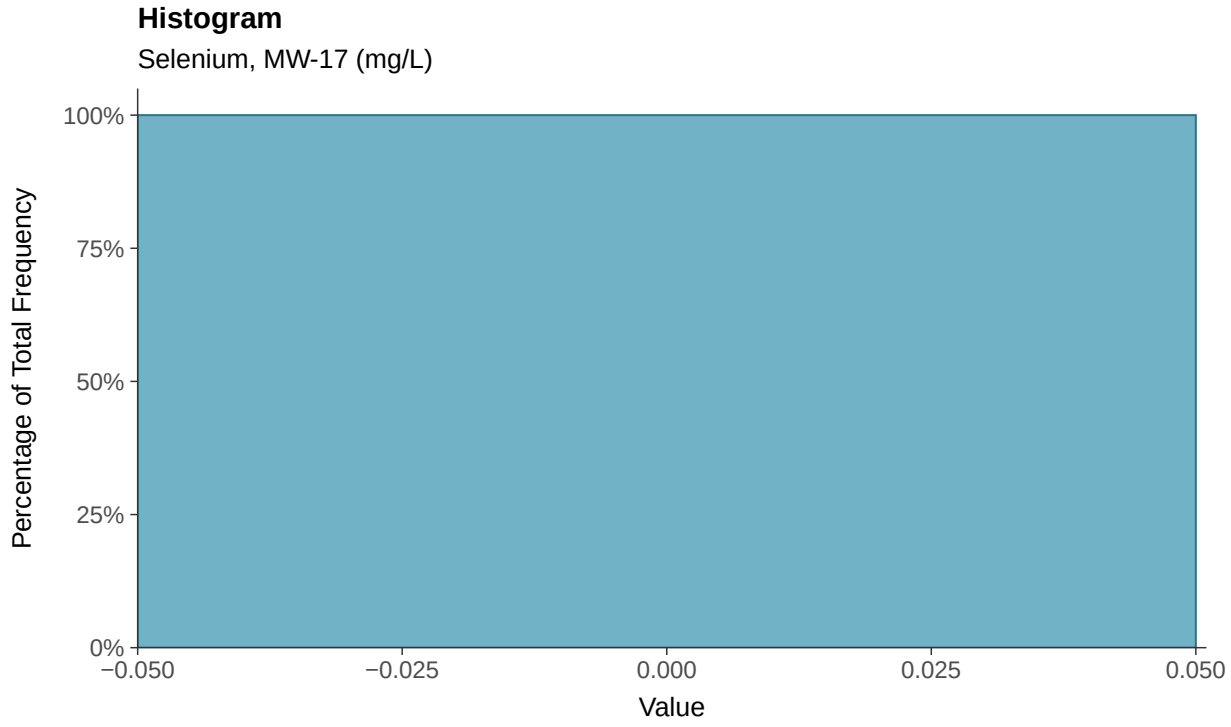



Normal Q-Q plot
Radium 226 and 228, MW-17 (pCi/L)
Value
0.65
0.60
0.55
0.50
−1
0
Theoretical Quantiles (Standard Normal)
Data Type
Detect

Appendix IV: Selenium, MW-17

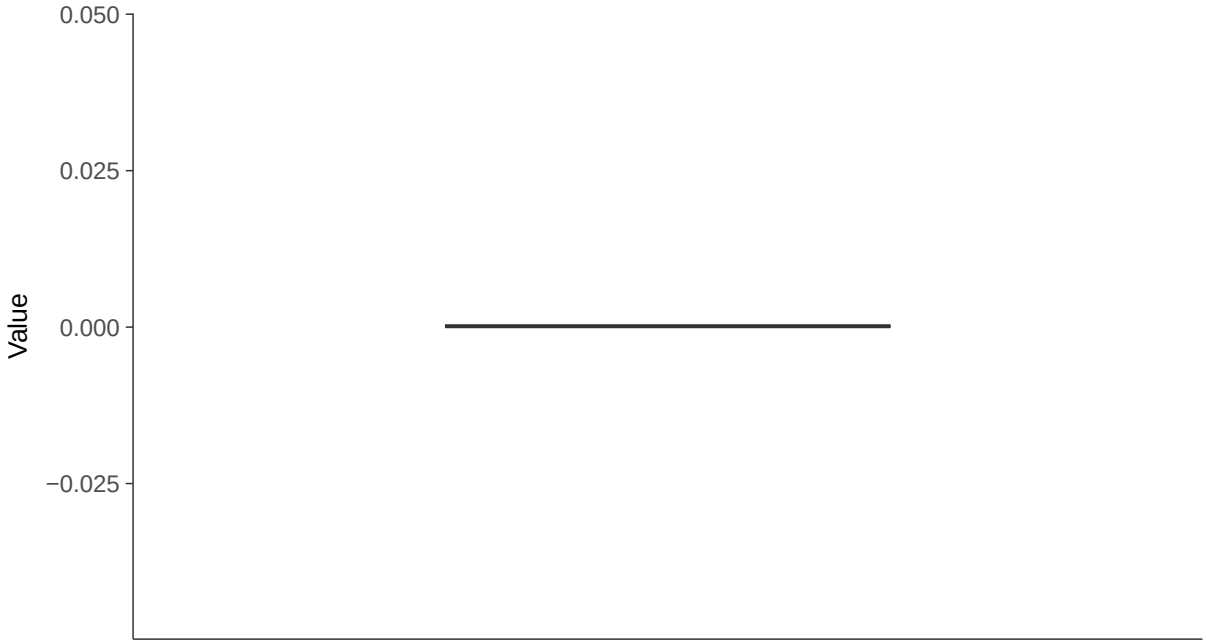
ID: 1_27_5_122





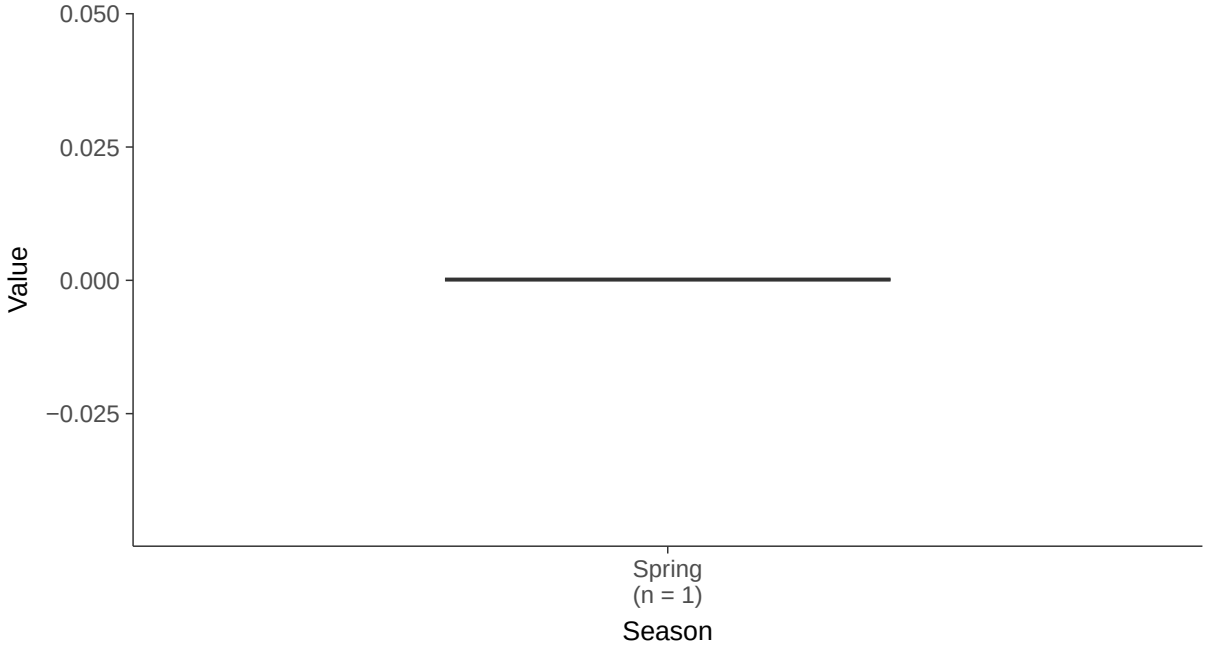
Boxplot

Selenium, MW-17 (mg/L)



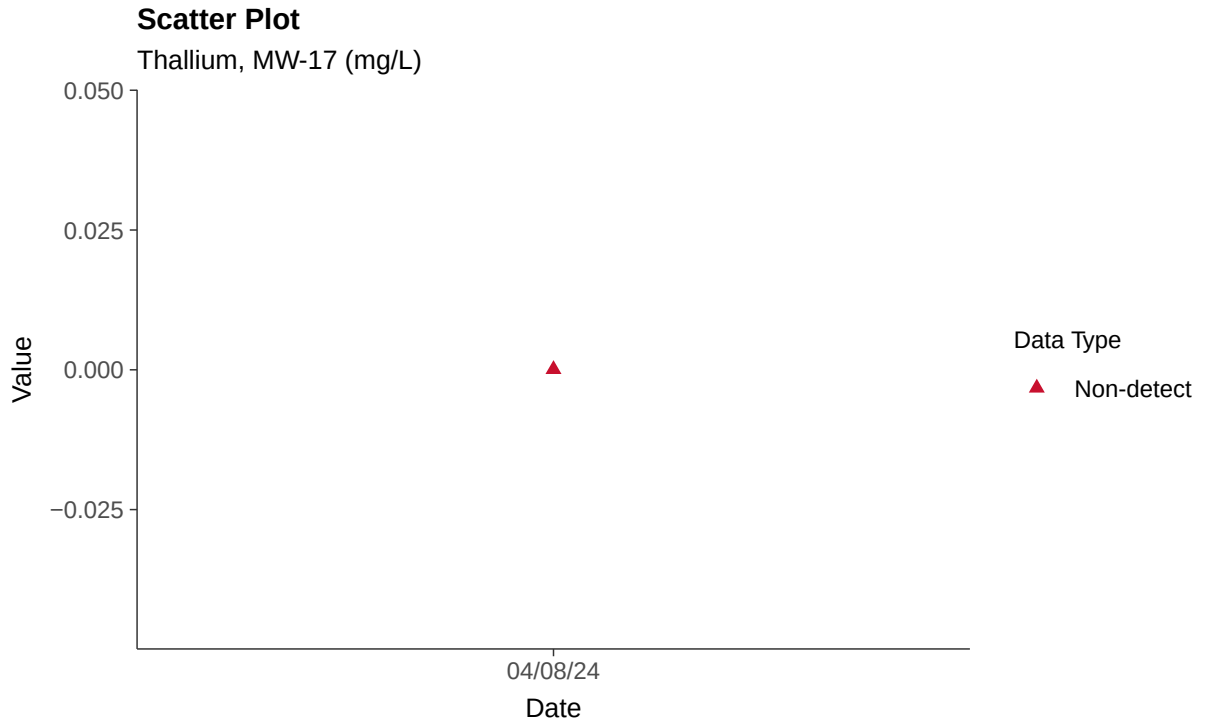
Boxplot by Season

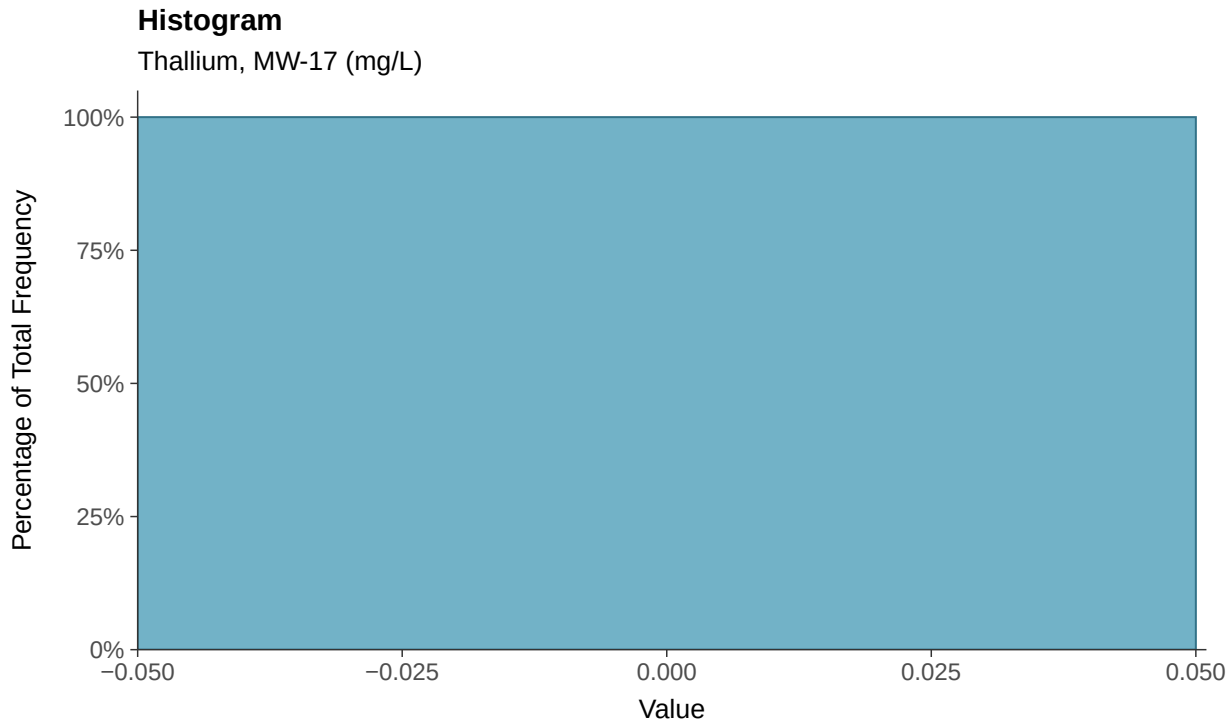
Selenium, MW-17 (mg/L)



Appendix IV: Thallium, MW-17

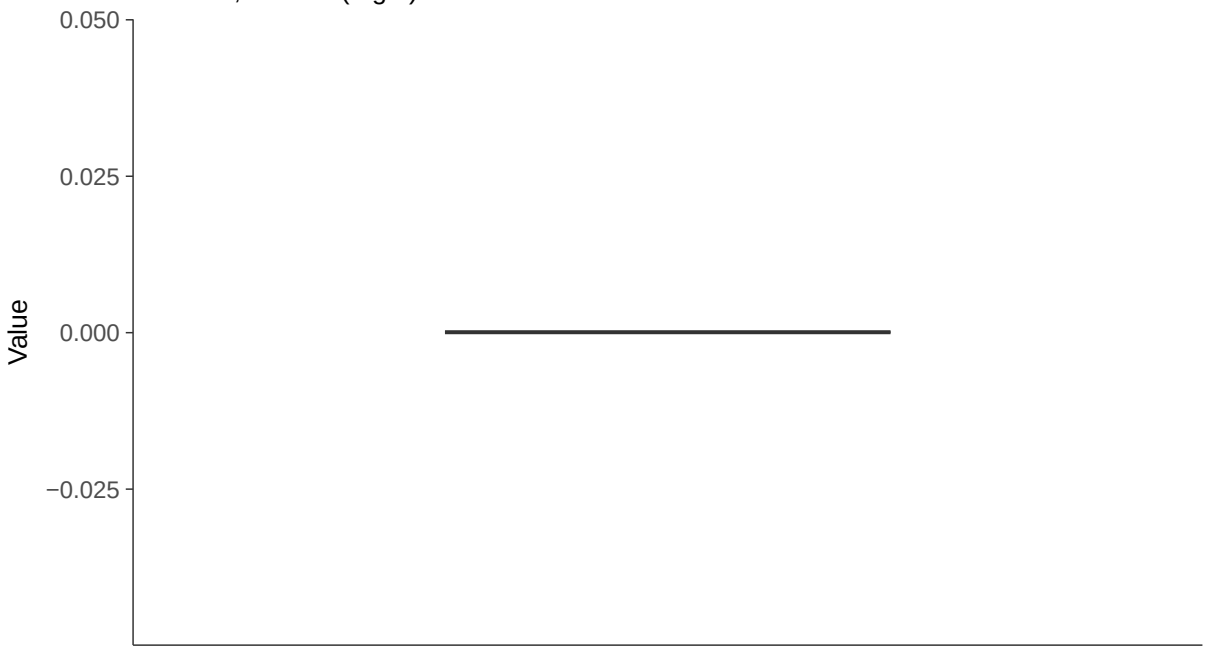
ID: 1_27_5_125





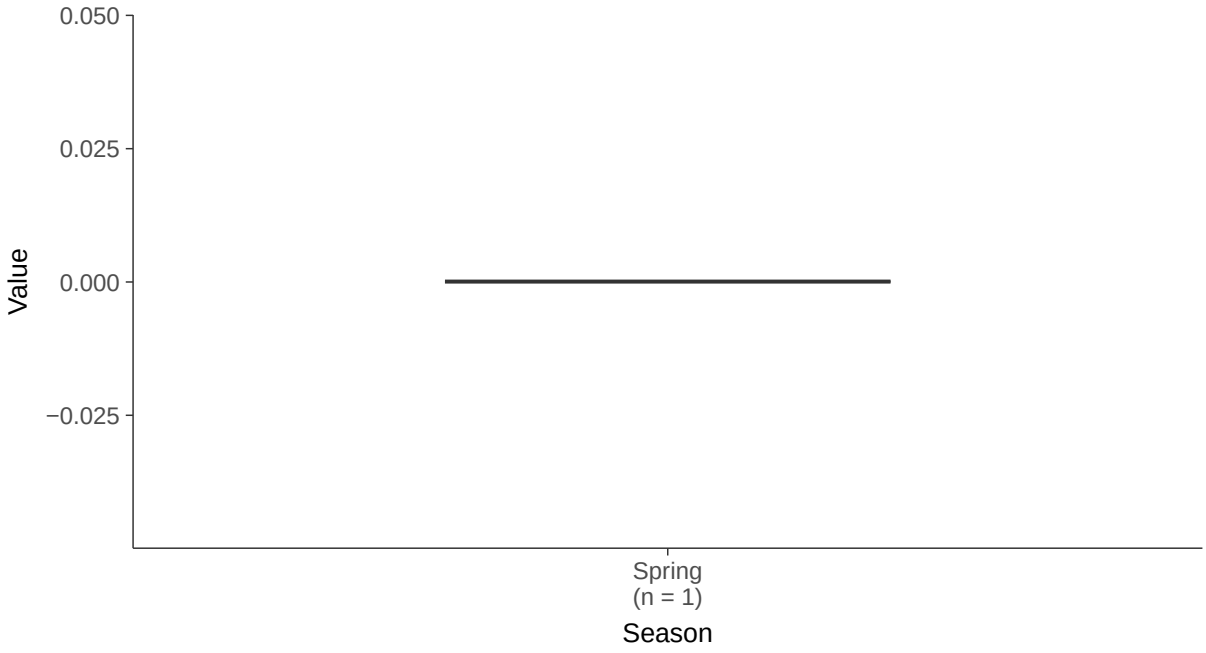
Boxplot

Thallium, MW-17 (mg/L)



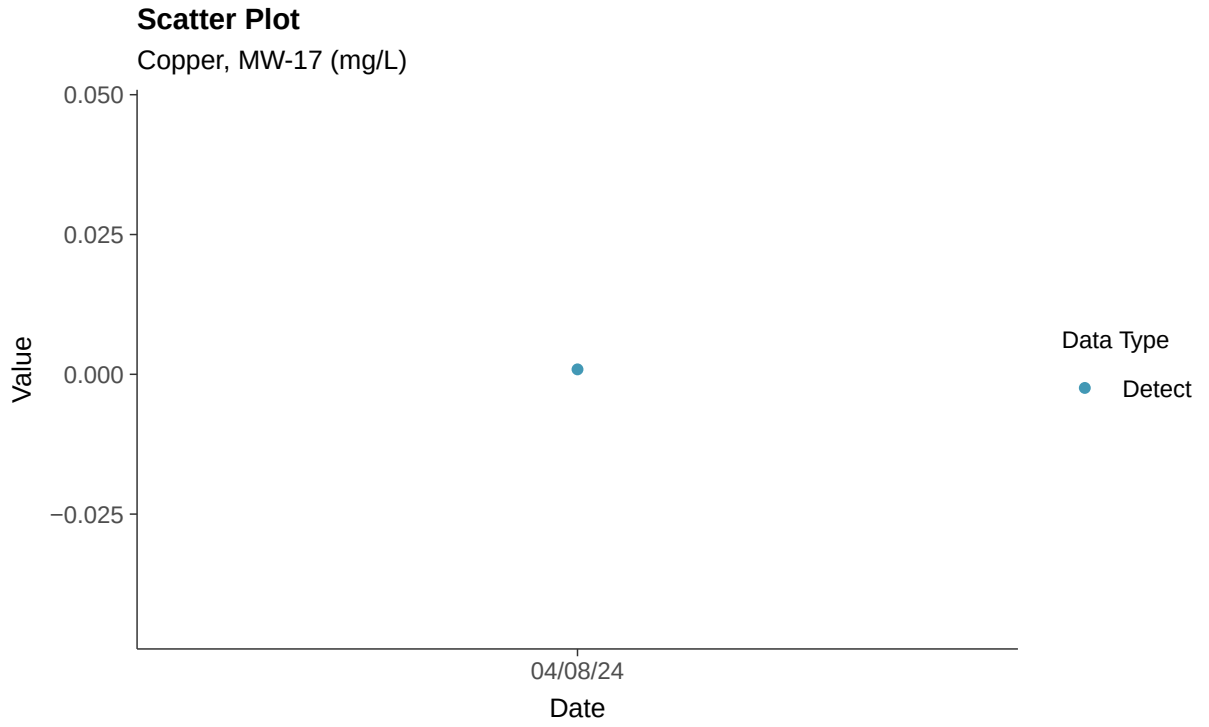
Boxplot by Season

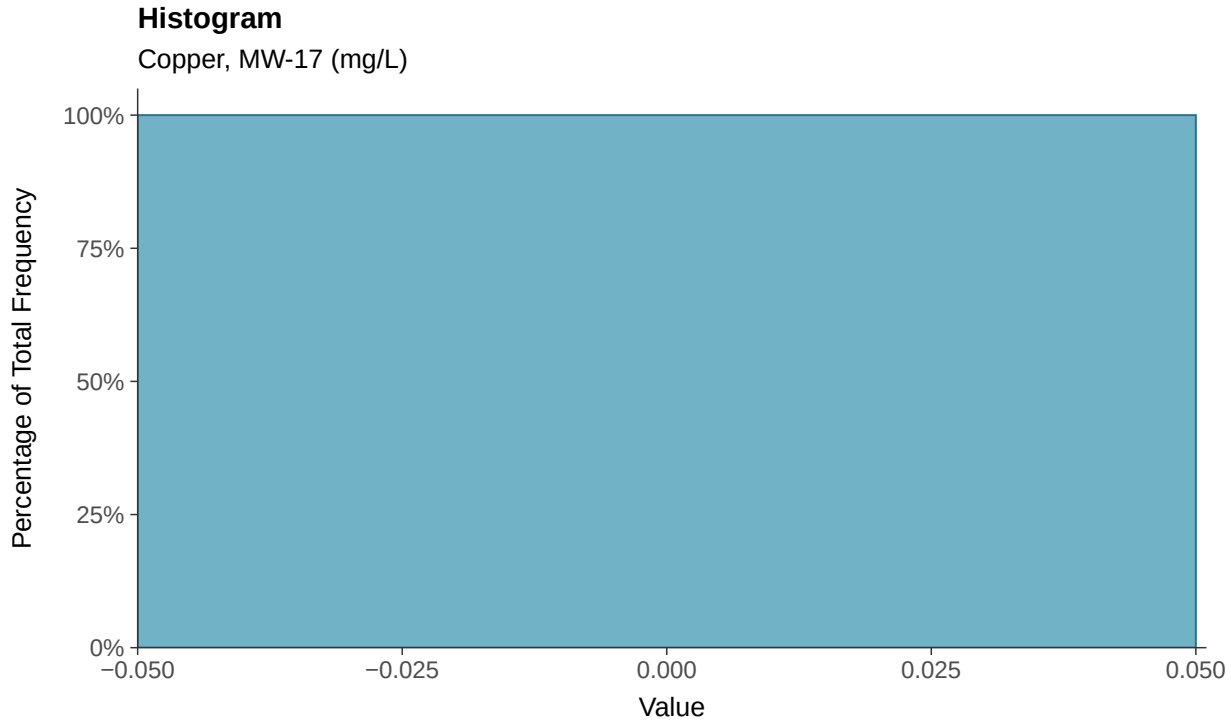
Thallium, MW-17 (mg/L)



Part 115: Copper, MW-17

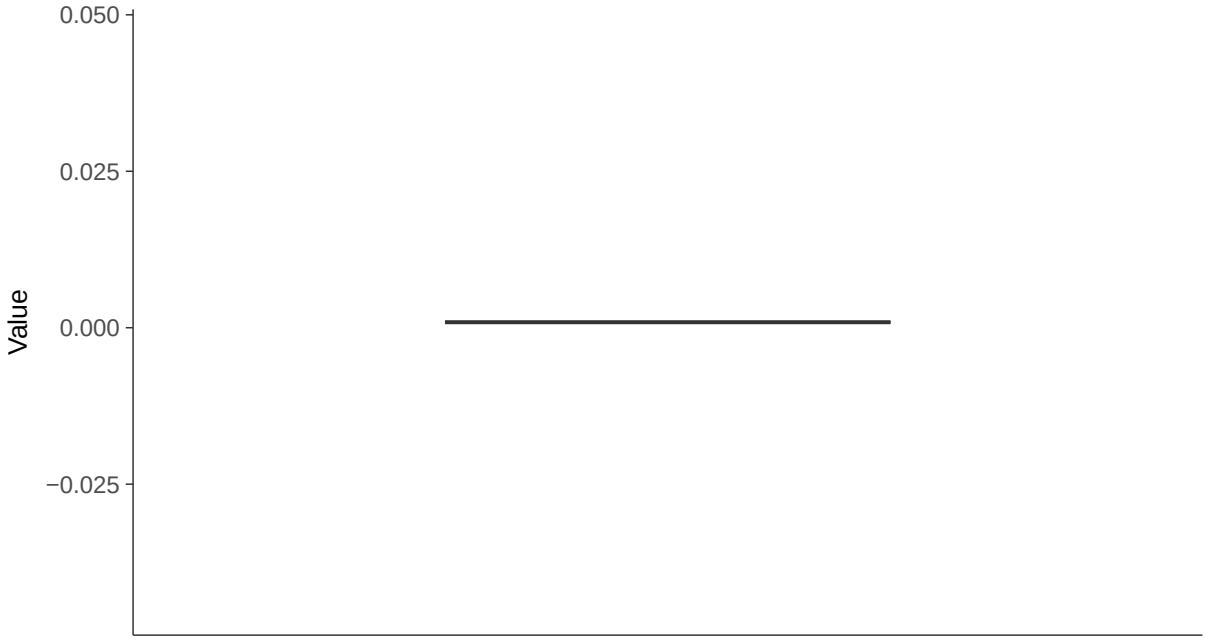
ID: 1_27_6_111





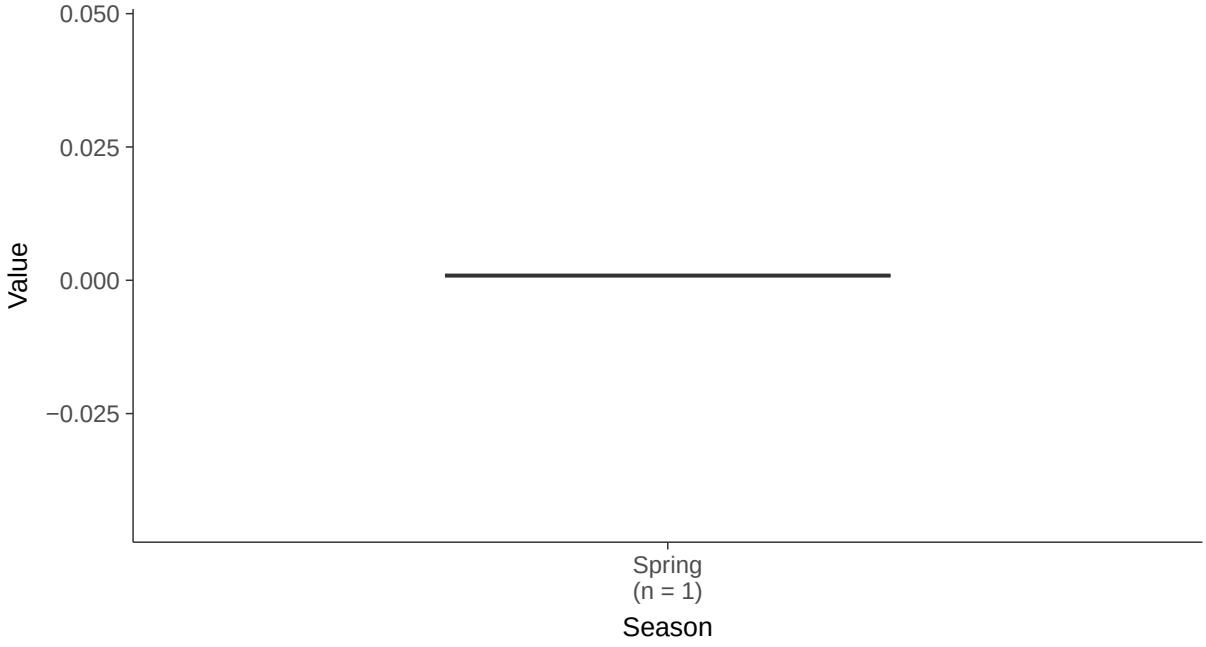
Boxplot

Copper, MW-17 (mg/L)



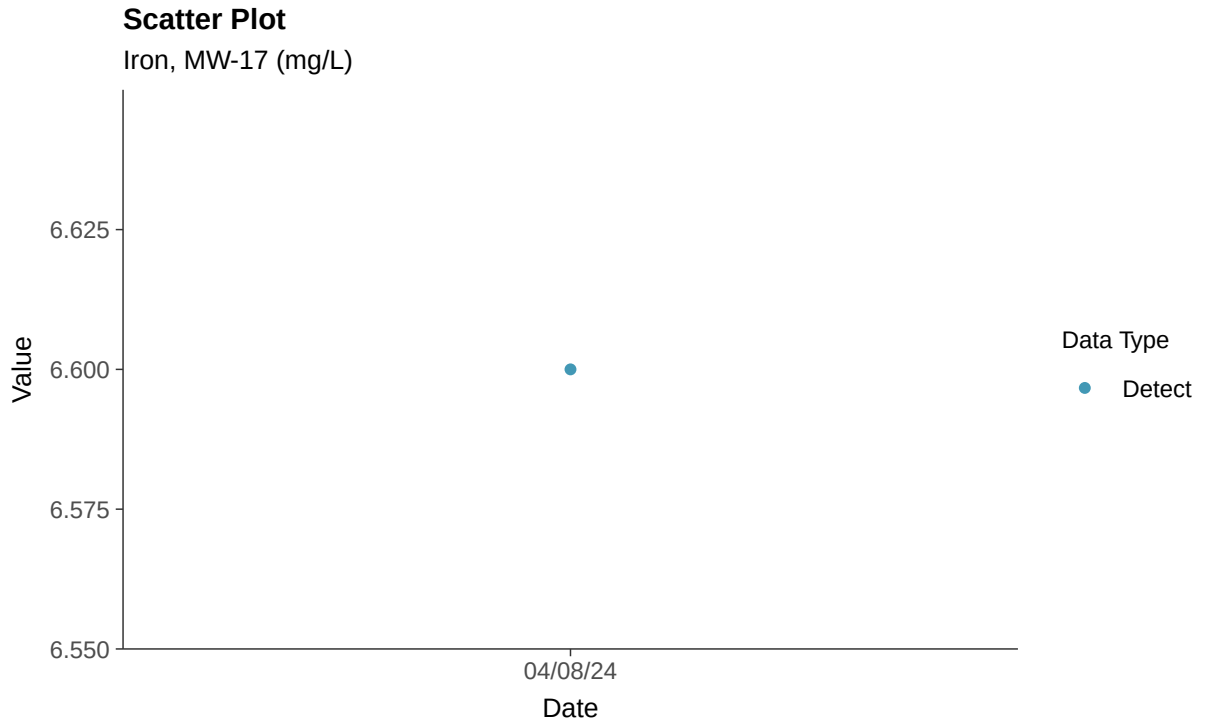
Boxplot by Season

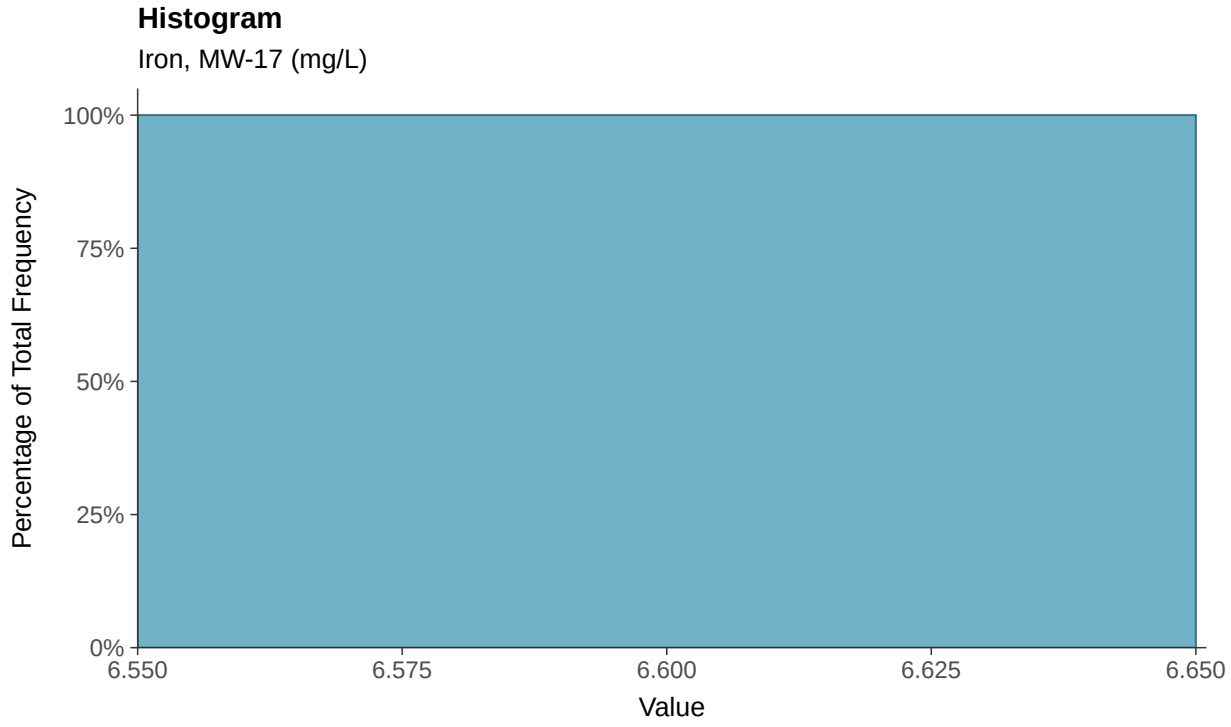
Copper, MW-17 (mg/L)



Part 115: Iron, MW-17

ID: 1_27_6_114



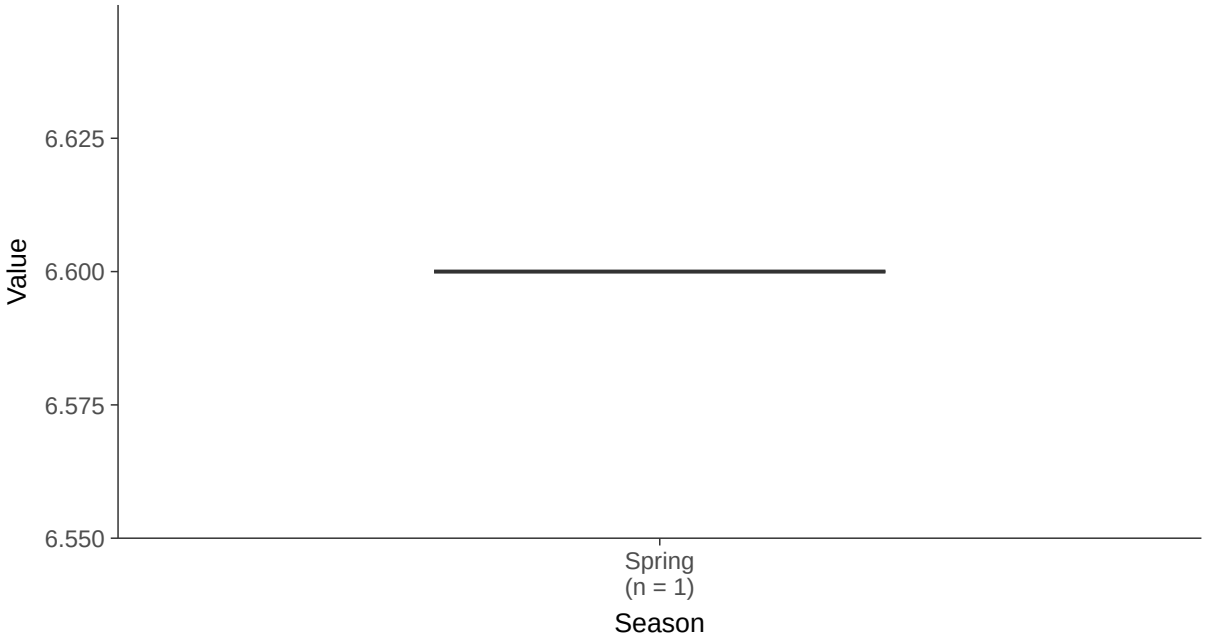


Boxplot

Iron, MW-17 (mg/L)

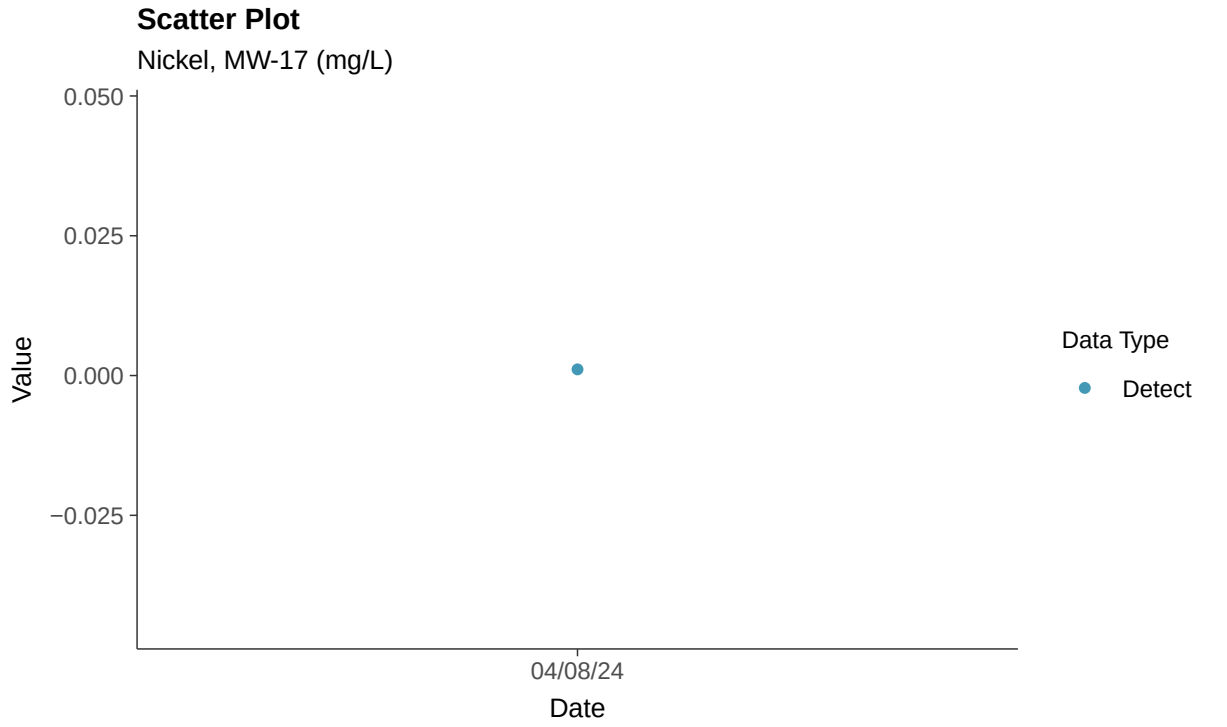
Boxplot by Season

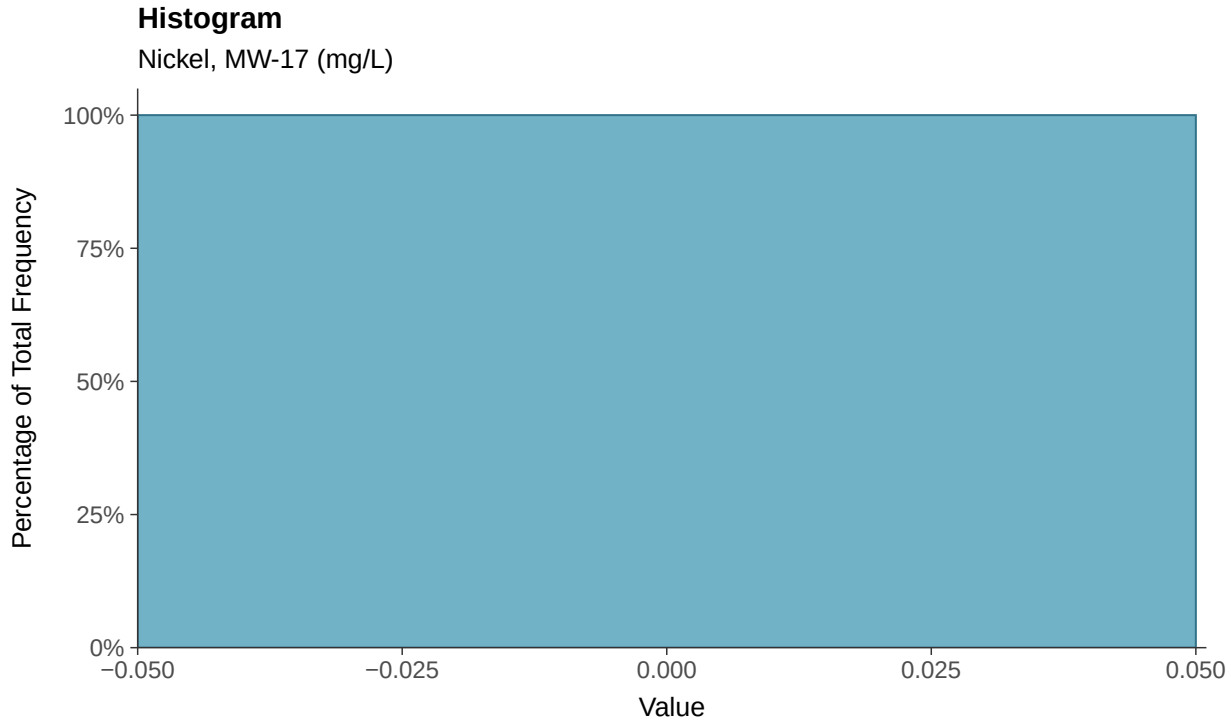
Iron, MW-17 (mg/L)



Part 115: Nickel, MW-17

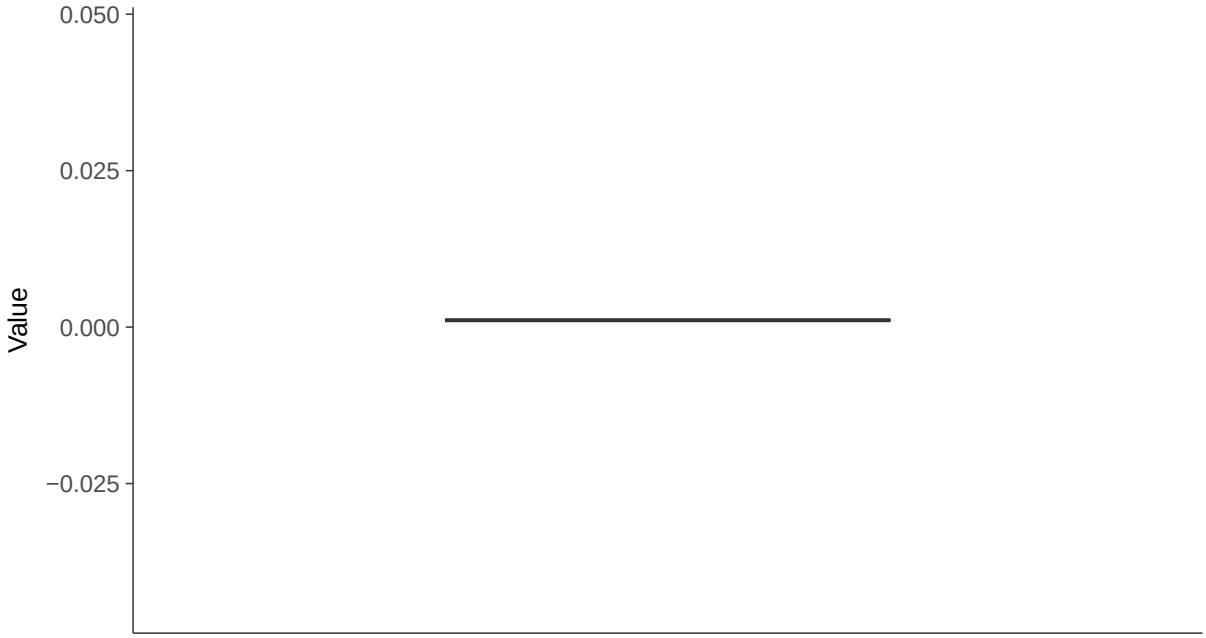
ID: 1_27_6_119





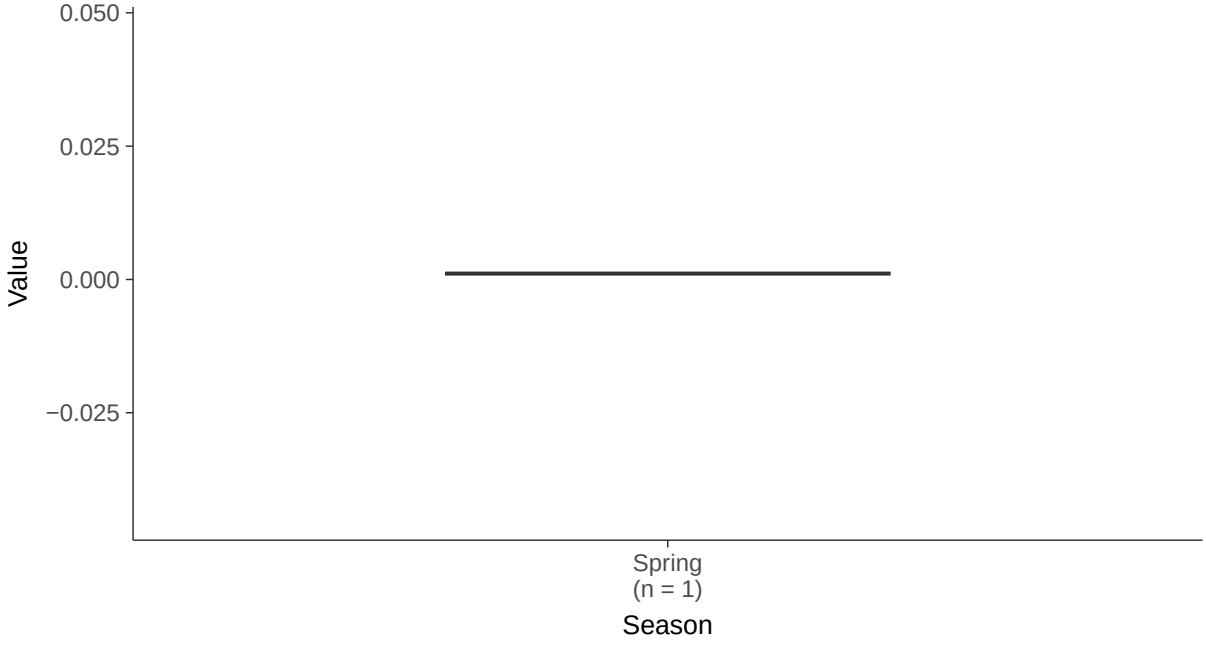
Boxplot

Nickel, MW-17 (mg/L)



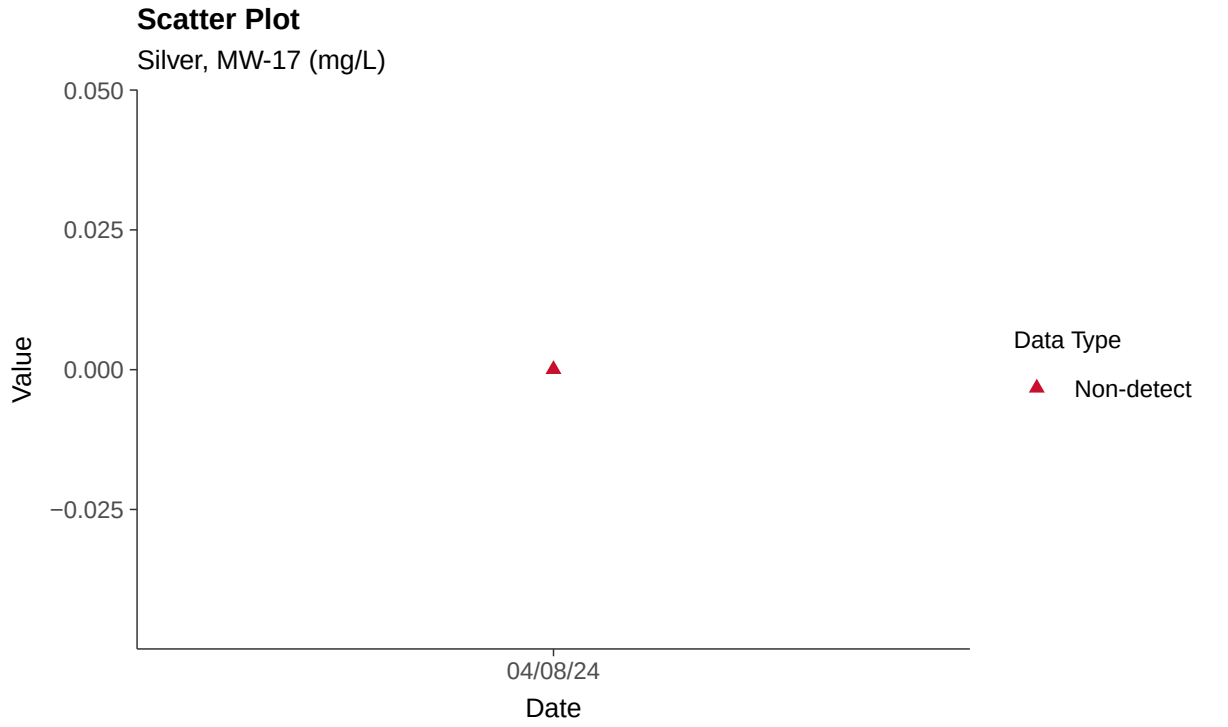
Boxplot by Season

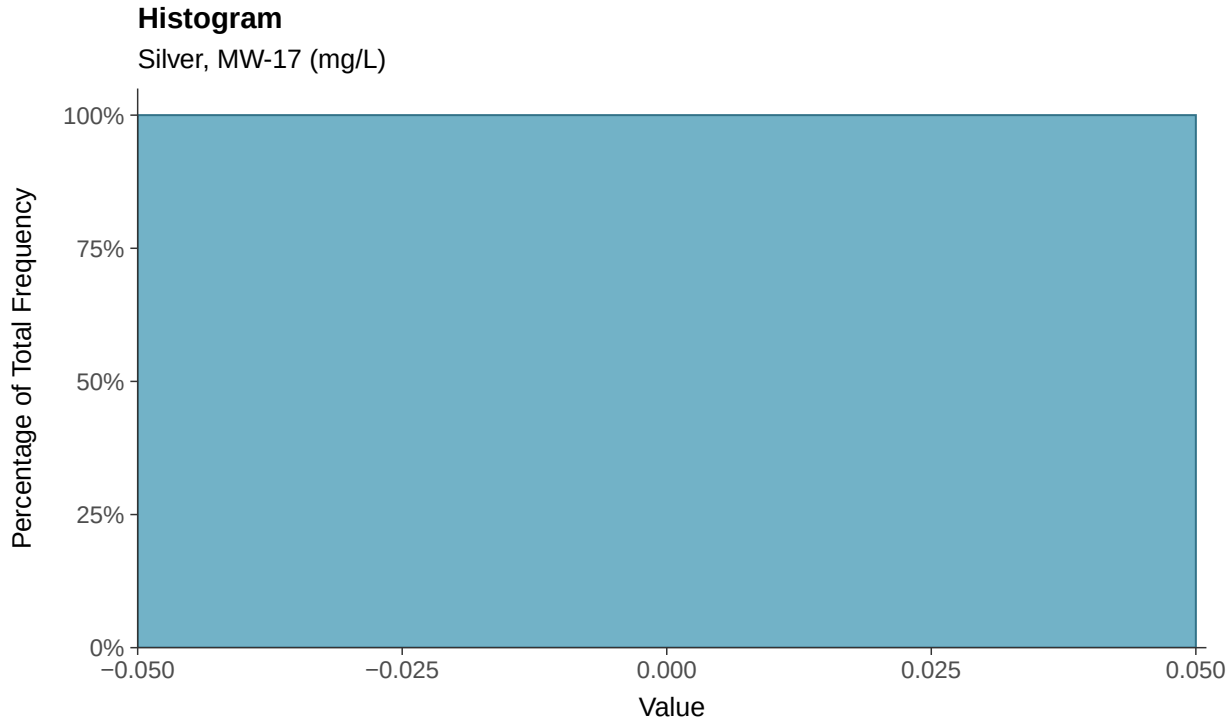
Nickel, MW-17 (mg/L)



Part 115: Silver, MW-17

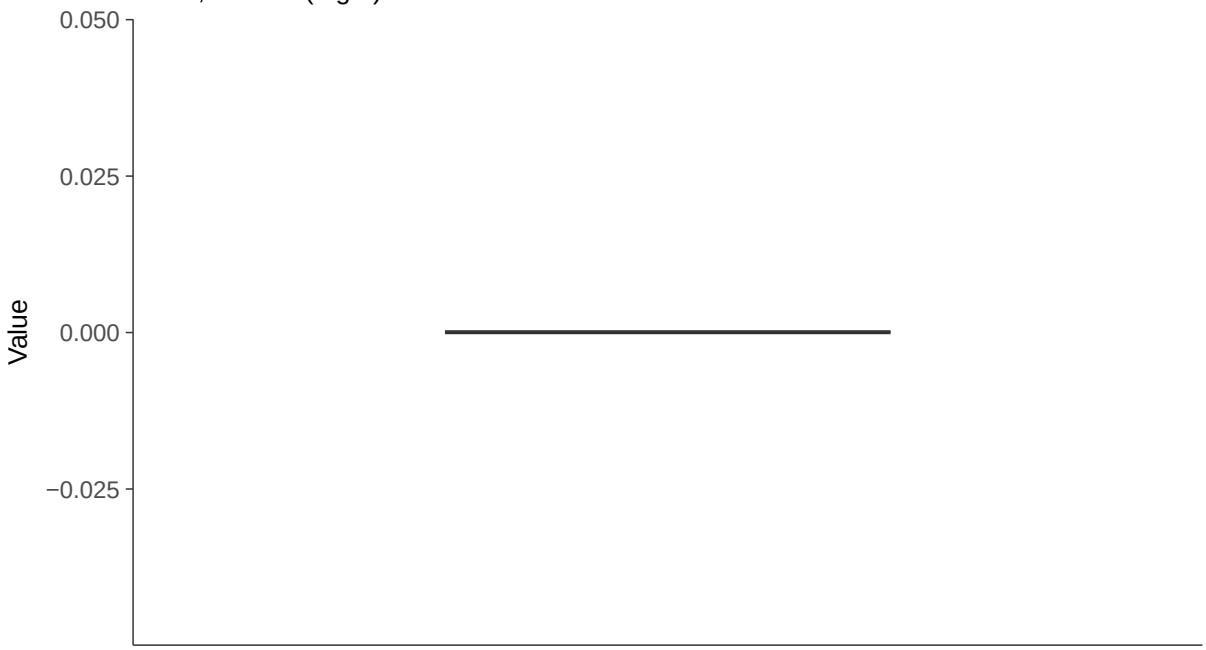
ID: 1_27_6_123





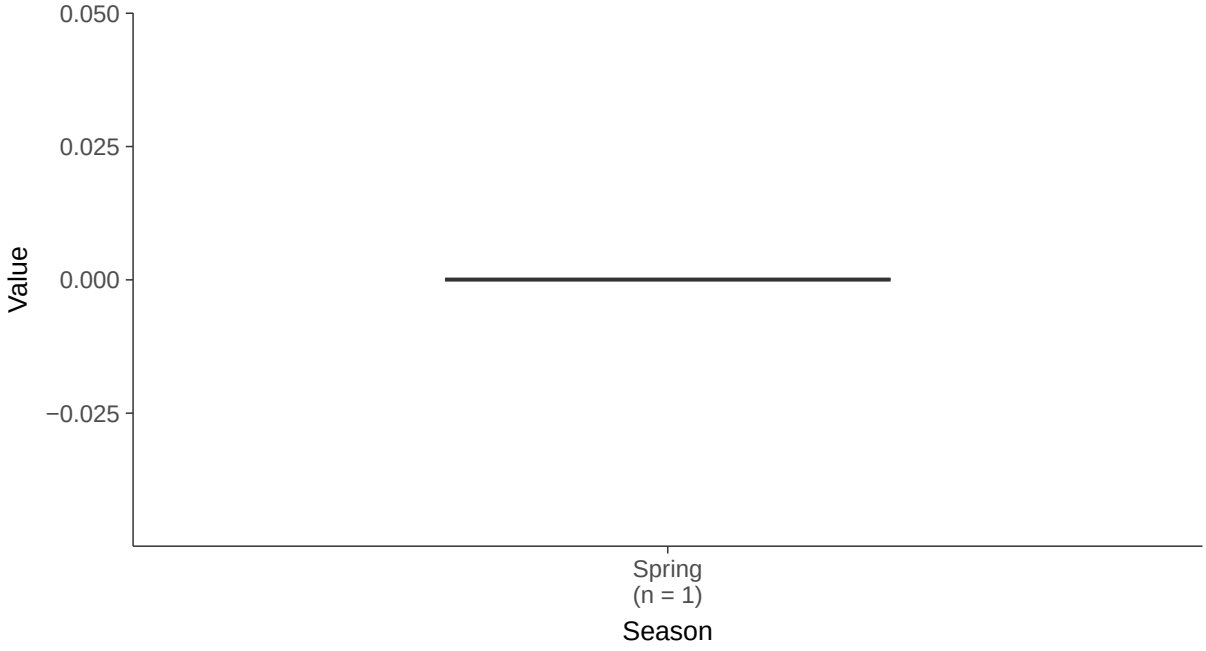
Boxplot

Silver, MW-17 (mg/L)



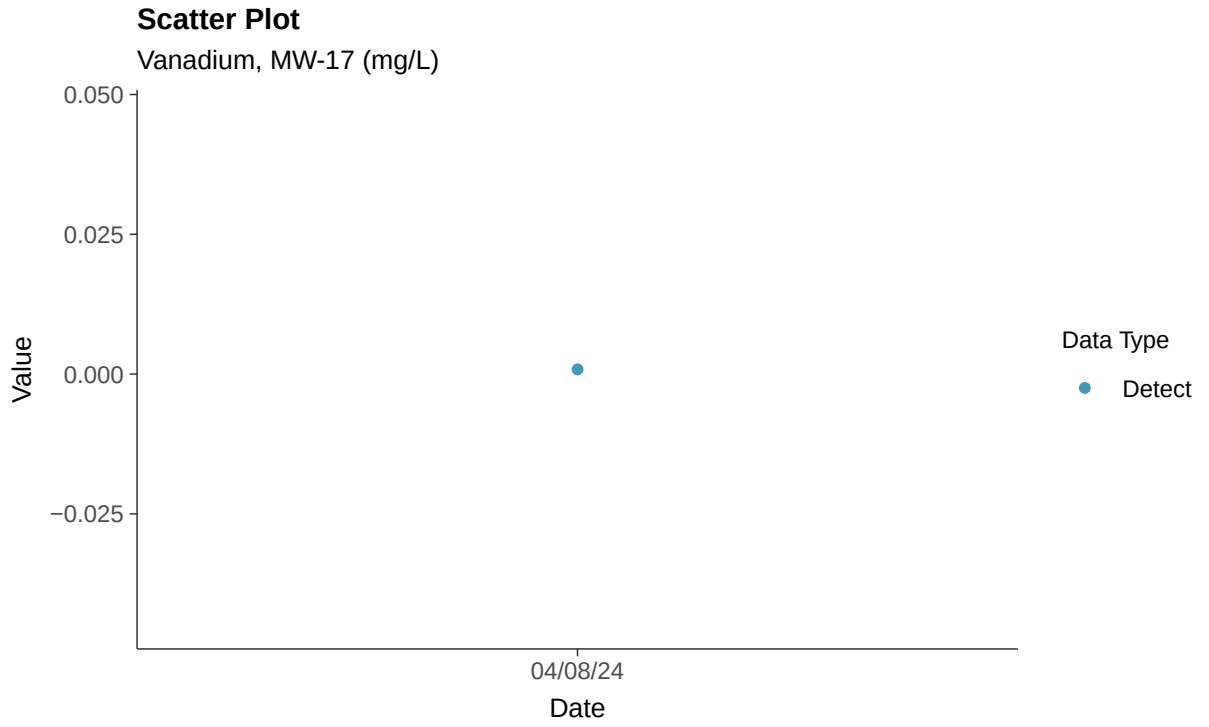
Boxplot by Season

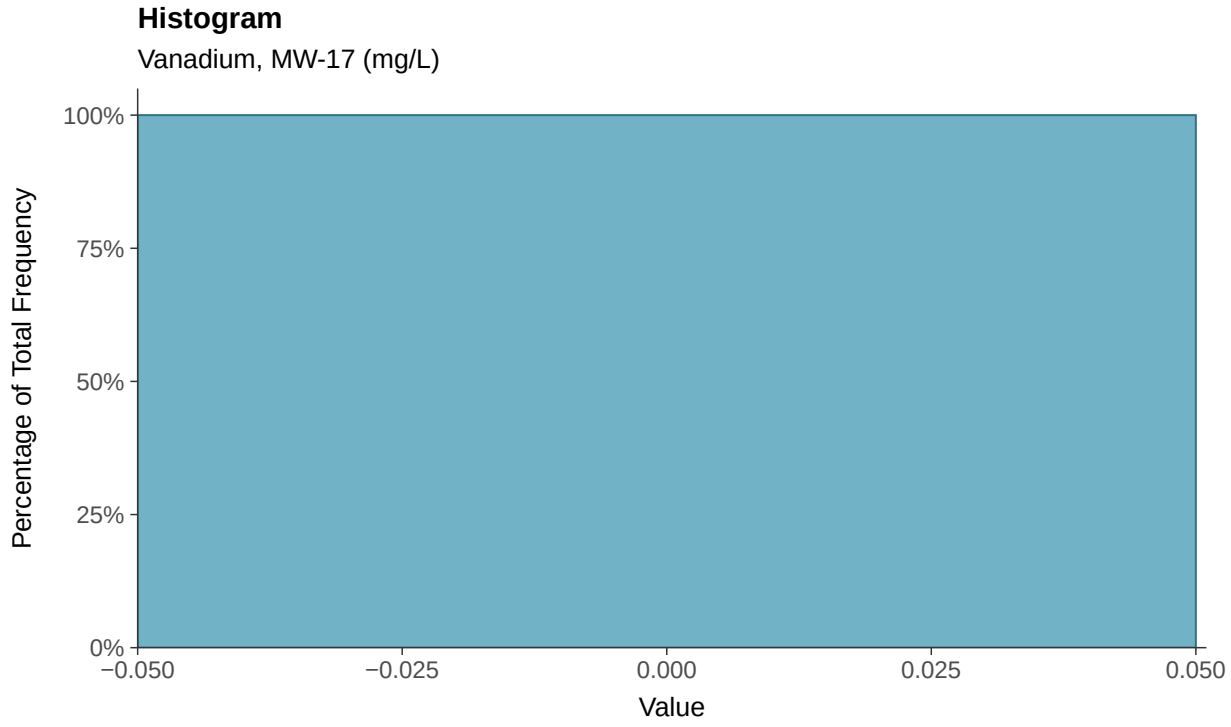
Silver, MW-17 (mg/L)



Part 115: Vanadium, MW-17

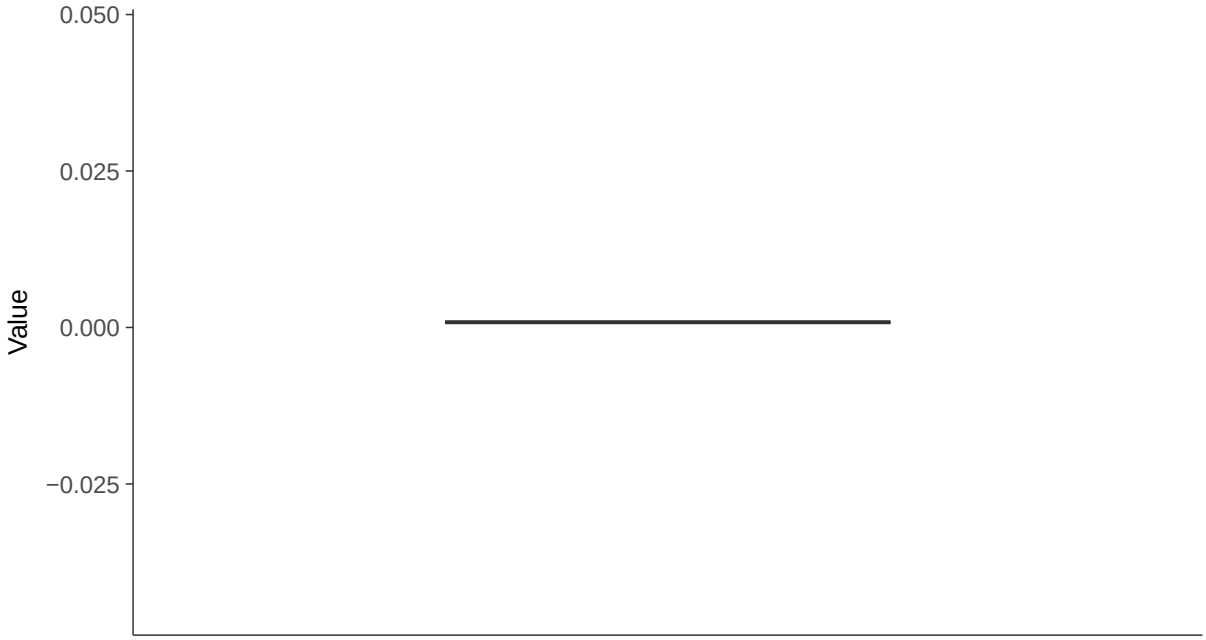
ID: 1_27_6_129





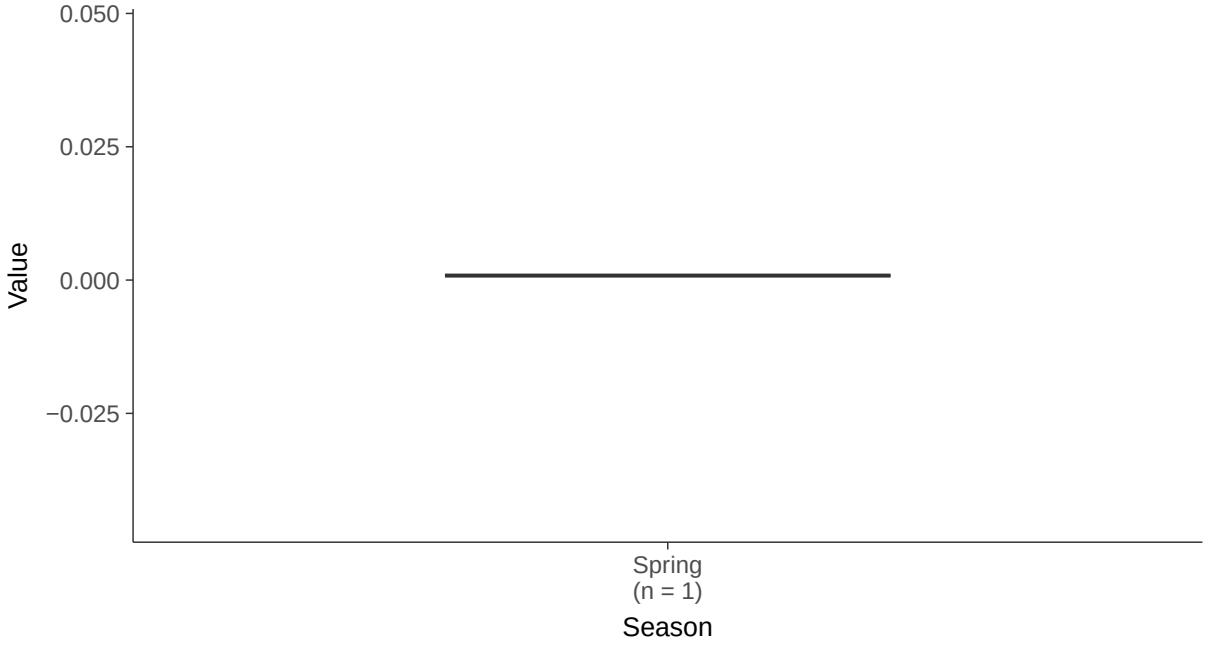
Boxplot

Vanadium, MW-17 (mg/L)



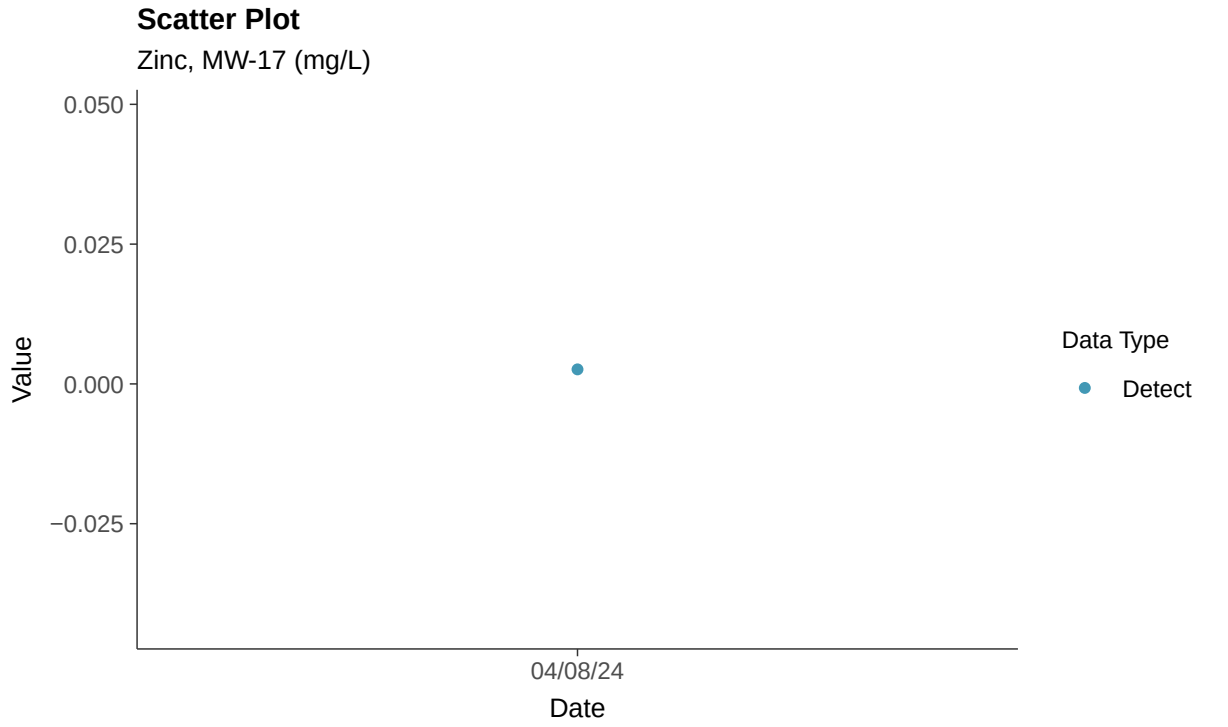
Boxplot by Season

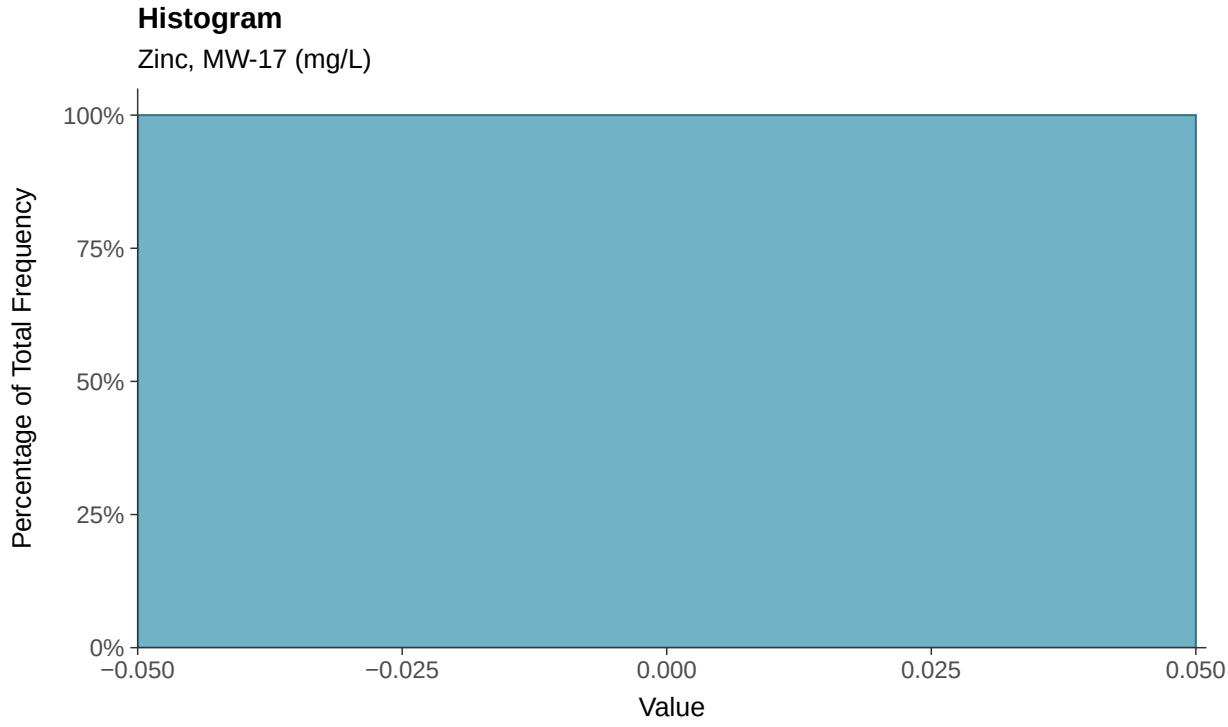
Vanadium, MW-17 (mg/L)



Part 115: Zinc, MW-17

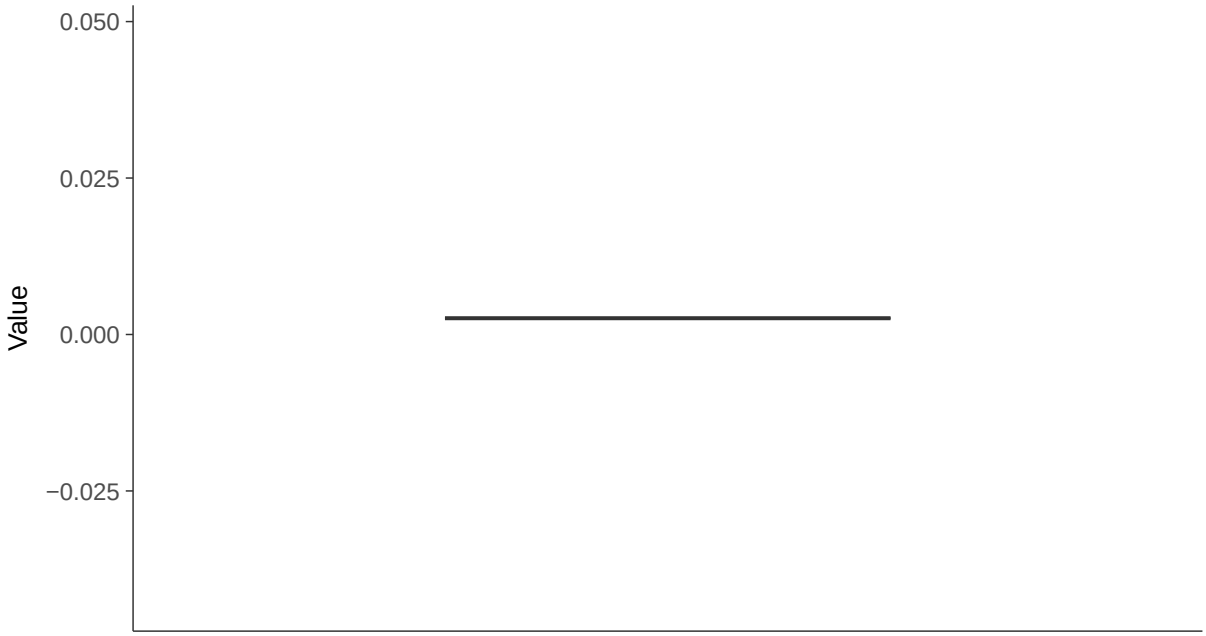
ID: 1_27_6_130





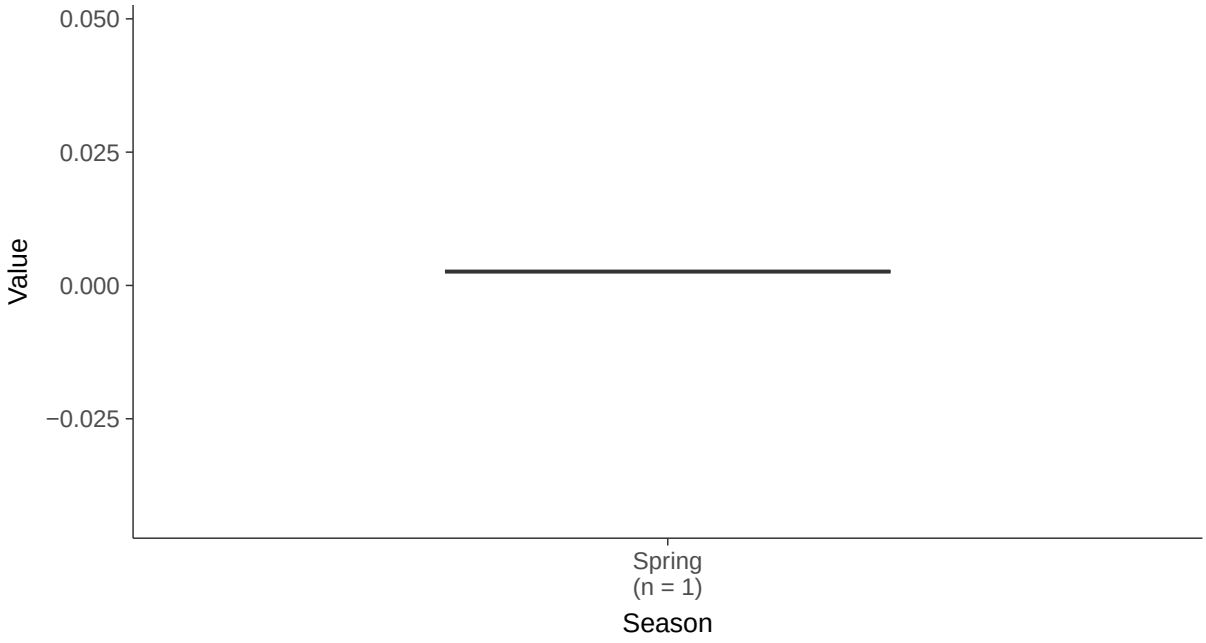
Boxplot

Zinc, MW-17 (mg/L)



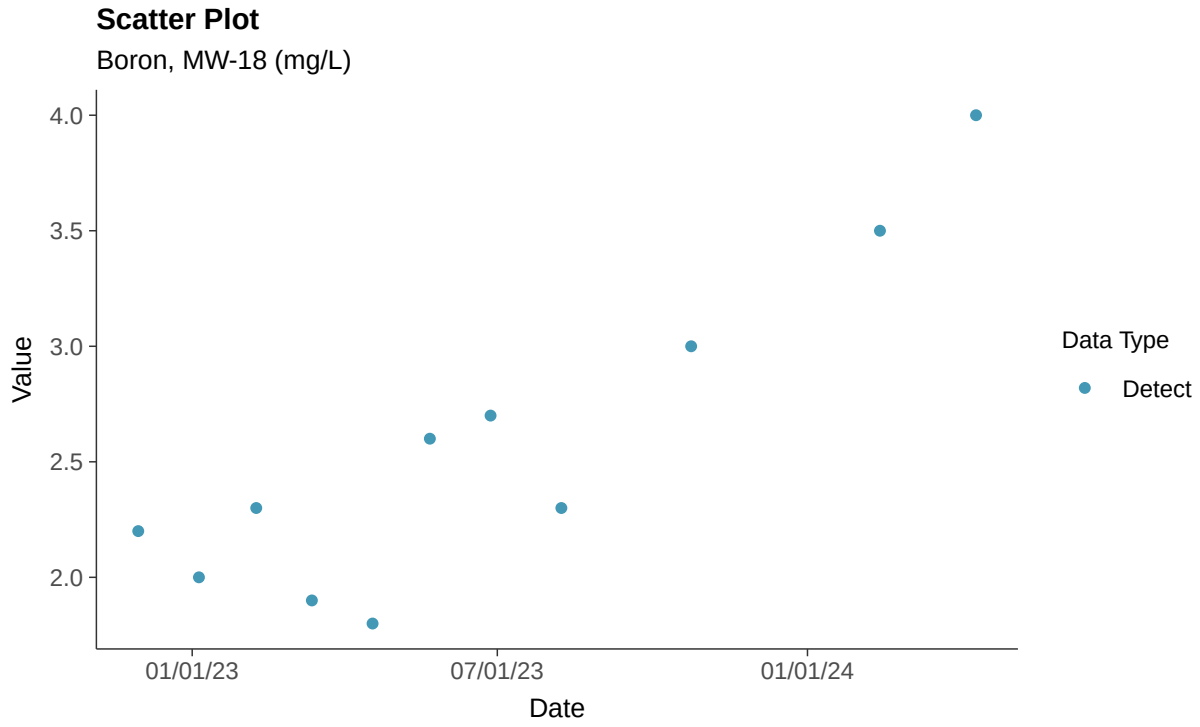
Boxplot by Season

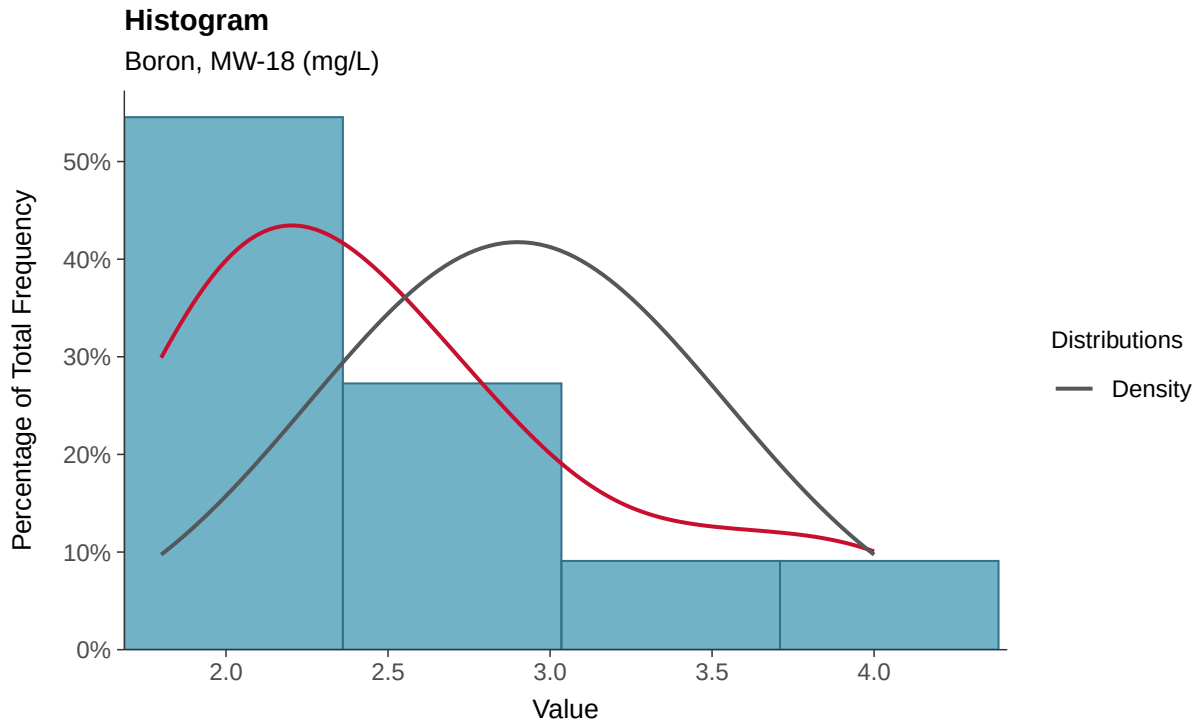
Zinc, MW-17 (mg/L)



Appendix III: Boron, MW-18

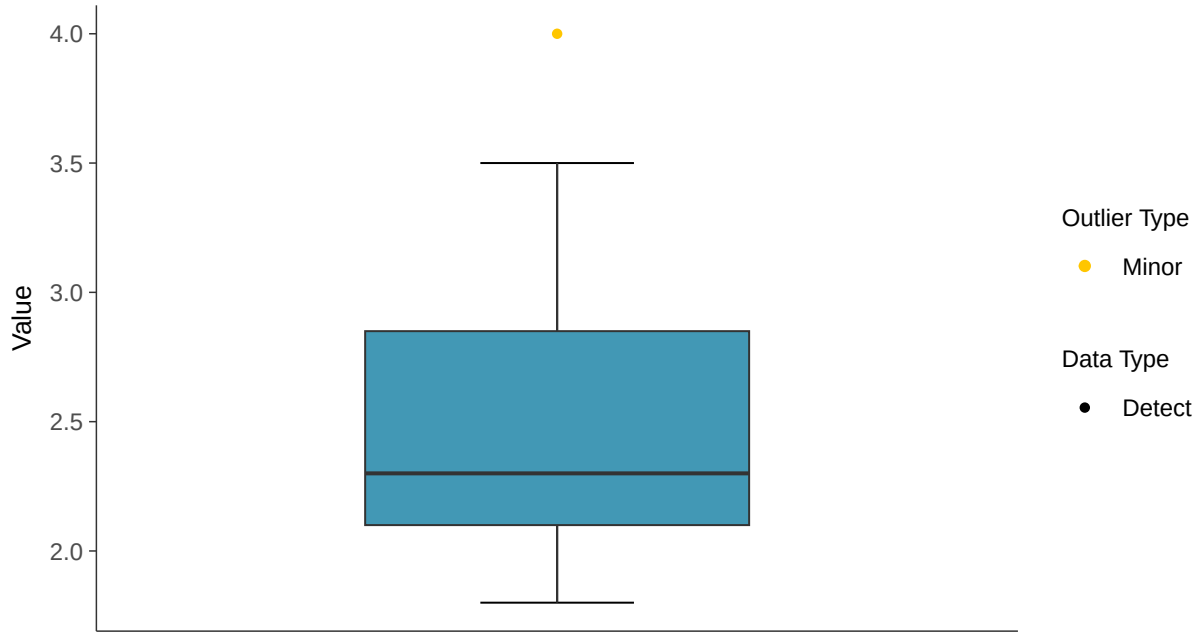
ID: 1_28_4_105





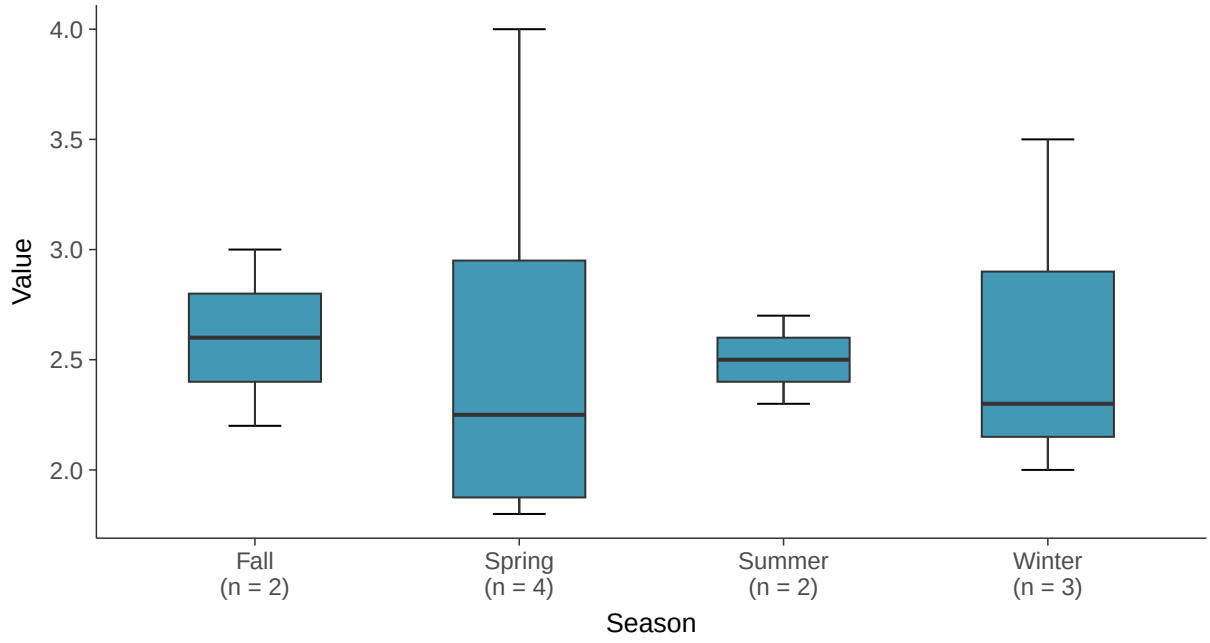
Boxplot

Boron, MW-18 (mg/L)



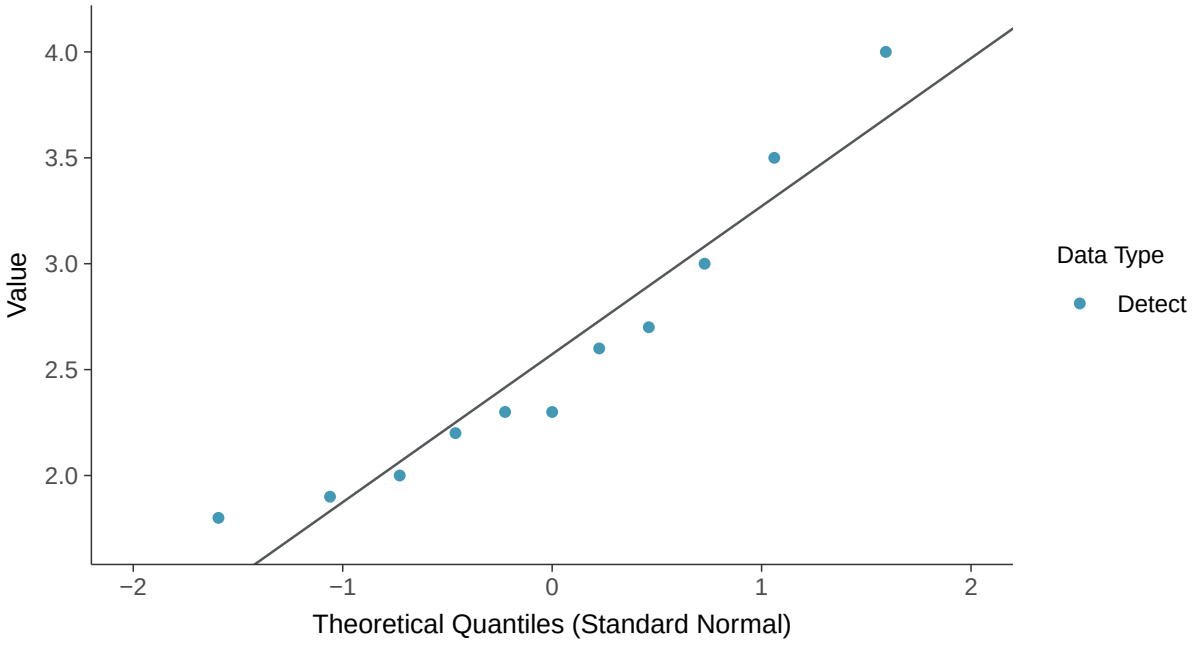
Boxplot by Season

Boron, MW-18 (mg/L)



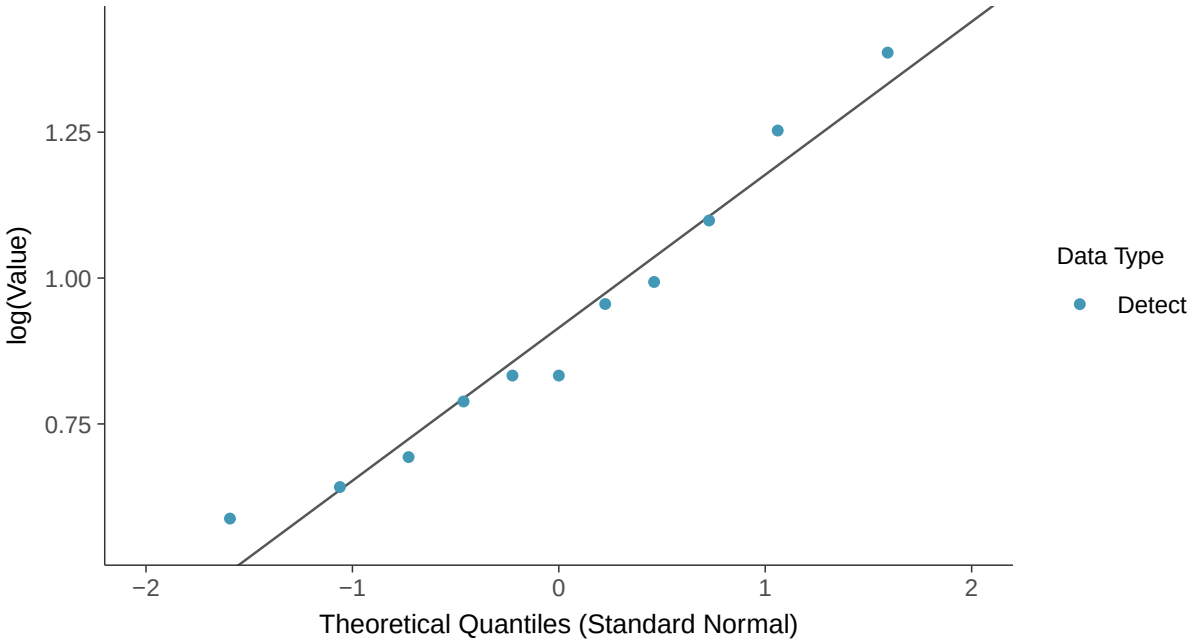
Normal Q-Q plot

Boron, MW-18 (mg/L)



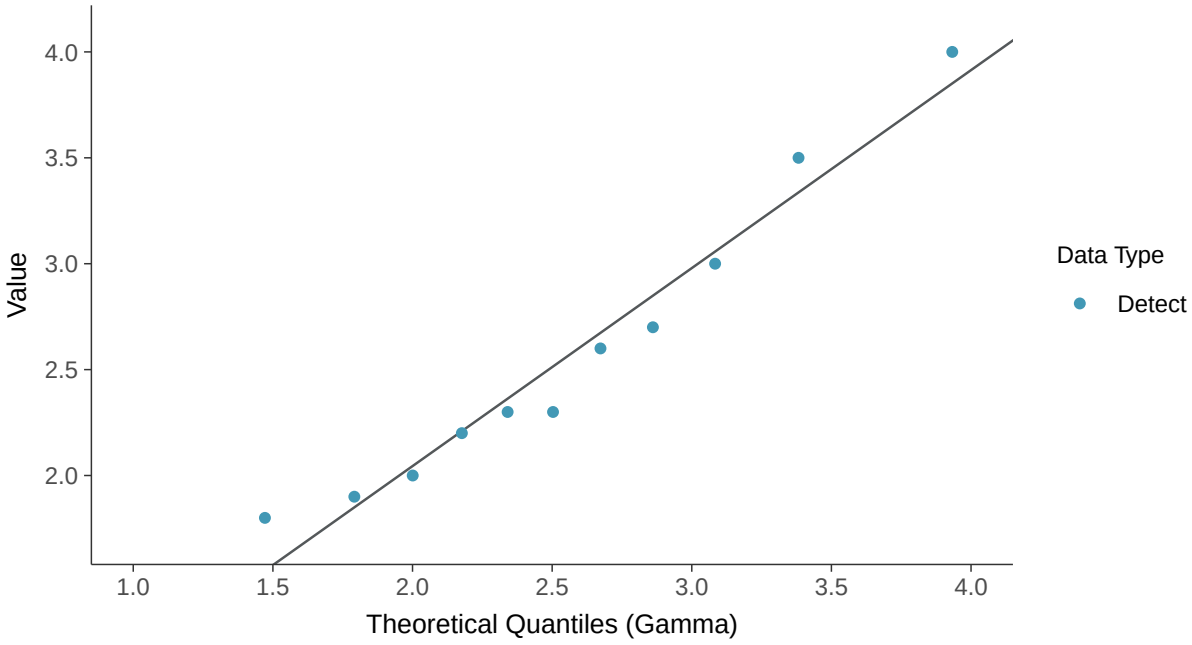
Lognormal Q-Q plot

Boron, MW-18 (mg/L)



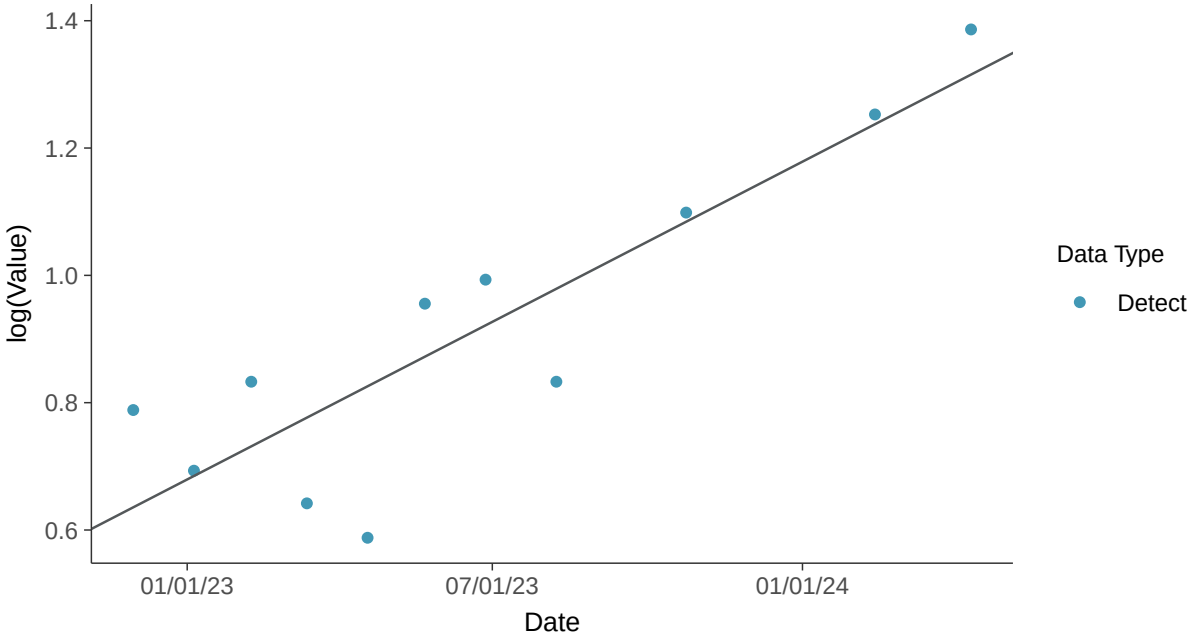
Gamma Q-Q plot

Boron, MW-18 (mg/L)



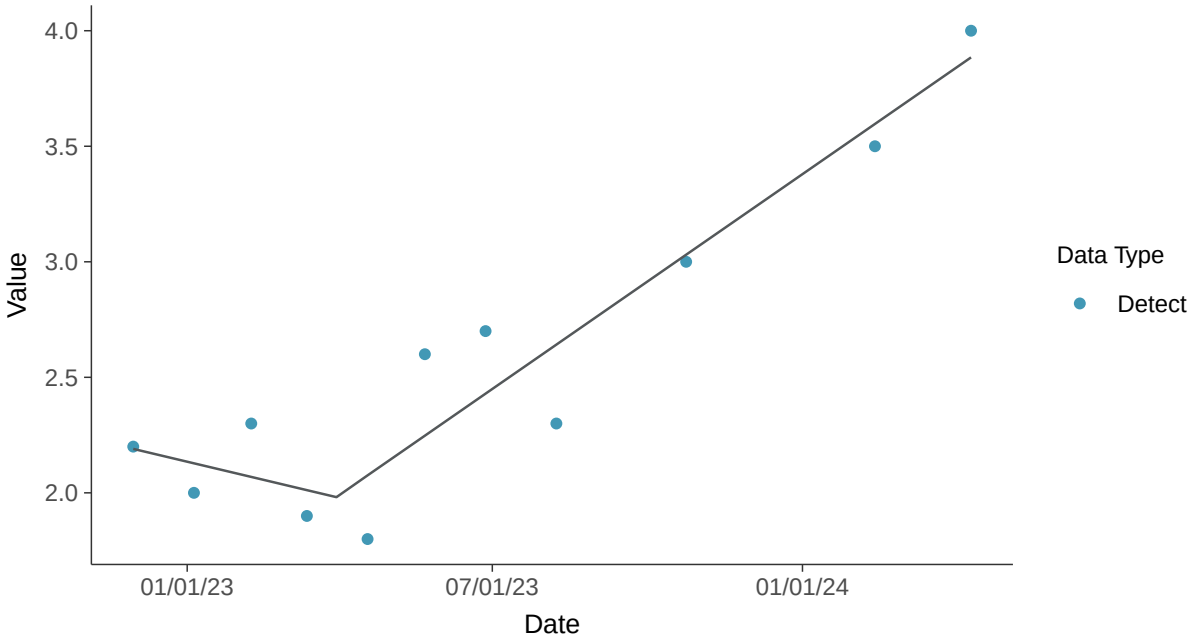
Trend Regression: Lognormal MLE

Boron, MW-18 (mg/L)



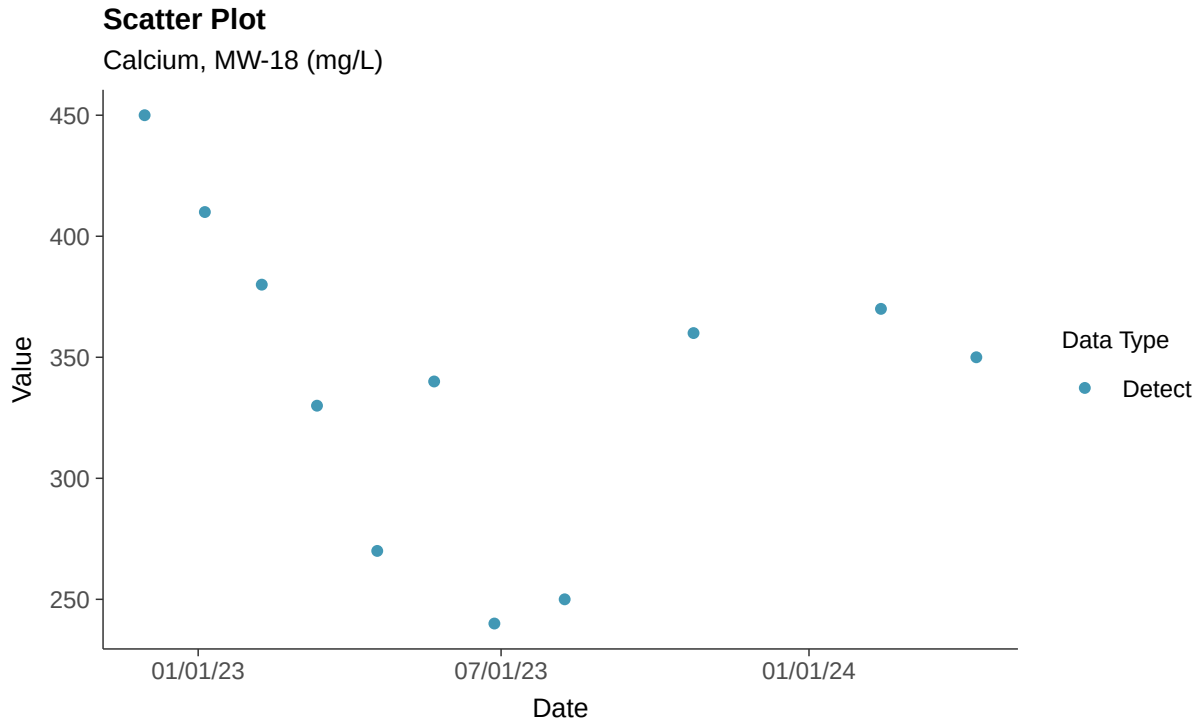
Trend Regression: Piecewise Linear-Linear

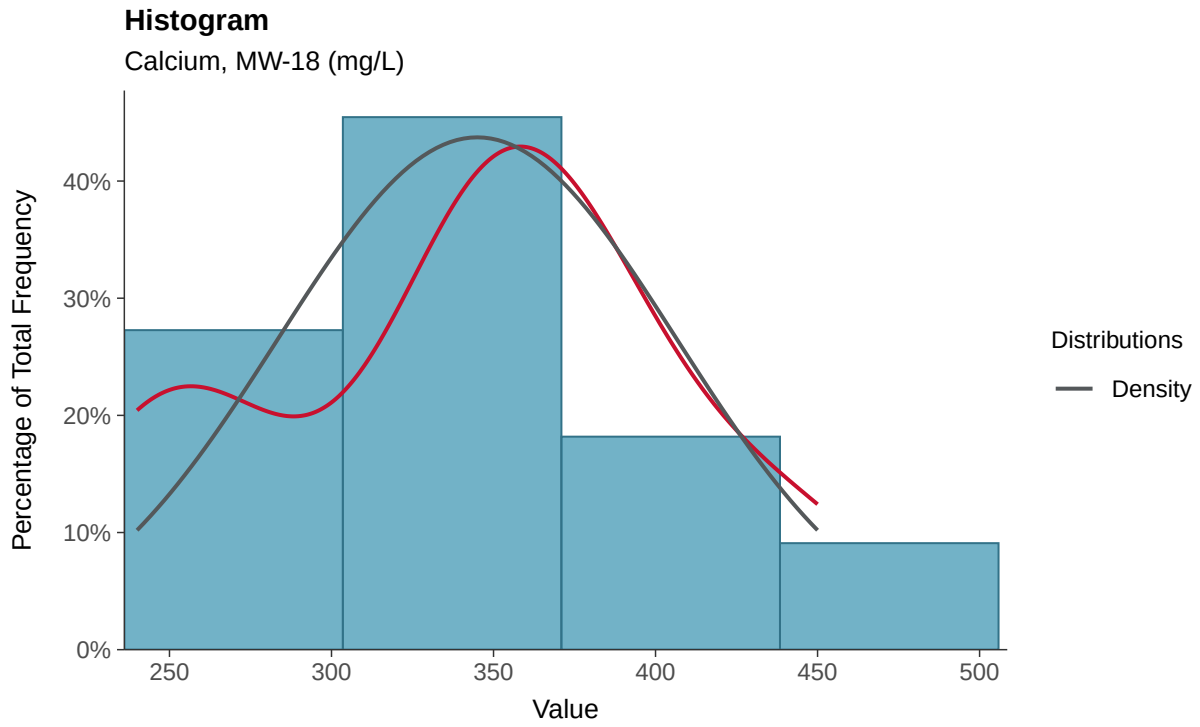
Boron, MW-18 (mg/L)



Appendix III: Calcium, MW-18

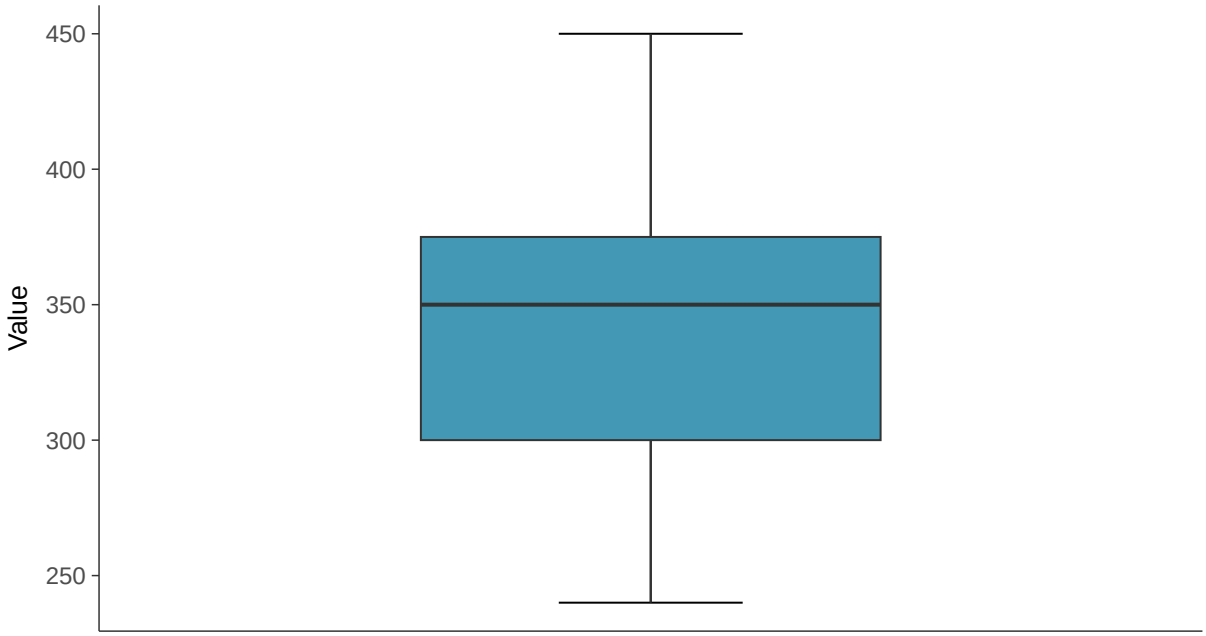
ID: 1_28_4_107





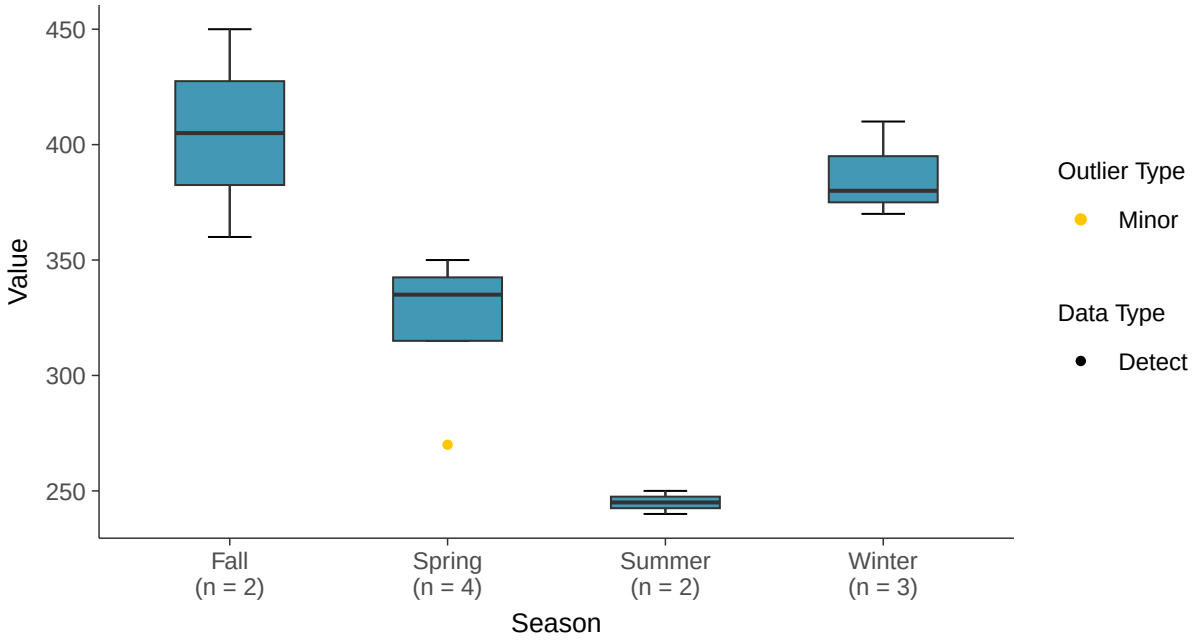
Boxplot

Calcium, MW-18 (mg/L)



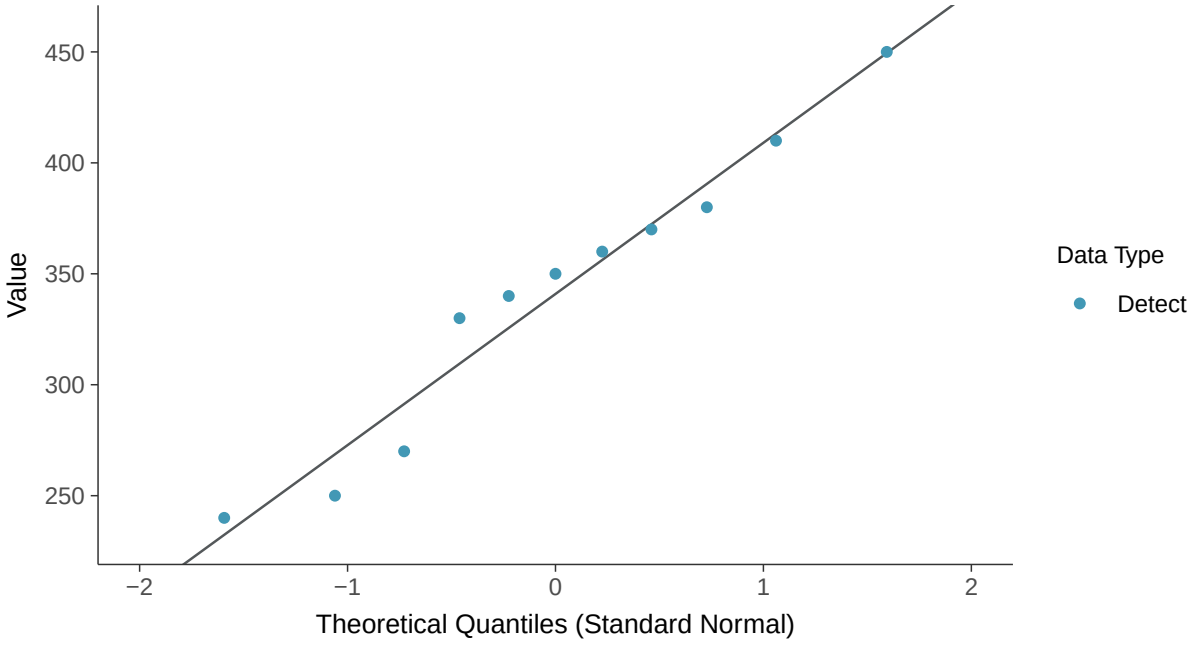
Boxplot by Season

Calcium, MW-18 (mg/L)



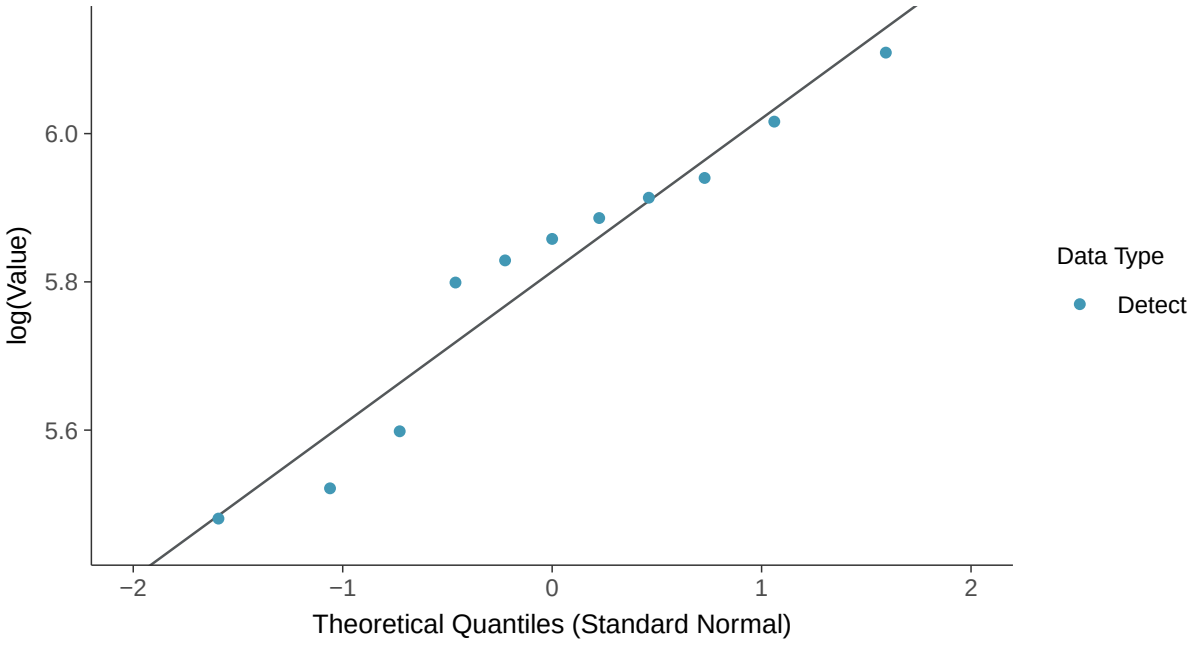
Normal Q-Q plot

Calcium, MW-18 (mg/L)



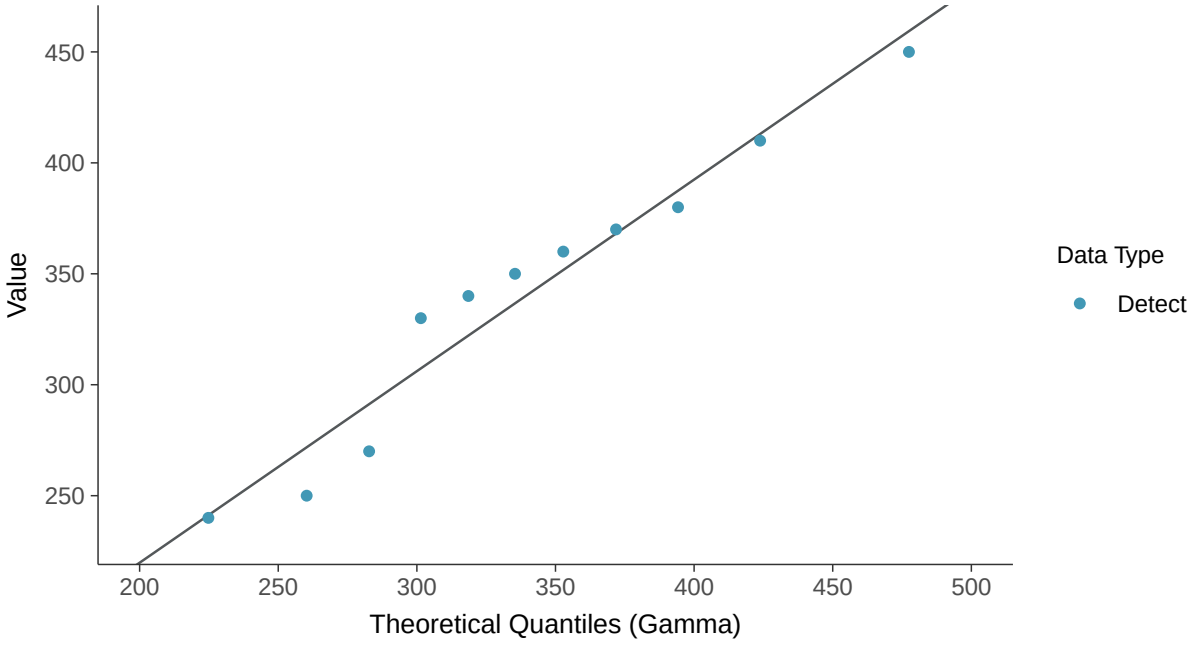
Lognormal Q-Q plot

Calcium, MW-18 (mg/L)



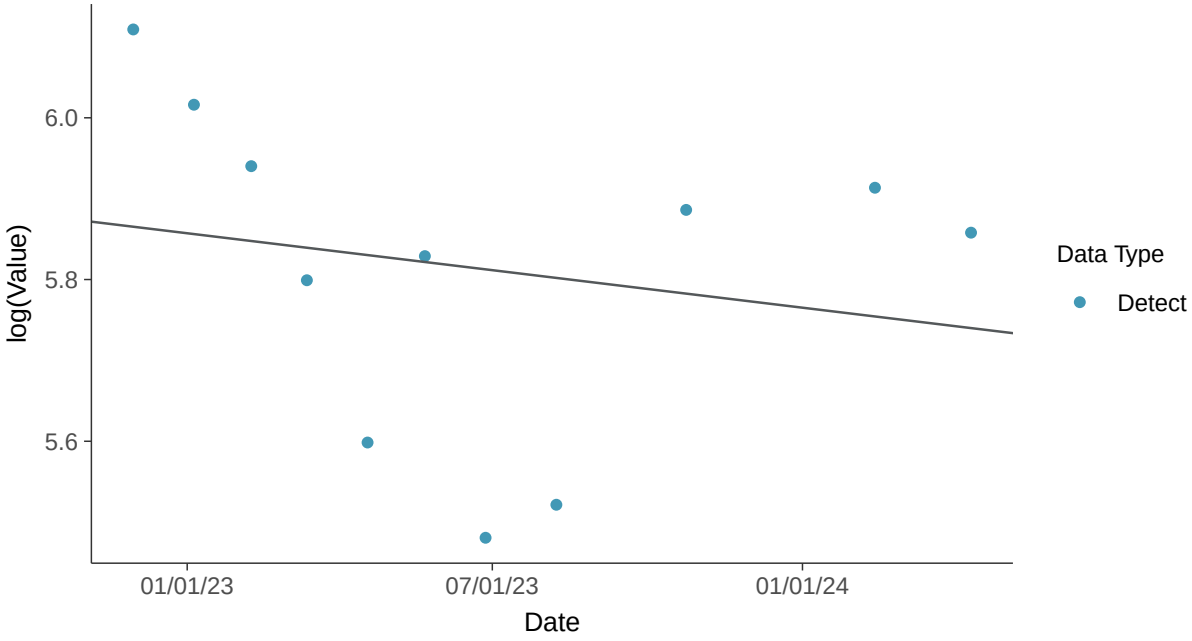
Gamma Q-Q plot

Calcium, MW-18 (mg/L)



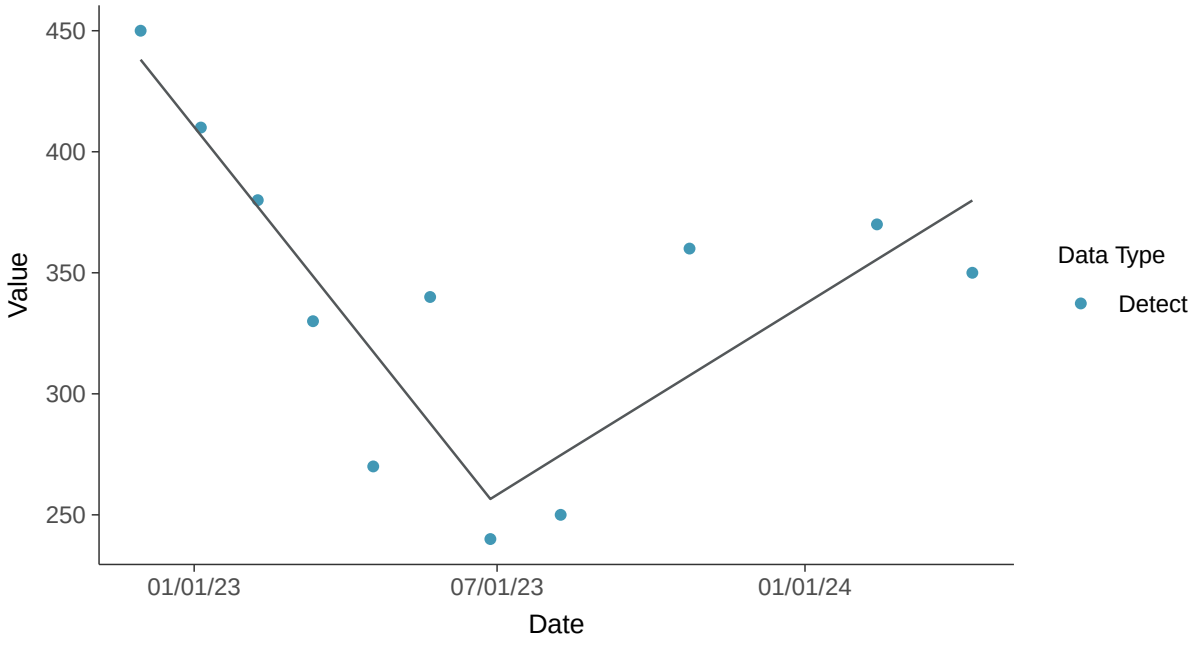
Trend Regression: Lognormal MLE

Calcium, MW-18 (mg/L)



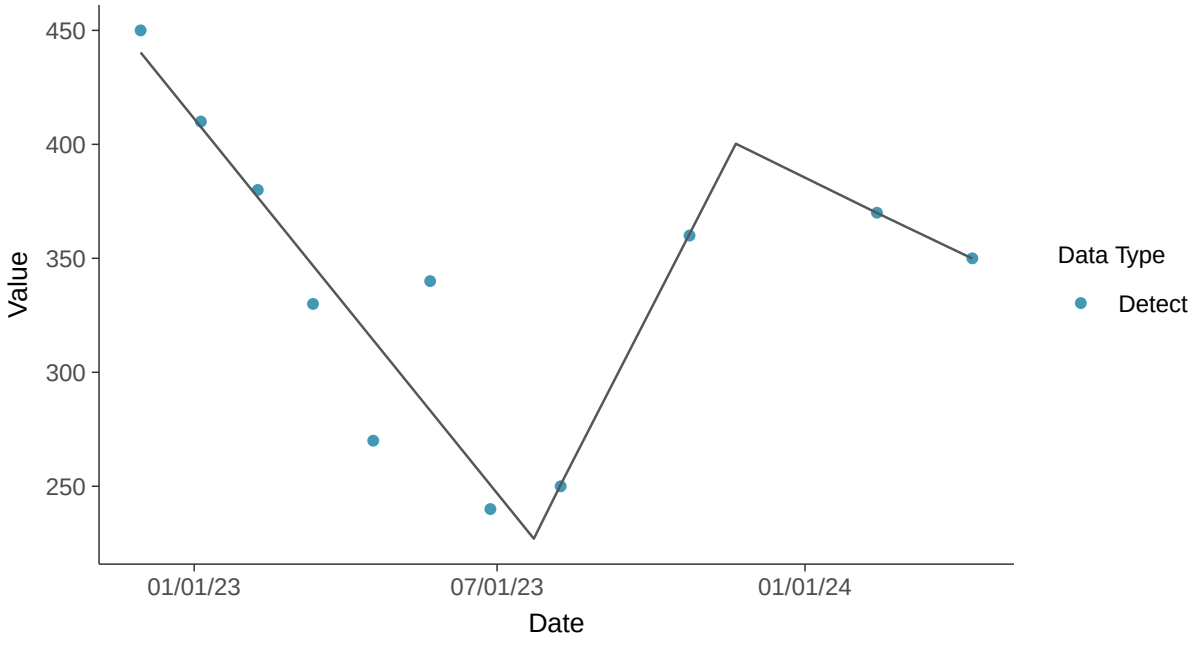
Trend Regression: Piecewise Linear-Linear

Calcium, MW-18 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Calcium, MW-18 (mg/L)

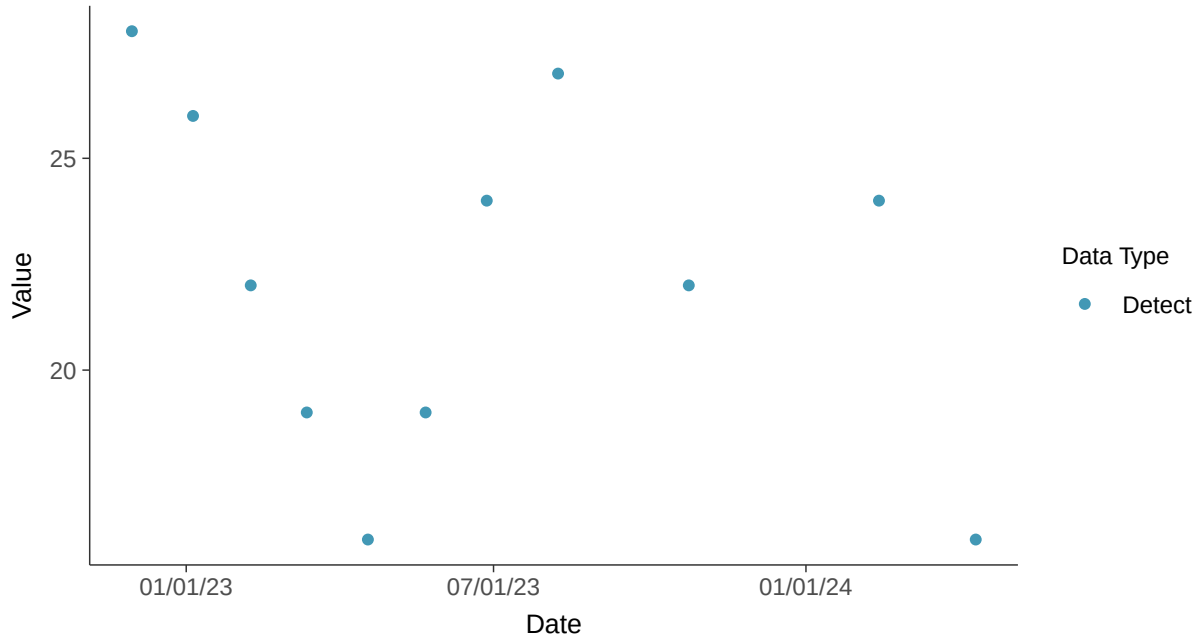


Appendix III: Chloride (as Cl), MW-18

ID: 1_28_4_108

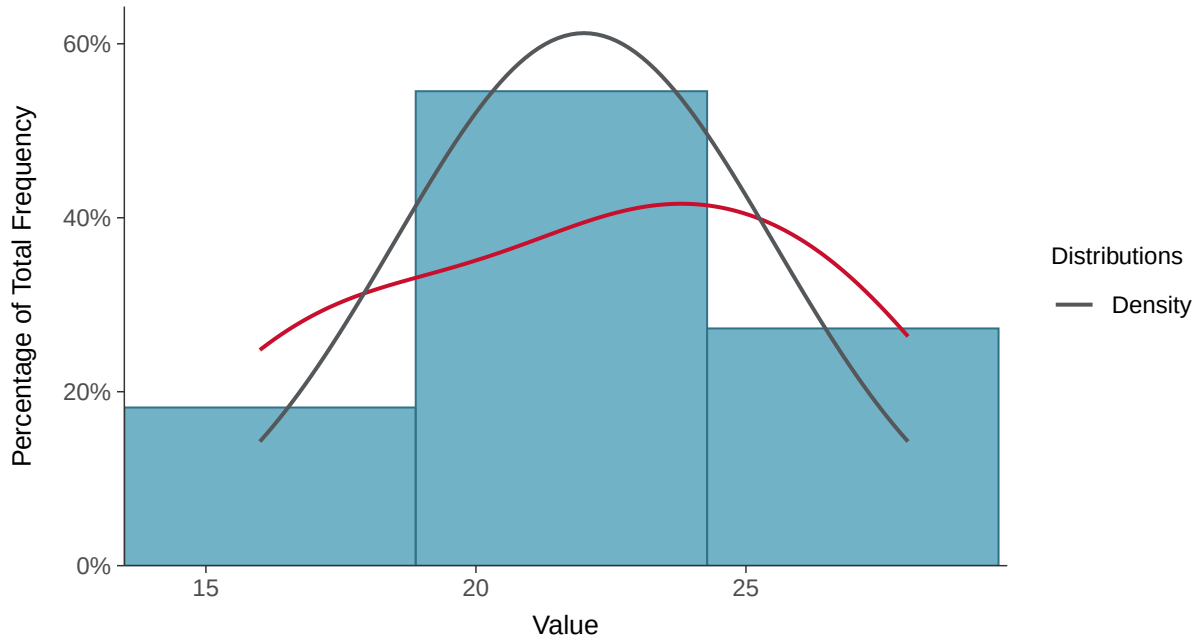
Scatter Plot

Chloride (as Cl), MW-18 (mg/L)



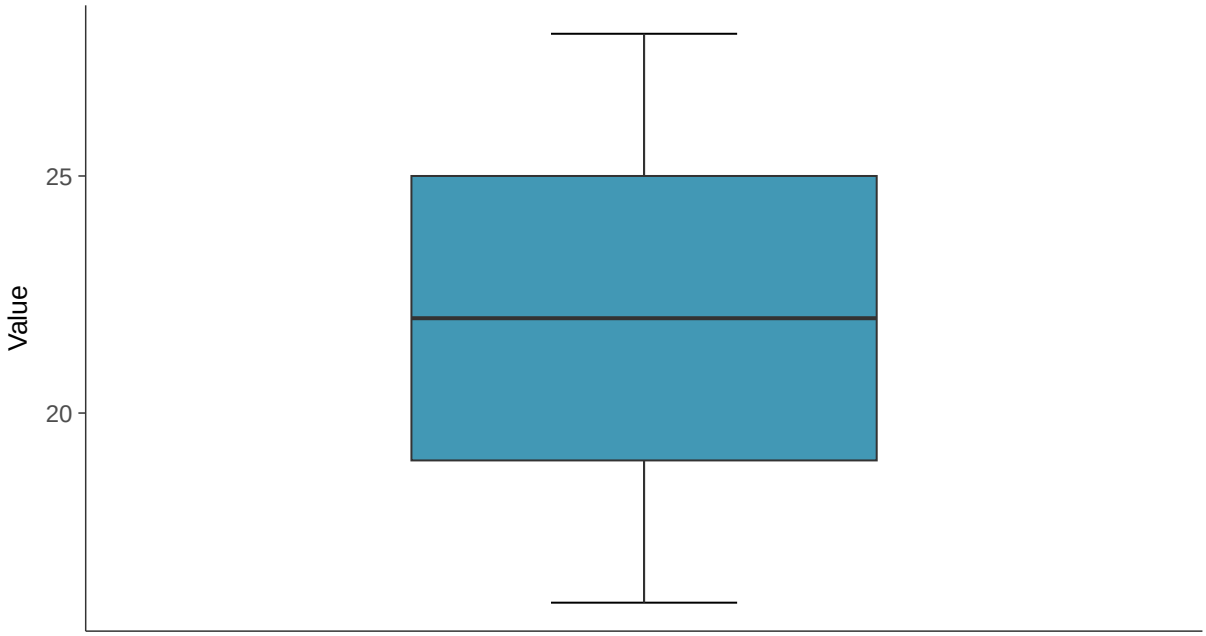
Histogram

Chloride (as Cl), MW-18 (mg/L)



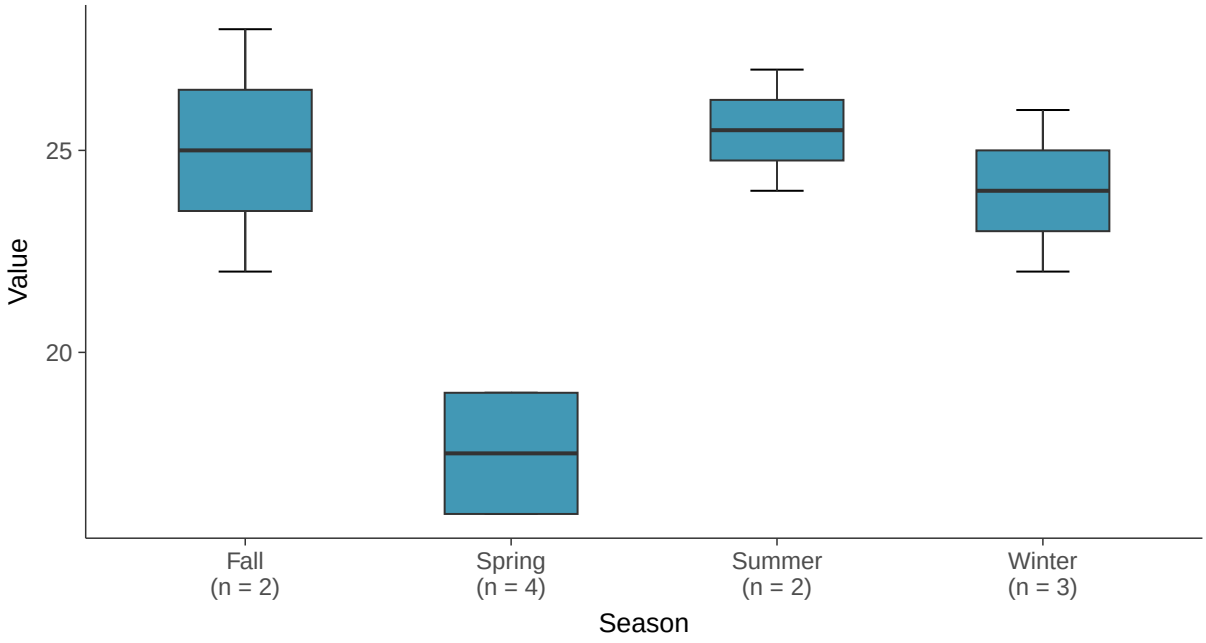
Boxplot

Chloride (as Cl), MW-18 (mg/L)



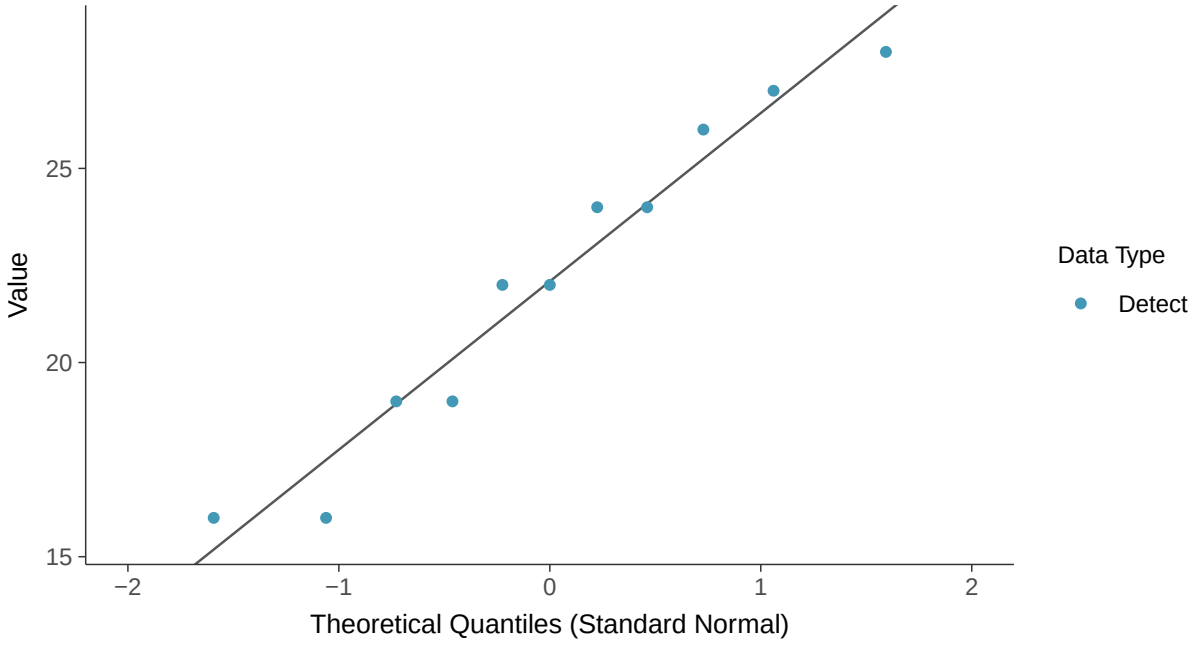
Boxplot by Season

Chloride (as Cl), MW-18 (mg/L)



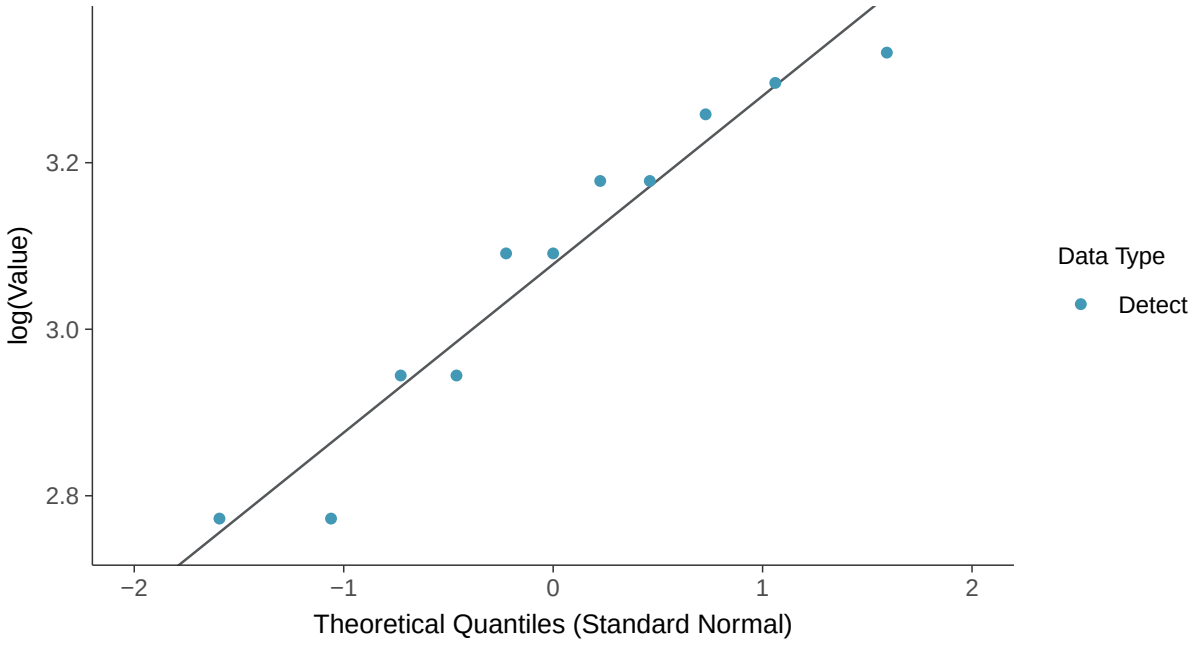
Normal Q-Q plot

Chloride (as Cl), MW-18 (mg/L)



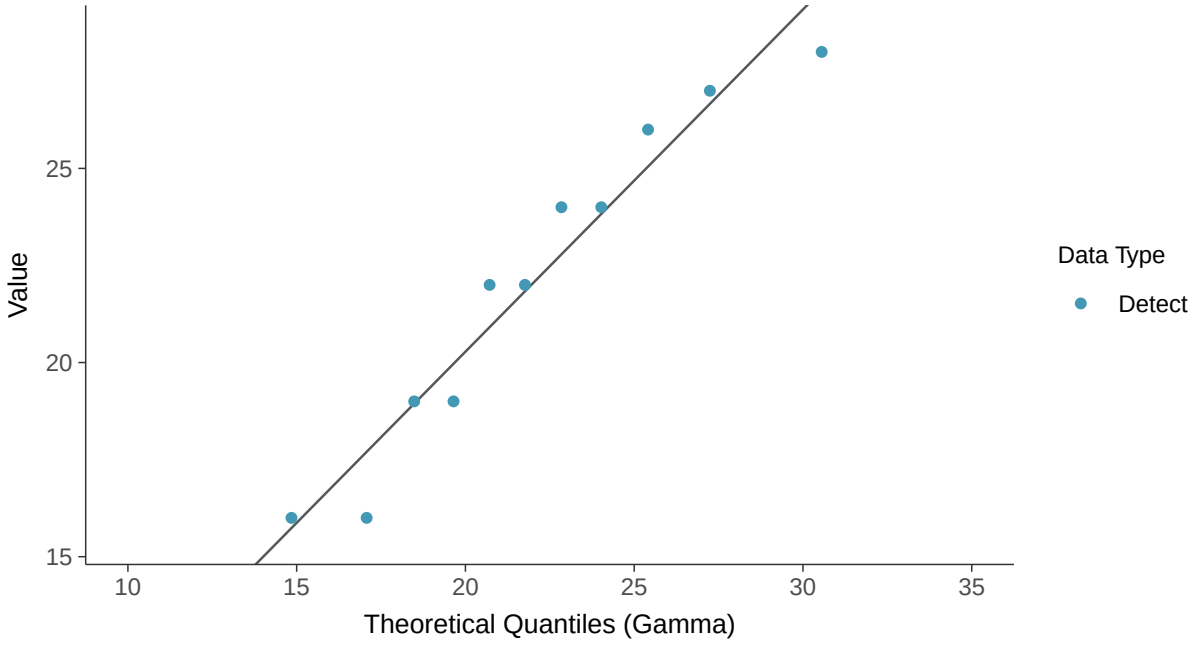
Lognormal Q-Q plot

Chloride (as Cl), MW-18 (mg/L)



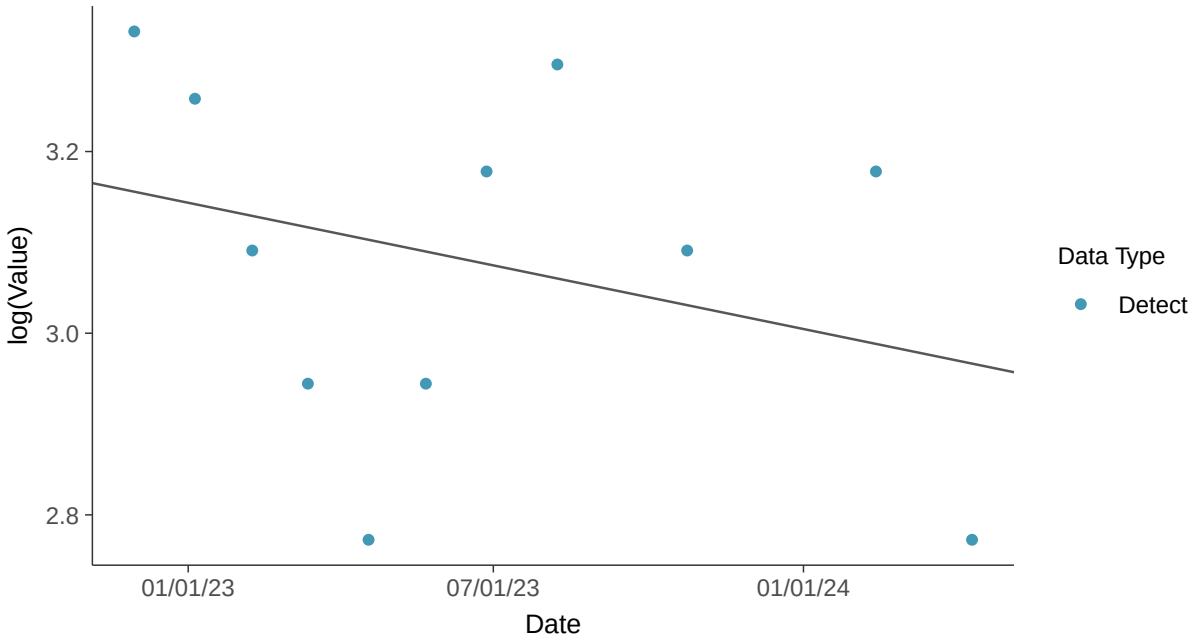
Gamma Q-Q plot

Chloride (as Cl), MW-18 (mg/L)



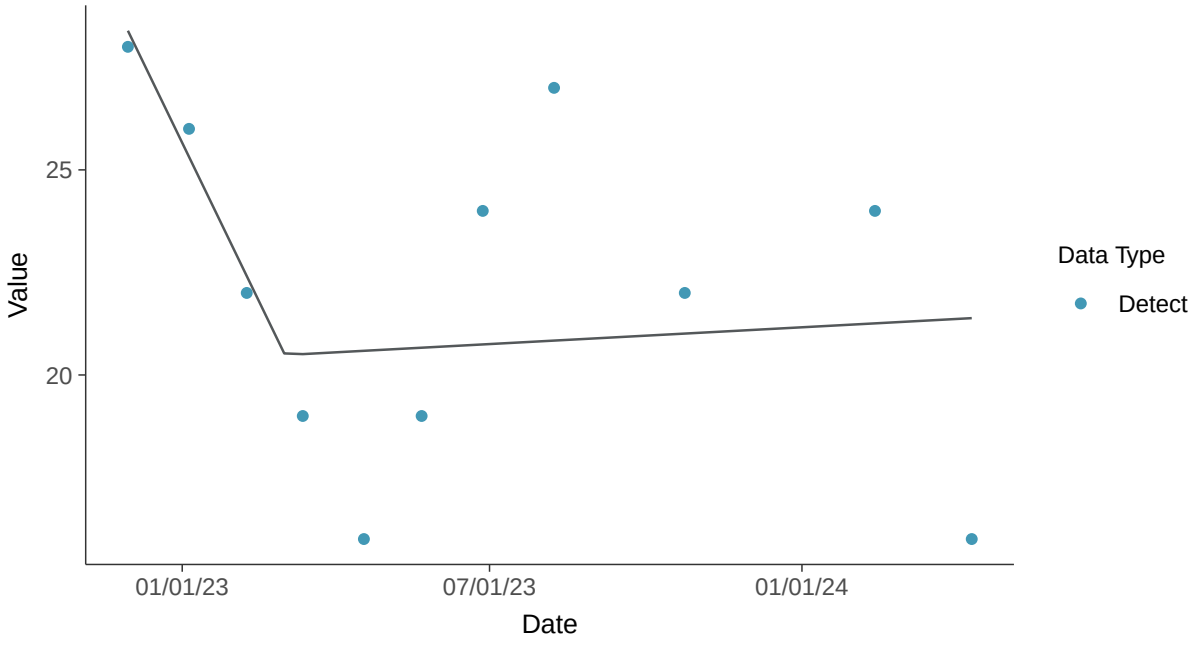
Trend Regression: Lognormal MLE

Chloride (as Cl), MW-18 (mg/L)



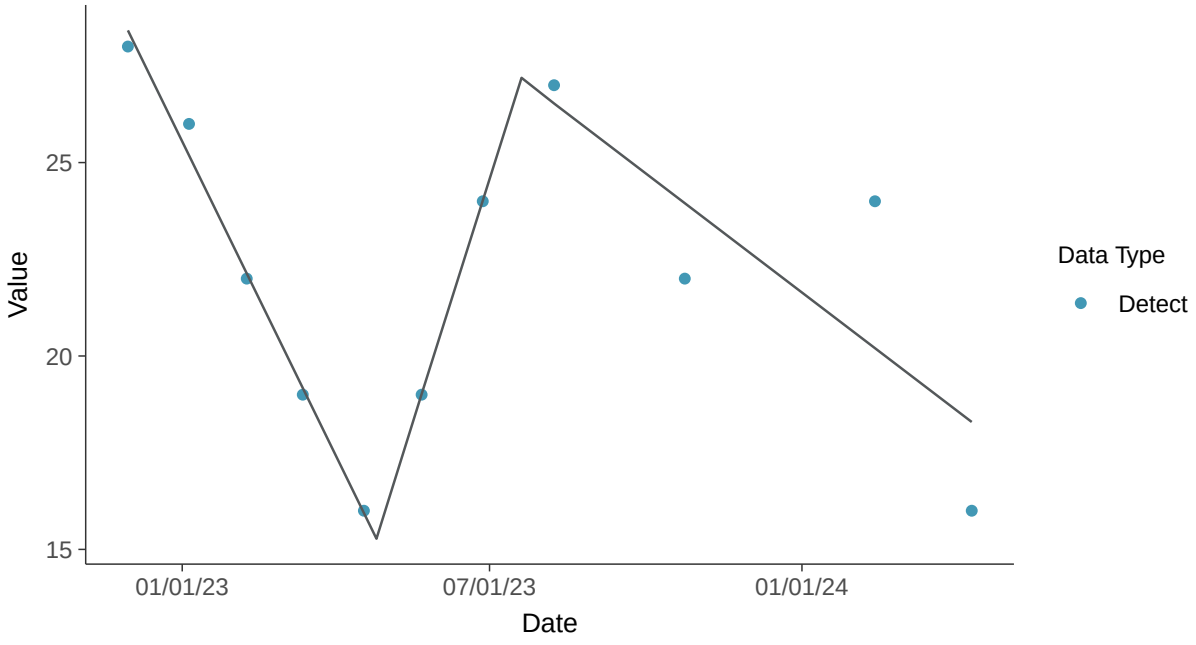
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-18 (mg/L)



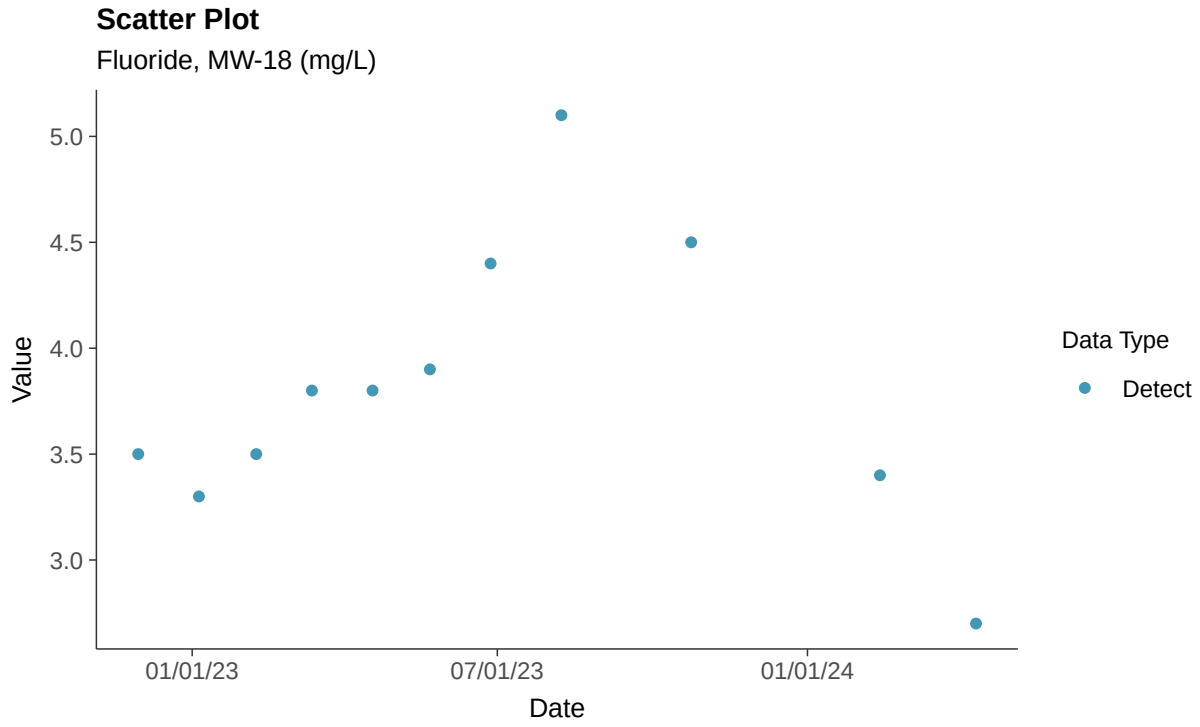
Trend Regression: Piecewise Linear-Linear-Linear

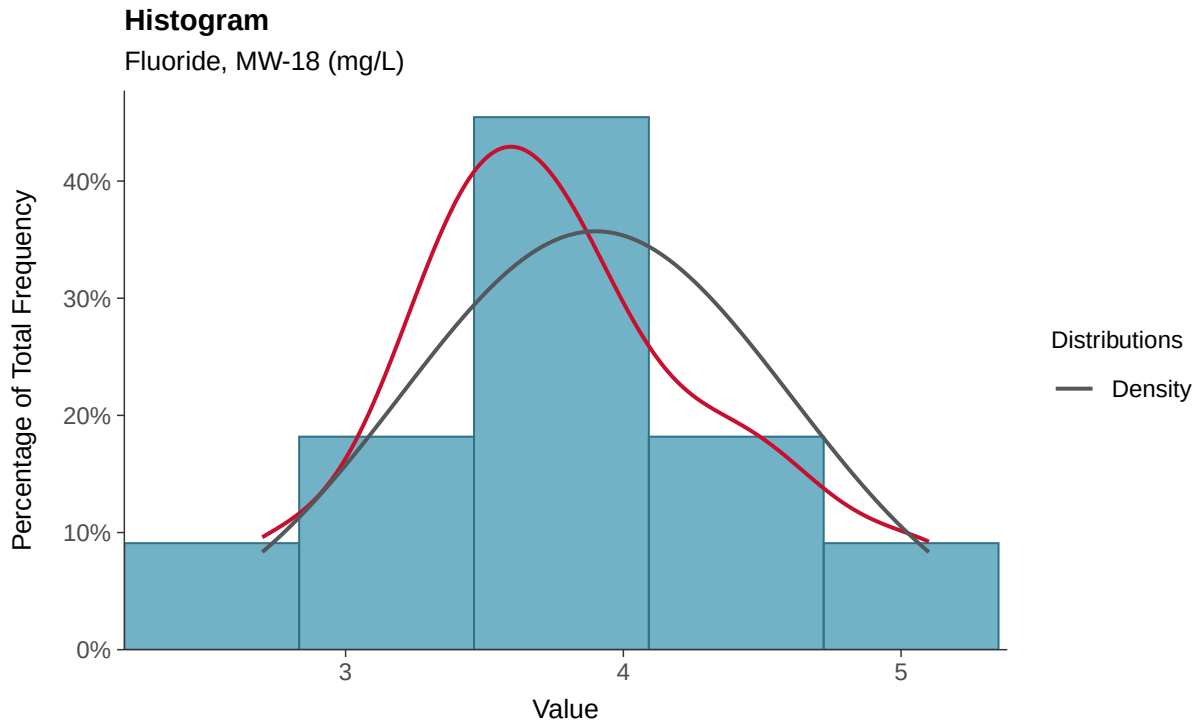
Chloride (as Cl), MW-18 (mg/L)



Appendix III: Fluoride, MW-18

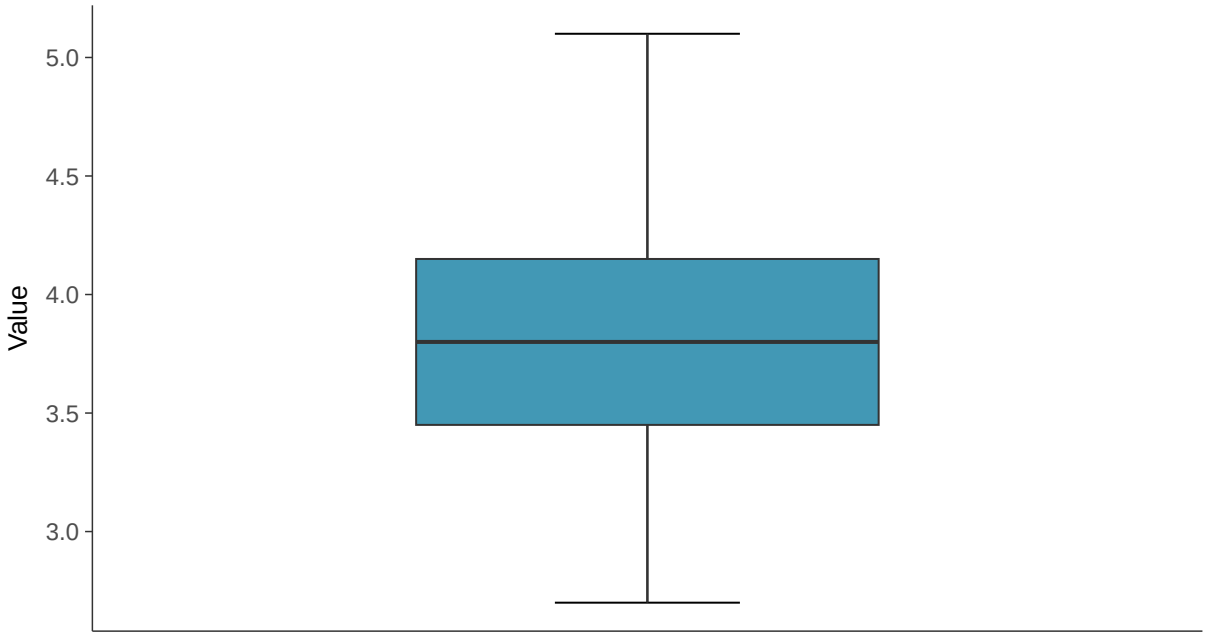
ID: 1_28_4_112





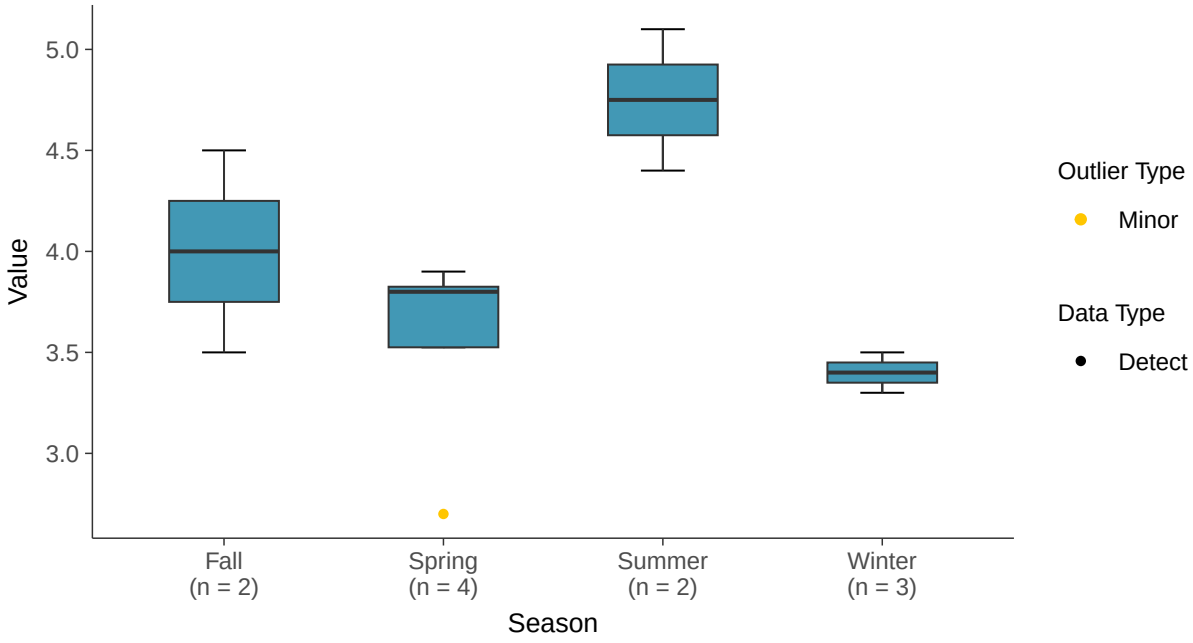
Boxplot

Fluoride, MW-18 (mg/L)



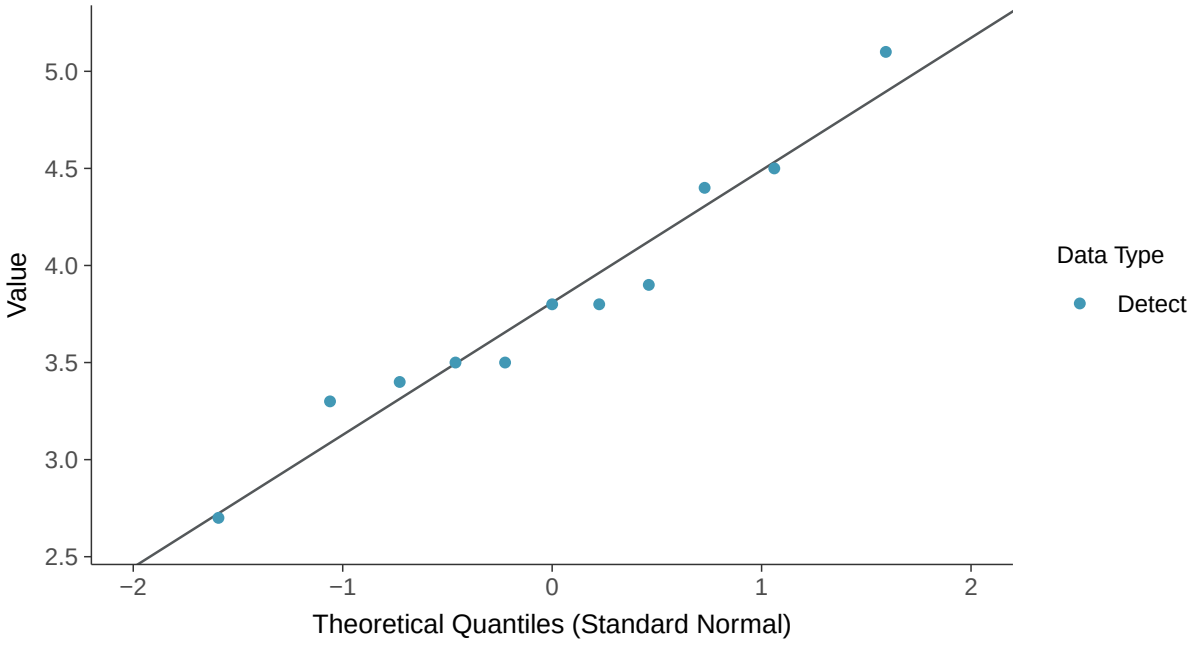
Boxplot by Season

Fluoride, MW-18 (mg/L)



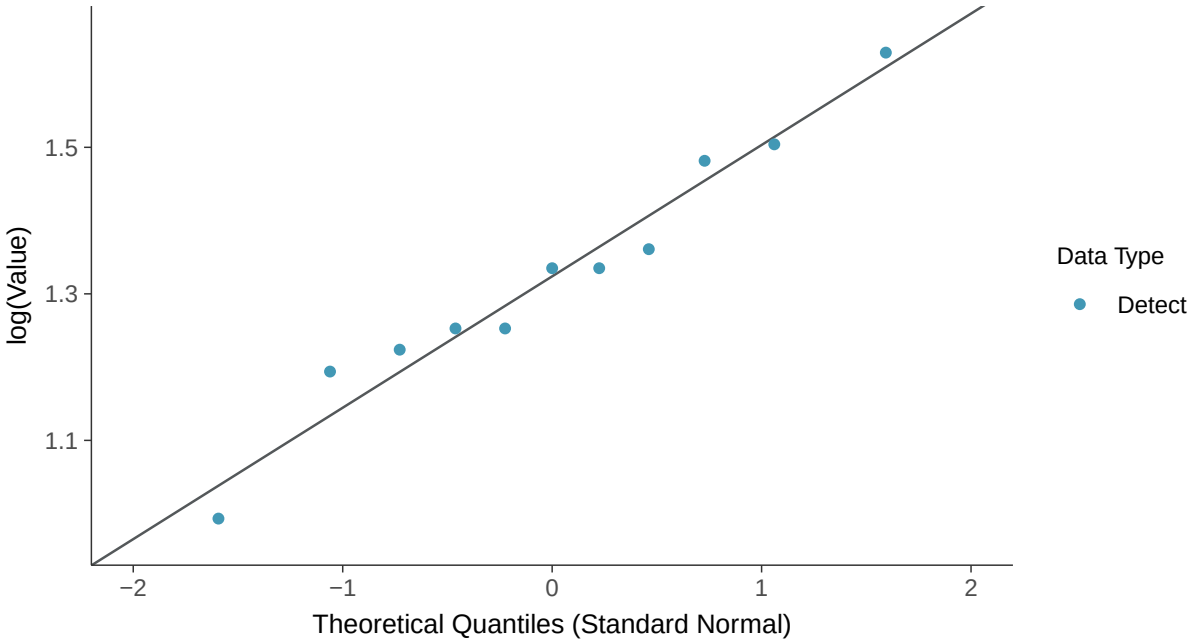
Normal Q-Q plot

Fluoride, MW-18 (mg/L)



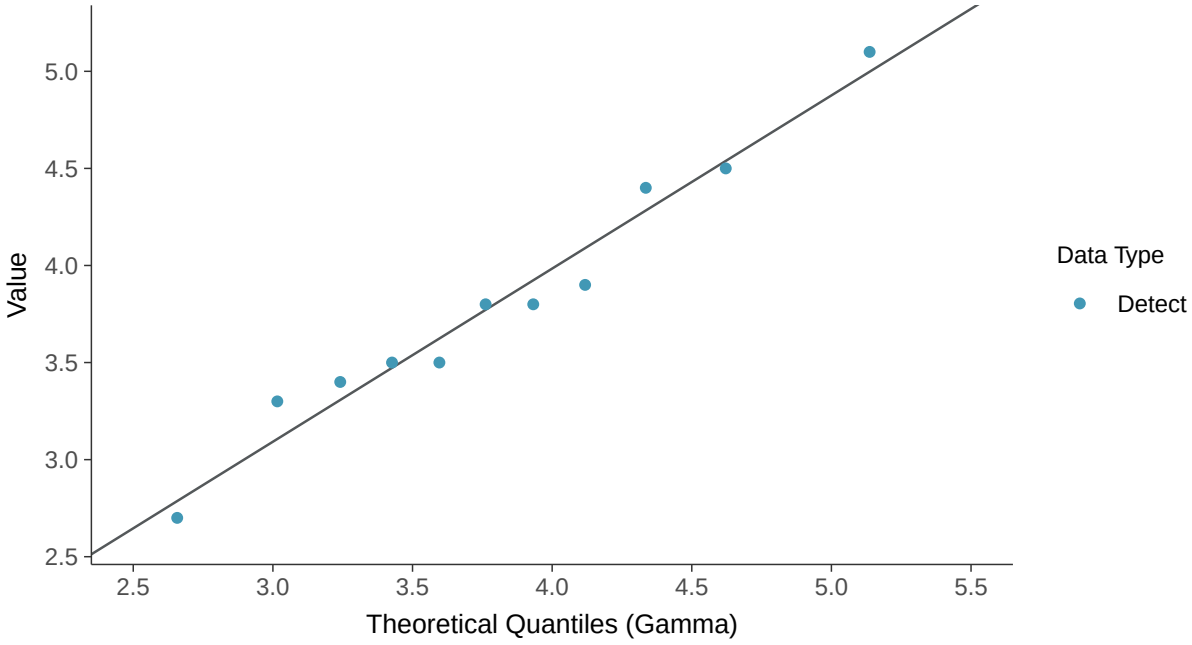
Lognormal Q-Q plot

Fluoride, MW-18 (mg/L)



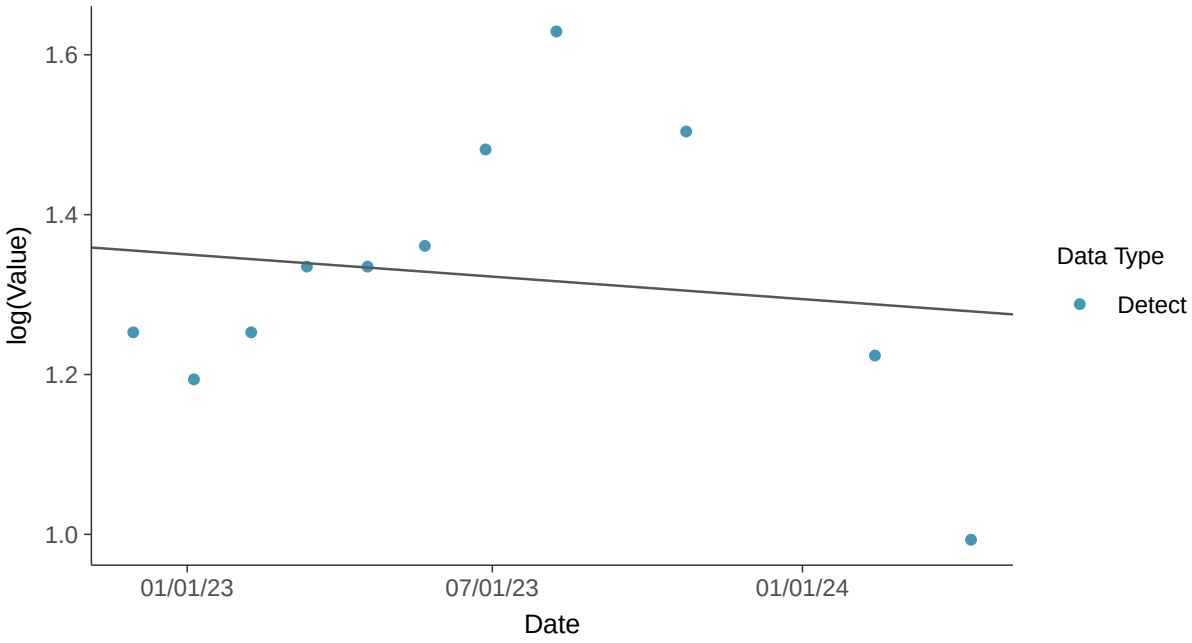
Gamma Q-Q plot

Fluoride, MW-18 (mg/L)



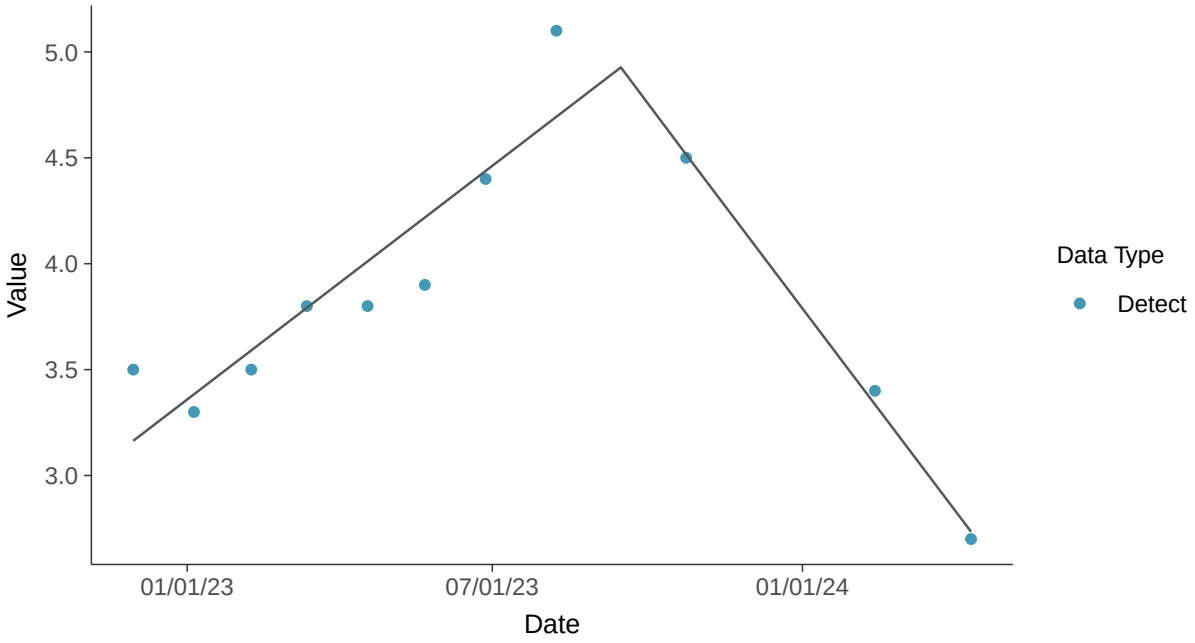
Trend Regression: Lognormal MLE

Fluoride, MW-18 (mg/L)



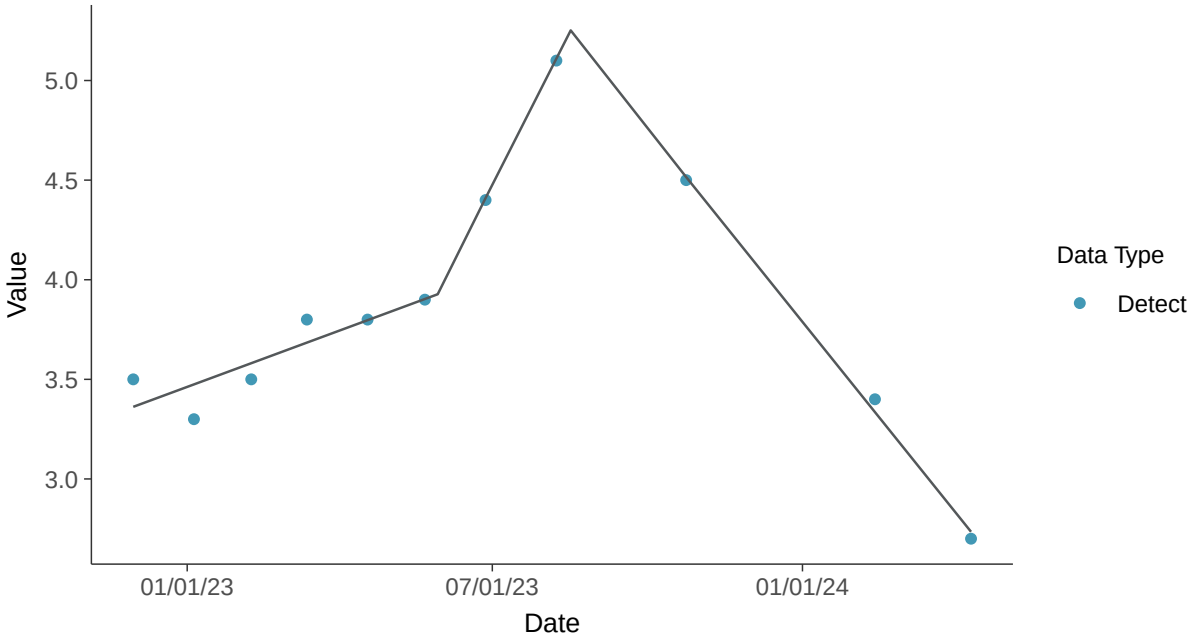
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-18 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Fluoride, MW-18 (mg/L)

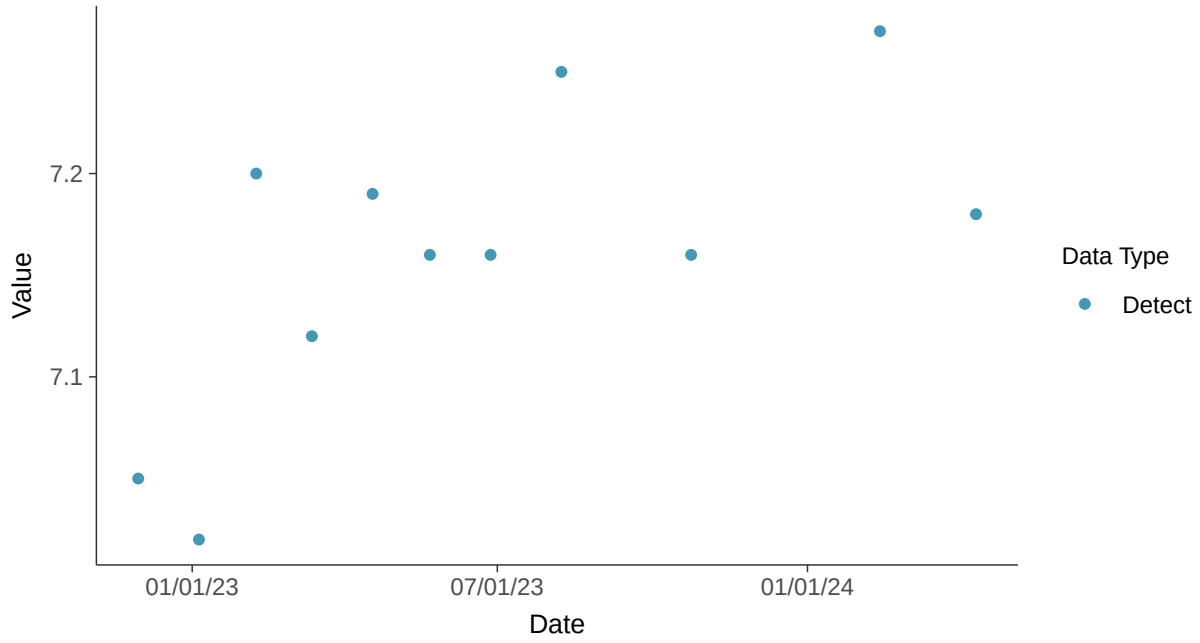


Appendix III: pH (field), MW-18

ID: 1_28_4_120

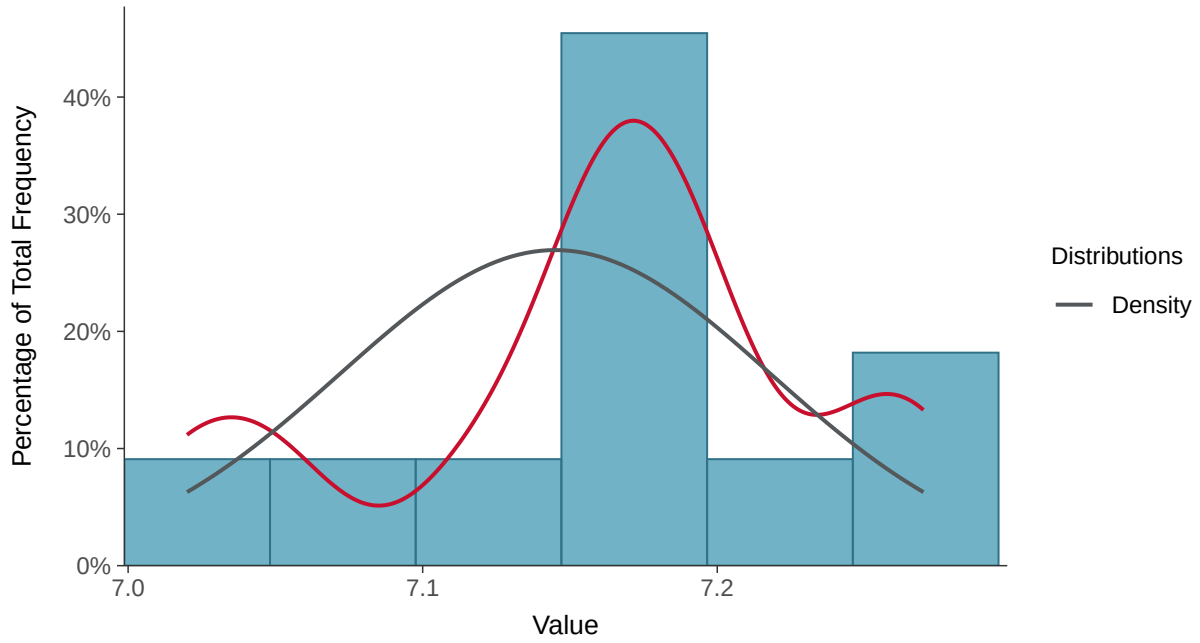
Scatter Plot

pH (field), MW-18 (su)



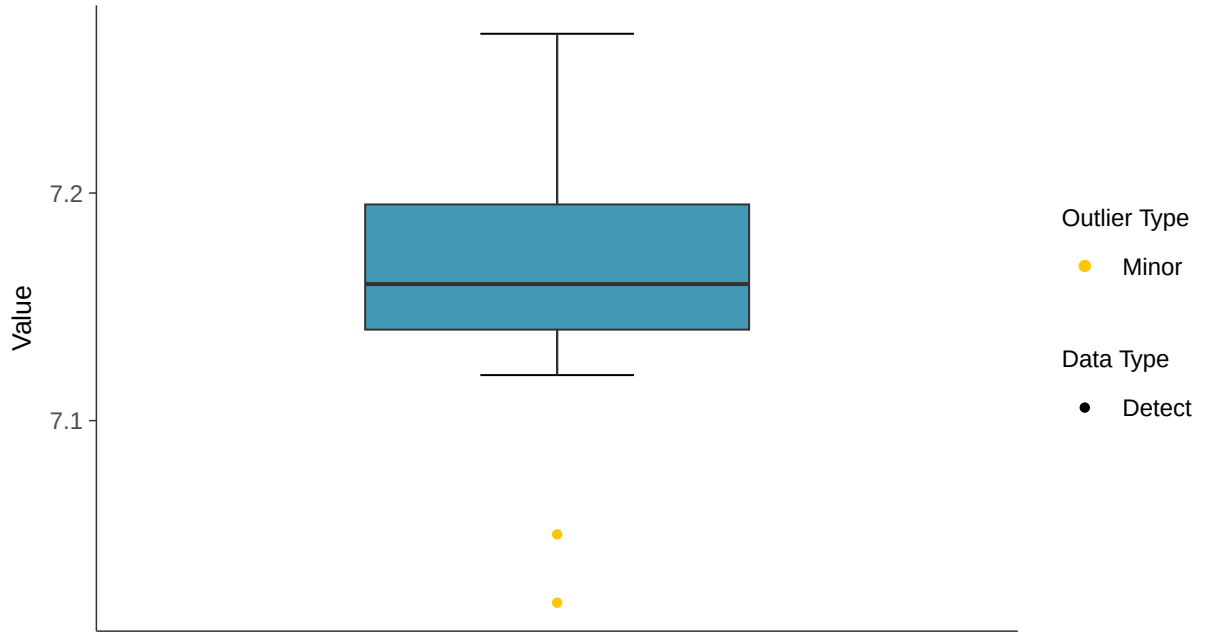
Histogram

pH (field), MW-18 (su)



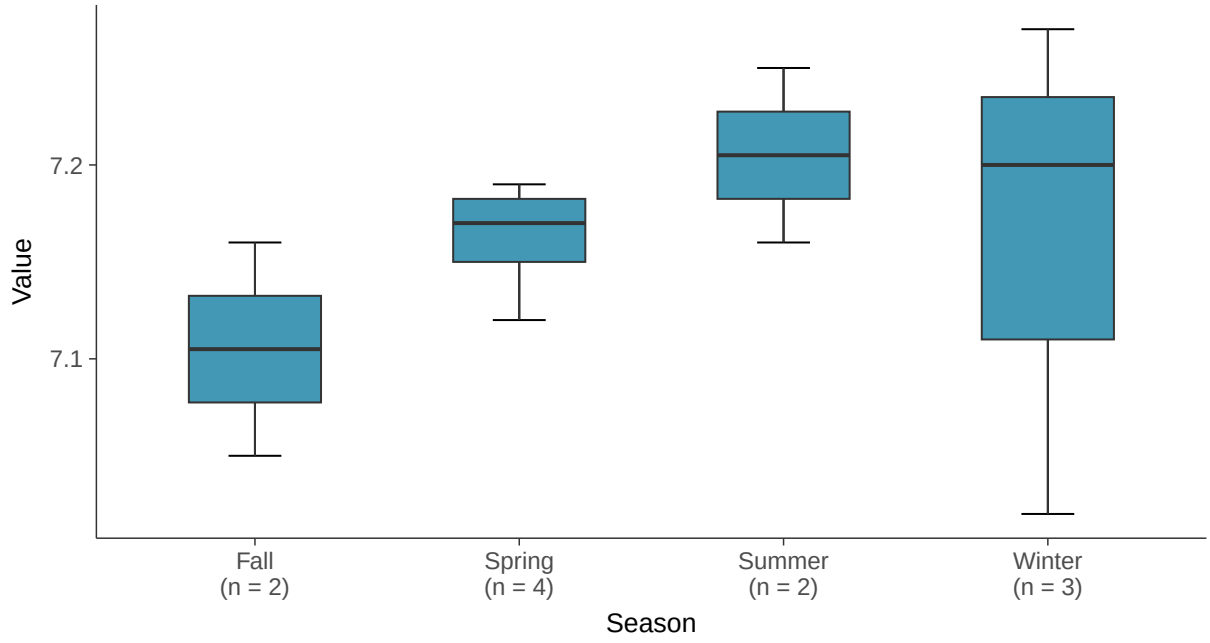
Boxplot

pH (field), MW-18 (su)



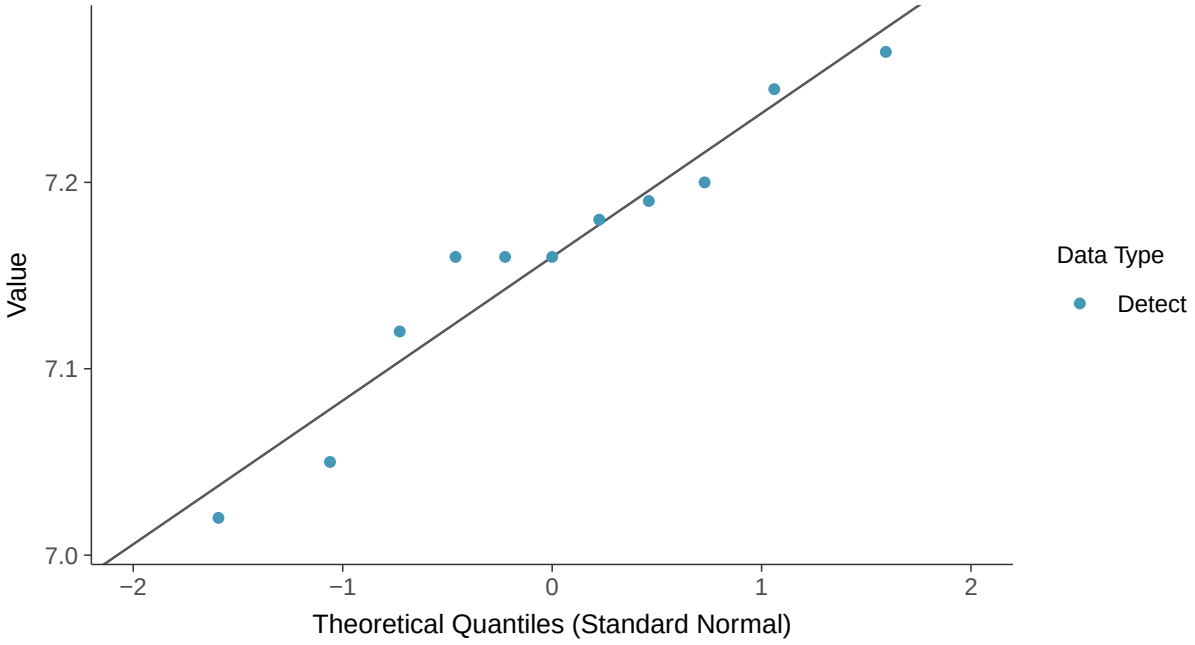
Boxplot by Season

pH (field), MW-18 (su)



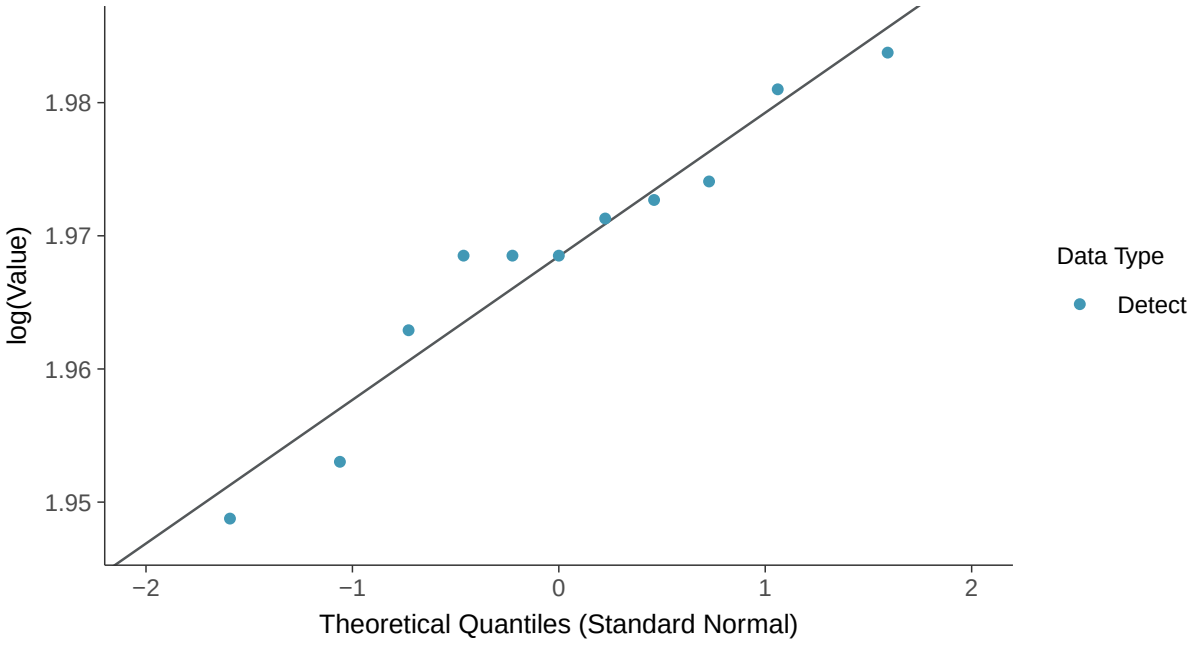
Normal Q-Q plot

pH (field), MW-18 (su)



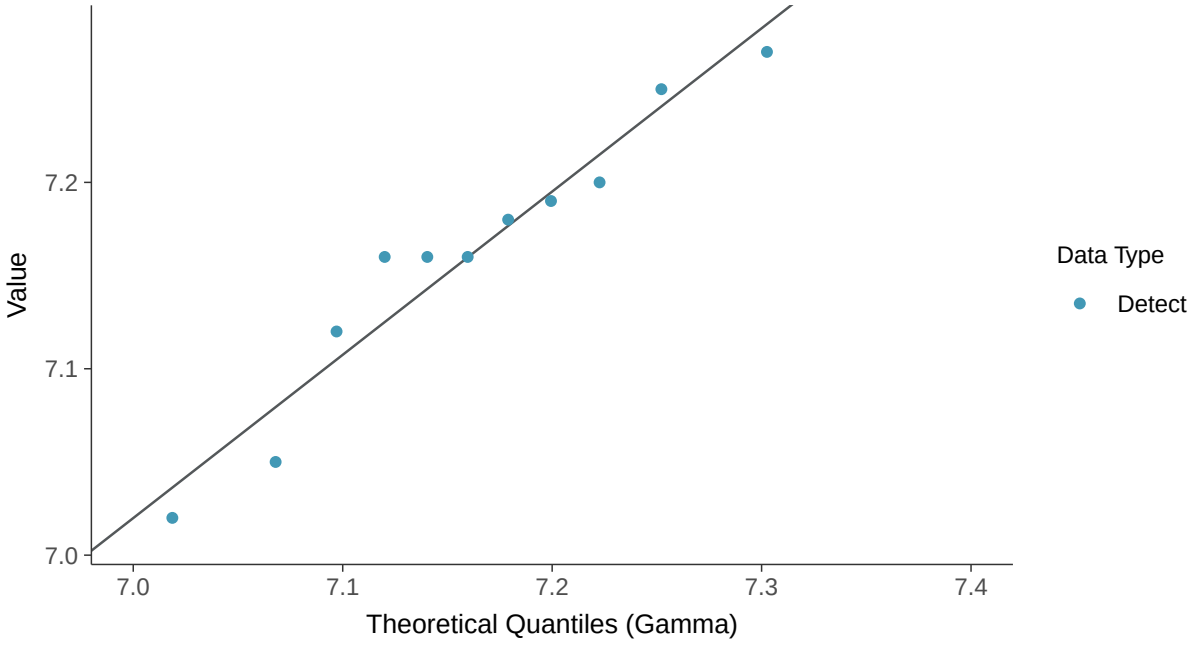
Lognormal Q-Q plot

pH (field), MW-18 (su)



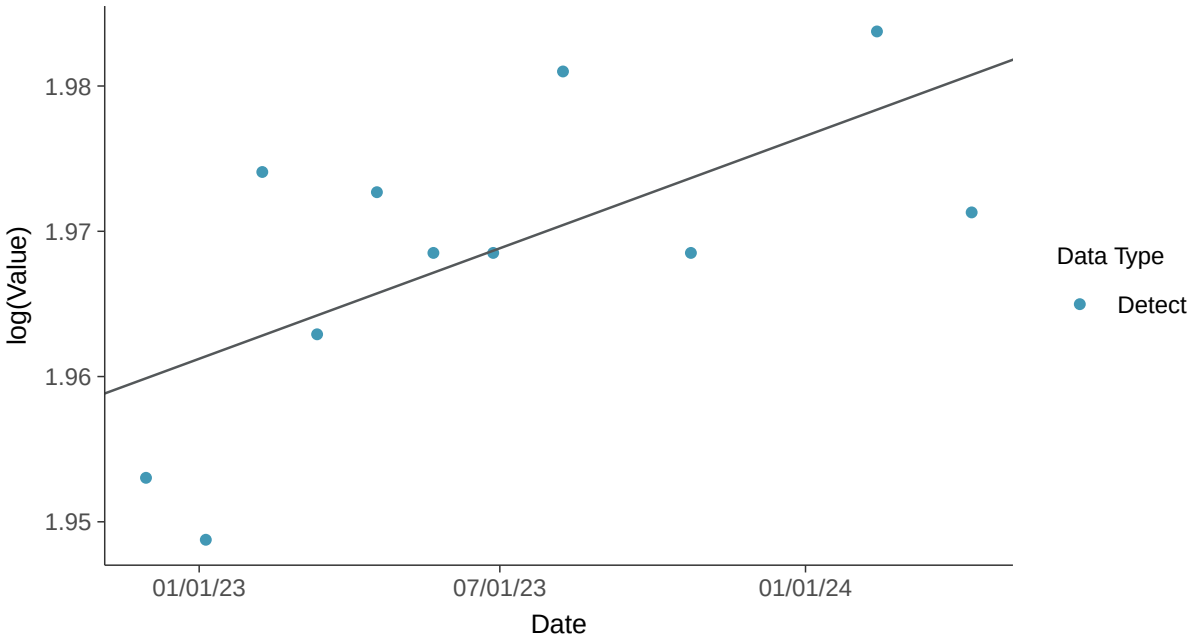
Gamma Q-Q plot

pH (field), MW-18 (su)



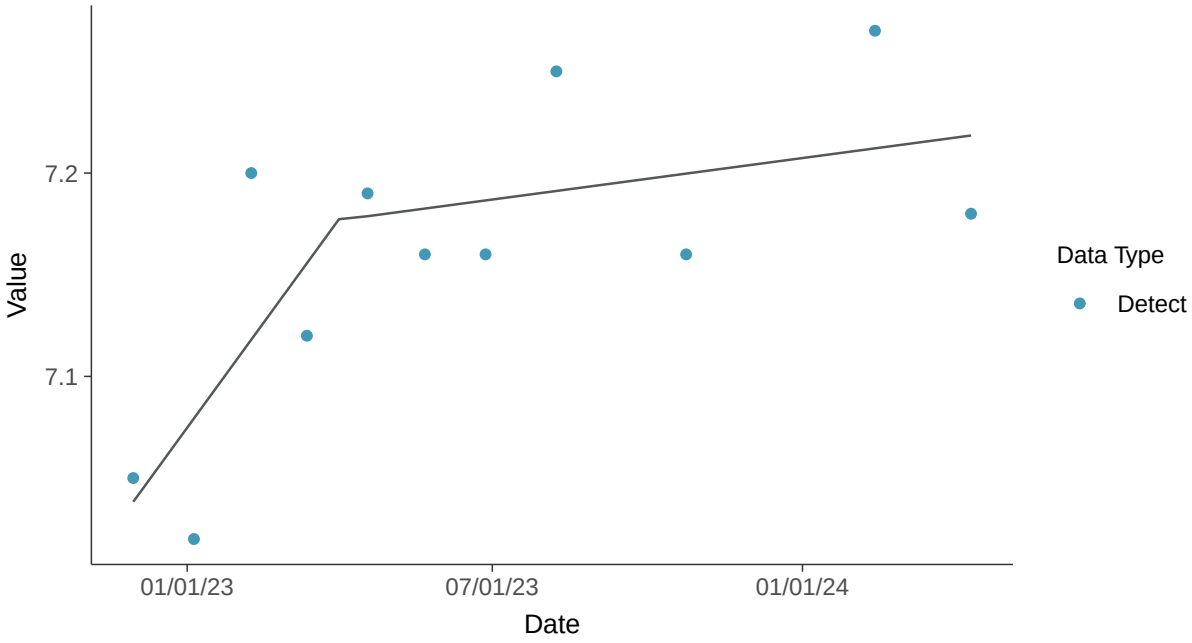
Trend Regression: Lognormal MLE

pH (field), MW-18 (su)



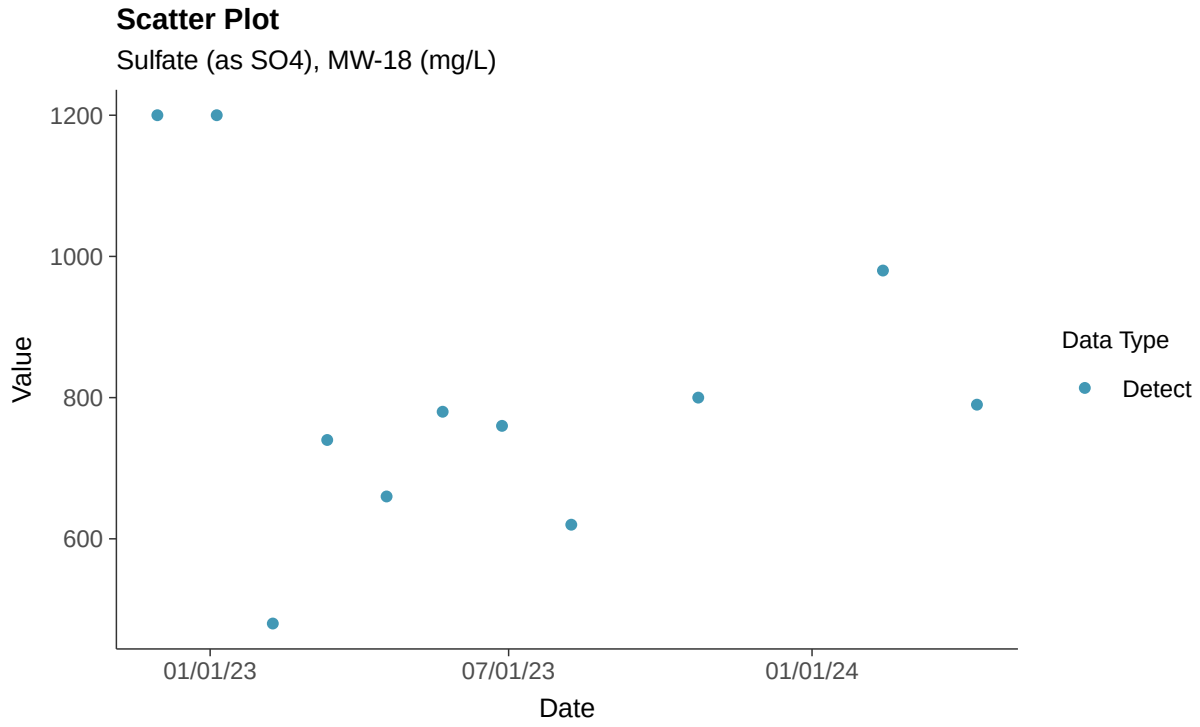
Trend Regression: Piecewise Linear-Linear

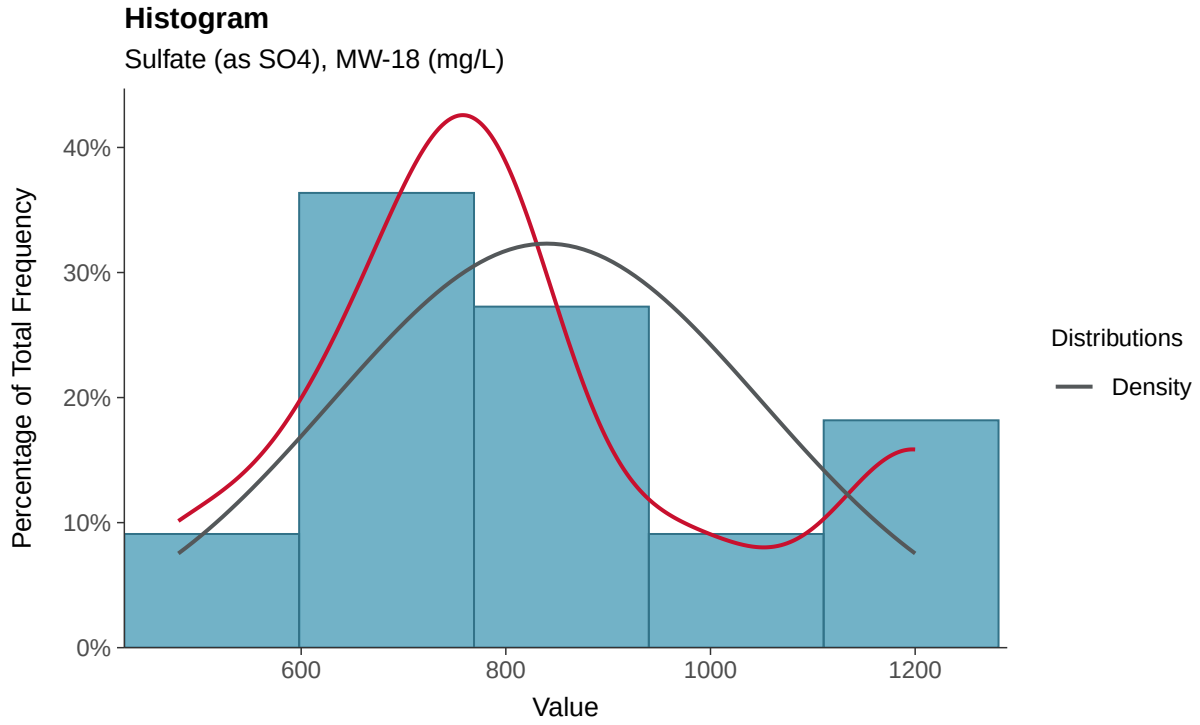
pH (field), MW-18 (su)



Appendix III: Sulfate (as SO4), MW-18

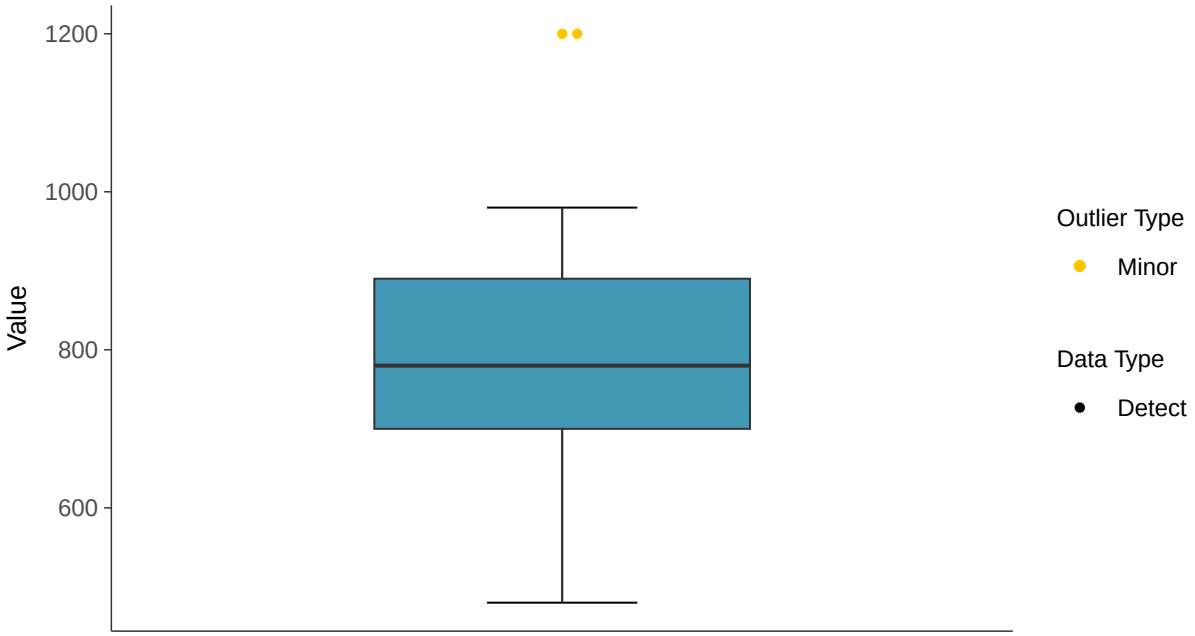
ID: 1_28_4_124





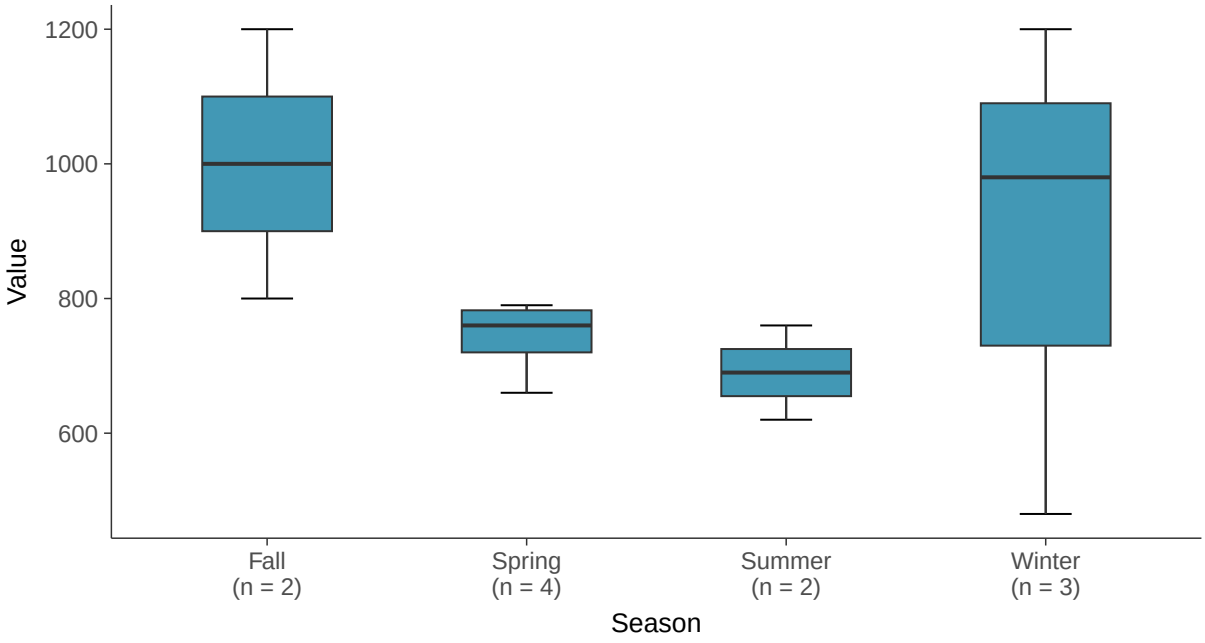
Boxplot

Sulfate (as SO4), MW-18 (mg/L)



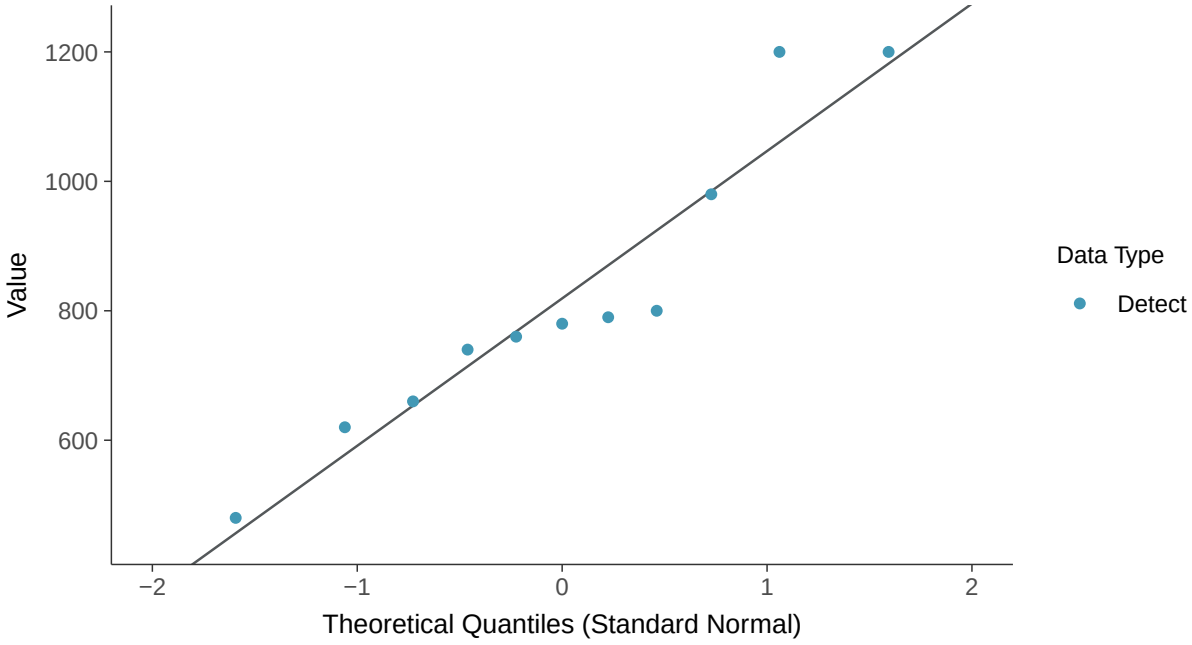
Boxplot by Season

Sulfate (as SO4), MW-18 (mg/L)



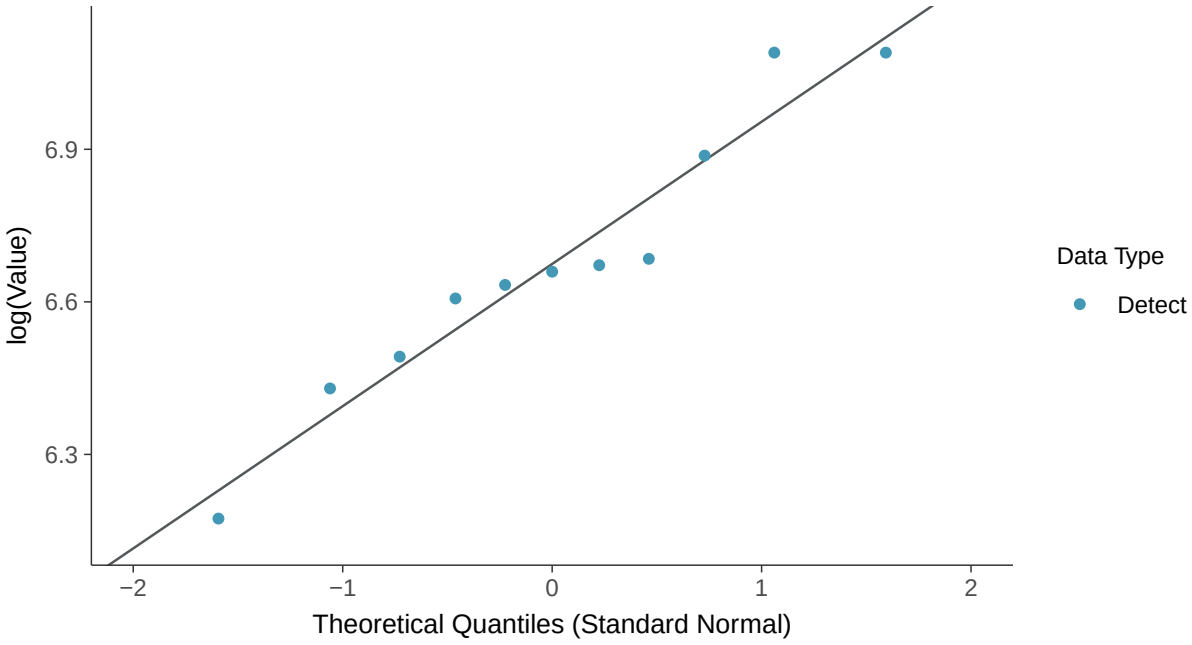
Normal Q-Q plot

Sulfate (as SO4), MW-18 (mg/L)



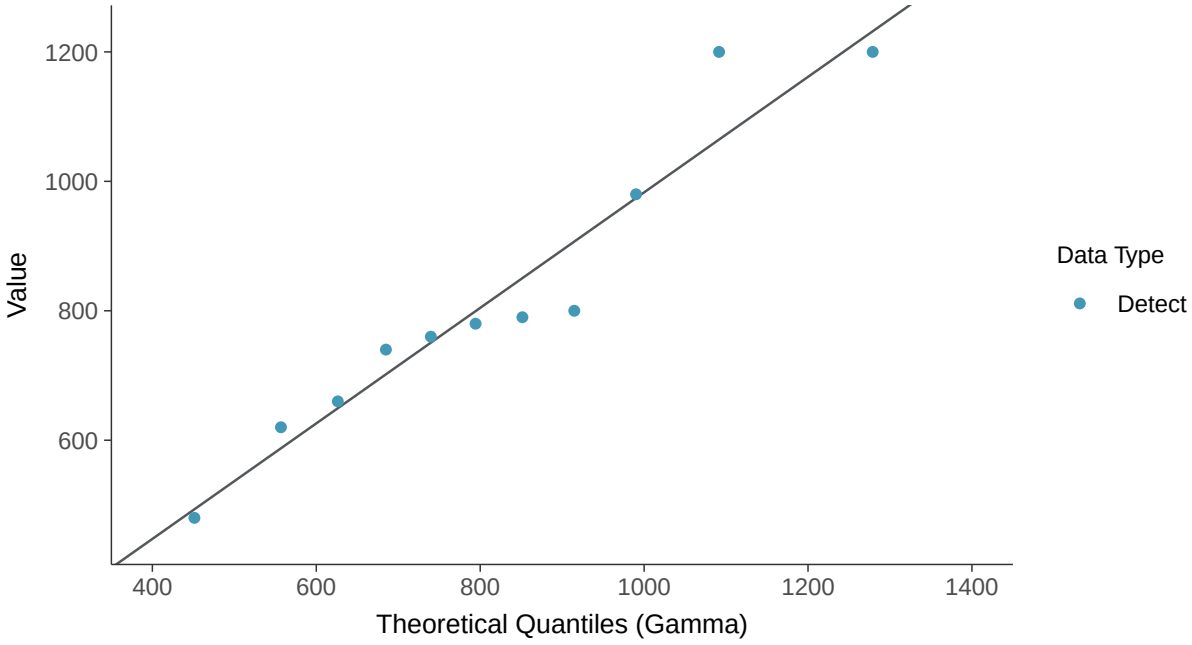
Lognormal Q-Q plot

Sulfate (as SO4), MW-18 (mg/L)



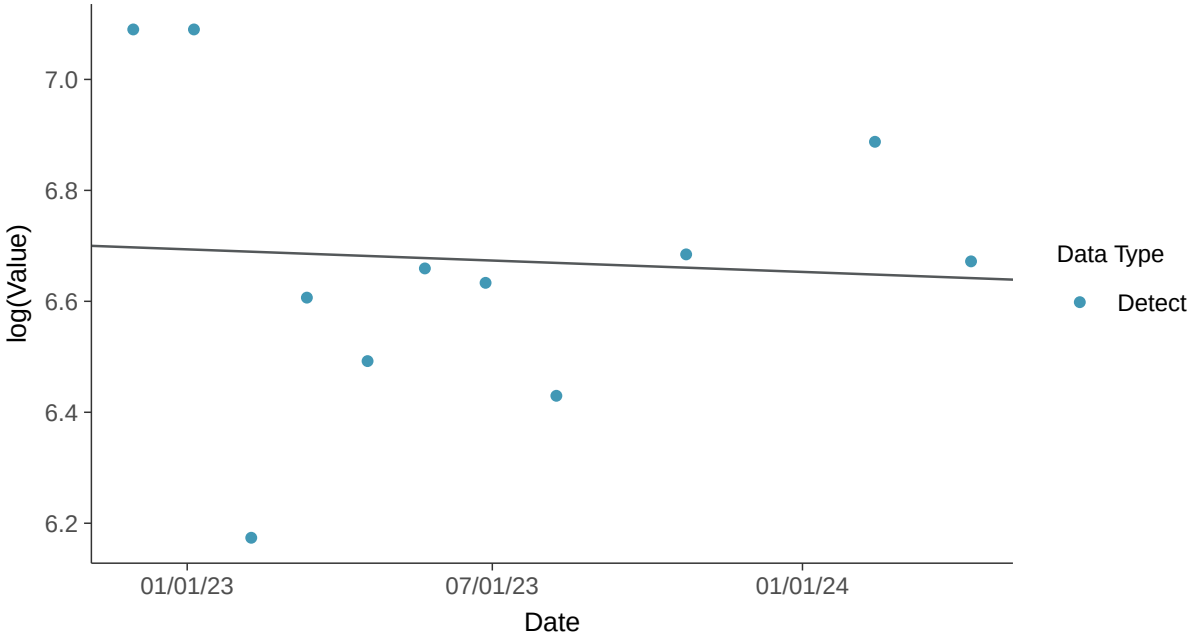
Gamma Q-Q plot

Sulfate (as SO4), MW-18 (mg/L)



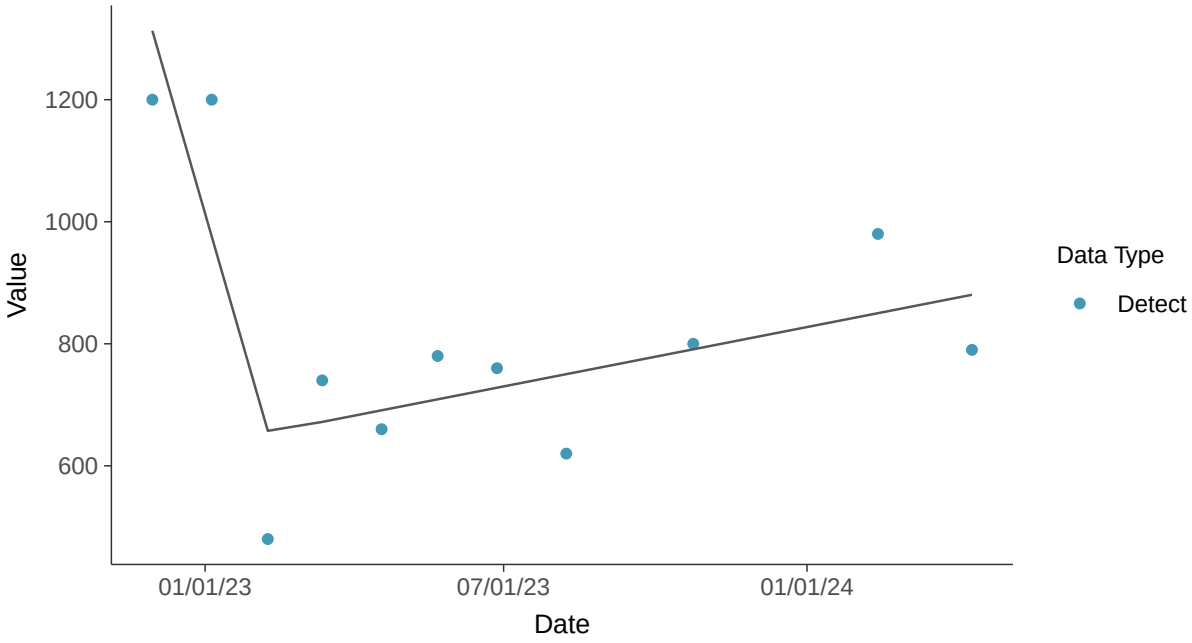
Trend Regression: Lognormal MLE

Sulfate (as SO4), MW-18 (mg/L)



Trend Regression: Piecewise Linear-Linear

Sulfate (as SO4), MW-18 (mg/L)

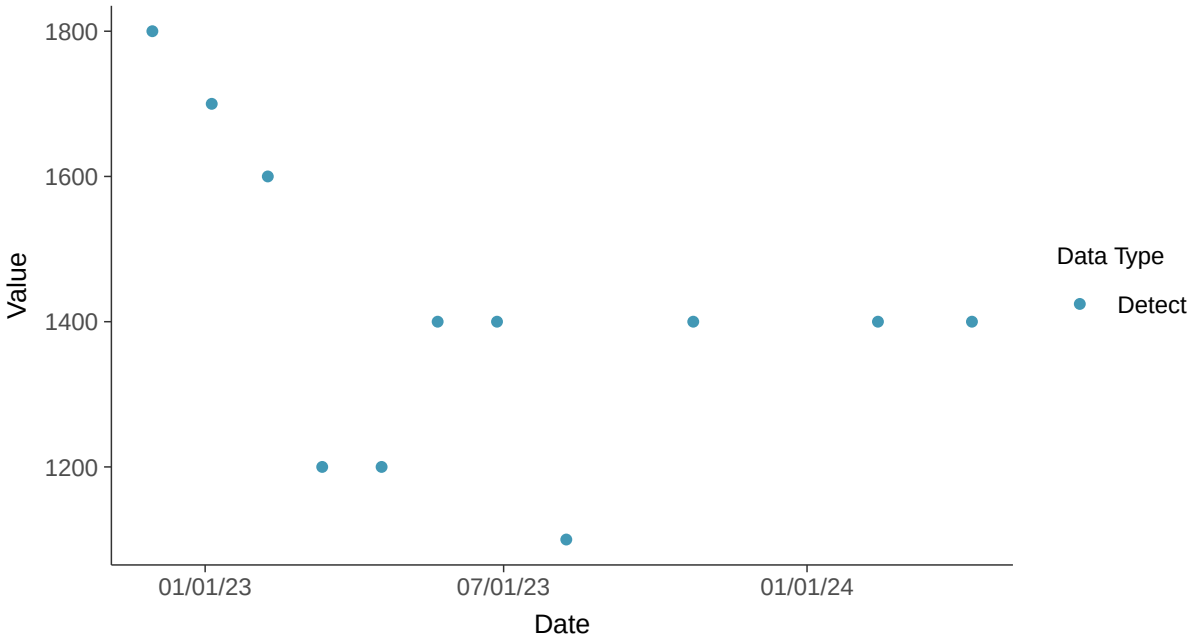


Appendix III: Total Dissolved Solids, MW-18

ID: 1_28_4_126

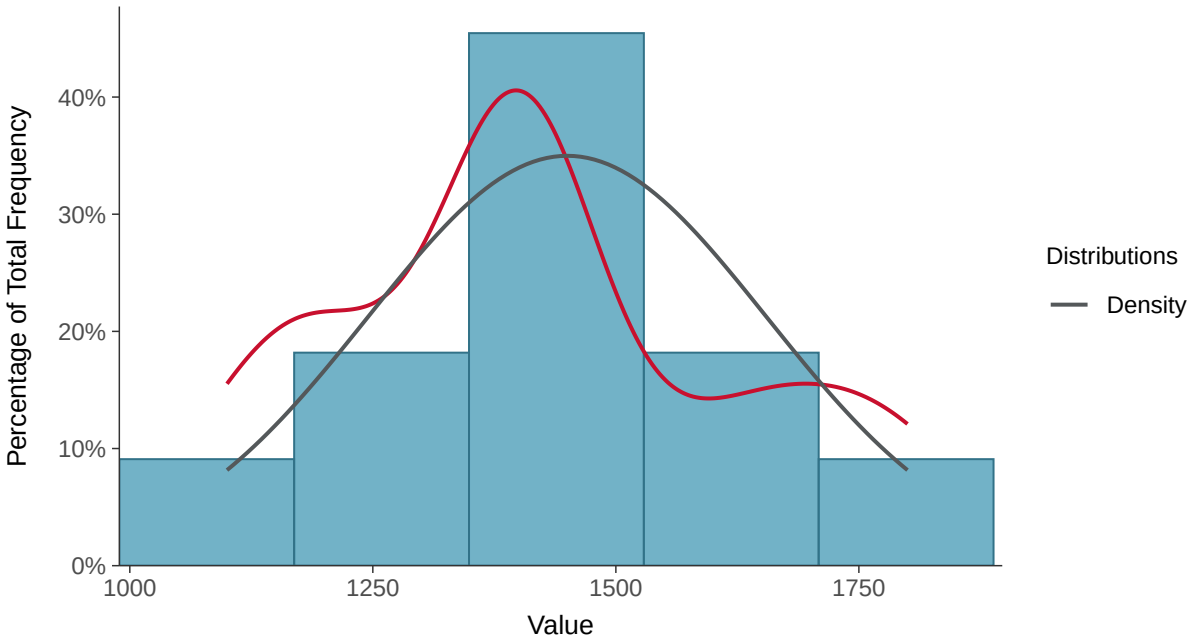
Scatter Plot

Total Dissolved Solids, MW-18 (mg/L)



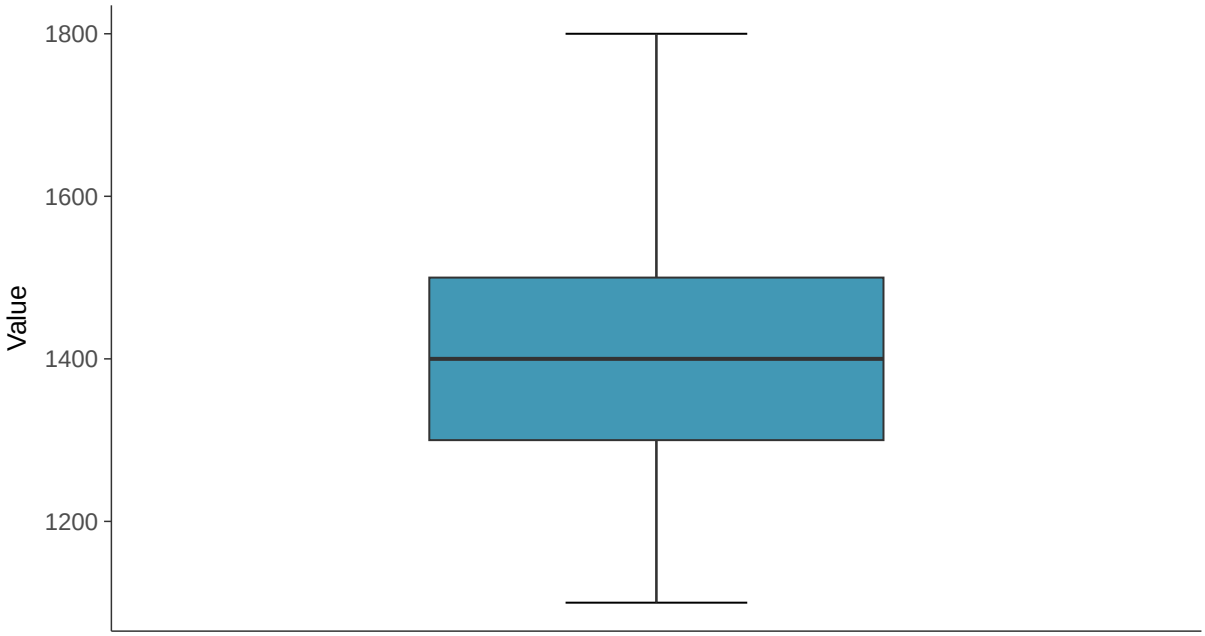
Histogram

Total Dissolved Solids, MW-18 (mg/L)



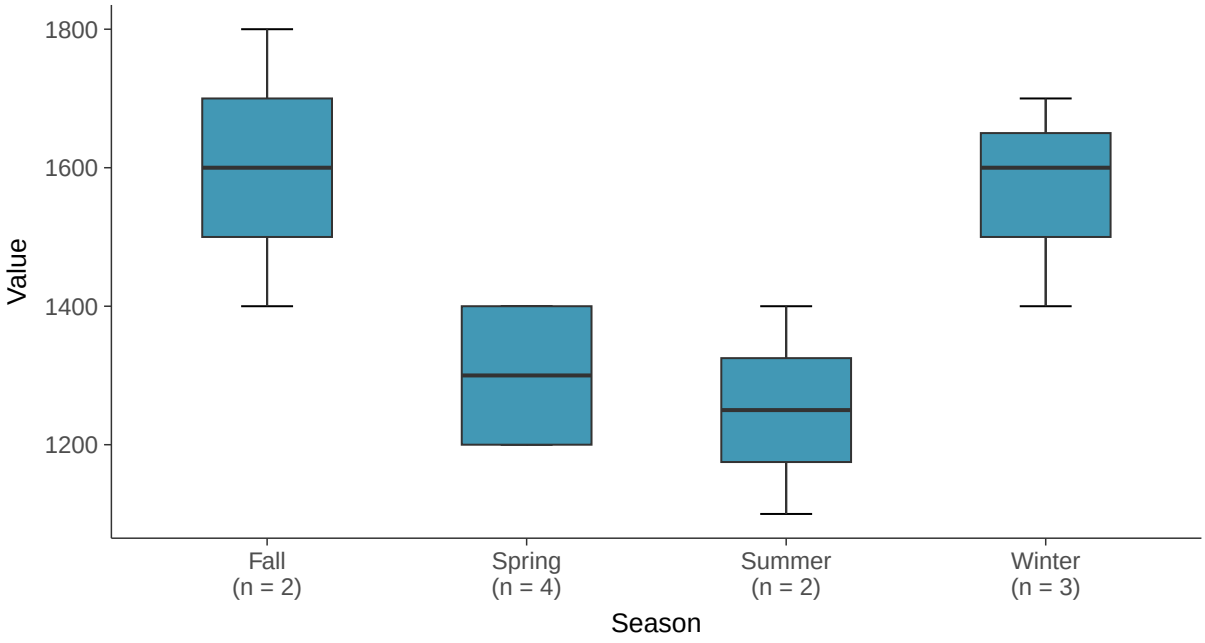
Boxplot

Total Dissolved Solids, MW-18 (mg/L)



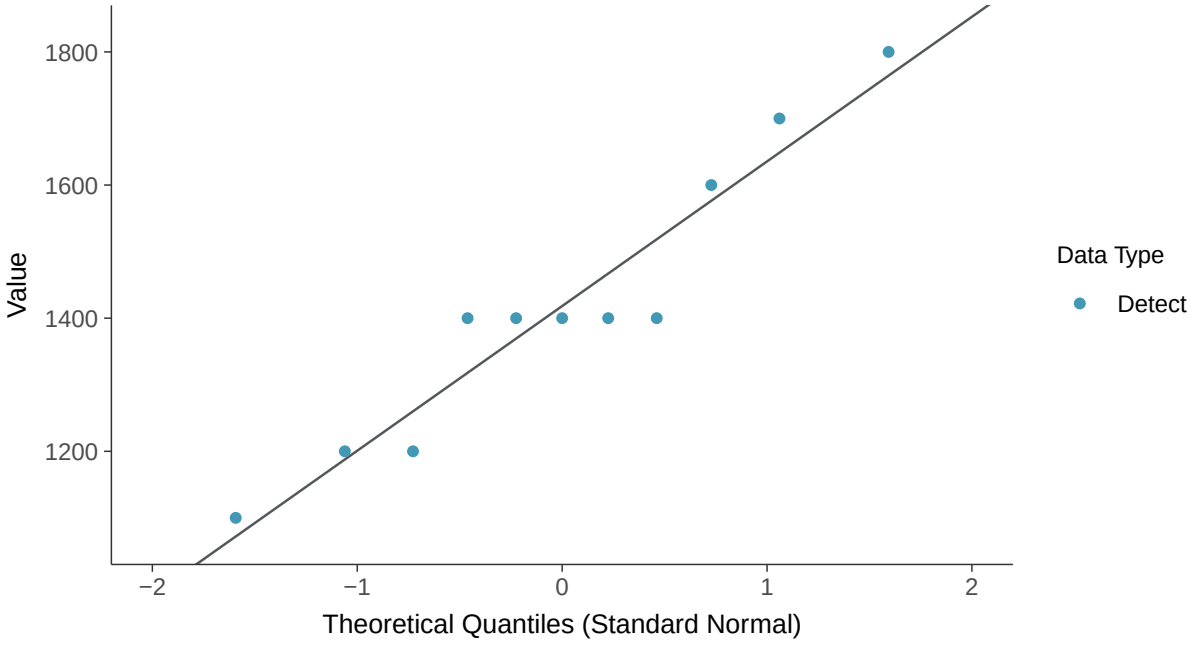
Boxplot by Season

Total Dissolved Solids, MW-18 (mg/L)



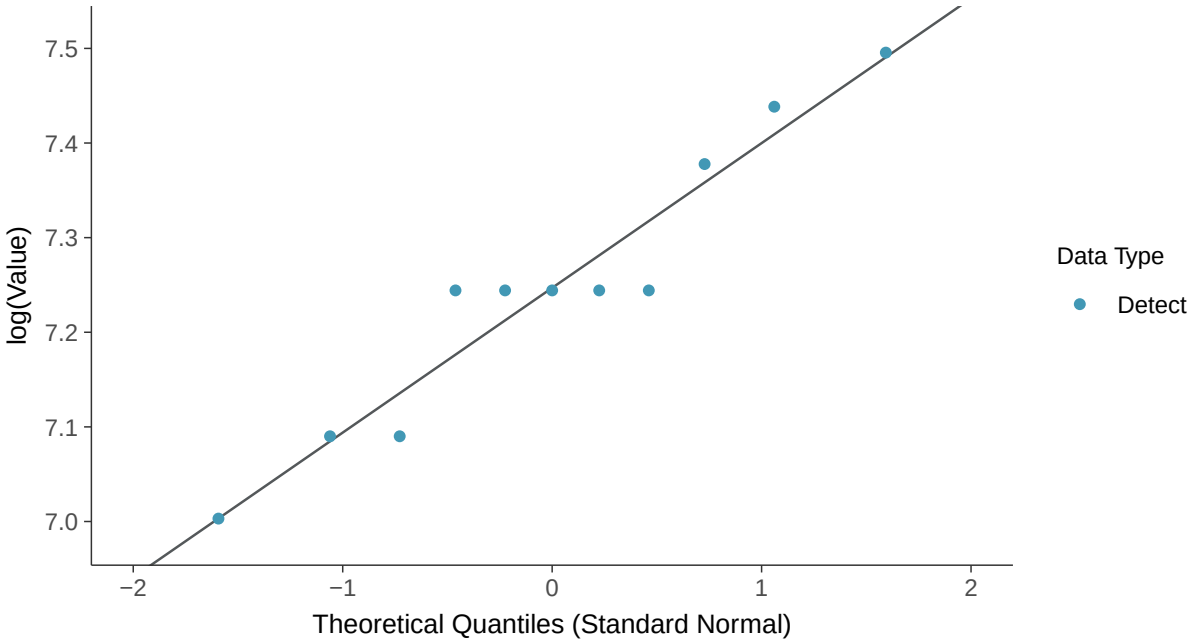
Normal Q-Q plot

Total Dissolved Solids, MW-18 (mg/L)



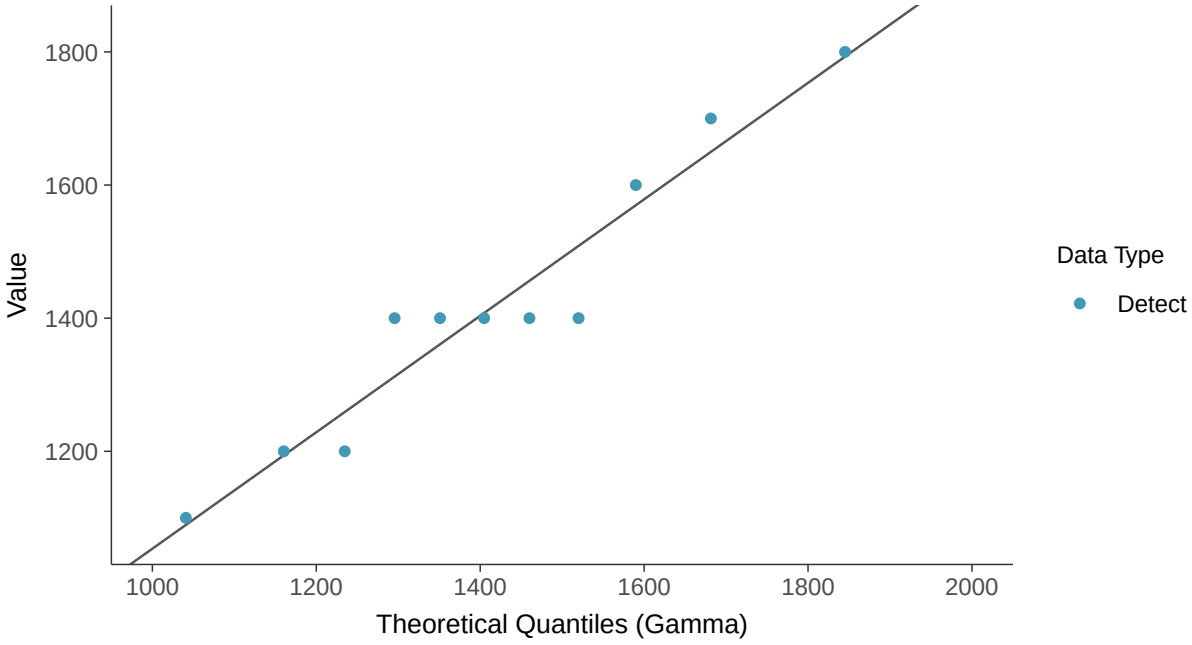
Lognormal Q-Q plot

Total Dissolved Solids, MW-18 (mg/L)



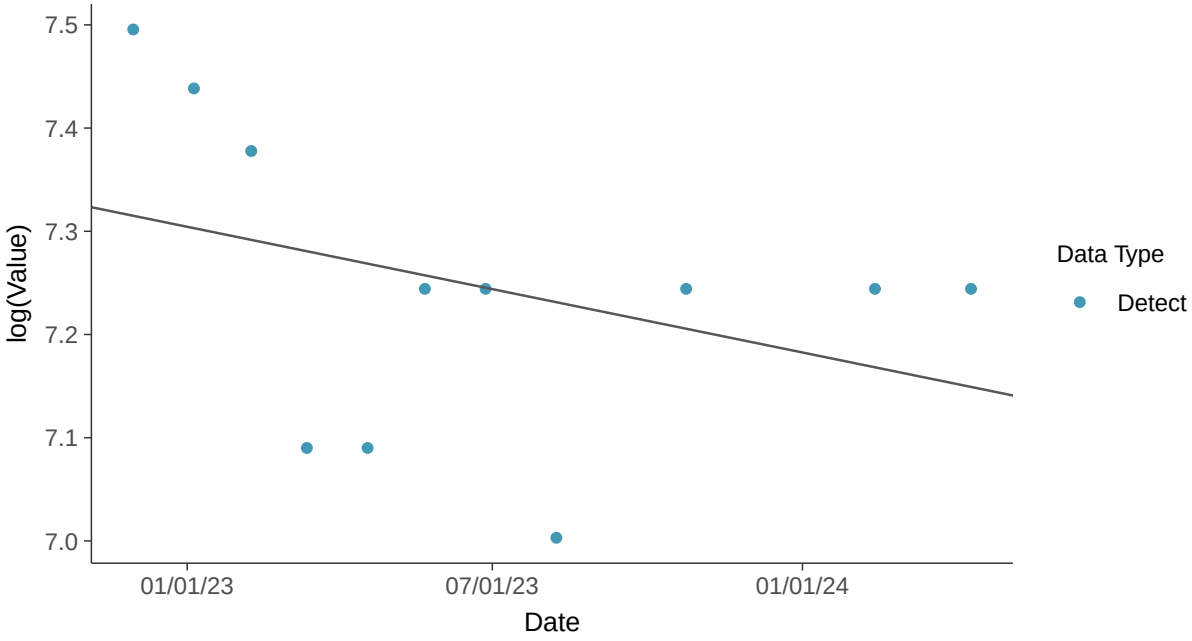
Gamma Q-Q plot

Total Dissolved Solids, MW-18 (mg/L)



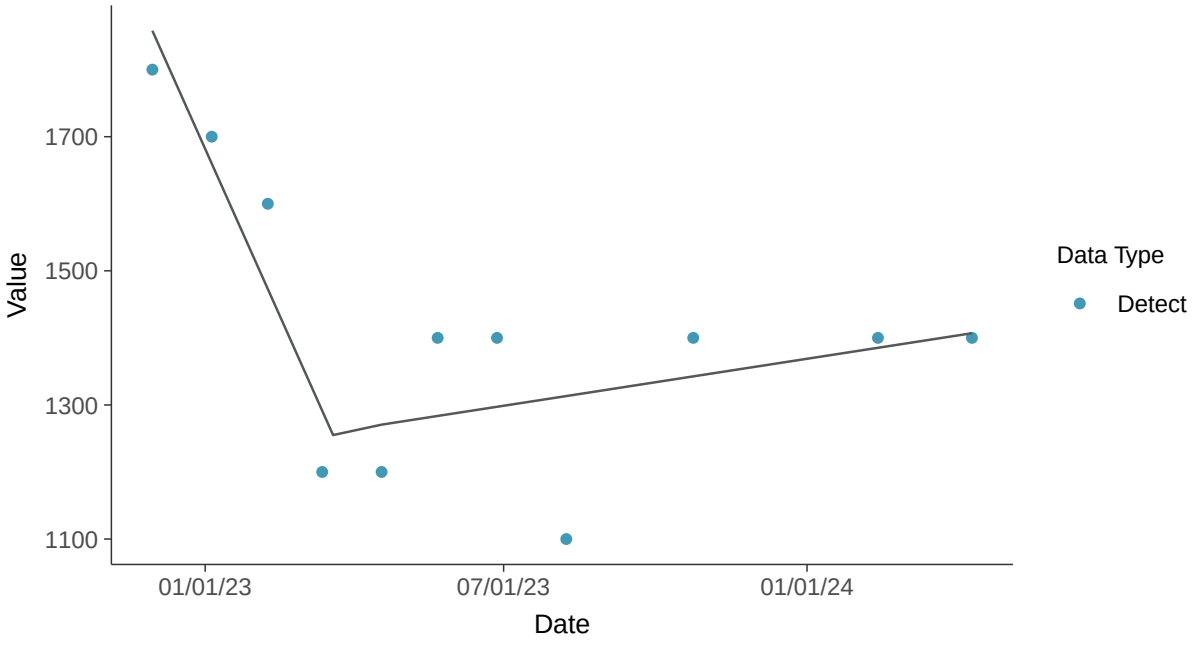
Trend Regression: Lognormal MLE

Total Dissolved Solids, MW-18 (mg/L)



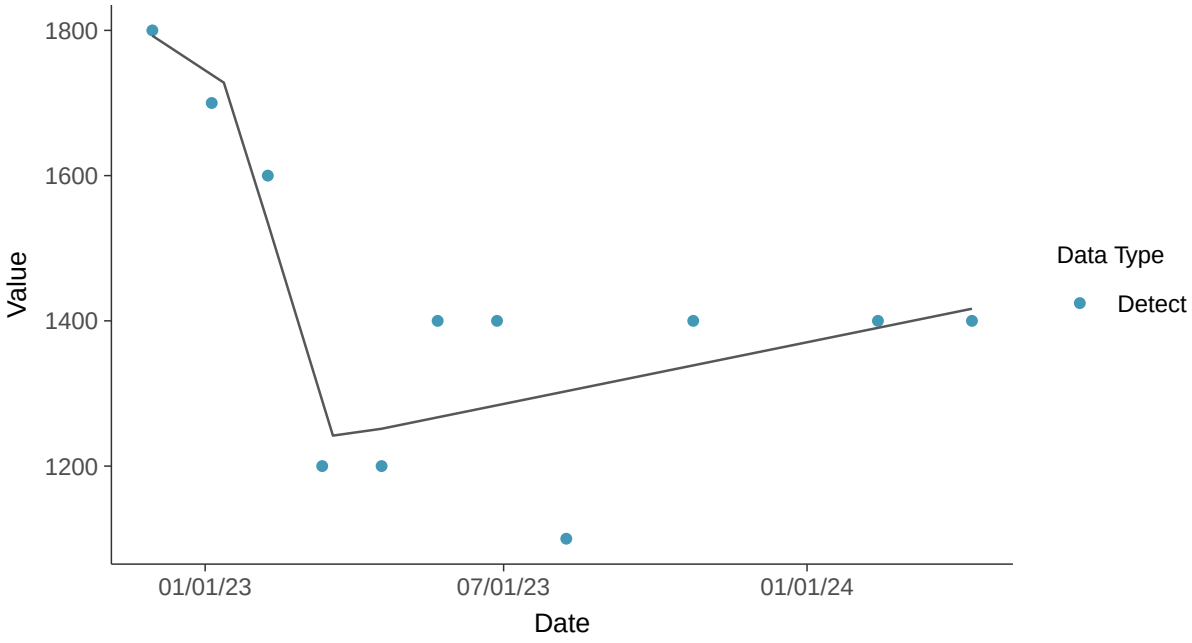
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-18 (mg/L)



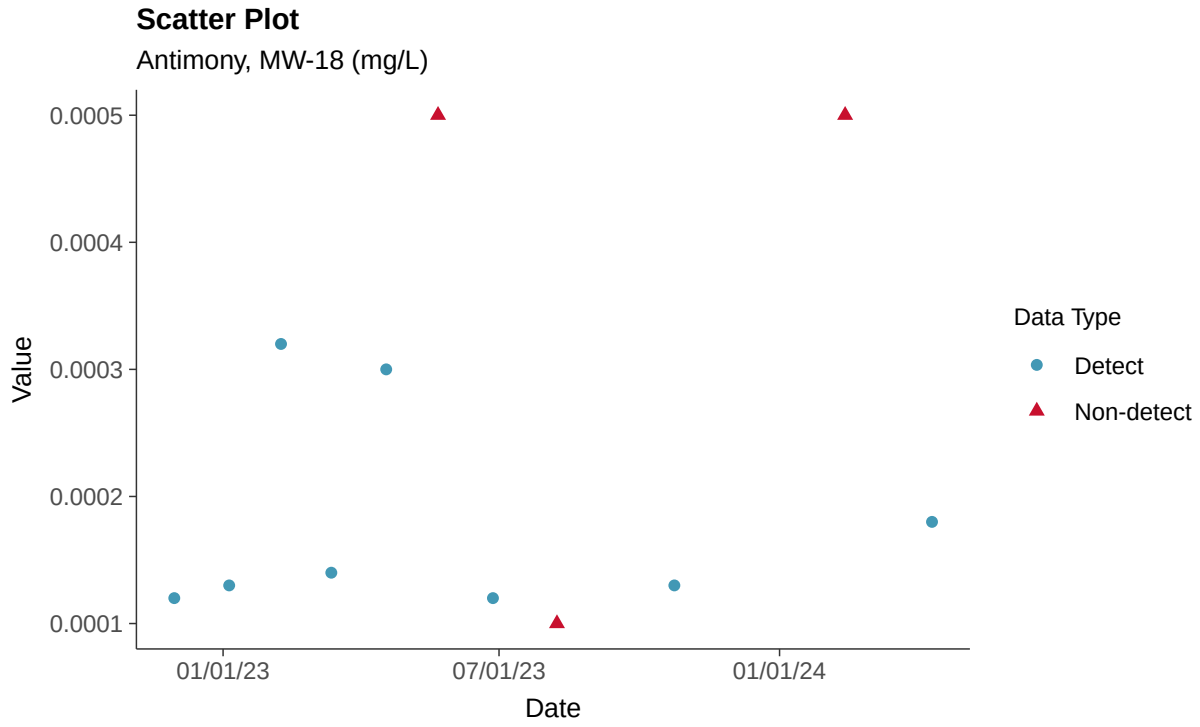
Trend Regression: Piecewise Linear-Linear-Linear

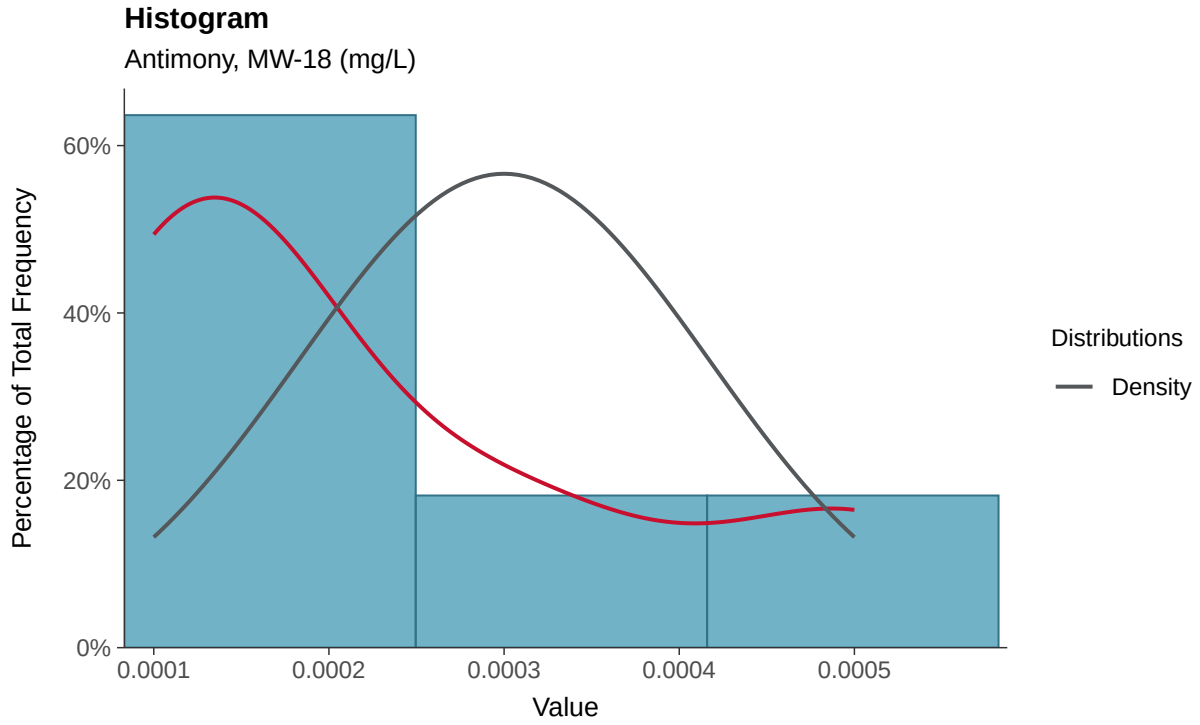
Total Dissolved Solids, MW-18 (mg/L)



Appendix IV: Antimony, MW-18

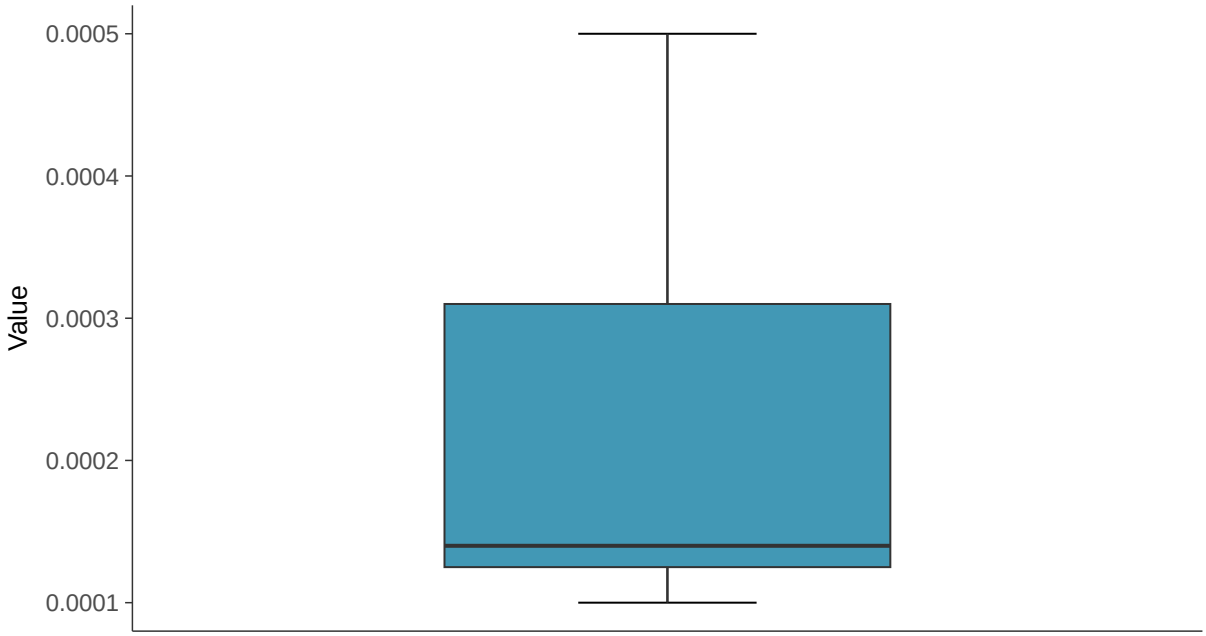
ID: 1_28_5_101





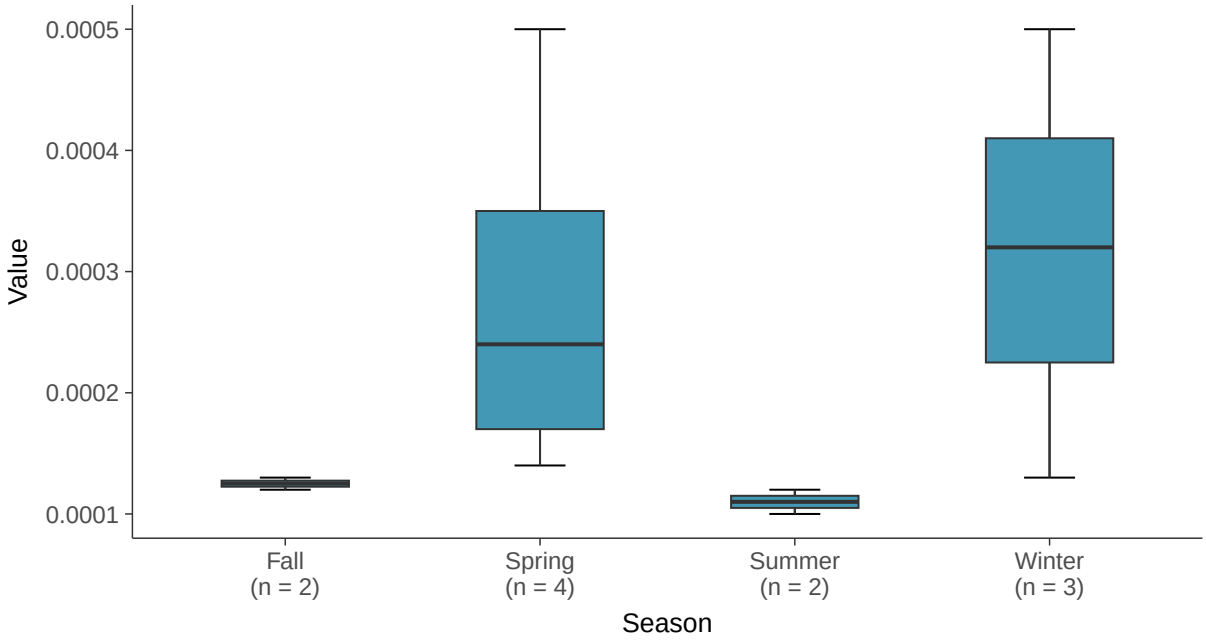
Boxplot

Antimony, MW-18 (mg/L)



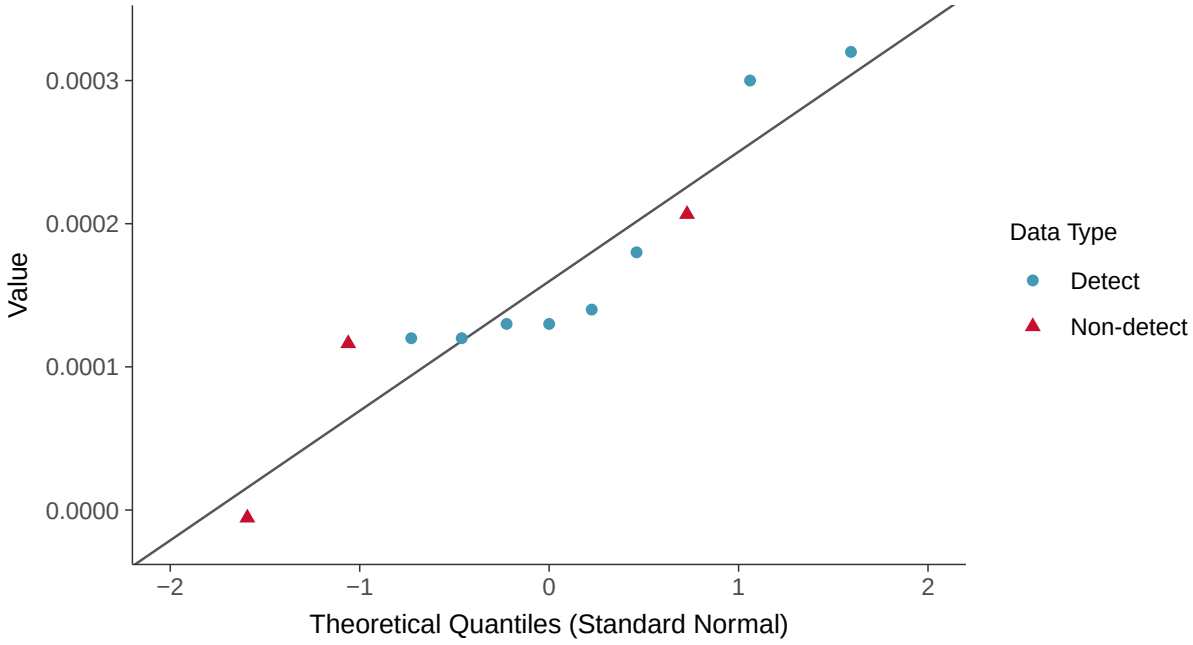
Boxplot by Season

Antimony, MW-18 (mg/L)



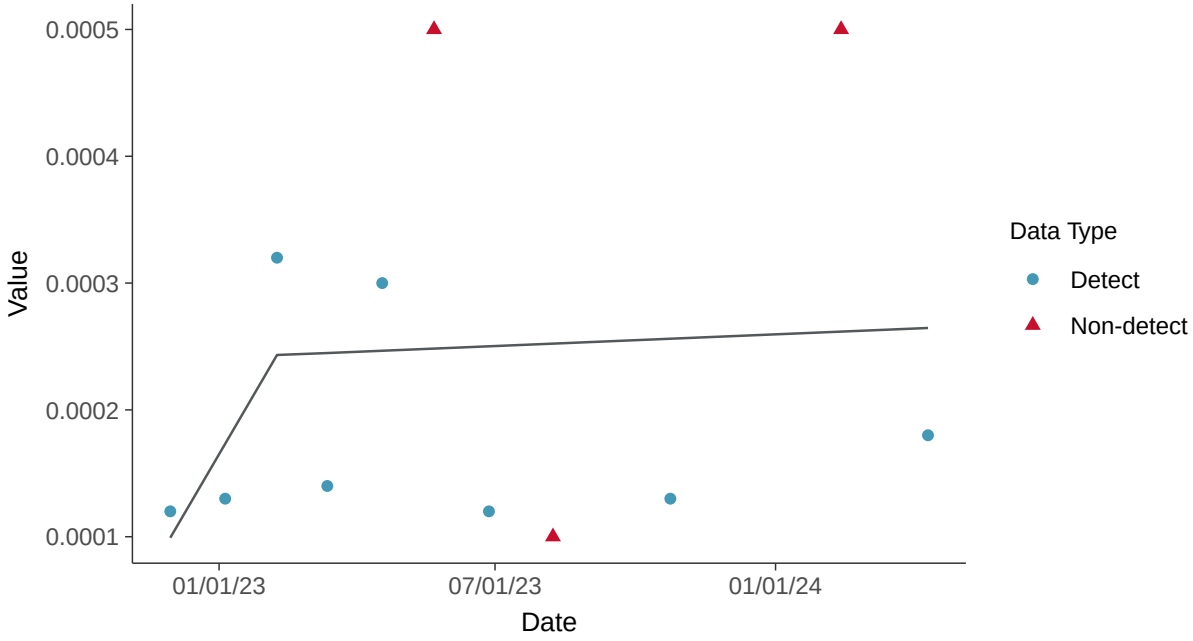
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-18 (mg/L)



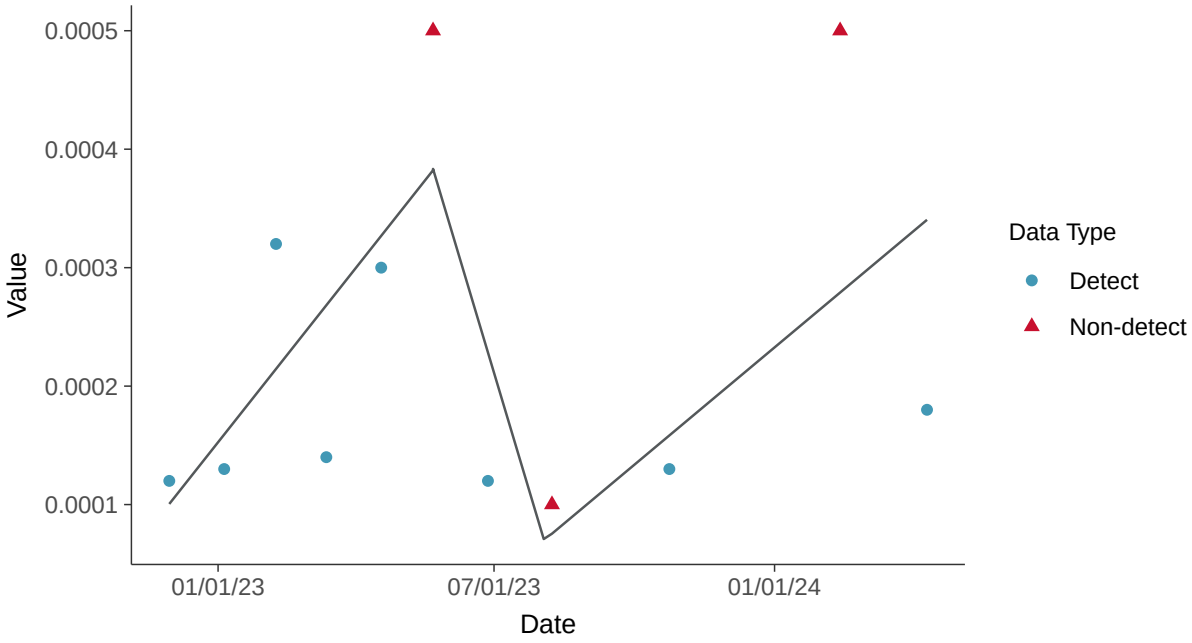
Trend Regression: Piecewise Linear-Linear

Antimony, MW-18 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Antimony, MW-18 (mg/L)

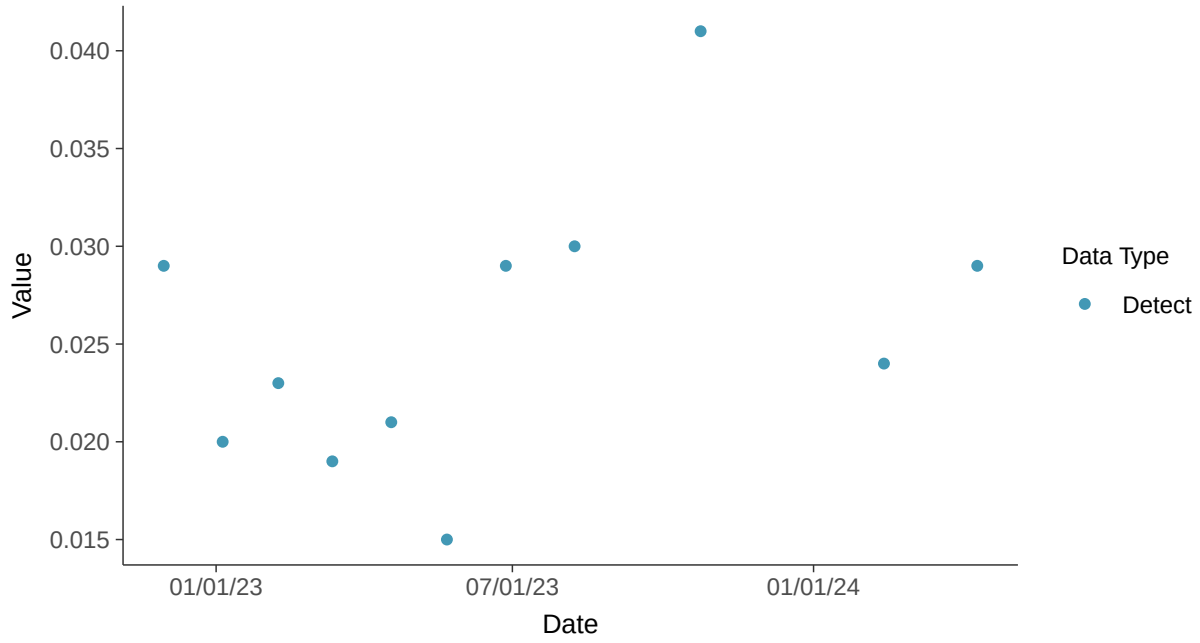


Appendix IV: Arsenic, MW-18

ID: 1_28_5_102

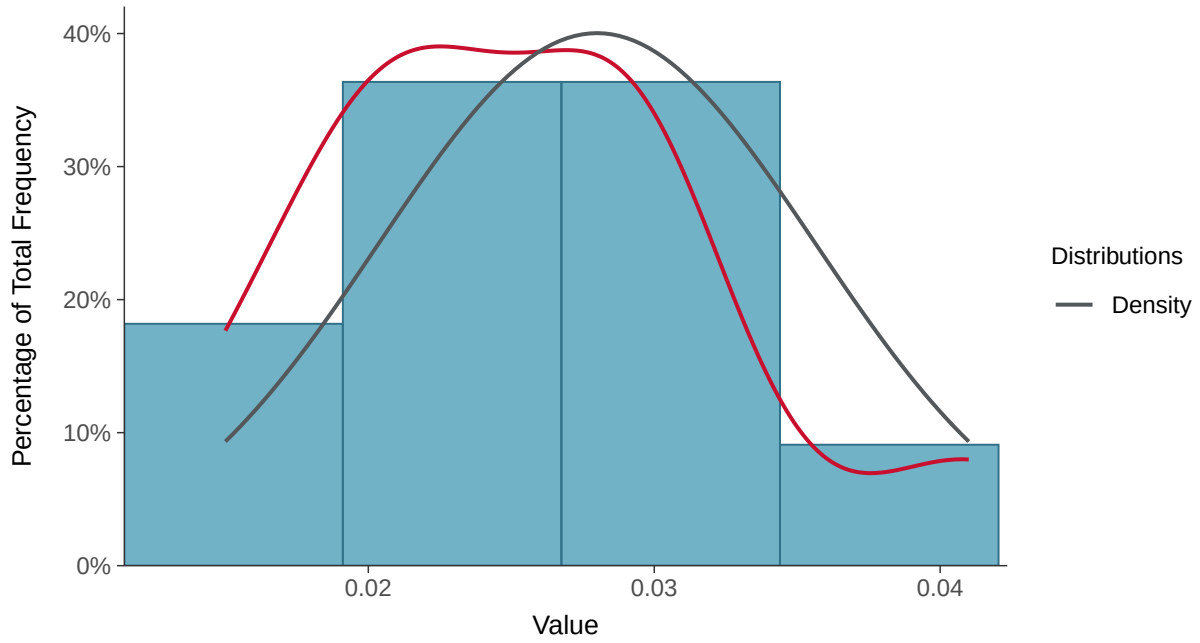
Scatter Plot

Arsenic, MW-18 (mg/L)



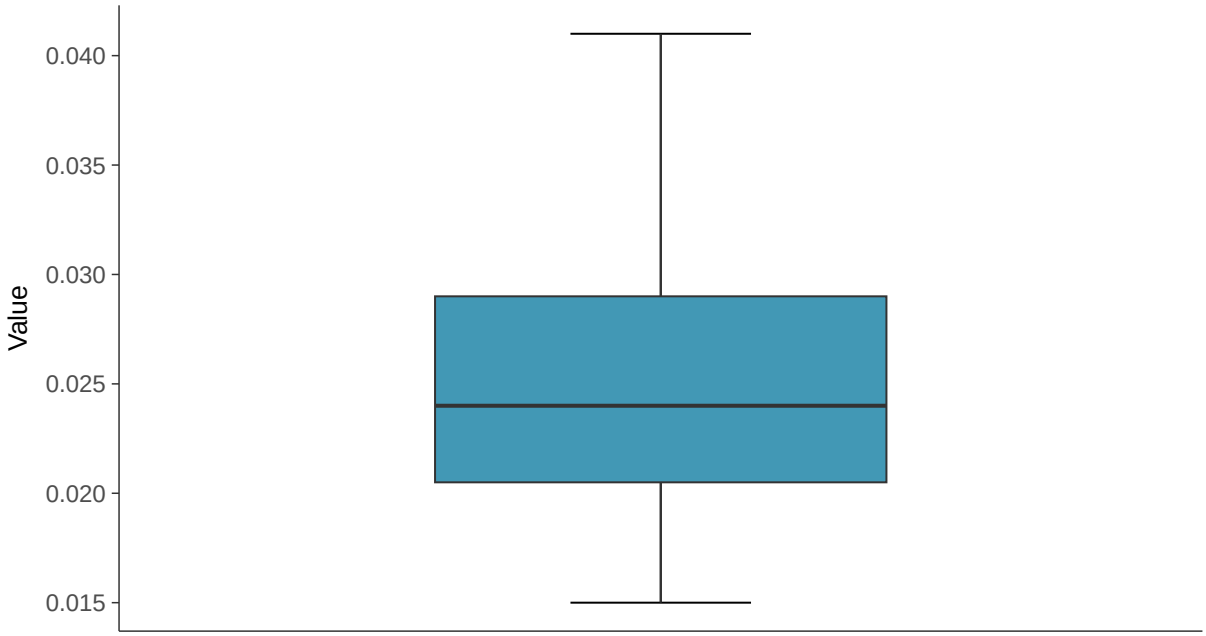
Histogram

Arsenic, MW-18 (mg/L)



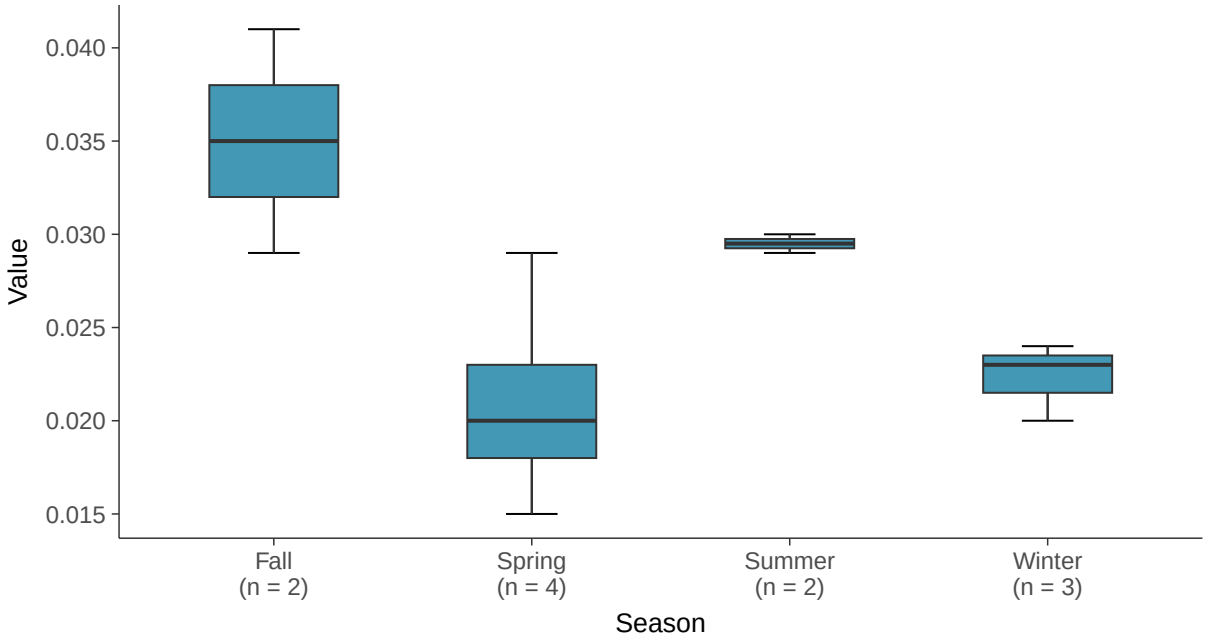
Boxplot

Arsenic, MW-18 (mg/L)



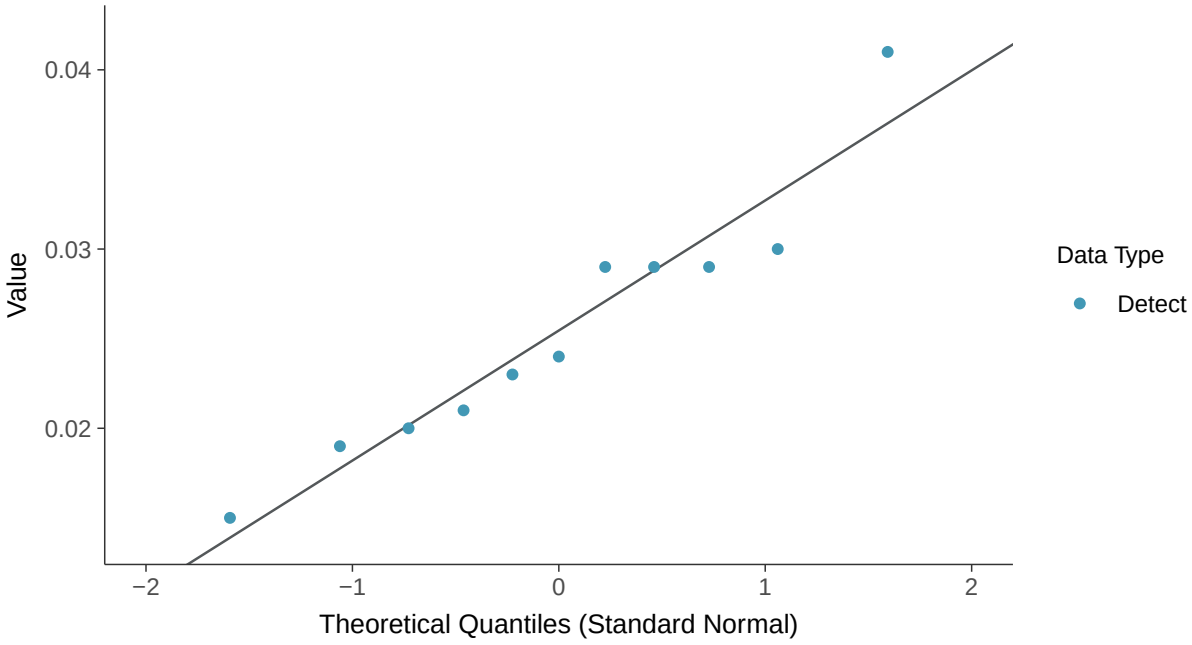
Boxplot by Season

Arsenic, MW-18 (mg/L)



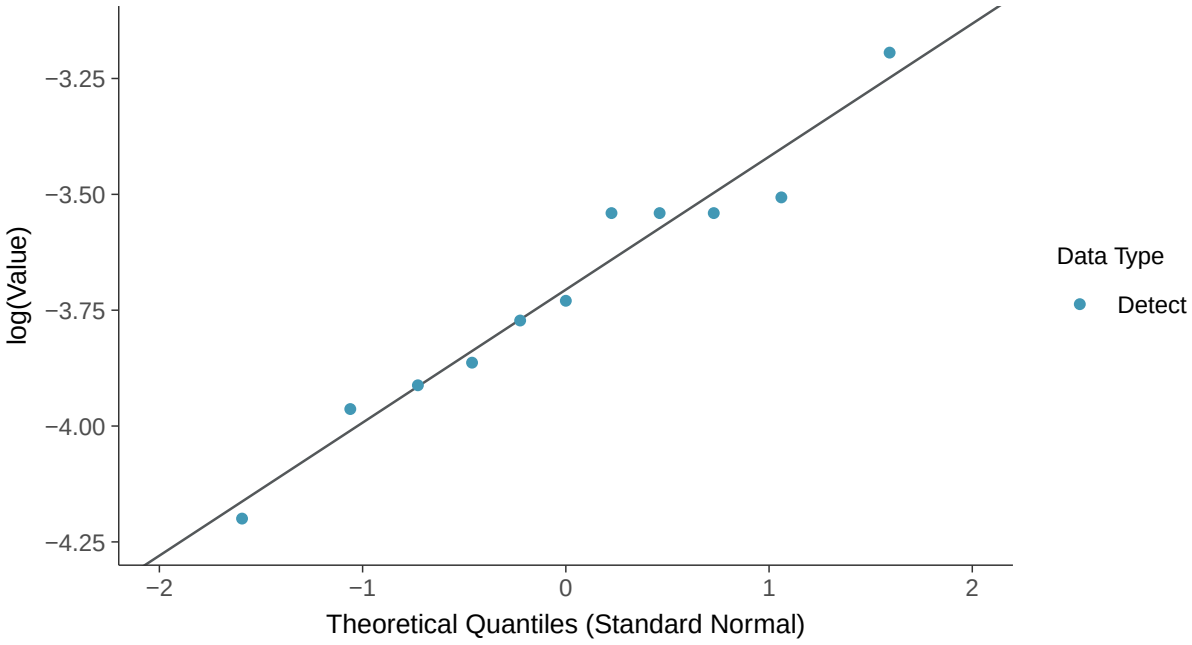
Normal Q-Q plot

Arsenic, MW-18 (mg/L)



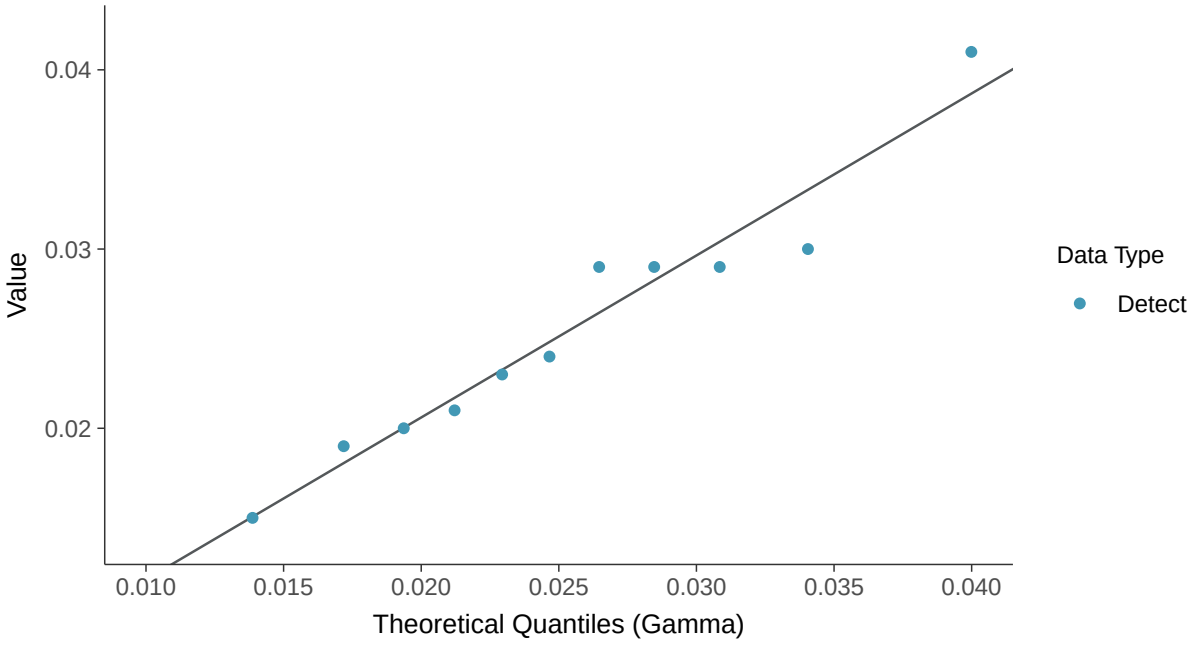
Lognormal Q-Q plot

Arsenic, MW-18 (mg/L)



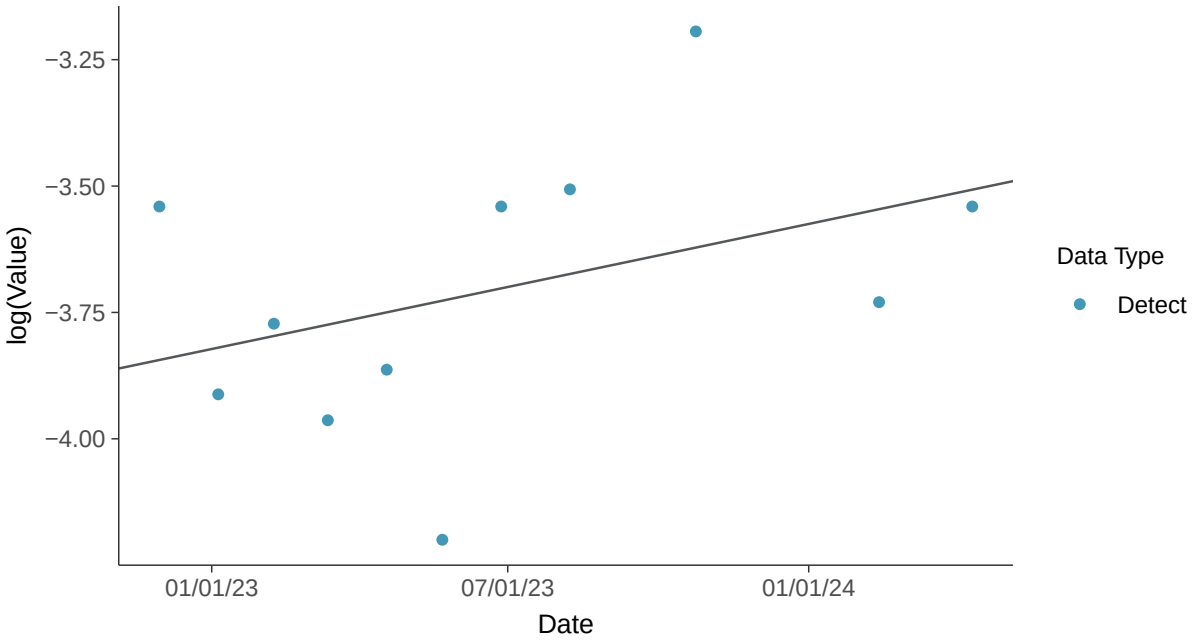
Gamma Q-Q plot

Arsenic, MW-18 (mg/L)



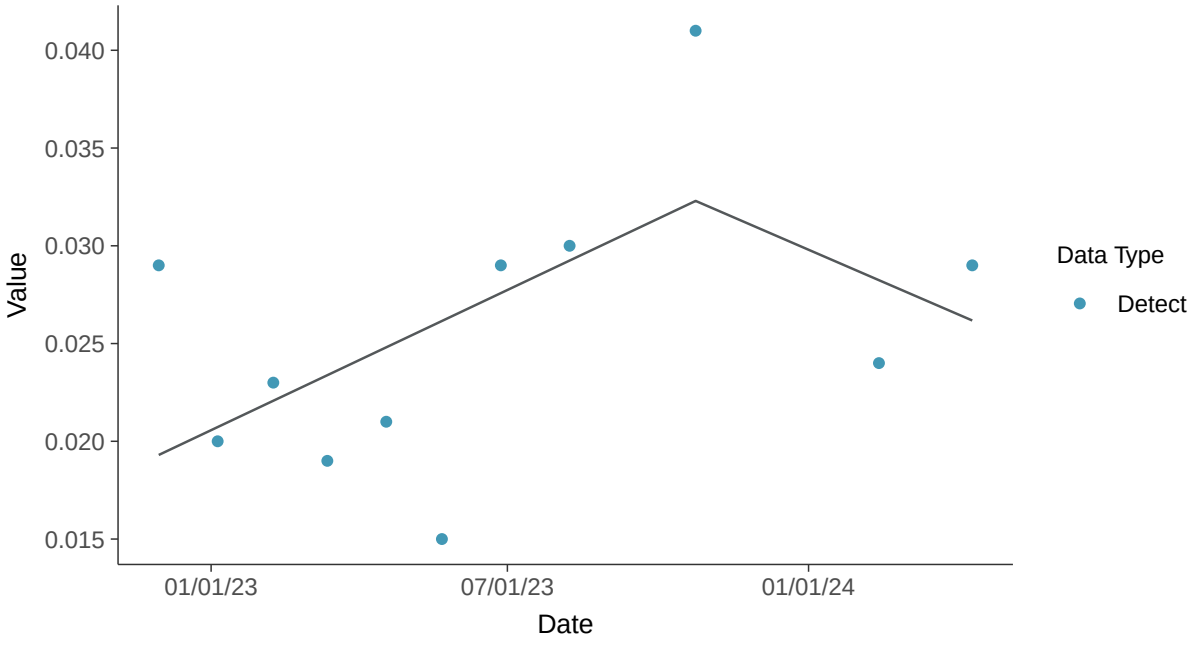
Trend Regression: Lognormal MLE

Arsenic, MW-18 (mg/L)



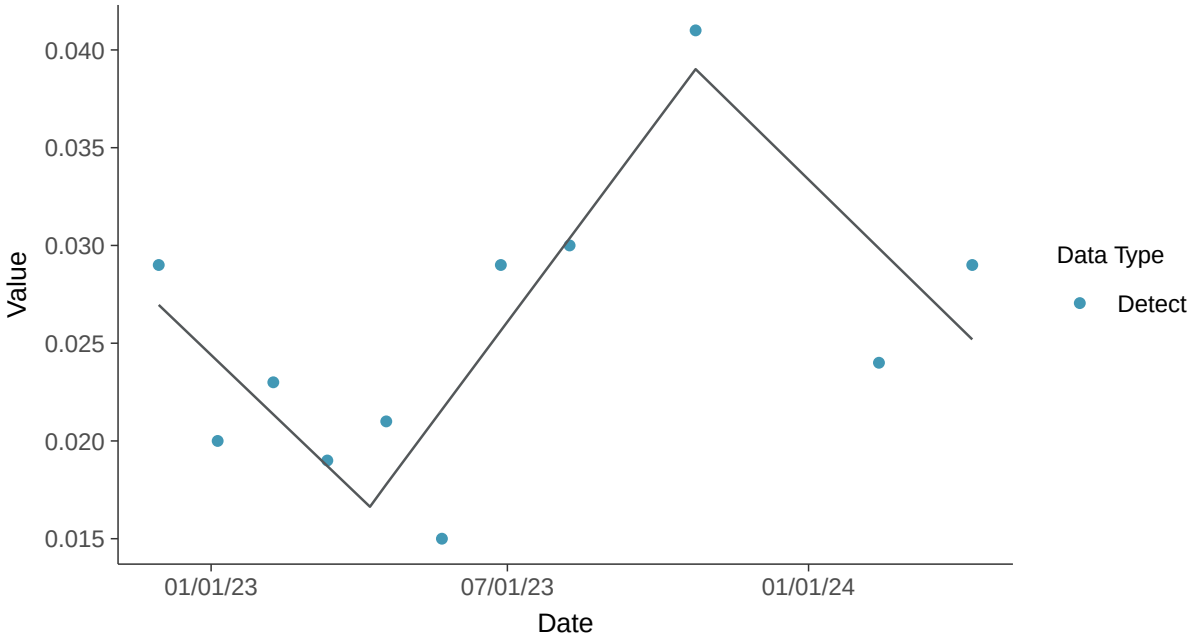
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-18 (mg/L)



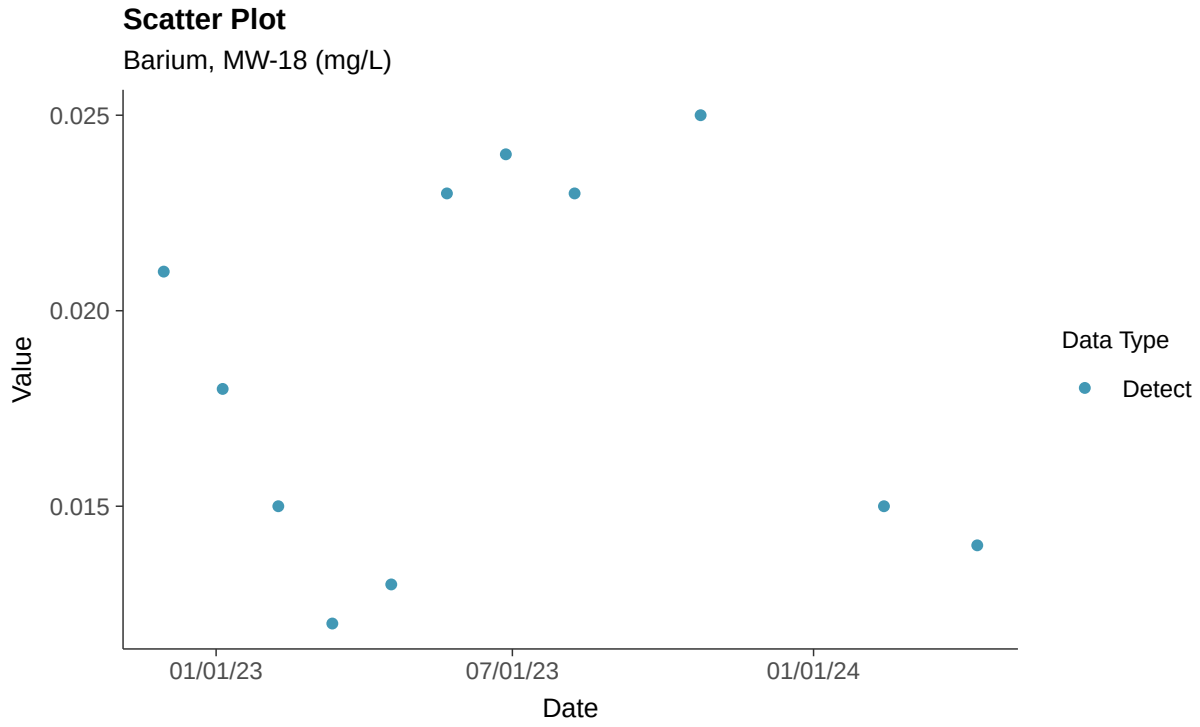
Trend Regression: Piecewise Linear-Linear-Linear

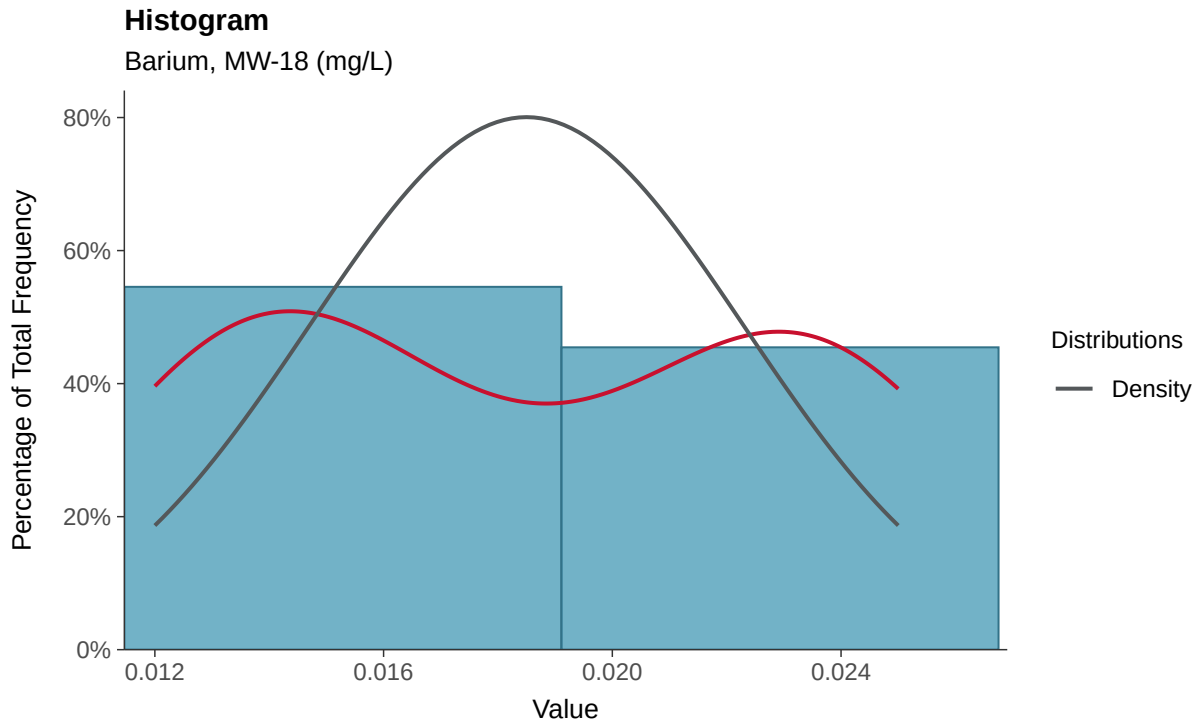
Arsenic, MW-18 (mg/L)



Appendix IV: Barium, MW-18

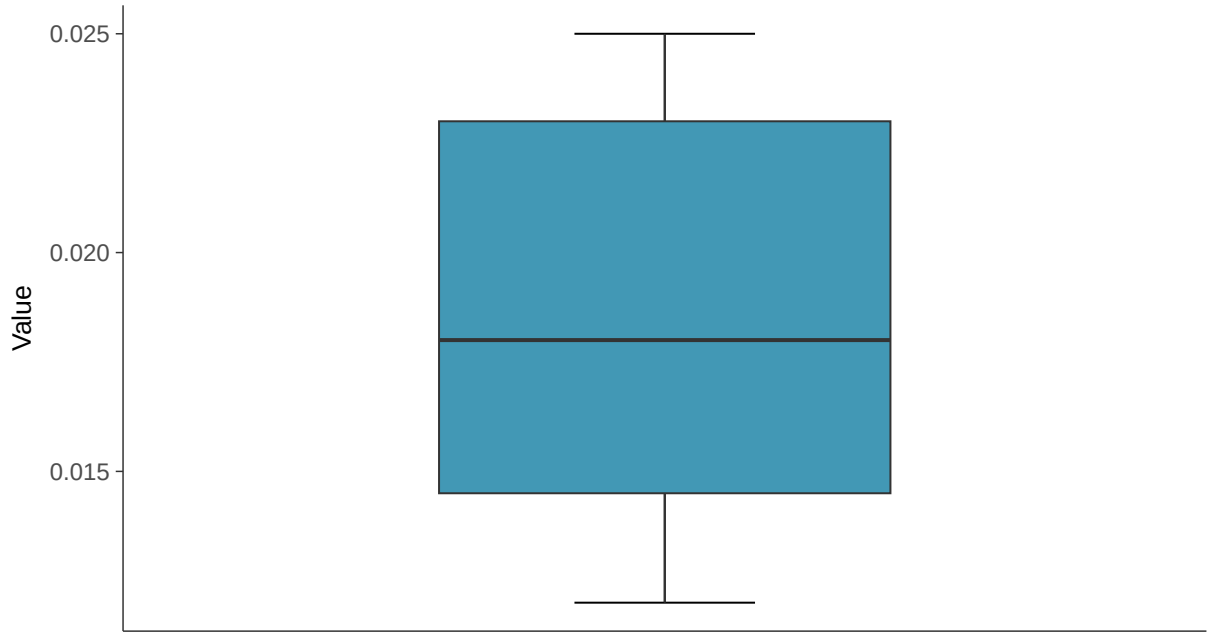
ID: 1_28_5_103





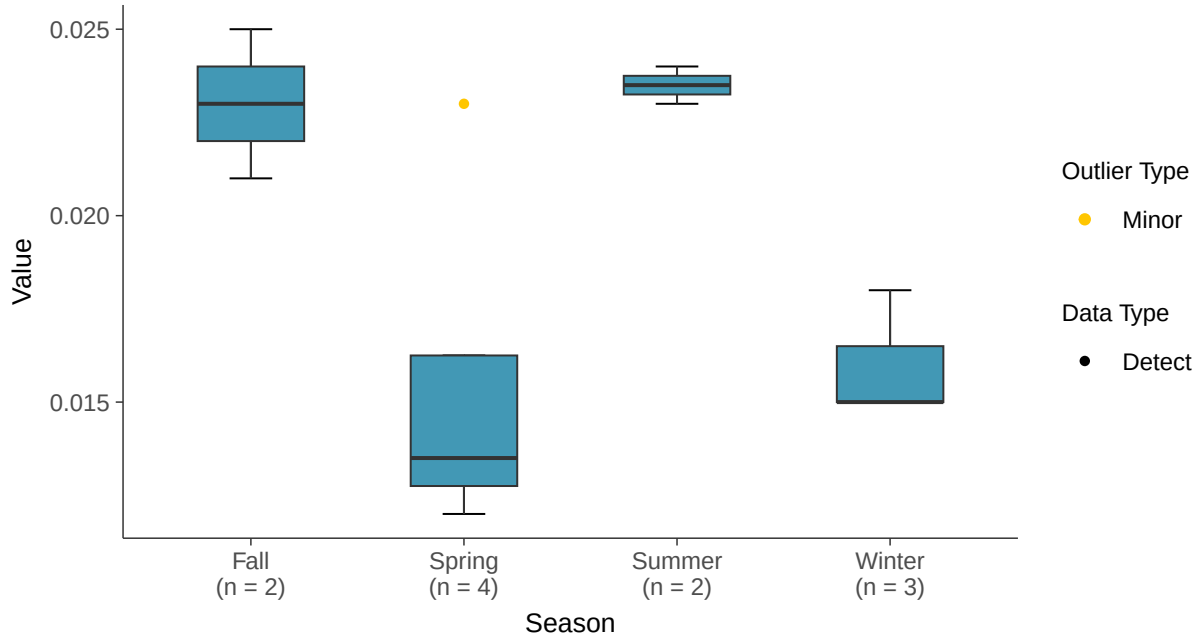
Boxplot

Barium, MW-18 (mg/L)



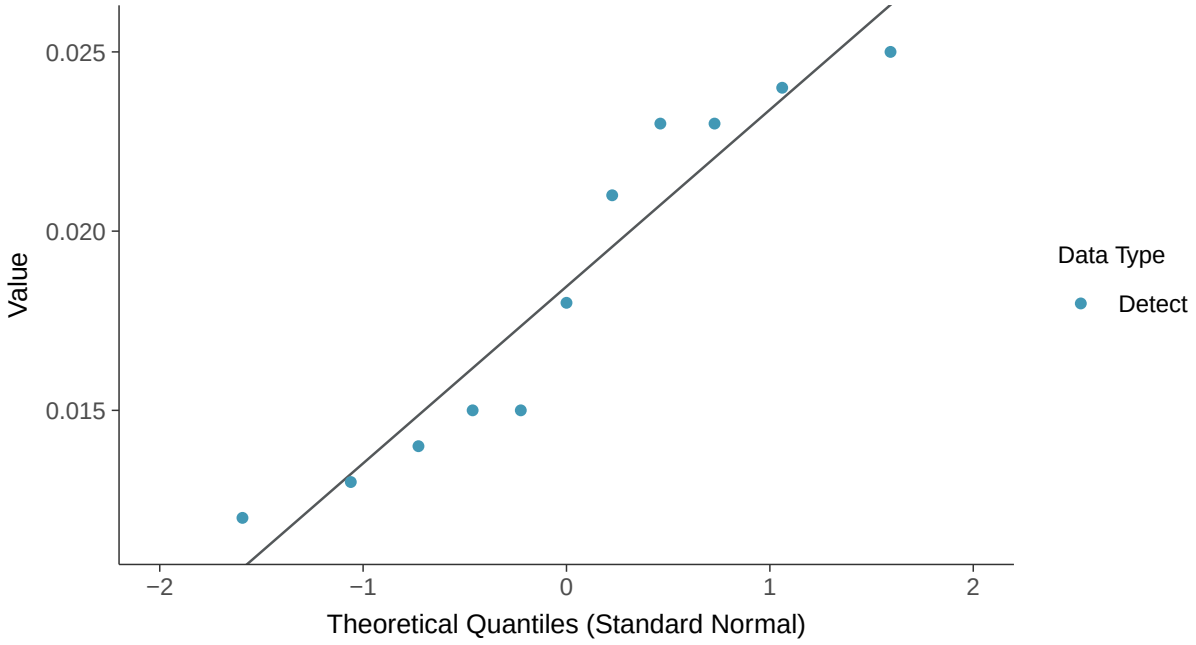
Boxplot by Season

Barium, MW-18 (mg/L)



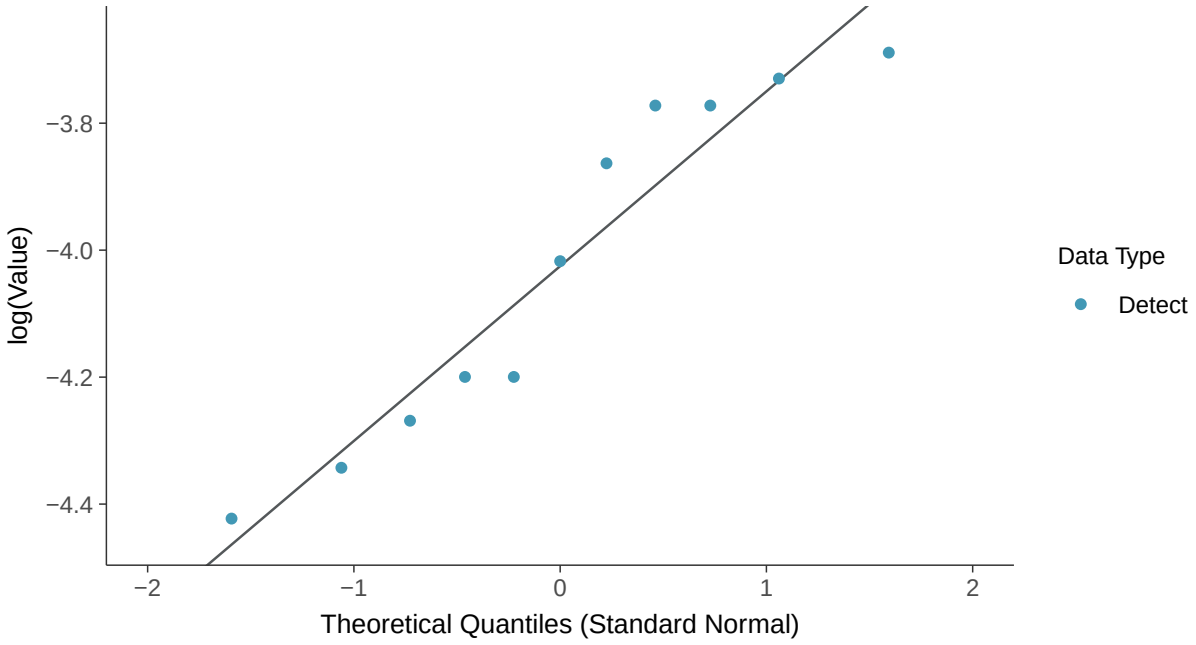
Normal Q-Q plot

Barium, MW-18 (mg/L)



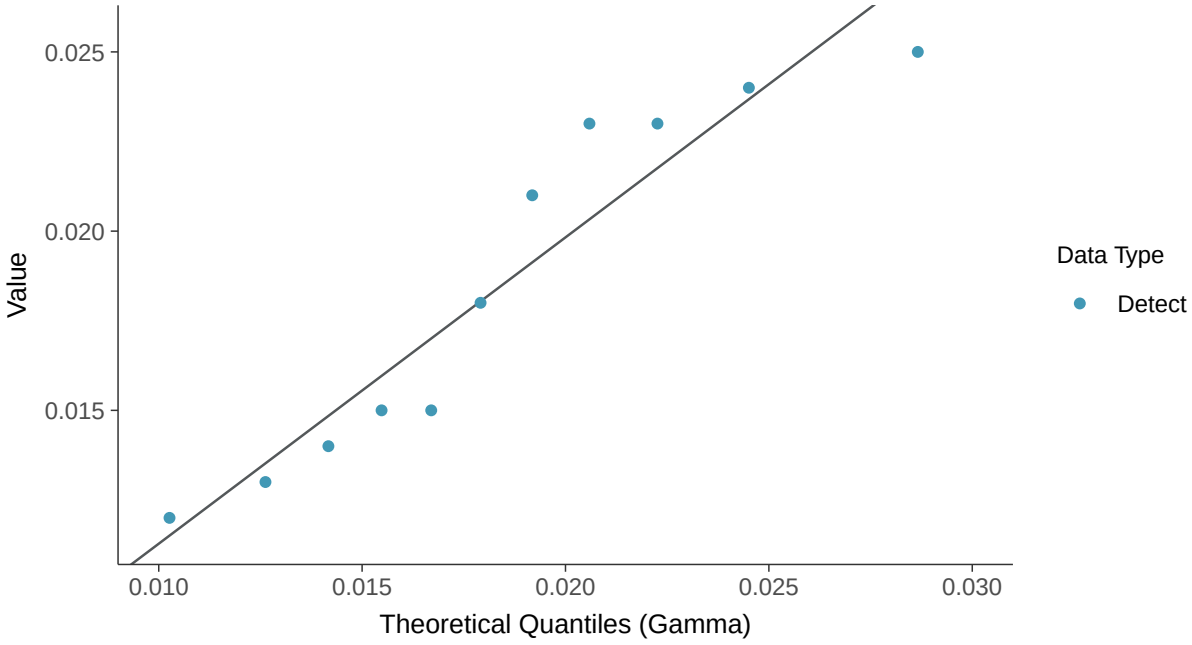
Lognormal Q-Q plot

Barium, MW-18 (mg/L)



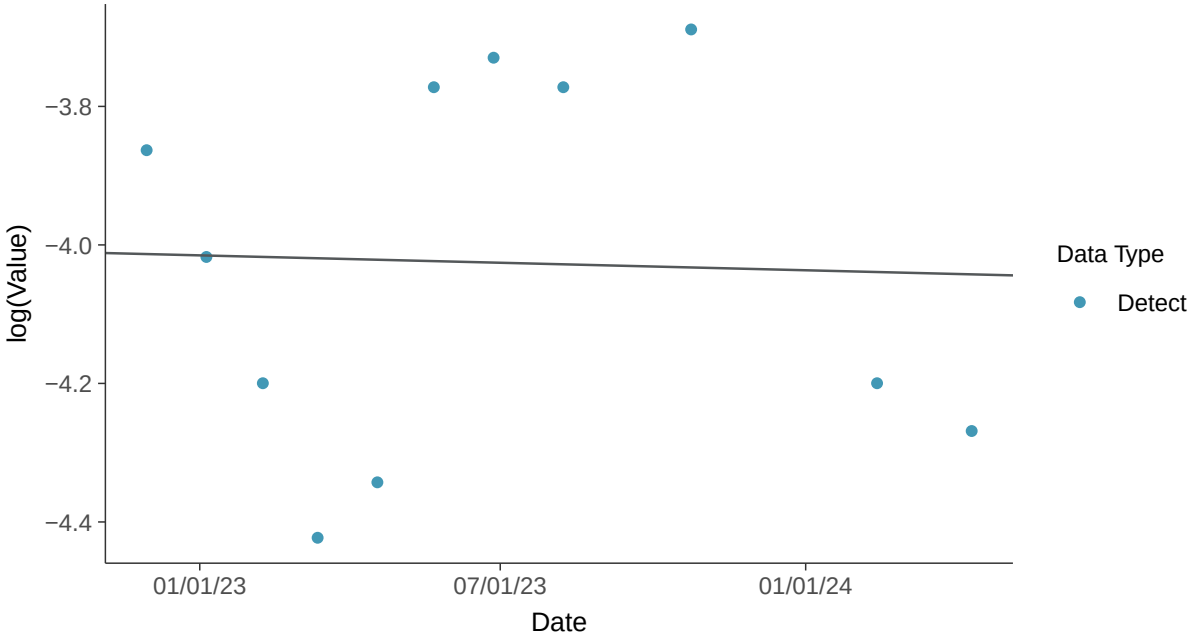
Gamma Q-Q plot

Barium, MW-18 (mg/L)



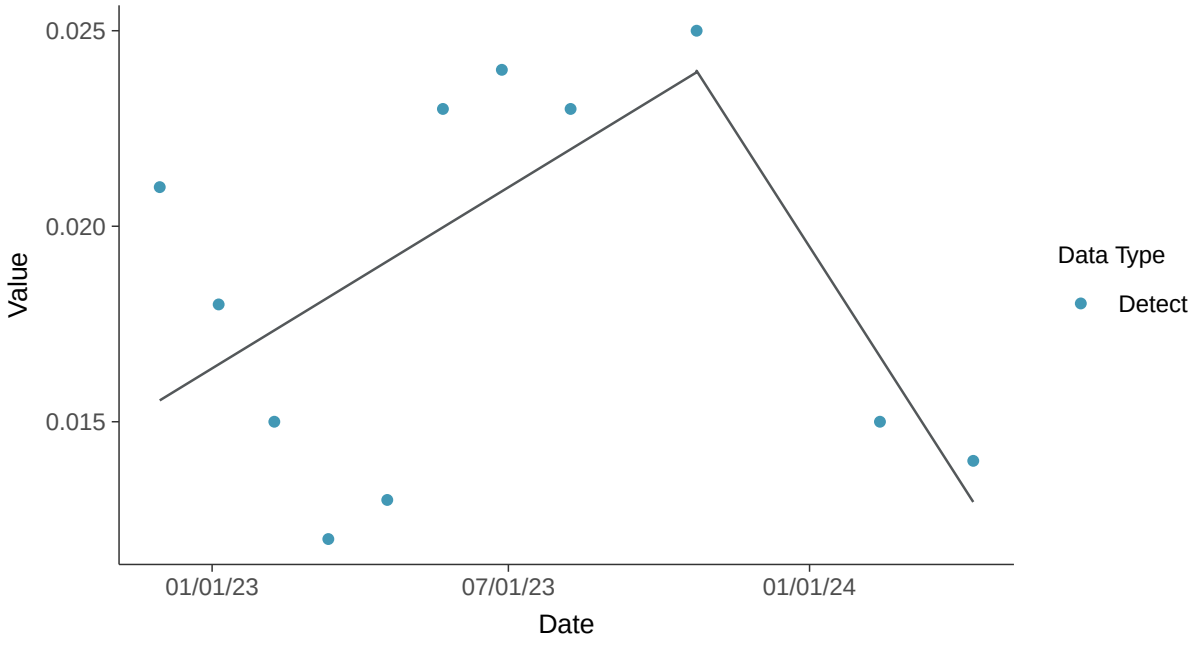
Trend Regression: Lognormal MLE

Barium, MW-18 (mg/L)



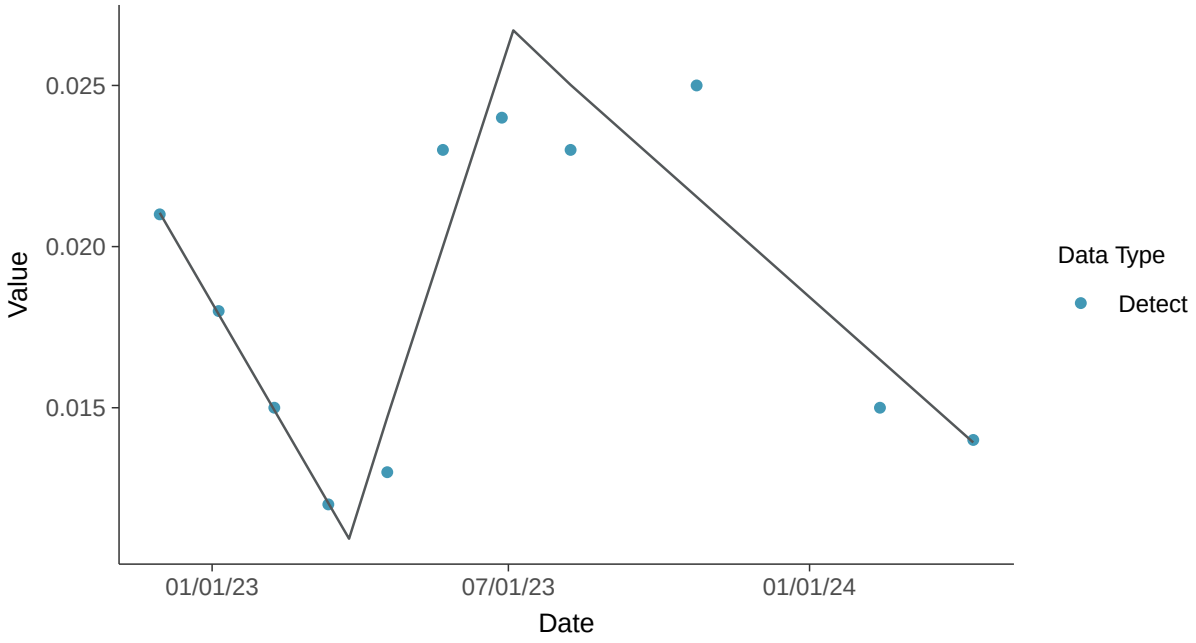
Trend Regression: Piecewise Linear-Linear

Barium, MW-18 (mg/L)



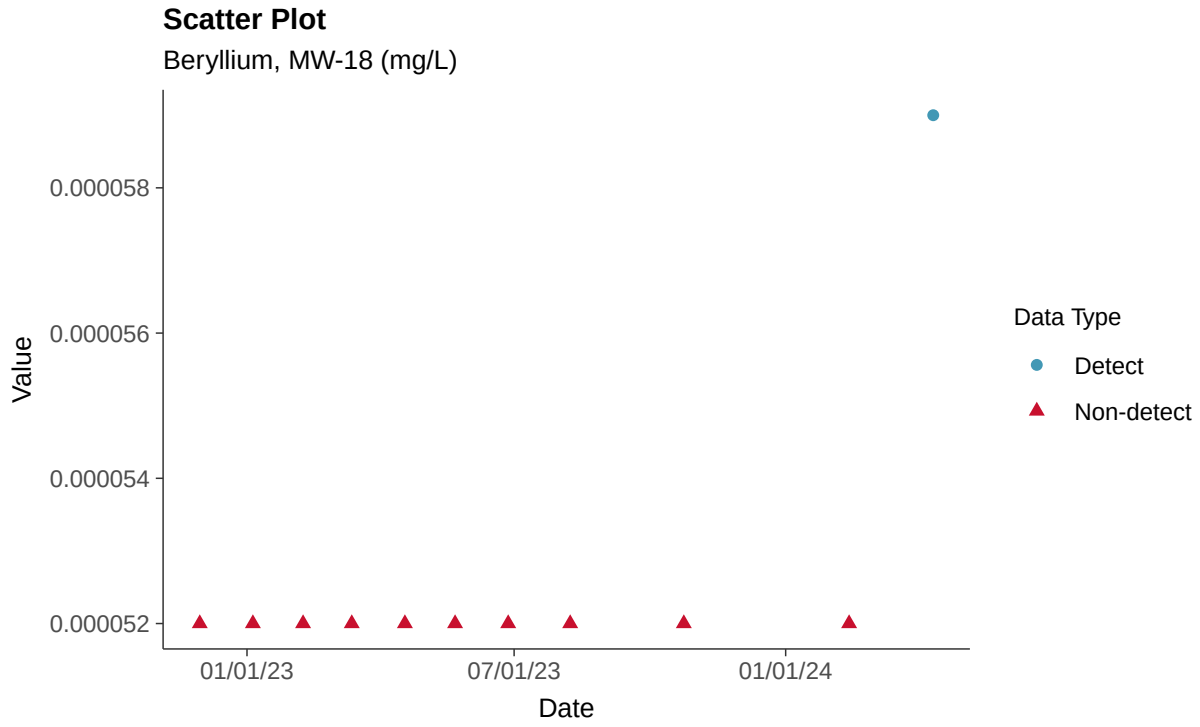
Trend Regression: Piecewise Linear-Linear-Linear

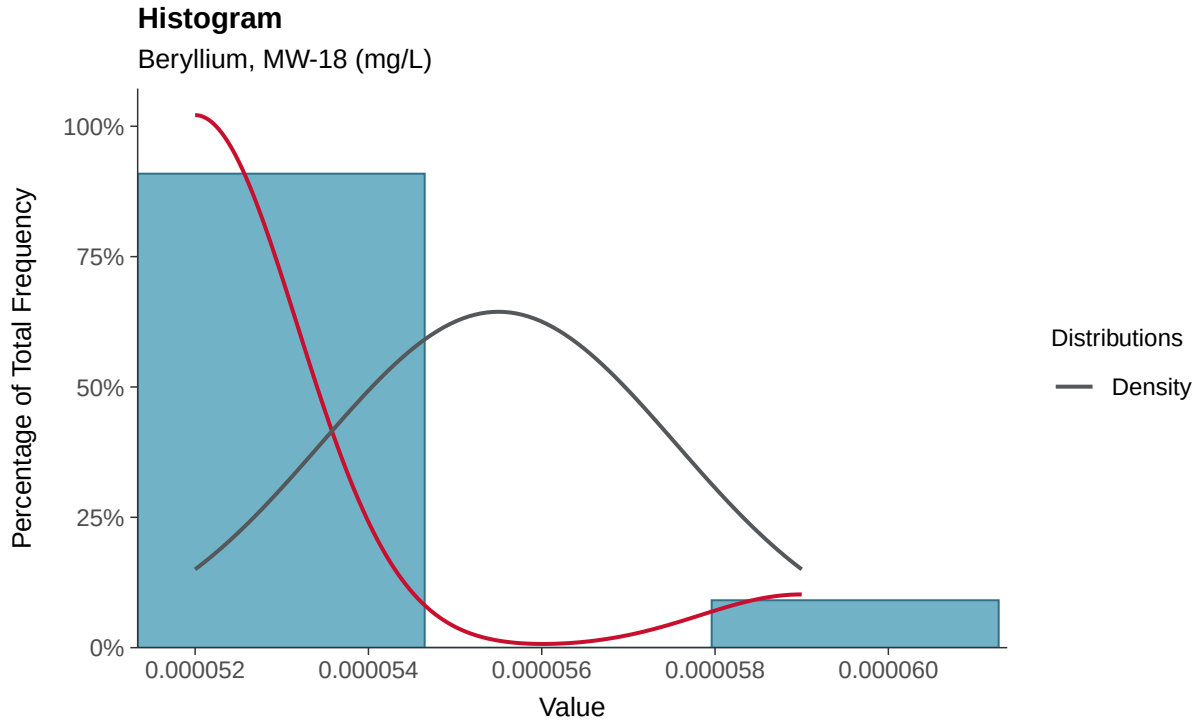
Barium, MW-18 (mg/L)



Appendix IV: Beryllium, MW-18

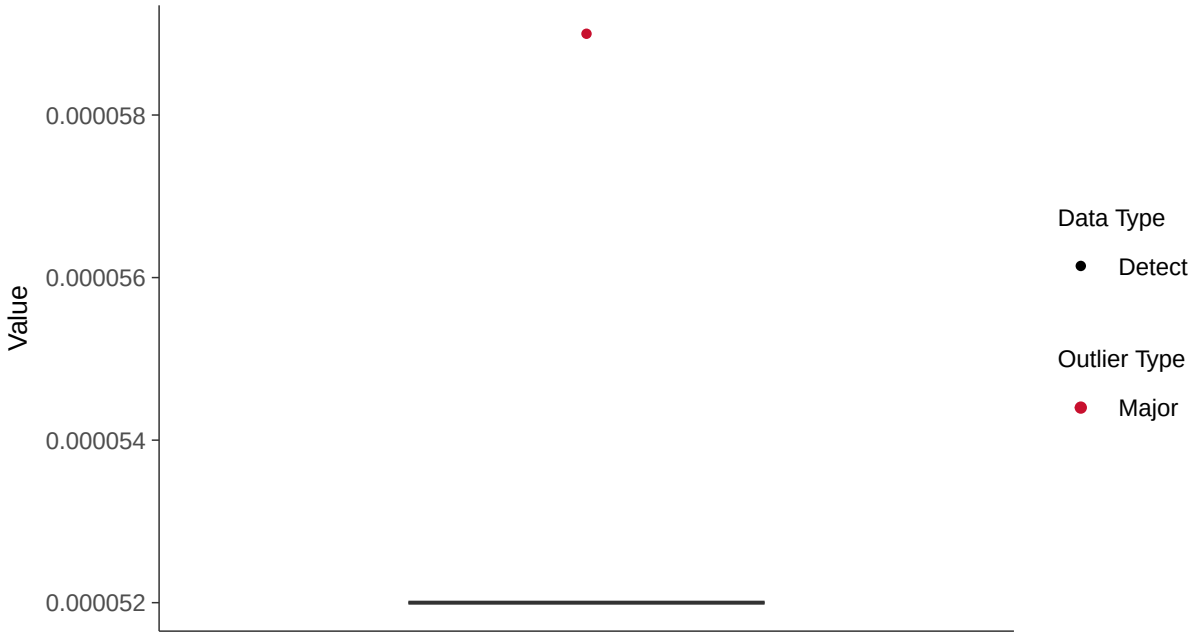
ID: 1_28_5_104





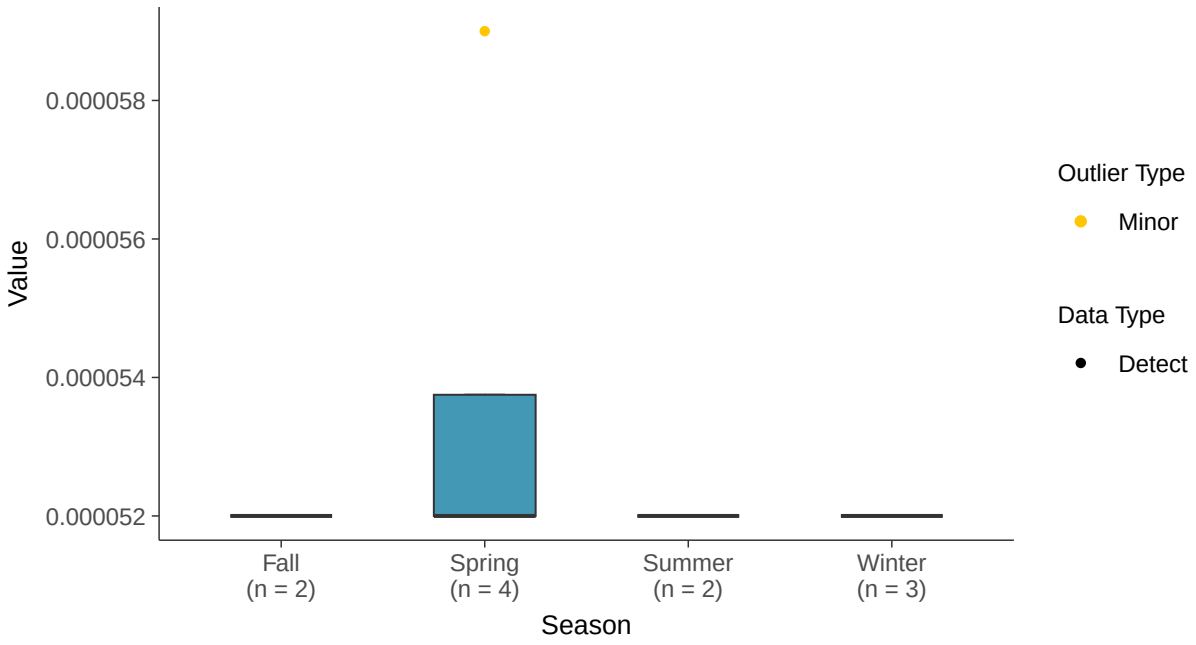
Boxplot

Beryllium, MW-18 (mg/L)



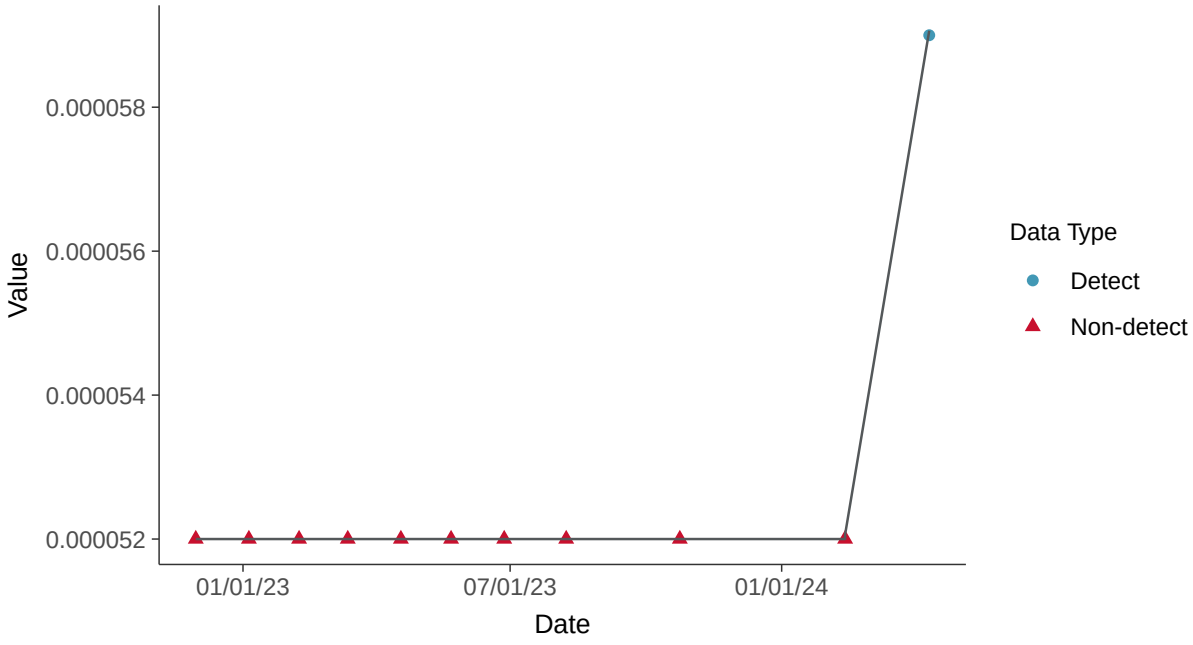
Boxplot by Season

Beryllium, MW-18 (mg/L)



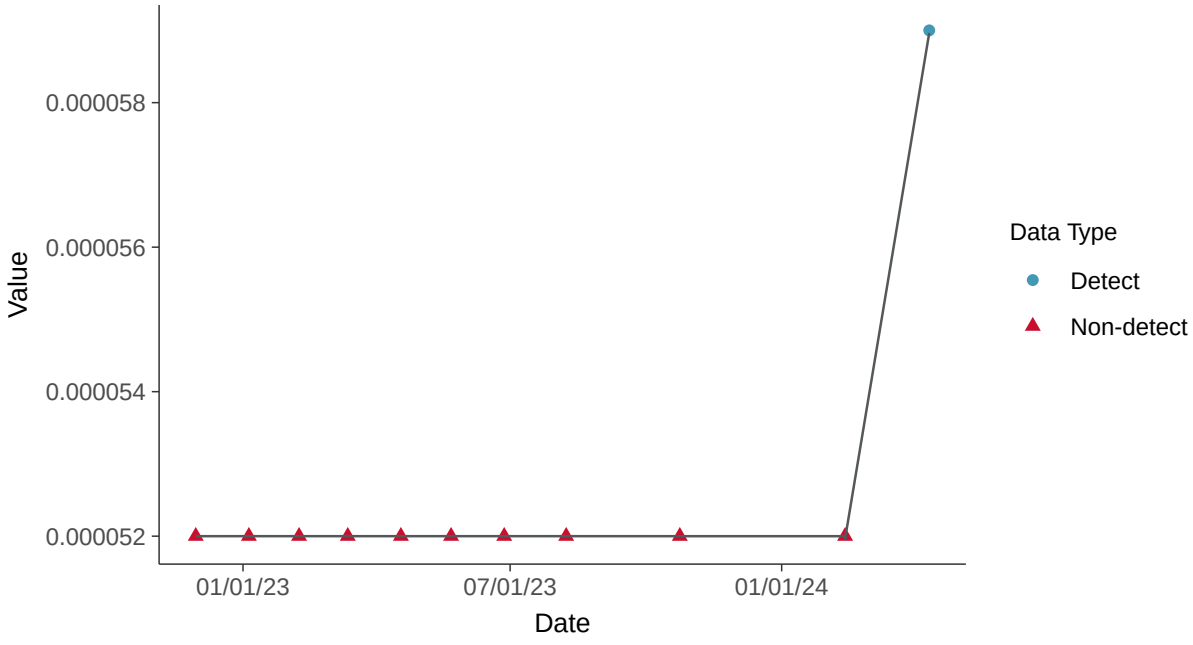
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-18 (mg/L)



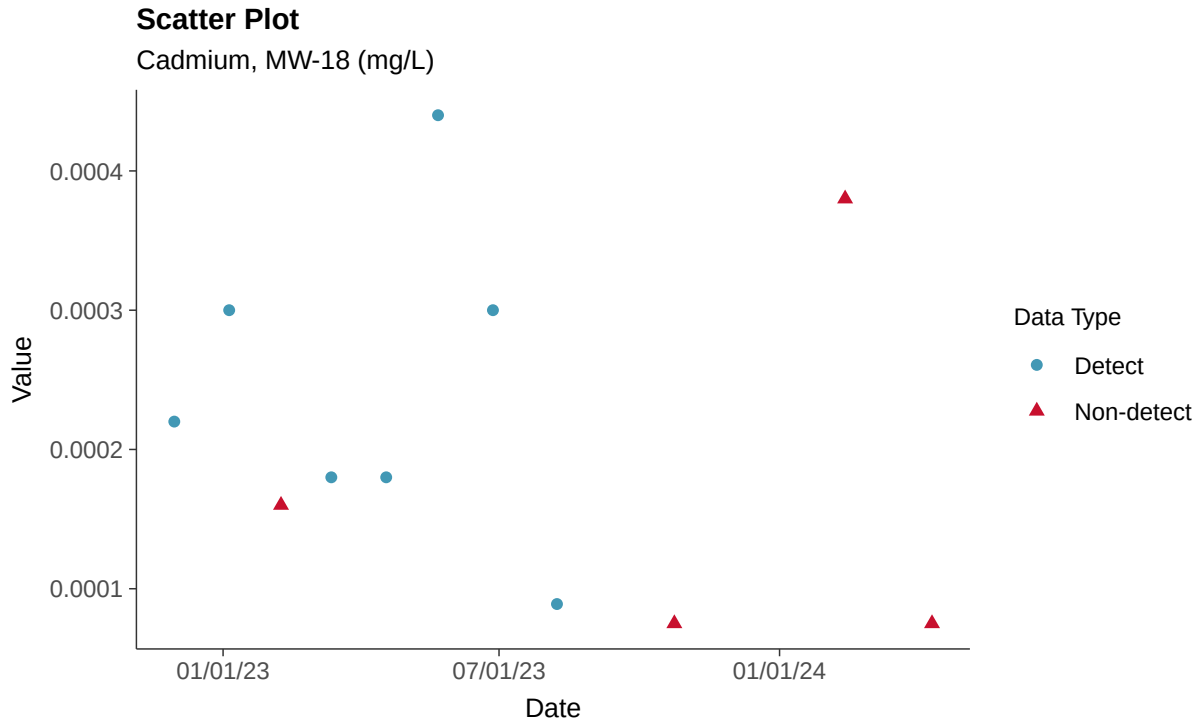
Trend Regression: Piecewise Linear-Linear-Linear

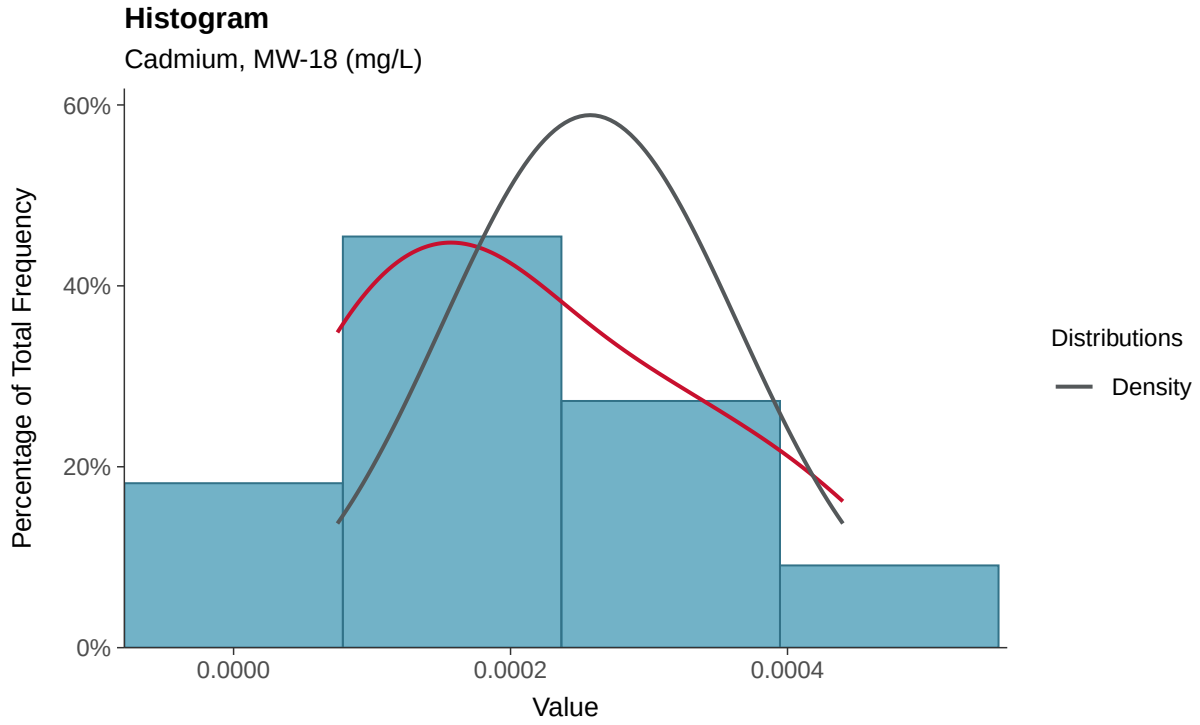
Beryllium, MW-18 (mg/L)



Appendix IV: Cadmium, MW-18

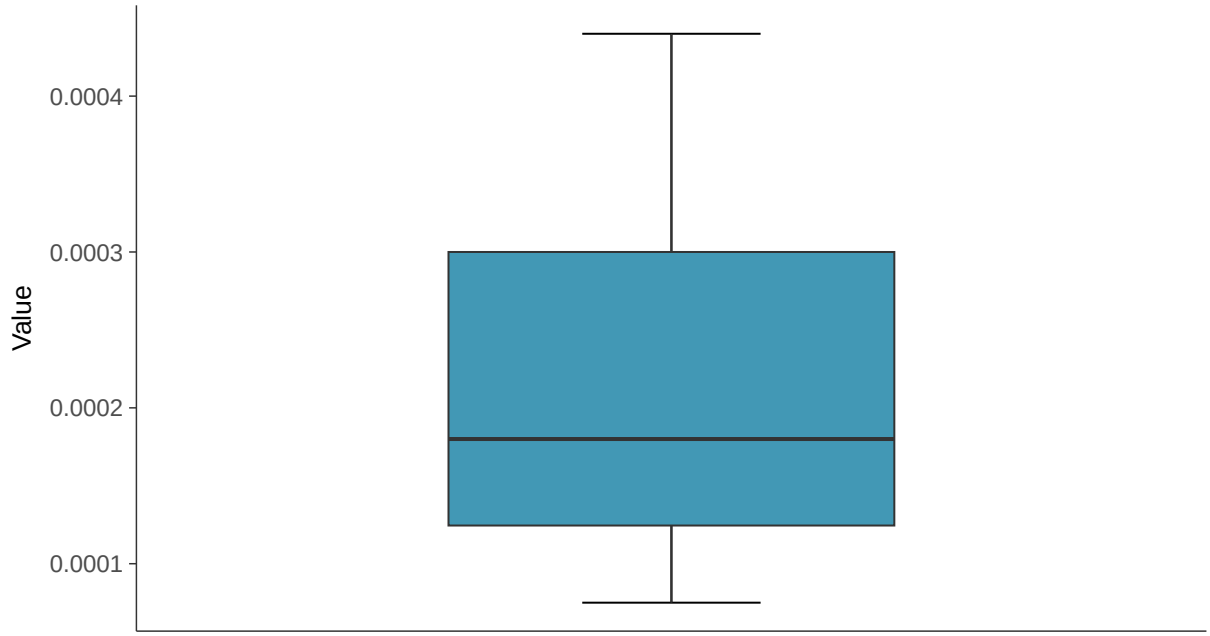
ID: 1_28_5_106





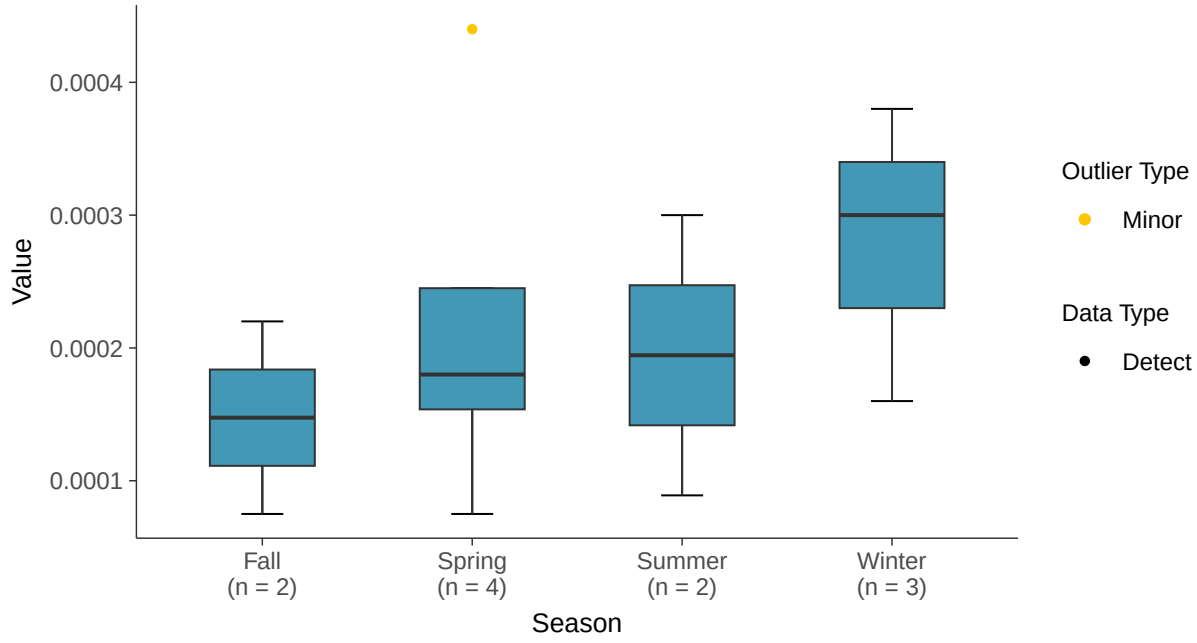
Boxplot

Cadmium, MW-18 (mg/L)



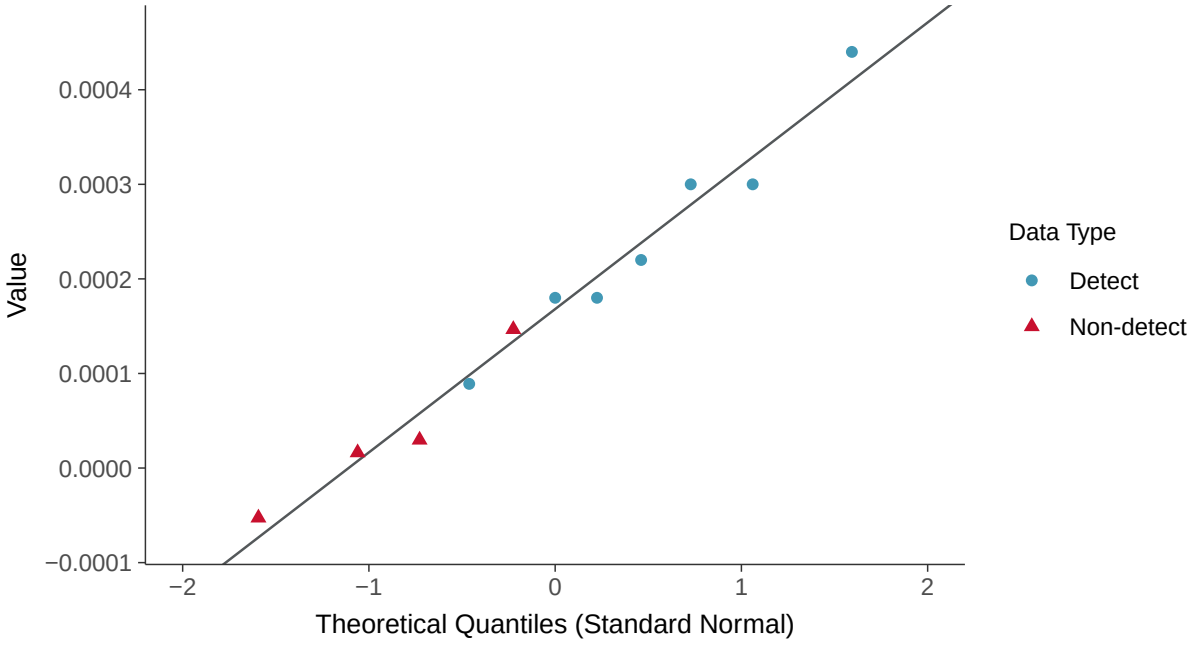
Boxplot by Season

Cadmium, MW-18 (mg/L)



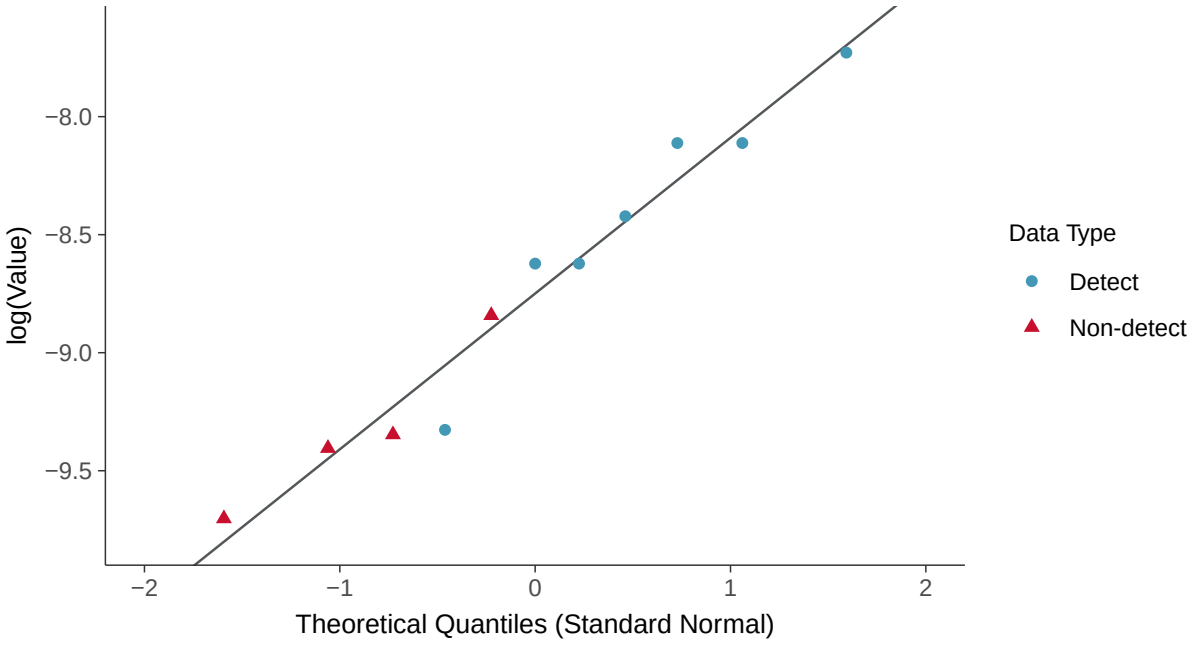
Normal Q-Q plot using ROS Imputed Estimates

Cadmium, MW-18 (mg/L)



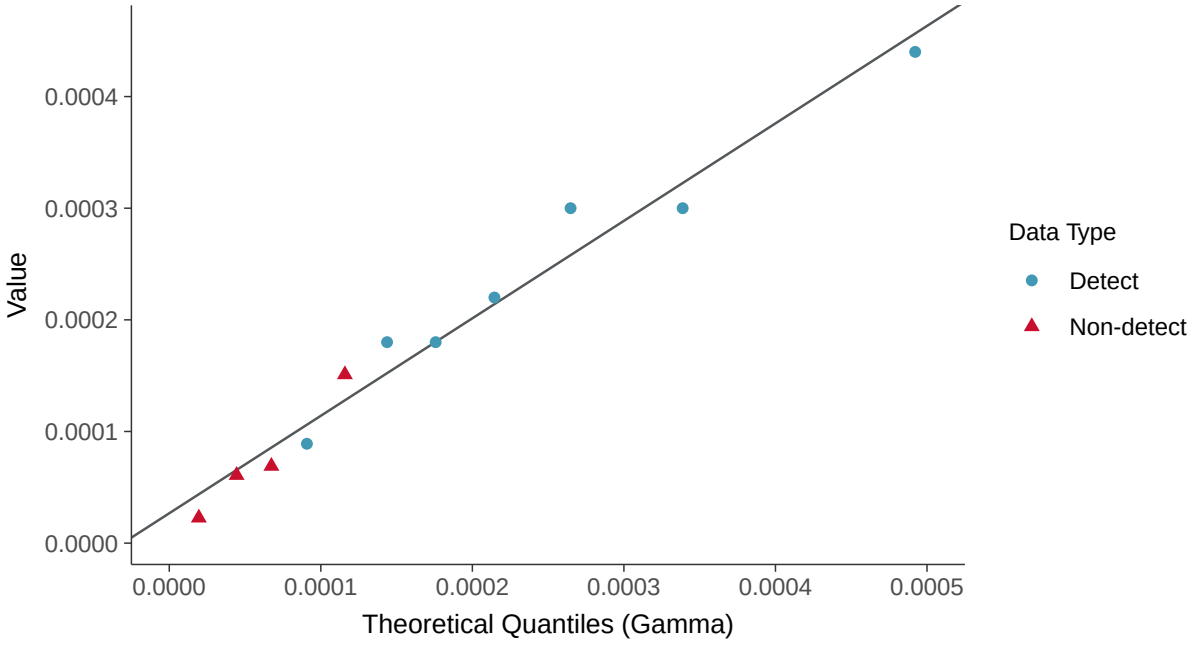
Lognormal Q-Q plot using ROS Imputed Estimates

Cadmium, MW-18 (mg/L)



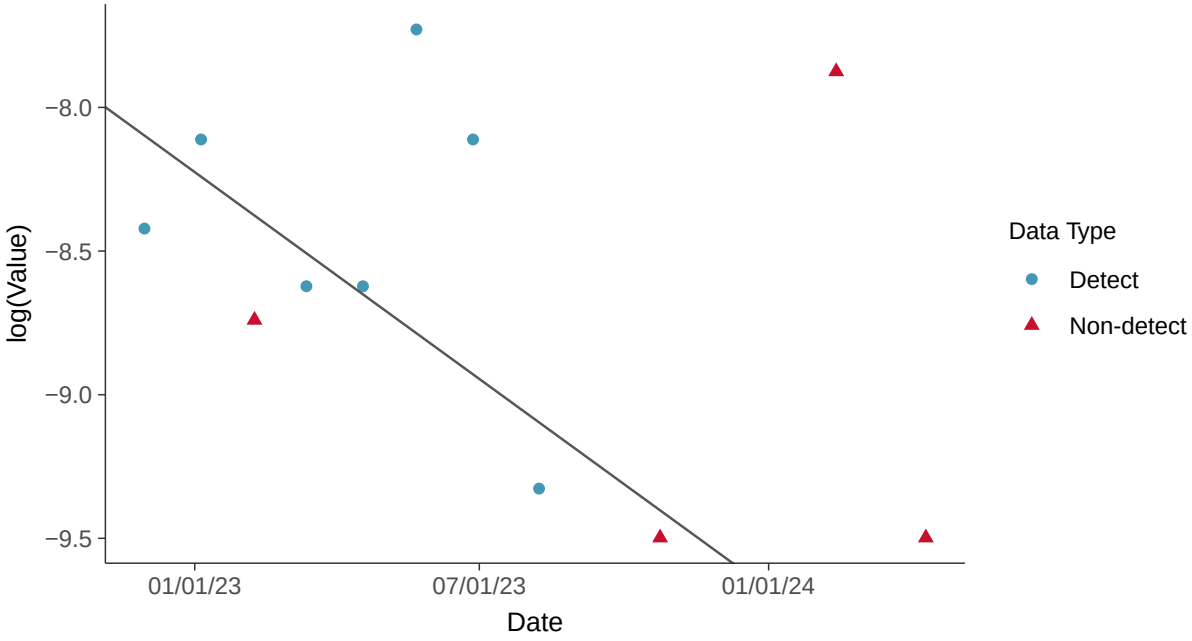
Gamma Q-Q plot using ROS Imputed Estimates

Cadmium, MW-18 (mg/L)



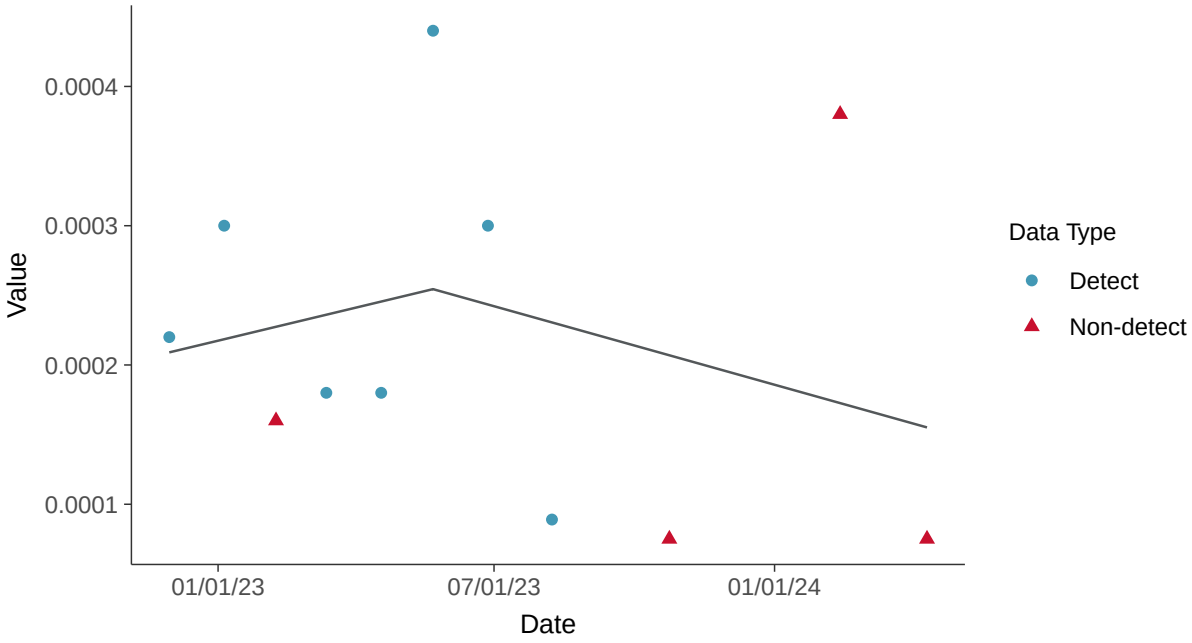
Trend Regression: Lognormal MLE

Cadmium, MW-18 (mg/L)



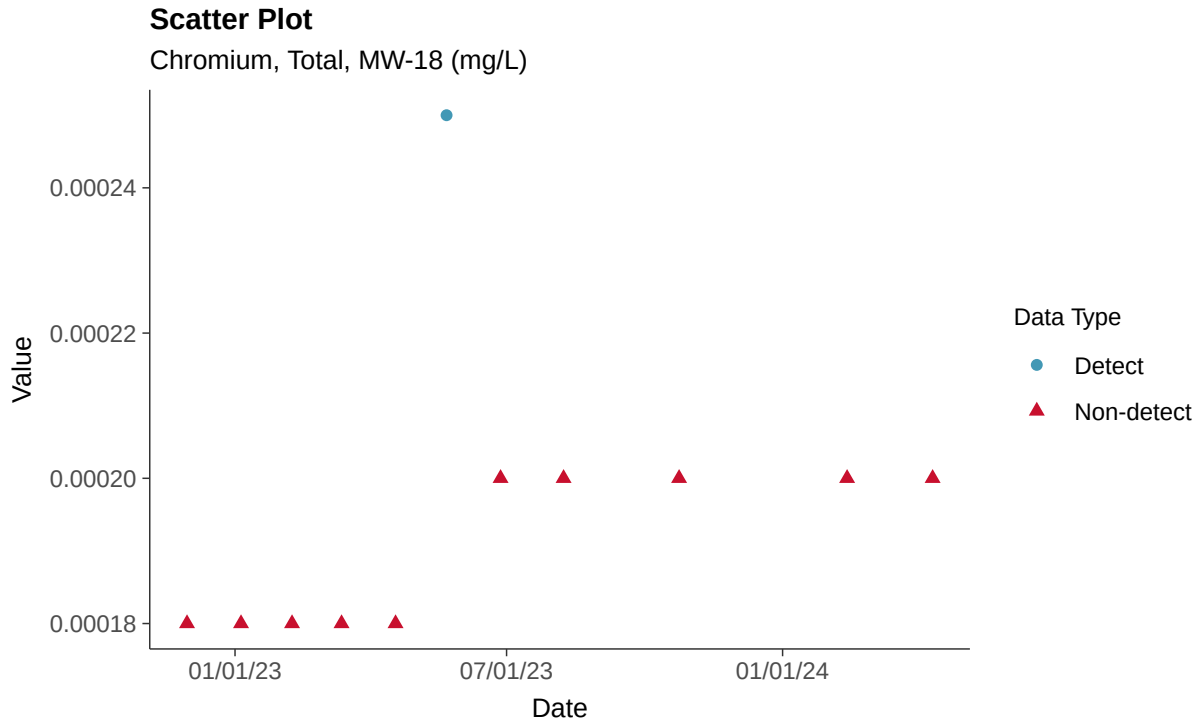
Trend Regression: Piecewise Linear-Linear

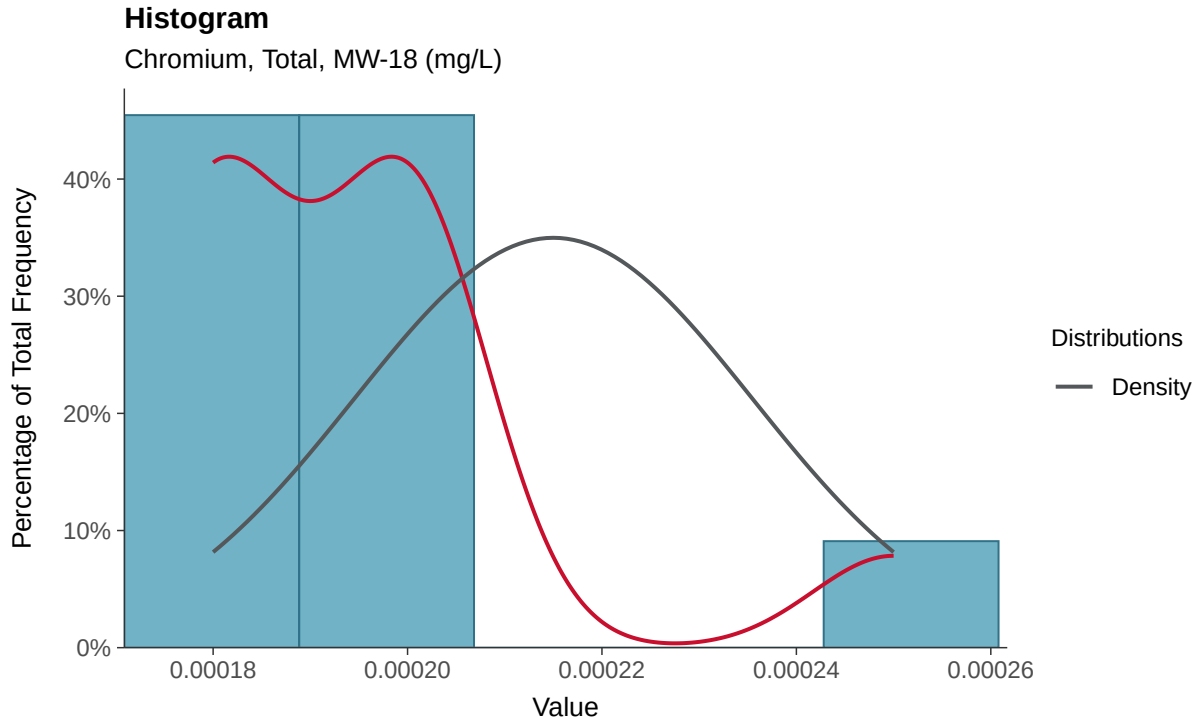
Cadmium, MW-18 (mg/L)



Appendix IV: Chromium, Total, MW-18

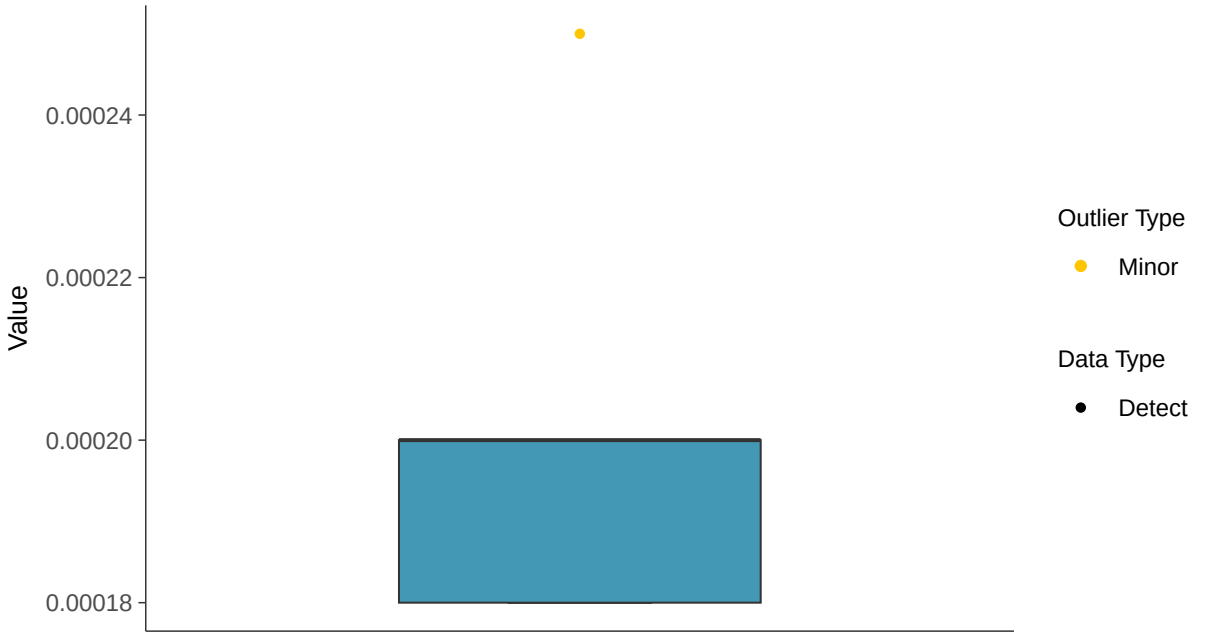
ID: 1_28_5_109





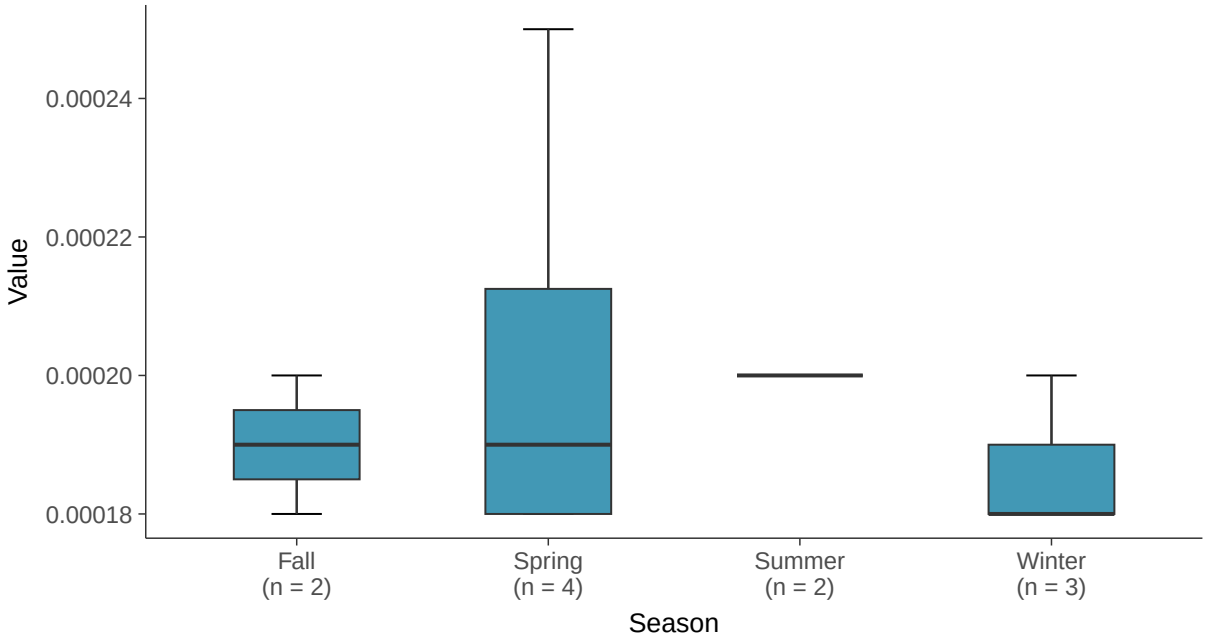
Boxplot

Chromium, Total, MW-18 (mg/L)



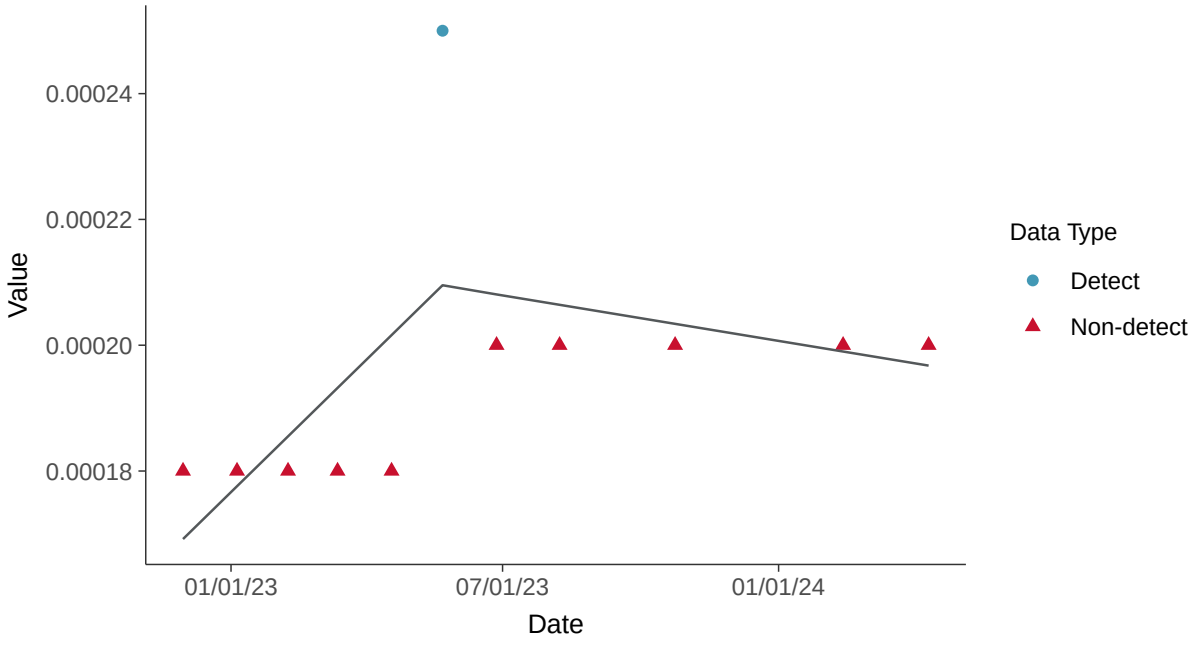
Boxplot by Season

Chromium, Total, MW-18 (mg/L)



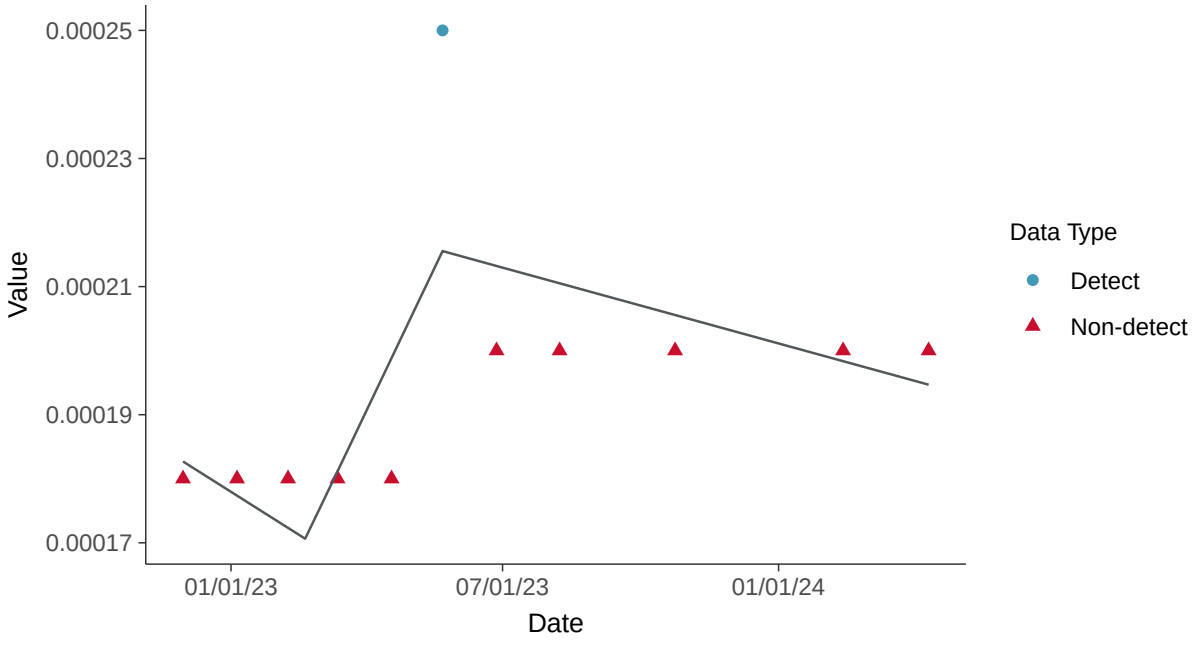
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-18 (mg/L)



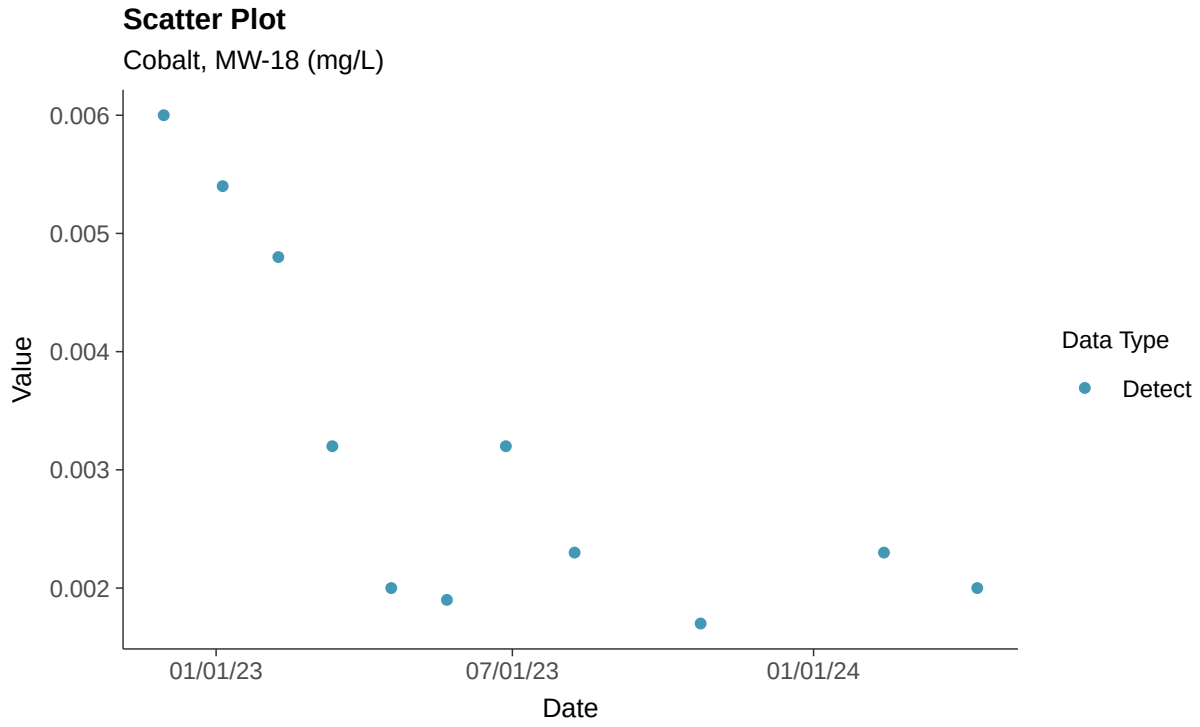
Trend Regression: Piecewise Linear-Linear-Linear

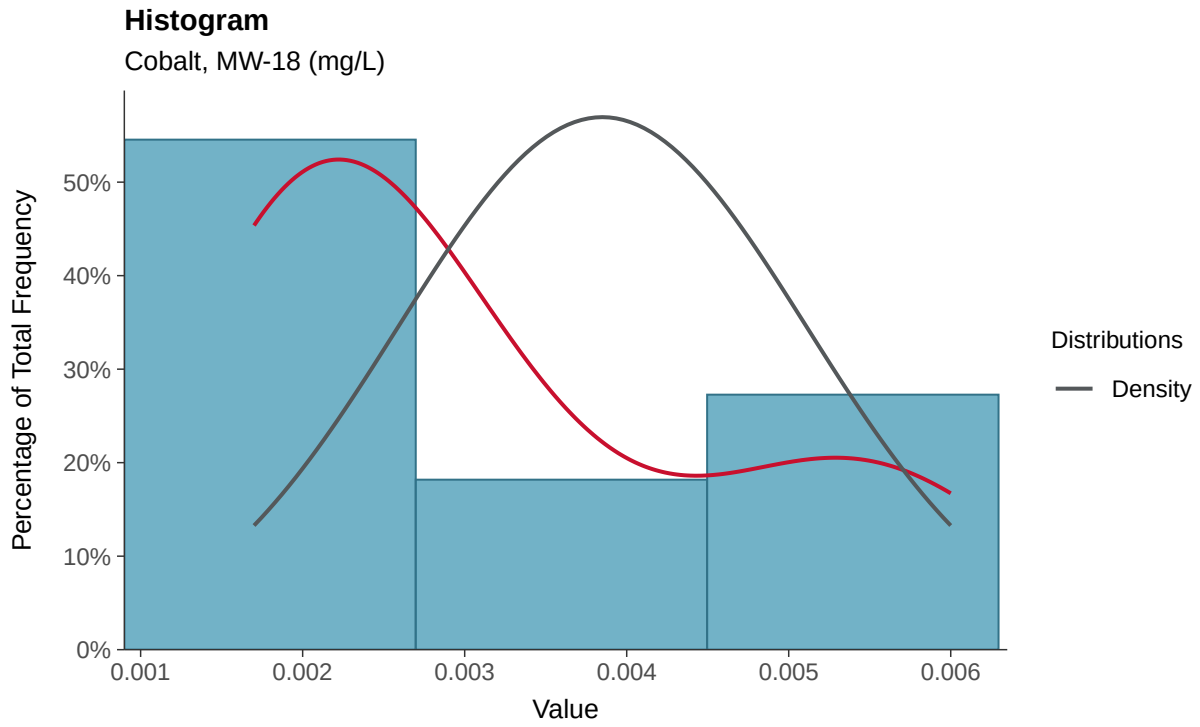
Chromium, Total, MW-18 (mg/L)



Appendix IV: Cobalt, MW-18

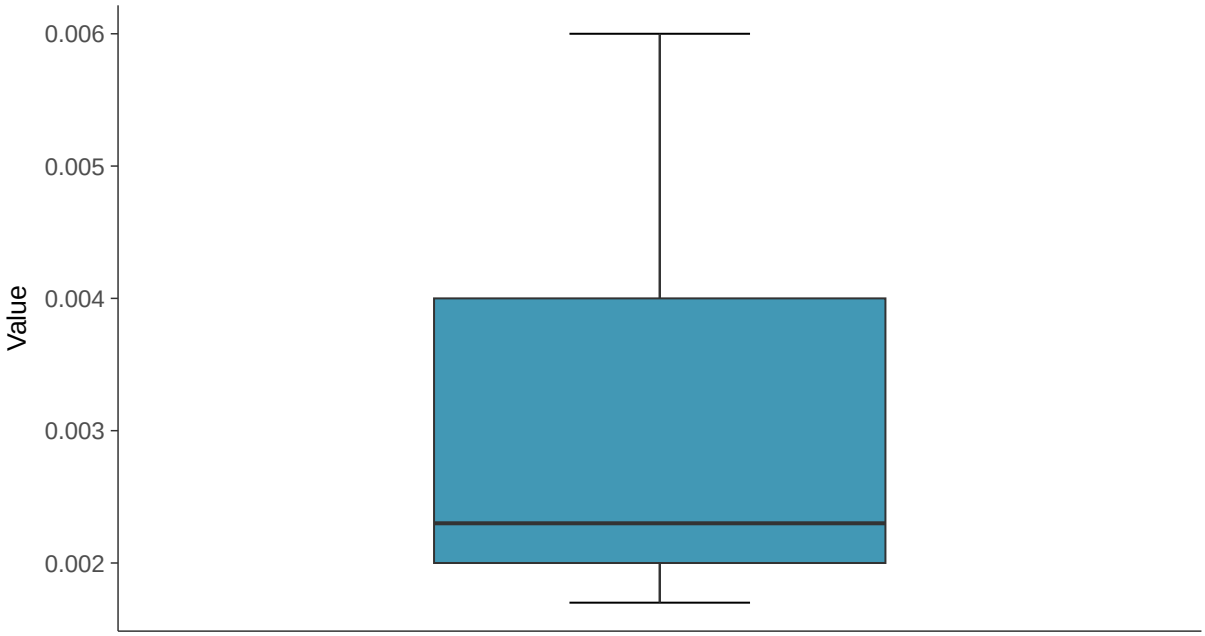
ID: 1_28_5_110





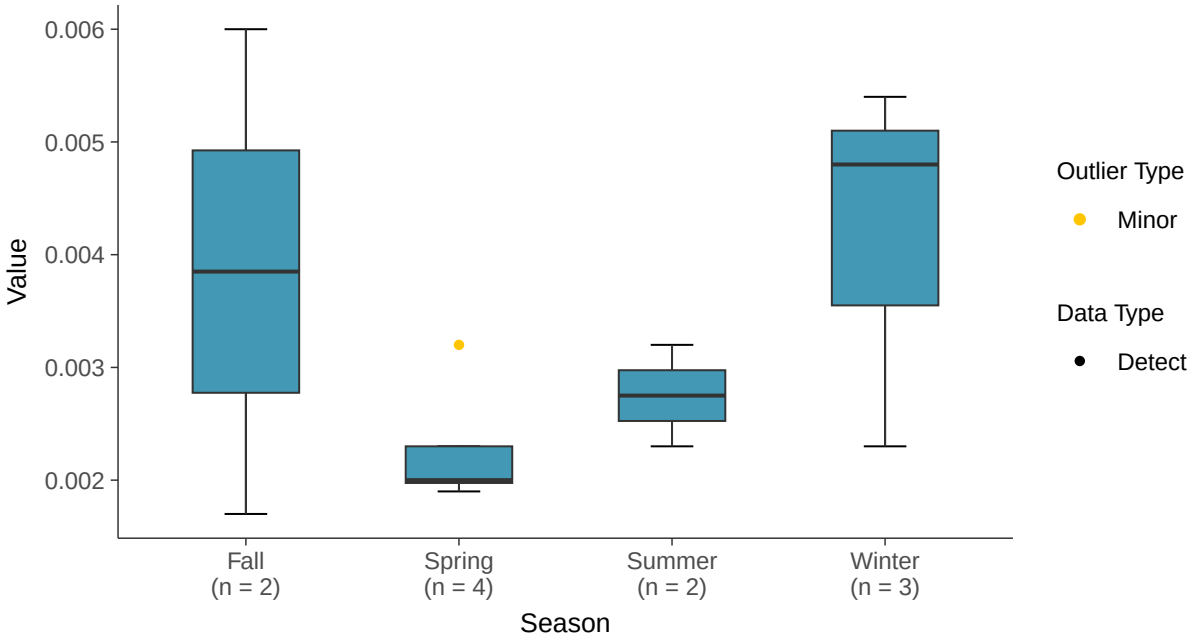
Boxplot

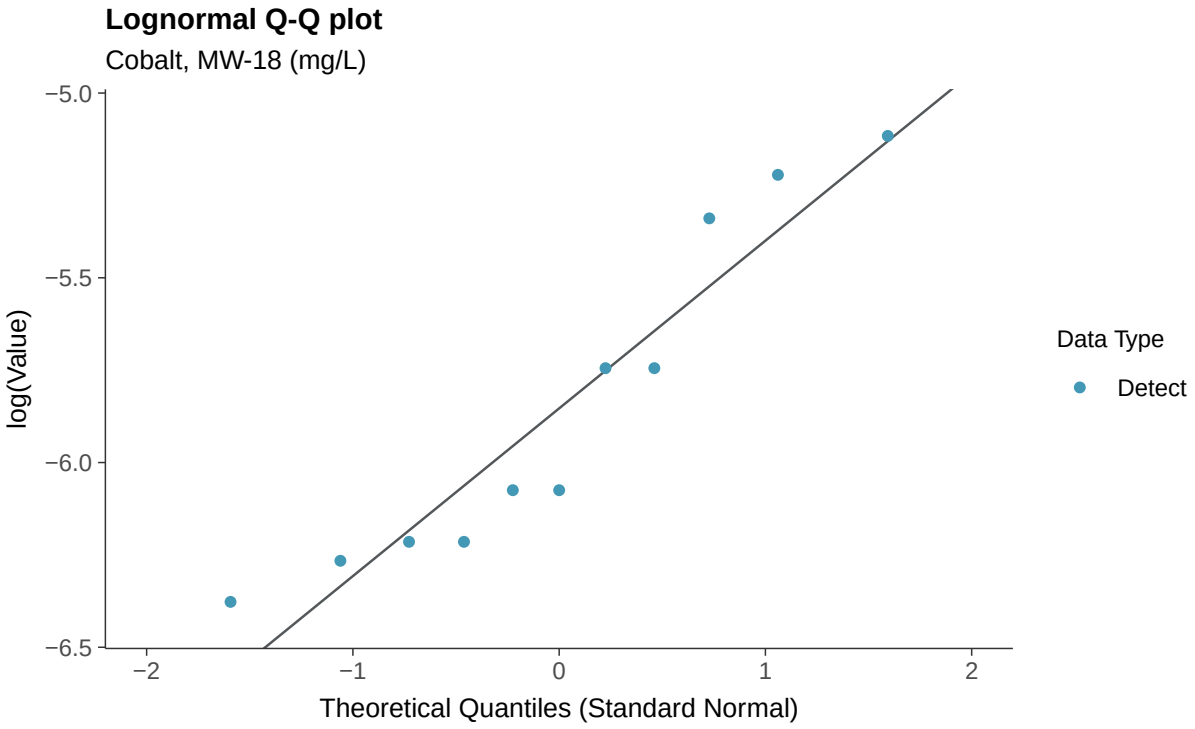
Cobalt, MW-18 (mg/L)

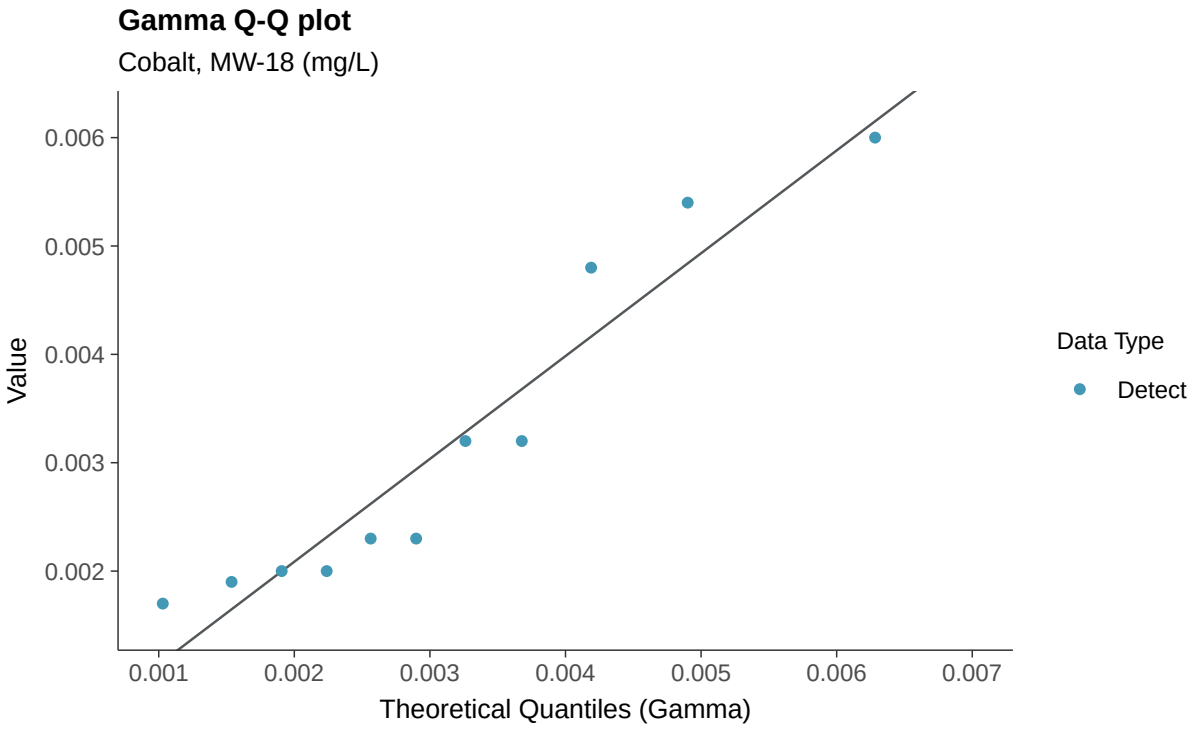


Boxplot by Season

Cobalt, MW-18 (mg/L)

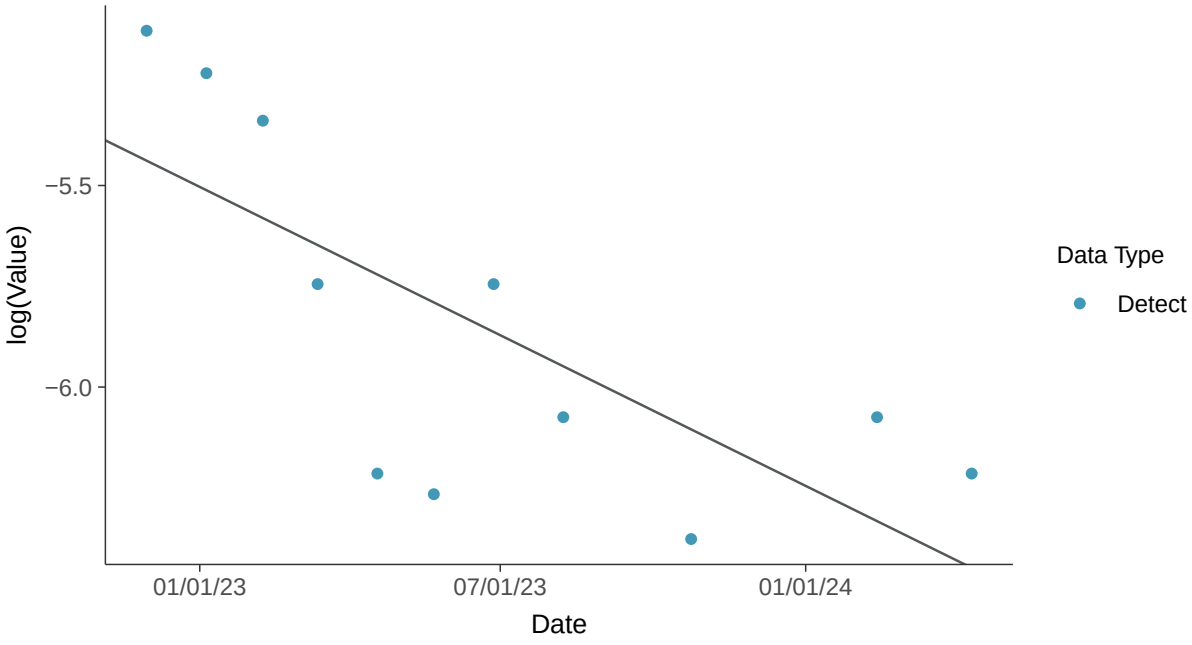



Lognormal Q-Q plot
Cobalt, MW-18 (mg/L)
log(Value)
−5.0
−5.5
−6.0
−6.5
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect


Gamma Q-Q plot
Cobalt, MW-18 (mg/L)
Value
0.006
0.005
0.004
0.003
0.002
0.001
0.002
0.003
0.004
0.005
0.006
0.007
Theoretical Quantiles (Gamma)
Data Type
Detect

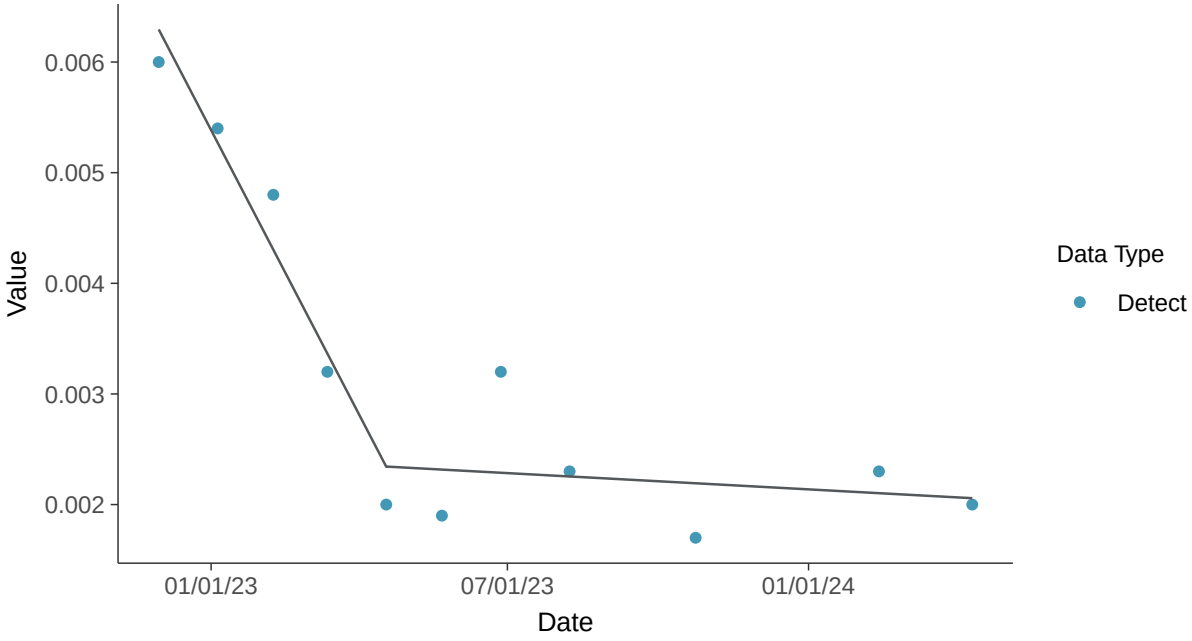
Trend Regression: Lognormal MLE

Cobalt, MW-18 (mg/L)



Trend Regression: Piecewise Linear-Linear

Cobalt, MW-18 (mg/L)

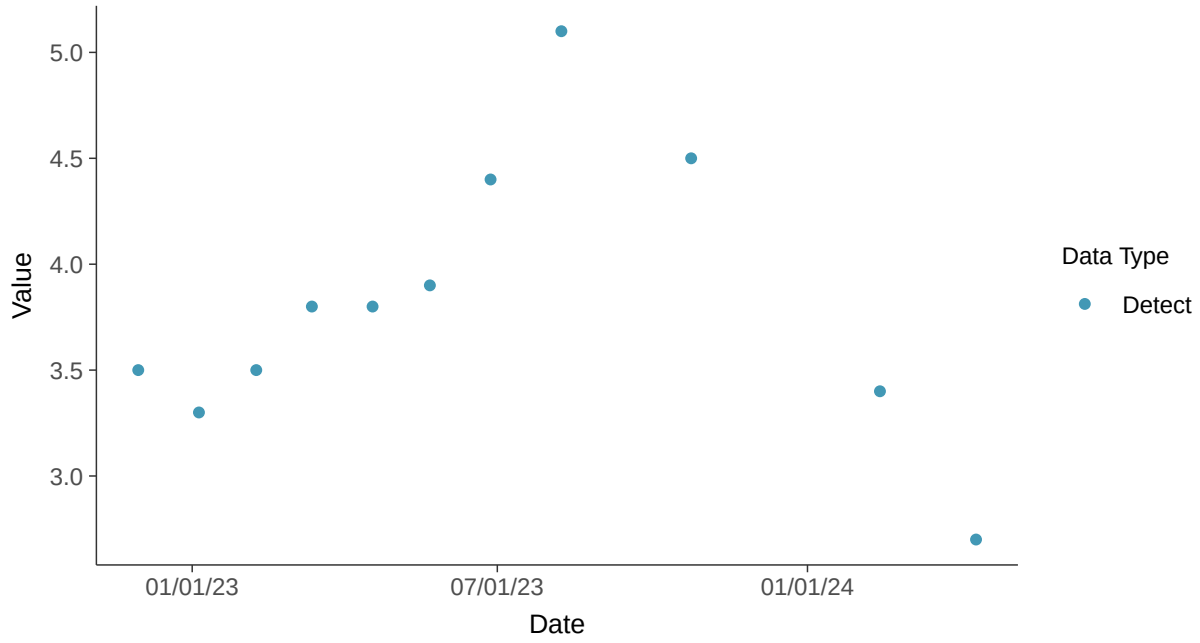


Appendix IV: Fluoride (App IV), MW-18

ID: 1_28_5_113

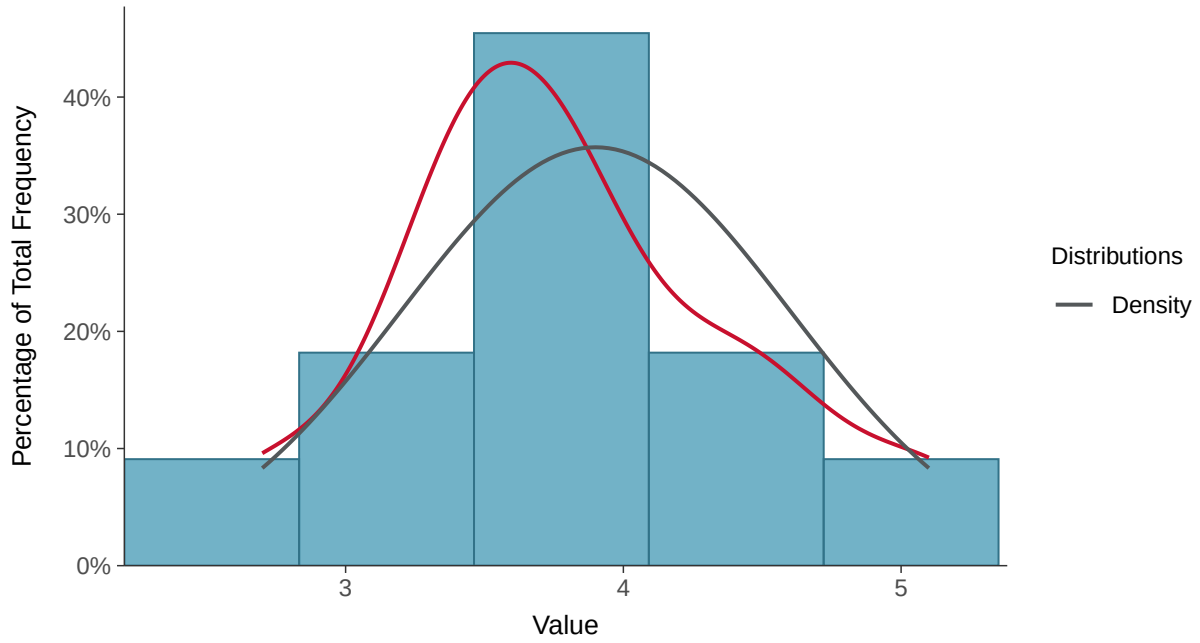
Scatter Plot

Fluoride (App IV), MW-18 (mg/L)



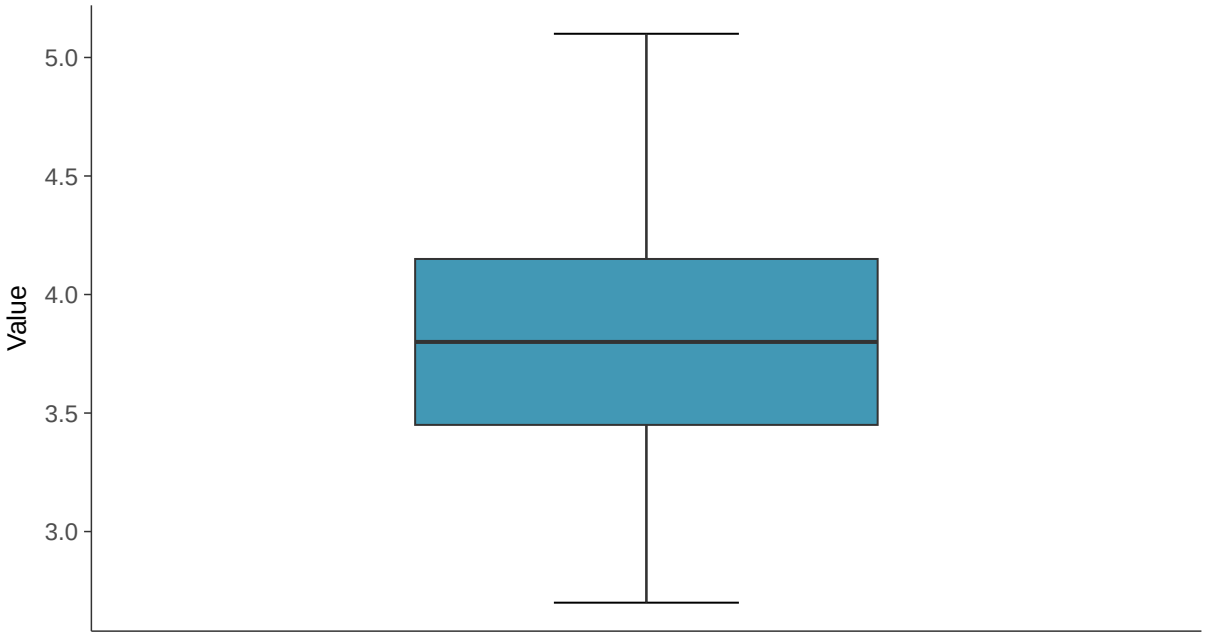
Histogram

Fluoride (App IV), MW-18 (mg/L)



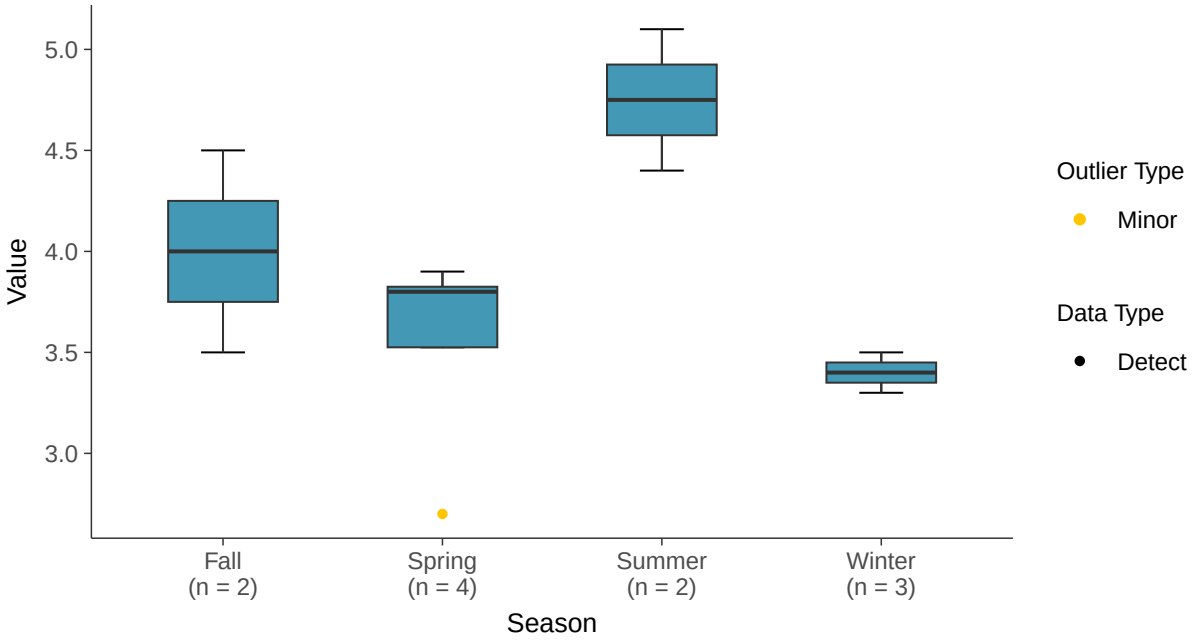
Boxplot

Fluoride (App IV), MW-18 (mg/L)



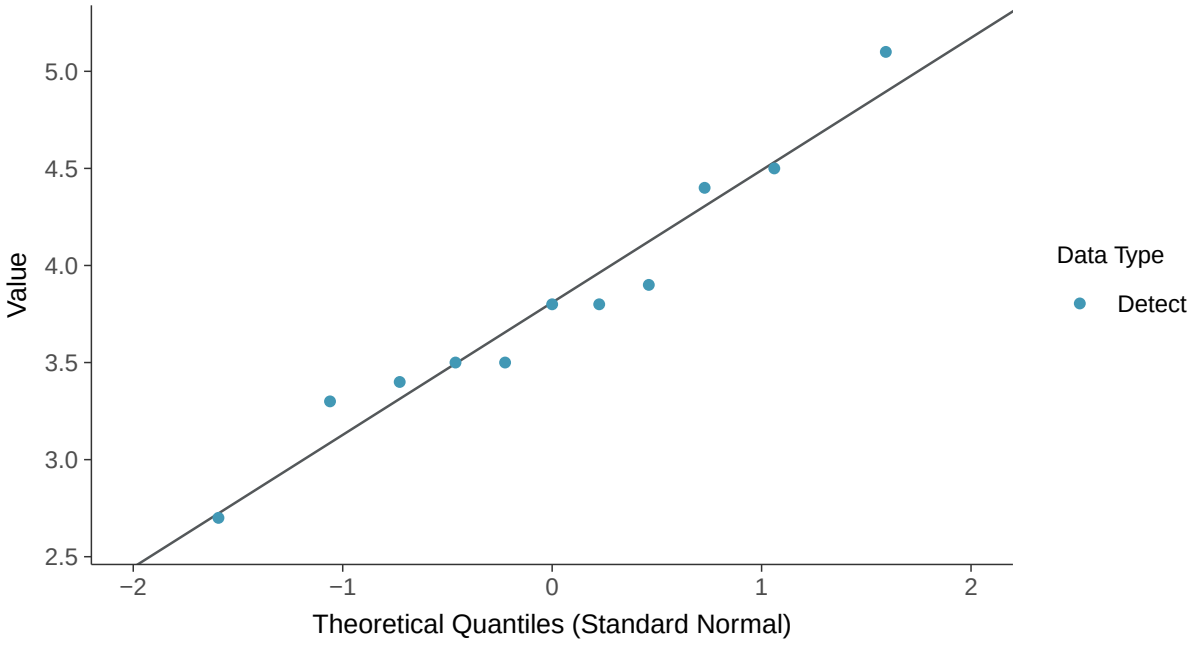
Boxplot by Season

Fluoride (App IV), MW-18 (mg/L)



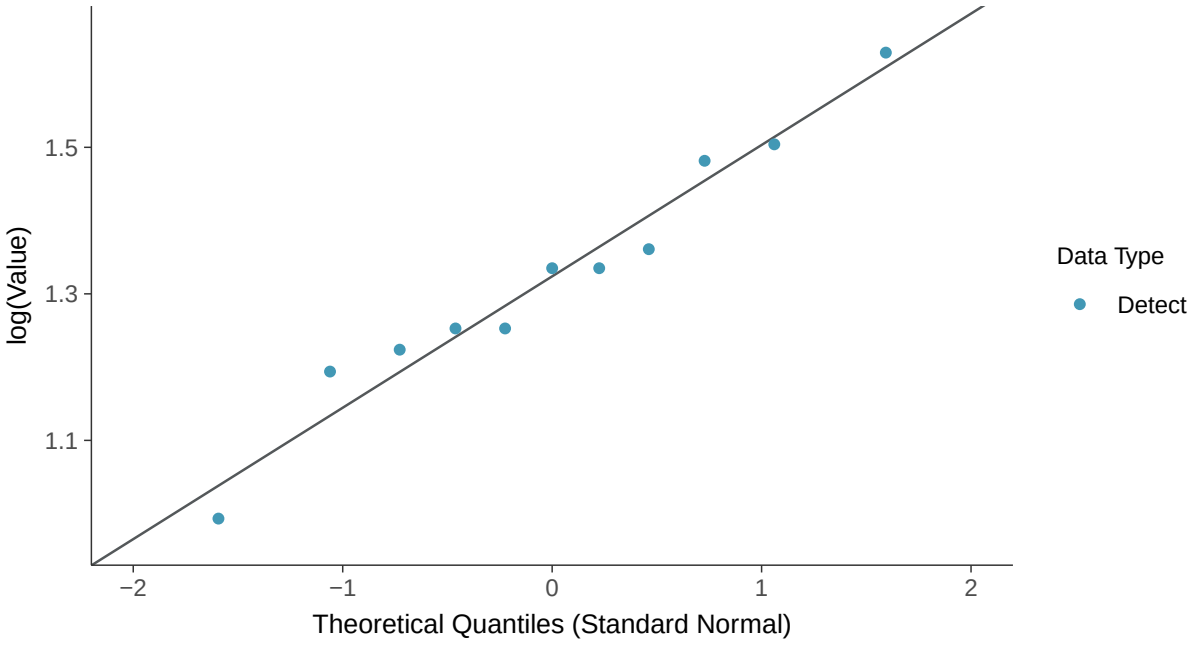
Normal Q-Q plot

Fluoride (App IV), MW-18 (mg/L)



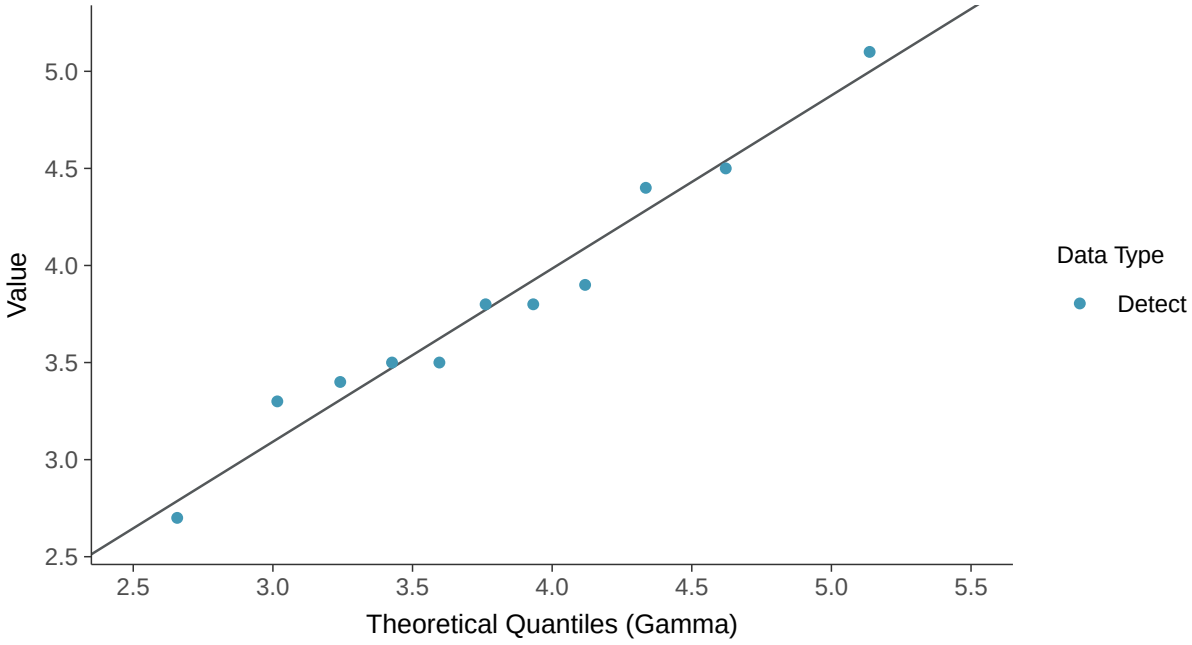
Lognormal Q-Q plot

Fluoride (App IV), MW-18 (mg/L)



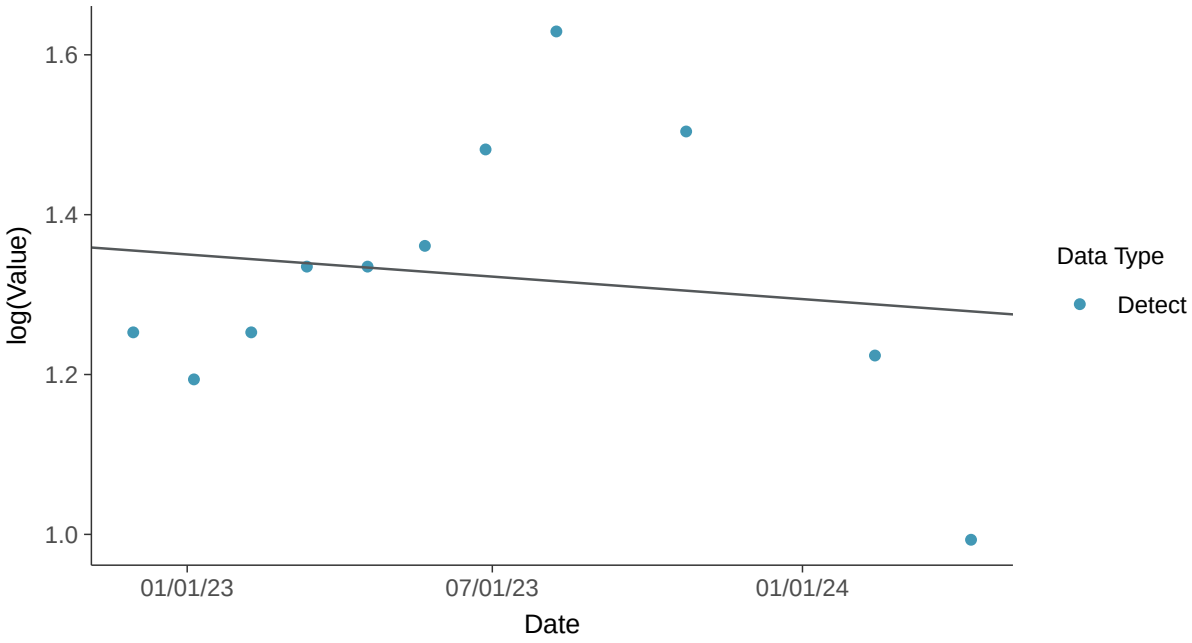
Gamma Q-Q plot

Fluoride (App IV), MW-18 (mg/L)



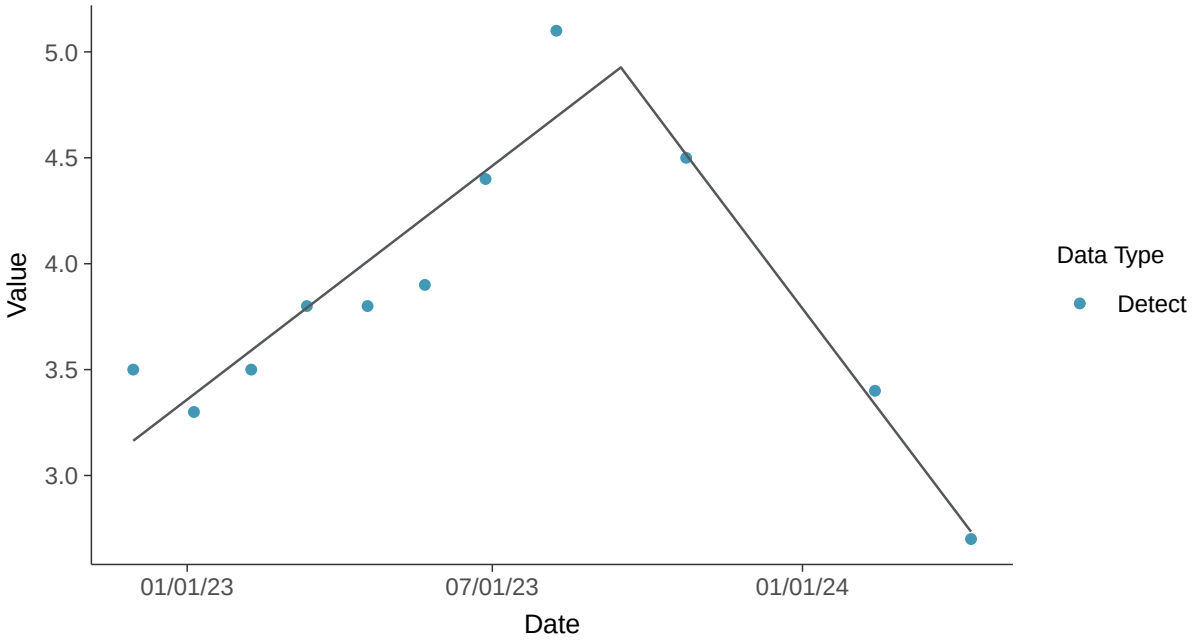
Trend Regression: Lognormal MLE

Fluoride (App IV), MW-18 (mg/L)



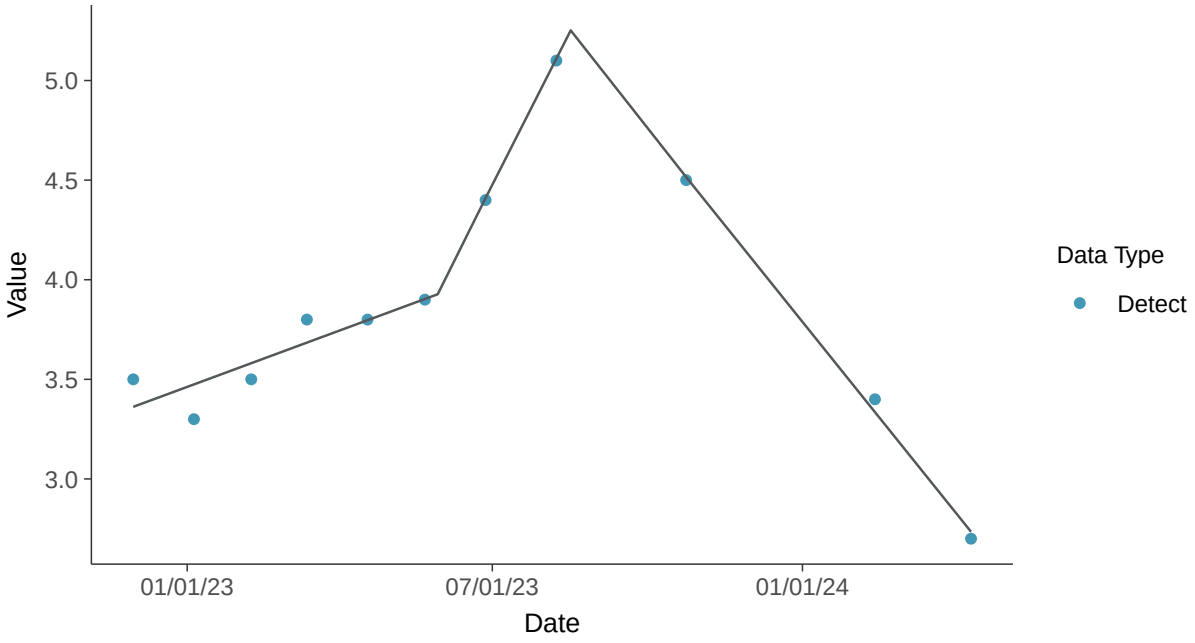
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-18 (mg/L)



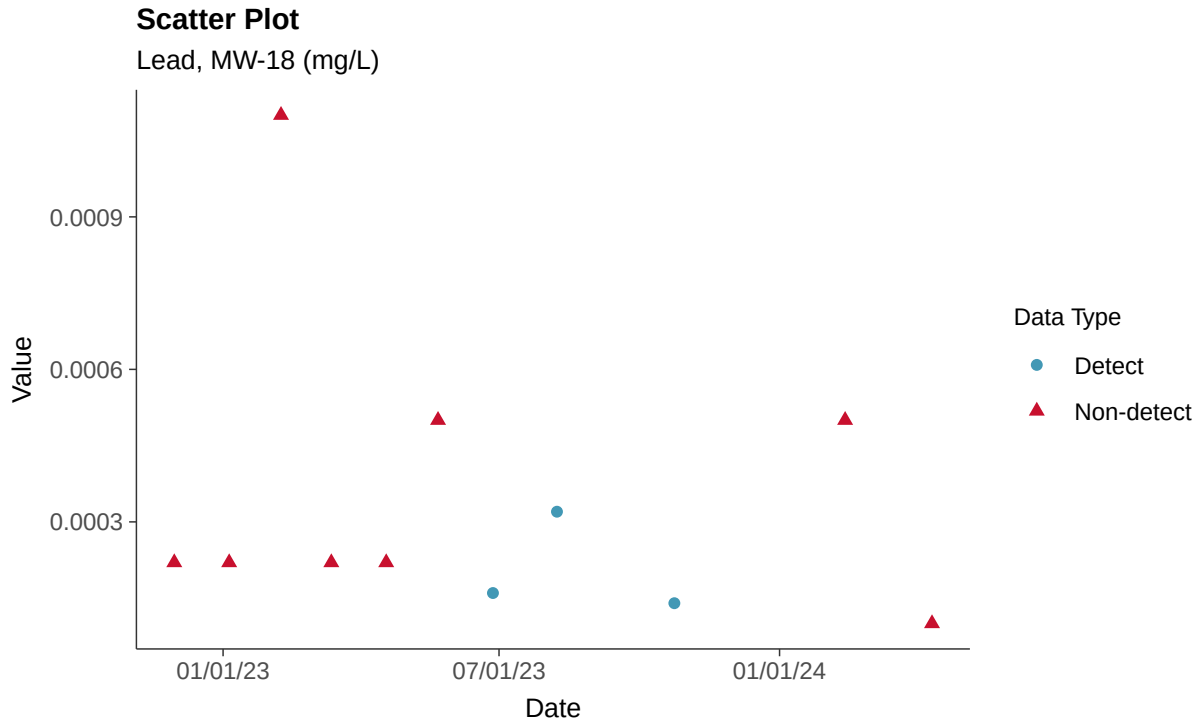
Trend Regression: Piecewise Linear-Linear-Linear

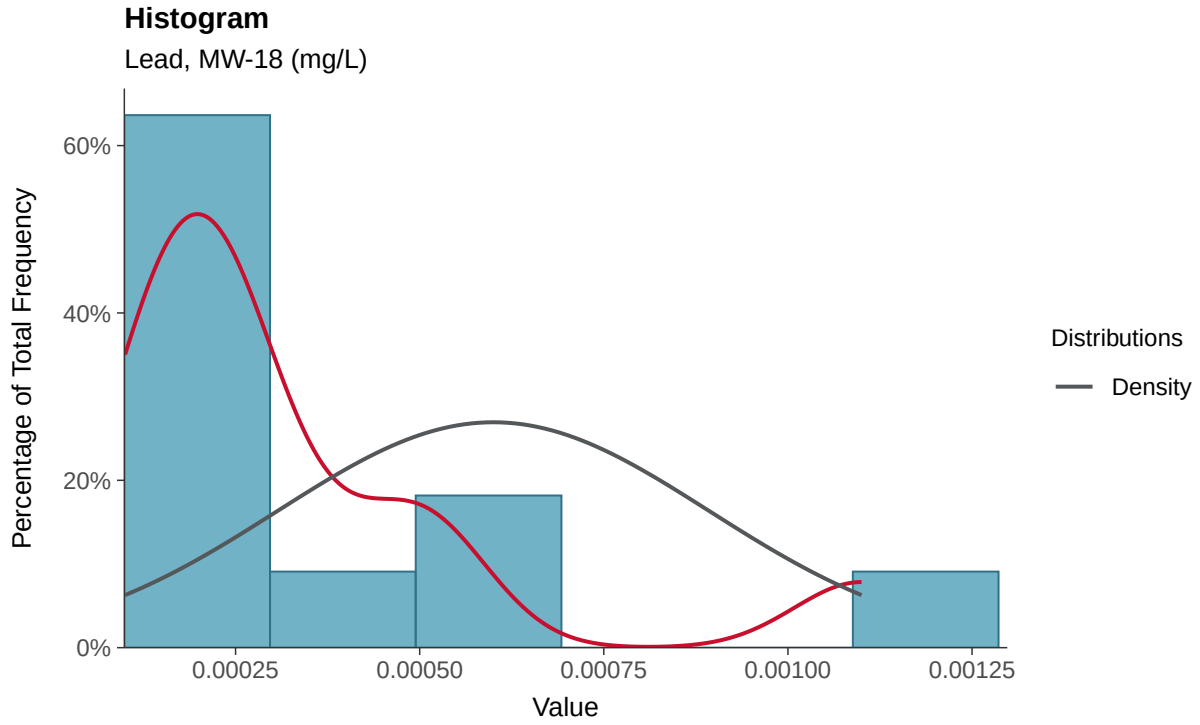
Fluoride (App IV), MW-18 (mg/L)



Appendix IV: Lead, MW-18

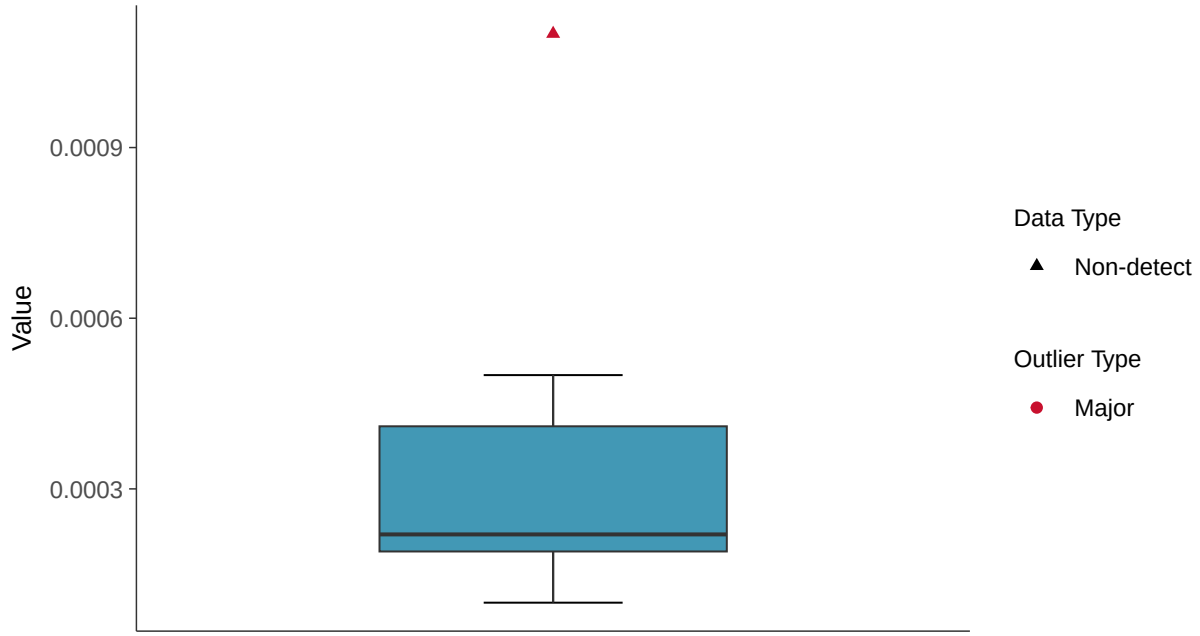
ID: 1_28_5_115





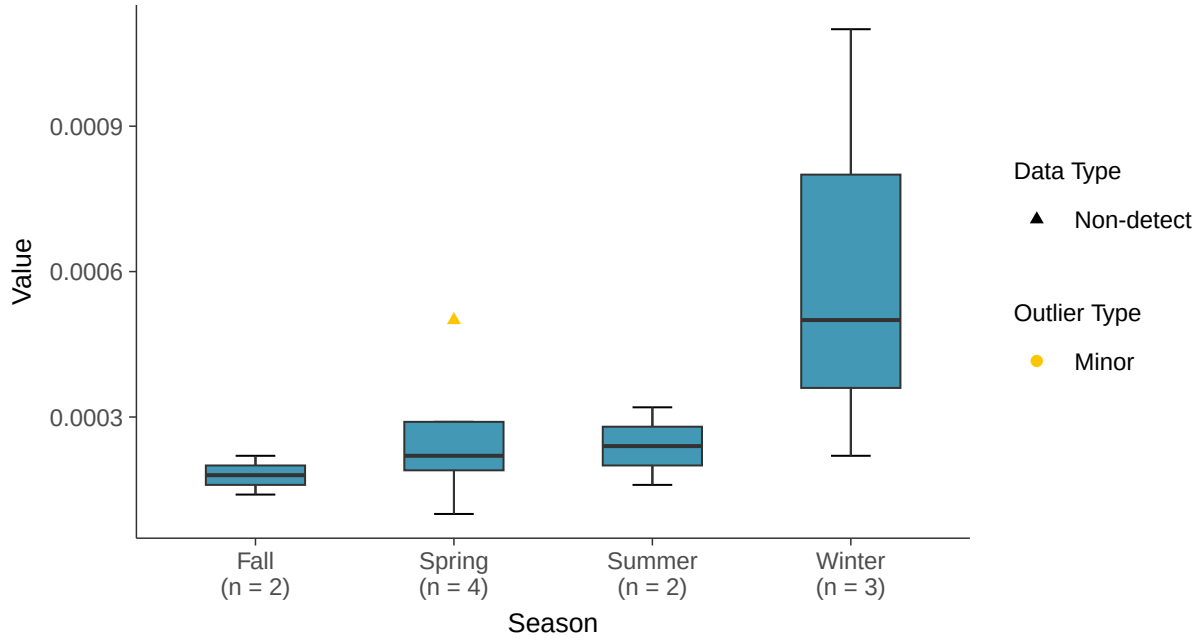
Boxplot

Lead, MW-18 (mg/L)



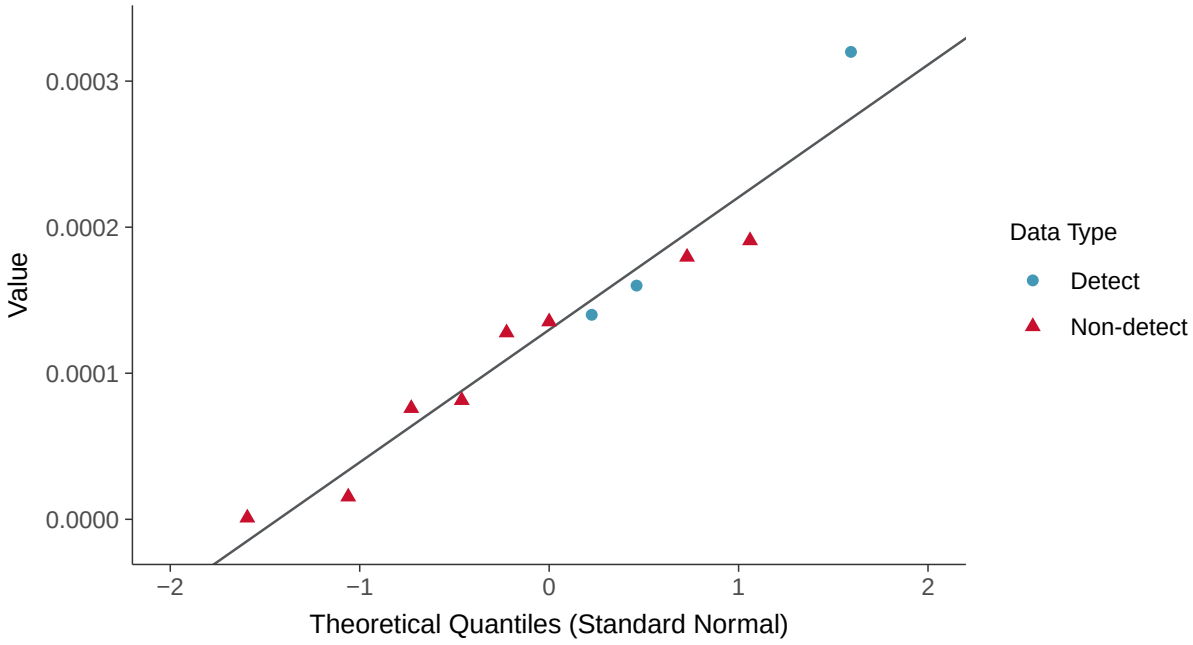
Boxplot by Season

Lead, MW-18 (mg/L)



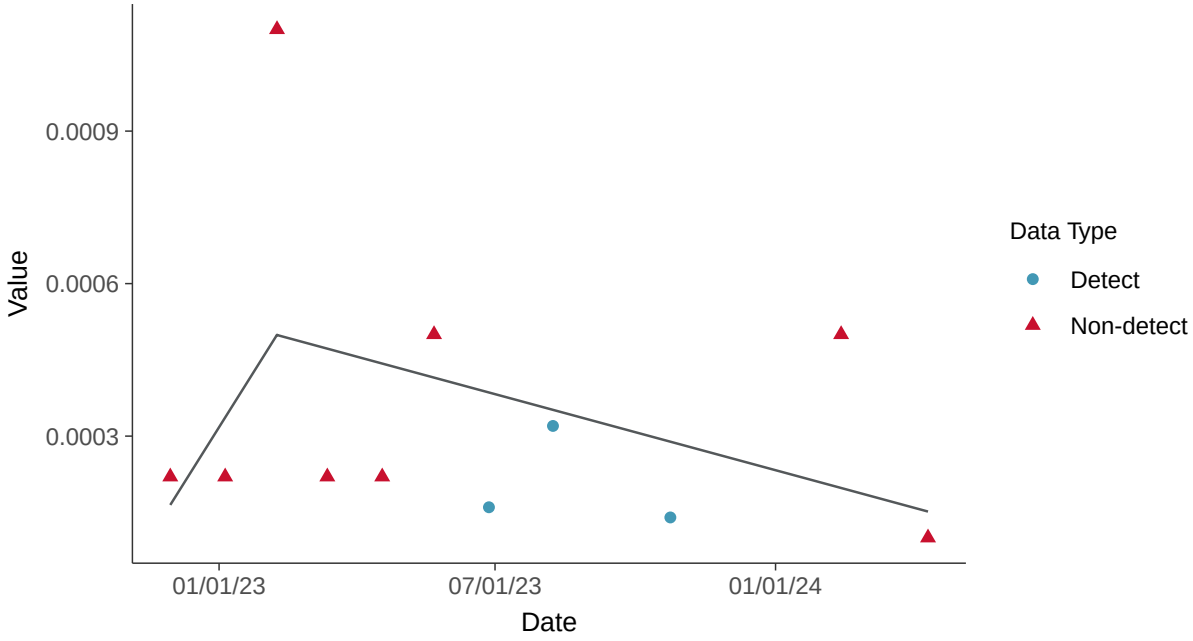
Normal Q-Q plot using ROS Imputed Estimates

Lead, MW-18 (mg/L)



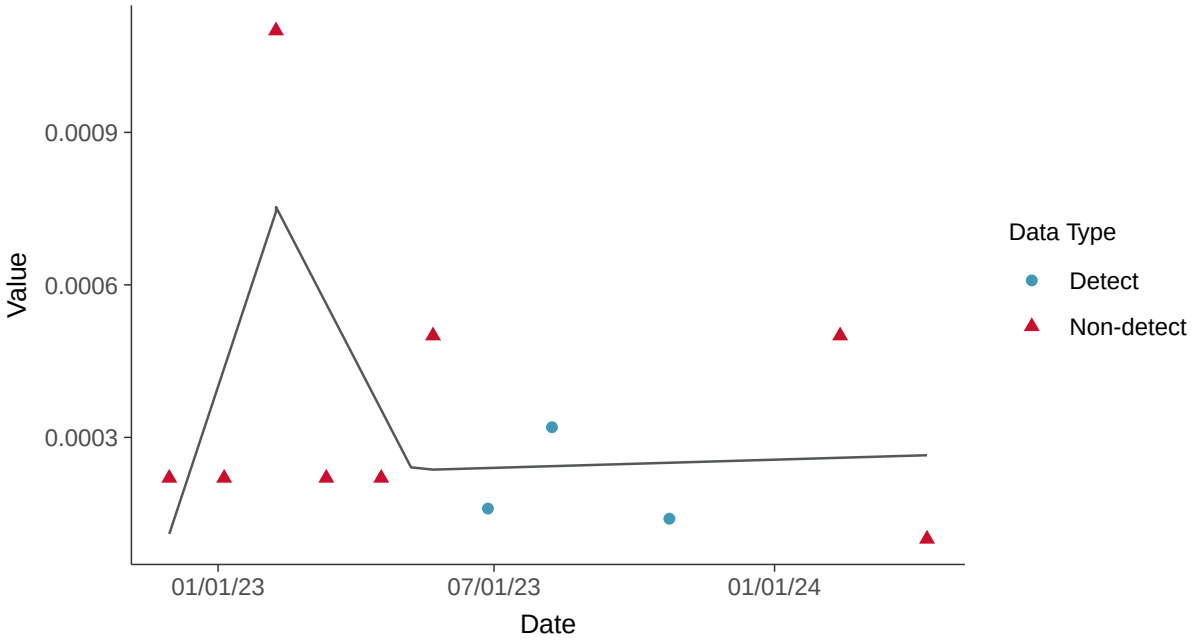
Trend Regression: Piecewise Linear-Linear

Lead, MW-18 (mg/L)



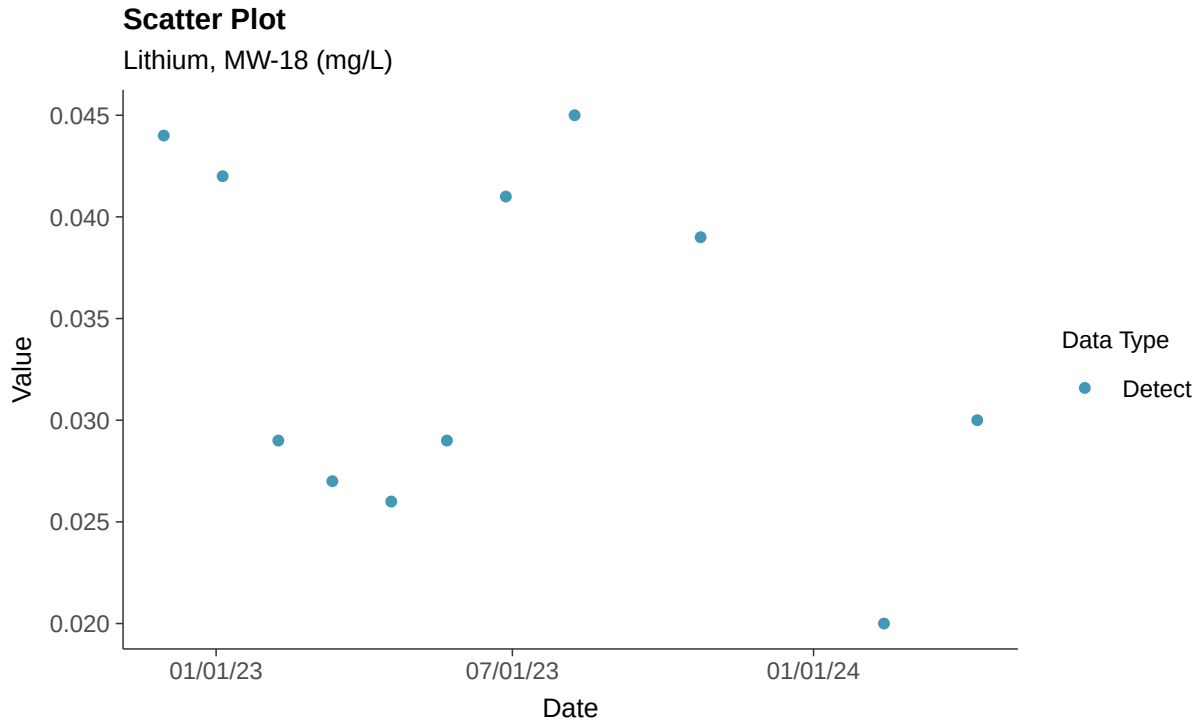
Trend Regression: Piecewise Linear-Linear-Linear

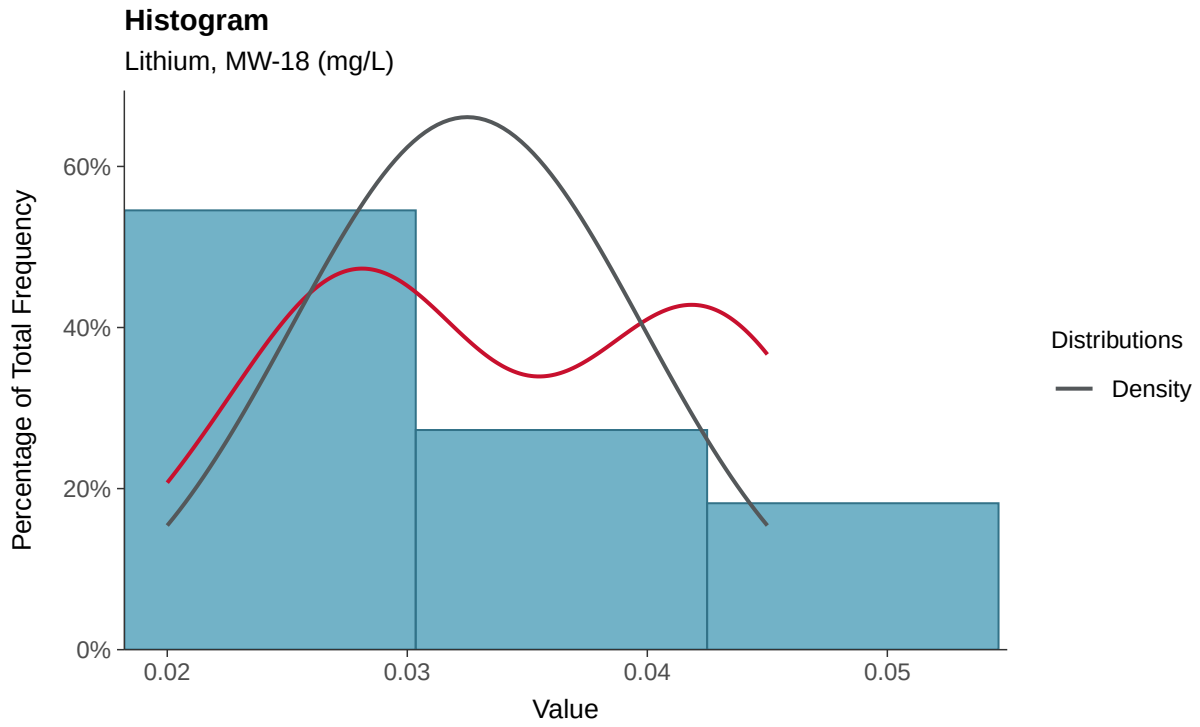
Lead, MW-18 (mg/L)



Appendix IV: Lithium, MW-18

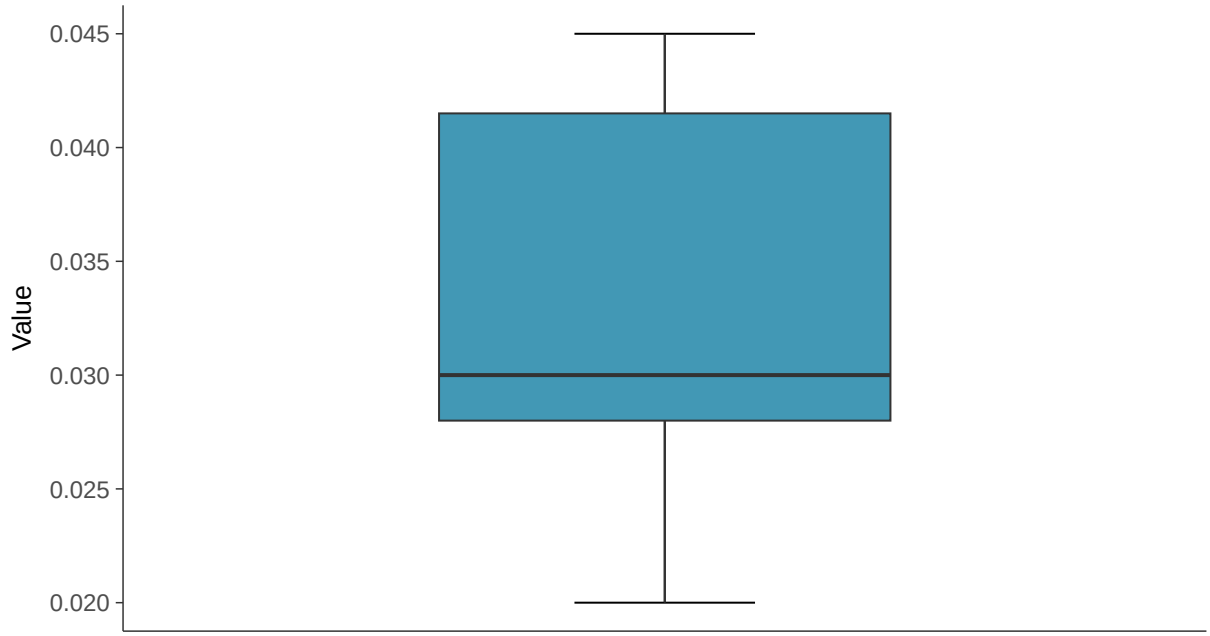
ID: 1_28_5_116





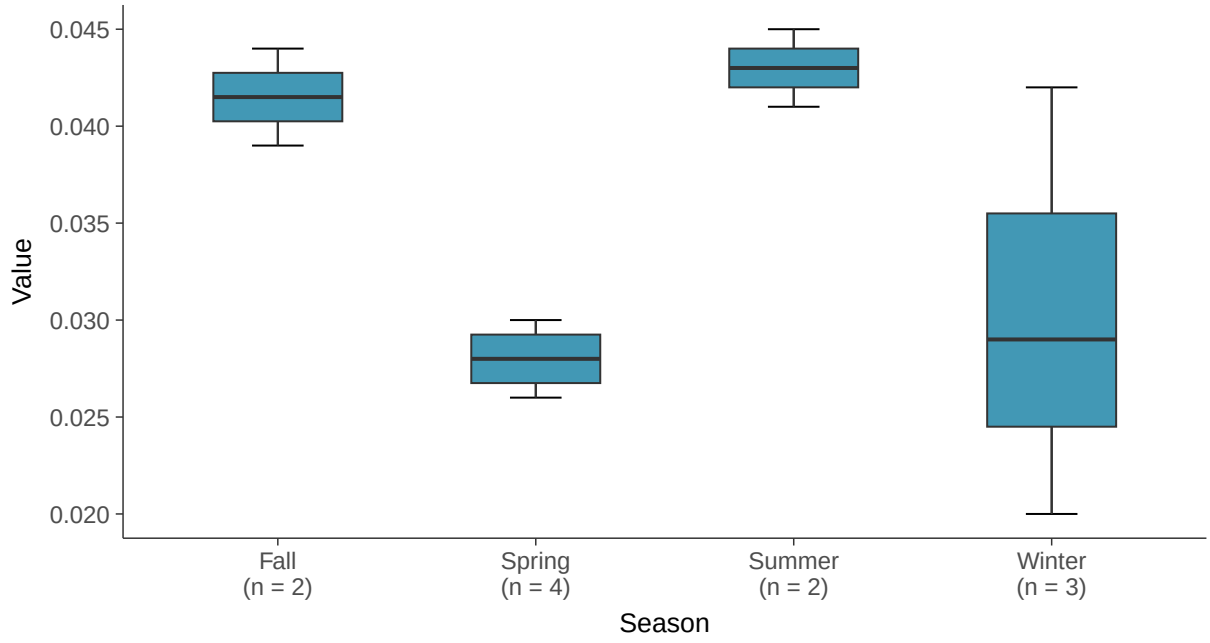
Boxplot

Lithium, MW-18 (mg/L)



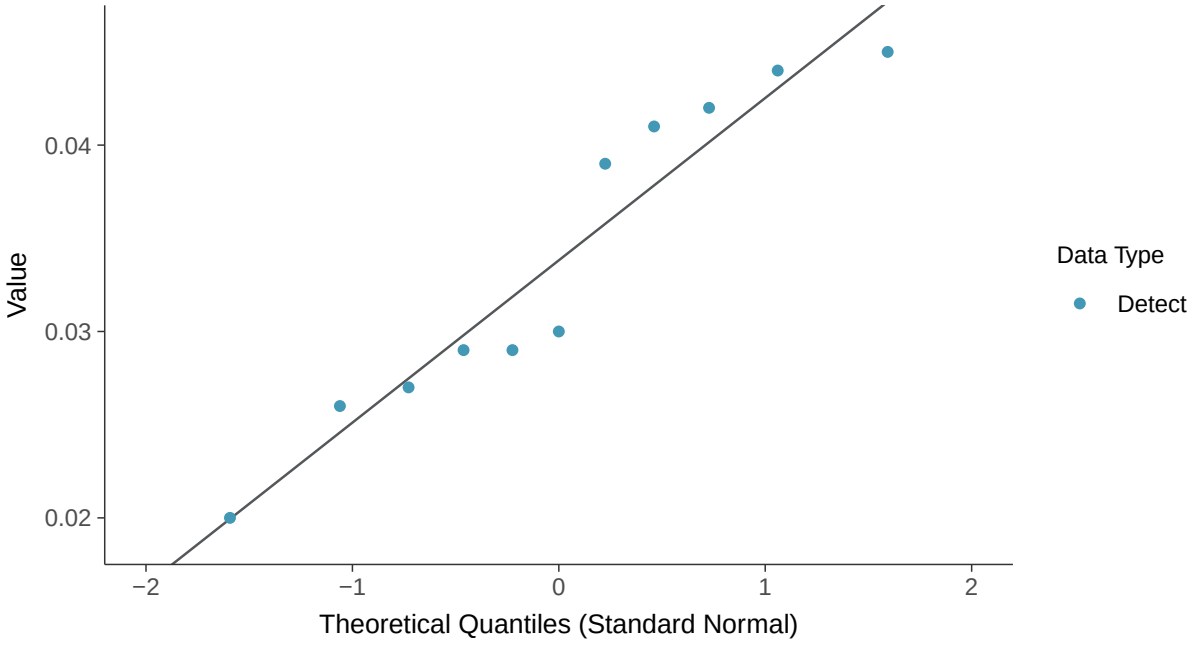
Boxplot by Season

Lithium, MW-18 (mg/L)



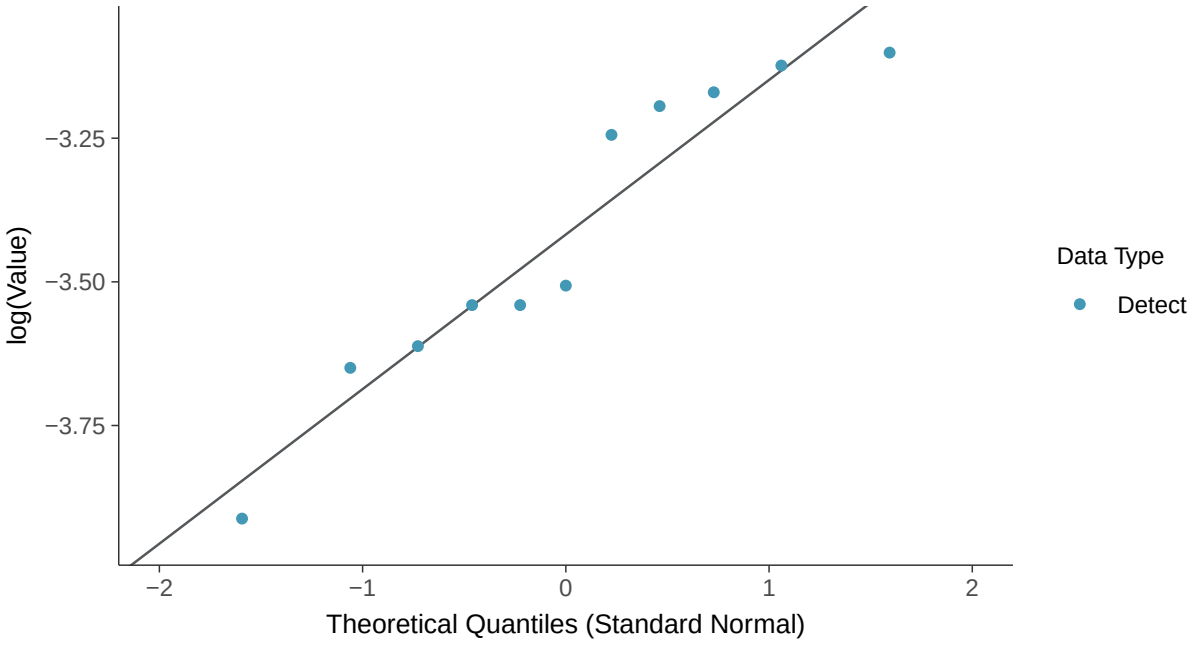
Normal Q-Q plot

Lithium, MW-18 (mg/L)



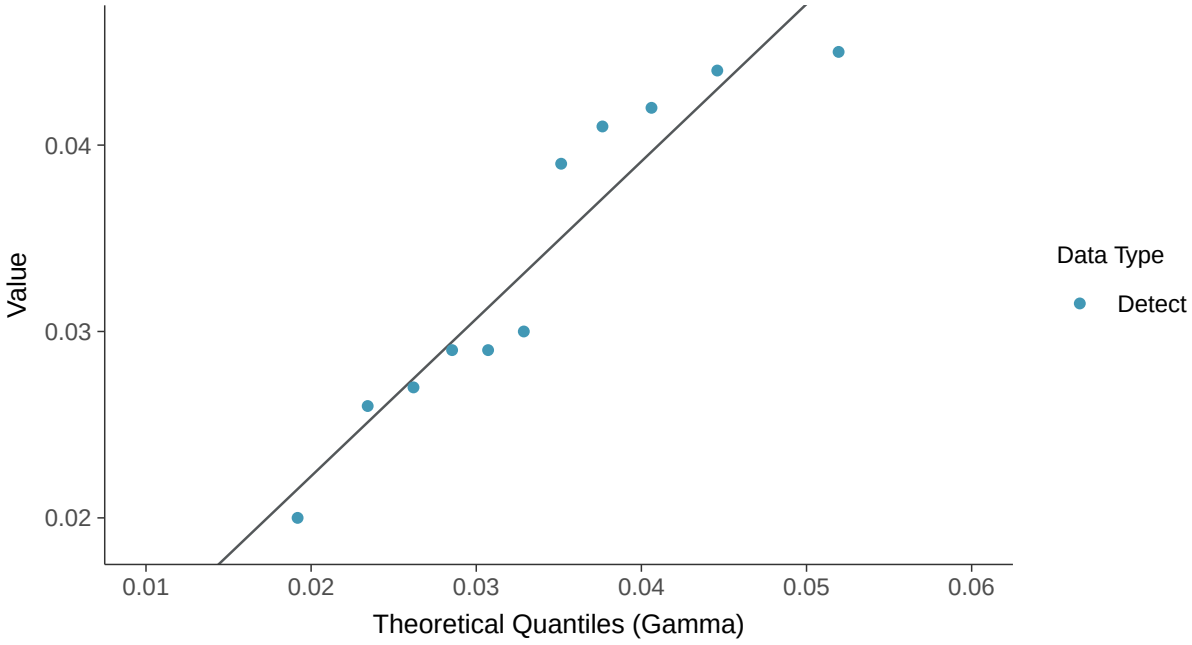
Lognormal Q-Q plot

Lithium, MW-18 (mg/L)



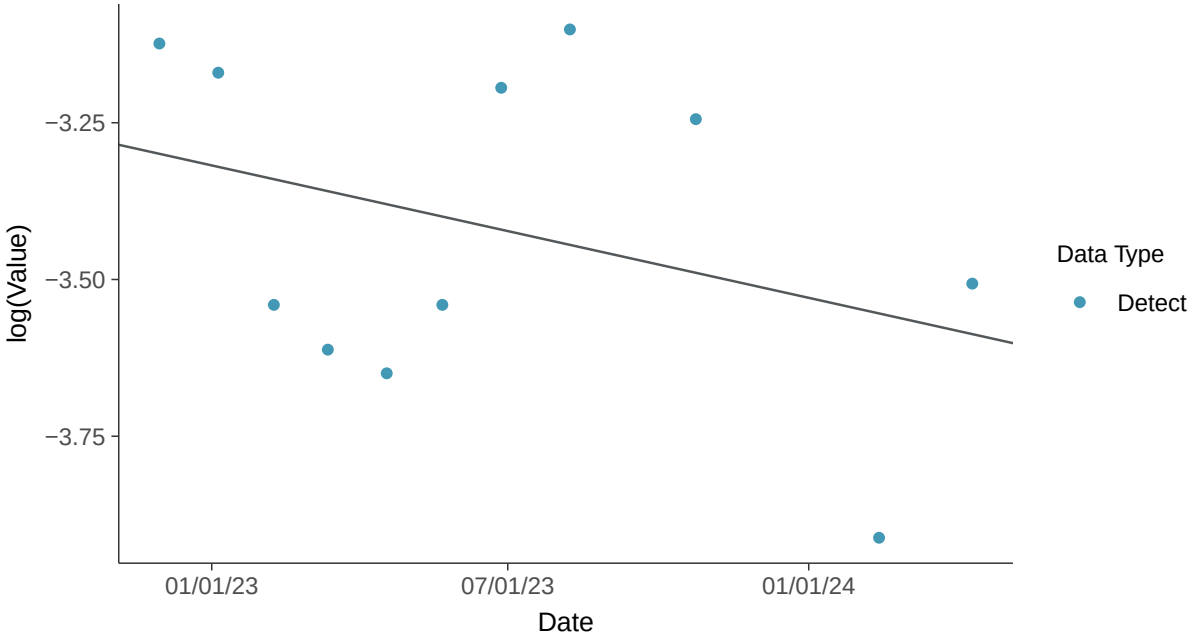
Gamma Q-Q plot

Lithium, MW-18 (mg/L)



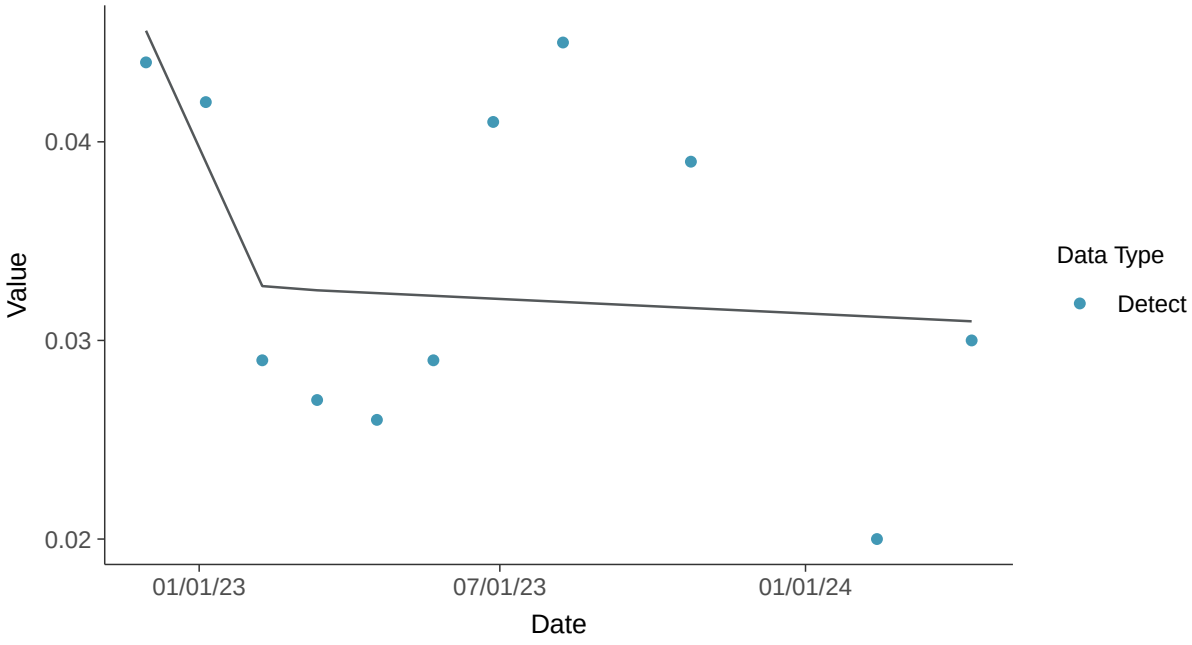
Trend Regression: Lognormal MLE

Lithium, MW-18 (mg/L)



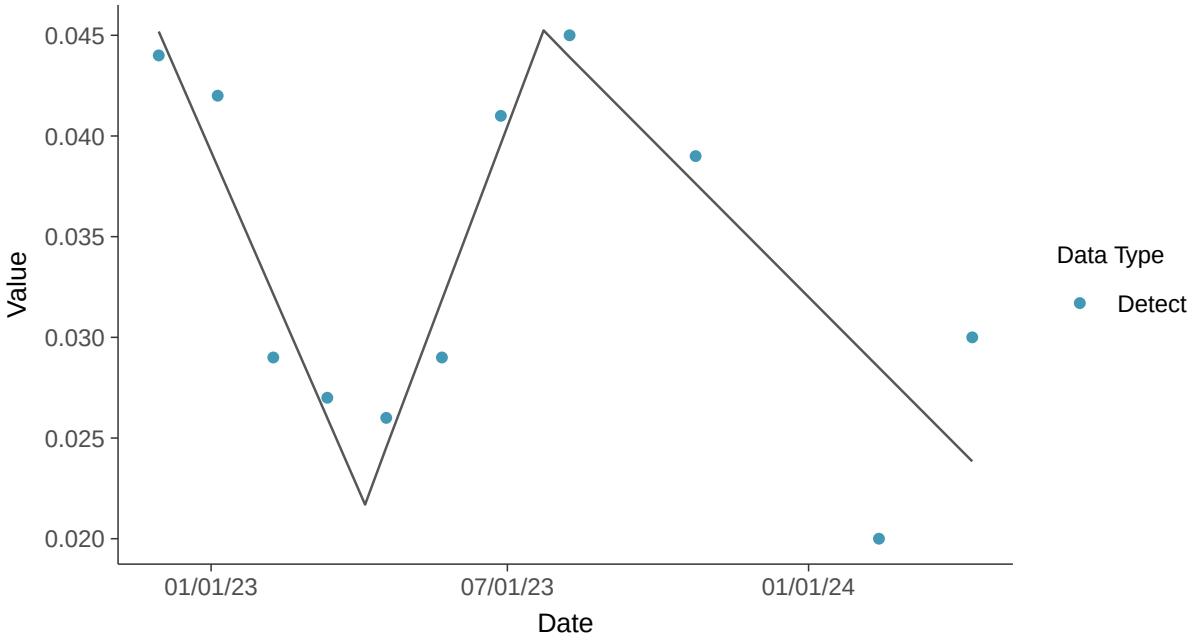
Trend Regression: Piecewise Linear-Linear

Lithium, MW-18 (mg/L)



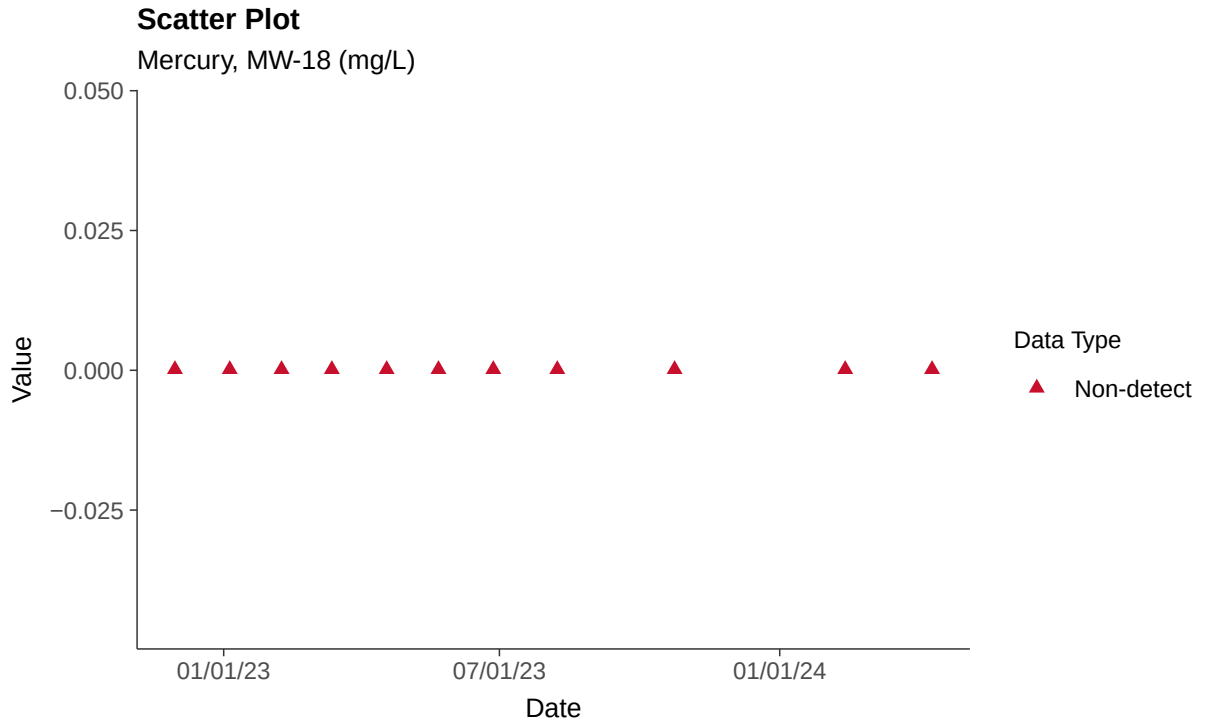
Trend Regression: Piecewise Linear-Linear-Linear

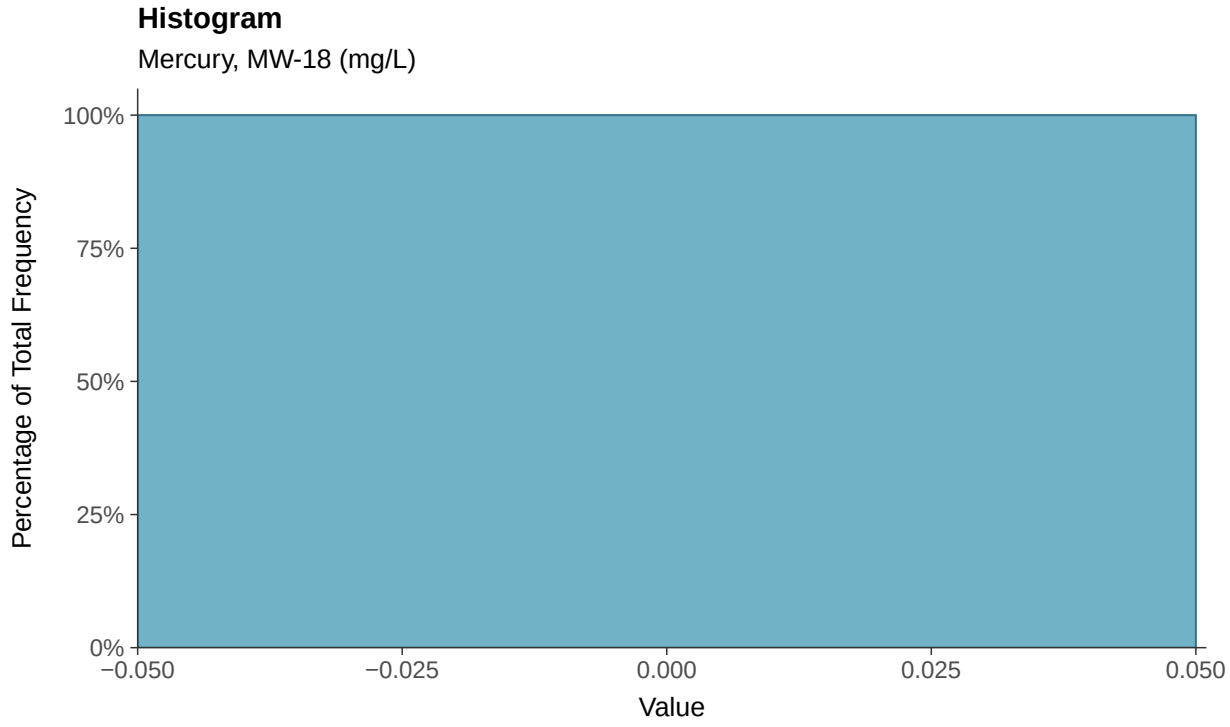
Lithium, MW-18 (mg/L)



Appendix IV: Mercury, MW-18

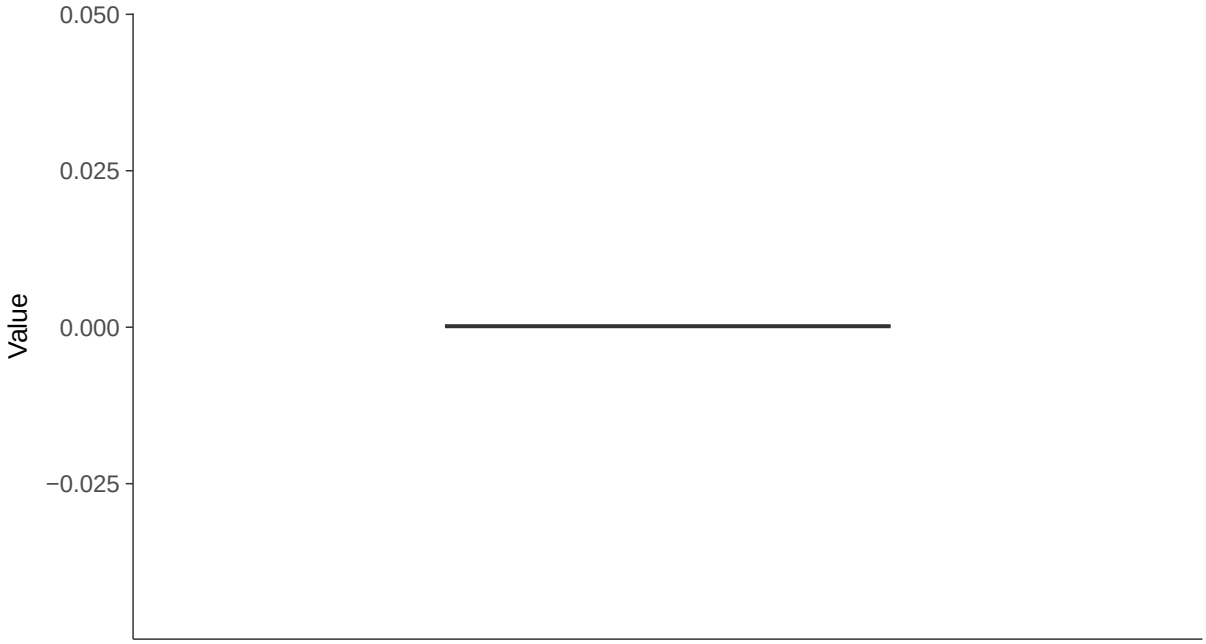
ID: 1_28_5_117





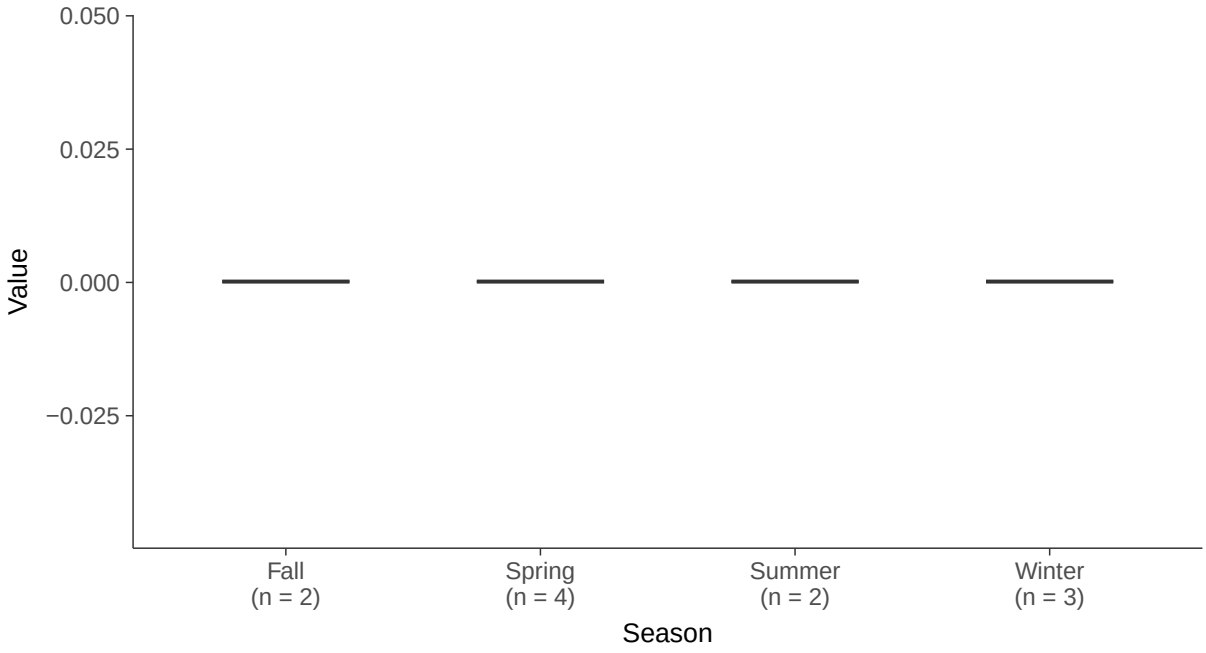
Boxplot

Mercury, MW-18 (mg/L)



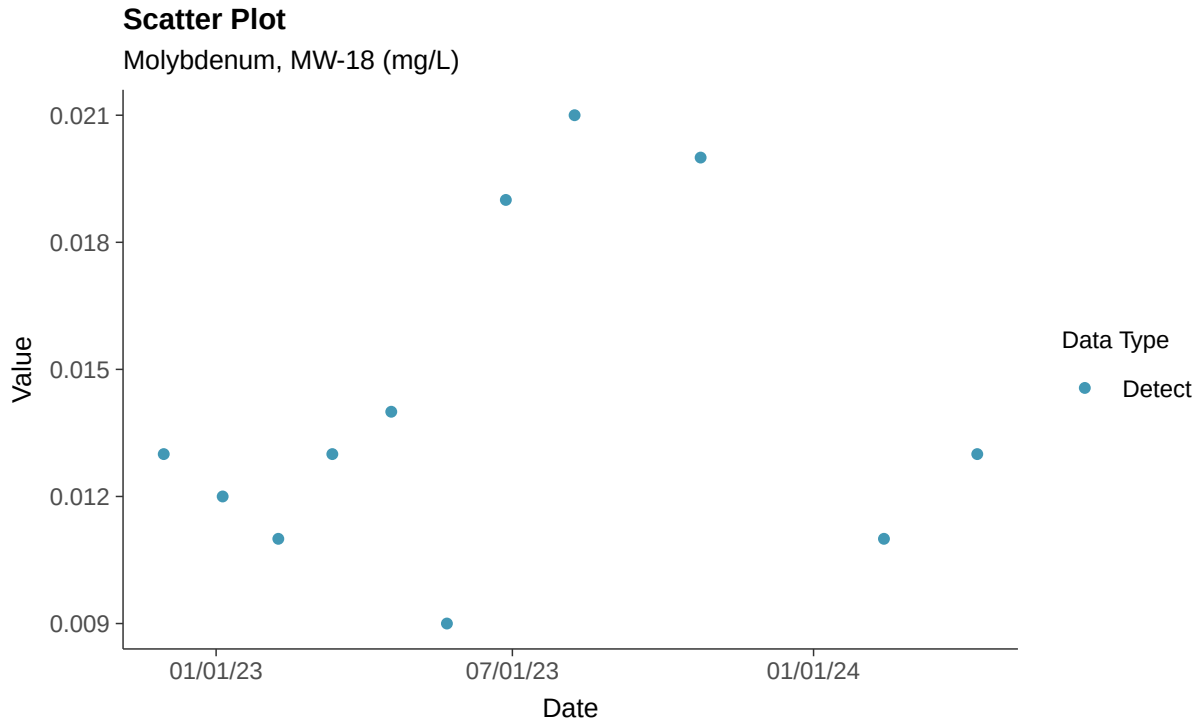
Boxplot by Season

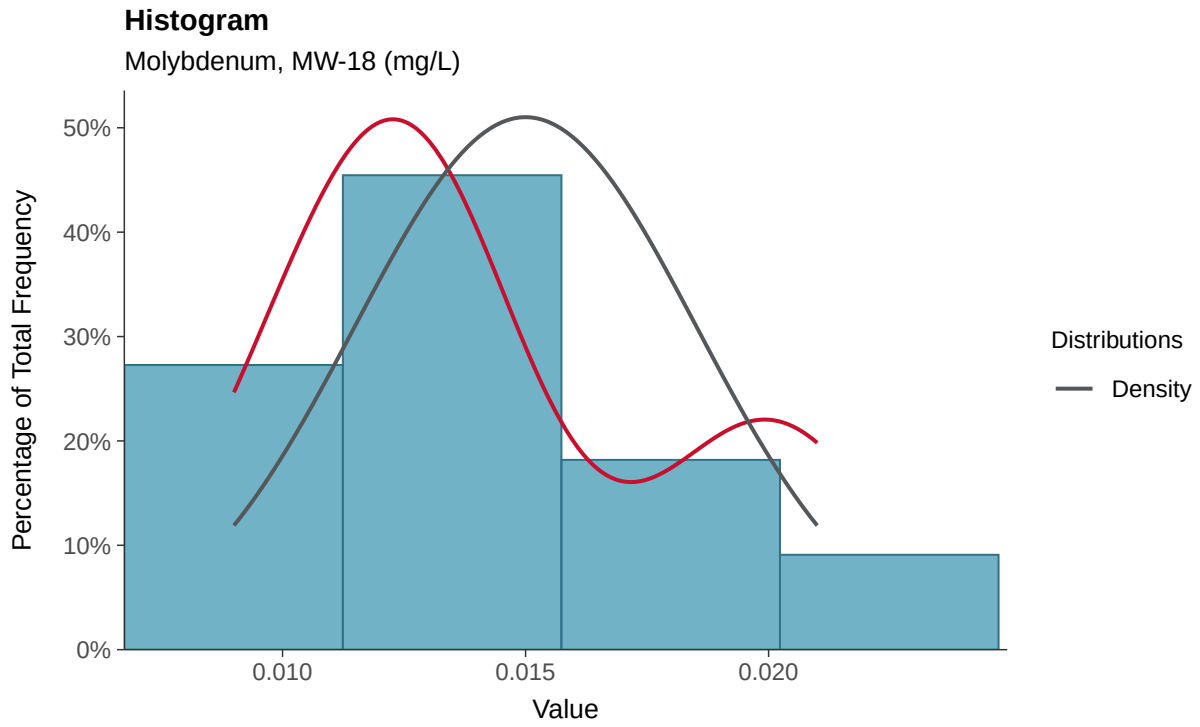
Mercury, MW-18 (mg/L)



Appendix IV: Molybdenum, MW-18

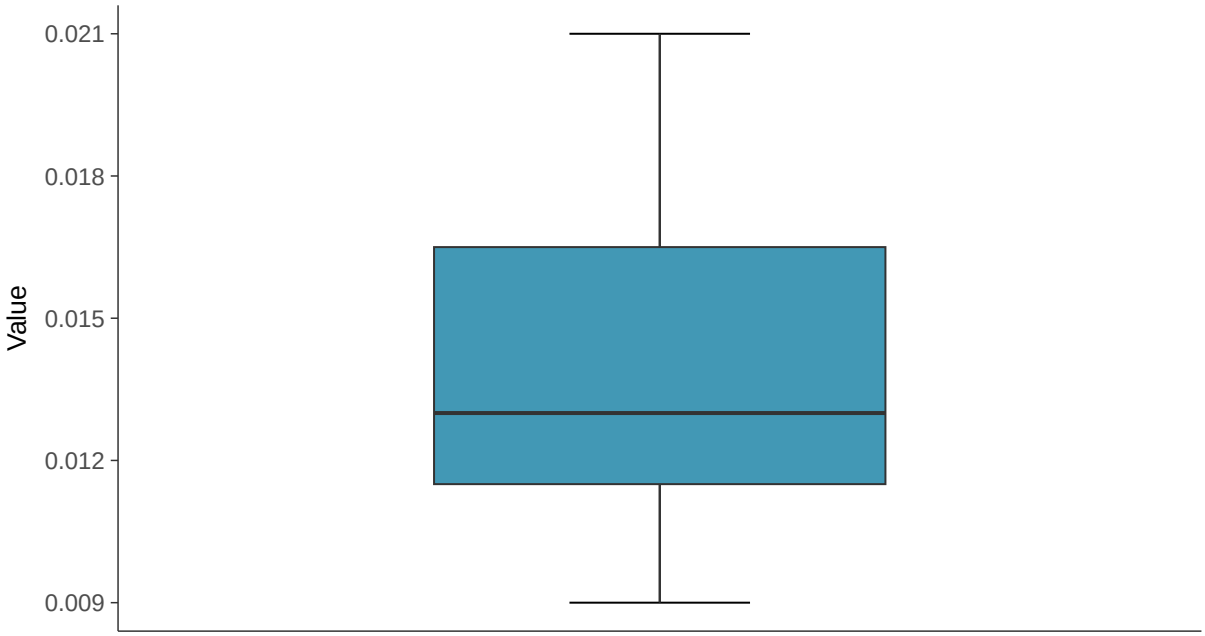
ID: 1_28_5_118





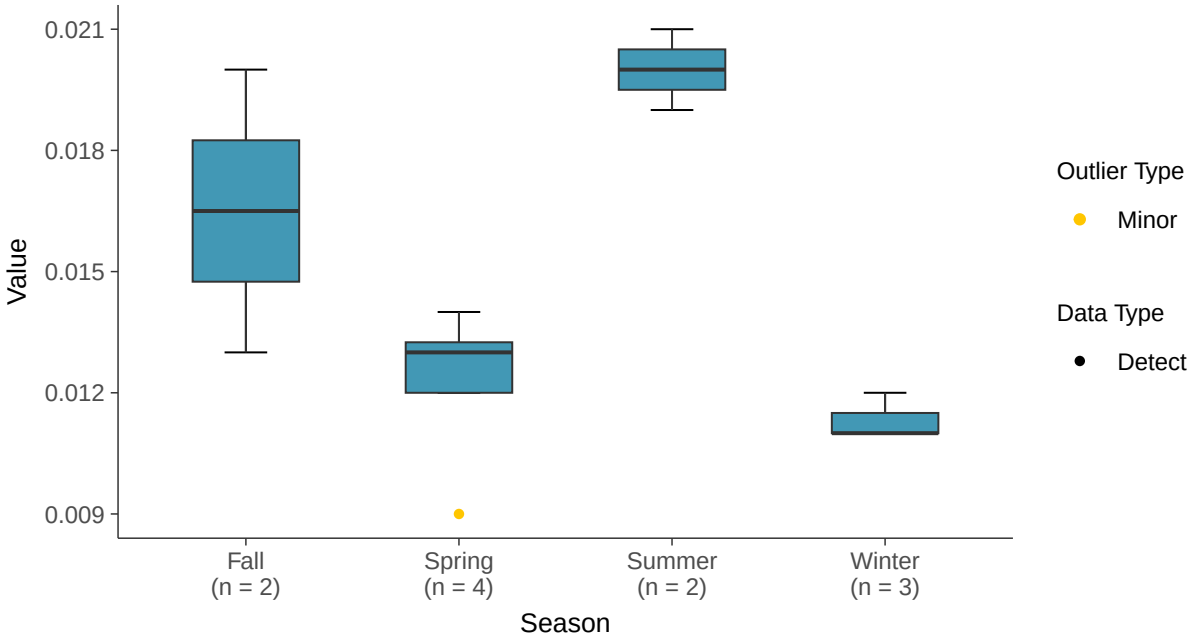
Boxplot

Molybdenum, MW-18 (mg/L)



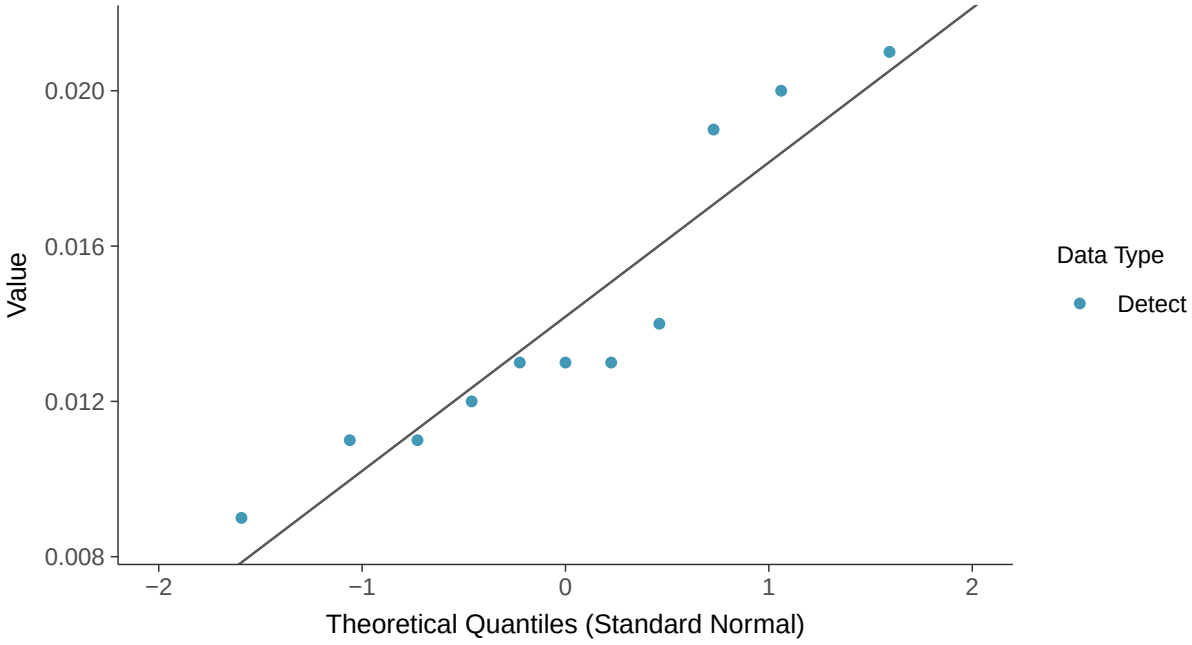
Boxplot by Season

Molybdenum, MW-18 (mg/L)



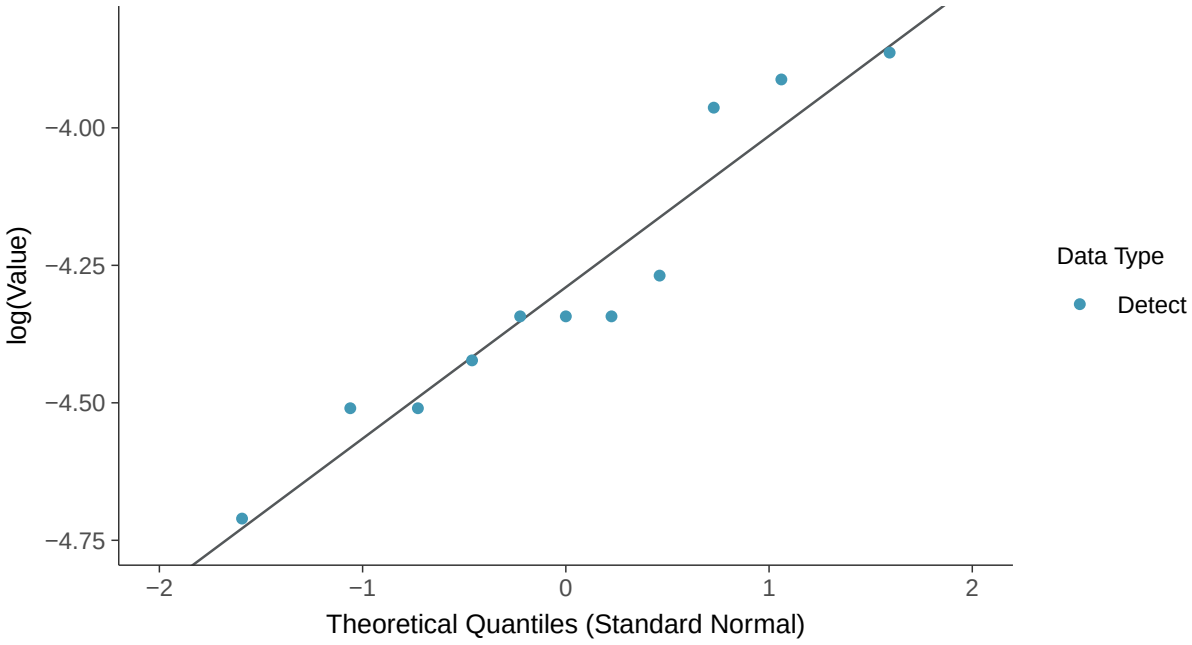
Normal Q-Q plot

Molybdenum, MW-18 (mg/L)



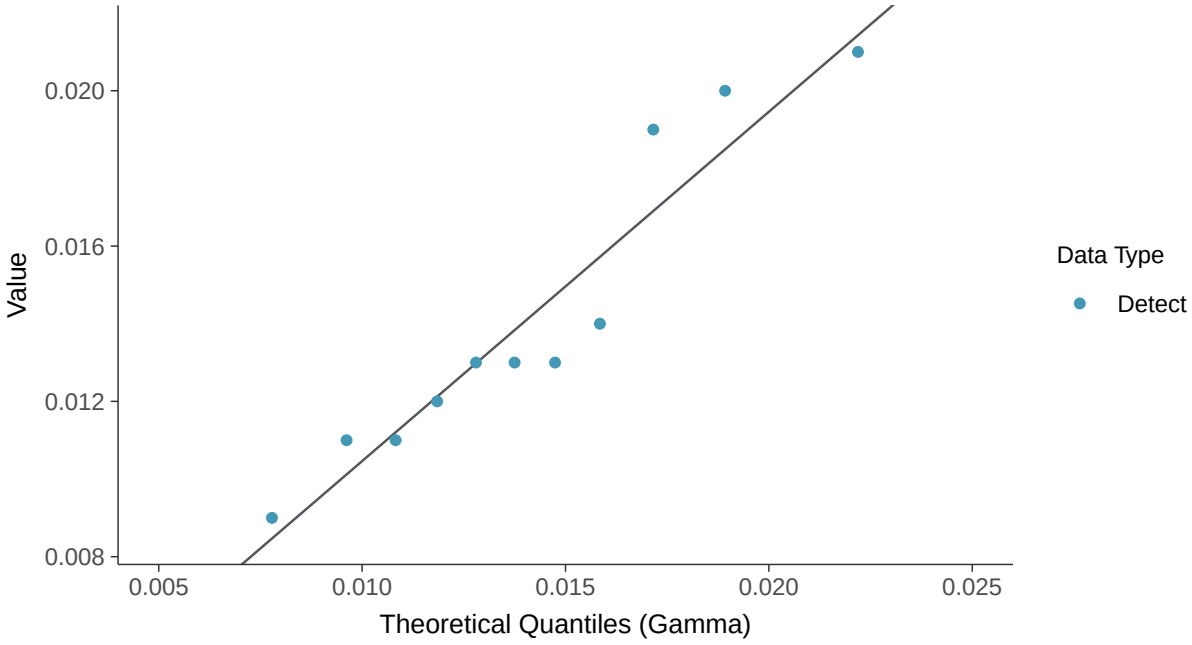
Lognormal Q-Q plot

Molybdenum, MW-18 (mg/L)



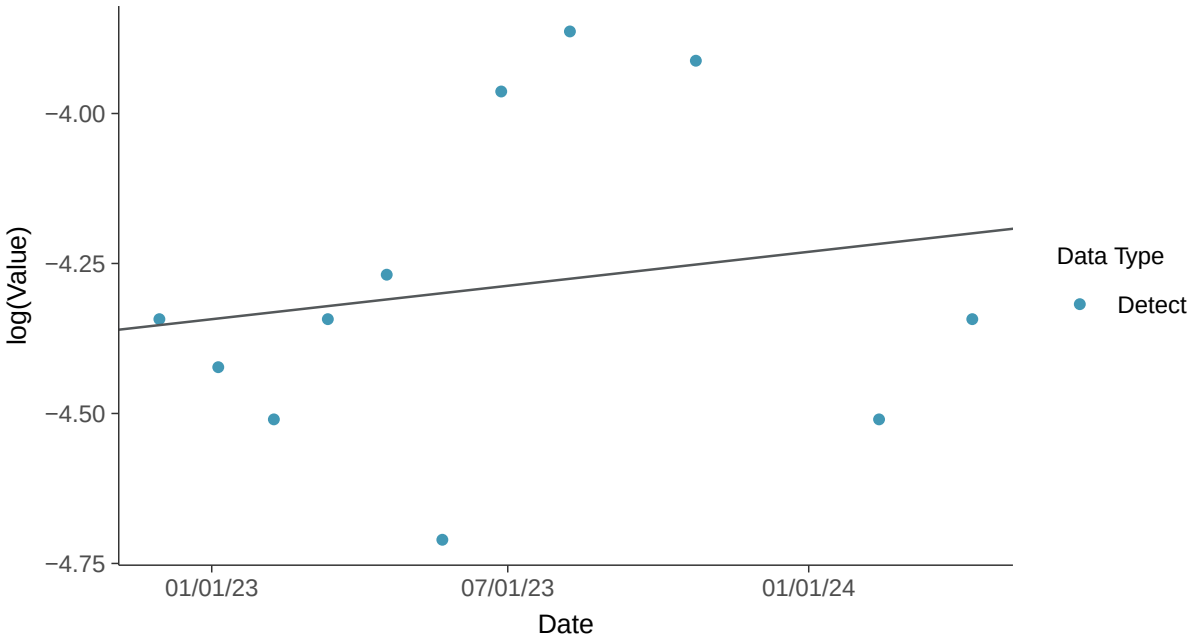
Gamma Q-Q plot

Molybdenum, MW-18 (mg/L)



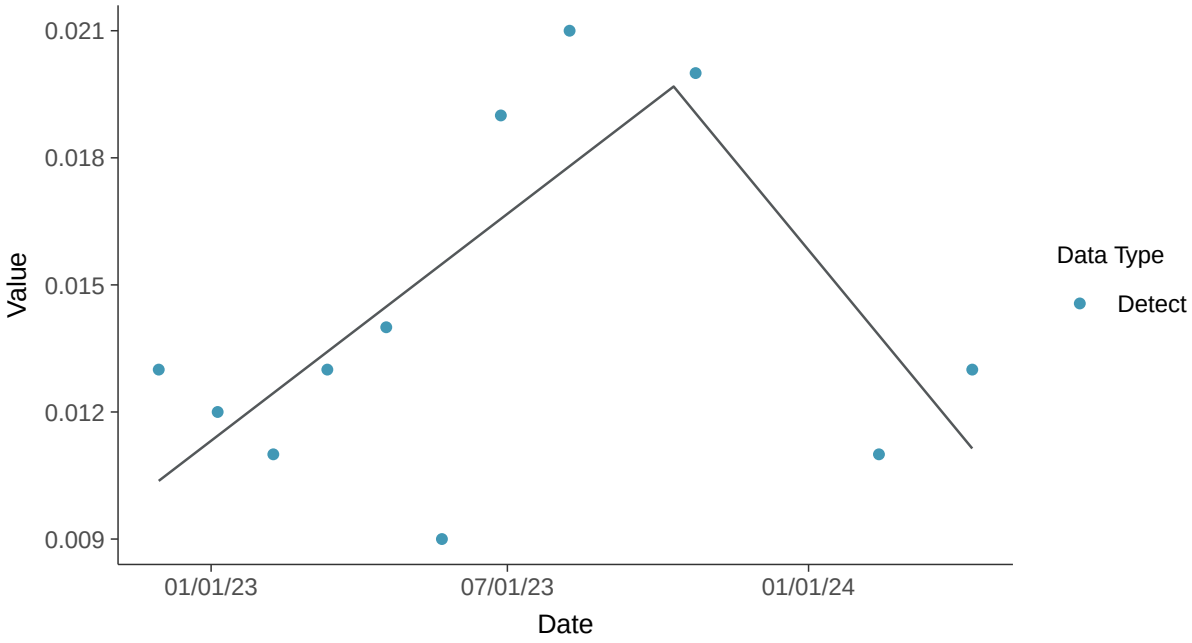
Trend Regression: Lognormal MLE

Molybdenum, MW-18 (mg/L)



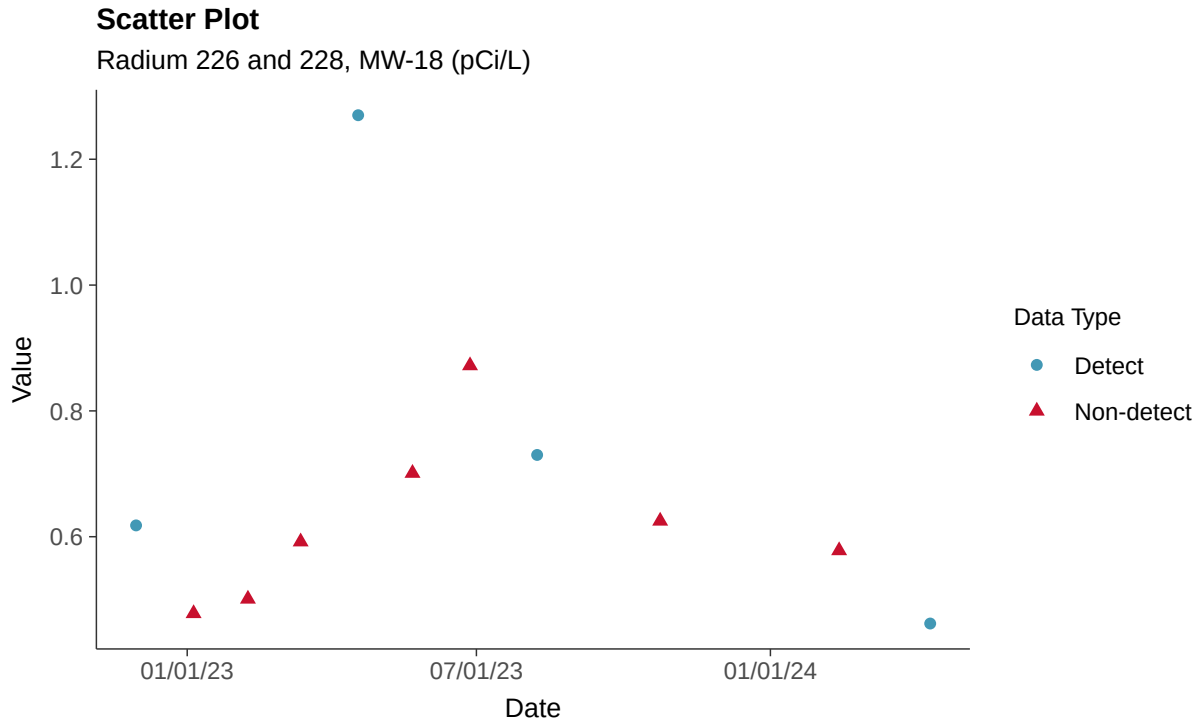
Trend Regression: Piecewise Linear-Linear

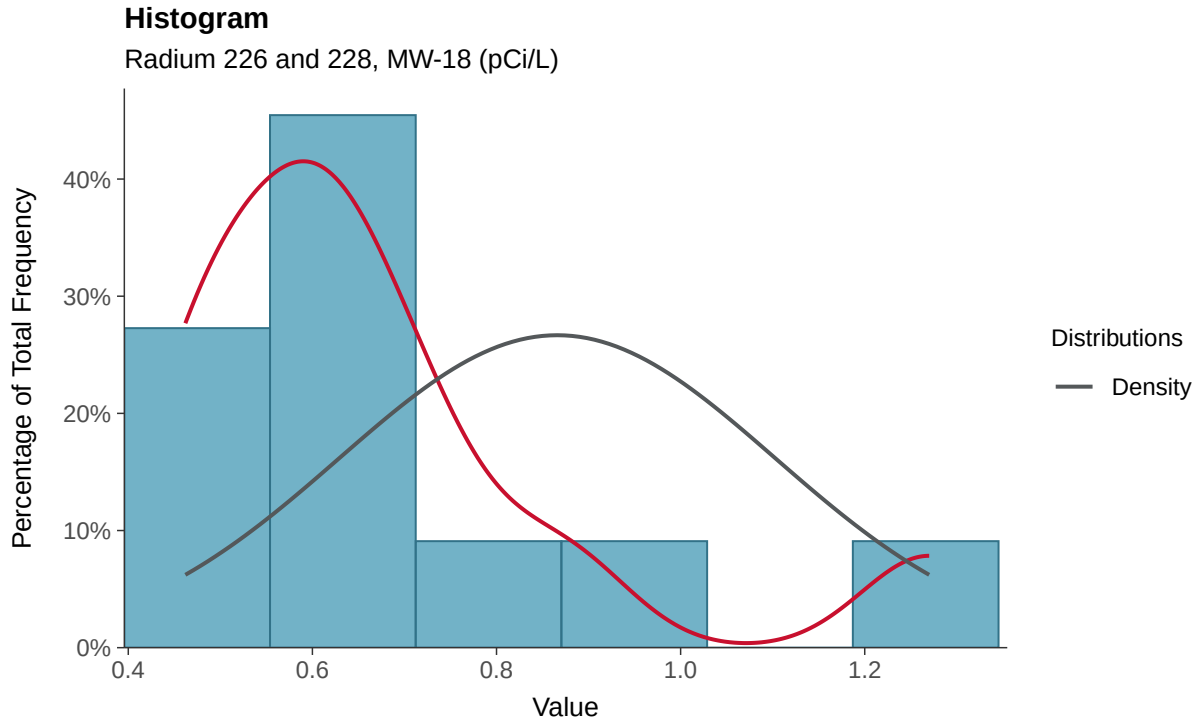
Molybdenum, MW-18 (mg/L)



Appendix IV: Radium 226 and 228, MW-18

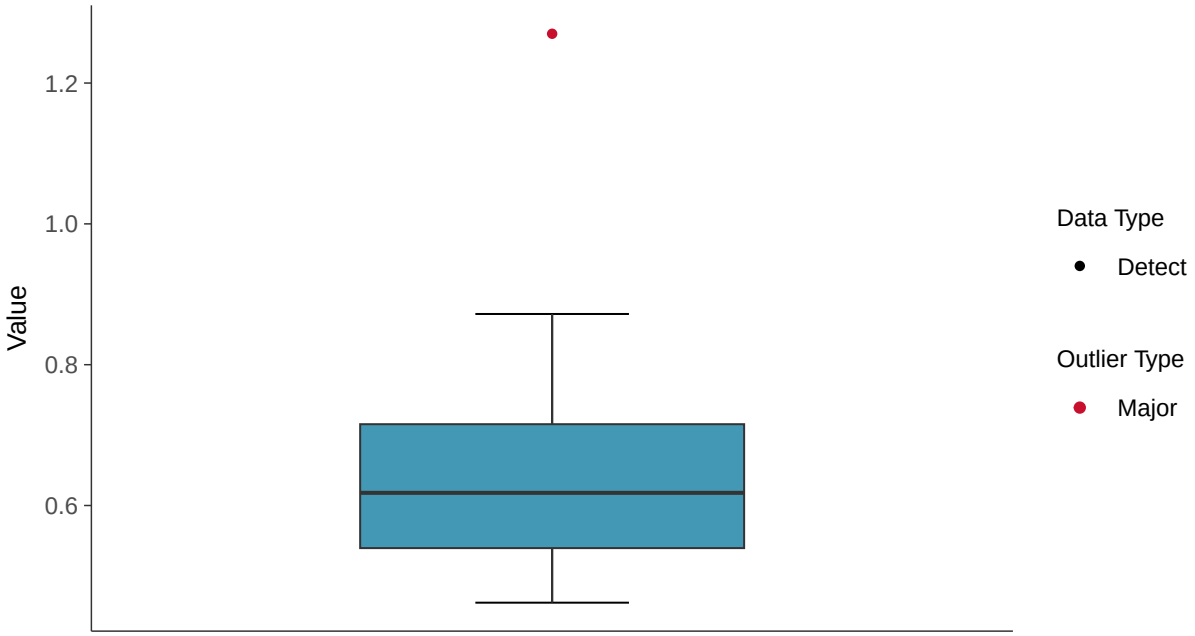
ID: 1_28_5_121





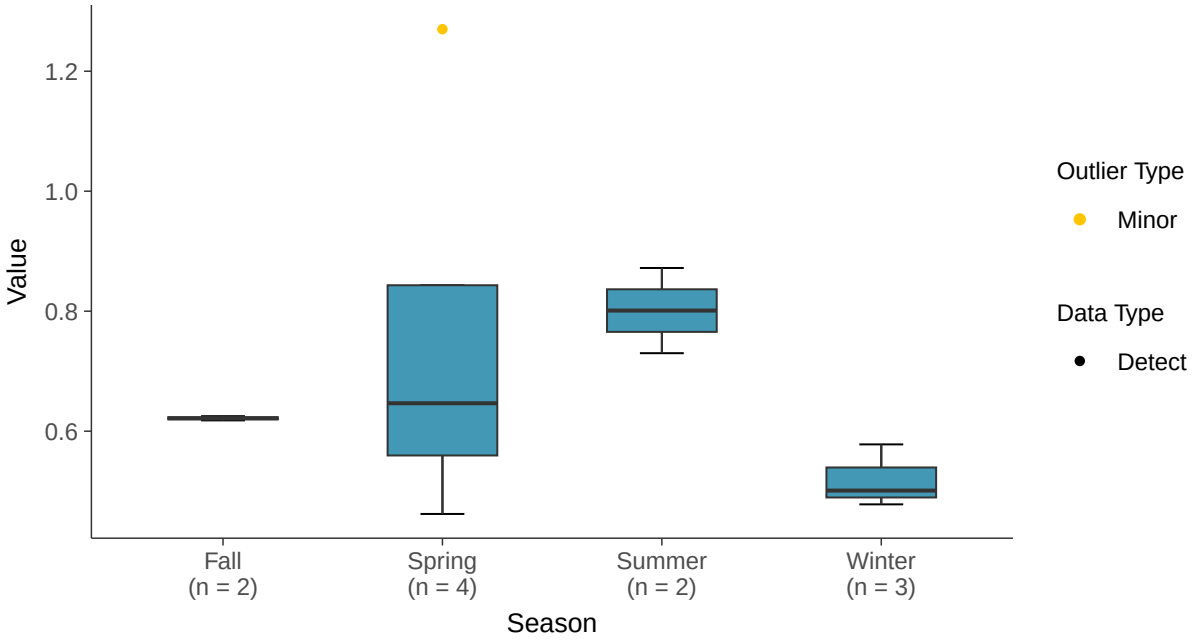
Boxplot

Radium 226 and 228, MW-18 (pCi/L)



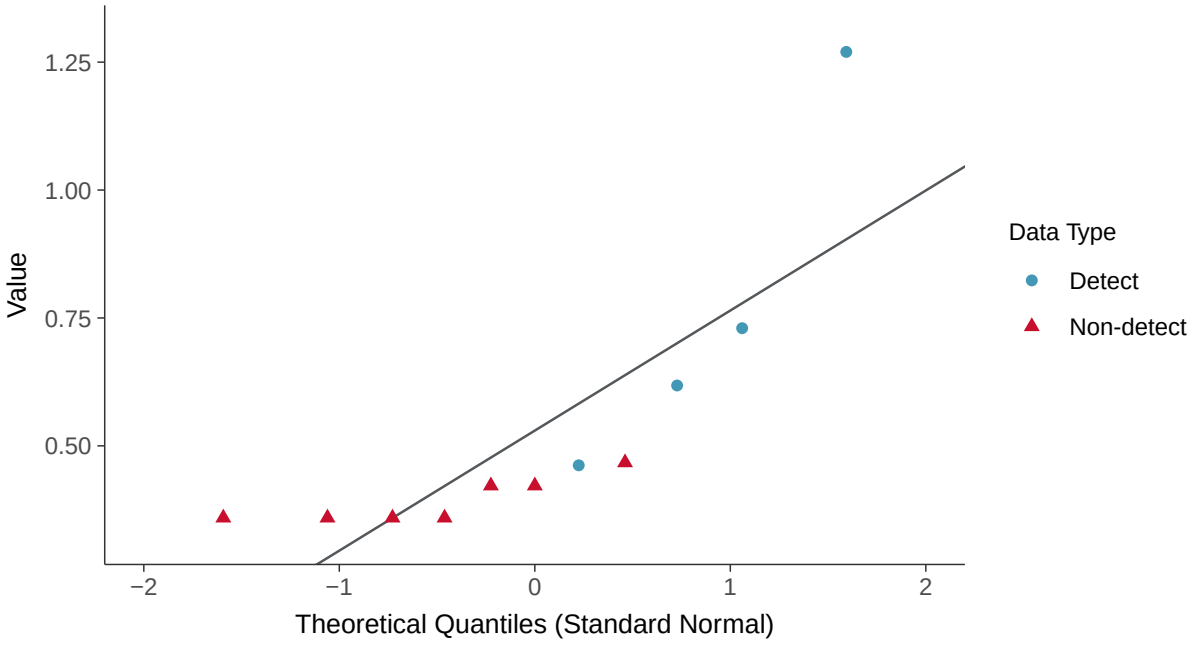
Boxplot by Season

Radium 226 and 228, MW-18 (pCi/L)



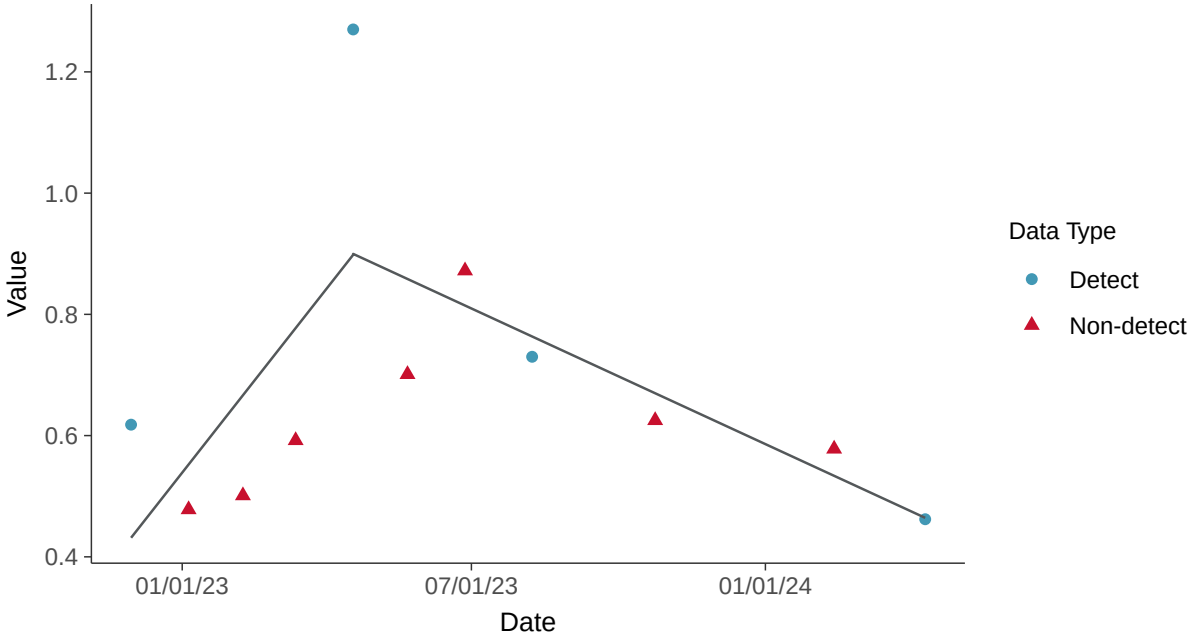
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-18 (pCi/L)



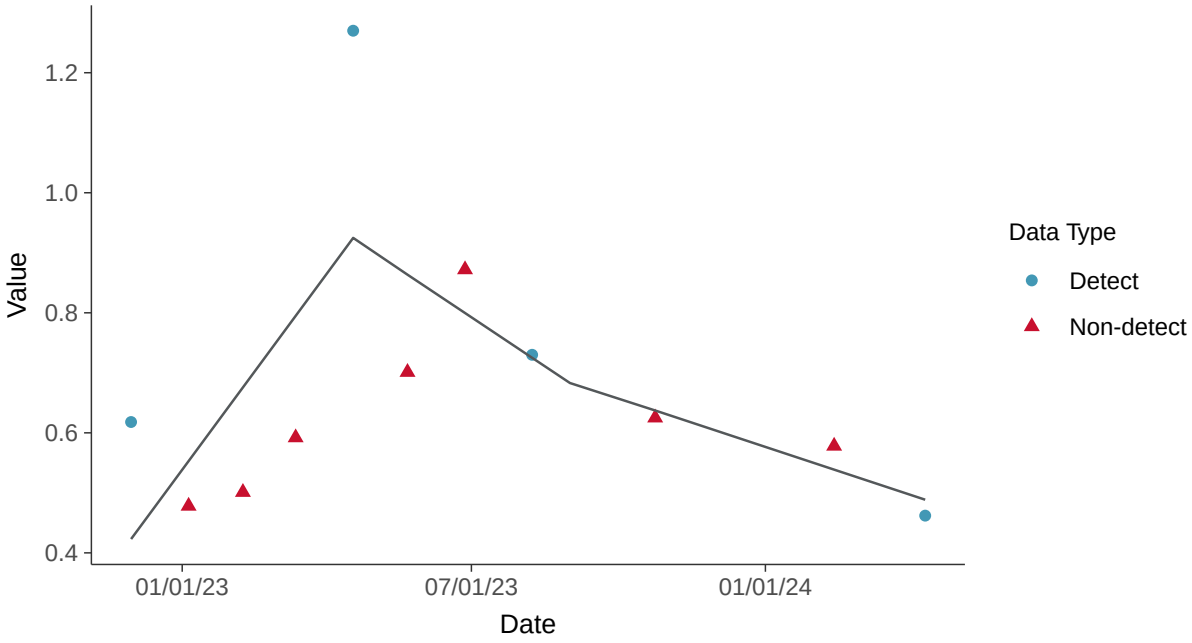
Trend Regression: Piecewise Linear-Linear

Radium 226 and 228, MW-18 (pCi/L)



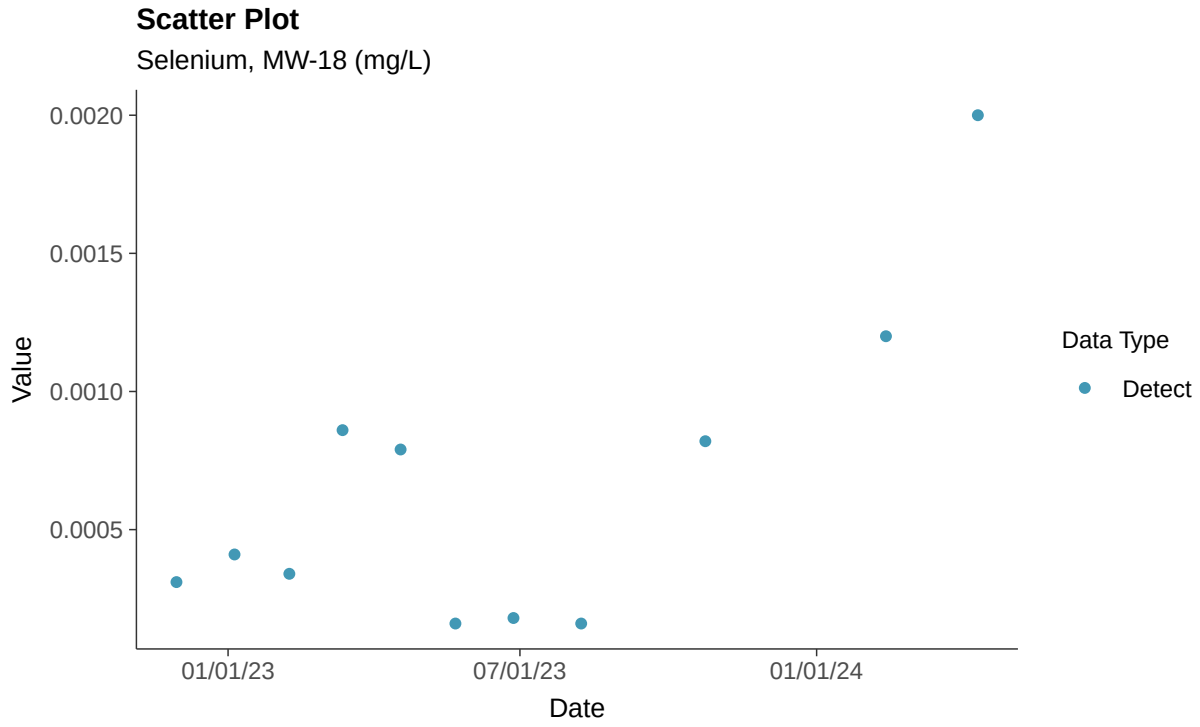
Trend Regression: Piecewise Linear-Linear-Linear

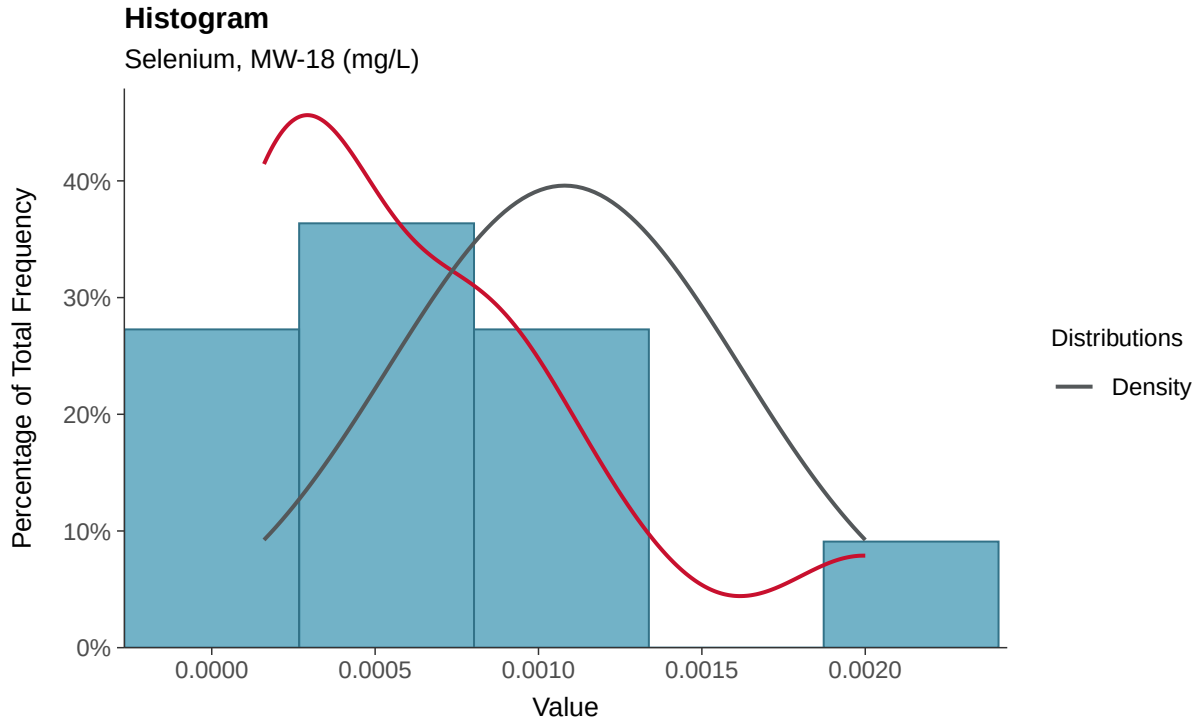
Radium 226 and 228, MW-18 (pCi/L)



Appendix IV: Selenium, MW-18

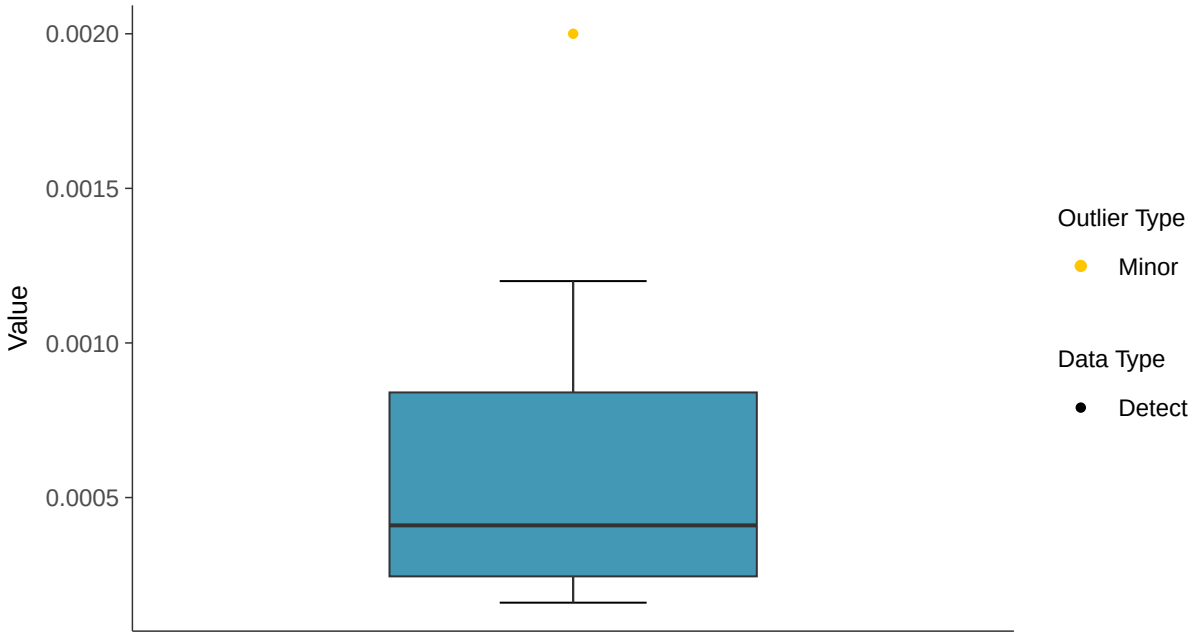
ID: 1_28_5_122





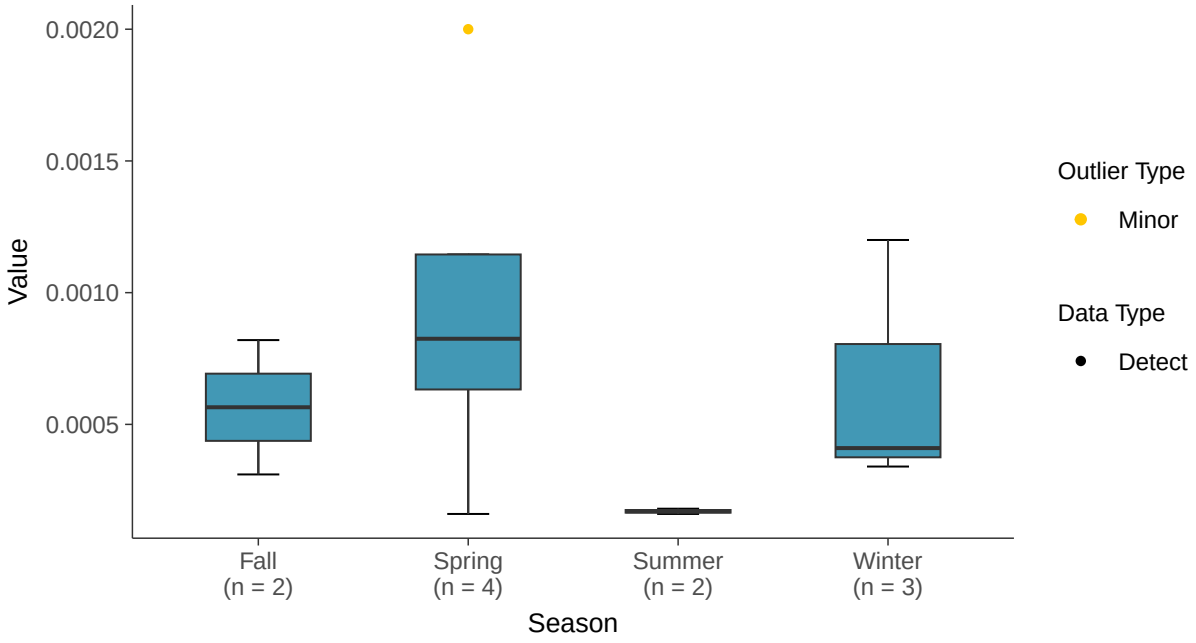
Boxplot

Selenium, MW-18 (mg/L)



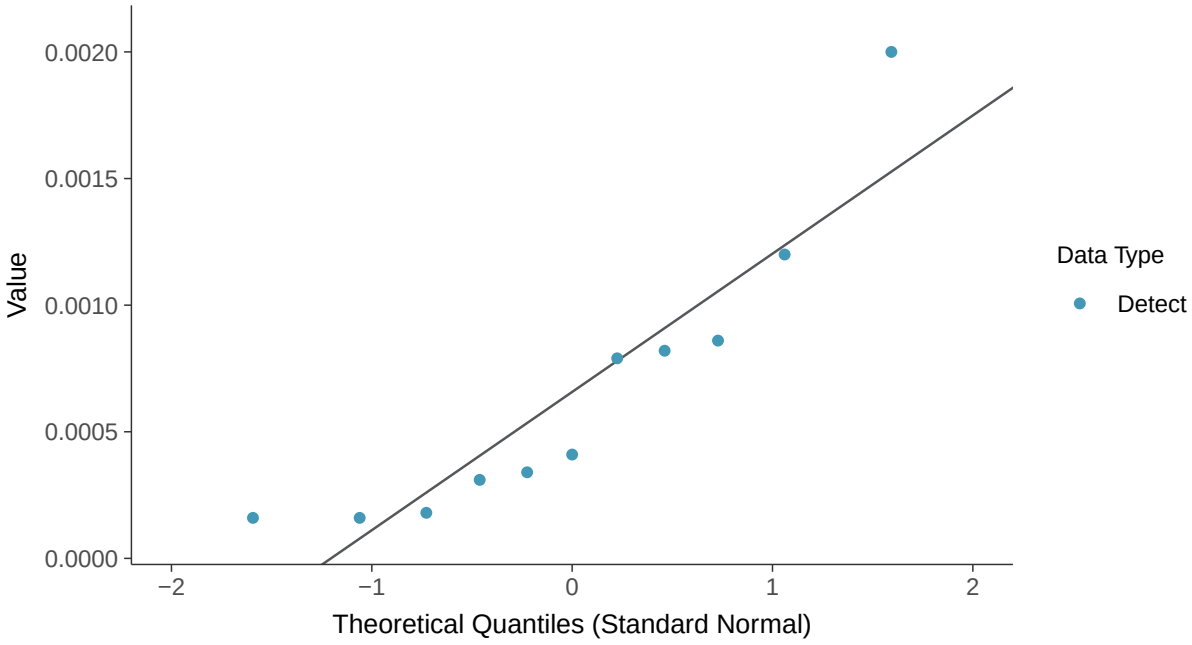
Boxplot by Season

Selenium, MW-18 (mg/L)



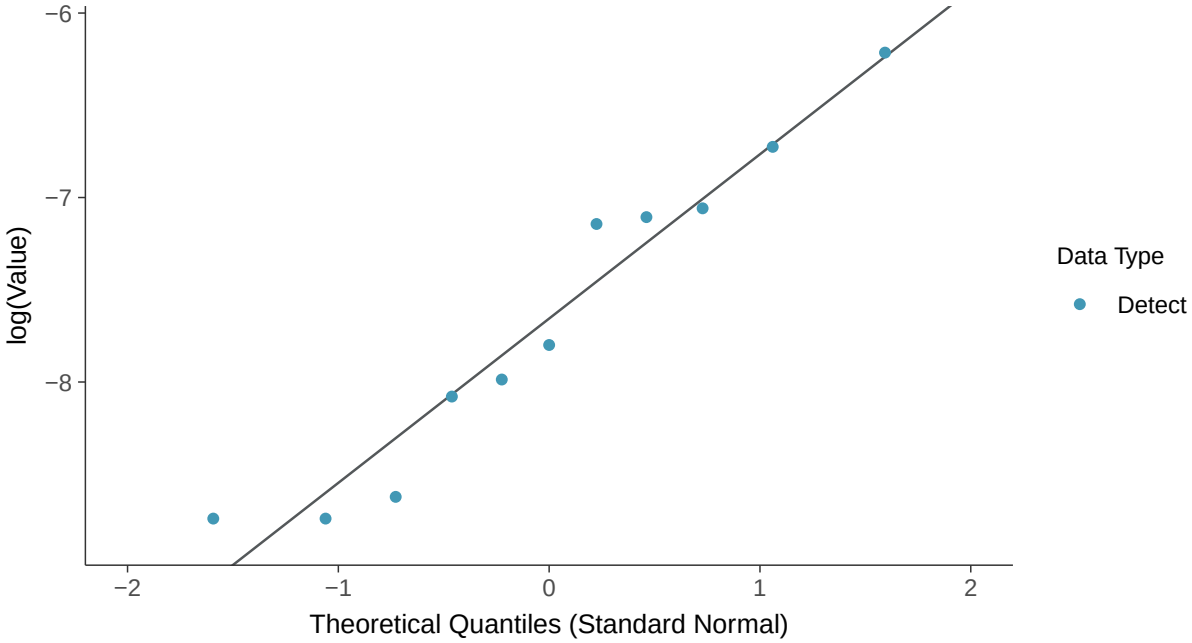
Normal Q-Q plot

Selenium, MW-18 (mg/L)



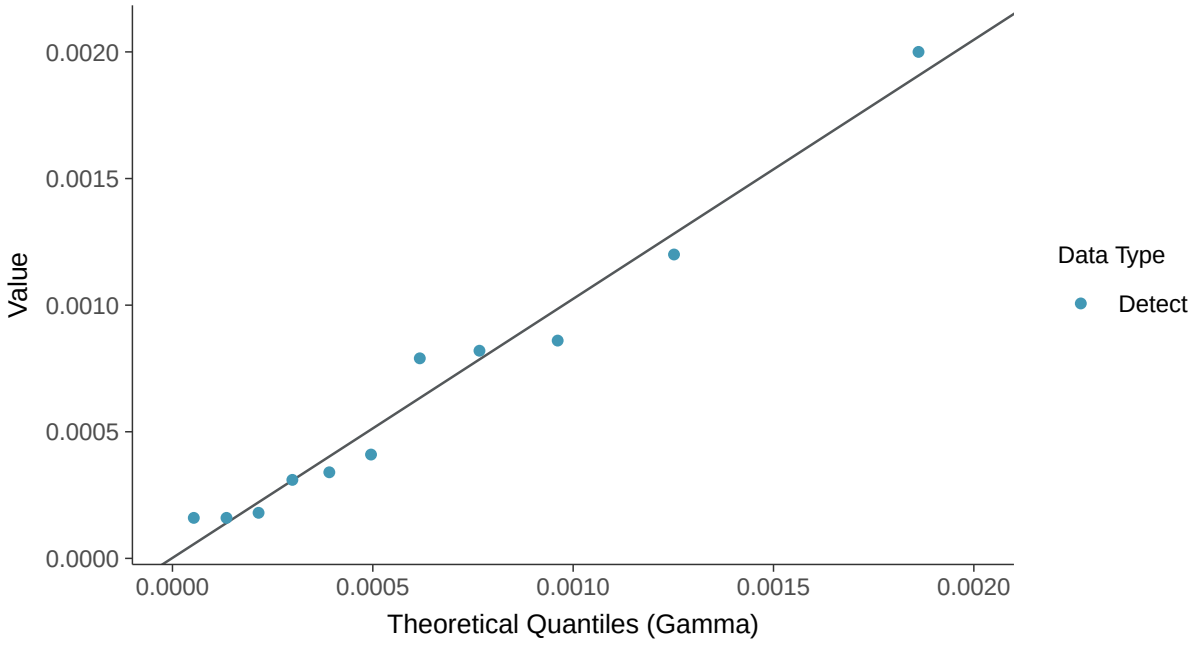
Lognormal Q-Q plot

Selenium, MW-18 (mg/L)



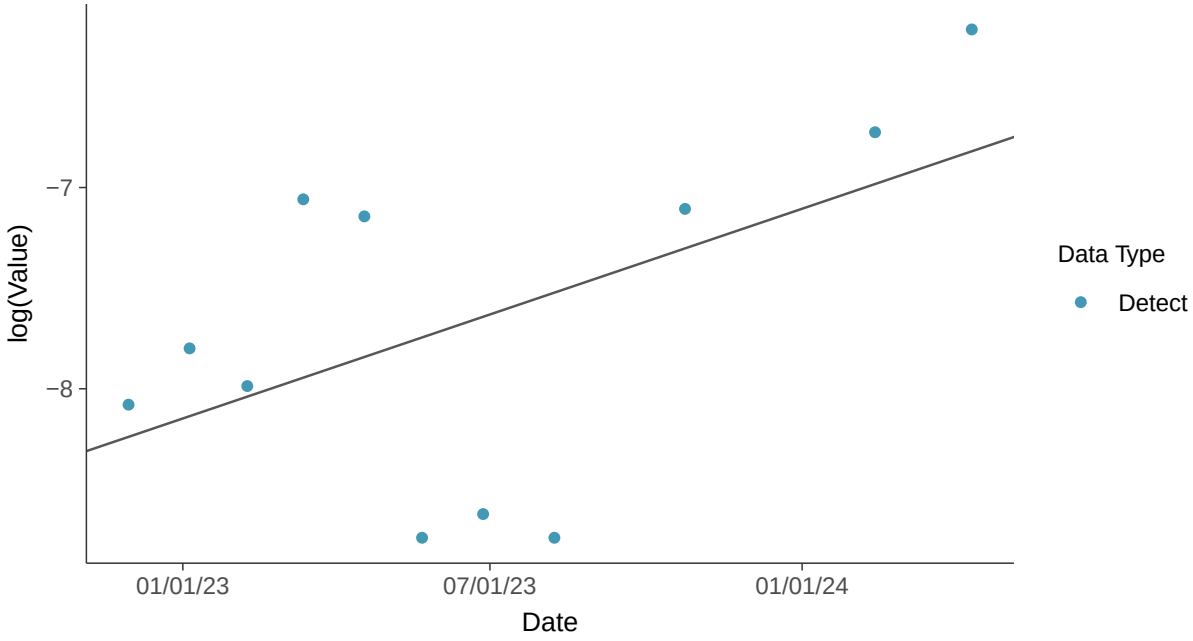
Gamma Q-Q plot

Selenium, MW-18 (mg/L)



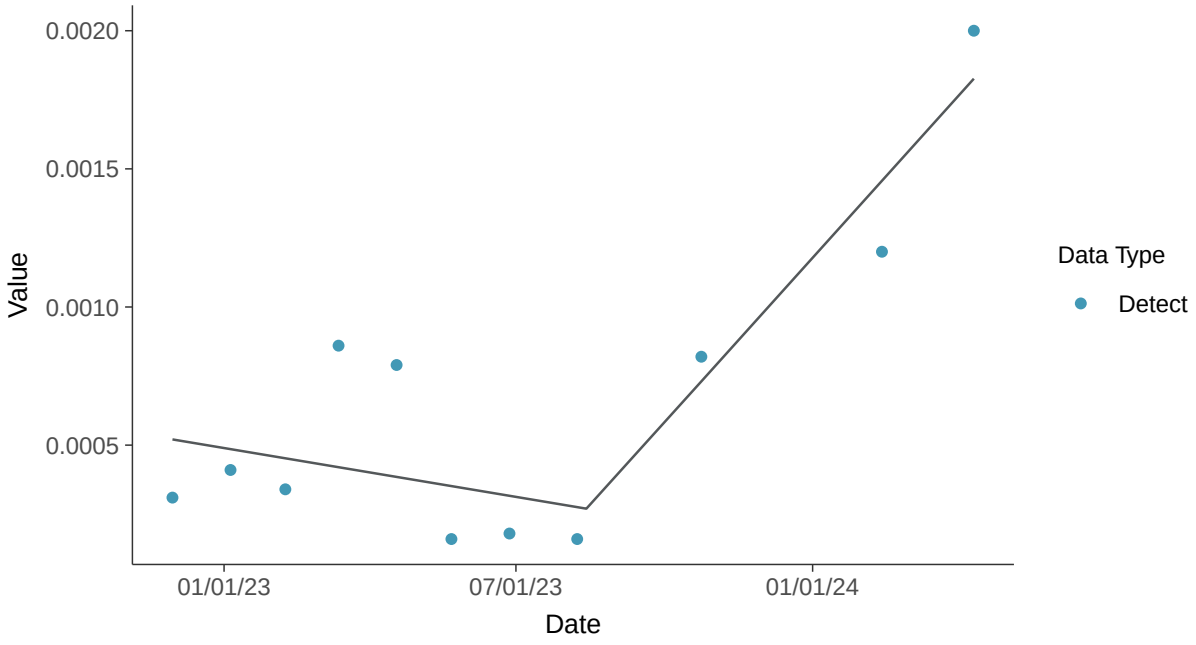
Trend Regression: Lognormal MLE

Selenium, MW-18 (mg/L)



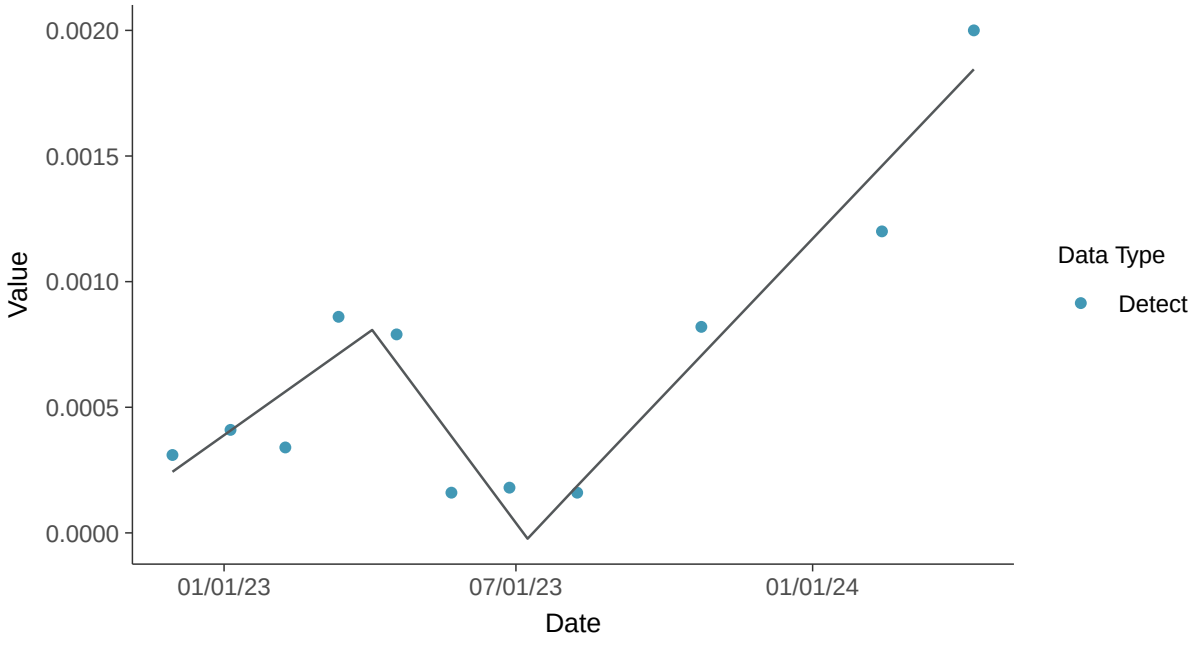
Trend Regression: Piecewise Linear-Linear

Selenium, MW-18 (mg/L)



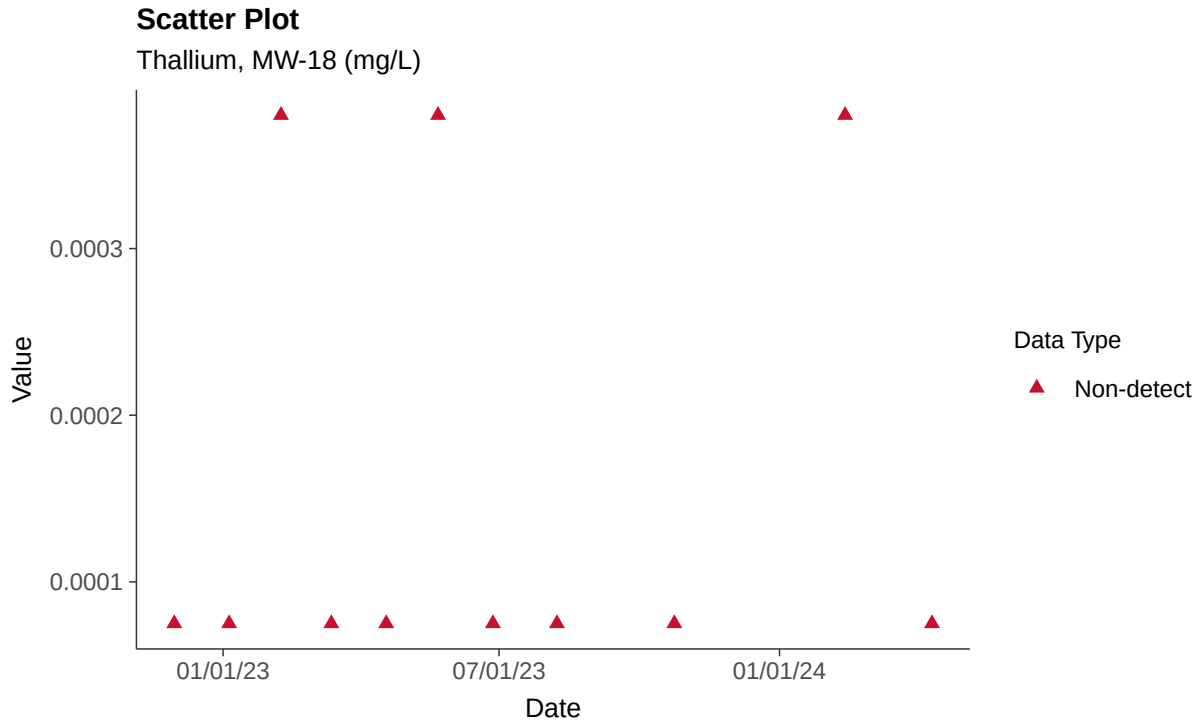
Trend Regression: Piecewise Linear-Linear-Linear

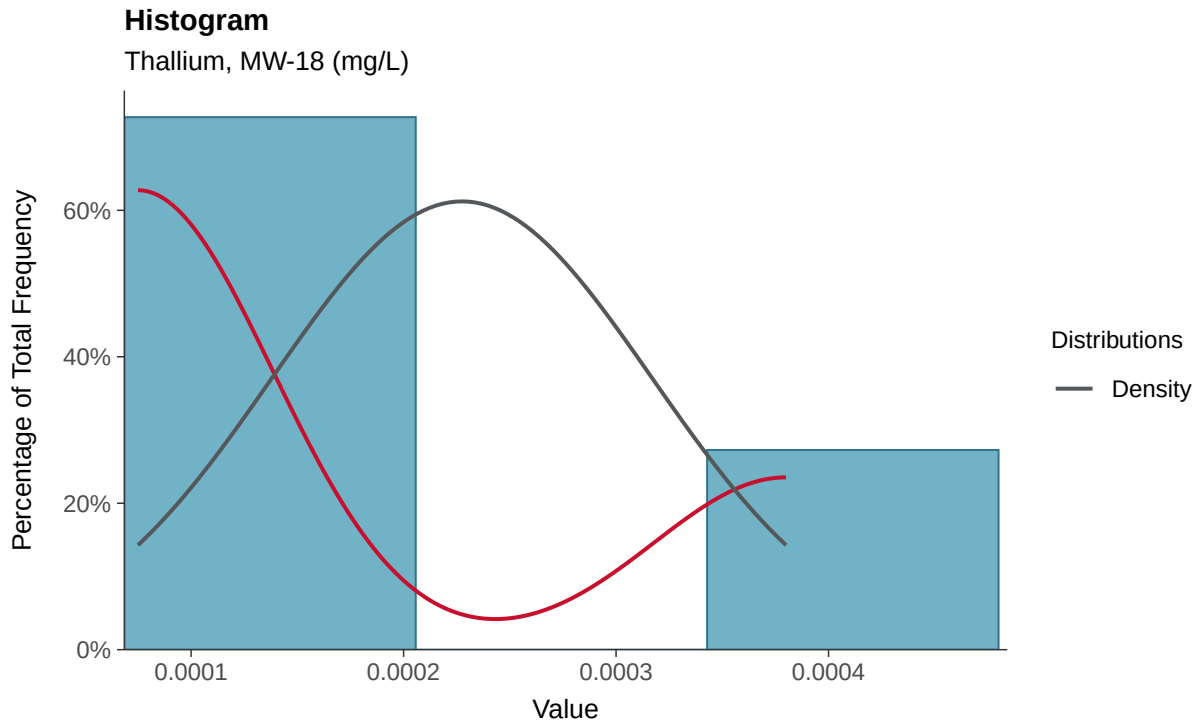
Selenium, MW-18 (mg/L)



Appendix IV: Thallium, MW-18

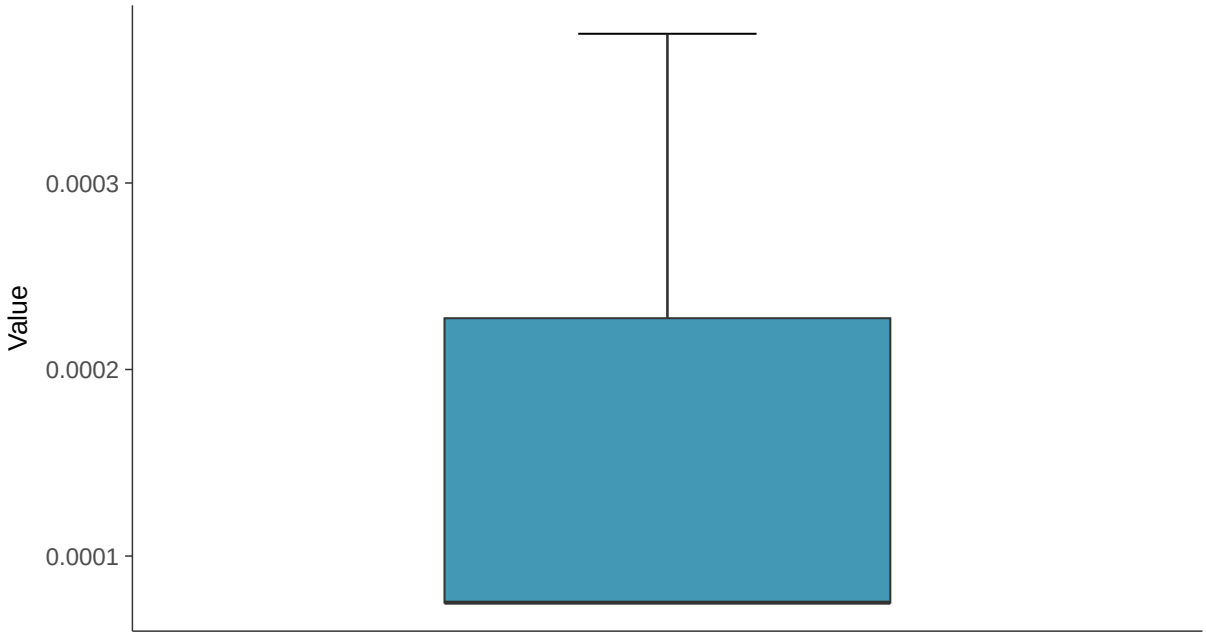
ID: 1_28_5_125





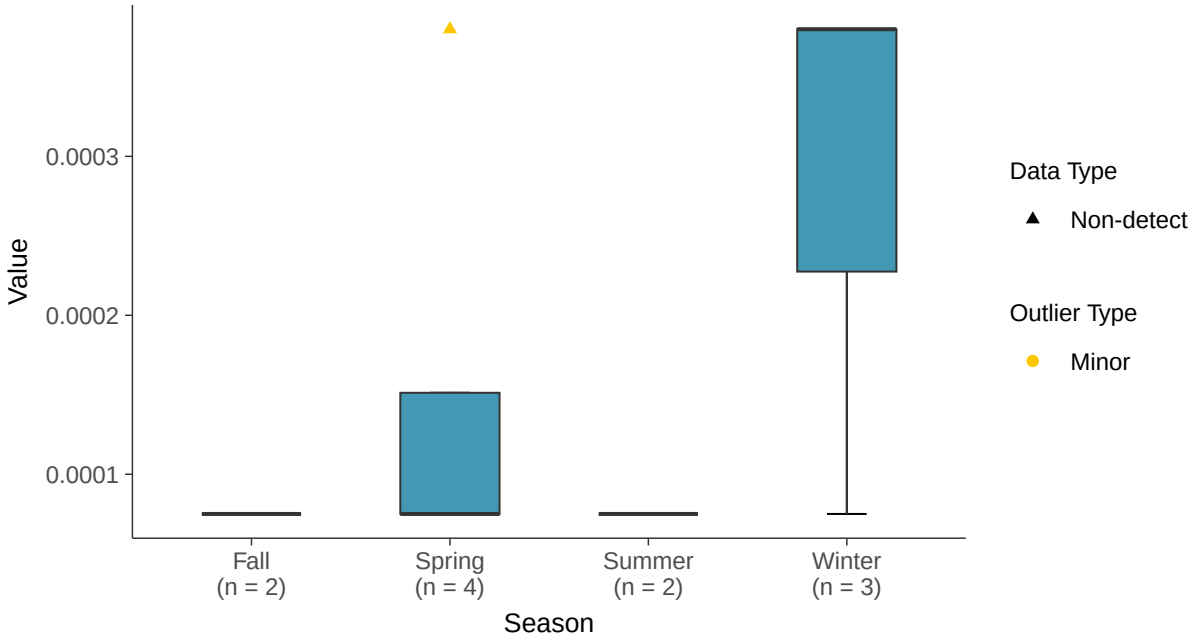
Boxplot

Thallium, MW-18 (mg/L)



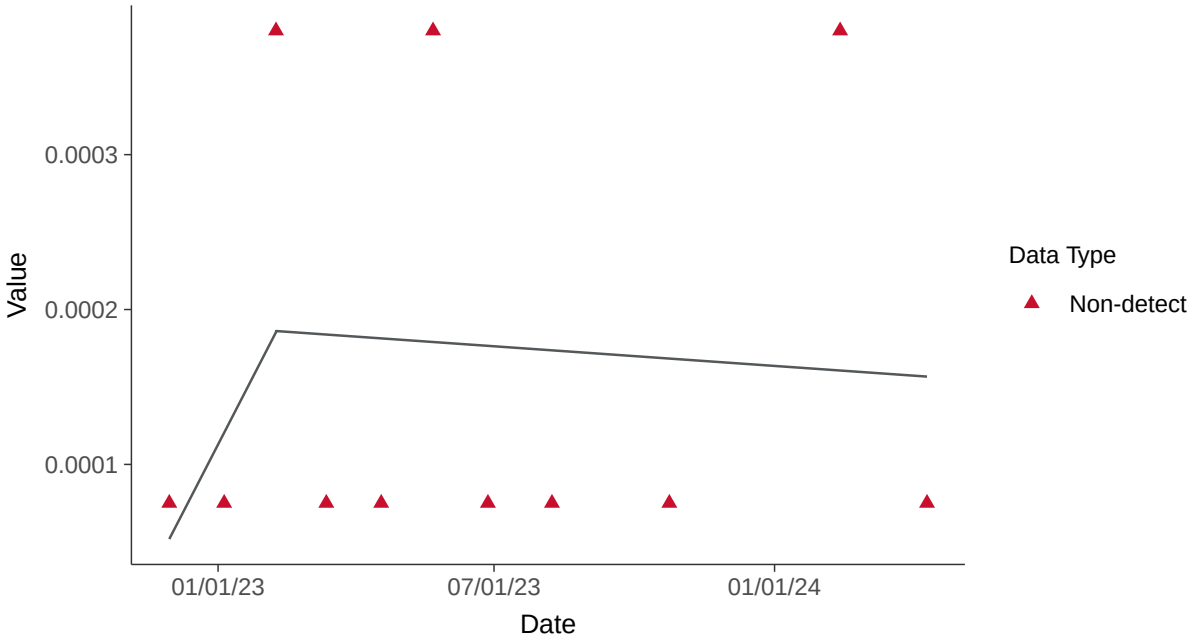
Boxplot by Season

Thallium, MW-18 (mg/L)



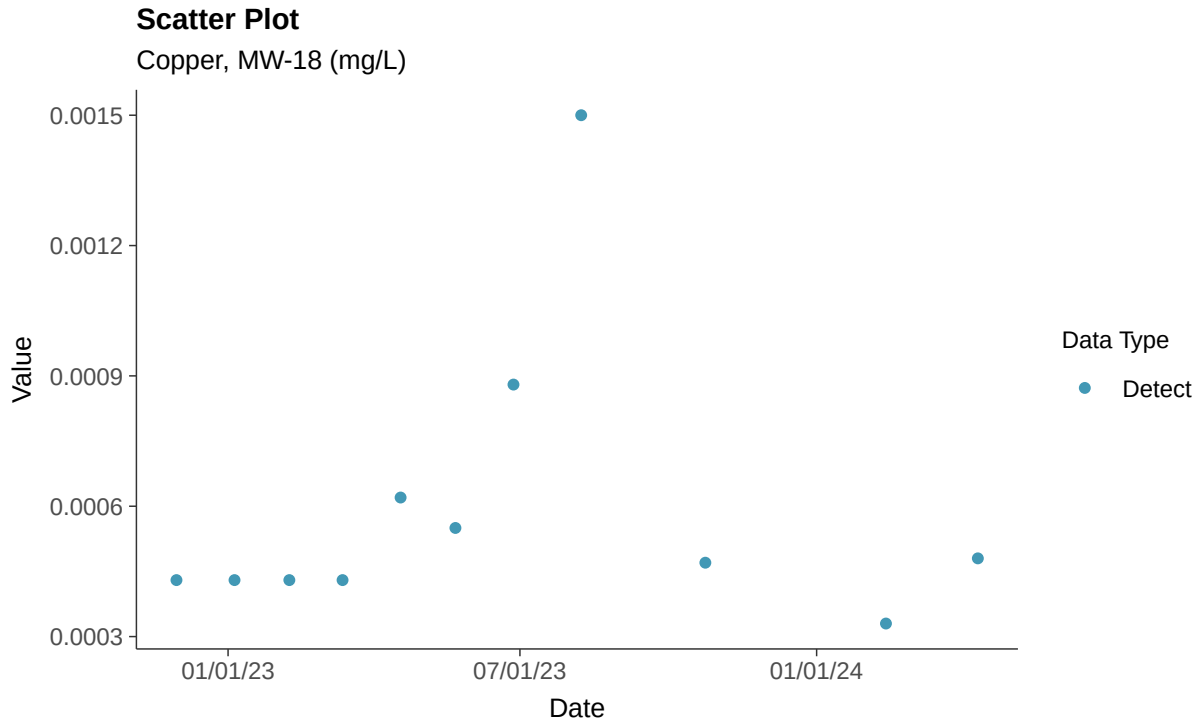
Trend Regression: Piecewise Linear-Linear

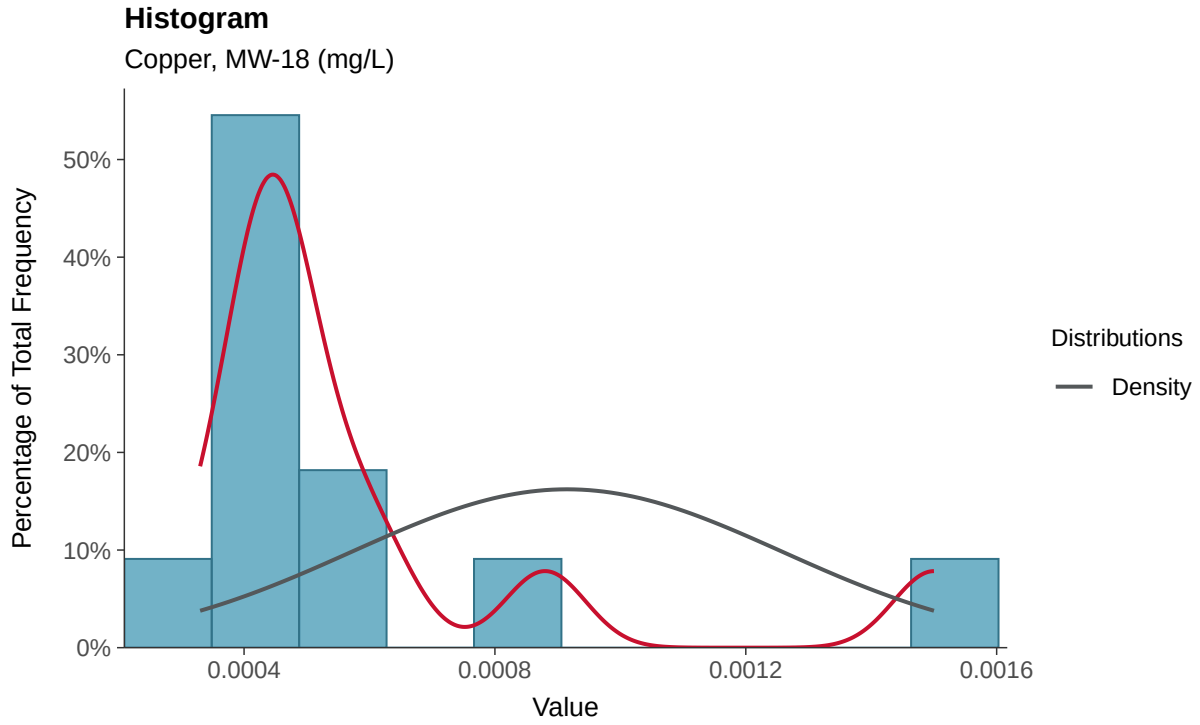
Thallium, MW-18 (mg/L)



Part 115: Copper, MW-18

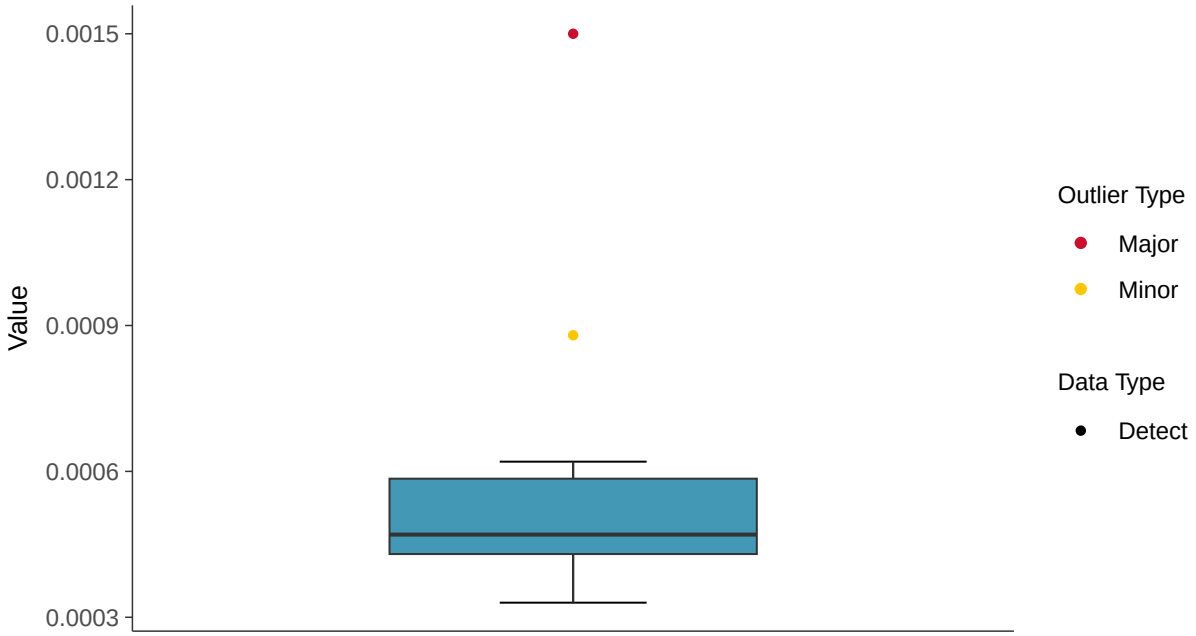
ID: 1_28_6_111





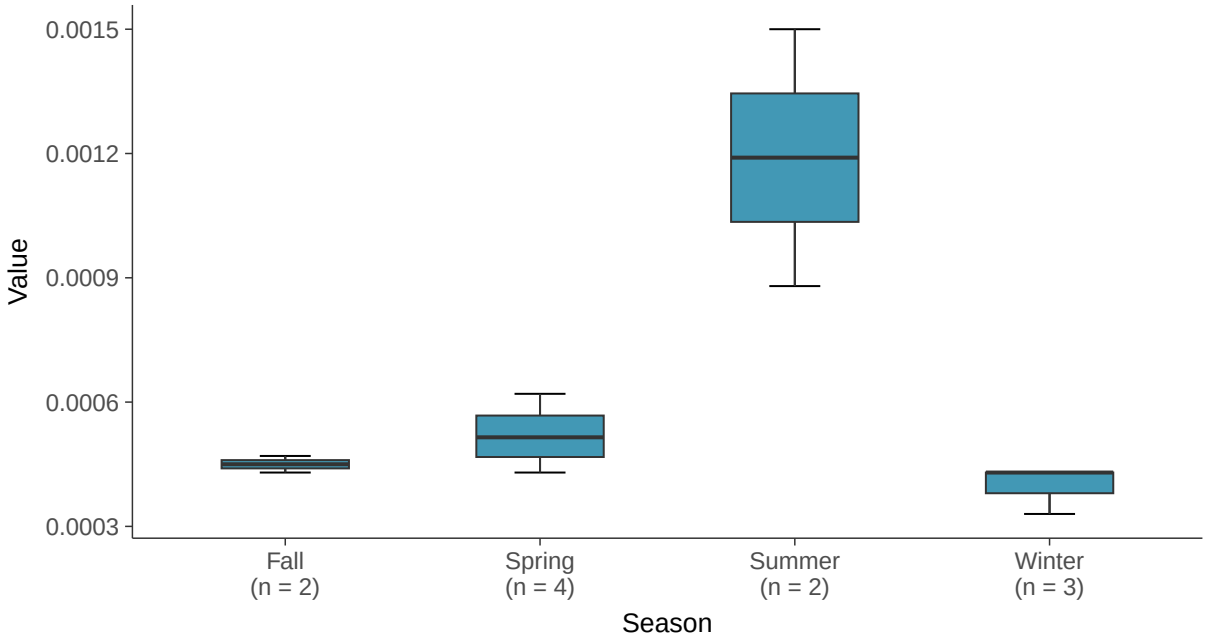
Boxplot

Copper, MW-18 (mg/L)



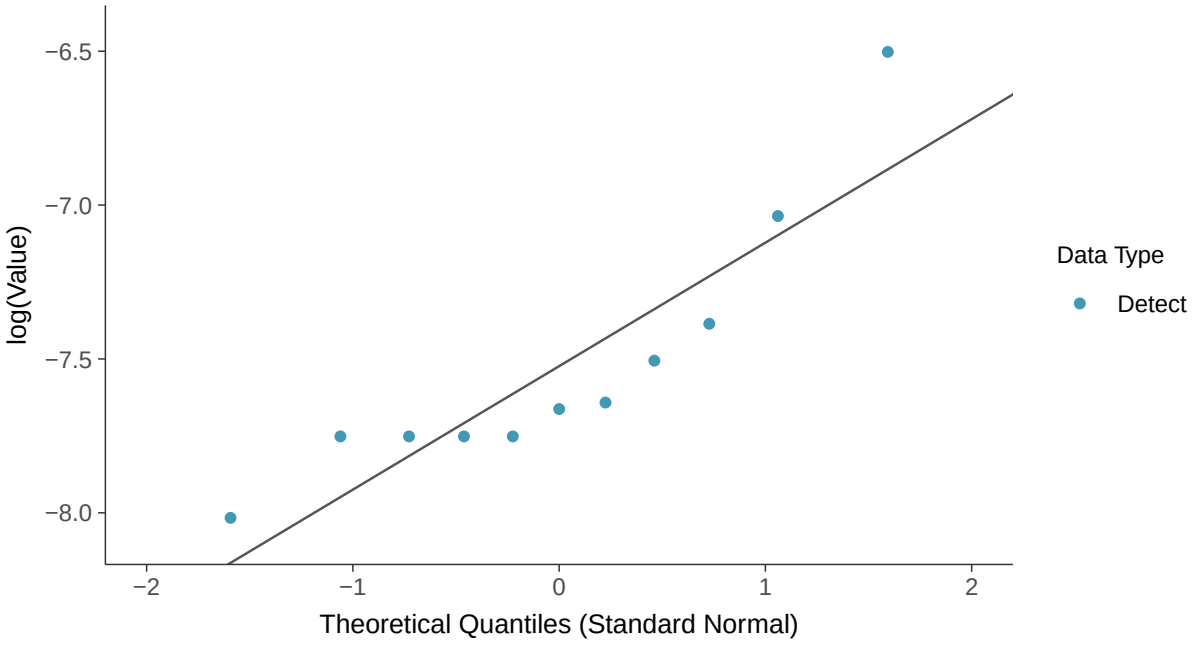
Boxplot by Season

Copper, MW-18 (mg/L)



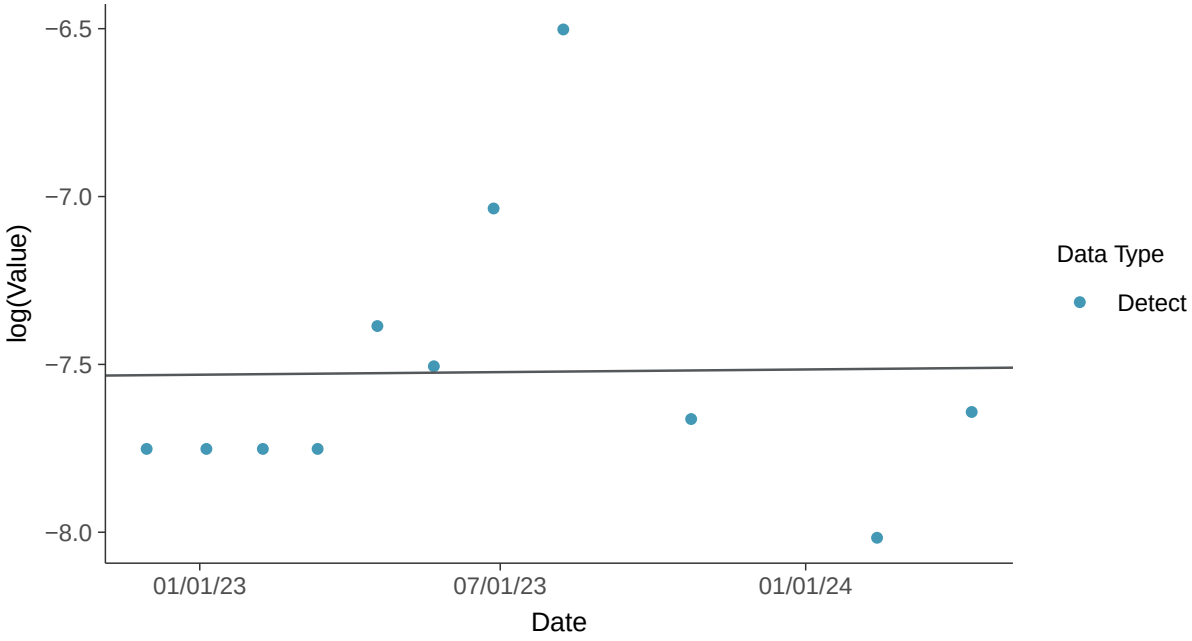
Lognormal Q-Q plot

Copper, MW-18 (mg/L)



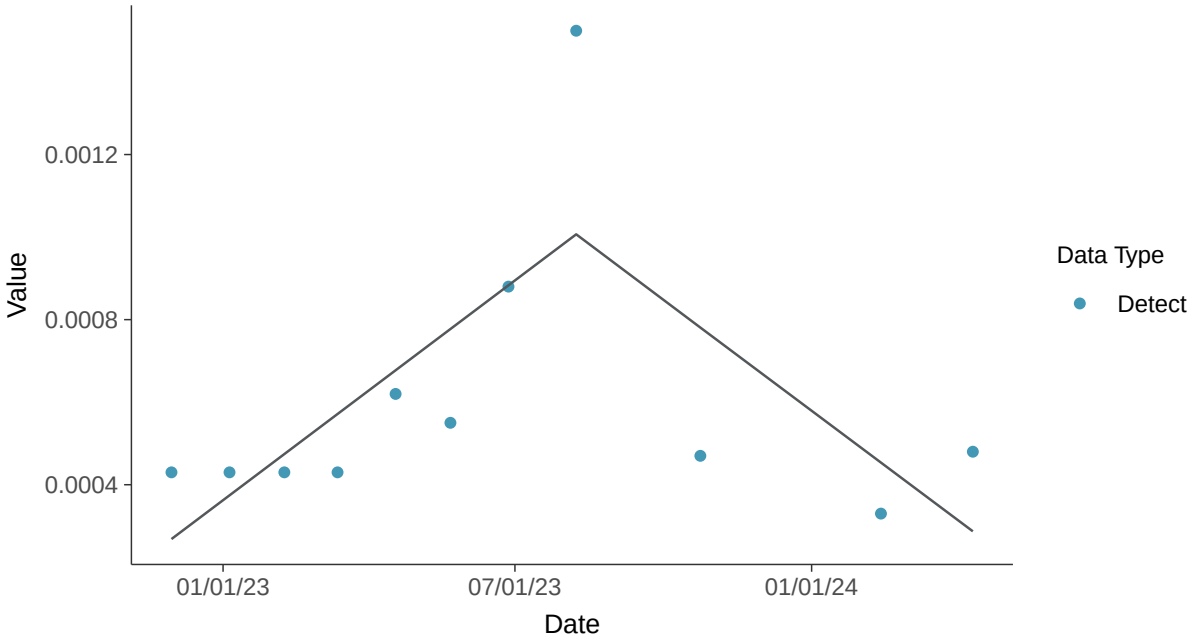
Trend Regression: Lognormal MLE

Copper, MW-18 (mg/L)



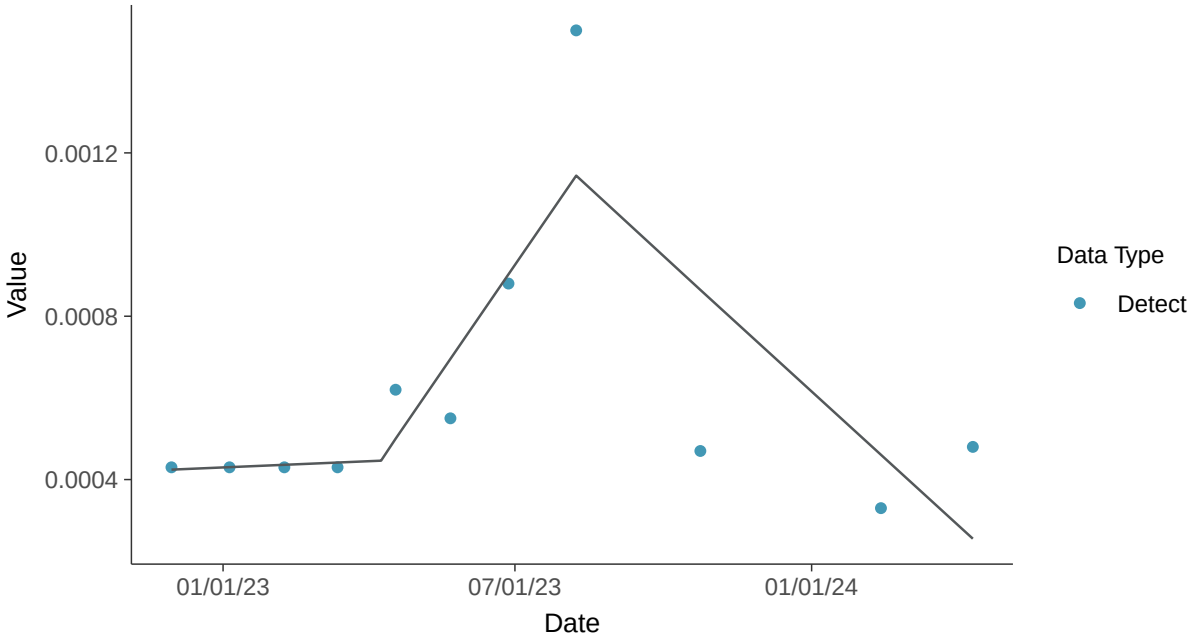
Trend Regression: Piecewise Linear-Linear

Copper, MW-18 (mg/L)



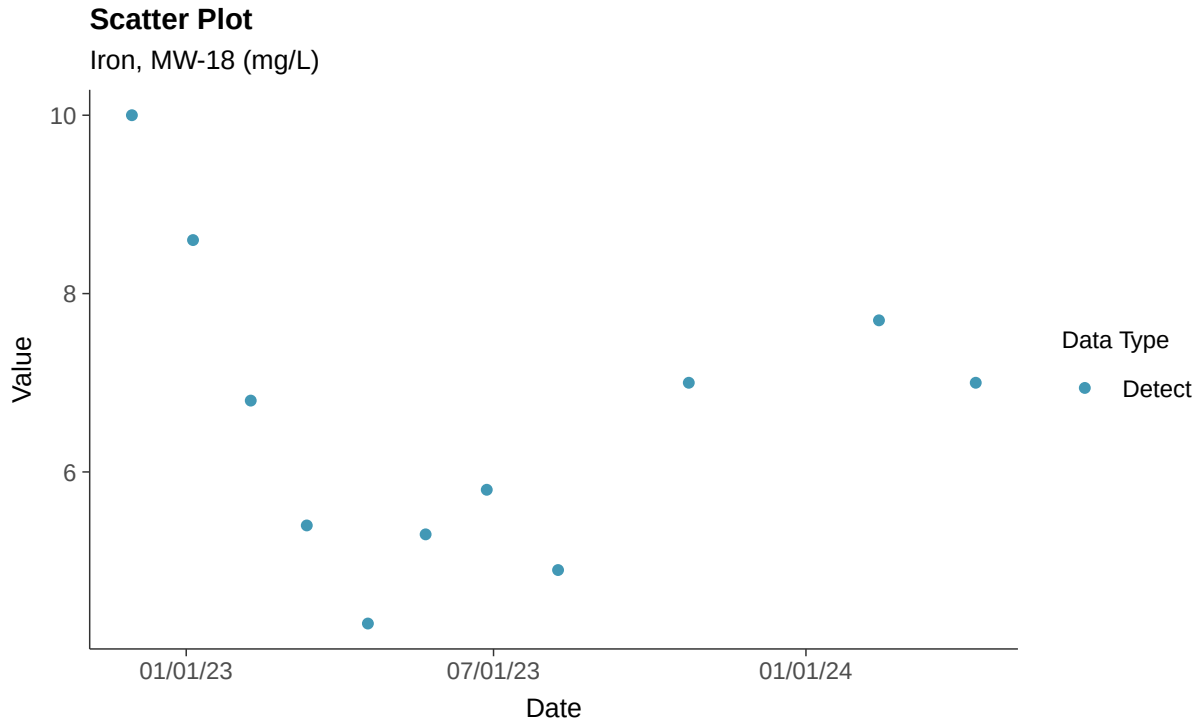
Trend Regression: Piecewise Linear-Linear-Linear

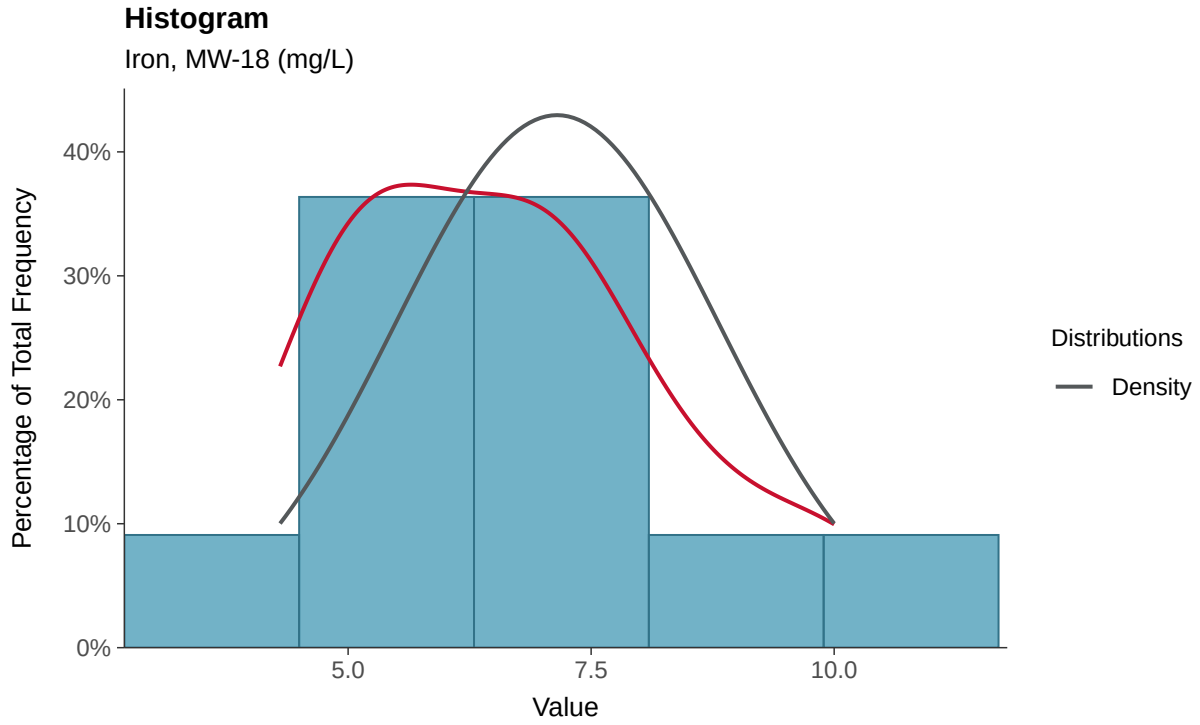
Copper, MW-18 (mg/L)



Part 115: Iron, MW-18

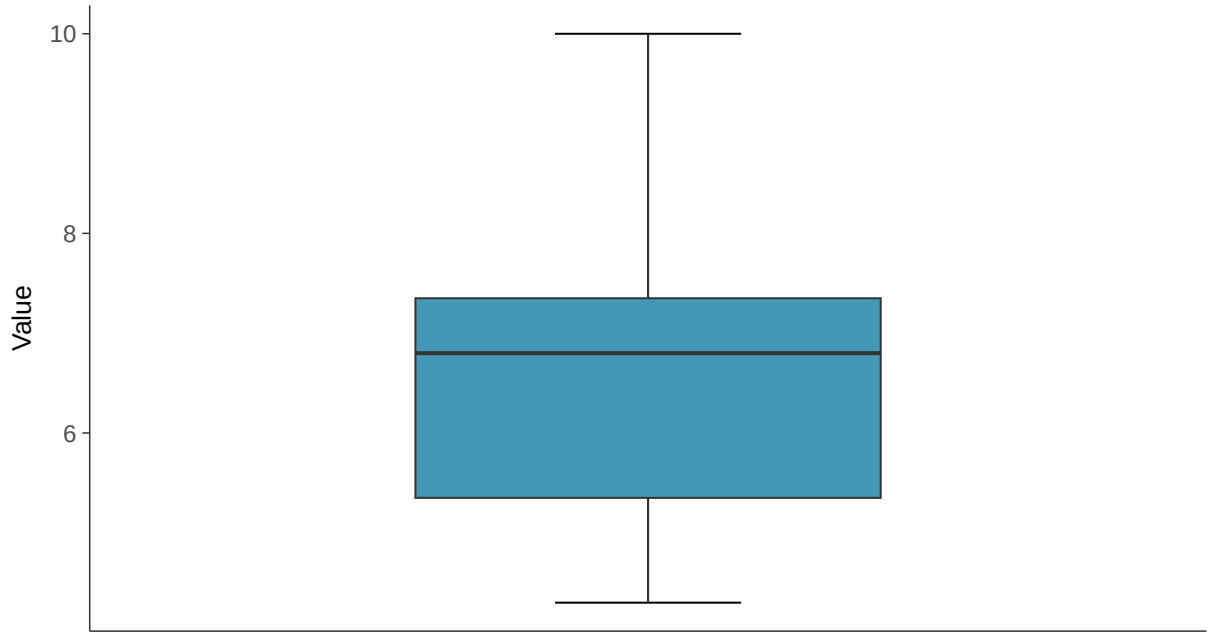
ID: 1_28_6_114





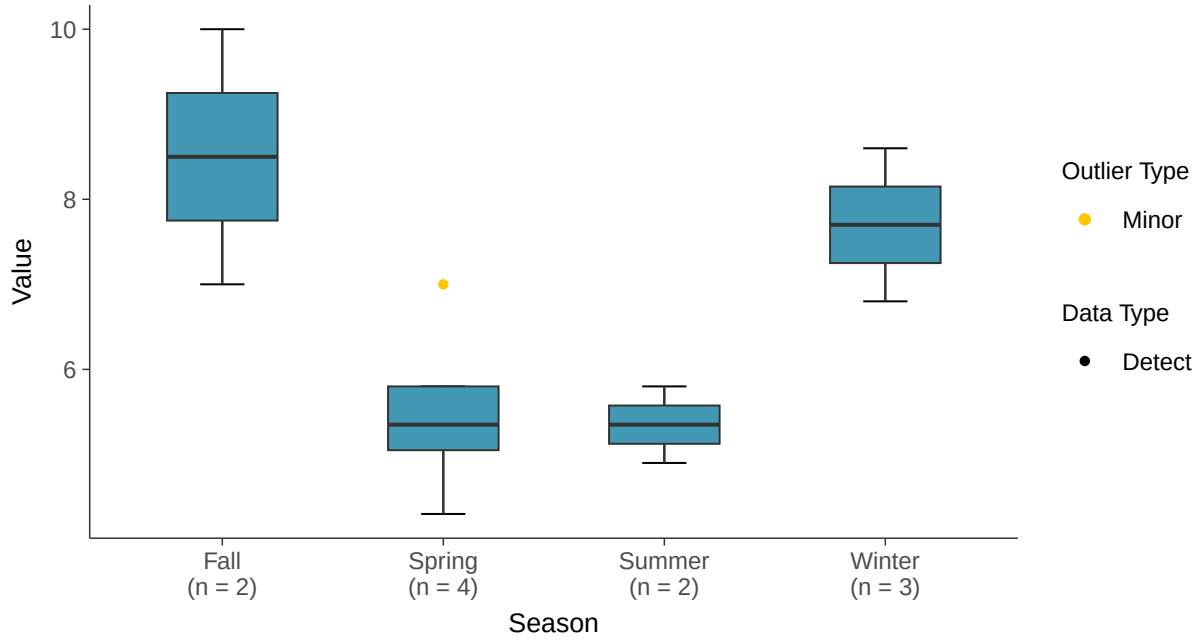
Boxplot

Iron, MW-18 (mg/L)



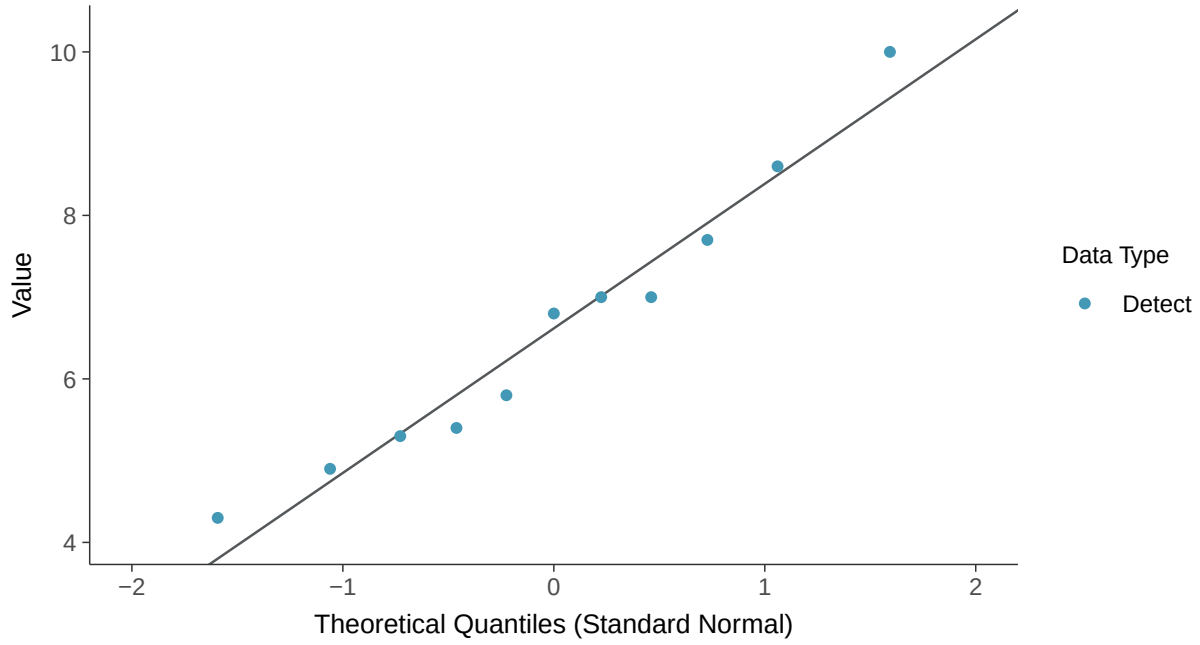
Boxplot by Season

Iron, MW-18 (mg/L)



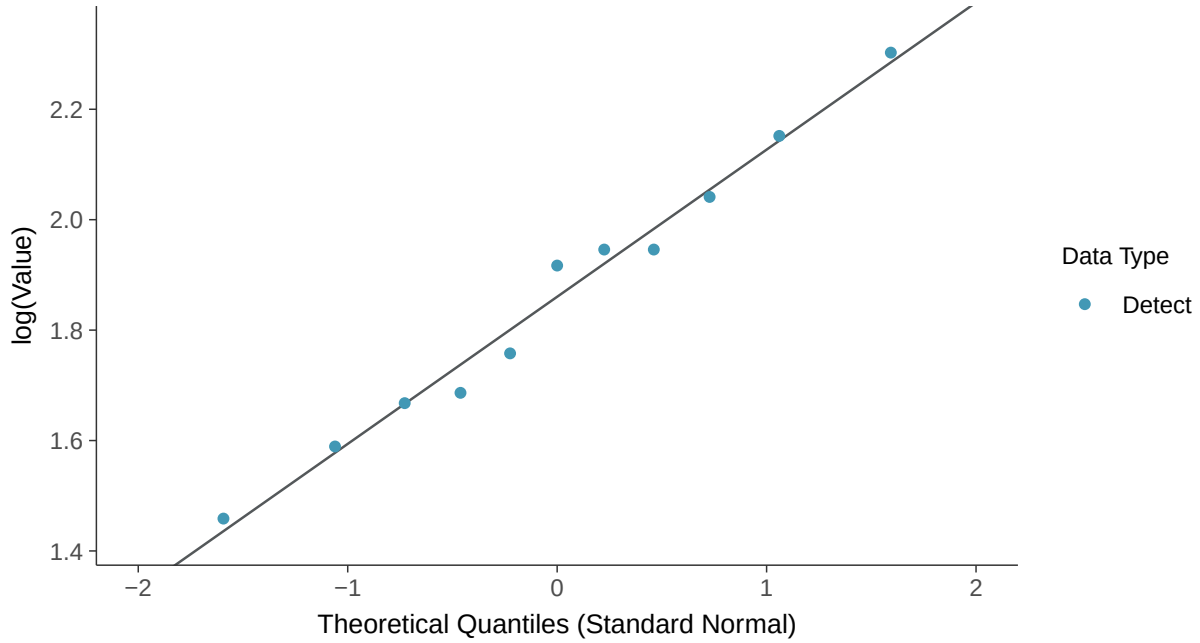
Normal Q-Q plot

Iron, MW-18 (mg/L)



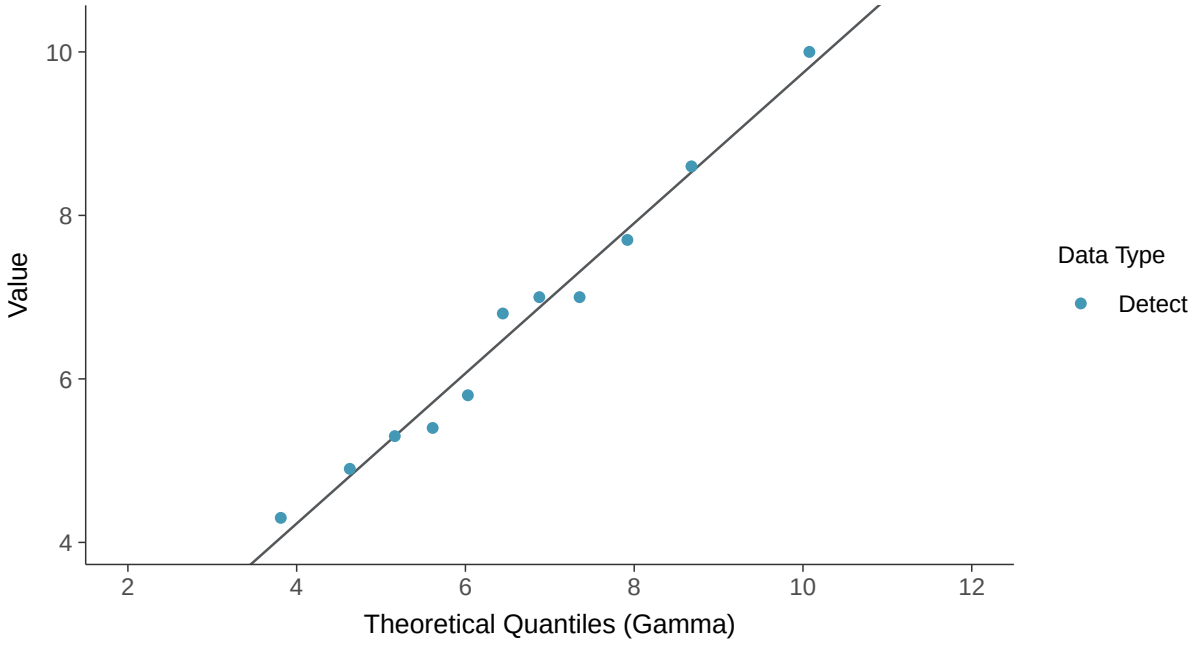
Lognormal Q-Q plot

Iron, MW-18 (mg/L)



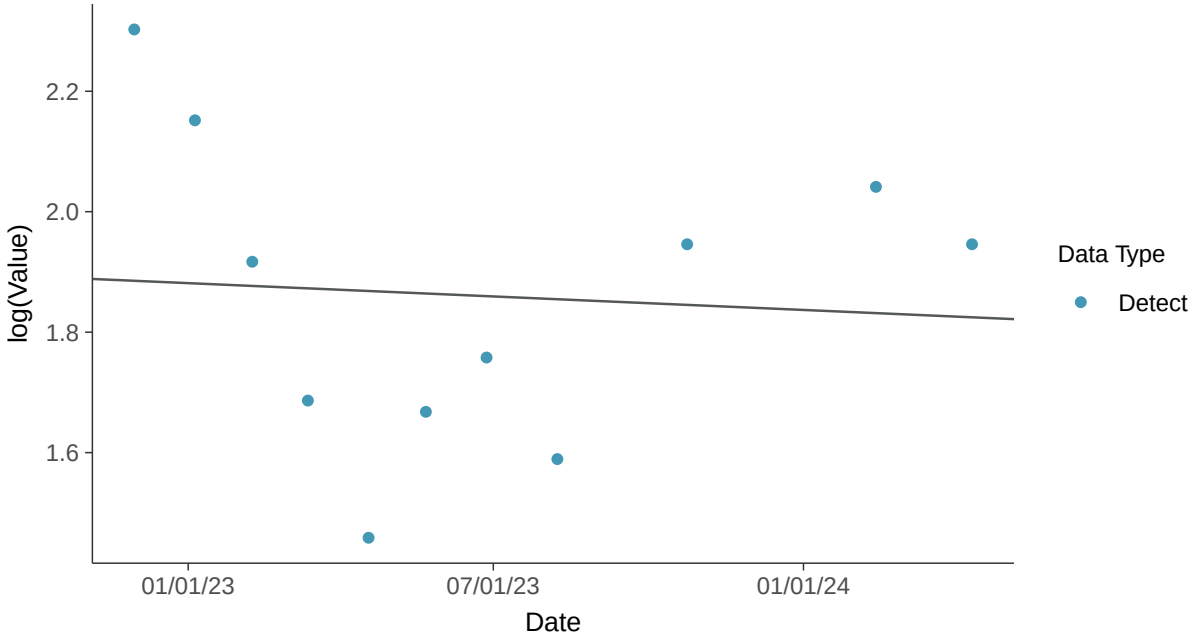
Gamma Q-Q plot

Iron, MW-18 (mg/L)



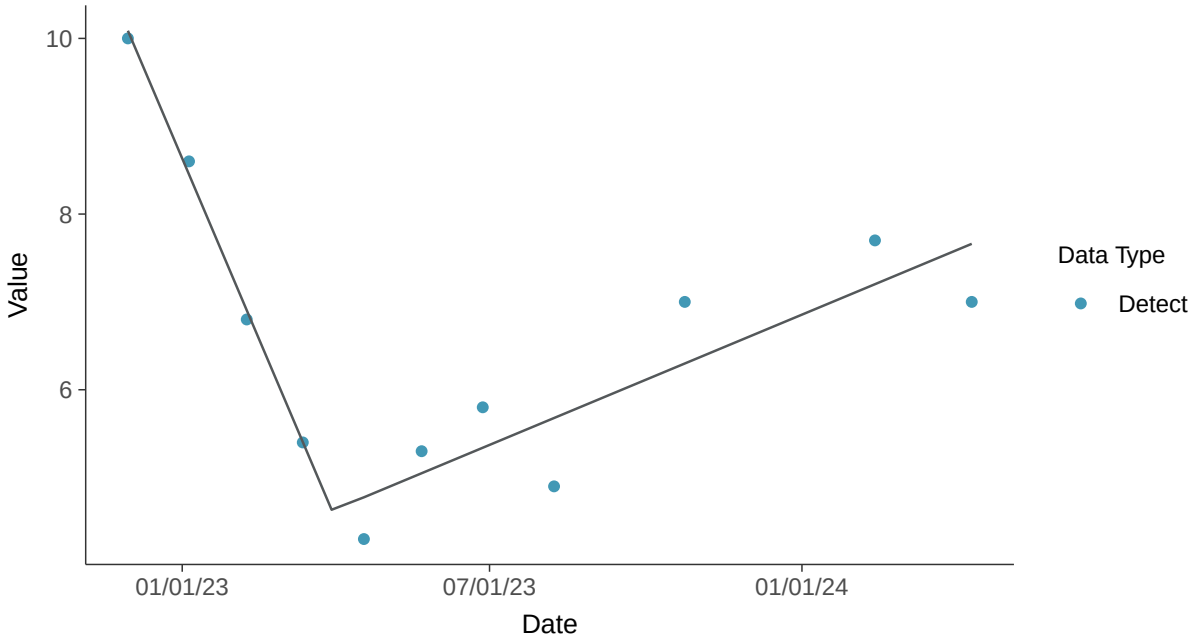
Trend Regression: Lognormal MLE

Iron, MW-18 (mg/L)



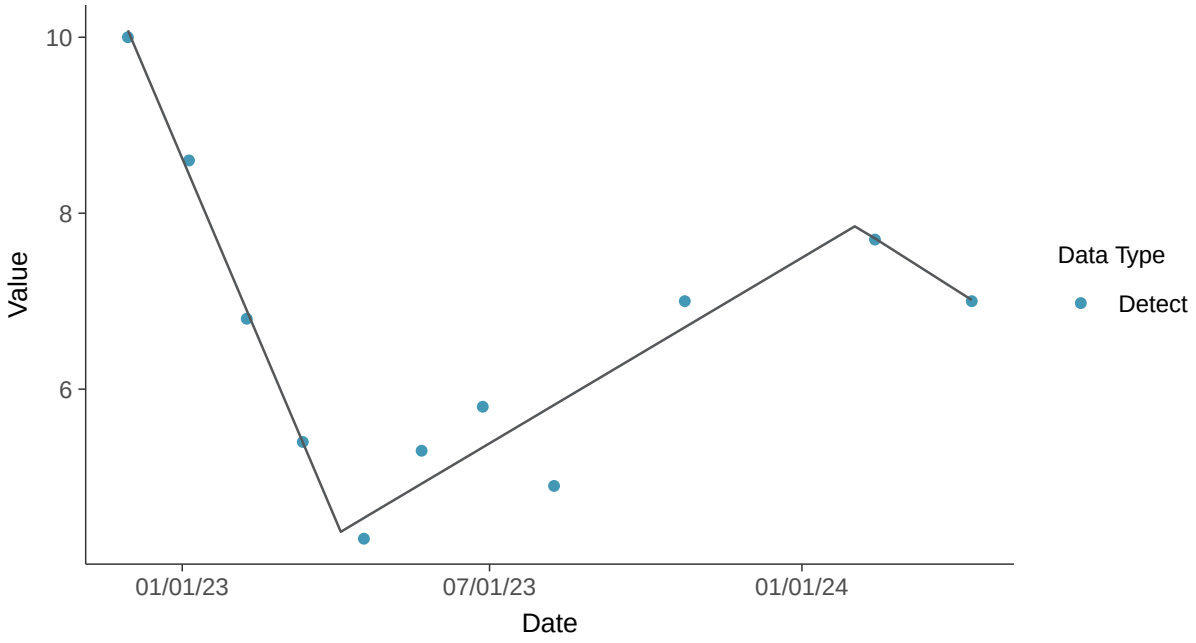
Trend Regression: Piecewise Linear-Linear

Iron, MW-18 (mg/L)



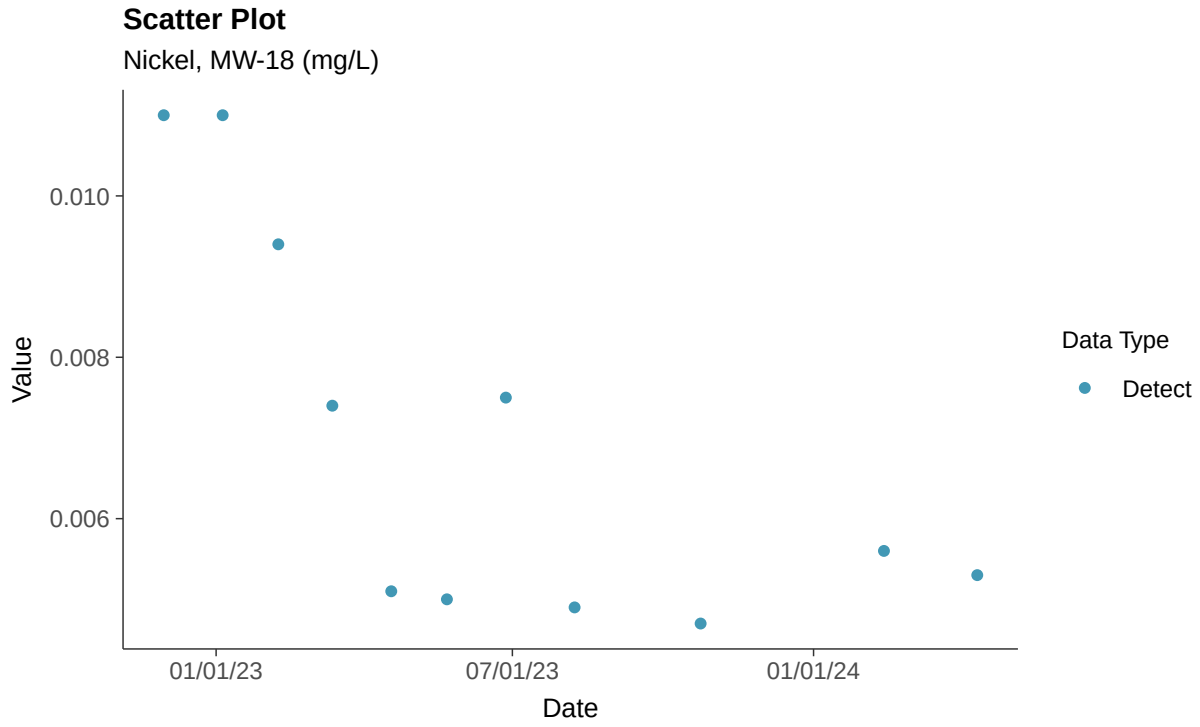
Trend Regression: Piecewise Linear-Linear-Linear

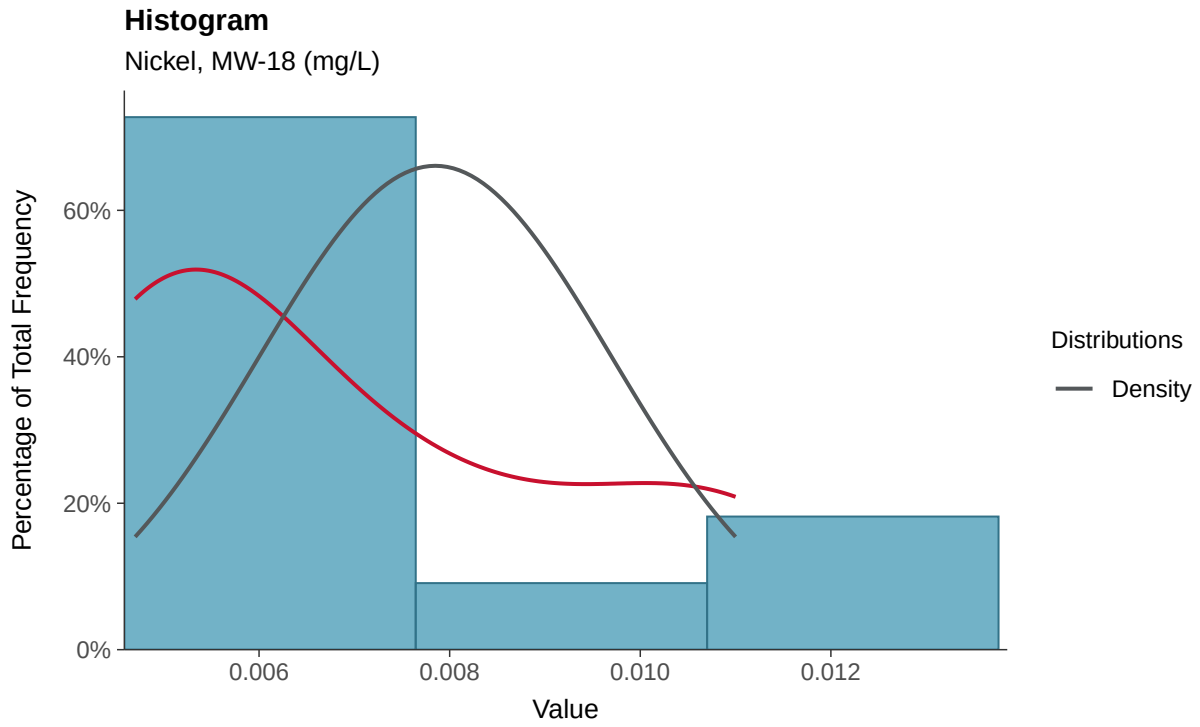
Iron, MW-18 (mg/L)



Part 115: Nickel, MW-18

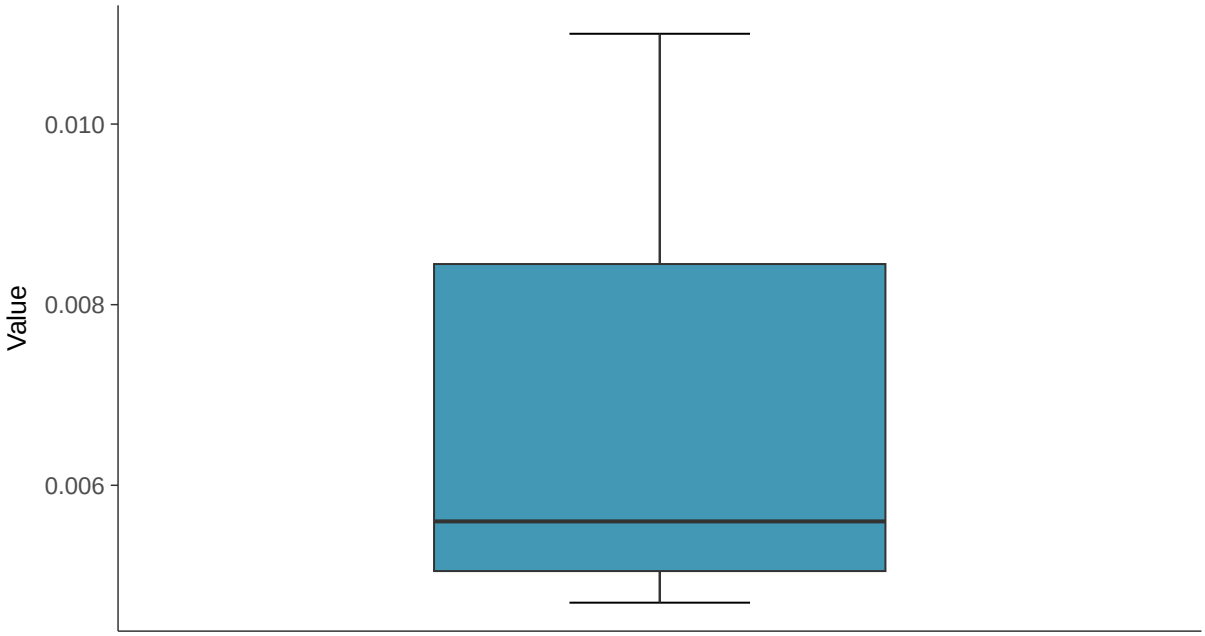
ID: 1_28_6_119





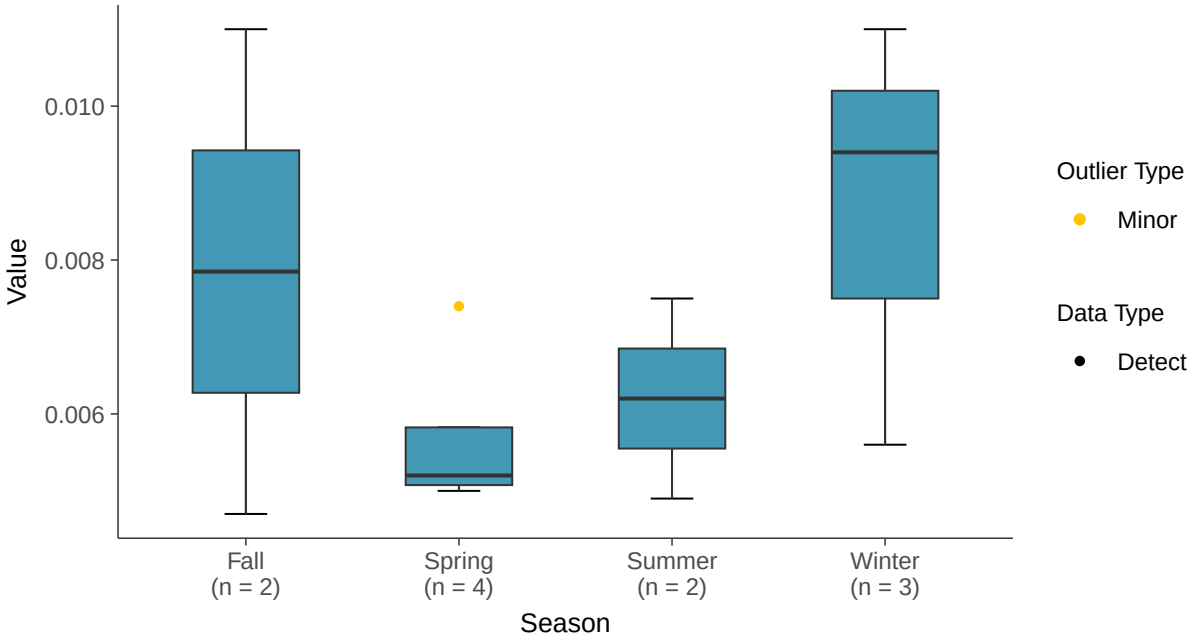
Boxplot

Nickel, MW-18 (mg/L)



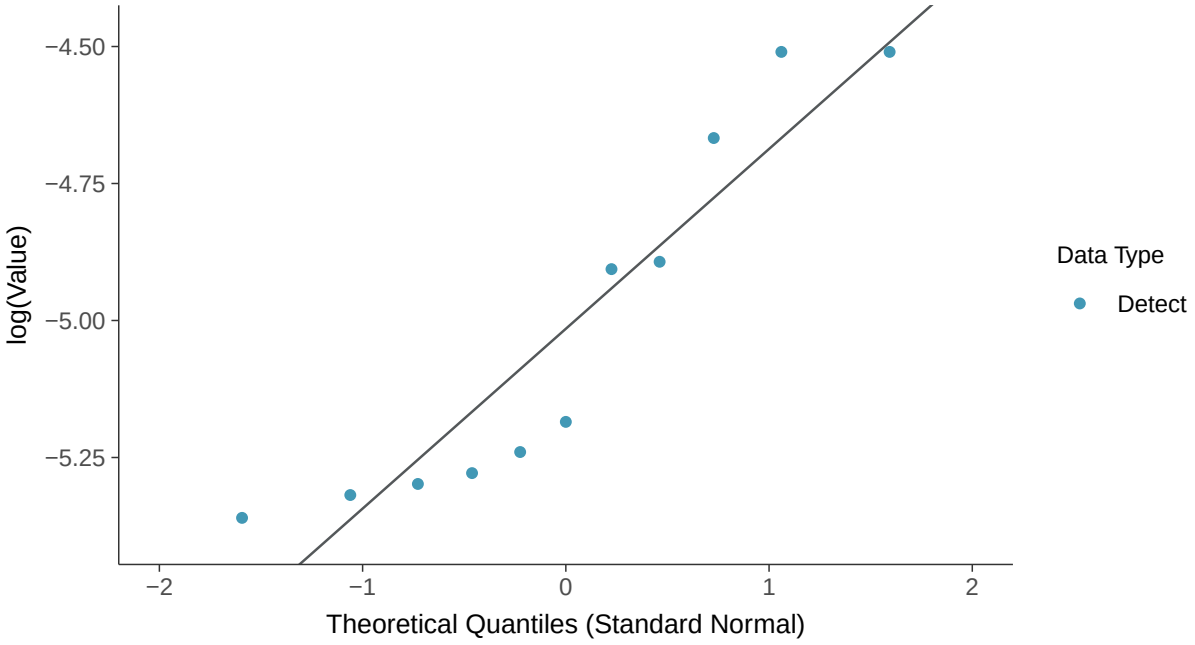
Boxplot by Season

Nickel, MW-18 (mg/L)



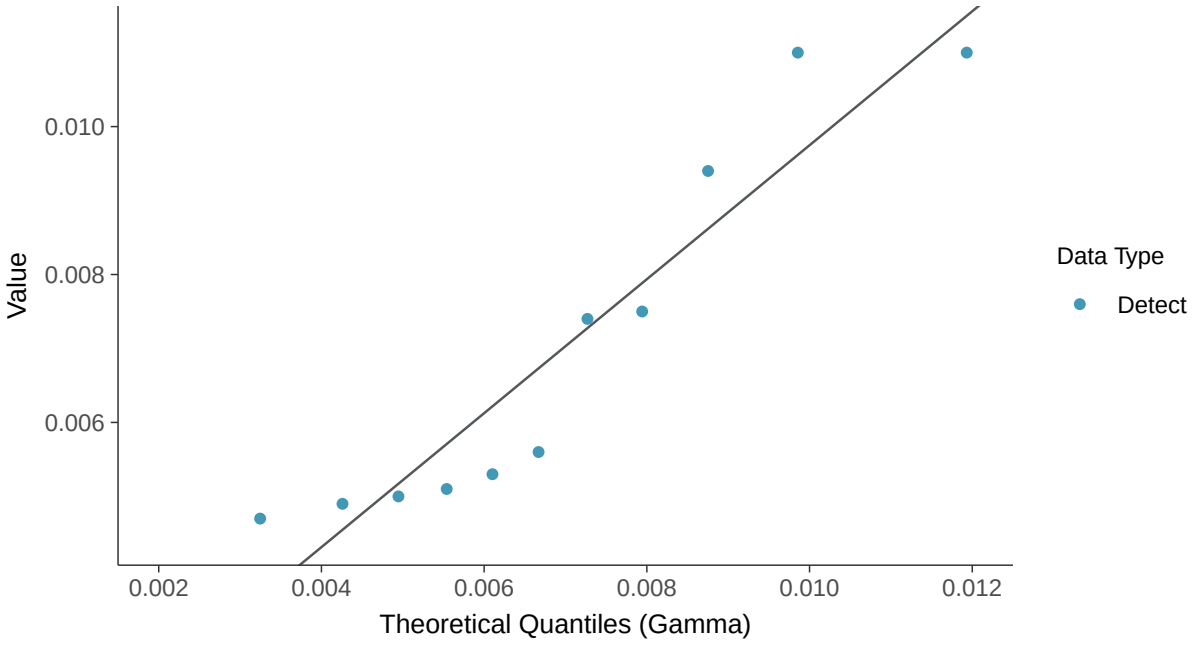
Lognormal Q-Q plot

Nickel, MW-18 (mg/L)



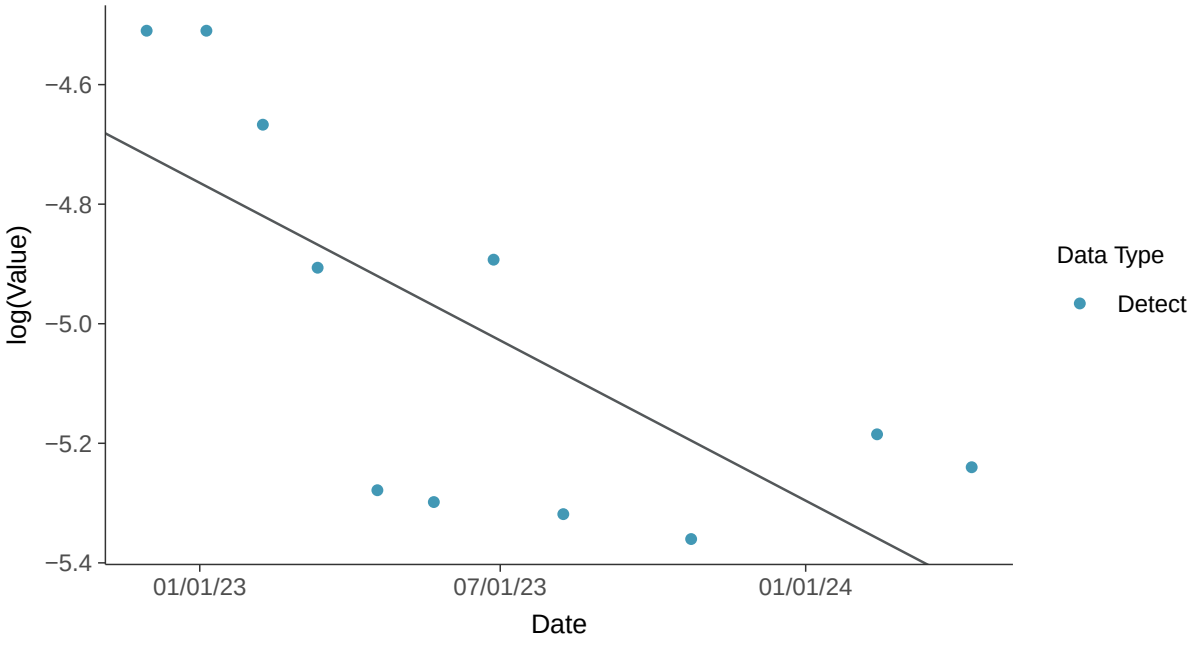
Gamma Q-Q plot

Nickel, MW-18 (mg/L)



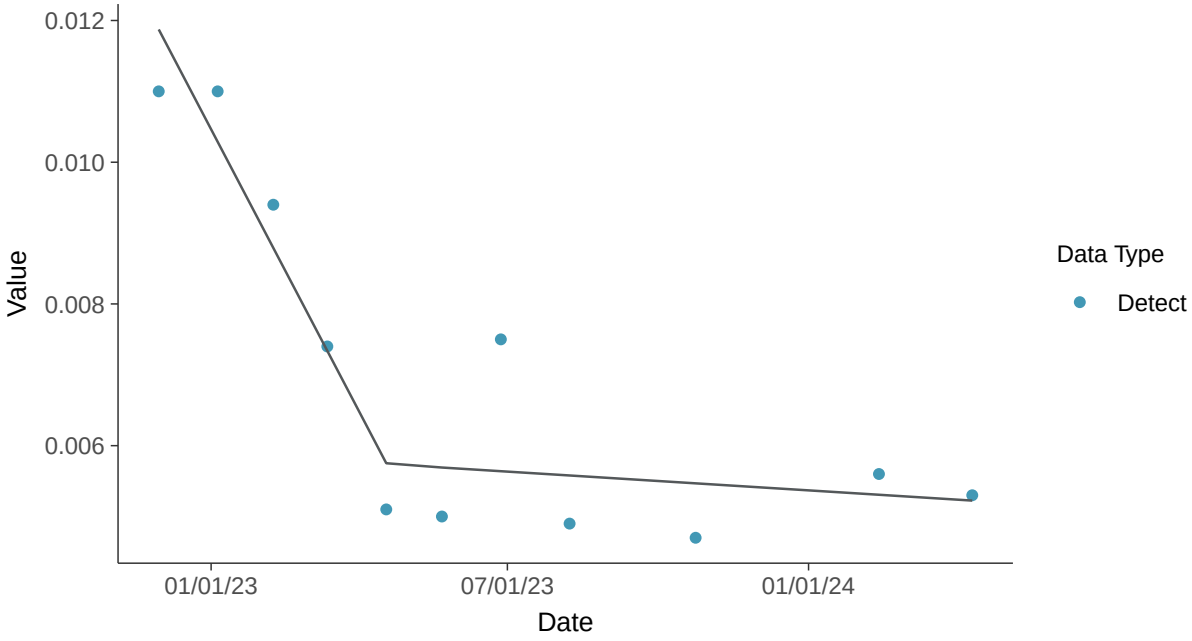
Trend Regression: Lognormal MLE

Nickel, MW-18 (mg/L)



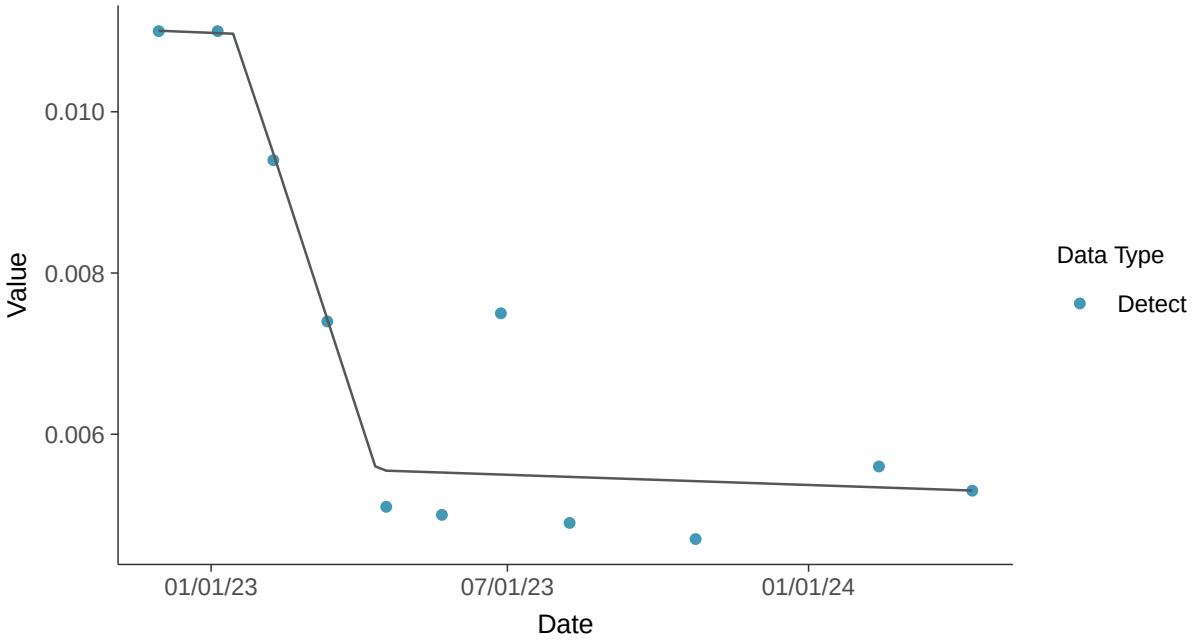
Trend Regression: Piecewise Linear-Linear

Nickel, MW-18 (mg/L)



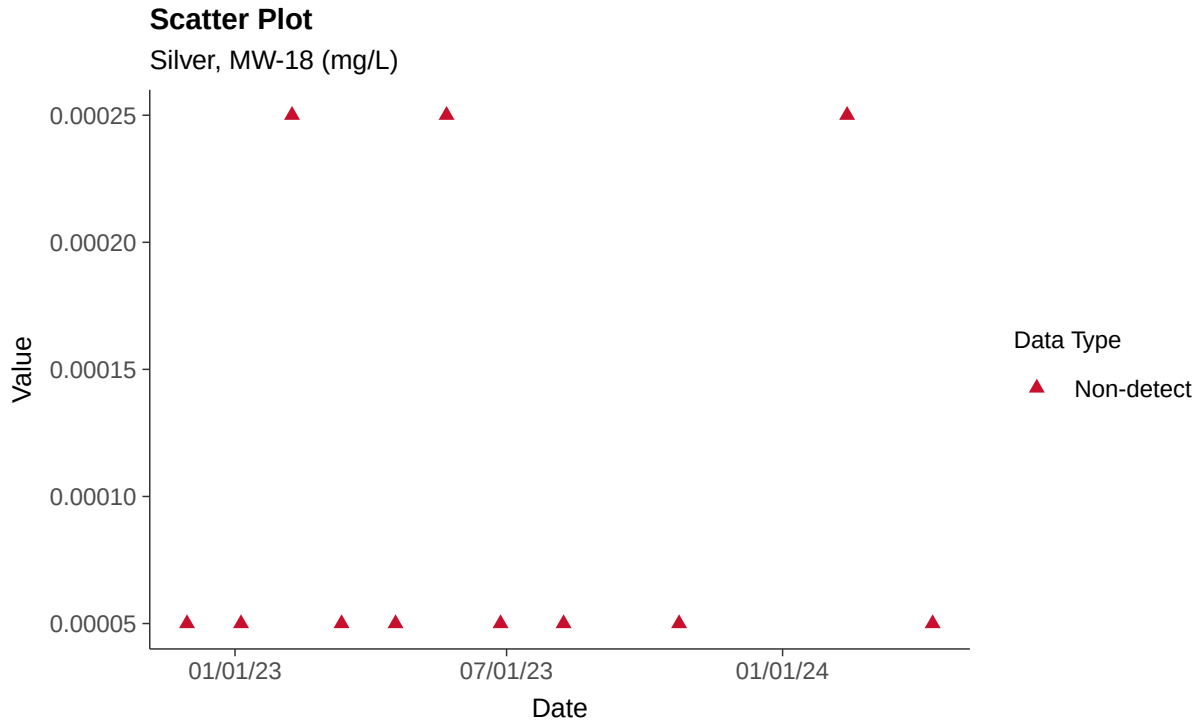
Trend Regression: Piecewise Linear-Linear-Linear

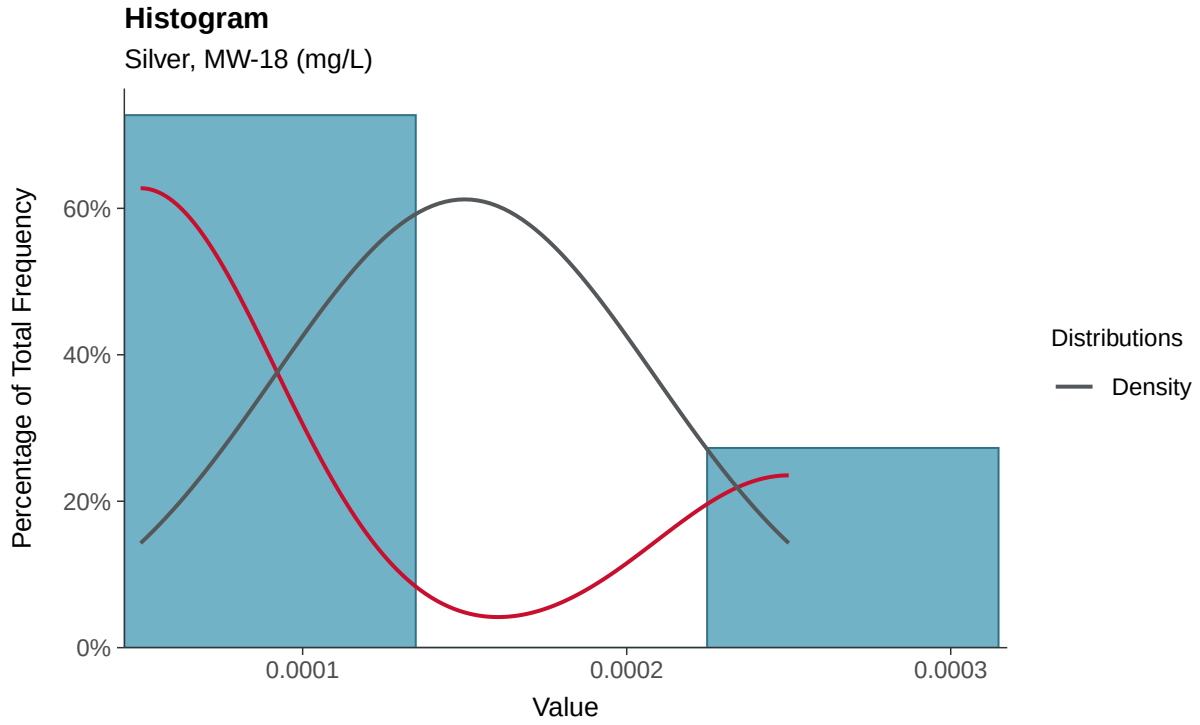
Nickel, MW-18 (mg/L)



Part 115: Silver, MW-18

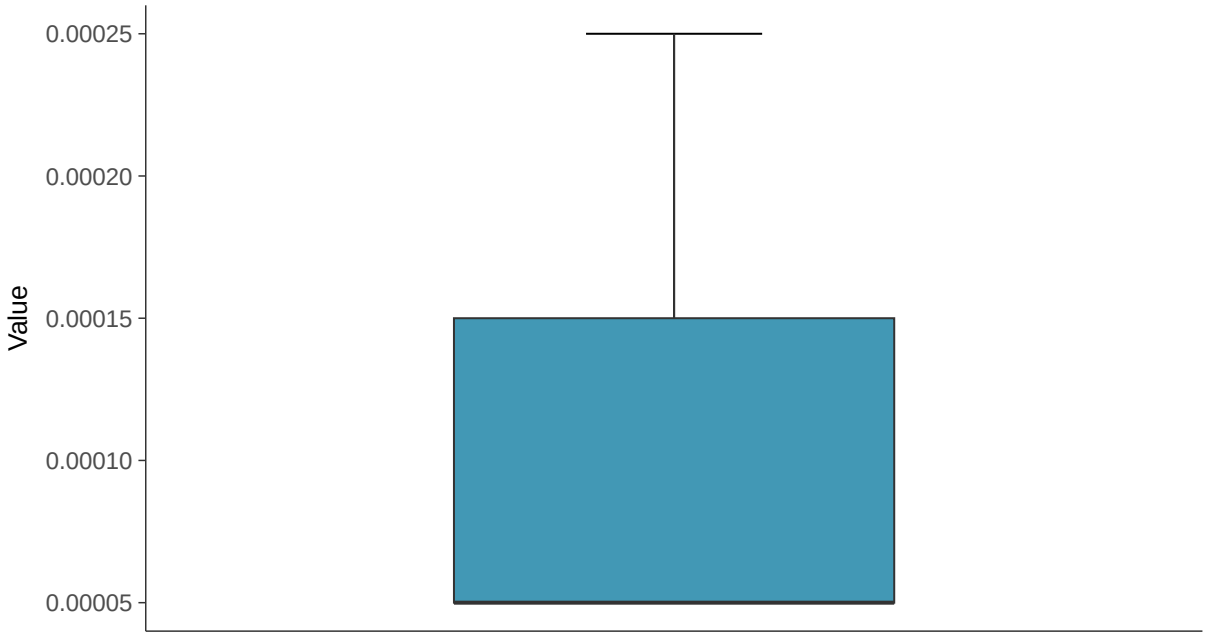
ID: 1_28_6_123





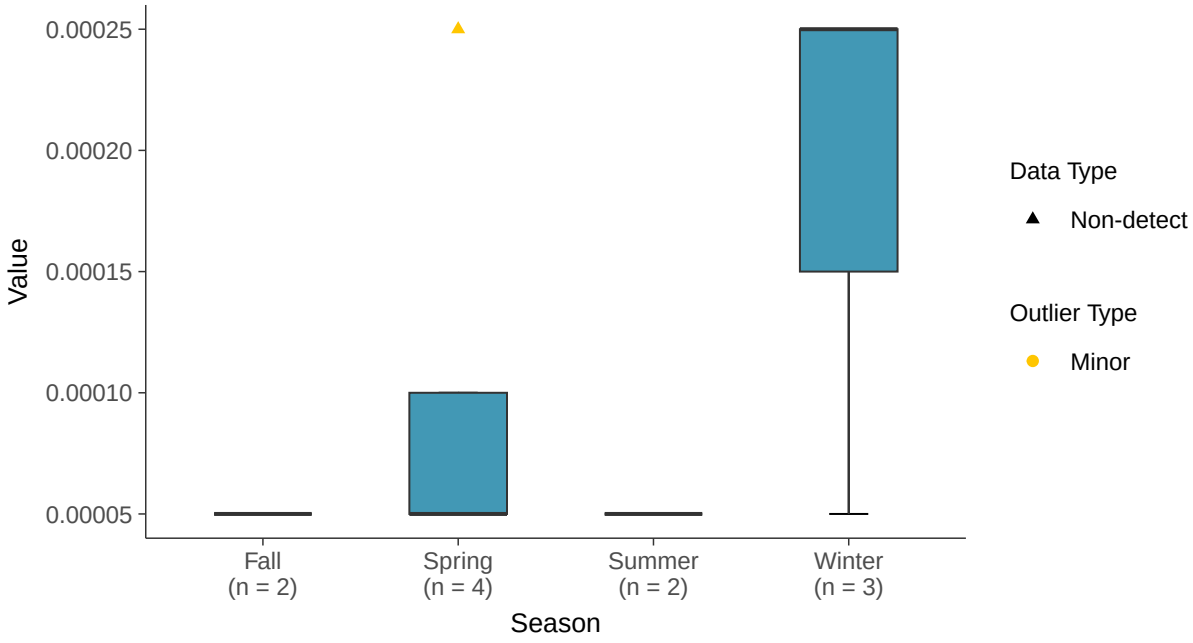
Boxplot

Silver, MW-18 (mg/L)



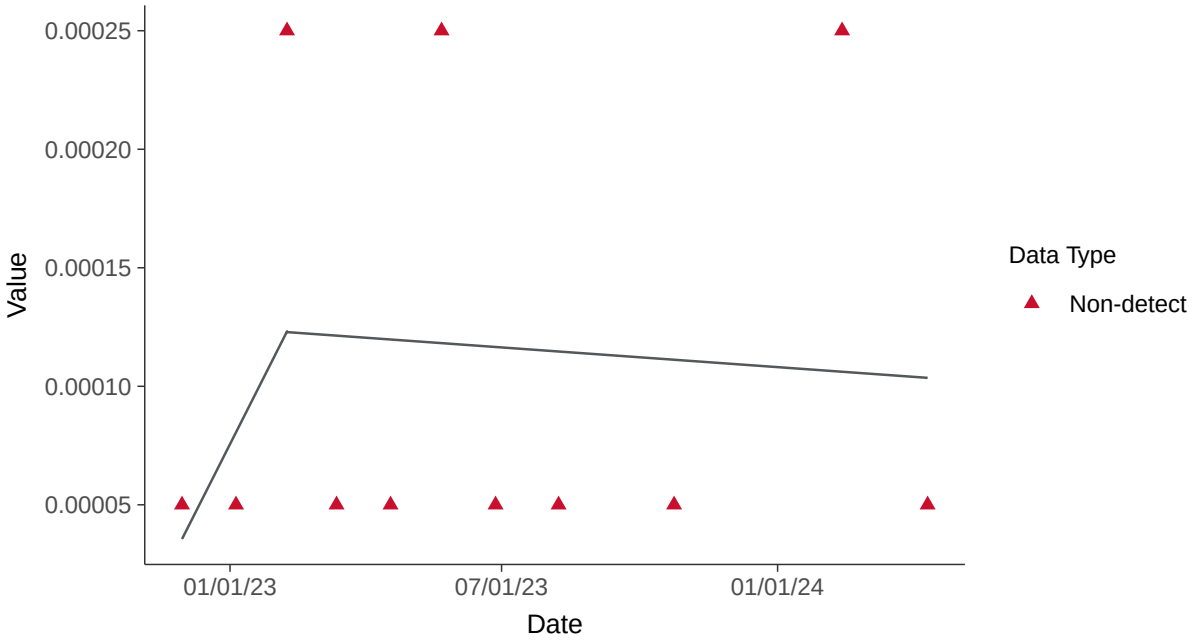
Boxplot by Season

Silver, MW-18 (mg/L)



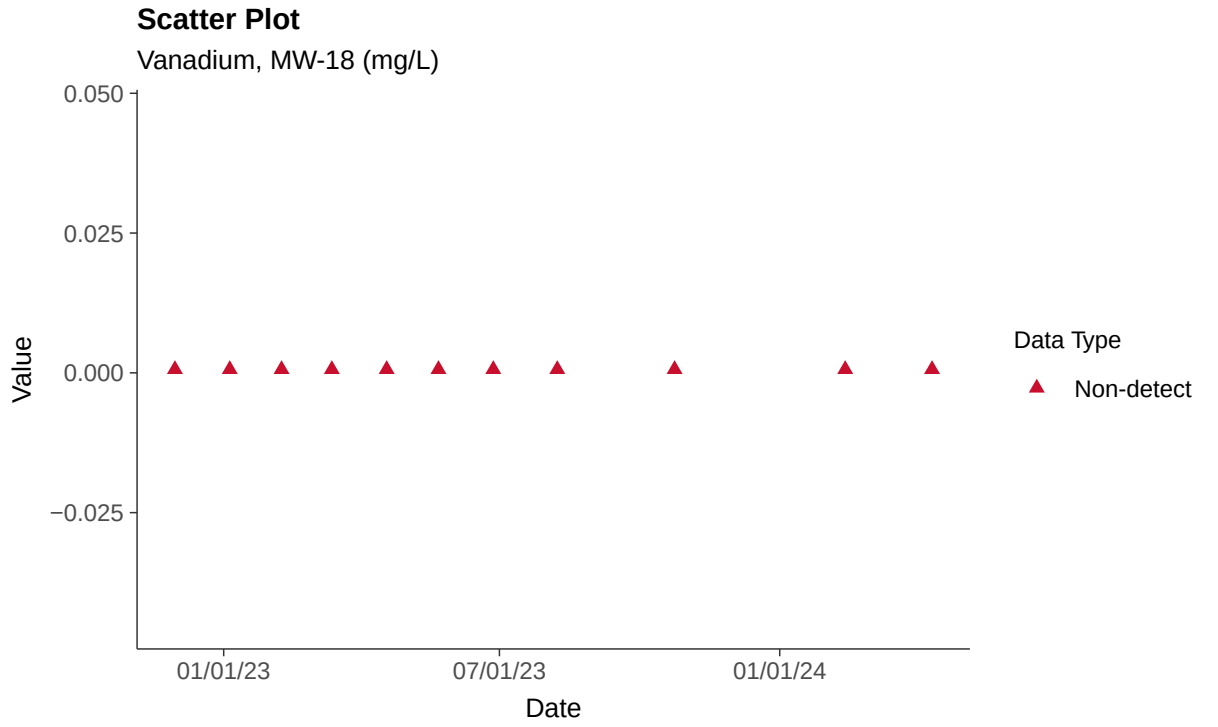
Trend Regression: Piecewise Linear-Linear

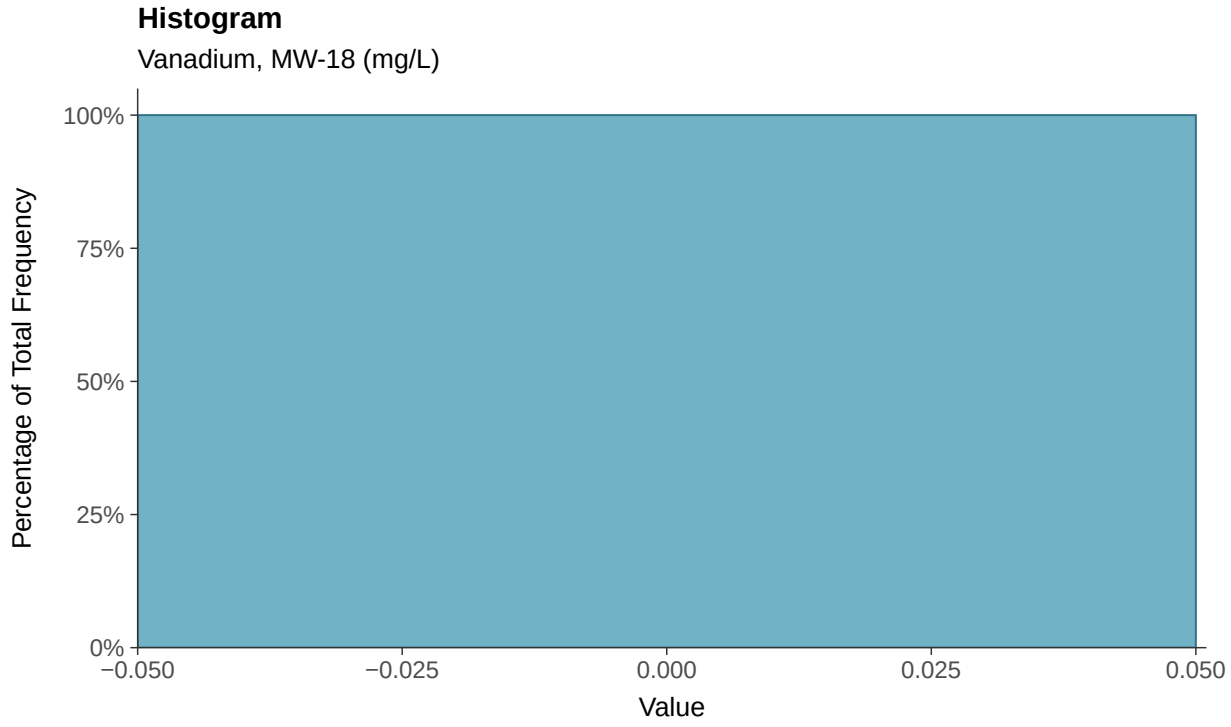
Silver, MW-18 (mg/L)



Part 115: Vanadium, MW-18

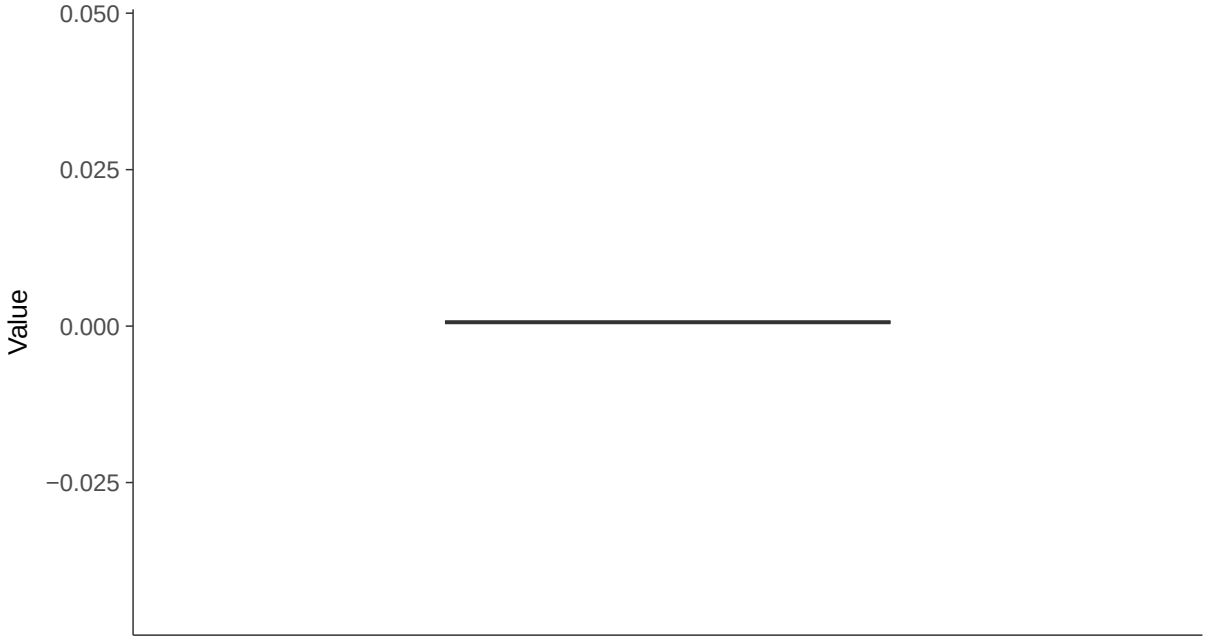
ID: 1_28_6_129





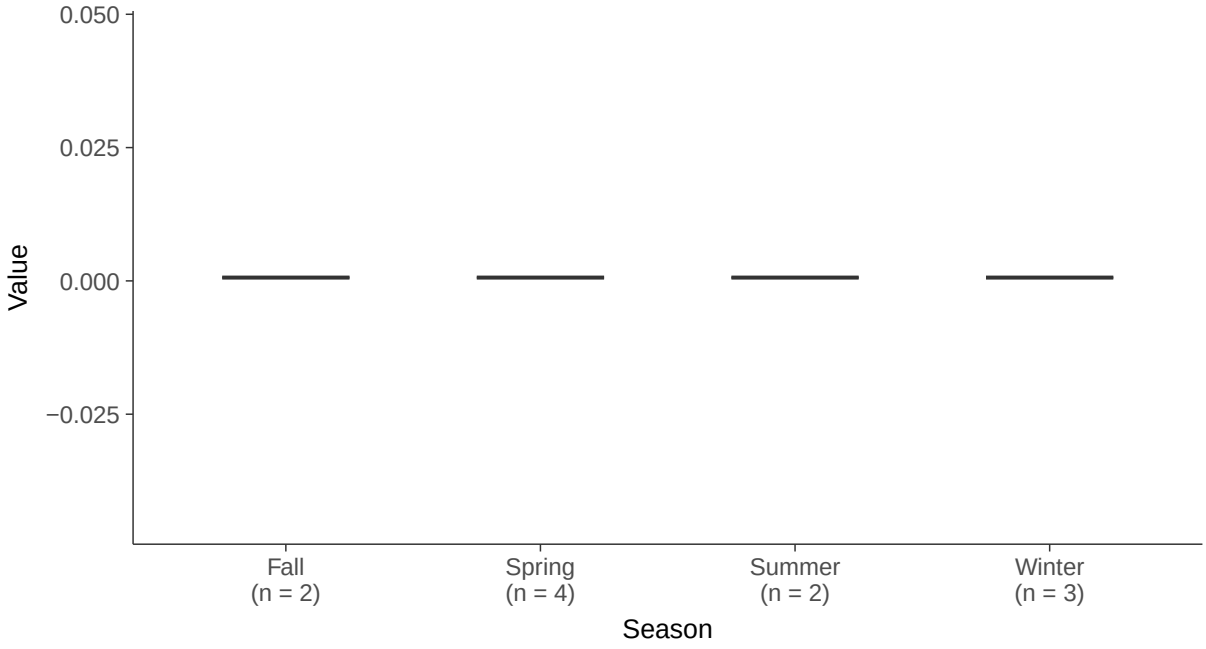
Boxplot

Vanadium, MW-18 (mg/L)



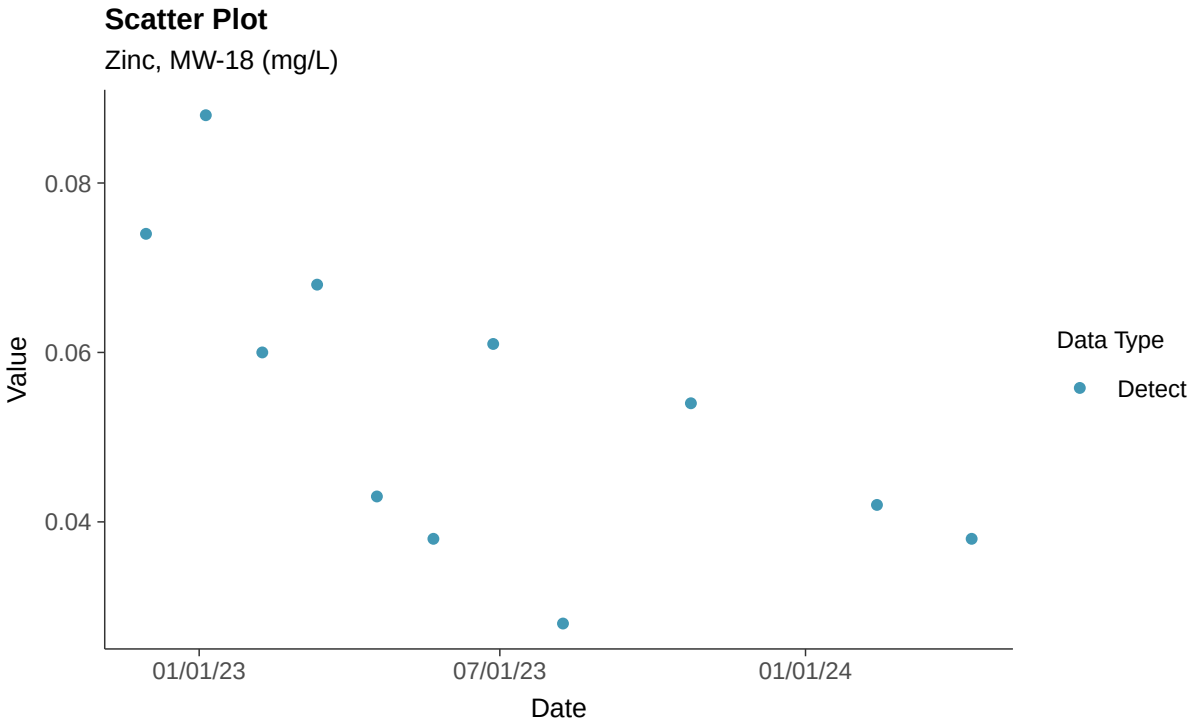
Boxplot by Season

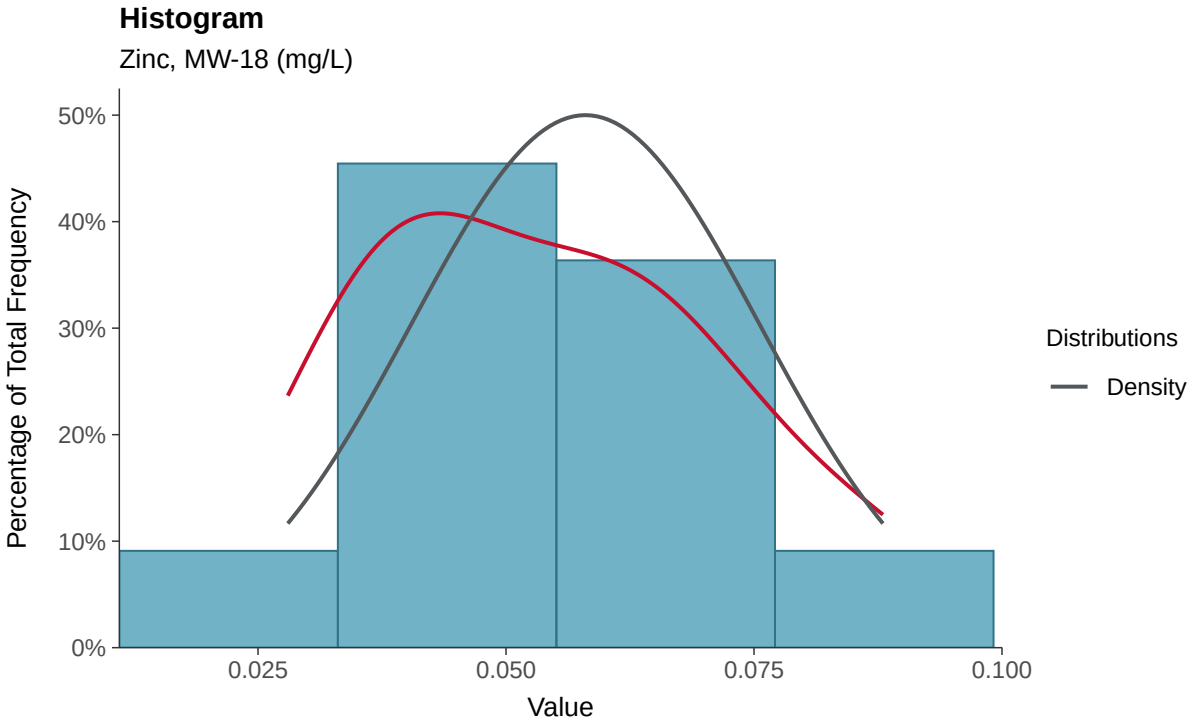
Vanadium, MW-18 (mg/L)



Part 115: Zinc, MW-18

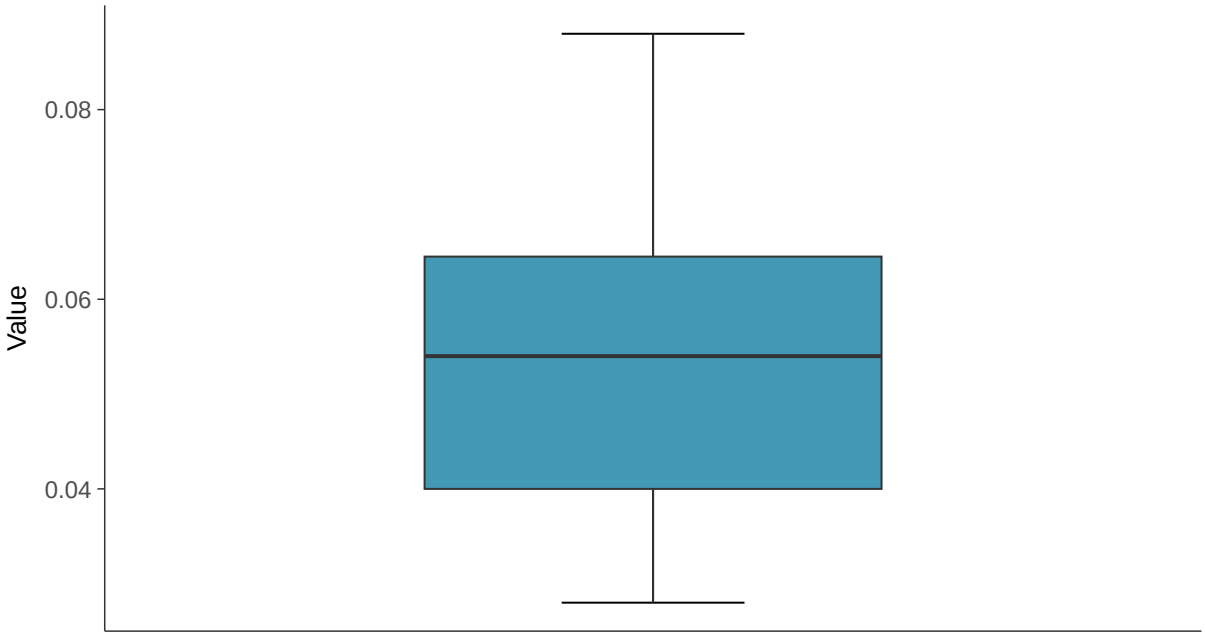
ID: 1_28_6_130





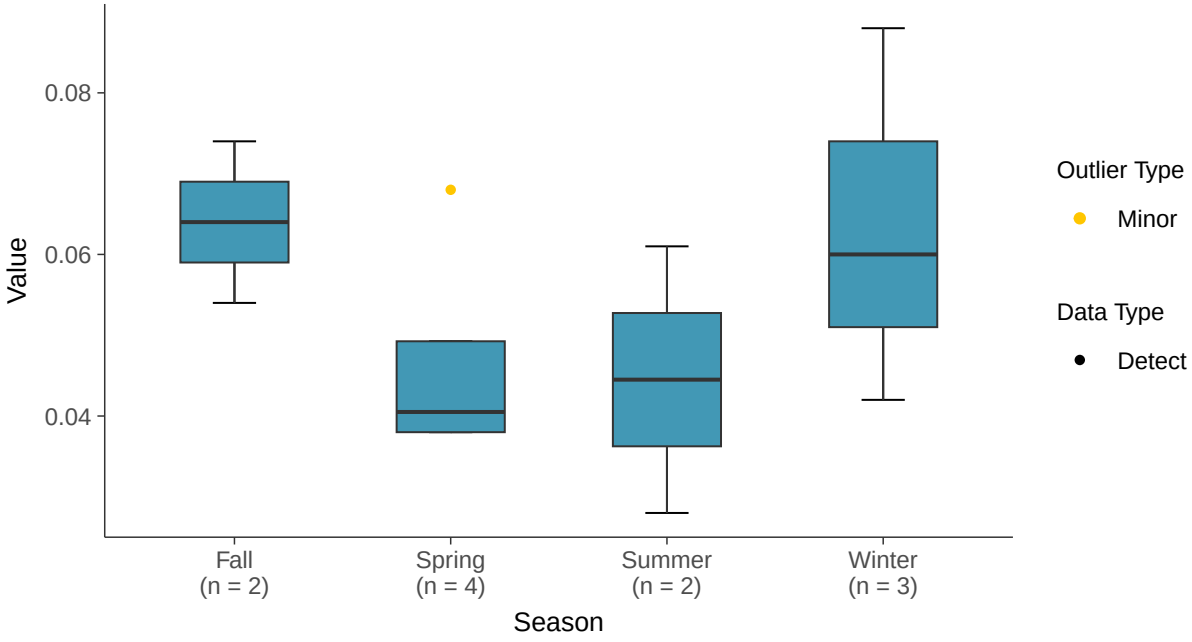
Boxplot

Zinc, MW-18 (mg/L)



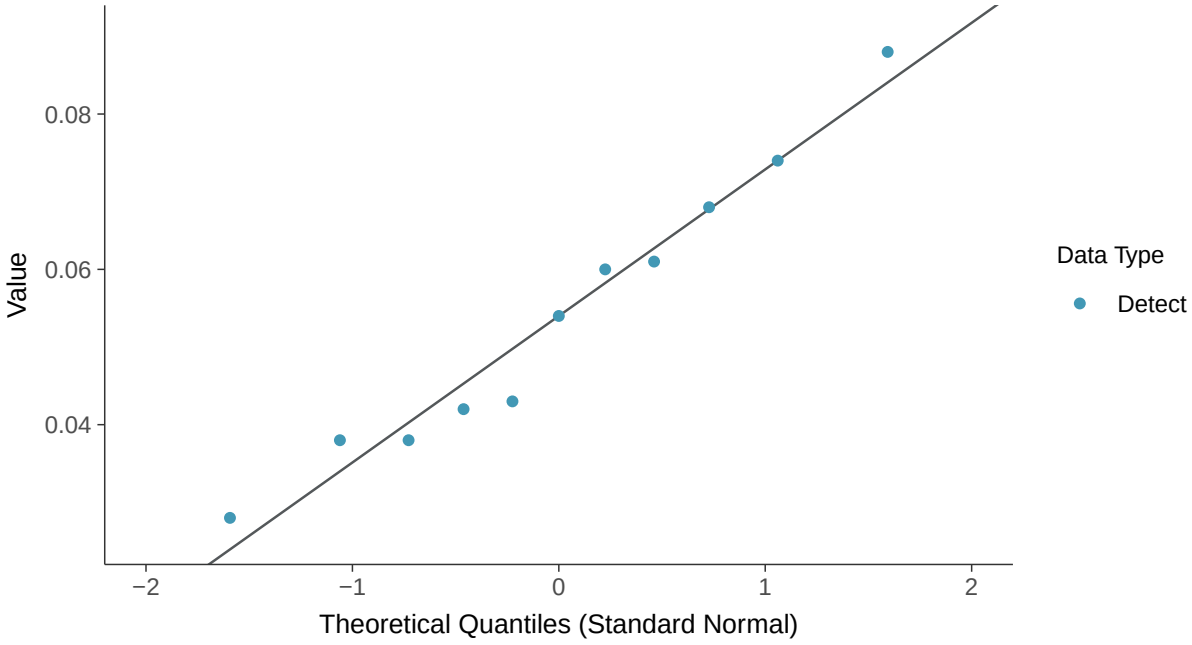
Boxplot by Season

Zinc, MW-18 (mg/L)



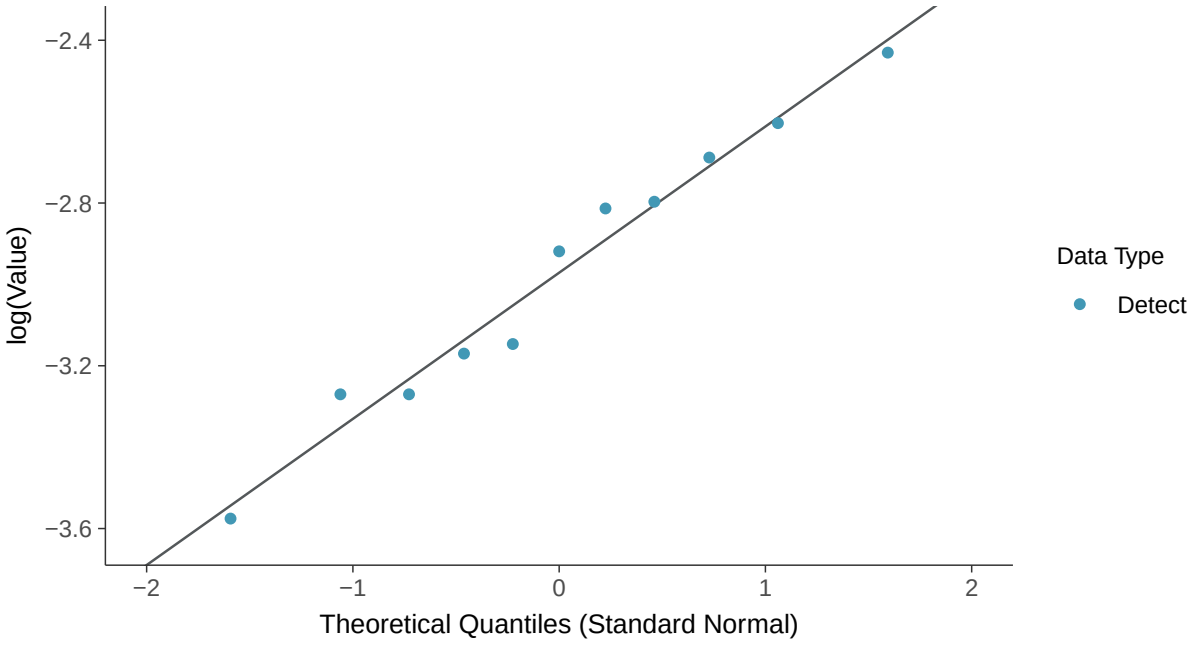
Normal Q-Q plot

Zinc, MW-18 (mg/L)



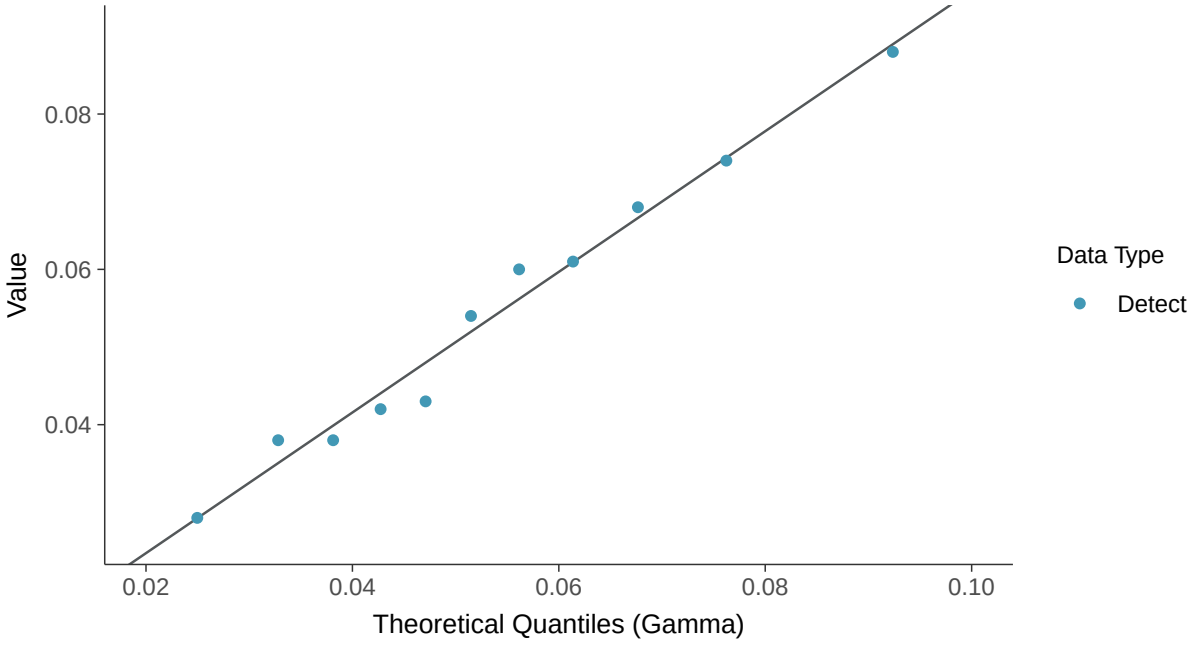
Lognormal Q-Q plot

Zinc, MW-18 (mg/L)



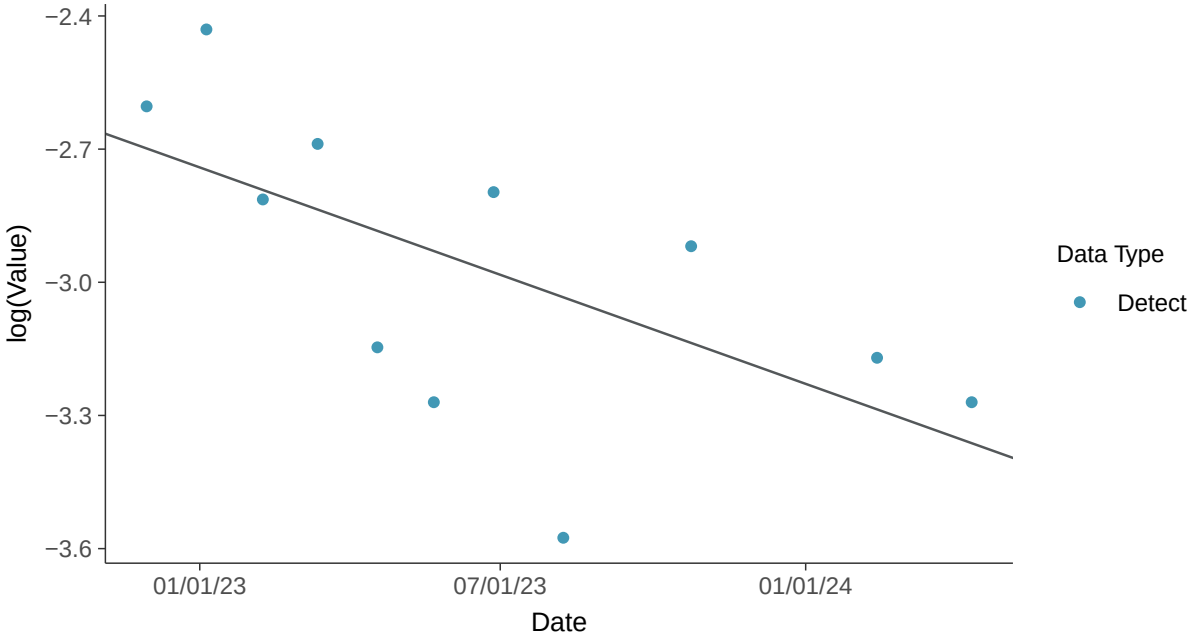
Gamma Q-Q plot

Zinc, MW-18 (mg/L)



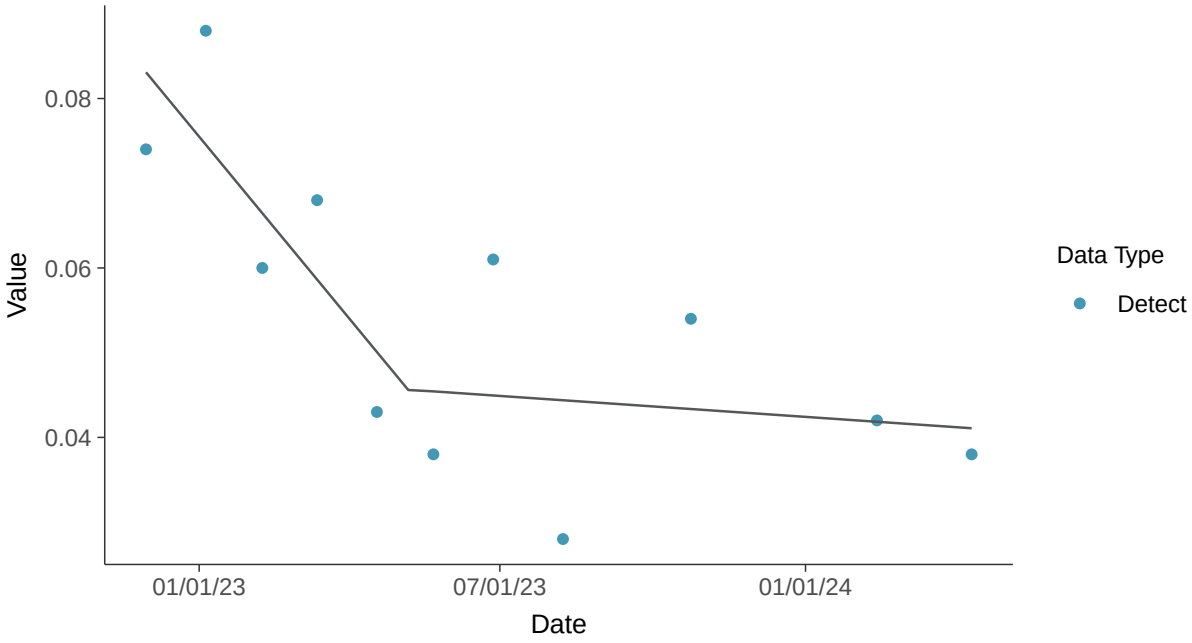
Trend Regression: Lognormal MLE

Zinc, MW-18 (mg/L)



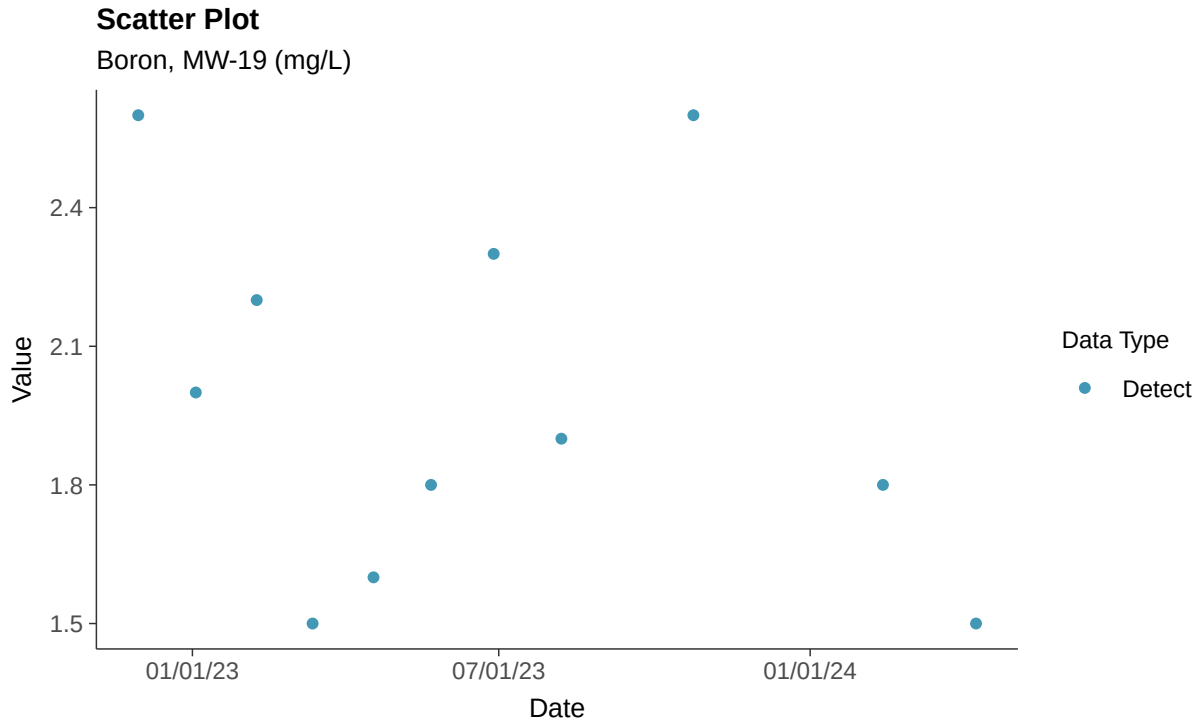
Trend Regression: Piecewise Linear-Linear

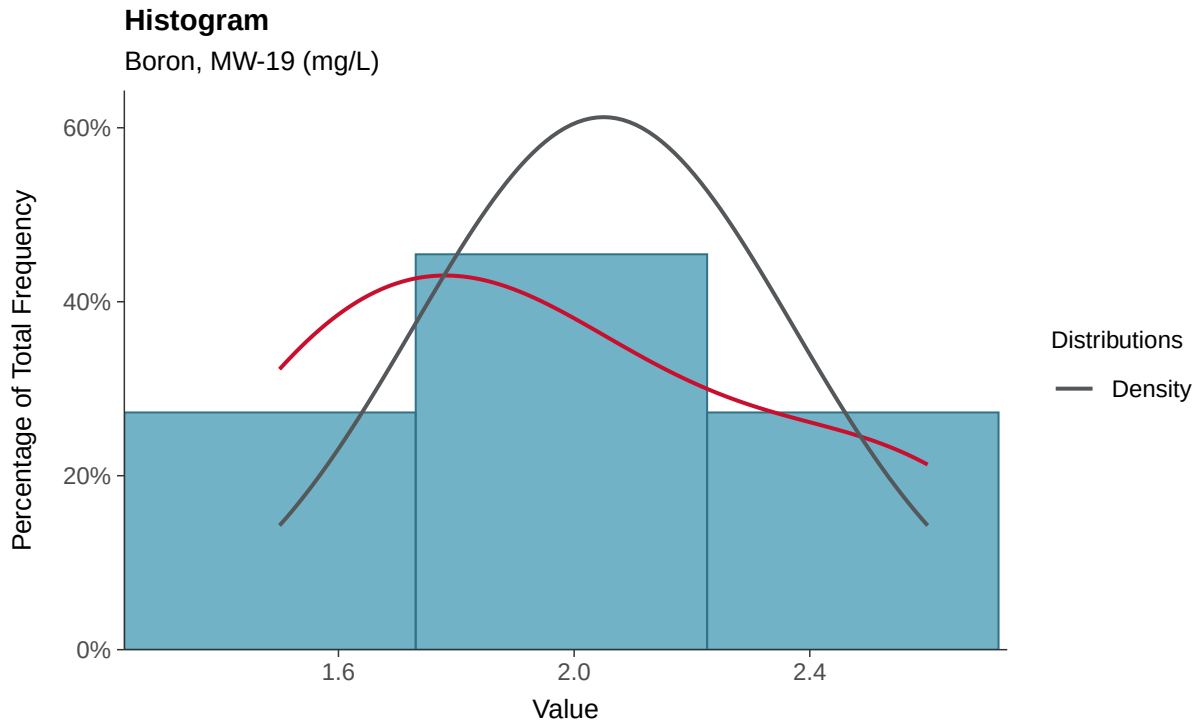
Zinc, MW-18 (mg/L)



Appendix III: Boron, MW-19

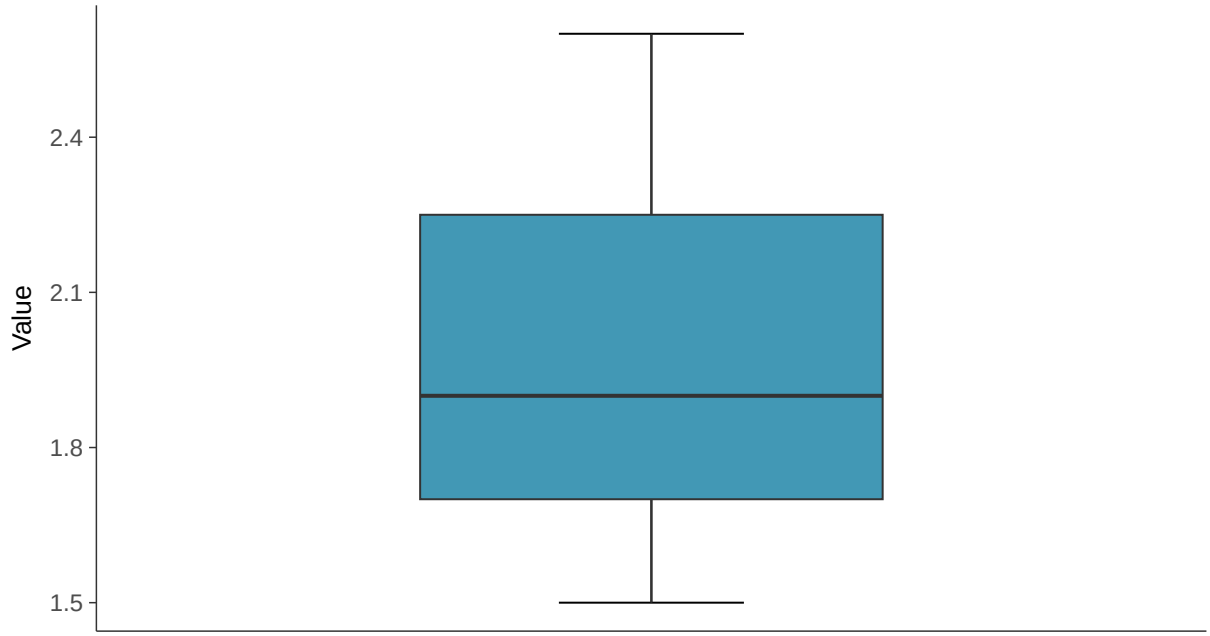
ID: 1_29_4_105





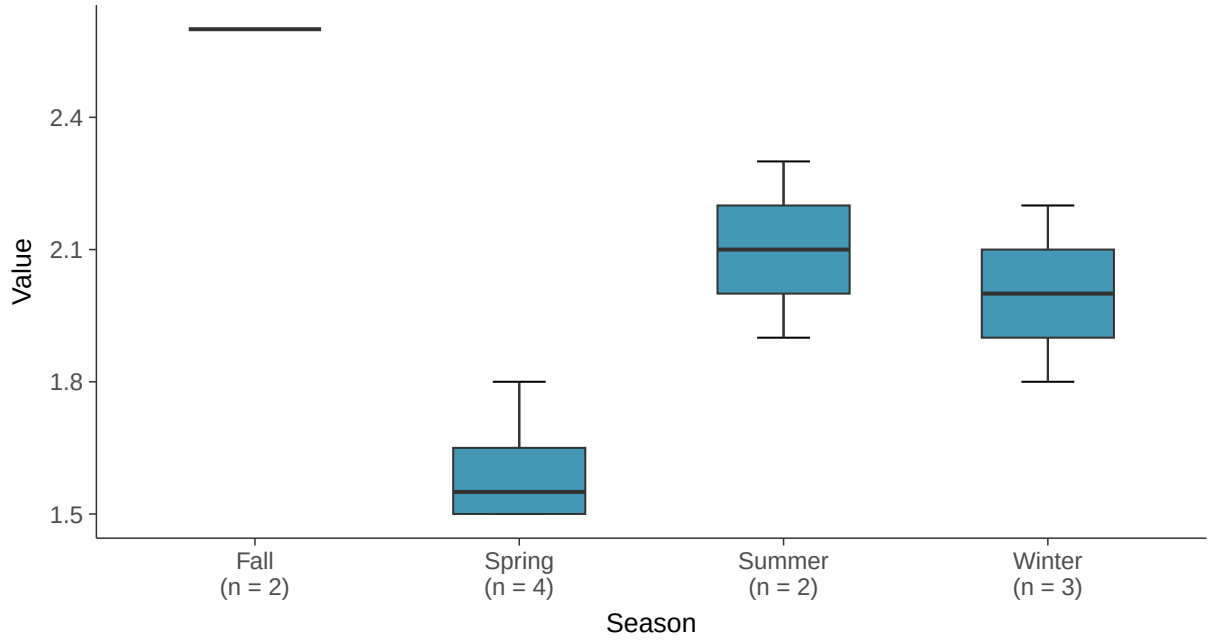
Boxplot

Boron, MW-19 (mg/L)



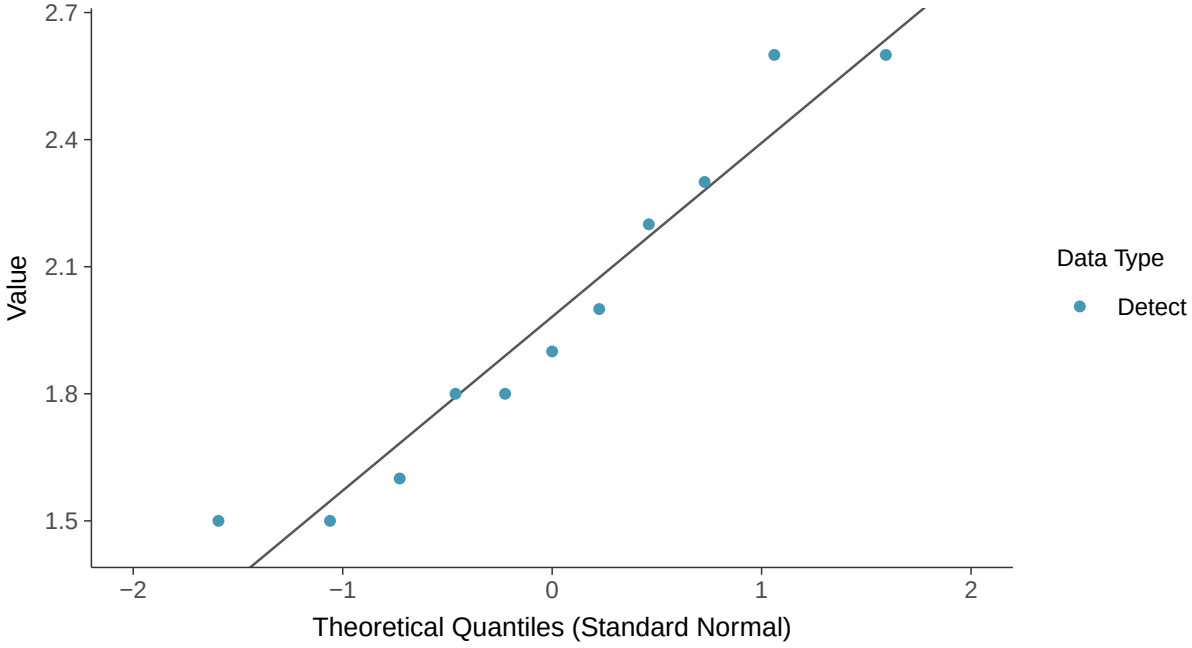
Boxplot by Season

Boron, MW-19 (mg/L)



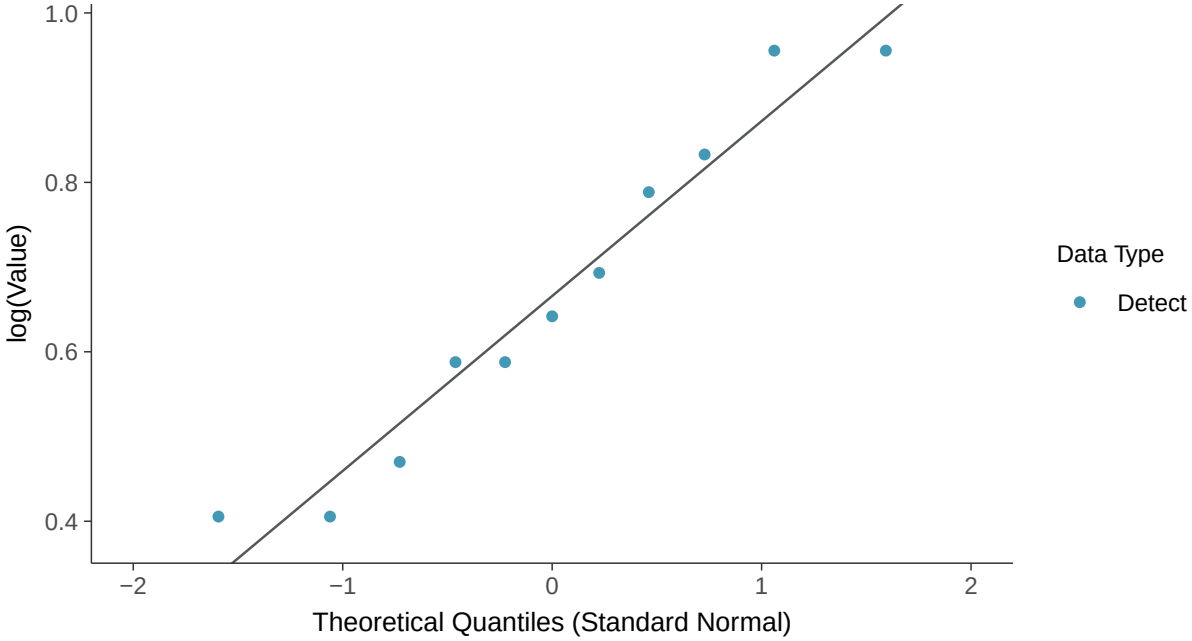
Normal Q-Q plot

Boron, MW-19 (mg/L)



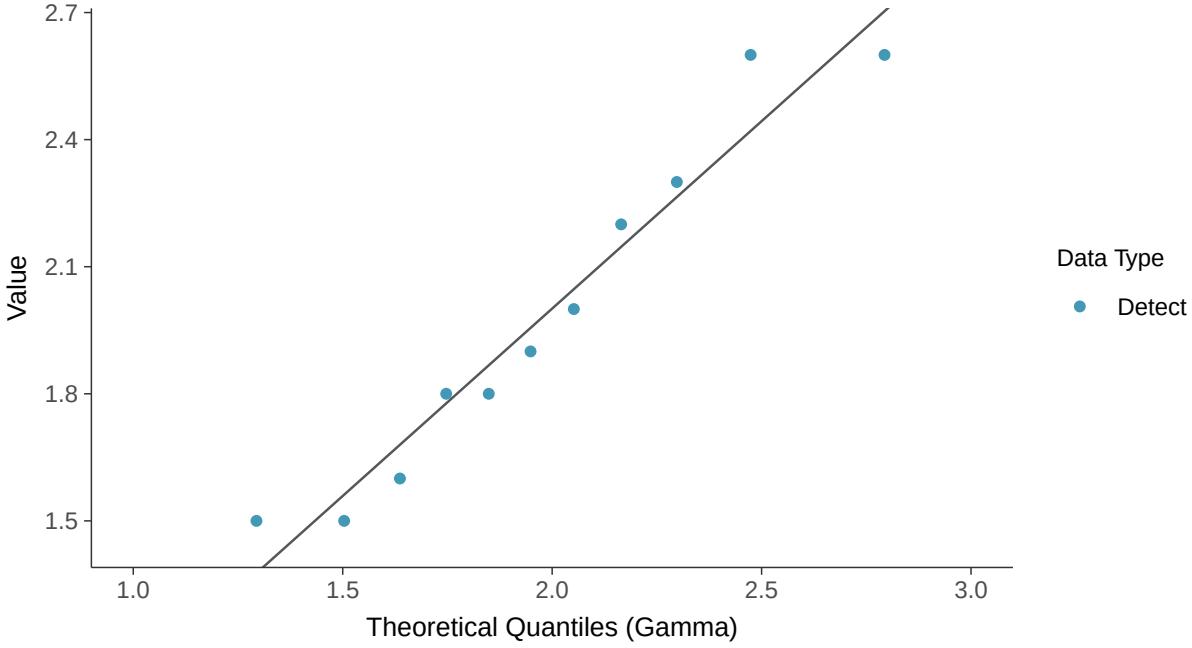
Lognormal Q-Q plot

Boron, MW-19 (mg/L)



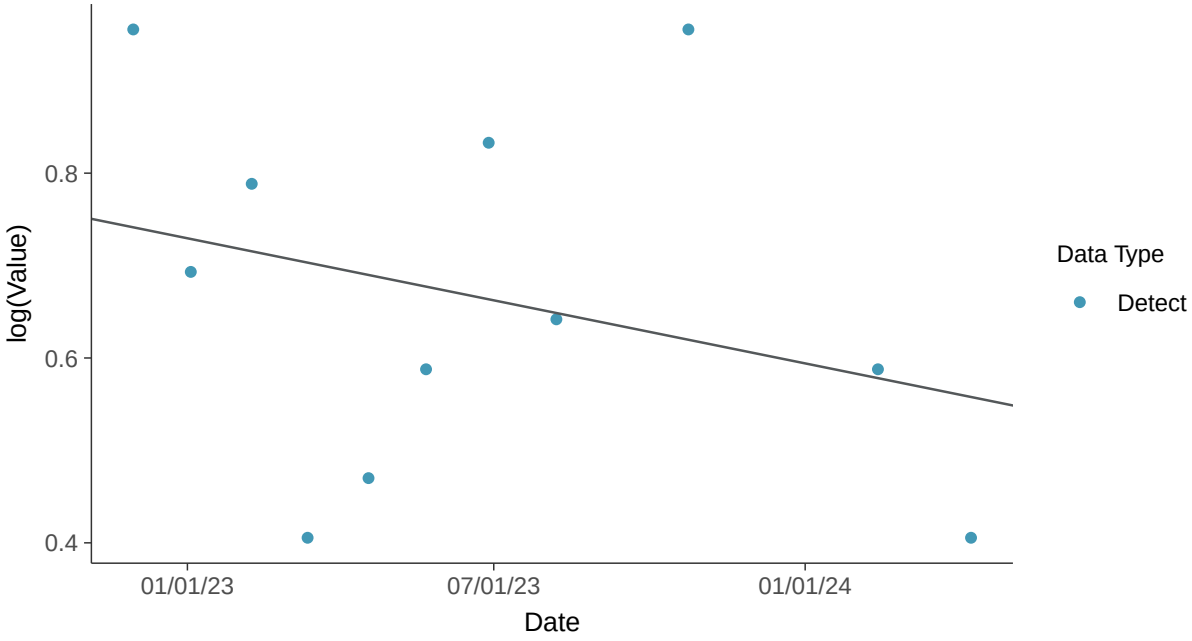
Gamma Q-Q plot

Boron, MW-19 (mg/L)



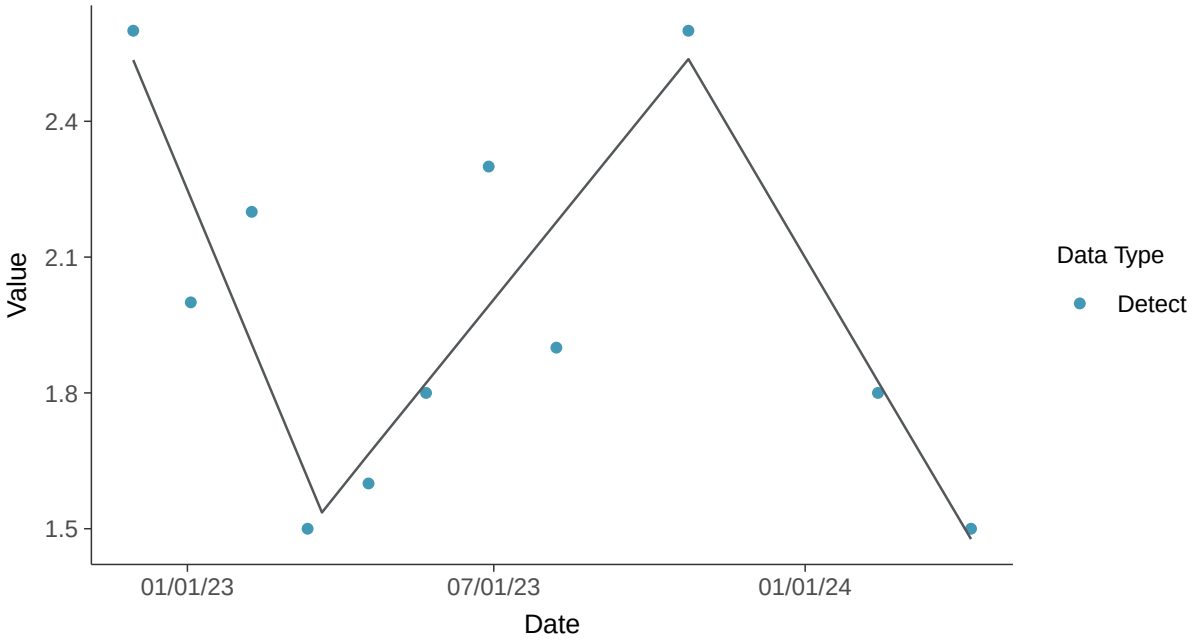
Trend Regression: Lognormal MLE

Boron, MW-19 (mg/L)



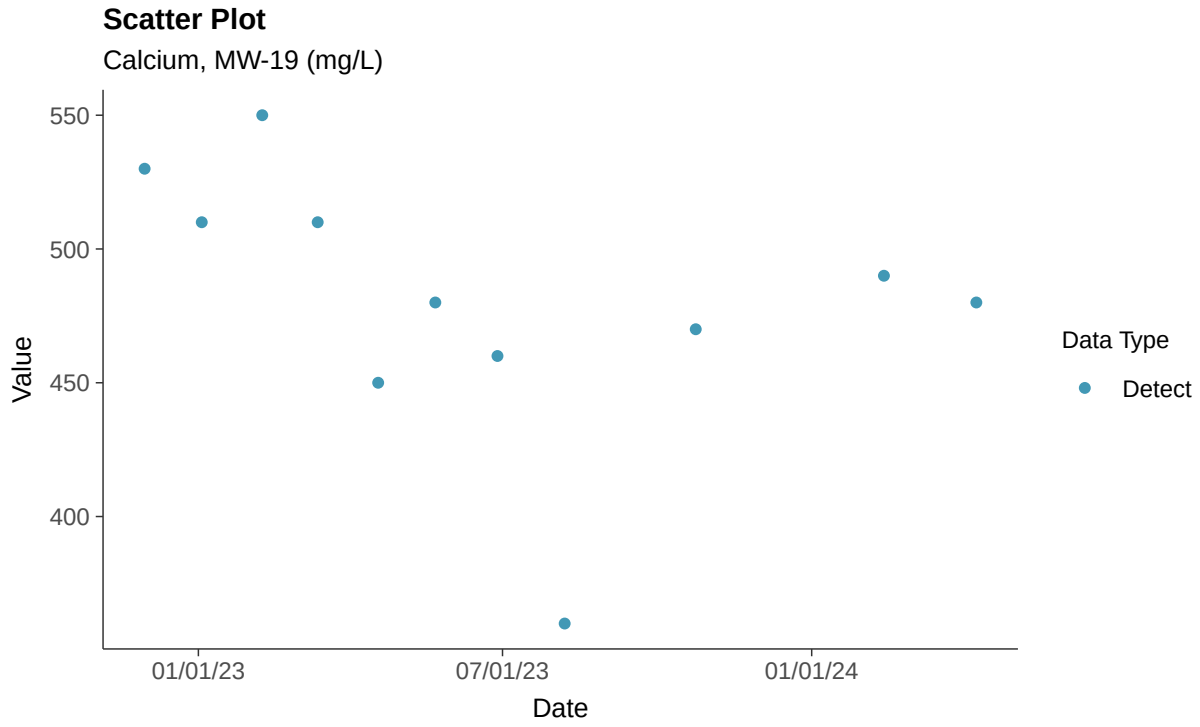
Trend Regression: Piecewise Linear-Linear-Linear

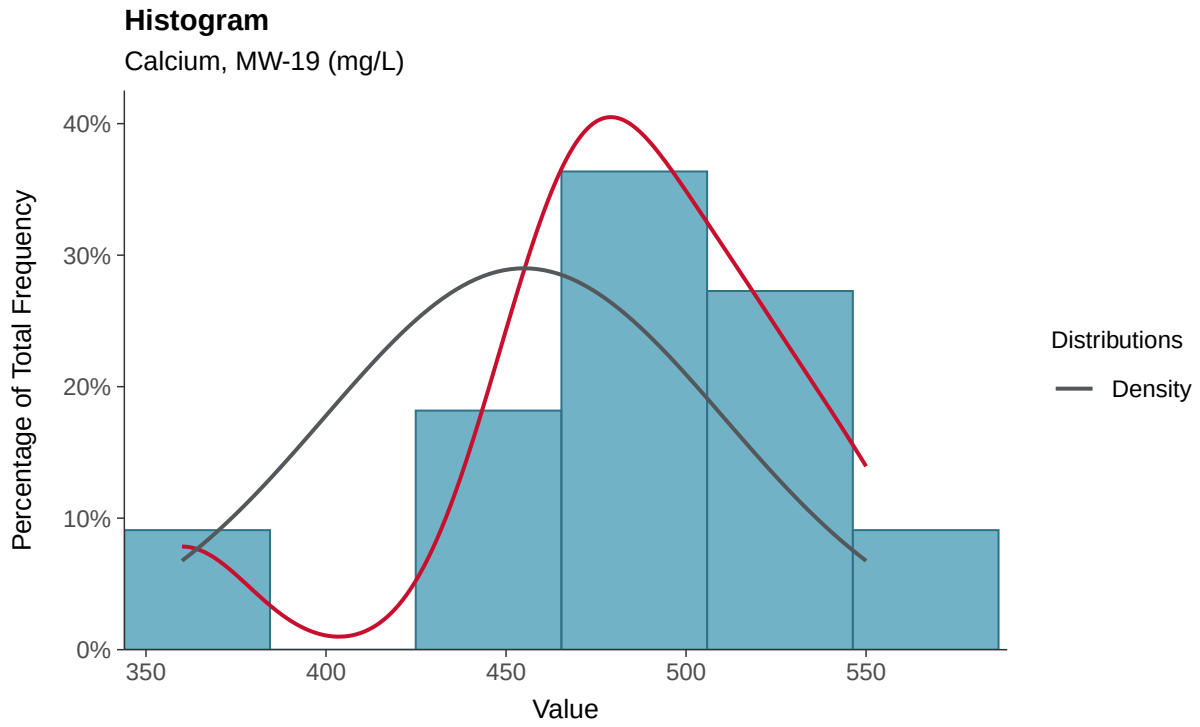
Boron, MW-19 (mg/L)



Appendix III: Calcium, MW-19

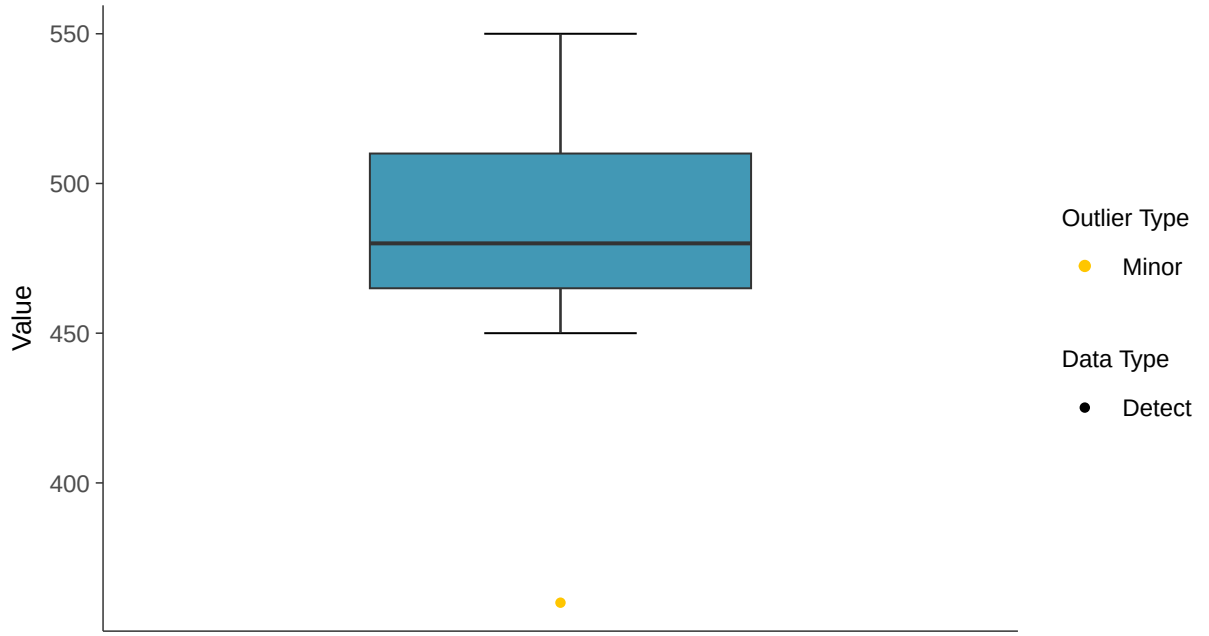
ID: 1_29_4_107





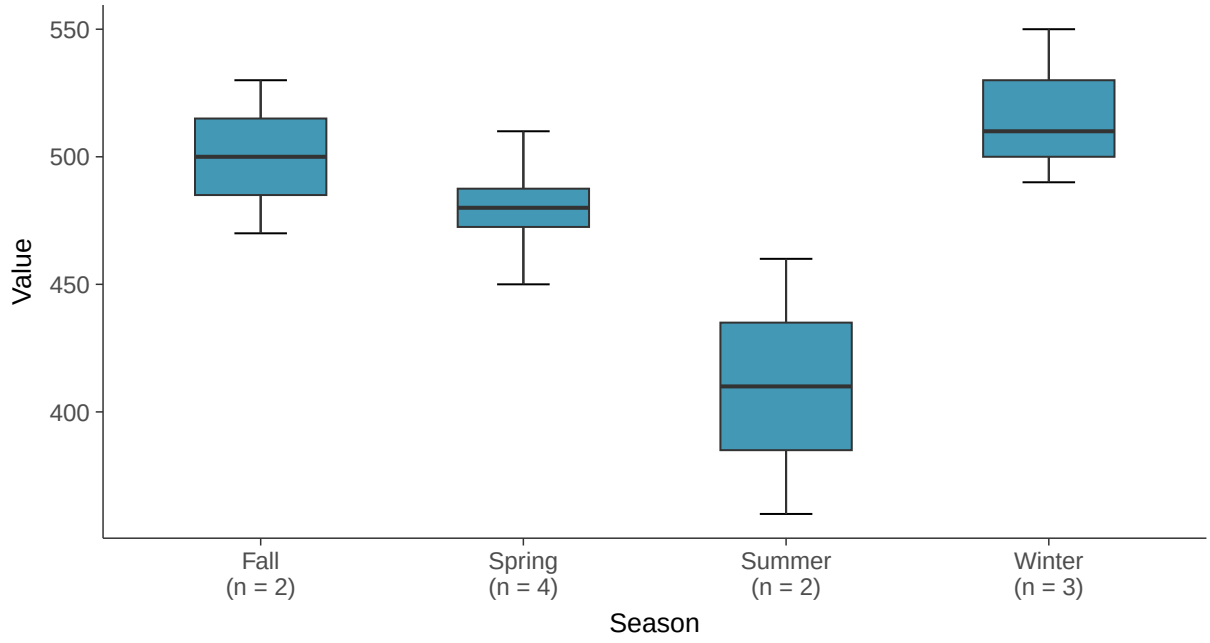
Boxplot

Calcium, MW-19 (mg/L)



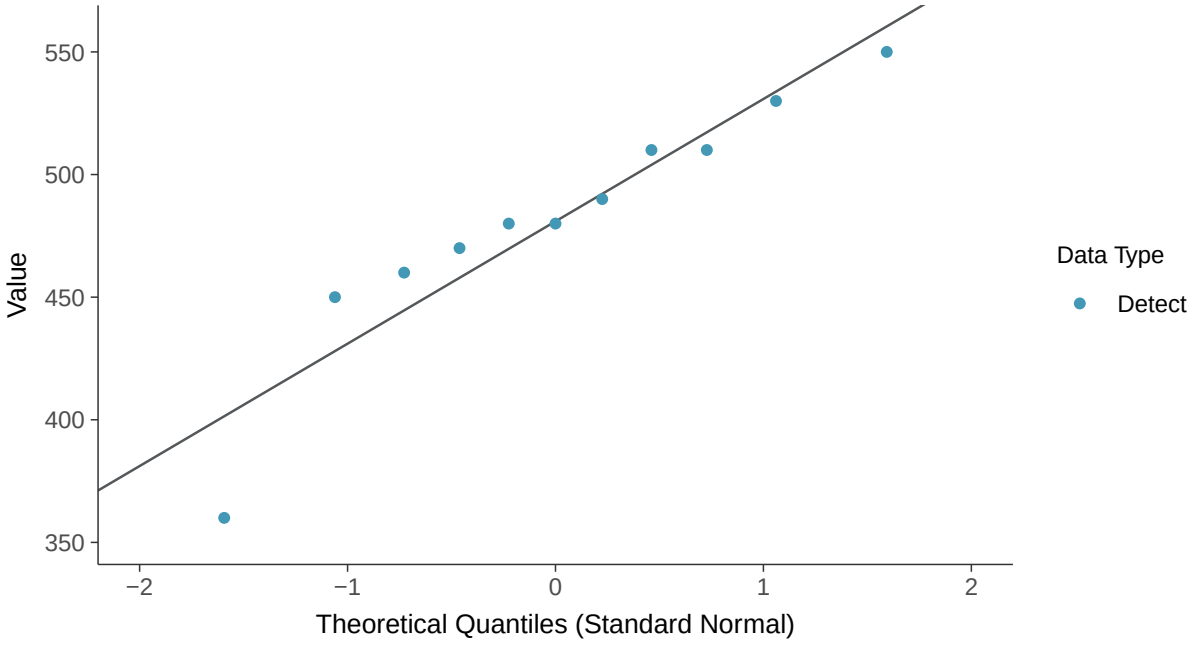
Boxplot by Season

Calcium, MW-19 (mg/L)



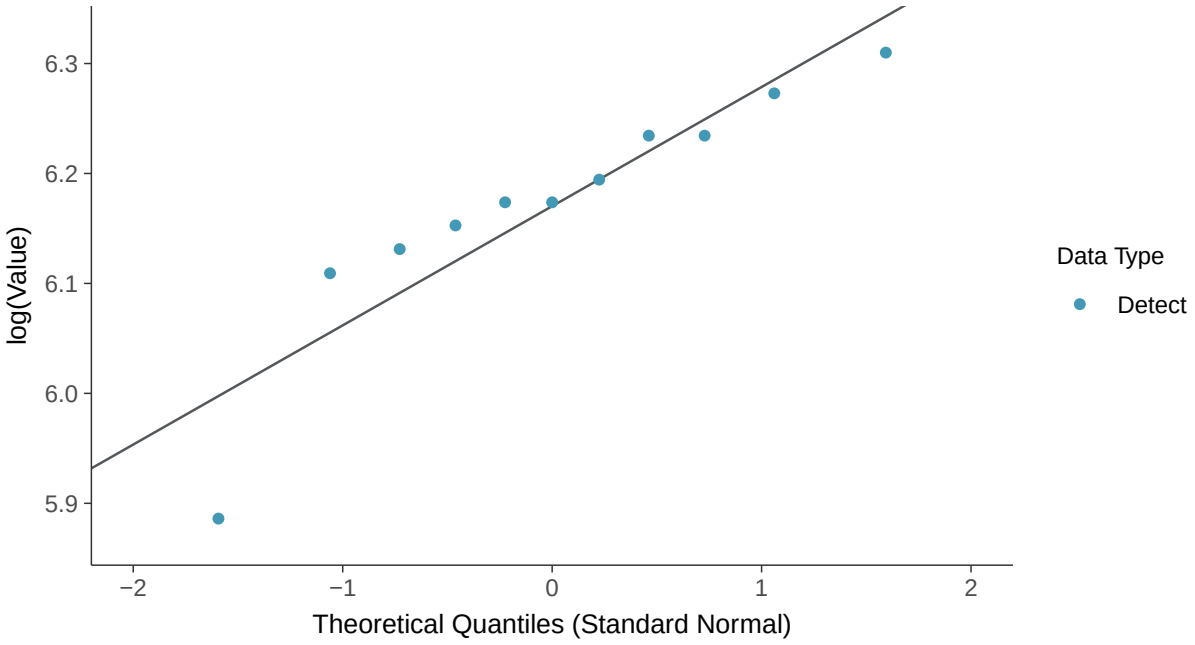
Normal Q-Q plot

Calcium, MW-19 (mg/L)



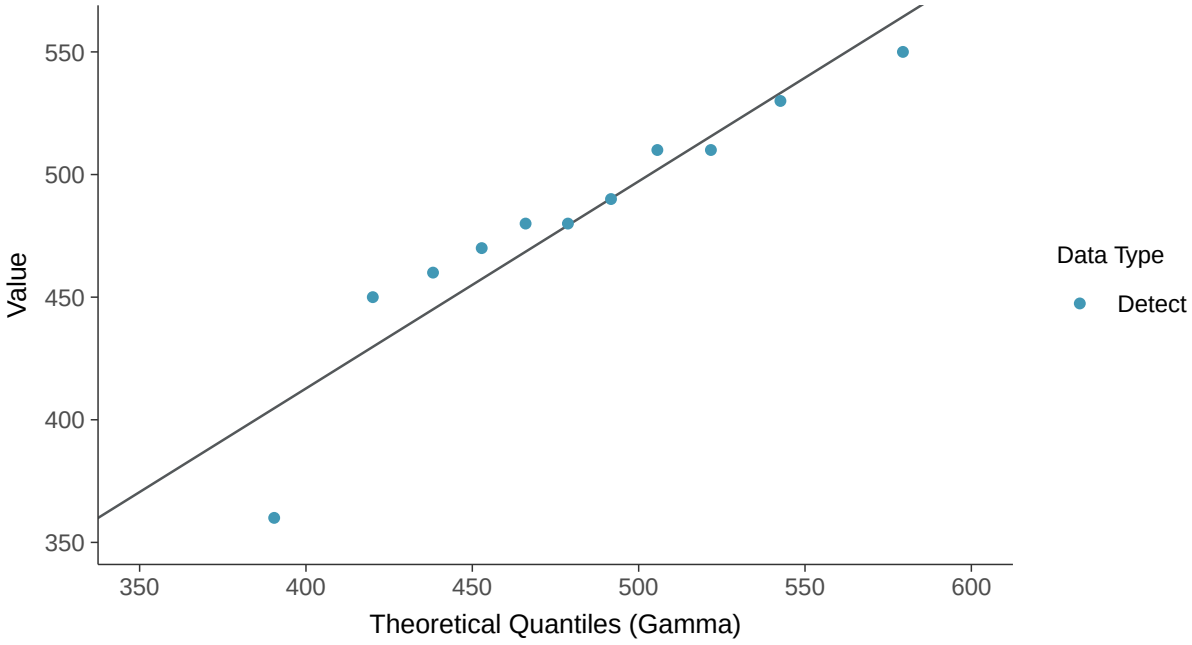
Lognormal Q-Q plot

Calcium, MW-19 (mg/L)



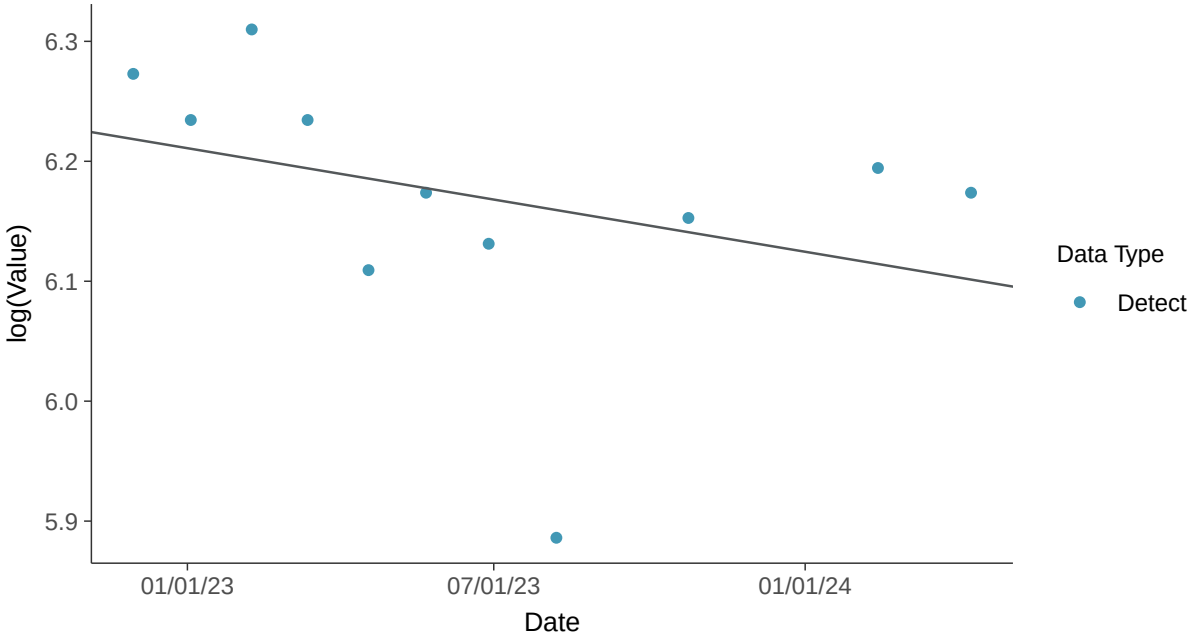
Gamma Q-Q plot

Calcium, MW-19 (mg/L)



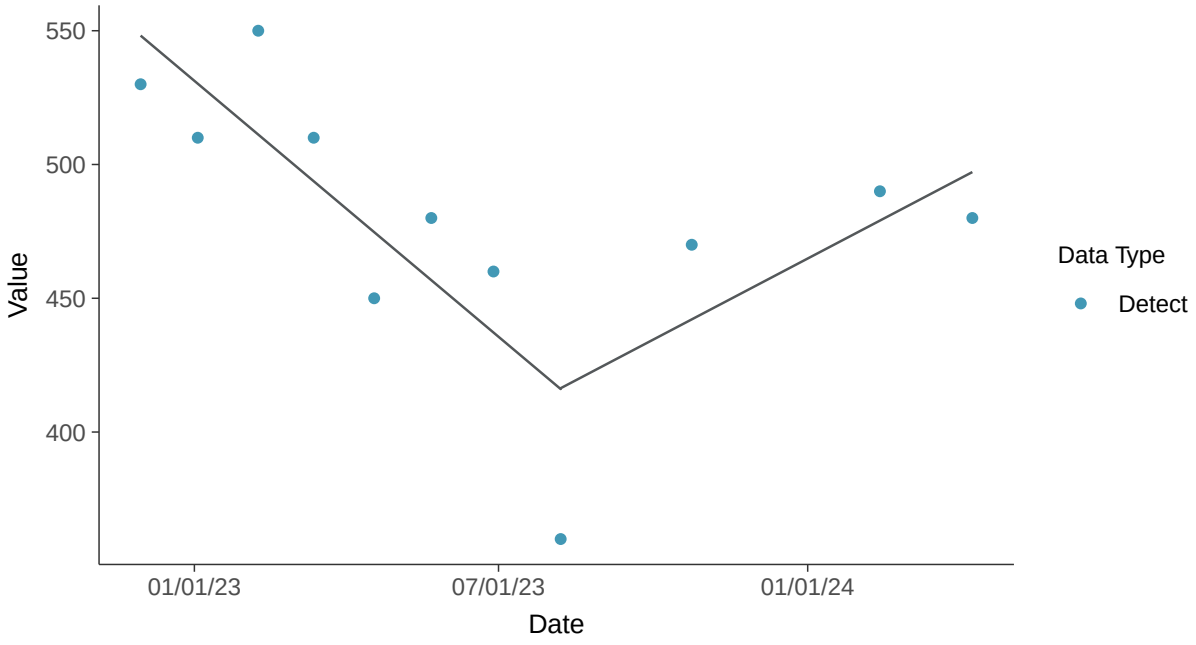
Trend Regression: Lognormal MLE

Calcium, MW-19 (mg/L)



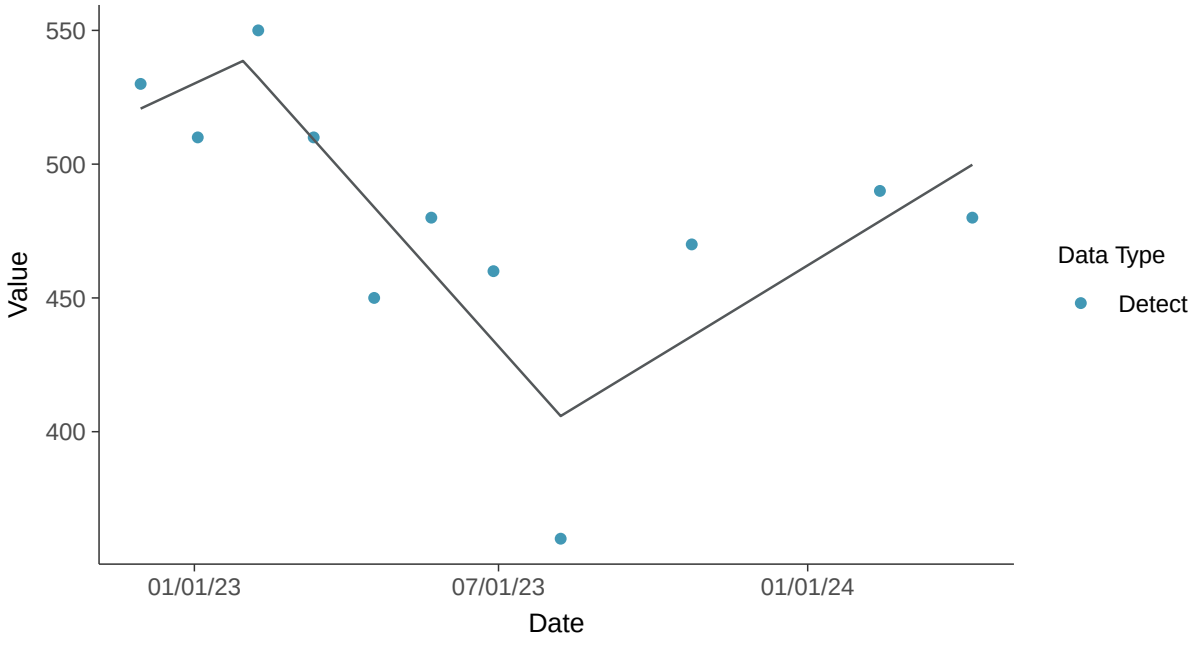
Trend Regression: Piecewise Linear-Linear

Calcium, MW-19 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Calcium, MW-19 (mg/L)

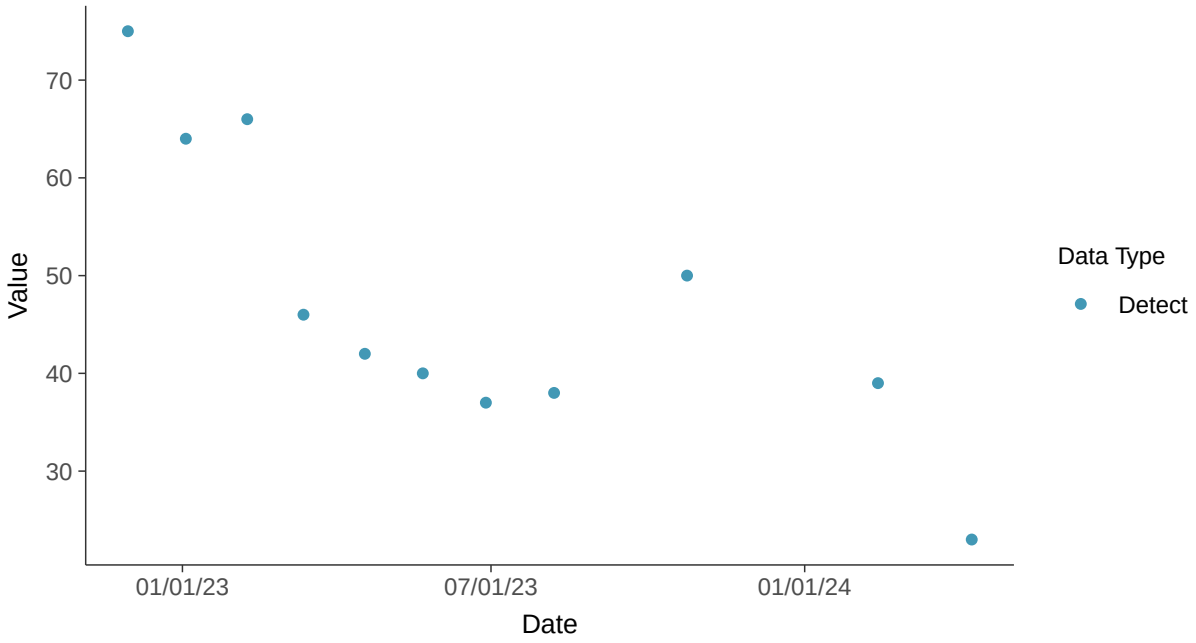


Appendix III: Chloride (as Cl), MW-19

ID: 1_29_4_108

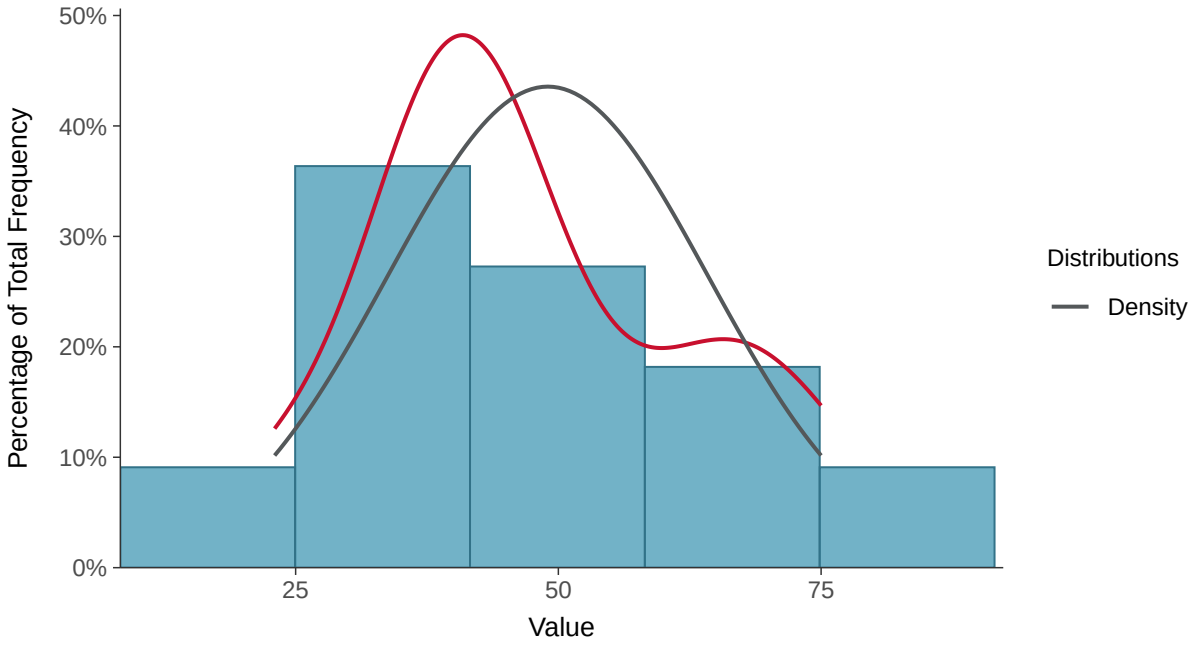
Scatter Plot

Chloride (as Cl), MW-19 (mg/L)



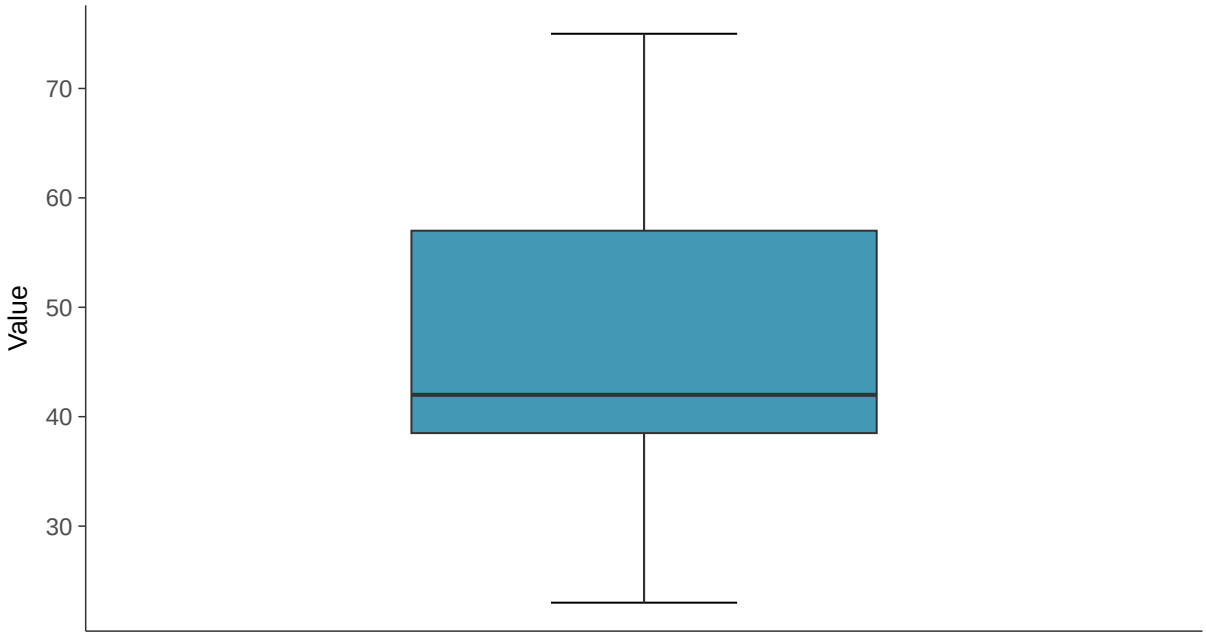
Histogram

Chloride (as Cl), MW-19 (mg/L)



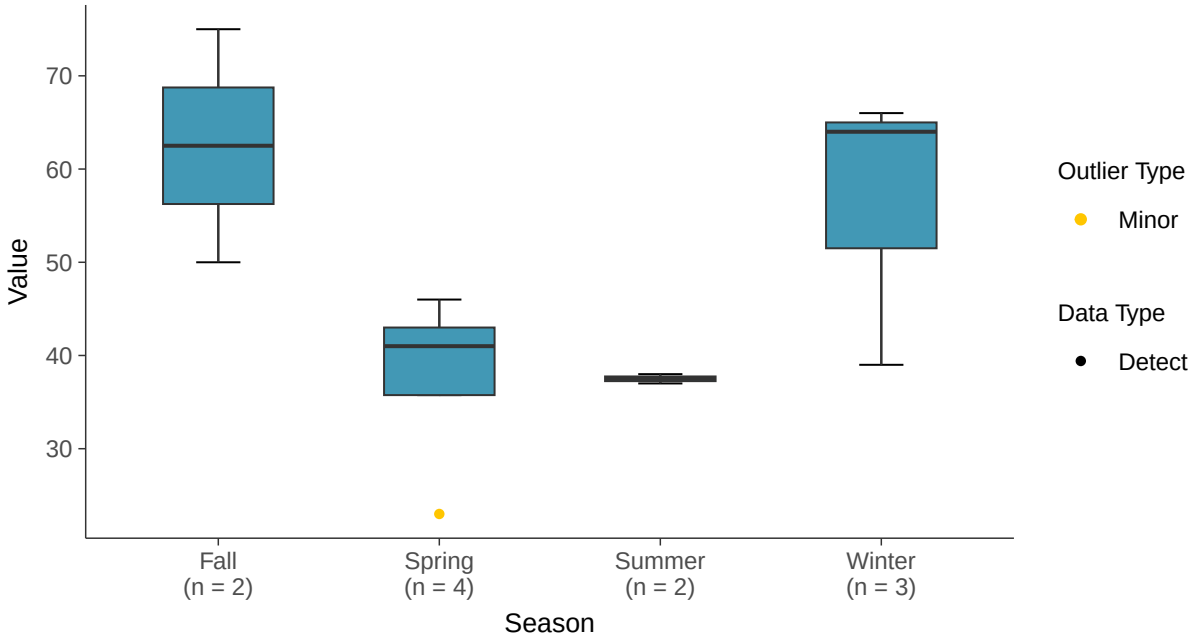
Boxplot

Chloride (as Cl), MW-19 (mg/L)



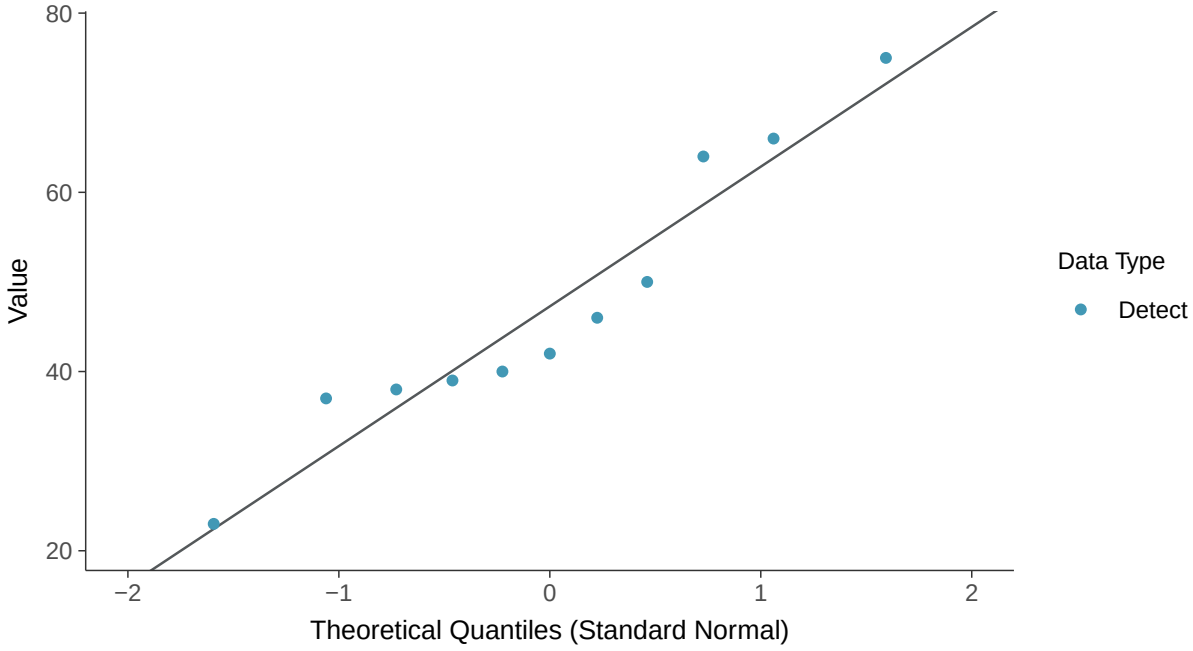
Boxplot by Season

Chloride (as Cl), MW-19 (mg/L)



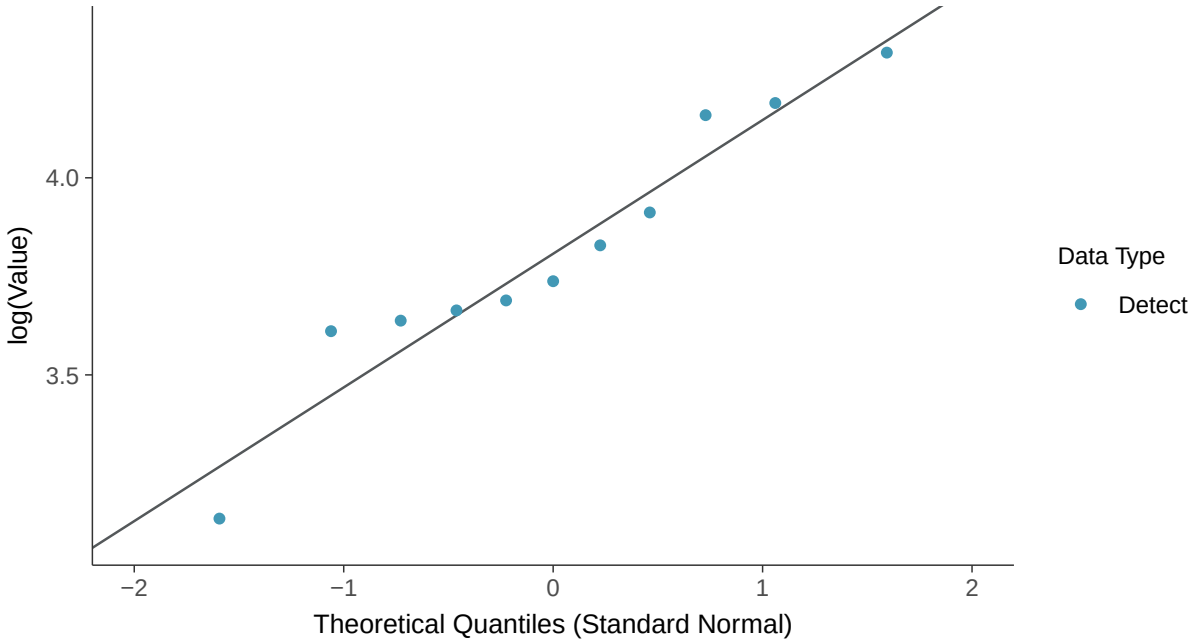
Normal Q-Q plot

Chloride (as Cl), MW-19 (mg/L)



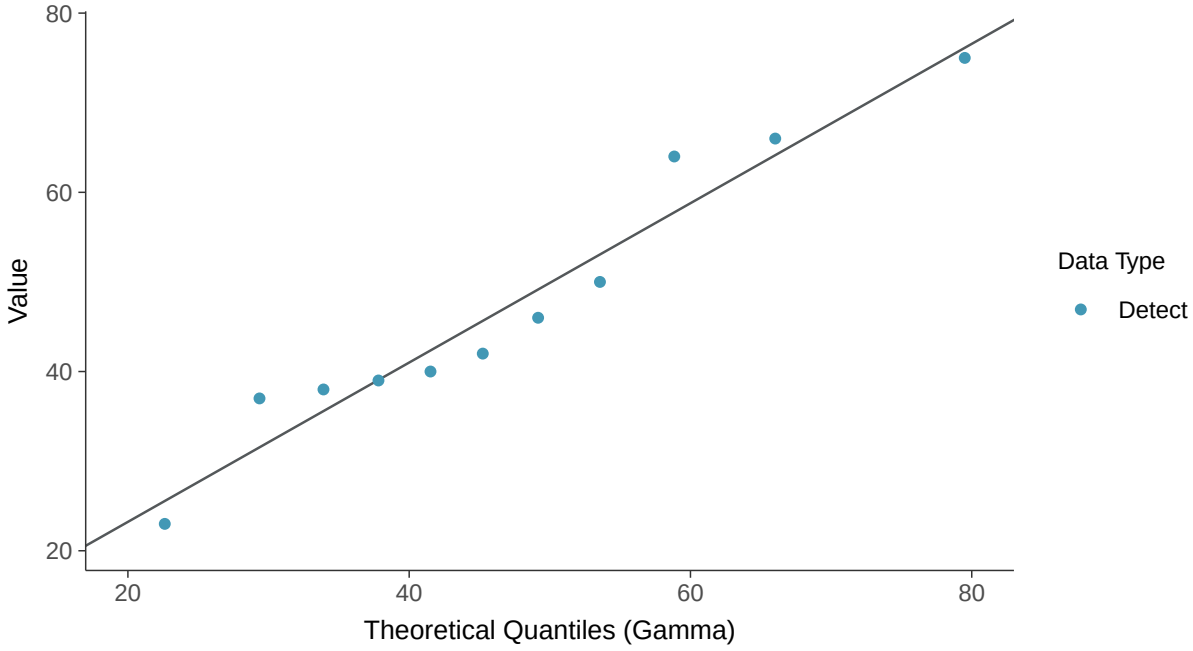
Lognormal Q-Q plot

Chloride (as Cl), MW-19 (mg/L)



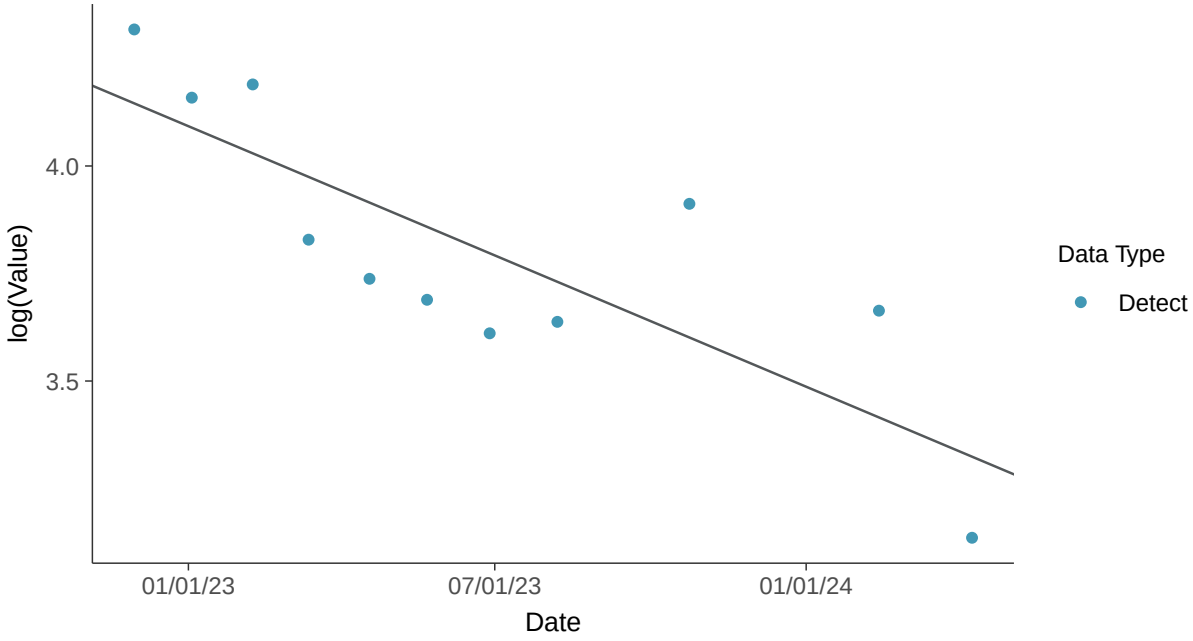
Gamma Q-Q plot

Chloride (as Cl), MW-19 (mg/L)



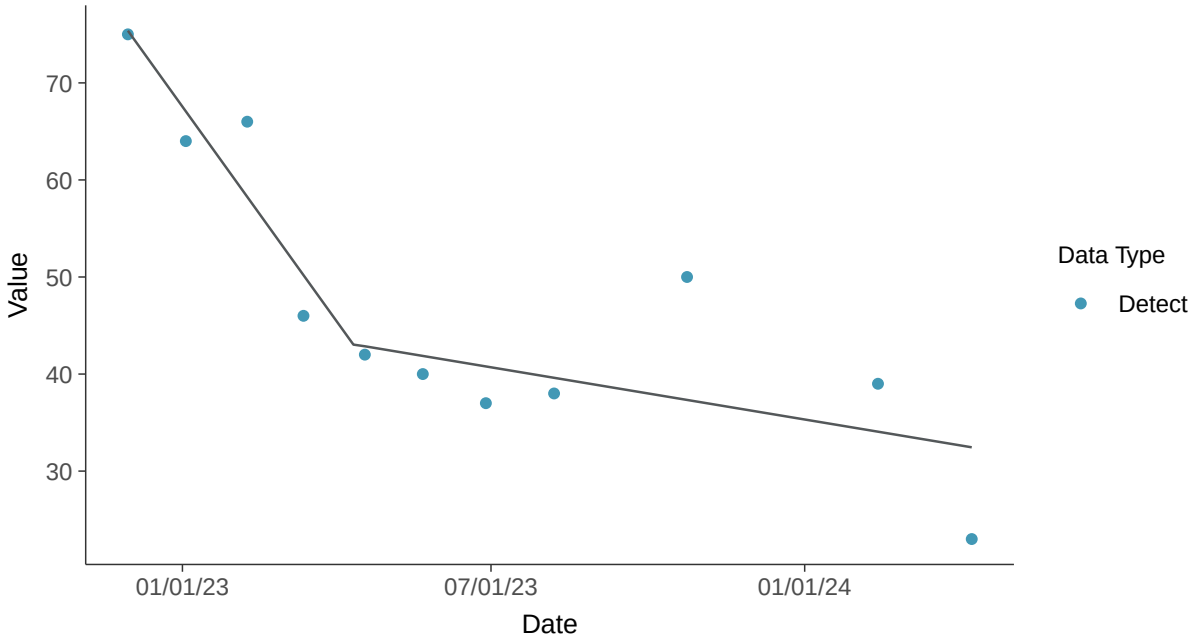
Trend Regression: Lognormal MLE

Chloride (as Cl), MW-19 (mg/L)



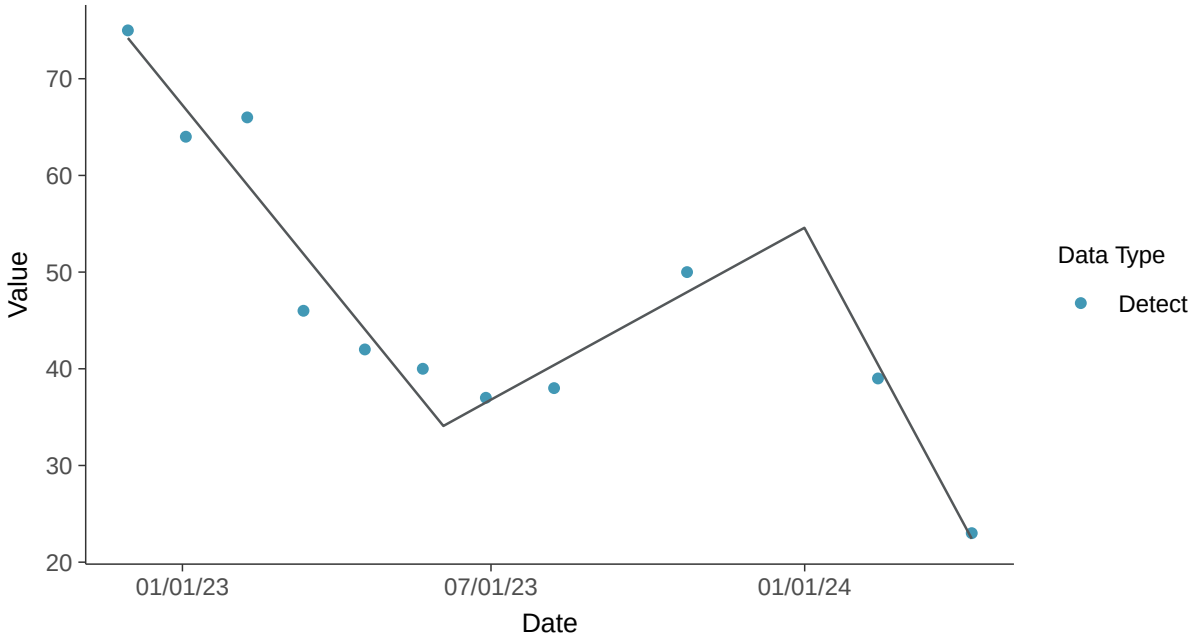
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-19 (mg/L)



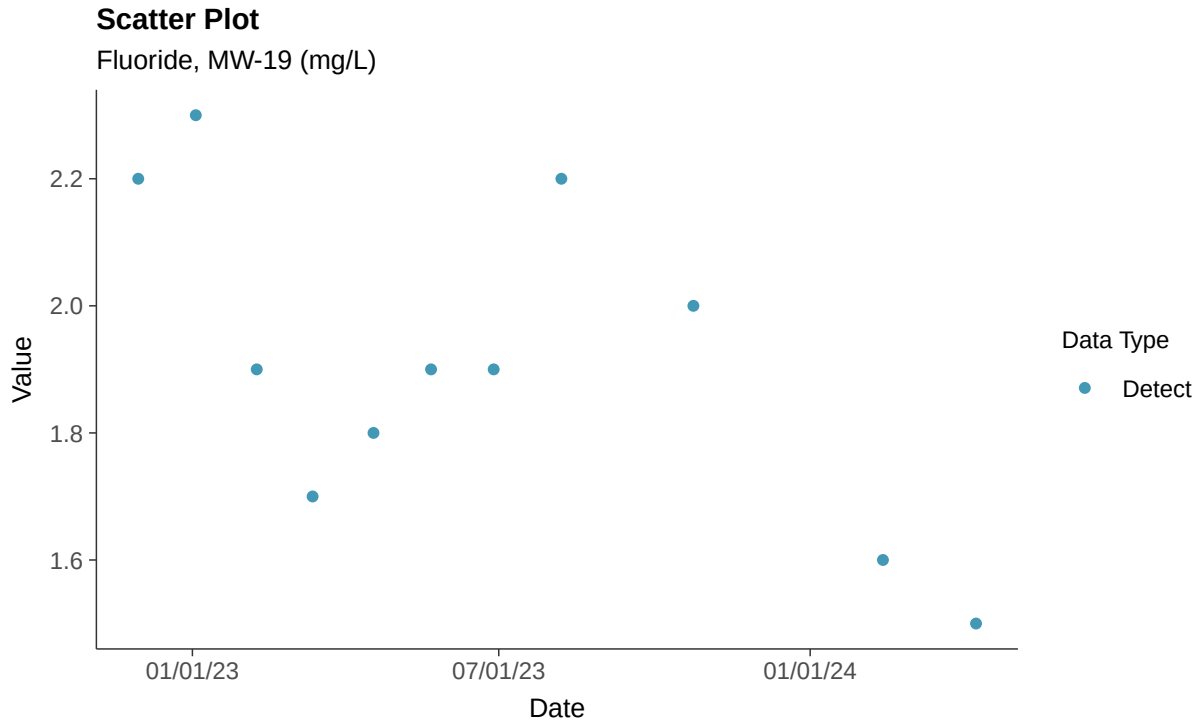
Trend Regression: Piecewise Linear-Linear-Linear

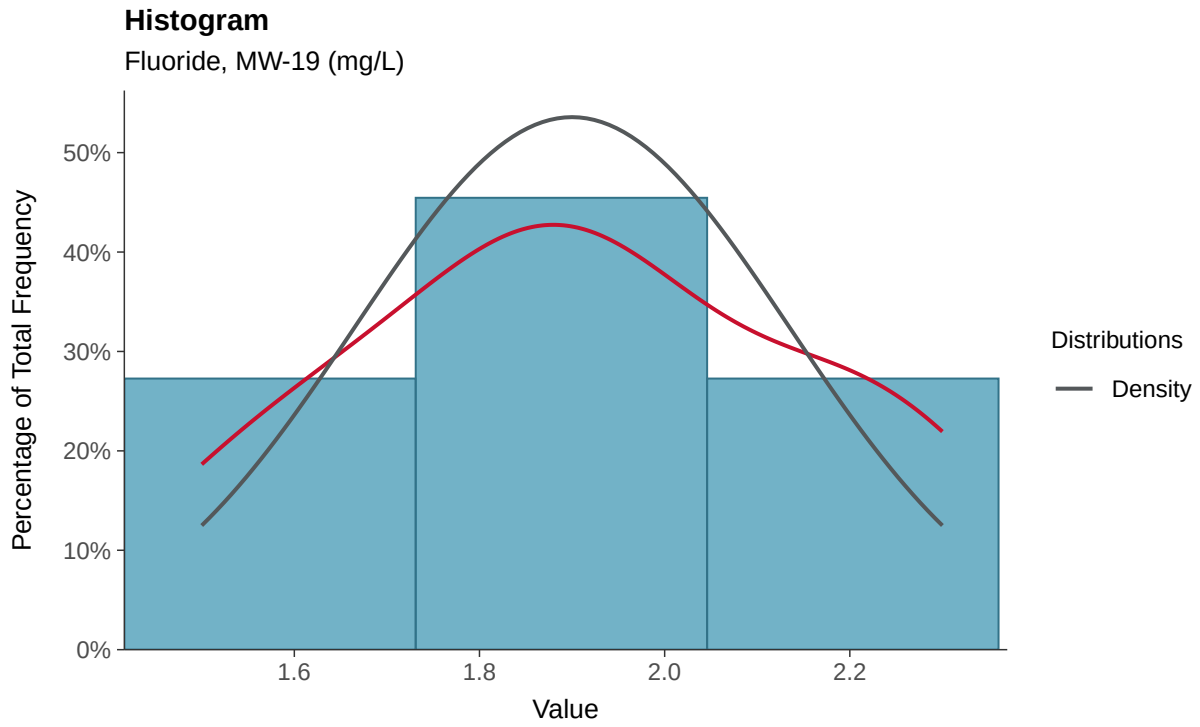
Chloride (as Cl), MW-19 (mg/L)



Appendix III: Fluoride, MW-19

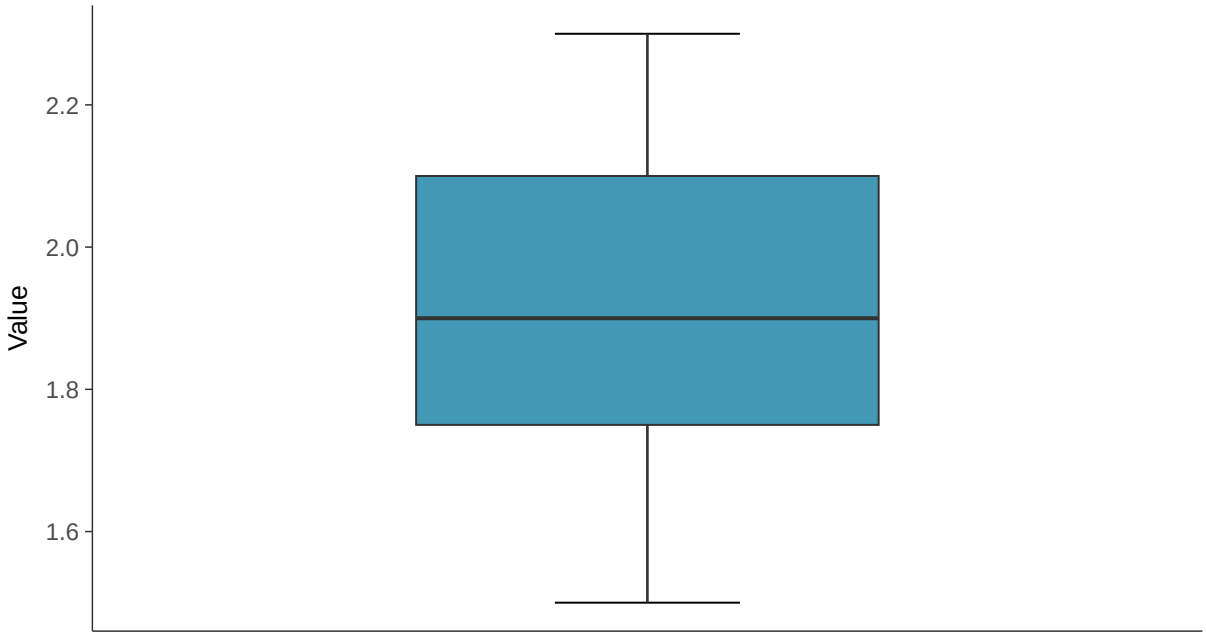
ID: 1_29_4_112





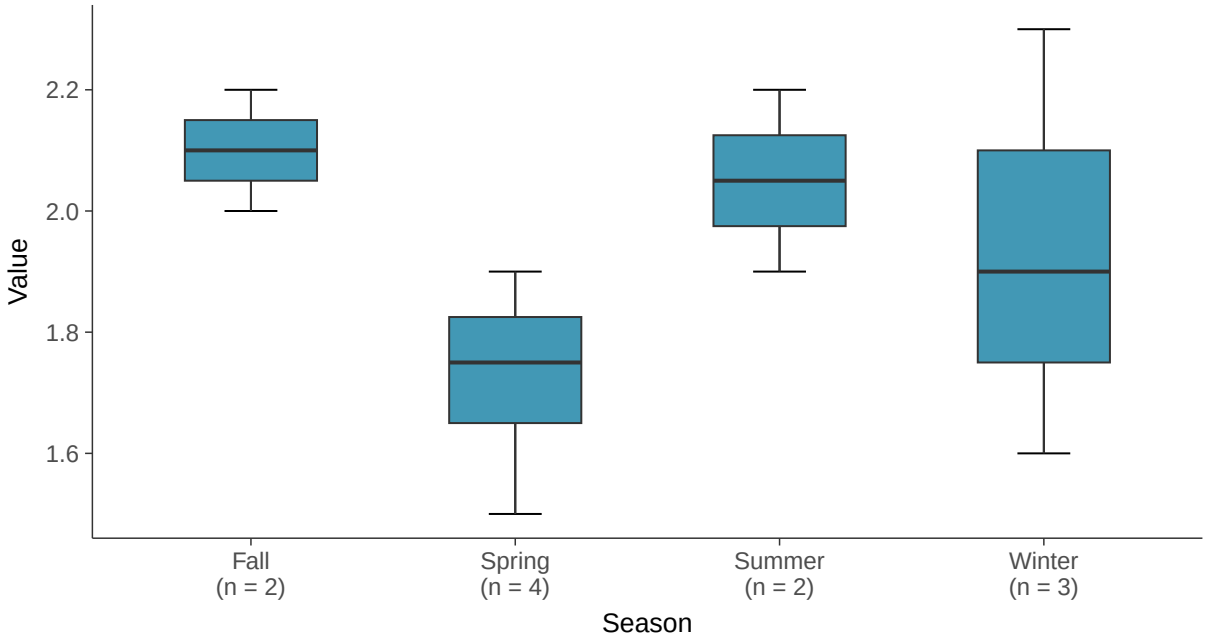
Boxplot

Fluoride, MW-19 (mg/L)



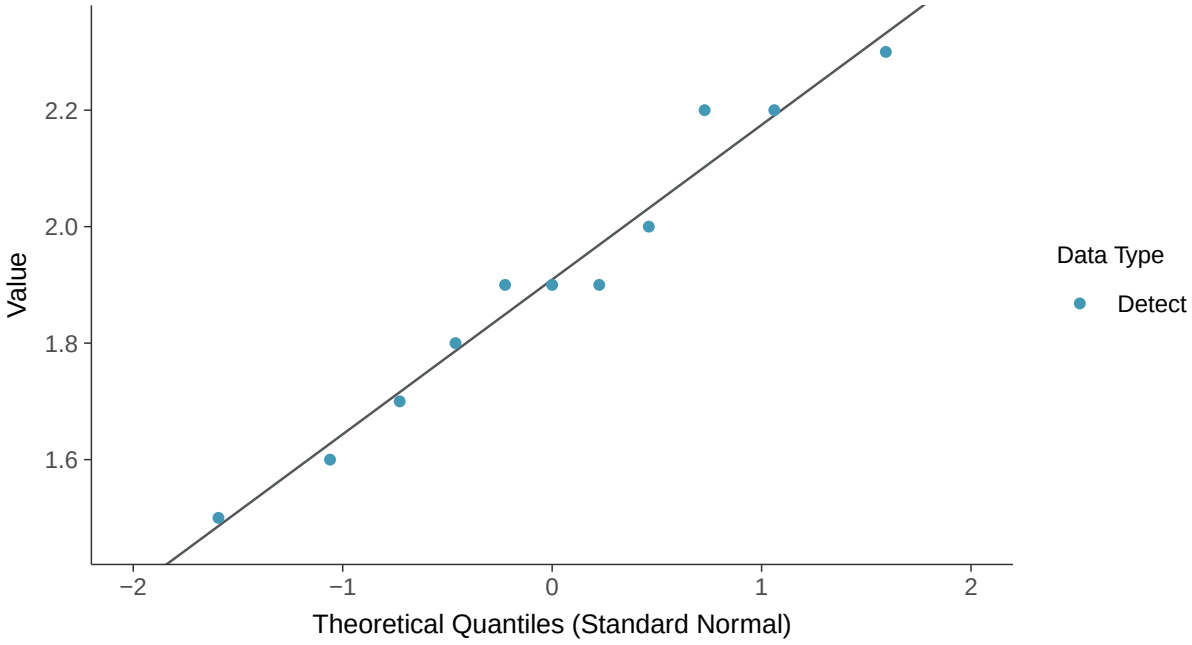
Boxplot by Season

Fluoride, MW-19 (mg/L)



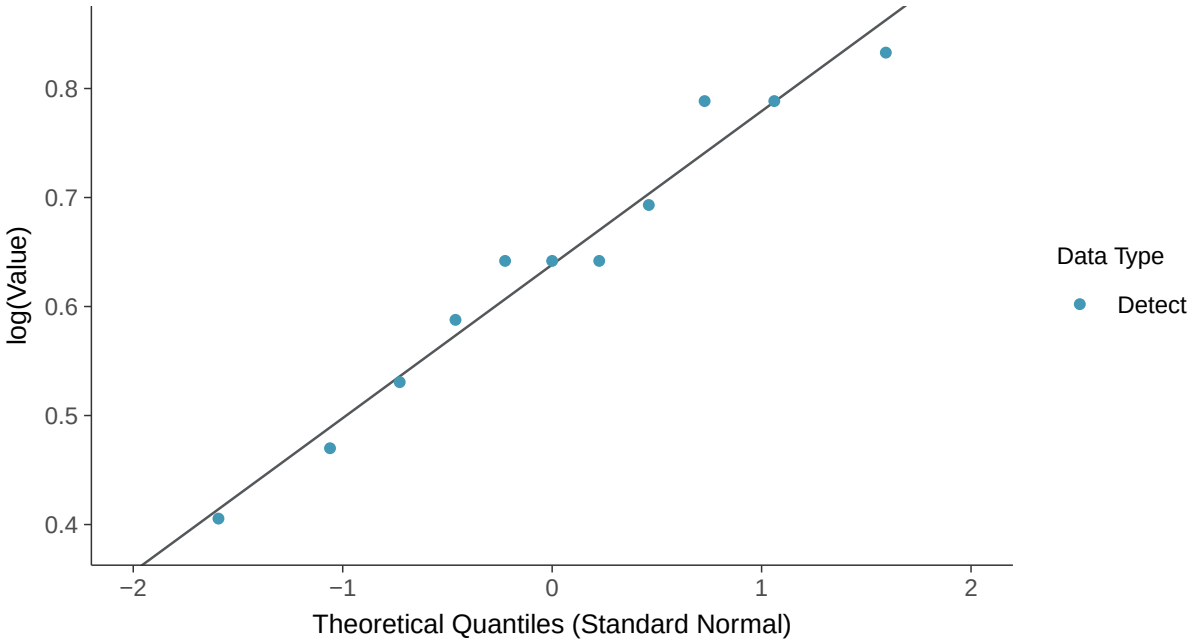
Normal Q-Q plot

Fluoride, MW-19 (mg/L)



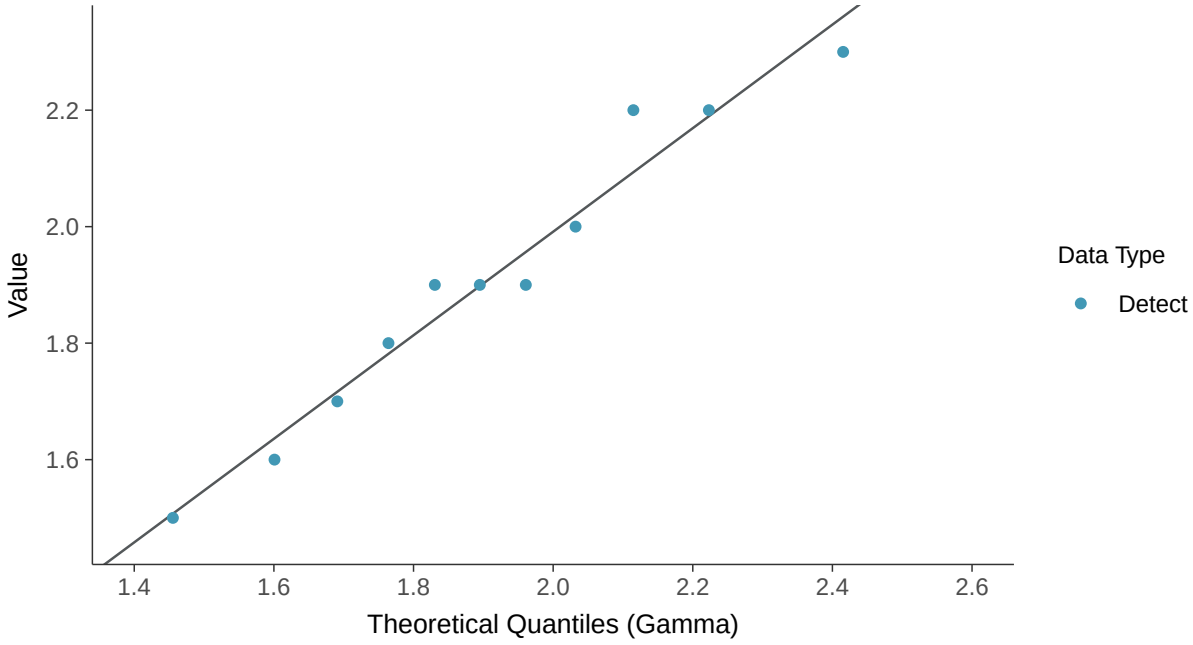
Lognormal Q-Q plot

Fluoride, MW-19 (mg/L)



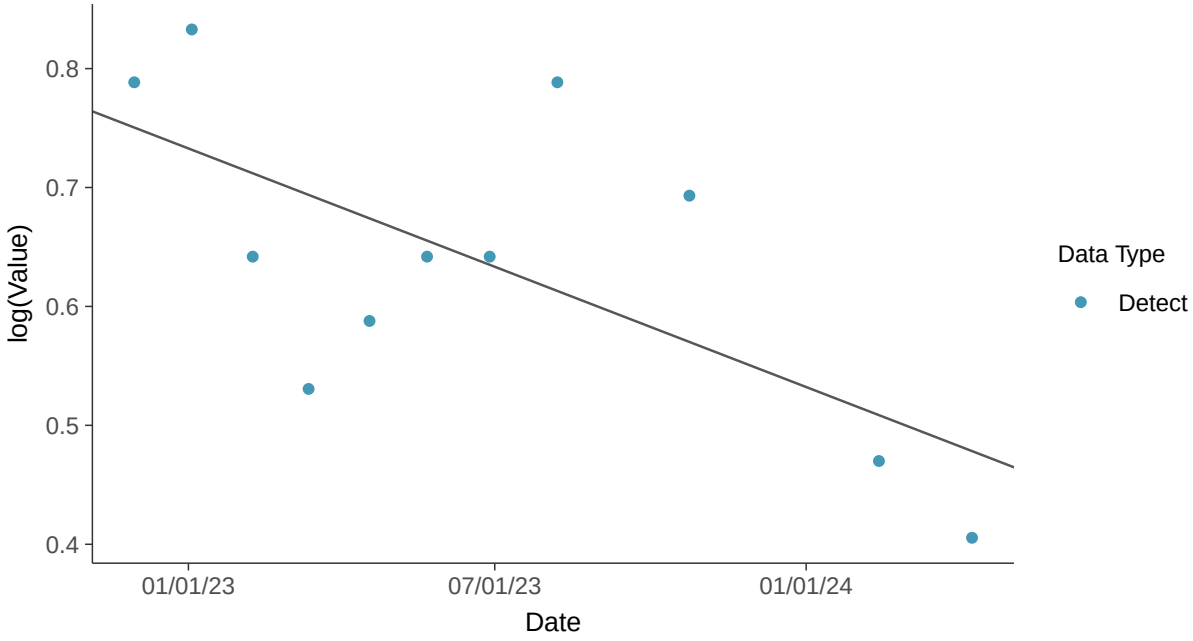
Gamma Q-Q plot

Fluoride, MW-19 (mg/L)



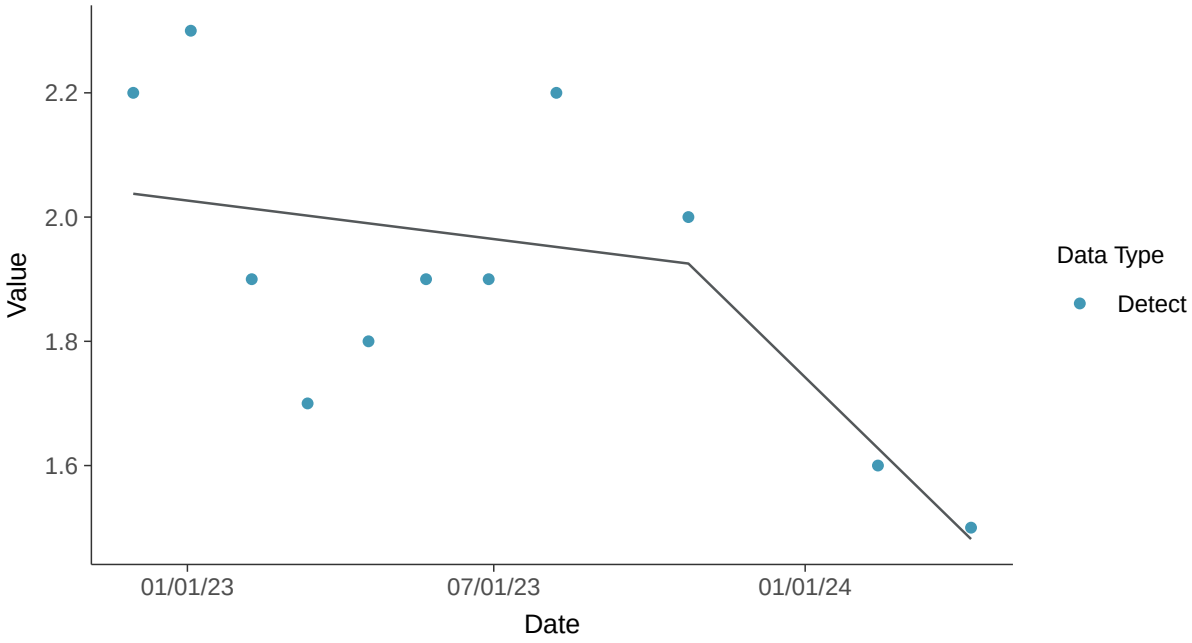
Trend Regression: Lognormal MLE

Fluoride, MW-19 (mg/L)



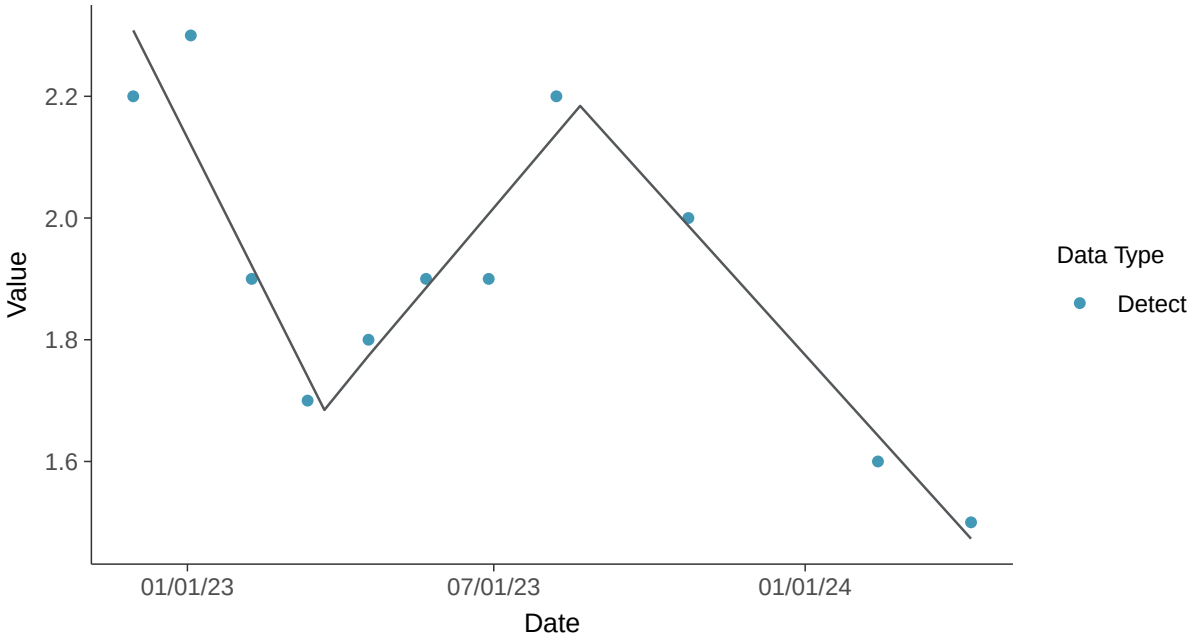
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-19 (mg/L)



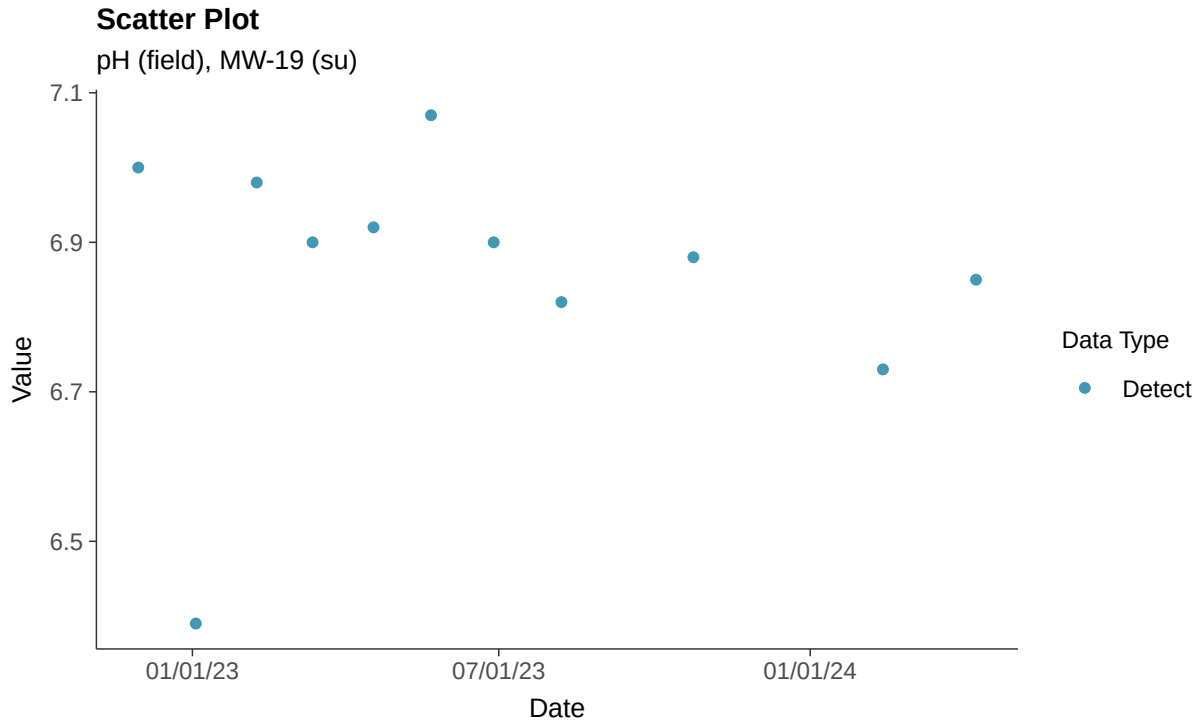
Trend Regression: Piecewise Linear-Linear-Linear

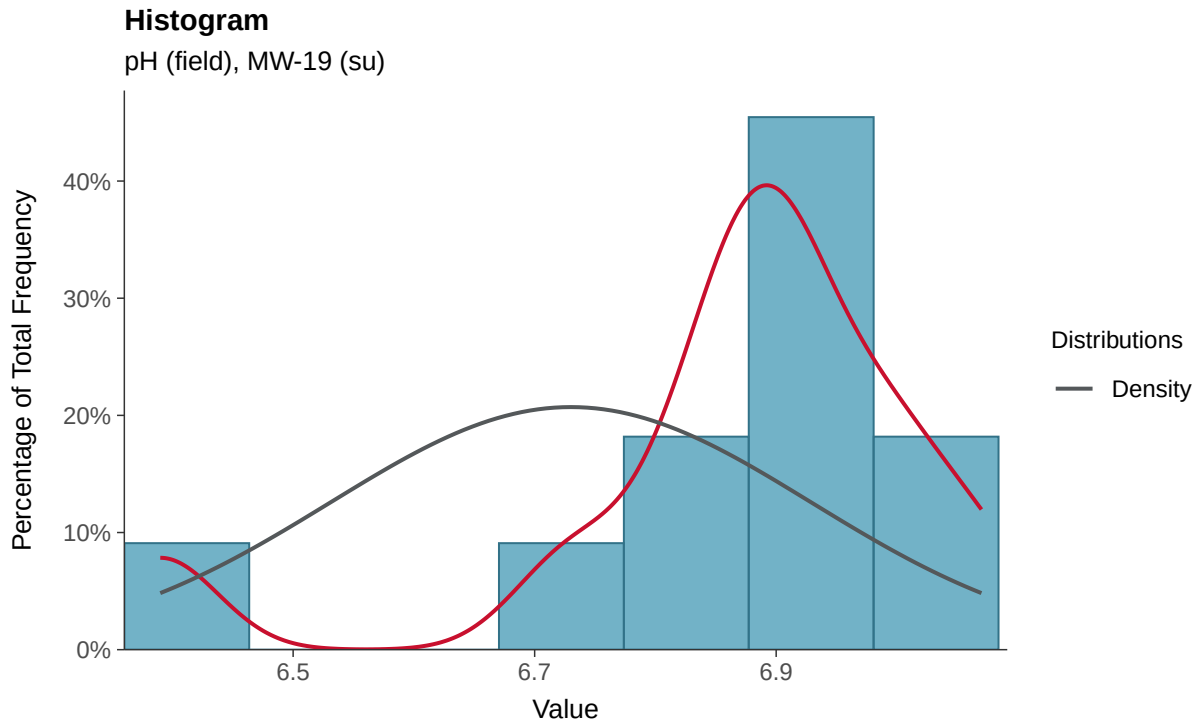
Fluoride, MW-19 (mg/L)



Appendix III: pH (field), MW-19

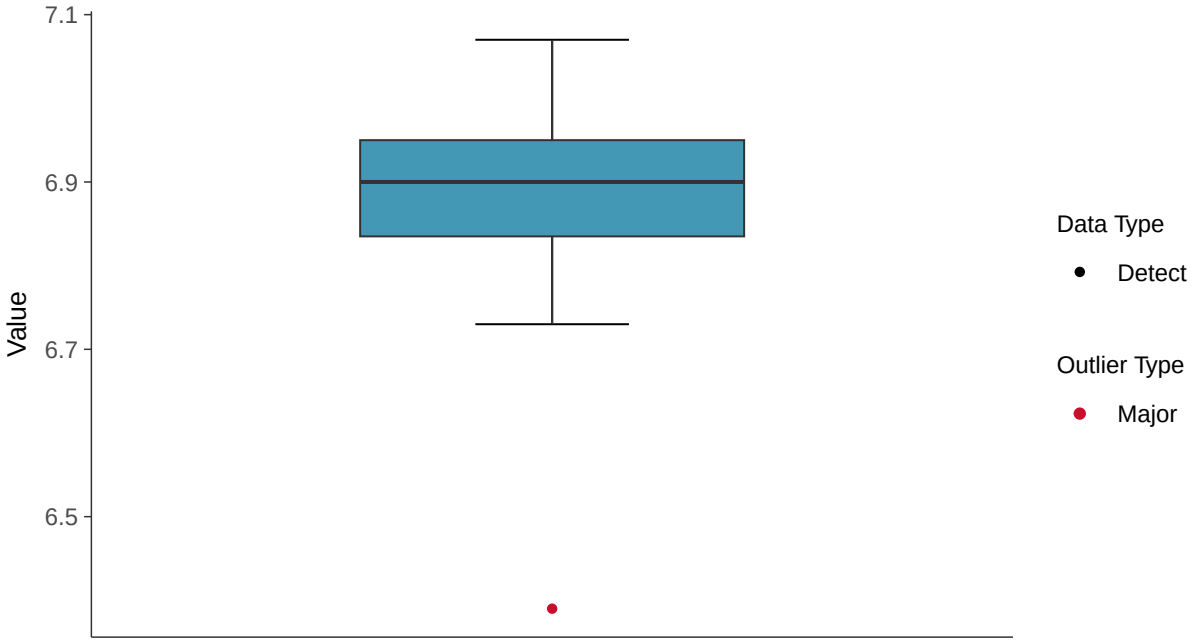
ID: 1_29_4_120





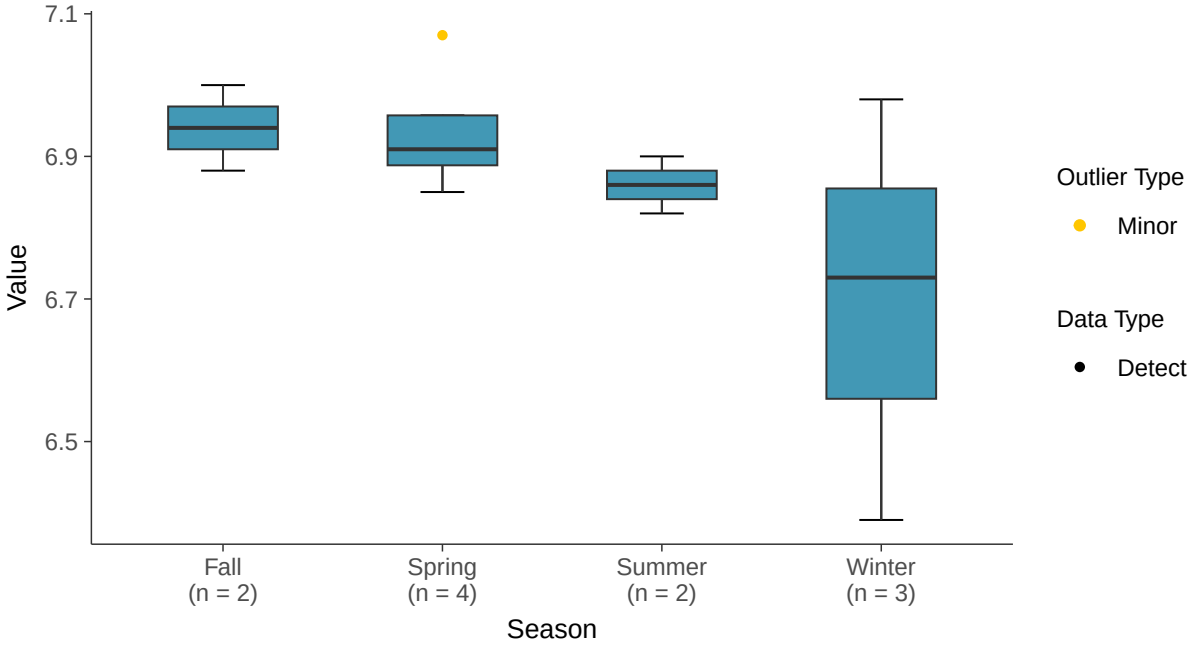
Boxplot

pH (field), MW-19 (su)



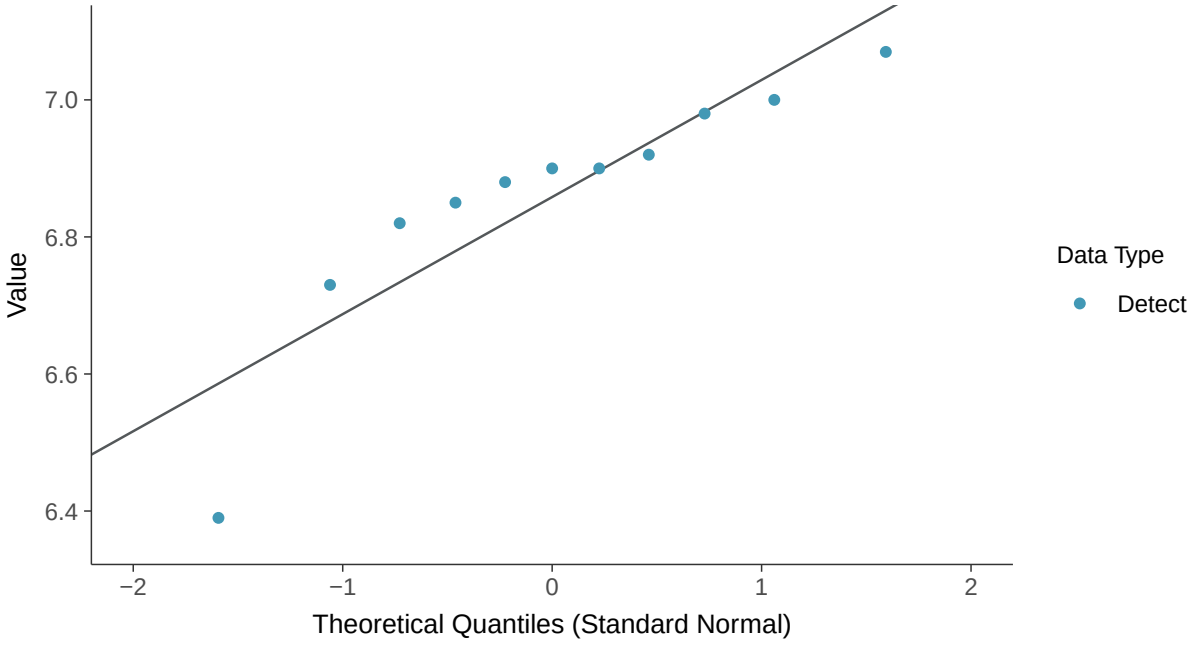
Boxplot by Season

pH (field), MW-19 (su)



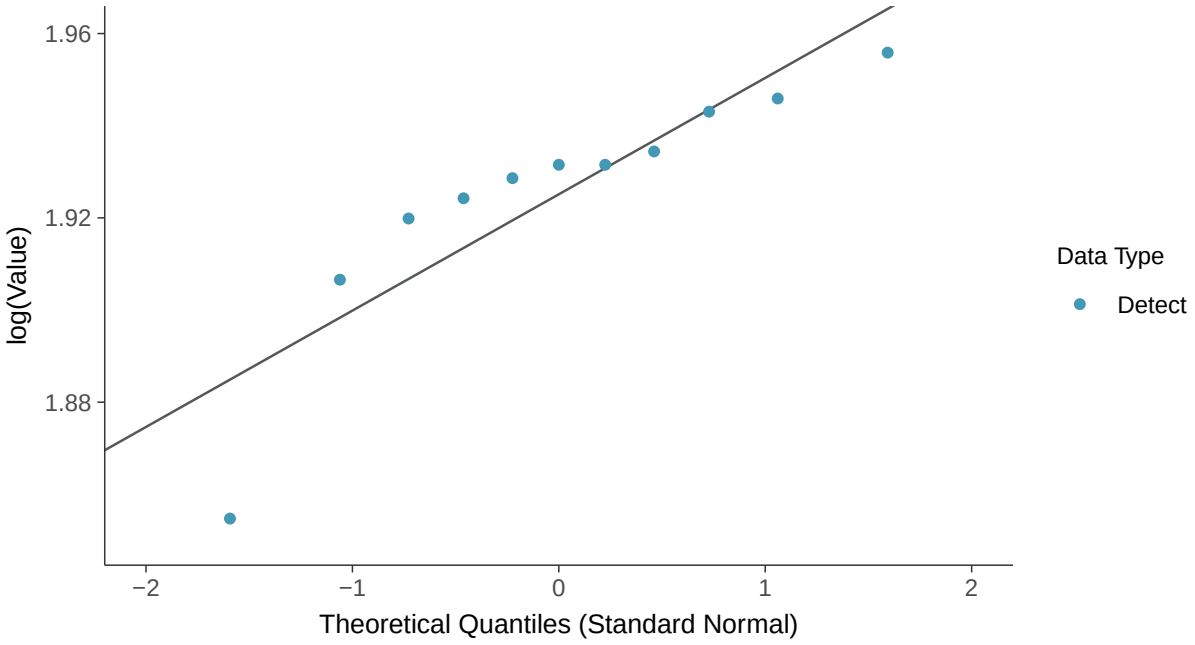
Normal Q-Q plot

pH (field), MW-19 (su)



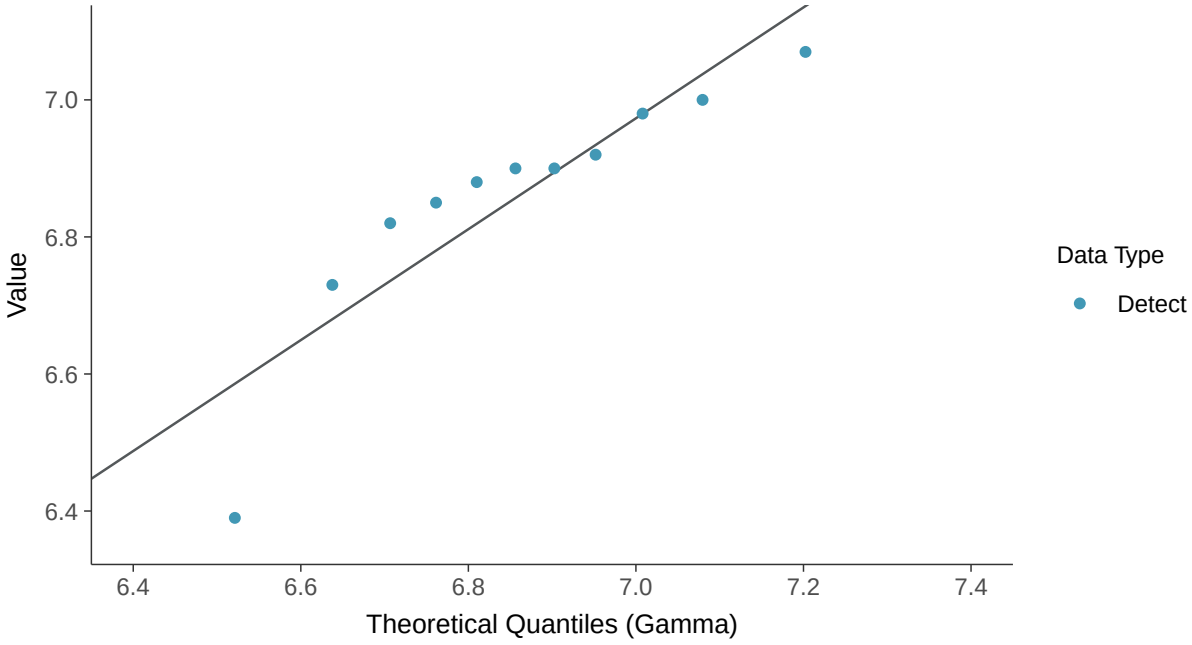
Lognormal Q-Q plot

pH (field), MW-19 (su)



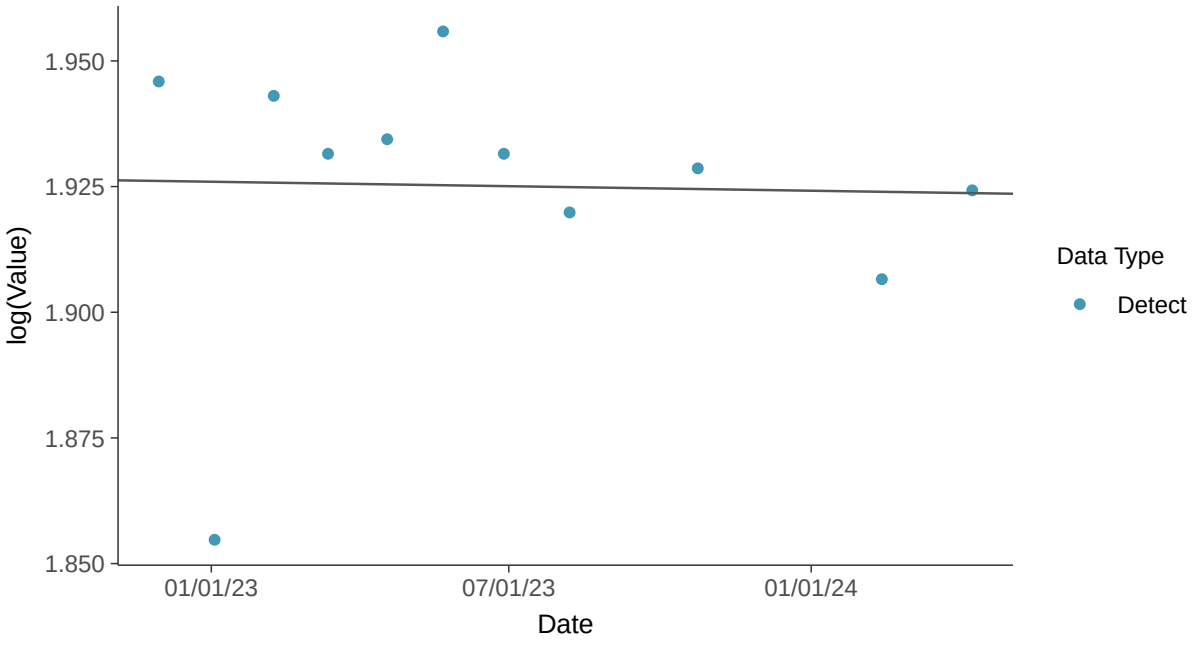
Gamma Q-Q plot

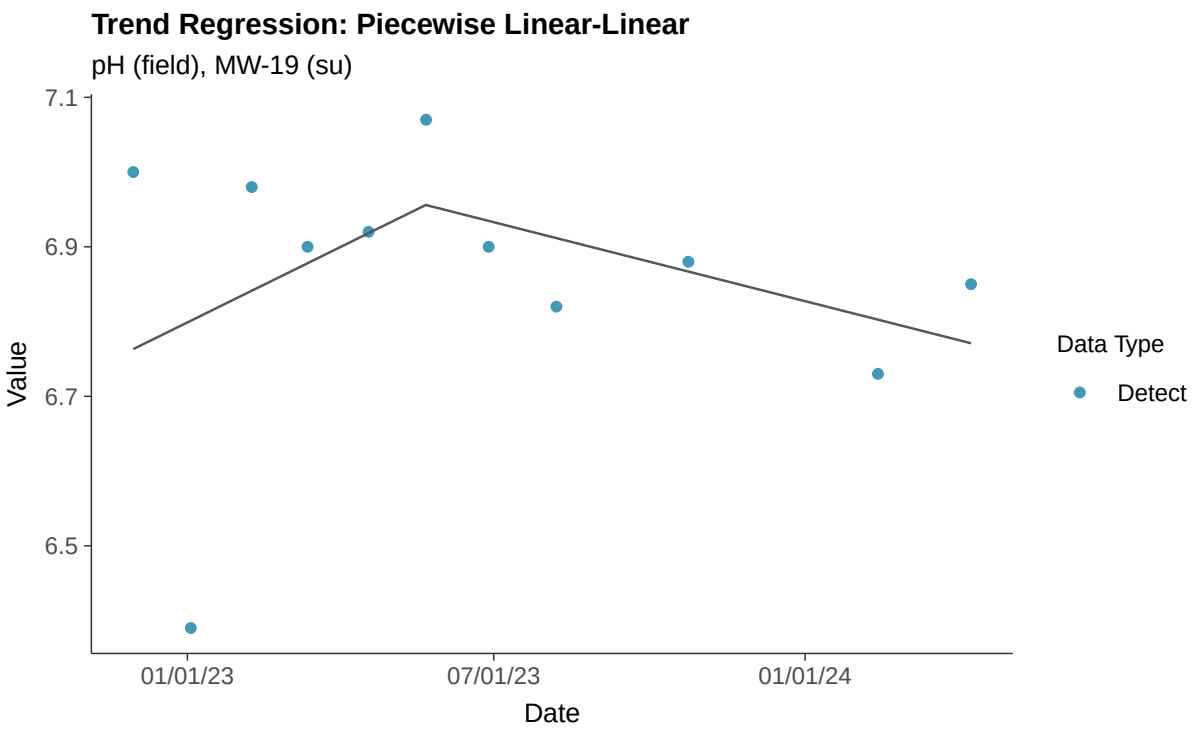
pH (field), MW-19 (su)



Trend Regression: Lognormal MLE

pH (field), MW-19 (su)



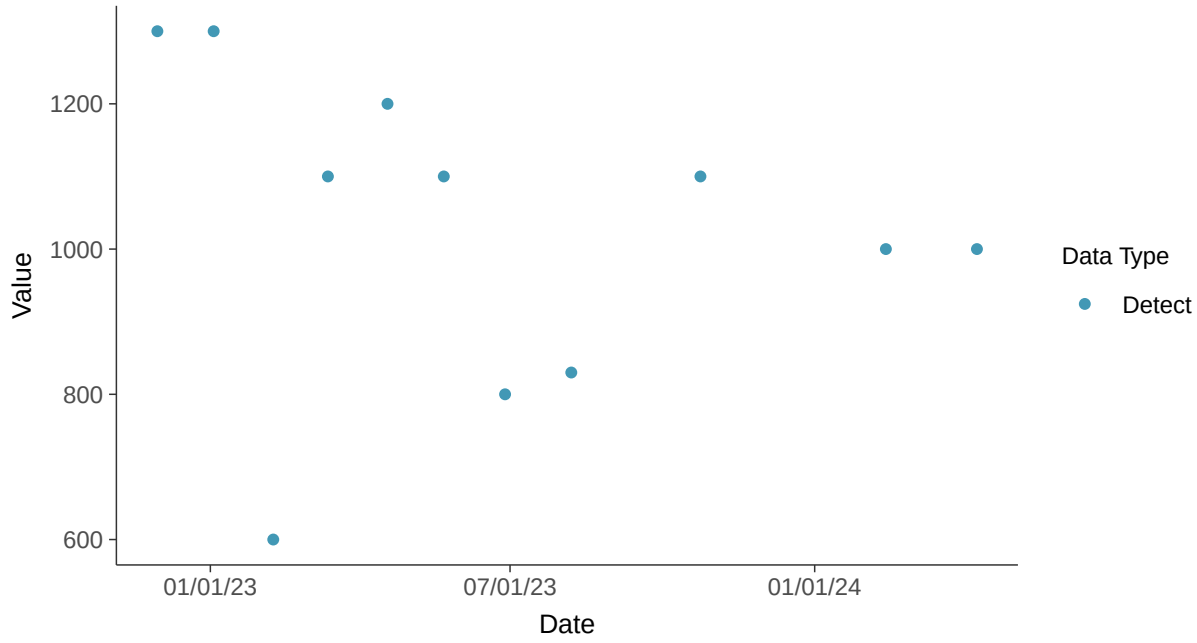

Trend Regression: Piecewise Linear-Linear
pH (field), MW-19 (su)
7.1
6.9
6.7
6.5
Value
01/01/23
07/01/23
01/01/24
Date
Data Type
Detect

Appendix III: Sulfate (as SO4), MW-19

ID: 1_29_4_124

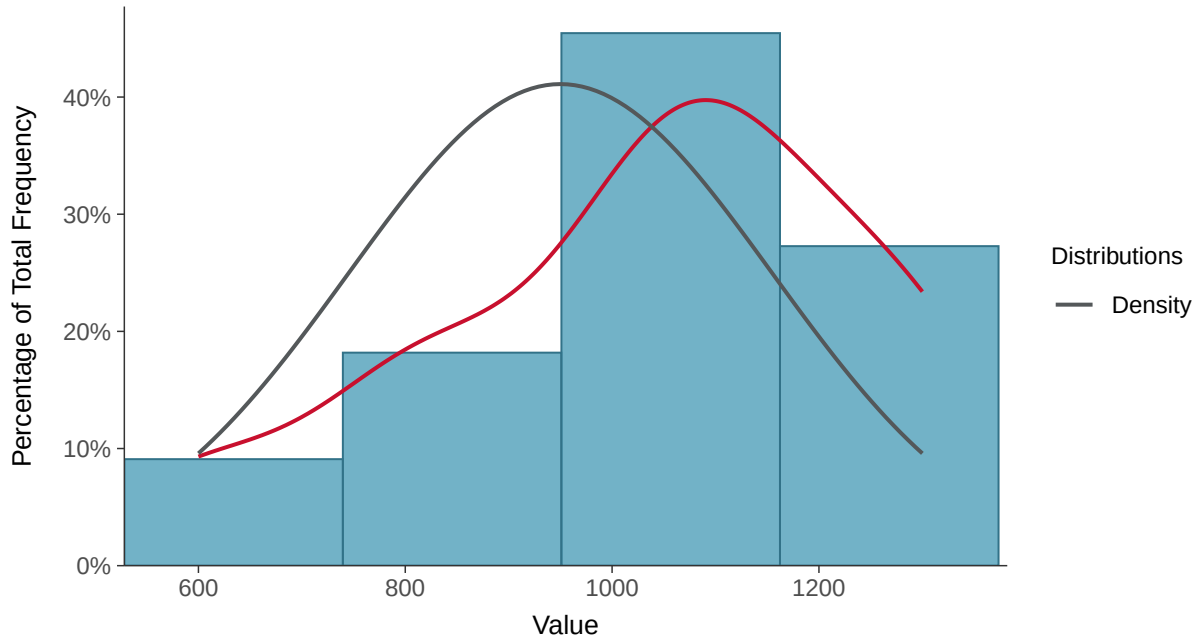
Scatter Plot

Sulfate (as SO4), MW-19 (mg/L)



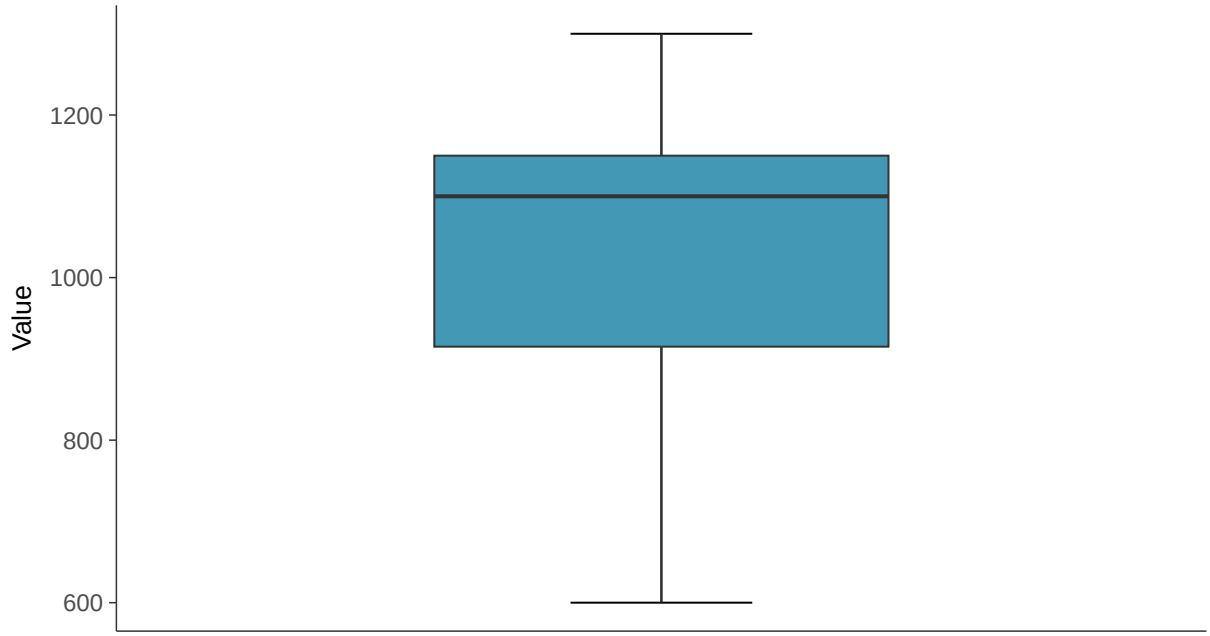
Histogram

Sulfate (as SO4), MW-19 (mg/L)



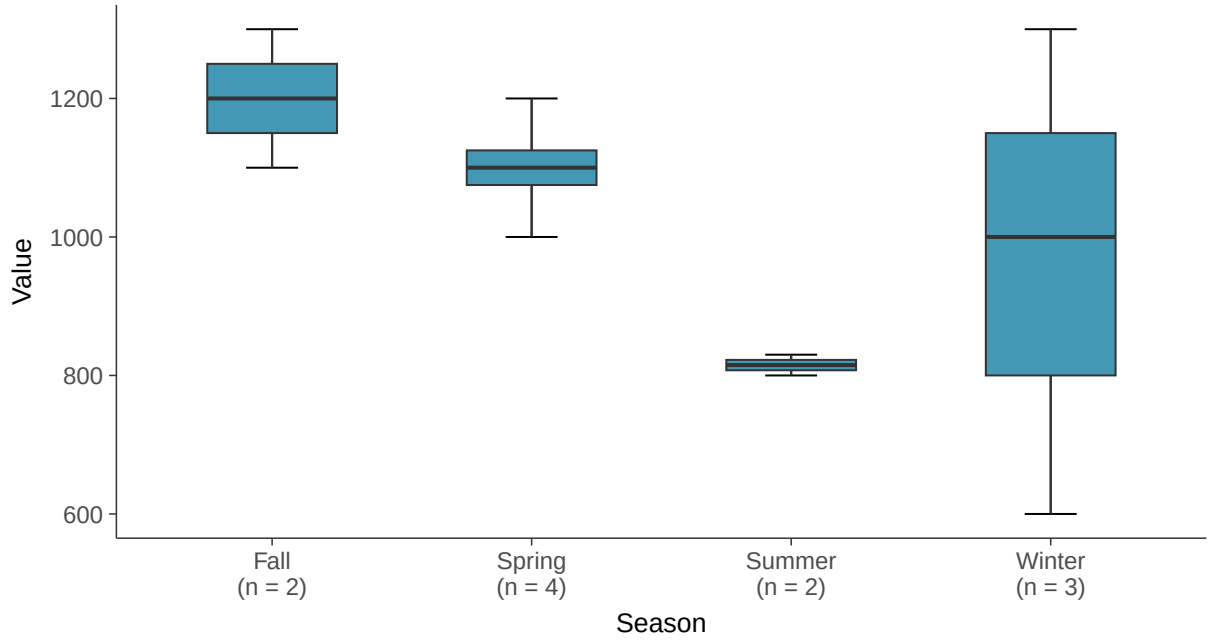
Boxplot

Sulfate (as SO4), MW-19 (mg/L)



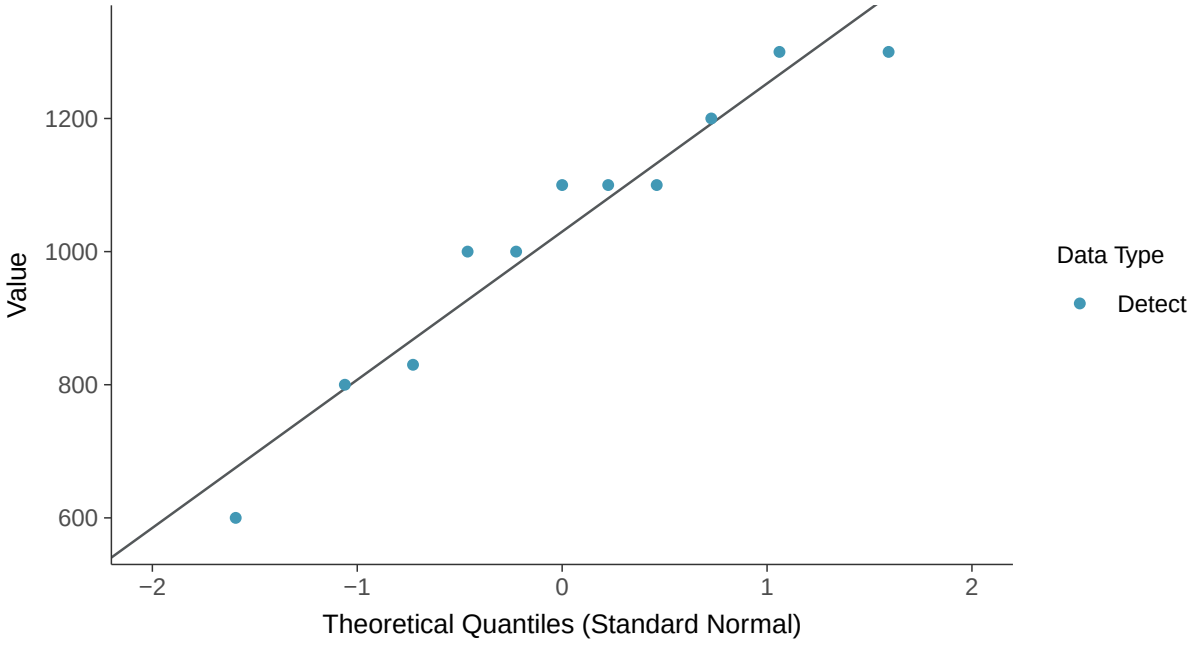
Boxplot by Season

Sulfate (as SO4), MW-19 (mg/L)



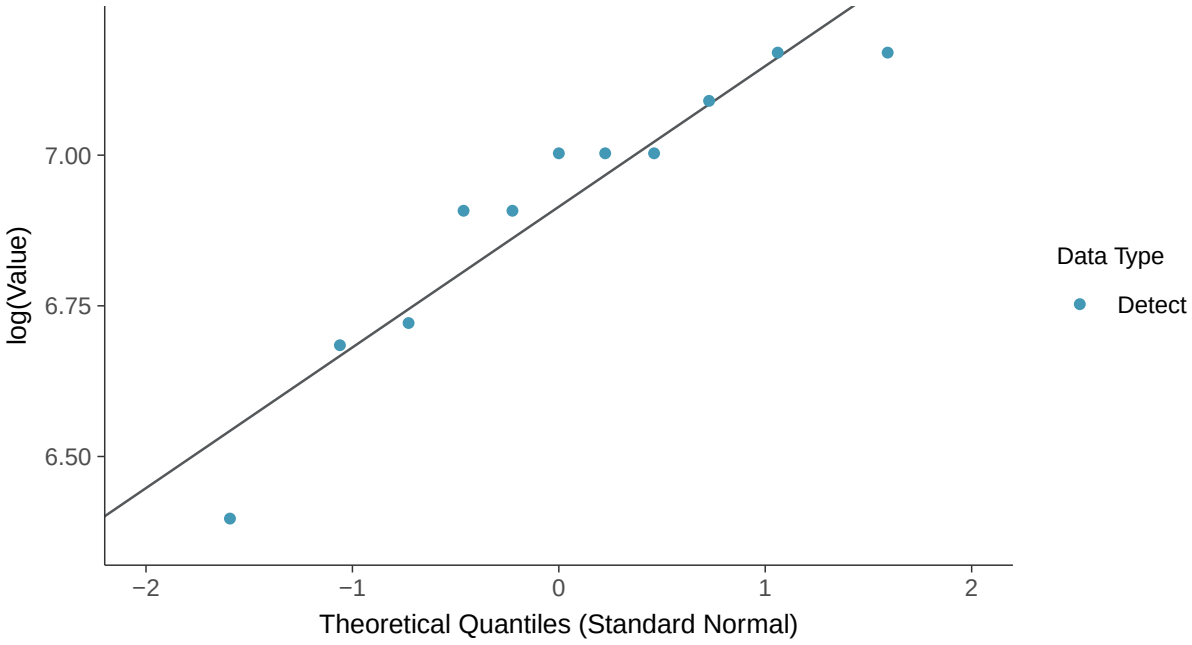
Normal Q-Q plot

Sulfate (as SO4), MW-19 (mg/L)



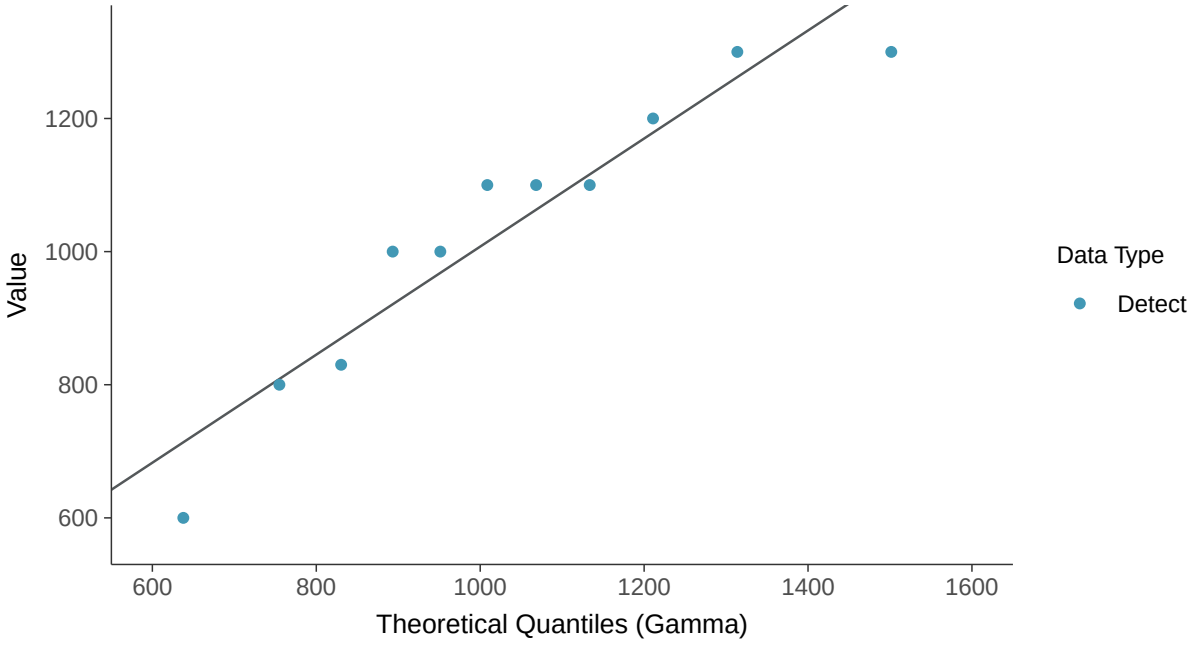
Lognormal Q-Q plot

Sulfate (as SO4), MW-19 (mg/L)



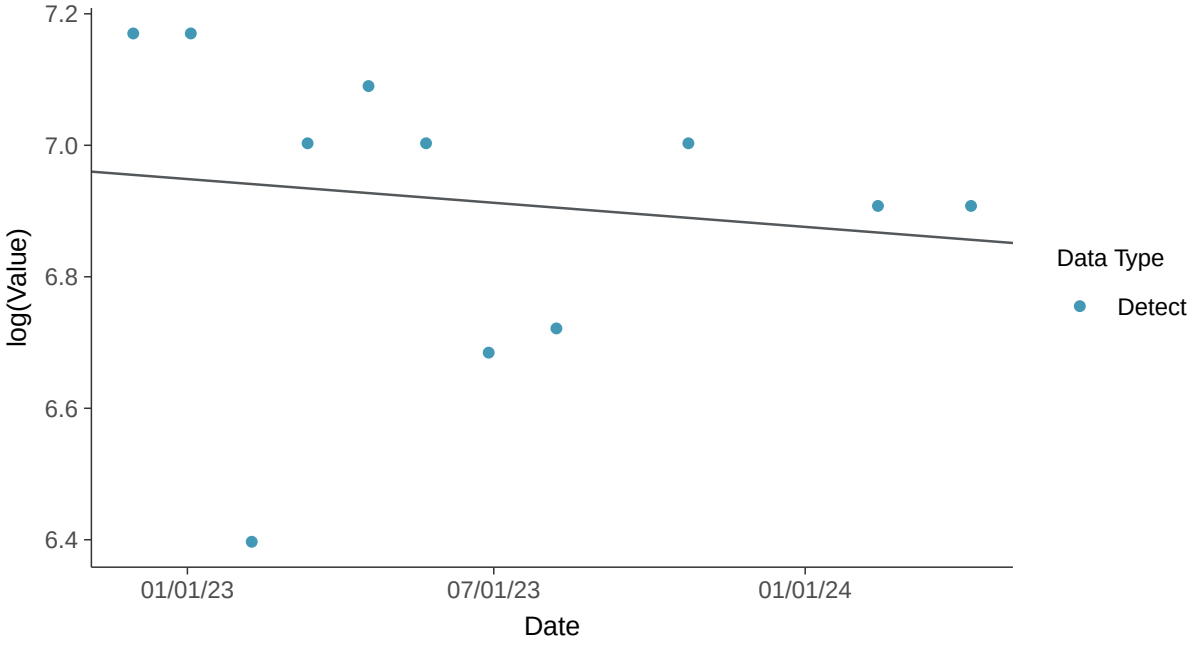
Gamma Q-Q plot

Sulfate (as SO4), MW-19 (mg/L)



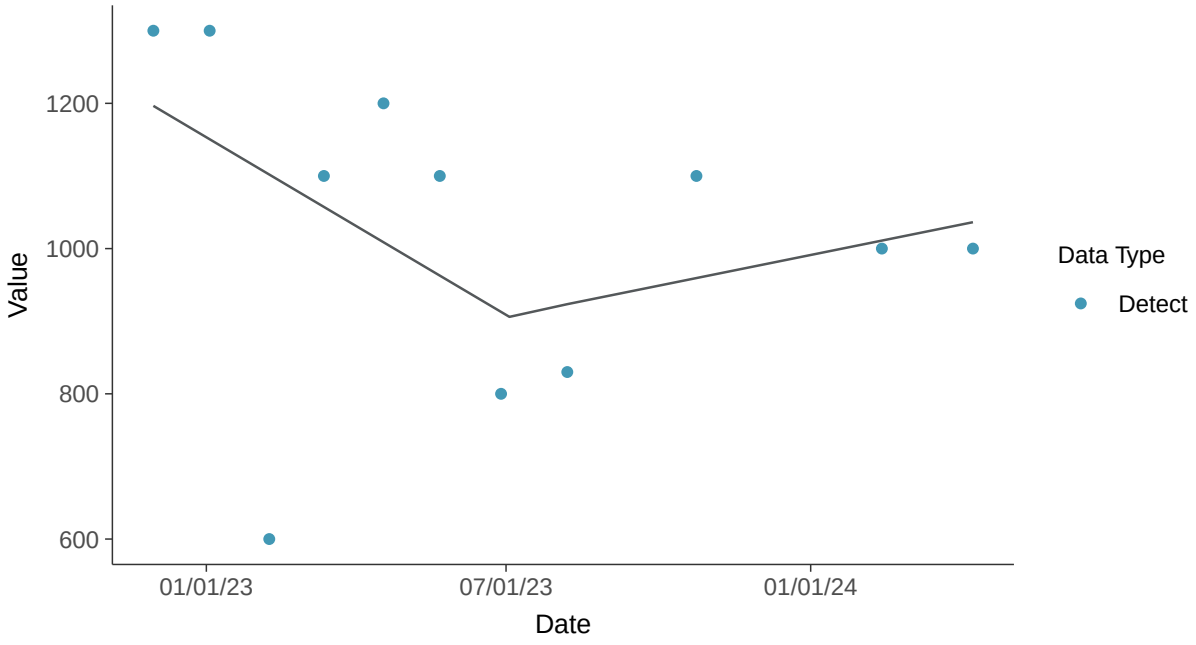
Trend Regression: Lognormal MLE

Sulfate (as SO4), MW-19 (mg/L)



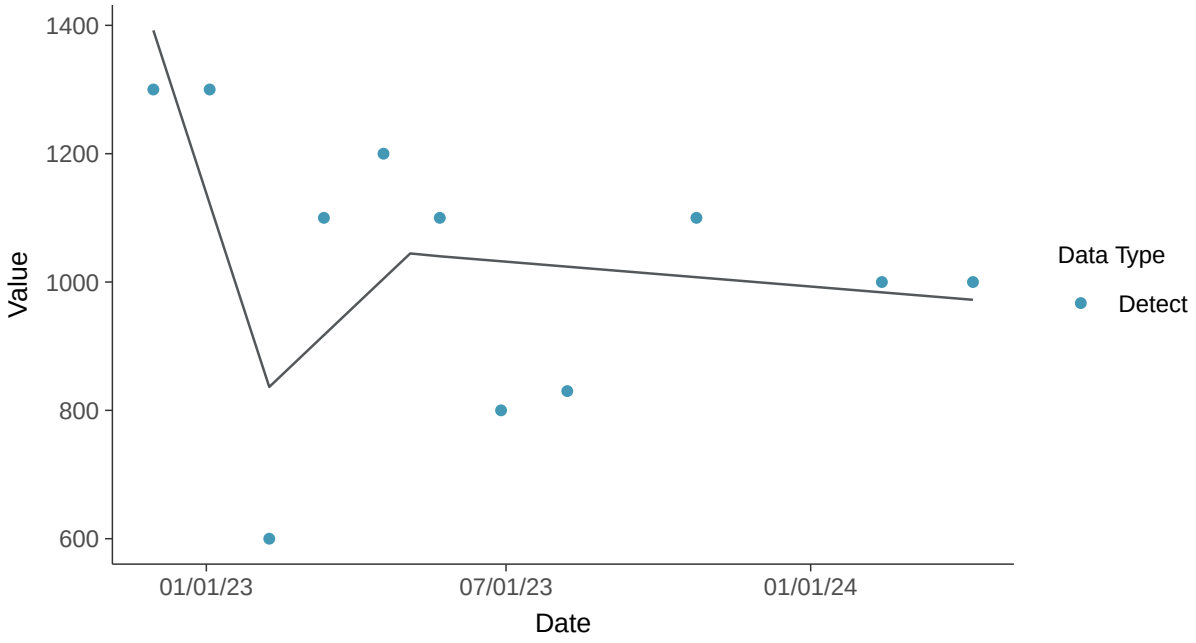
Trend Regression: Piecewise Linear-Linear

Sulfate (as SO4), MW-19 (mg/L)



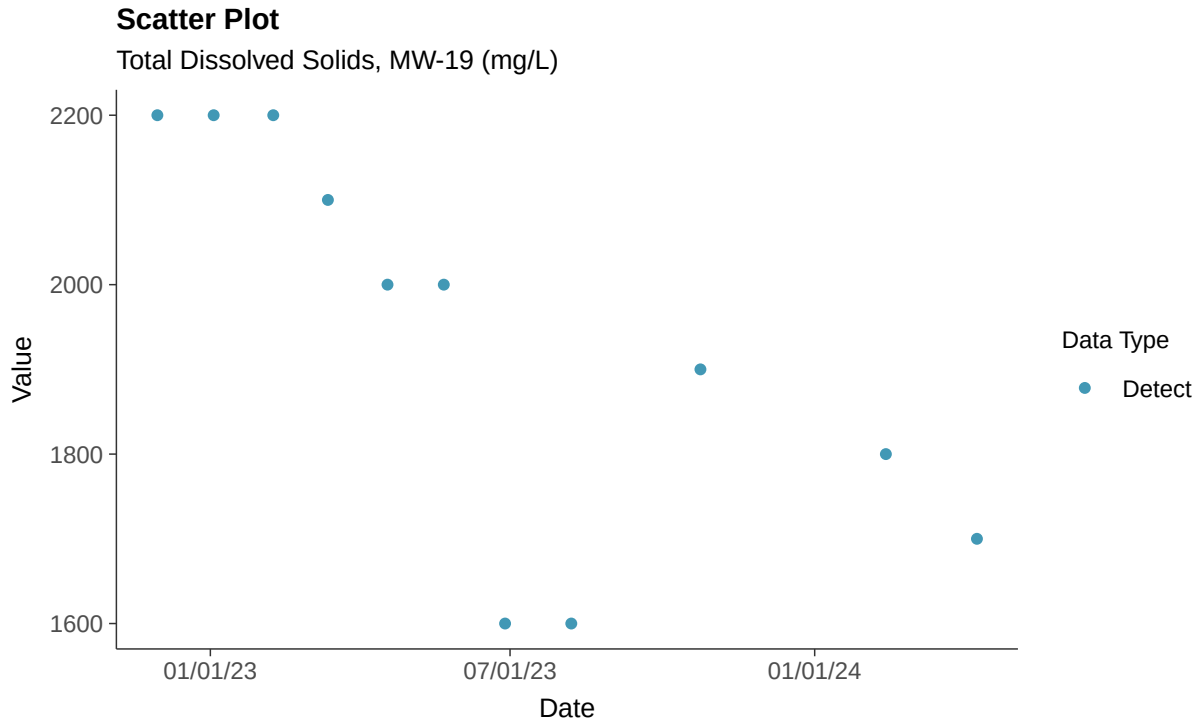
Trend Regression: Piecewise Linear-Linear-Linear

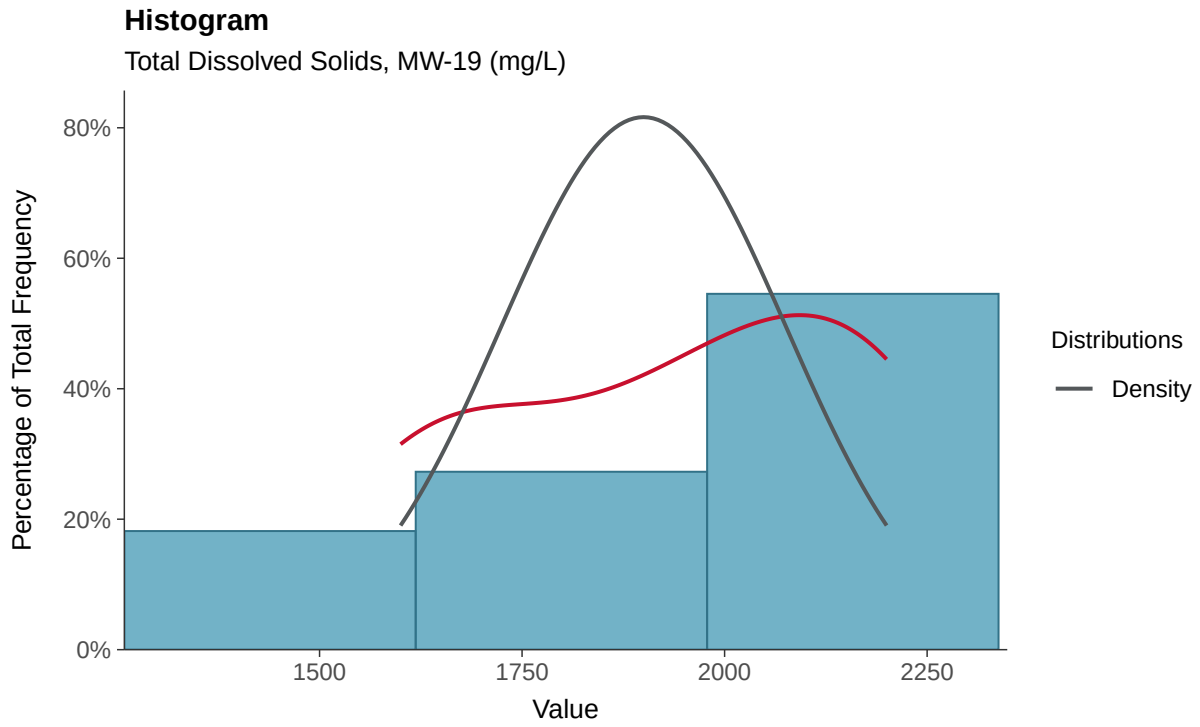
Sulfate (as SO4), MW-19 (mg/L)



Appendix III: Total Dissolved Solids, MW-19

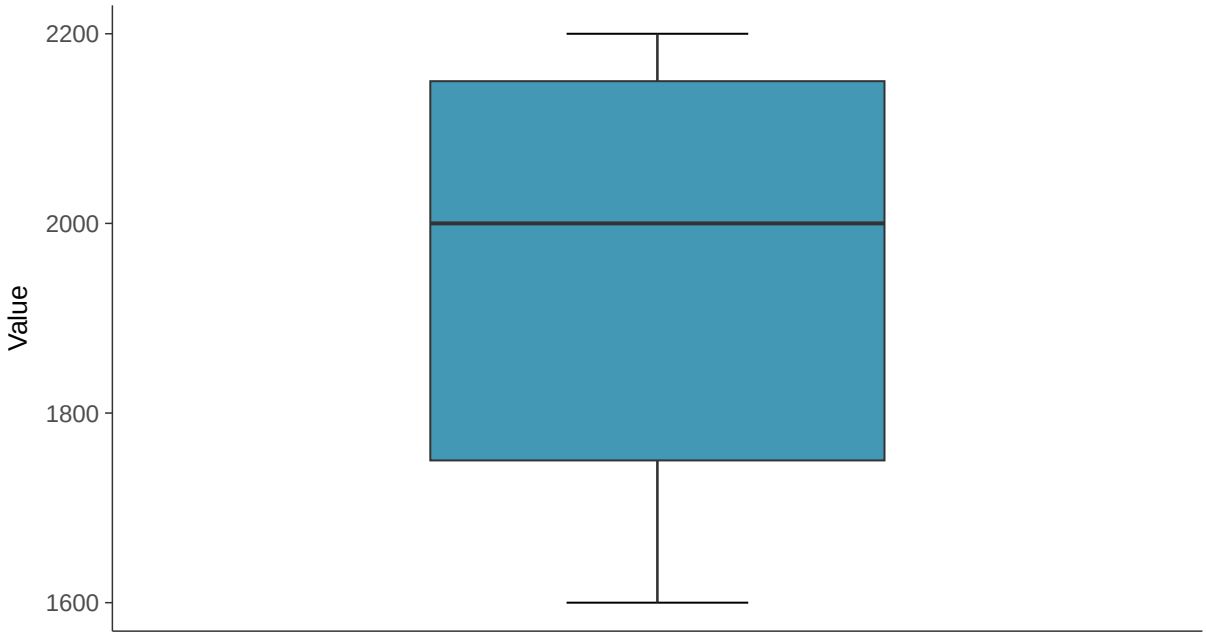
ID: 1_29_4_126





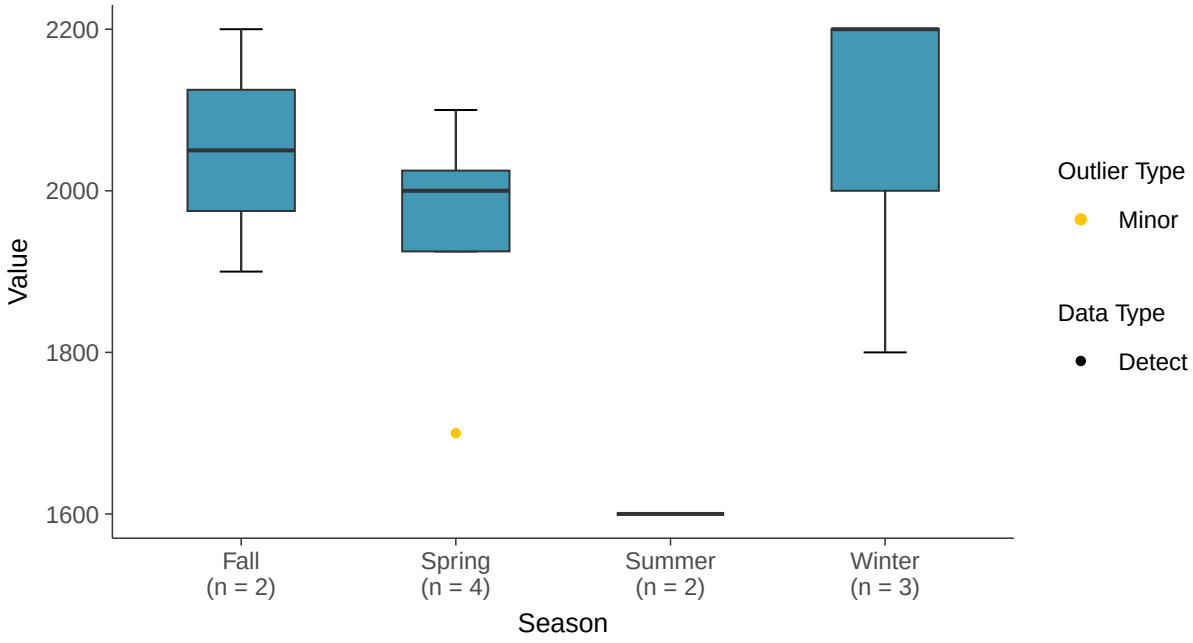
Boxplot

Total Dissolved Solids, MW-19 (mg/L)



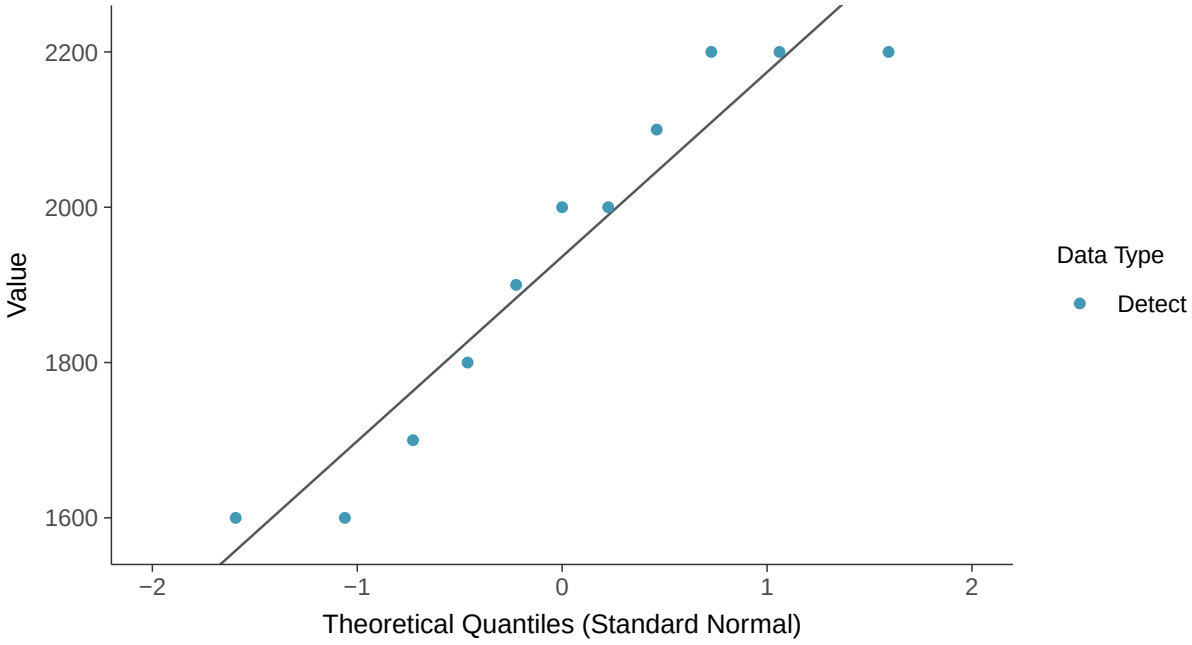
Boxplot by Season

Total Dissolved Solids, MW-19 (mg/L)



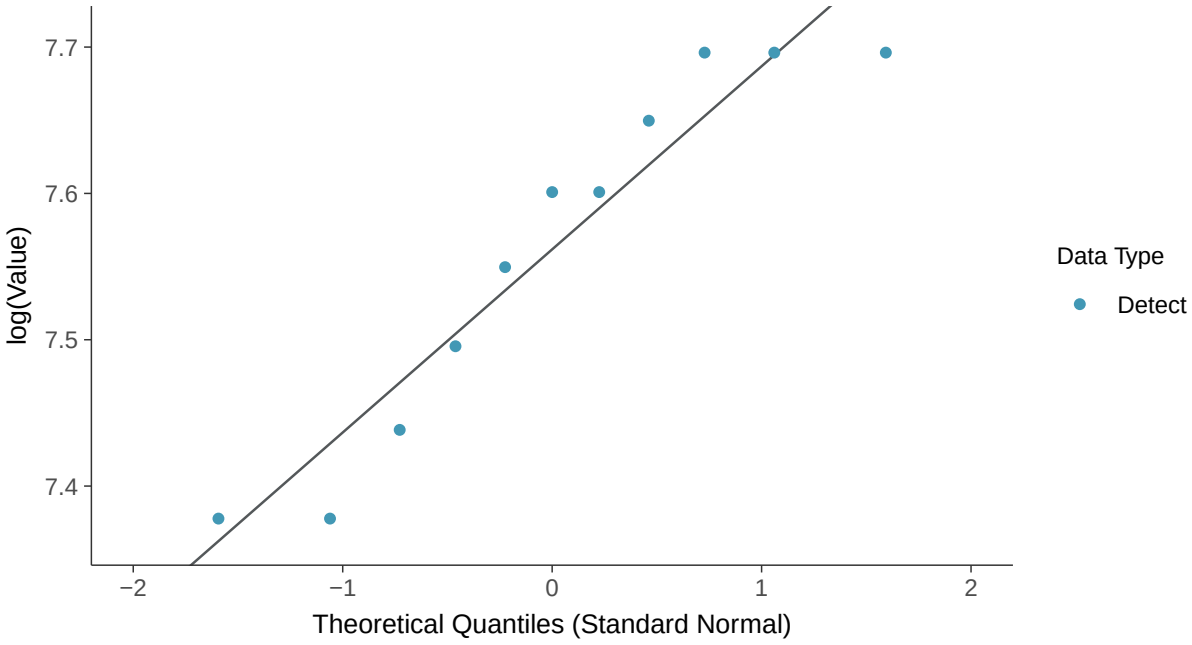
Normal Q-Q plot

Total Dissolved Solids, MW-19 (mg/L)



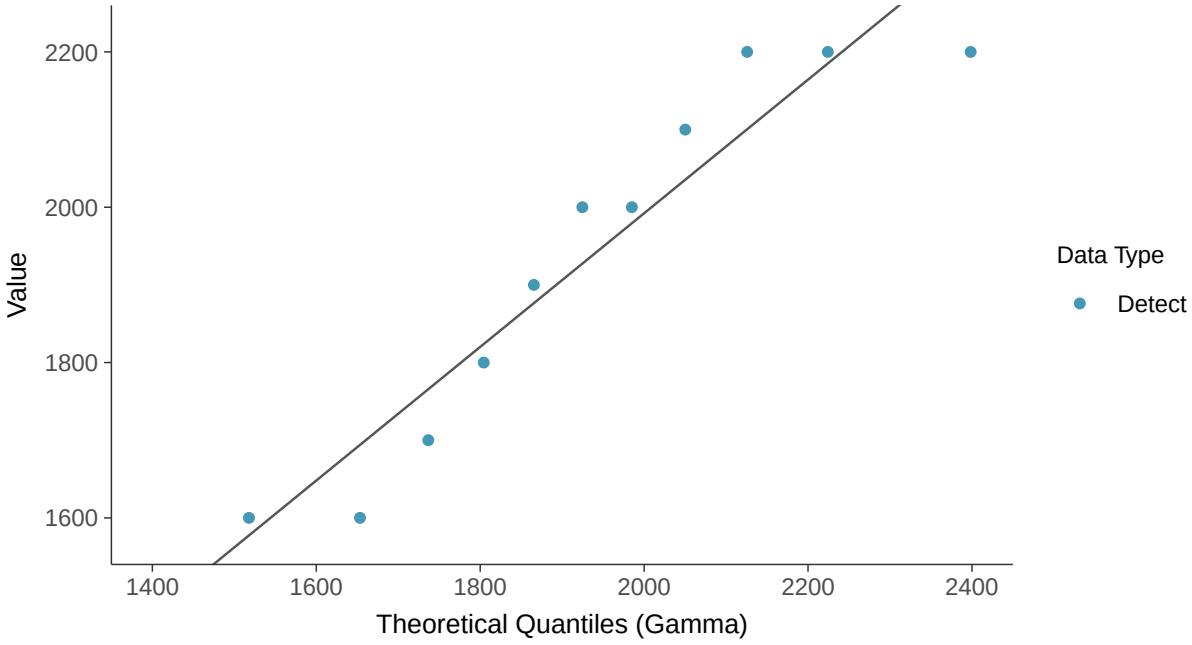
Lognormal Q-Q plot

Total Dissolved Solids, MW-19 (mg/L)



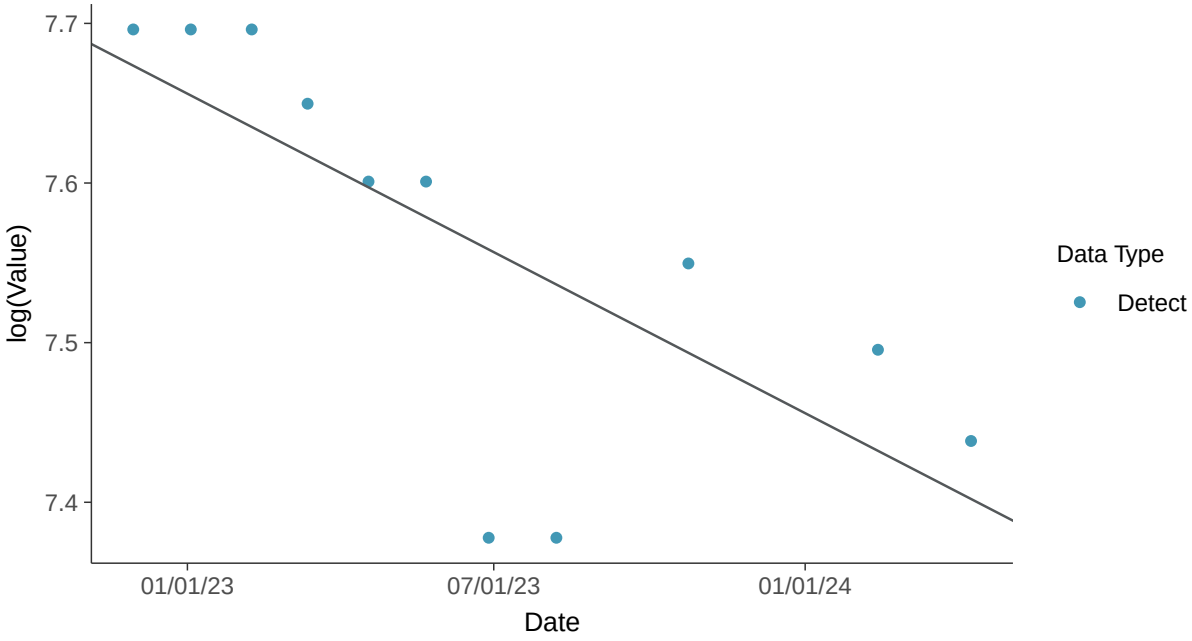
Gamma Q-Q plot

Total Dissolved Solids, MW-19 (mg/L)



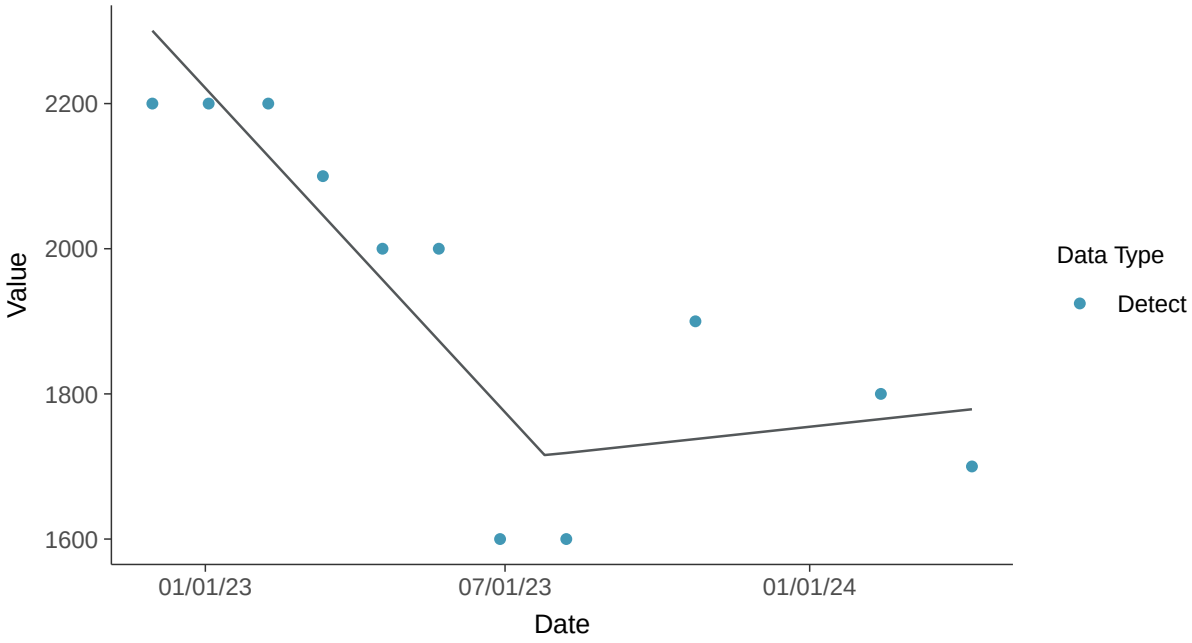
Trend Regression: Lognormal MLE

Total Dissolved Solids, MW-19 (mg/L)



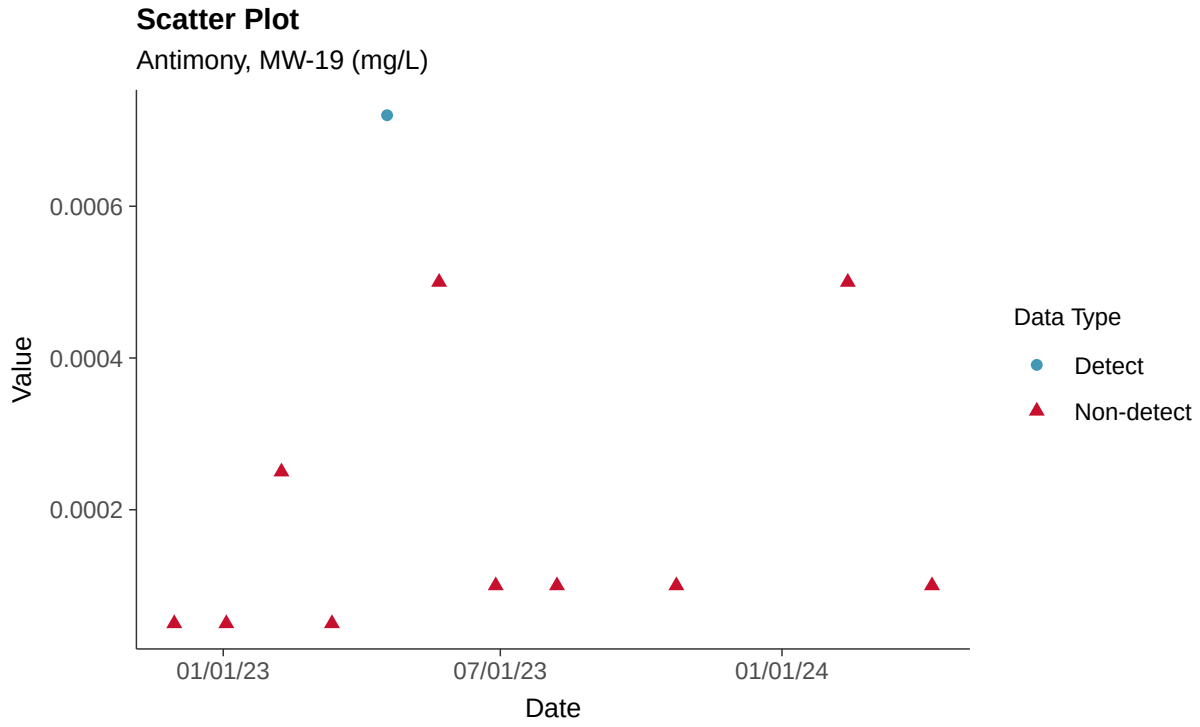
Trend Regression: Piecewise Linear-Linear

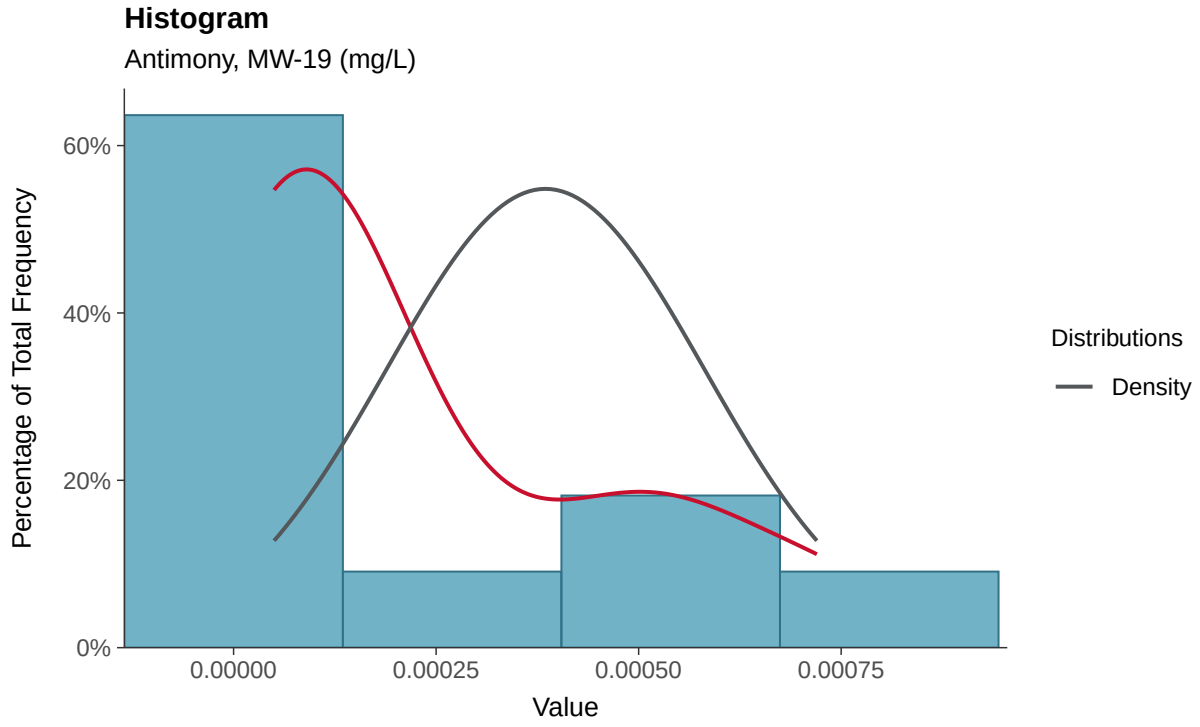
Total Dissolved Solids, MW-19 (mg/L)



Appendix IV: Antimony, MW-19

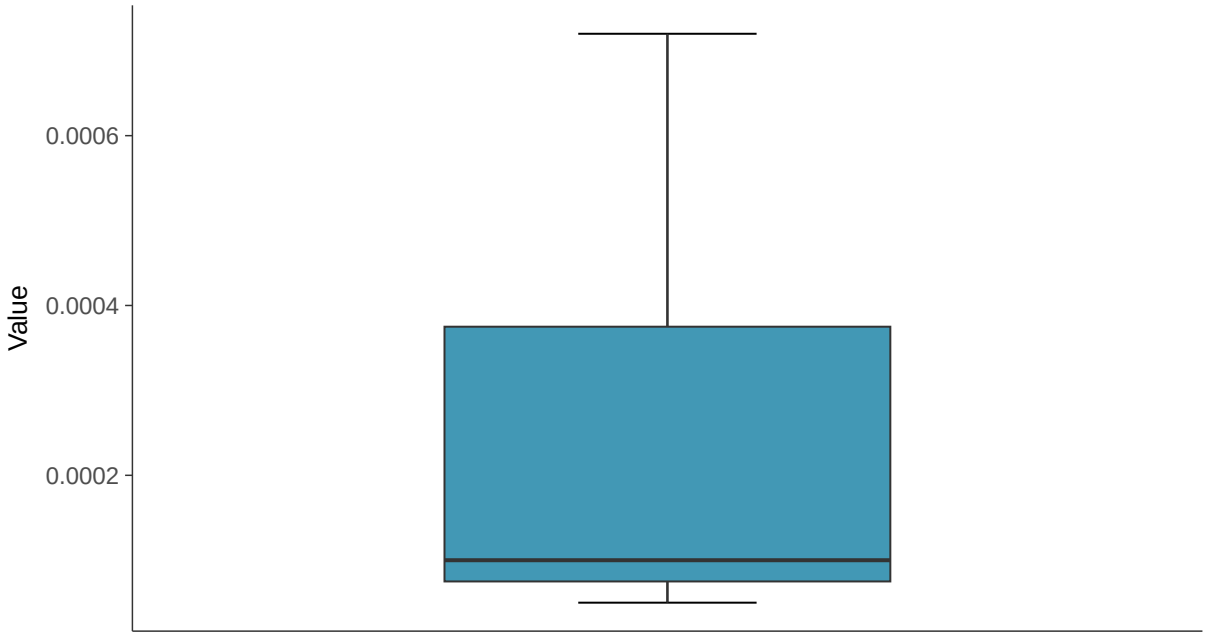
ID: 1_29_5_101





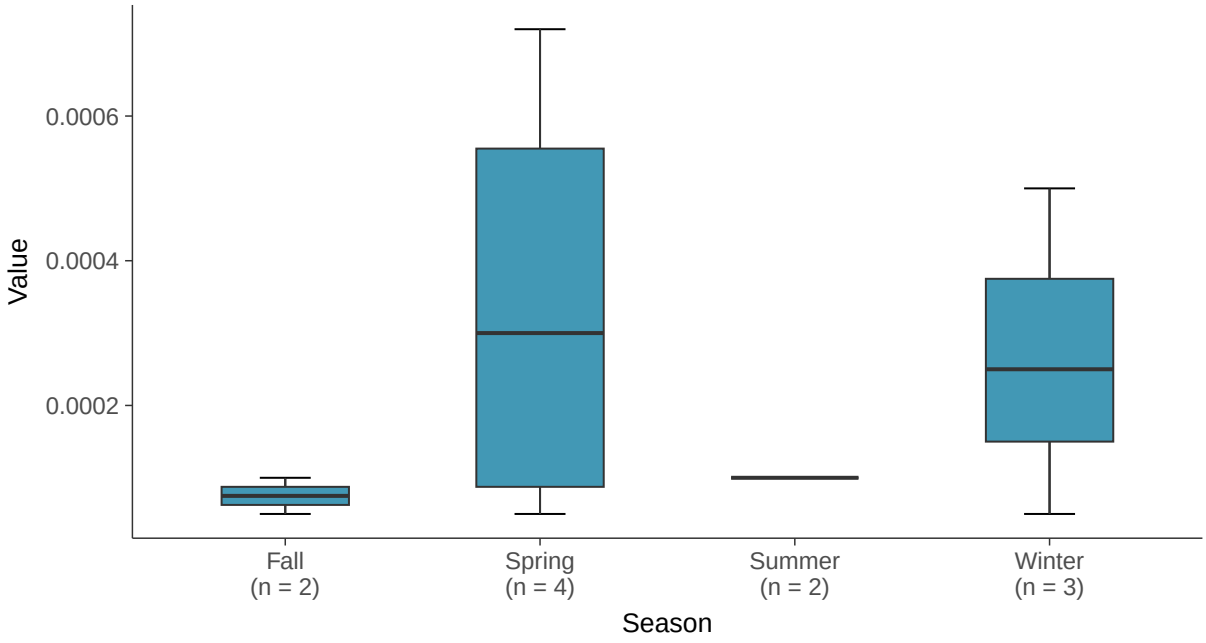
Boxplot

Antimony, MW-19 (mg/L)



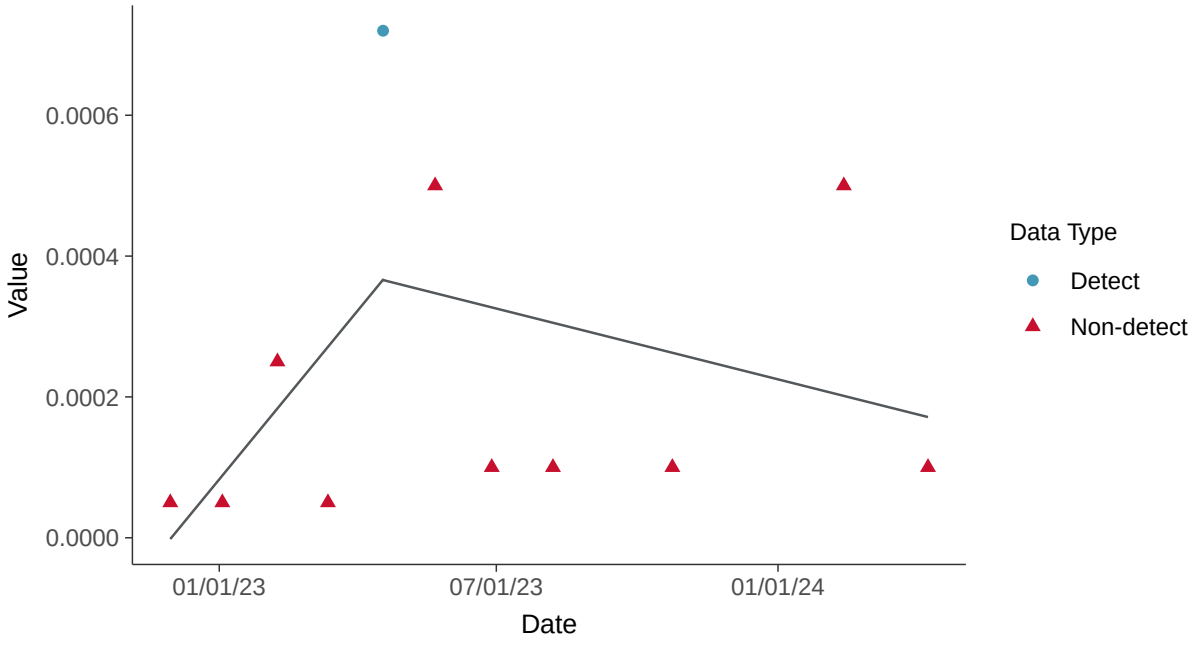
Boxplot by Season

Antimony, MW-19 (mg/L)



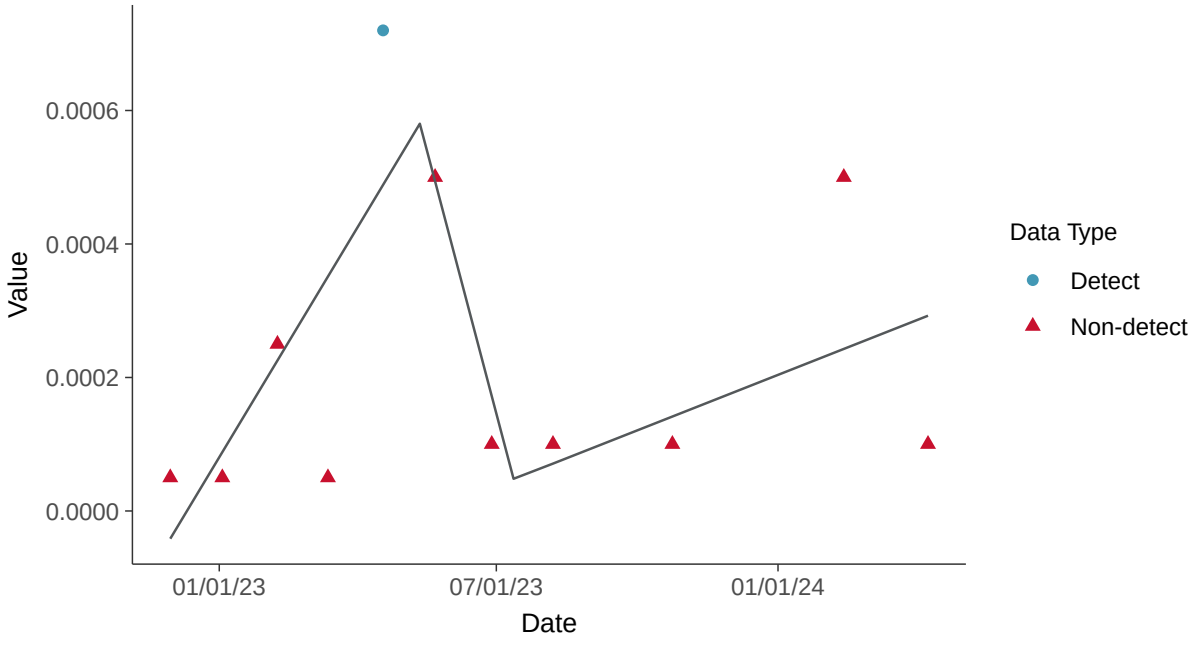
Trend Regression: Piecewise Linear-Linear

Antimony, MW-19 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Antimony, MW-19 (mg/L)

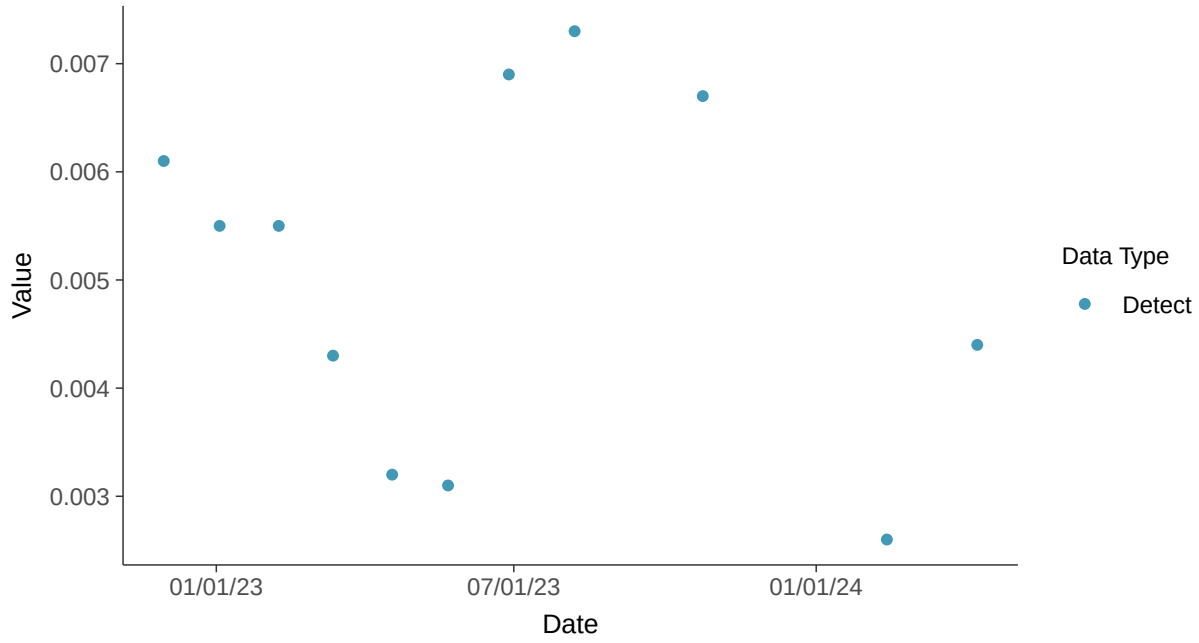


Appendix IV: Arsenic, MW-19

ID: 1_29_5_102

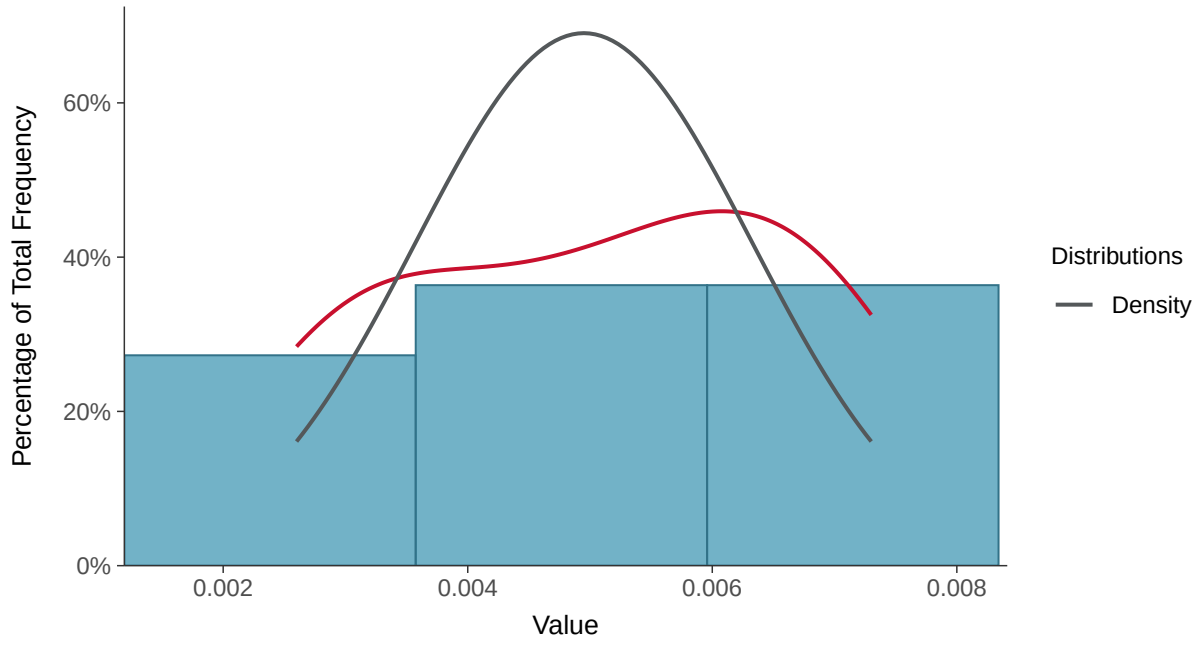
Scatter Plot

Arsenic, MW-19 (mg/L)



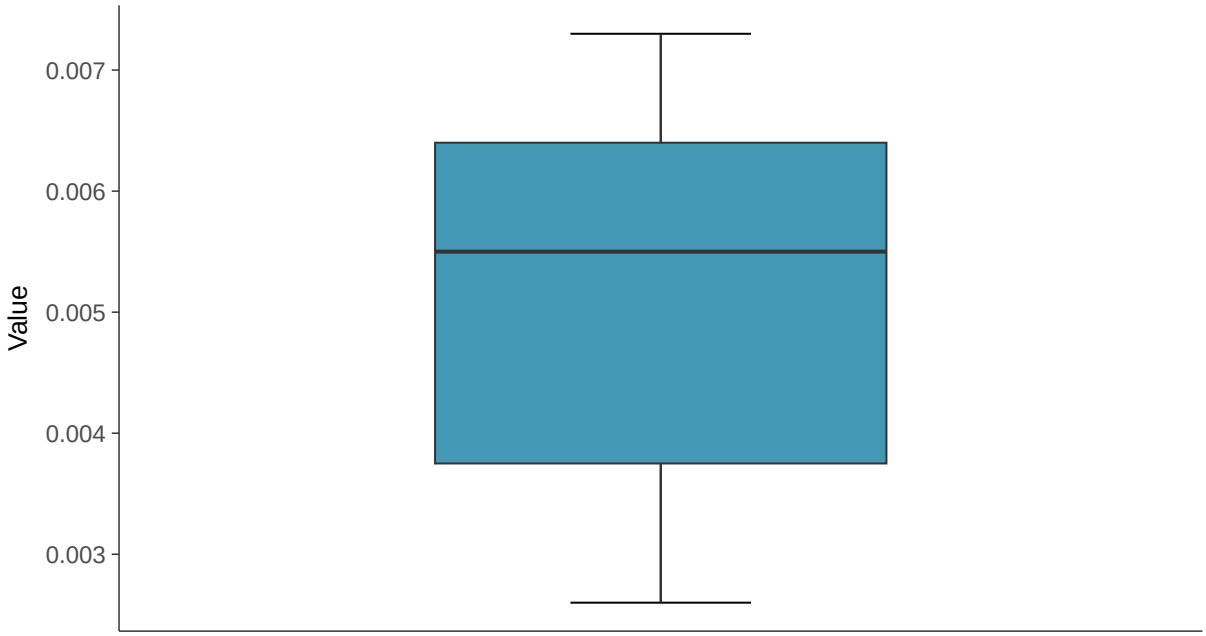
Histogram

Arsenic, MW-19 (mg/L)



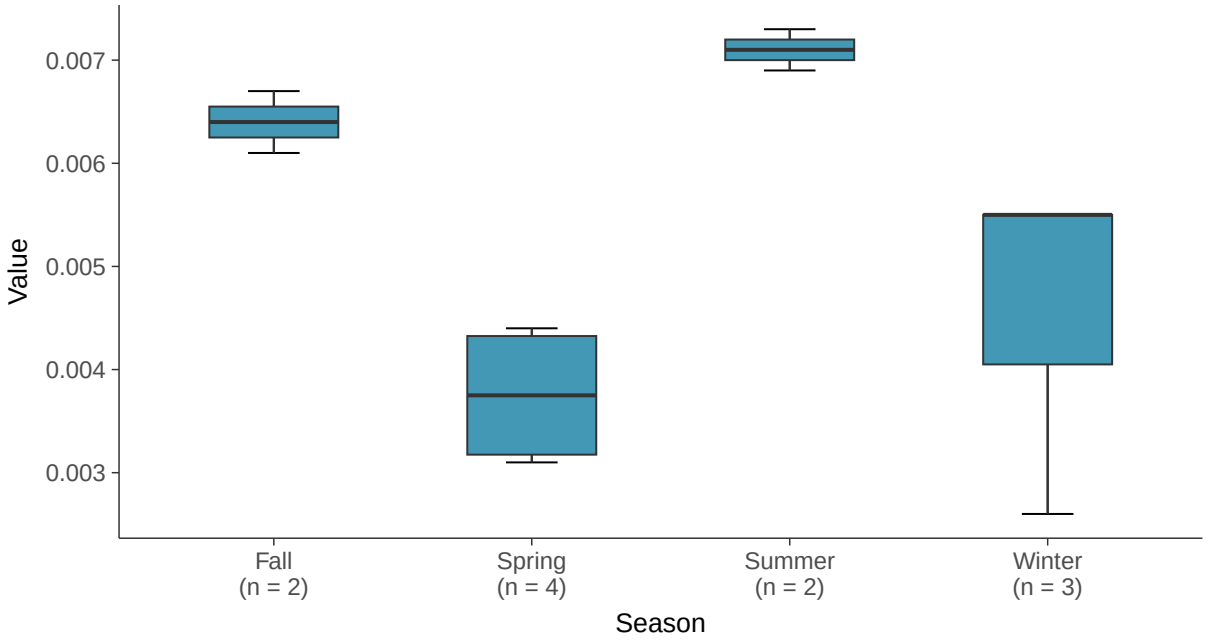
Boxplot

Arsenic, MW-19 (mg/L)



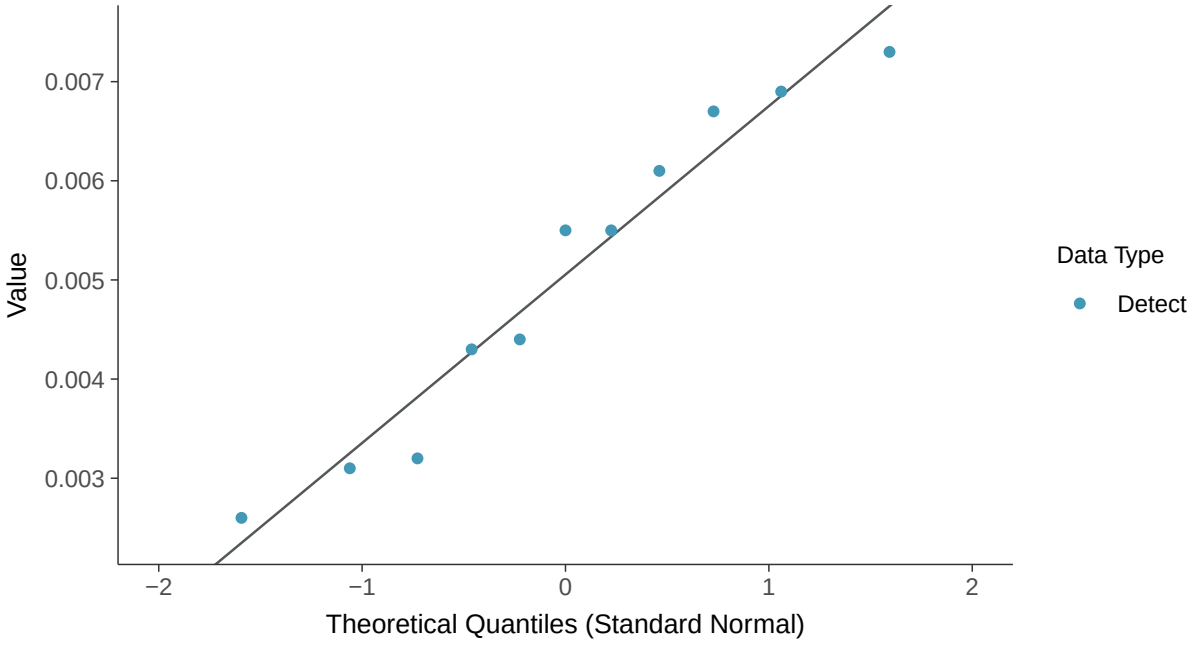
Boxplot by Season

Arsenic, MW-19 (mg/L)



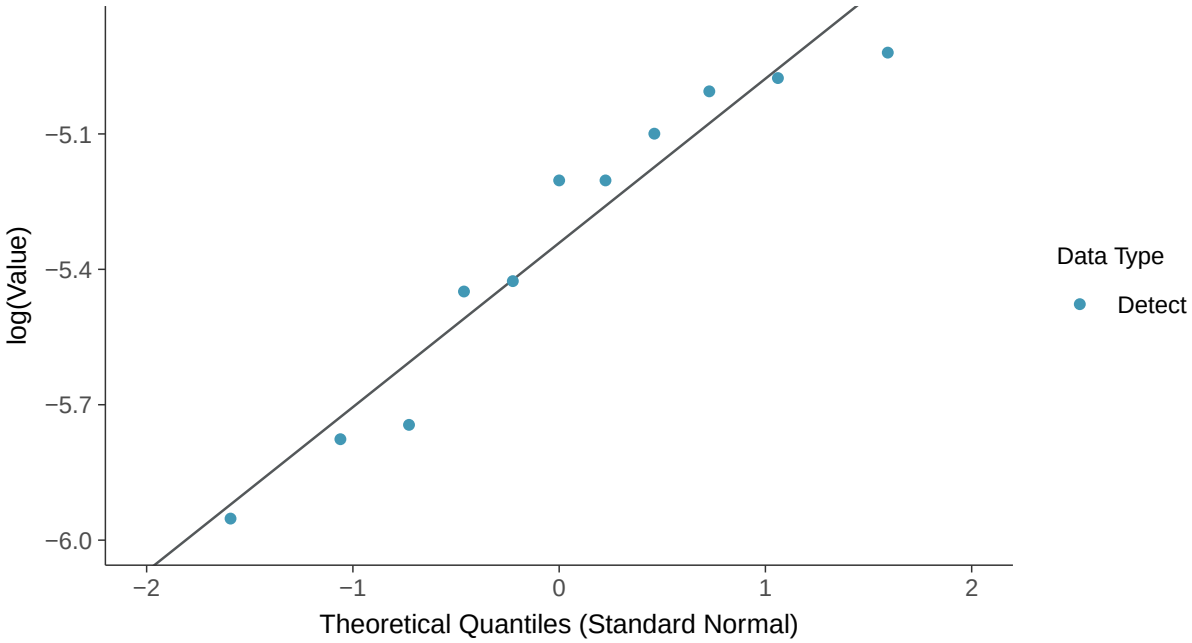
Normal Q-Q plot

Arsenic, MW-19 (mg/L)



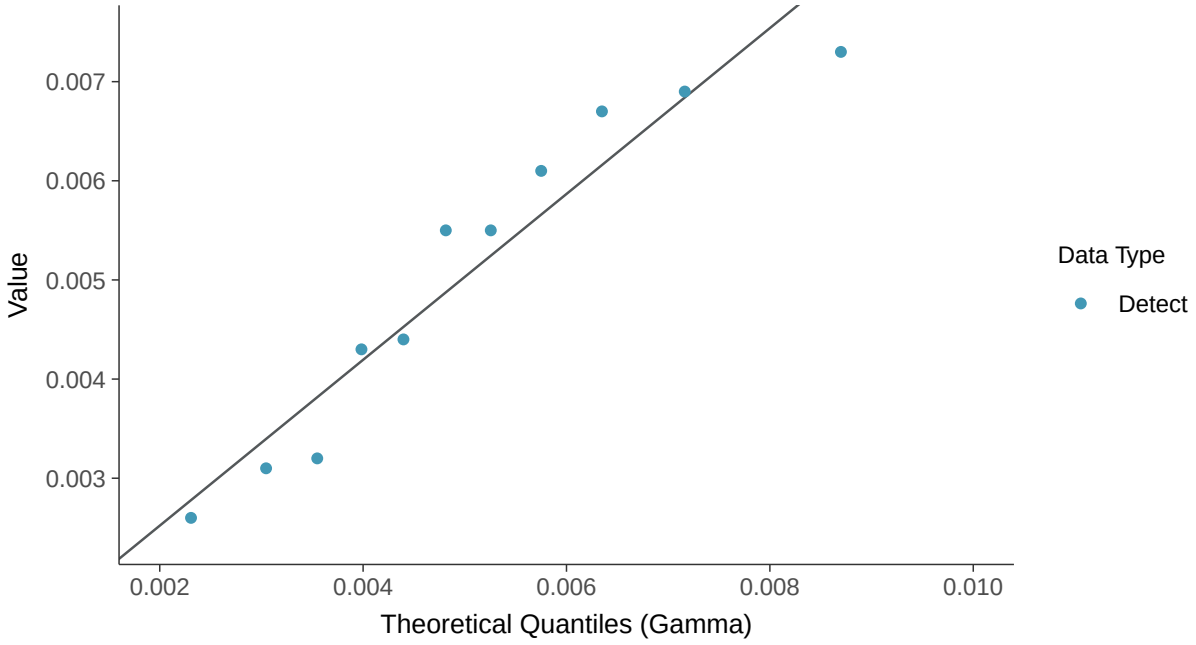
Lognormal Q-Q plot

Arsenic, MW-19 (mg/L)



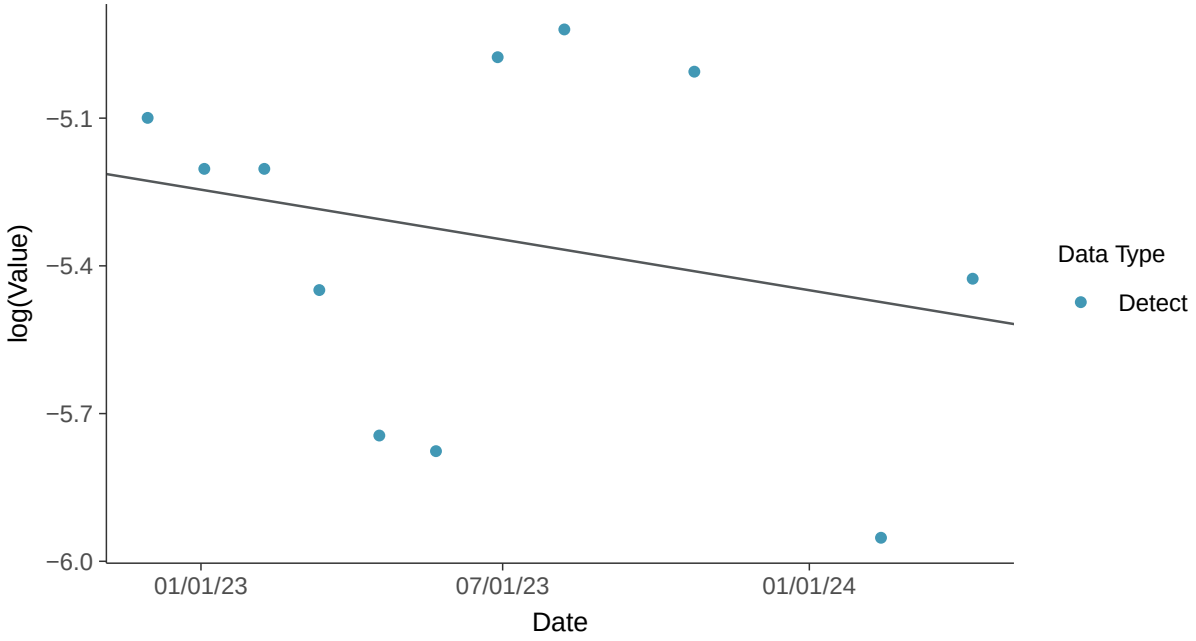
Gamma Q-Q plot

Arsenic, MW-19 (mg/L)



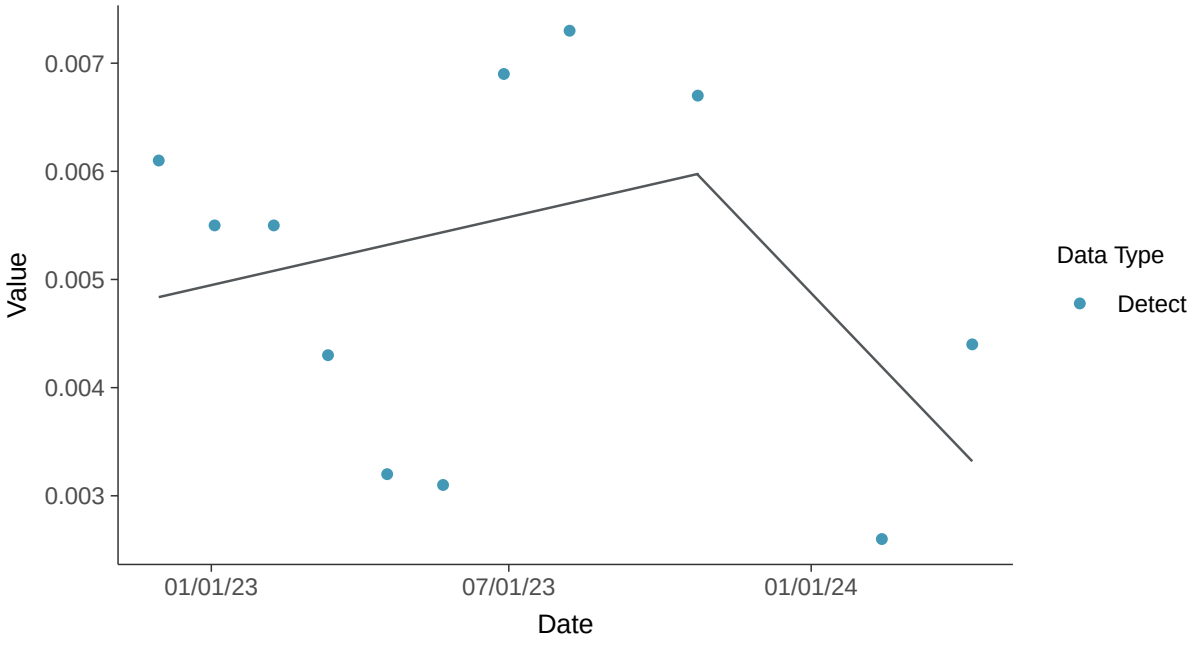
Trend Regression: Lognormal MLE

Arsenic, MW-19 (mg/L)



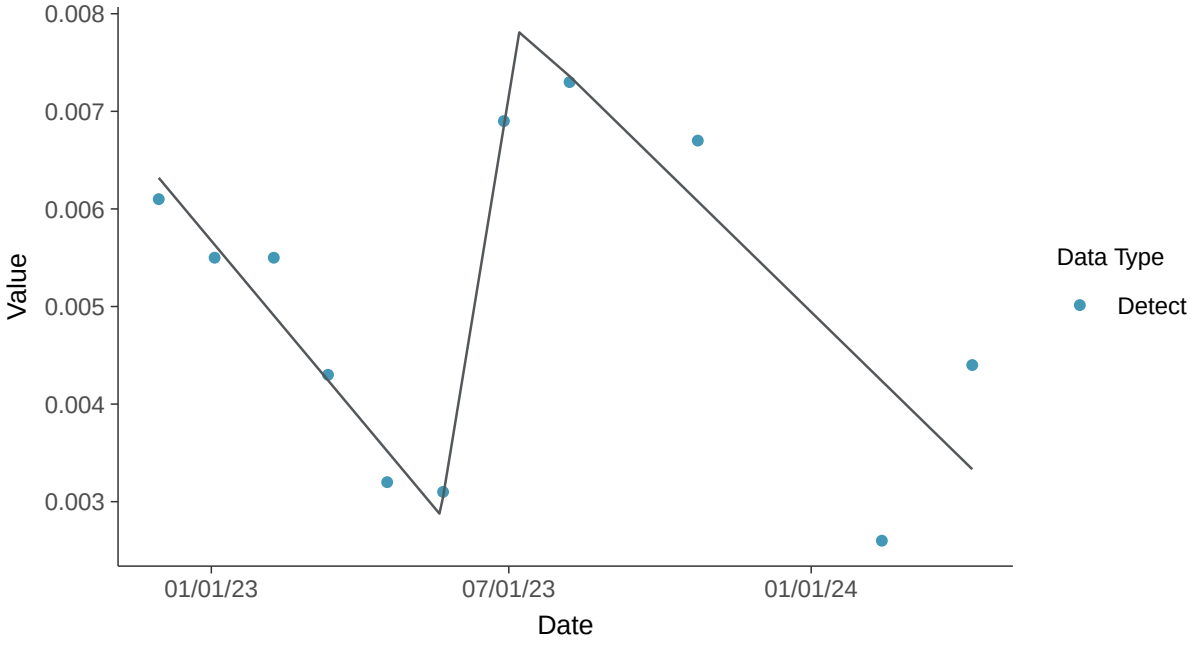
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-19 (mg/L)



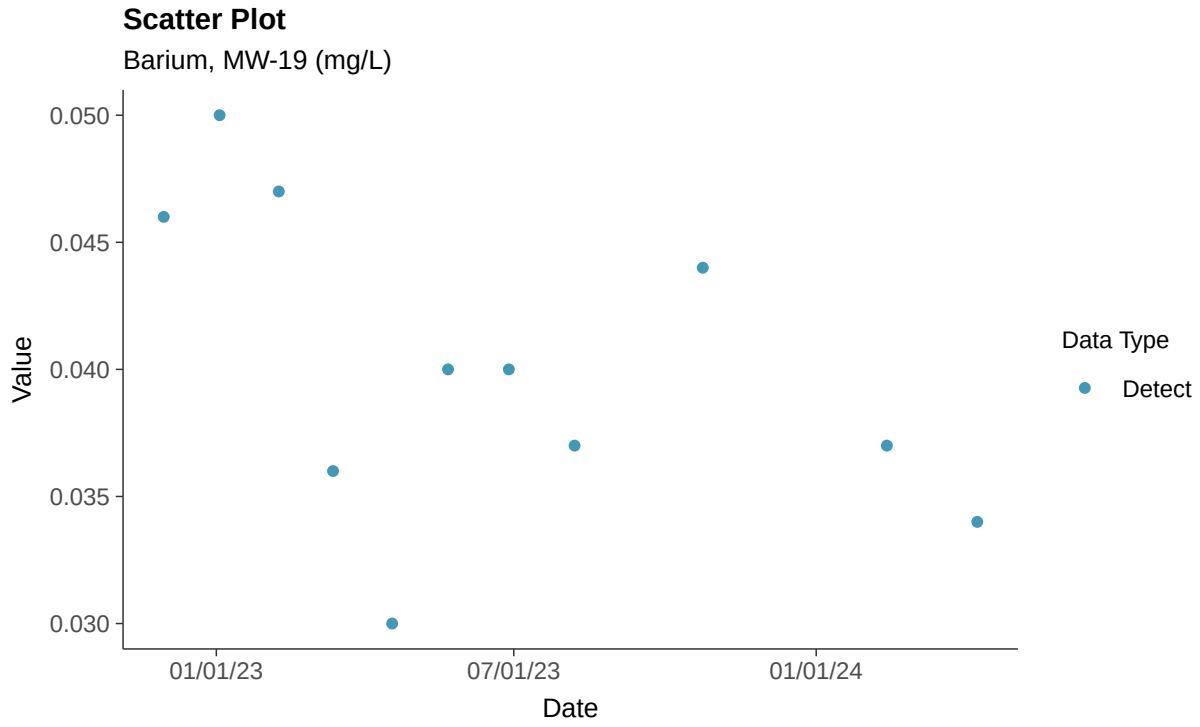
Trend Regression: Piecewise Linear-Linear-Linear

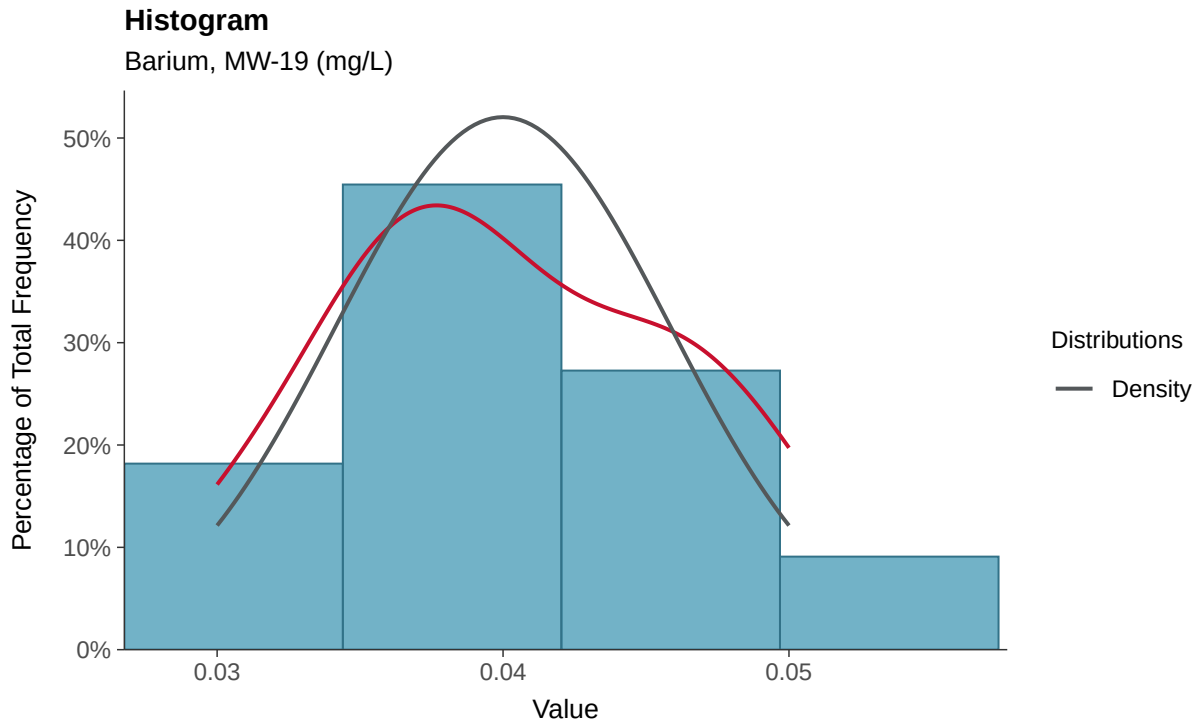
Arsenic, MW-19 (mg/L)



Appendix IV: Barium, MW-19

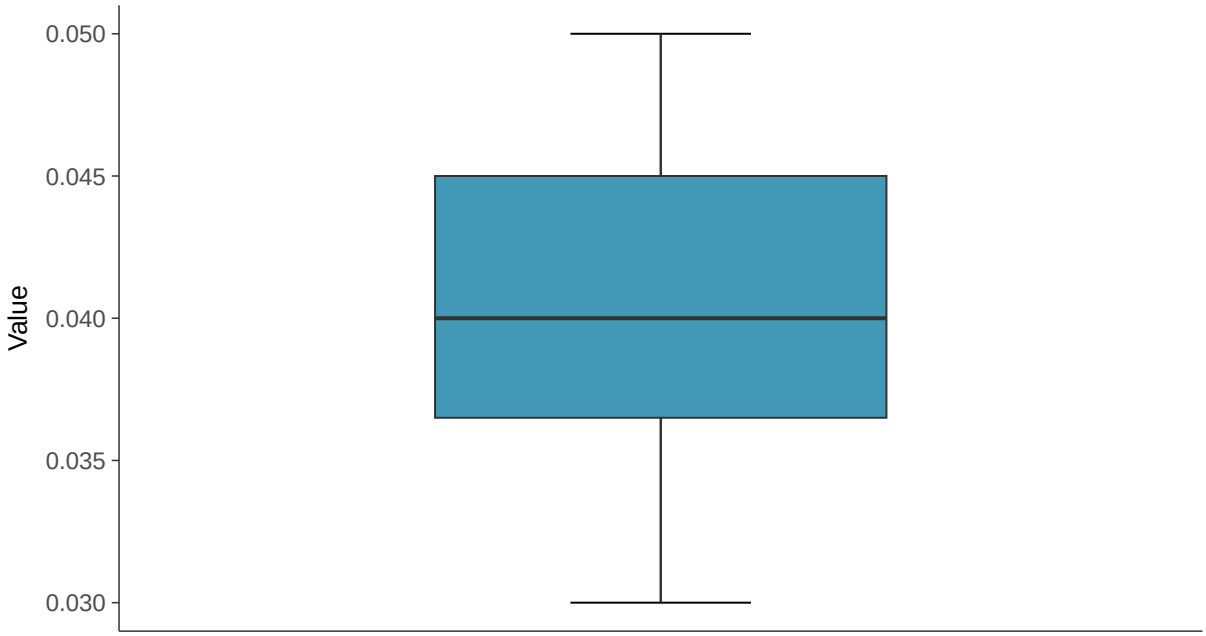
ID: 1_29_5_103





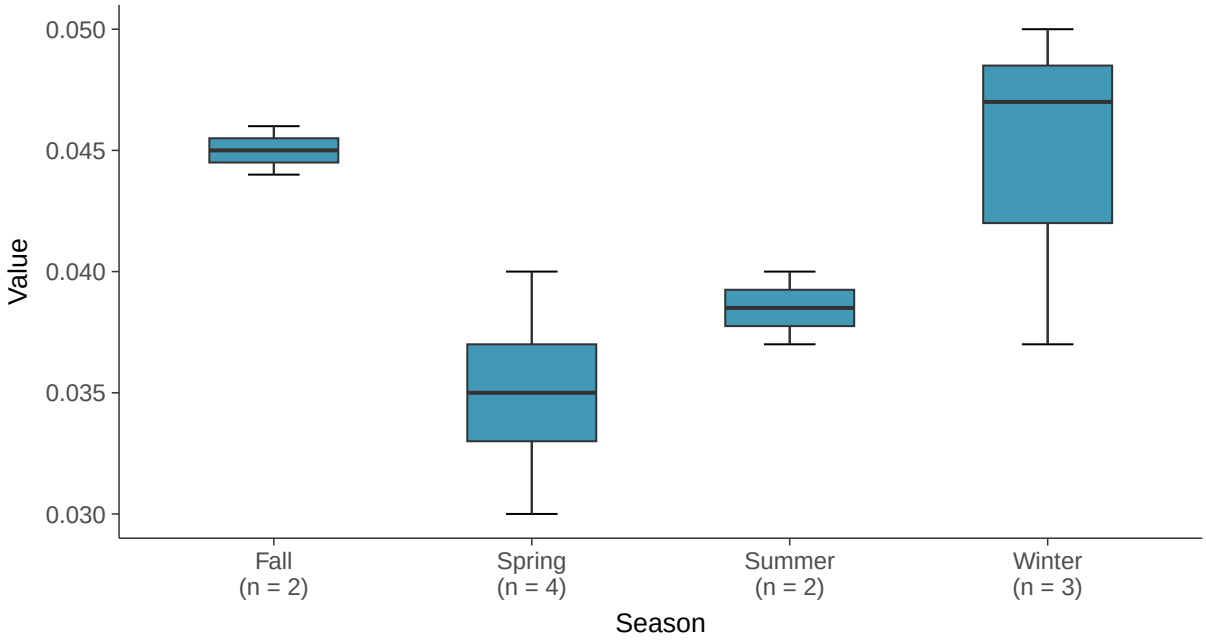
Boxplot

Barium, MW-19 (mg/L)



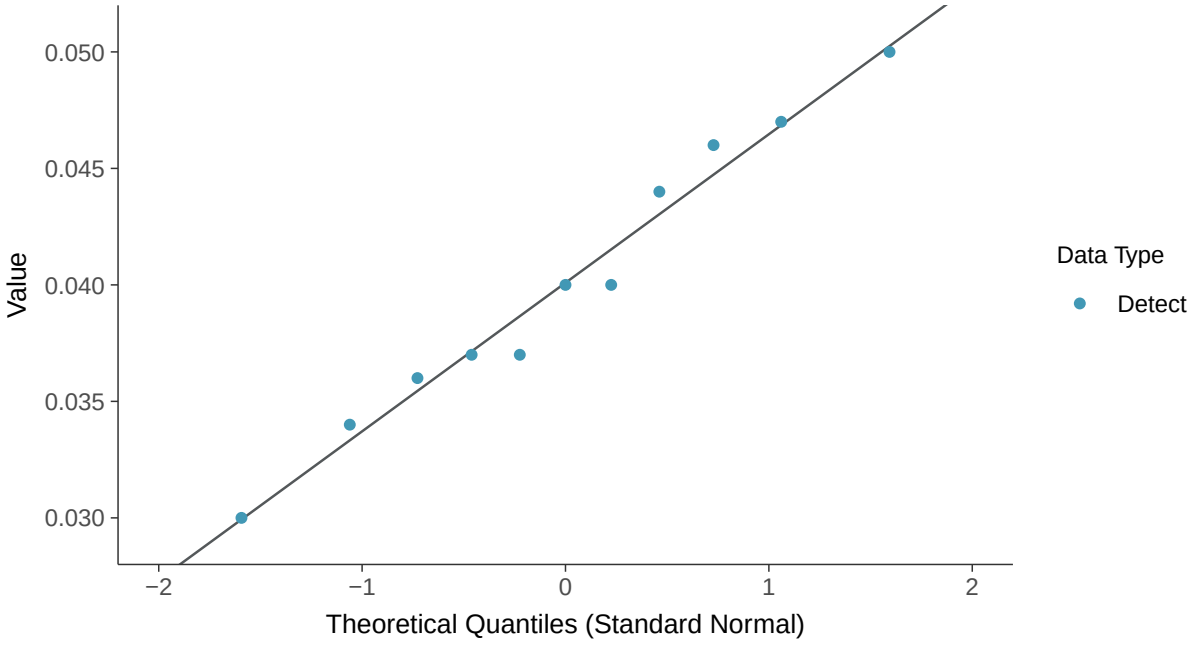
Boxplot by Season

Barium, MW-19 (mg/L)



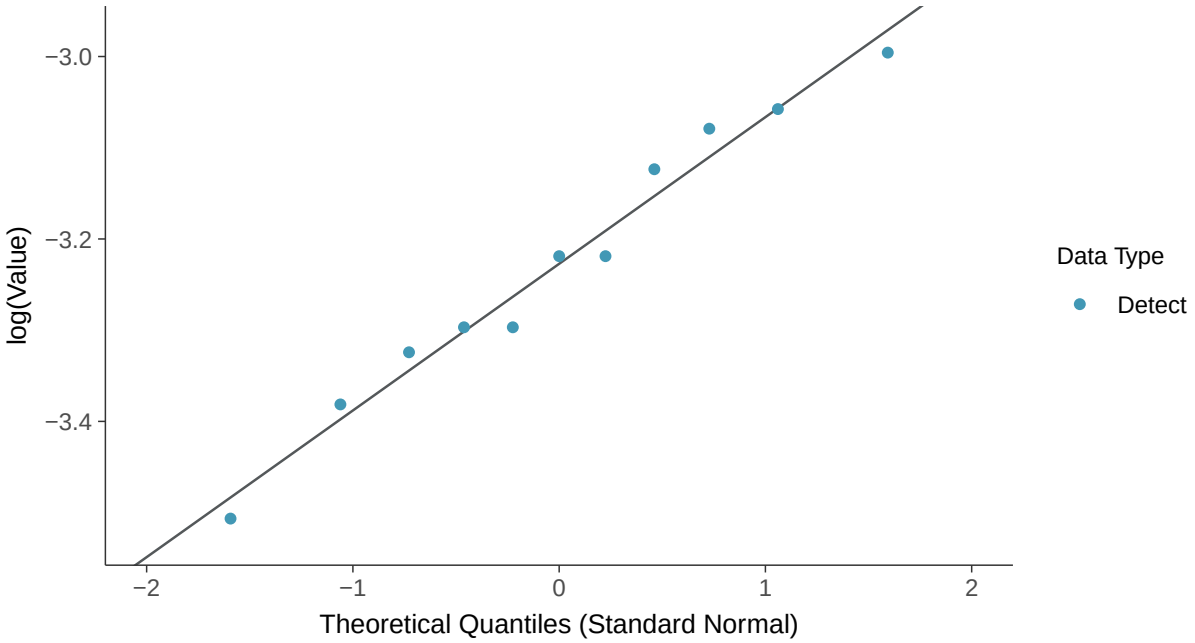
Normal Q-Q plot

Barium, MW-19 (mg/L)



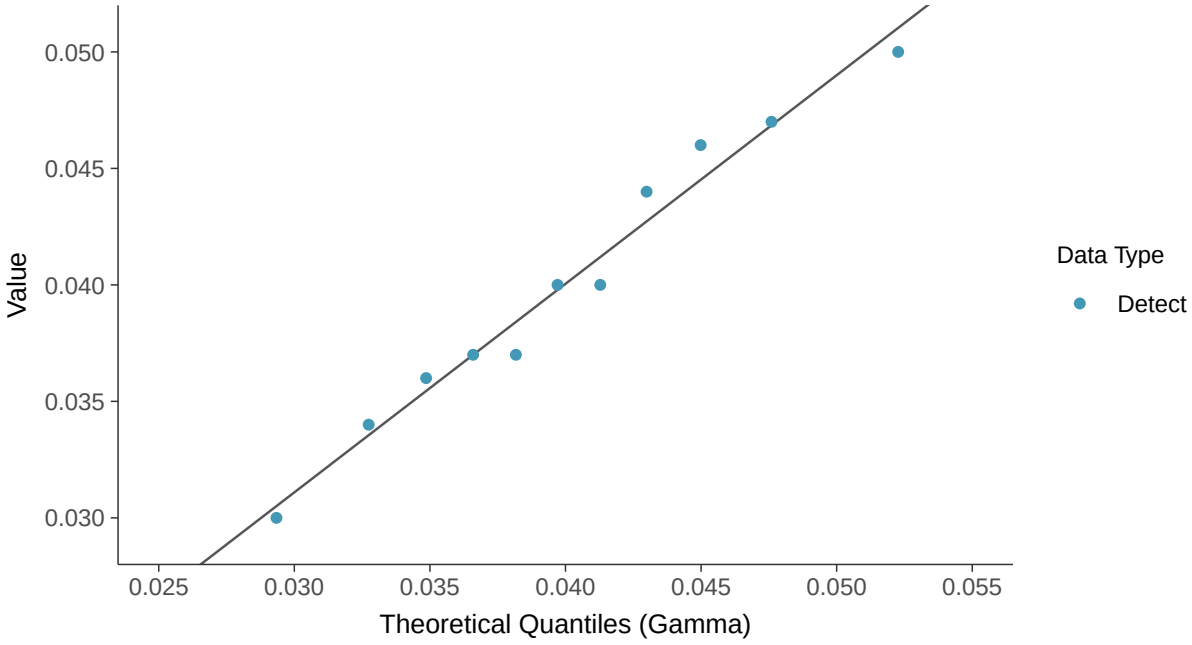
Lognormal Q-Q plot

Barium, MW-19 (mg/L)



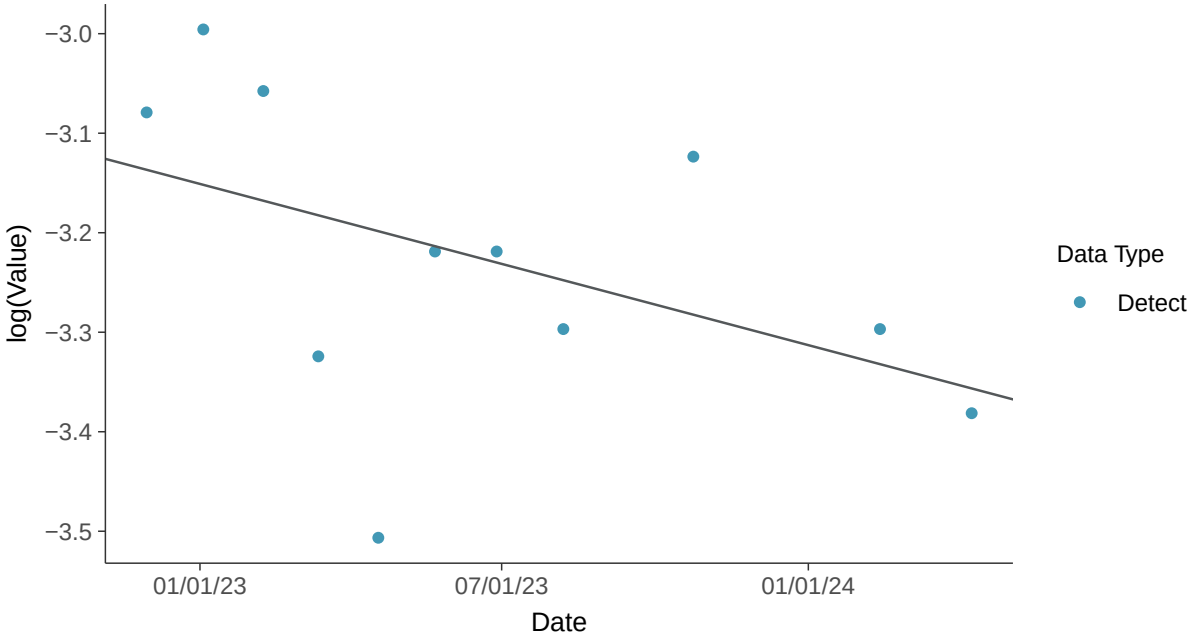
Gamma Q-Q plot

Barium, MW-19 (mg/L)



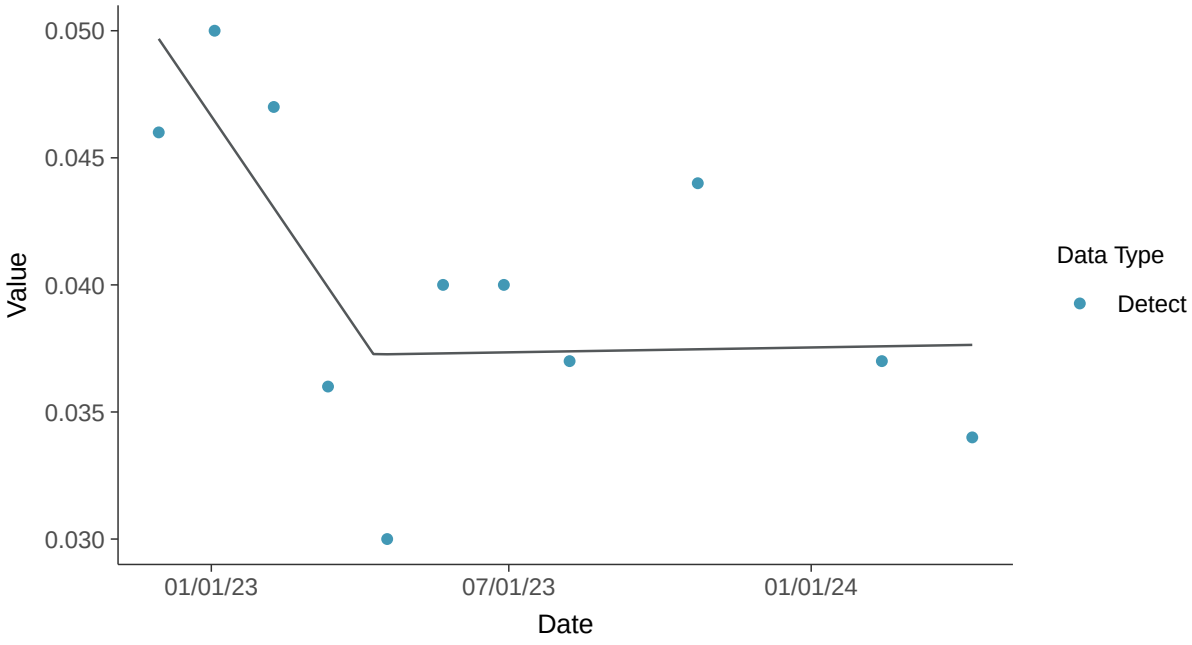
Trend Regression: Lognormal MLE

Barium, MW-19 (mg/L)



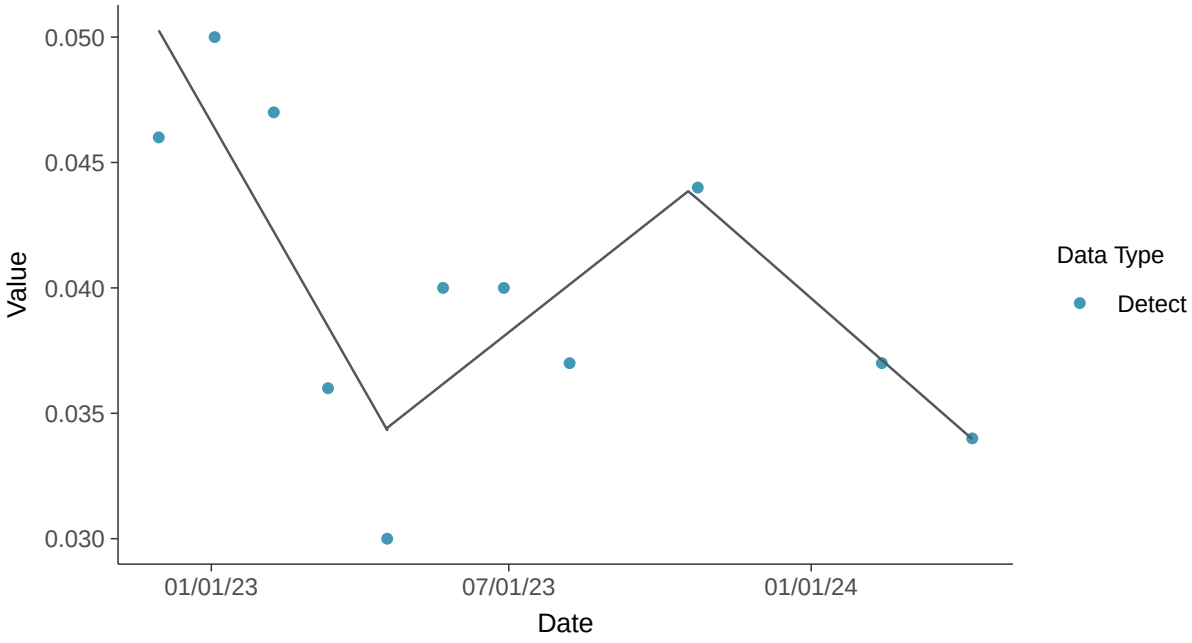
Trend Regression: Piecewise Linear-Linear

Barium, MW-19 (mg/L)



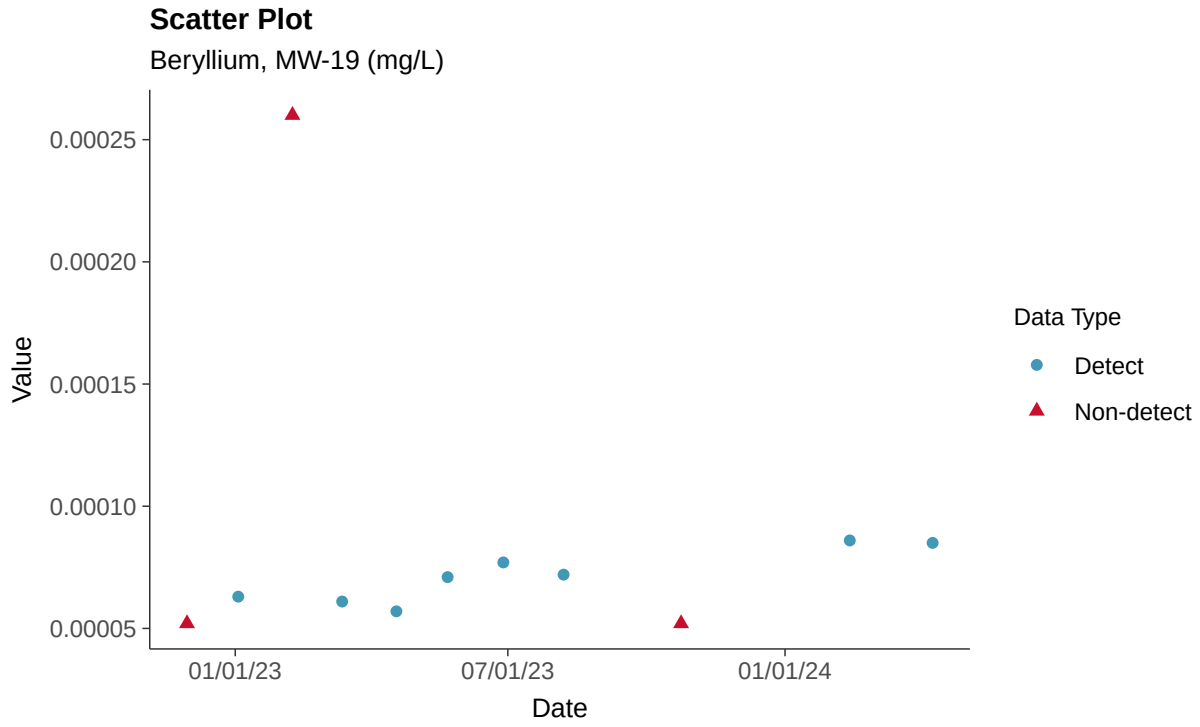
Trend Regression: Piecewise Linear-Linear-Linear

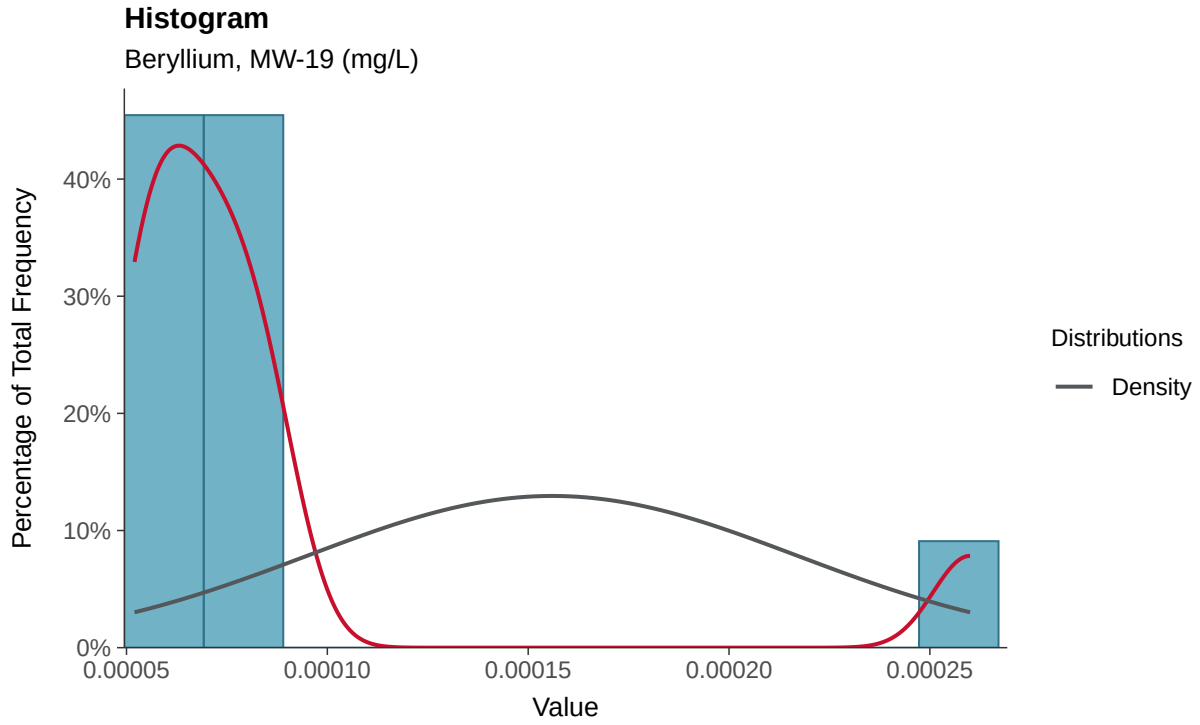
Barium, MW-19 (mg/L)



Appendix IV: Beryllium, MW-19

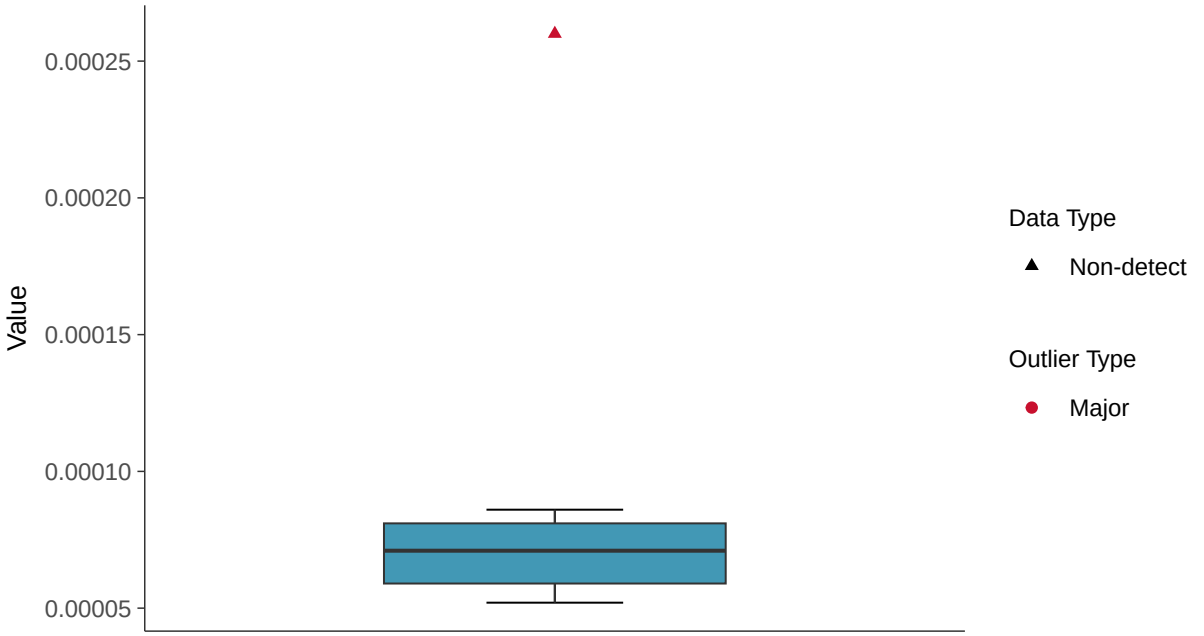
ID: 1_29_5_104





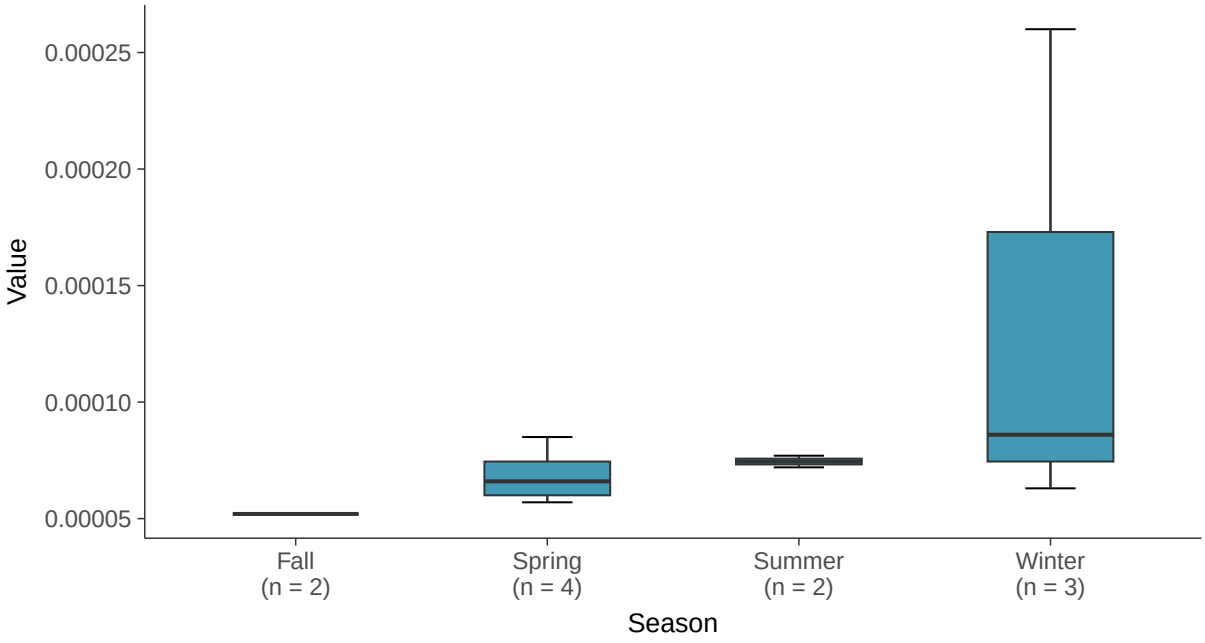
Boxplot

Beryllium, MW-19 (mg/L)



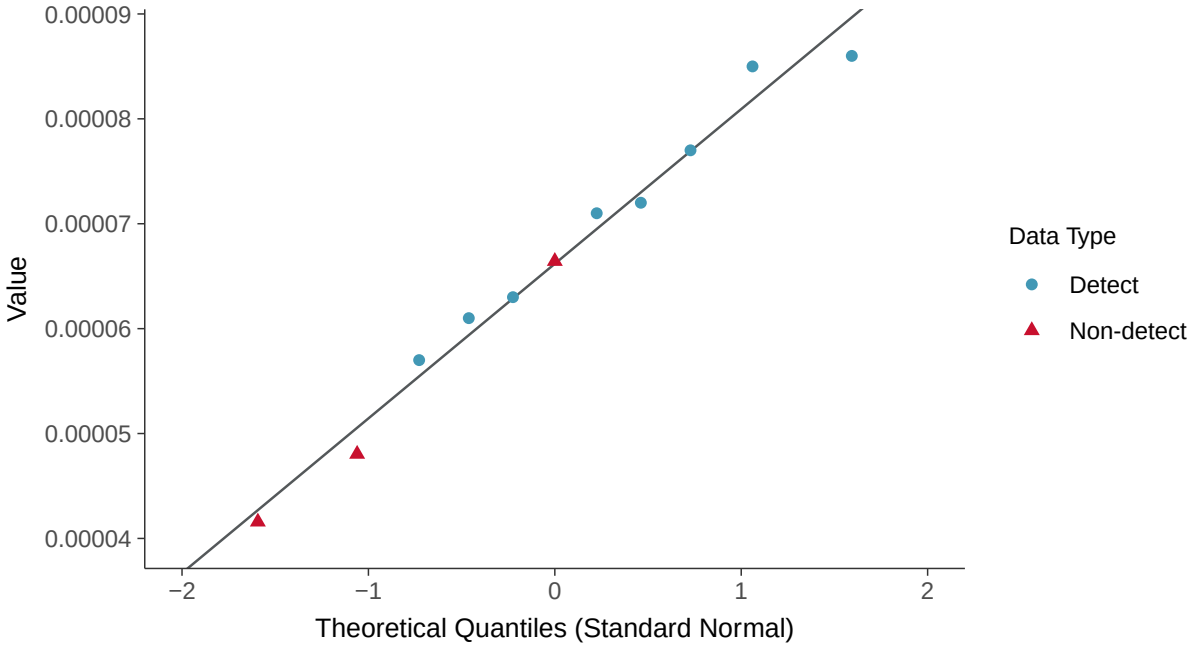
Boxplot by Season

Beryllium, MW-19 (mg/L)



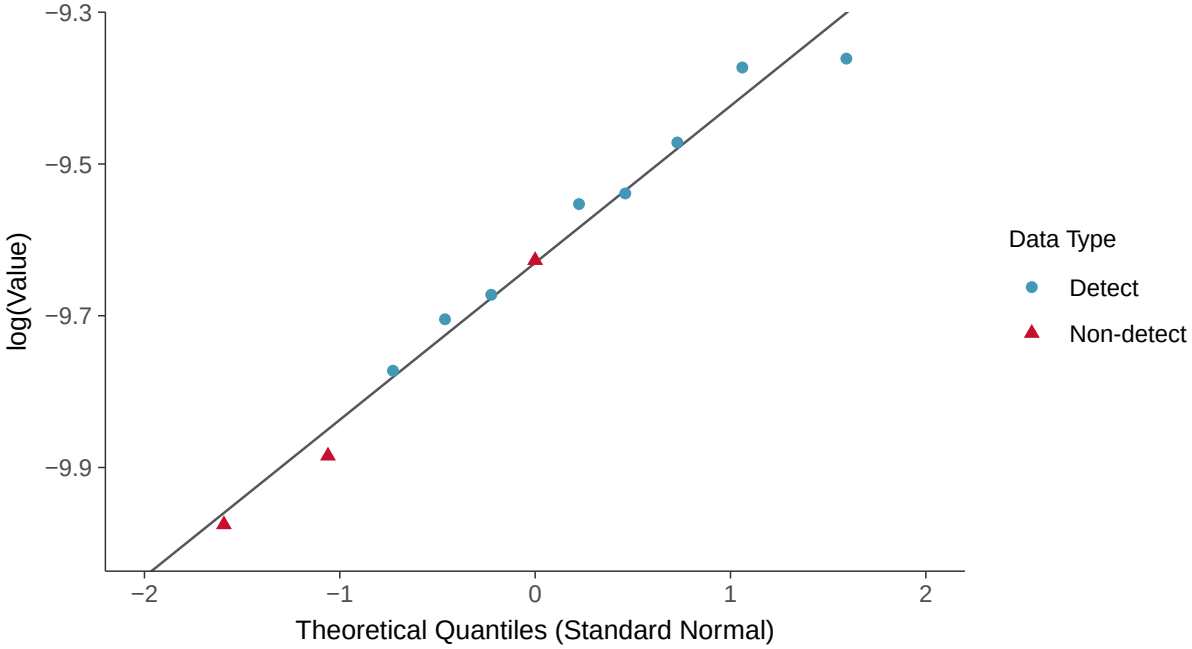
Normal Q-Q plot using ROS Imputed Estimates

Beryllium, MW-19 (mg/L)



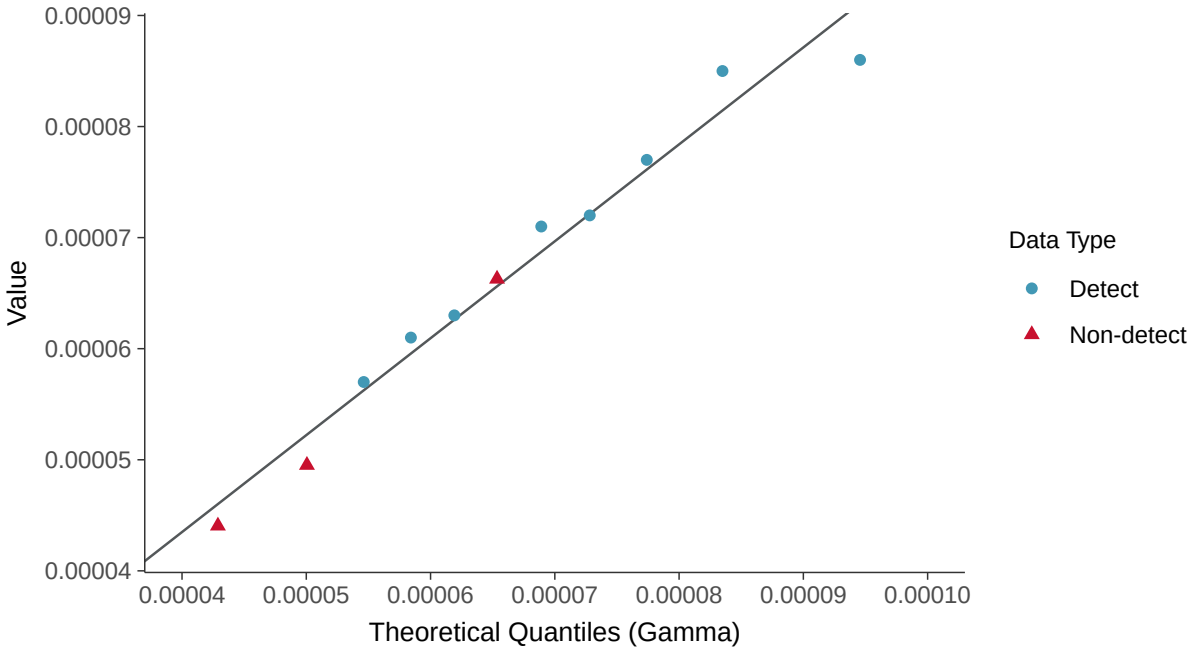
Lognormal Q-Q plot using ROS Imputed Estimates

Beryllium, MW-19 (mg/L)



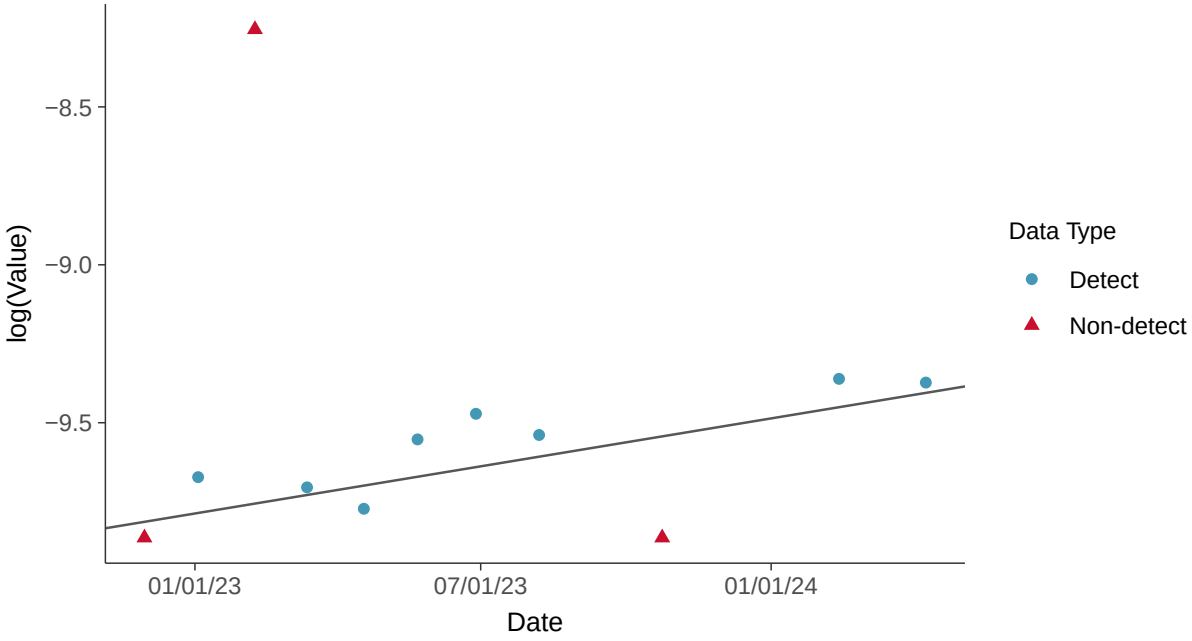
Gamma Q-Q plot using ROS Imputed Estimates

Beryllium, MW-19 (mg/L)



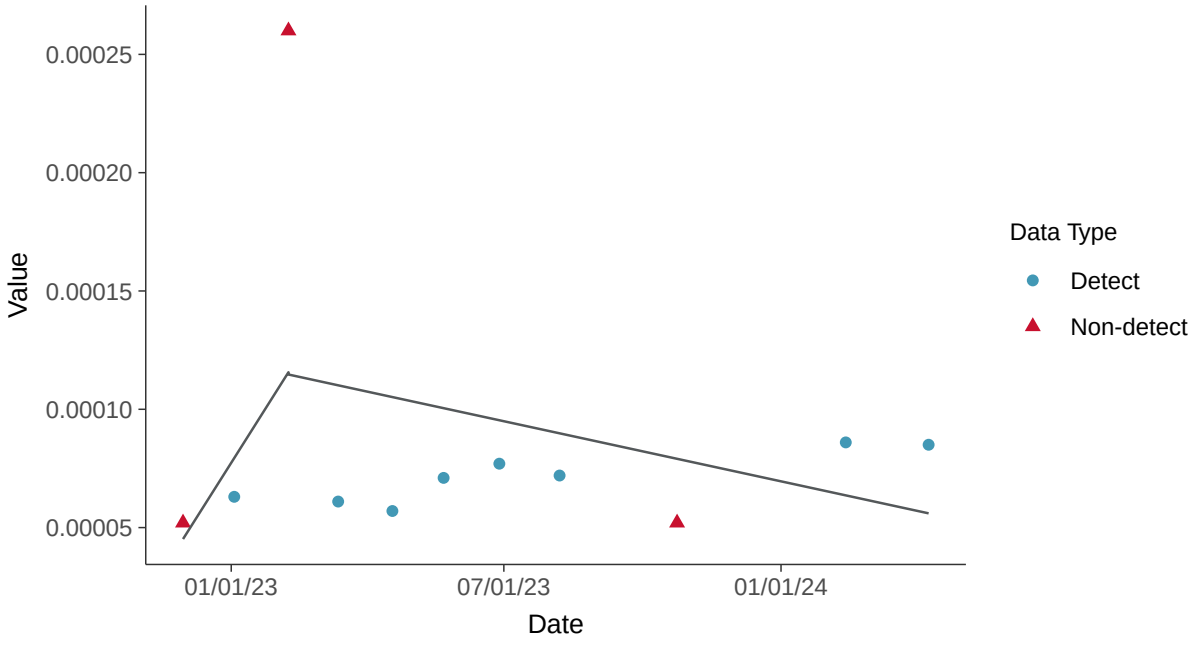
Trend Regression: Lognormal MLE

Beryllium, MW-19 (mg/L)



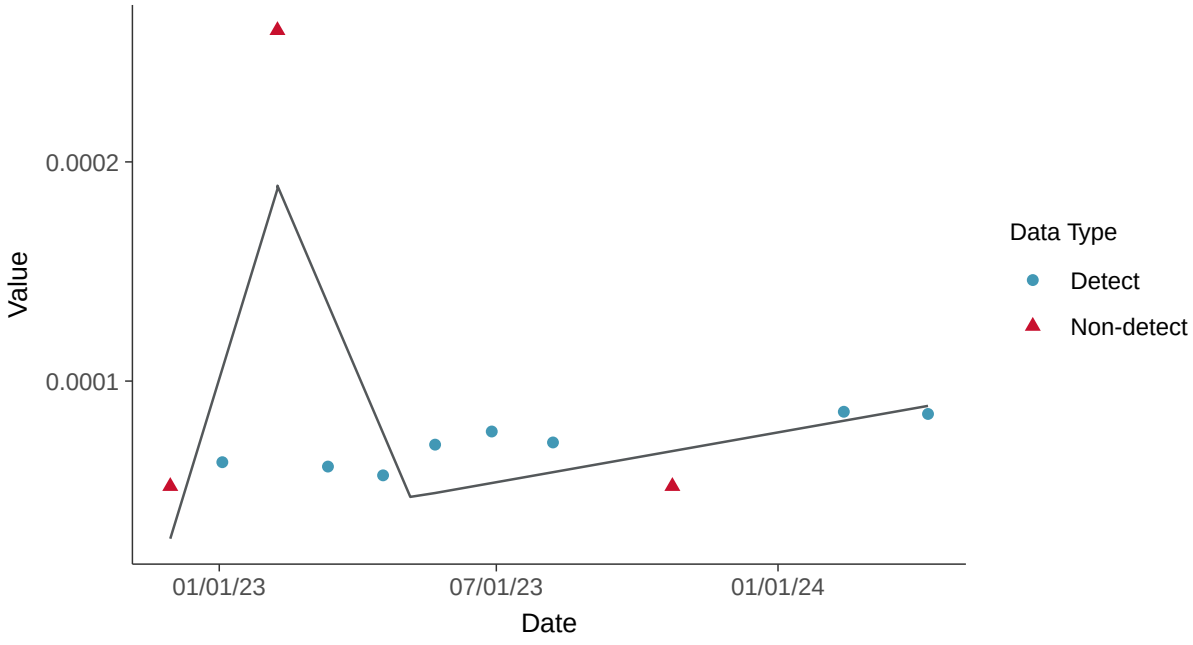
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-19 (mg/L)



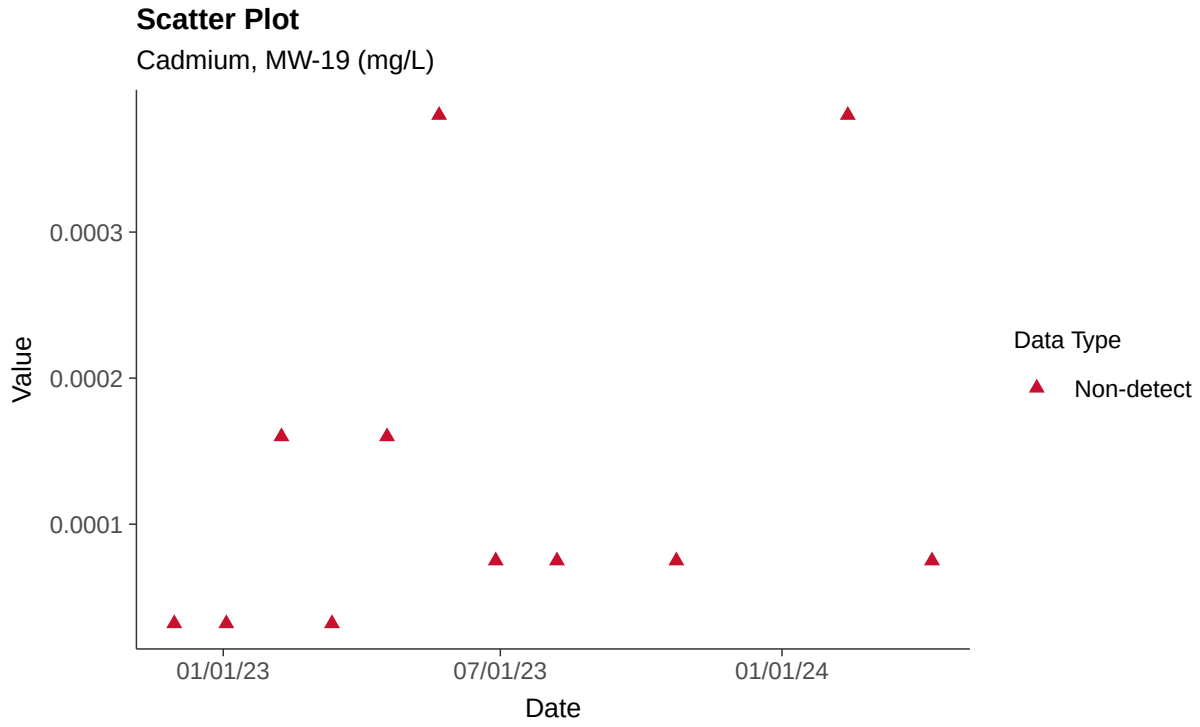
Trend Regression: Piecewise Linear-Linear-Linear

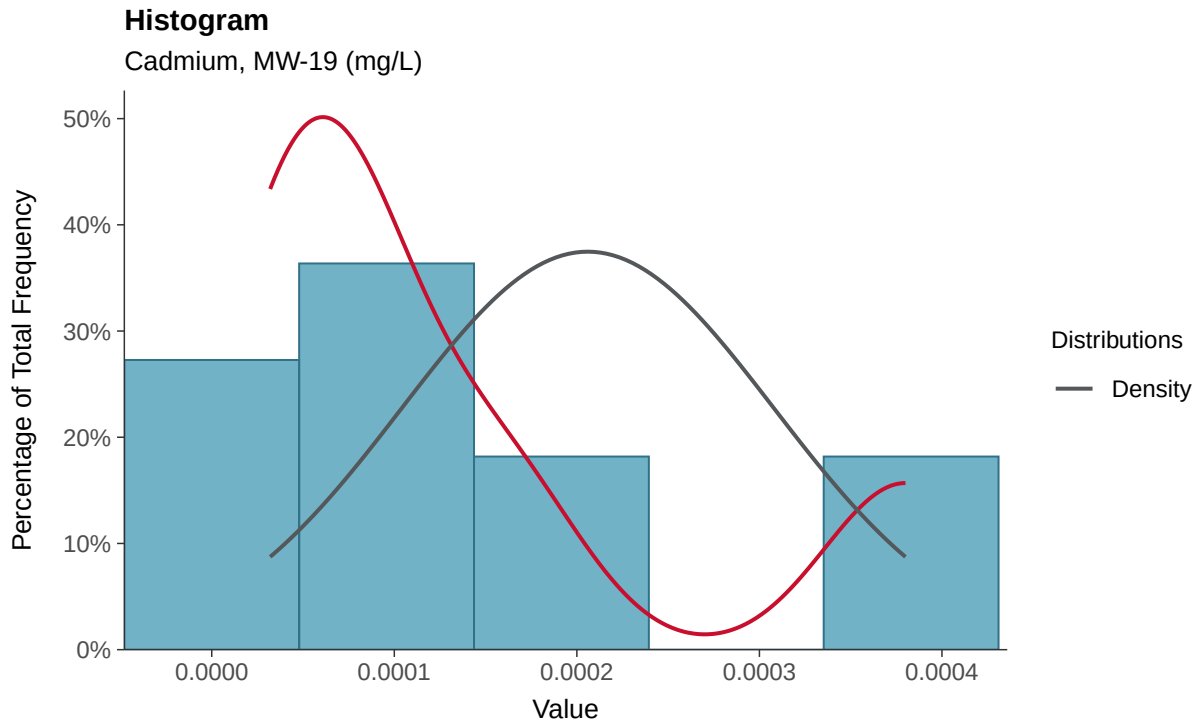
Beryllium, MW-19 (mg/L)



Appendix IV: Cadmium, MW-19

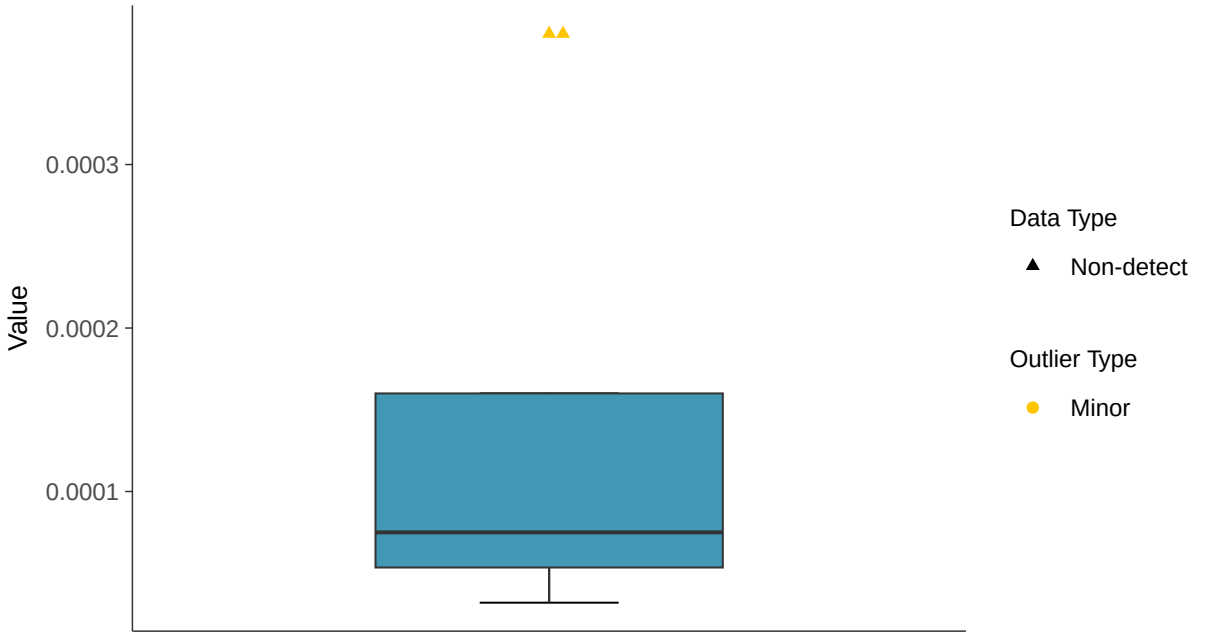
ID: 1_29_5_106





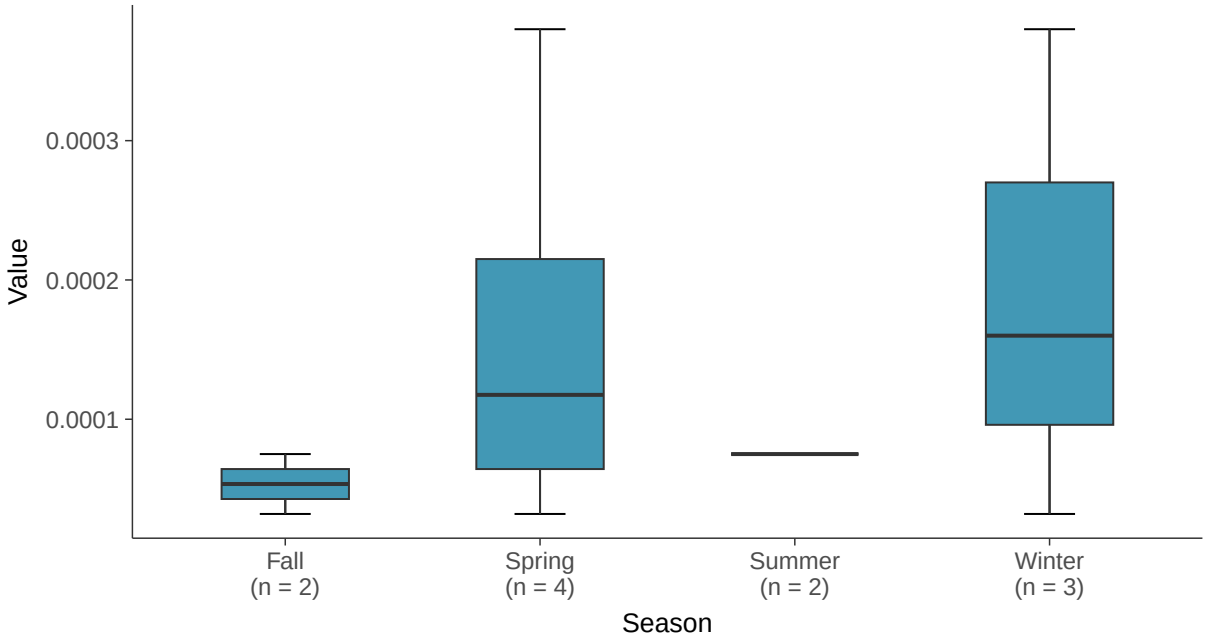
Boxplot

Cadmium, MW-19 (mg/L)



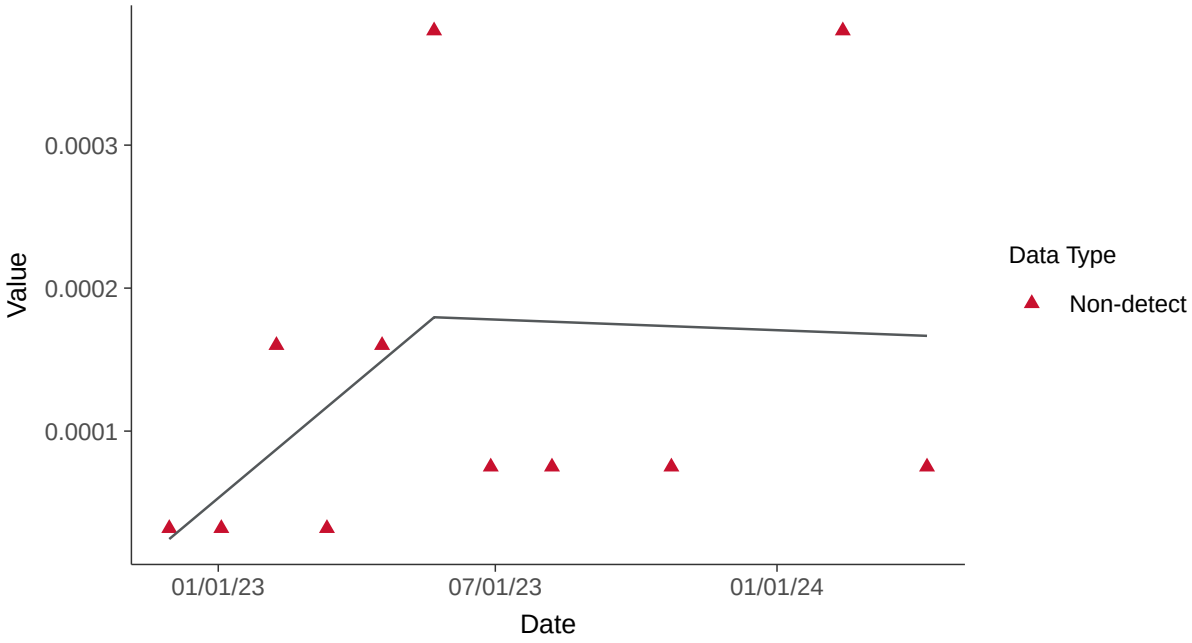
Boxplot by Season

Cadmium, MW-19 (mg/L)



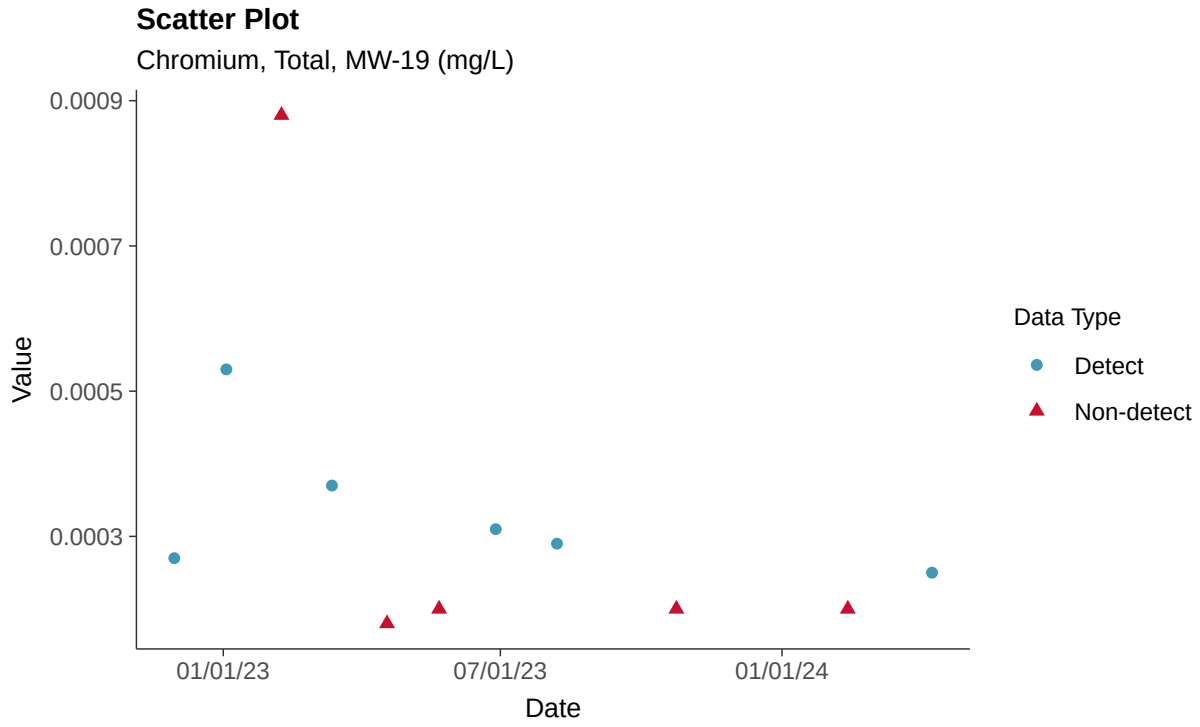
Trend Regression: Piecewise Linear-Linear

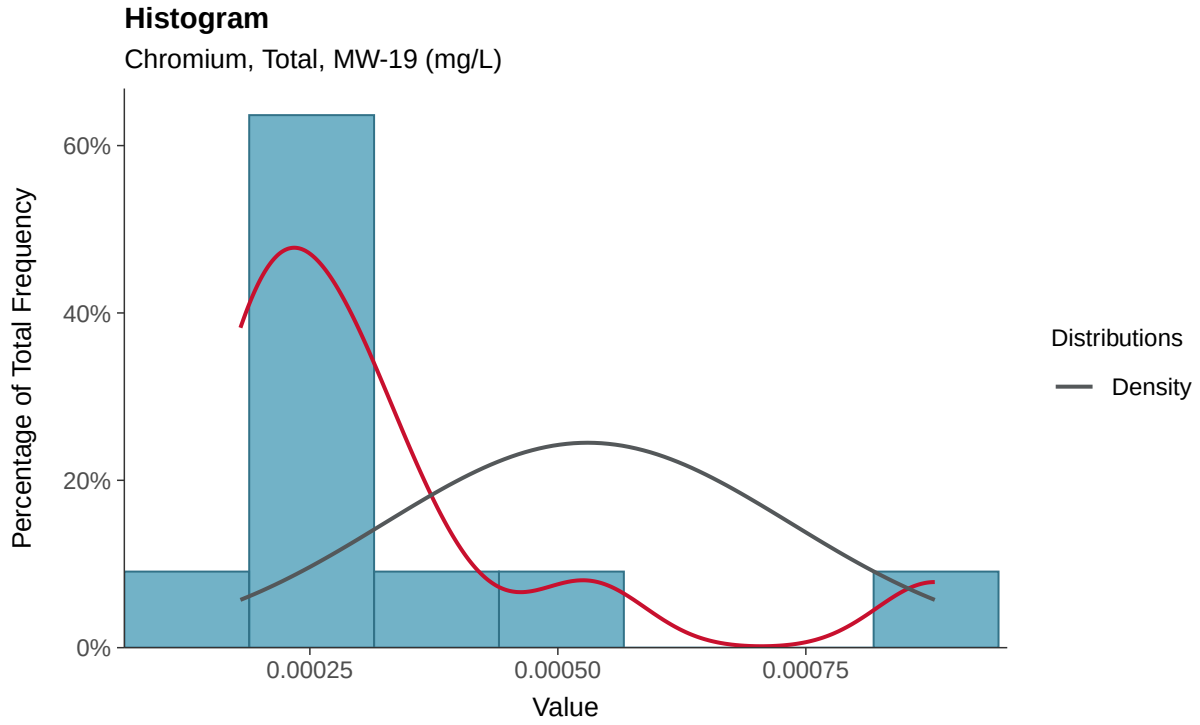
Cadmium, MW-19 (mg/L)



Appendix IV: Chromium, Total, MW-19

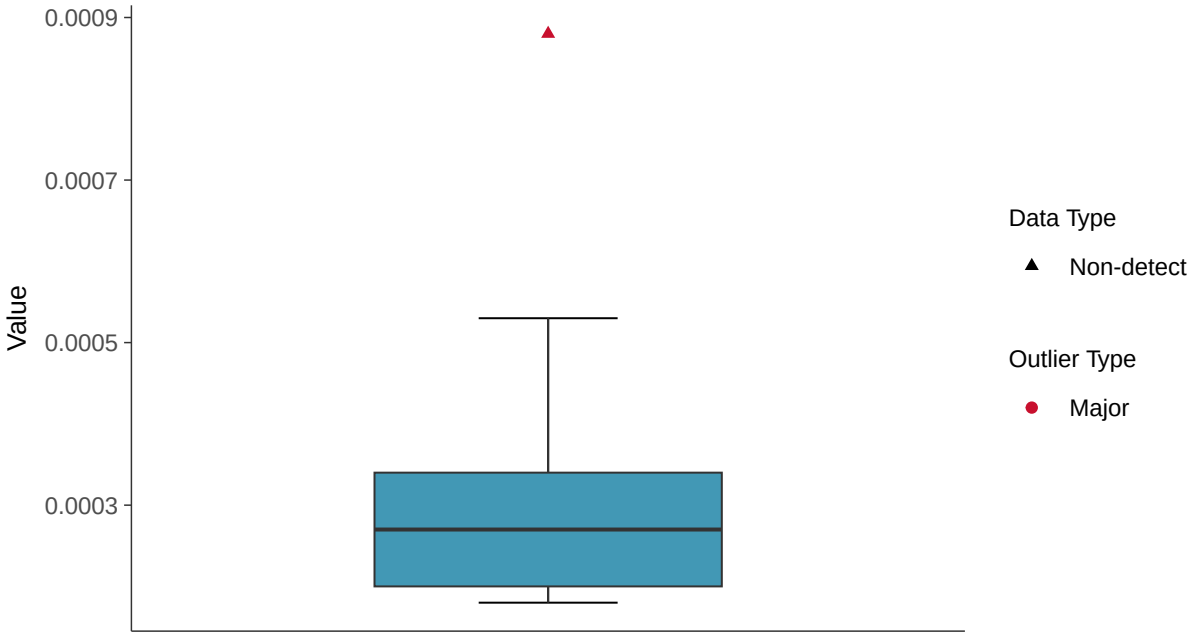
ID: 1_29_5_109





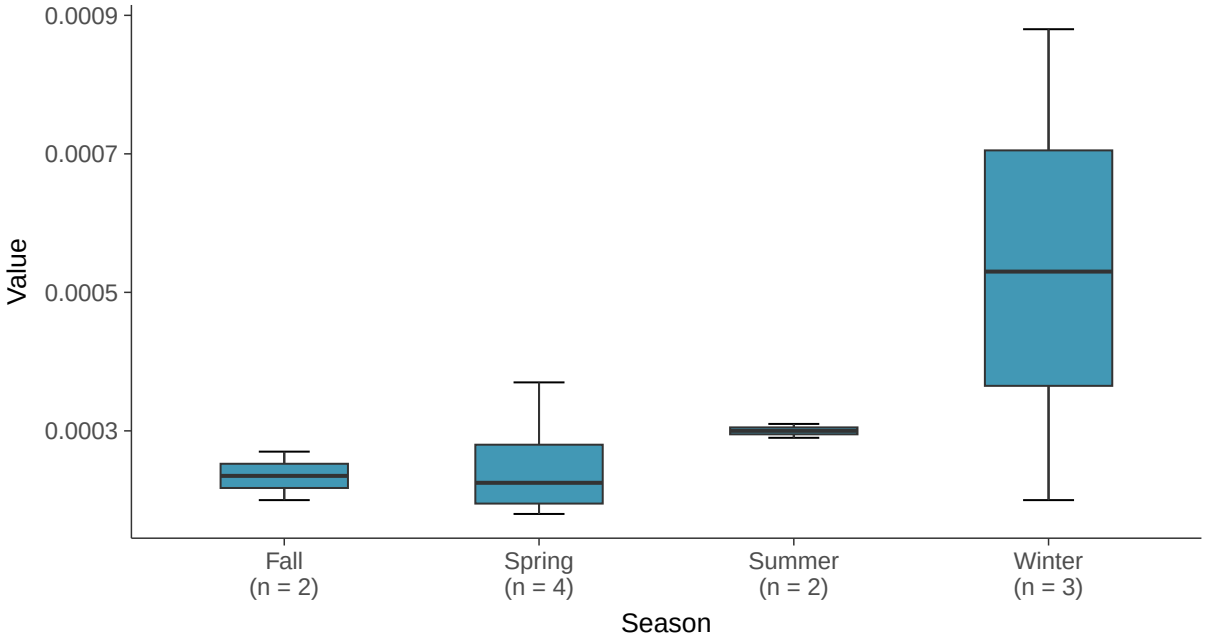
Boxplot

Chromium, Total, MW-19 (mg/L)



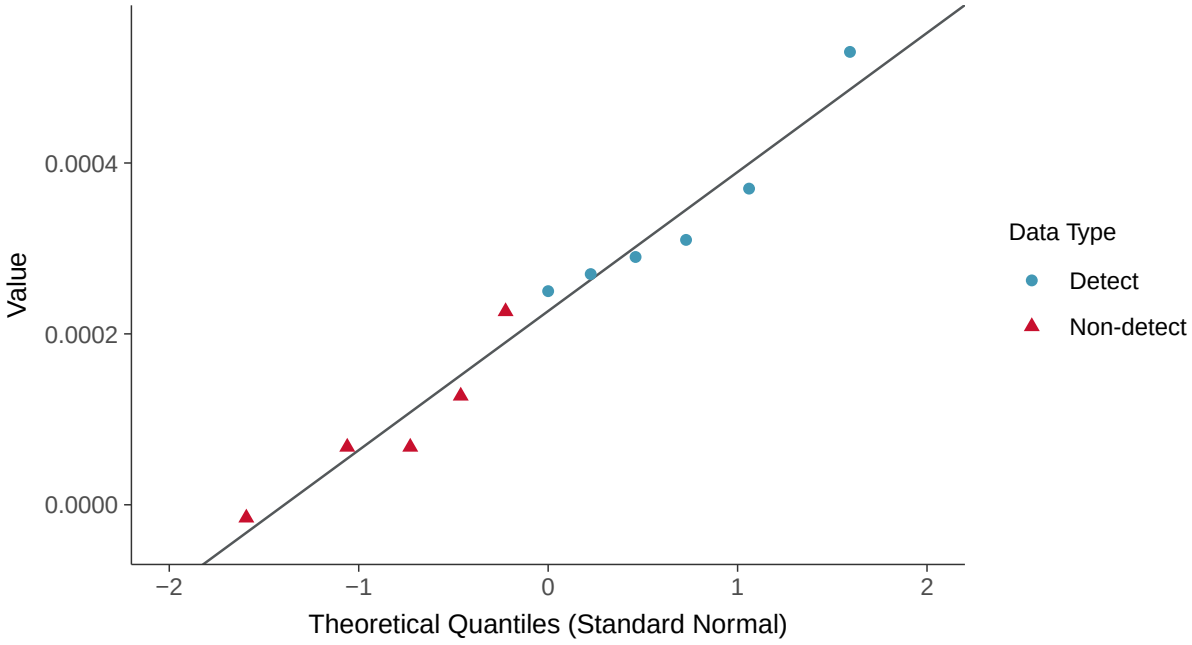
Boxplot by Season

Chromium, Total, MW-19 (mg/L)



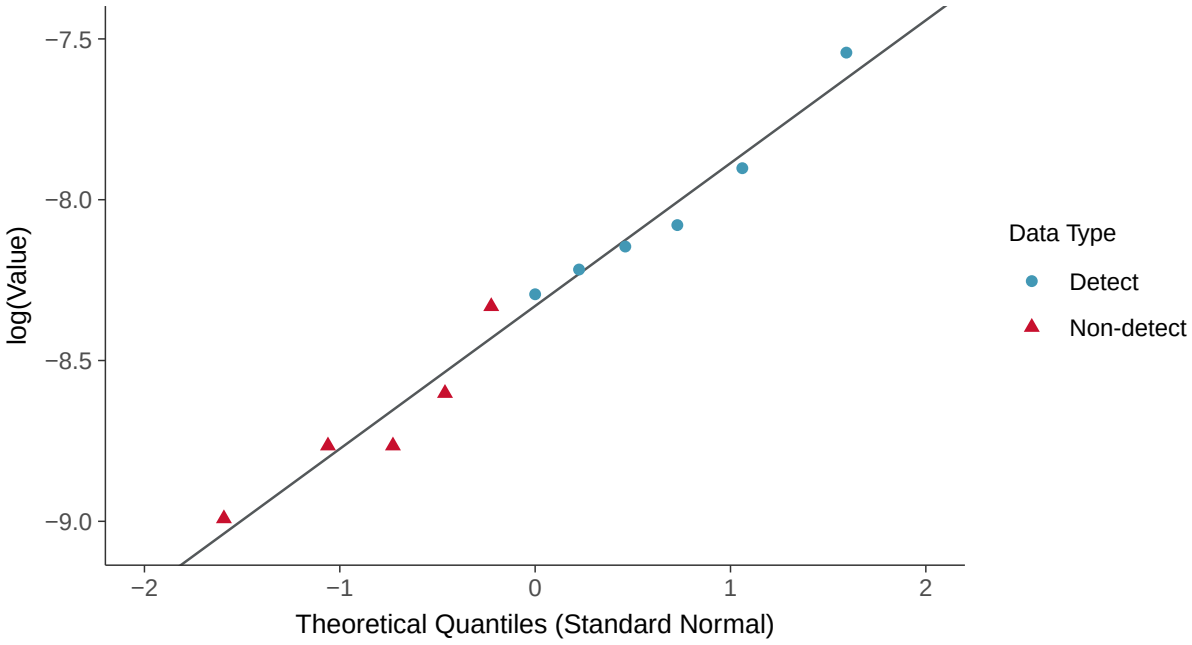
Normal Q-Q plot using ROS Imputed Estimates

Chromium, Total, MW-19 (mg/L)



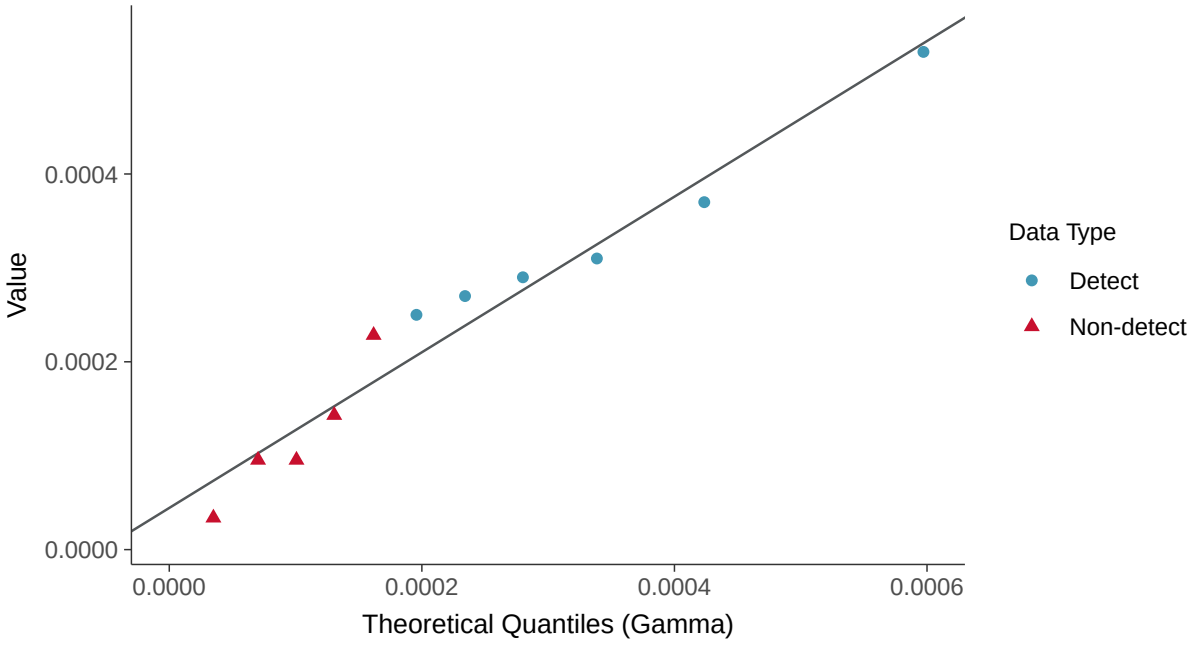
Lognormal Q-Q plot using ROS Imputed Estimates

Chromium, Total, MW-19 (mg/L)



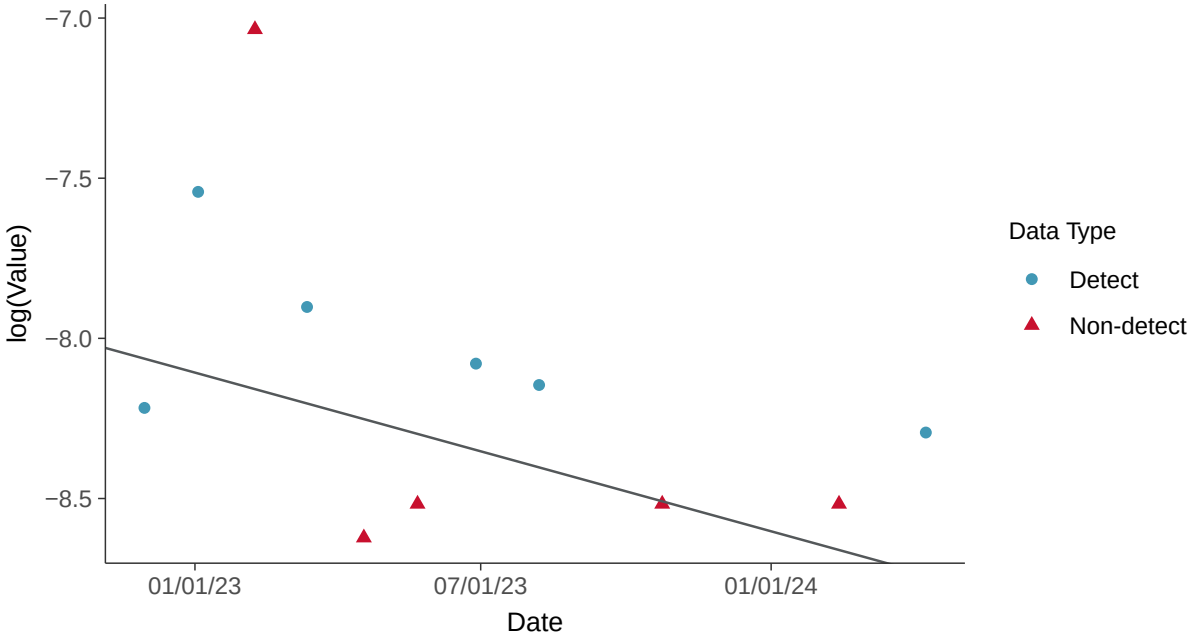
Gamma Q-Q plot using ROS Imputed Estimates

Chromium, Total, MW-19 (mg/L)



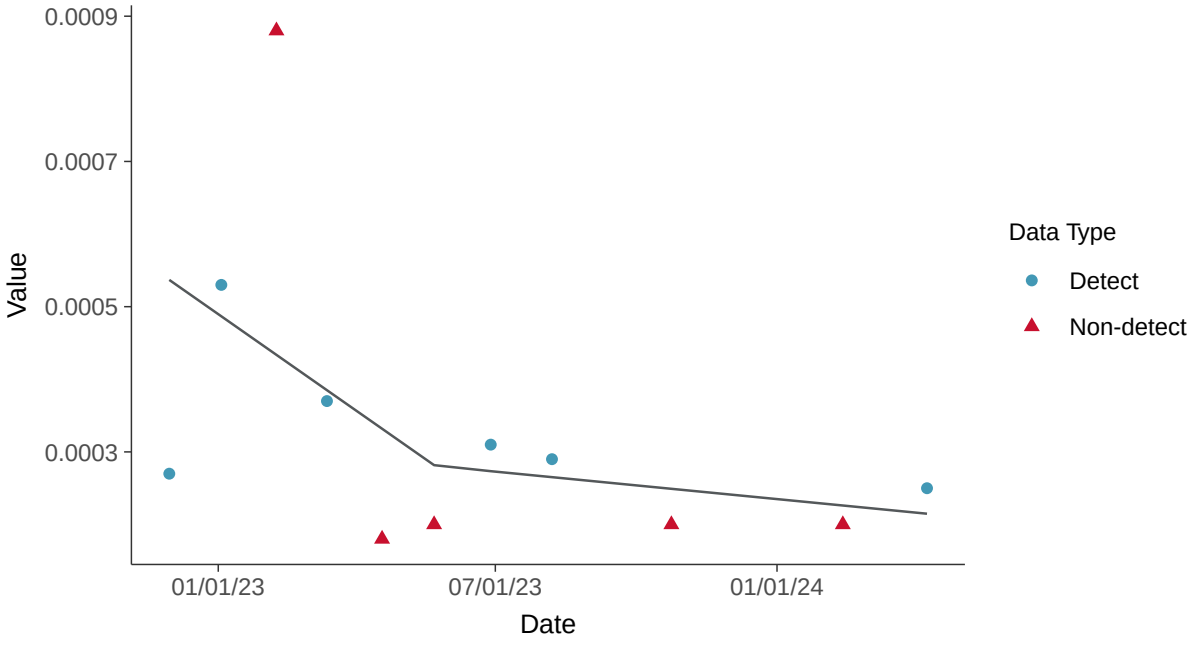
Trend Regression: Lognormal MLE

Chromium, Total, MW-19 (mg/L)



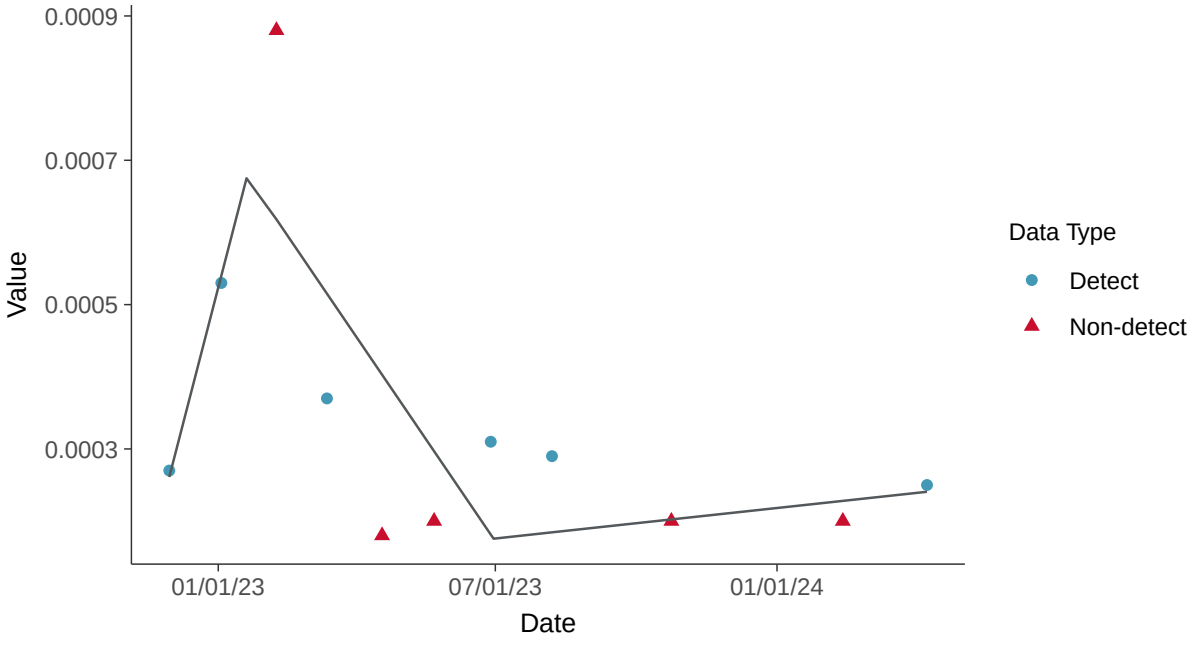
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-19 (mg/L)



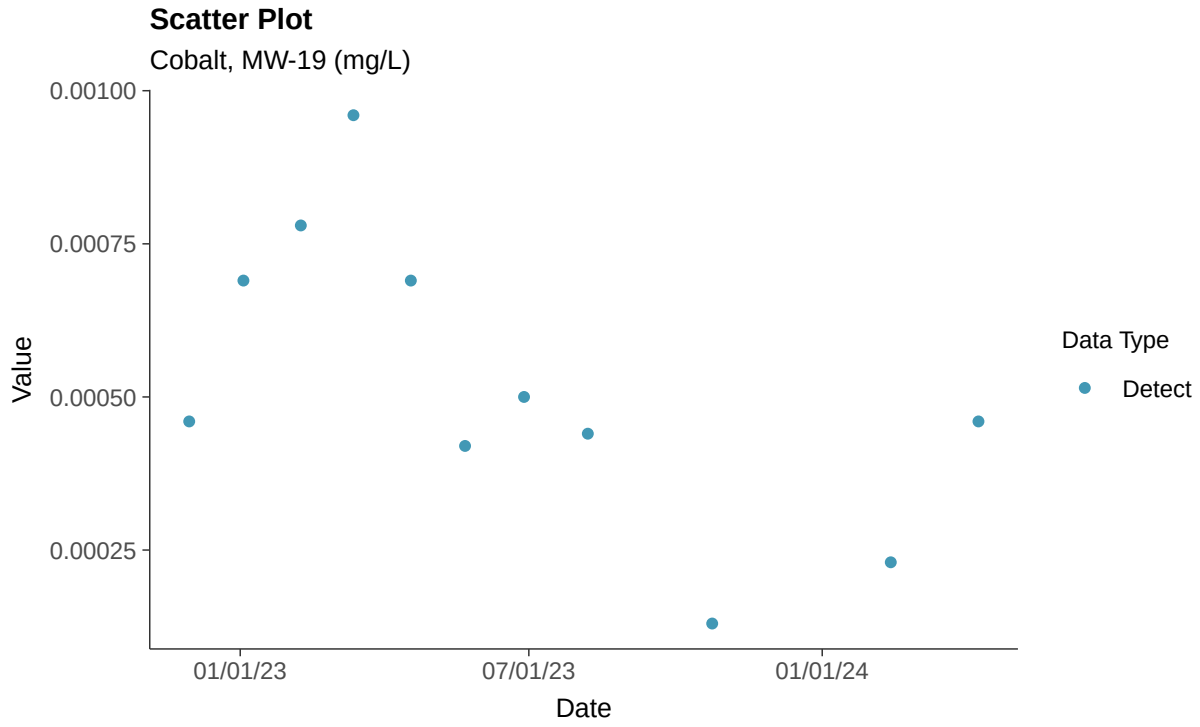
Trend Regression: Piecewise Linear-Linear-Linear

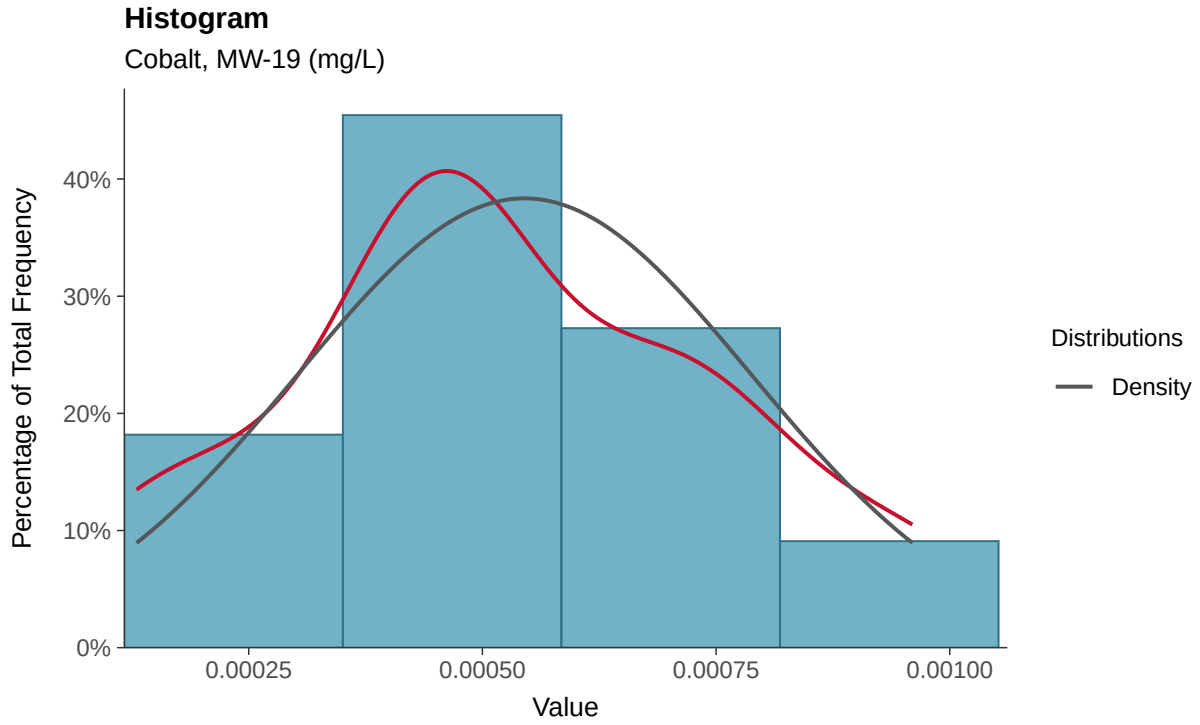
Chromium, Total, MW-19 (mg/L)



Appendix IV: Cobalt, MW-19

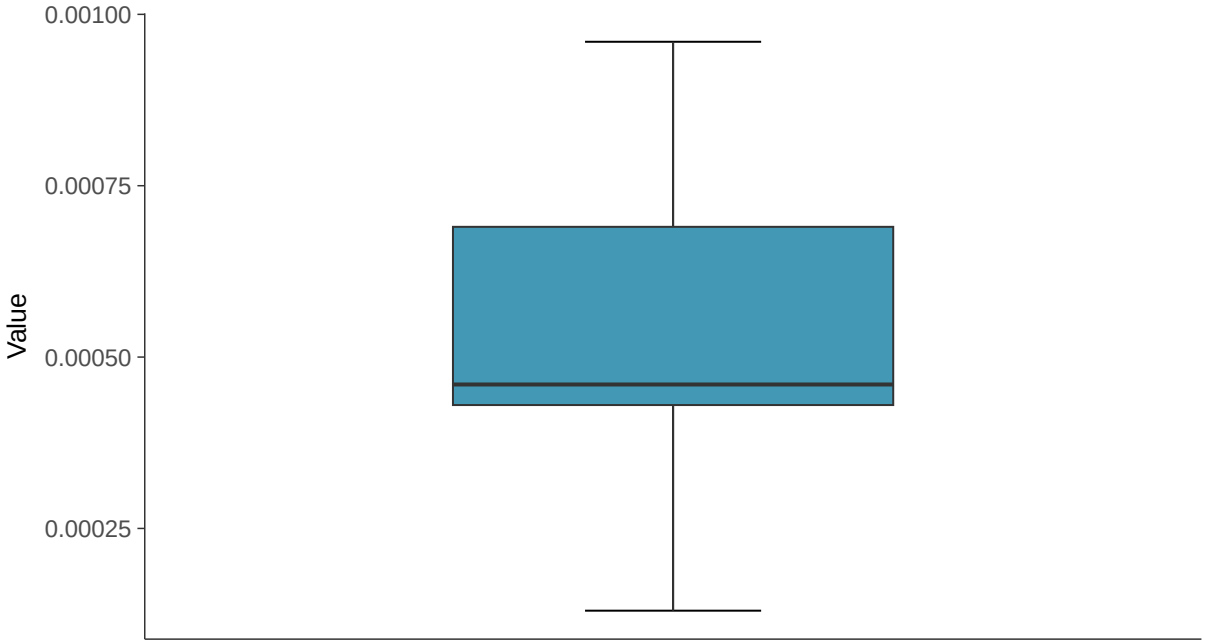
ID: 1_29_5_110





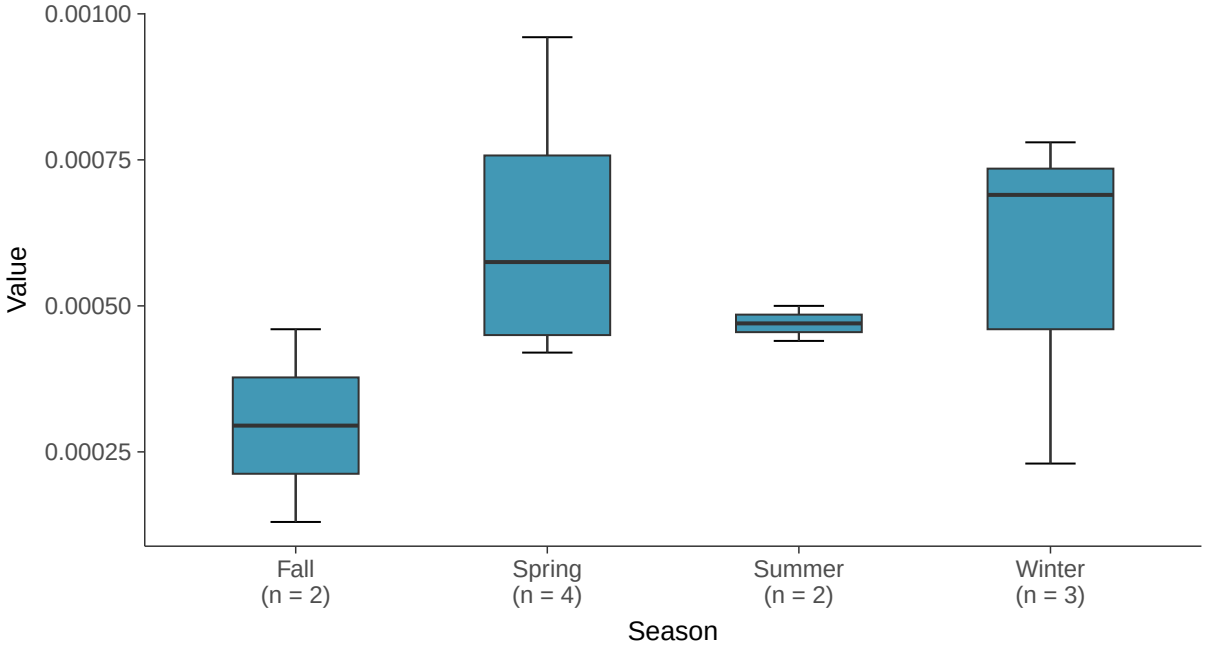
Boxplot

Cobalt, MW-19 (mg/L)



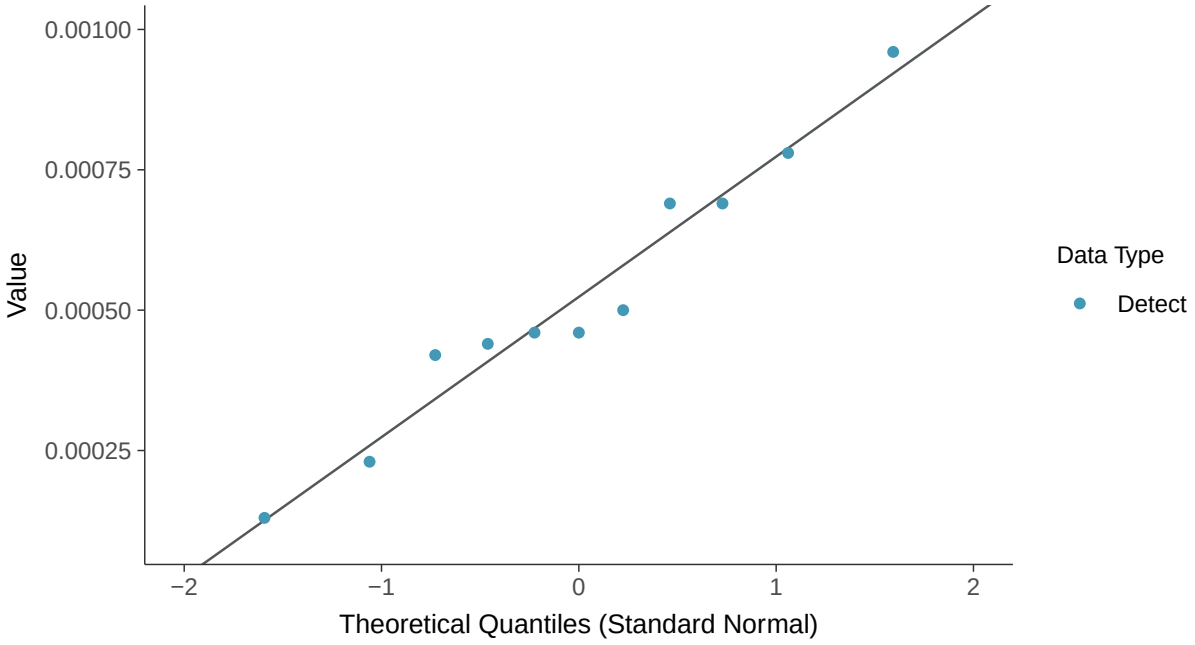
Boxplot by Season

Cobalt, MW-19 (mg/L)



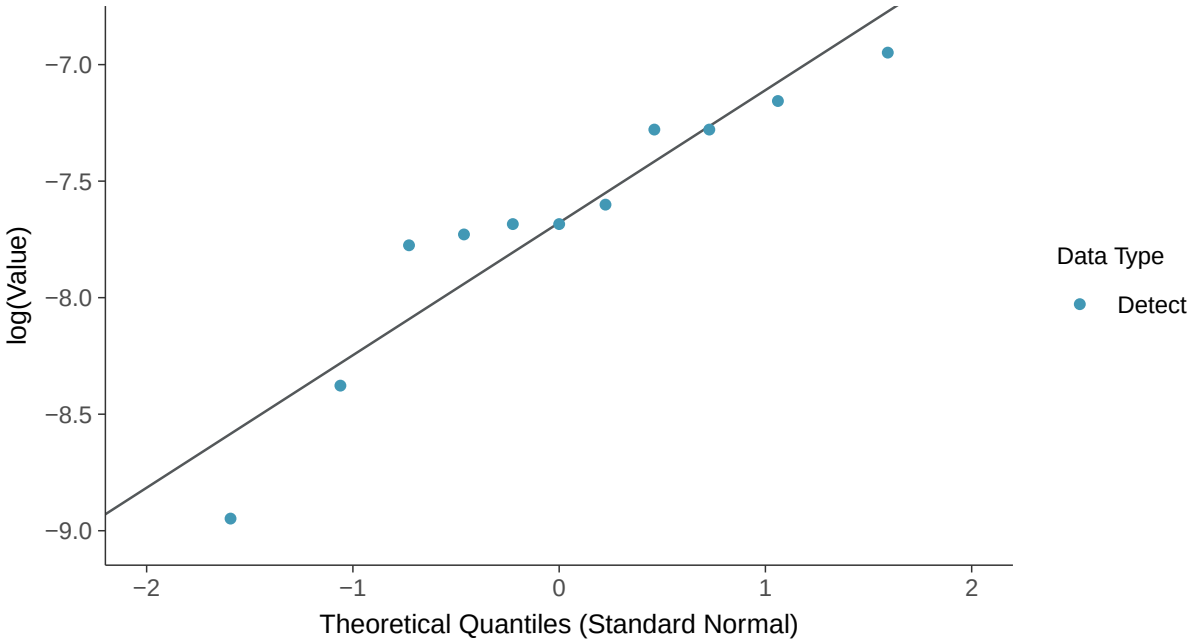
Normal Q-Q plot

Cobalt, MW-19 (mg/L)



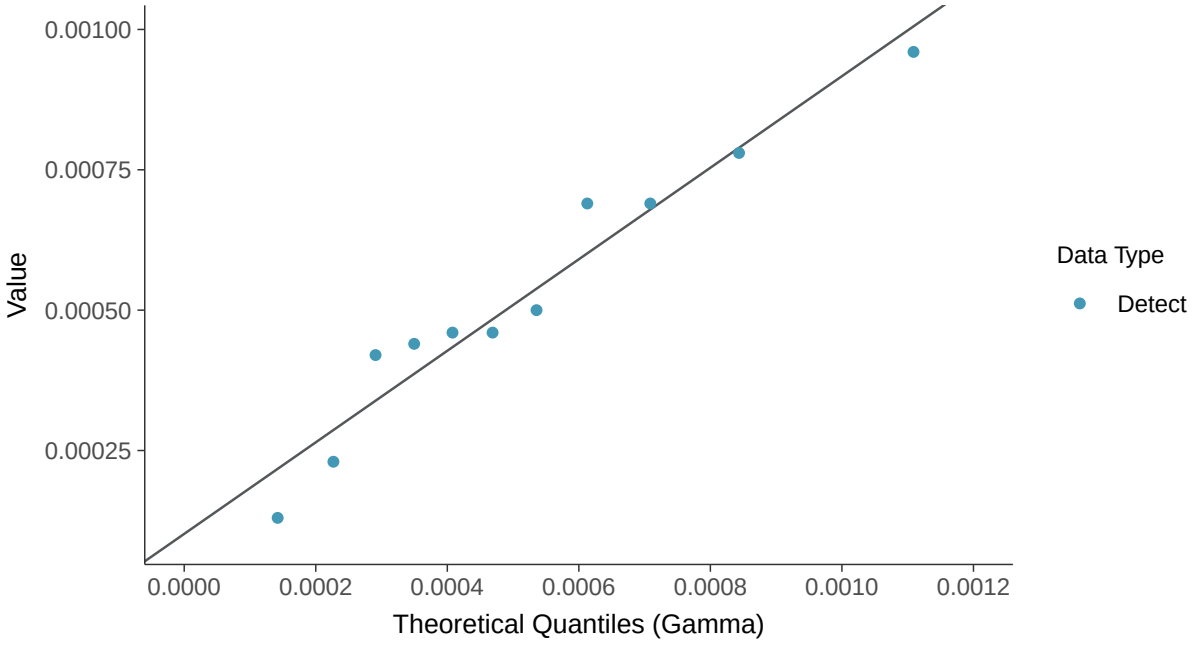
Lognormal Q-Q plot

Cobalt, MW-19 (mg/L)



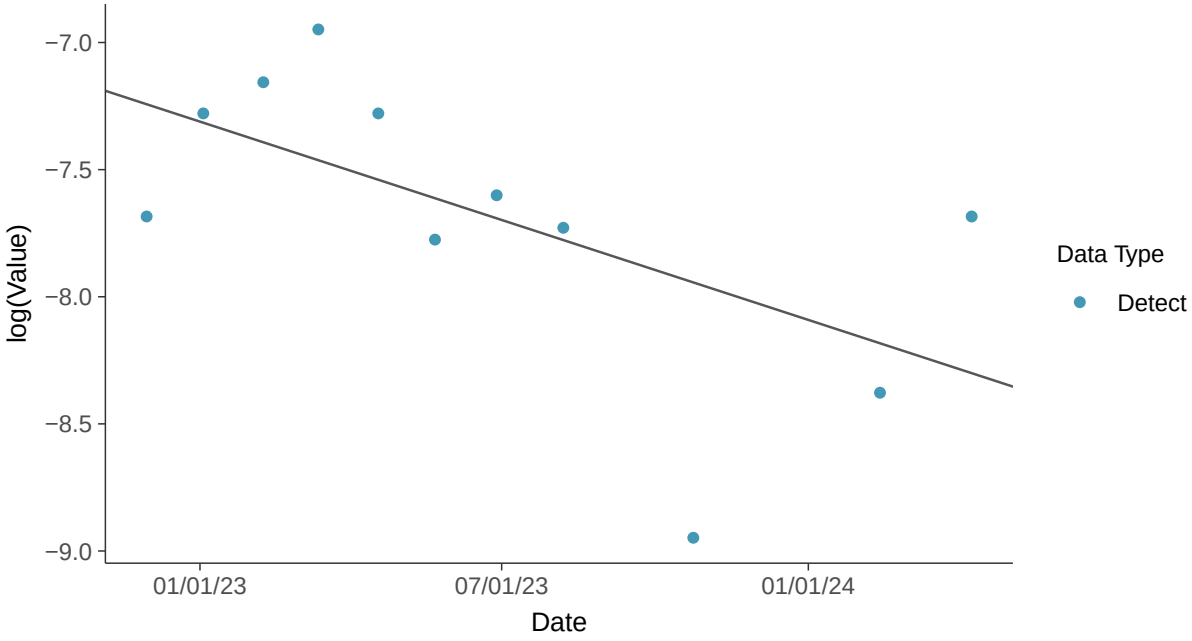
Gamma Q-Q plot

Cobalt, MW-19 (mg/L)



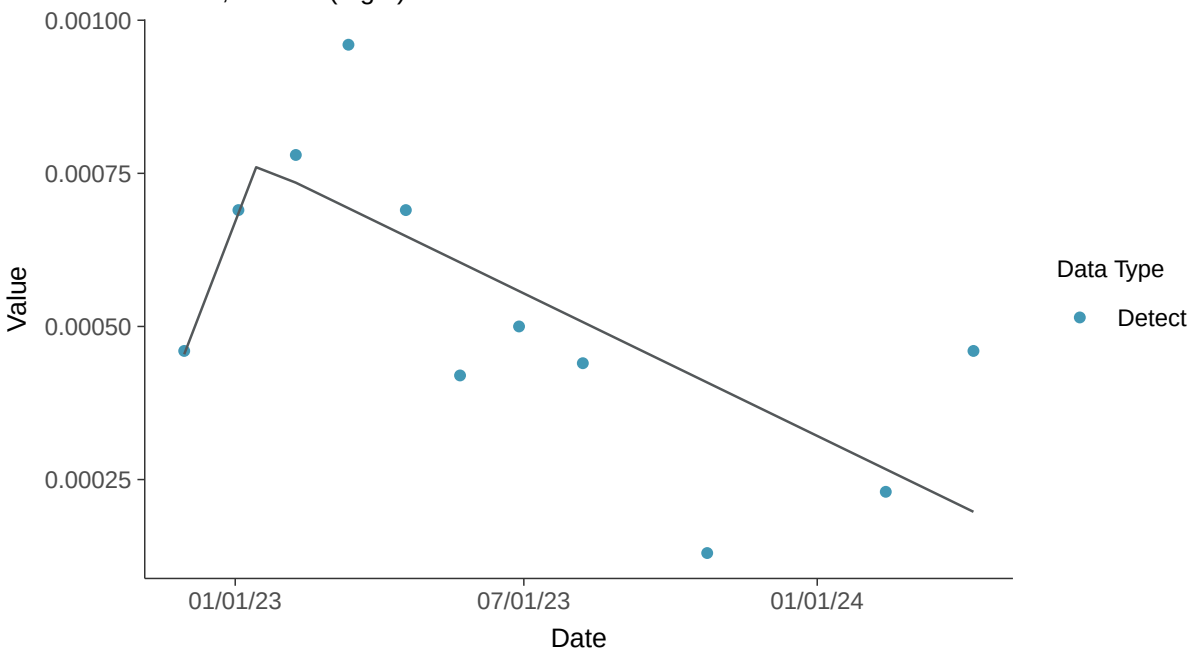
Trend Regression: Lognormal MLE

Cobalt, MW-19 (mg/L)



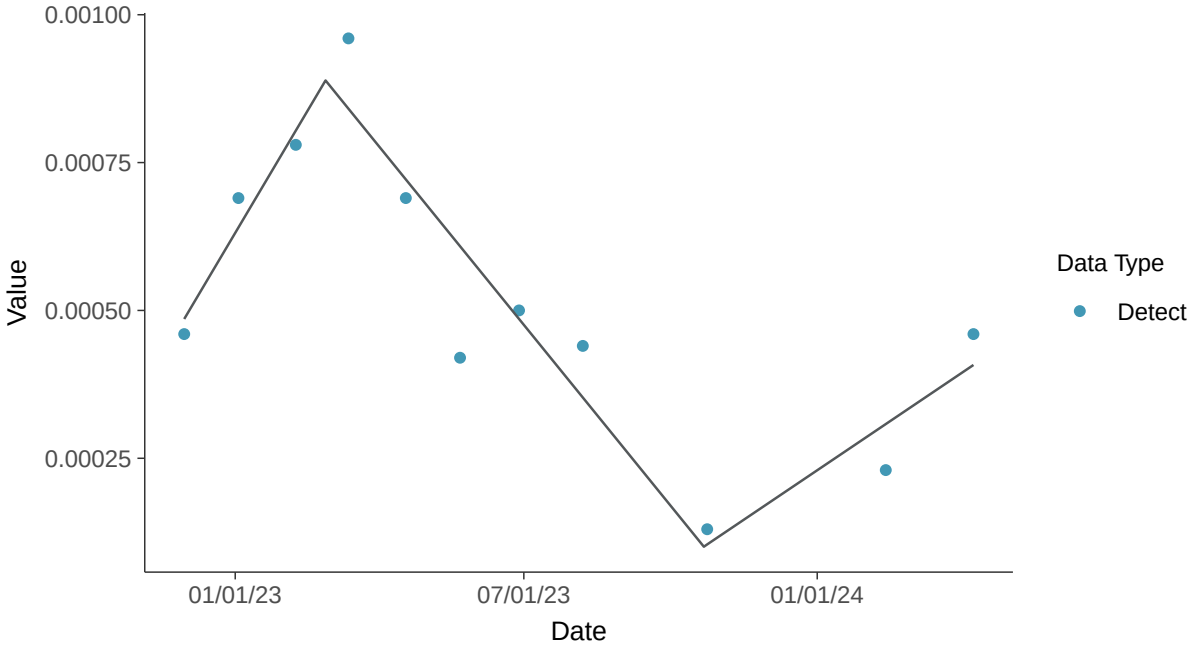
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-19 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cobalt, MW-19 (mg/L)

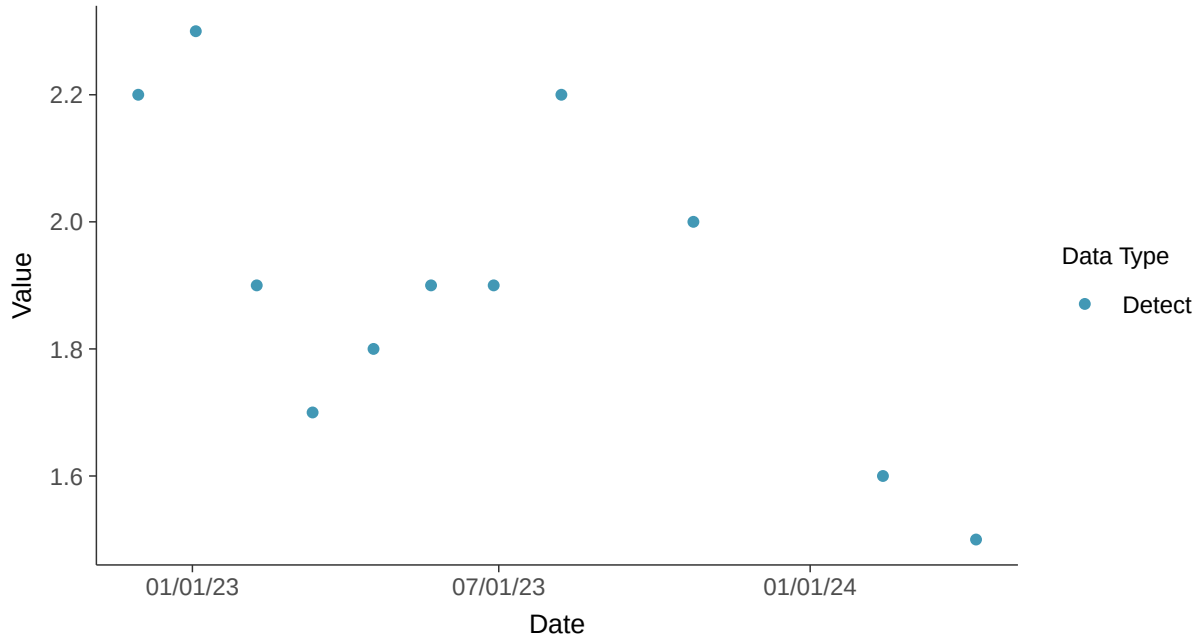


Appendix IV: Fluoride (App IV), MW-19

ID: 1_29_5_113

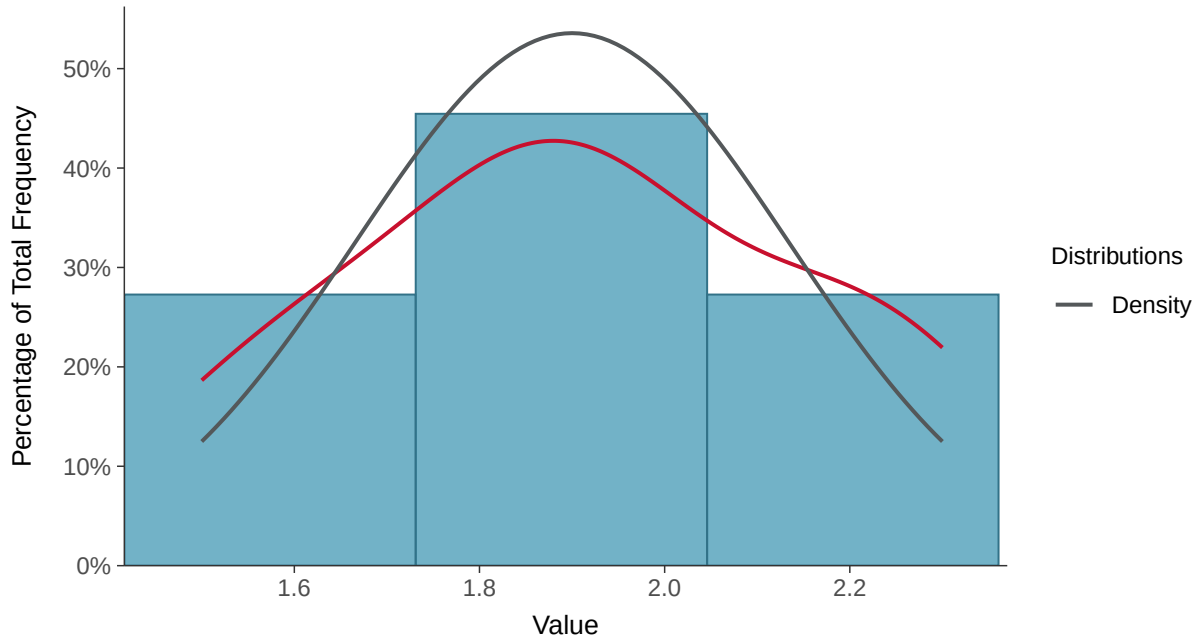
Scatter Plot

Fluoride (App IV), MW-19 (mg/L)



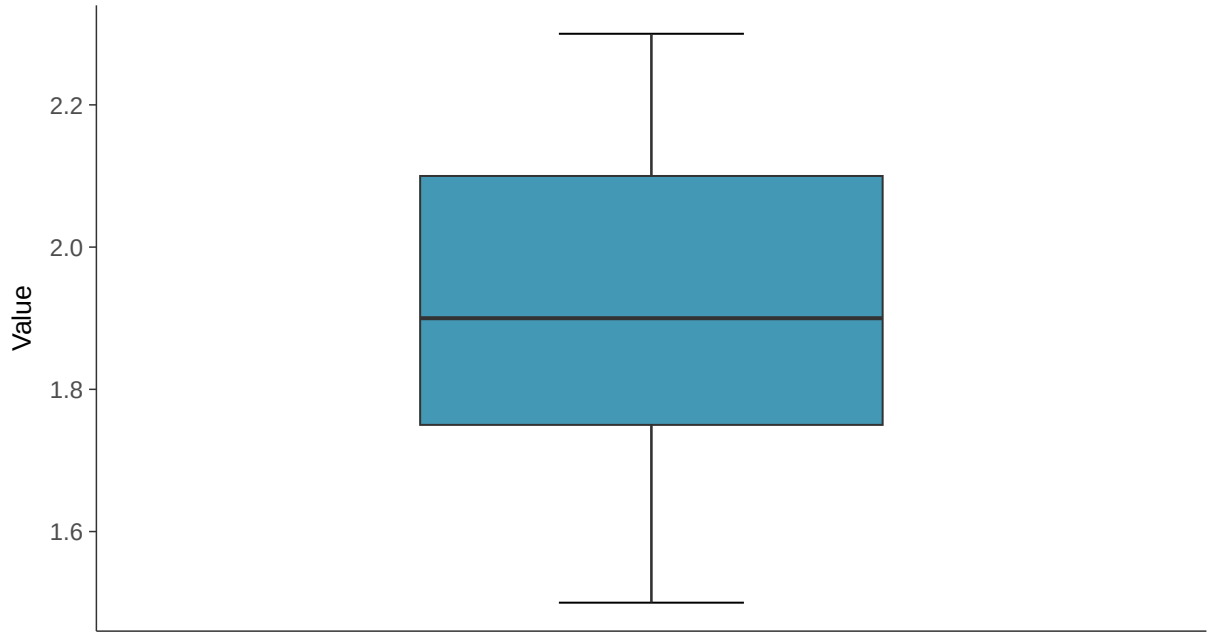
Histogram

Fluoride (App IV), MW-19 (mg/L)



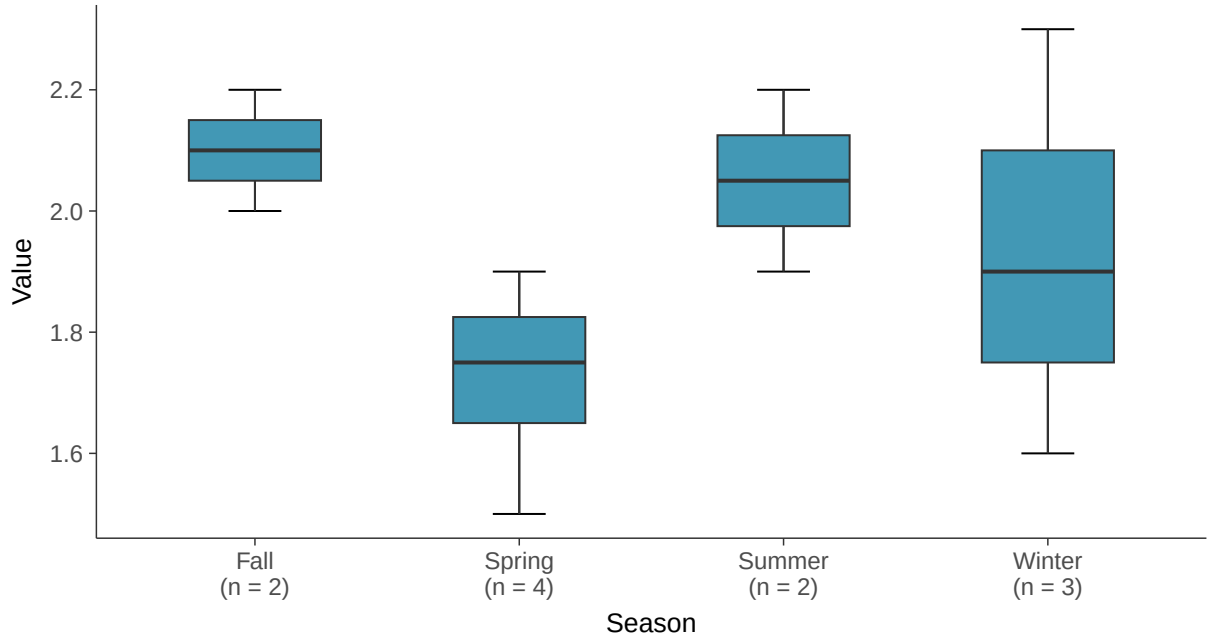
Boxplot

Fluoride (App IV), MW-19 (mg/L)



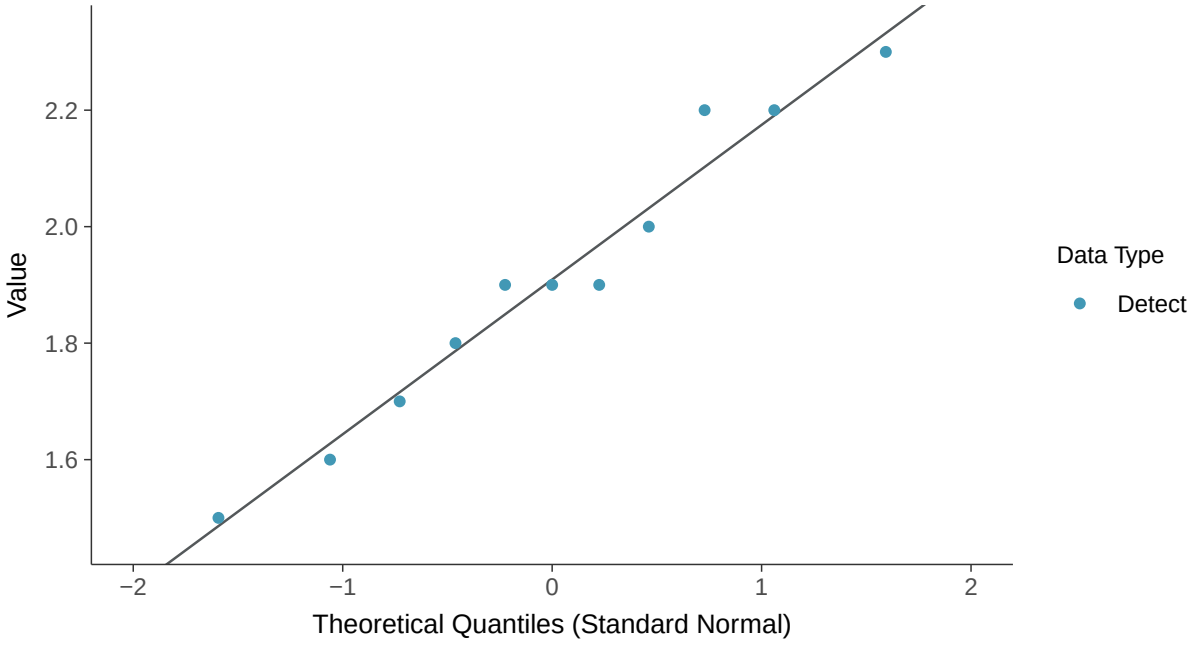
Boxplot by Season

Fluoride (App IV), MW-19 (mg/L)



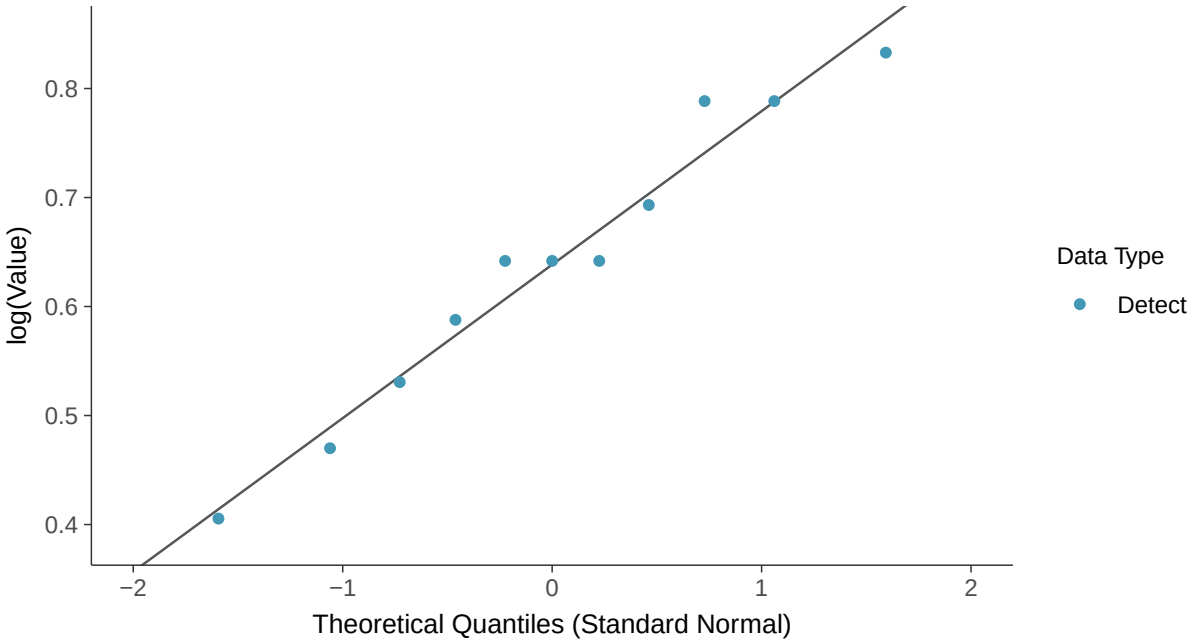
Normal Q-Q plot

Fluoride (App IV), MW-19 (mg/L)



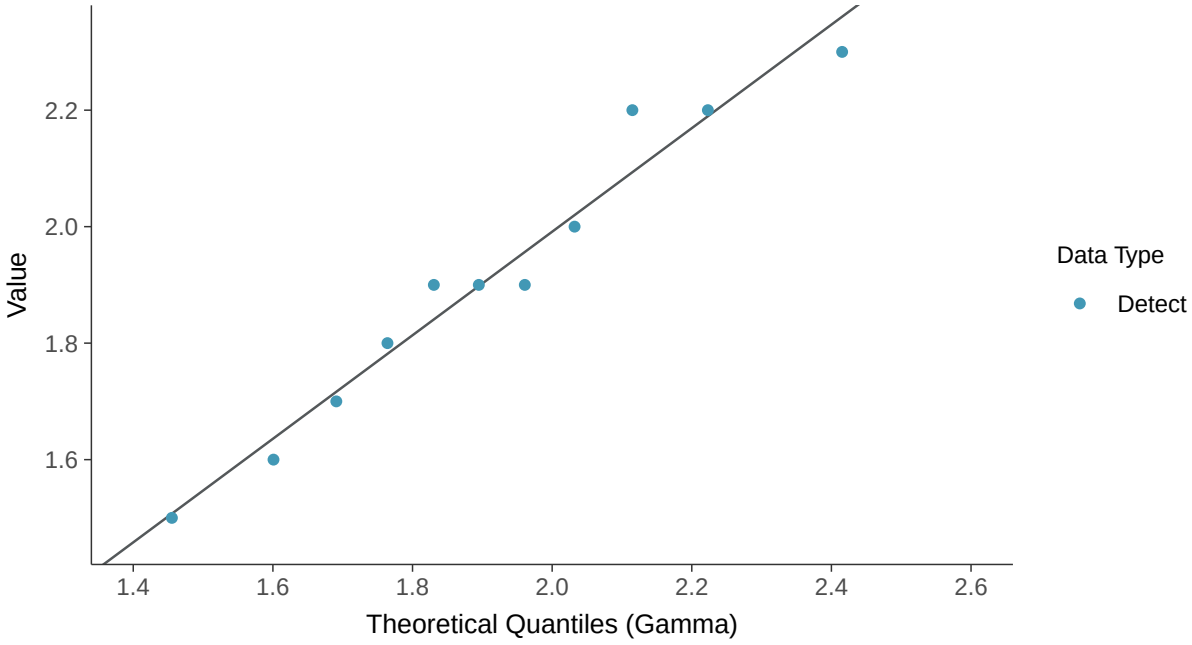
Lognormal Q-Q plot

Fluoride (App IV), MW-19 (mg/L)



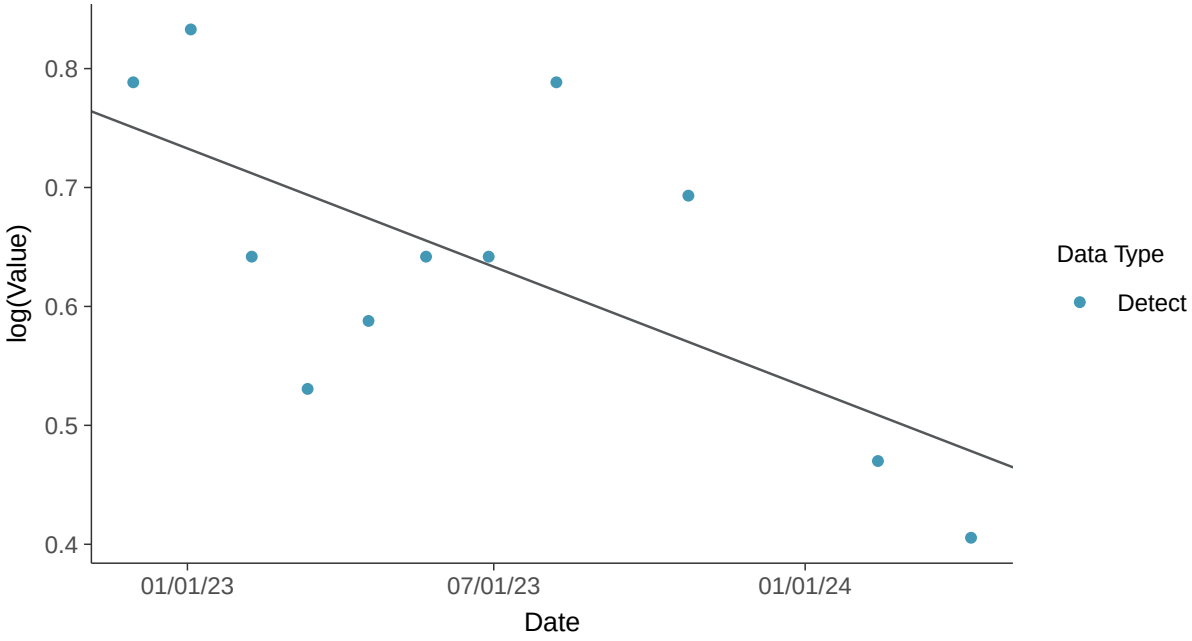
Gamma Q-Q plot

Fluoride (App IV), MW-19 (mg/L)



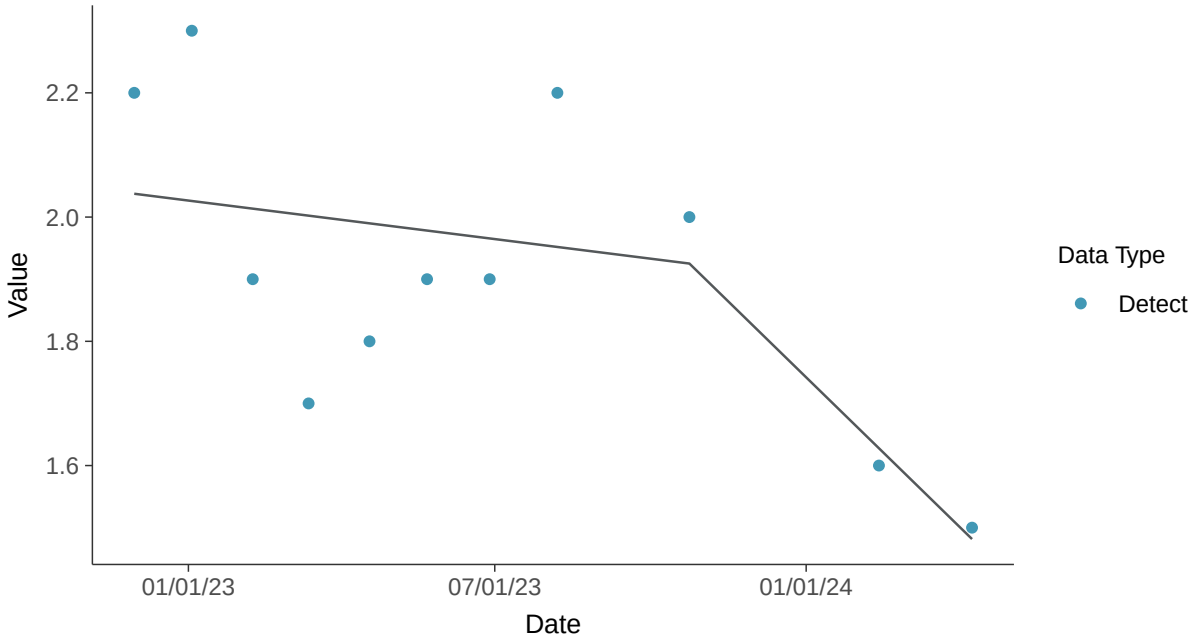
Trend Regression: Lognormal MLE

Fluoride (App IV), MW-19 (mg/L)



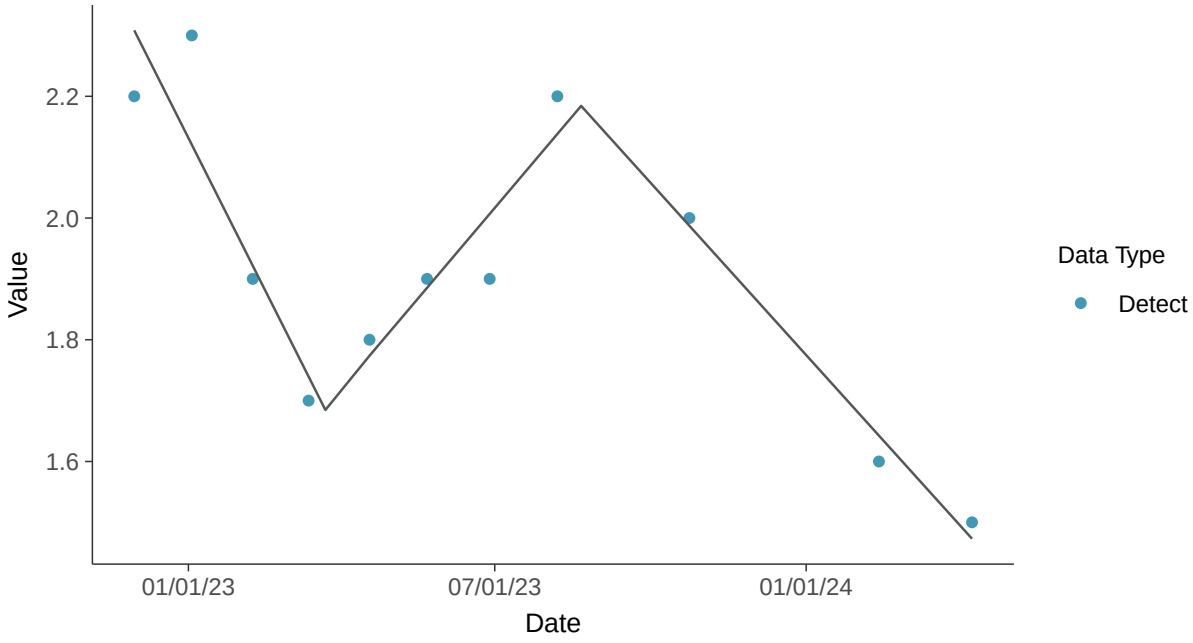
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-19 (mg/L)



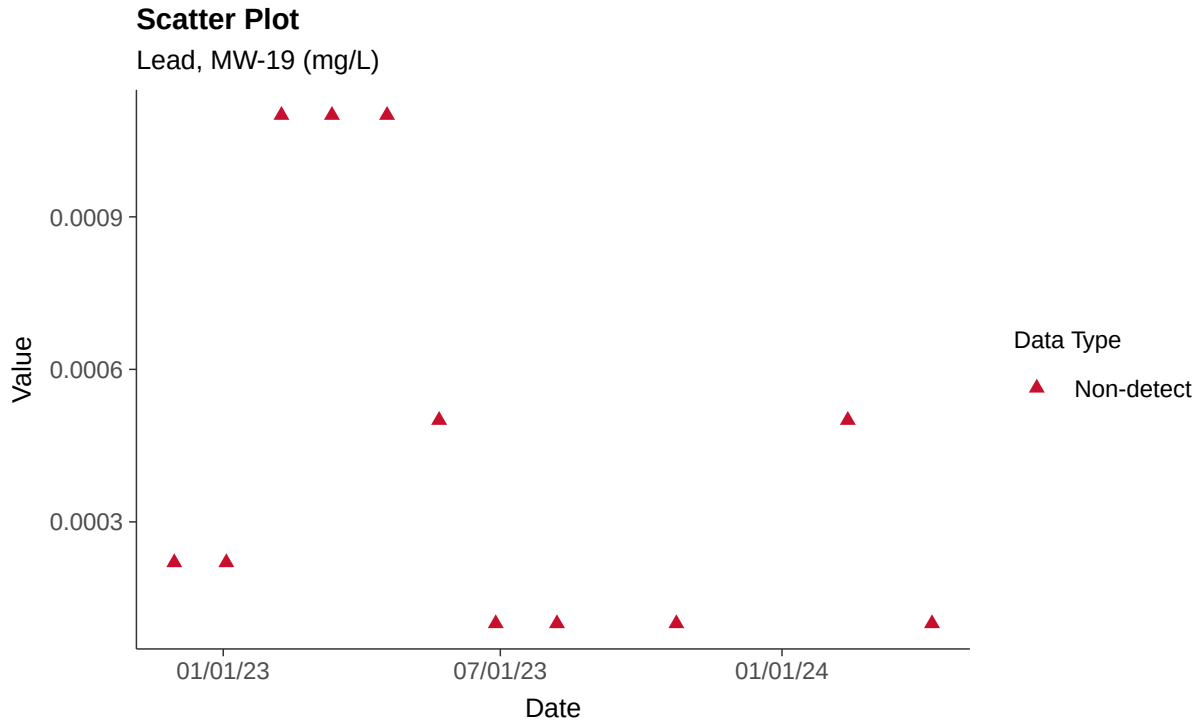
Trend Regression: Piecewise Linear-Linear-Linear

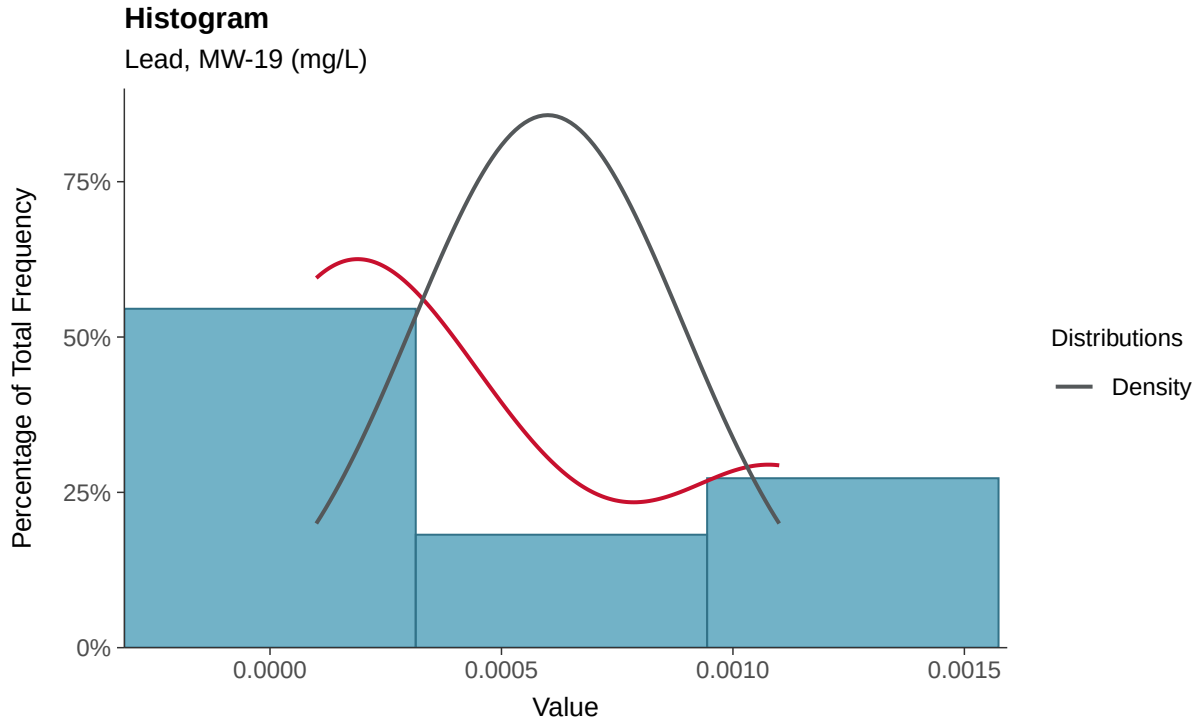
Fluoride (App IV), MW-19 (mg/L)



Appendix IV: Lead, MW-19

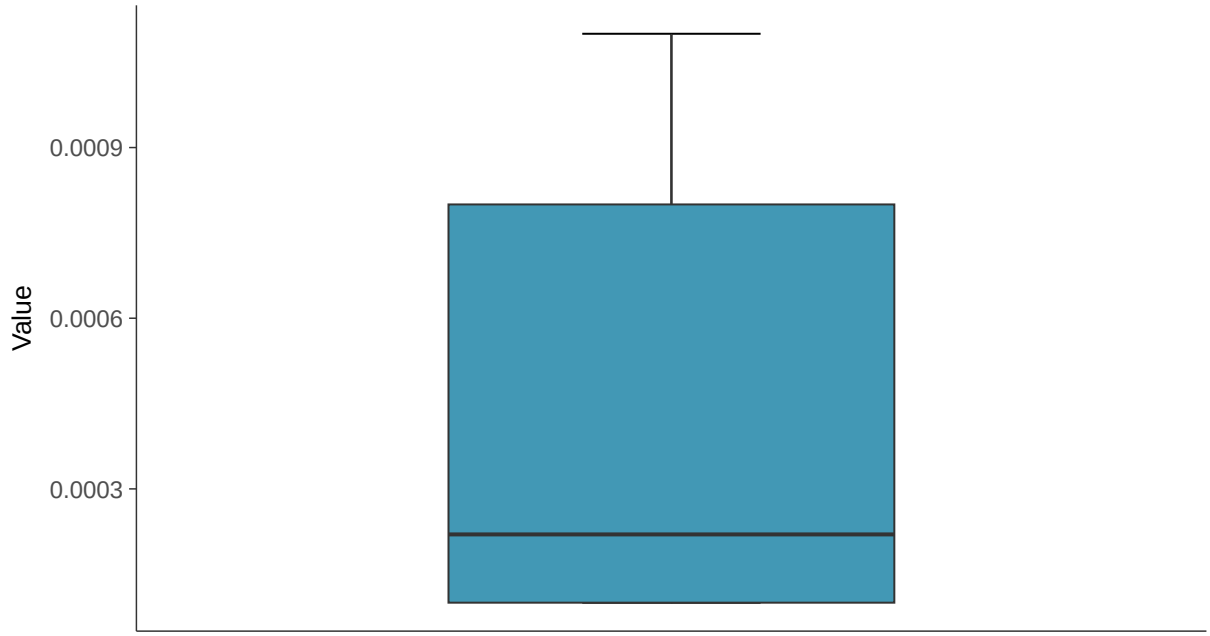
ID: 1_29_5_115





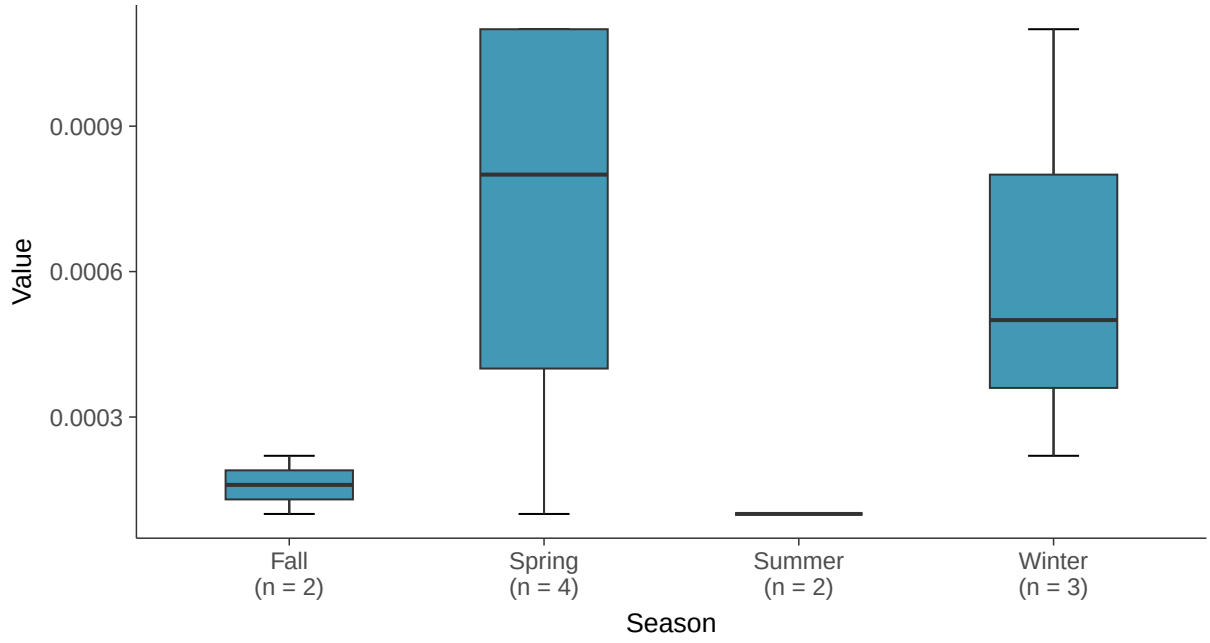
Boxplot

Lead, MW-19 (mg/L)



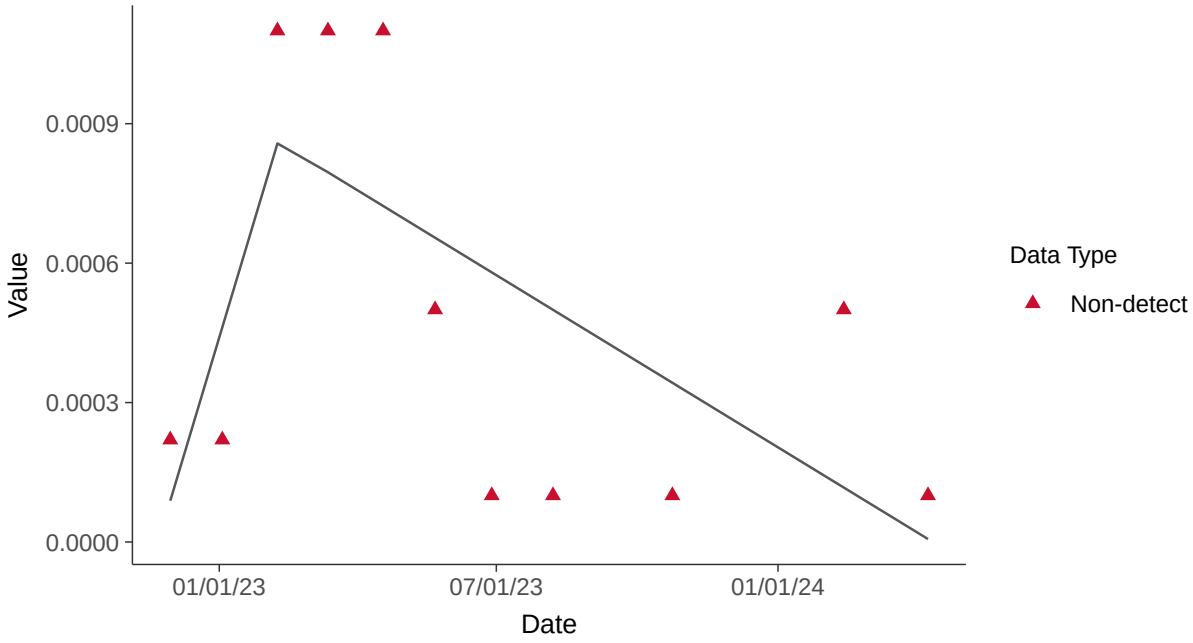
Boxplot by Season

Lead, MW-19 (mg/L)



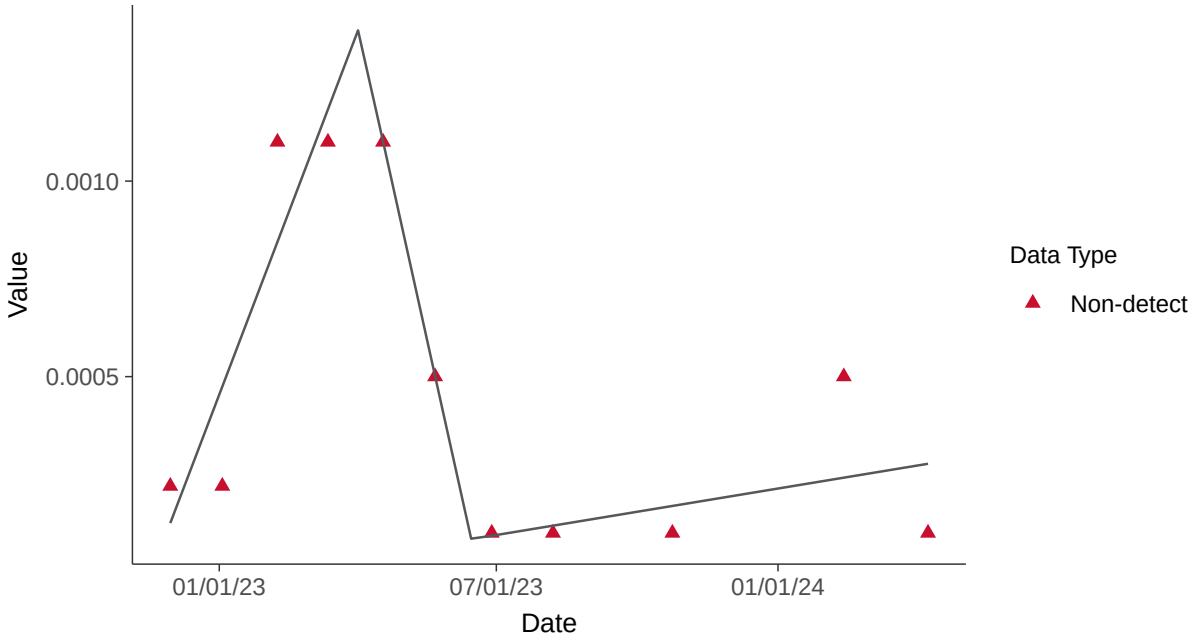
Trend Regression: Piecewise Linear-Linear

Lead, MW-19 (mg/L)



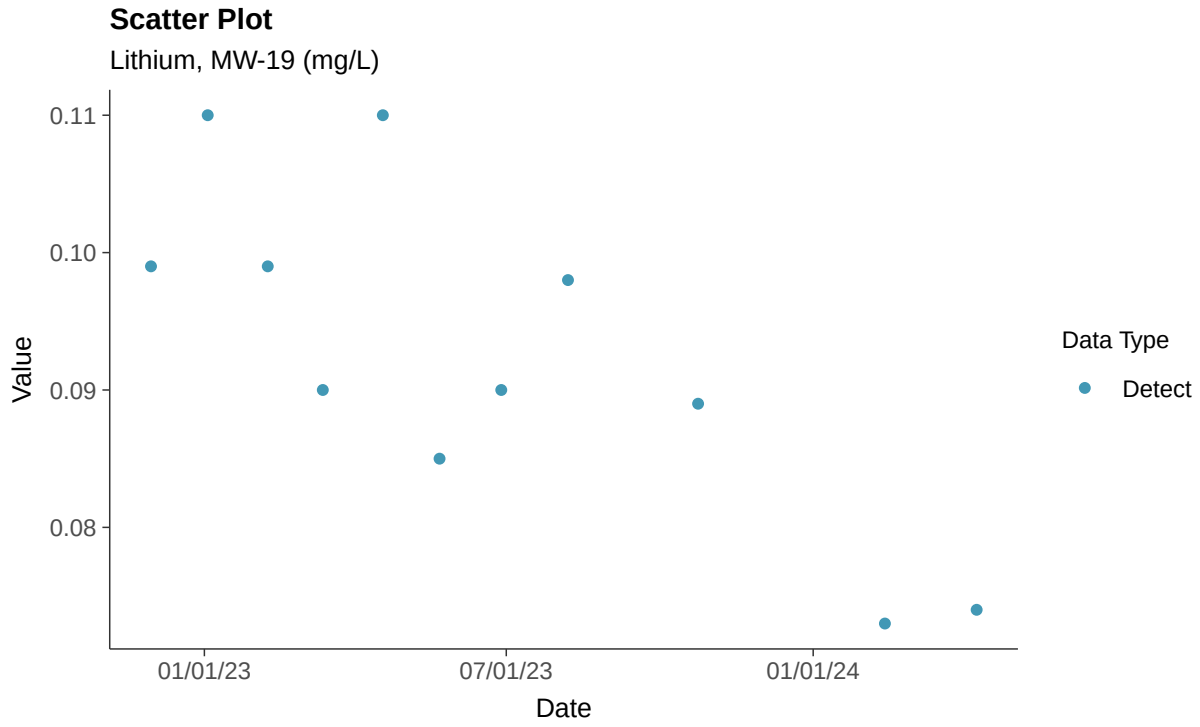
Trend Regression: Piecewise Linear-Linear-Linear

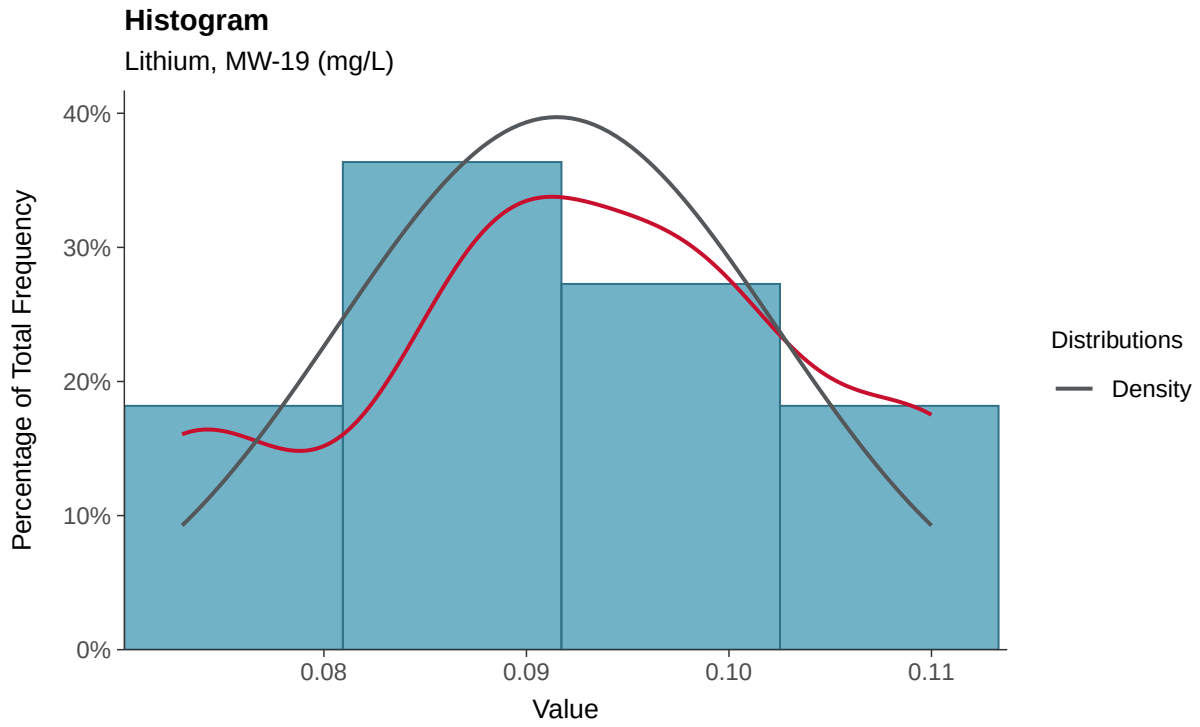
Lead, MW-19 (mg/L)



Appendix IV: Lithium, MW-19

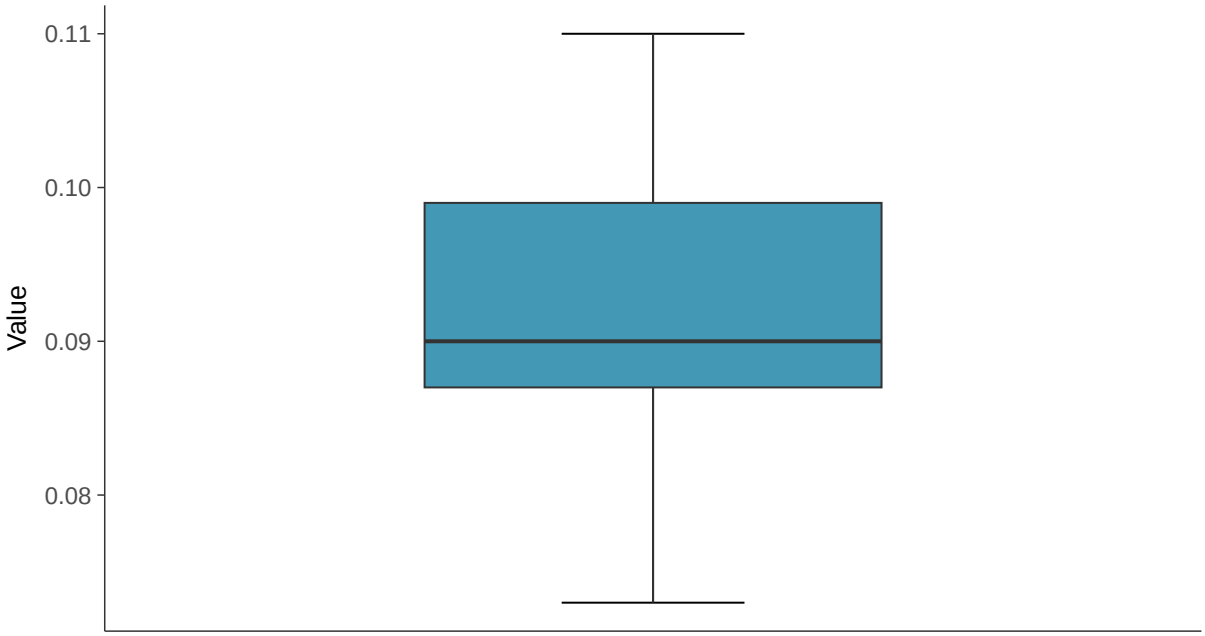
ID: 1_29_5_116





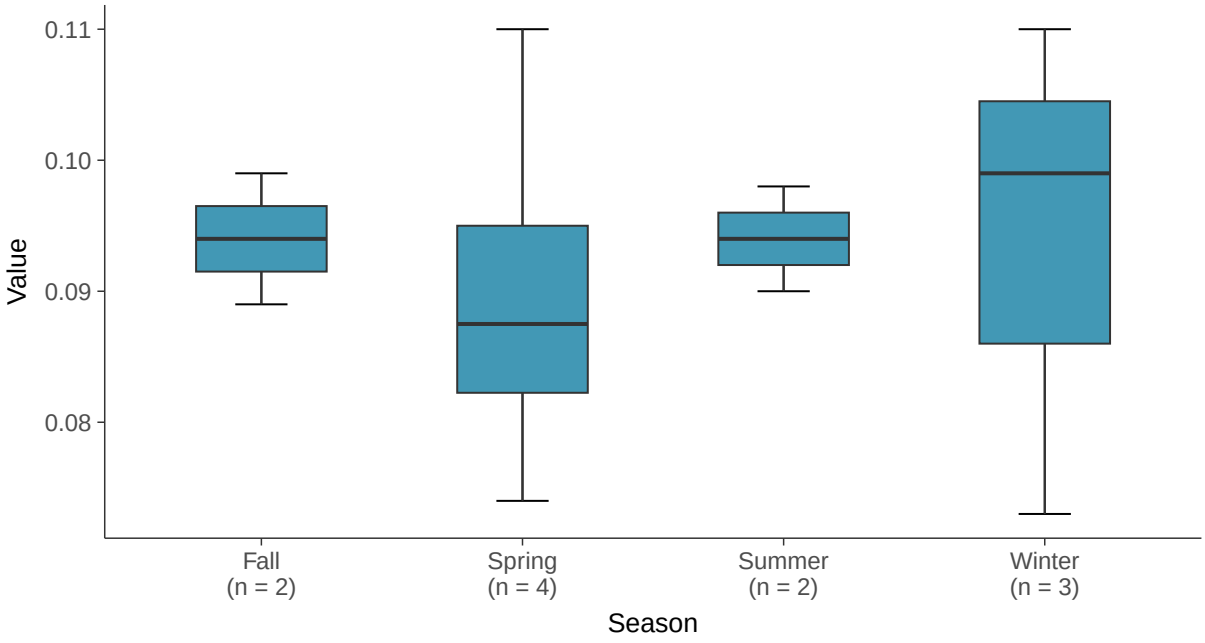
Boxplot

Lithium, MW-19 (mg/L)



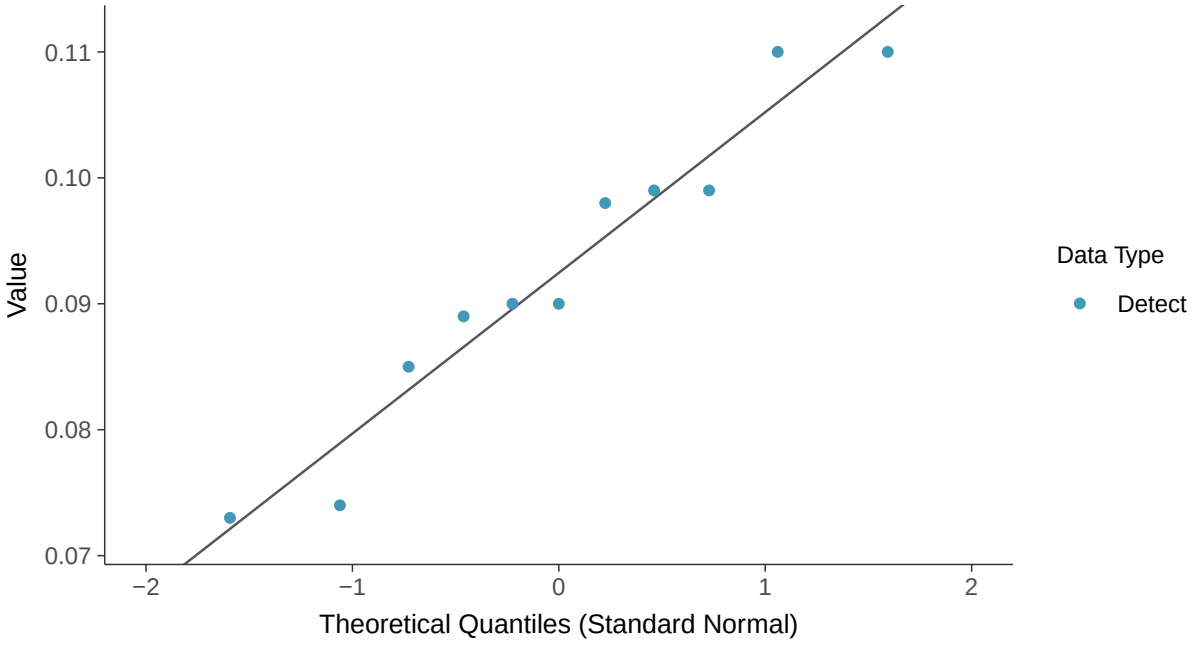
Boxplot by Season

Lithium, MW-19 (mg/L)



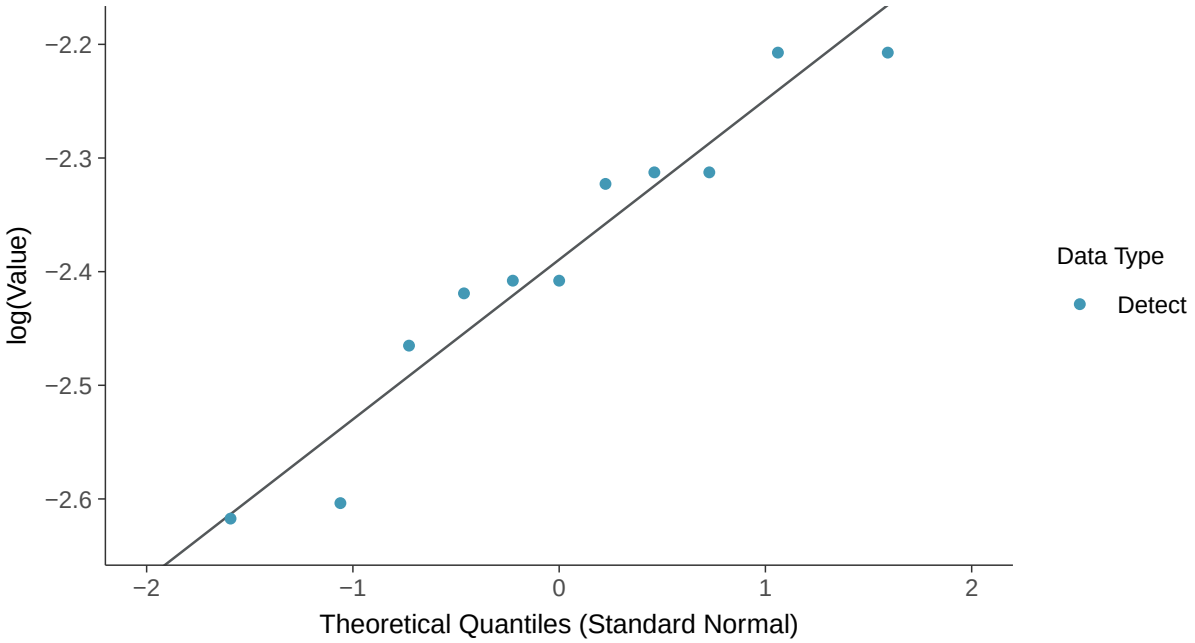
Normal Q-Q plot

Lithium, MW-19 (mg/L)



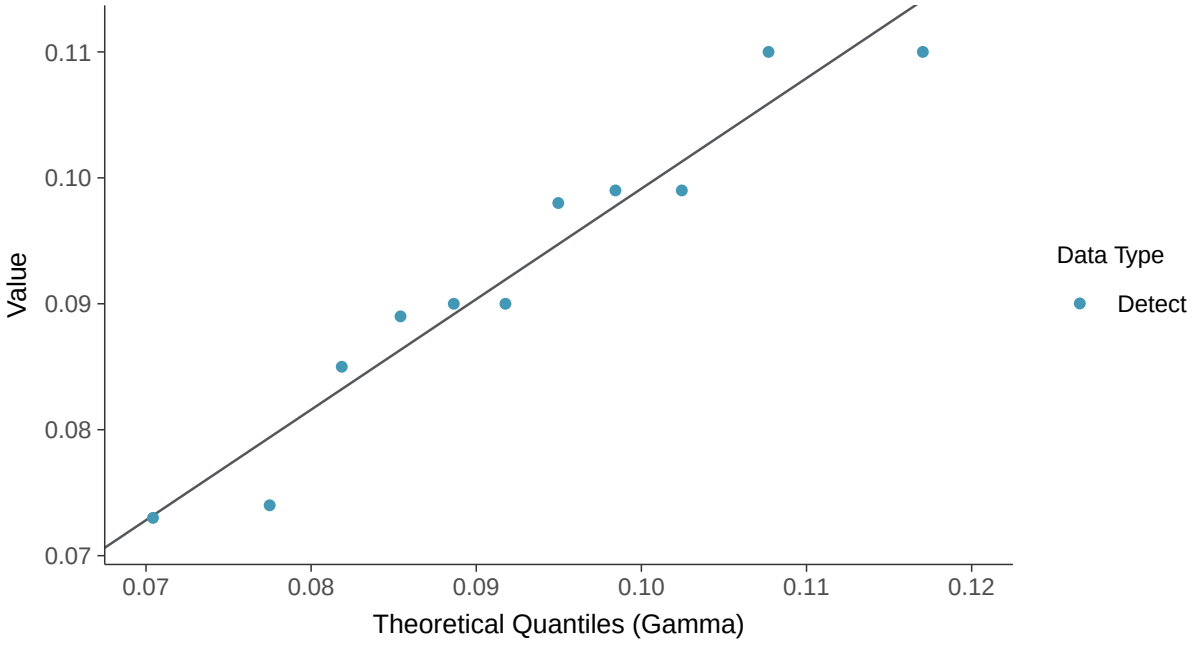
Lognormal Q-Q plot

Lithium, MW-19 (mg/L)



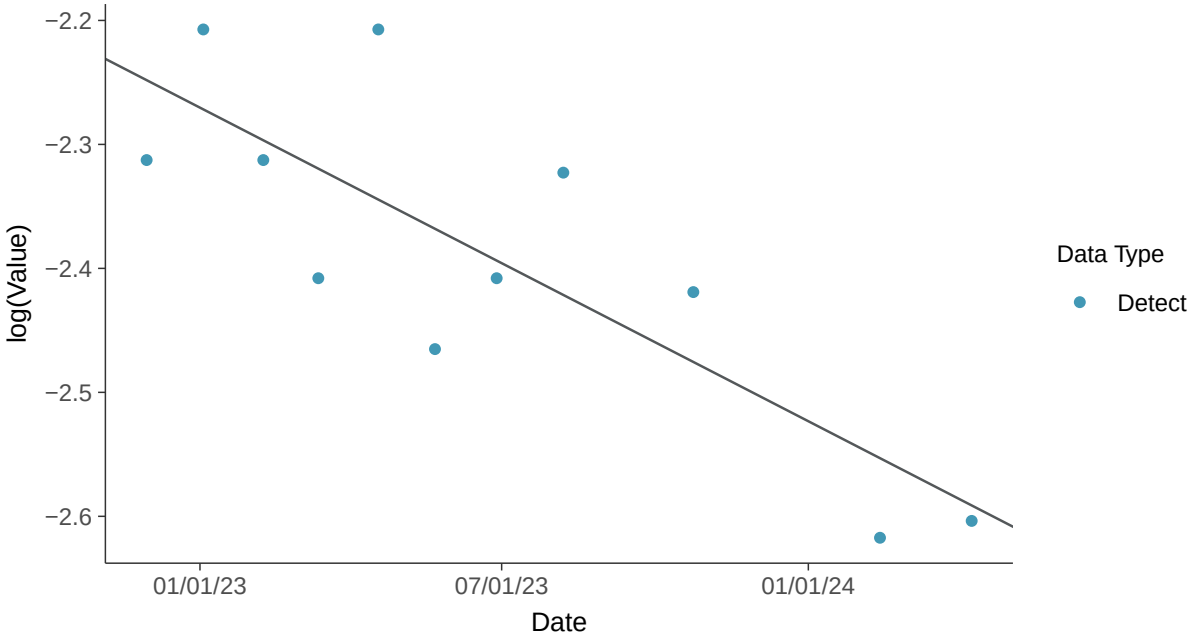
Gamma Q-Q plot

Lithium, MW-19 (mg/L)



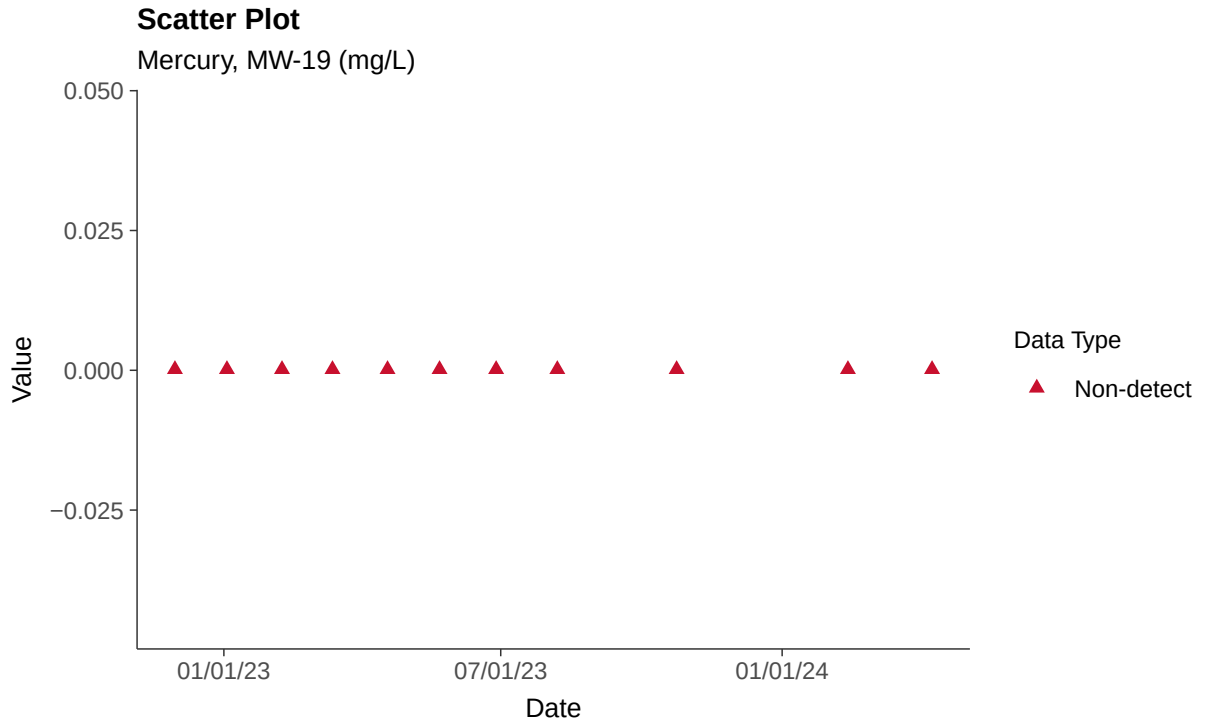
Trend Regression: Lognormal MLE

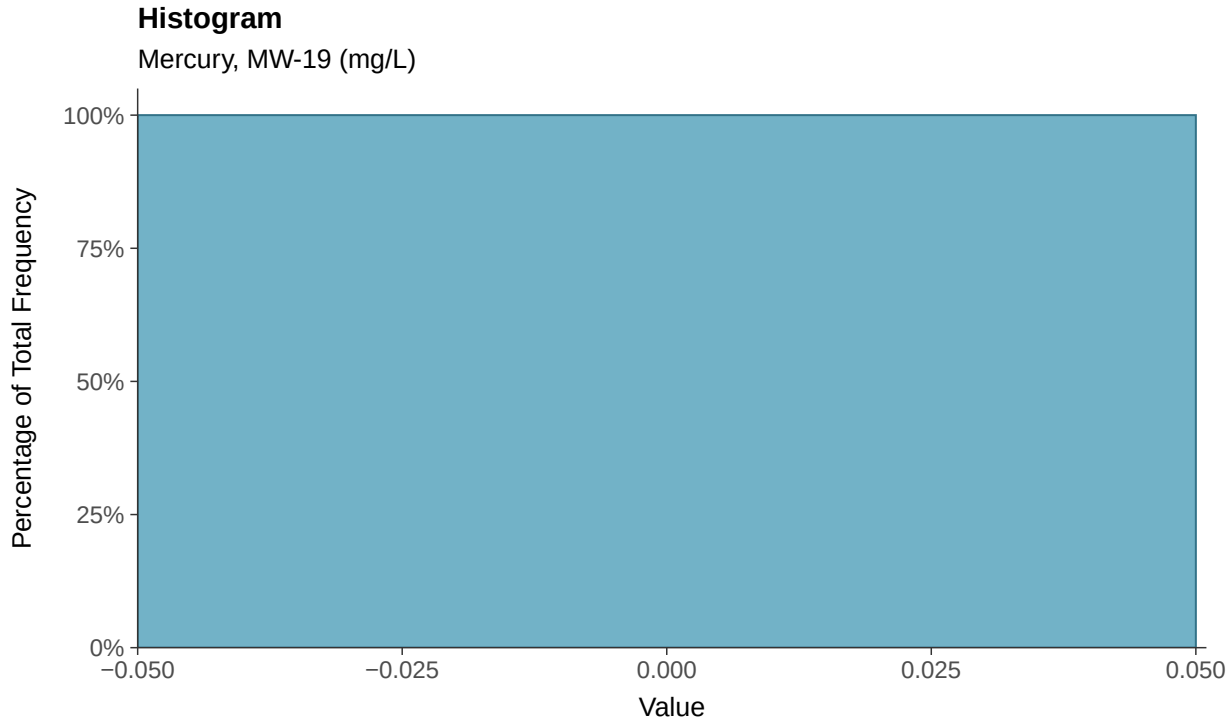
Lithium, MW-19 (mg/L)



Appendix IV: Mercury, MW-19

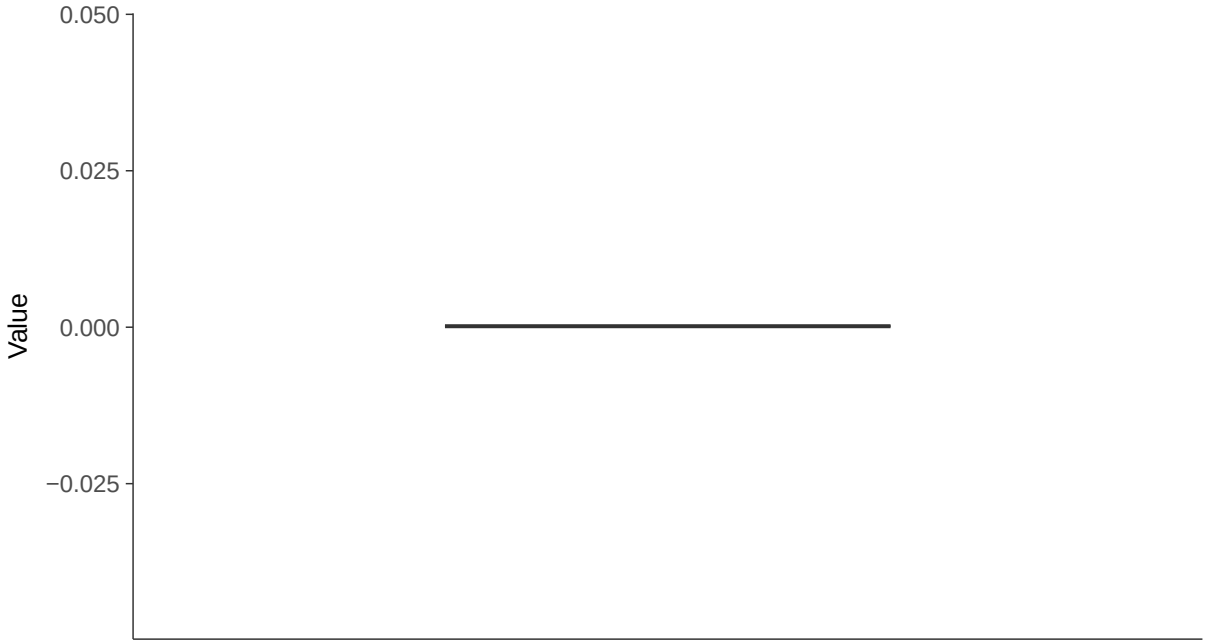
ID: 1_29_5_117





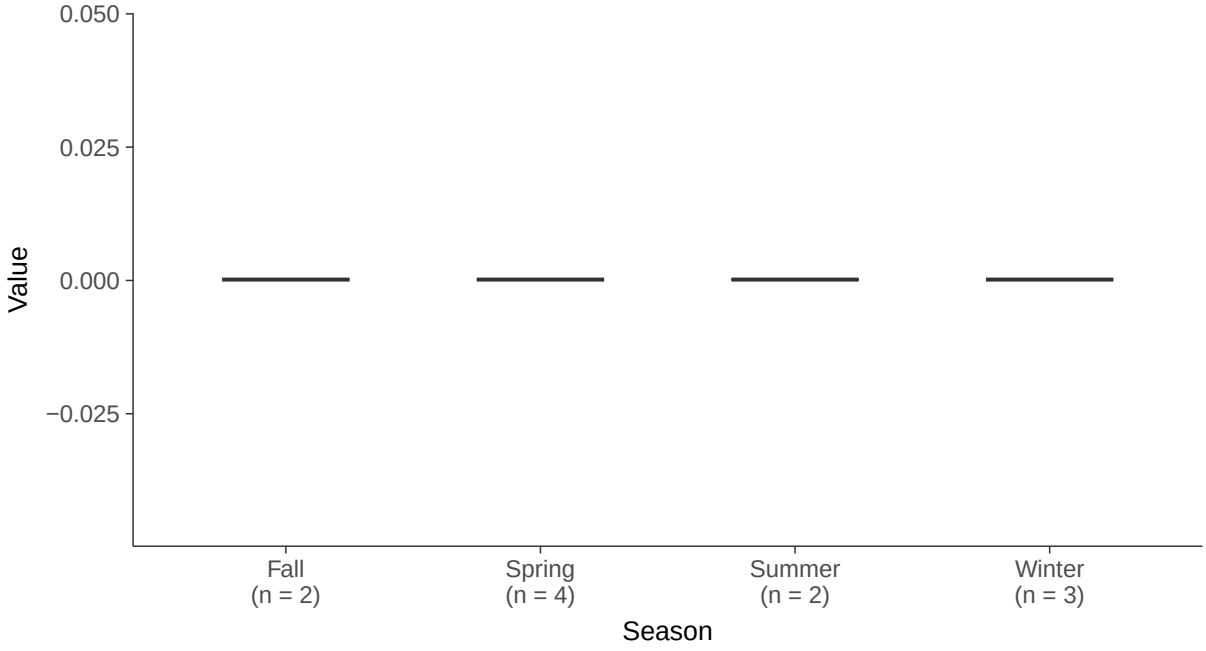
Boxplot

Mercury, MW-19 (mg/L)



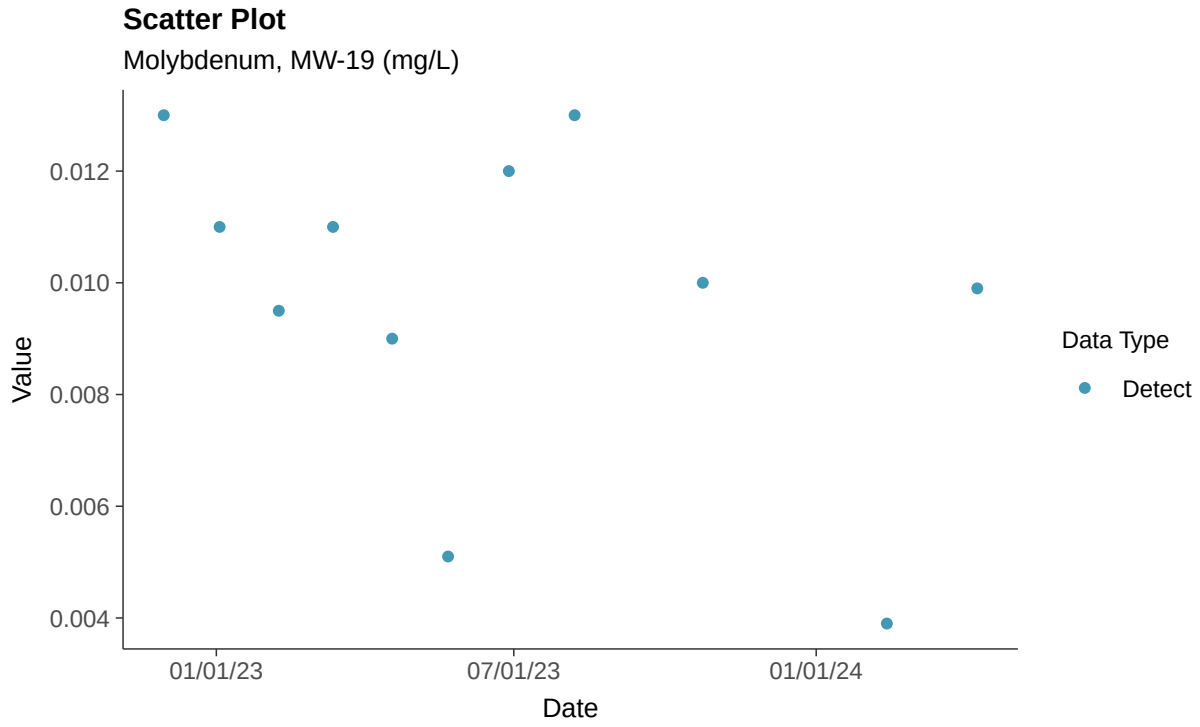
Boxplot by Season

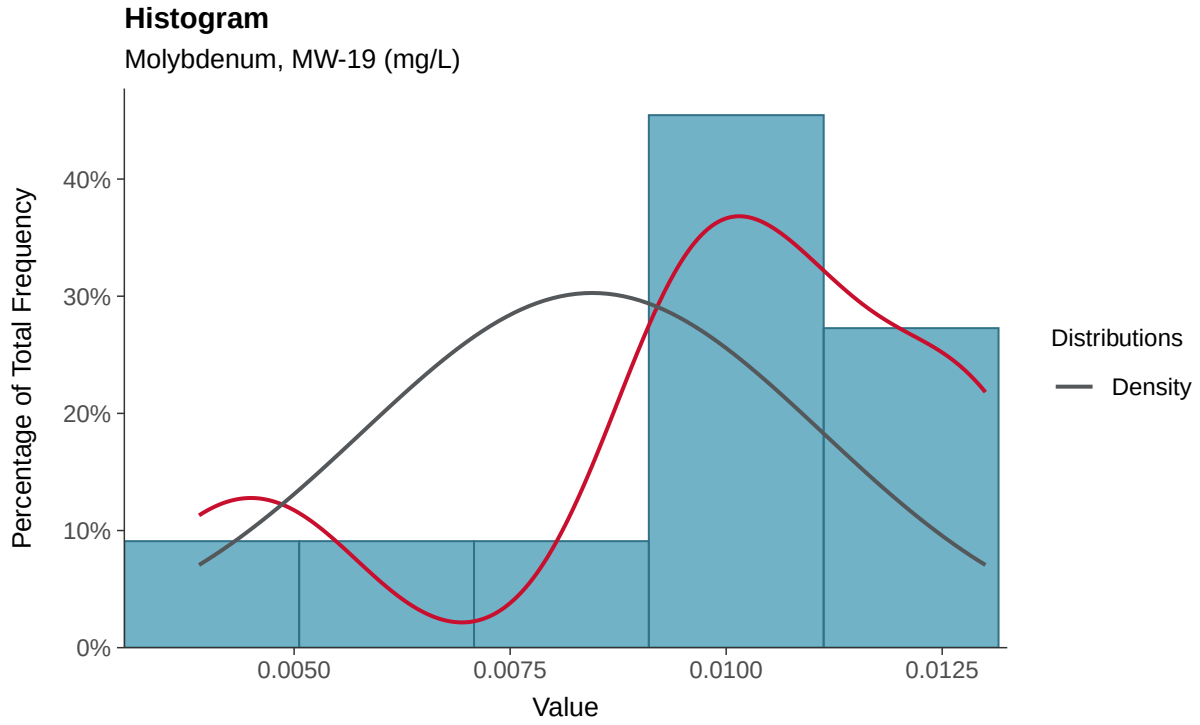
Mercury, MW-19 (mg/L)



Appendix IV: Molybdenum, MW-19

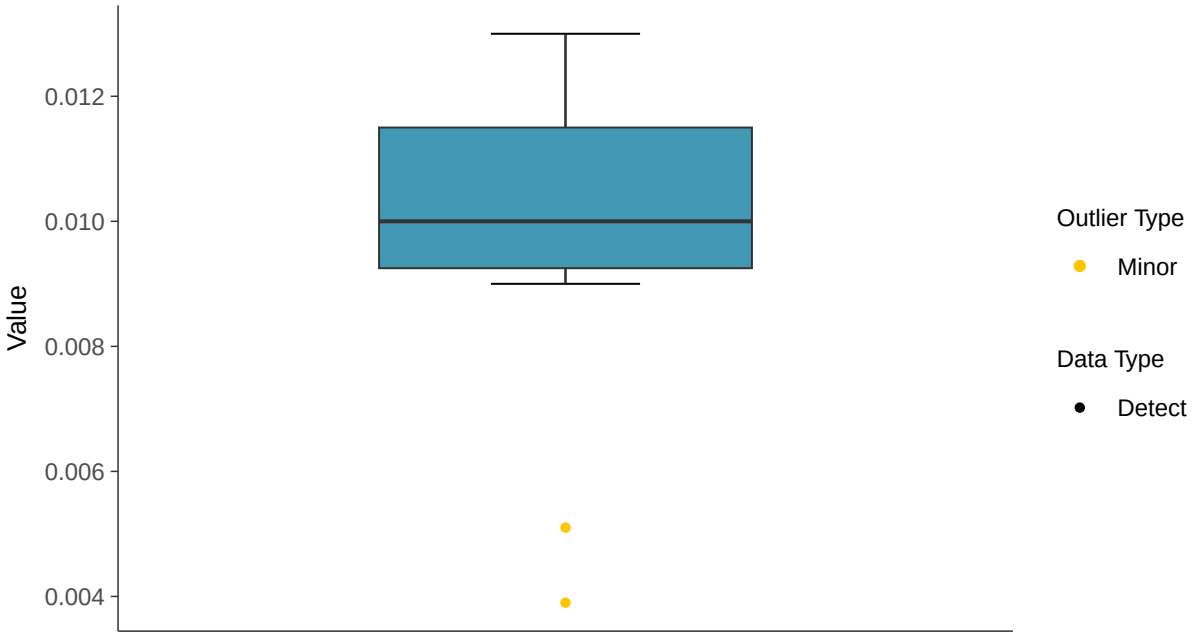
ID: 1_29_5_118





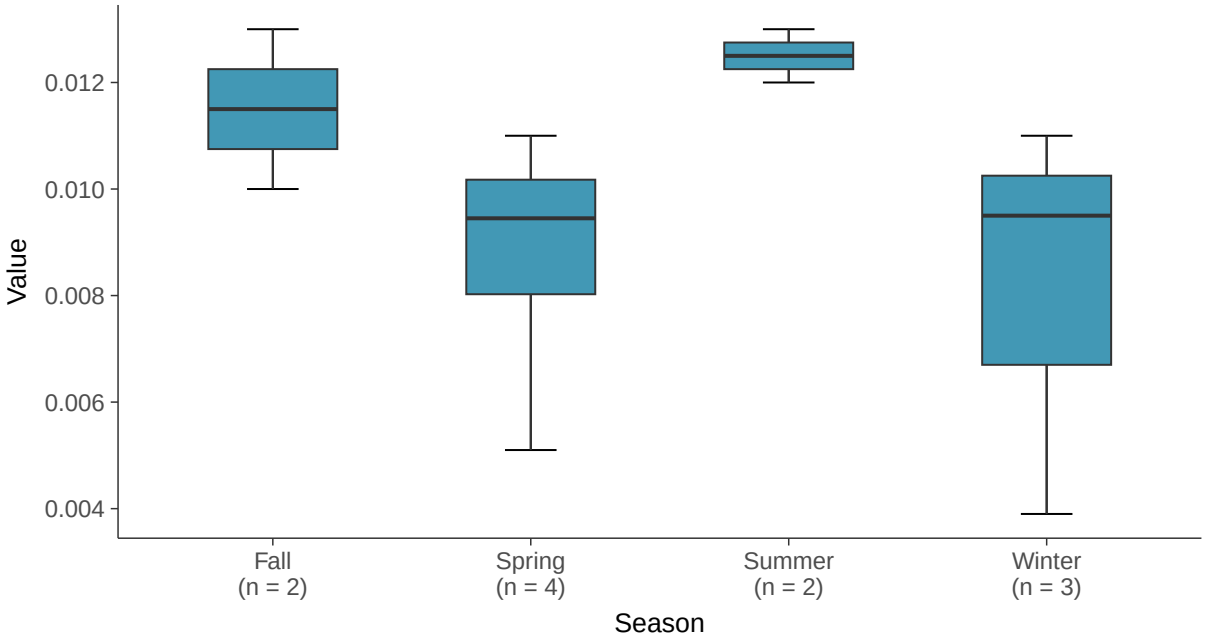
Boxplot

Molybdenum, MW-19 (mg/L)



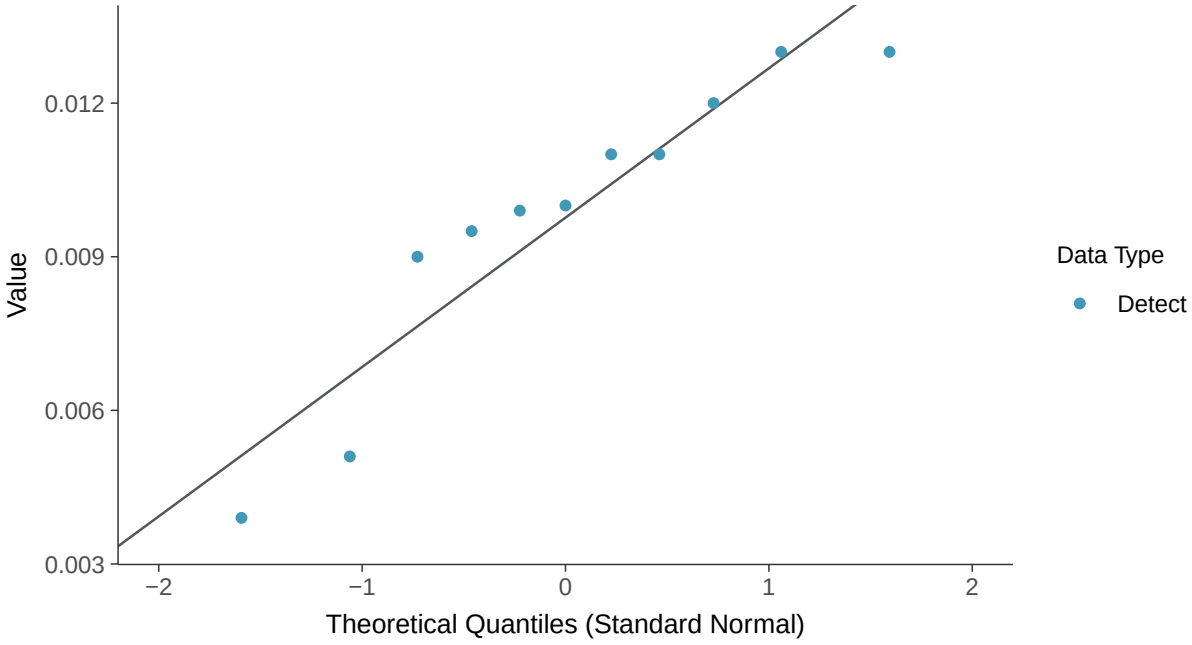
Boxplot by Season

Molybdenum, MW-19 (mg/L)



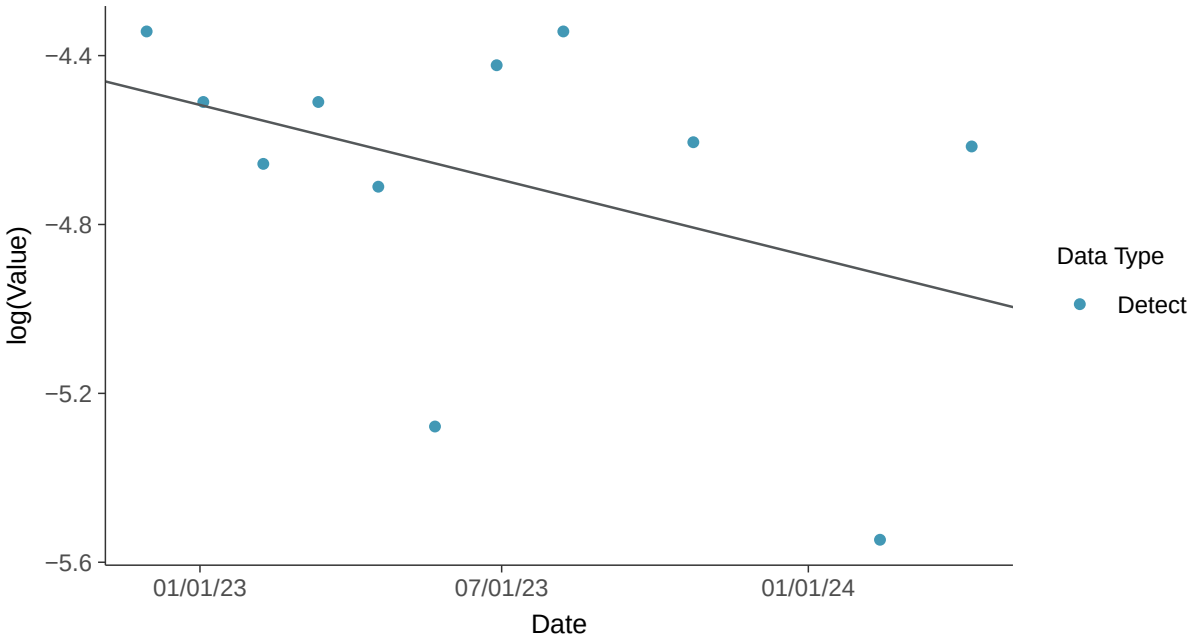
Normal Q-Q plot

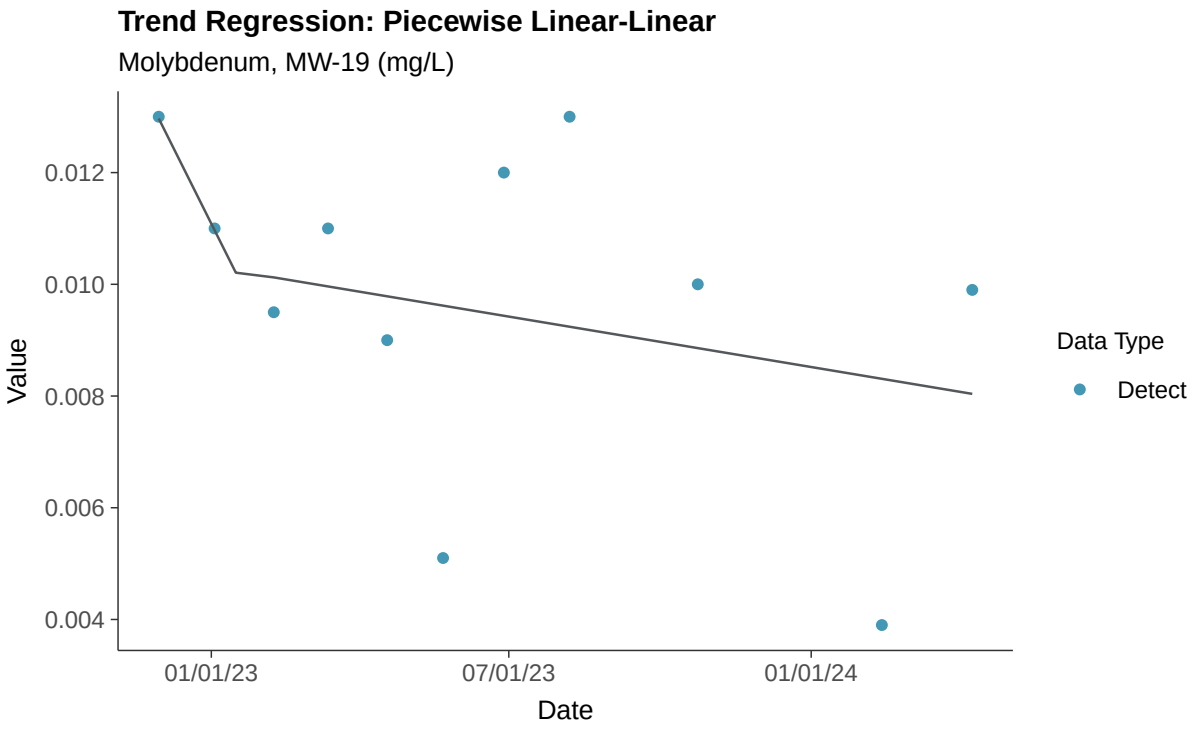
Molybdenum, MW-19 (mg/L)



Trend Regression: Lognormal MLE

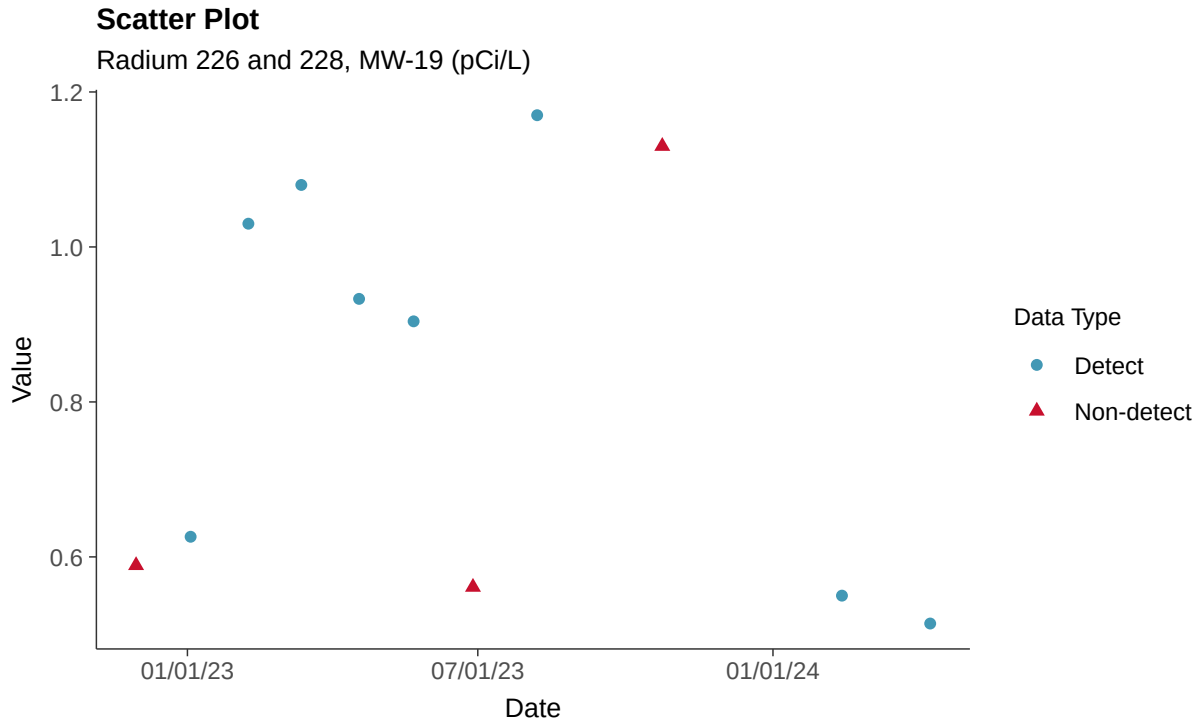
Molybdenum, MW-19 (mg/L)

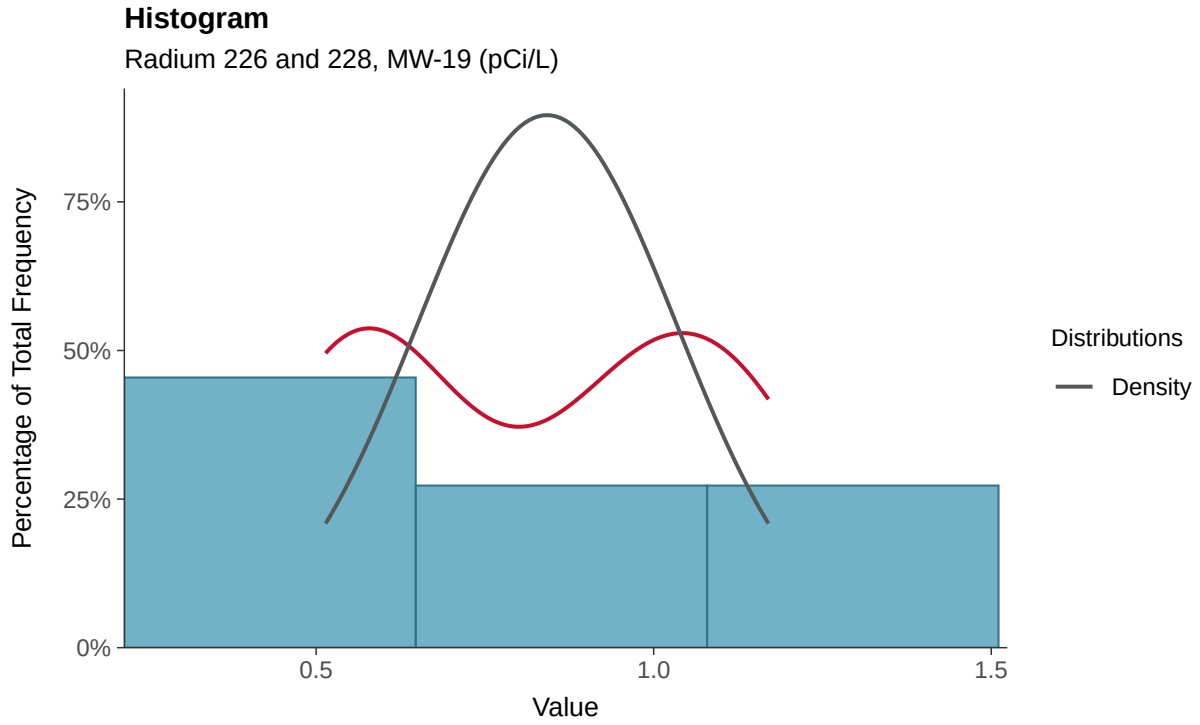



Trend Regression: Piecewise Linear-Linear
Molybdenum, MW-19 (mg/L)
Value
0.012
0.010
0.008
0.006
0.004
01/01/23
07/01/23
01/01/24
Date
Data Type
Detect

Appendix IV: Radium 226 and 228, MW-19

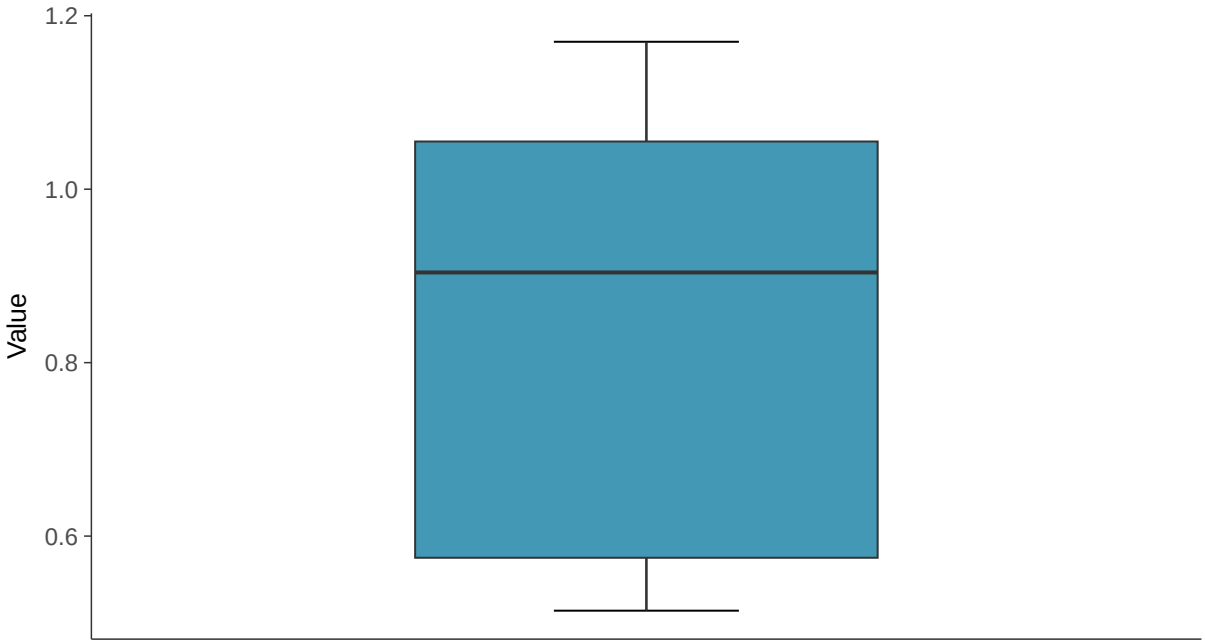
ID: 1_29_5_121





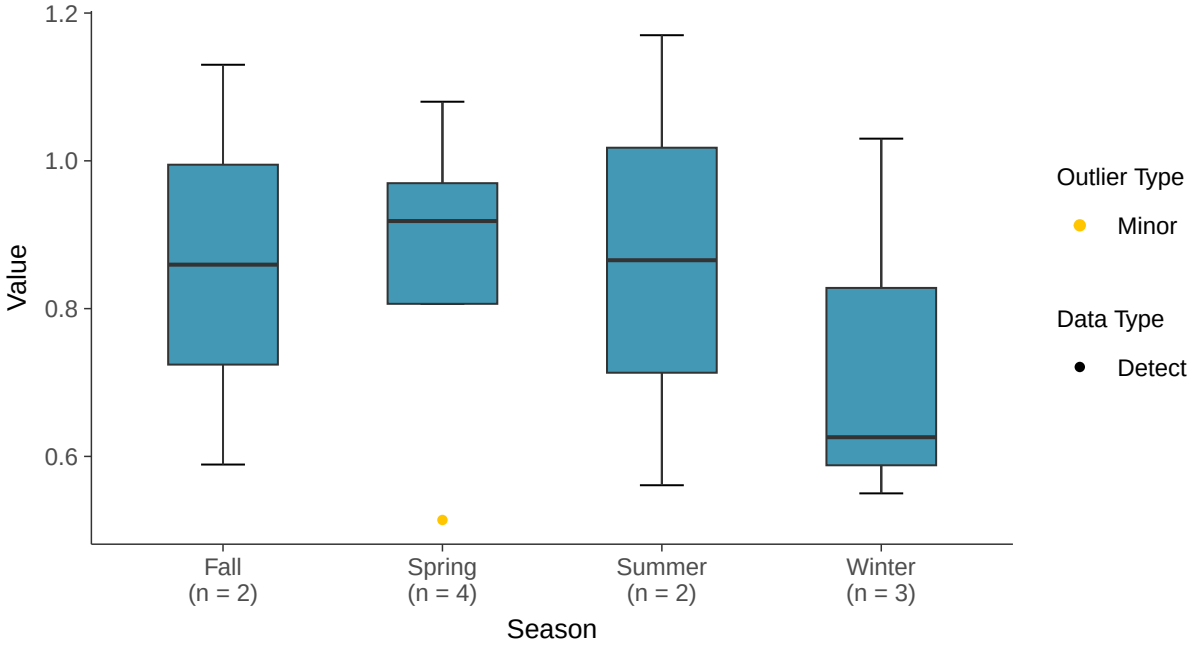
Boxplot

Radium 226 and 228, MW-19 (pCi/L)



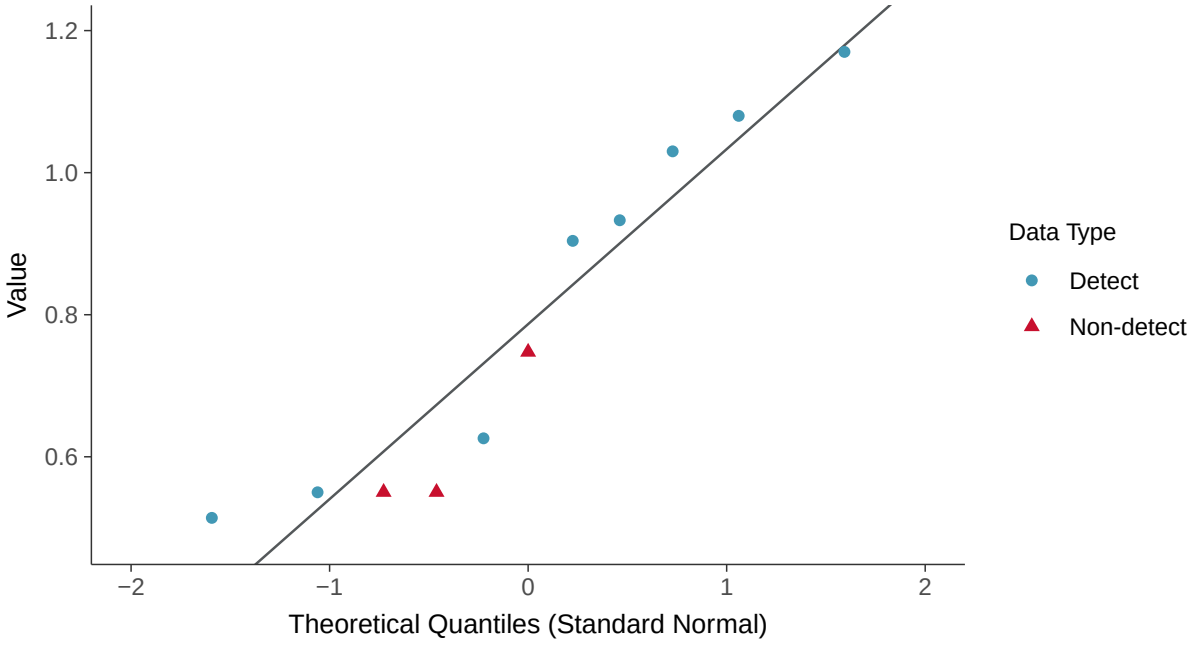
Boxplot by Season

Radium 226 and 228, MW-19 (pCi/L)



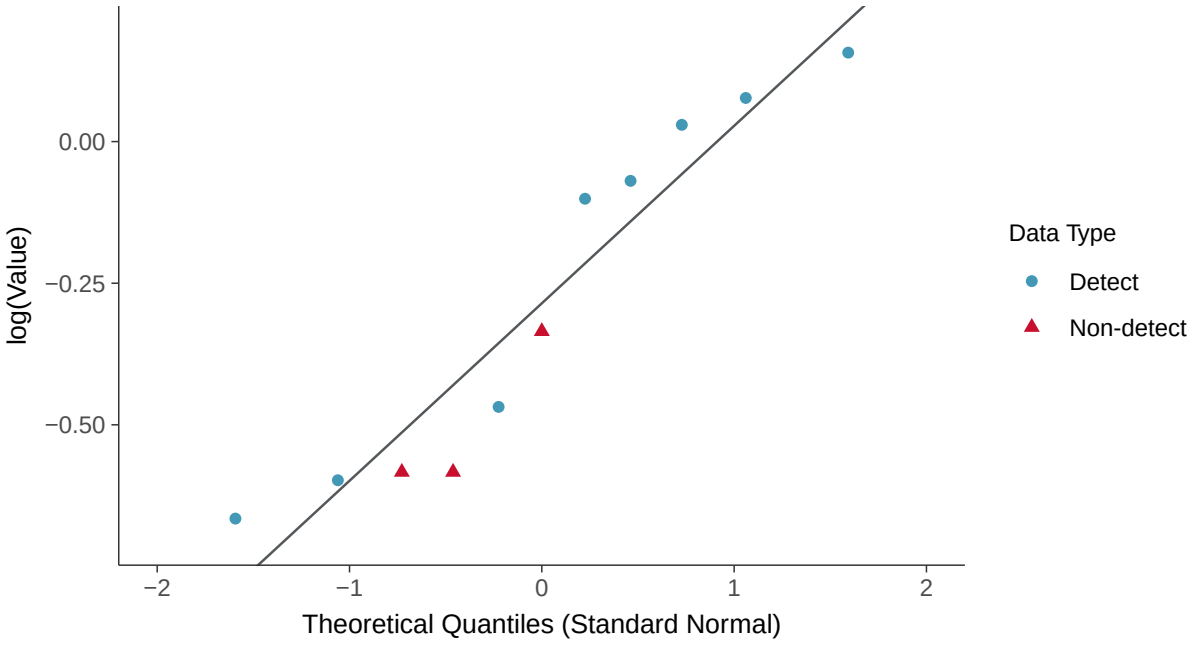
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-19 (pCi/L)



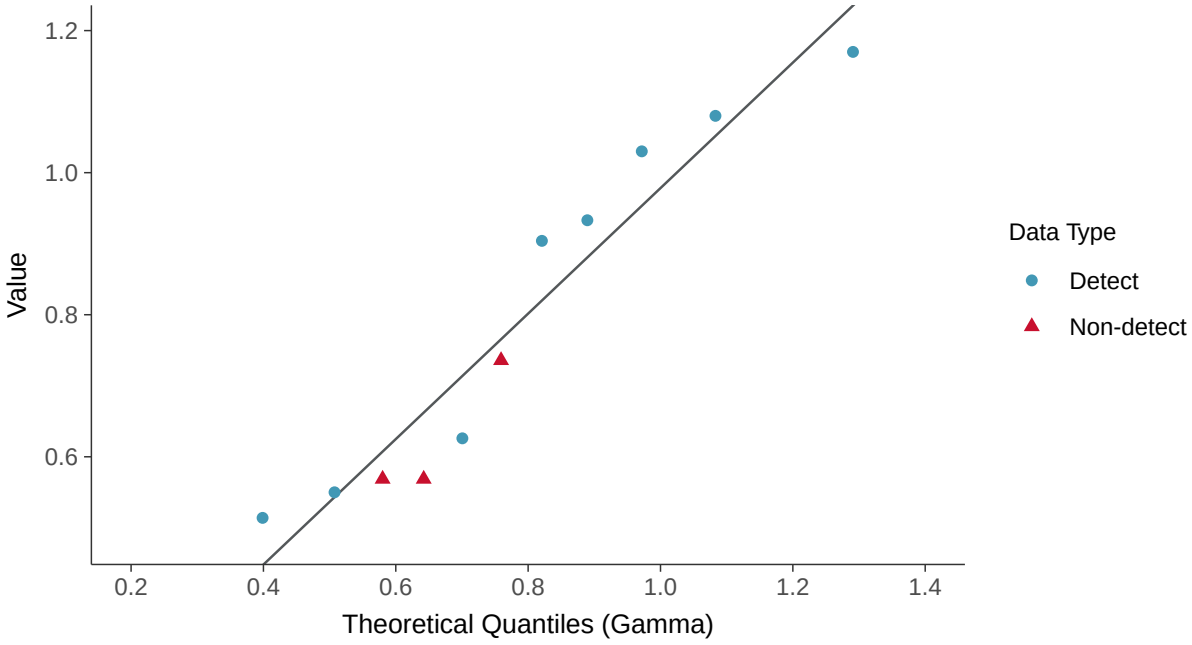
Lognormal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-19 (pCi/L)



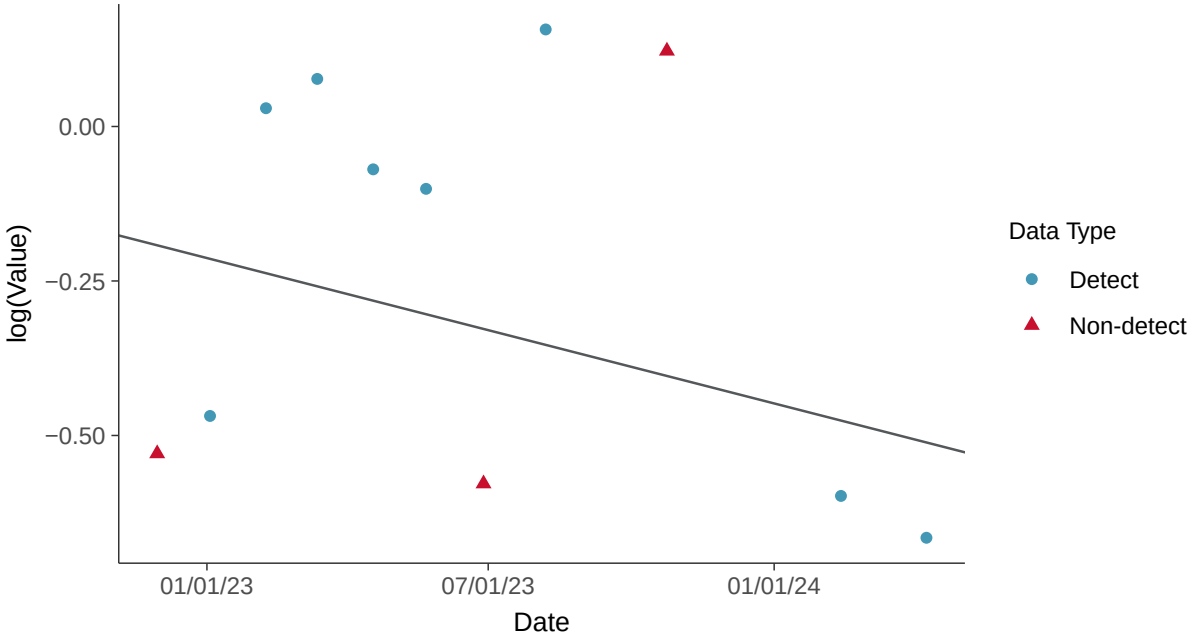
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-19 (pCi/L)



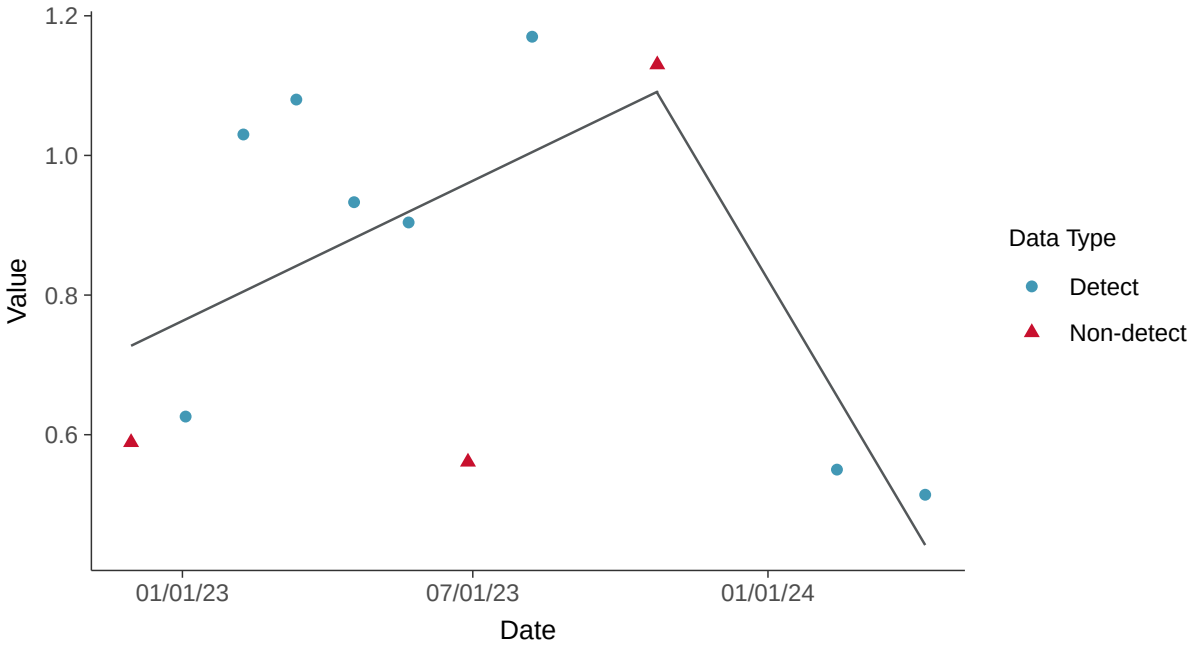
Trend Regression: Lognormal MLE

Radium 226 and 228, MW-19 (pCi/L)



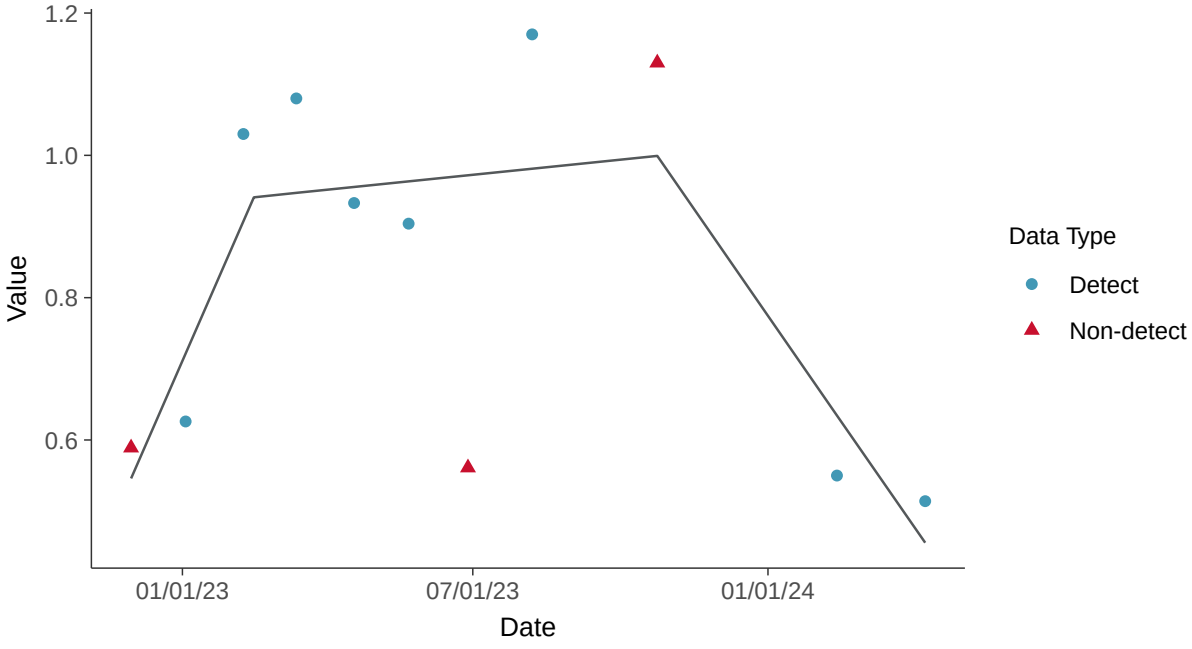
Trend Regression: Piecewise Linear-Linear

Radium 226 and 228, MW-19 (pCi/L)



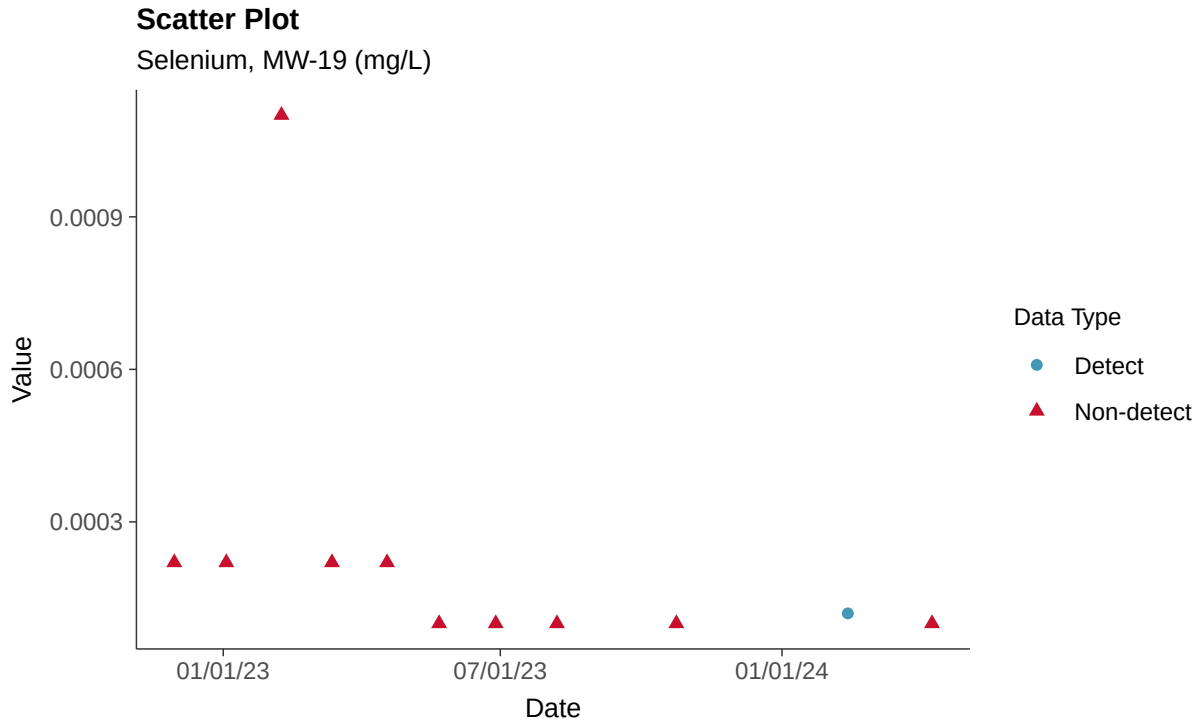
Trend Regression: Piecewise Linear-Linear-Linear

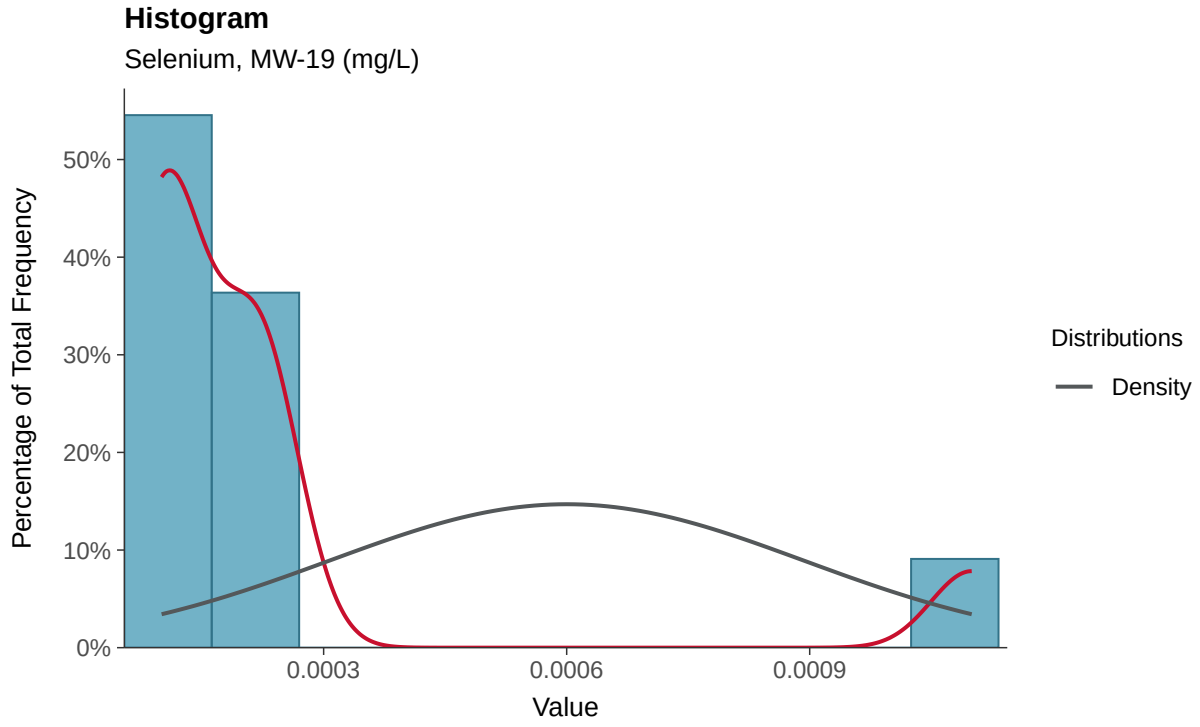
Radium 226 and 228, MW-19 (pCi/L)



Appendix IV: Selenium, MW-19

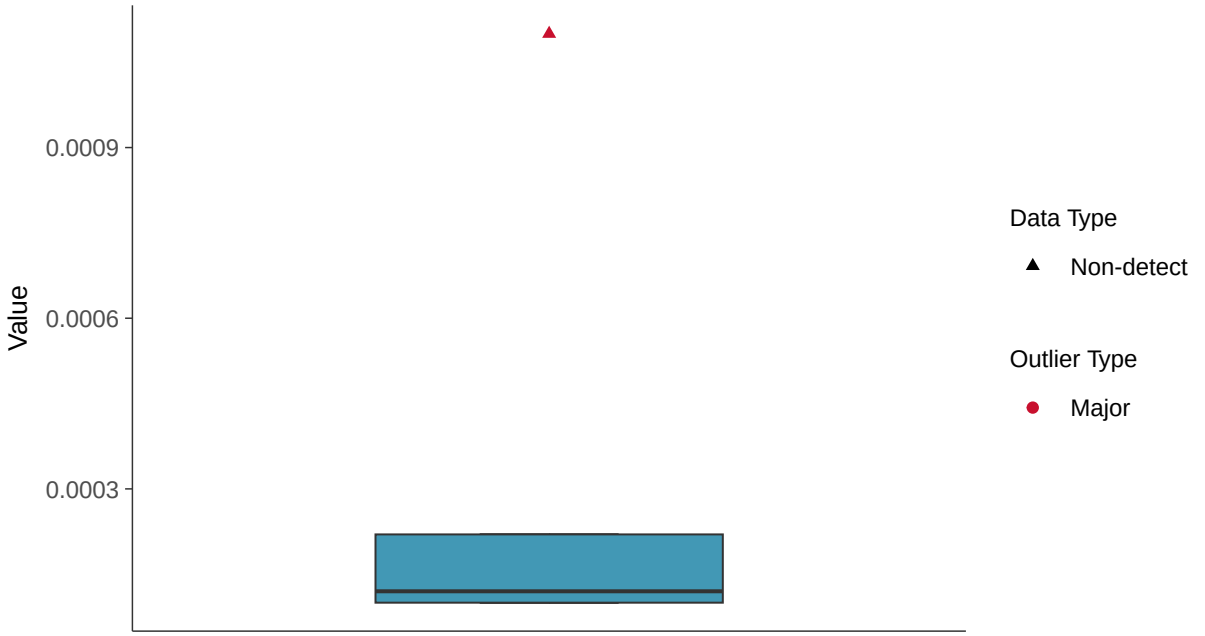
ID: 1_29_5_122





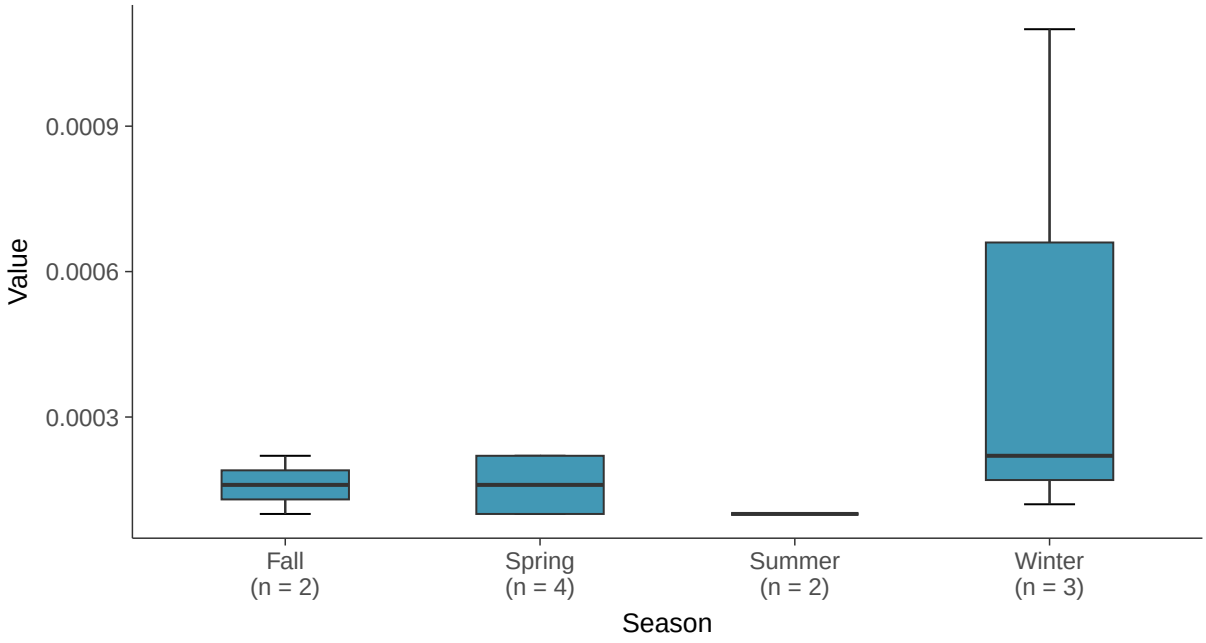
Boxplot

Selenium, MW-19 (mg/L)



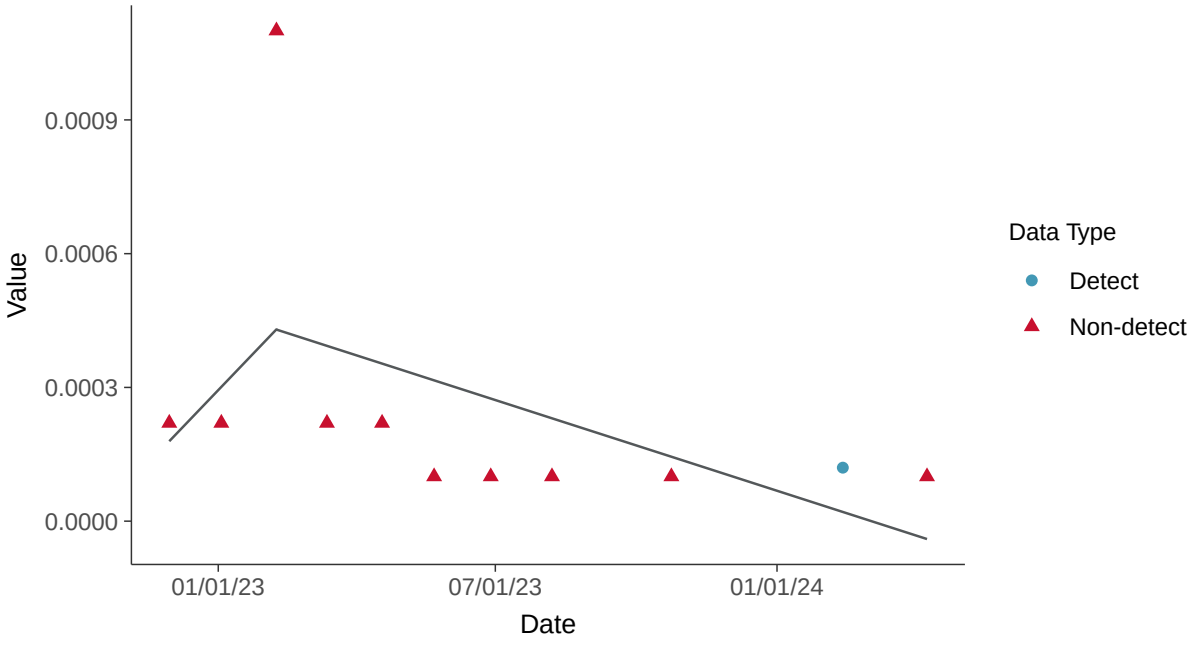
Boxplot by Season

Selenium, MW-19 (mg/L)



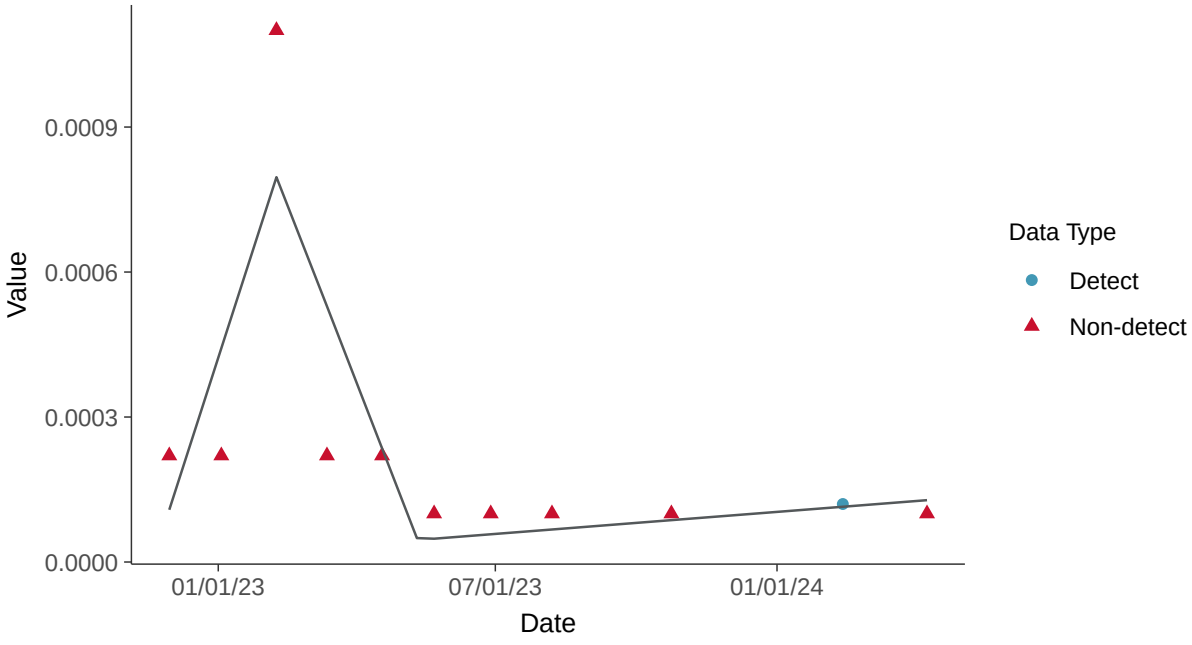
Trend Regression: Piecewise Linear-Linear

Selenium, MW-19 (mg/L)



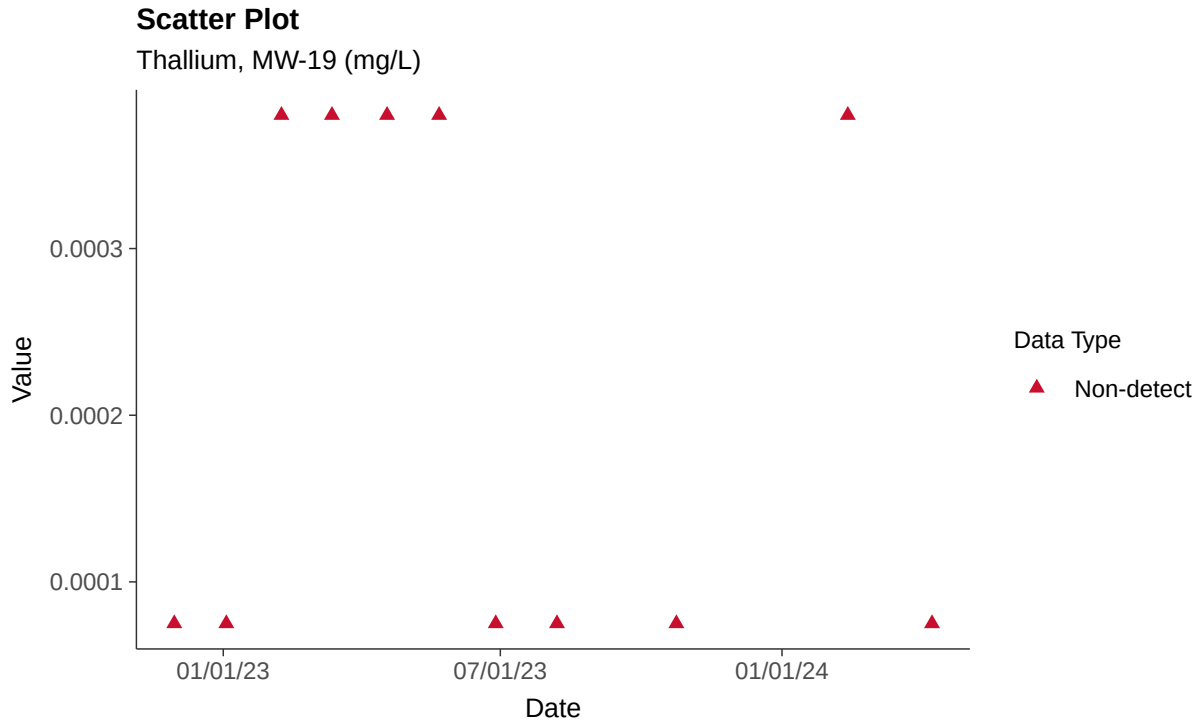
Trend Regression: Piecewise Linear-Linear-Linear

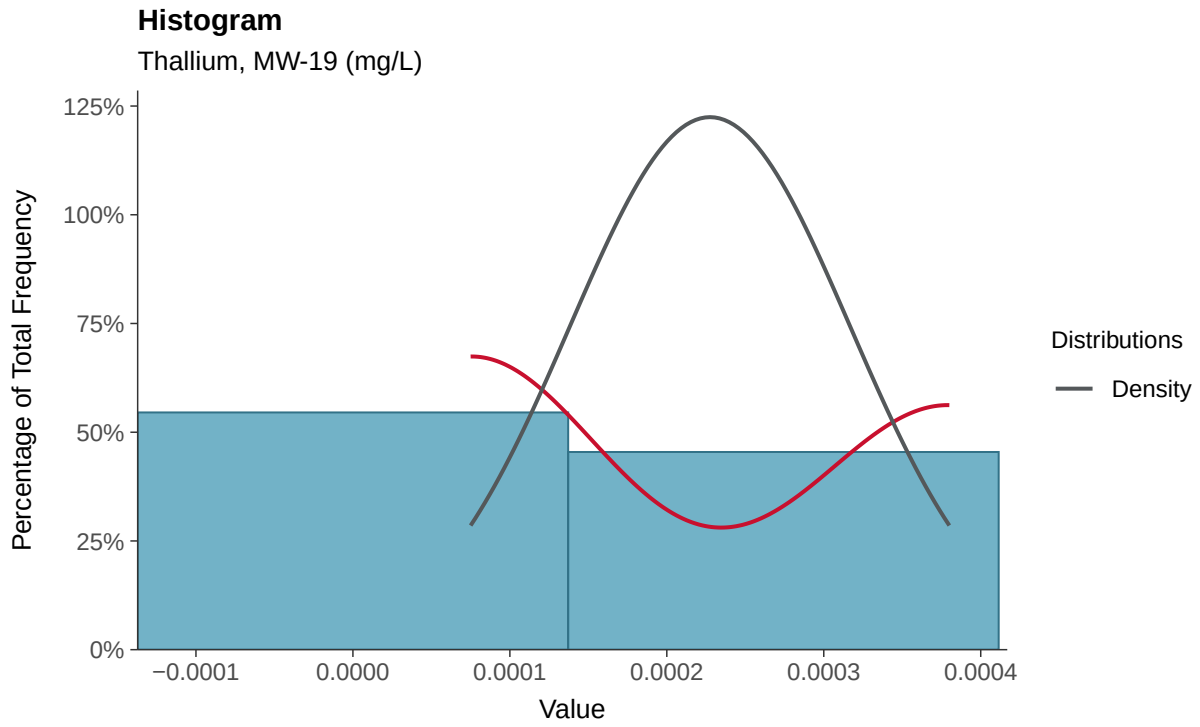
Selenium, MW-19 (mg/L)



Appendix IV: Thallium, MW-19

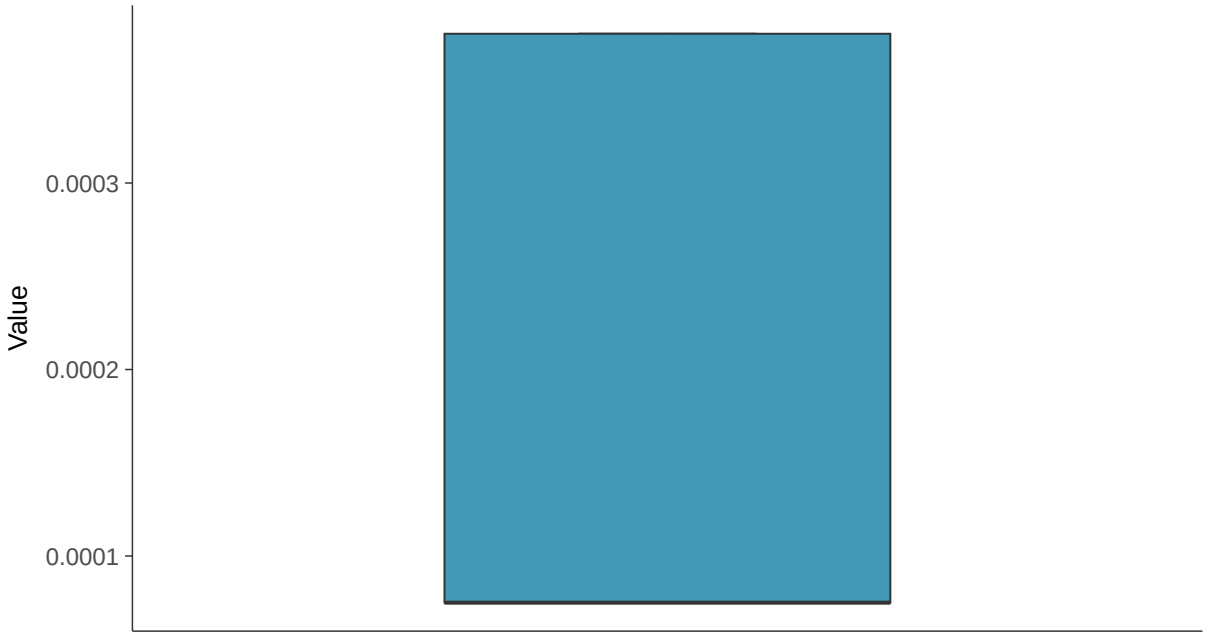
ID: 1_29_5_125





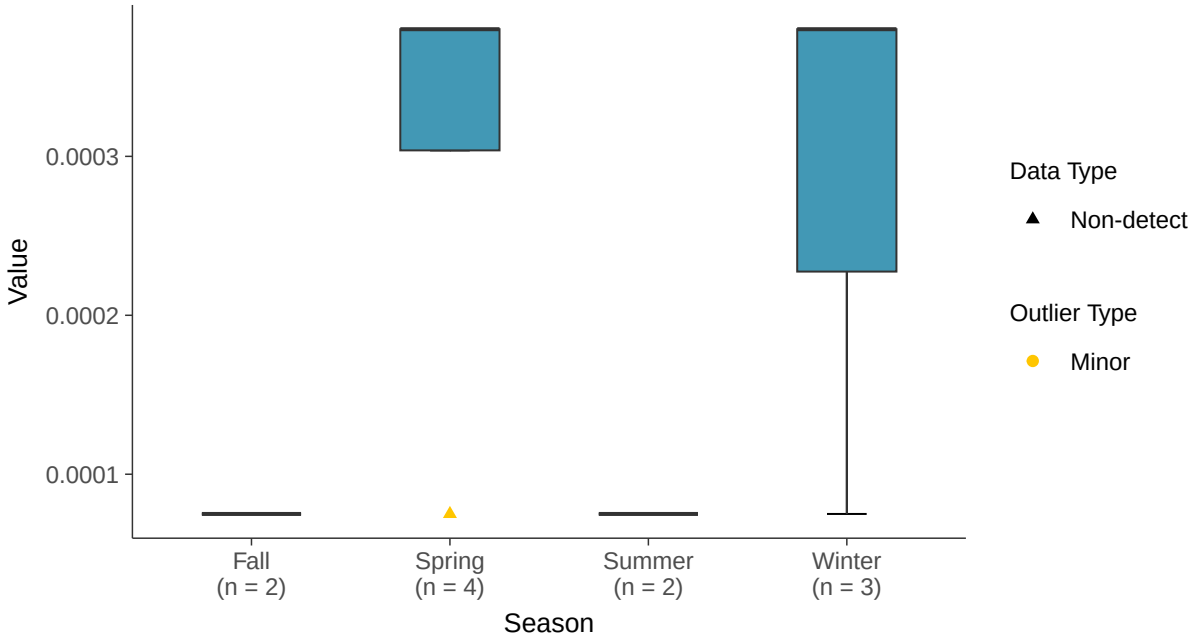
Boxplot

Thallium, MW-19 (mg/L)



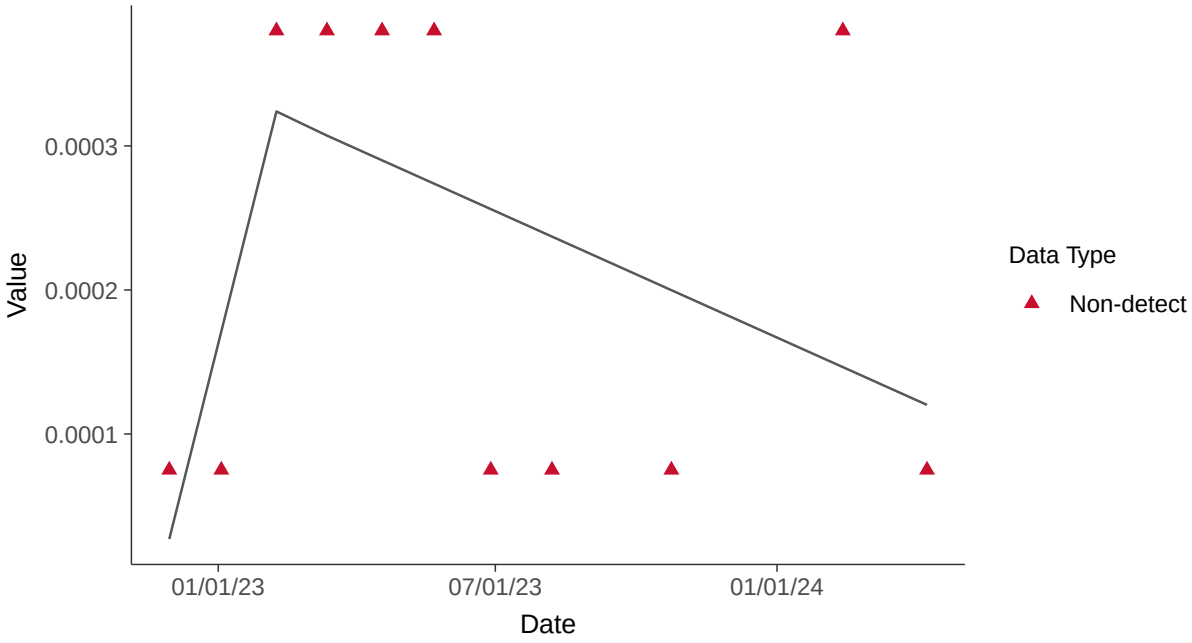
Boxplot by Season

Thallium, MW-19 (mg/L)



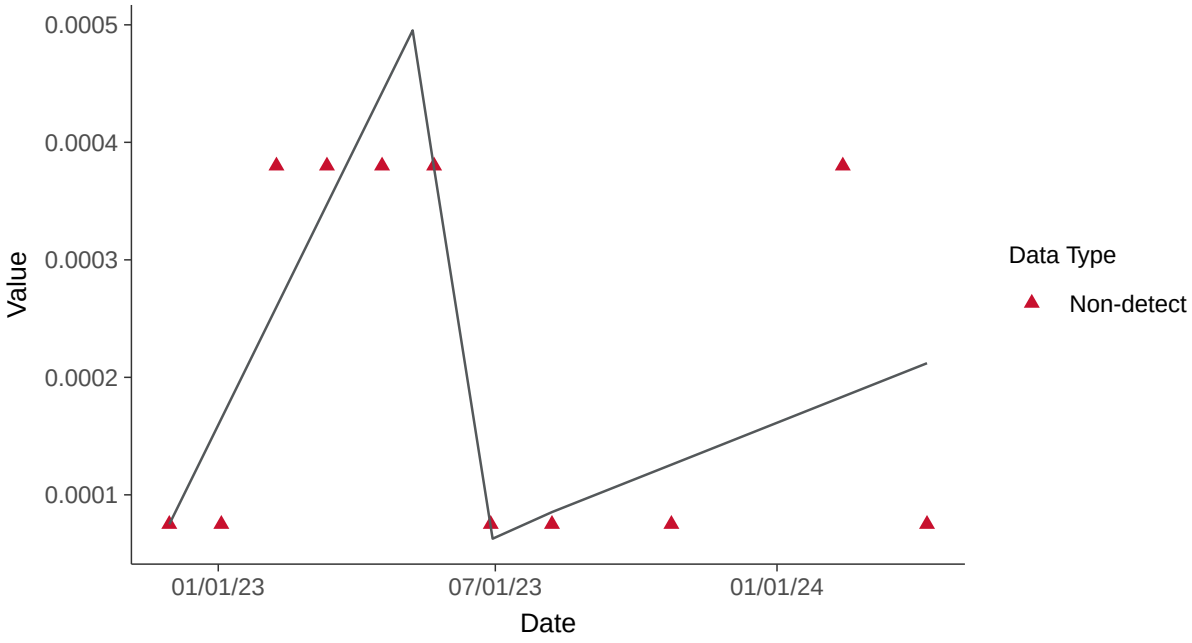
Trend Regression: Piecewise Linear-Linear

Thallium, MW-19 (mg/L)



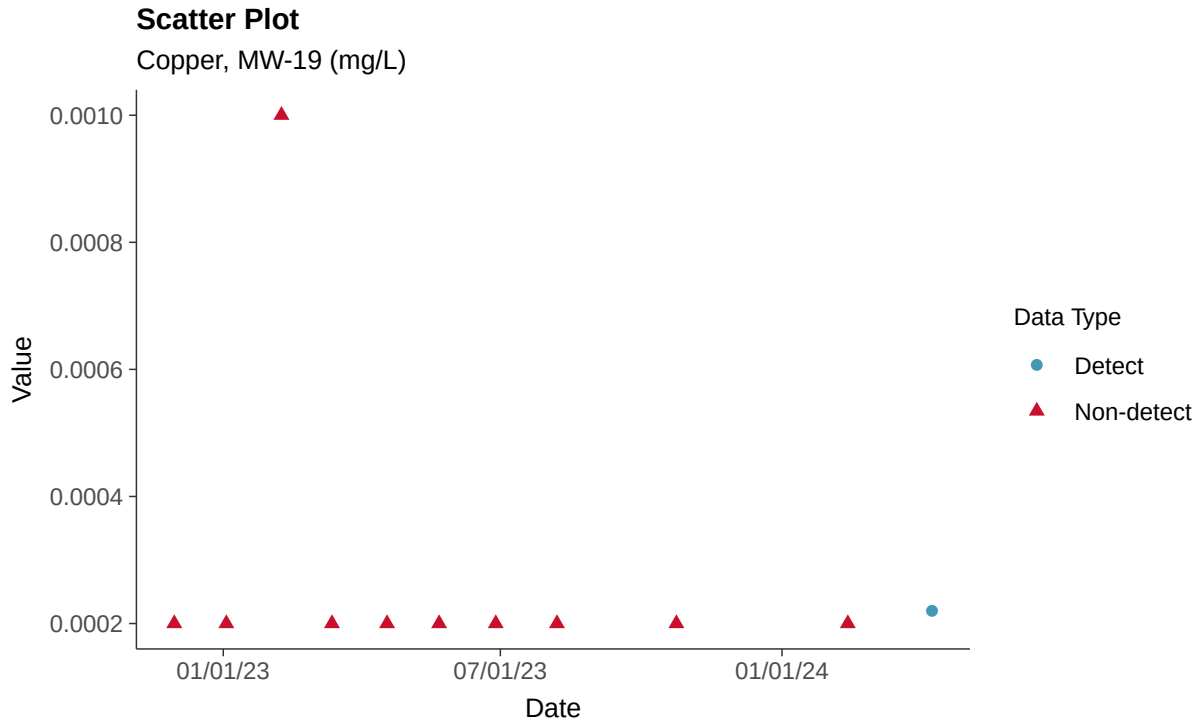
Trend Regression: Piecewise Linear-Linear-Linear

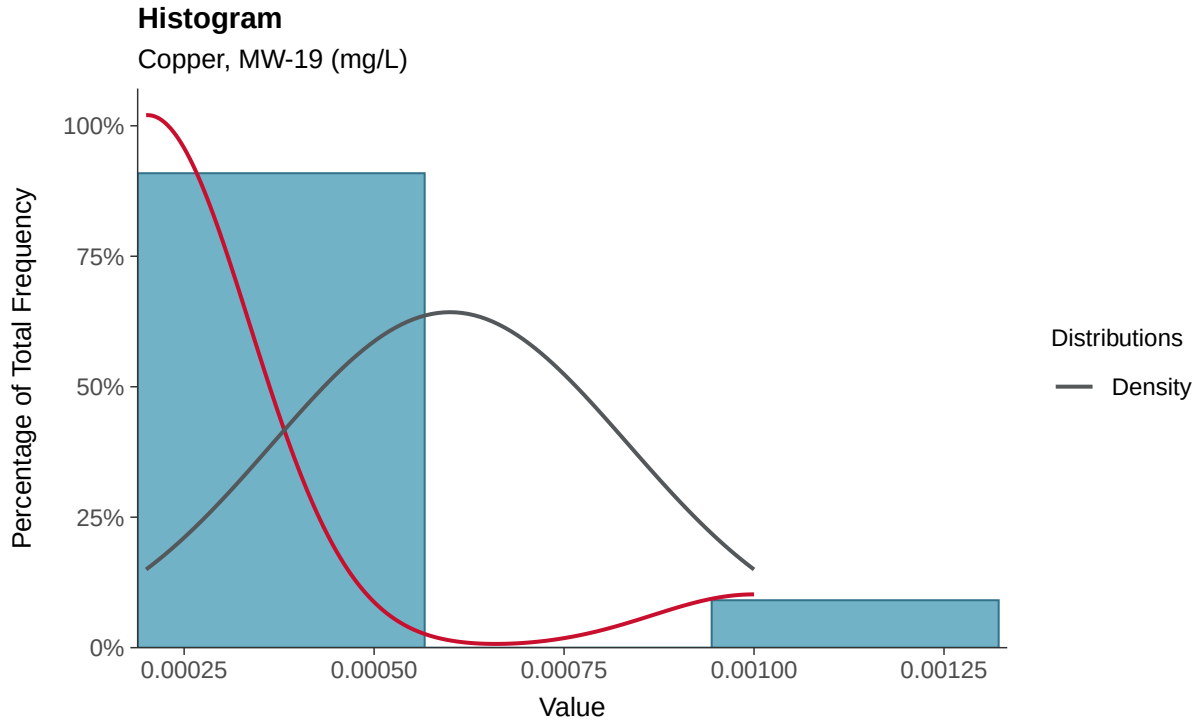
Thallium, MW-19 (mg/L)



Part 115: Copper, MW-19

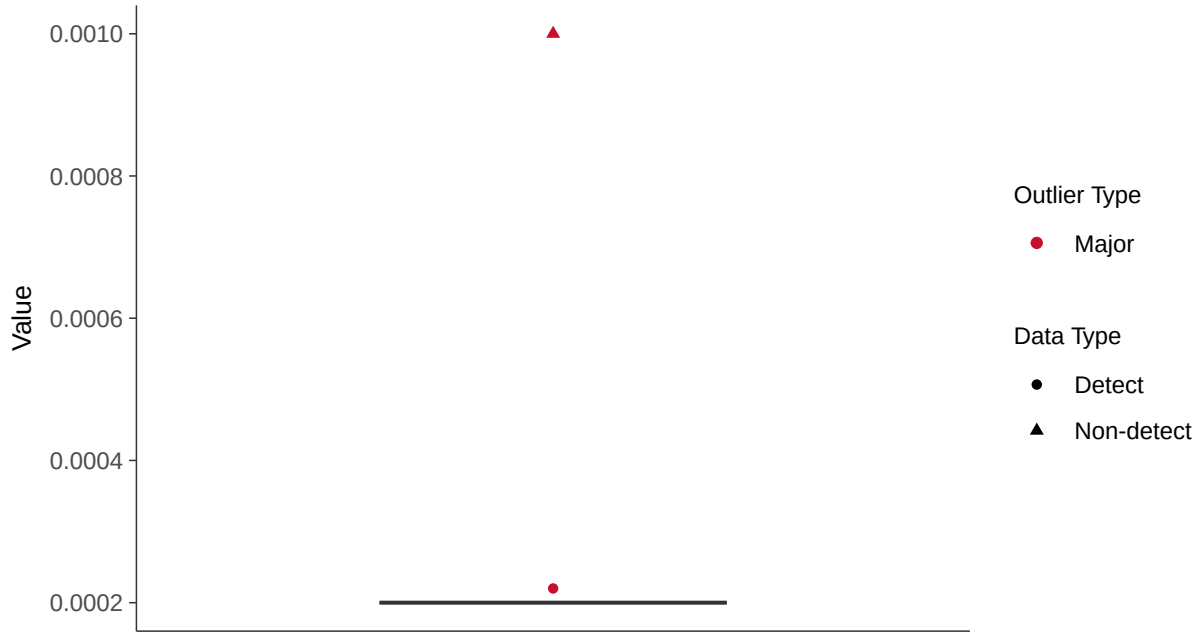
ID: 1_29_6_111





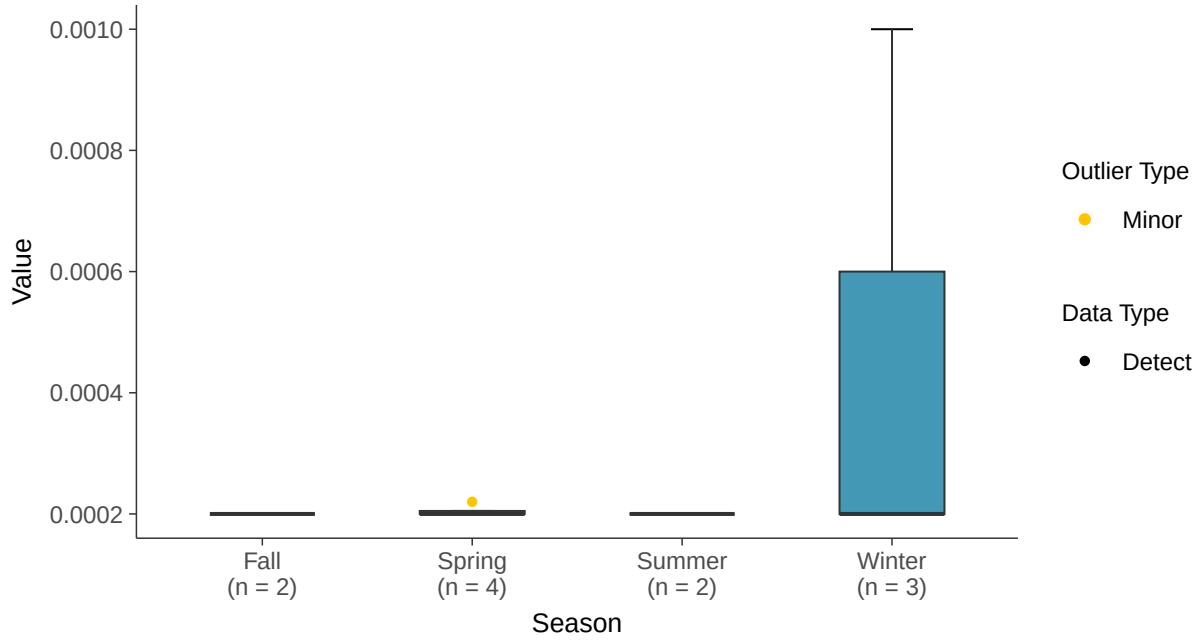
Boxplot

Copper, MW-19 (mg/L)



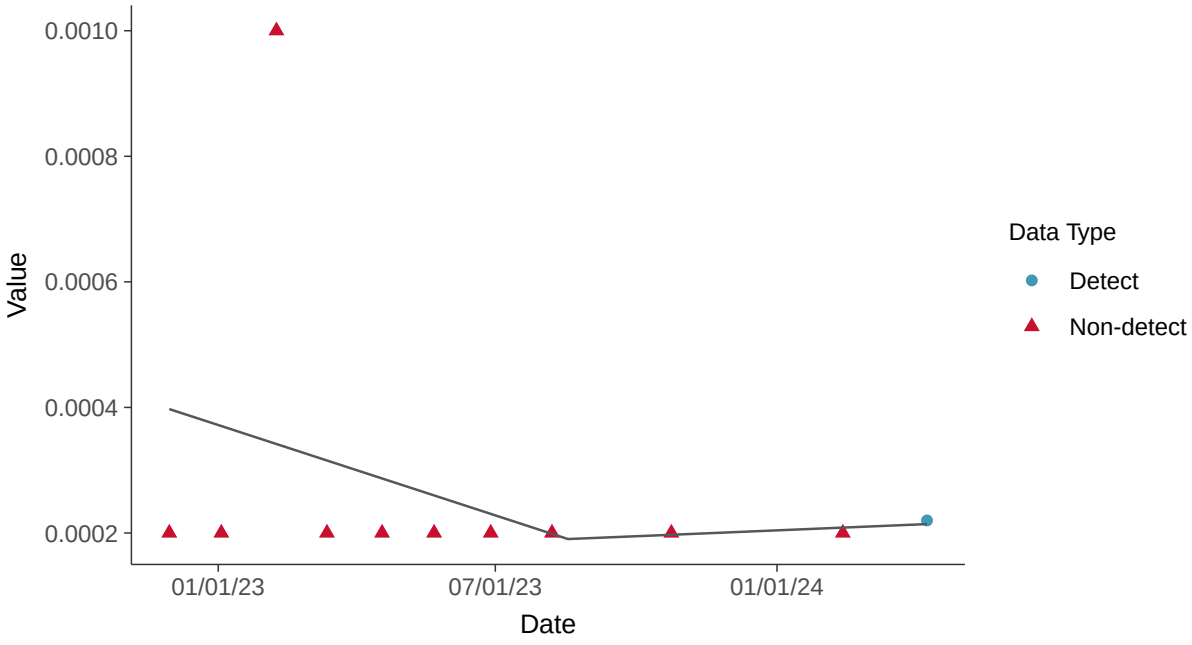
Boxplot by Season

Copper, MW-19 (mg/L)



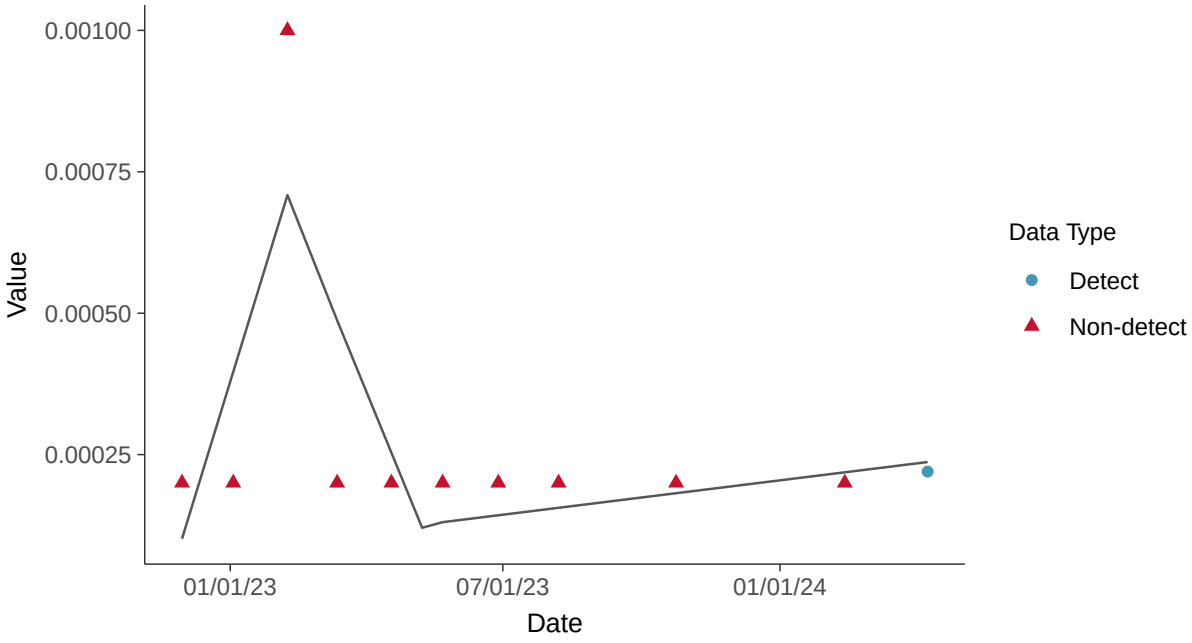
Trend Regression: Piecewise Linear-Linear

Copper, MW-19 (mg/L)



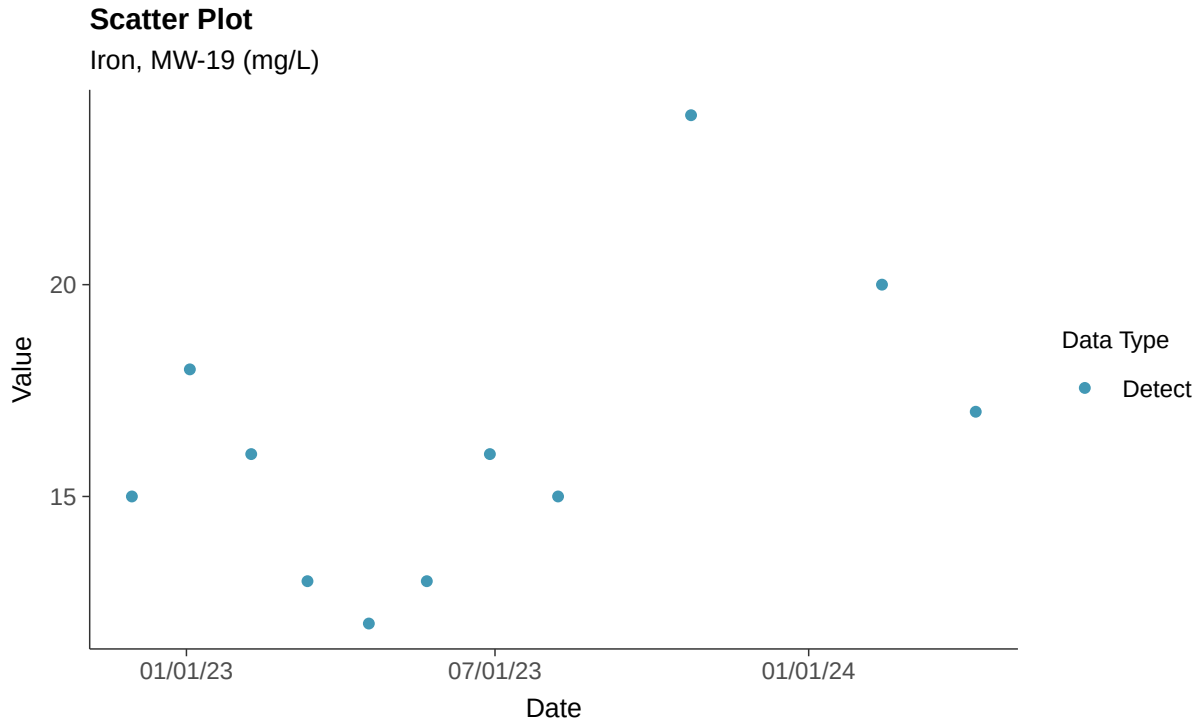
Trend Regression: Piecewise Linear-Linear-Linear

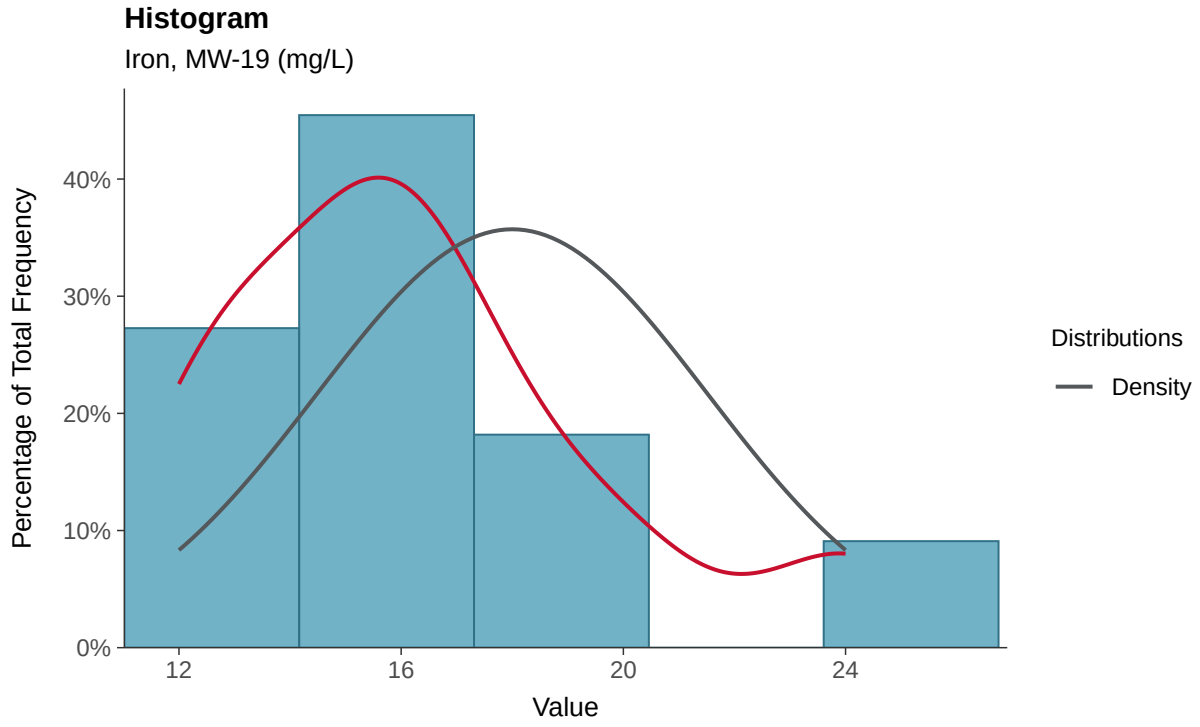
Copper, MW-19 (mg/L)



Part 115: Iron, MW-19

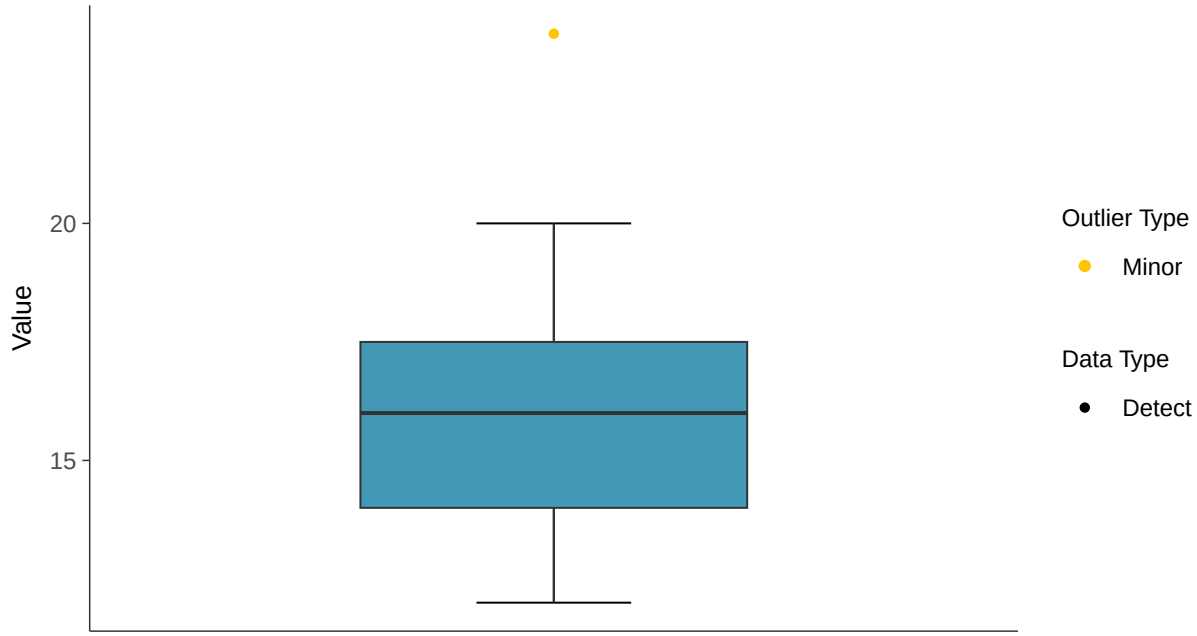
ID: 1_29_6_114





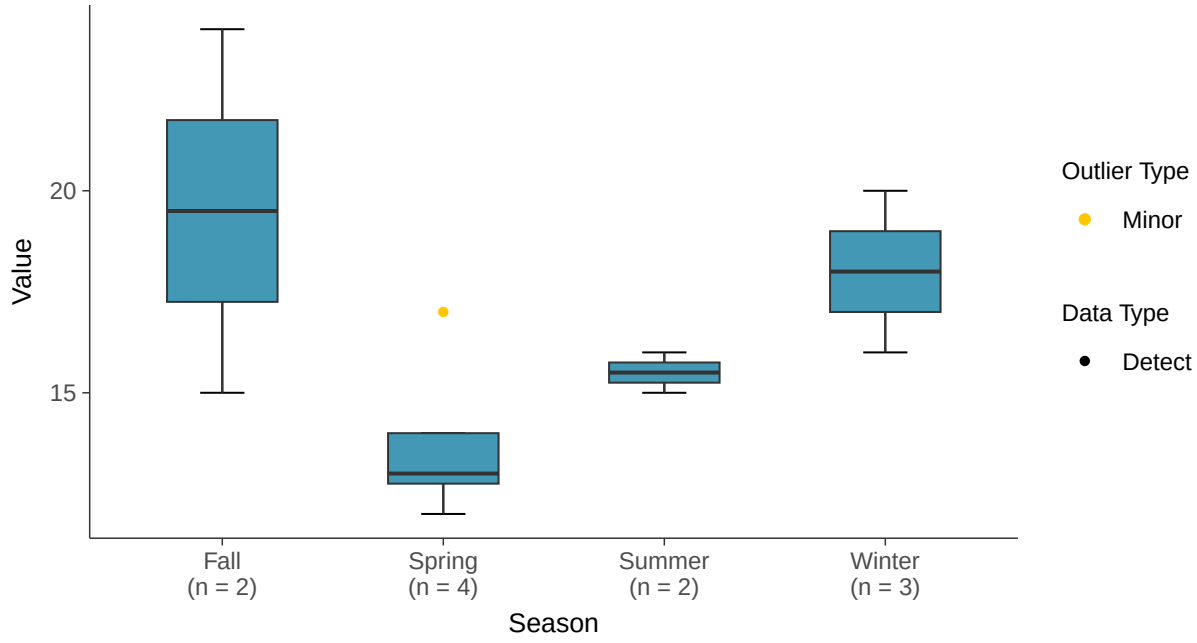
Boxplot

Iron, MW-19 (mg/L)



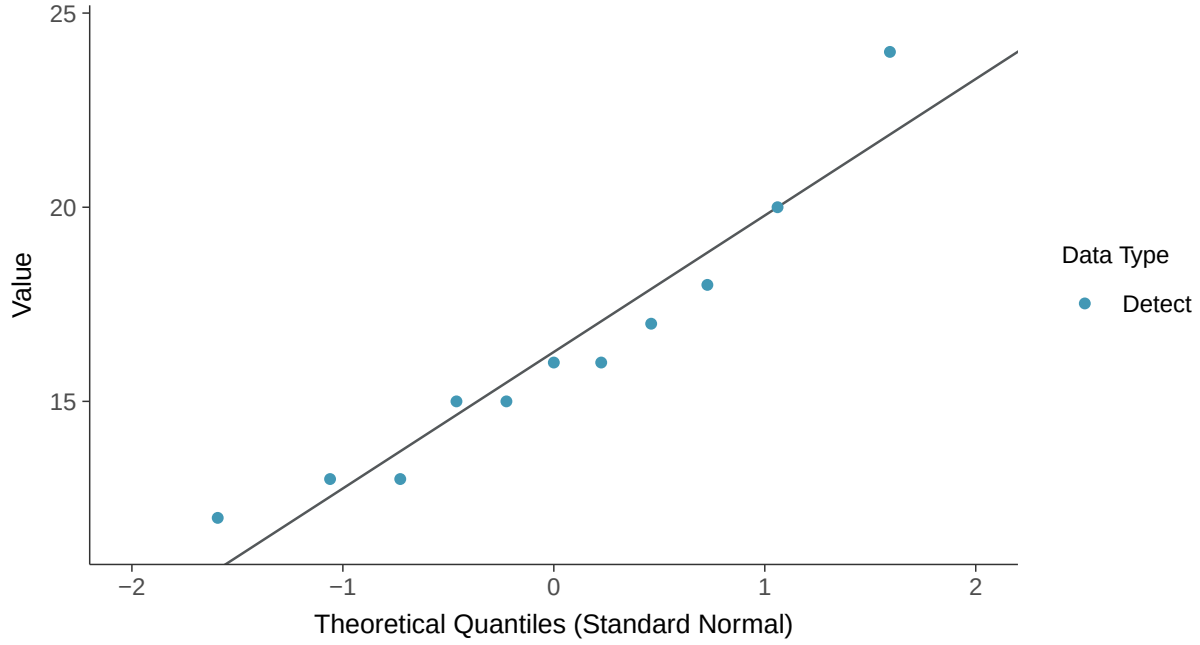
Boxplot by Season

Iron, MW-19 (mg/L)



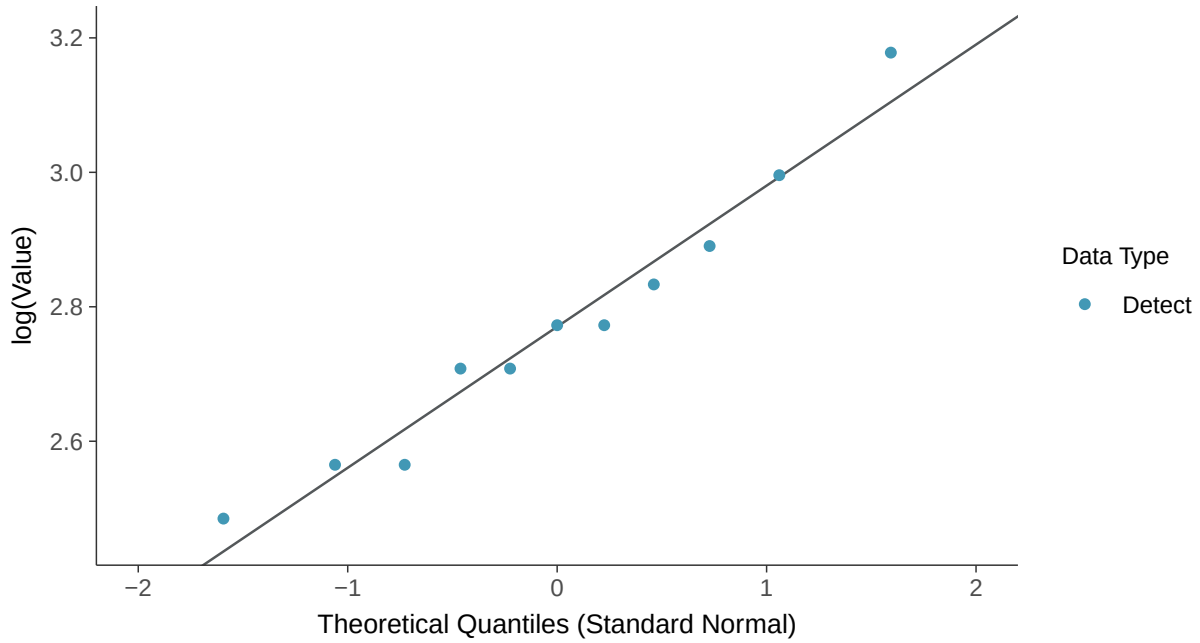
Normal Q-Q plot

Iron, MW-19 (mg/L)



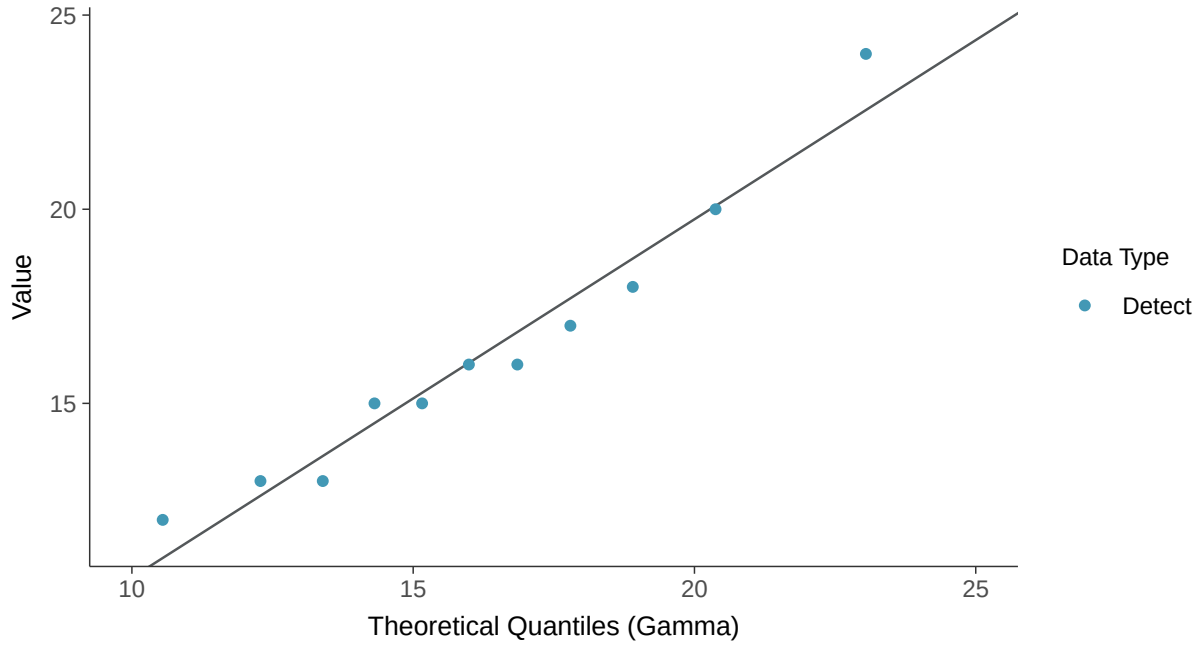
Lognormal Q-Q plot

Iron, MW-19 (mg/L)



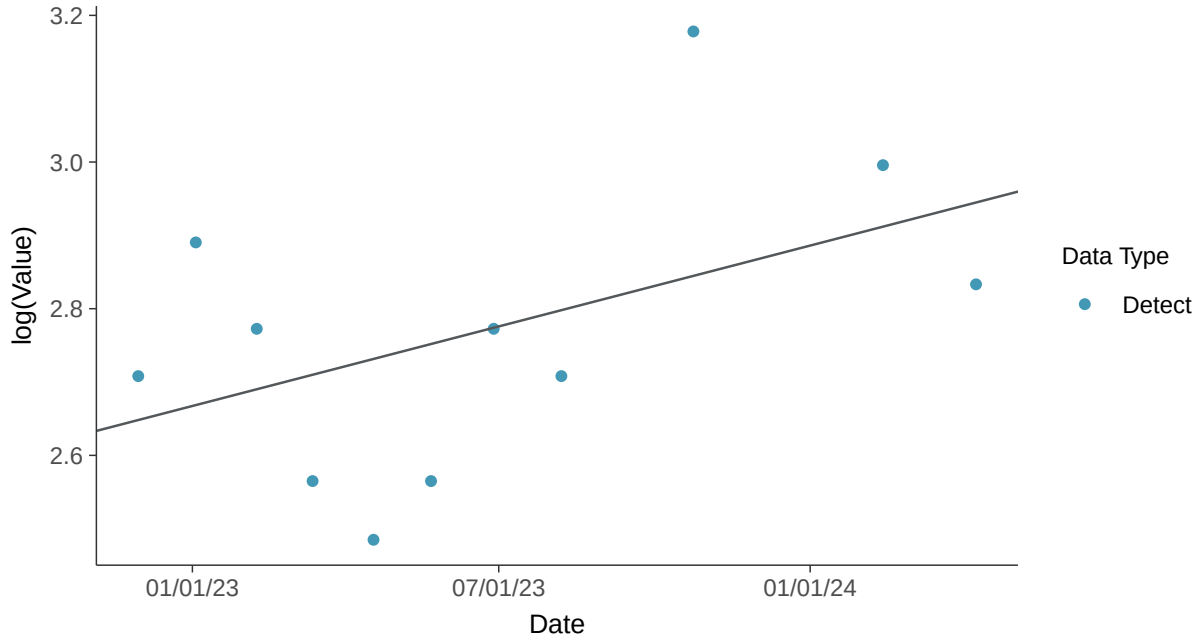
Gamma Q-Q plot

Iron, MW-19 (mg/L)



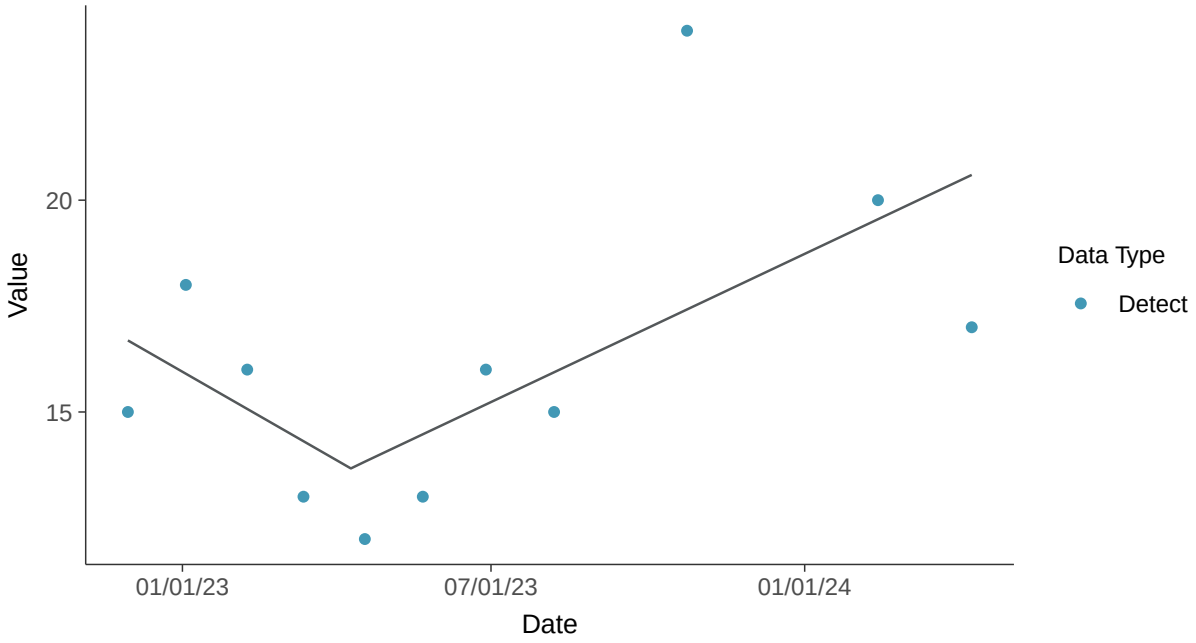
Trend Regression: Lognormal MLE

Iron, MW-19 (mg/L)



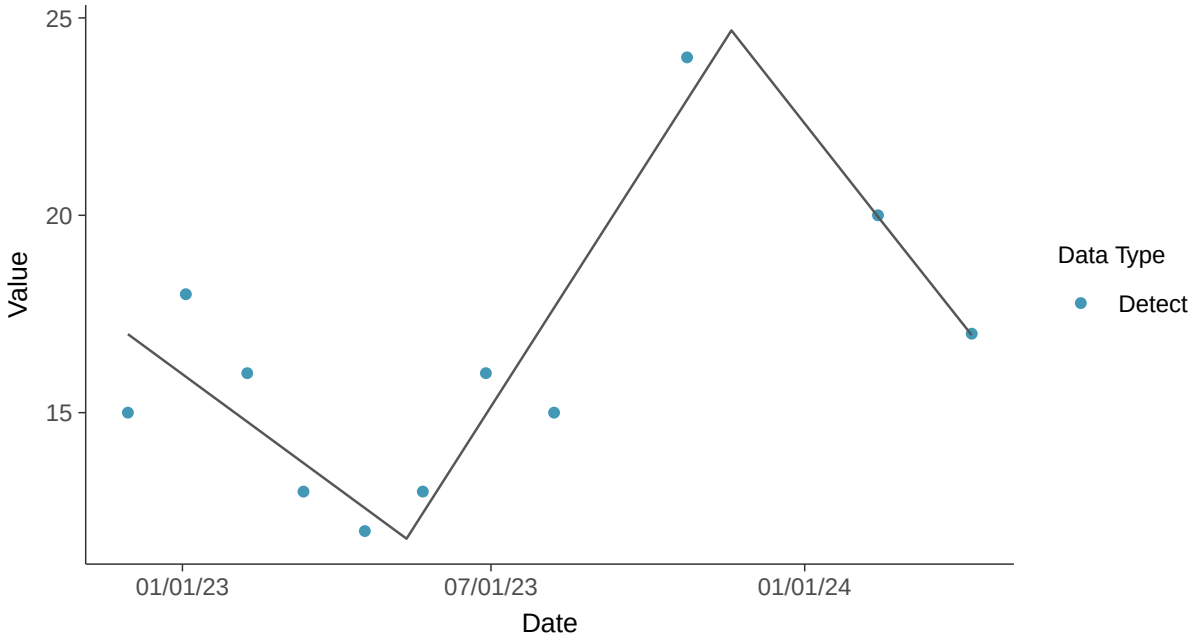
Trend Regression: Piecewise Linear-Linear

Iron, MW-19 (mg/L)



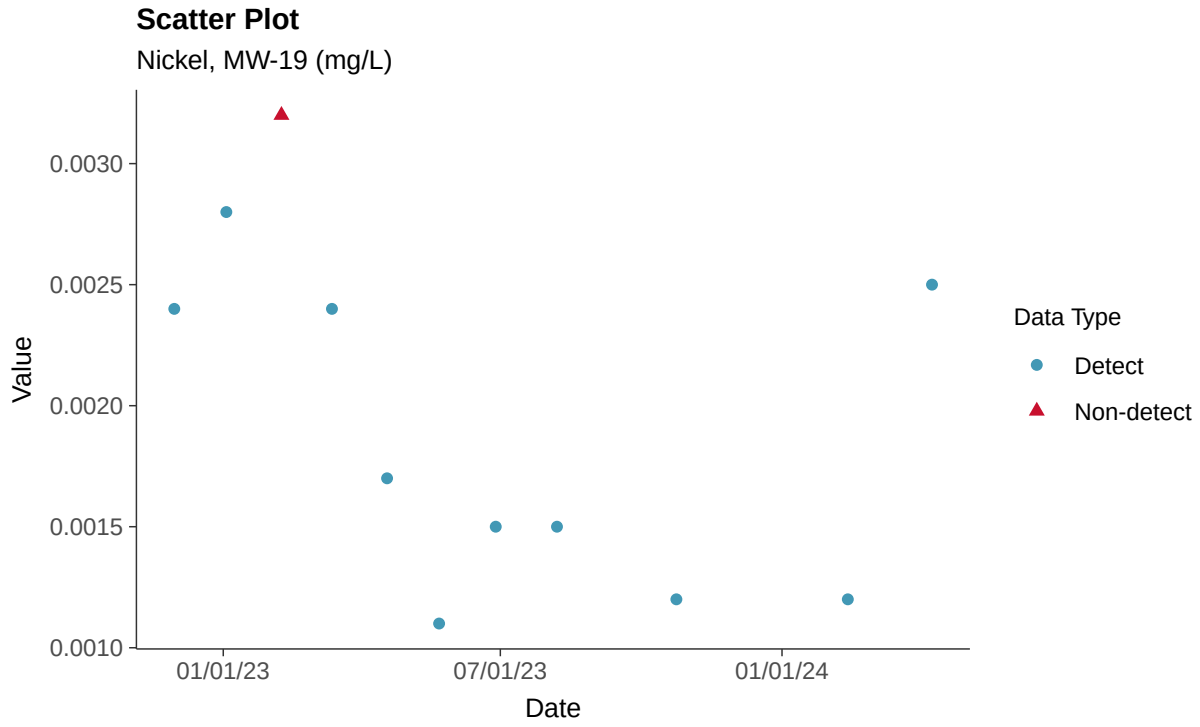
Trend Regression: Piecewise Linear-Linear-Linear

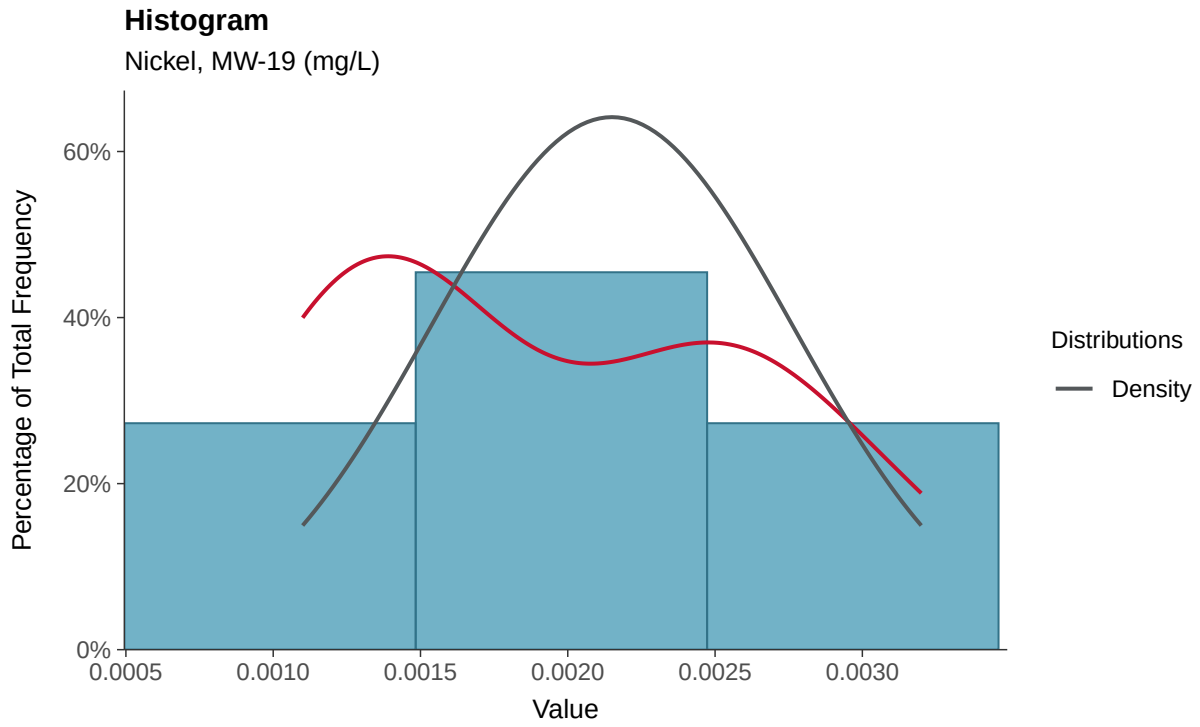
Iron, MW-19 (mg/L)



Part 115: Nickel, MW-19

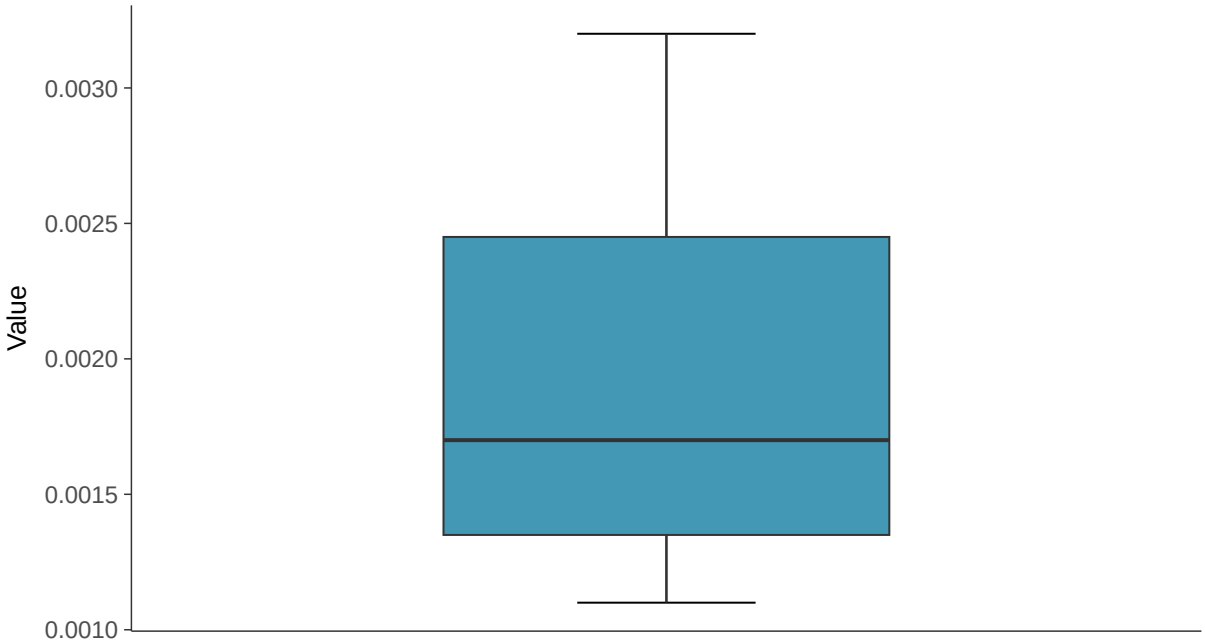
ID: 1_29_6_119





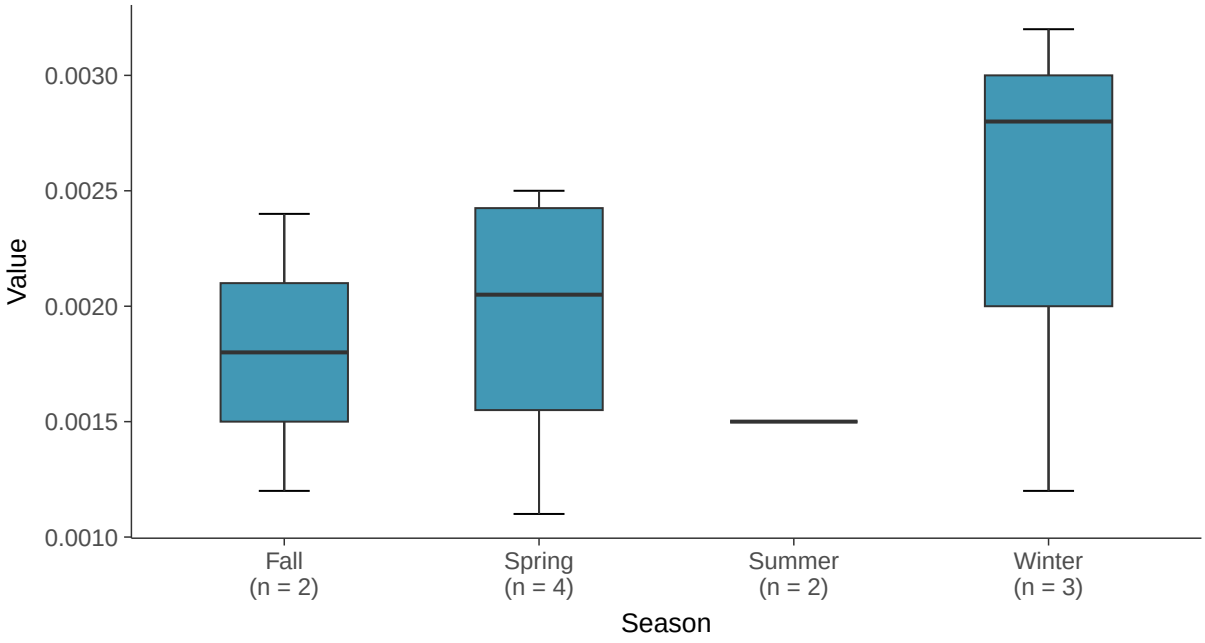
Boxplot

Nickel, MW-19 (mg/L)



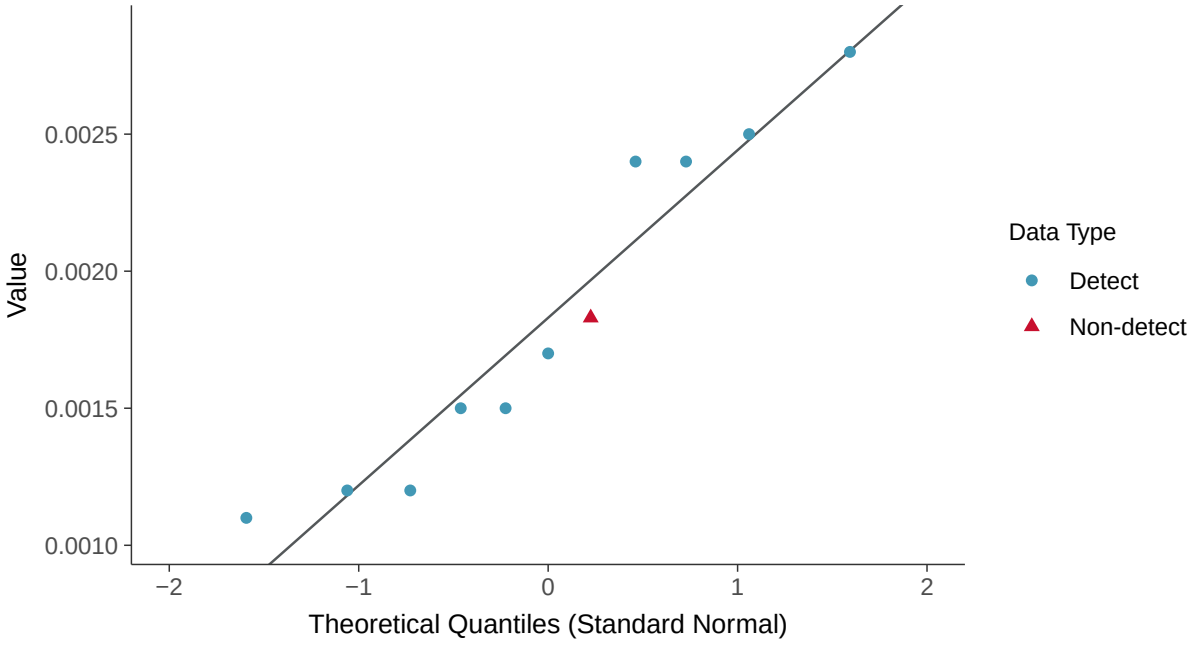
Boxplot by Season

Nickel, MW-19 (mg/L)



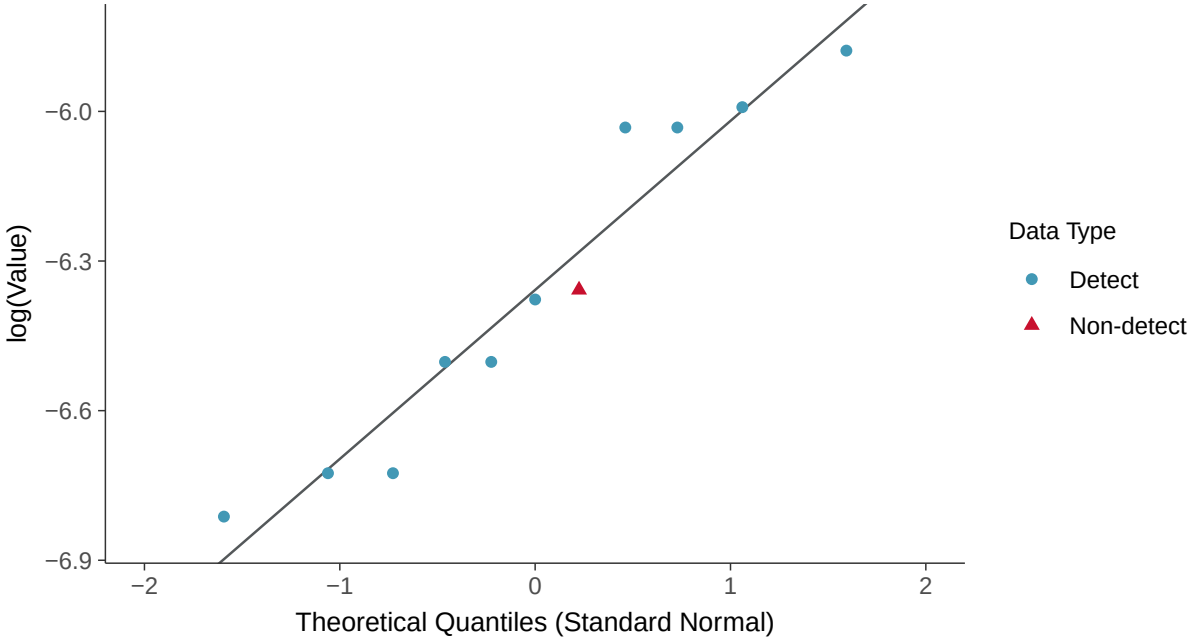
Normal Q-Q plot using ROS Imputed Estimates

Nickel, MW-19 (mg/L)



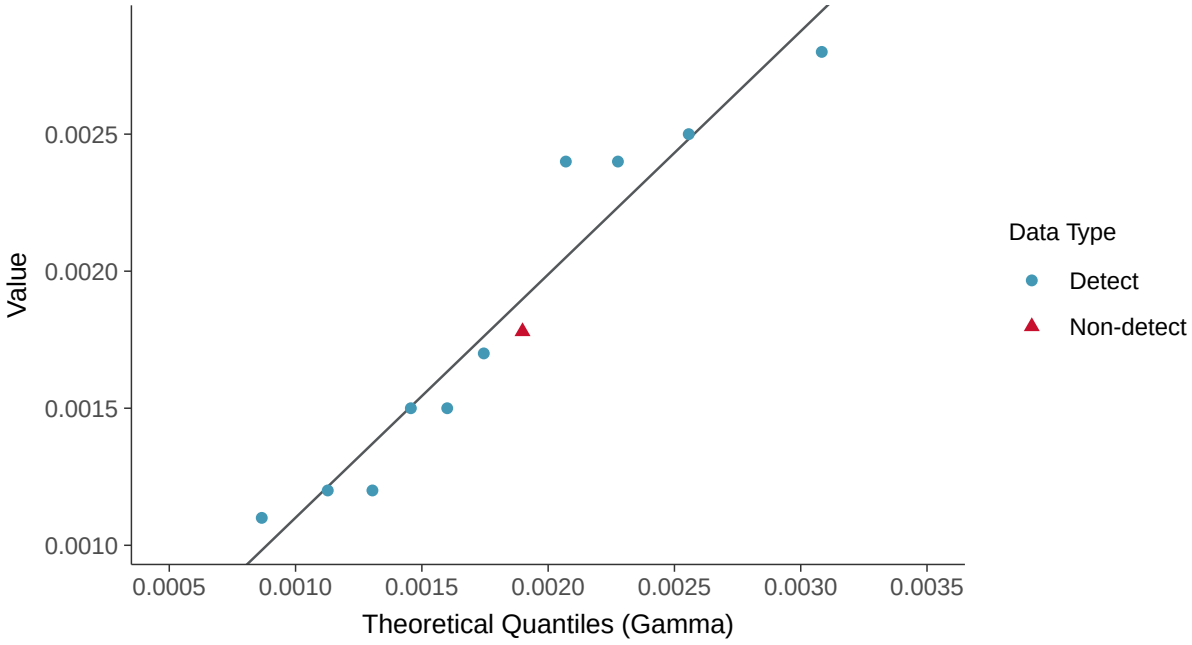
Lognormal Q-Q plot using ROS Imputed Estimates

Nickel, MW-19 (mg/L)



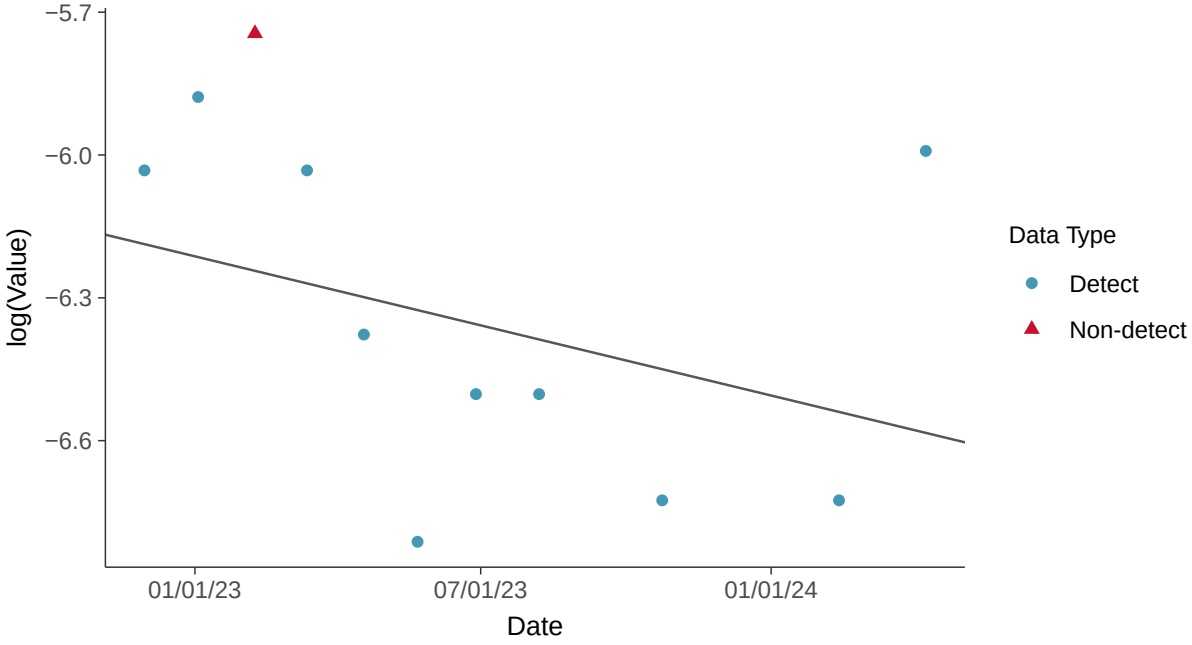
Gamma Q-Q plot using ROS Imputed Estimates

Nickel, MW-19 (mg/L)



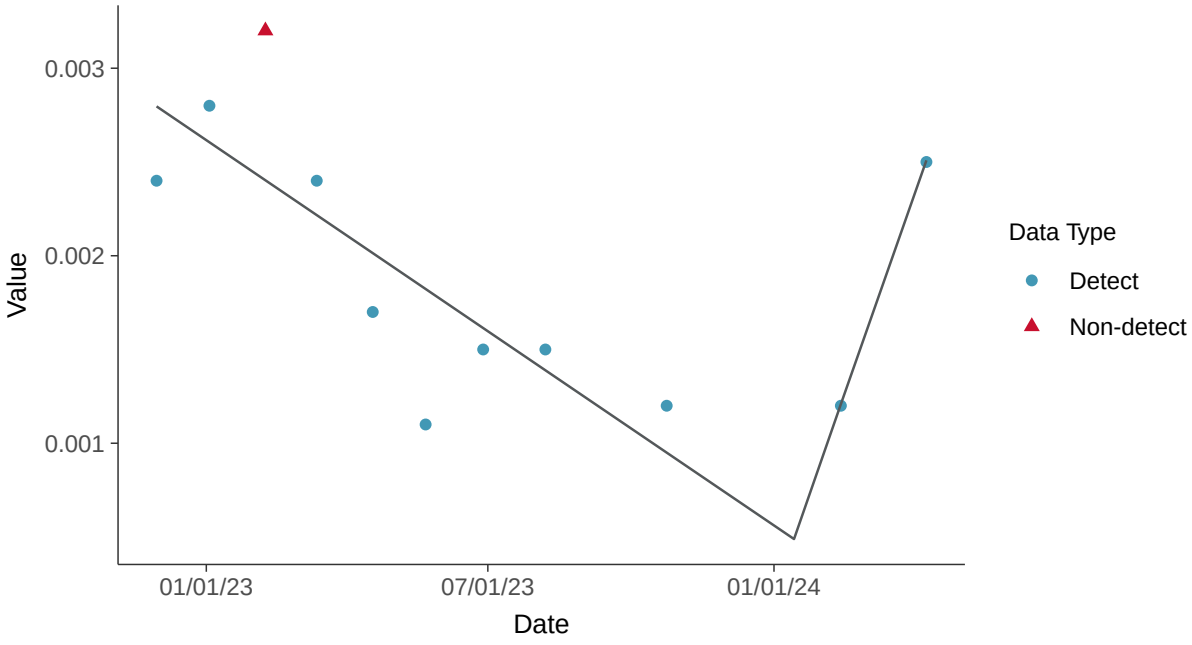
Trend Regression: Lognormal MLE

Nickel, MW-19 (mg/L)



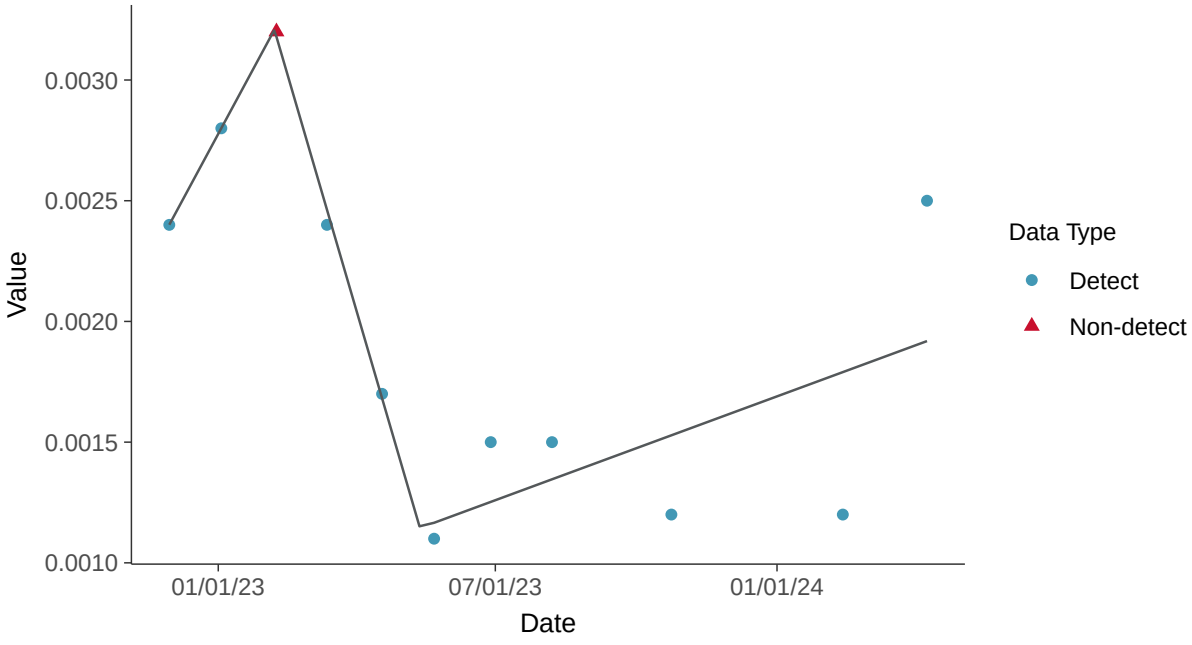
Trend Regression: Piecewise Linear-Linear

Nickel, MW-19 (mg/L)



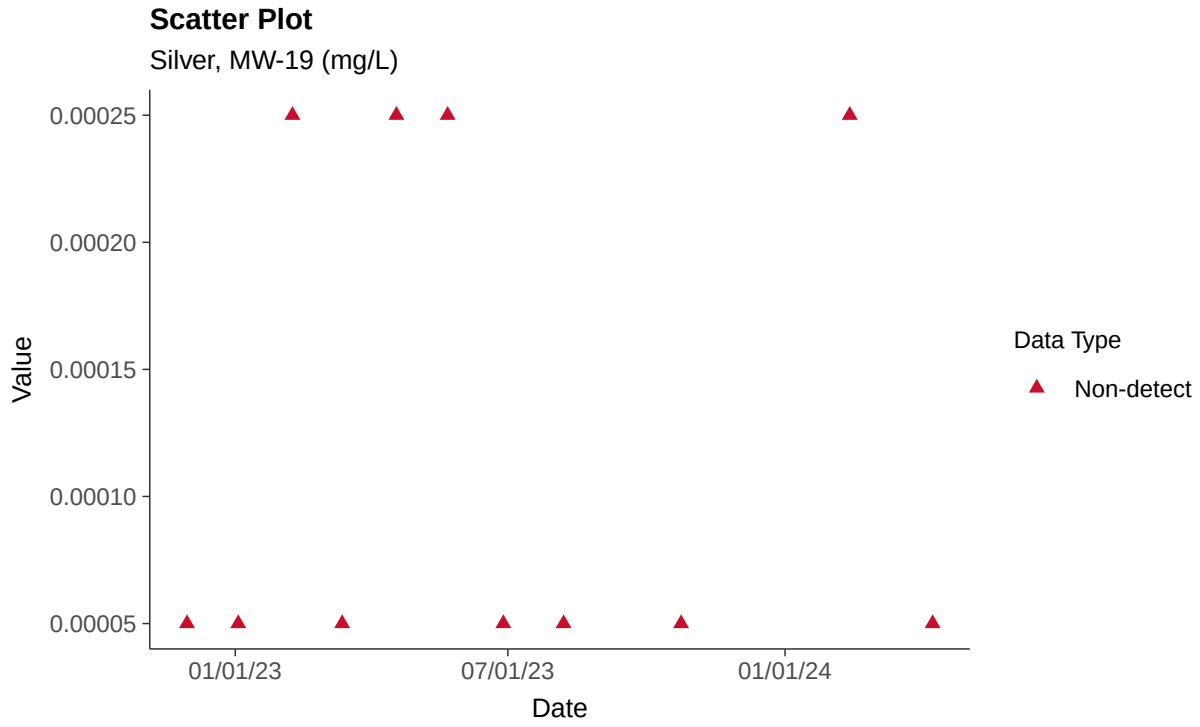
Trend Regression: Piecewise Linear-Linear-Linear

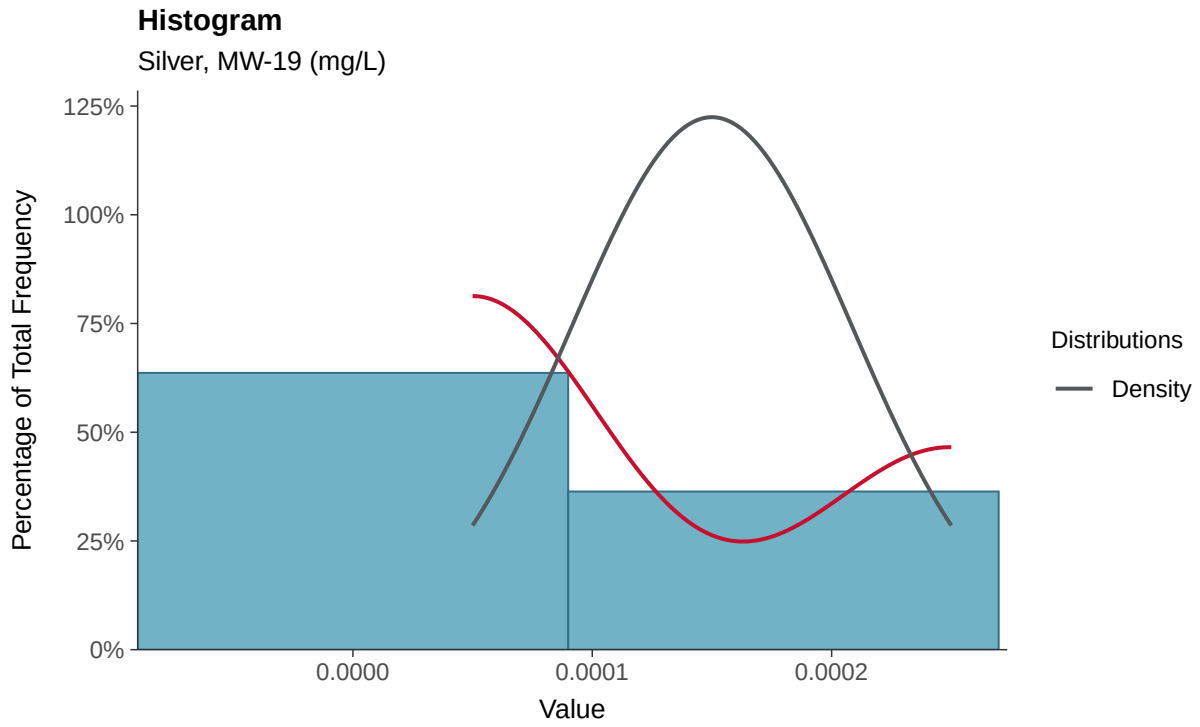
Nickel, MW-19 (mg/L)



Part 115: Silver, MW-19

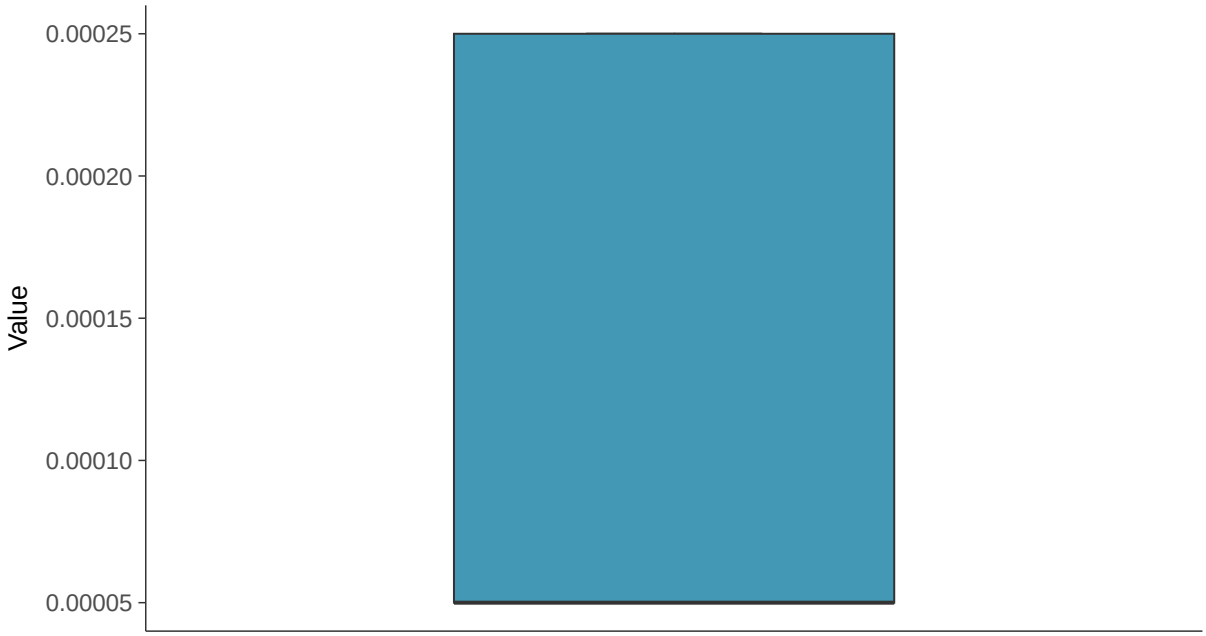
ID: 1_29_6_123





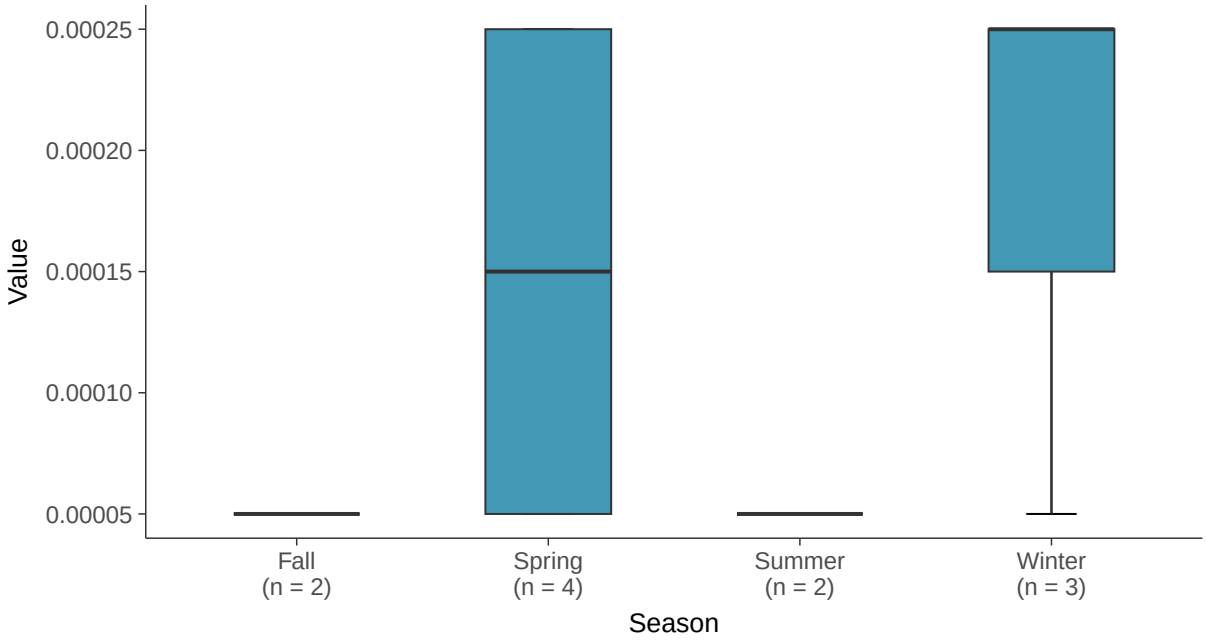
Boxplot

Silver, MW-19 (mg/L)



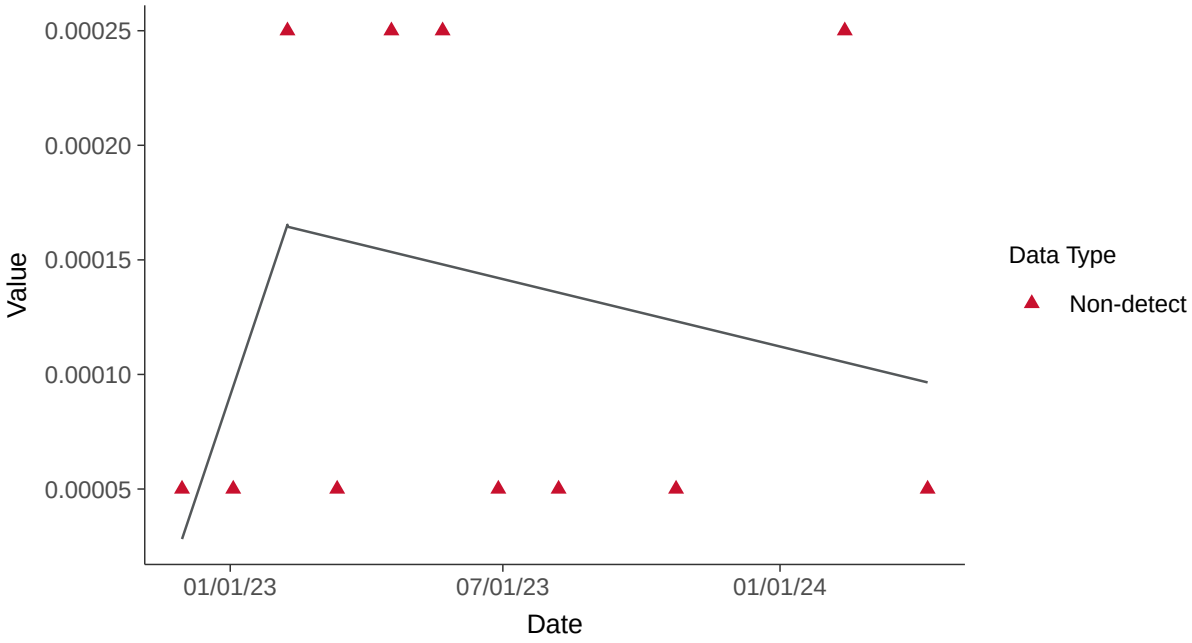
Boxplot by Season

Silver, MW-19 (mg/L)



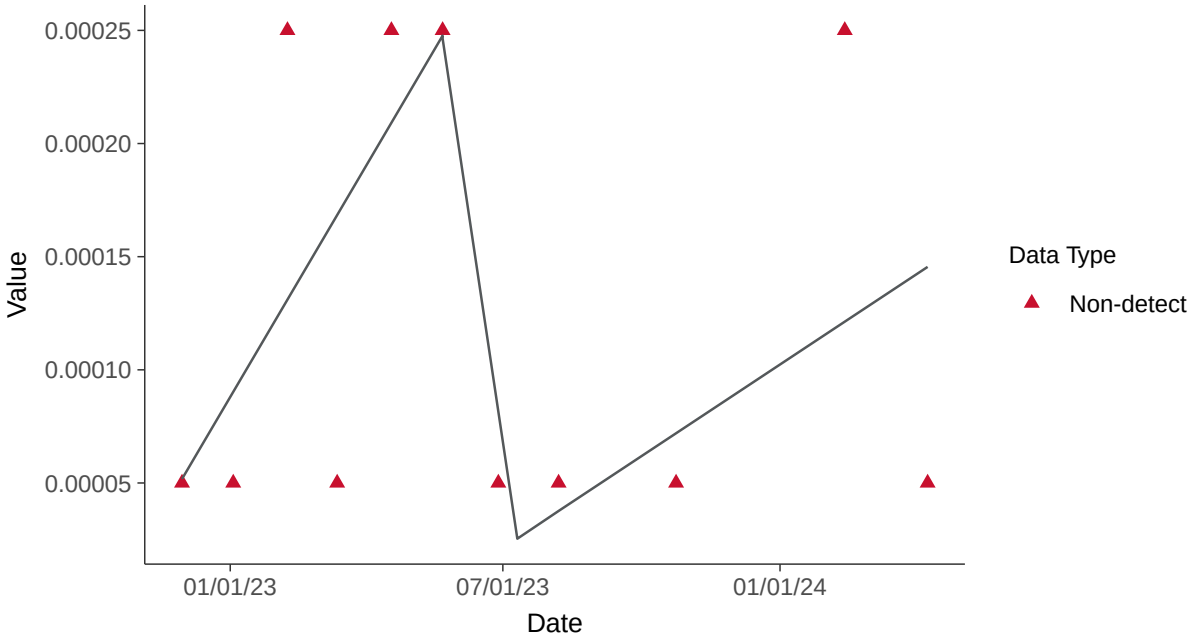
Trend Regression: Piecewise Linear-Linear

Silver, MW-19 (mg/L)



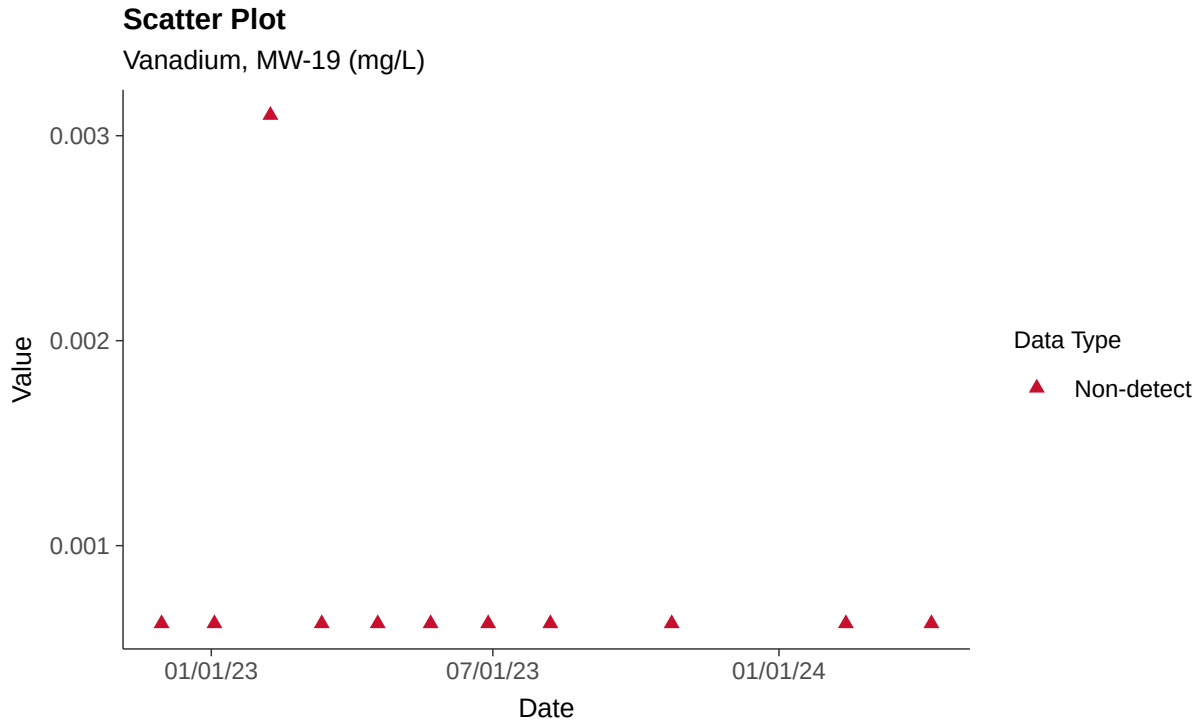
Trend Regression: Piecewise Linear-Linear-Linear

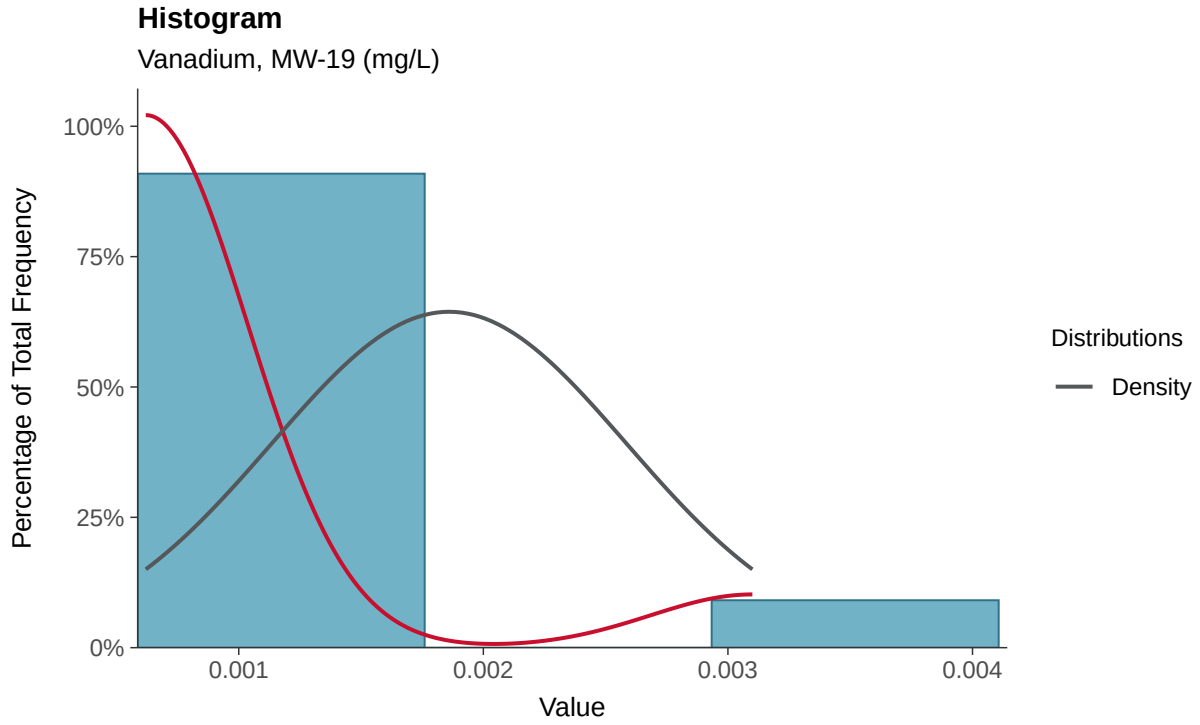
Silver, MW-19 (mg/L)



Part 115: Vanadium, MW-19

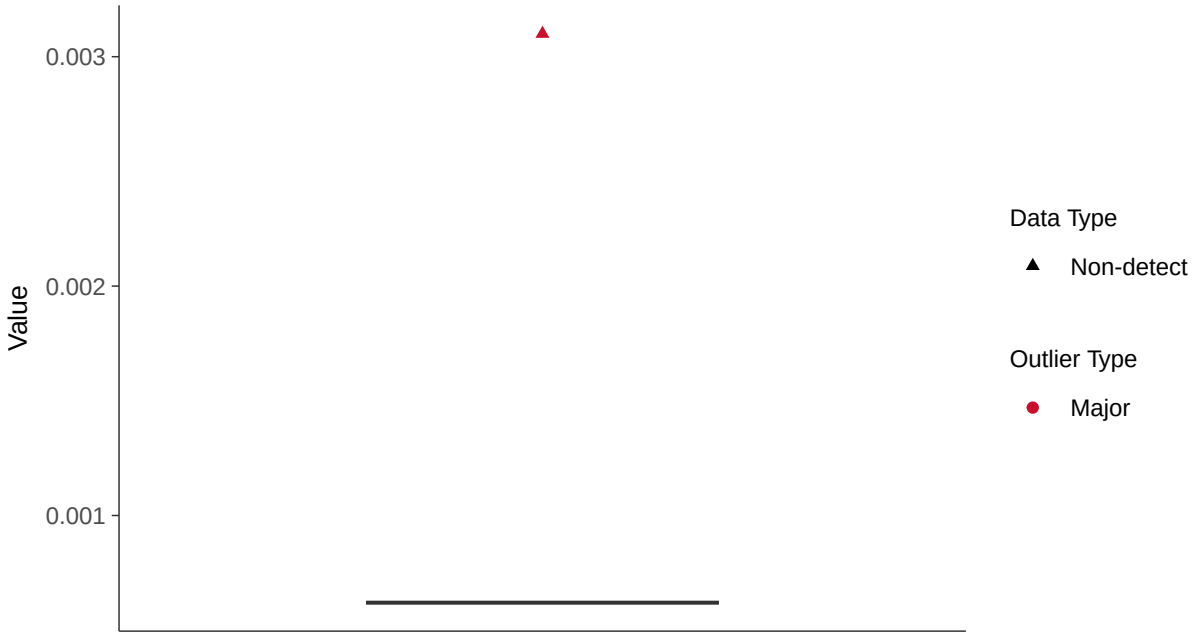
ID: 1_29_6_129





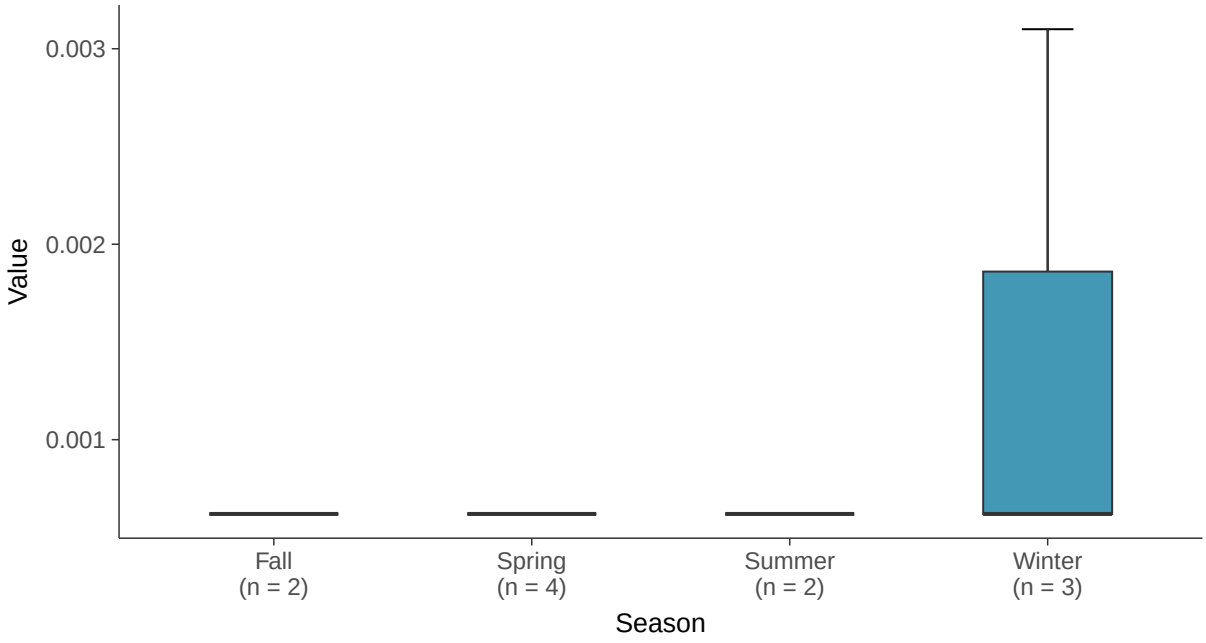
Boxplot

Vanadium, MW-19 (mg/L)



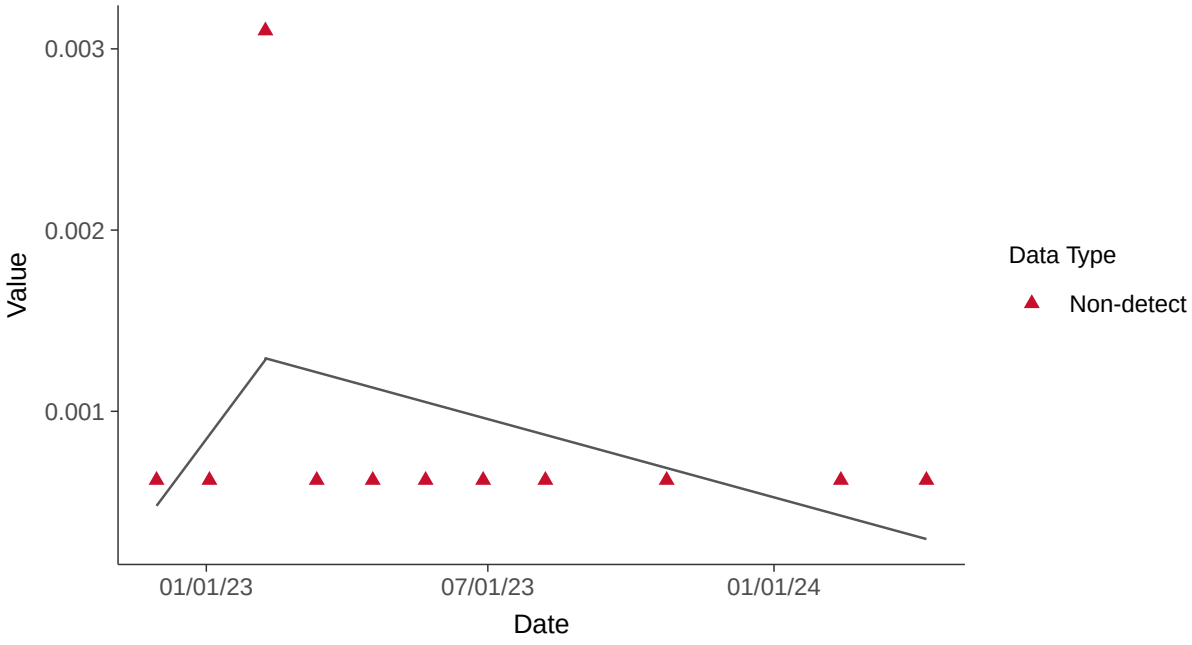
Boxplot by Season

Vanadium, MW-19 (mg/L)



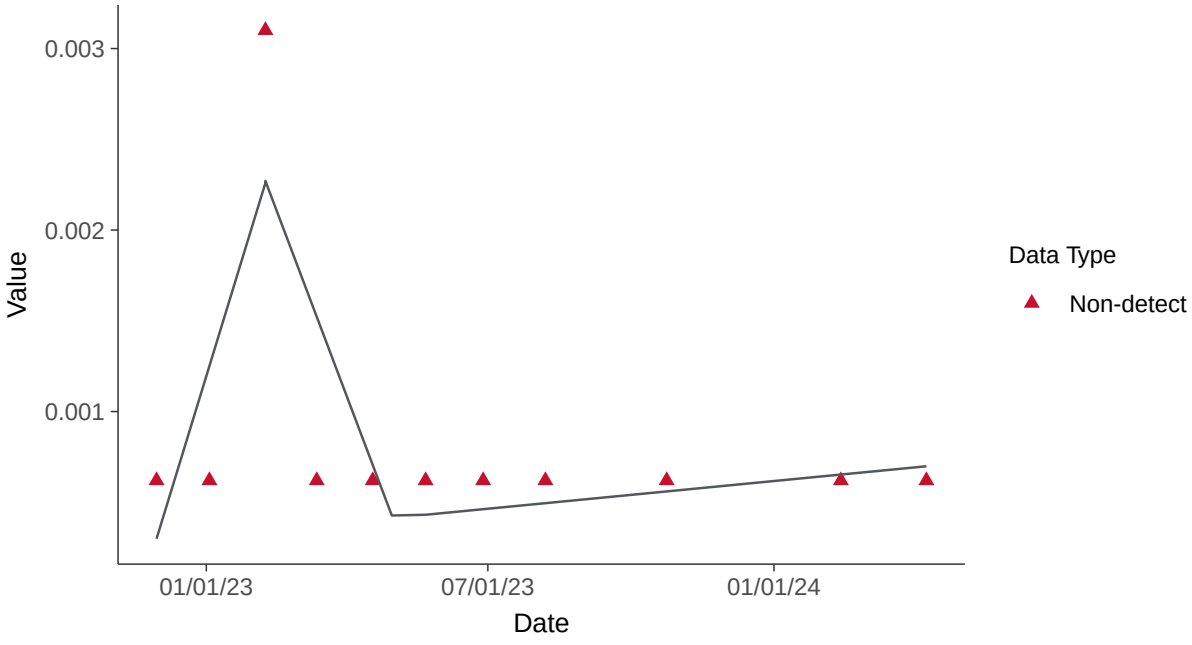
Trend Regression: Piecewise Linear-Linear

Vanadium, MW-19 (mg/L)



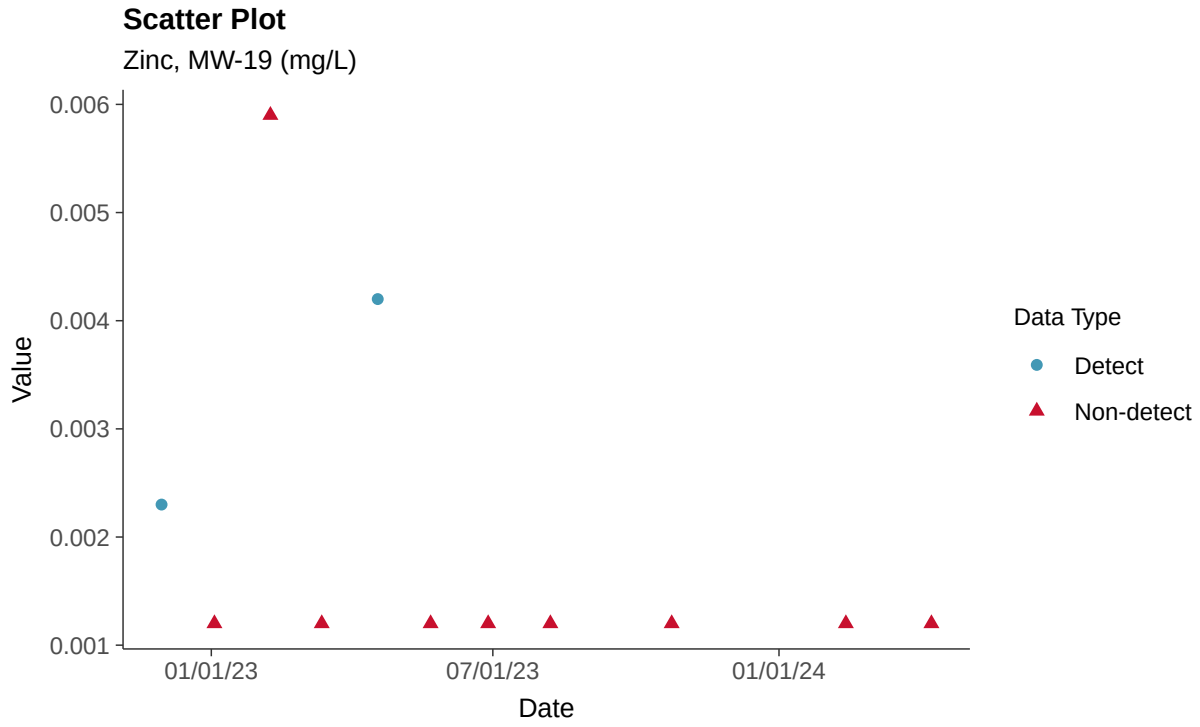
Trend Regression: Piecewise Linear-Linear-Linear

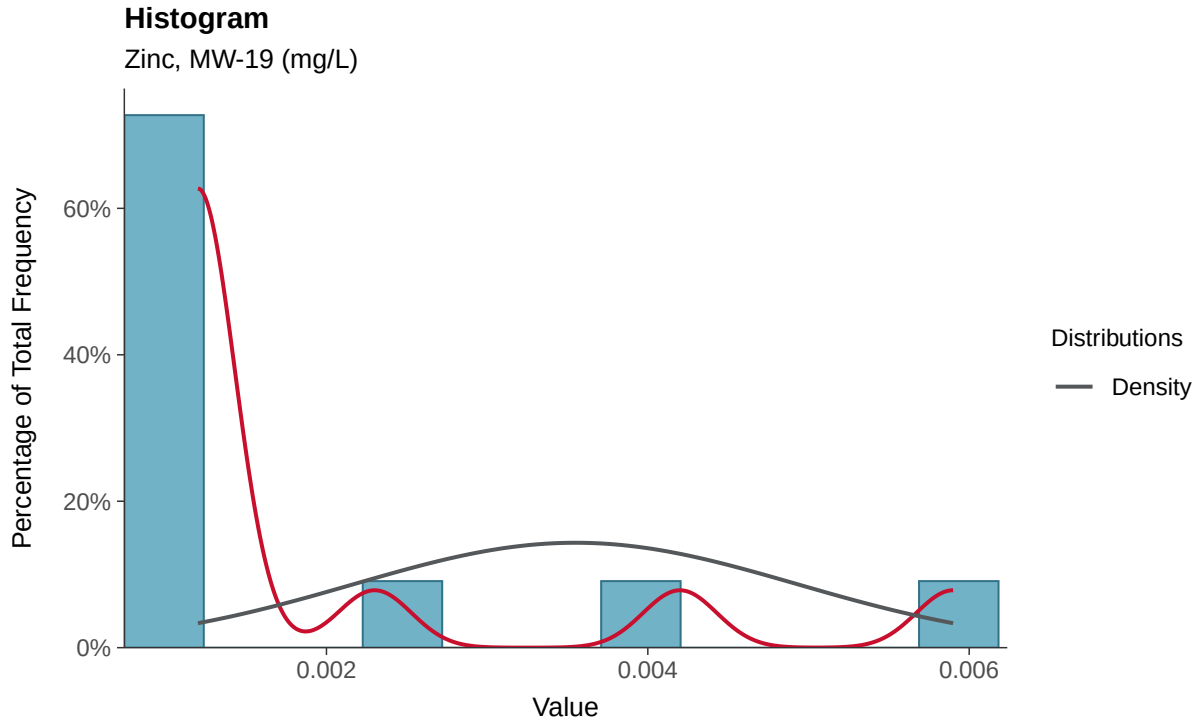
Vanadium, MW-19 (mg/L)



Part 115: Zinc, MW-19

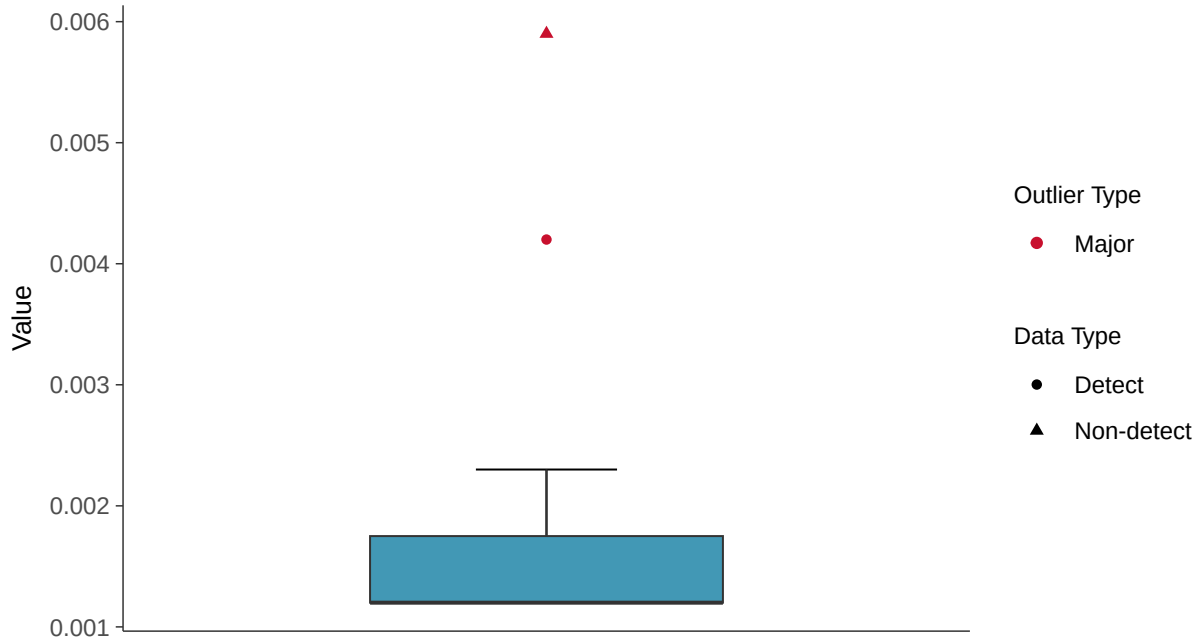
ID: 1_29_6_130





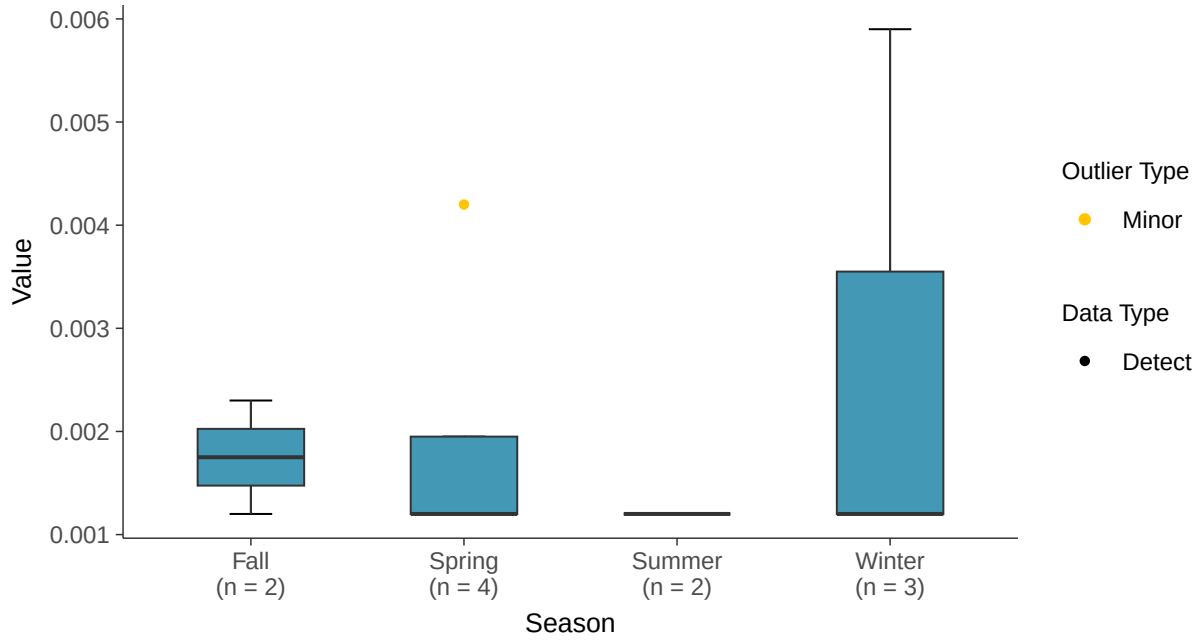
Boxplot

Zinc, MW-19 (mg/L)



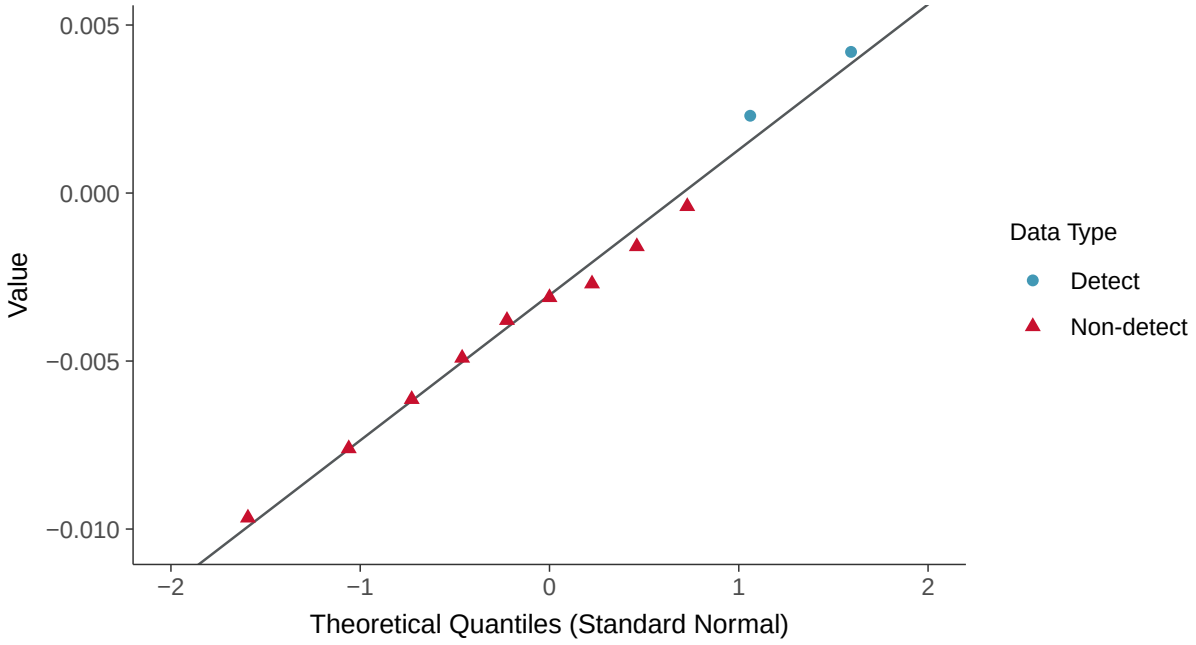
Boxplot by Season

Zinc, MW-19 (mg/L)



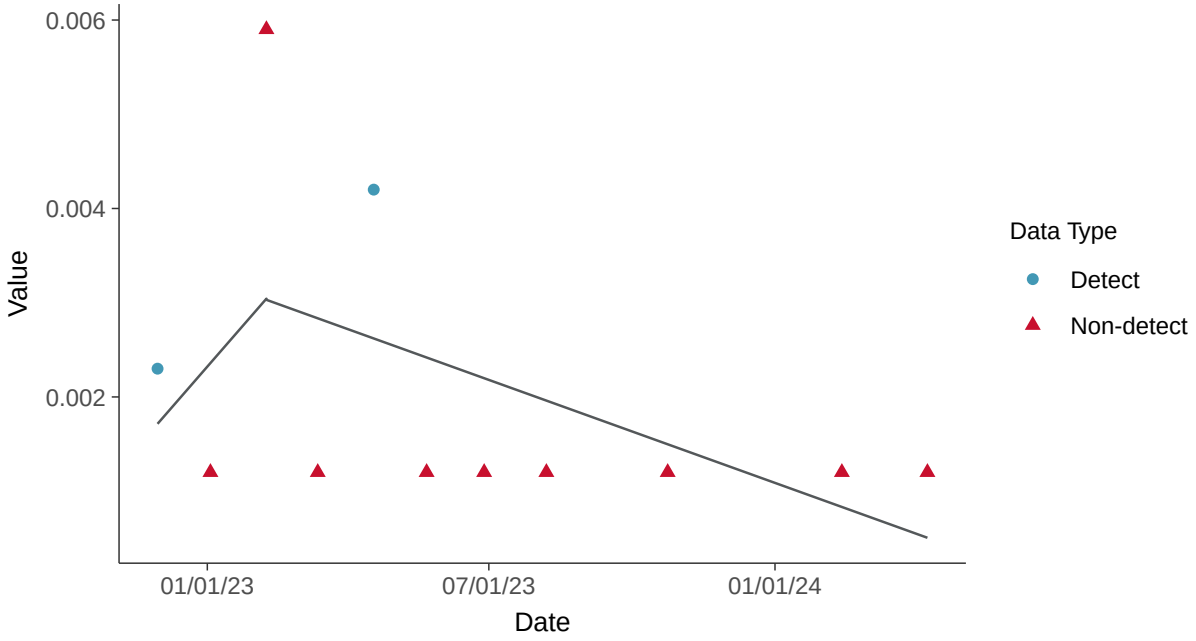
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-19 (mg/L)



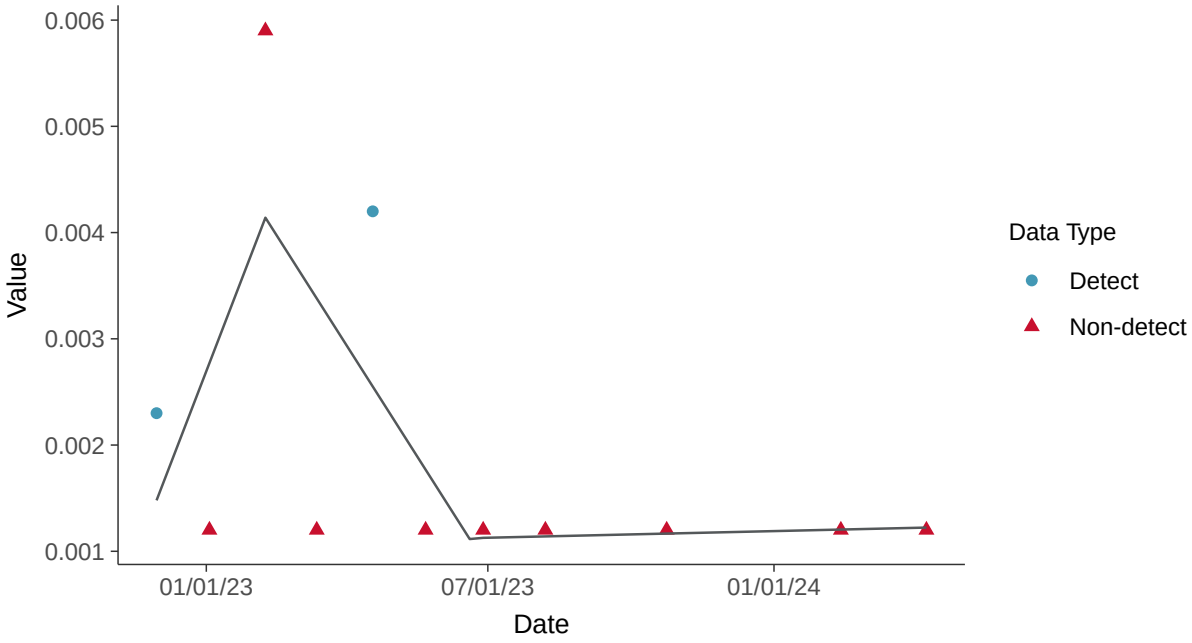
Trend Regression: Piecewise Linear-Linear

Zinc, MW-19 (mg/L)



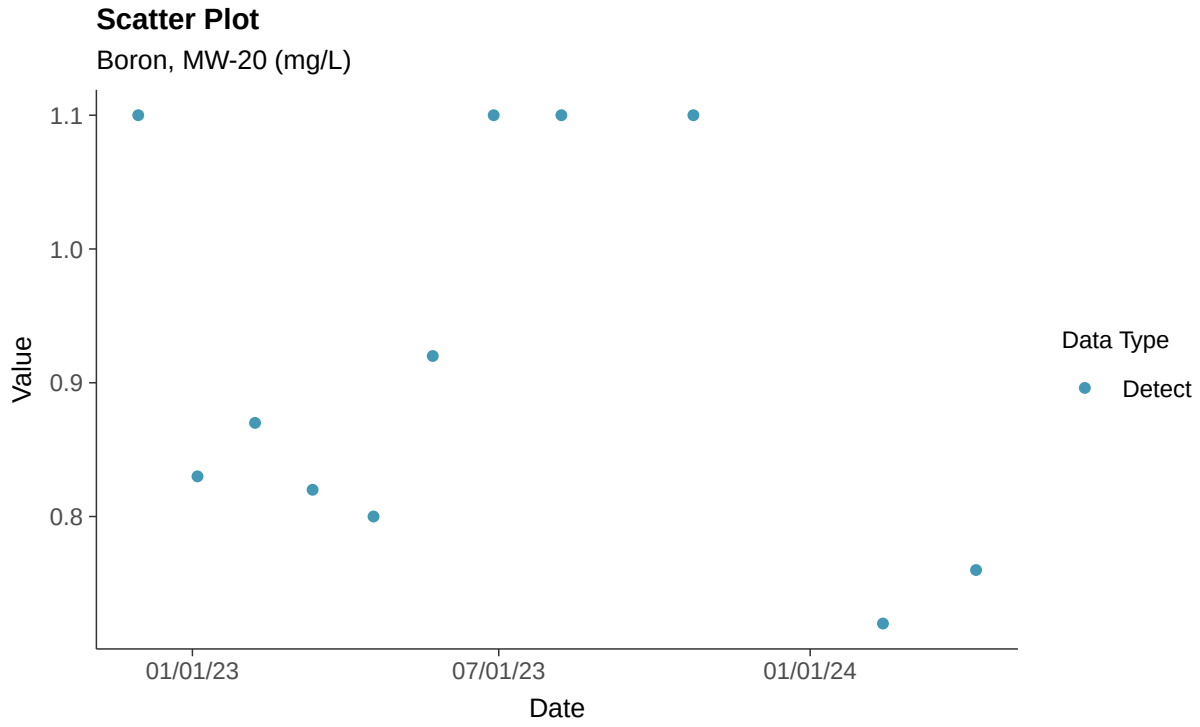
Trend Regression: Piecewise Linear-Linear-Linear

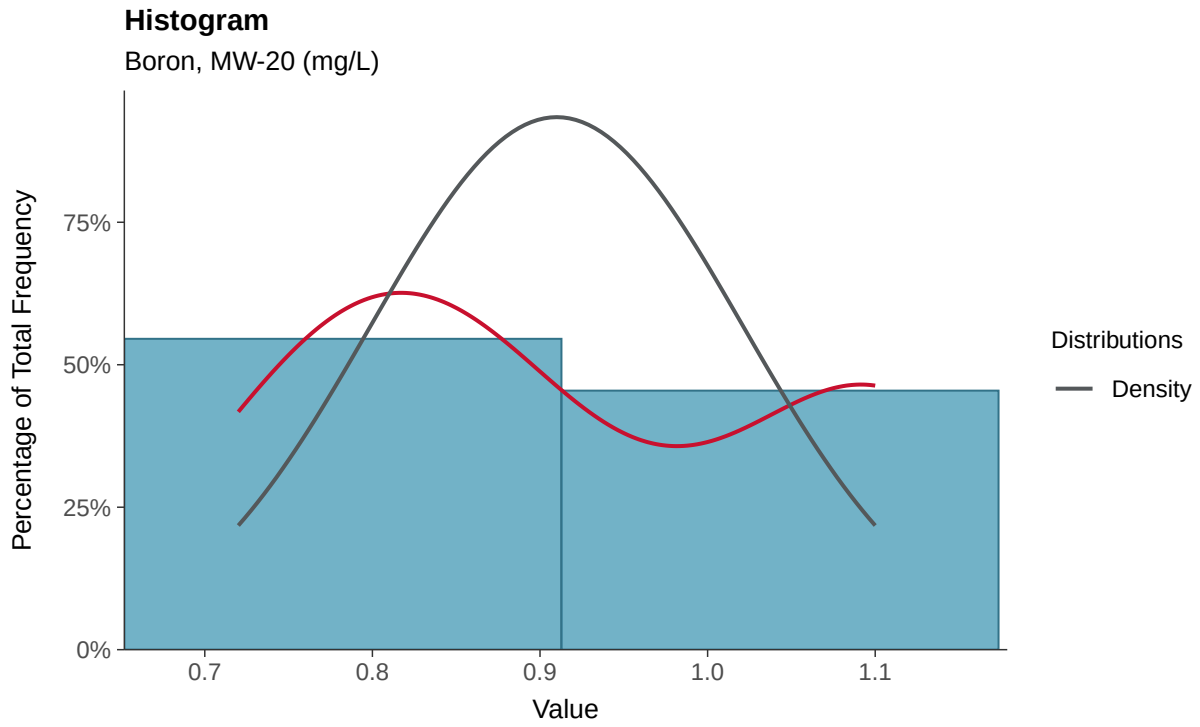
Zinc, MW-19 (mg/L)



Appendix III: Boron, MW-20

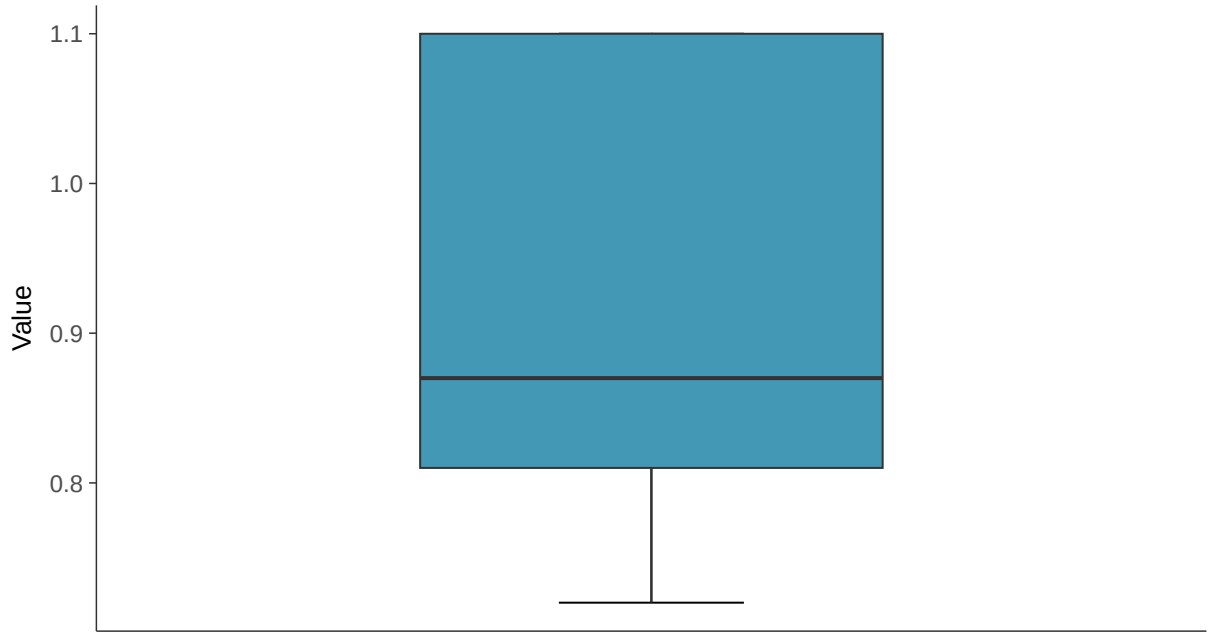
ID: 1_30_4_105





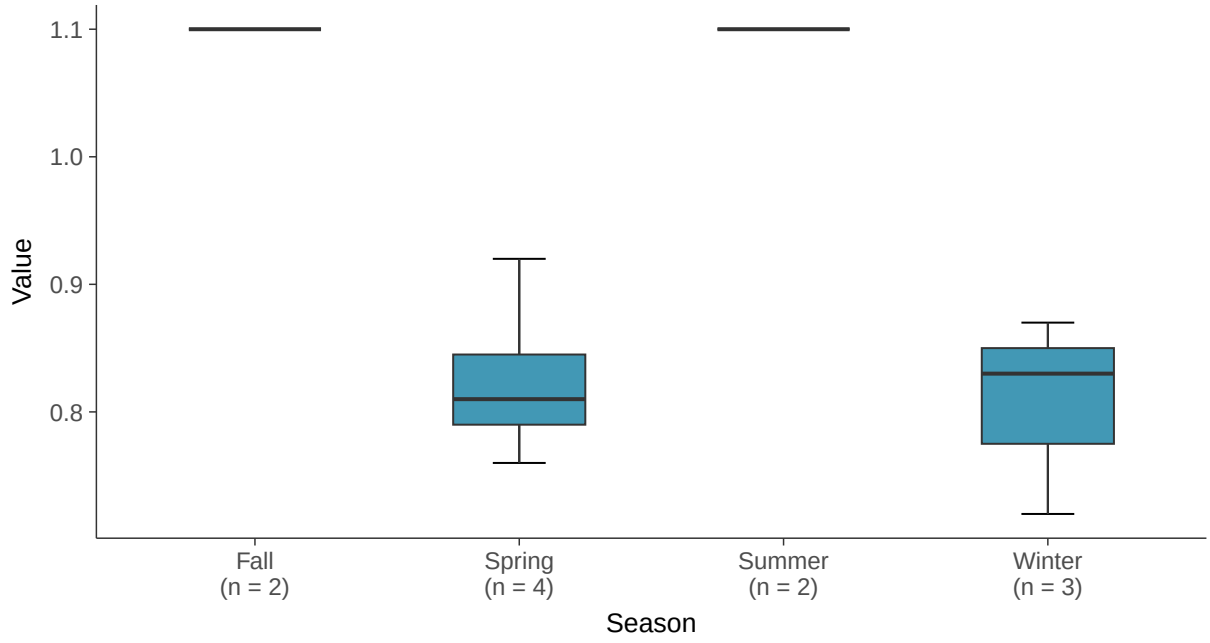
Boxplot

Boron, MW-20 (mg/L)



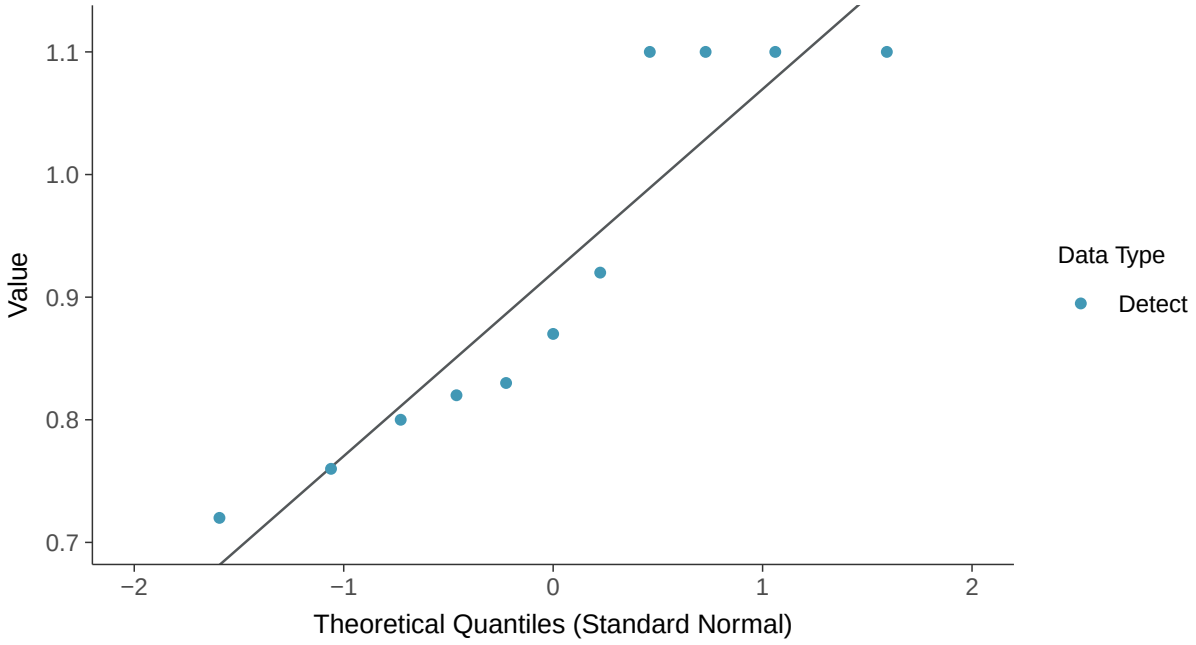
Boxplot by Season

Boron, MW-20 (mg/L)



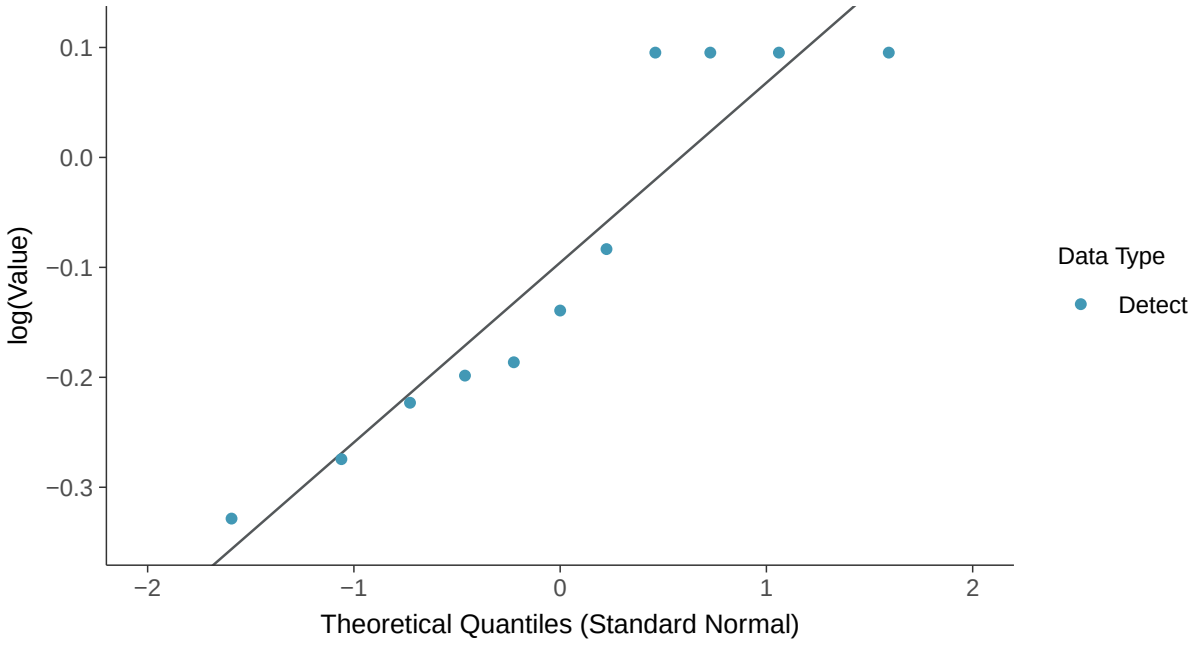
Normal Q-Q plot

Boron, MW-20 (mg/L)



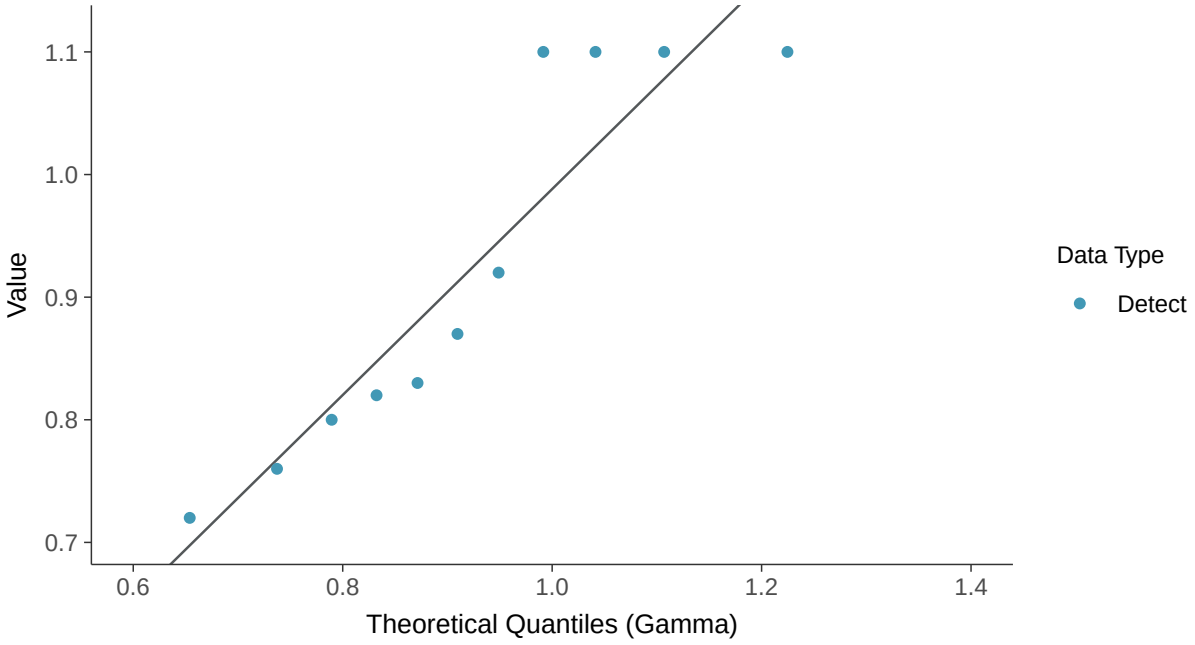
Lognormal Q-Q plot

Boron, MW-20 (mg/L)



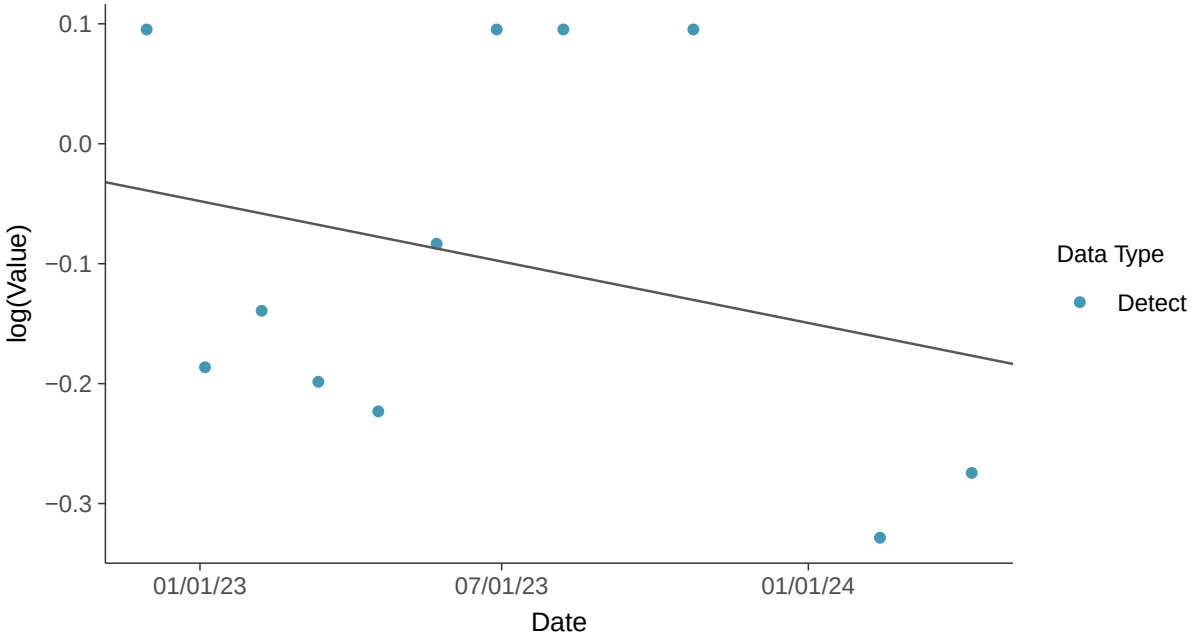
Gamma Q-Q plot

Boron, MW-20 (mg/L)



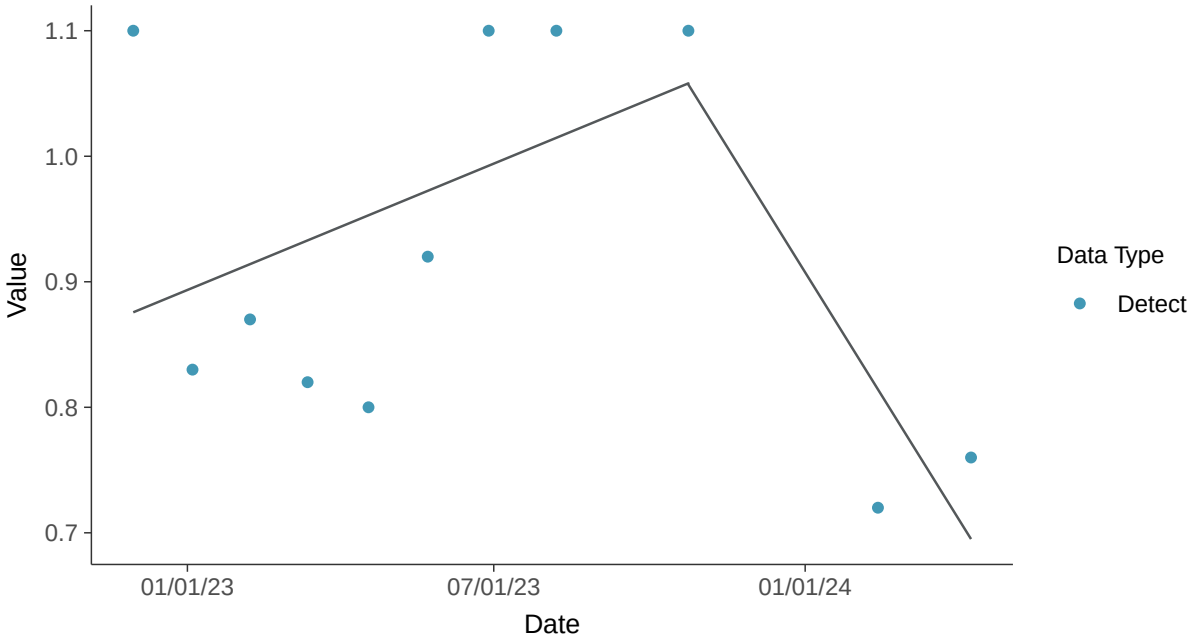
Trend Regression: Lognormal MLE

Boron, MW-20 (mg/L)



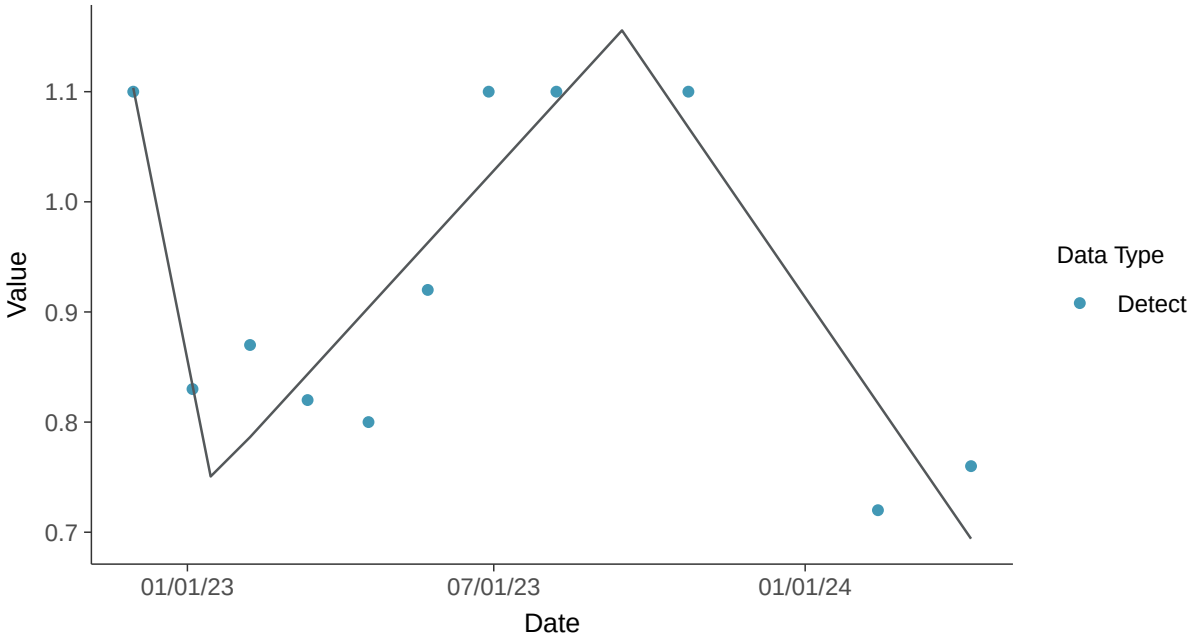
Trend Regression: Piecewise Linear-Linear

Boron, MW-20 (mg/L)



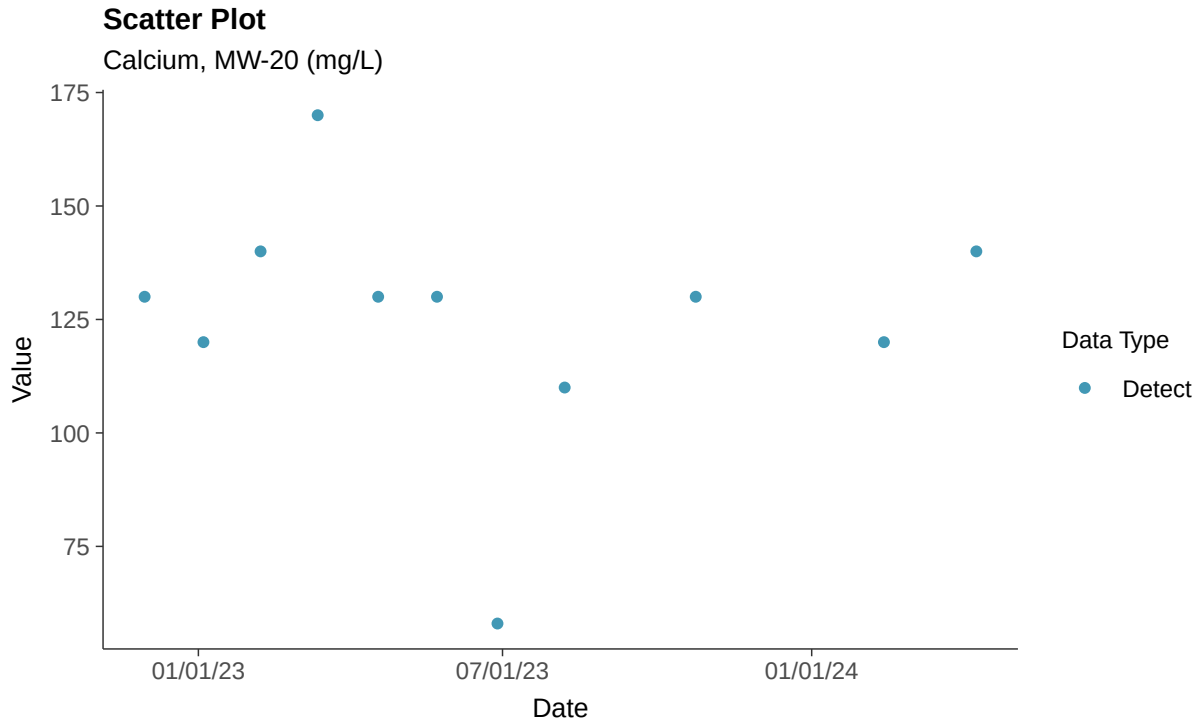
Trend Regression: Piecewise Linear-Linear-Linear

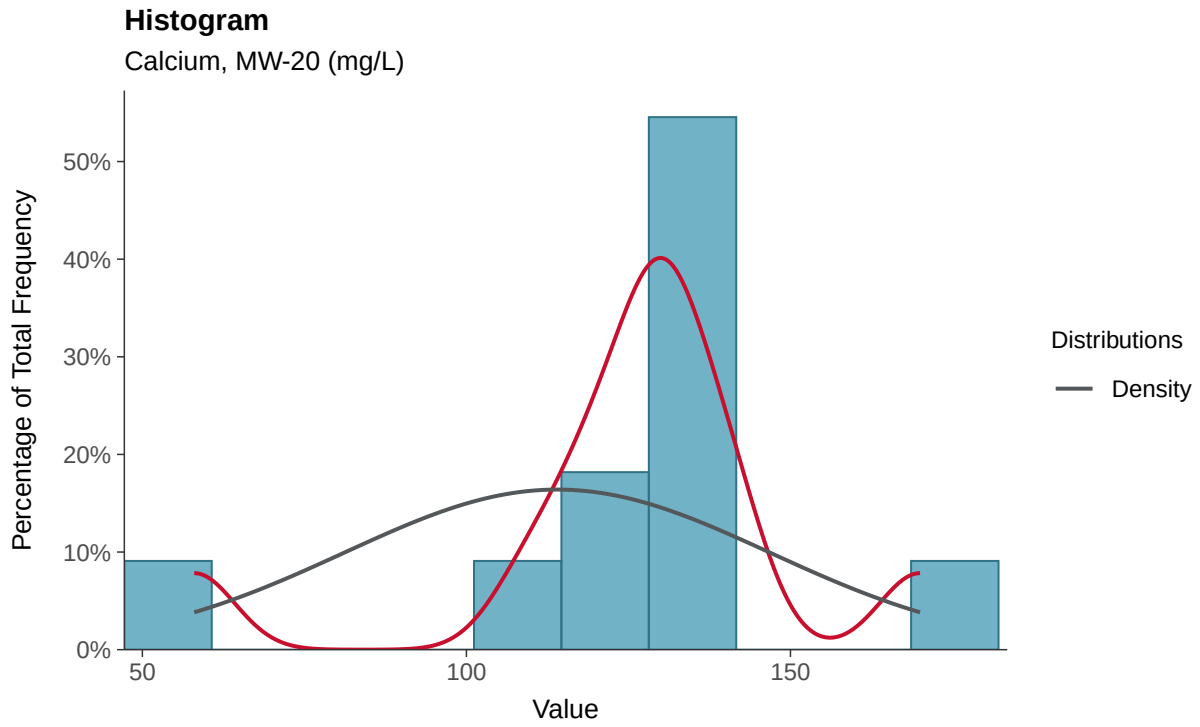
Boron, MW-20 (mg/L)



Appendix III: Calcium, MW-20

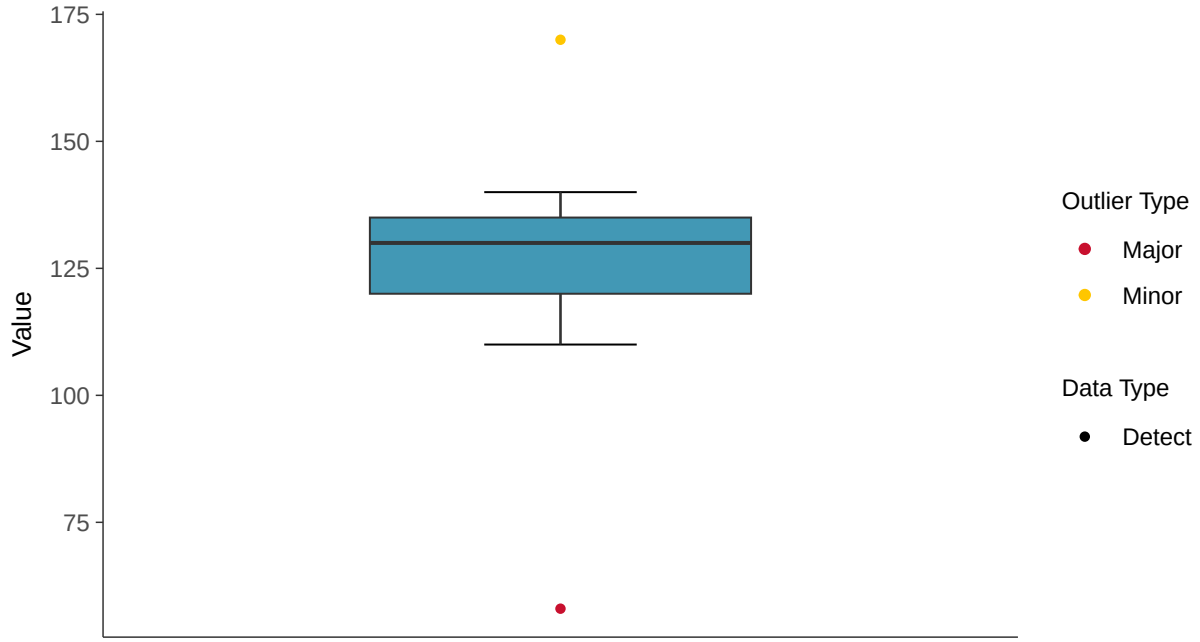
ID: 1_30_4_107





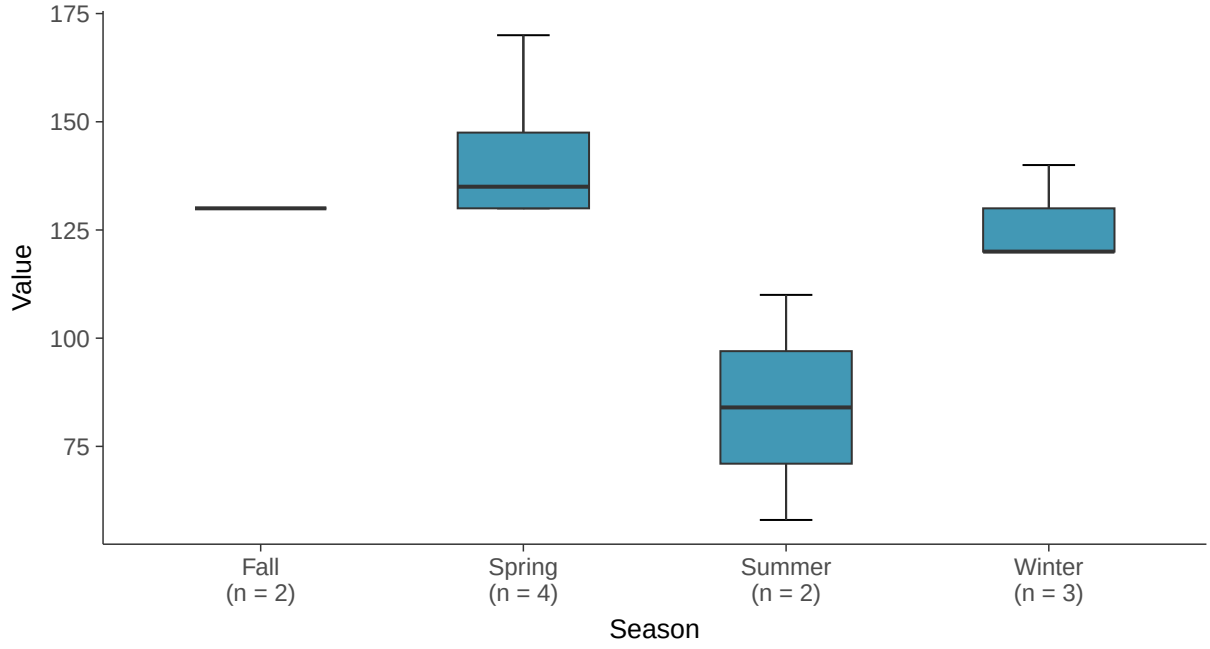
Boxplot

Calcium, MW-20 (mg/L)



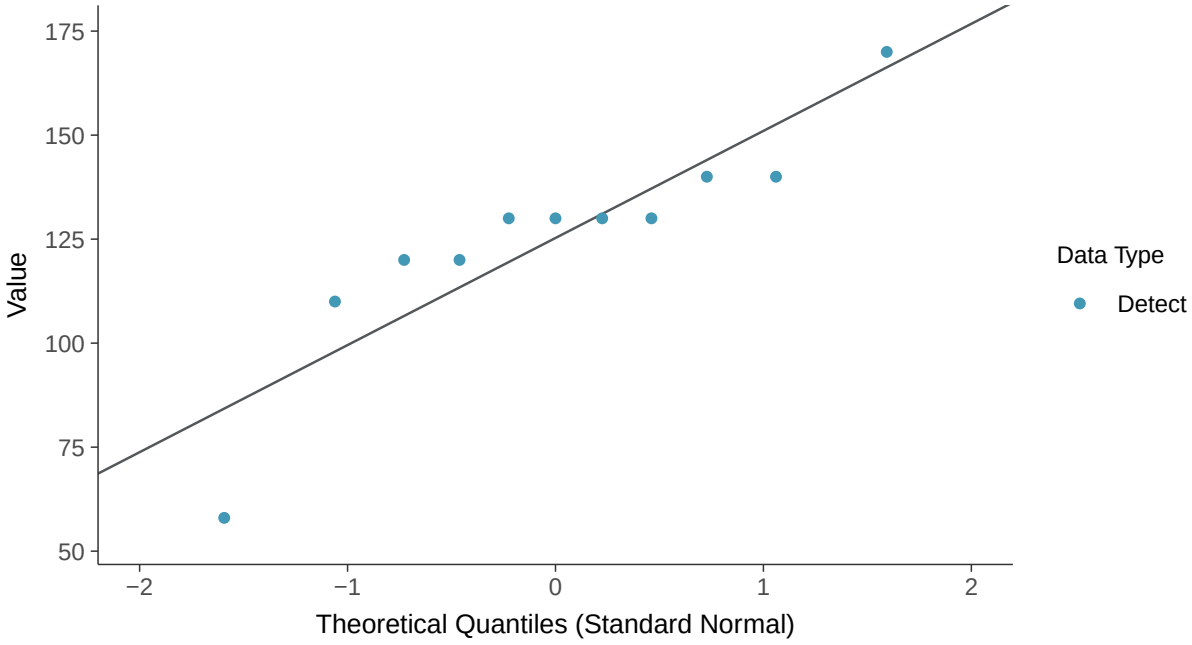
Boxplot by Season

Calcium, MW-20 (mg/L)



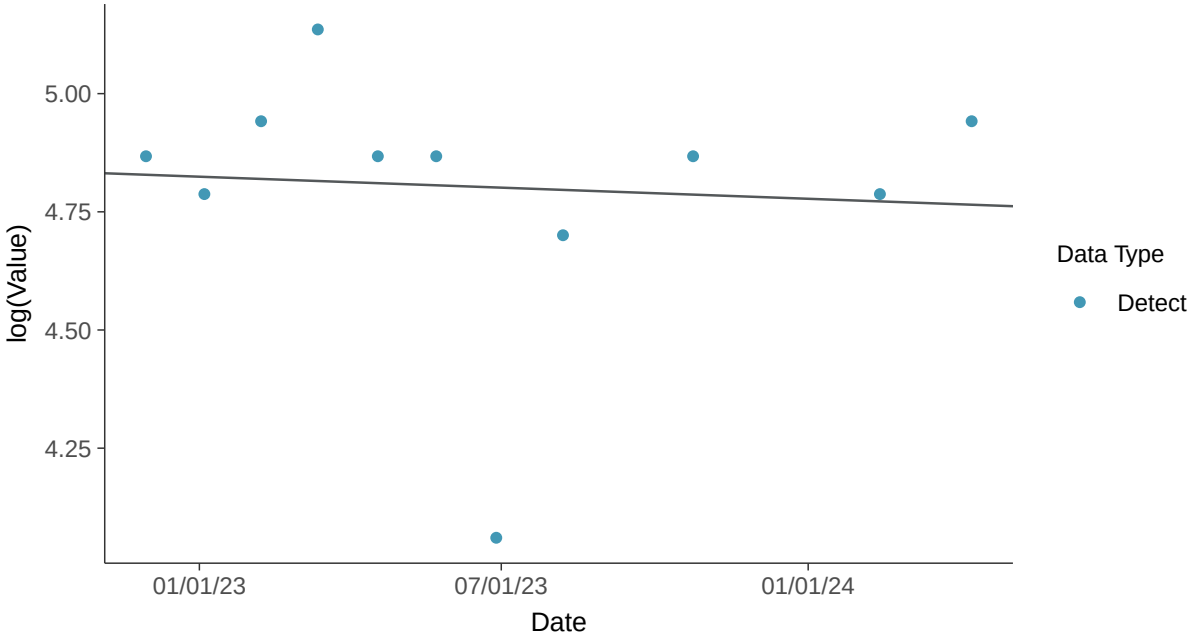
Normal Q-Q plot

Calcium, MW-20 (mg/L)



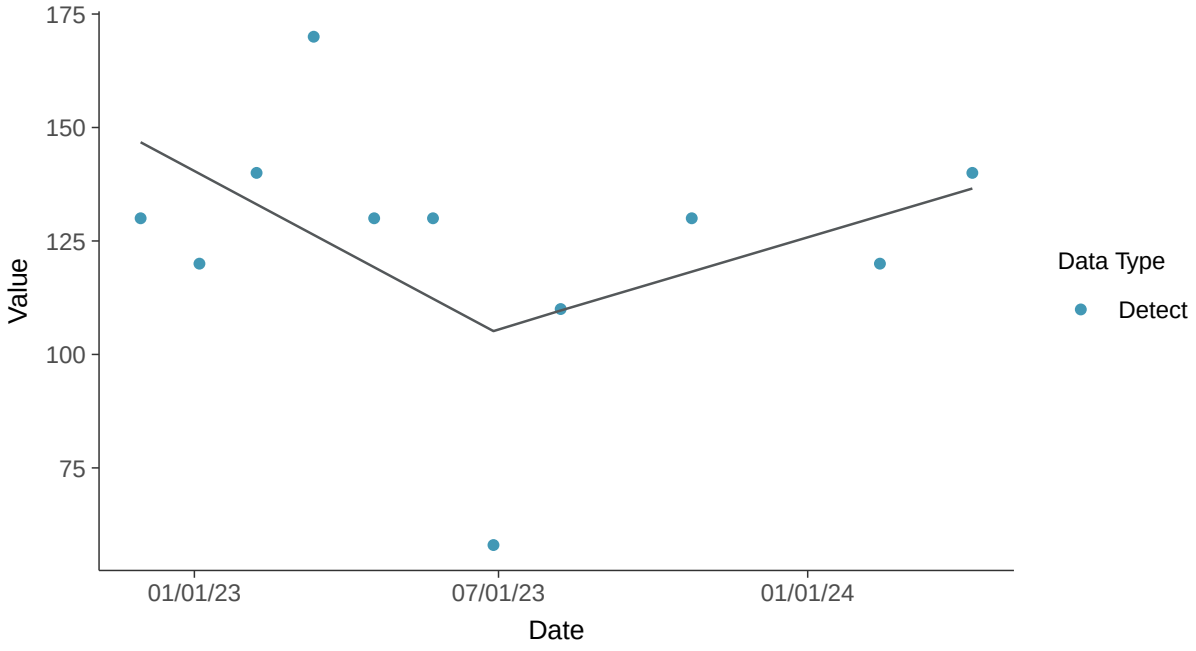
Trend Regression: Lognormal MLE

Calcium, MW-20 (mg/L)



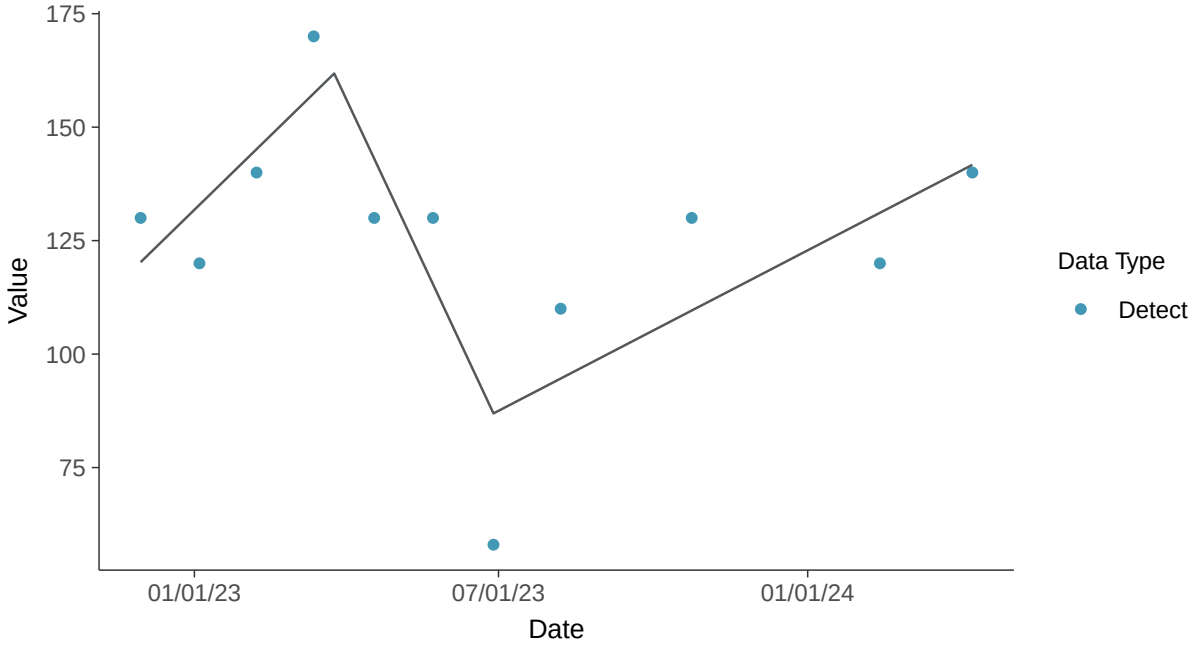
Trend Regression: Piecewise Linear-Linear

Calcium, MW-20 (mg/L)



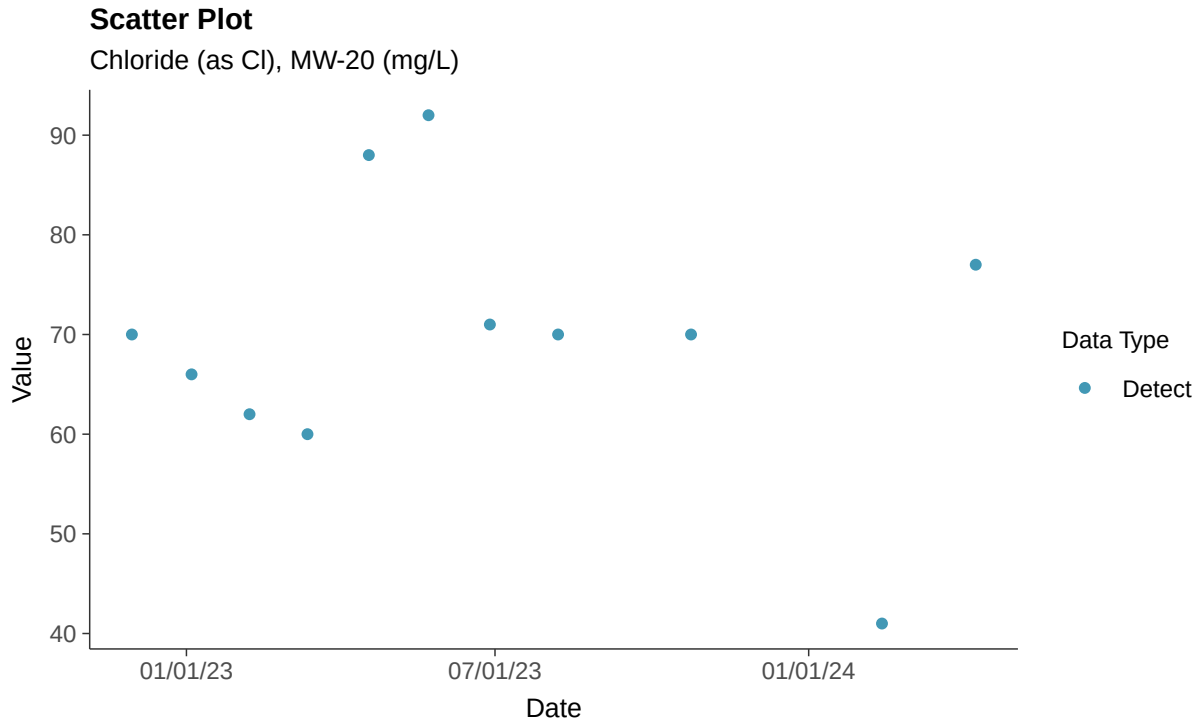
Trend Regression: Piecewise Linear-Linear-Linear

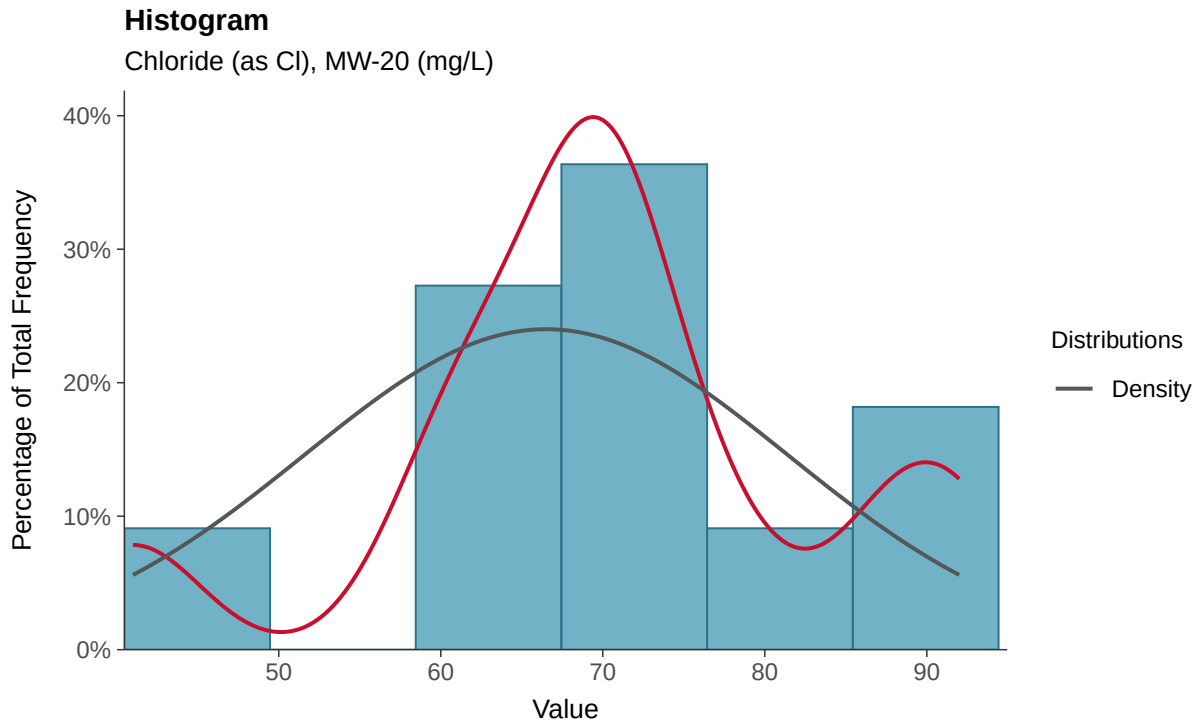
Calcium, MW-20 (mg/L)



Appendix III: Chloride (as Cl), MW-20

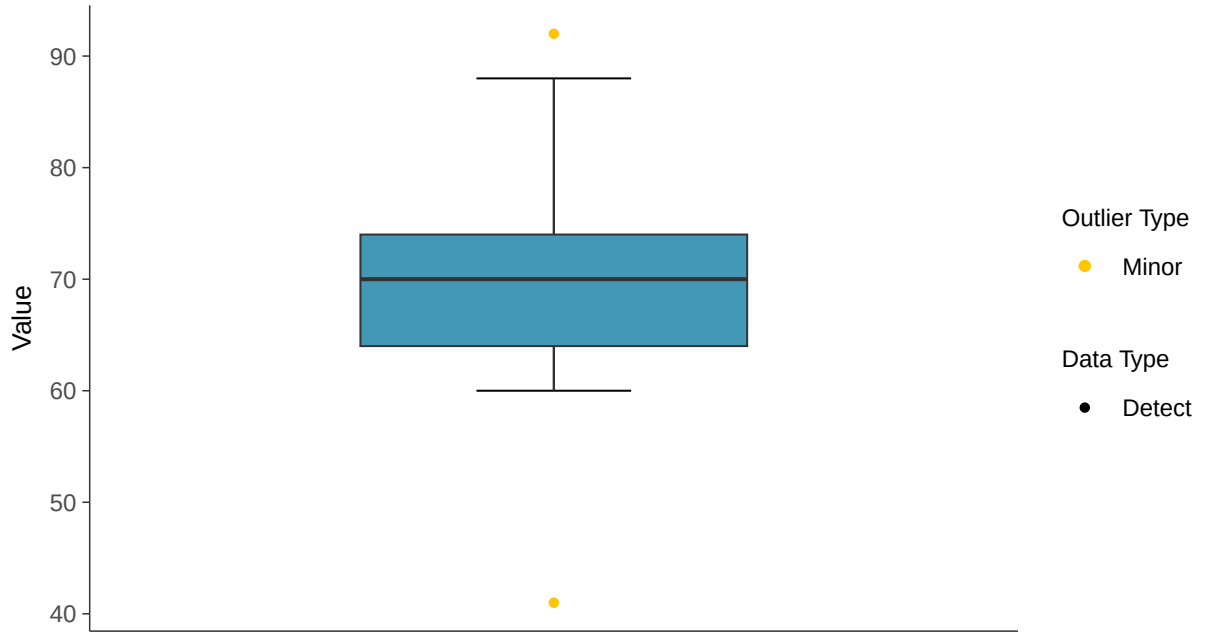
ID: 1_30_4_108





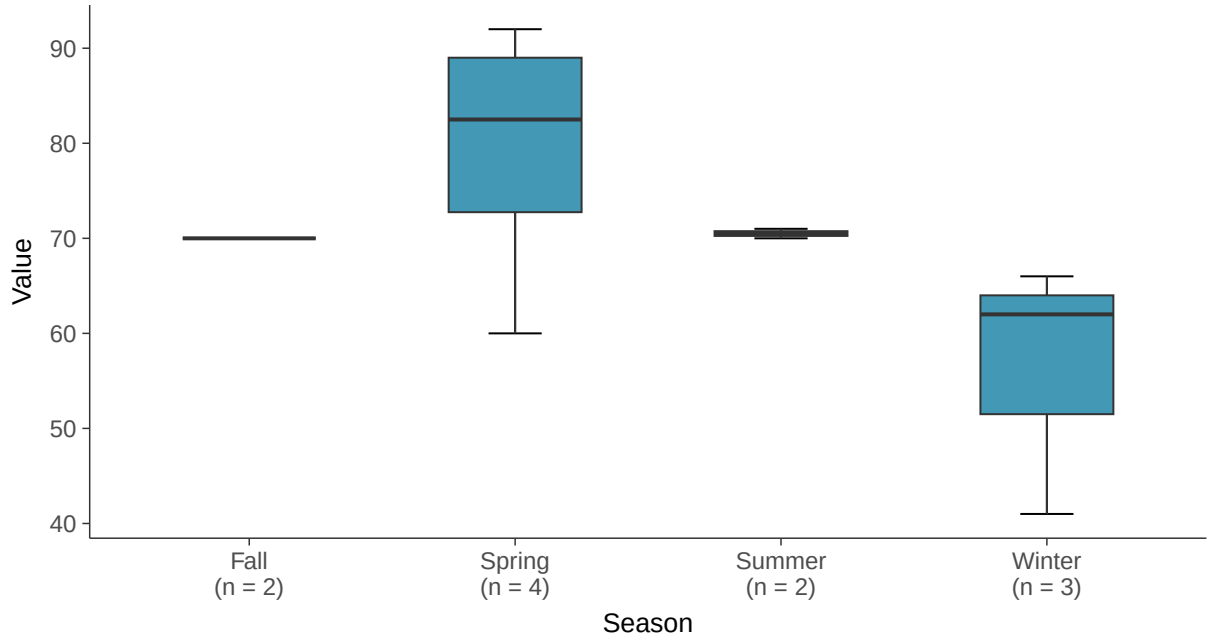
Boxplot

Chloride (as Cl), MW-20 (mg/L)



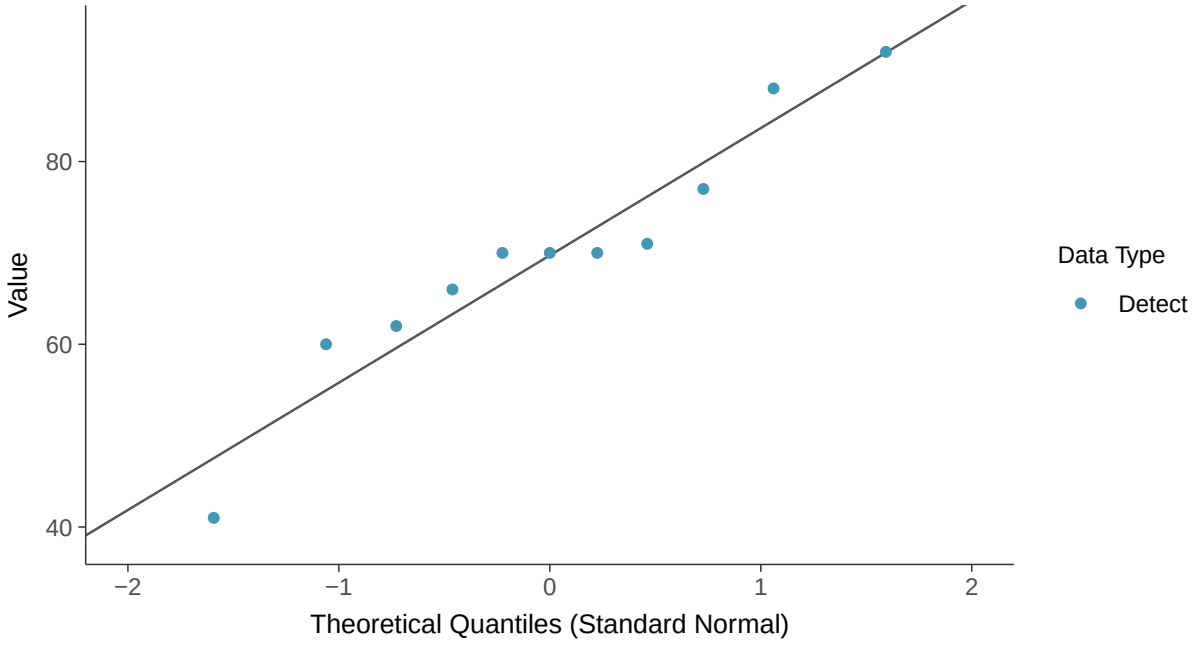
Boxplot by Season

Chloride (as Cl), MW-20 (mg/L)



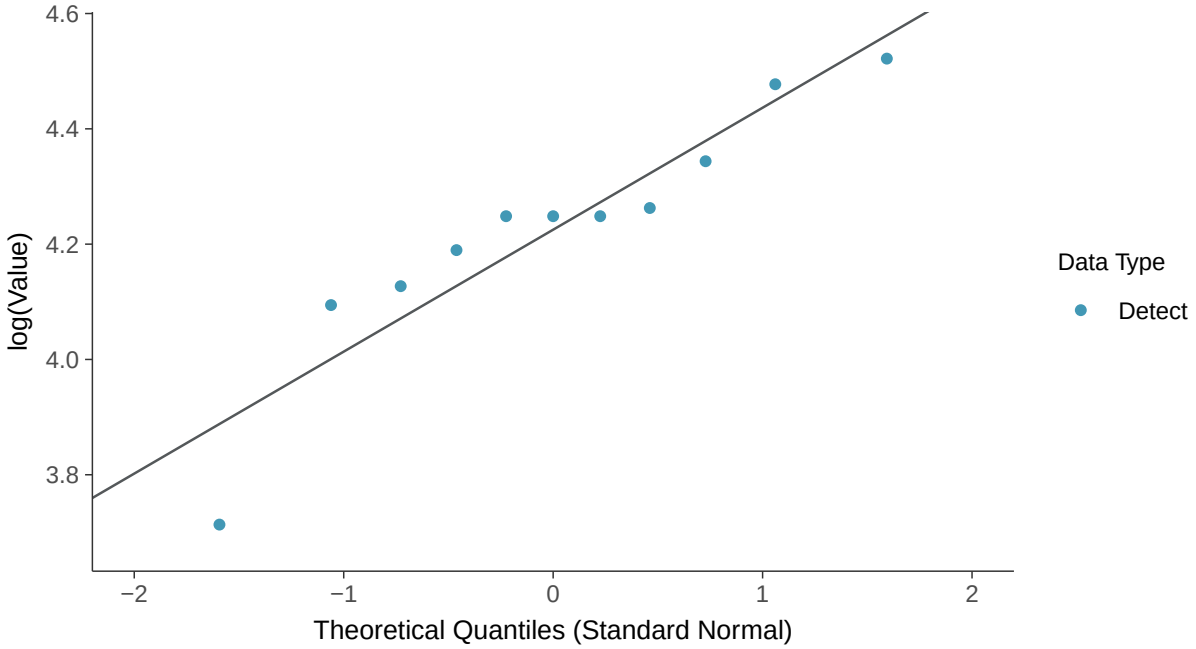
Normal Q-Q plot

Chloride (as Cl), MW-20 (mg/L)



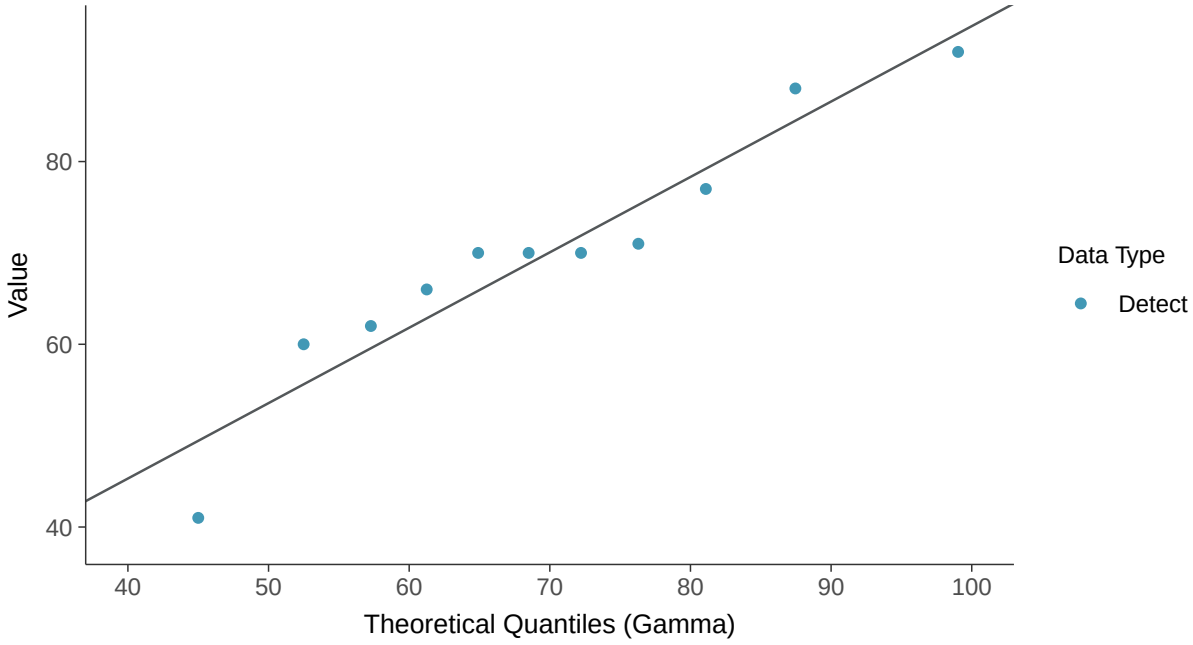
Lognormal Q-Q plot

Chloride (as Cl), MW-20 (mg/L)



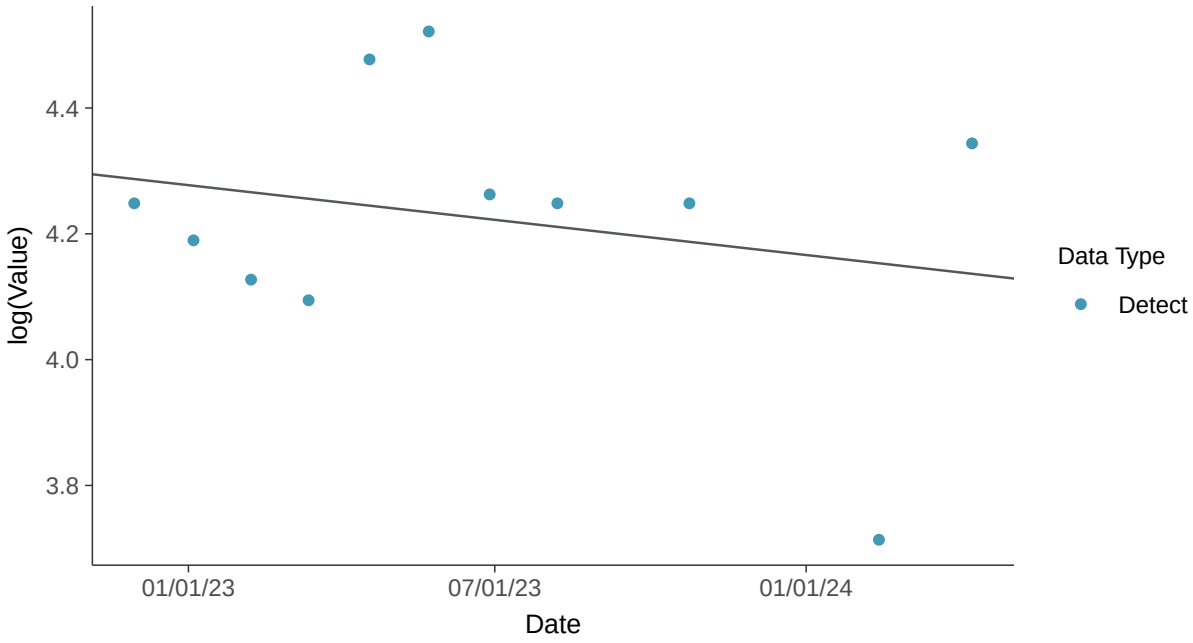
Gamma Q-Q plot

Chloride (as Cl), MW-20 (mg/L)



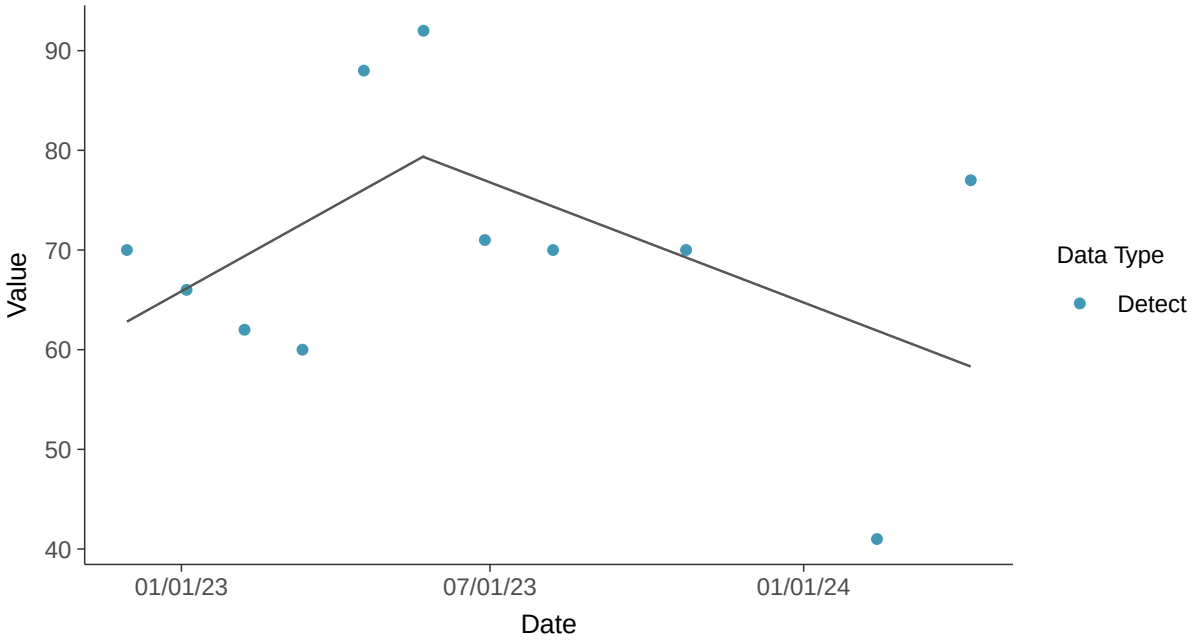
Trend Regression: Lognormal MLE

Chloride (as Cl), MW-20 (mg/L)



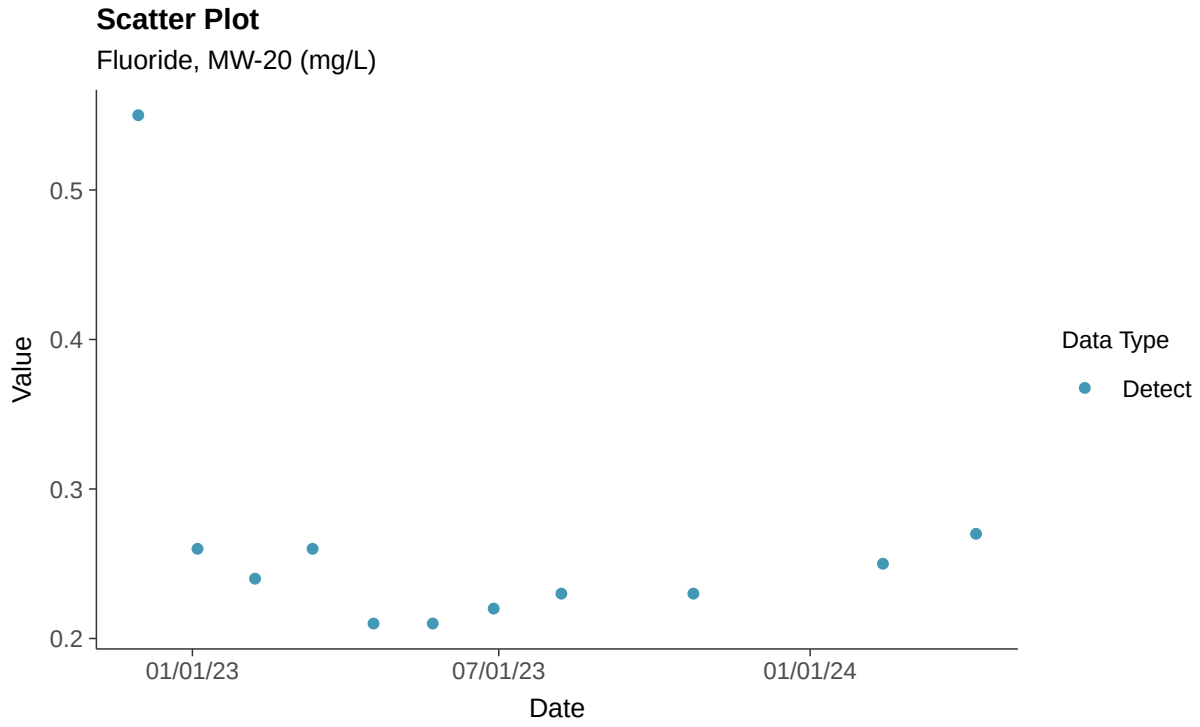
Trend Regression: Piecewise Linear-Linear

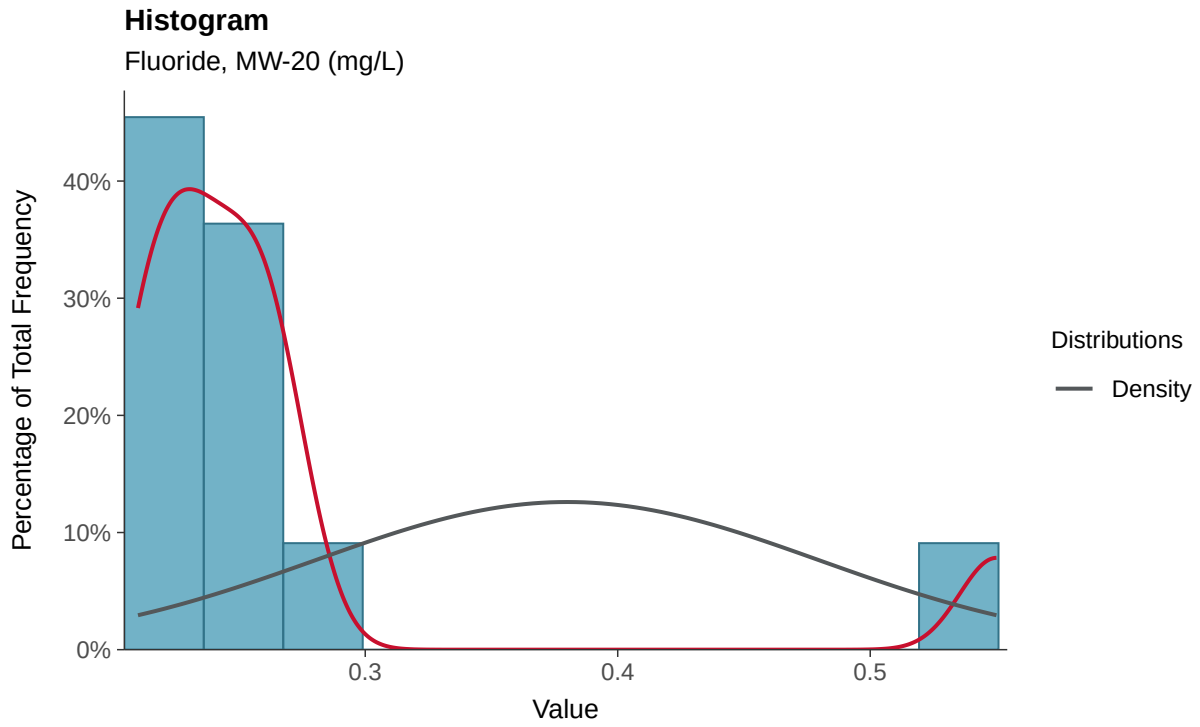
Chloride (as Cl), MW-20 (mg/L)



Appendix III: Fluoride, MW-20

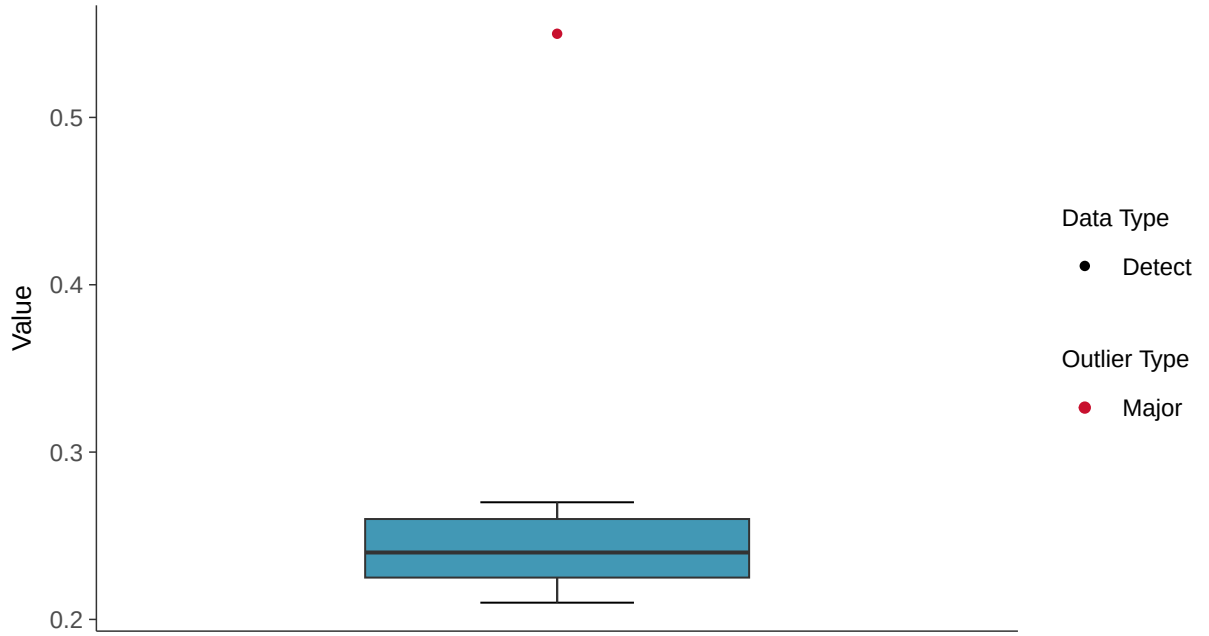
ID: 1_30_4_112





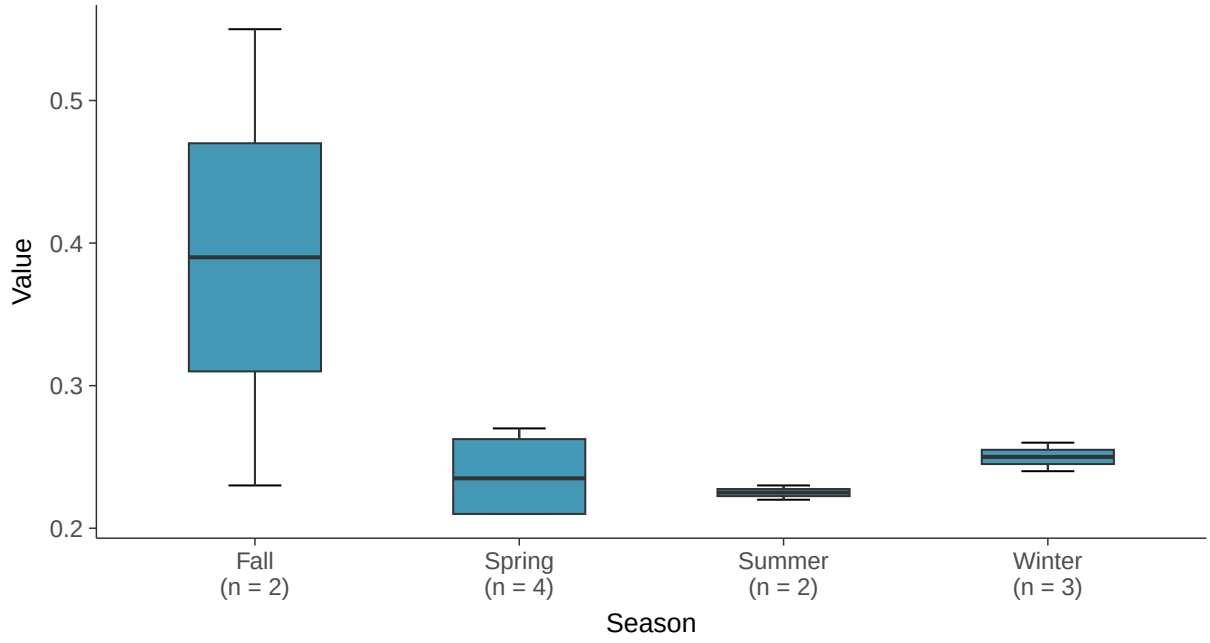
Boxplot

Fluoride, MW-20 (mg/L)



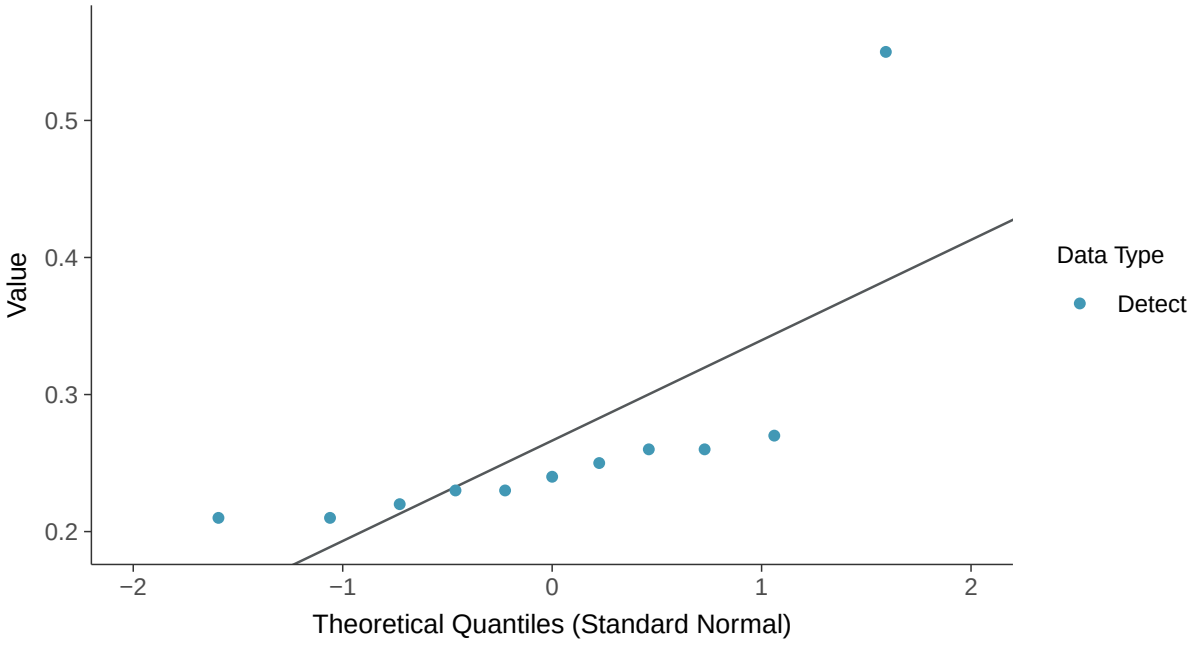
Boxplot by Season

Fluoride, MW-20 (mg/L)



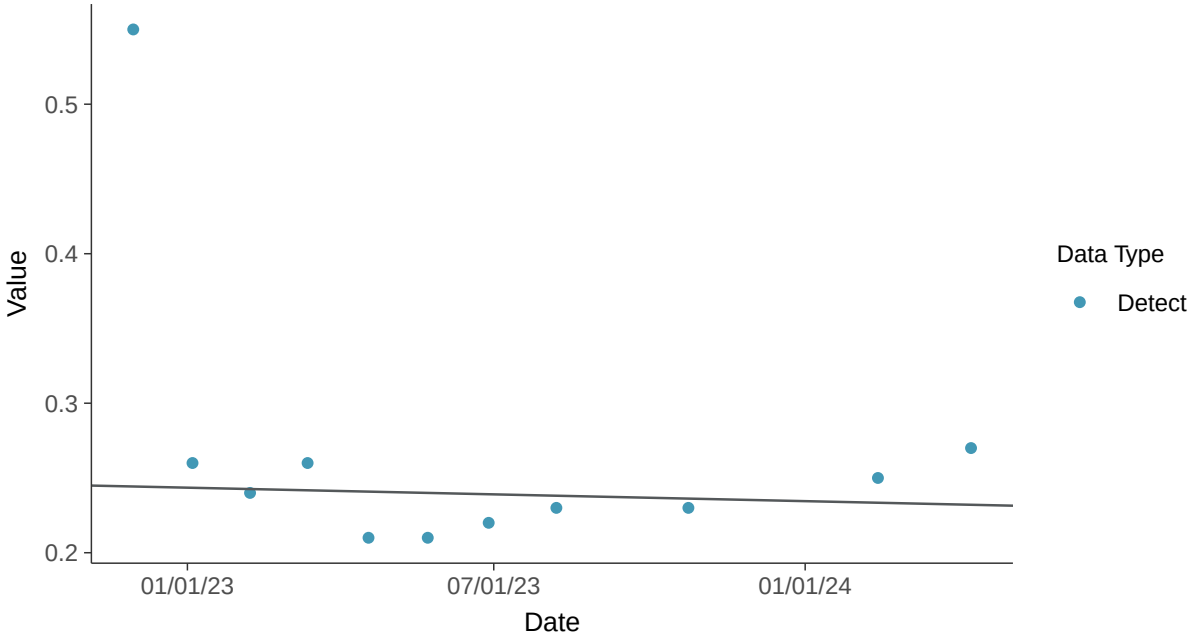
Normal Q-Q plot

Fluoride, MW-20 (mg/L)



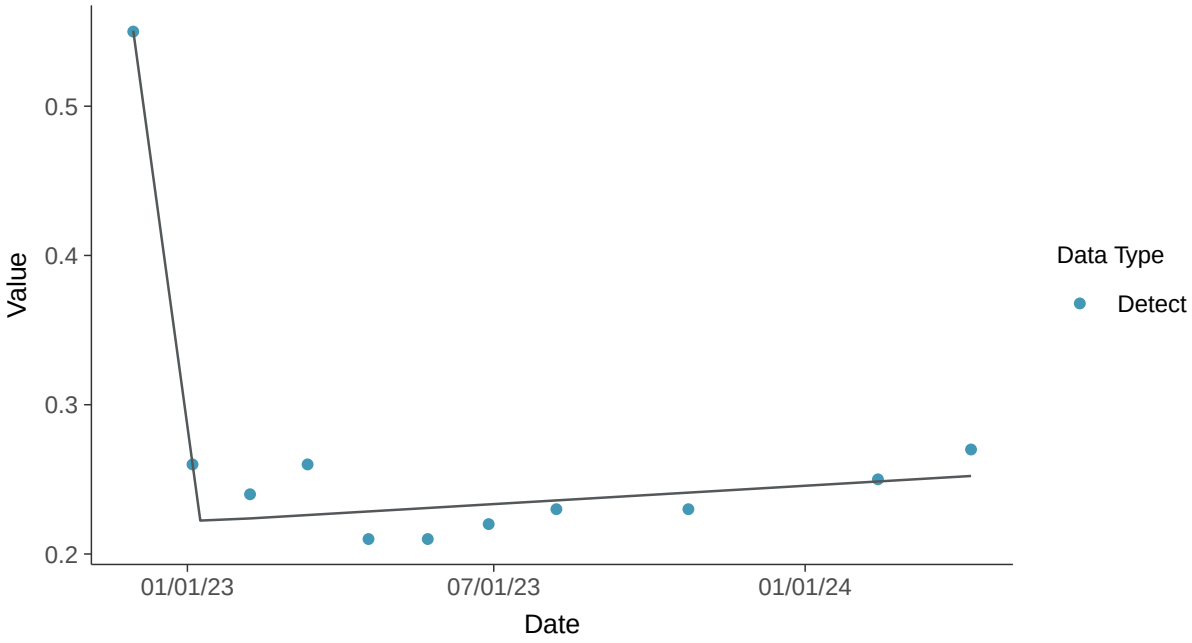
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Fluoride, MW-20 (mg/L)



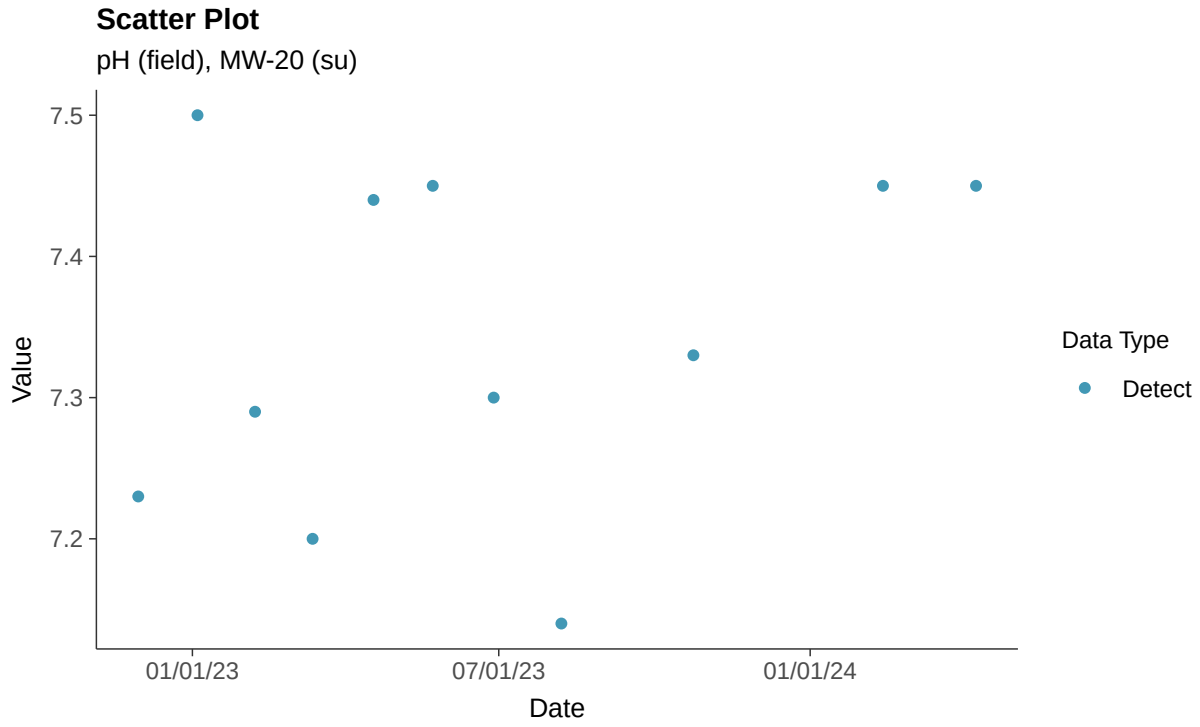
Trend Regression: Piecewise Linear-Linear

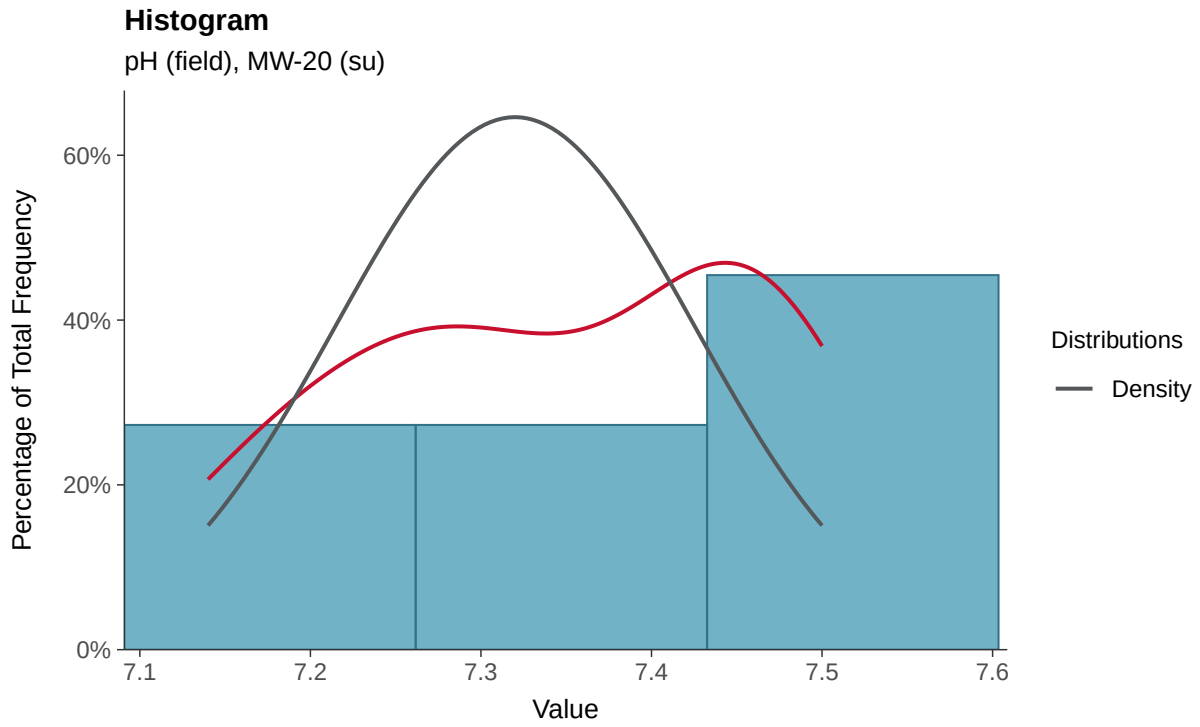
Fluoride, MW-20 (mg/L)



Appendix III: pH (field), MW-20

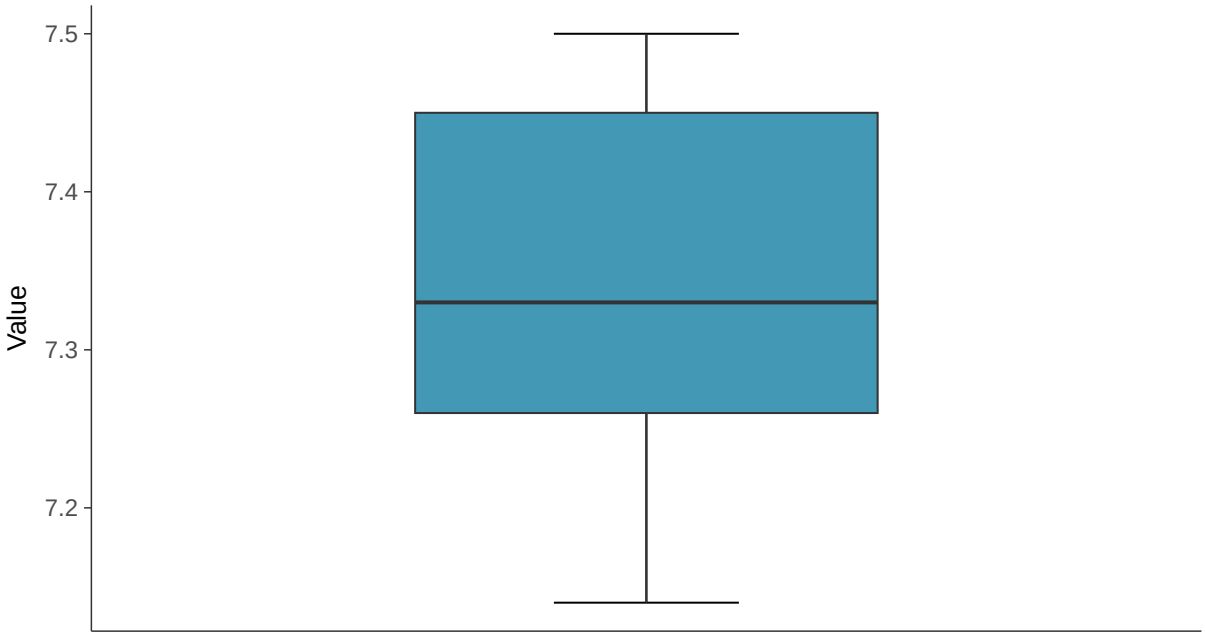
ID: 1_30_4_120





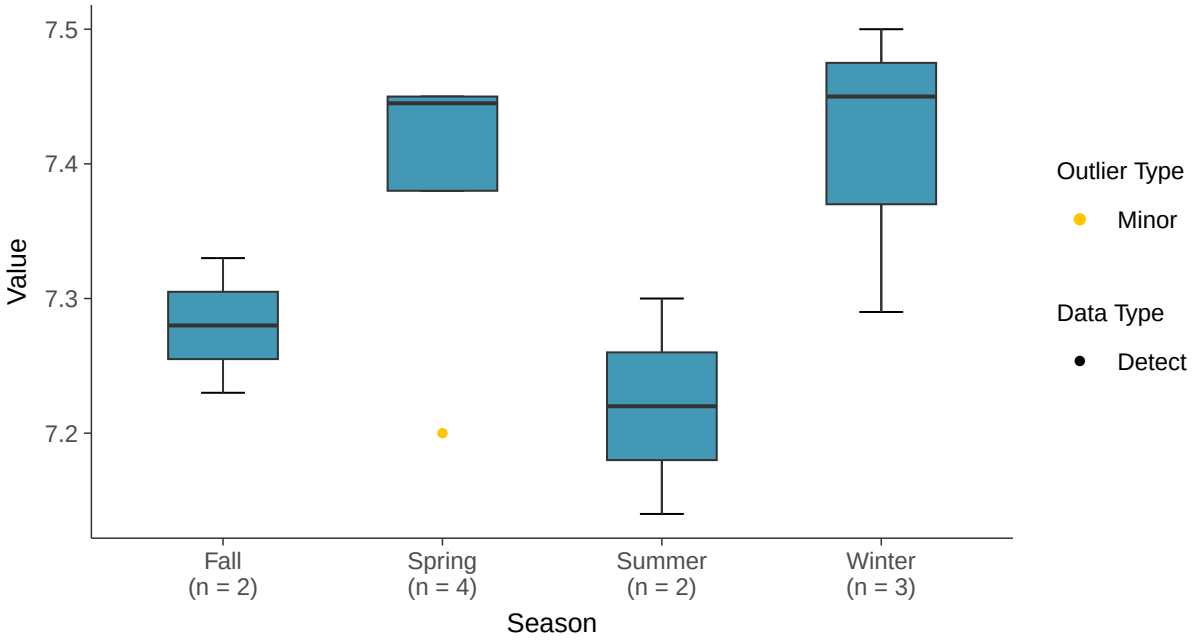
Boxplot

pH (field), MW-20 (su)



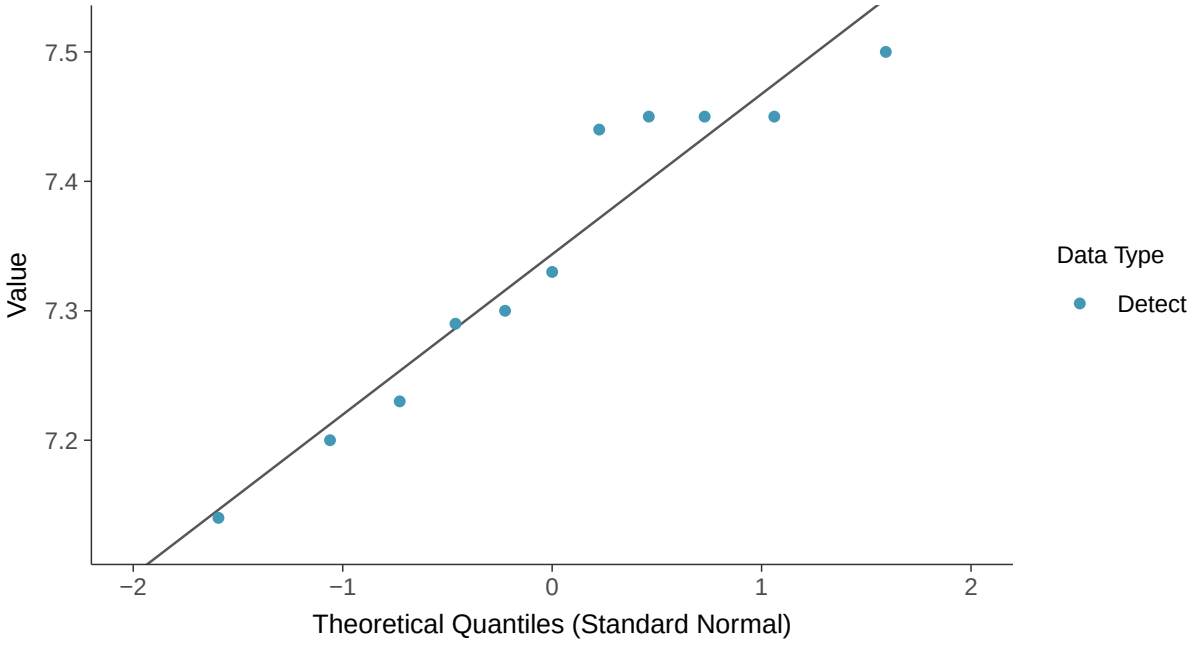
Boxplot by Season

pH (field), MW-20 (su)



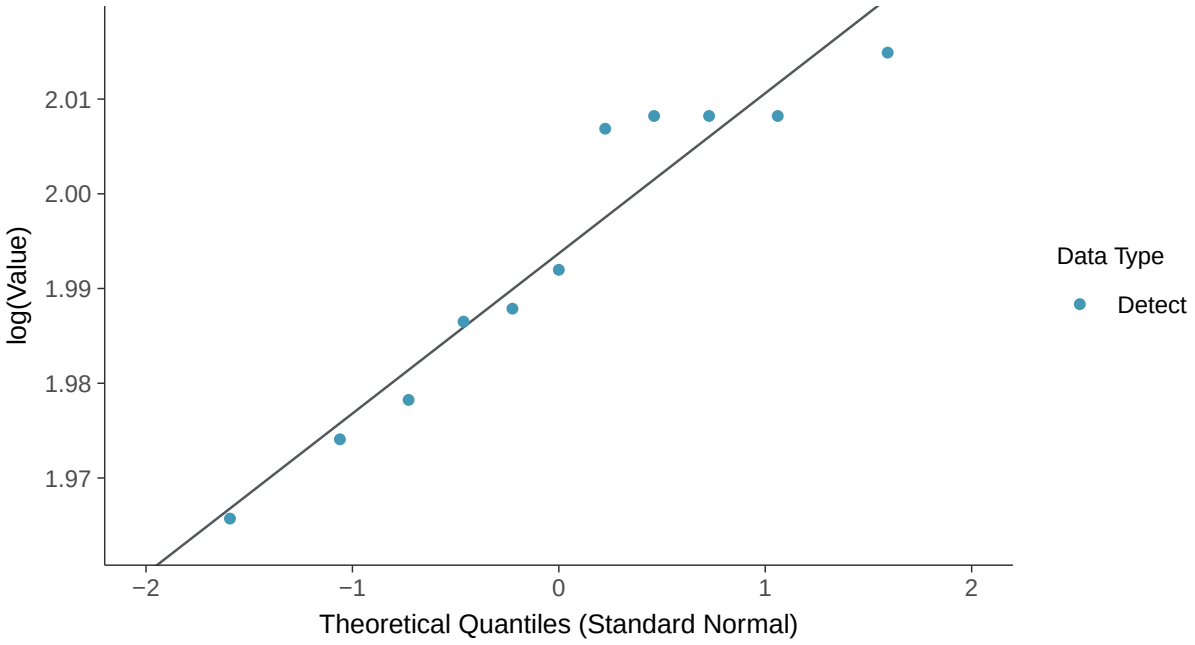
Normal Q-Q plot

pH (field), MW-20 (su)



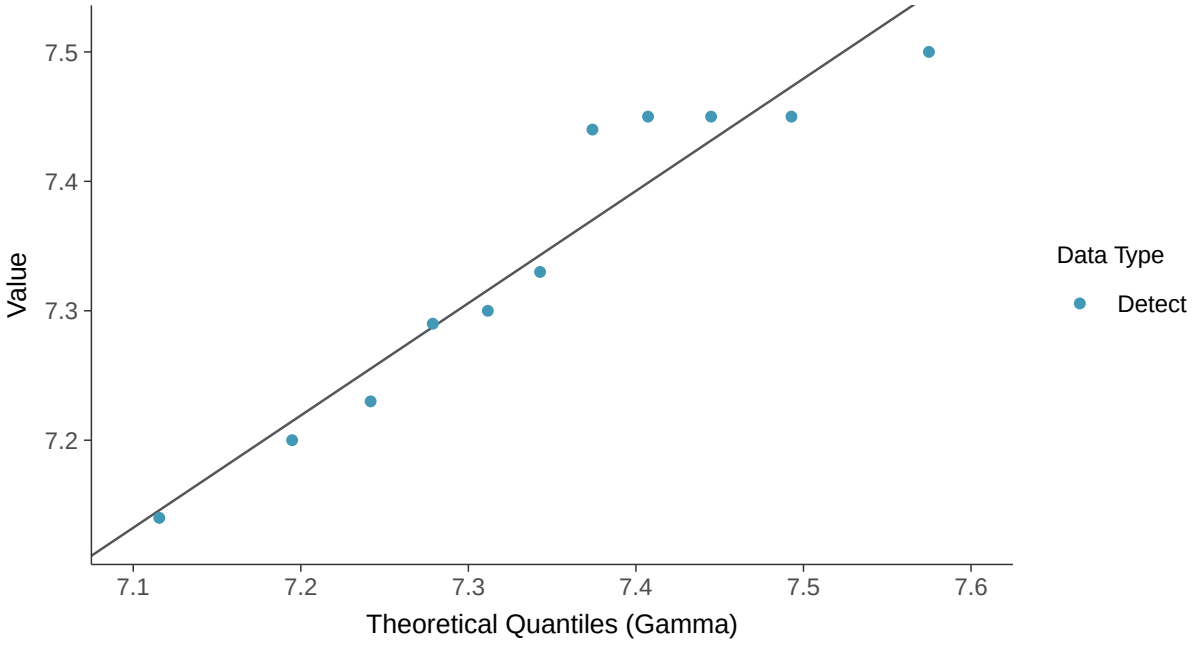
Lognormal Q-Q plot

pH (field), MW-20 (su)



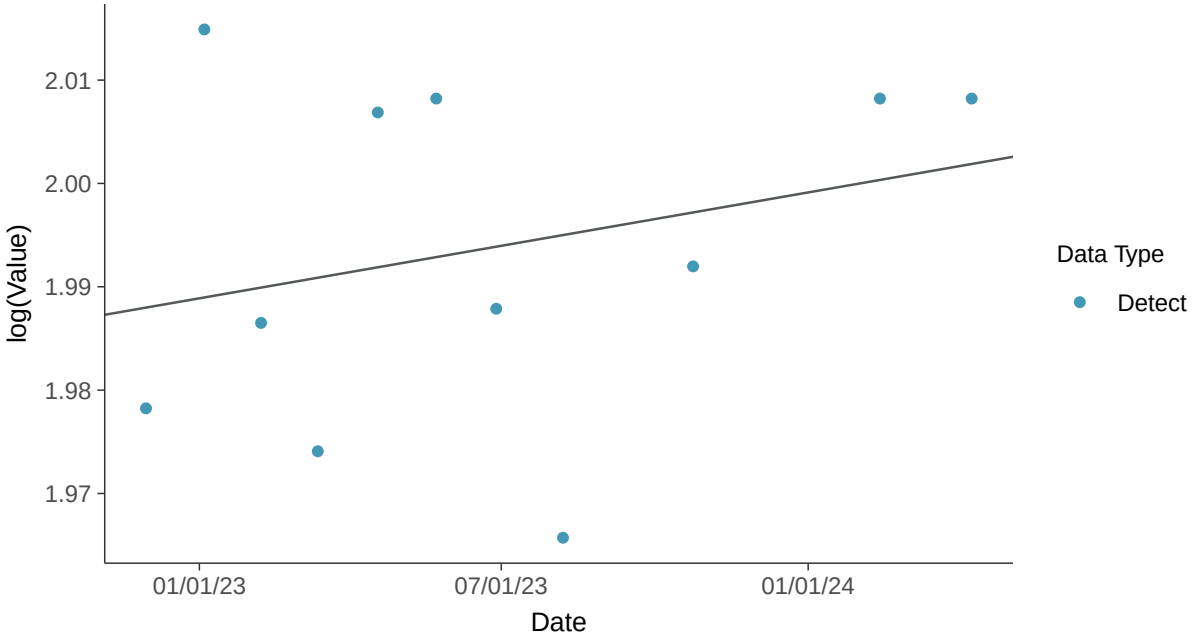
Gamma Q-Q plot

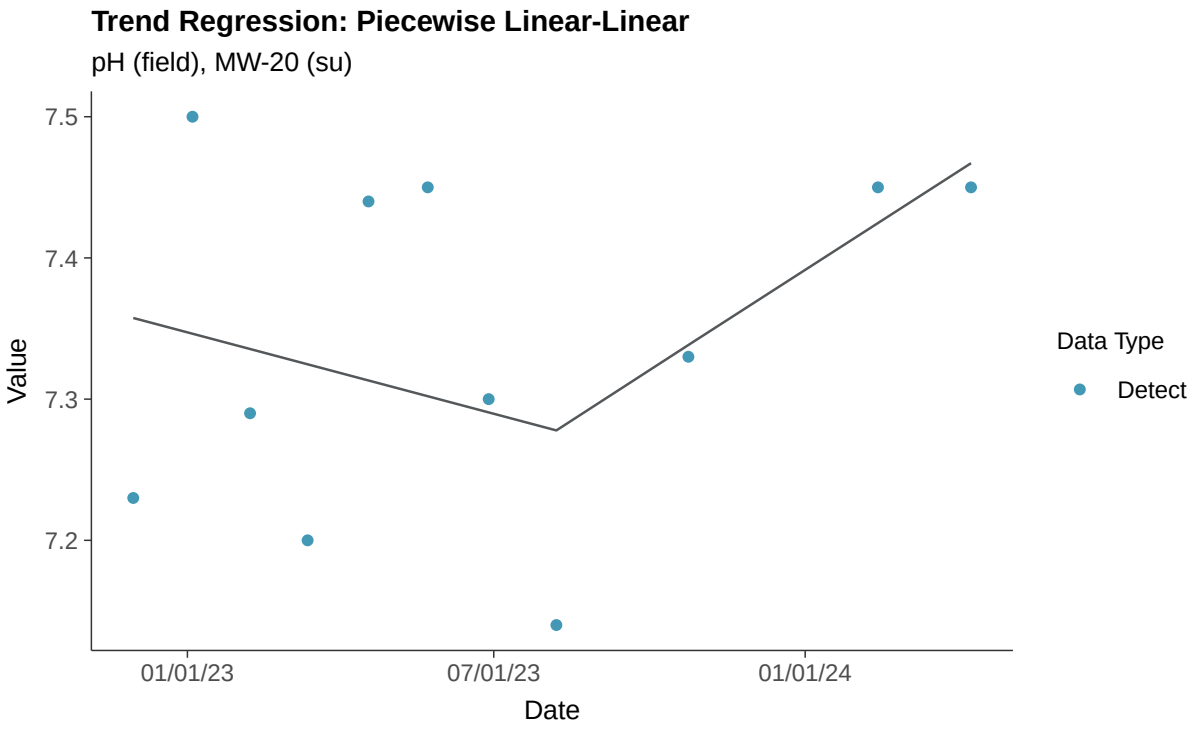
pH (field), MW-20 (su)



Trend Regression: Lognormal MLE

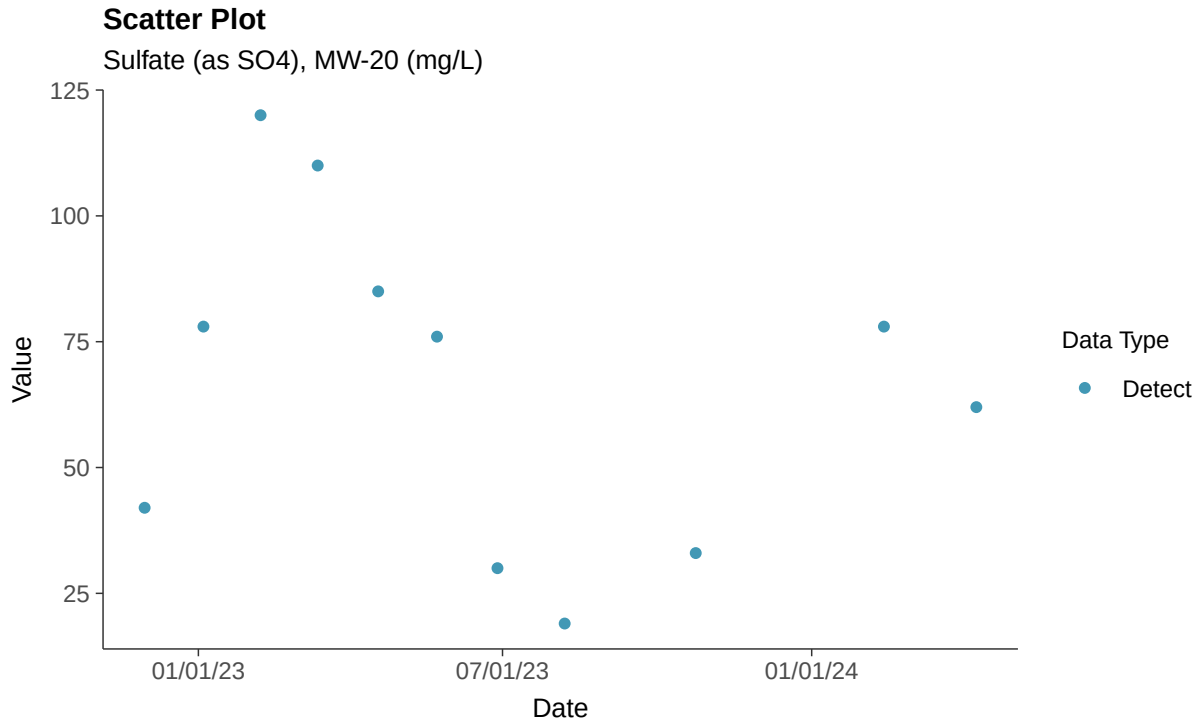
pH (field), MW-20 (su)

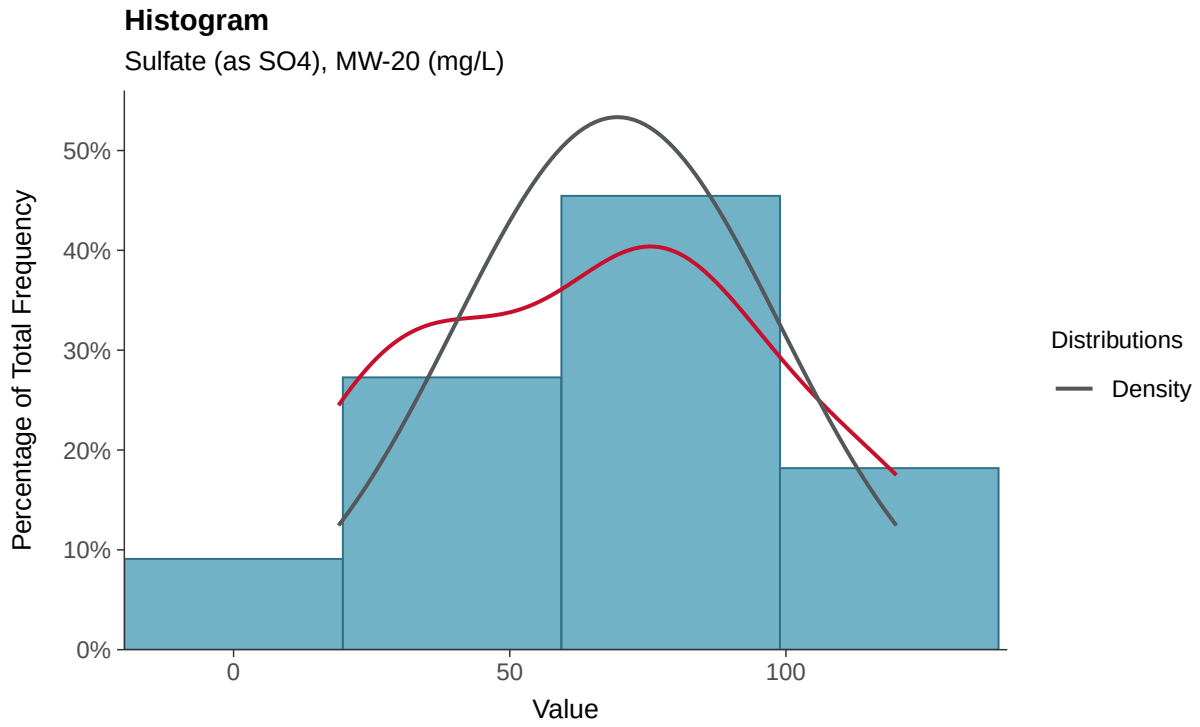



Trend Regression: Piecewise Linear-Linear
pH (field), MW-20 (su)
Value
7.5
7.4
7.3
7.2
01/01/23
07/01/23
01/01/24
Date
Data Type
Detect

Appendix III: Sulfate (as SO4), MW-20

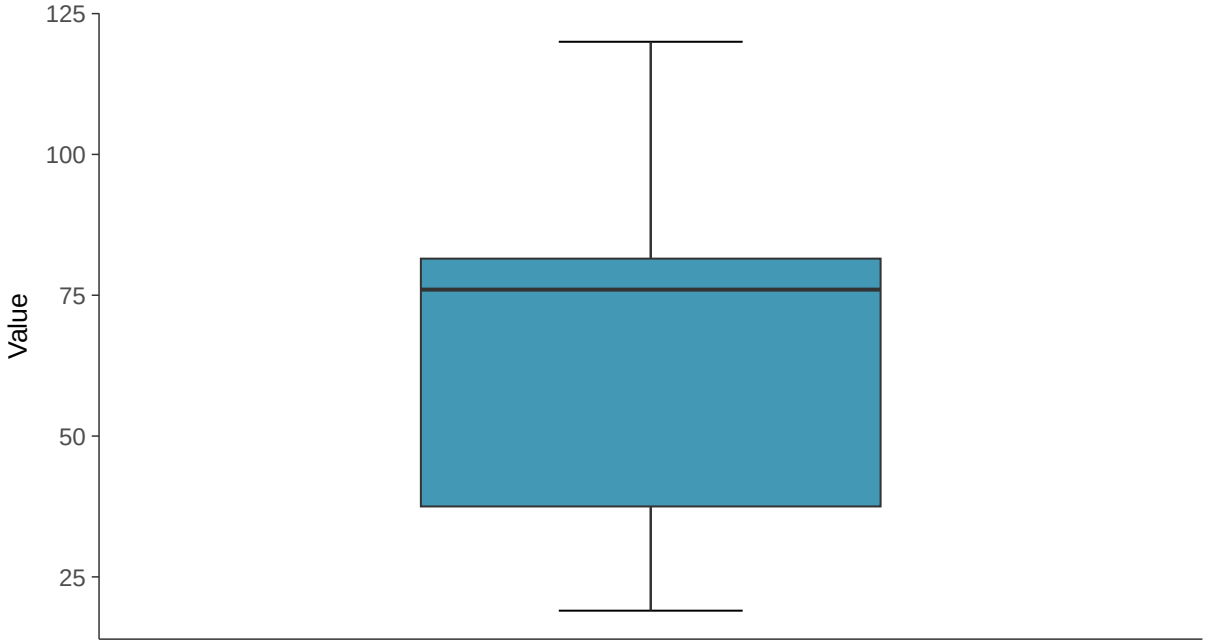
ID: 1_30_4_124





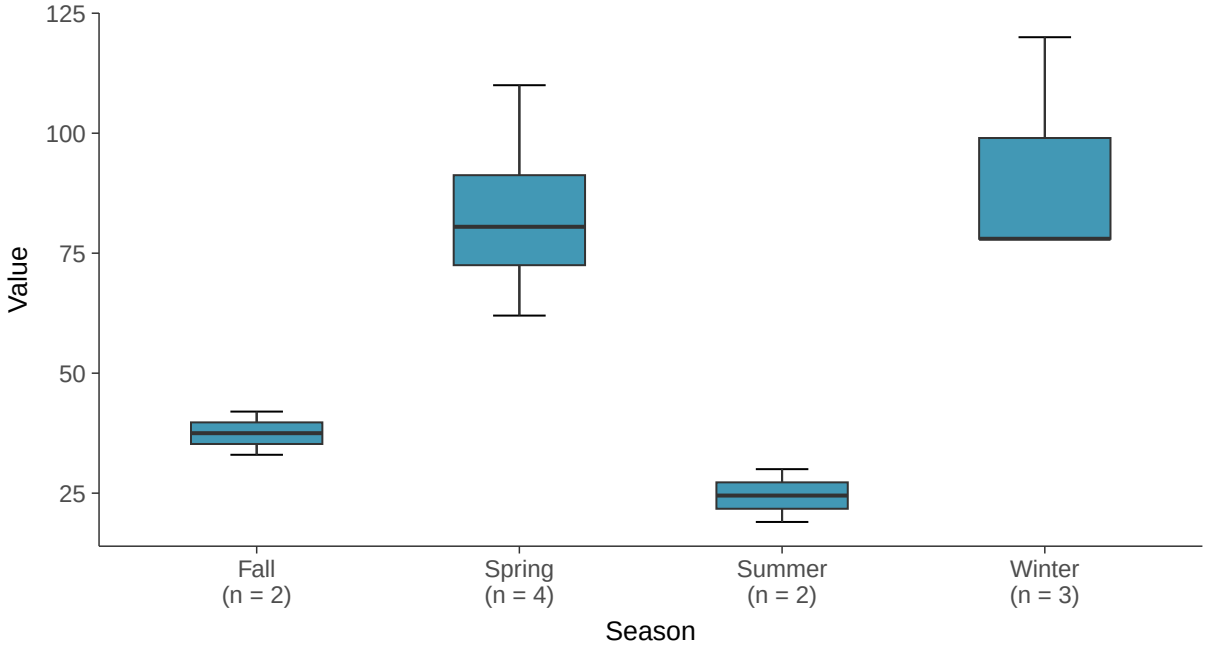
Boxplot

Sulfate (as SO4), MW-20 (mg/L)



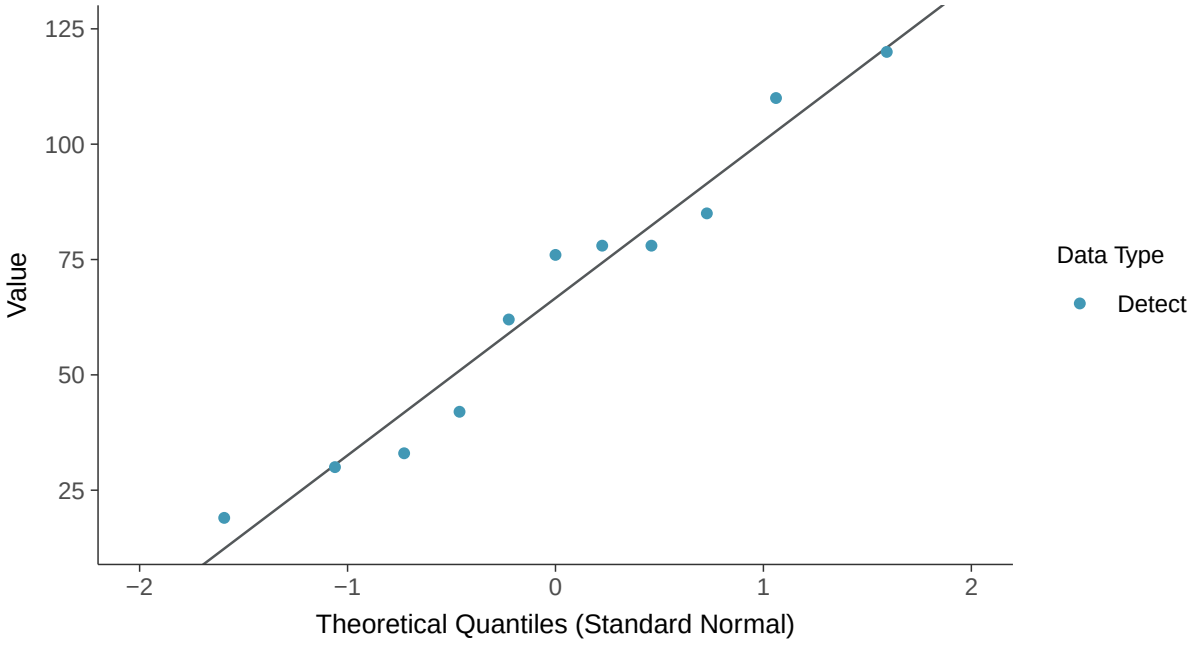
Boxplot by Season

Sulfate (as SO4), MW-20 (mg/L)



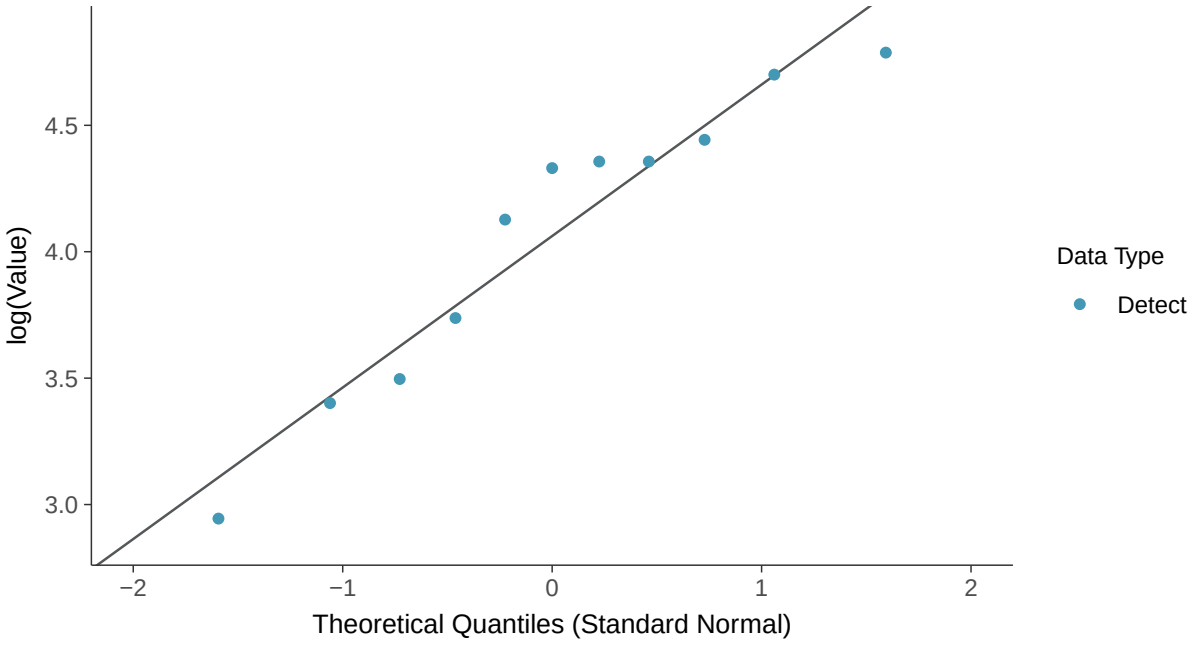
Normal Q-Q plot

Sulfate (as SO4), MW-20 (mg/L)



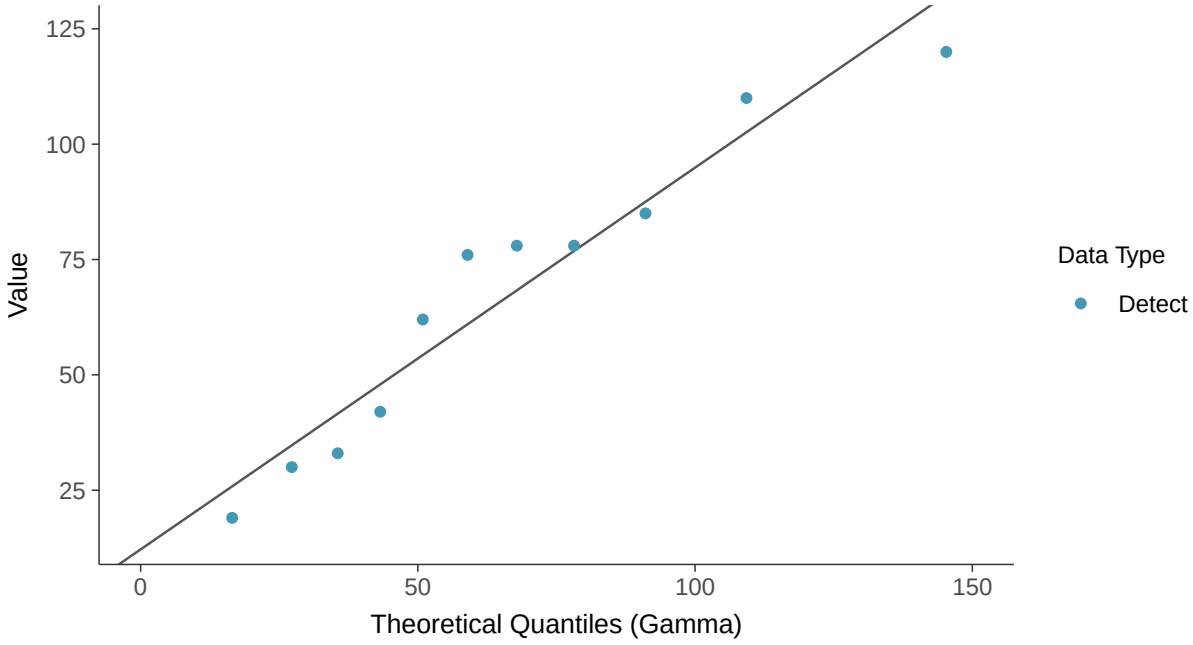
Lognormal Q-Q plot

Sulfate (as SO4), MW-20 (mg/L)



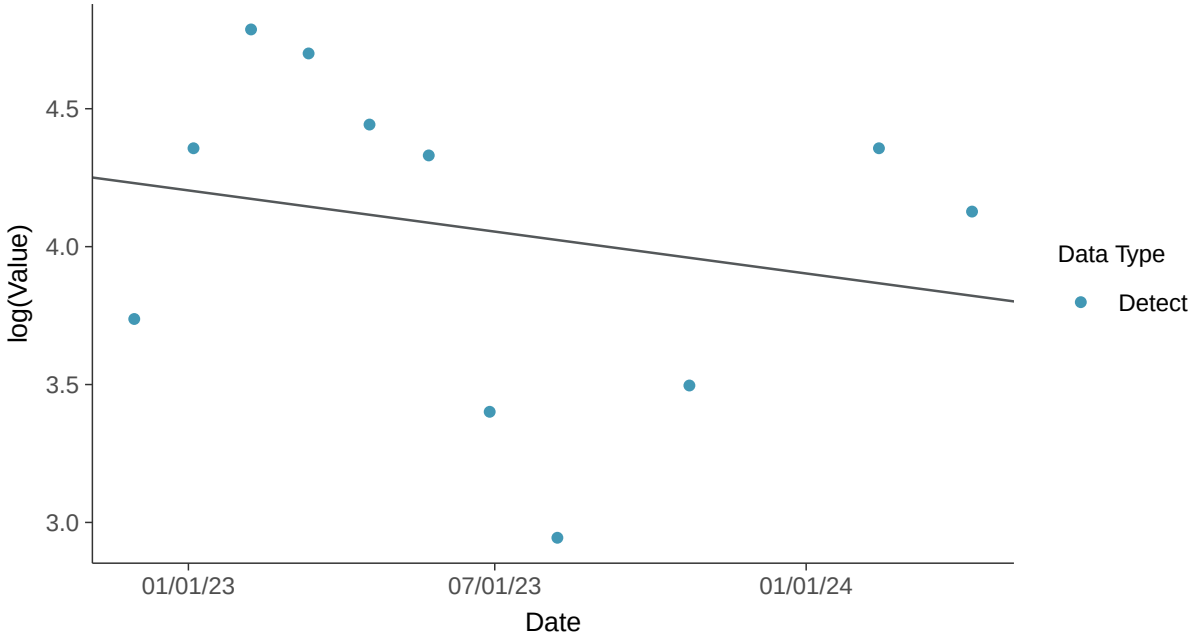
Gamma Q-Q plot

Sulfate (as SO4), MW-20 (mg/L)



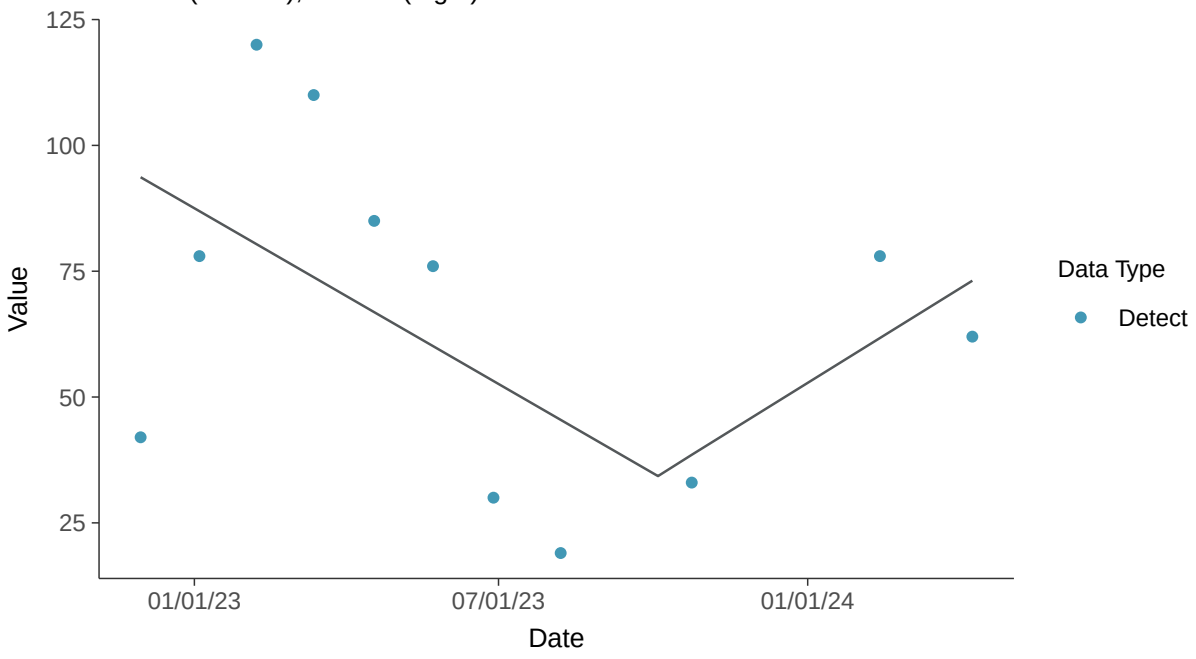
Trend Regression: Lognormal MLE

Sulfate (as SO4), MW-20 (mg/L)



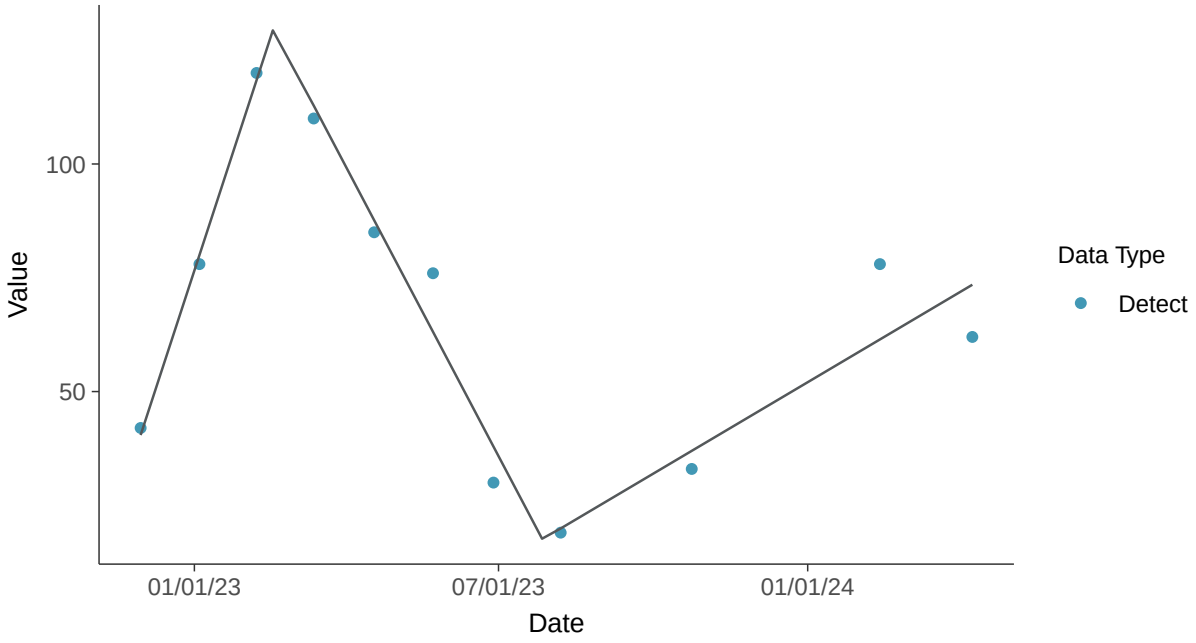
Trend Regression: Piecewise Linear-Linear

Sulfate (as SO4), MW-20 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Sulfate (as SO4), MW-20 (mg/L)

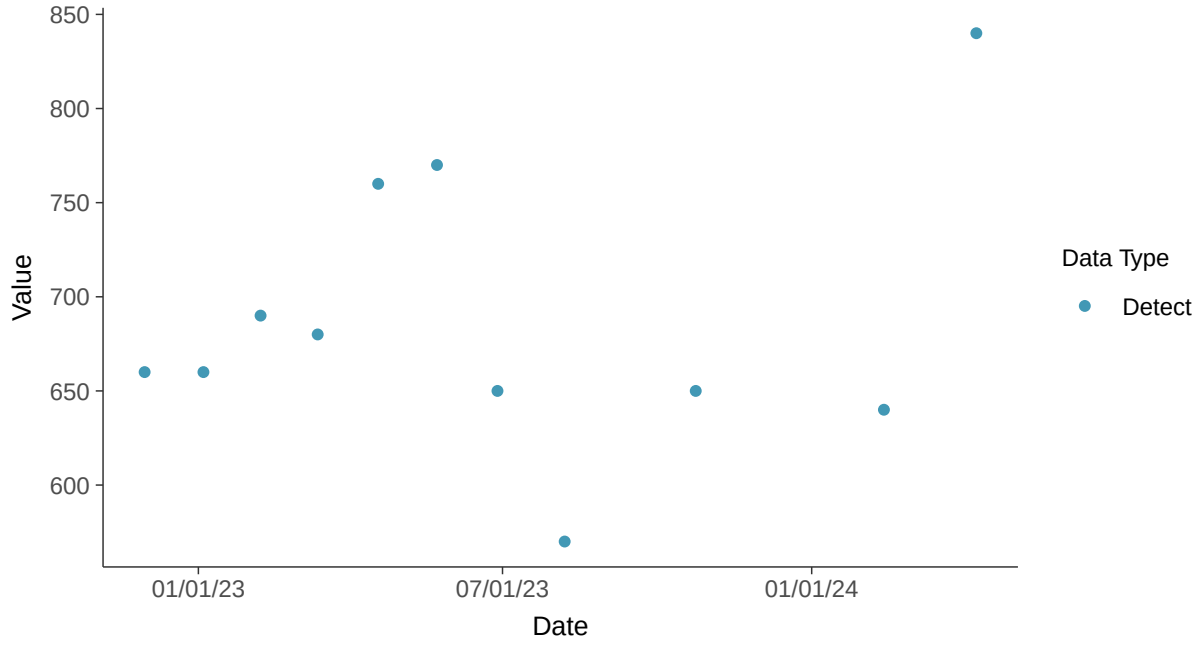


Appendix III: Total Dissolved Solids, MW-20

ID: 1_30_4_126

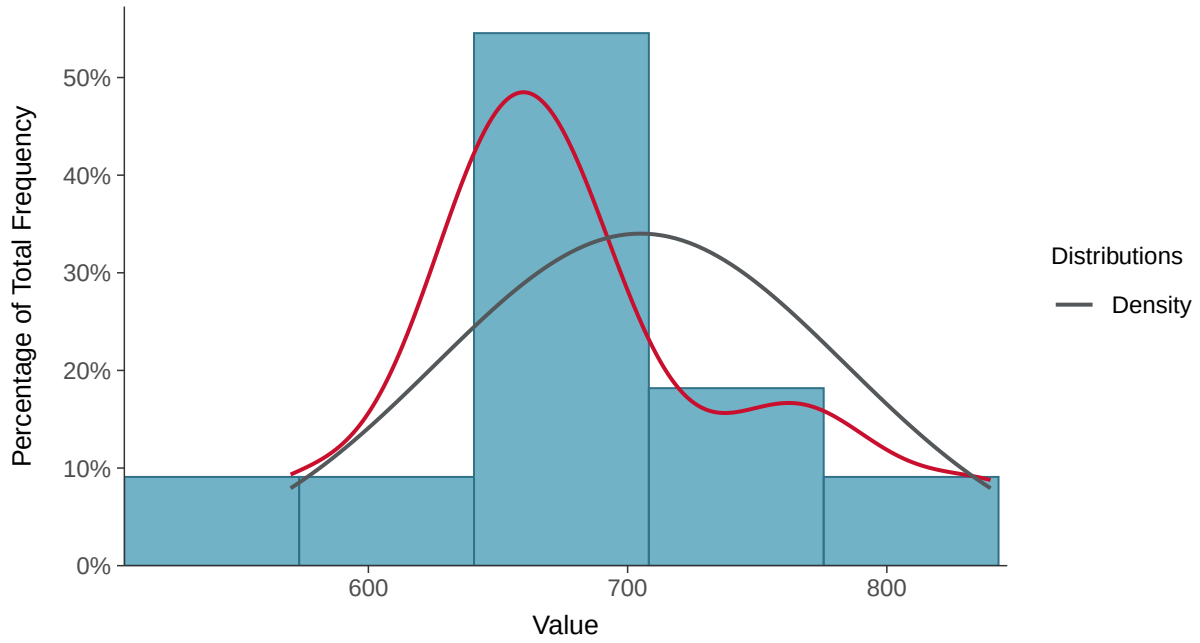
Scatter Plot

Total Dissolved Solids, MW-20 (mg/L)



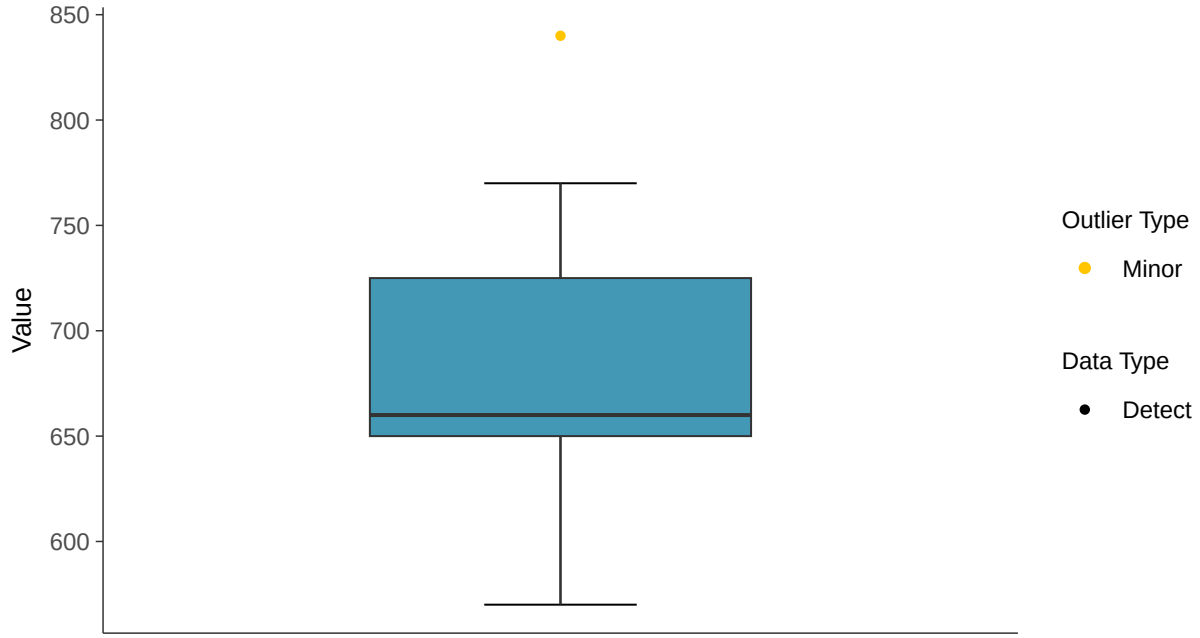
Histogram

Total Dissolved Solids, MW-20 (mg/L)



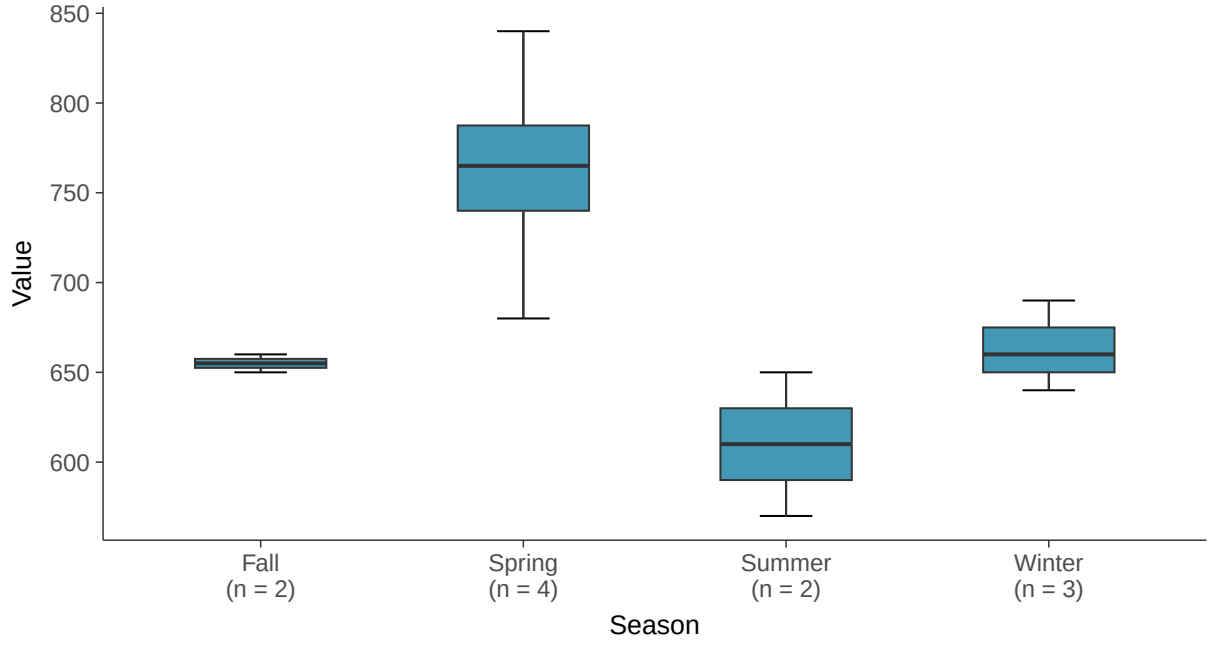
Boxplot

Total Dissolved Solids, MW-20 (mg/L)



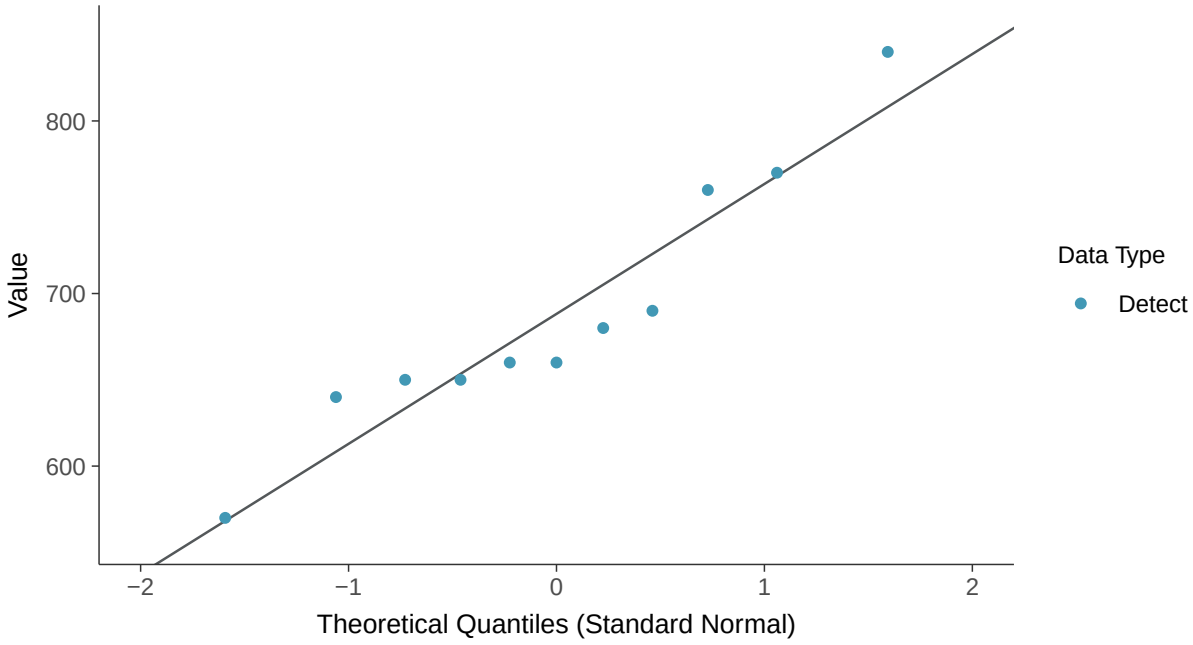
Boxplot by Season

Total Dissolved Solids, MW-20 (mg/L)



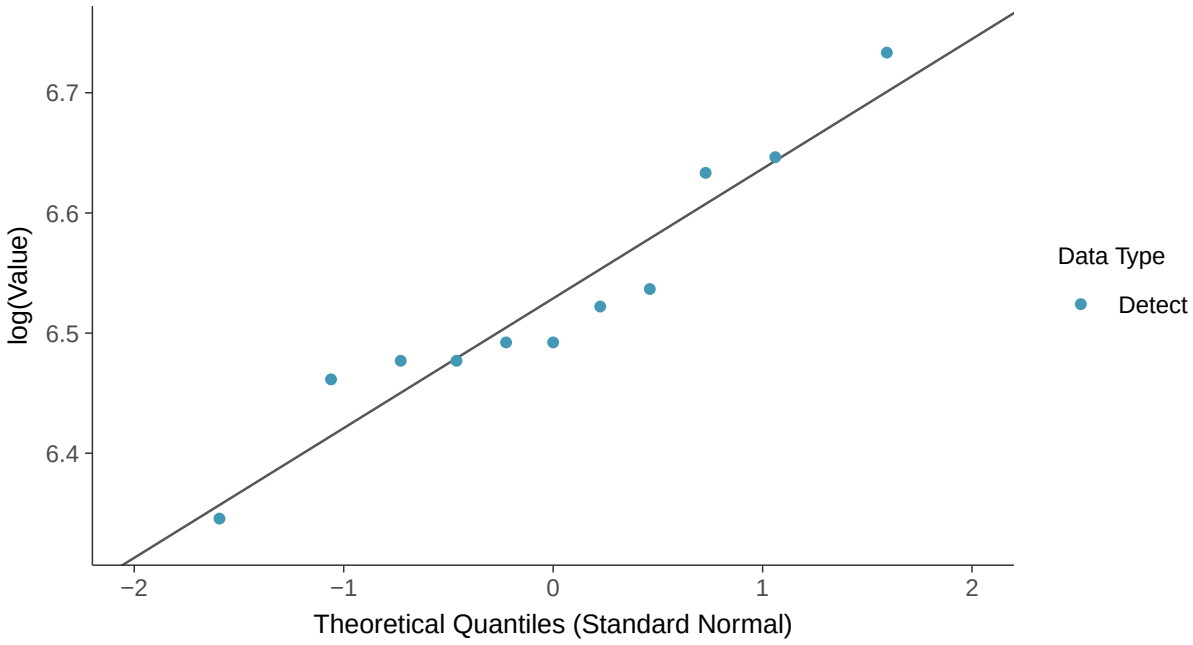
Normal Q-Q plot

Total Dissolved Solids, MW-20 (mg/L)



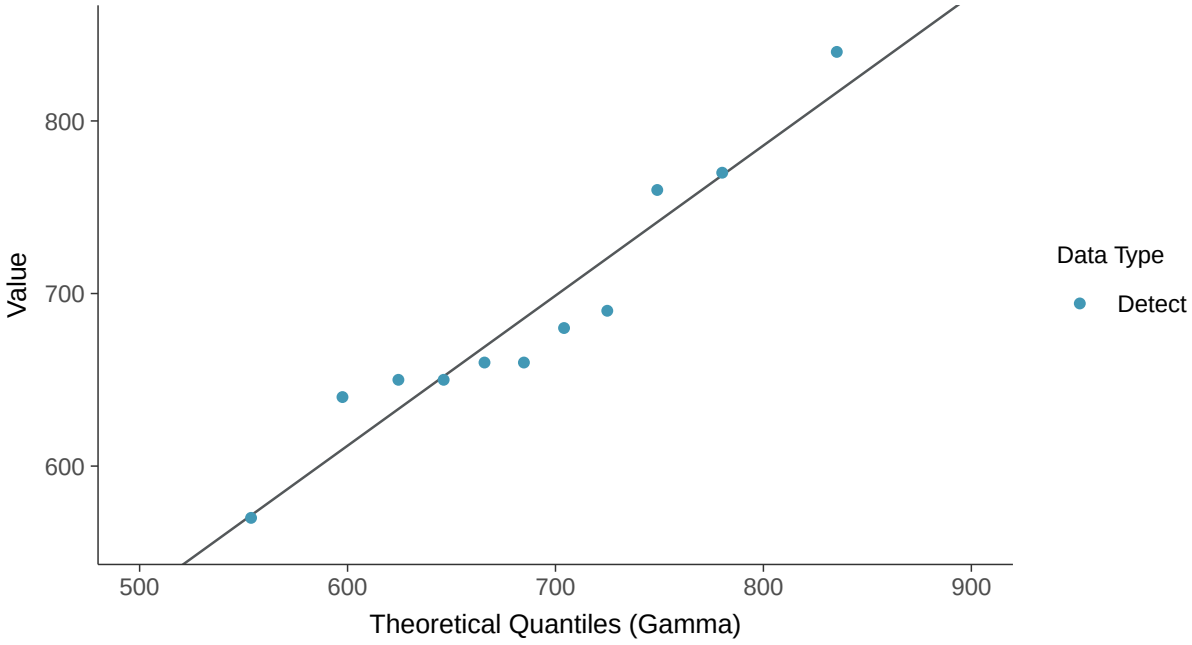
Lognormal Q-Q plot

Total Dissolved Solids, MW-20 (mg/L)



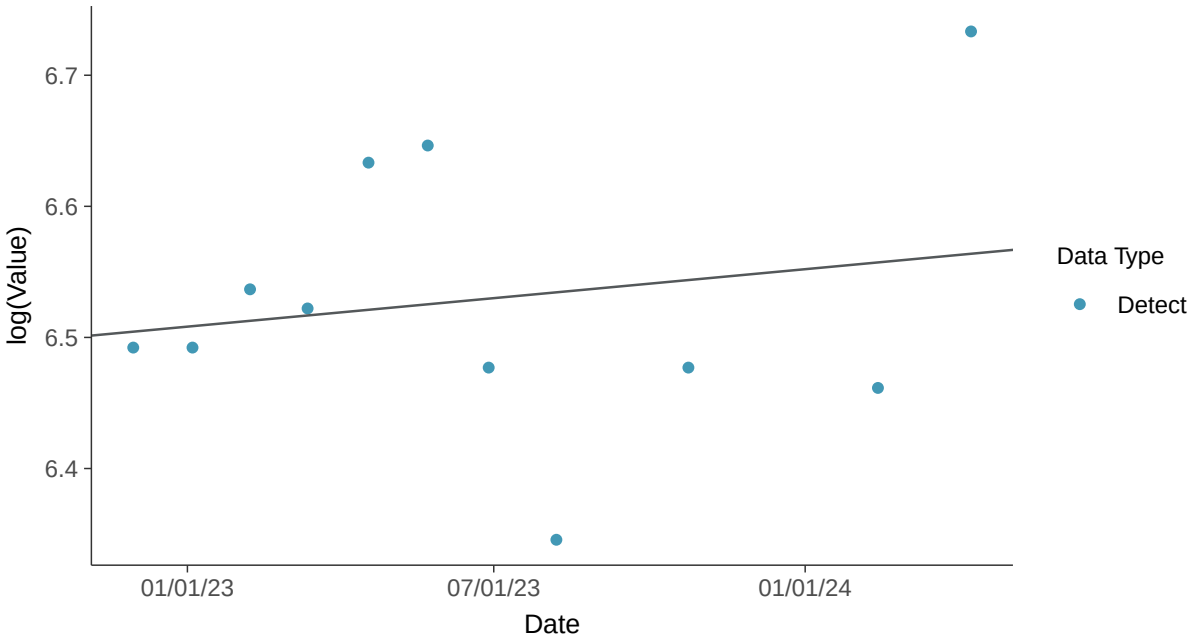
Gamma Q-Q plot

Total Dissolved Solids, MW-20 (mg/L)



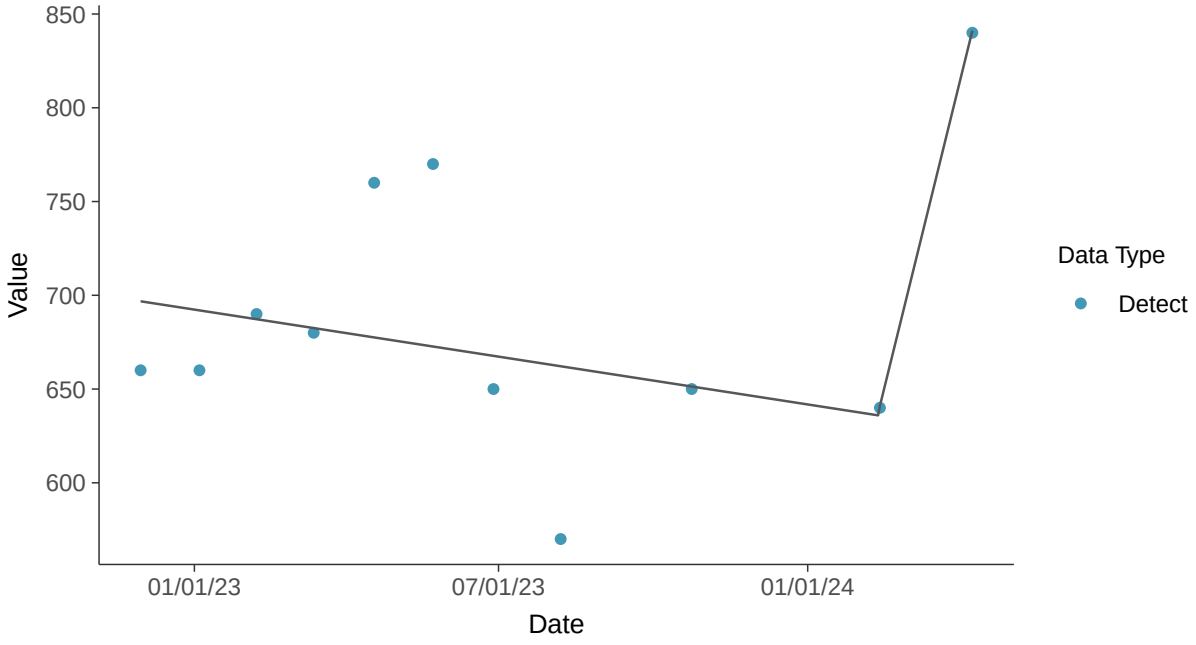
Trend Regression: Lognormal MLE

Total Dissolved Solids, MW-20 (mg/L)



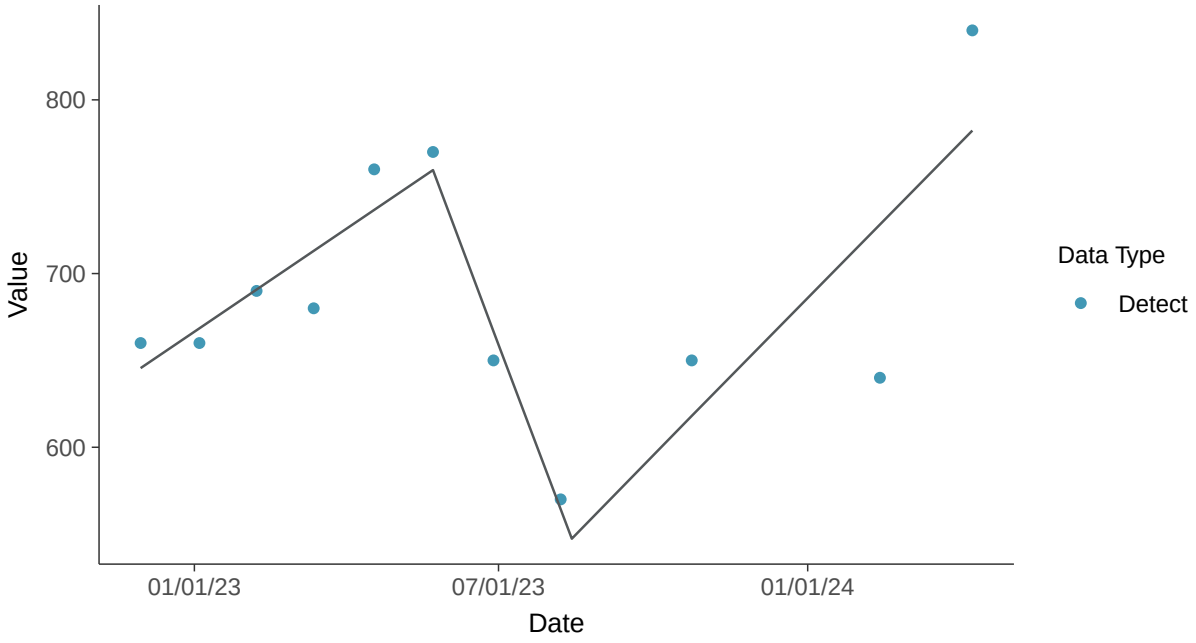
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-20 (mg/L)



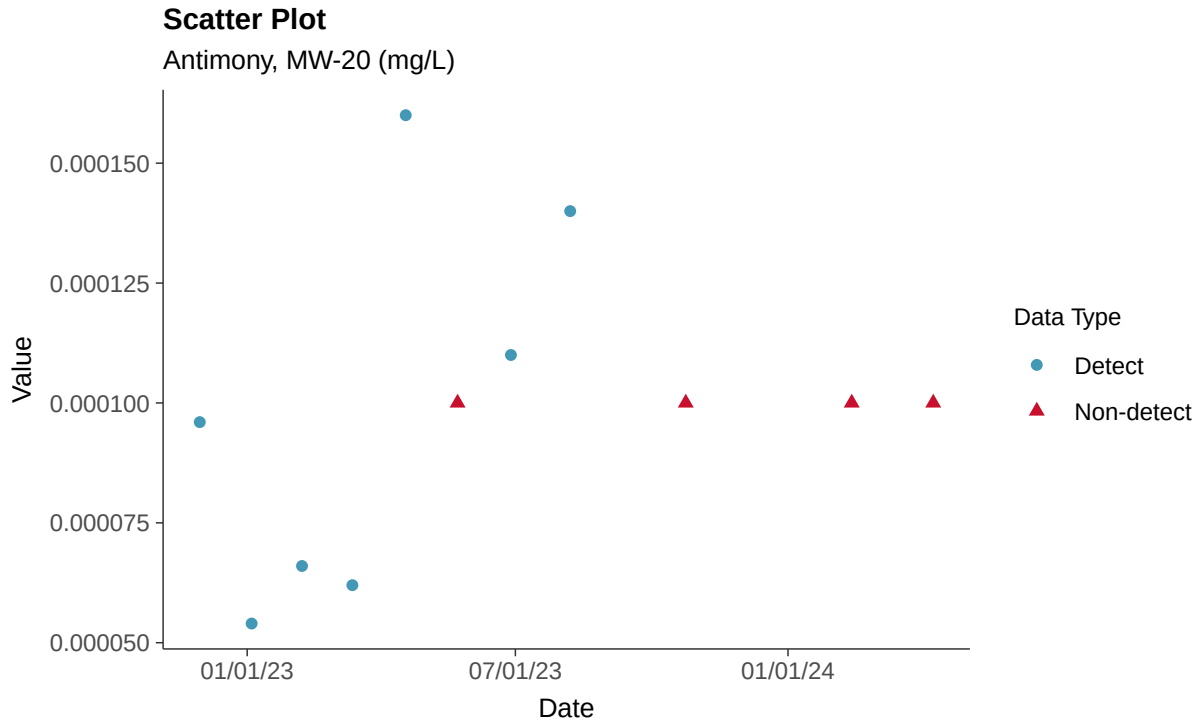
Trend Regression: Piecewise Linear-Linear-Linear

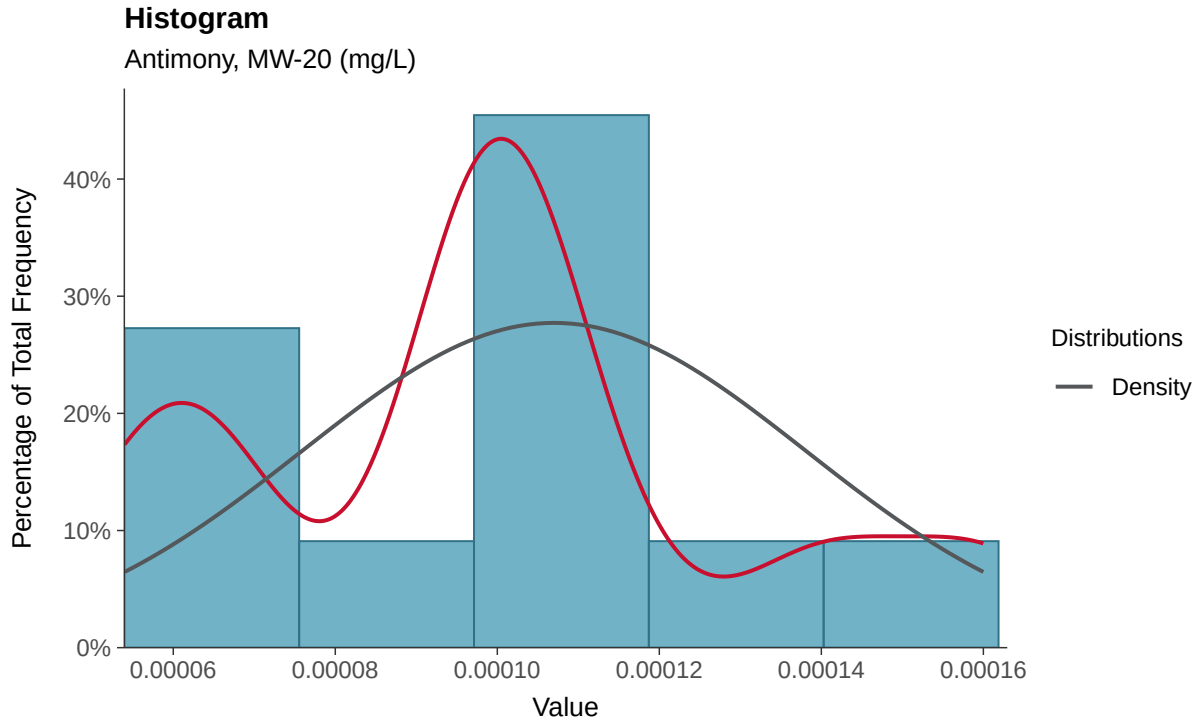
Total Dissolved Solids, MW-20 (mg/L)



Appendix IV: Antimony, MW-20

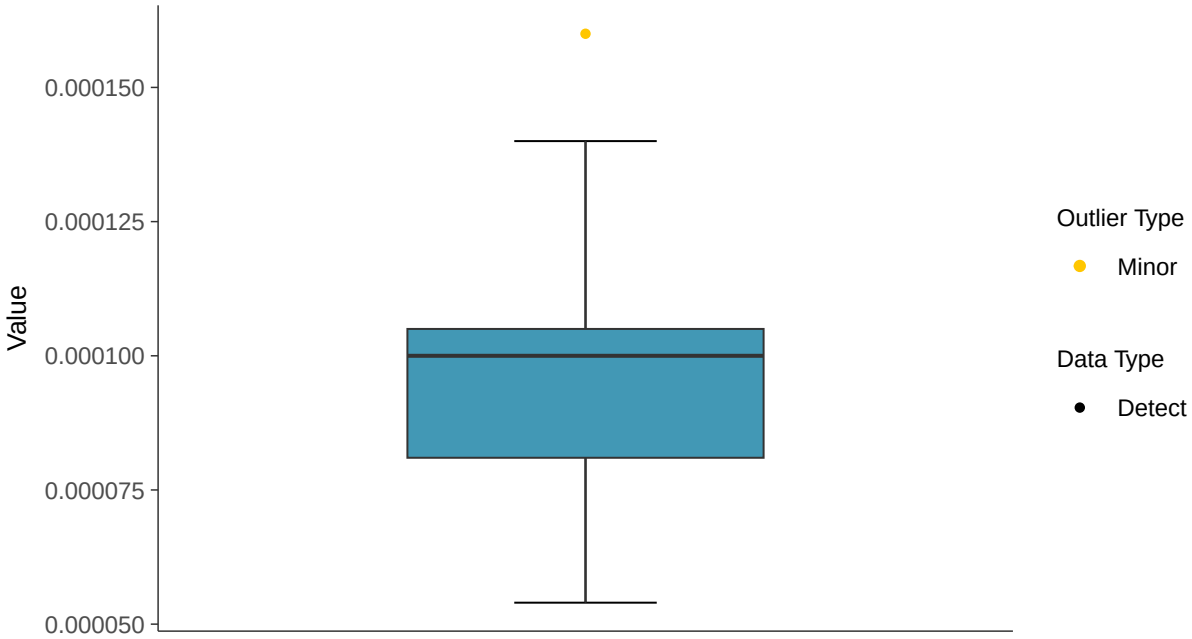
ID: 1_30_5_101





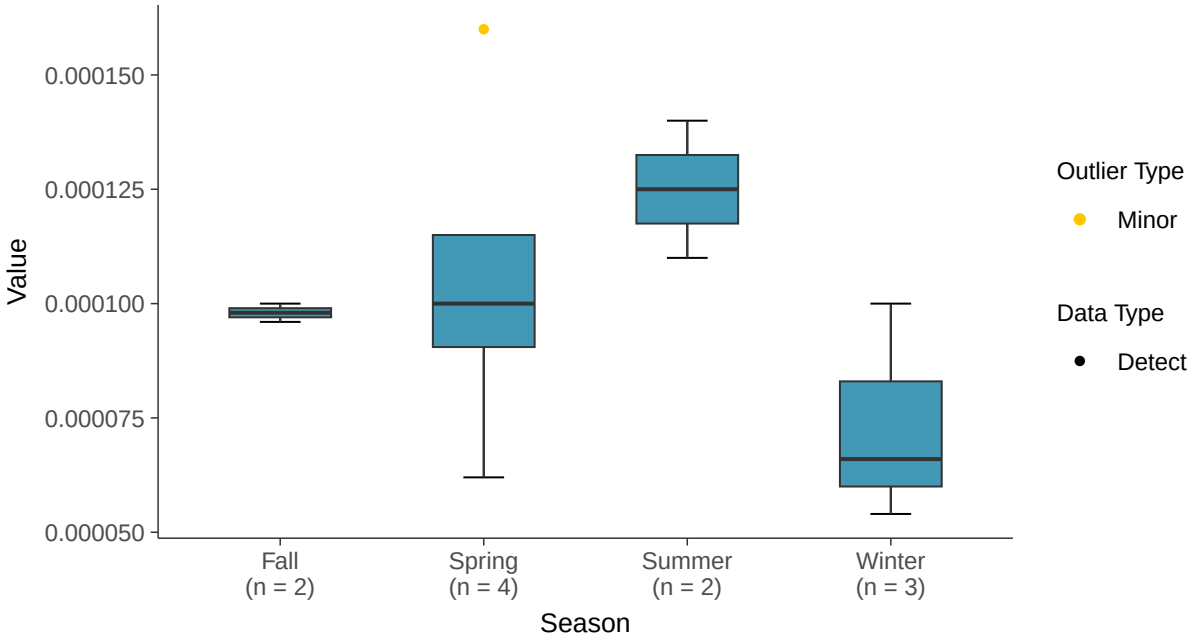
Boxplot

Antimony, MW-20 (mg/L)



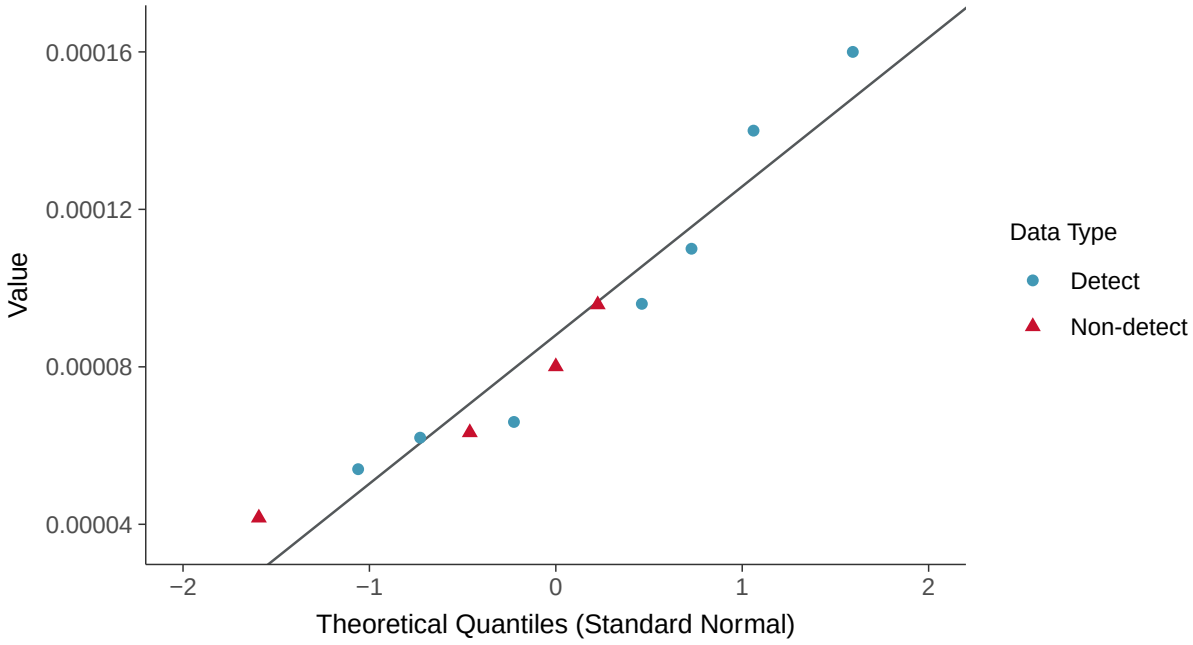
Boxplot by Season

Antimony, MW-20 (mg/L)



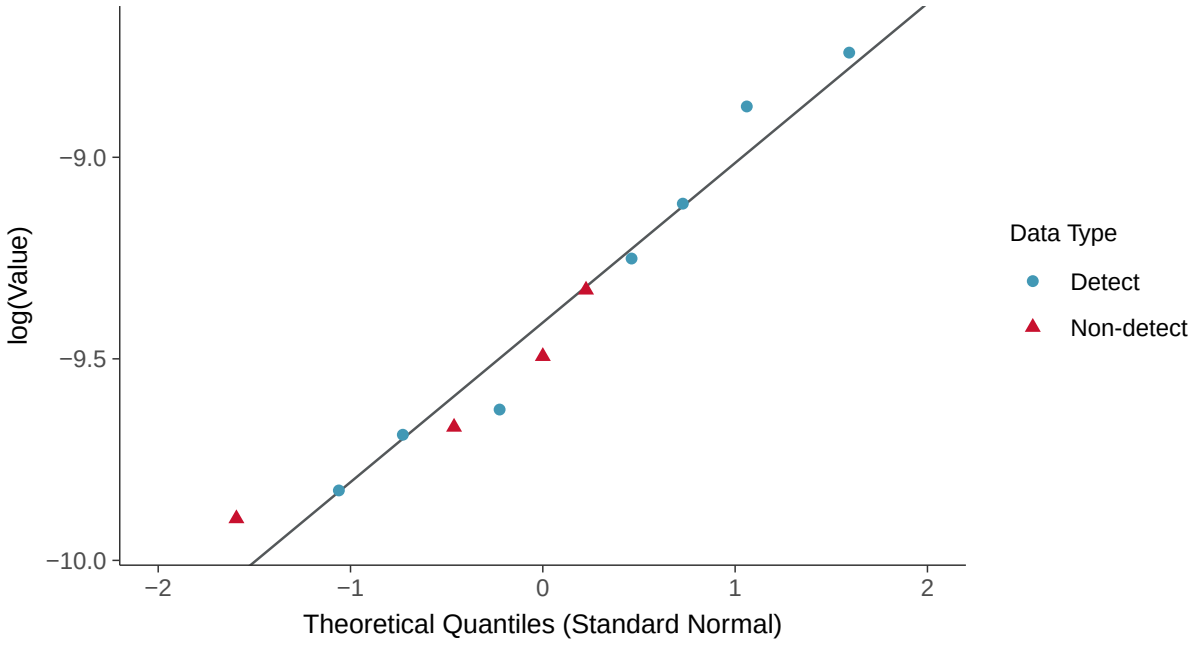
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-20 (mg/L)



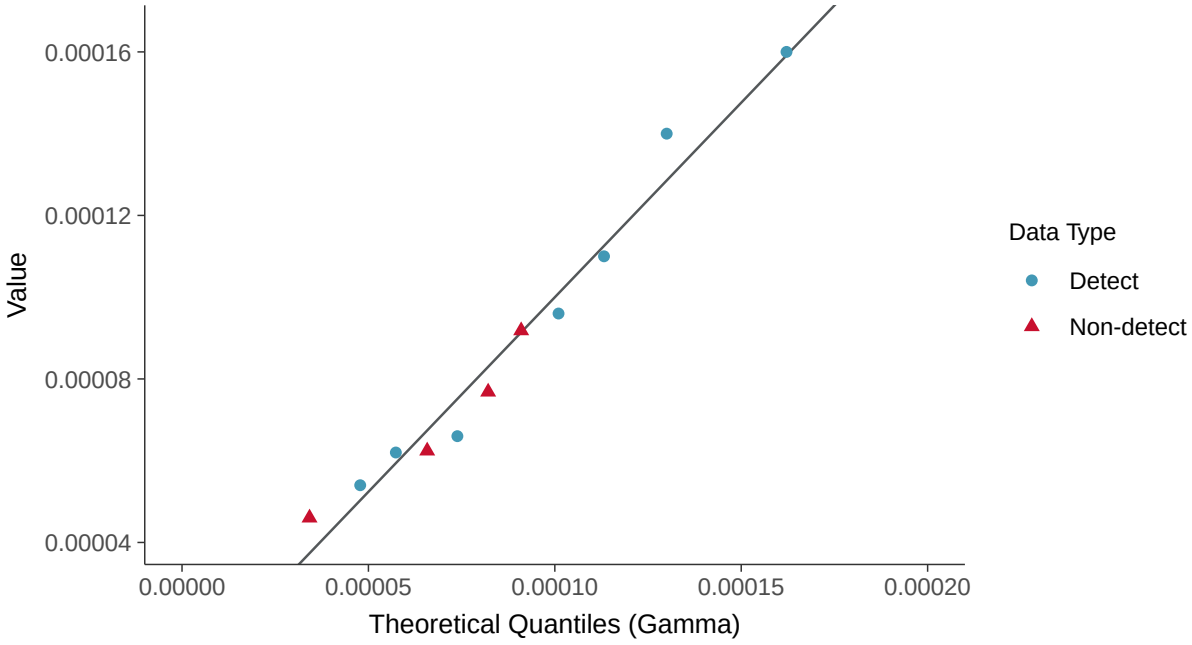
Lognormal Q-Q plot using ROS Imputed Estimates

Antimony, MW-20 (mg/L)



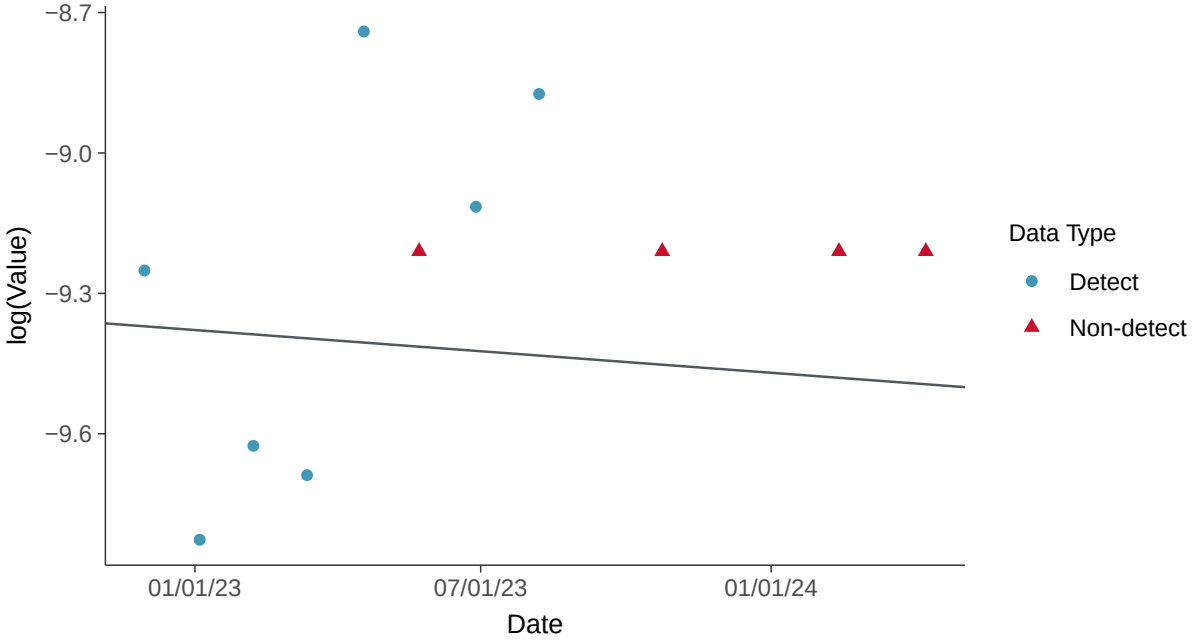
Gamma Q-Q plot using ROS Imputed Estimates

Antimony, MW-20 (mg/L)



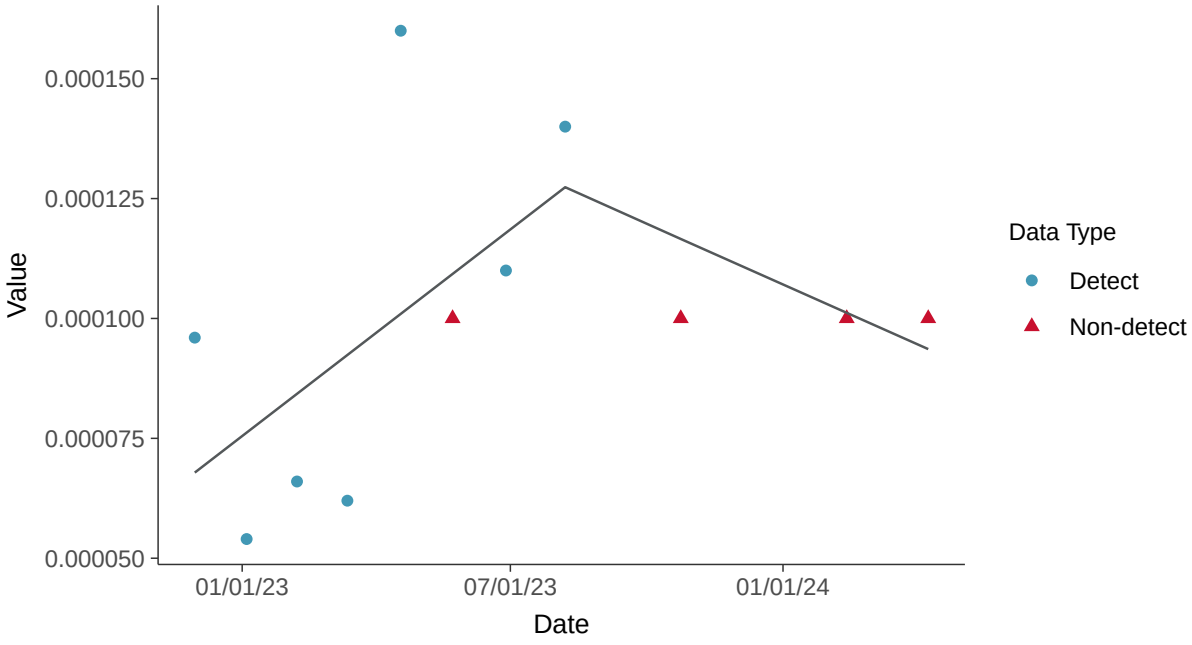
Trend Regression: Lognormal MLE

Antimony, MW-20 (mg/L)



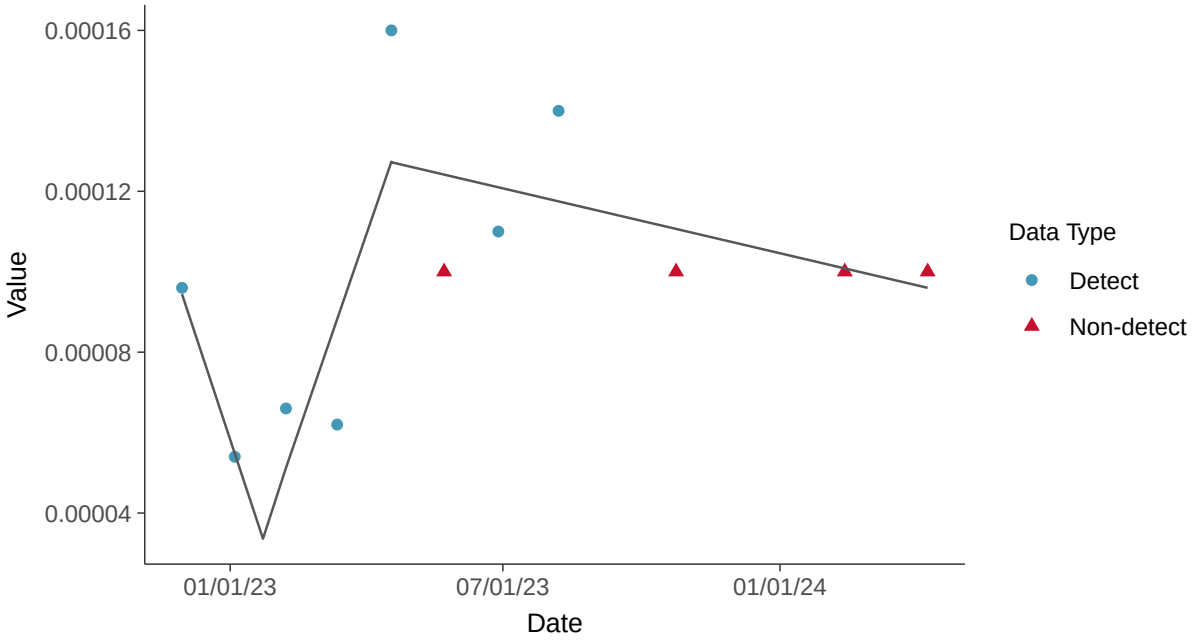
Trend Regression: Piecewise Linear-Linear

Antimony, MW-20 (mg/L)



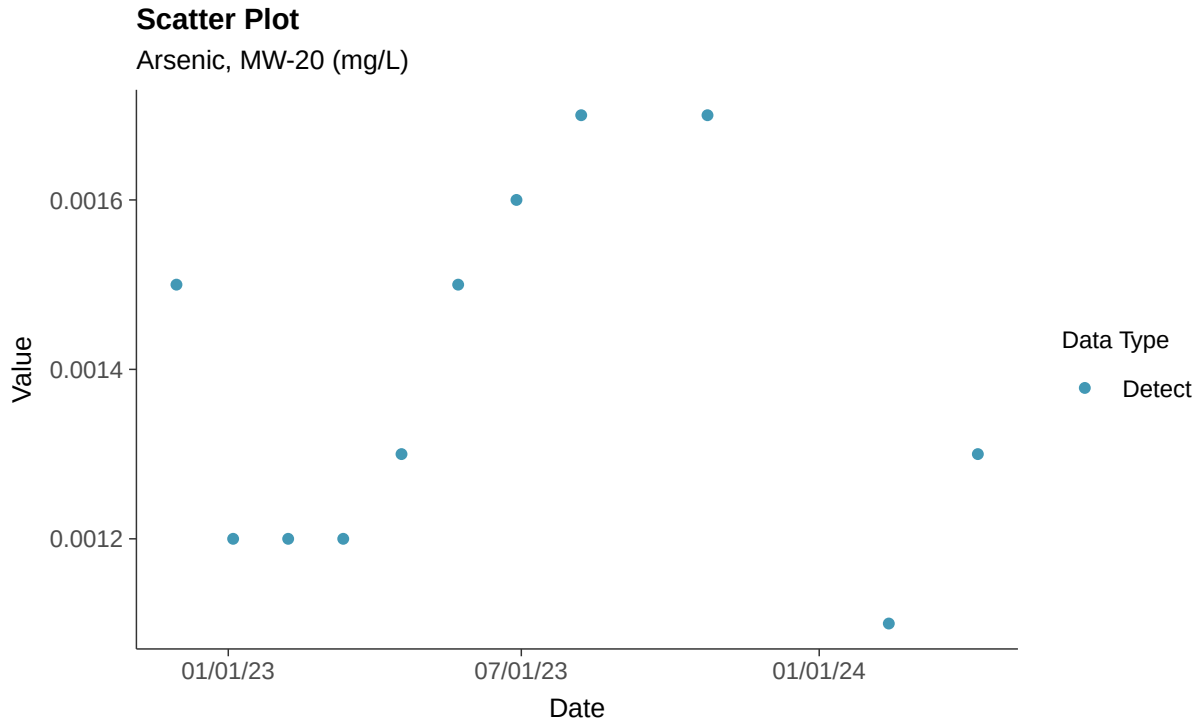
Trend Regression: Piecewise Linear-Linear-Linear

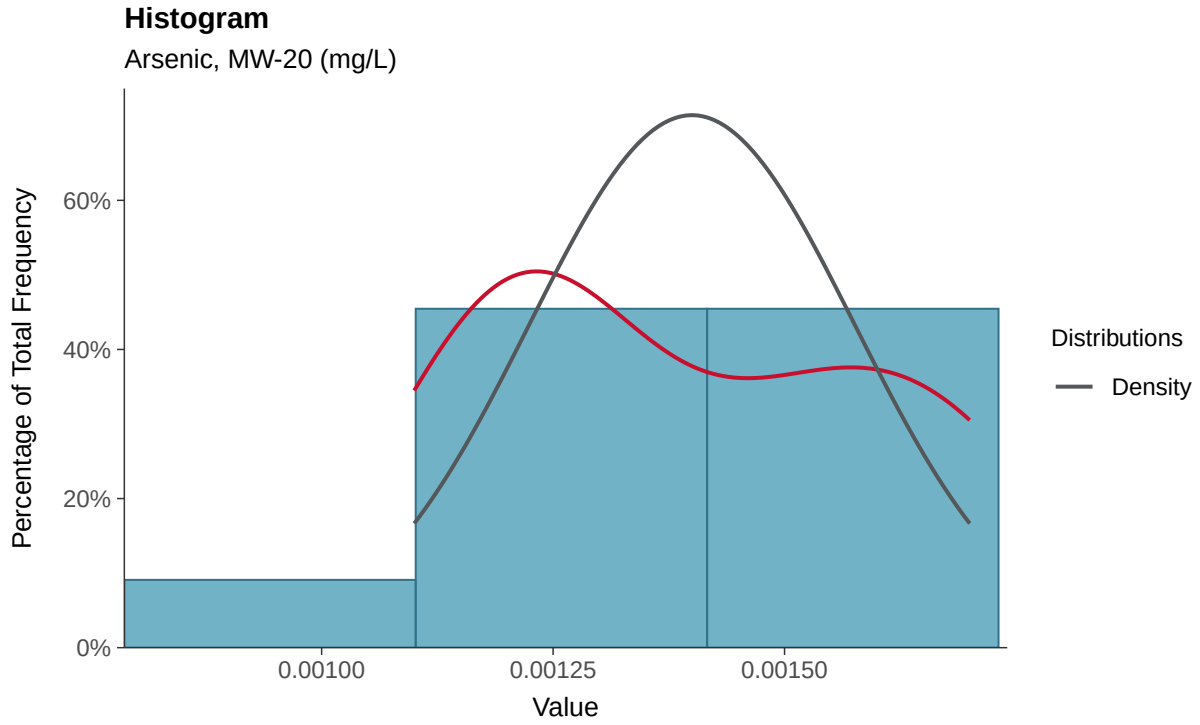
Antimony, MW-20 (mg/L)



Appendix IV: Arsenic, MW-20

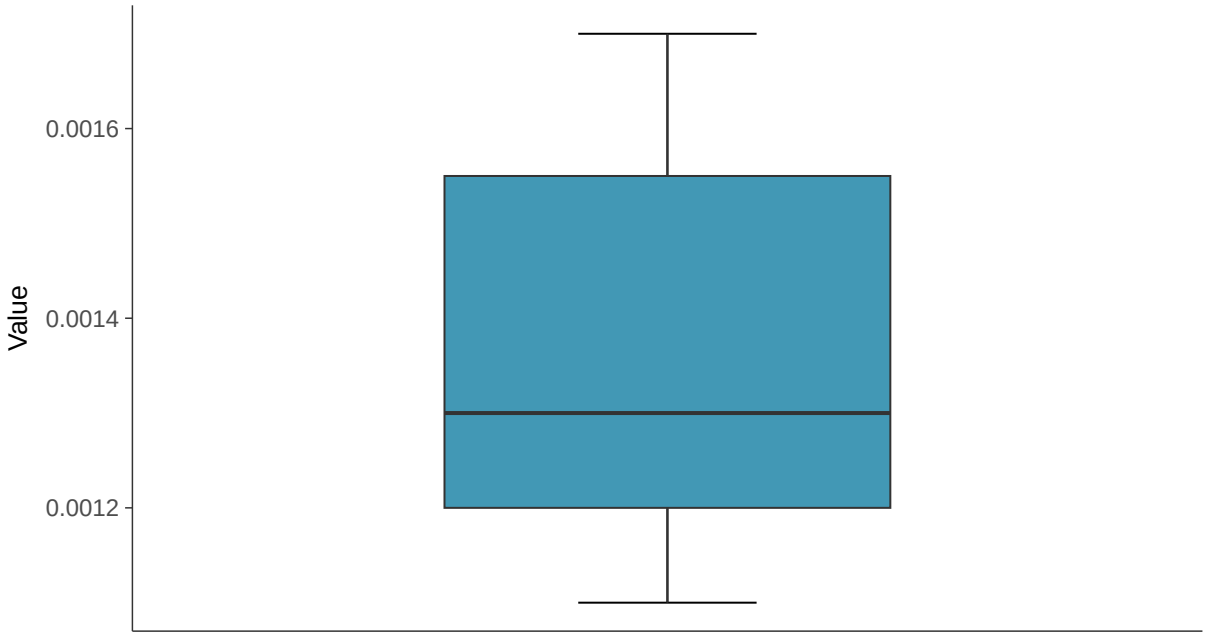
ID: 1_30_5_102





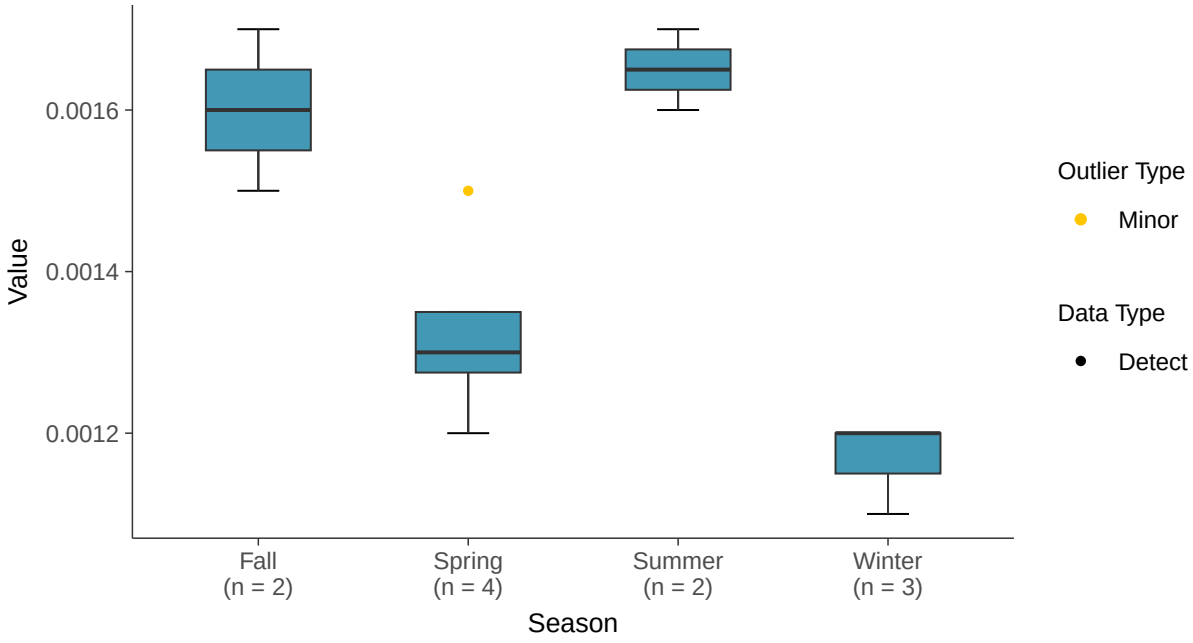
Boxplot

Arsenic, MW-20 (mg/L)



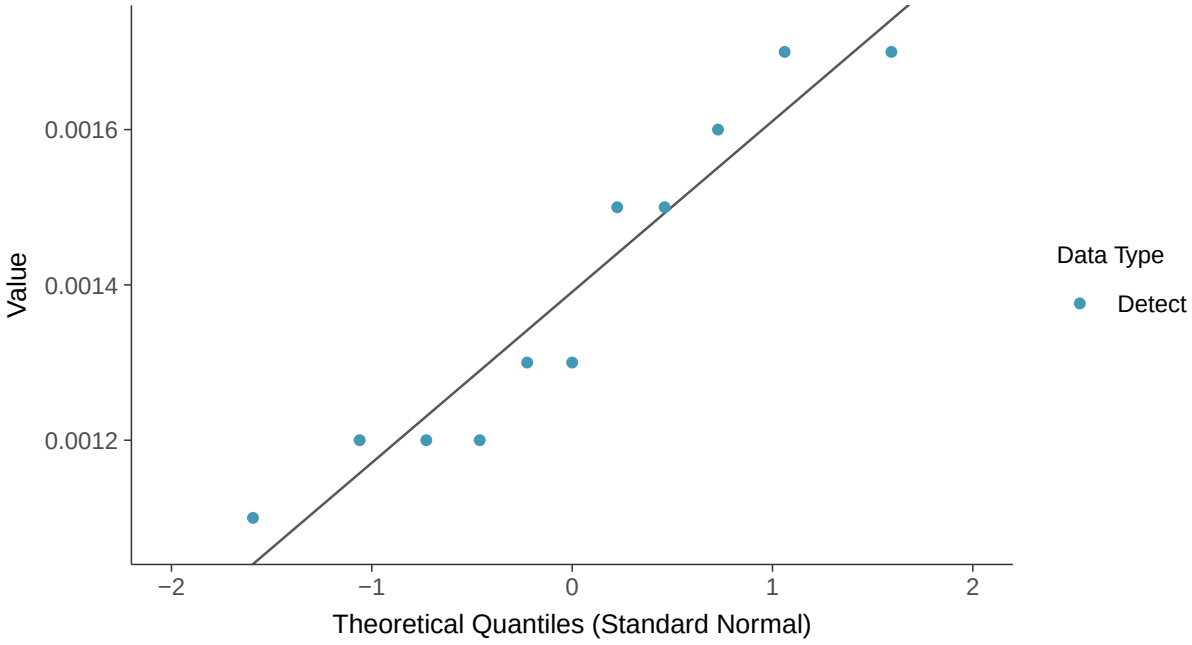
Boxplot by Season

Arsenic, MW-20 (mg/L)



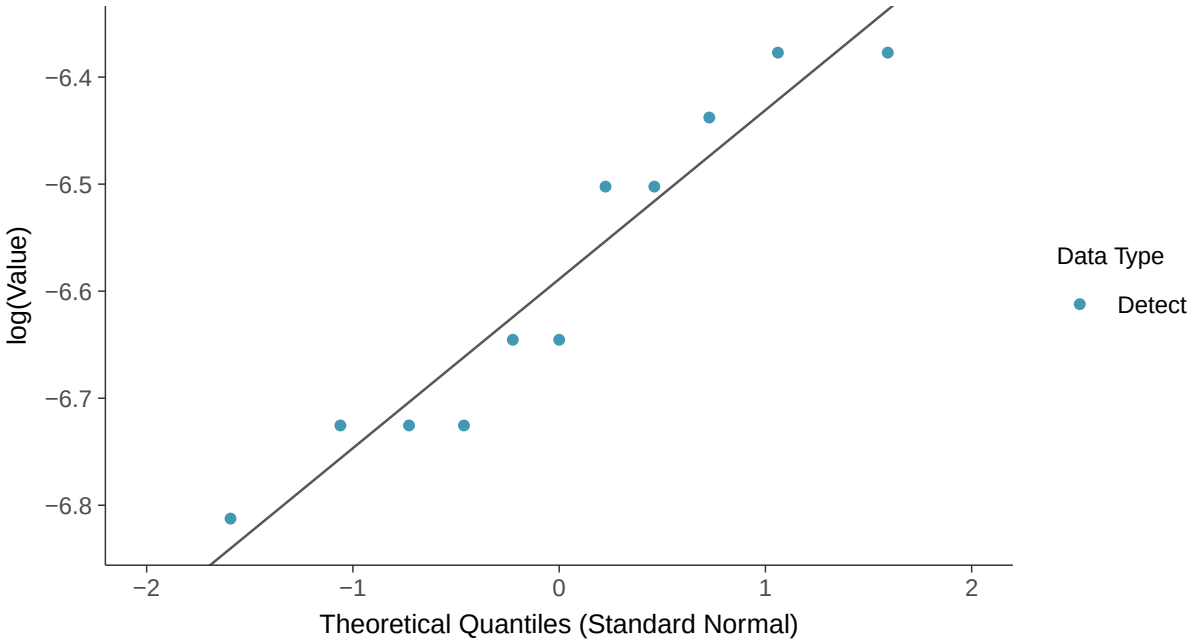
Normal Q-Q plot

Arsenic, MW-20 (mg/L)



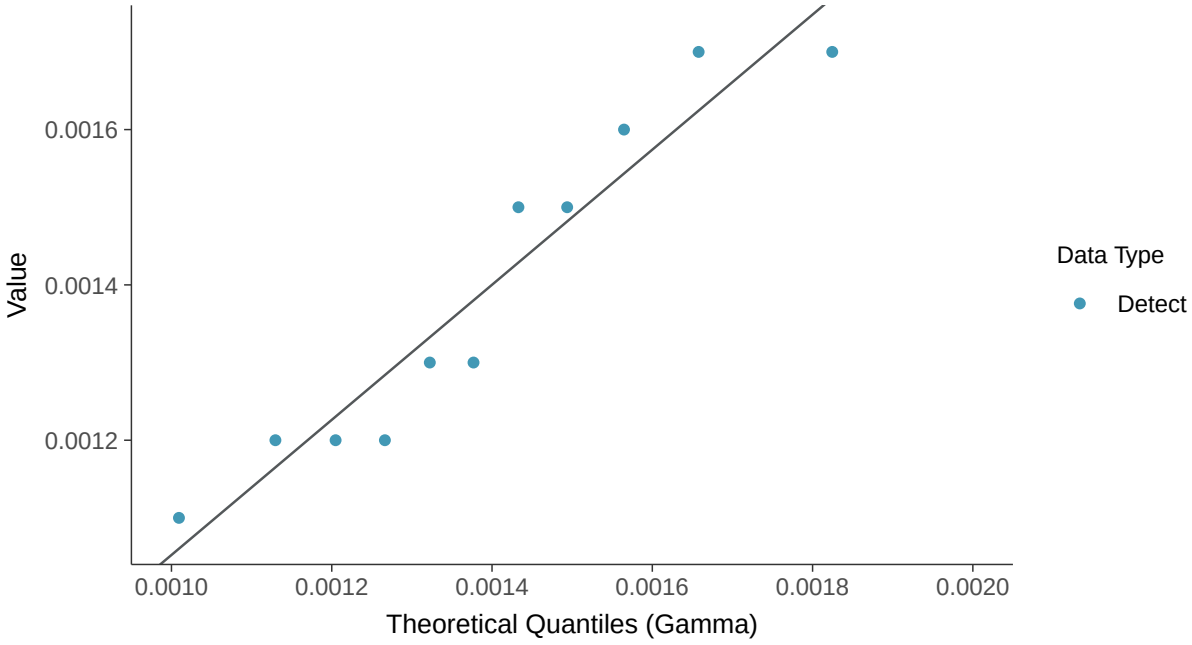
Lognormal Q-Q plot

Arsenic, MW-20 (mg/L)



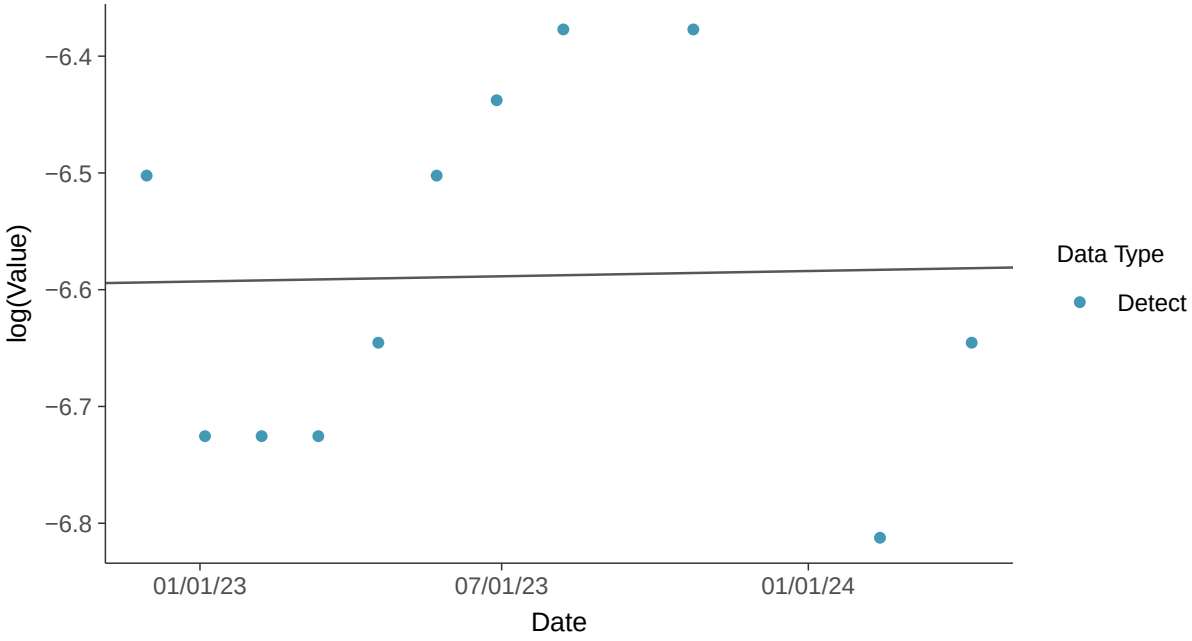
Gamma Q-Q plot

Arsenic, MW-20 (mg/L)



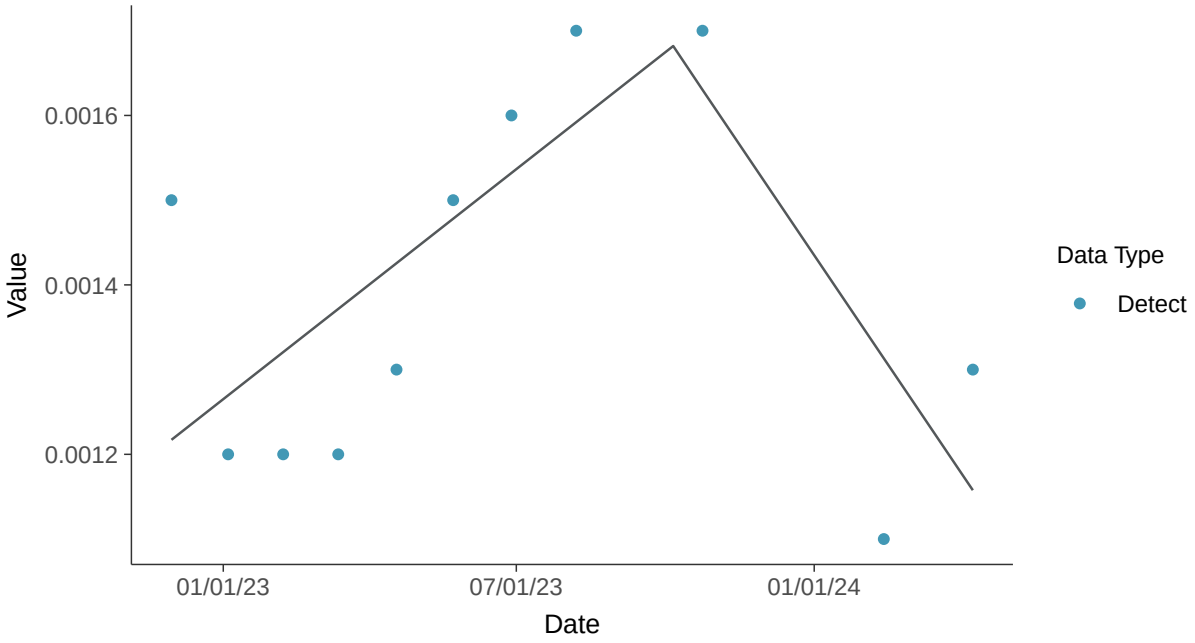
Trend Regression: Lognormal MLE

Arsenic, MW-20 (mg/L)



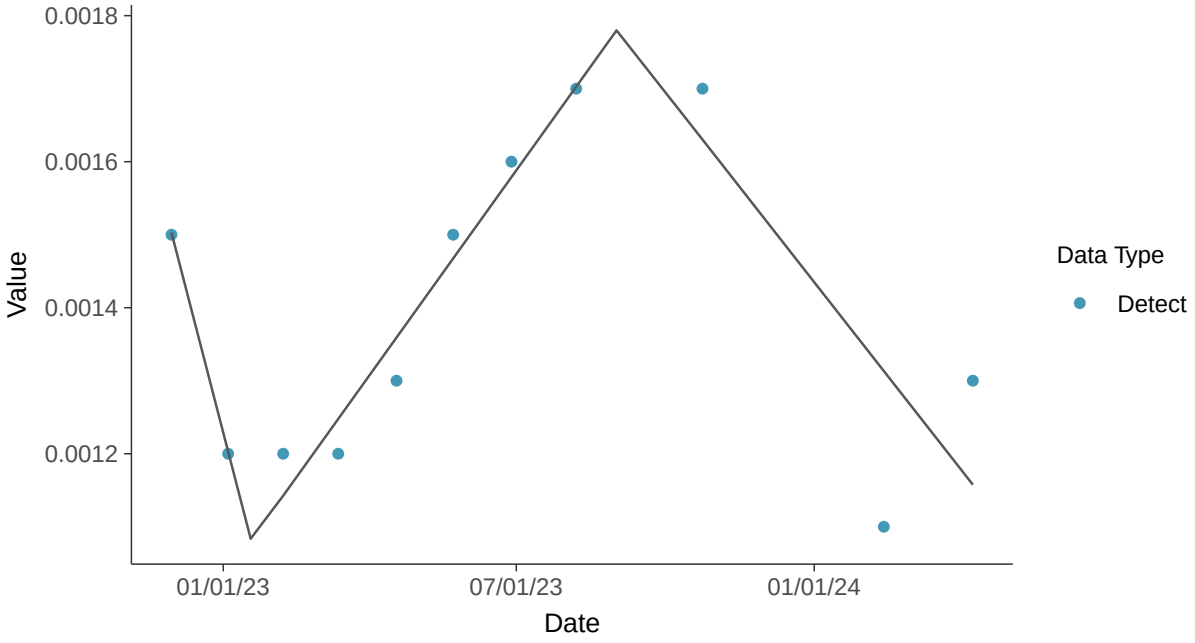
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-20 (mg/L)



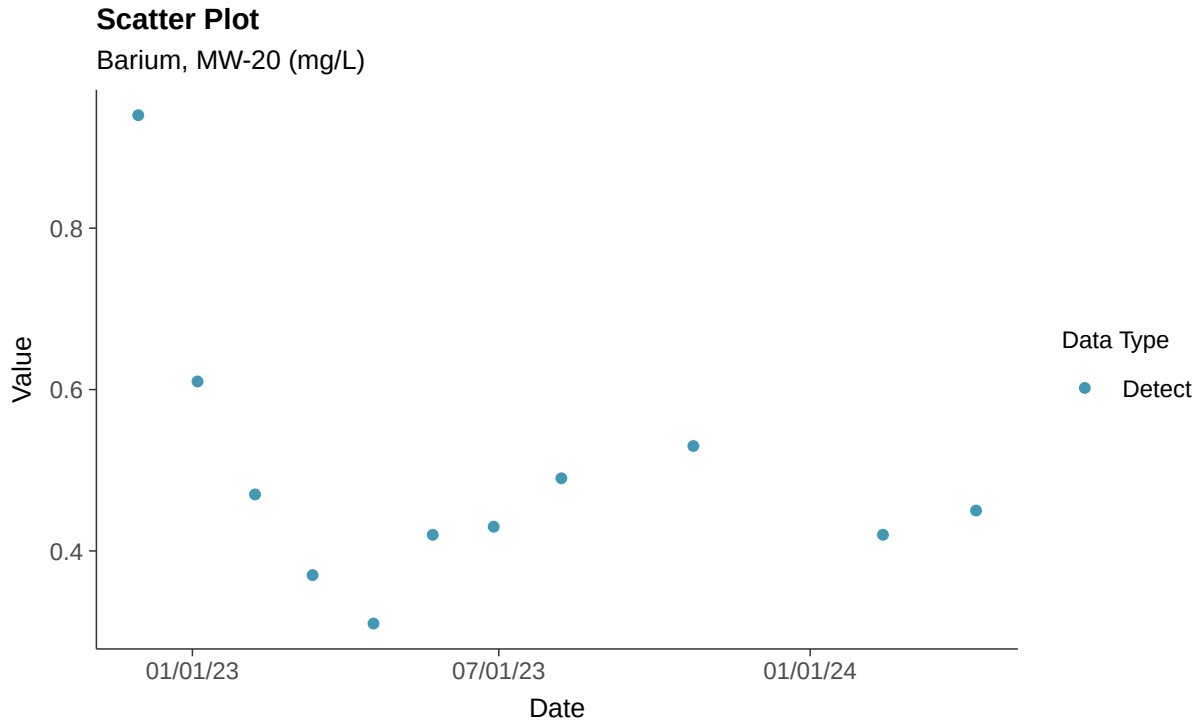
Trend Regression: Piecewise Linear-Linear-Linear

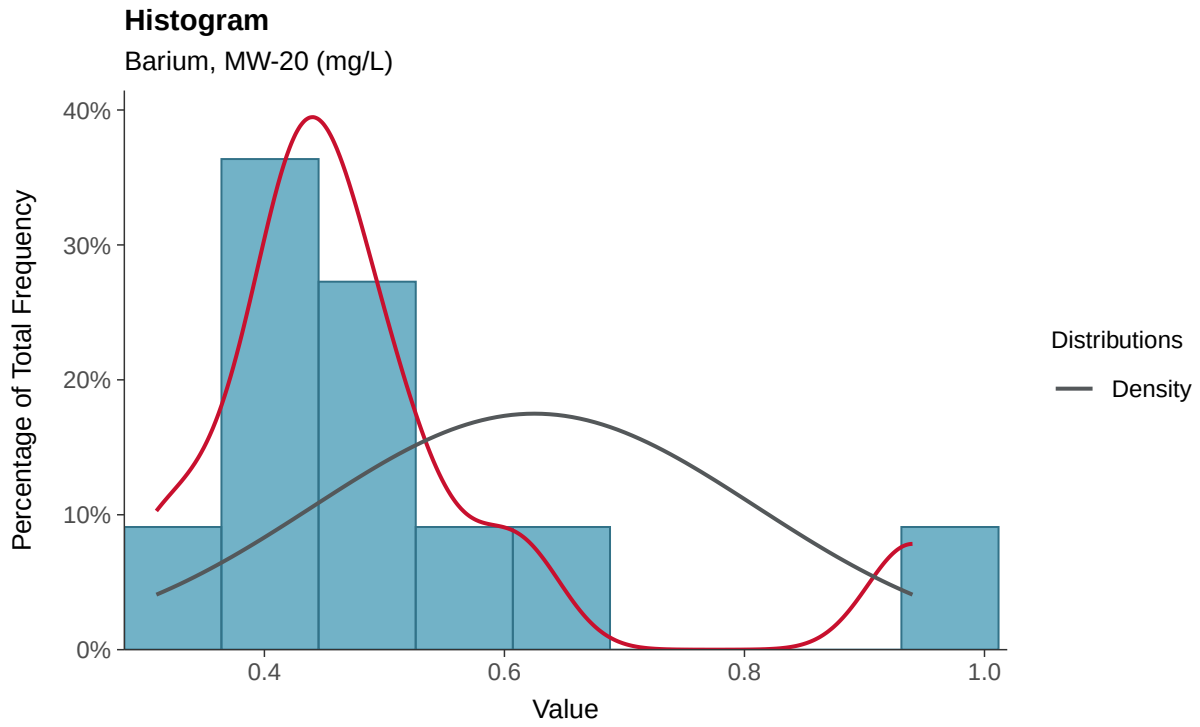
Arsenic, MW-20 (mg/L)



Appendix IV: Barium, MW-20

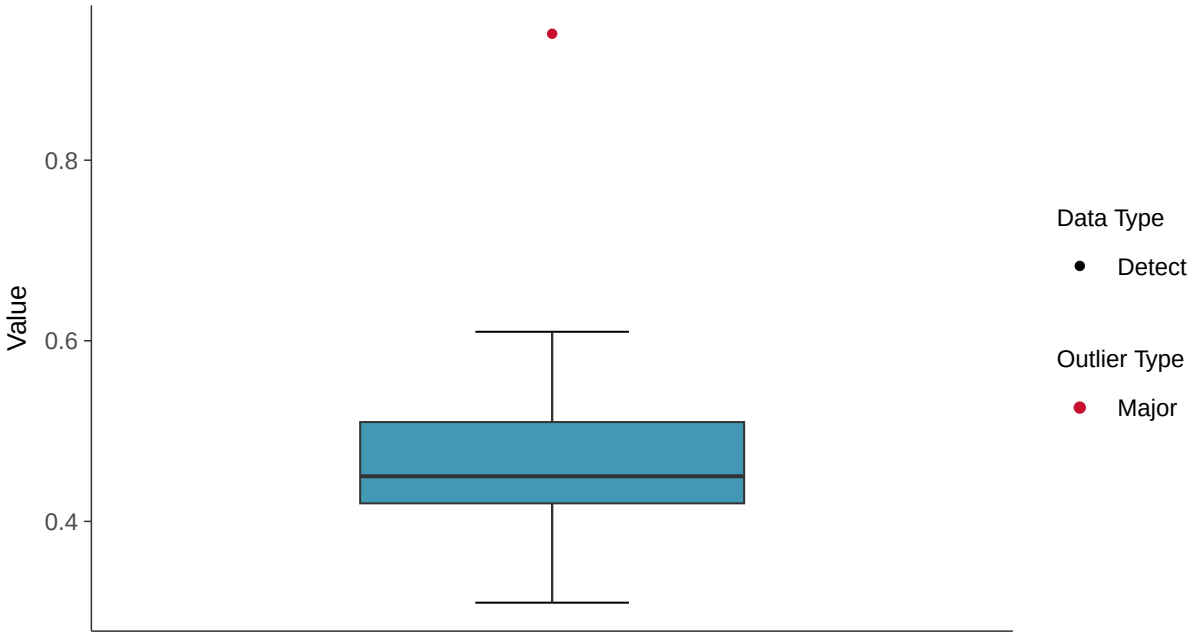
ID: 1_30_5_103





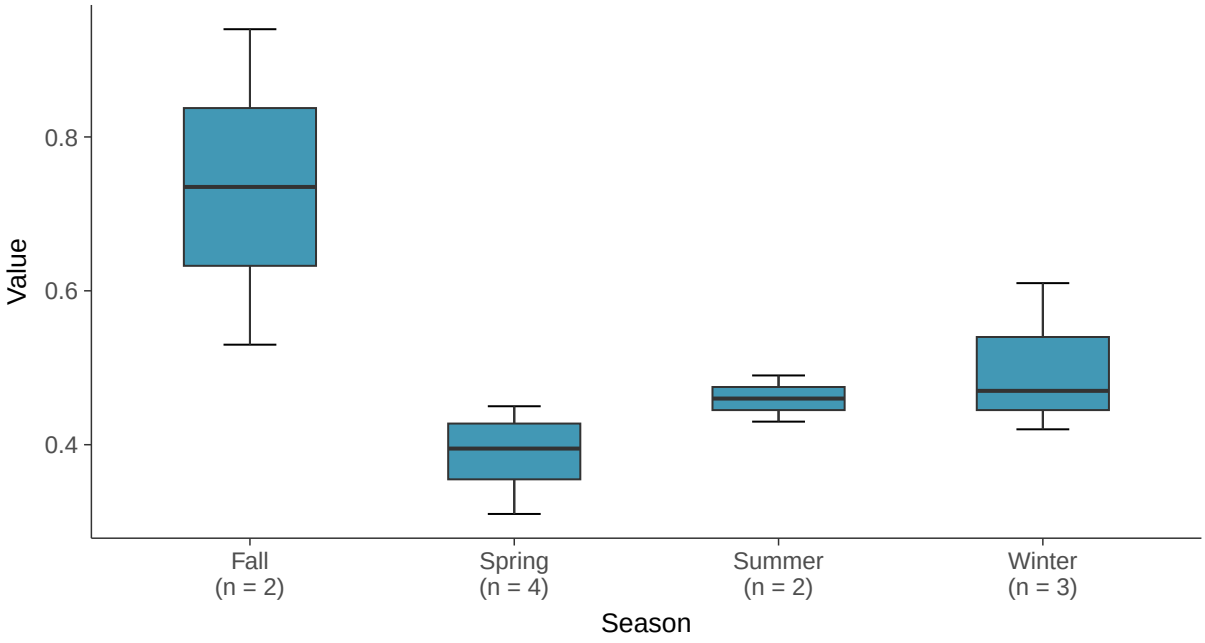
Boxplot

Barium, MW-20 (mg/L)



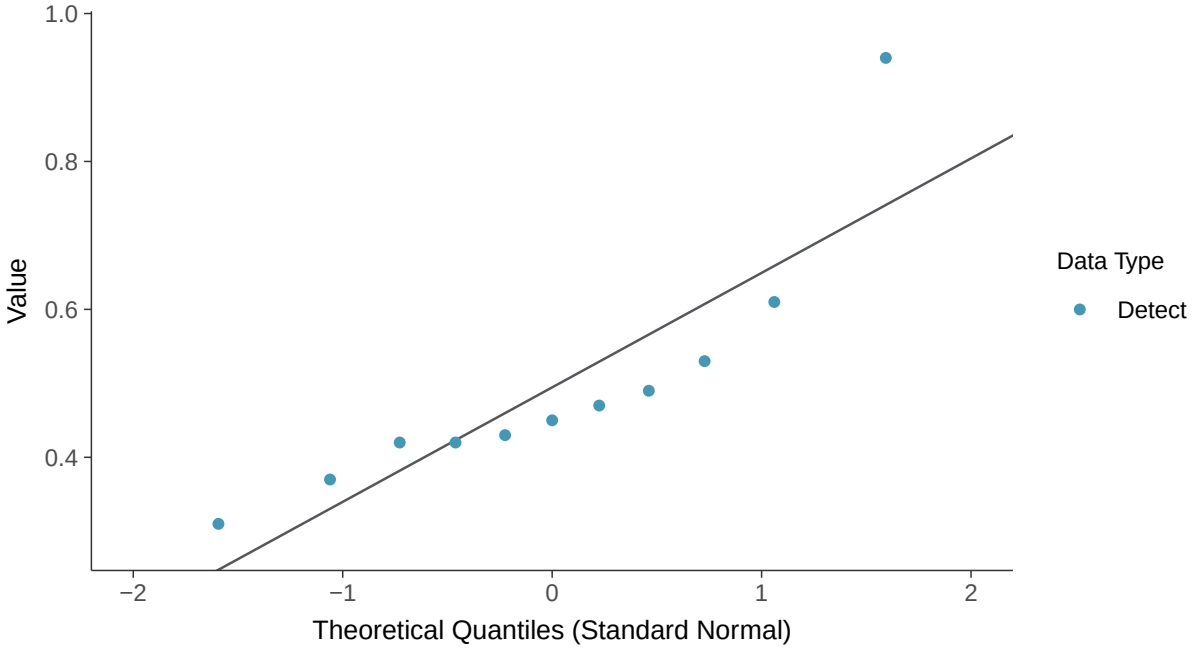
Boxplot by Season

Barium, MW-20 (mg/L)



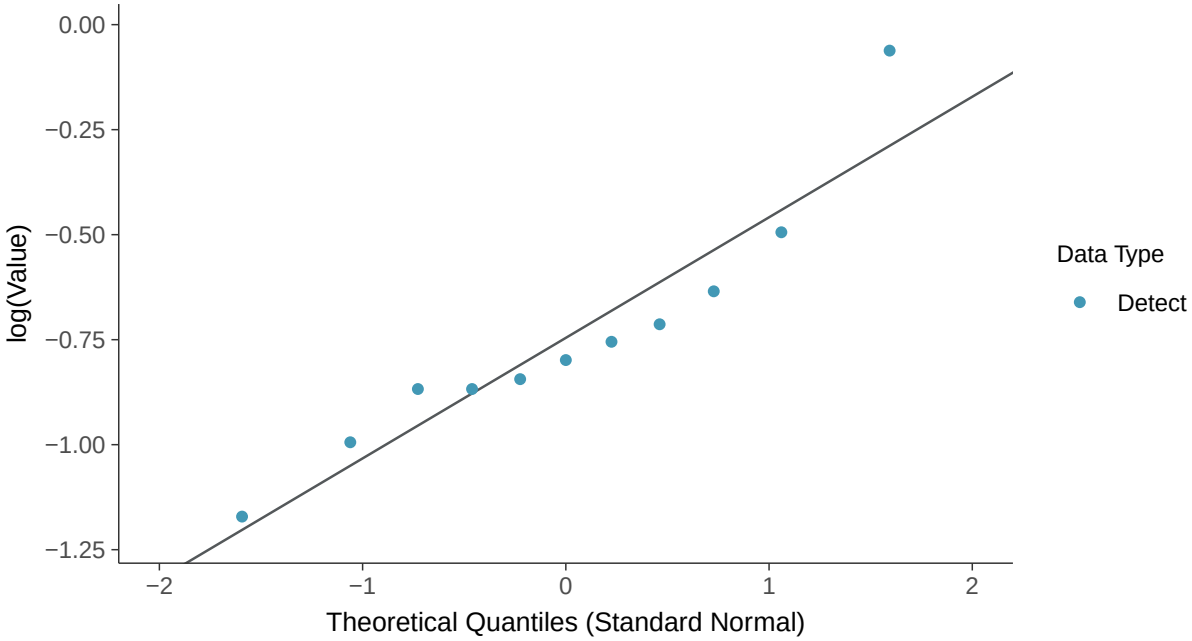
Normal Q-Q plot

Barium, MW-20 (mg/L)



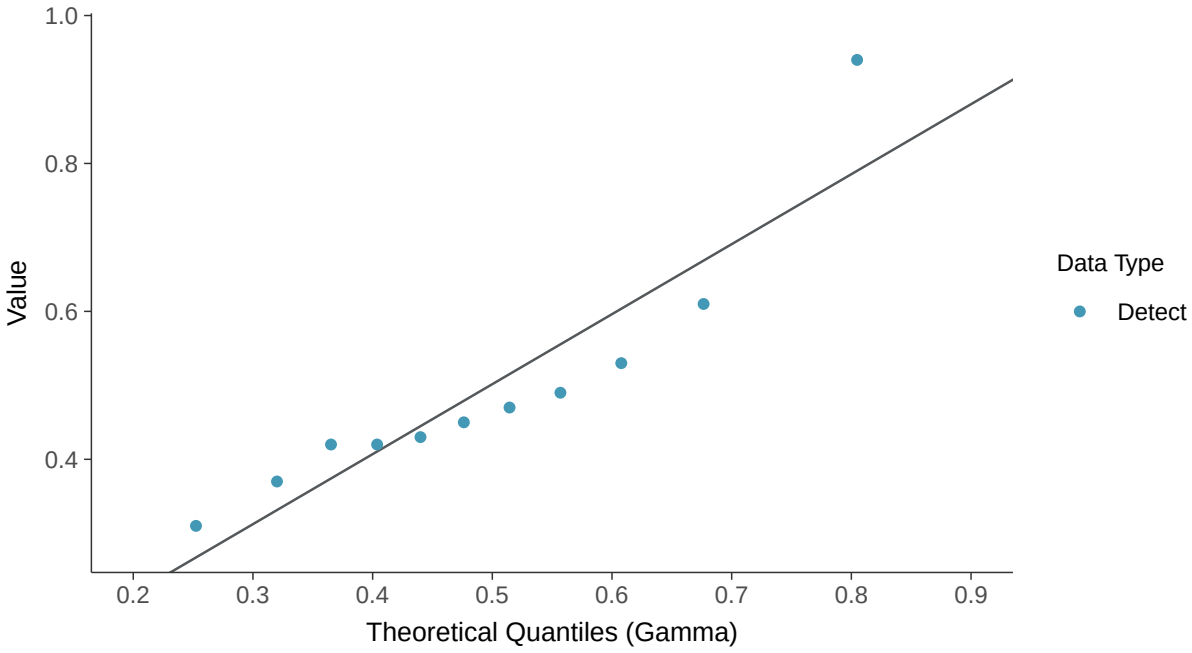
Lognormal Q-Q plot

Barium, MW-20 (mg/L)



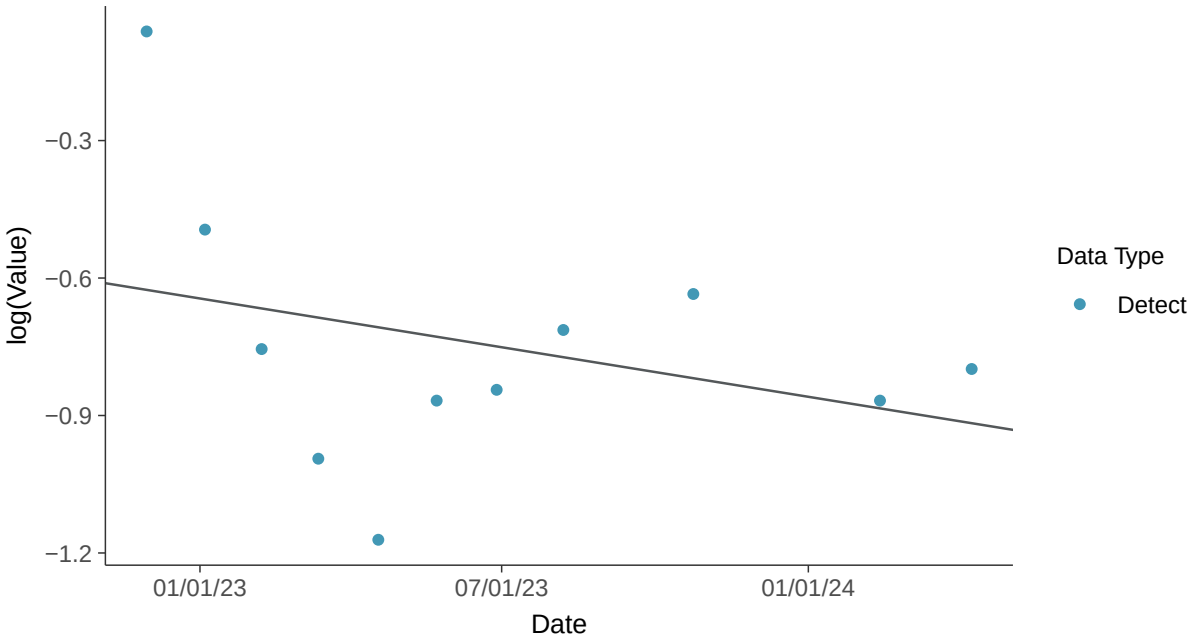
Gamma Q-Q plot

Barium, MW-20 (mg/L)



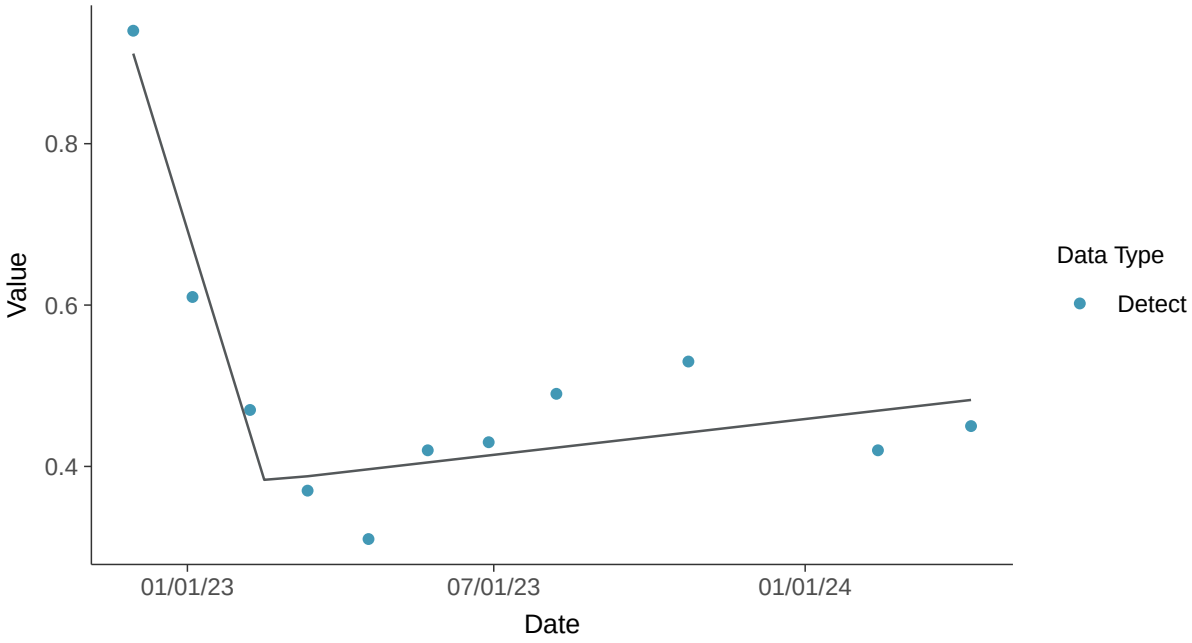
Trend Regression: Lognormal MLE

Barium, MW-20 (mg/L)



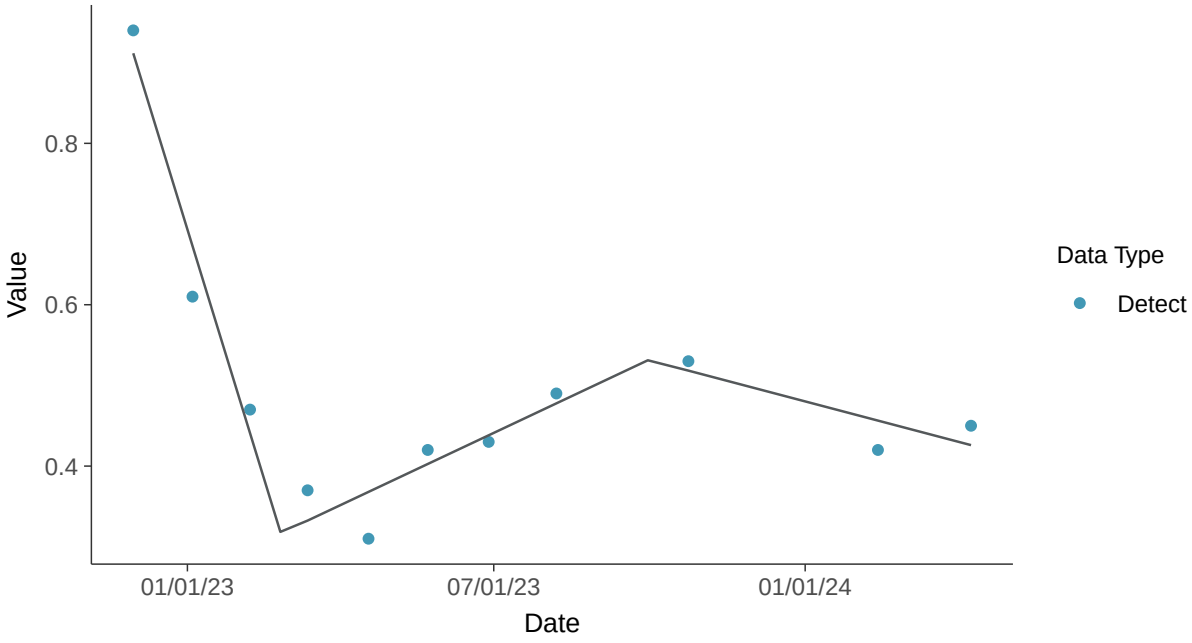
Trend Regression: Piecewise Linear-Linear

Barium, MW-20 (mg/L)



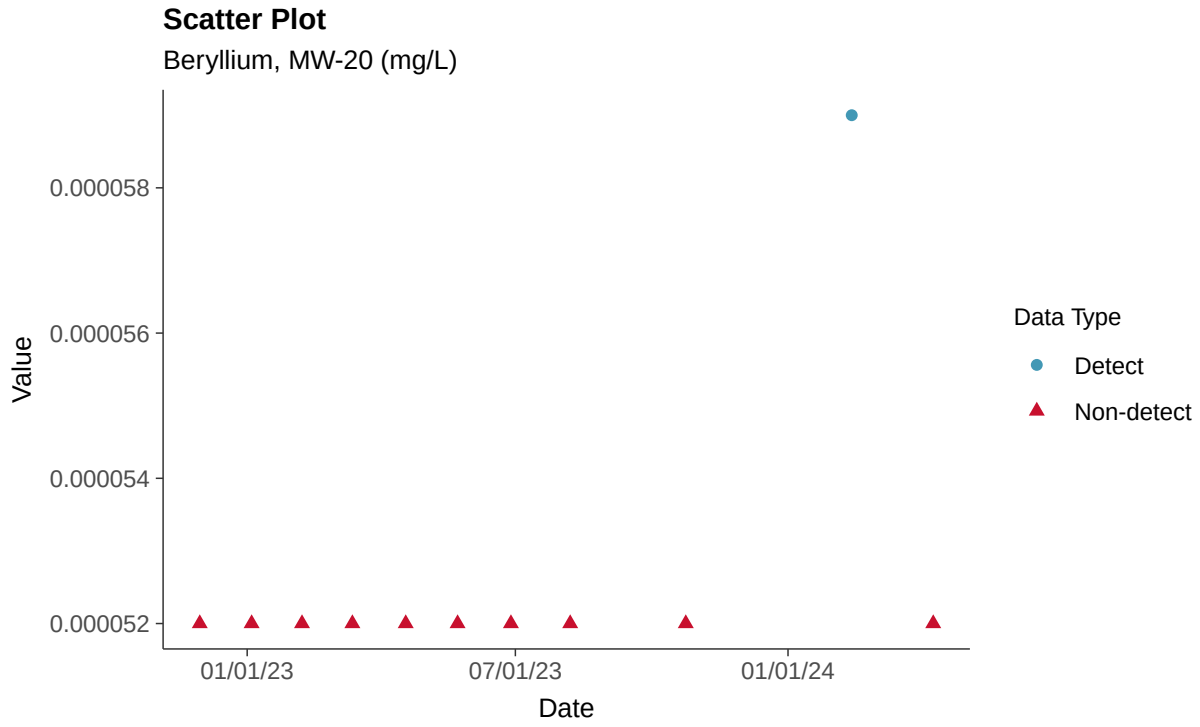
Trend Regression: Piecewise Linear-Linear-Linear

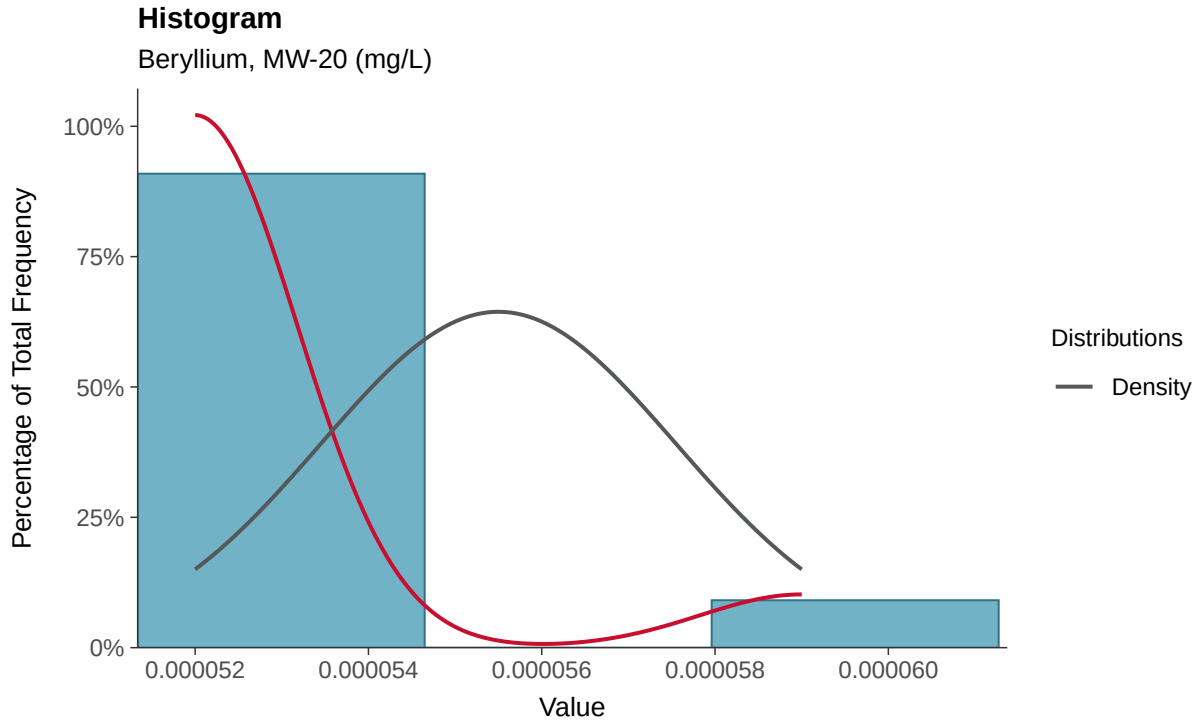
Barium, MW-20 (mg/L)

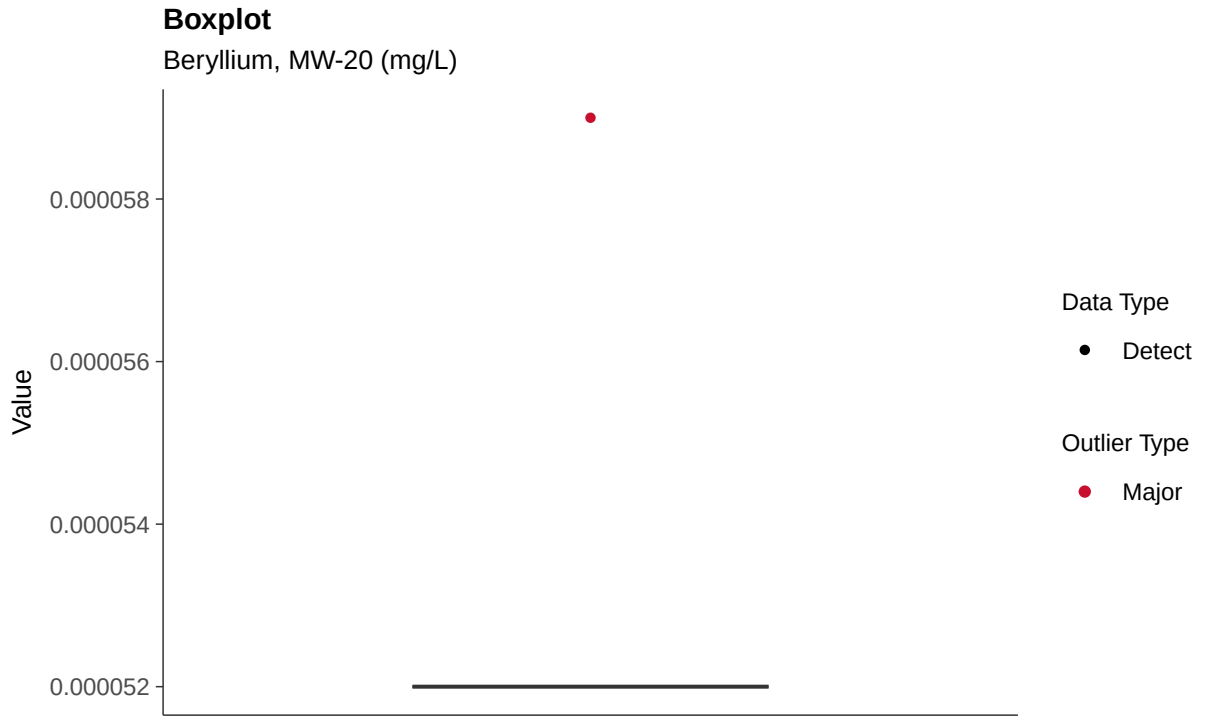


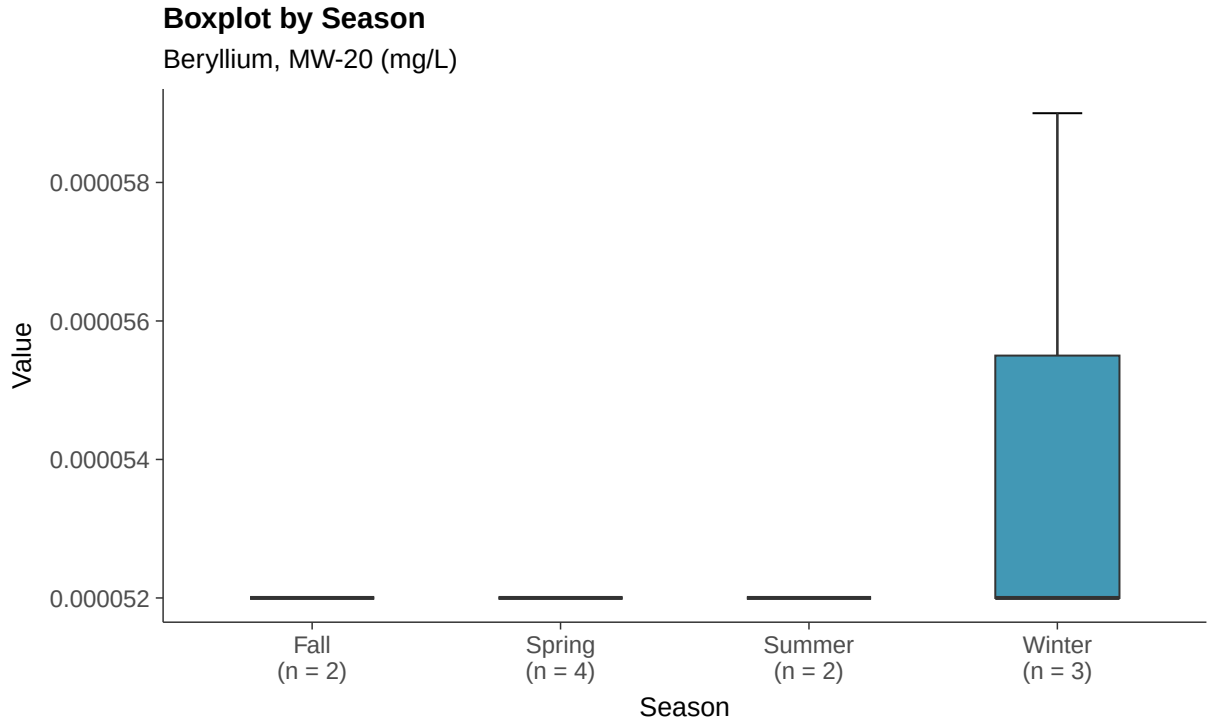
Appendix IV: Beryllium, MW-20

ID: 1_30_5_104



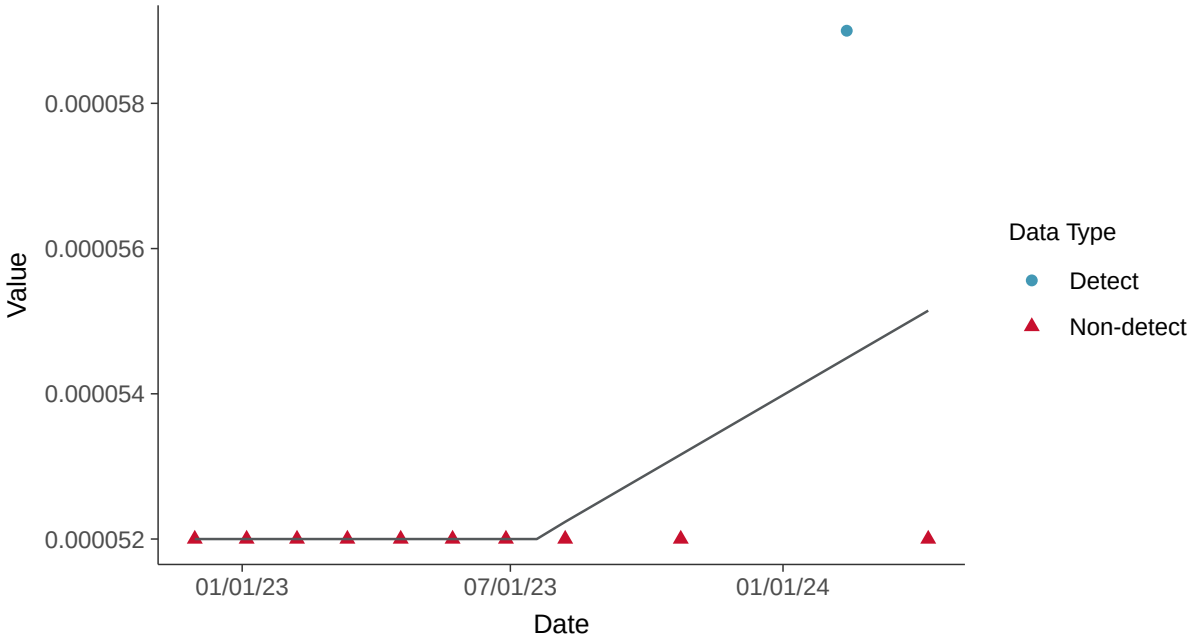



Boxplot
Beryllium, MW-20 (mg/L)
Value
0.000058
0.000056
0.000054
0.000052
Data Type
Detect
Outlier Type
Major


Boxplot by Season
Beryllium, MW-20 (mg/L)
Value
0.000058
0.000056
0.000054
0.000052
Fall
(n = 2)
Spring
(n = 4)
Summer
(n = 2)
Winter
(n = 3)
Season

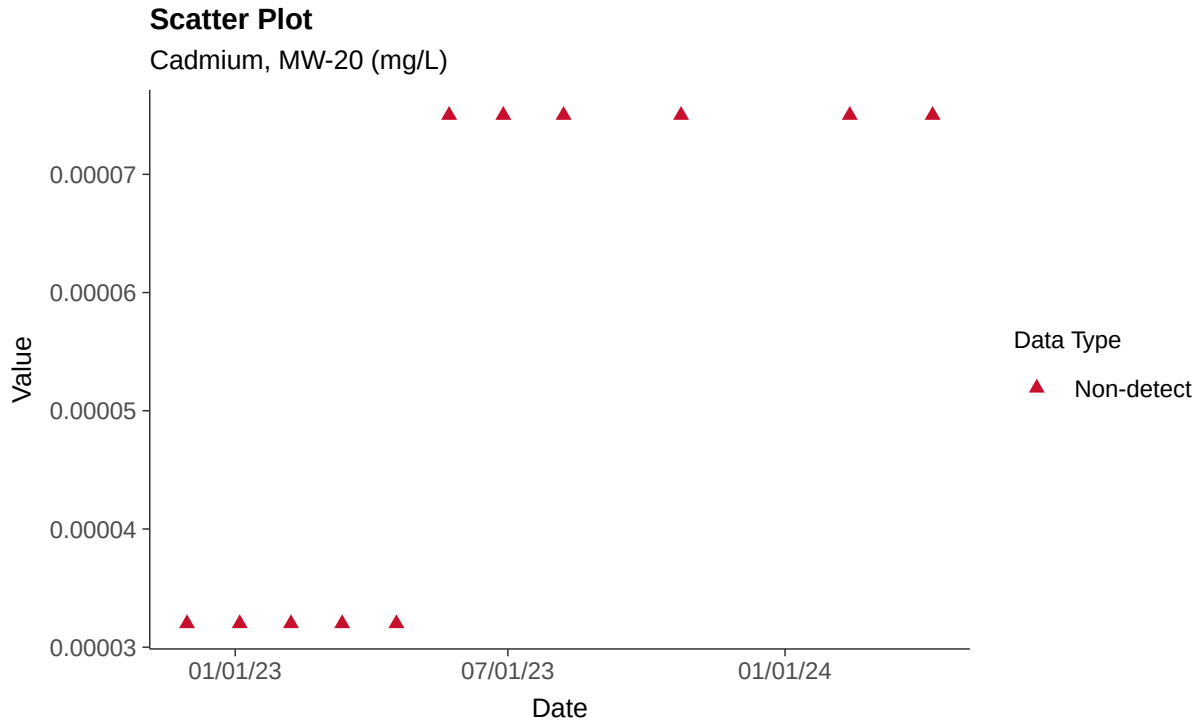
Trend Regression: Piecewise Linear-Linear

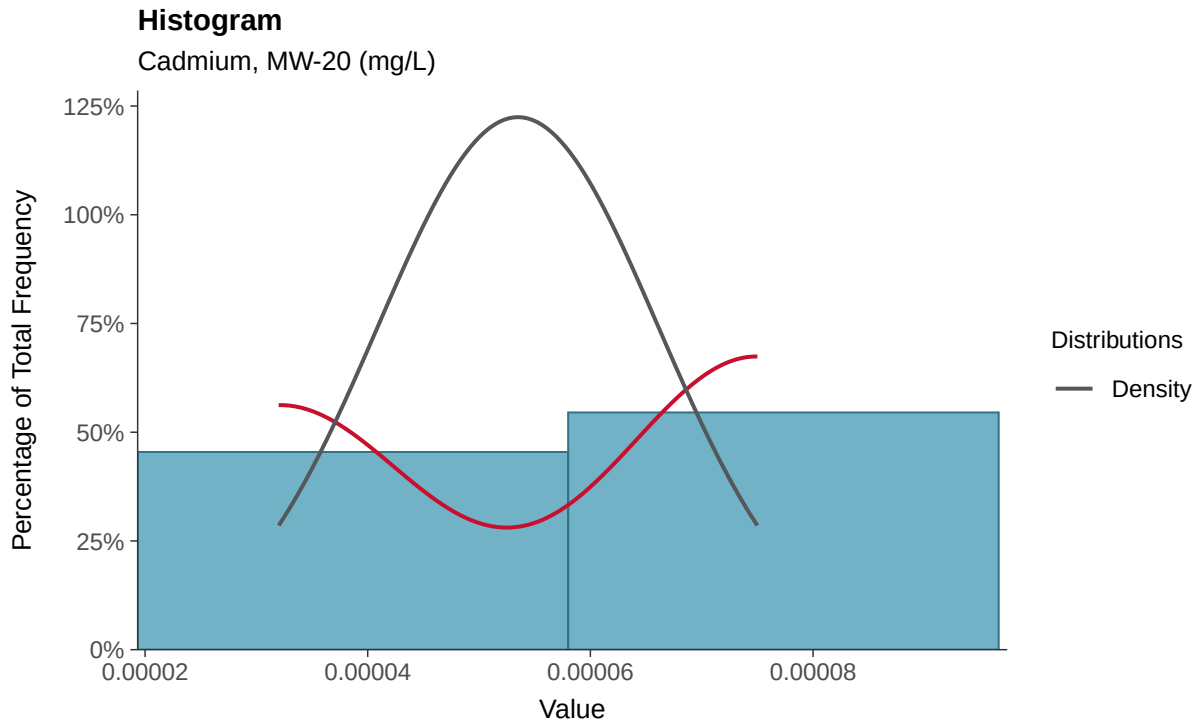
Beryllium, MW-20 (mg/L)



Appendix IV: Cadmium, MW-20

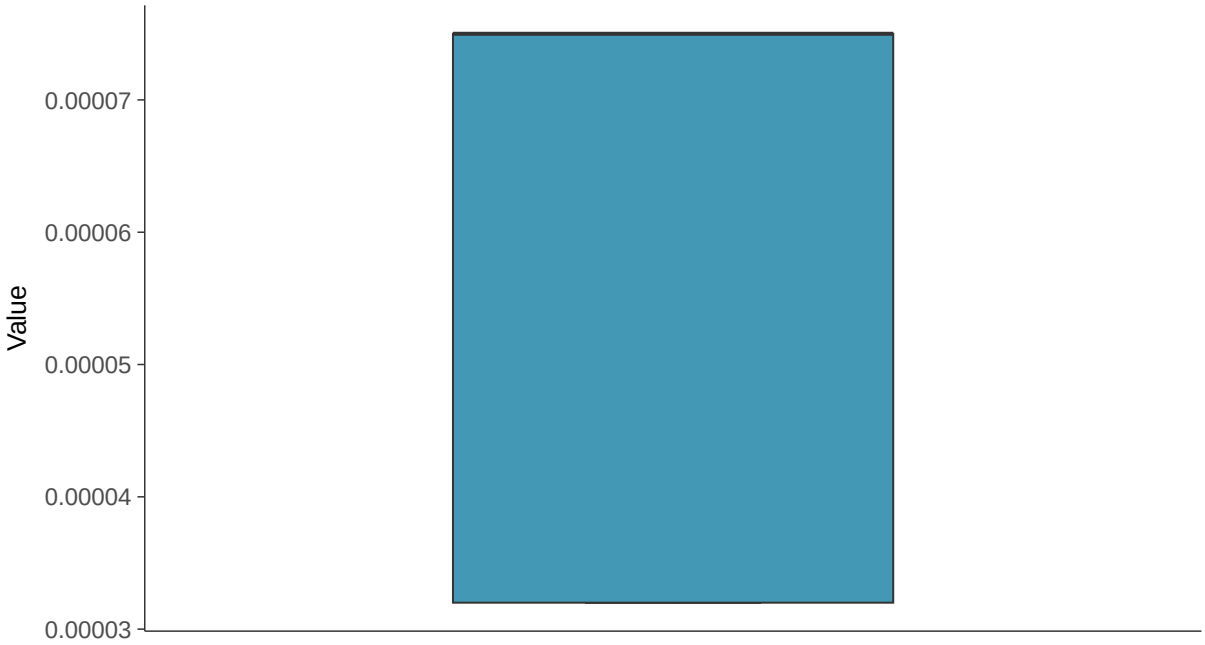
ID: 1_30_5_106





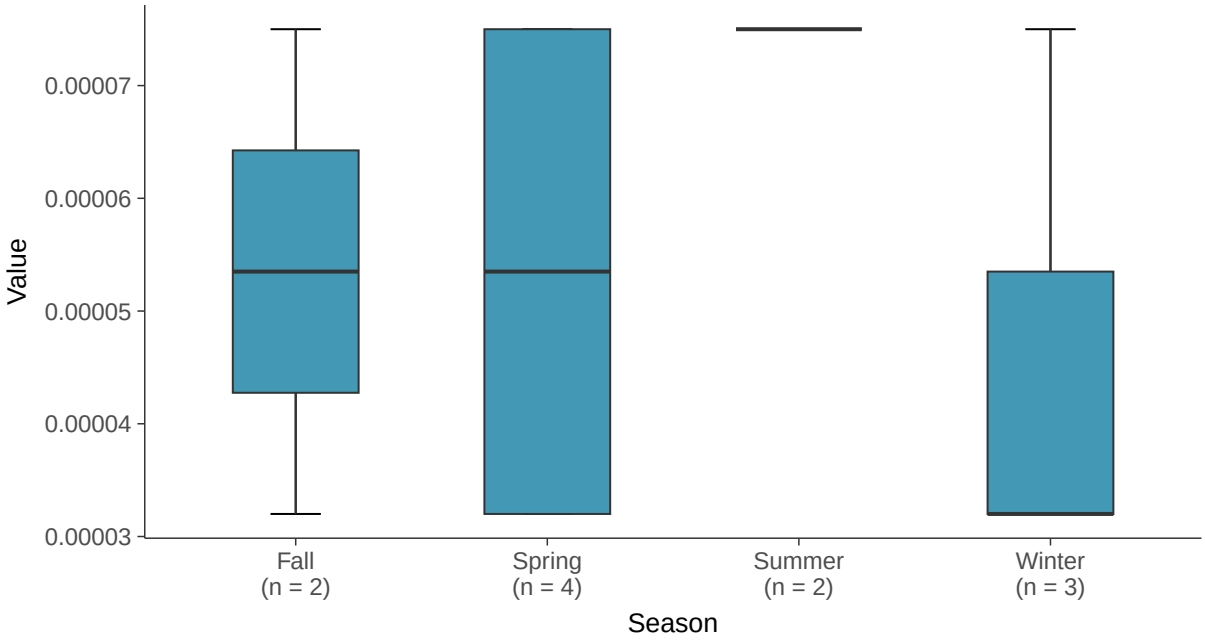
Boxplot

Cadmium, MW-20 (mg/L)



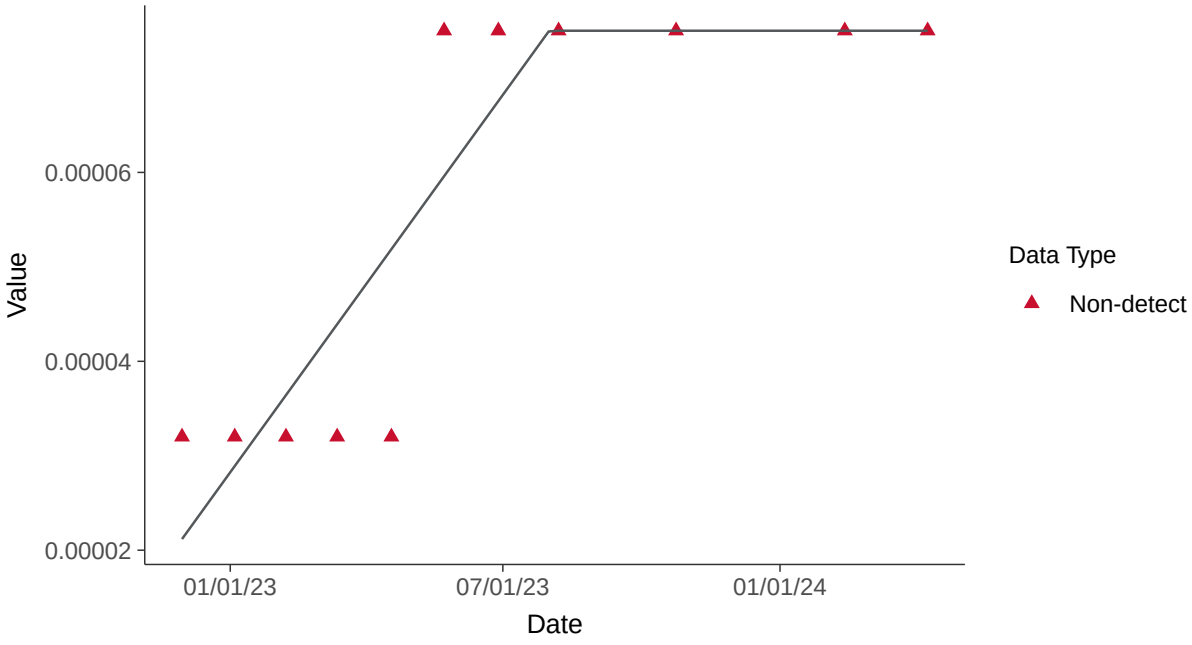
Boxplot by Season

Cadmium, MW-20 (mg/L)



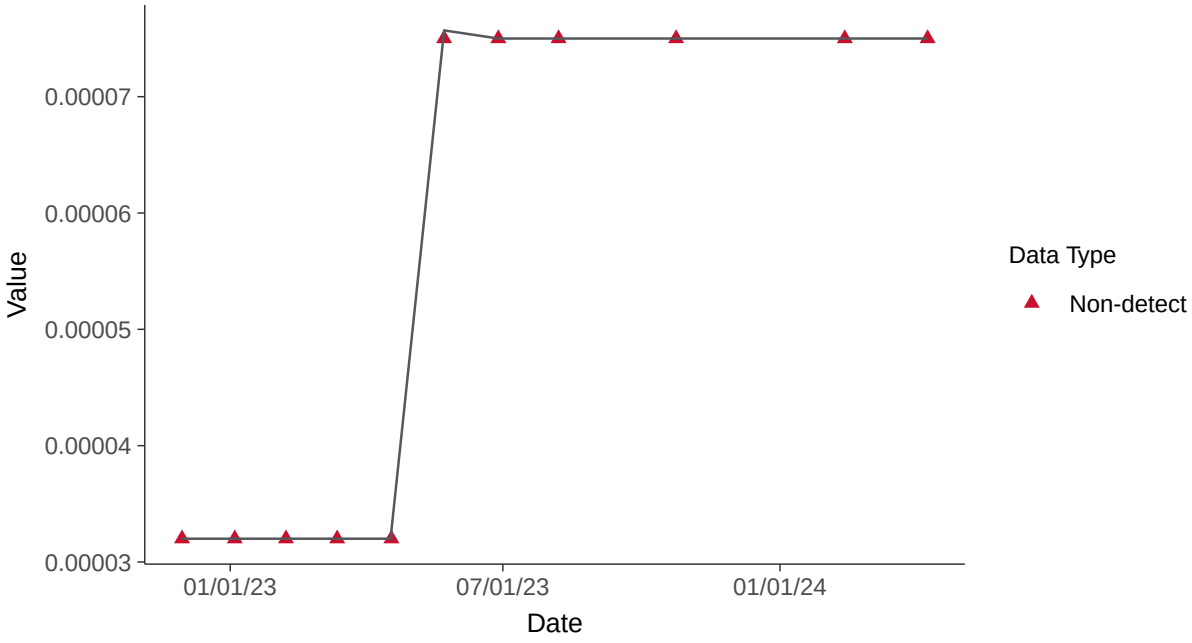
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-20 (mg/L)



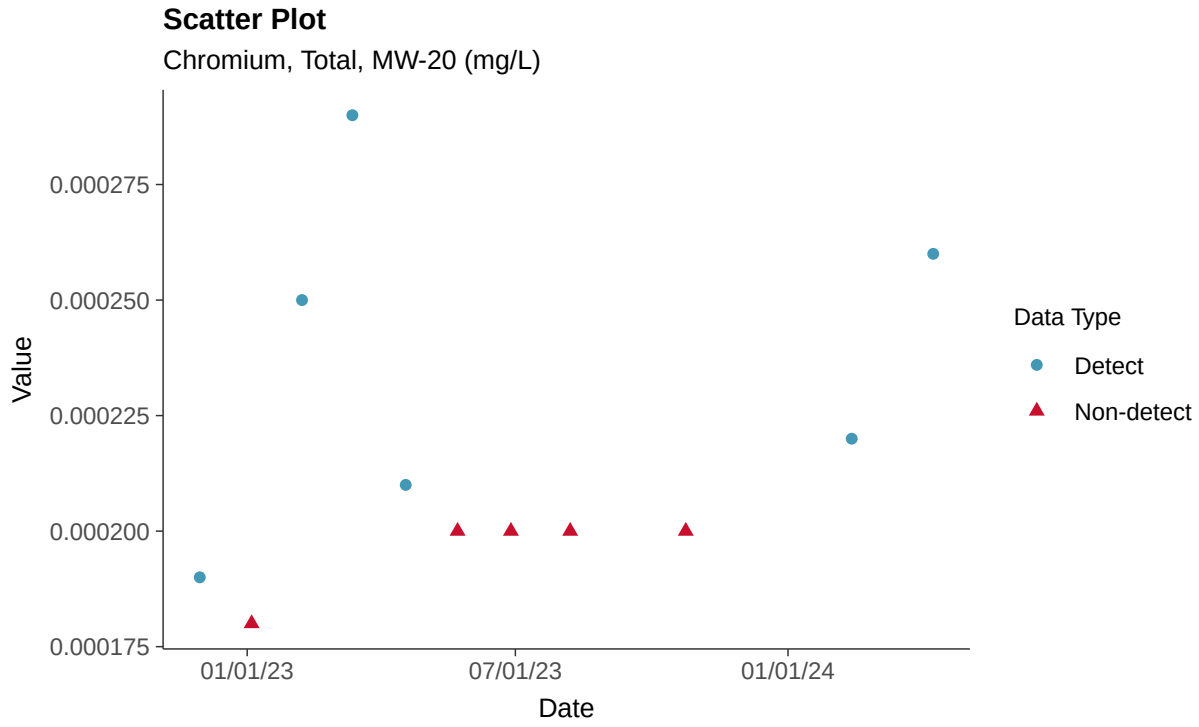
Trend Regression: Piecewise Linear-Linear-Linear

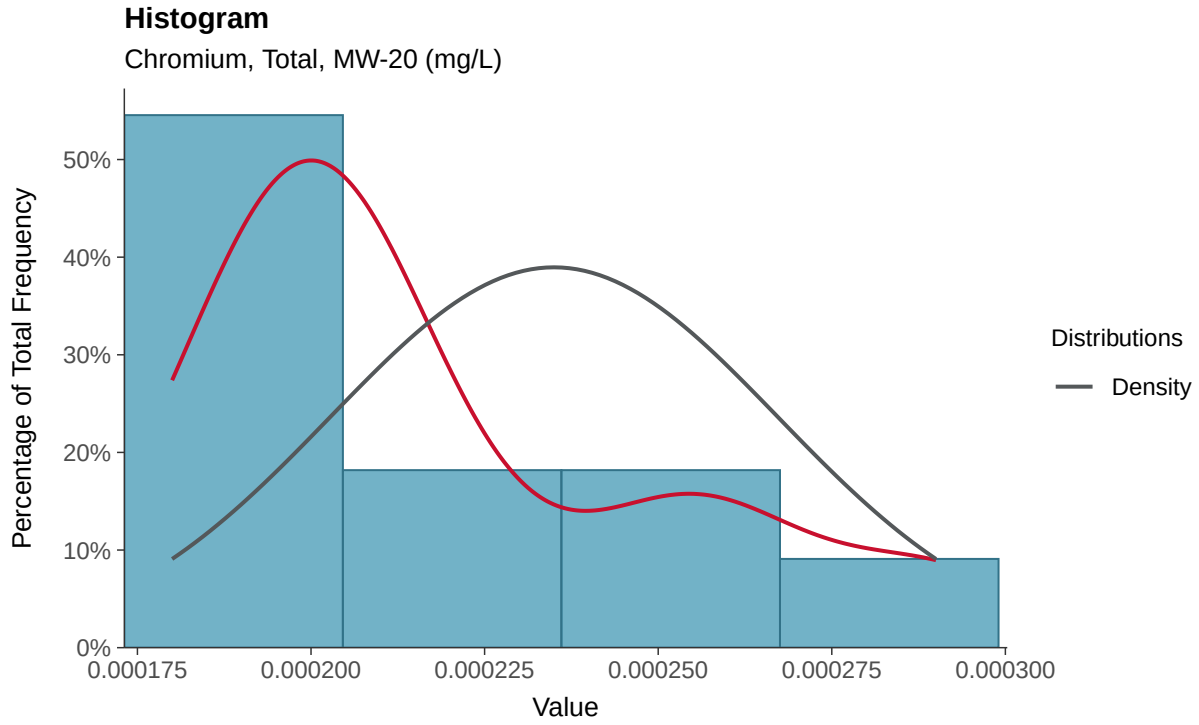
Cadmium, MW-20 (mg/L)



Appendix IV: Chromium, Total, MW-20

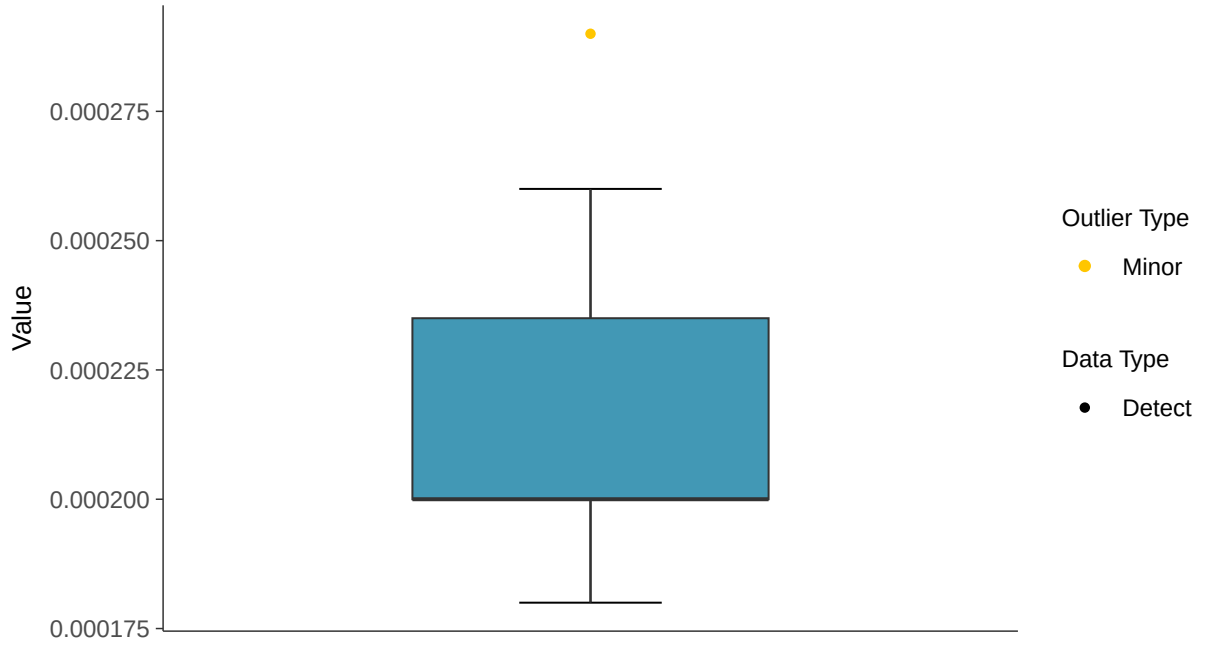
ID: 1_30_5_109





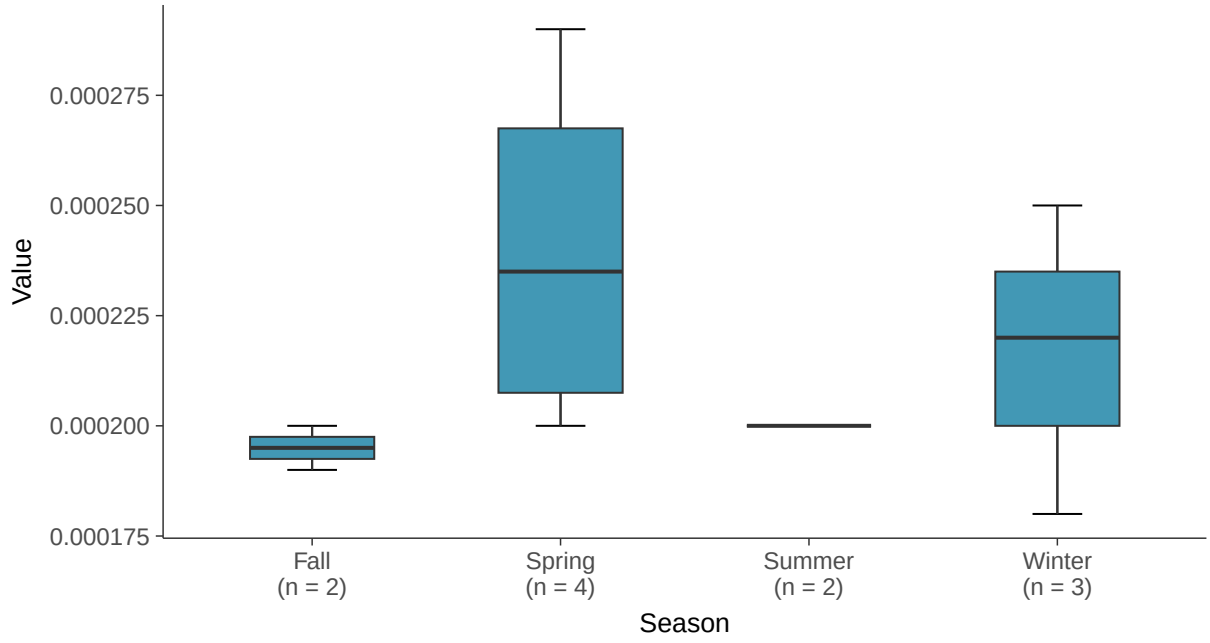
Boxplot

Chromium, Total, MW-20 (mg/L)



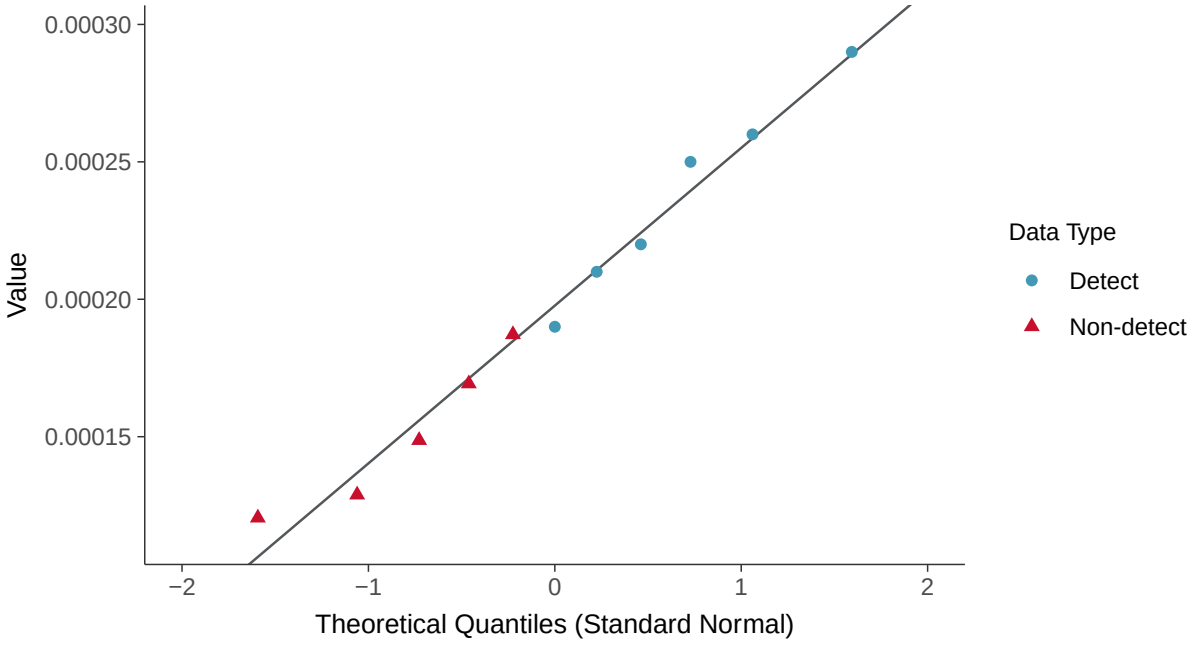
Boxplot by Season

Chromium, Total, MW-20 (mg/L)



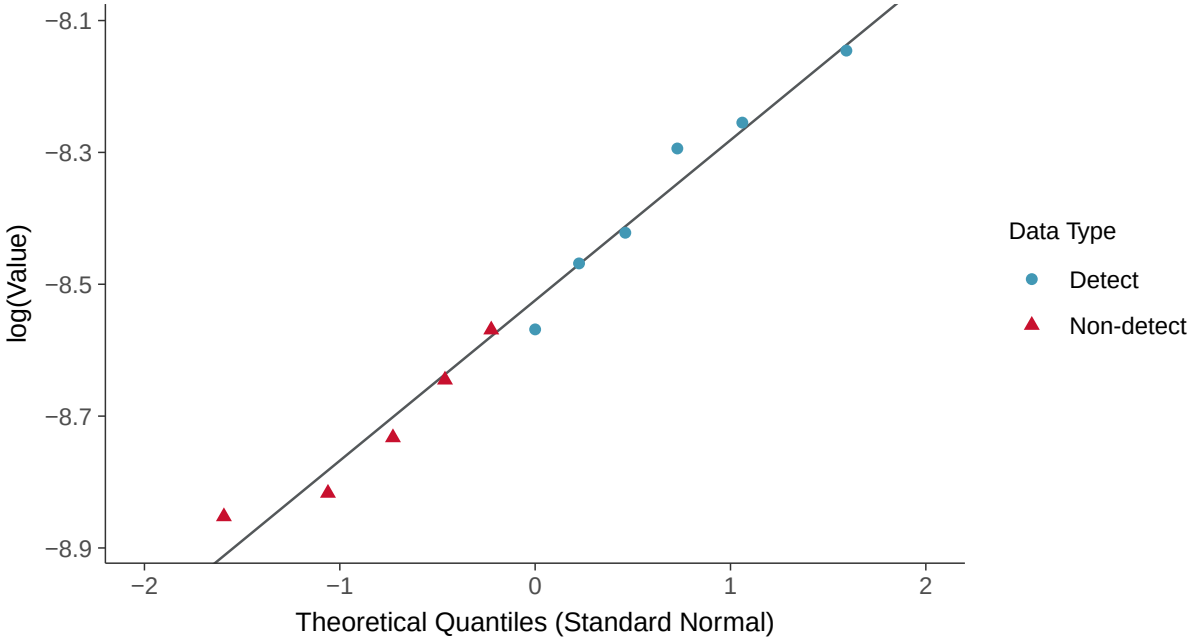
Normal Q-Q plot using ROS Imputed Estimates

Chromium, Total, MW-20 (mg/L)



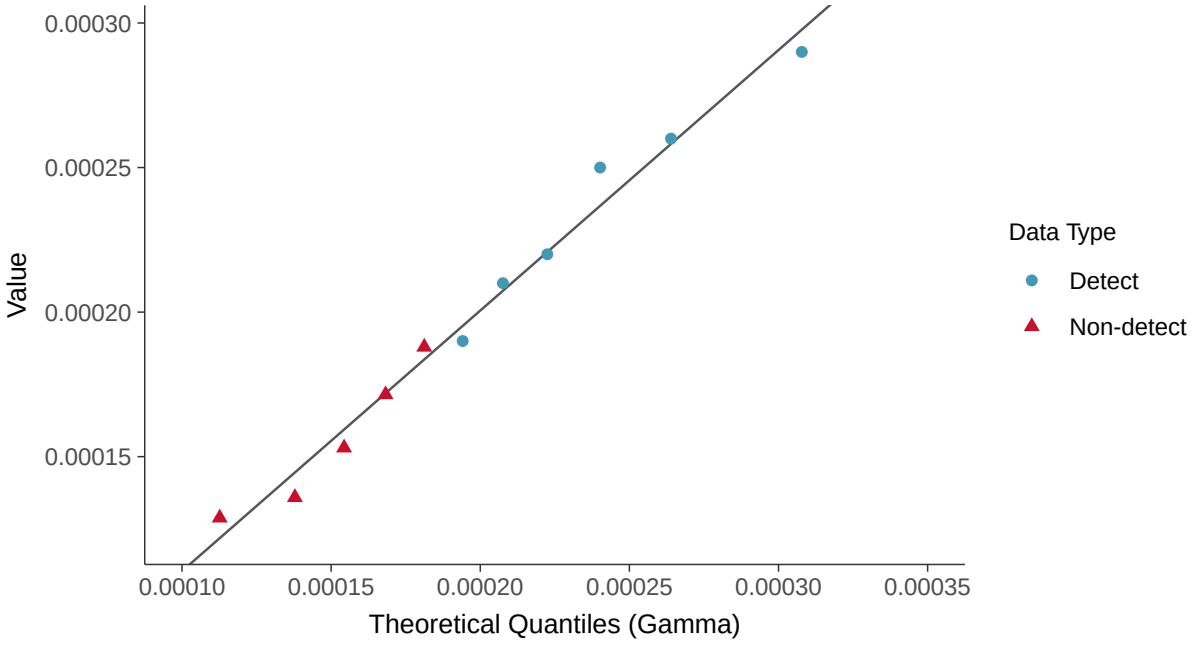
Lognormal Q-Q plot using ROS Imputed Estimates

Chromium, Total, MW-20 (mg/L)



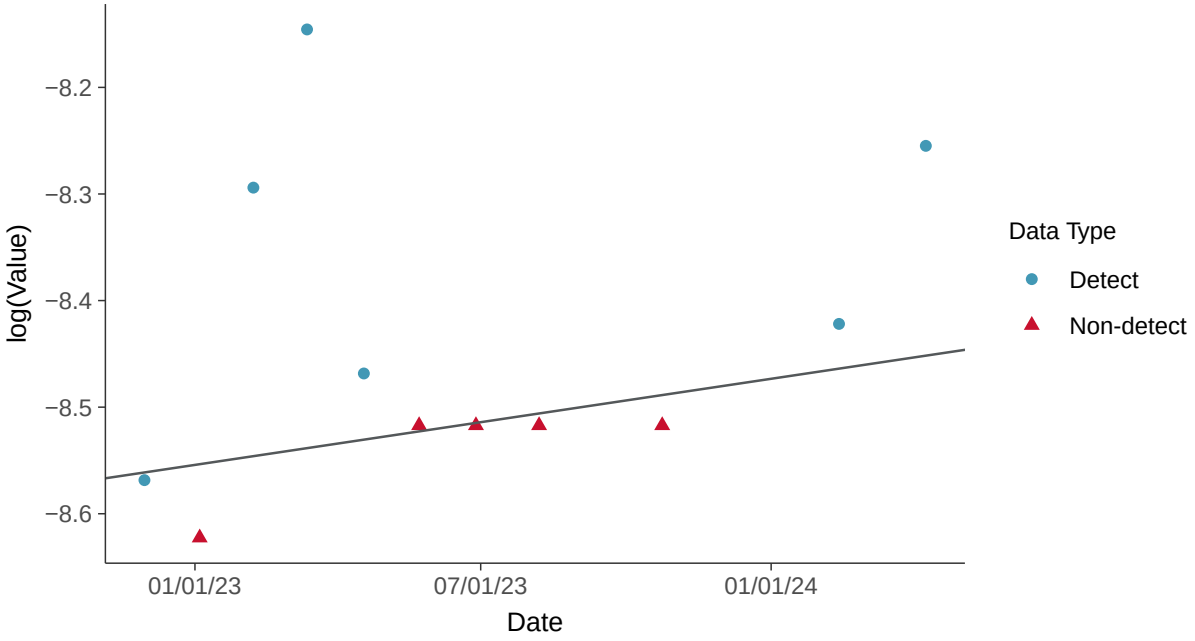
Gamma Q-Q plot using ROS Imputed Estimates

Chromium, Total, MW-20 (mg/L)



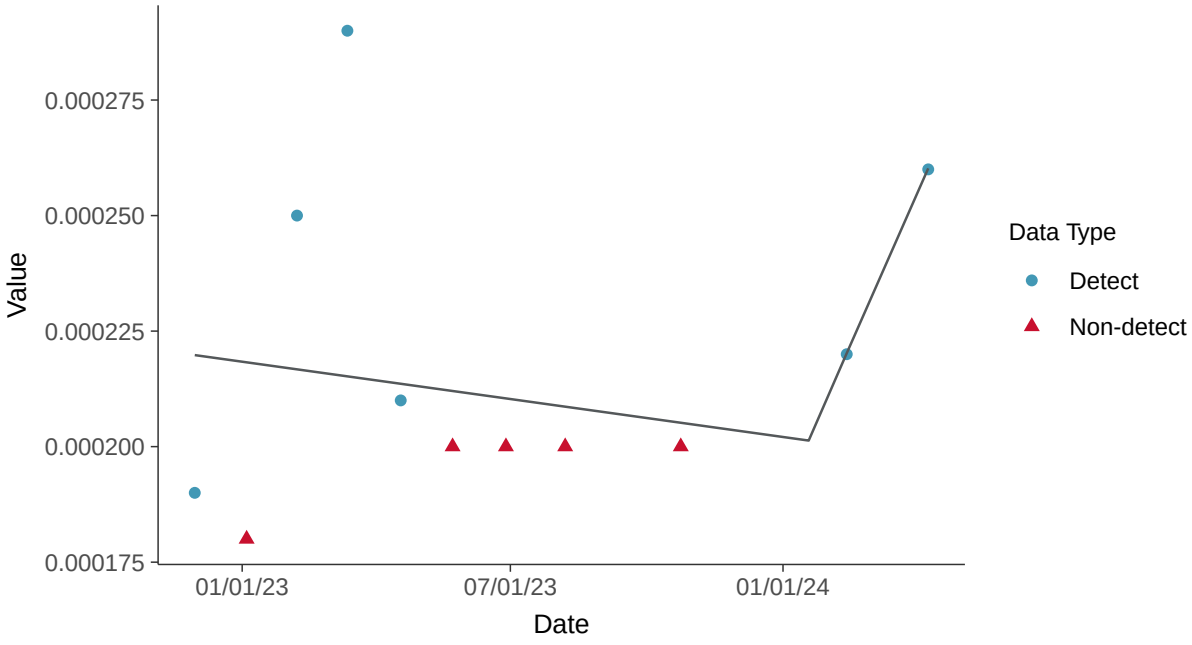
Trend Regression: Lognormal MLE

Chromium, Total, MW-20 (mg/L)



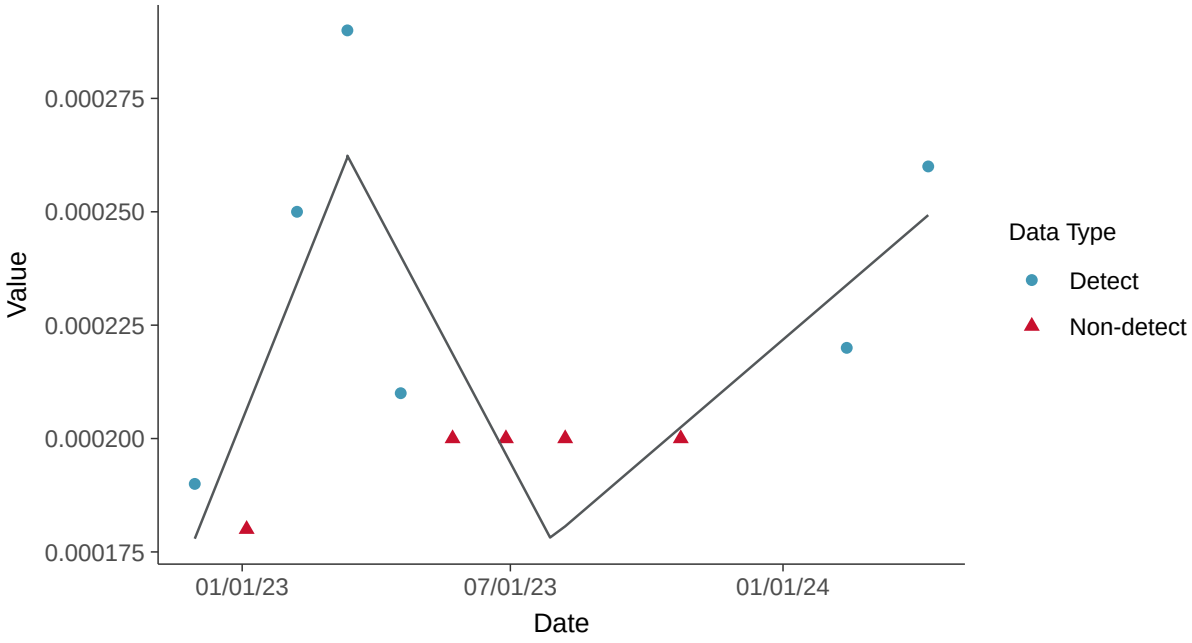
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-20 (mg/L)



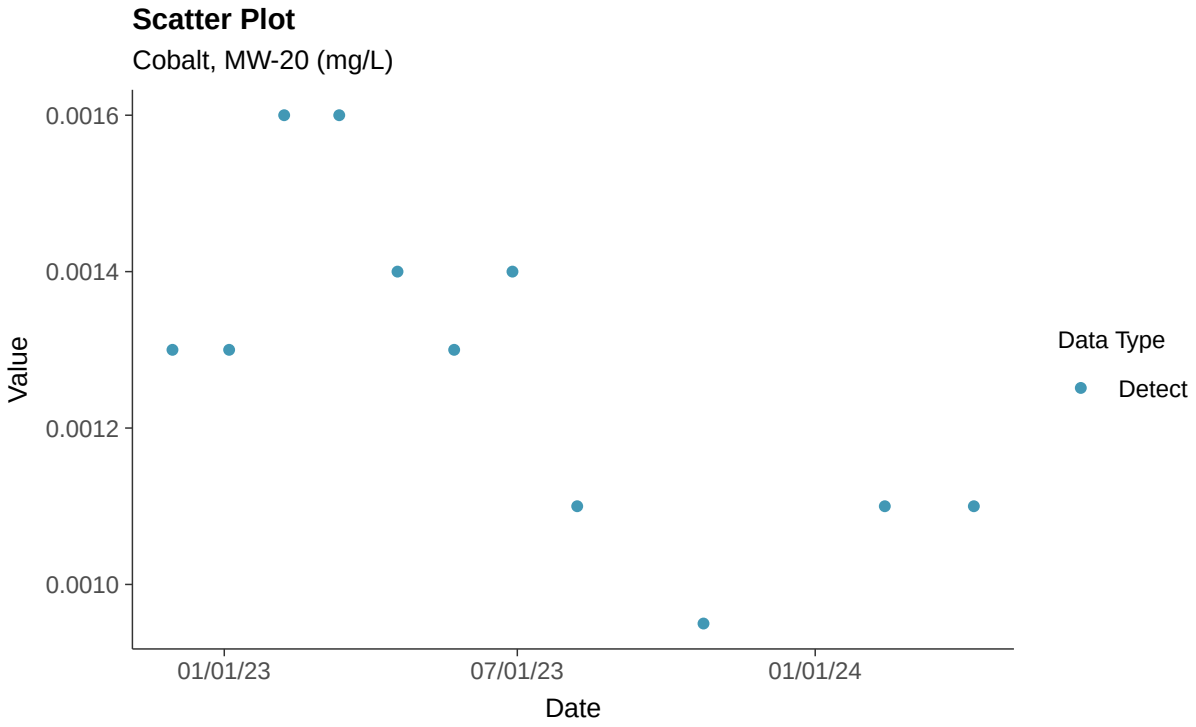
Trend Regression: Piecewise Linear-Linear-Linear

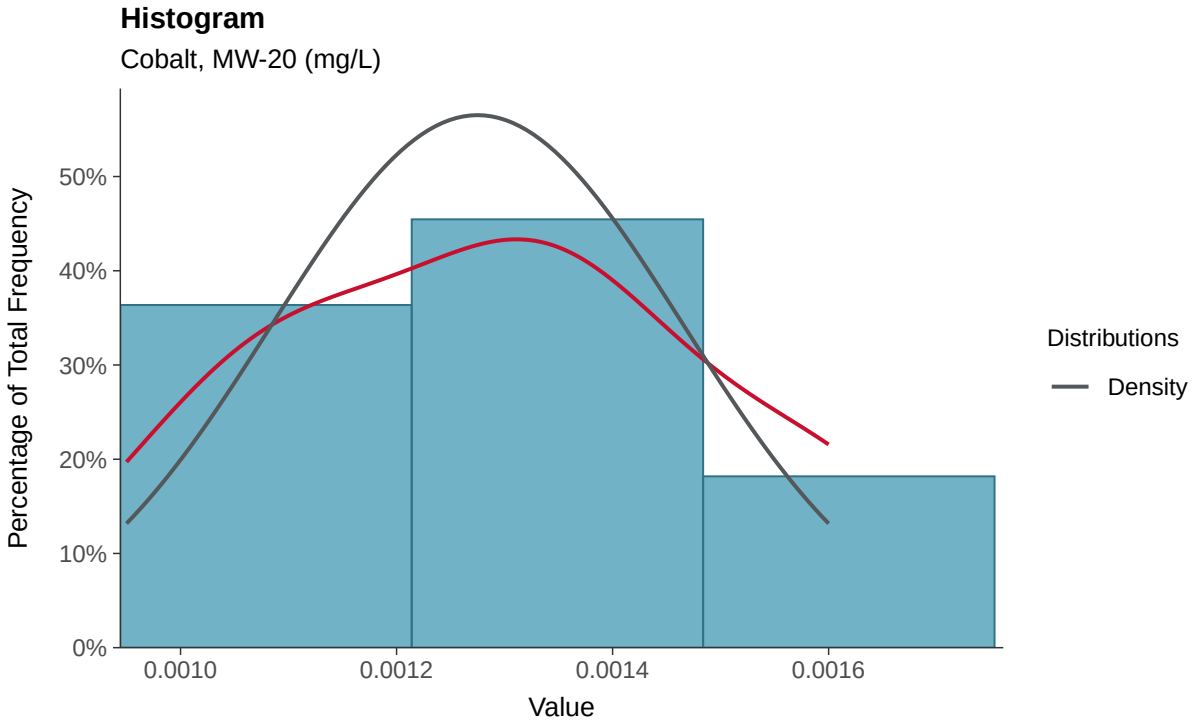
Chromium, Total, MW-20 (mg/L)



Appendix IV: Cobalt, MW-20

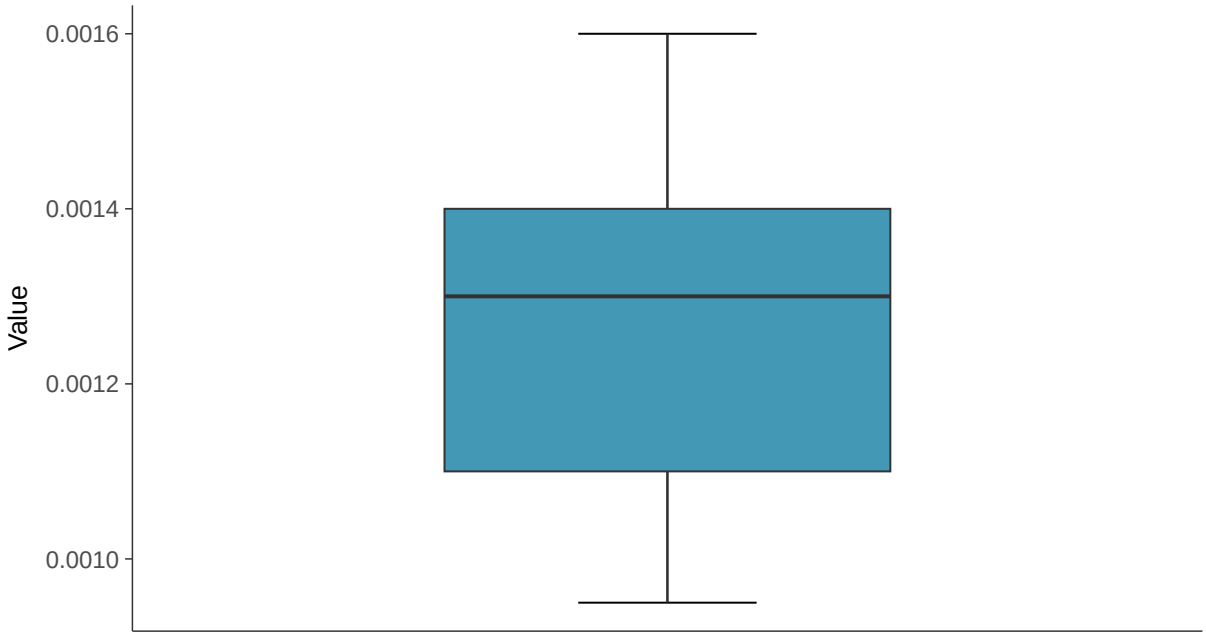
ID: 1_30_5_110





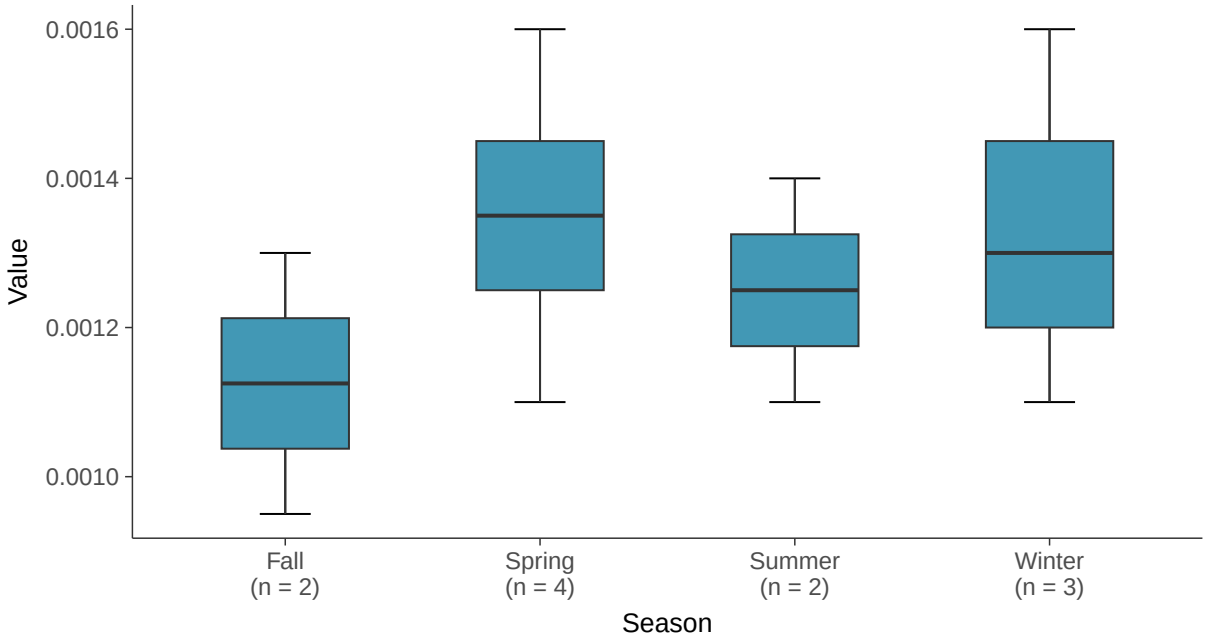
Boxplot

Cobalt, MW-20 (mg/L)



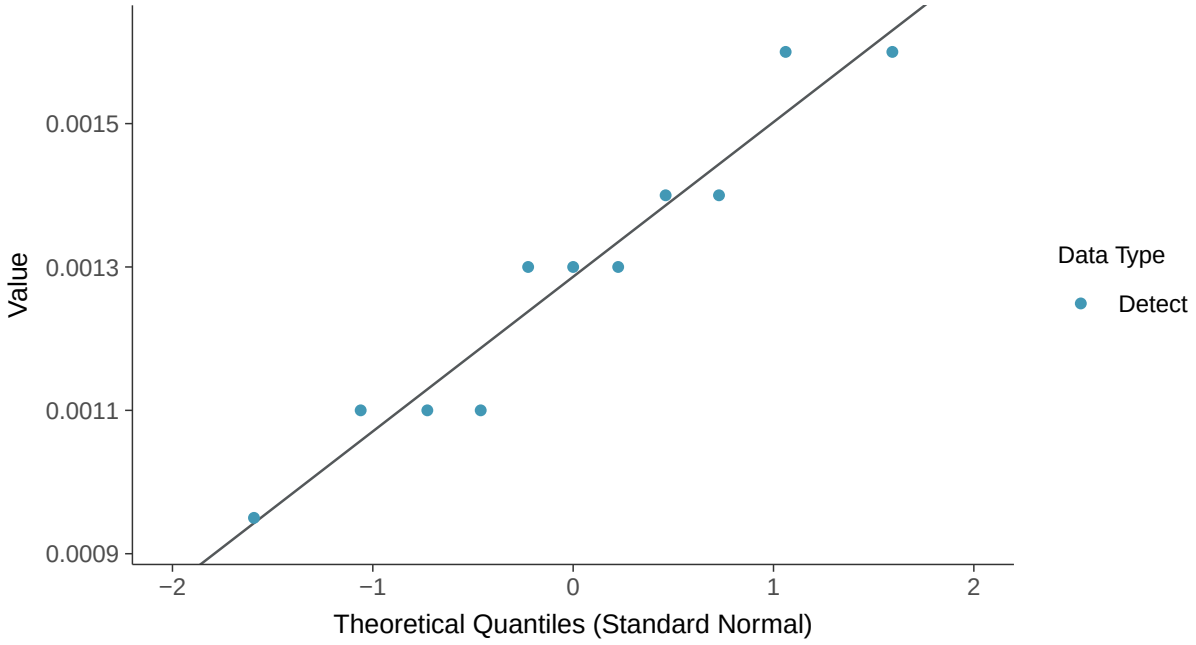
Boxplot by Season

Cobalt, MW-20 (mg/L)



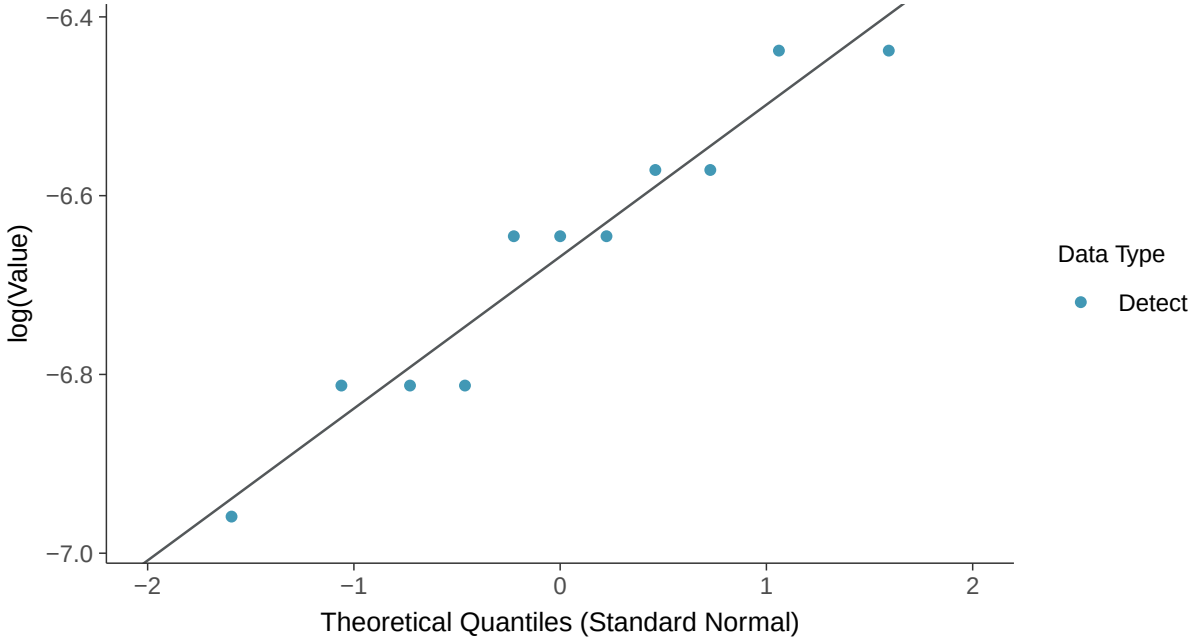
Normal Q-Q plot

Cobalt, MW-20 (mg/L)



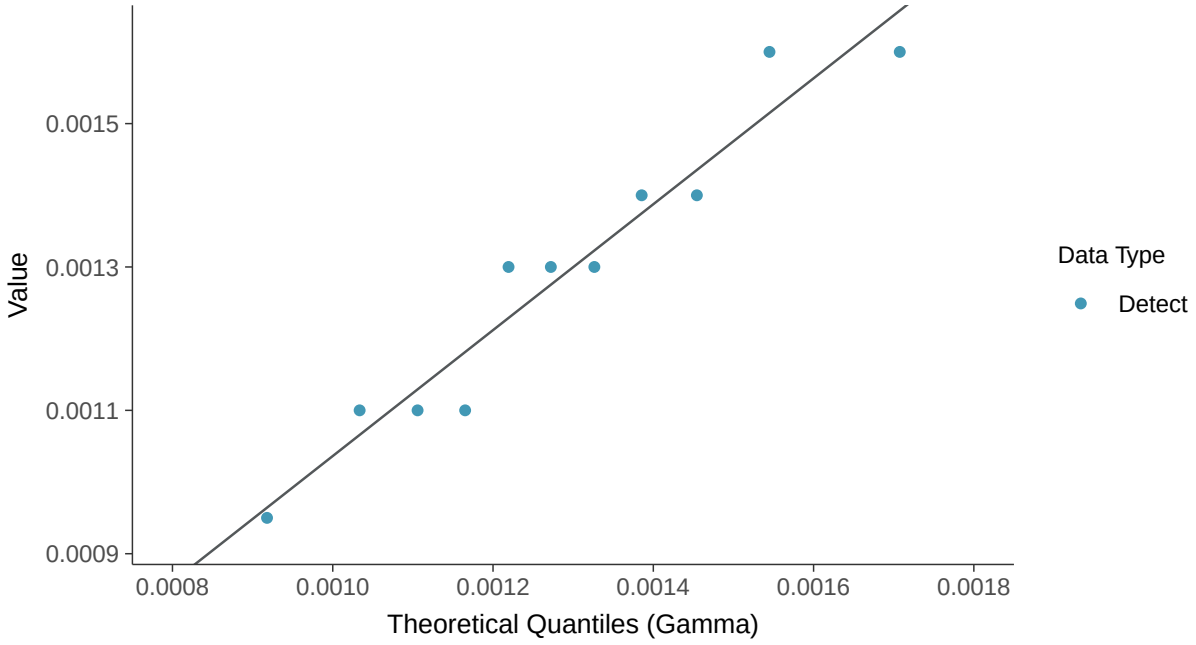
Lognormal Q-Q plot

Cobalt, MW-20 (mg/L)



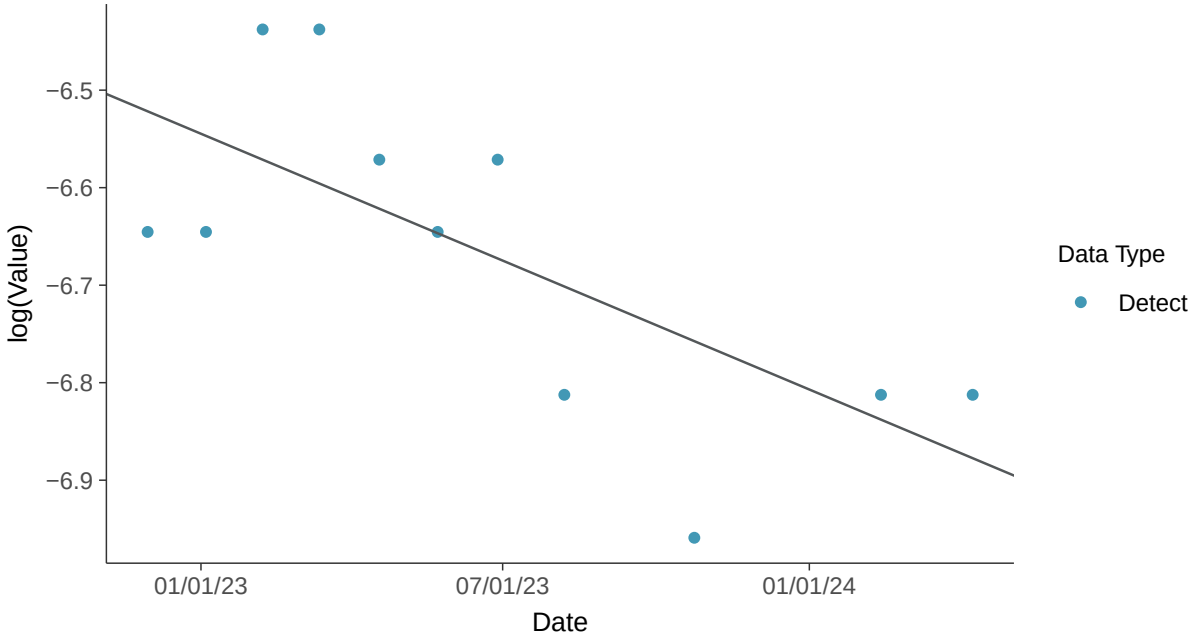
Gamma Q-Q plot

Cobalt, MW-20 (mg/L)



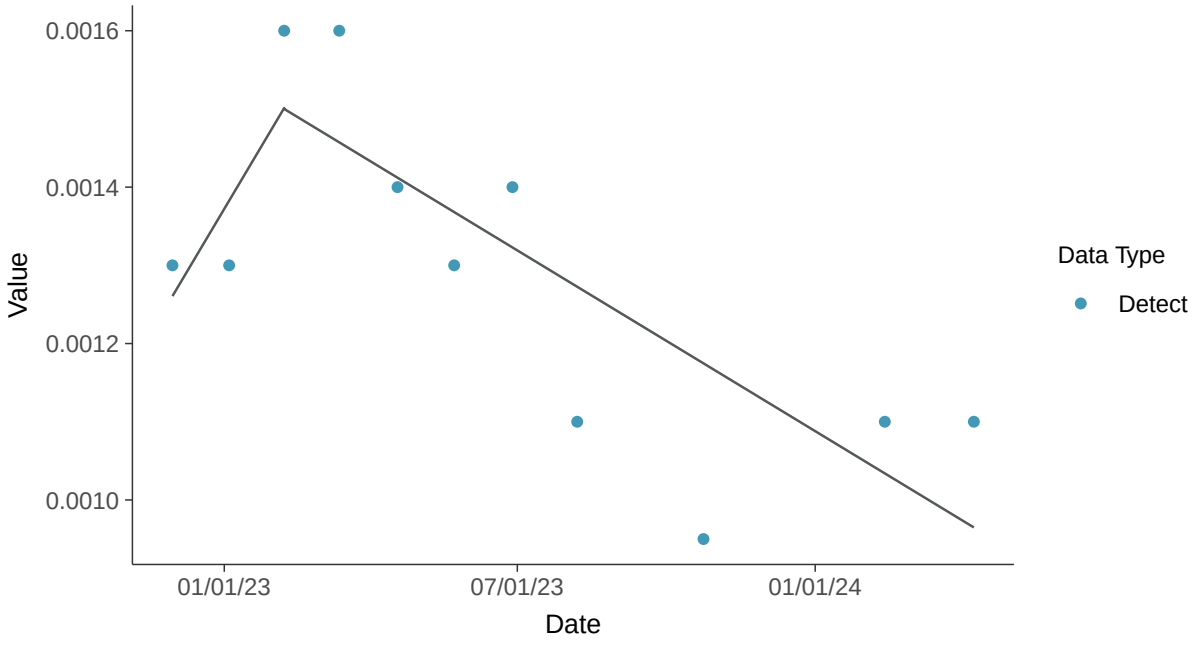
Trend Regression: Lognormal MLE

Cobalt, MW-20 (mg/L)



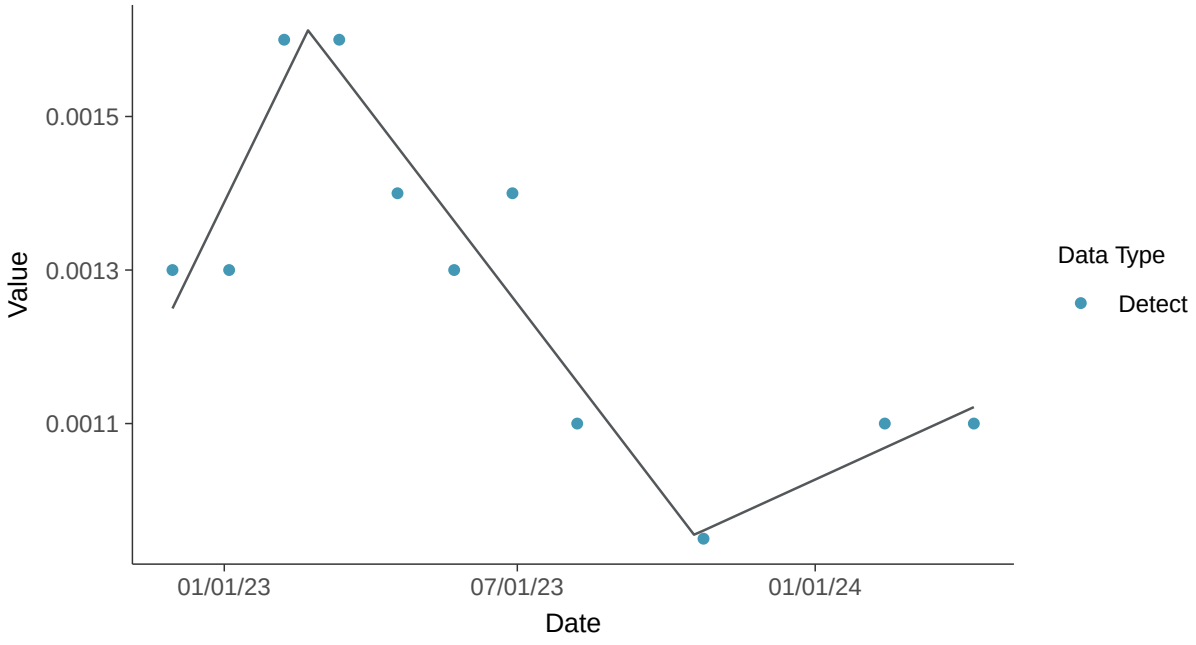
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-20 (mg/L)



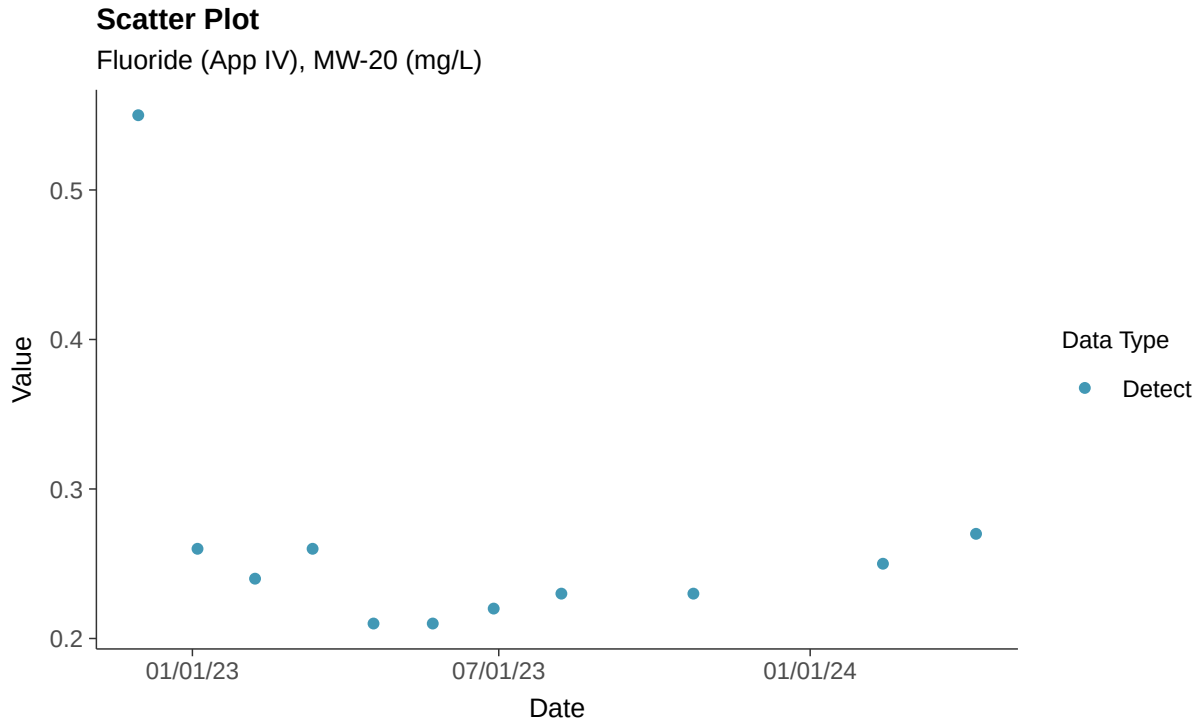
Trend Regression: Piecewise Linear-Linear-Linear

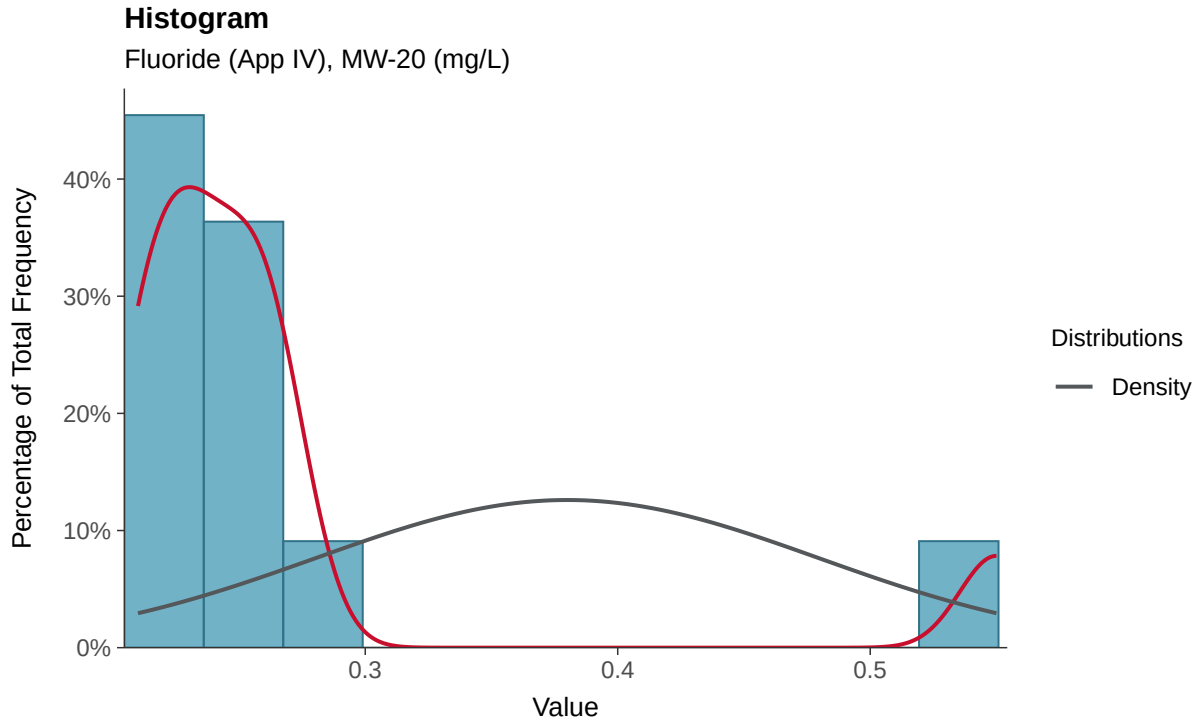
Cobalt, MW-20 (mg/L)



Appendix IV: Fluoride (App IV), MW-20

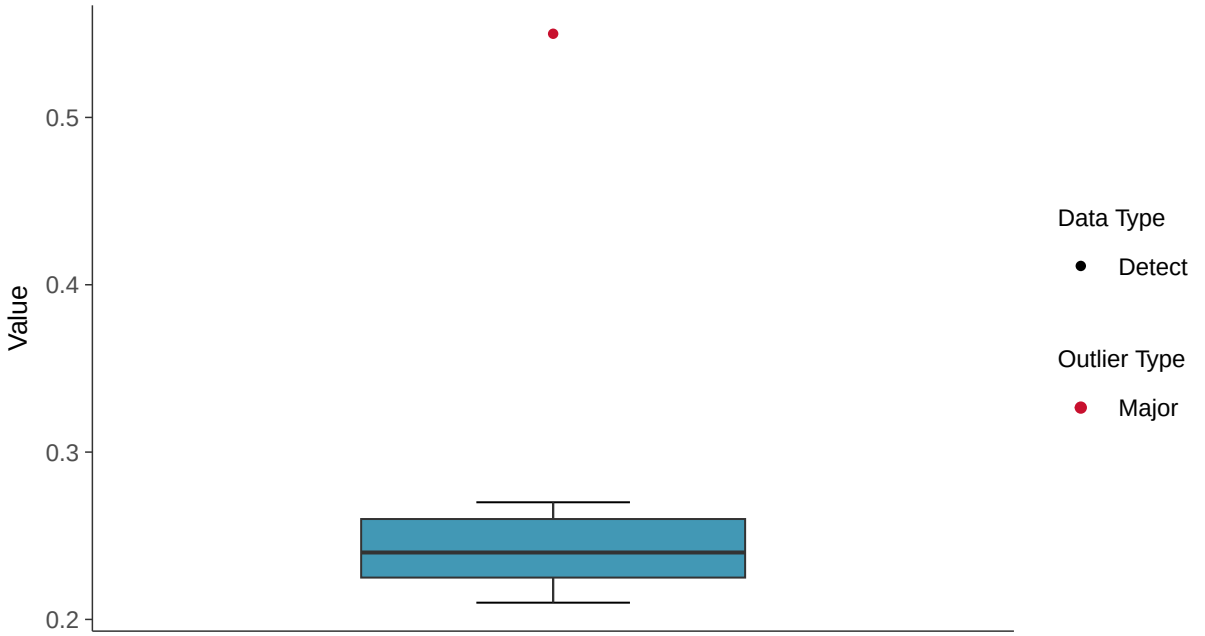
ID: 1_30_5_113





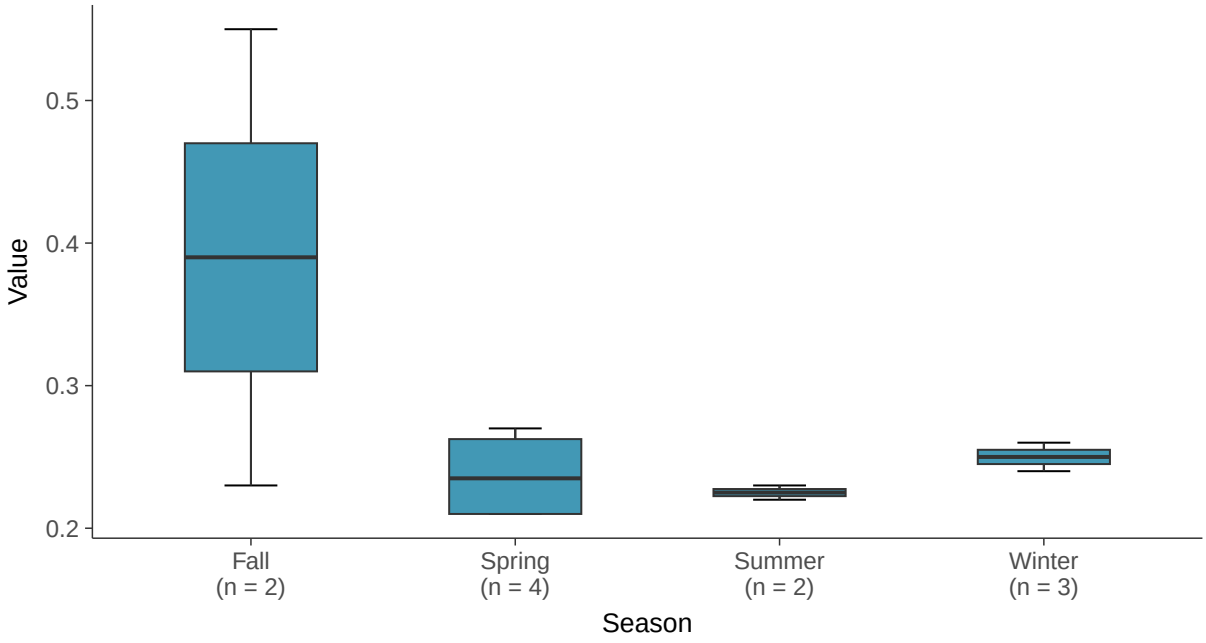
Boxplot

Fluoride (App IV), MW-20 (mg/L)



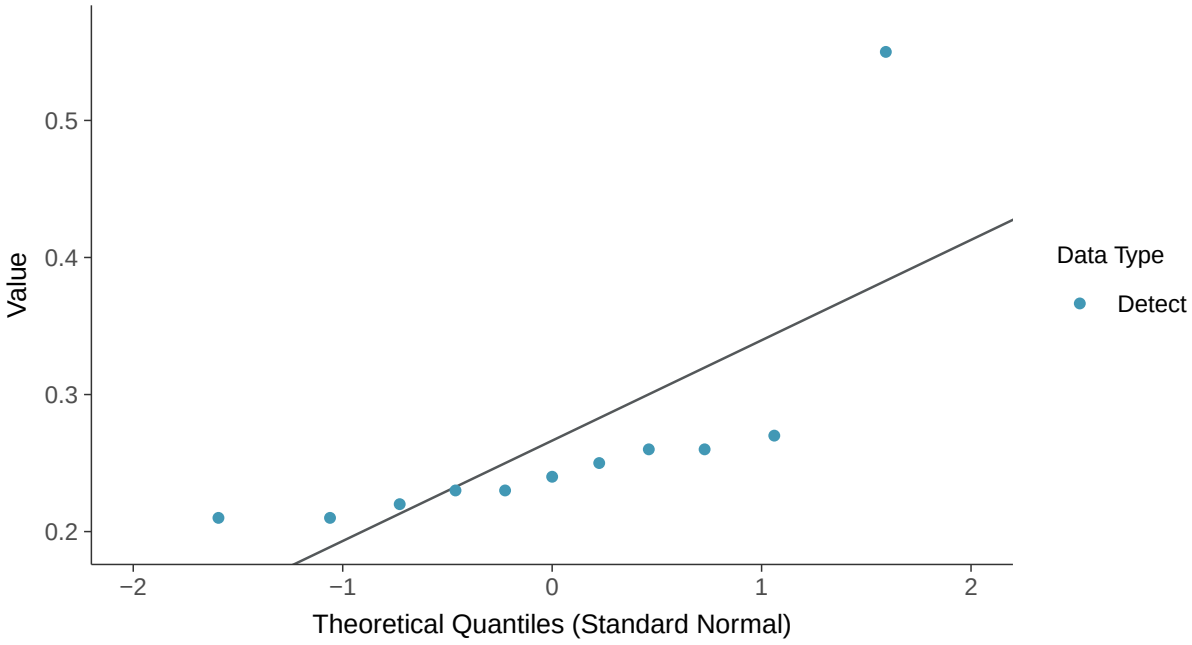
Boxplot by Season

Fluoride (App IV), MW-20 (mg/L)



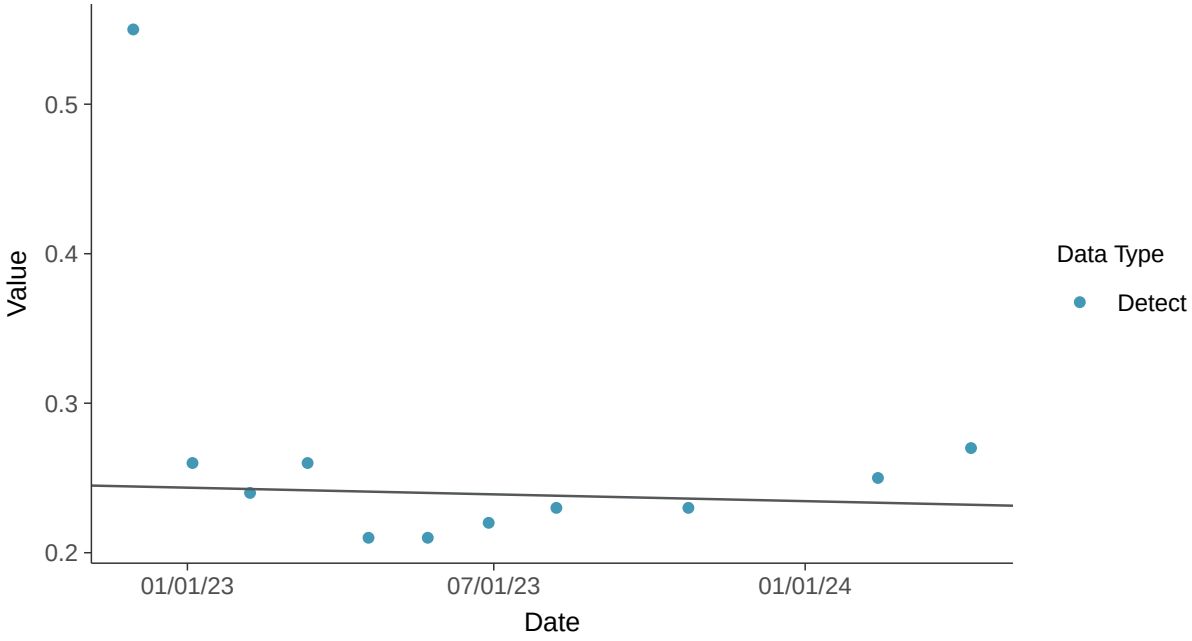
Normal Q-Q plot

Fluoride (App IV), MW-20 (mg/L)



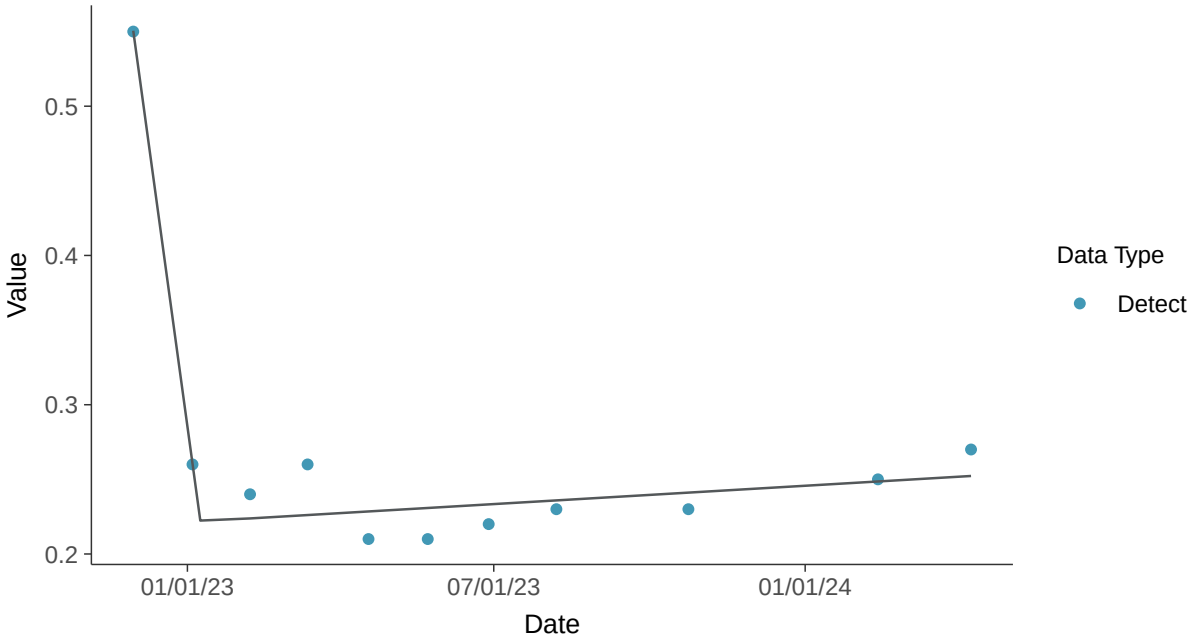
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Fluoride (App IV), MW-20 (mg/L)



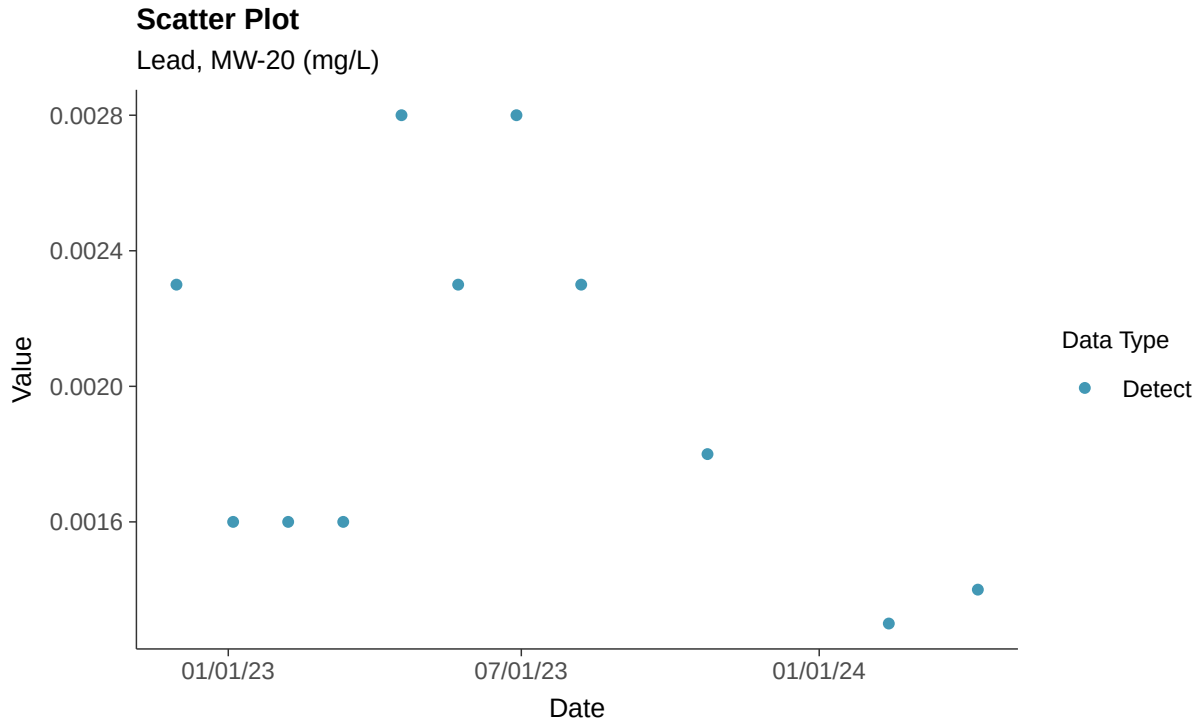
Trend Regression: Piecewise Linear-Linear

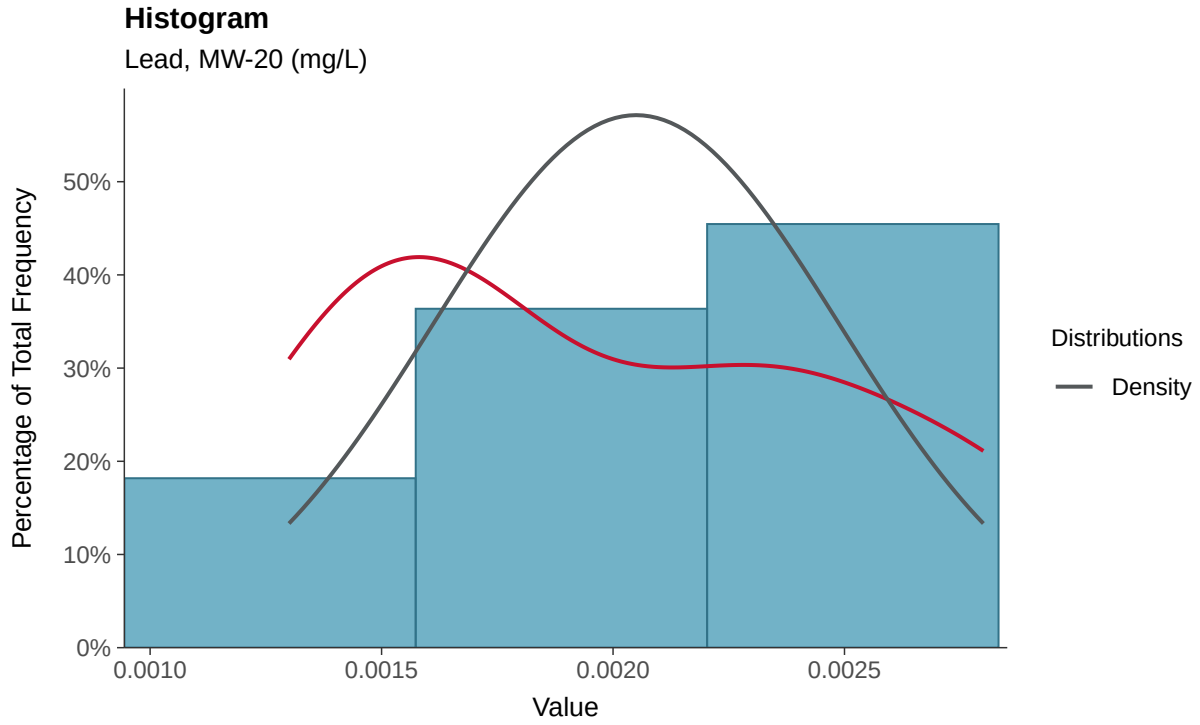
Fluoride (App IV), MW-20 (mg/L)



Appendix IV: Lead, MW-20

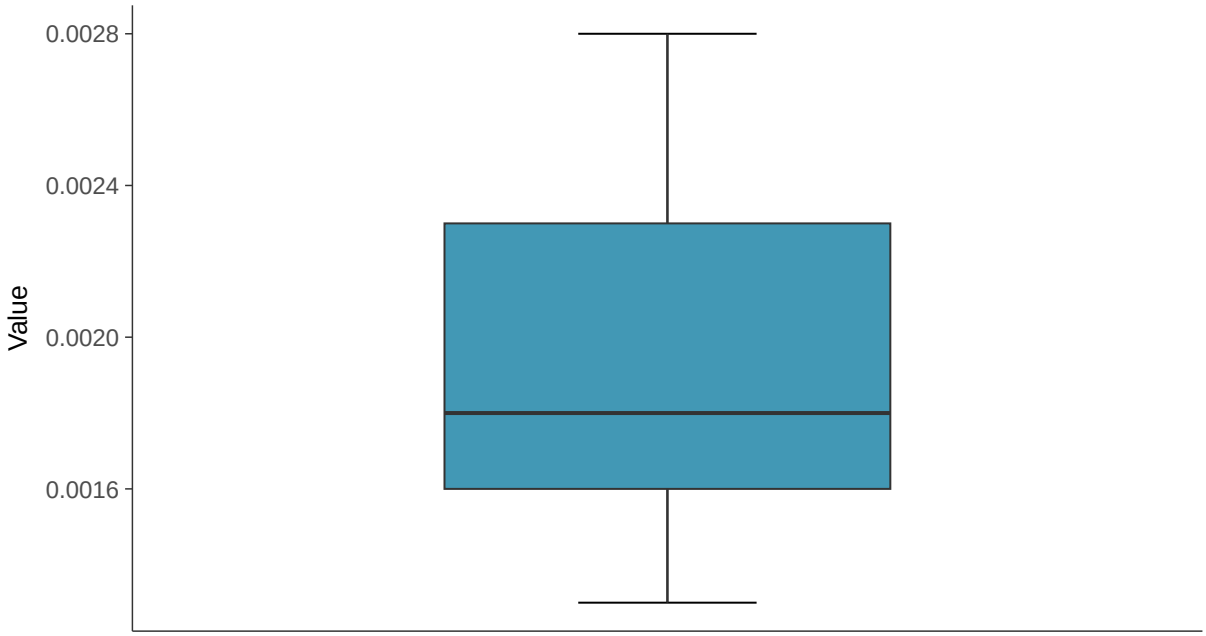
ID: 1_30_5_115





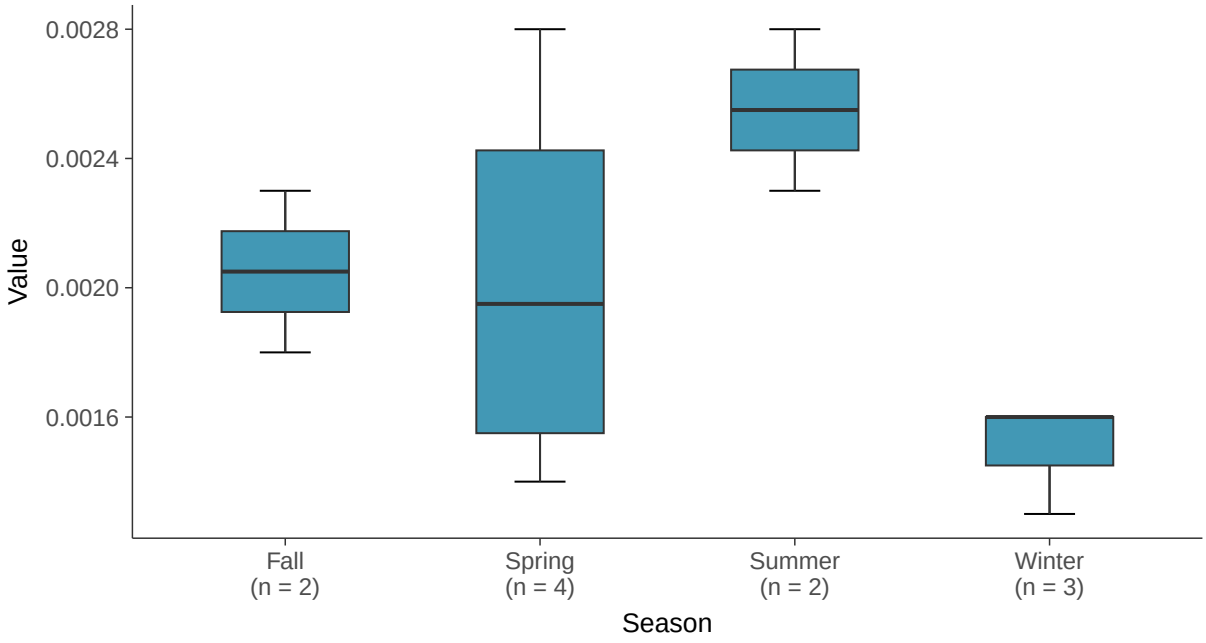
Boxplot

Lead, MW-20 (mg/L)



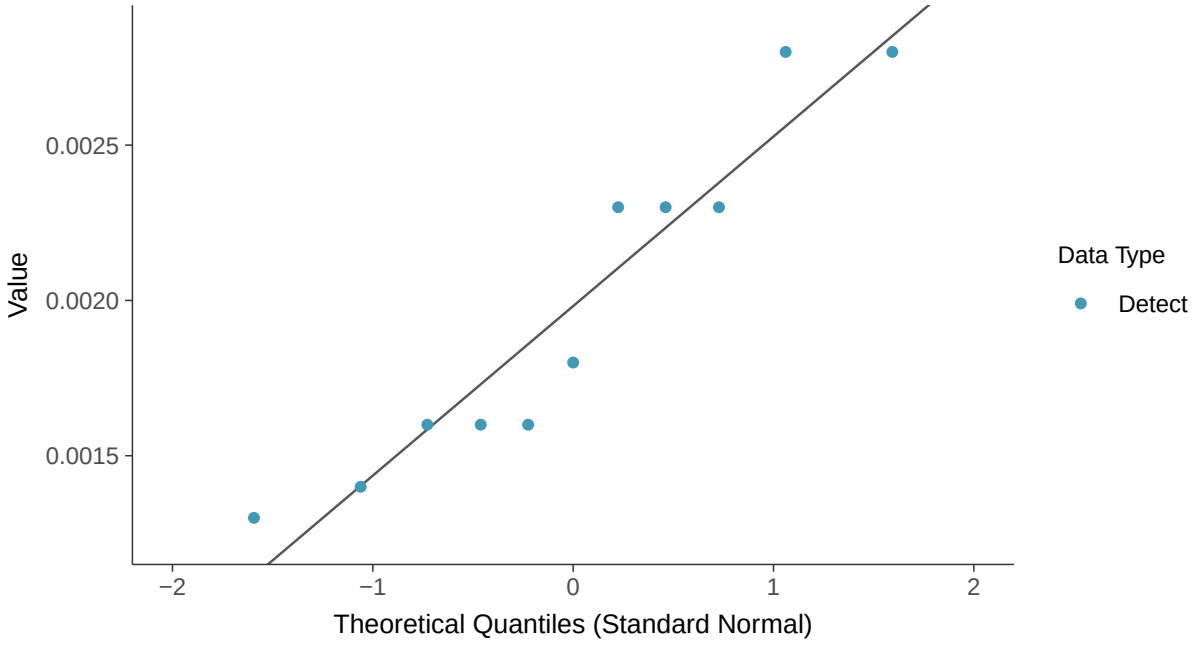
Boxplot by Season

Lead, MW-20 (mg/L)



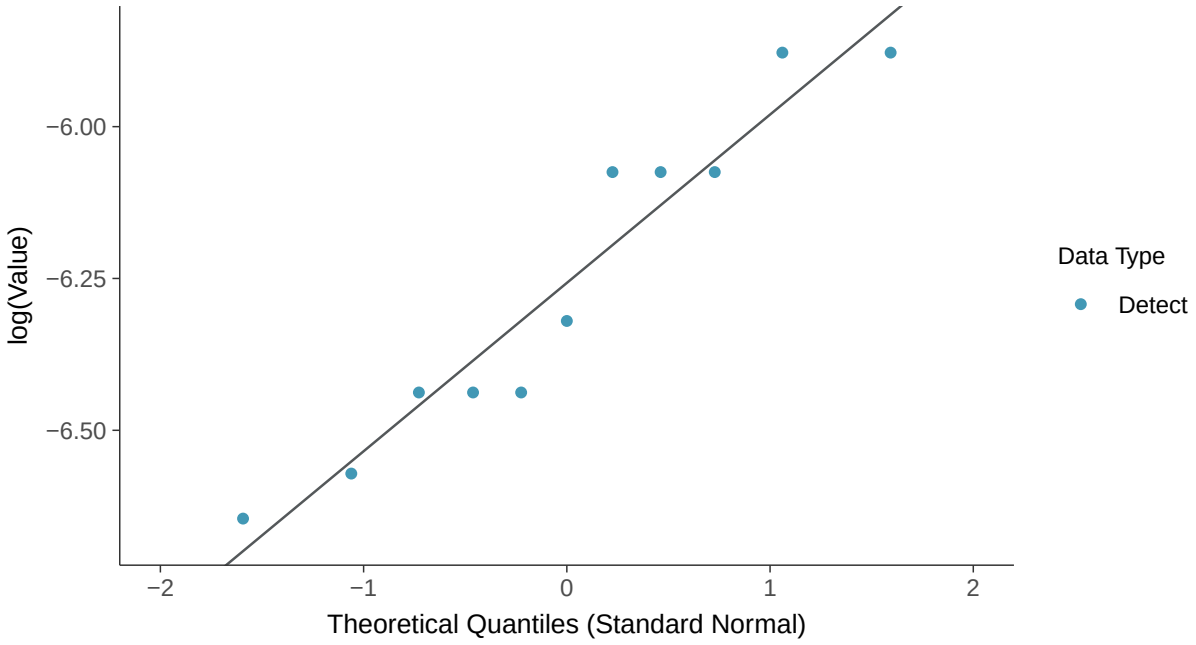
Normal Q-Q plot

Lead, MW-20 (mg/L)



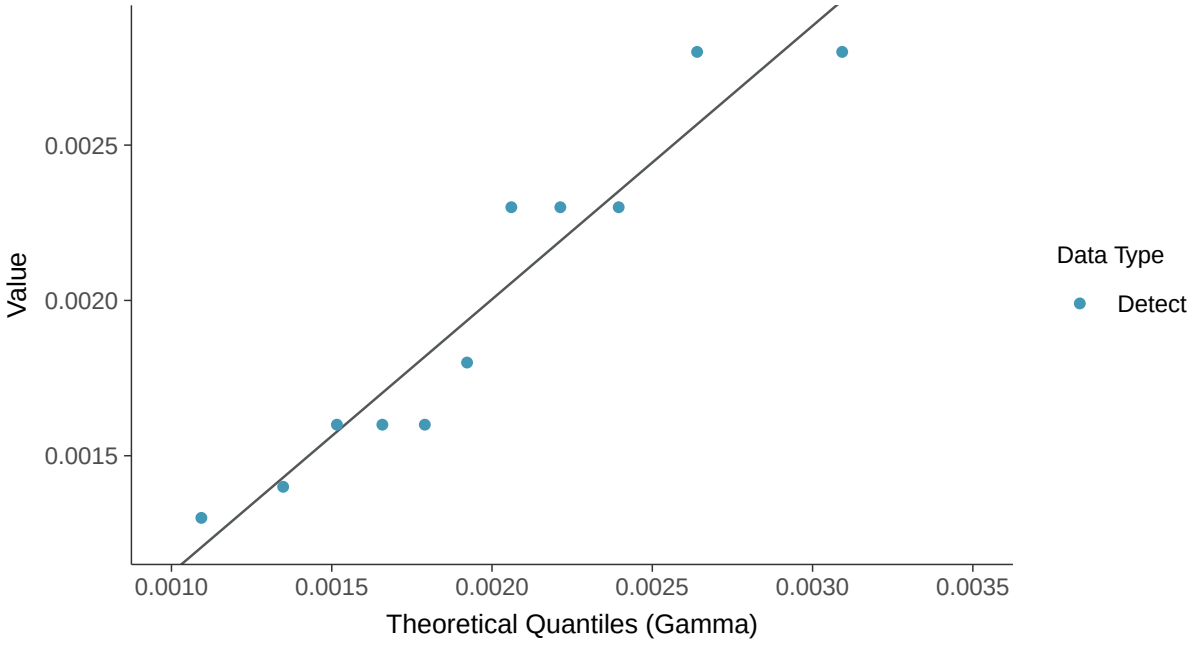
Lognormal Q-Q plot

Lead, MW-20 (mg/L)



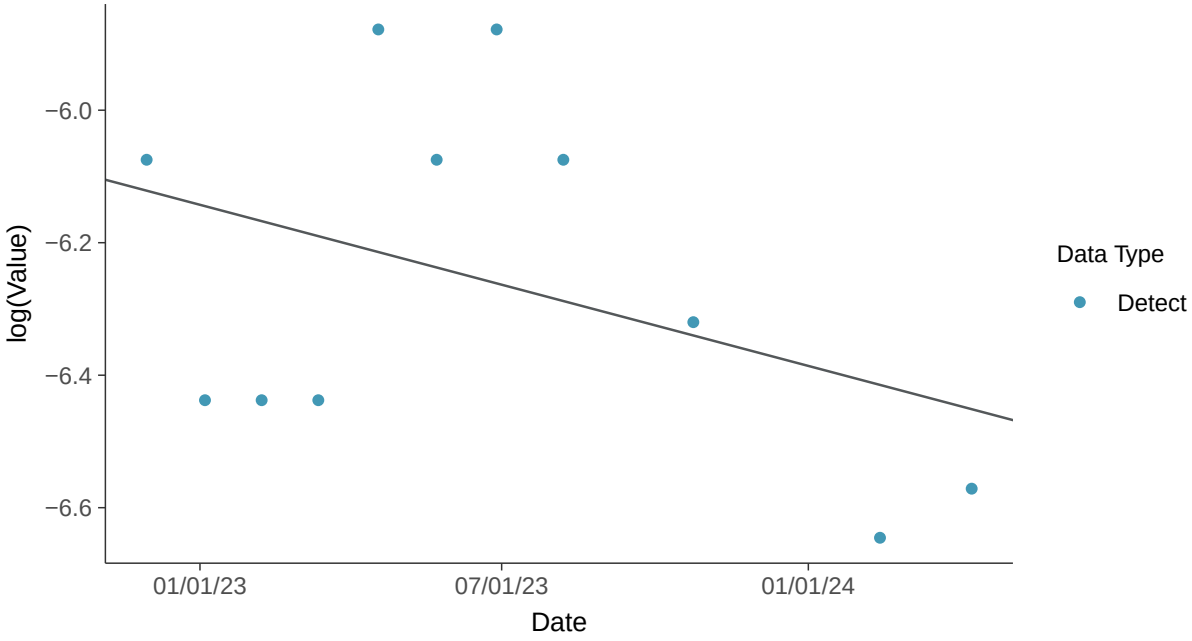
Gamma Q-Q plot

Lead, MW-20 (mg/L)



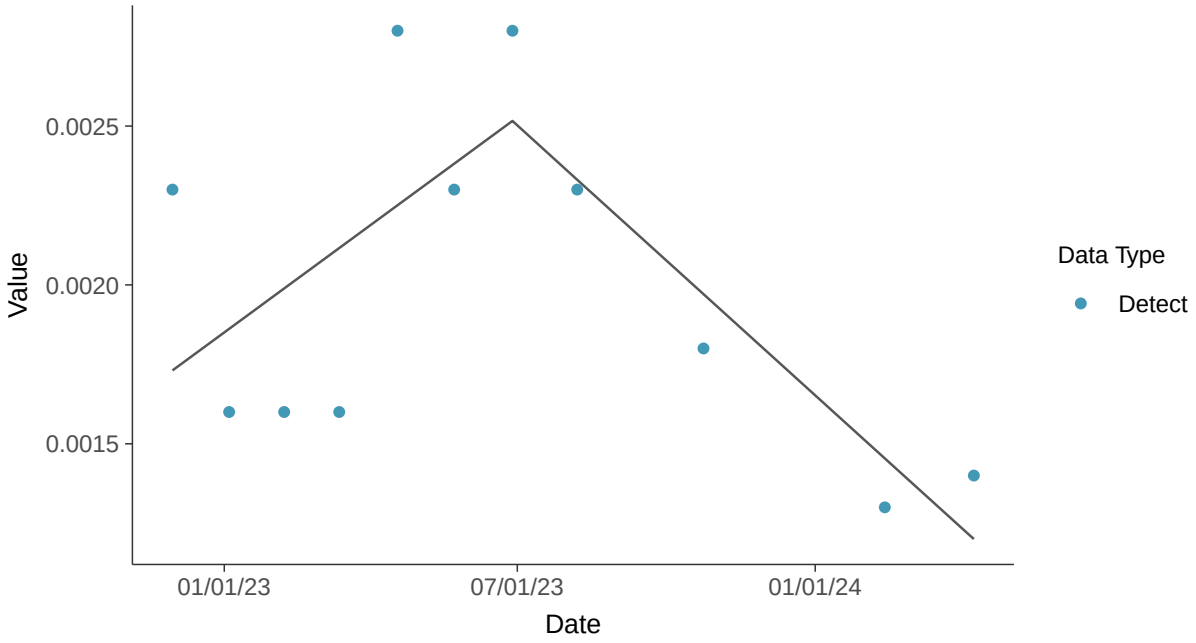
Trend Regression: Lognormal MLE

Lead, MW-20 (mg/L)



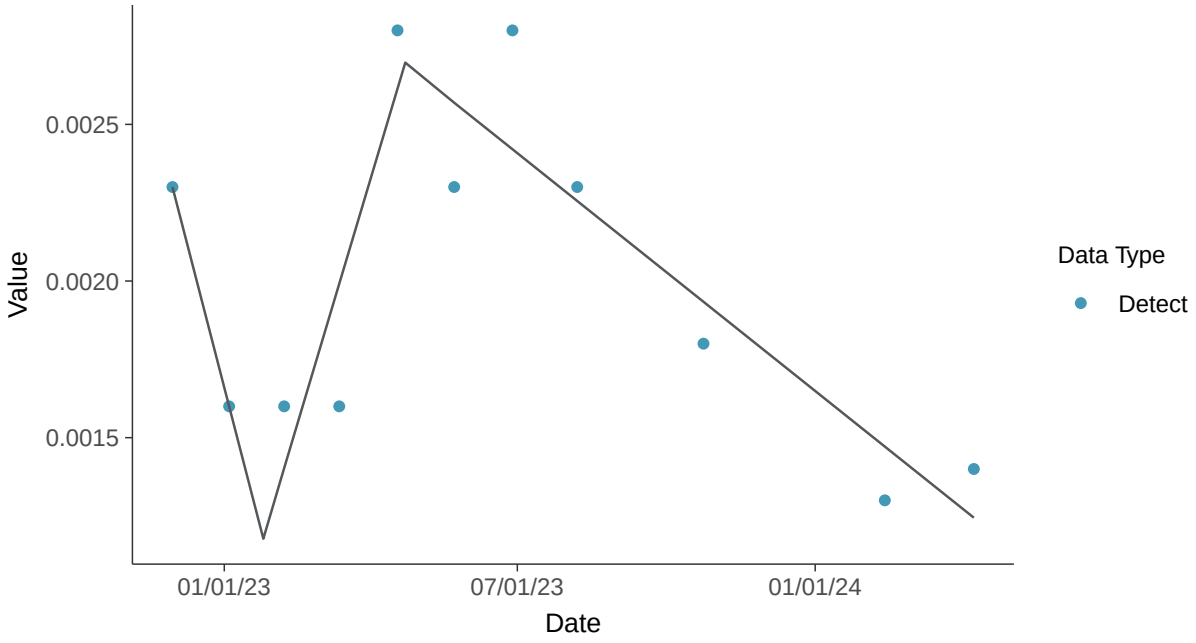
Trend Regression: Piecewise Linear-Linear

Lead, MW-20 (mg/L)



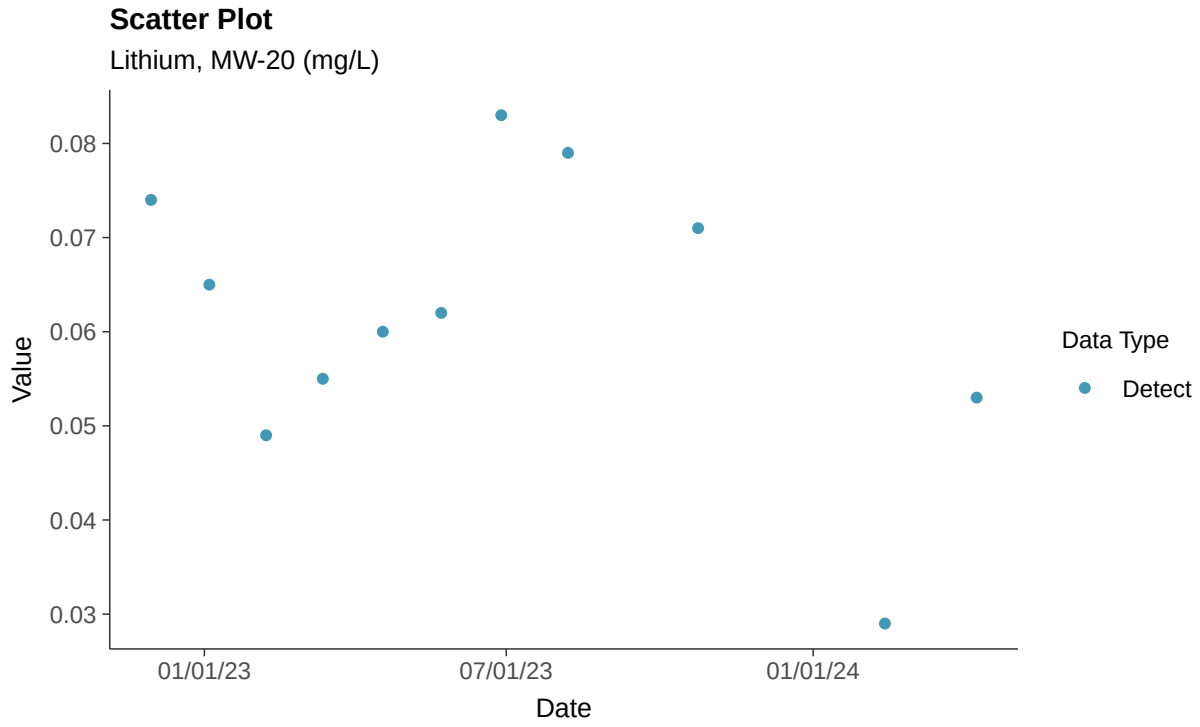
Trend Regression: Piecewise Linear-Linear-Linear

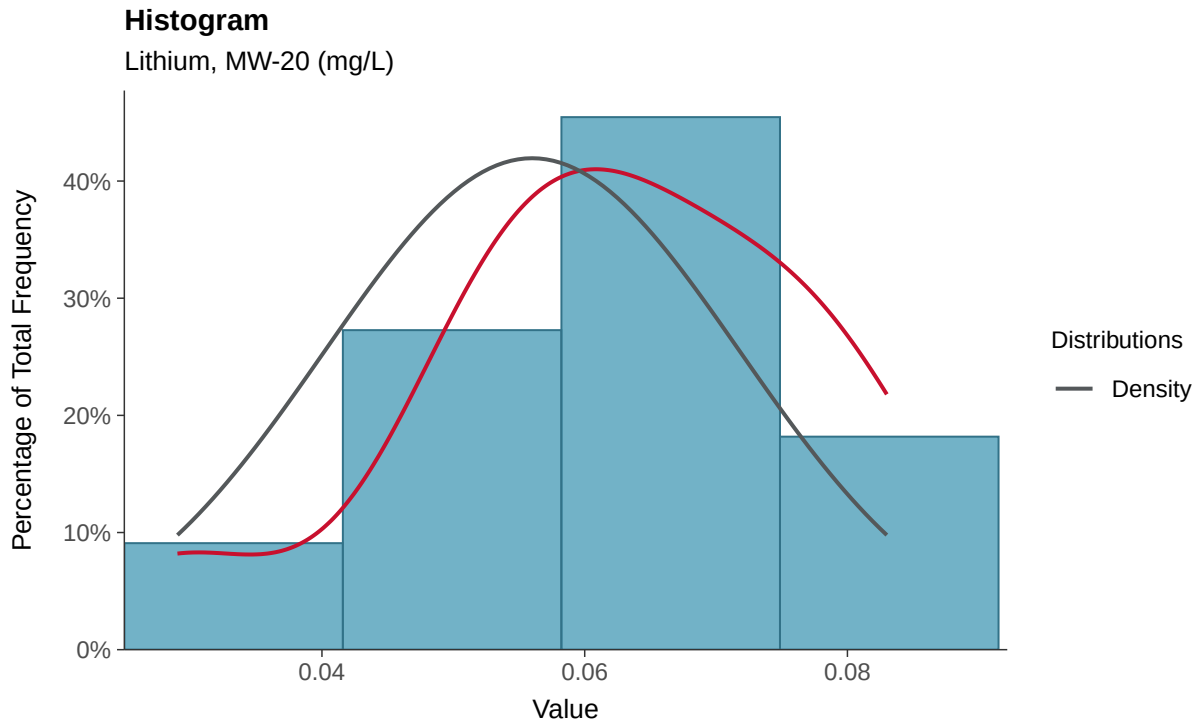
Lead, MW-20 (mg/L)



Appendix IV: Lithium, MW-20

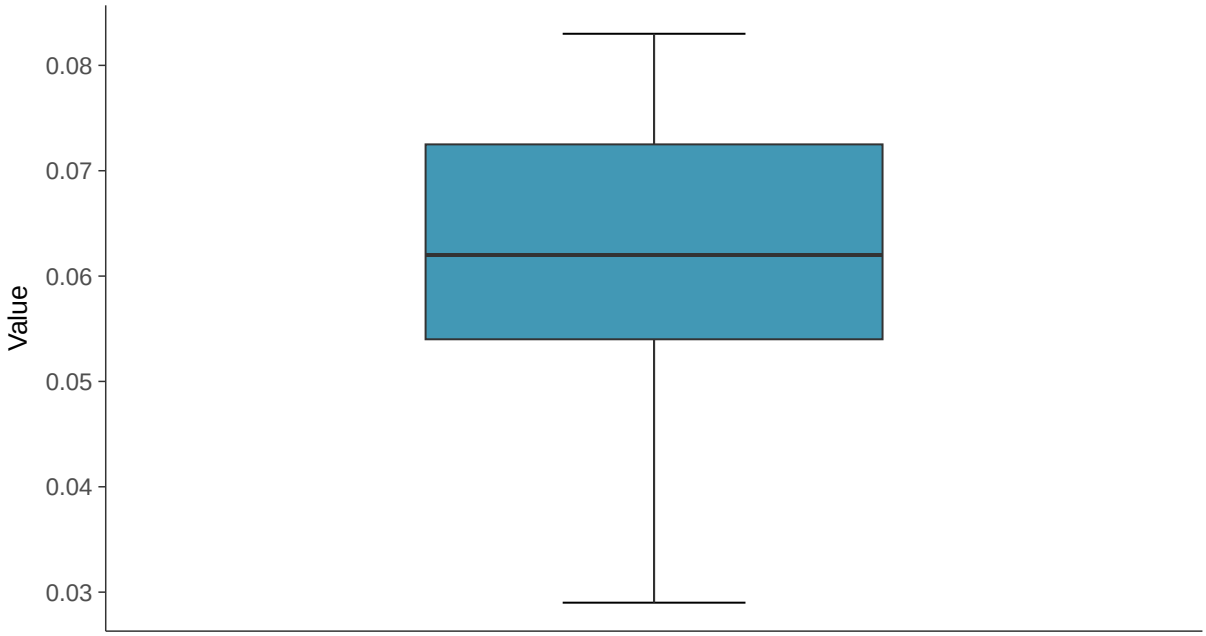
ID: 1_30_5_116





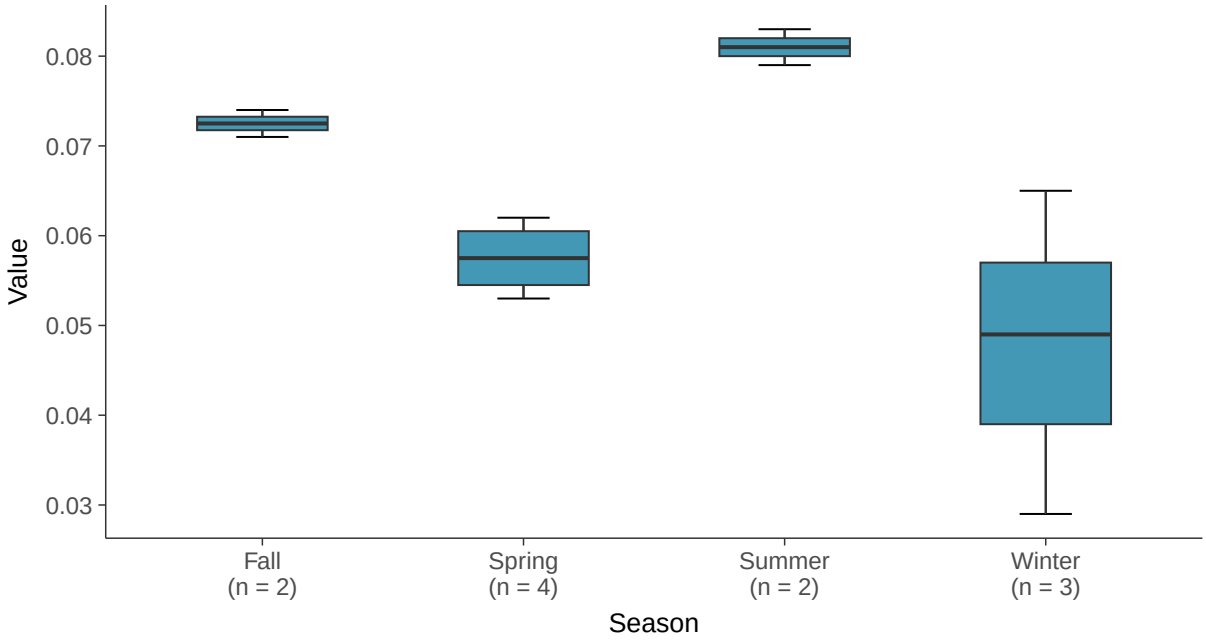
Boxplot

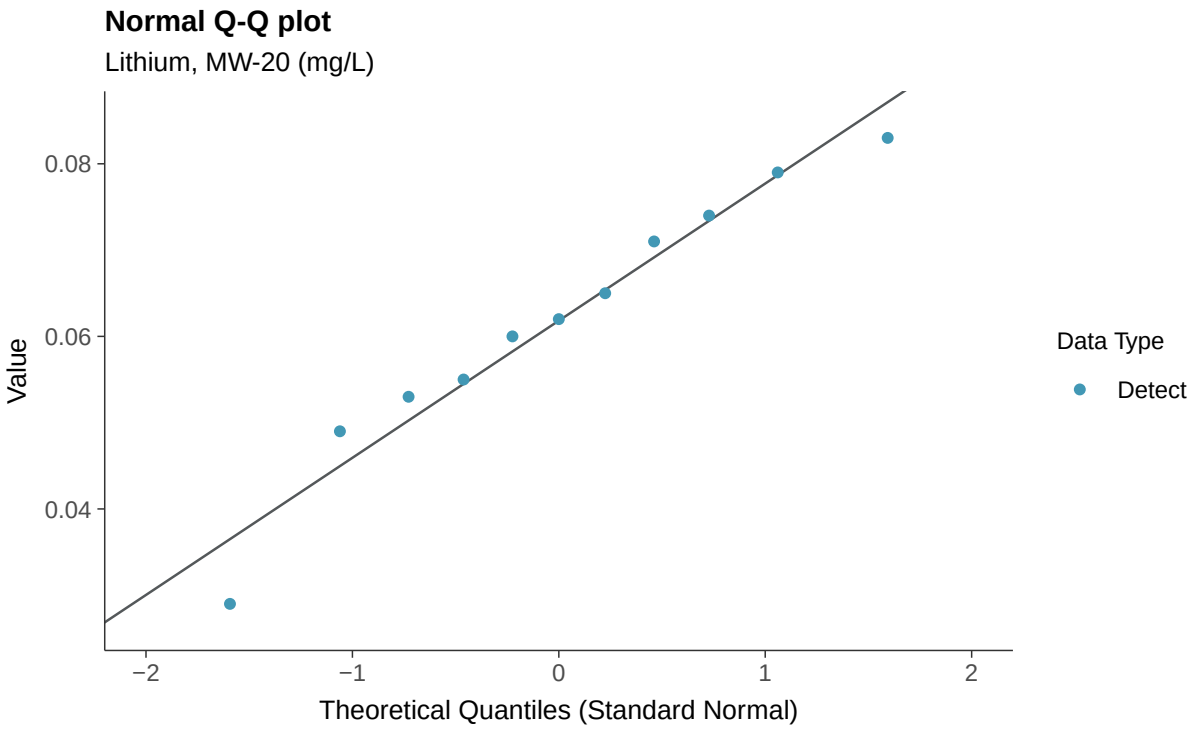
Lithium, MW-20 (mg/L)

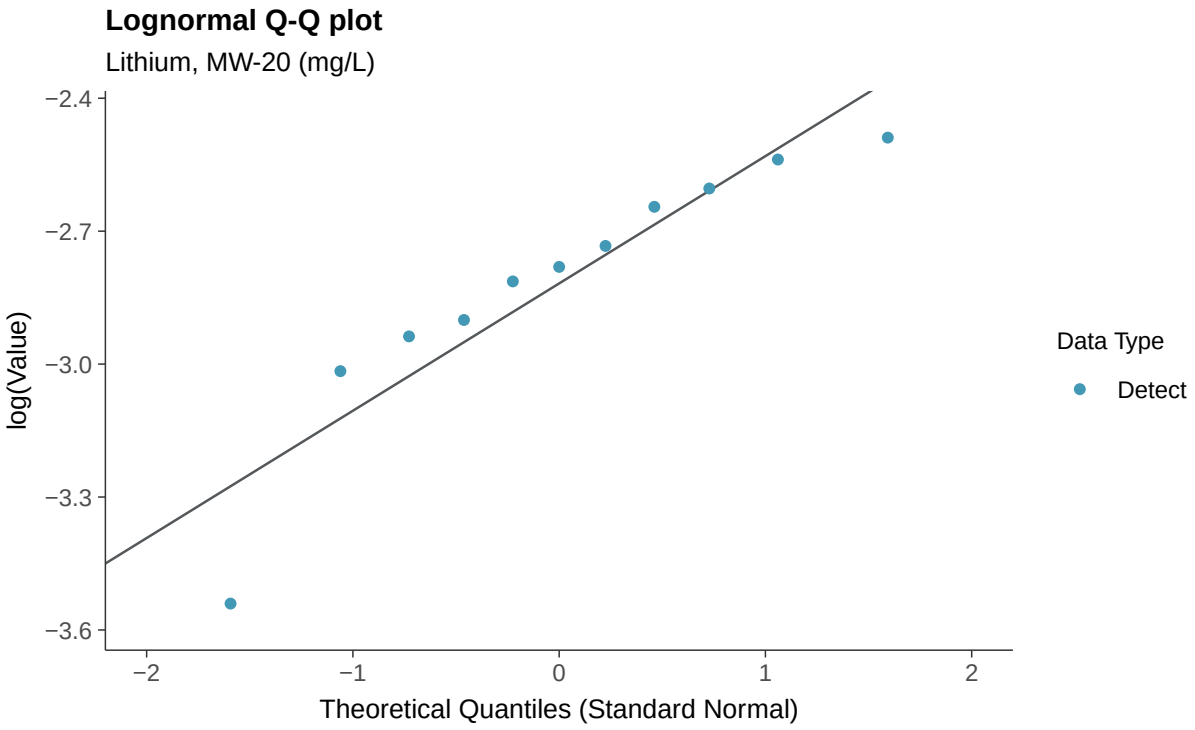


Boxplot by Season

Lithium, MW-20 (mg/L)

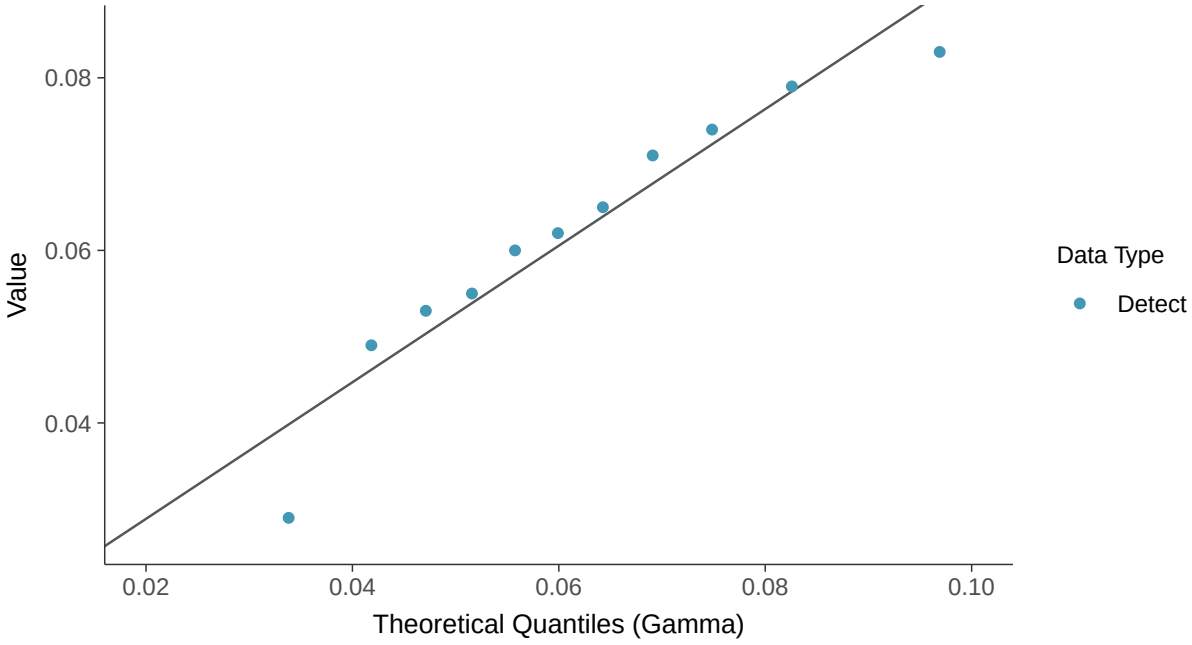



Normal Q-Q plot
Lithium, MW-20 (mg/L)
Value
0.08
0.06
0.04
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect


Lognormal Q-Q plot
Lithium, MW-20 (mg/L)
log(Value)
−2.4
−2.7
−3.0
−3.3
−3.6
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect

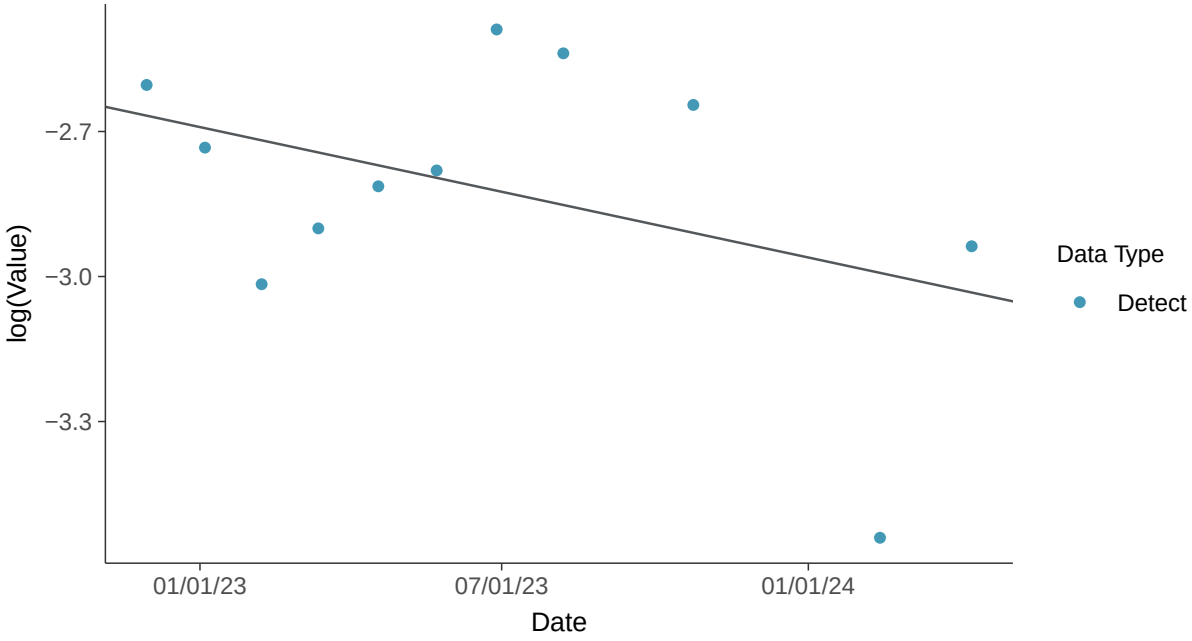
Gamma Q-Q plot

Lithium, MW-20 (mg/L)



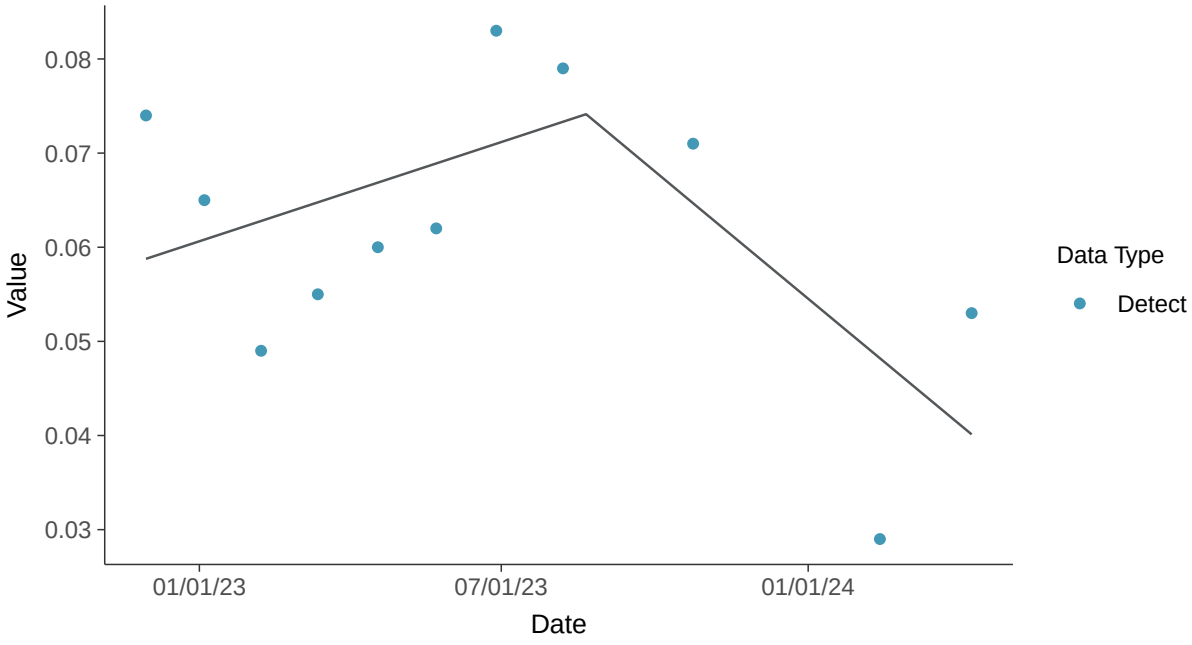
Trend Regression: Lognormal MLE

Lithium, MW-20 (mg/L)



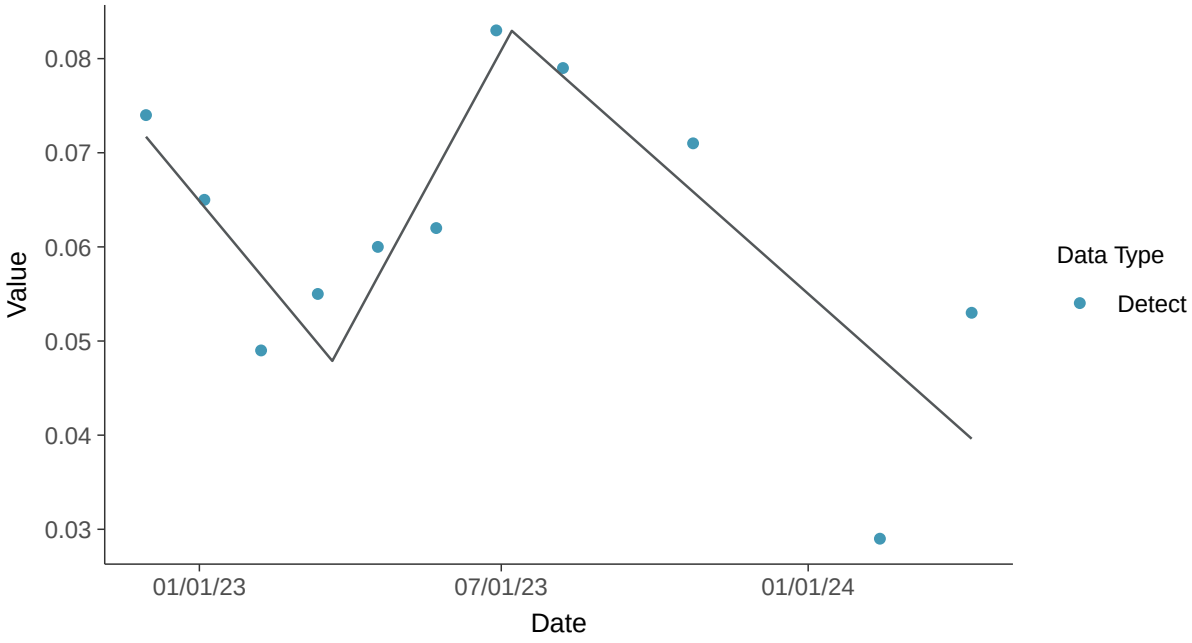
Trend Regression: Piecewise Linear-Linear

Lithium, MW-20 (mg/L)



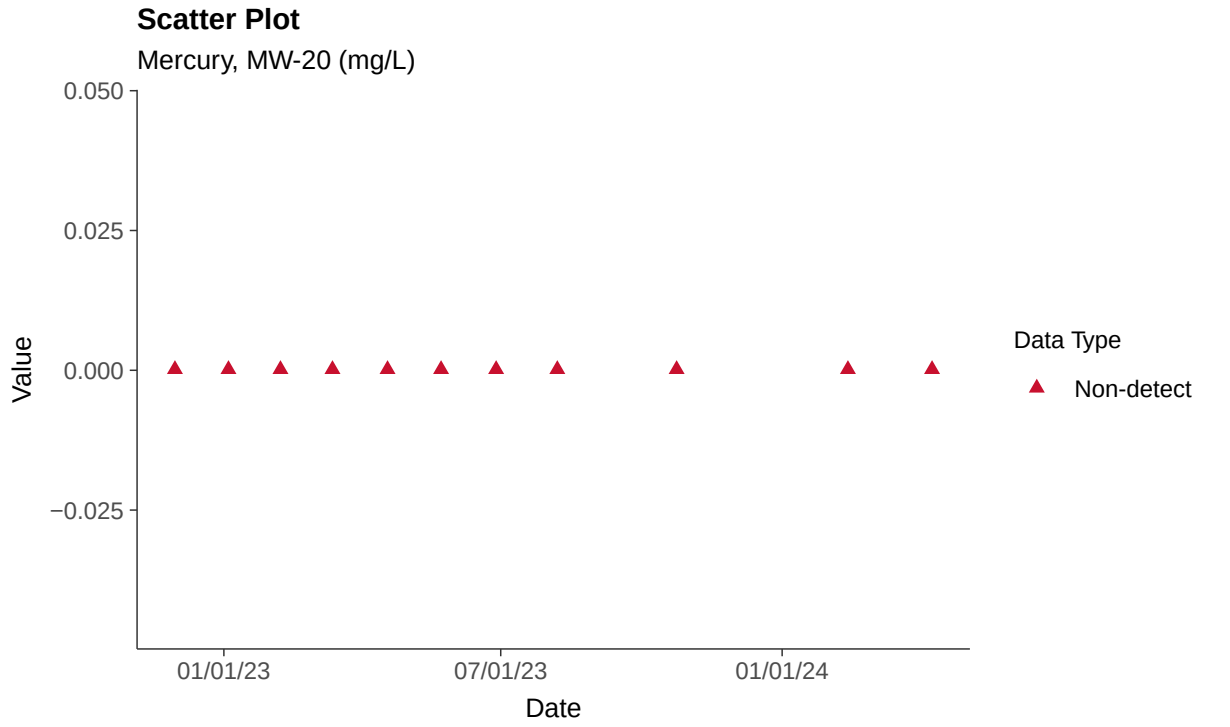
Trend Regression: Piecewise Linear-Linear-Linear

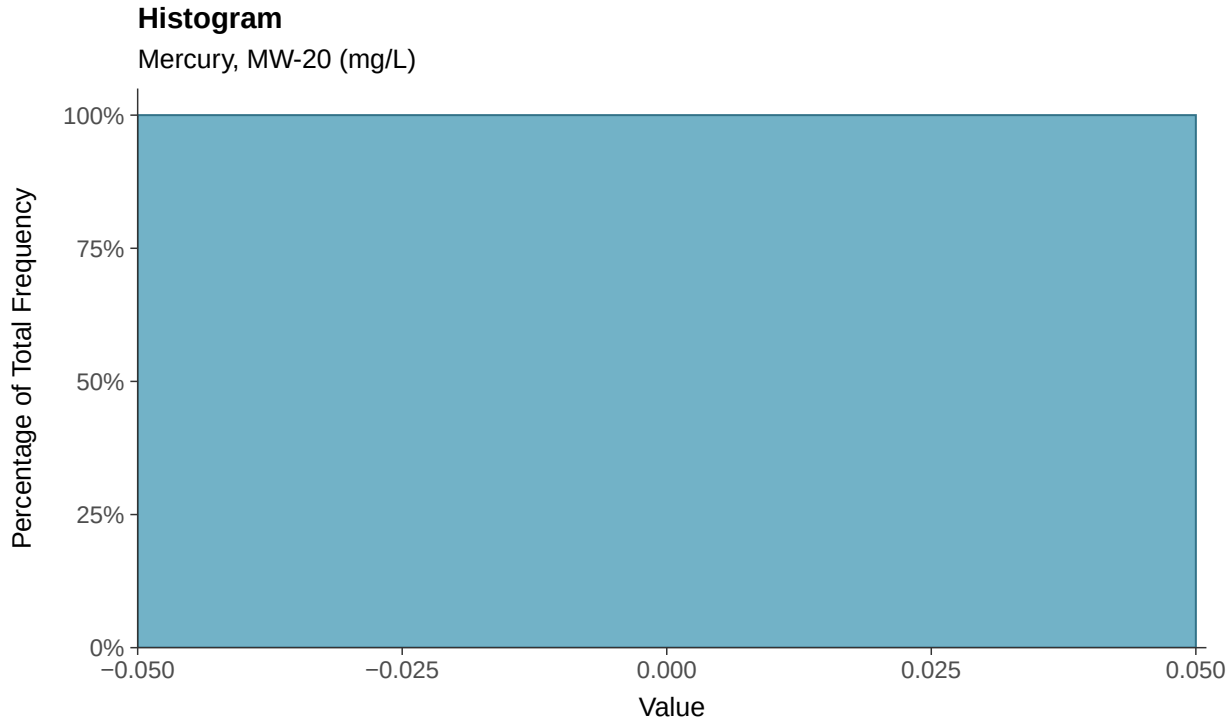
Lithium, MW-20 (mg/L)



Appendix IV: Mercury, MW-20

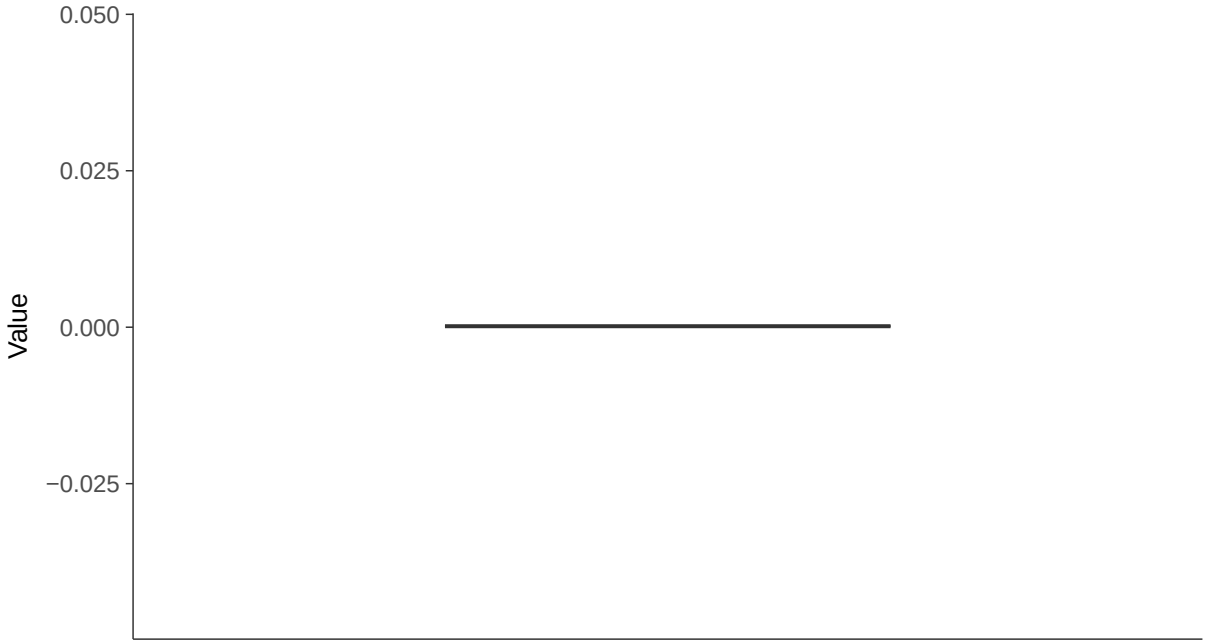
ID: 1_30_5_117





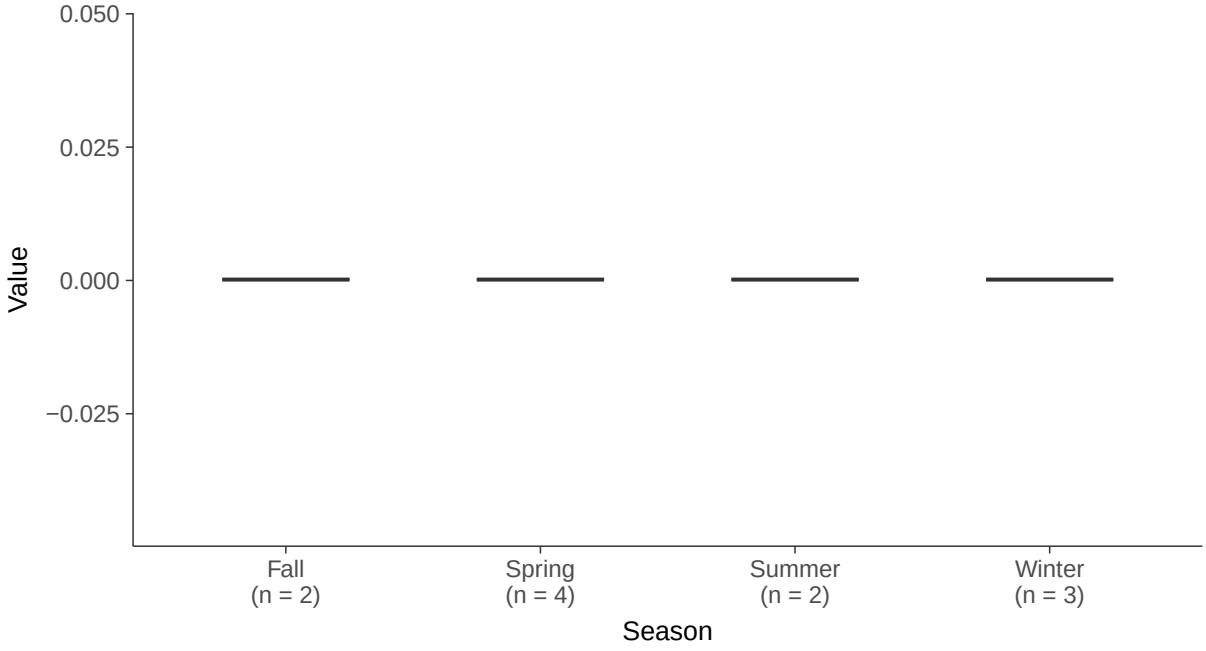
Boxplot

Mercury, MW-20 (mg/L)



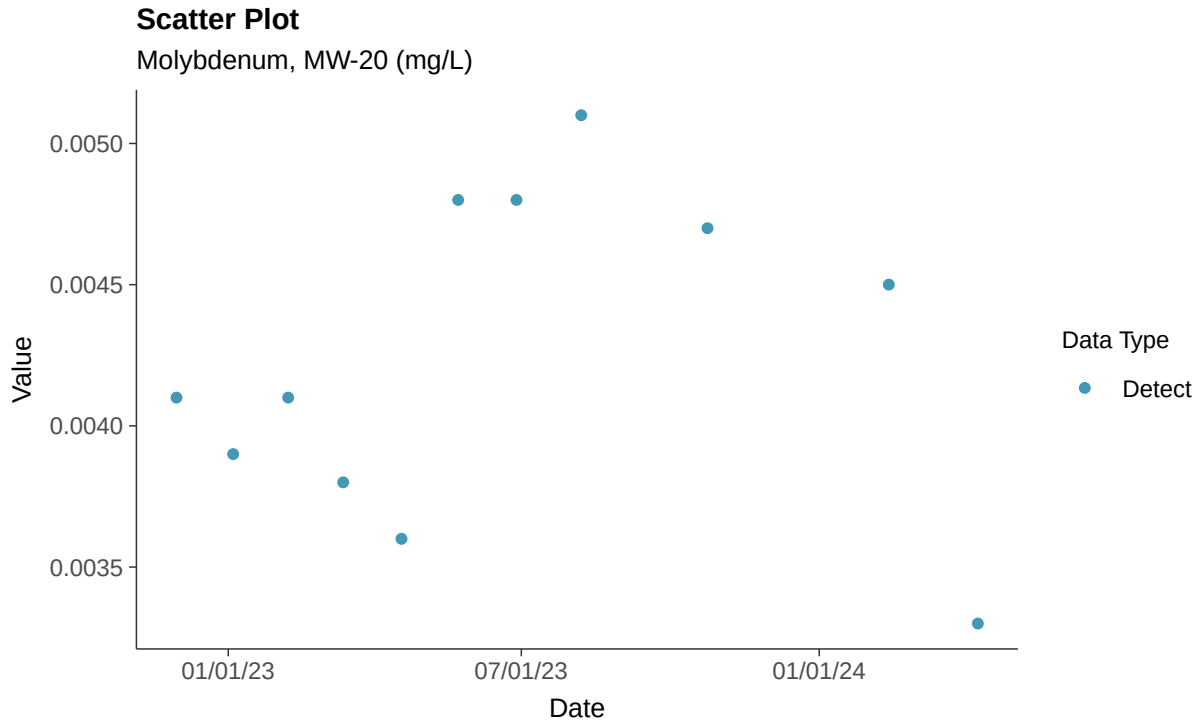
Boxplot by Season

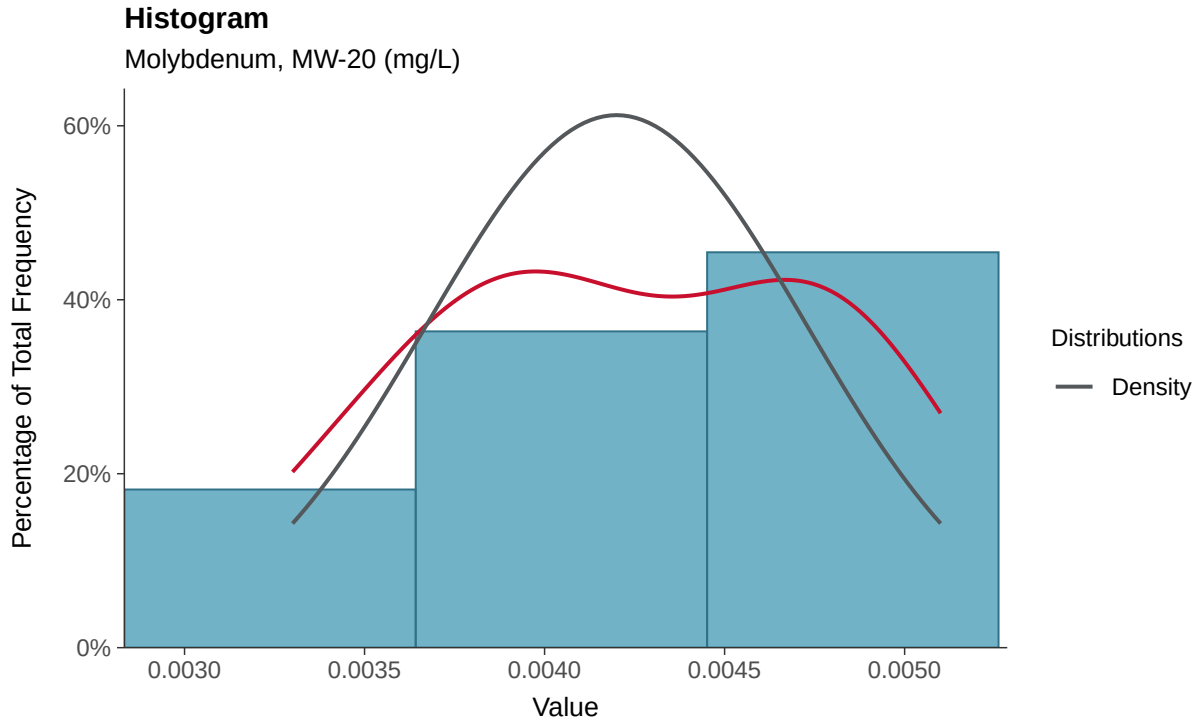
Mercury, MW-20 (mg/L)



Appendix IV: Molybdenum, MW-20

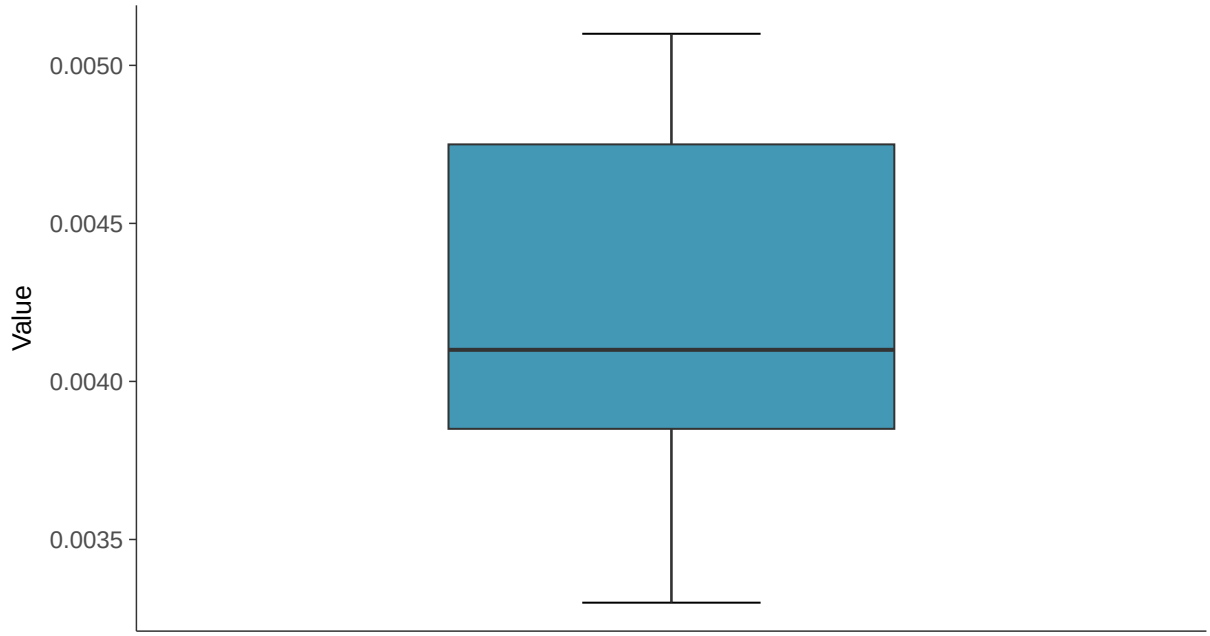
ID: 1_30_5_118





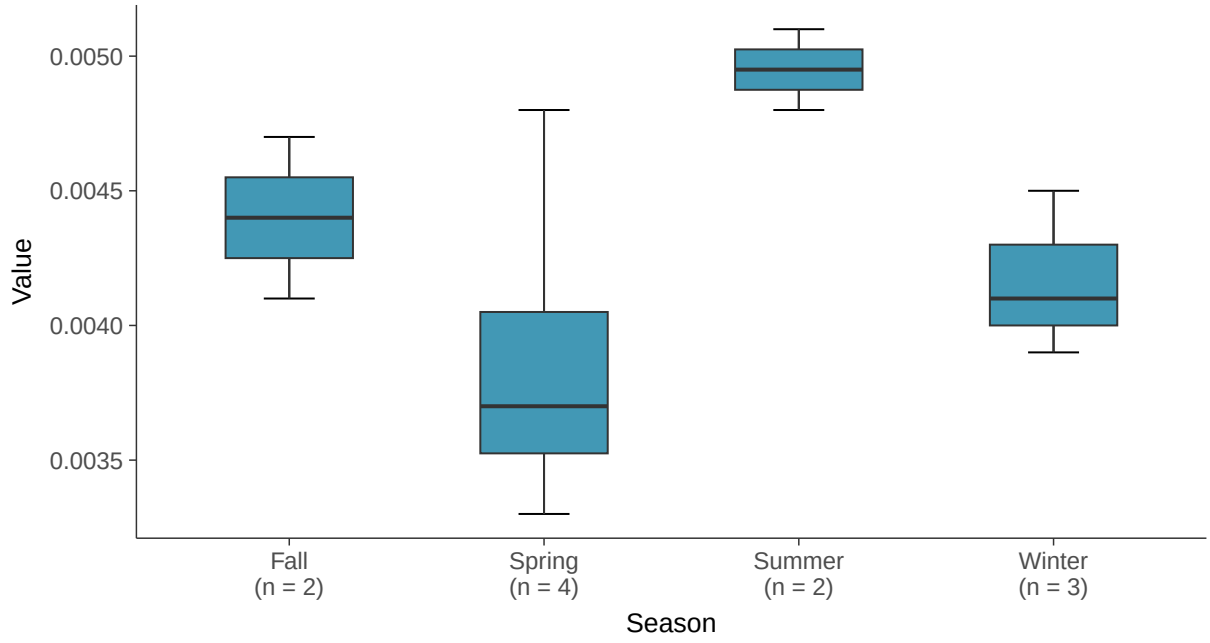
Boxplot

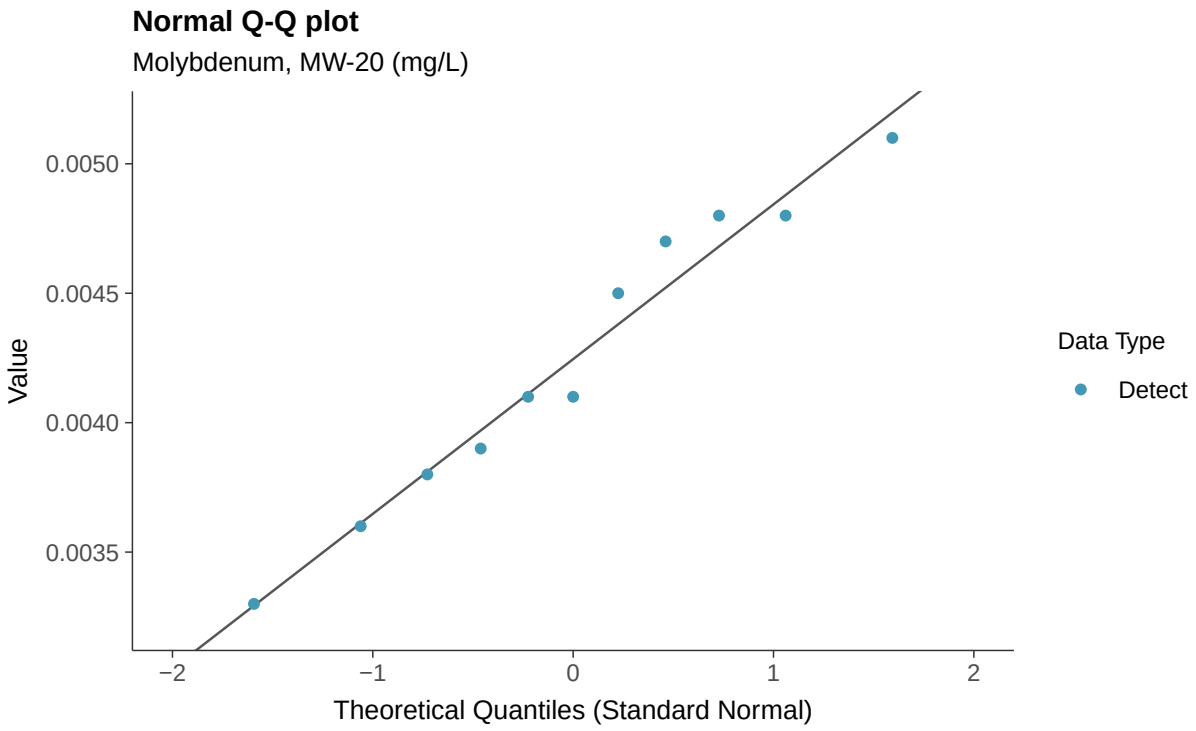
Molybdenum, MW-20 (mg/L)

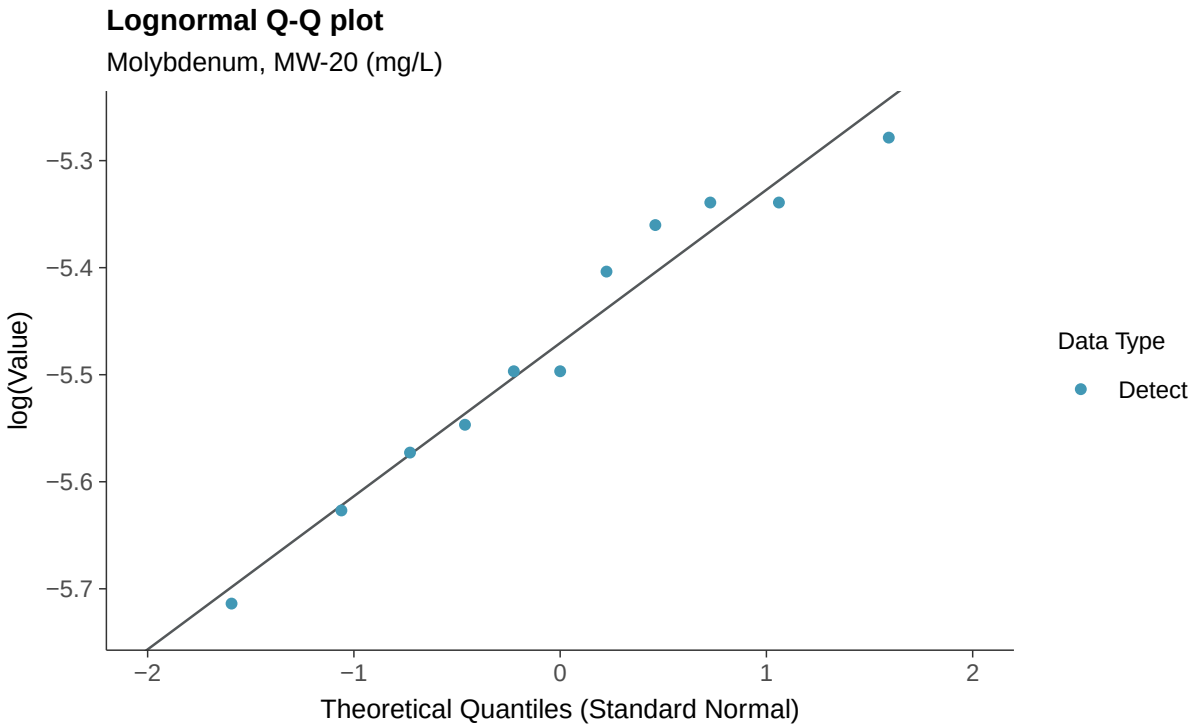


Boxplot by Season

Molybdenum, MW-20 (mg/L)

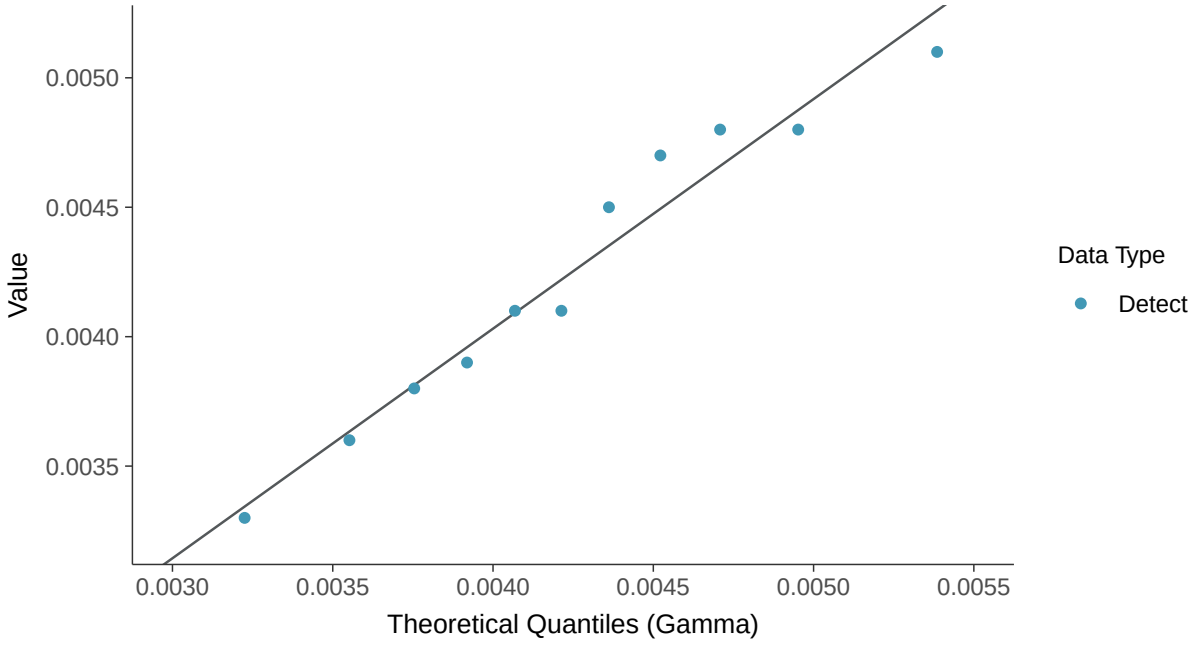



Normal Q-Q plot
Molybdenum, MW-20 (mg/L)
Value
0.0050
0.0045
0.0040
0.0035
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect


Lognormal Q-Q plot
Molybdenum, MW-20 (mg/L)
log(Value)
−5.3
−5.4
−5.5
−5.6
−5.7
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect

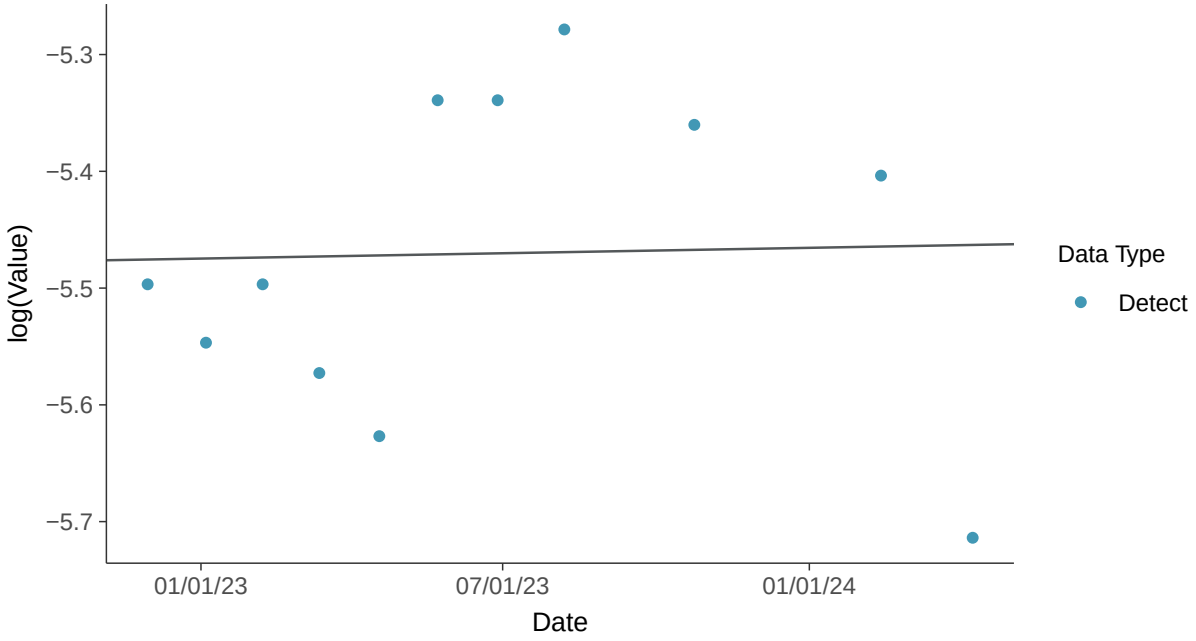
Gamma Q-Q plot

Molybdenum, MW-20 (mg/L)



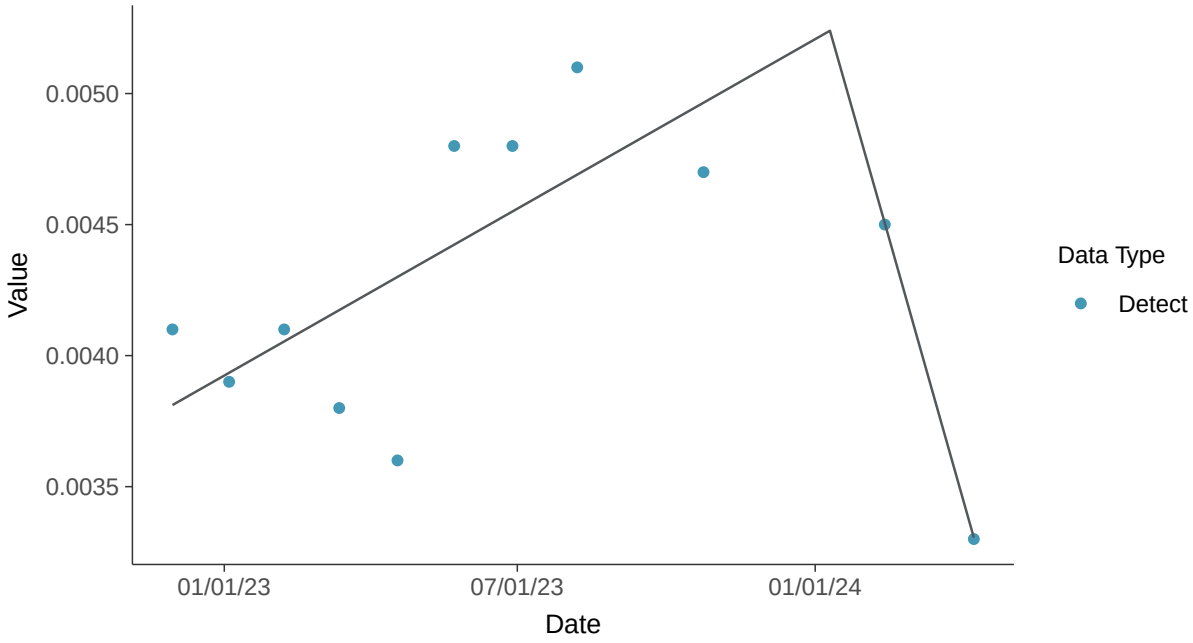
Trend Regression: Lognormal MLE

Molybdenum, MW-20 (mg/L)



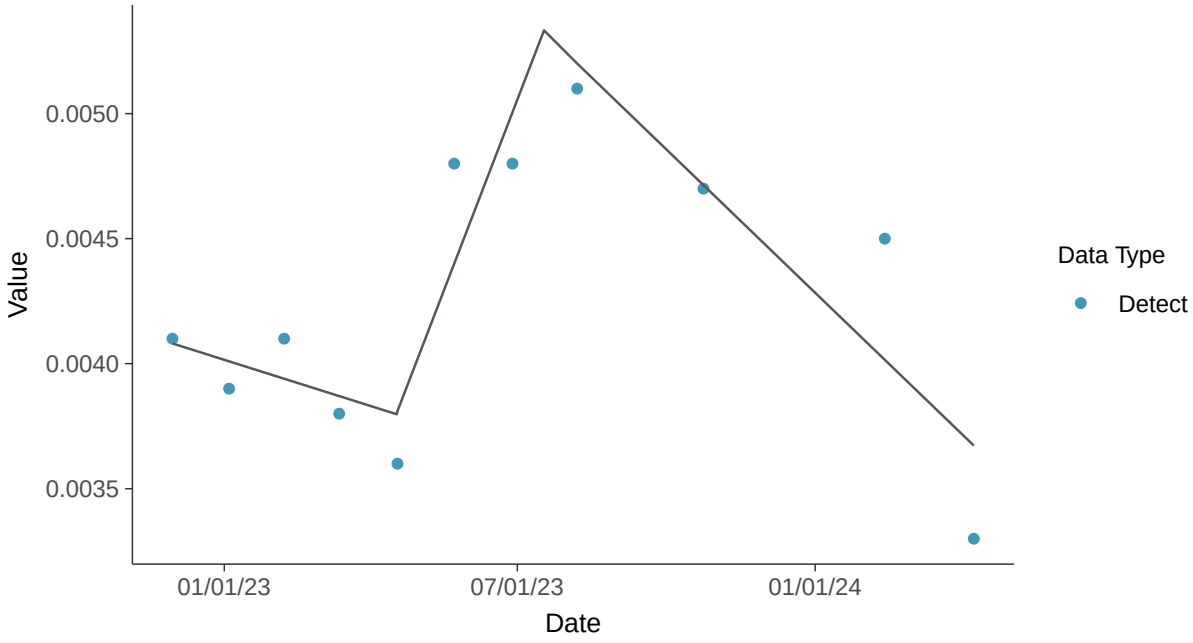
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-20 (mg/L)



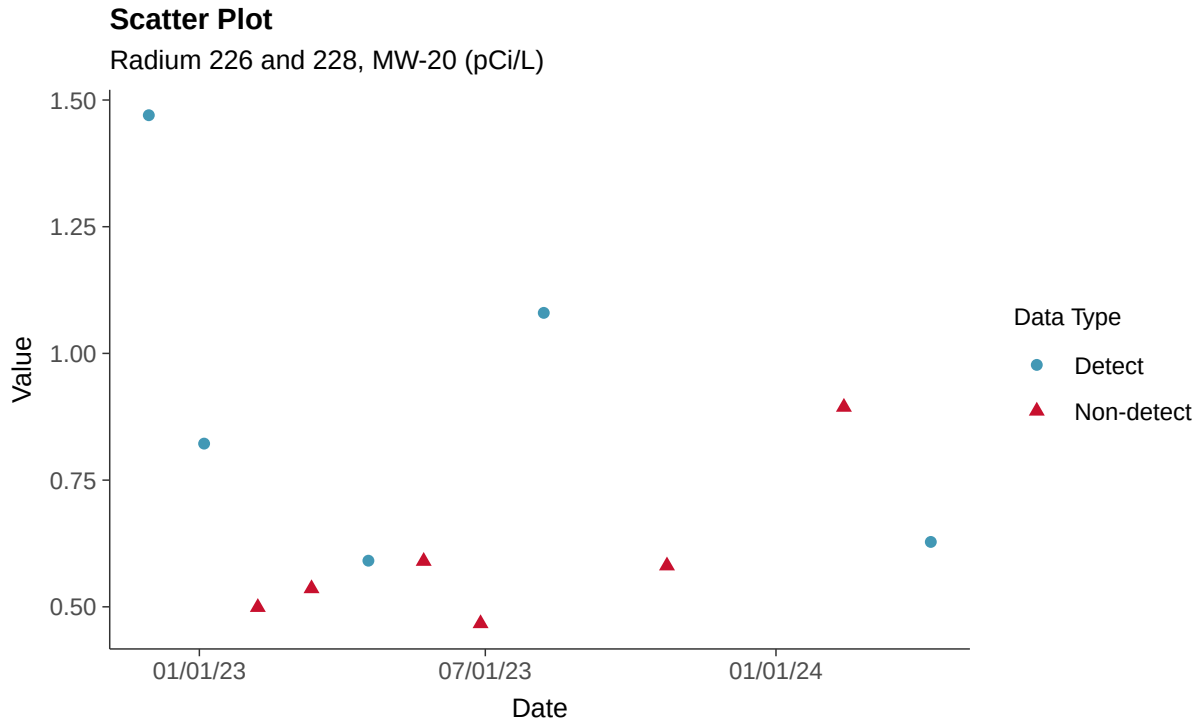
Trend Regression: Piecewise Linear-Linear-Linear

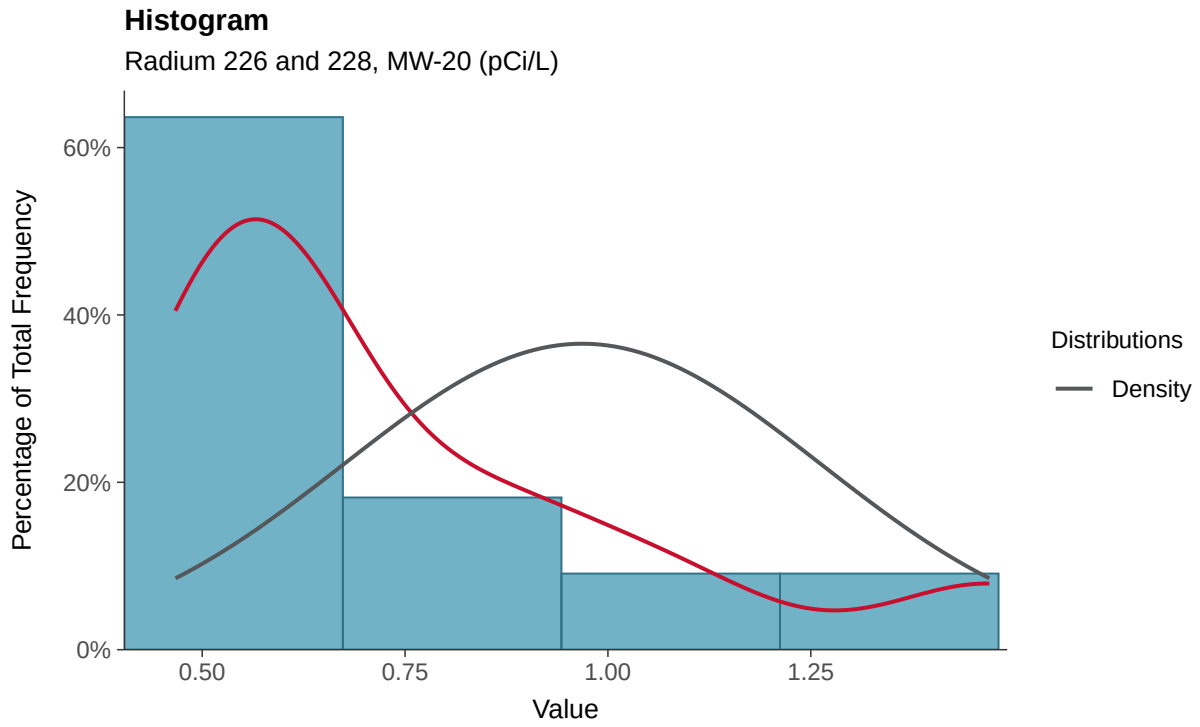
Molybdenum, MW-20 (mg/L)



Appendix IV: Radium 226 and 228, MW-20

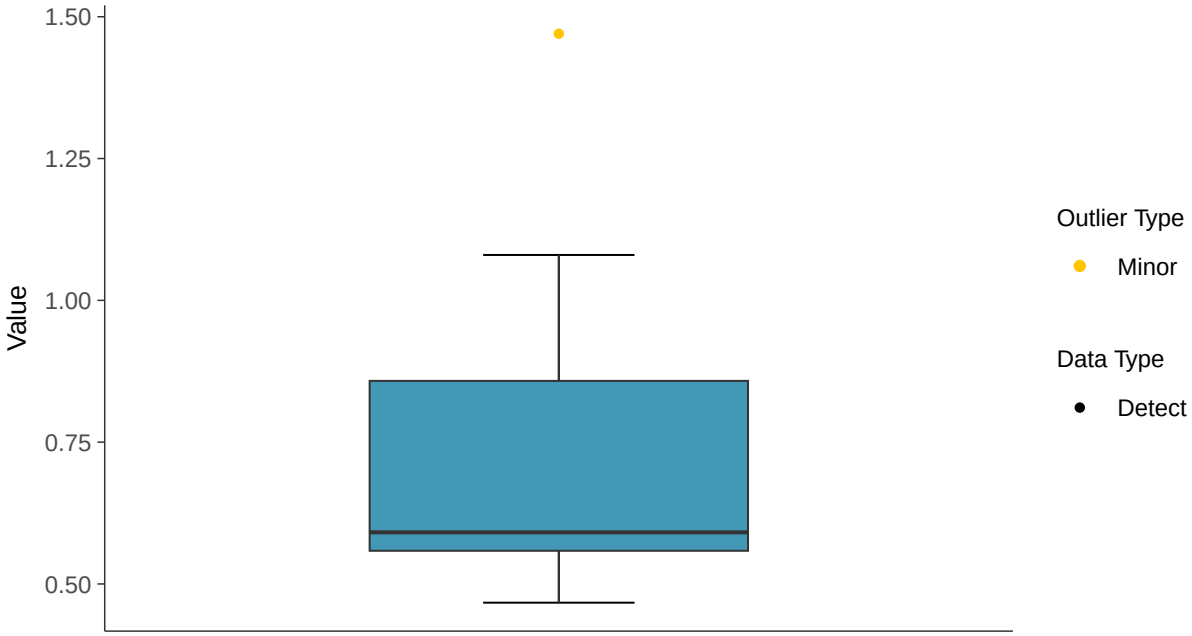
ID: 1_30_5_121





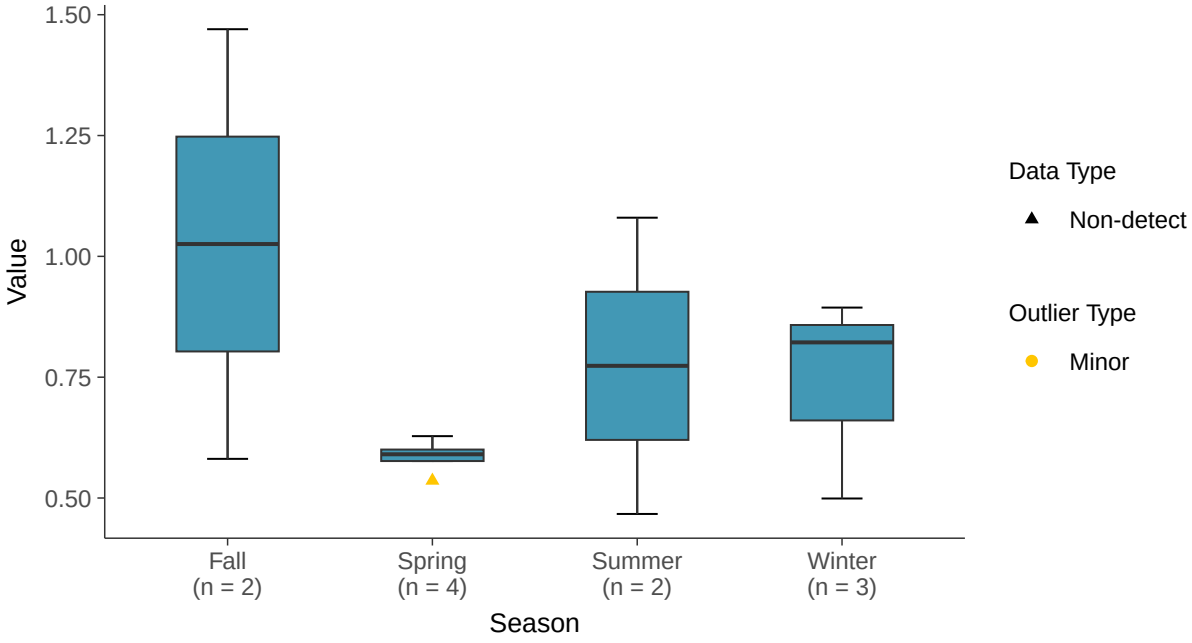
Boxplot

Radium 226 and 228, MW-20 (pCi/L)



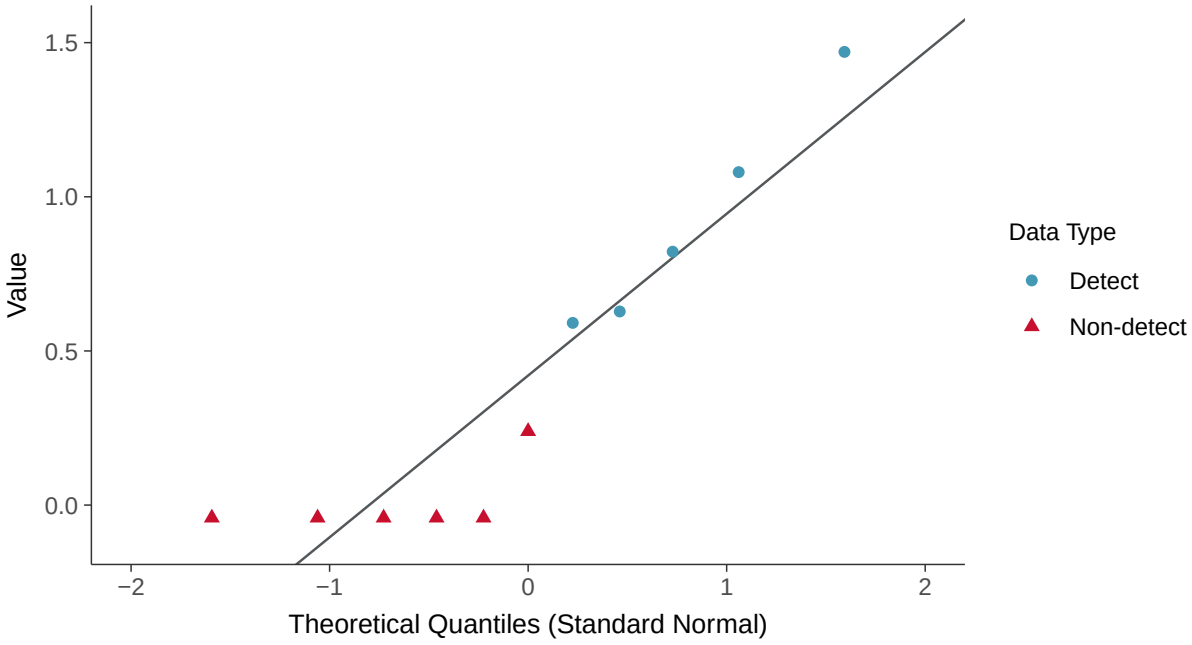
Boxplot by Season

Radium 226 and 228, MW-20 (pCi/L)



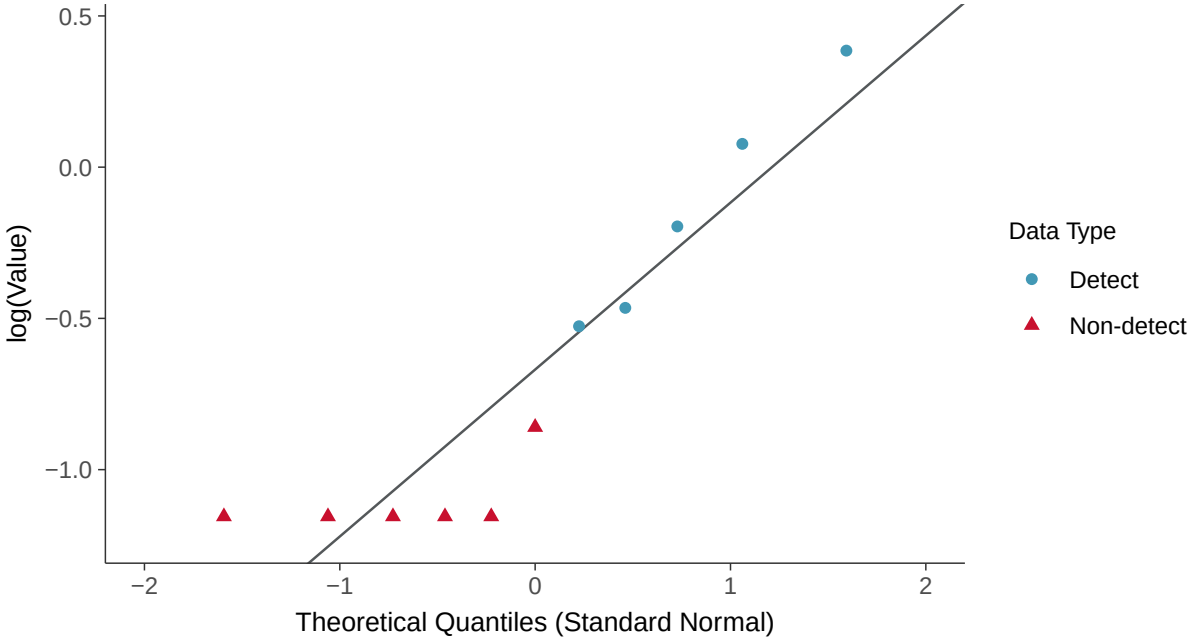
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-20 (pCi/L)



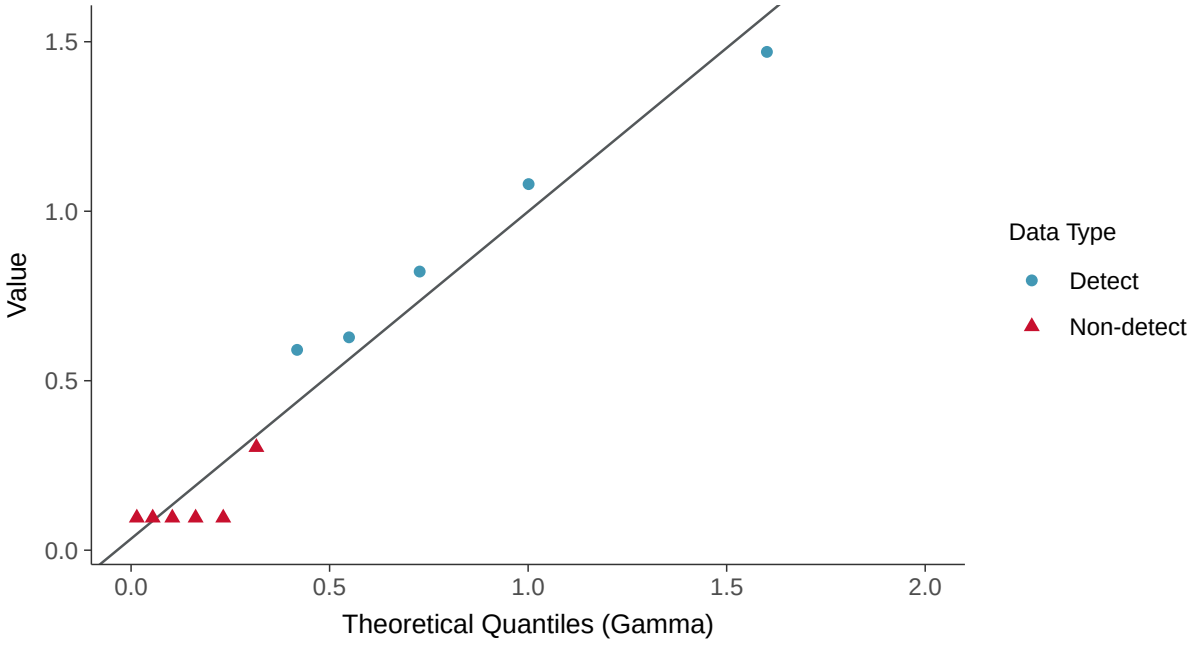
Lognormal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-20 (pCi/L)



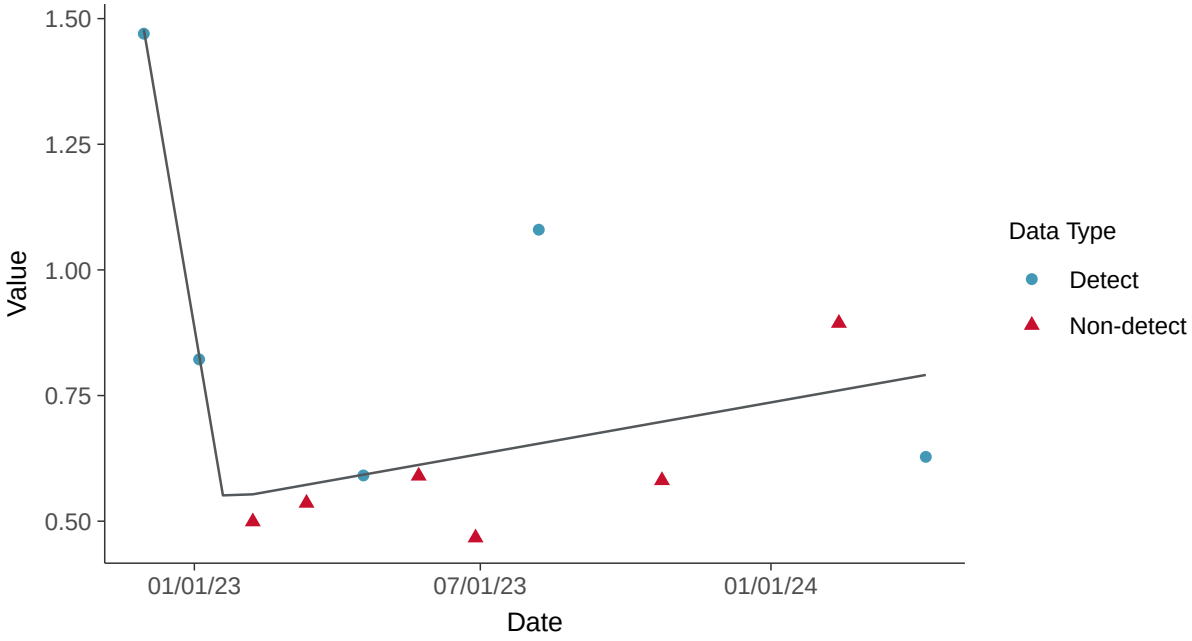
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-20 (pCi/L)



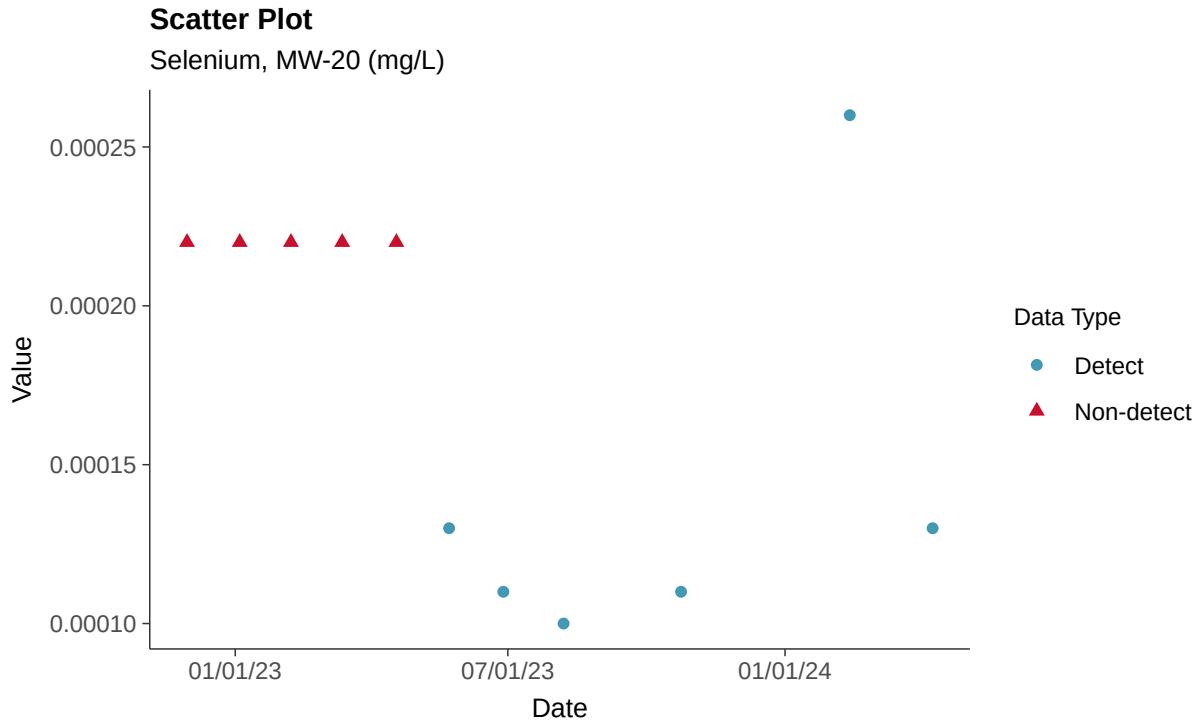
Trend Regression: Piecewise Linear-Linear

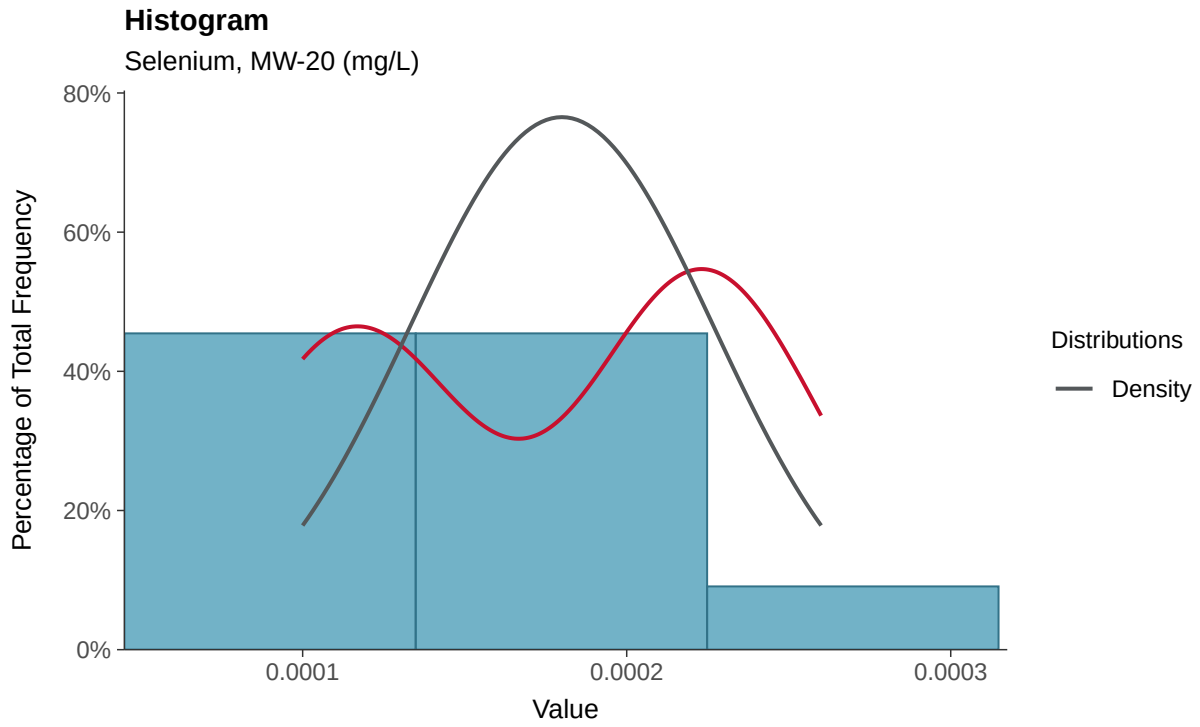
Radium 226 and 228, MW-20 (pCi/L)



Appendix IV: Selenium, MW-20

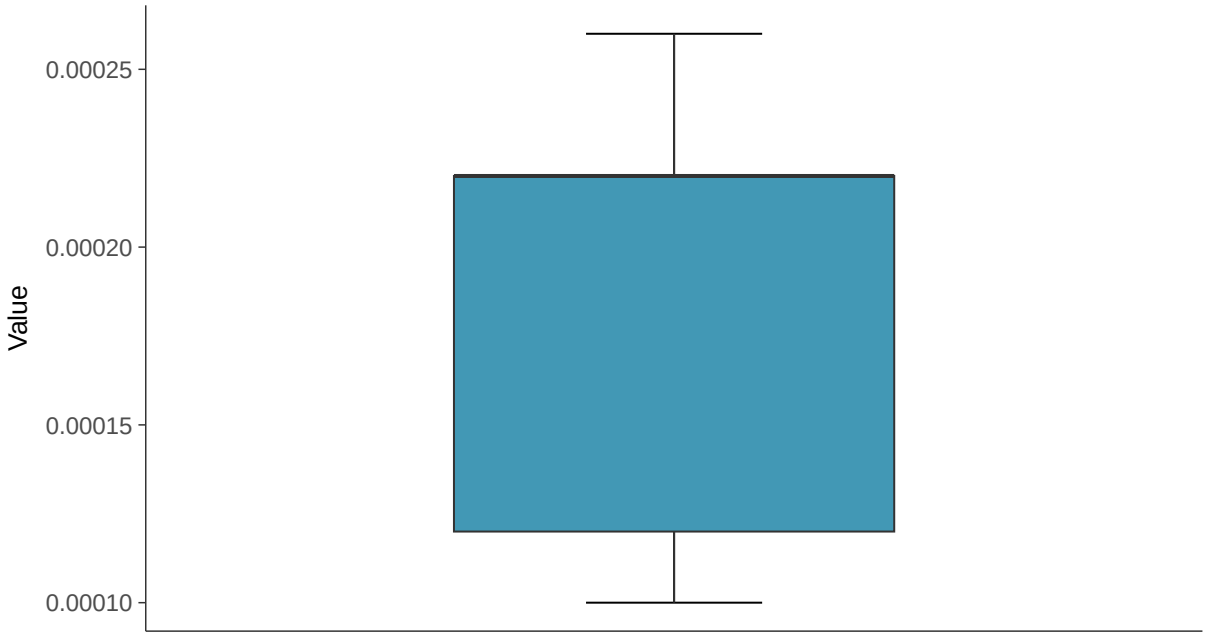
ID: 1_30_5_122





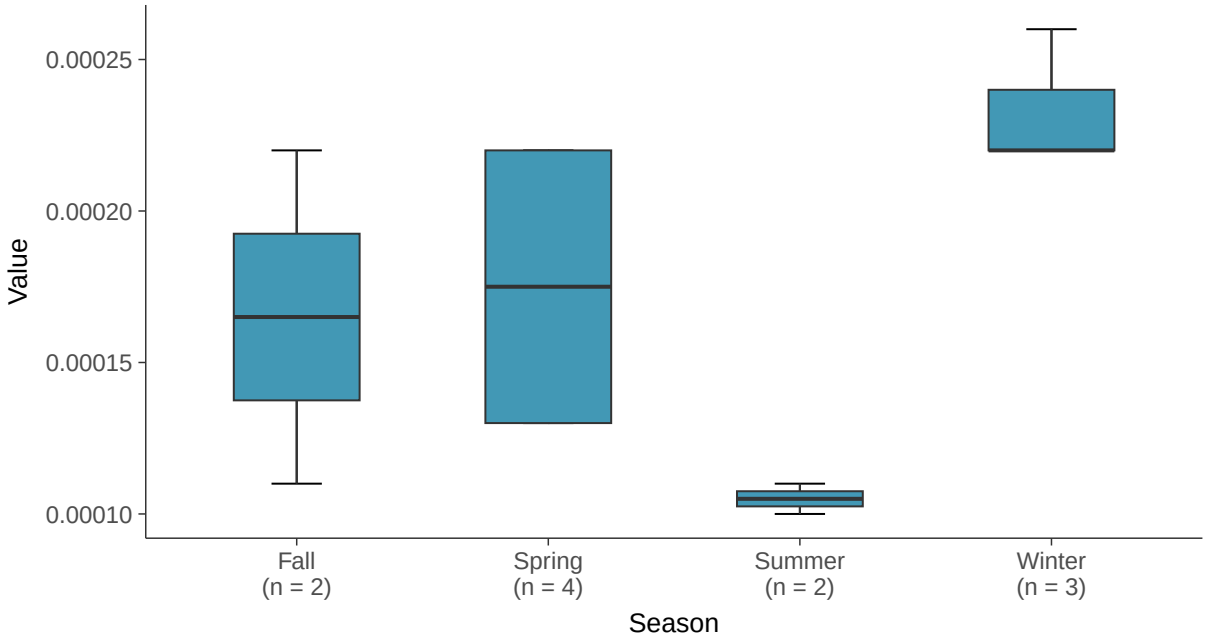
Boxplot

Selenium, MW-20 (mg/L)



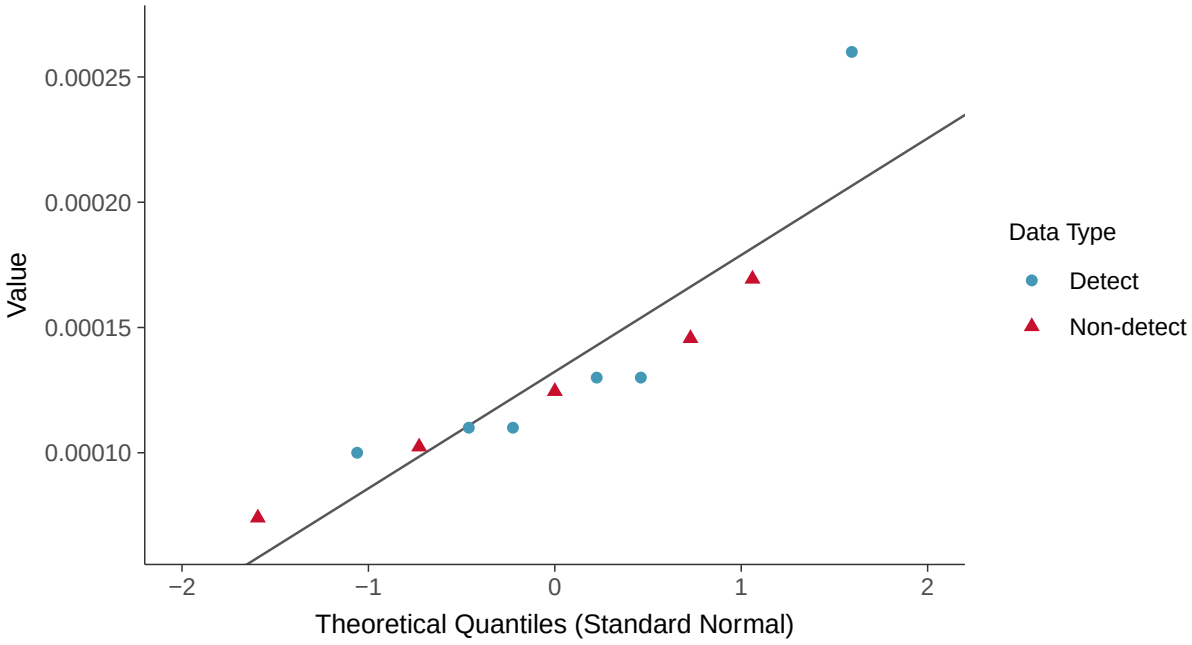
Boxplot by Season

Selenium, MW-20 (mg/L)



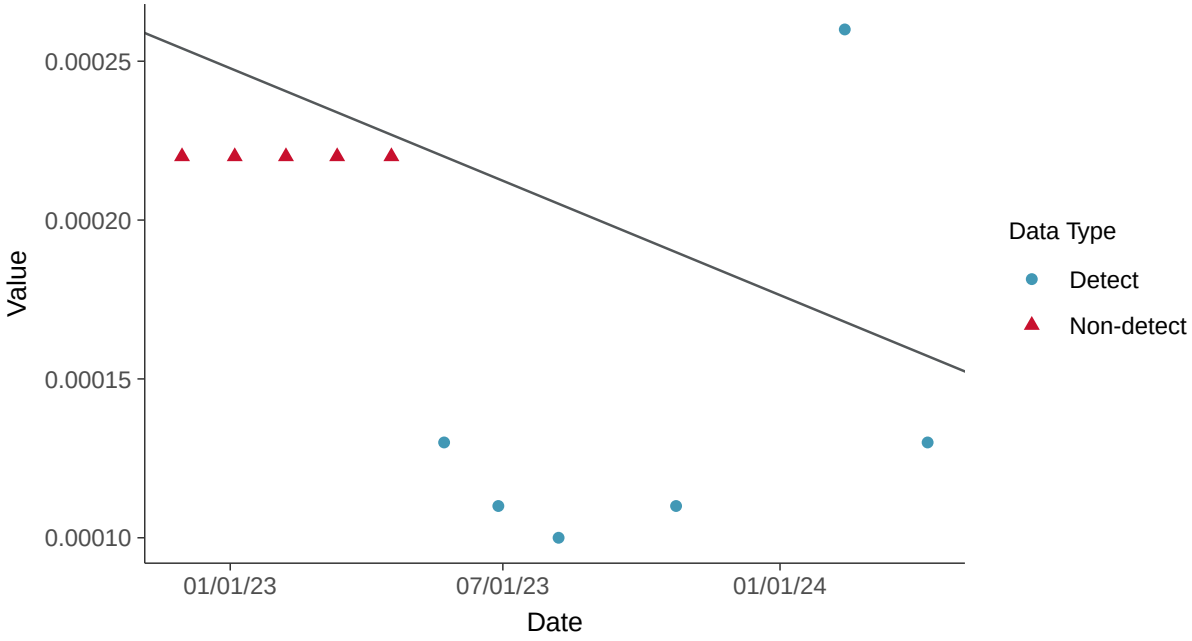
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-20 (mg/L)



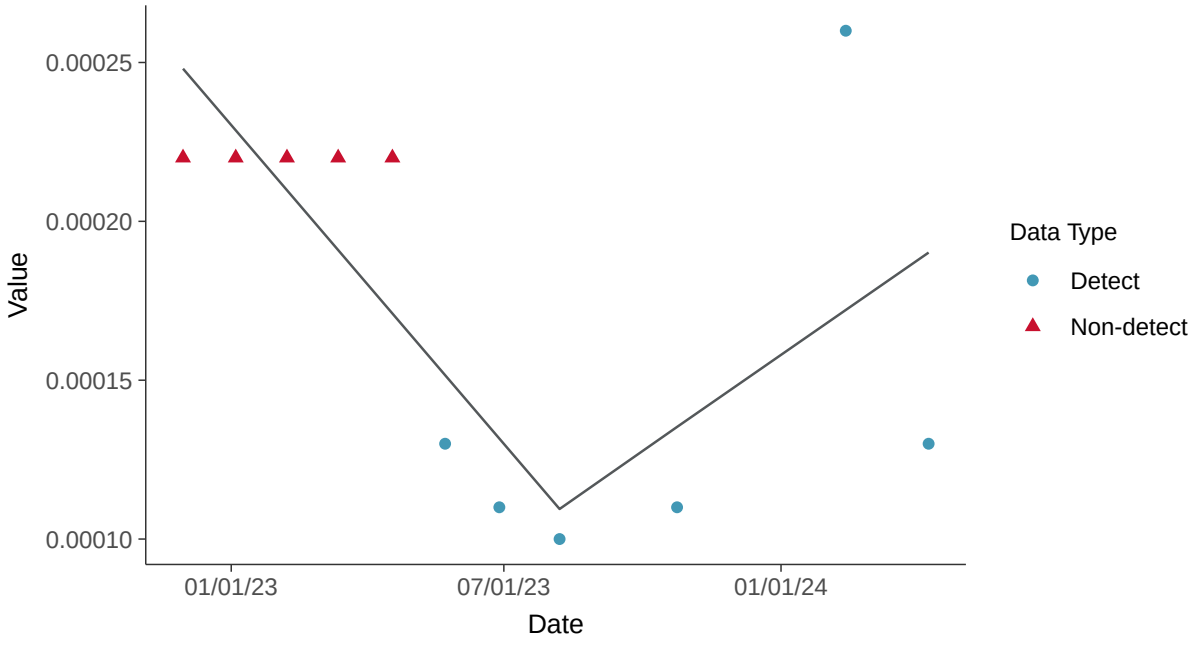
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Selenium, MW-20 (mg/L)



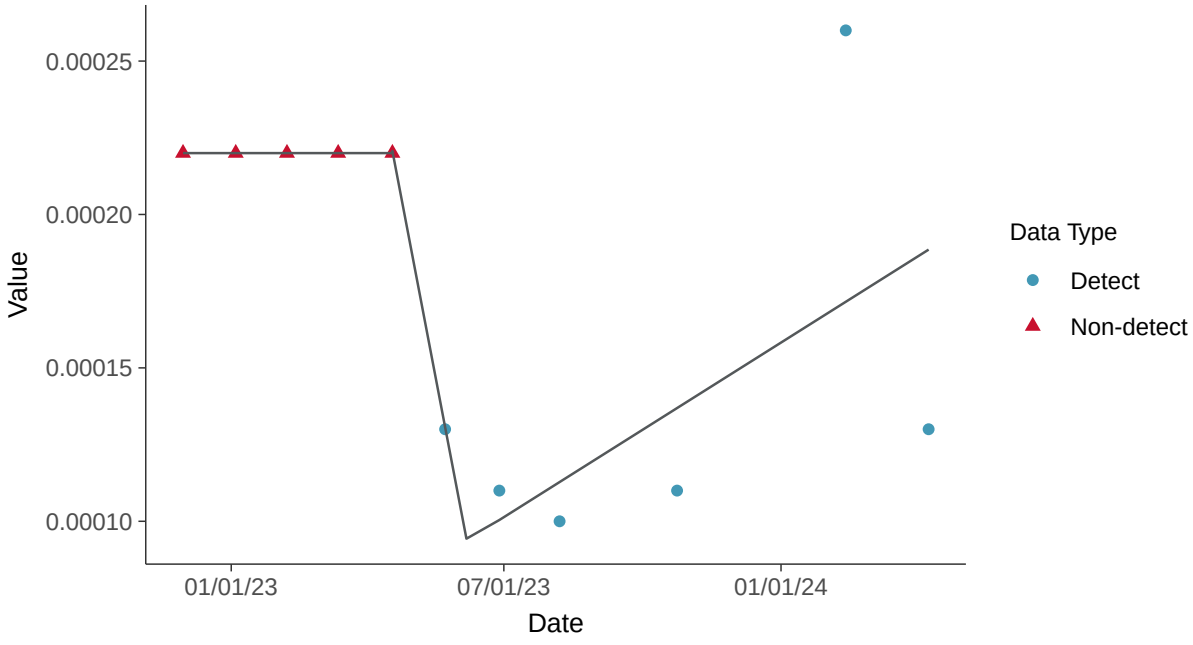
Trend Regression: Piecewise Linear-Linear

Selenium, MW-20 (mg/L)



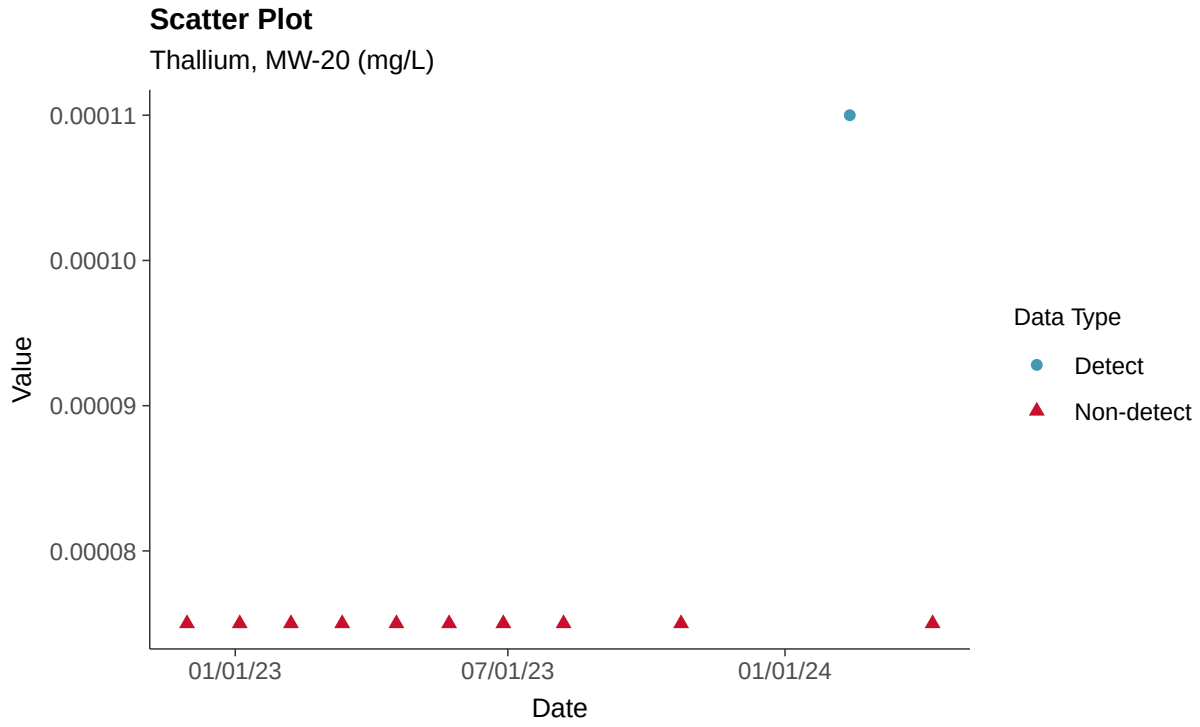
Trend Regression: Piecewise Linear-Linear-Linear

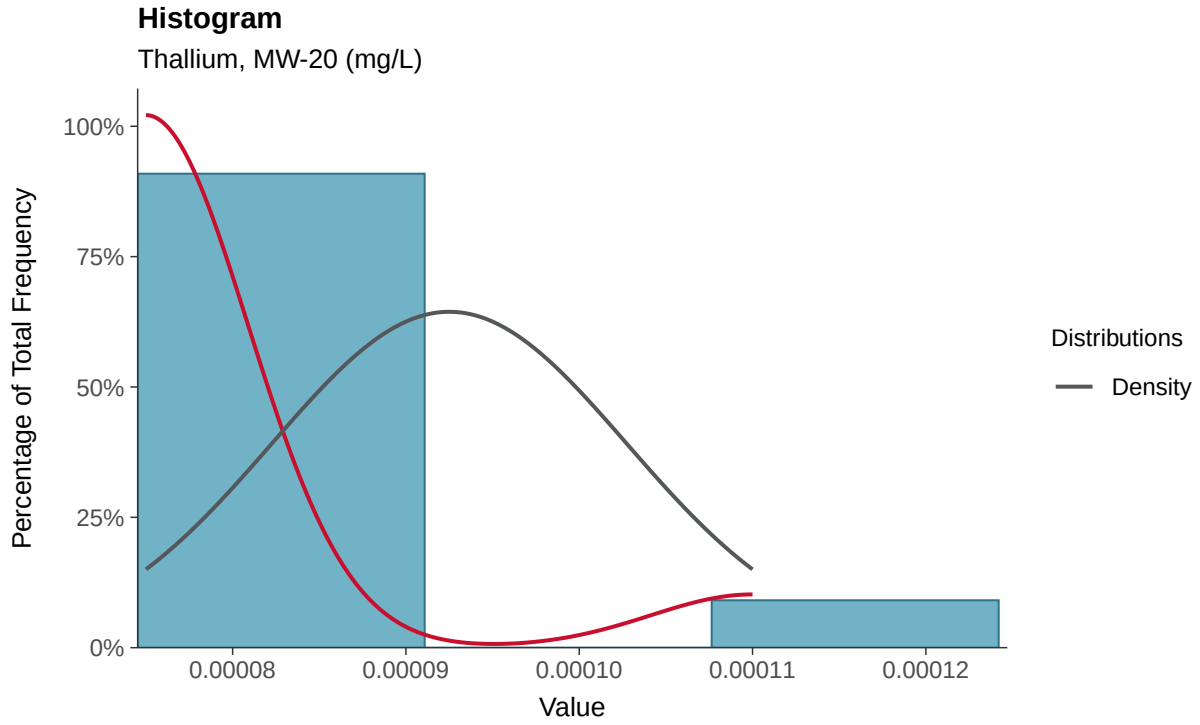
Selenium, MW-20 (mg/L)



Appendix IV: Thallium, MW-20

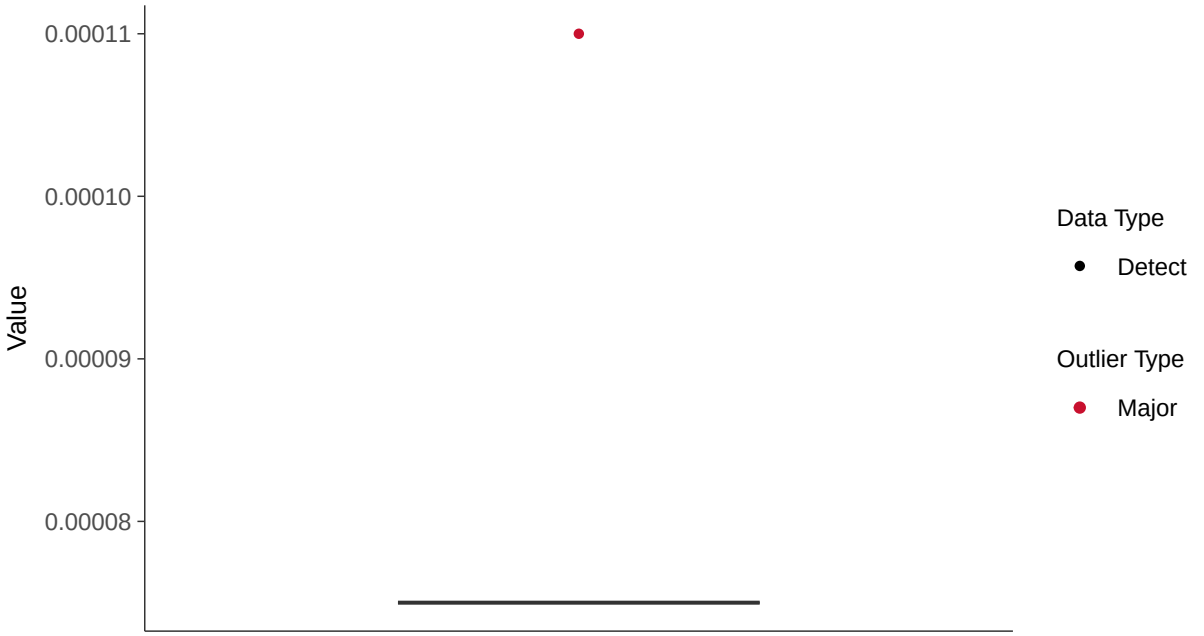
ID: 1_30_5_125





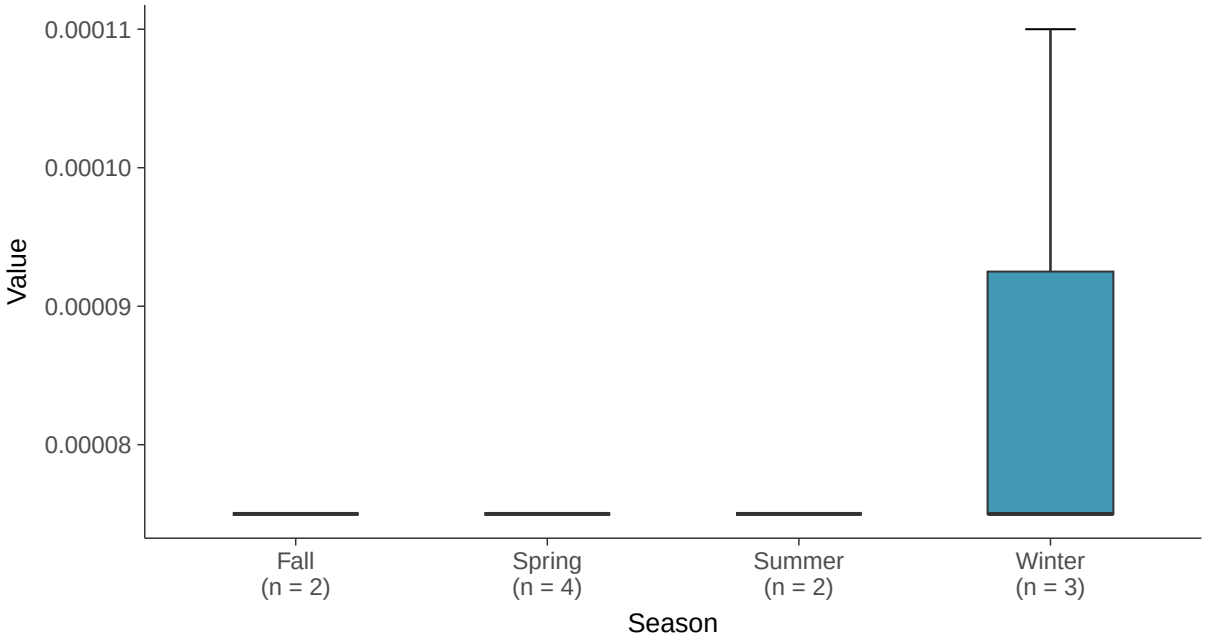
Boxplot

Thallium, MW-20 (mg/L)



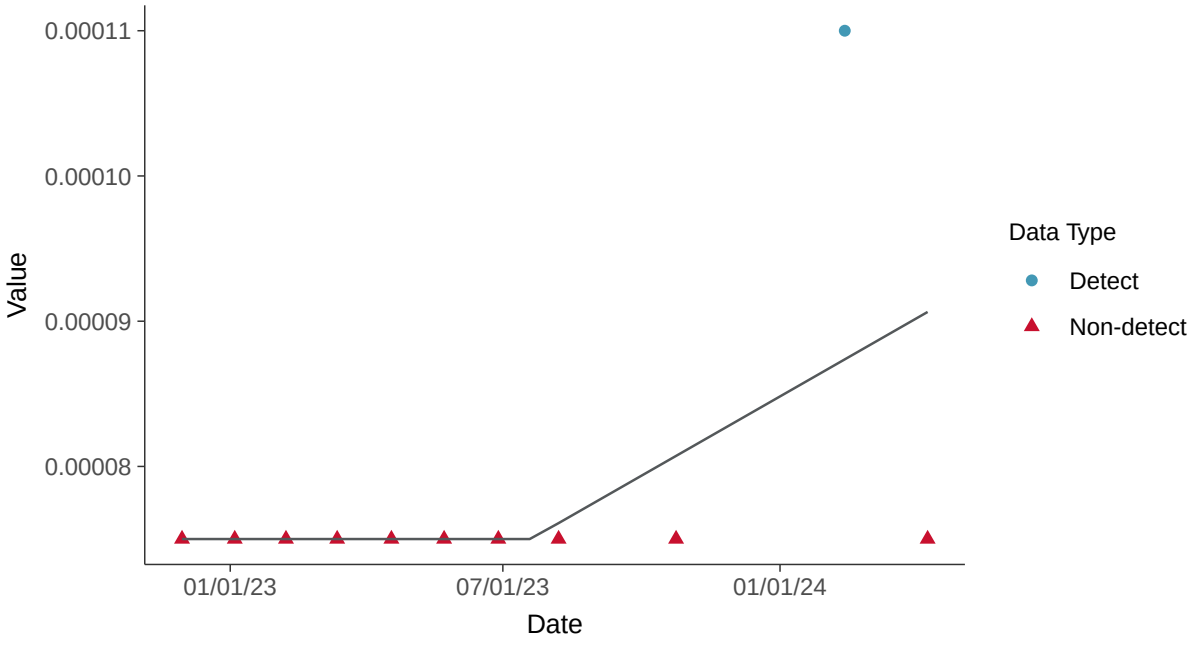
Boxplot by Season

Thallium, MW-20 (mg/L)



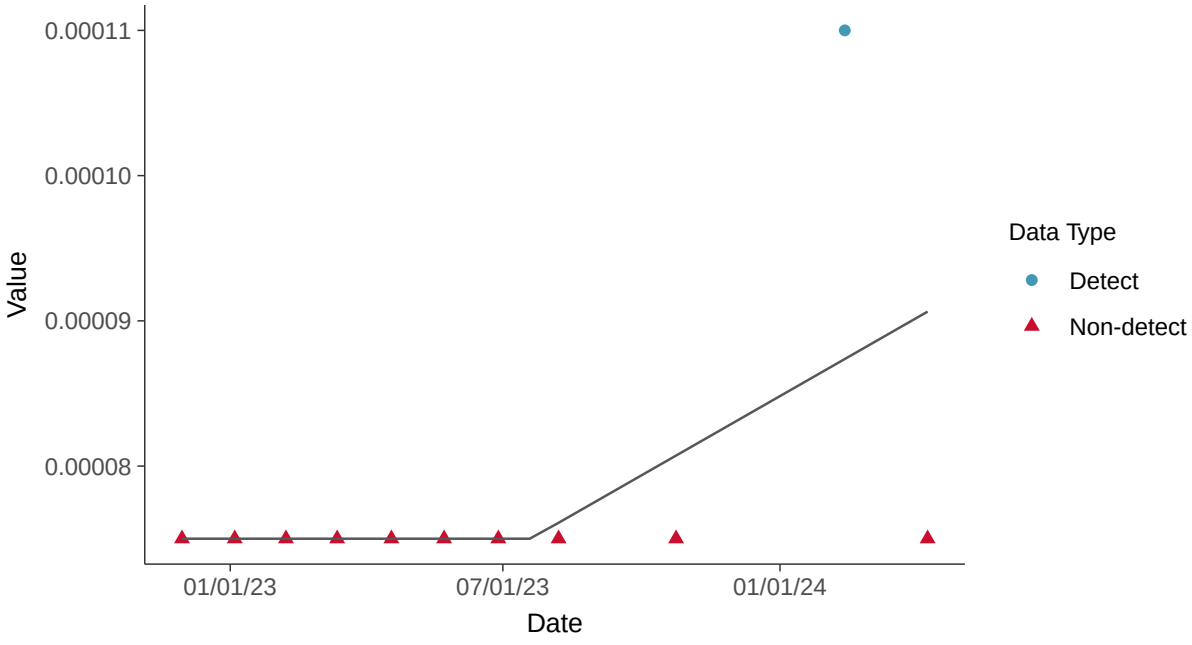
Trend Regression: Piecewise Linear-Linear

Thallium, MW-20 (mg/L)



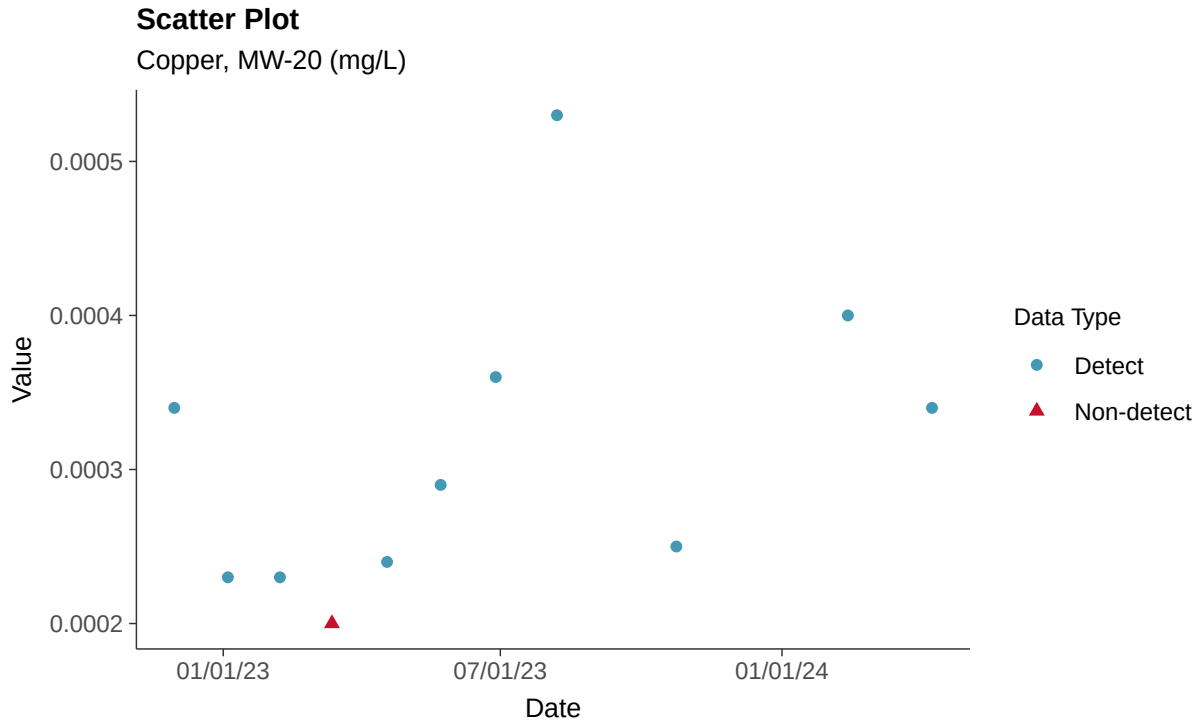
Trend Regression: Piecewise Linear-Linear-Linear

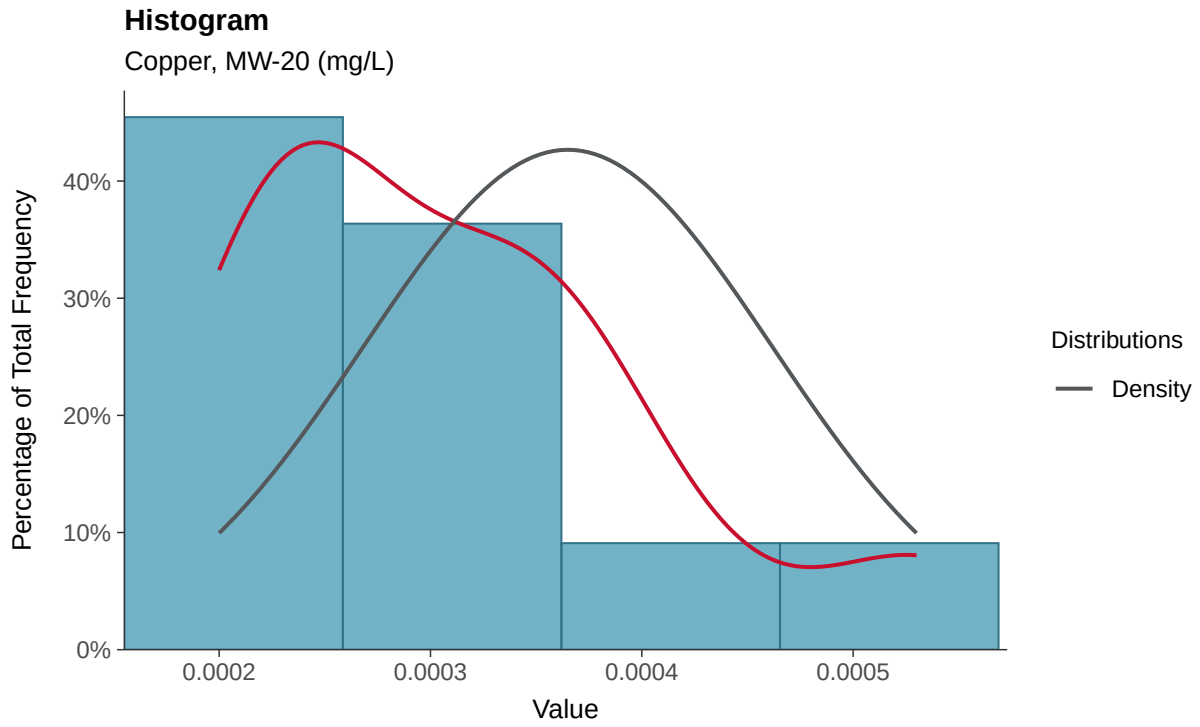
Thallium, MW-20 (mg/L)



Part 115: Copper, MW-20

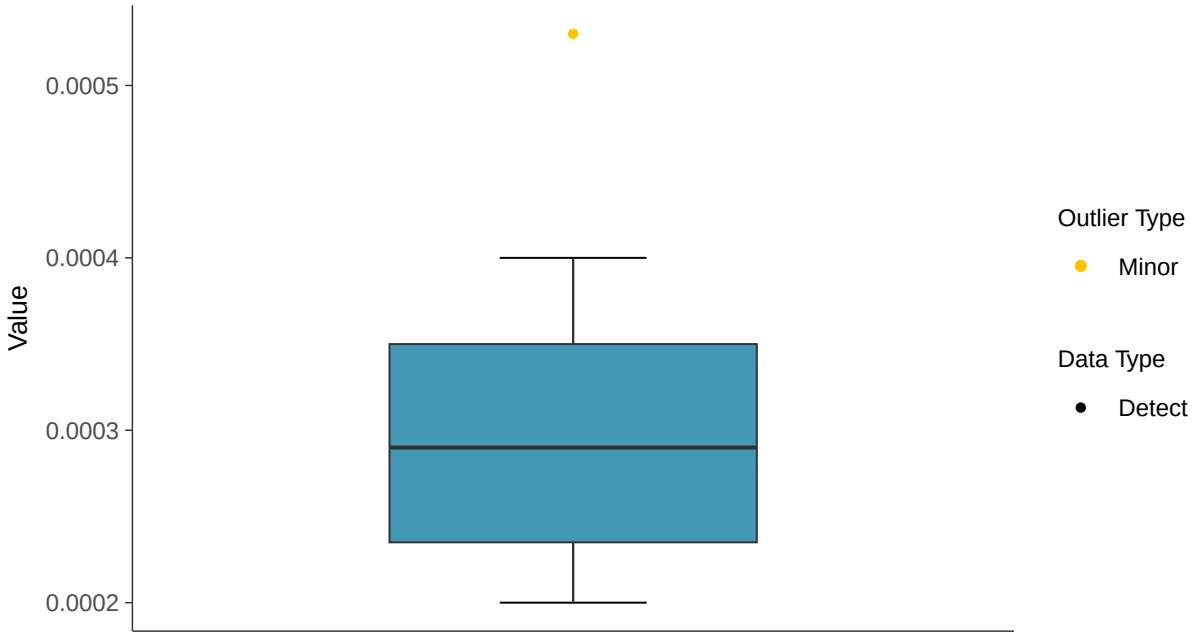
ID: 1_30_6_111





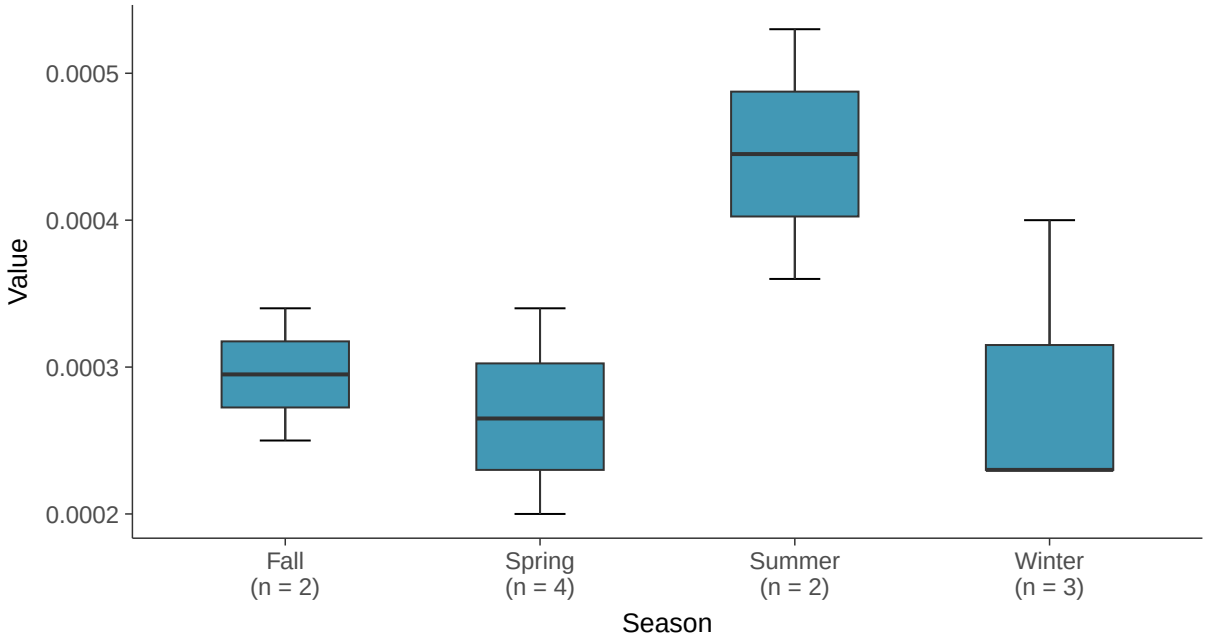
Boxplot

Copper, MW-20 (mg/L)



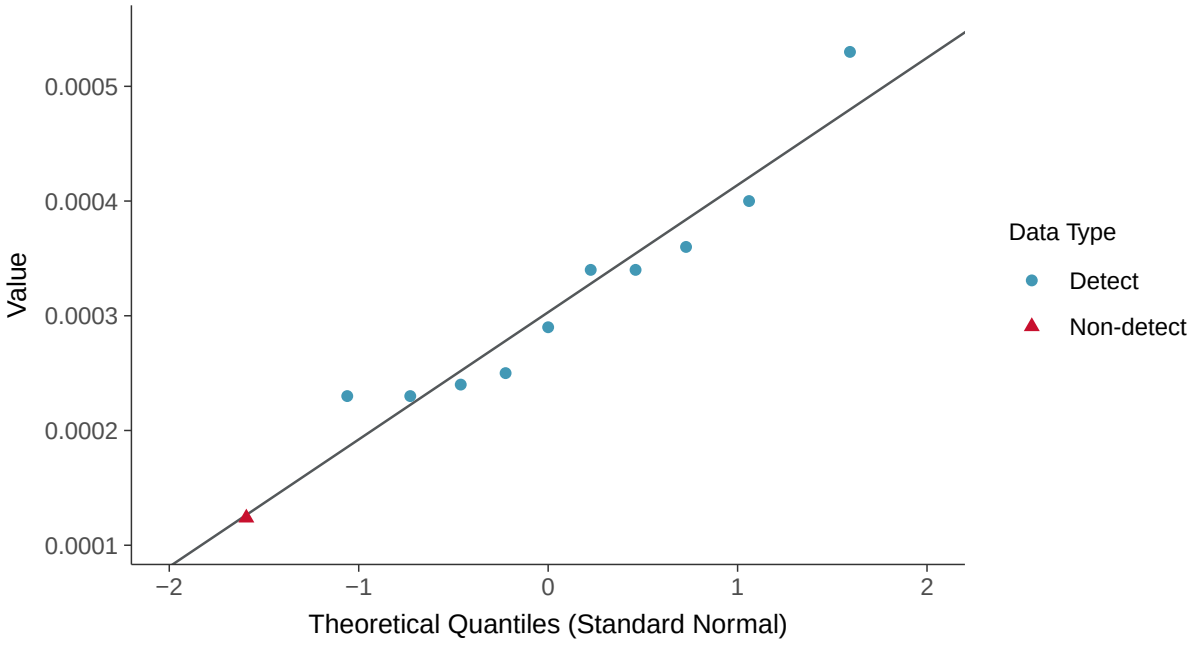
Boxplot by Season

Copper, MW-20 (mg/L)



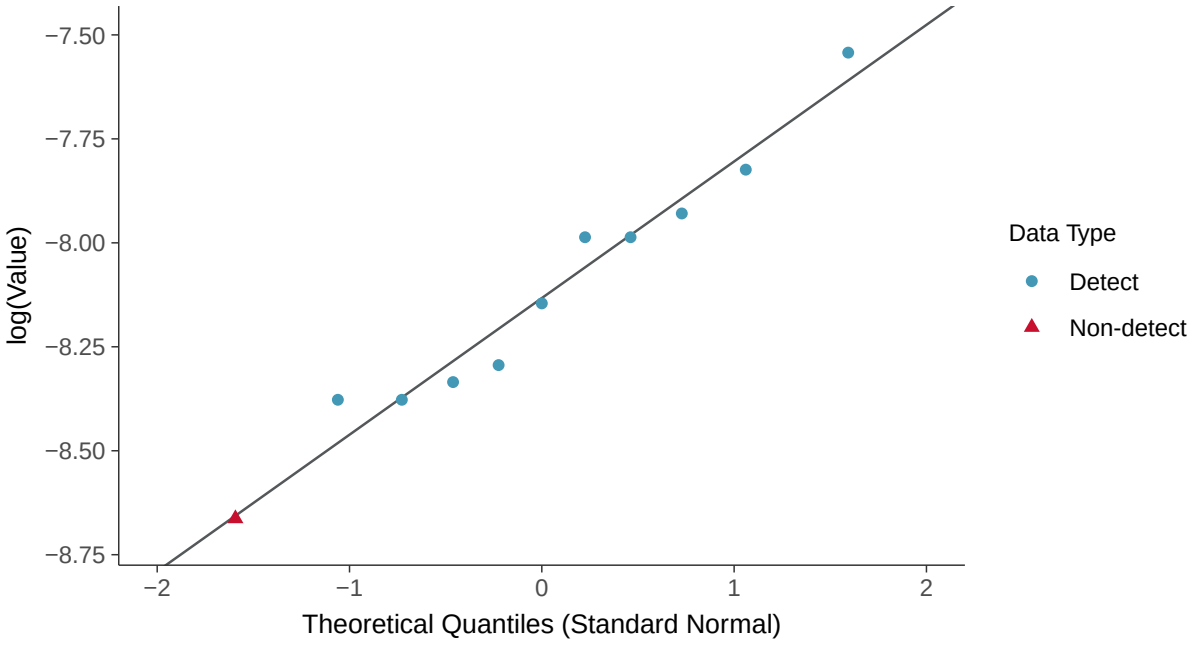
Normal Q-Q plot using ROS Imputed Estimates

Copper, MW-20 (mg/L)



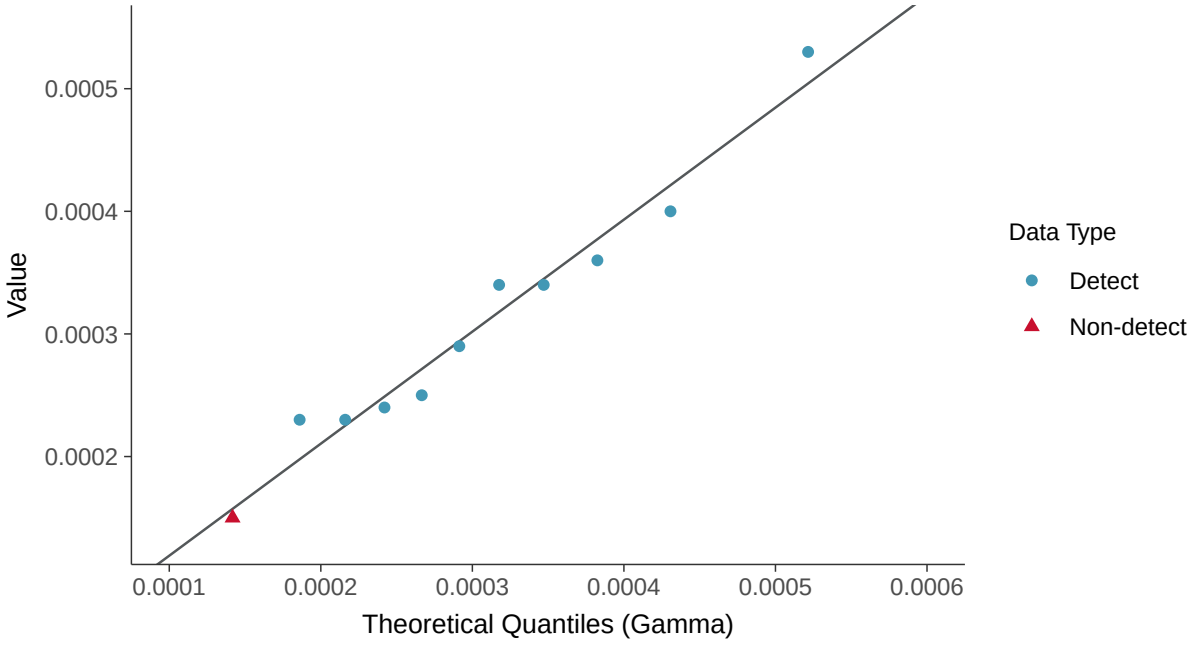
Lognormal Q-Q plot using ROS Imputed Estimates

Copper, MW-20 (mg/L)



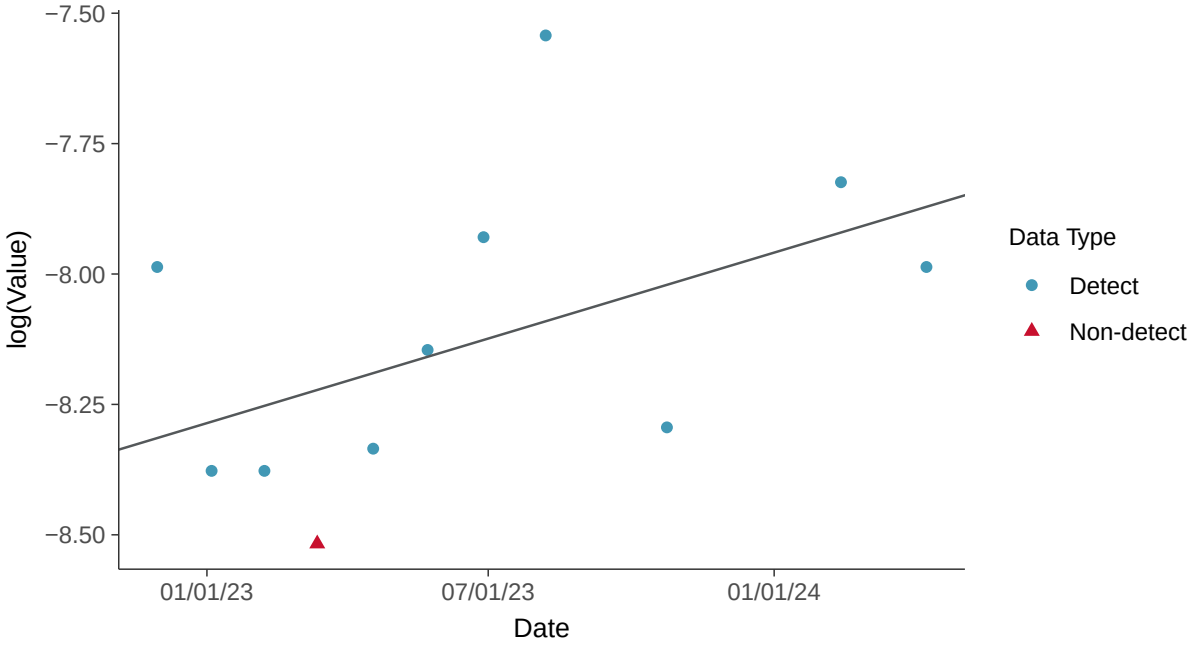
Gamma Q-Q plot using ROS Imputed Estimates

Copper, MW-20 (mg/L)



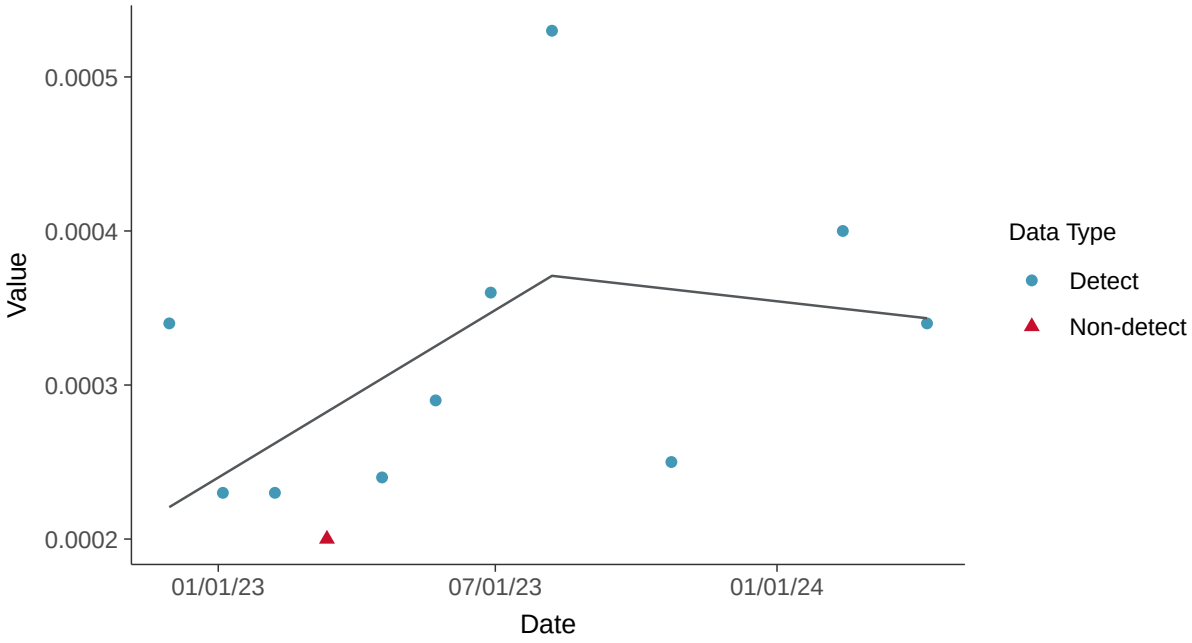
Trend Regression: Lognormal MLE

Copper, MW-20 (mg/L)



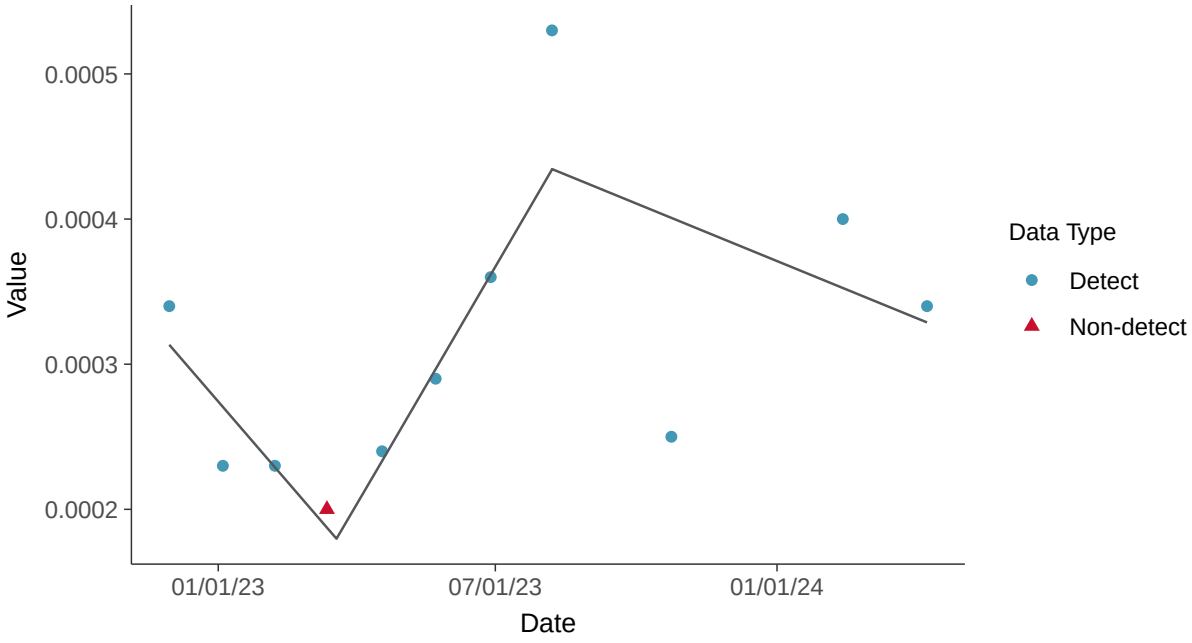
Trend Regression: Piecewise Linear-Linear

Copper, MW-20 (mg/L)



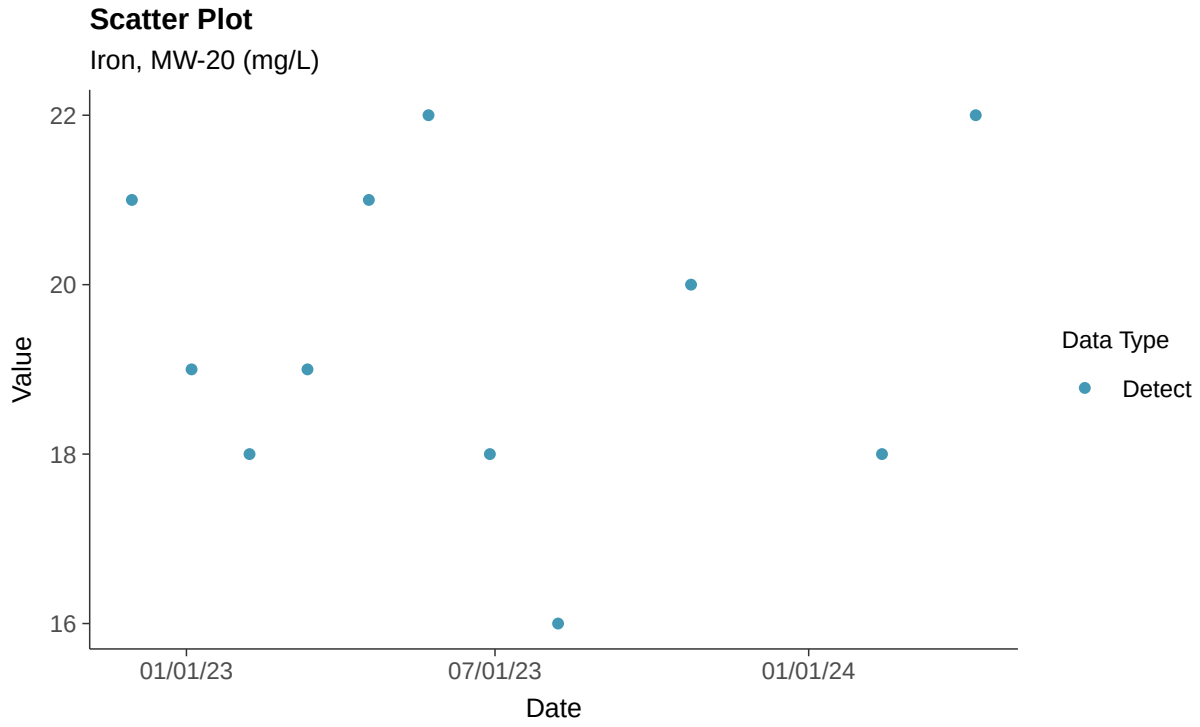
Trend Regression: Piecewise Linear-Linear-Linear

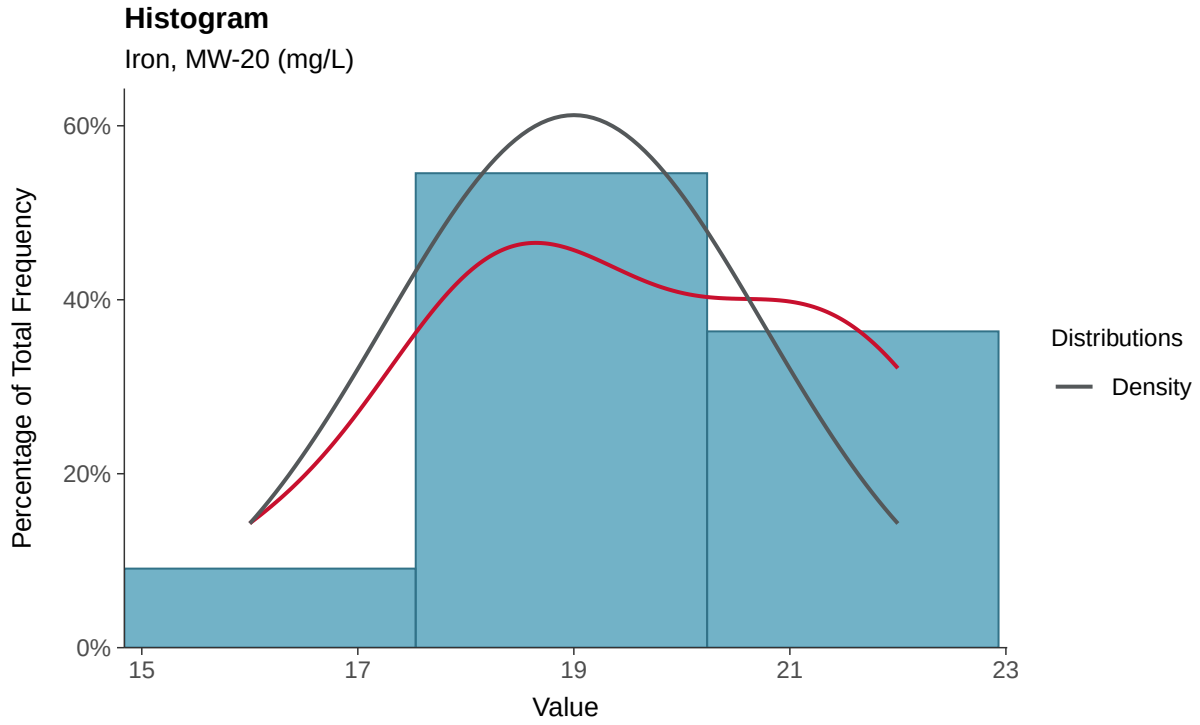
Copper, MW-20 (mg/L)



Part 115: Iron, MW-20

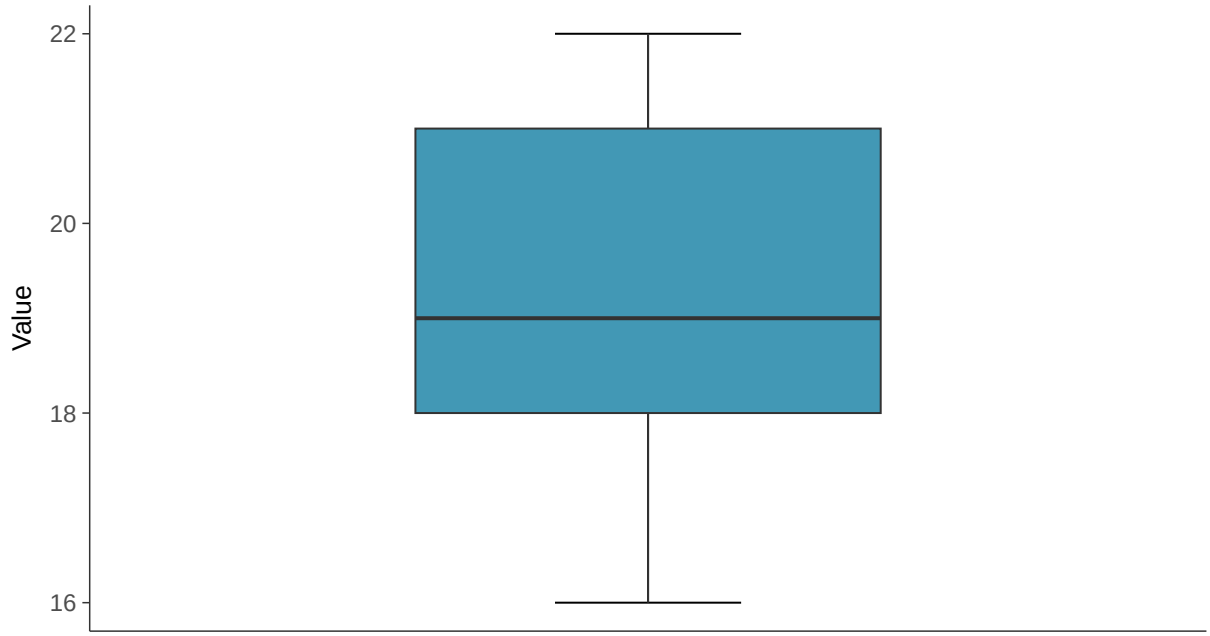
ID: 1_30_6_114





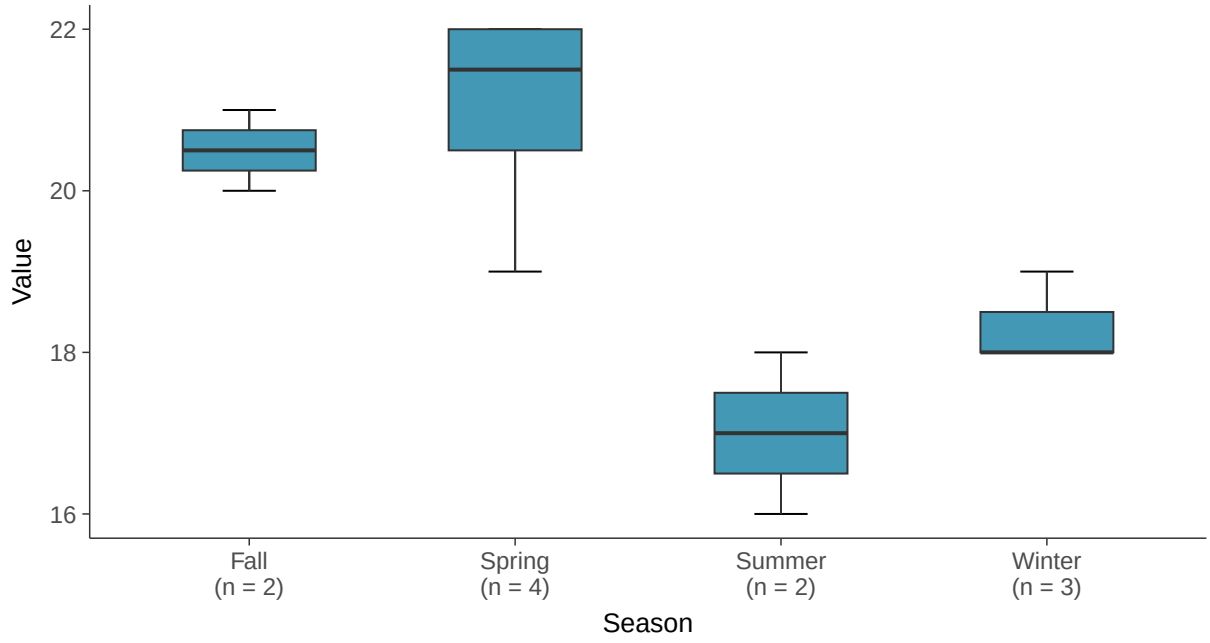
Boxplot

Iron, MW-20 (mg/L)



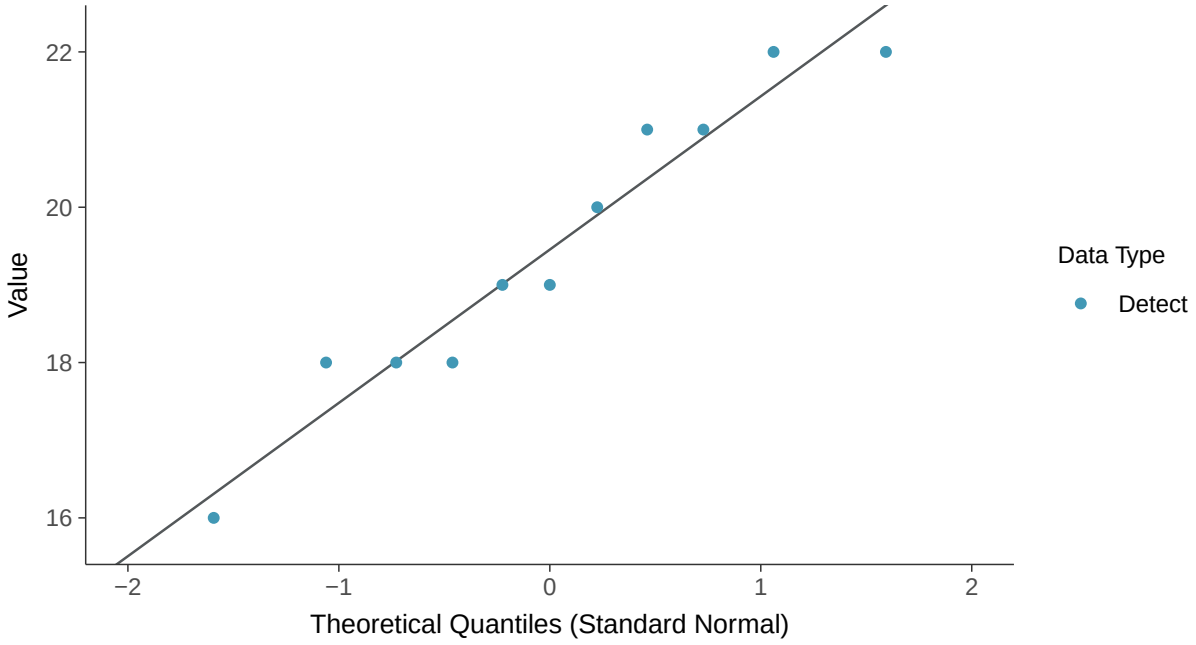
Boxplot by Season

Iron, MW-20 (mg/L)



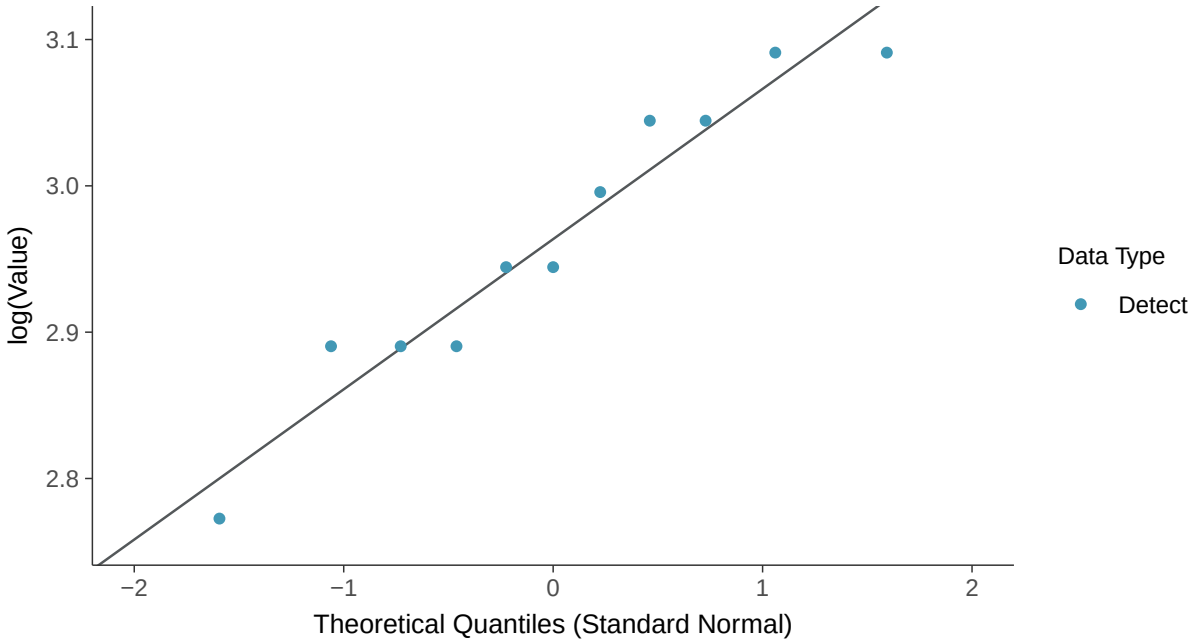
Normal Q-Q plot

Iron, MW-20 (mg/L)



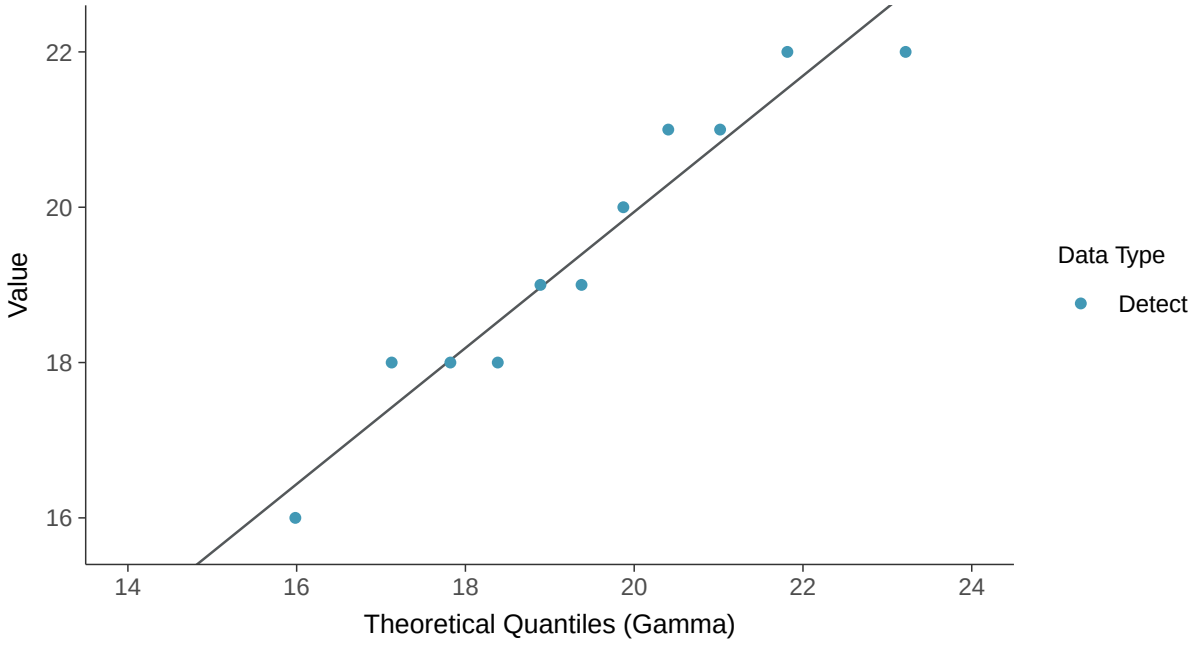
Lognormal Q-Q plot

Iron, MW-20 (mg/L)



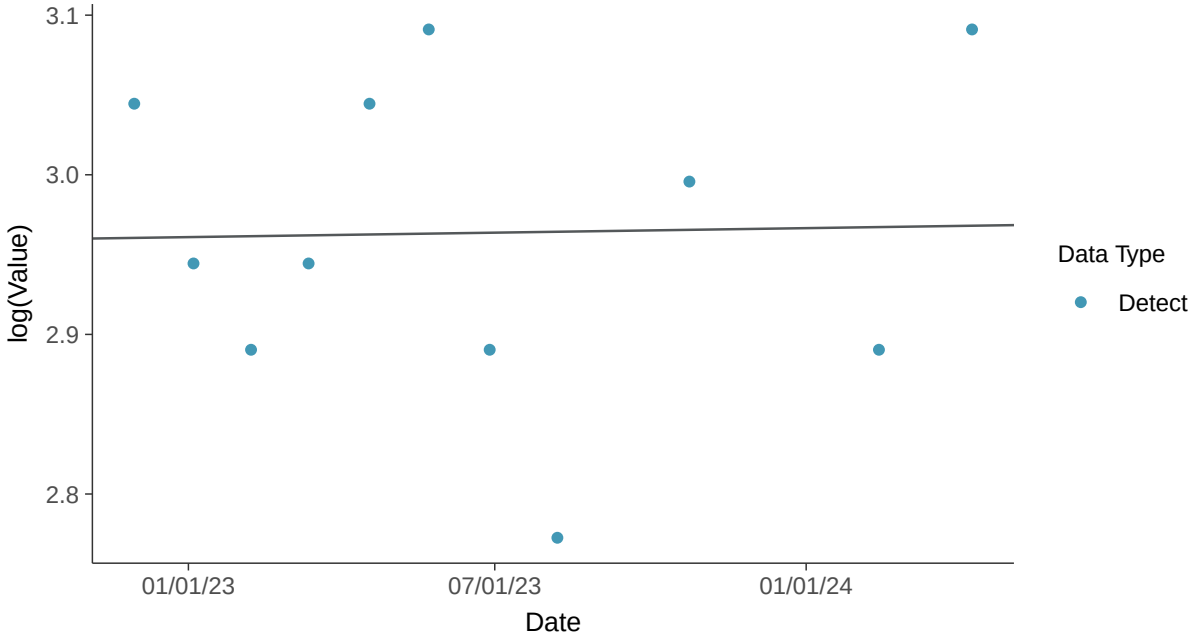
Gamma Q-Q plot

Iron, MW-20 (mg/L)



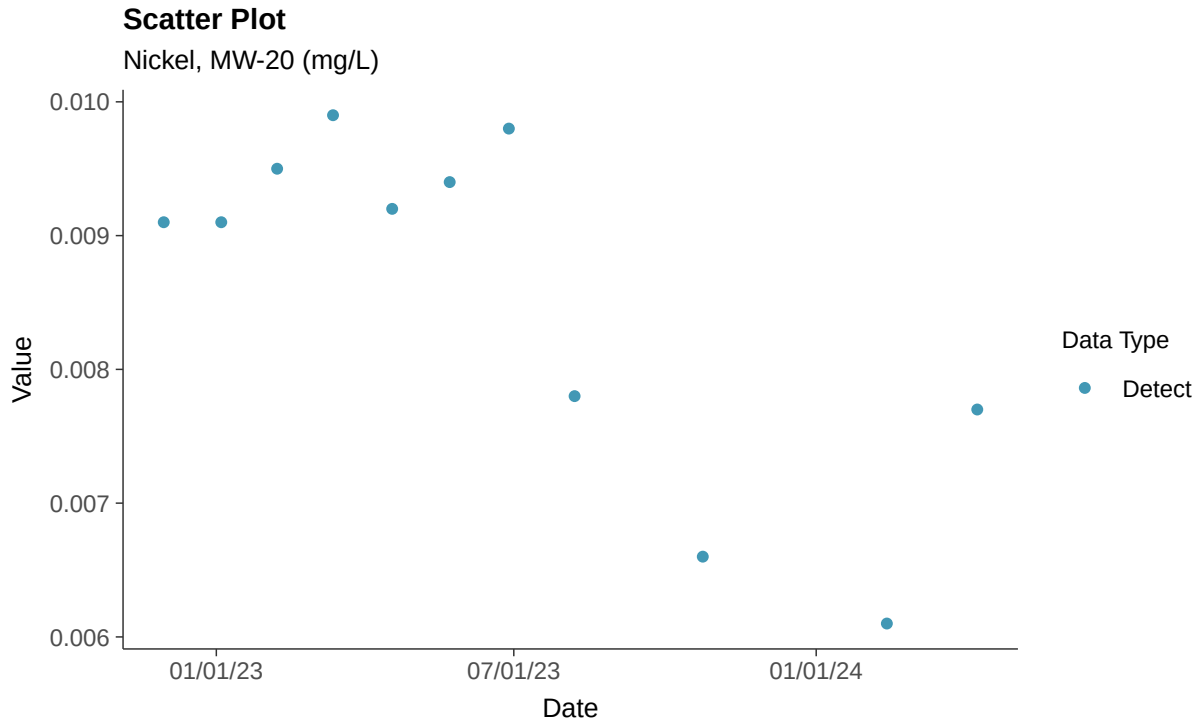
Trend Regression: Lognormal MLE

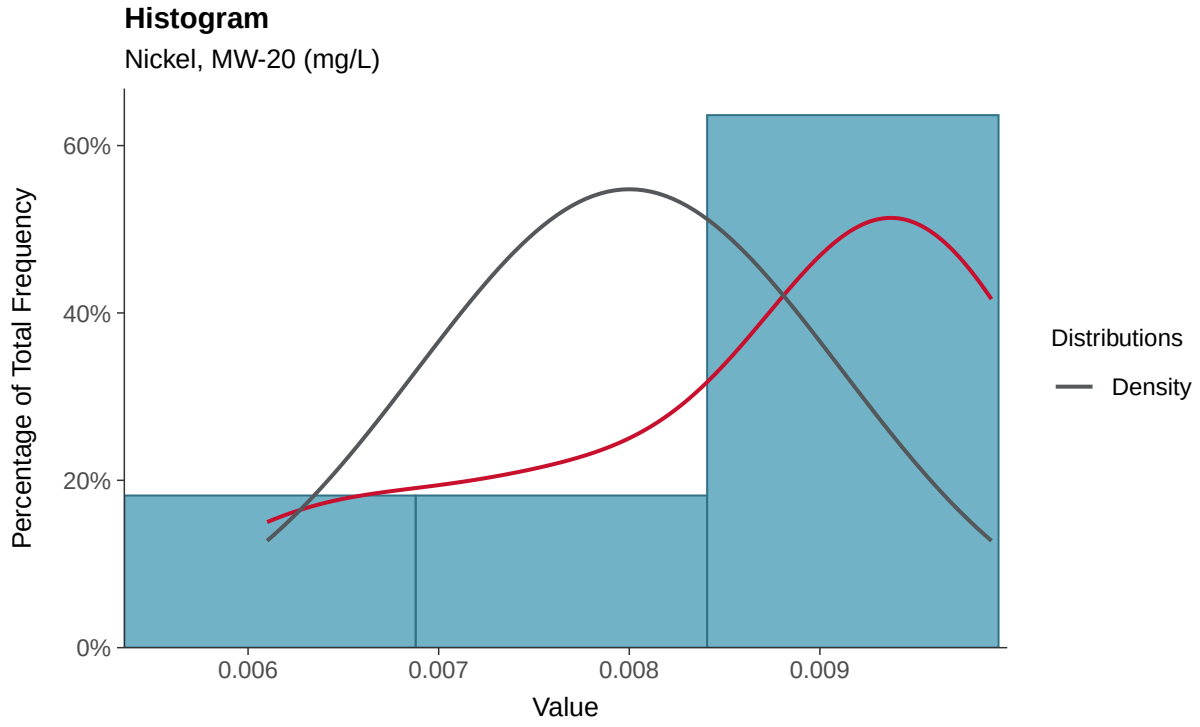
Iron, MW-20 (mg/L)



Part 115: Nickel, MW-20

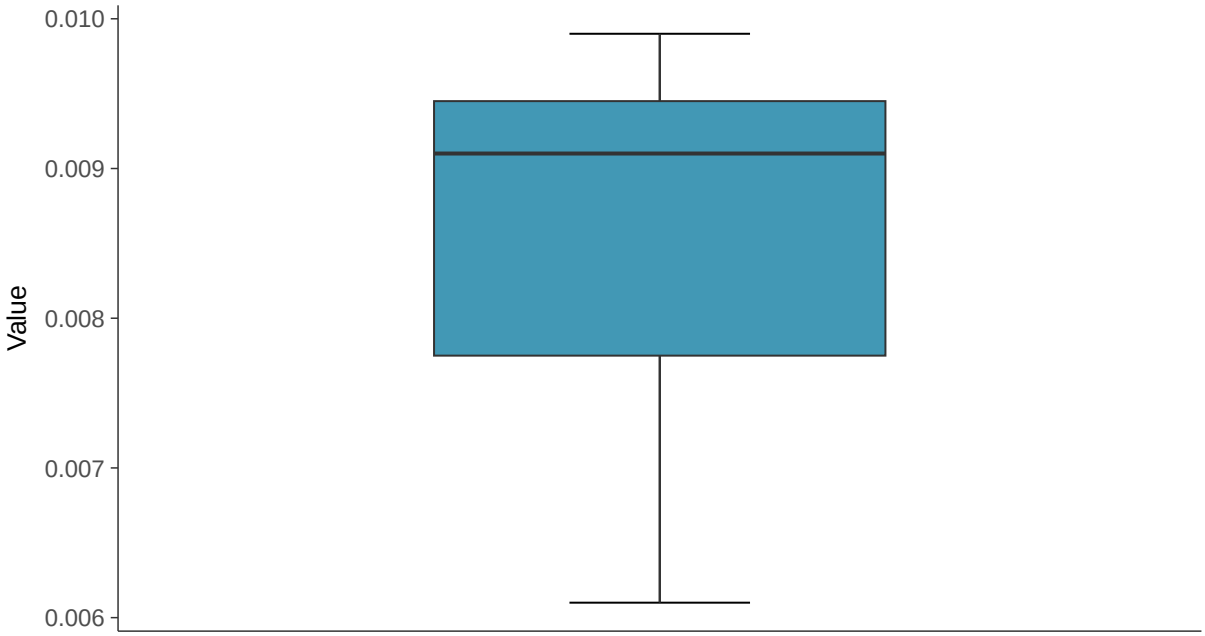
ID: 1_30_6_119





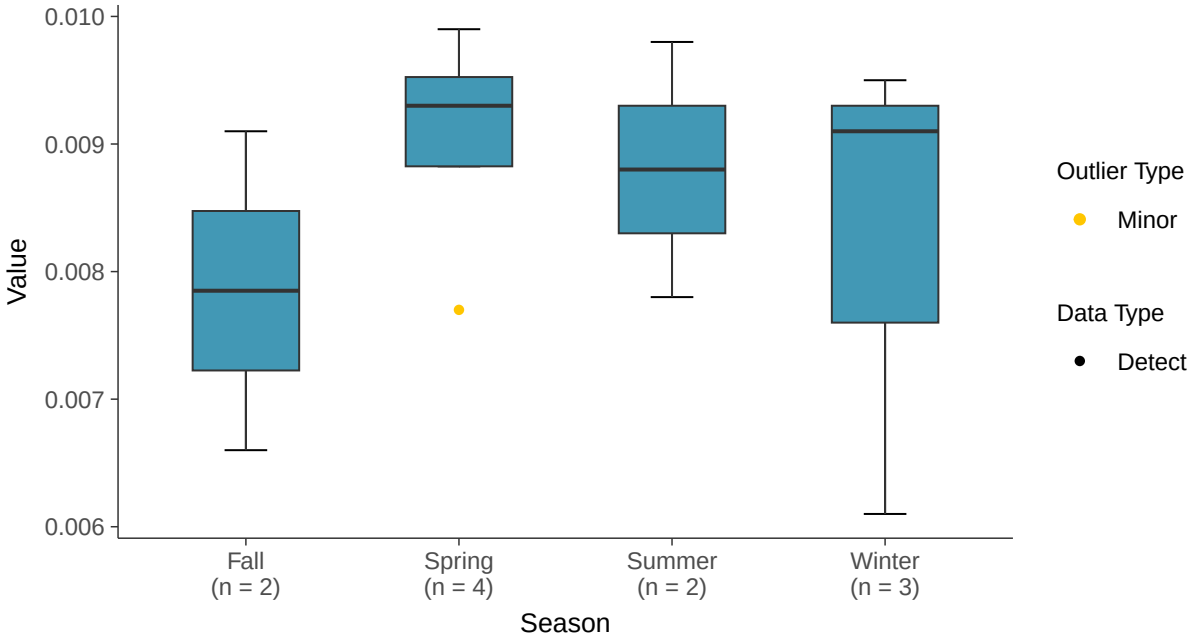
Boxplot

Nickel, MW-20 (mg/L)



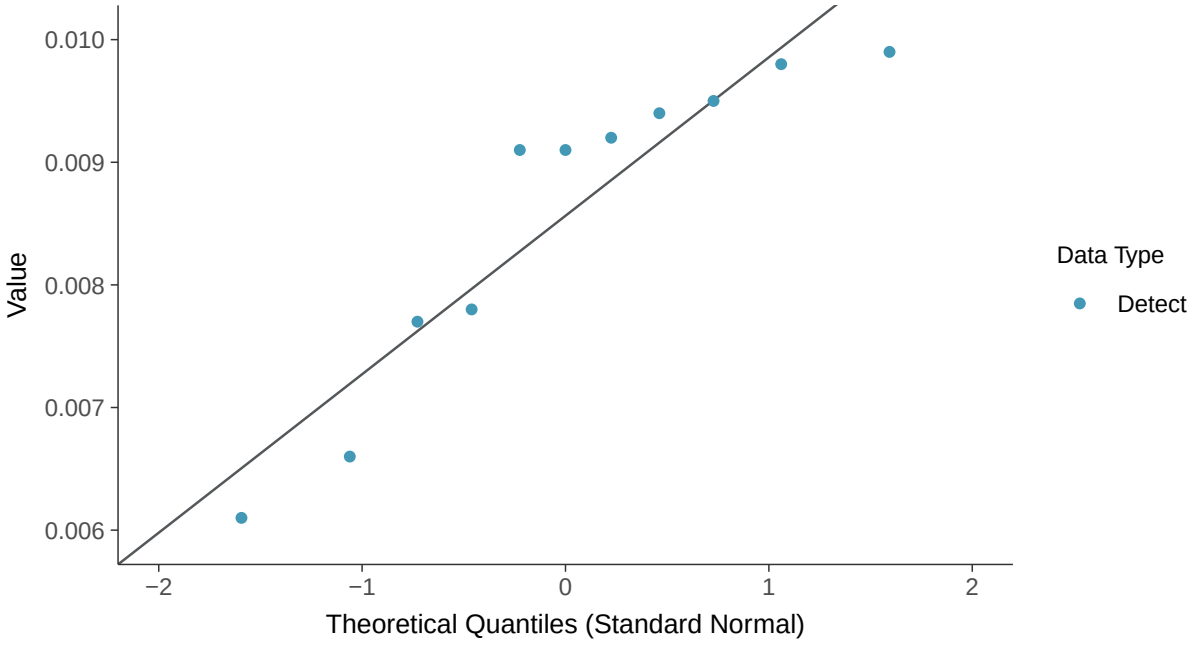
Boxplot by Season

Nickel, MW-20 (mg/L)



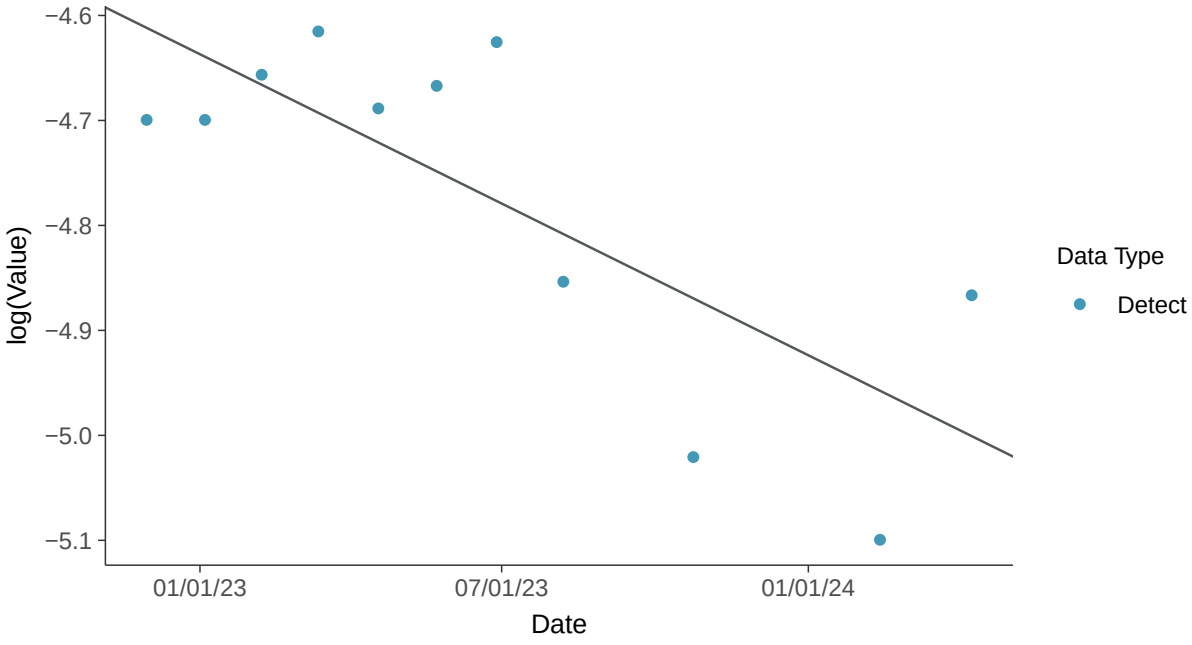
Normal Q-Q plot

Nickel, MW-20 (mg/L)



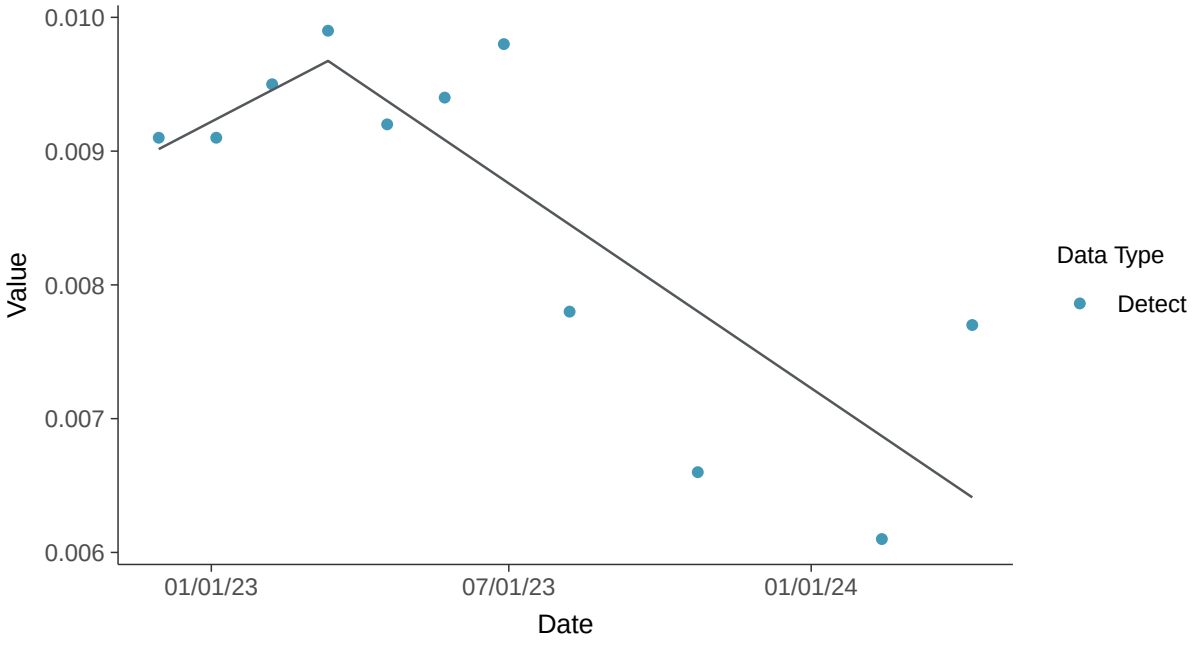
Trend Regression: Lognormal MLE

Nickel, MW-20 (mg/L)



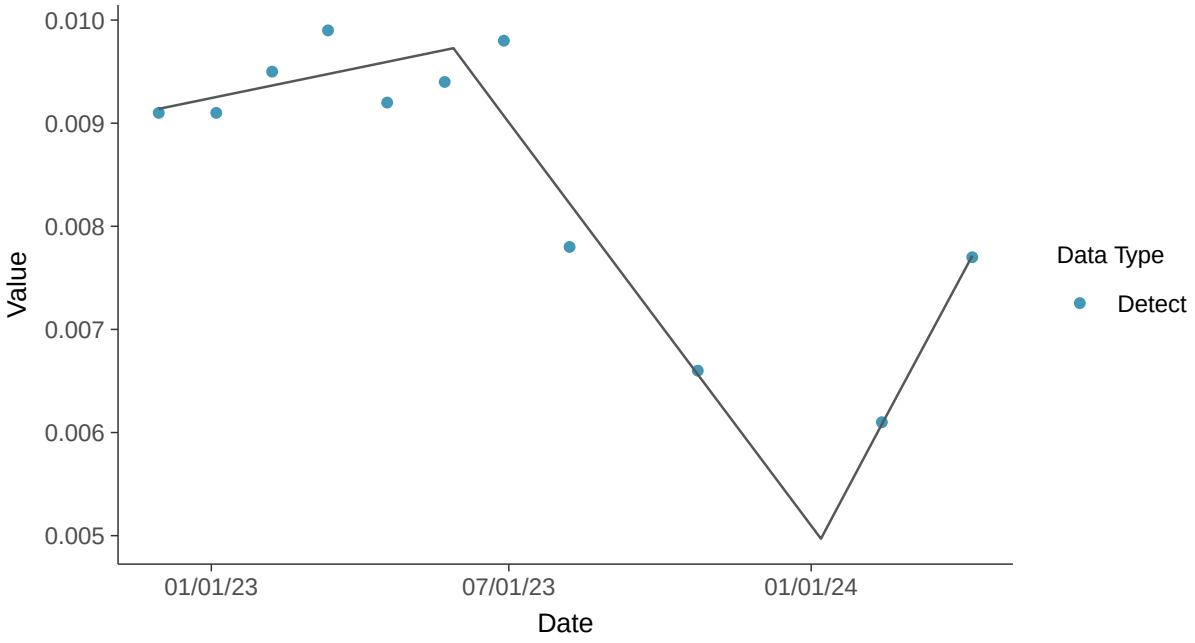
Trend Regression: Piecewise Linear-Linear

Nickel, MW-20 (mg/L)



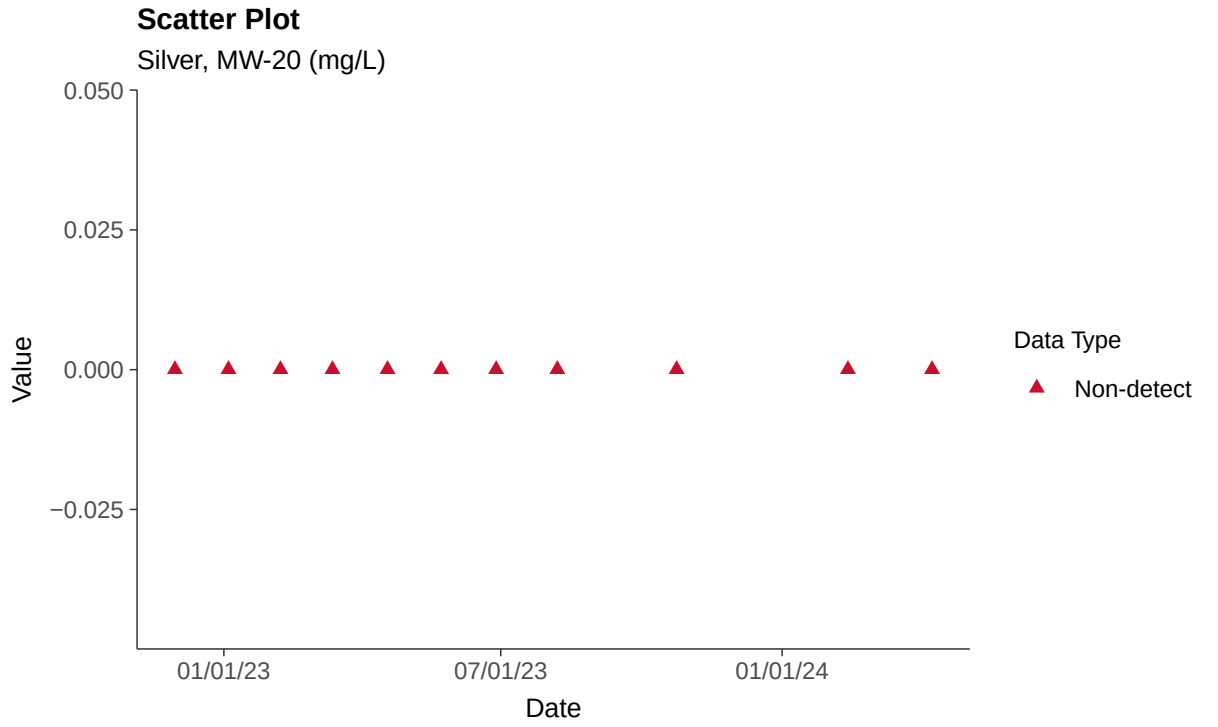
Trend Regression: Piecewise Linear-Linear-Linear

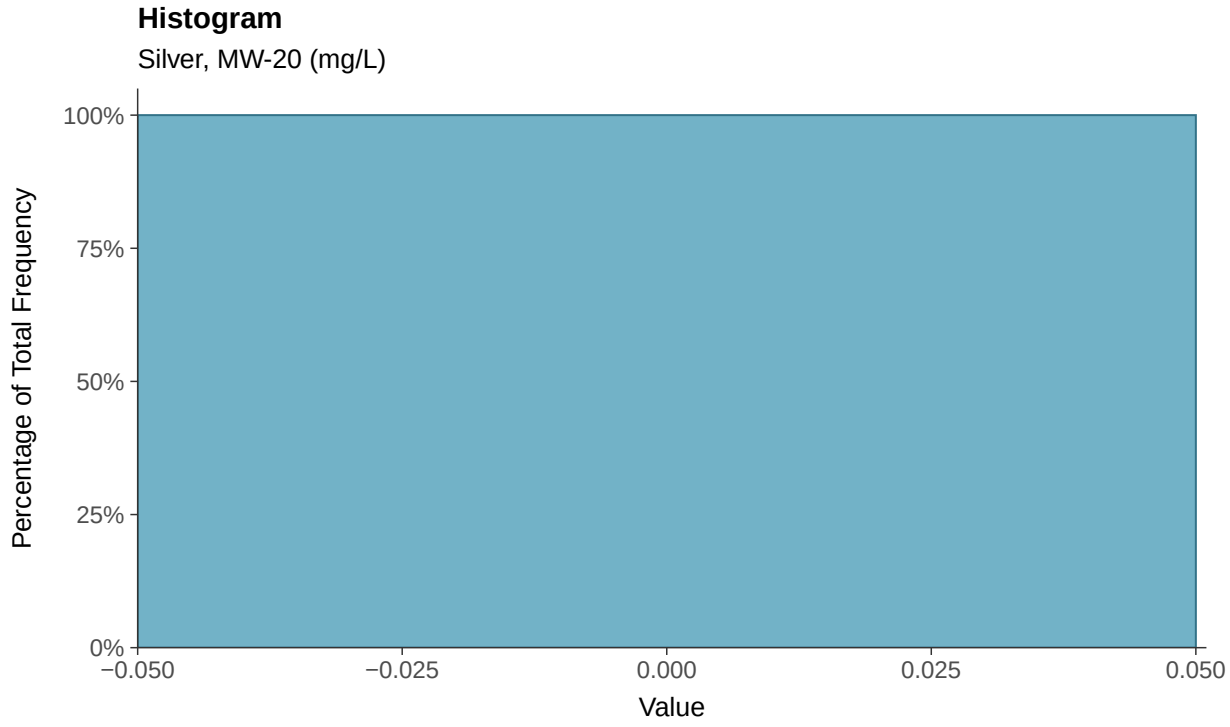
Nickel, MW-20 (mg/L)



Part 115: Silver, MW-20

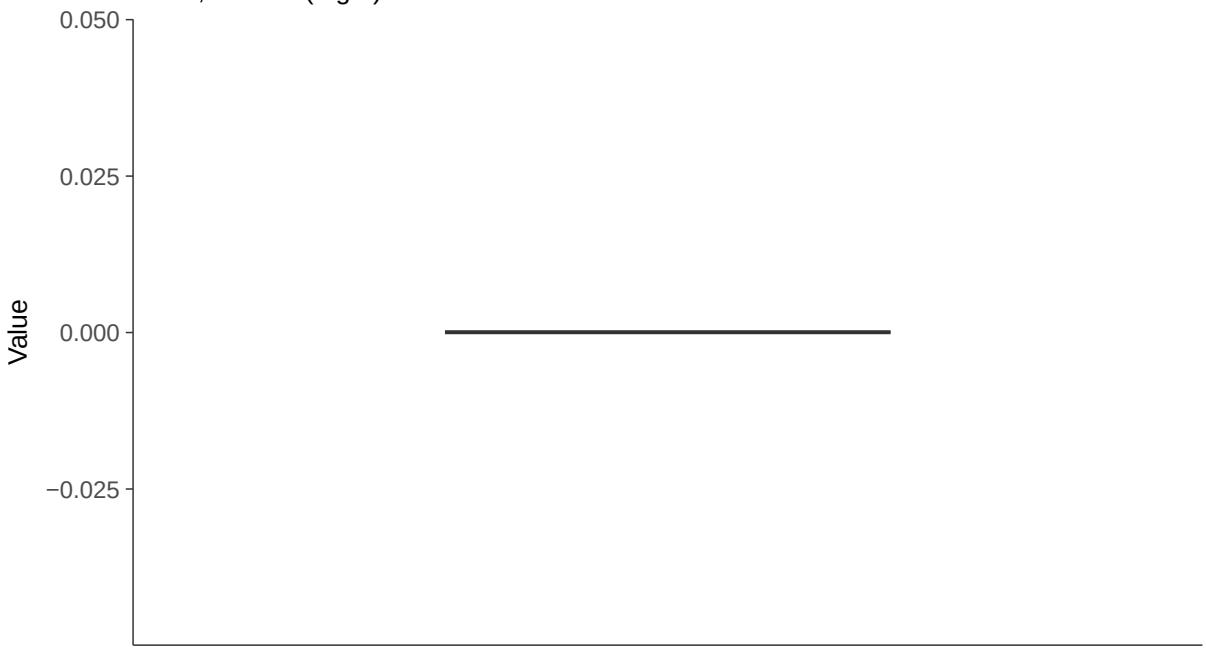
ID: 1_30_6_123





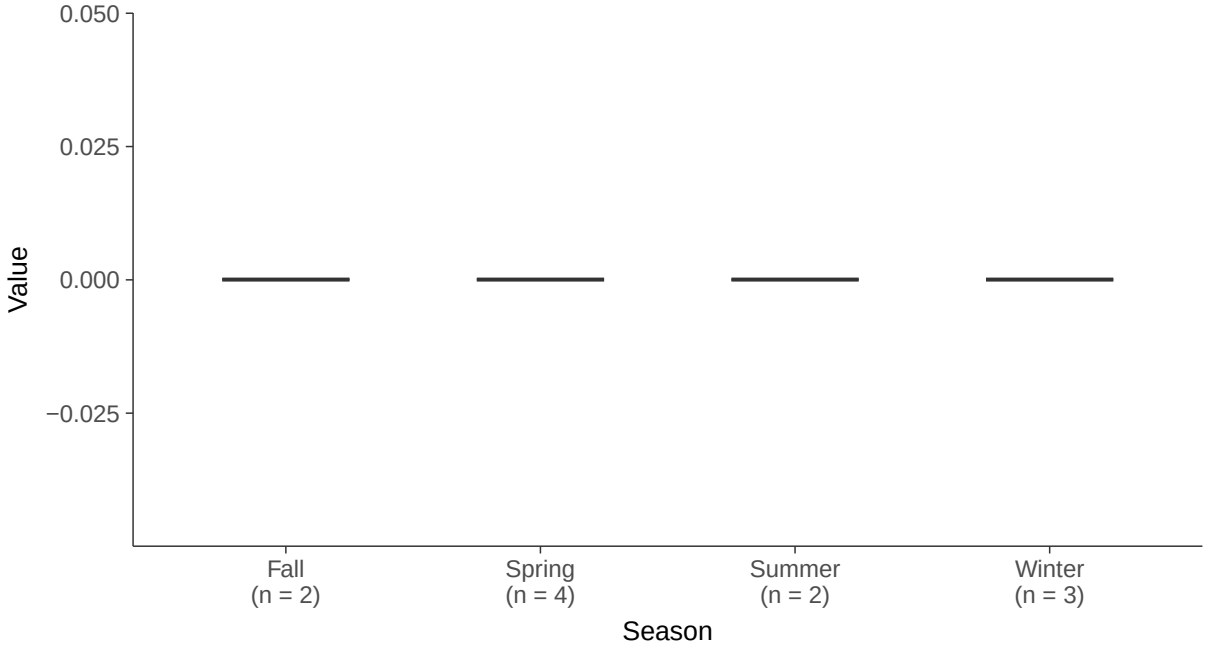
Boxplot

Silver, MW-20 (mg/L)



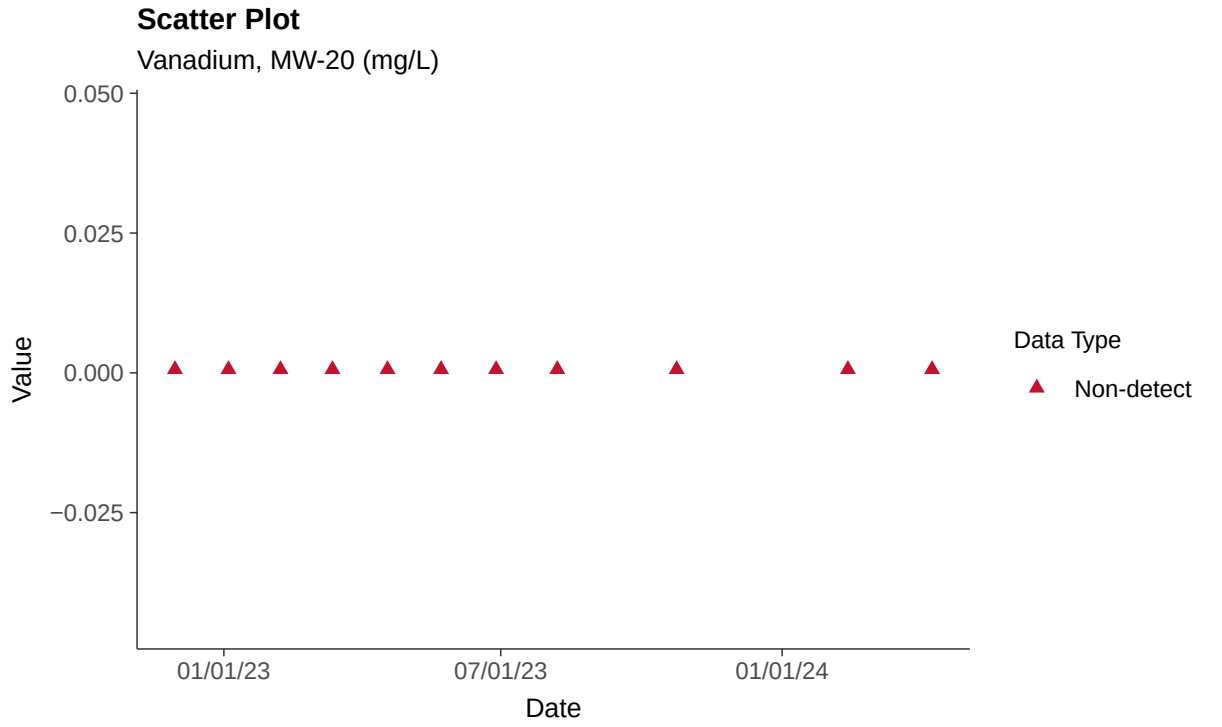
Boxplot by Season

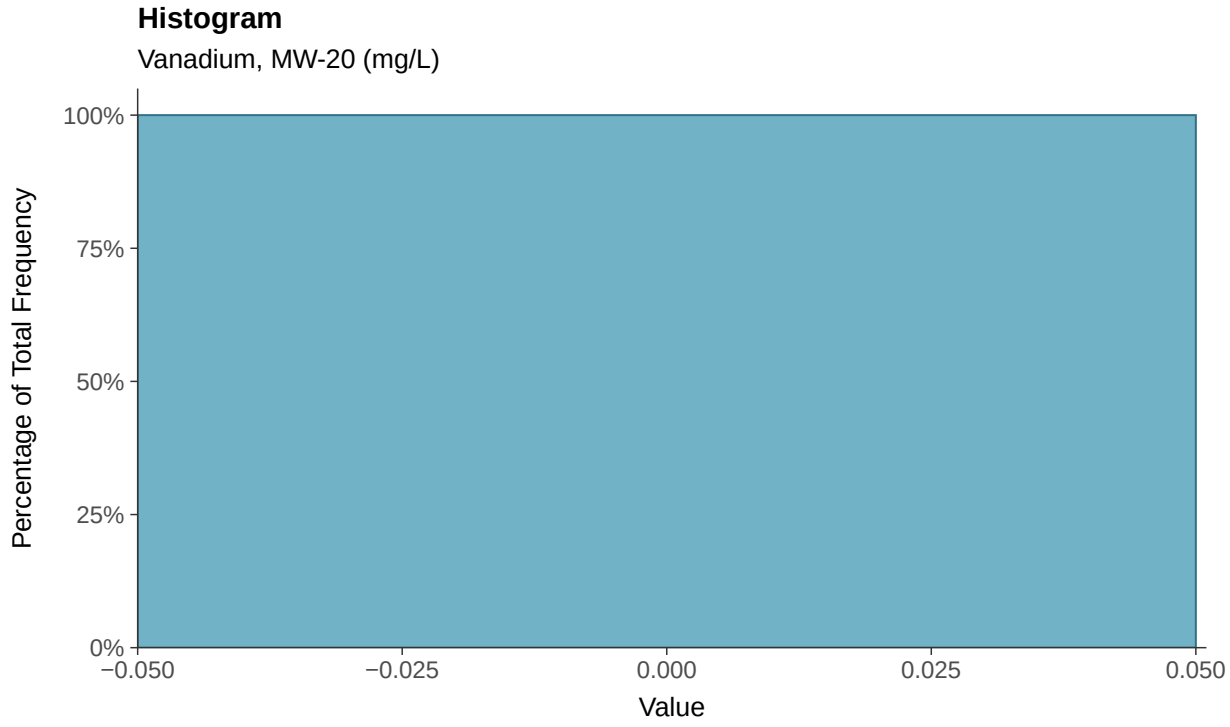
Silver, MW-20 (mg/L)



Part 115: Vanadium, MW-20

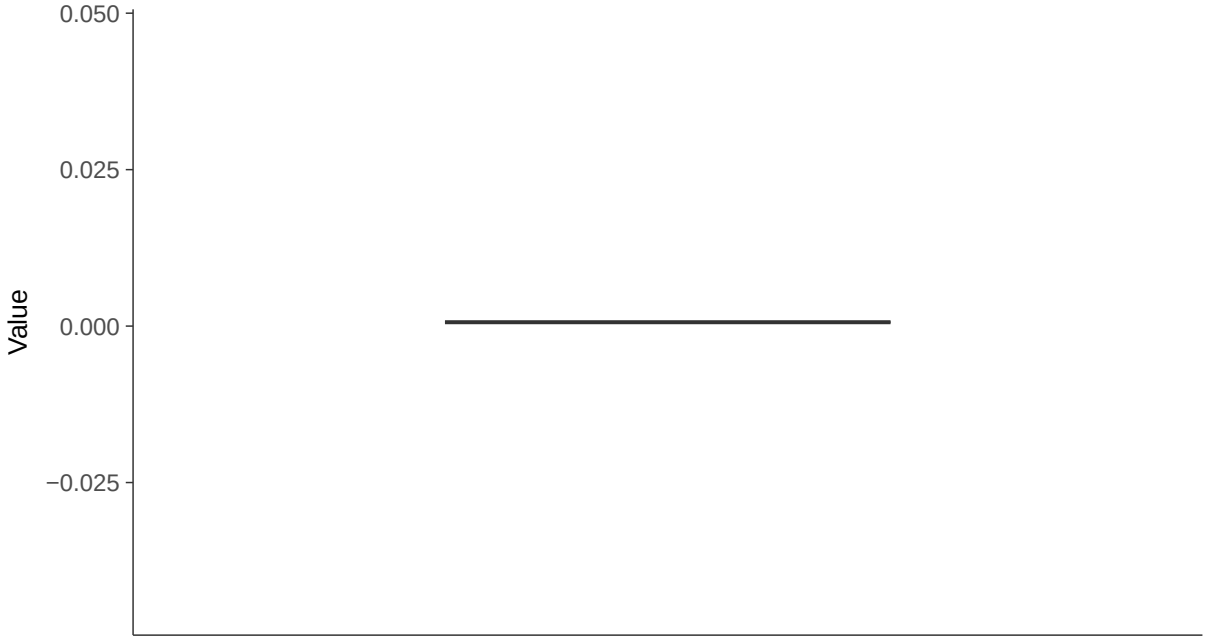
ID: 1_30_6_129





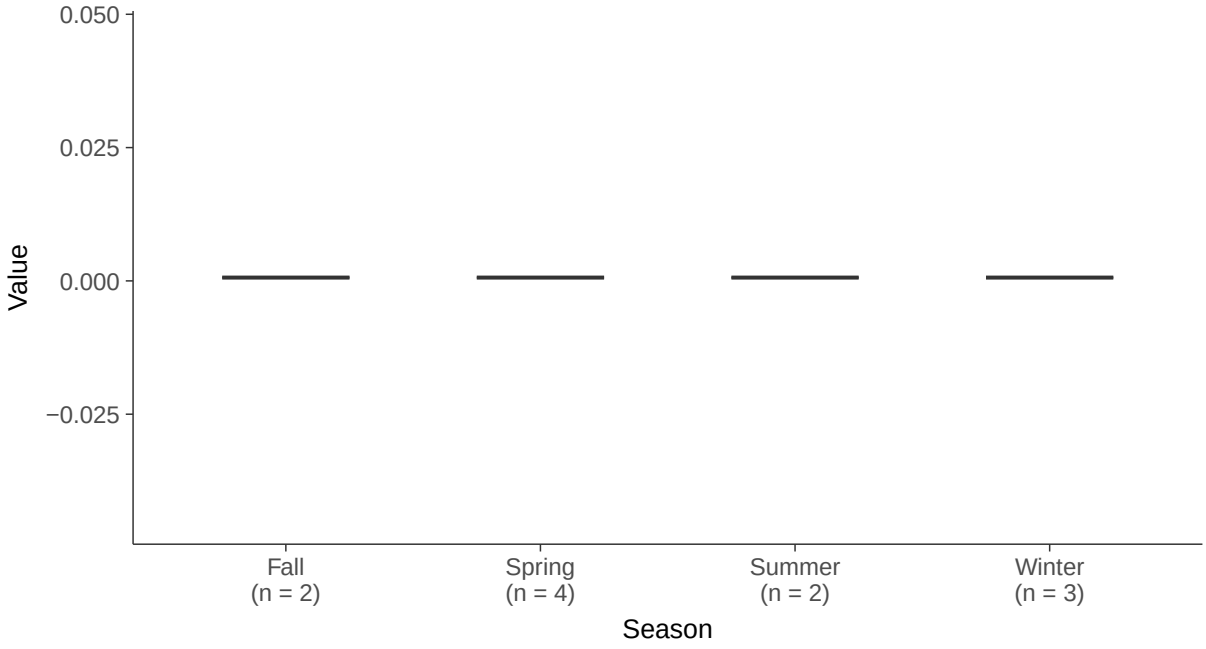
Boxplot

Vanadium, MW-20 (mg/L)



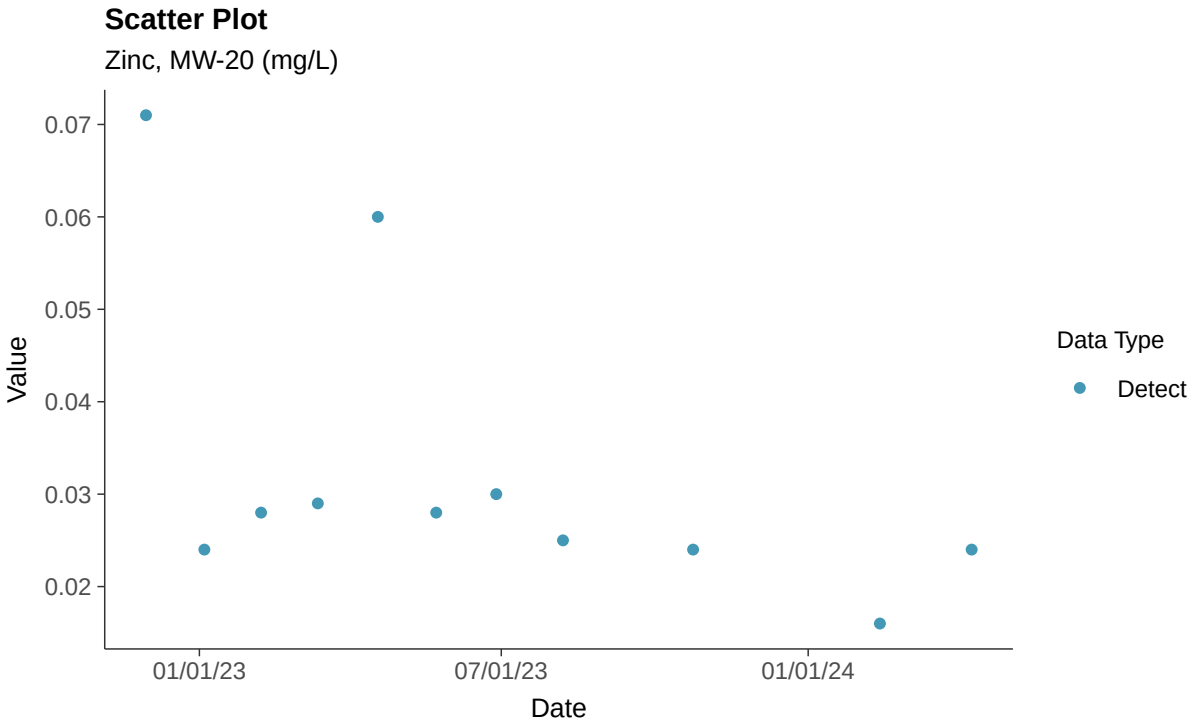
Boxplot by Season

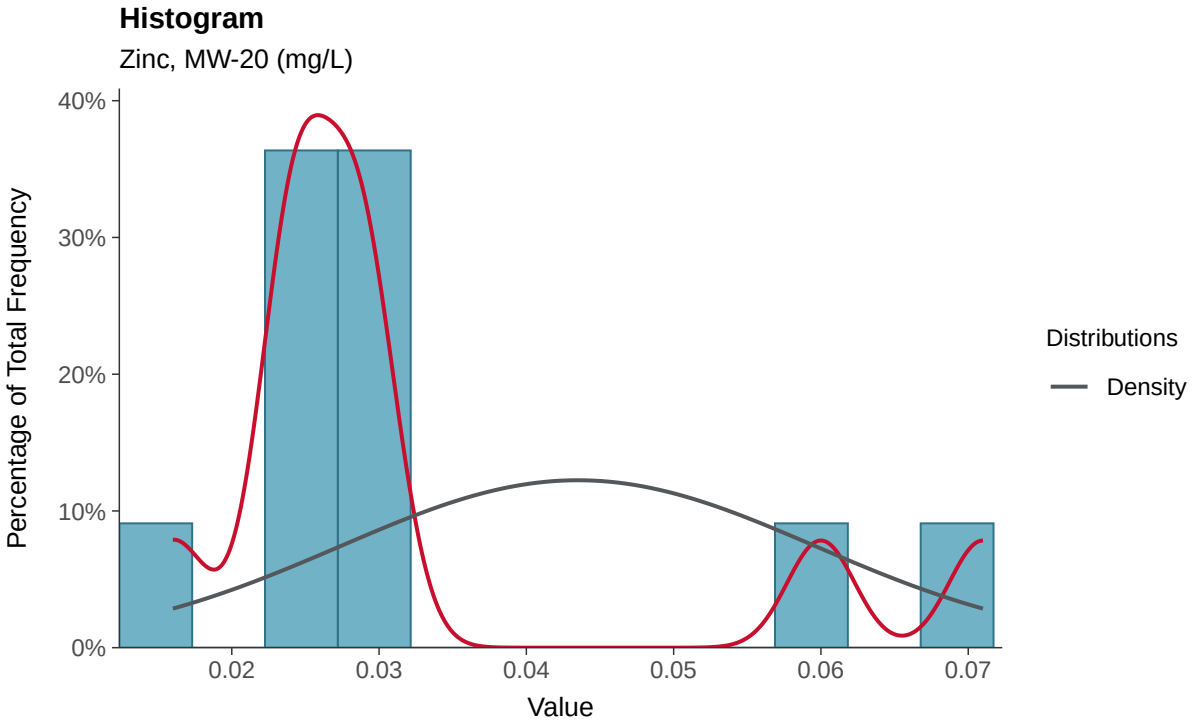
Vanadium, MW-20 (mg/L)



Part 115: Zinc, MW-20

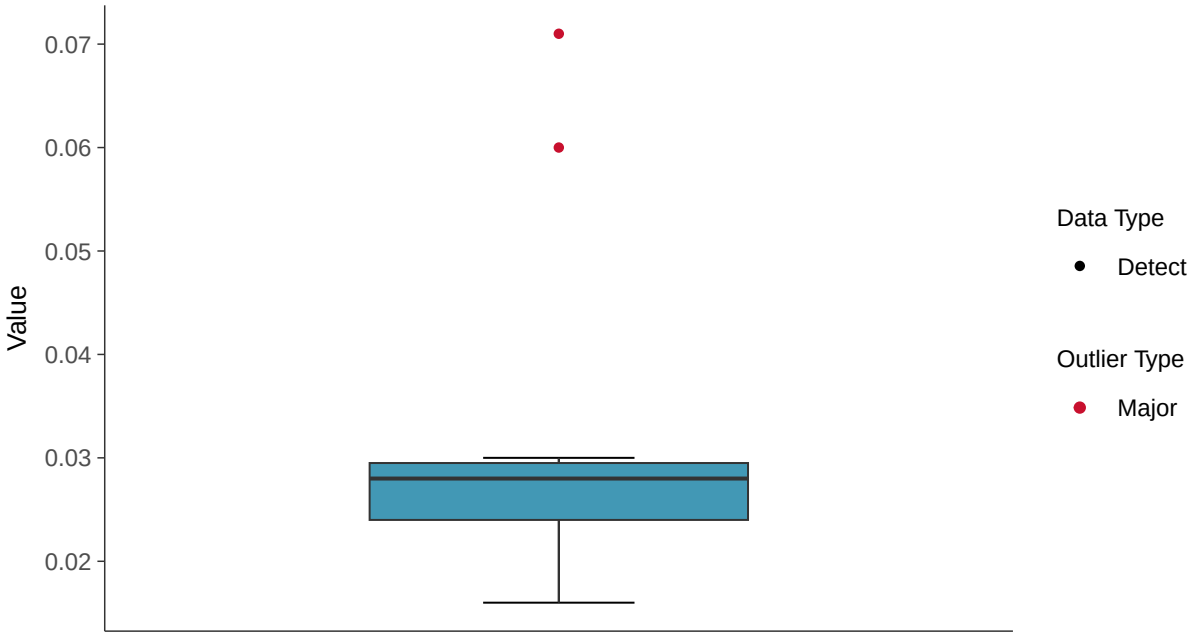
ID: 1_30_6_130





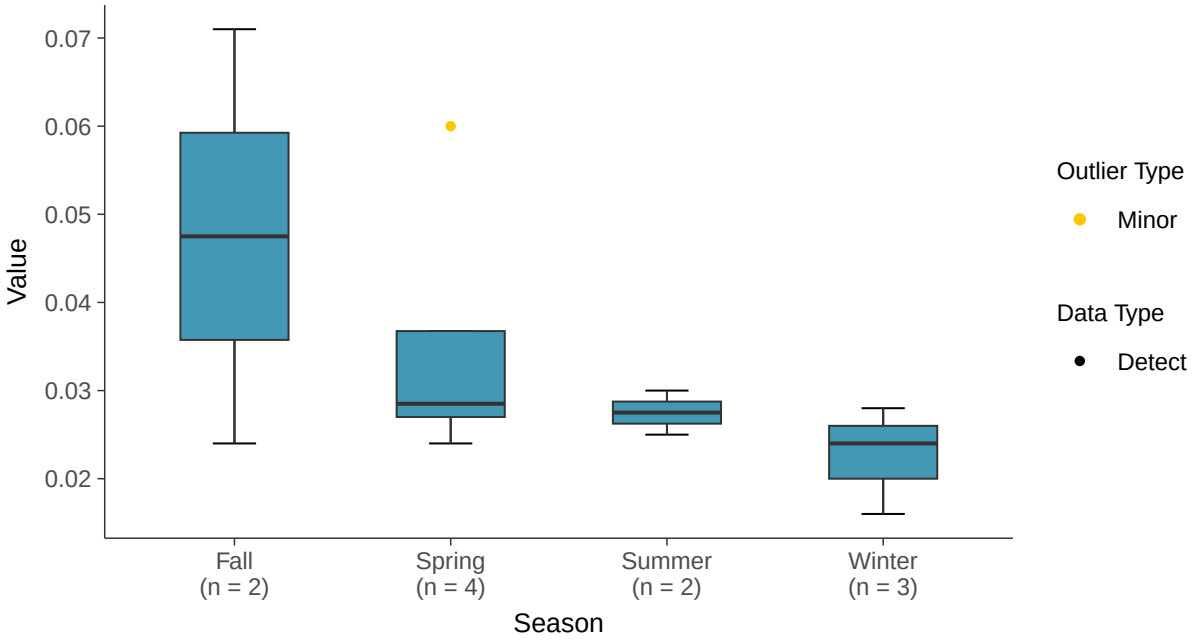
Boxplot

Zinc, MW-20 (mg/L)



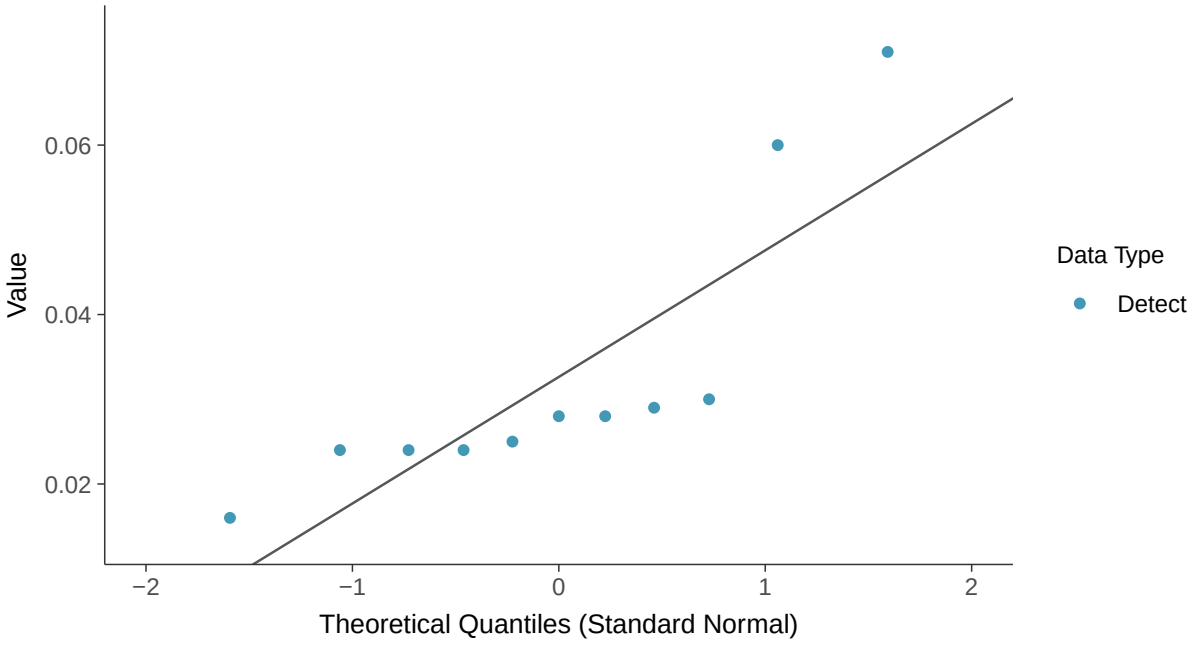
Boxplot by Season

Zinc, MW-20 (mg/L)



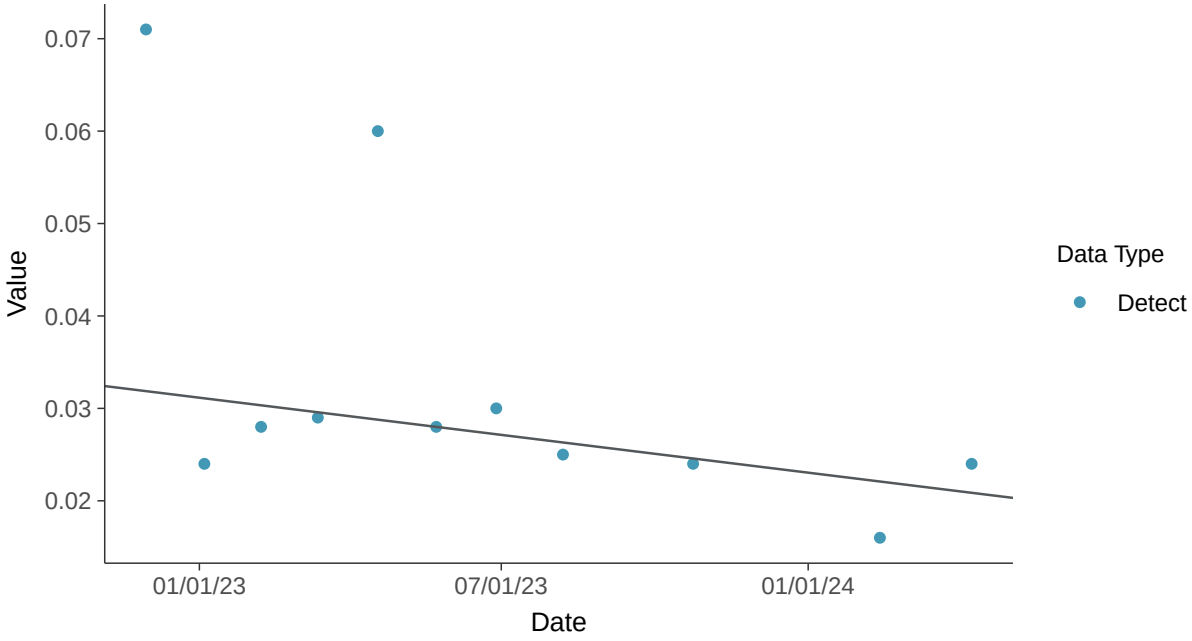
Normal Q-Q plot

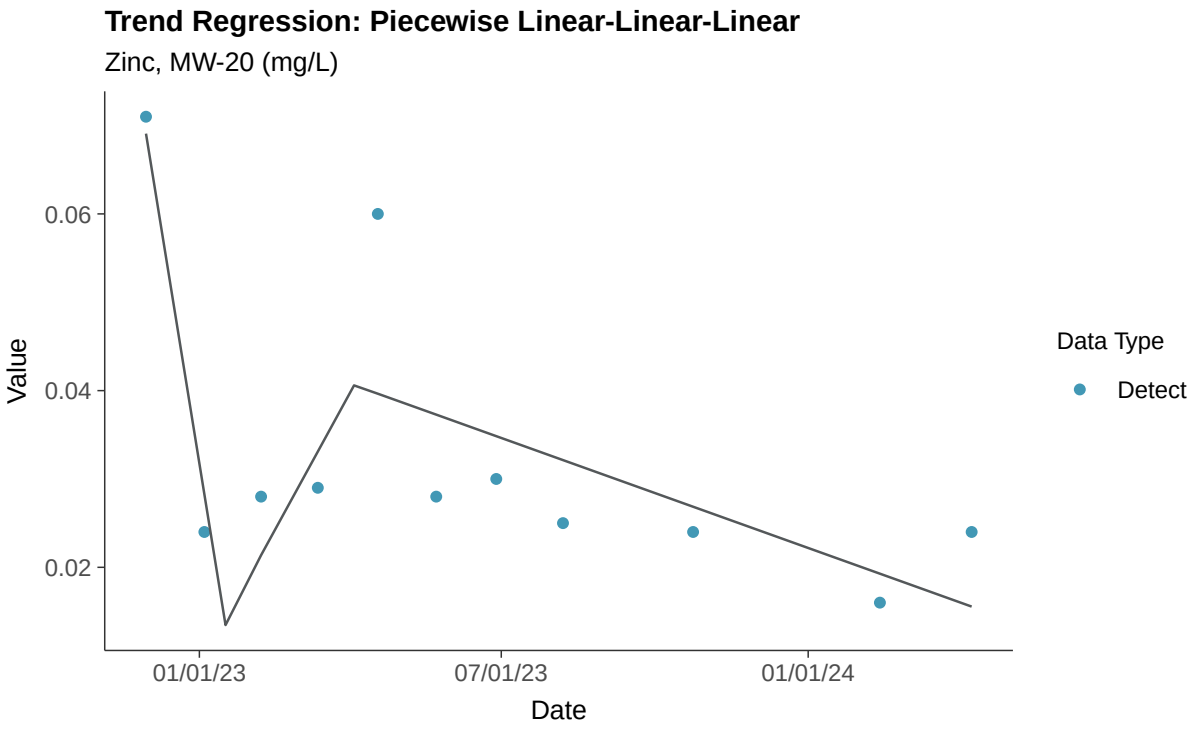
Zinc, MW-20 (mg/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

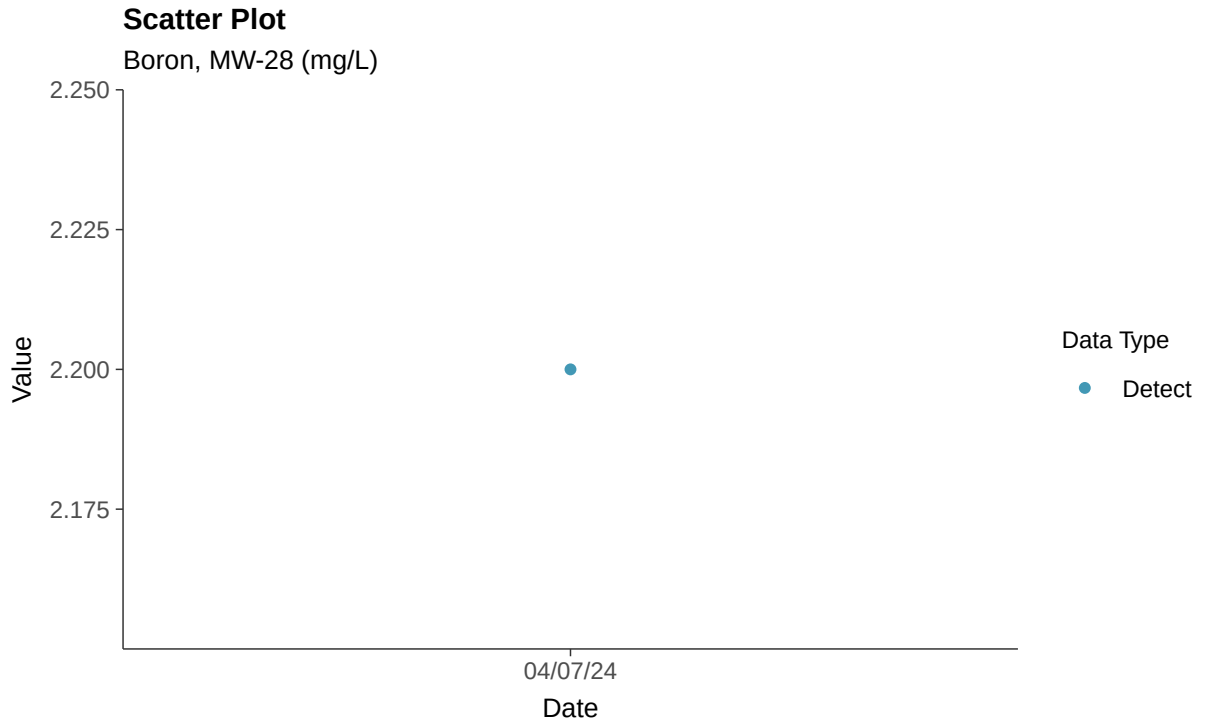
Zinc, MW-20 (mg/L)

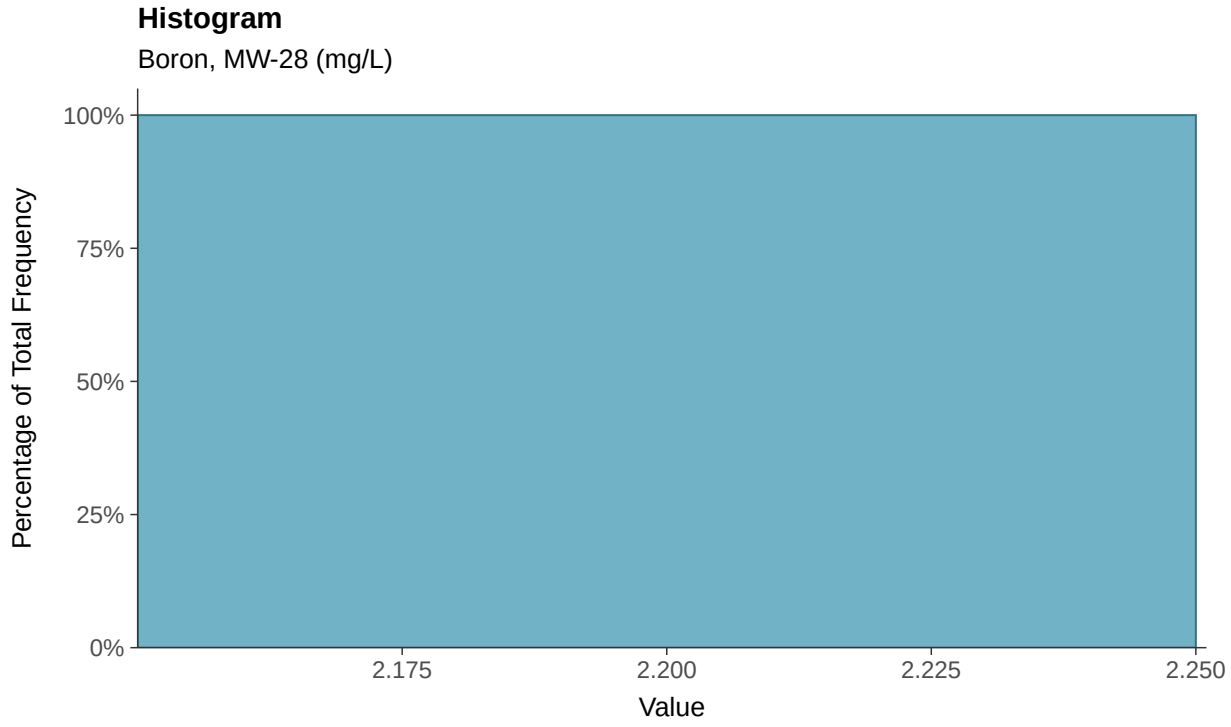



Trend Regression: Piecewise Linear-Linear-Linear
Zinc, MW-20 (mg/L)
Value
0.06
0.04
0.02
01/01/23
07/01/23
01/01/24
Date
Data Type
Detect

Appendix III: Boron, MW-28

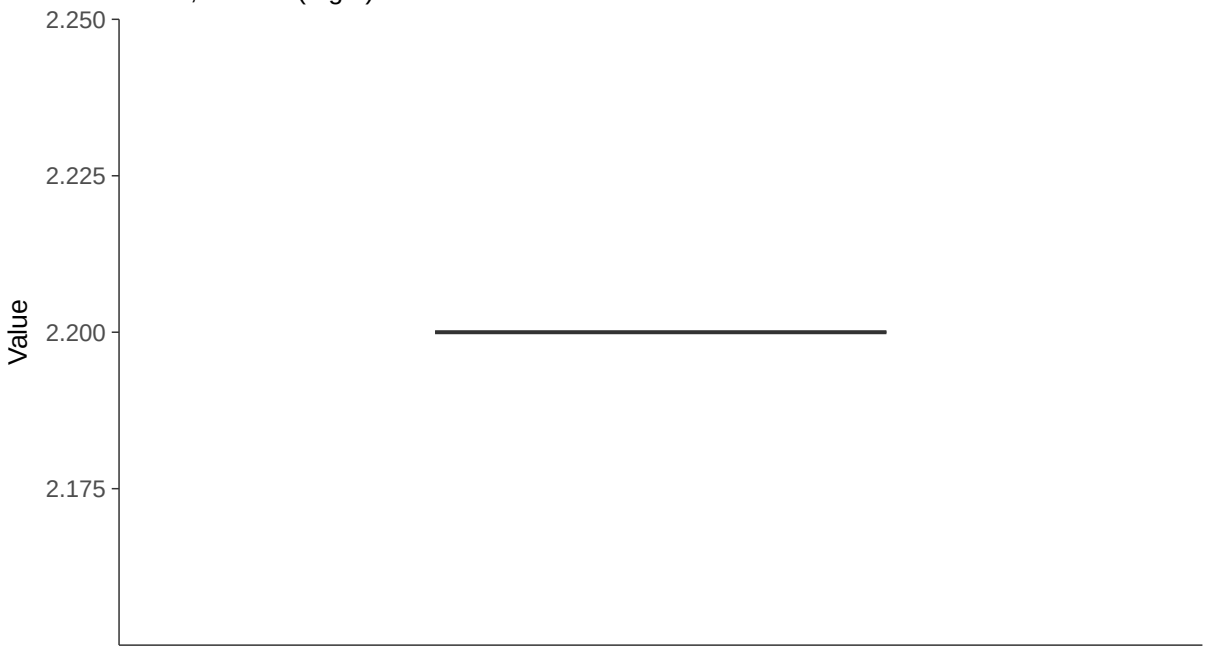
ID: 1_38_4_105





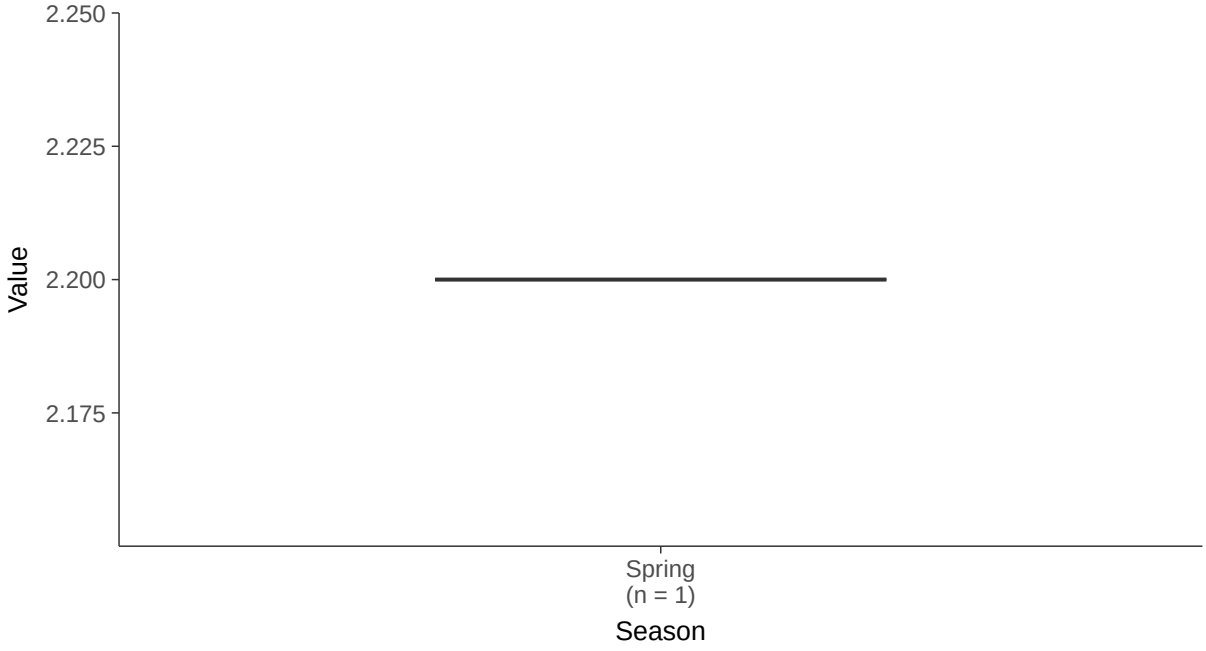
Boxplot

Boron, MW-28 (mg/L)



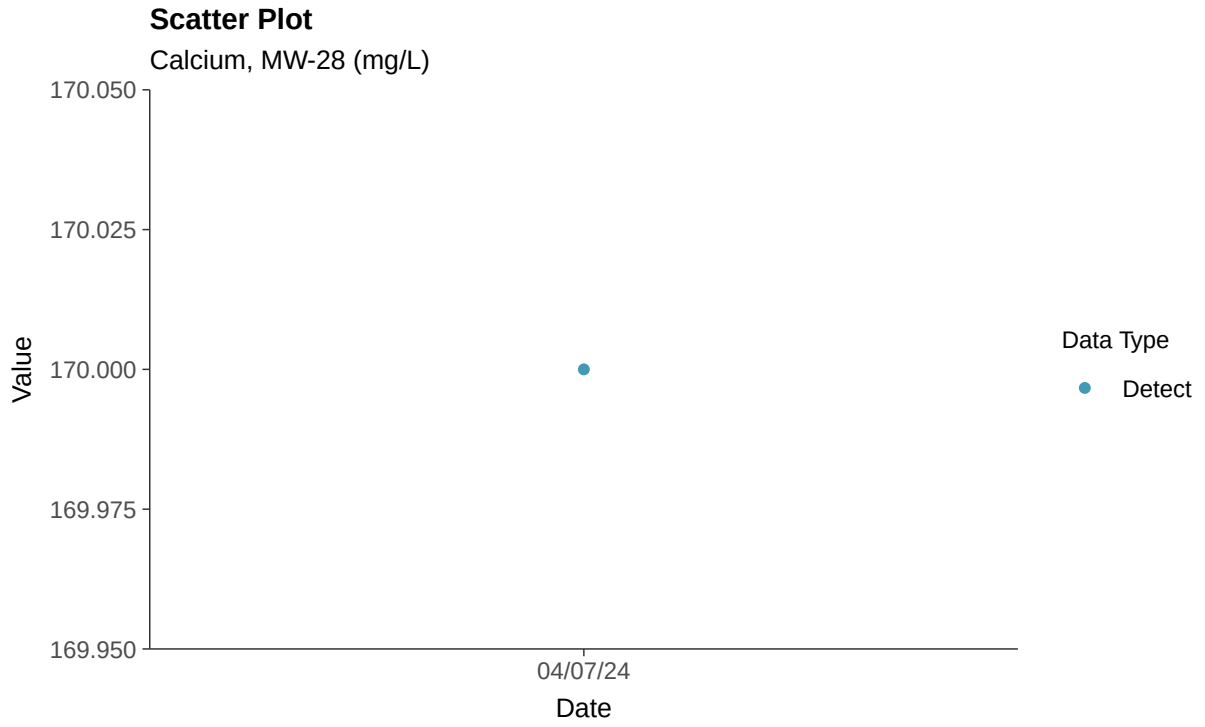
Boxplot by Season

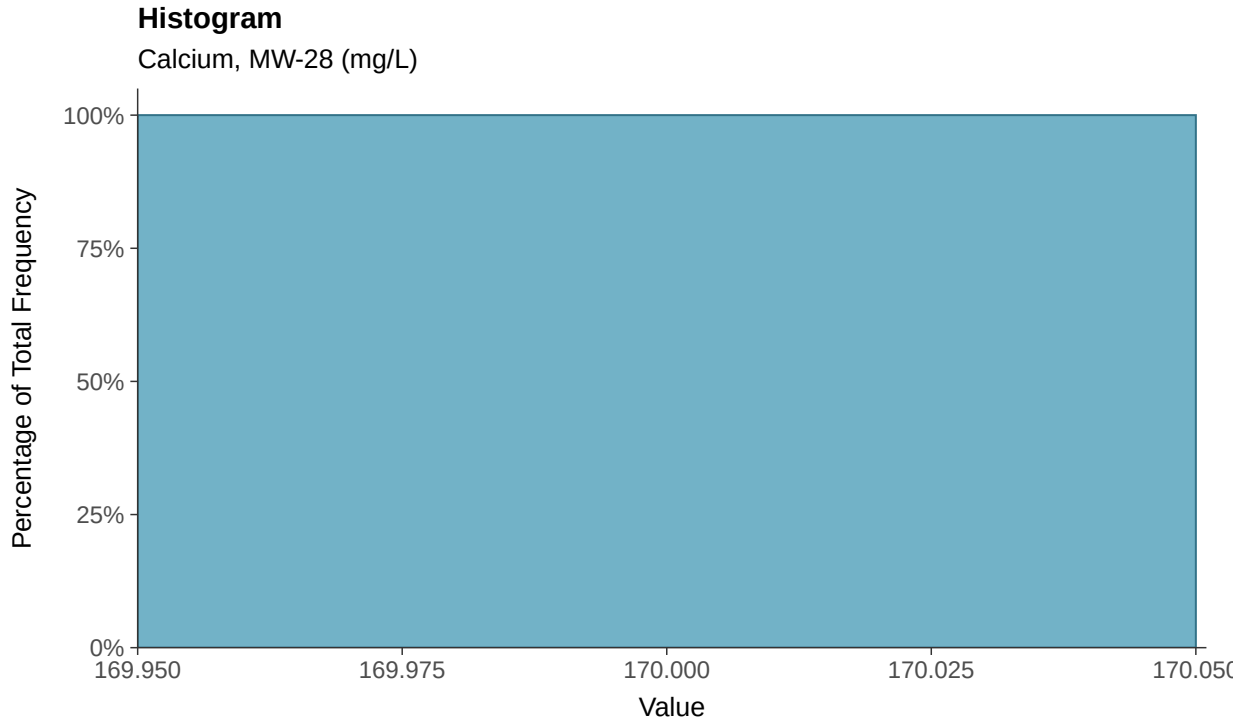
Boron, MW-28 (mg/L)



Appendix III: Calcium, MW-28

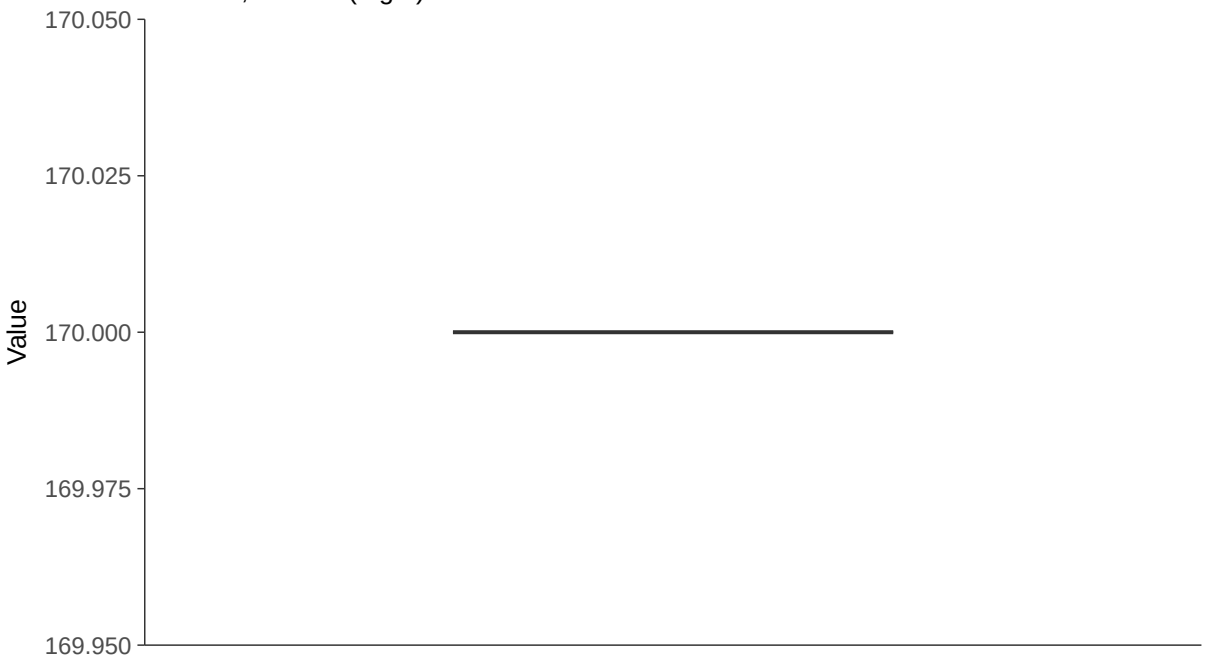
ID: 1_38_4_107





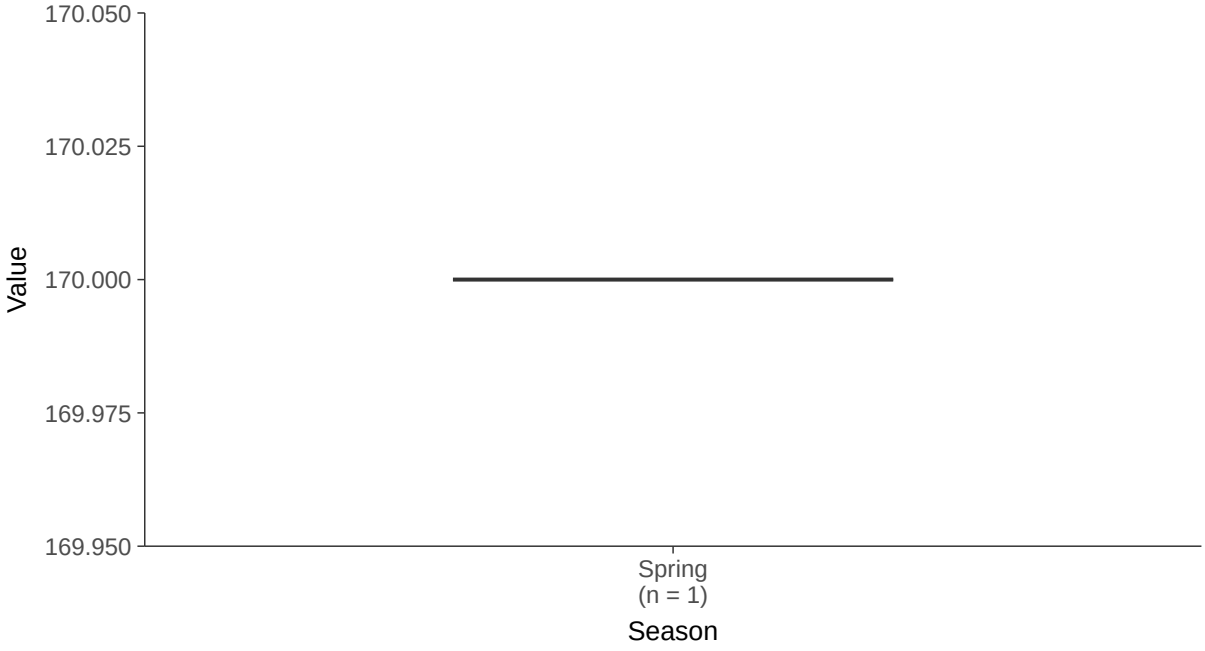
Boxplot

Calcium, MW-28 (mg/L)



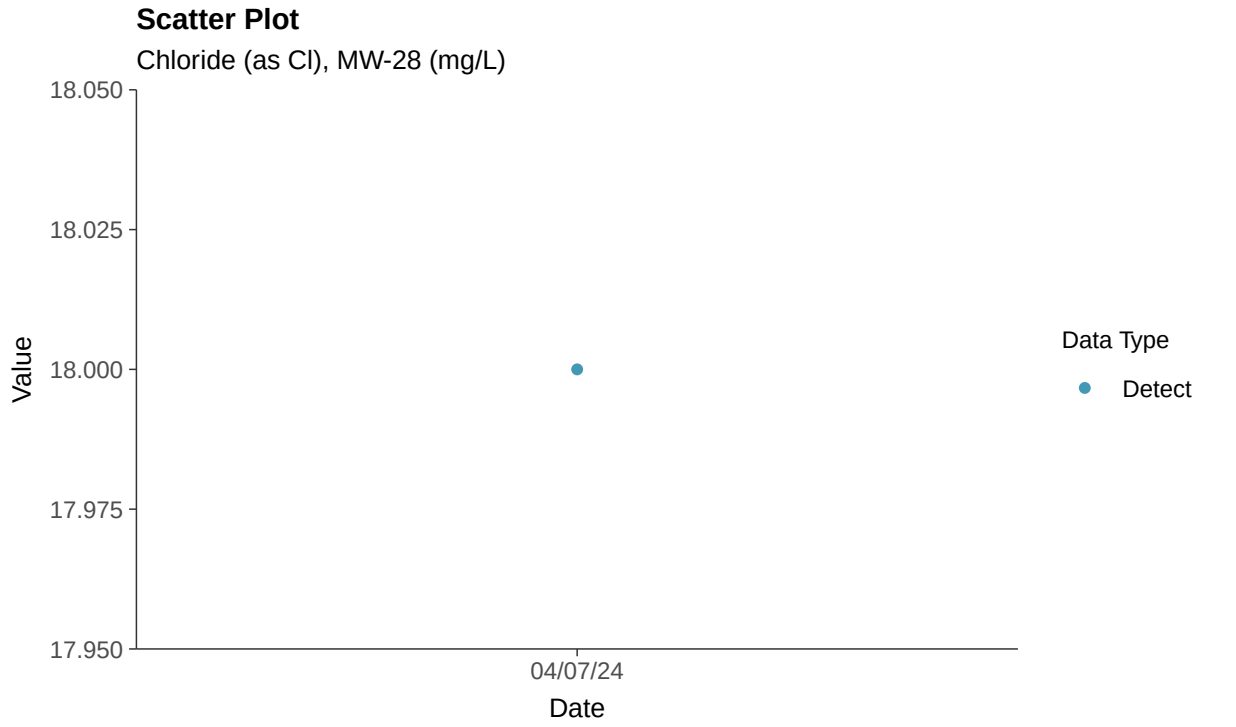
Boxplot by Season

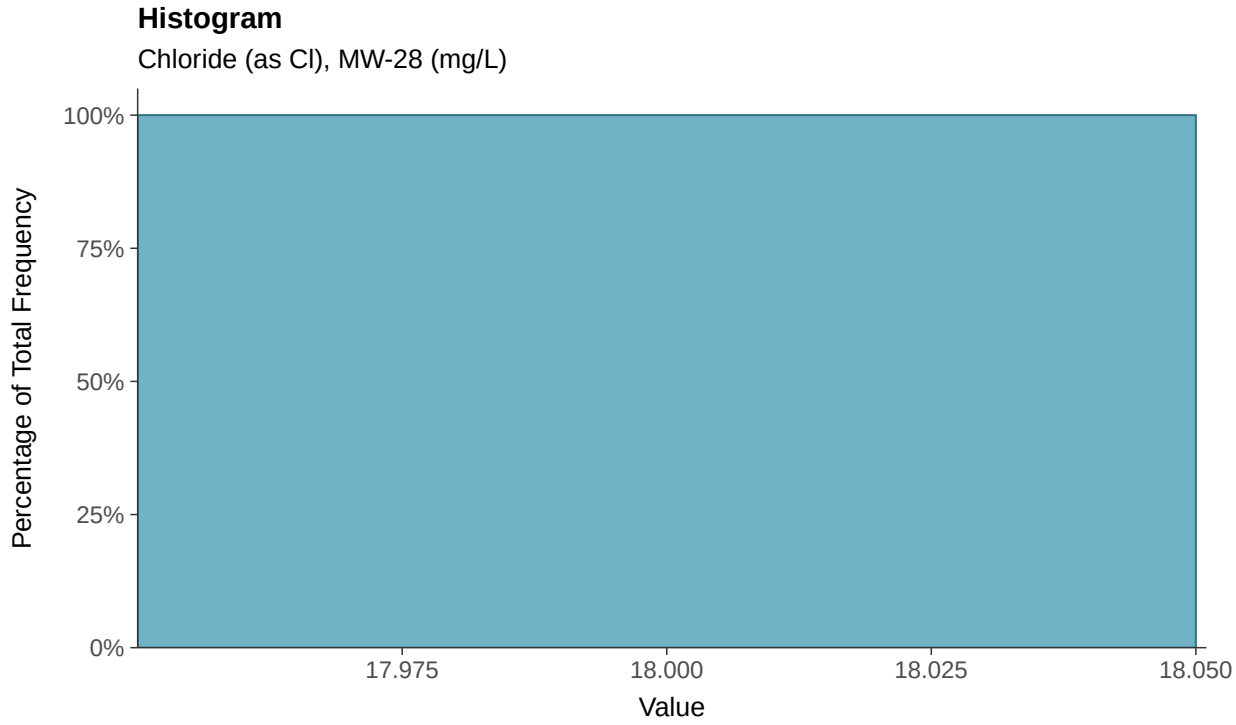
Calcium, MW-28 (mg/L)



Appendix III: Chloride (as Cl), MW-28

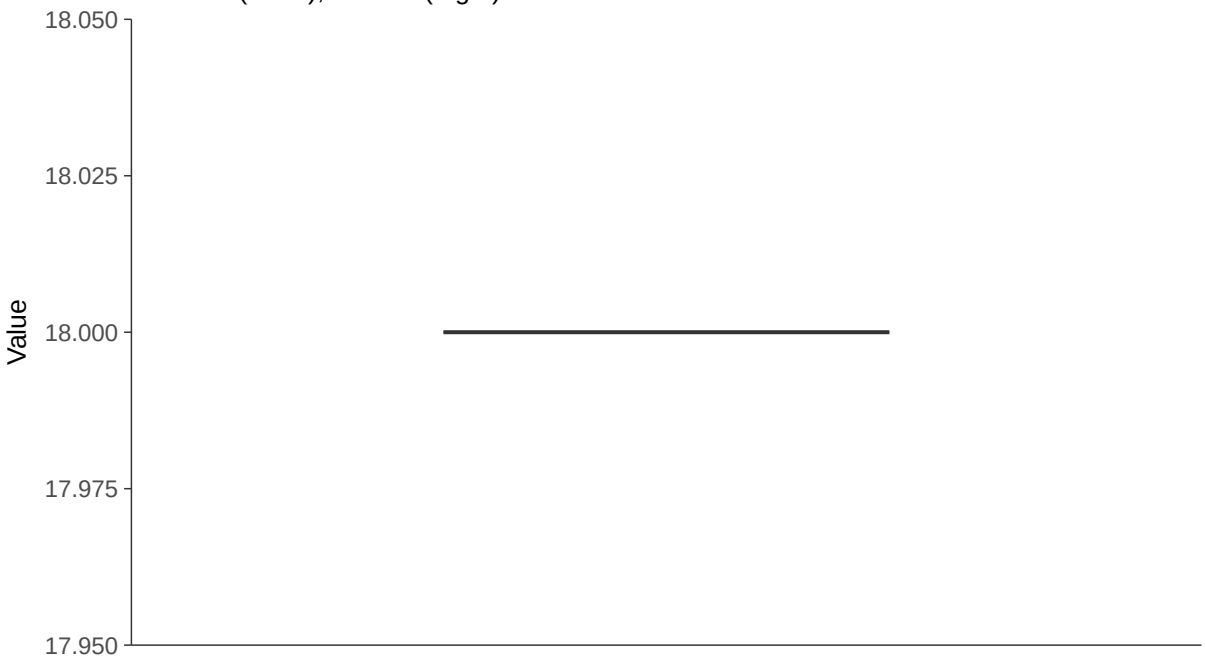
ID: 1_38_4_108





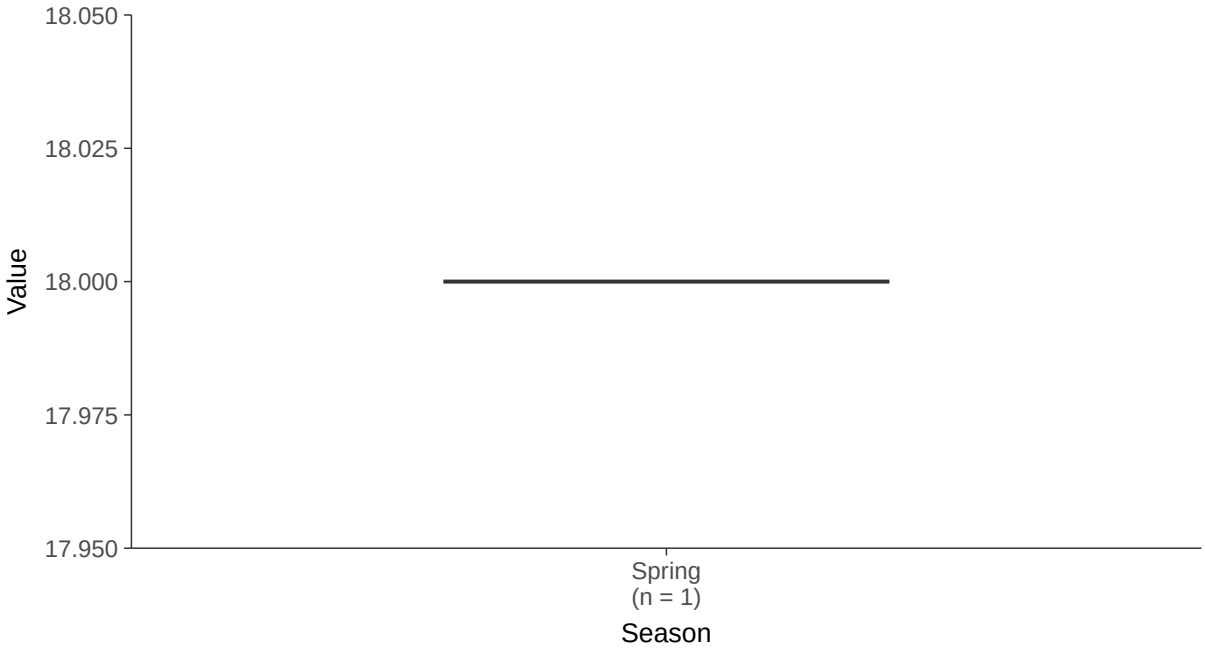
Boxplot

Chloride (as Cl), MW-28 (mg/L)



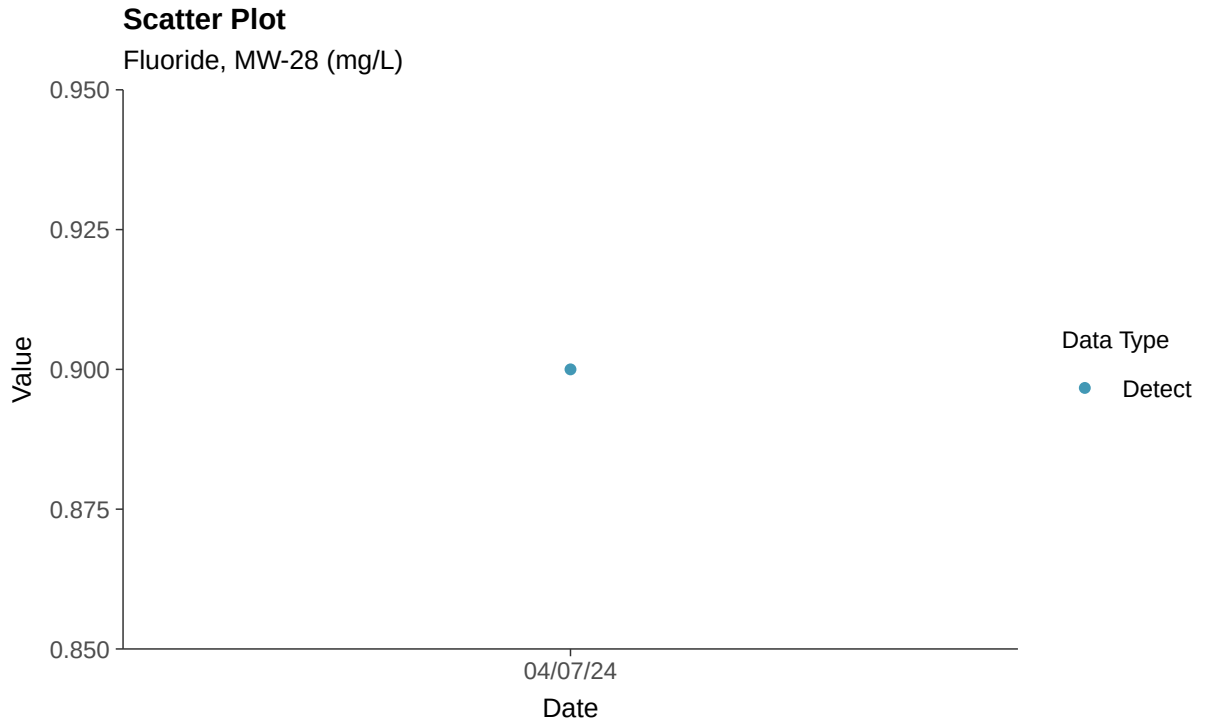
Boxplot by Season

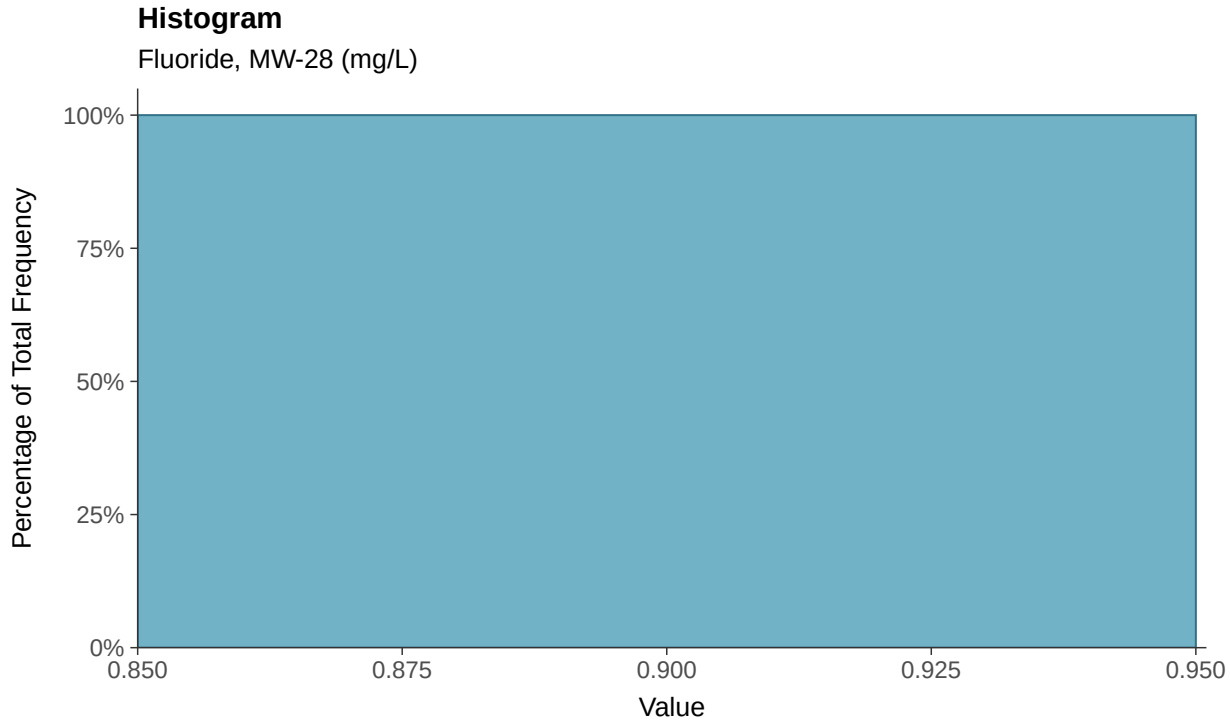
Chloride (as Cl), MW-28 (mg/L)



Appendix III: Fluoride, MW-28

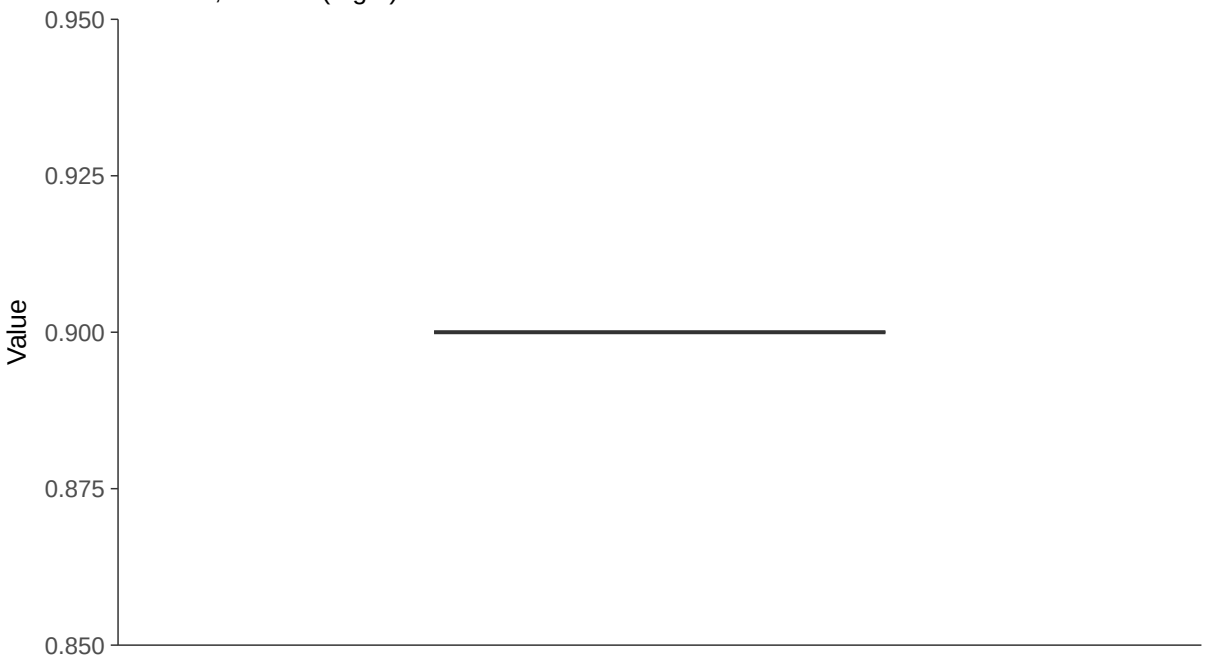
ID: 1_38_4_112





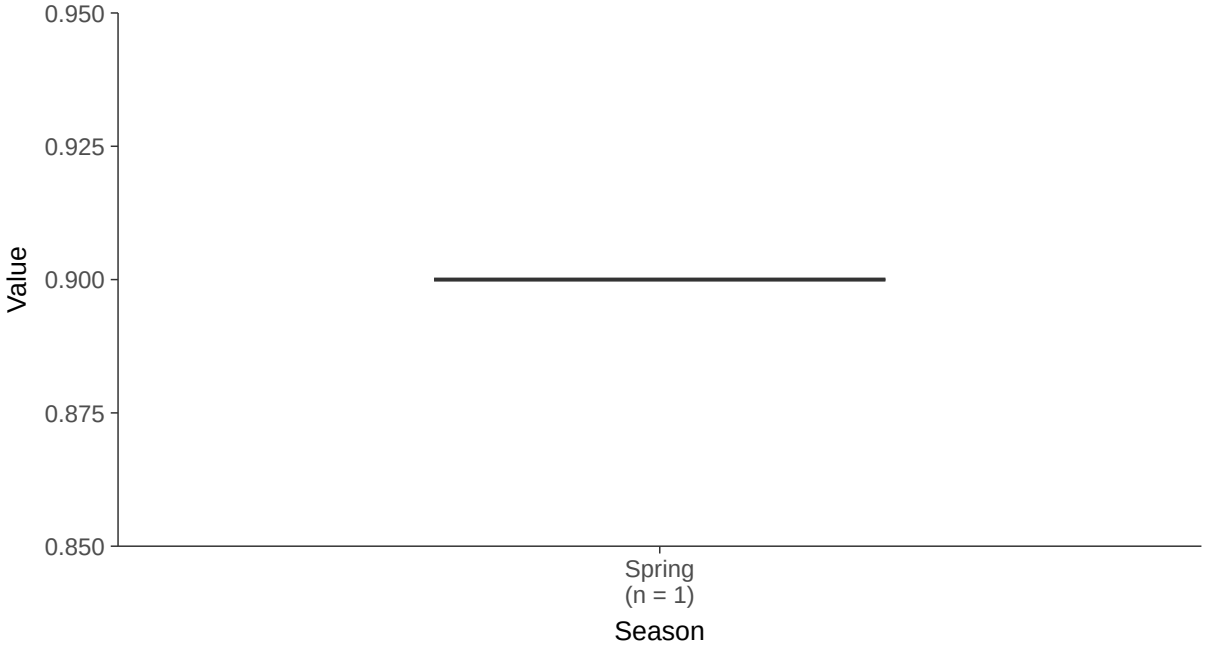
Boxplot

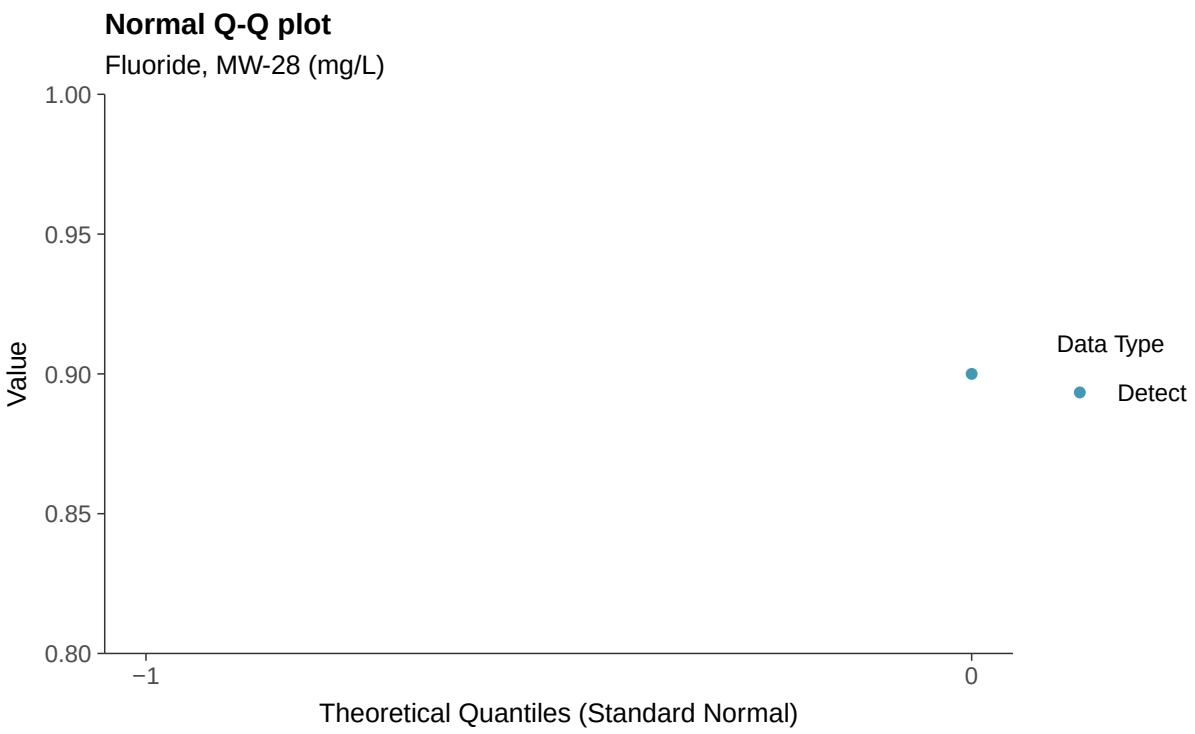
Fluoride, MW-28 (mg/L)



Boxplot by Season

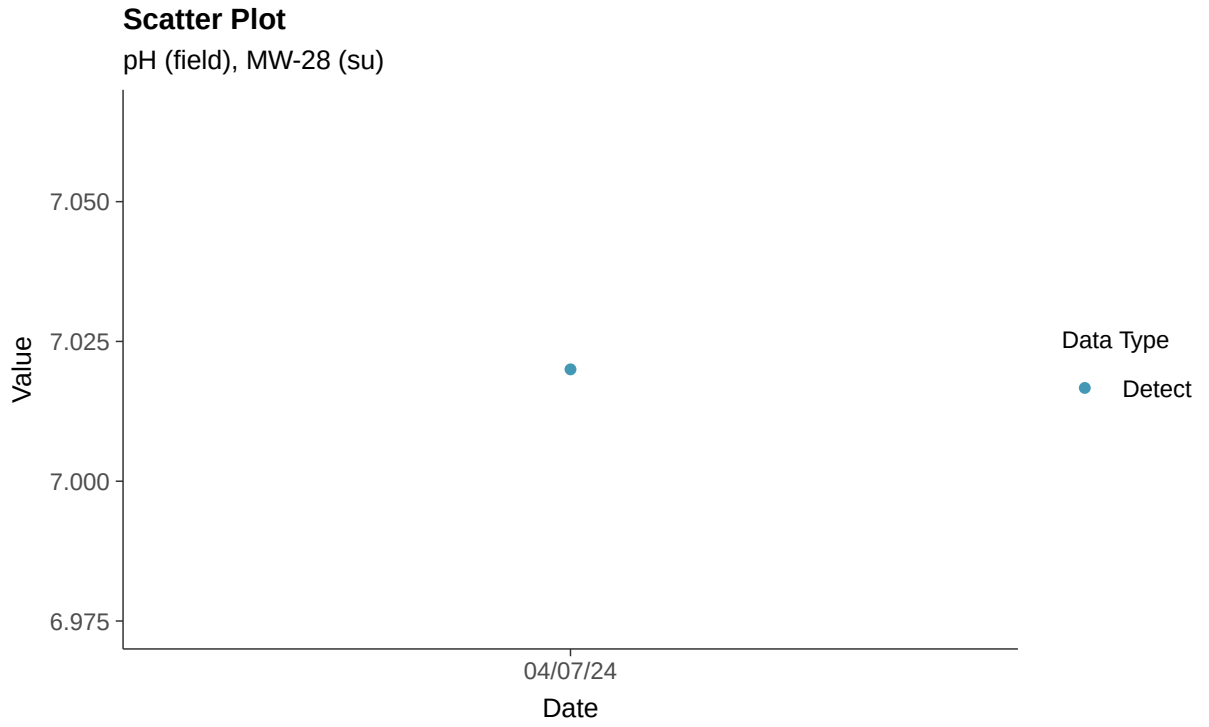
Fluoride, MW-28 (mg/L)

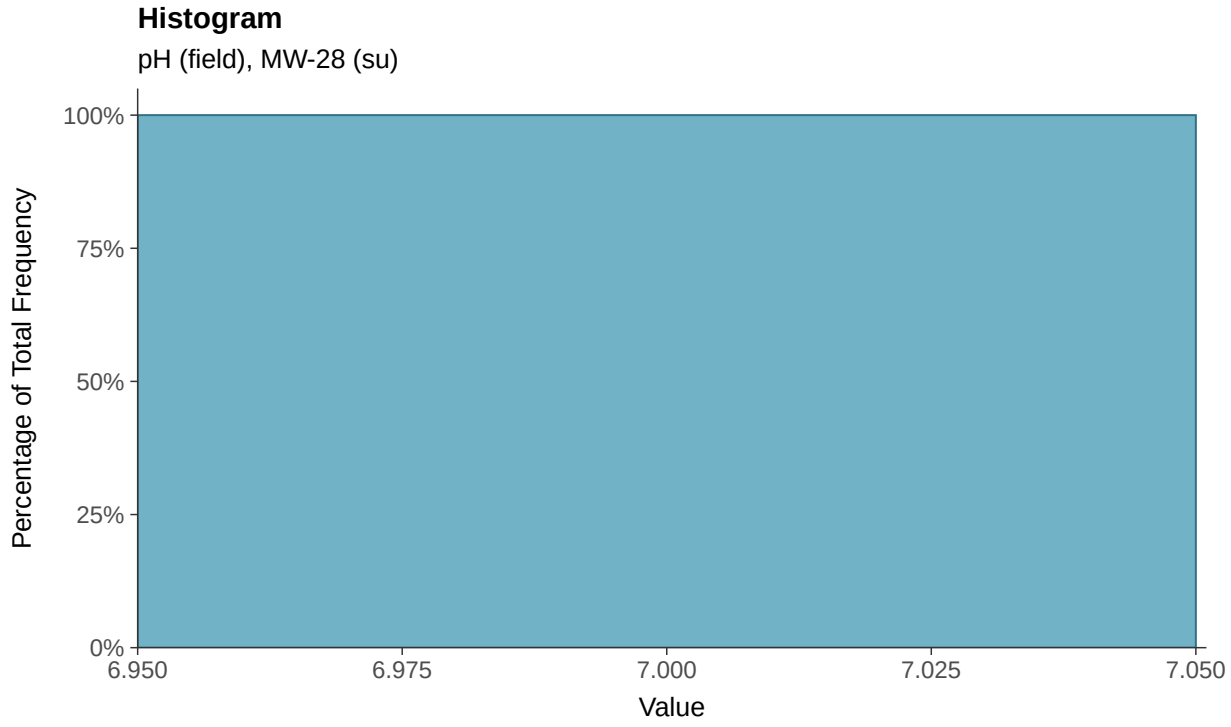



Normal Q-Q plot
Fluoride, MW-28 (mg/L)
Value
1.00
0.95
0.90
0.85
0.80
−1
0
Theoretical Quantiles (Standard Normal)
Data Type
Detect

Appendix III: pH (field), MW-28

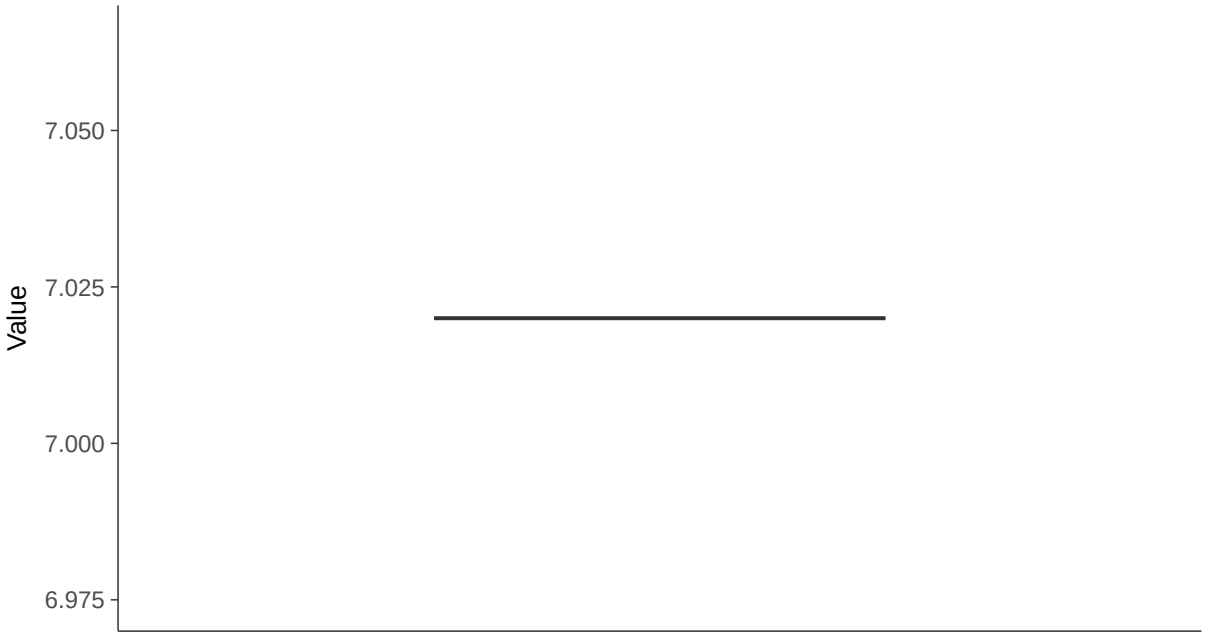
ID: 1_38_4_120





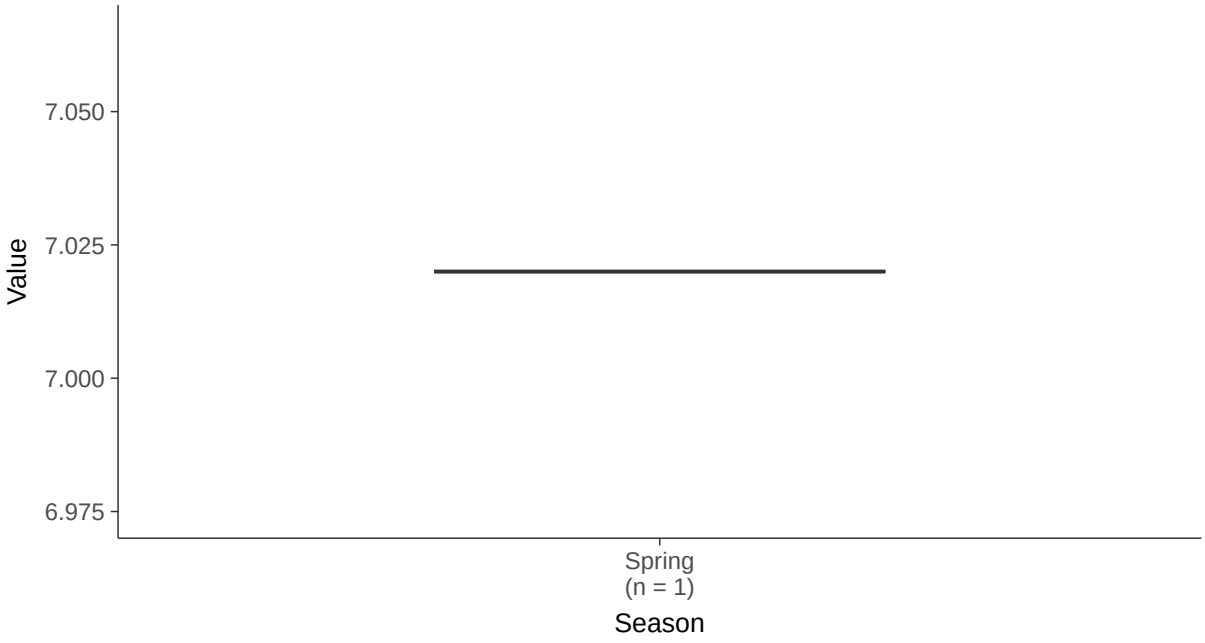
Boxplot

pH (field), MW-28 (su)



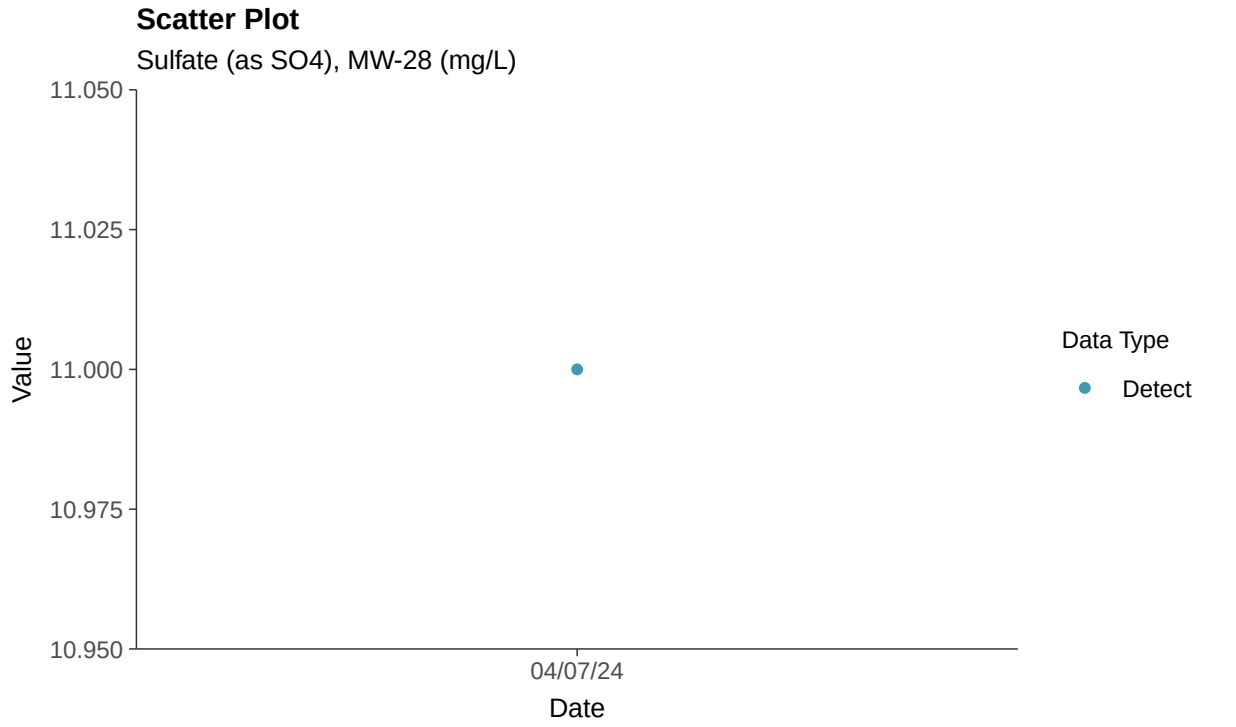
Boxplot by Season

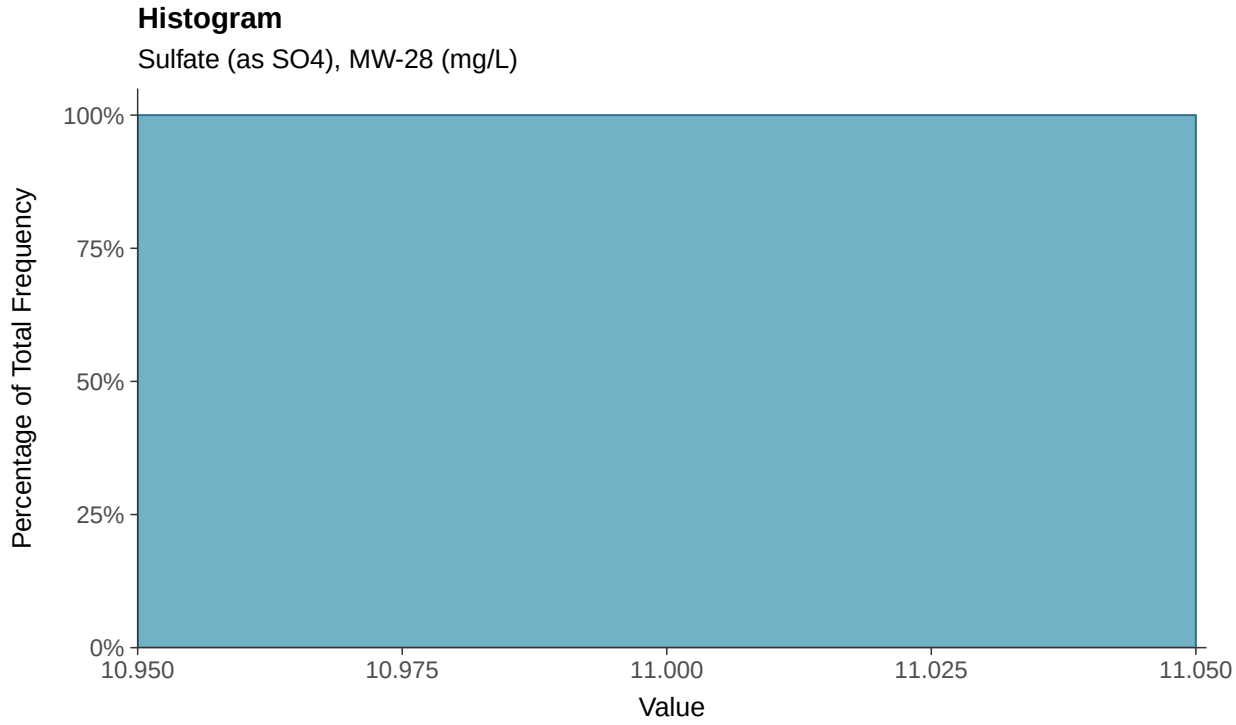
pH (field), MW-28 (su)



Appendix III: Sulfate (as SO4), MW-28

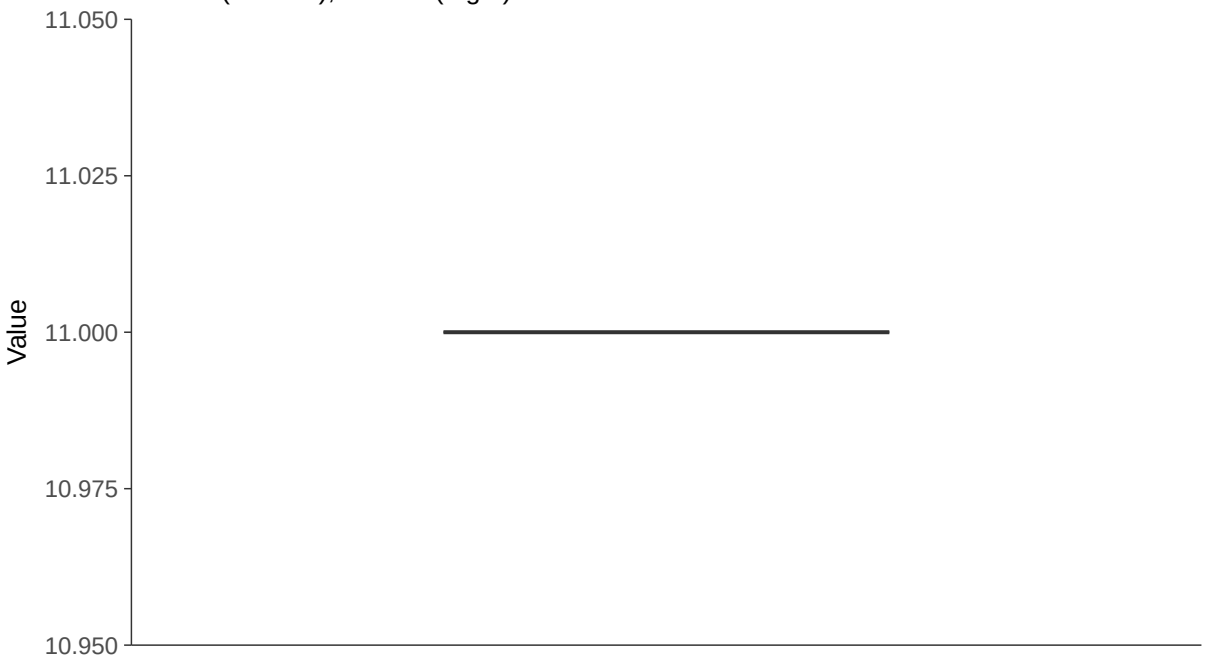
ID: 1_38_4_124





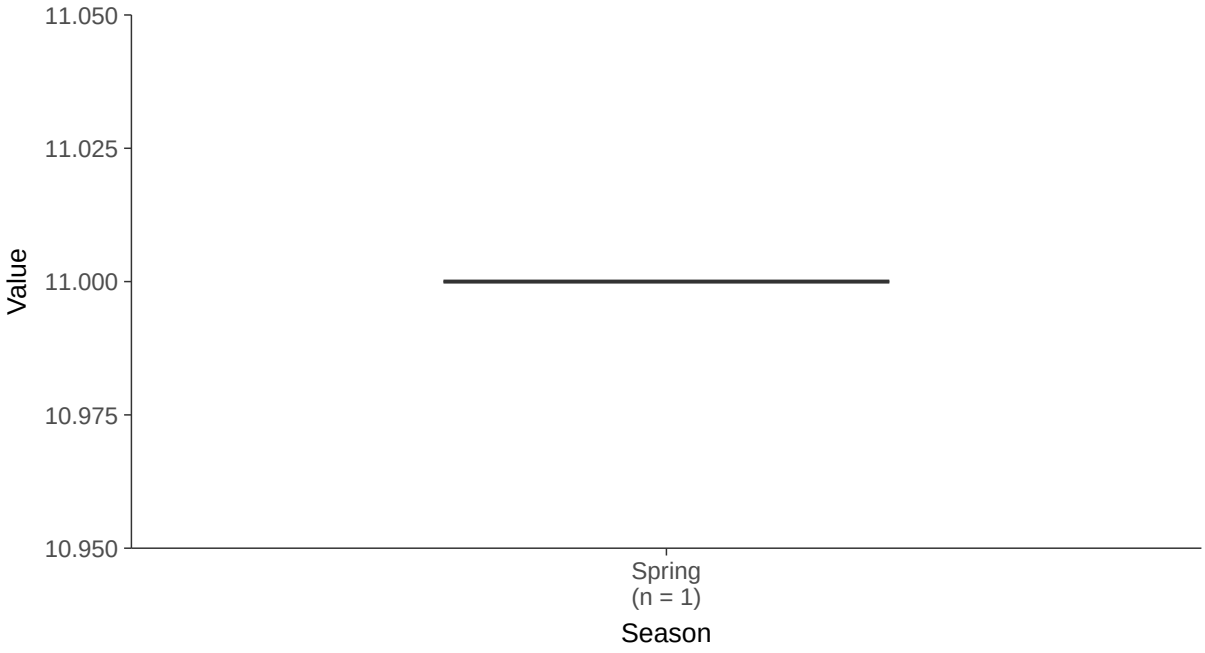
Boxplot

Sulfate (as SO4), MW-28 (mg/L)



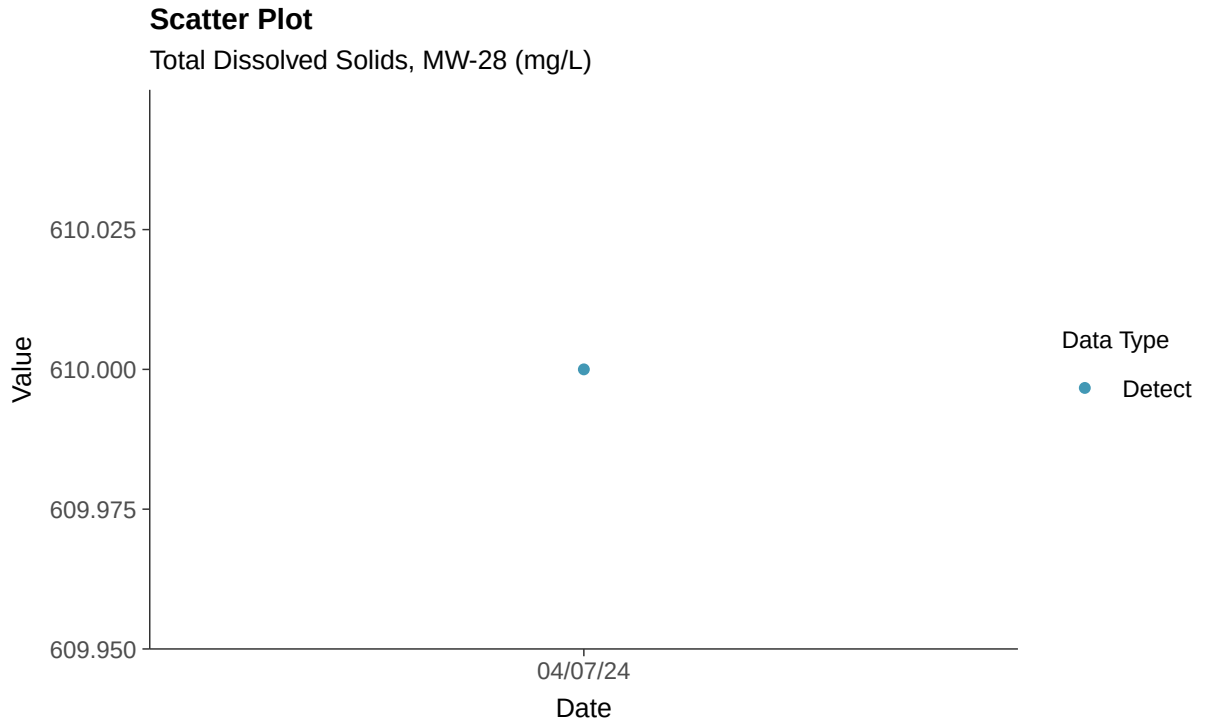
Boxplot by Season

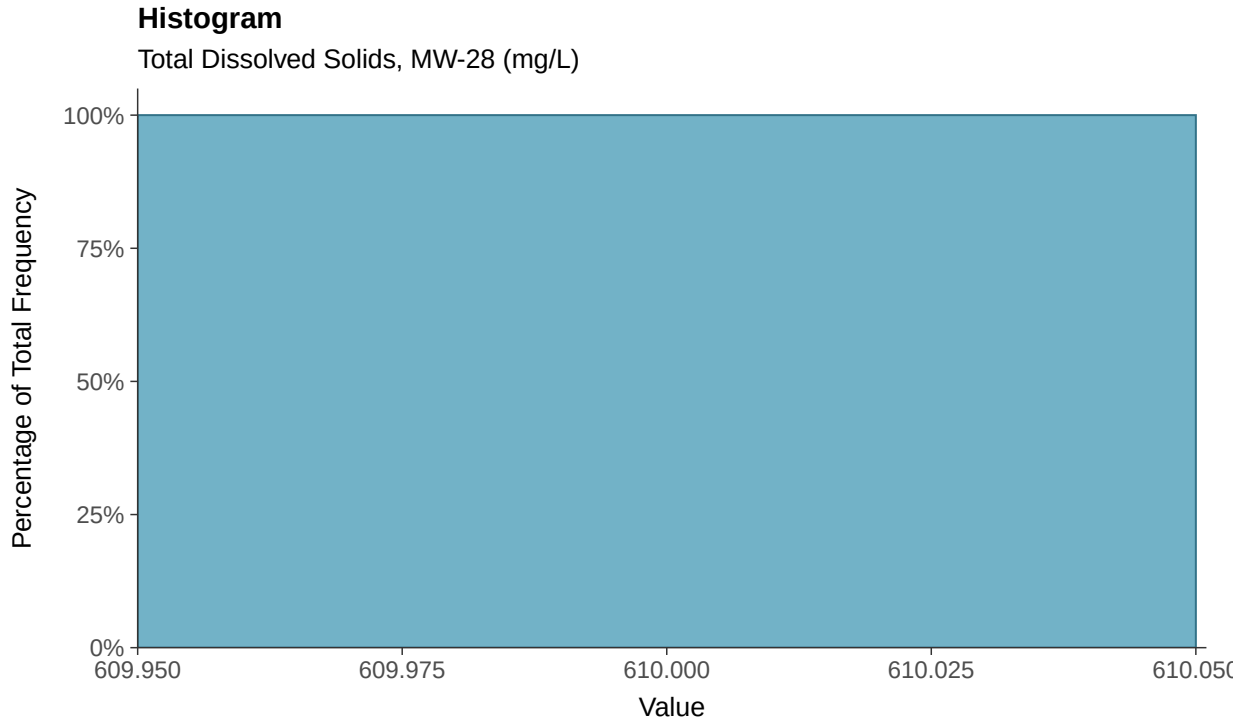
Sulfate (as SO4), MW-28 (mg/L)



Appendix III: Total Dissolved Solids, MW-28

ID: 1_38_4_126



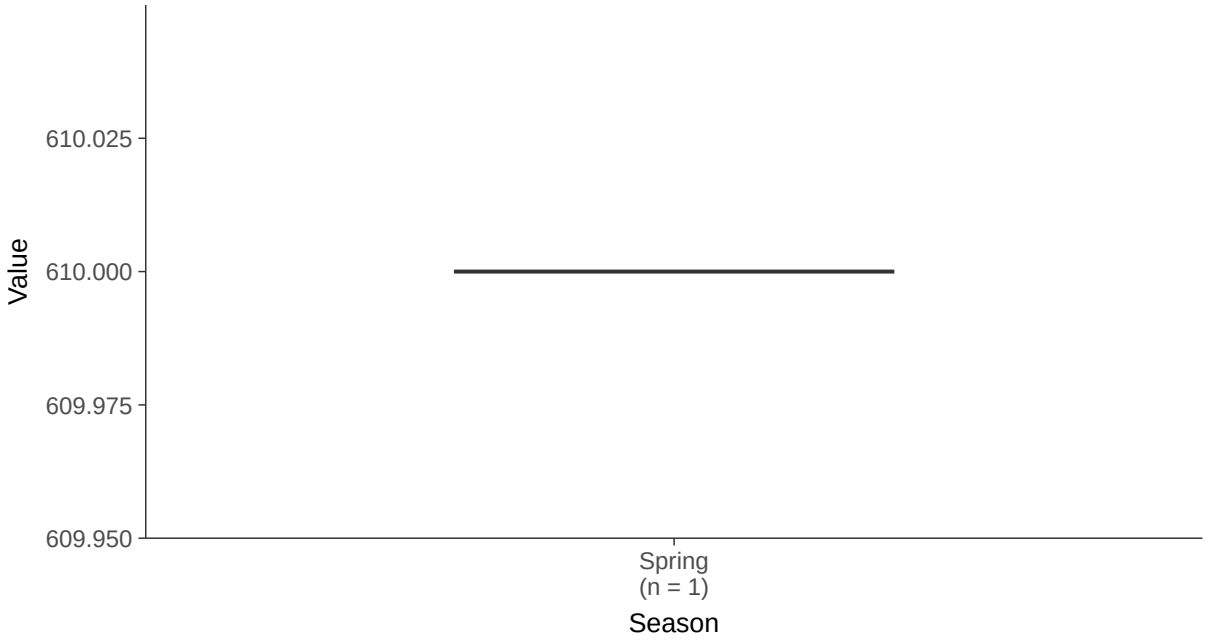


Boxplot

Total Dissolved Solids, MW-28 (mg/L)

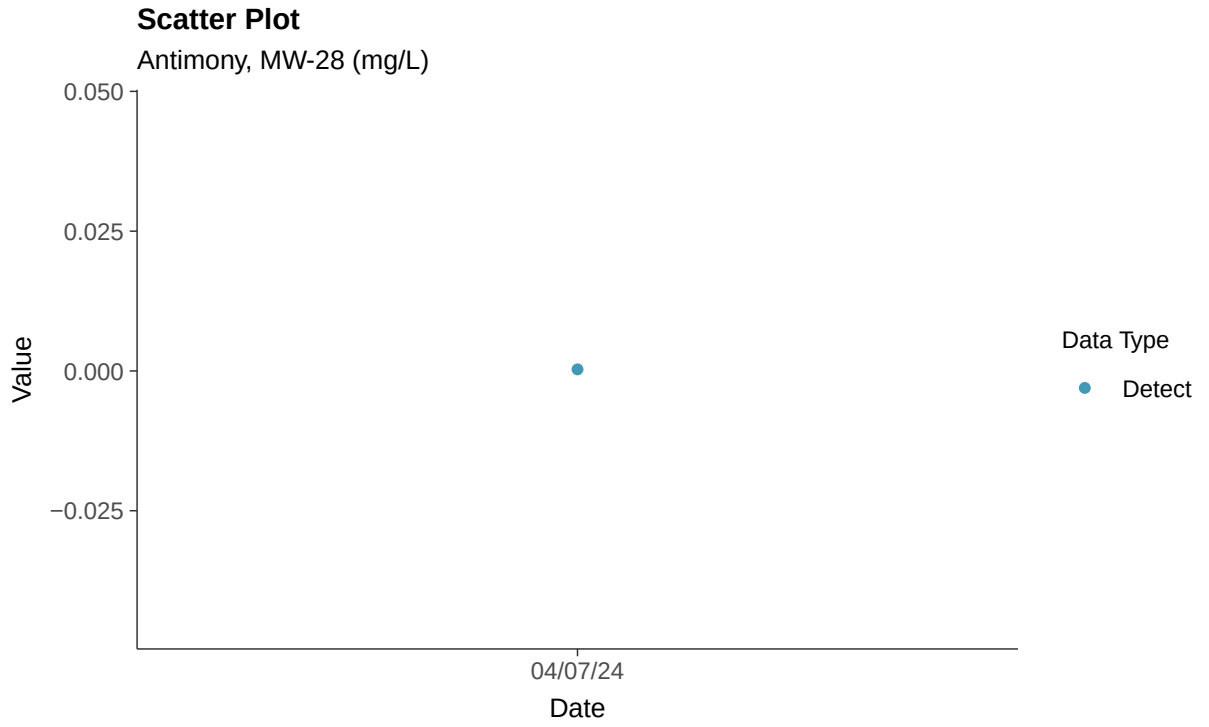
Boxplot by Season

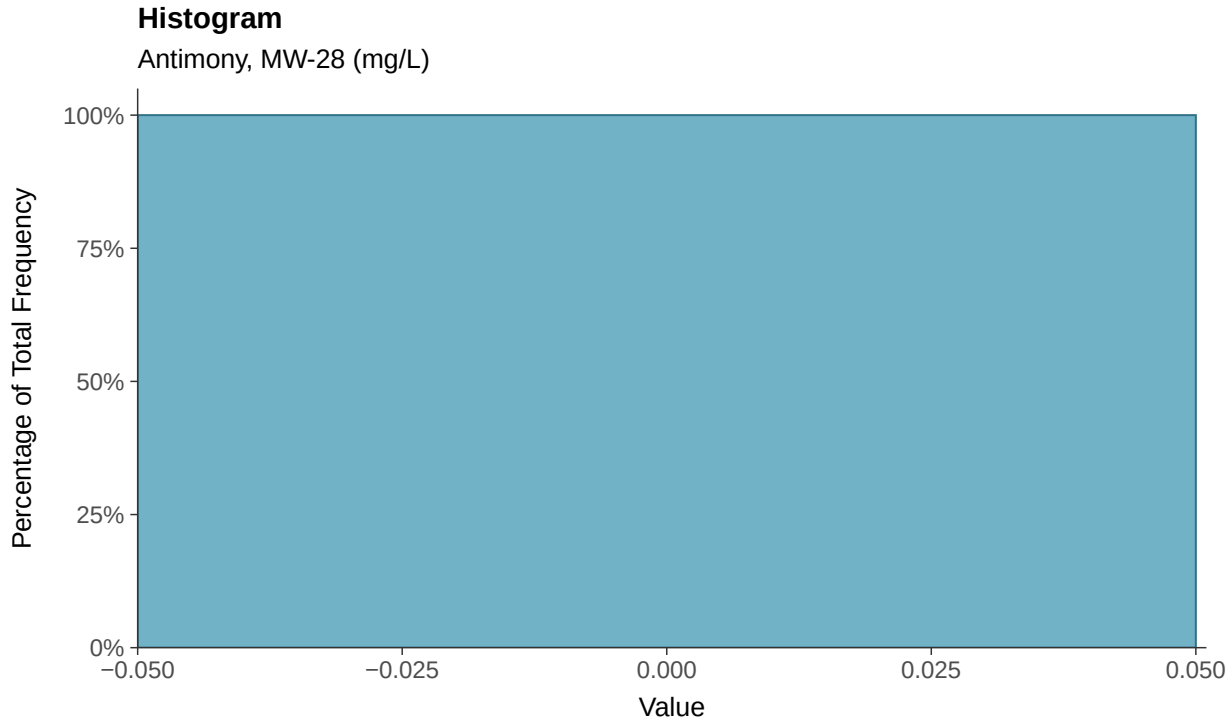
Total Dissolved Solids, MW-28 (mg/L)



Appendix IV: Antimony, MW-28

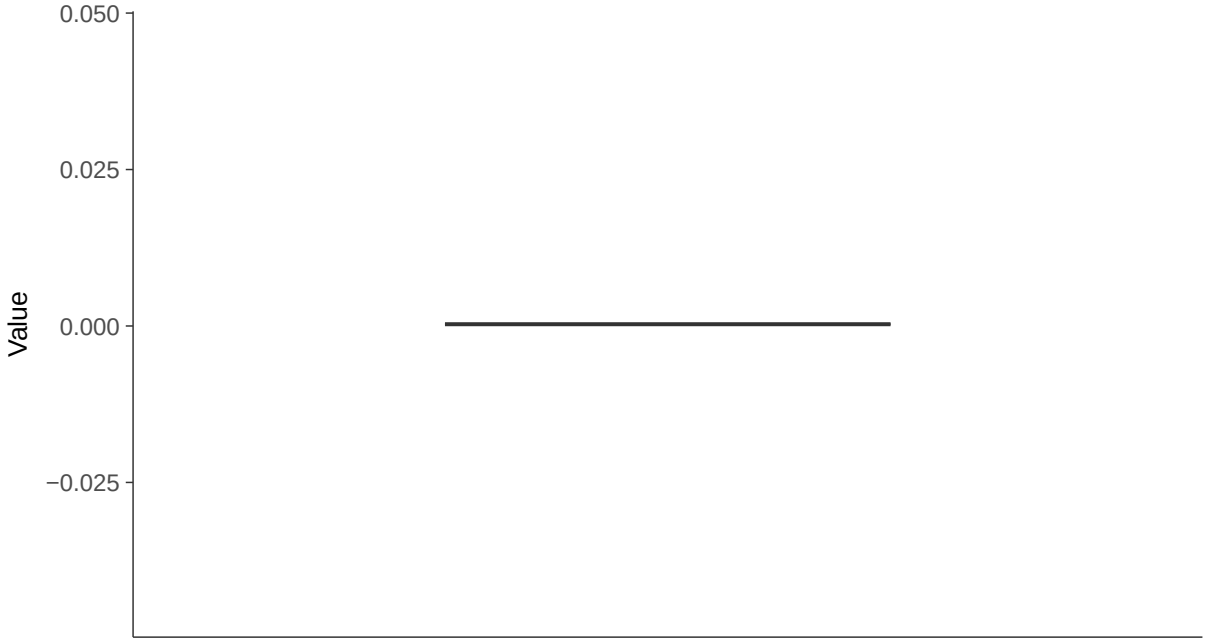
ID: 1_38_5_101





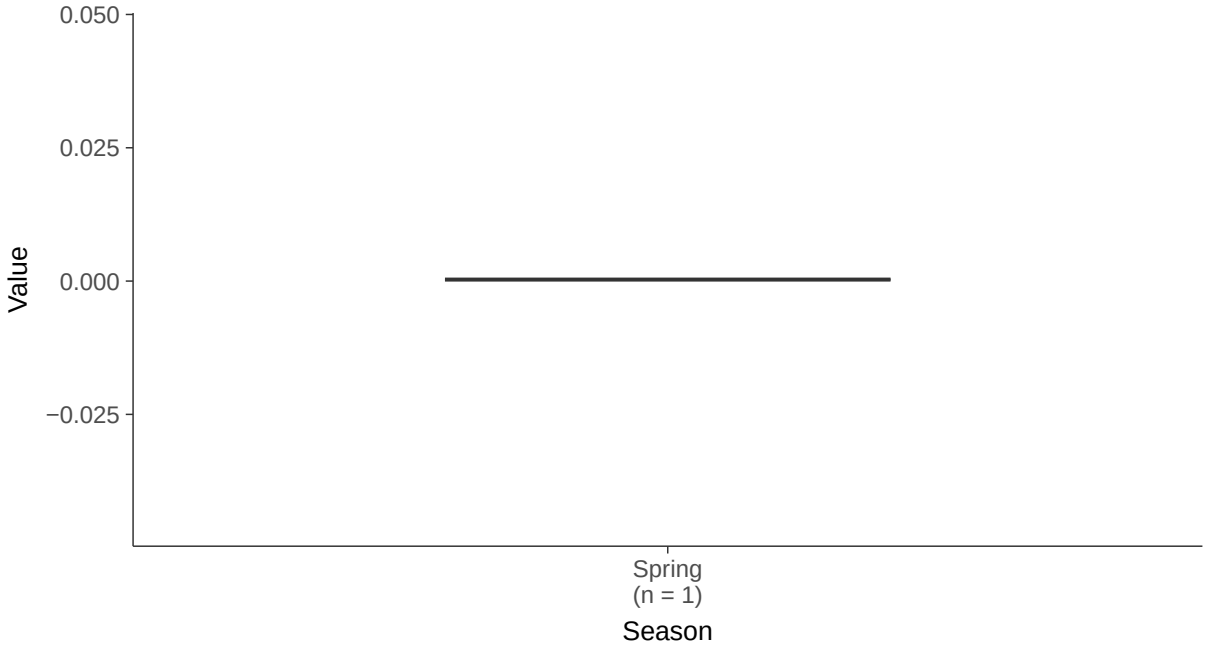
Boxplot

Antimony, MW-28 (mg/L)



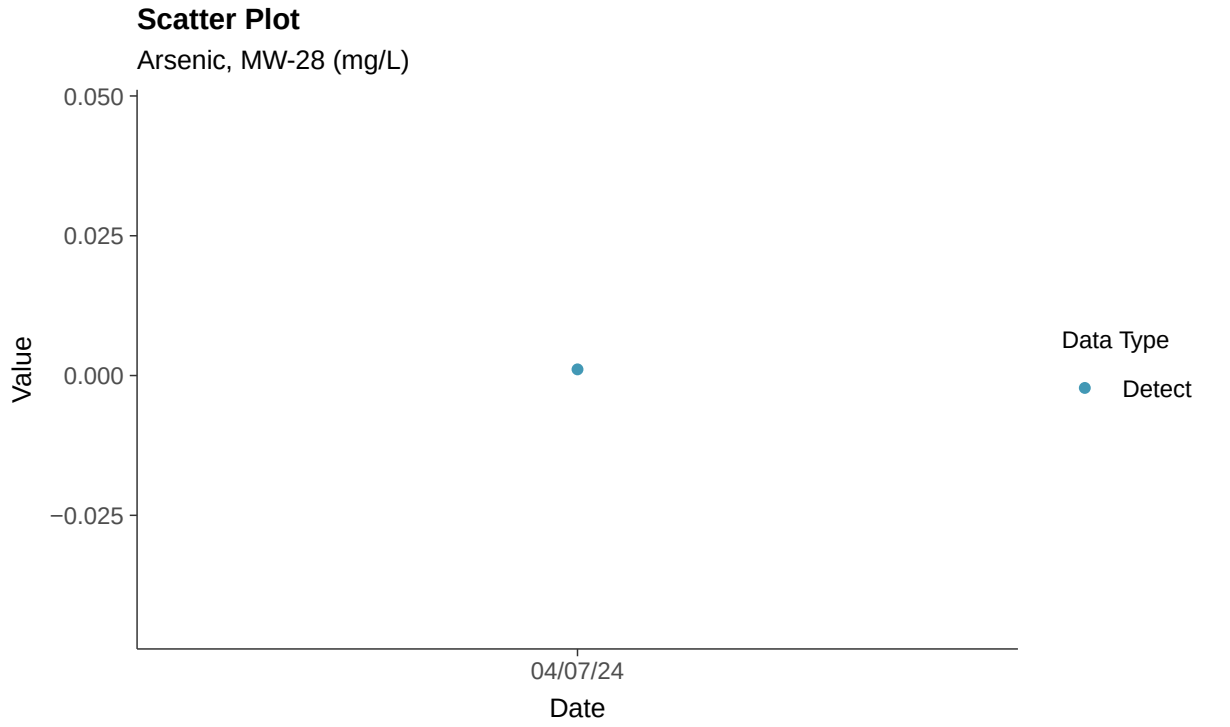
Boxplot by Season

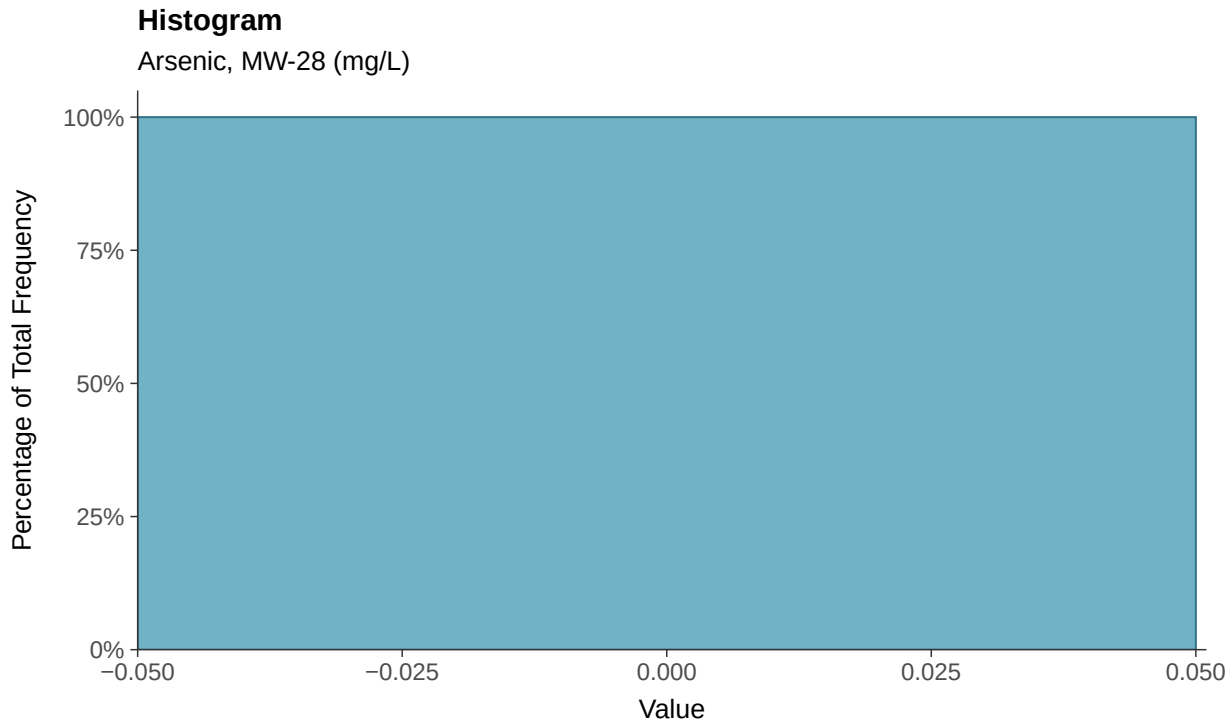
Antimony, MW-28 (mg/L)



Appendix IV: Arsenic, MW-28

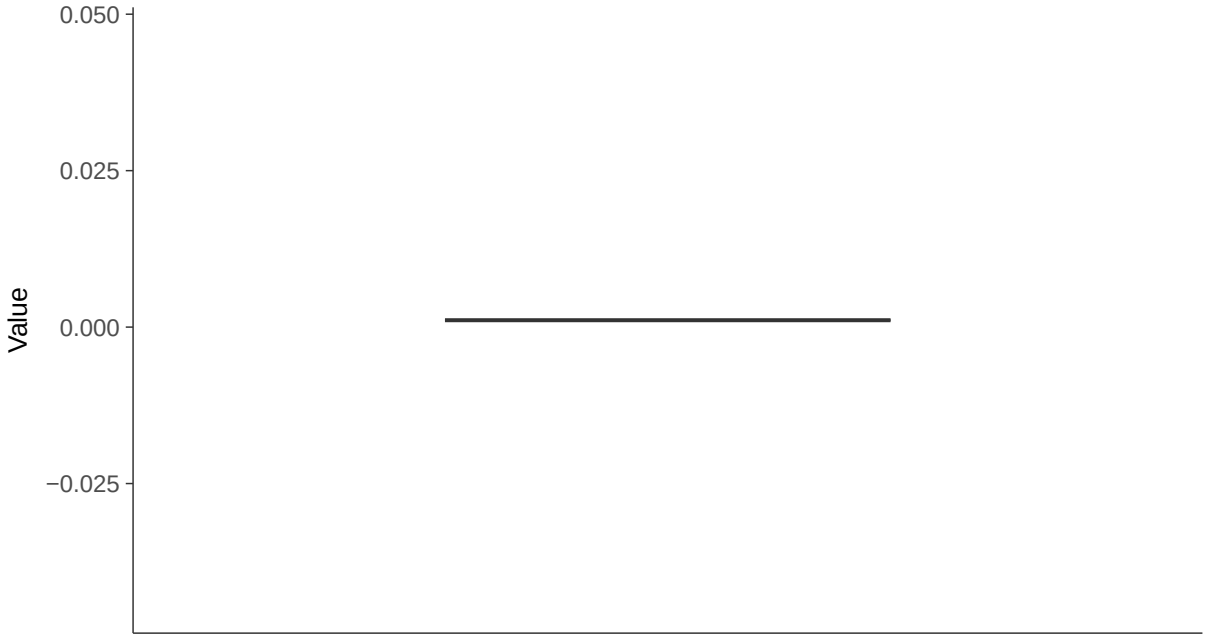
ID: 1_38_5_102





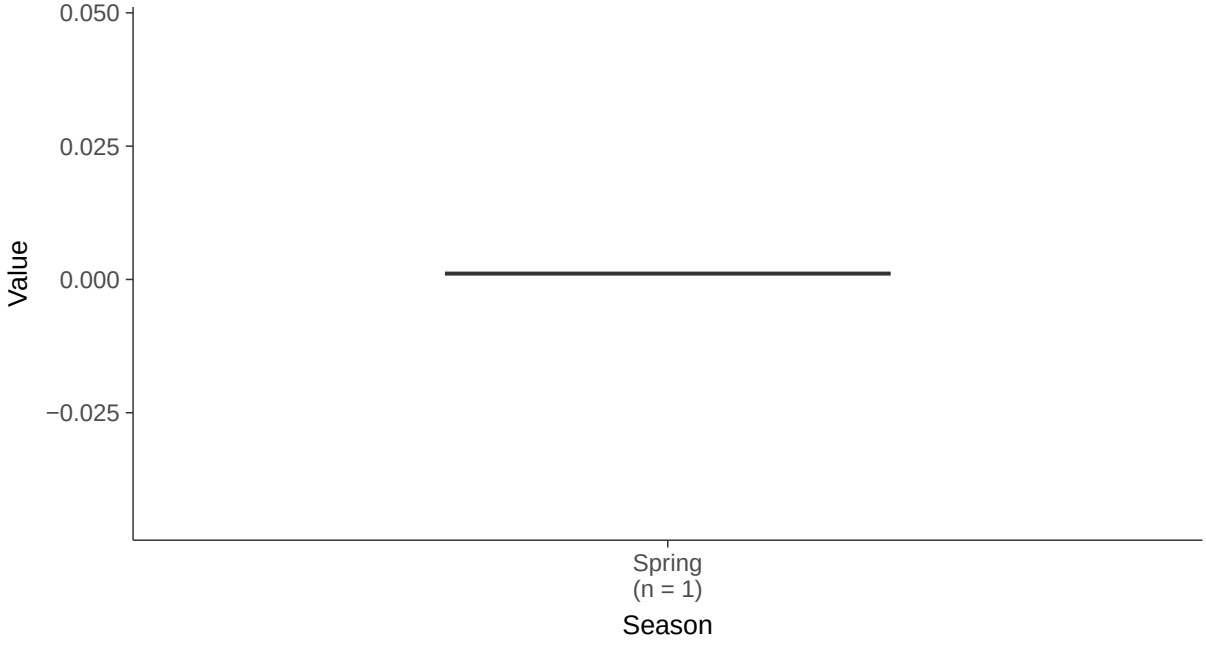
Boxplot

Arsenic, MW-28 (mg/L)



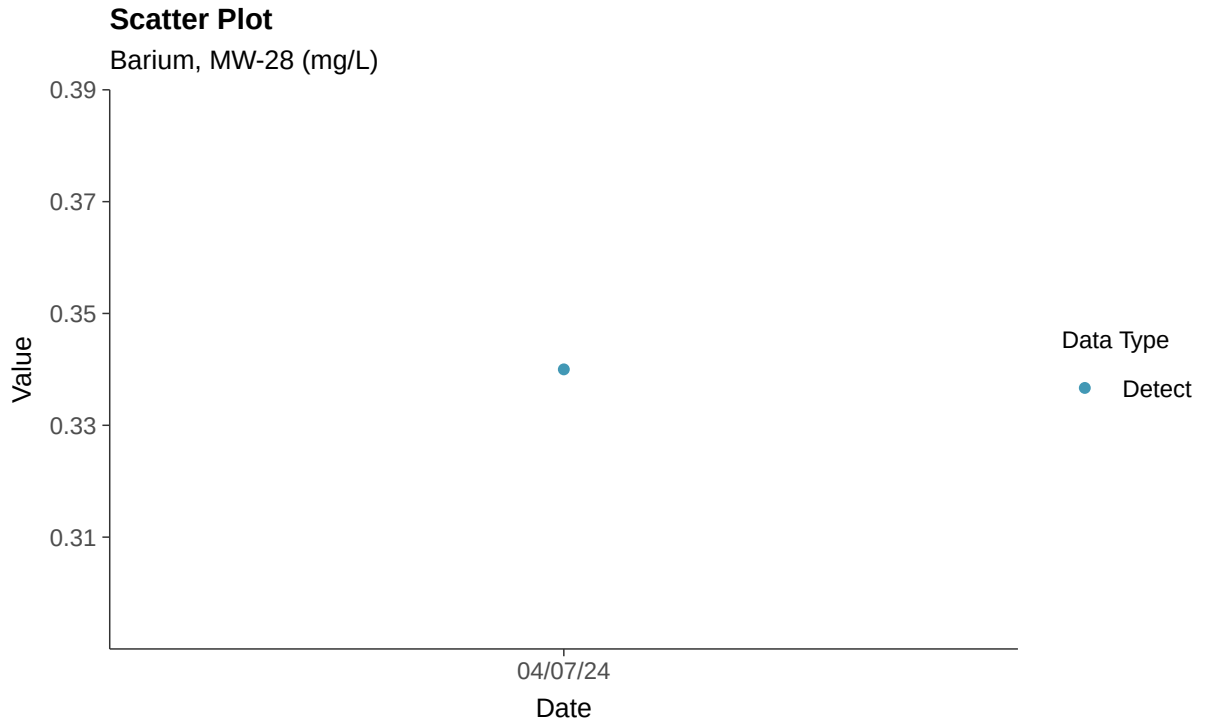
Boxplot by Season

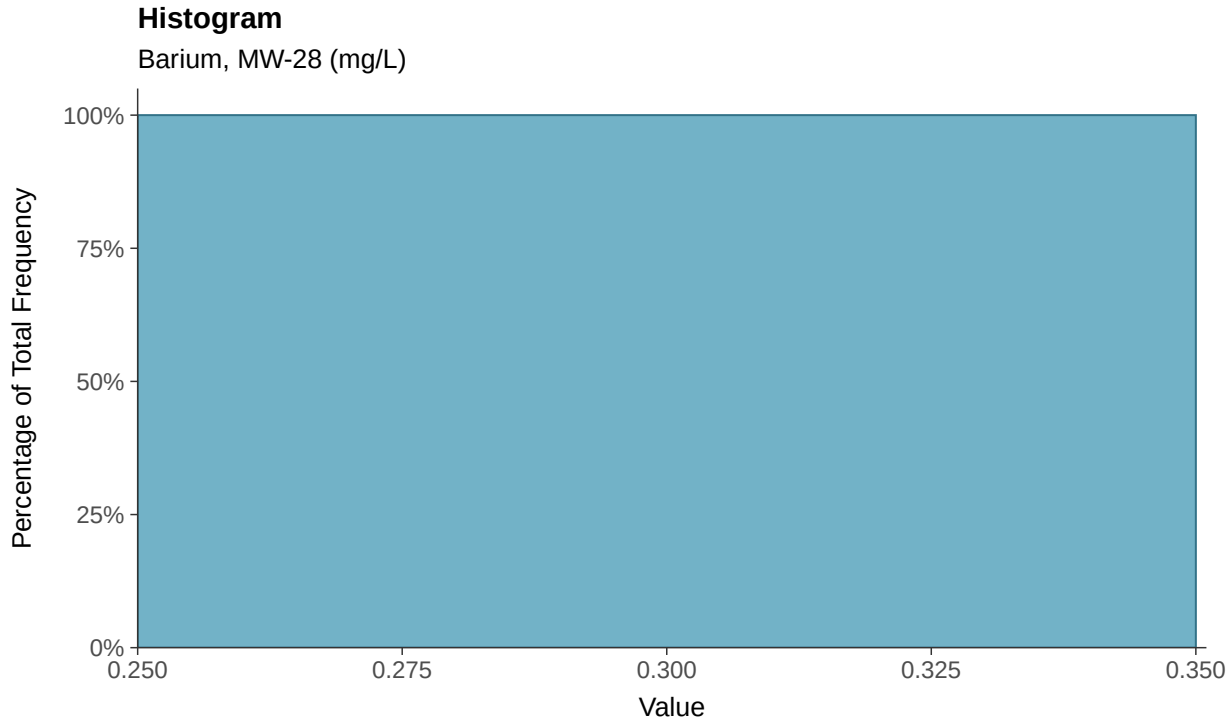
Arsenic, MW-28 (mg/L)



Appendix IV: Barium, MW-28

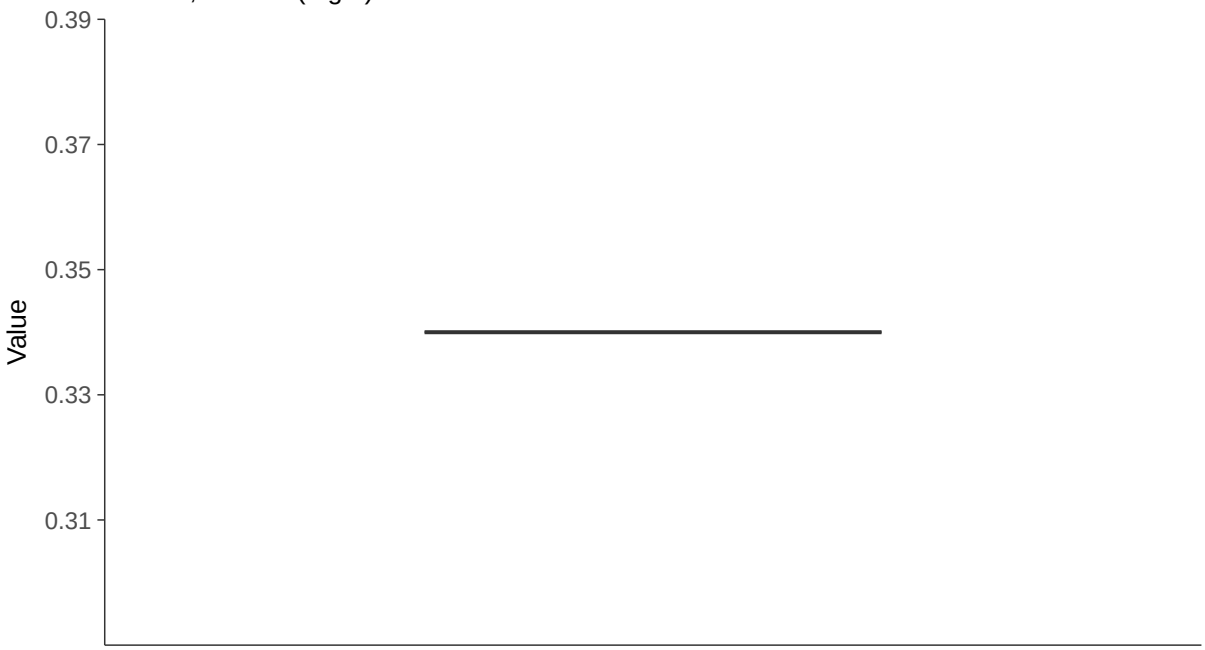
ID: 1_38_5_103





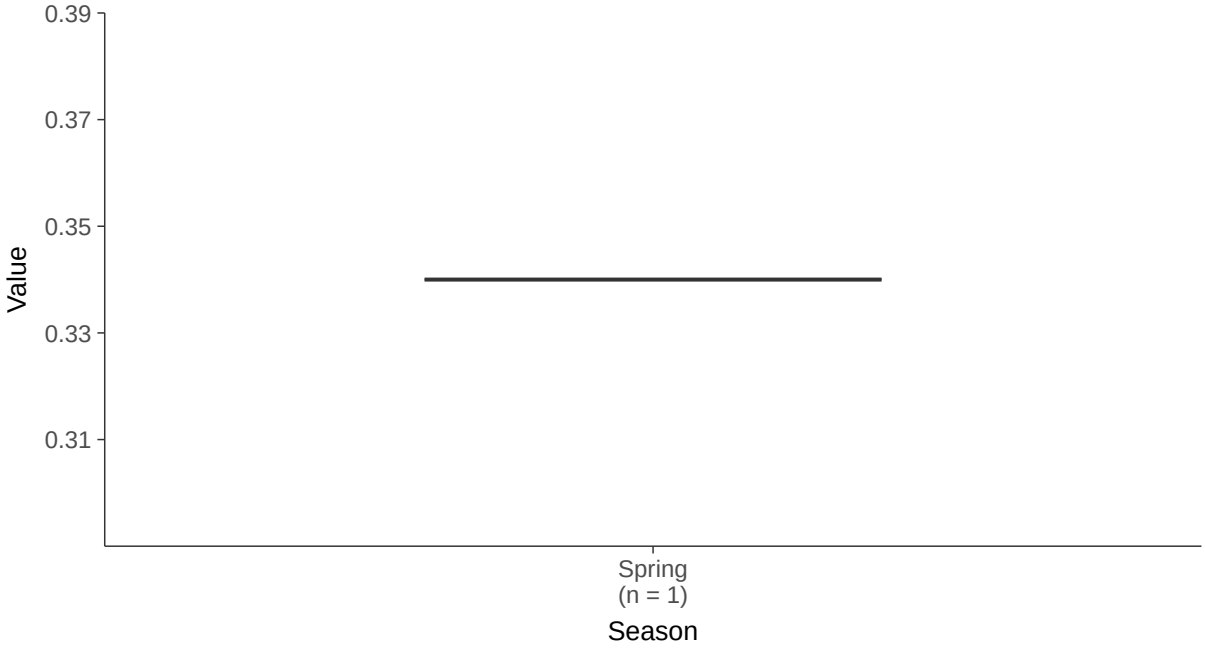
Boxplot

Barium, MW-28 (mg/L)



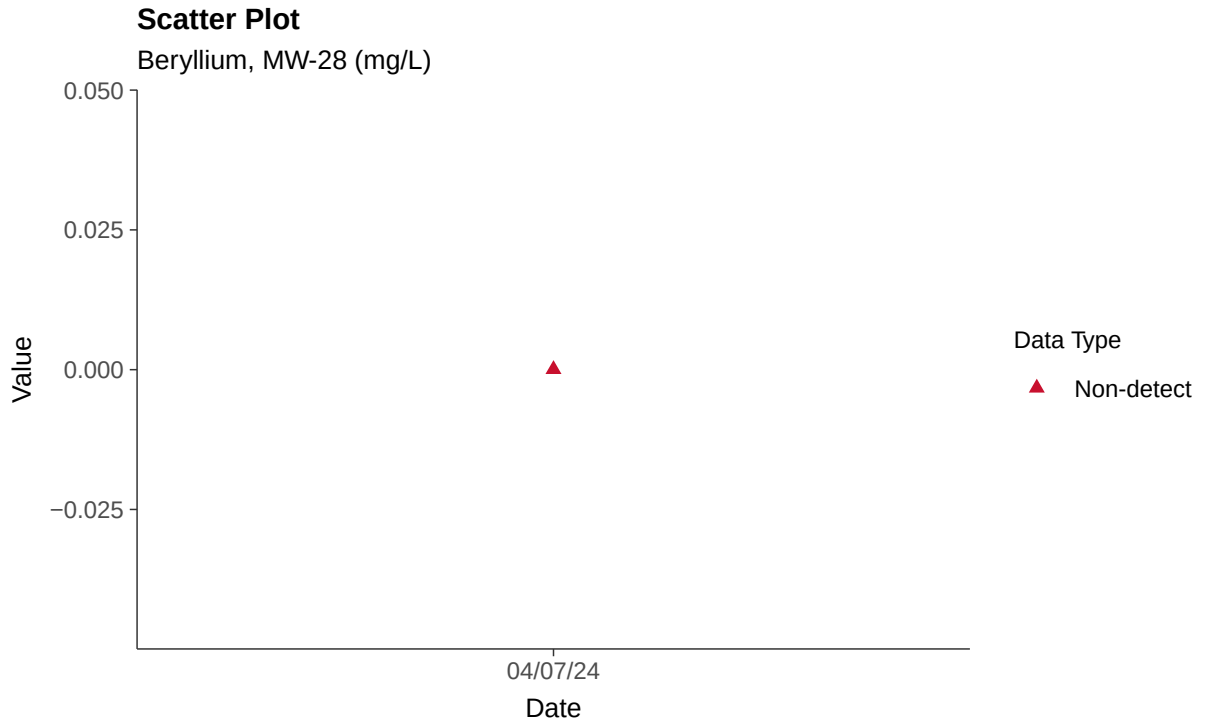
Boxplot by Season

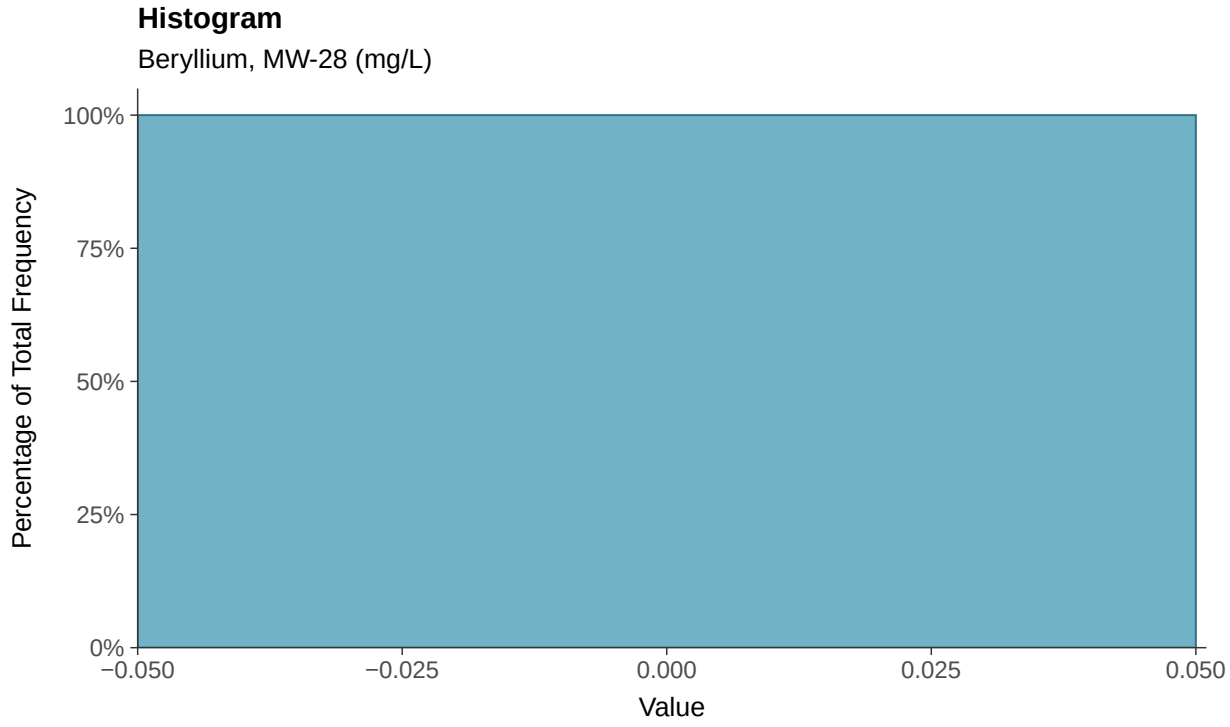
Barium, MW-28 (mg/L)



Appendix IV: Beryllium, MW-28

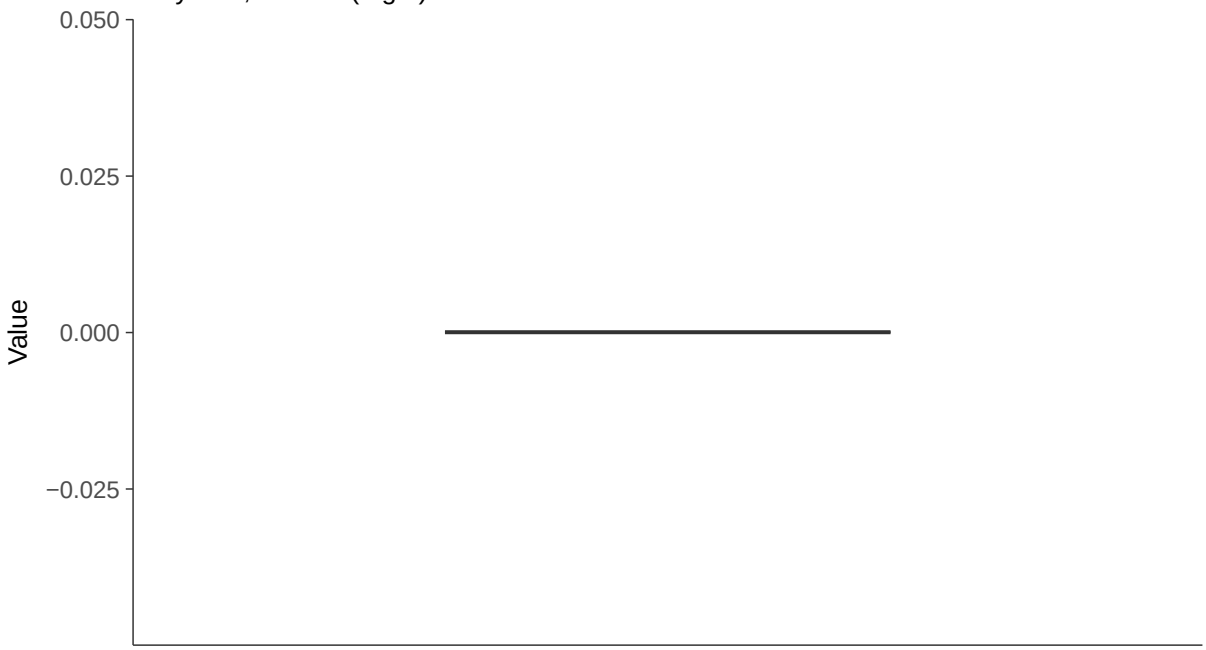
ID: 1_38_5_104





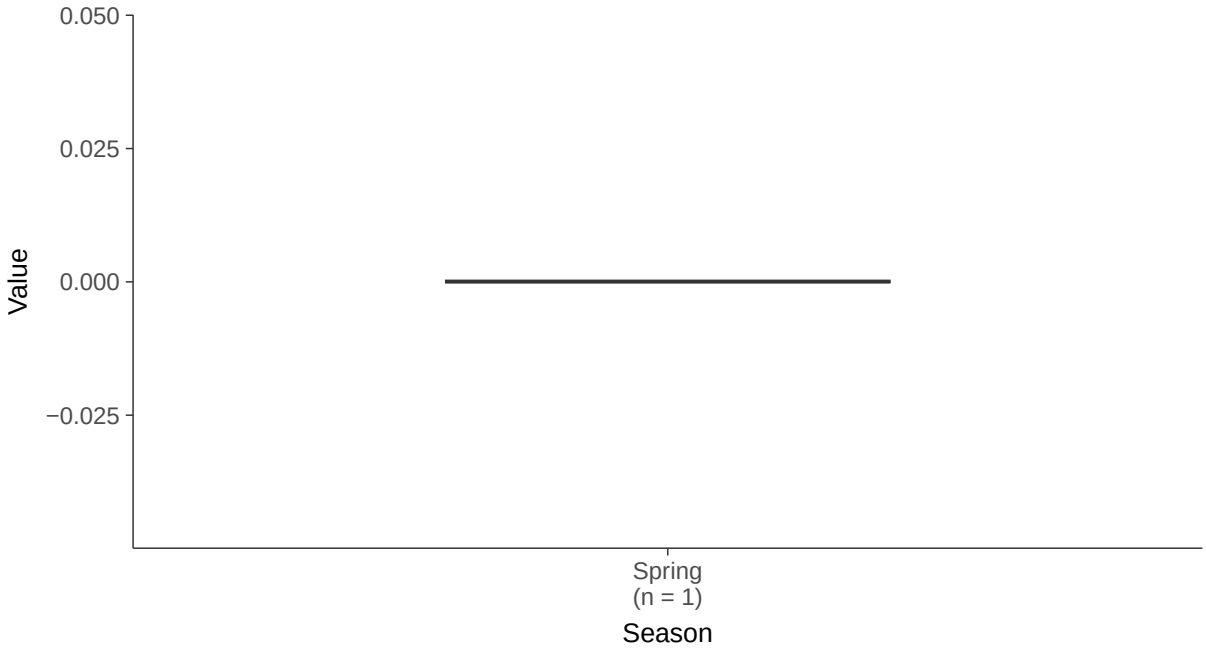
Boxplot

Beryllium, MW-28 (mg/L)



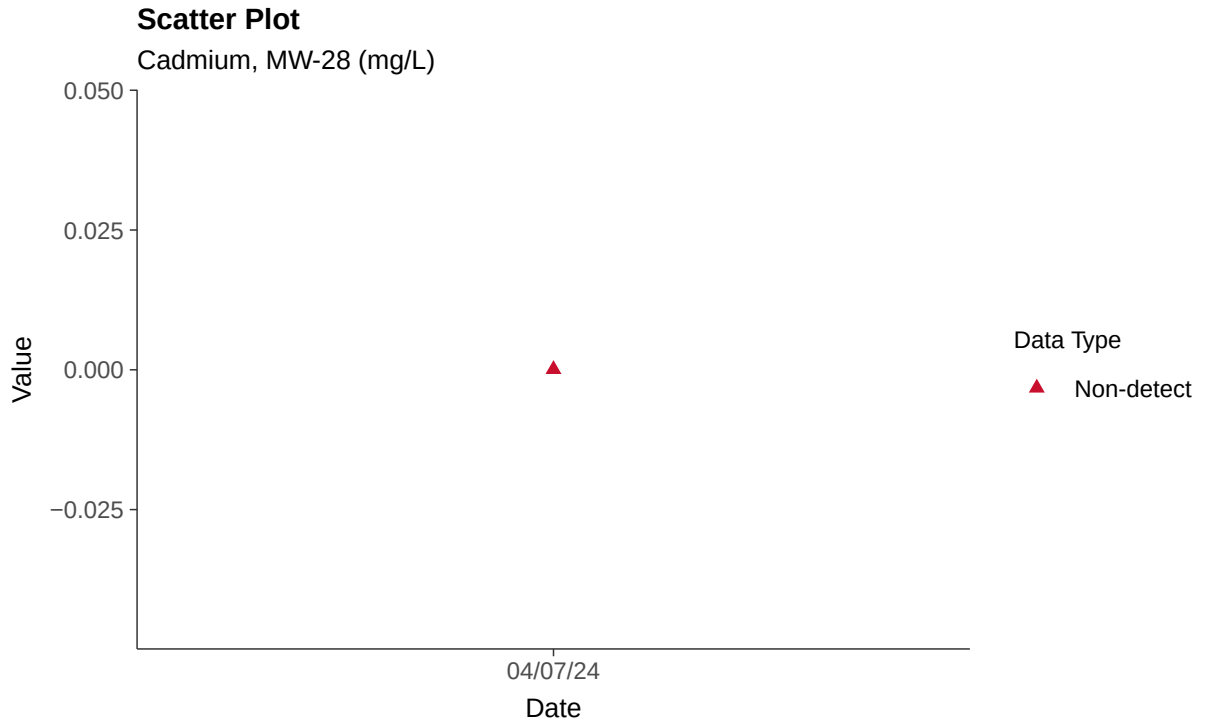
Boxplot by Season

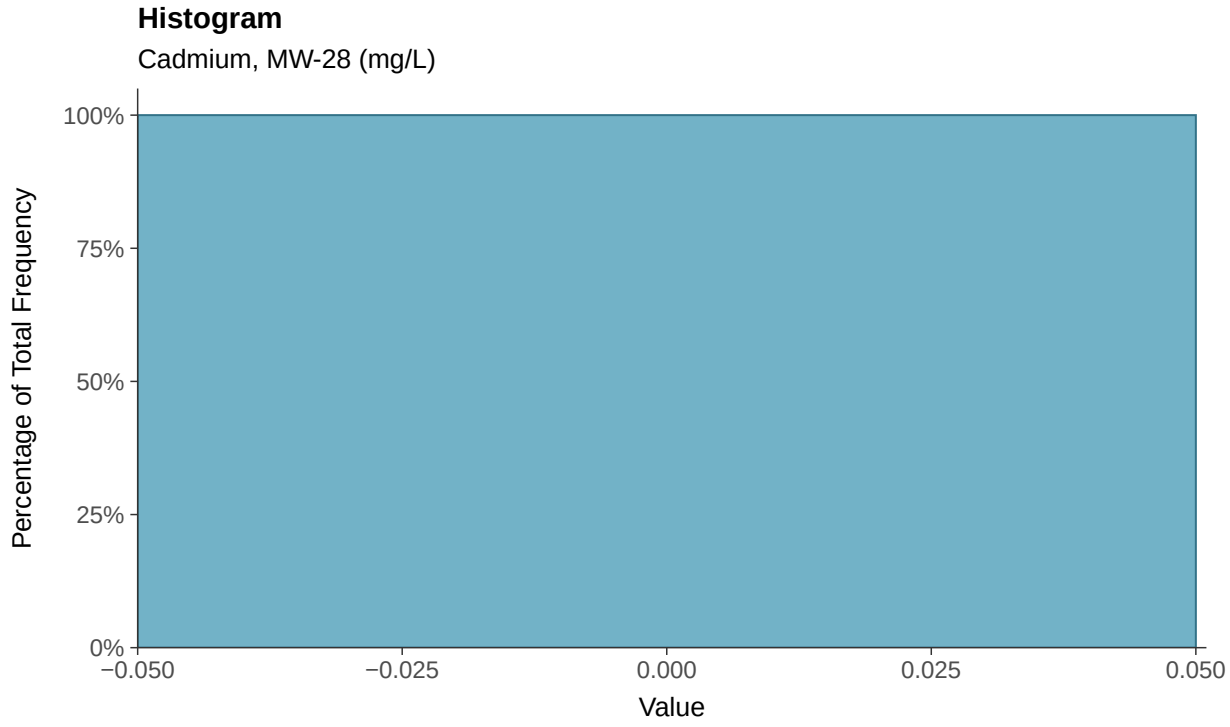
Beryllium, MW-28 (mg/L)



Appendix IV: Cadmium, MW-28

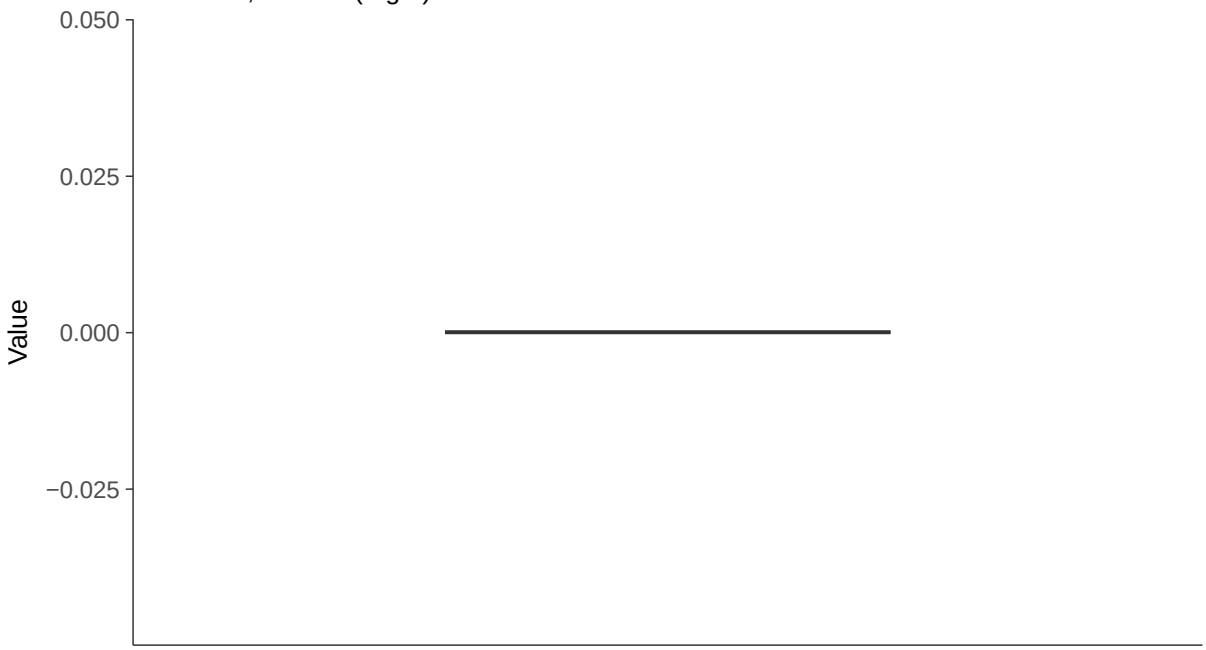
ID: 1_38_5_106





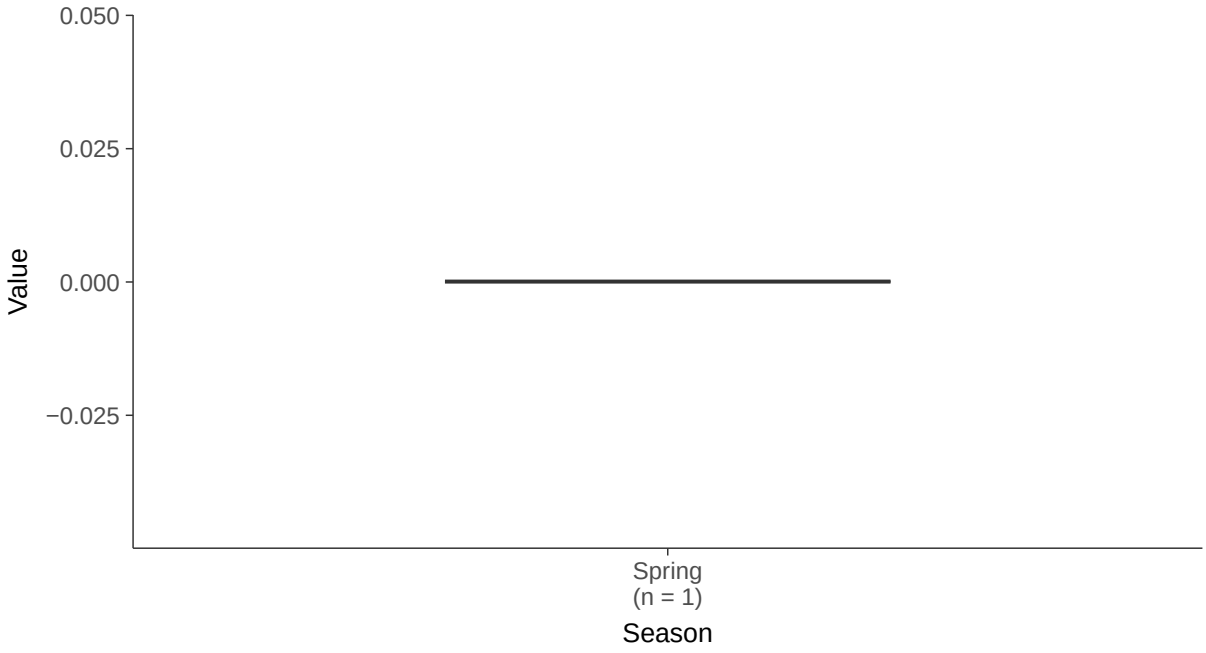
Boxplot

Cadmium, MW-28 (mg/L)



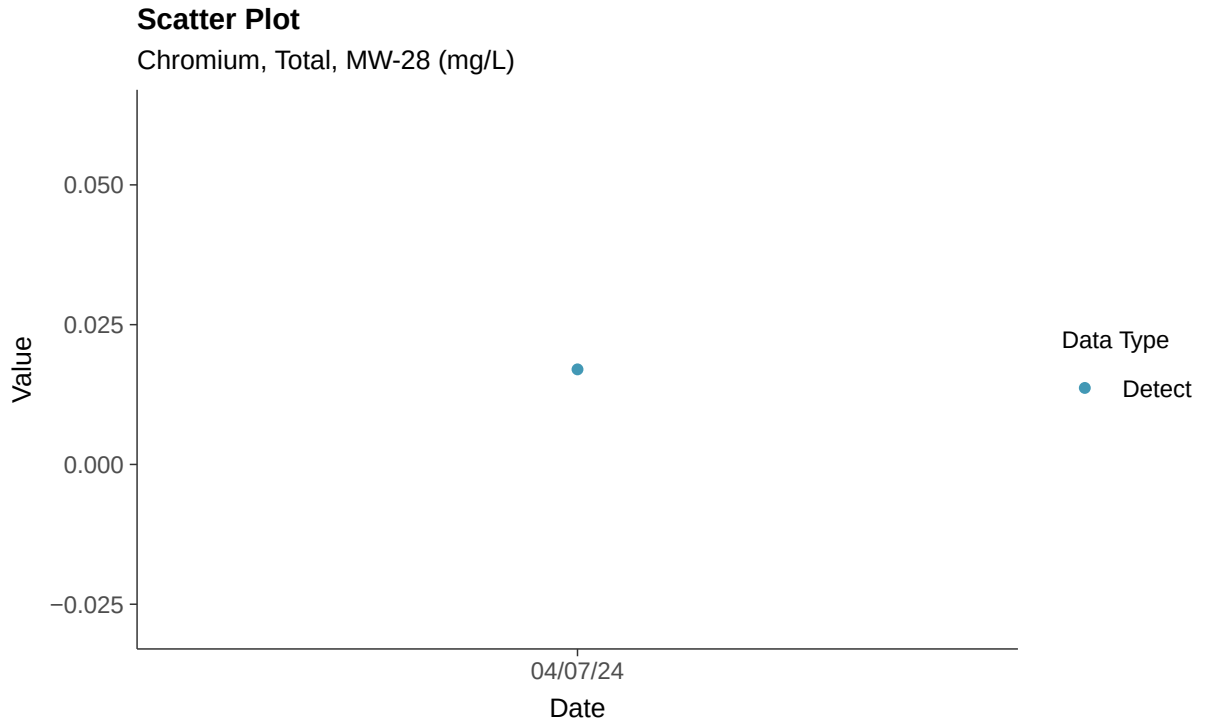
Boxplot by Season

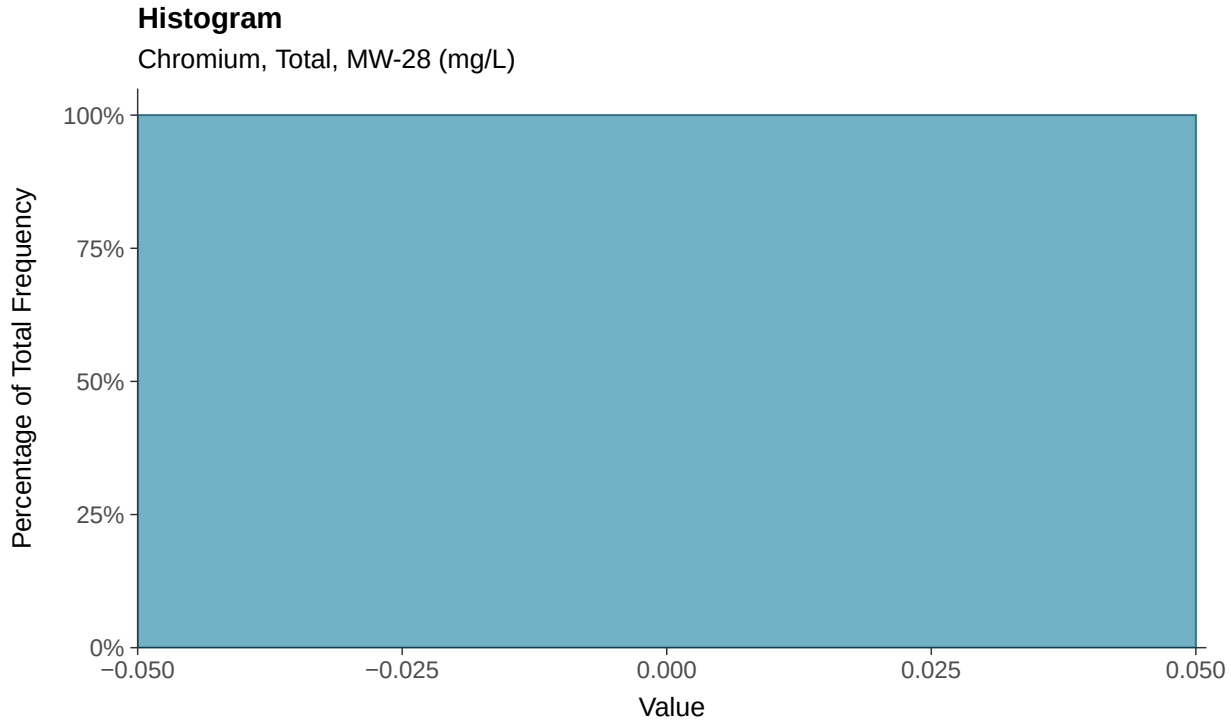
Cadmium, MW-28 (mg/L)



Appendix IV: Chromium, Total, MW-28

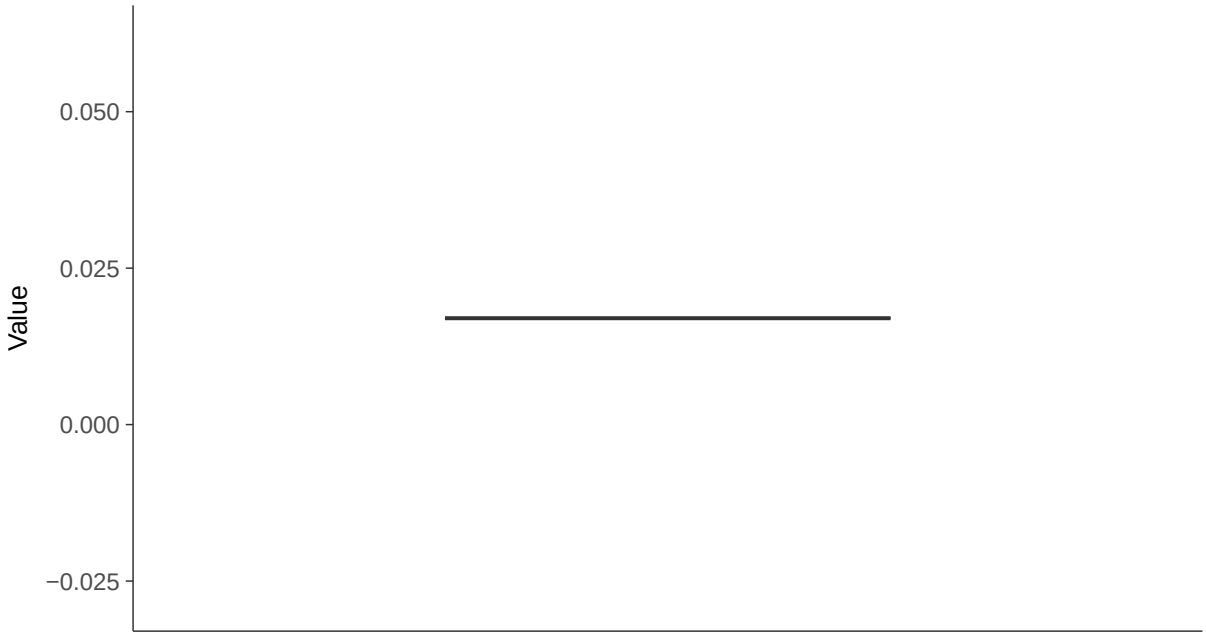
ID: 1_38_5_109





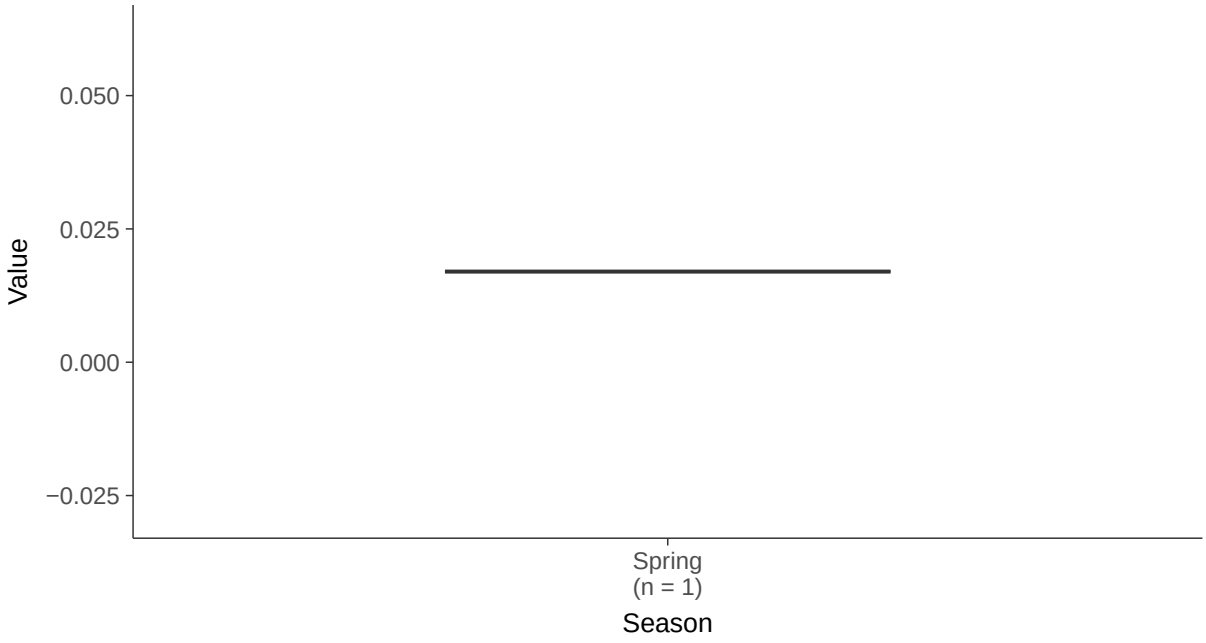
Boxplot

Chromium, Total, MW-28 (mg/L)



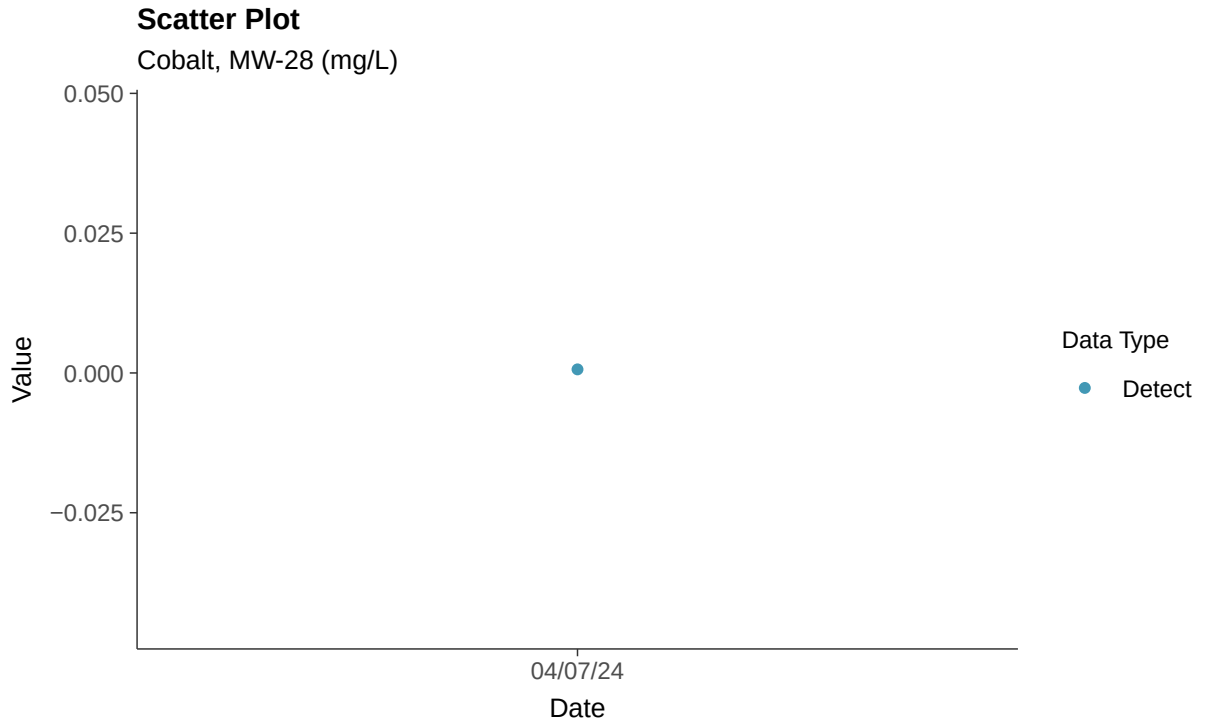
Boxplot by Season

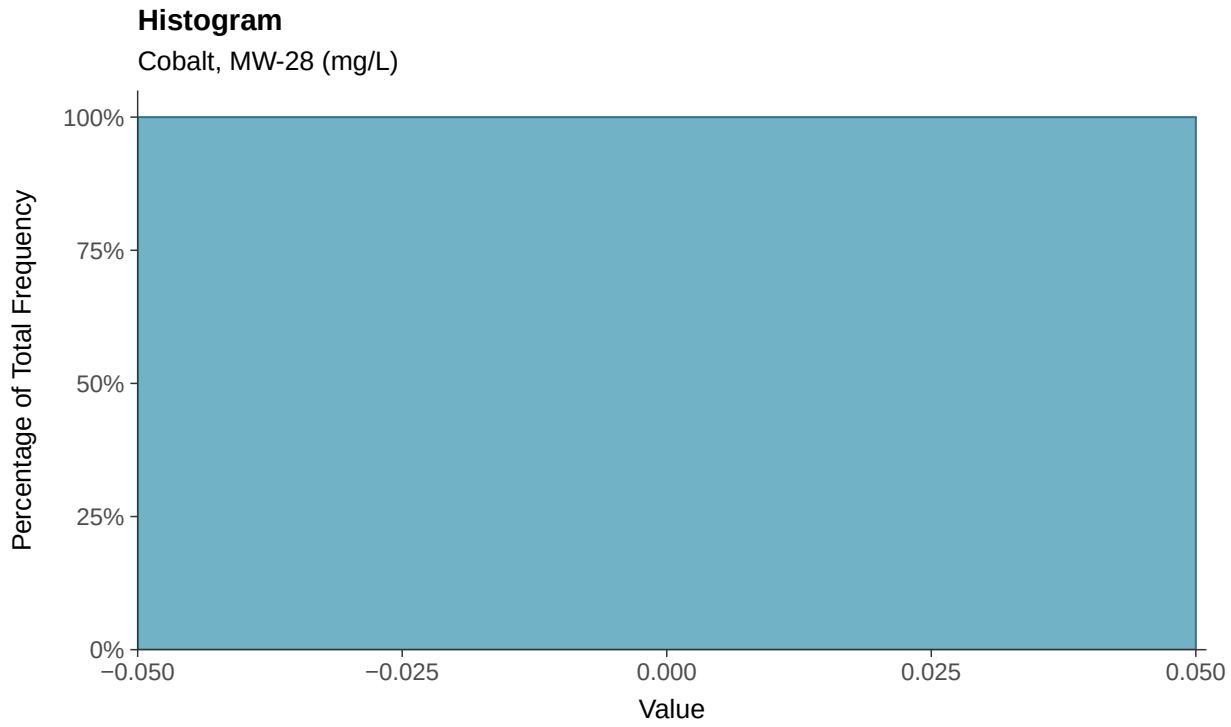
Chromium, Total, MW-28 (mg/L)



Appendix IV: Cobalt, MW-28

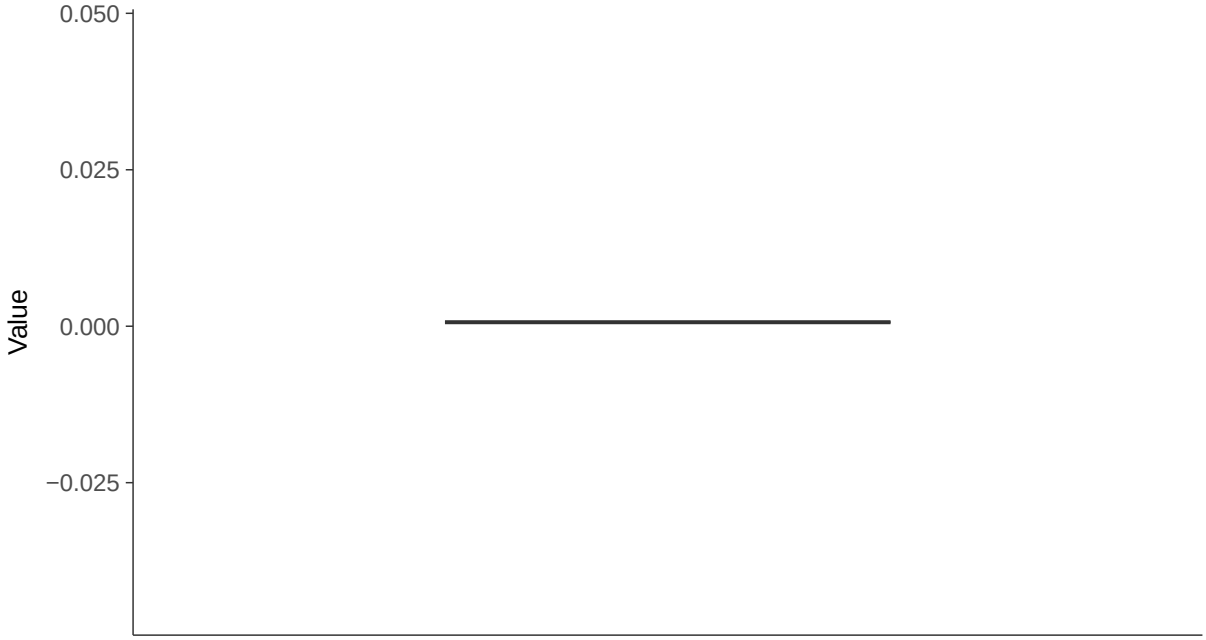
ID: 1_38_5_110





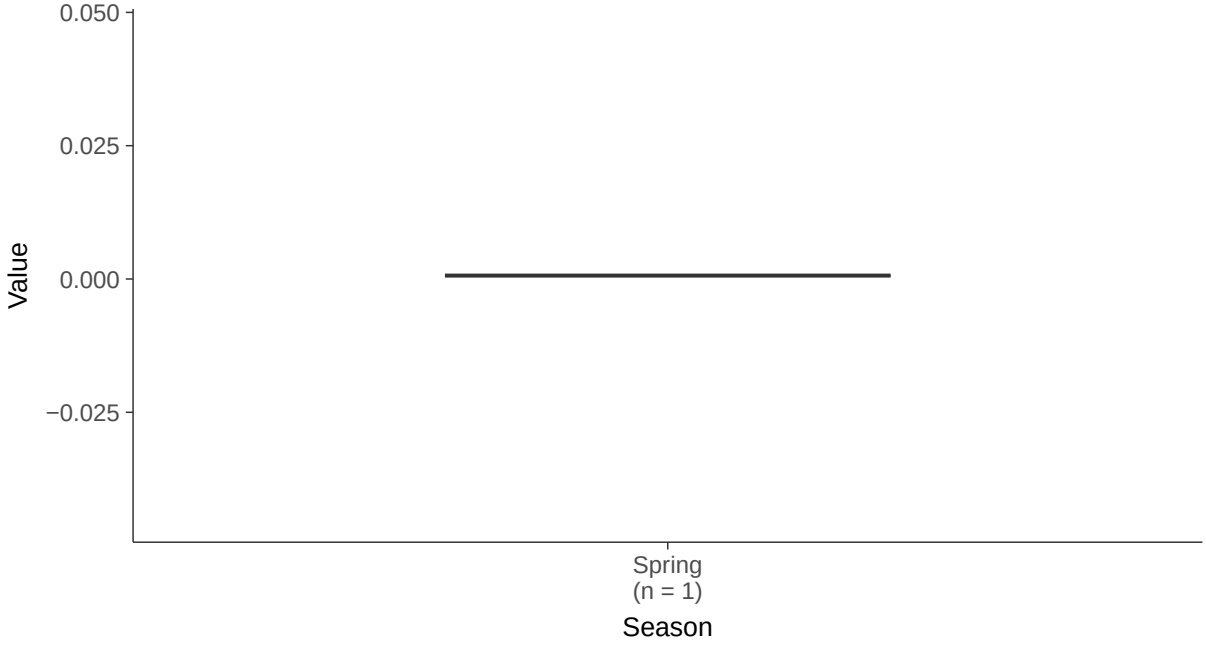
Boxplot

Cobalt, MW-28 (mg/L)



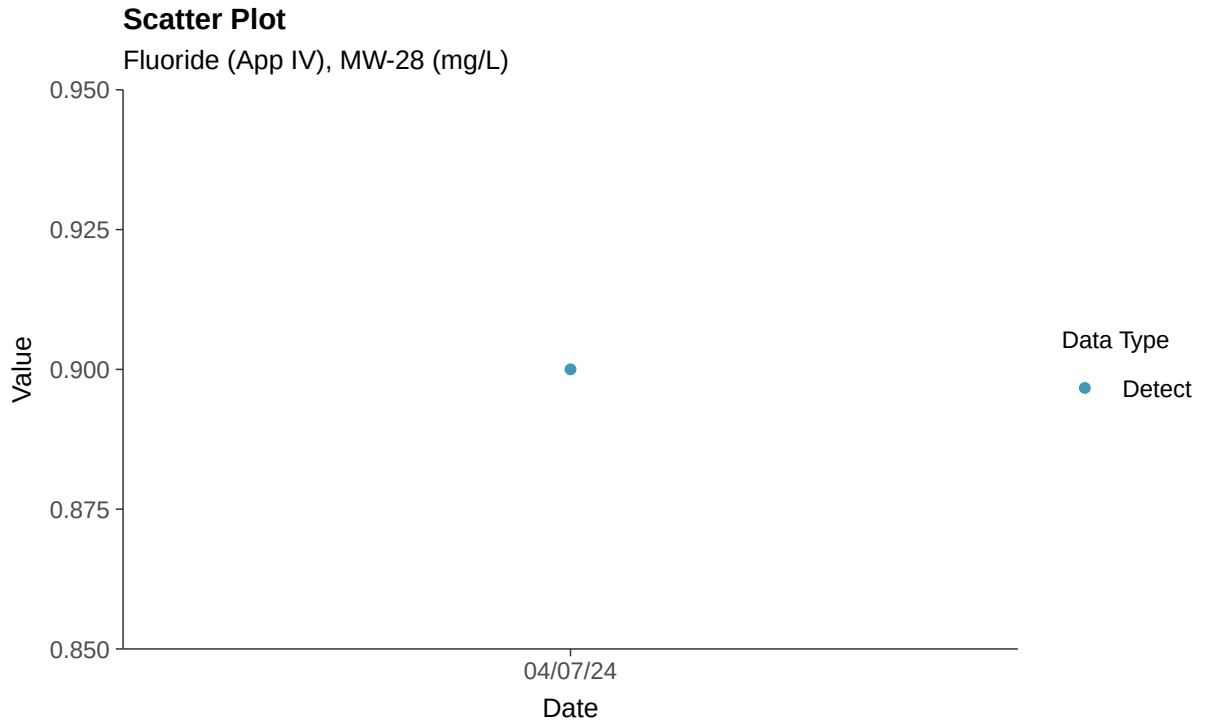
Boxplot by Season

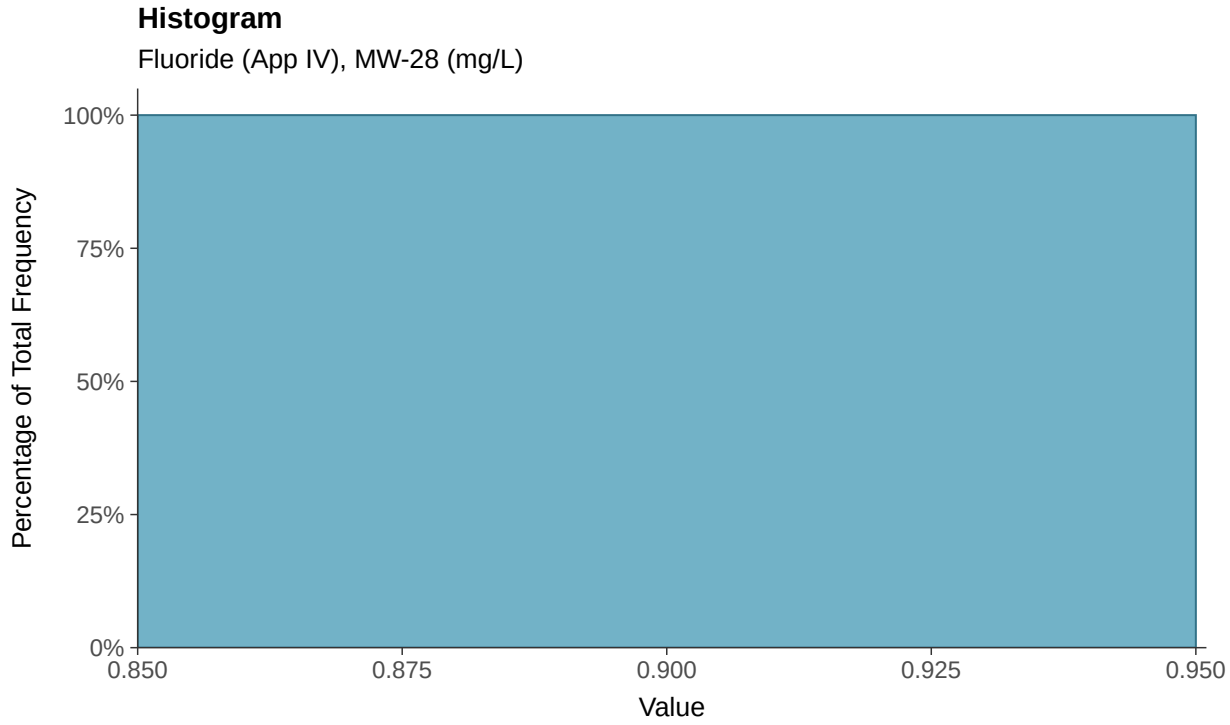
Cobalt, MW-28 (mg/L)



Appendix IV: Fluoride (App IV), MW-28

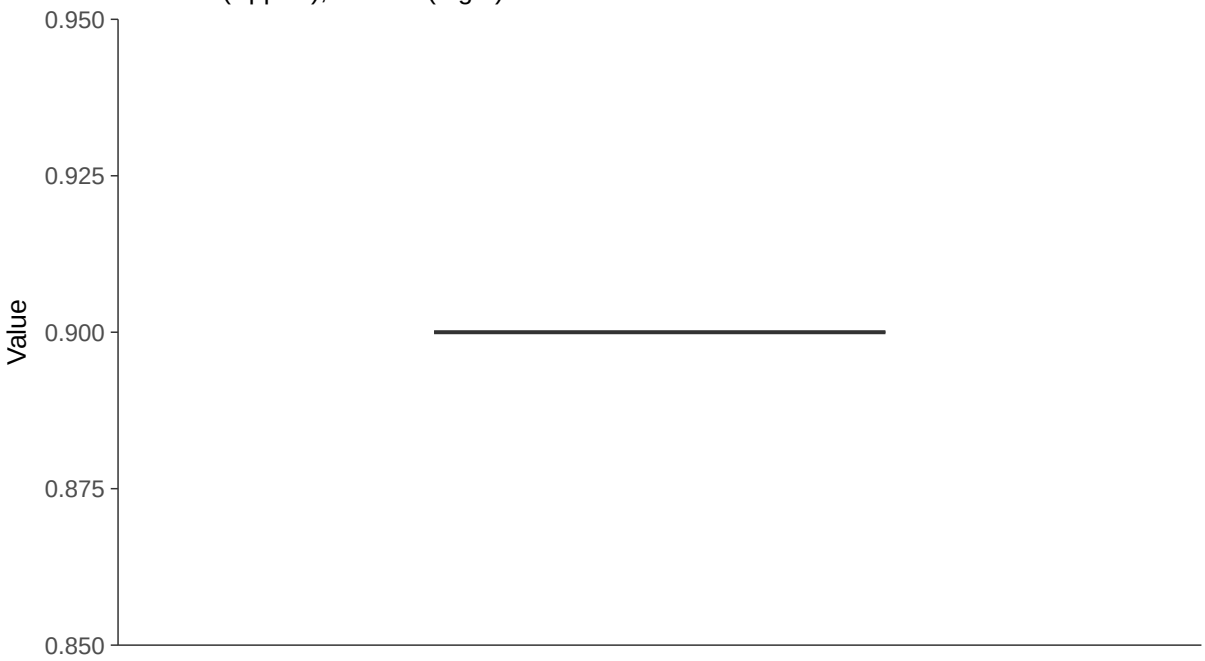
ID: 1_38_5_113





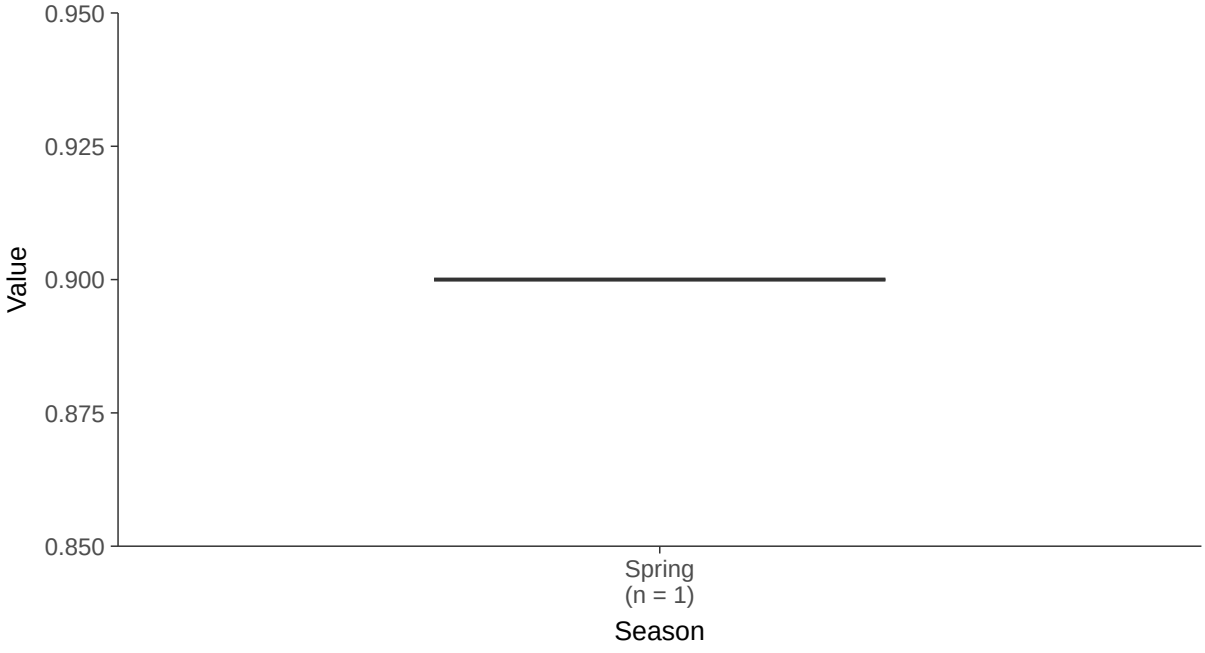
Boxplot

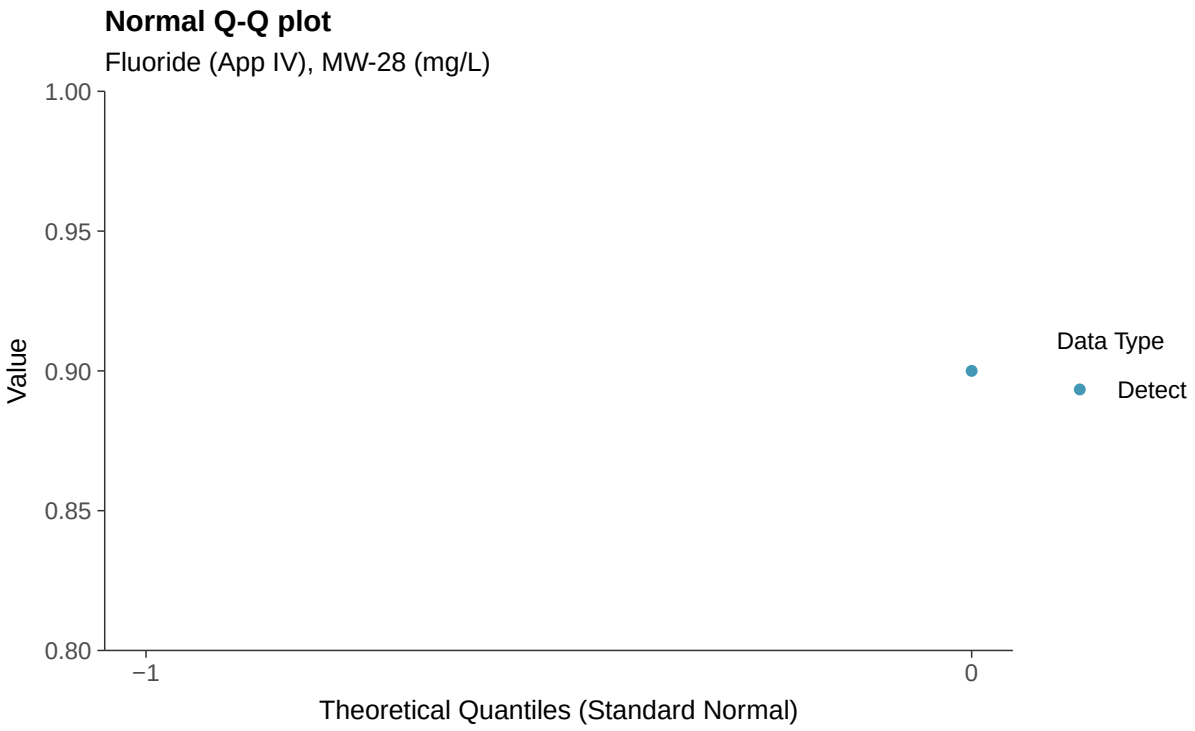
Fluoride (App IV), MW-28 (mg/L)



Boxplot by Season

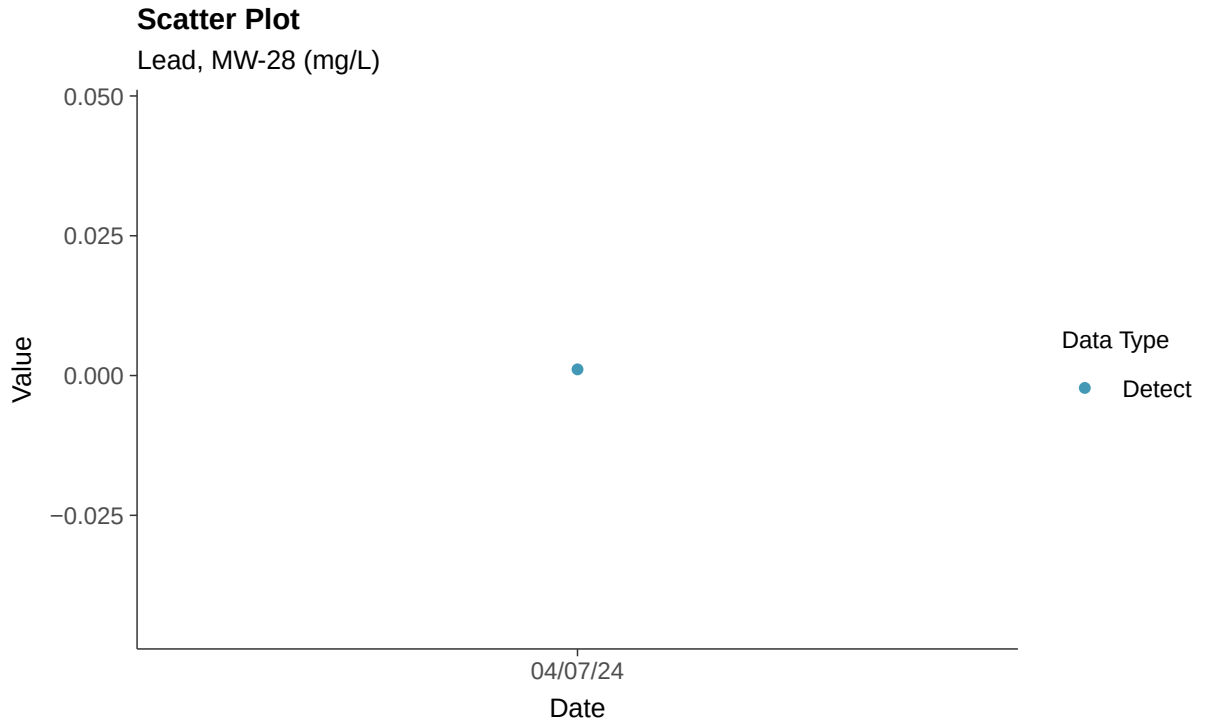
Fluoride (App IV), MW-28 (mg/L)

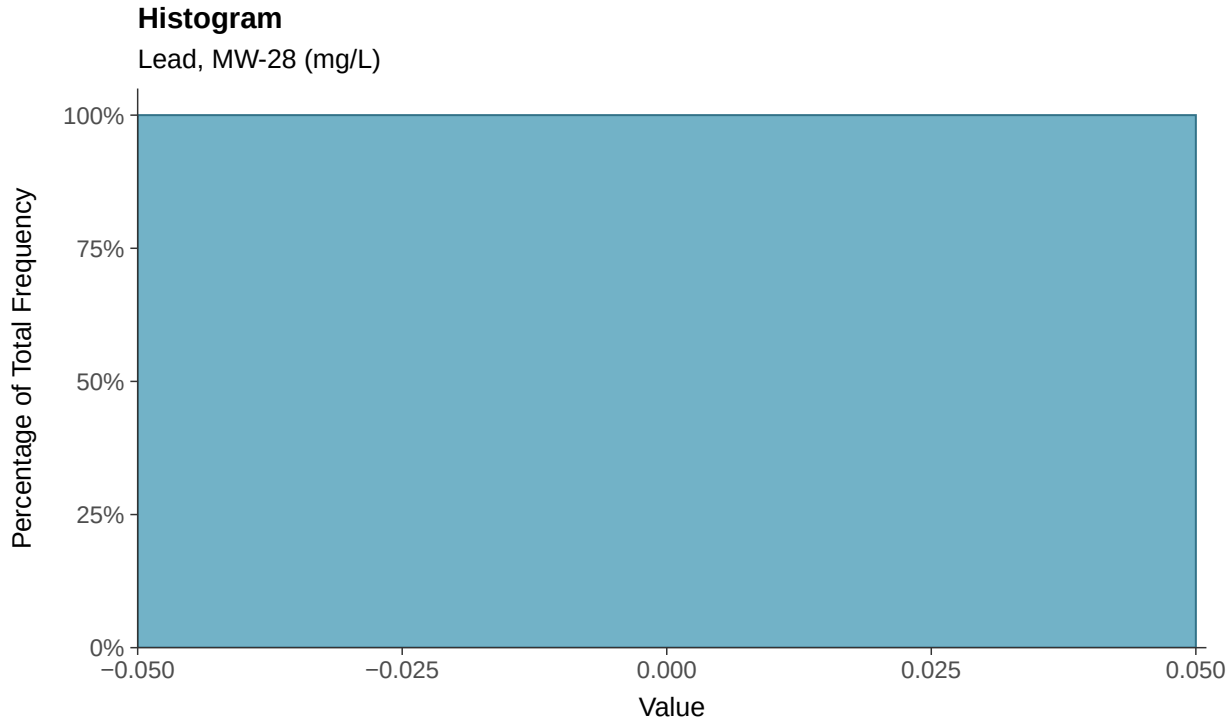



Normal Q-Q plot
Fluoride (App IV), MW-28 (mg/L)
1.00
0.95
0.90
0.85
0.80
Value
−1
0
Theoretical Quantiles (Standard Normal)
Data Type
Detect

Appendix IV: Lead, MW-28

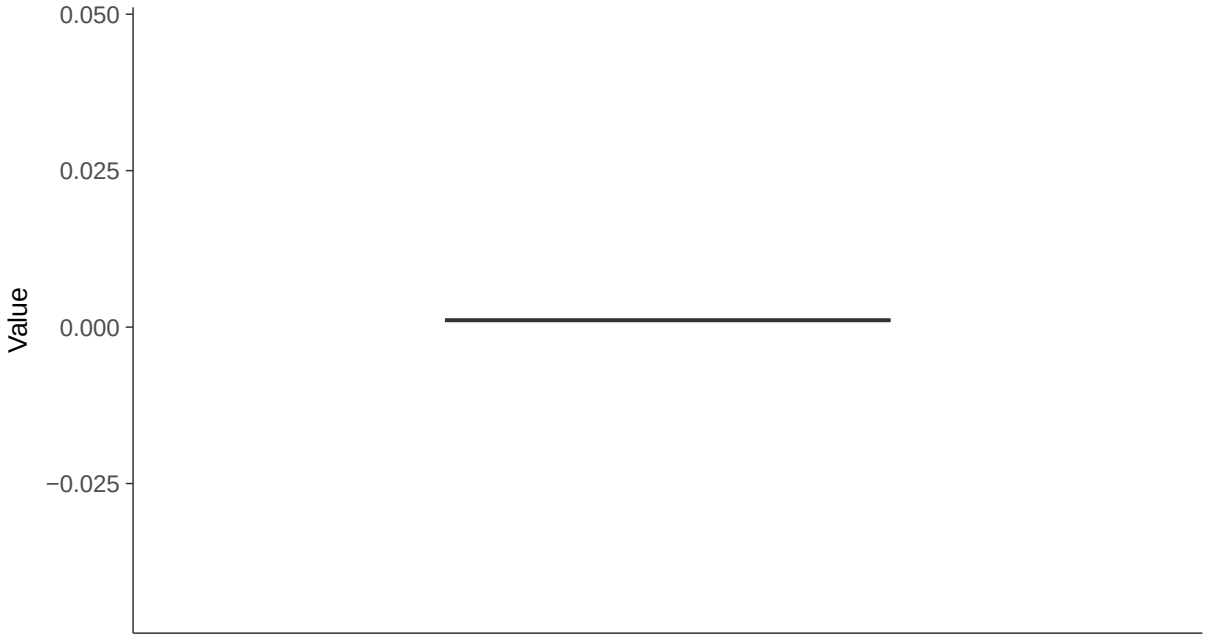
ID: 1_38_5_115





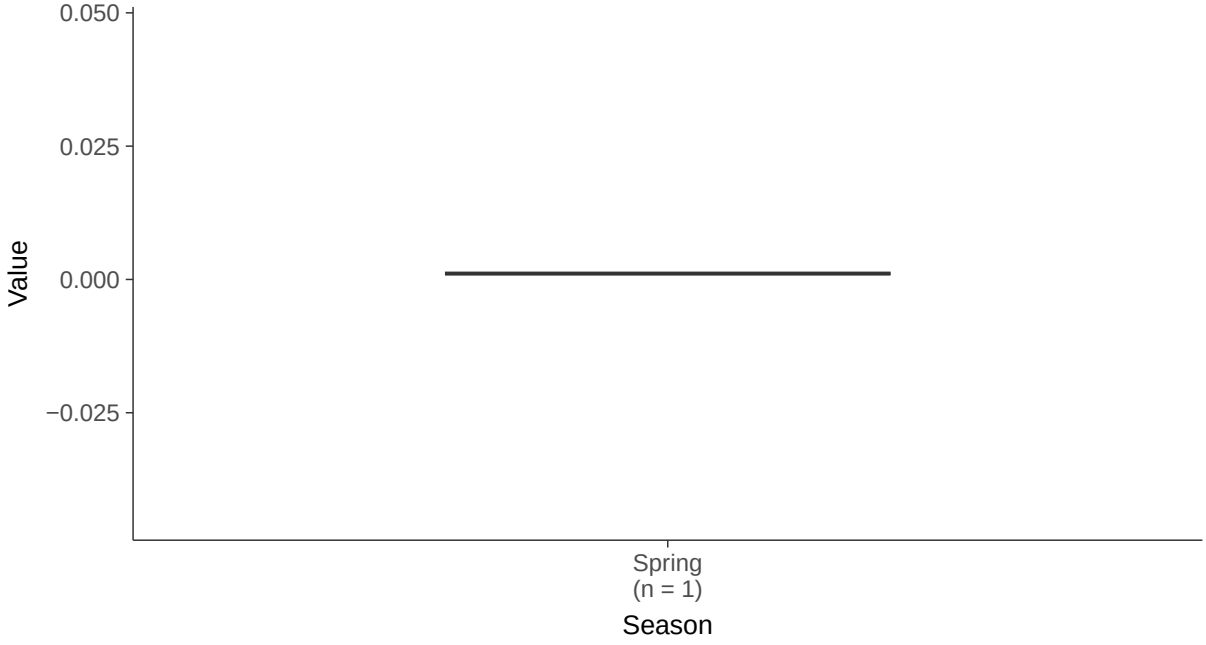
Boxplot

Lead, MW-28 (mg/L)



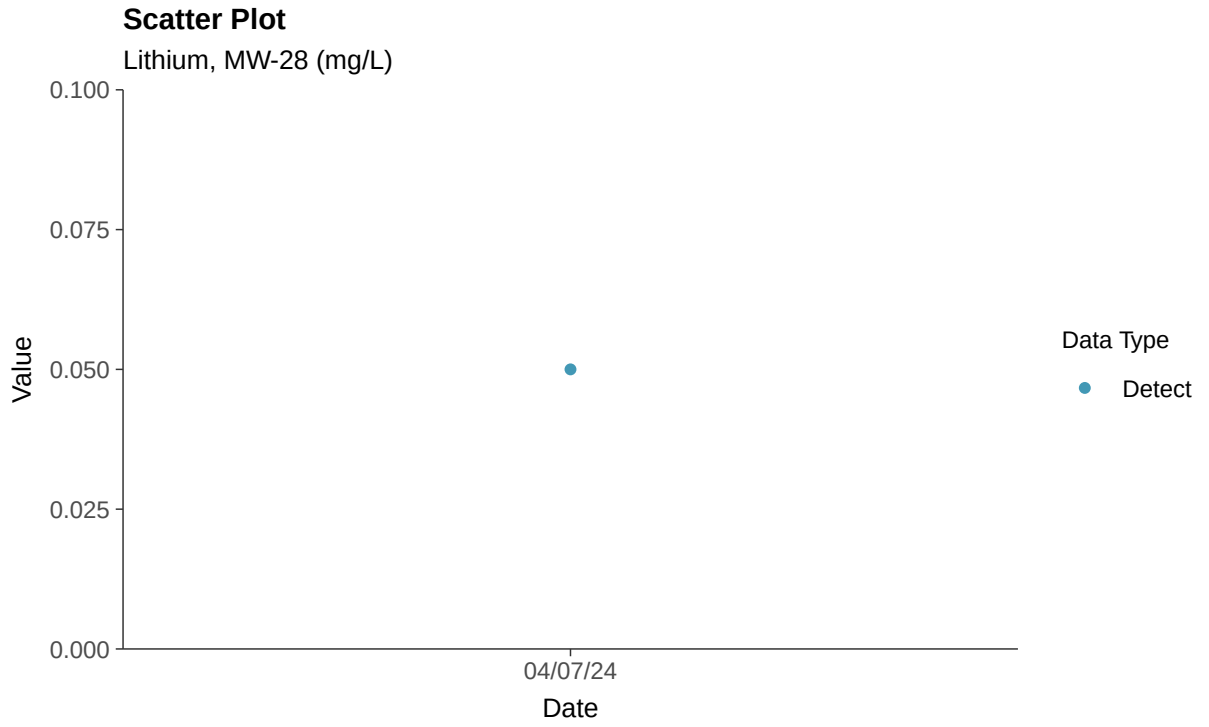
Boxplot by Season

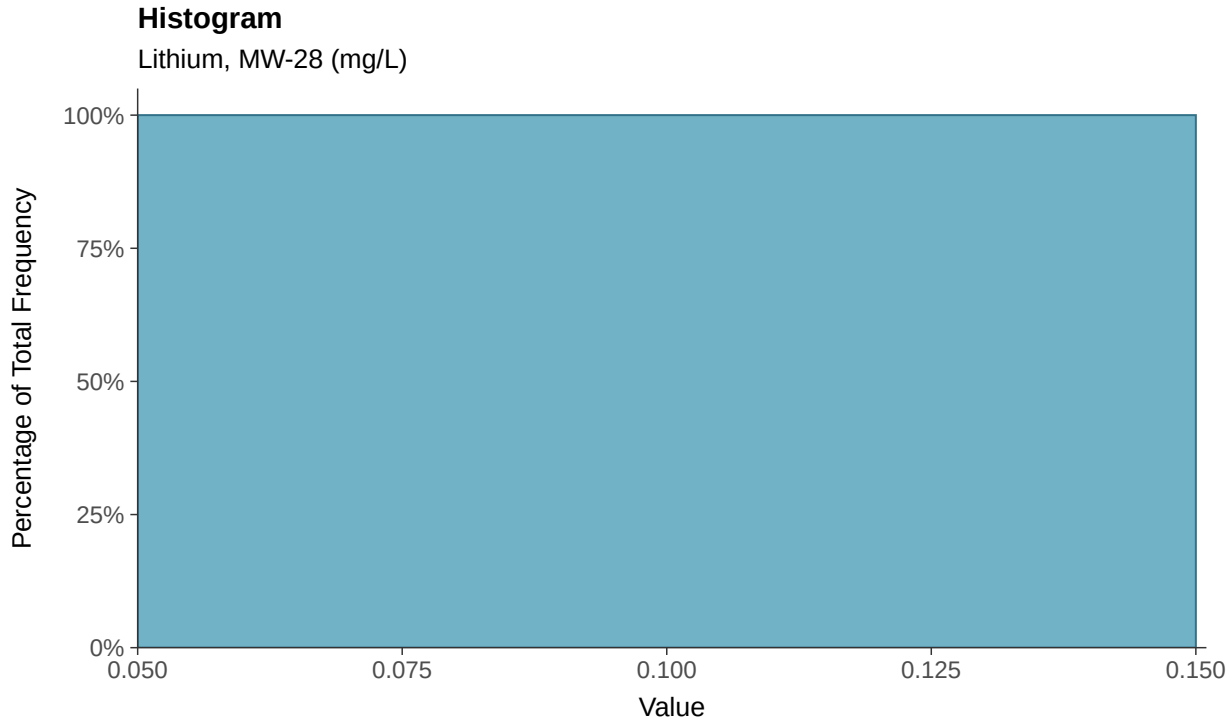
Lead, MW-28 (mg/L)



Appendix IV: Lithium, MW-28

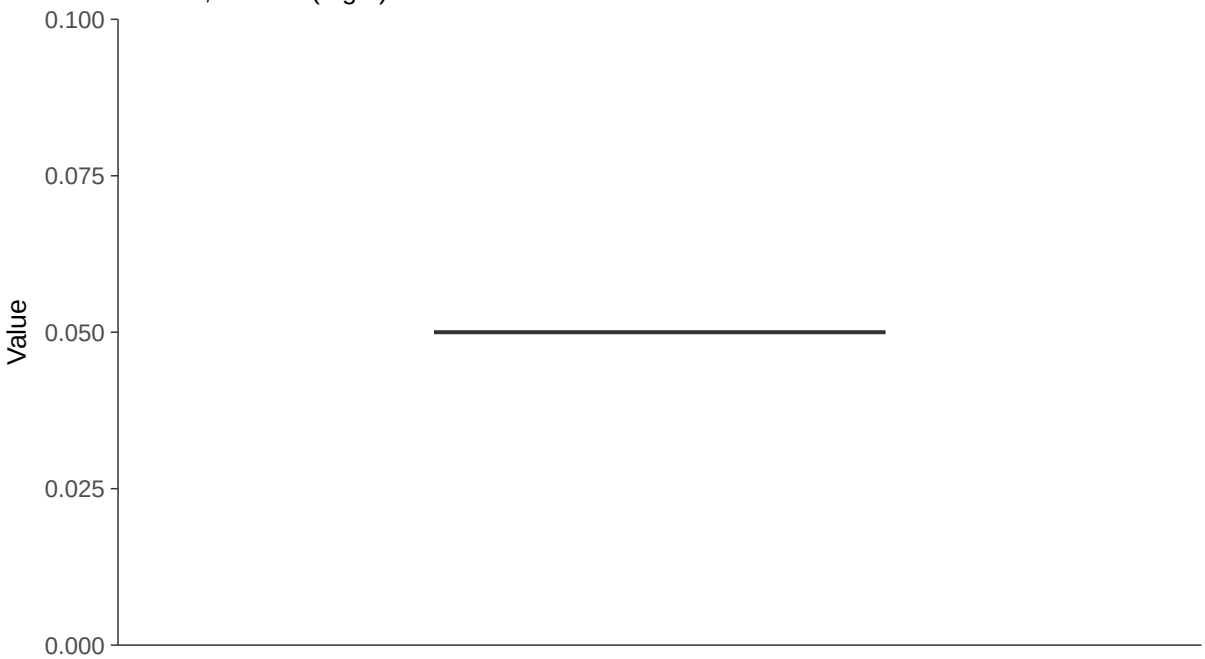
ID: 1_38_5_116





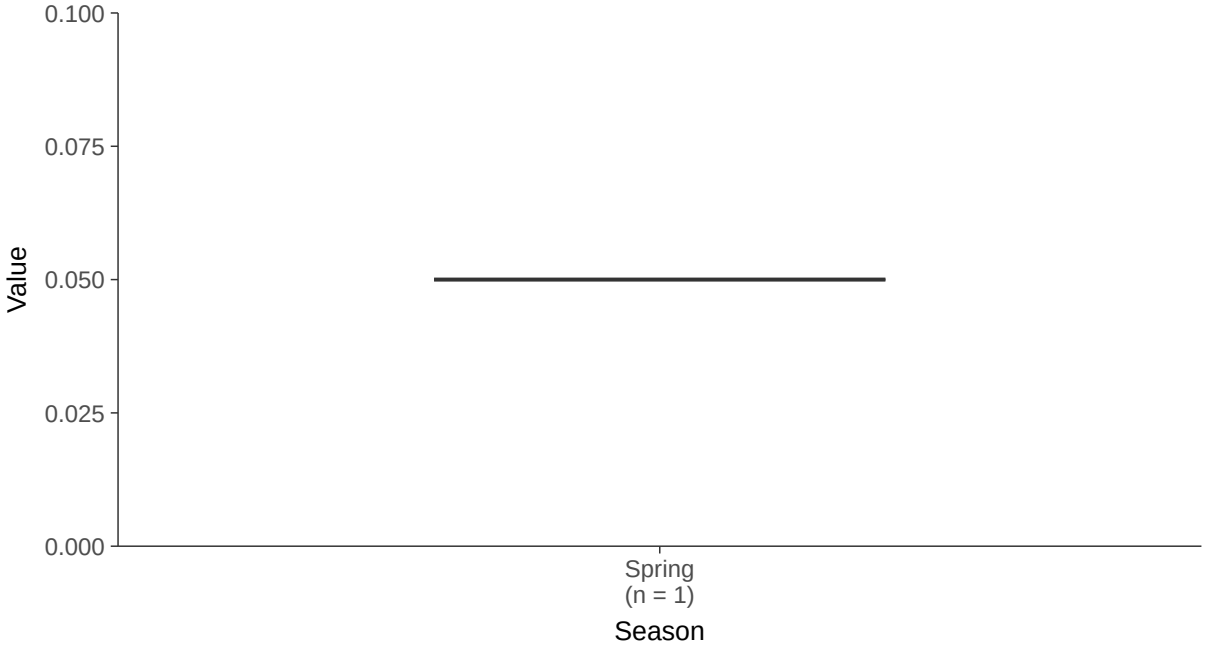
Boxplot

Lithium, MW-28 (mg/L)



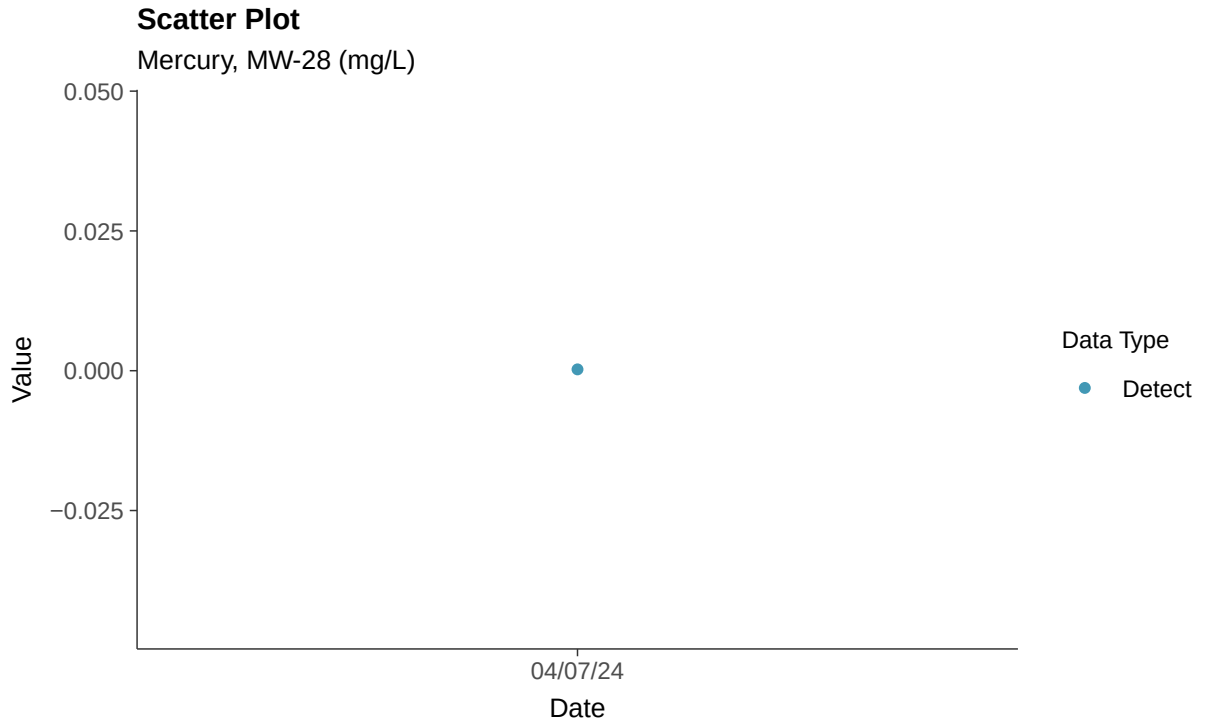
Boxplot by Season

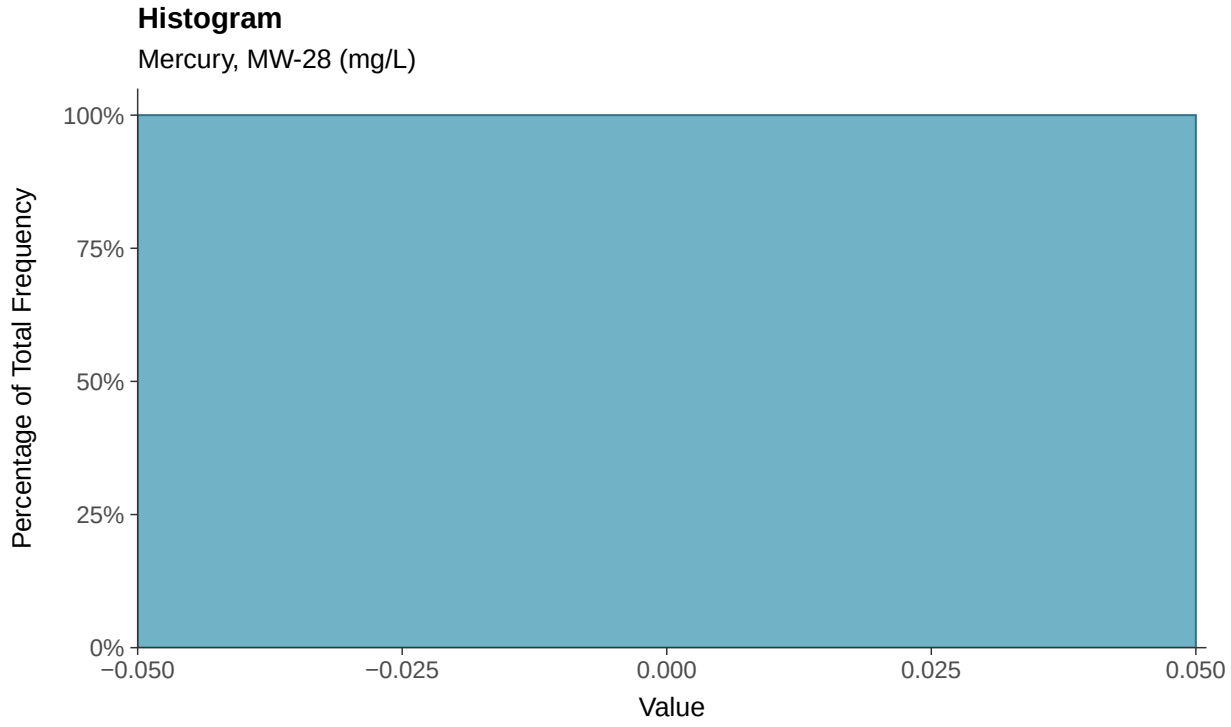
Lithium, MW-28 (mg/L)



Appendix IV: Mercury, MW-28

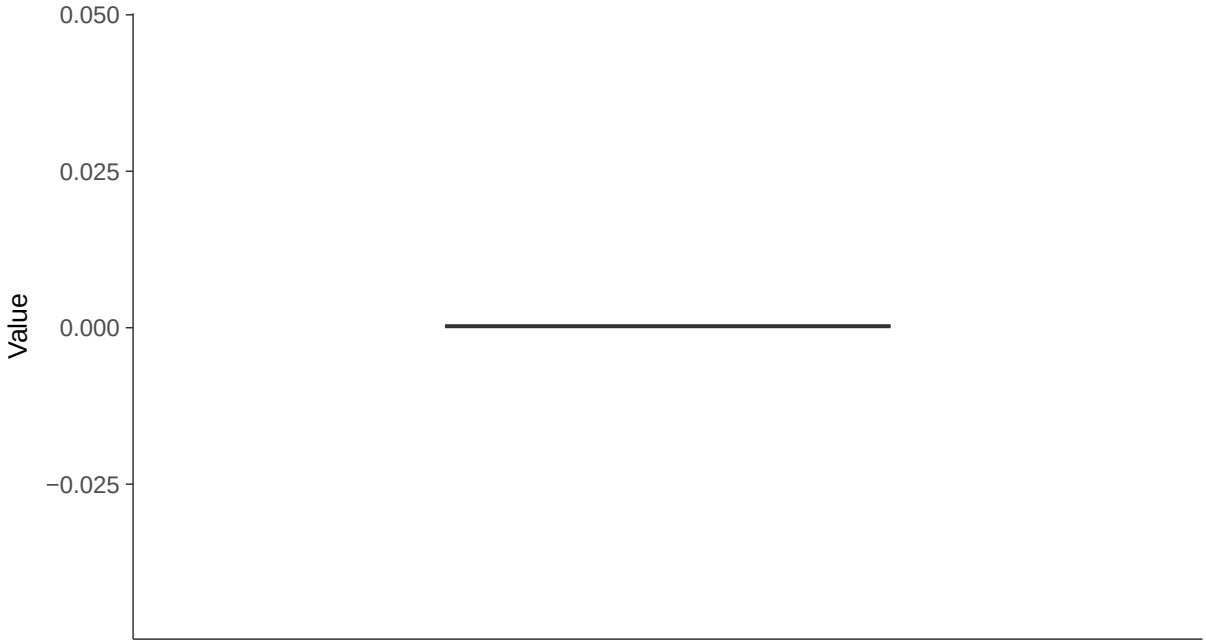
ID: 1_38_5_117





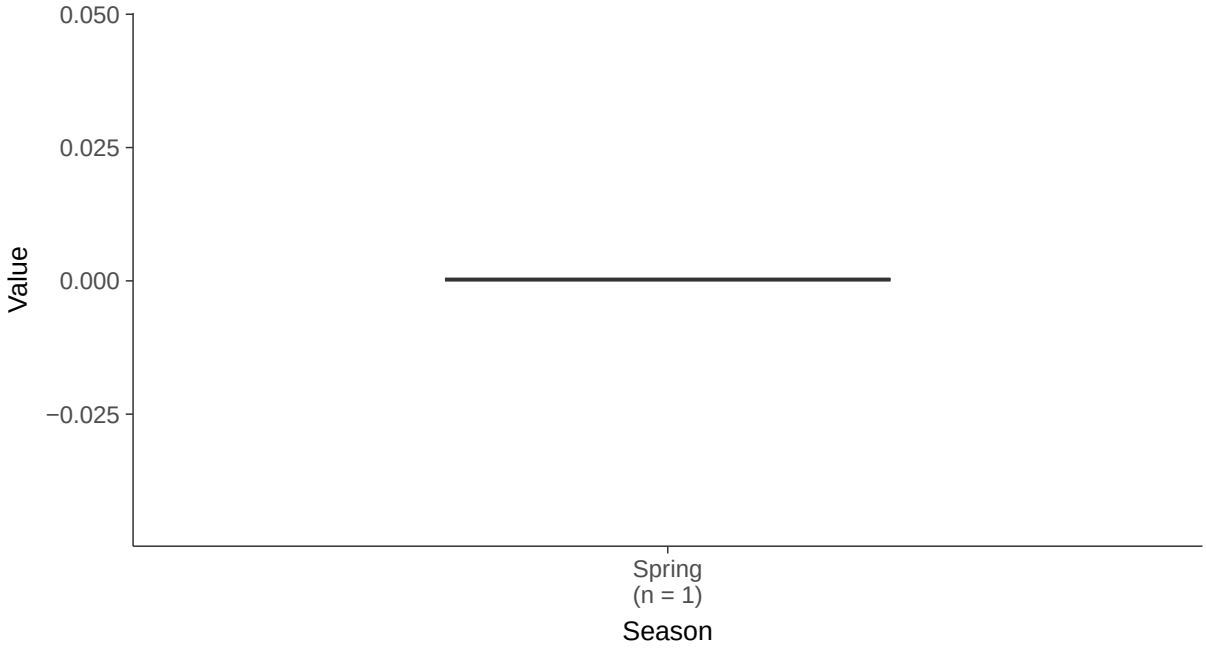
Boxplot

Mercury, MW-28 (mg/L)



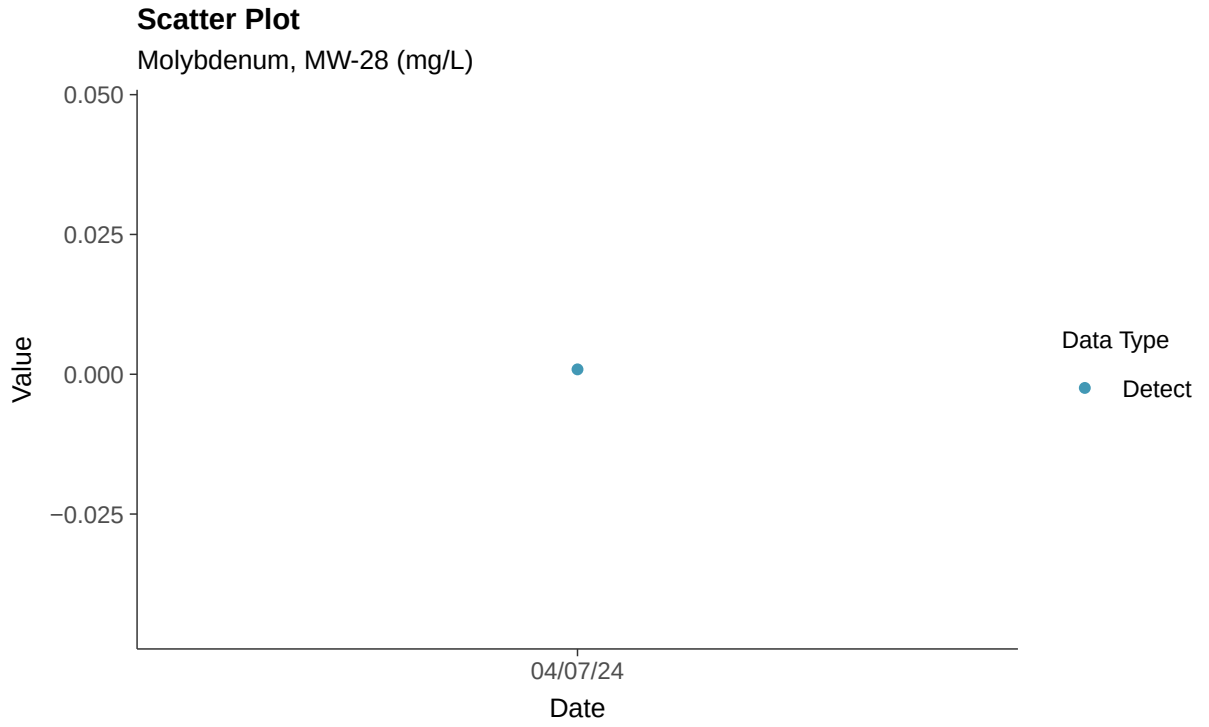
Boxplot by Season

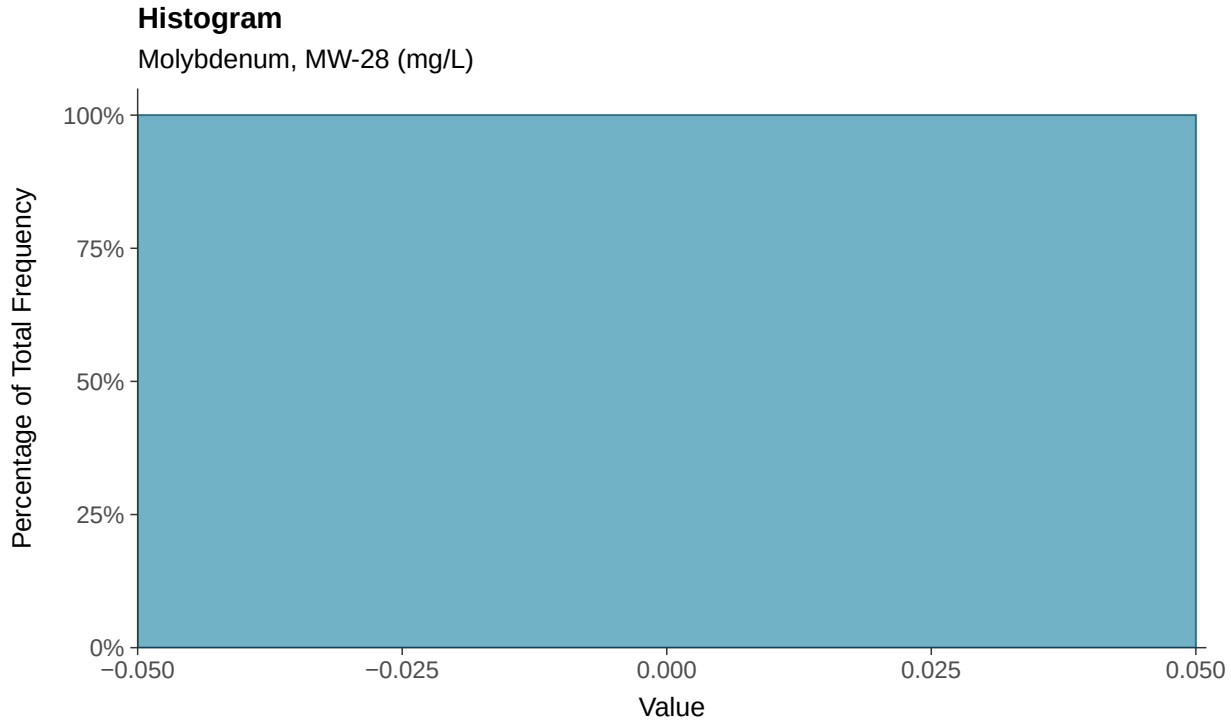
Mercury, MW-28 (mg/L)



Appendix IV: Molybdenum, MW-28

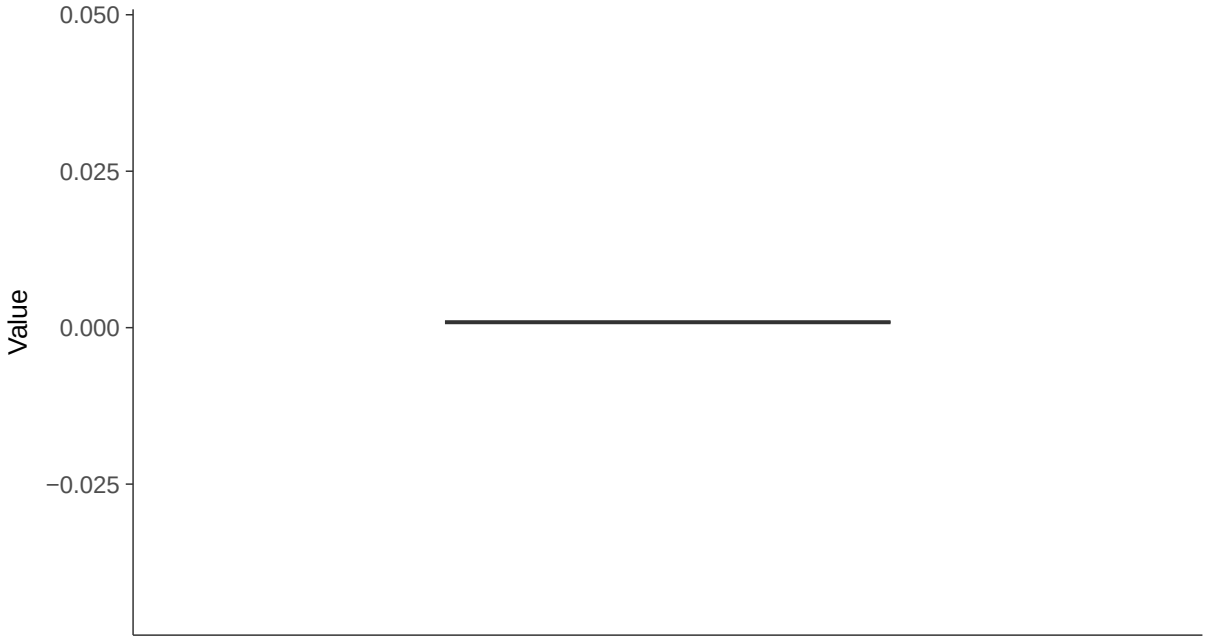
ID: 1_38_5_118





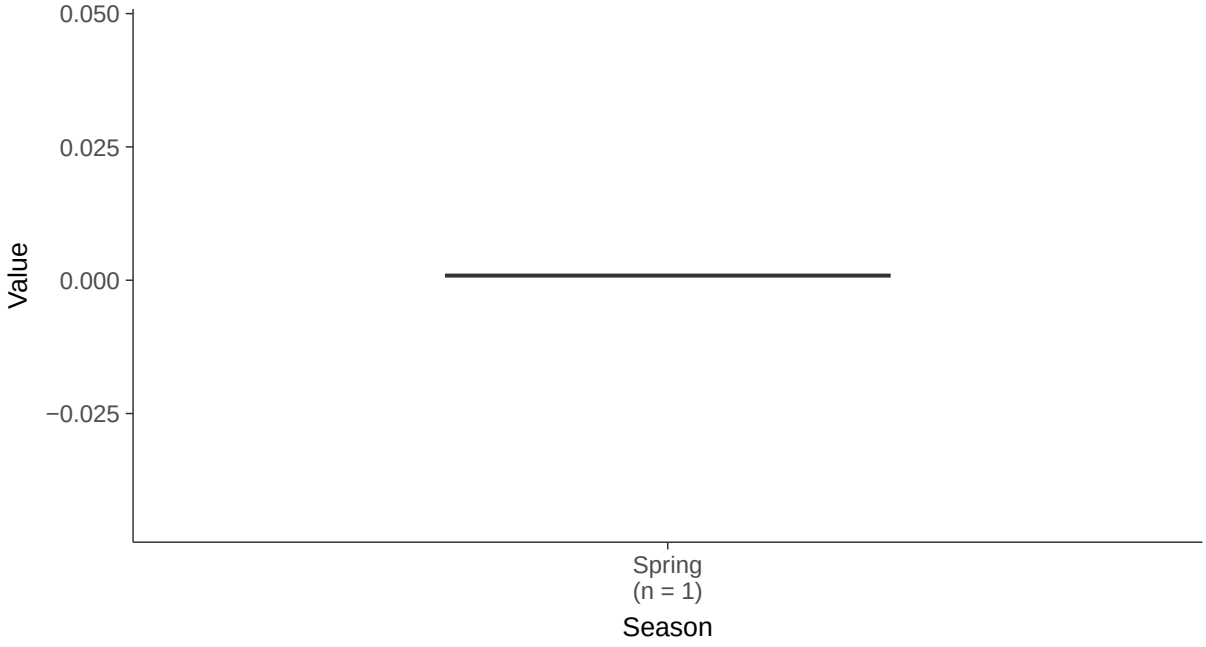
Boxplot

Molybdenum, MW-28 (mg/L)



Boxplot by Season

Molybdenum, MW-28 (mg/L)

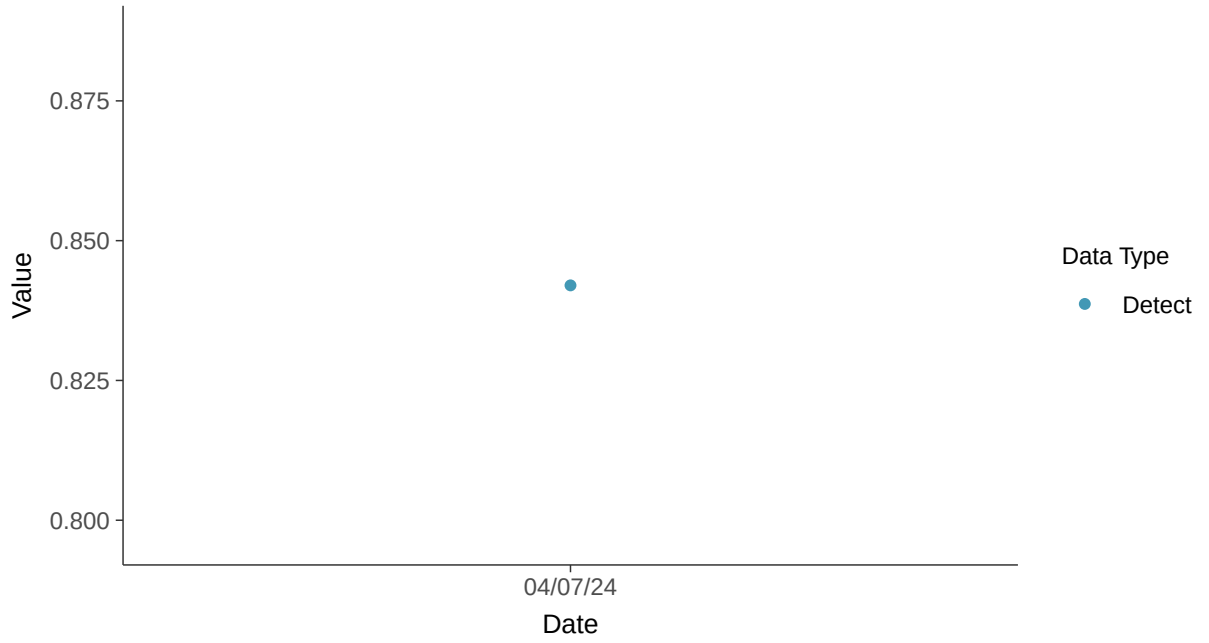


Appendix IV: Radium 226 and 228, MW-28

ID: 1_38_5_121

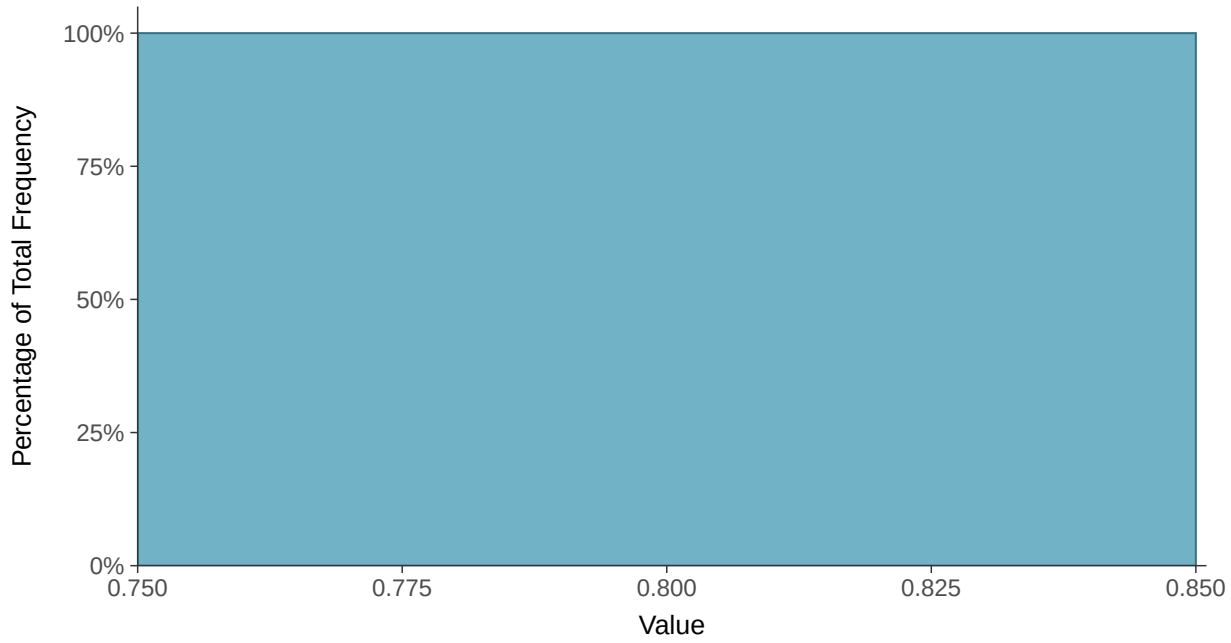
Scatter Plot

Radium 226 and 228, MW-28 (pCi/L)



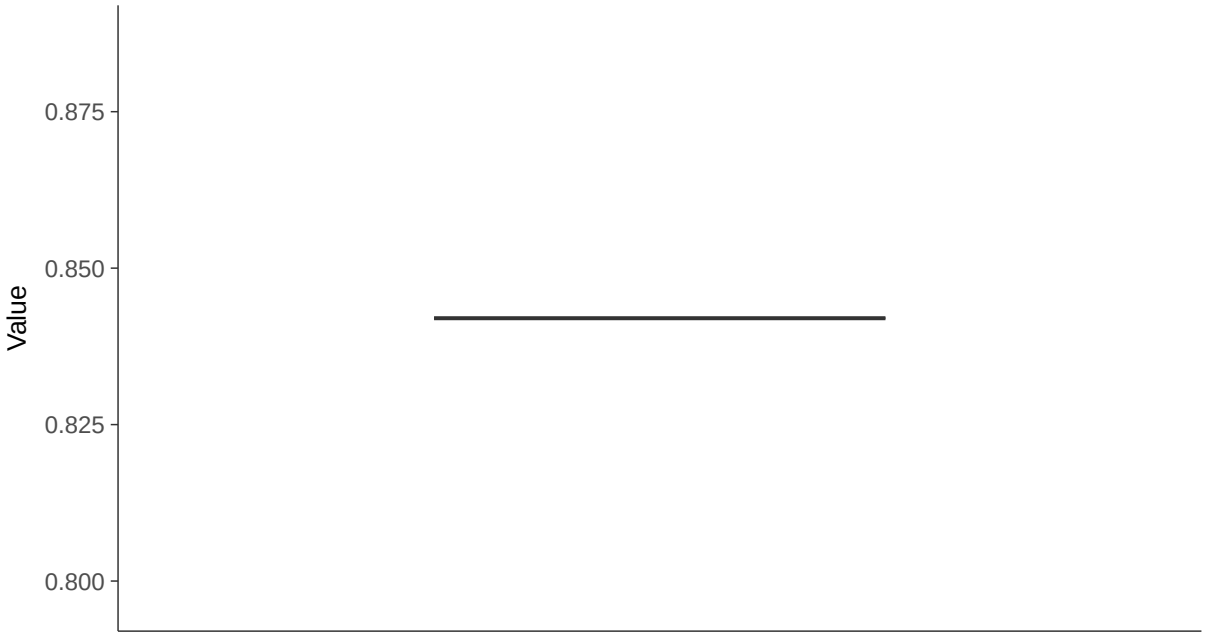
Histogram

Radium 226 and 228, MW-28 (pCi/L)



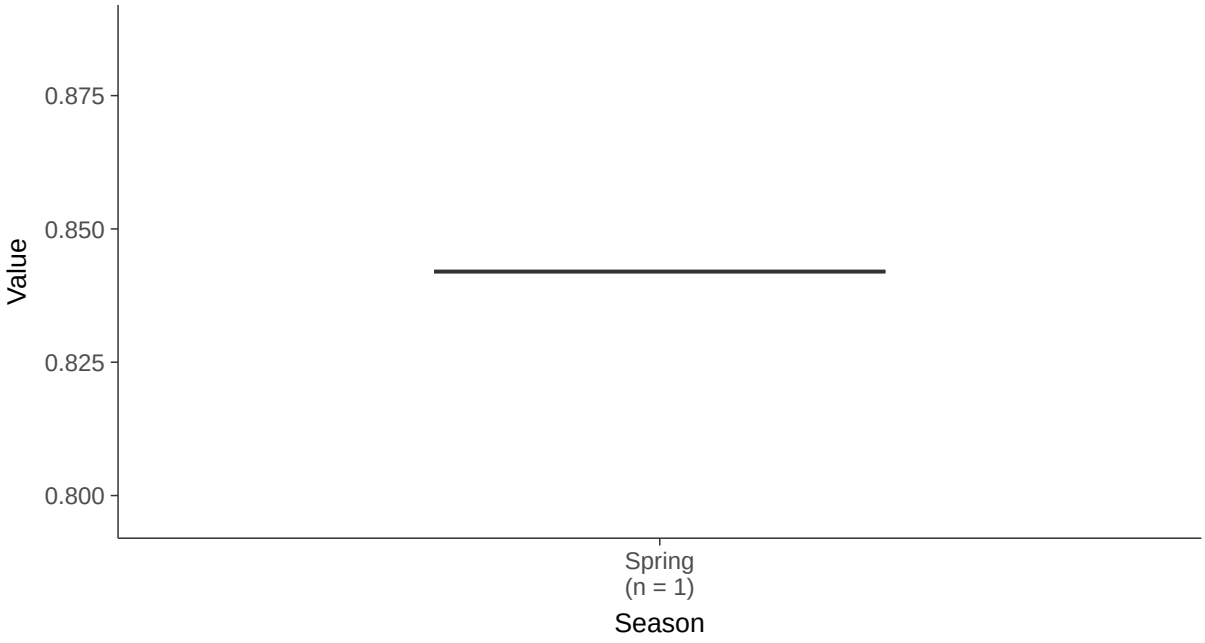
Boxplot

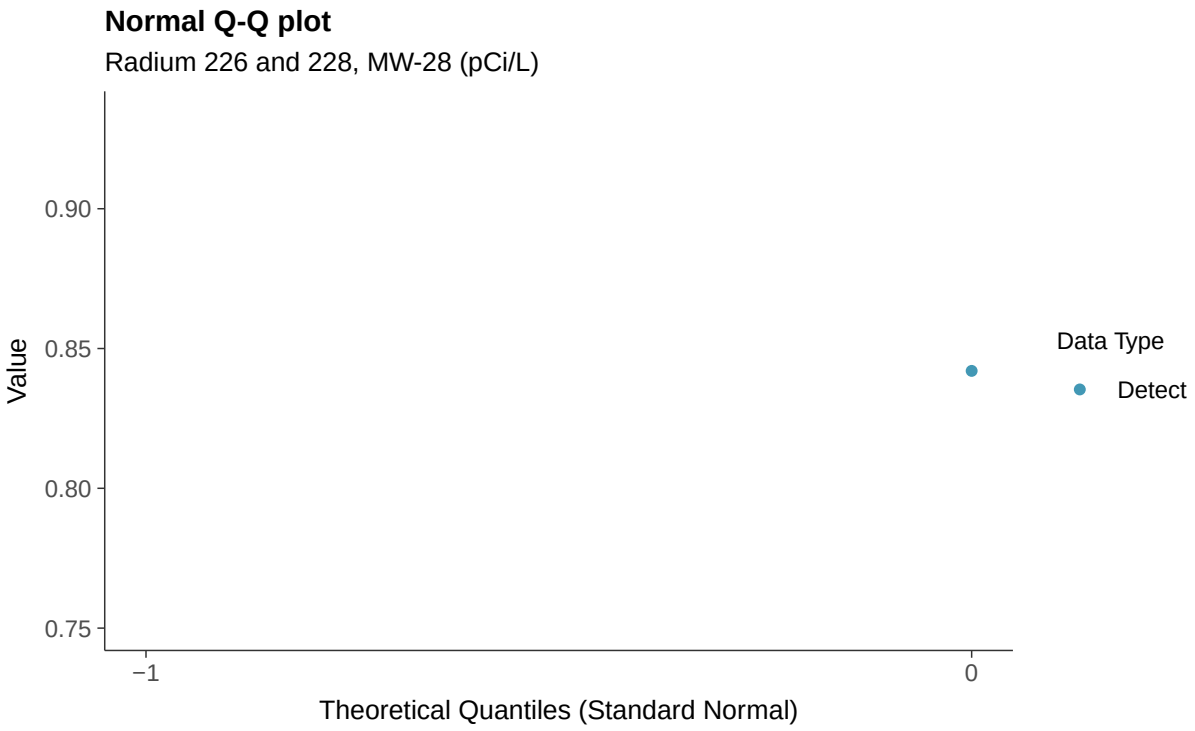
Radium 226 and 228, MW-28 (pCi/L)



Boxplot by Season

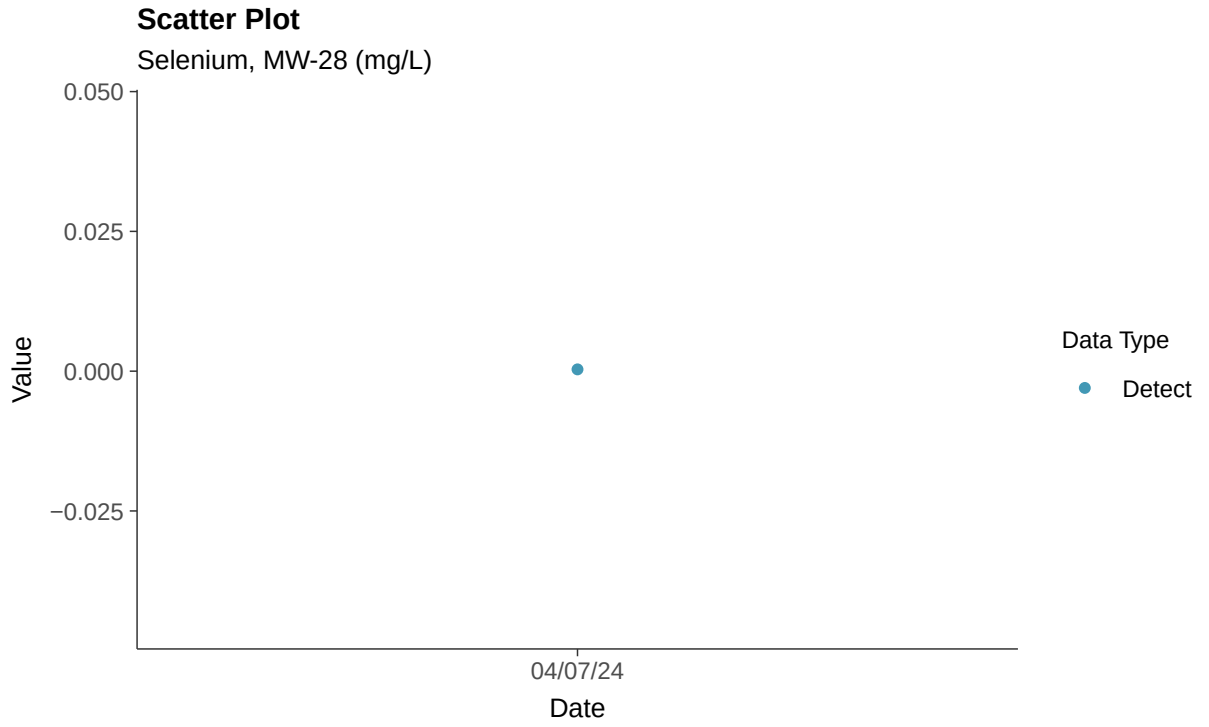
Radium 226 and 228, MW-28 (pCi/L)

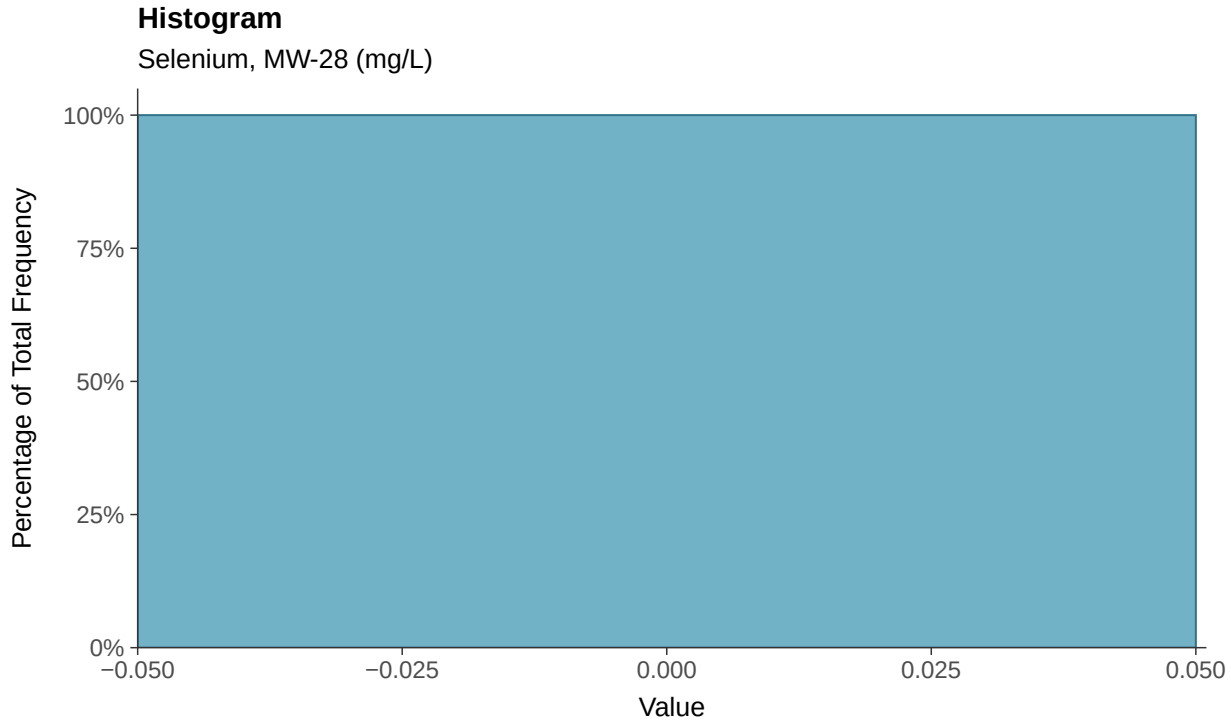



Normal Q-Q plot
Radium 226 and 228, MW-28 (pCi/L)
Value
0.90
0.85
0.80
0.75
−1
0
Theoretical Quantiles (Standard Normal)
Data Type
Detect

Appendix IV: Selenium, MW-28

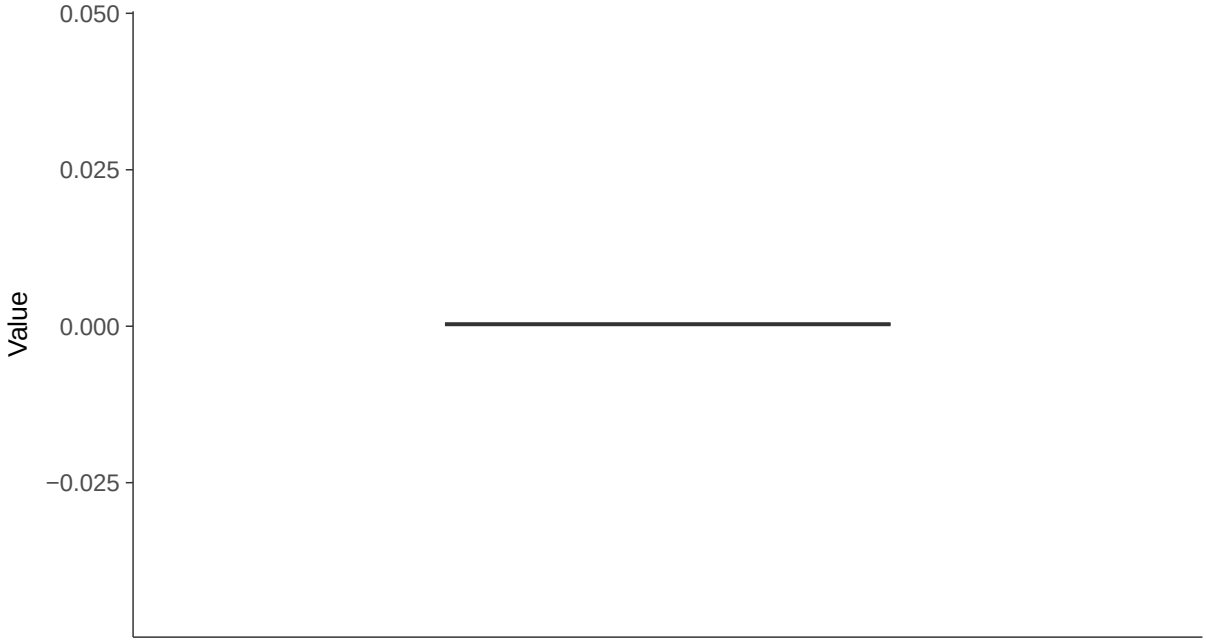
ID: 1_38_5_122





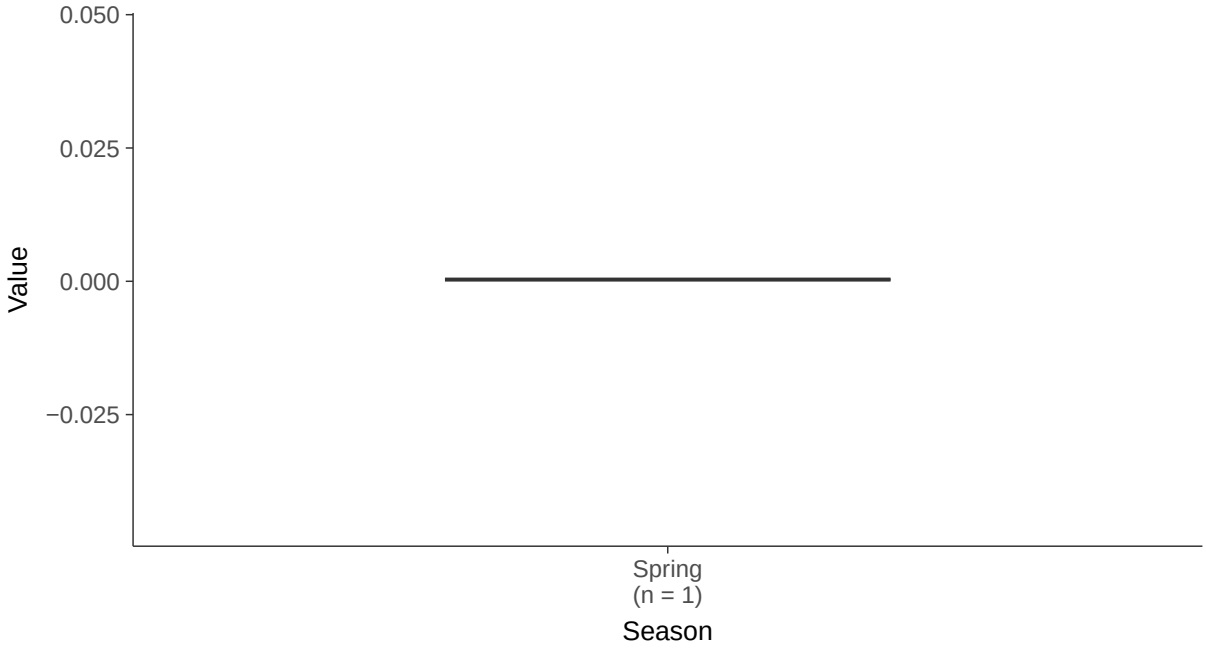
Boxplot

Selenium, MW-28 (mg/L)



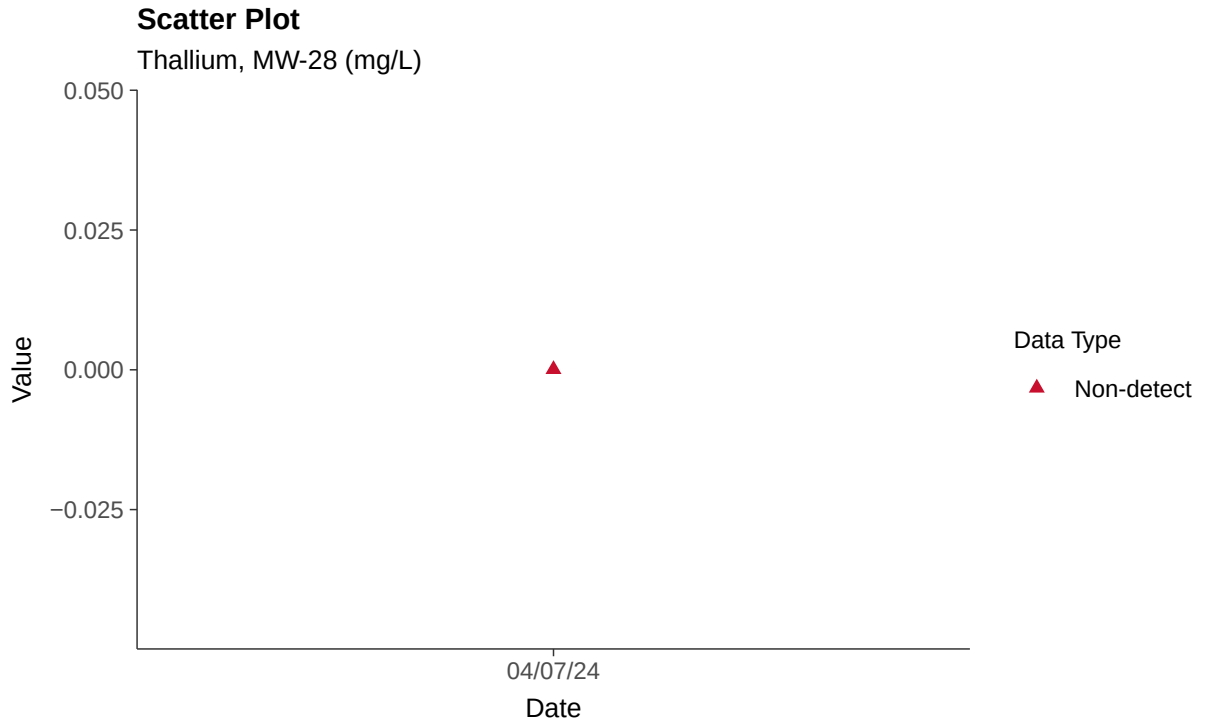
Boxplot by Season

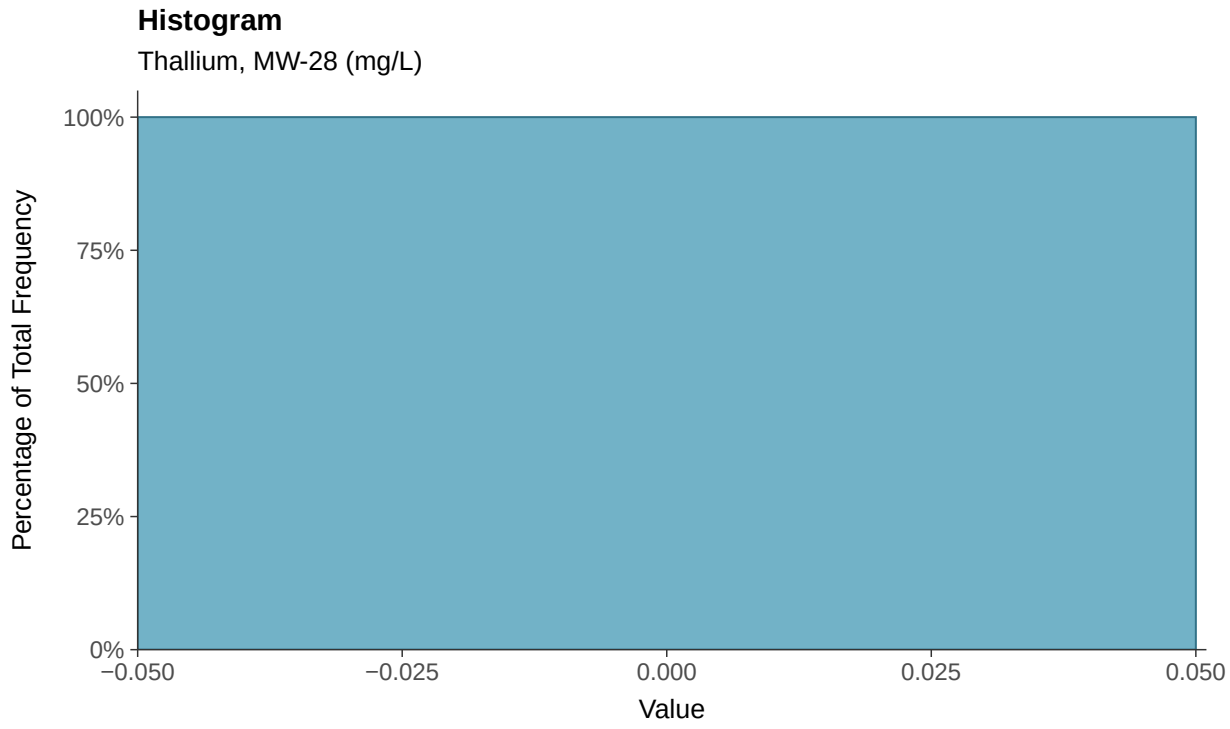
Selenium, MW-28 (mg/L)



Appendix IV: Thallium, MW-28

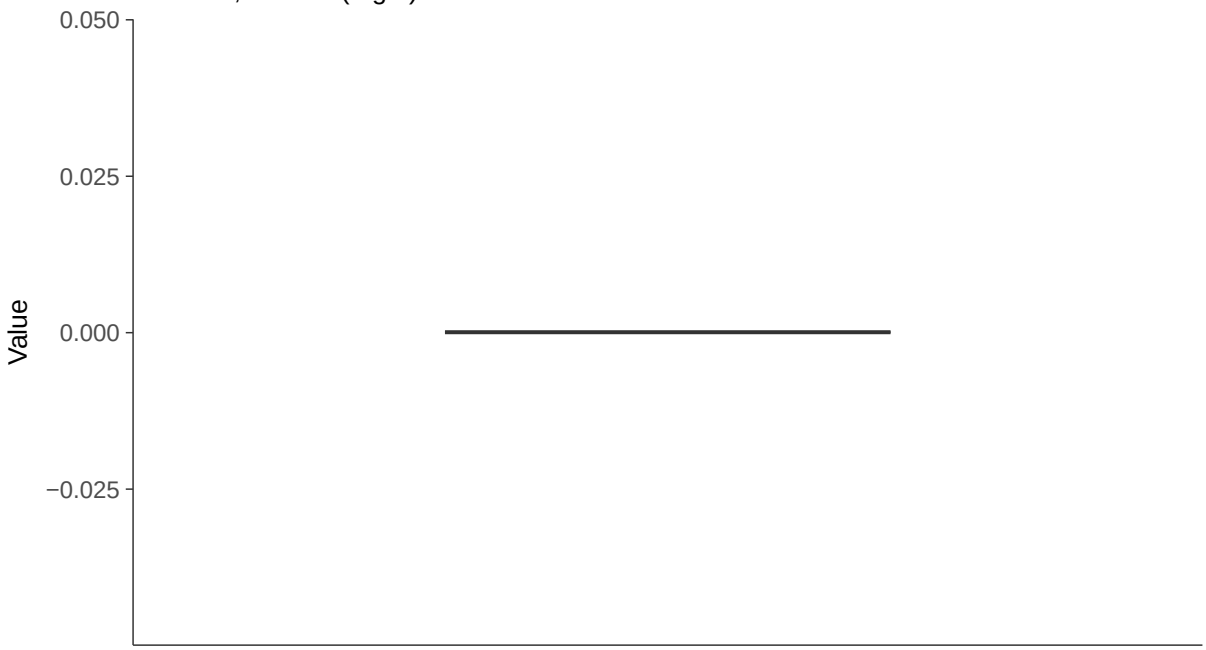
ID: 1_38_5_125





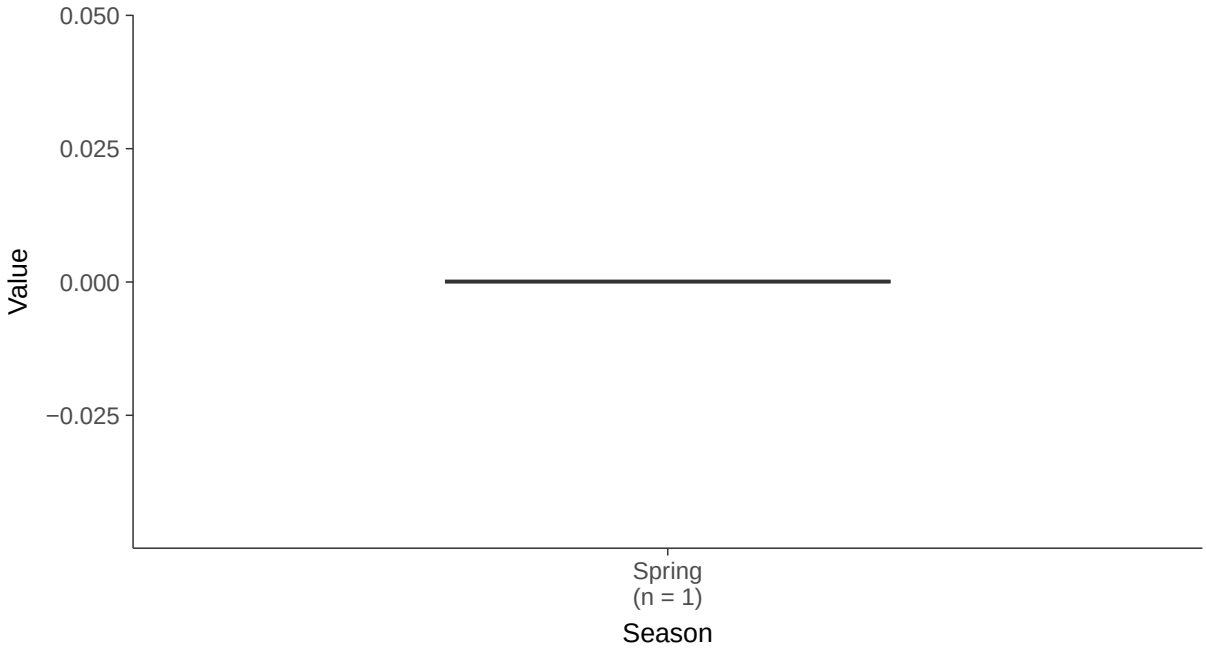
Boxplot

Thallium, MW-28 (mg/L)



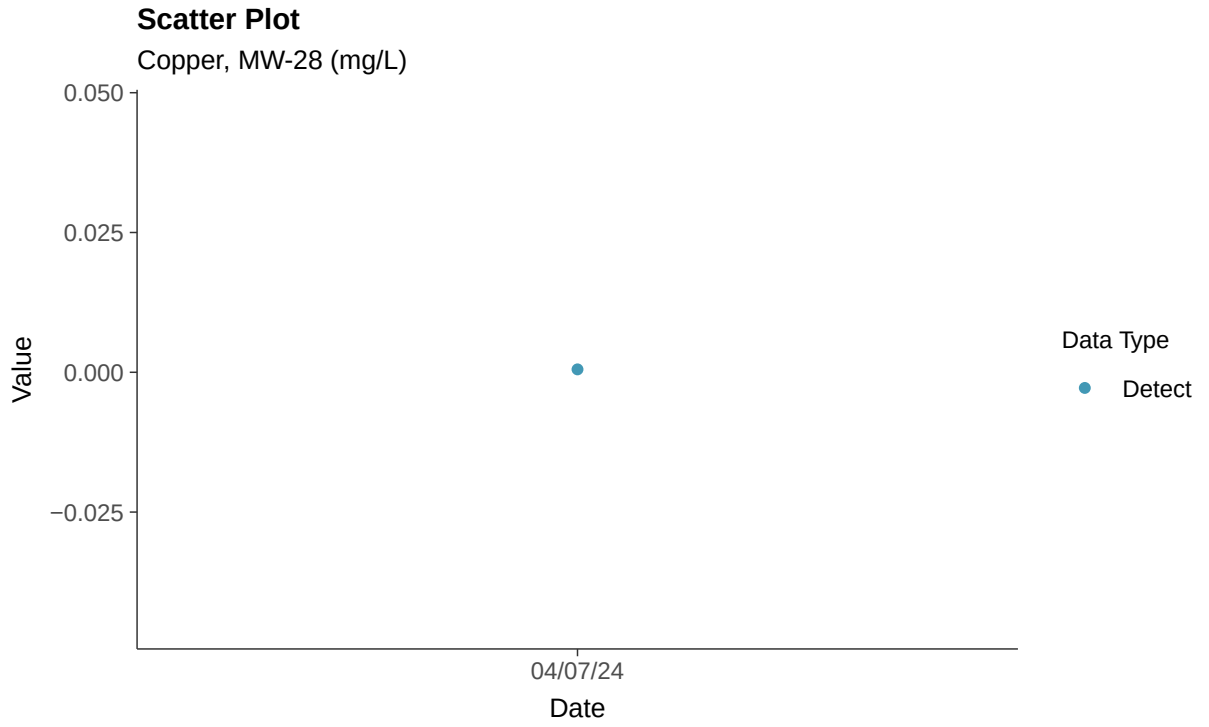
Boxplot by Season

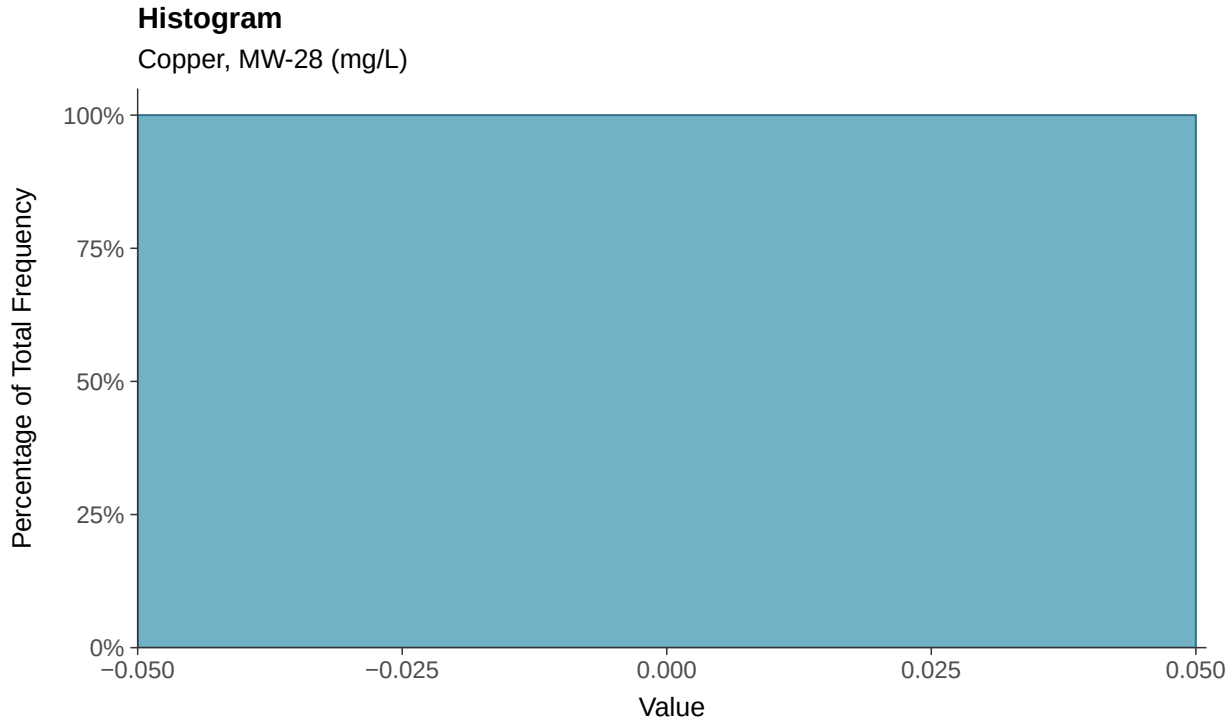
Thallium, MW-28 (mg/L)



Part 115: Copper, MW-28

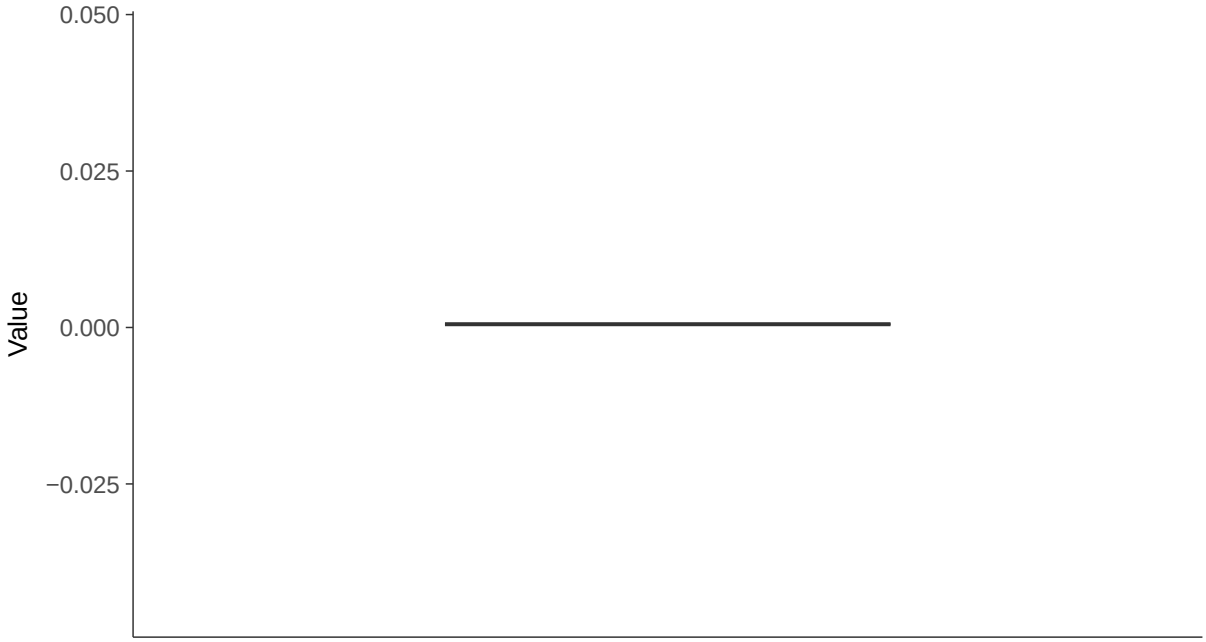
ID: 1_38_6_111





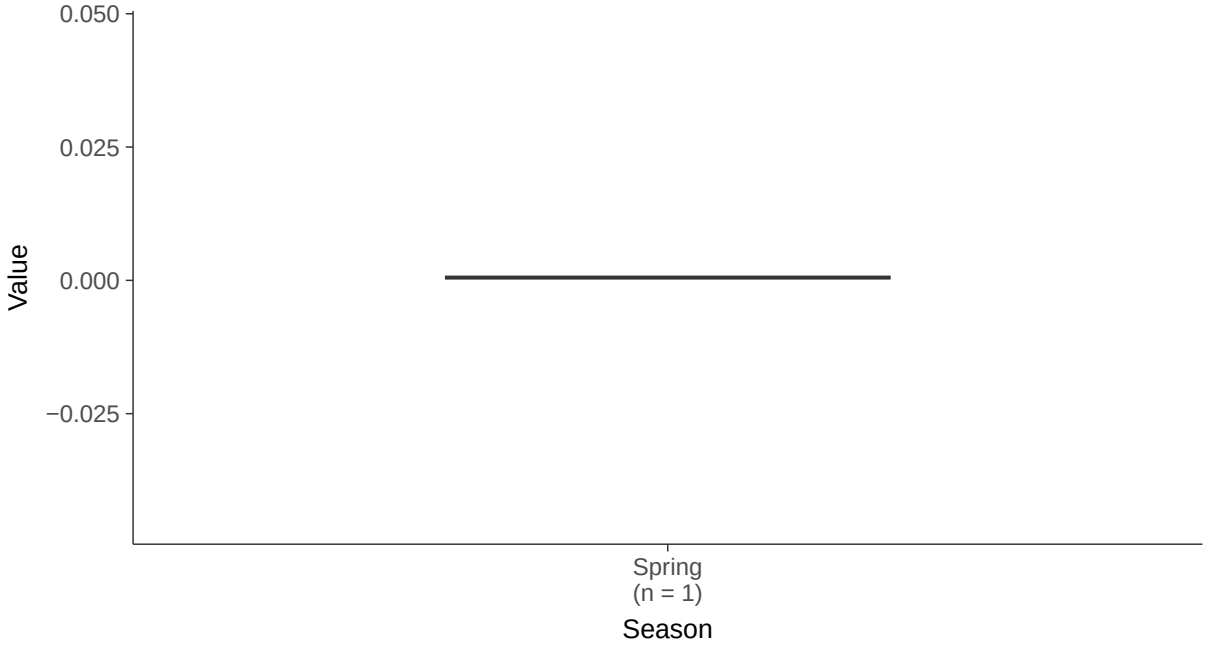
Boxplot

Copper, MW-28 (mg/L)



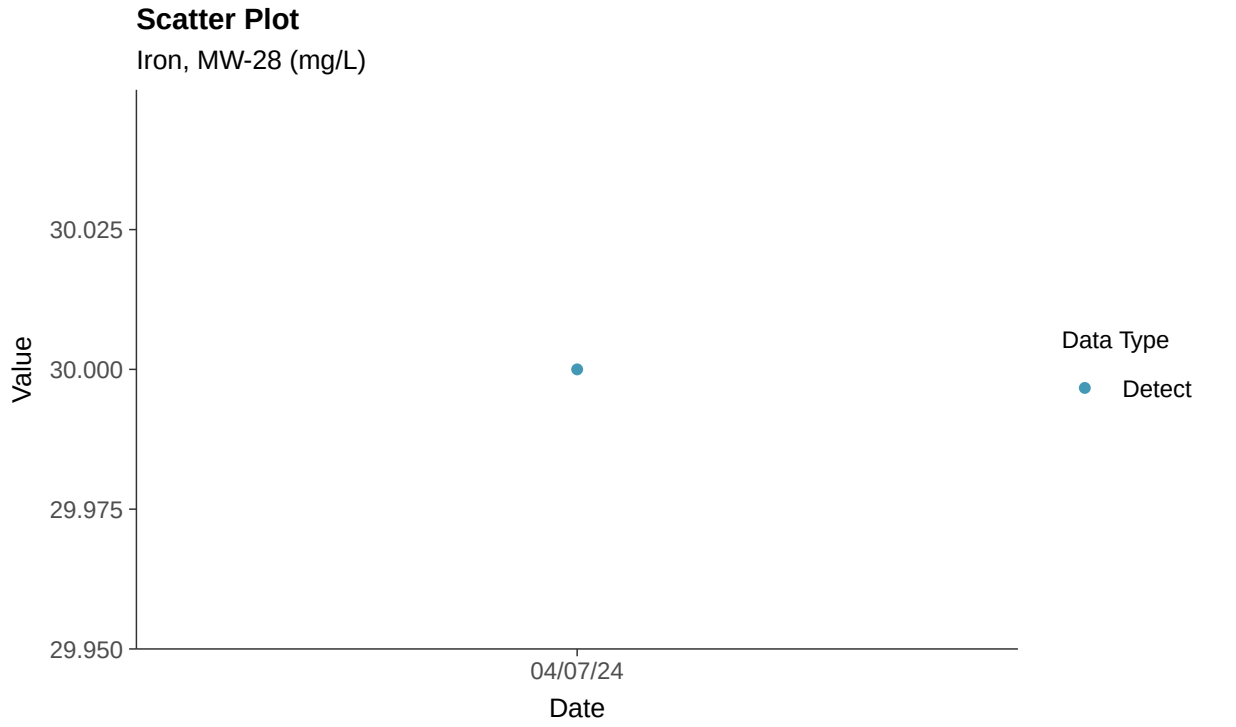
Boxplot by Season

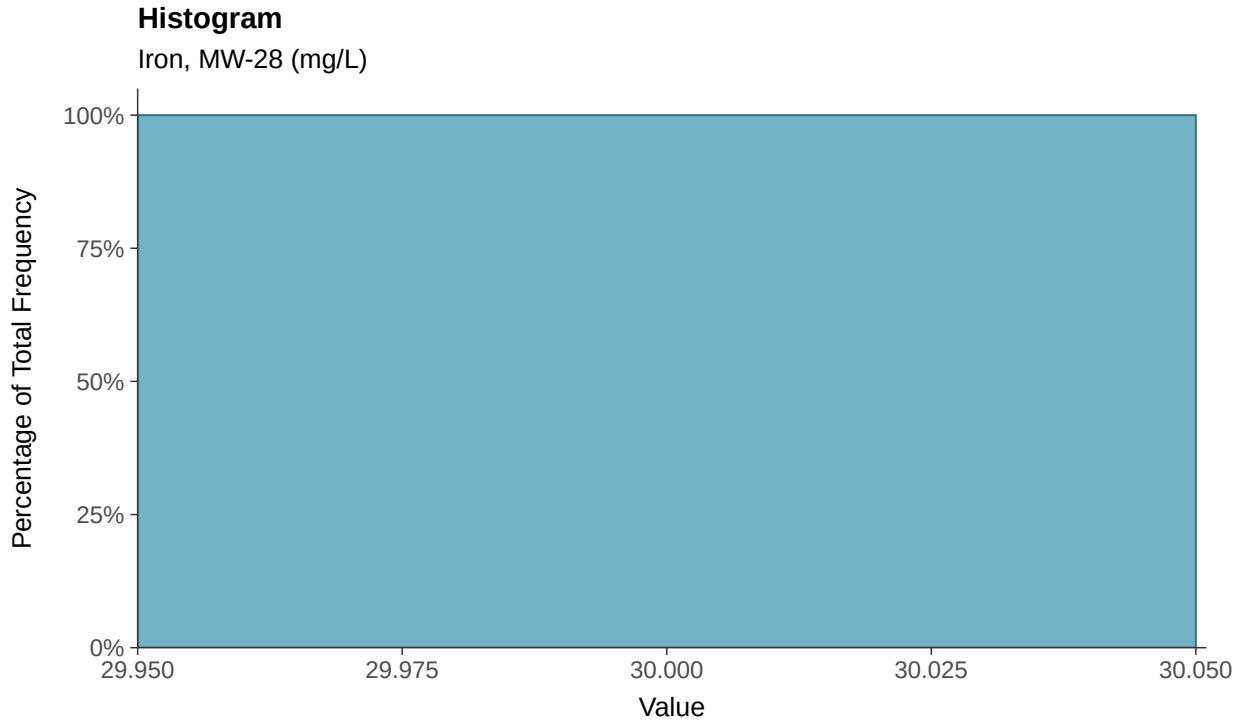
Copper, MW-28 (mg/L)



Part 115: Iron, MW-28

ID: 1_38_6_114



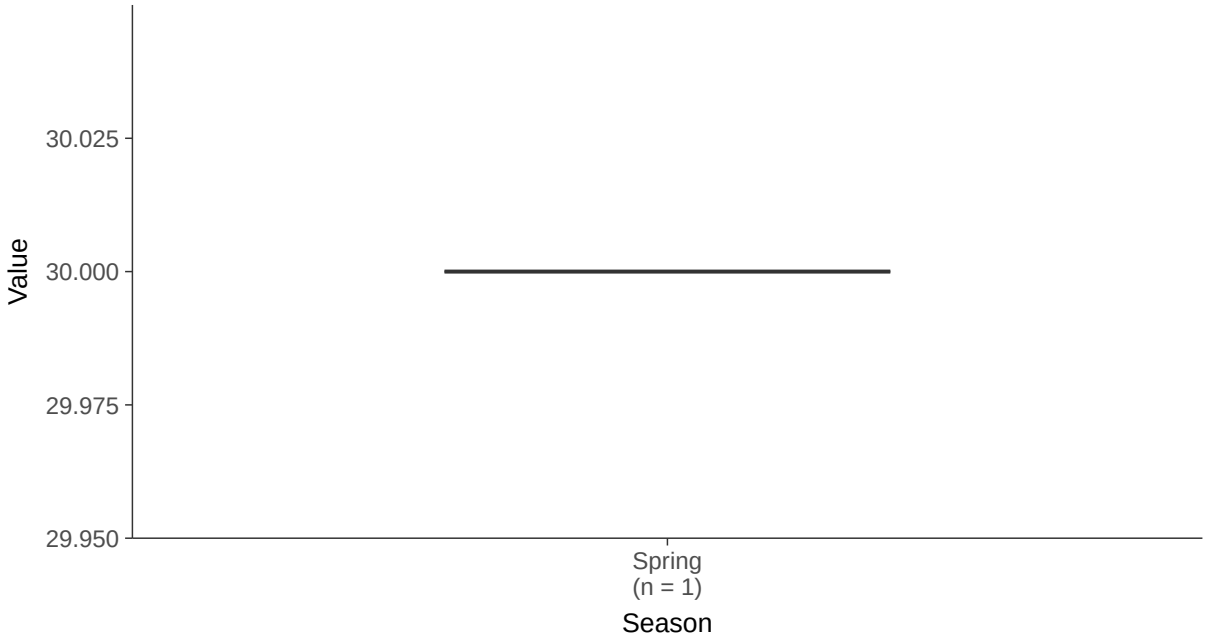


Boxplot

Iron, MW-28 (mg/L)

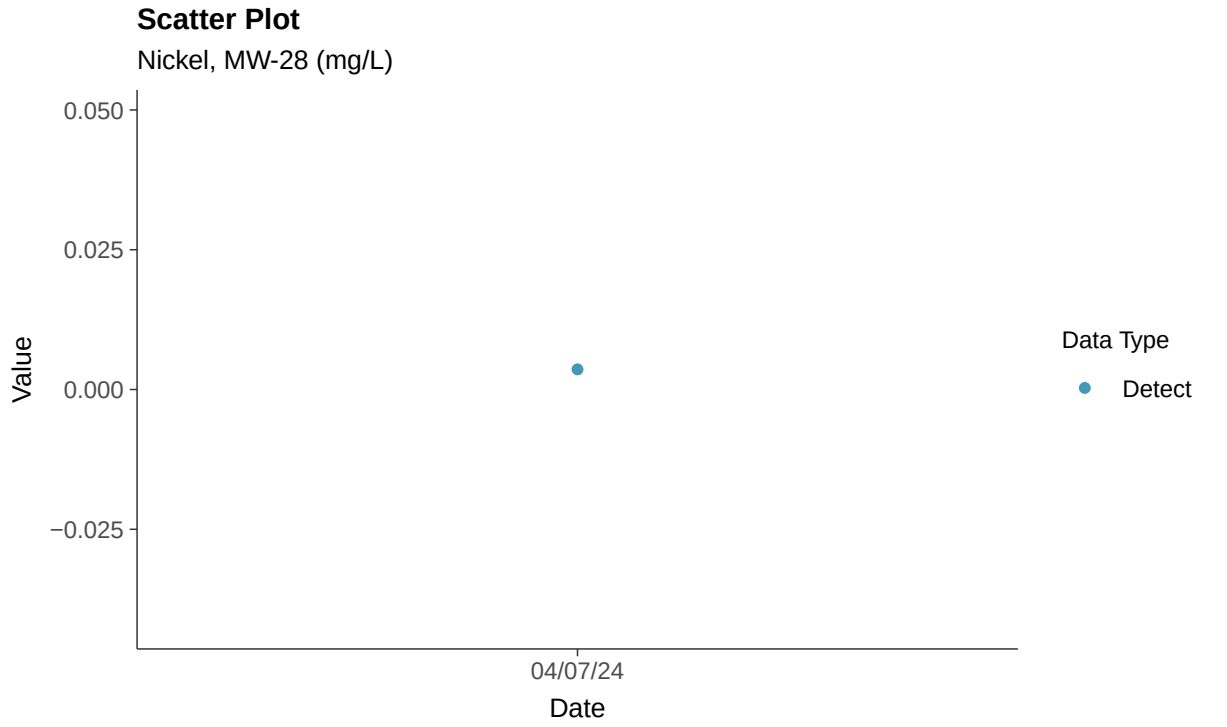
Boxplot by Season

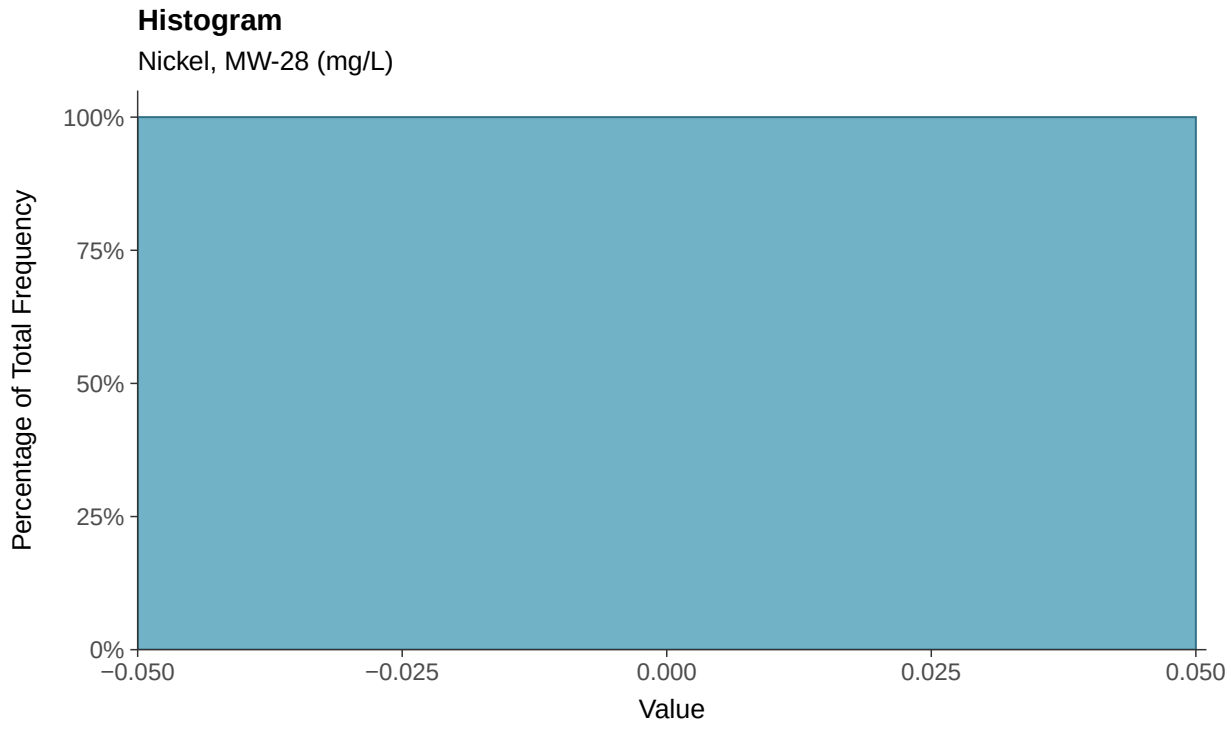
Iron, MW-28 (mg/L)



Part 115: Nickel, MW-28

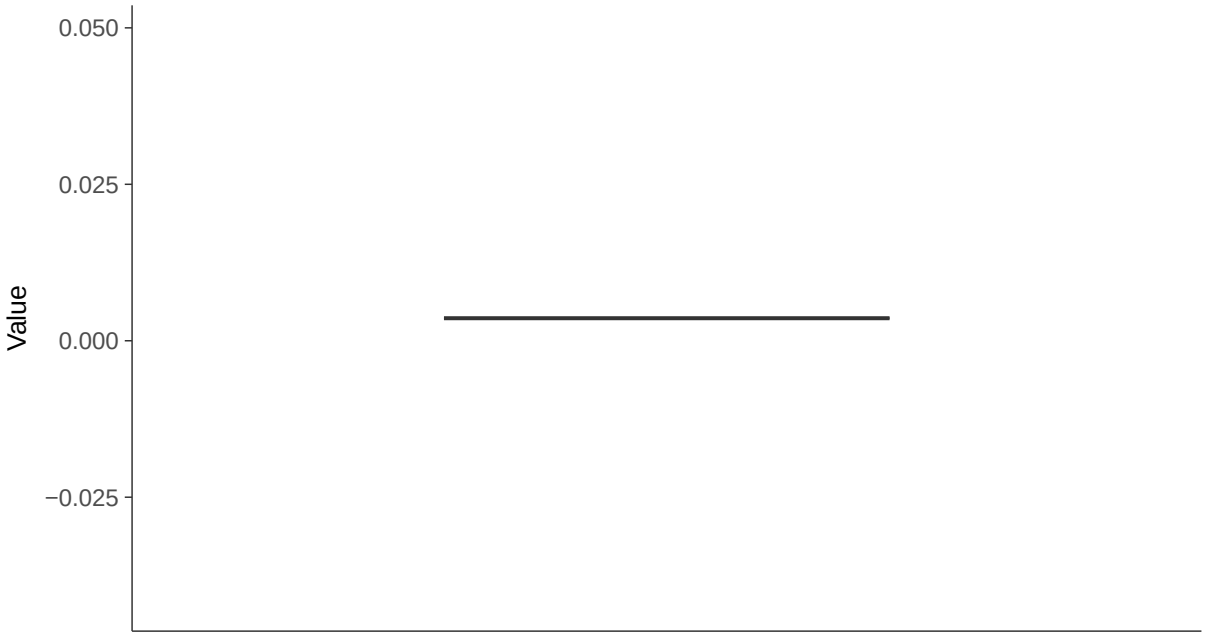
ID: 1_38_6_119





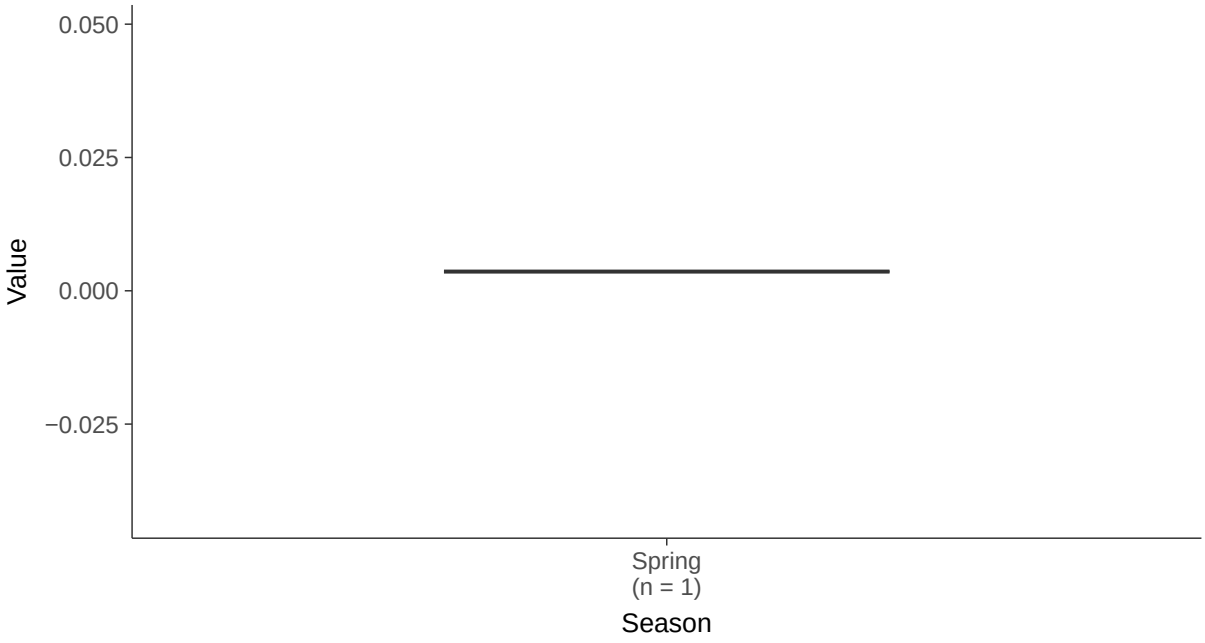
Boxplot

Nickel, MW-28 (mg/L)



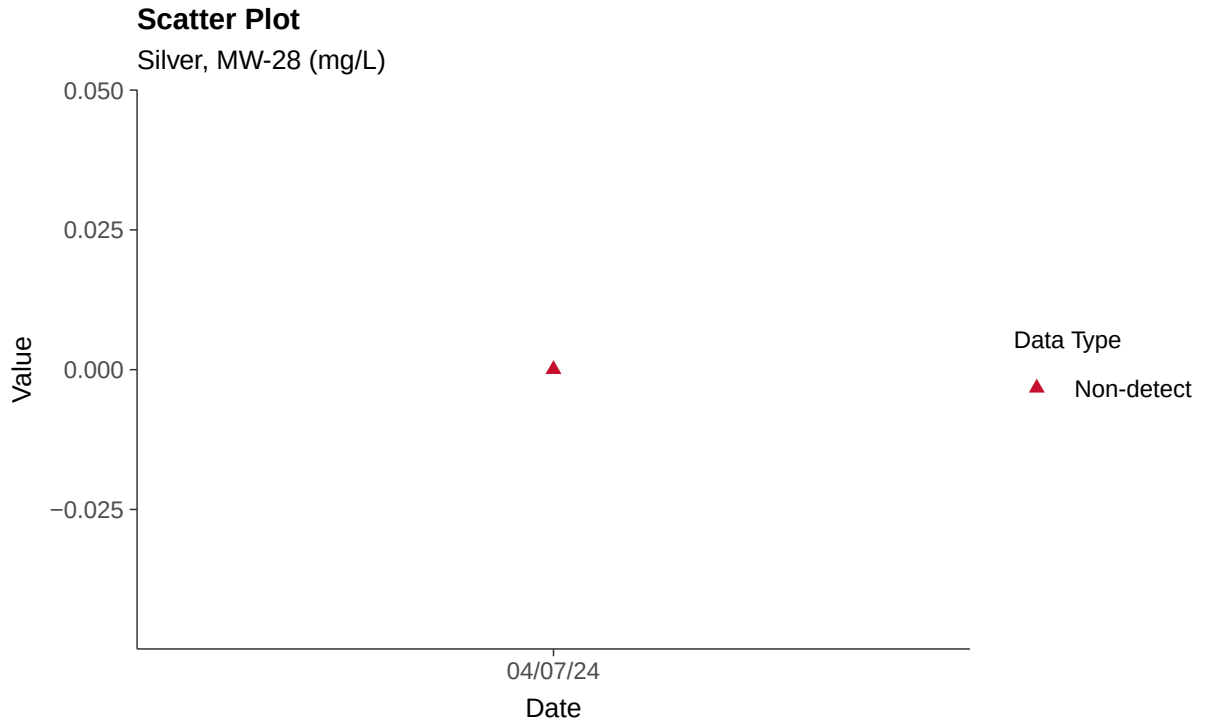
Boxplot by Season

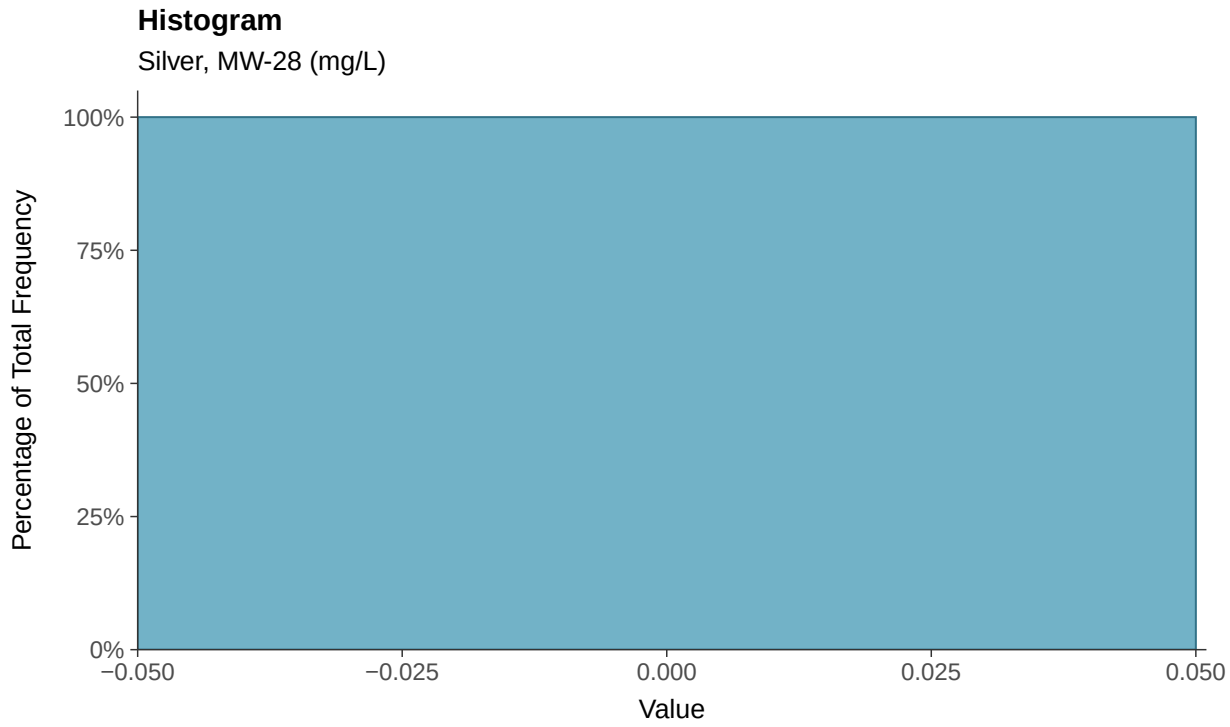
Nickel, MW-28 (mg/L)



Part 115: Silver, MW-28

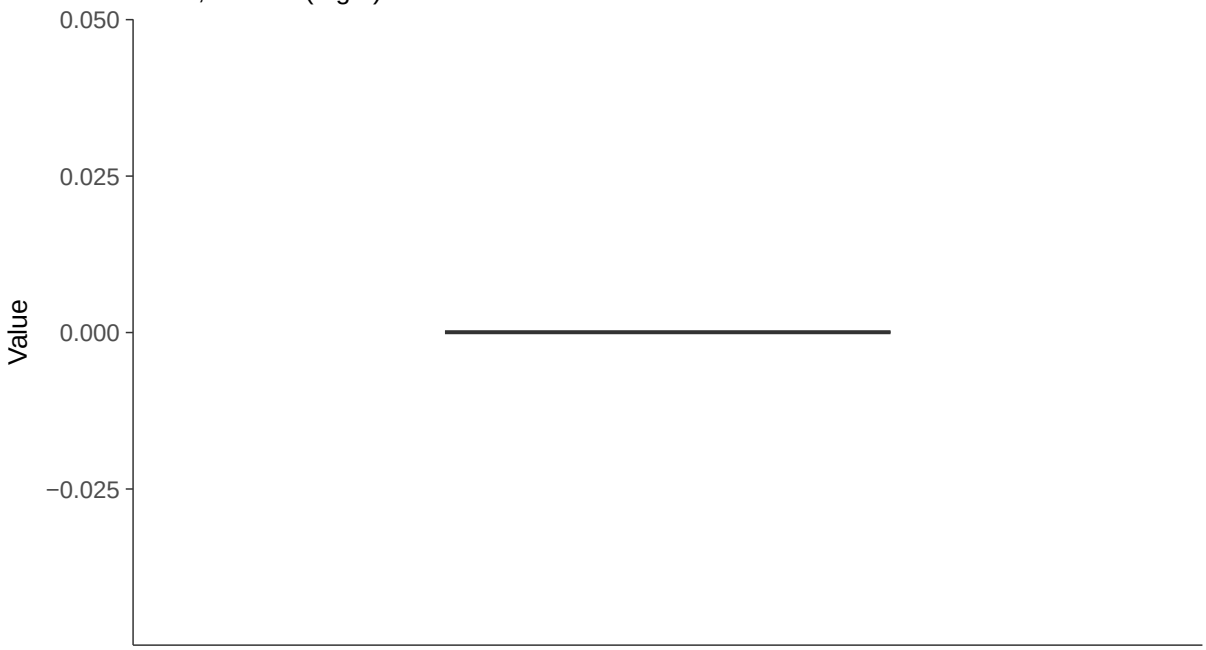
ID: 1_38_6_123





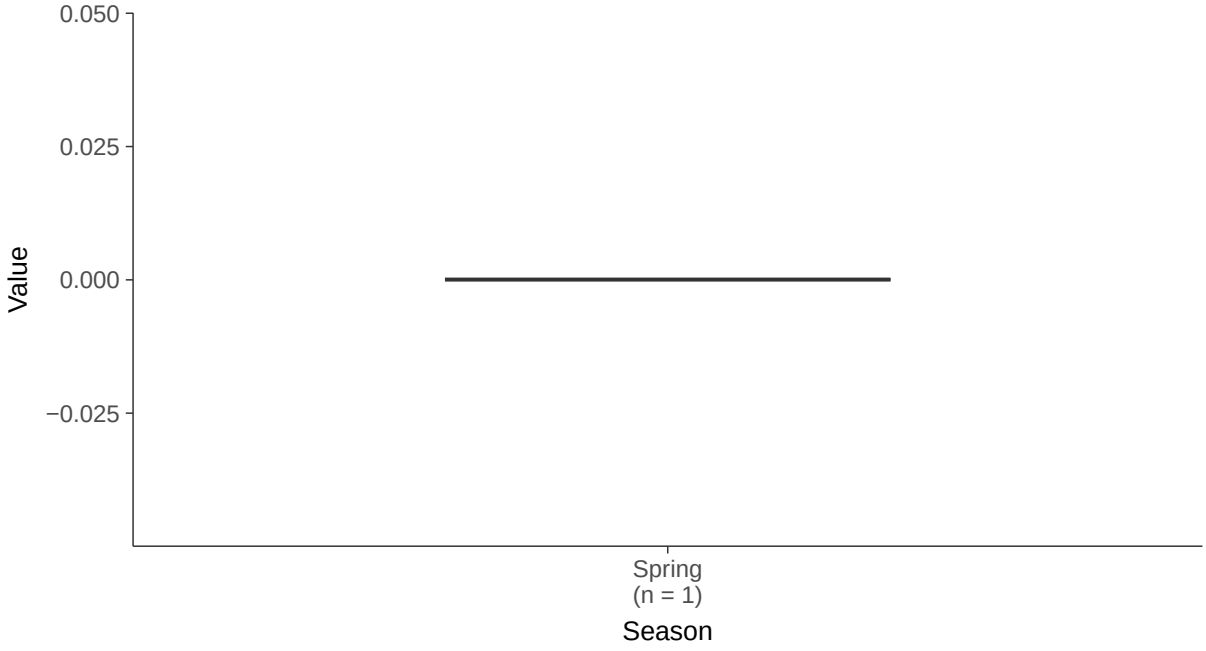
Boxplot

Silver, MW-28 (mg/L)



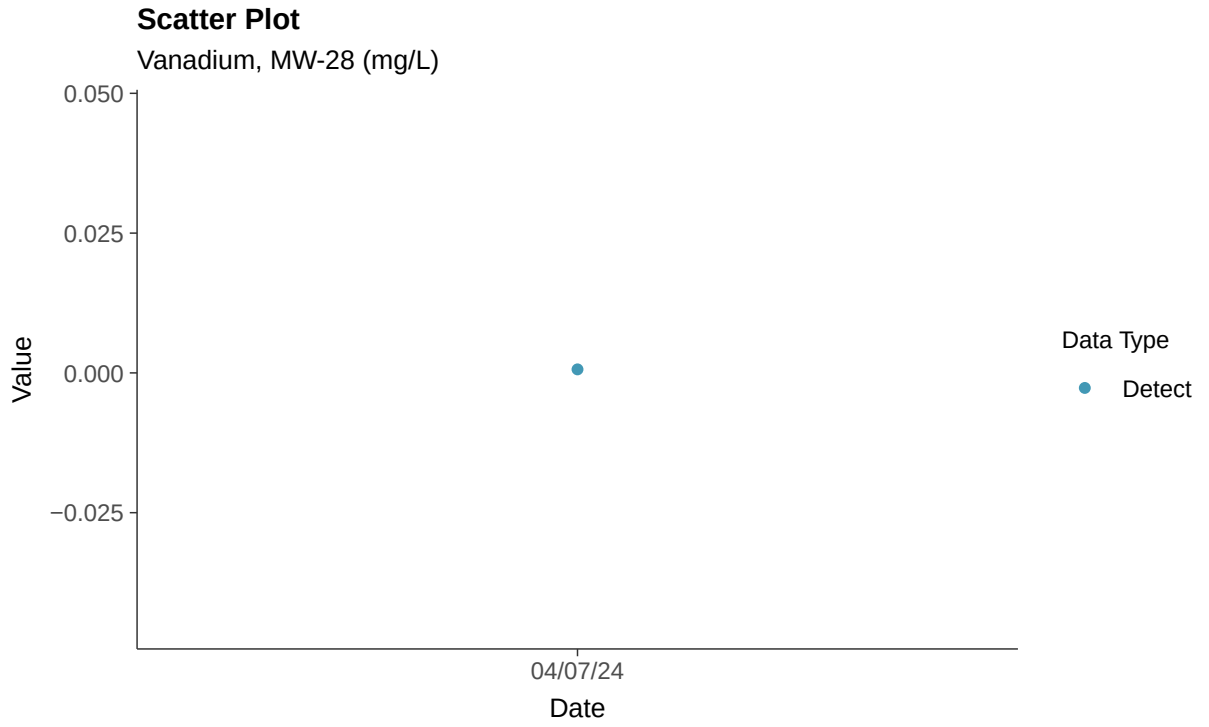
Boxplot by Season

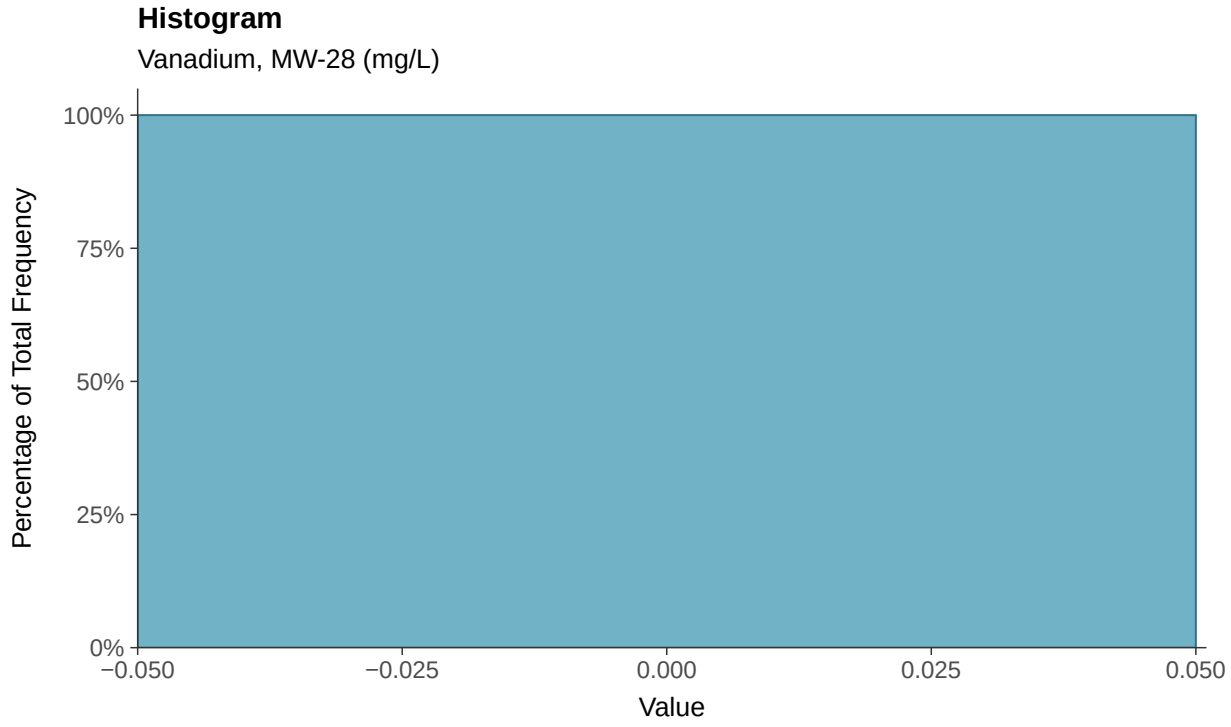
Silver, MW-28 (mg/L)



Part 115: Vanadium, MW-28

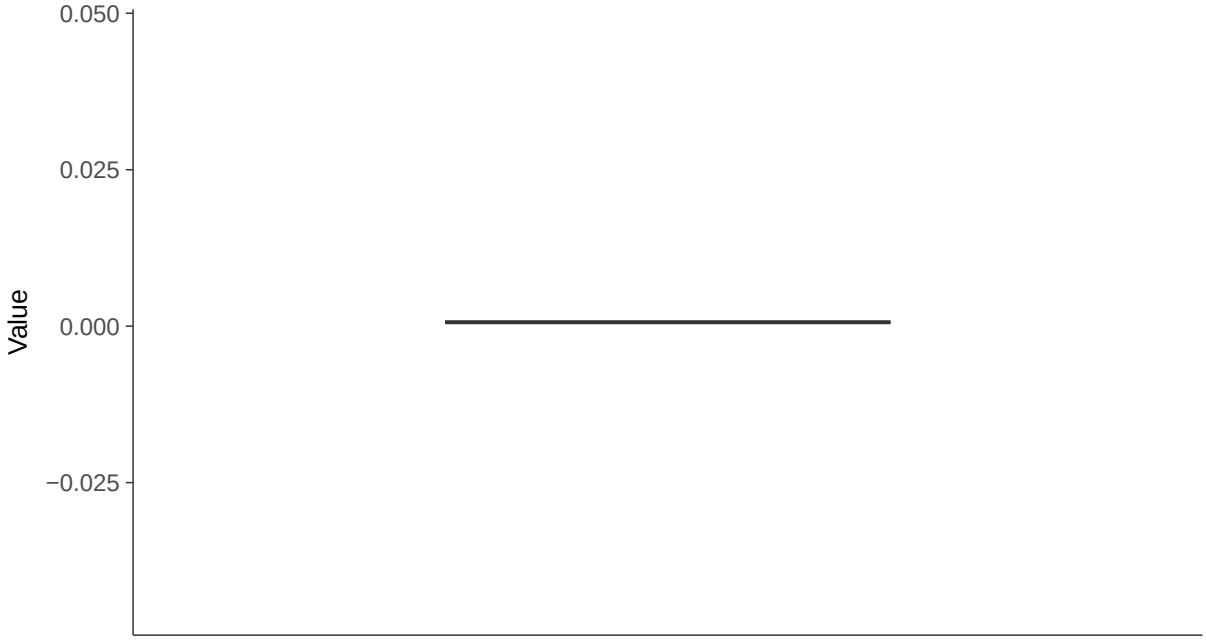
ID: 1_38_6_129





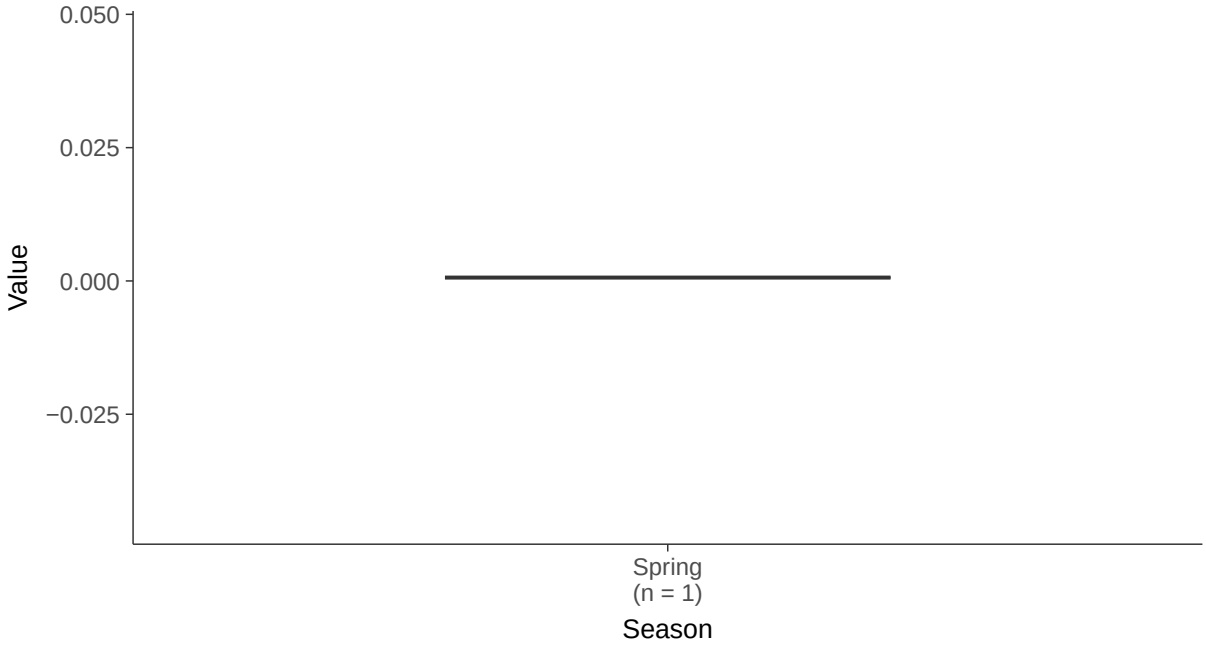
Boxplot

Vanadium, MW-28 (mg/L)



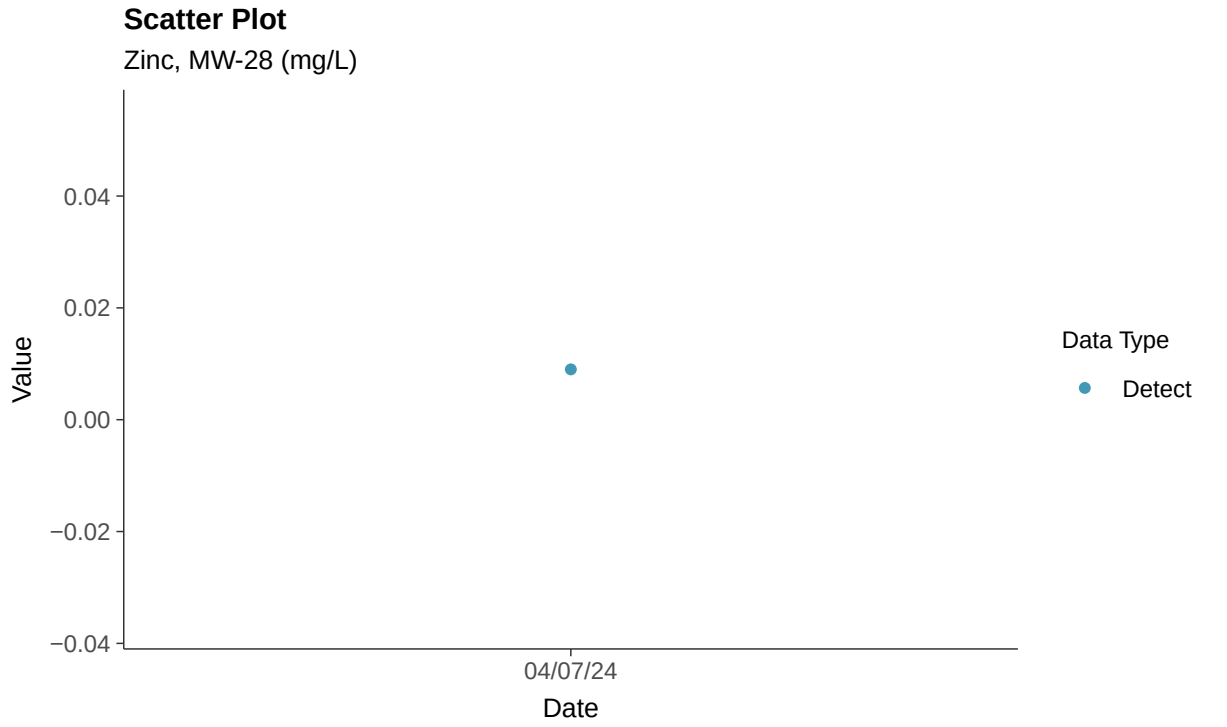
Boxplot by Season

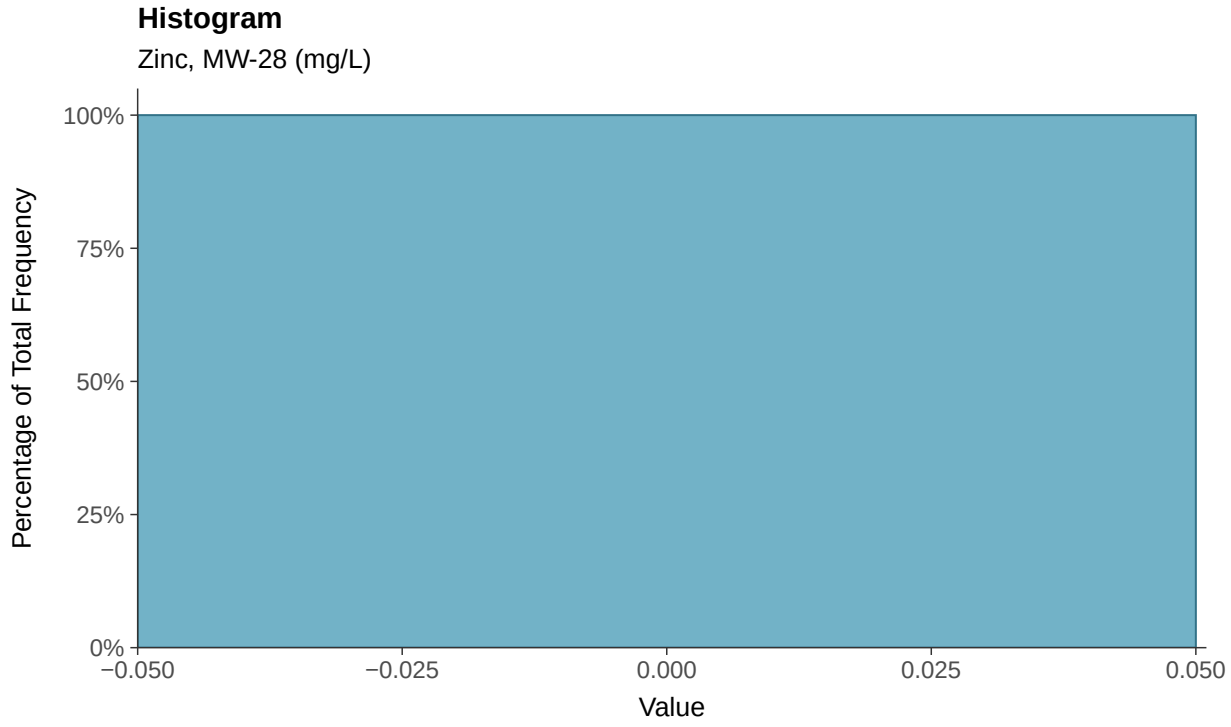
Vanadium, MW-28 (mg/L)



Part 115: Zinc, MW-28

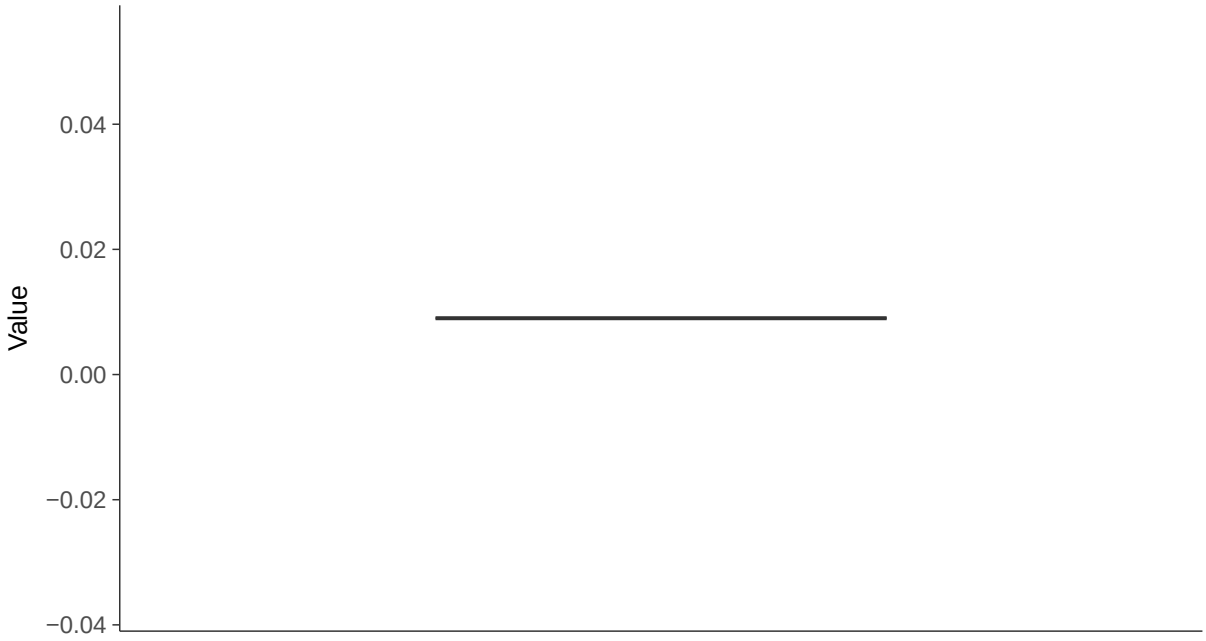
ID: 1_38_6_130





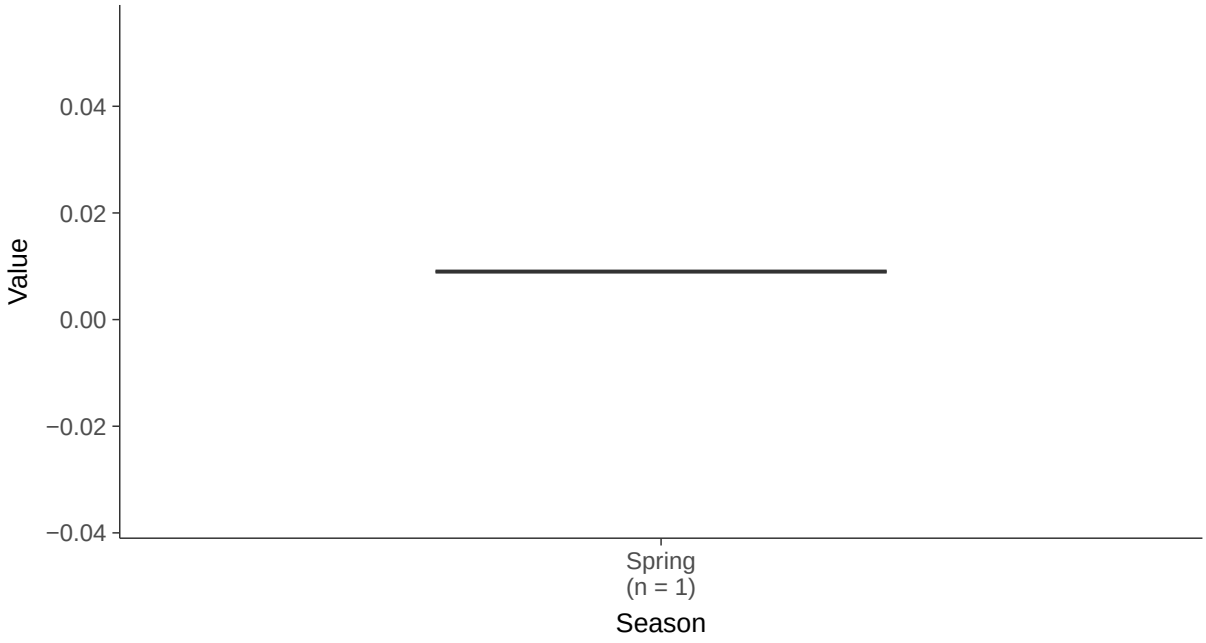
Boxplot

Zinc, MW-28 (mg/L)



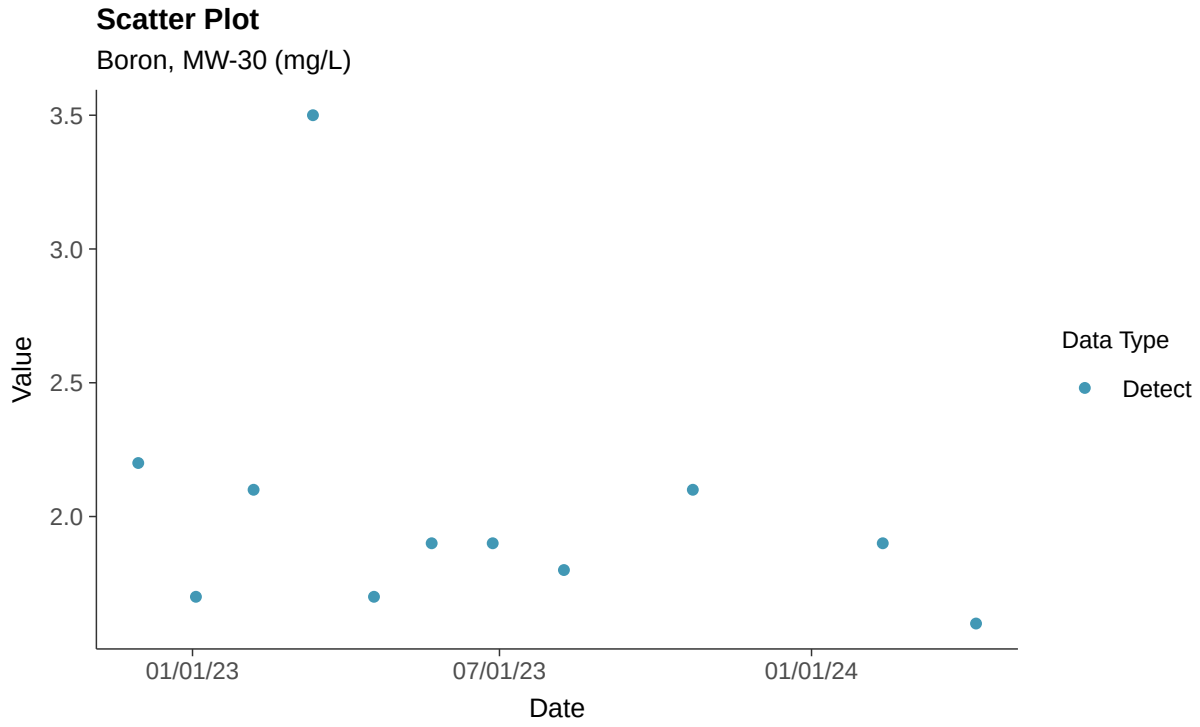
Boxplot by Season

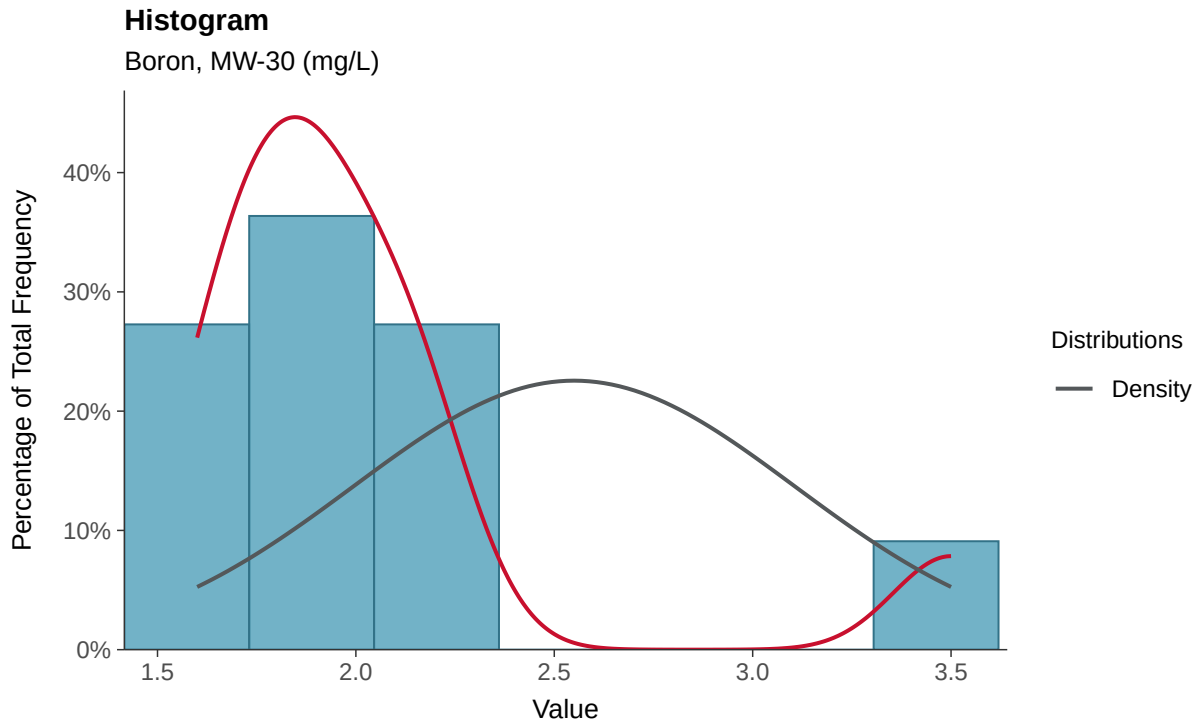
Zinc, MW-28 (mg/L)



Appendix III: Boron, MW-30

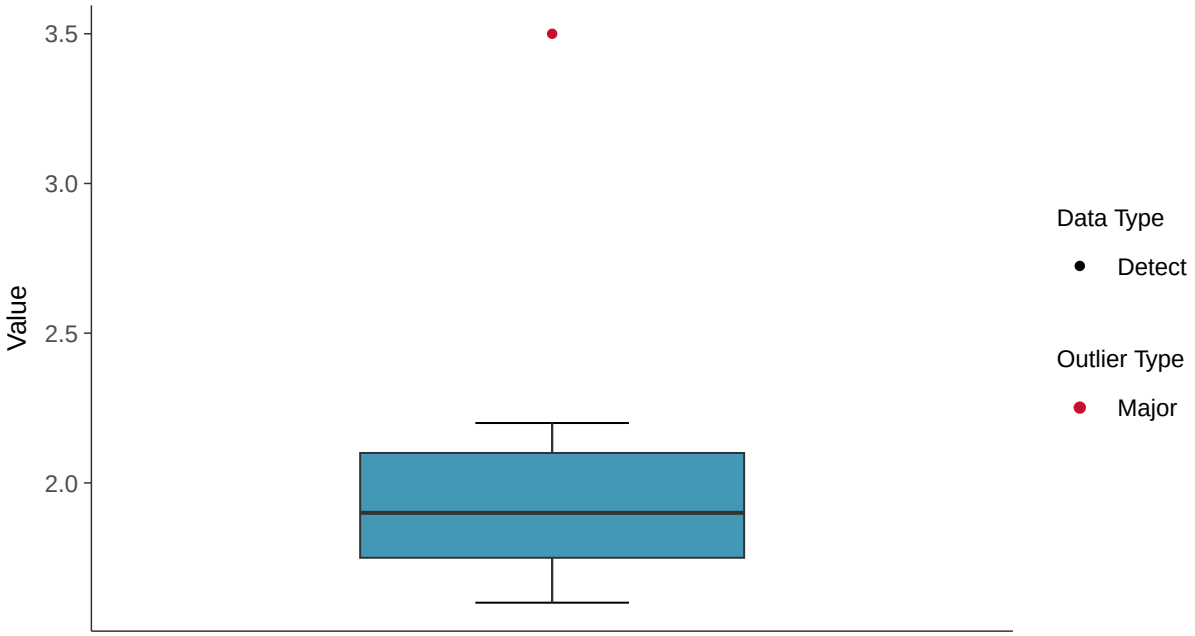
ID: 1_40_4_105





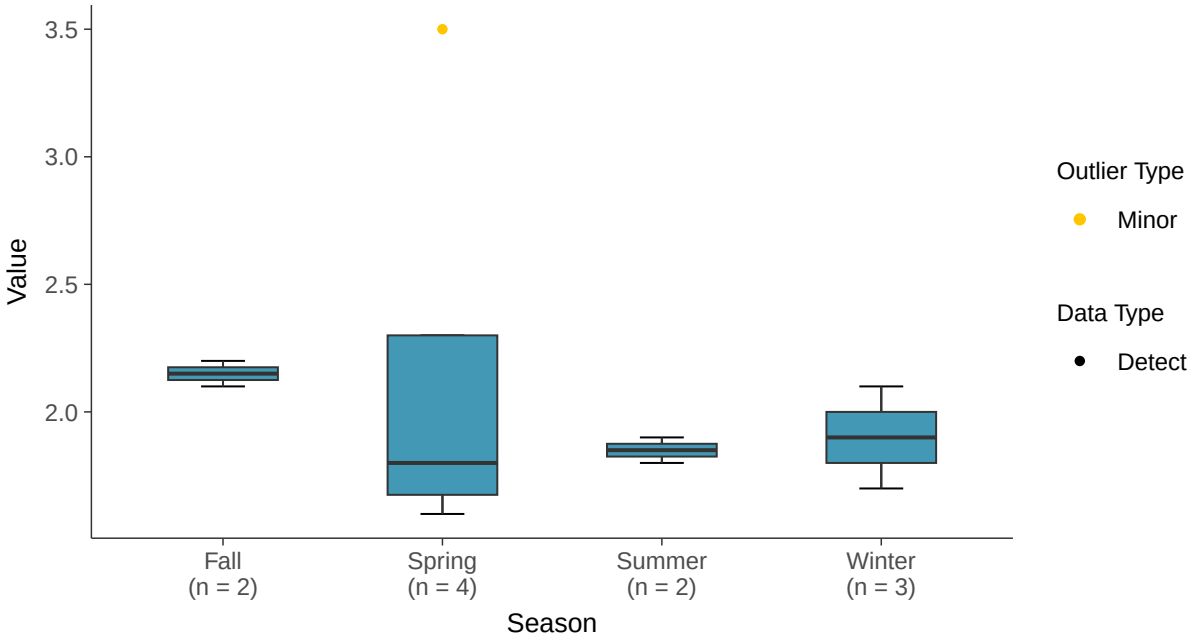
Boxplot

Boron, MW-30 (mg/L)



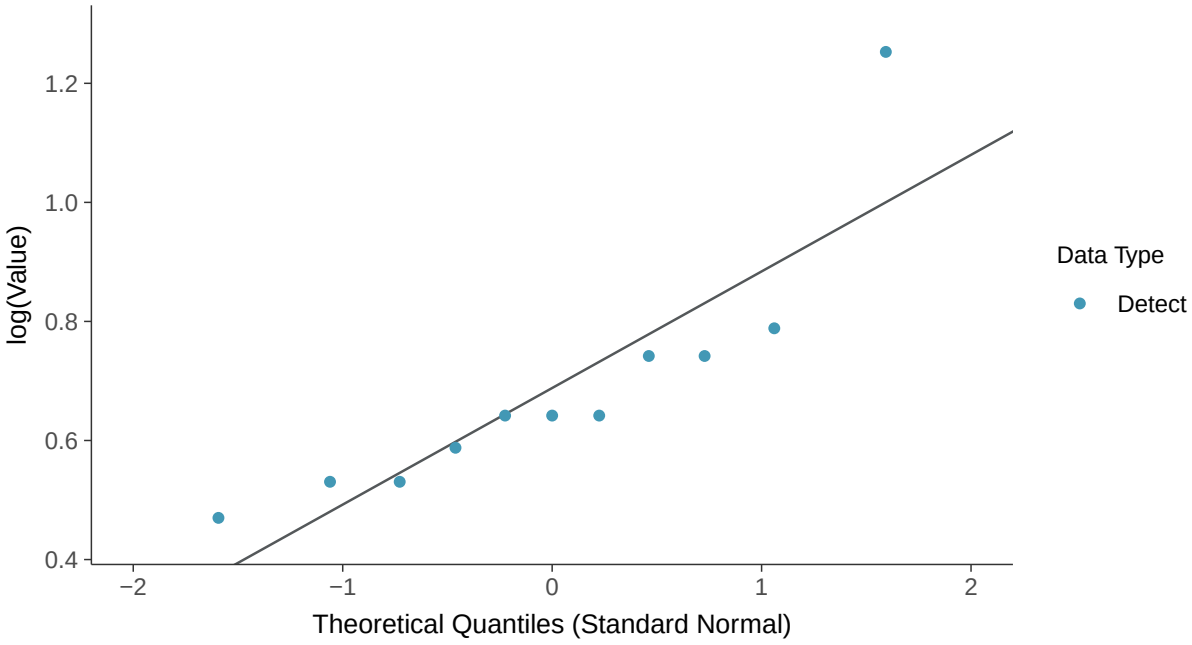
Boxplot by Season

Boron, MW-30 (mg/L)



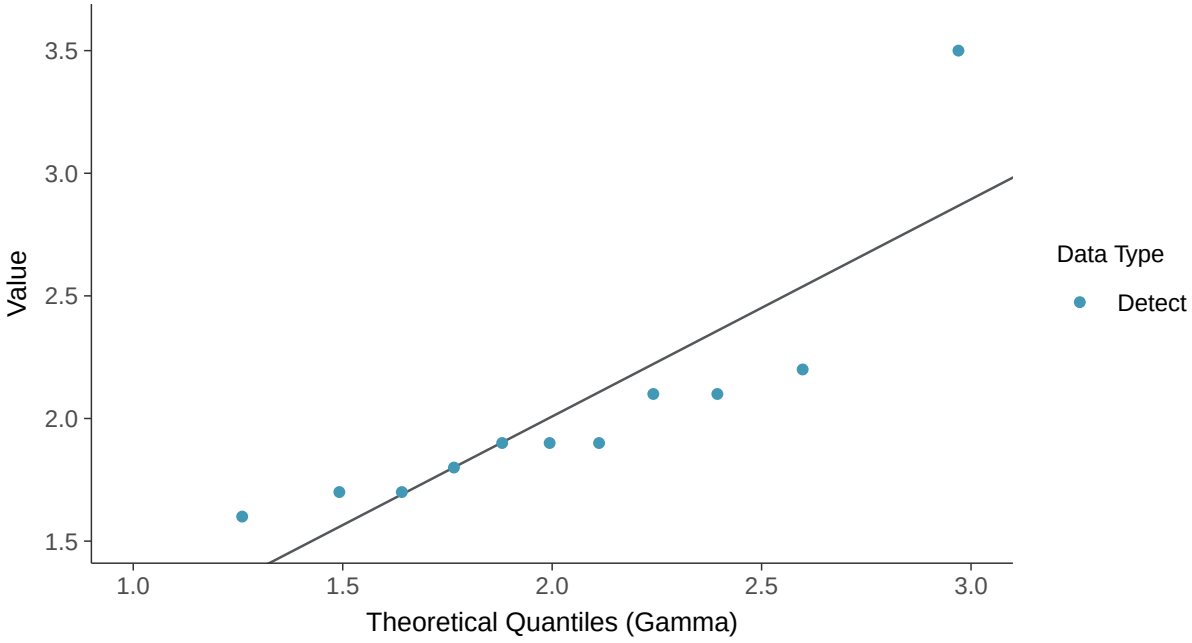
Lognormal Q-Q plot

Boron, MW-30 (mg/L)



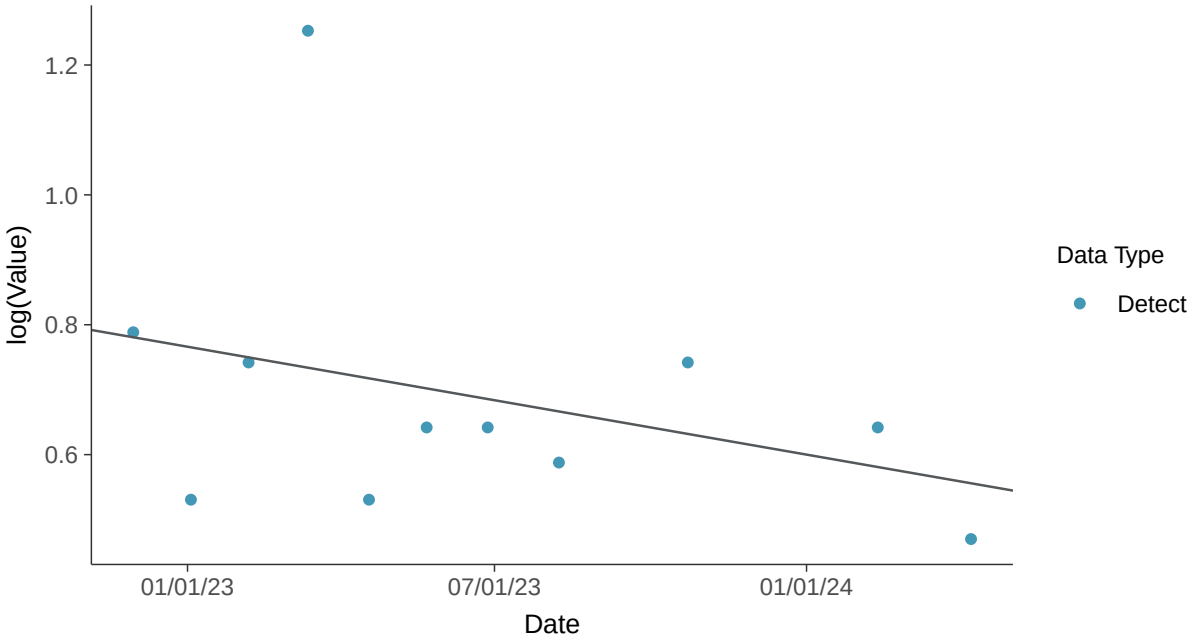
Gamma Q-Q plot

Boron, MW-30 (mg/L)



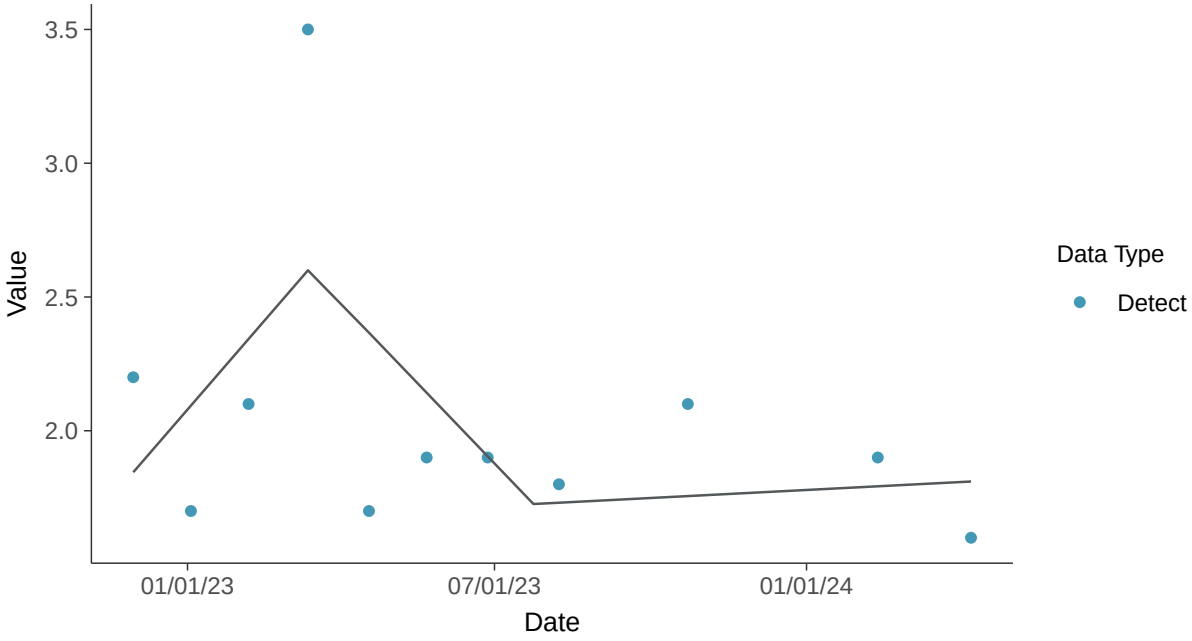
Trend Regression: Lognormal MLE

Boron, MW-30 (mg/L)



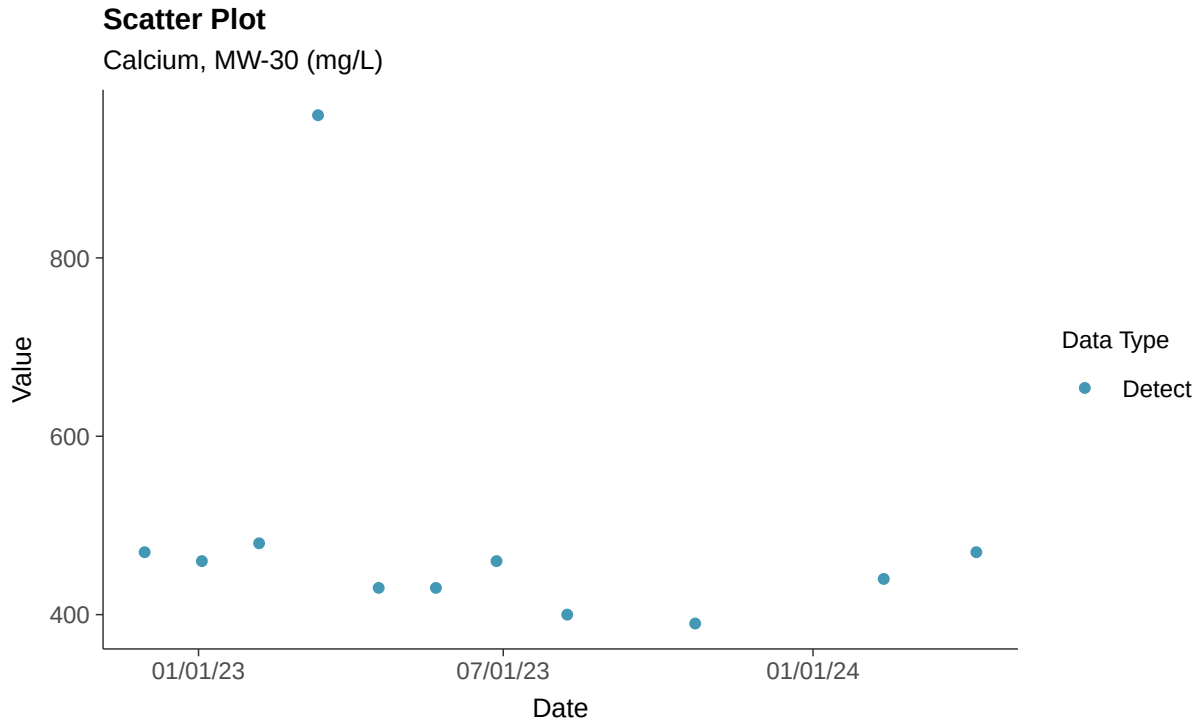
Trend Regression: Piecewise Linear-Linear-Linear

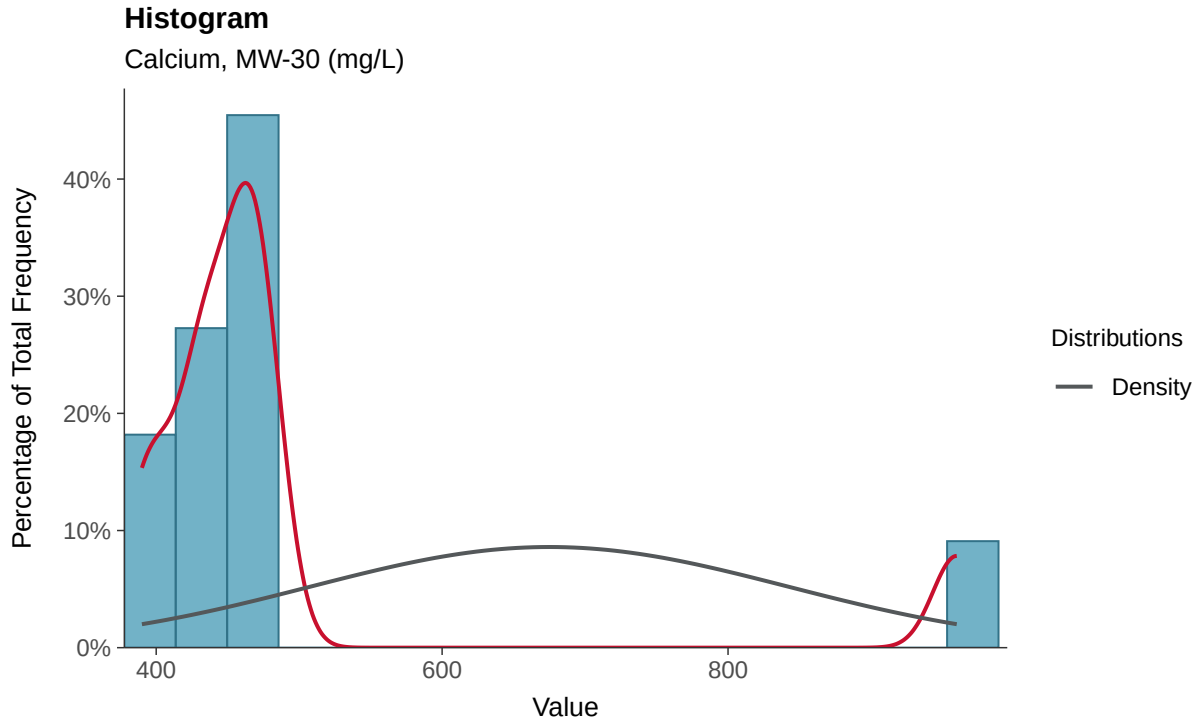
Boron, MW-30 (mg/L)



Appendix III: Calcium, MW-30

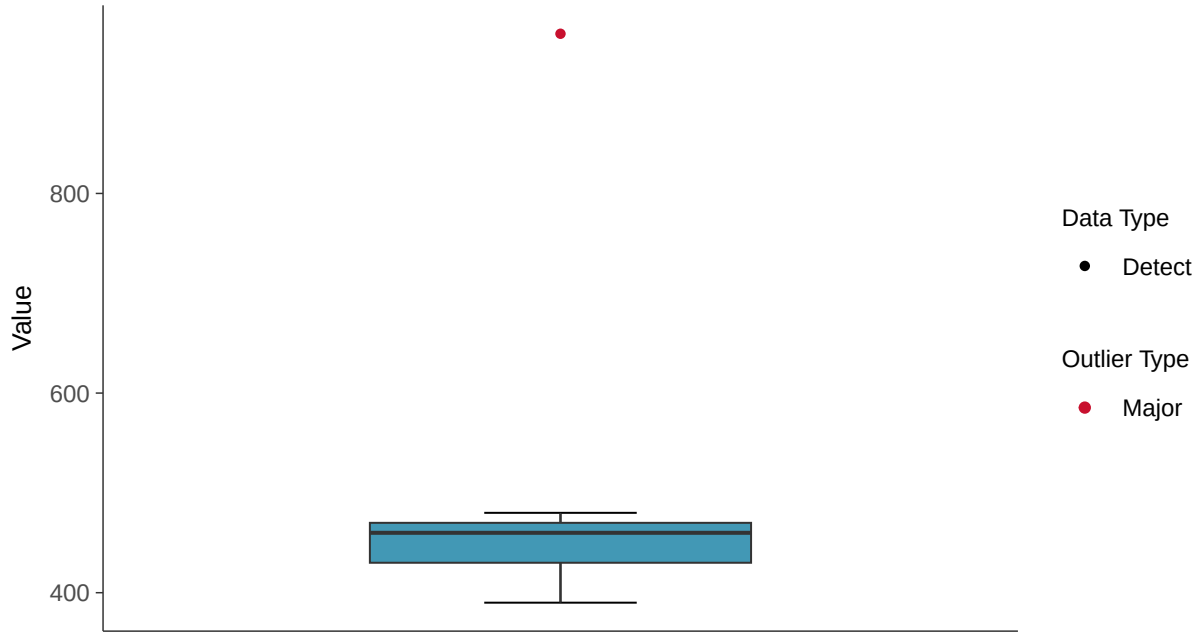
ID: 1_40_4_107





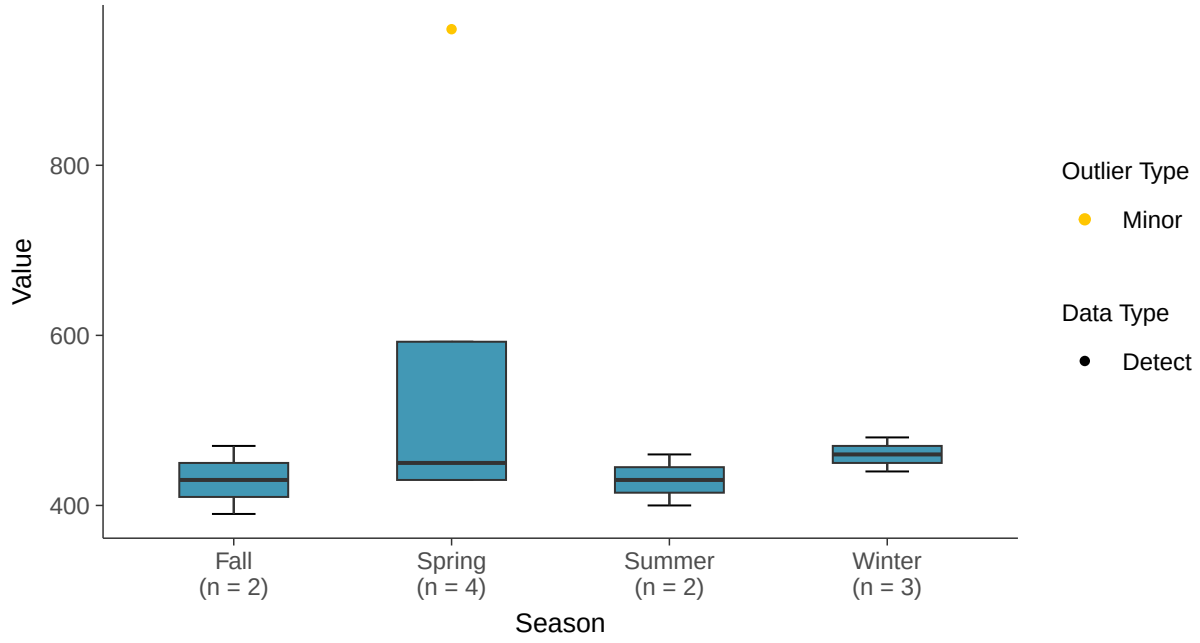
Boxplot

Calcium, MW-30 (mg/L)



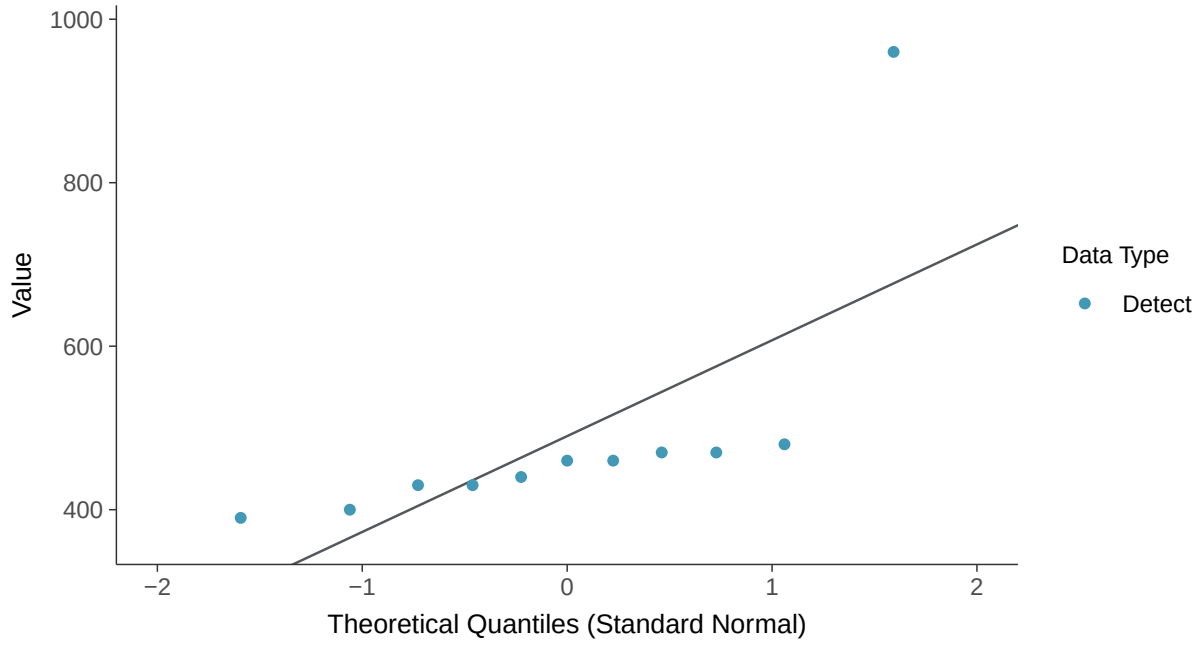
Boxplot by Season

Calcium, MW-30 (mg/L)



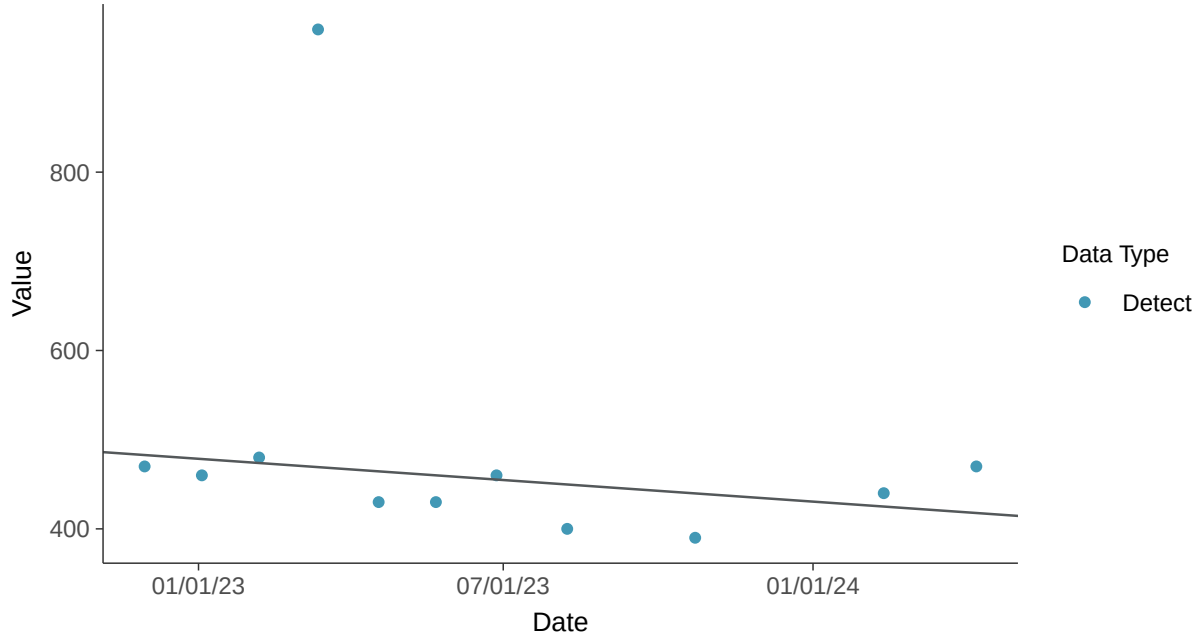
Normal Q-Q plot

Calcium, MW-30 (mg/L)



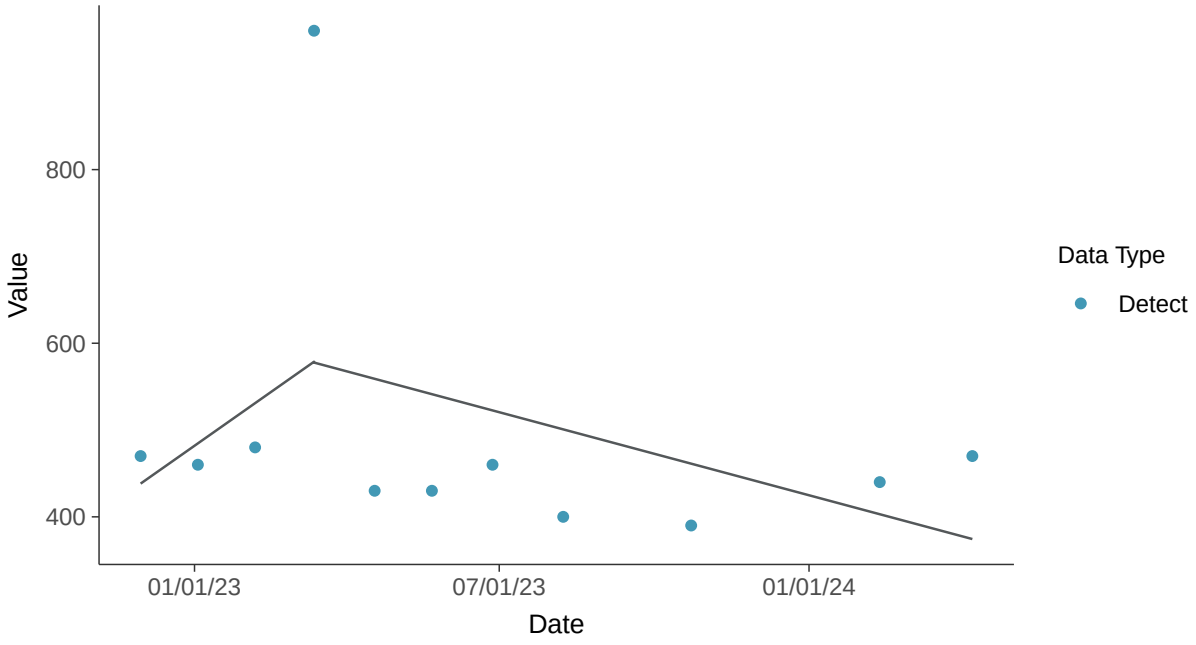
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Calcium, MW-30 (mg/L)



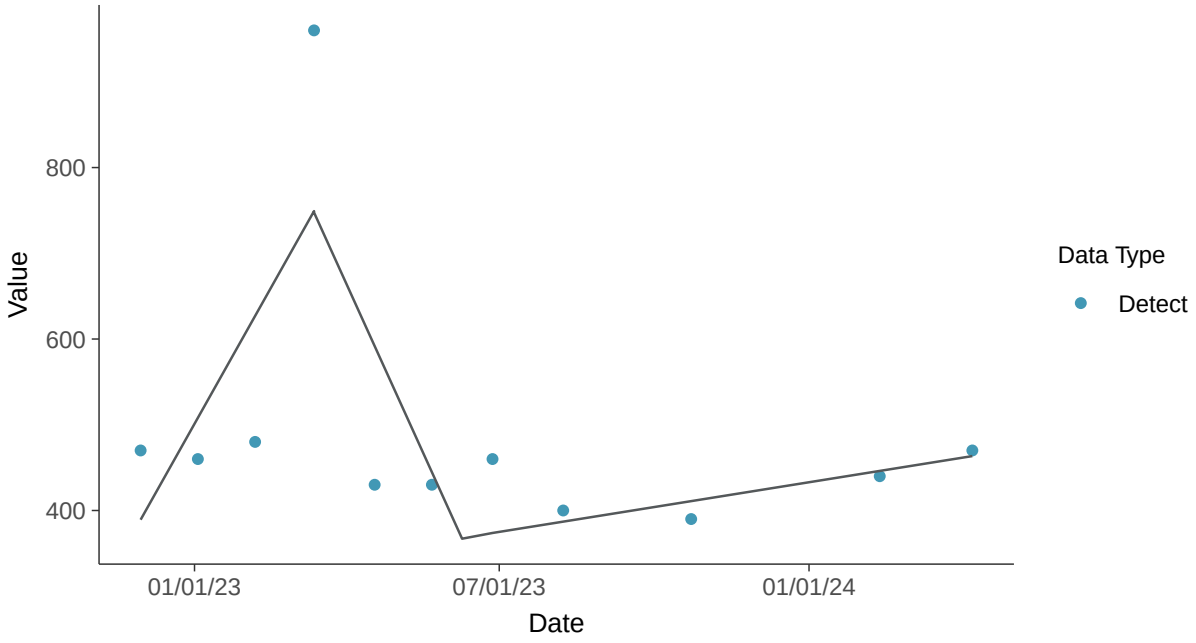
Trend Regression: Piecewise Linear-Linear

Calcium, MW-30 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Calcium, MW-30 (mg/L)

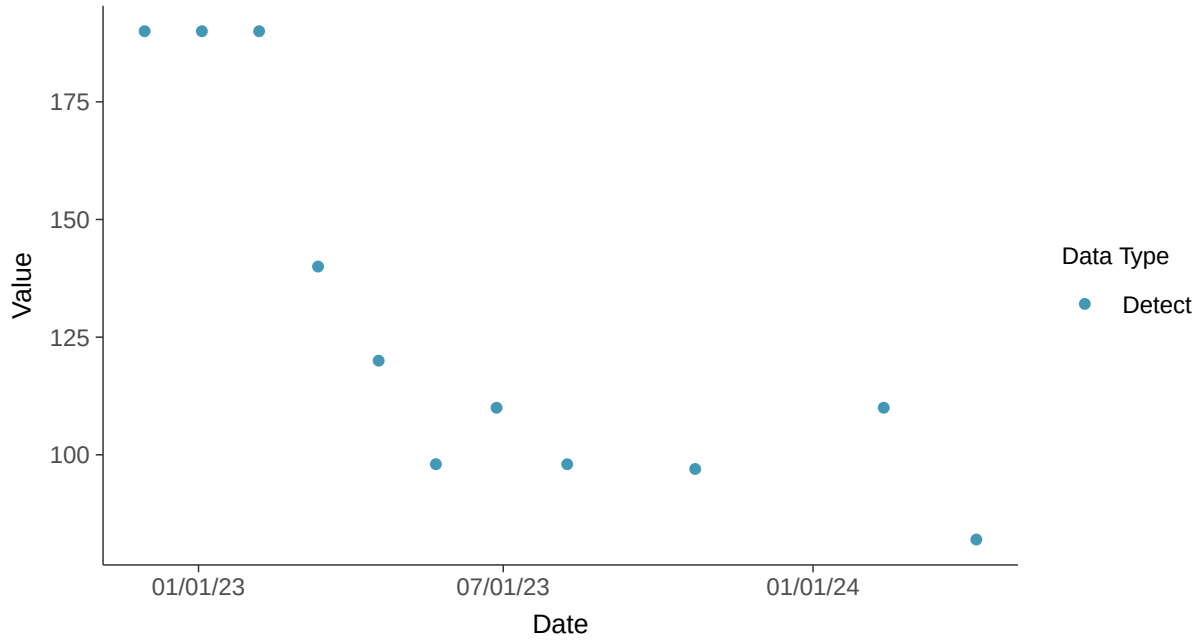


Appendix III: Chloride (as Cl), MW-30

ID: 1_40_4_108

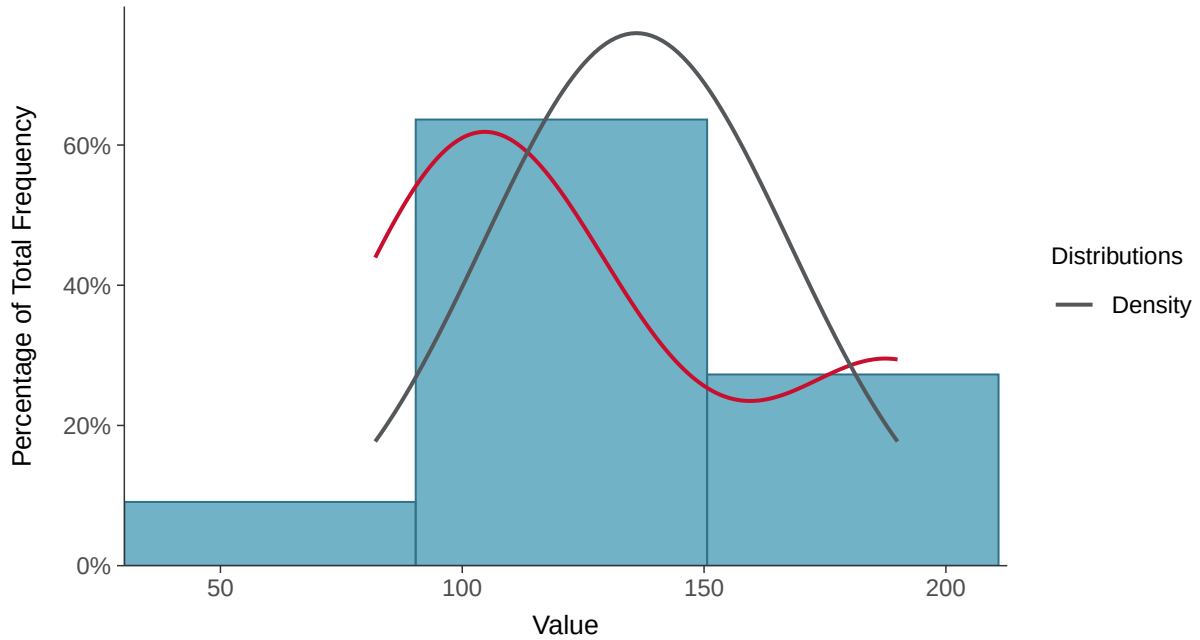
Scatter Plot

Chloride (as Cl), MW-30 (mg/L)



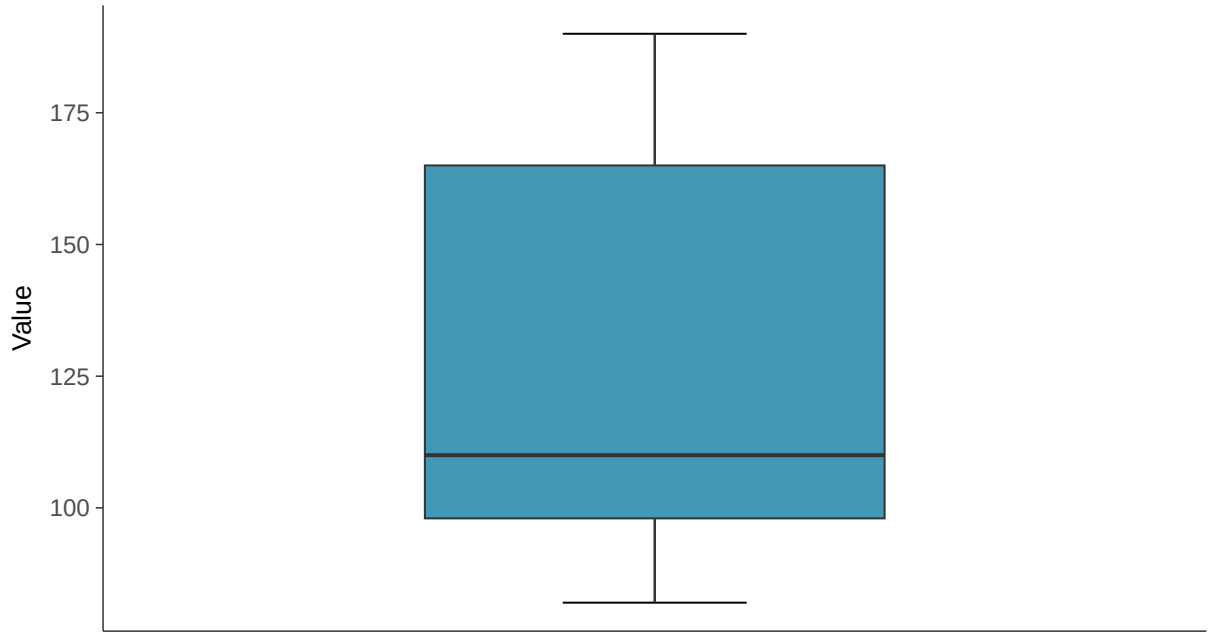
Histogram

Chloride (as Cl), MW-30 (mg/L)



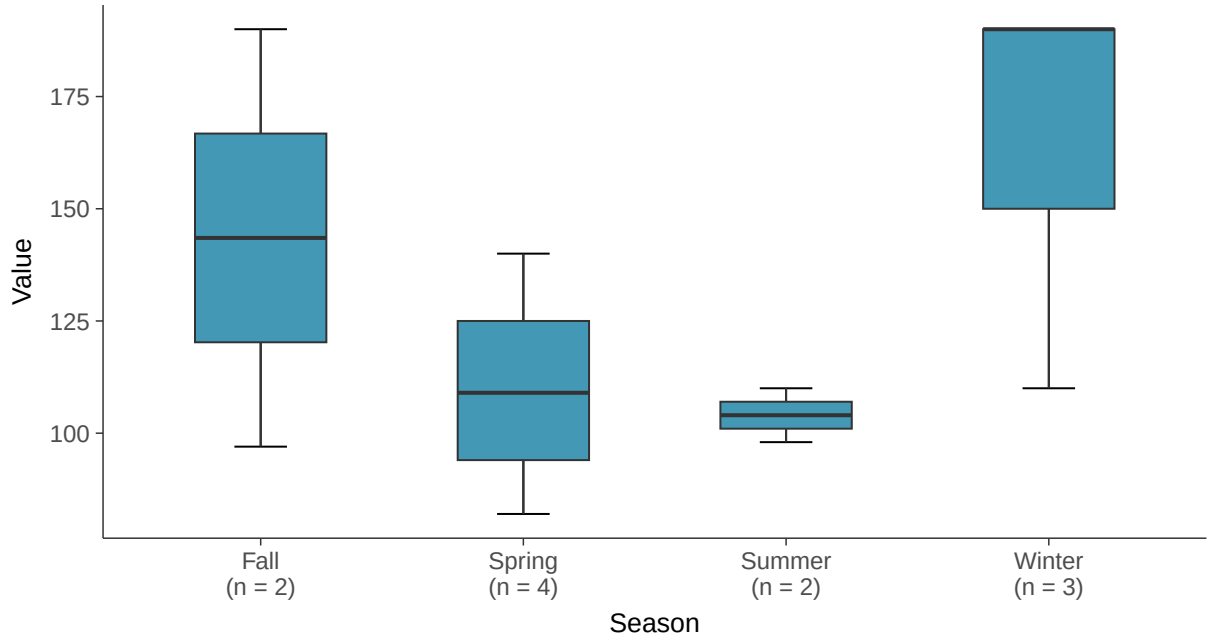
Boxplot

Chloride (as Cl), MW-30 (mg/L)



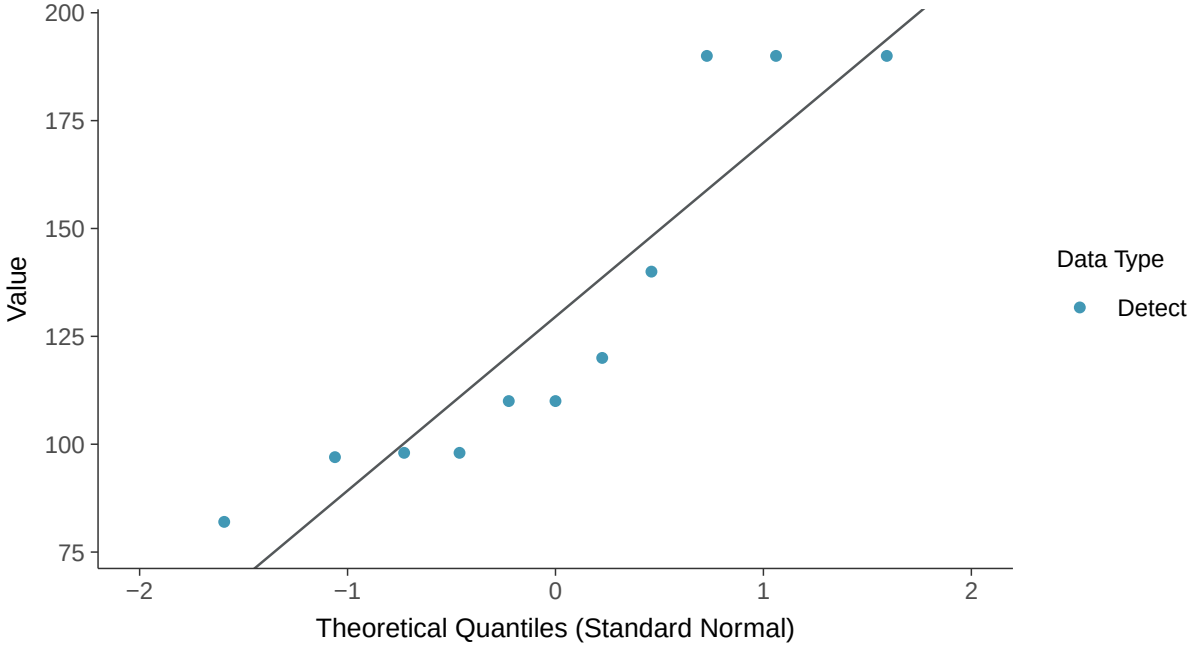
Boxplot by Season

Chloride (as Cl), MW-30 (mg/L)



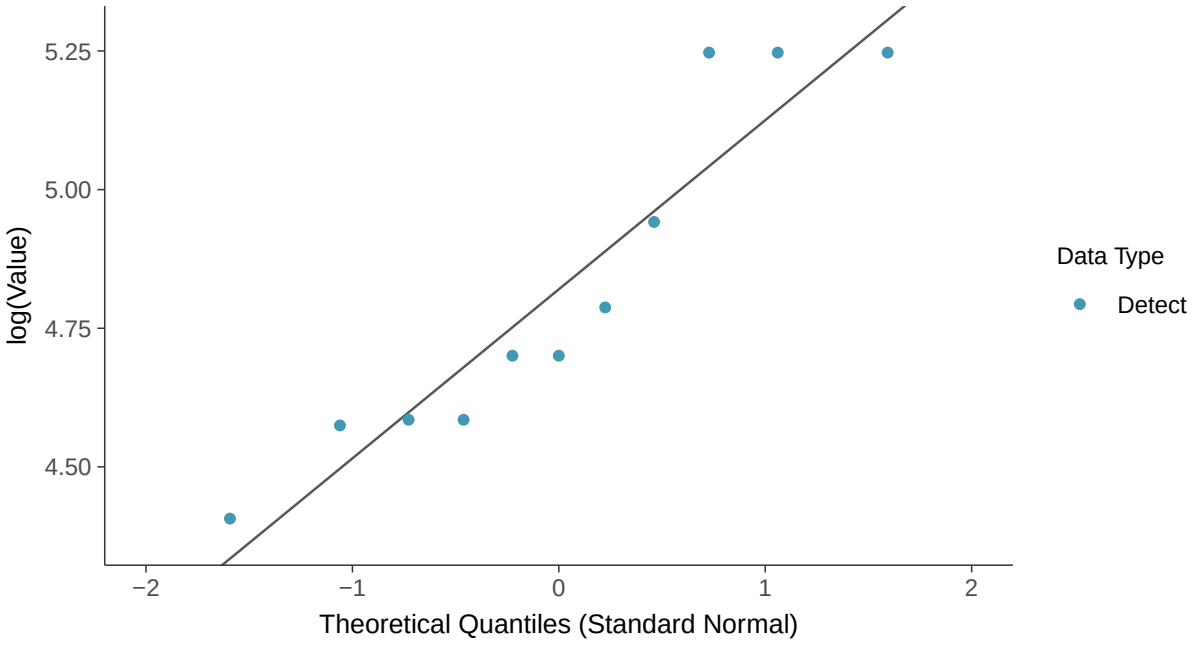
Normal Q-Q plot

Chloride (as Cl), MW-30 (mg/L)



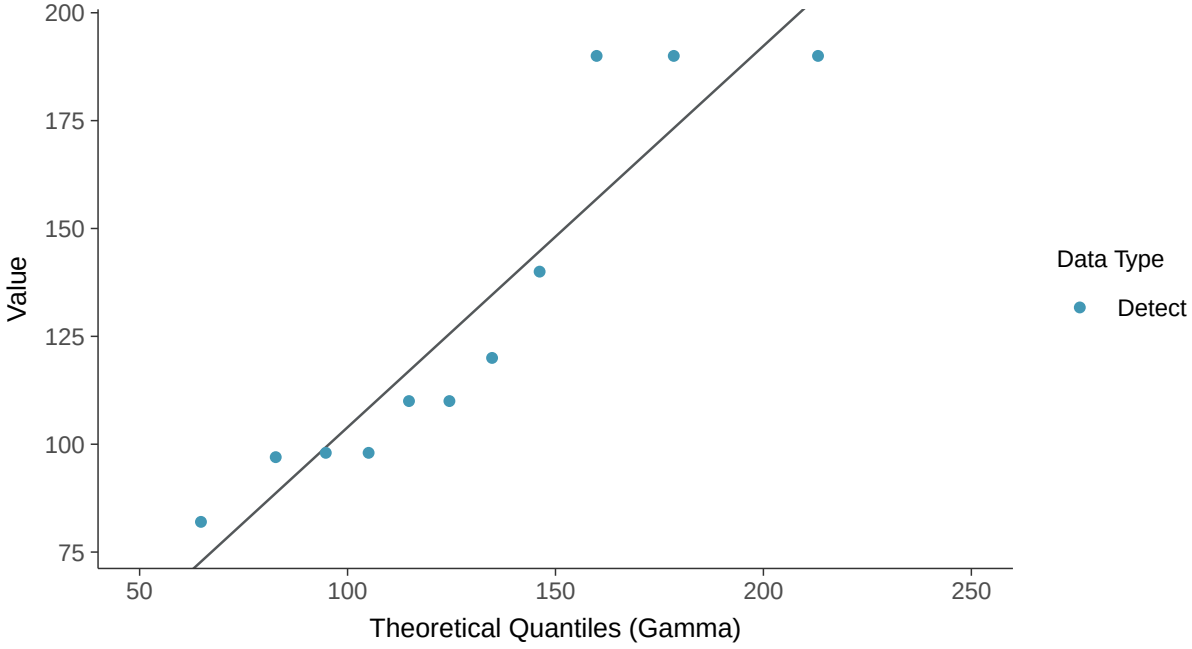
Lognormal Q-Q plot

Chloride (as Cl), MW-30 (mg/L)



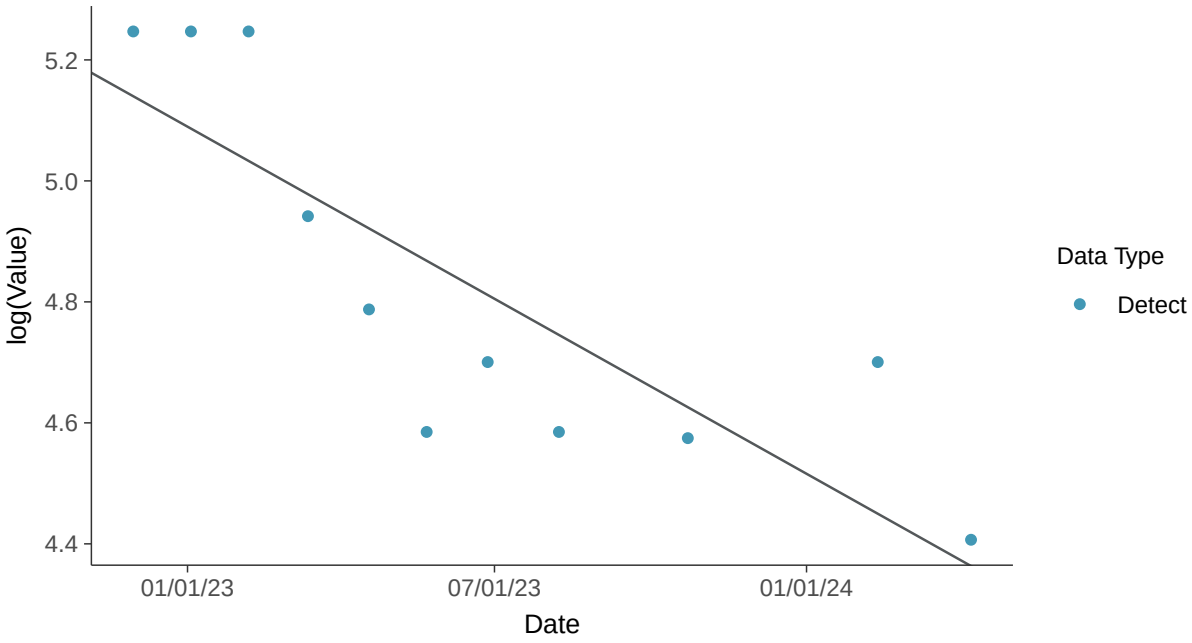
Gamma Q-Q plot

Chloride (as Cl), MW-30 (mg/L)



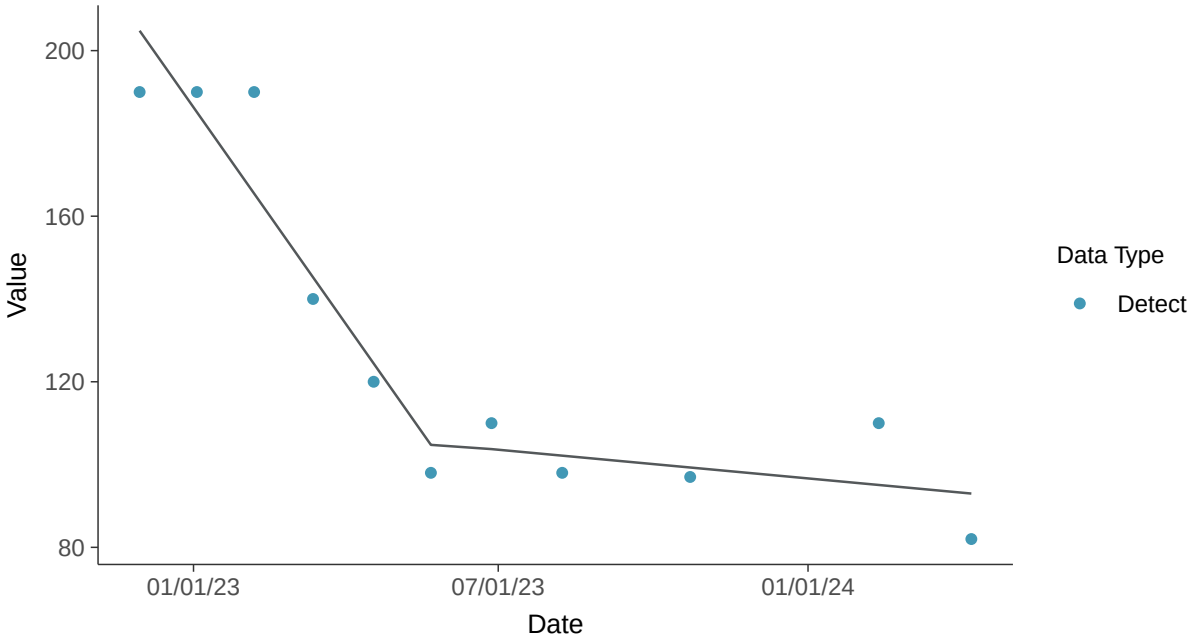
Trend Regression: Lognormal MLE

Chloride (as Cl), MW-30 (mg/L)



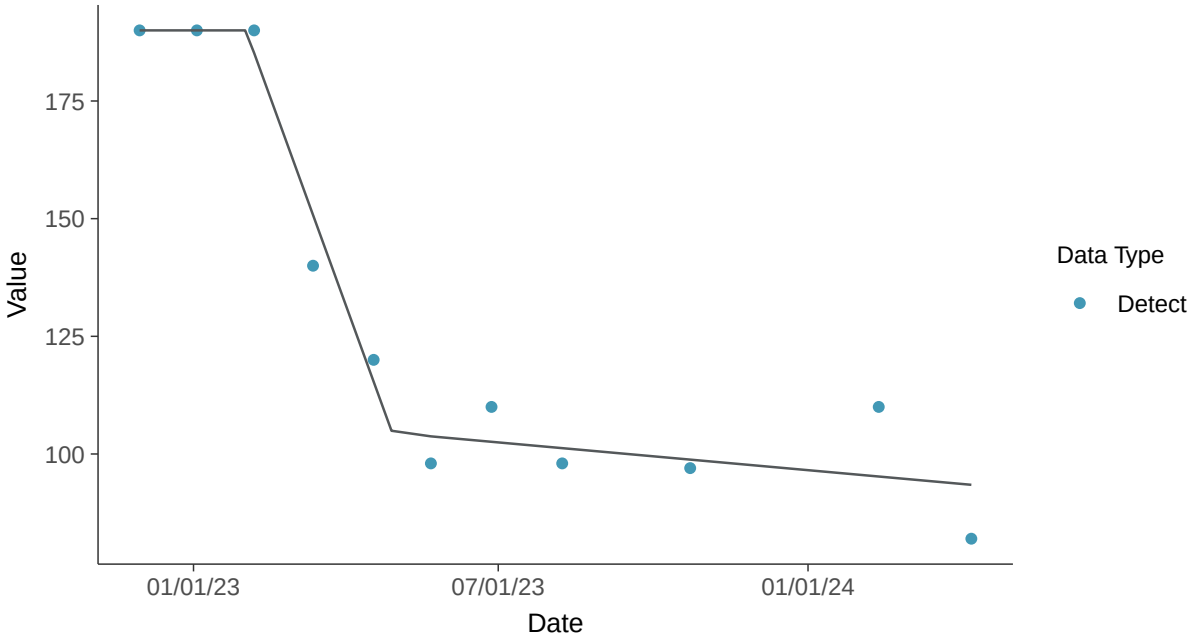
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-30 (mg/L)



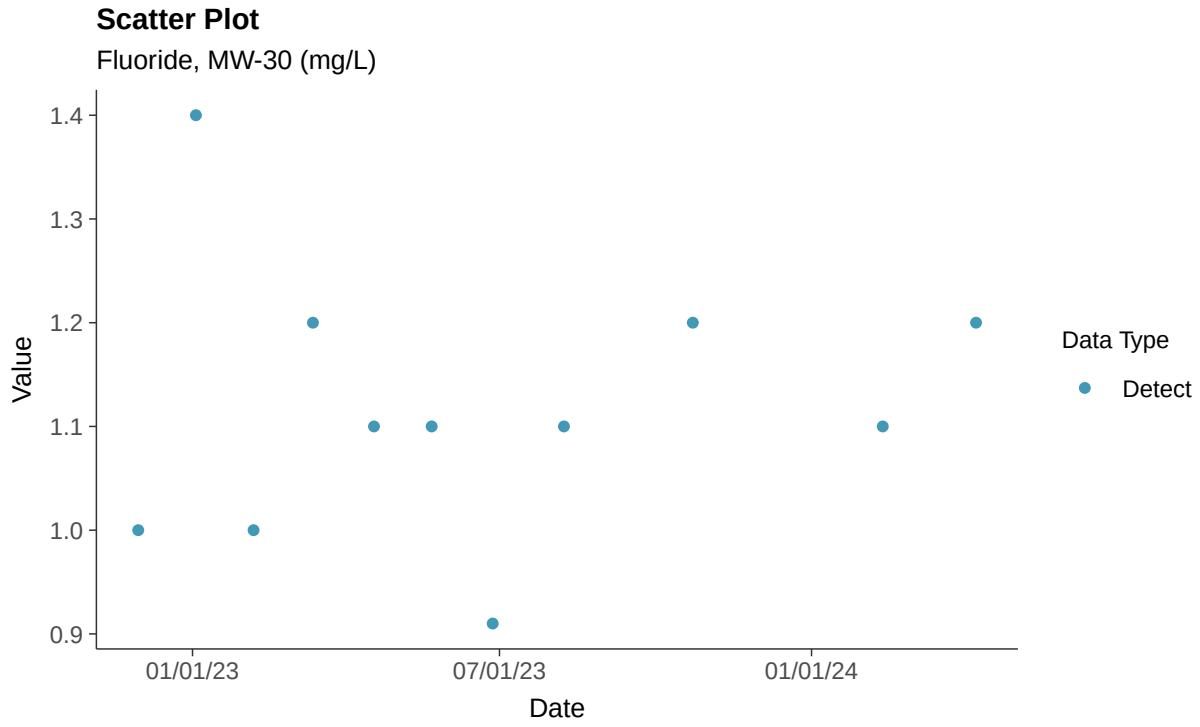
Trend Regression: Piecewise Linear-Linear-Linear

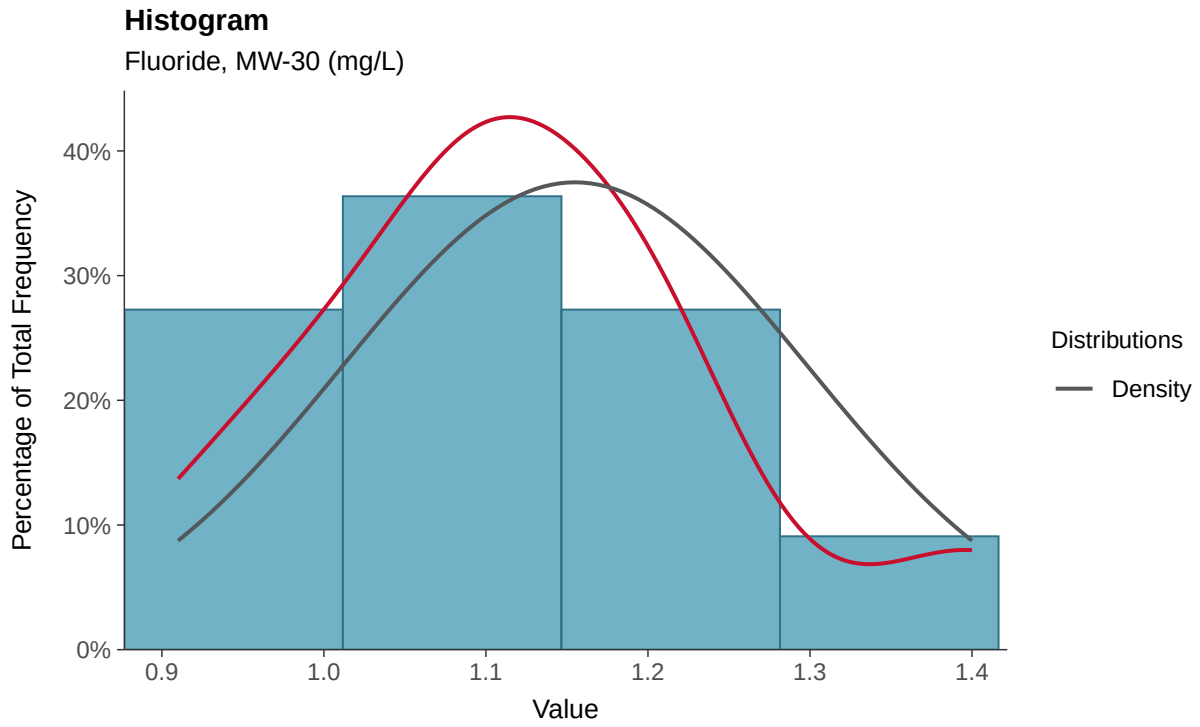
Chloride (as Cl), MW-30 (mg/L)



Appendix III: Fluoride, MW-30

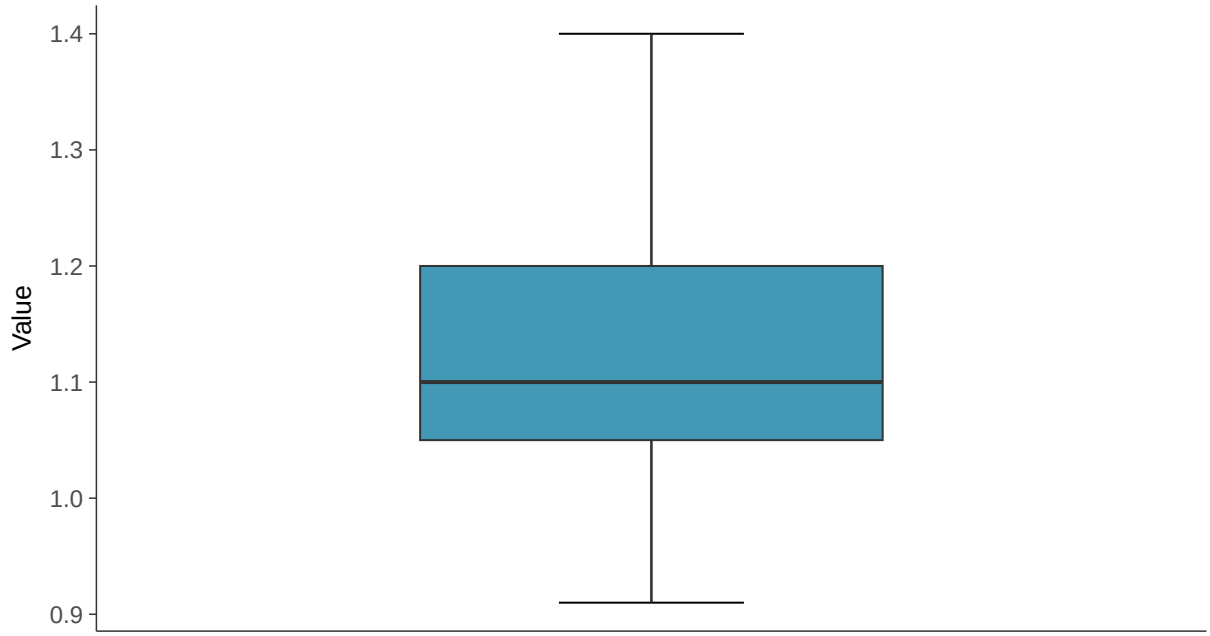
ID: 1_40_4_112





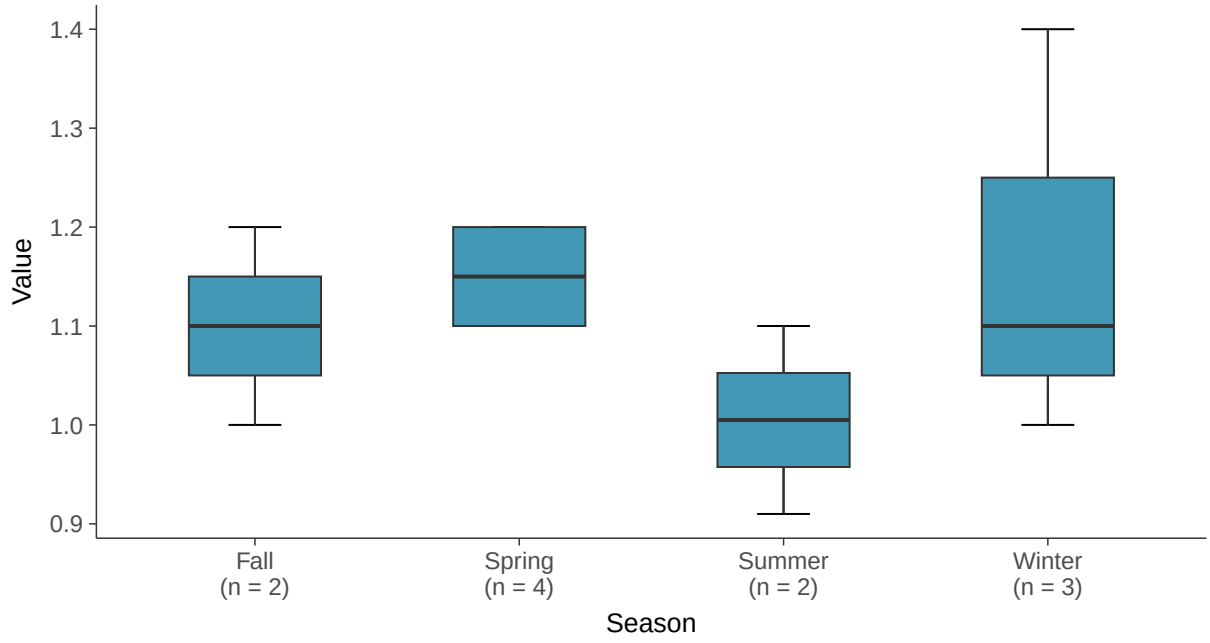
Boxplot

Fluoride, MW-30 (mg/L)



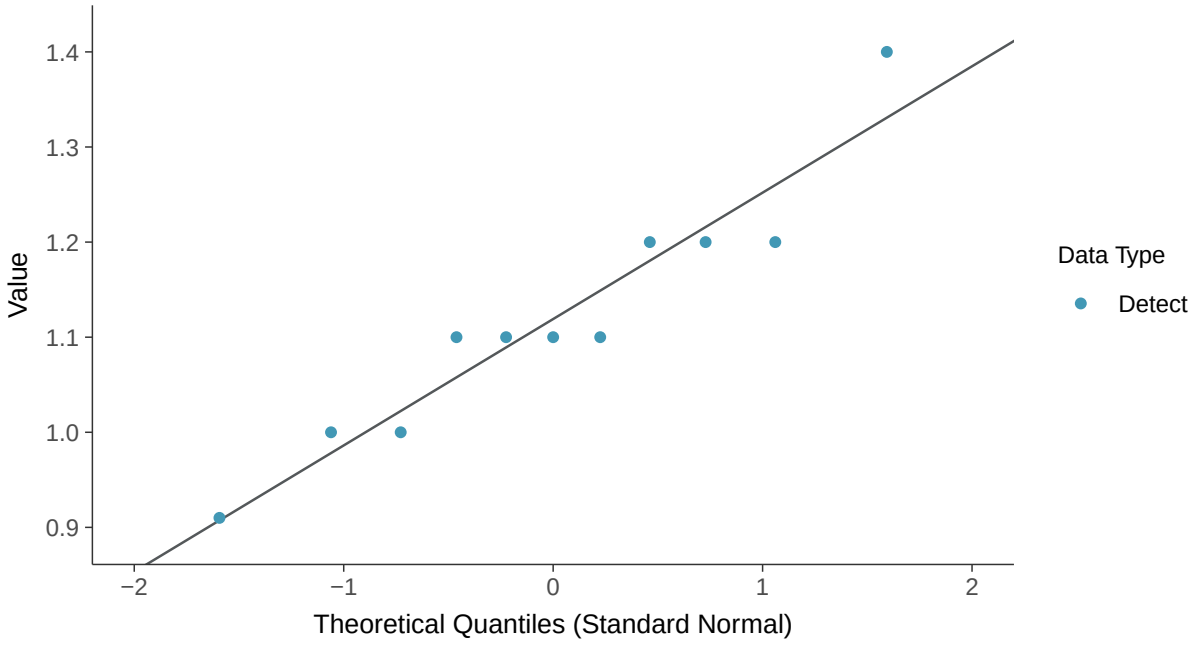
Boxplot by Season

Fluoride, MW-30 (mg/L)



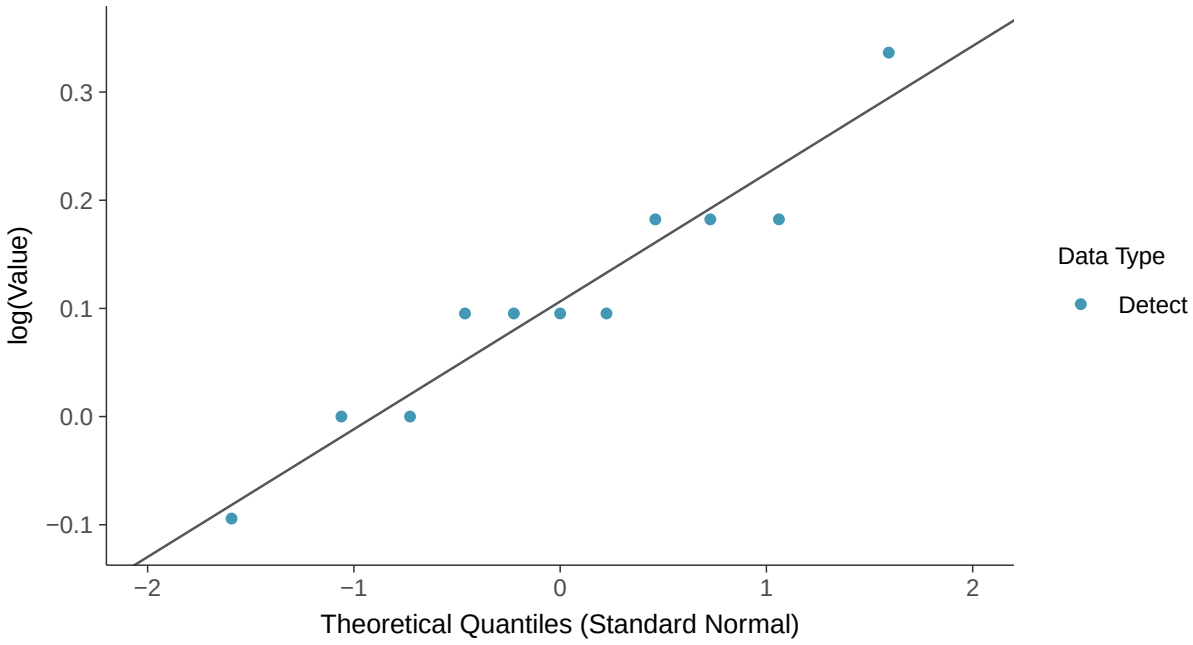
Normal Q-Q plot

Fluoride, MW-30 (mg/L)



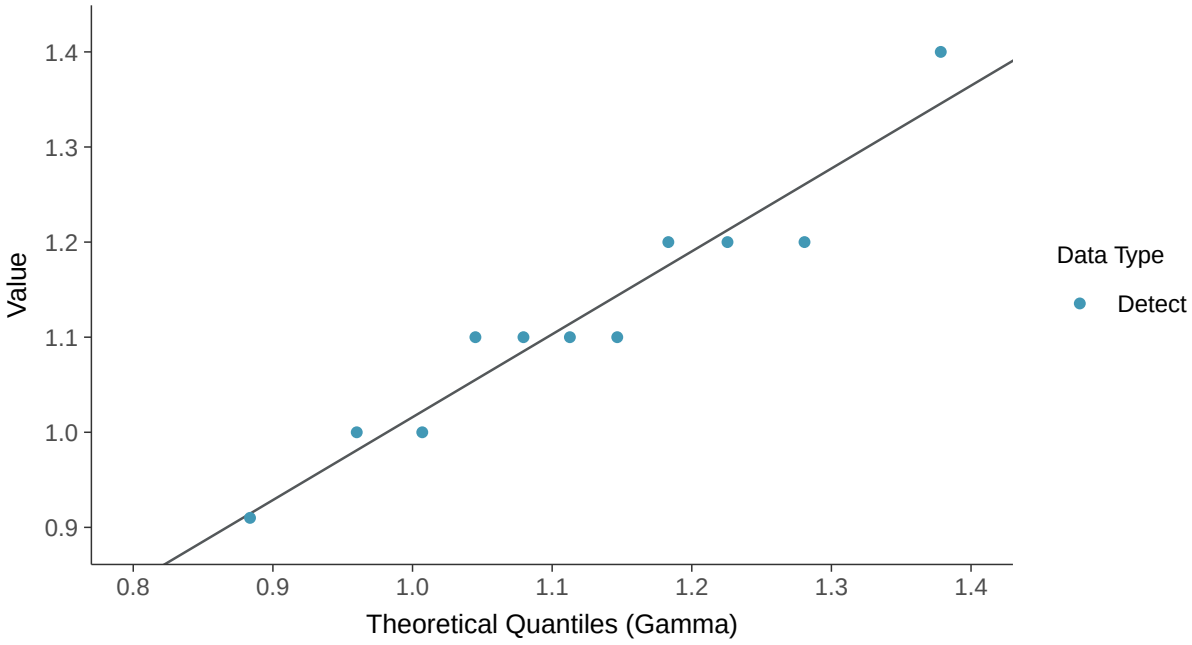
Lognormal Q-Q plot

Fluoride, MW-30 (mg/L)



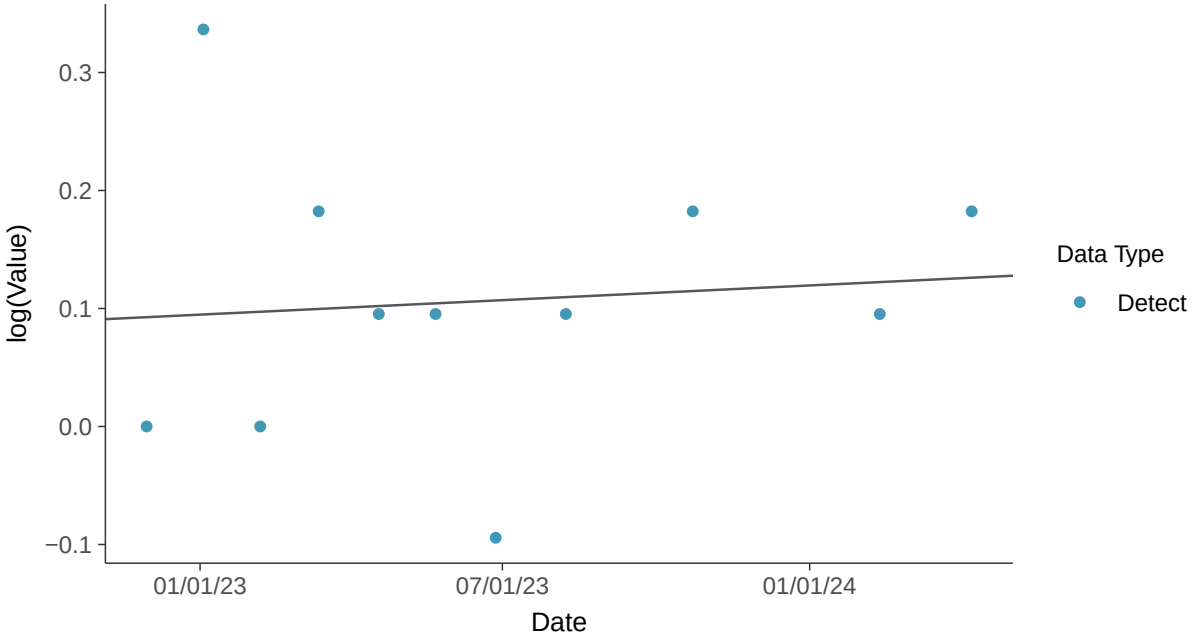
Gamma Q-Q plot

Fluoride, MW-30 (mg/L)



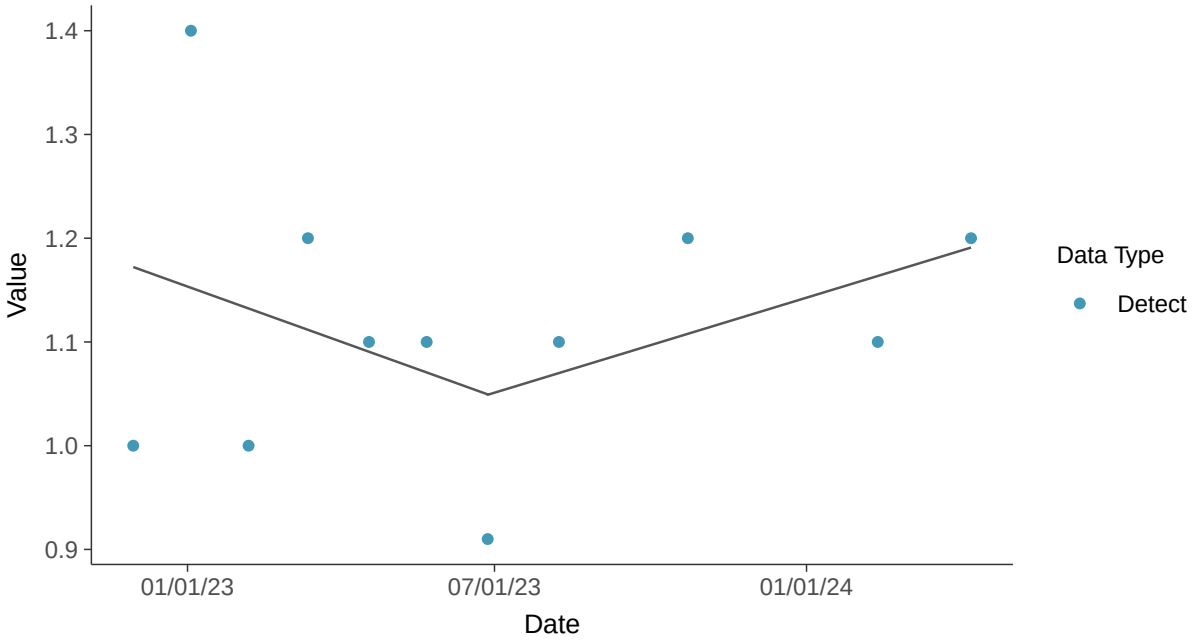
Trend Regression: Lognormal MLE

Fluoride, MW-30 (mg/L)



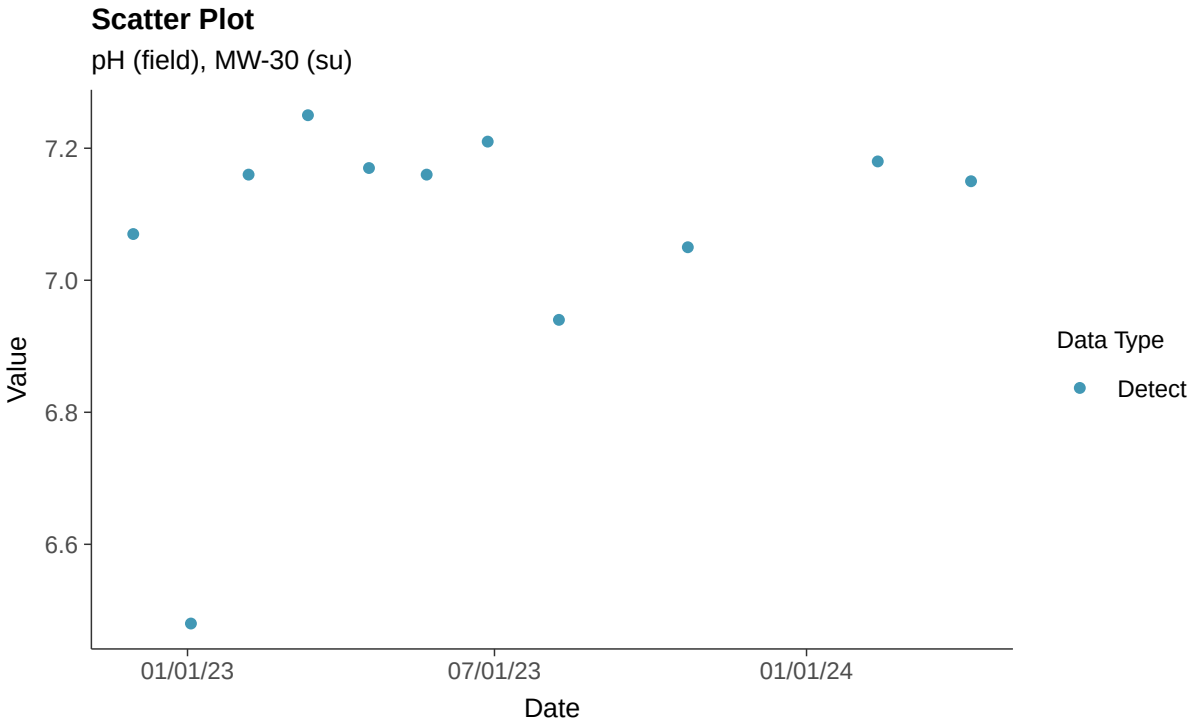
Trend Regression: Piecewise Linear-Linear

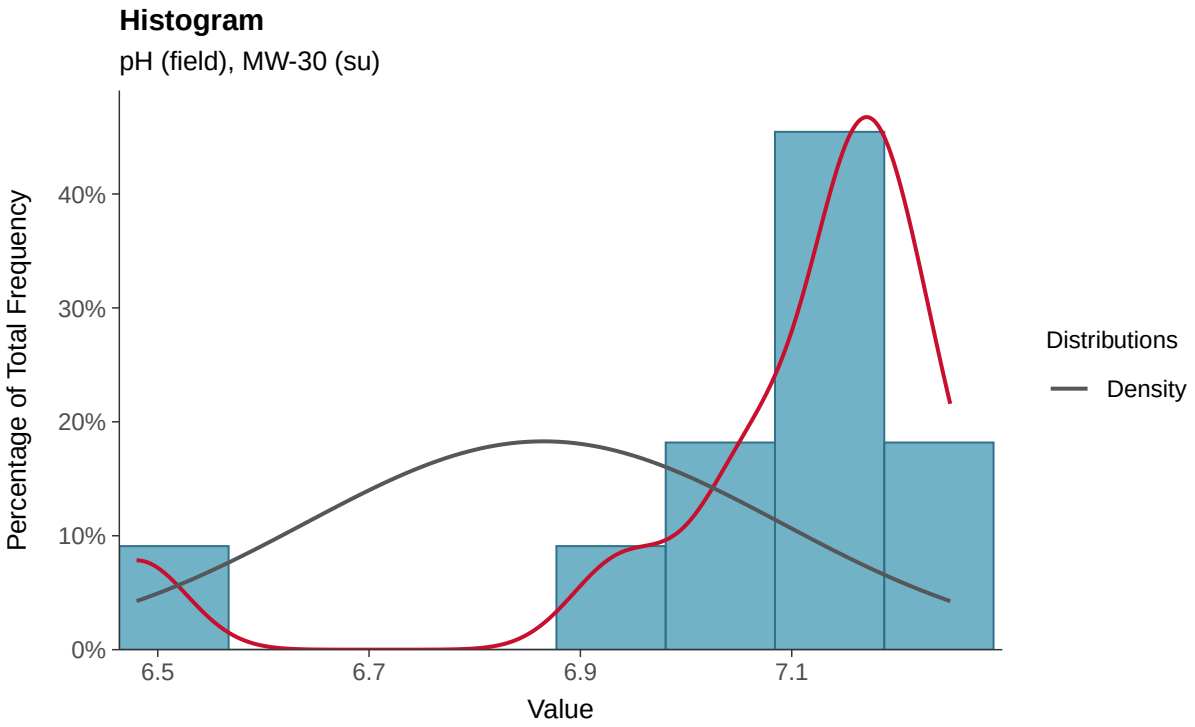
Fluoride, MW-30 (mg/L)



Appendix III: pH (field), MW-30

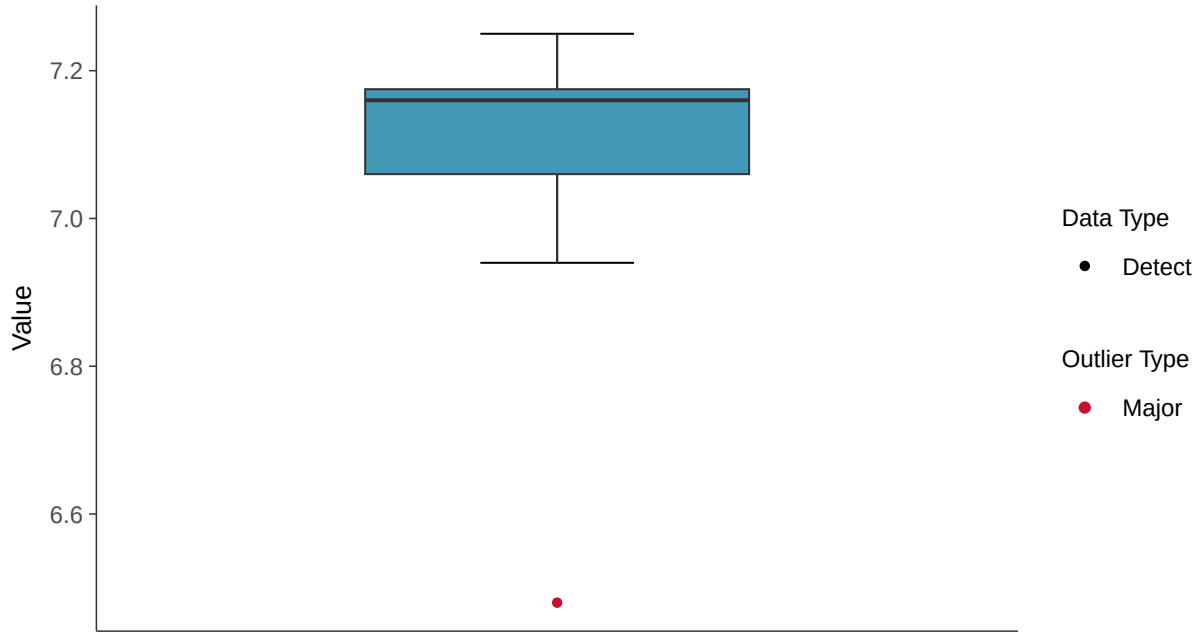
ID: 1_40_4_120





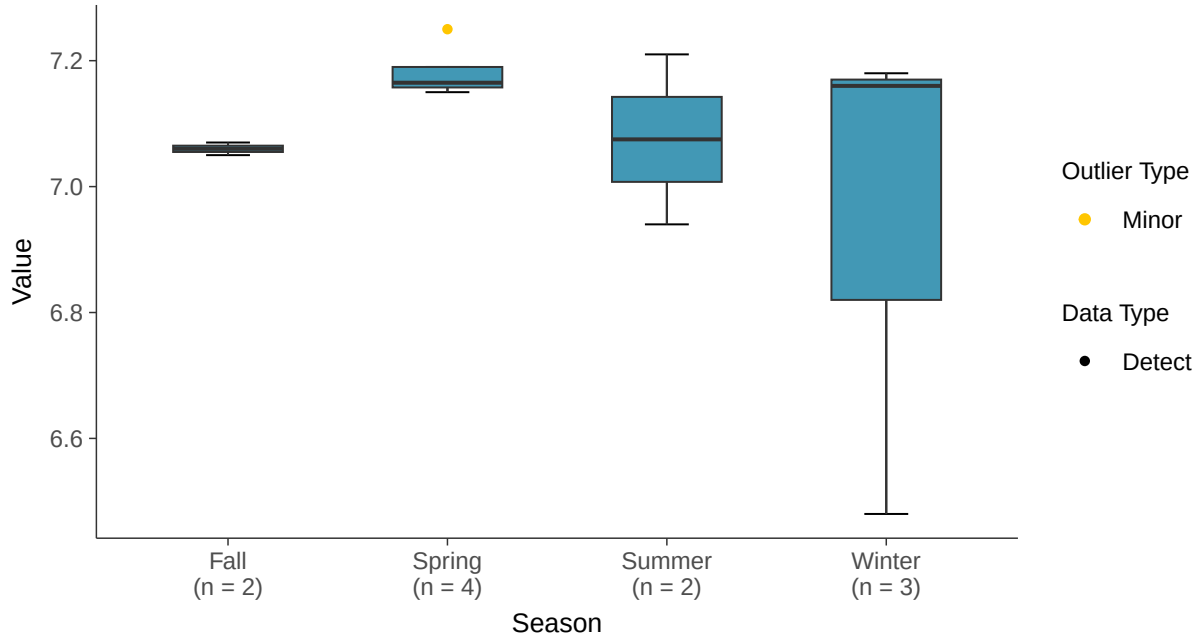
Boxplot

pH (field), MW-30 (su)



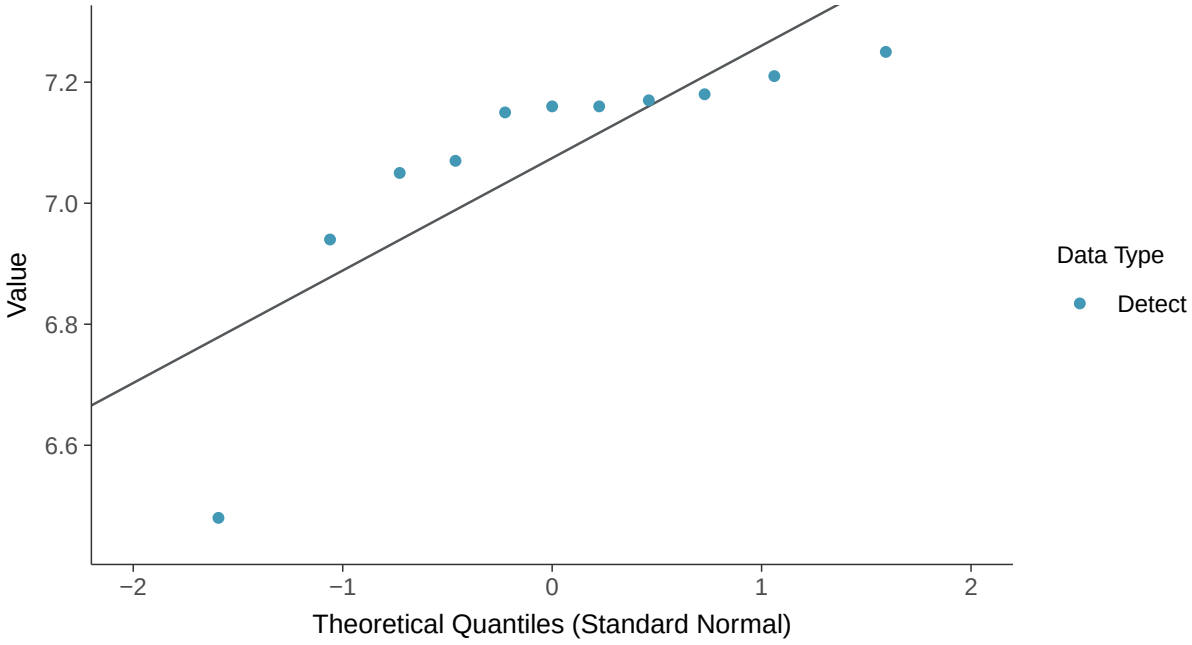
Boxplot by Season

pH (field), MW-30 (su)



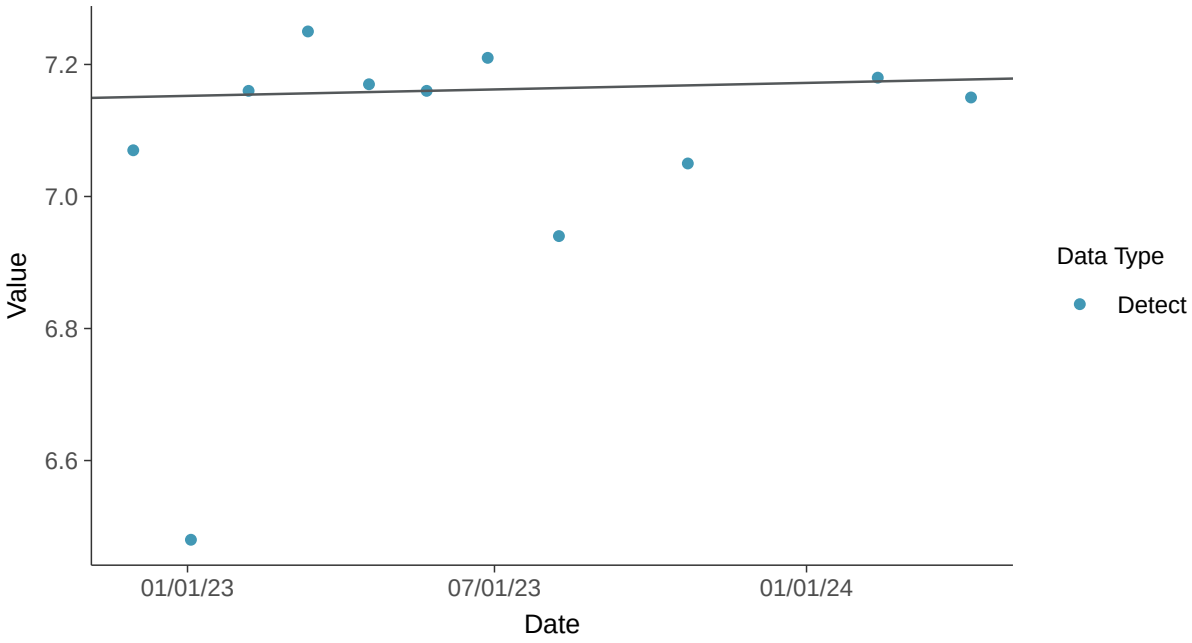
Normal Q-Q plot

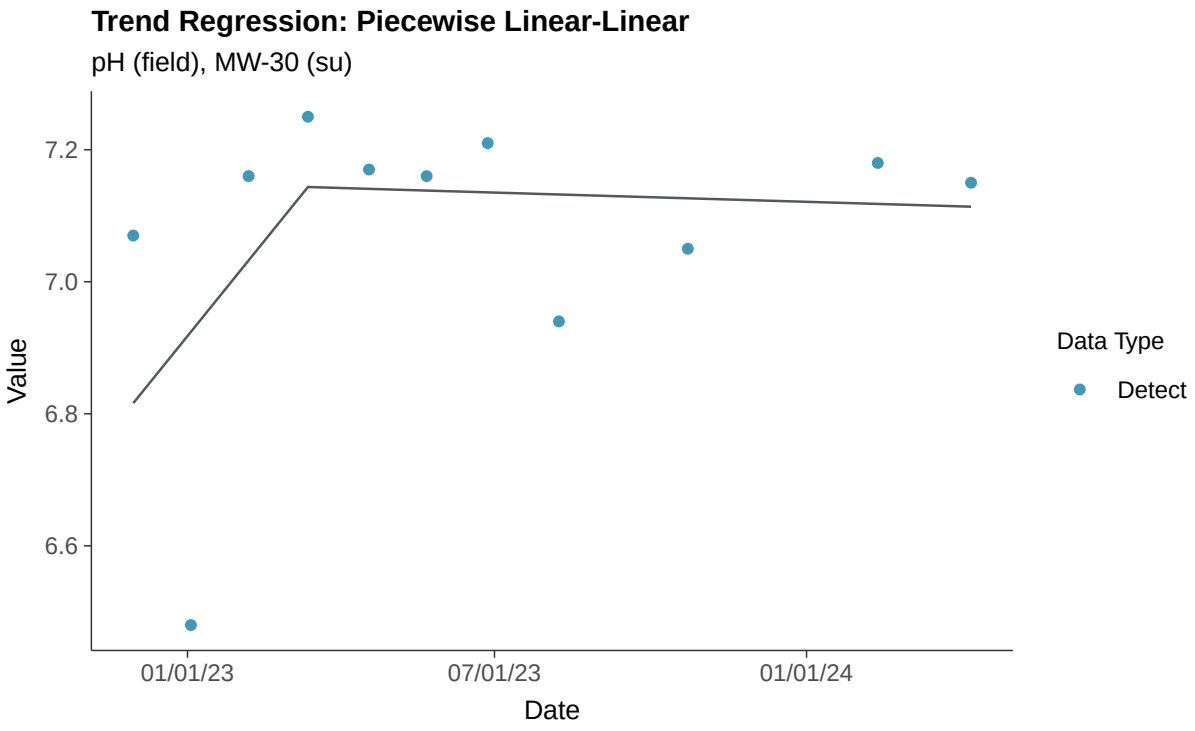
pH (field), MW-30 (su)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

pH (field), MW-30 (su)



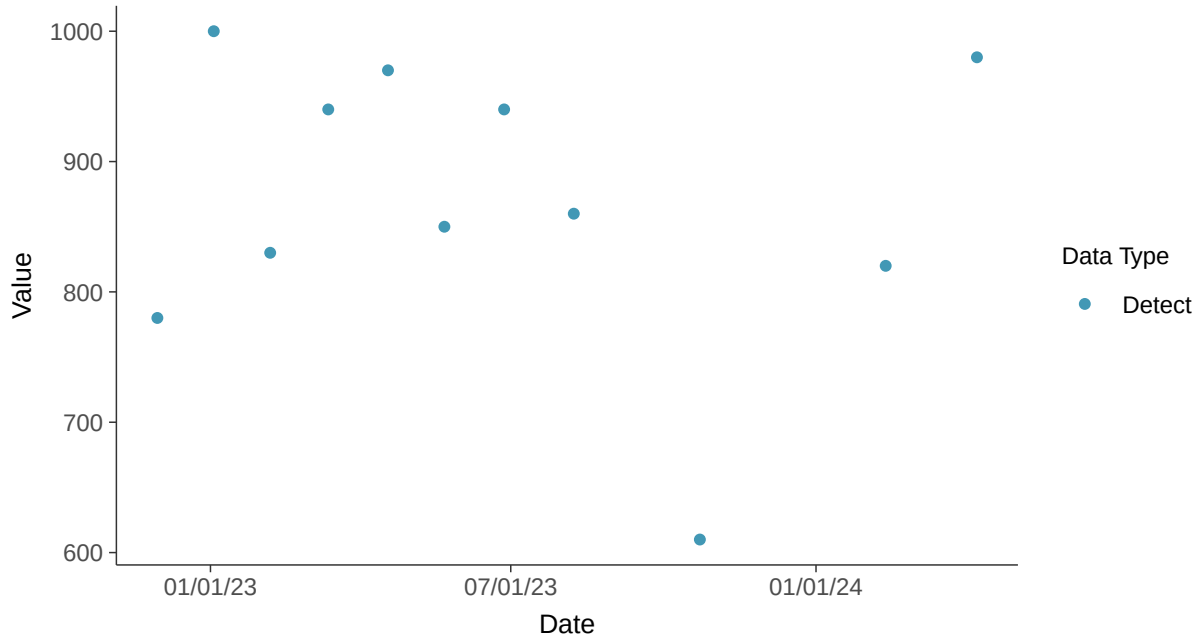

Trend Regression: Piecewise Linear-Linear
pH (field), MW-30 (su)
Value
7.2
7.0
6.8
6.6
01/01/23
07/01/23
01/01/24
Date
Data Type
Detect

Appendix III: Sulfate (as SO4), MW-30

ID: 1_40_4_124

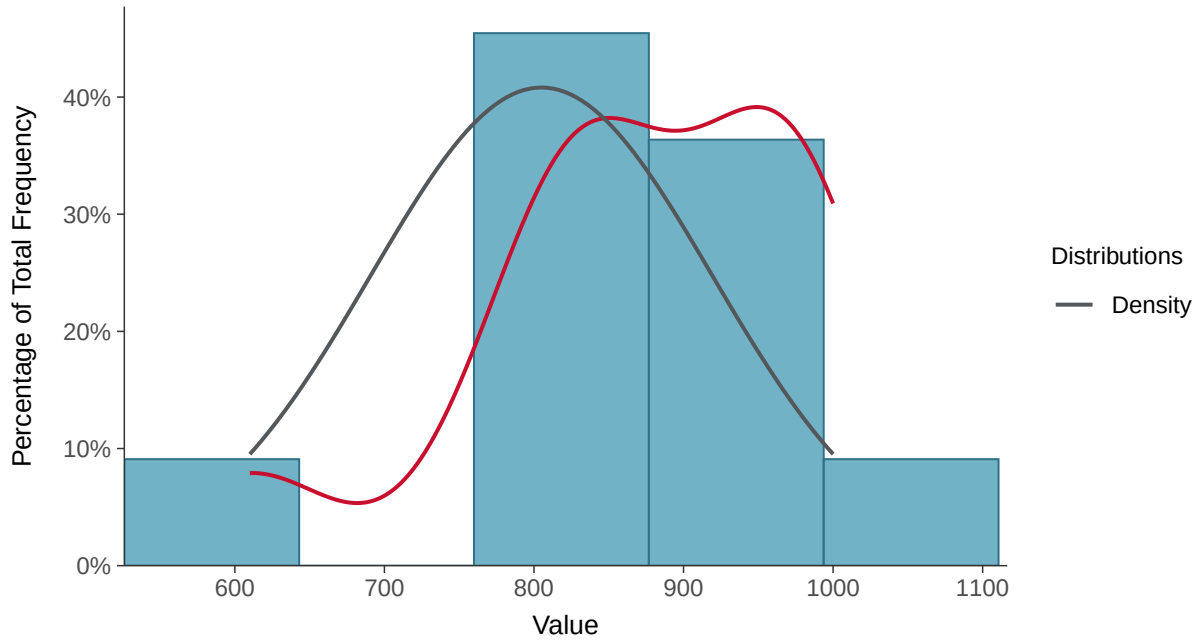
Scatter Plot

Sulfate (as SO4), MW-30 (mg/L)



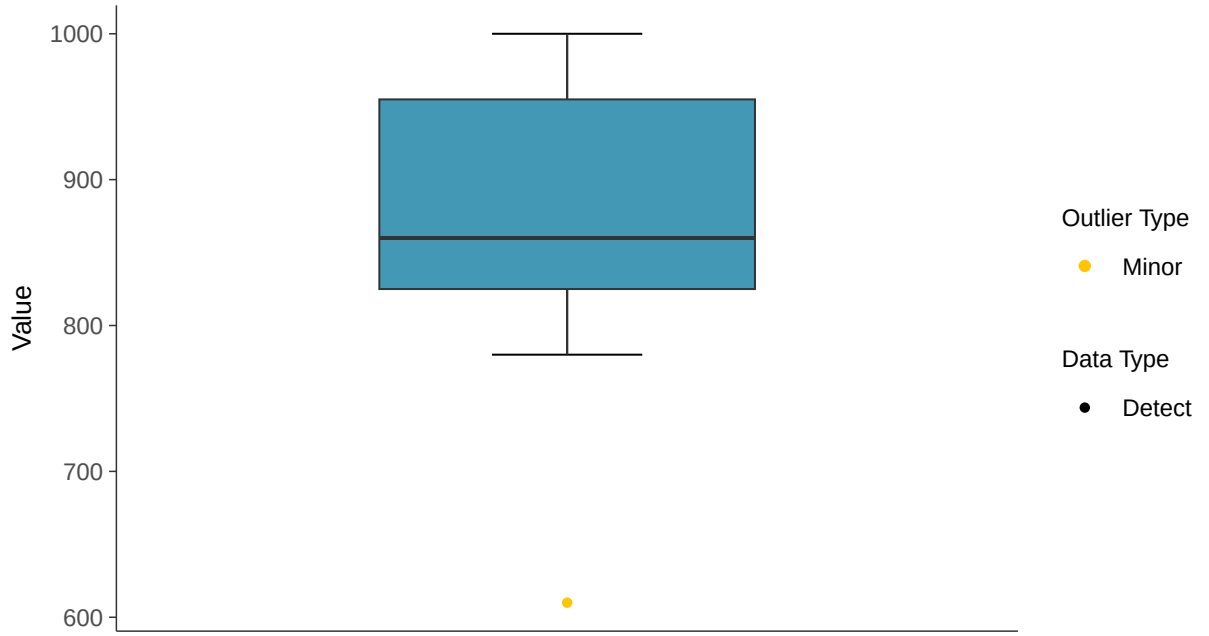
Histogram

Sulfate (as SO4), MW-30 (mg/L)



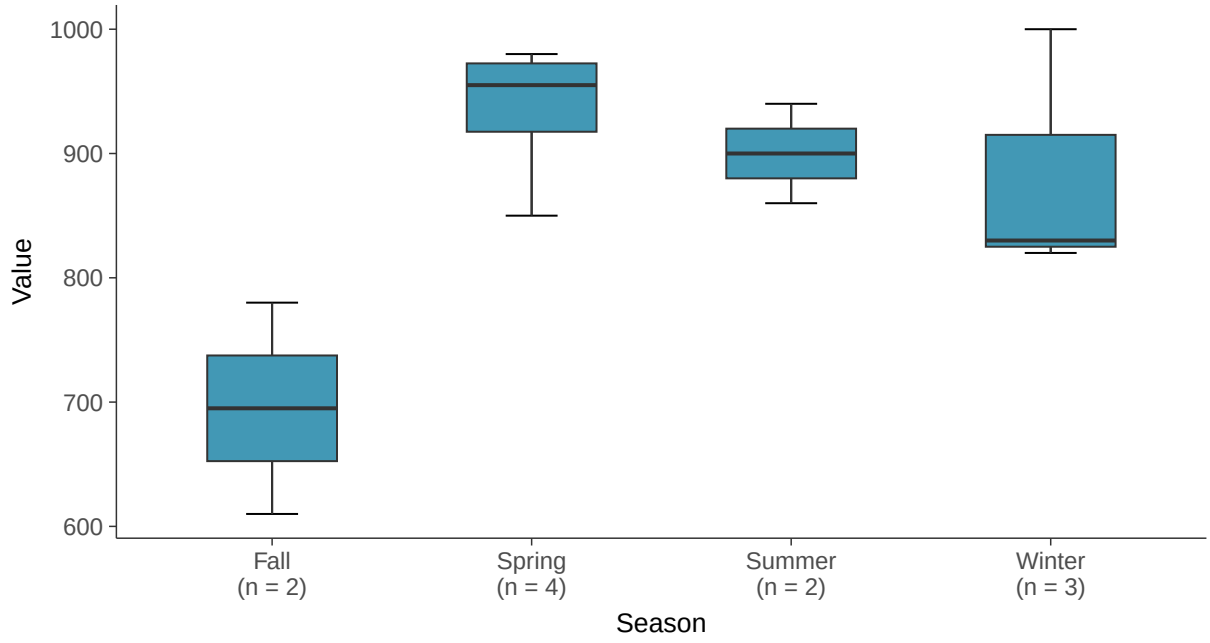
Boxplot

Sulfate (as SO4), MW-30 (mg/L)



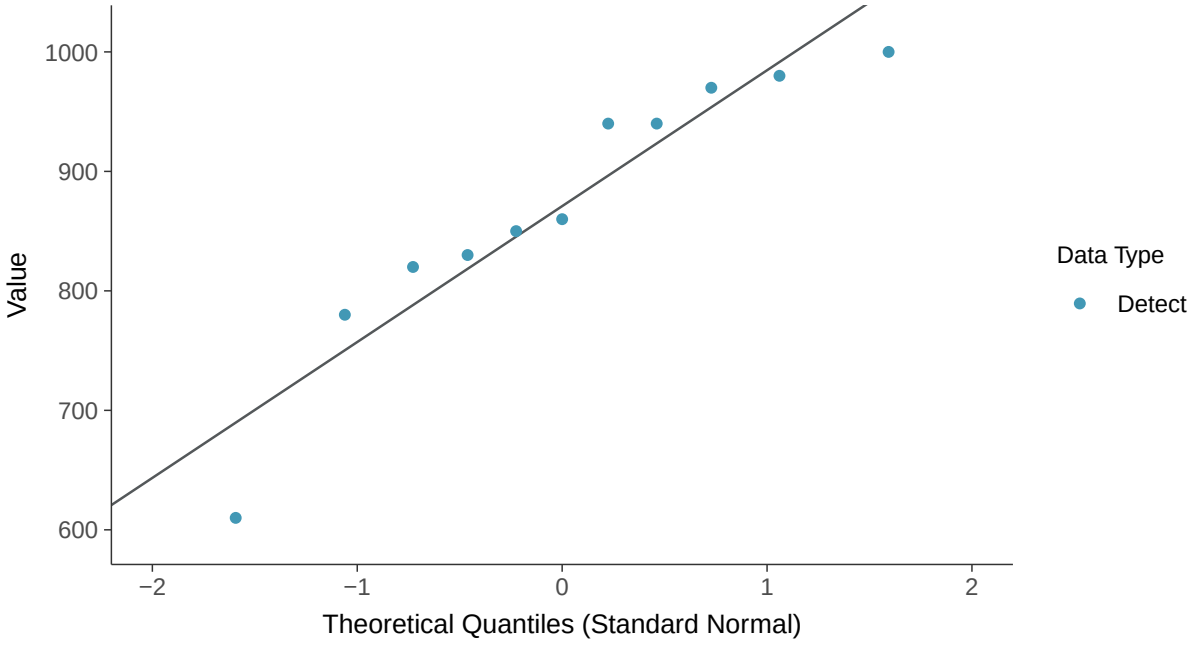
Boxplot by Season

Sulfate (as SO4), MW-30 (mg/L)



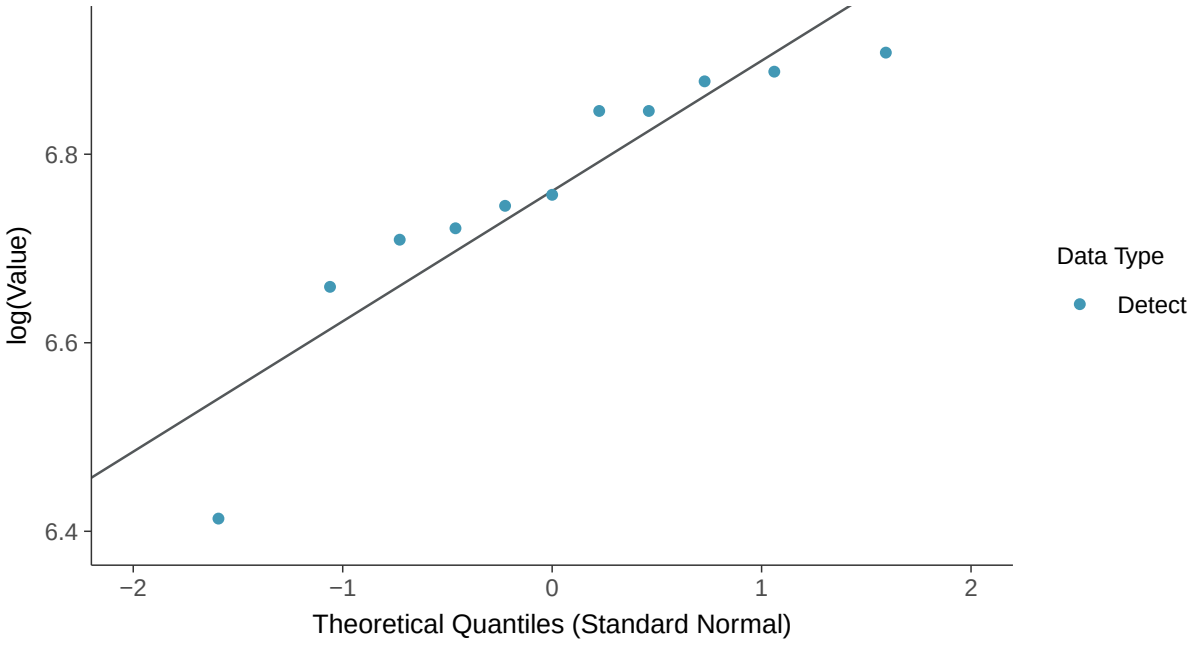
Normal Q-Q plot

Sulfate (as SO4), MW-30 (mg/L)



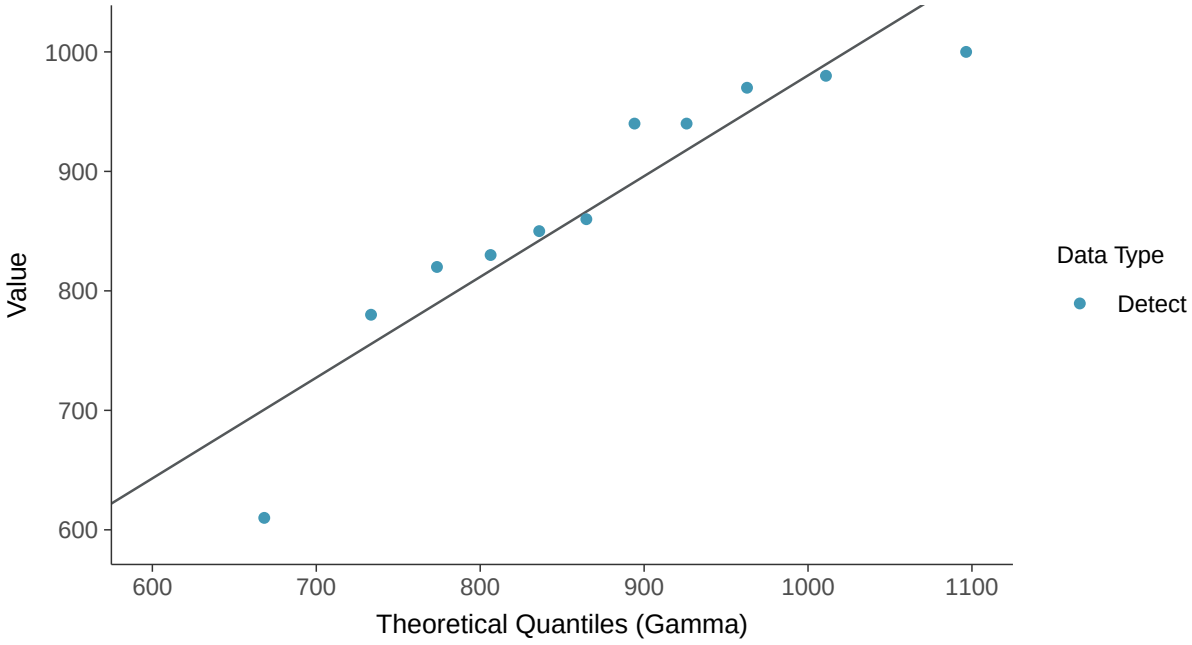
Lognormal Q-Q plot

Sulfate (as SO4), MW-30 (mg/L)



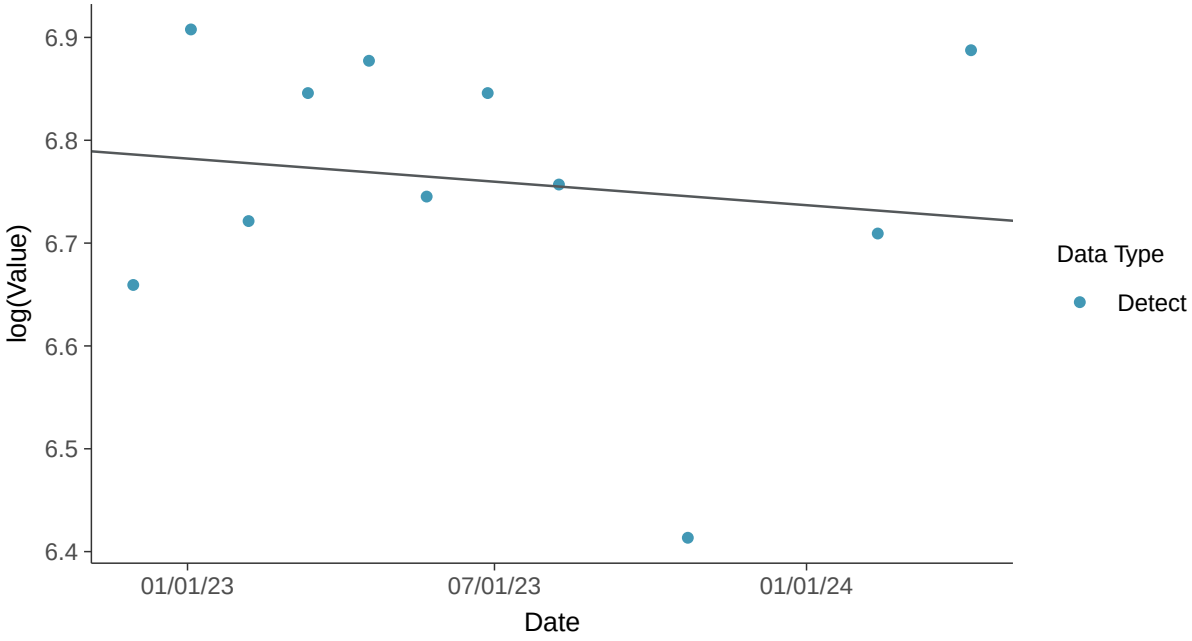
Gamma Q-Q plot

Sulfate (as SO4), MW-30 (mg/L)



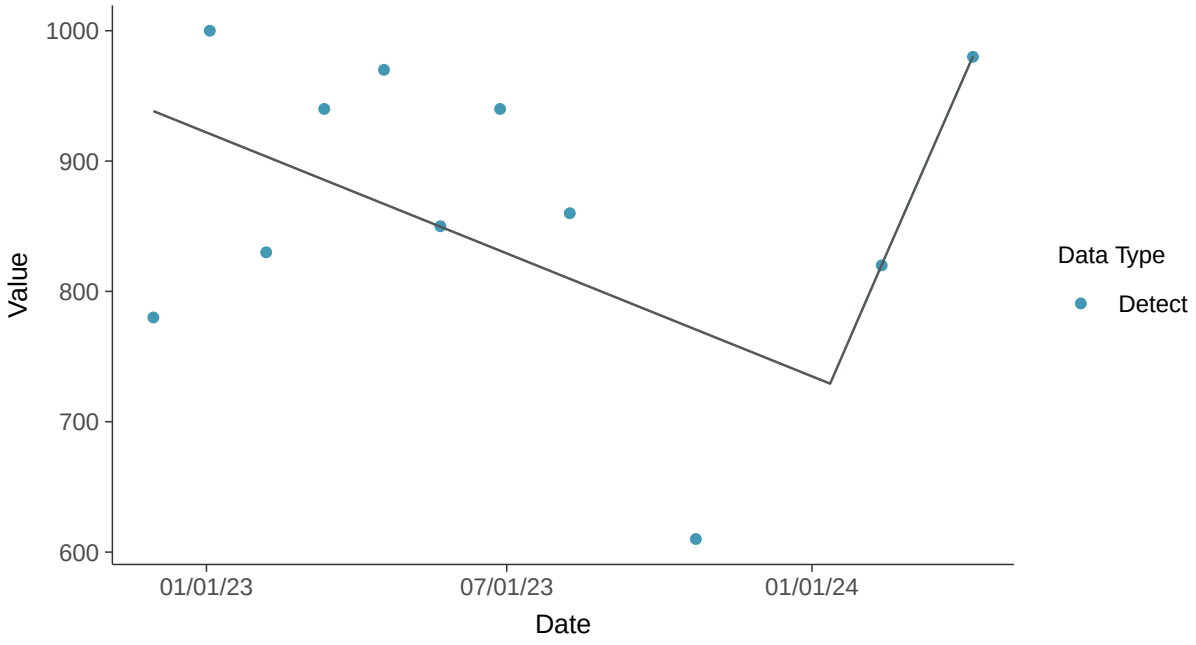
Trend Regression: Lognormal MLE

Sulfate (as SO4), MW-30 (mg/L)



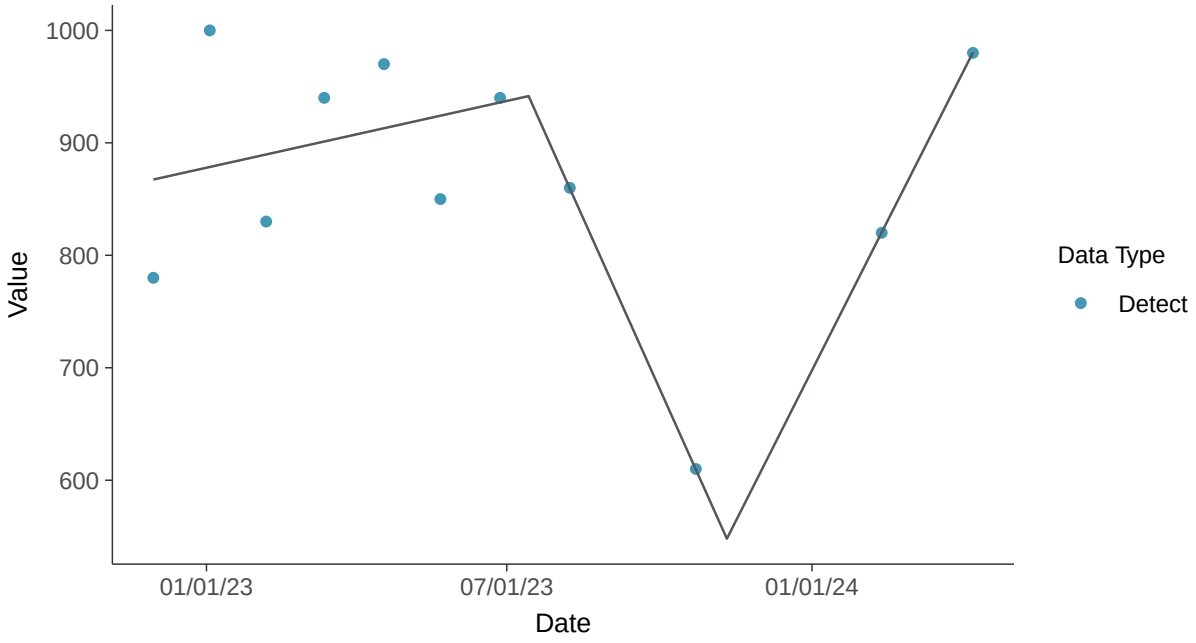
Trend Regression: Piecewise Linear-Linear

Sulfate (as SO4), MW-30 (mg/L)



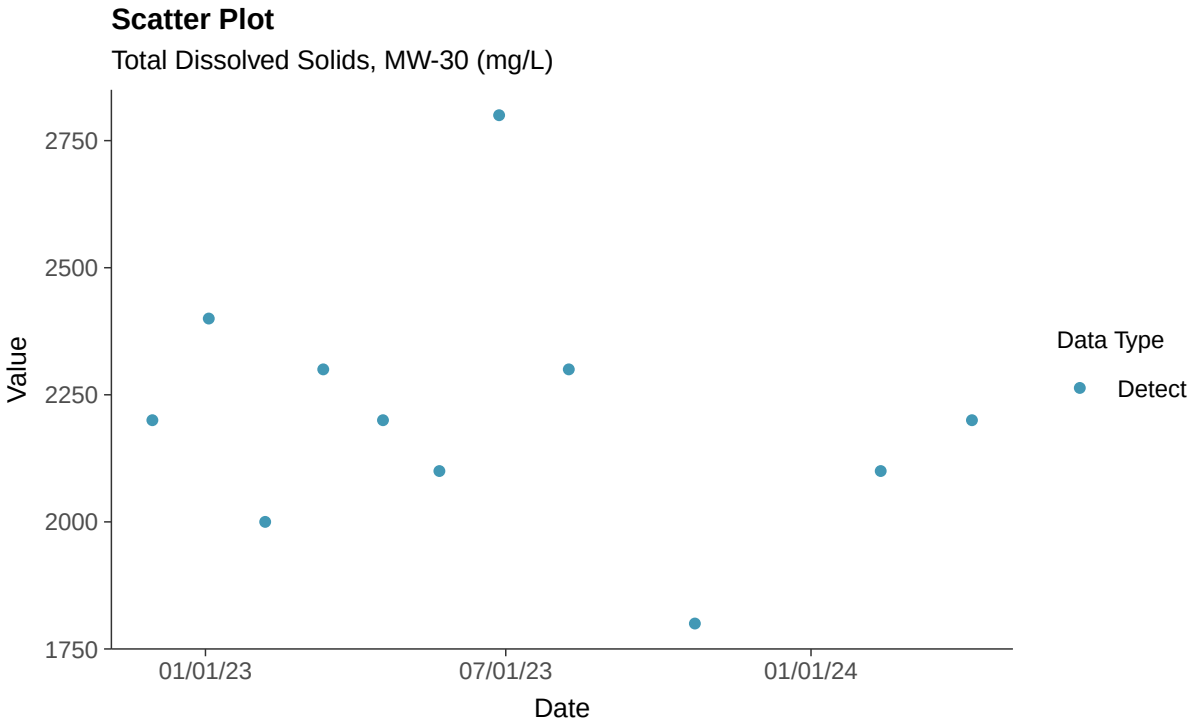
Trend Regression: Piecewise Linear-Linear-Linear

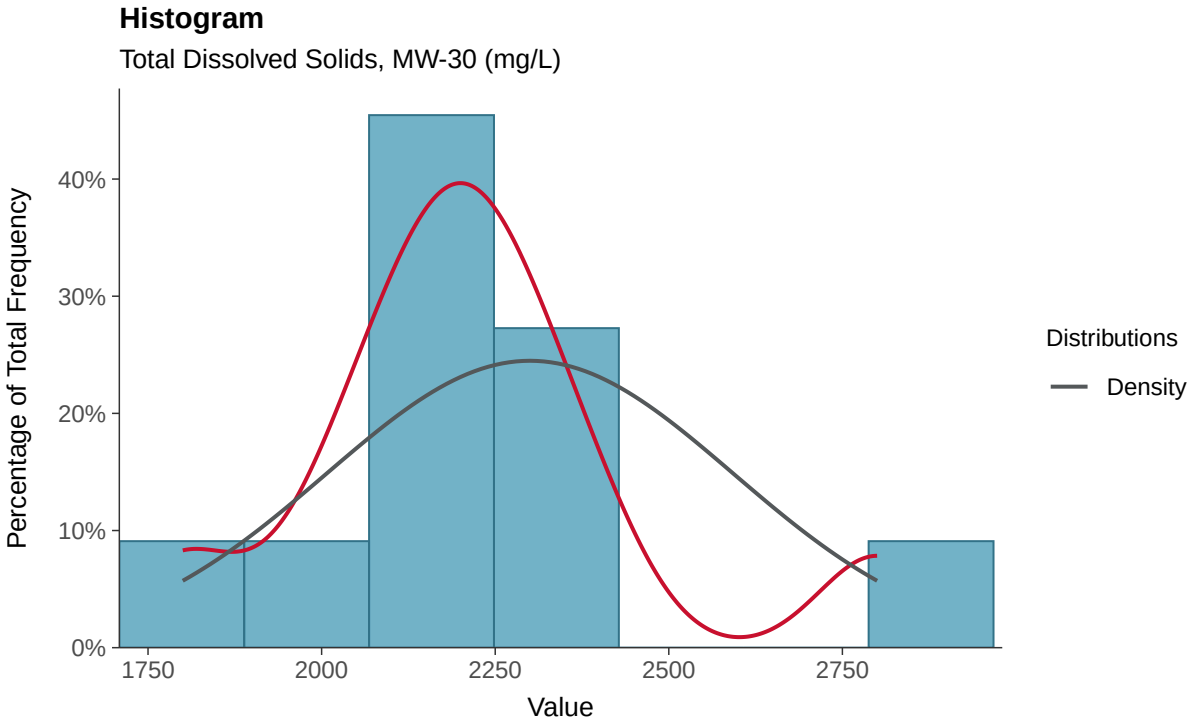
Sulfate (as SO4), MW-30 (mg/L)



Appendix III: Total Dissolved Solids, MW-30

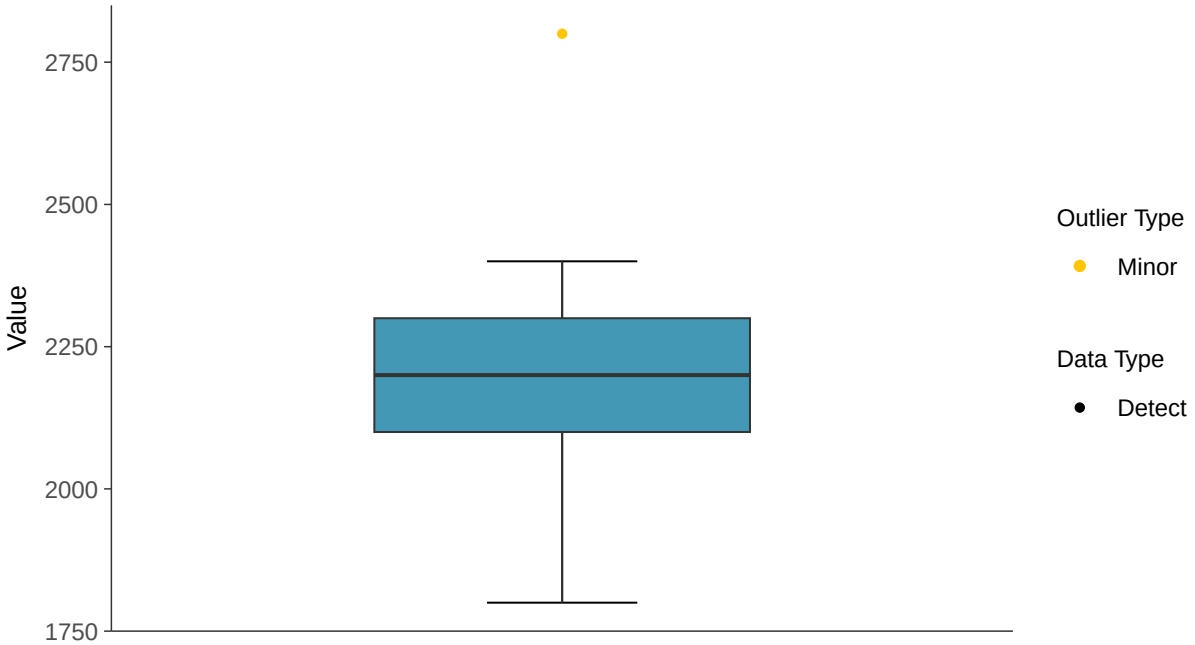
ID: 1_40_4_126





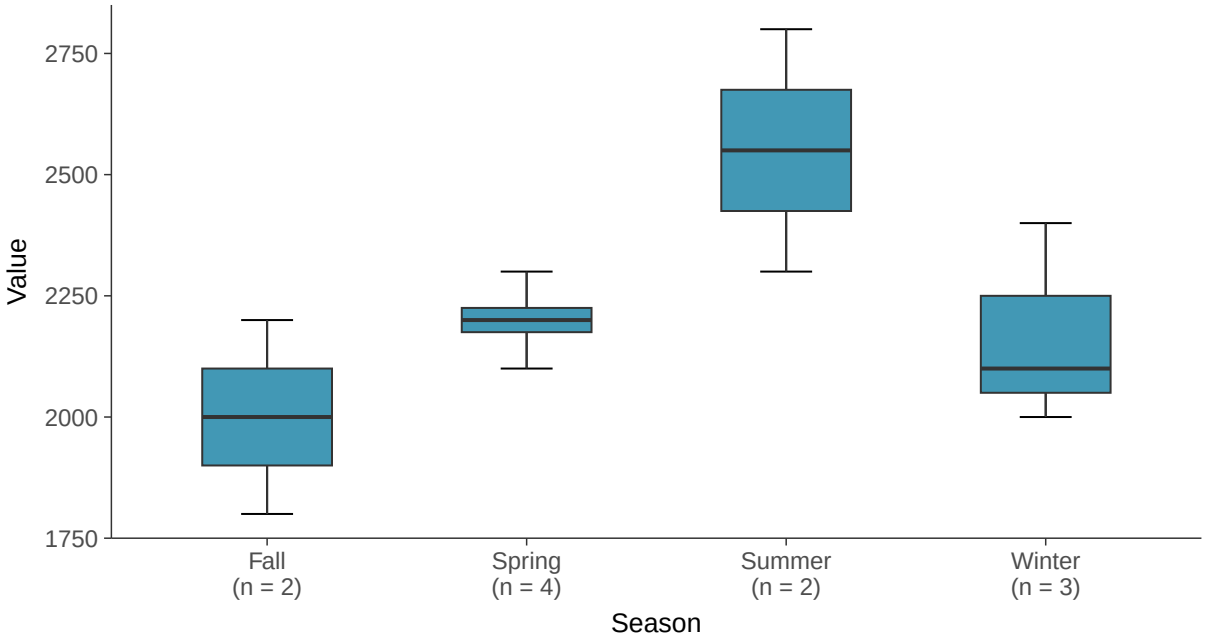
Boxplot

Total Dissolved Solids, MW-30 (mg/L)



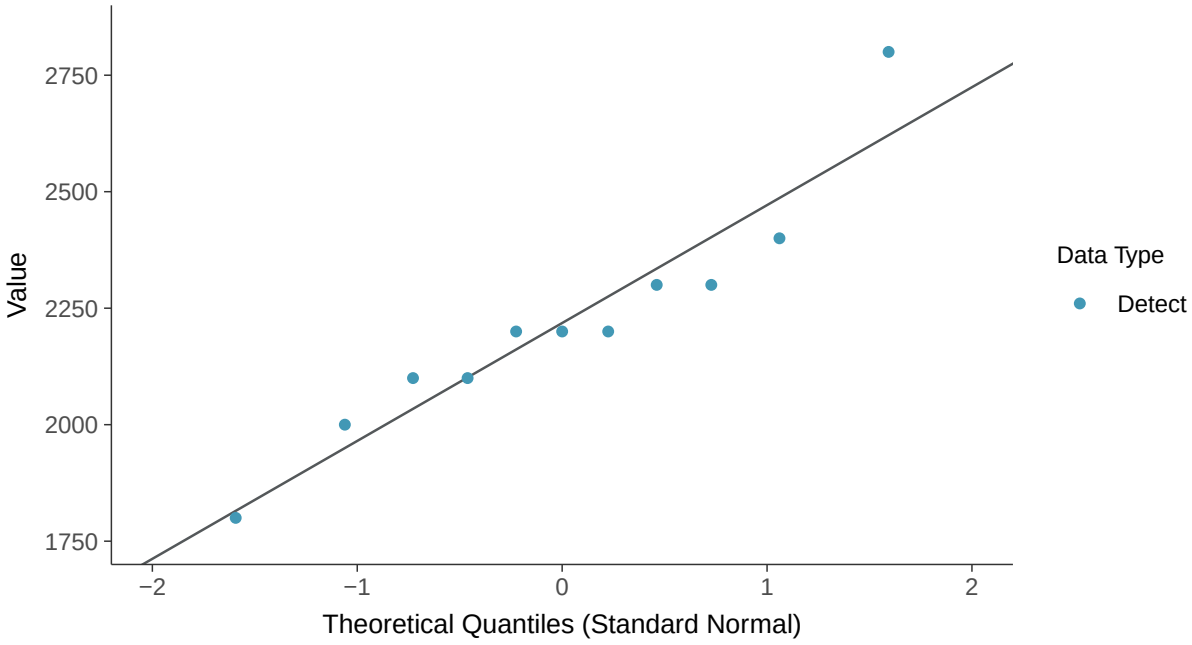
Boxplot by Season

Total Dissolved Solids, MW-30 (mg/L)



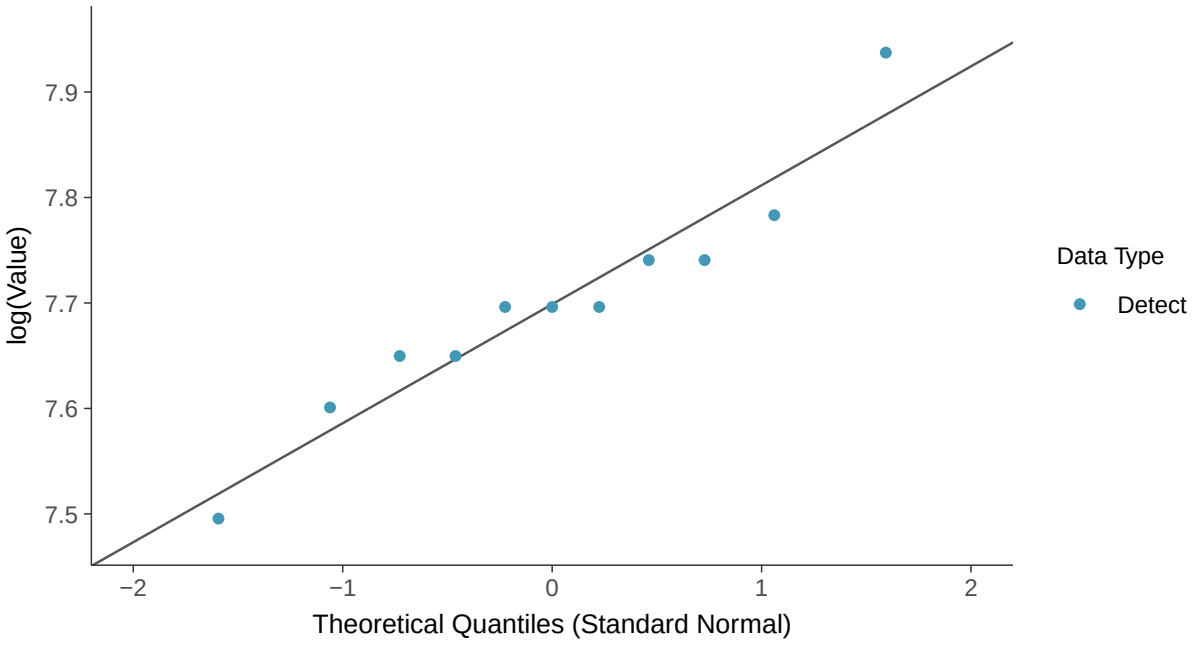
Normal Q-Q plot

Total Dissolved Solids, MW-30 (mg/L)



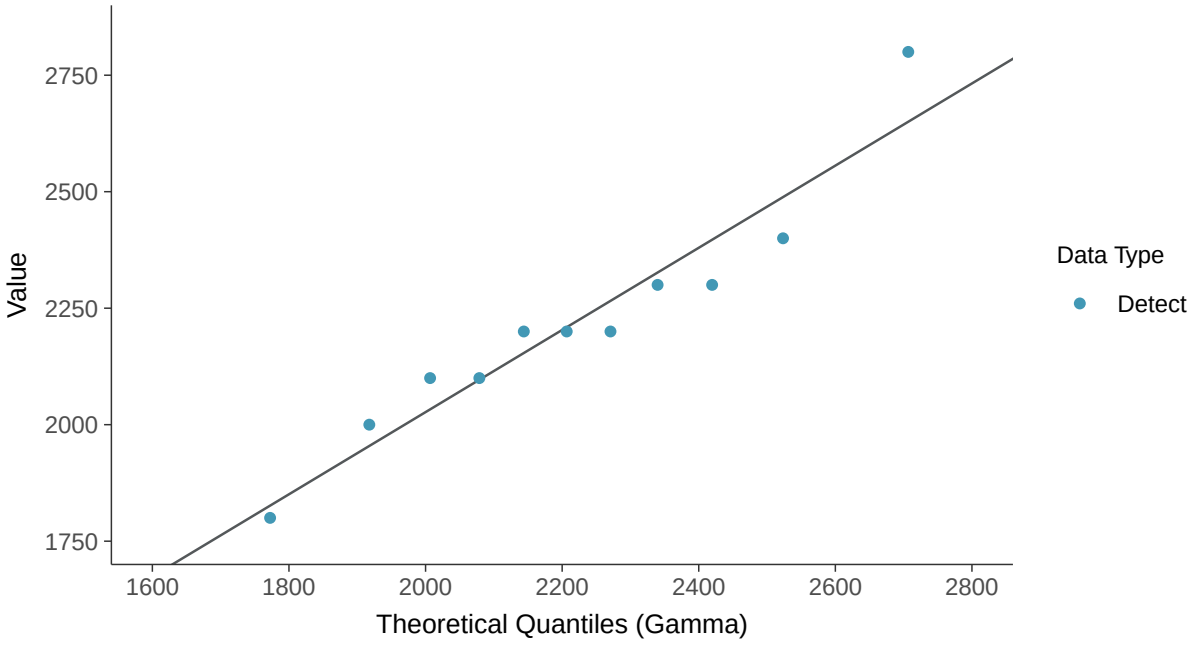
Lognormal Q-Q plot

Total Dissolved Solids, MW-30 (mg/L)



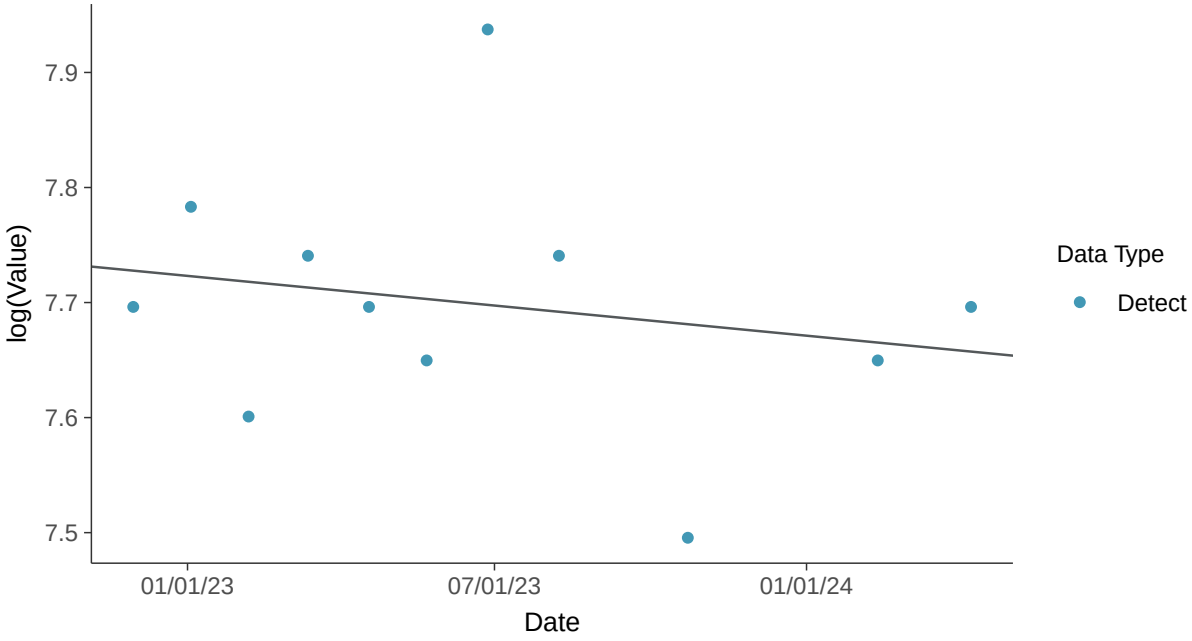
Gamma Q-Q plot

Total Dissolved Solids, MW-30 (mg/L)



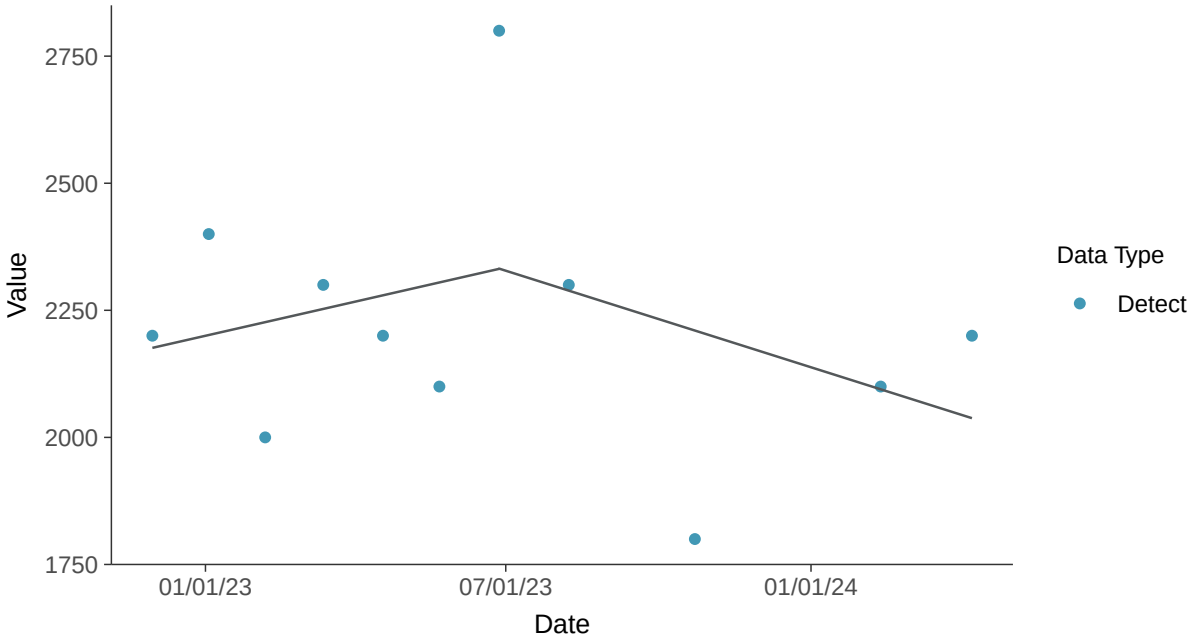
Trend Regression: Lognormal MLE

Total Dissolved Solids, MW-30 (mg/L)



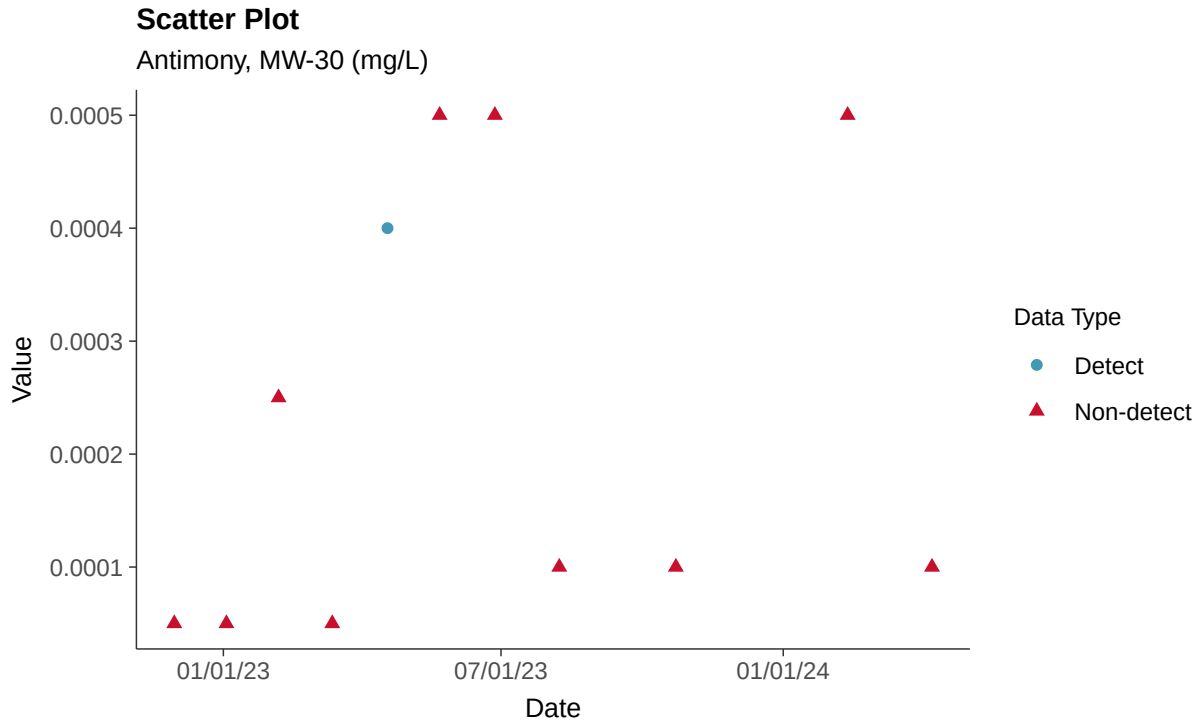
Trend Regression: Piecewise Linear-Linear

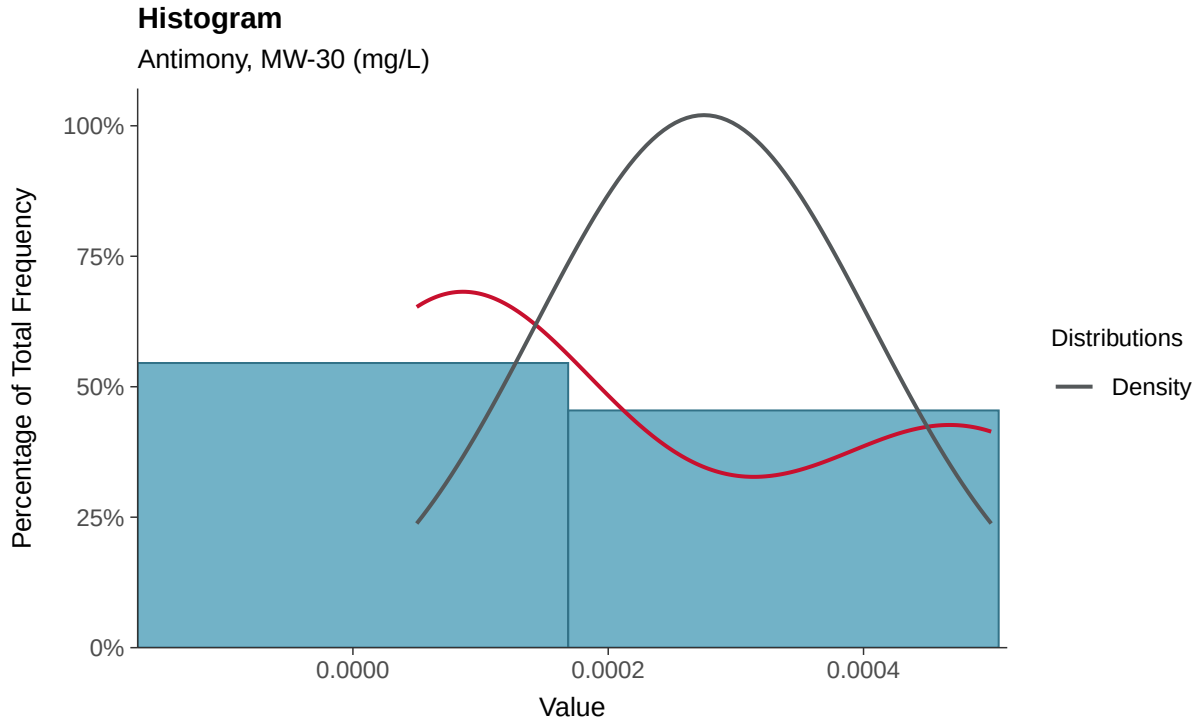
Total Dissolved Solids, MW-30 (mg/L)



Appendix IV: Antimony, MW-30

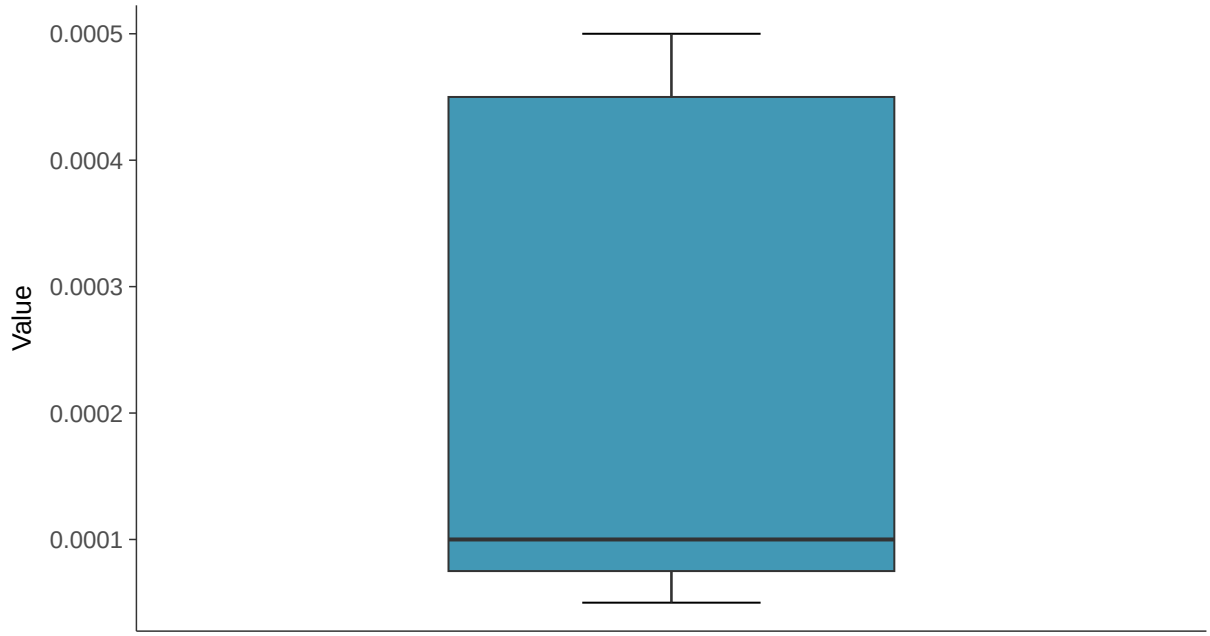
ID: 1_40_5_101





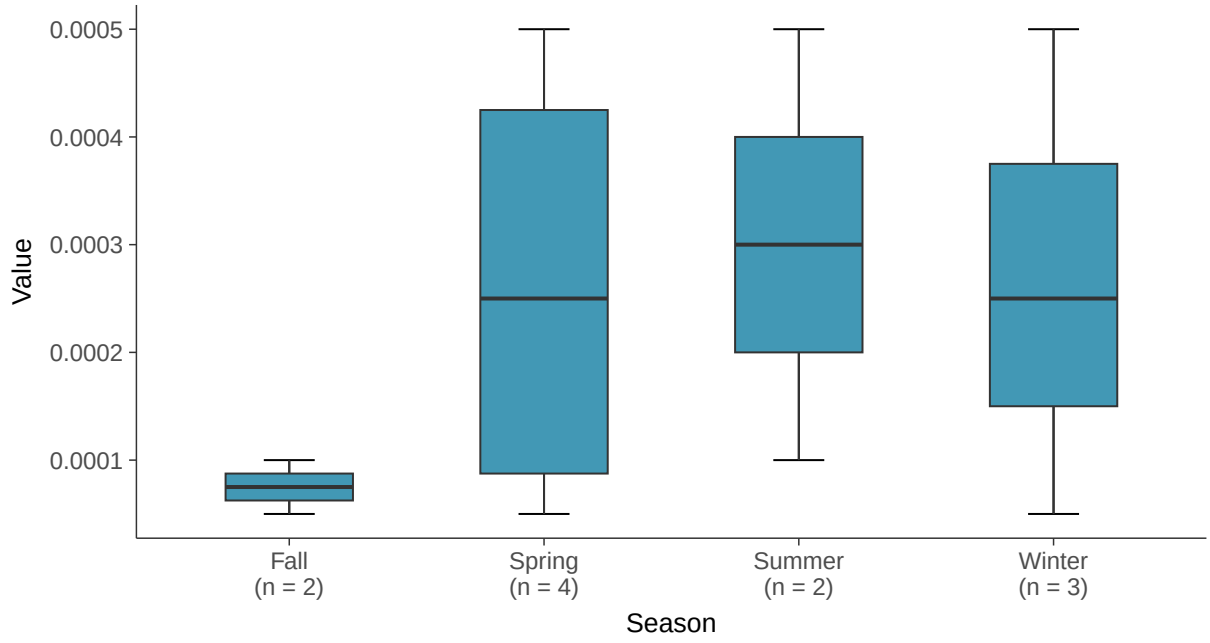
Boxplot

Antimony, MW-30 (mg/L)



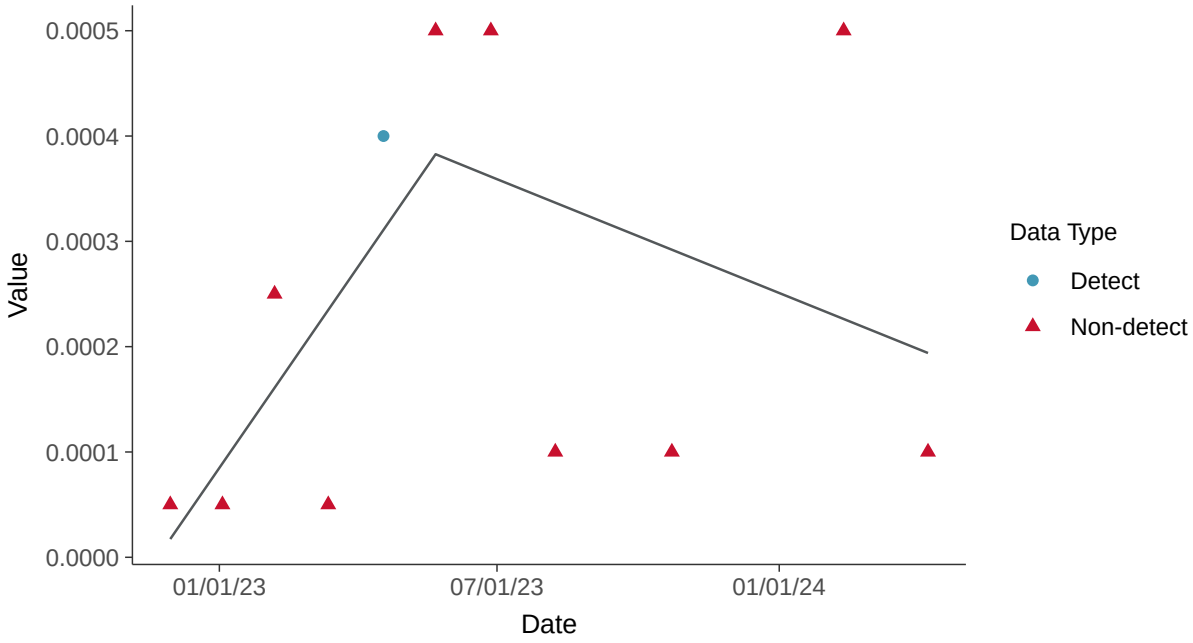
Boxplot by Season

Antimony, MW-30 (mg/L)



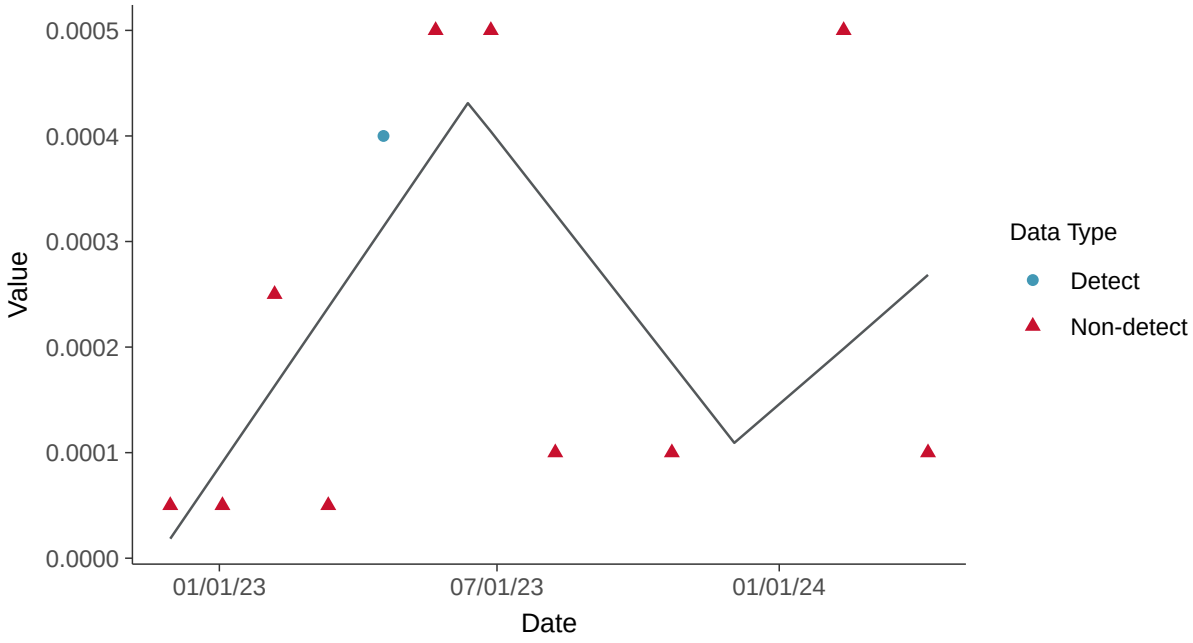
Trend Regression: Piecewise Linear-Linear

Antimony, MW-30 (mg/L)



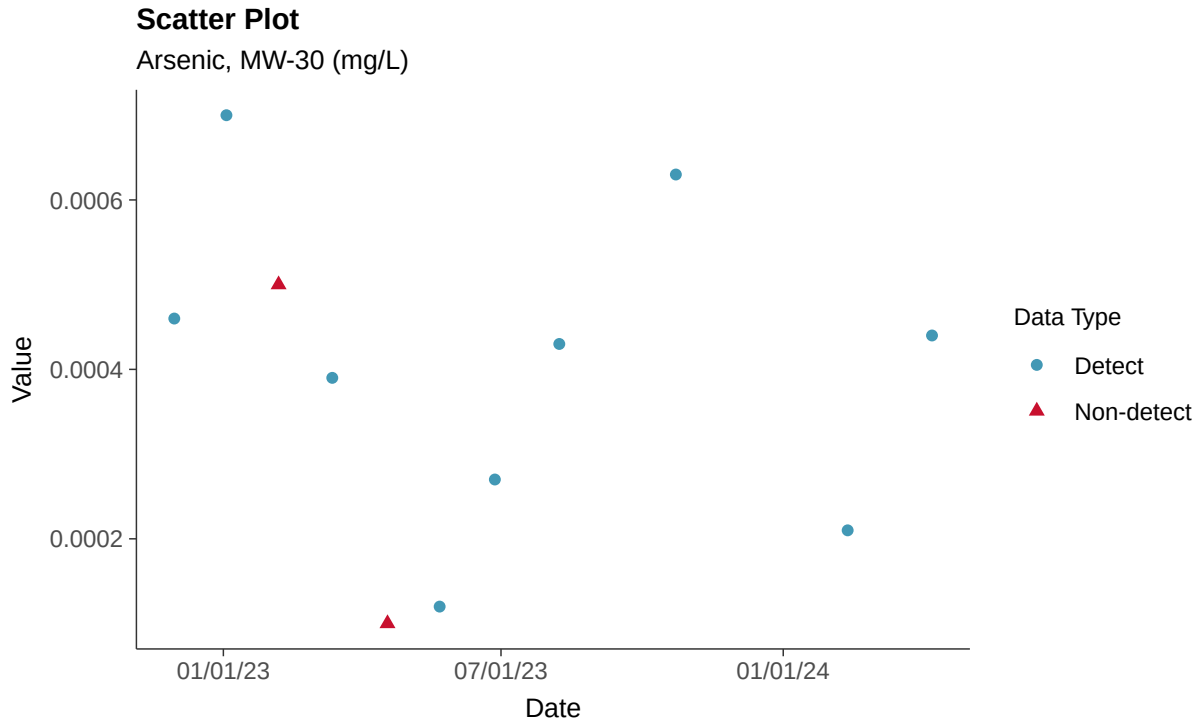
Trend Regression: Piecewise Linear-Linear-Linear

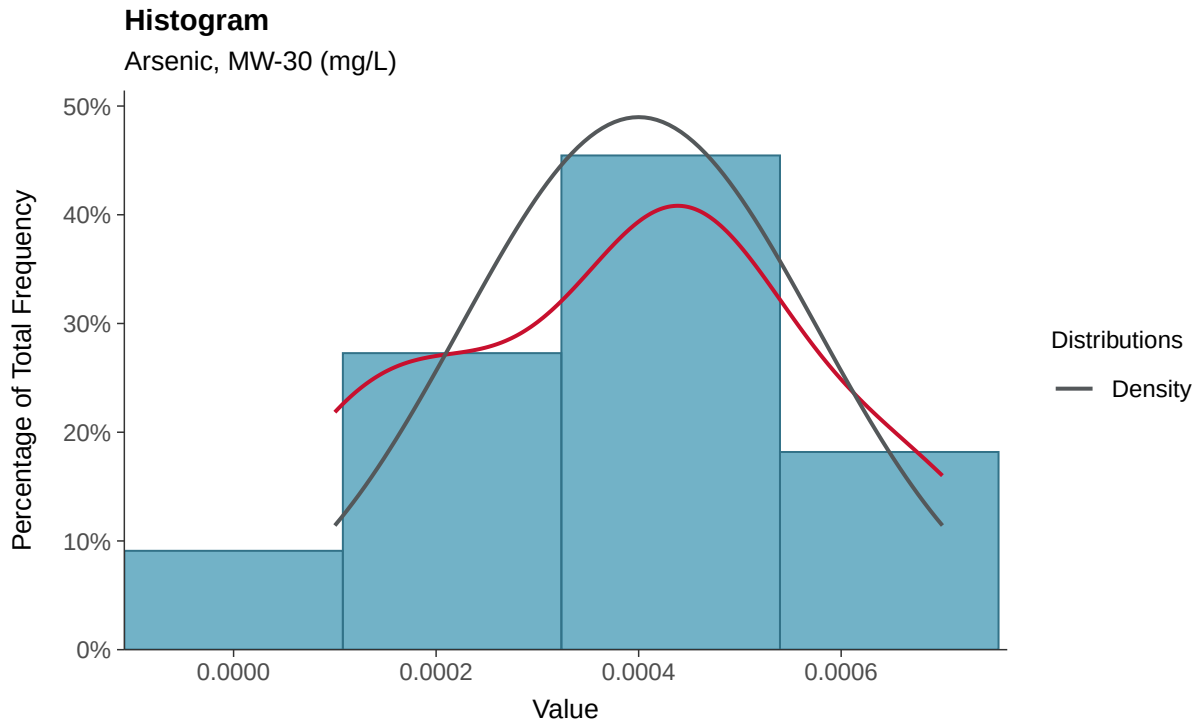
Antimony, MW-30 (mg/L)



Appendix IV: Arsenic, MW-30

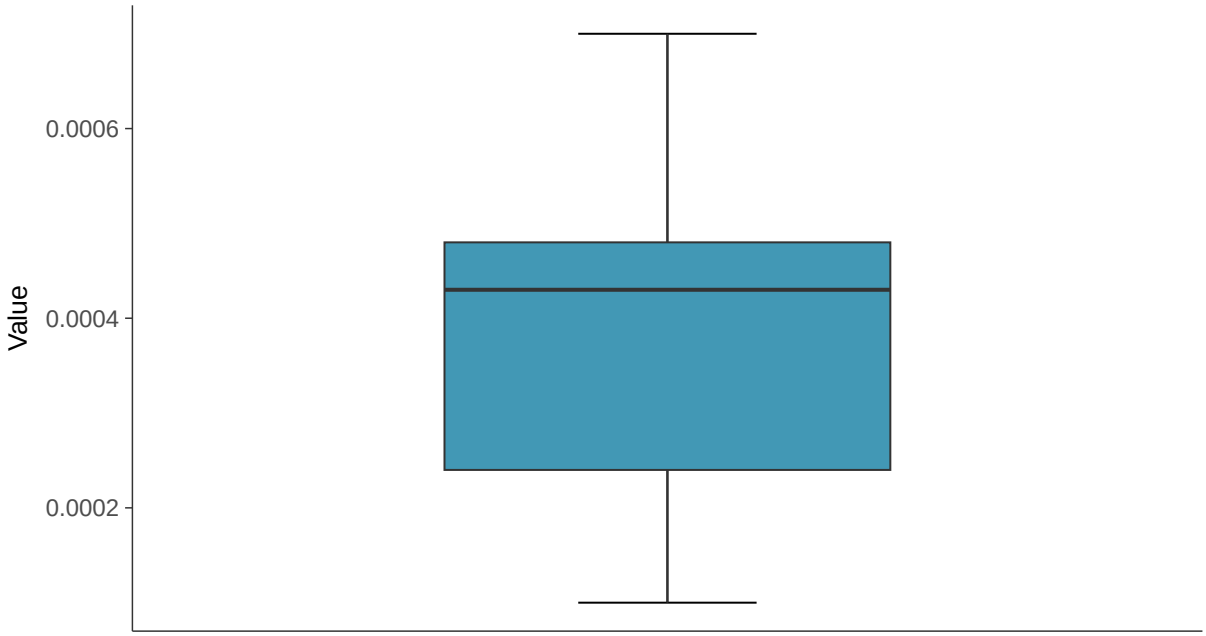
ID: 1_40_5_102





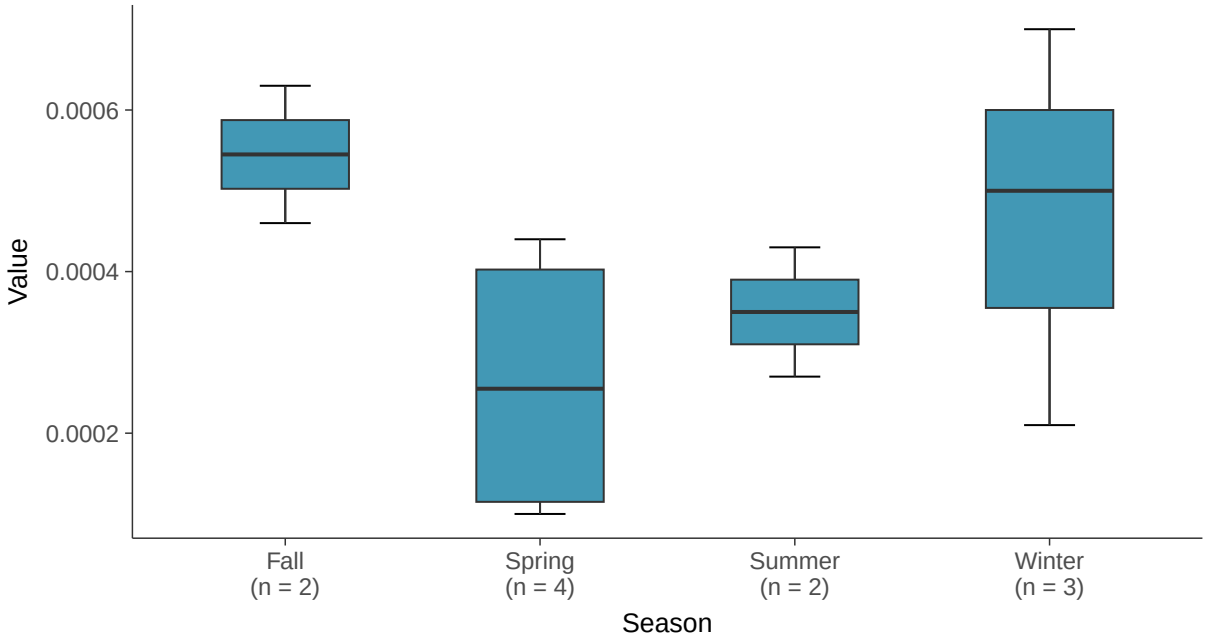
Boxplot

Arsenic, MW-30 (mg/L)



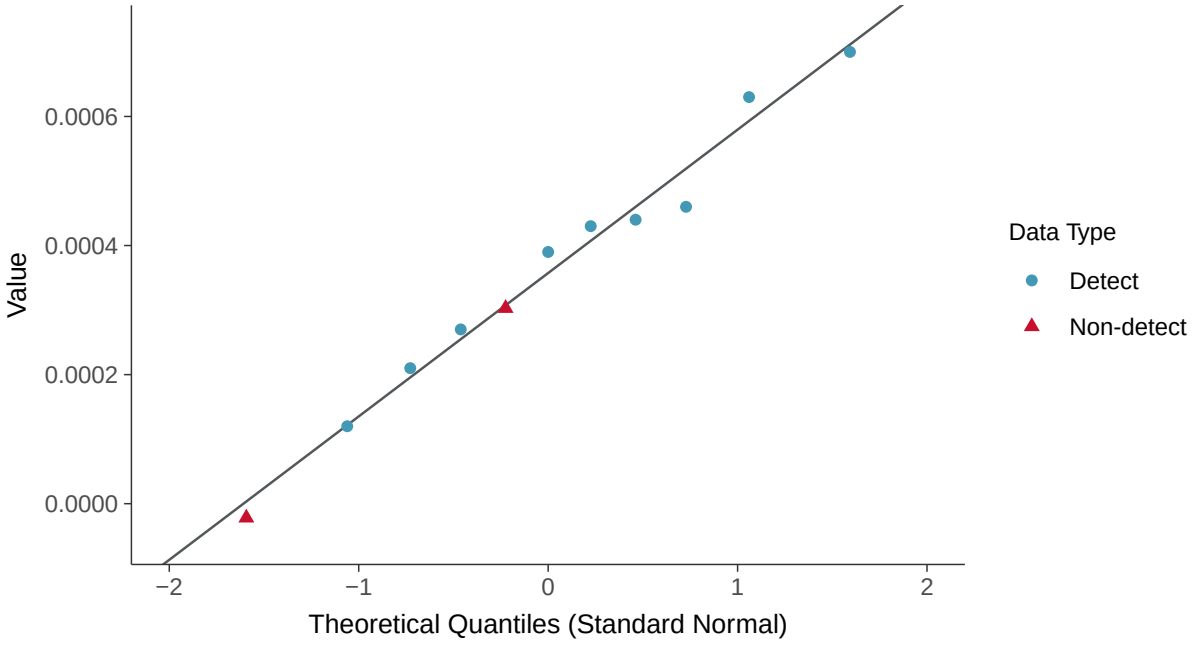
Boxplot by Season

Arsenic, MW-30 (mg/L)



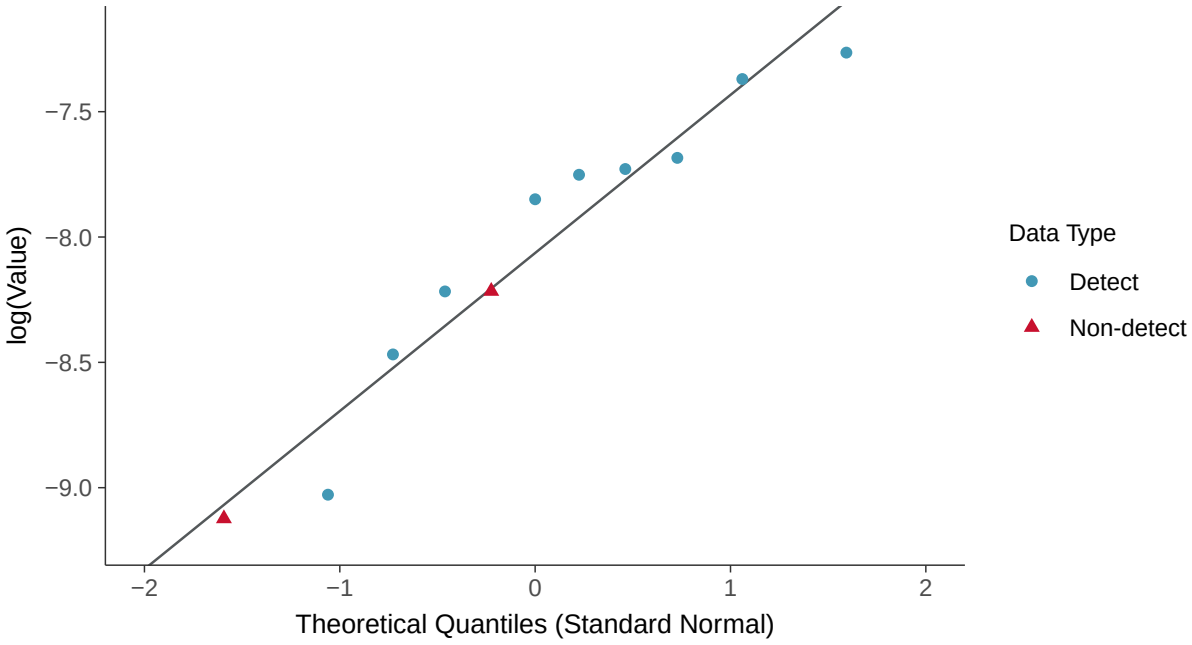
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-30 (mg/L)



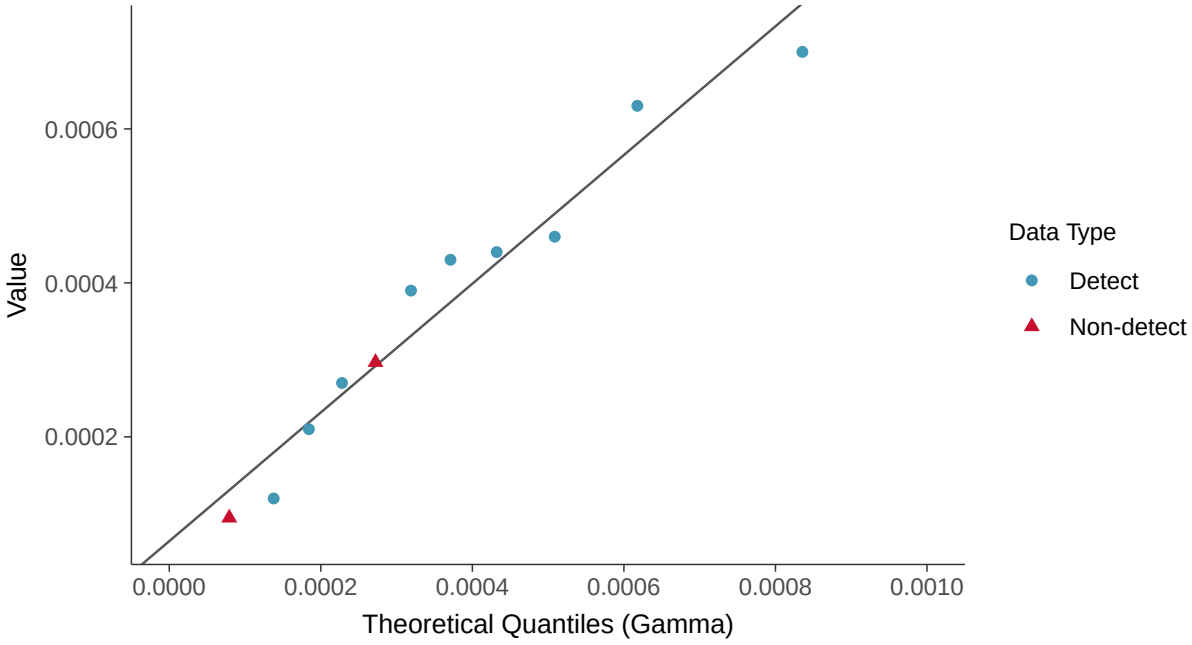
Lognormal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-30 (mg/L)



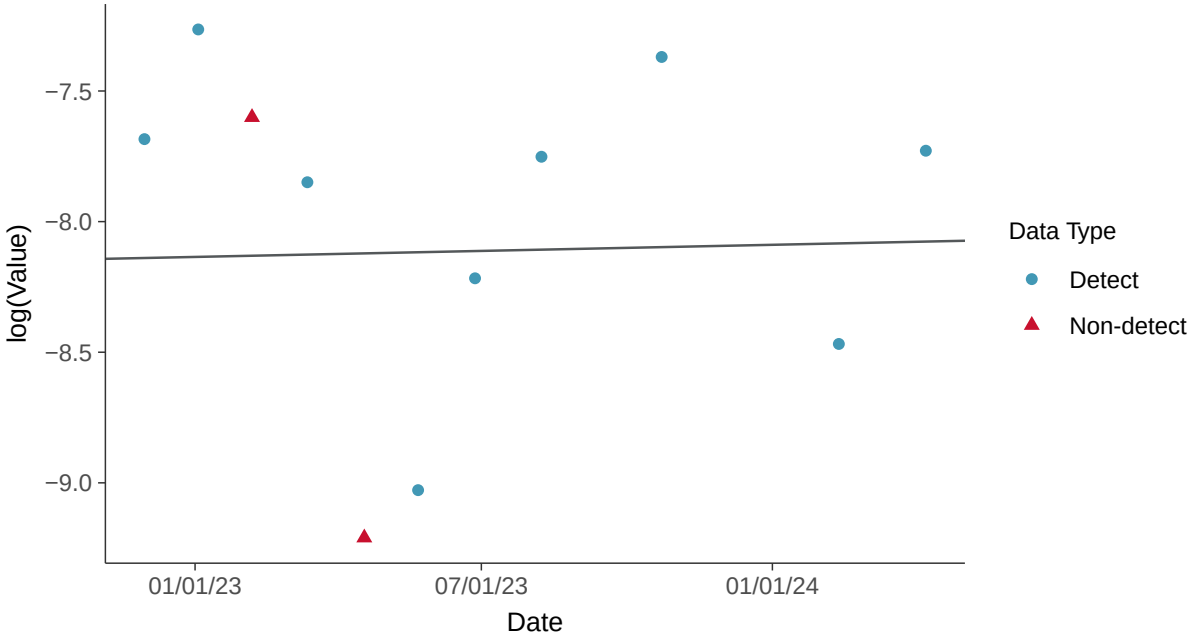
Gamma Q-Q plot using ROS Imputed Estimates

Arsenic, MW-30 (mg/L)



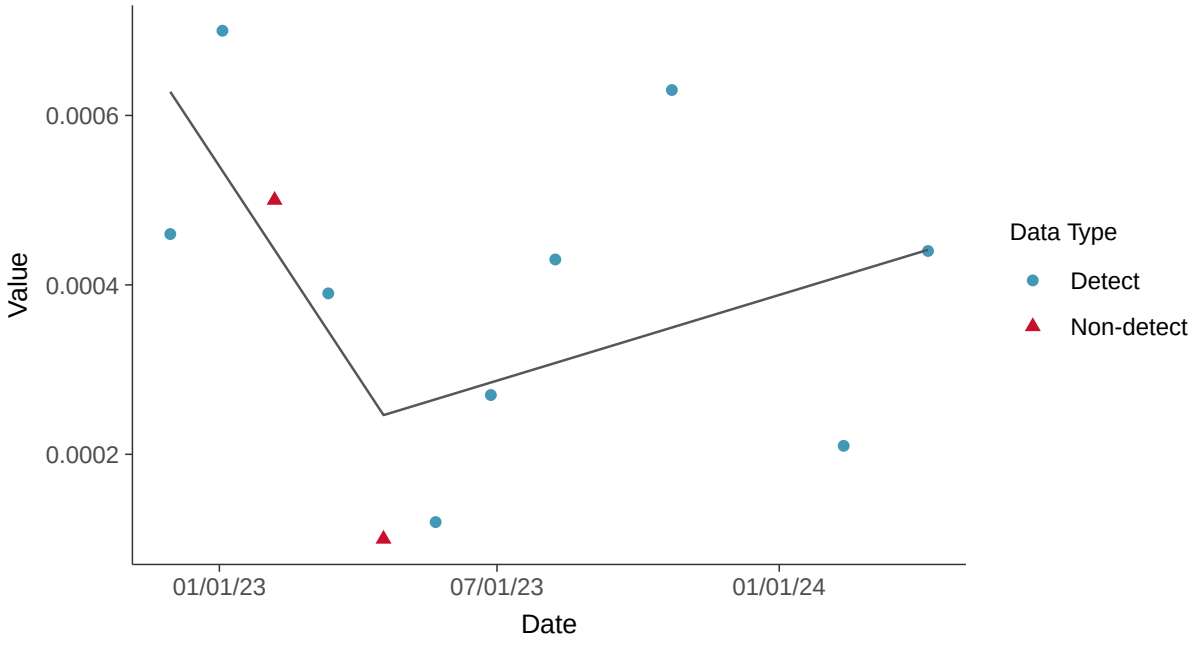
Trend Regression: Lognormal MLE

Arsenic, MW-30 (mg/L)



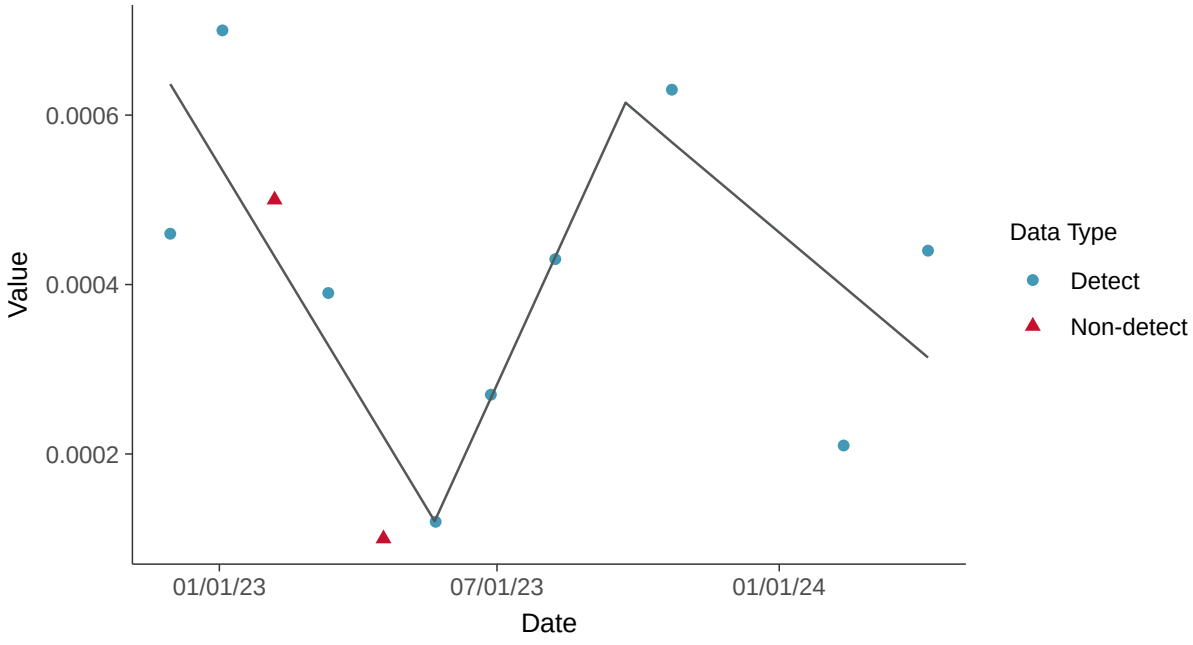
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-30 (mg/L)



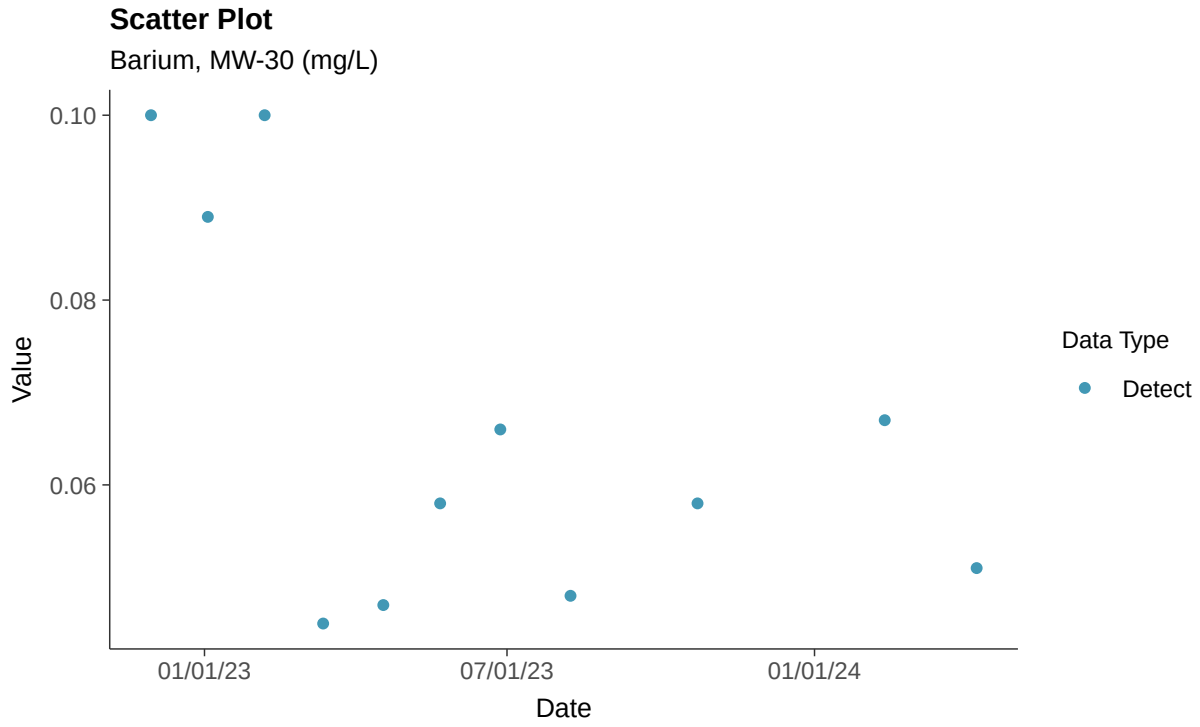
Trend Regression: Piecewise Linear-Linear-Linear

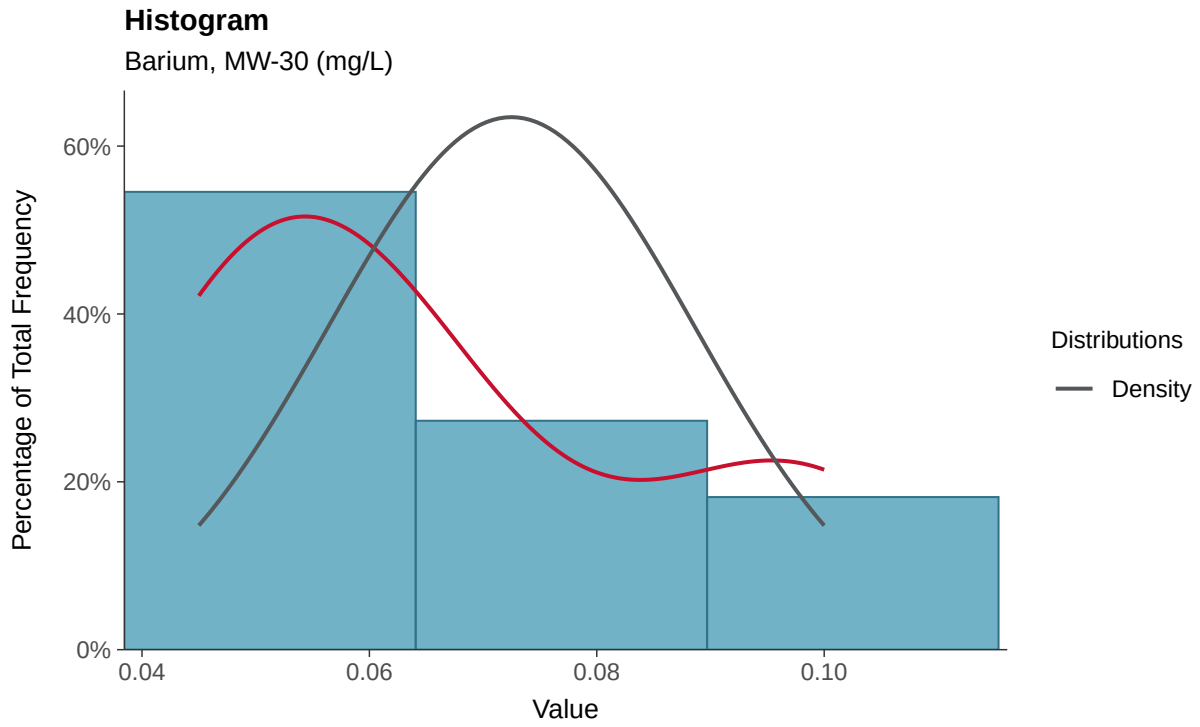
Arsenic, MW-30 (mg/L)



Appendix IV: Barium, MW-30

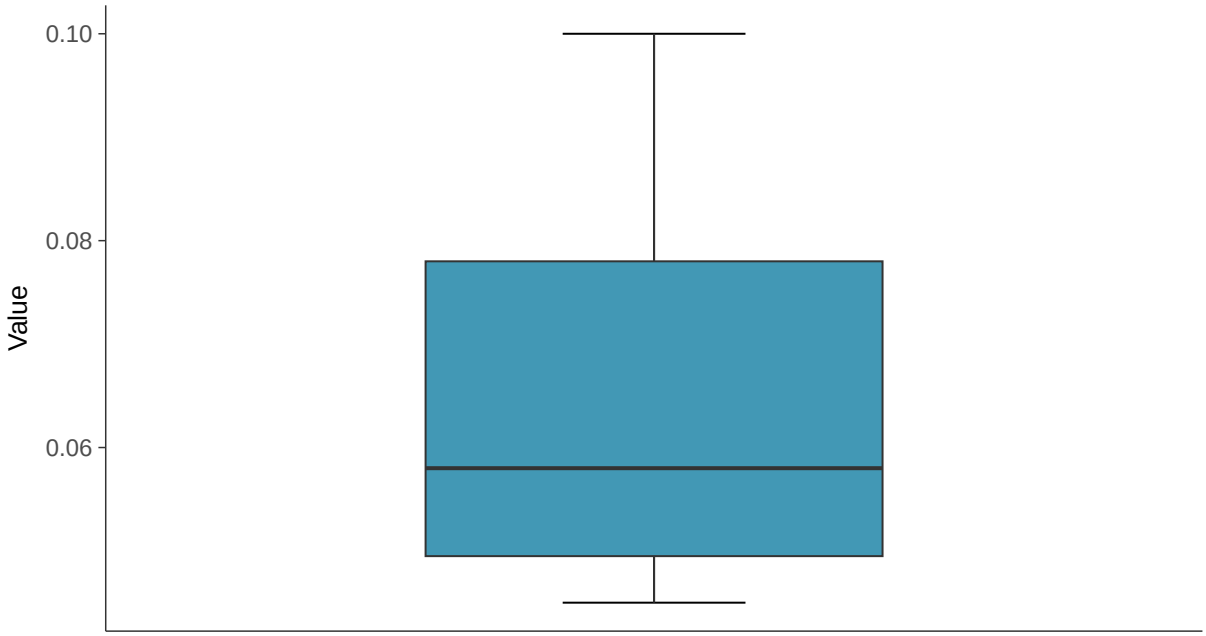
ID: 1_40_5_103





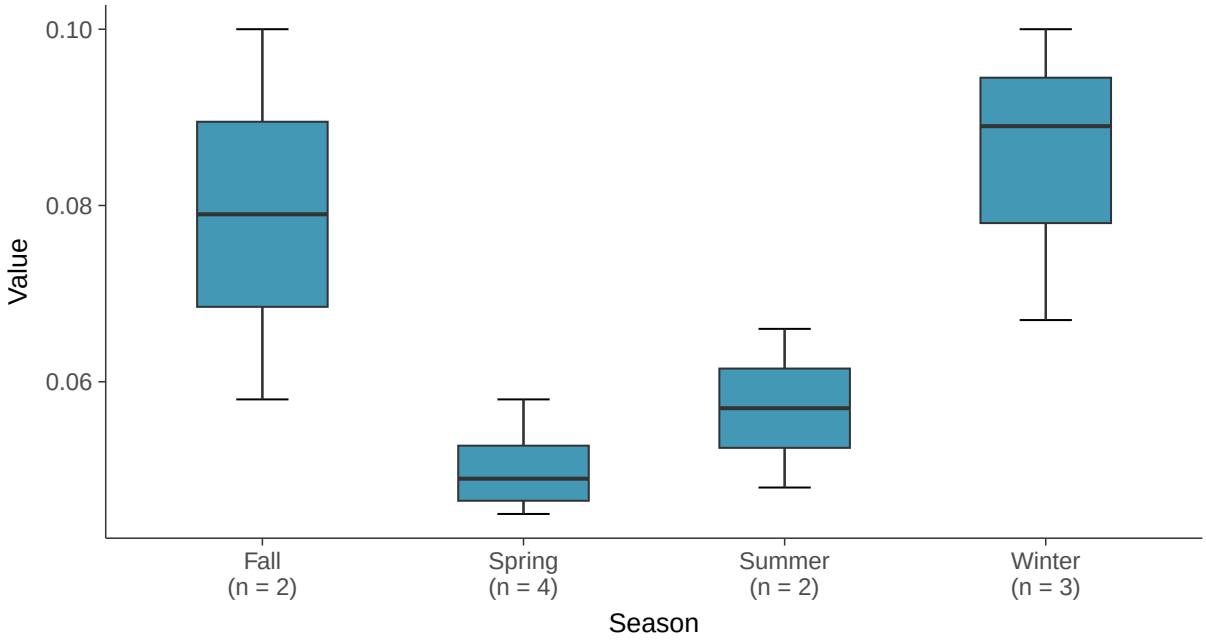
Boxplot

Barium, MW-30 (mg/L)



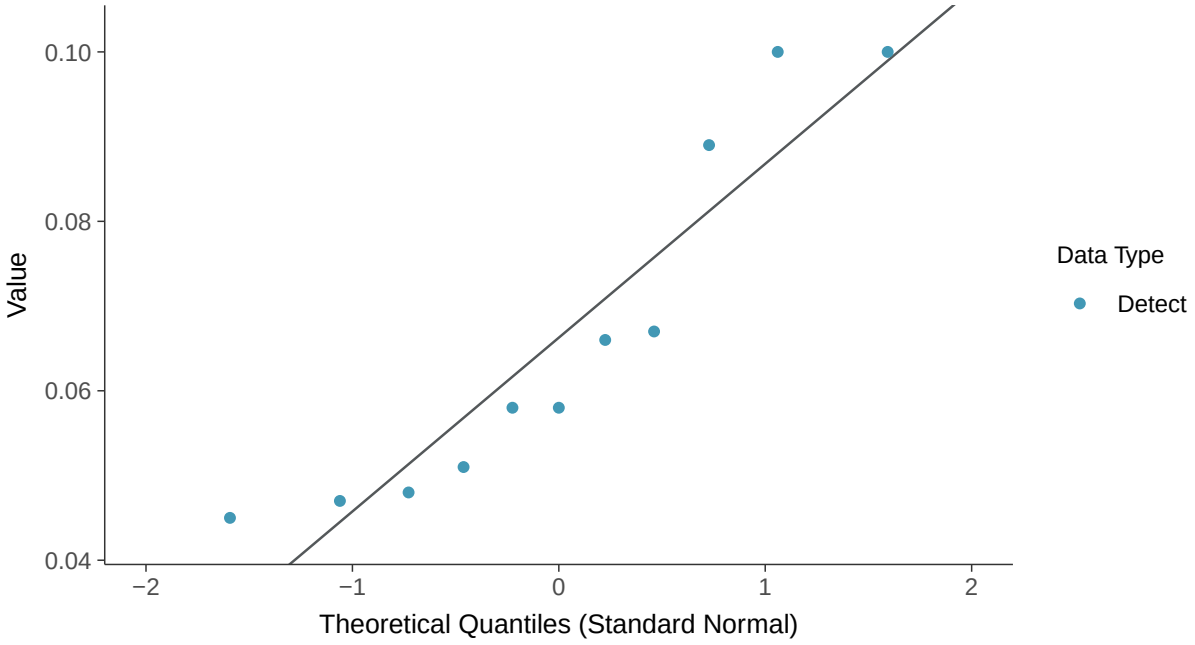
Boxplot by Season

Barium, MW-30 (mg/L)



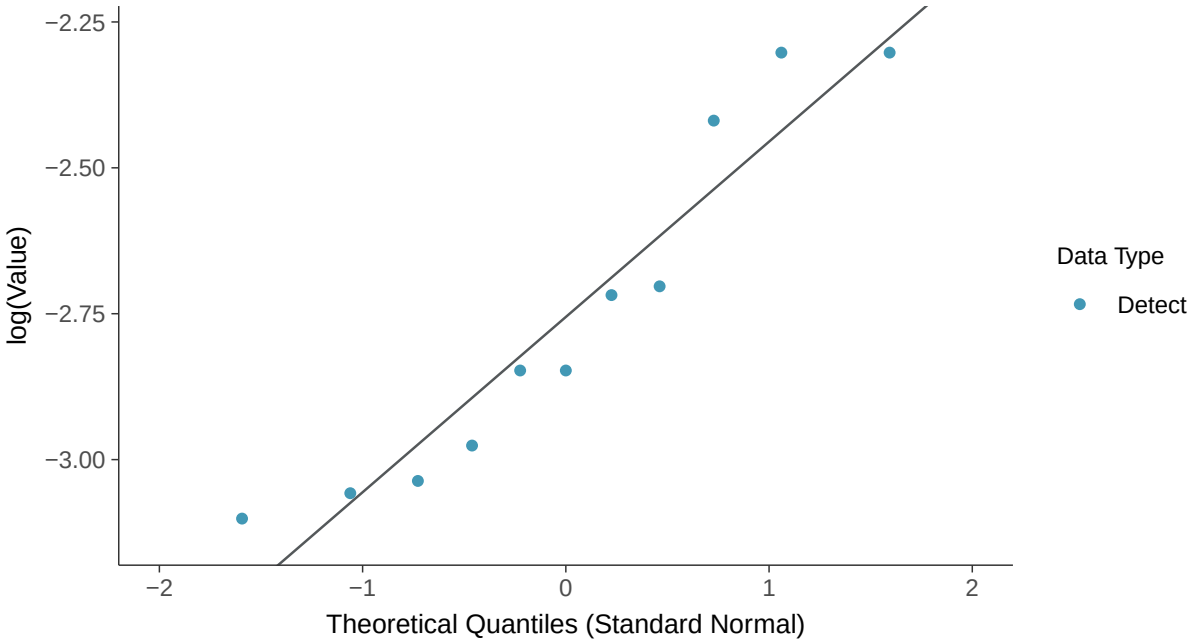
Normal Q-Q plot

Barium, MW-30 (mg/L)



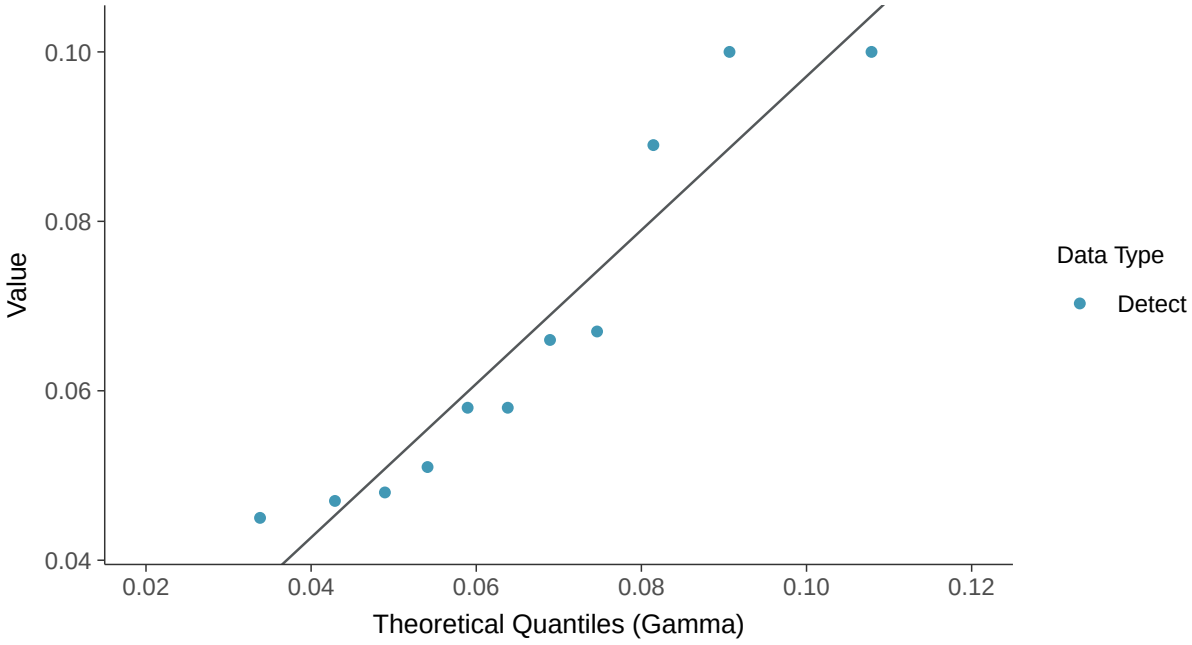
Lognormal Q-Q plot

Barium, MW-30 (mg/L)



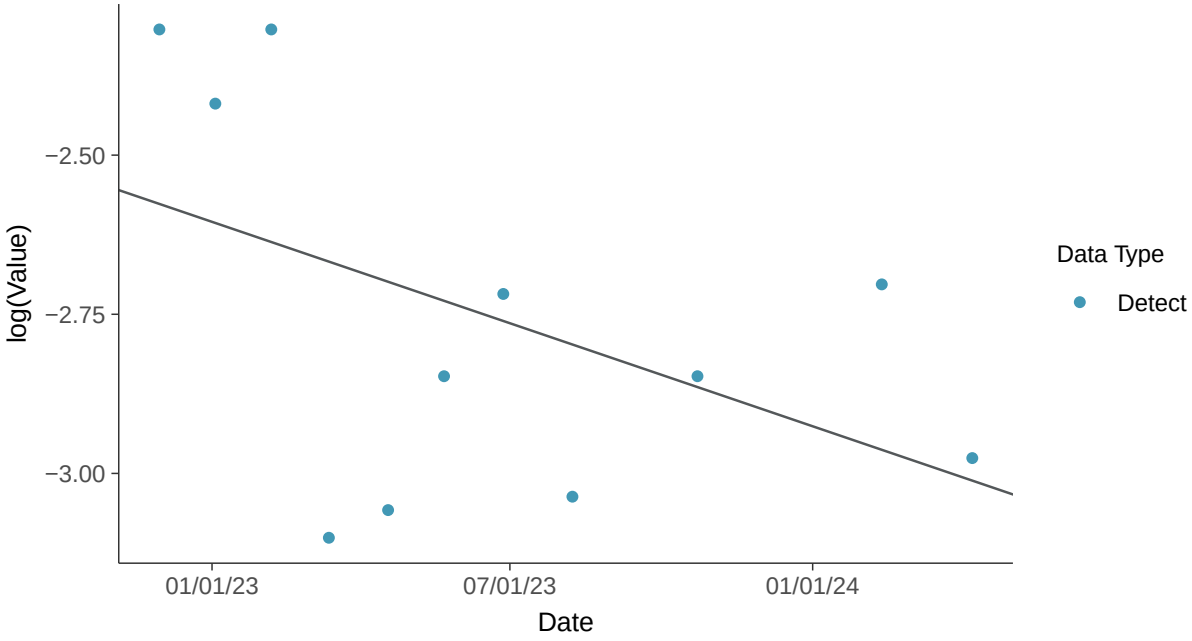
Gamma Q-Q plot

Barium, MW-30 (mg/L)



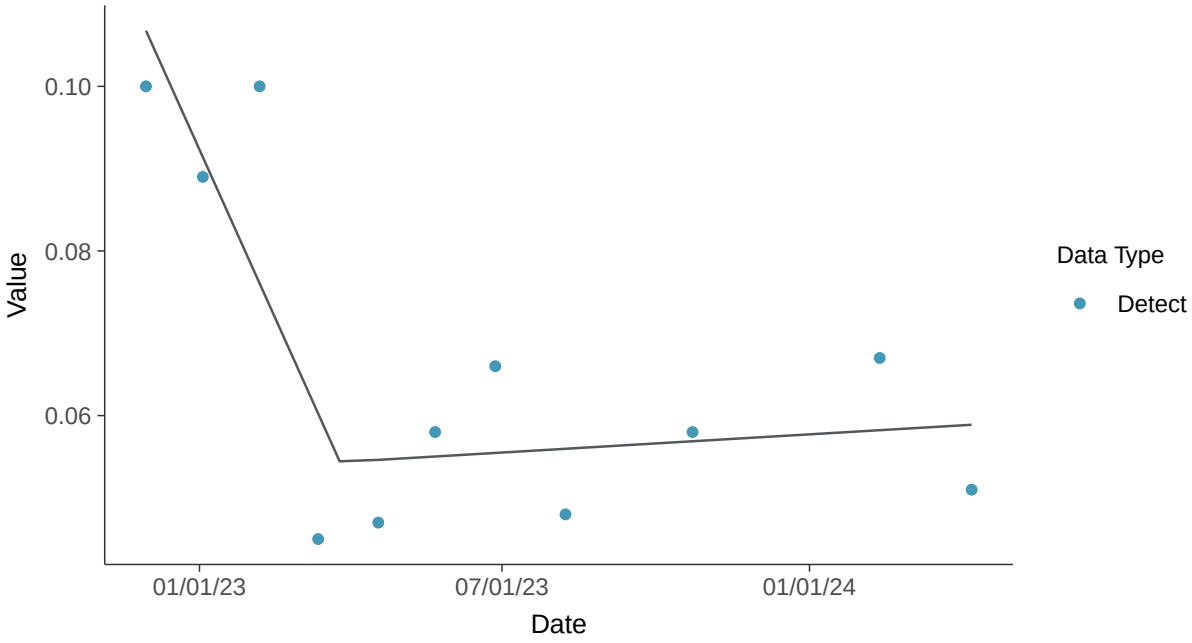
Trend Regression: Lognormal MLE

Barium, MW-30 (mg/L)



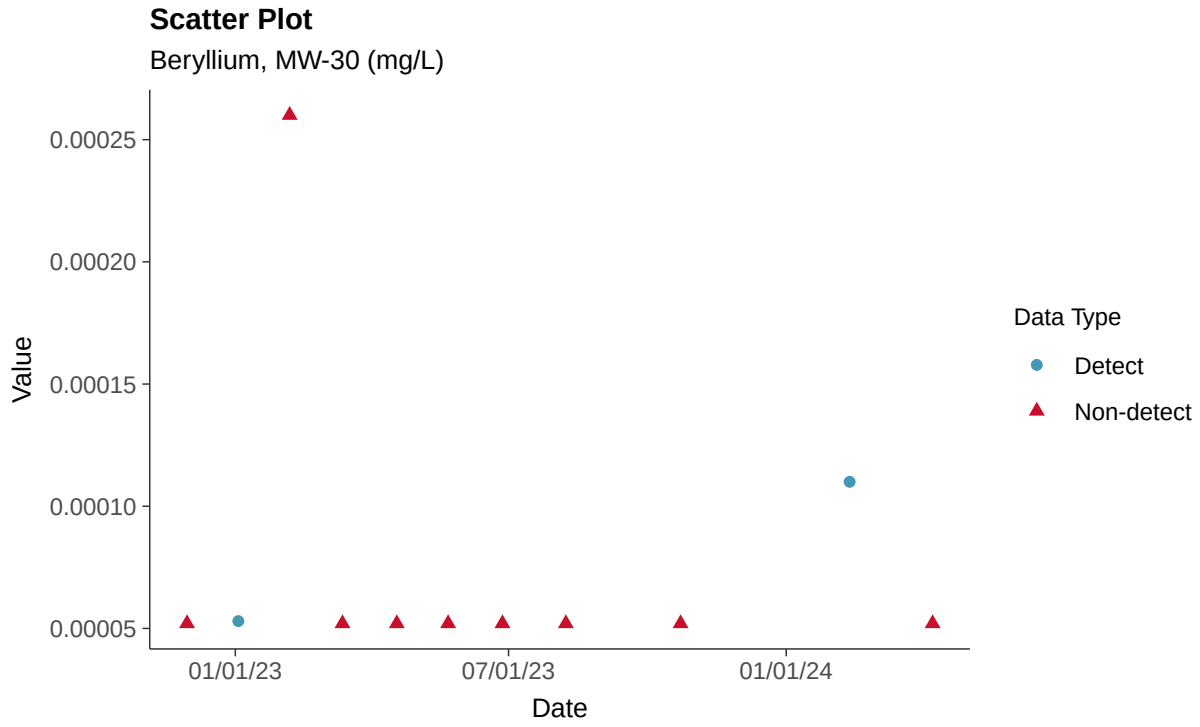
Trend Regression: Piecewise Linear-Linear

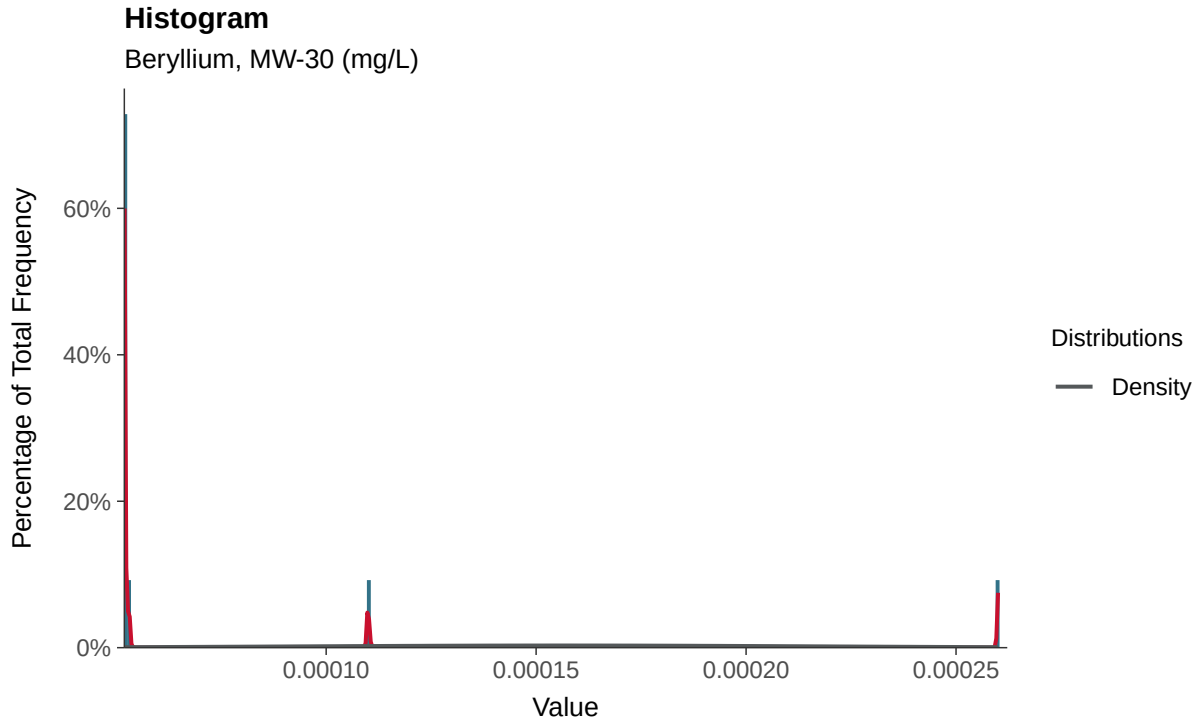
Barium, MW-30 (mg/L)



Appendix IV: Beryllium, MW-30

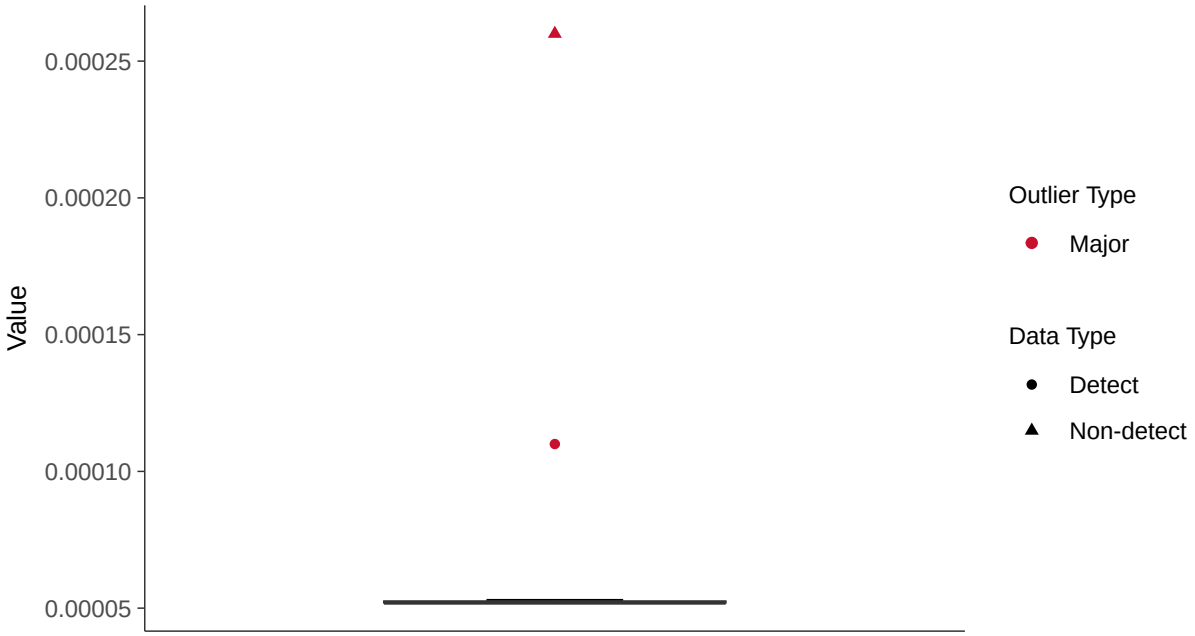
ID: 1_40_5_104





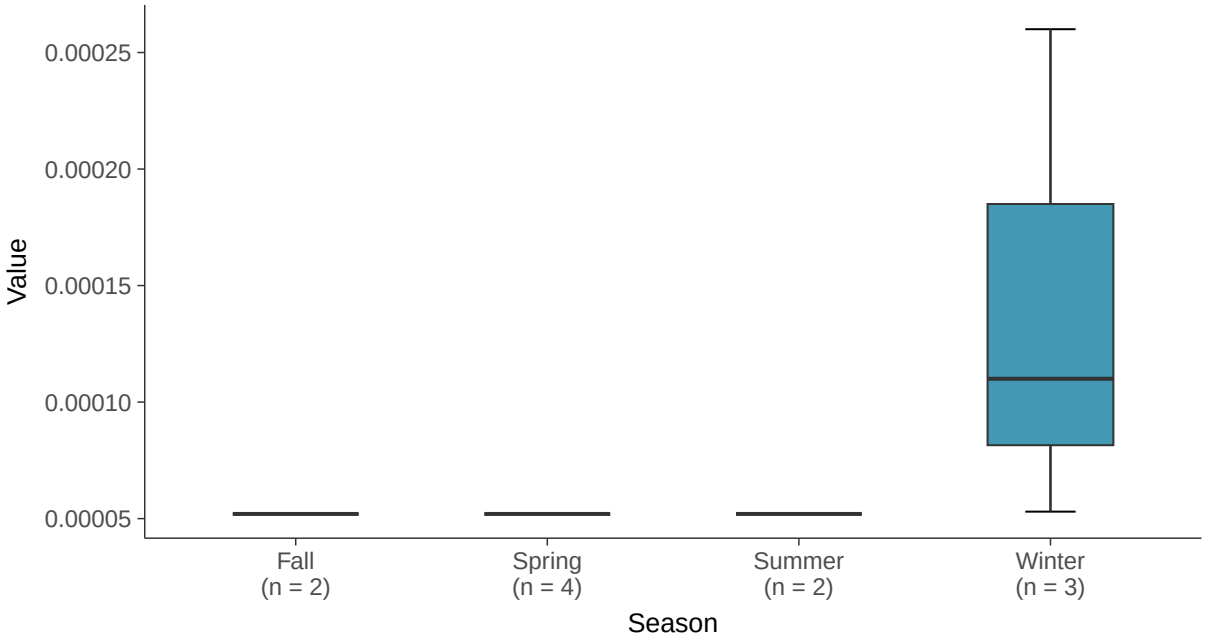
Boxplot

Beryllium, MW-30 (mg/L)



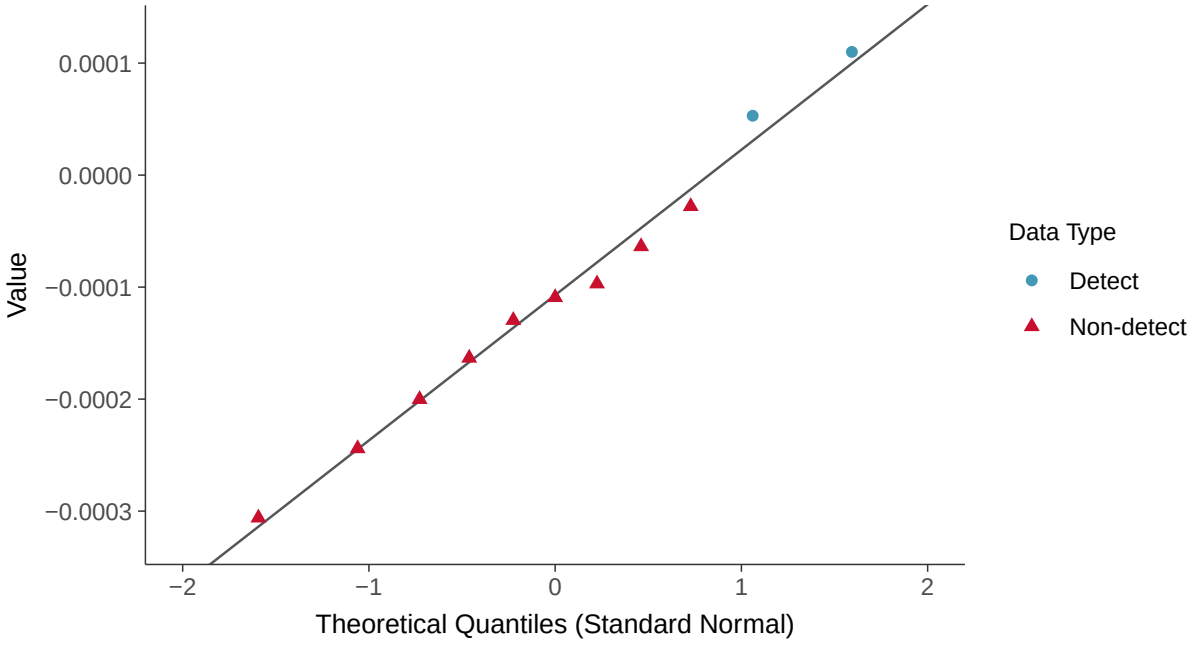
Boxplot by Season

Beryllium, MW-30 (mg/L)



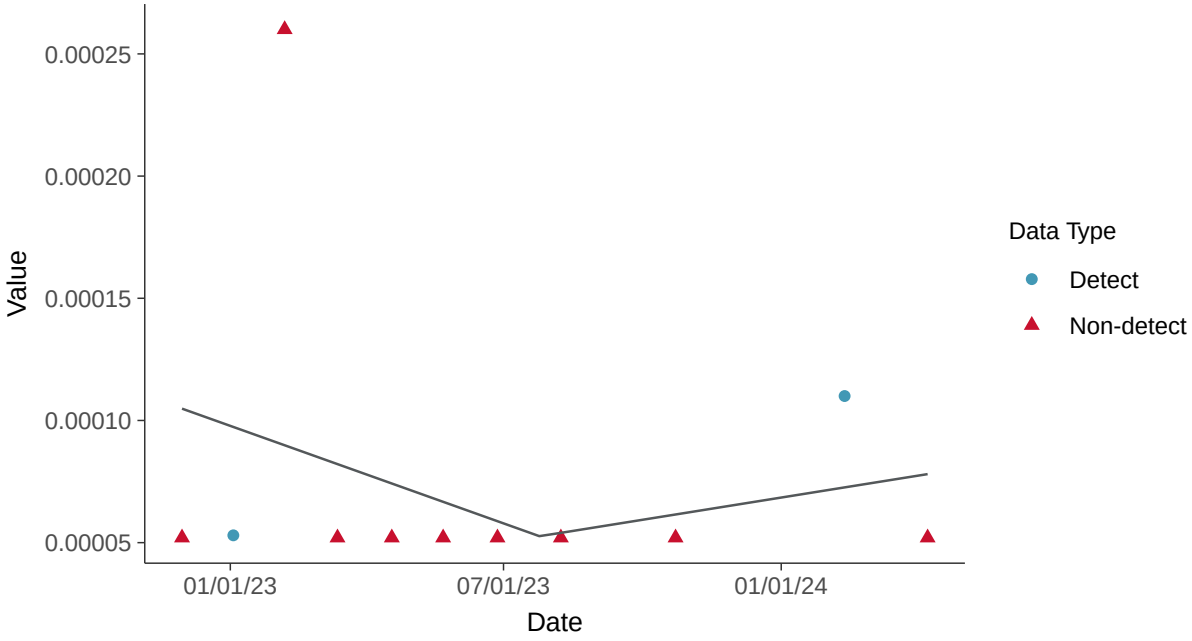
Normal Q-Q plot using ROS Imputed Estimates

Beryllium, MW-30 (mg/L)



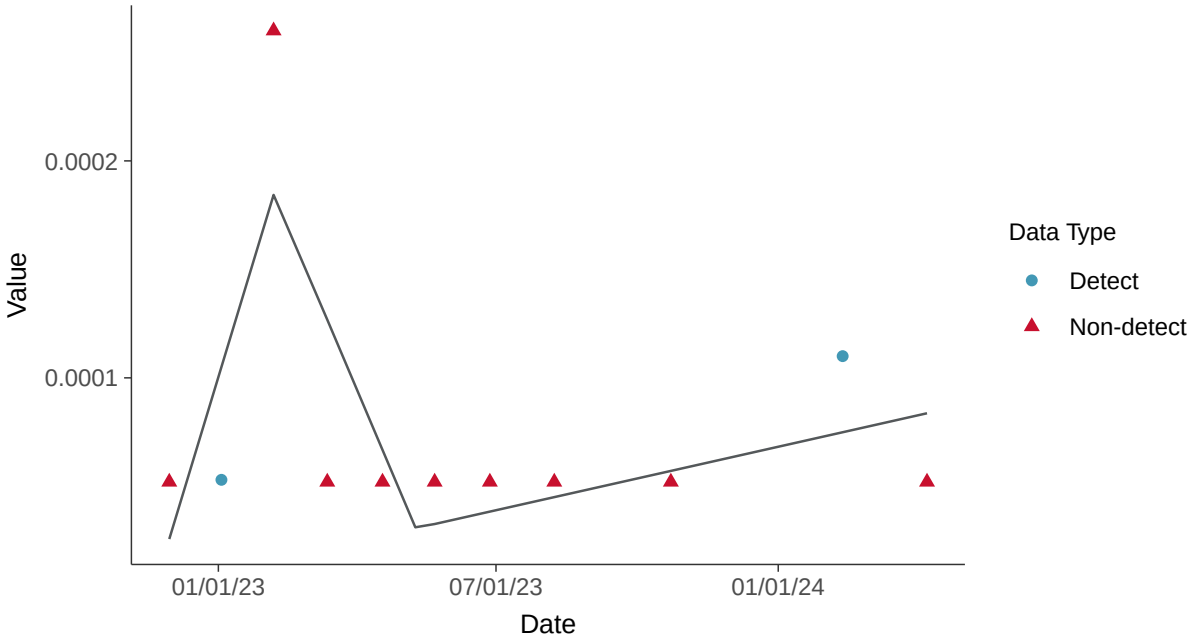
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-30 (mg/L)



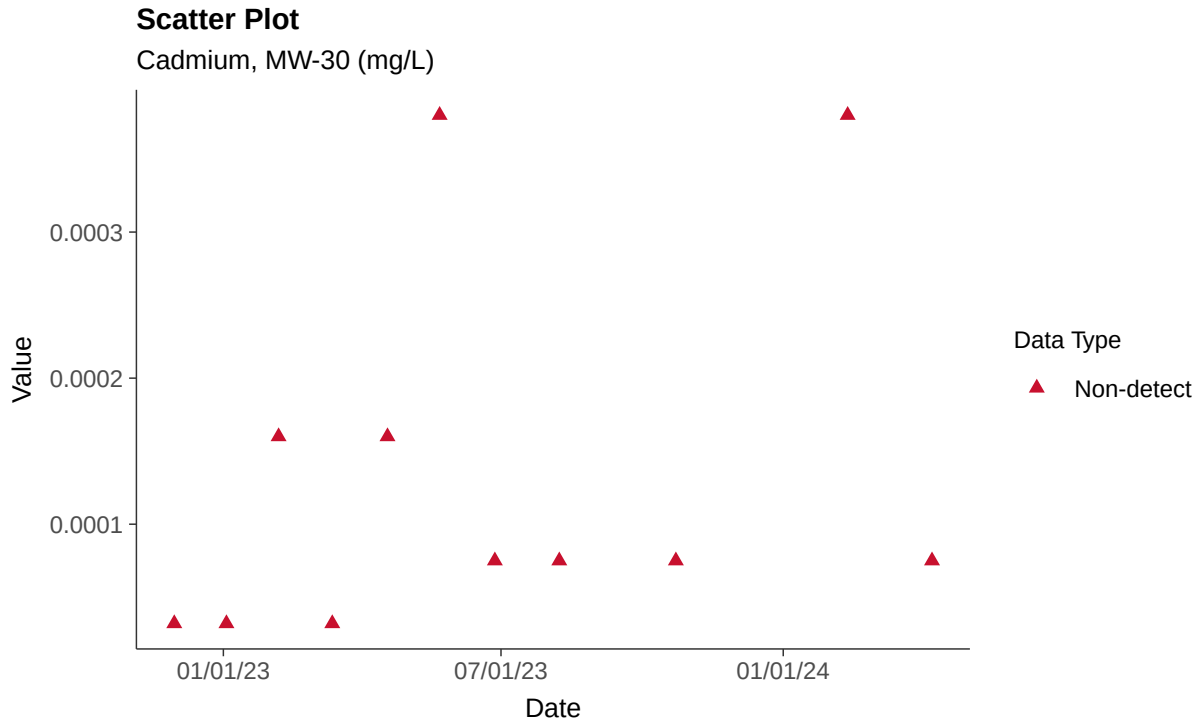
Trend Regression: Piecewise Linear-Linear-Linear

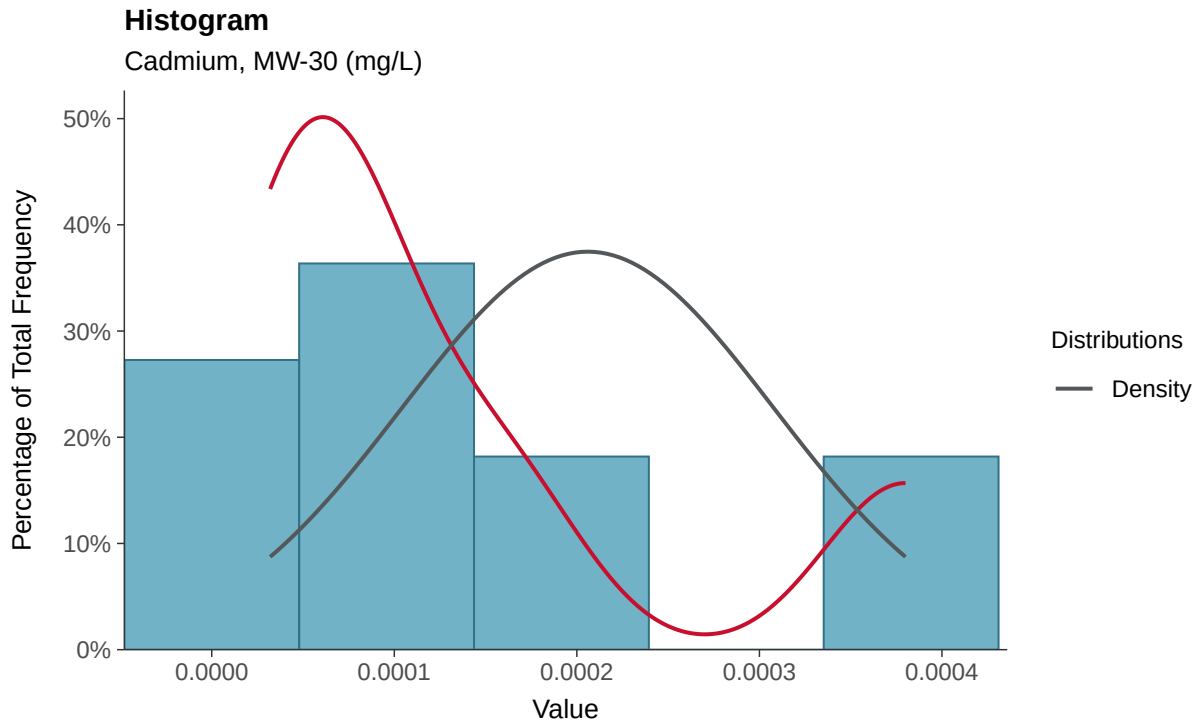
Beryllium, MW-30 (mg/L)



Appendix IV: Cadmium, MW-30

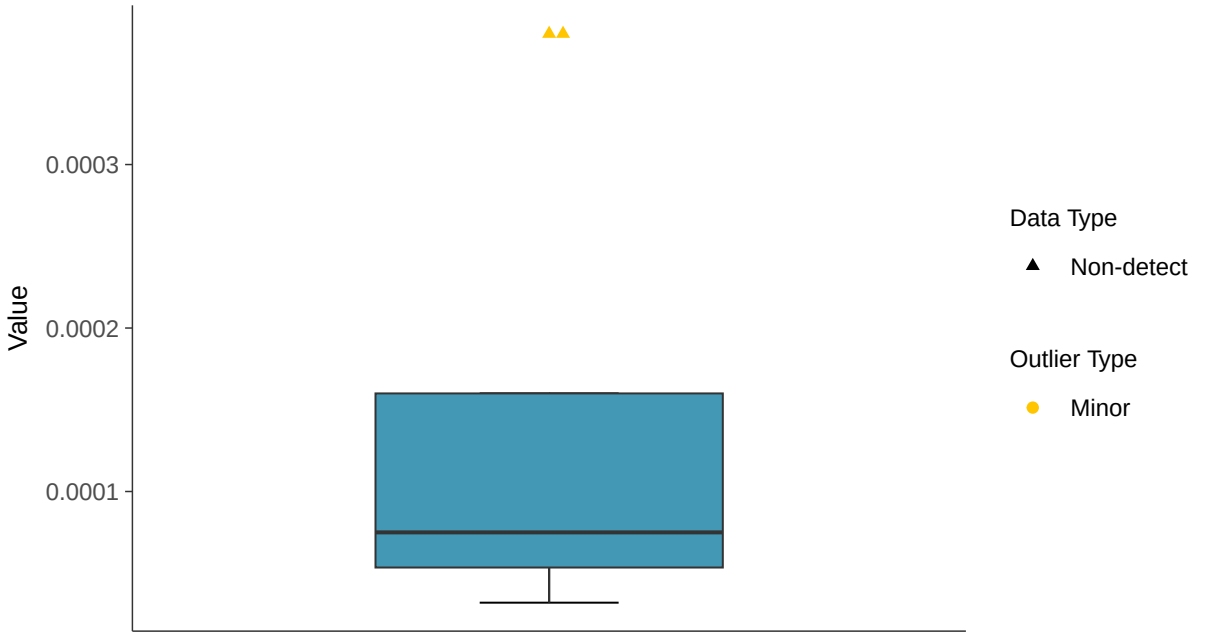
ID: 1_40_5_106





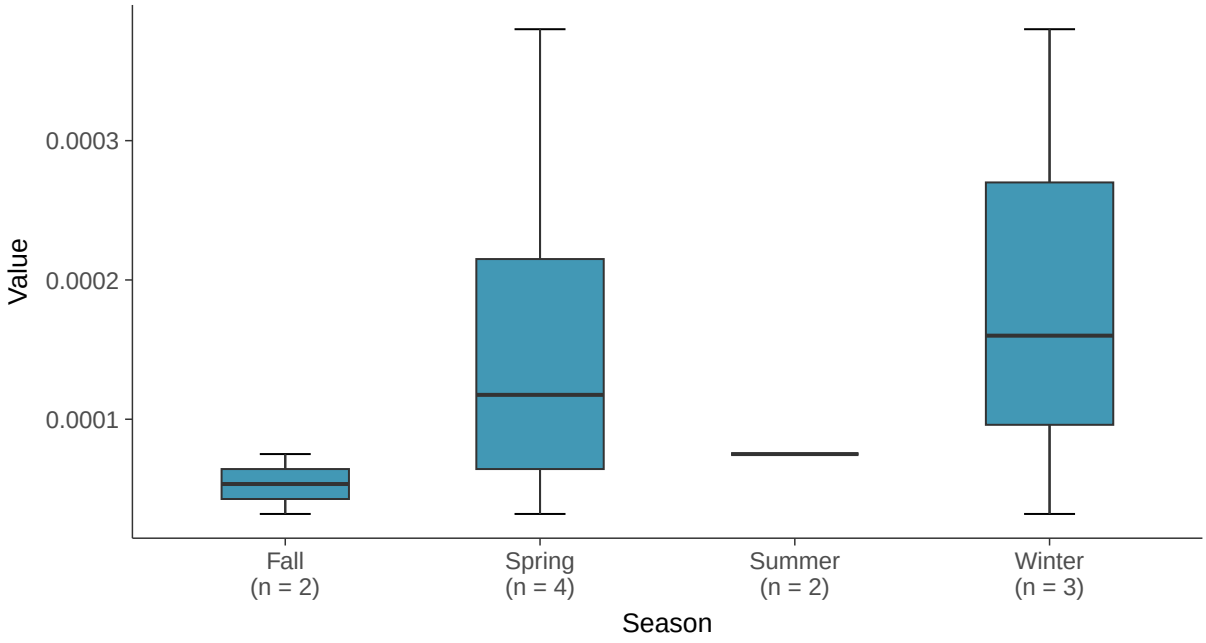
Boxplot

Cadmium, MW-30 (mg/L)



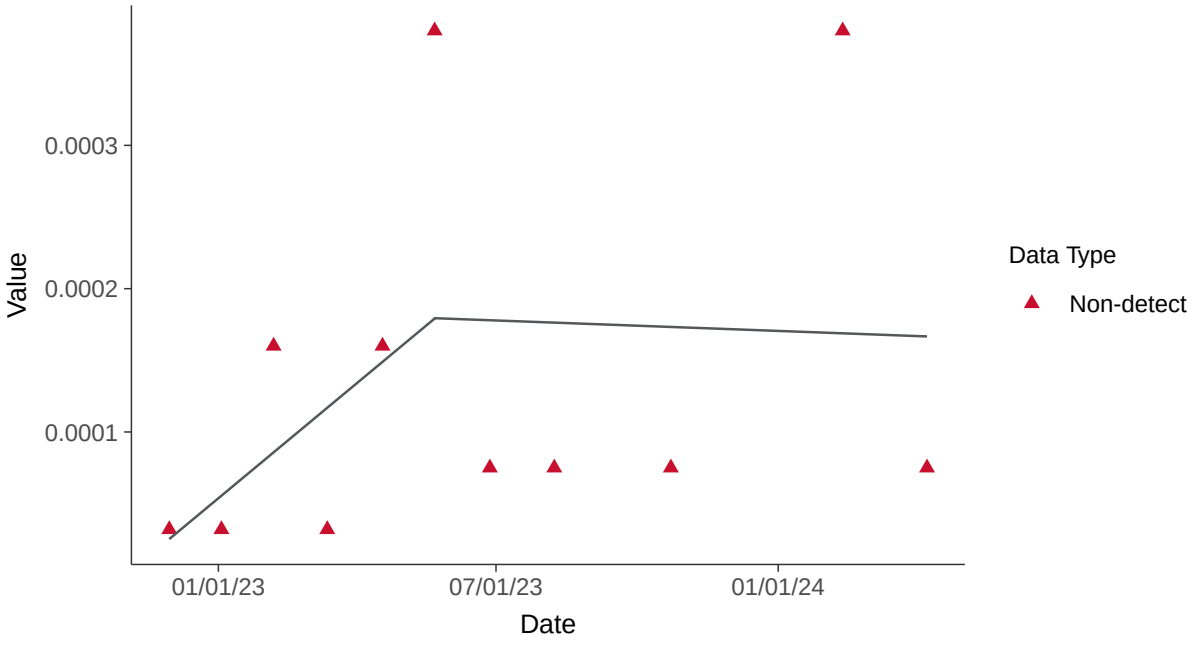
Boxplot by Season

Cadmium, MW-30 (mg/L)



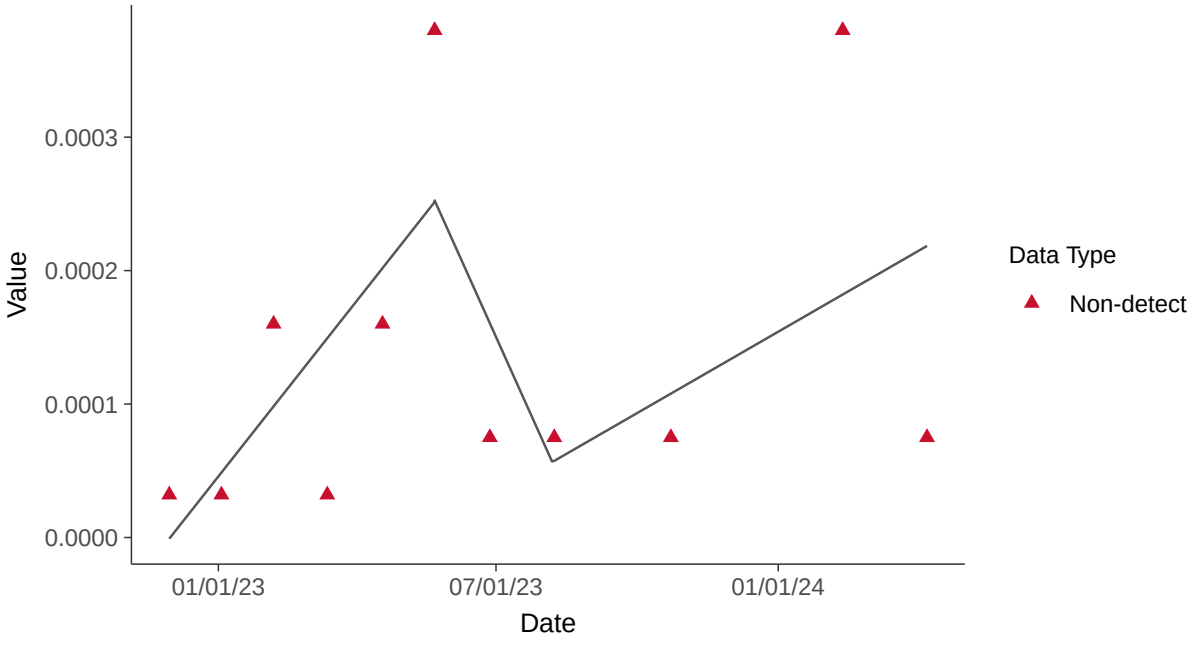
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-30 (mg/L)



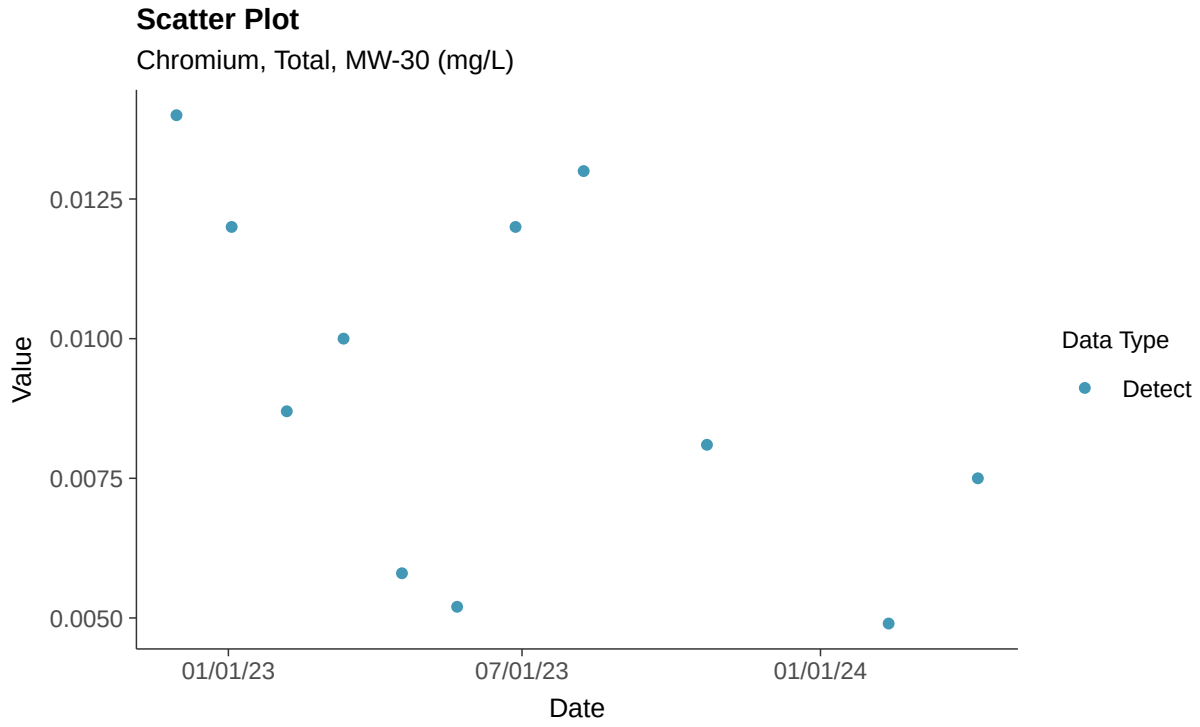
Trend Regression: Piecewise Linear-Linear-Linear

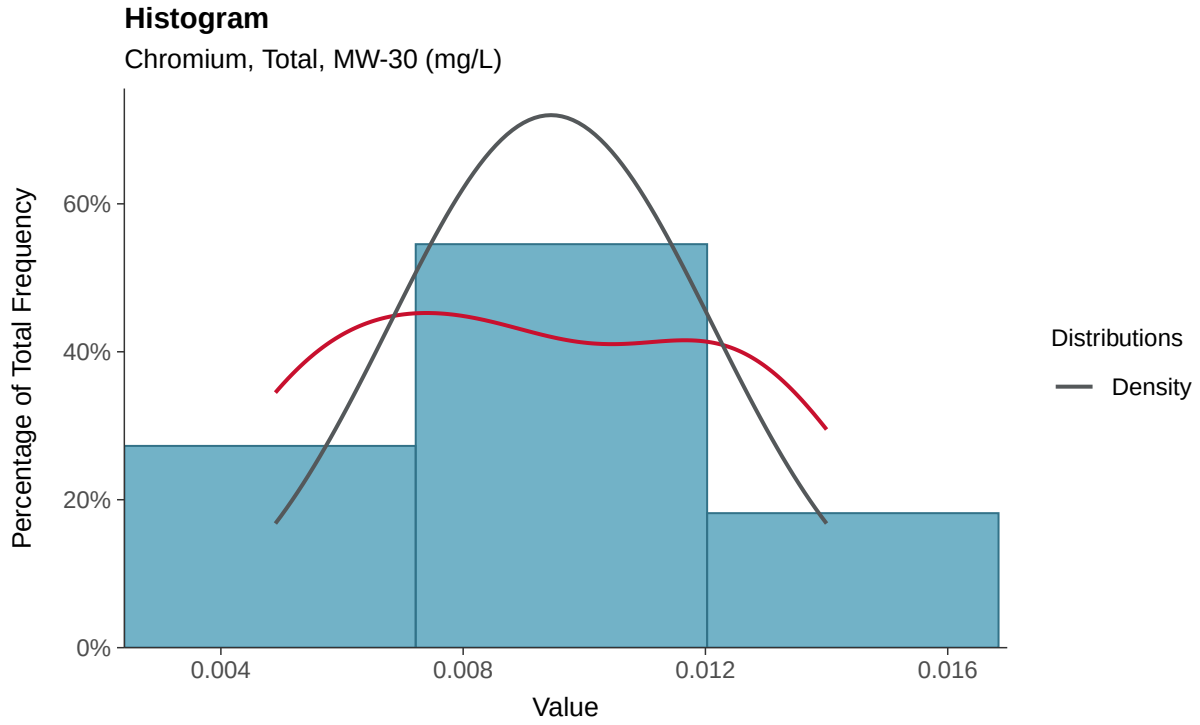
Cadmium, MW-30 (mg/L)



Appendix IV: Chromium, Total, MW-30

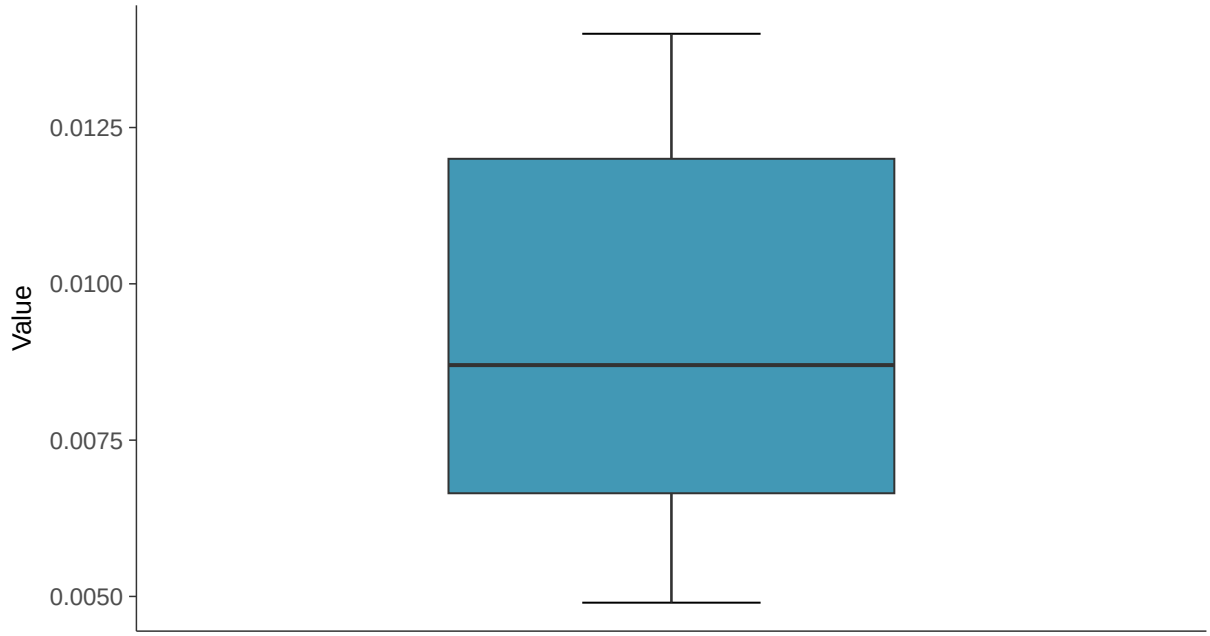
ID: 1_40_5_109





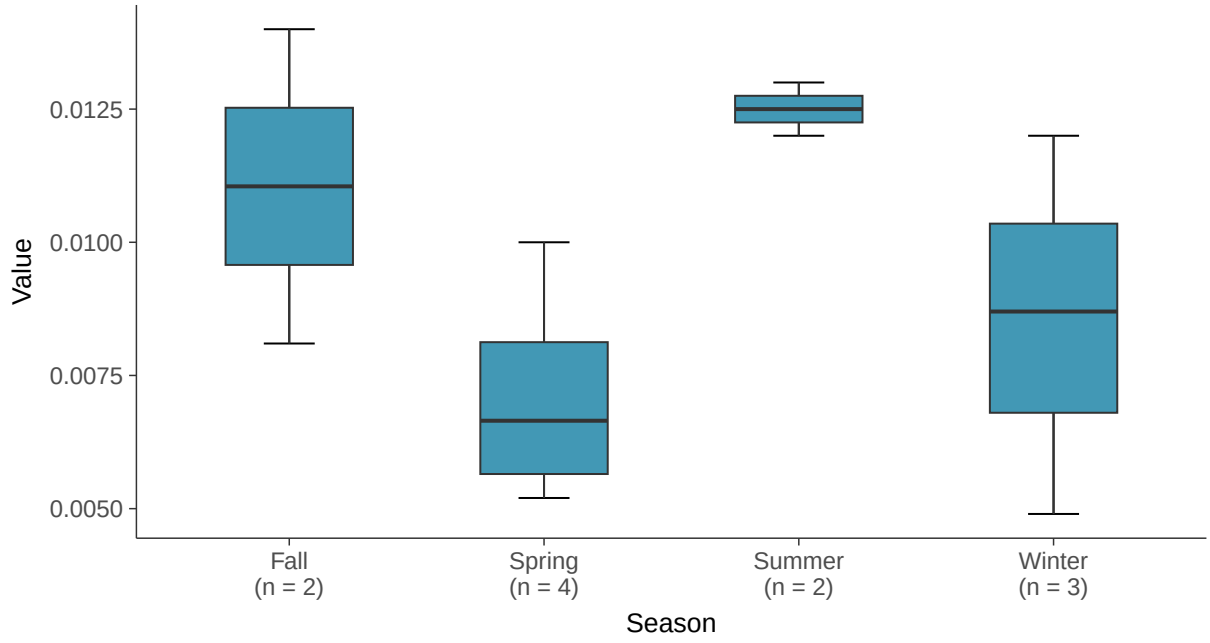
Boxplot

Chromium, Total, MW-30 (mg/L)



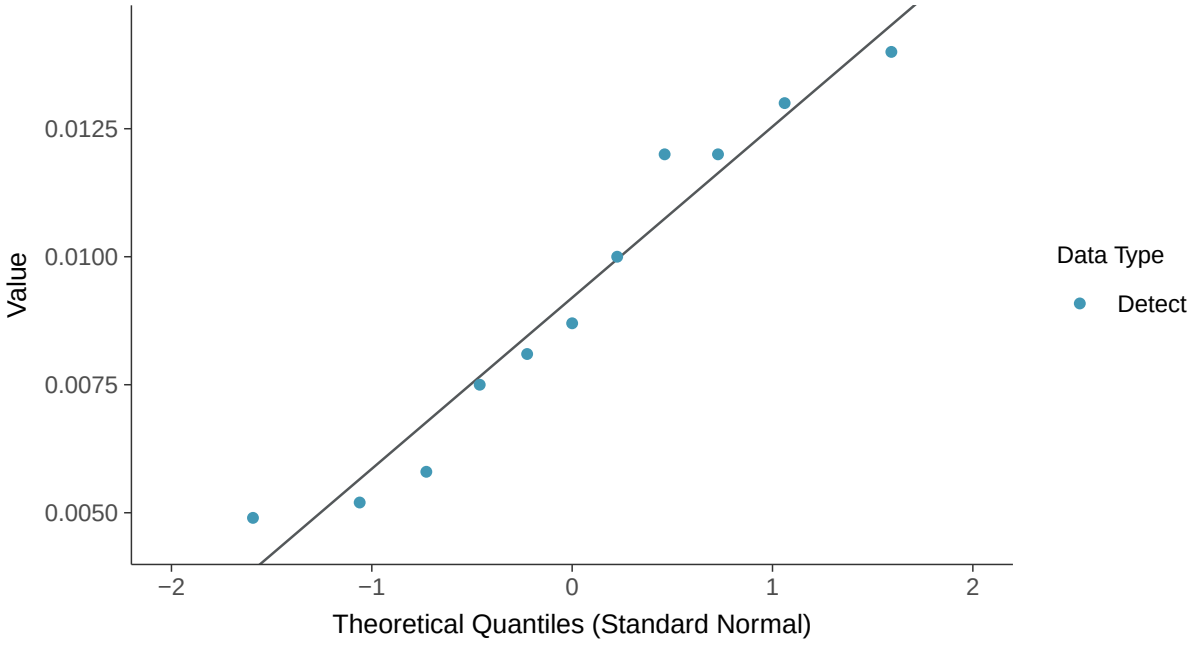
Boxplot by Season

Chromium, Total, MW-30 (mg/L)



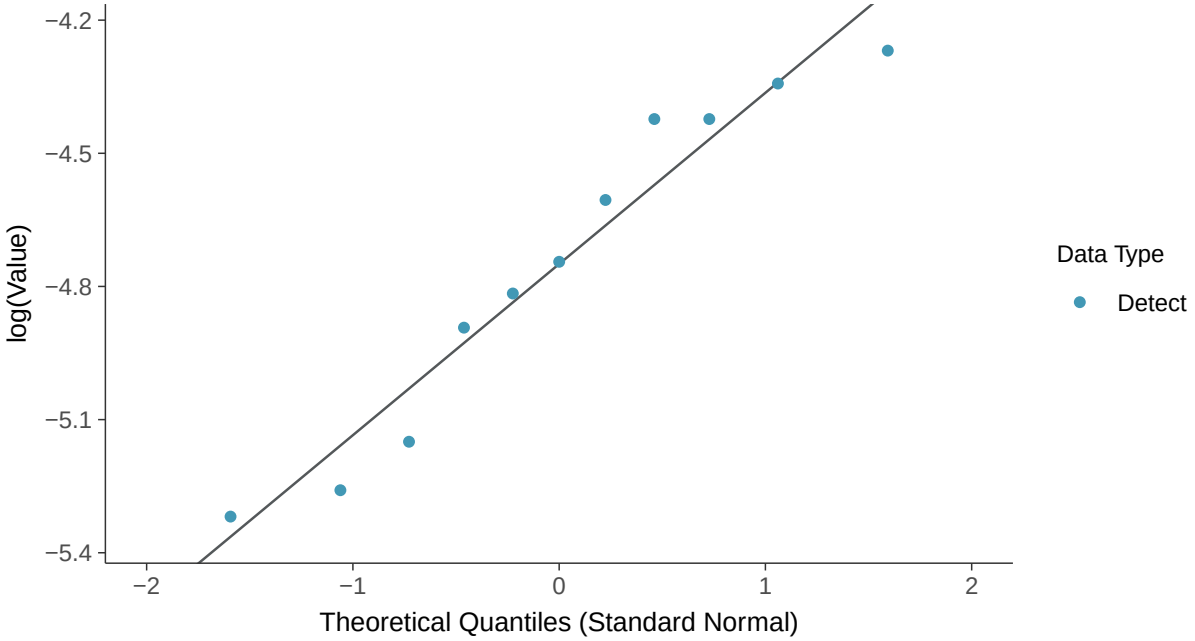
Normal Q-Q plot

Chromium, Total, MW-30 (mg/L)



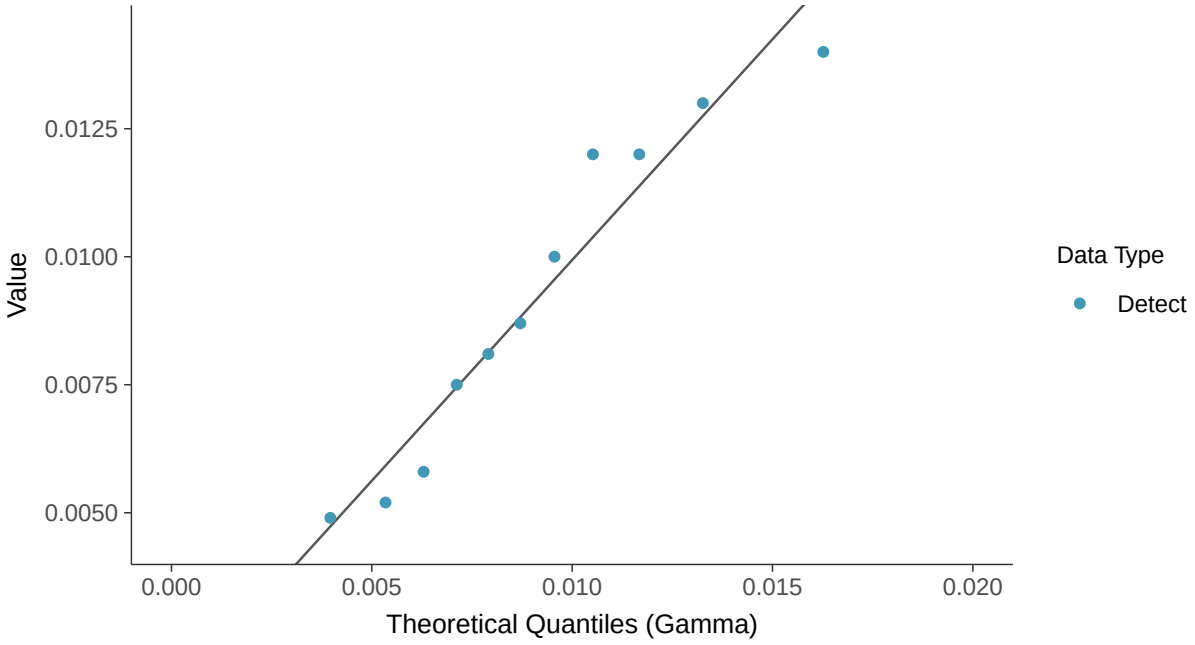
Lognormal Q-Q plot

Chromium, Total, MW-30 (mg/L)



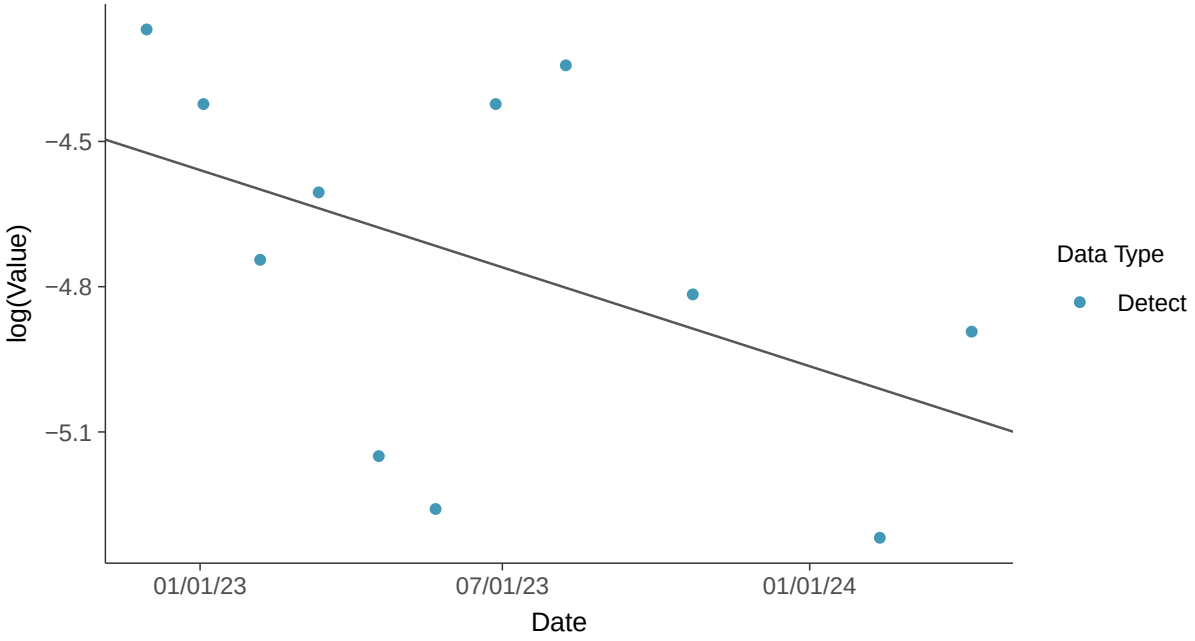
Gamma Q-Q plot

Chromium, Total, MW-30 (mg/L)



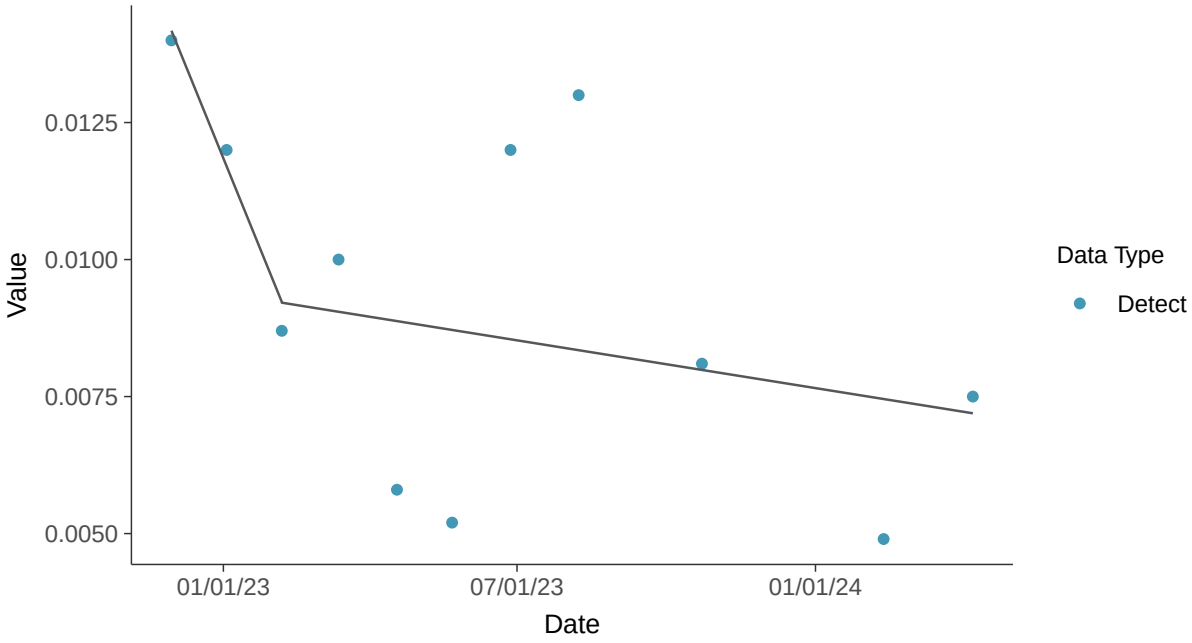
Trend Regression: Lognormal MLE

Chromium, Total, MW-30 (mg/L)



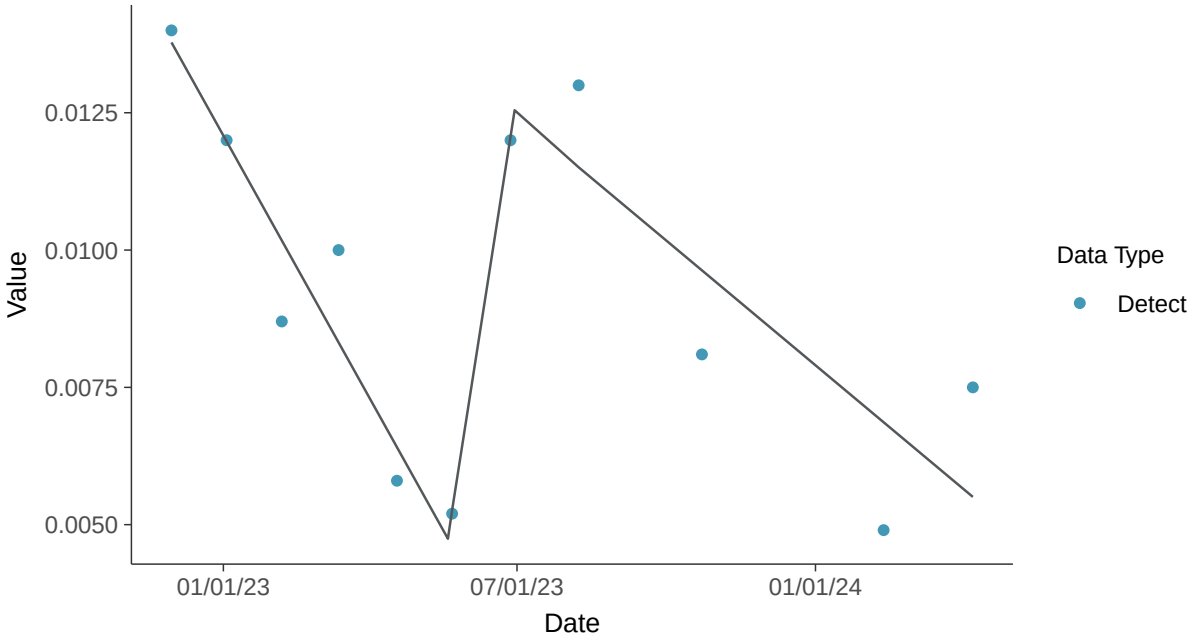
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-30 (mg/L)



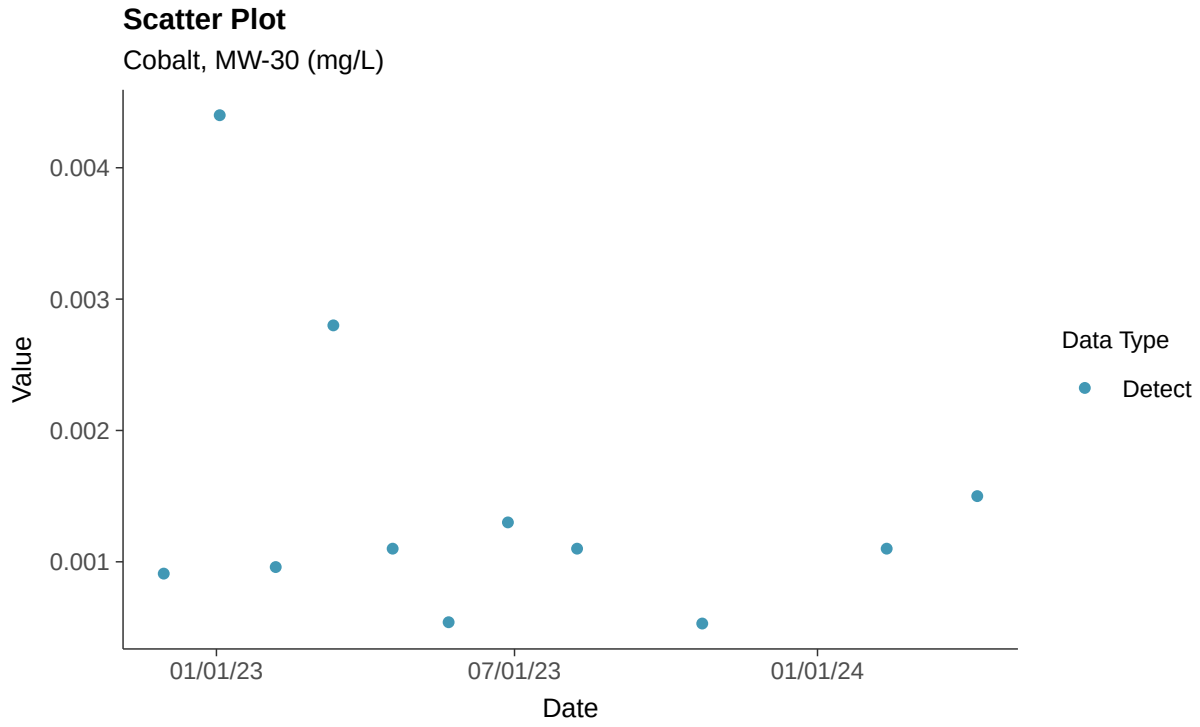
Trend Regression: Piecewise Linear-Linear-Linear

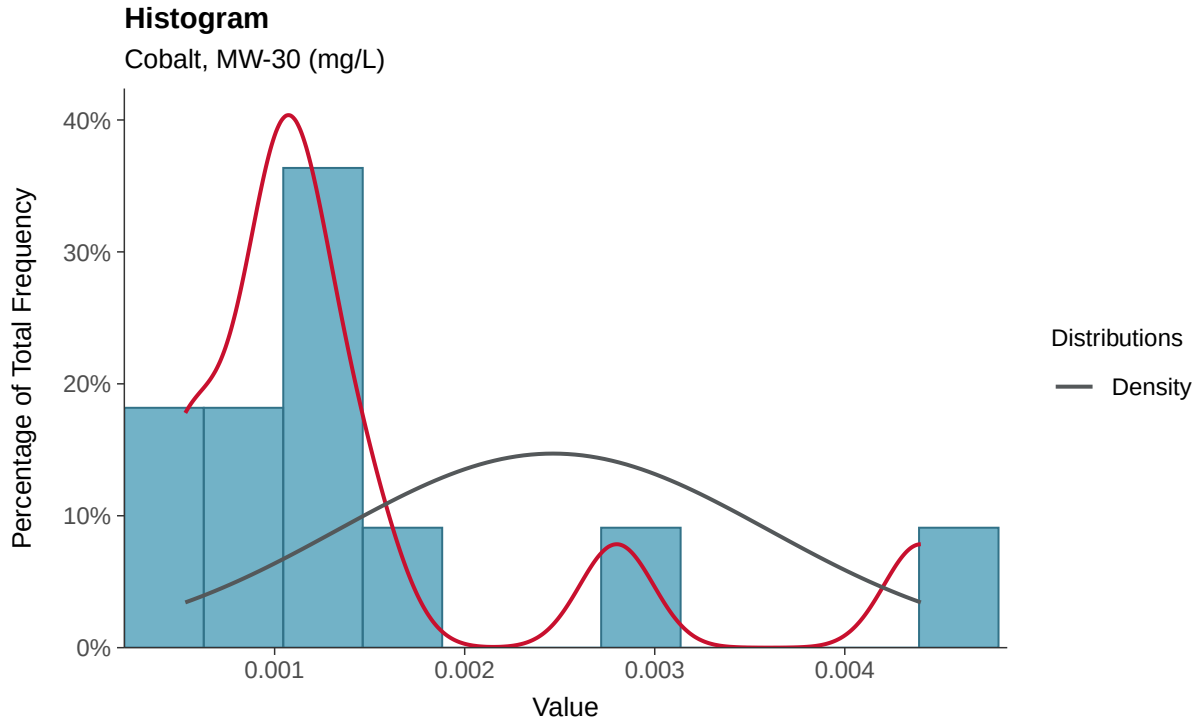
Chromium, Total, MW-30 (mg/L)



Appendix IV: Cobalt, MW-30

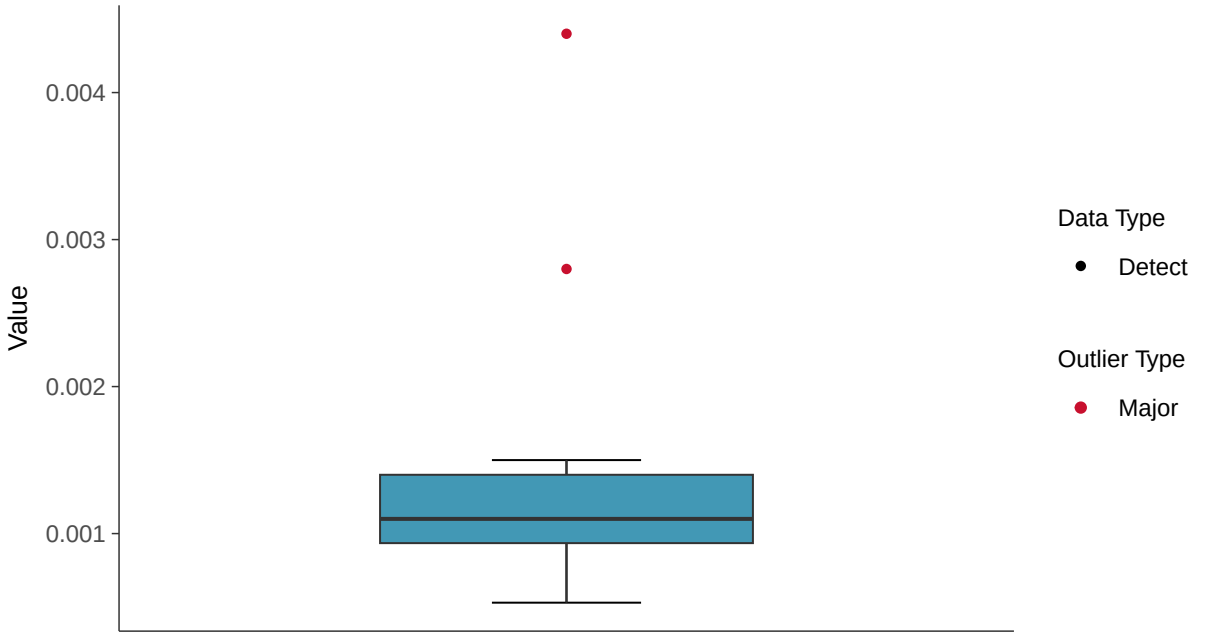
ID: 1_40_5_110





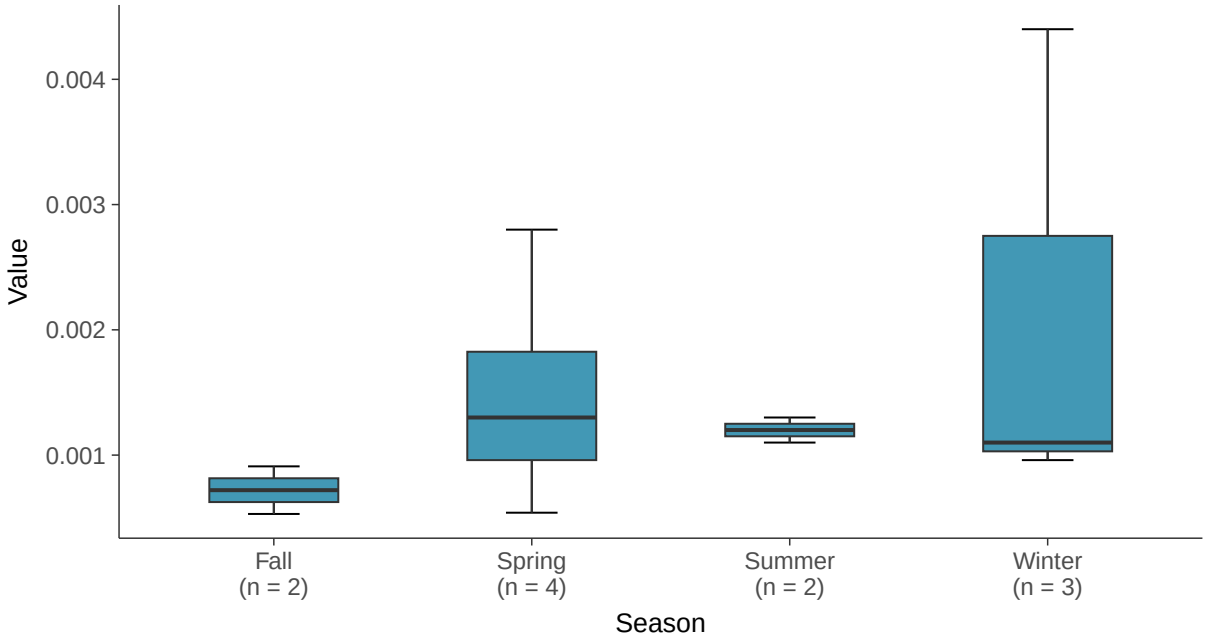
Boxplot

Cobalt, MW-30 (mg/L)



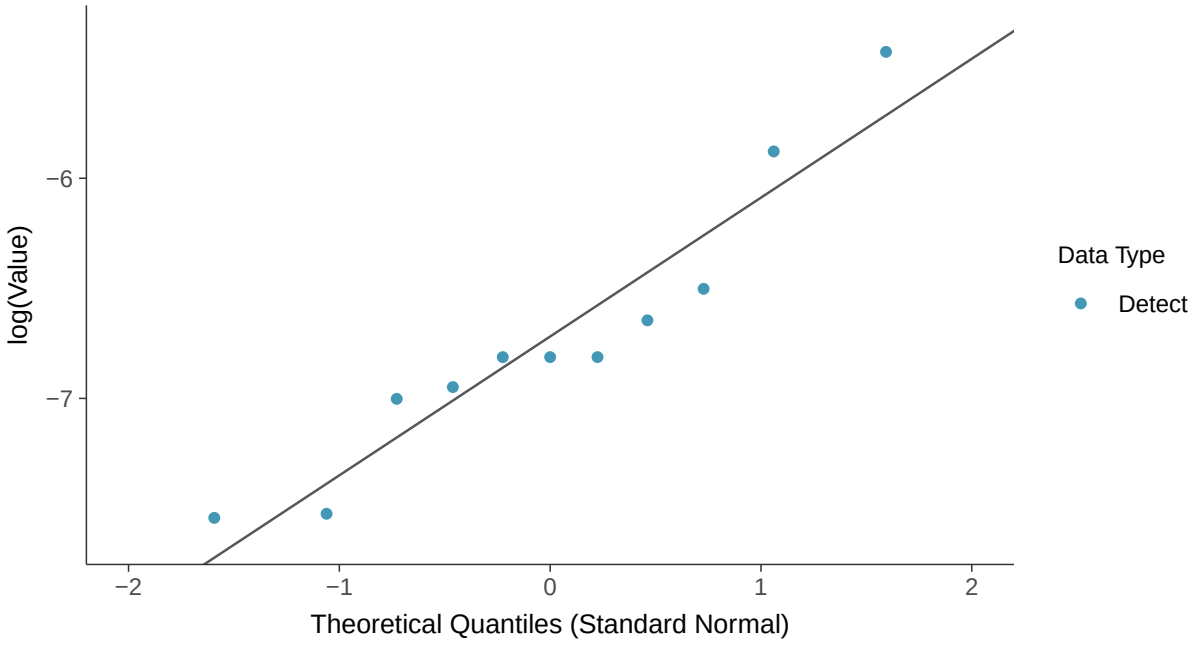
Boxplot by Season

Cobalt, MW-30 (mg/L)



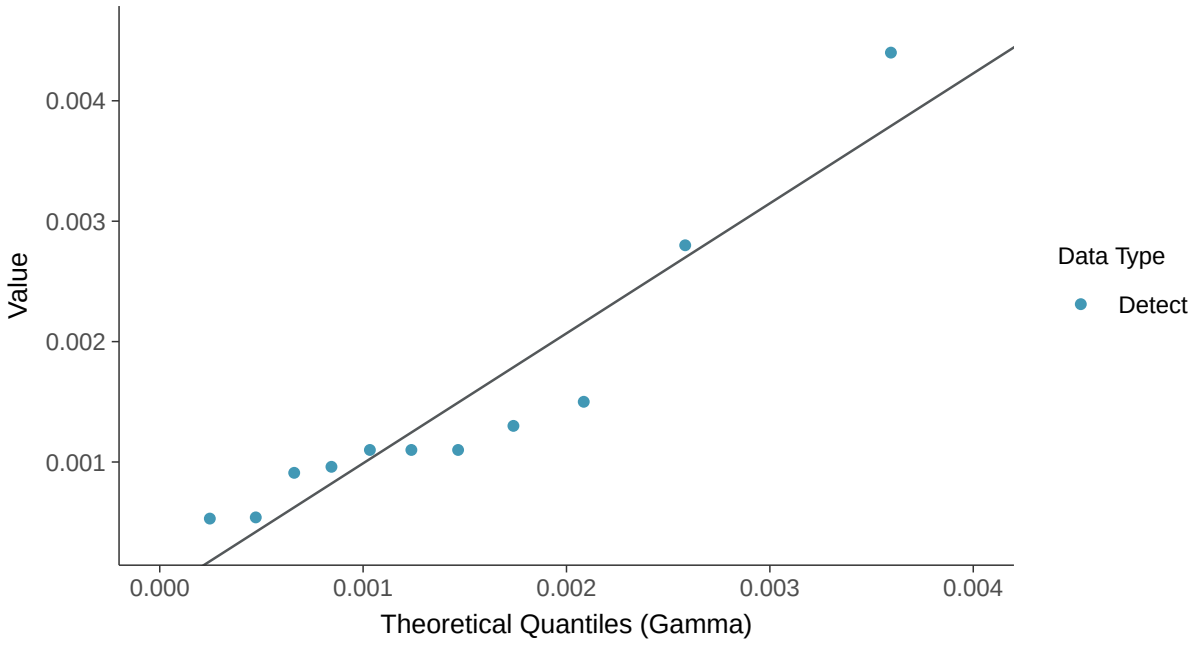
Lognormal Q-Q plot

Cobalt, MW-30 (mg/L)



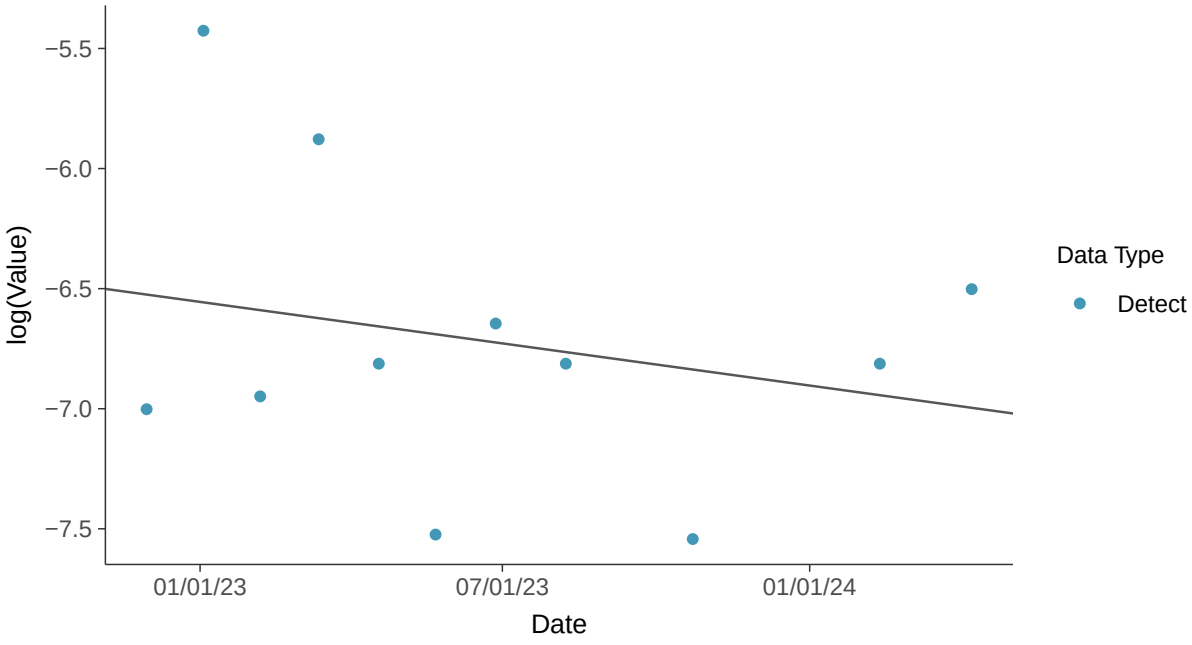
Gamma Q-Q plot

Cobalt, MW-30 (mg/L)



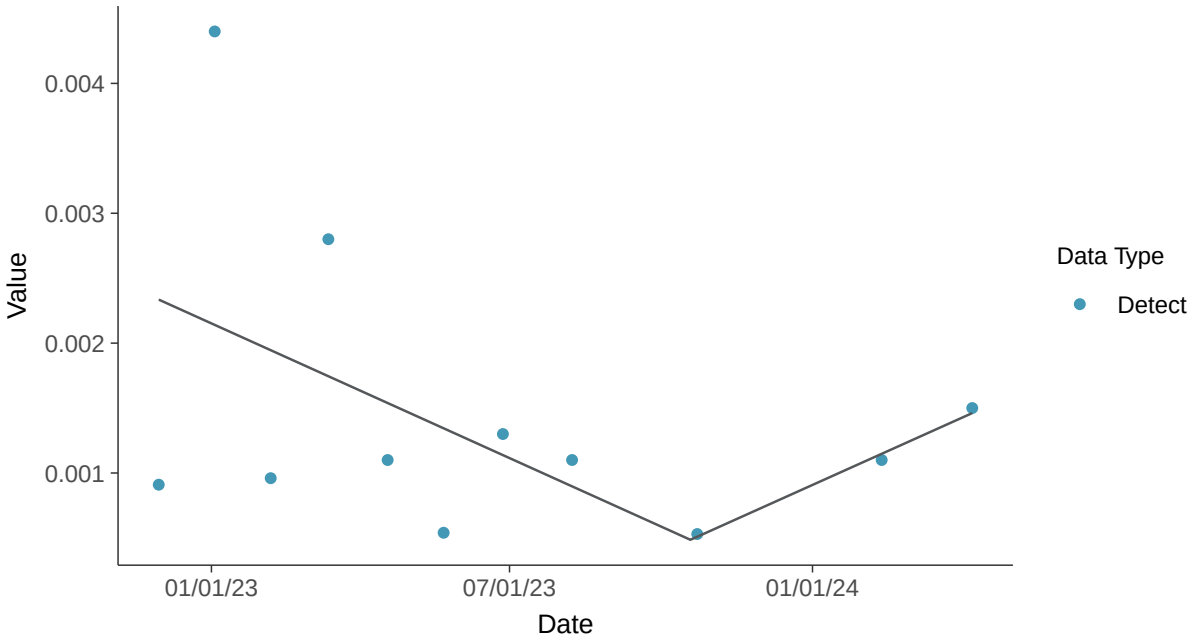
Trend Regression: Lognormal MLE

Cobalt, MW-30 (mg/L)



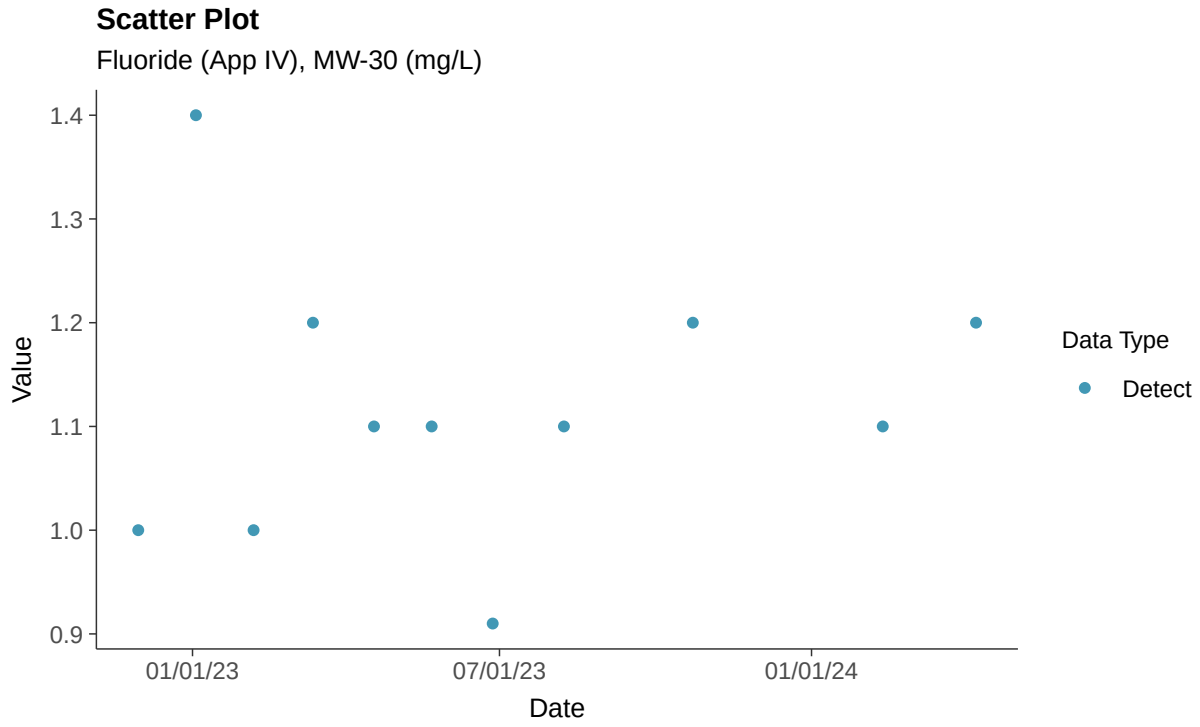
Trend Regression: Piecewise Linear-Linear

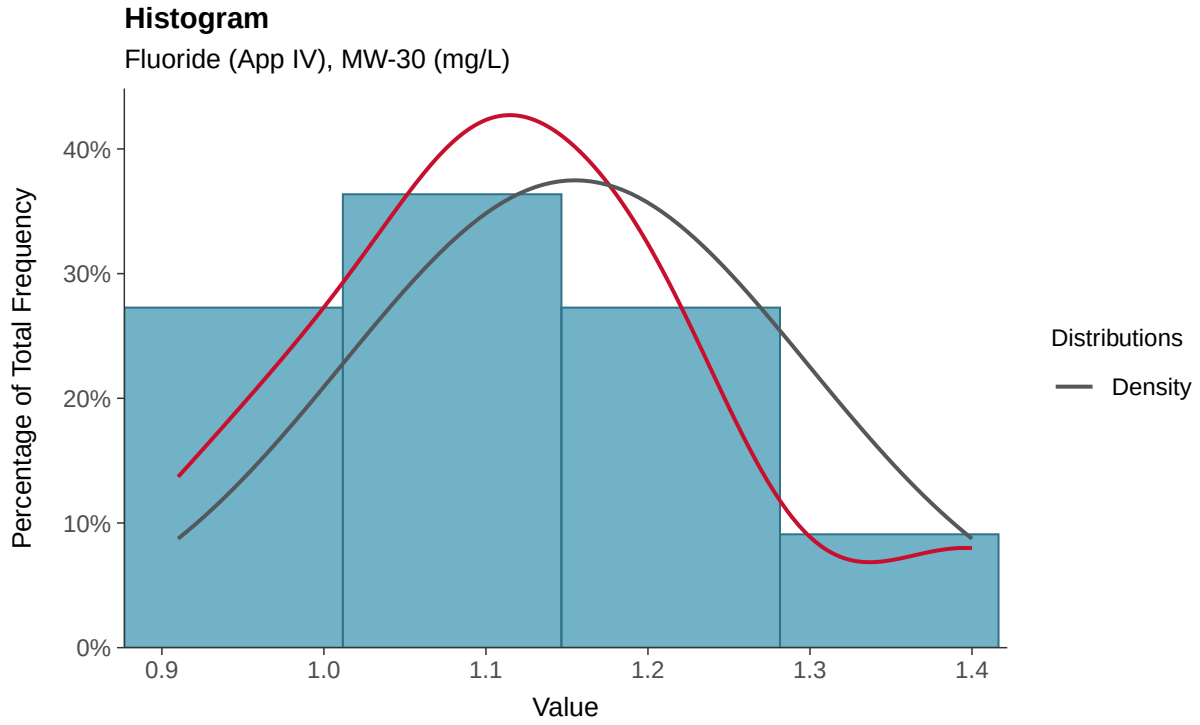
Cobalt, MW-30 (mg/L)



Appendix IV: Fluoride (App IV), MW-30

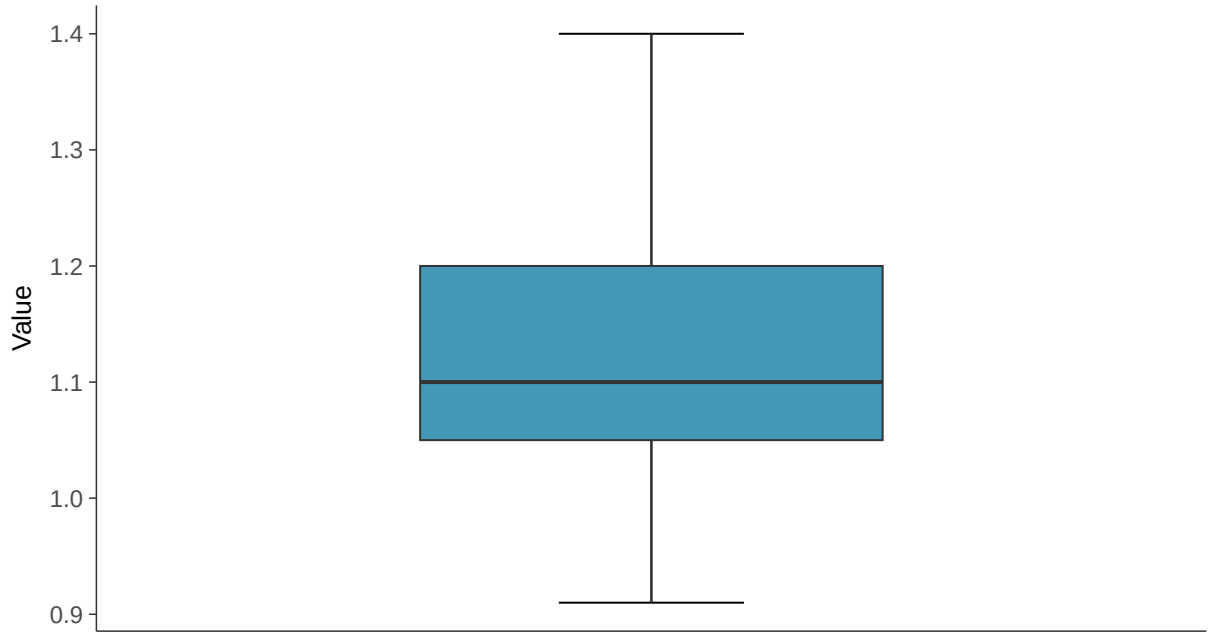
ID: 1_40_5_113





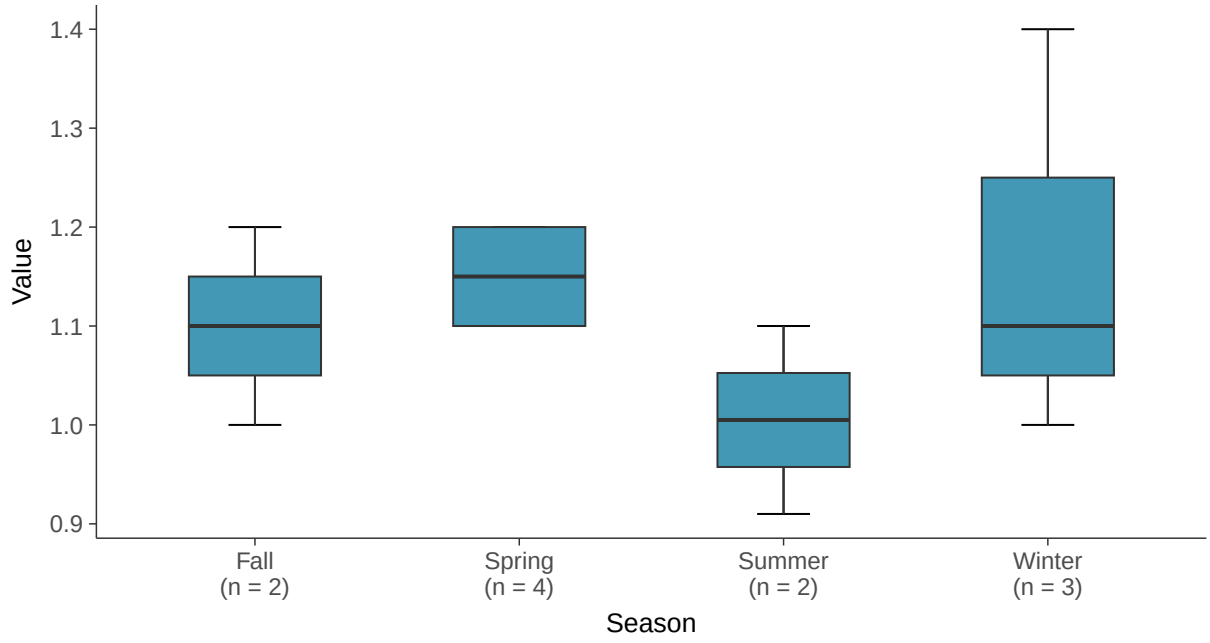
Boxplot

Fluoride (App IV), MW-30 (mg/L)



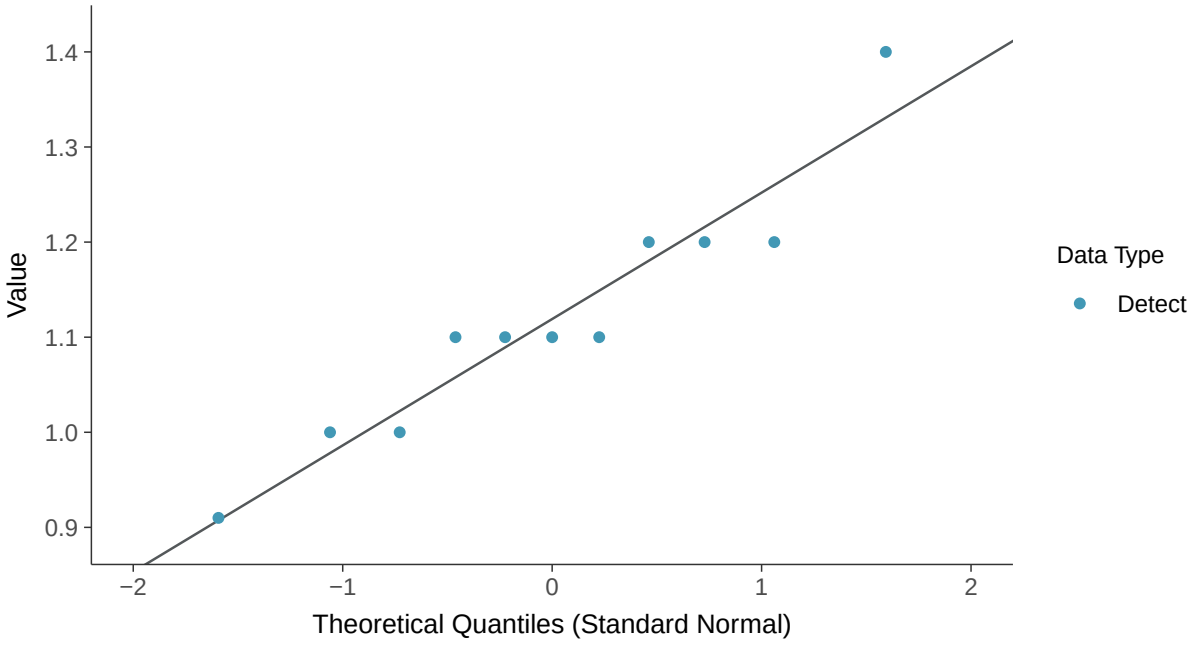
Boxplot by Season

Fluoride (App IV), MW-30 (mg/L)



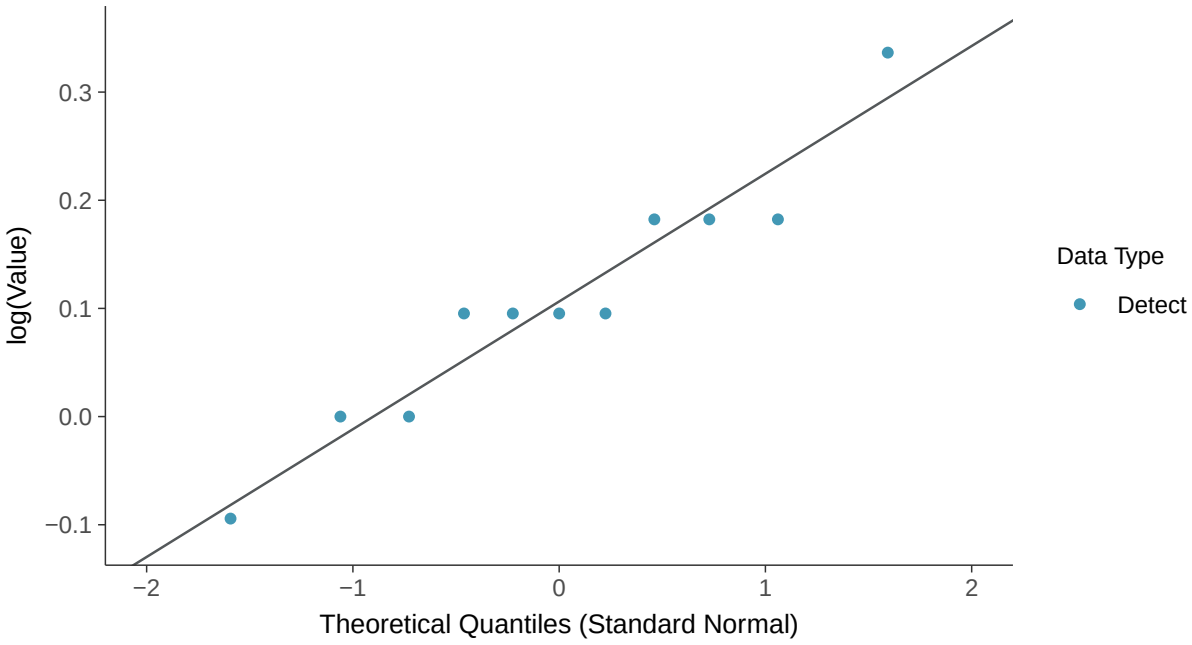
Normal Q-Q plot

Fluoride (App IV), MW-30 (mg/L)



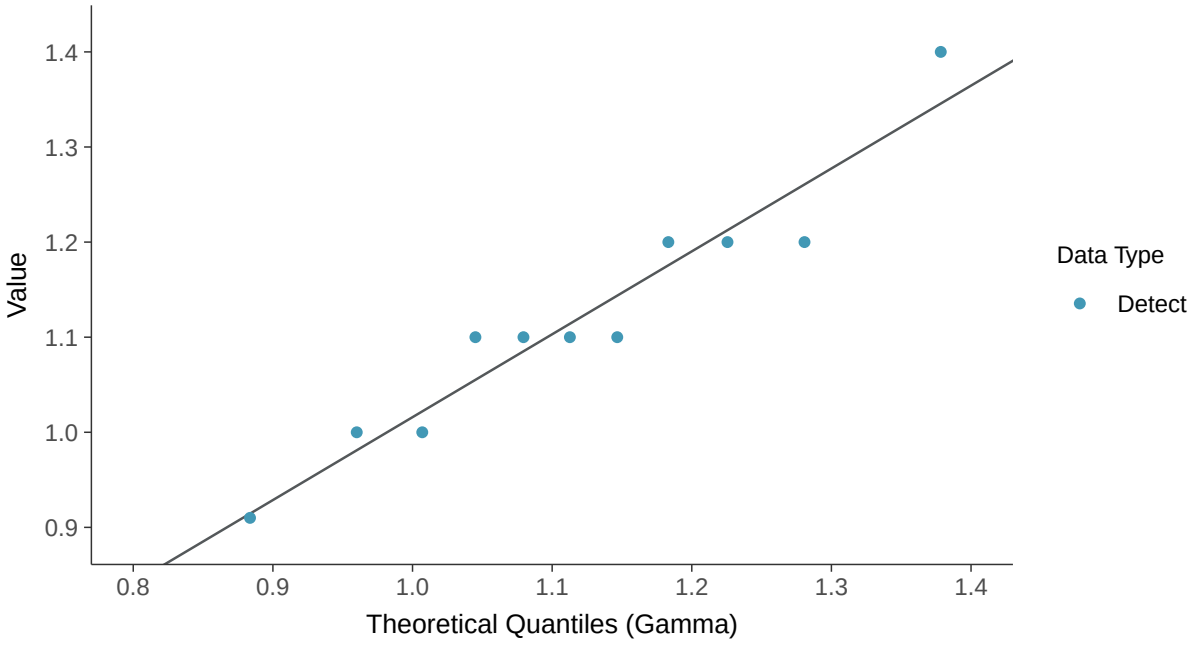
Lognormal Q-Q plot

Fluoride (App IV), MW-30 (mg/L)



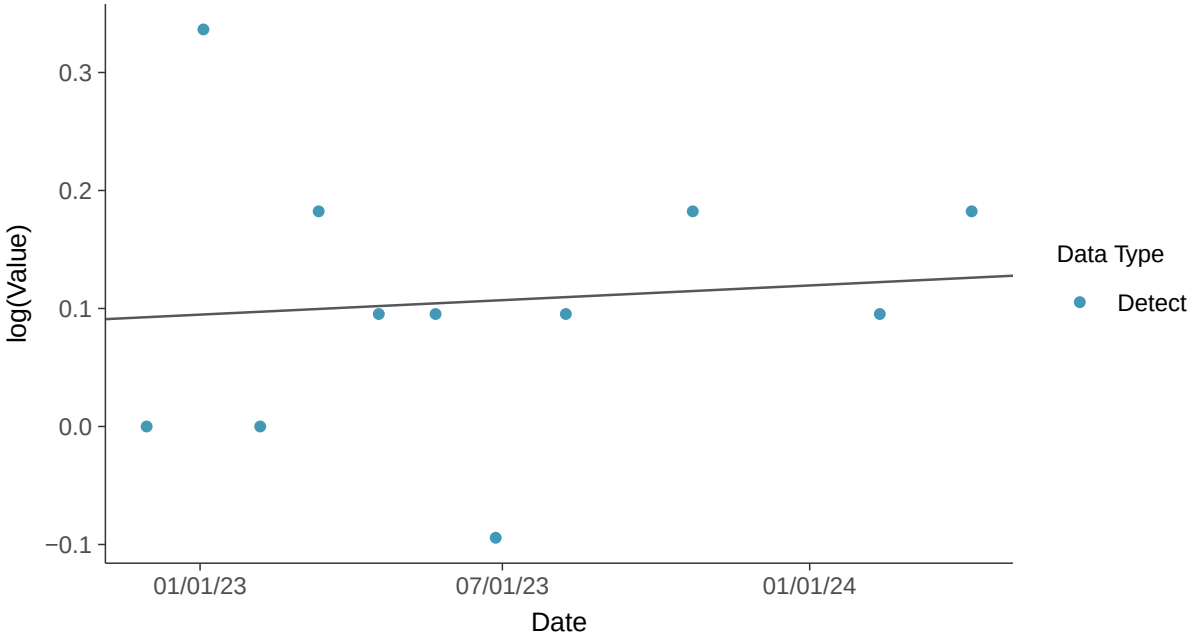
Gamma Q-Q plot

Fluoride (App IV), MW-30 (mg/L)



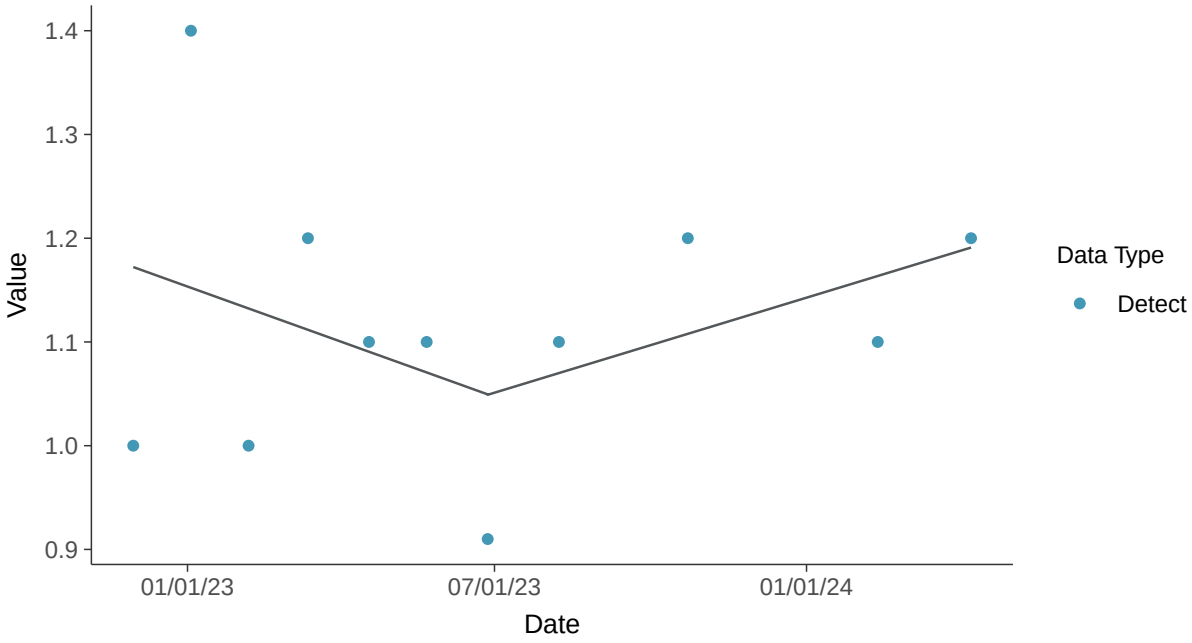
Trend Regression: Lognormal MLE

Fluoride (App IV), MW-30 (mg/L)



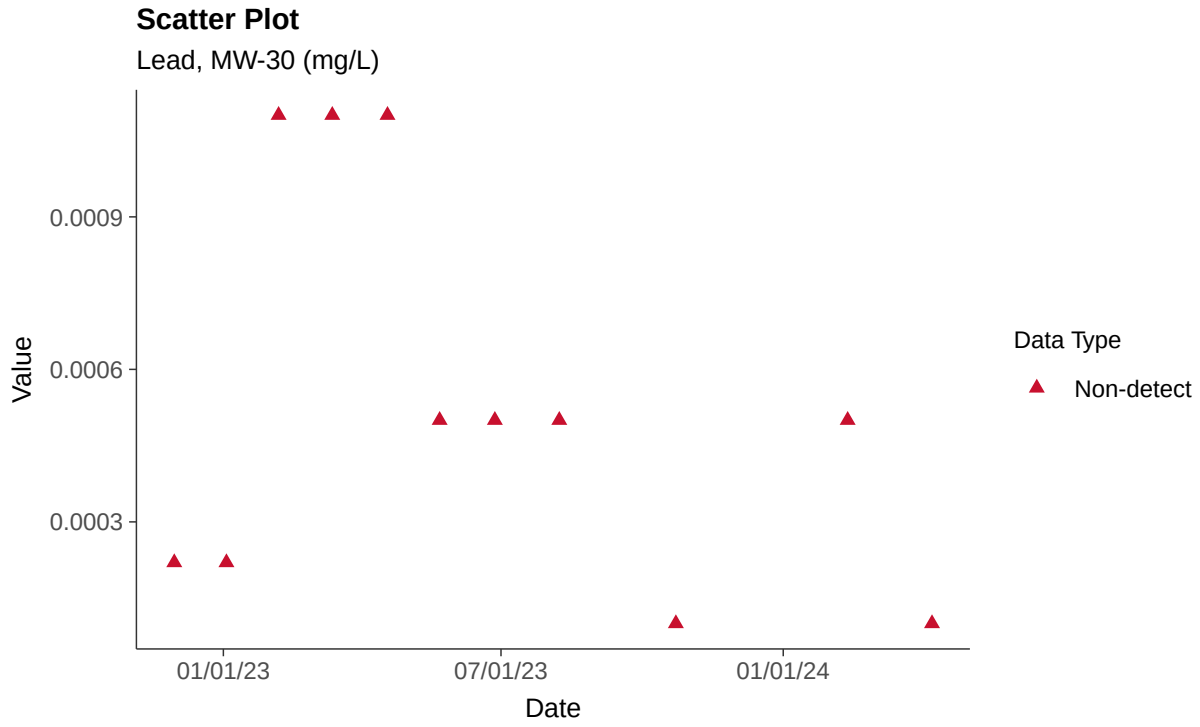
Trend Regression: Piecewise Linear-Linear

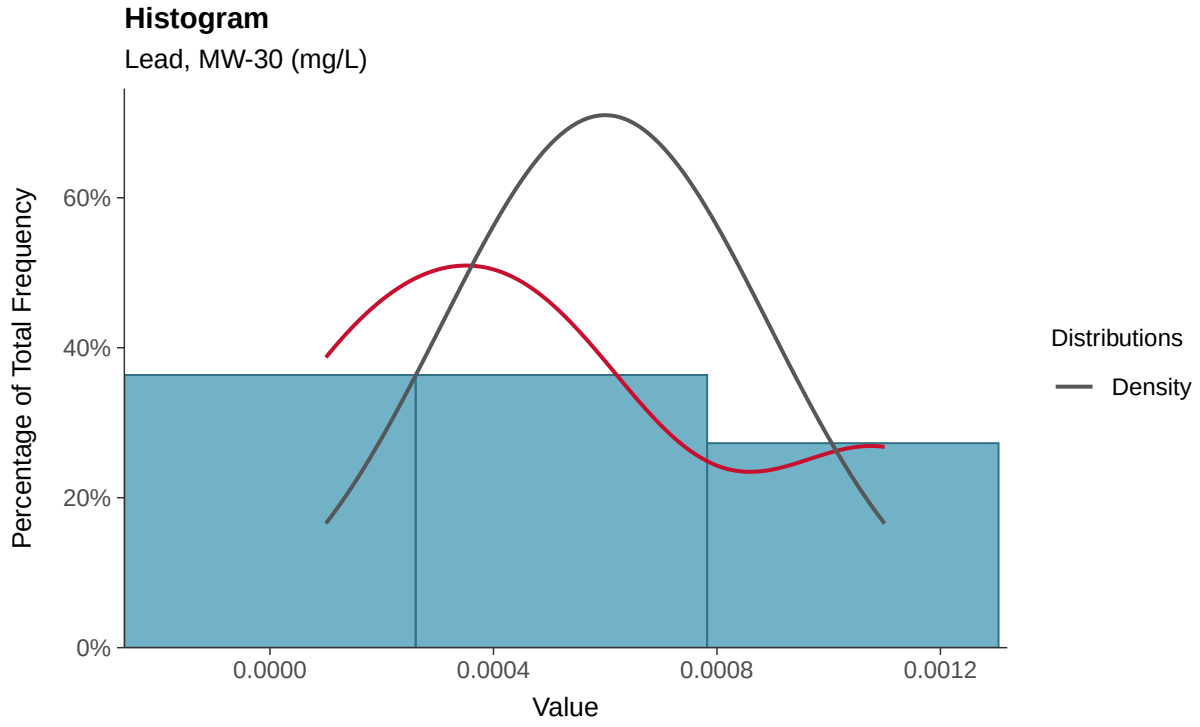
Fluoride (App IV), MW-30 (mg/L)



Appendix IV: Lead, MW-30

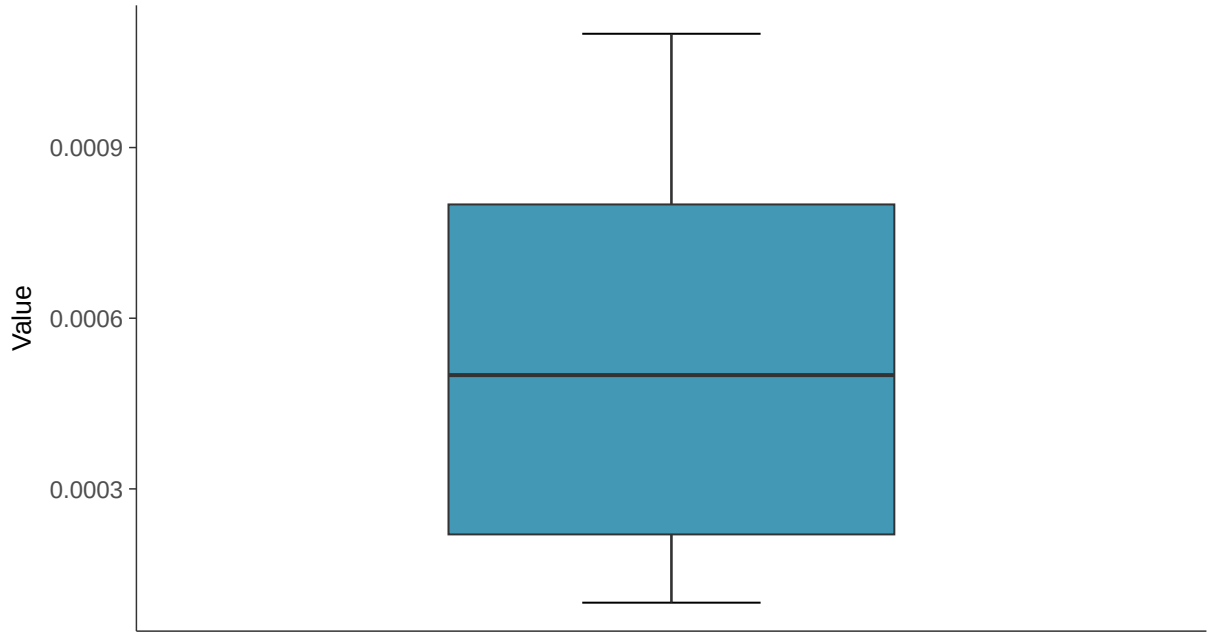
ID: 1_40_5_115





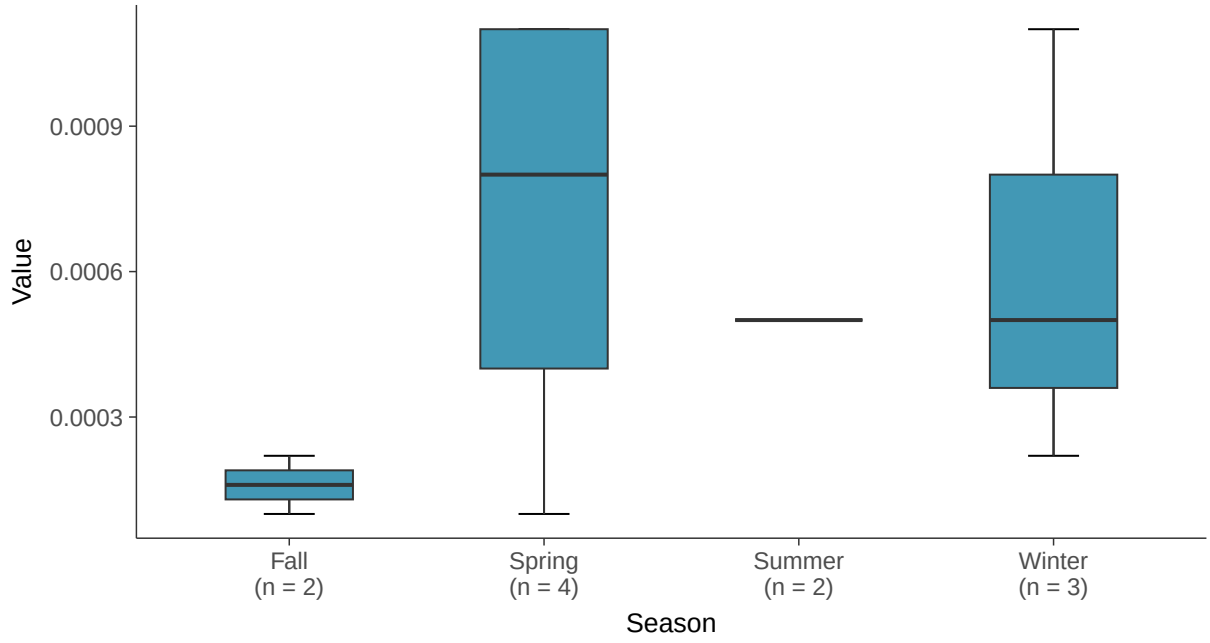
Boxplot

Lead, MW-30 (mg/L)



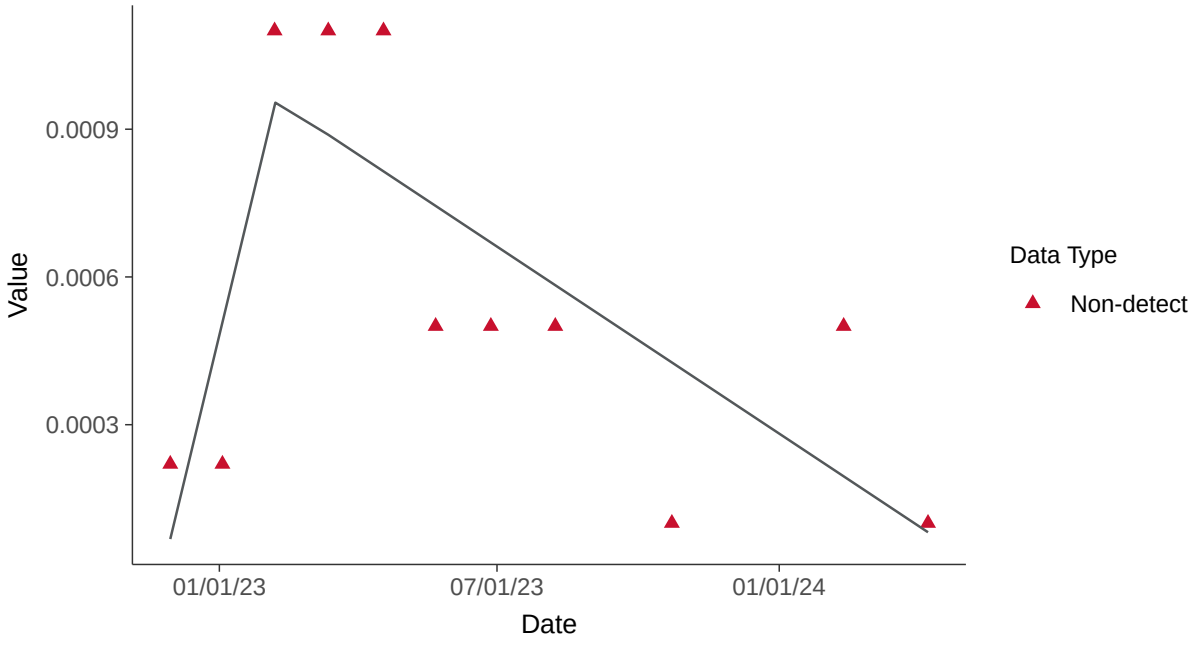
Boxplot by Season

Lead, MW-30 (mg/L)



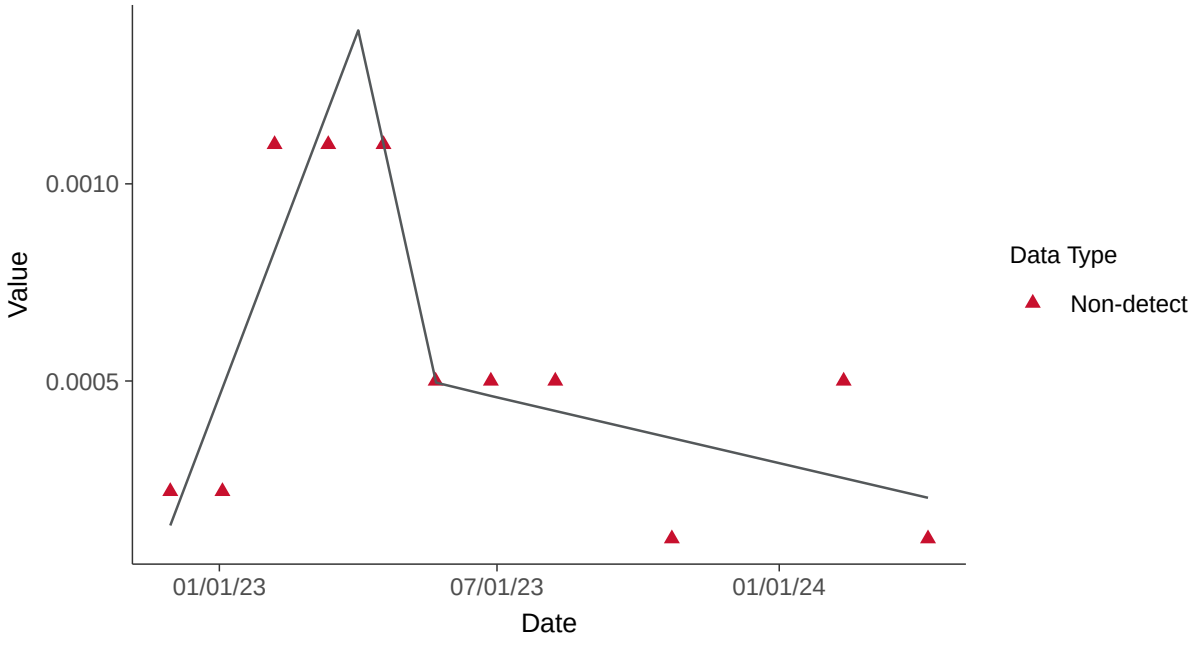
Trend Regression: Piecewise Linear-Linear

Lead, MW-30 (mg/L)



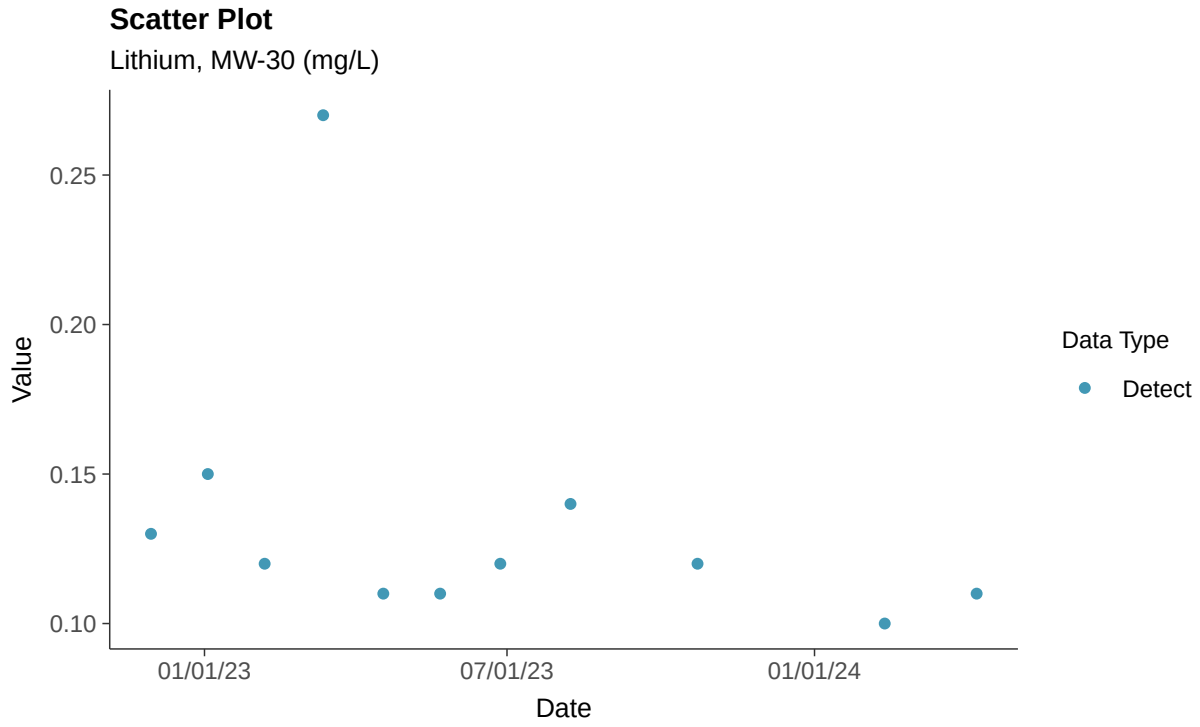
Trend Regression: Piecewise Linear-Linear-Linear

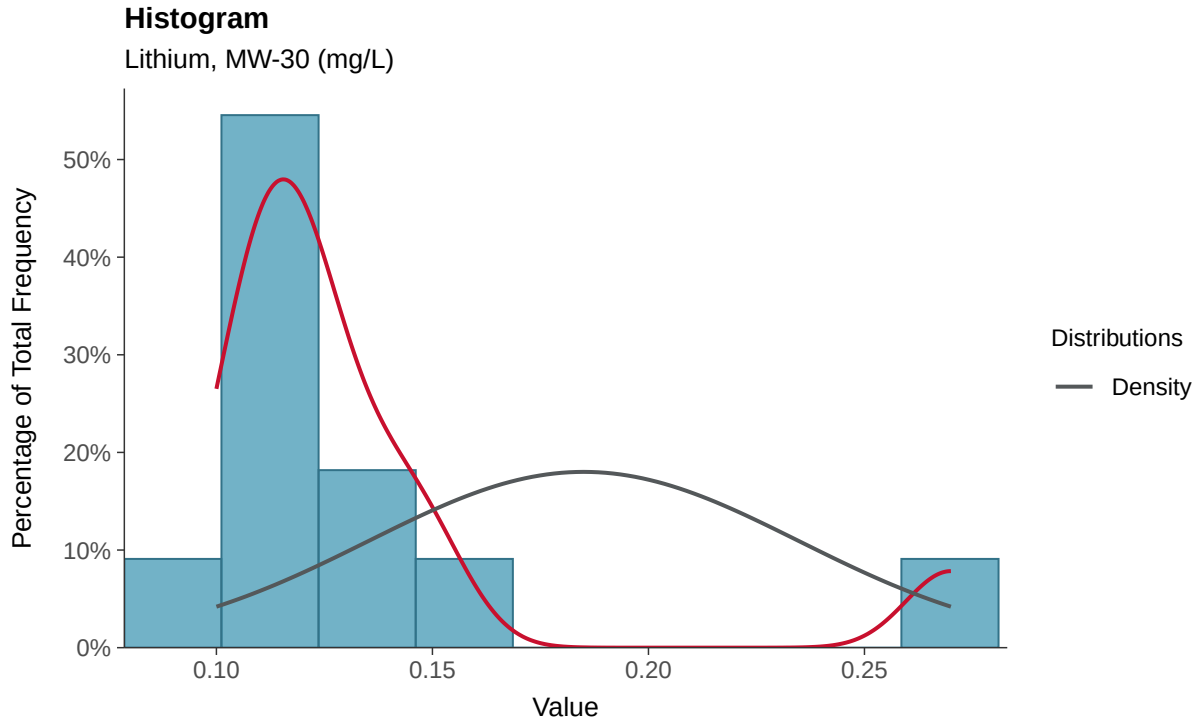
Lead, MW-30 (mg/L)



Appendix IV: Lithium, MW-30

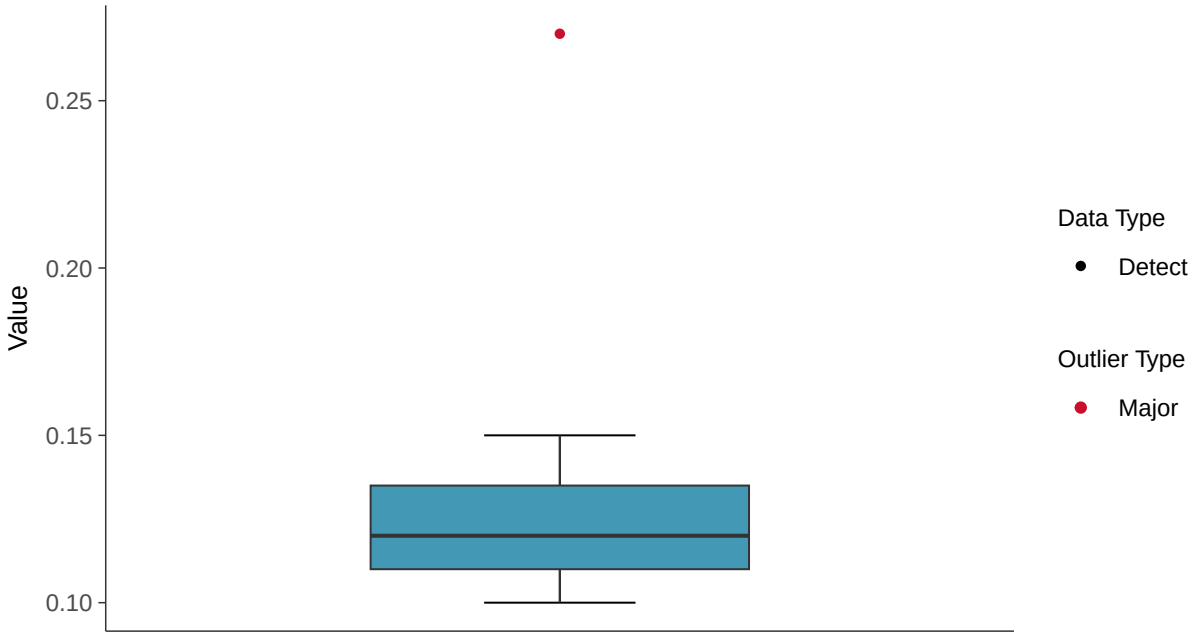
ID: 1_40_5_116





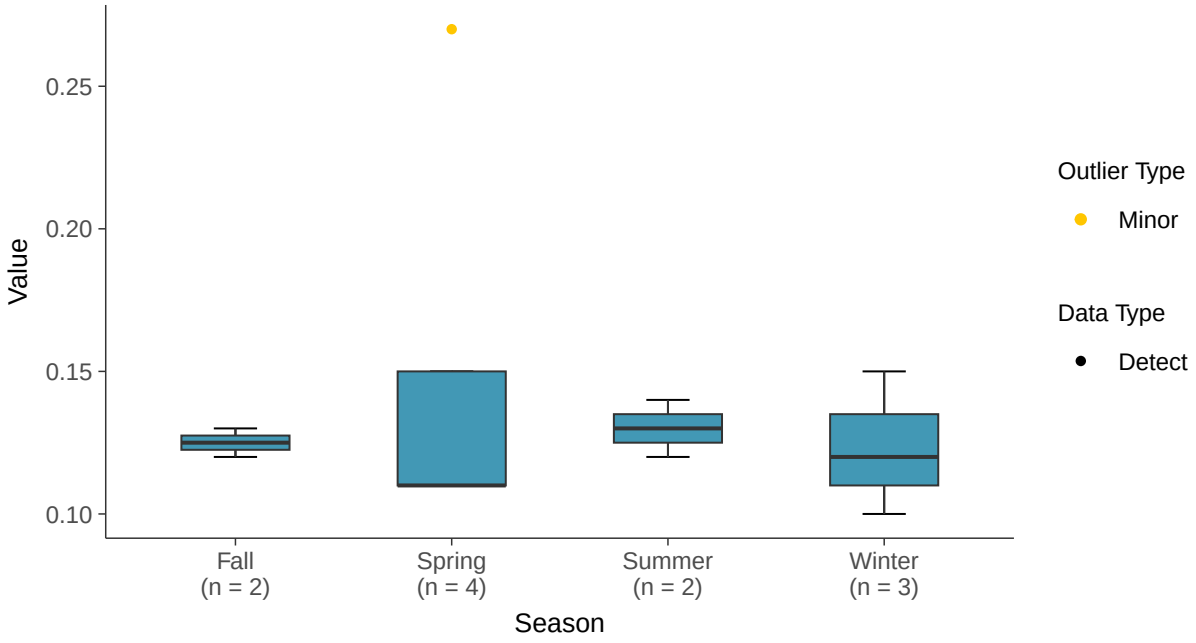
Boxplot

Lithium, MW-30 (mg/L)



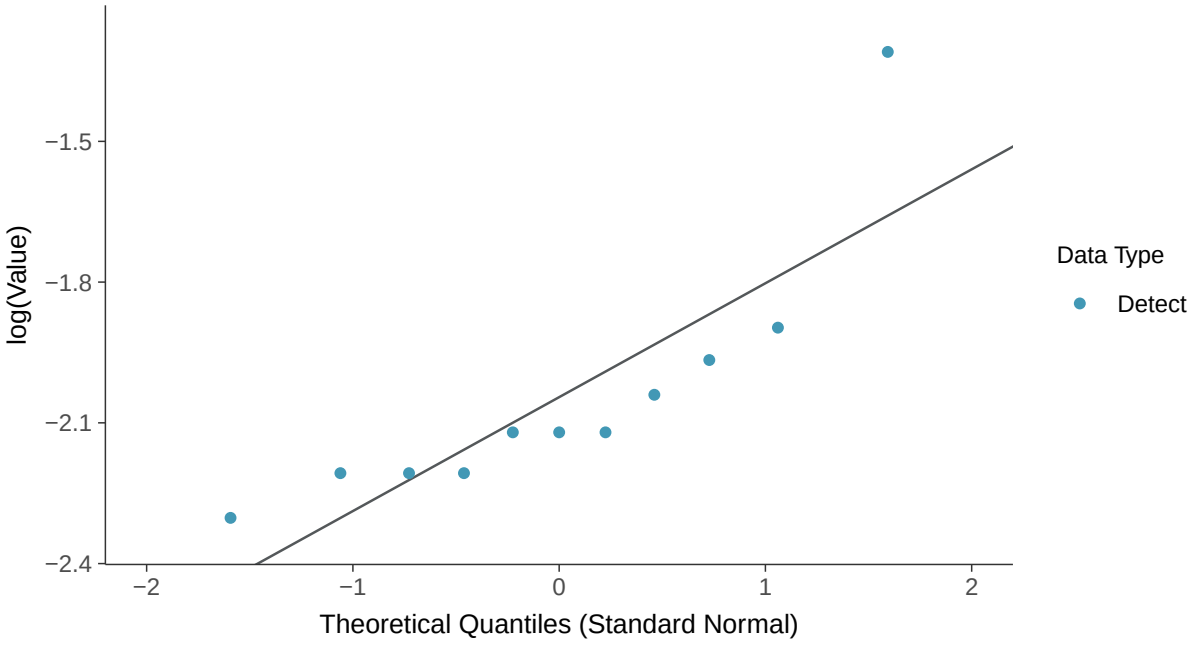
Boxplot by Season

Lithium, MW-30 (mg/L)



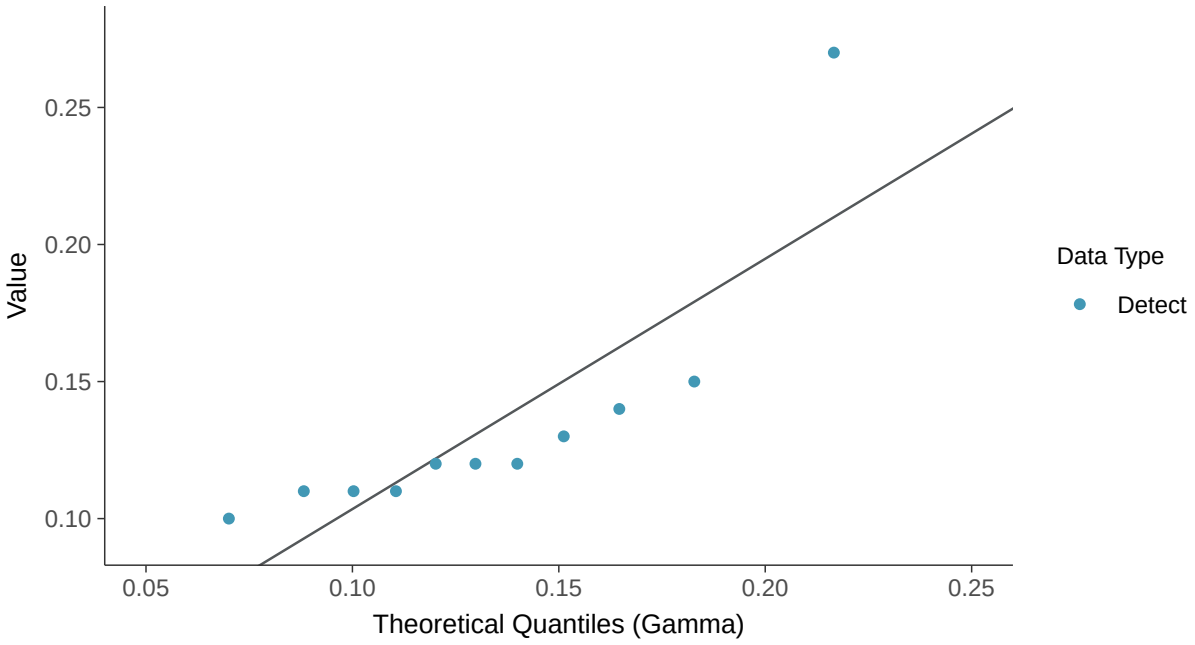
Lognormal Q-Q plot

Lithium, MW-30 (mg/L)



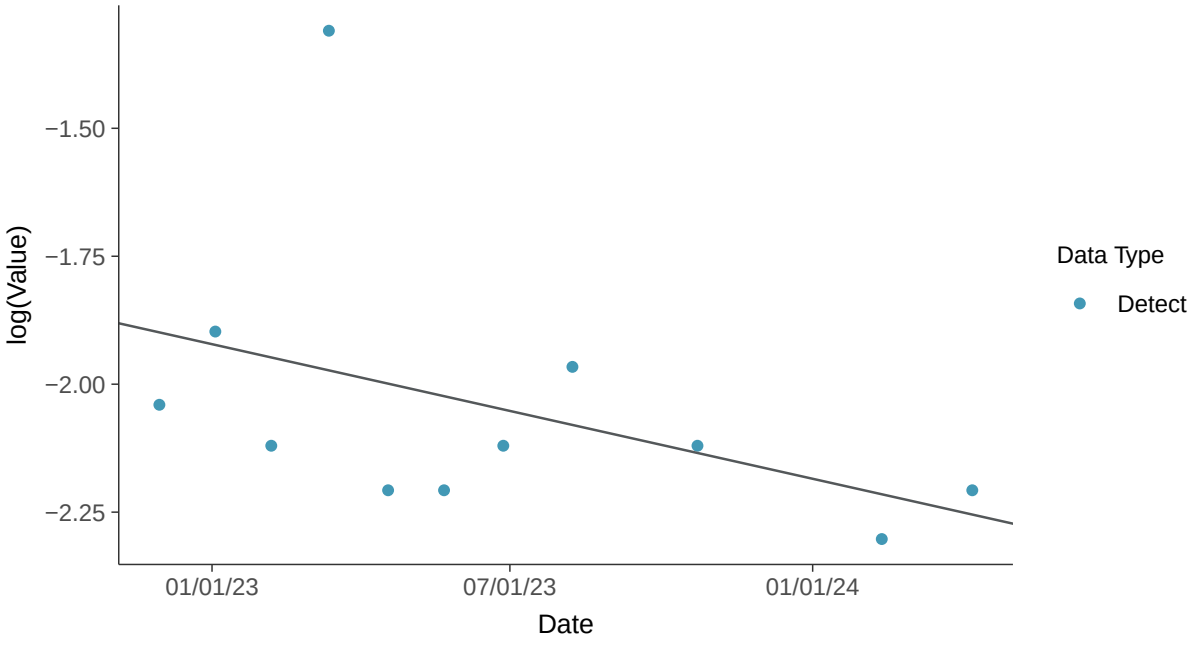
Gamma Q-Q plot

Lithium, MW-30 (mg/L)



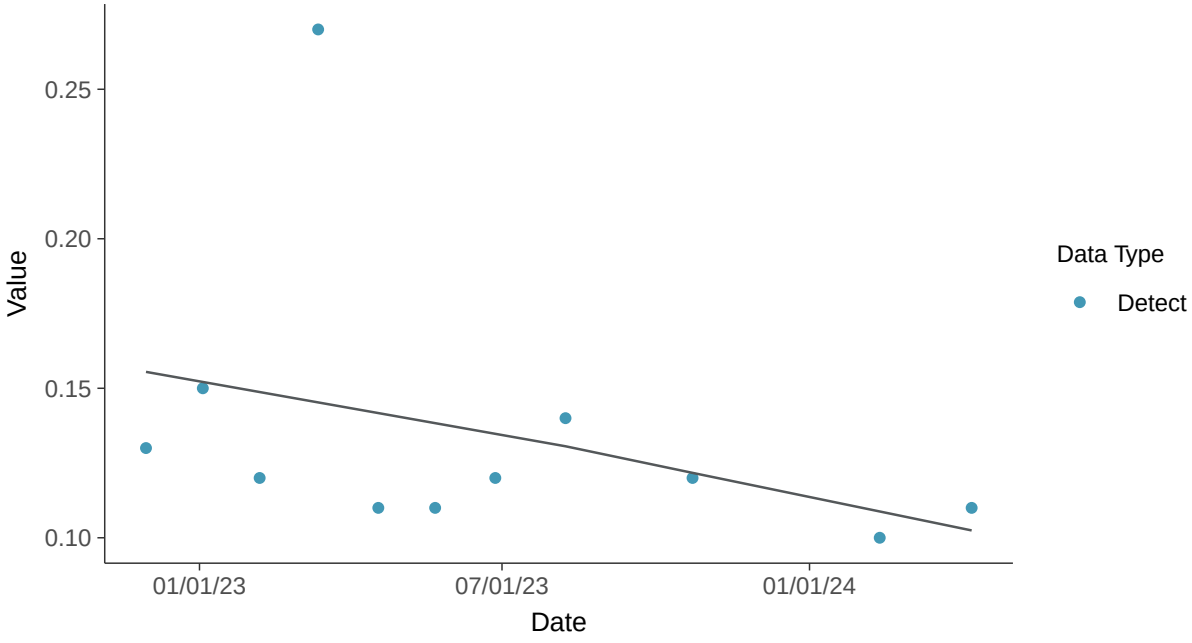
Trend Regression: Lognormal MLE

Lithium, MW-30 (mg/L)



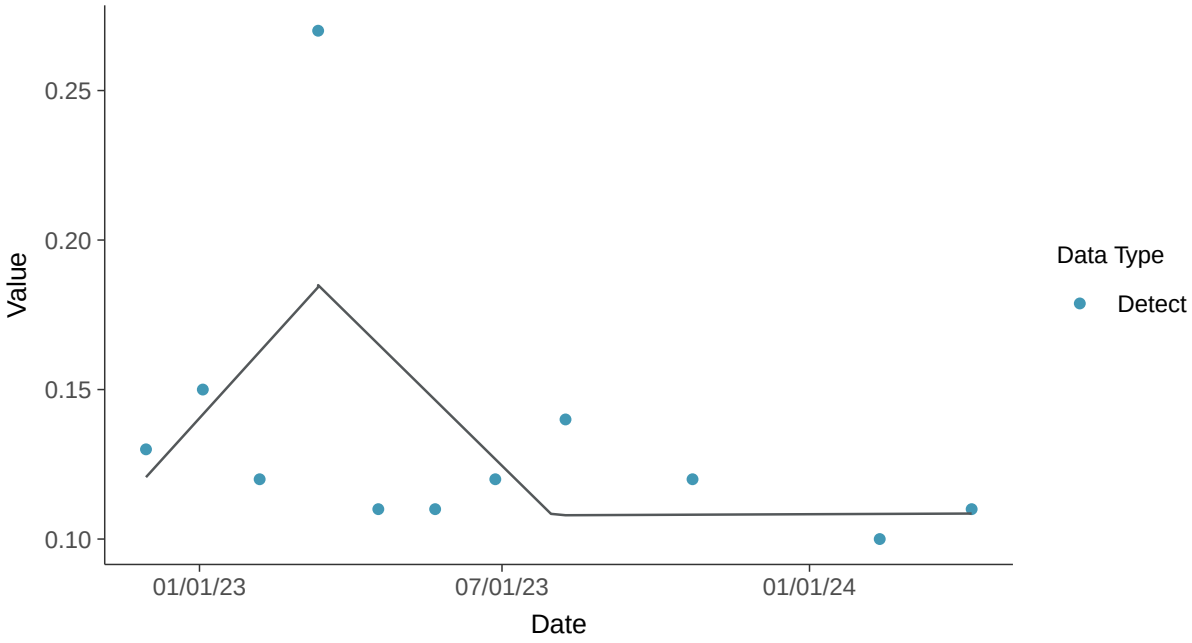
Trend Regression: Piecewise Linear-Linear

Lithium, MW-30 (mg/L)



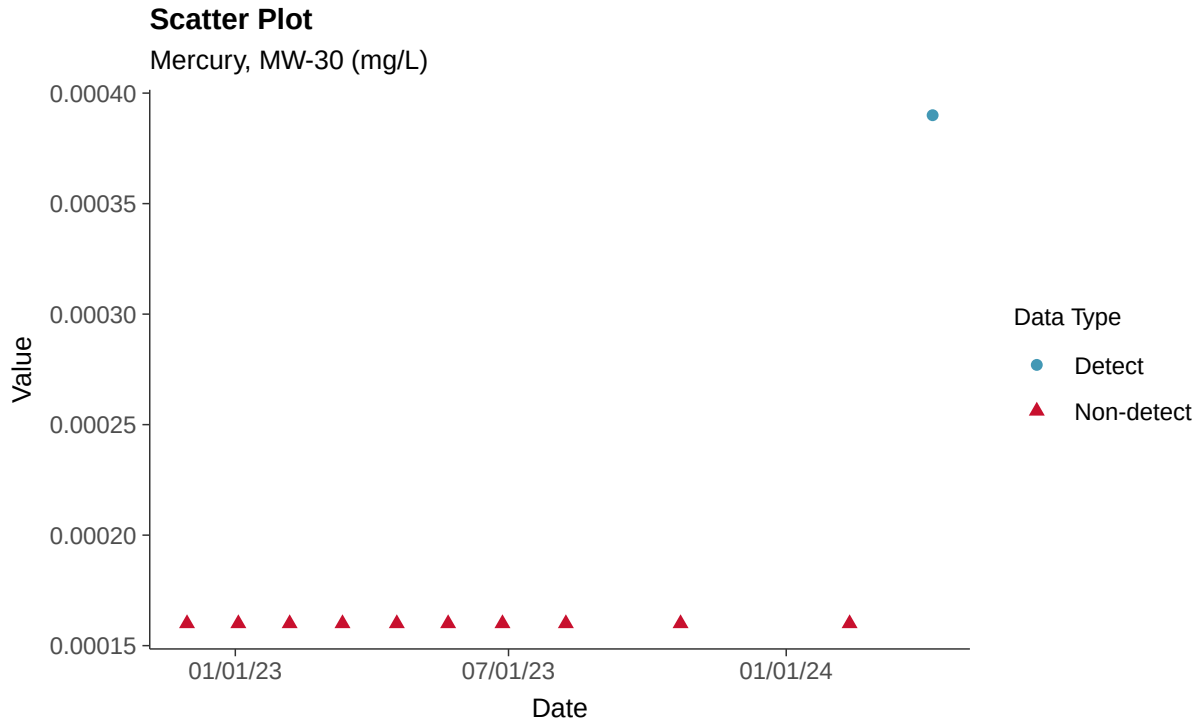
Trend Regression: Piecewise Linear-Linear-Linear

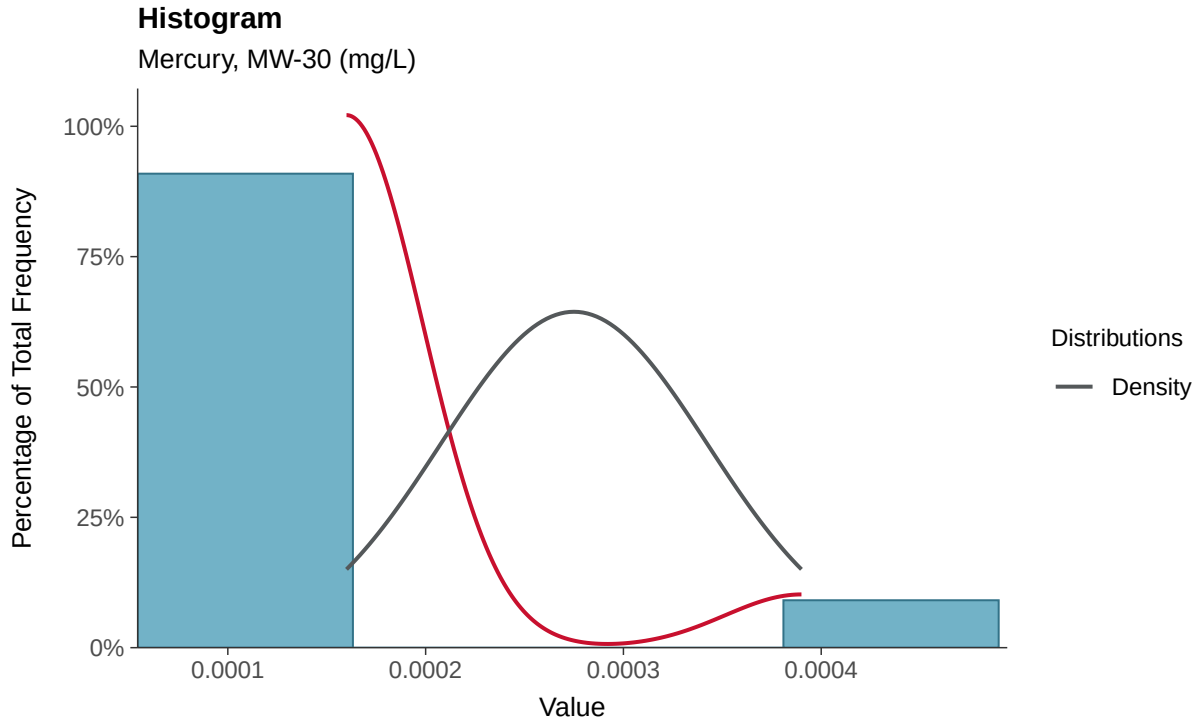
Lithium, MW-30 (mg/L)

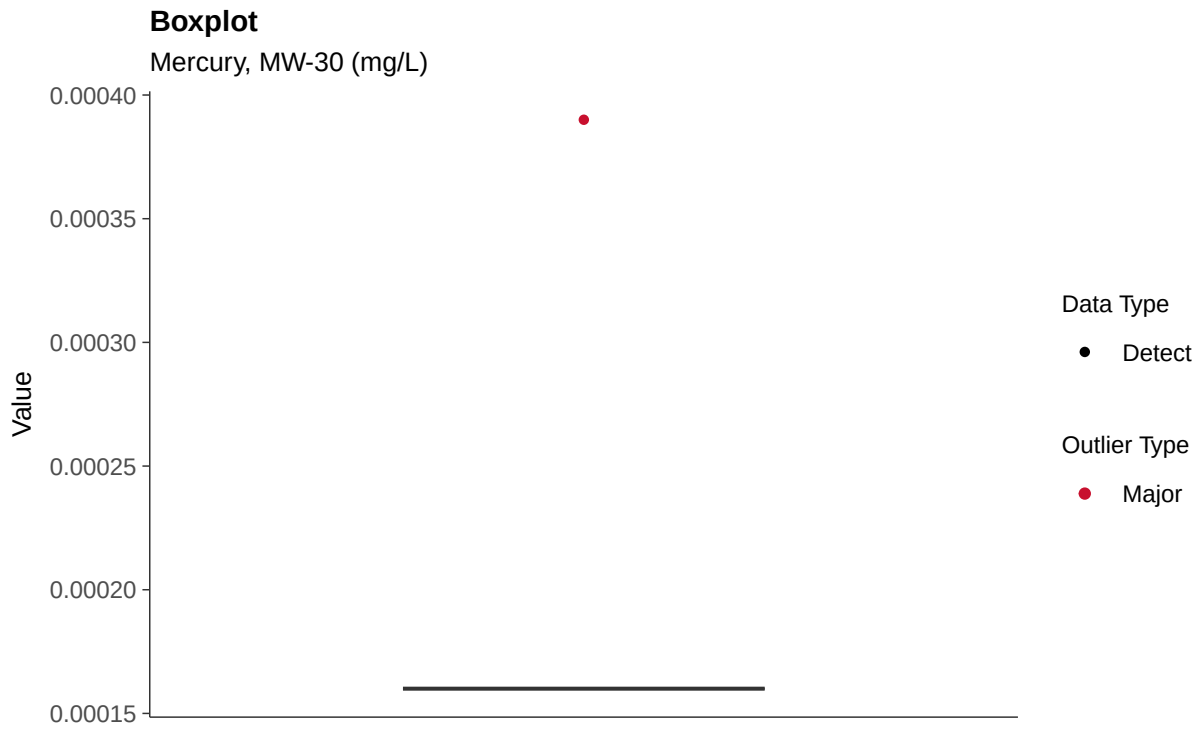


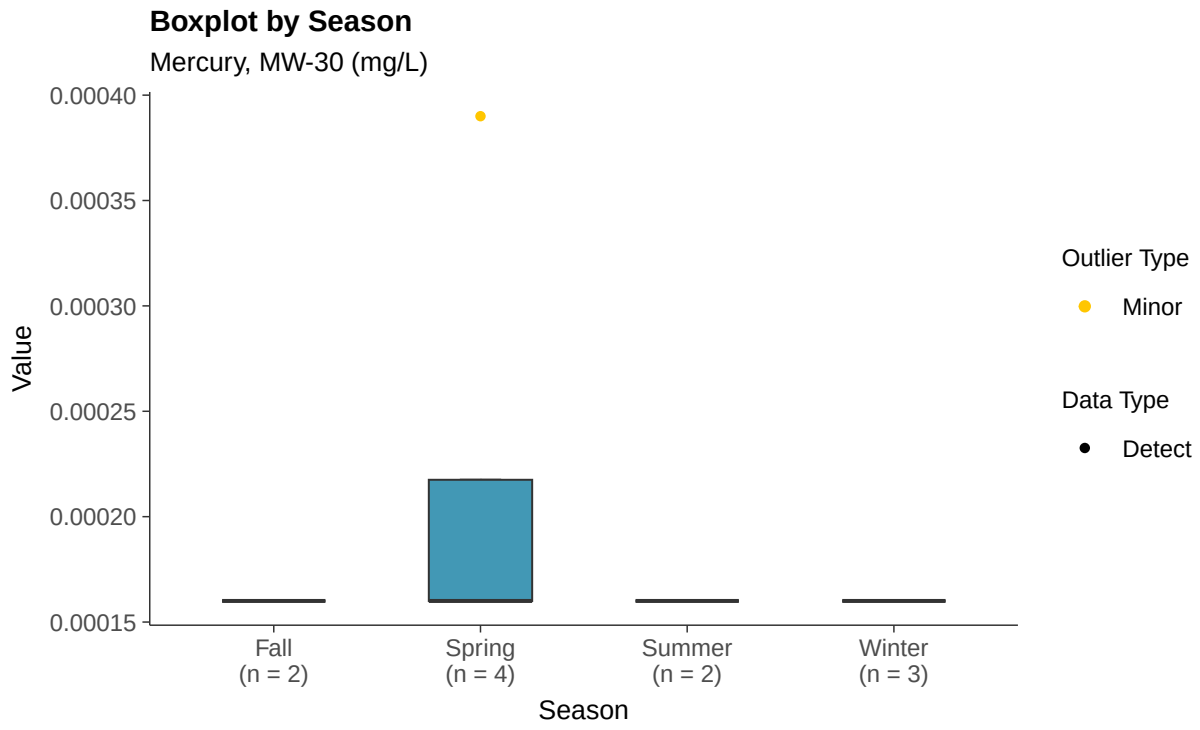
Appendix IV: Mercury, MW-30

ID: 1_40_5_117



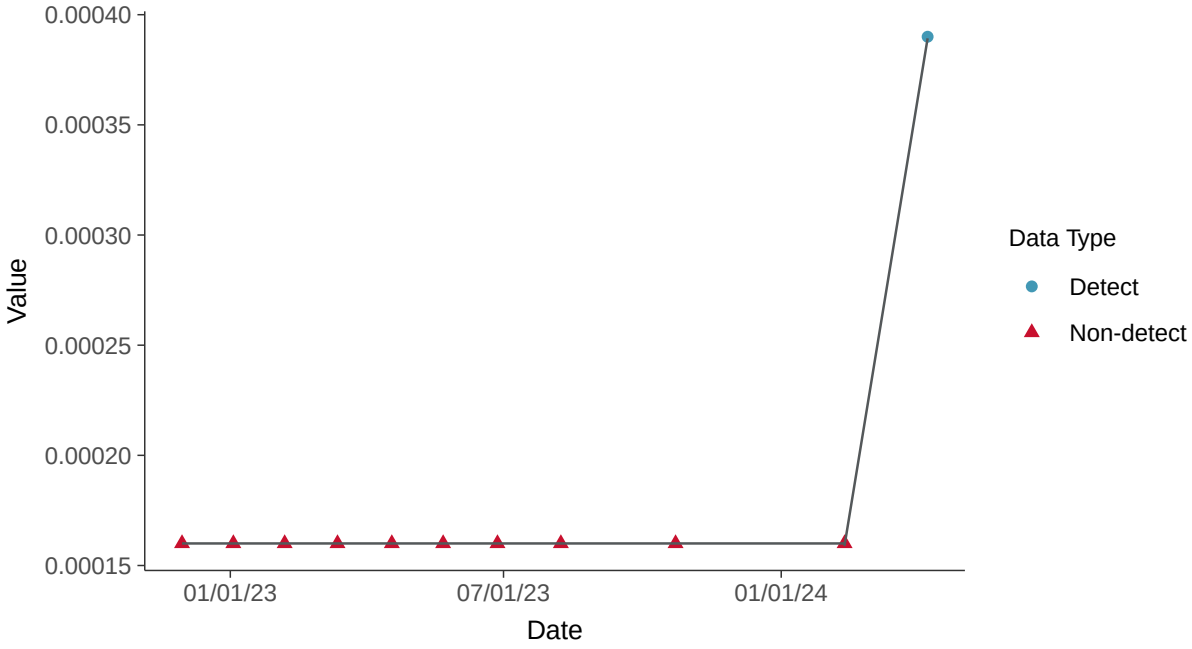



Boxplot
Mercury, MW-30 (mg/L)
0.00040
0.00035
0.00030
0.00025
0.00020
0.00015
Value
Data Type
Detect
Outlier Type
Major


Boxplot by Season
Mercury, MW-30 (mg/L)
0.00040
0.00035
0.00030
0.00025
0.00020
0.00015
Value
Fall
(n = 2)
Spring
(n = 4)
Summer
(n = 2)
Winter
(n = 3)
Season
Outlier Type
Minor
Data Type
Detect

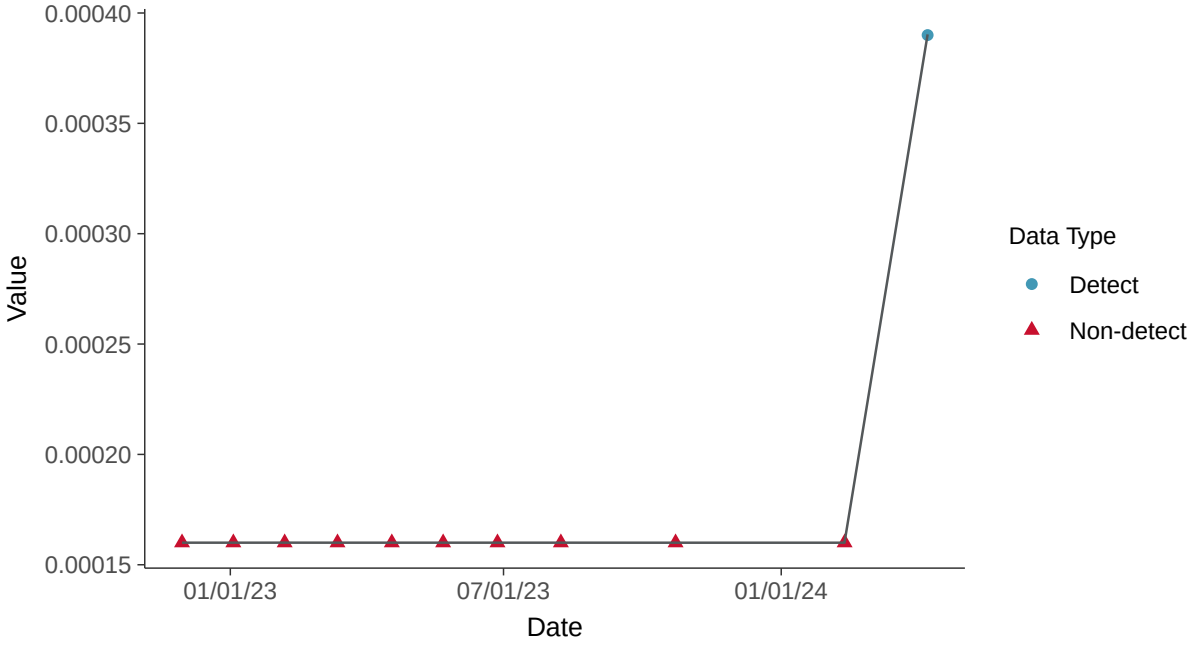
Trend Regression: Piecewise Linear-Linear

Mercury, MW-30 (mg/L)



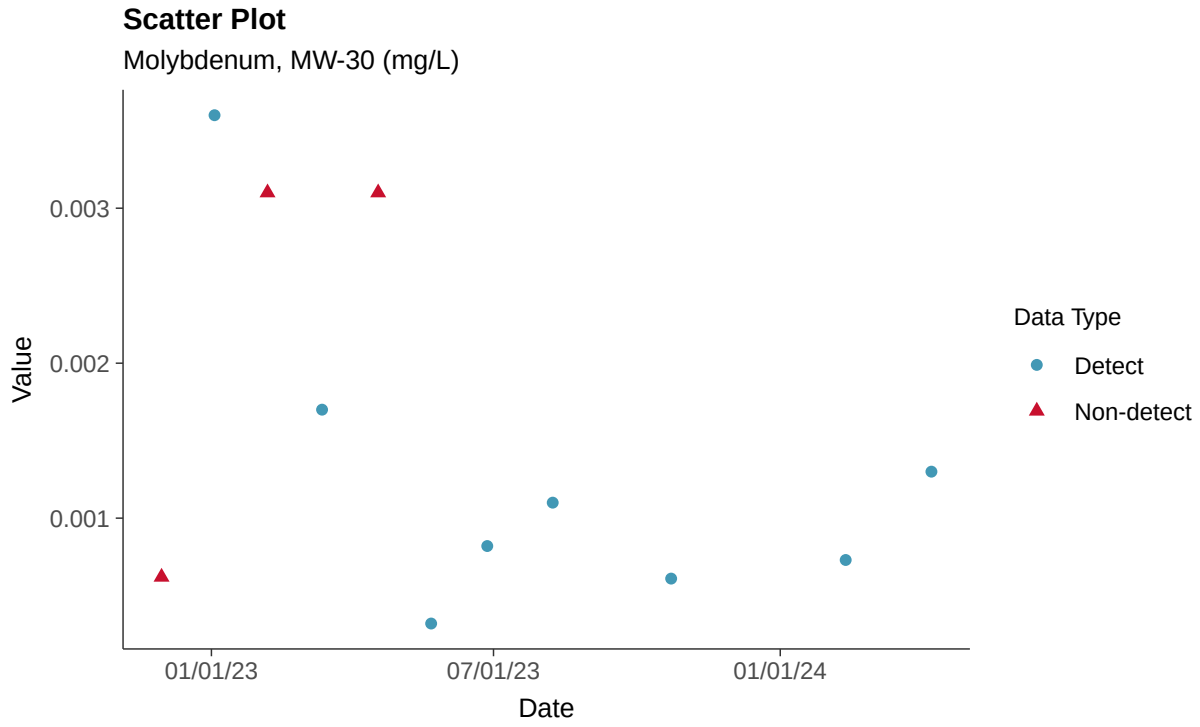
Trend Regression: Piecewise Linear-Linear-Linear

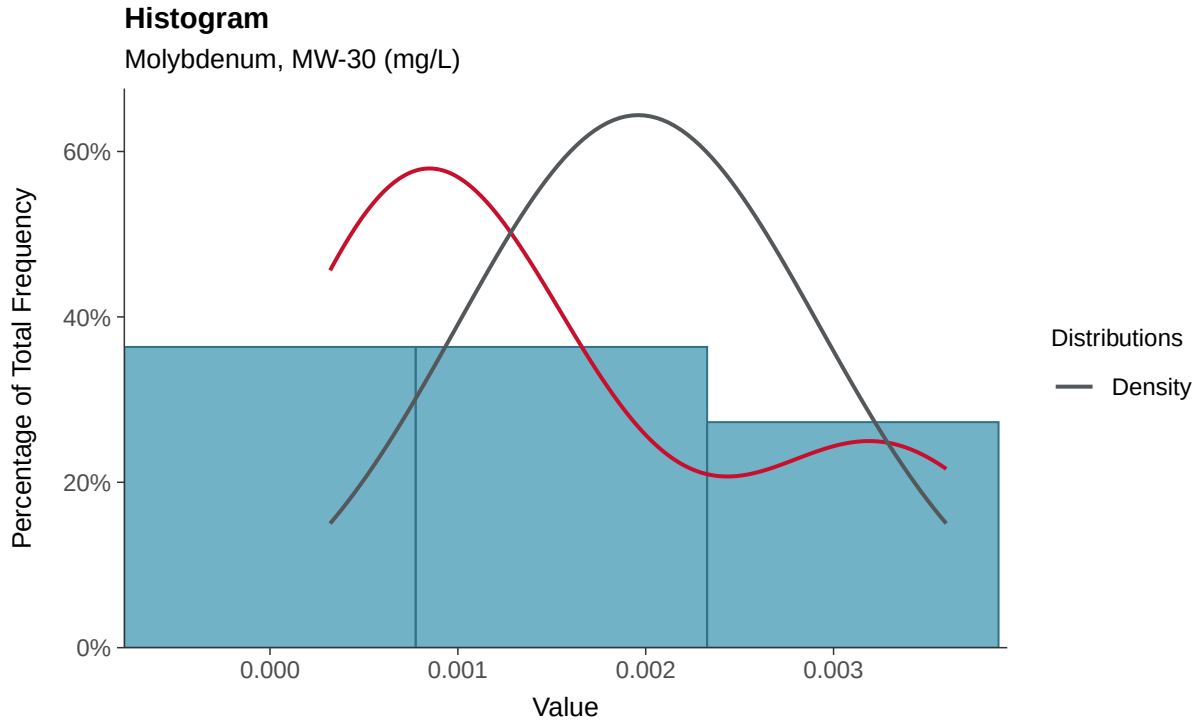
Mercury, MW-30 (mg/L)



Appendix IV: Molybdenum, MW-30

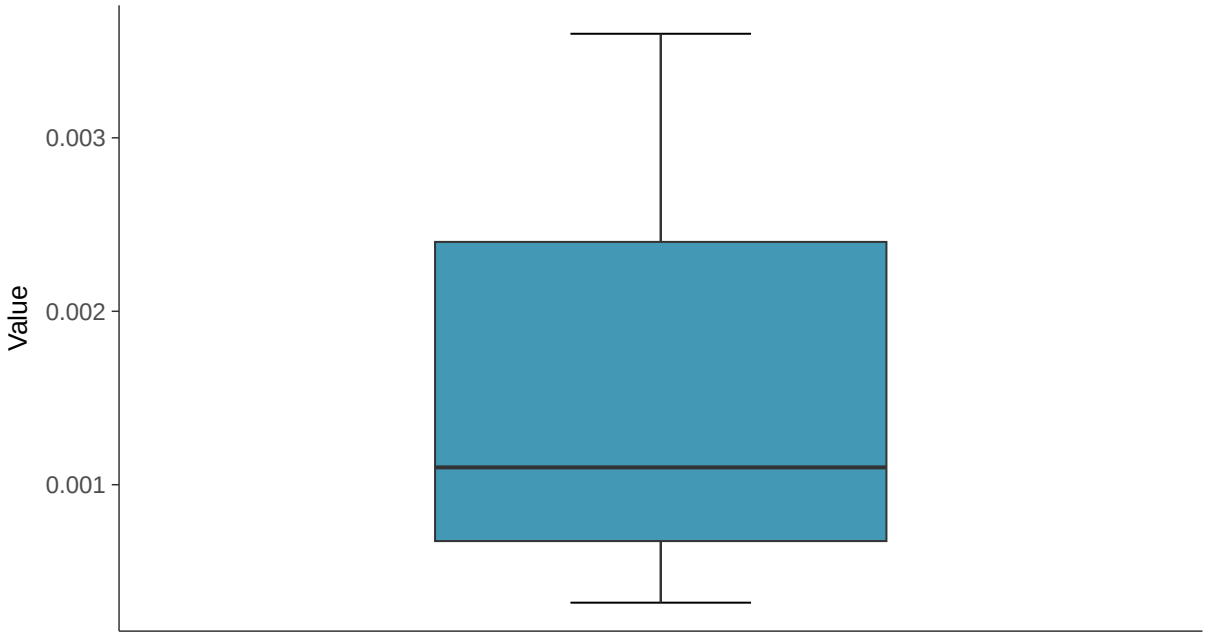
ID: 1_40_5_118





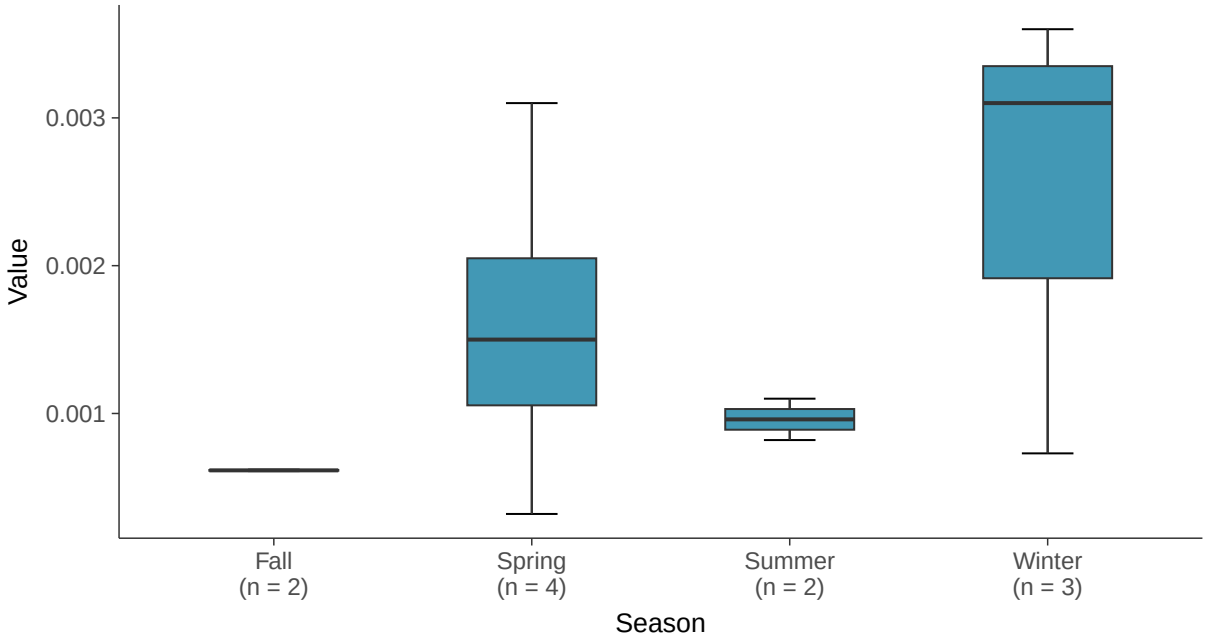
Boxplot

Molybdenum, MW-30 (mg/L)



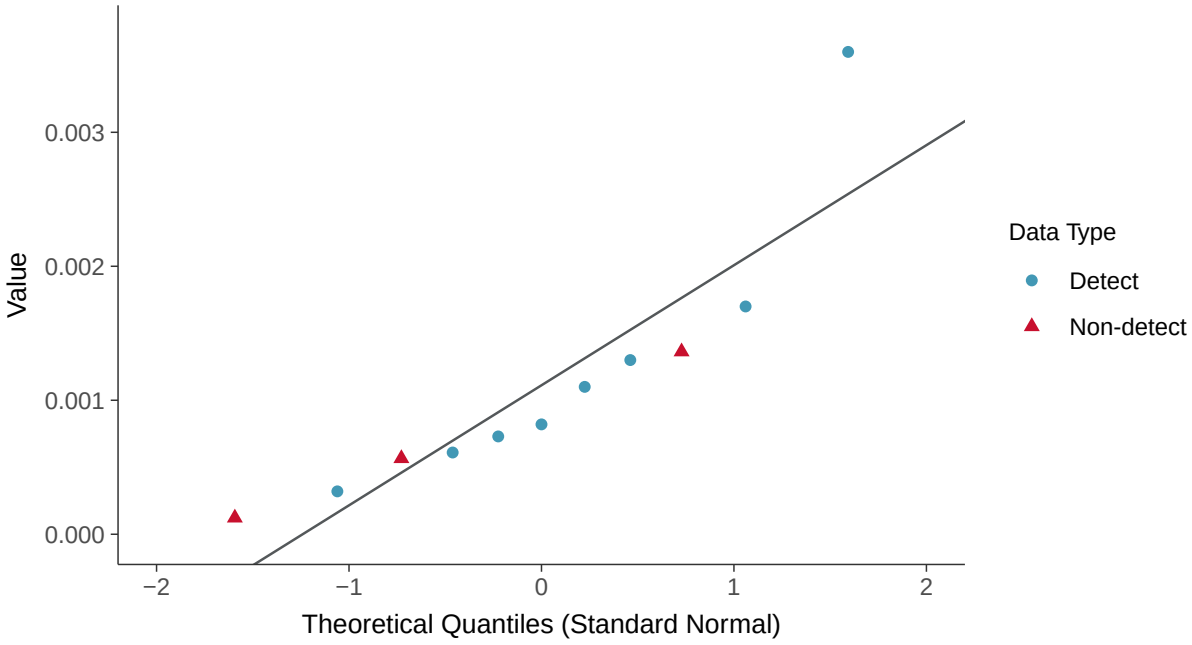
Boxplot by Season

Molybdenum, MW-30 (mg/L)



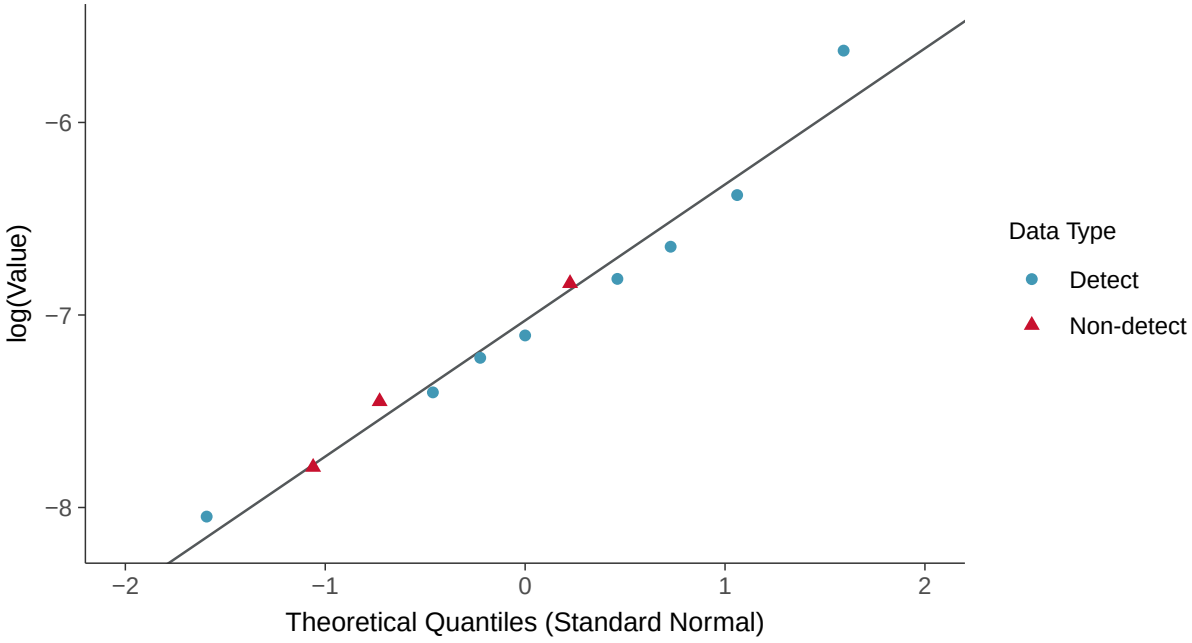
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-30 (mg/L)



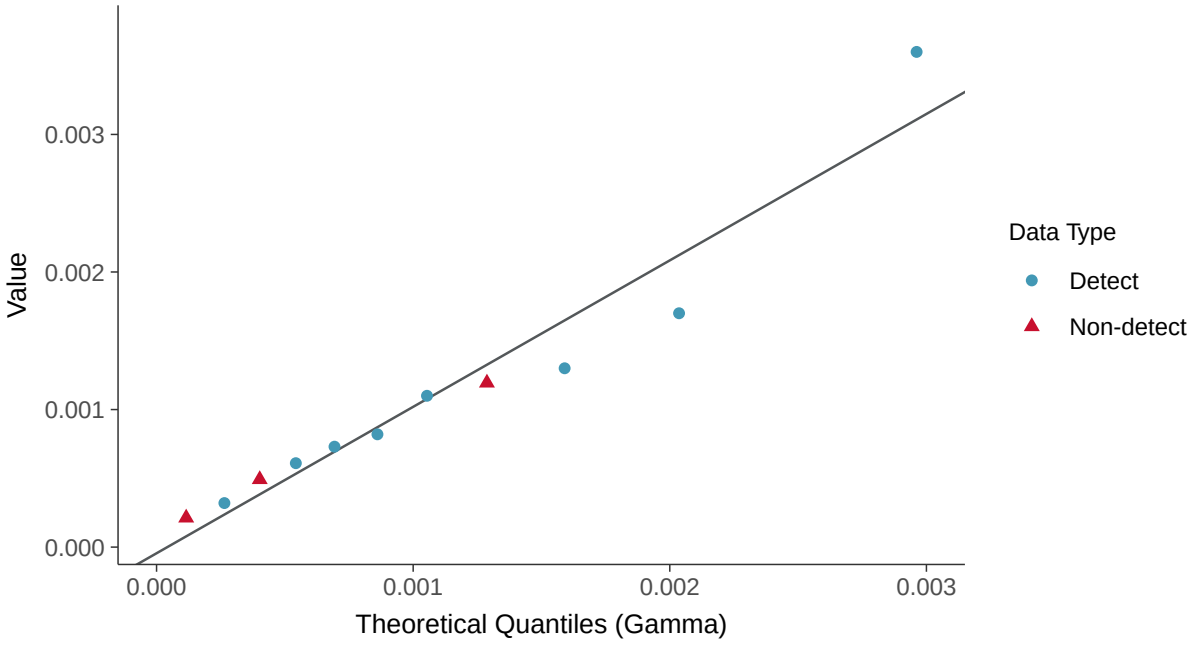
Lognormal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-30 (mg/L)



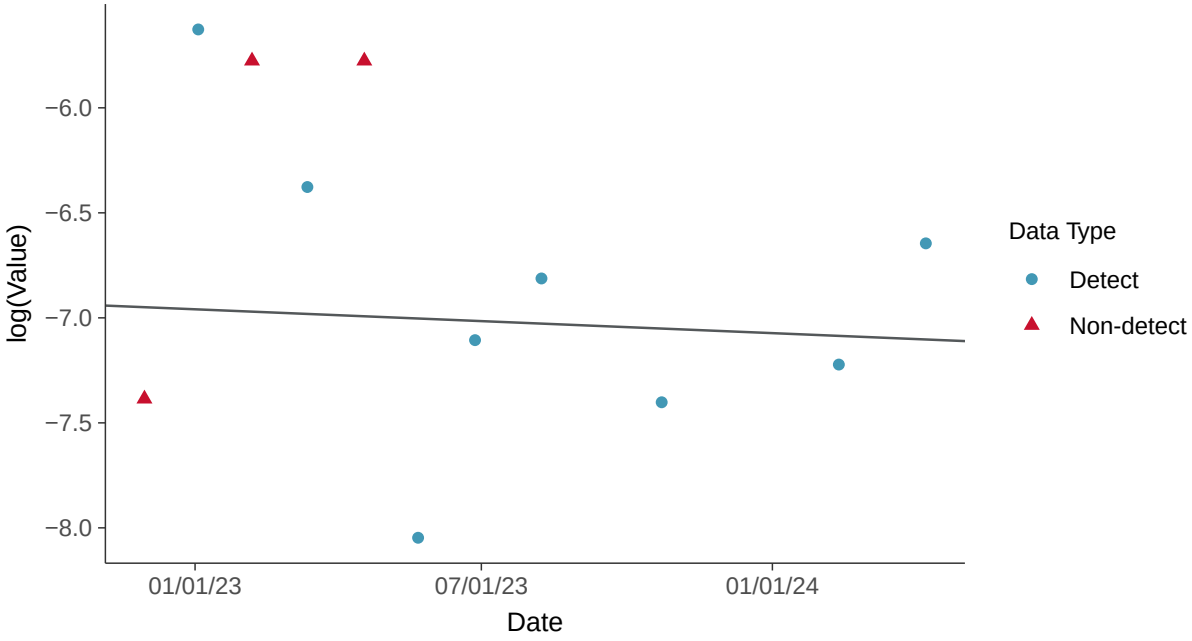
Gamma Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-30 (mg/L)



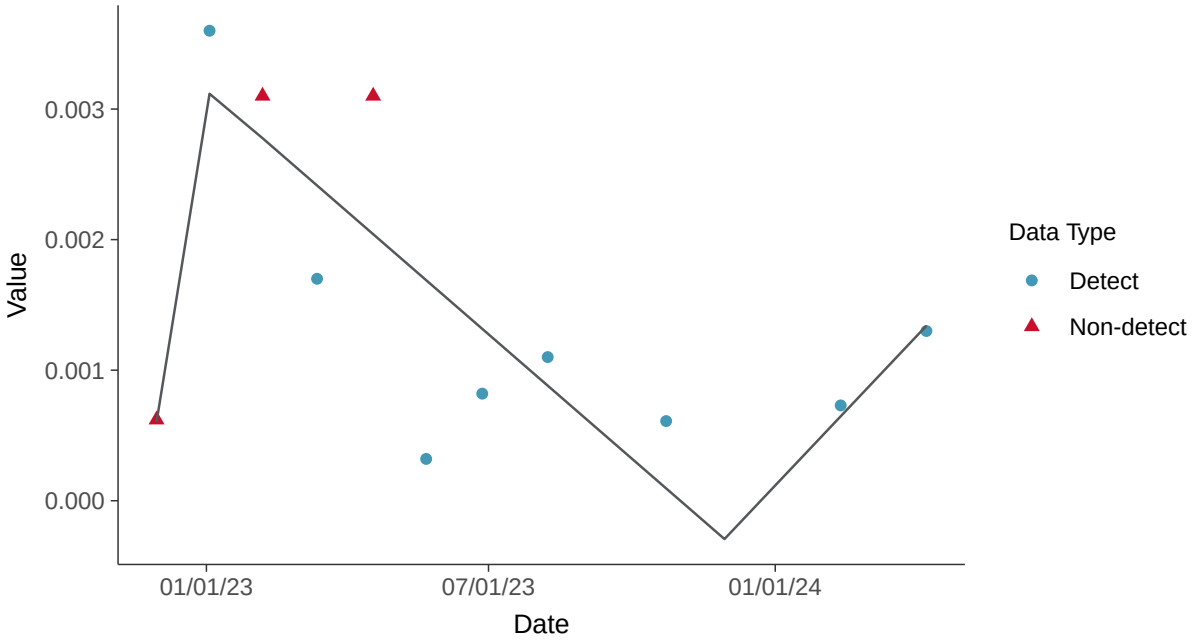
Trend Regression: Lognormal MLE

Molybdenum, MW-30 (mg/L)



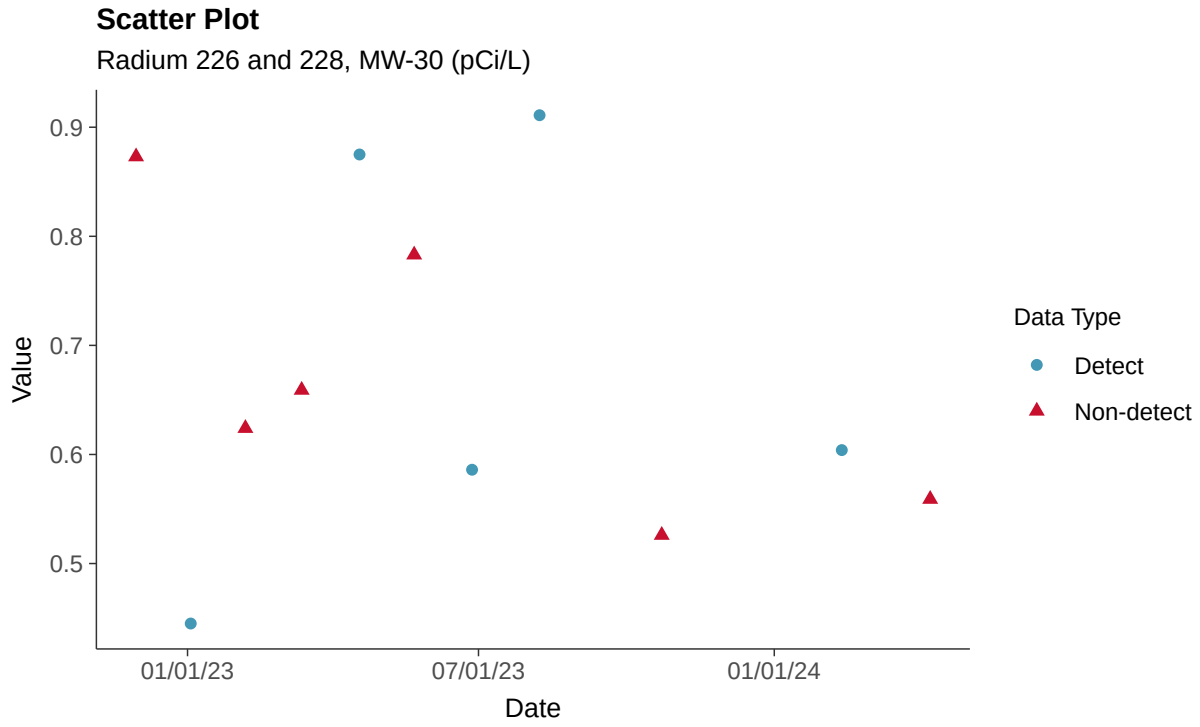
Trend Regression: Piecewise Linear-Linear-Linear

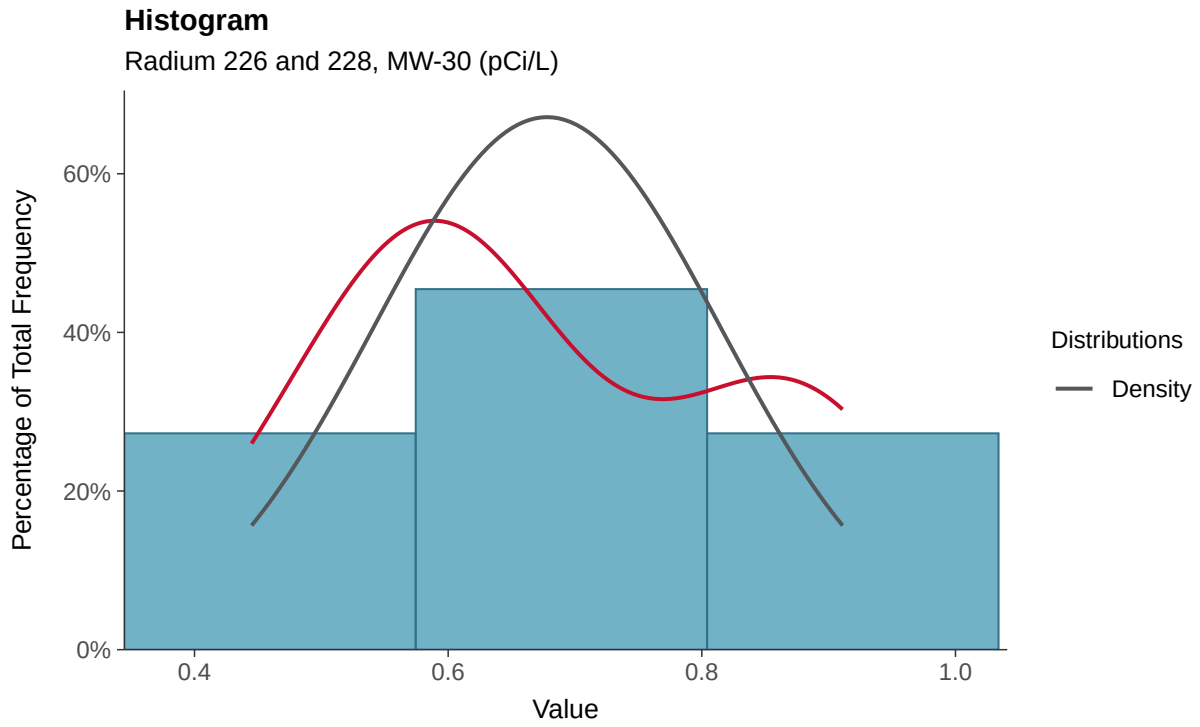
Molybdenum, MW-30 (mg/L)



Appendix IV: Radium 226 and 228, MW-30

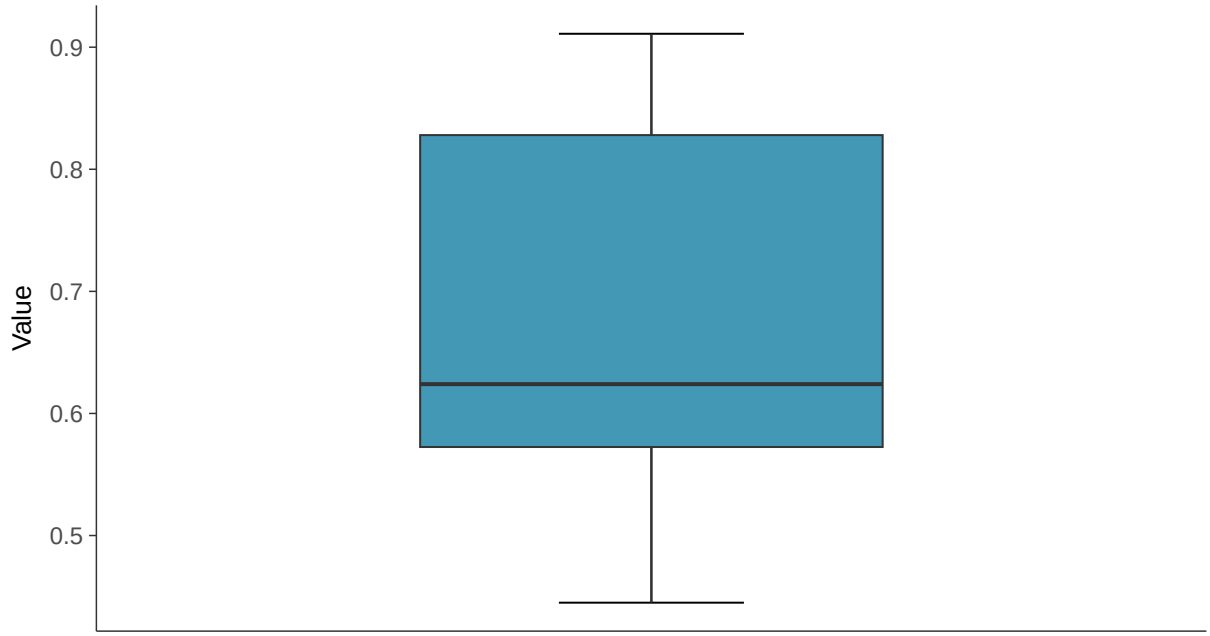
ID: 1_40_5_121





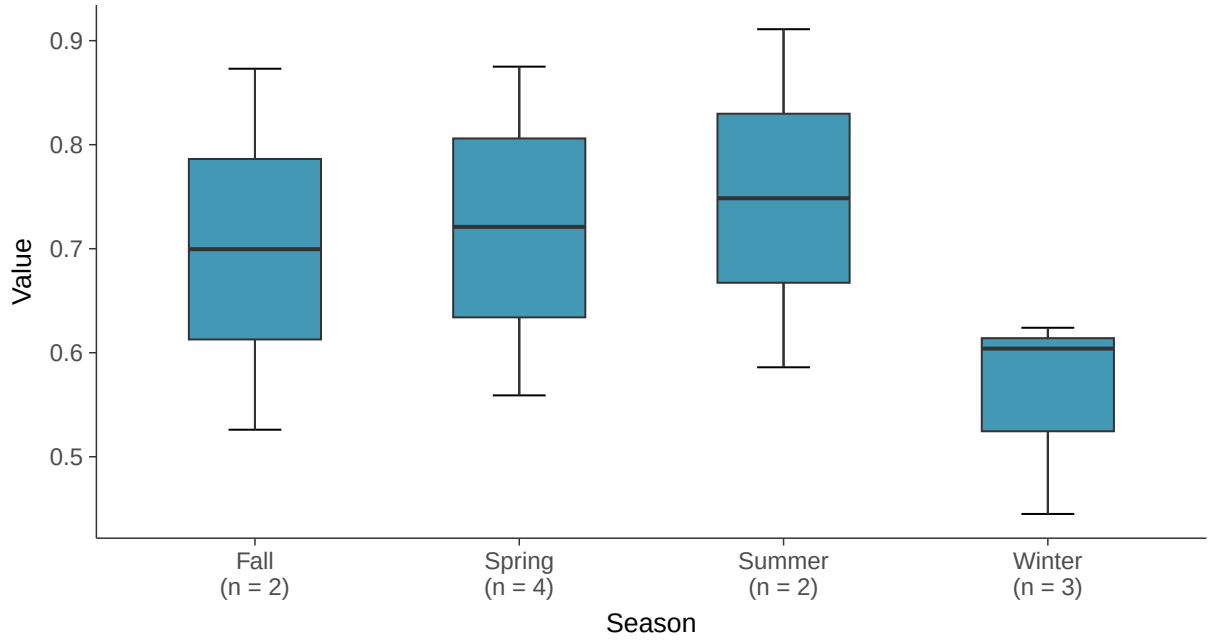
Boxplot

Radium 226 and 228, MW-30 (pCi/L)



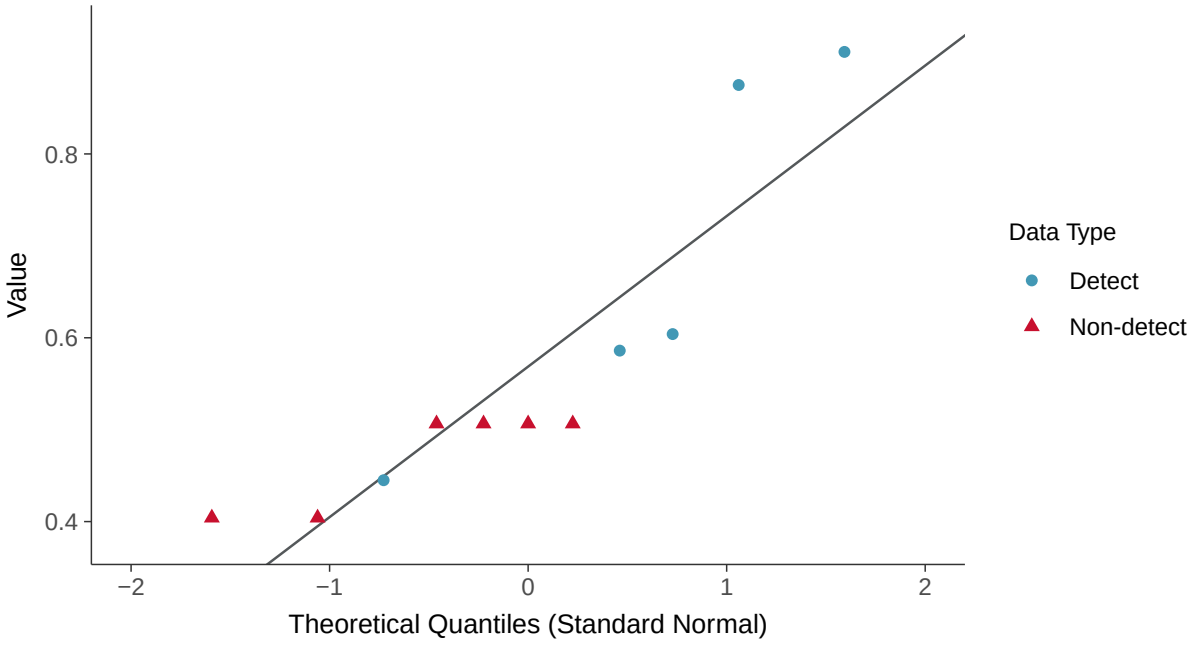
Boxplot by Season

Radium 226 and 228, MW-30 (pCi/L)



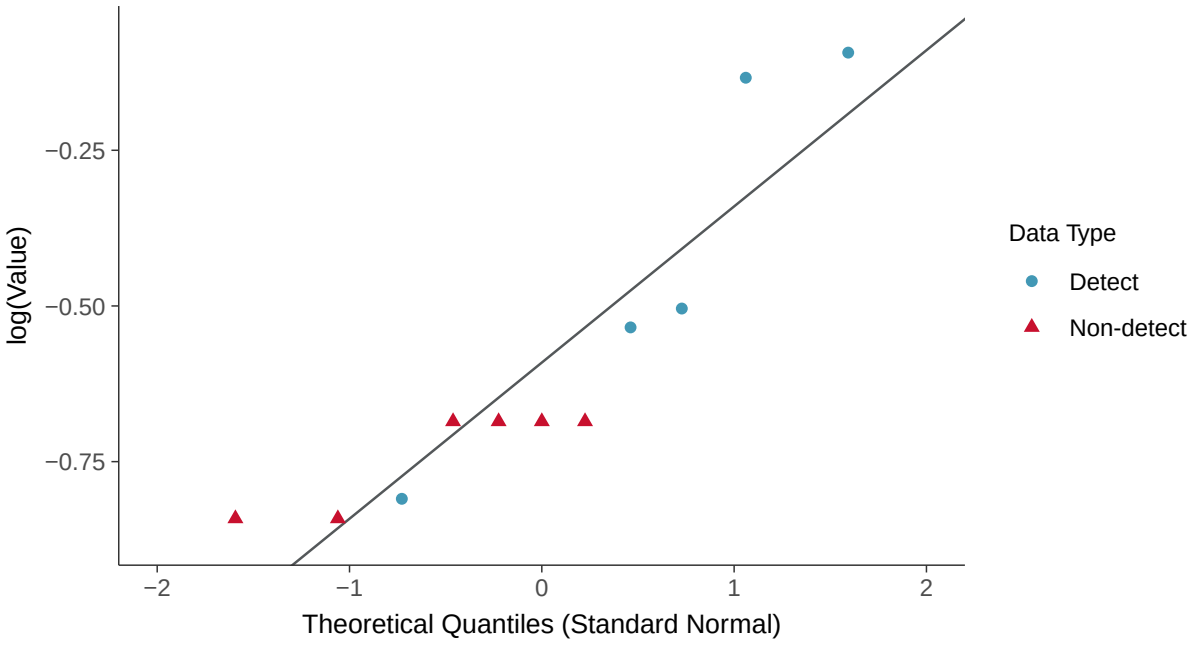
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-30 (pCi/L)



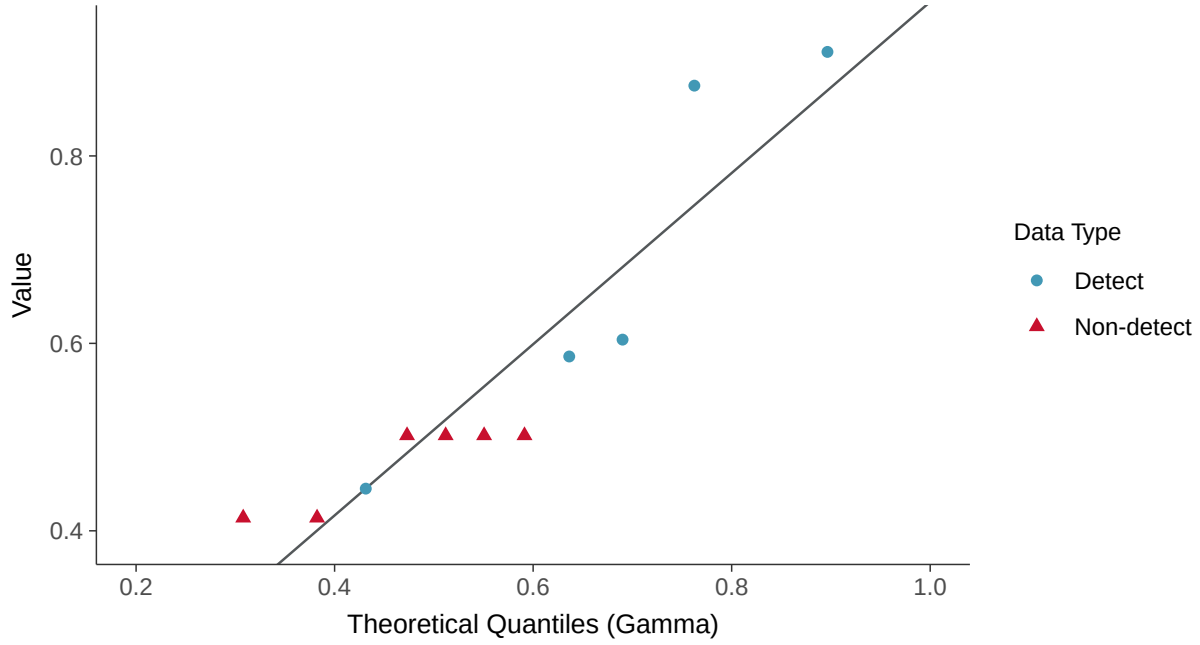
Lognormal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-30 (pCi/L)



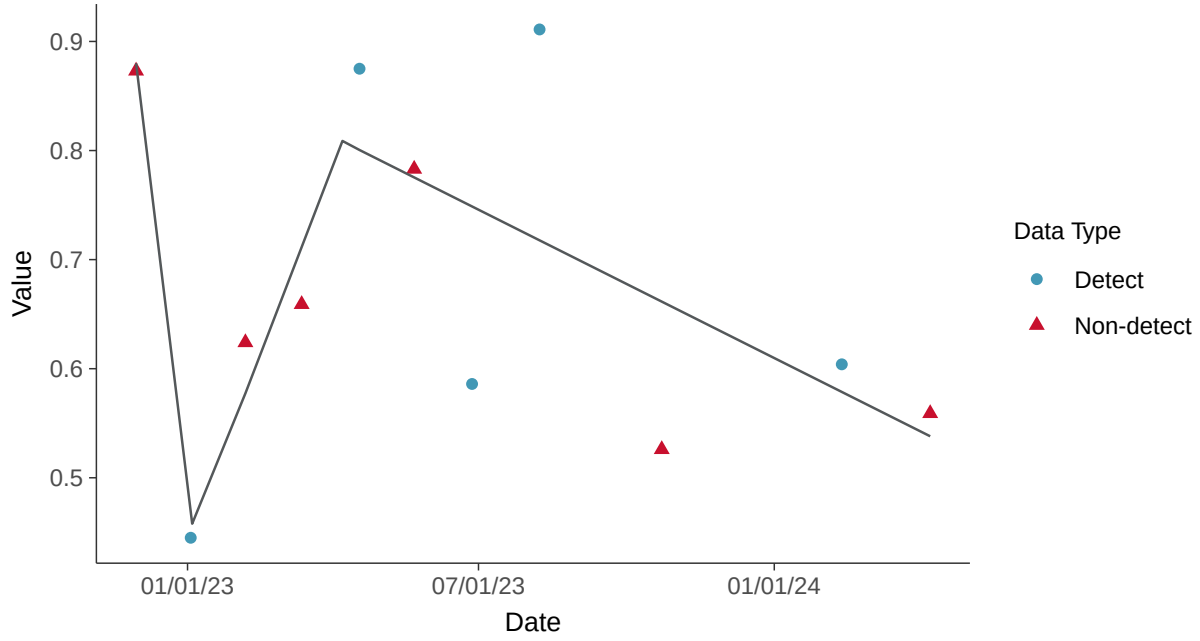
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-30 (pCi/L)



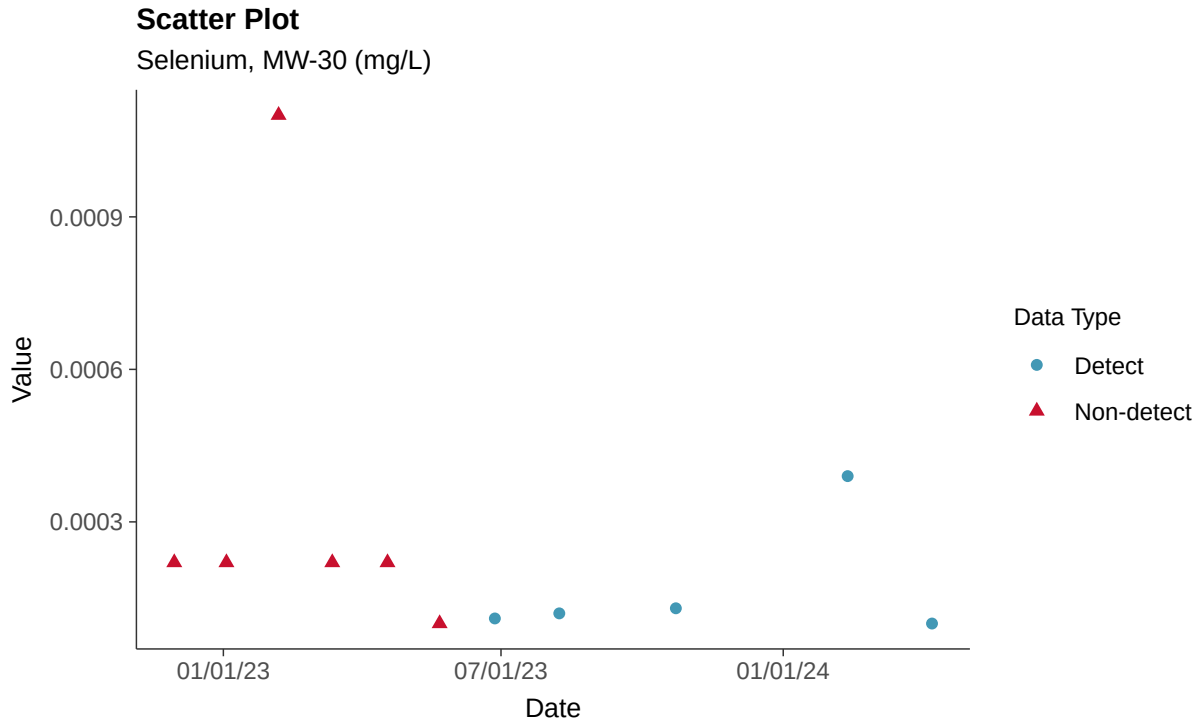
Trend Regression: Piecewise Linear-Linear-Linear

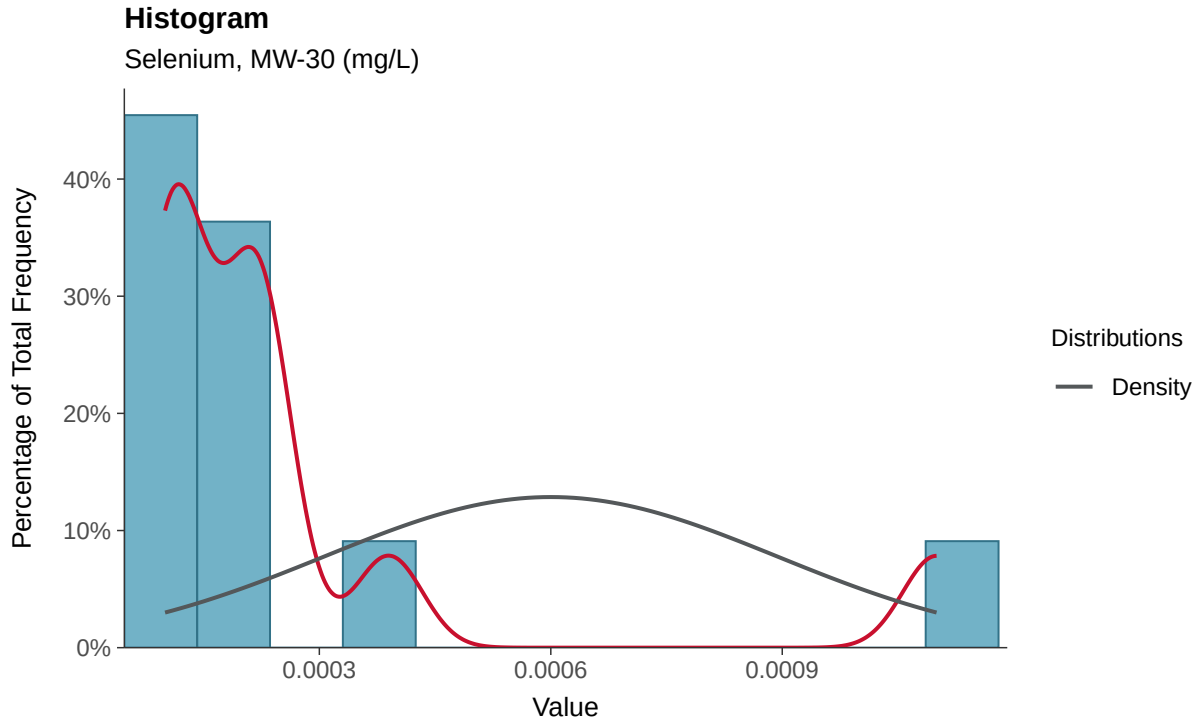
Radium 226 and 228, MW-30 (pCi/L)



Appendix IV: Selenium, MW-30

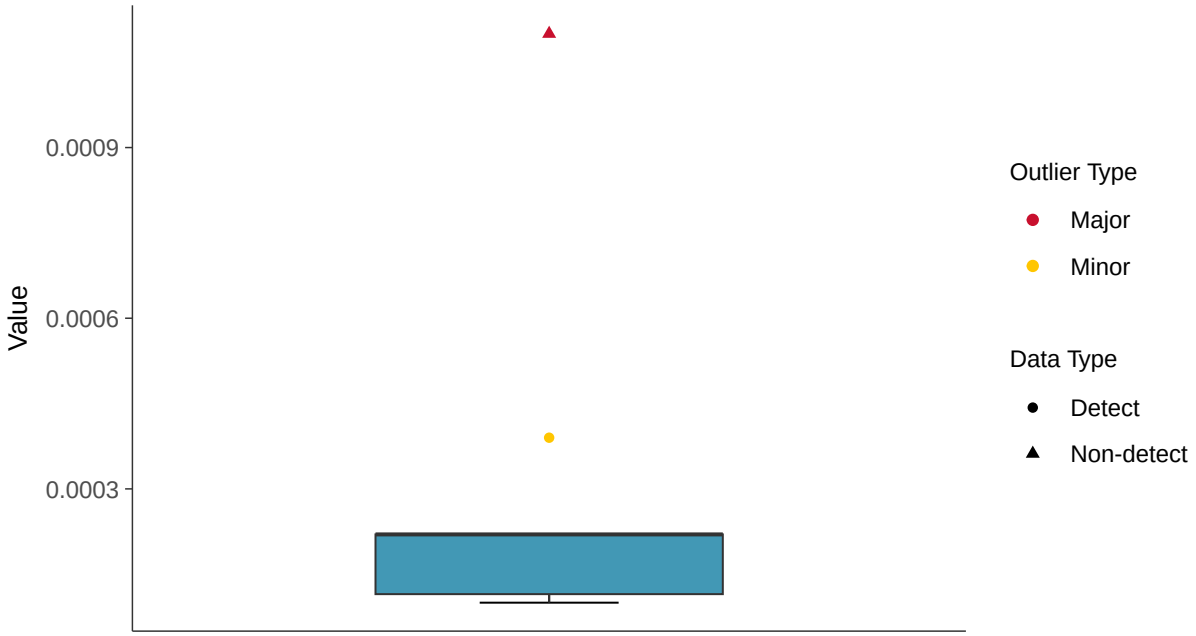
ID: 1_40_5_122





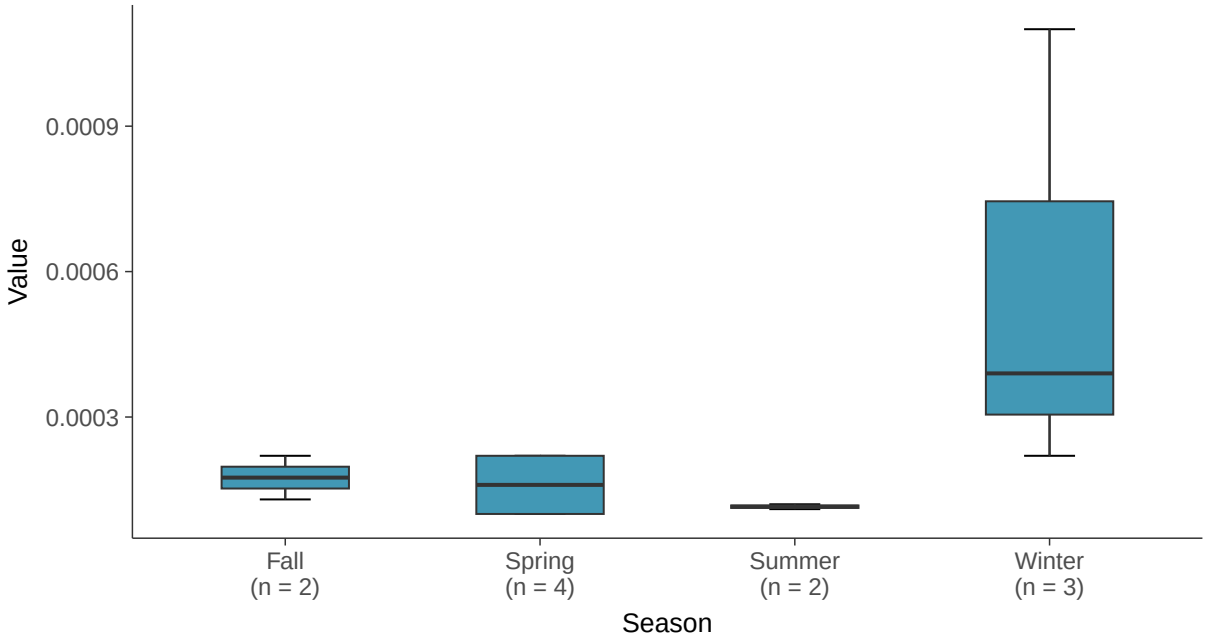
Boxplot

Selenium, MW-30 (mg/L)



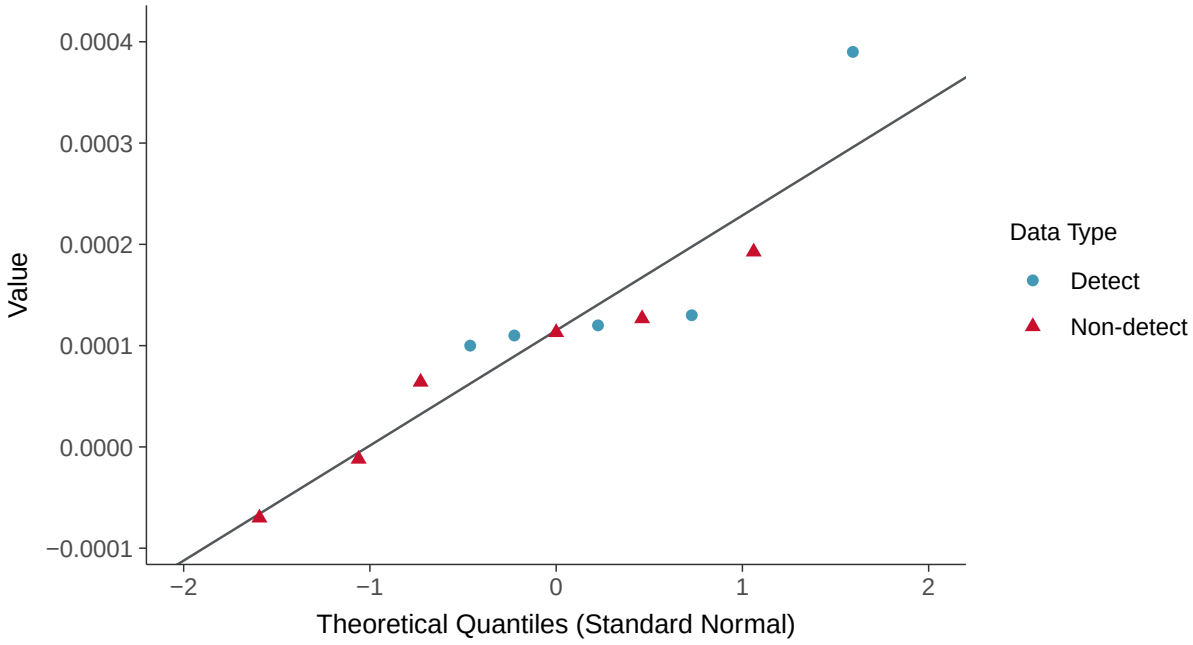
Boxplot by Season

Selenium, MW-30 (mg/L)



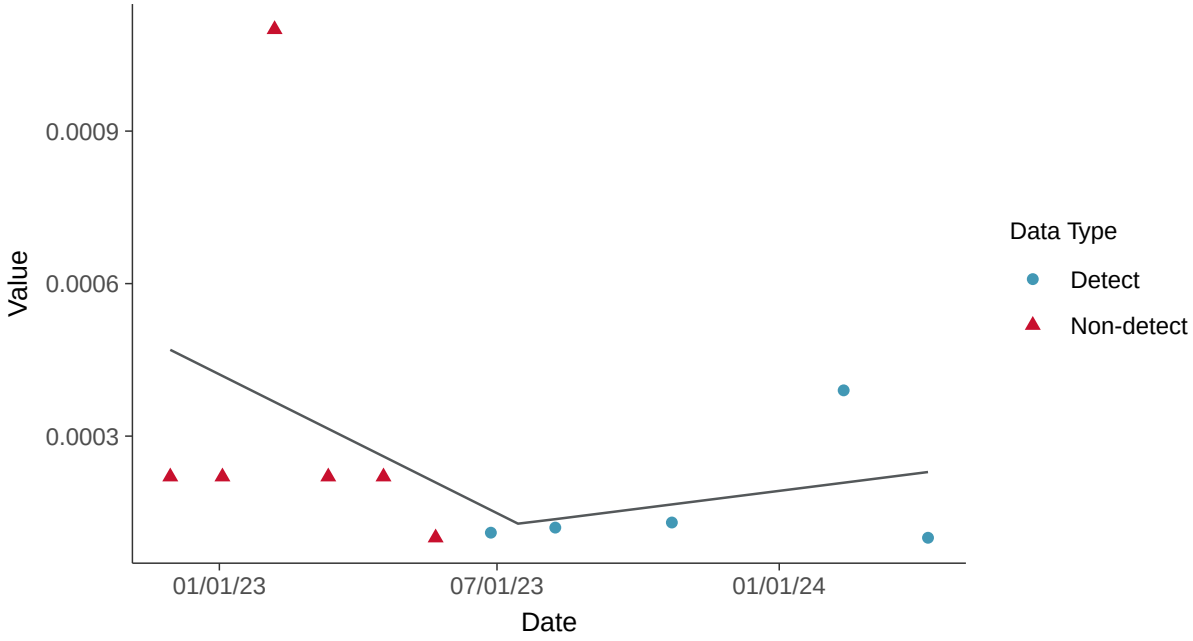
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-30 (mg/L)



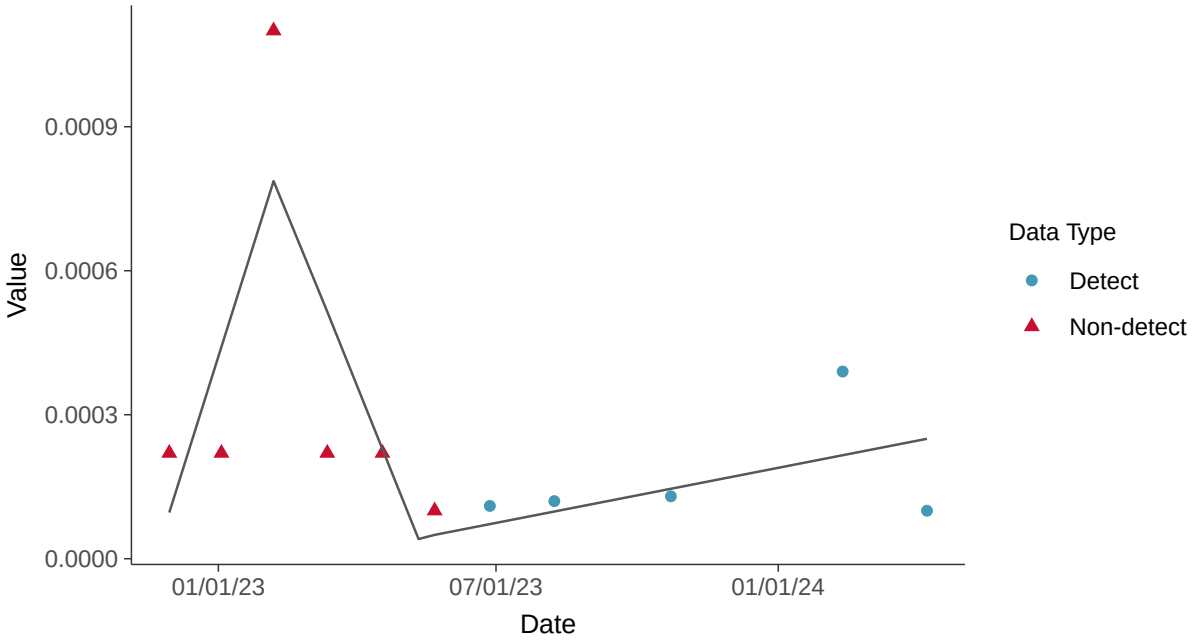
Trend Regression: Piecewise Linear-Linear

Selenium, MW-30 (mg/L)



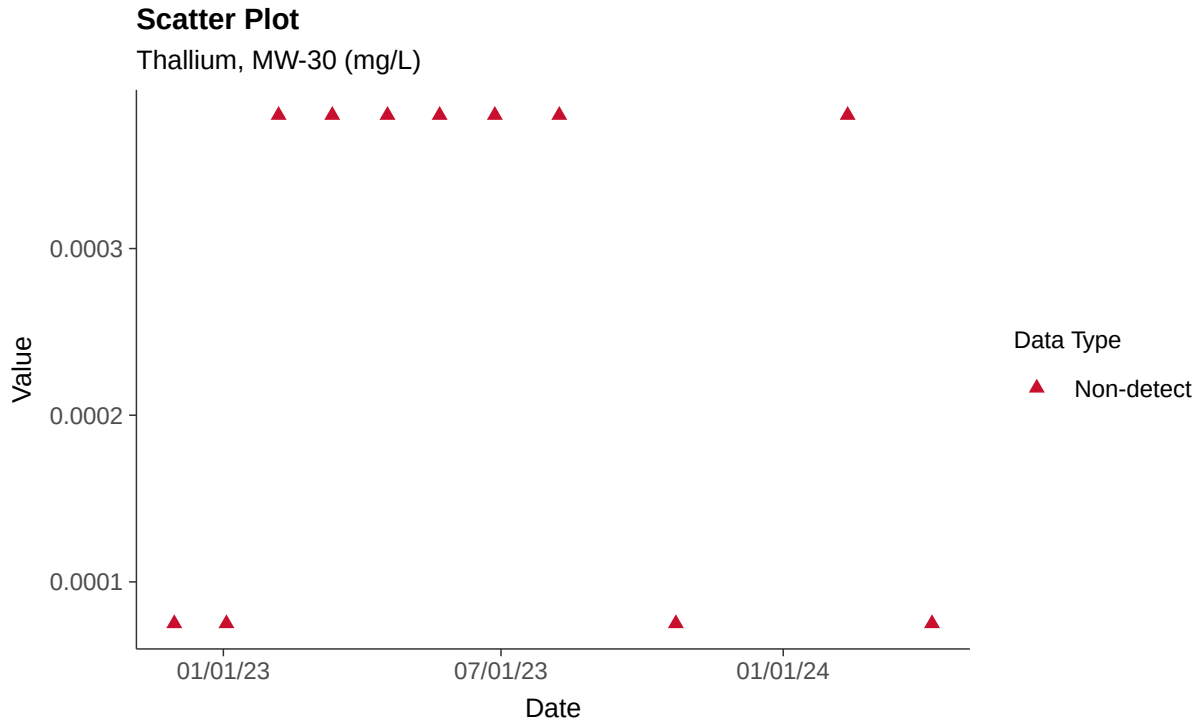
Trend Regression: Piecewise Linear-Linear-Linear

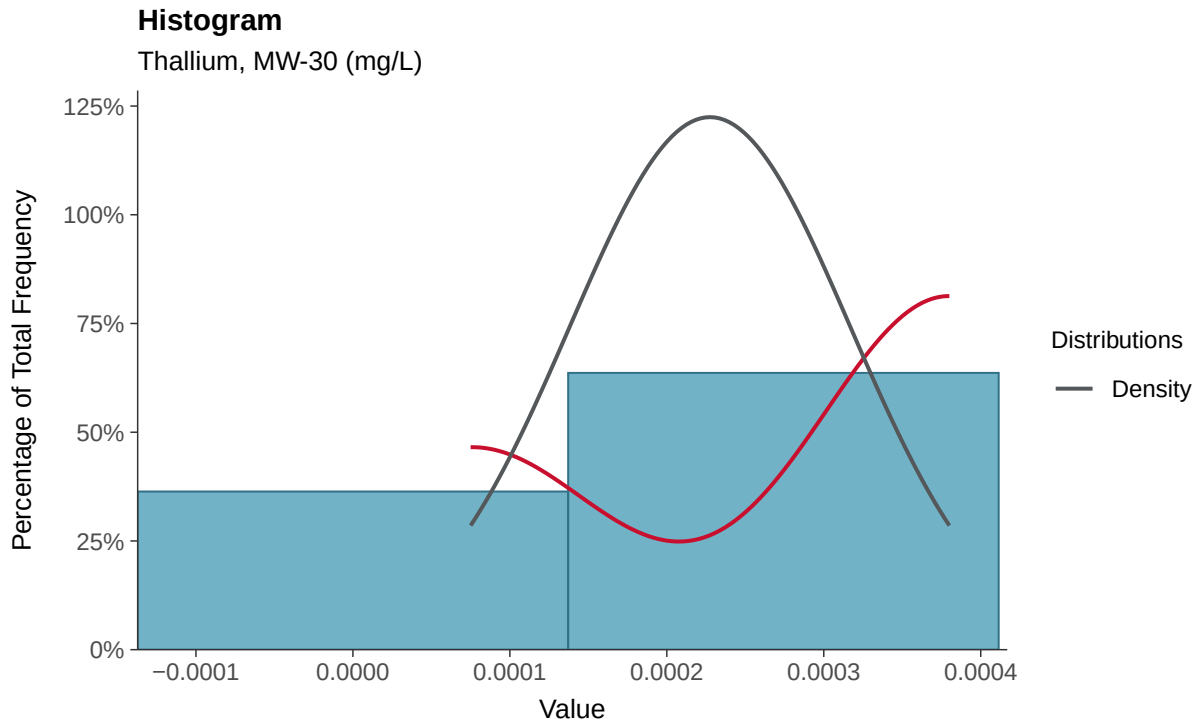
Selenium, MW-30 (mg/L)



Appendix IV: Thallium, MW-30

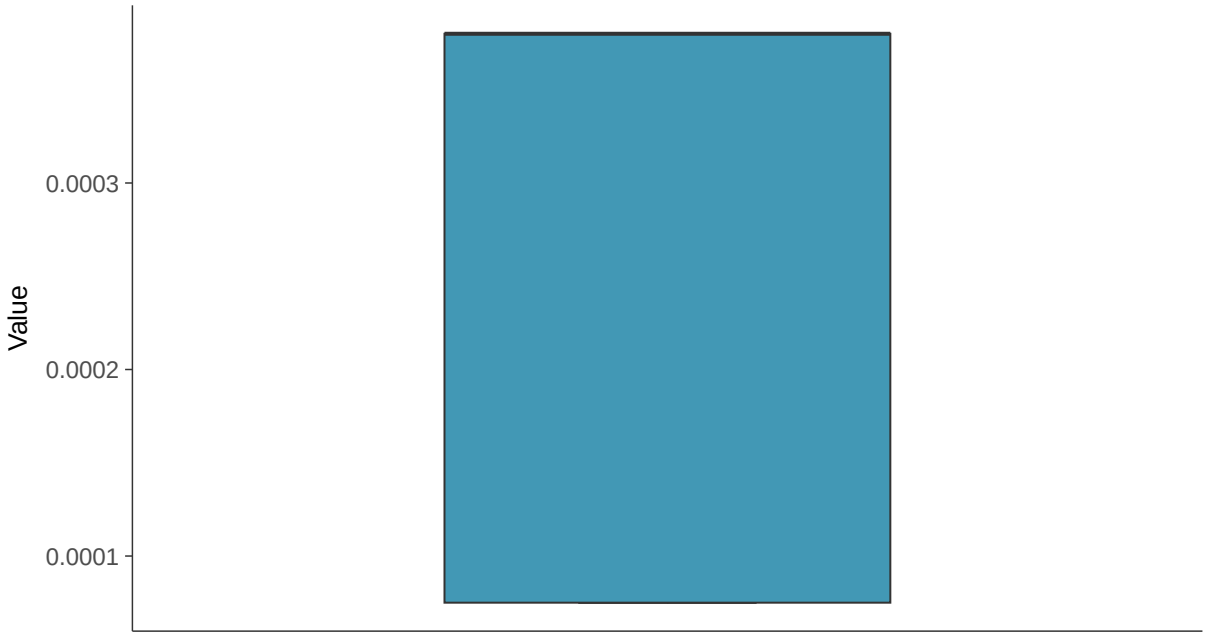
ID: 1_40_5_125





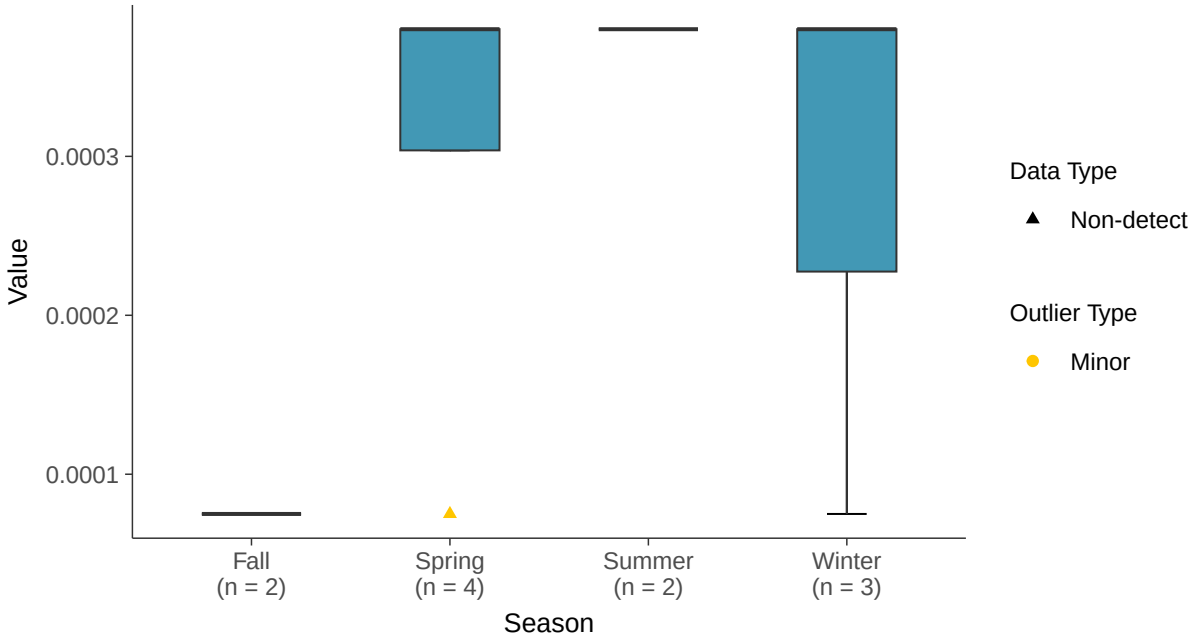
Boxplot

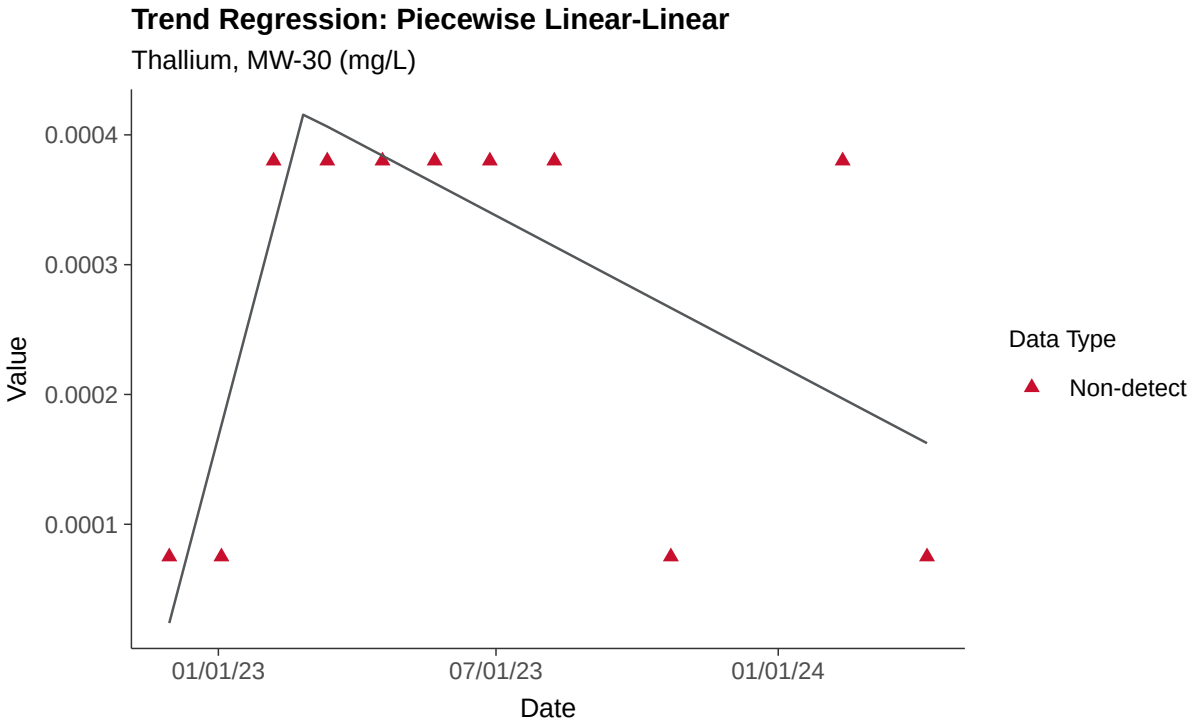
Thallium, MW-30 (mg/L)



Boxplot by Season

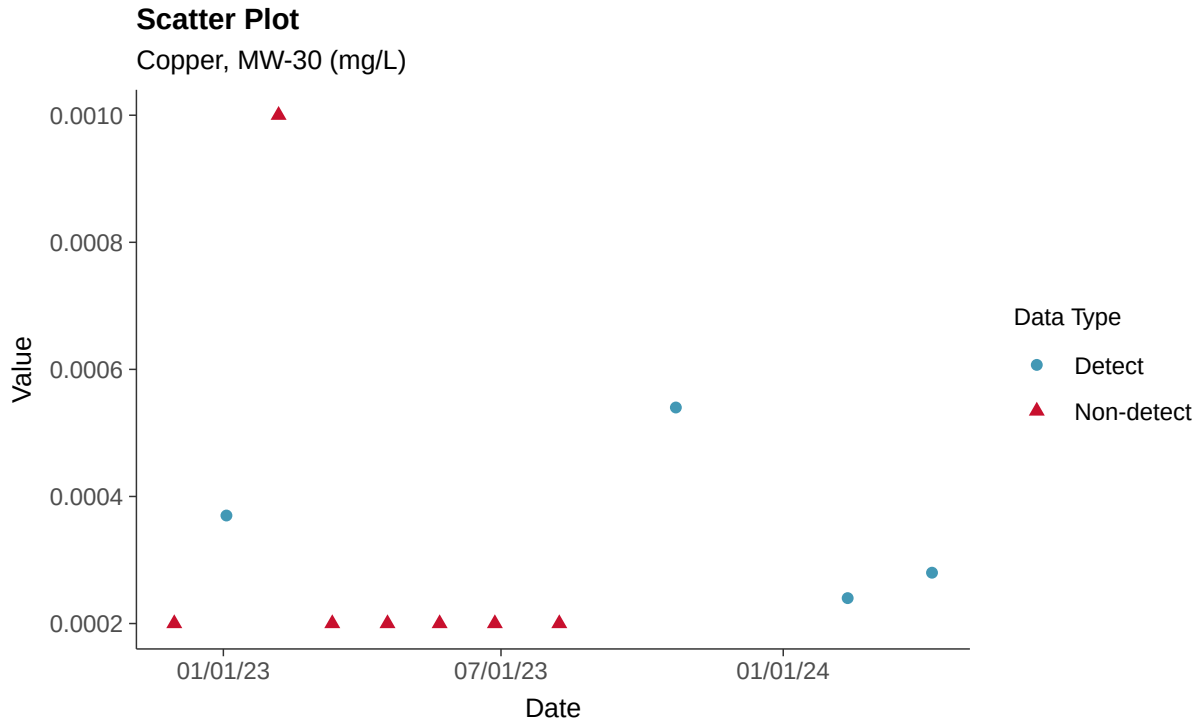
Thallium, MW-30 (mg/L)

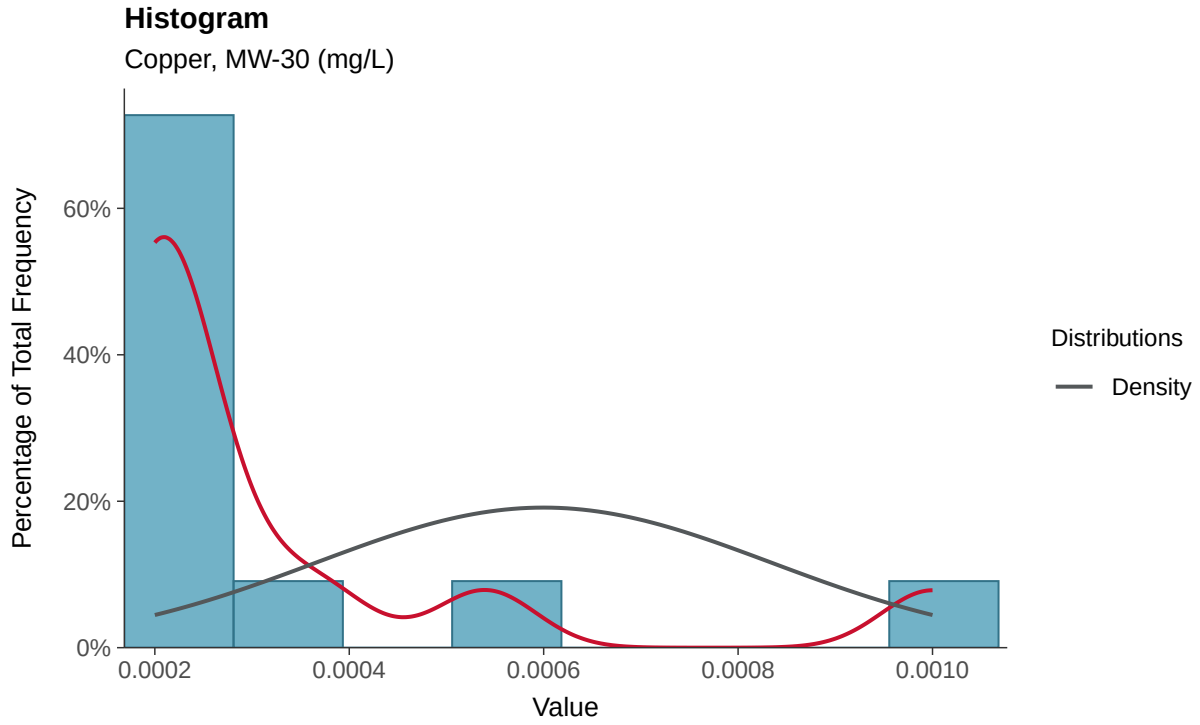



Trend Regression: Piecewise Linear-Linear
Thallium, MW-30 (mg/L)
0.0004
0.0003
0.0002
0.0001
Value
01/01/23
07/01/23
01/01/24
Date
Data Type
Non-detect

Part 115: Copper, MW-30

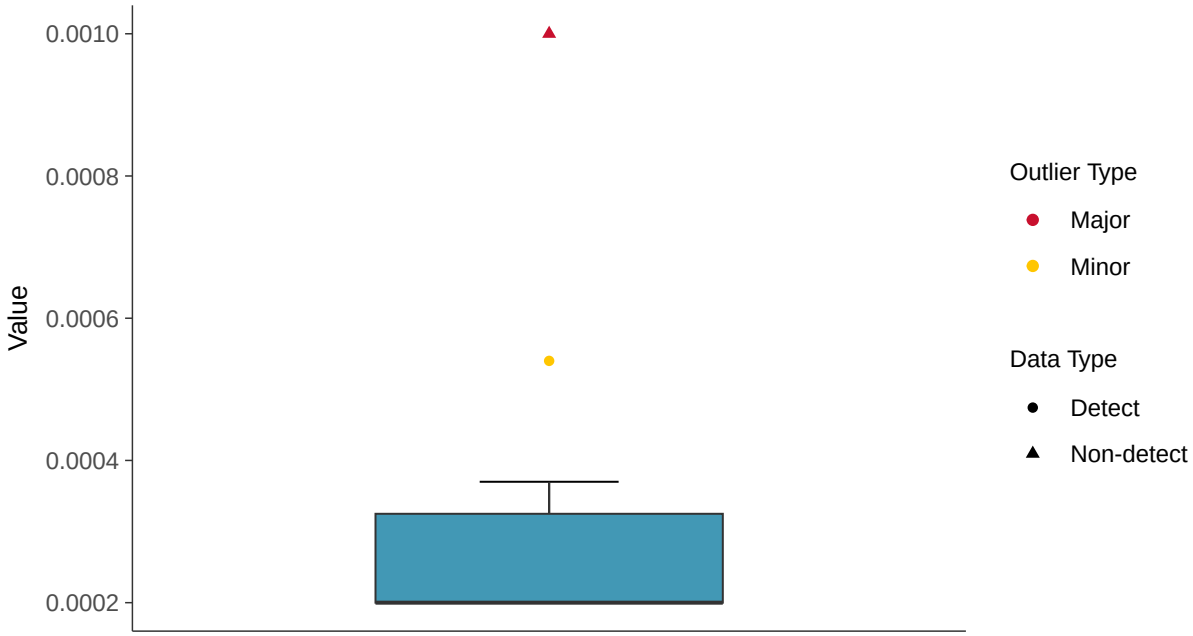
ID: 1_40_6_111





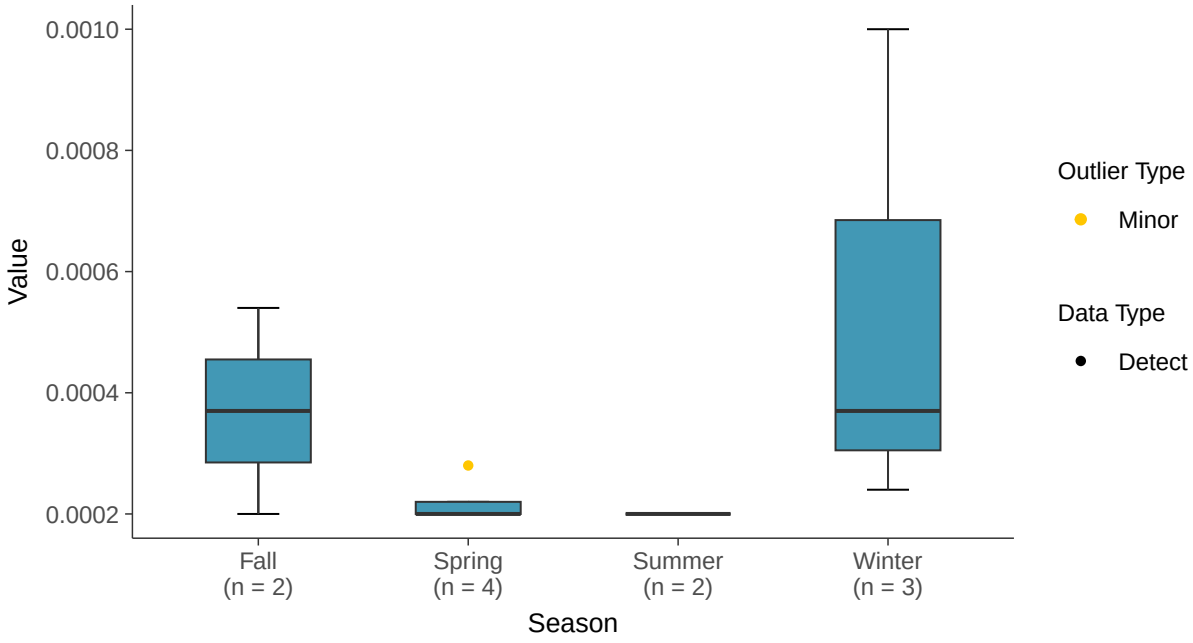
Boxplot

Copper, MW-30 (mg/L)



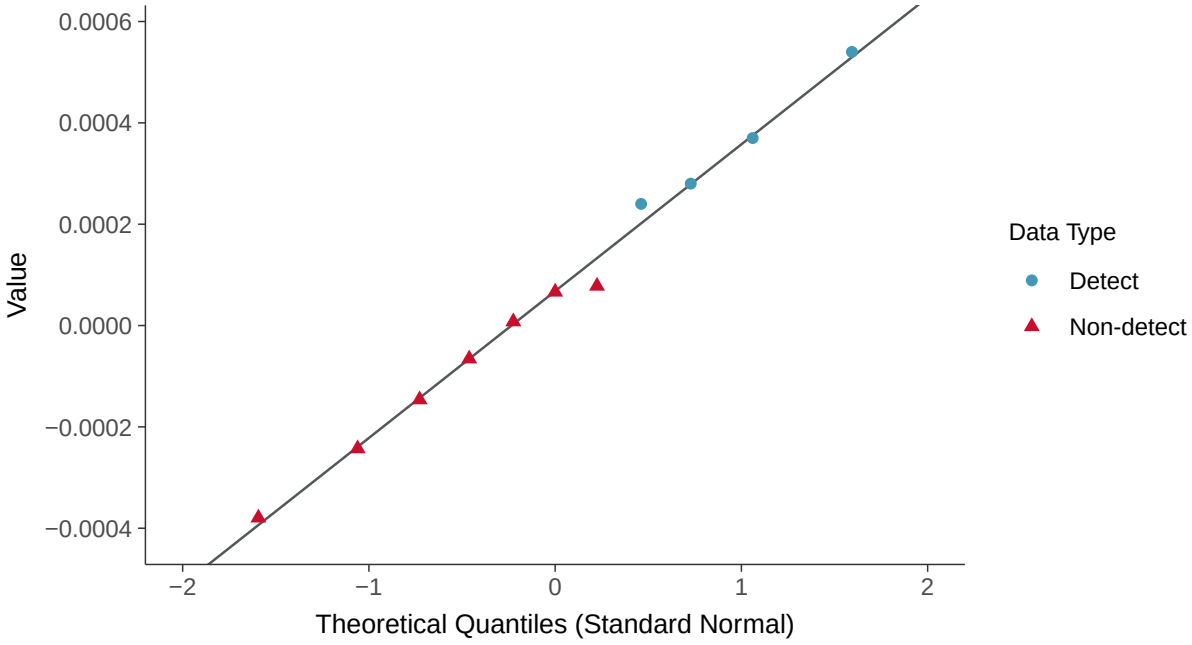
Boxplot by Season

Copper, MW-30 (mg/L)



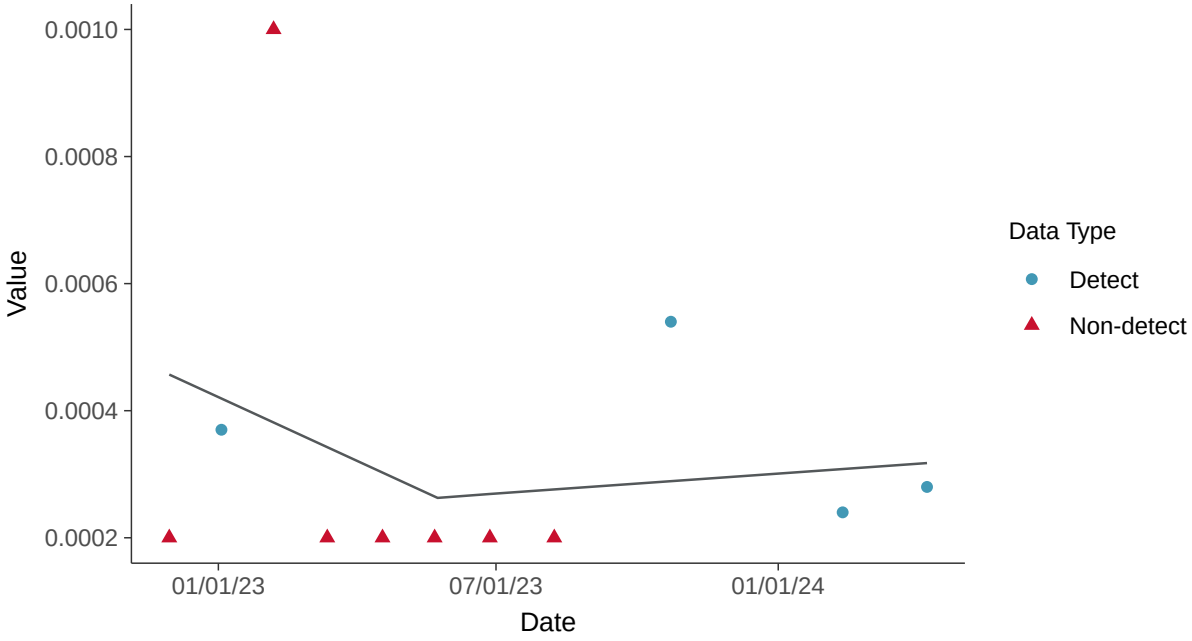
Normal Q-Q plot using ROS Imputed Estimates

Copper, MW-30 (mg/L)



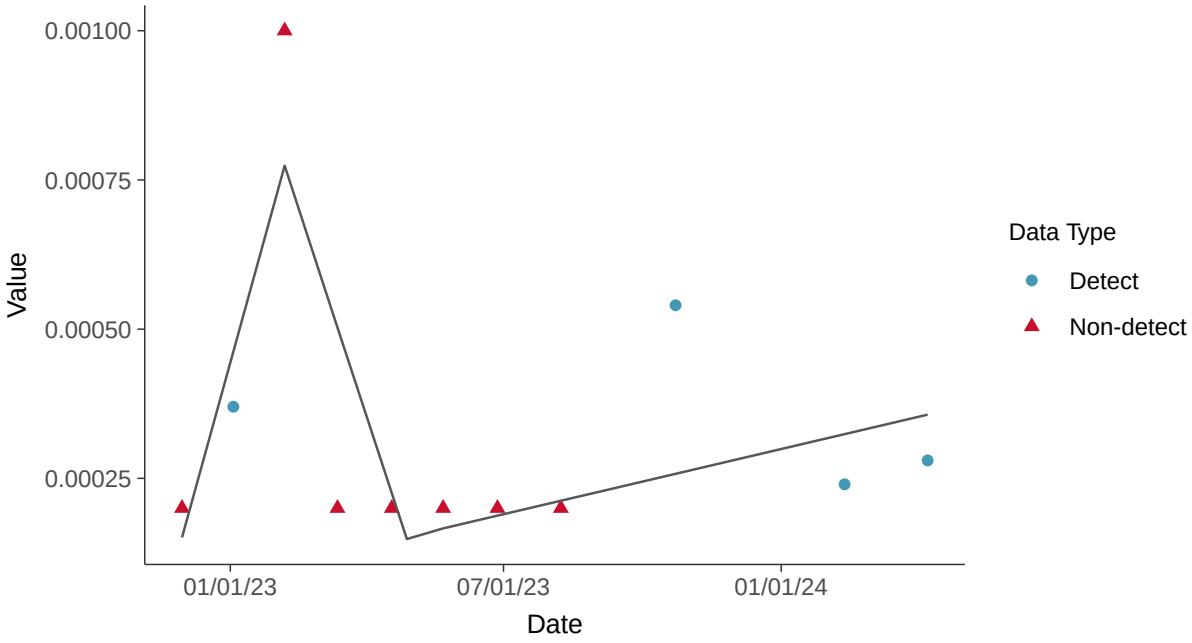
Trend Regression: Piecewise Linear-Linear

Copper, MW-30 (mg/L)



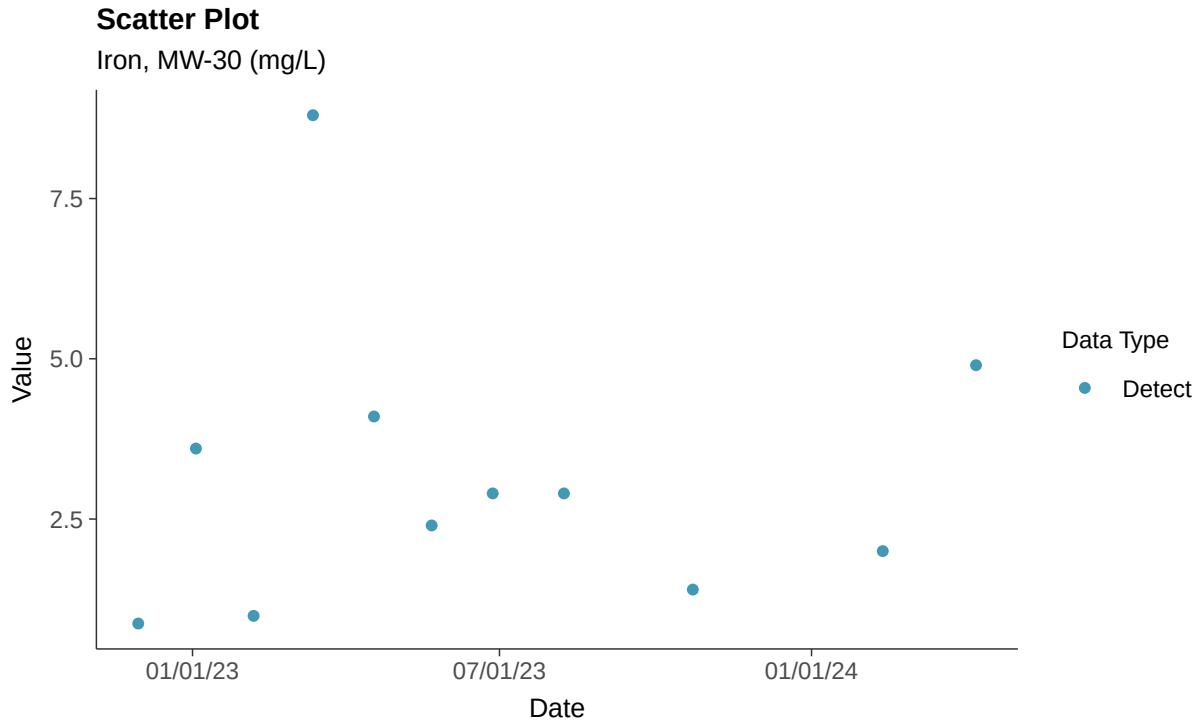
Trend Regression: Piecewise Linear-Linear-Linear

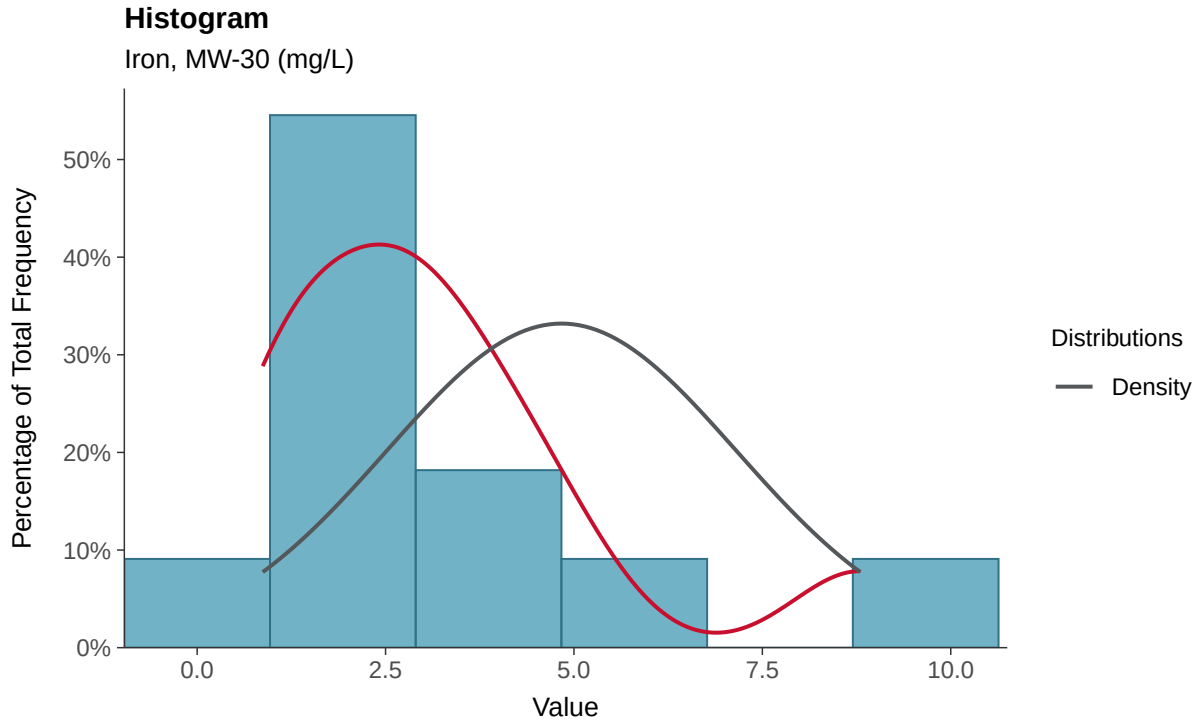
Copper, MW-30 (mg/L)



Part 115: Iron, MW-30

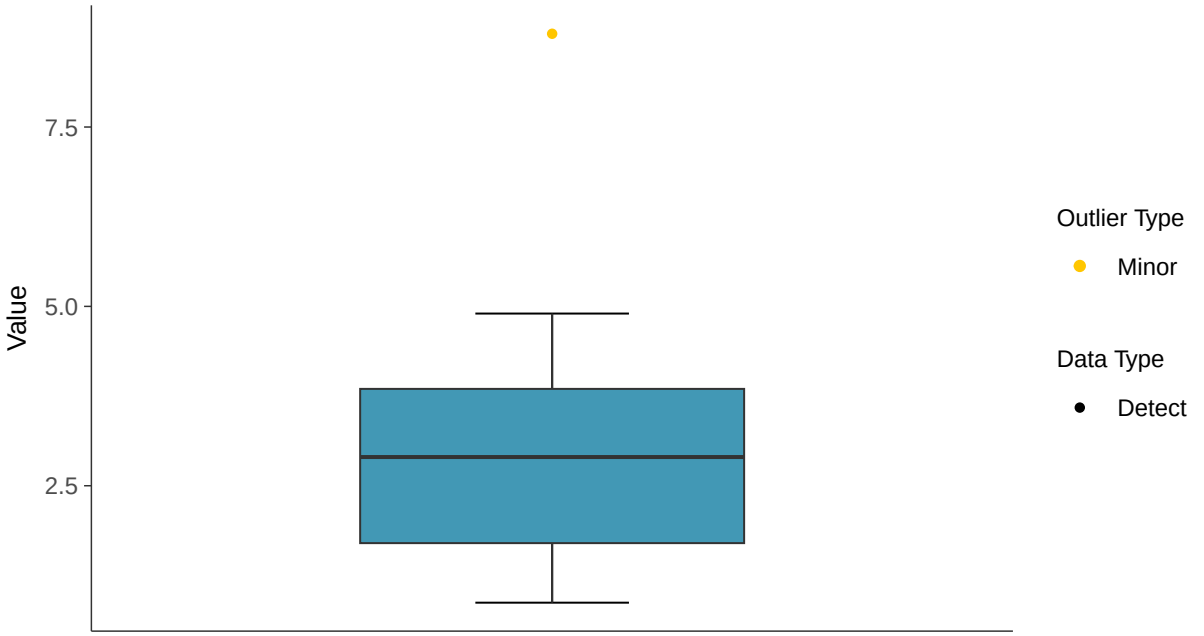
ID: 1_40_6_114





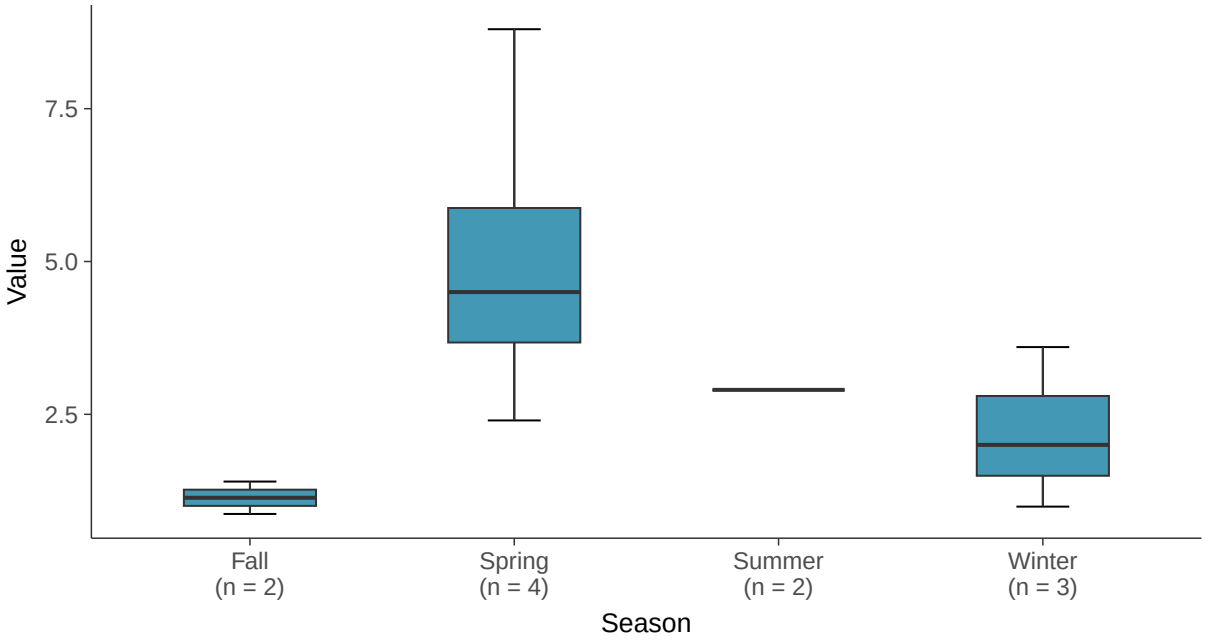
Boxplot

Iron, MW-30 (mg/L)



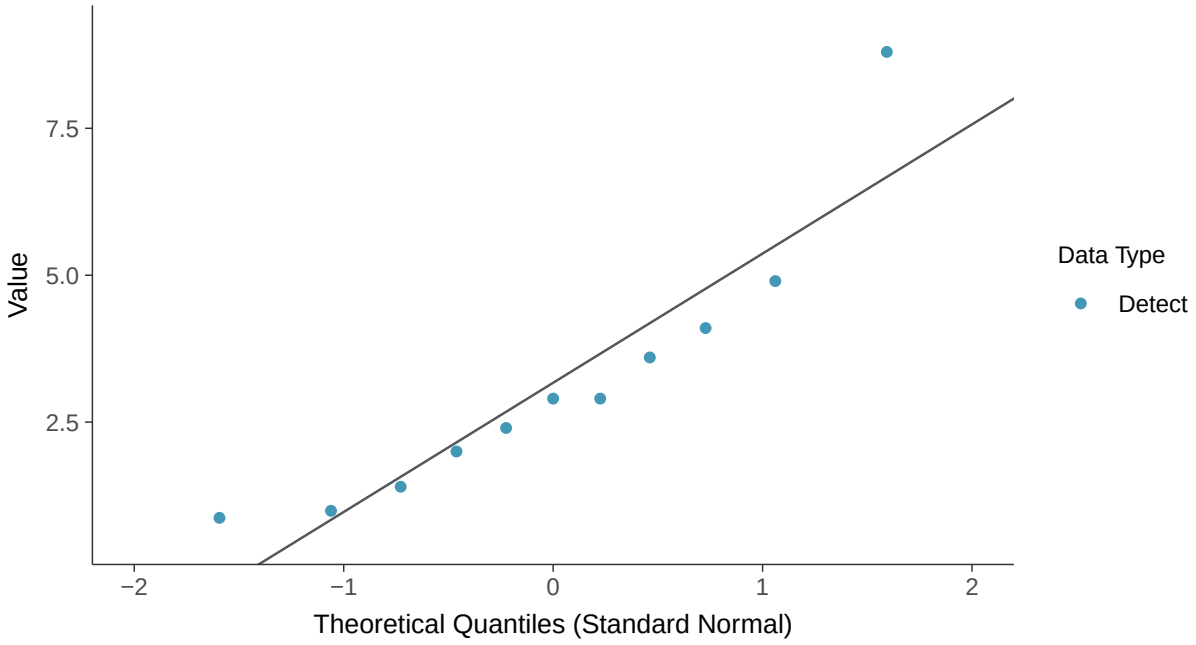
Boxplot by Season

Iron, MW-30 (mg/L)



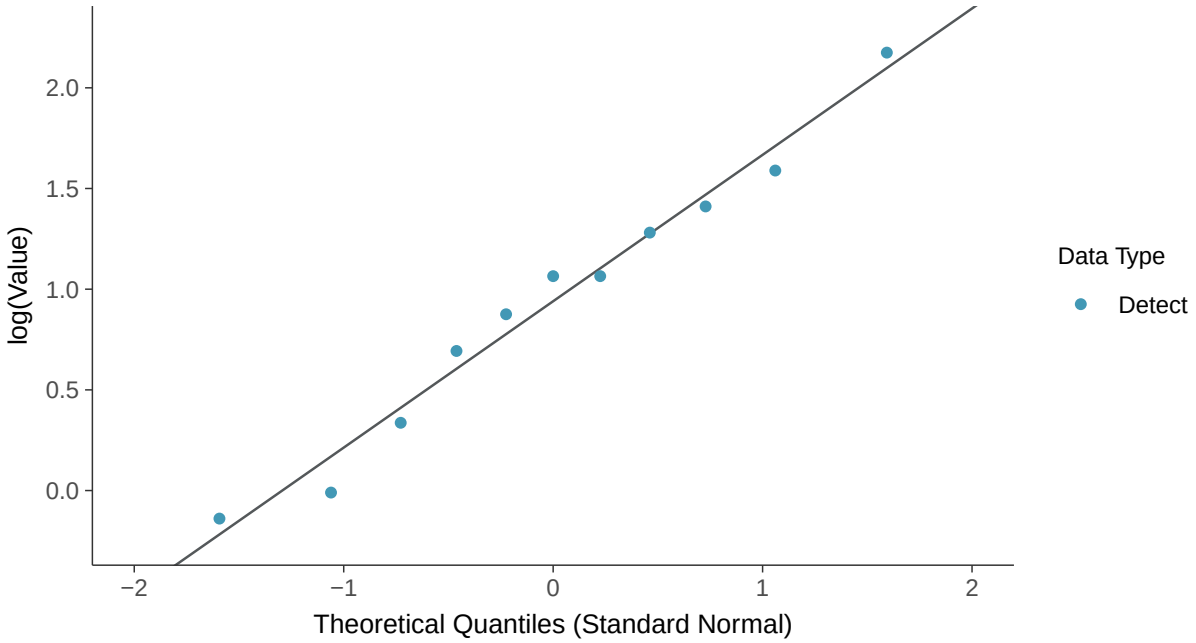
Normal Q-Q plot

Iron, MW-30 (mg/L)



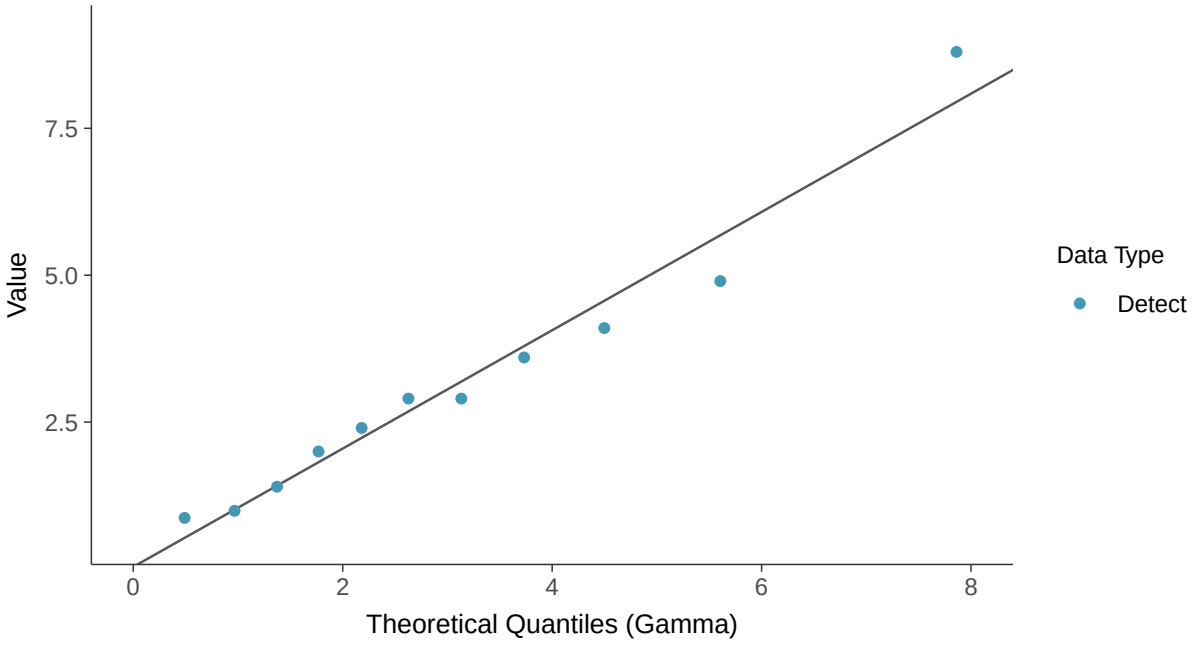
Lognormal Q-Q plot

Iron, MW-30 (mg/L)



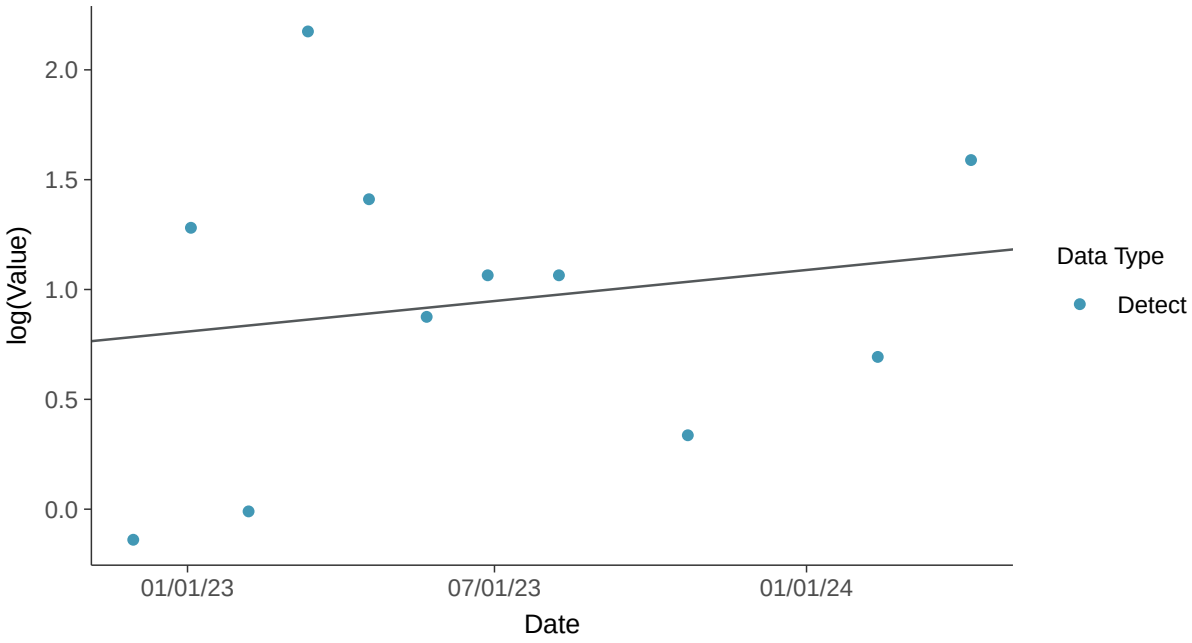
Gamma Q-Q plot

Iron, MW-30 (mg/L)



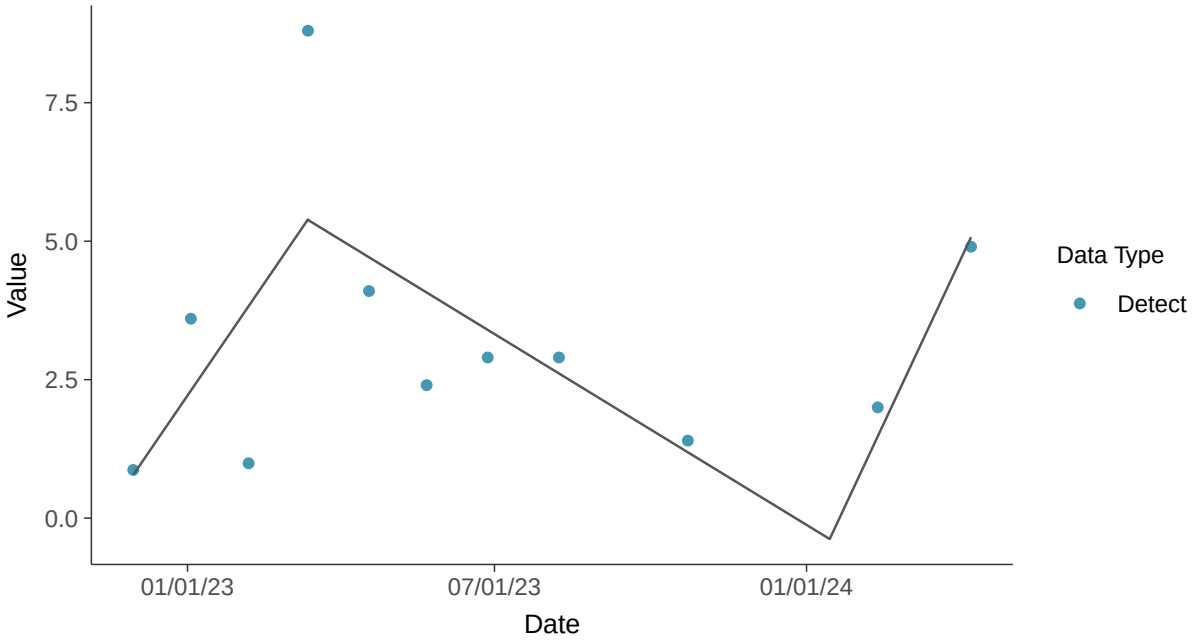
Trend Regression: Lognormal MLE

Iron, MW-30 (mg/L)



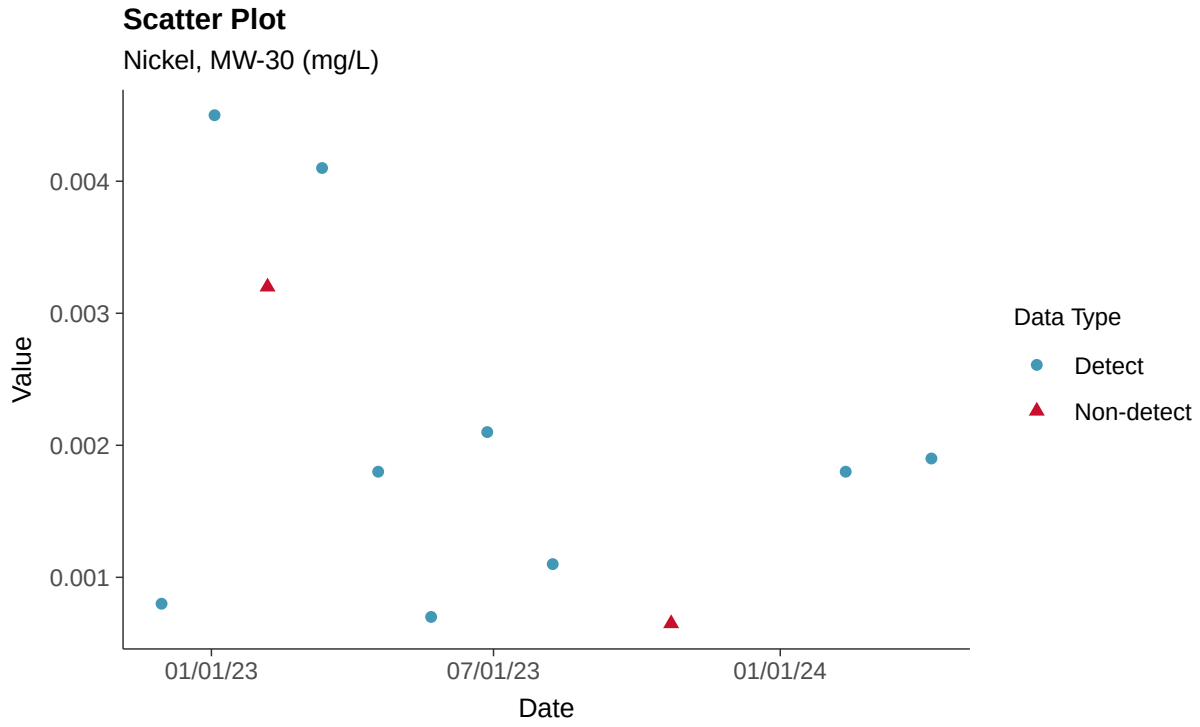
Trend Regression: Piecewise Linear-Linear-Linear

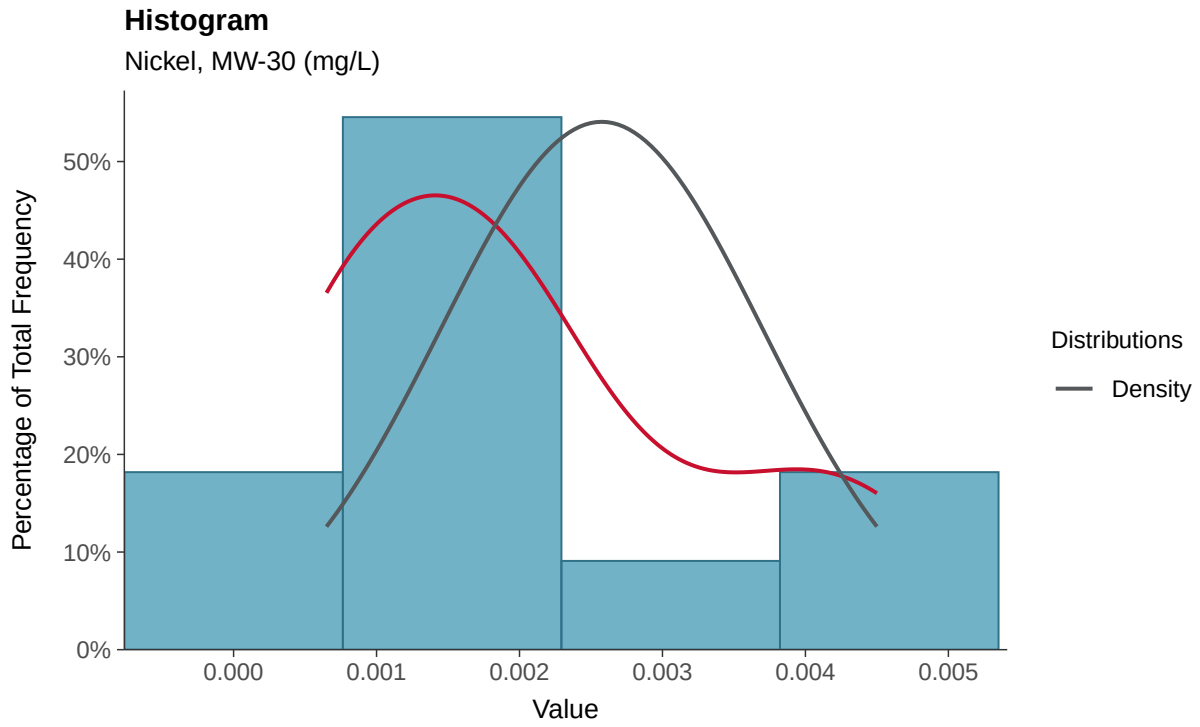
Iron, MW-30 (mg/L)



Part 115: Nickel, MW-30

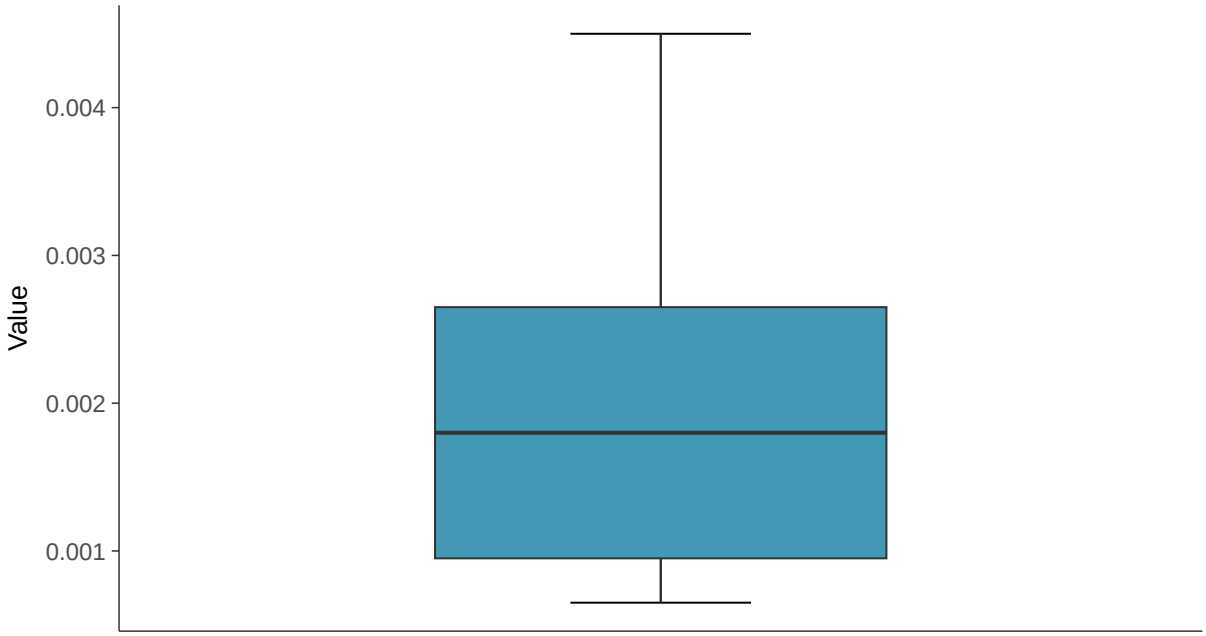
ID: 1_40_6_119





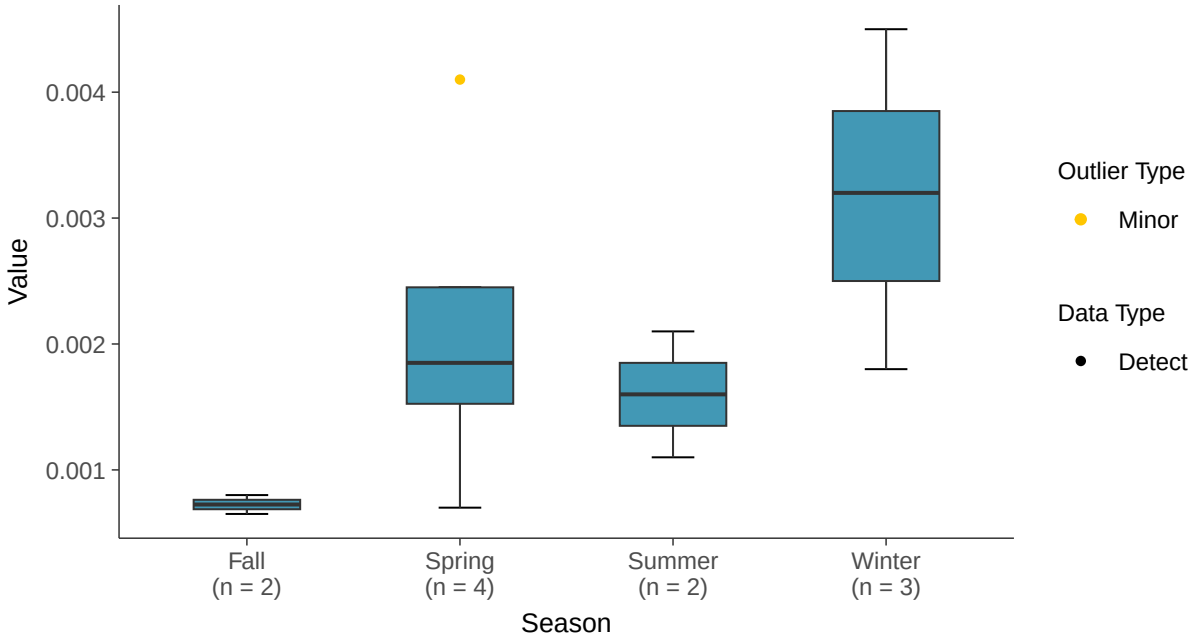
Boxplot

Nickel, MW-30 (mg/L)



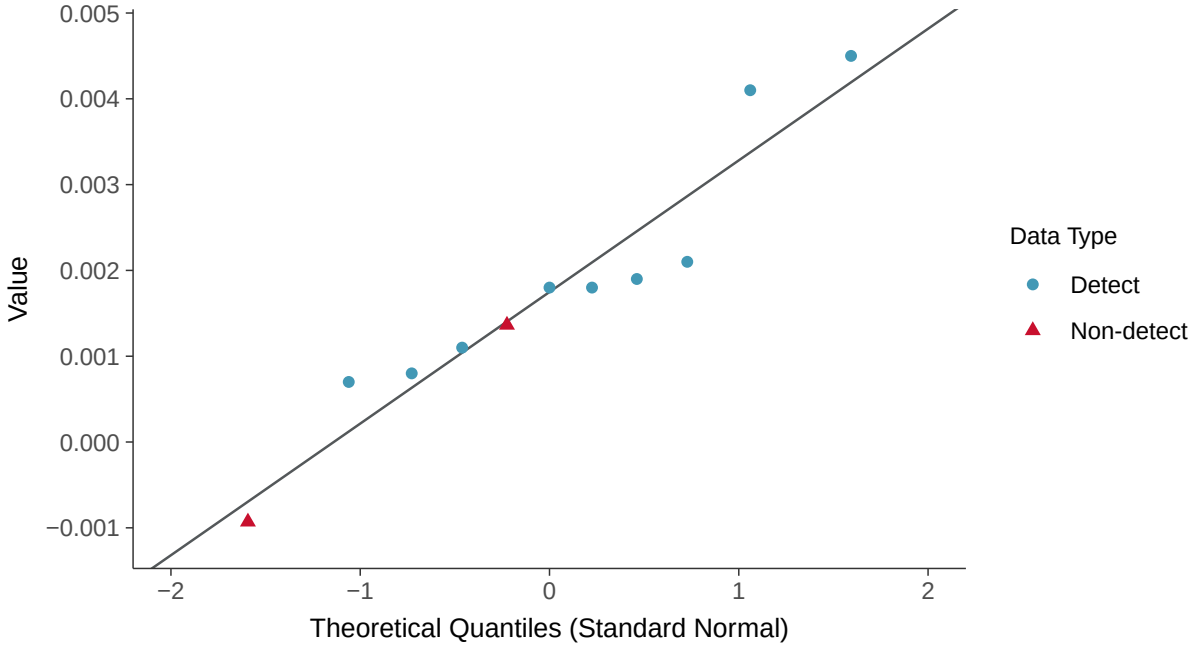
Boxplot by Season

Nickel, MW-30 (mg/L)



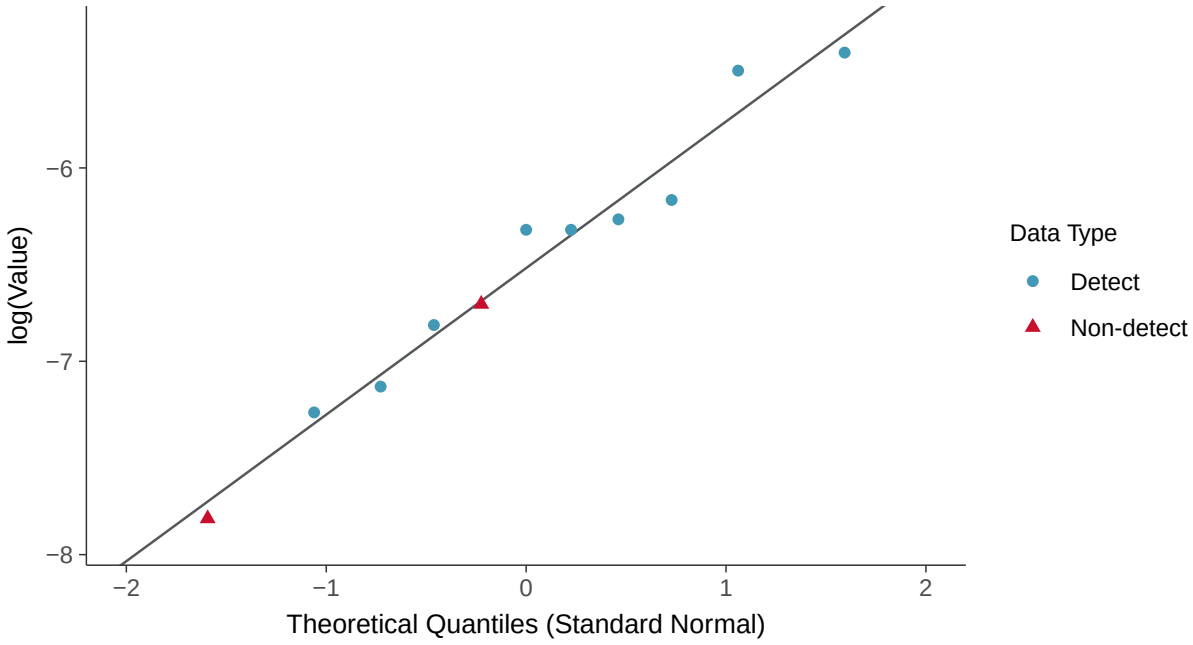
Normal Q-Q plot using ROS Imputed Estimates

Nickel, MW-30 (mg/L)



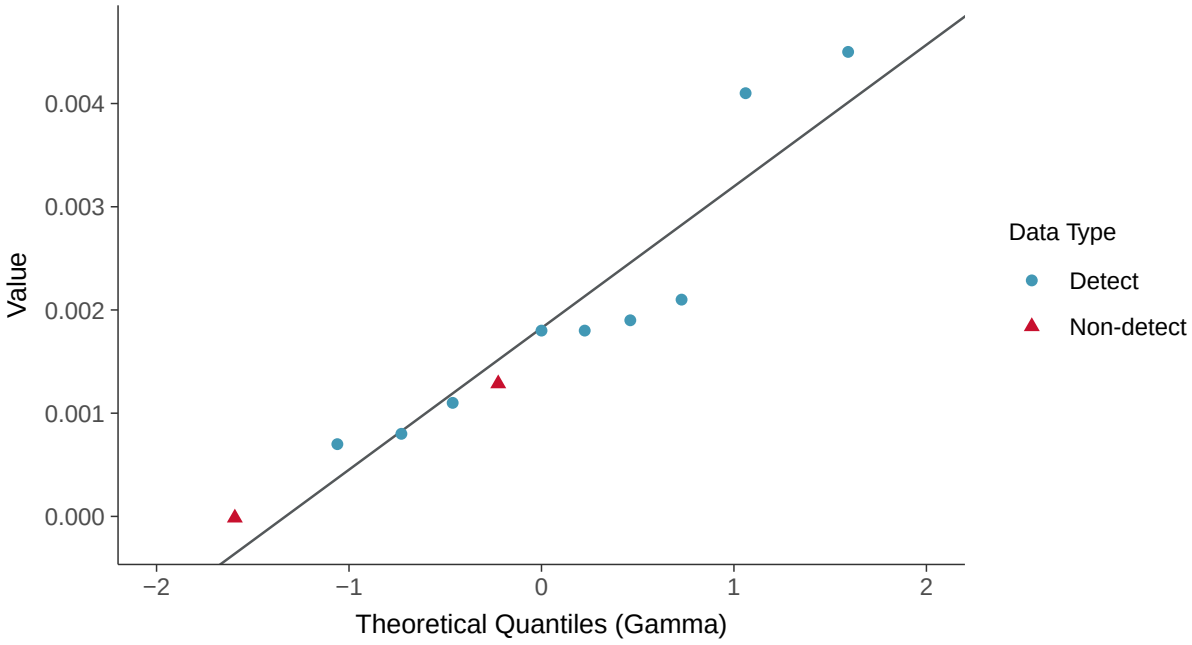
Lognormal Q-Q plot using ROS Imputed Estimates

Nickel, MW-30 (mg/L)



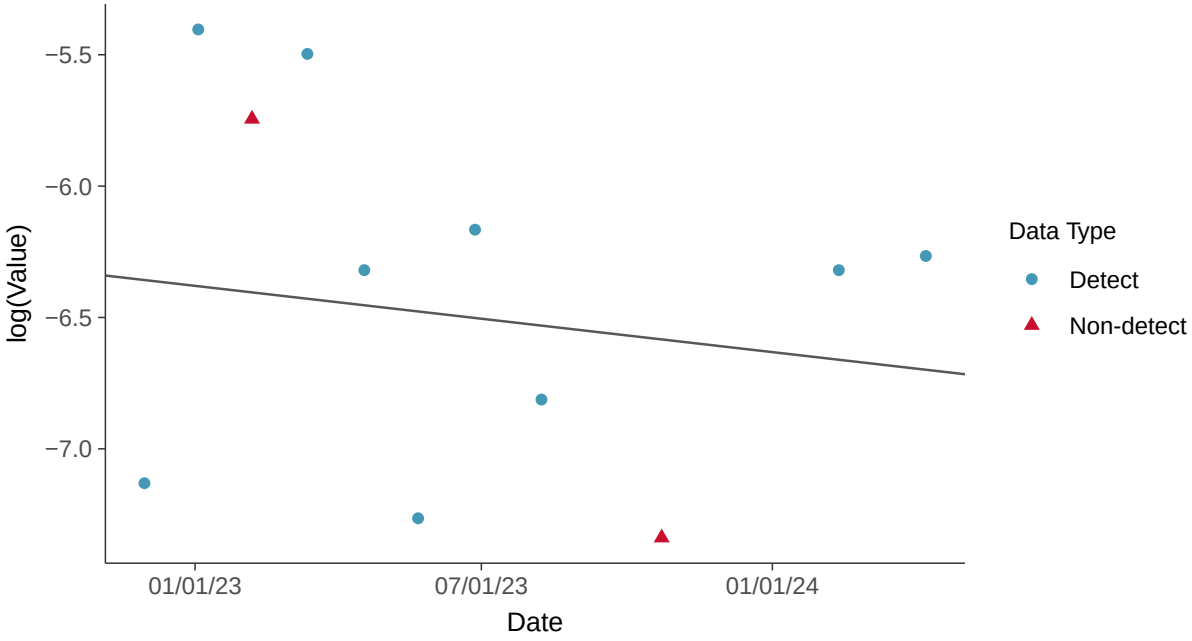
Gamma Q-Q plot using ROS Imputed Estimates

Nickel, MW-30 (mg/L)



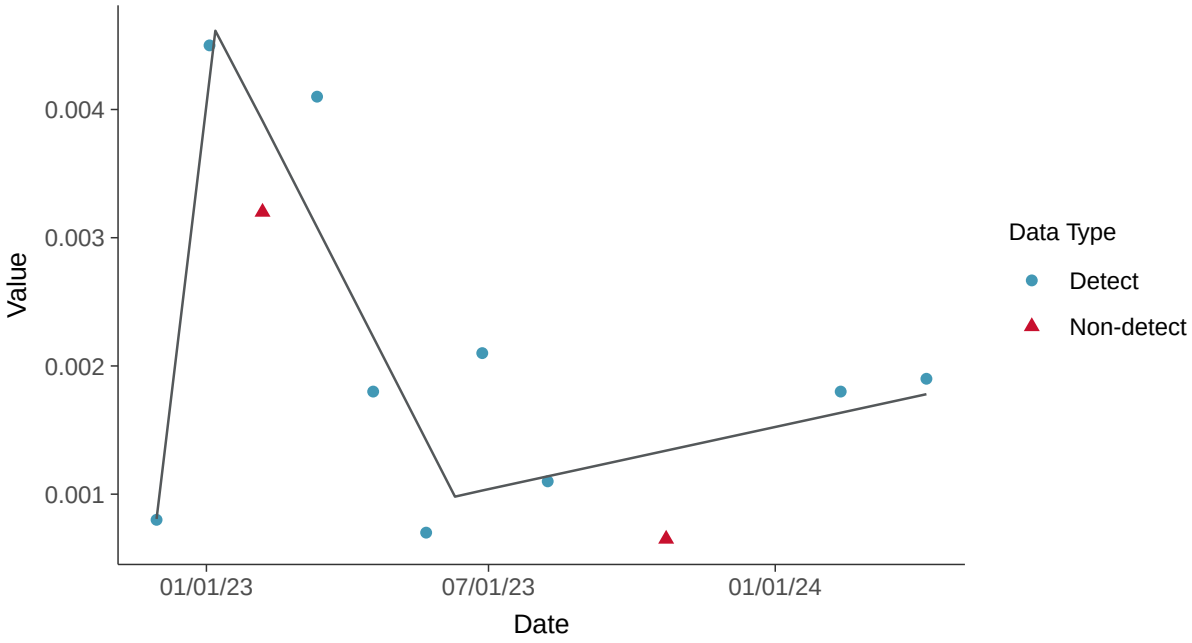
Trend Regression: Lognormal MLE

Nickel, MW-30 (mg/L)



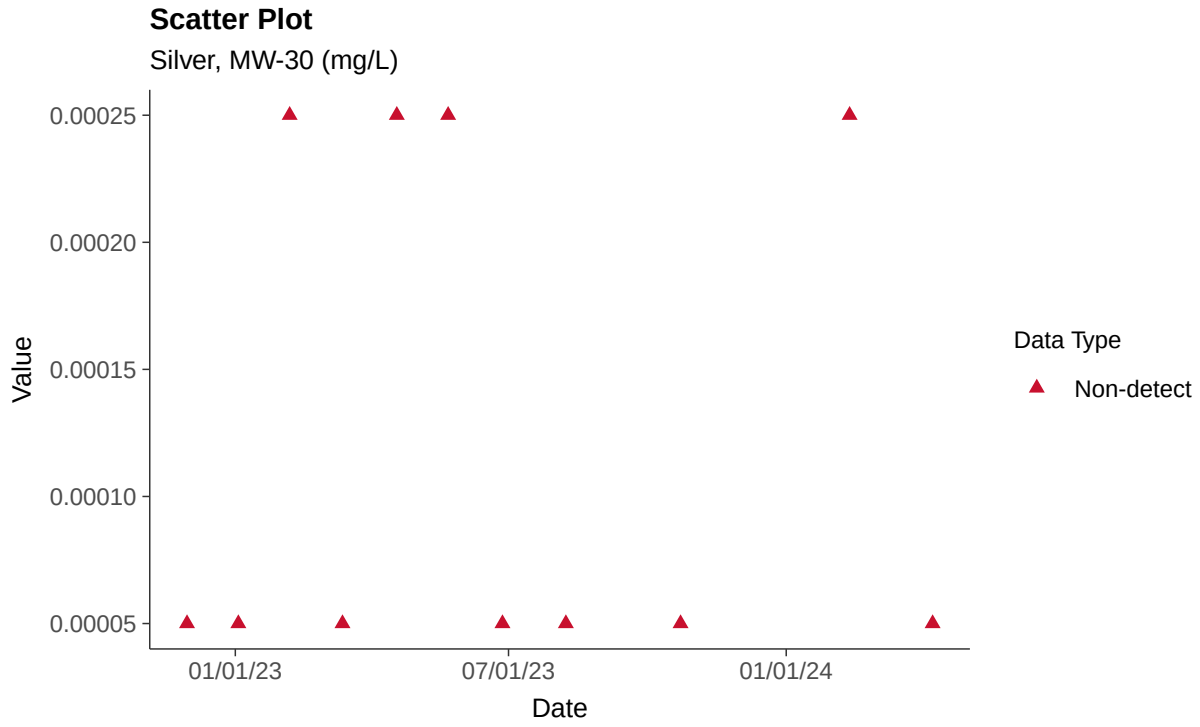
Trend Regression: Piecewise Linear-Linear-Linear

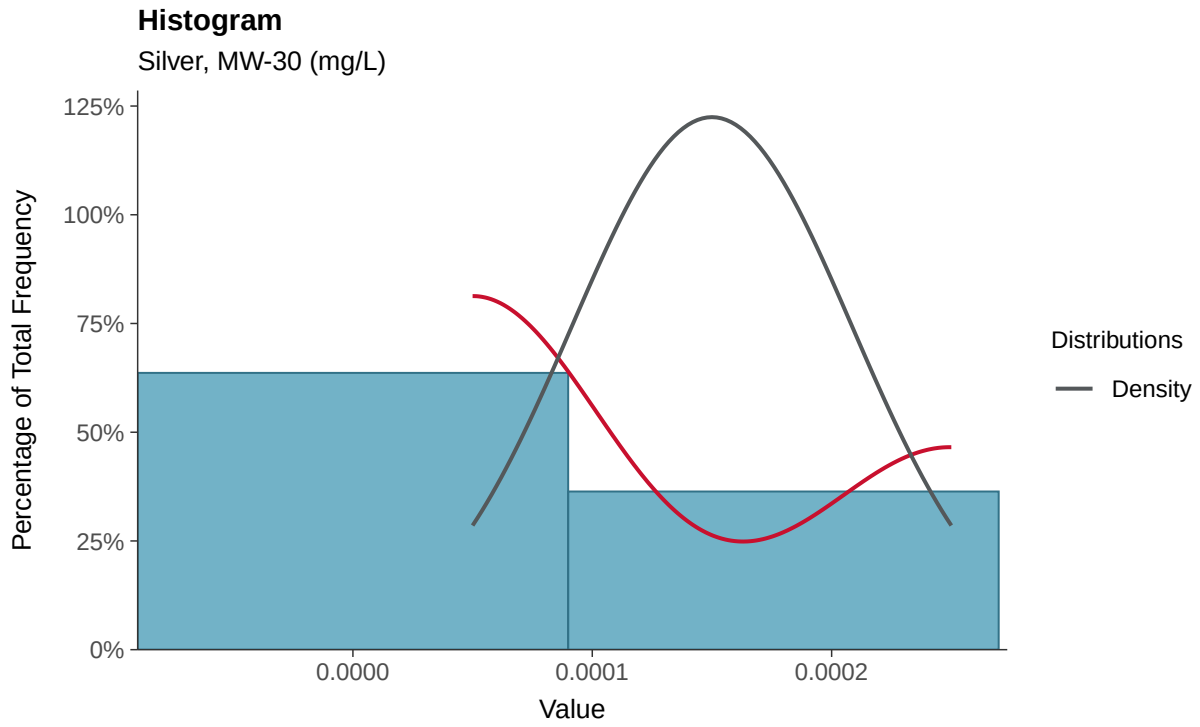
Nickel, MW-30 (mg/L)



Part 115: Silver, MW-30

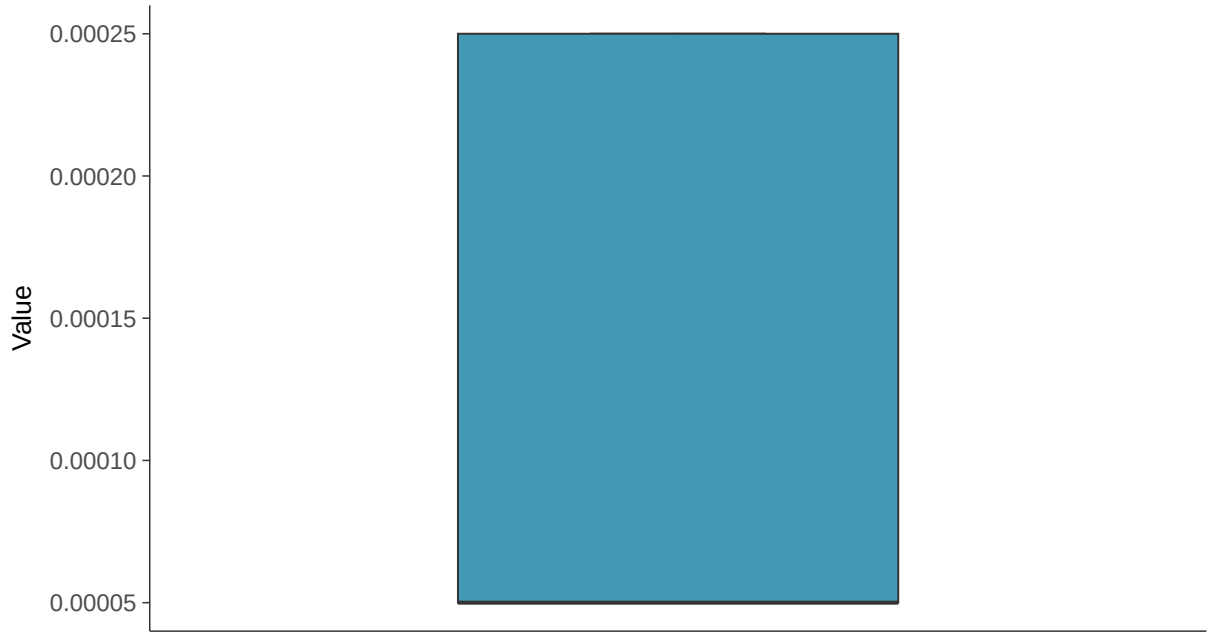
ID: 1_40_6_123





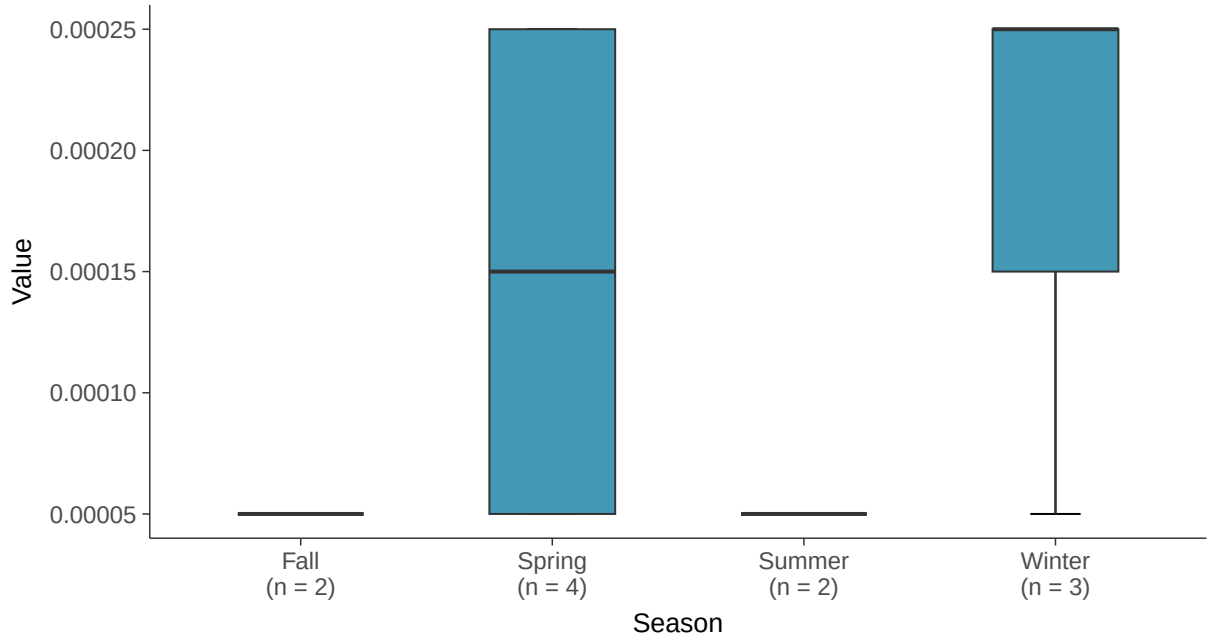
Boxplot

Silver, MW-30 (mg/L)



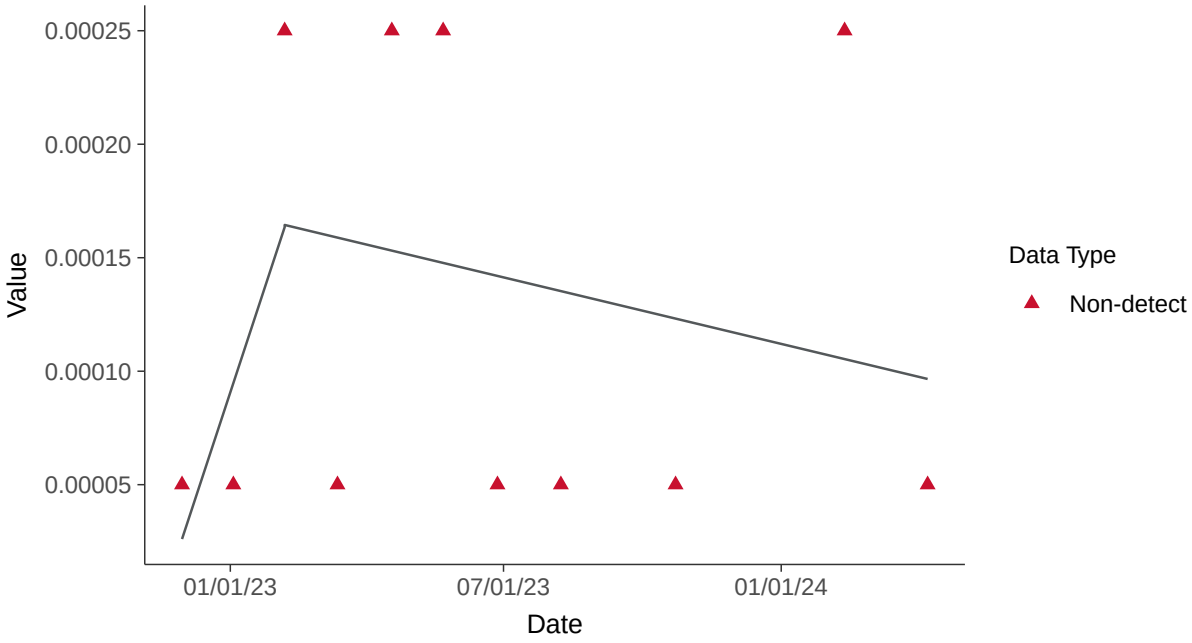
Boxplot by Season

Silver, MW-30 (mg/L)



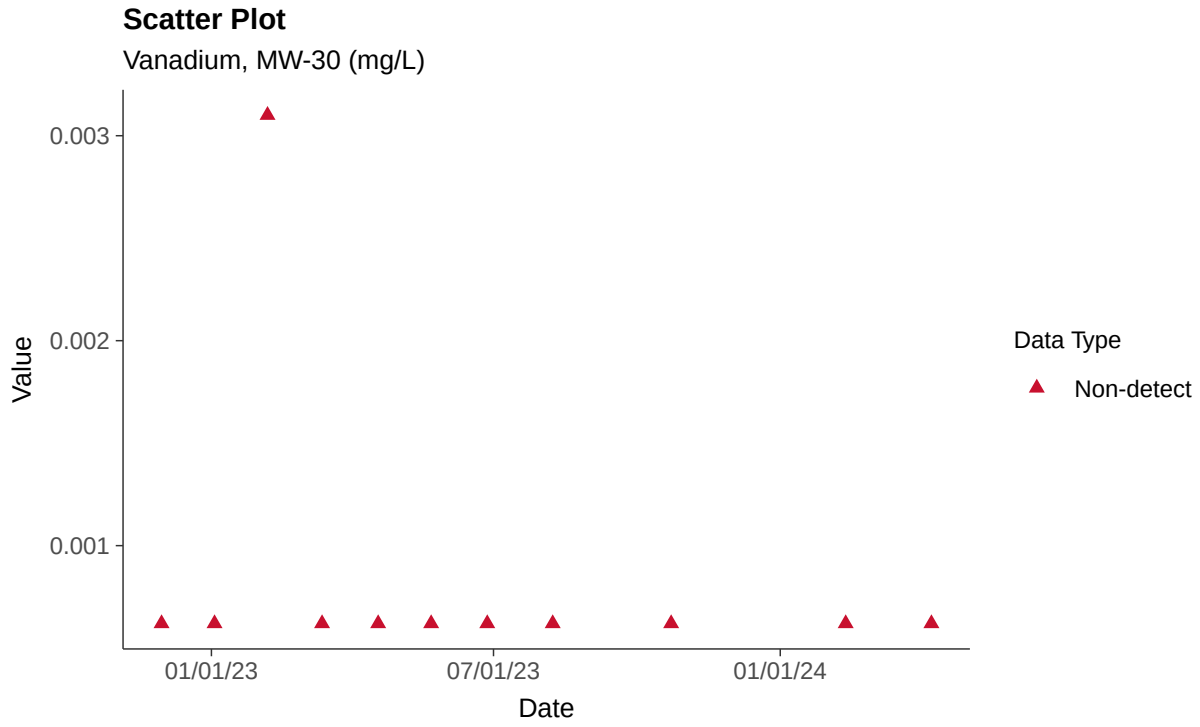
Trend Regression: Piecewise Linear-Linear

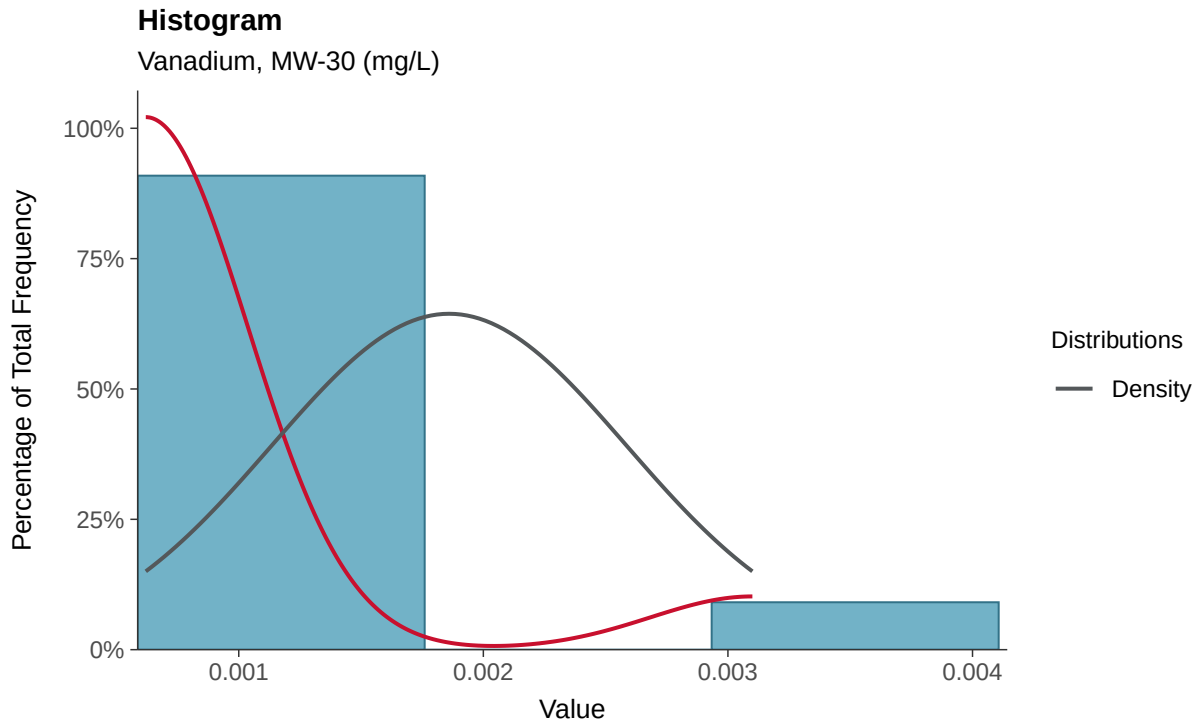
Silver, MW-30 (mg/L)



Part 115: Vanadium, MW-30

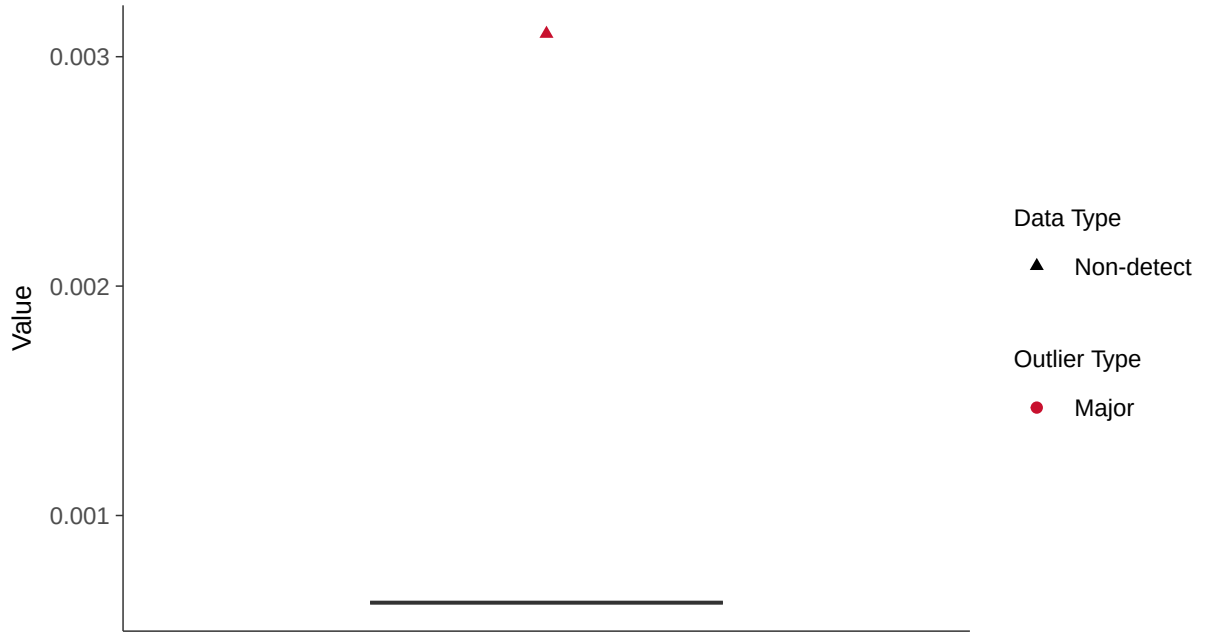
ID: 1_40_6_129





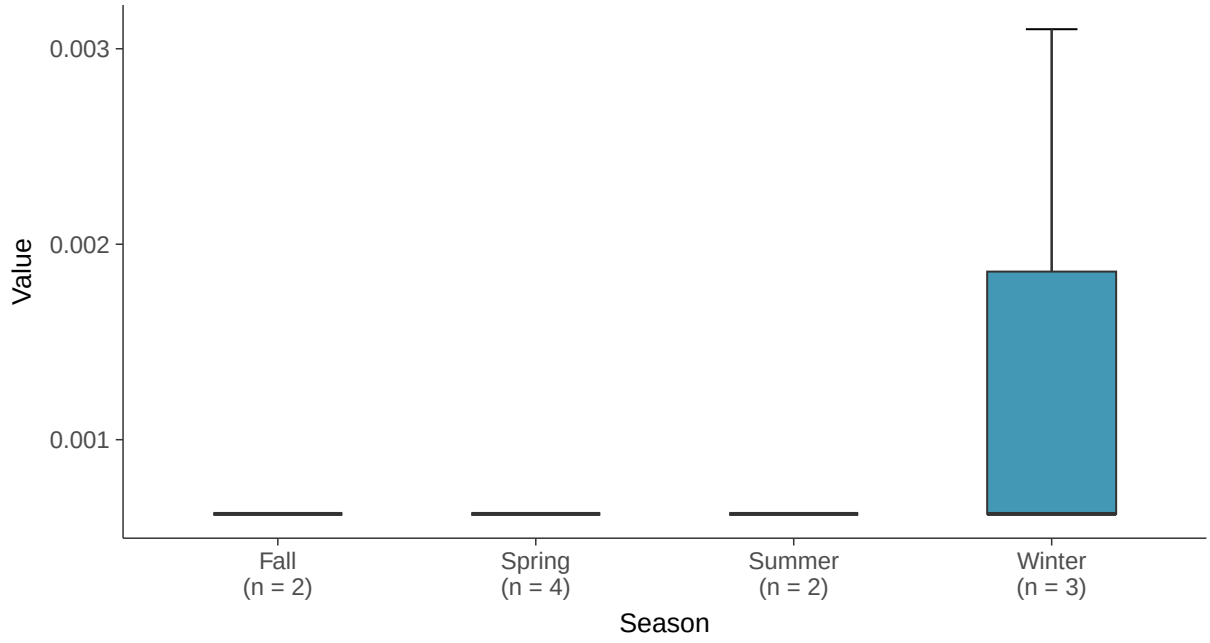
Boxplot

Vanadium, MW-30 (mg/L)



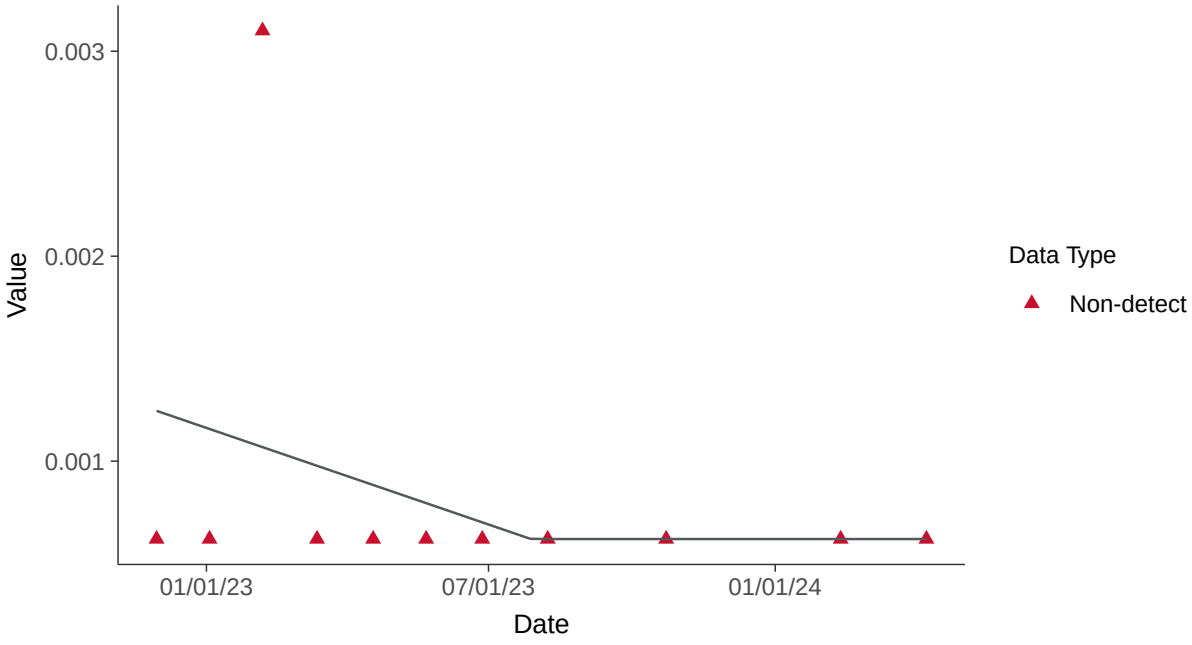
Boxplot by Season

Vanadium, MW-30 (mg/L)



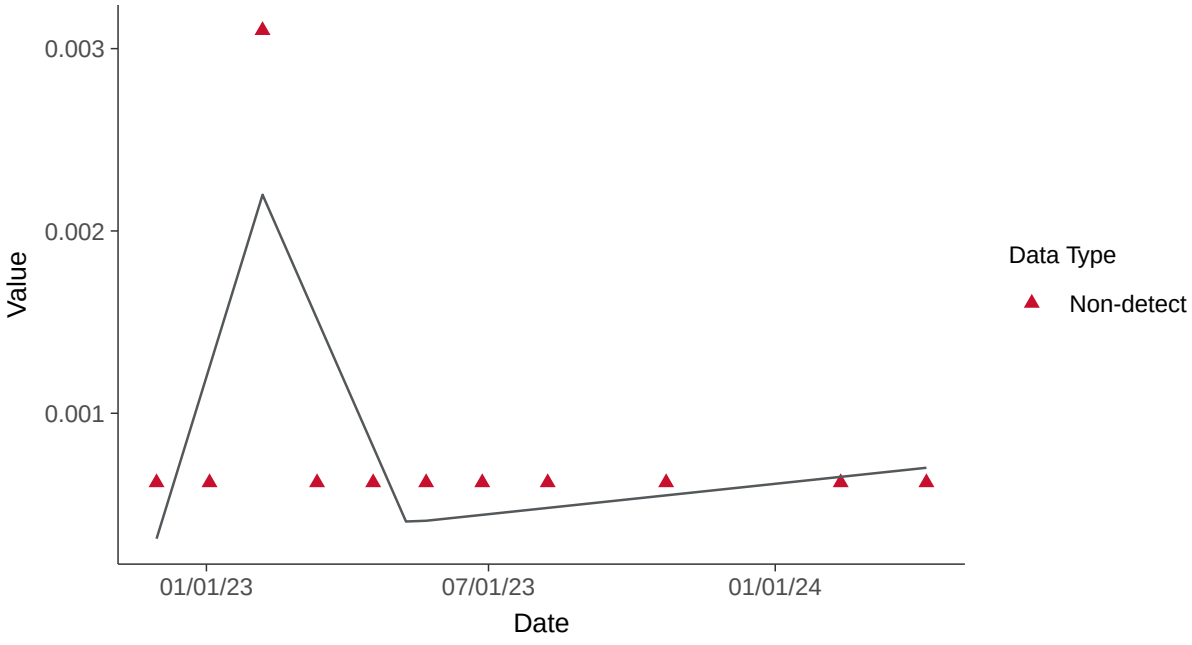
Trend Regression: Piecewise Linear-Linear

Vanadium, MW-30 (mg/L)



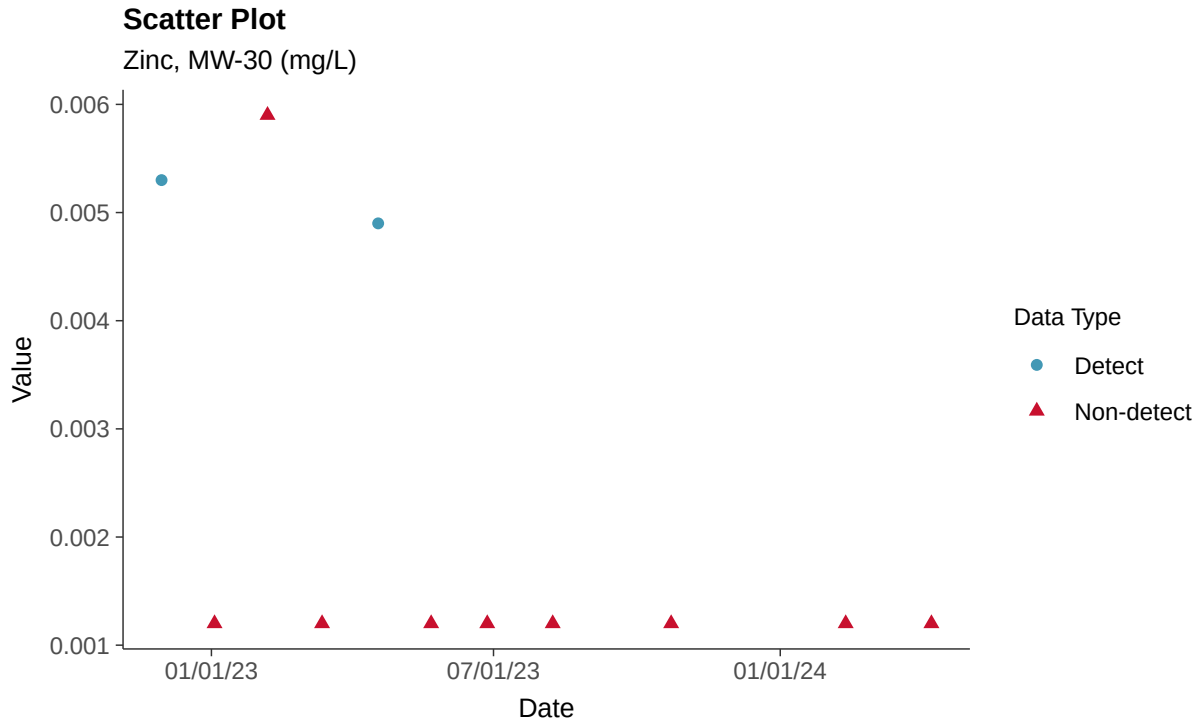
Trend Regression: Piecewise Linear-Linear-Linear

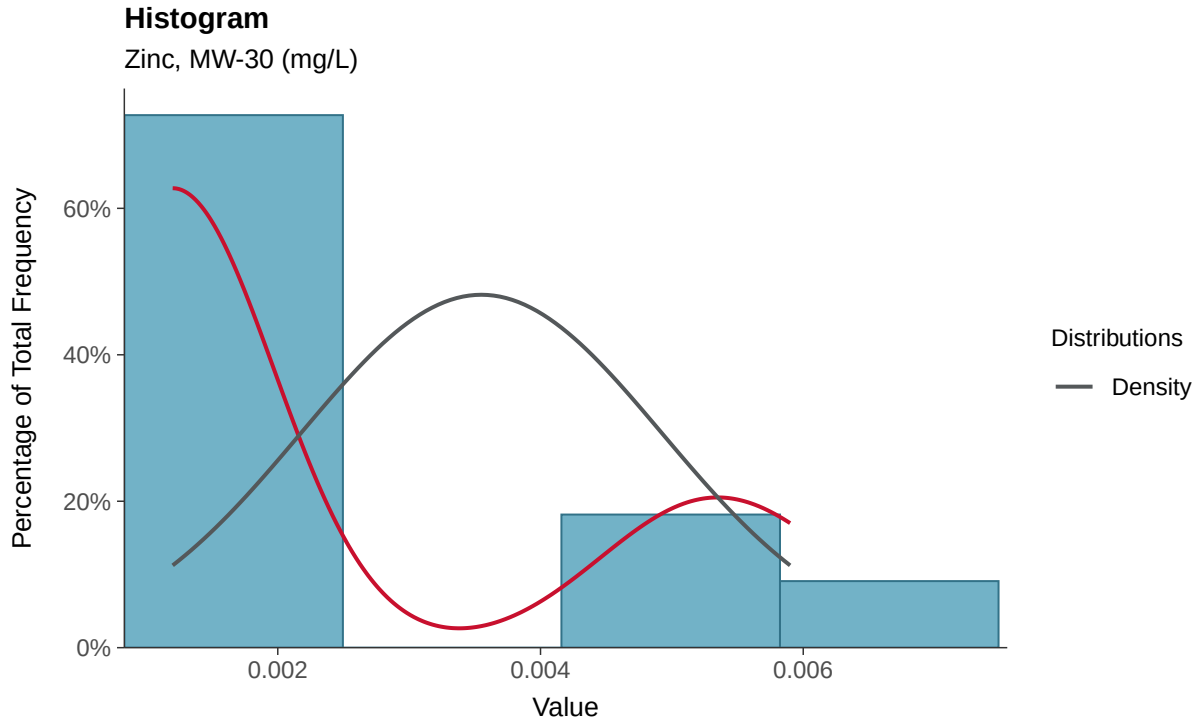
Vanadium, MW-30 (mg/L)



Part 115: Zinc, MW-30

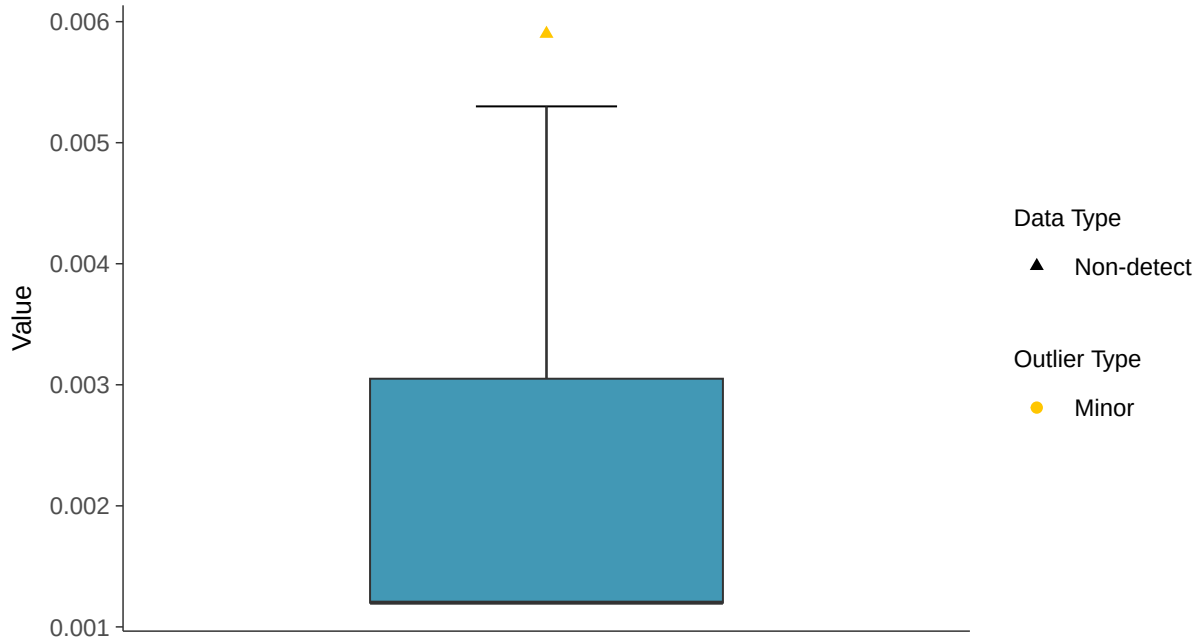
ID: 1_40_6_130





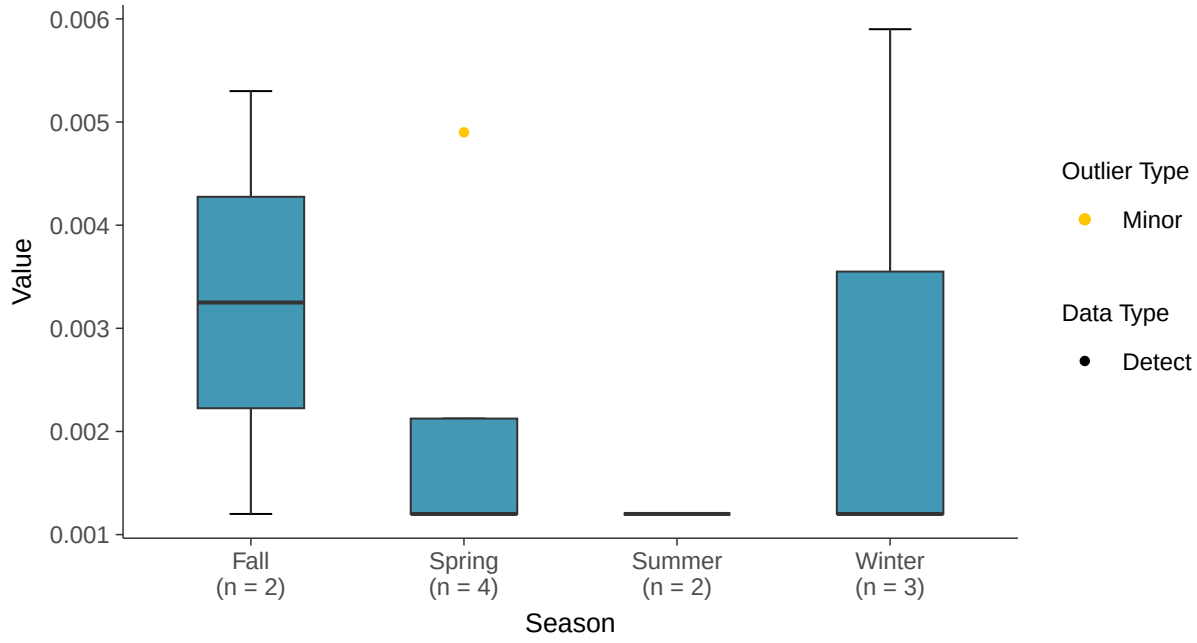
Boxplot

Zinc, MW-30 (mg/L)



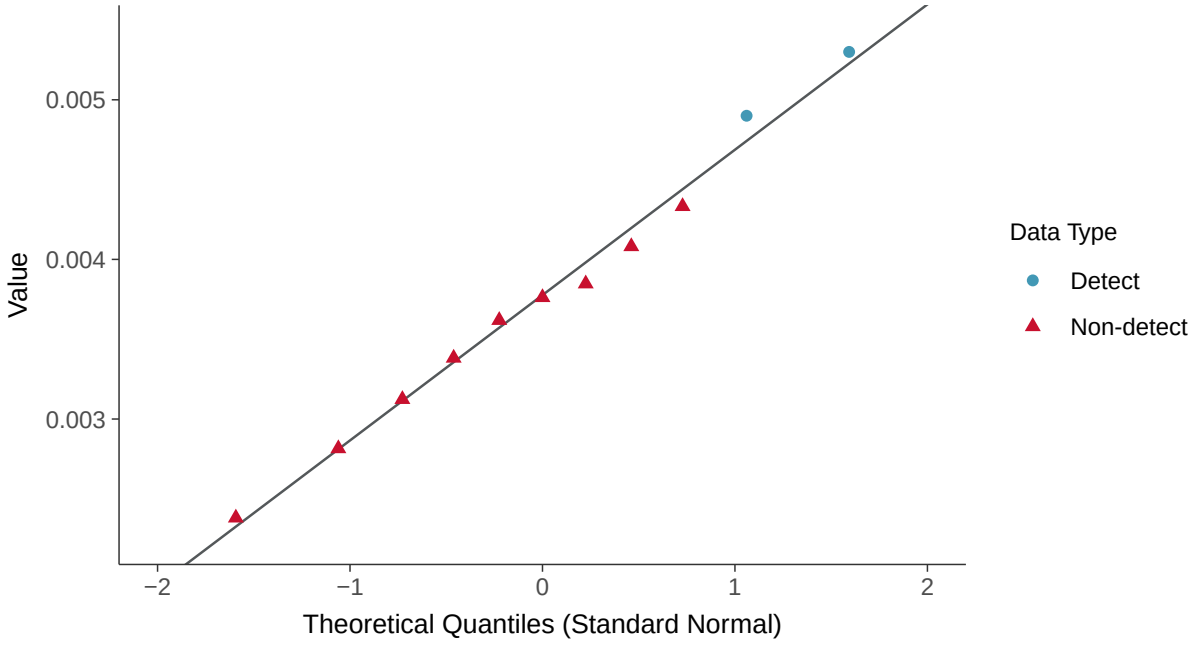
Boxplot by Season

Zinc, MW-30 (mg/L)



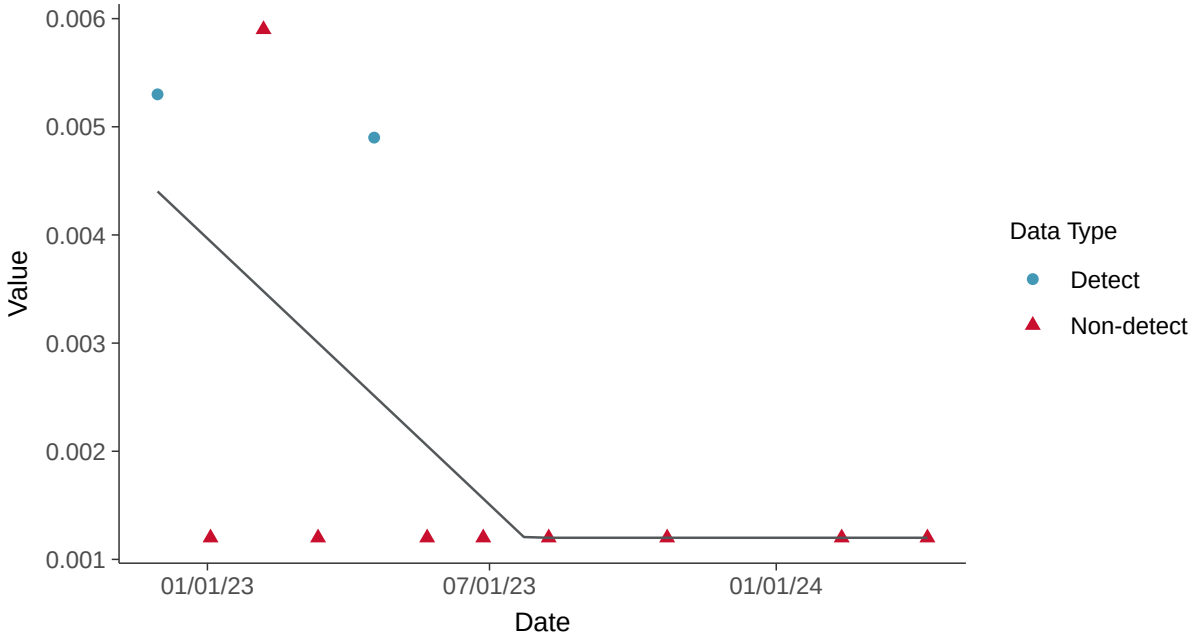
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-30 (mg/L)



Trend Regression: Piecewise Linear-Linear

Zinc, MW-30 (mg/L)

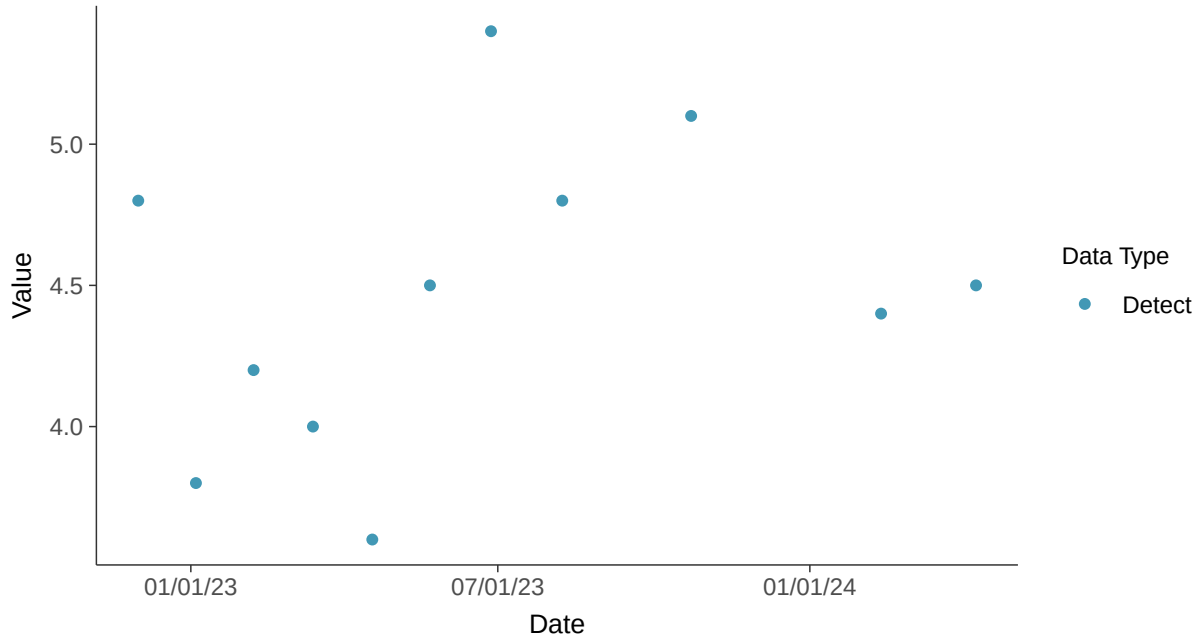


Appendix III: Boron, MW-31

ID: 1_41_4_105

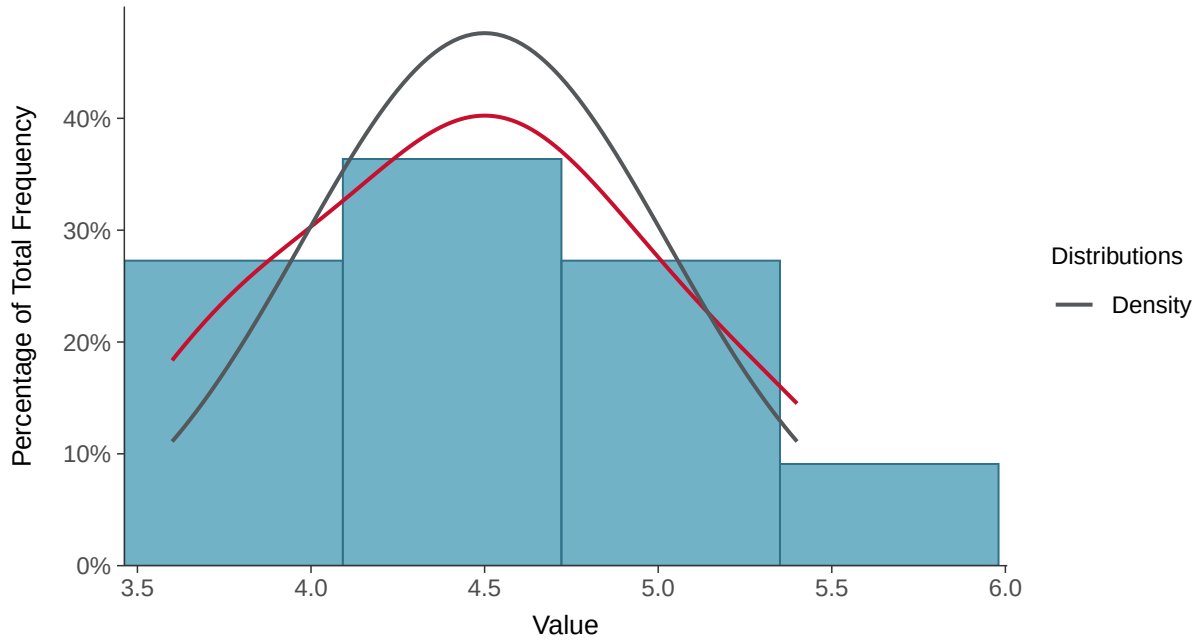
Scatter Plot

Boron, MW-31 (mg/L)



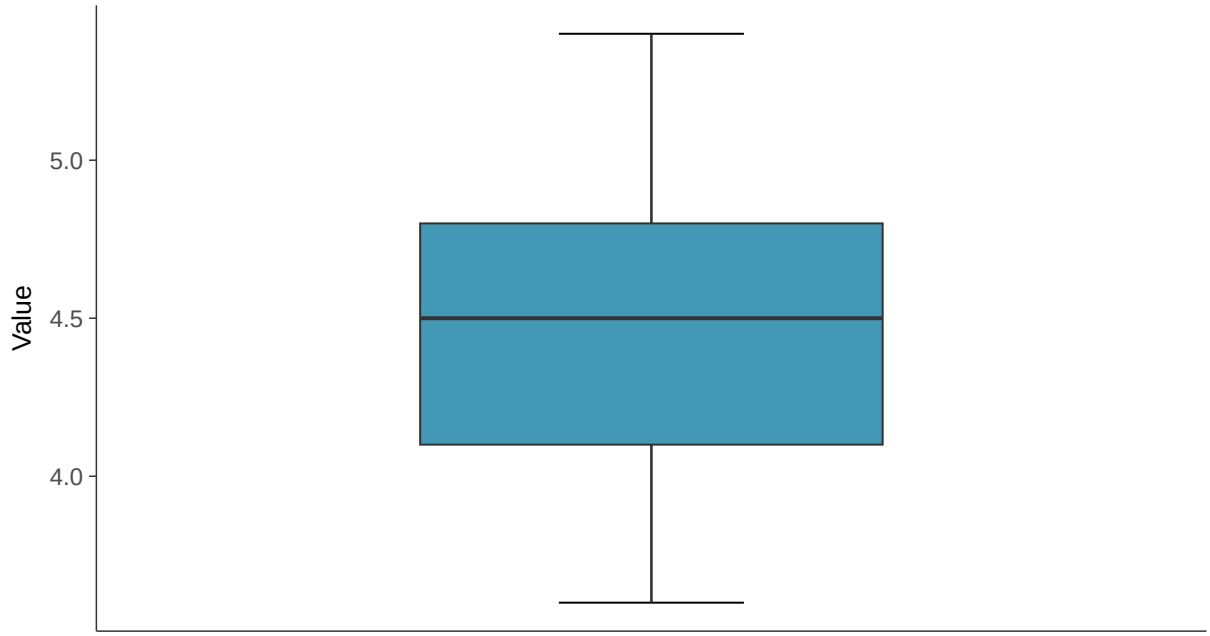
Histogram

Boron, MW-31 (mg/L)



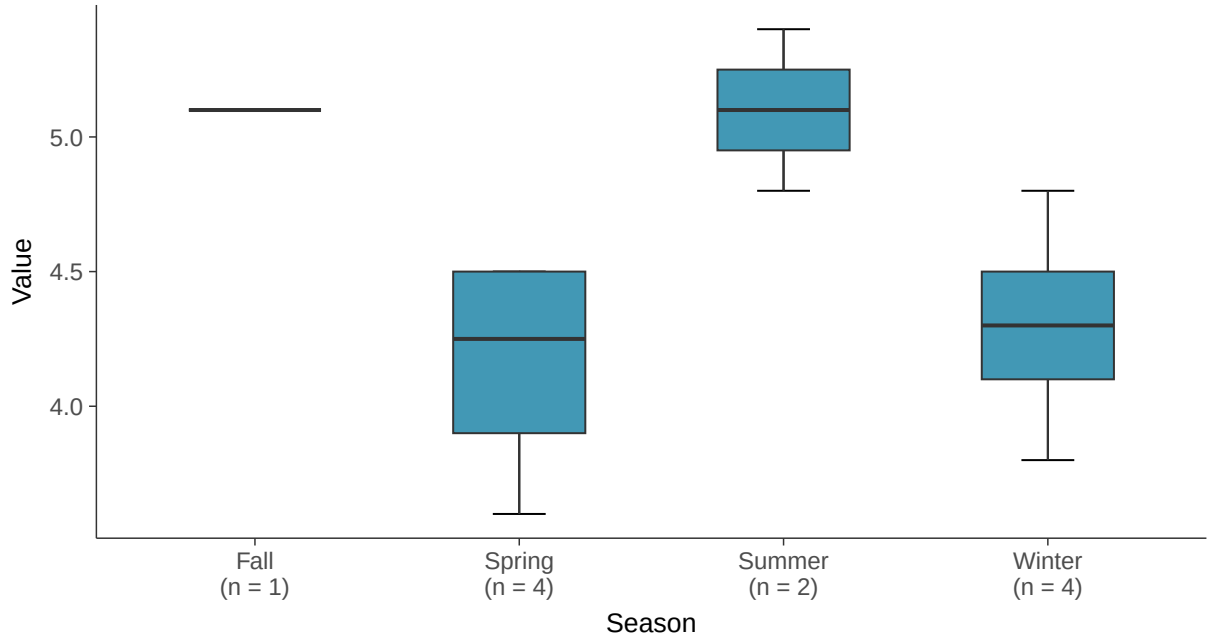
Boxplot

Boron, MW-31 (mg/L)



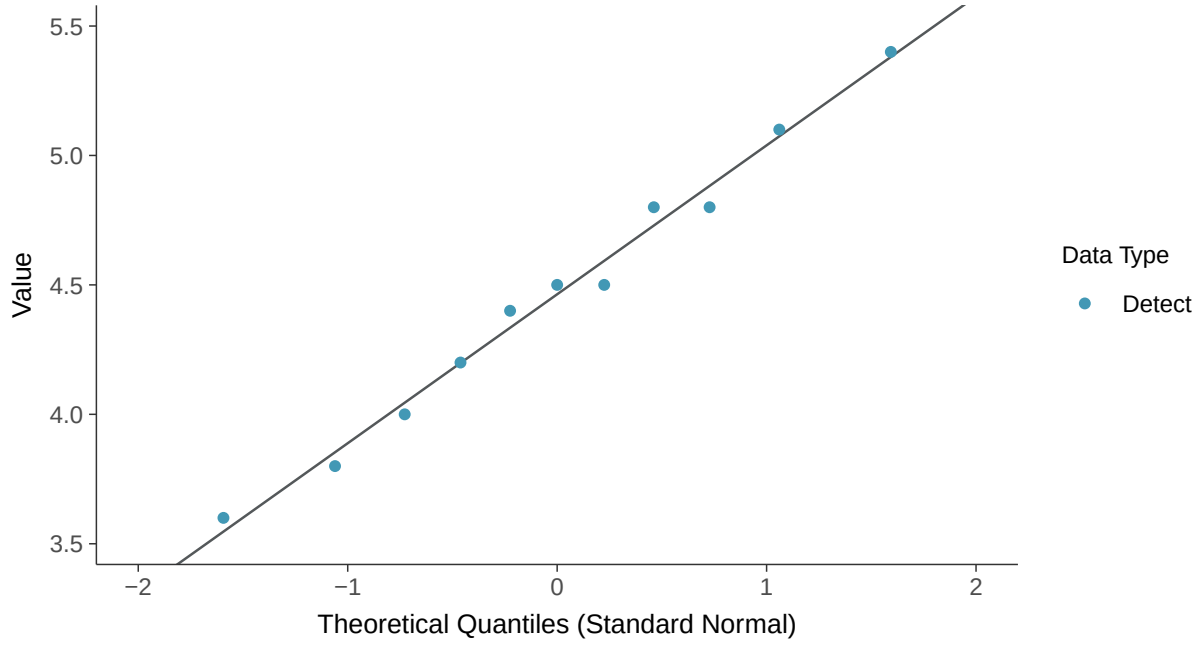
Boxplot by Season

Boron, MW-31 (mg/L)



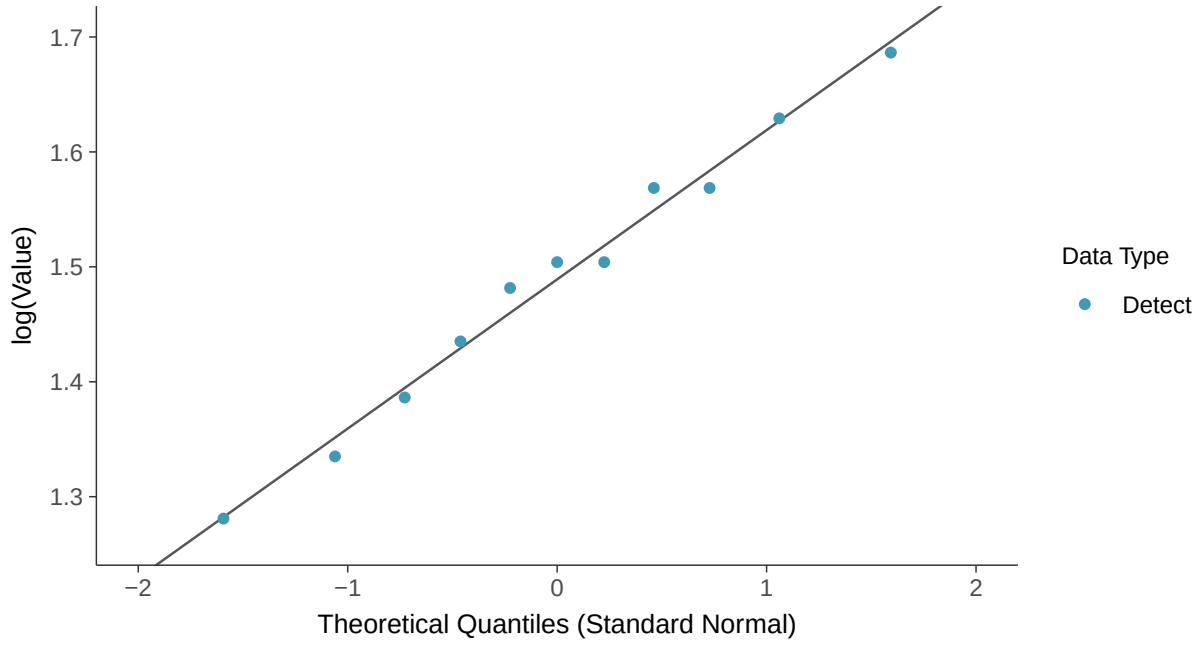
Normal Q-Q plot

Boron, MW-31 (mg/L)



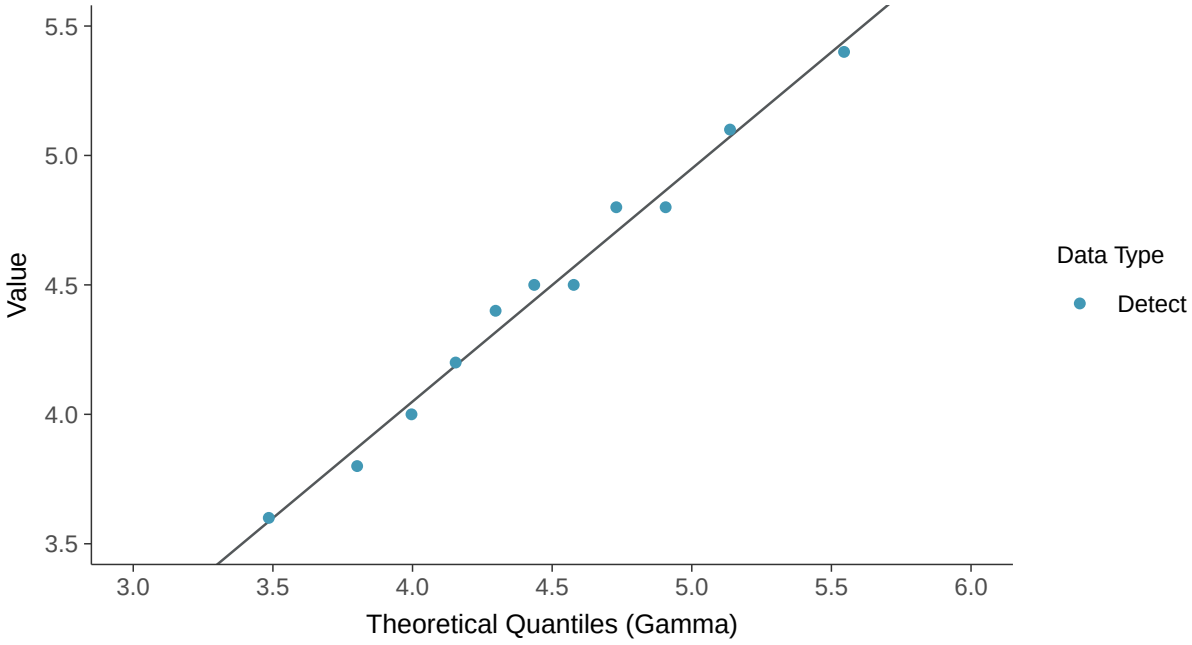
Lognormal Q-Q plot

Boron, MW-31 (mg/L)



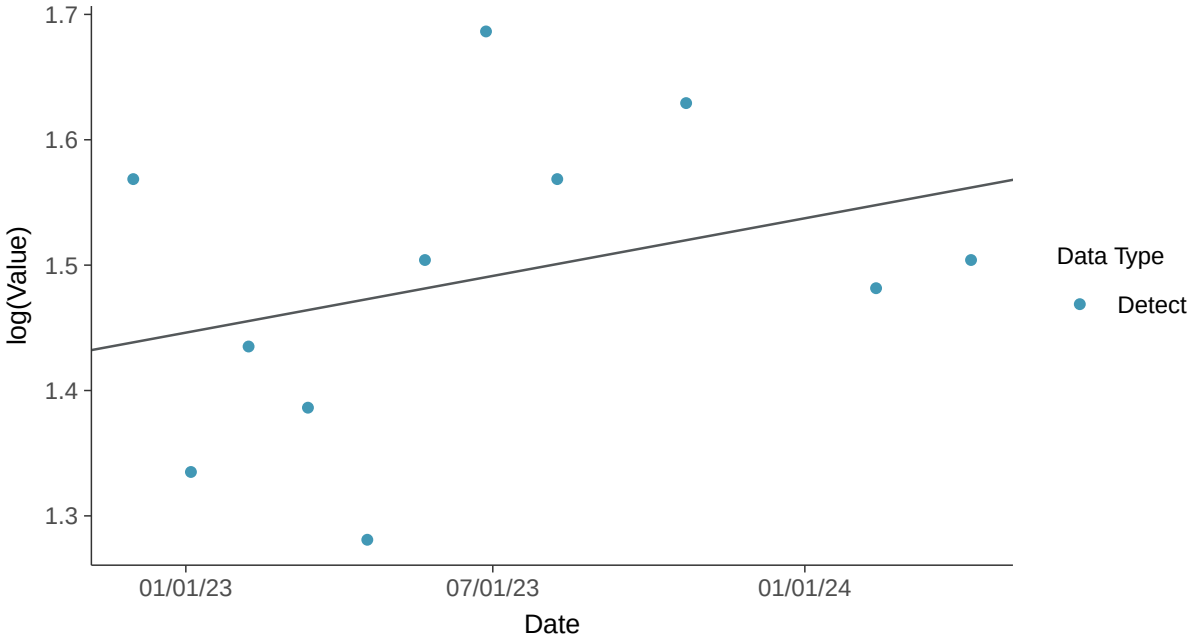
Gamma Q-Q plot

Boron, MW-31 (mg/L)



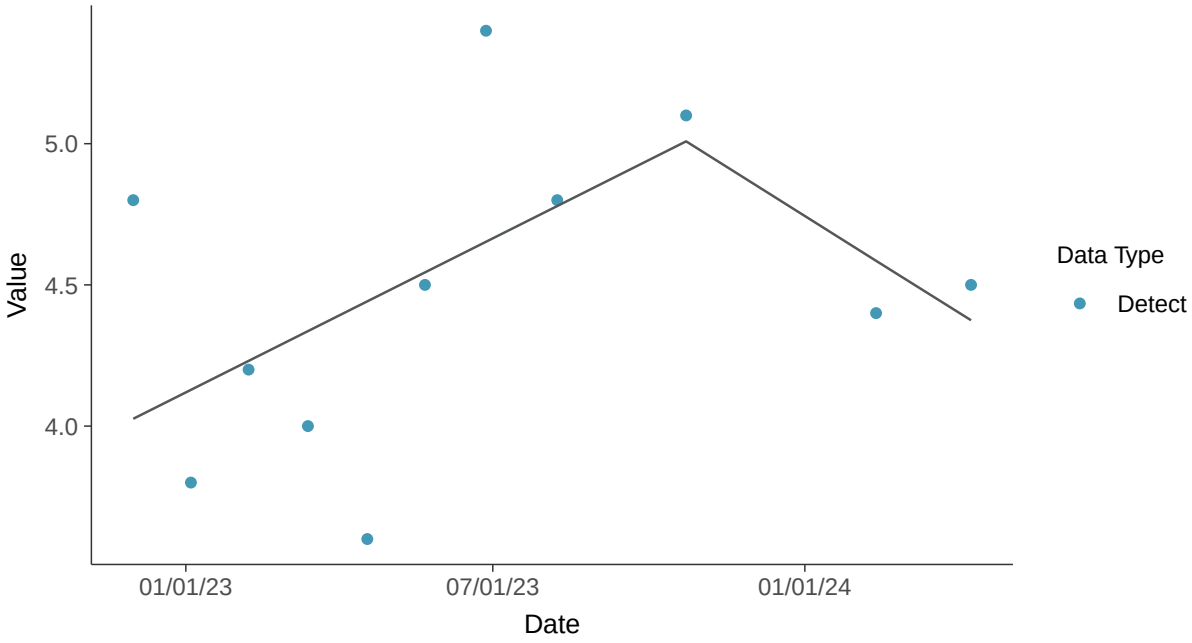
Trend Regression: Lognormal MLE

Boron, MW-31 (mg/L)



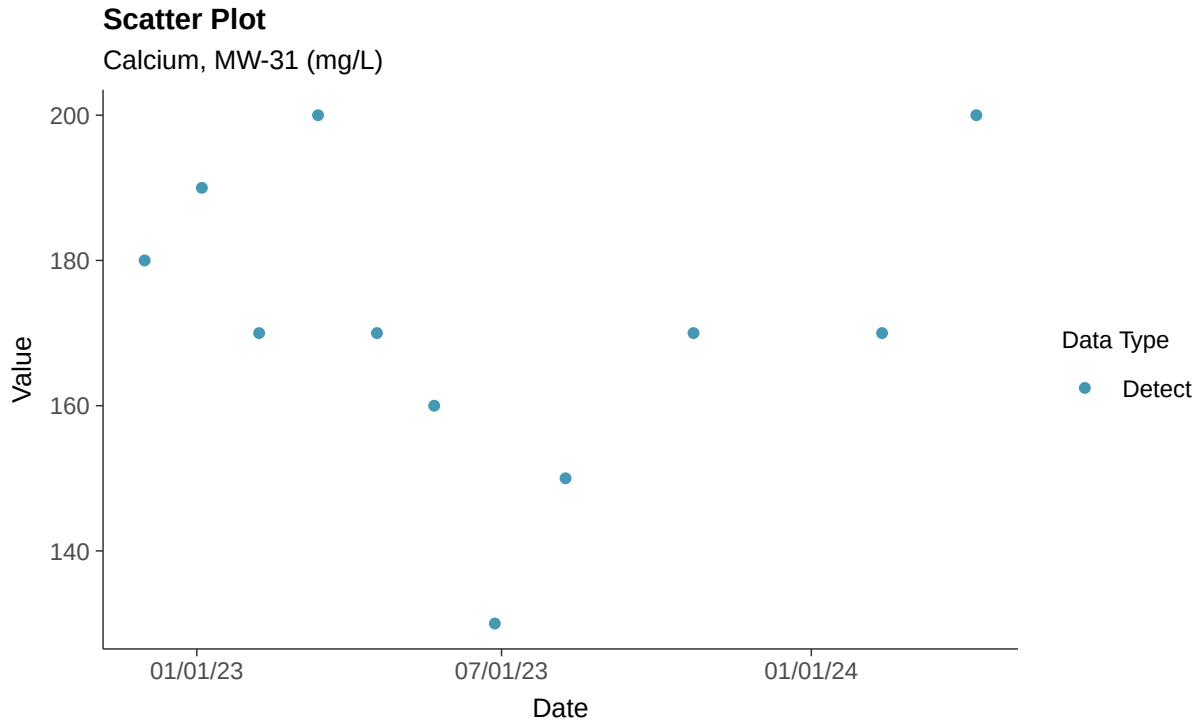
Trend Regression: Piecewise Linear-Linear

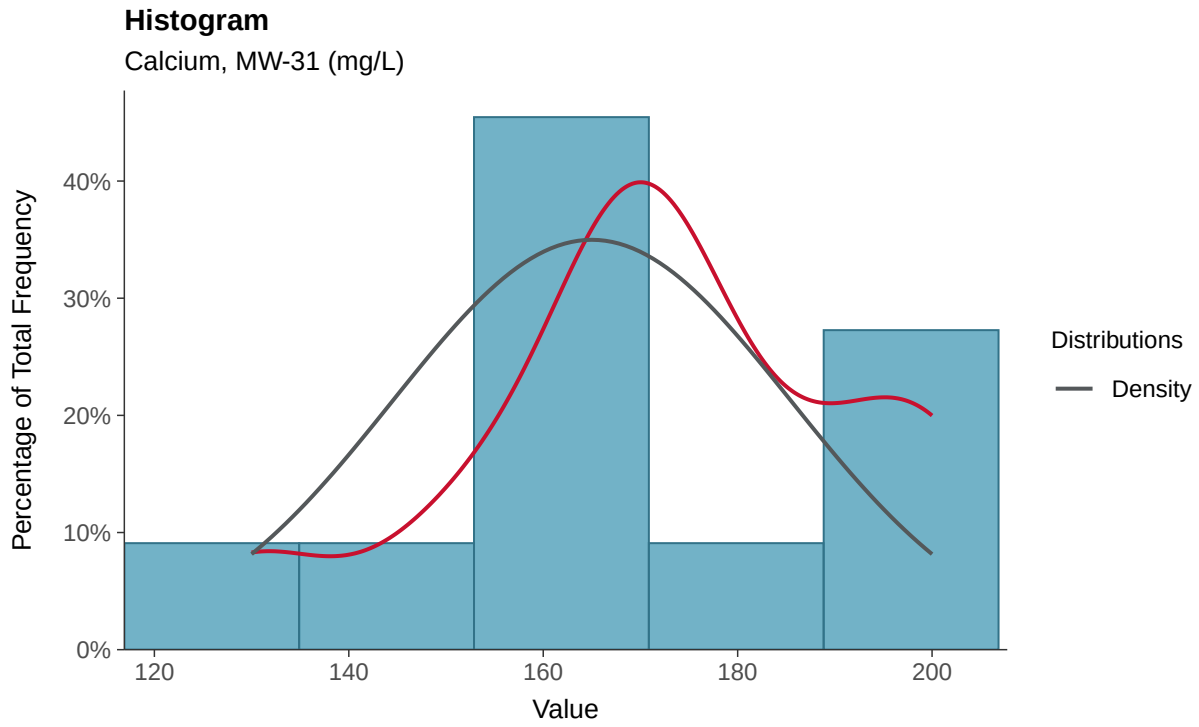
Boron, MW-31 (mg/L)



Appendix III: Calcium, MW-31

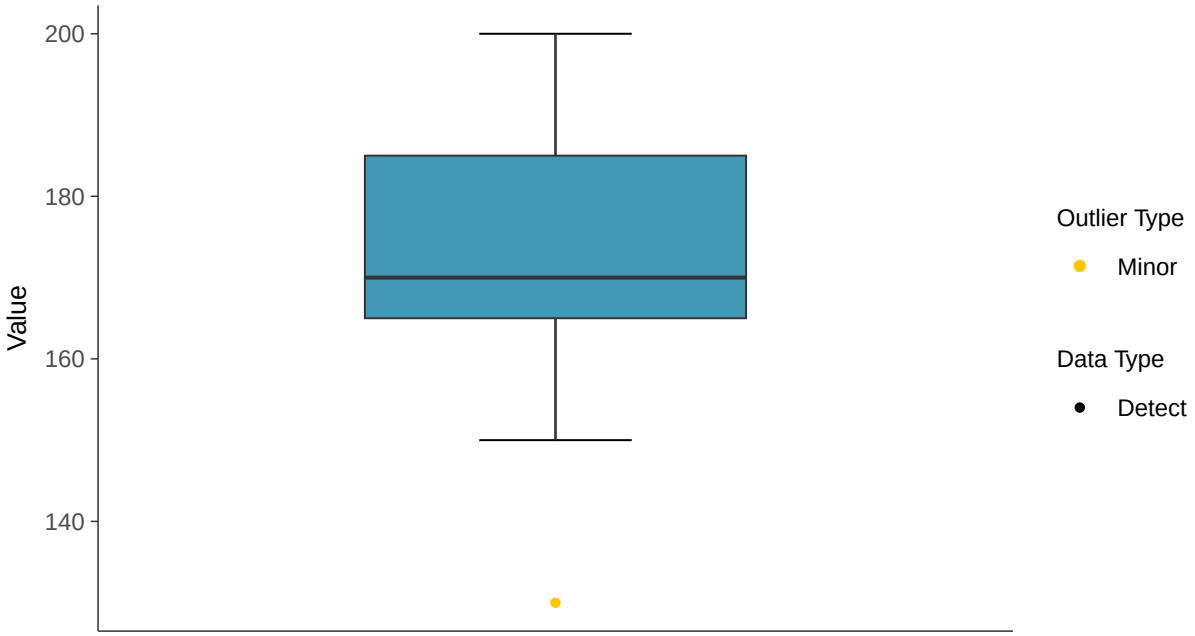
ID: 1_41_4_107





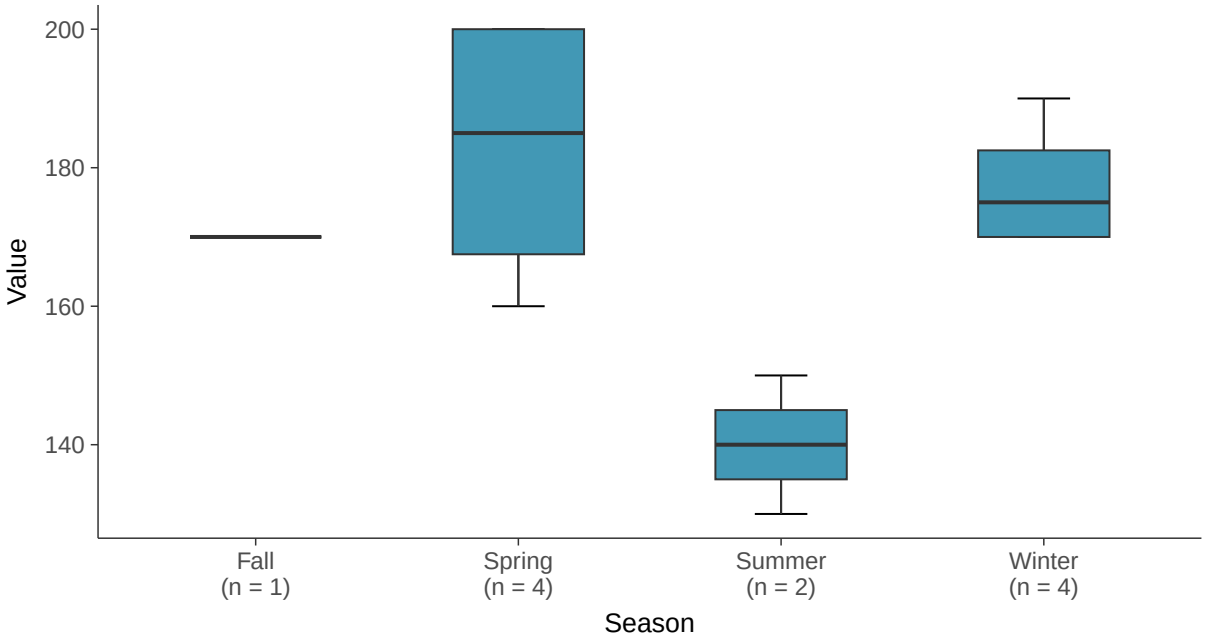
Boxplot

Calcium, MW-31 (mg/L)



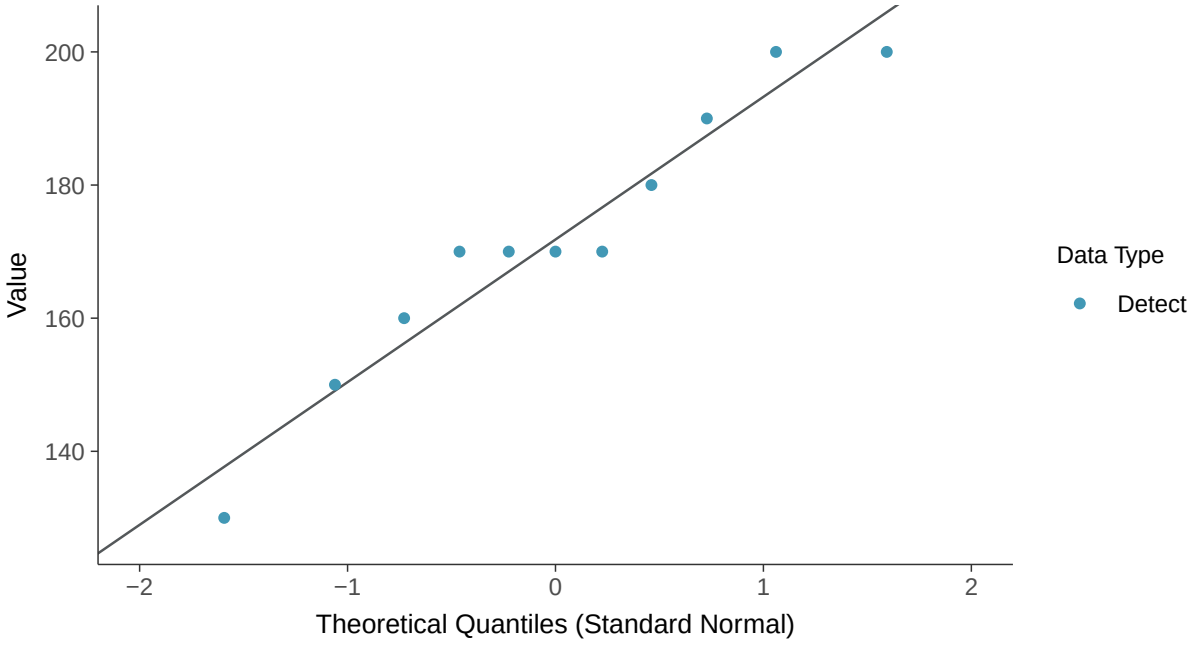
Boxplot by Season

Calcium, MW-31 (mg/L)



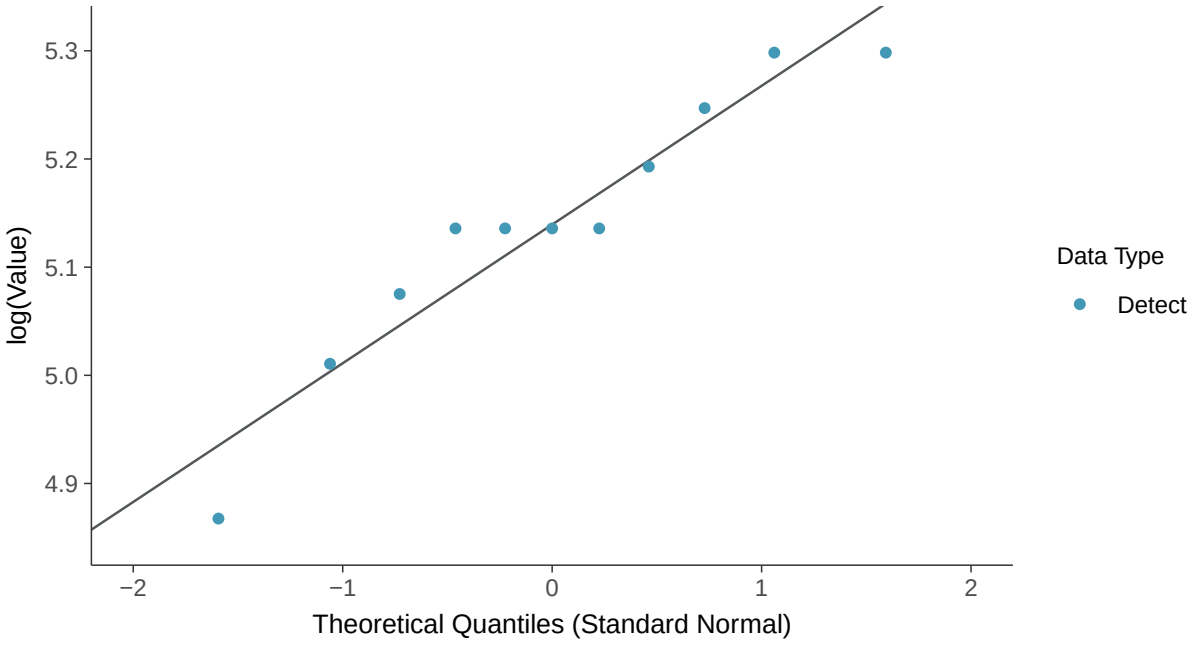
Normal Q-Q plot

Calcium, MW-31 (mg/L)



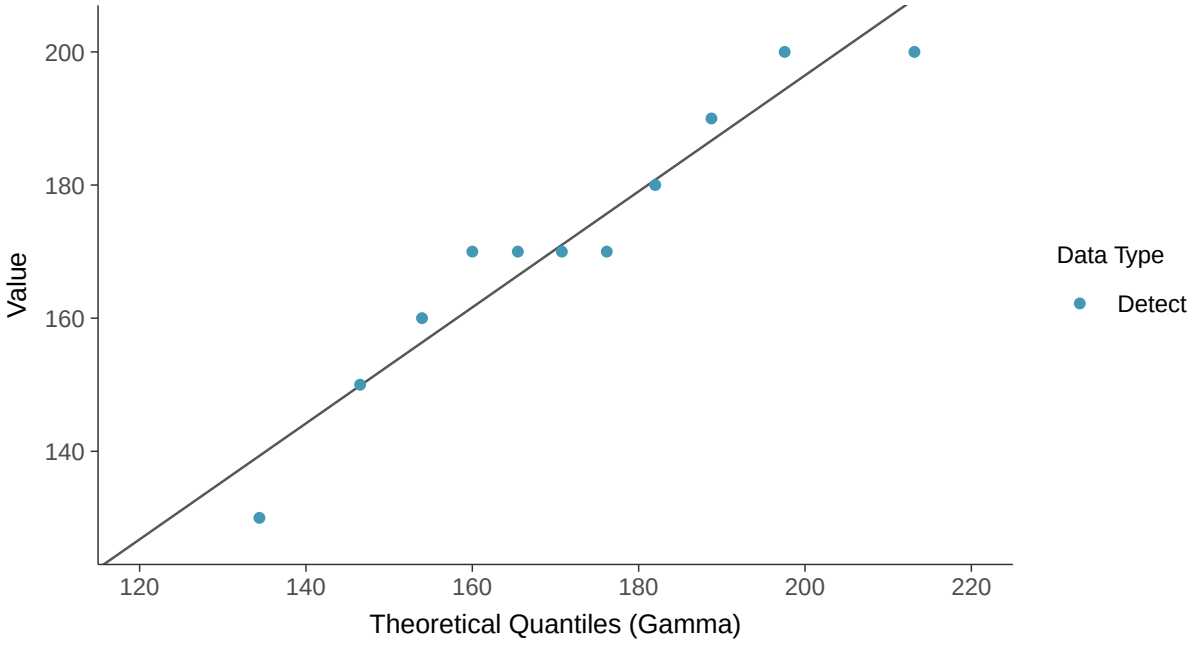
Lognormal Q-Q plot

Calcium, MW-31 (mg/L)



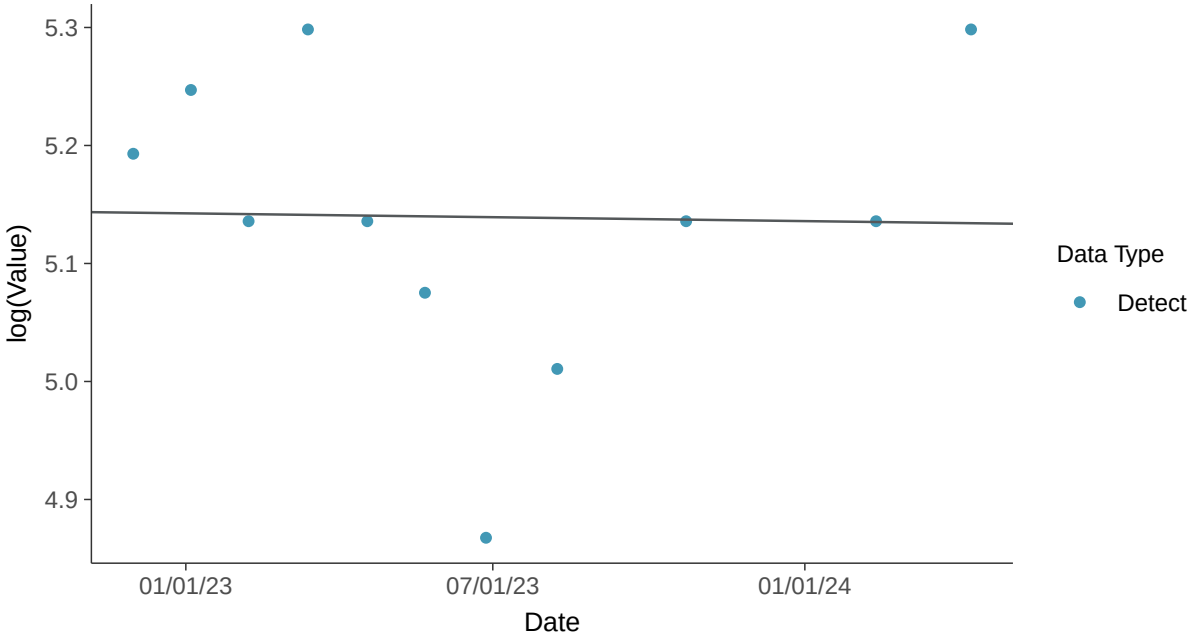
Gamma Q-Q plot

Calcium, MW-31 (mg/L)



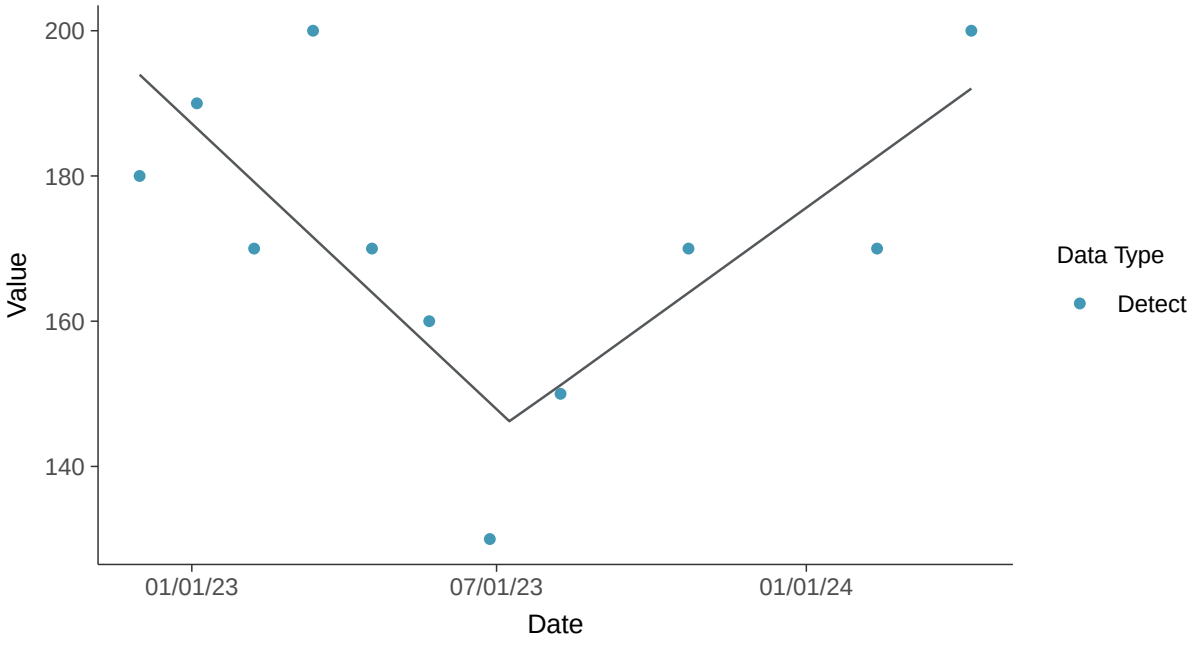
Trend Regression: Lognormal MLE

Calcium, MW-31 (mg/L)



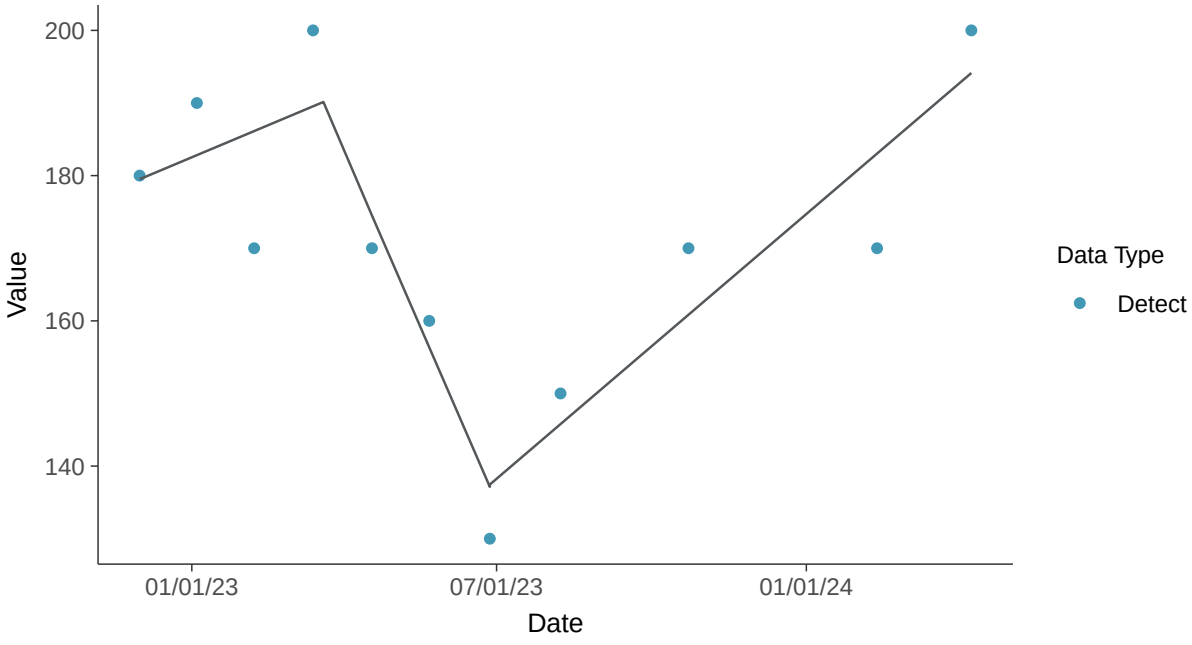
Trend Regression: Piecewise Linear-Linear

Calcium, MW-31 (mg/L)



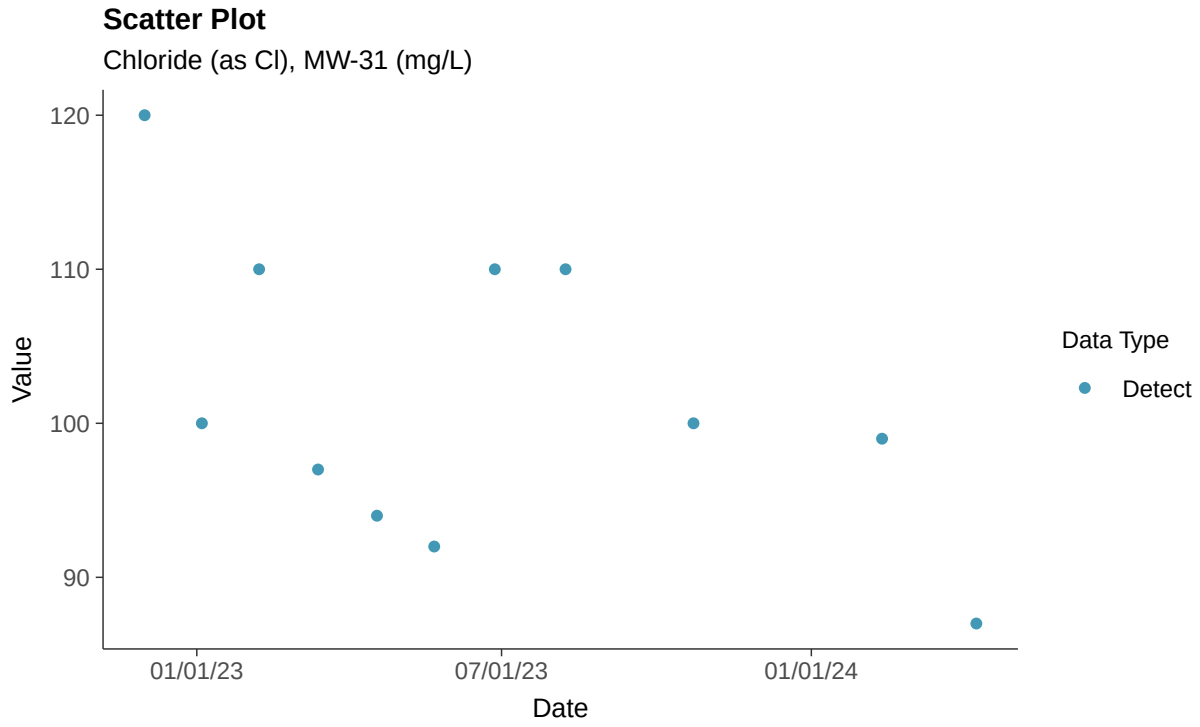
Trend Regression: Piecewise Linear-Linear-Linear

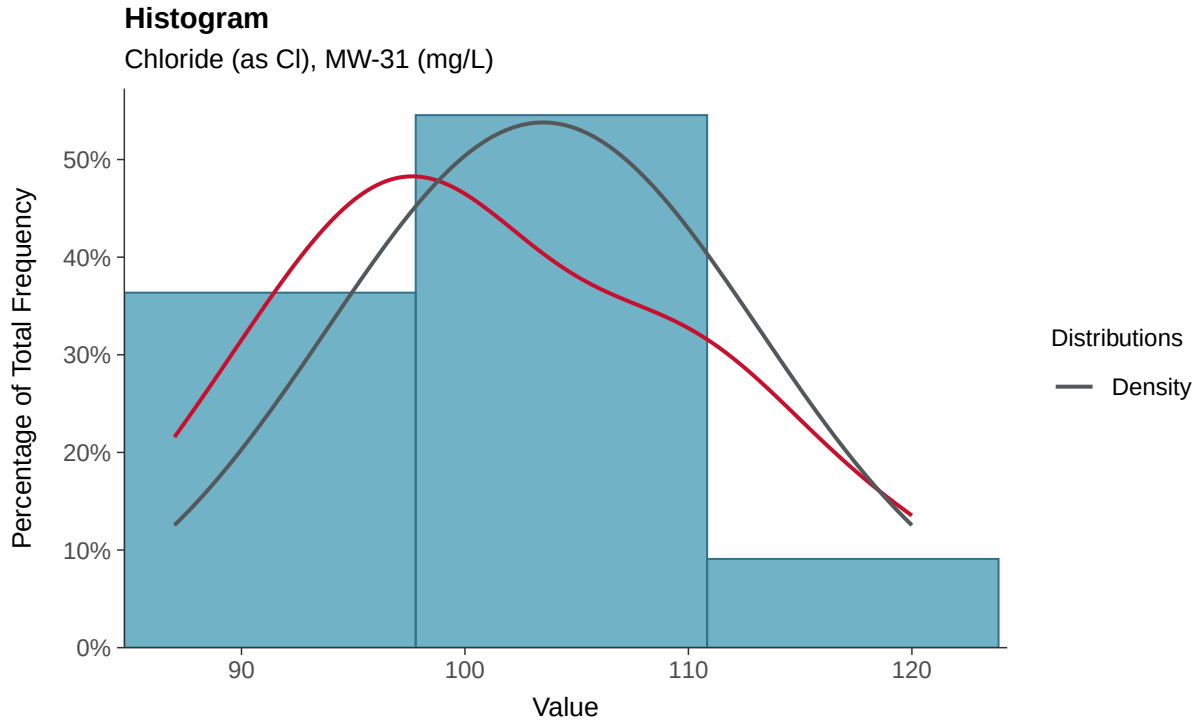
Calcium, MW-31 (mg/L)



Appendix III: Chloride (as Cl), MW-31

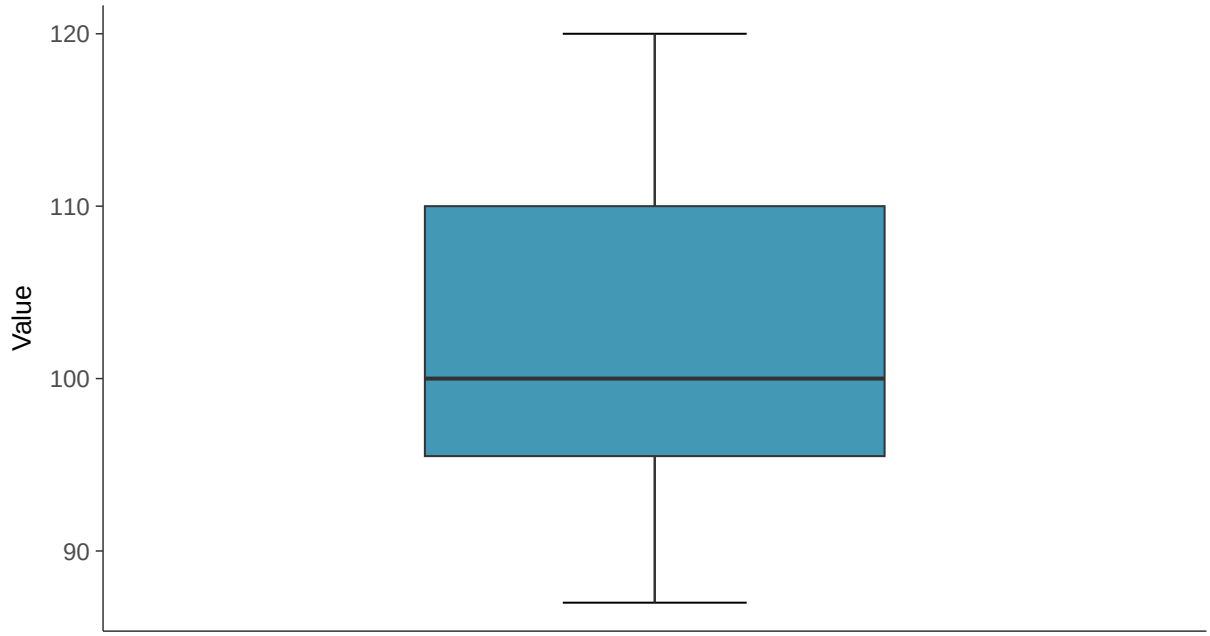
ID: 1_41_4_108





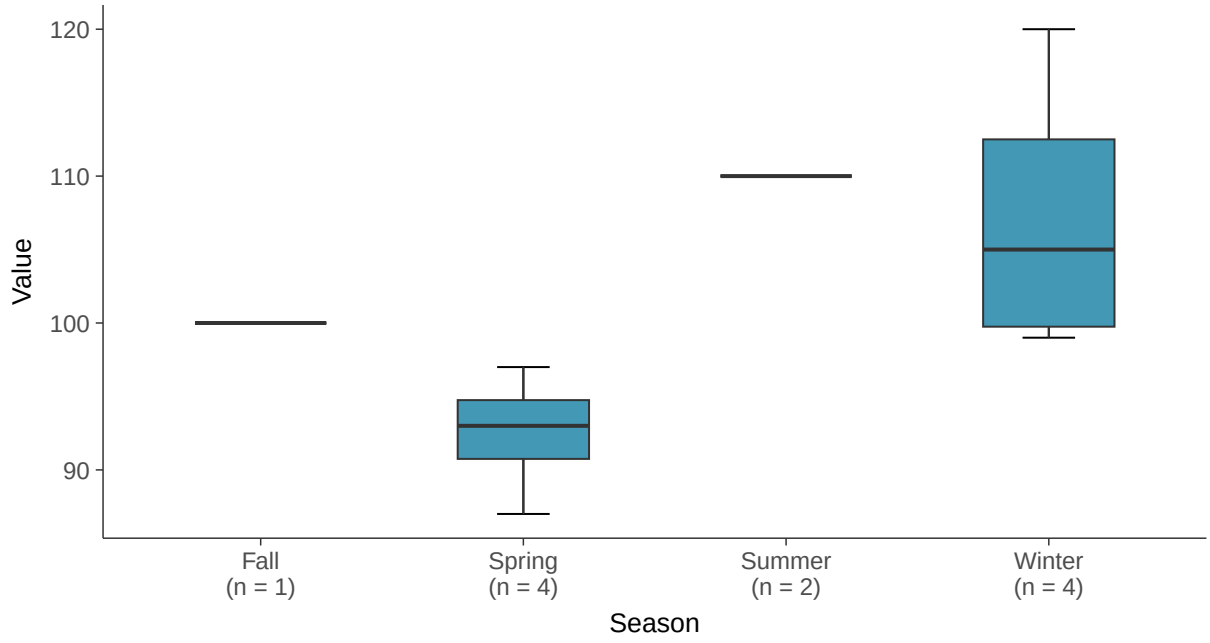
Boxplot

Chloride (as Cl), MW-31 (mg/L)



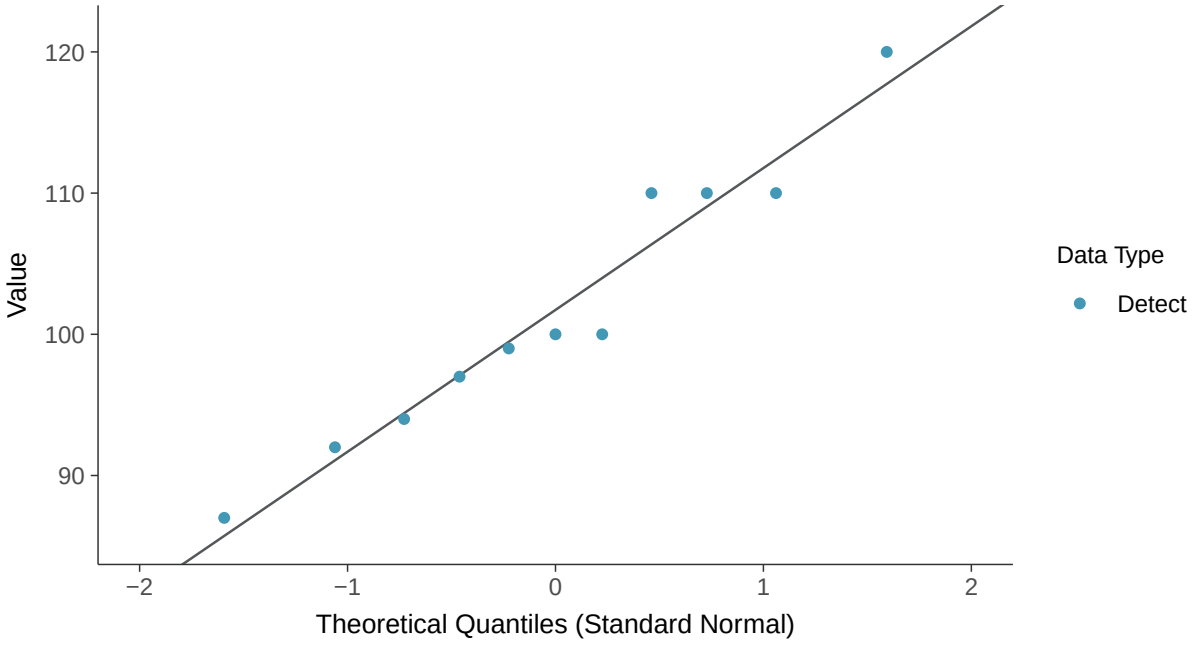
Boxplot by Season

Chloride (as Cl), MW-31 (mg/L)



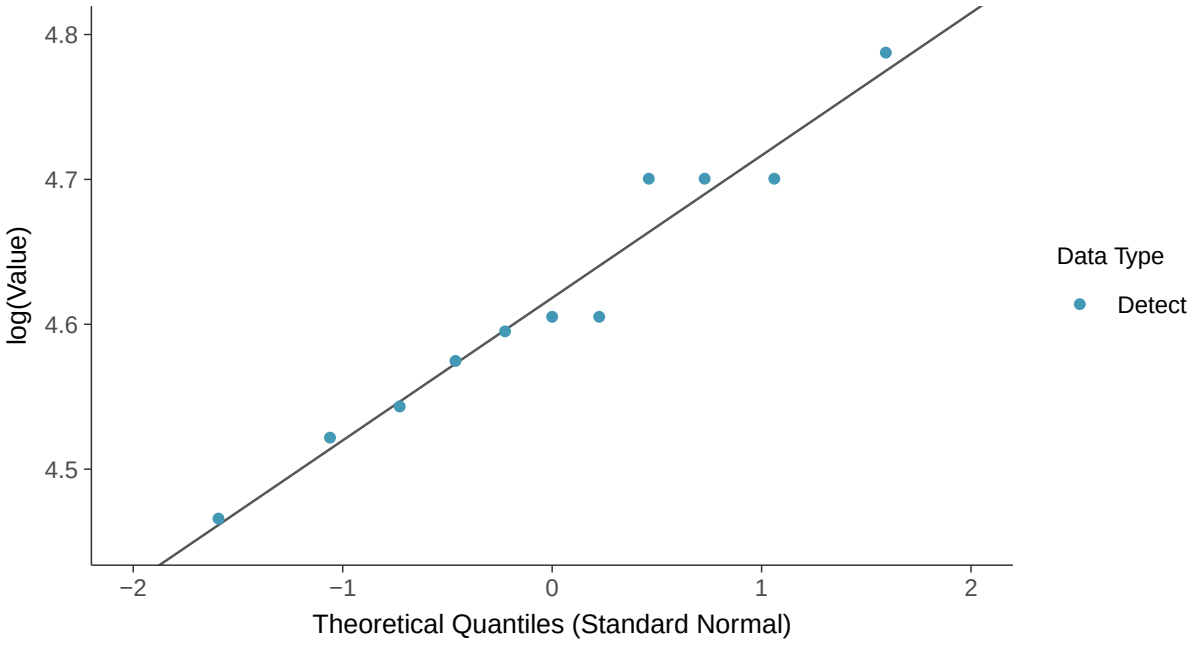
Normal Q-Q plot

Chloride (as Cl), MW-31 (mg/L)



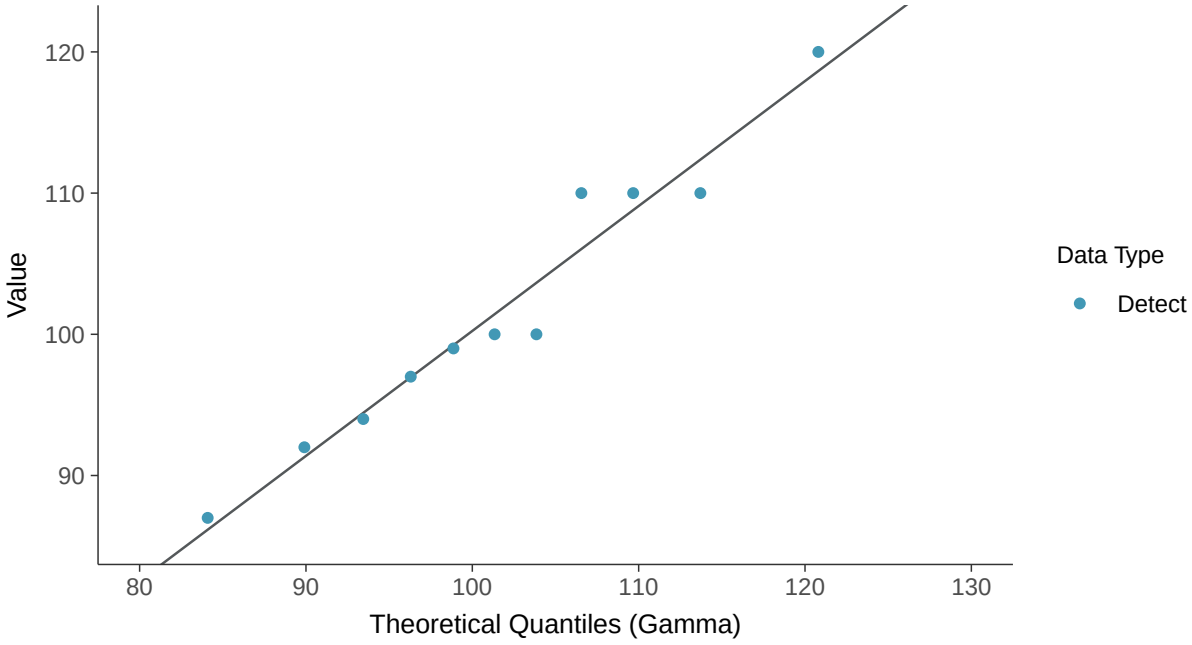
Lognormal Q-Q plot

Chloride (as Cl), MW-31 (mg/L)



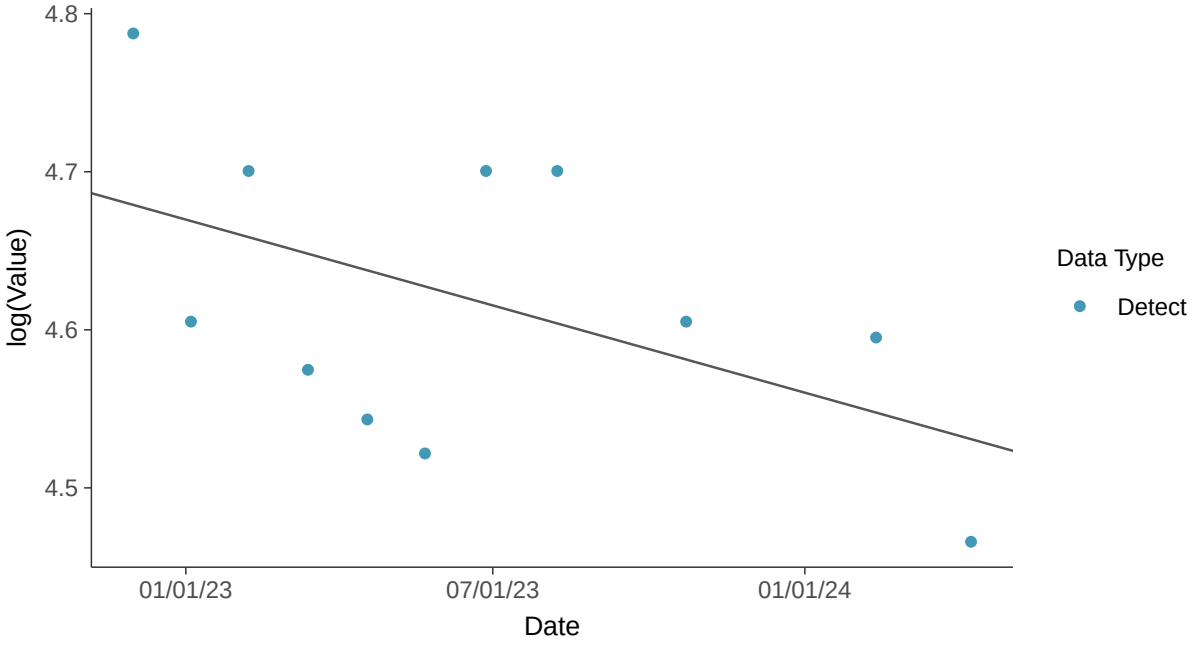
Gamma Q-Q plot

Chloride (as Cl), MW-31 (mg/L)



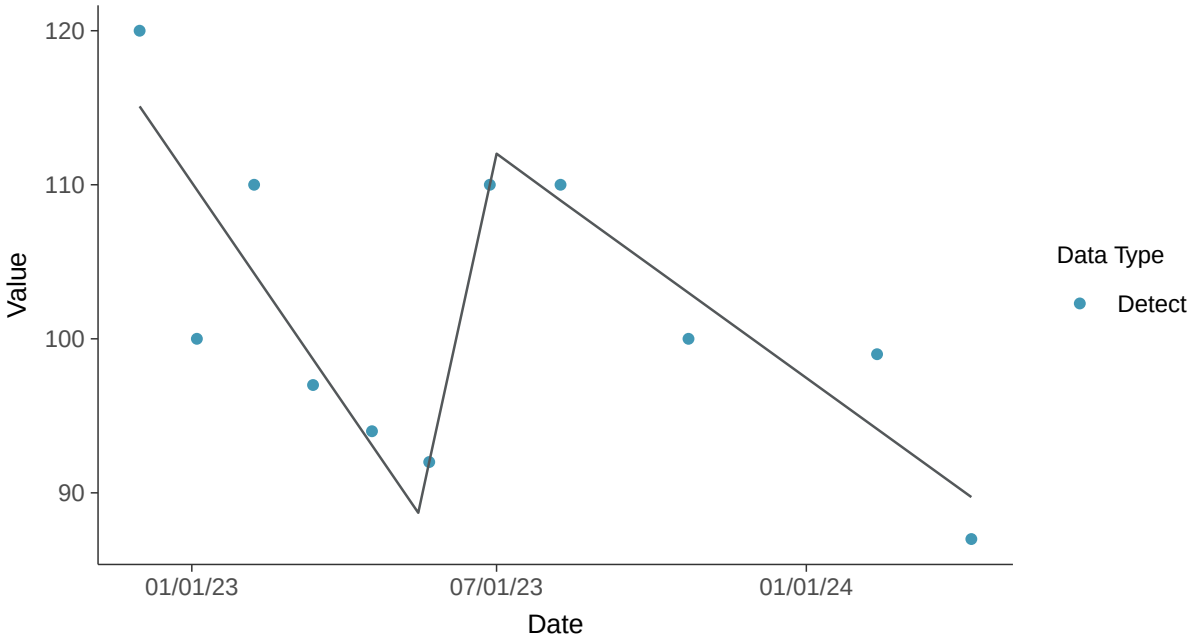
Trend Regression: Lognormal MLE

Chloride (as Cl), MW-31 (mg/L)



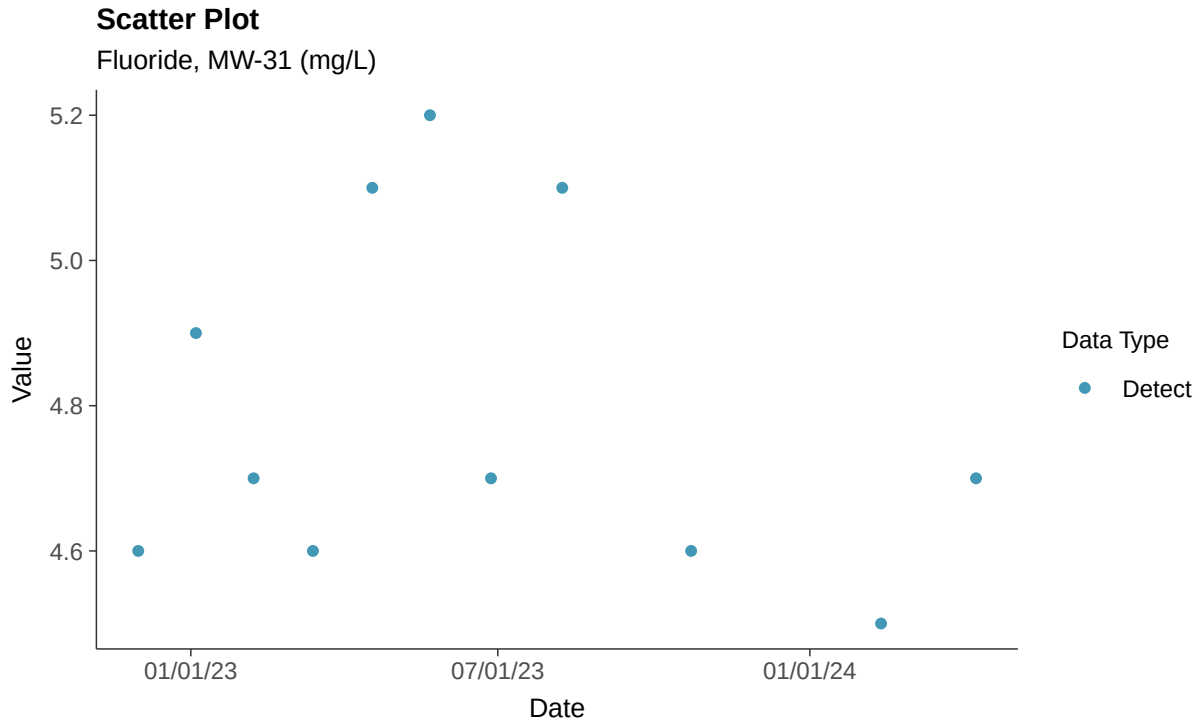
Trend Regression: Piecewise Linear-Linear-Linear

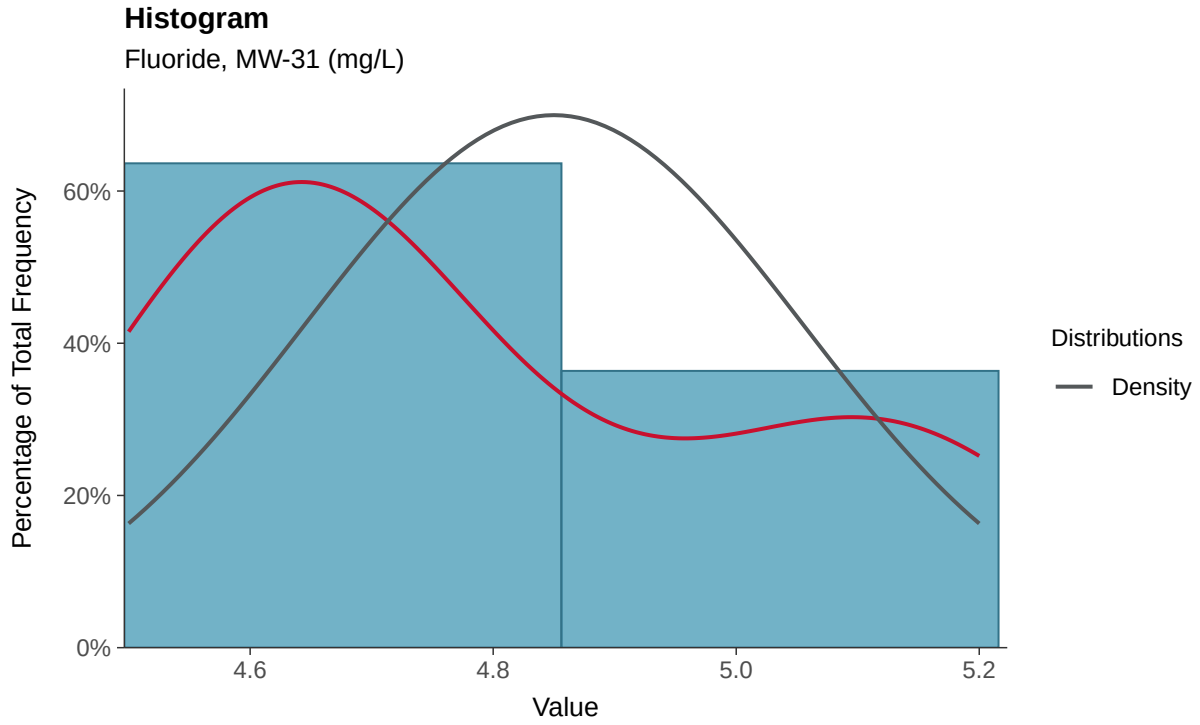
Chloride (as Cl), MW-31 (mg/L)



Appendix III: Fluoride, MW-31

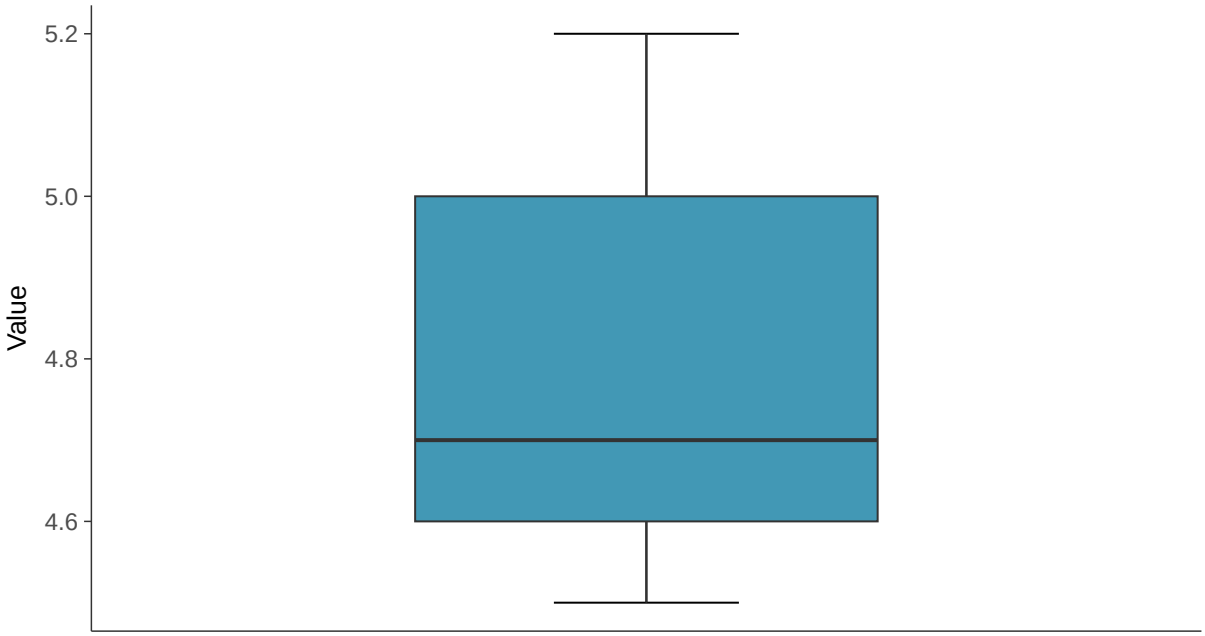
ID: 1_41_4_112





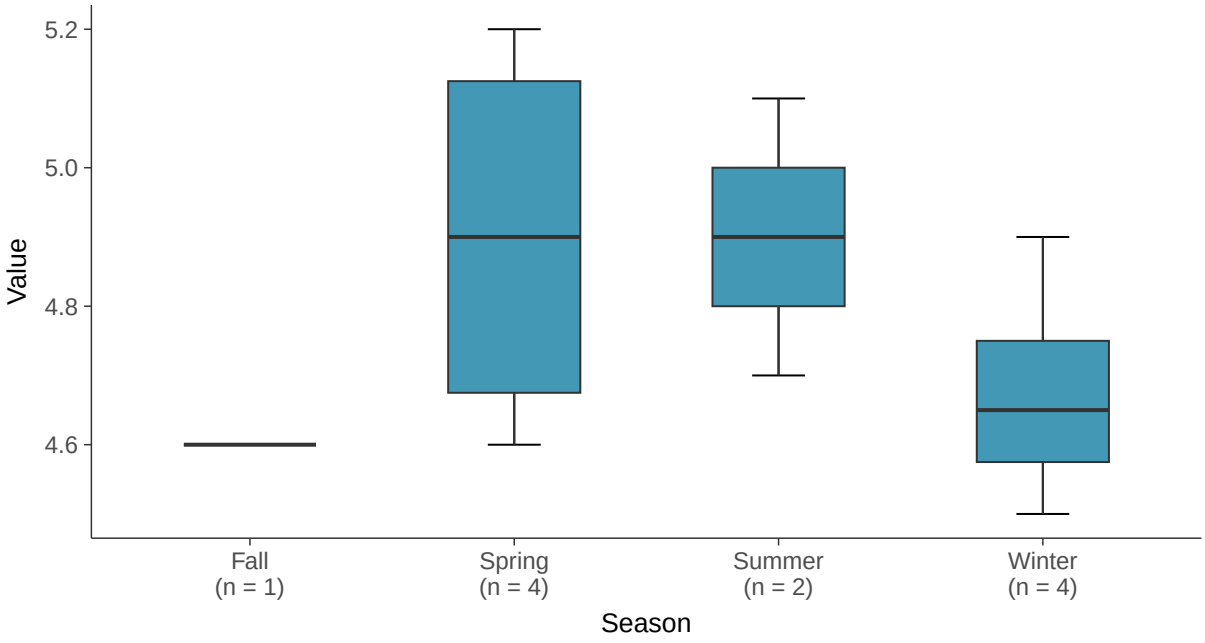
Boxplot

Fluoride, MW-31 (mg/L)



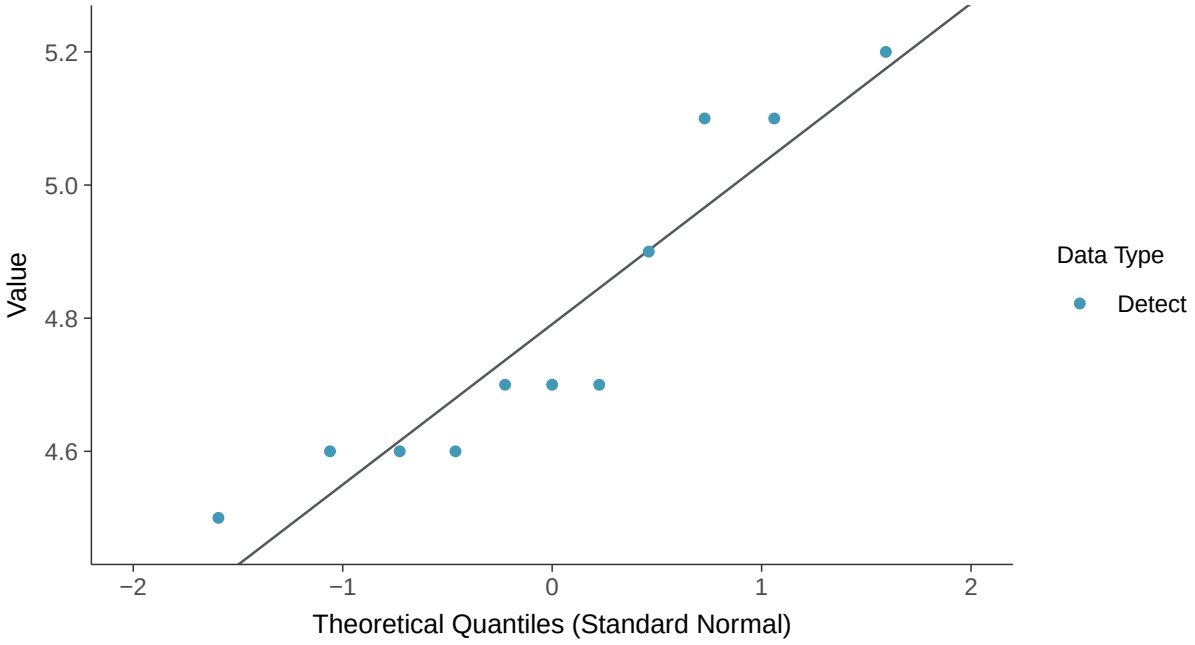
Boxplot by Season

Fluoride, MW-31 (mg/L)



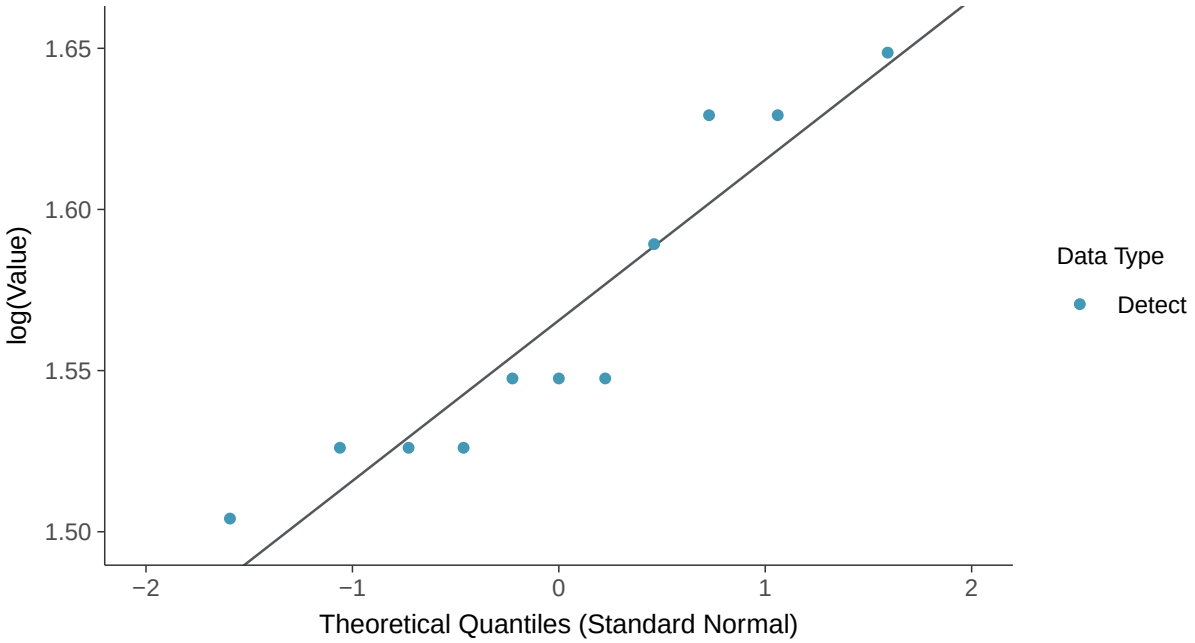
Normal Q-Q plot

Fluoride, MW-31 (mg/L)



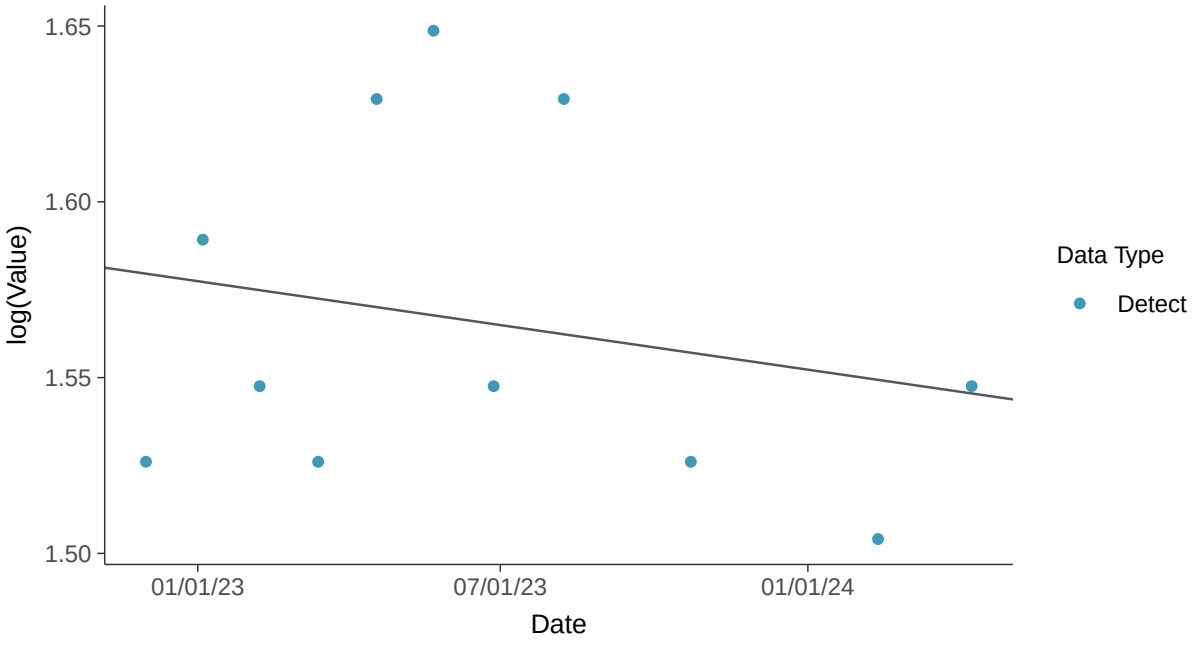
Lognormal Q-Q plot

Fluoride, MW-31 (mg/L)



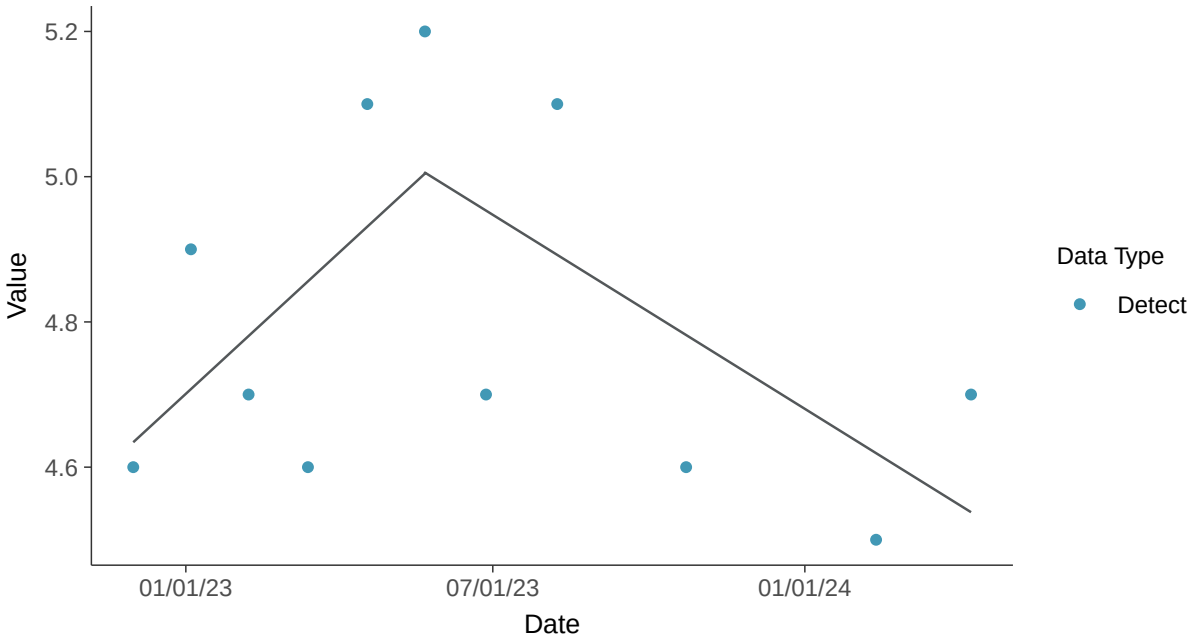
Trend Regression: Lognormal MLE

Fluoride, MW-31 (mg/L)



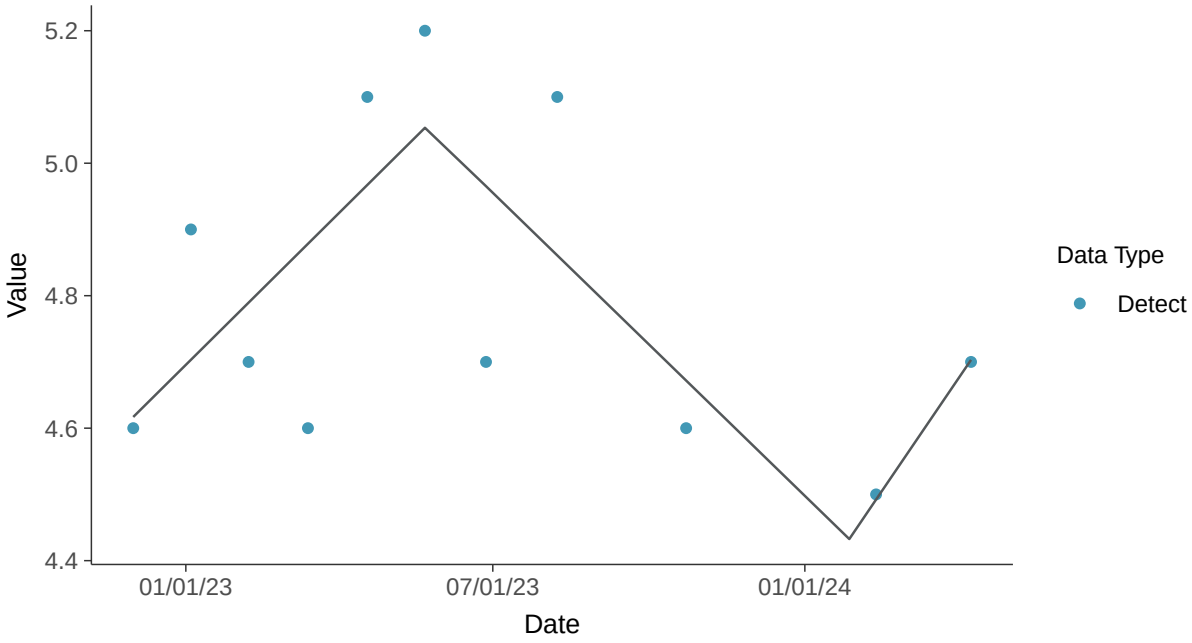
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-31 (mg/L)



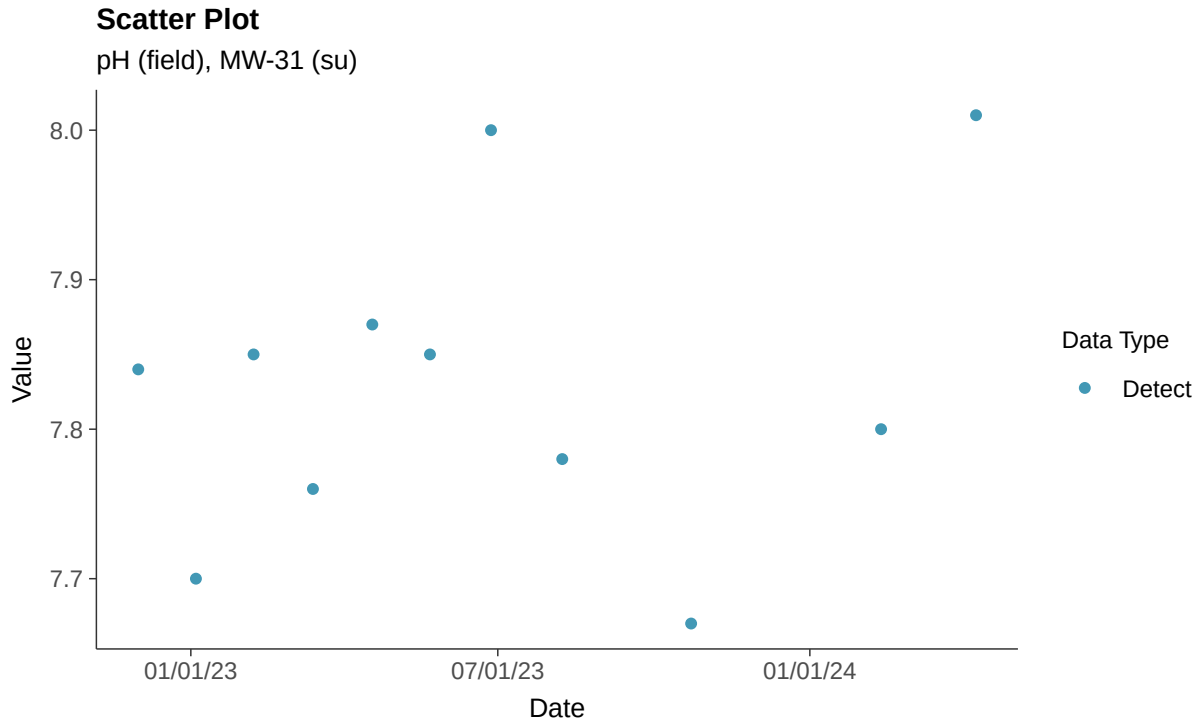
Trend Regression: Piecewise Linear-Linear-Linear

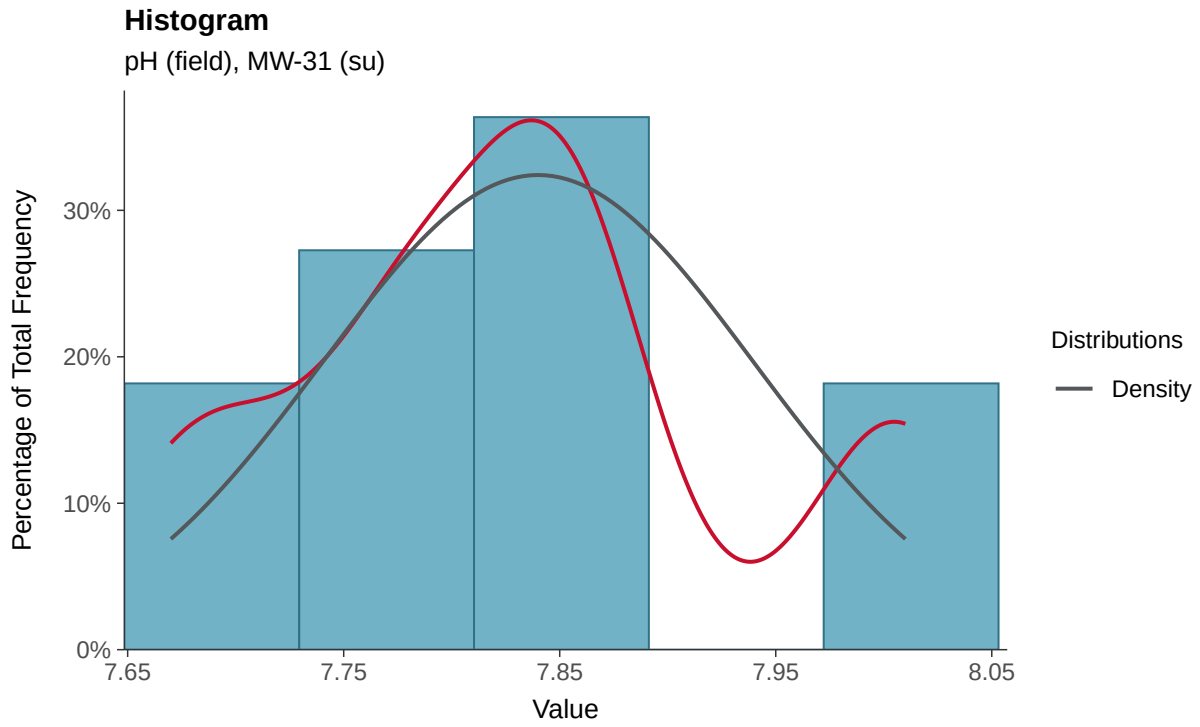
Fluoride, MW-31 (mg/L)



Appendix III: pH (field), MW-31

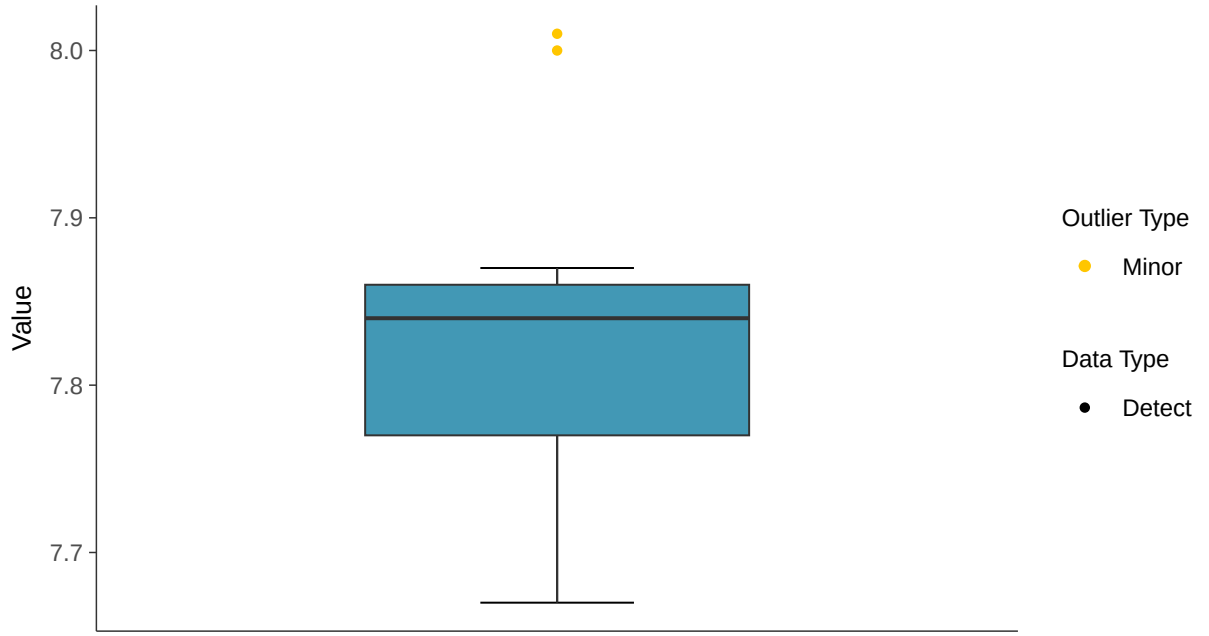
ID: 1_41_4_120





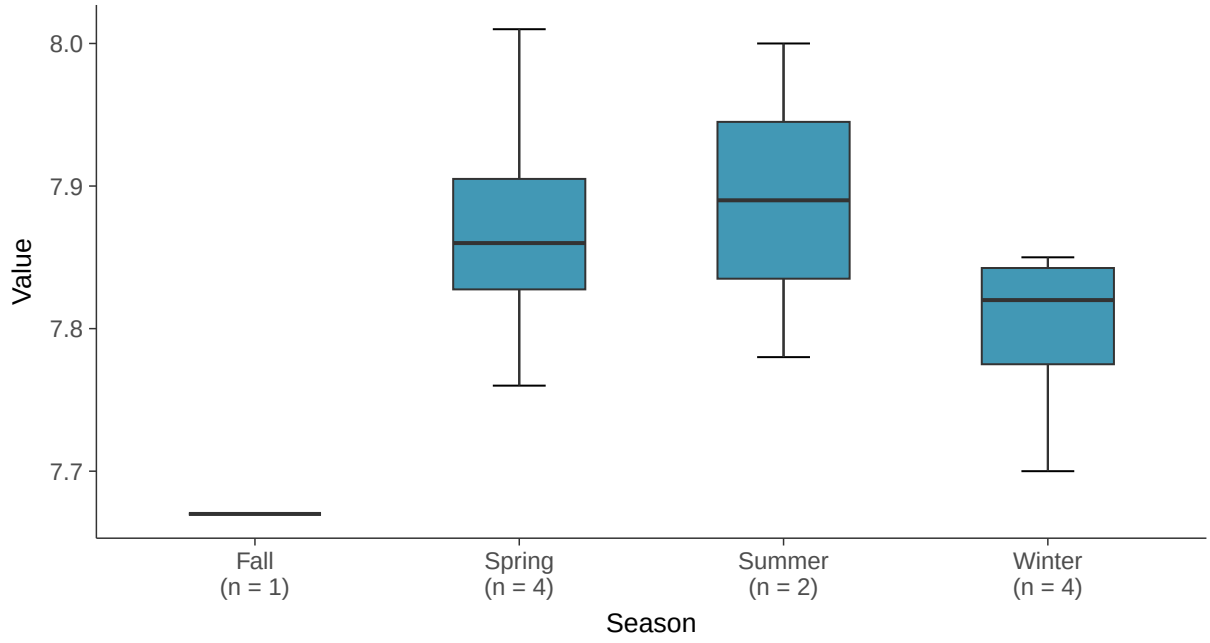
Boxplot

pH (field), MW-31 (su)



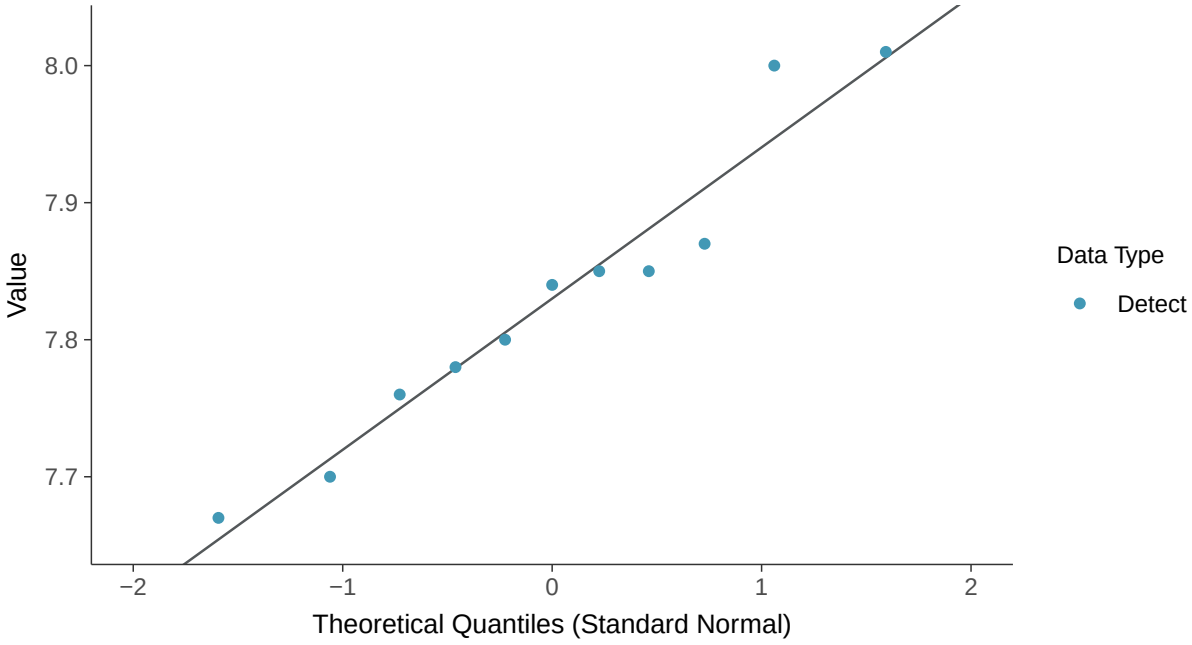
Boxplot by Season

pH (field), MW-31 (su)



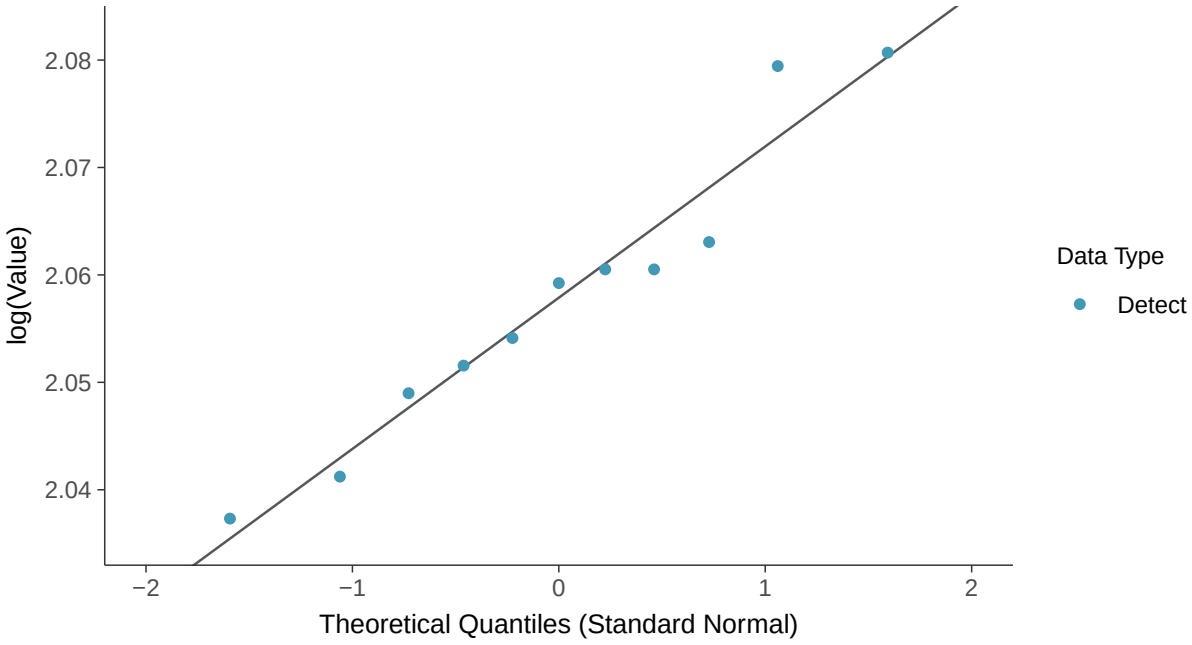
Normal Q-Q plot

pH (field), MW-31 (su)



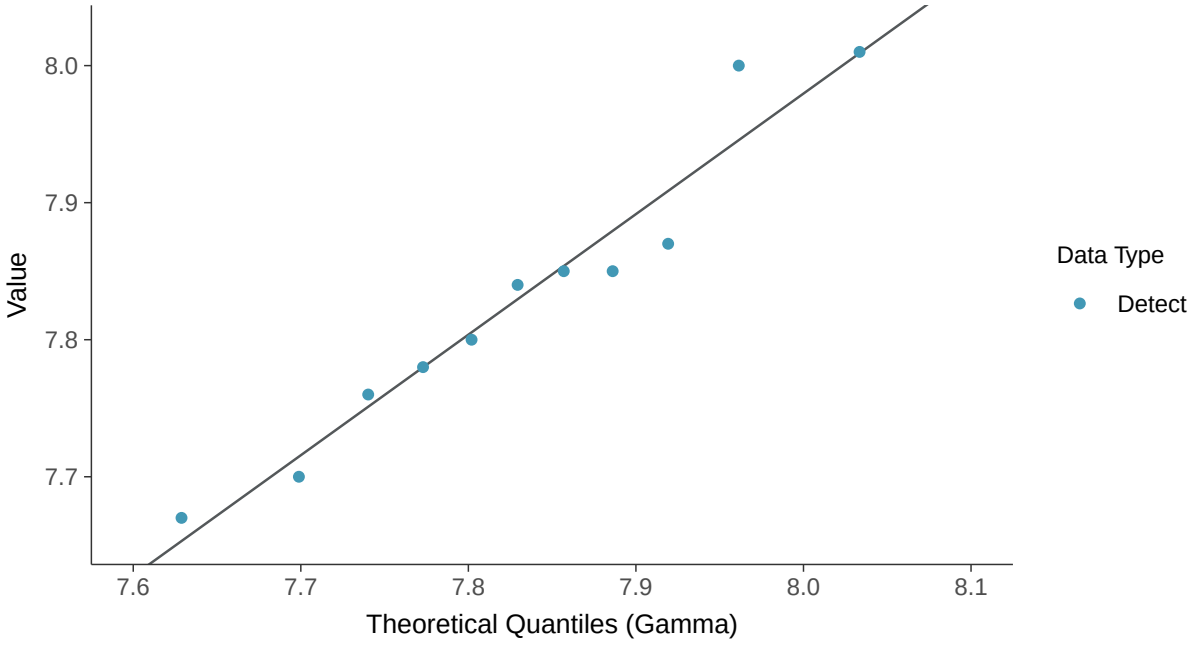
Lognormal Q-Q plot

pH (field), MW-31 (su)



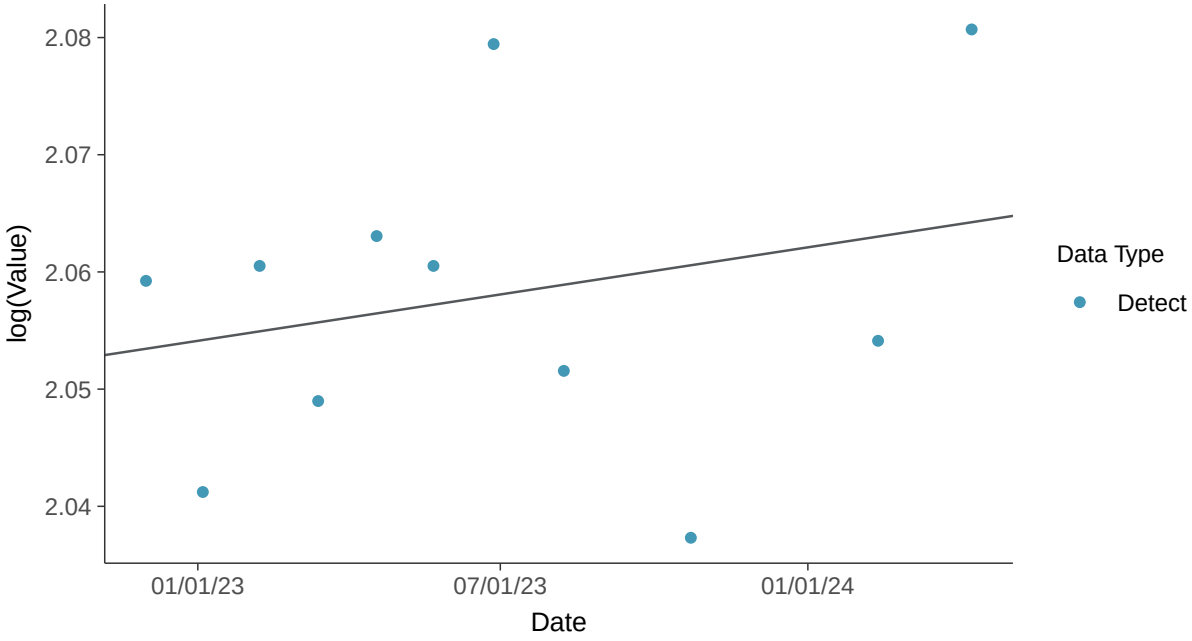
Gamma Q-Q plot

pH (field), MW-31 (su)



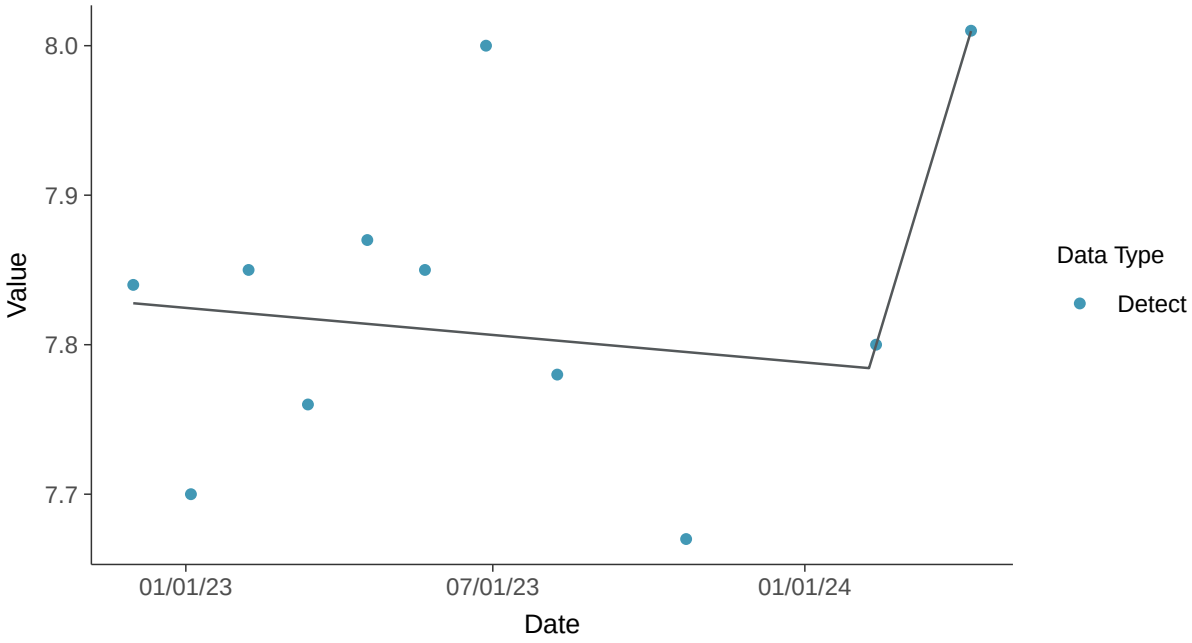
Trend Regression: Lognormal MLE

pH (field), MW-31 (su)



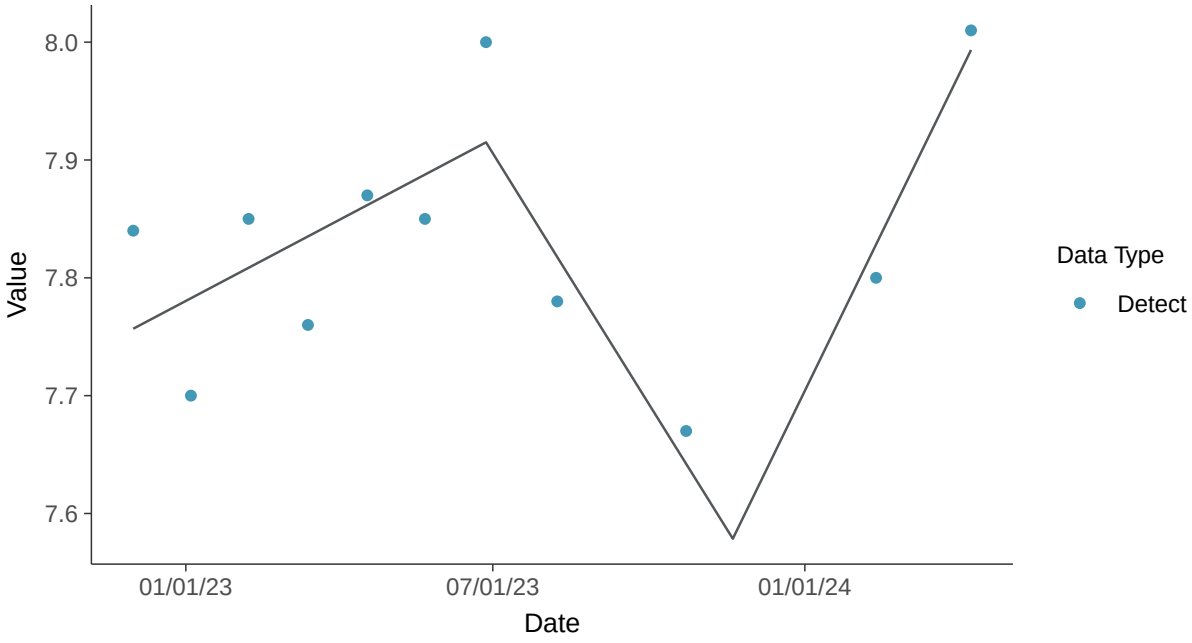
Trend Regression: Piecewise Linear-Linear

pH (field), MW-31 (su)



Trend Regression: Piecewise Linear-Linear-Linear

pH (field), MW-31 (su)

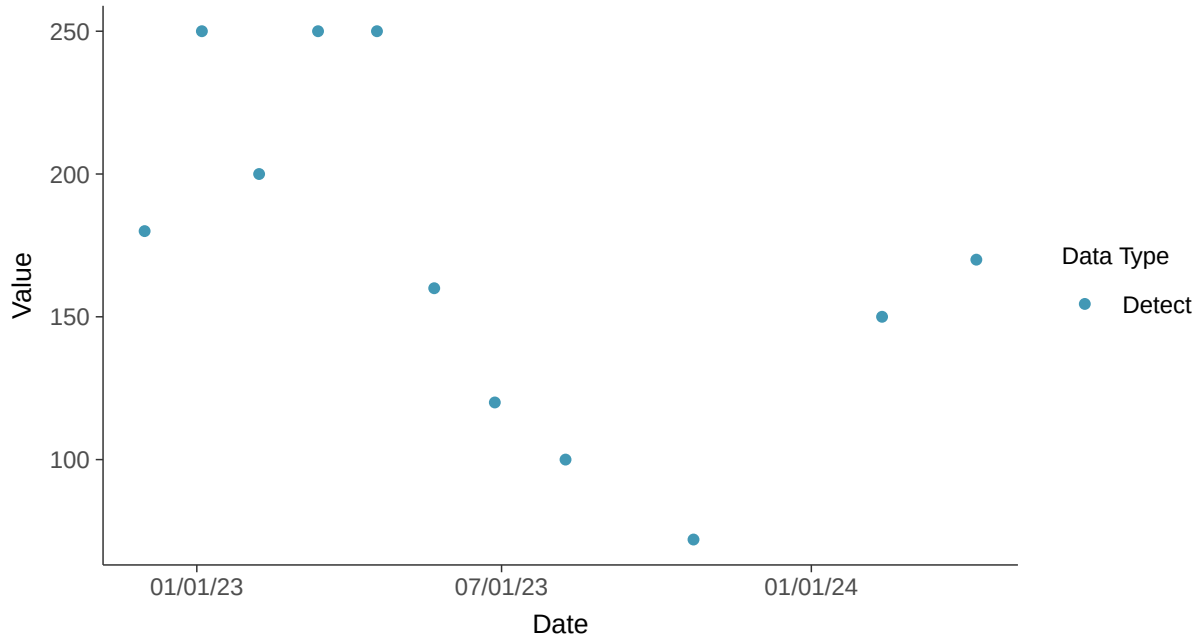


Appendix III: Sulfate (as SO4), MW-31

ID: 1_41_4_124

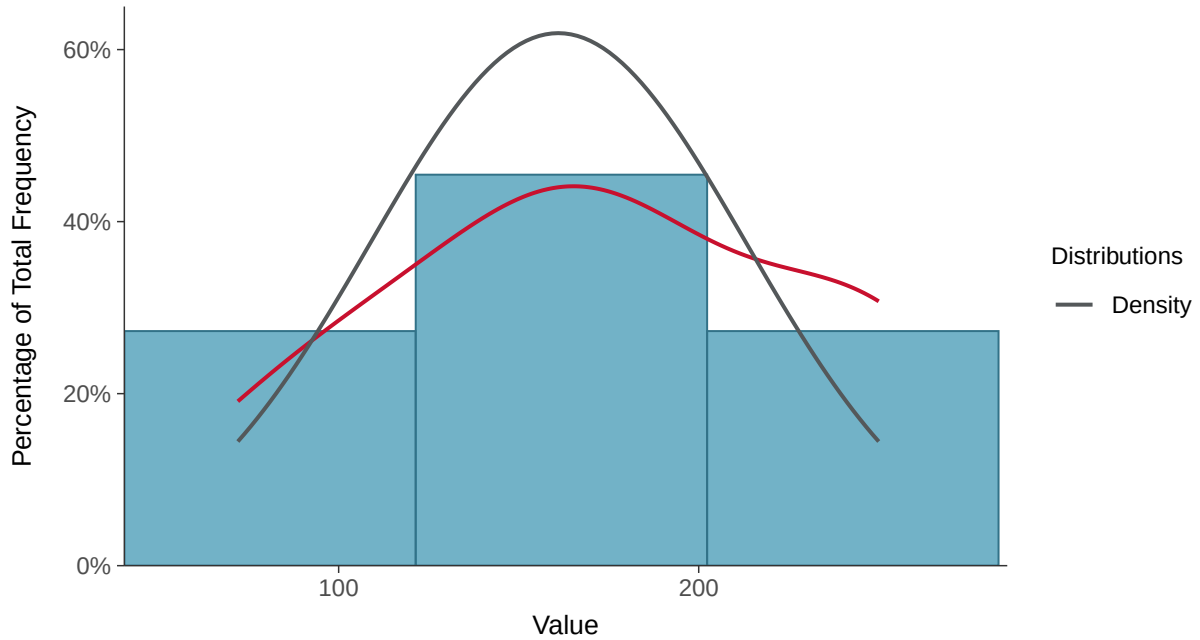
Scatter Plot

Sulfate (as SO4), MW-31 (mg/L)



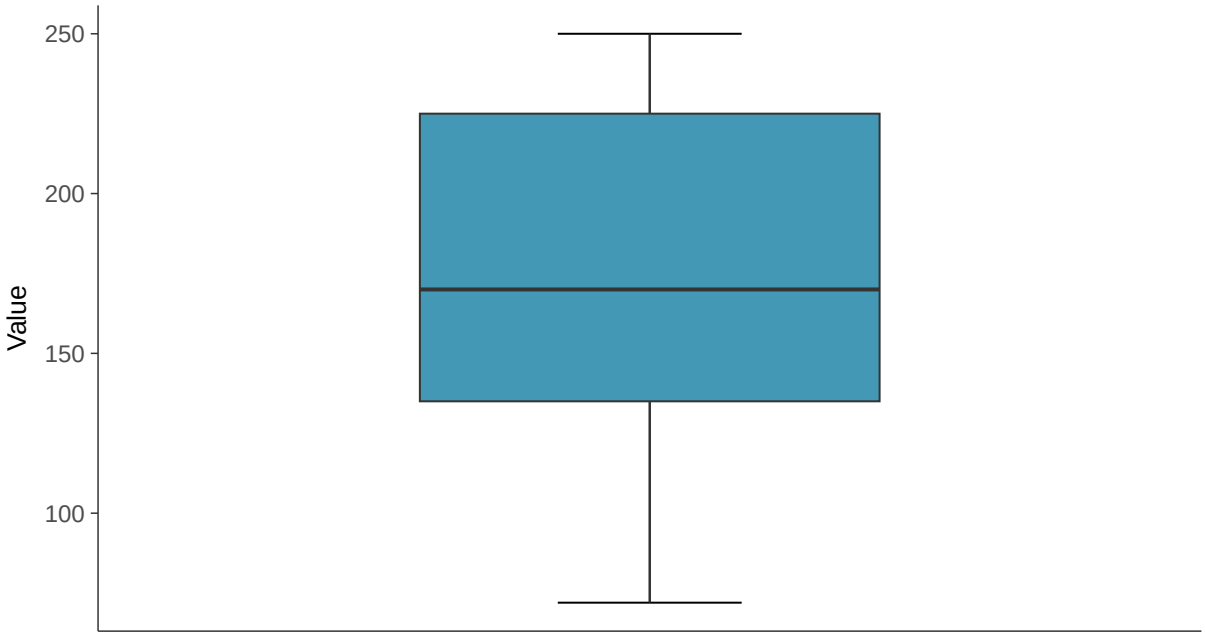
Histogram

Sulfate (as SO4), MW-31 (mg/L)



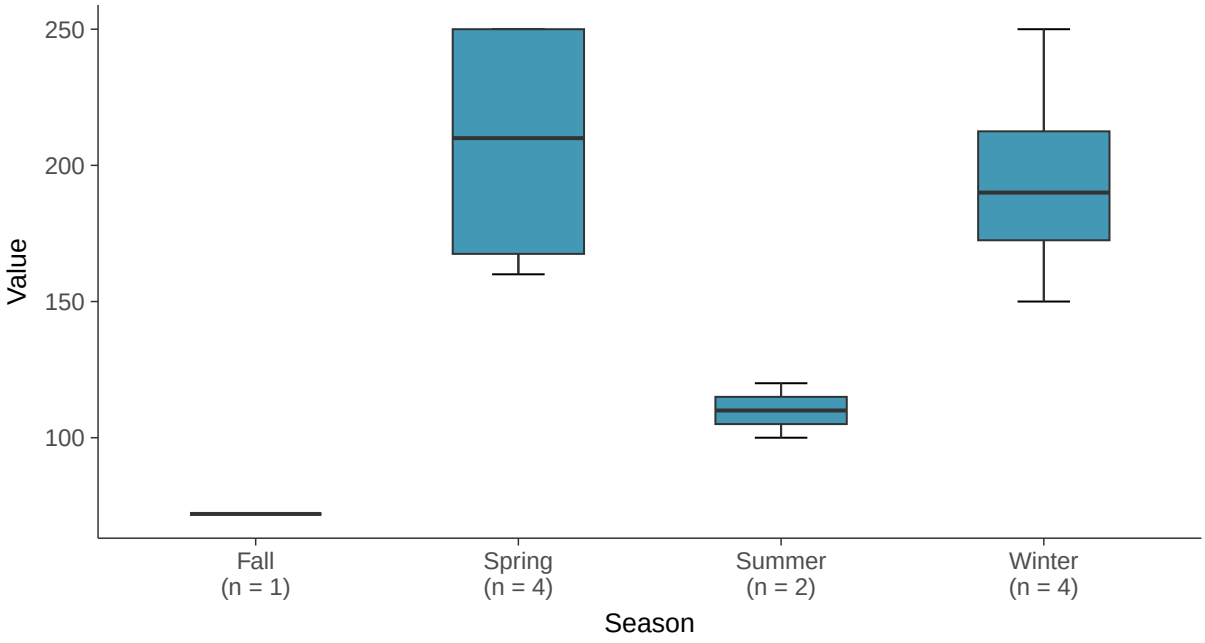
Boxplot

Sulfate (as SO4), MW-31 (mg/L)



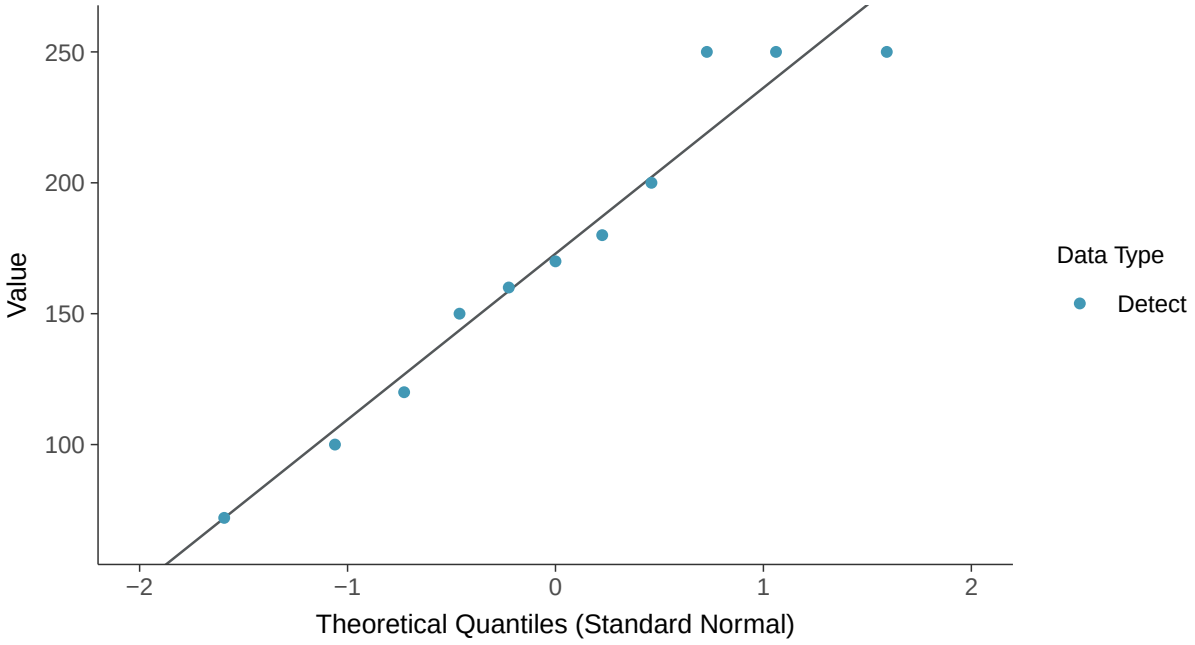
Boxplot by Season

Sulfate (as SO4), MW-31 (mg/L)



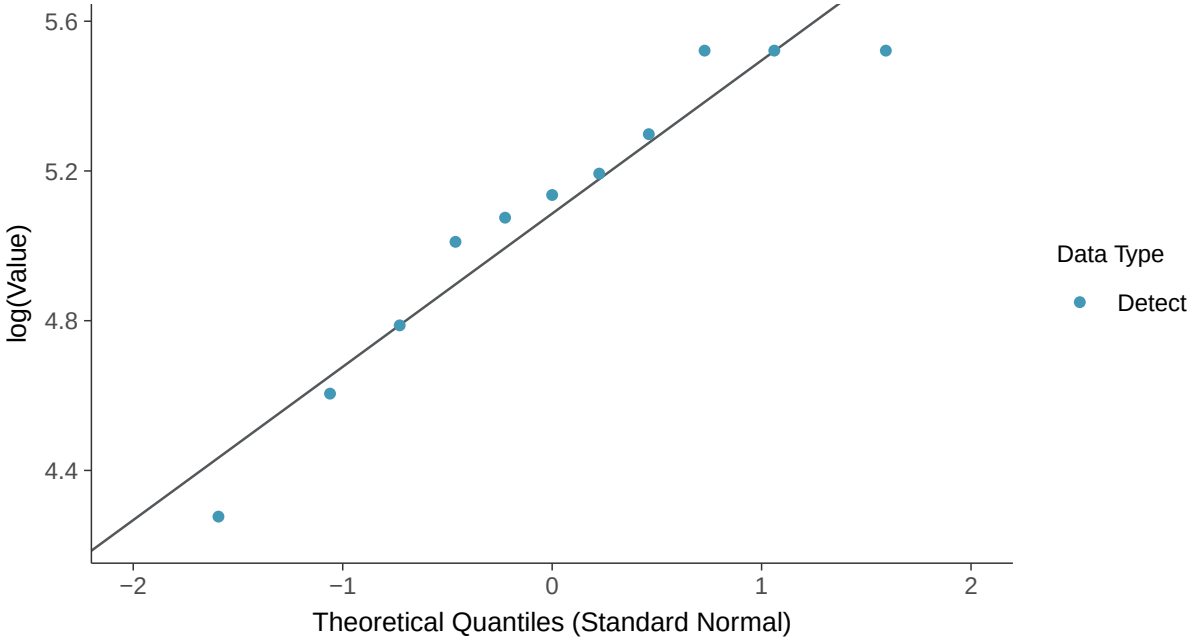
Normal Q-Q plot

Sulfate (as SO4), MW-31 (mg/L)



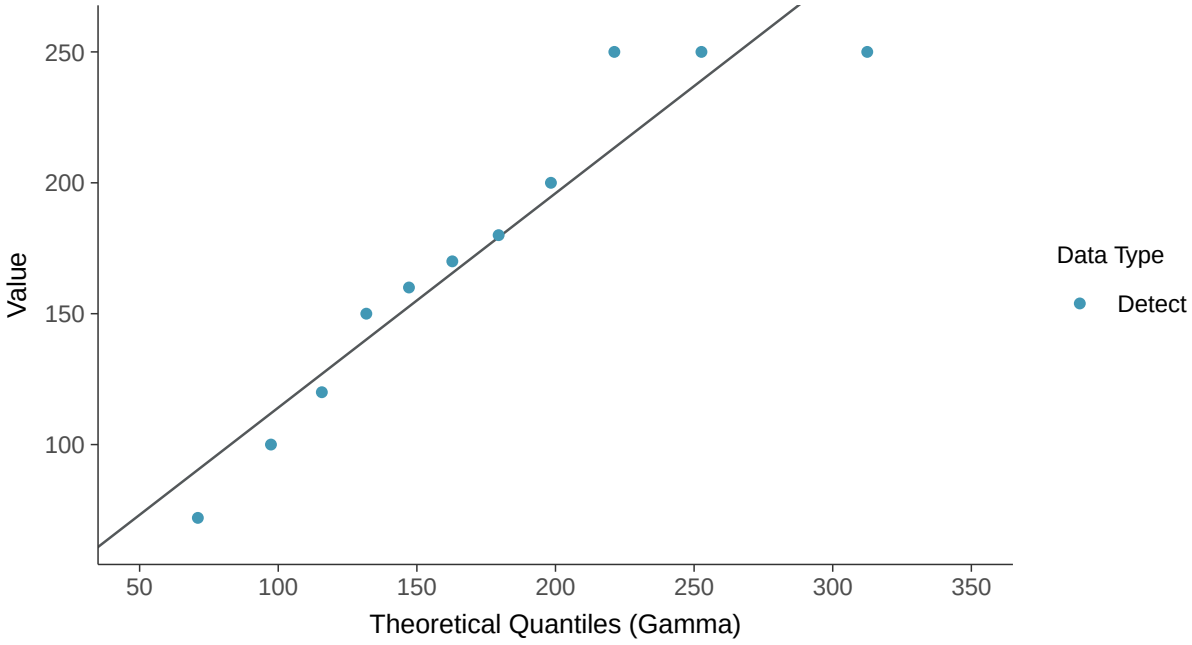
Lognormal Q-Q plot

Sulfate (as SO4), MW-31 (mg/L)



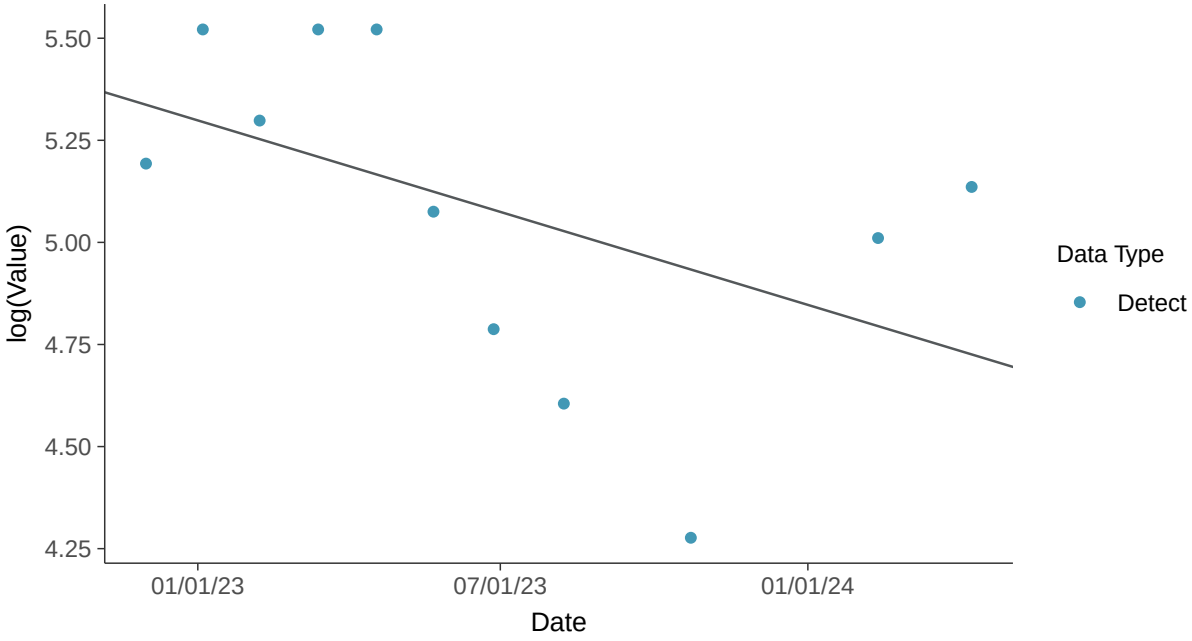
Gamma Q-Q plot

Sulfate (as SO4), MW-31 (mg/L)



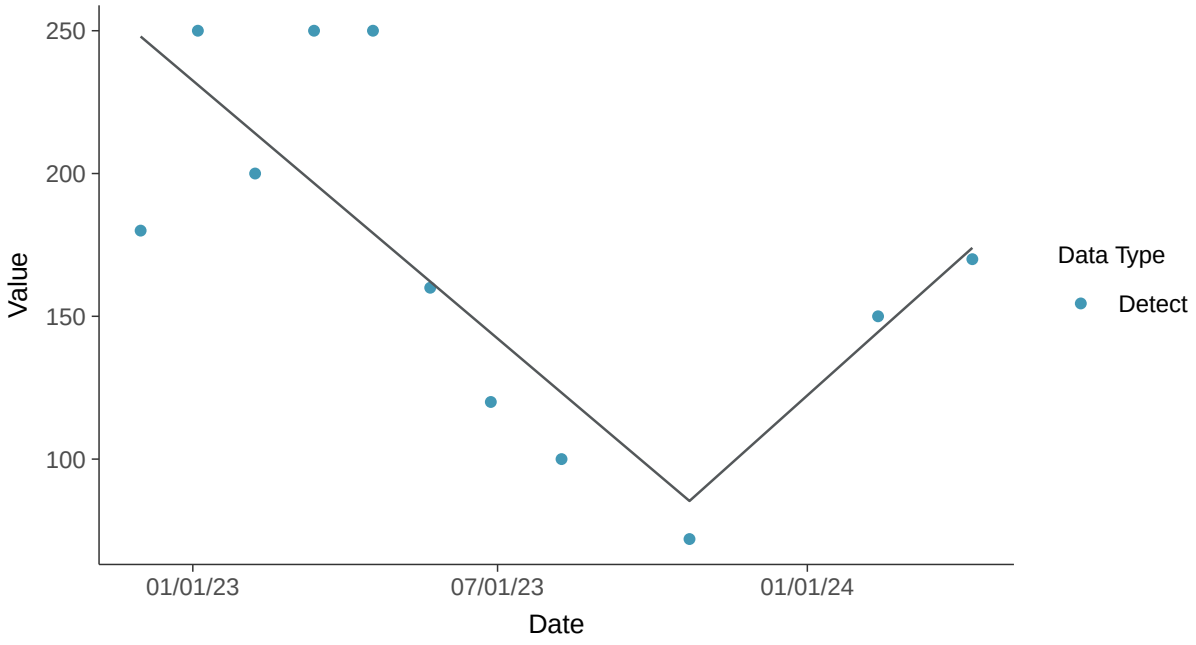
Trend Regression: Lognormal MLE

Sulfate (as SO4), MW-31 (mg/L)



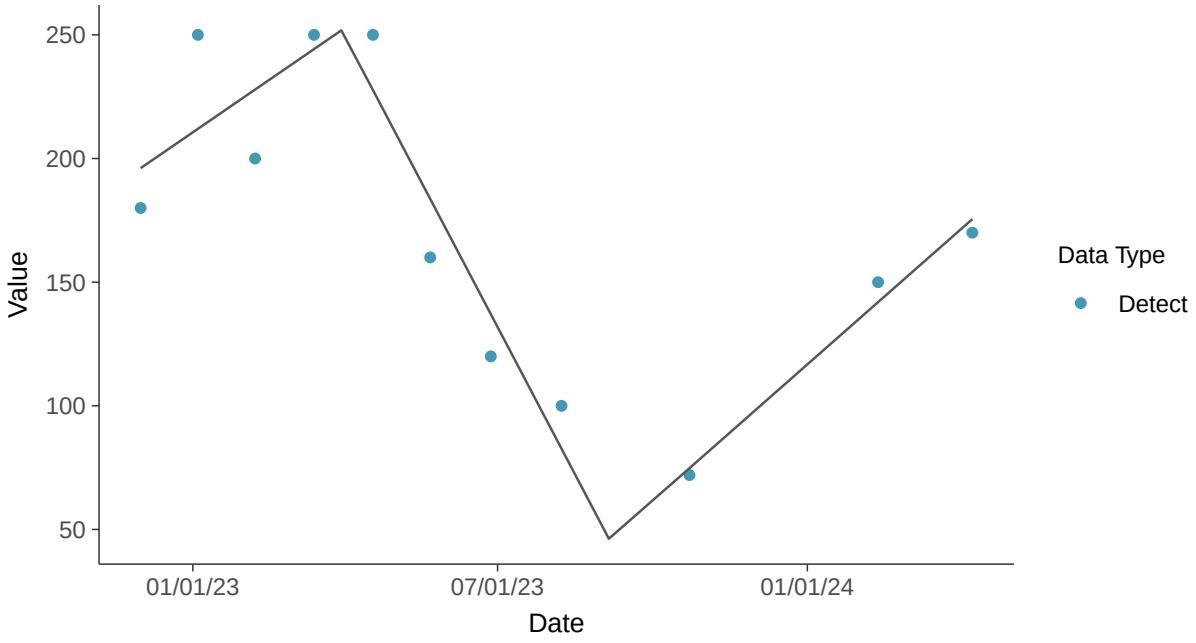
Trend Regression: Piecewise Linear-Linear

Sulfate (as SO4), MW-31 (mg/L)



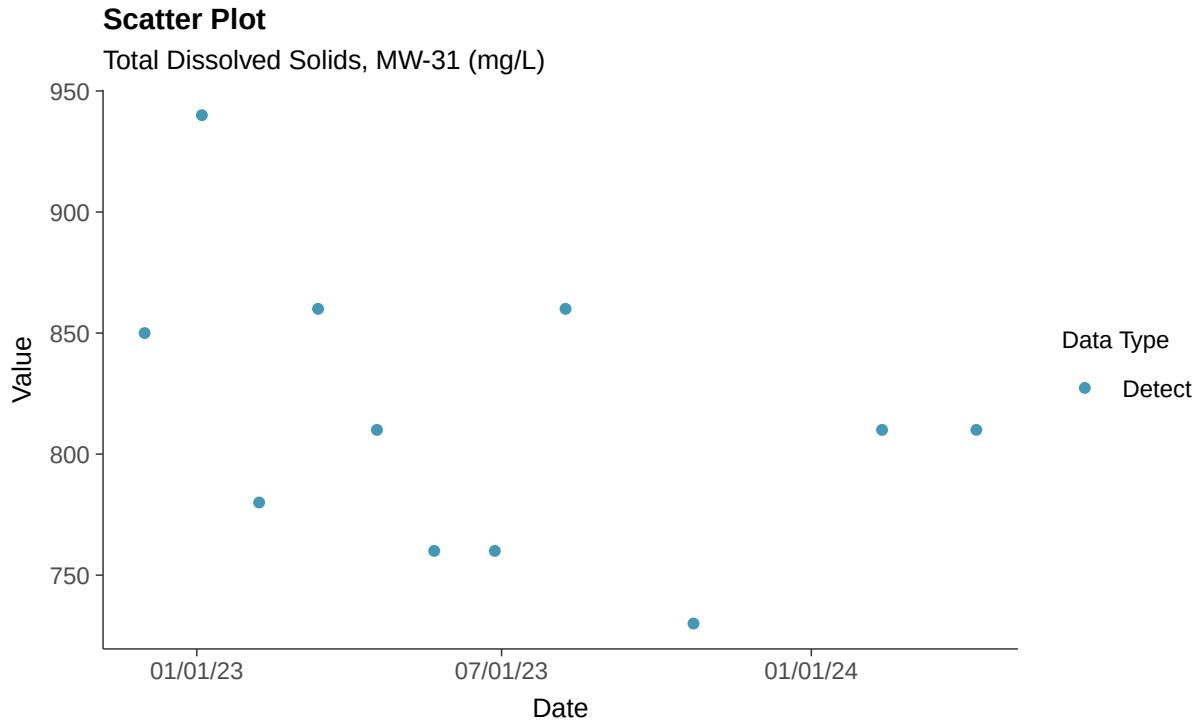
Trend Regression: Piecewise Linear-Linear-Linear

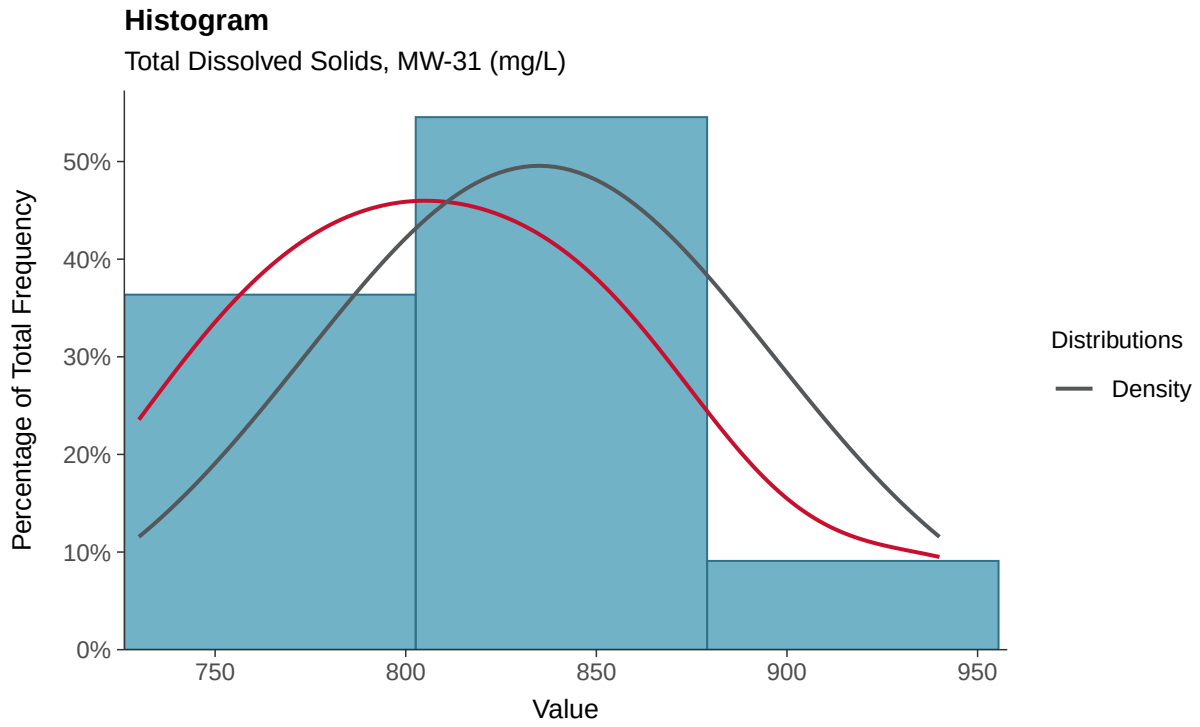
Sulfate (as SO4), MW-31 (mg/L)



Appendix III: Total Dissolved Solids, MW-31

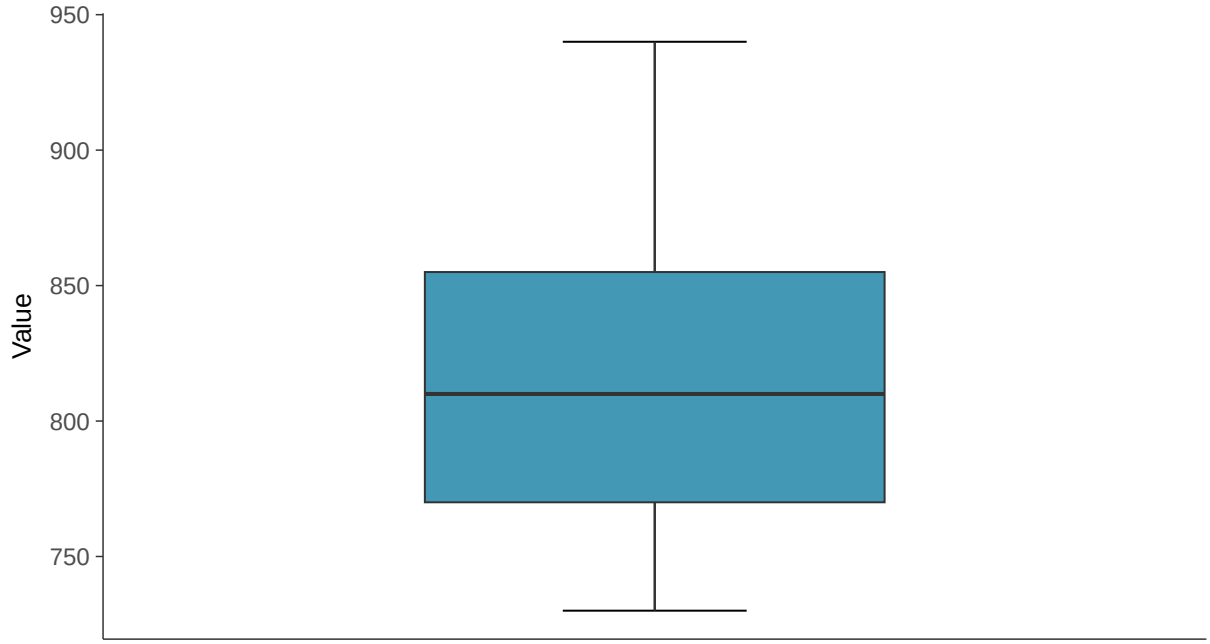
ID: 1_41_4_126





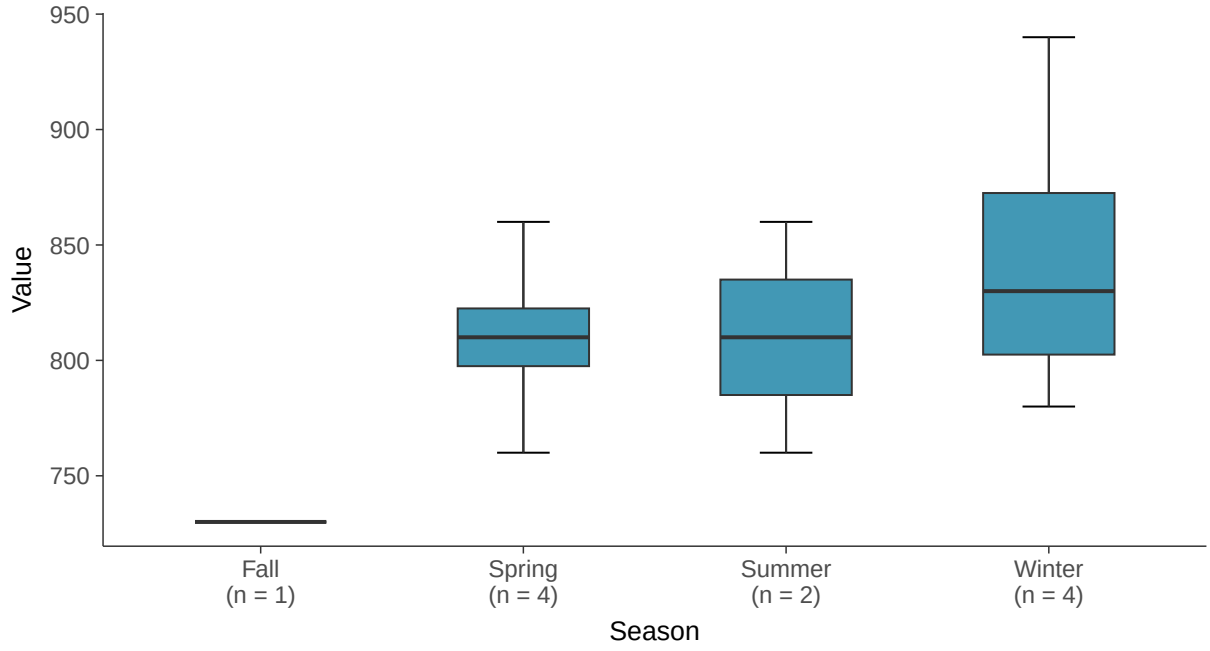
Boxplot

Total Dissolved Solids, MW-31 (mg/L)



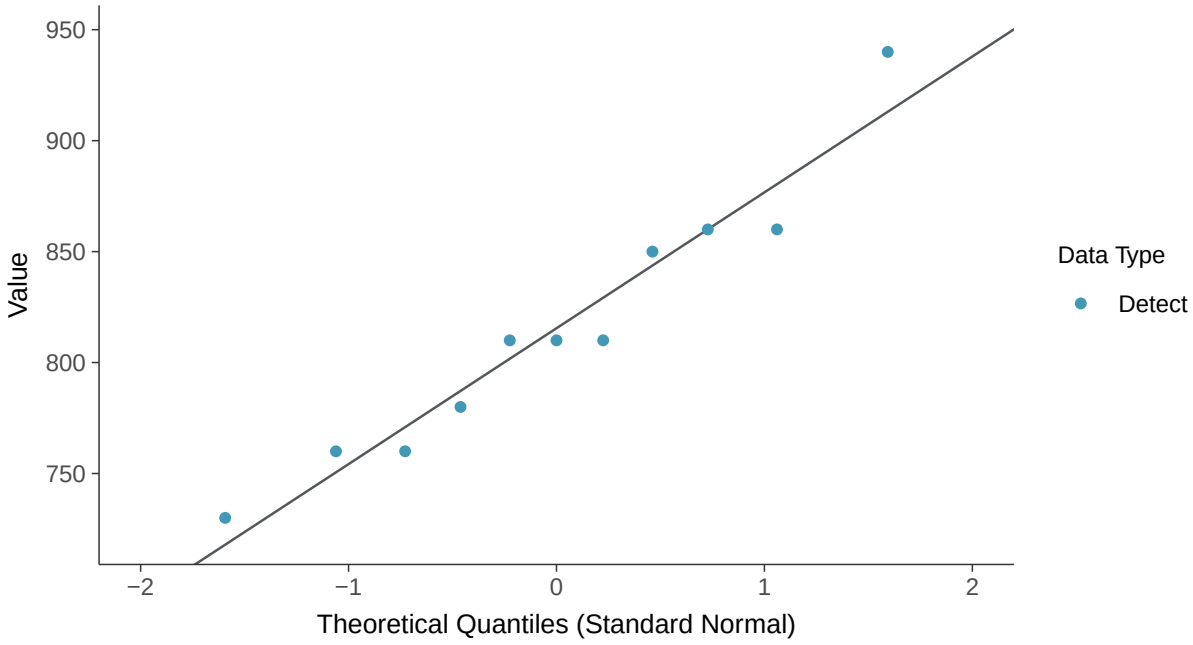
Boxplot by Season

Total Dissolved Solids, MW-31 (mg/L)



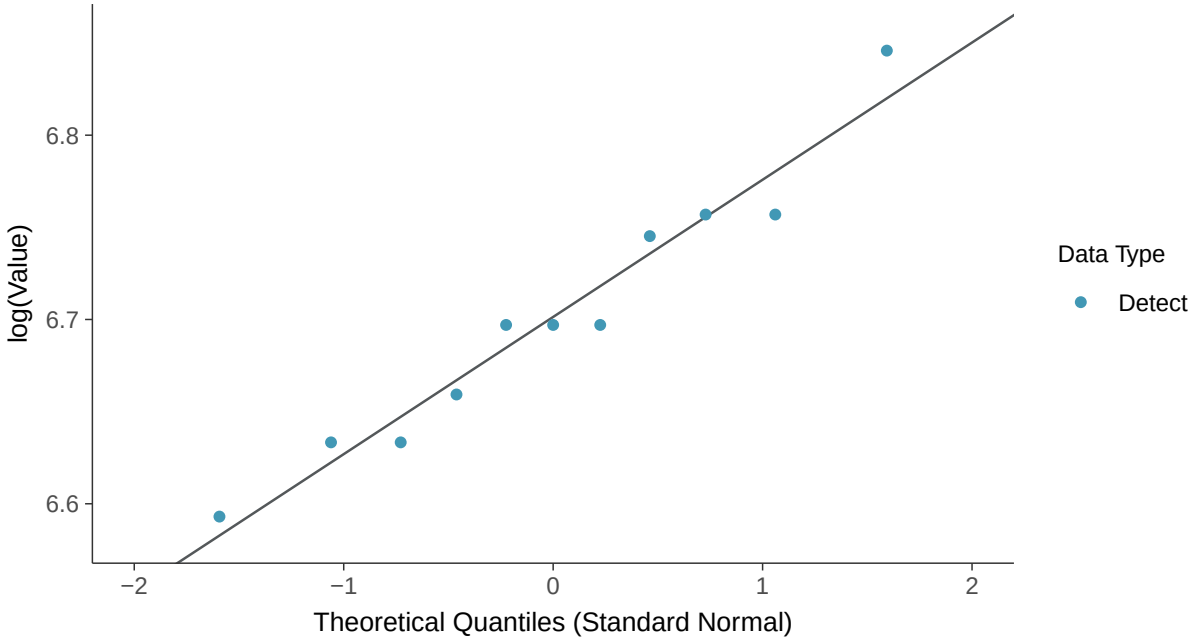
Normal Q-Q plot

Total Dissolved Solids, MW-31 (mg/L)



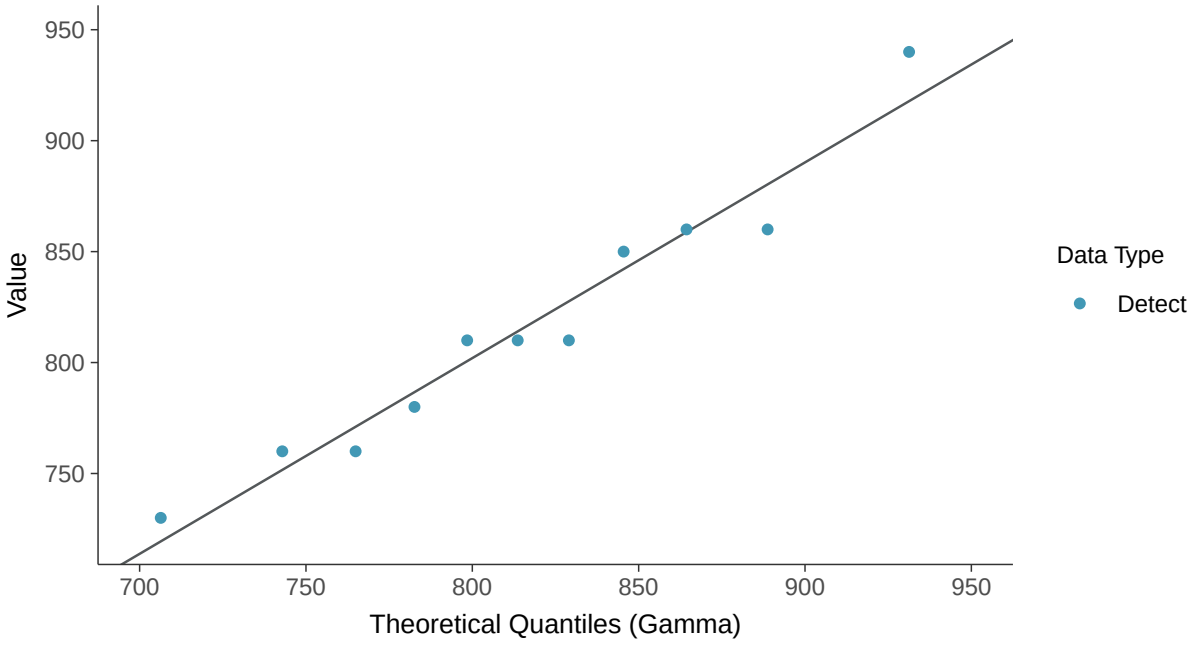
Lognormal Q-Q plot

Total Dissolved Solids, MW-31 (mg/L)



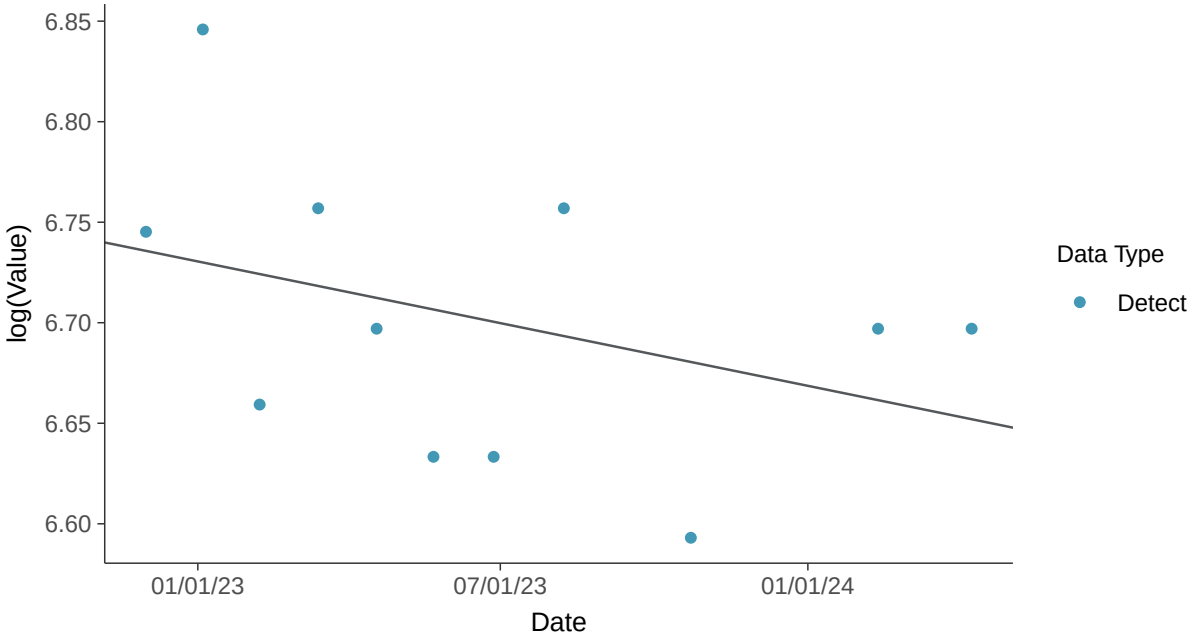
Gamma Q-Q plot

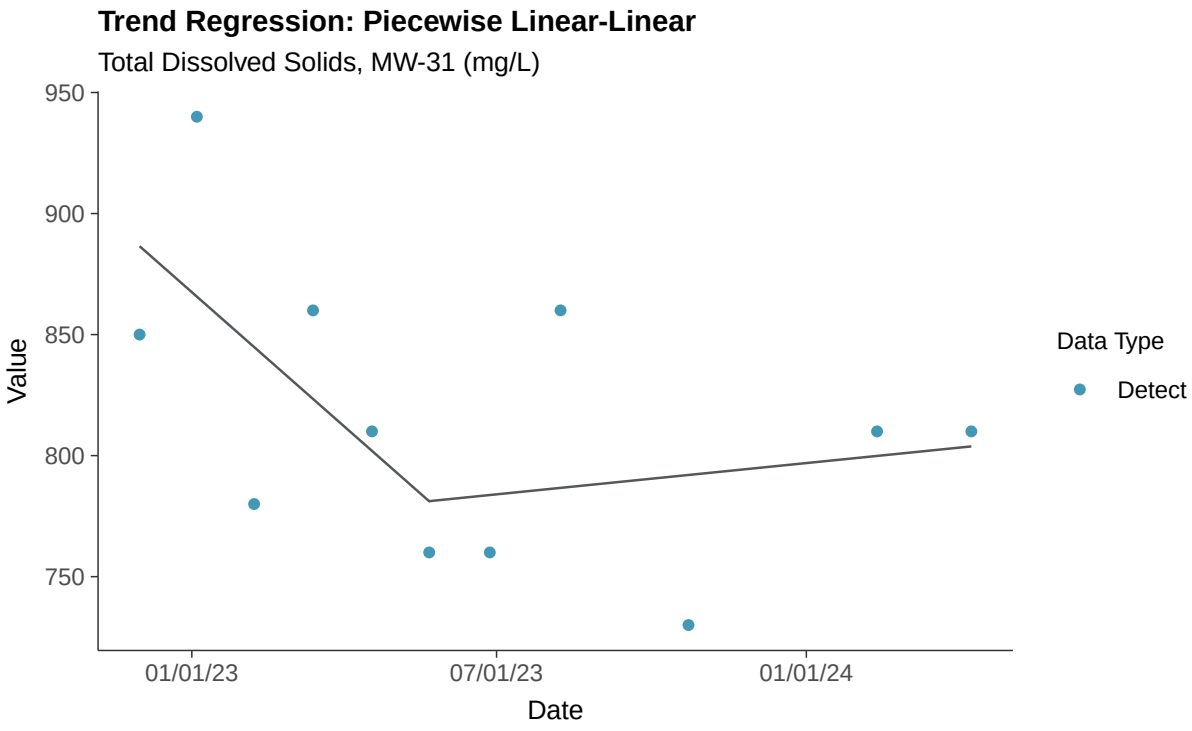
Total Dissolved Solids, MW-31 (mg/L)



Trend Regression: Lognormal MLE

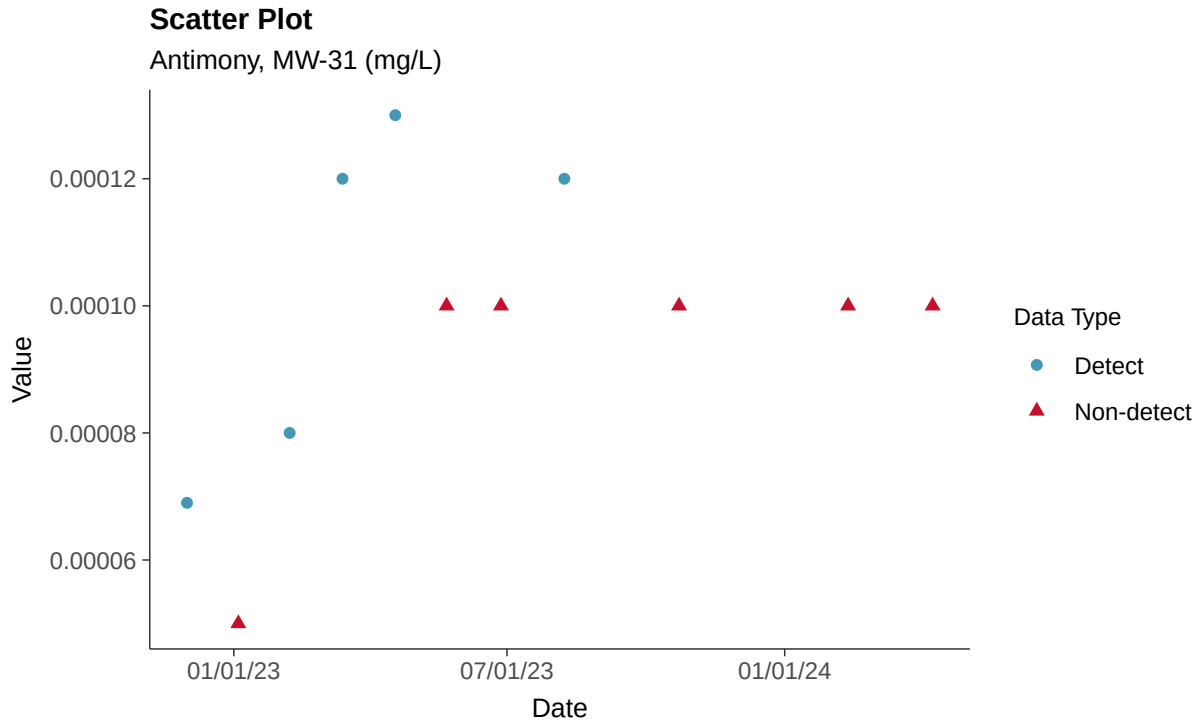
Total Dissolved Solids, MW-31 (mg/L)

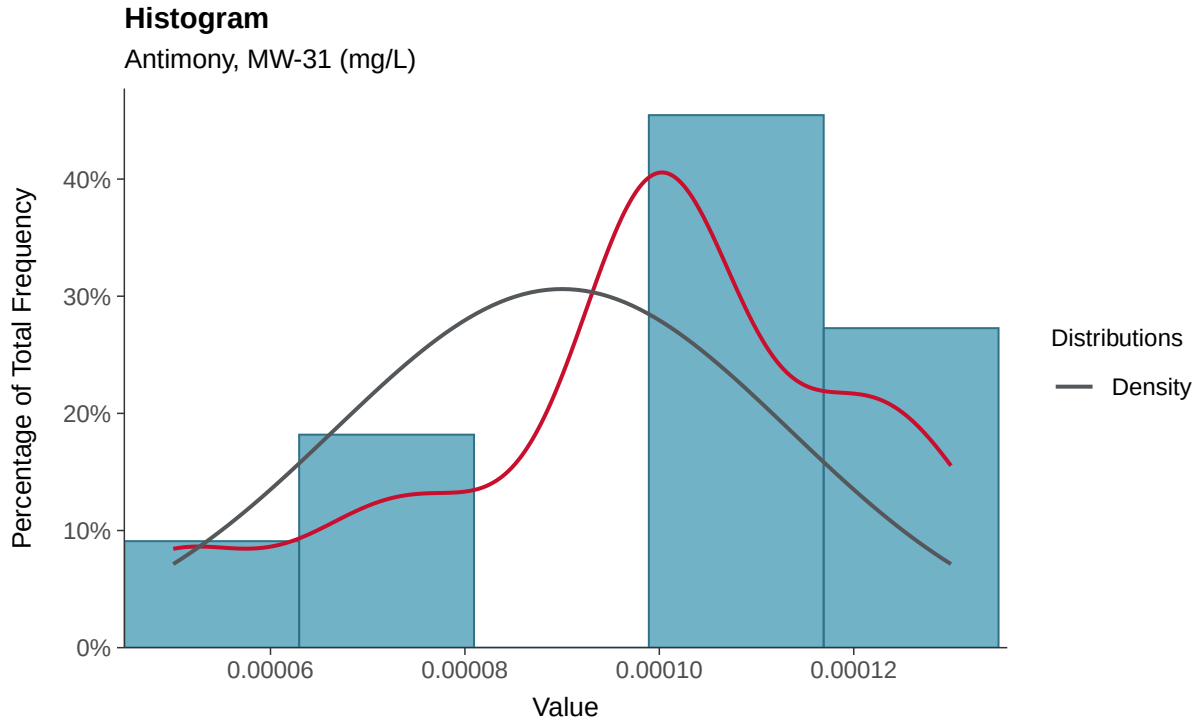



Trend Regression: Piecewise Linear-Linear
Total Dissolved Solids, MW-31 (mg/L)
950
900
850
800
750
Value
01/01/23
07/01/23
01/01/24
Date
Data Type
Detect

Appendix IV: Antimony, MW-31

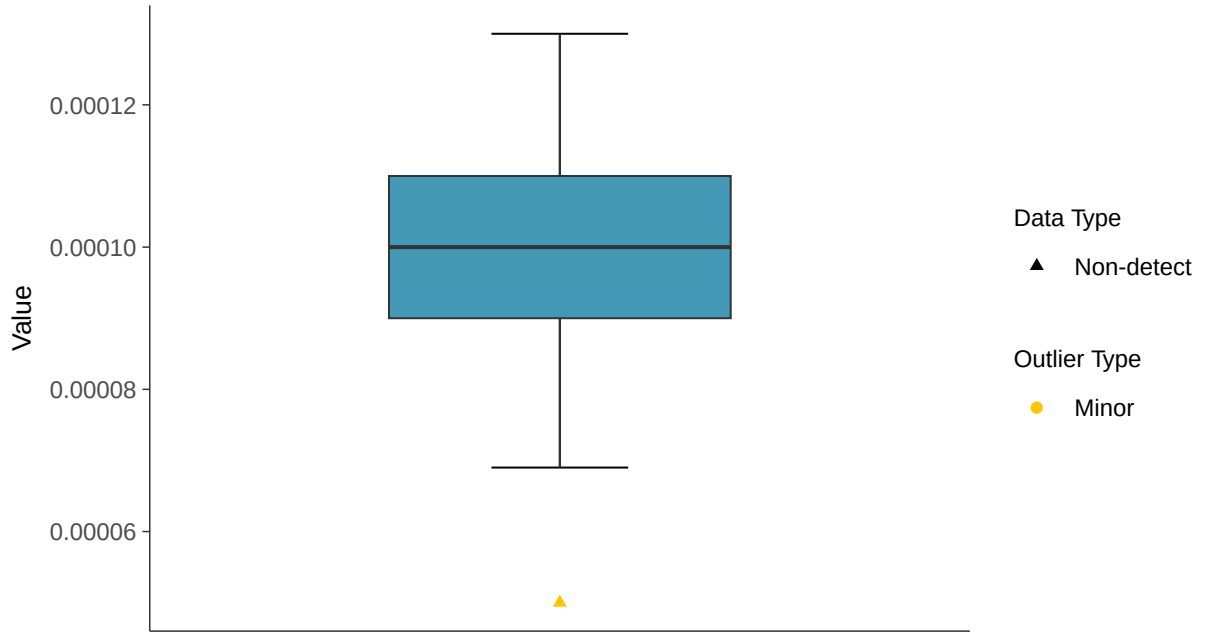
ID: 1_41_5_101





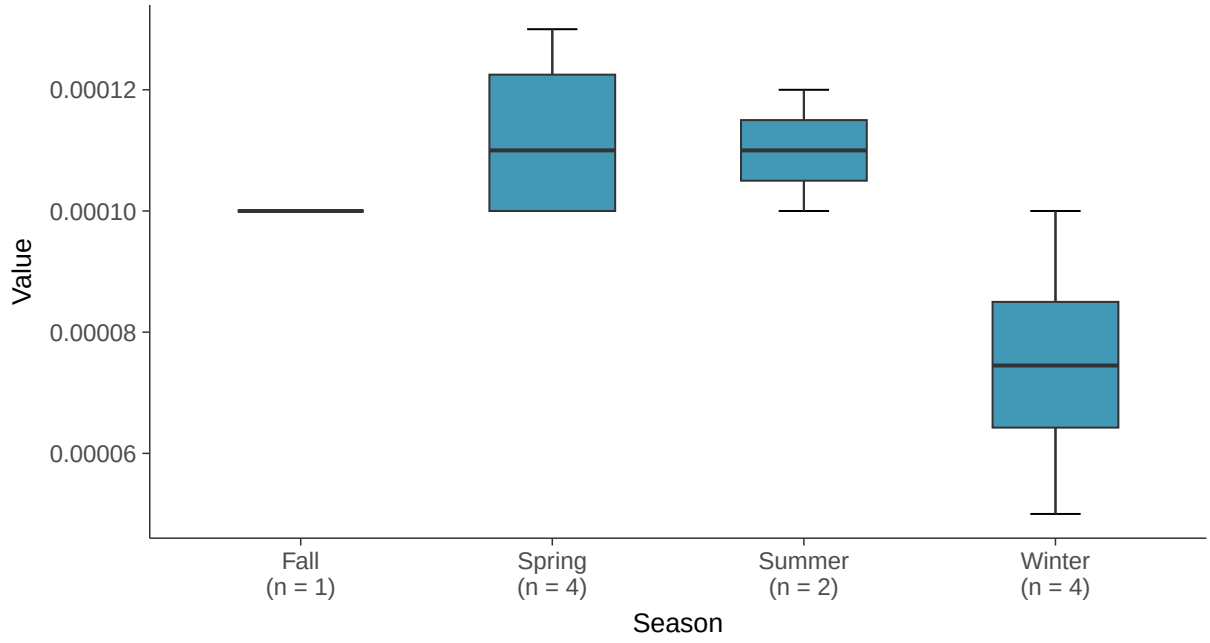
Boxplot

Antimony, MW-31 (mg/L)



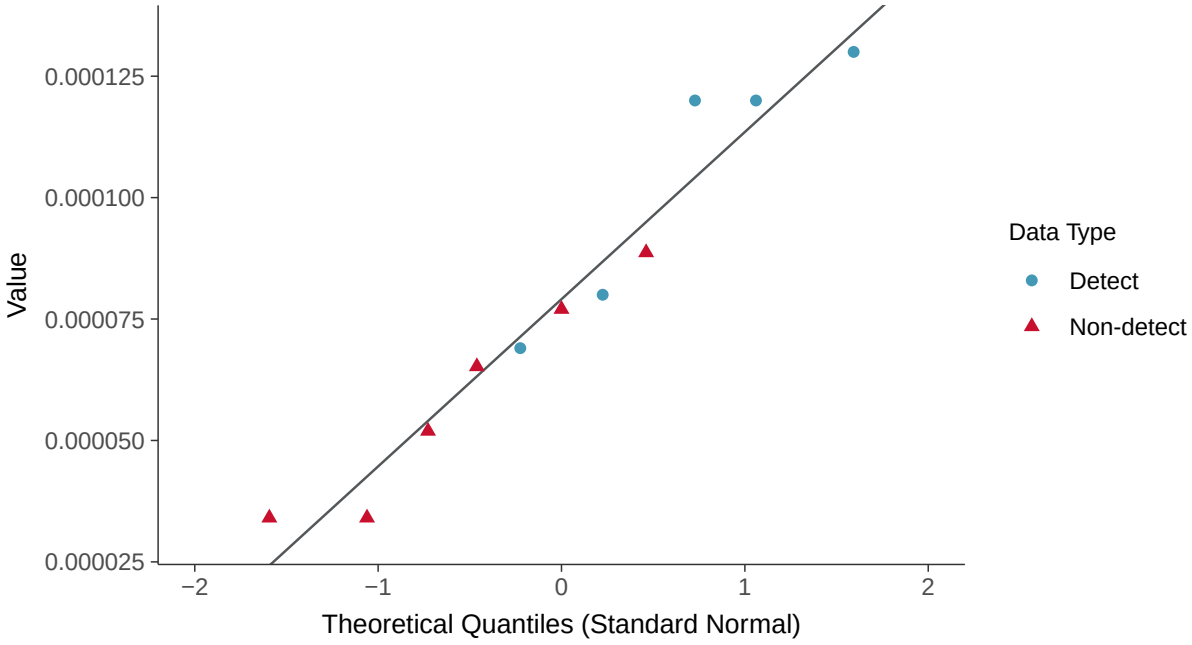
Boxplot by Season

Antimony, MW-31 (mg/L)



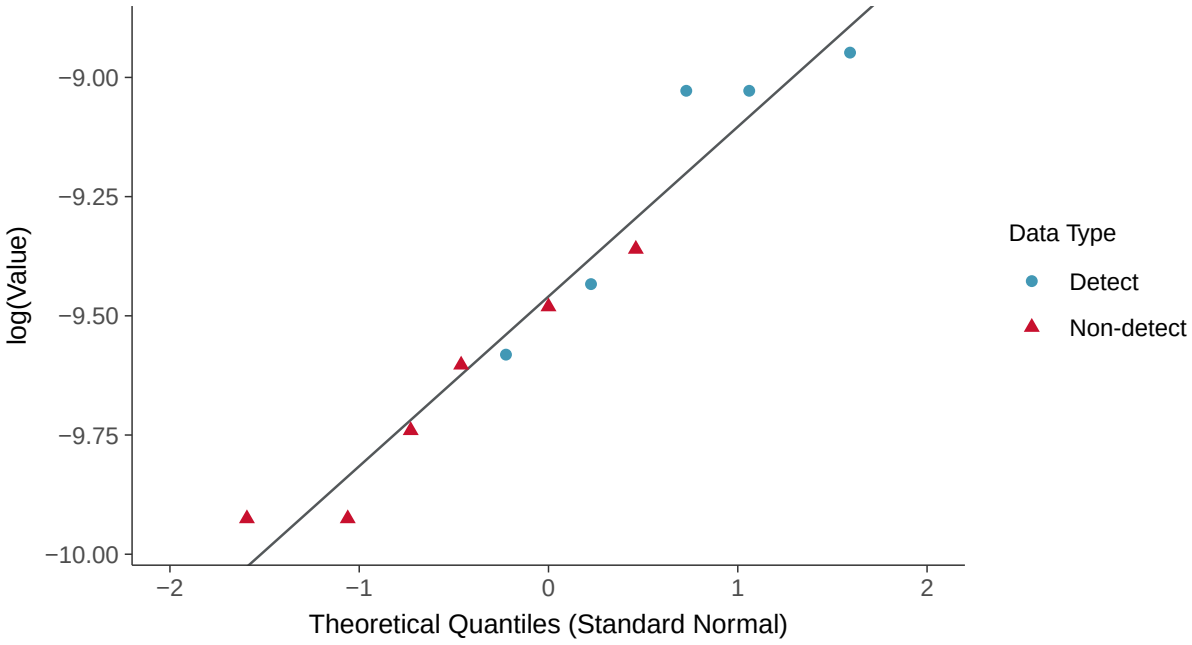
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-31 (mg/L)



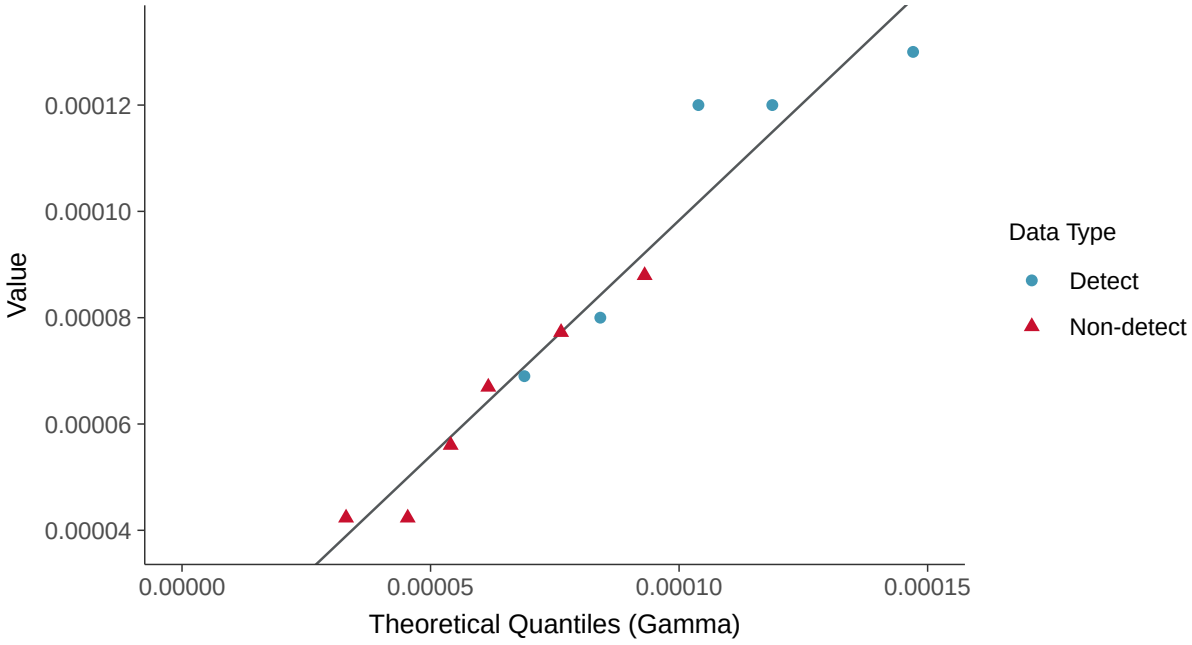
Lognormal Q-Q plot using ROS Imputed Estimates

Antimony, MW-31 (mg/L)



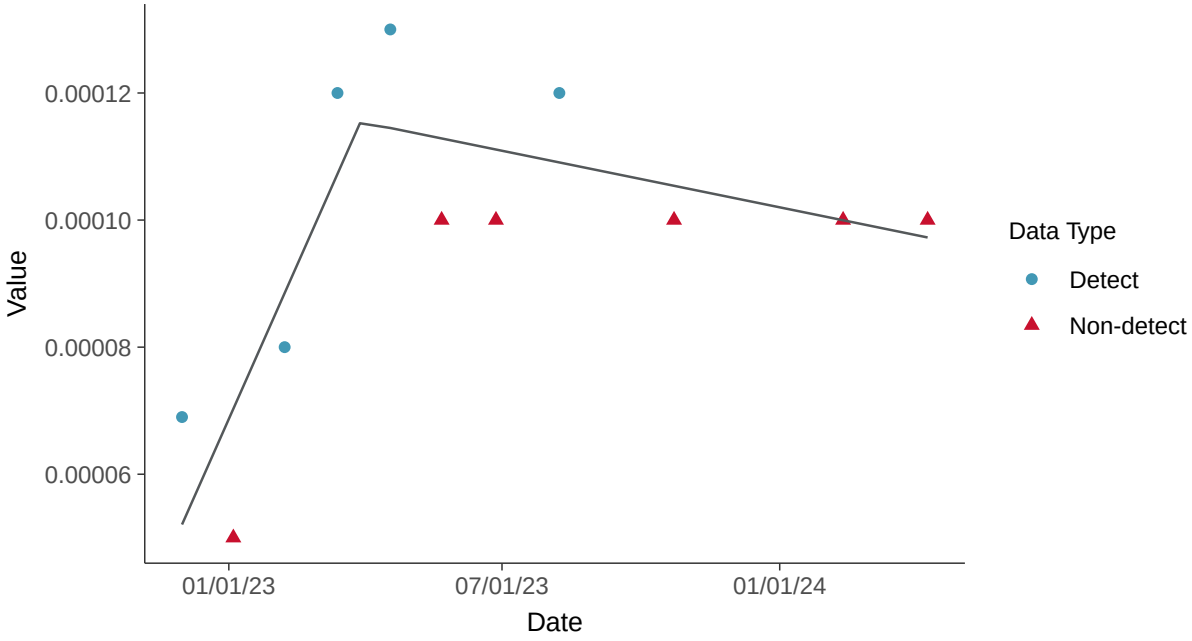
Gamma Q-Q plot using ROS Imputed Estimates

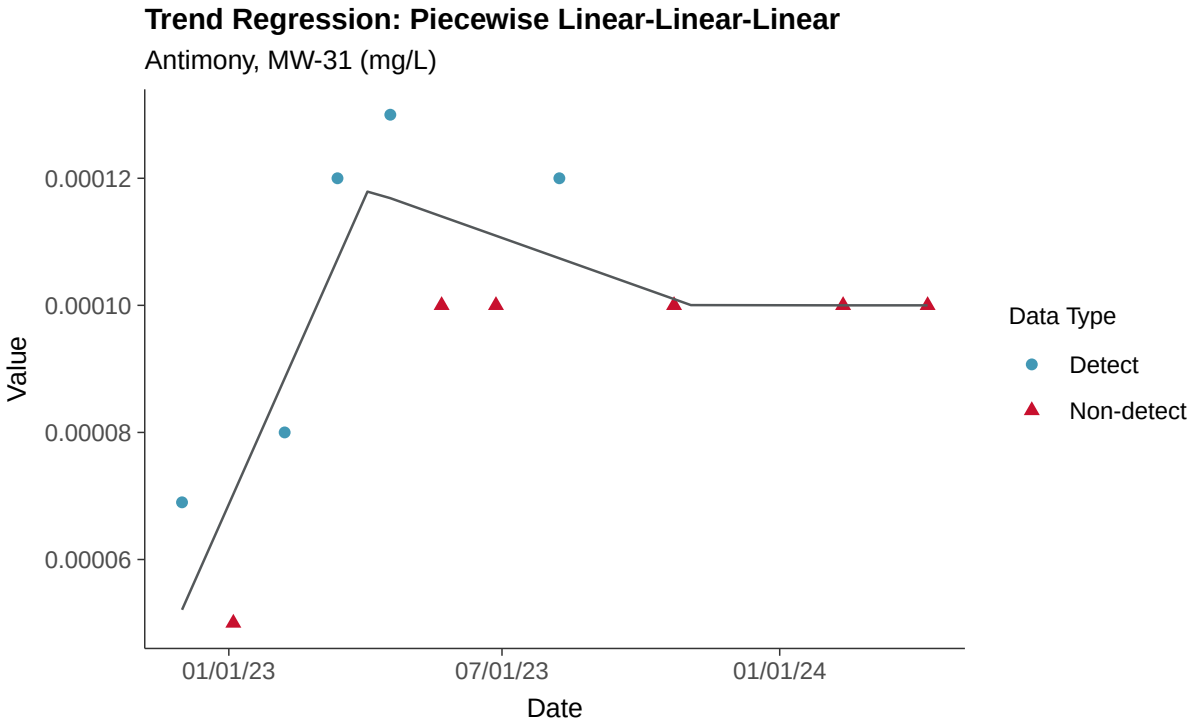
Antimony, MW-31 (mg/L)



Trend Regression: Piecewise Linear-Linear

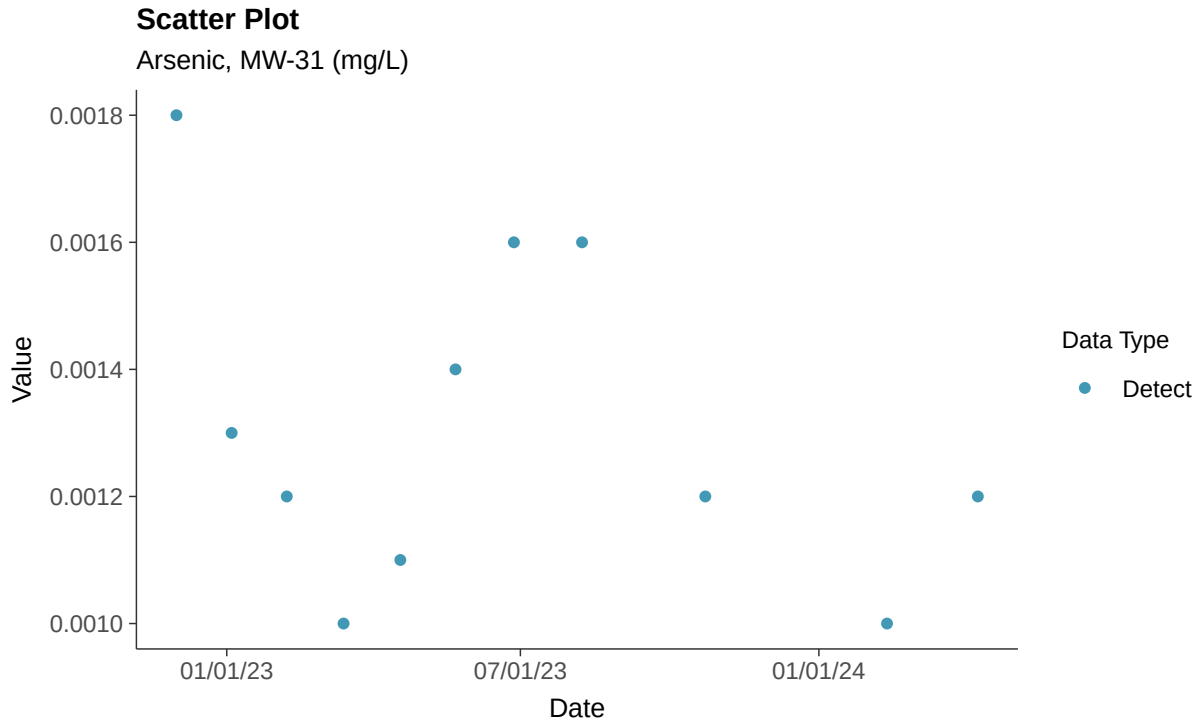
Antimony, MW-31 (mg/L)

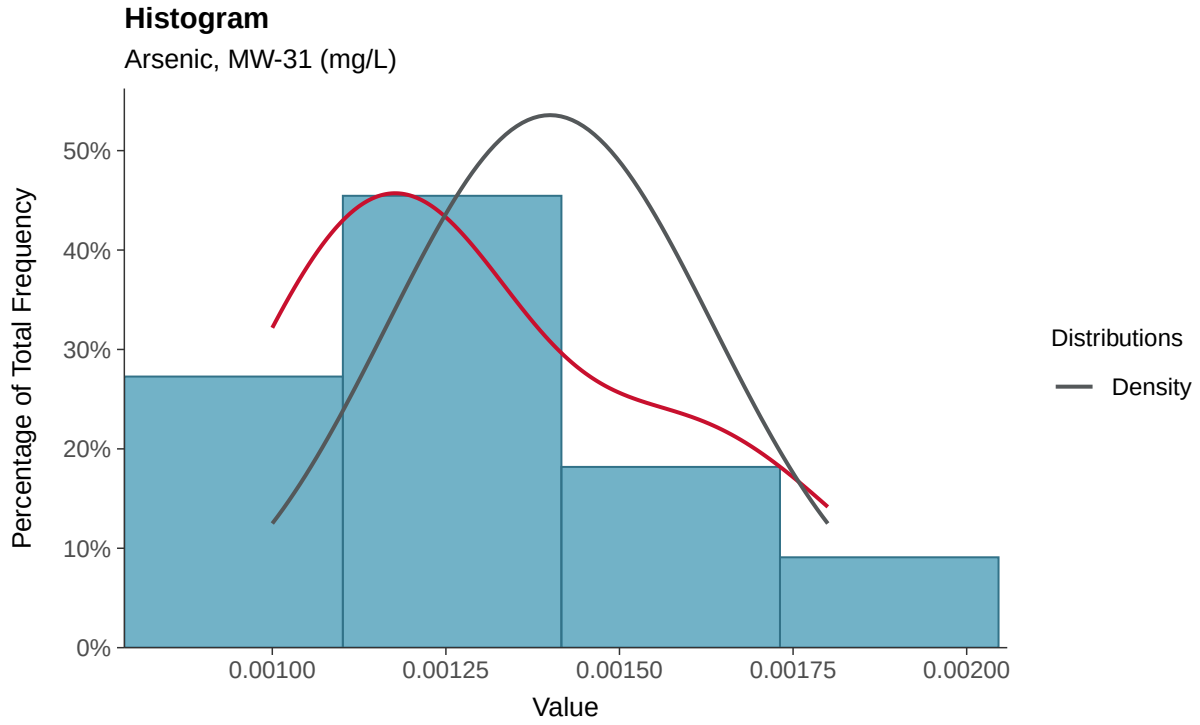



Trend Regression: Piecewise Linear-Linear-Linear
Antimony, MW-31 (mg/L)
0.00012
0.00010
0.00008
0.00006
Value
01/01/23
07/01/23
01/01/24
Date
Data Type
Detect
Non-detect

Appendix IV: Arsenic, MW-31

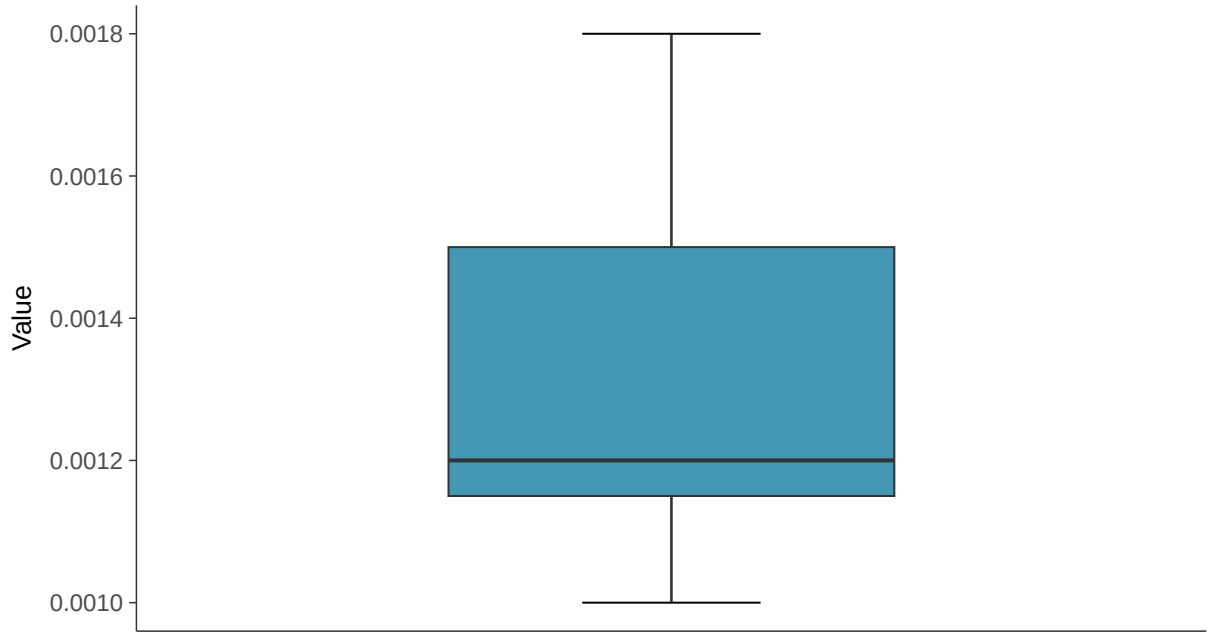
ID: 1_41_5_102





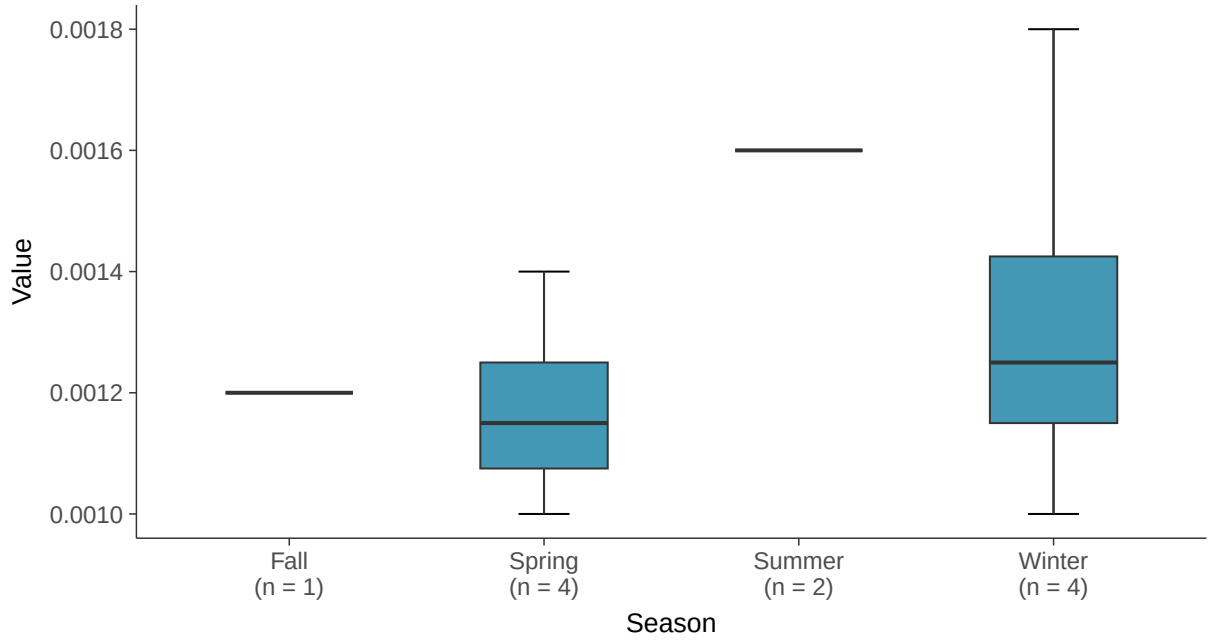
Boxplot

Arsenic, MW-31 (mg/L)



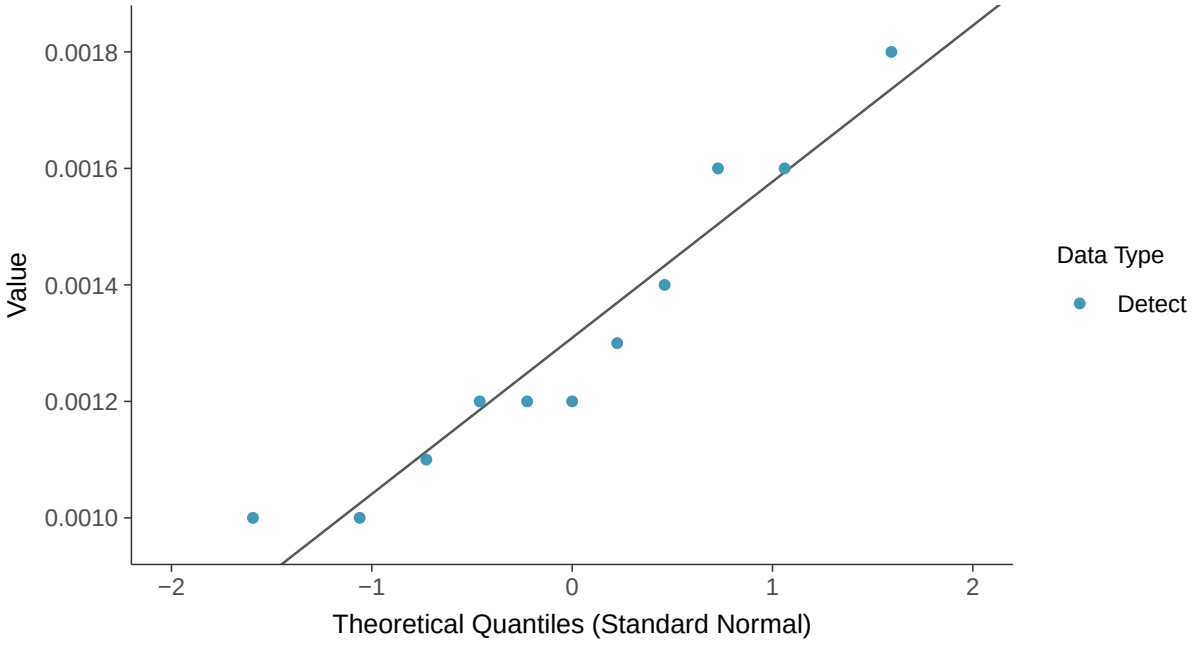
Boxplot by Season

Arsenic, MW-31 (mg/L)



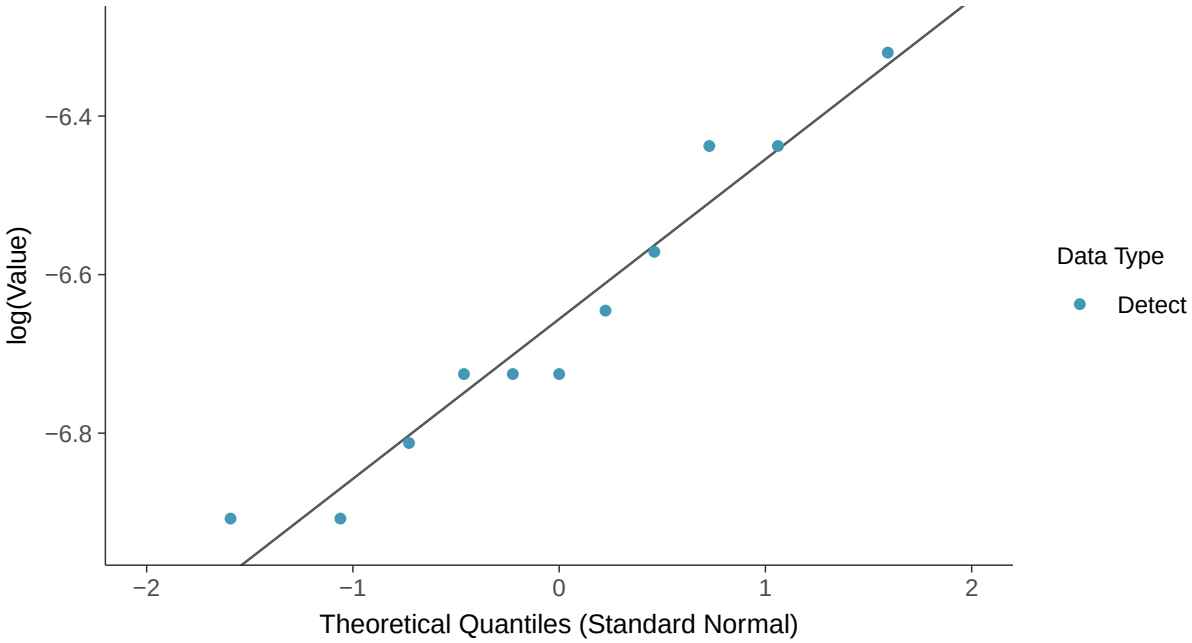
Normal Q-Q plot

Arsenic, MW-31 (mg/L)



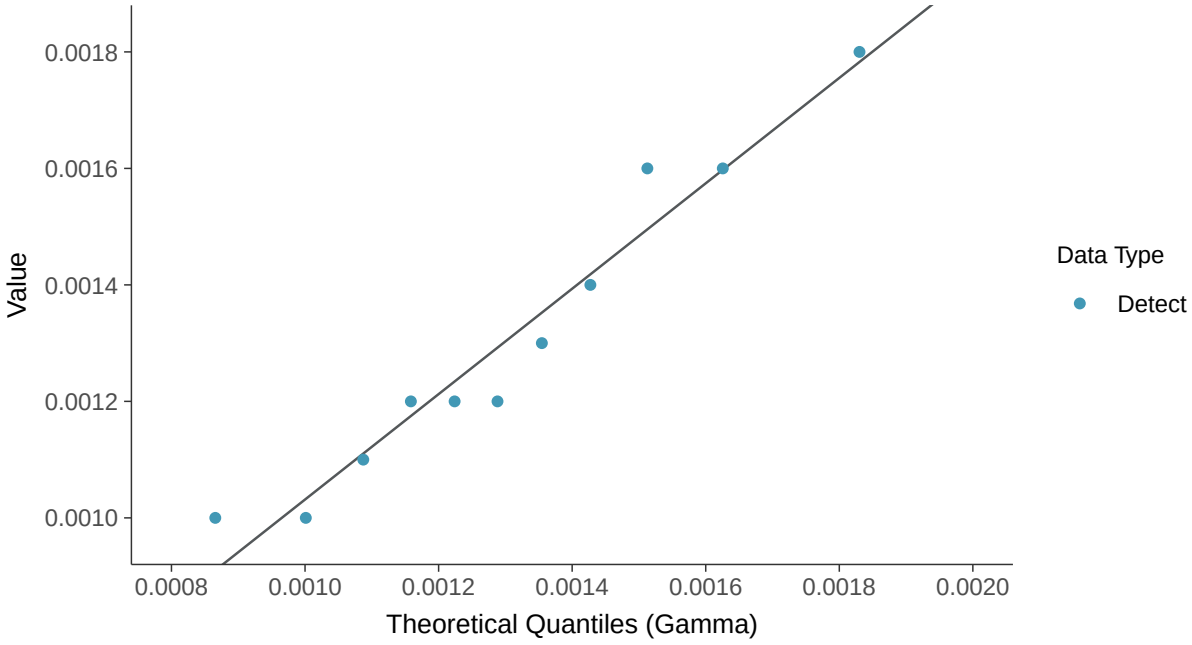
Lognormal Q-Q plot

Arsenic, MW-31 (mg/L)



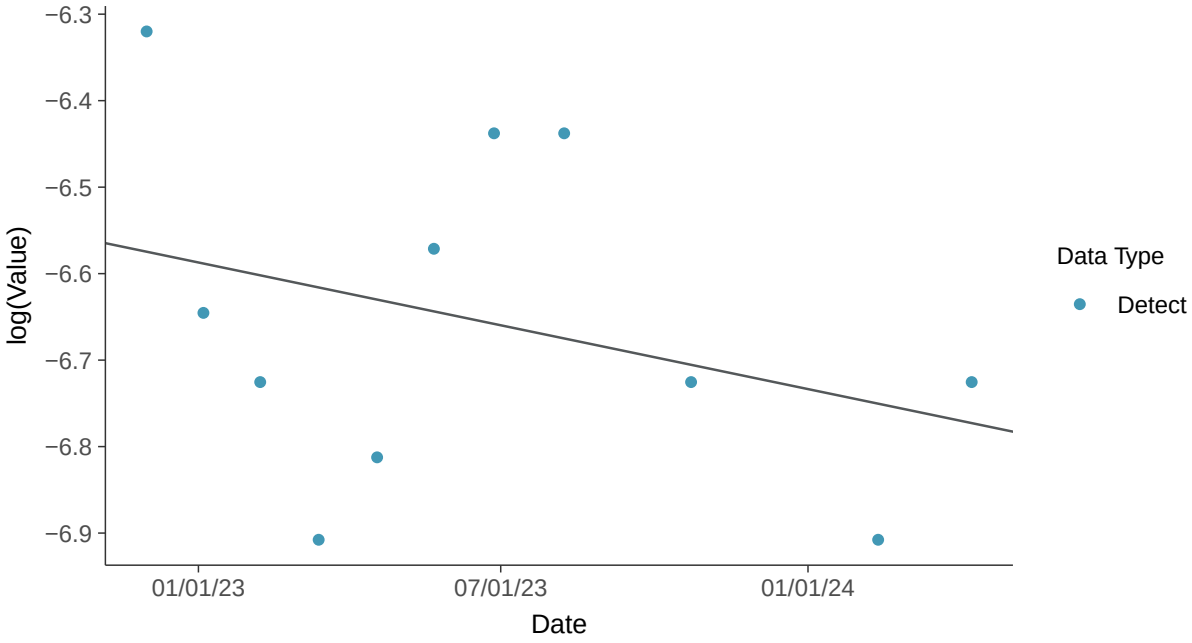
Gamma Q-Q plot

Arsenic, MW-31 (mg/L)



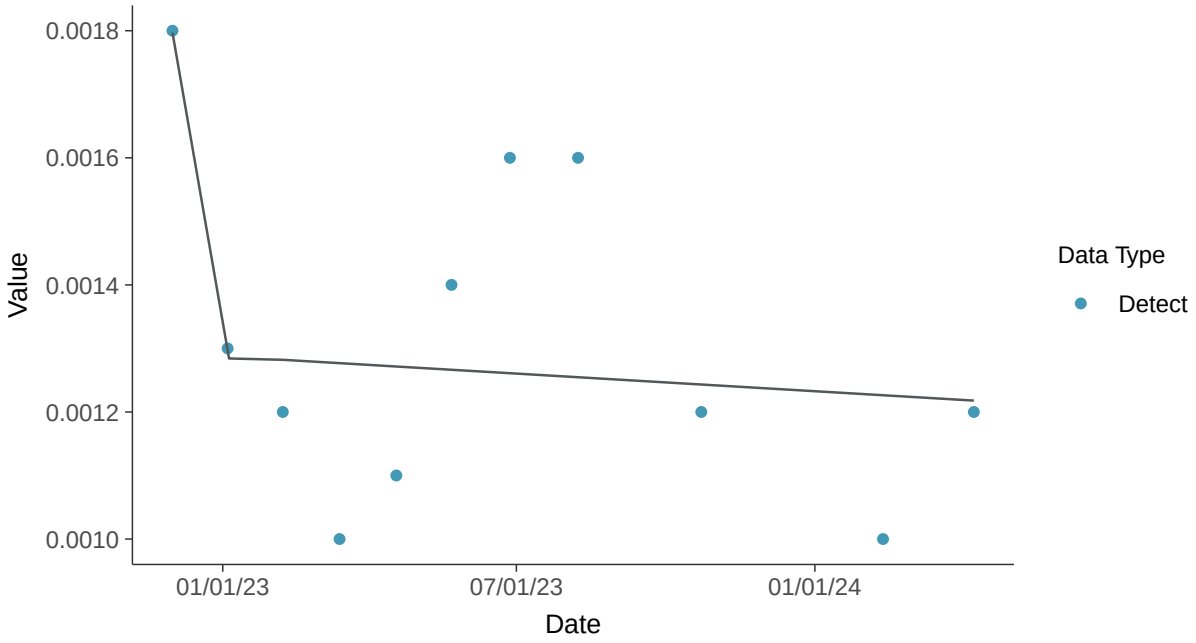
Trend Regression: Lognormal MLE

Arsenic, MW-31 (mg/L)



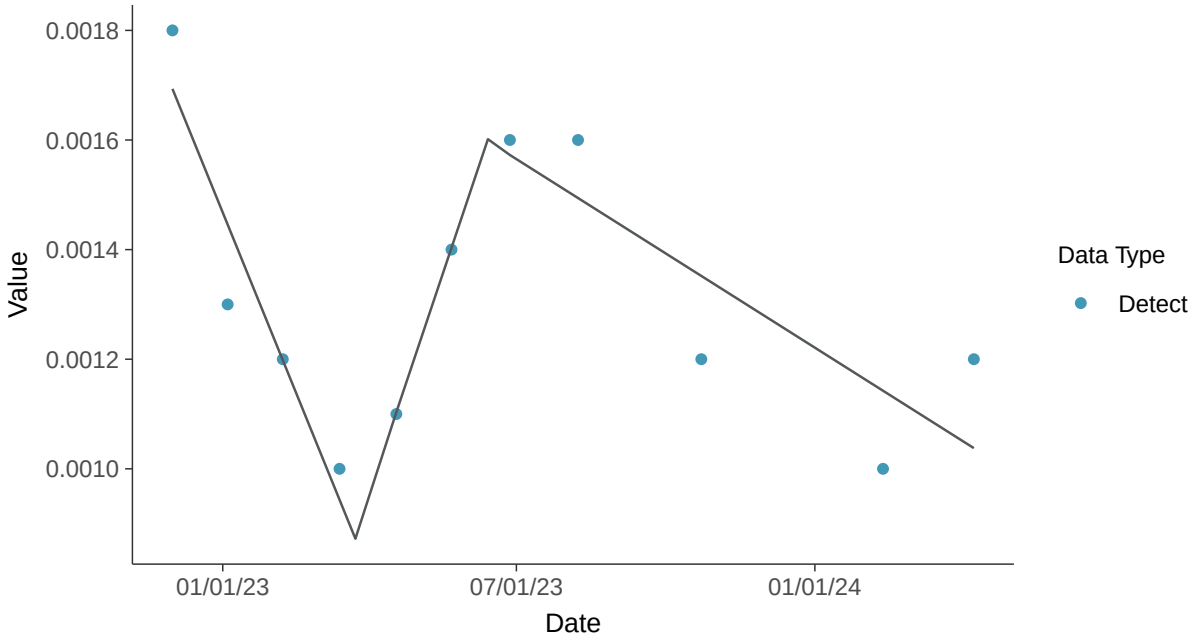
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-31 (mg/L)



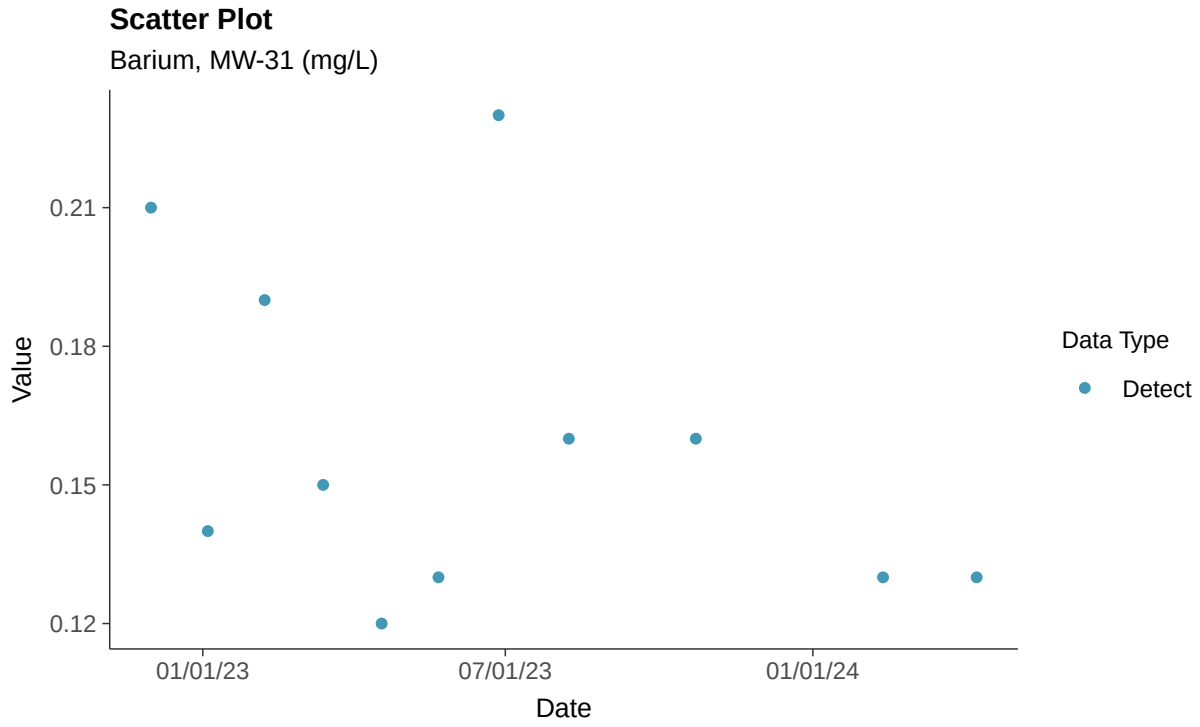
Trend Regression: Piecewise Linear-Linear-Linear

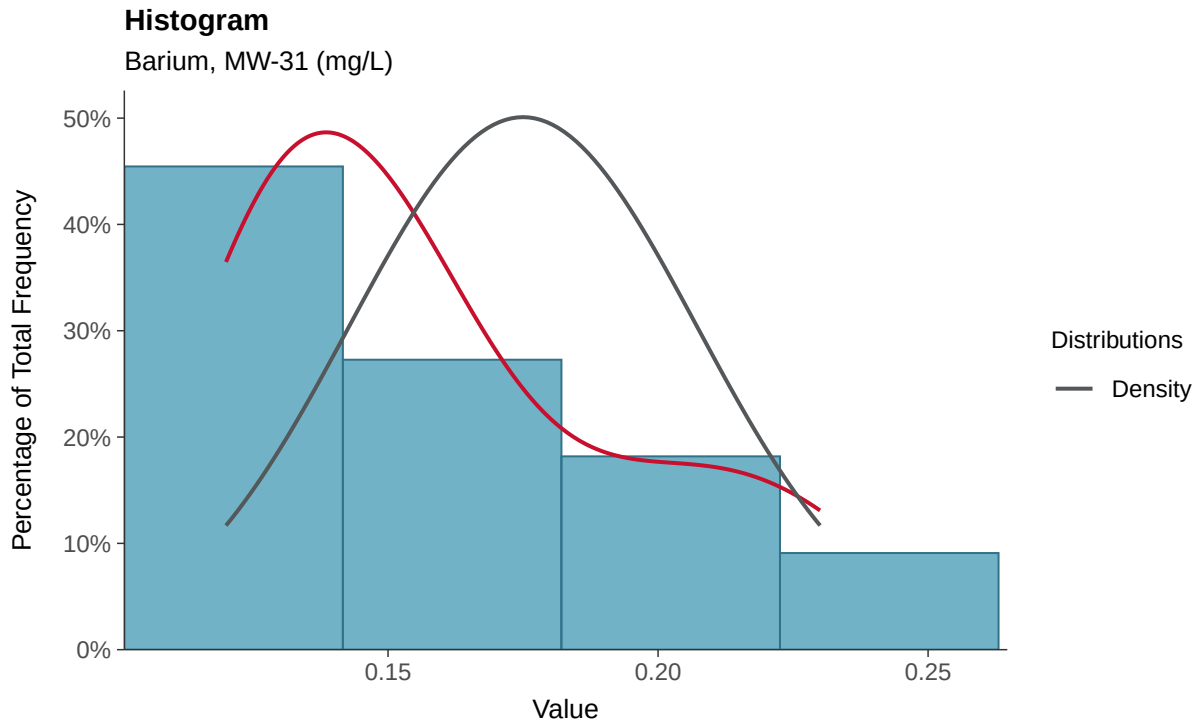
Arsenic, MW-31 (mg/L)



Appendix IV: Barium, MW-31

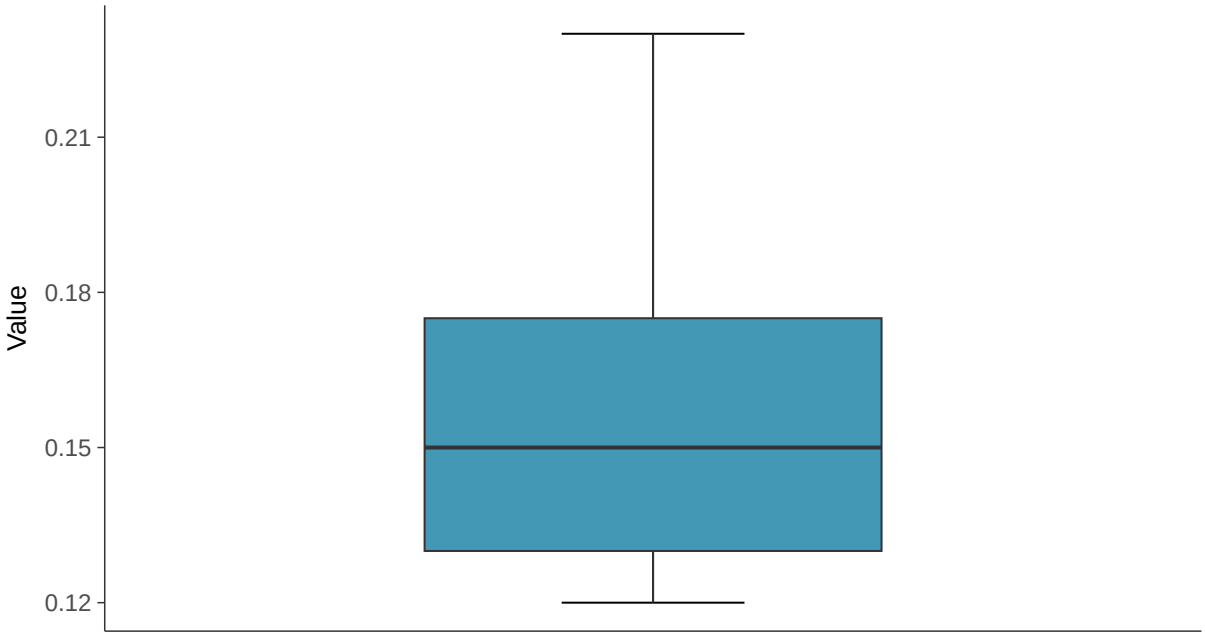
ID: 1_41_5_103





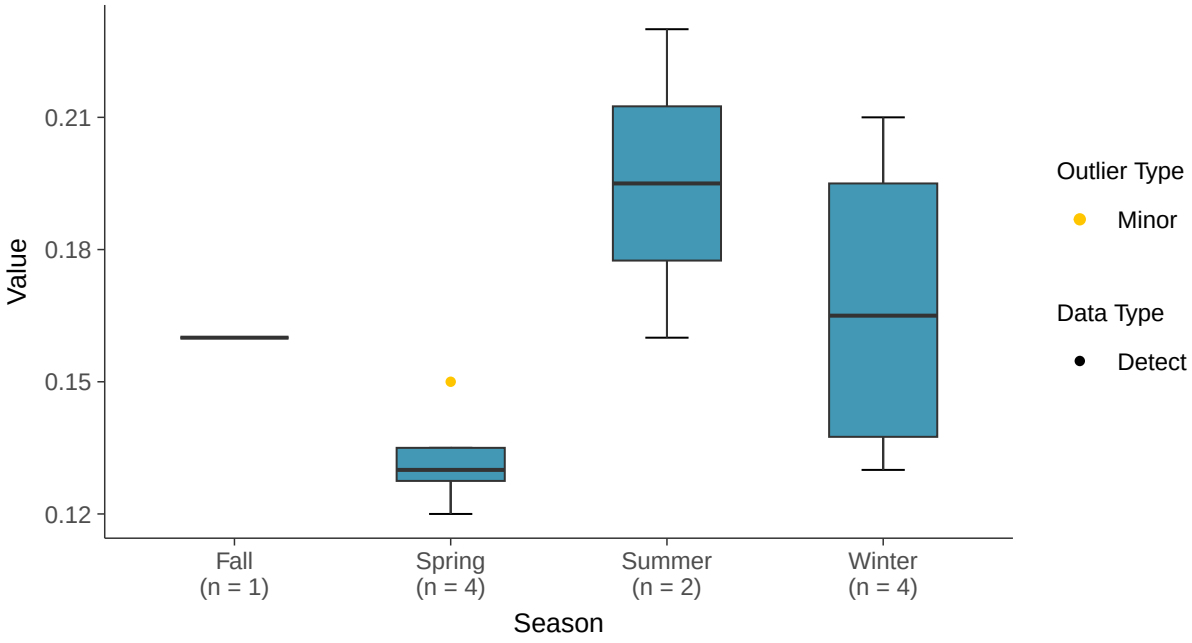
Boxplot

Barium, MW-31 (mg/L)



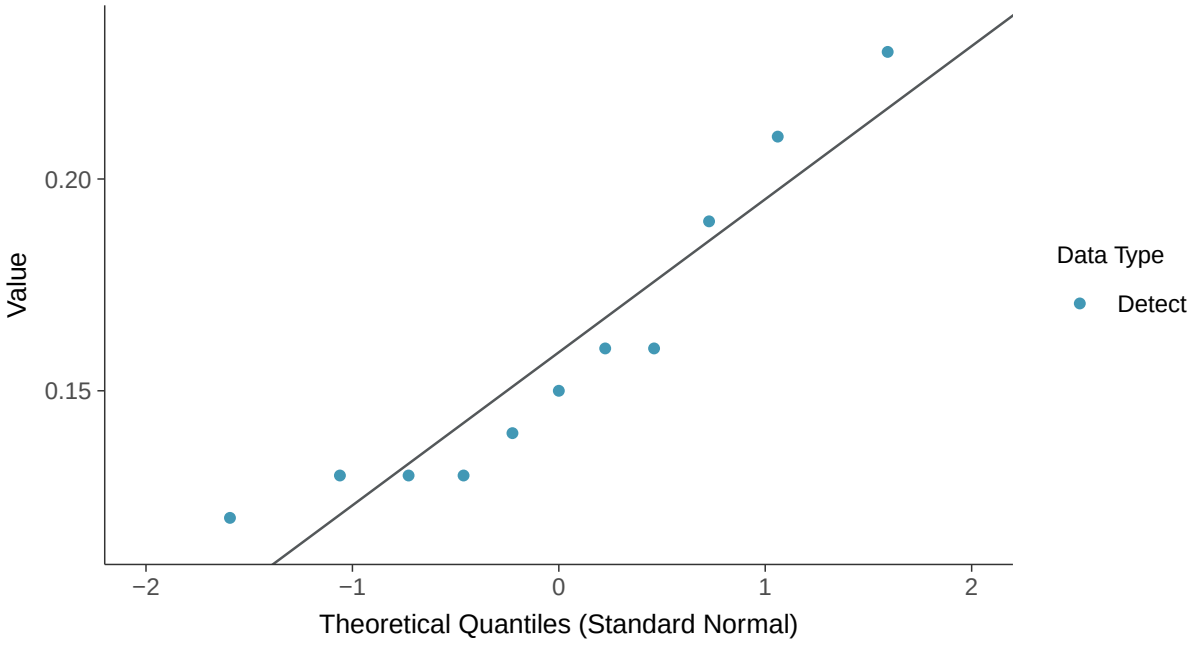
Boxplot by Season

Barium, MW-31 (mg/L)



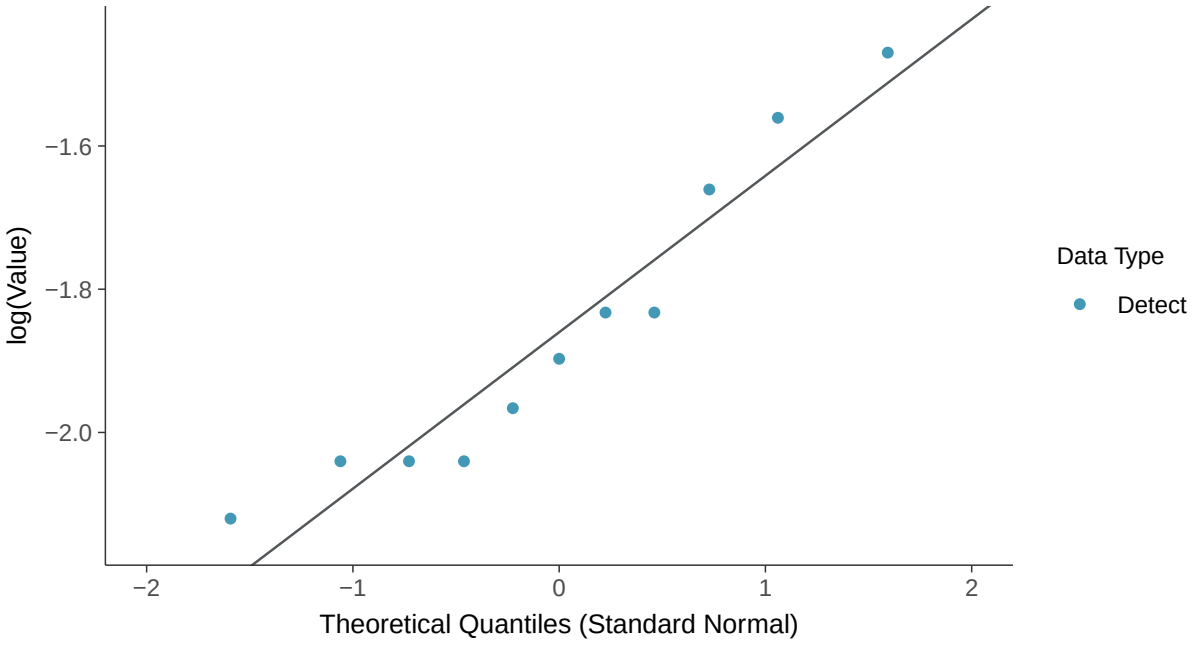
Normal Q-Q plot

Barium, MW-31 (mg/L)



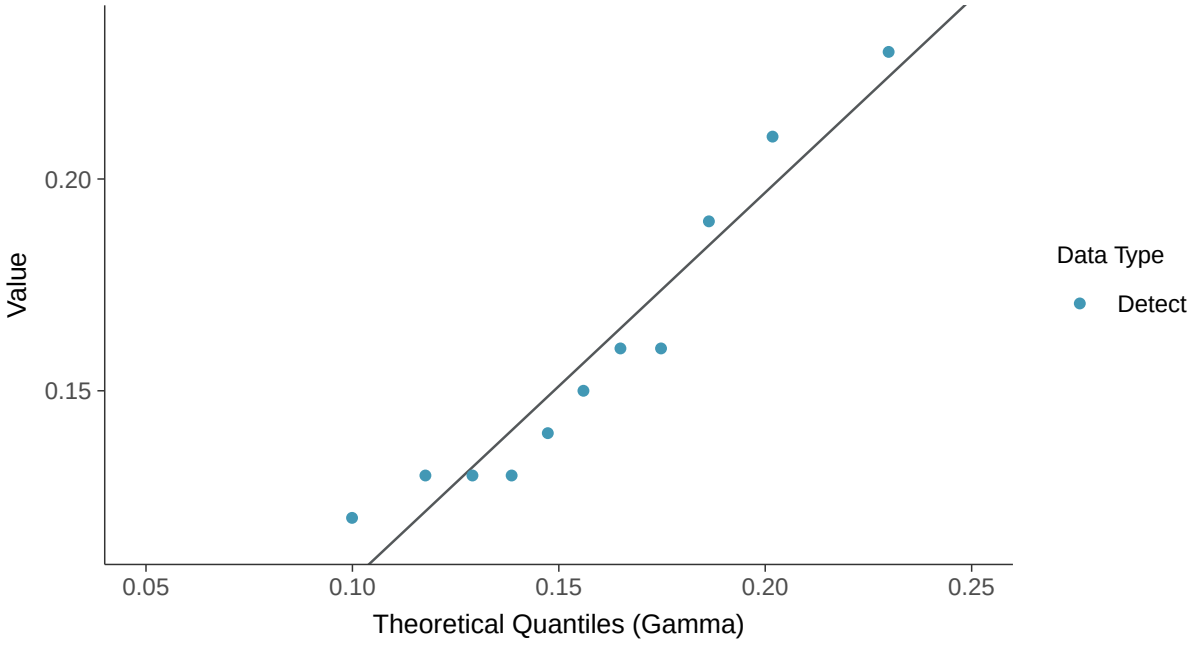
Lognormal Q-Q plot

Barium, MW-31 (mg/L)



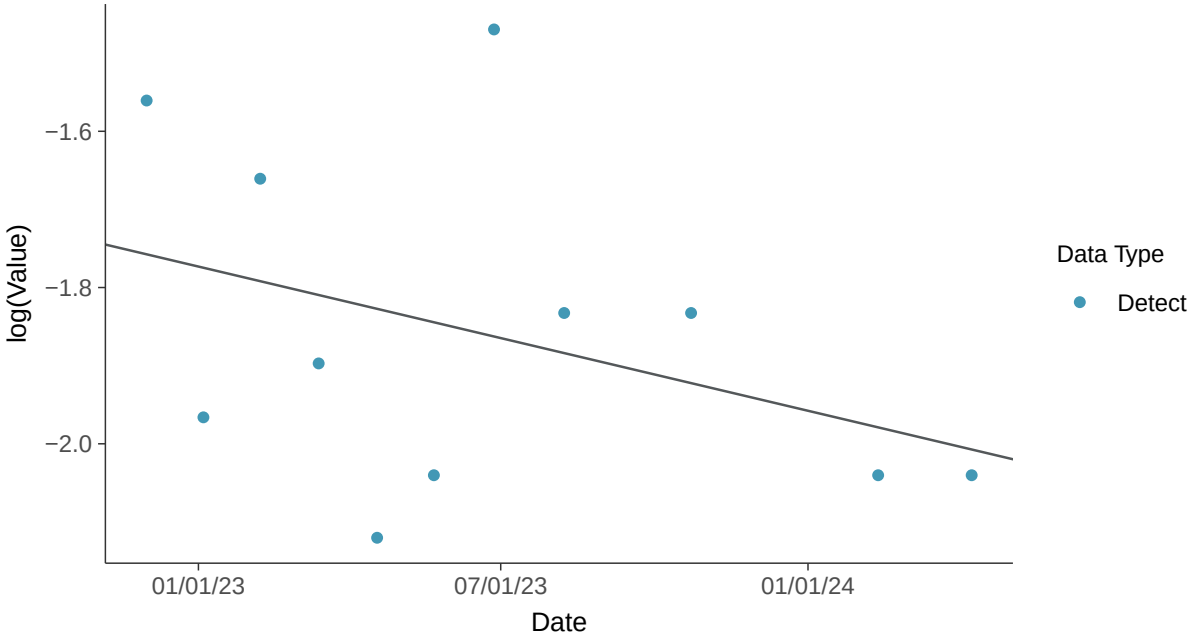
Gamma Q-Q plot

Barium, MW-31 (mg/L)



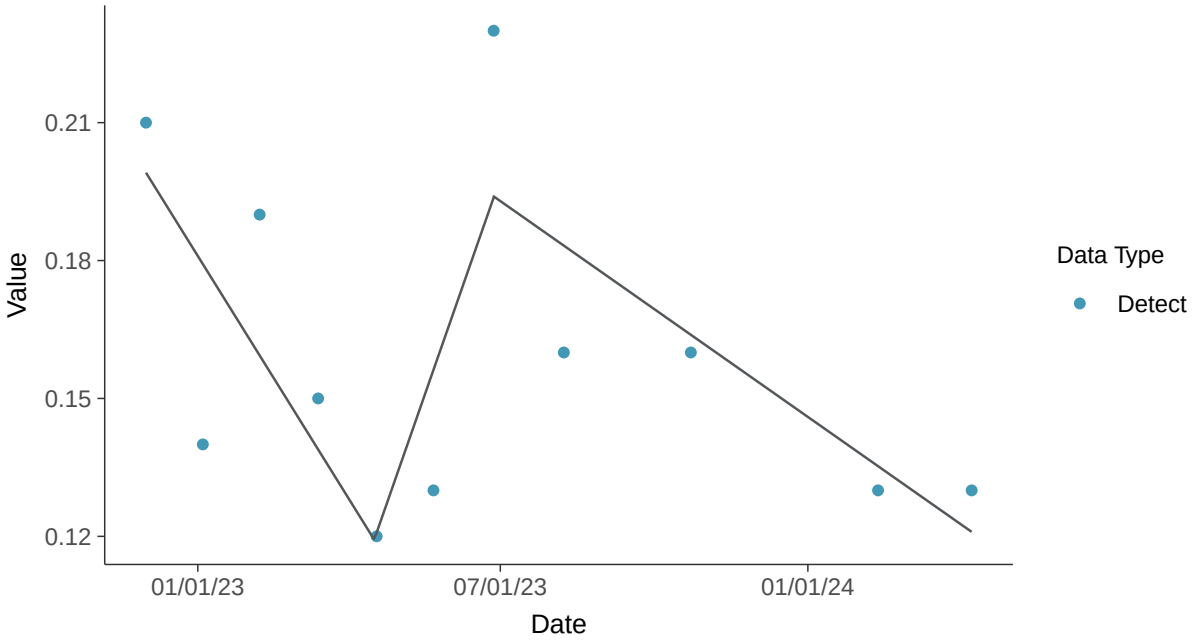
Trend Regression: Lognormal MLE

Barium, MW-31 (mg/L)



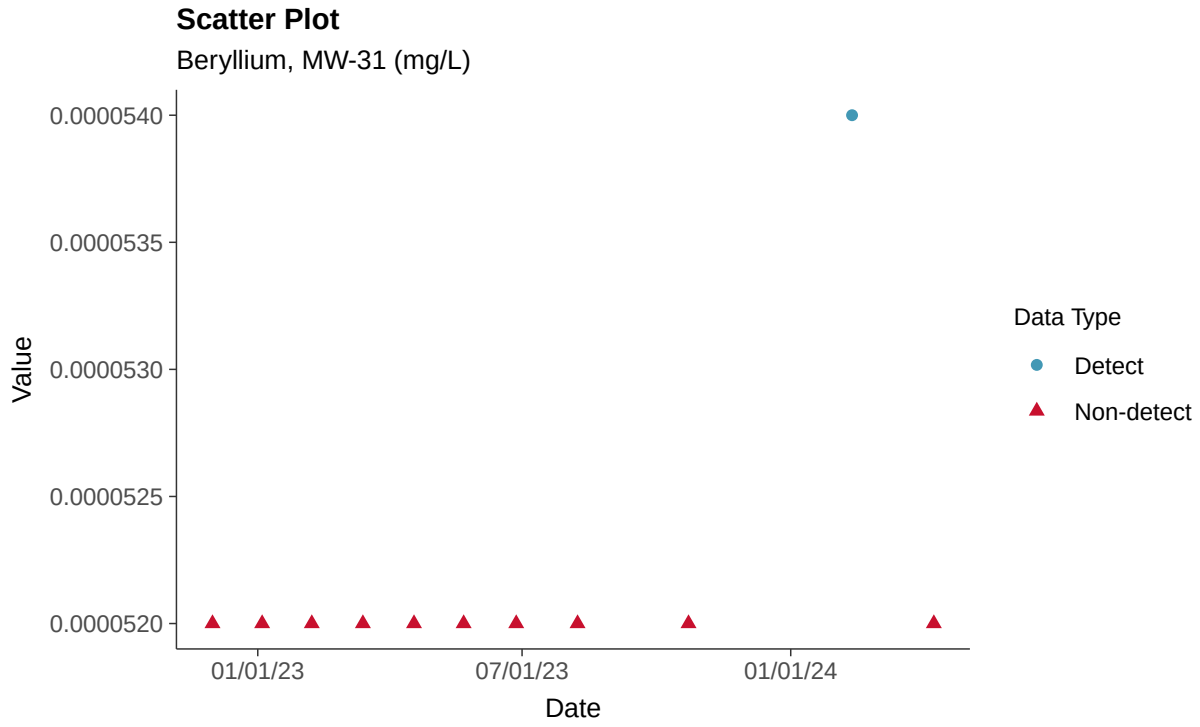
Trend Regression: Piecewise Linear-Linear-Linear

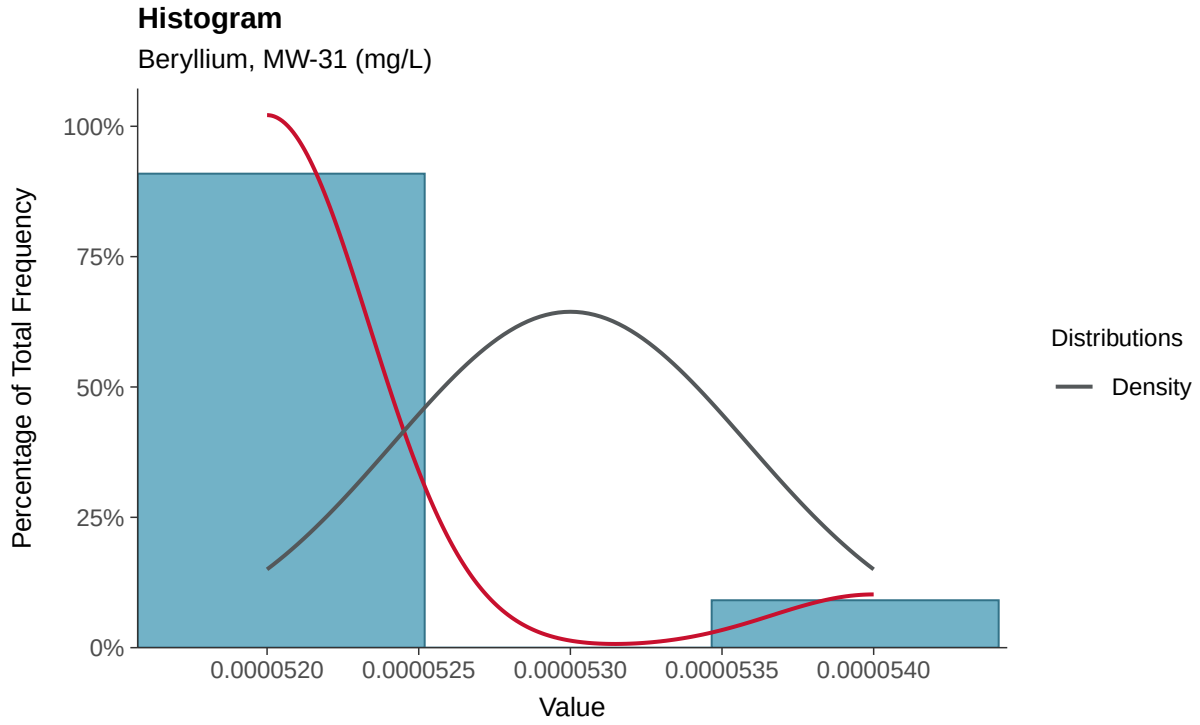
Barium, MW-31 (mg/L)



Appendix IV: Beryllium, MW-31

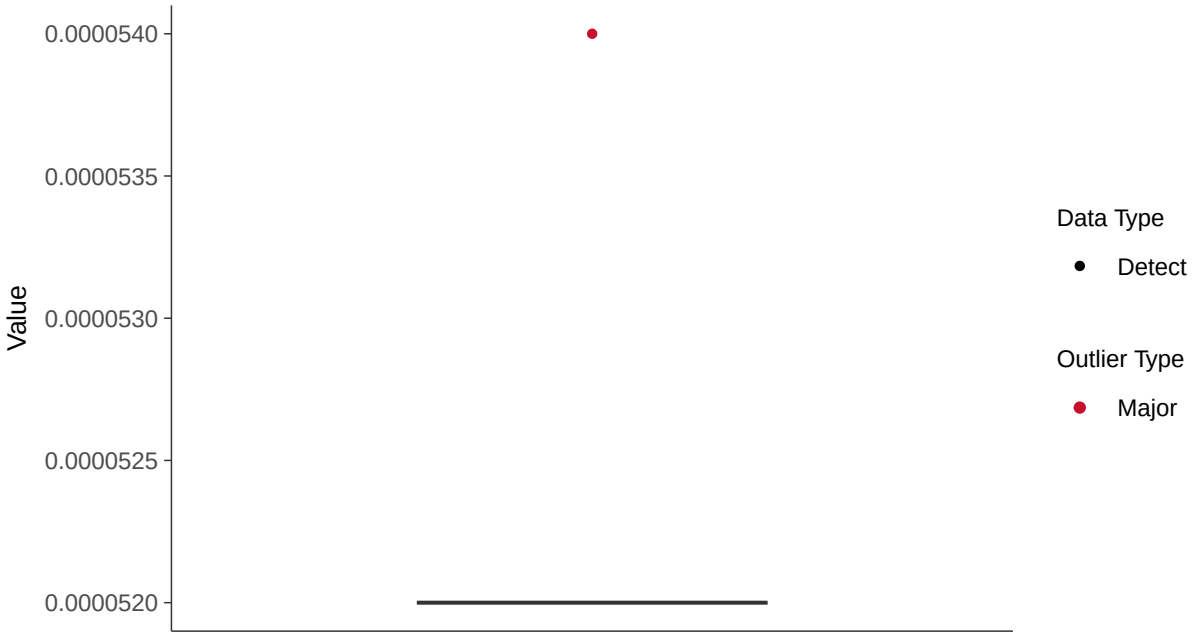
ID: 1_41_5_104





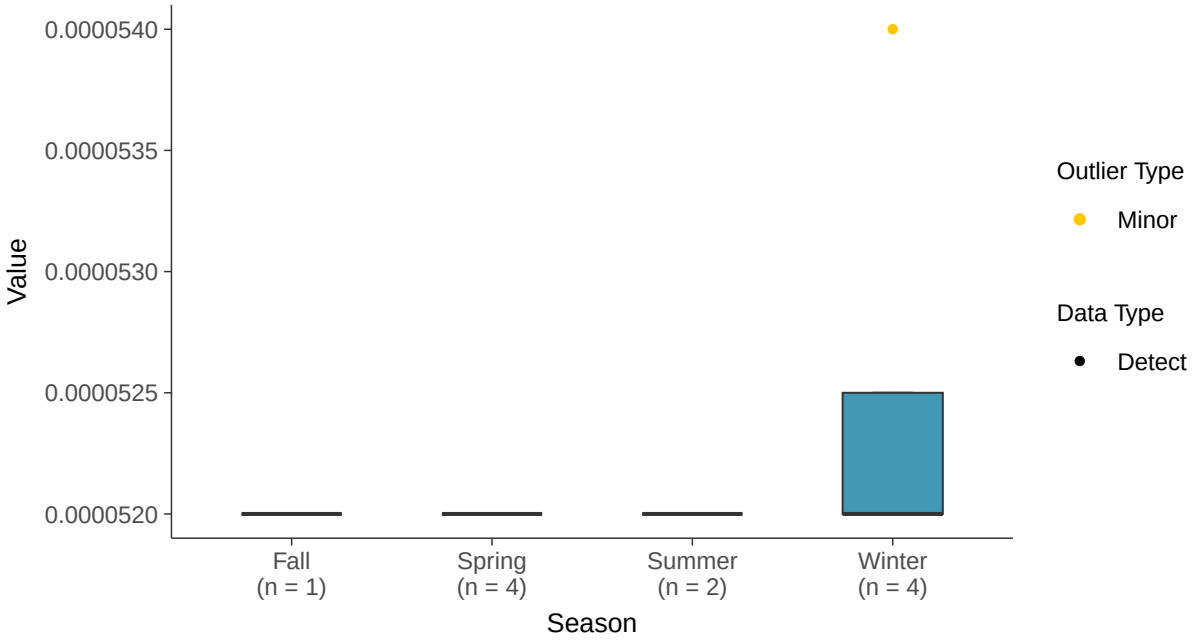
Boxplot

Beryllium, MW-31 (mg/L)



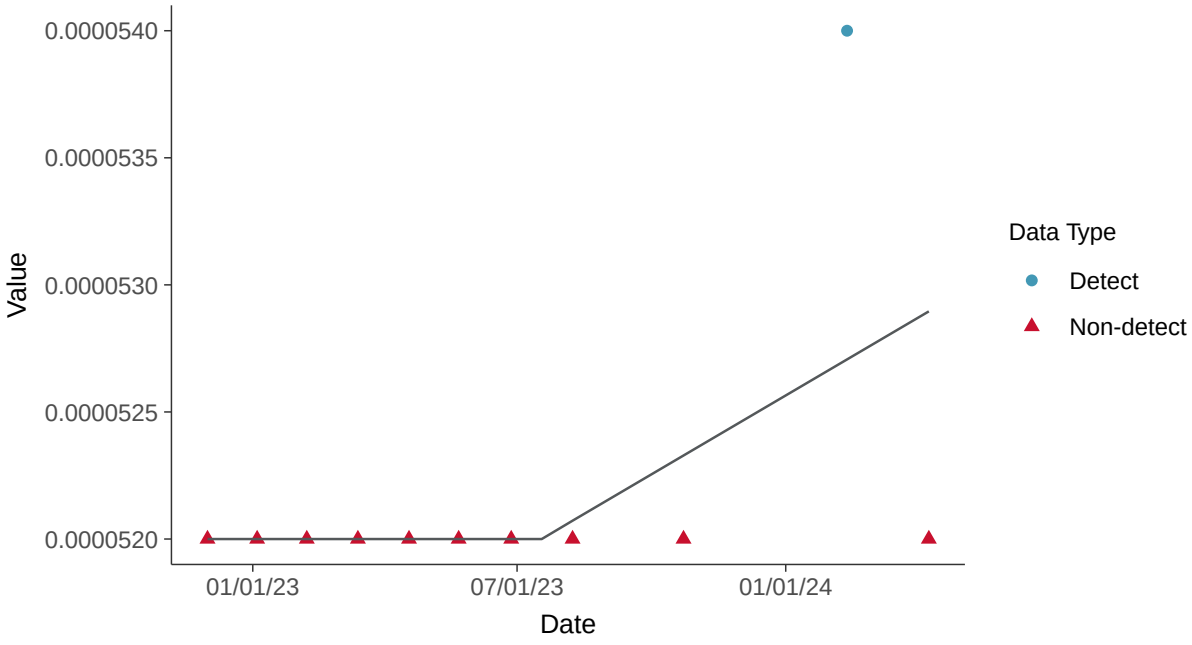
Boxplot by Season

Beryllium, MW-31 (mg/L)



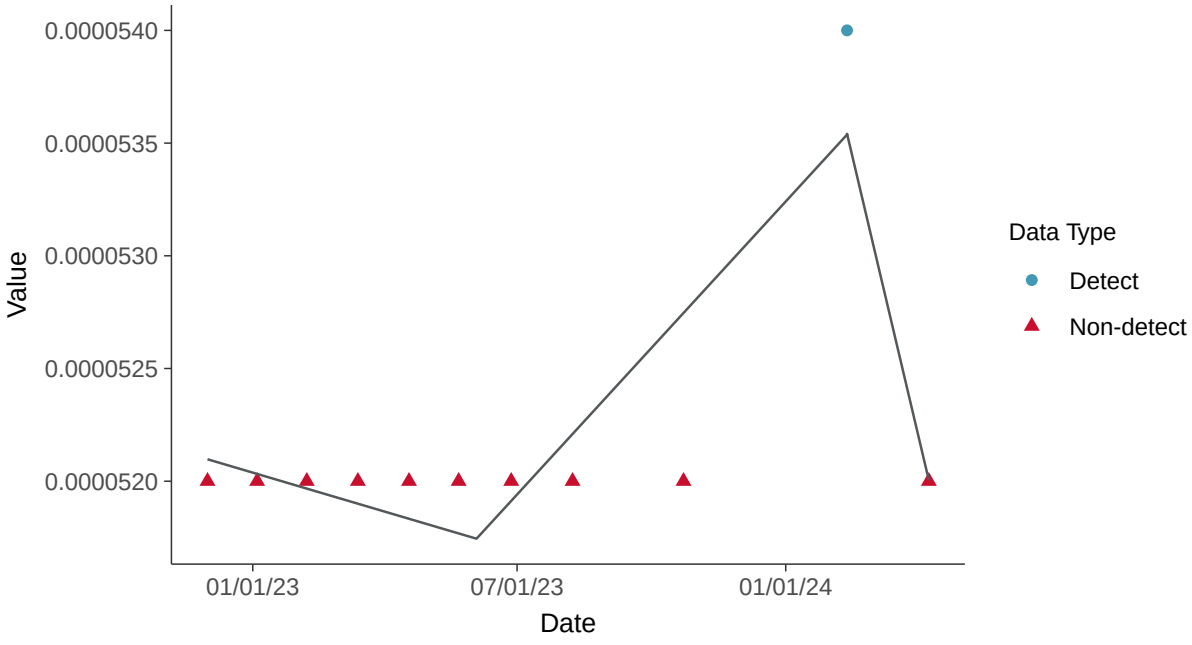
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-31 (mg/L)



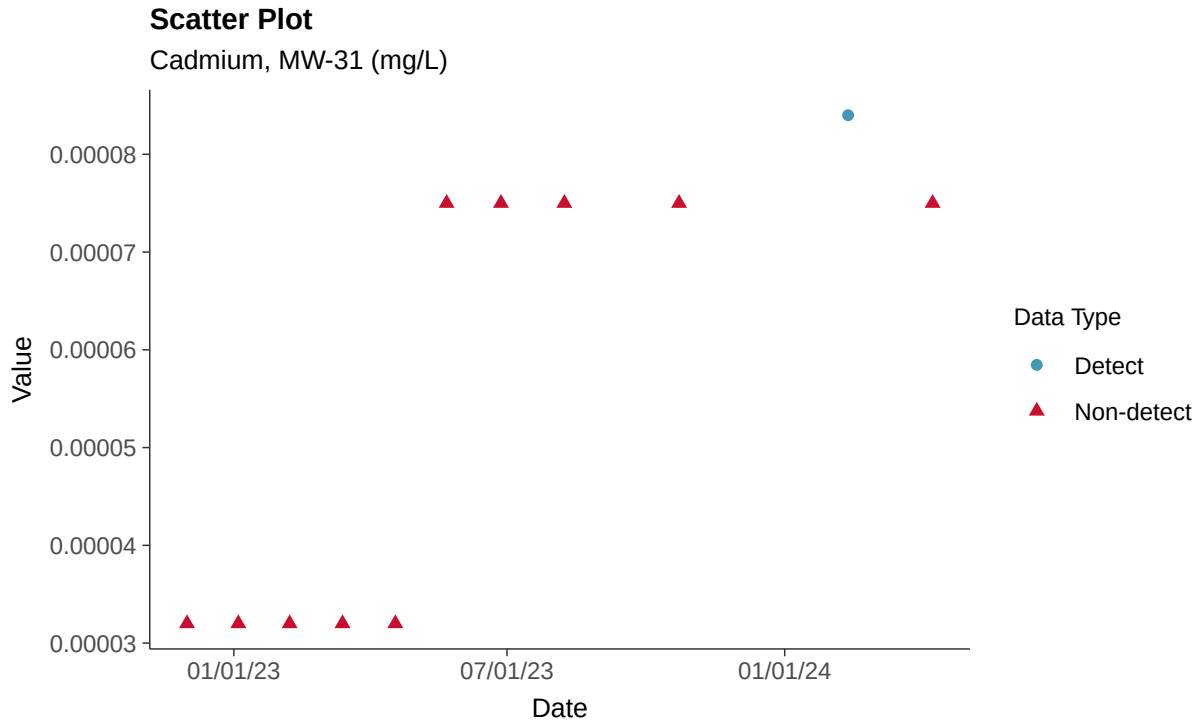
Trend Regression: Piecewise Linear-Linear-Linear

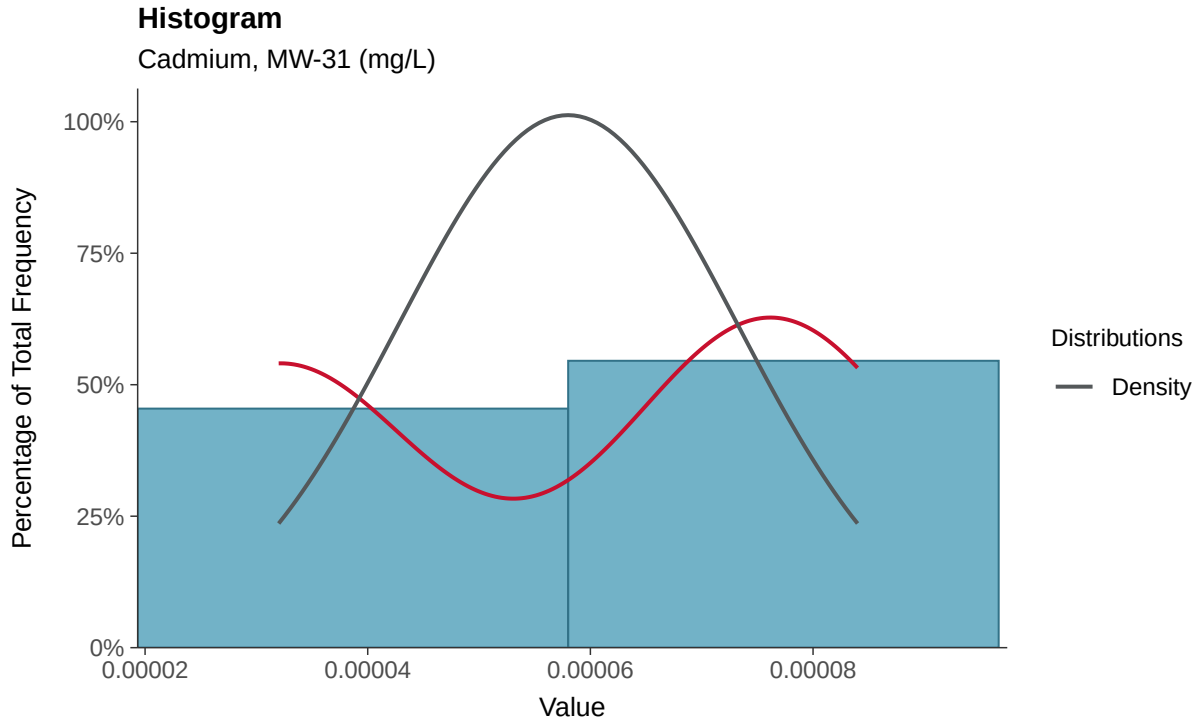
Beryllium, MW-31 (mg/L)



Appendix IV: Cadmium, MW-31

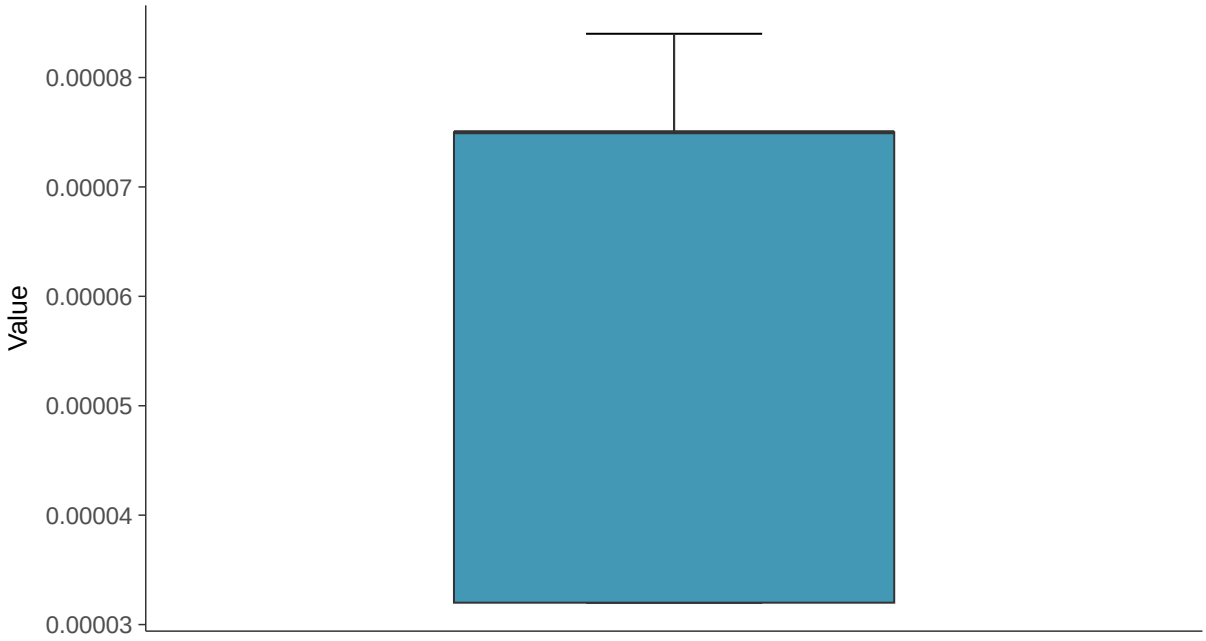
ID: 1_41_5_106





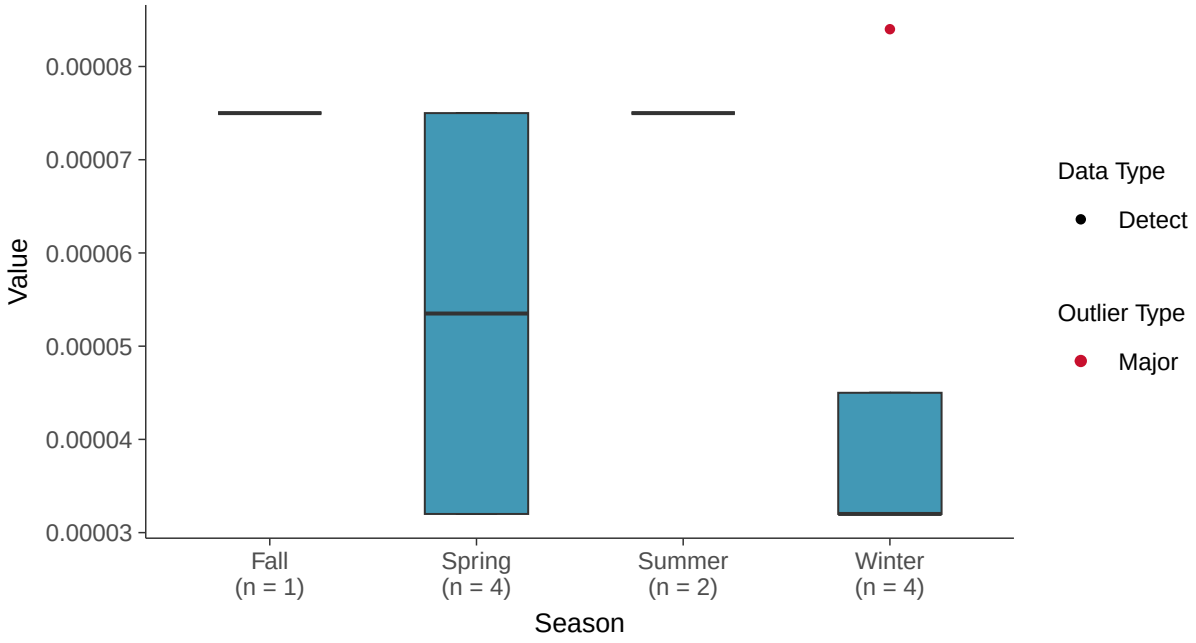
Boxplot

Cadmium, MW-31 (mg/L)



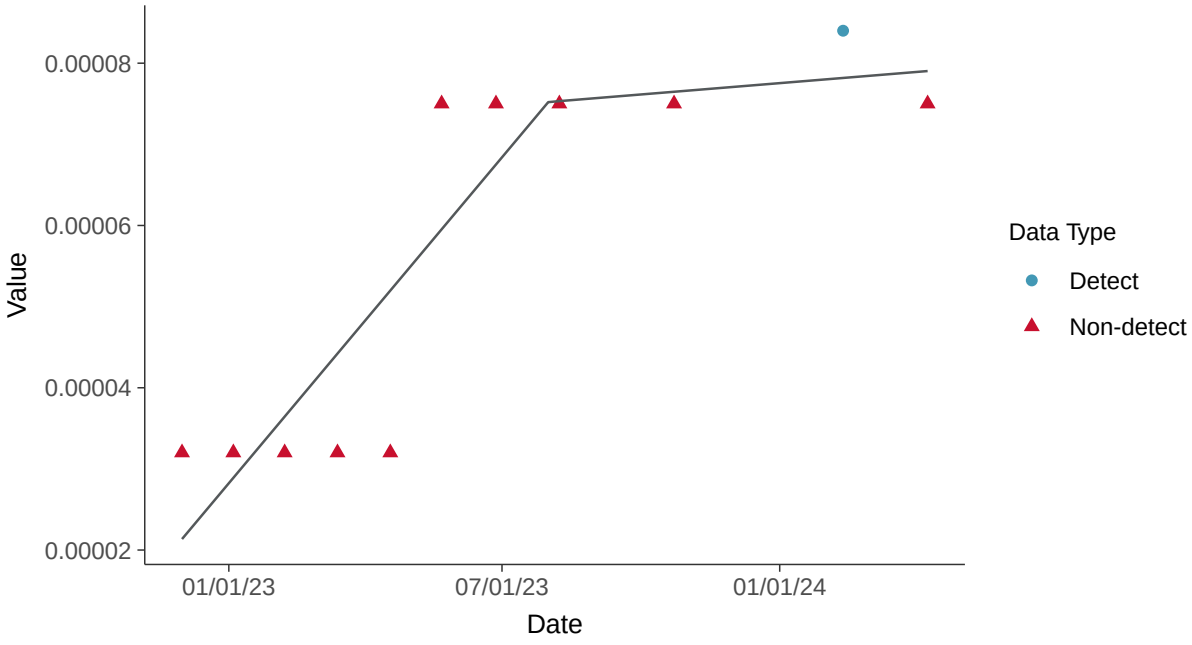
Boxplot by Season

Cadmium, MW-31 (mg/L)



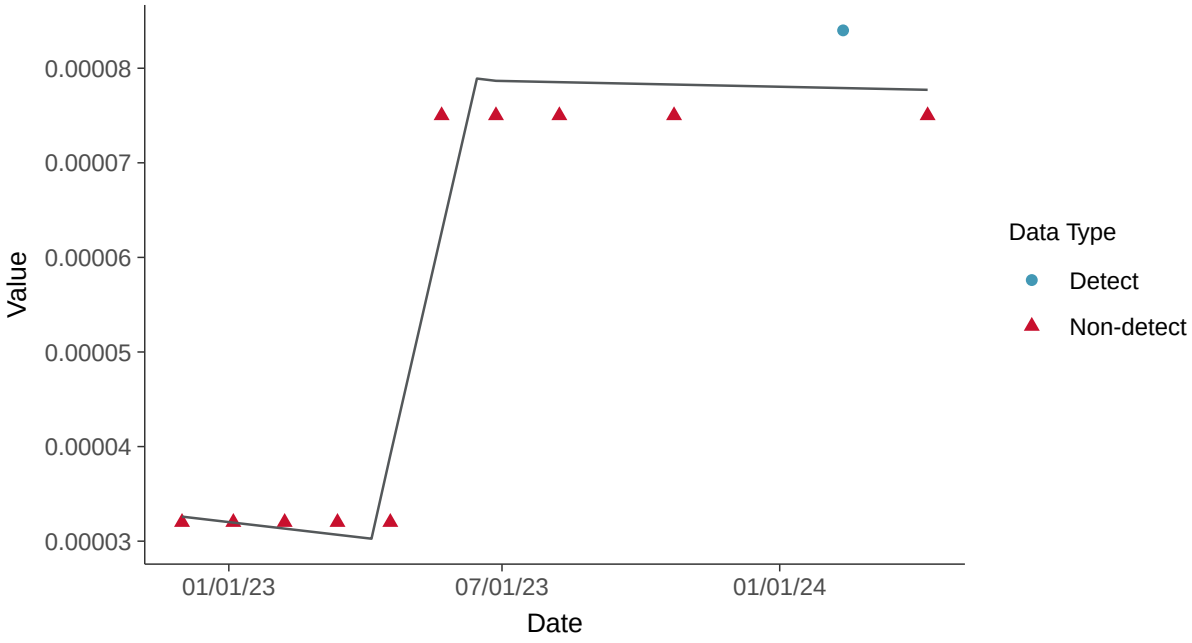
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-31 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cadmium, MW-31 (mg/L)

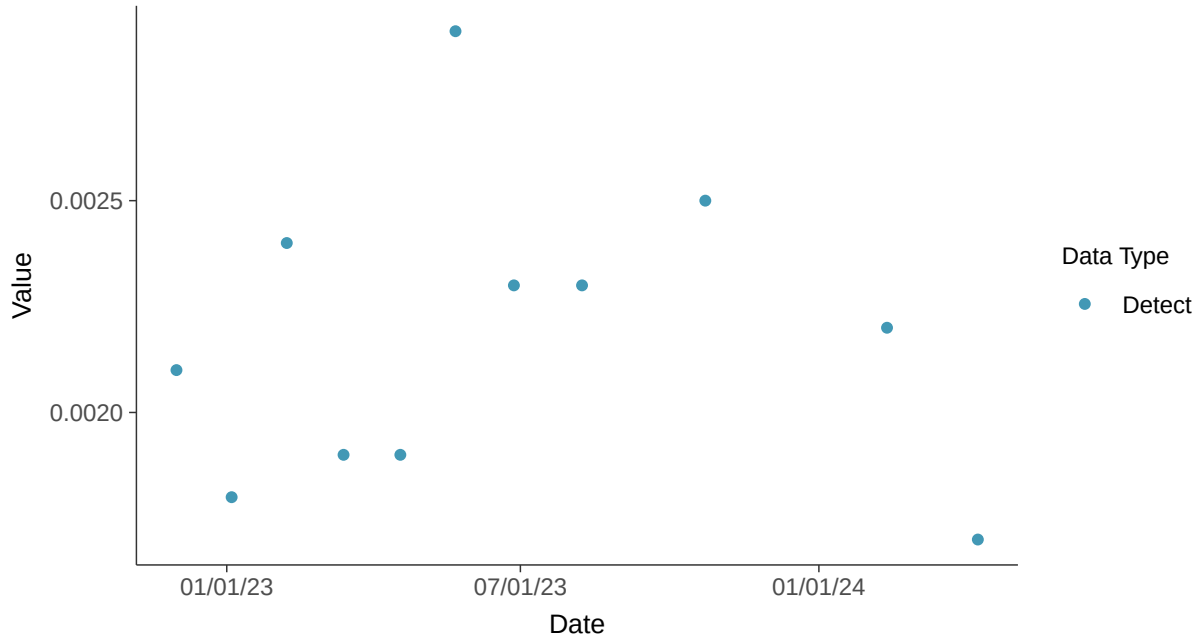


Appendix IV: Chromium, Total, MW-31

ID: 1_41_5_109

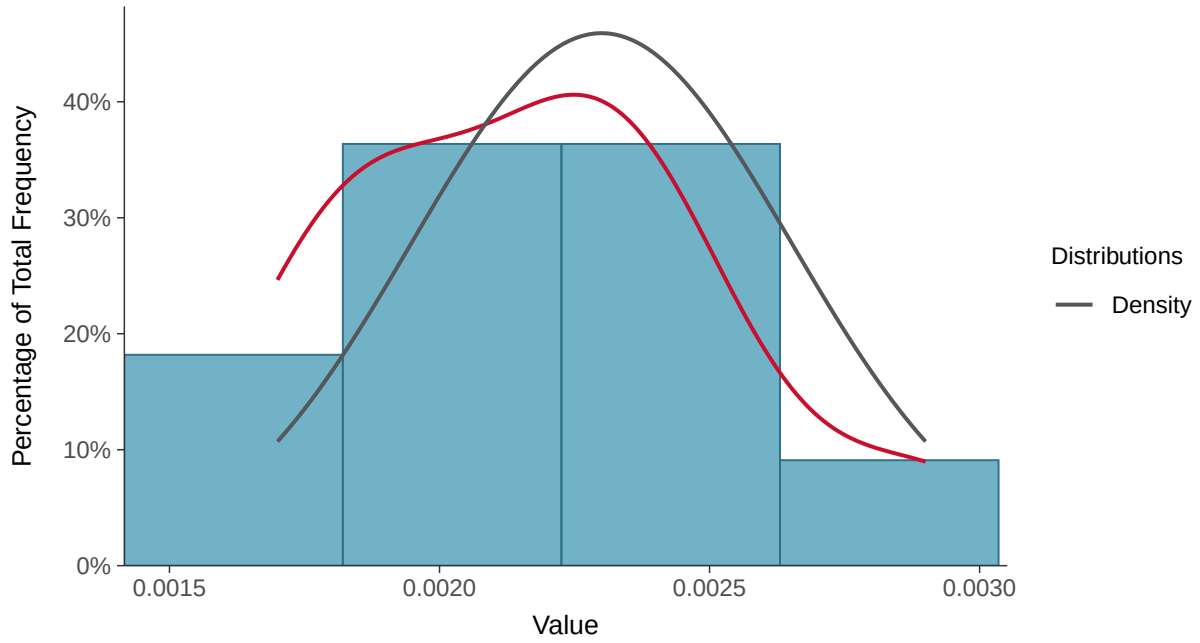
Scatter Plot

Chromium, Total, MW-31 (mg/L)



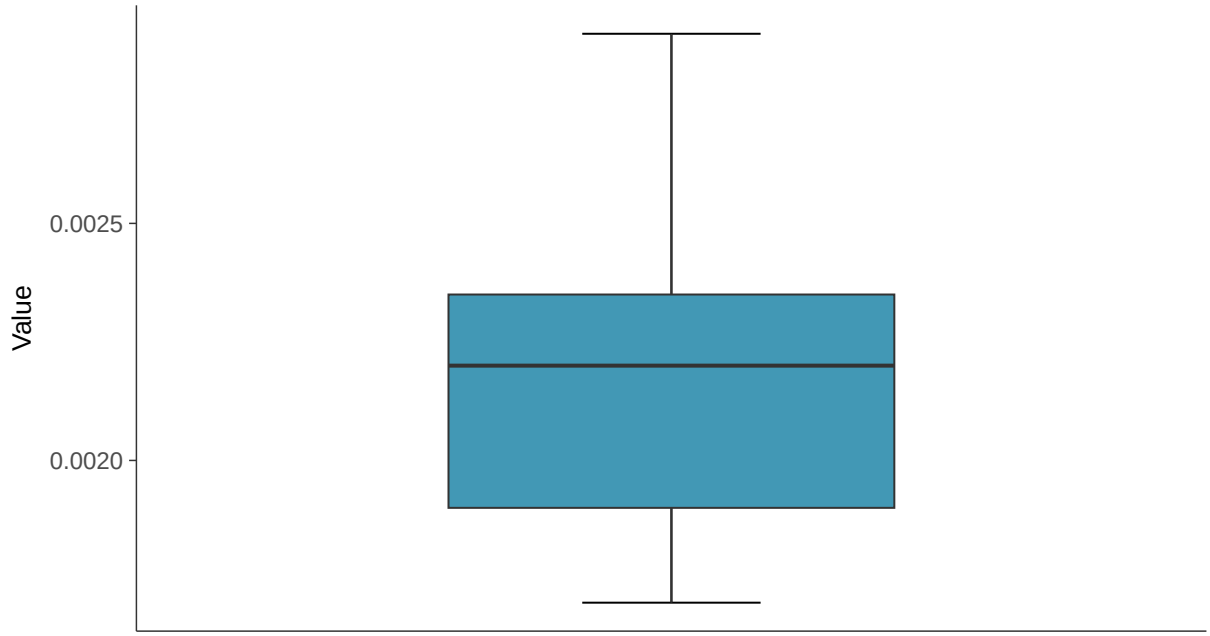
Histogram

Chromium, Total, MW-31 (mg/L)



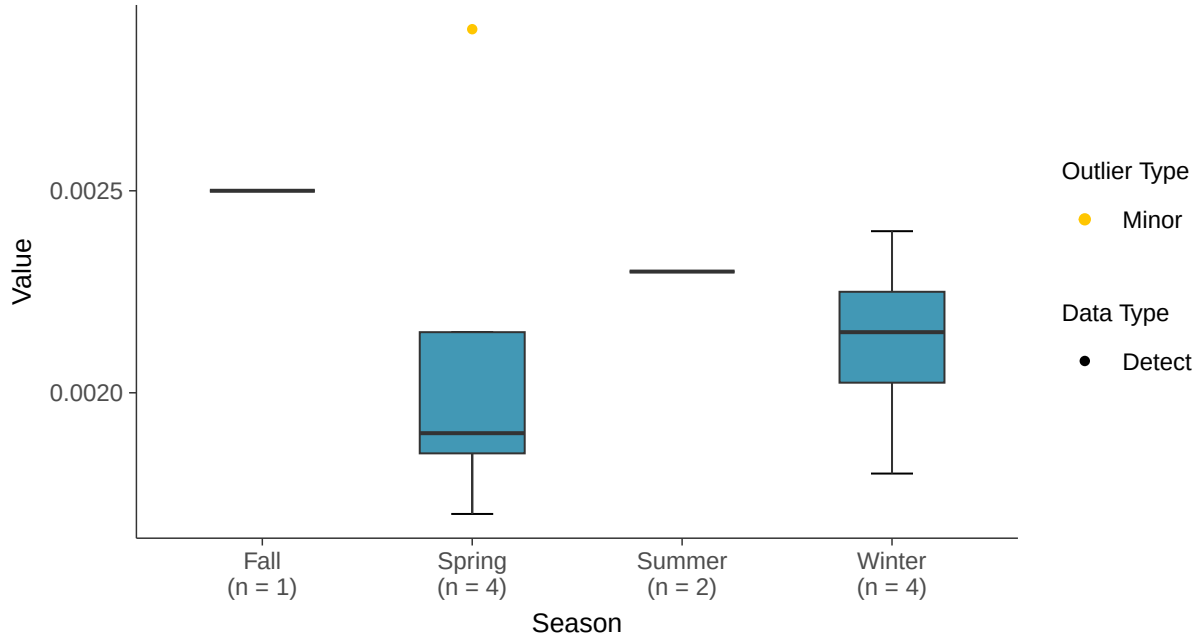
Boxplot

Chromium, Total, MW-31 (mg/L)



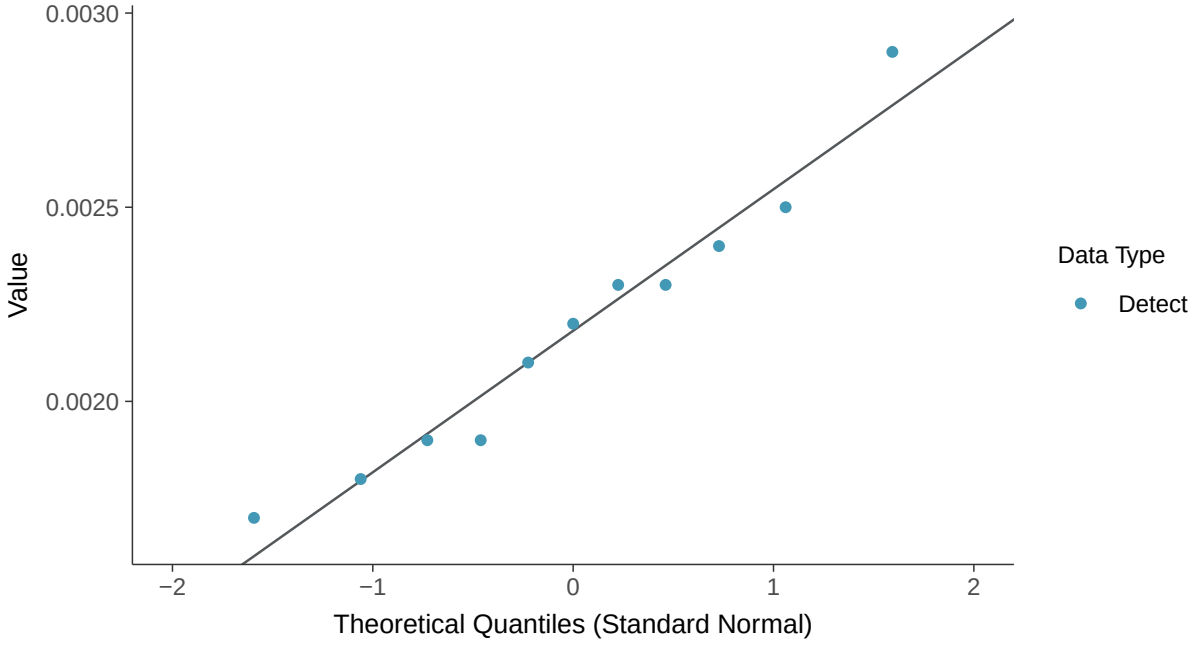
Boxplot by Season

Chromium, Total, MW-31 (mg/L)



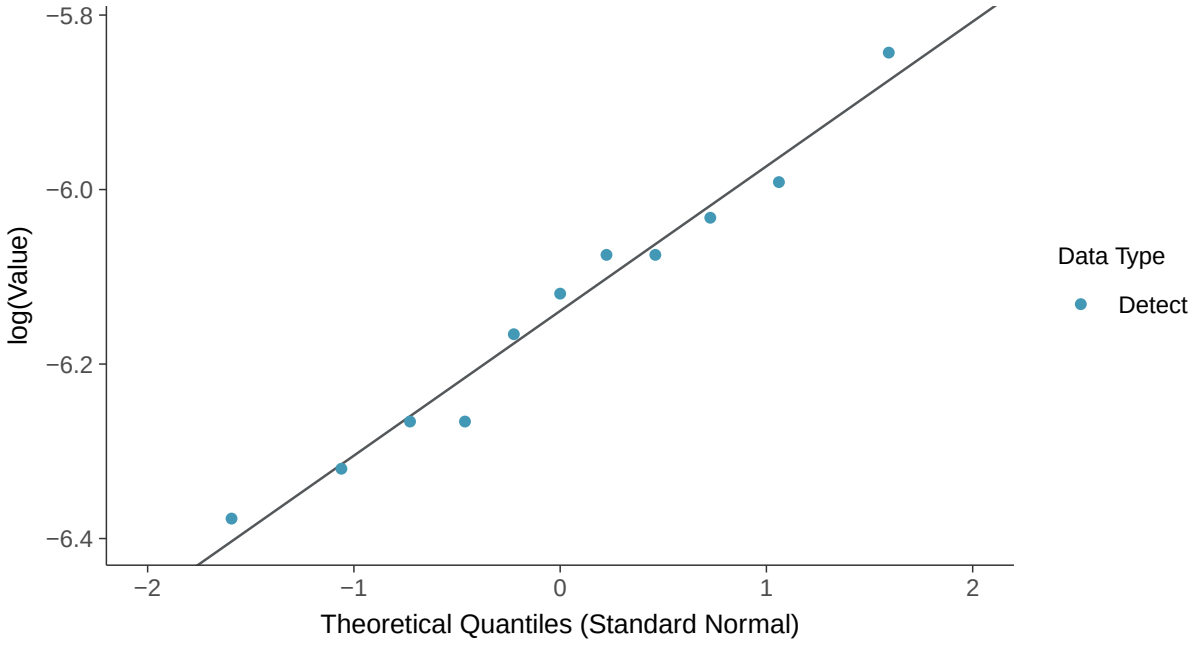
Normal Q-Q plot

Chromium, Total, MW-31 (mg/L)



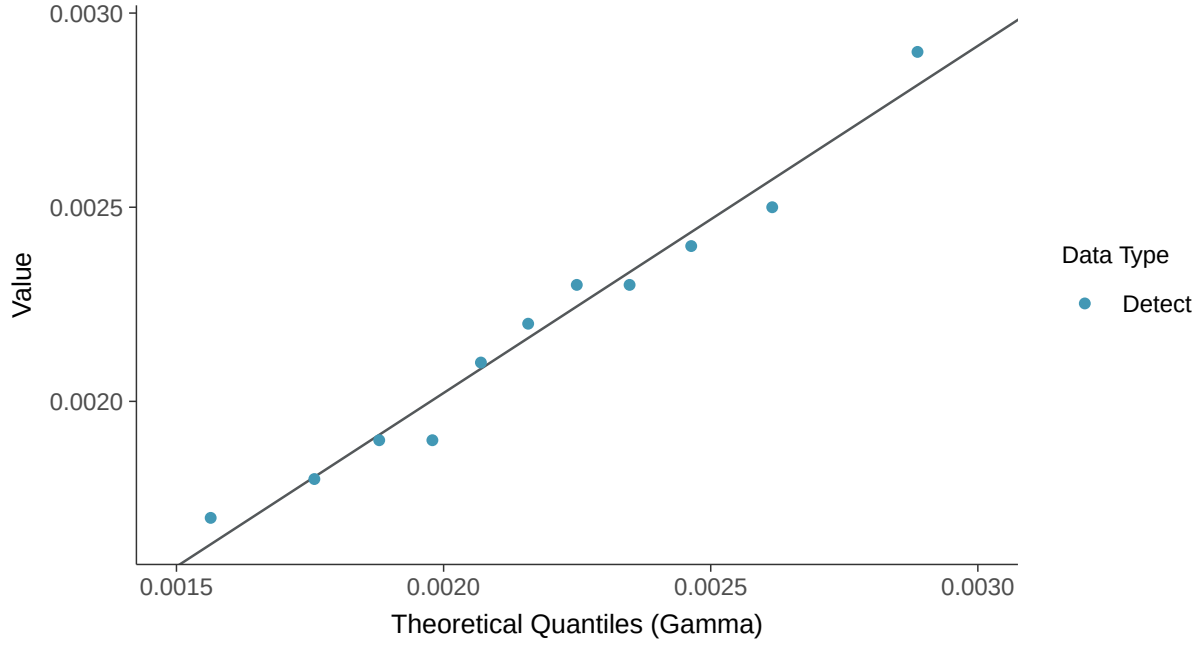
Lognormal Q-Q plot

Chromium, Total, MW-31 (mg/L)



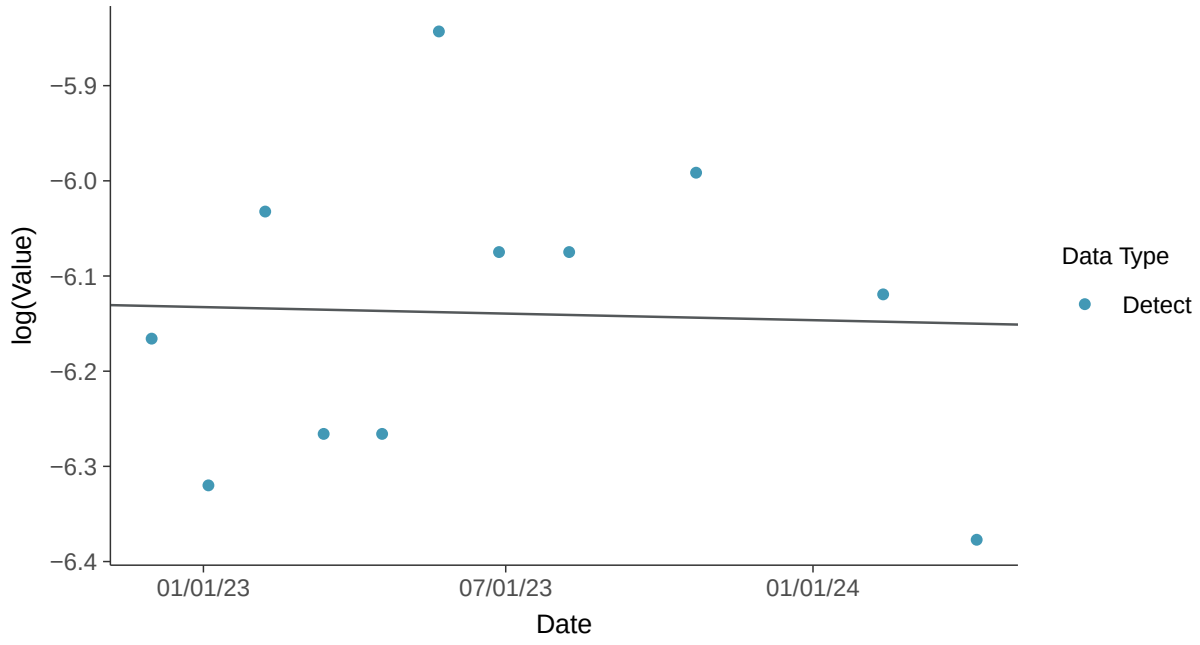
Gamma Q-Q plot

Chromium, Total, MW-31 (mg/L)



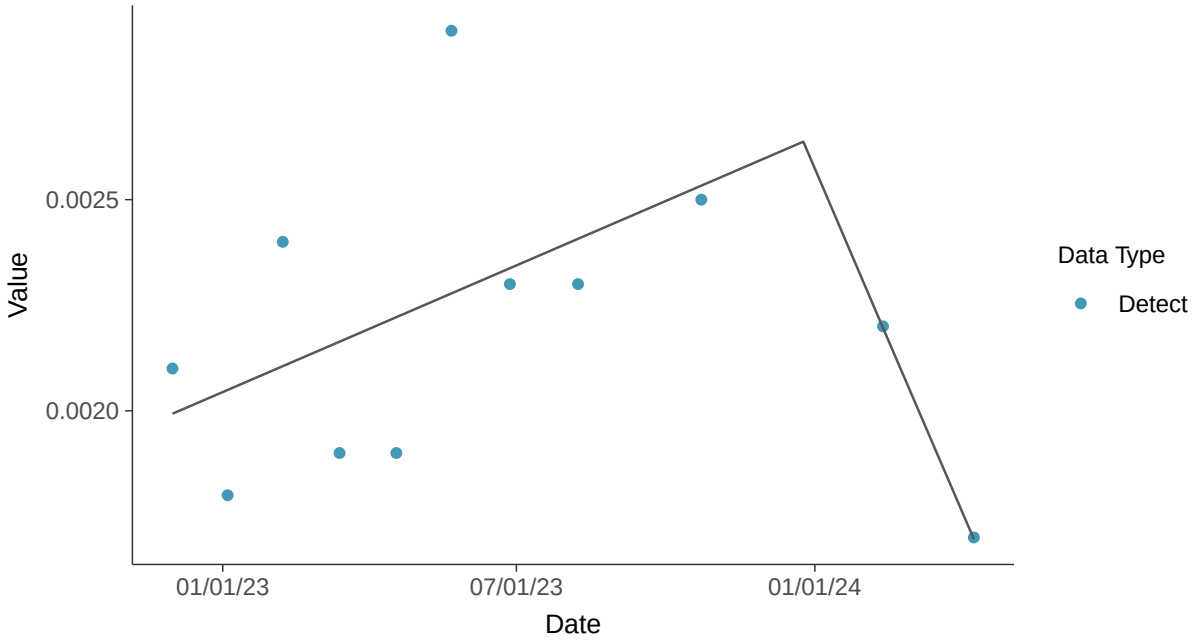
Trend Regression: Lognormal MLE

Chromium, Total, MW-31 (mg/L)



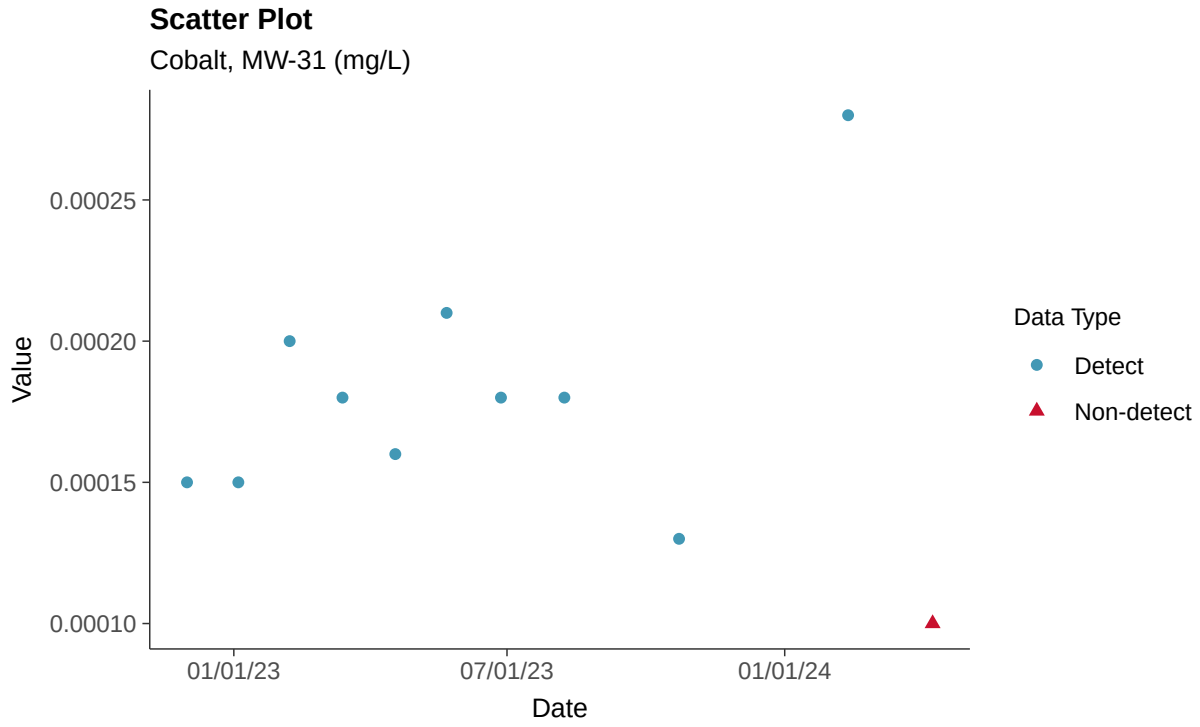
Trend Regression: Piecewise Linear-Linear

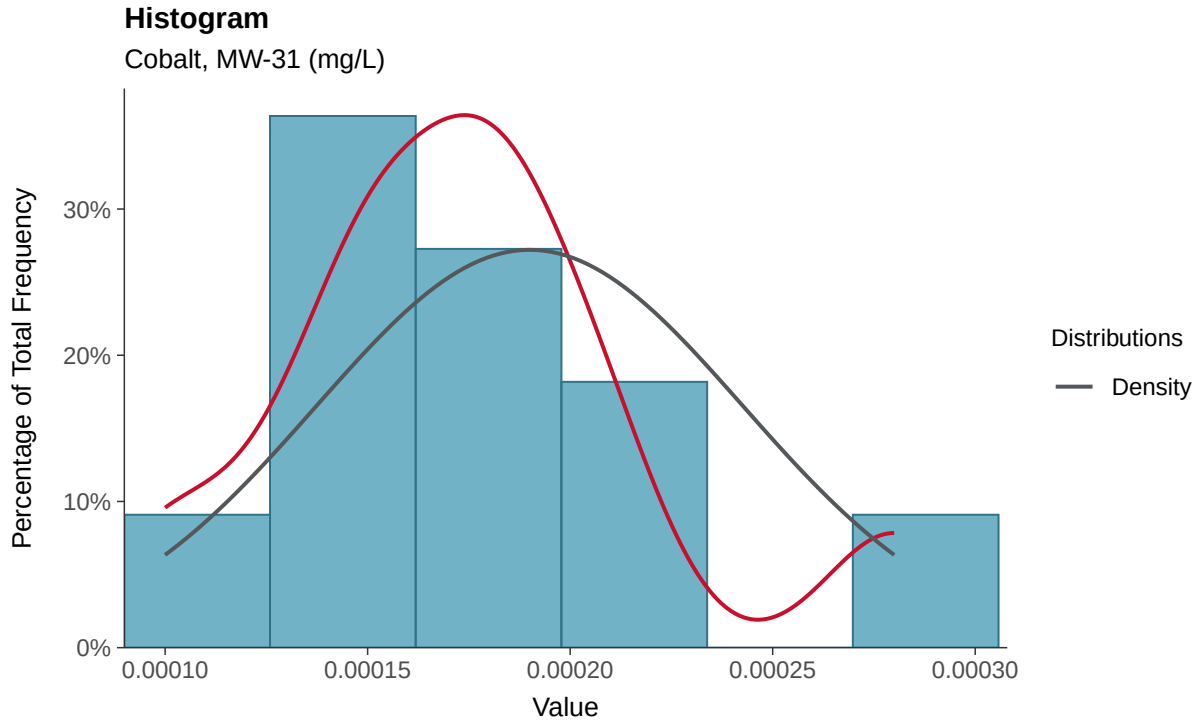
Chromium, Total, MW-31 (mg/L)



Appendix IV: Cobalt, MW-31

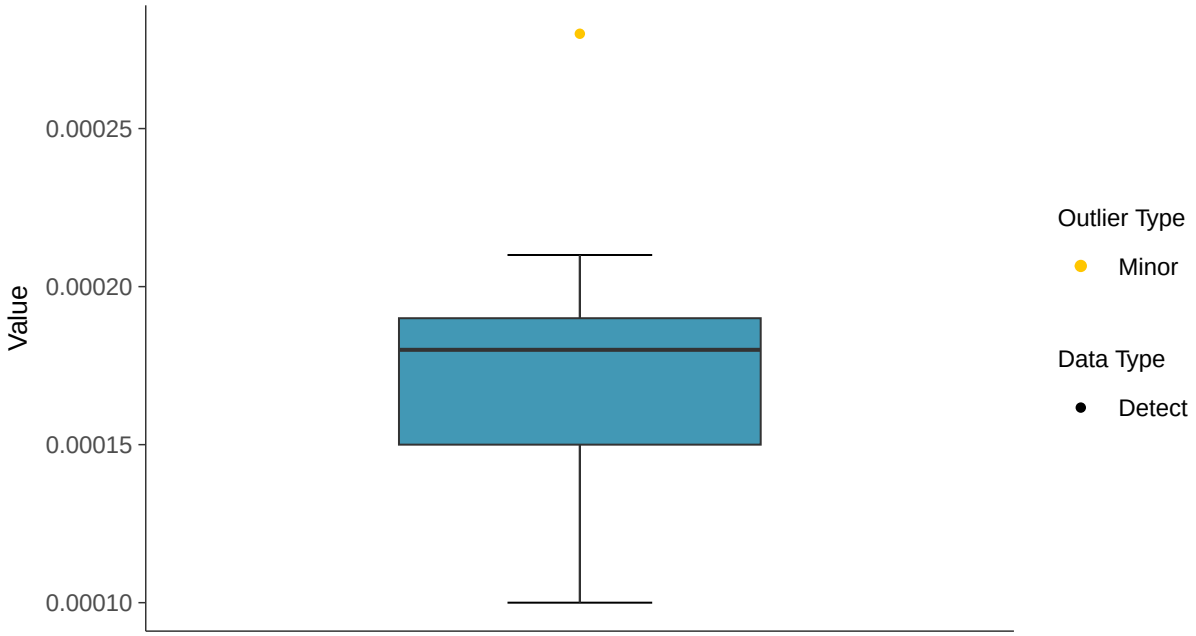
ID: 1_41_5_110





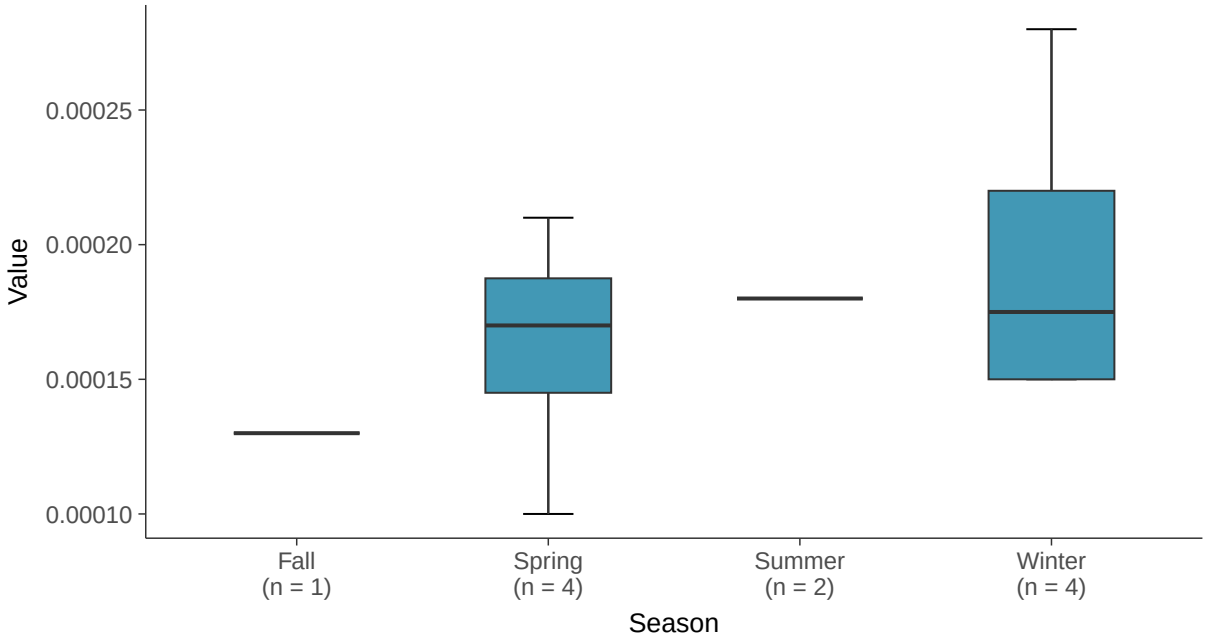
Boxplot

Cobalt, MW-31 (mg/L)



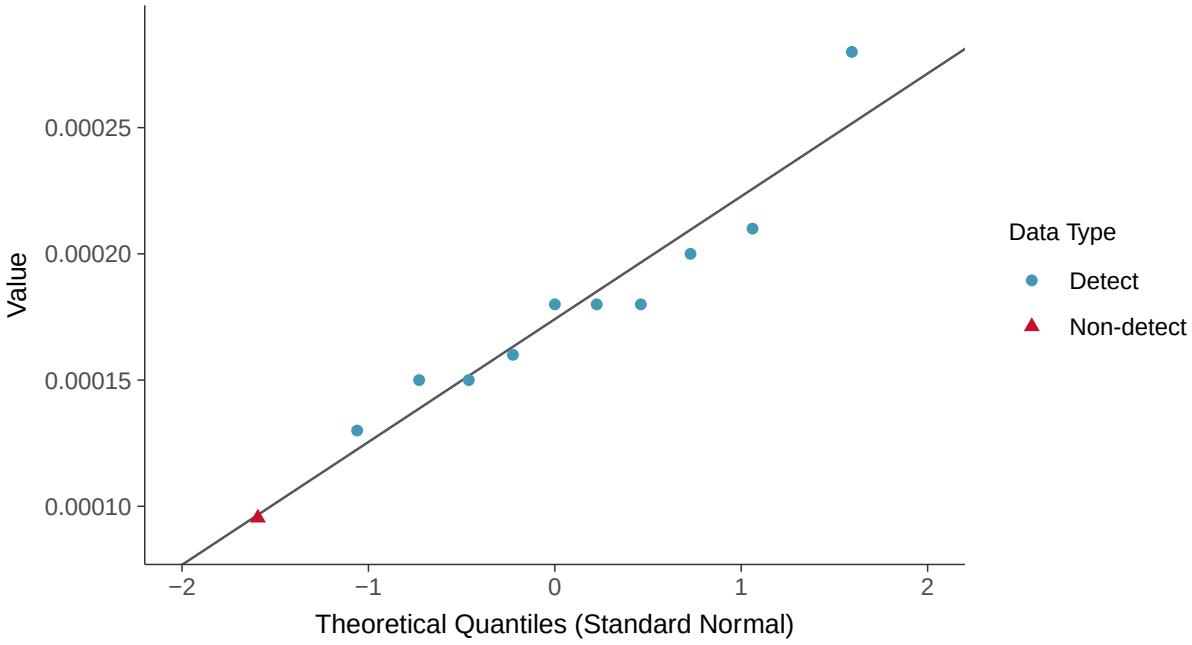
Boxplot by Season

Cobalt, MW-31 (mg/L)



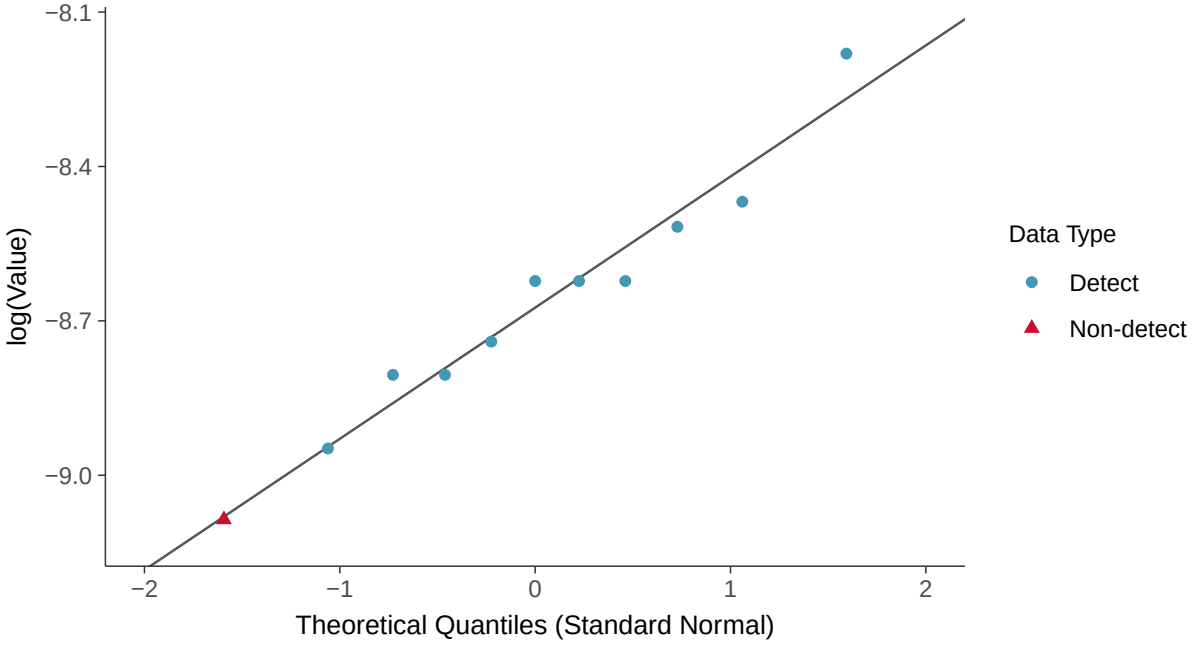
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-31 (mg/L)



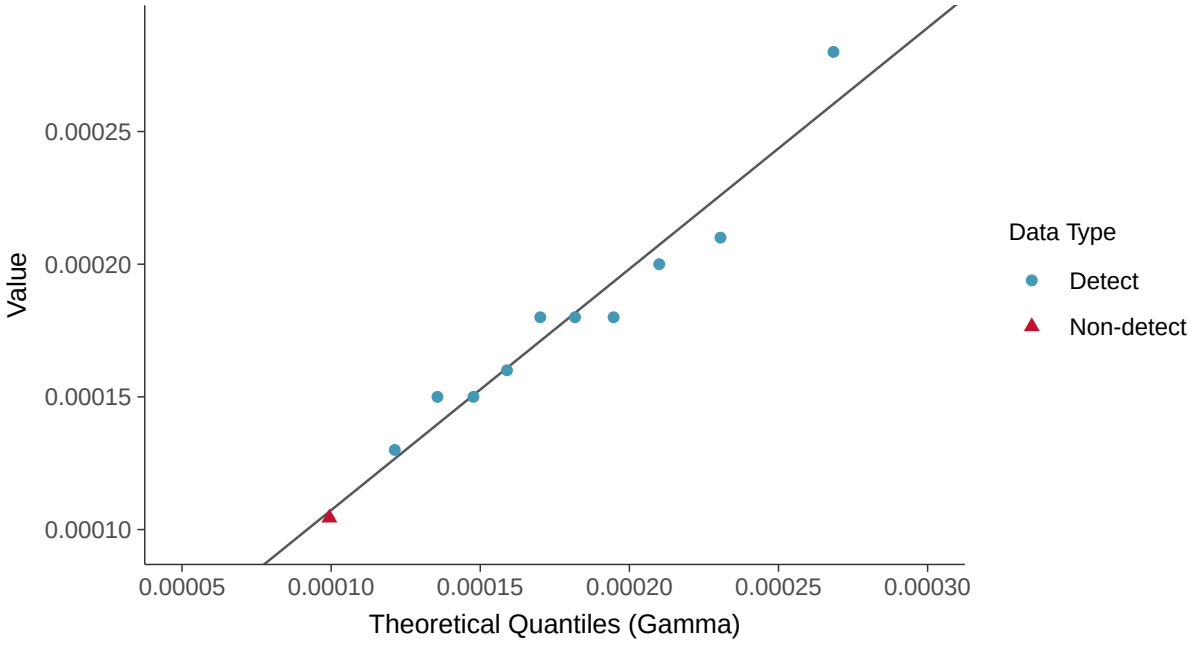
Lognormal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-31 (mg/L)



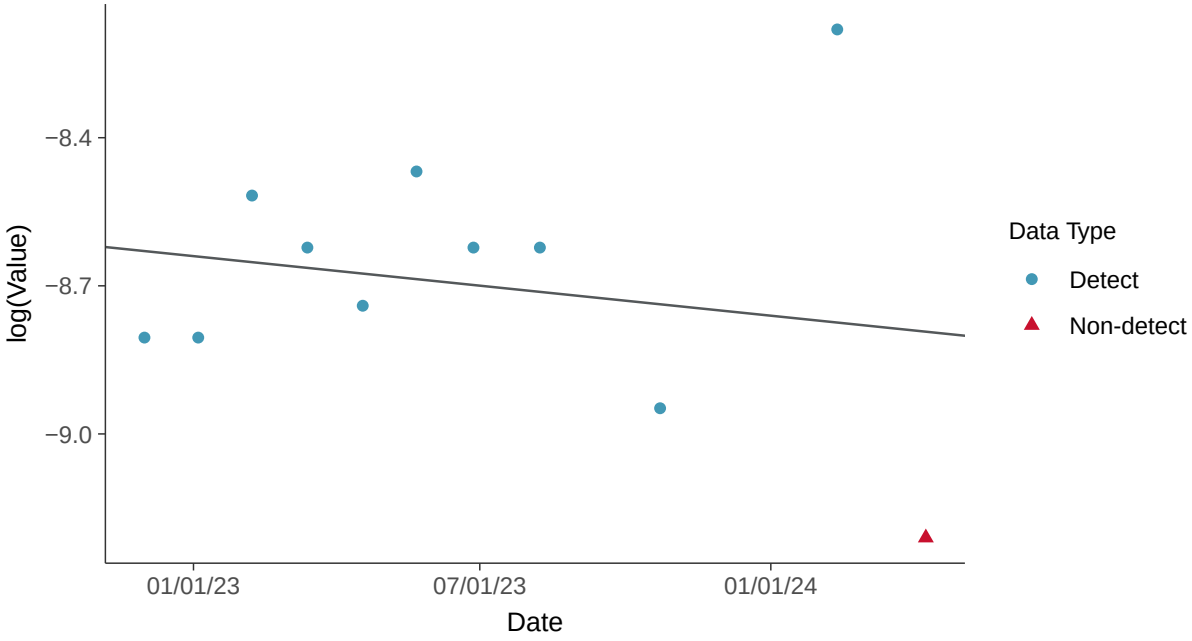
Gamma Q-Q plot using ROS Imputed Estimates

Cobalt, MW-31 (mg/L)



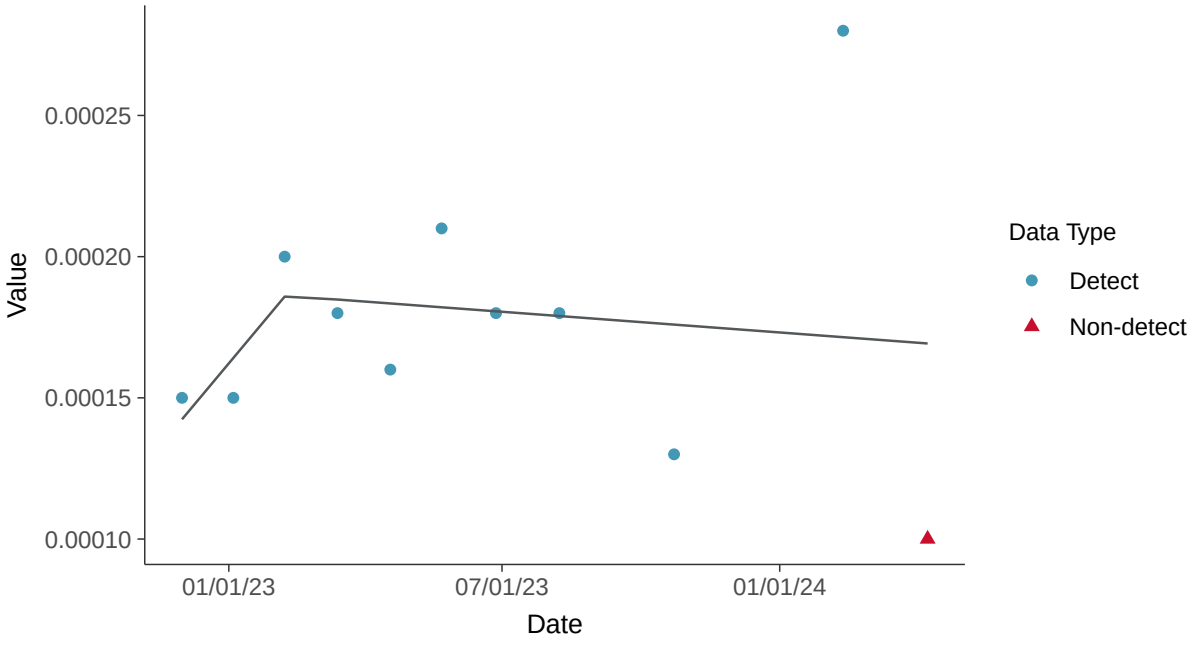
Trend Regression: Lognormal MLE

Cobalt, MW-31 (mg/L)



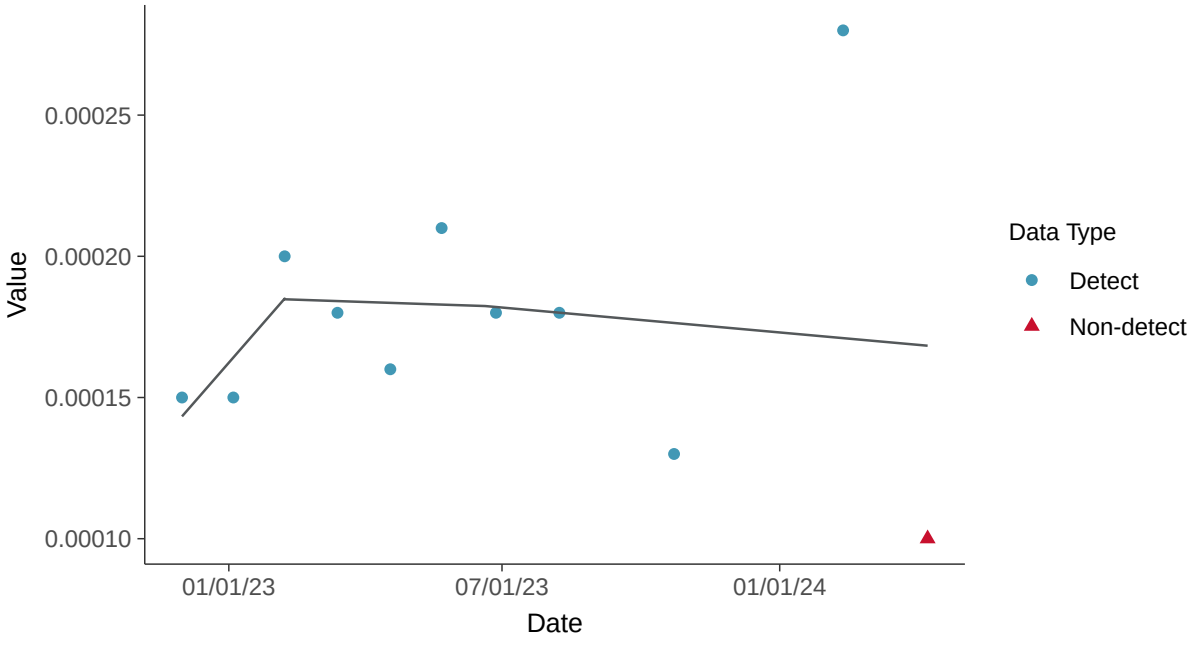
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-31 (mg/L)



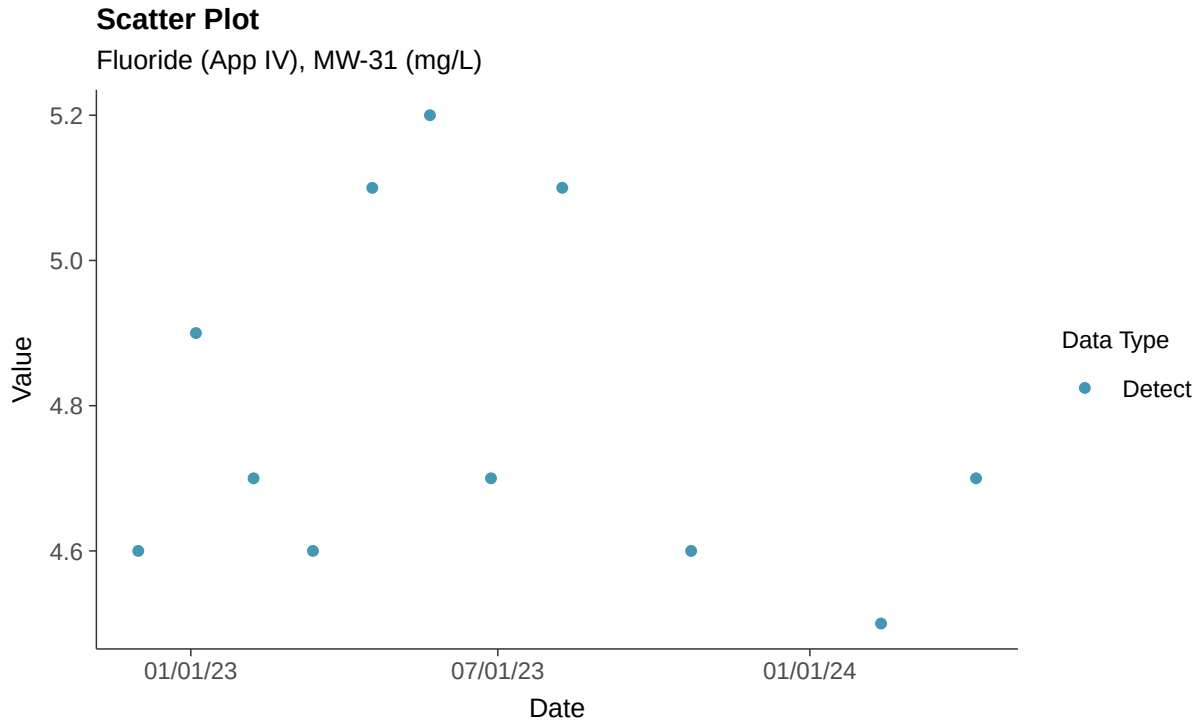
Trend Regression: Piecewise Linear-Linear-Linear

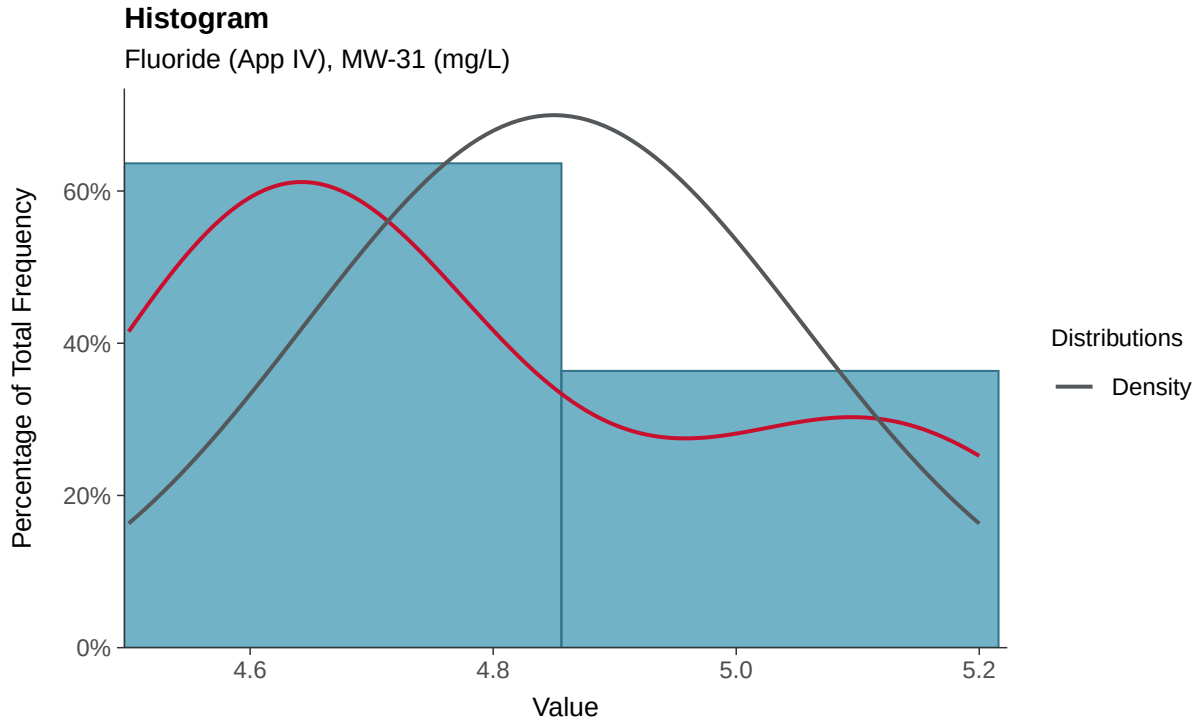
Cobalt, MW-31 (mg/L)



Appendix IV: Fluoride (App IV), MW-31

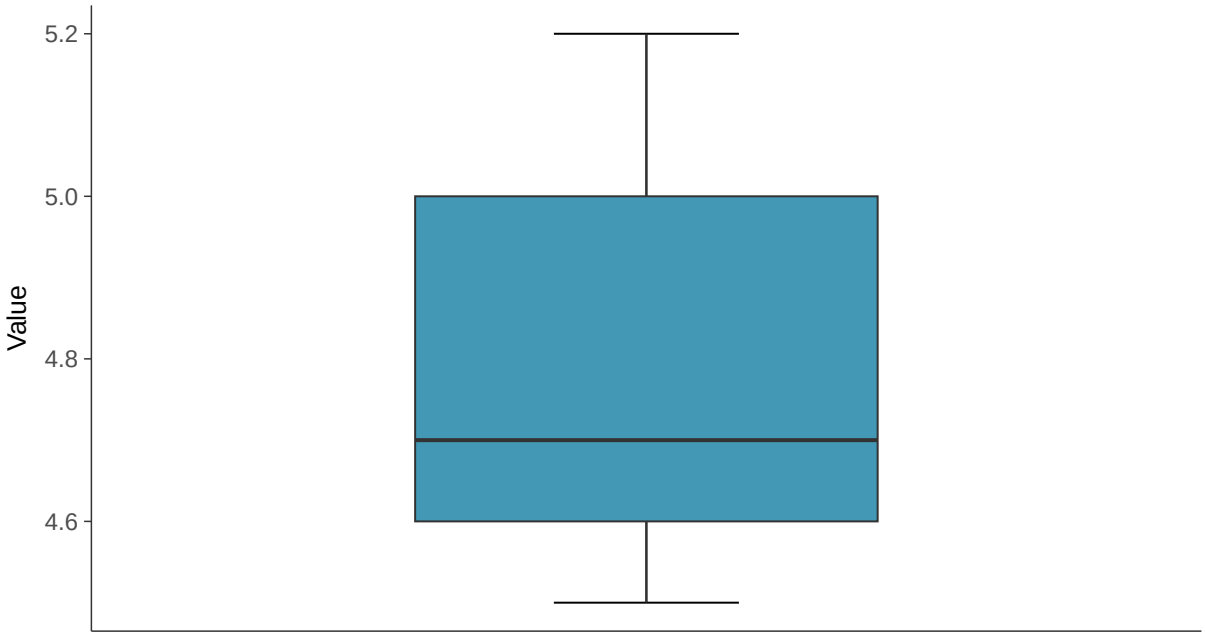
ID: 1_41_5_113





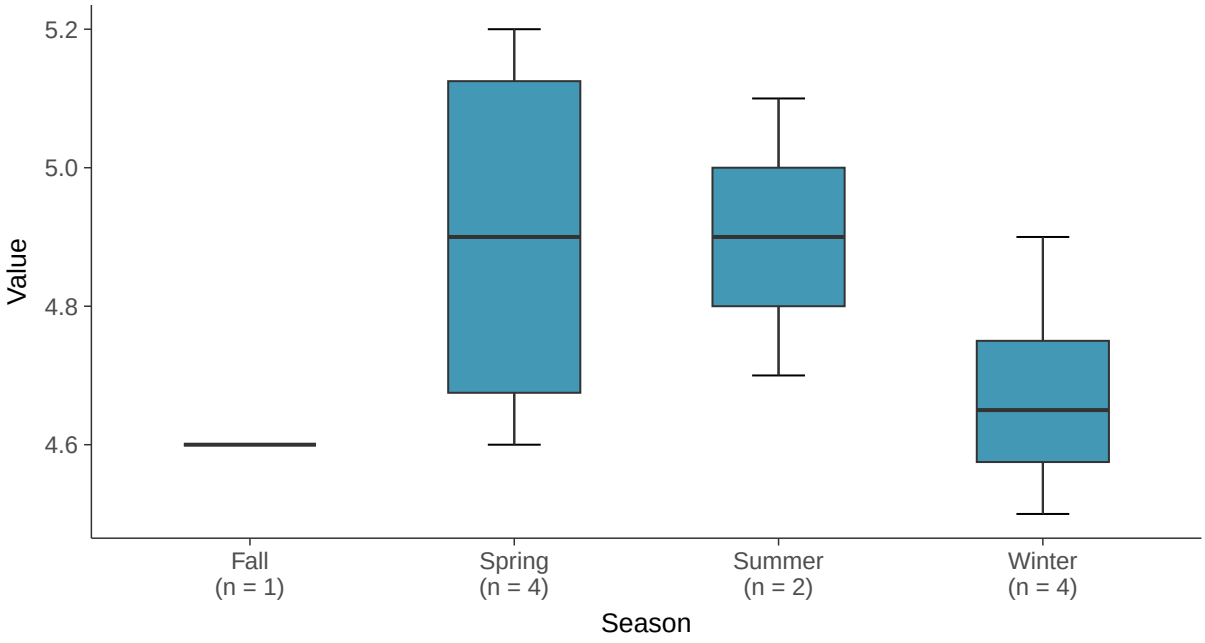
Boxplot

Fluoride (App IV), MW-31 (mg/L)



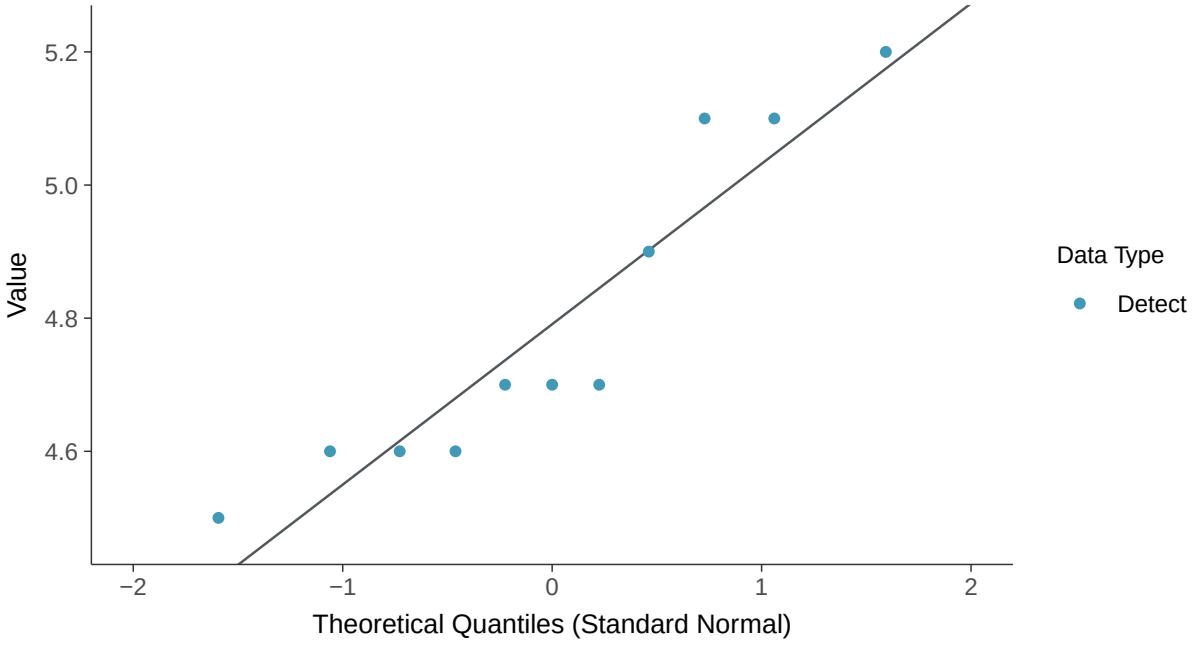
Boxplot by Season

Fluoride (App IV), MW-31 (mg/L)



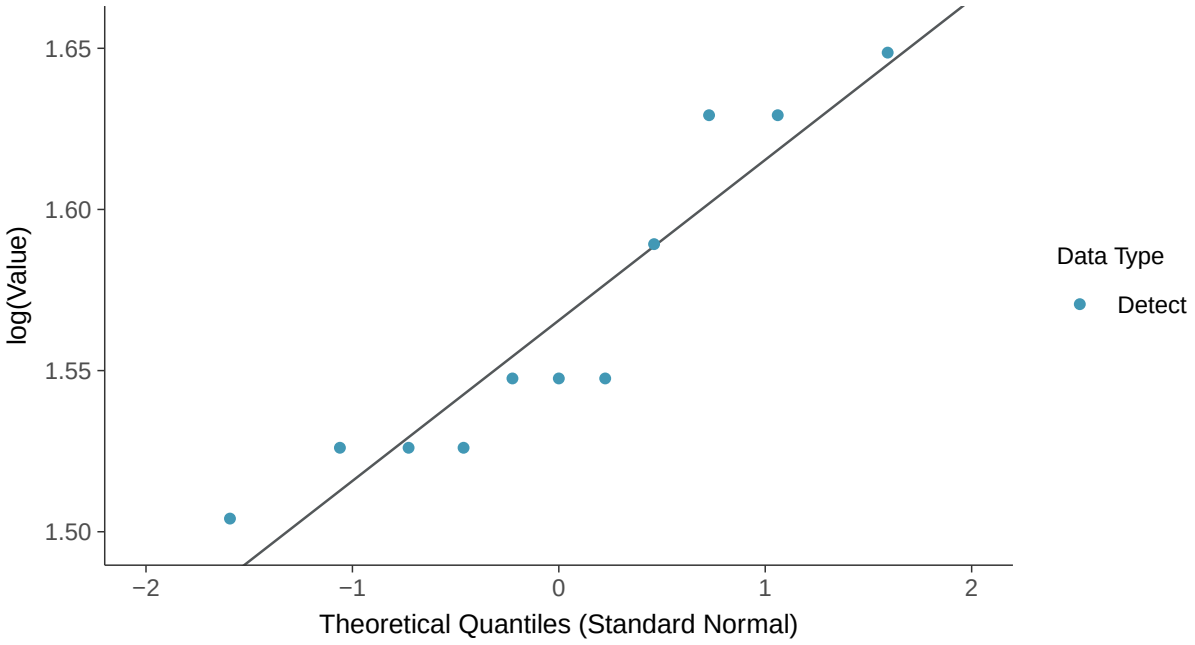
Normal Q-Q plot

Fluoride (App IV), MW-31 (mg/L)



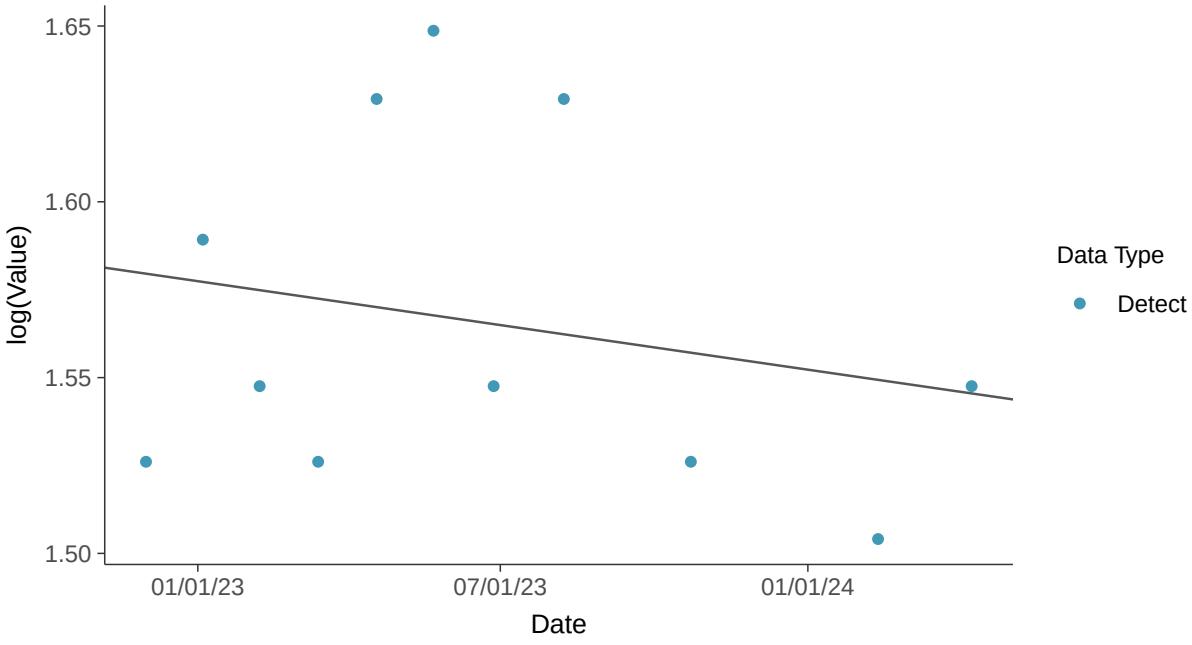
Lognormal Q-Q plot

Fluoride (App IV), MW-31 (mg/L)



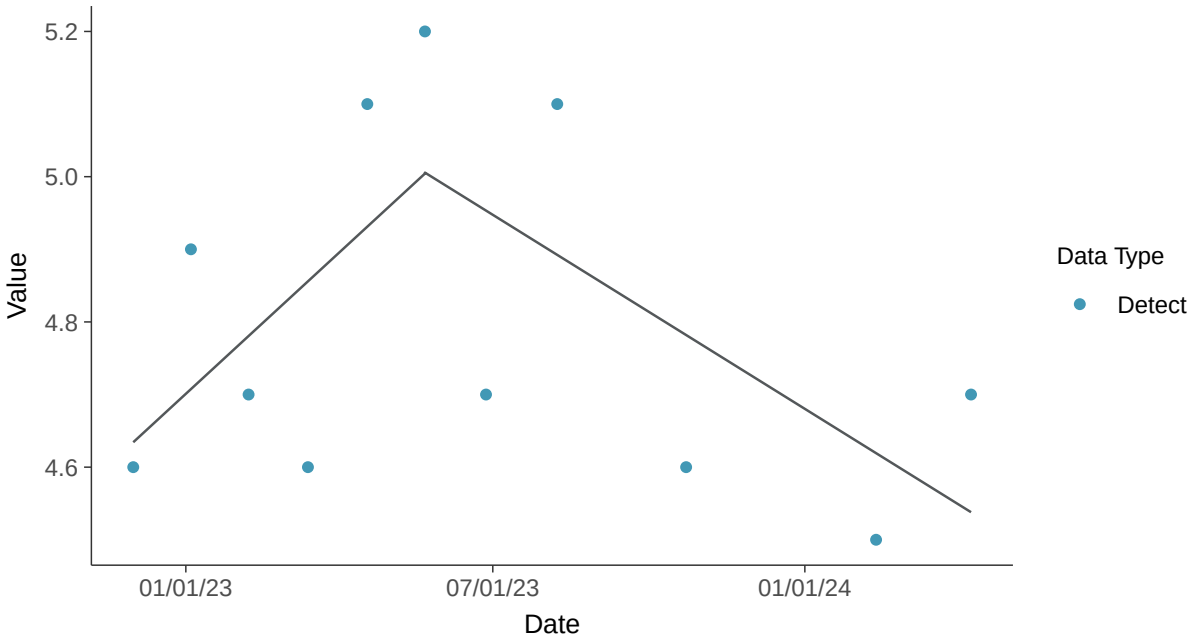
Trend Regression: Lognormal MLE

Fluoride (App IV), MW-31 (mg/L)



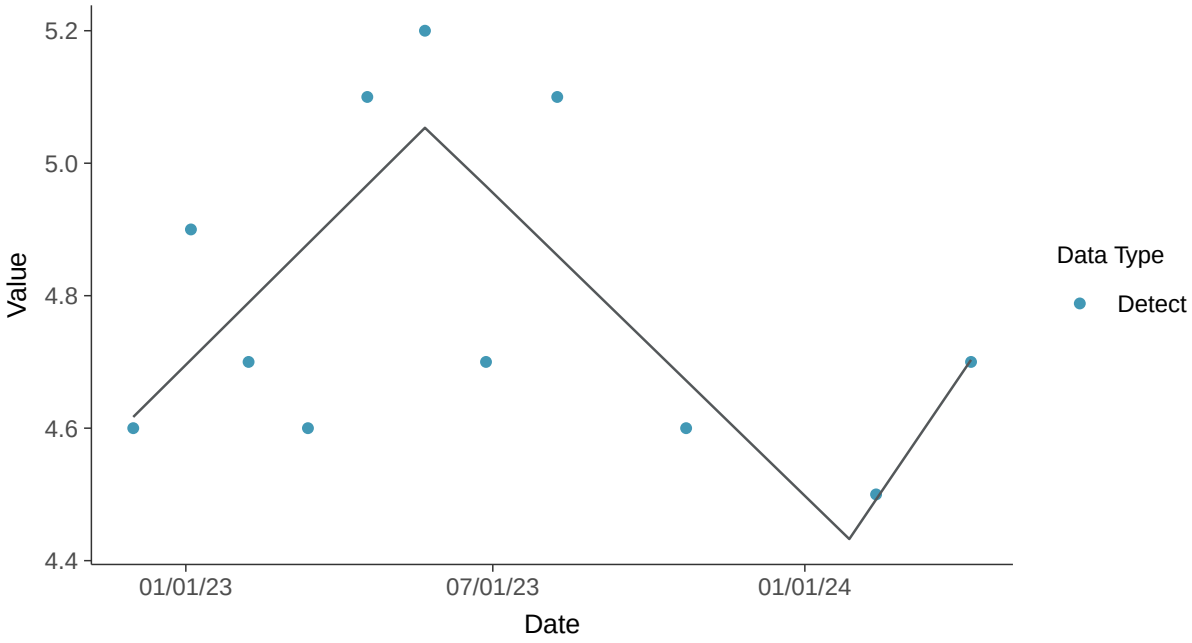
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-31 (mg/L)



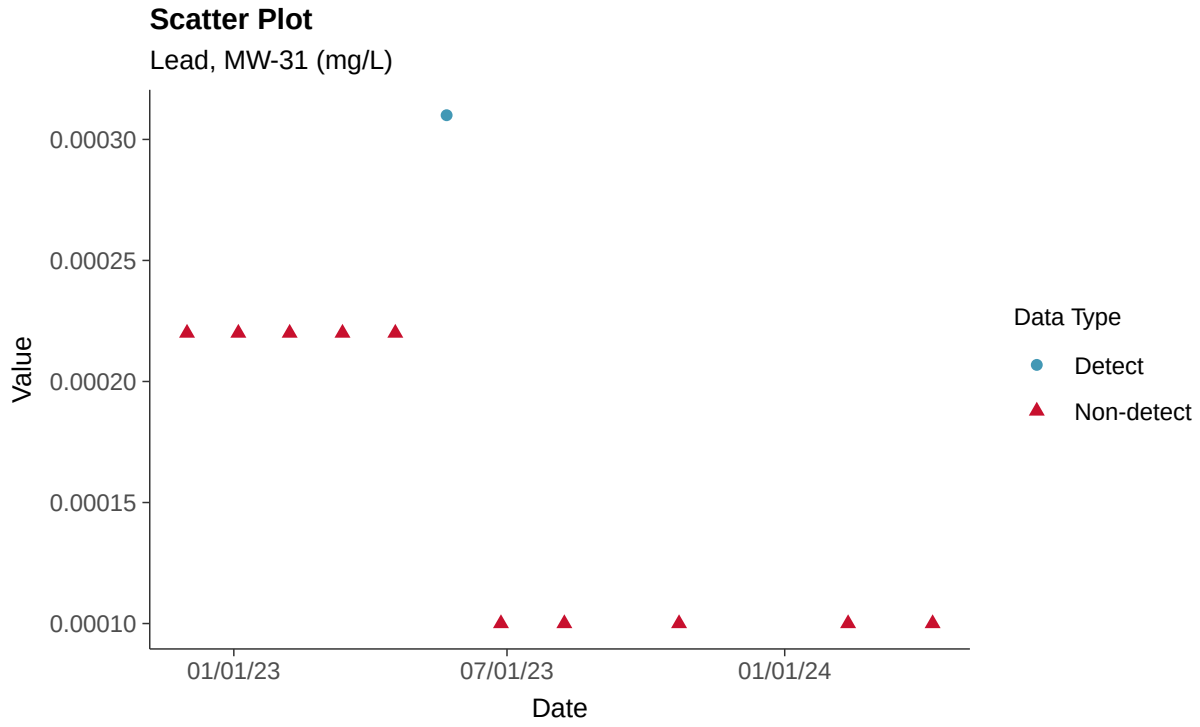
Trend Regression: Piecewise Linear-Linear-Linear

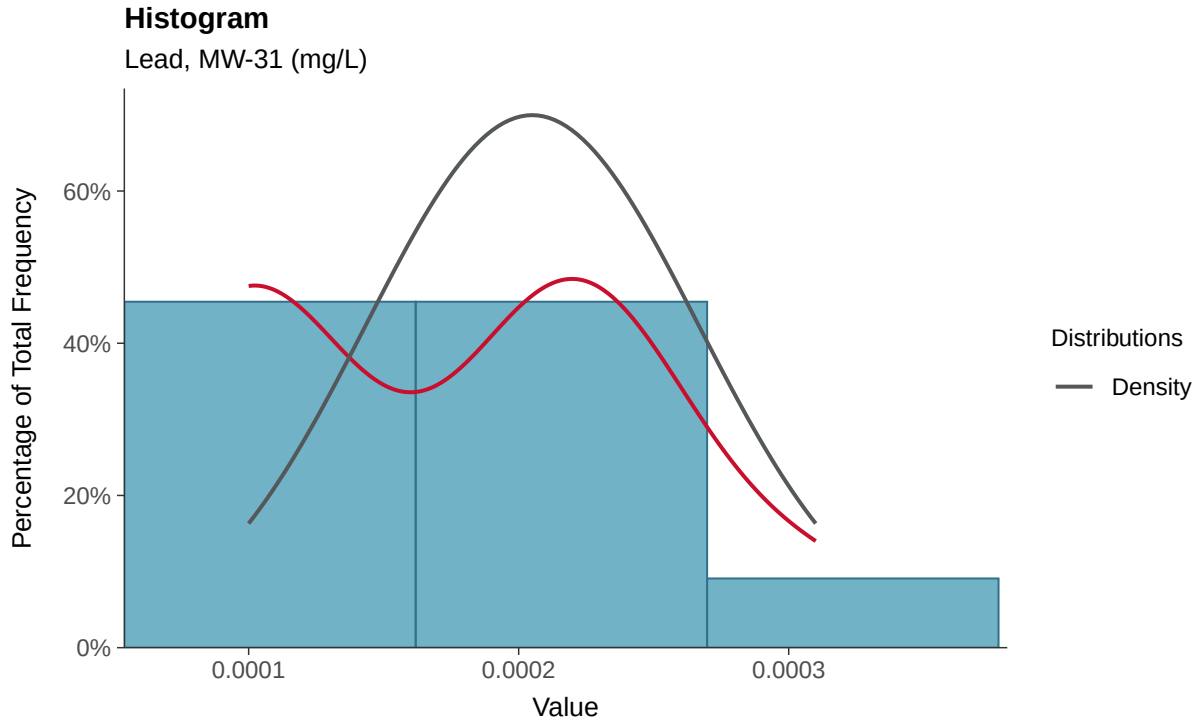
Fluoride (App IV), MW-31 (mg/L)



Appendix IV: Lead, MW-31

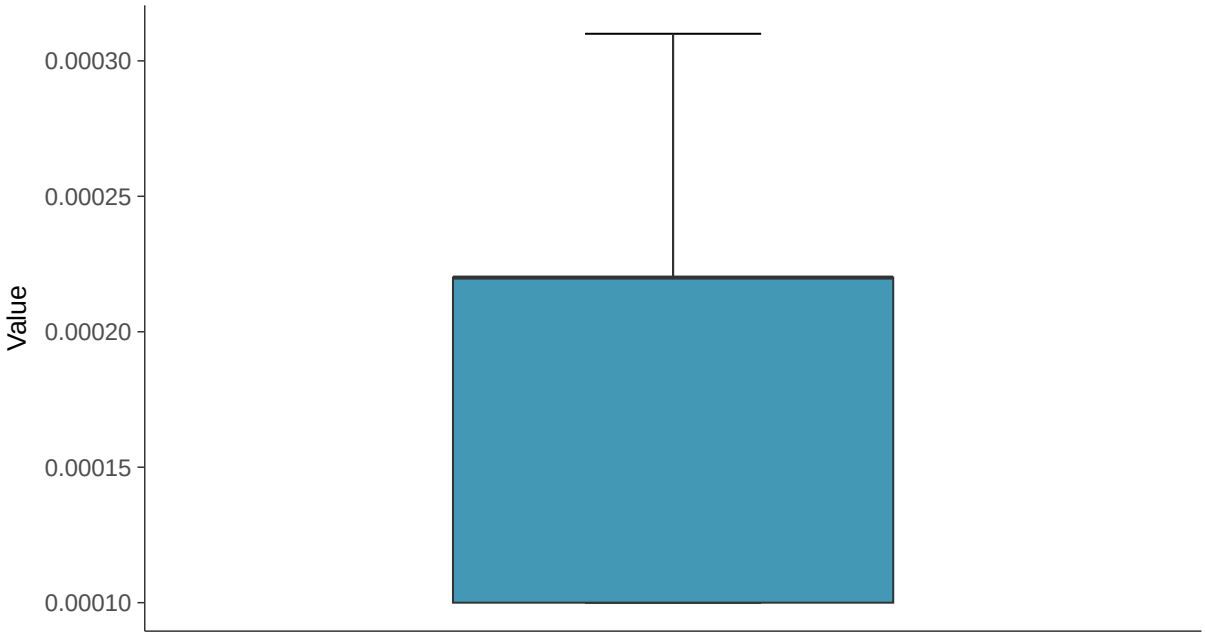
ID: 1_41_5_115





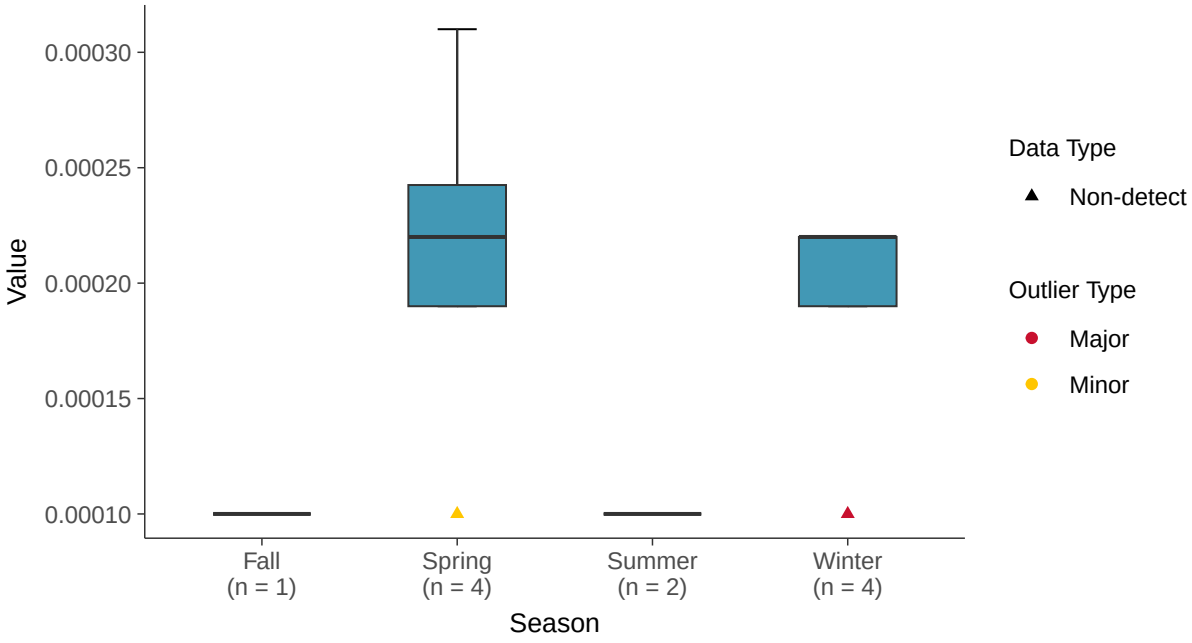
Boxplot

Lead, MW-31 (mg/L)



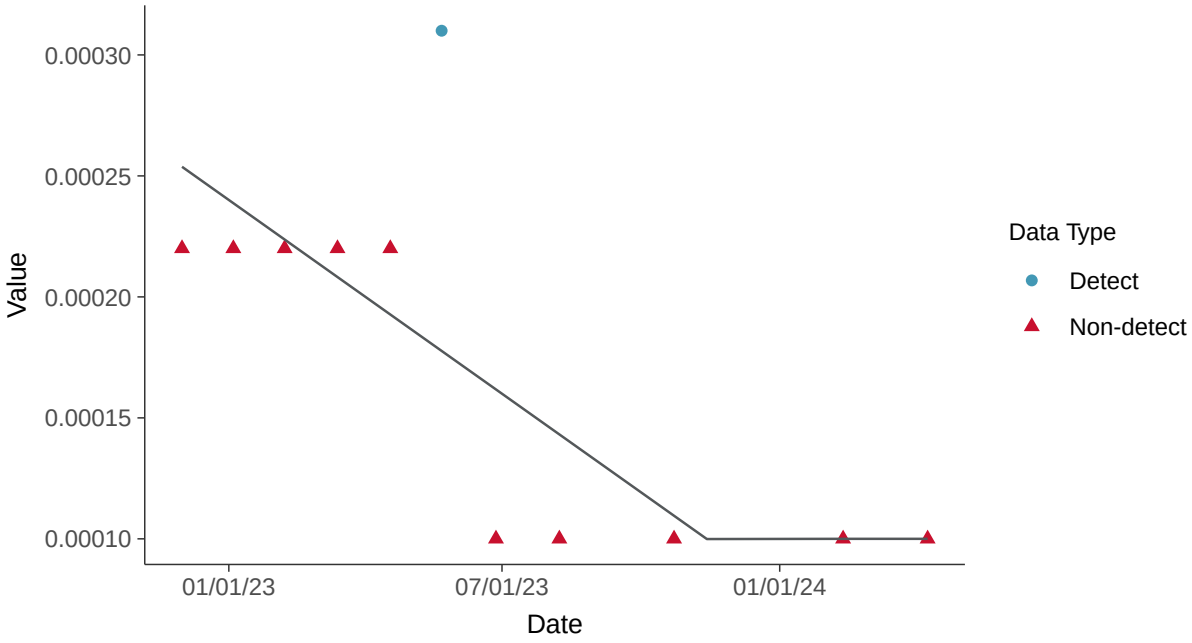
Boxplot by Season

Lead, MW-31 (mg/L)



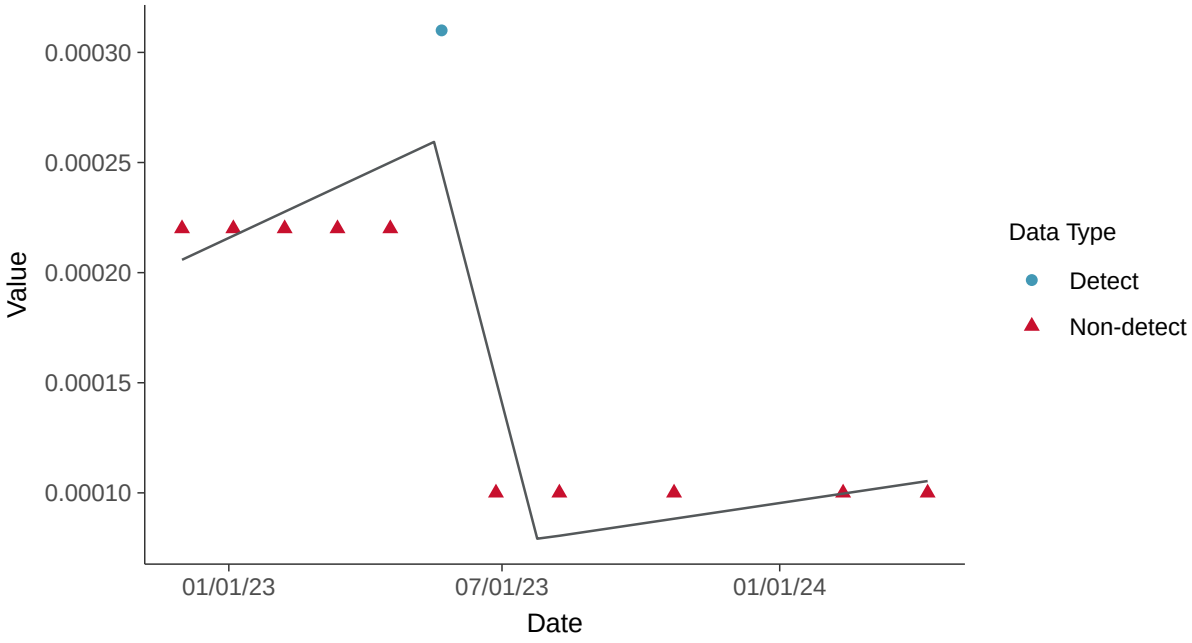
Trend Regression: Piecewise Linear-Linear

Lead, MW-31 (mg/L)



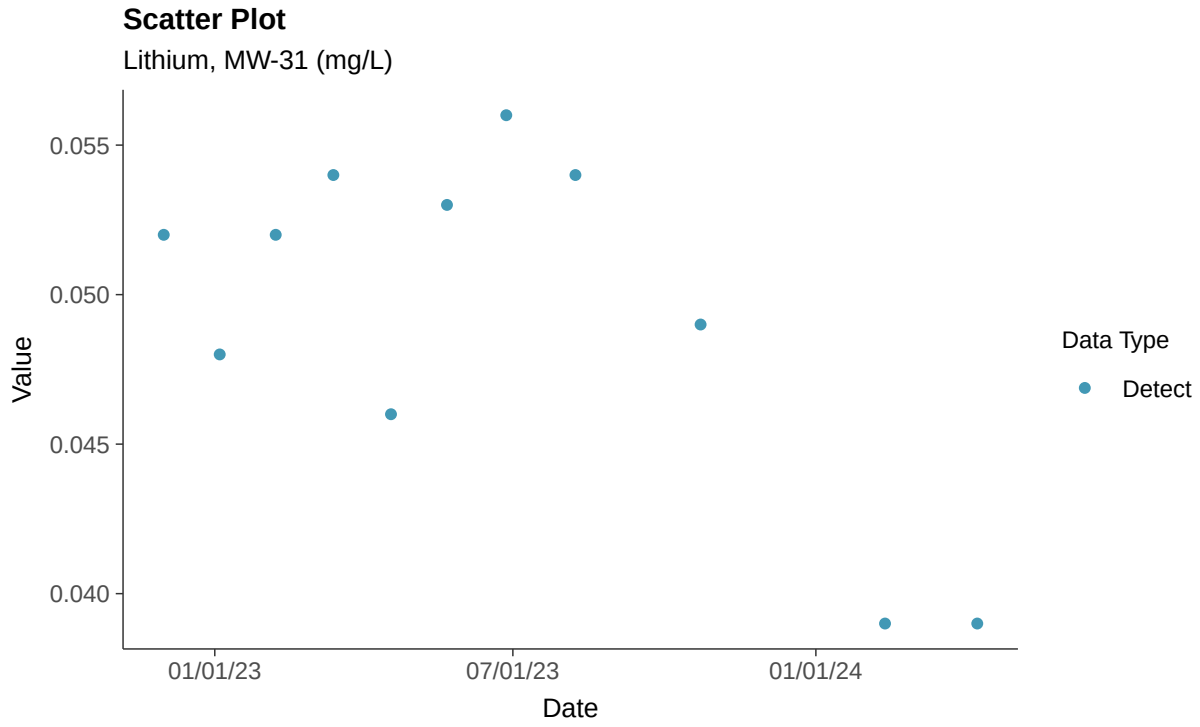
Trend Regression: Piecewise Linear-Linear-Linear

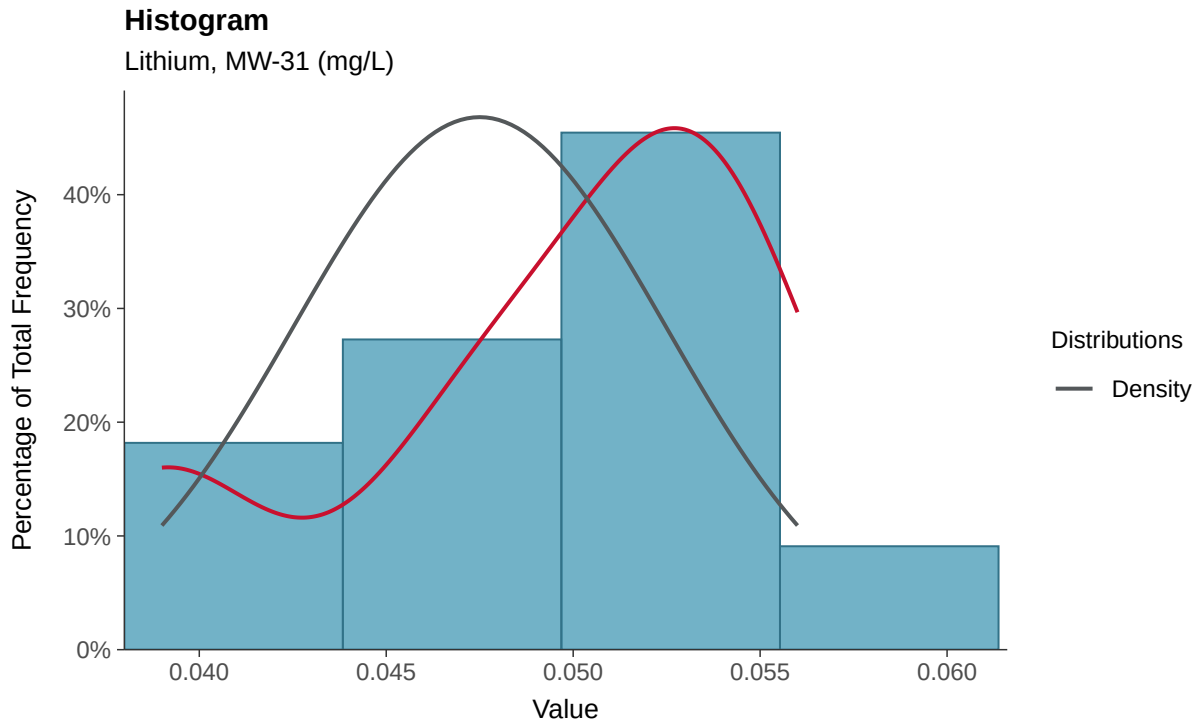
Lead, MW-31 (mg/L)



Appendix IV: Lithium, MW-31

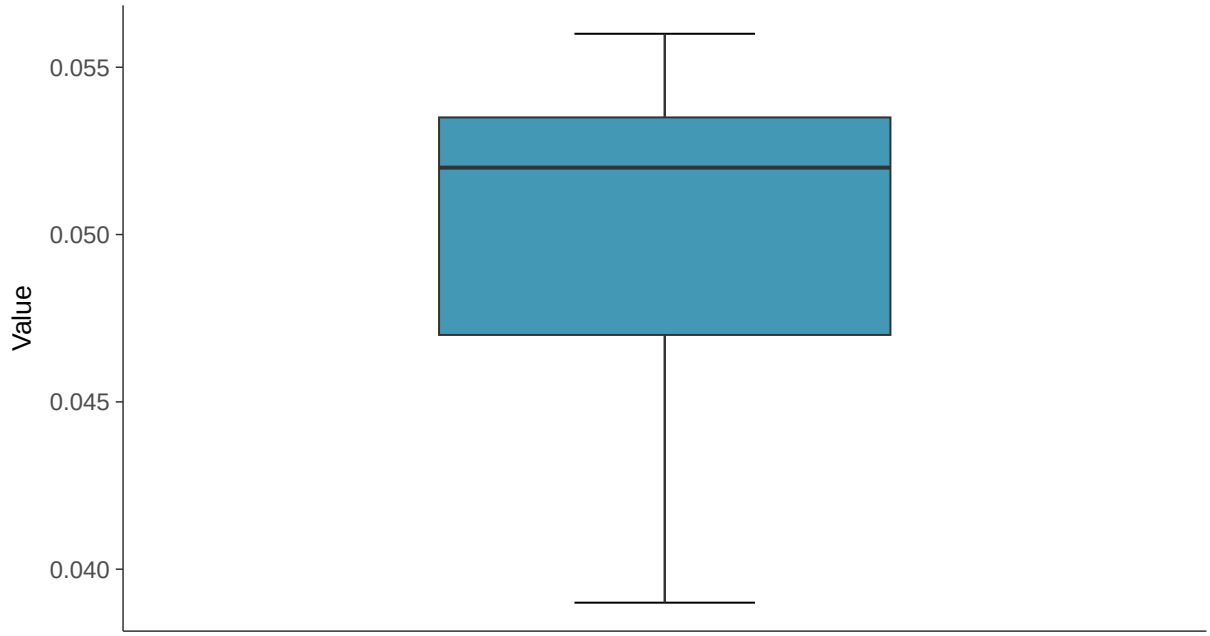
ID: 1_41_5_116





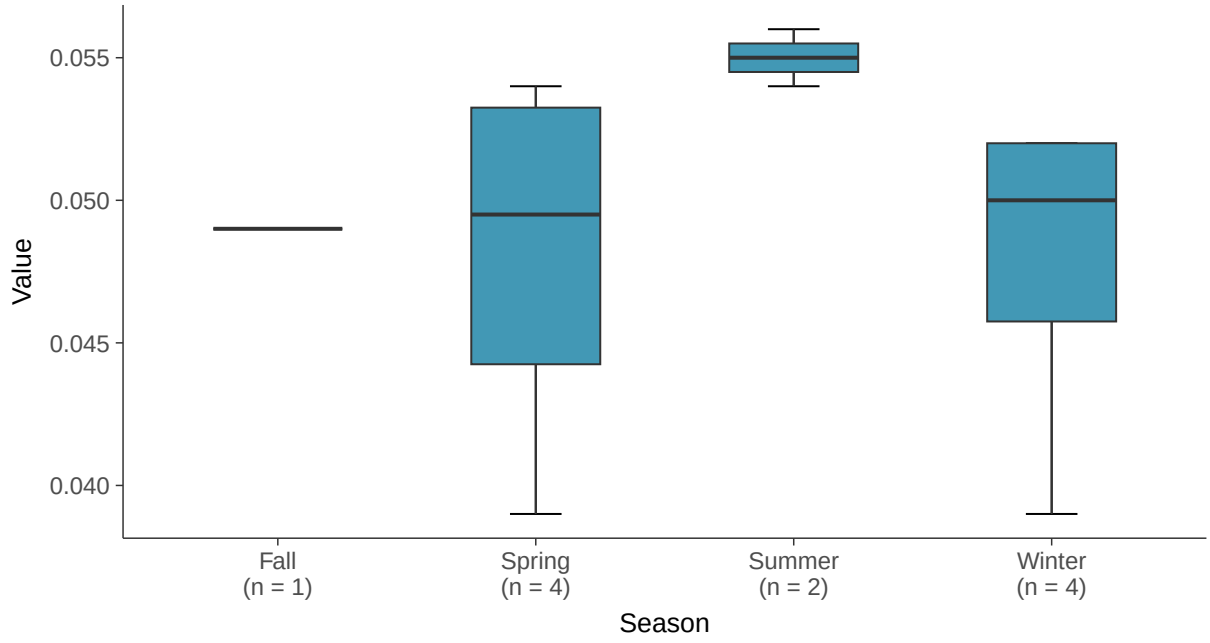
Boxplot

Lithium, MW-31 (mg/L)



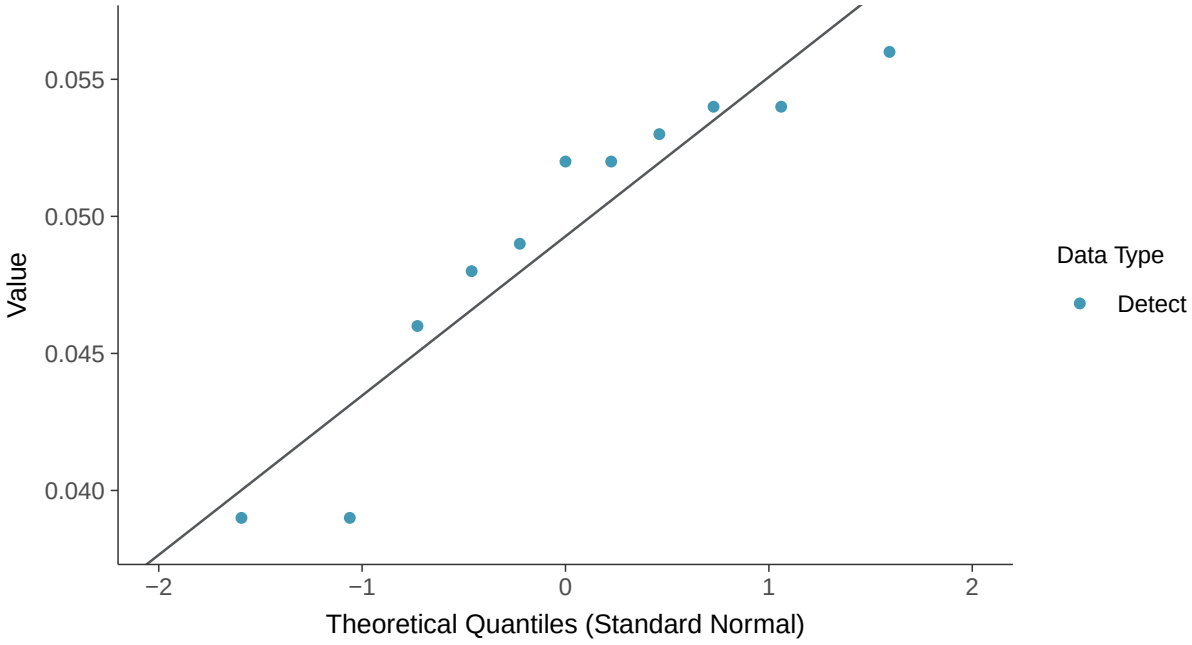
Boxplot by Season

Lithium, MW-31 (mg/L)



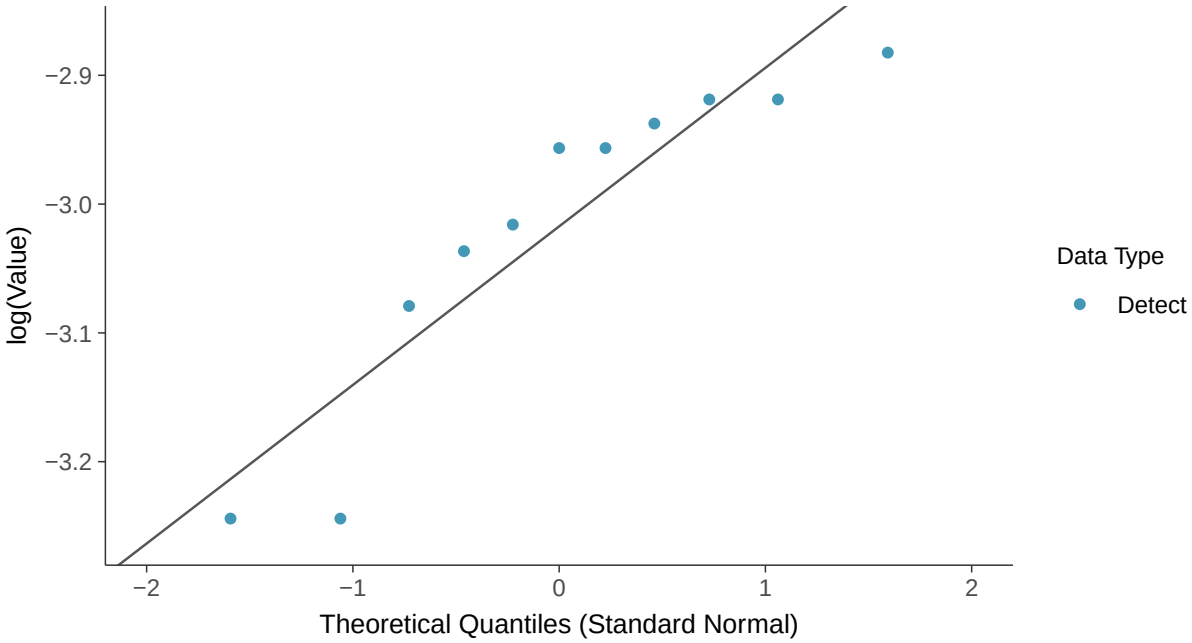
Normal Q-Q plot

Lithium, MW-31 (mg/L)



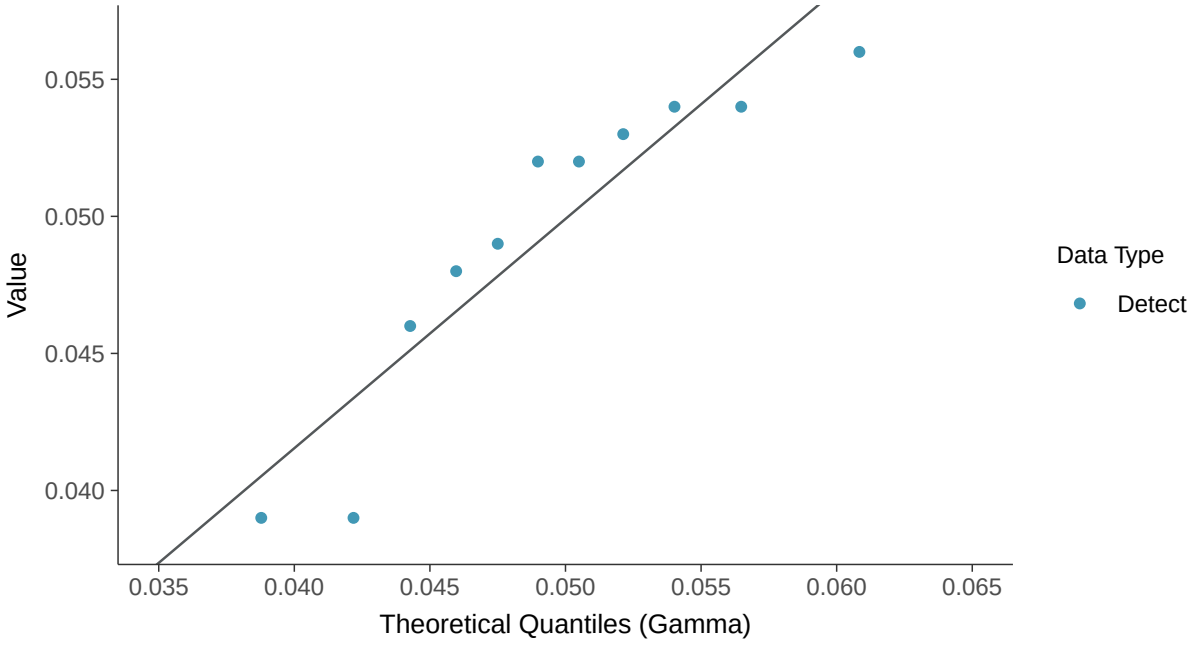
Lognormal Q-Q plot

Lithium, MW-31 (mg/L)



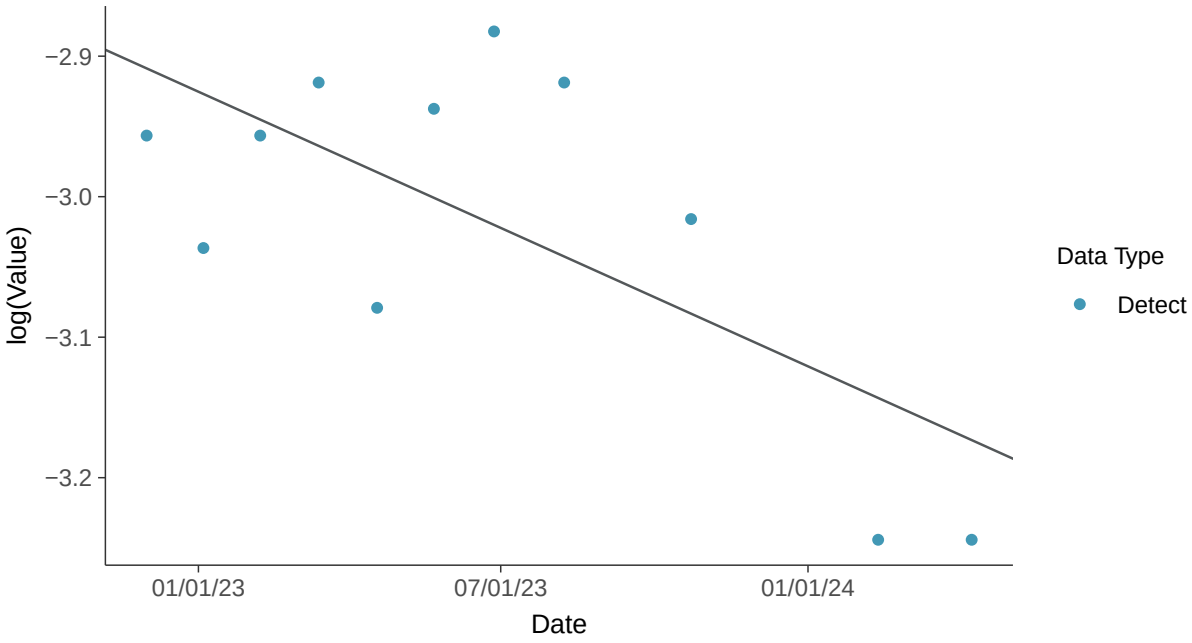
Gamma Q-Q plot

Lithium, MW-31 (mg/L)



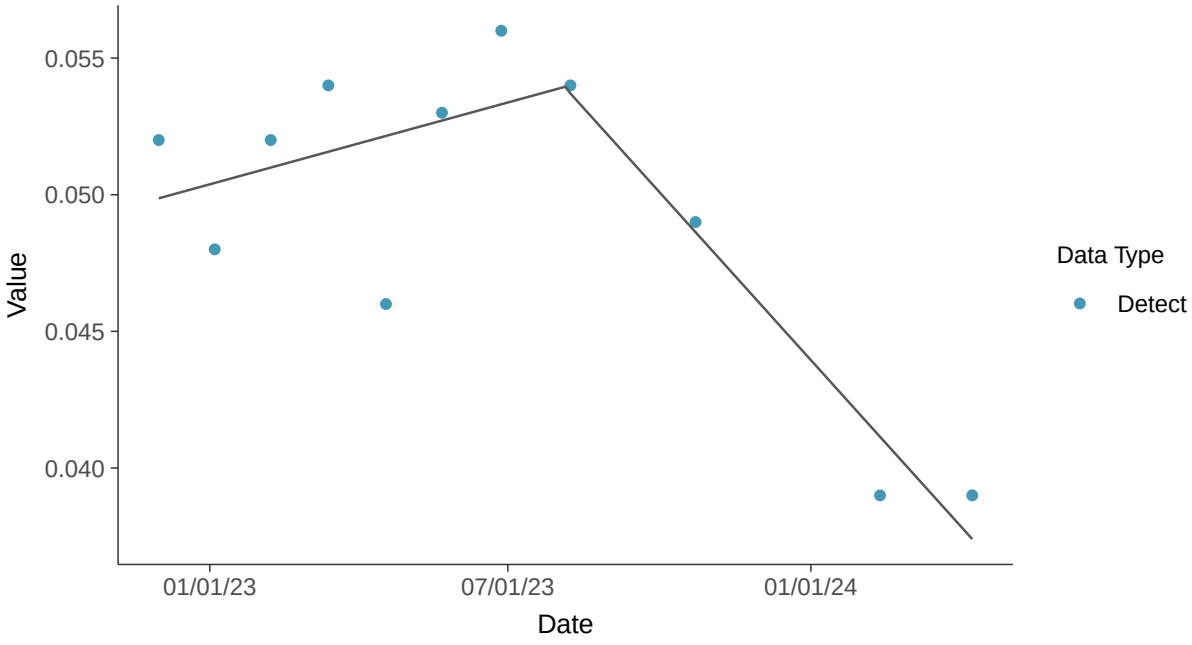
Trend Regression: Lognormal MLE

Lithium, MW-31 (mg/L)



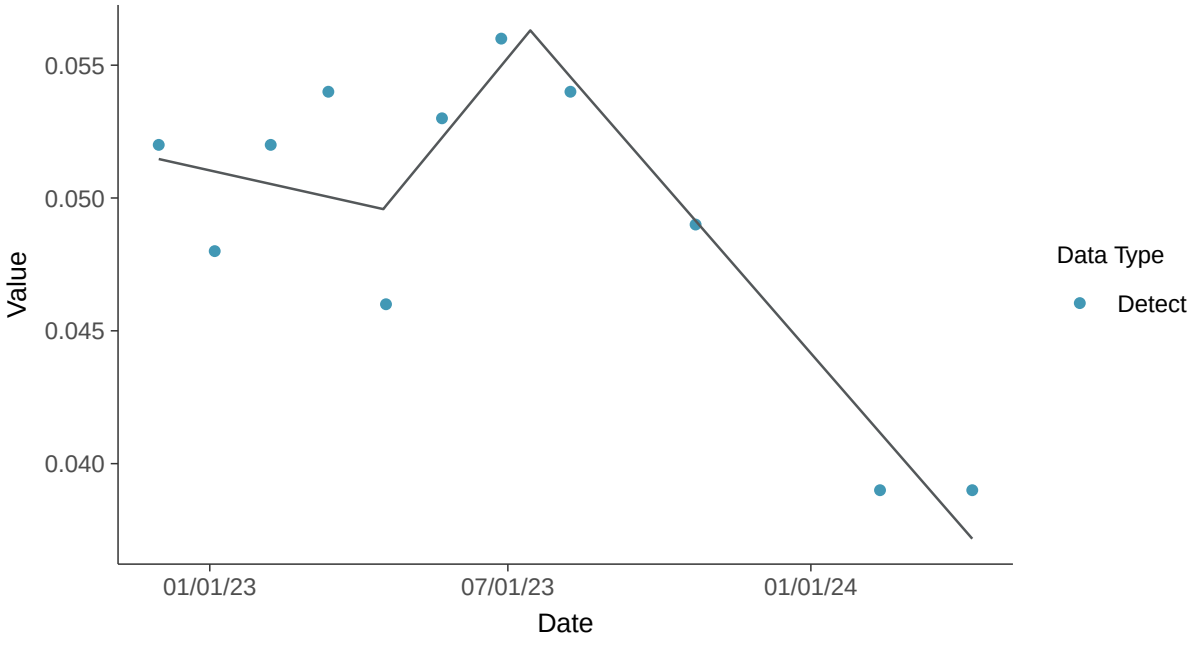
Trend Regression: Piecewise Linear-Linear

Lithium, MW-31 (mg/L)



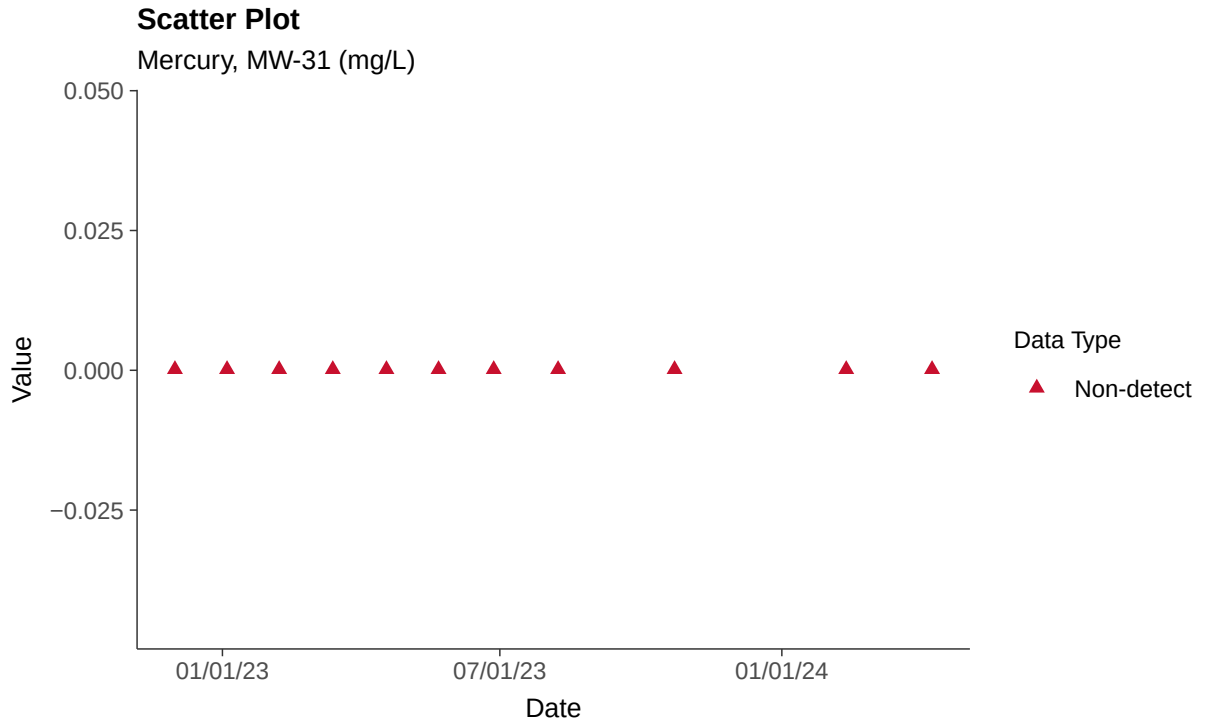
Trend Regression: Piecewise Linear-Linear-Linear

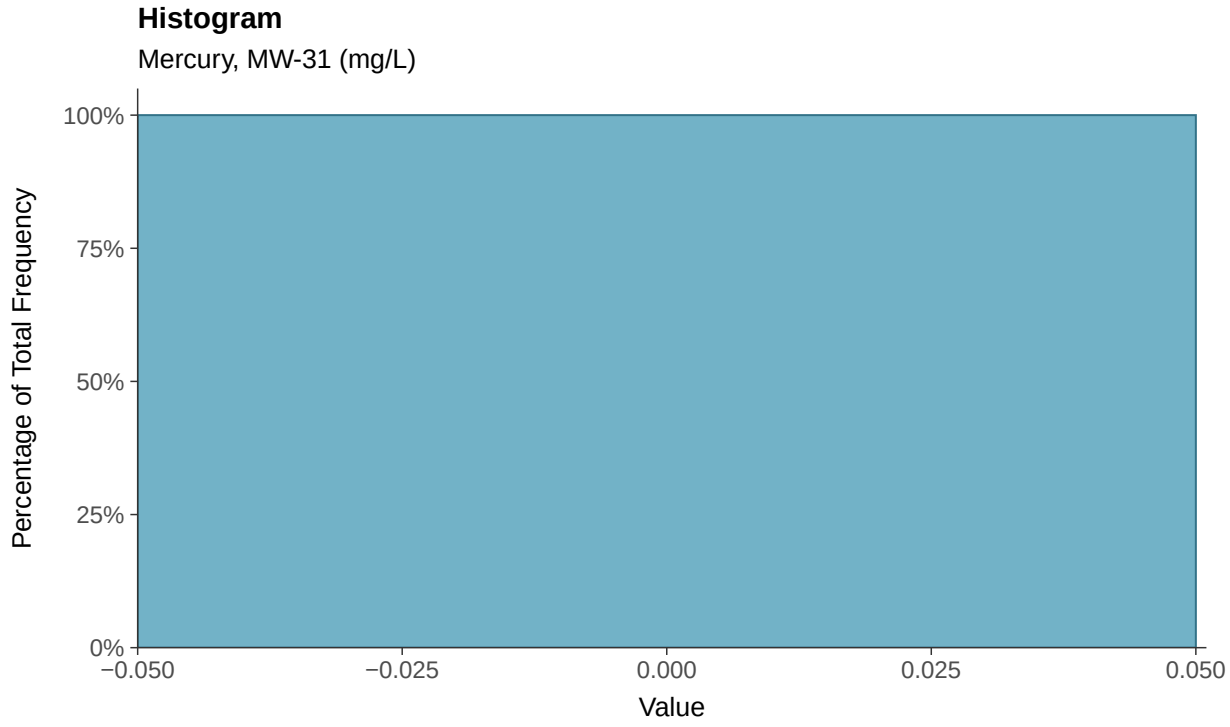
Lithium, MW-31 (mg/L)



Appendix IV: Mercury, MW-31

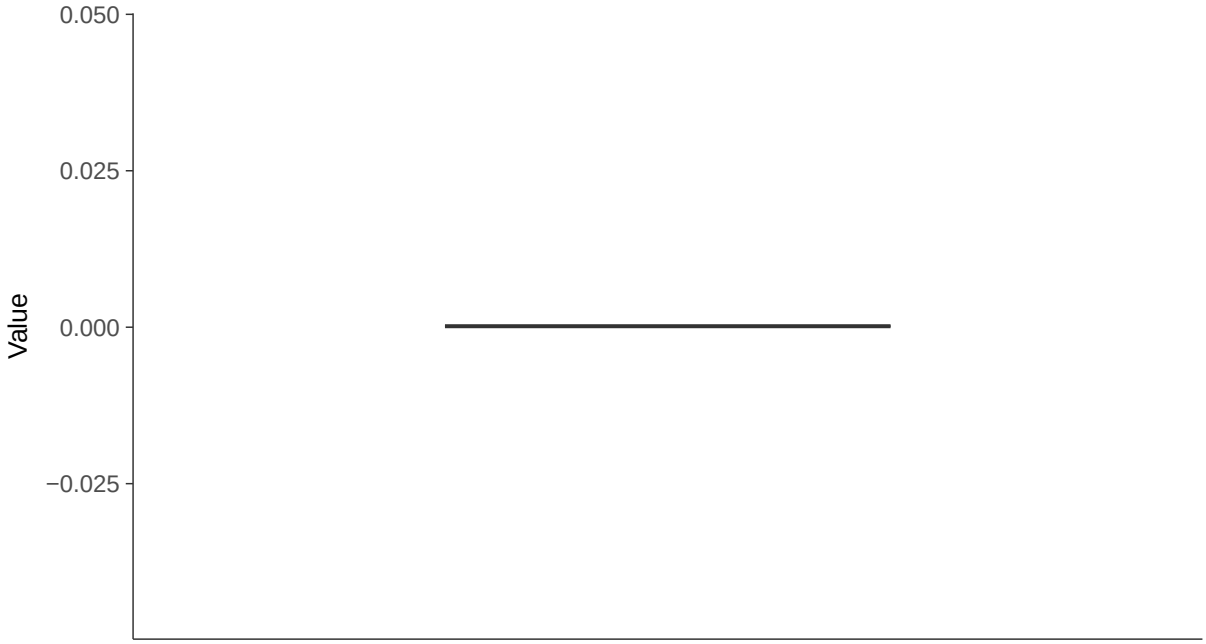
ID: 1_41_5_117





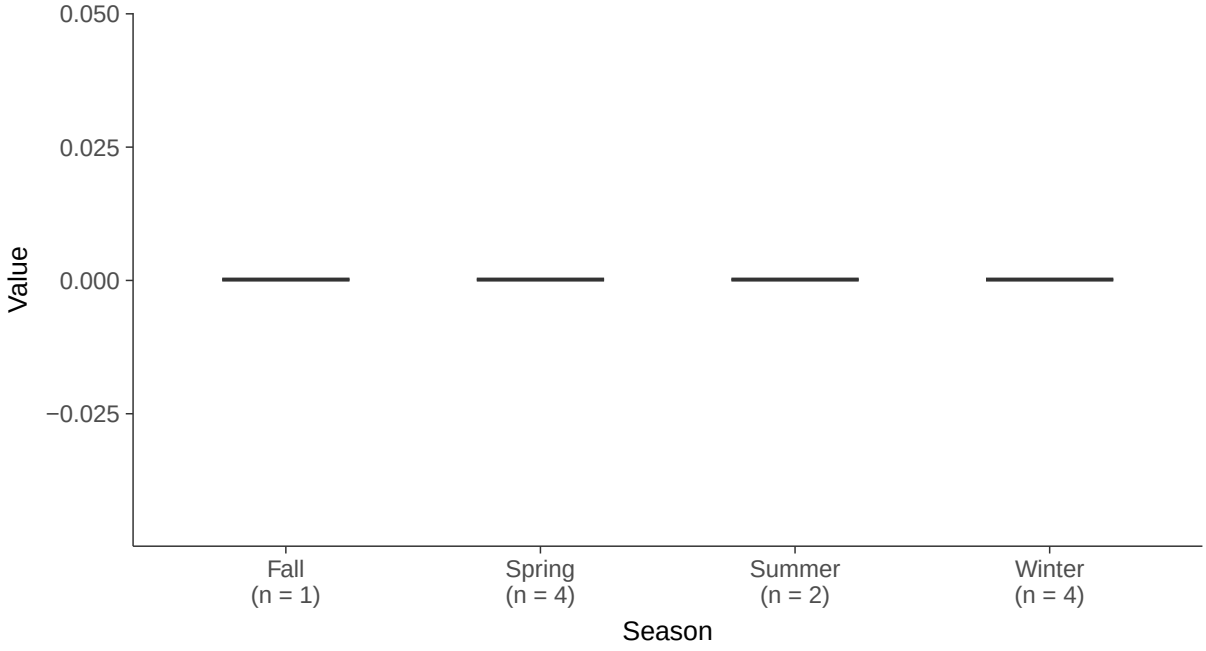
Boxplot

Mercury, MW-31 (mg/L)



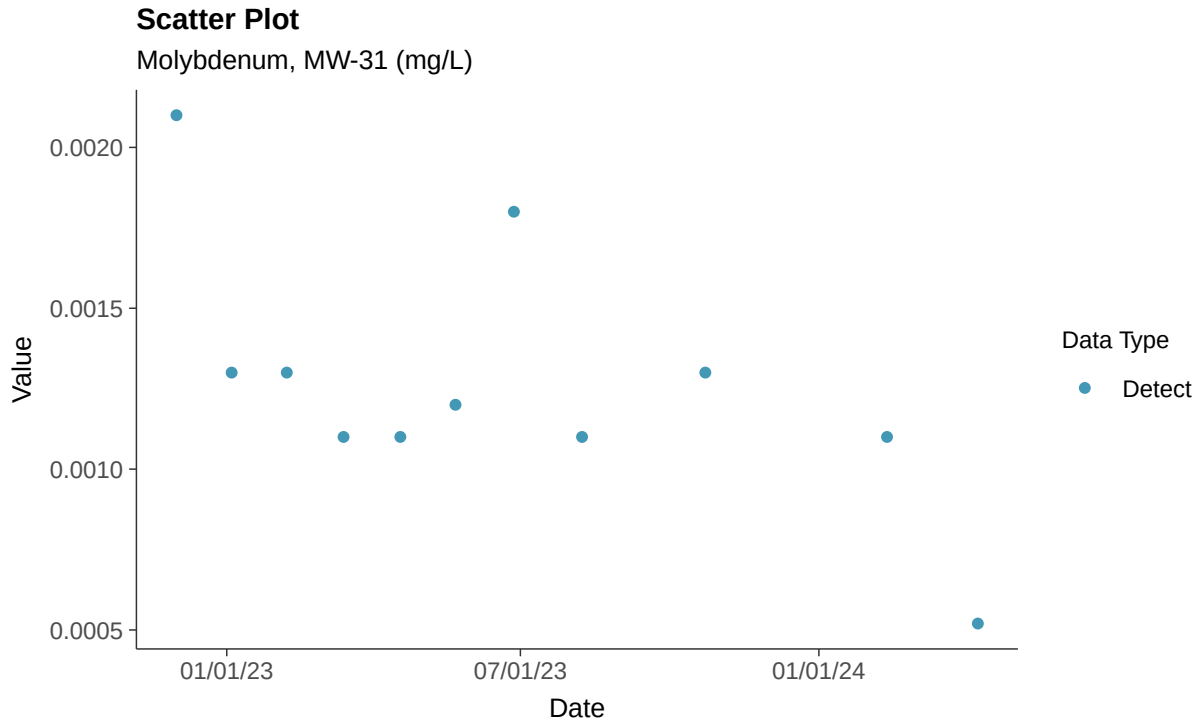
Boxplot by Season

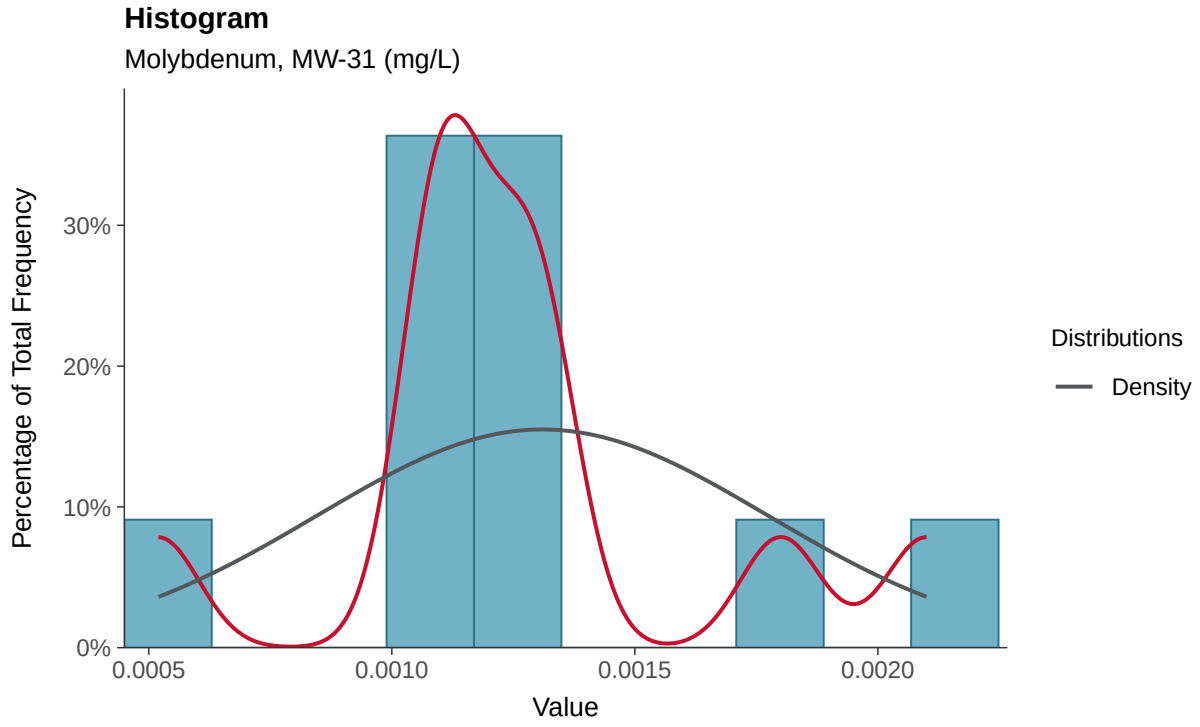
Mercury, MW-31 (mg/L)



Appendix IV: Molybdenum, MW-31

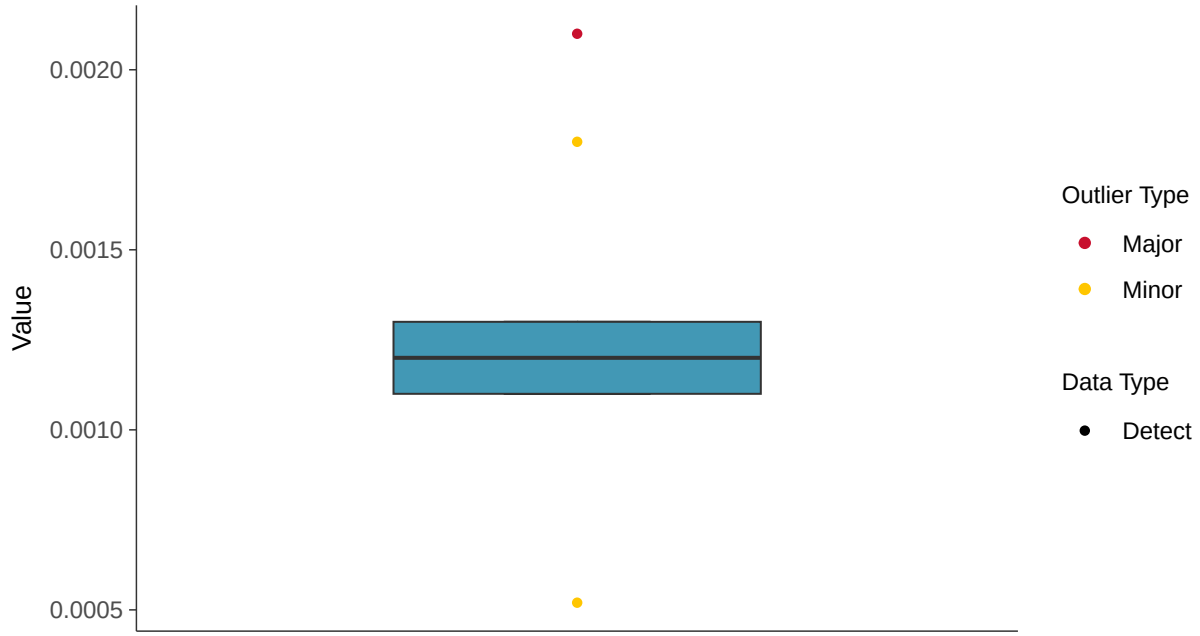
ID: 1_41_5_118





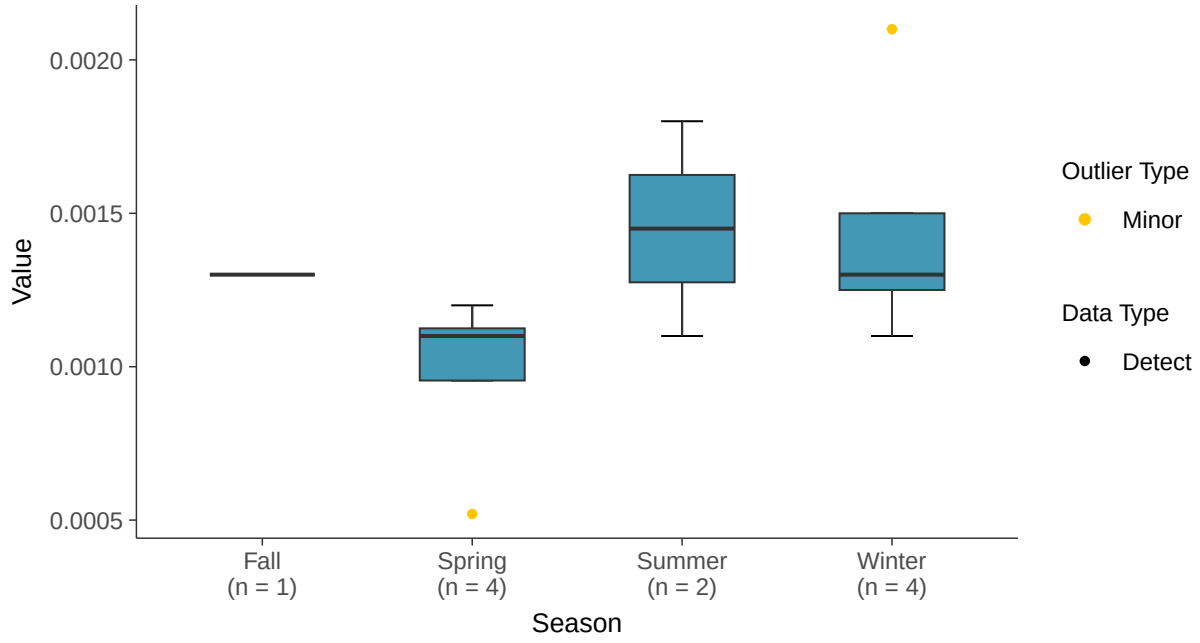
Boxplot

Molybdenum, MW-31 (mg/L)



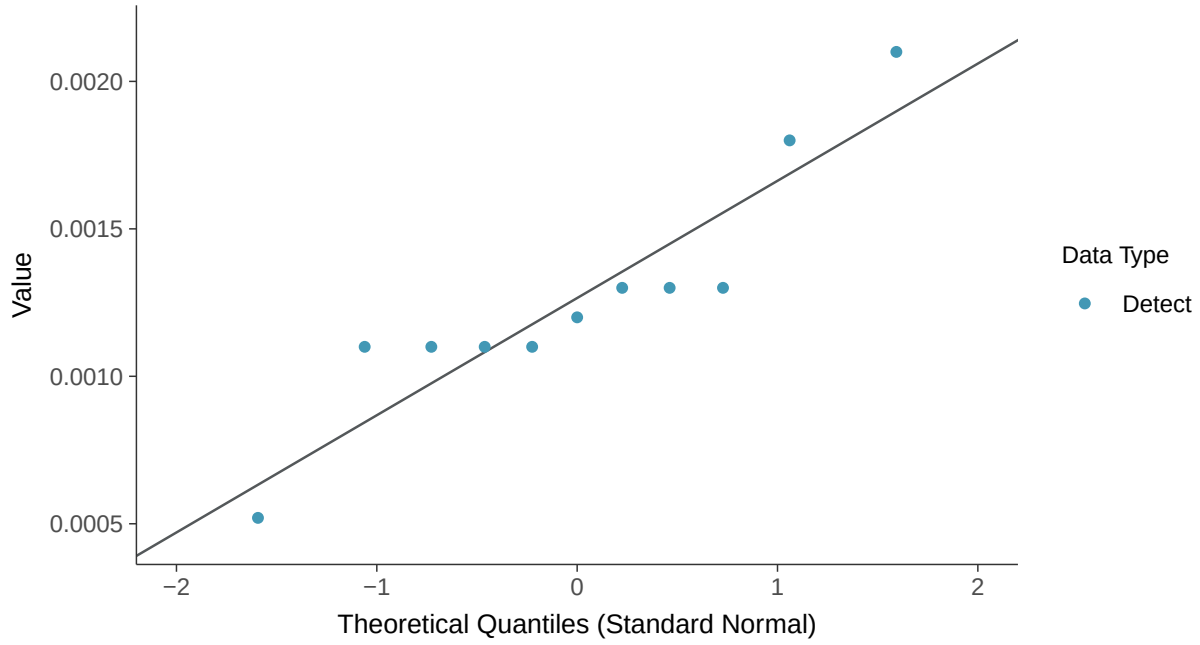
Boxplot by Season

Molybdenum, MW-31 (mg/L)



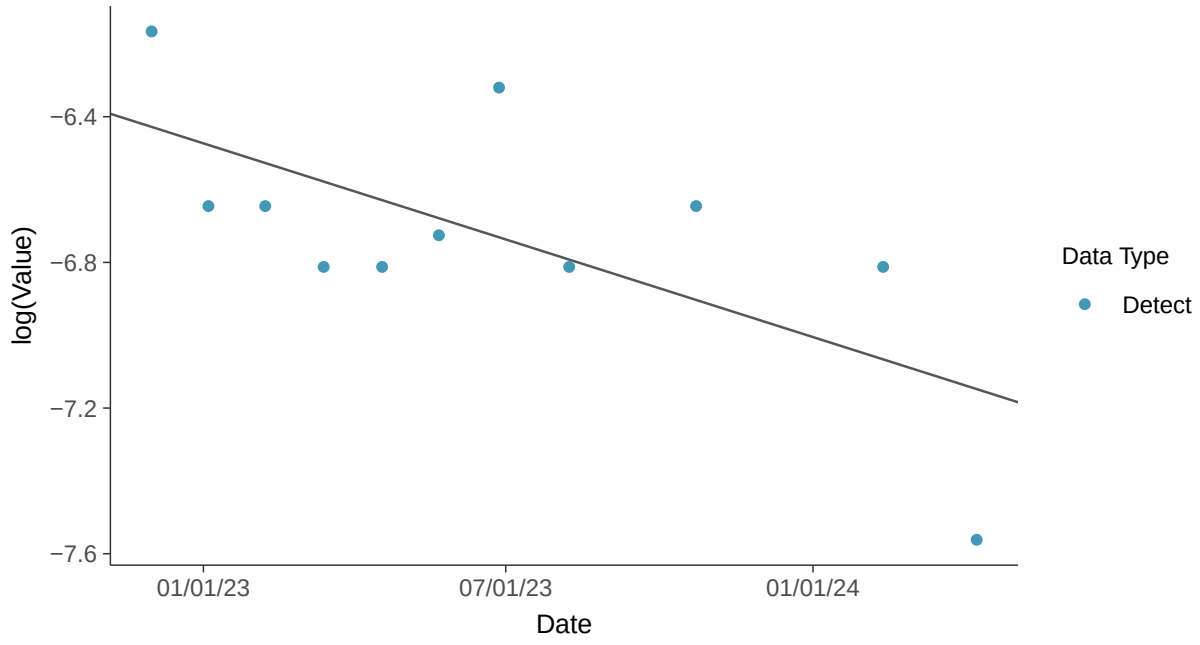
Normal Q-Q plot

Molybdenum, MW-31 (mg/L)



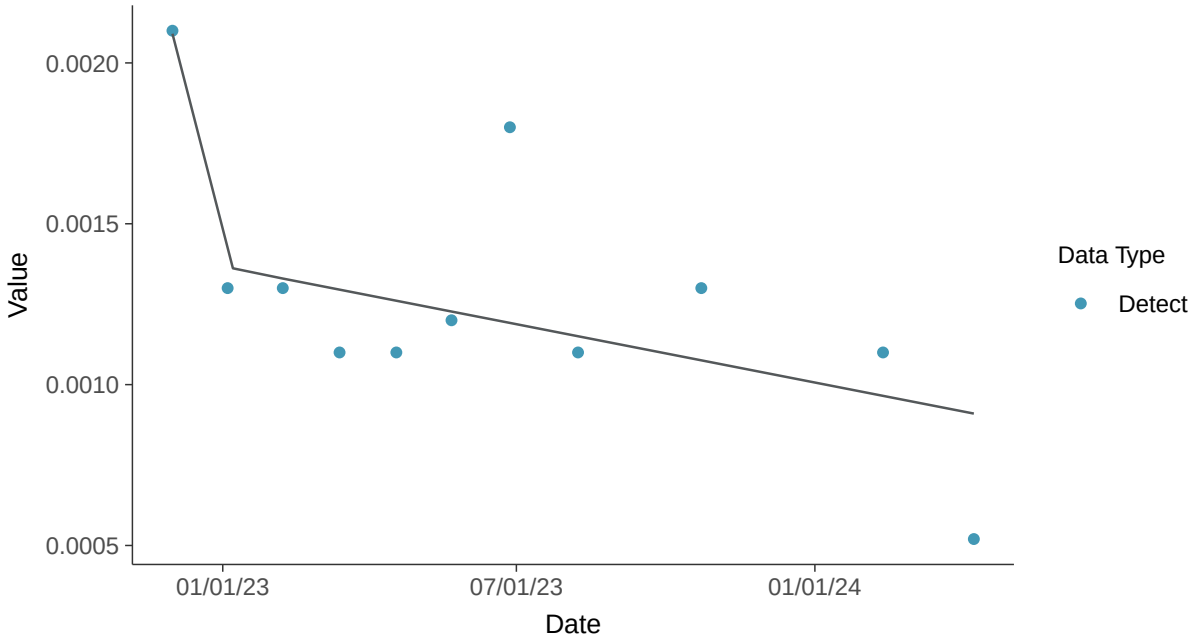
Trend Regression: Lognormal MLE

Molybdenum, MW-31 (mg/L)



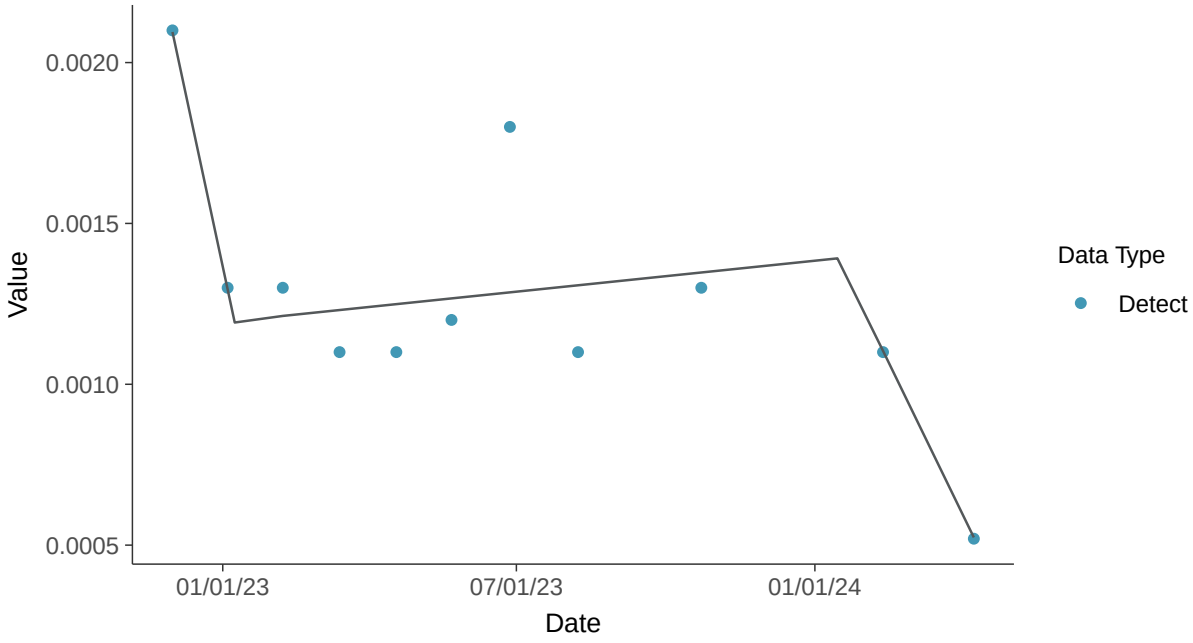
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-31 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-31 (mg/L)

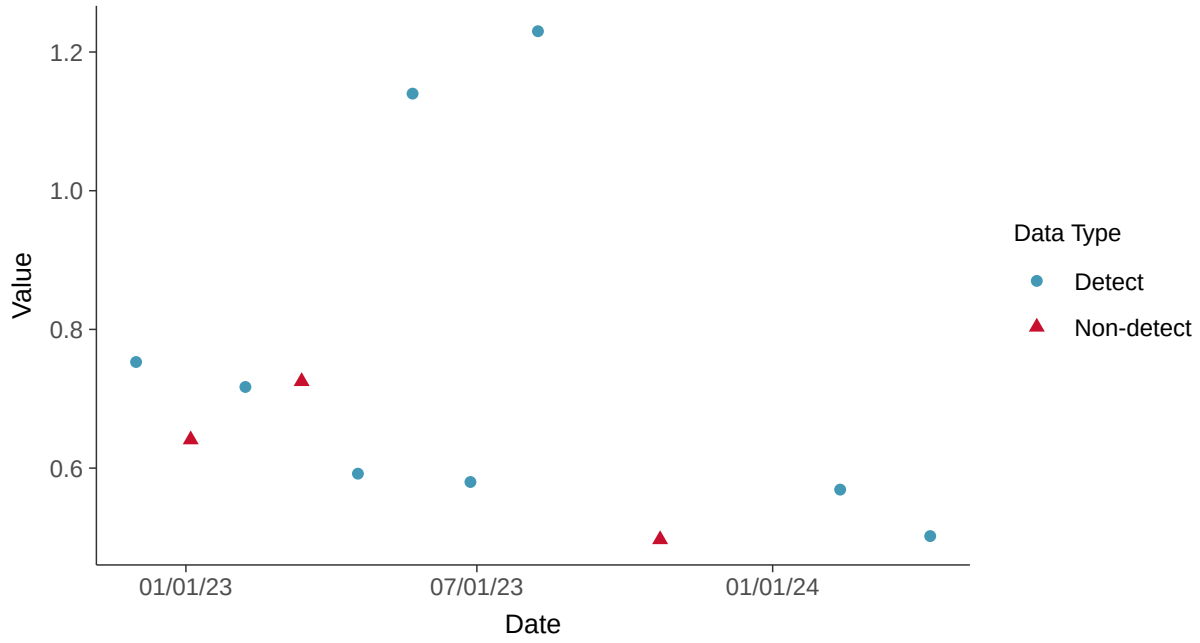


Appendix IV: Radium 226 and 228, MW-31

ID: 1_41_5_121

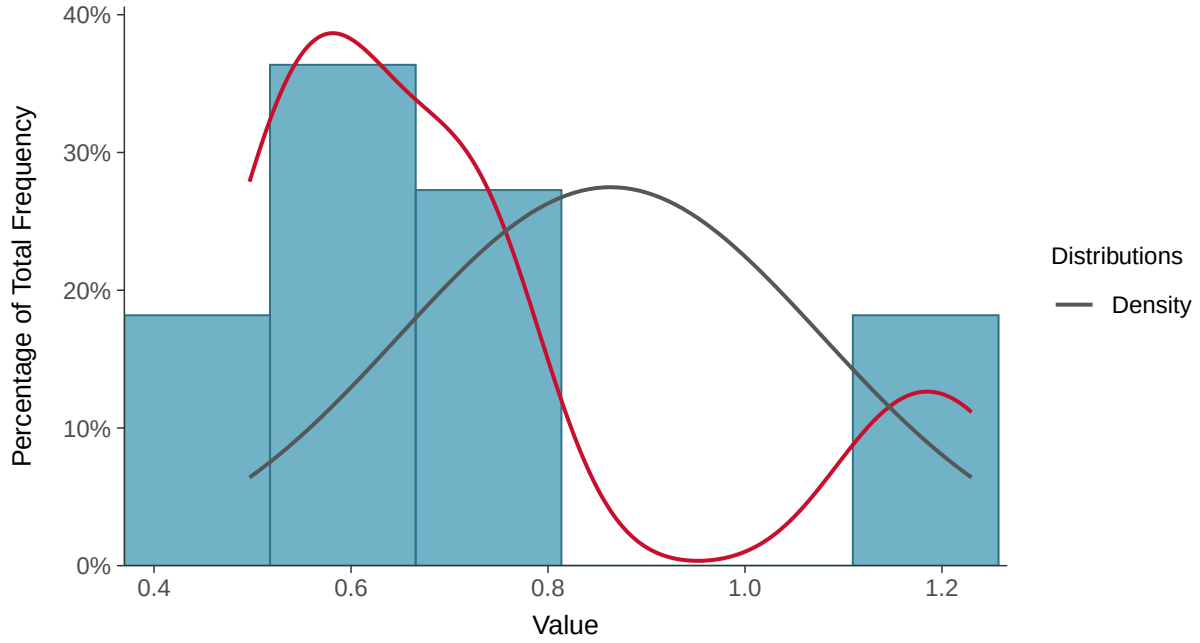
Scatter Plot

Radium 226 and 228, MW-31 (pCi/L)



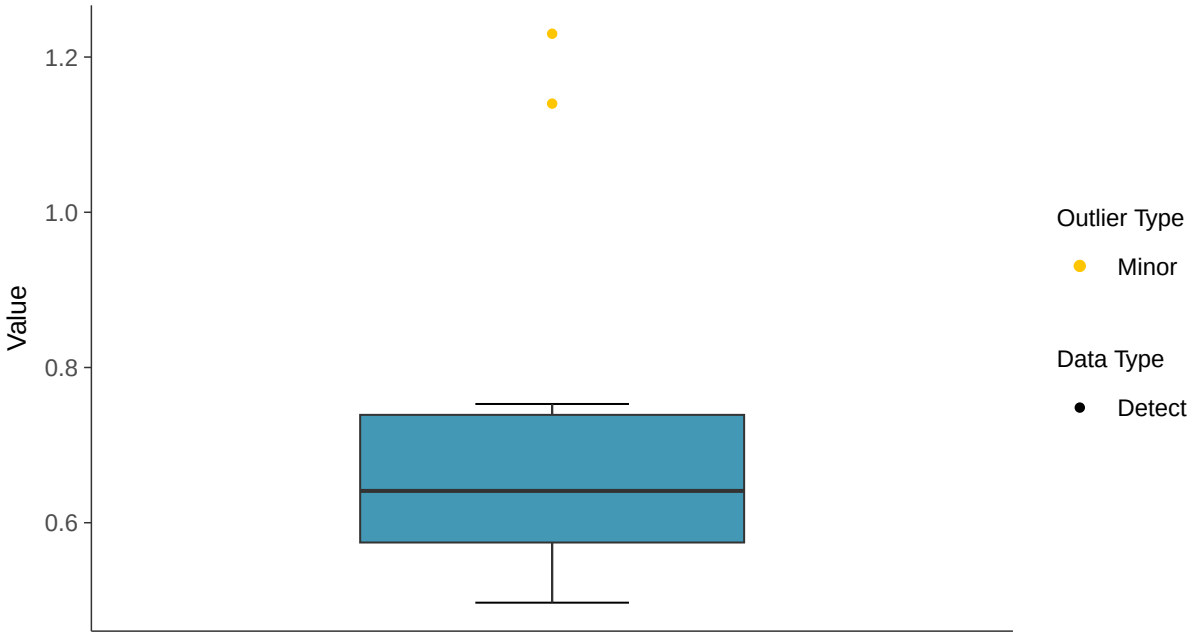
Histogram

Radium 226 and 228, MW-31 (pCi/L)



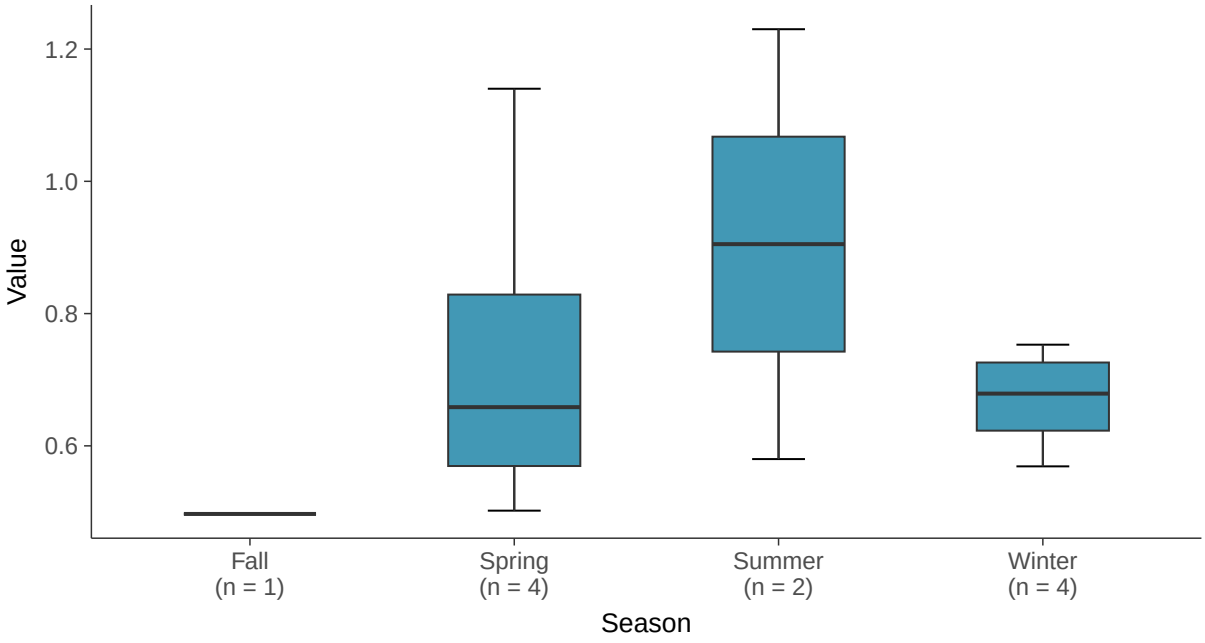
Boxplot

Radium 226 and 228, MW-31 (pCi/L)



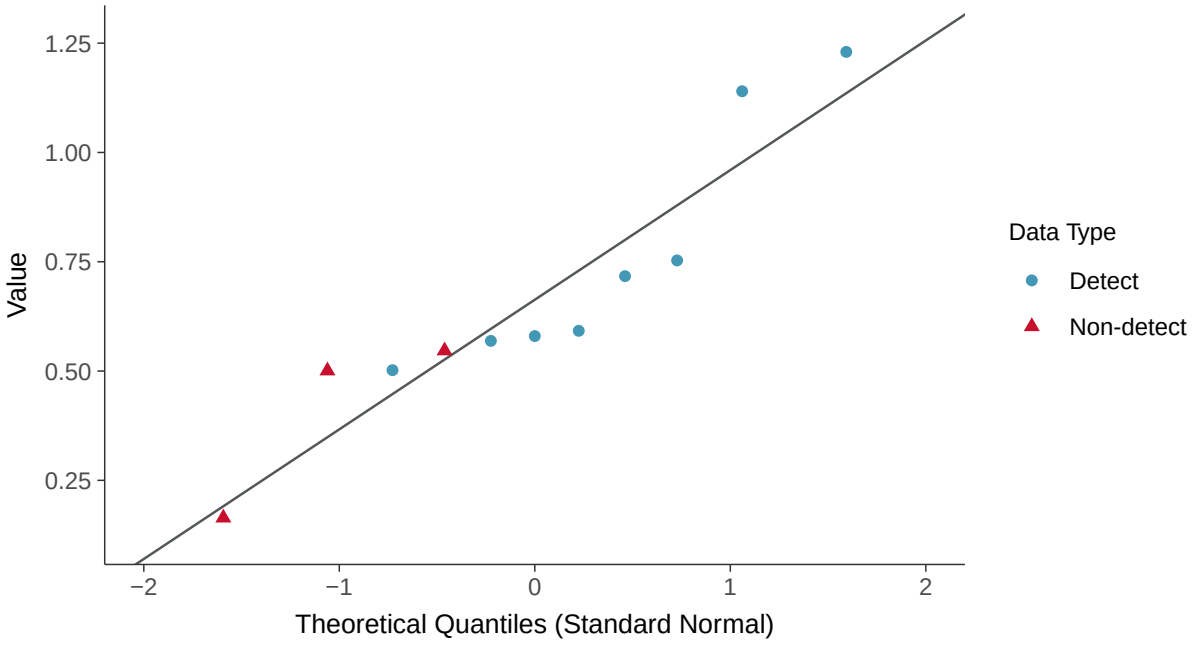
Boxplot by Season

Radium 226 and 228, MW-31 (pCi/L)



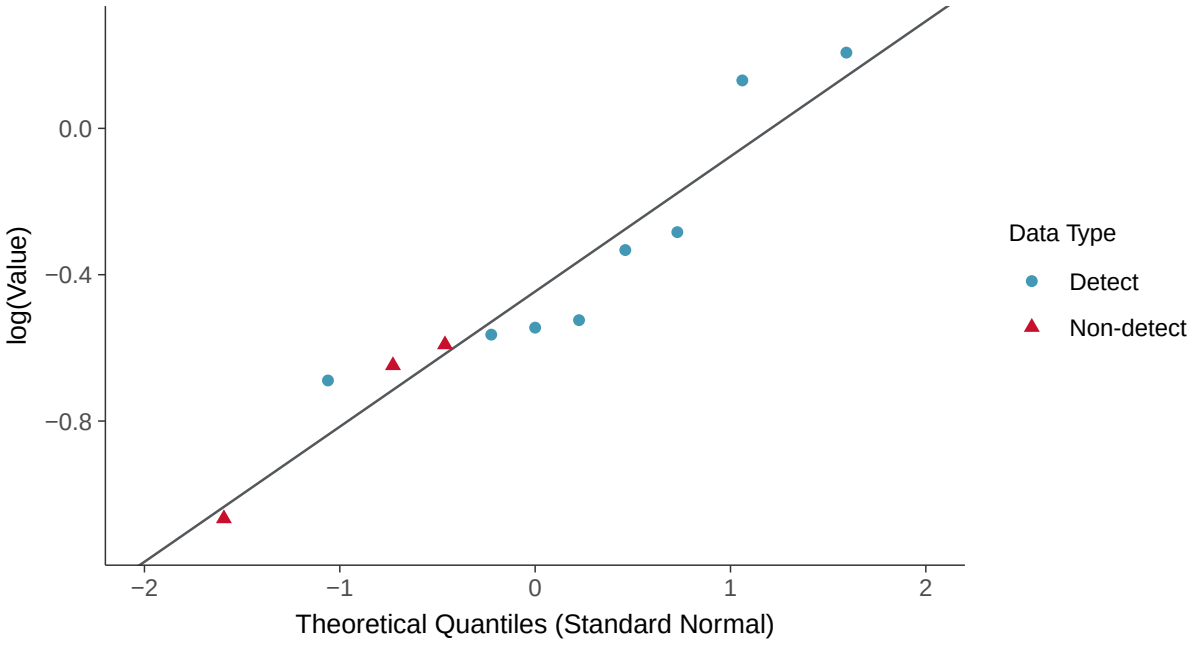
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-31 (pCi/L)



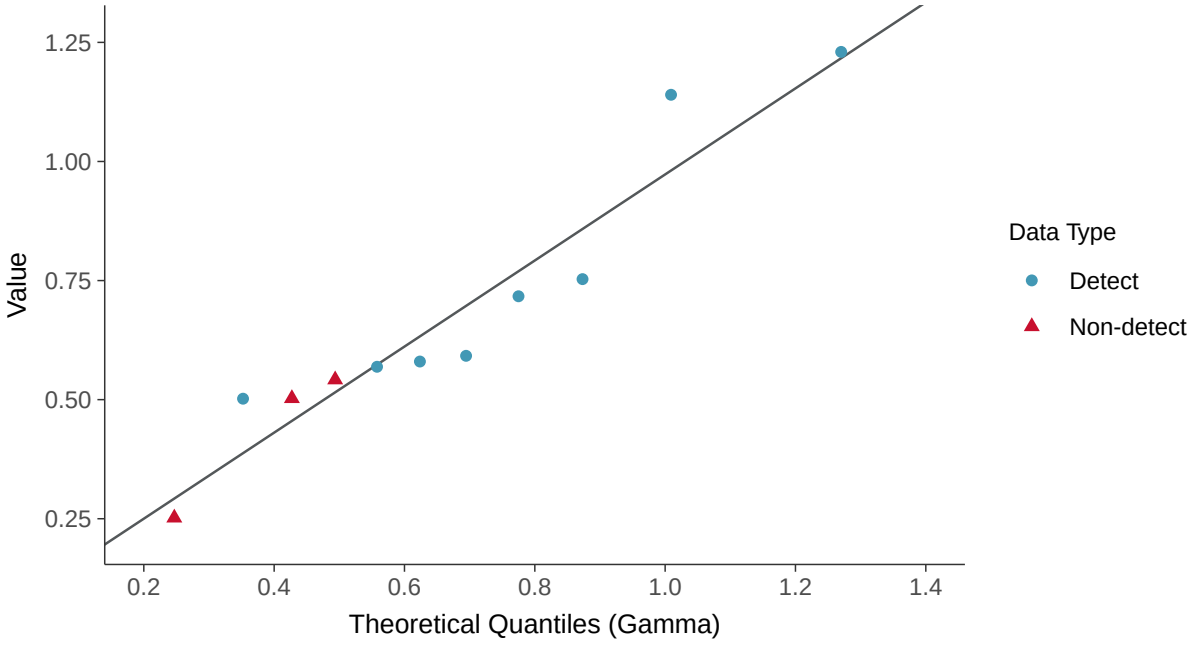
Lognormal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-31 (pCi/L)



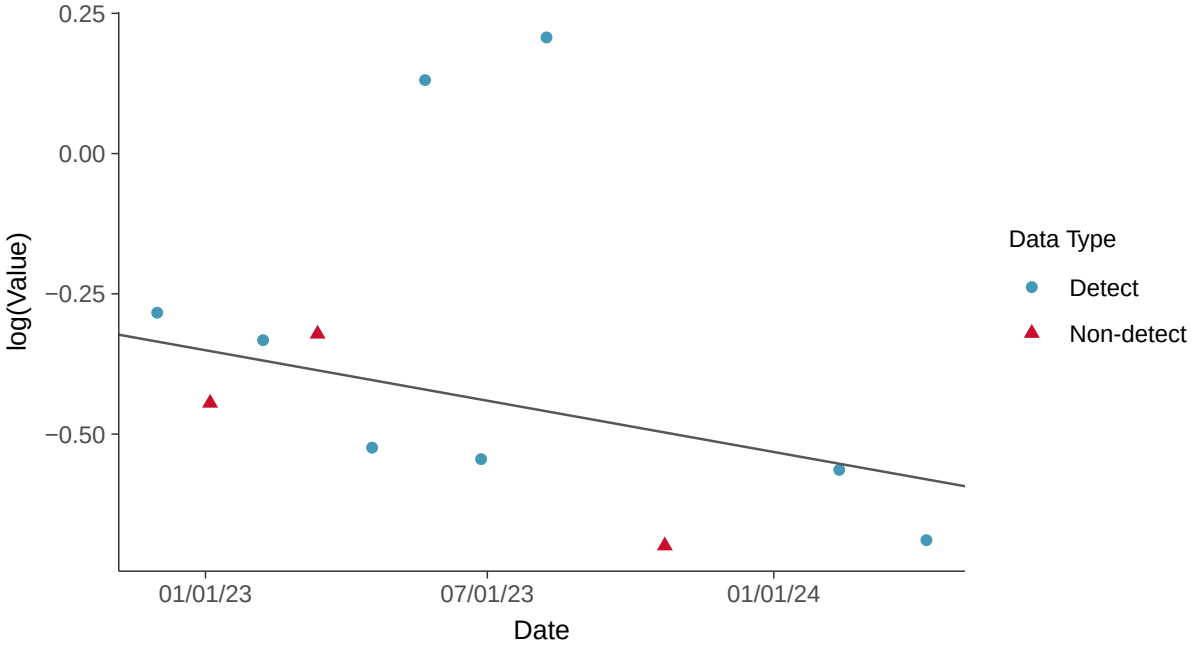
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-31 (pCi/L)



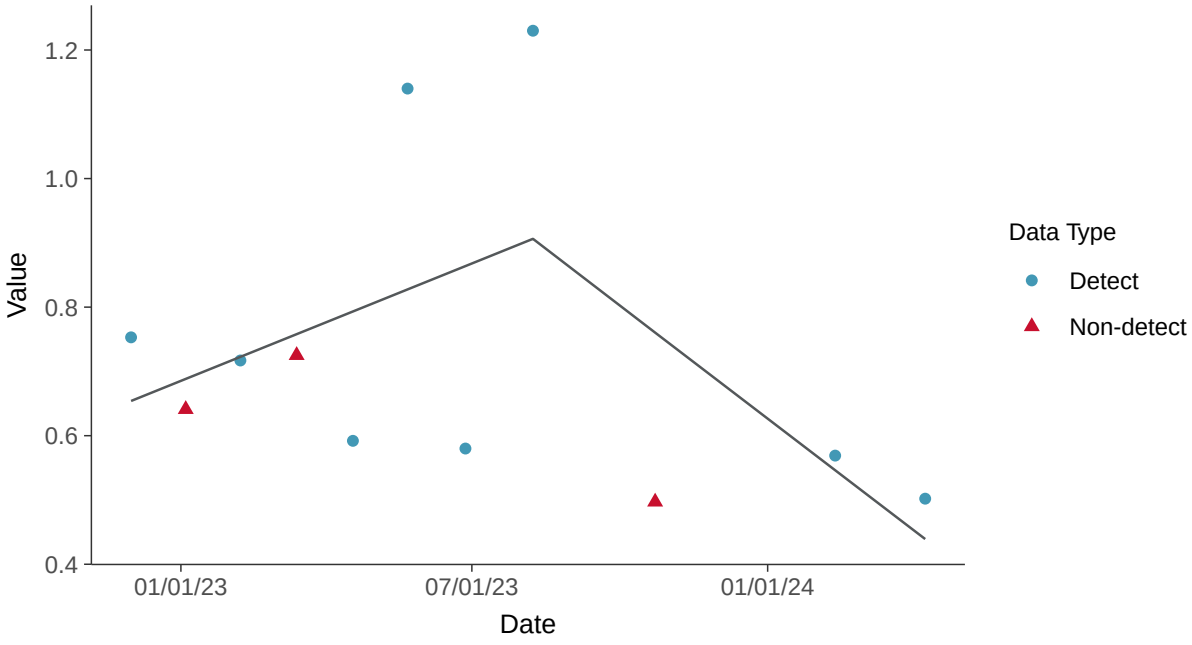
Trend Regression: Lognormal MLE

Radium 226 and 228, MW-31 (pCi/L)



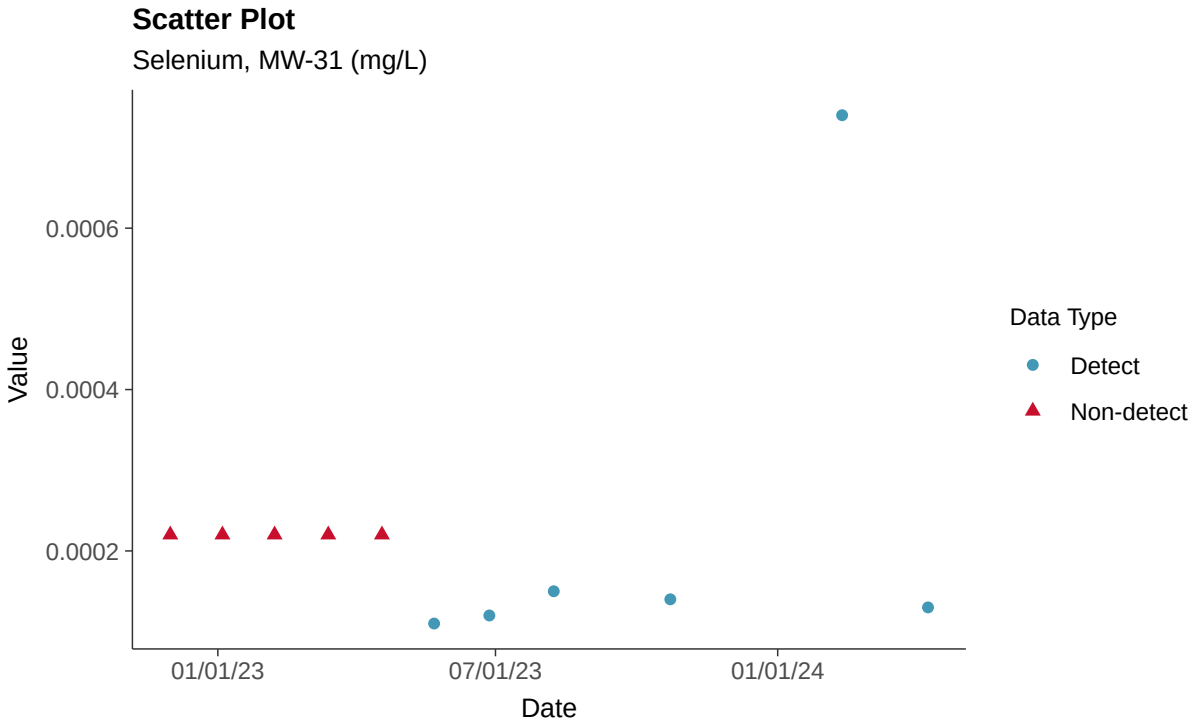
Trend Regression: Piecewise Linear-Linear

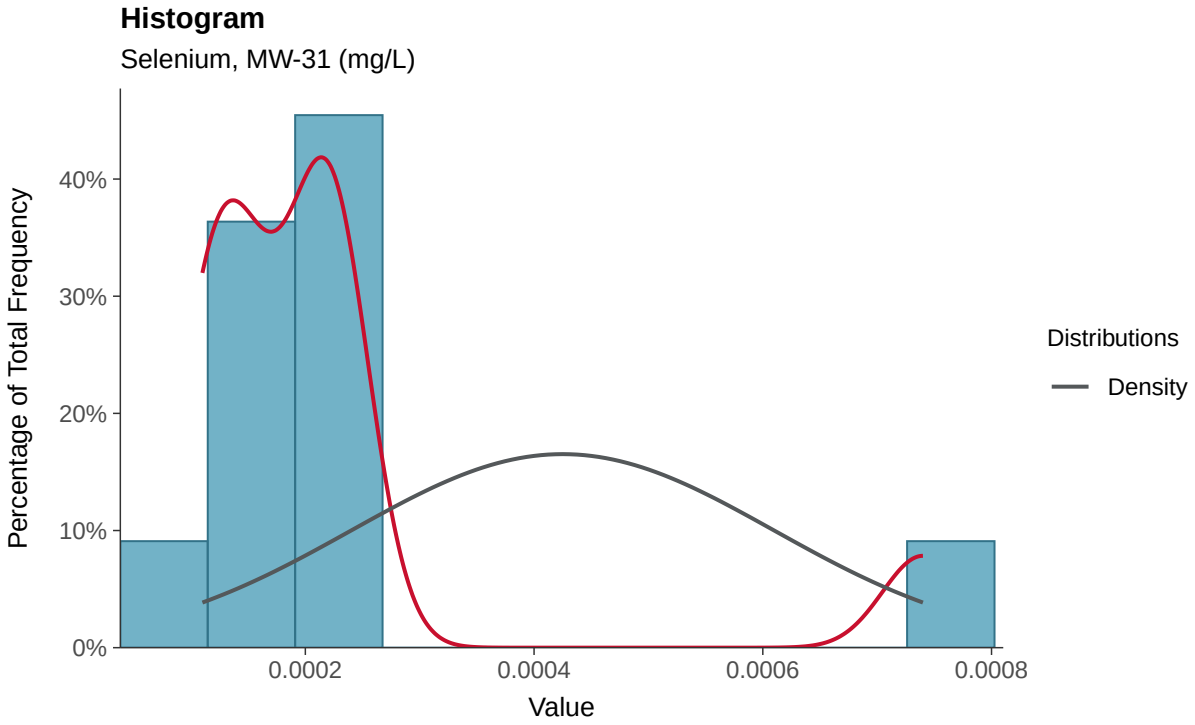
Radium 226 and 228, MW-31 (pCi/L)



Appendix IV: Selenium, MW-31

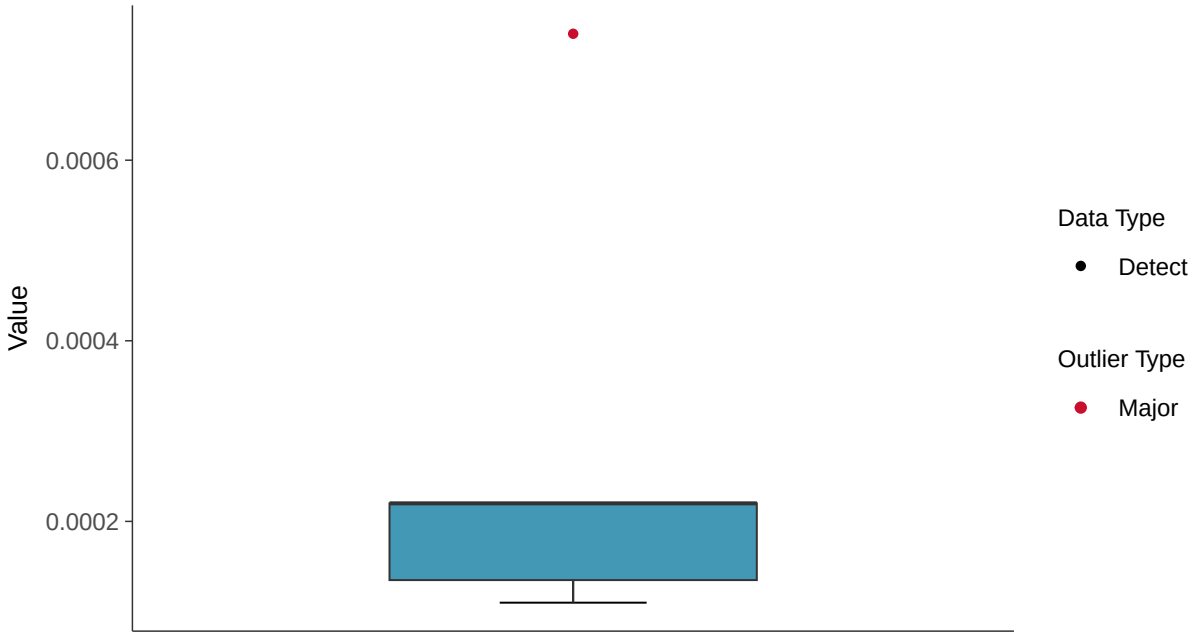
ID: 1_41_5_122





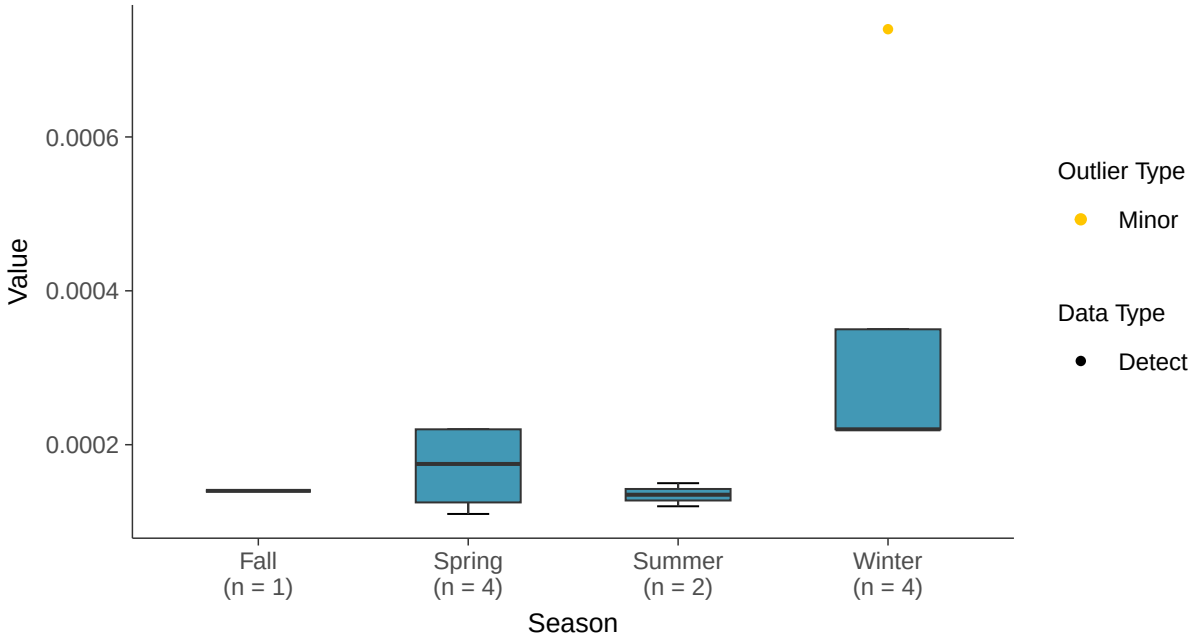
Boxplot

Selenium, MW-31 (mg/L)



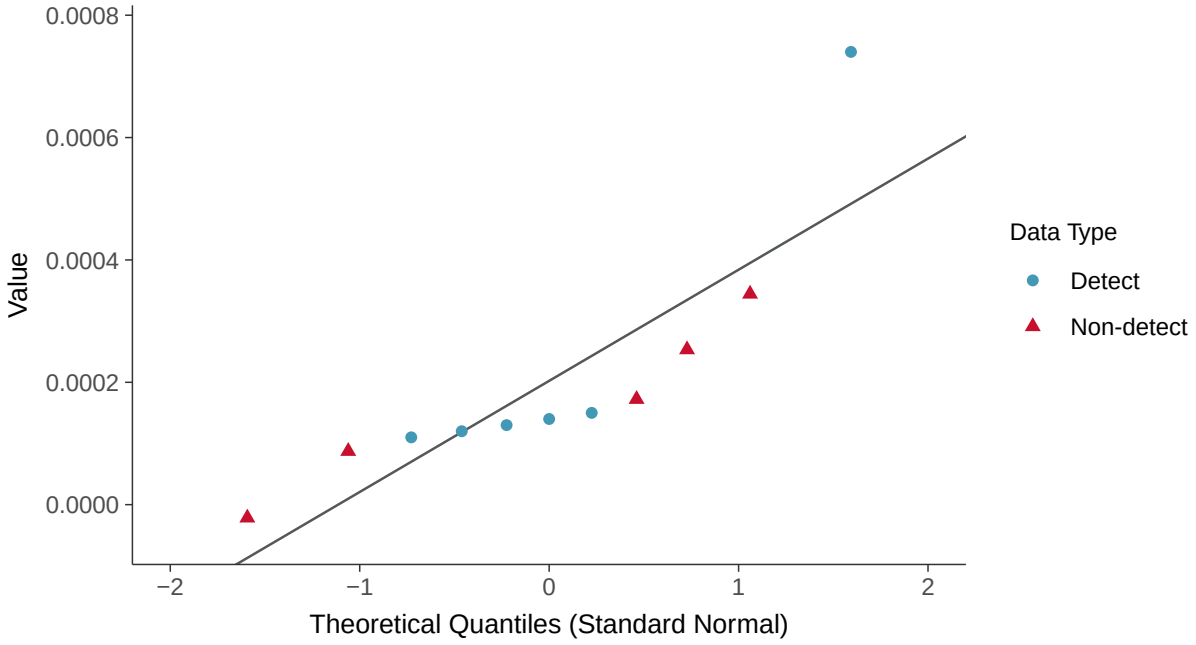
Boxplot by Season

Selenium, MW-31 (mg/L)



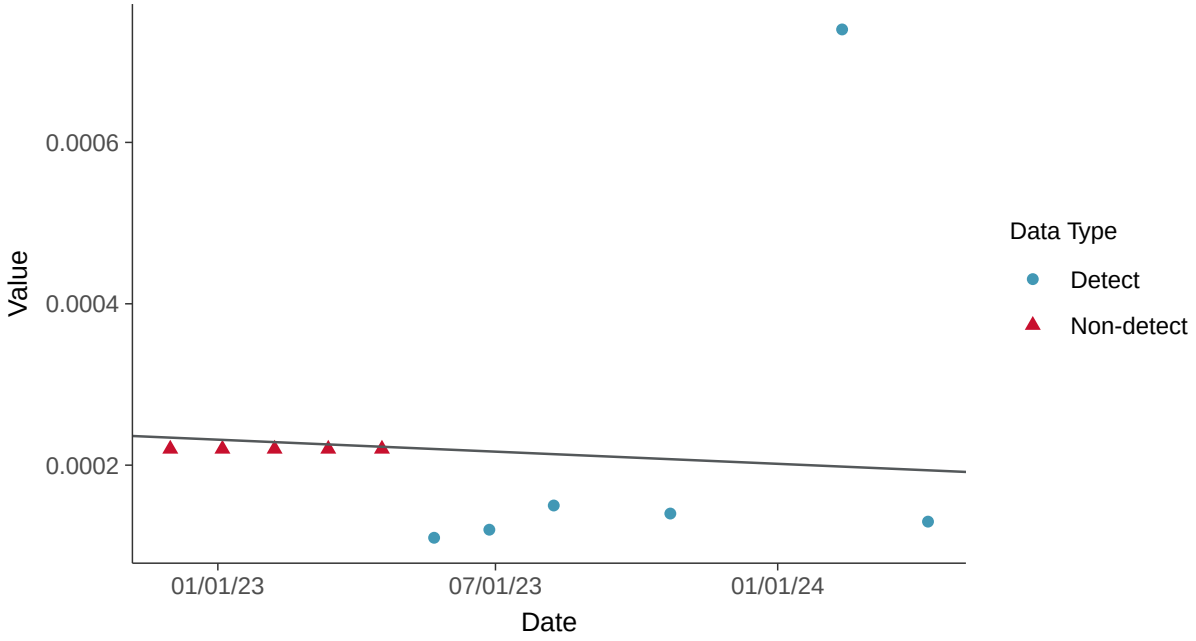
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-31 (mg/L)



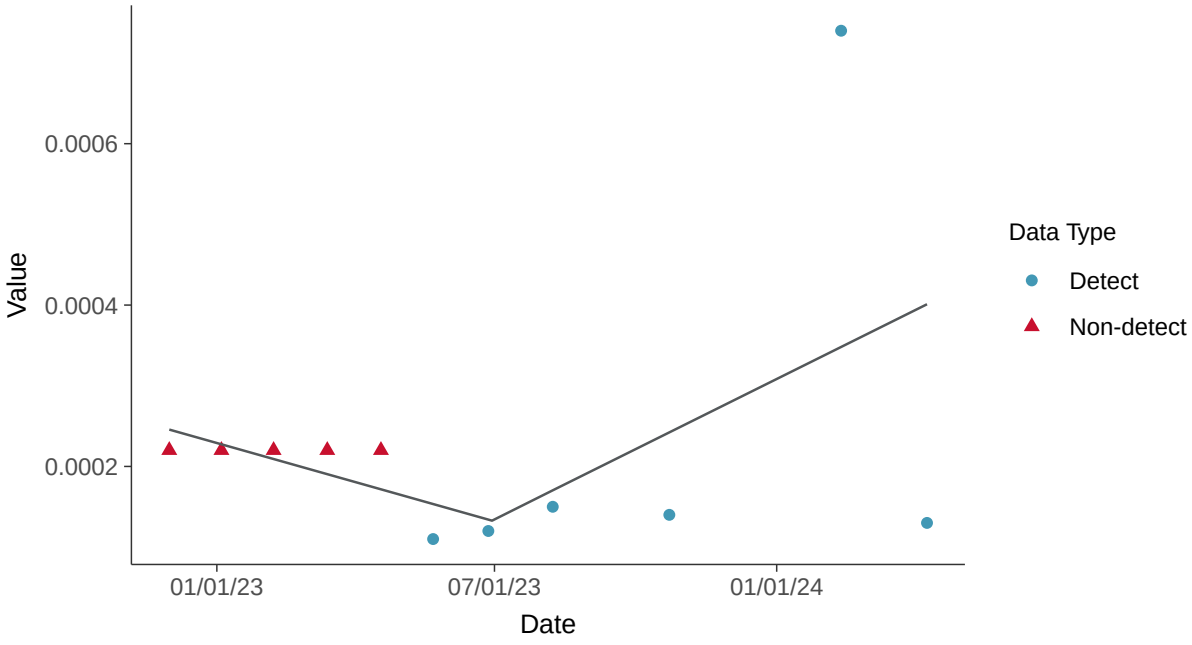
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Selenium, MW-31 (mg/L)



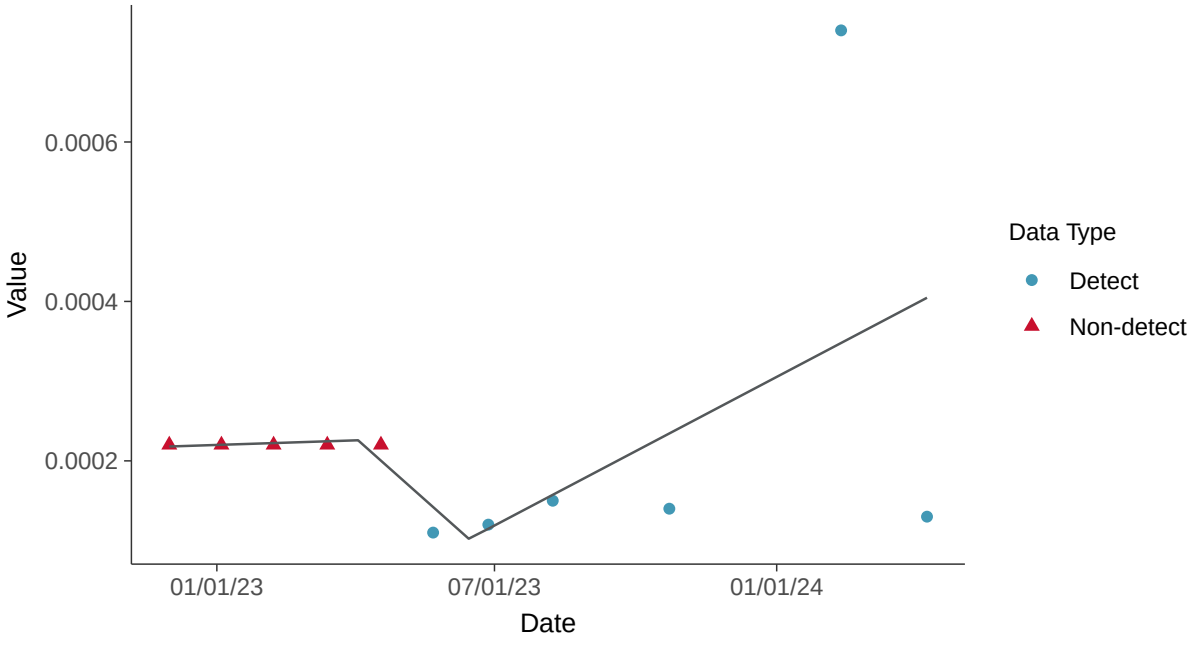
Trend Regression: Piecewise Linear-Linear

Selenium, MW-31 (mg/L)



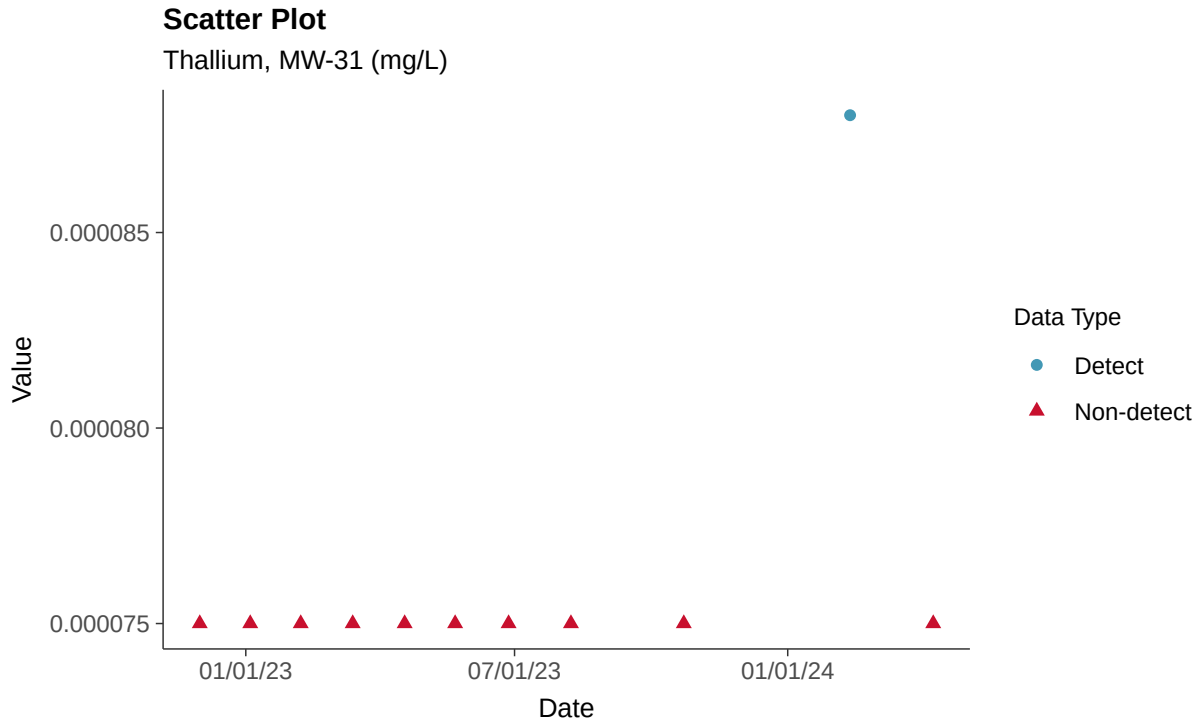
Trend Regression: Piecewise Linear-Linear-Linear

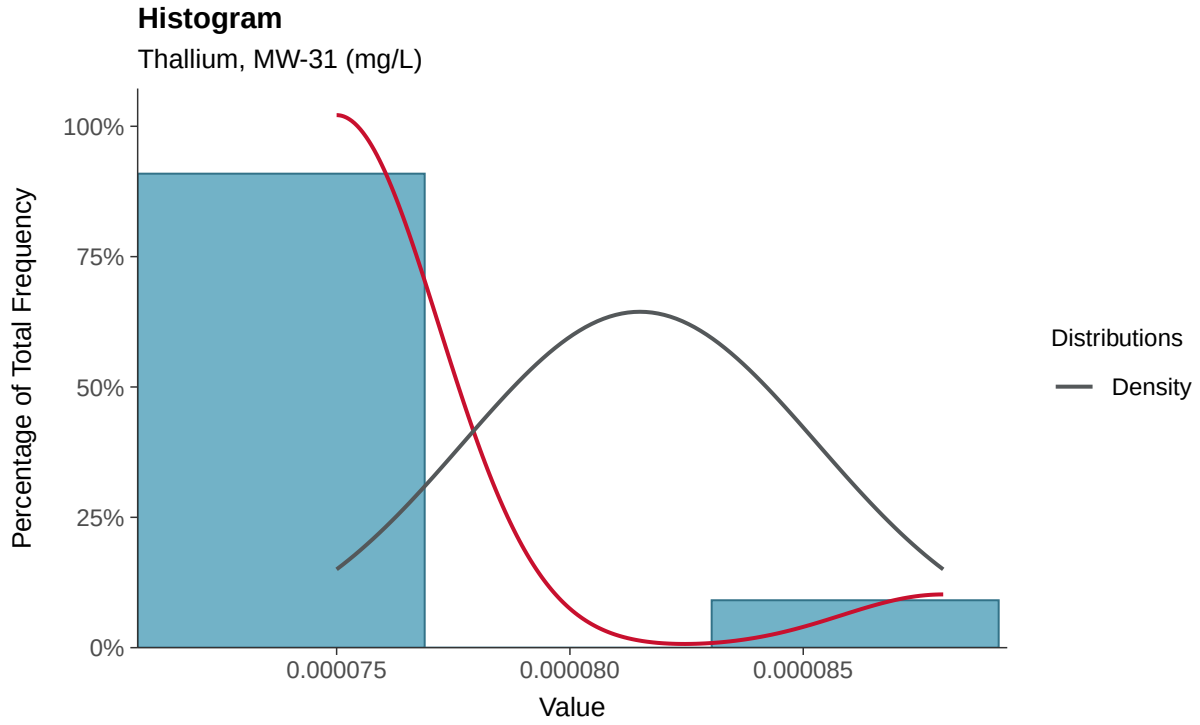
Selenium, MW-31 (mg/L)



Appendix IV: Thallium, MW-31

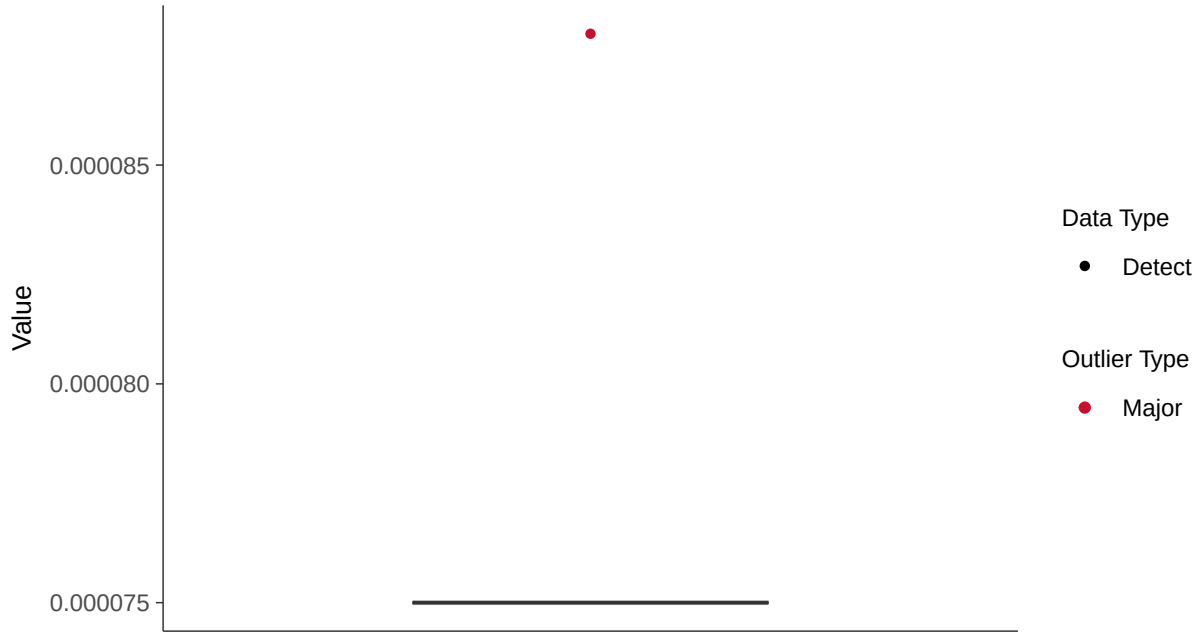
ID: 1_41_5_125





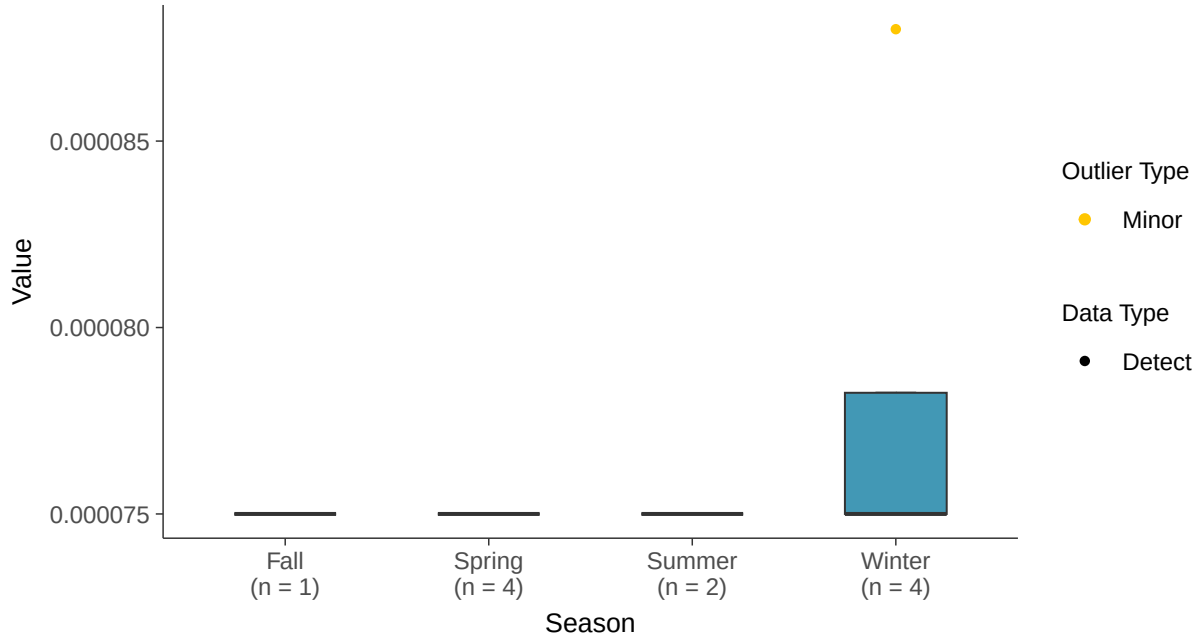
Boxplot

Thallium, MW-31 (mg/L)



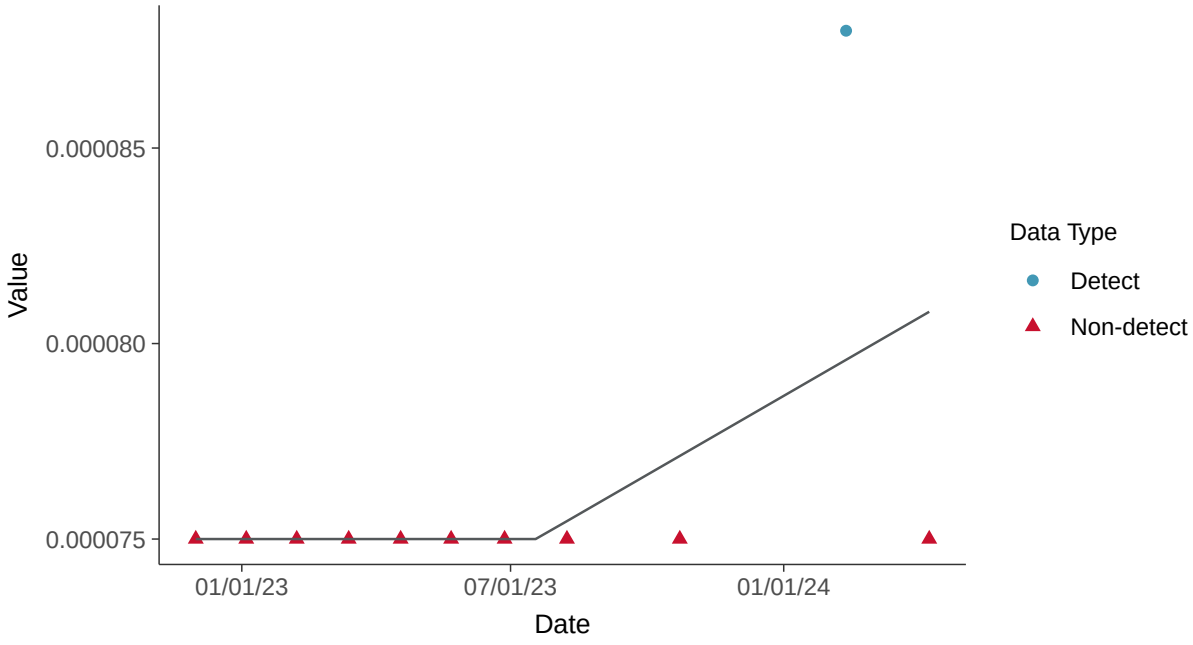
Boxplot by Season

Thallium, MW-31 (mg/L)



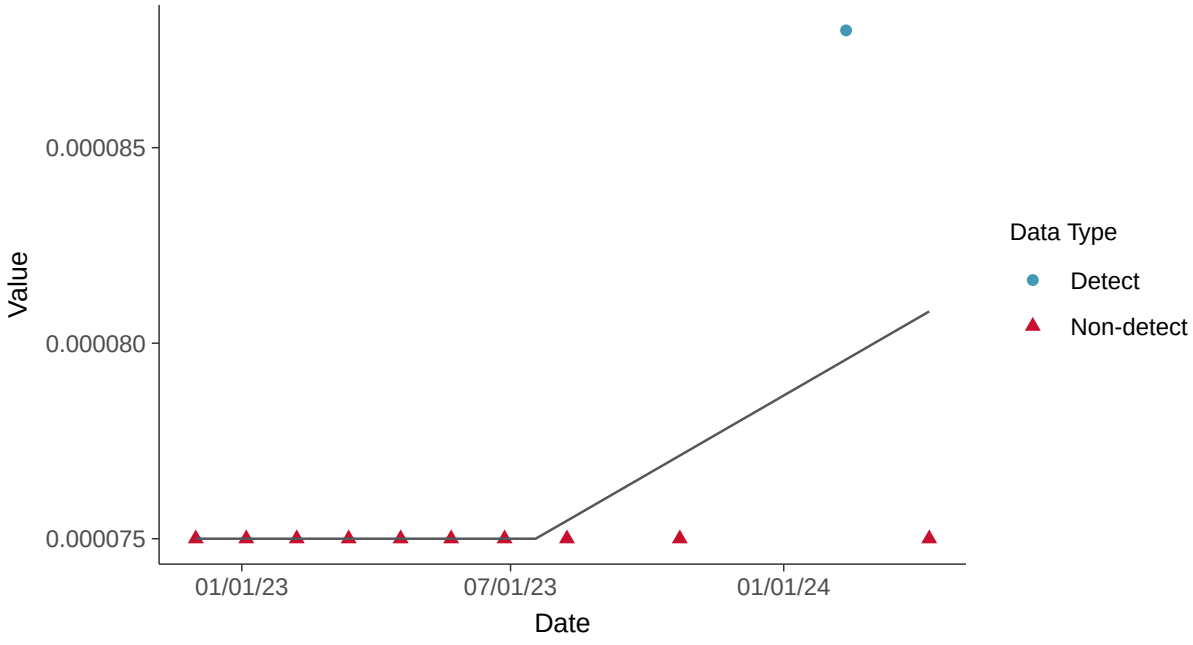
Trend Regression: Piecewise Linear-Linear

Thallium, MW-31 (mg/L)



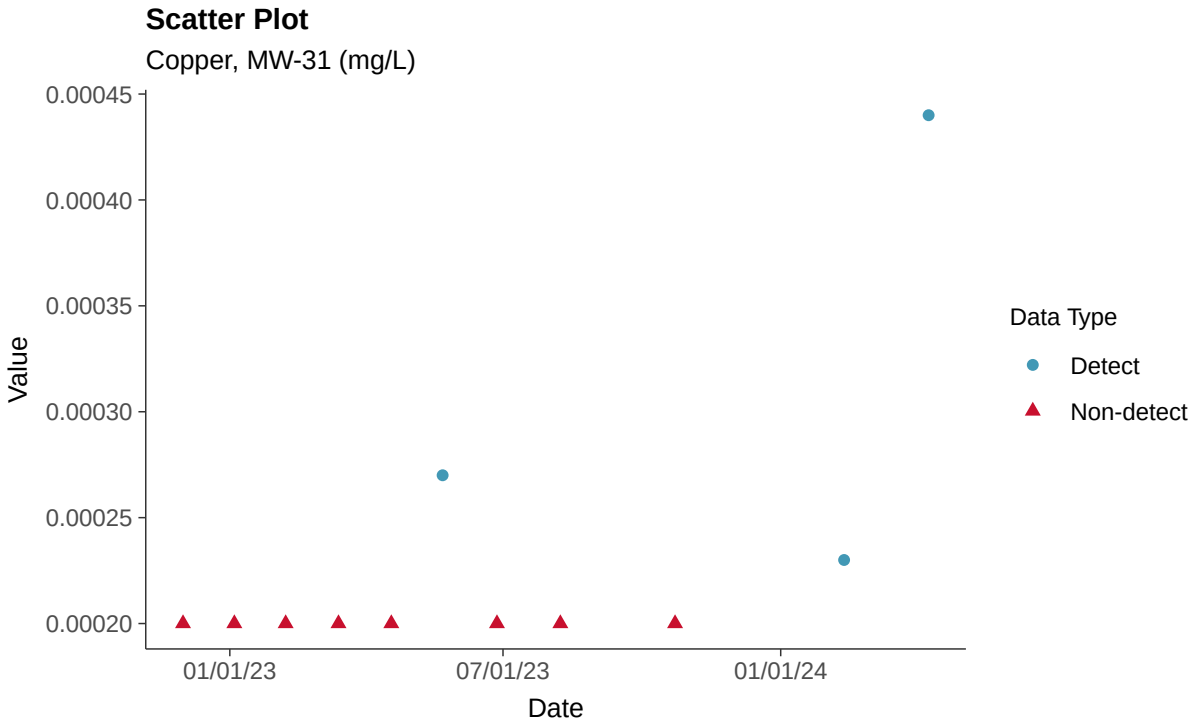
Trend Regression: Piecewise Linear-Linear-Linear

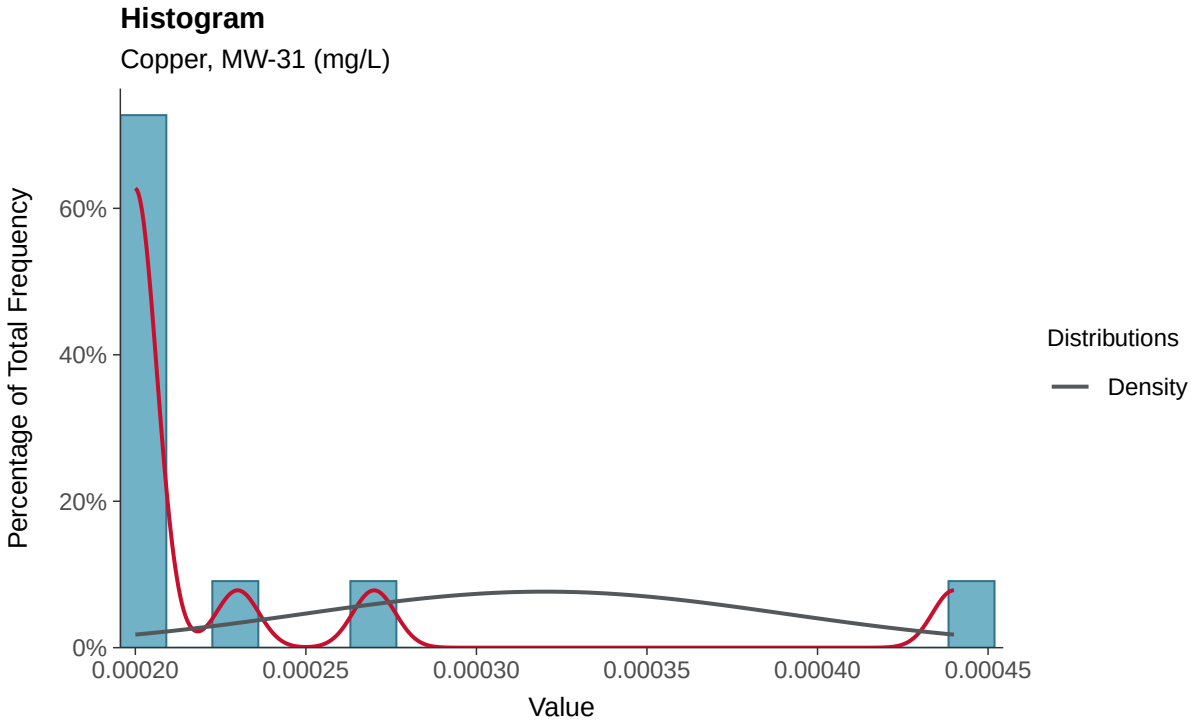
Thallium, MW-31 (mg/L)



Part 115: Copper, MW-31

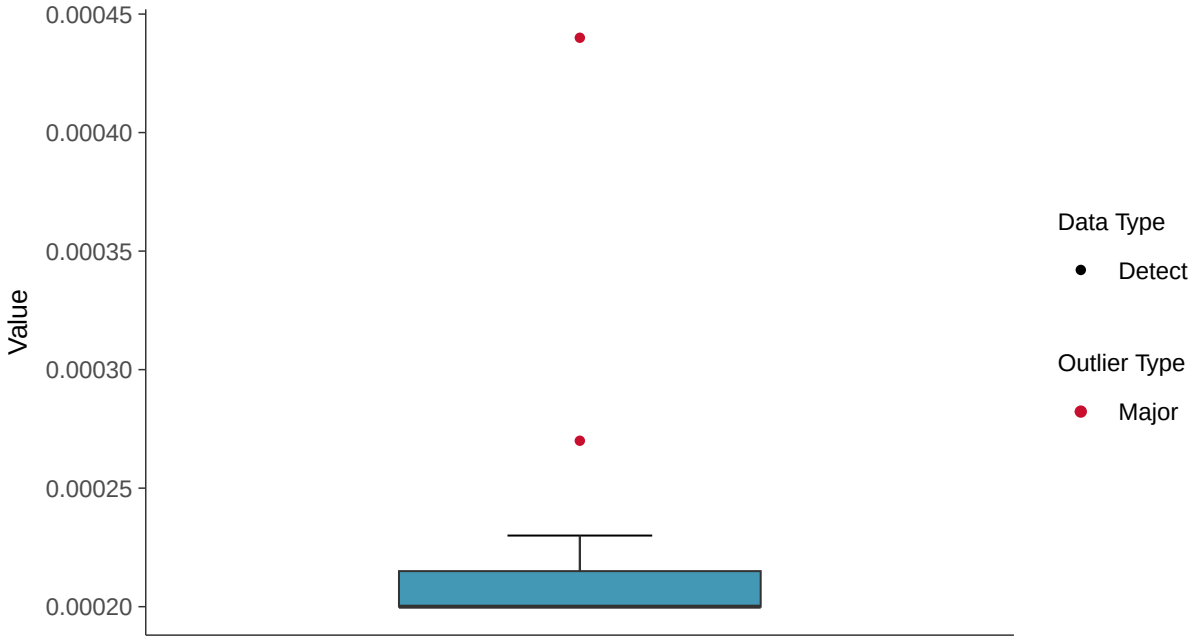
ID: 1_41_6_111





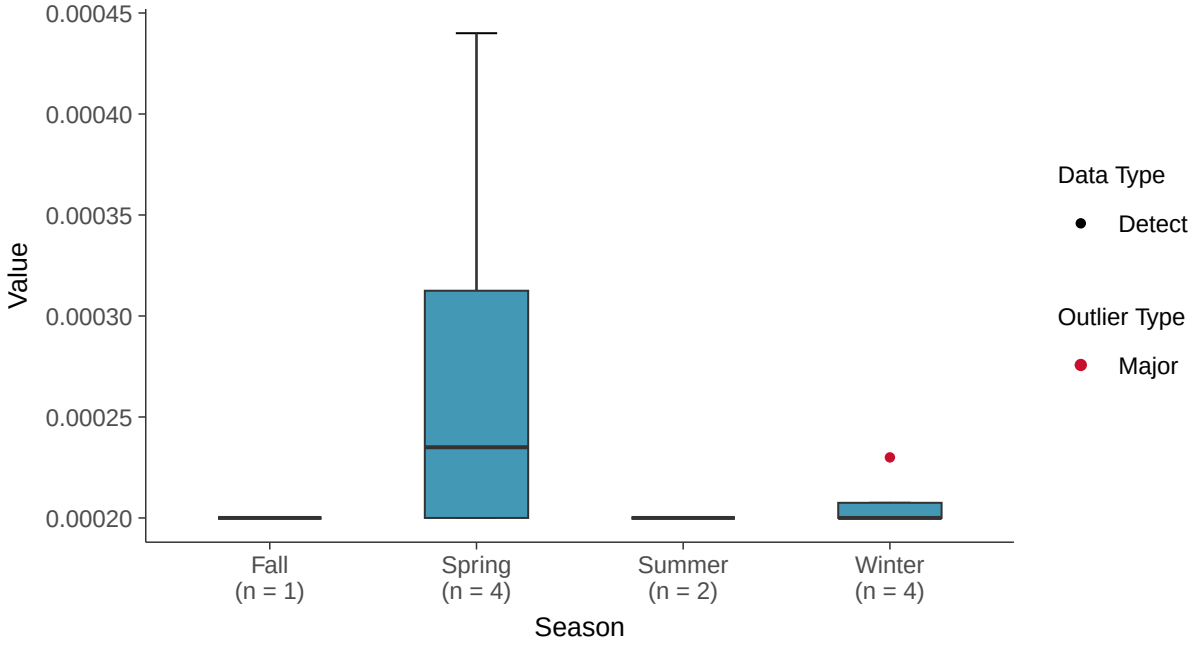
Boxplot

Copper, MW-31 (mg/L)



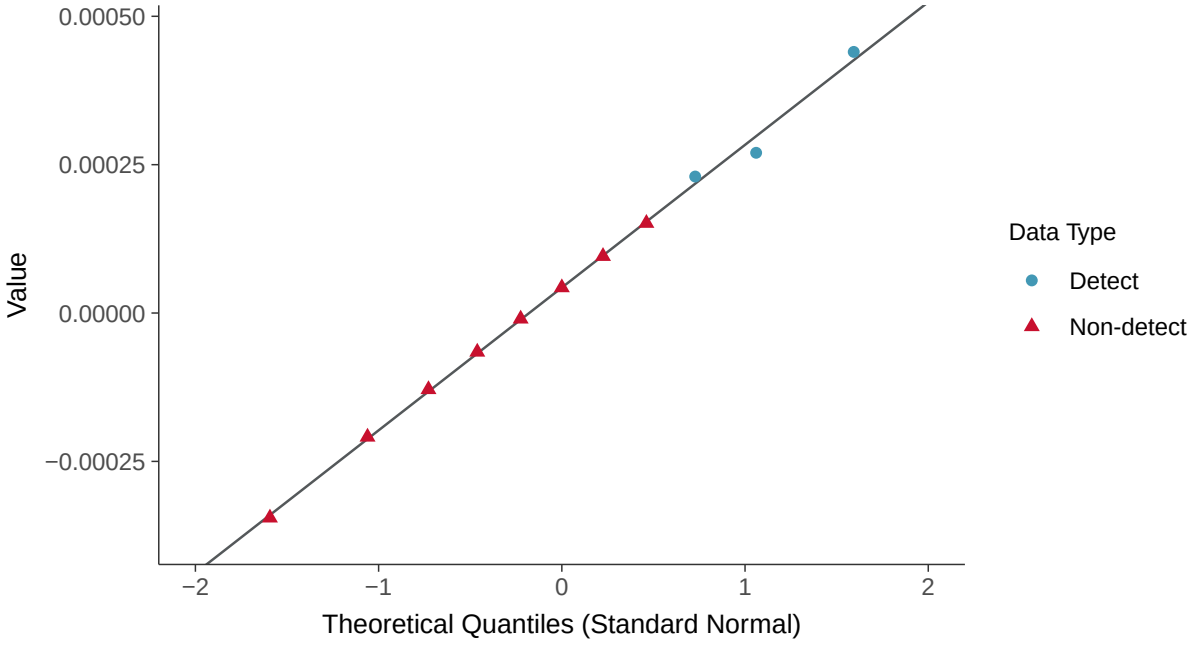
Boxplot by Season

Copper, MW-31 (mg/L)



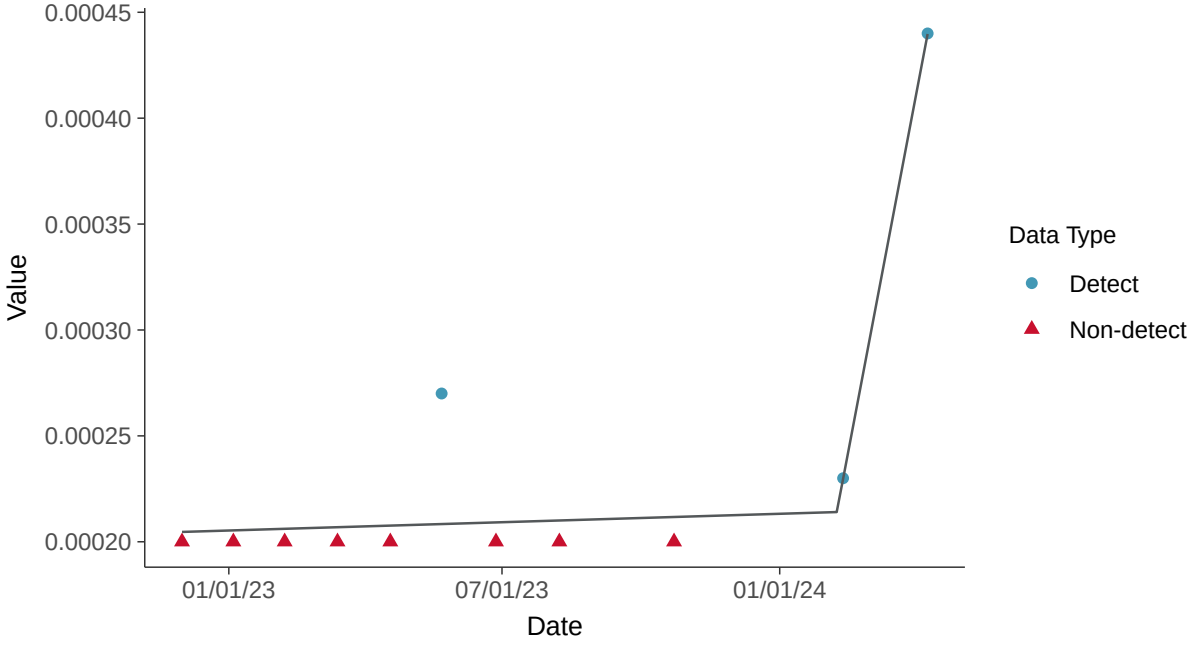
Normal Q-Q plot using ROS Imputed Estimates

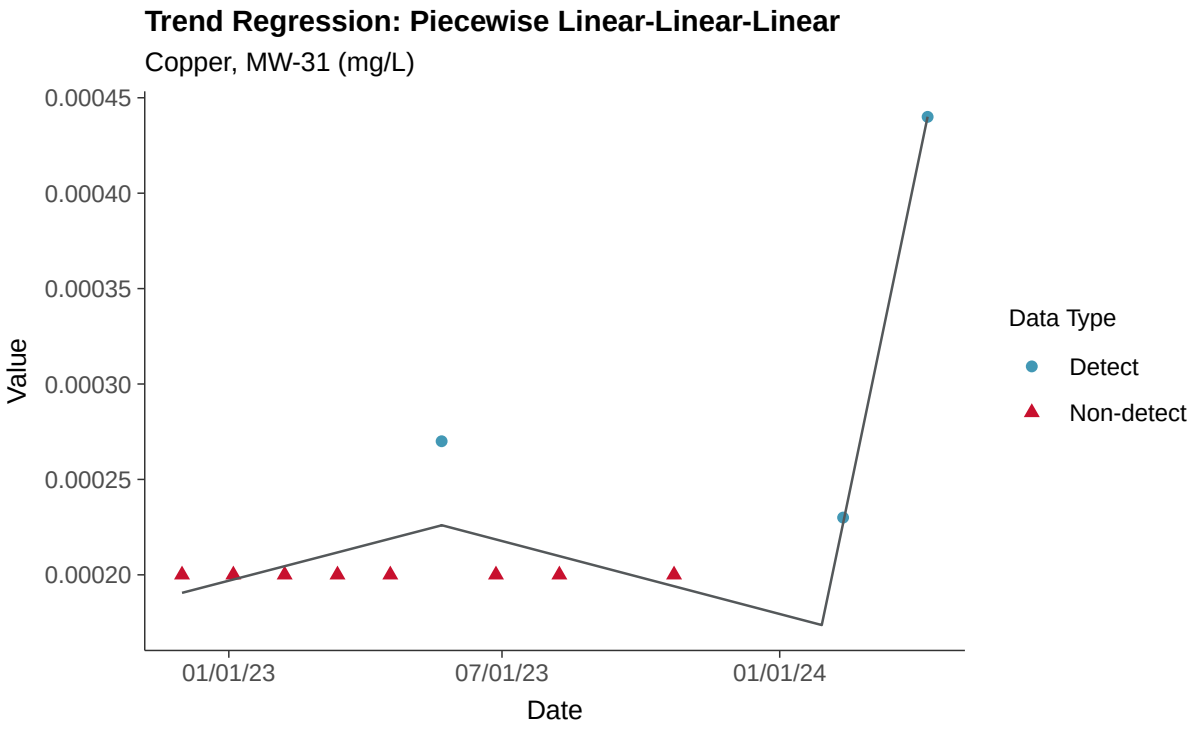
Copper, MW-31 (mg/L)



Trend Regression: Piecewise Linear-Linear

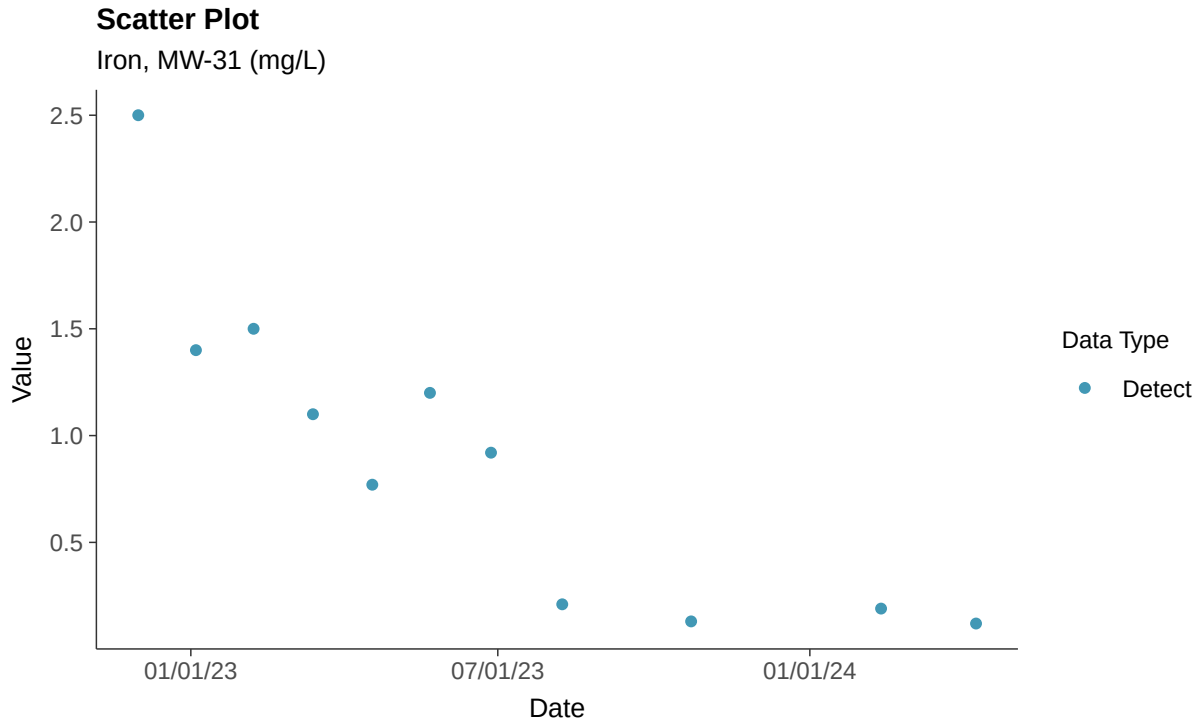
Copper, MW-31 (mg/L)

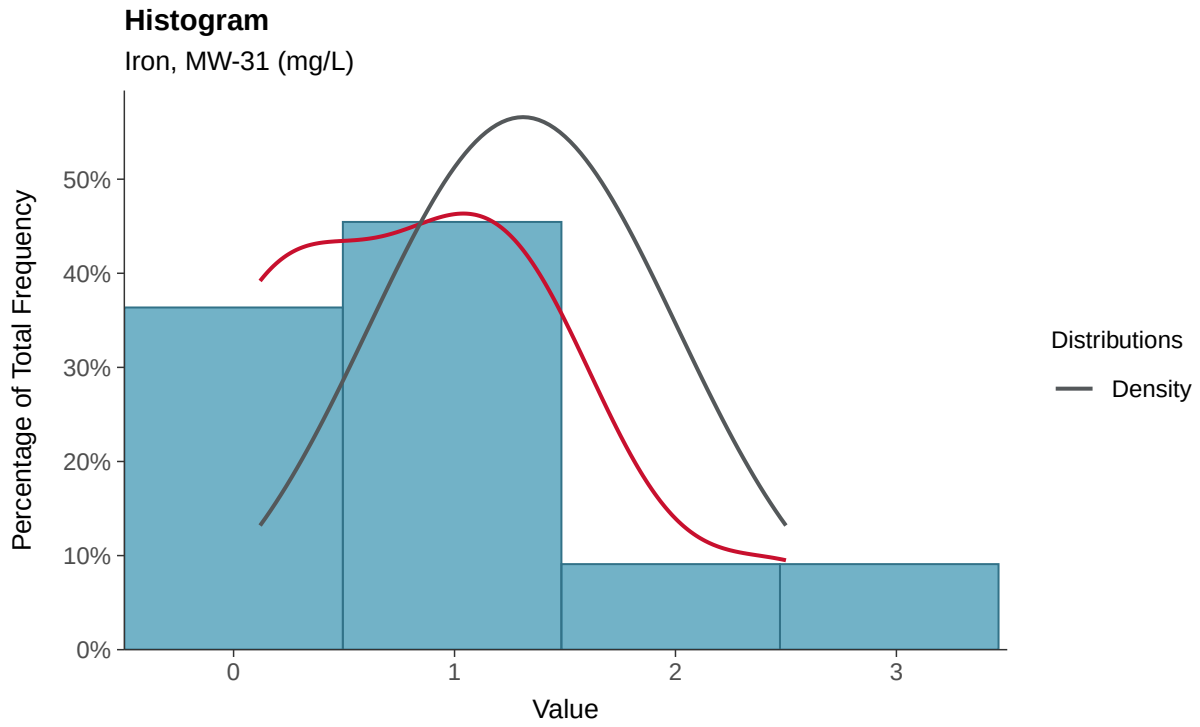



Trend Regression: Piecewise Linear-Linear-Linear
Copper, MW-31 (mg/L)
0.00045
0.00040
0.00035
0.00030
0.00025
0.00020
Value
01/01/23
07/01/23
01/01/24
Date
Data Type
Detect
Non-detect

Part 115: Iron, MW-31

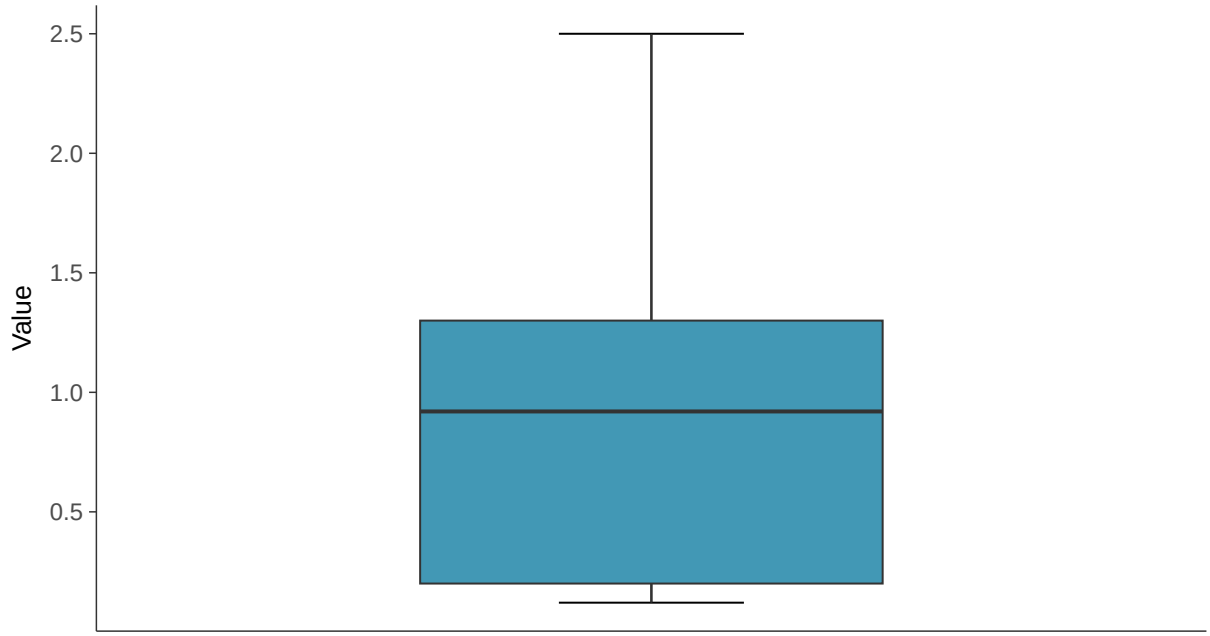
ID: 1_41_6_114





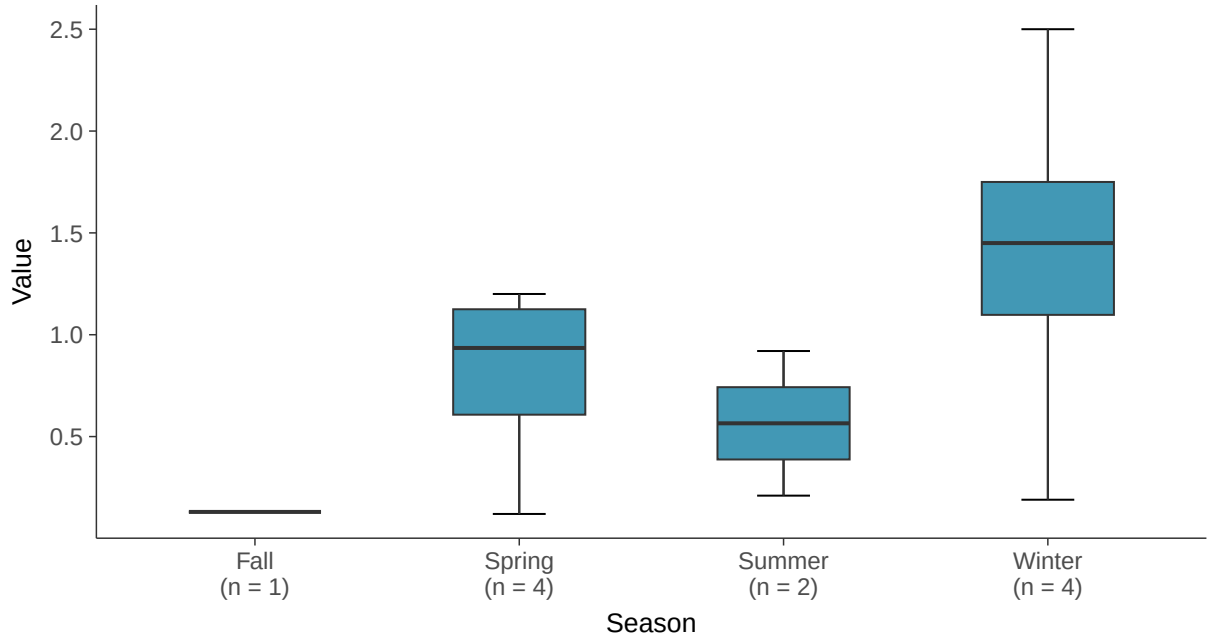
Boxplot

Iron, MW-31 (mg/L)



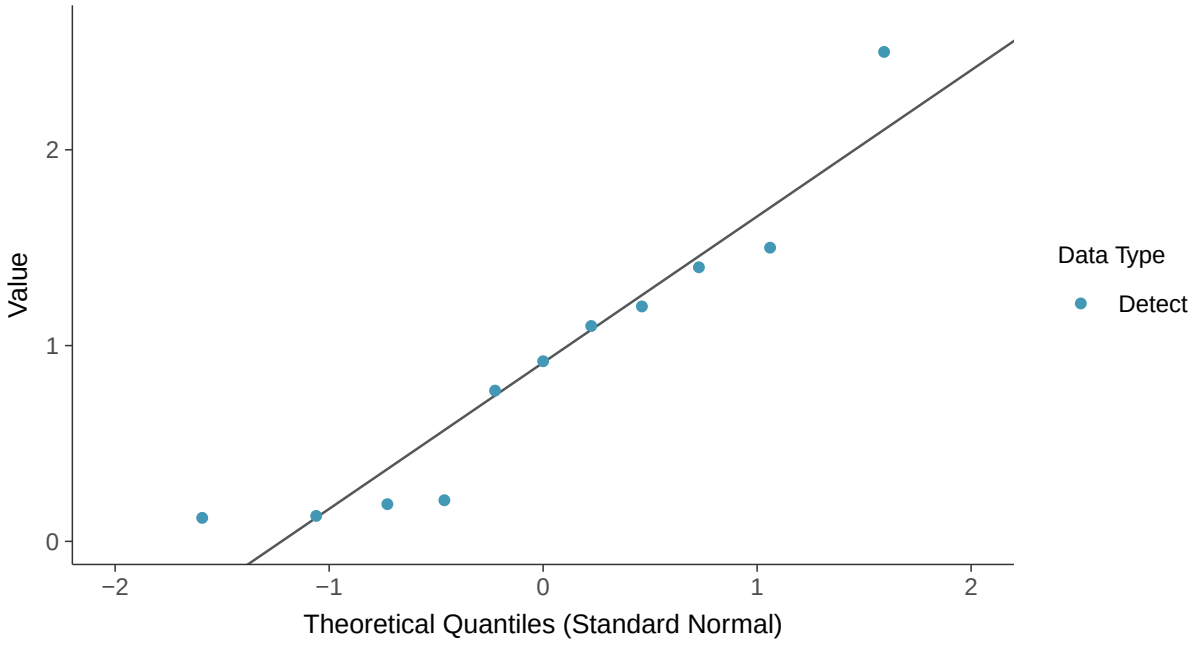
Boxplot by Season

Iron, MW-31 (mg/L)



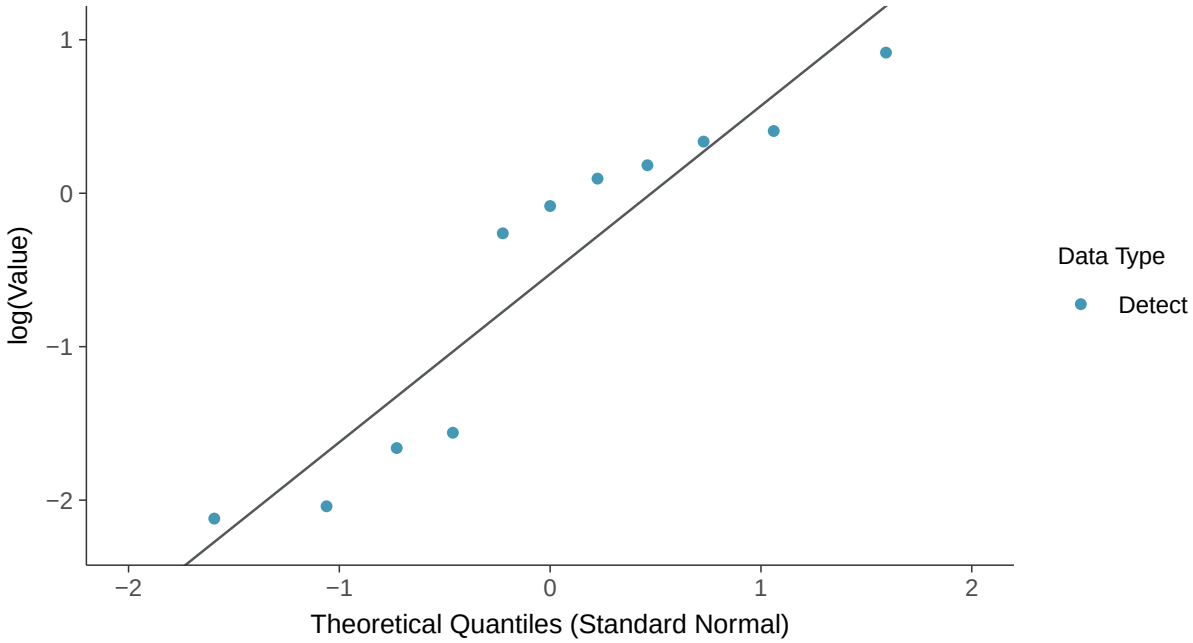
Normal Q-Q plot

Iron, MW-31 (mg/L)



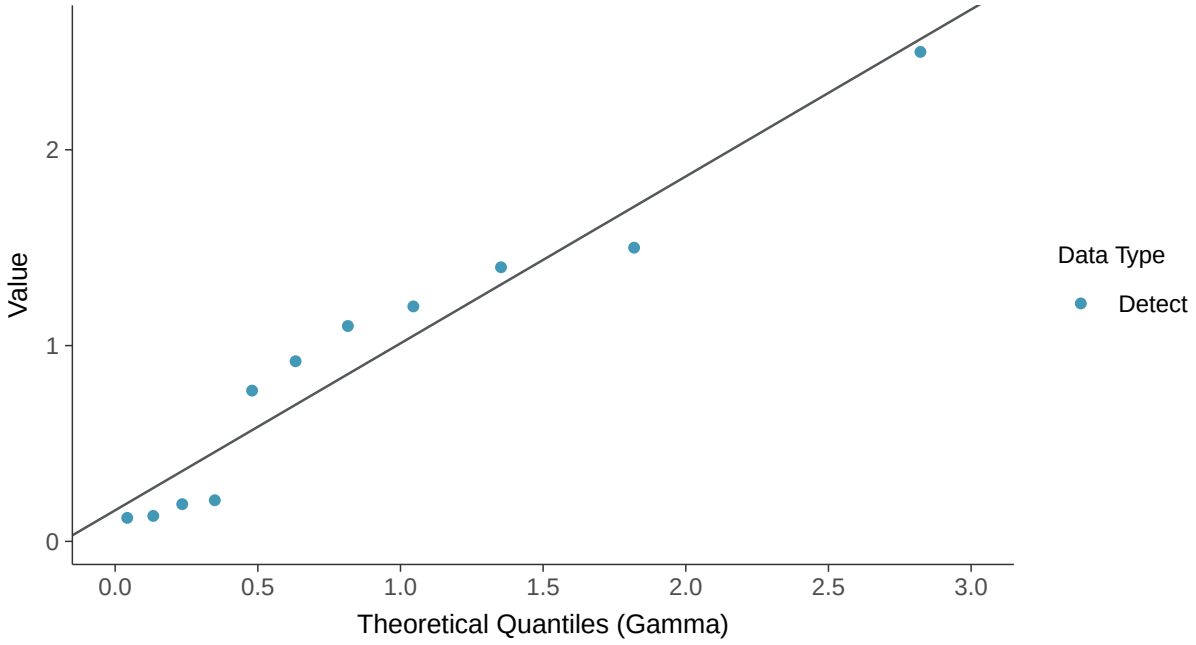
Lognormal Q-Q plot

Iron, MW-31 (mg/L)



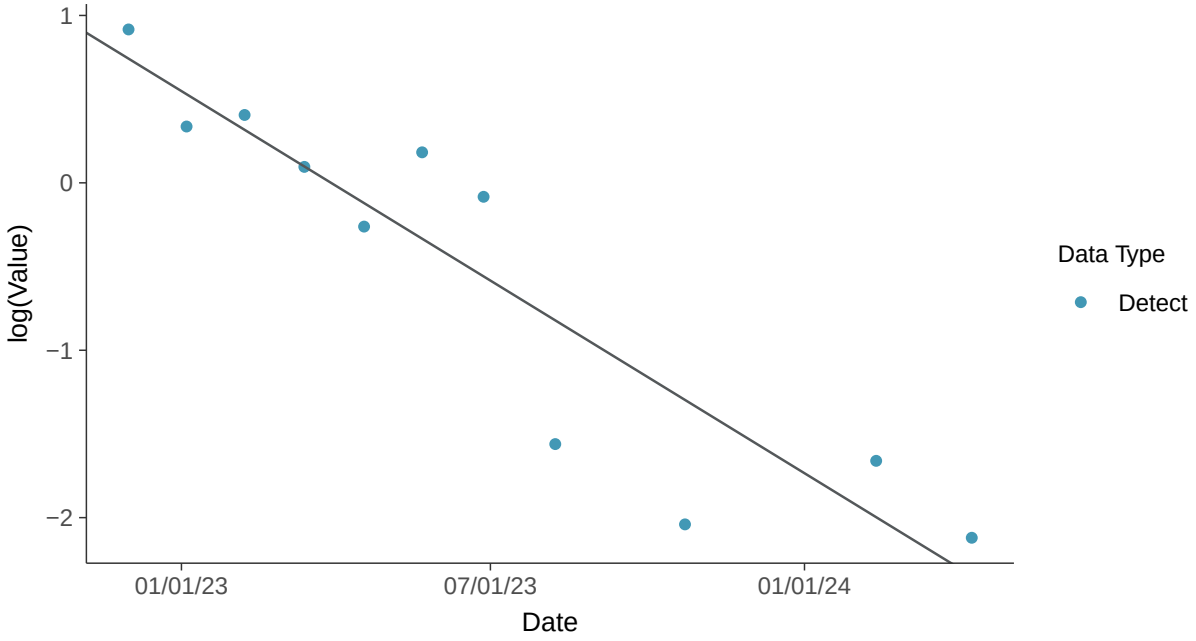
Gamma Q-Q plot

Iron, MW-31 (mg/L)



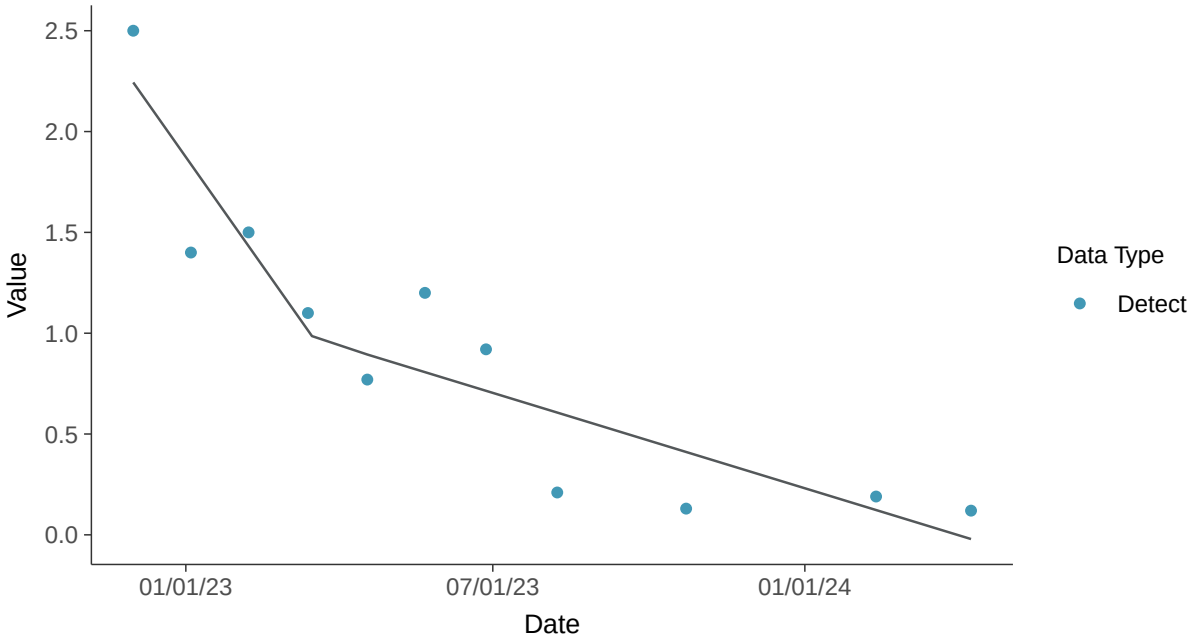
Trend Regression: Lognormal MLE

Iron, MW-31 (mg/L)



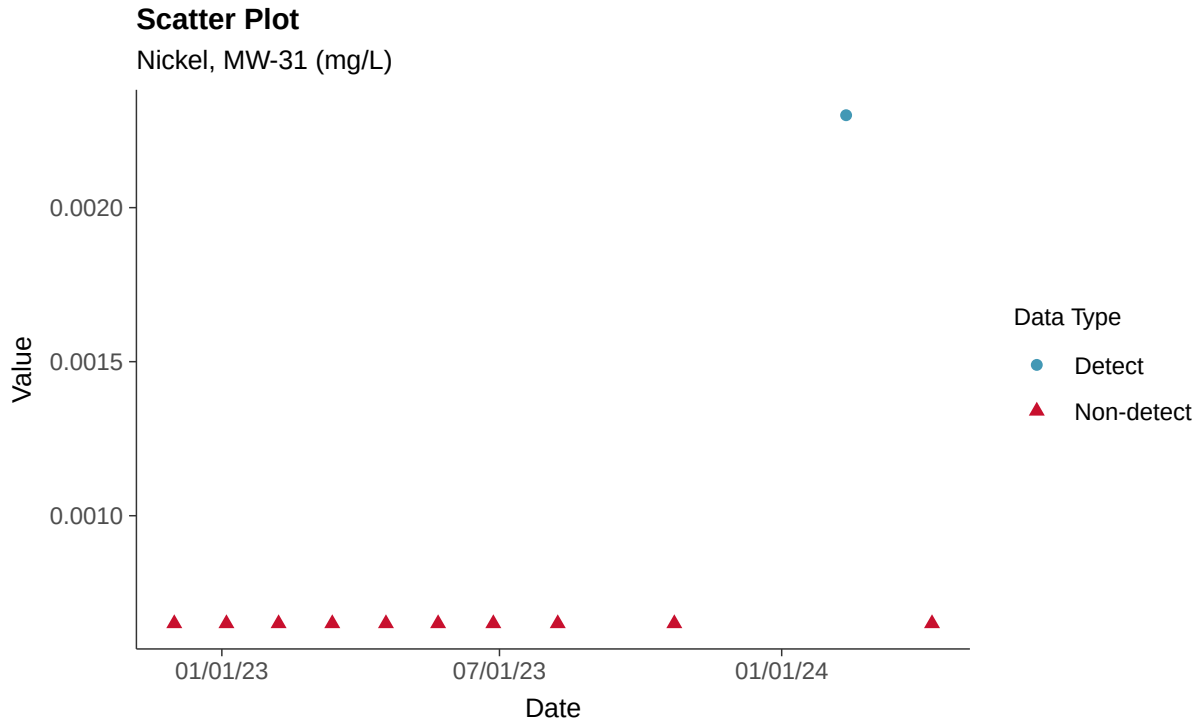
Trend Regression: Piecewise Linear-Linear

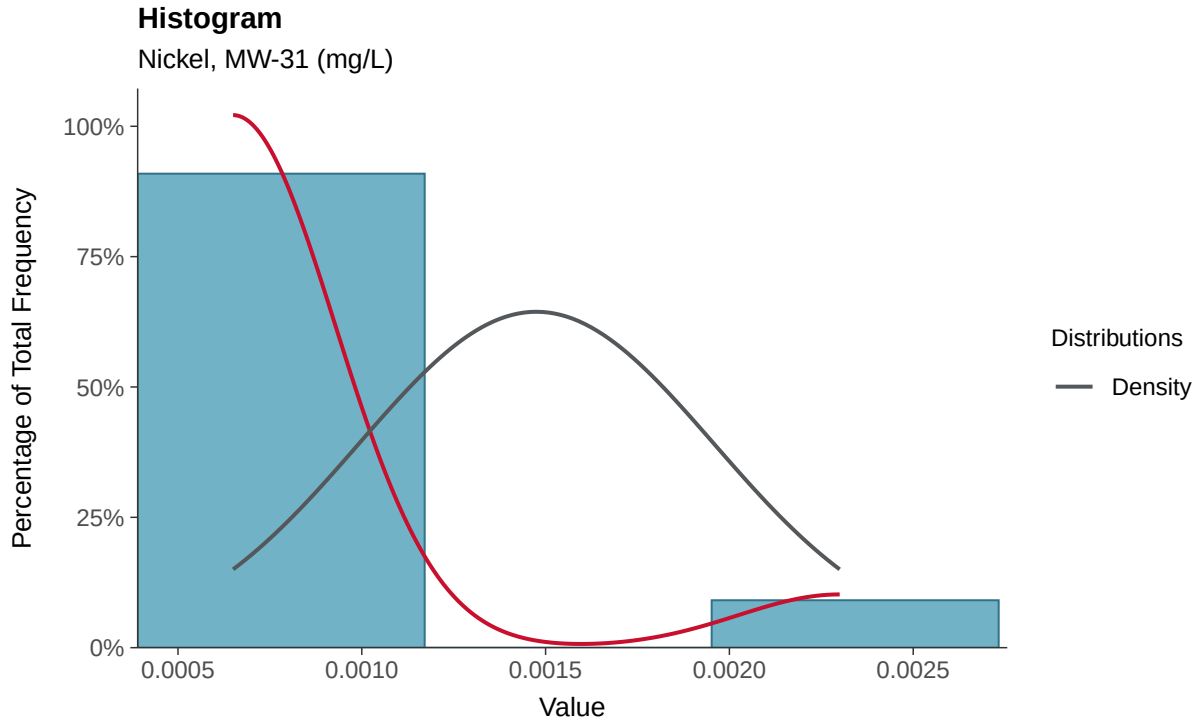
Iron, MW-31 (mg/L)



Part 115: Nickel, MW-31

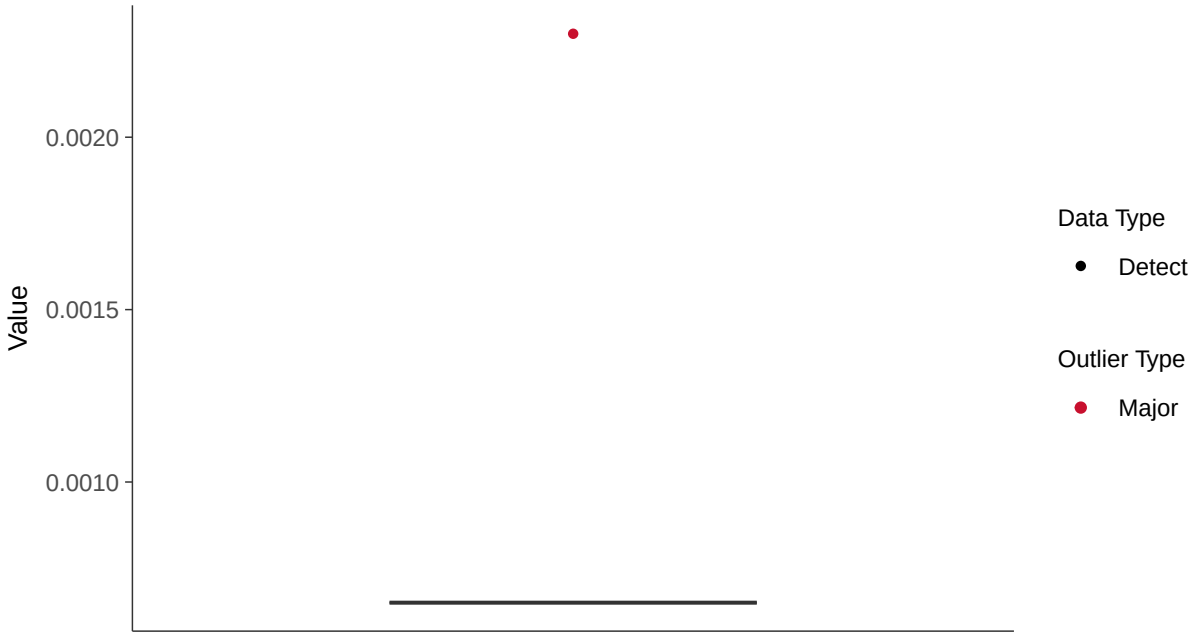
ID: 1_41_6_119





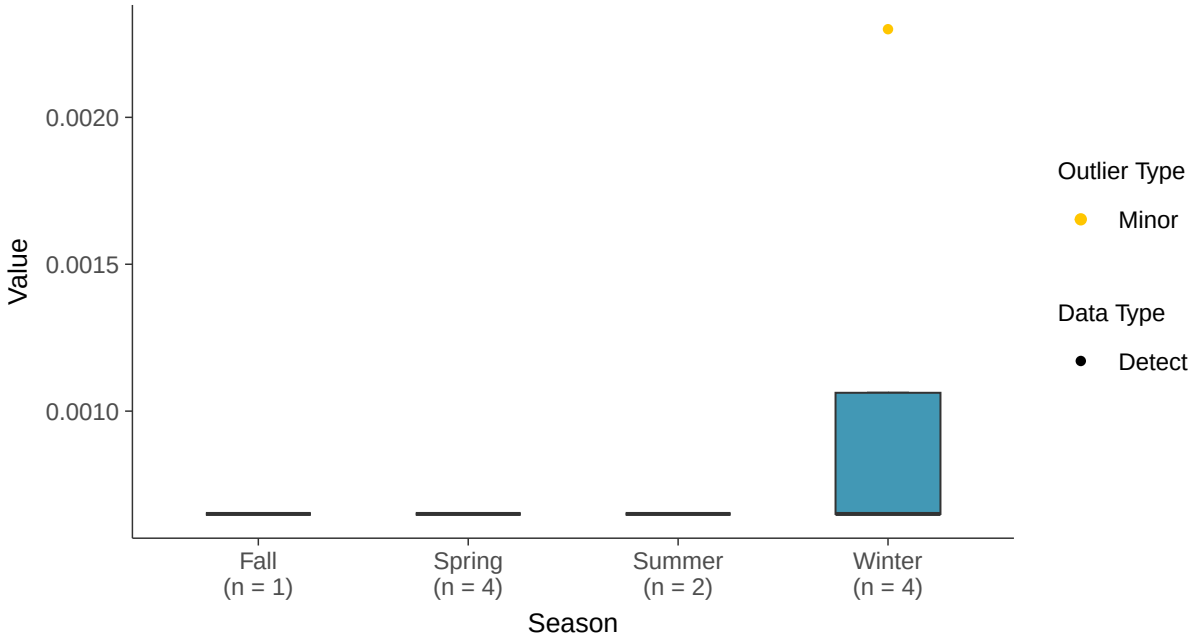
Boxplot

Nickel, MW-31 (mg/L)



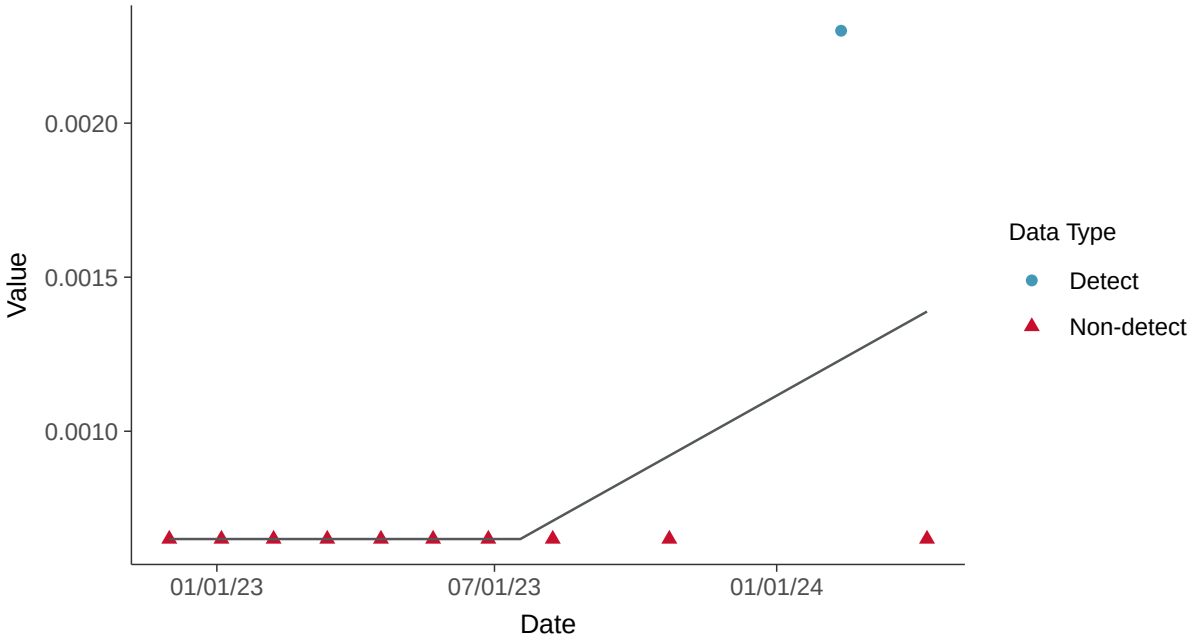
Boxplot by Season

Nickel, MW-31 (mg/L)



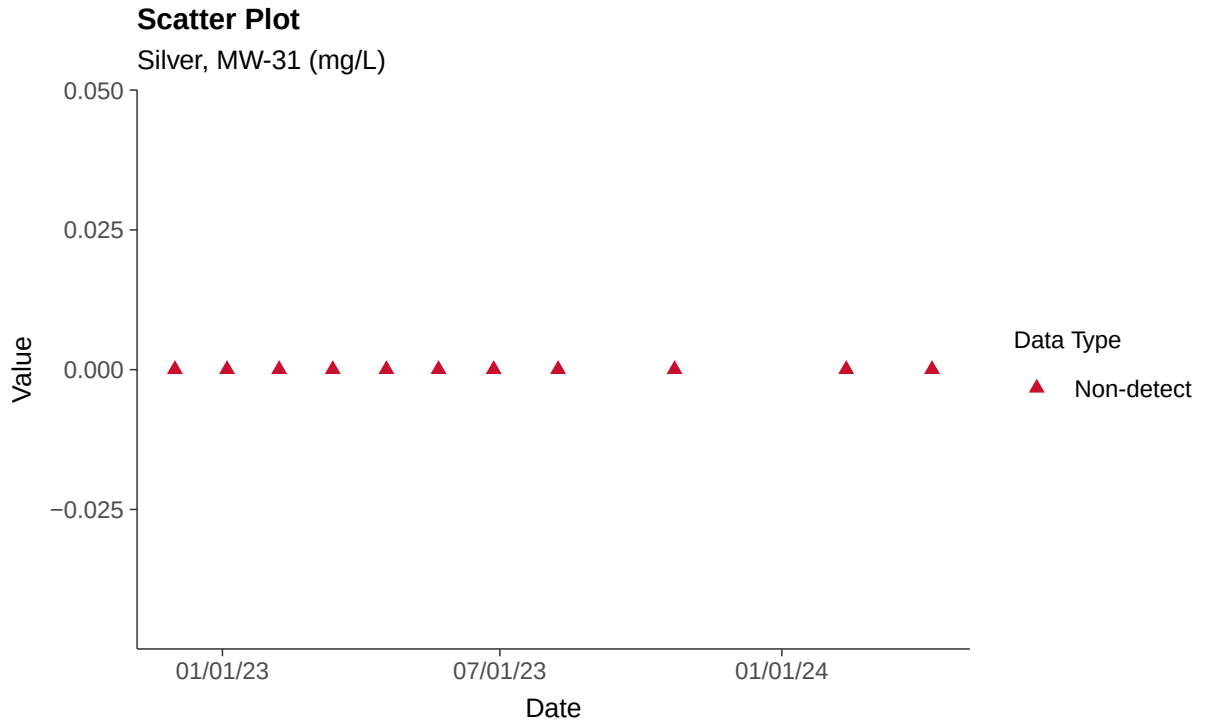
Trend Regression: Piecewise Linear-Linear

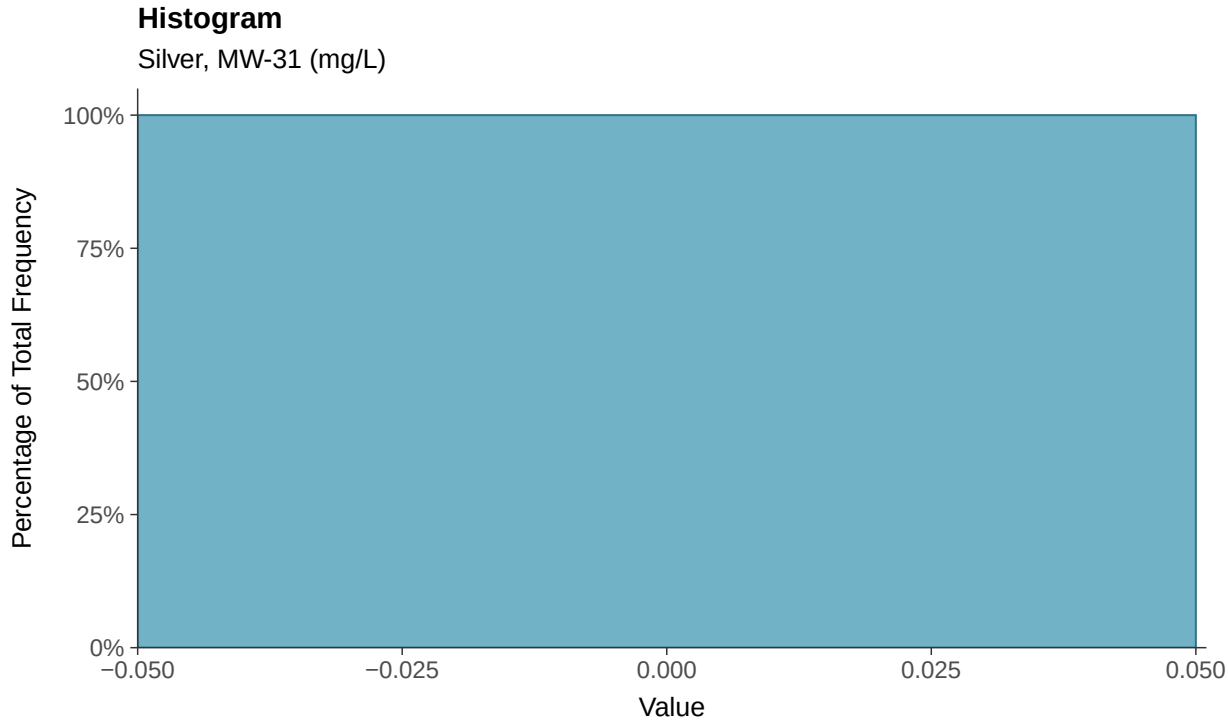
Nickel, MW-31 (mg/L)



Part 115: Silver, MW-31

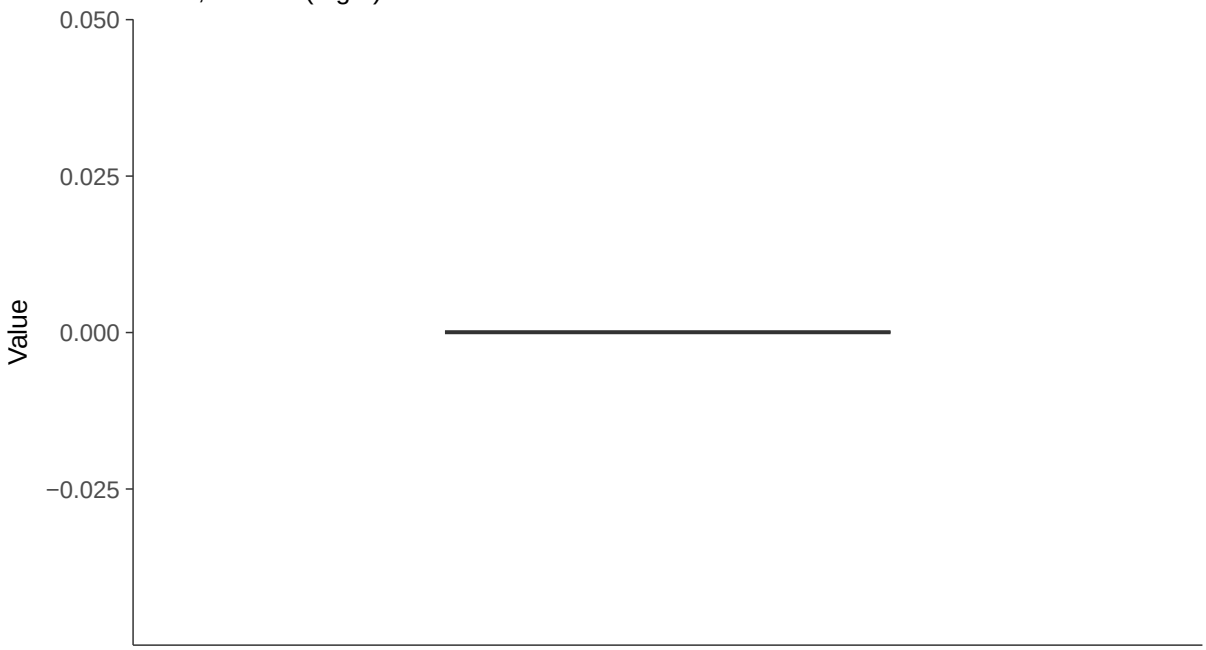
ID: 1_41_6_123





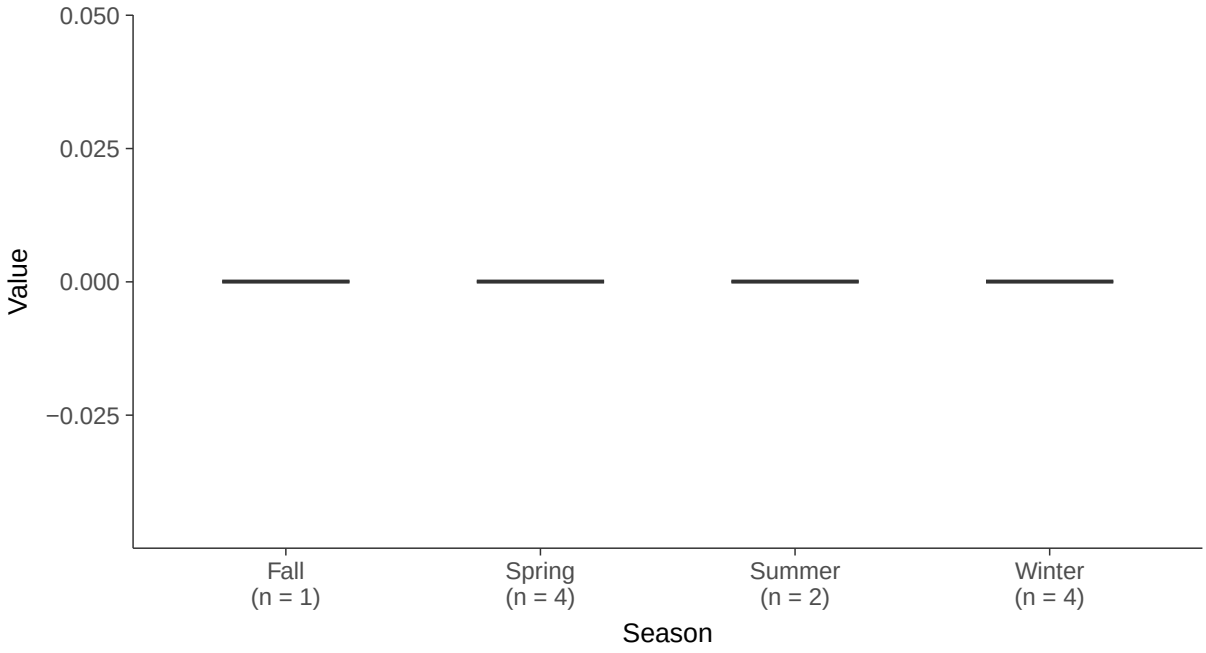
Boxplot

Silver, MW-31 (mg/L)



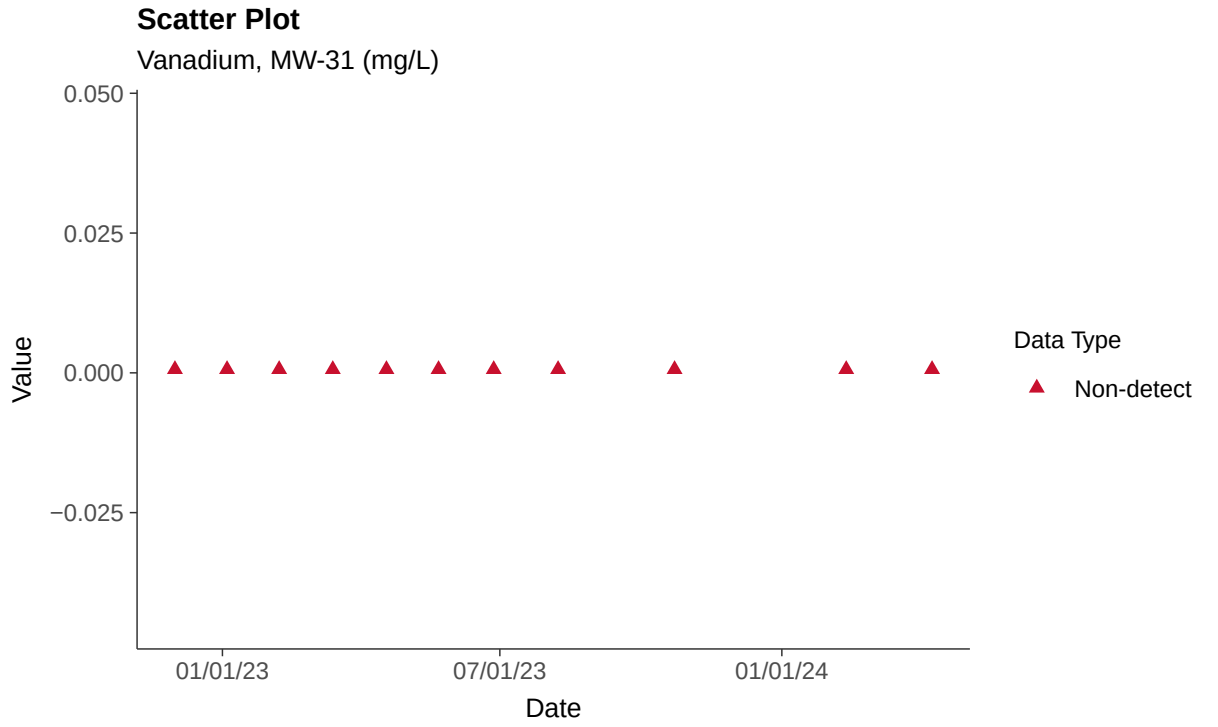
Boxplot by Season

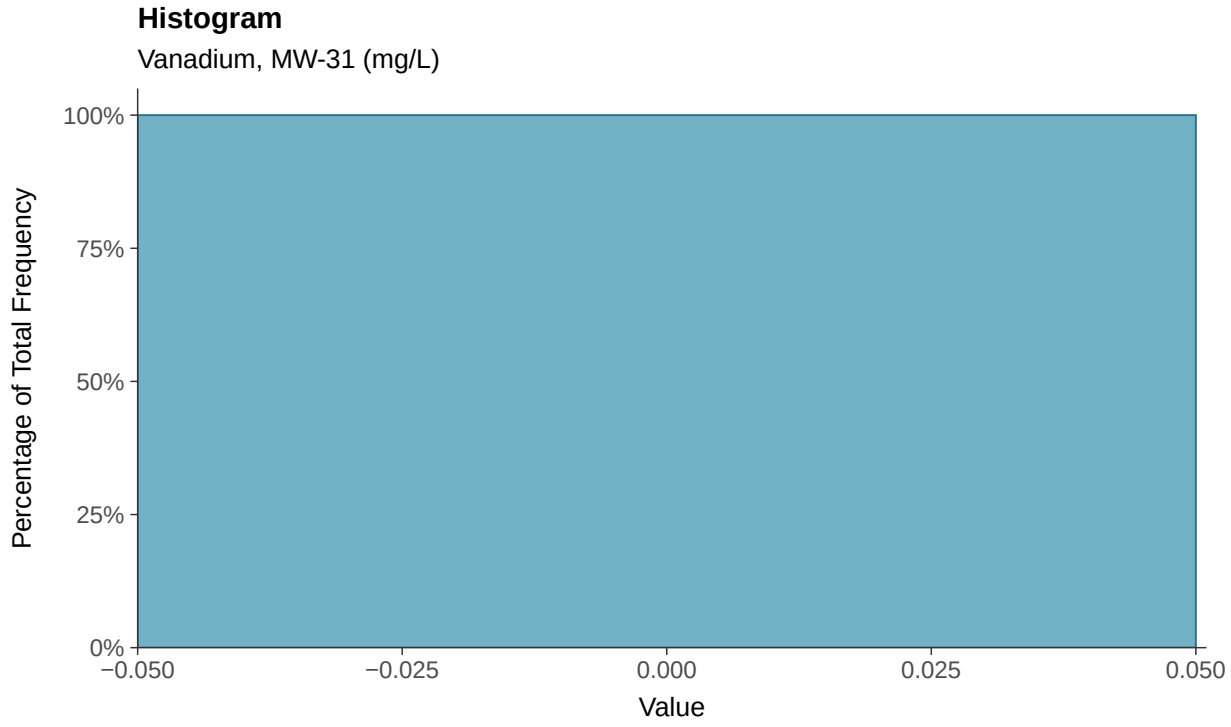
Silver, MW-31 (mg/L)



Part 115: Vanadium, MW-31

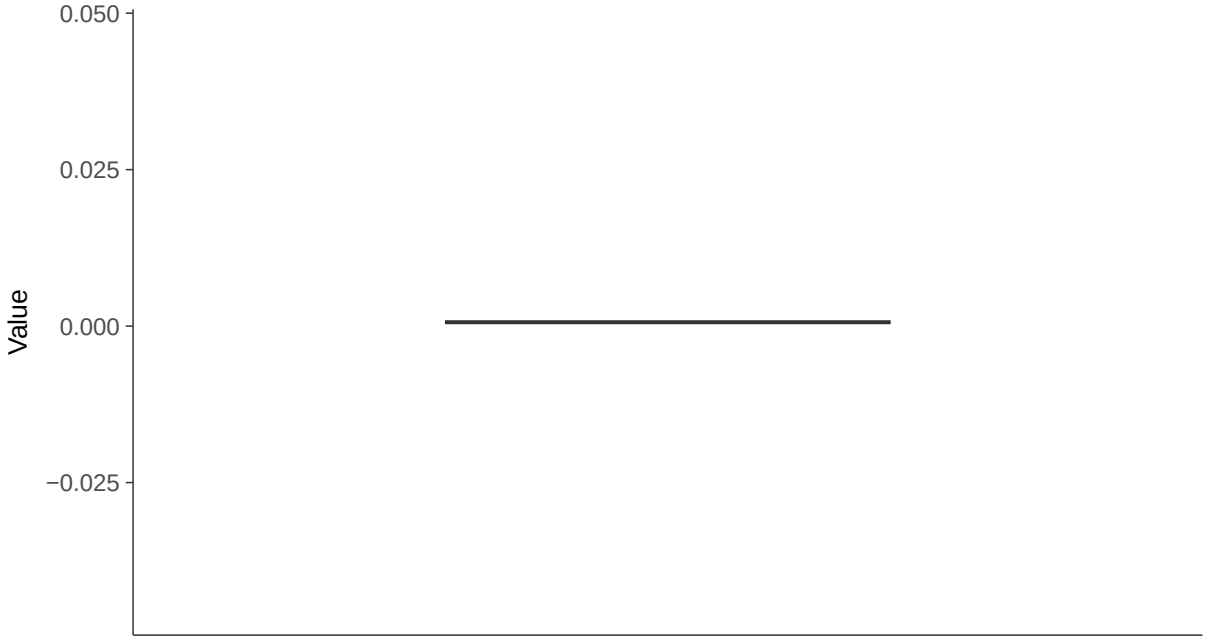
ID: 1_41_6_129





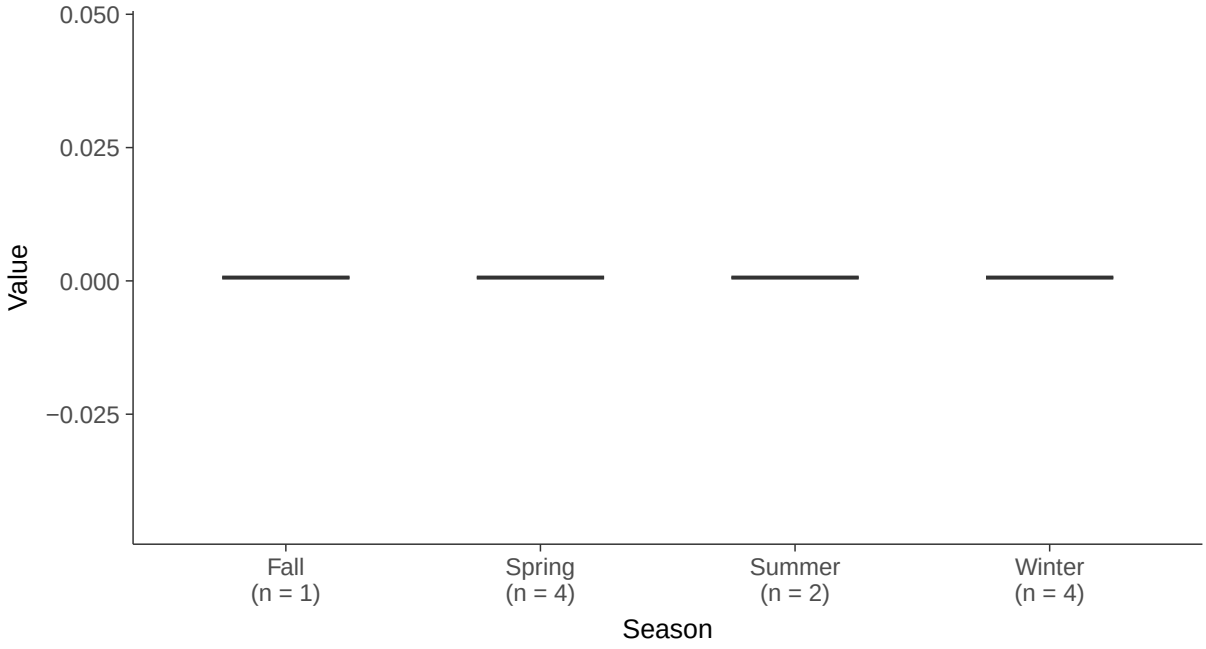
Boxplot

Vanadium, MW-31 (mg/L)



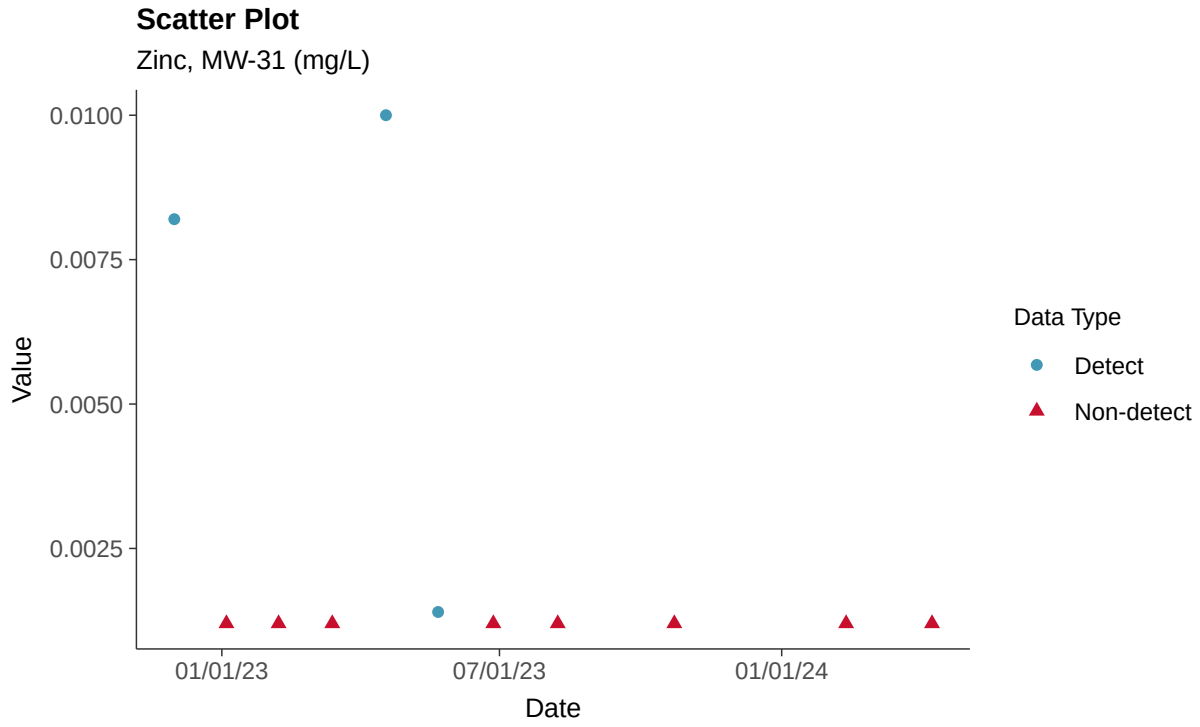
Boxplot by Season

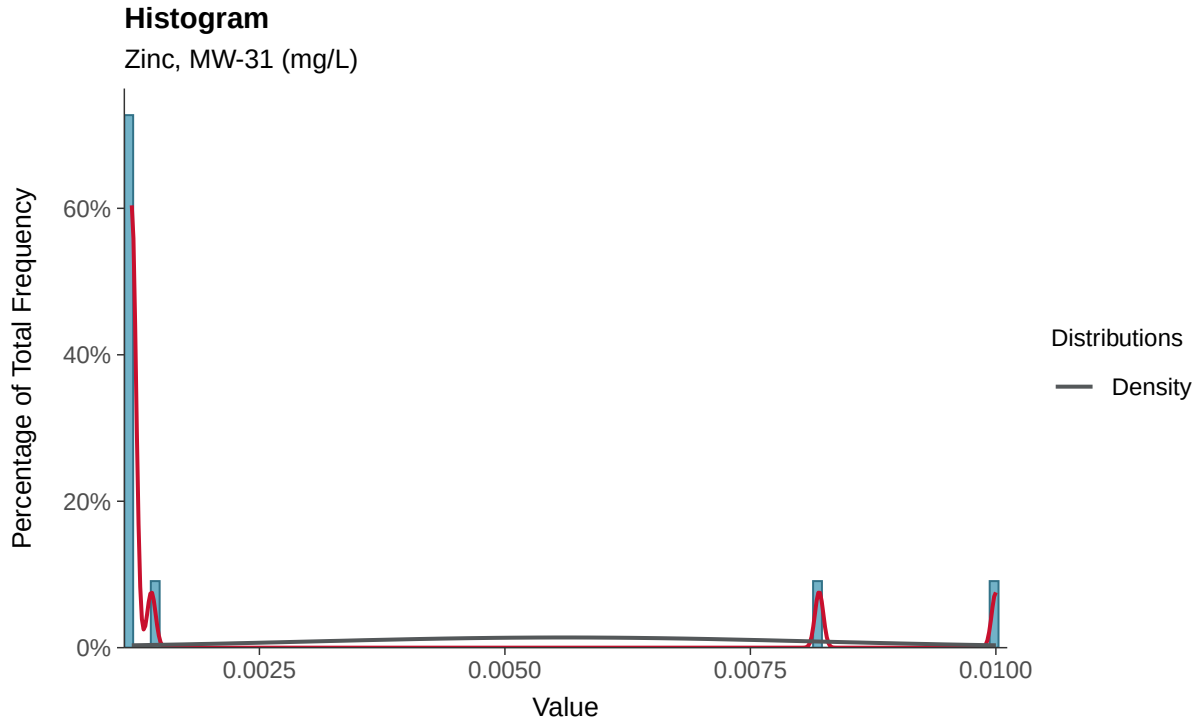
Vanadium, MW-31 (mg/L)



Part 115: Zinc, MW-31

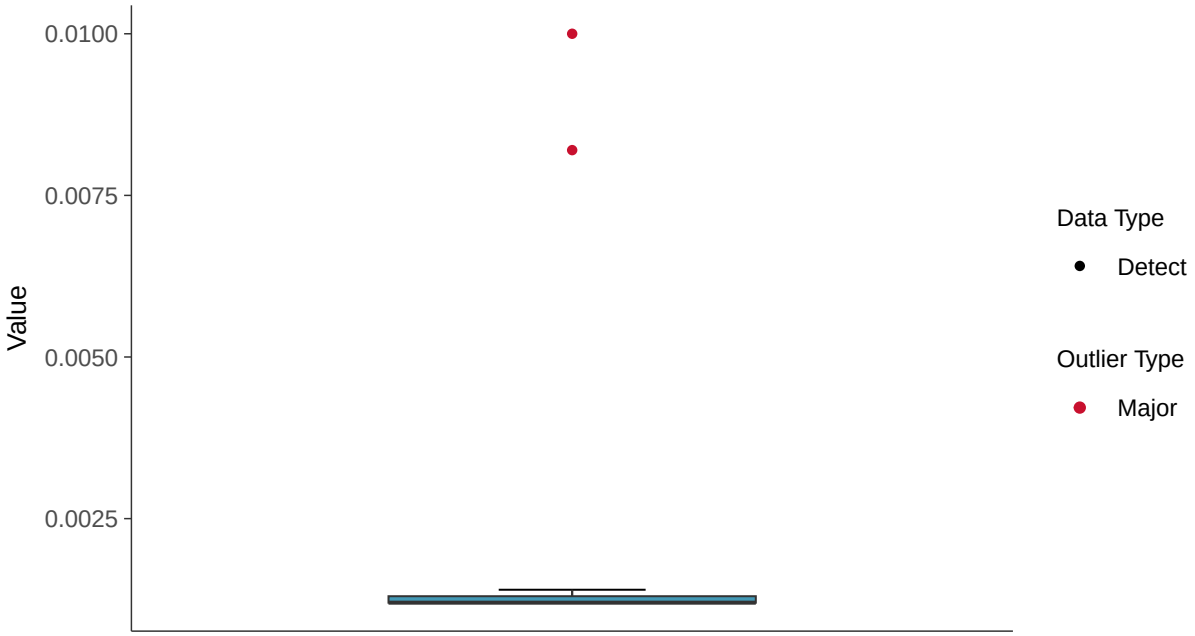
ID: 1_41_6_130





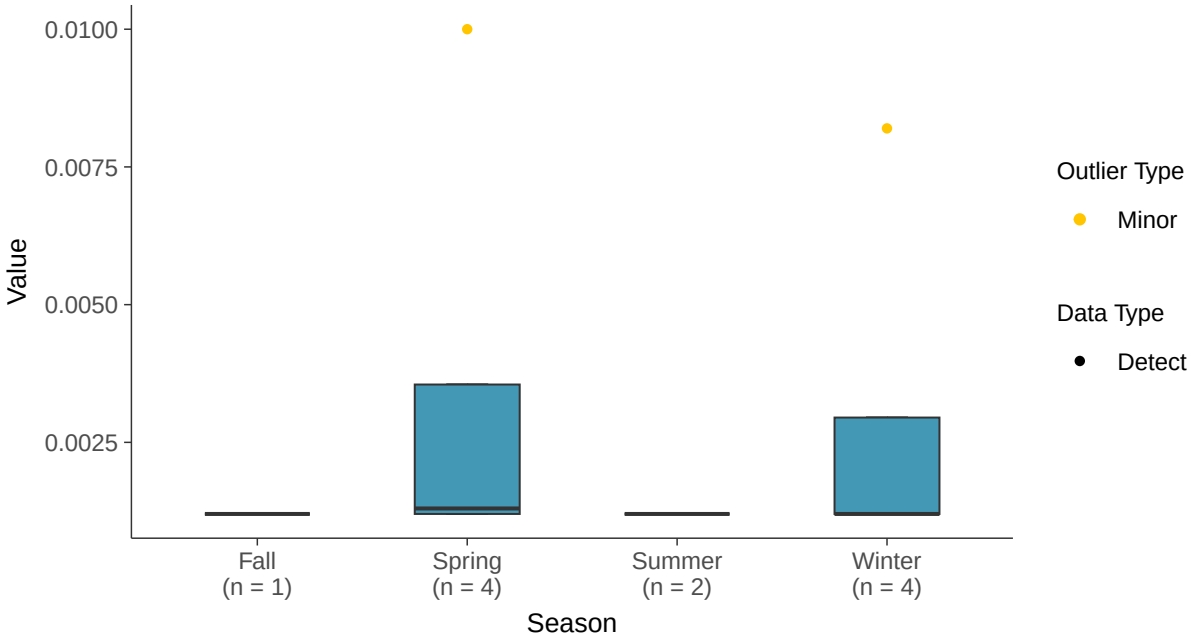
Boxplot

Zinc, MW-31 (mg/L)



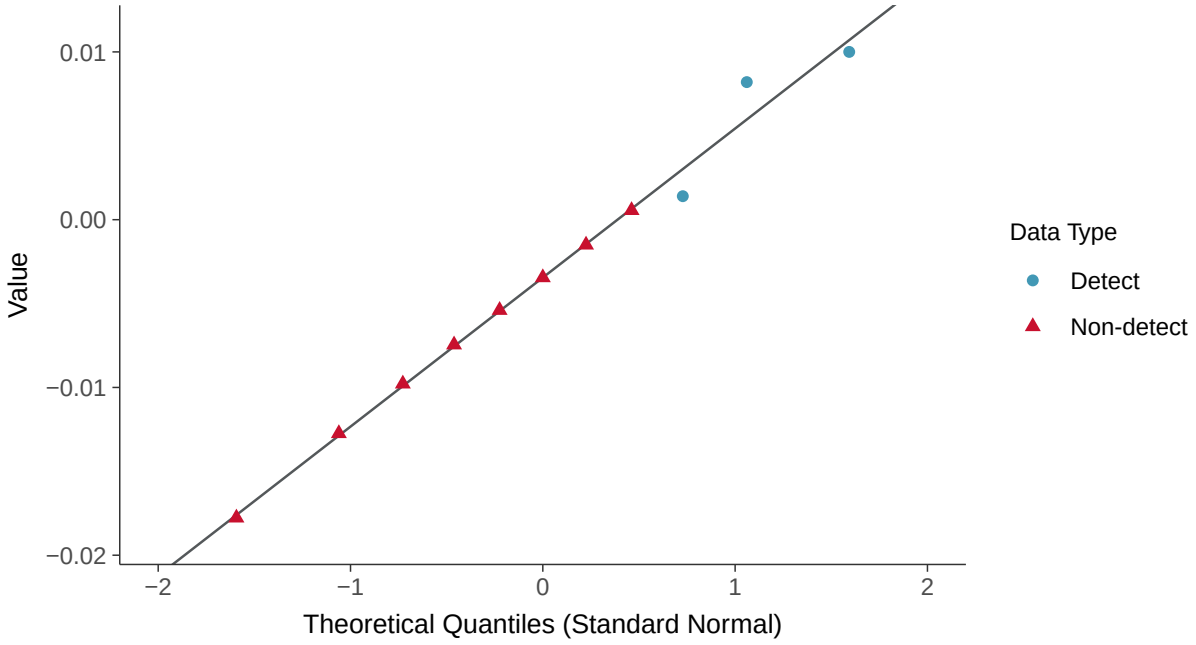
Boxplot by Season

Zinc, MW-31 (mg/L)



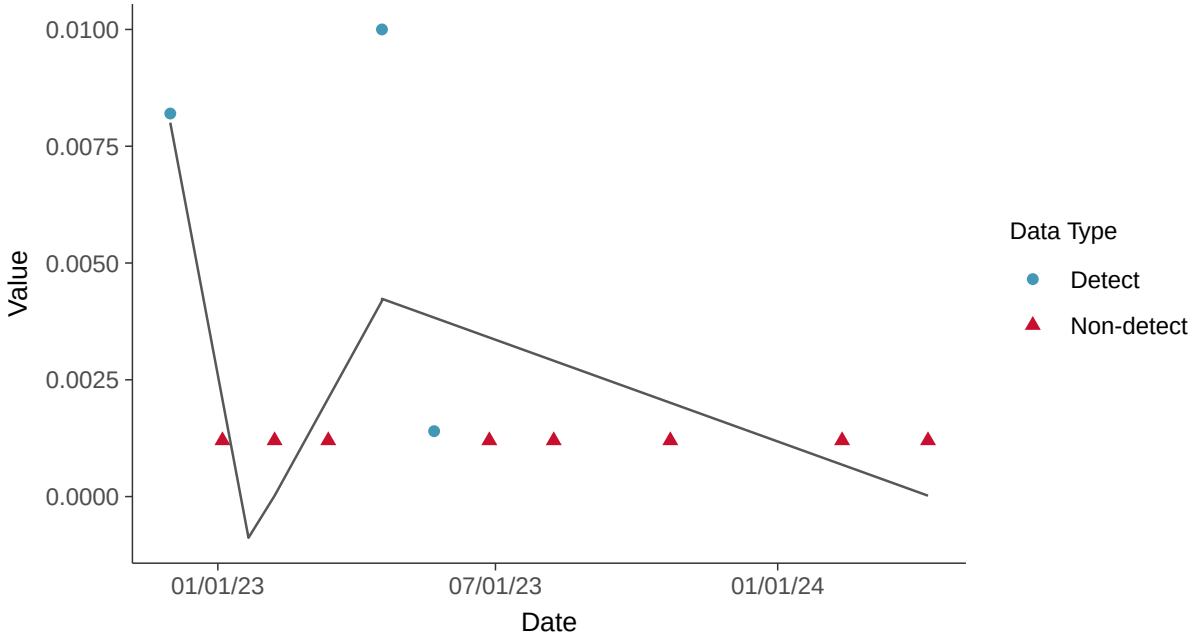
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-31 (mg/L)



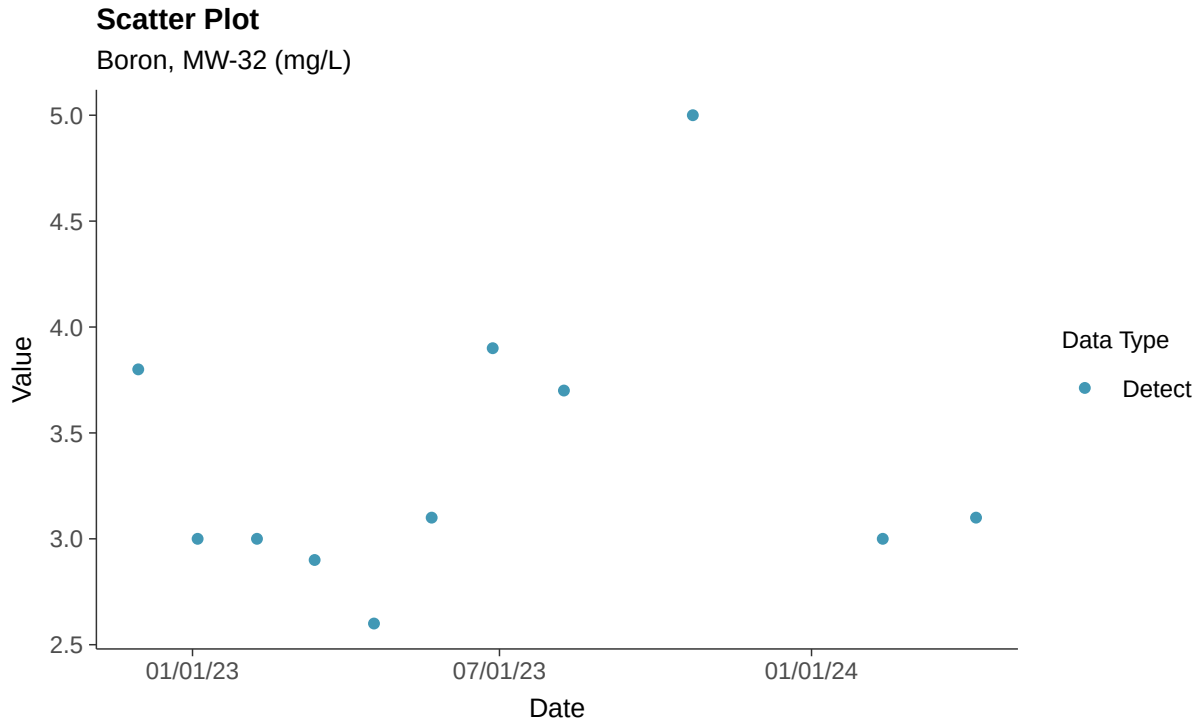
Trend Regression: Piecewise Linear-Linear-Linear

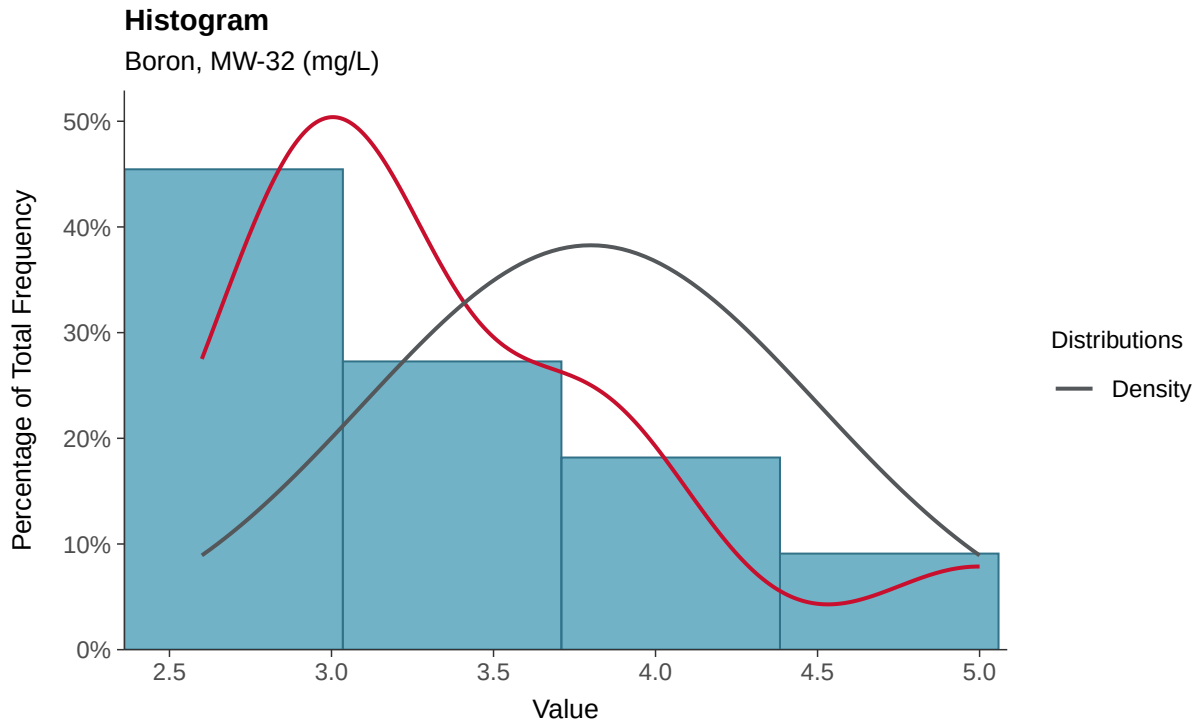
Zinc, MW-31 (mg/L)



Appendix III: Boron, MW-32

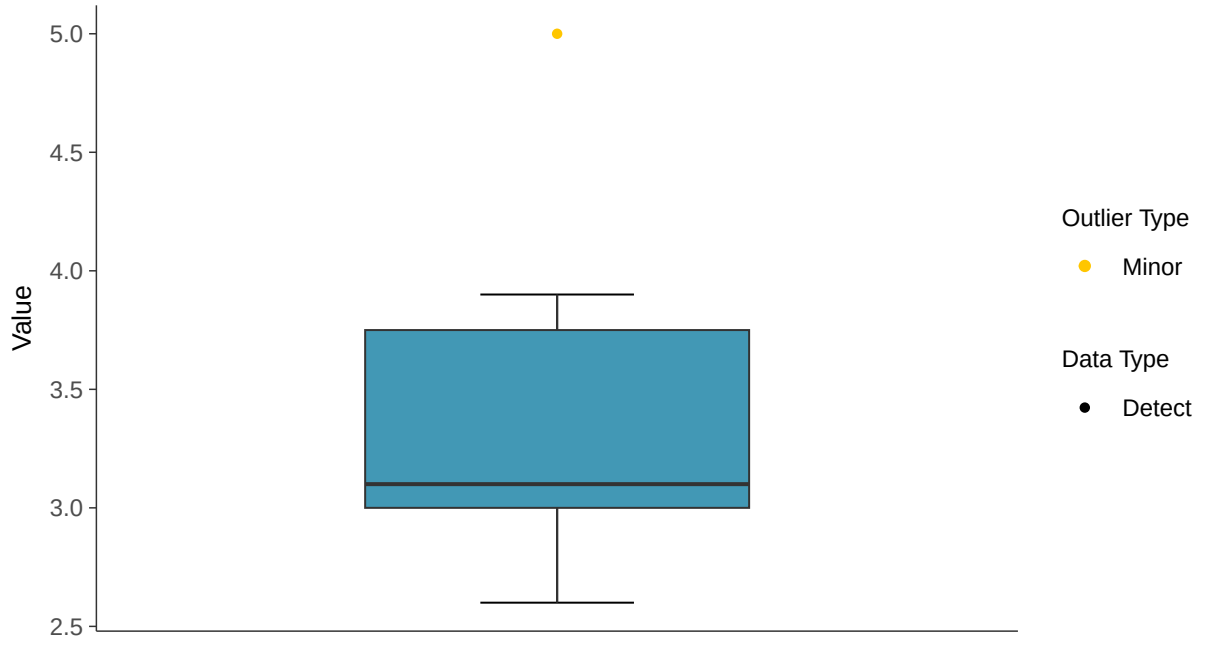
ID: 1_42_4_105





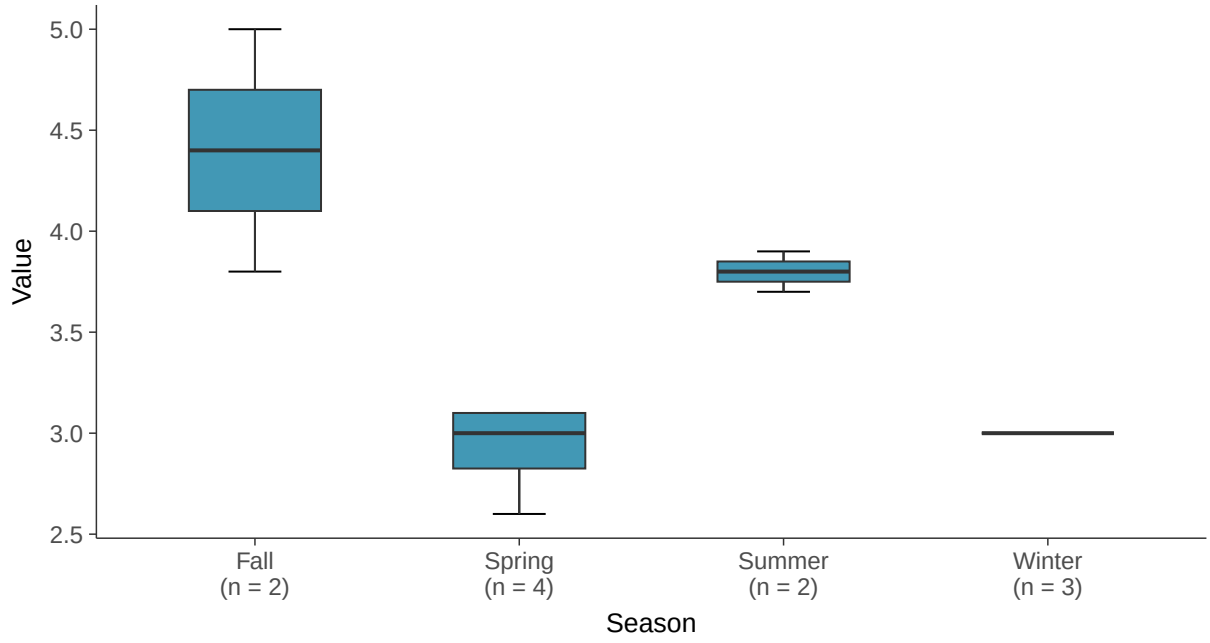
Boxplot

Boron, MW-32 (mg/L)



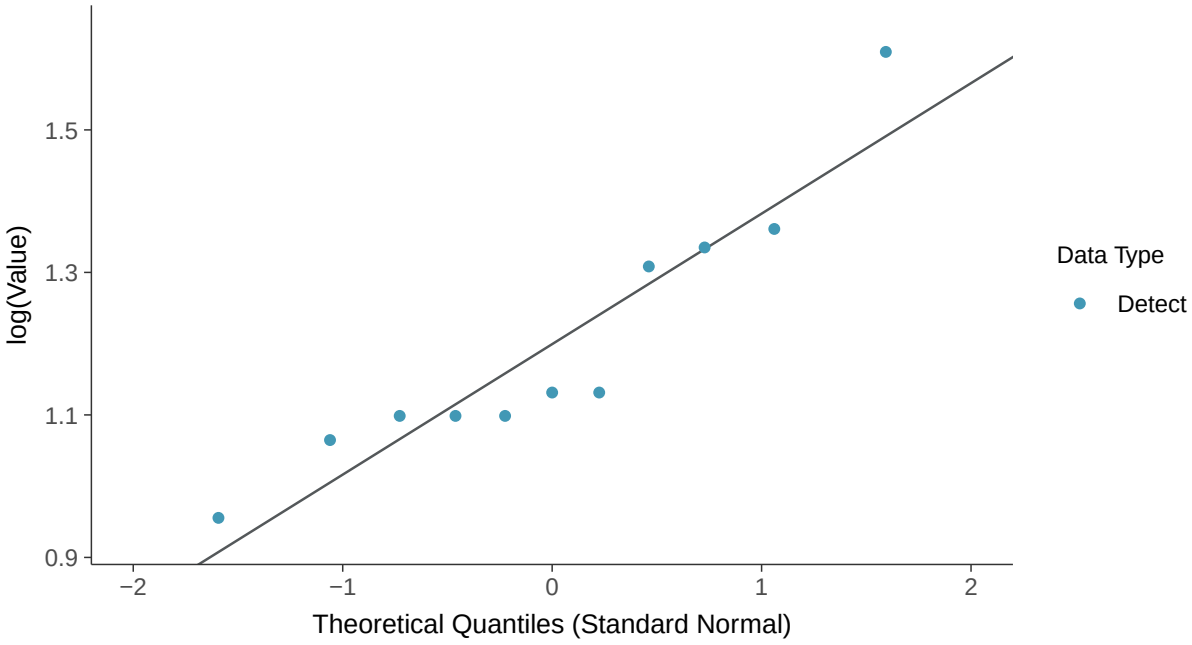
Boxplot by Season

Boron, MW-32 (mg/L)



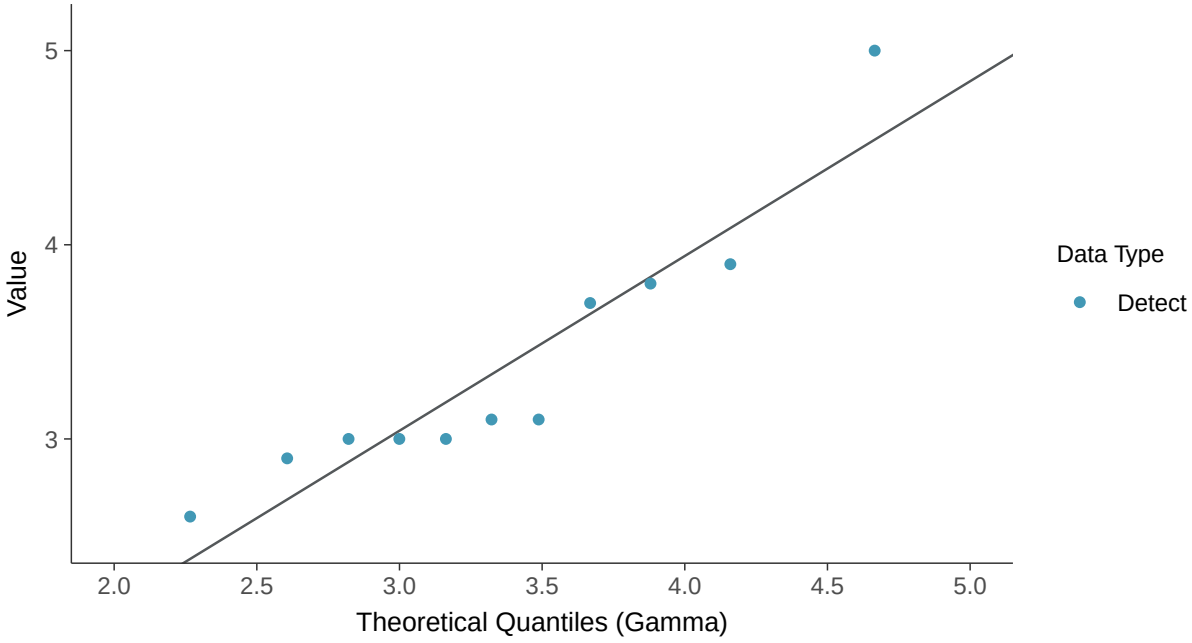
Lognormal Q-Q plot

Boron, MW-32 (mg/L)



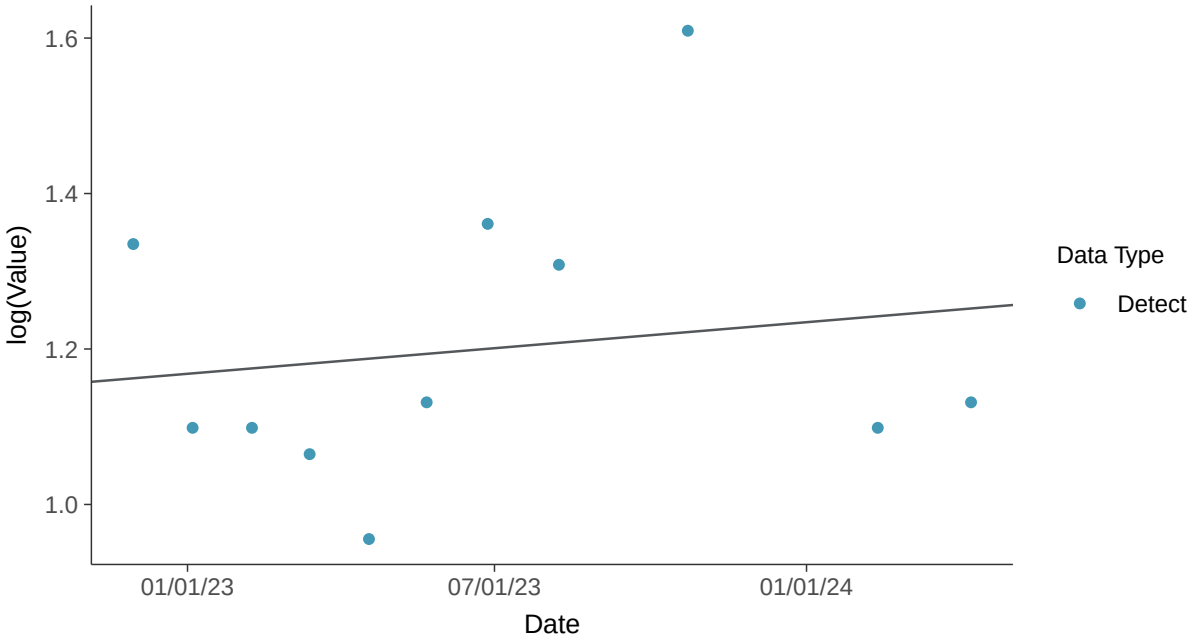
Gamma Q-Q plot

Boron, MW-32 (mg/L)



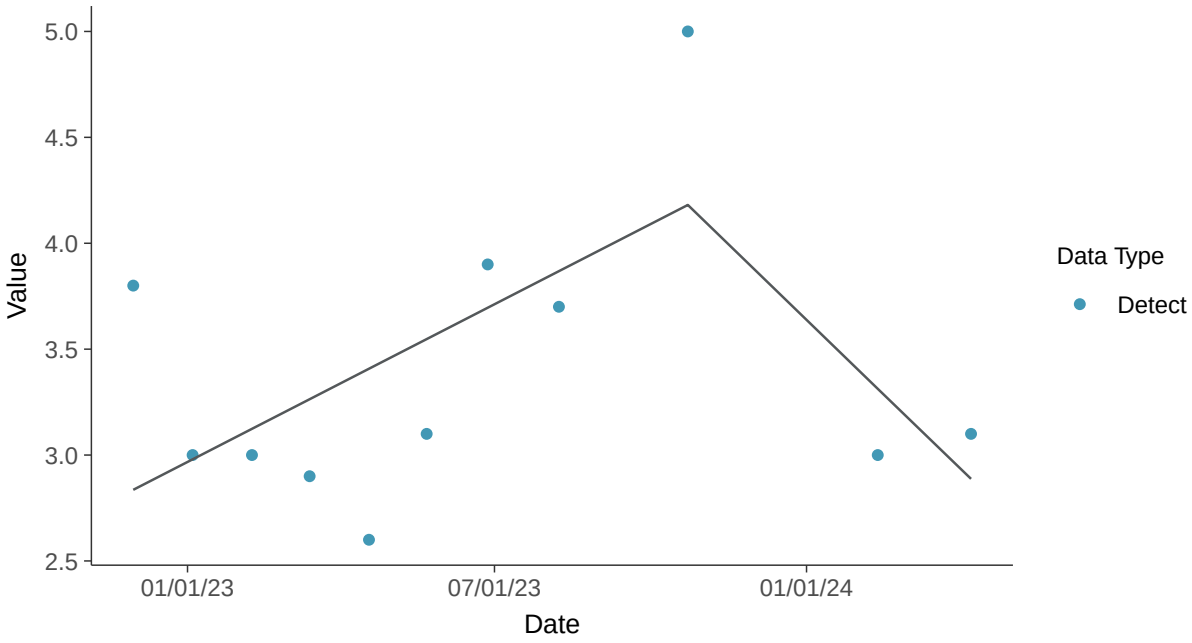
Trend Regression: Lognormal MLE

Boron, MW-32 (mg/L)



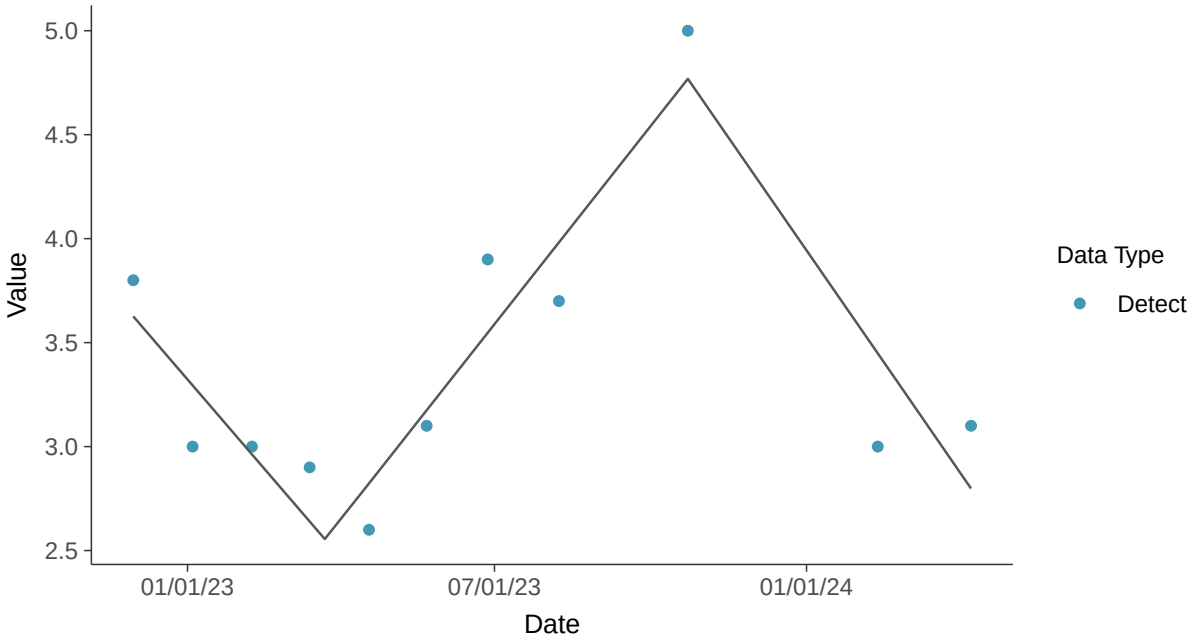
Trend Regression: Piecewise Linear-Linear

Boron, MW-32 (mg/L)



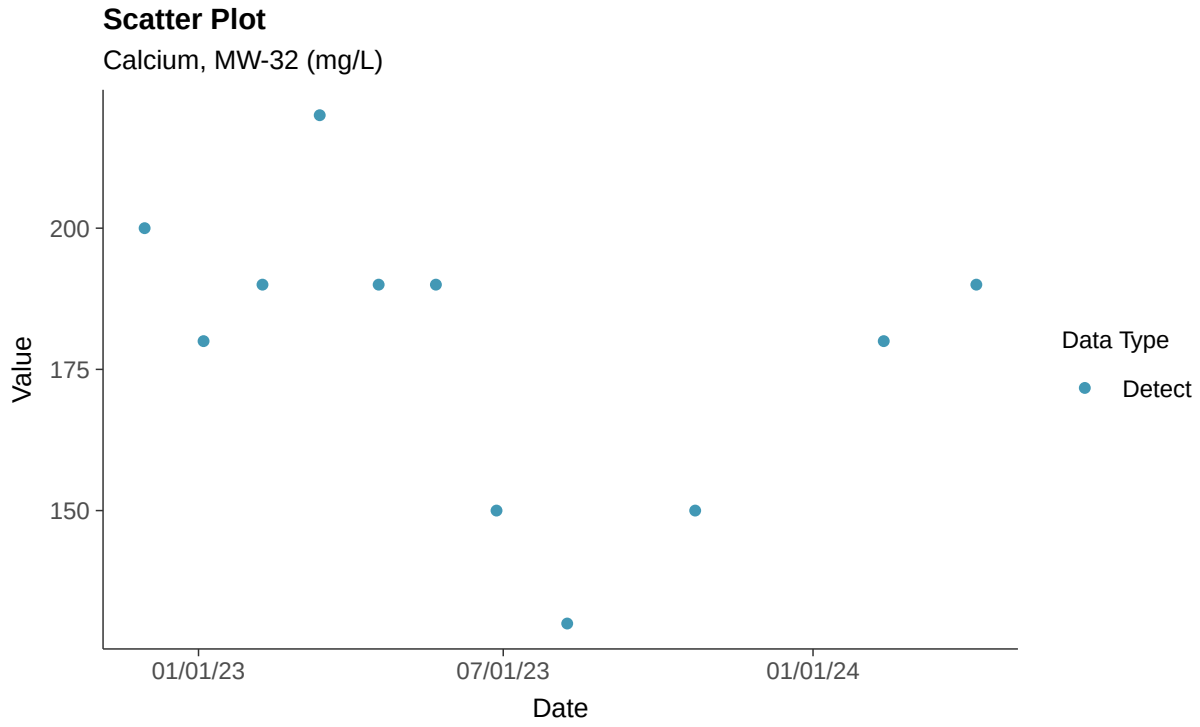
Trend Regression: Piecewise Linear-Linear-Linear

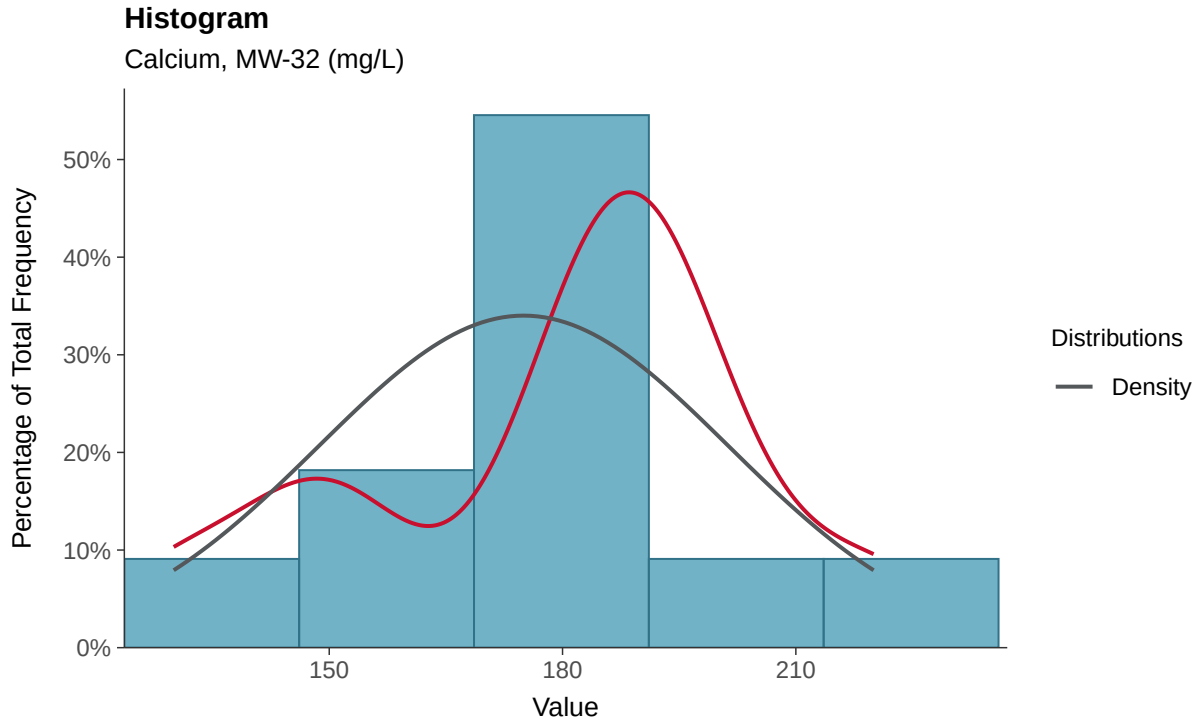
Boron, MW-32 (mg/L)



Appendix III: Calcium, MW-32

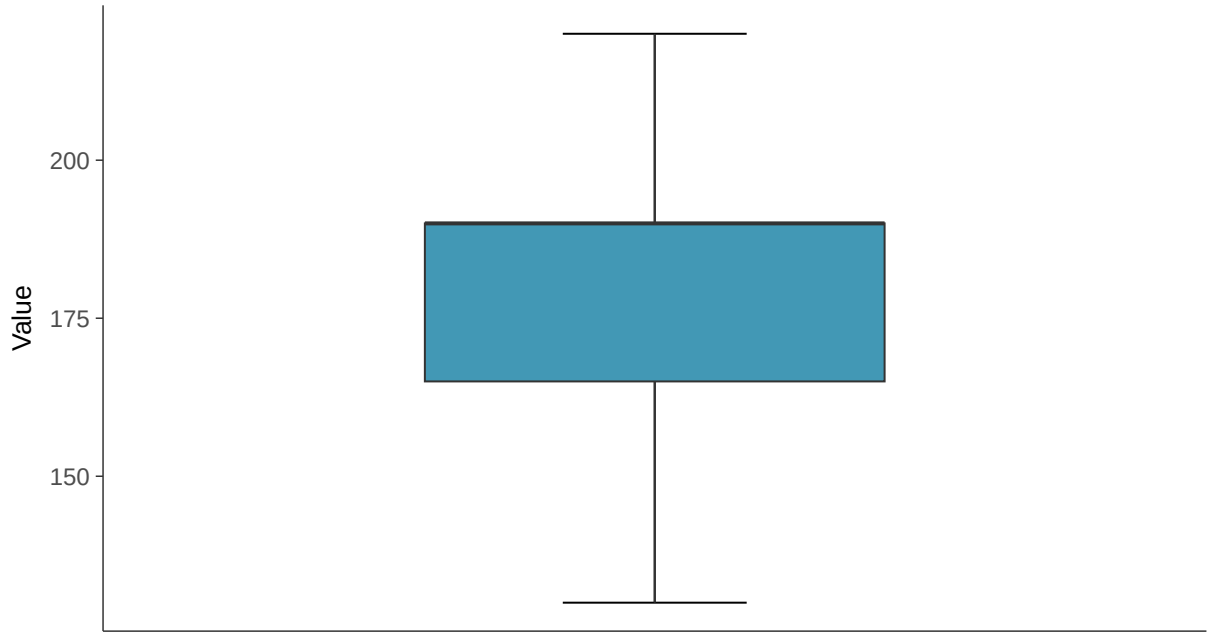
ID: 1_42_4_107





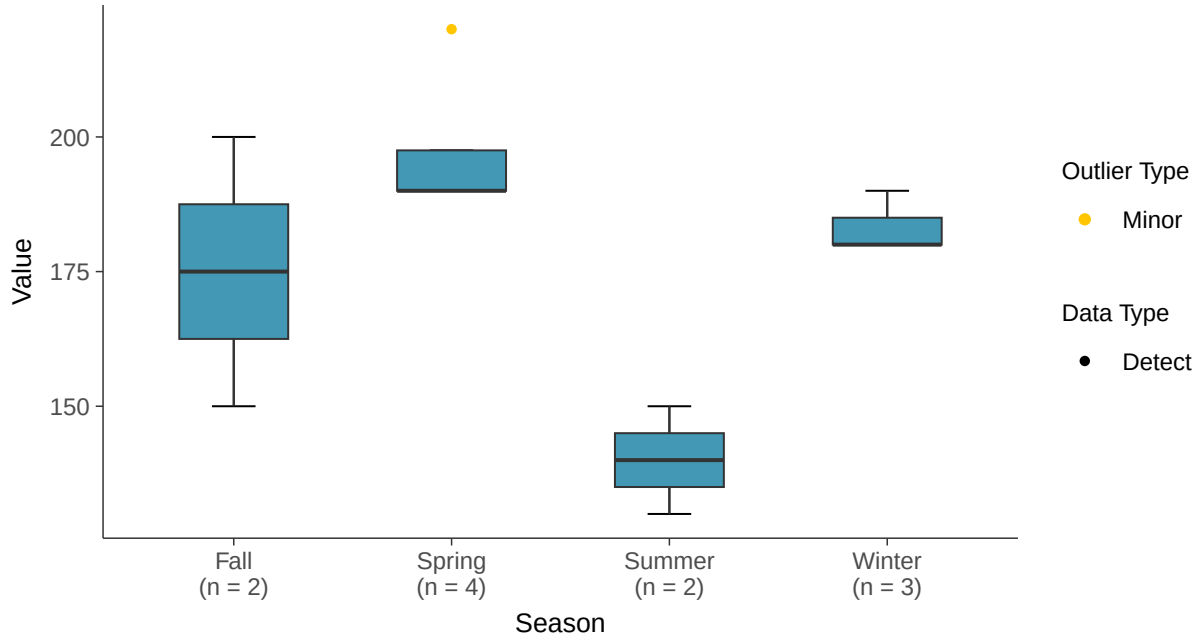
Boxplot

Calcium, MW-32 (mg/L)



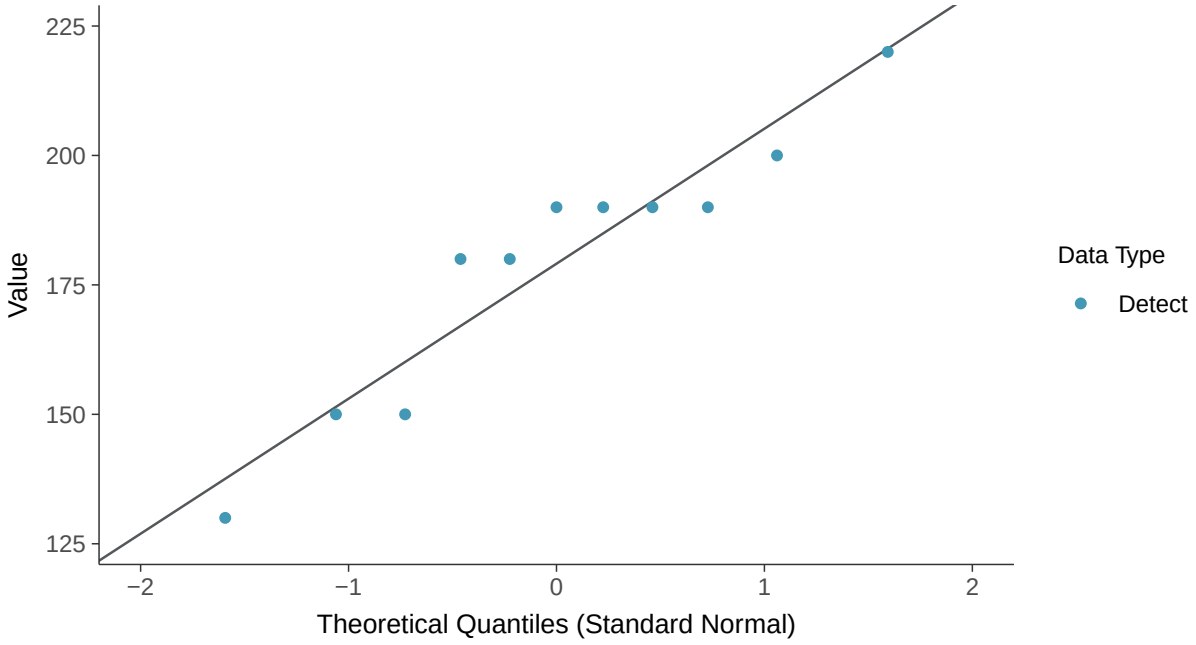
Boxplot by Season

Calcium, MW-32 (mg/L)



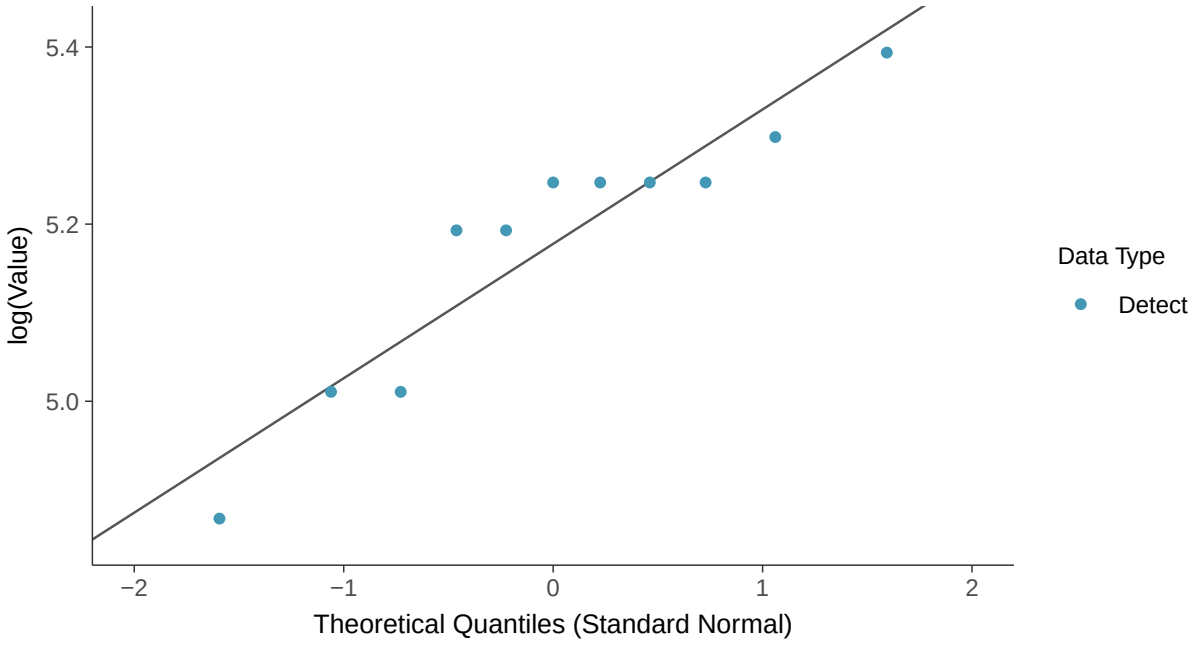
Normal Q-Q plot

Calcium, MW-32 (mg/L)



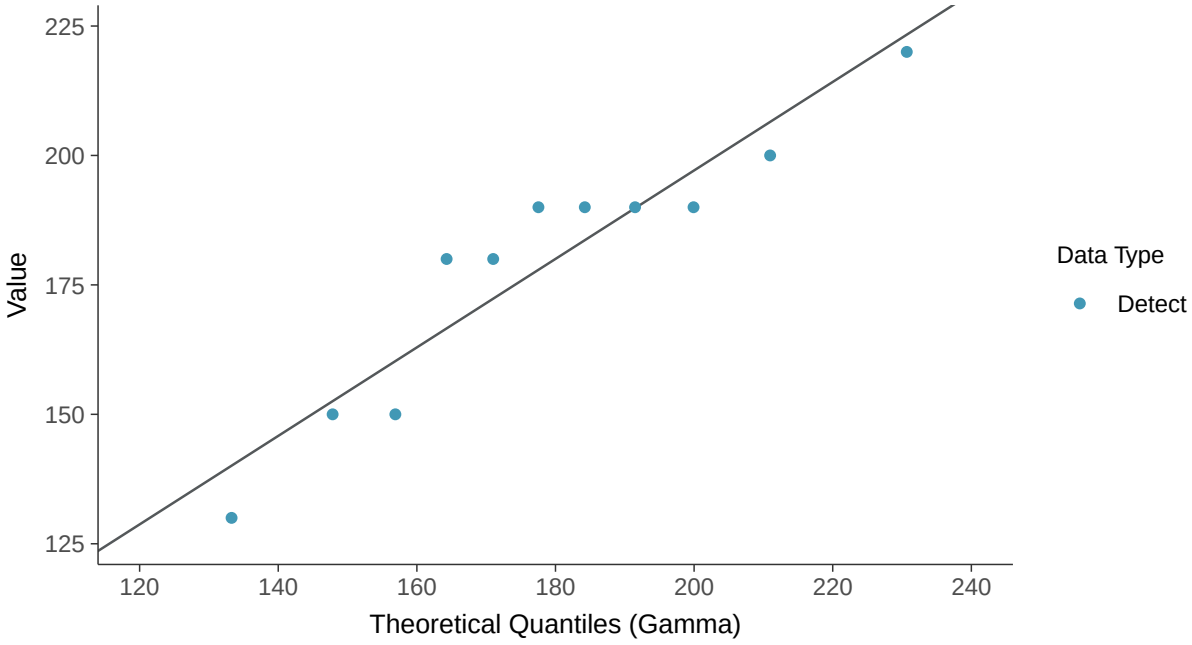
Lognormal Q-Q plot

Calcium, MW-32 (mg/L)



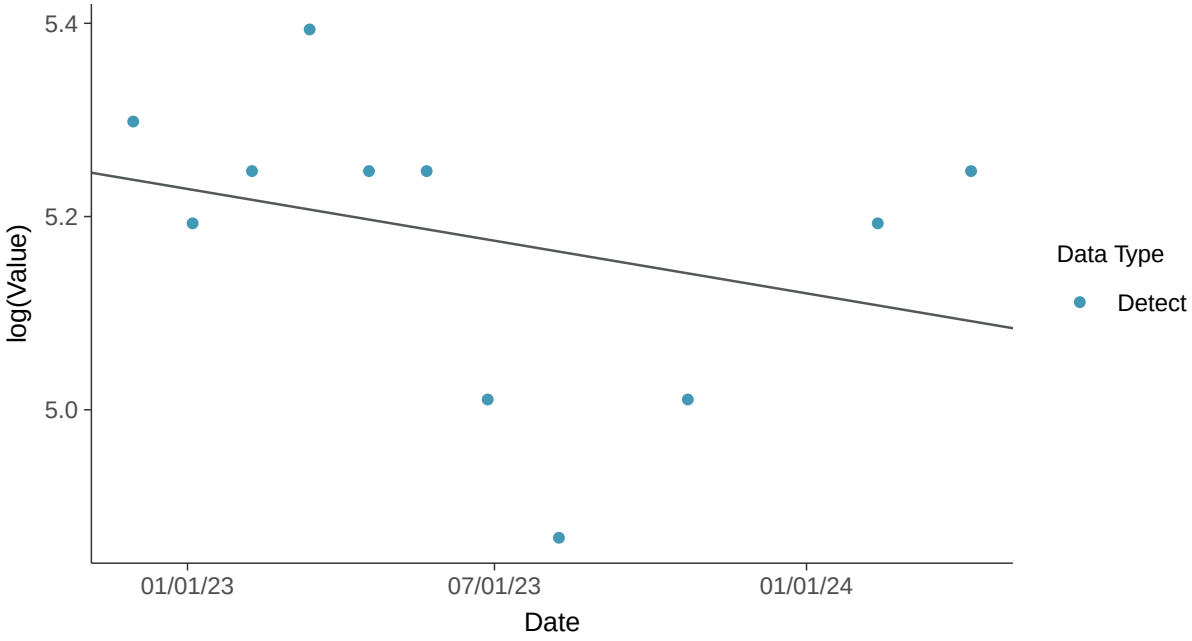
Gamma Q-Q plot

Calcium, MW-32 (mg/L)



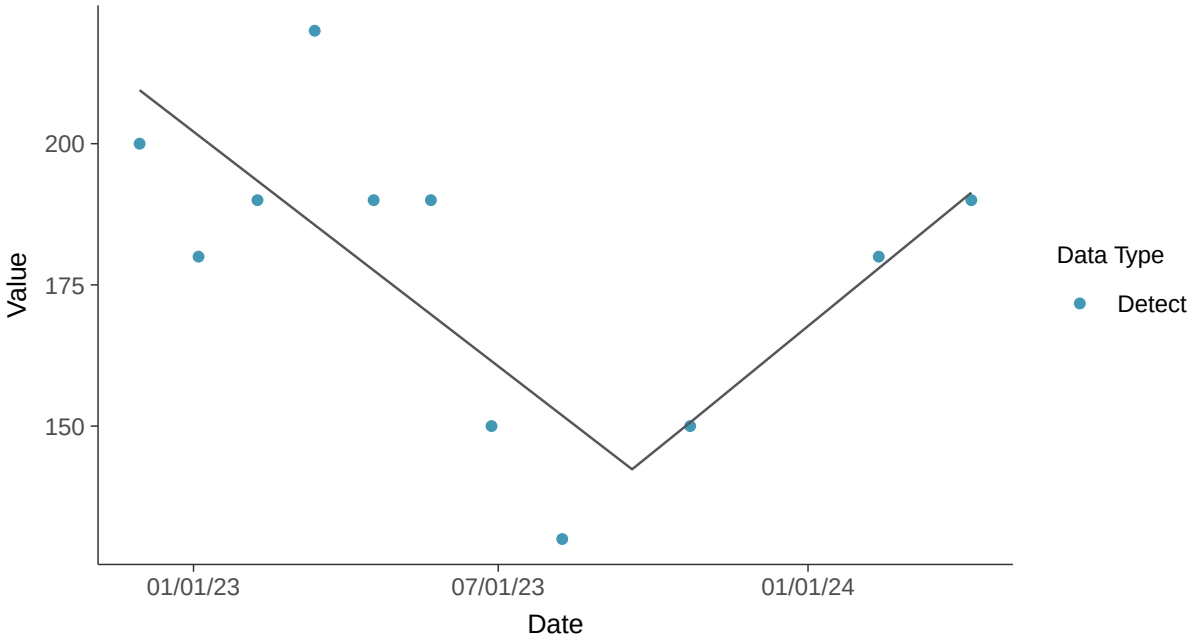
Trend Regression: Lognormal MLE

Calcium, MW-32 (mg/L)



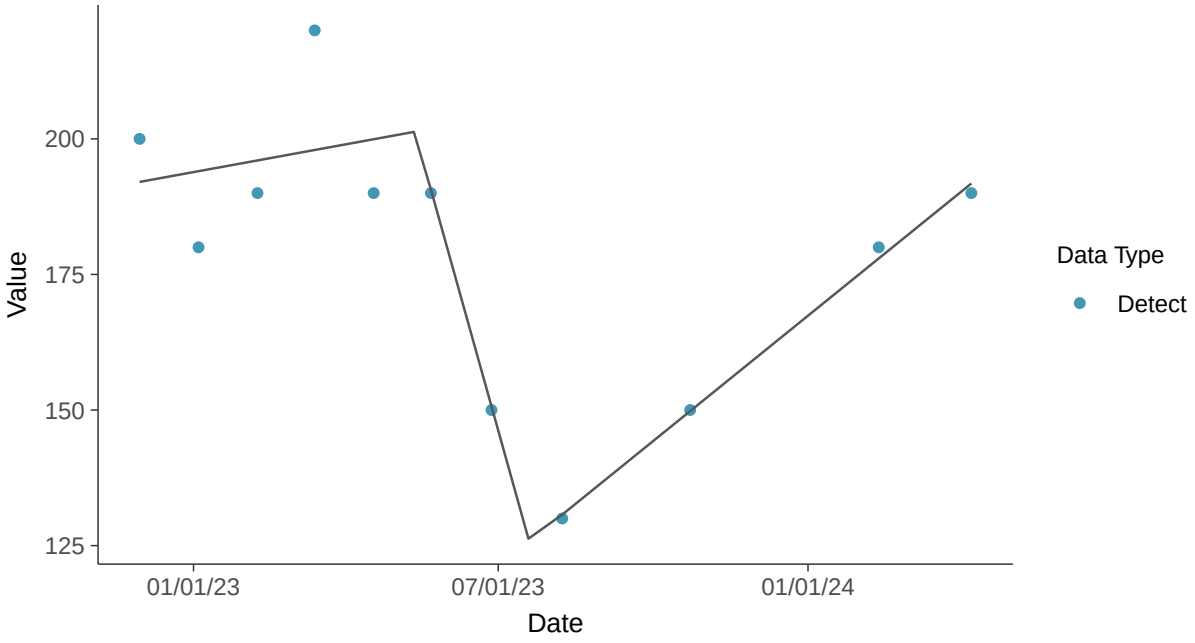
Trend Regression: Piecewise Linear-Linear

Calcium, MW-32 (mg/L)



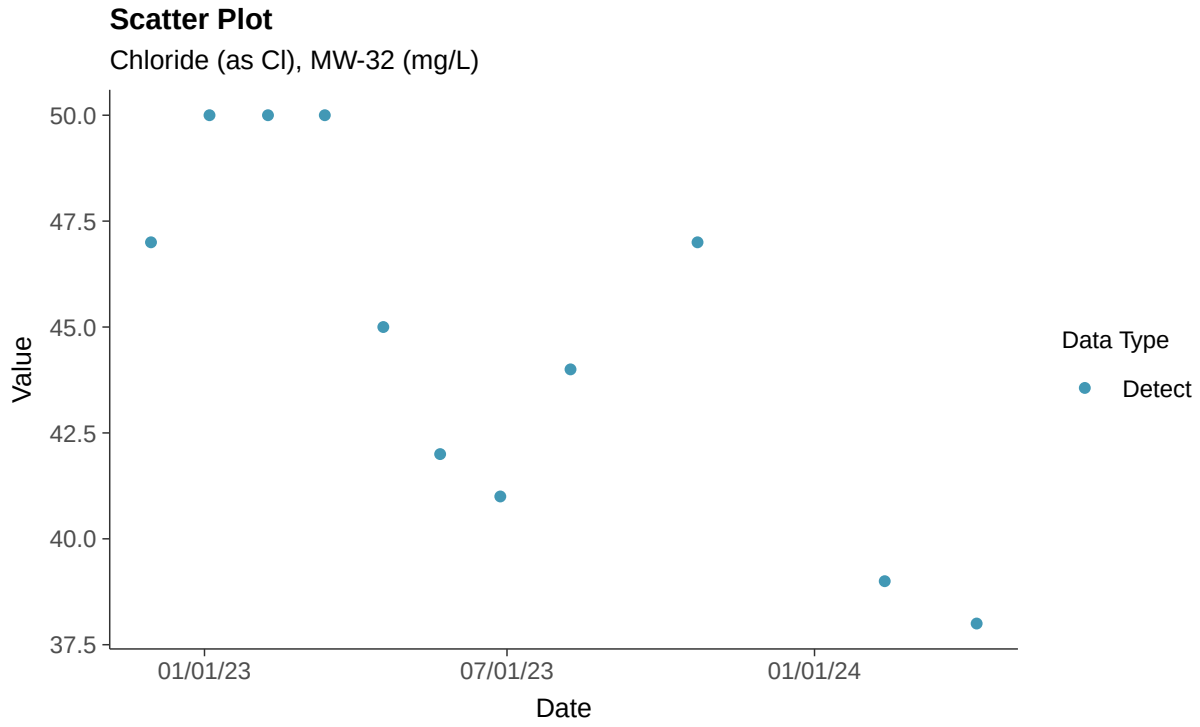
Trend Regression: Piecewise Linear-Linear-Linear

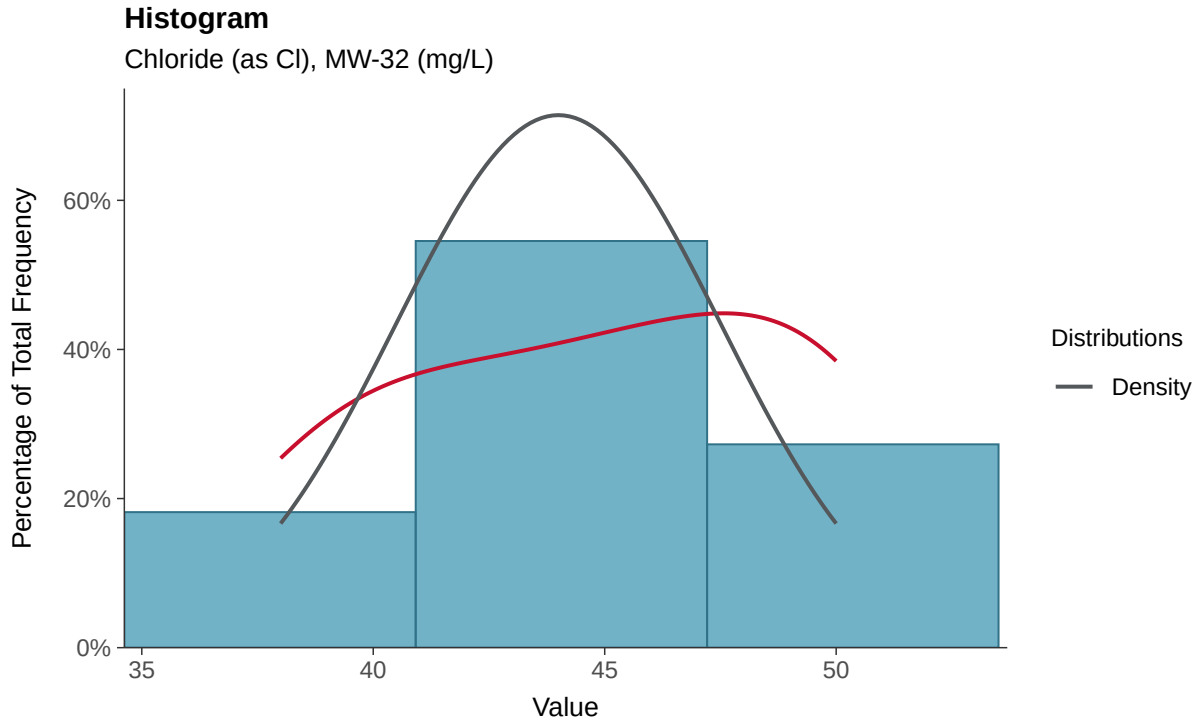
Calcium, MW-32 (mg/L)



Appendix III: Chloride (as Cl), MW-32

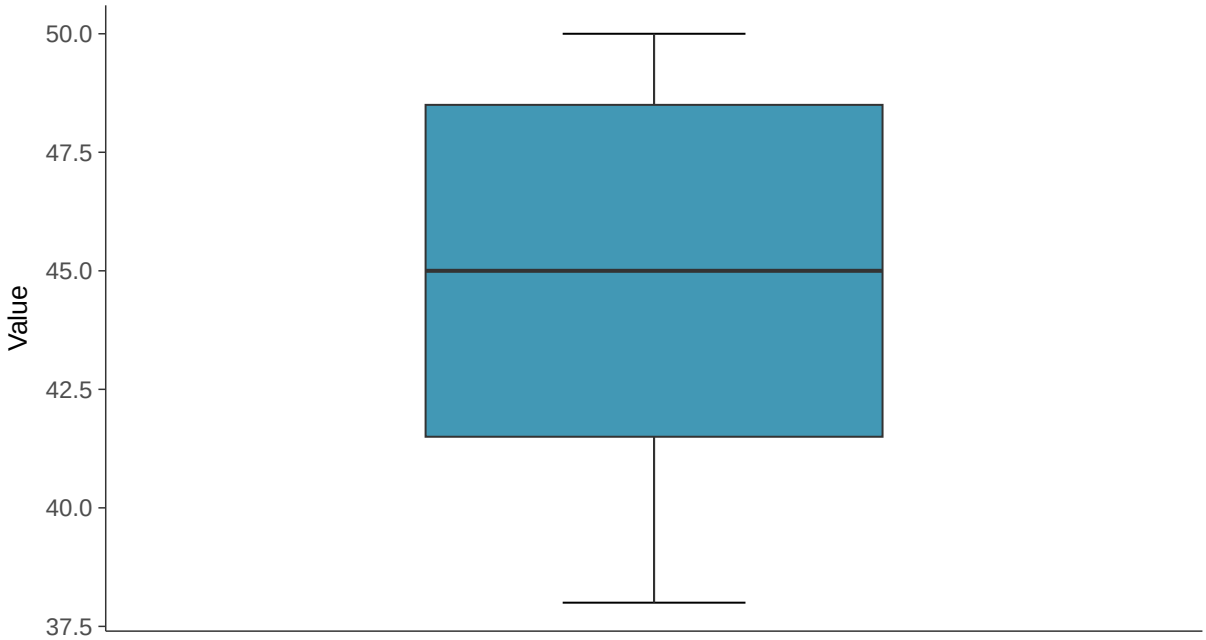
ID: 1_42_4_108





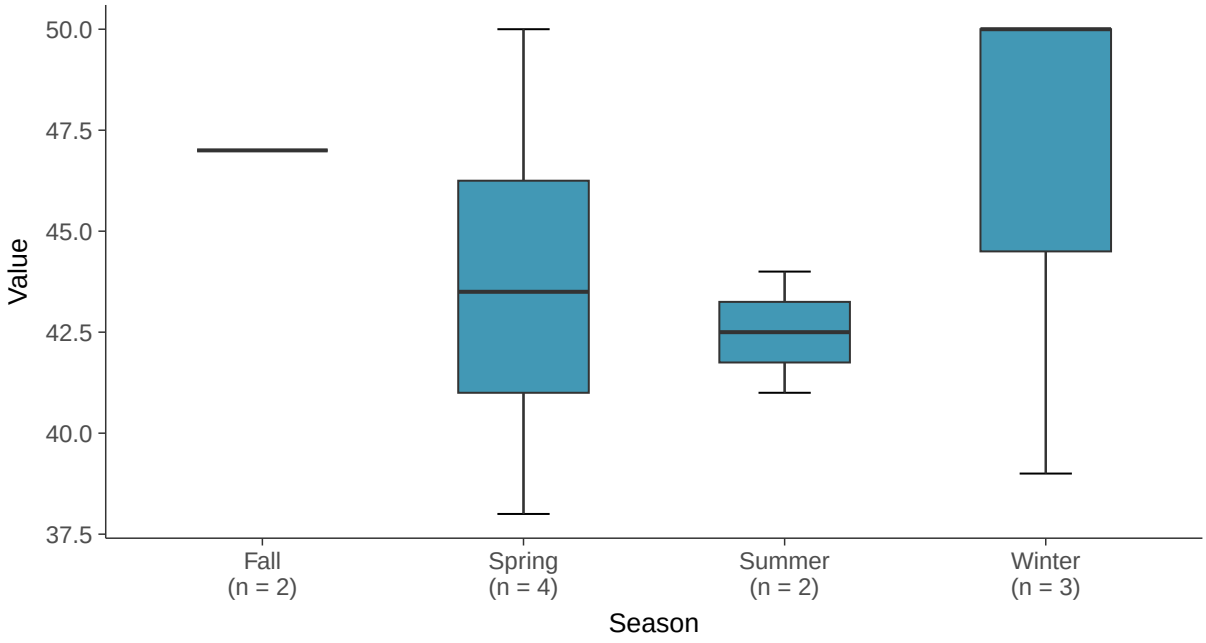
Boxplot

Chloride (as Cl), MW-32 (mg/L)



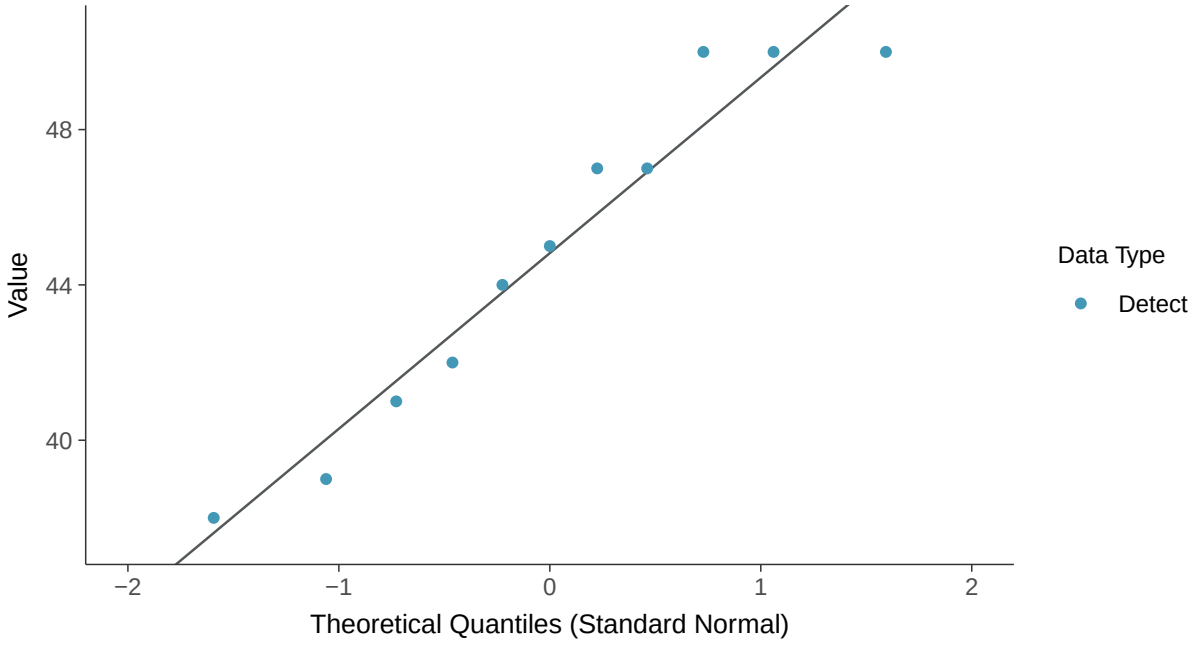
Boxplot by Season

Chloride (as Cl), MW-32 (mg/L)



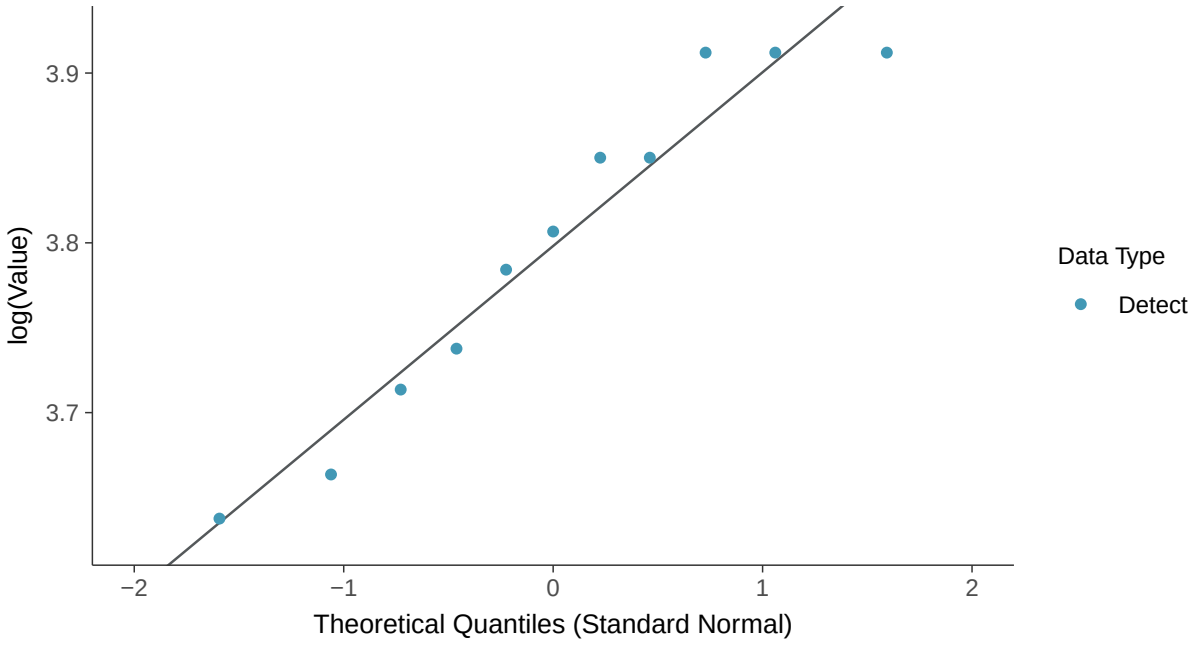
Normal Q-Q plot

Chloride (as Cl), MW-32 (mg/L)



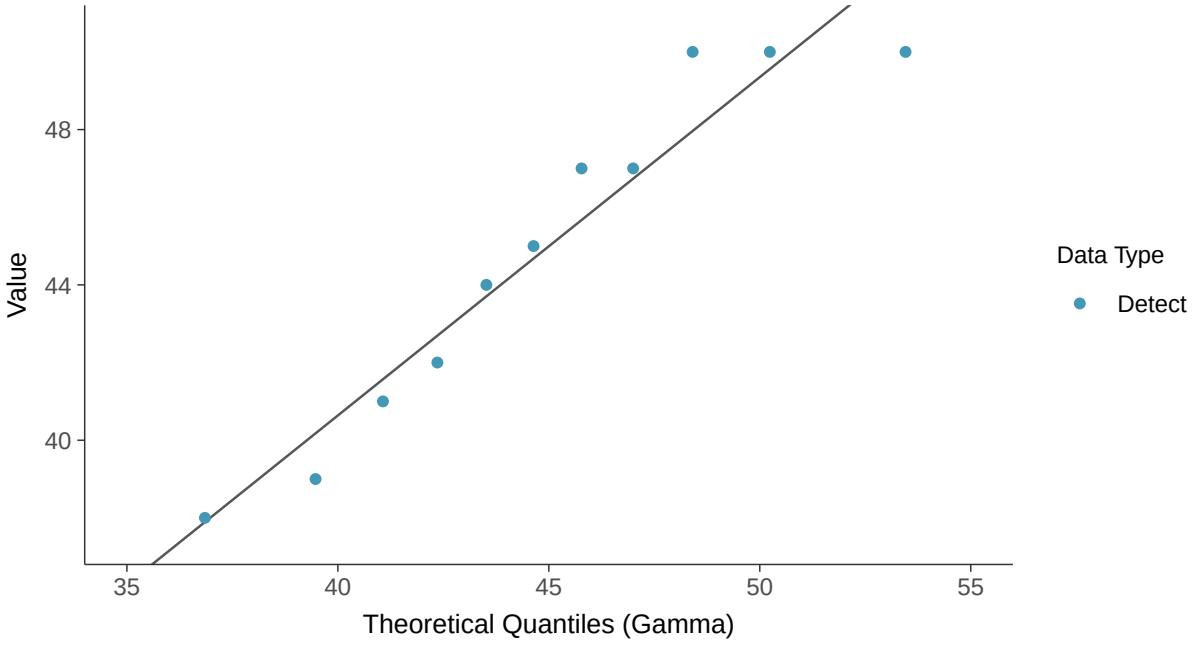
Lognormal Q-Q plot

Chloride (as Cl), MW-32 (mg/L)



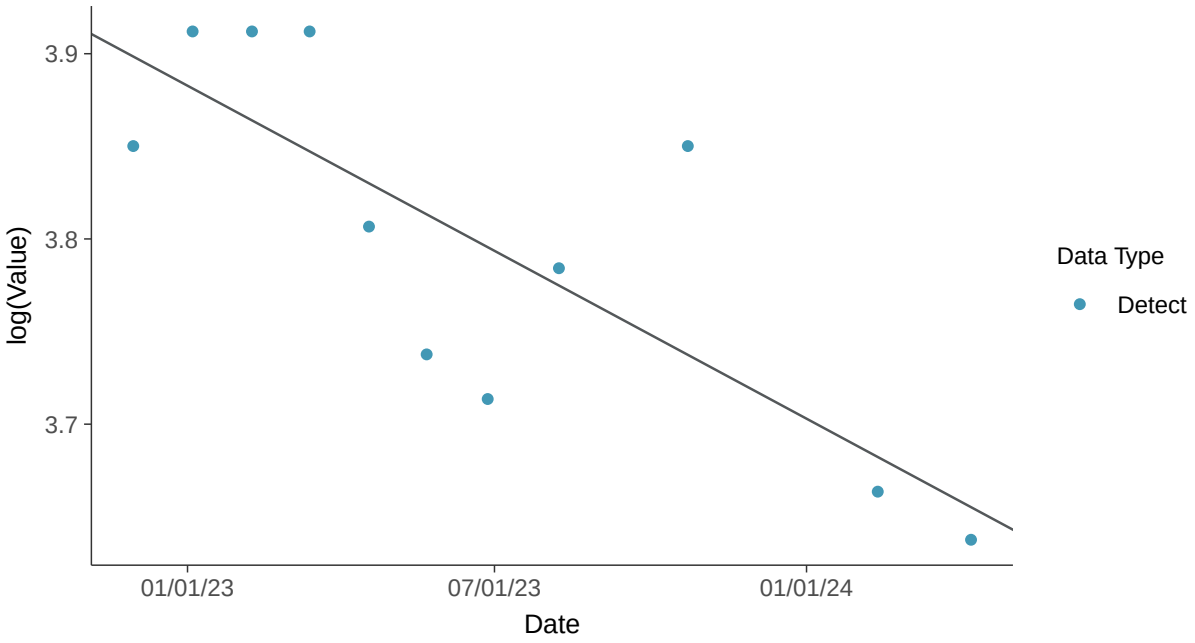
Gamma Q-Q plot

Chloride (as Cl), MW-32 (mg/L)



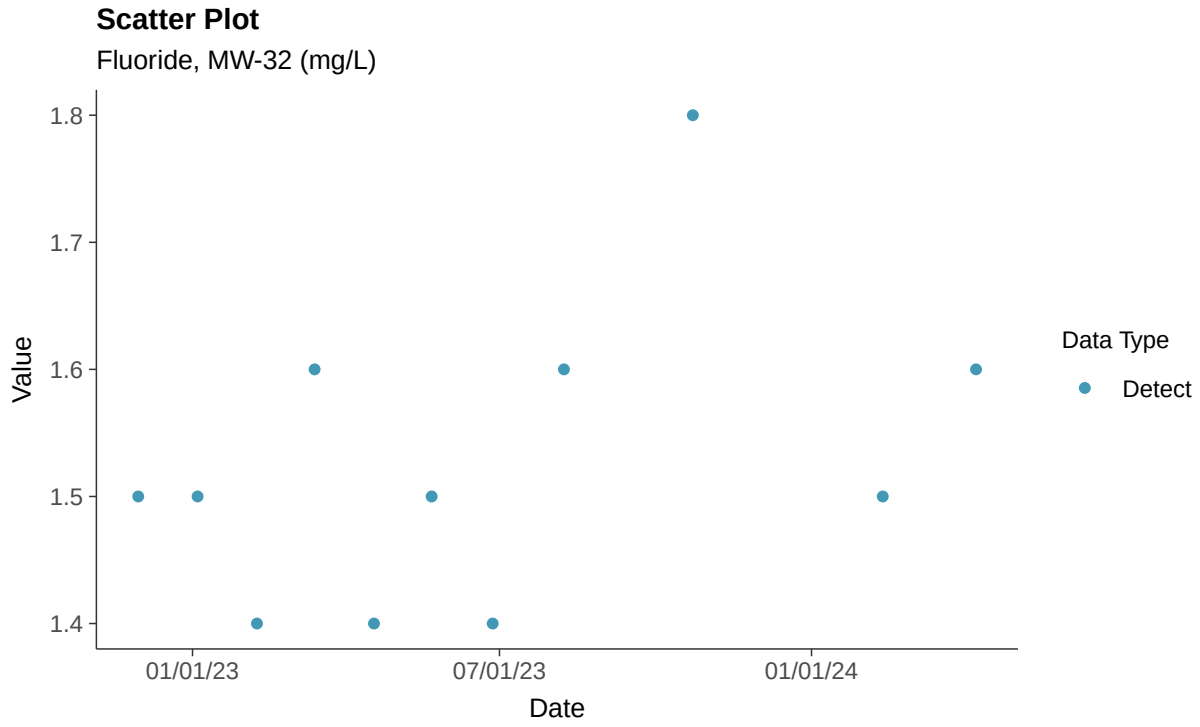
Trend Regression: Lognormal MLE

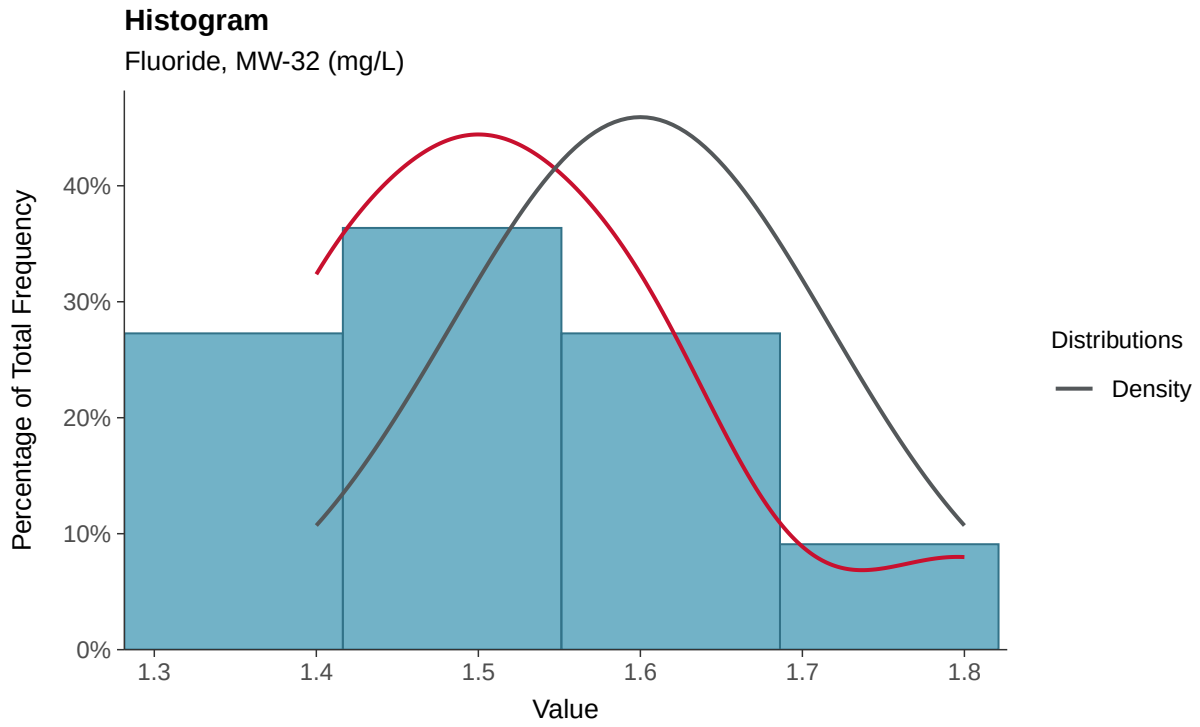
Chloride (as Cl), MW-32 (mg/L)



Appendix III: Fluoride, MW-32

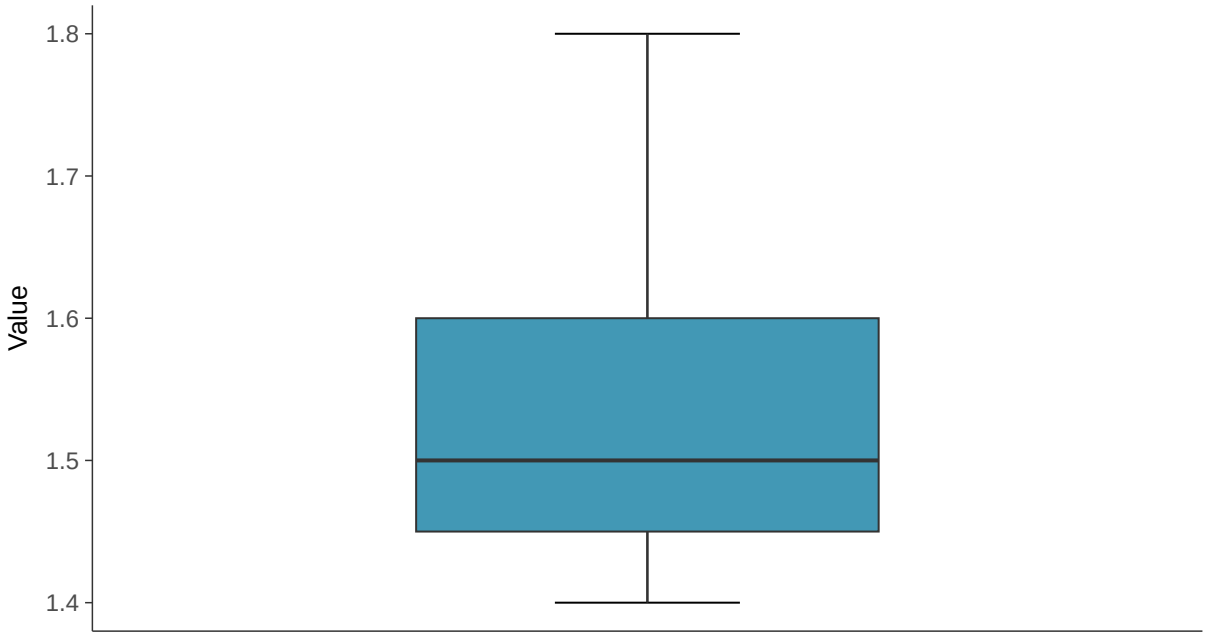
ID: 1_42_4_112





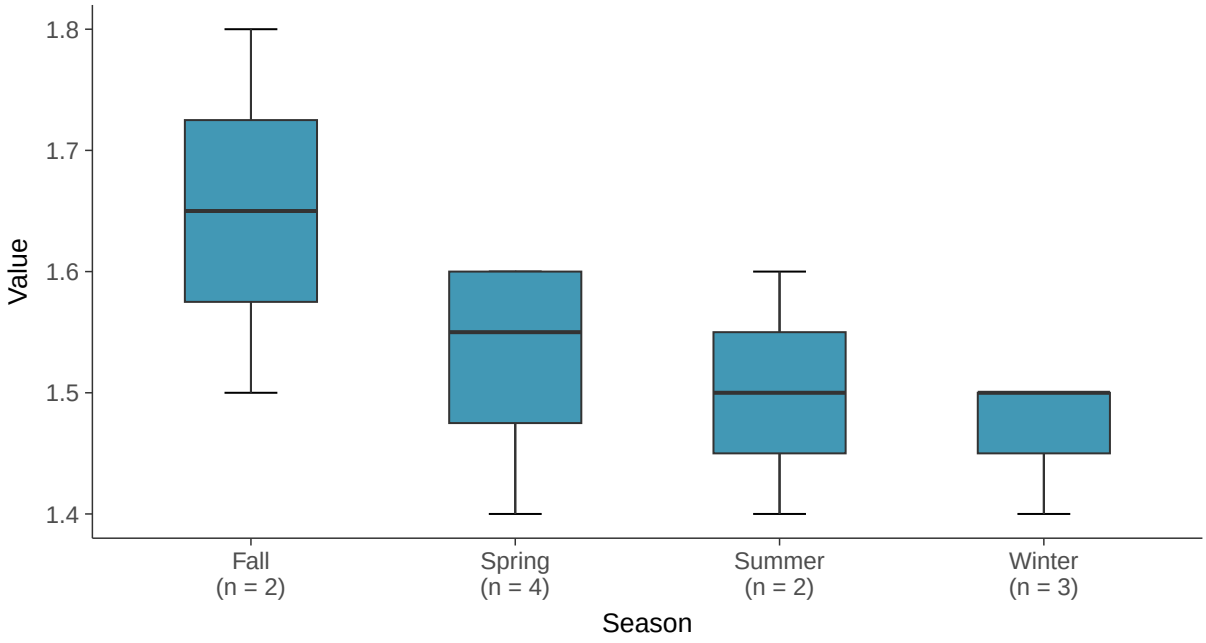
Boxplot

Fluoride, MW-32 (mg/L)



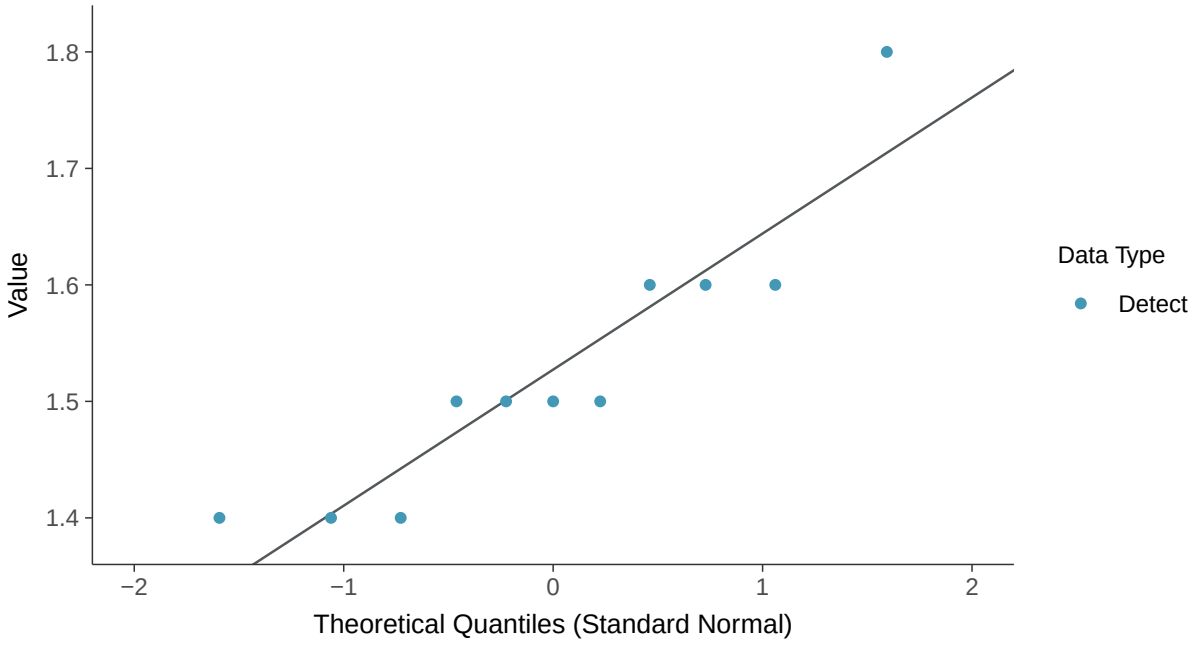
Boxplot by Season

Fluoride, MW-32 (mg/L)



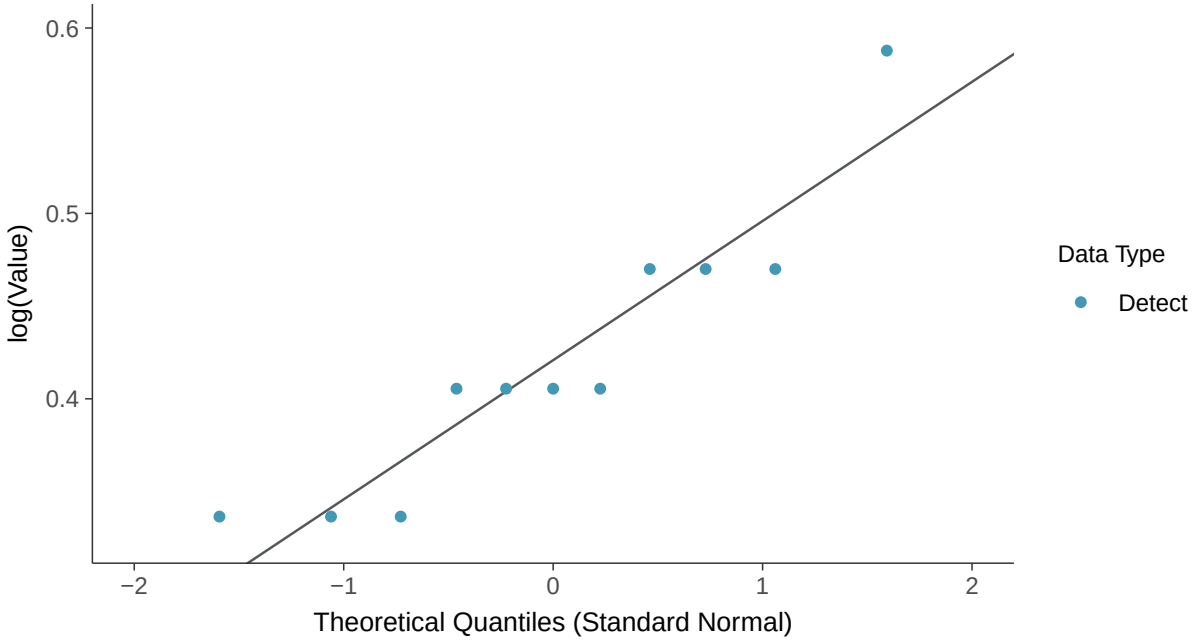
Normal Q-Q plot

Fluoride, MW-32 (mg/L)



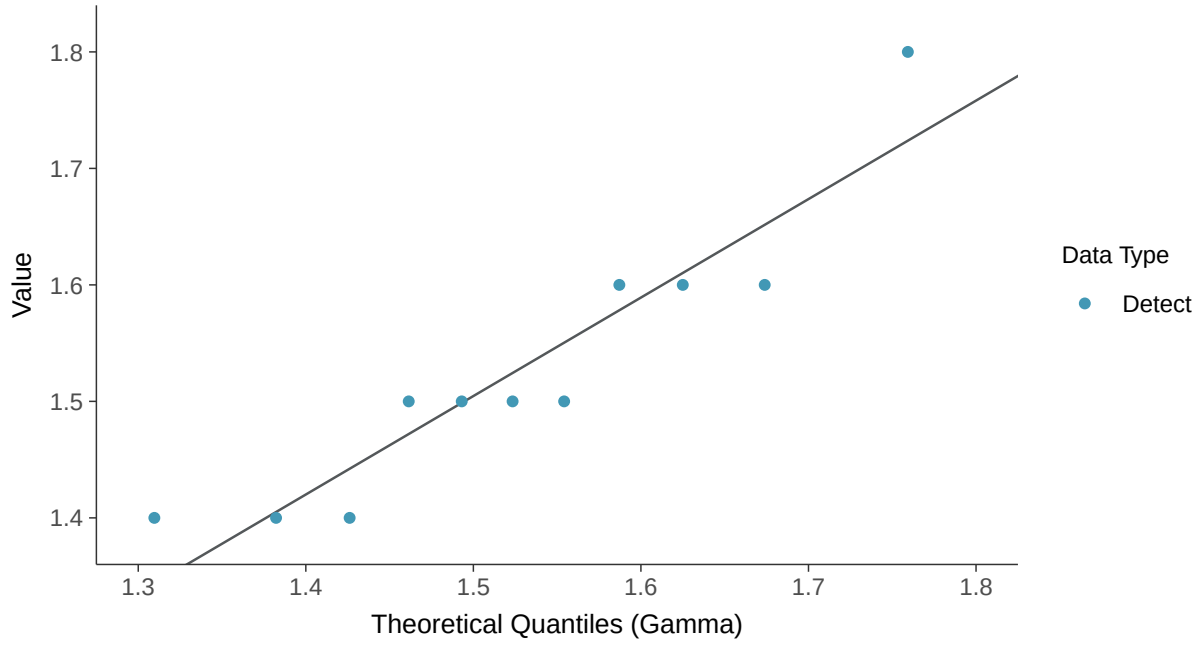
Lognormal Q-Q plot

Fluoride, MW-32 (mg/L)



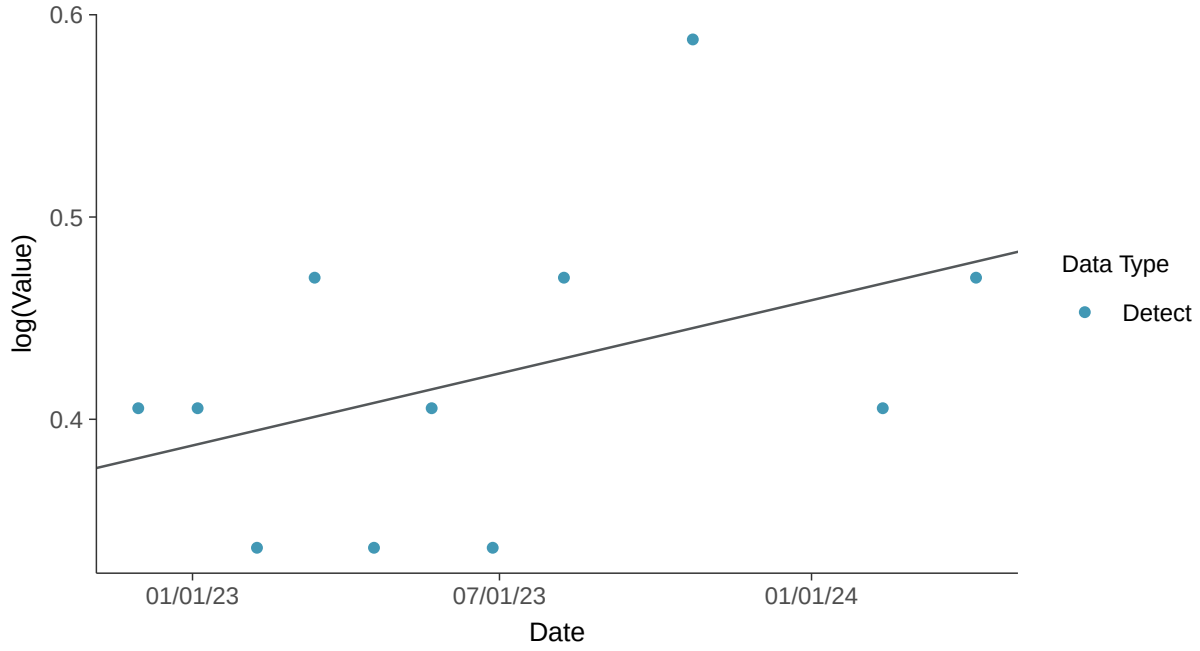
Gamma Q-Q plot

Fluoride, MW-32 (mg/L)



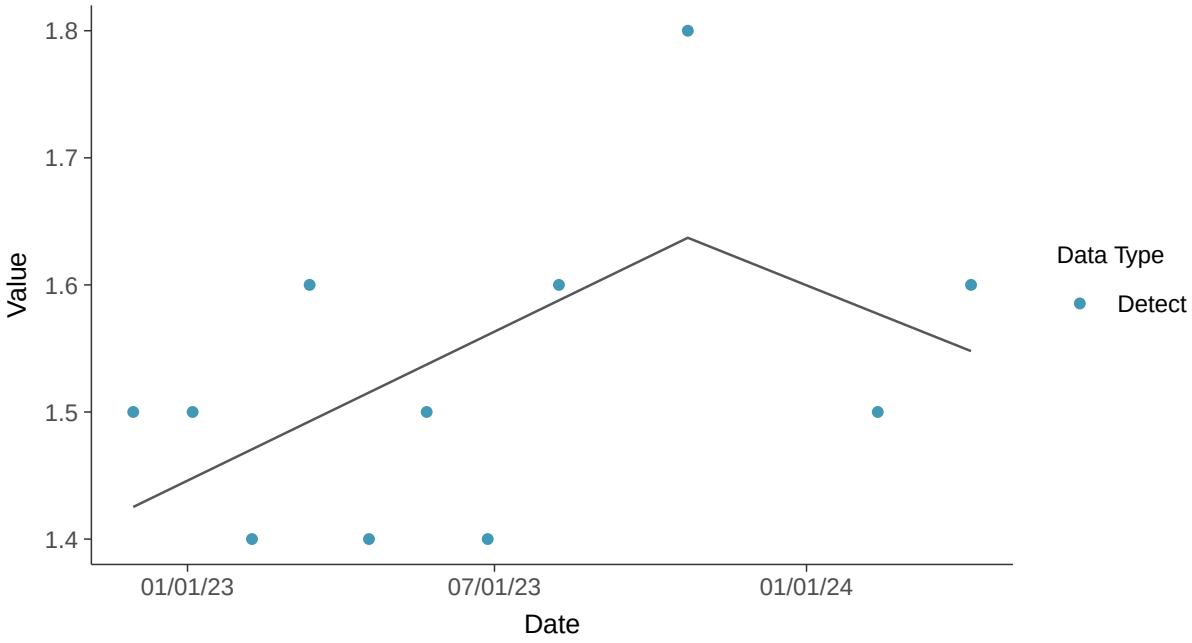
Trend Regression: Lognormal MLE

Fluoride, MW-32 (mg/L)



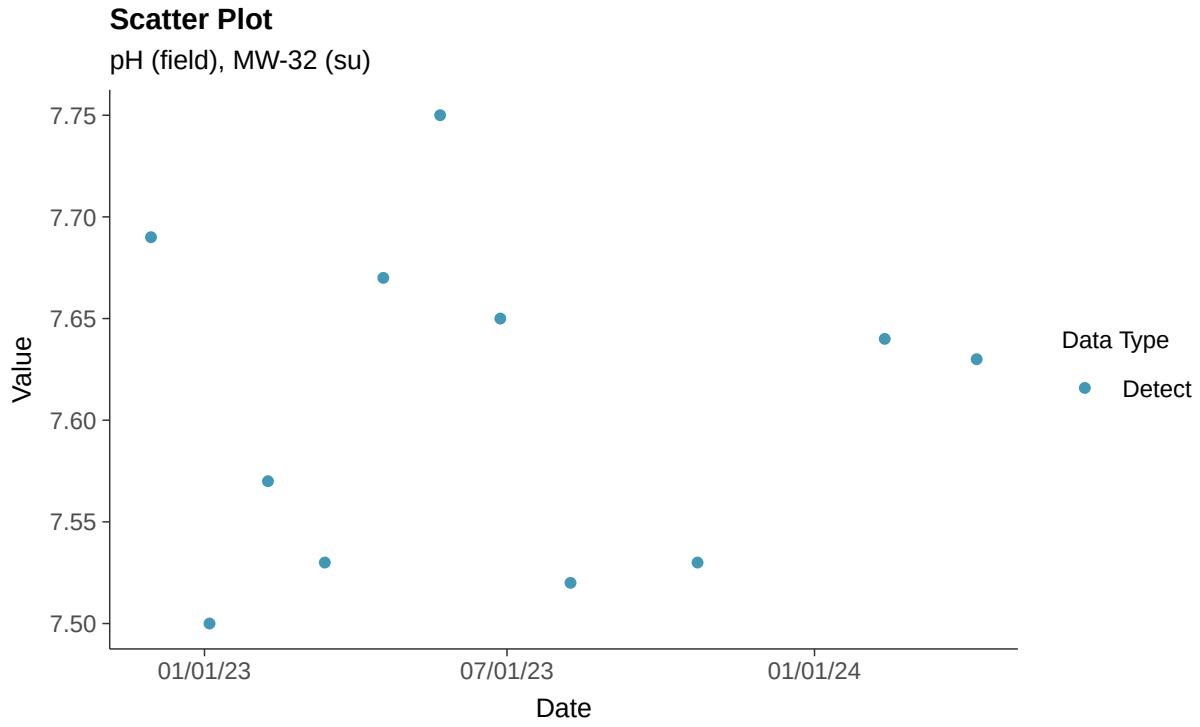
Trend Regression: Piecewise Linear-Linear

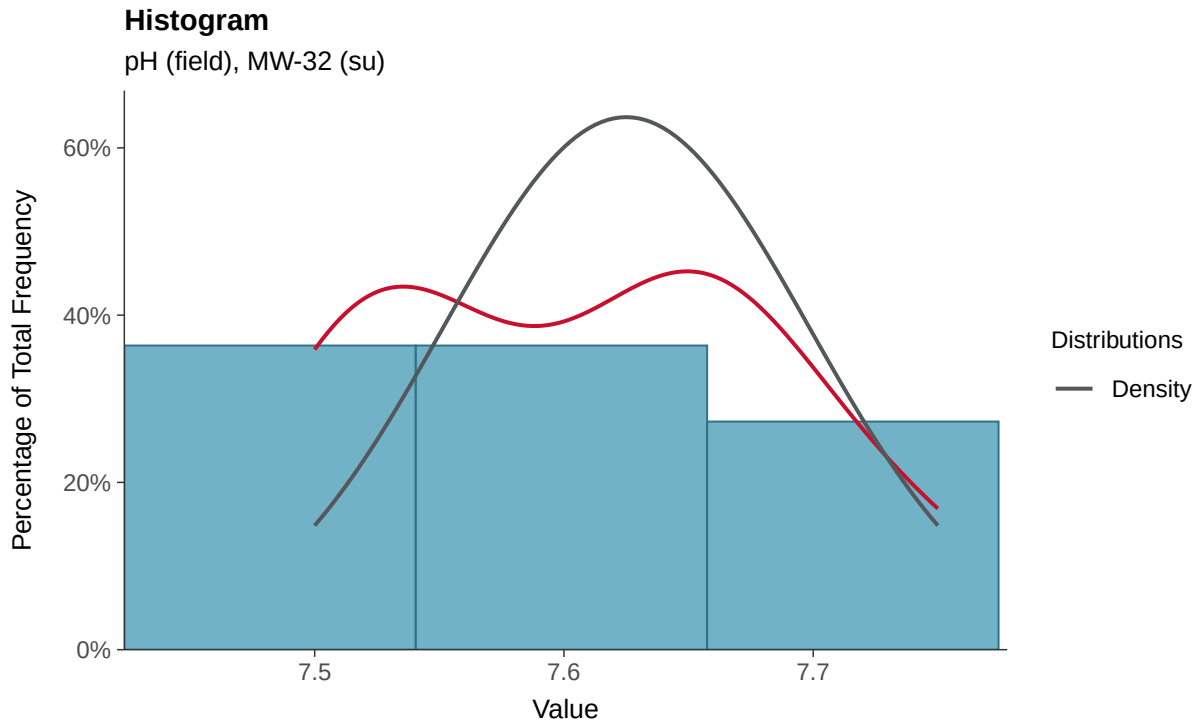
Fluoride, MW-32 (mg/L)



Appendix III: pH (field), MW-32

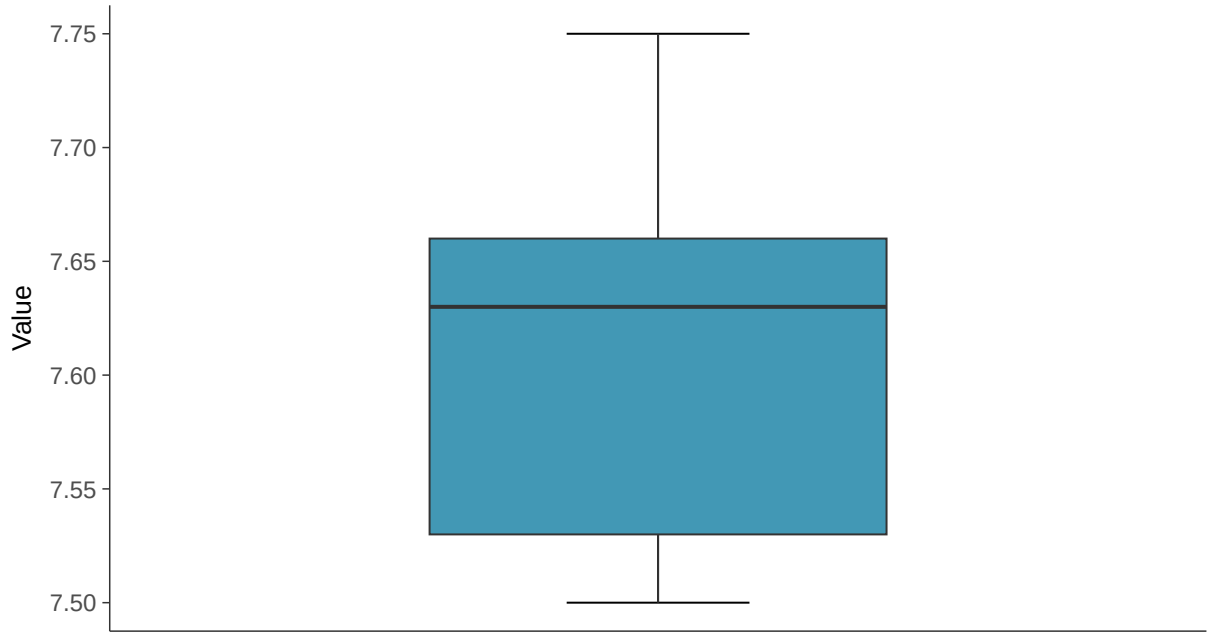
ID: 1_42_4_120





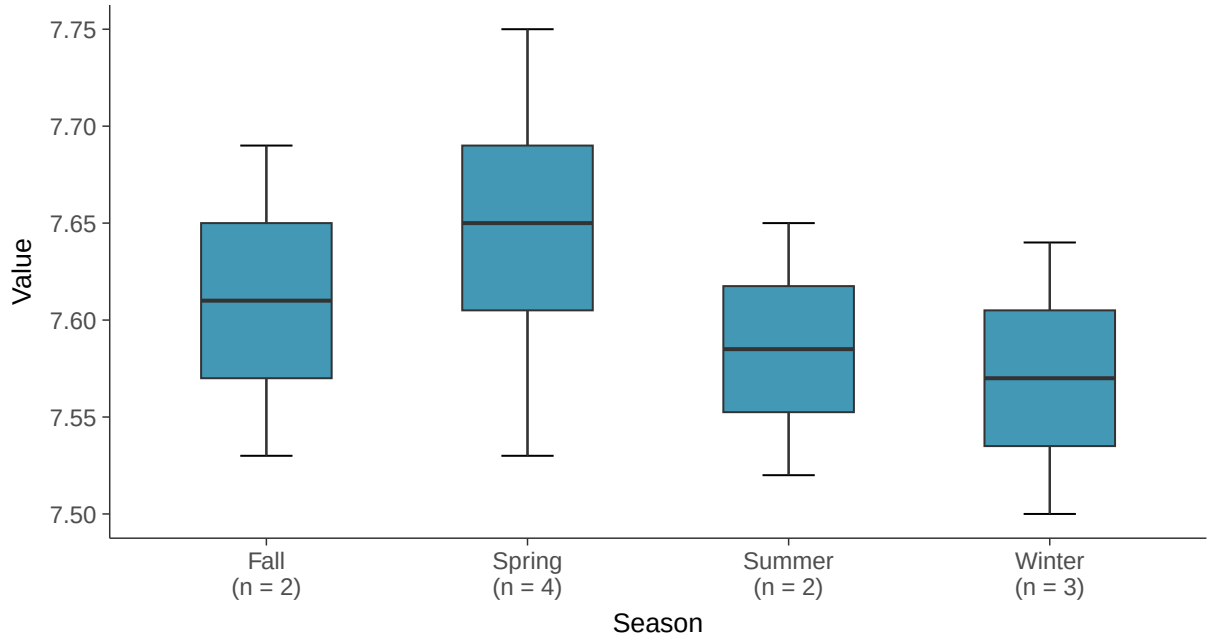
Boxplot

pH (field), MW-32 (su)



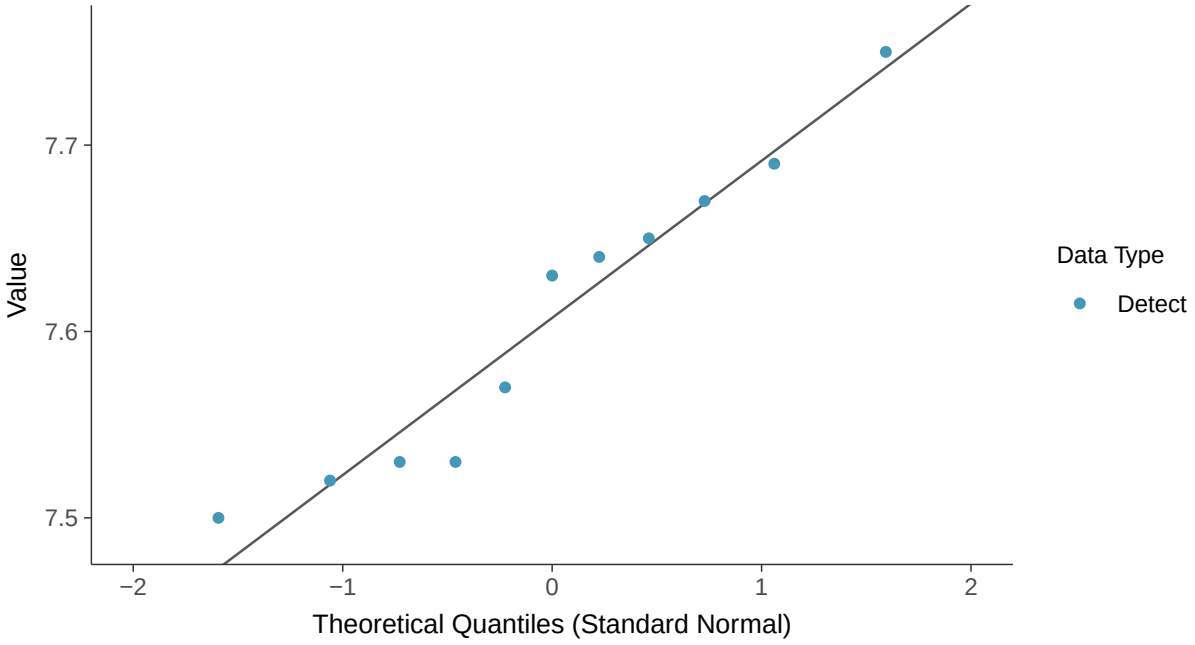
Boxplot by Season

pH (field), MW-32 (su)



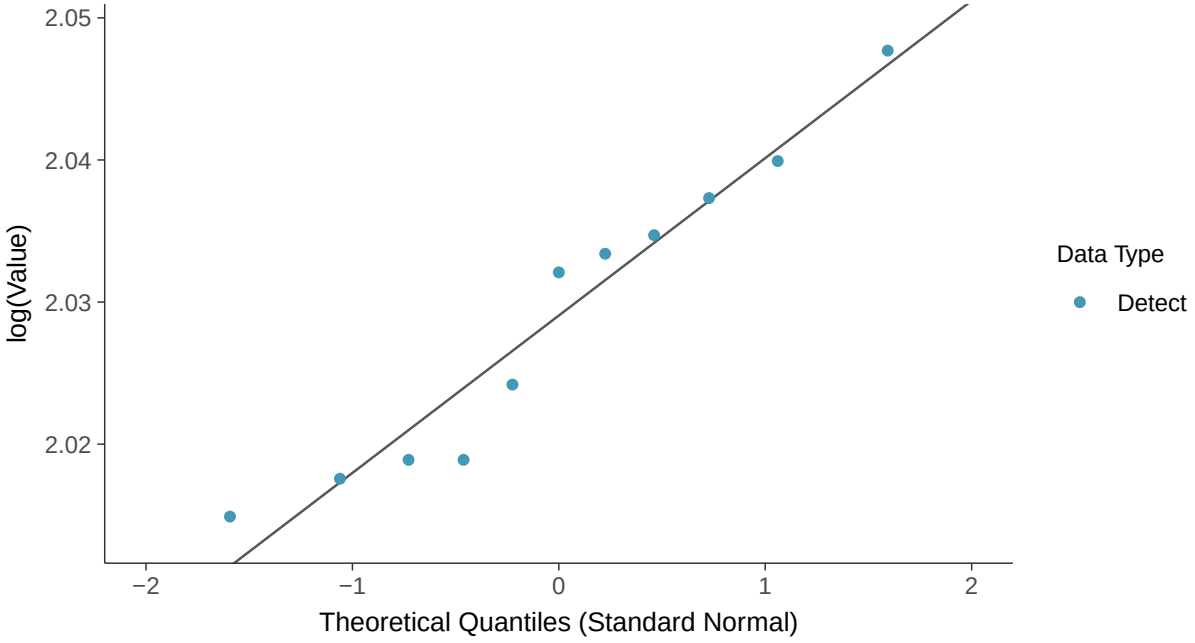
Normal Q-Q plot

pH (field), MW-32 (su)



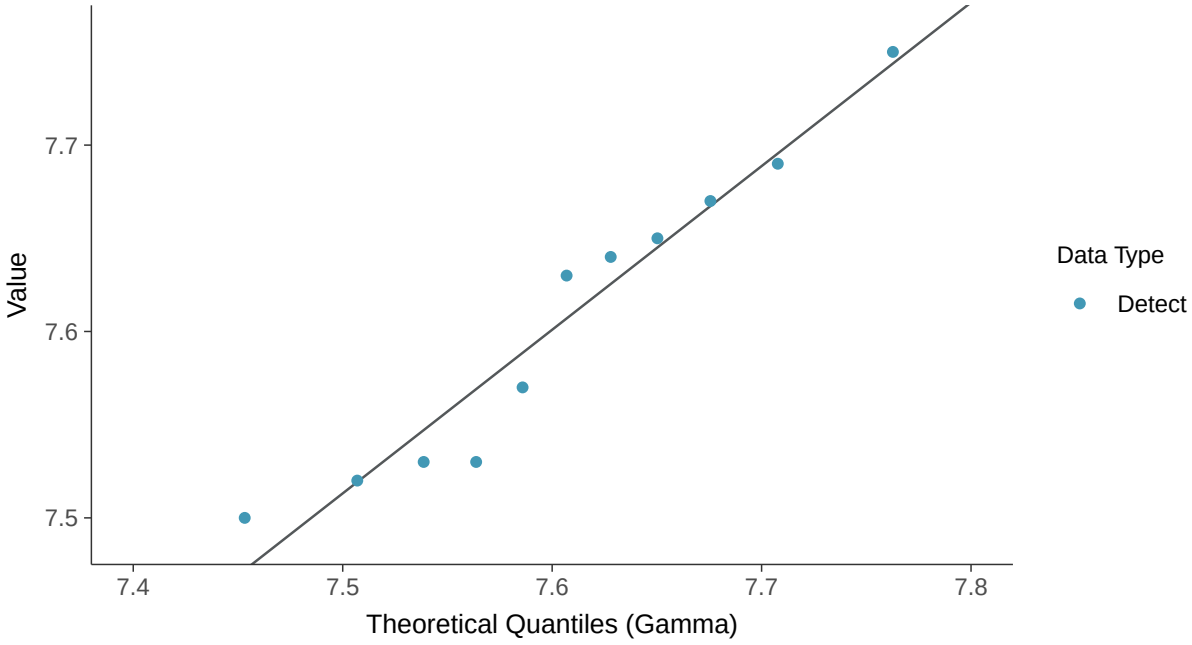
Lognormal Q-Q plot

pH (field), MW-32 (su)



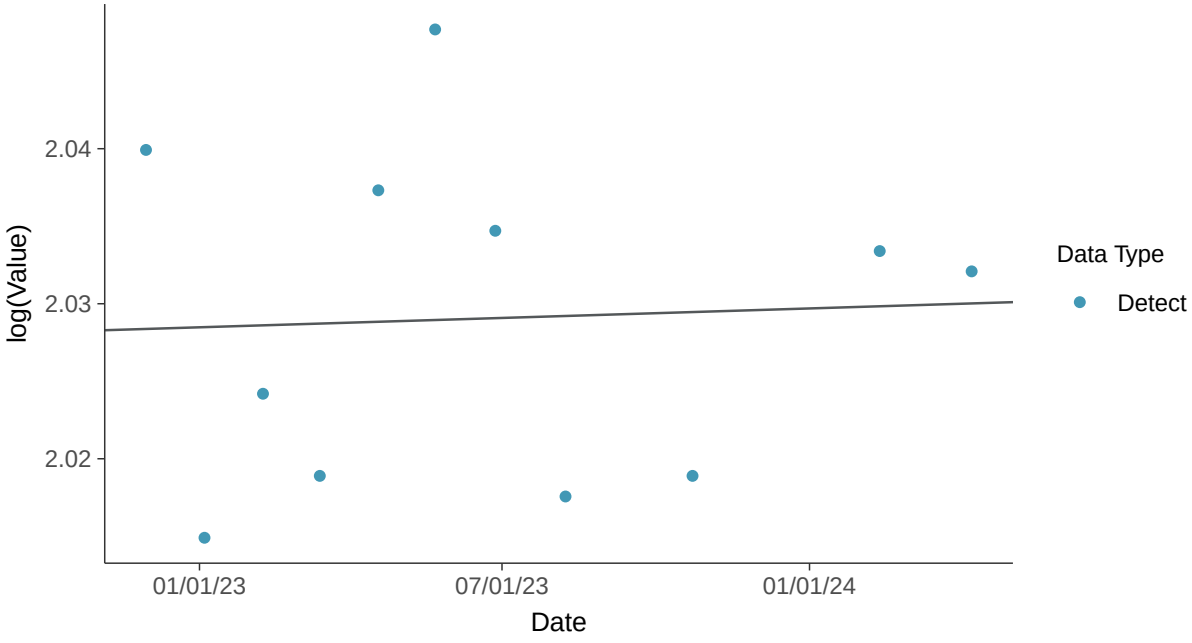
Gamma Q-Q plot

pH (field), MW-32 (su)



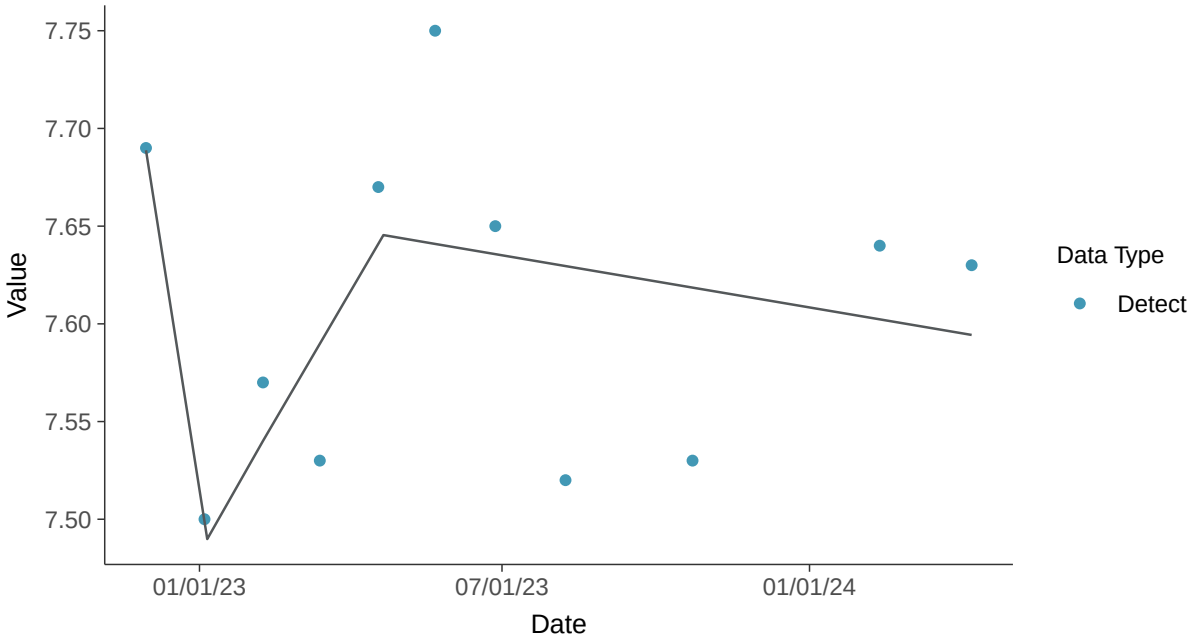
Trend Regression: Lognormal MLE

pH (field), MW-32 (su)



Trend Regression: Piecewise Linear-Linear-Linear

pH (field), MW-32 (su)

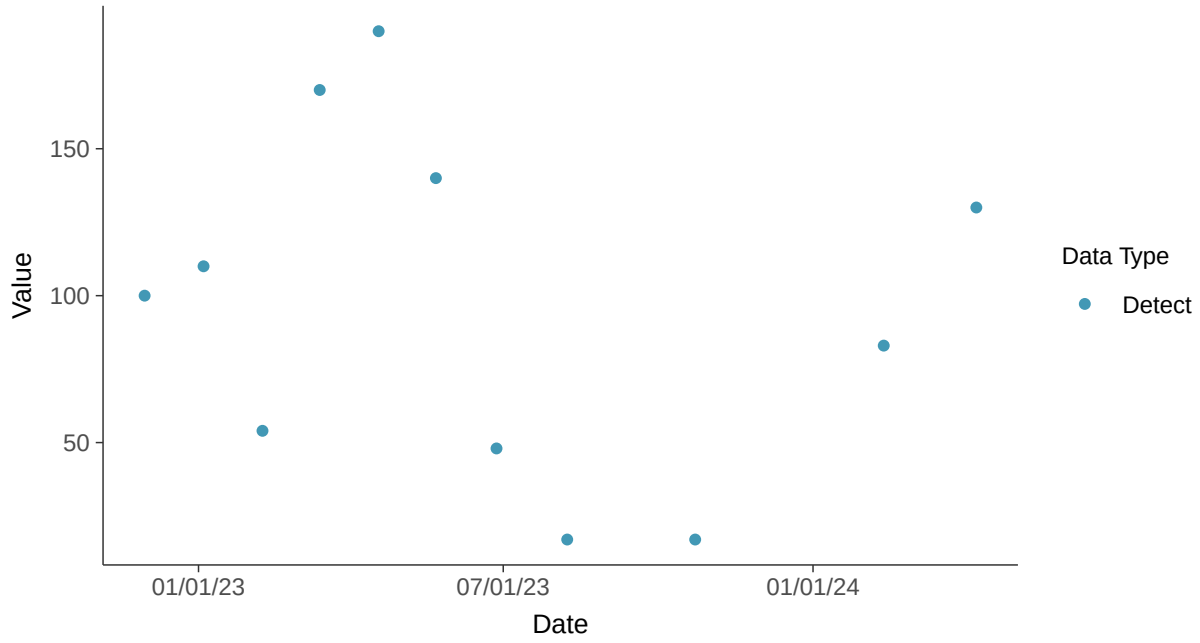


Appendix III: Sulfate (as SO4), MW-32

ID: 1_42_4_124

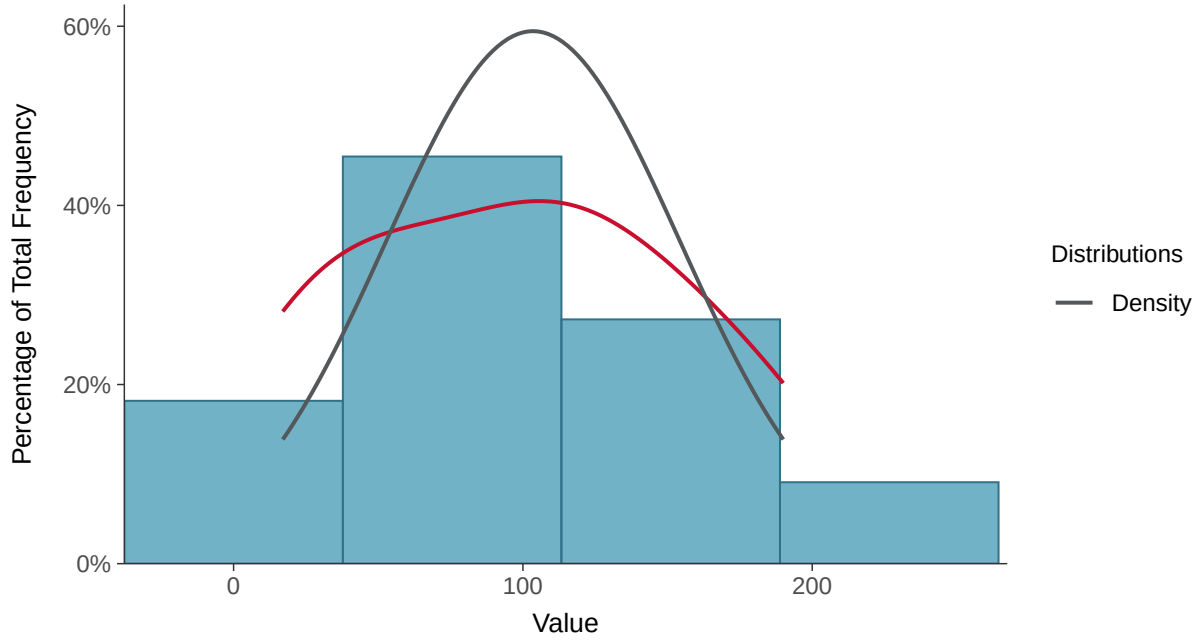
Scatter Plot

Sulfate (as SO4), MW-32 (mg/L)



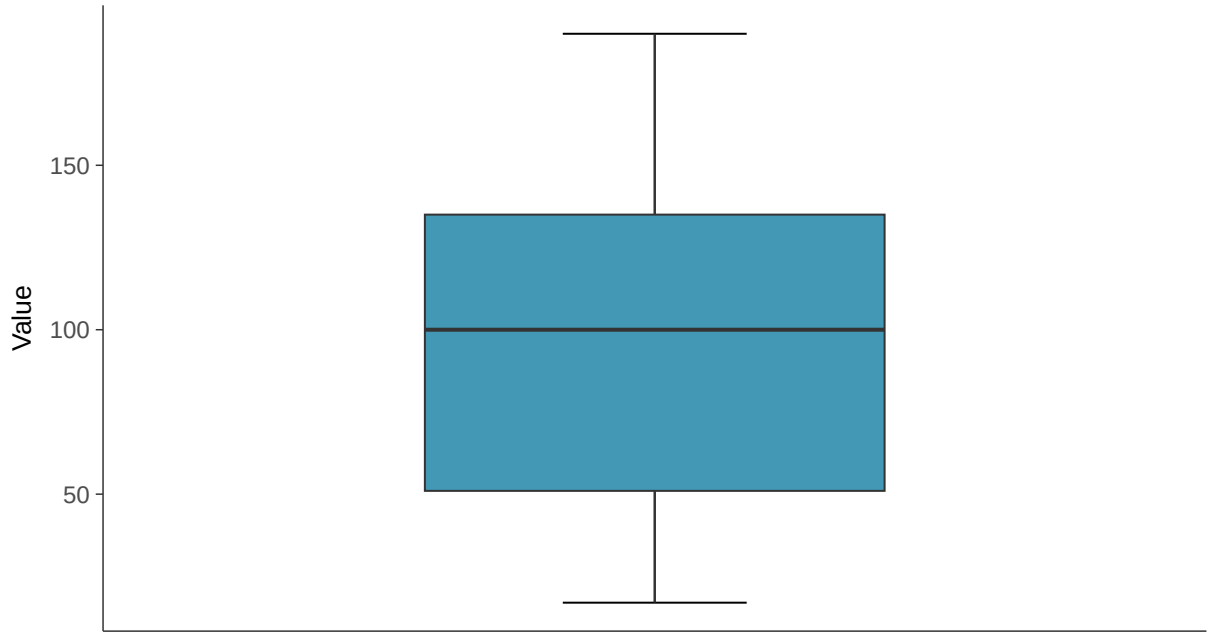
Histogram

Sulfate (as SO4), MW-32 (mg/L)



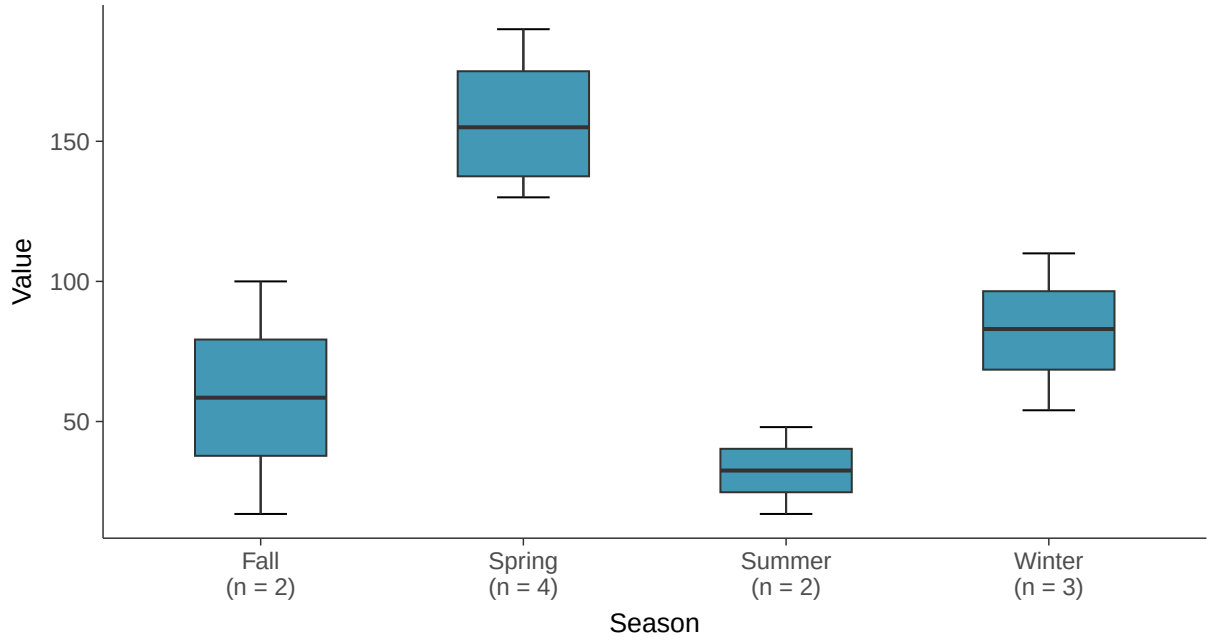
Boxplot

Sulfate (as SO4), MW-32 (mg/L)



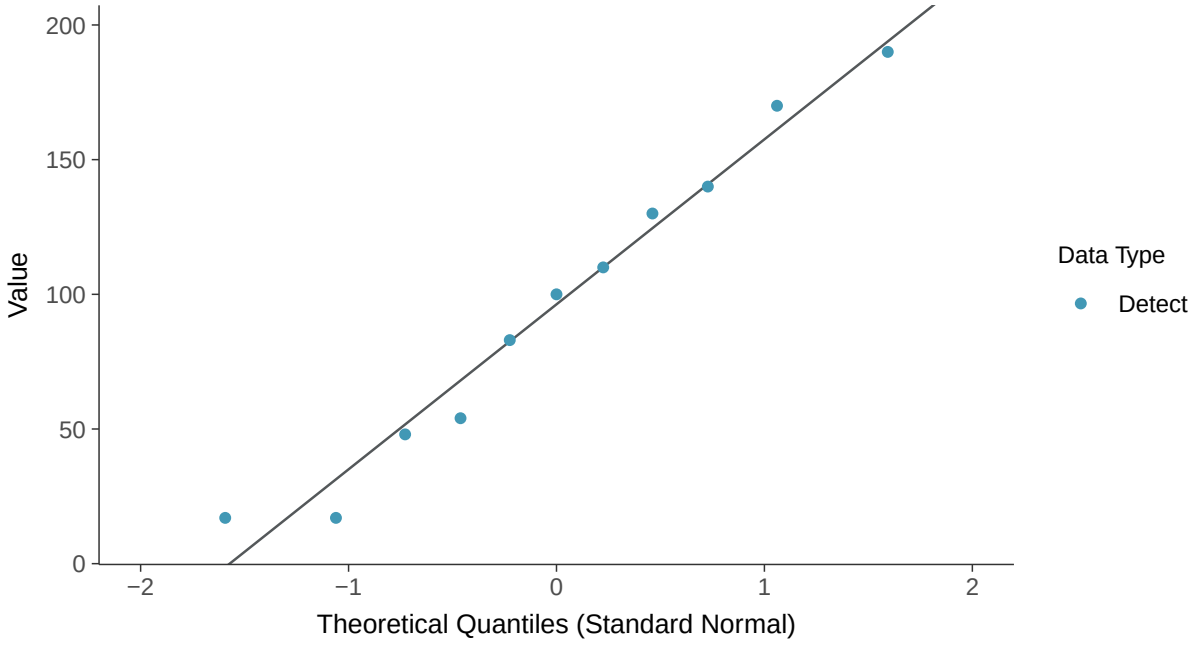
Boxplot by Season

Sulfate (as SO4), MW-32 (mg/L)



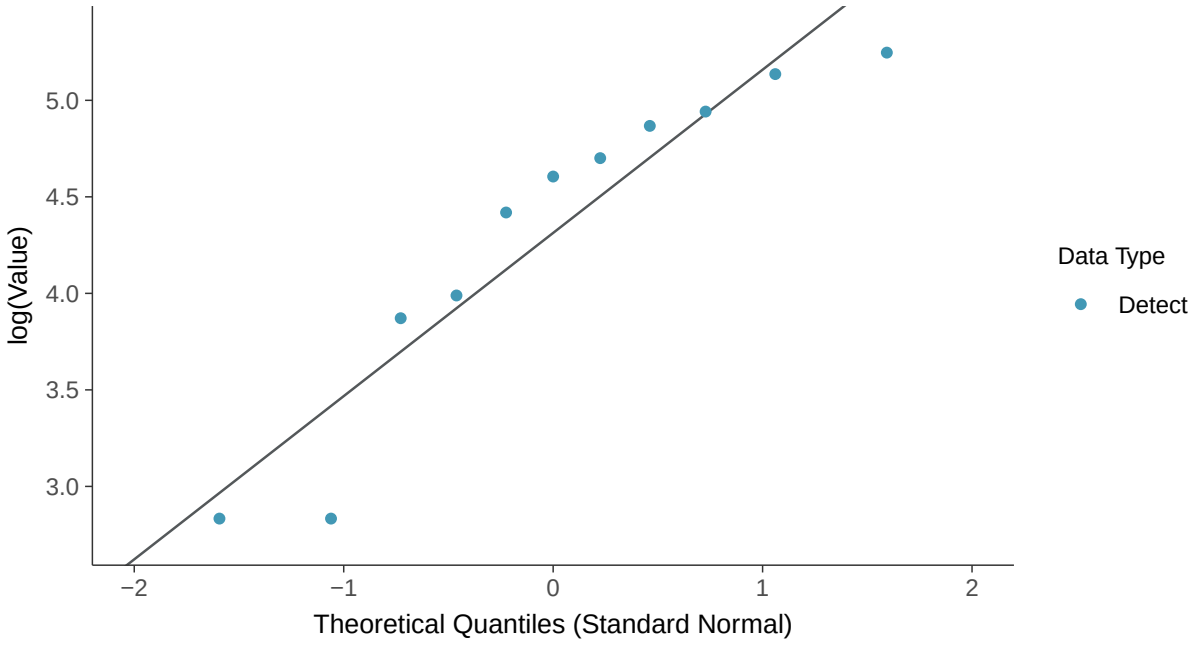
Normal Q-Q plot

Sulfate (as SO4), MW-32 (mg/L)



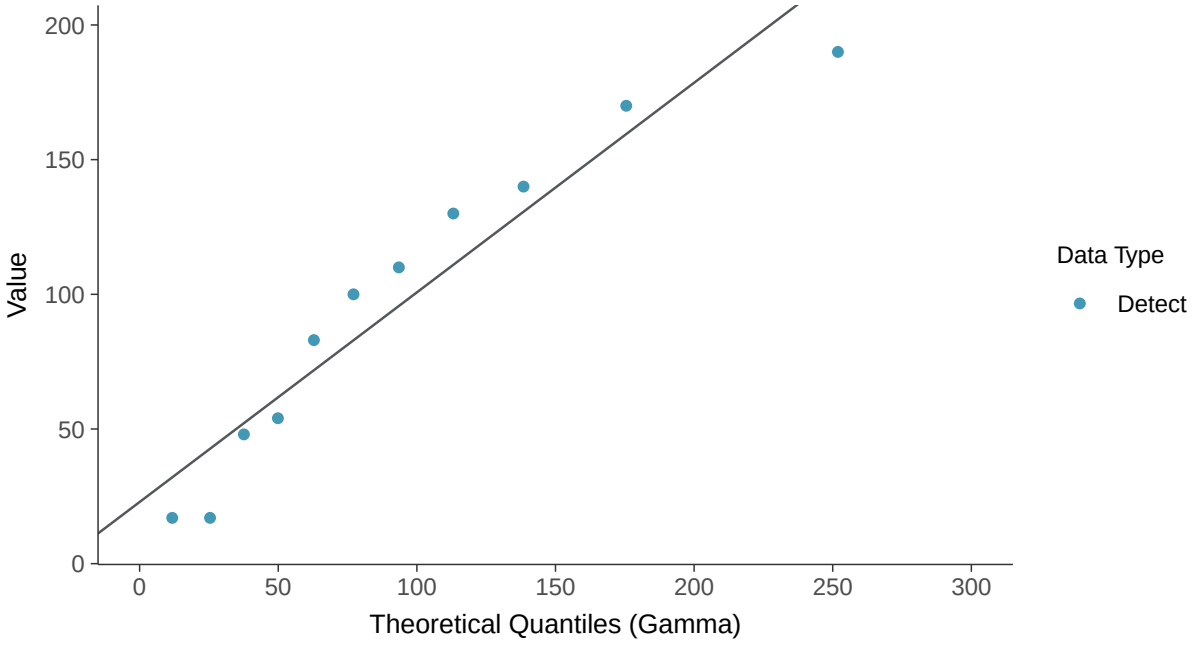
Lognormal Q-Q plot

Sulfate (as SO4), MW-32 (mg/L)



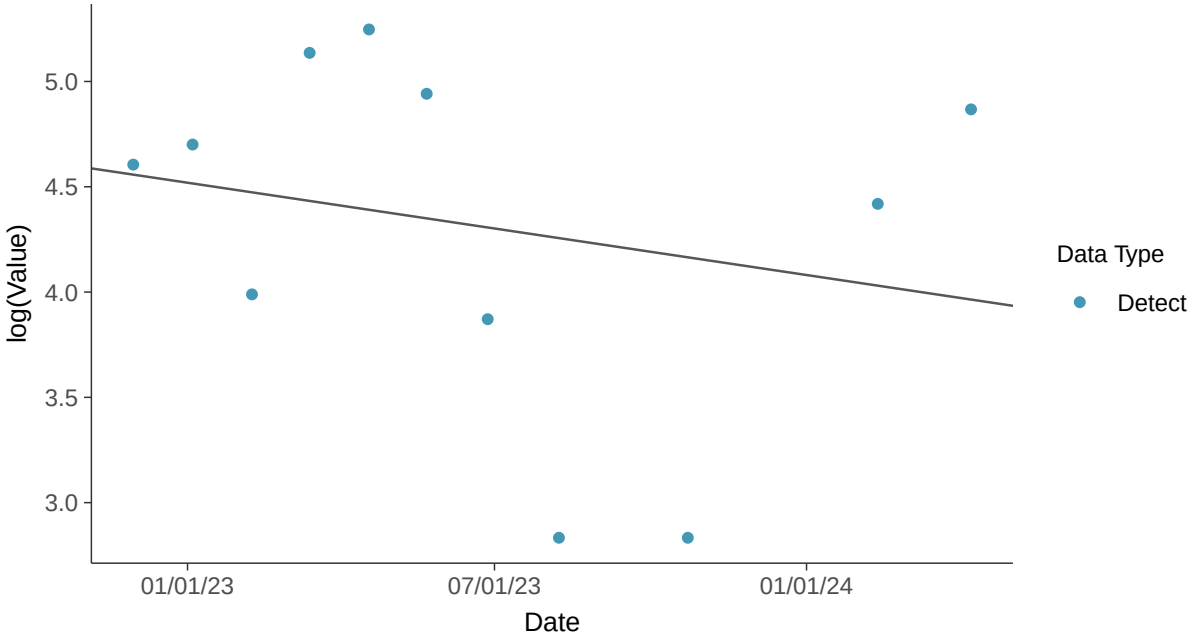
Gamma Q-Q plot

Sulfate (as SO4), MW-32 (mg/L)



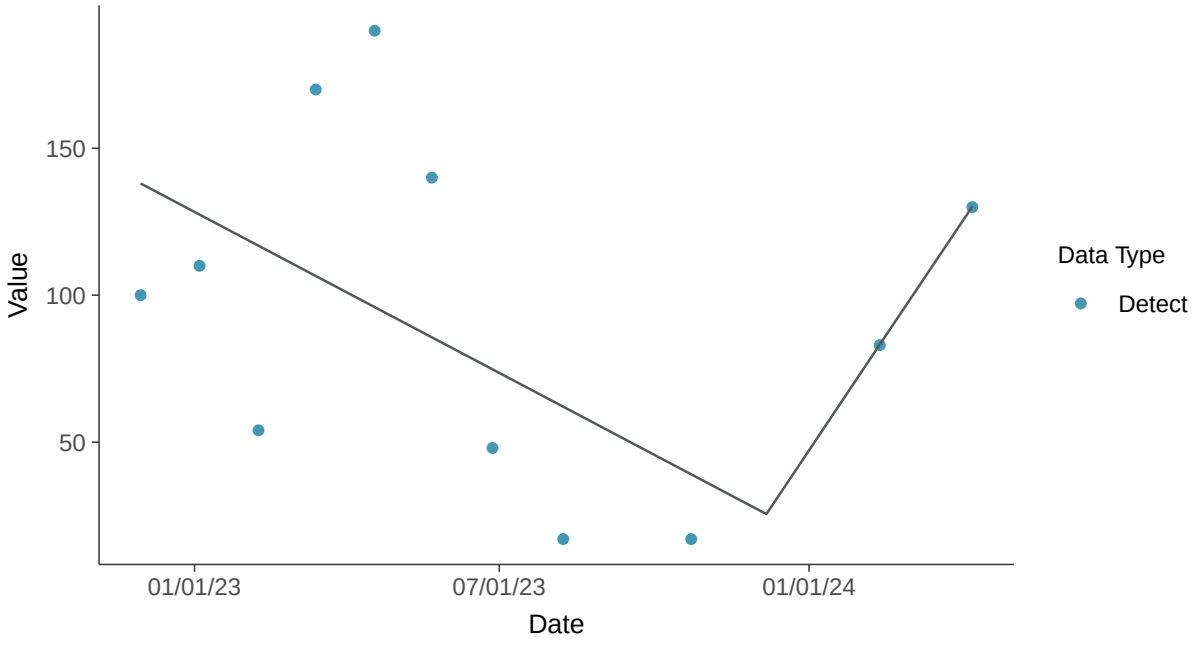
Trend Regression: Lognormal MLE

Sulfate (as SO4), MW-32 (mg/L)



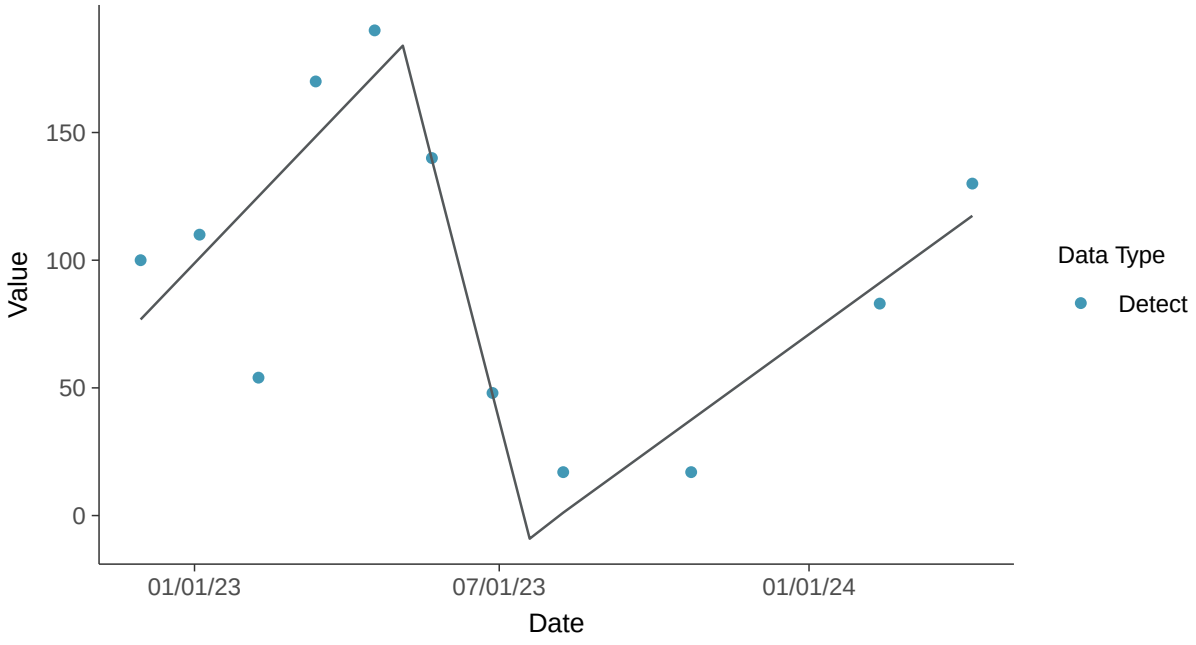
Trend Regression: Piecewise Linear-Linear

Sulfate (as SO4), MW-32 (mg/L)



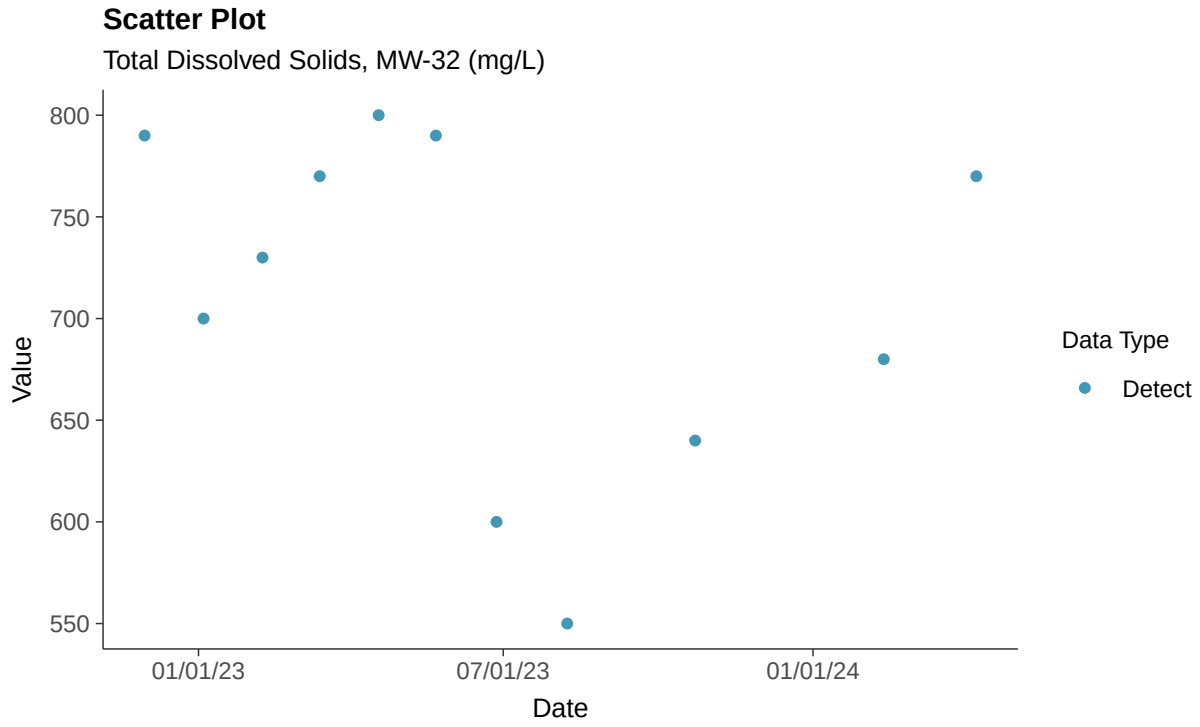
Trend Regression: Piecewise Linear-Linear-Linear

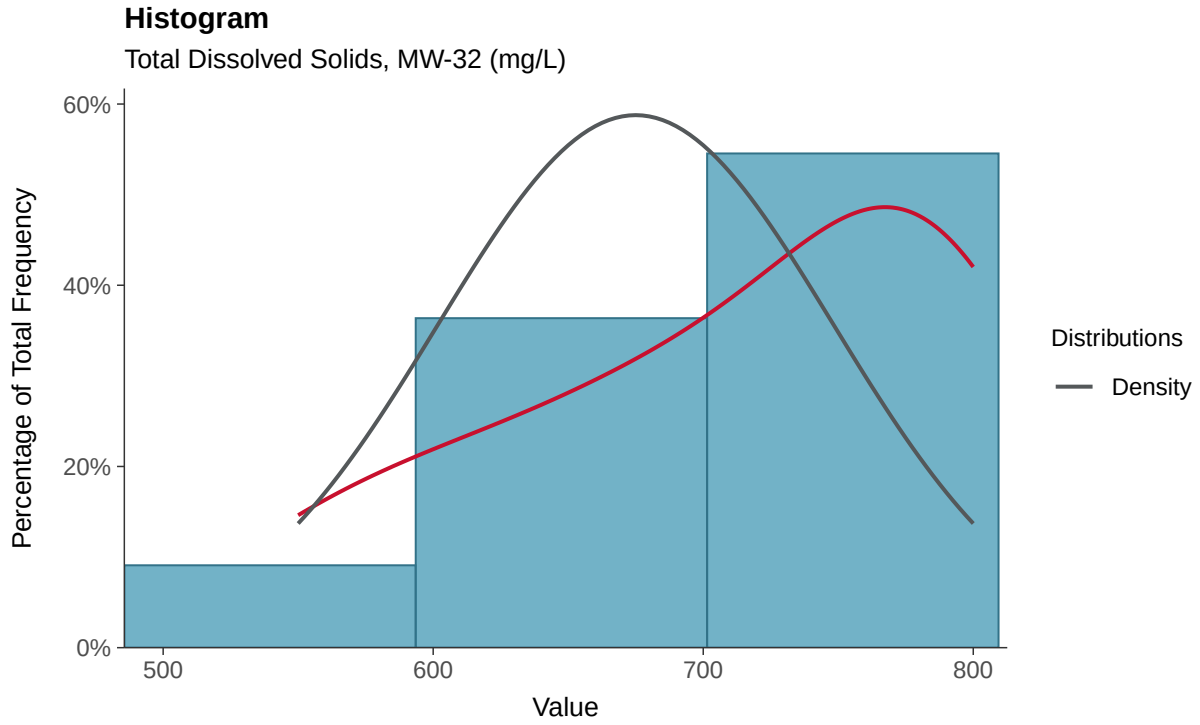
Sulfate (as SO4), MW-32 (mg/L)



Appendix III: Total Dissolved Solids, MW-32

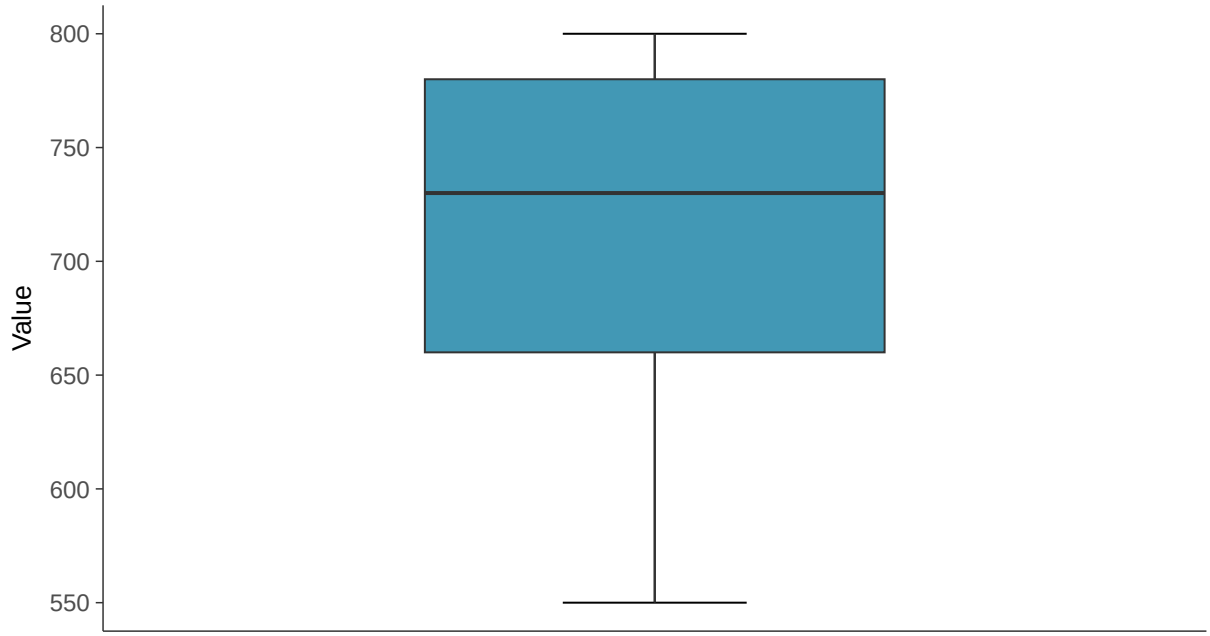
ID: 1_42_4_126





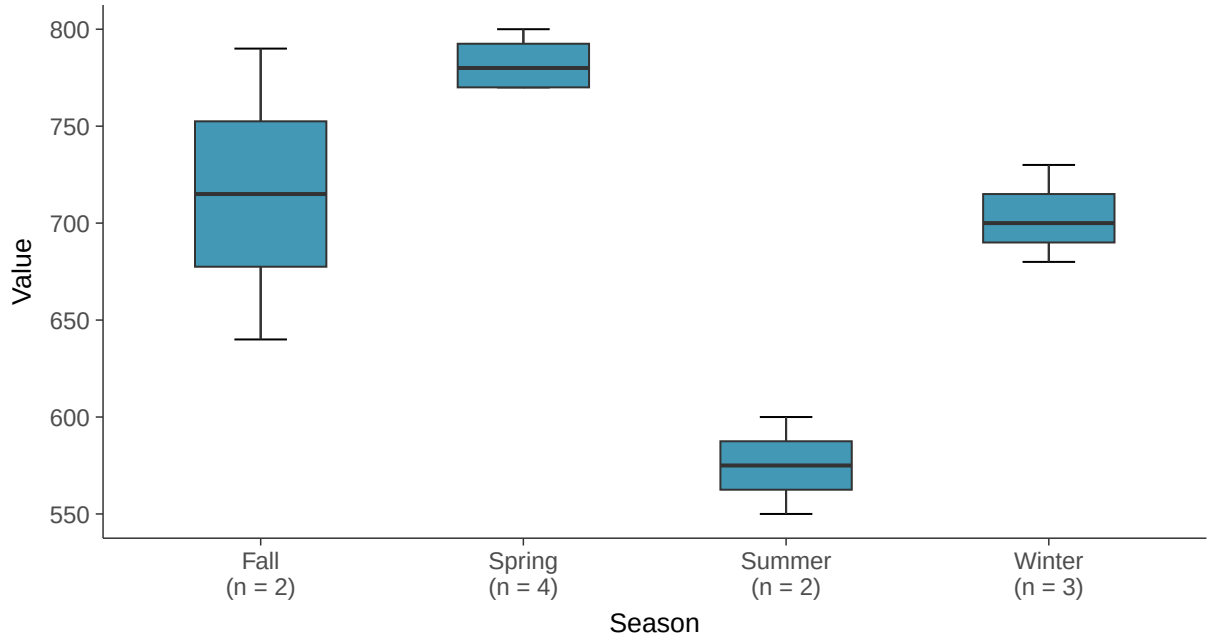
Boxplot

Total Dissolved Solids, MW-32 (mg/L)



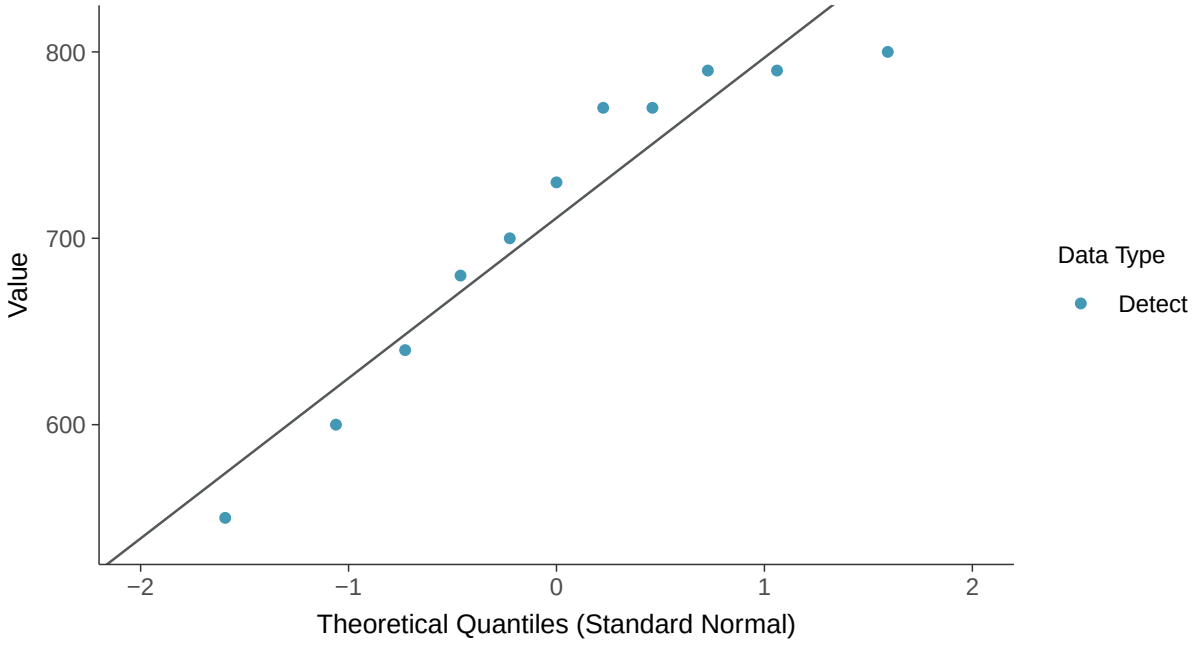
Boxplot by Season

Total Dissolved Solids, MW-32 (mg/L)



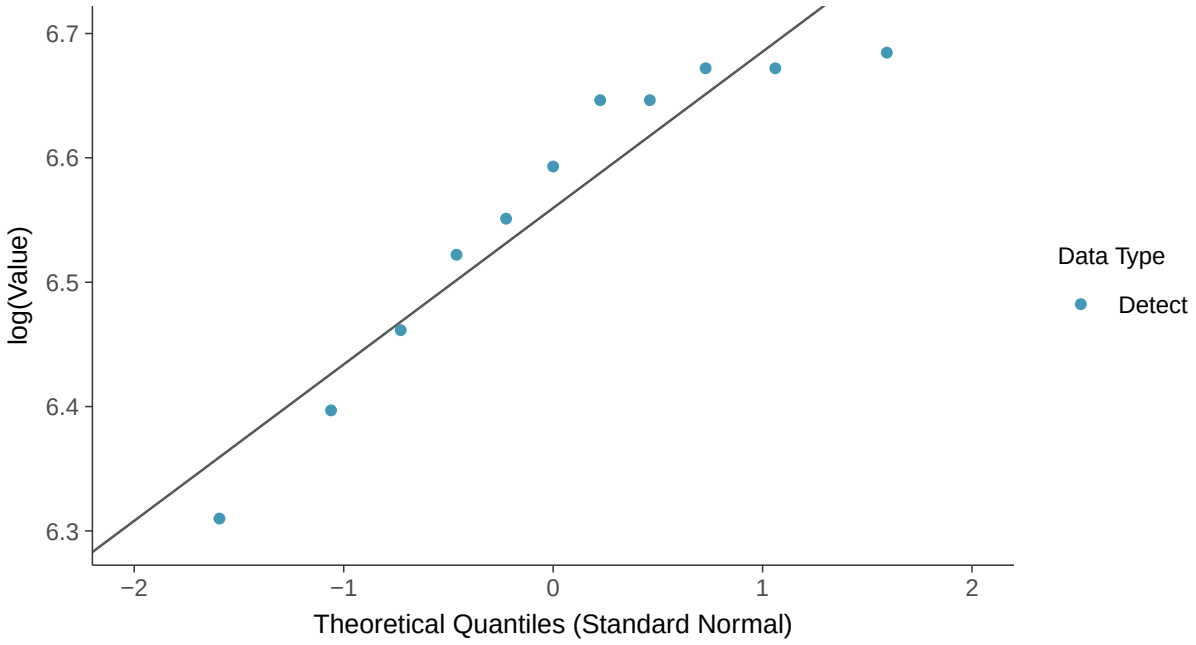
Normal Q-Q plot

Total Dissolved Solids, MW-32 (mg/L)



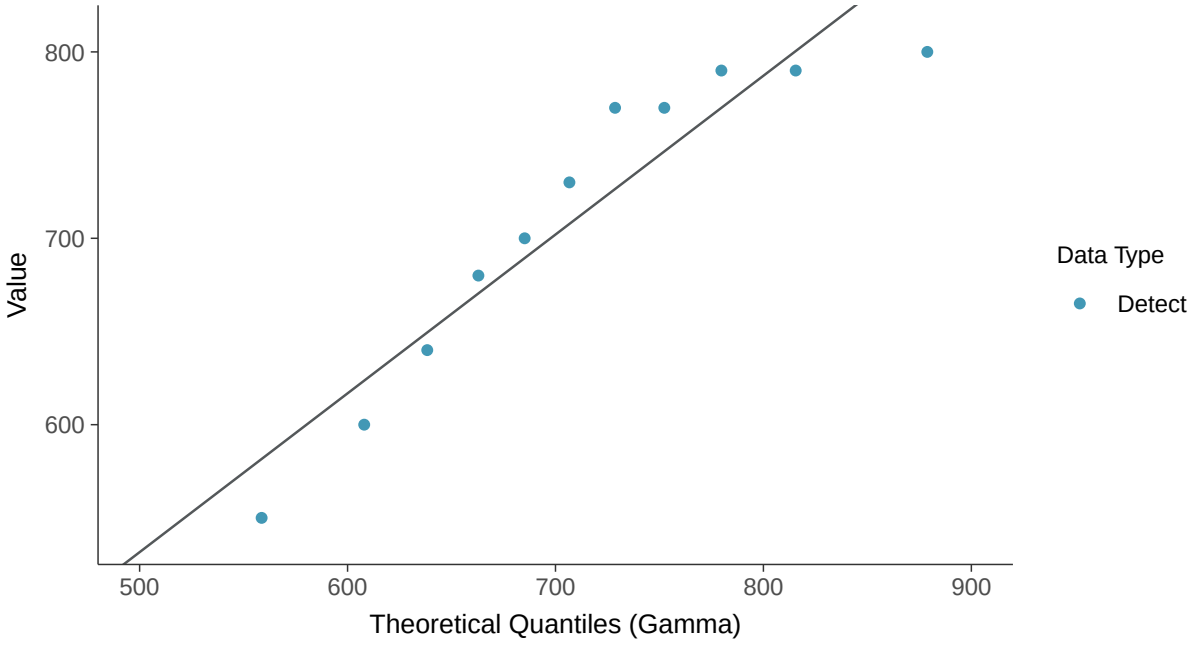
Lognormal Q-Q plot

Total Dissolved Solids, MW-32 (mg/L)



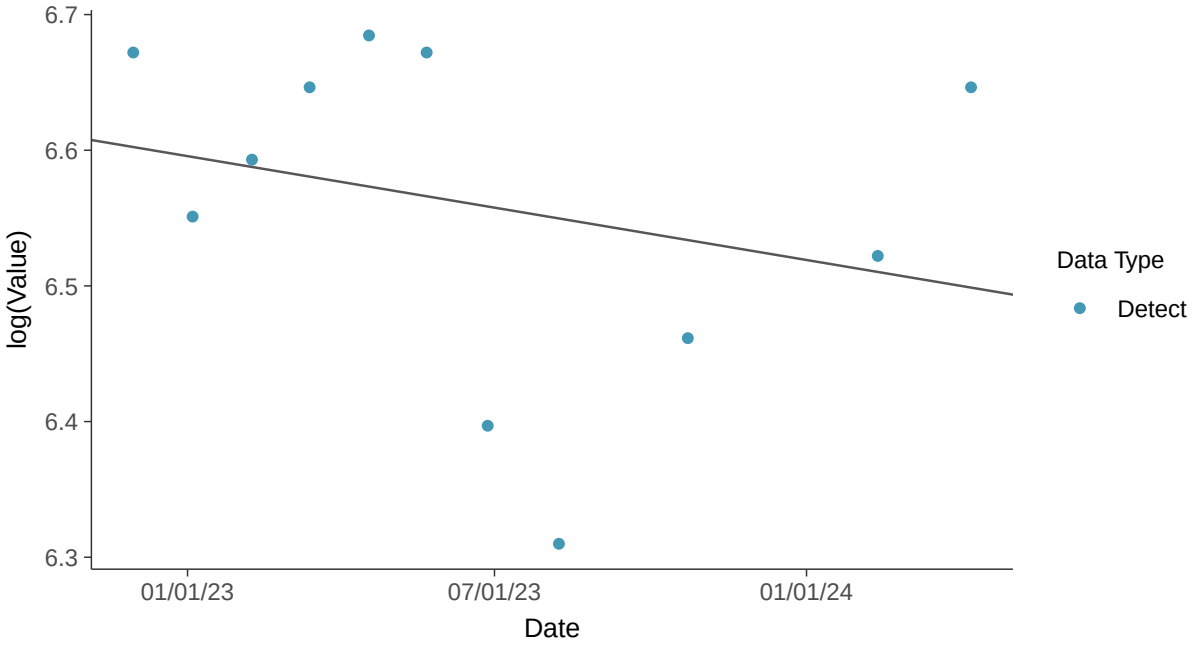
Gamma Q-Q plot

Total Dissolved Solids, MW-32 (mg/L)



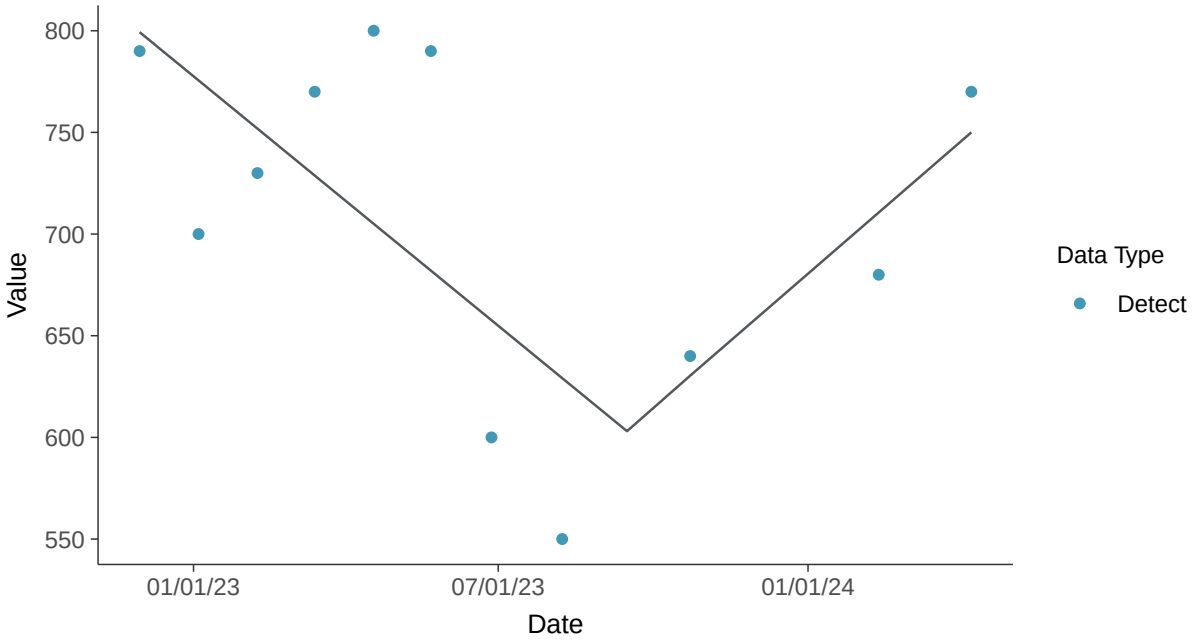
Trend Regression: Lognormal MLE

Total Dissolved Solids, MW-32 (mg/L)



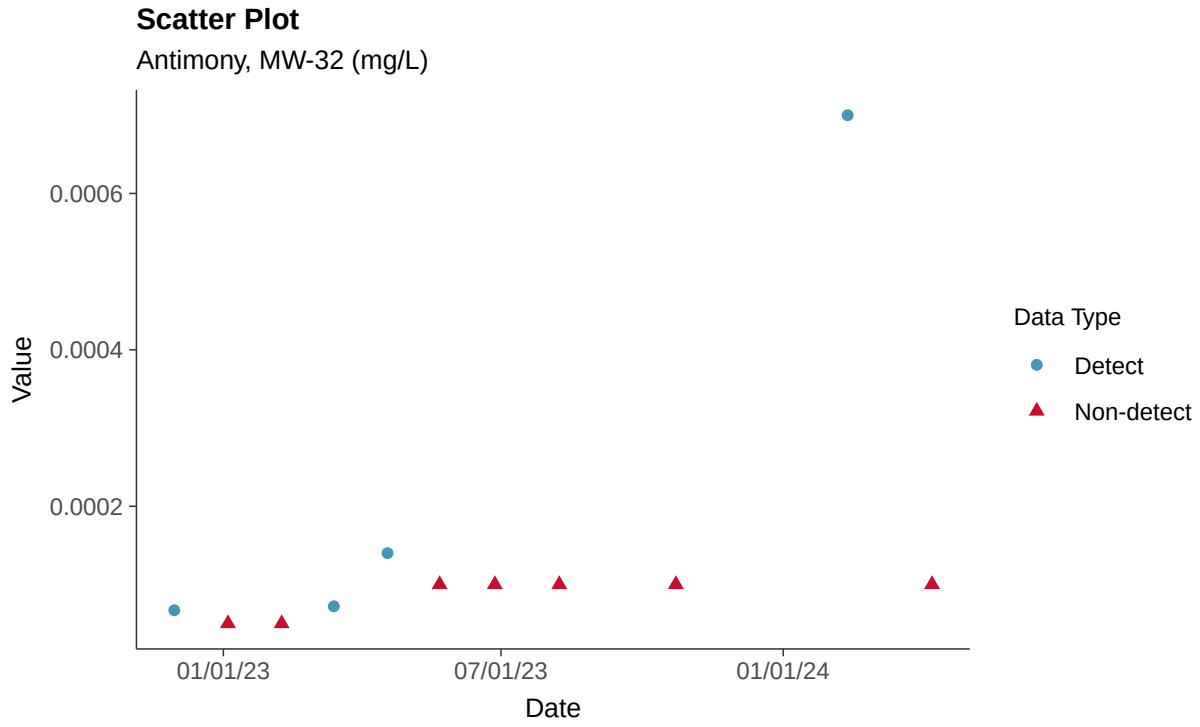
Trend Regression: Piecewise Linear-Linear

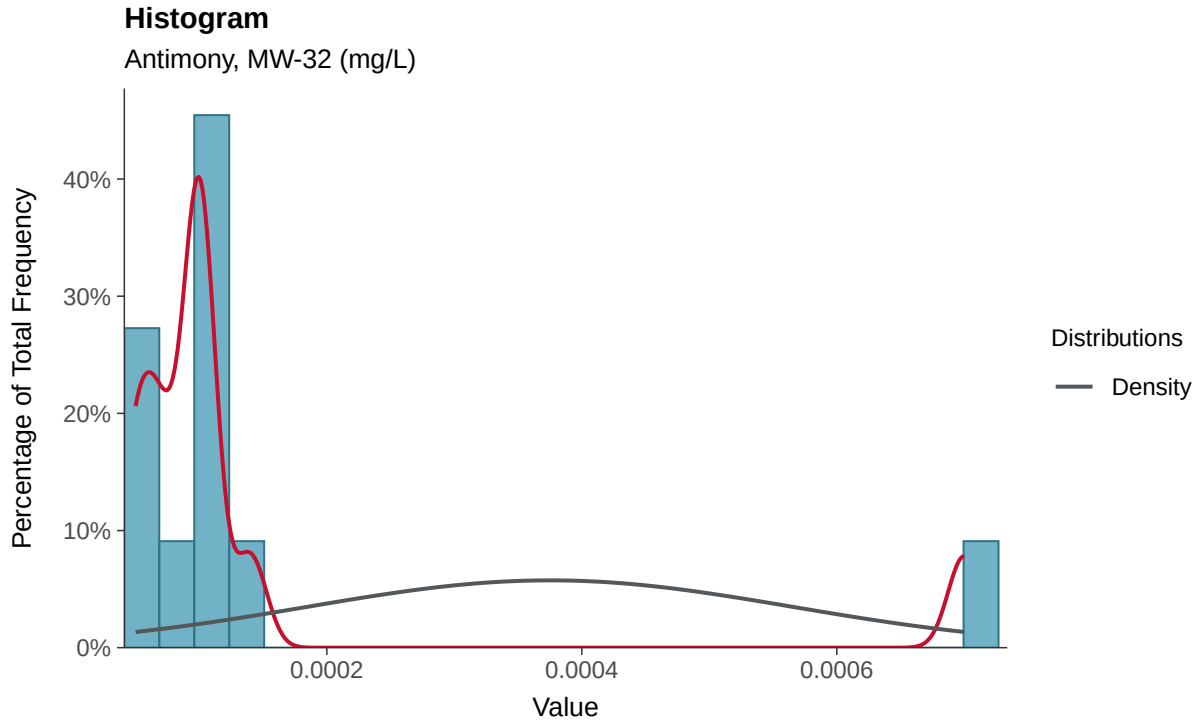
Total Dissolved Solids, MW-32 (mg/L)



Appendix IV: Antimony, MW-32

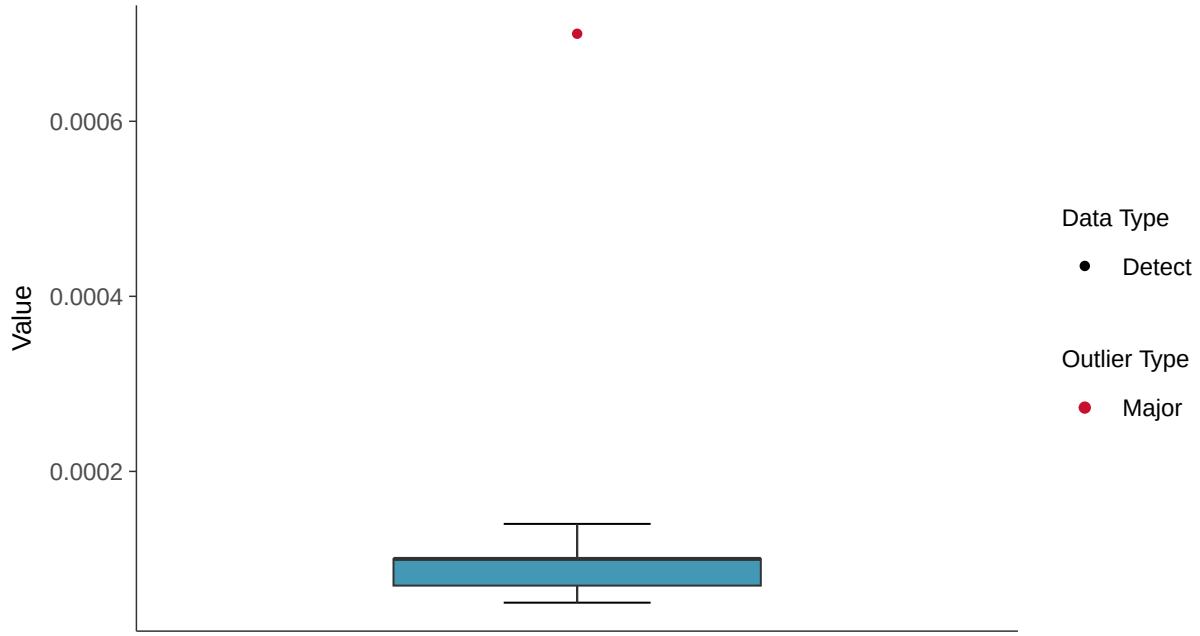
ID: 1_42_5_101





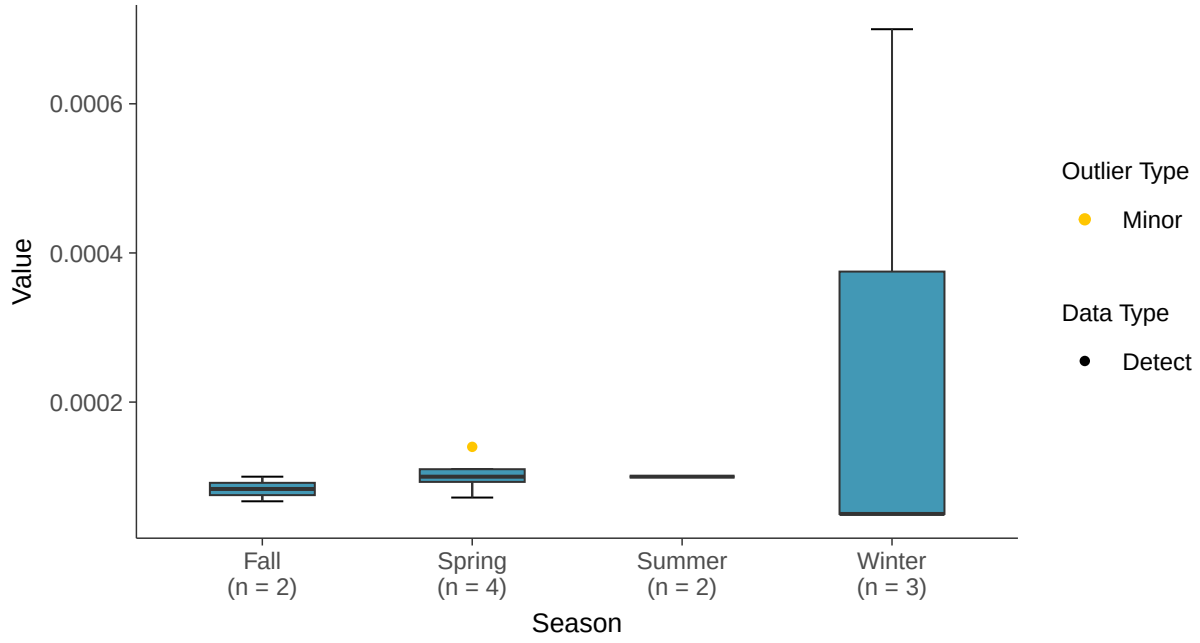
Boxplot

Antimony, MW-32 (mg/L)



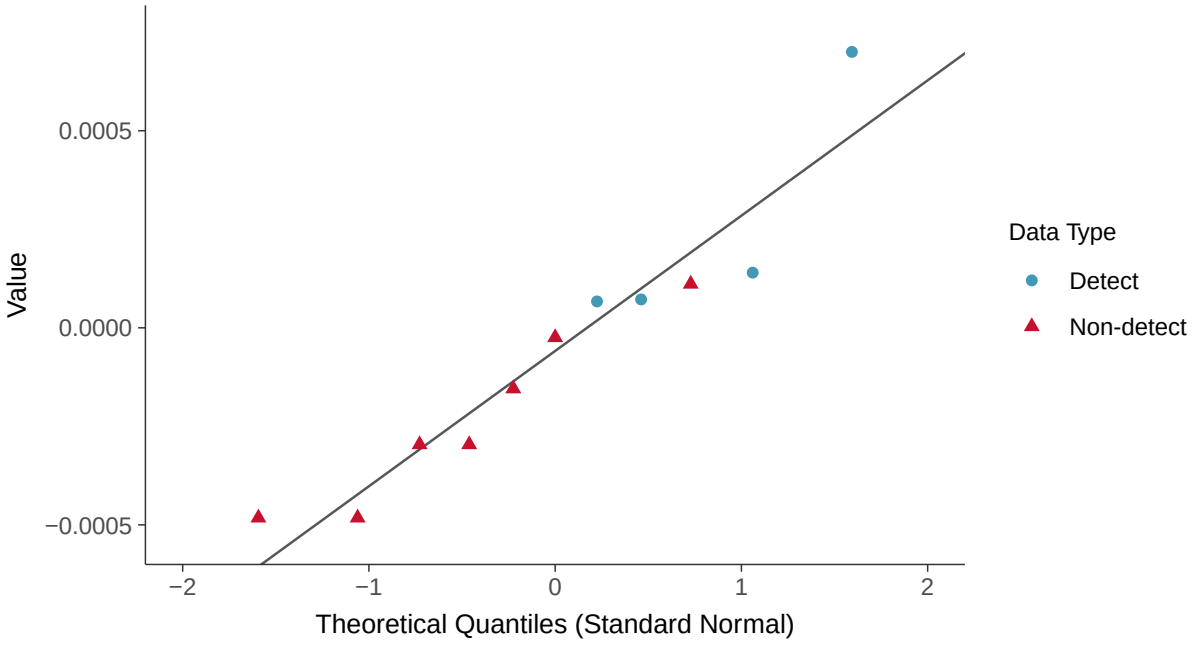
Boxplot by Season

Antimony, MW-32 (mg/L)



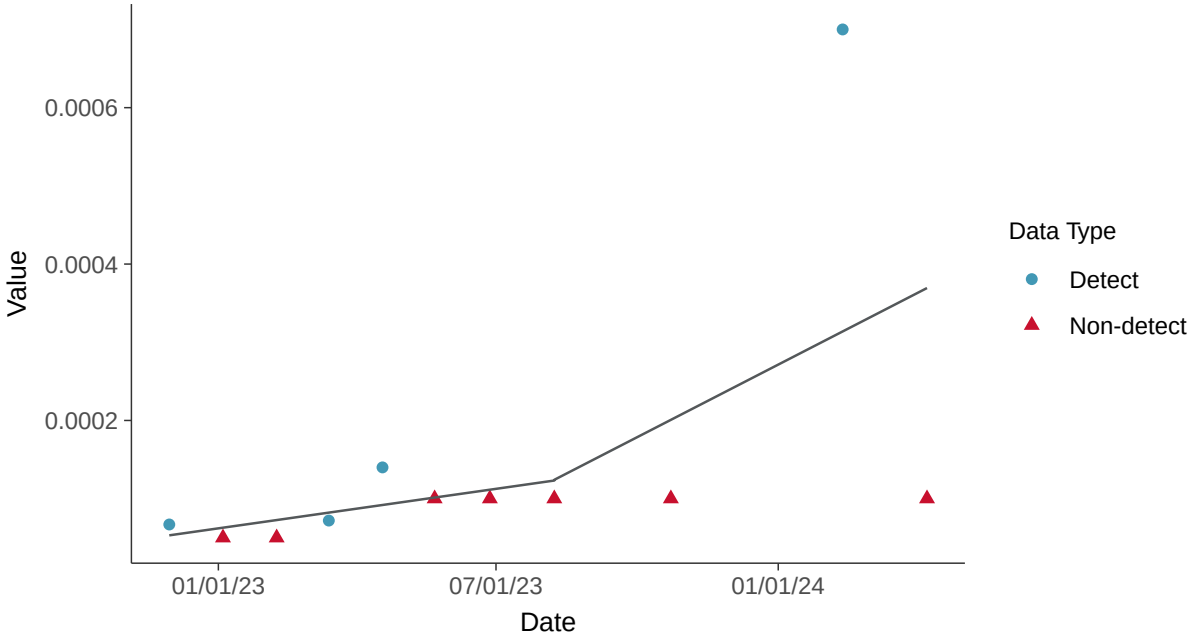
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-32 (mg/L)



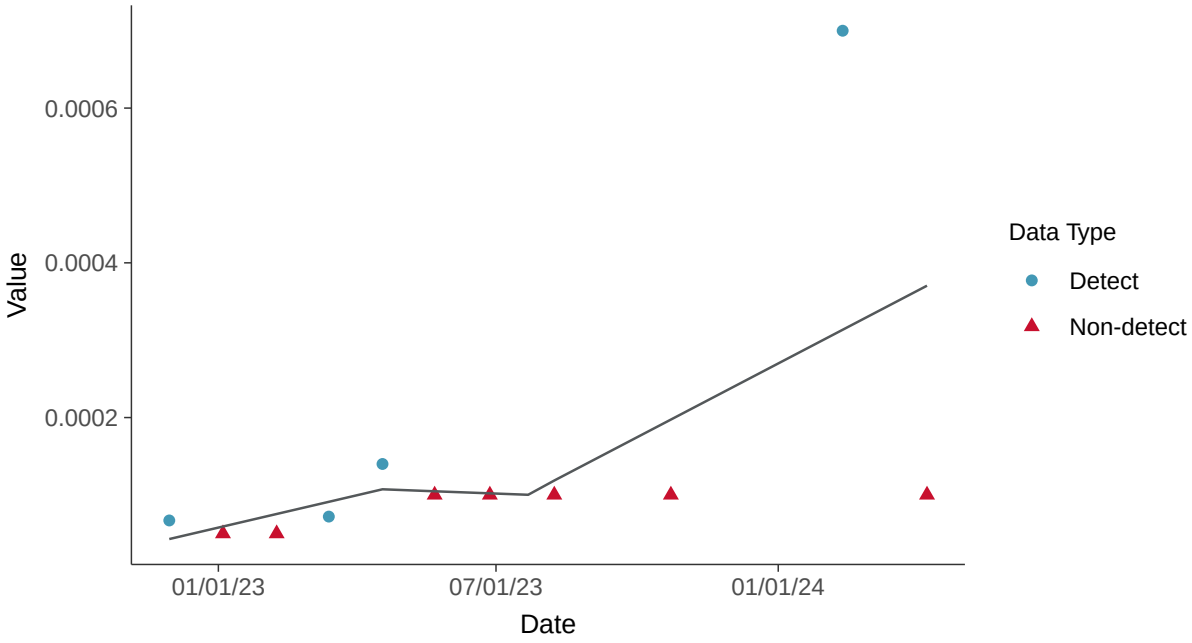
Trend Regression: Piecewise Linear-Linear

Antimony, MW-32 (mg/L)



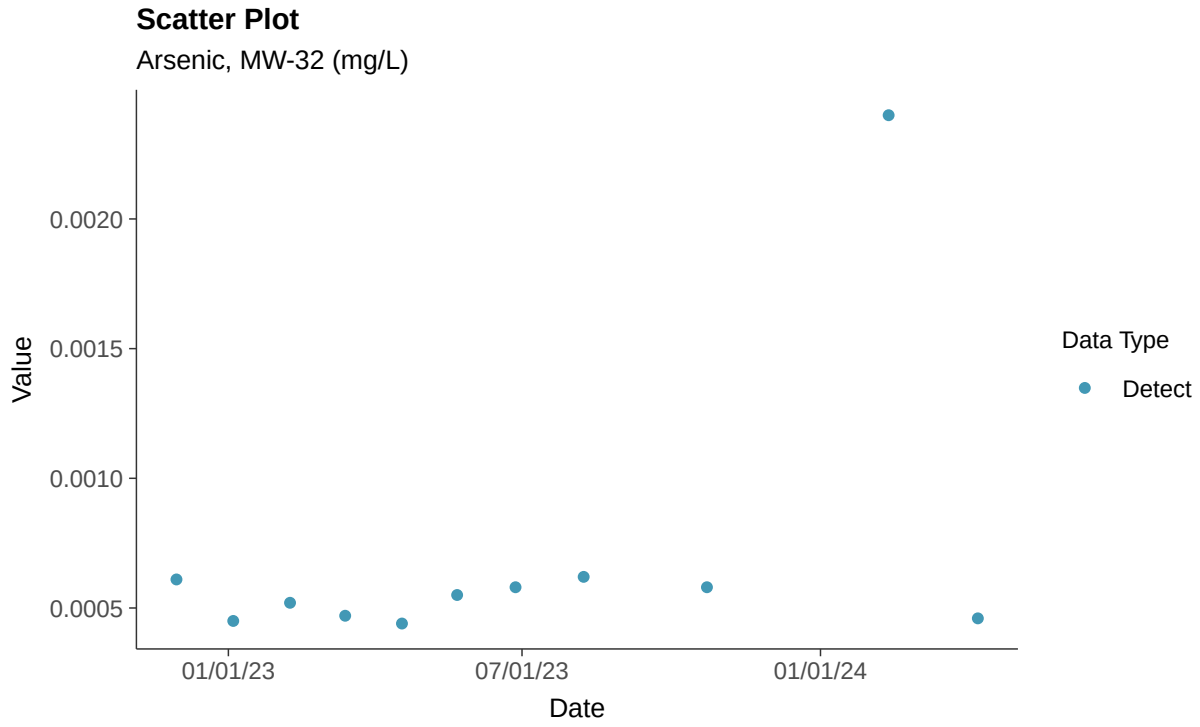
Trend Regression: Piecewise Linear-Linear-Linear

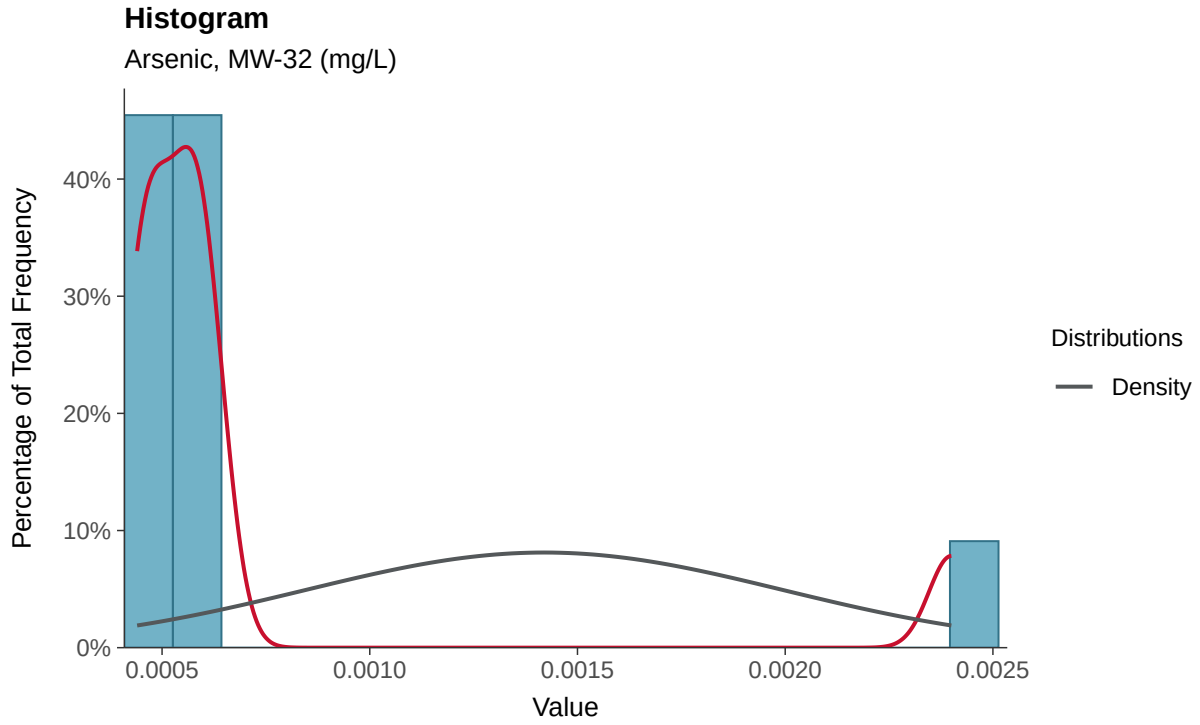
Antimony, MW-32 (mg/L)



Appendix IV: Arsenic, MW-32

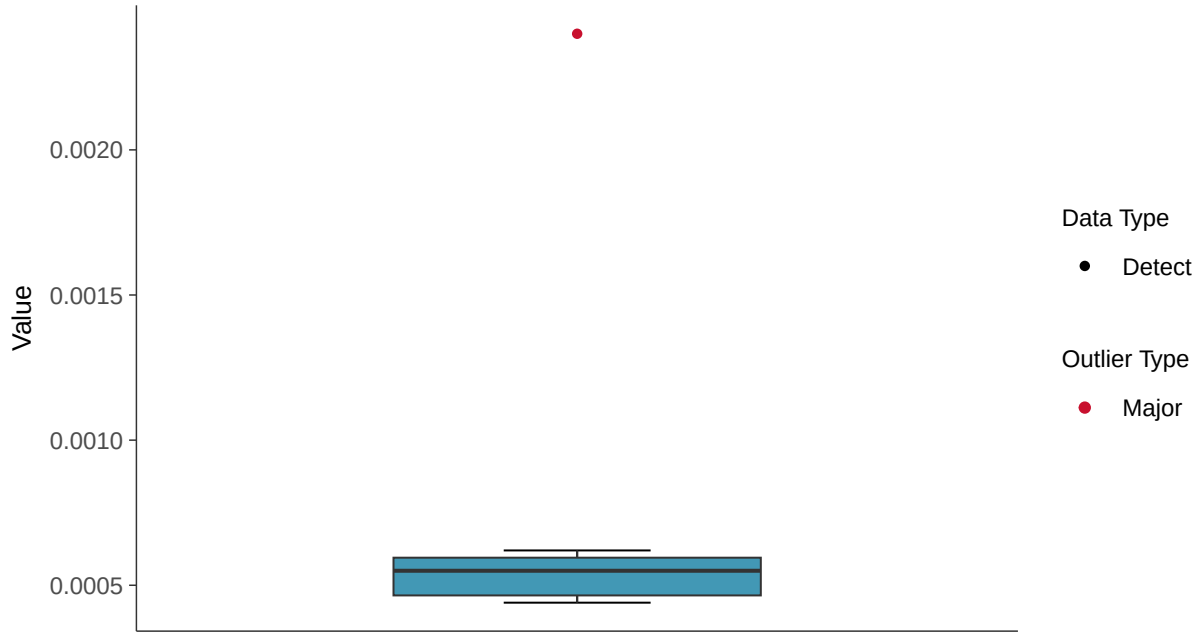
ID: 1_42_5_102





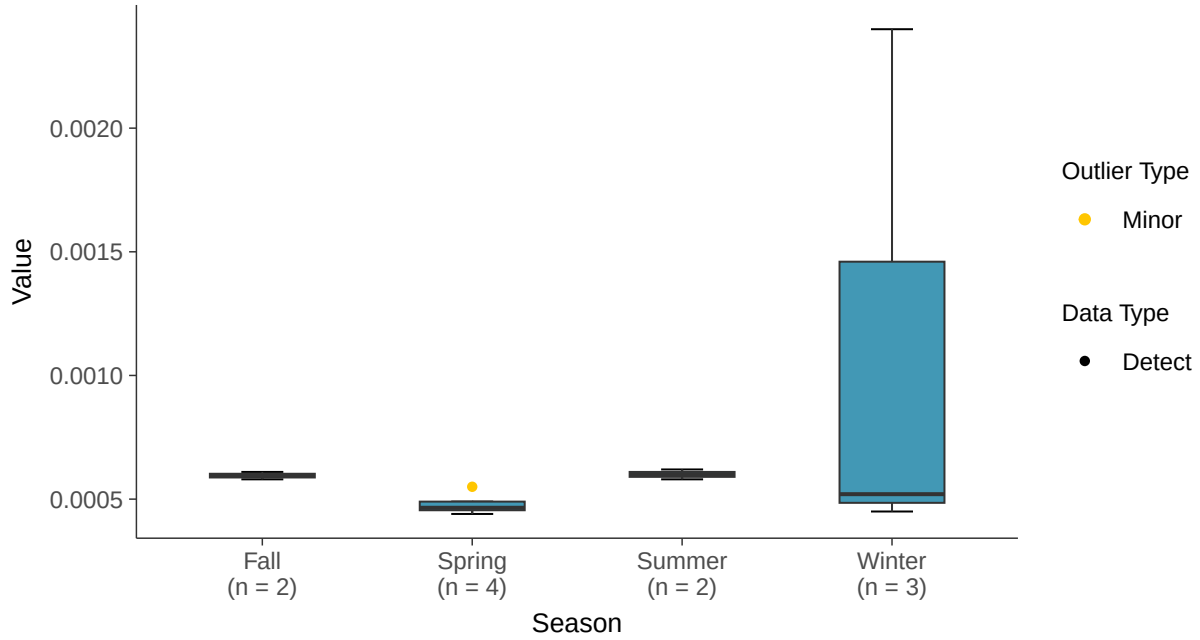
Boxplot

Arsenic, MW-32 (mg/L)



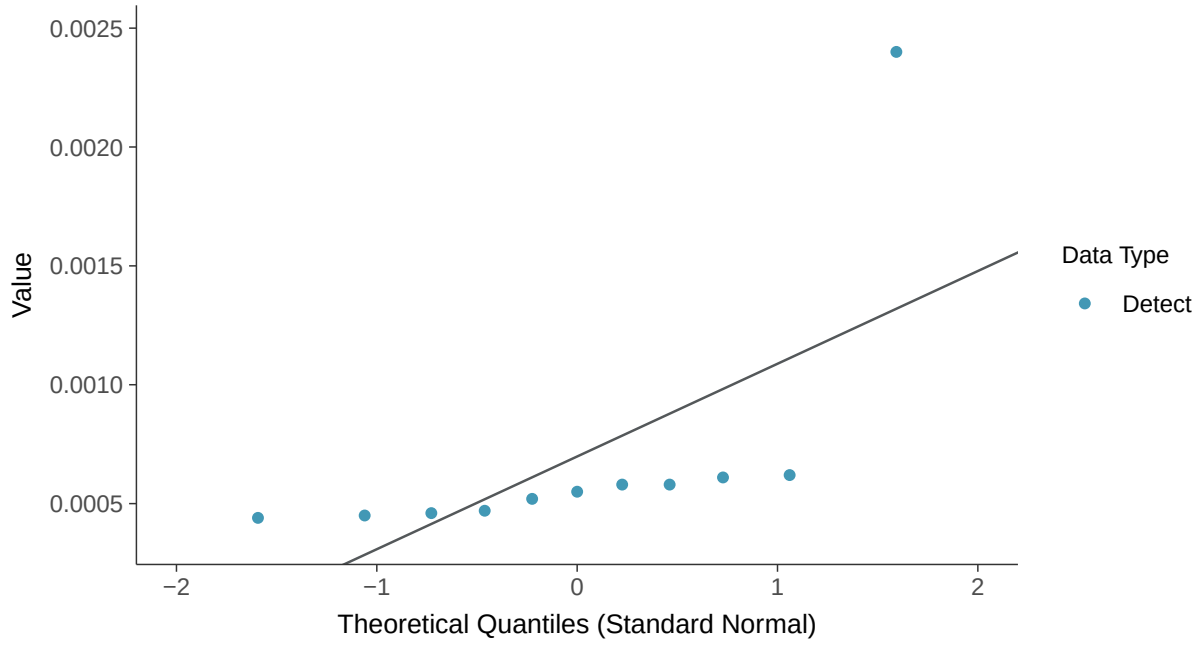
Boxplot by Season

Arsenic, MW-32 (mg/L)



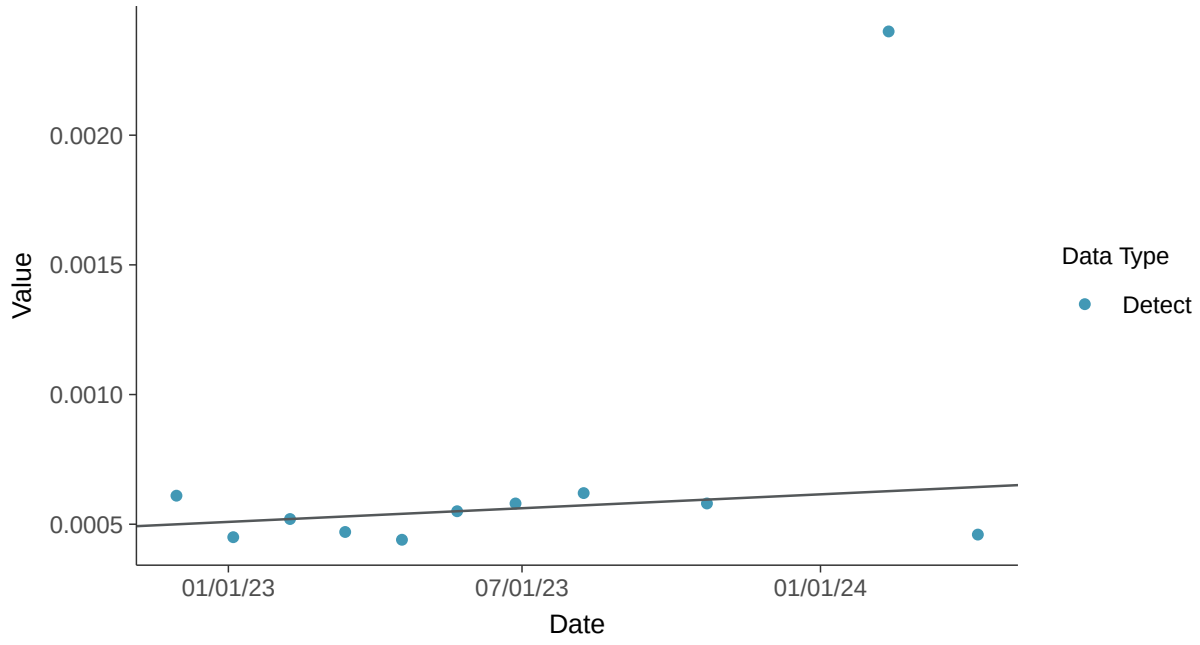
Normal Q-Q plot

Arsenic, MW-32 (mg/L)



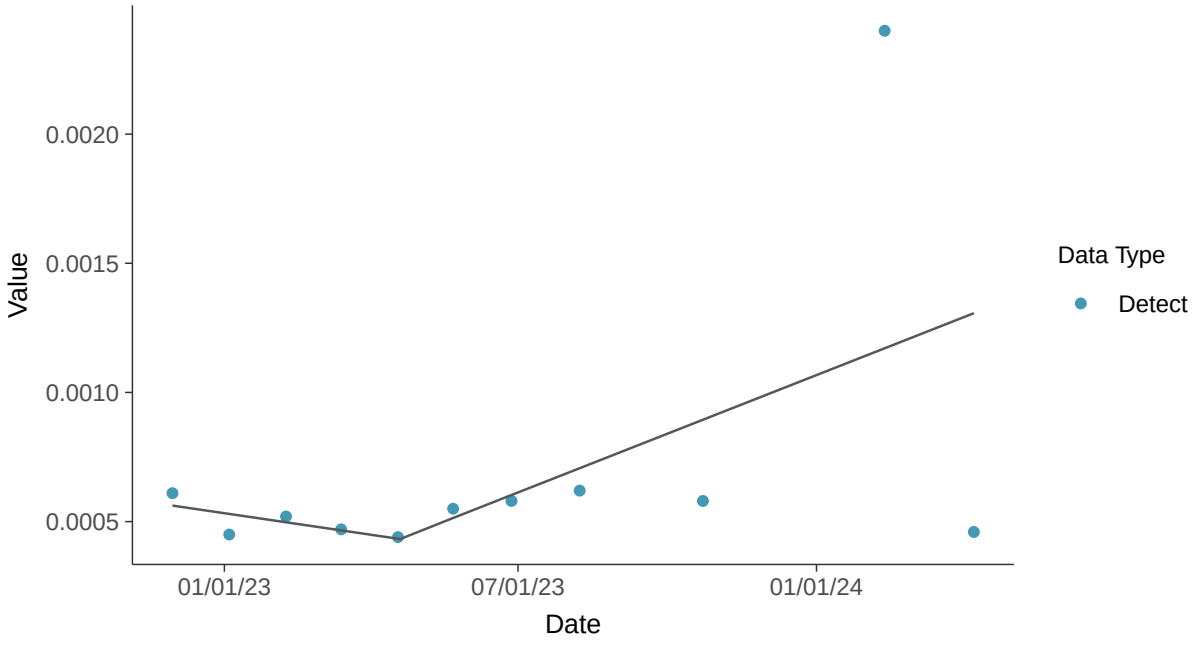
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Arsenic, MW-32 (mg/L)



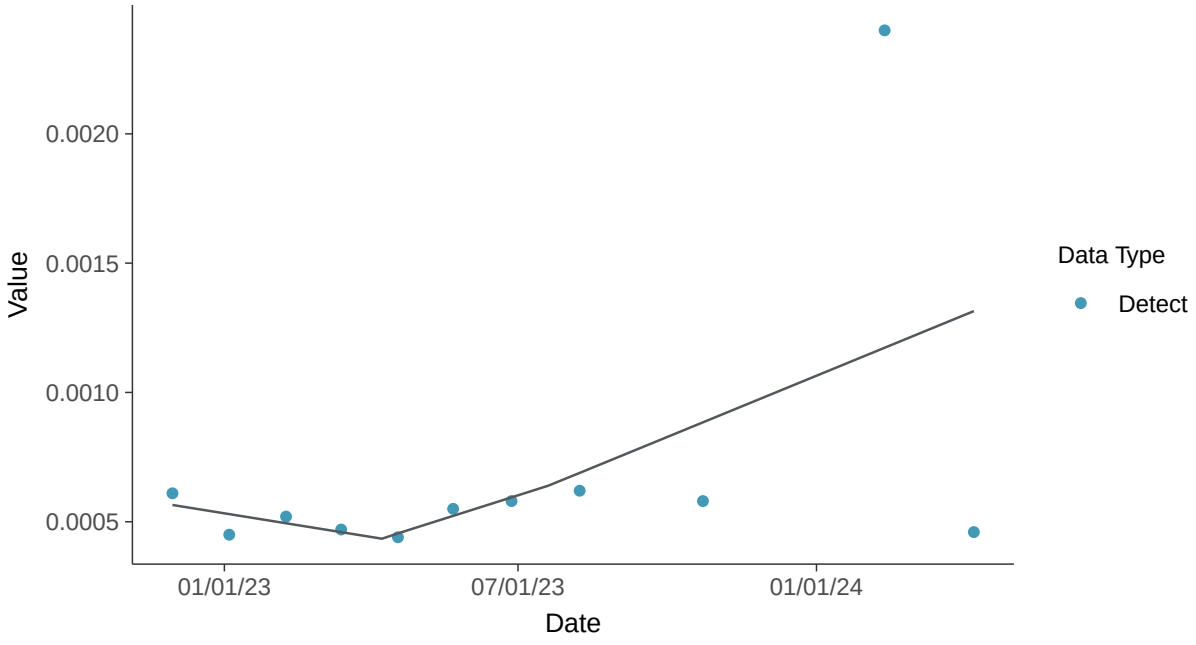
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-32 (mg/L)



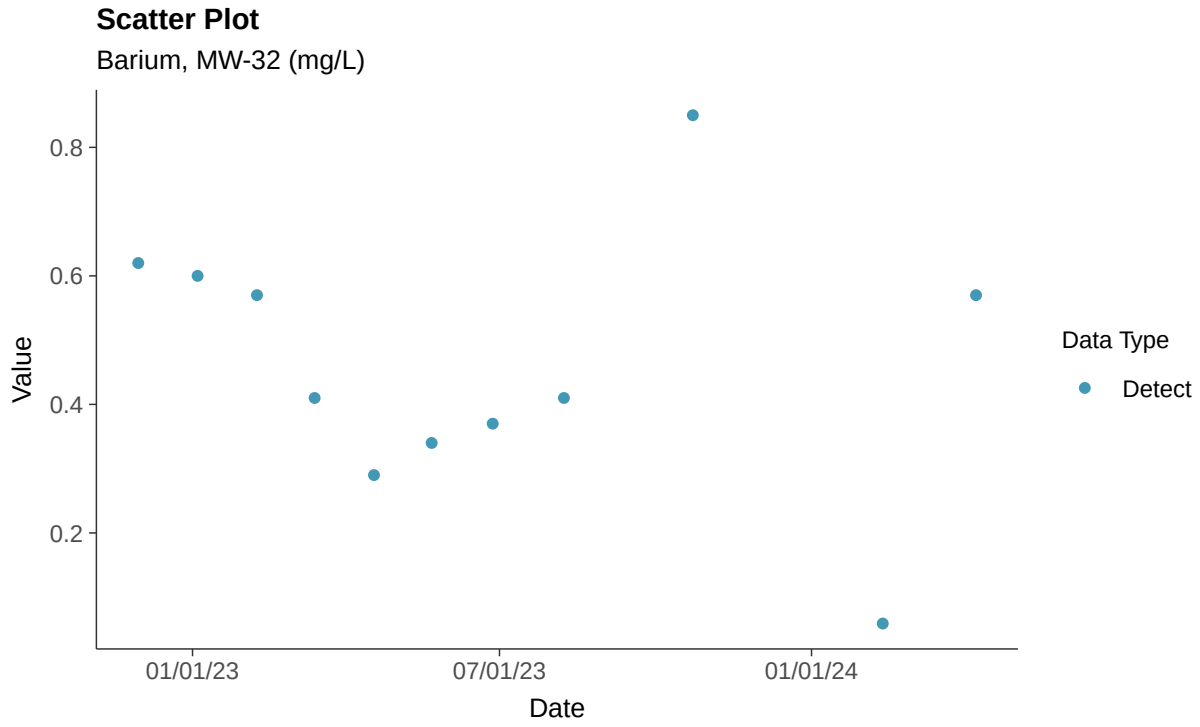
Trend Regression: Piecewise Linear-Linear-Linear

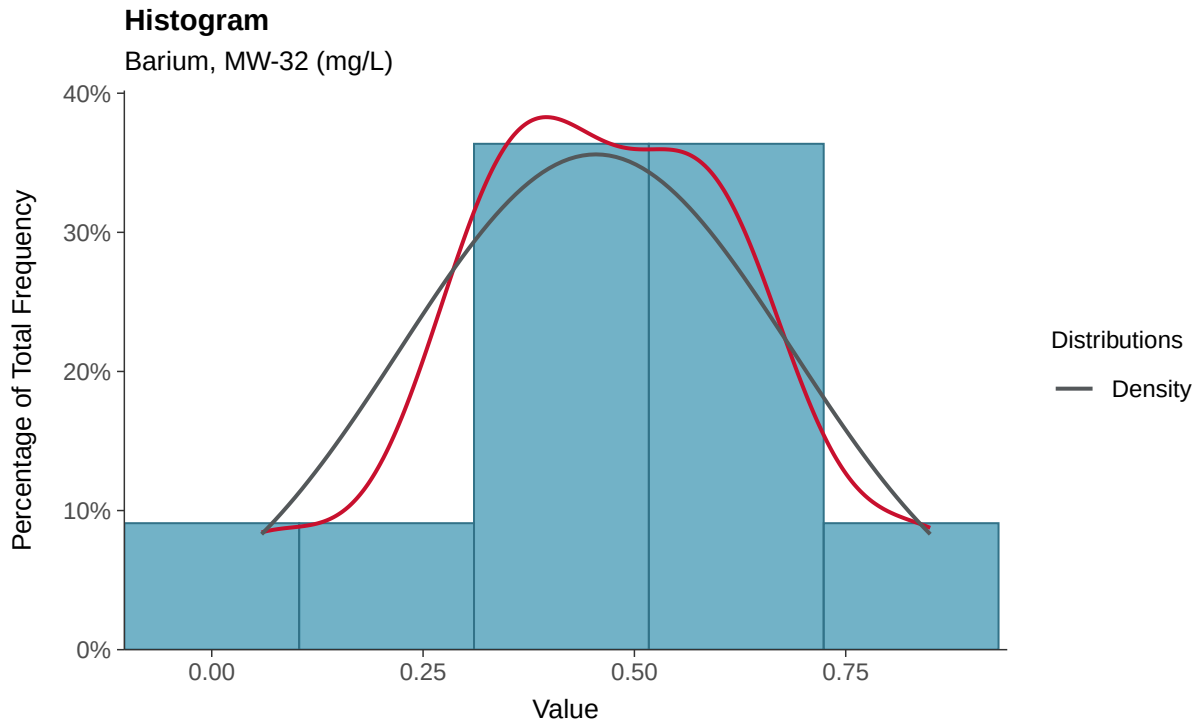
Arsenic, MW-32 (mg/L)



Appendix IV: Barium, MW-32

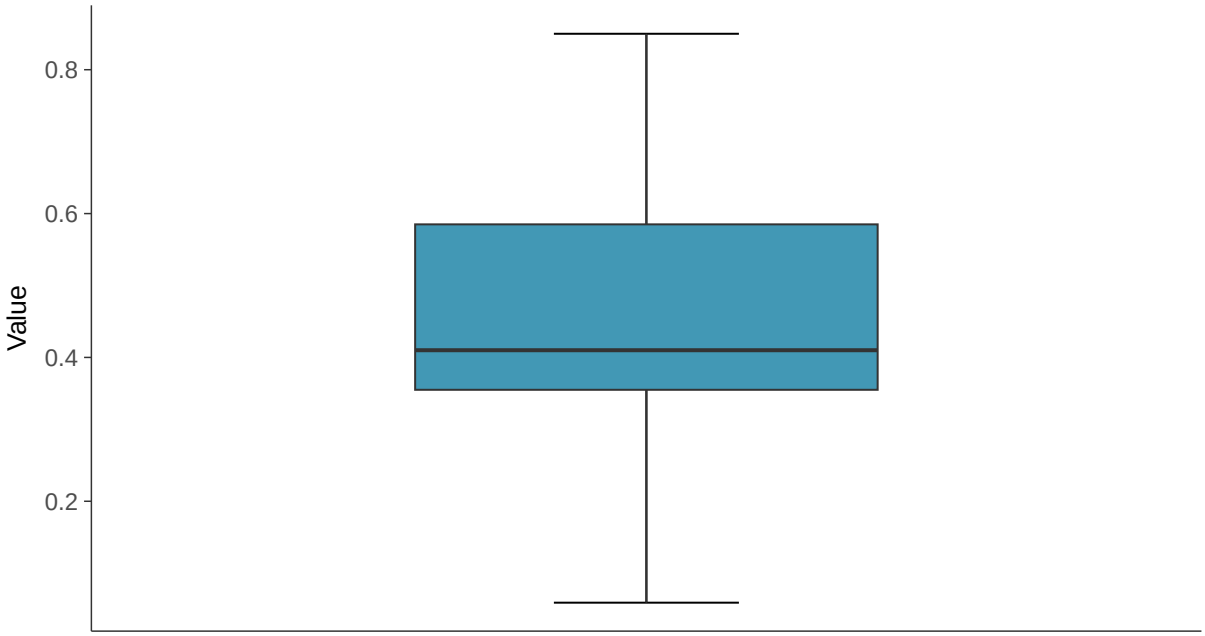
ID: 1_42_5_103





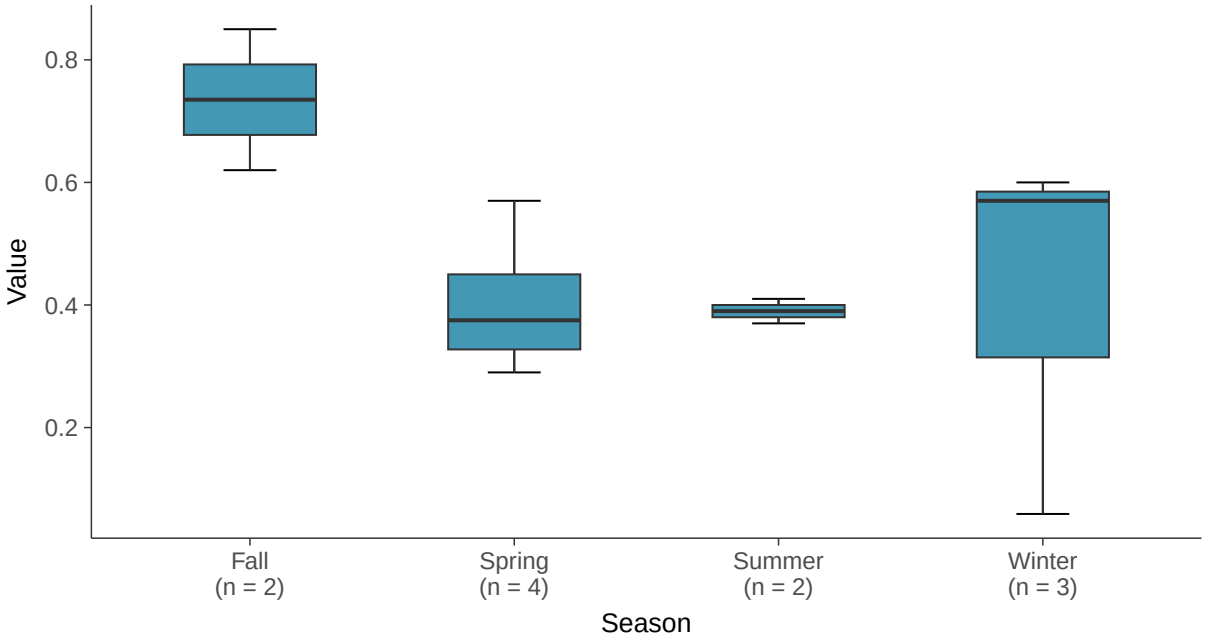
Boxplot

Barium, MW-32 (mg/L)



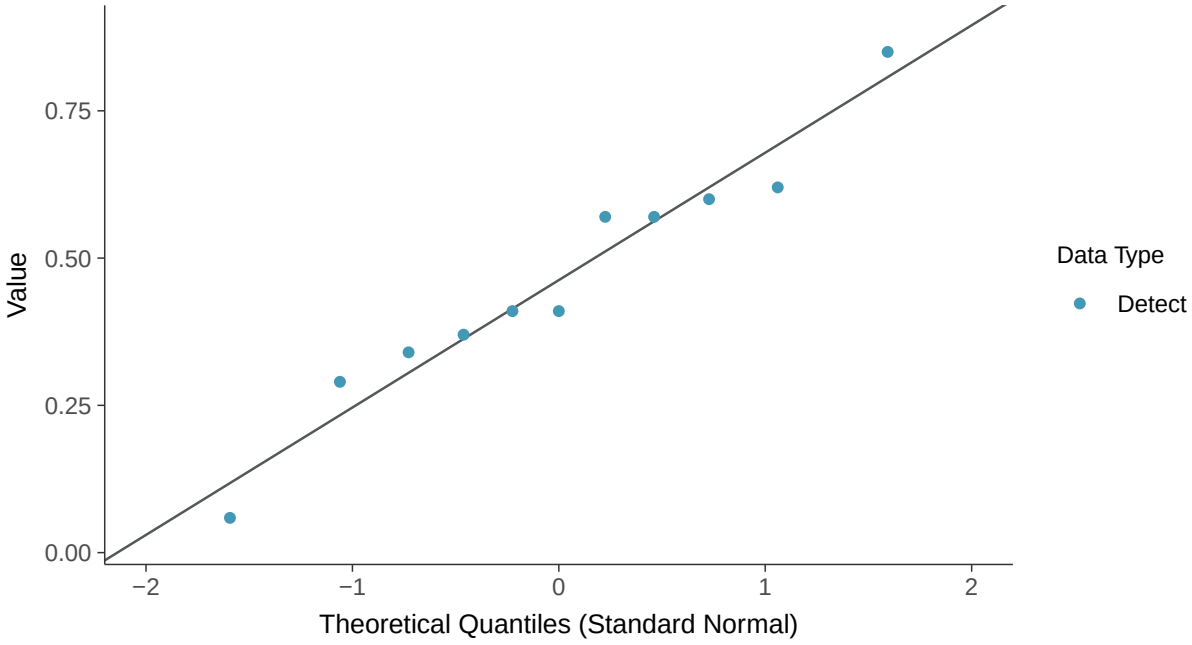
Boxplot by Season

Barium, MW-32 (mg/L)



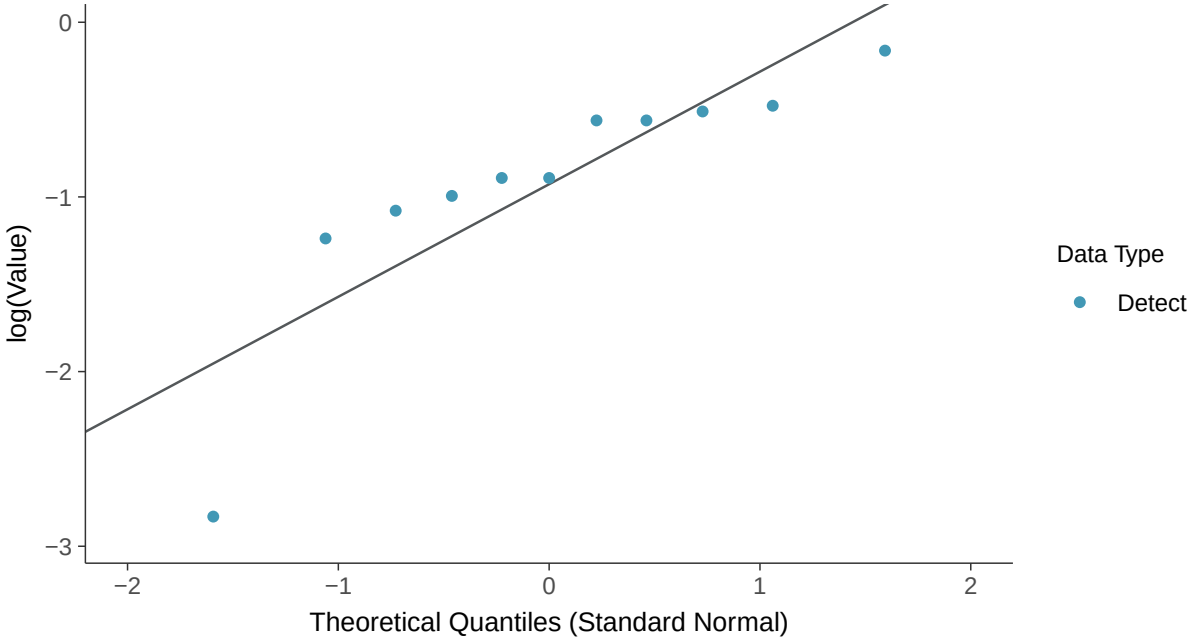
Normal Q-Q plot

Barium, MW-32 (mg/L)



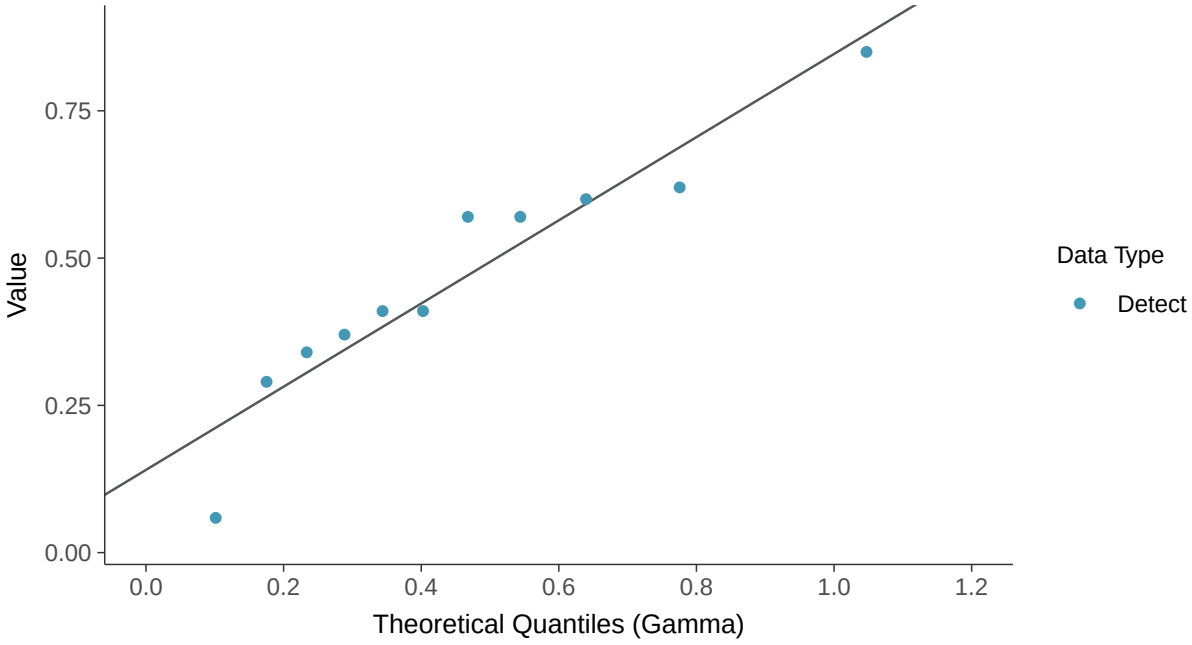
Lognormal Q-Q plot

Barium, MW-32 (mg/L)



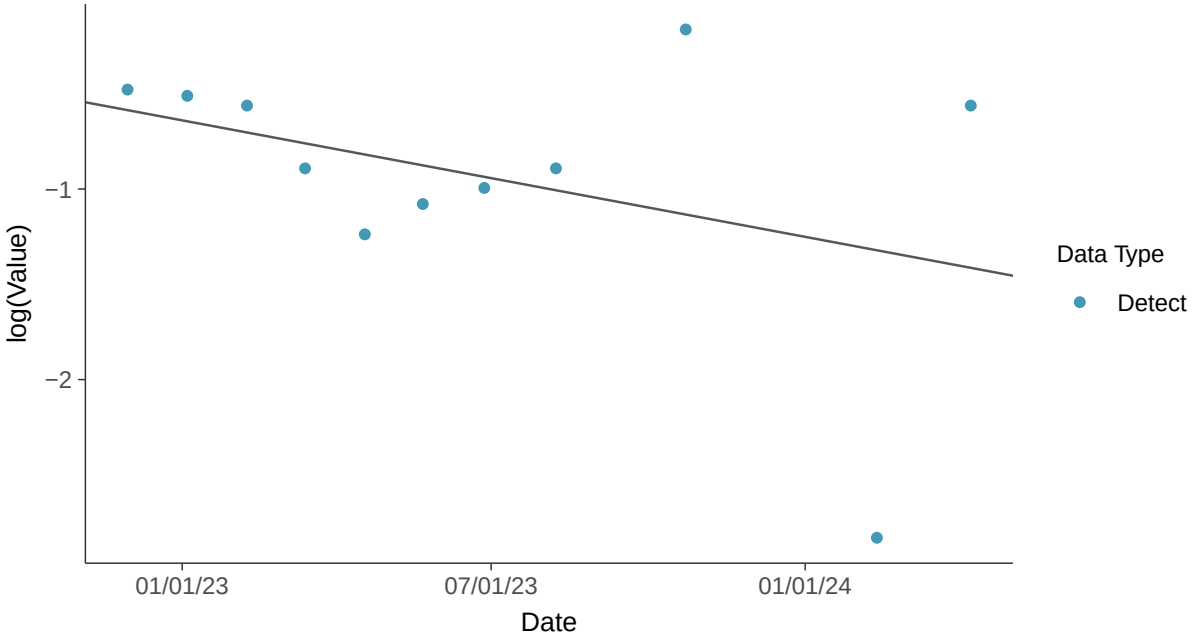
Gamma Q-Q plot

Barium, MW-32 (mg/L)



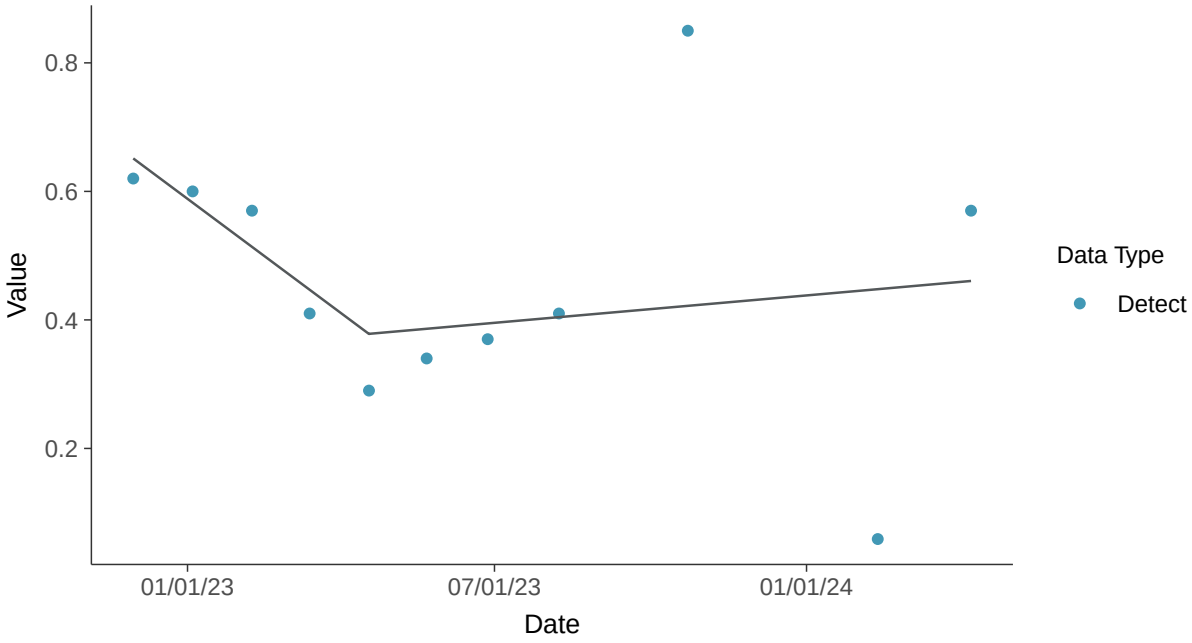
Trend Regression: Lognormal MLE

Barium, MW-32 (mg/L)



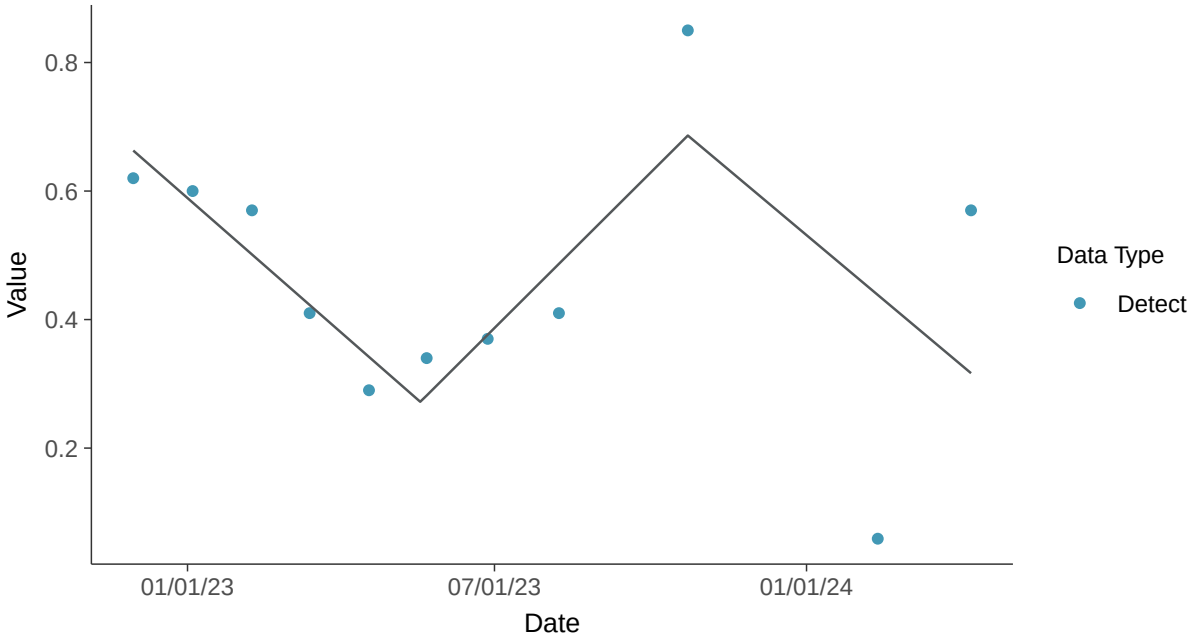
Trend Regression: Piecewise Linear-Linear

Barium, MW-32 (mg/L)



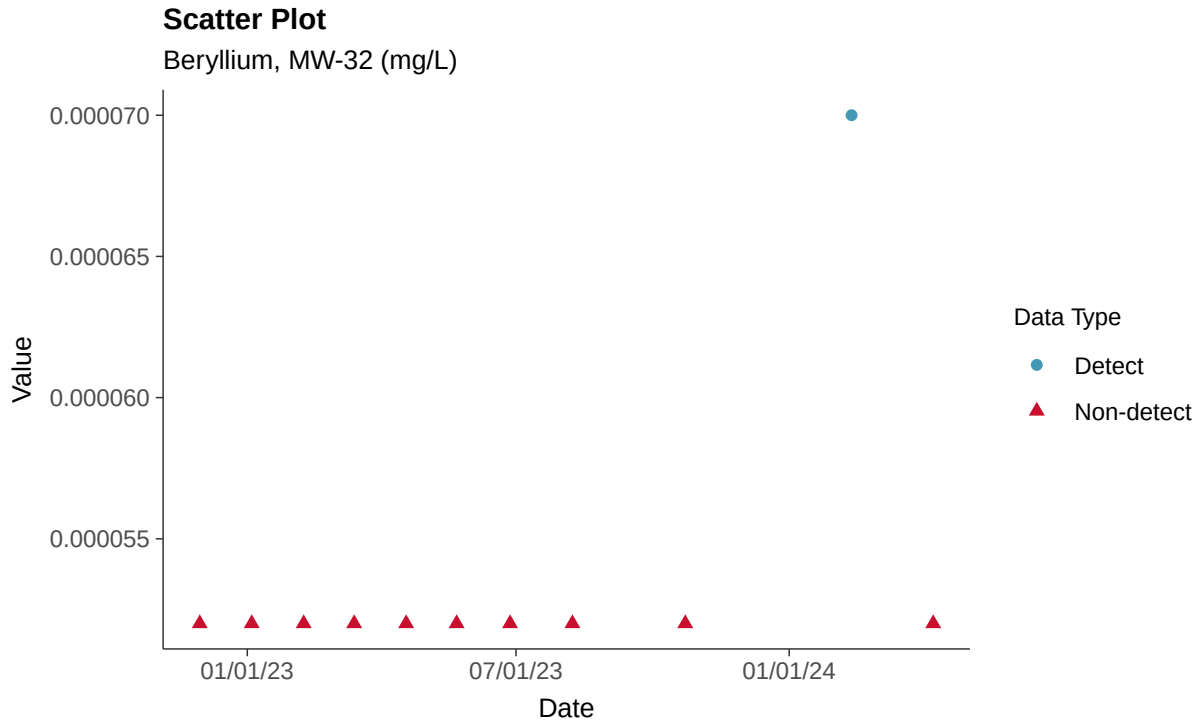
Trend Regression: Piecewise Linear-Linear-Linear

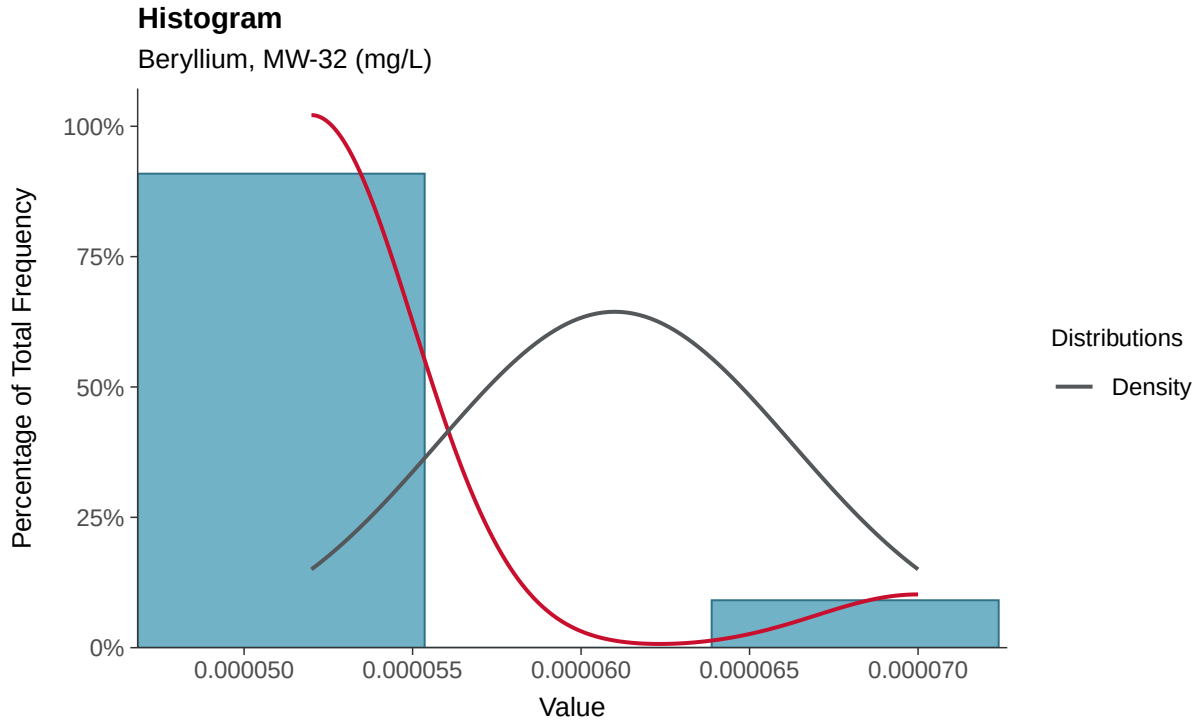
Barium, MW-32 (mg/L)

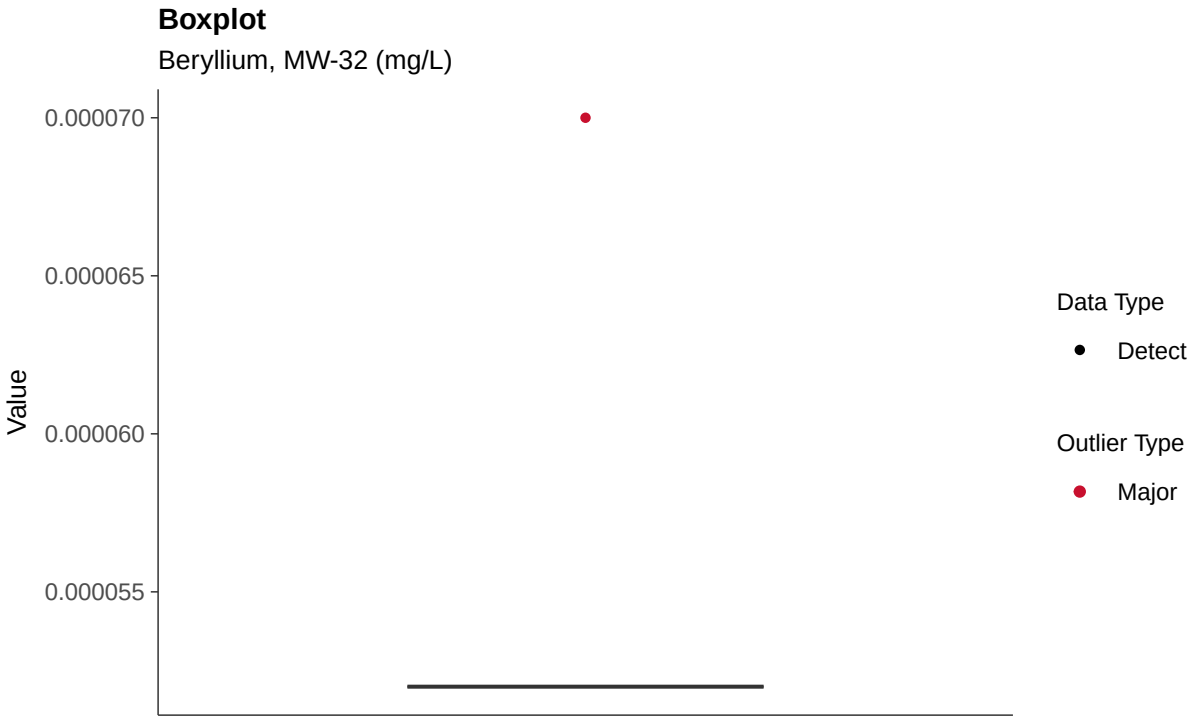


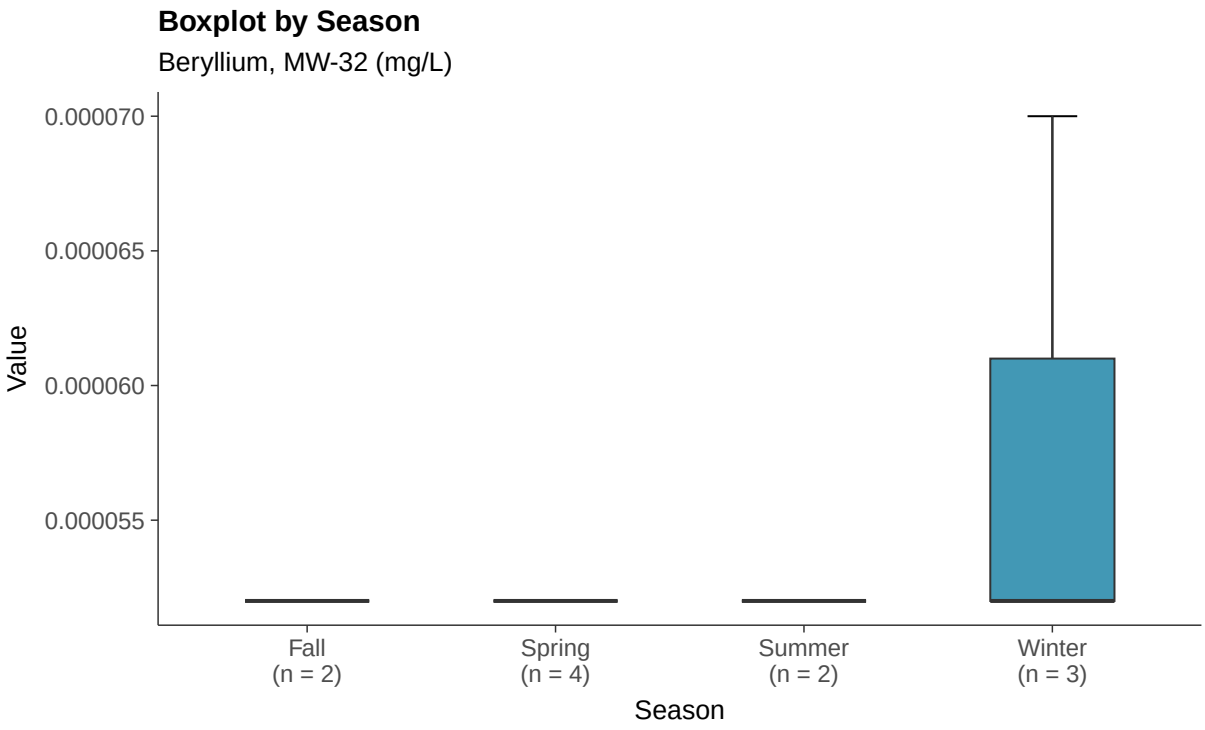
Appendix IV: Beryllium, MW-32

ID: 1_42_5_104



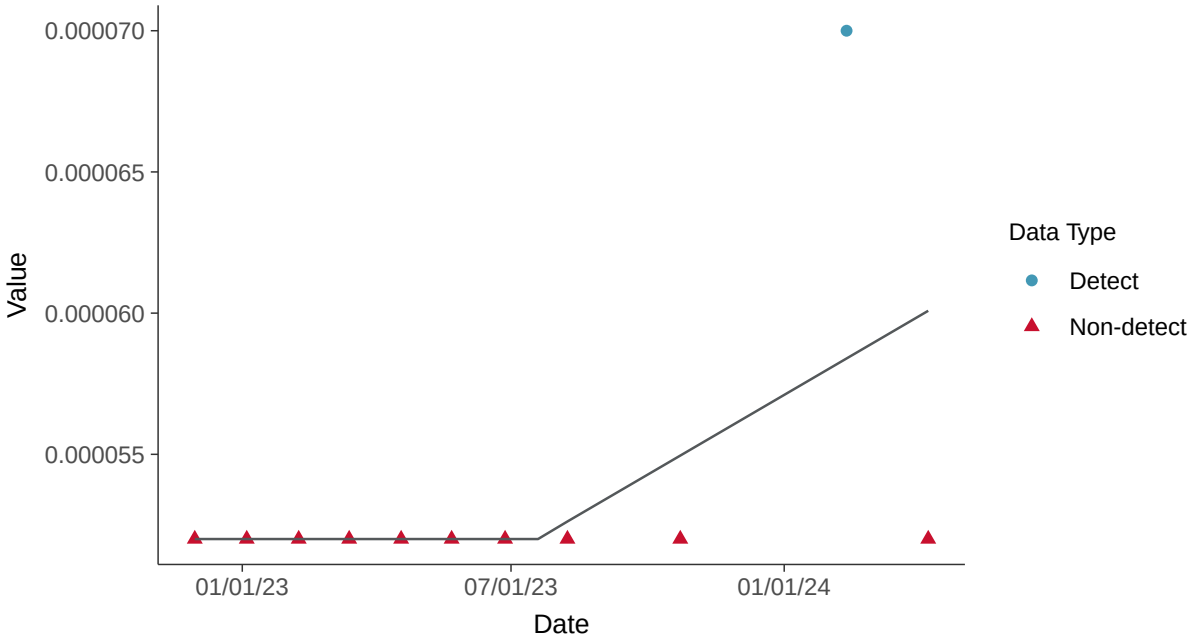



Boxplot
Beryllium, MW-32 (mg/L)
0.000070
0.000065
0.000060
0.000055
Value
Data Type
Detect
Outlier Type
Major


Boxplot by Season
Beryllium, MW-32 (mg/L)
0.000070
0.000065
0.000060
0.000055
Value
Fall
(n = 2)
Spring
(n = 4)
Summer
(n = 2)
Winter
(n = 3)
Season

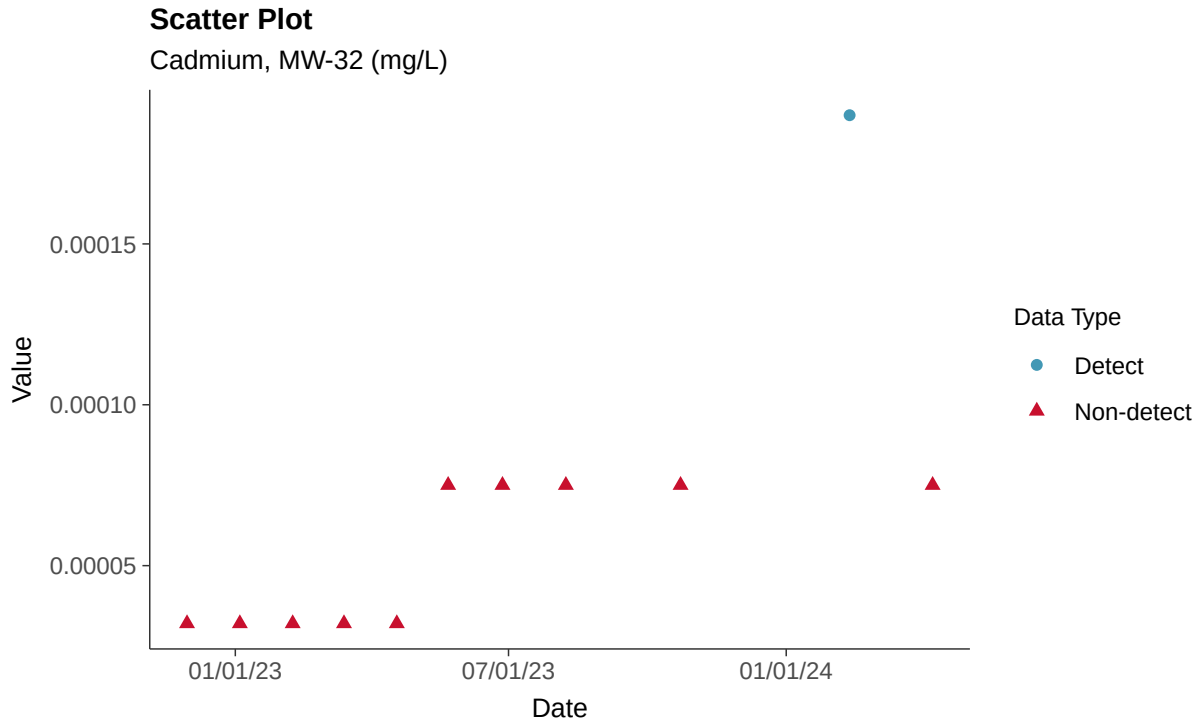
Trend Regression: Piecewise Linear-Linear

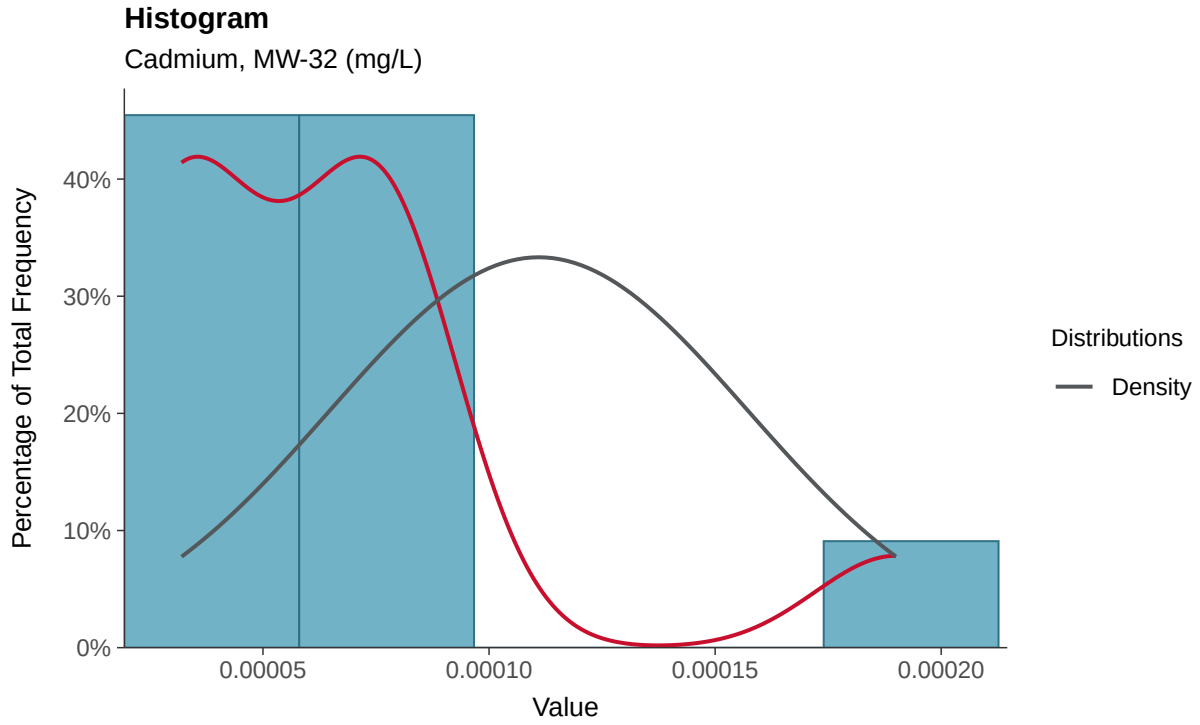
Beryllium, MW-32 (mg/L)



Appendix IV: Cadmium, MW-32

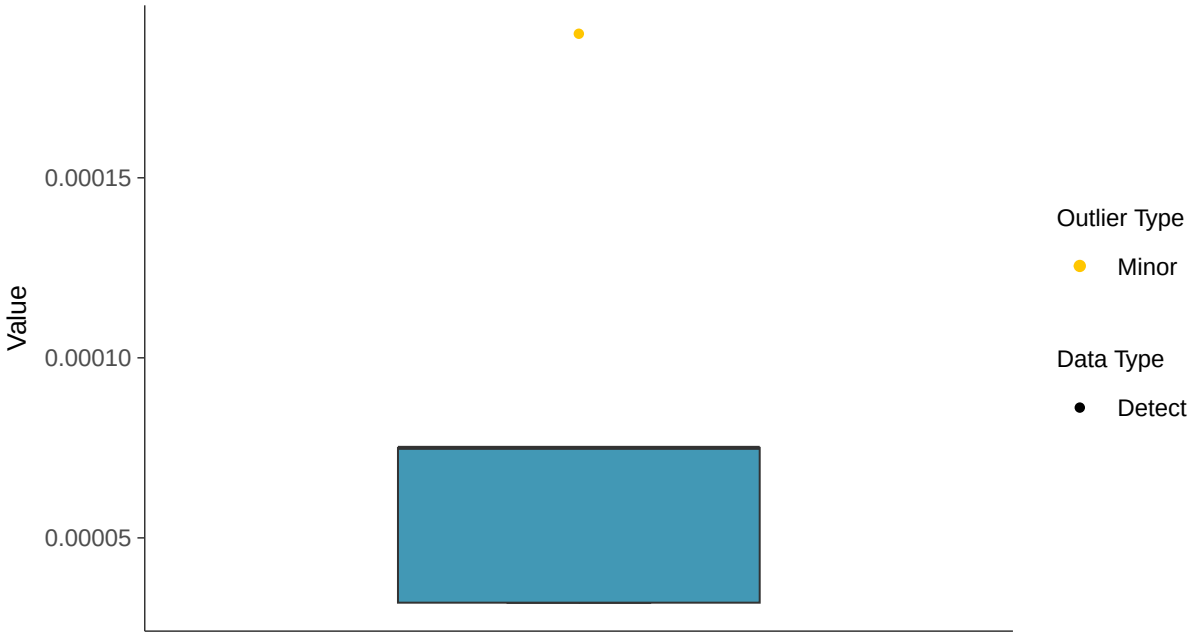
ID: 1_42_5_106





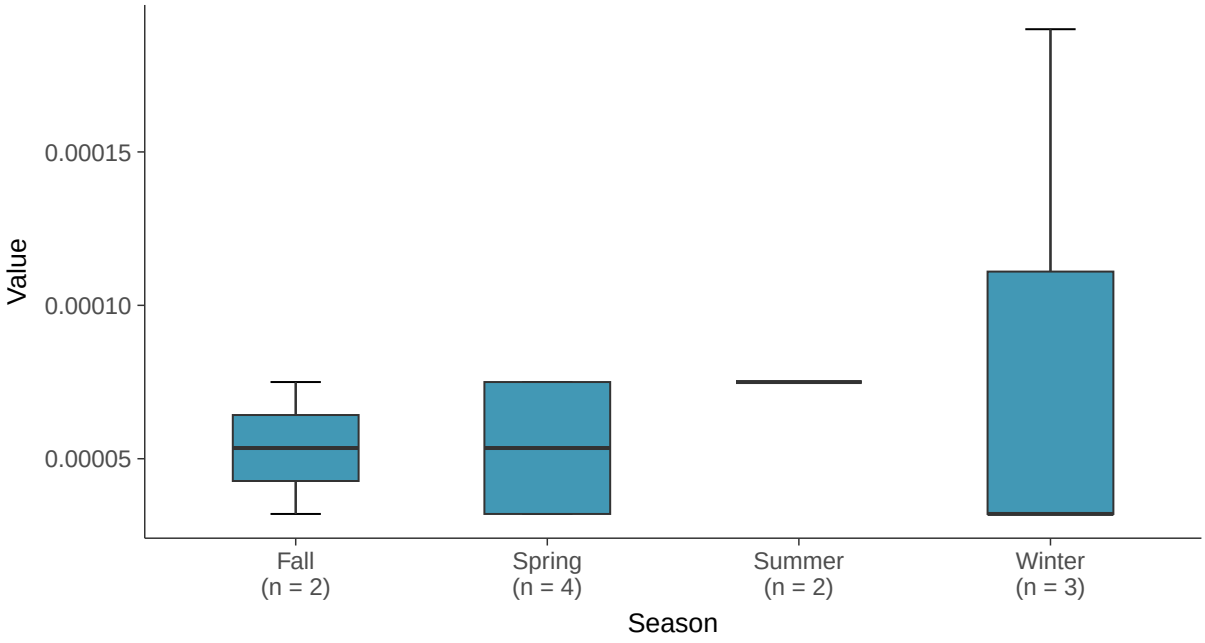
Boxplot

Cadmium, MW-32 (mg/L)



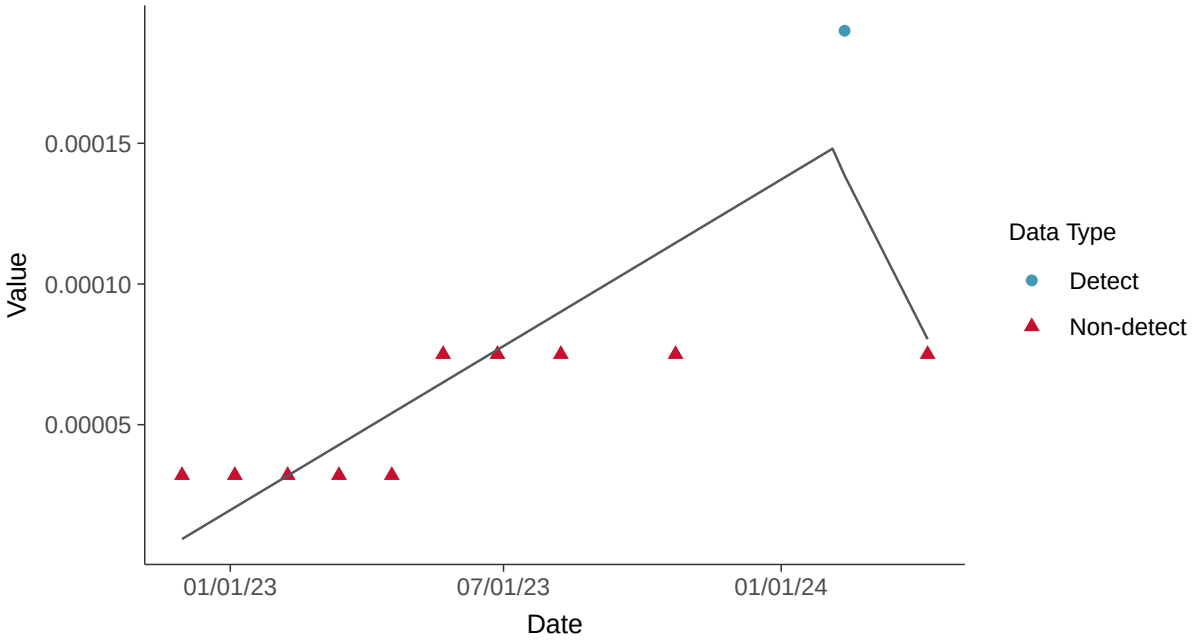
Boxplot by Season

Cadmium, MW-32 (mg/L)



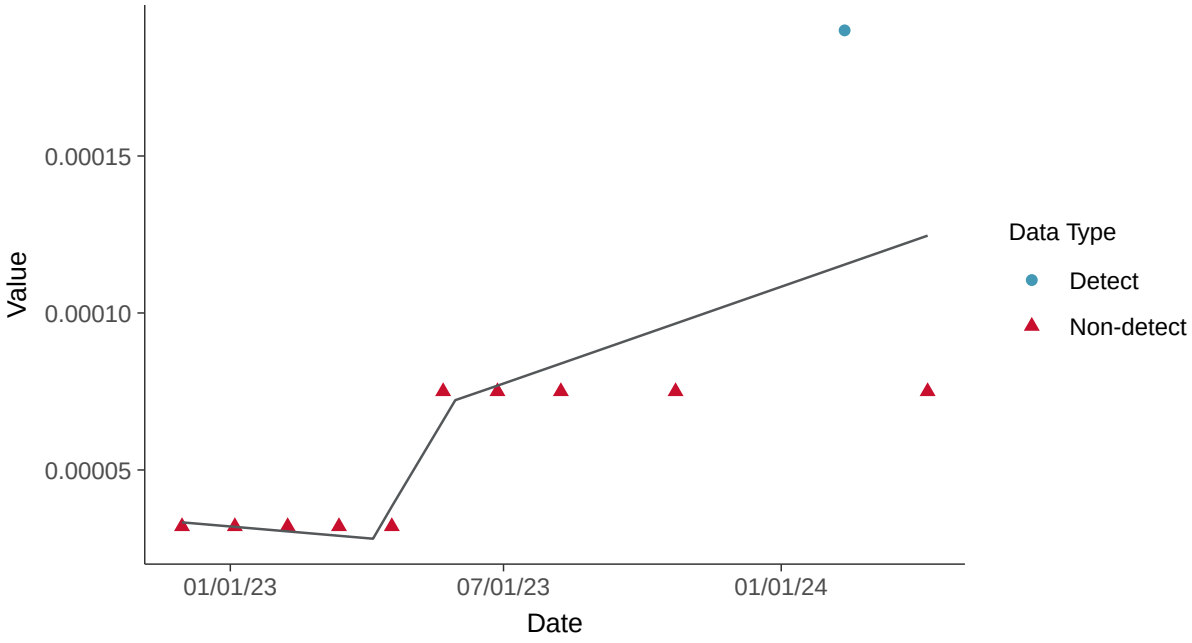
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-32 (mg/L)



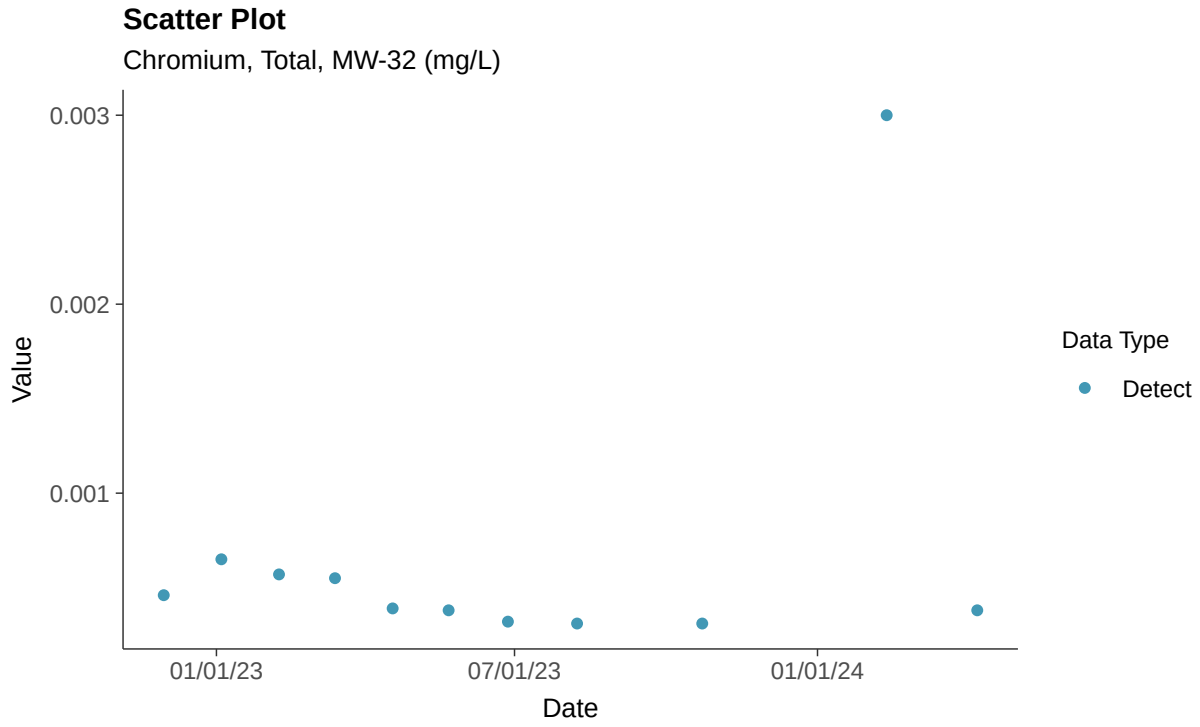
Trend Regression: Piecewise Linear-Linear-Linear

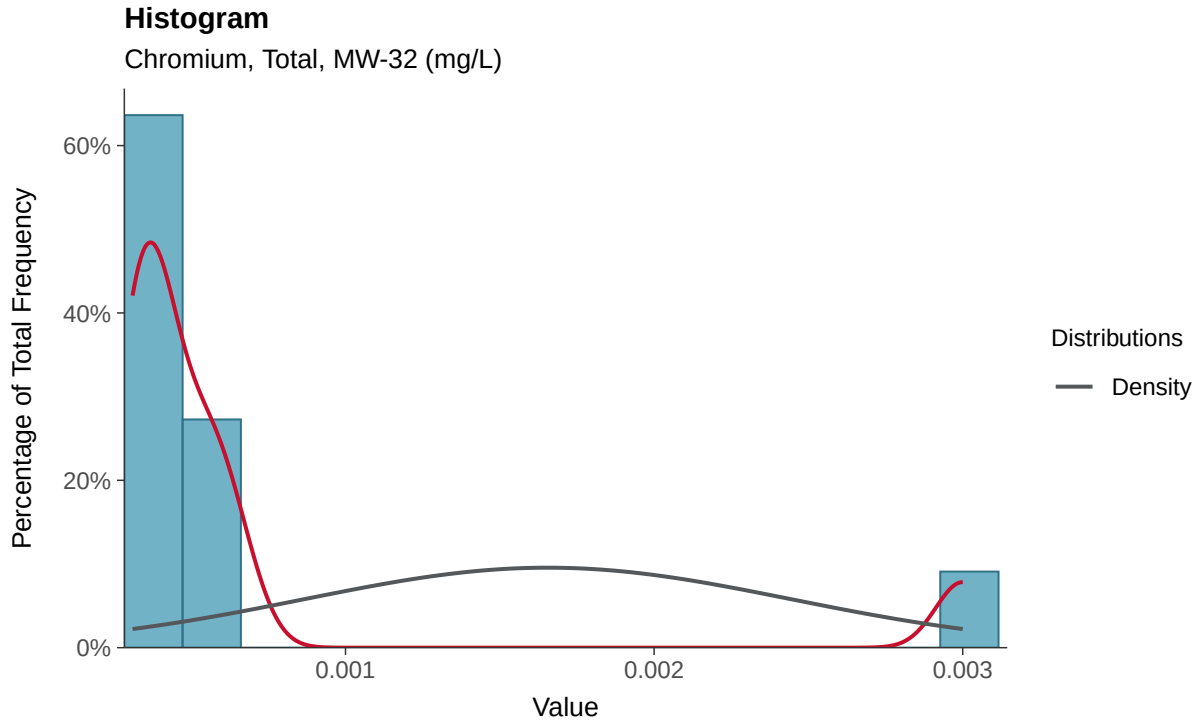
Cadmium, MW-32 (mg/L)



Appendix IV: Chromium, Total, MW-32

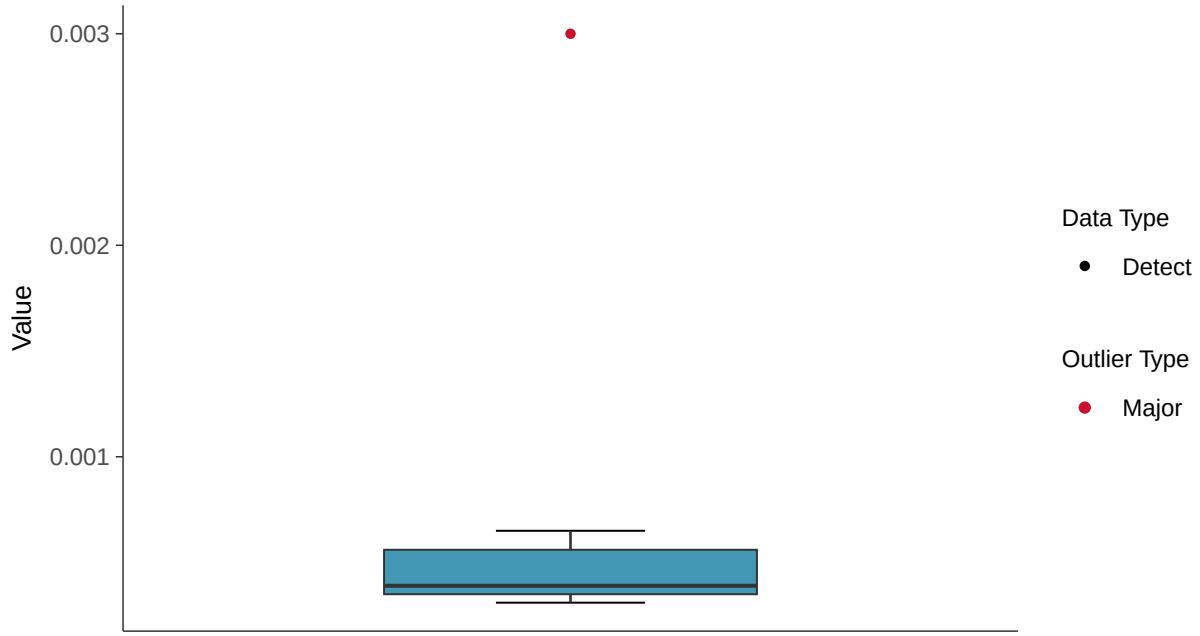
ID: 1_42_5_109





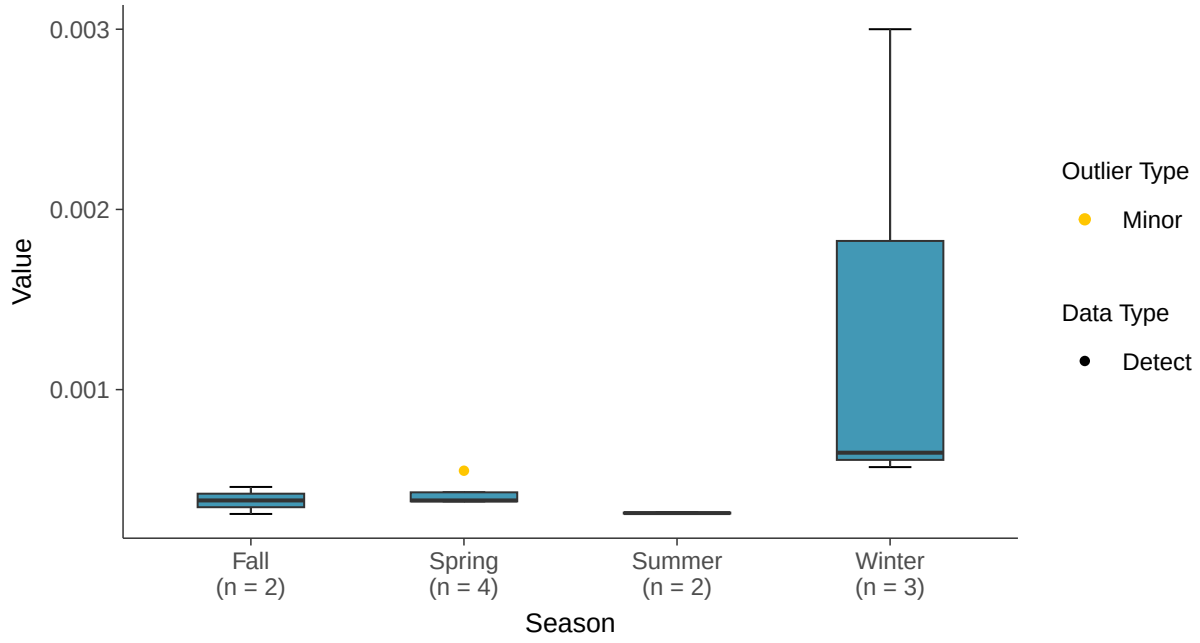
Boxplot

Chromium, Total, MW-32 (mg/L)



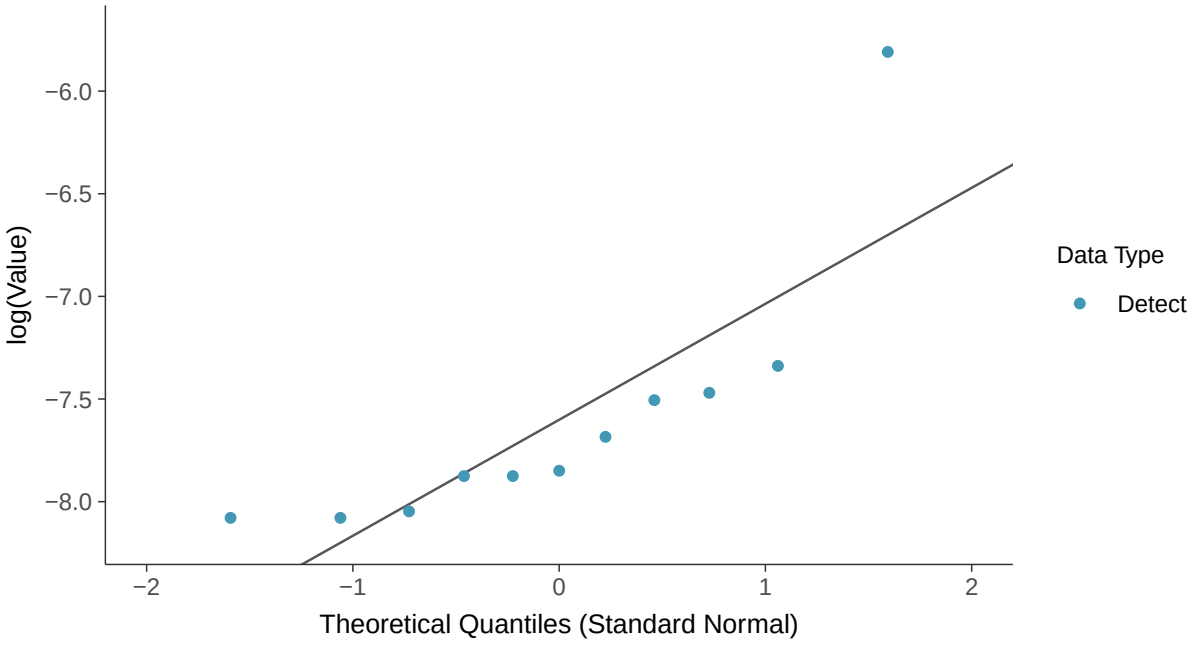
Boxplot by Season

Chromium, Total, MW-32 (mg/L)



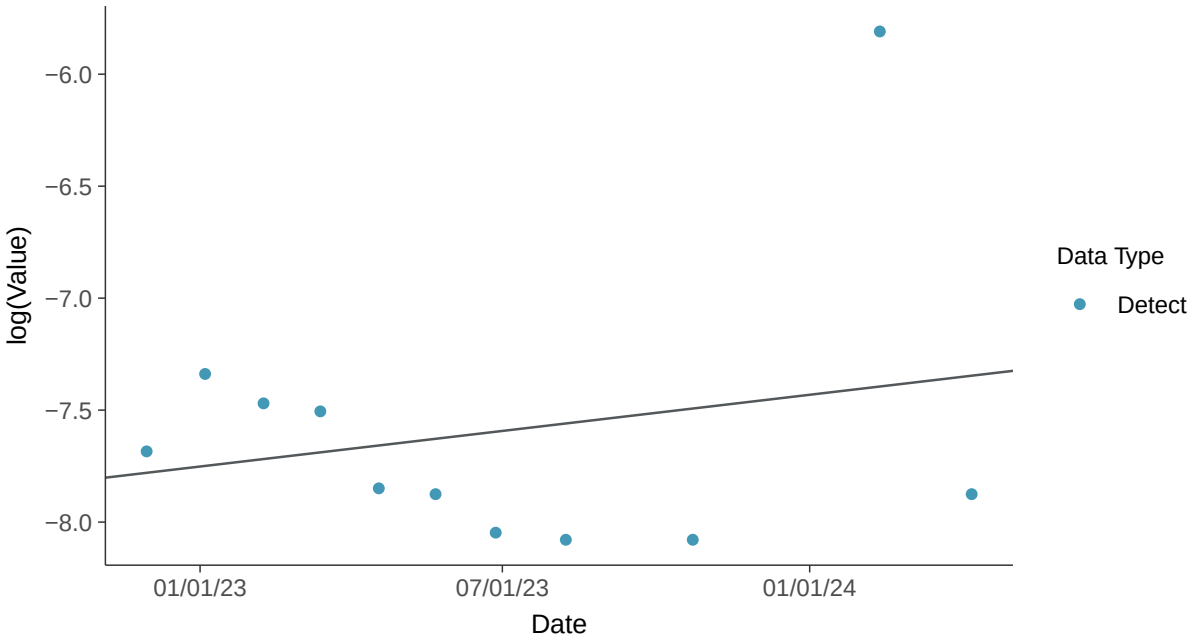
Lognormal Q-Q plot

Chromium, Total, MW-32 (mg/L)



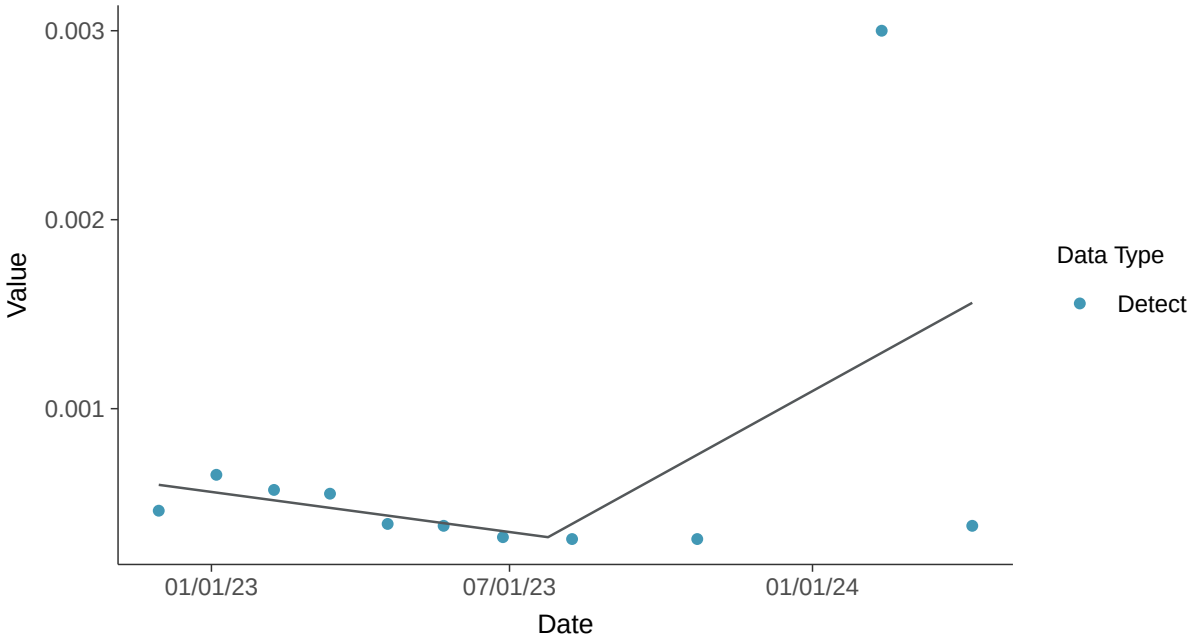
Trend Regression: Lognormal MLE

Chromium, Total, MW-32 (mg/L)



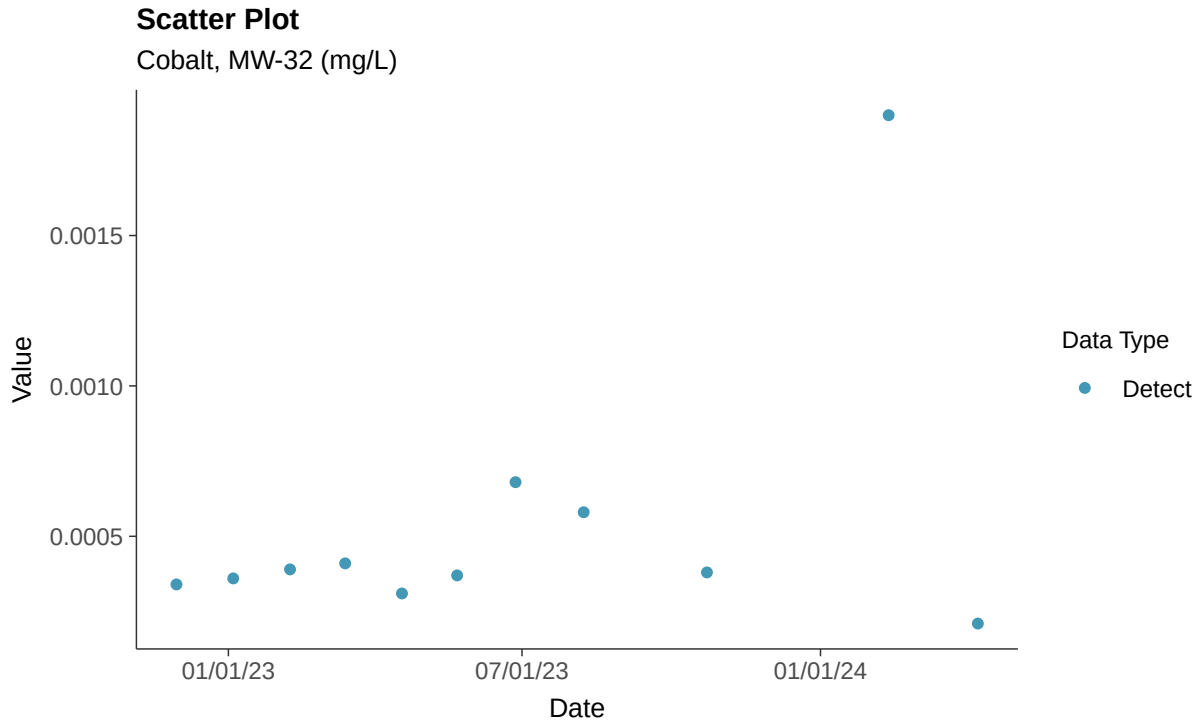
Trend Regression: Piecewise Linear-Linear

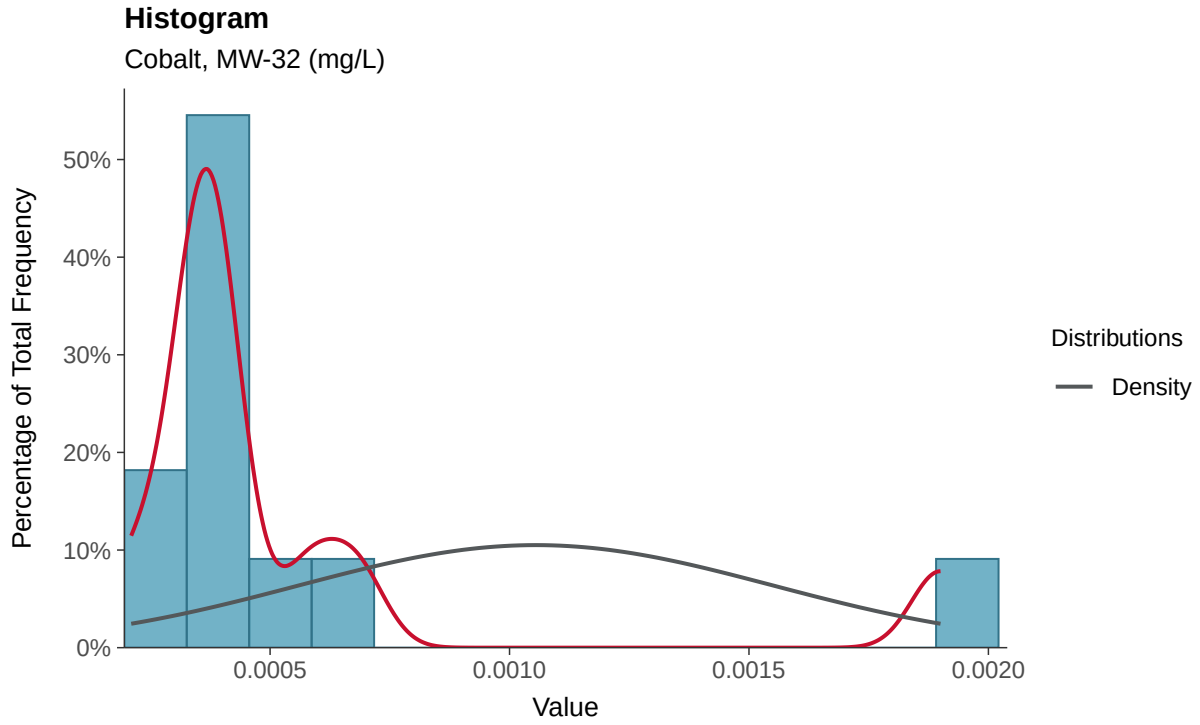
Chromium, Total, MW-32 (mg/L)



Appendix IV: Cobalt, MW-32

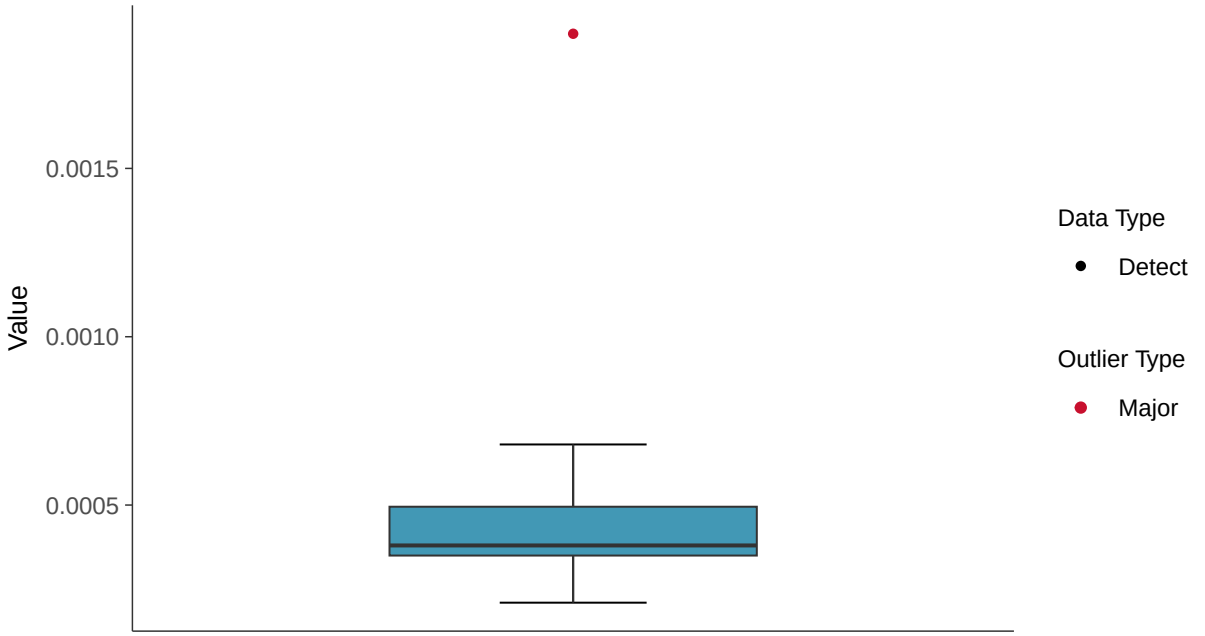
ID: 1_42_5_110





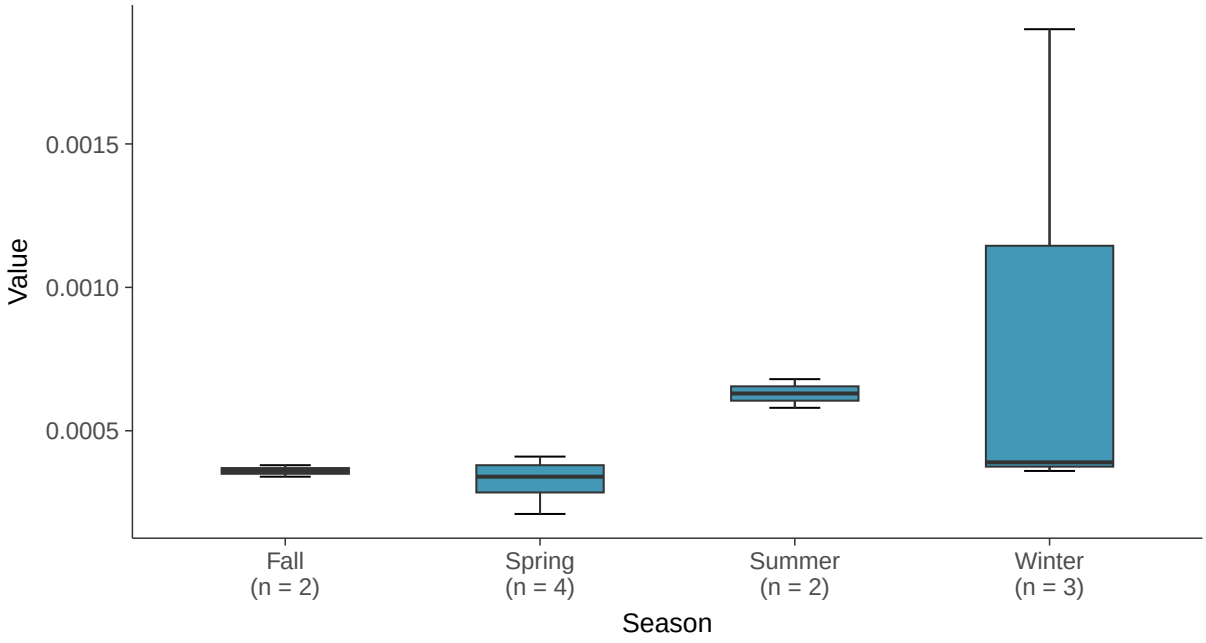
Boxplot

Cobalt, MW-32 (mg/L)



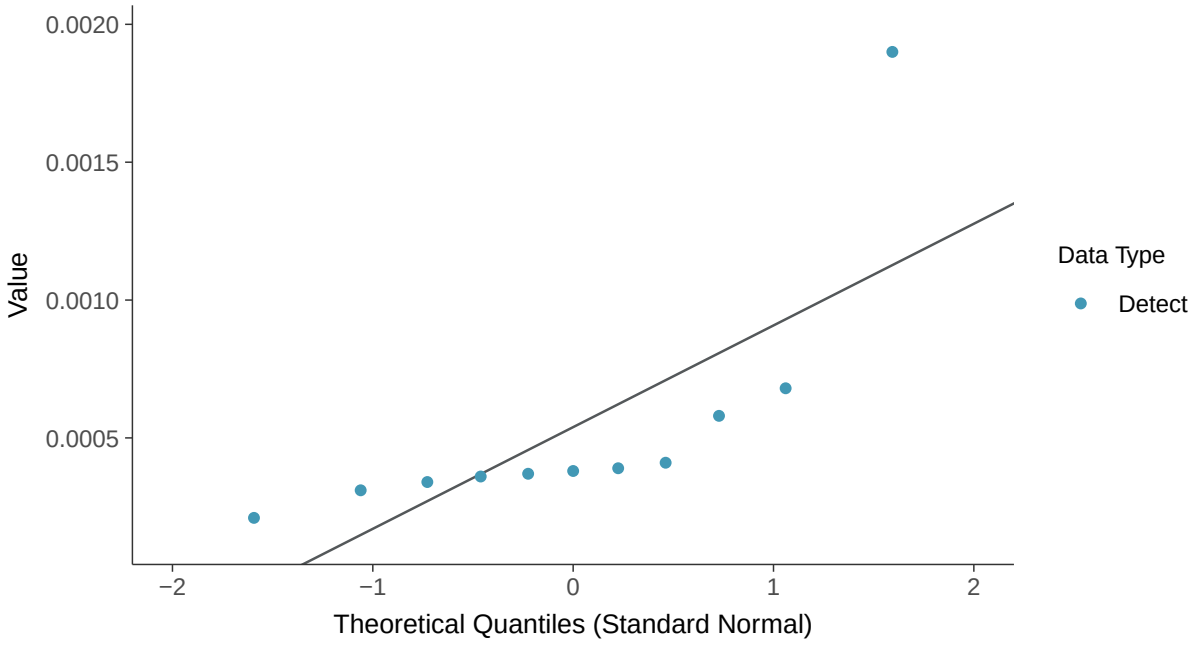
Boxplot by Season

Cobalt, MW-32 (mg/L)



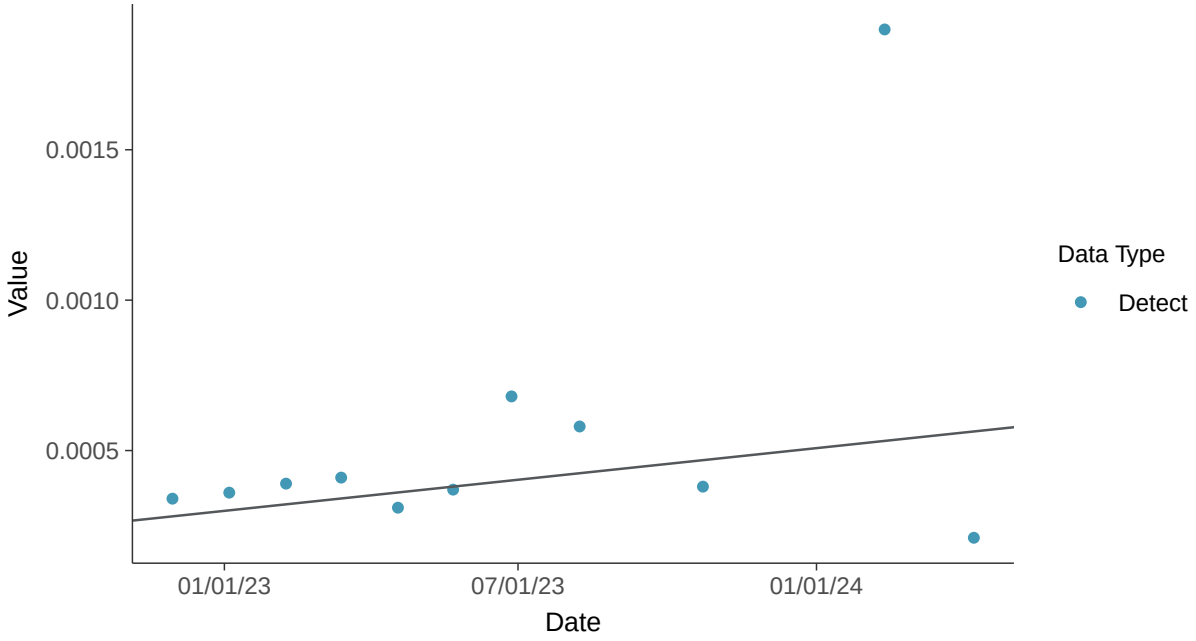
Normal Q-Q plot

Cobalt, MW-32 (mg/L)



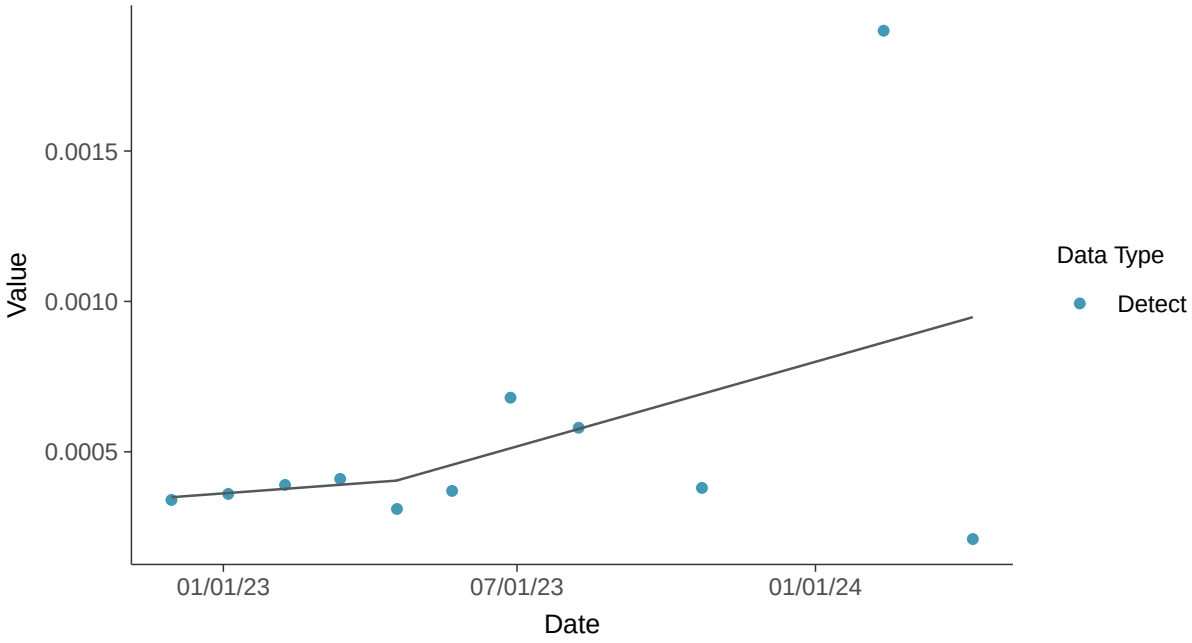
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Cobalt, MW-32 (mg/L)



Trend Regression: Piecewise Linear-Linear

Cobalt, MW-32 (mg/L)

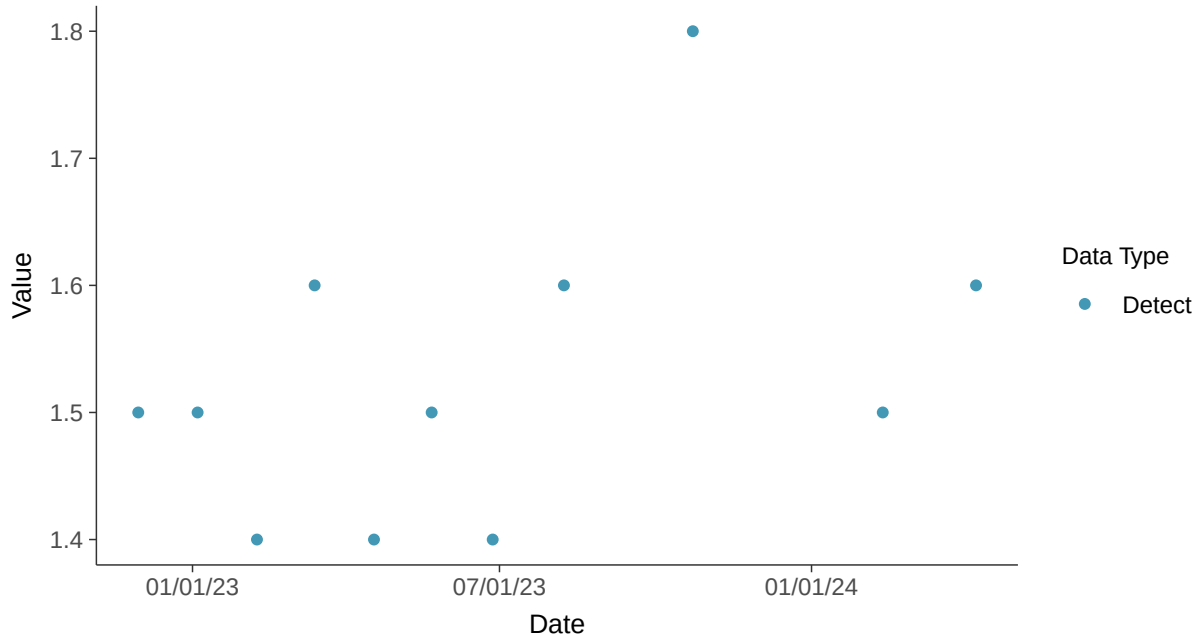


Appendix IV: Fluoride (App IV), MW-32

ID: 1_42_5_113

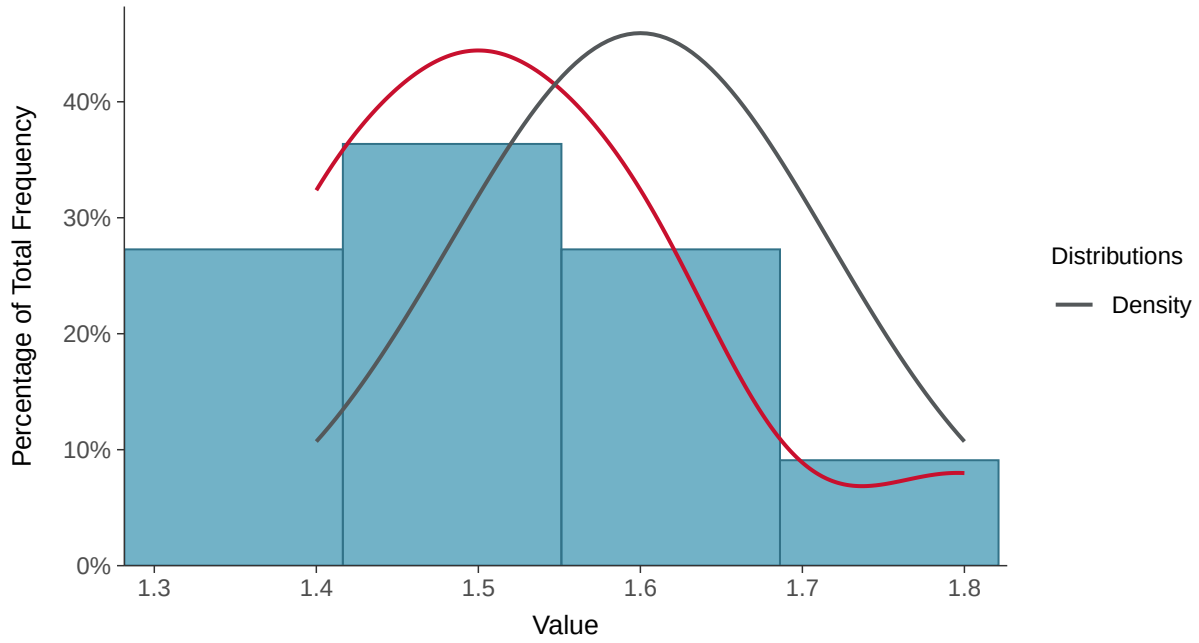
Scatter Plot

Fluoride (App IV), MW-32 (mg/L)



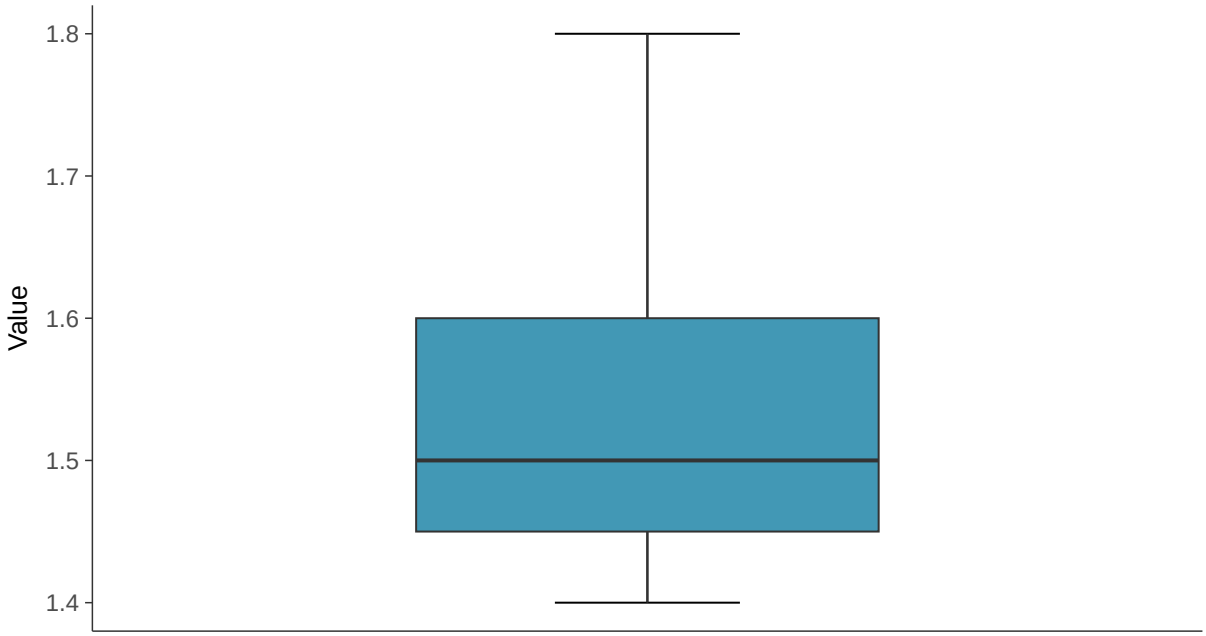
Histogram

Fluoride (App IV), MW-32 (mg/L)



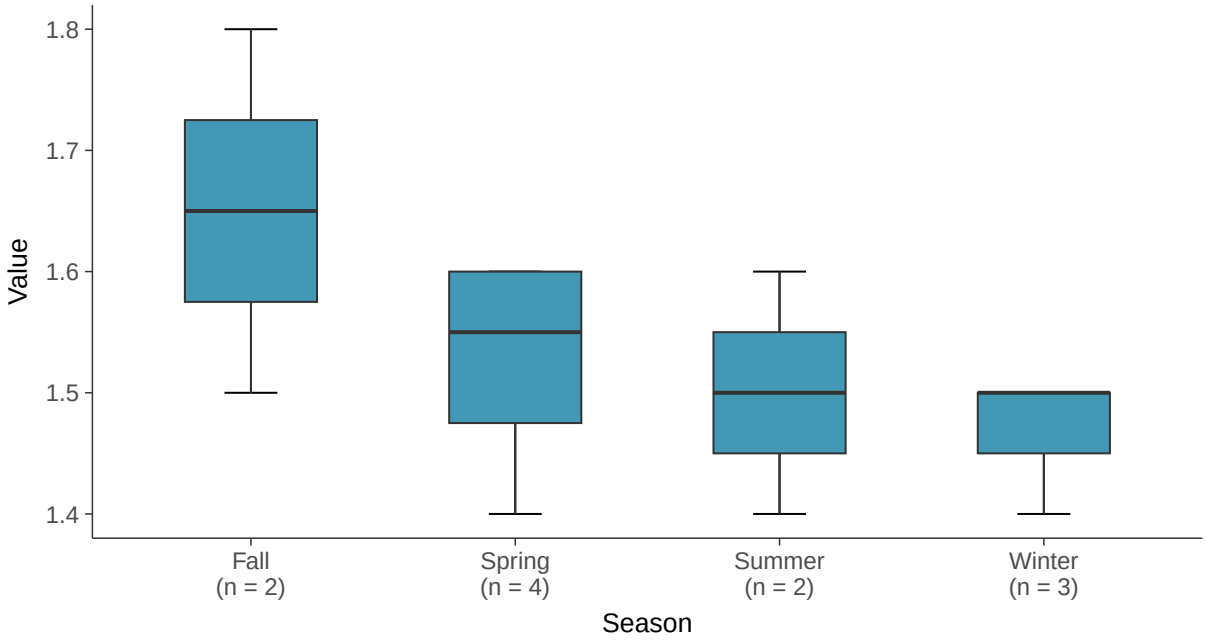
Boxplot

Fluoride (App IV), MW-32 (mg/L)



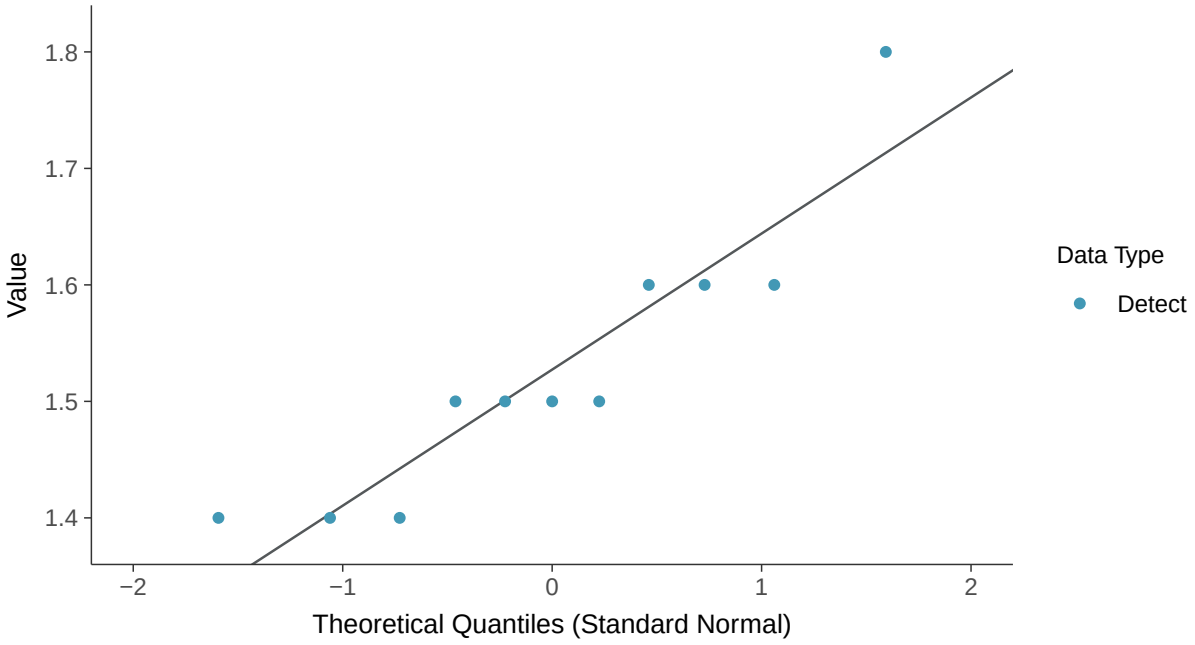
Boxplot by Season

Fluoride (App IV), MW-32 (mg/L)



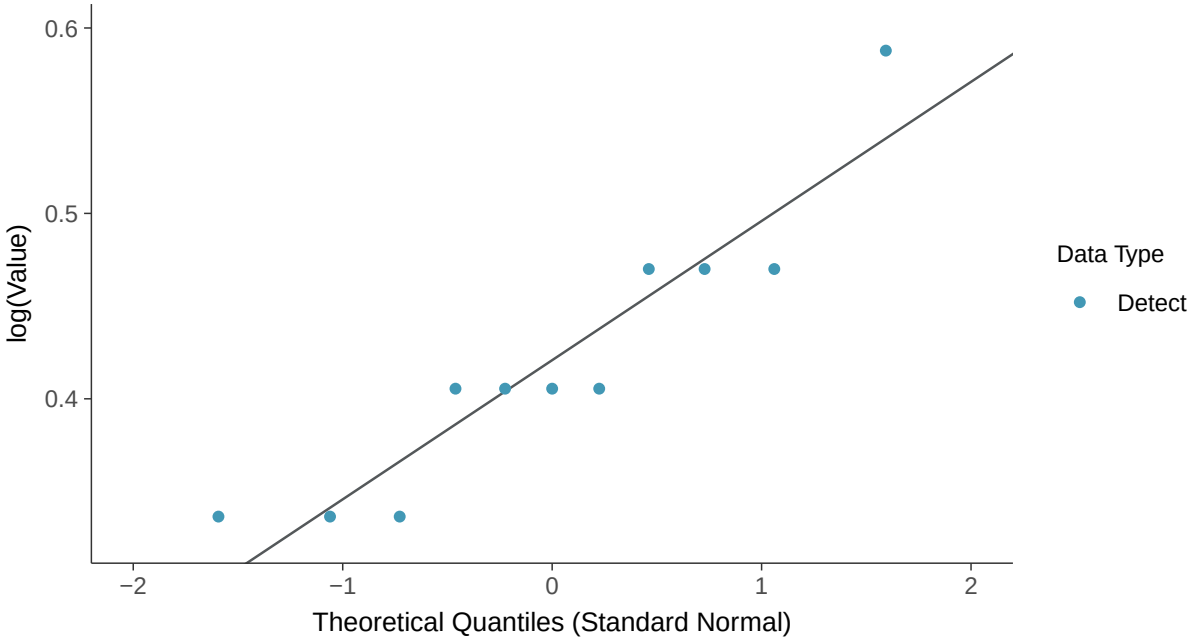
Normal Q-Q plot

Fluoride (App IV), MW-32 (mg/L)



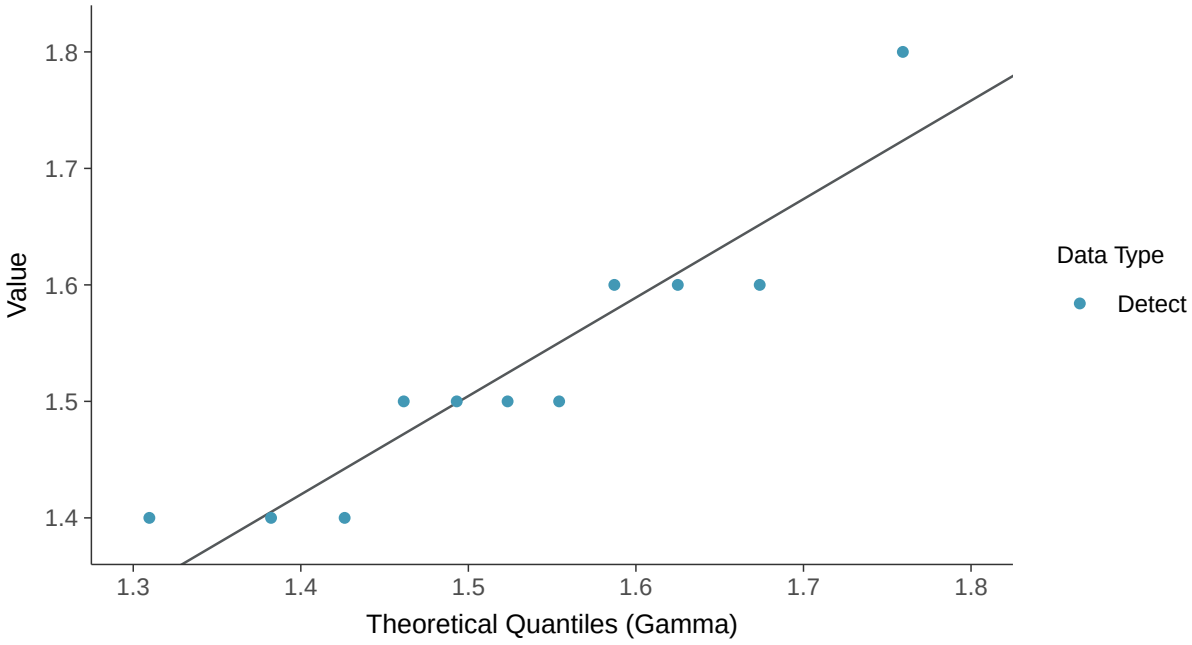
Lognormal Q-Q plot

Fluoride (App IV), MW-32 (mg/L)



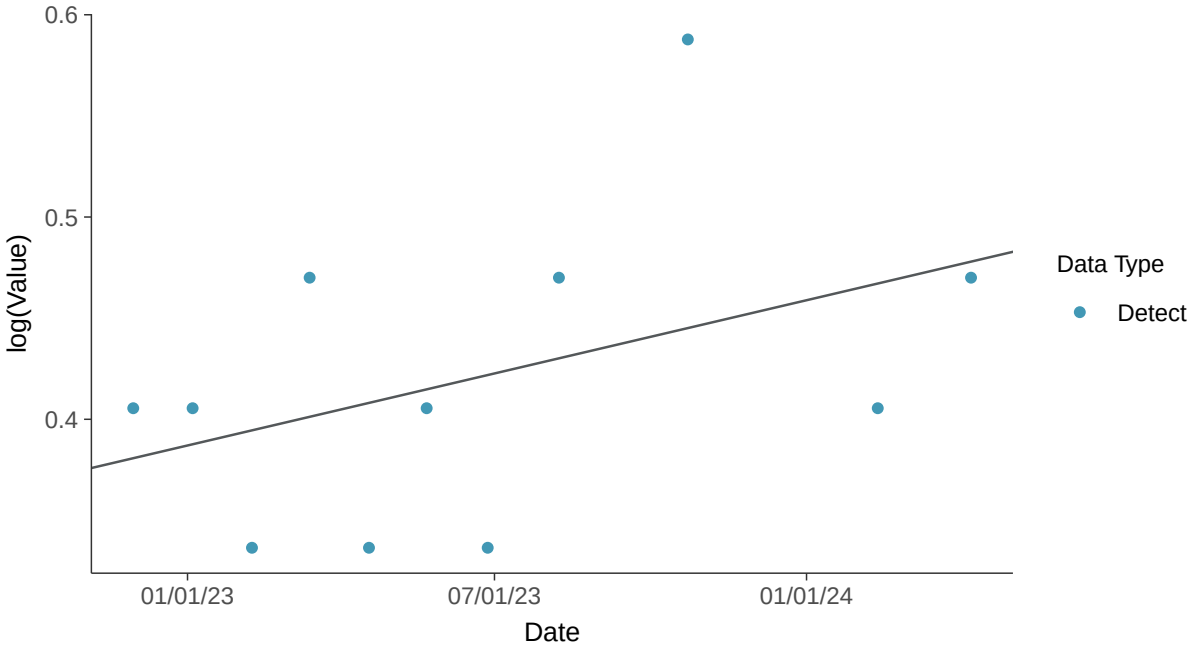
Gamma Q-Q plot

Fluoride (App IV), MW-32 (mg/L)



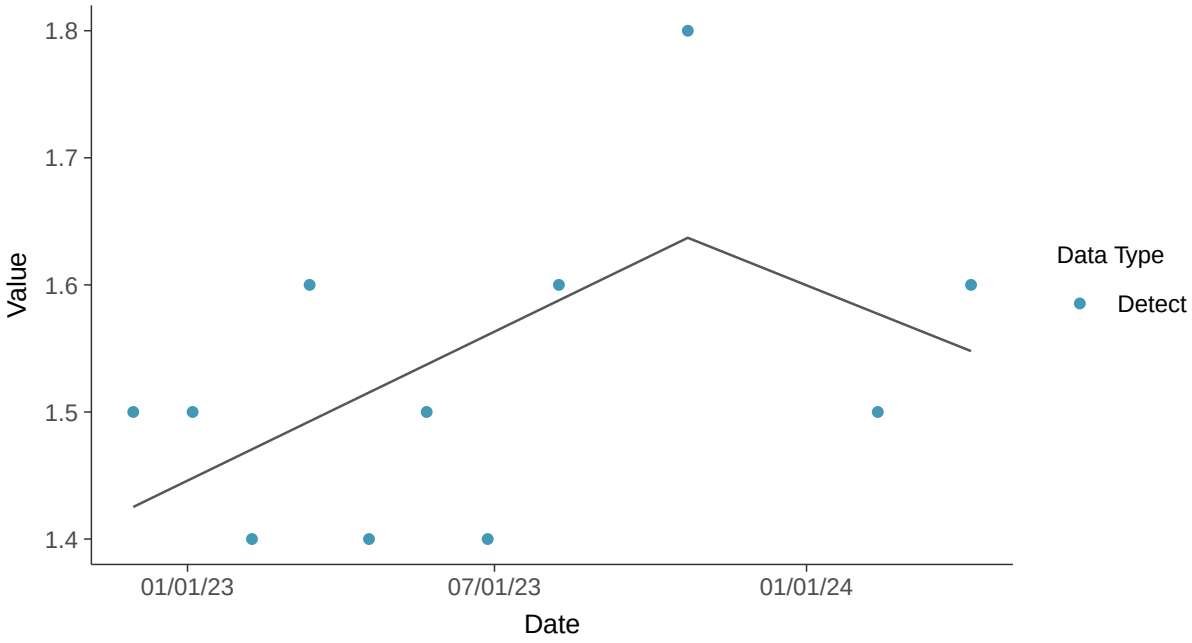
Trend Regression: Lognormal MLE

Fluoride (App IV), MW-32 (mg/L)



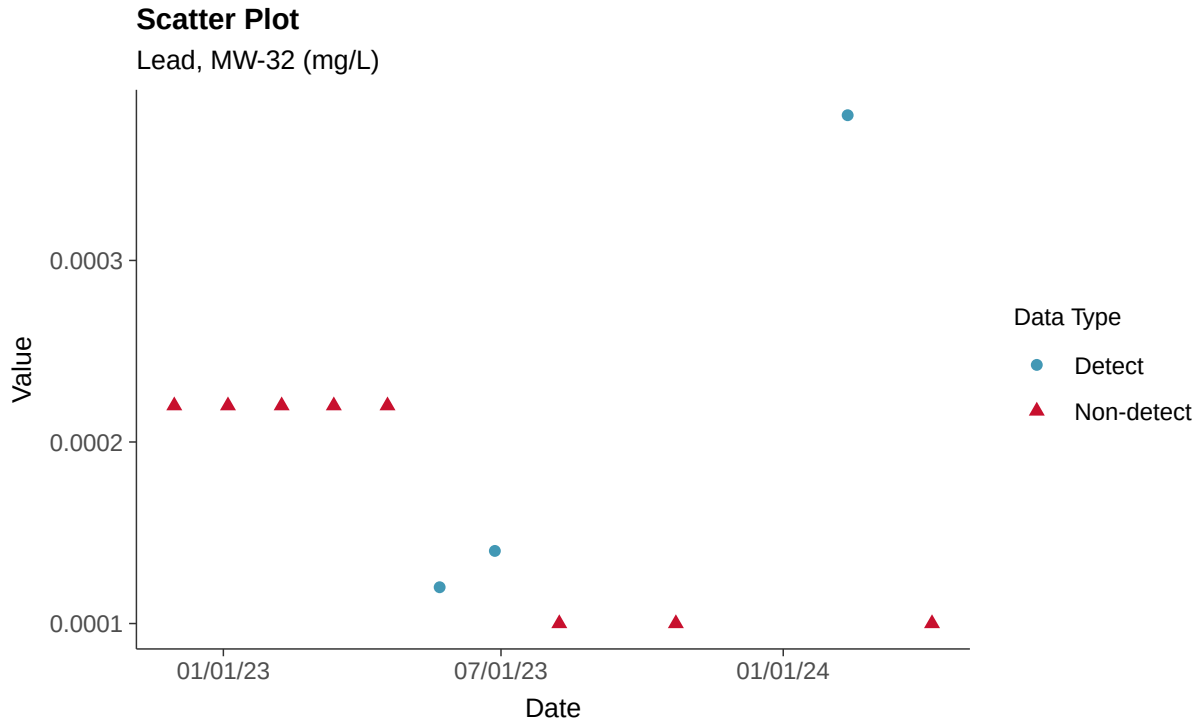
Trend Regression: Piecewise Linear-Linear

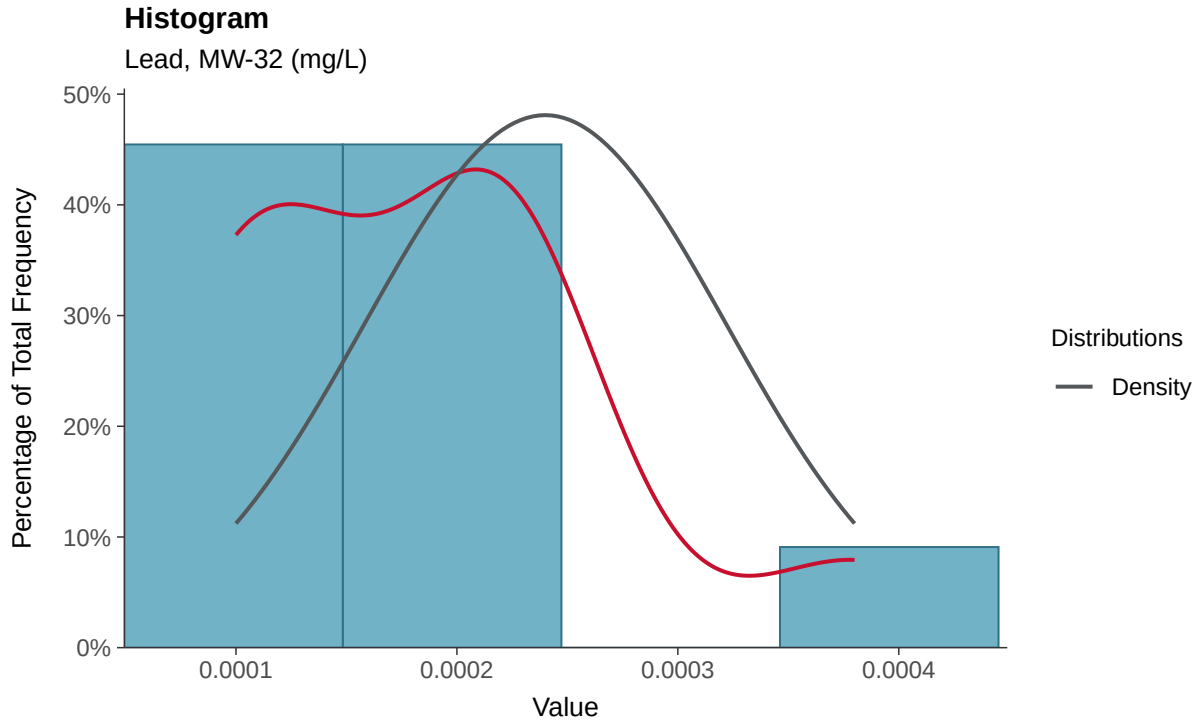
Fluoride (App IV), MW-32 (mg/L)



Appendix IV: Lead, MW-32

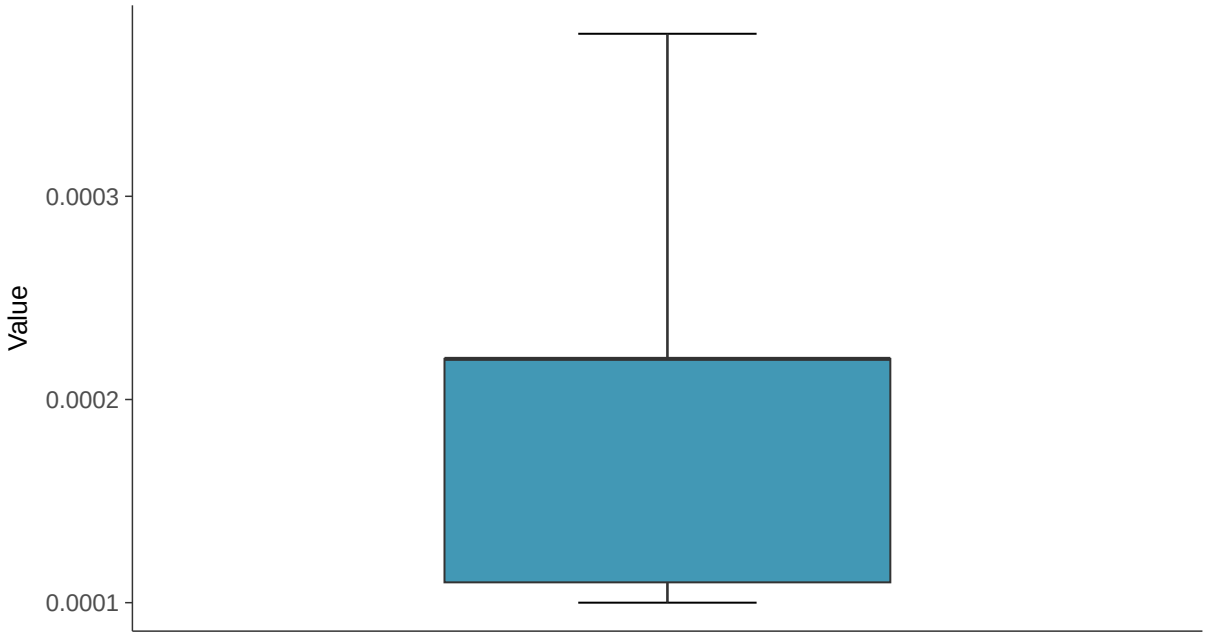
ID: 1_42_5_115





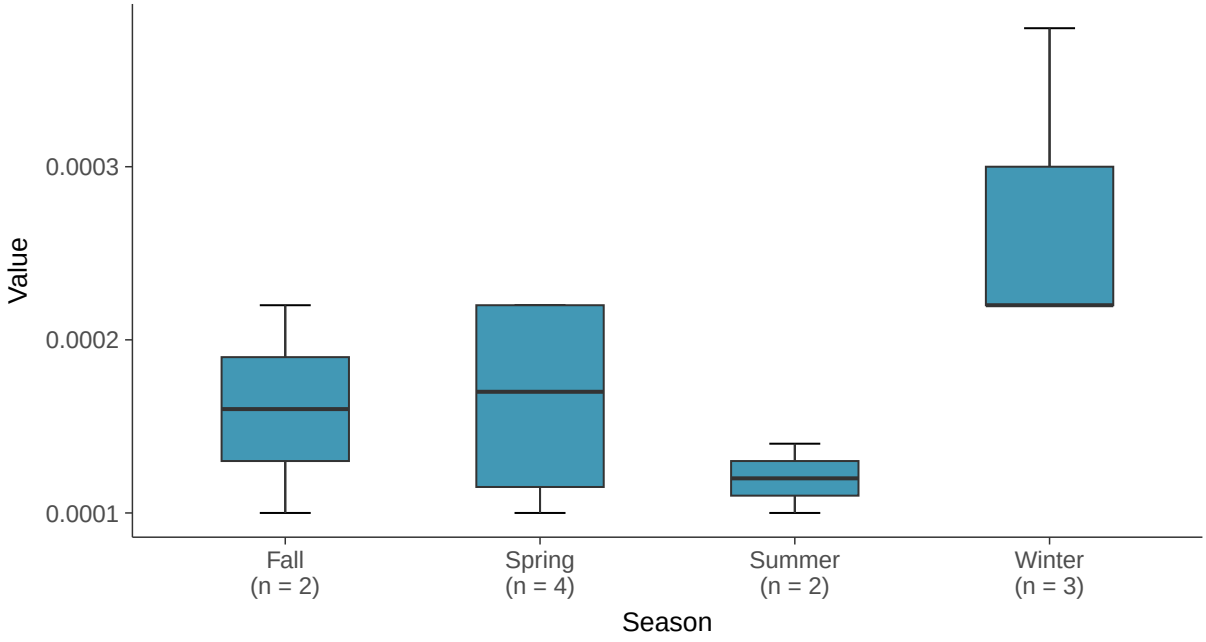
Boxplot

Lead, MW-32 (mg/L)



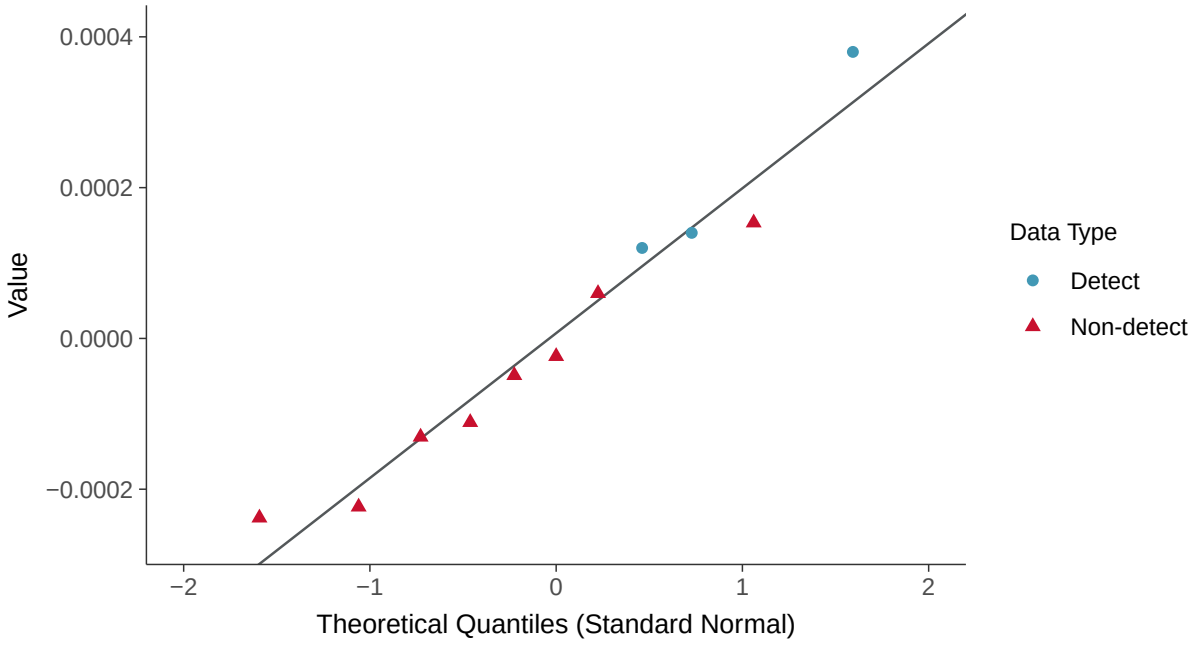
Boxplot by Season

Lead, MW-32 (mg/L)



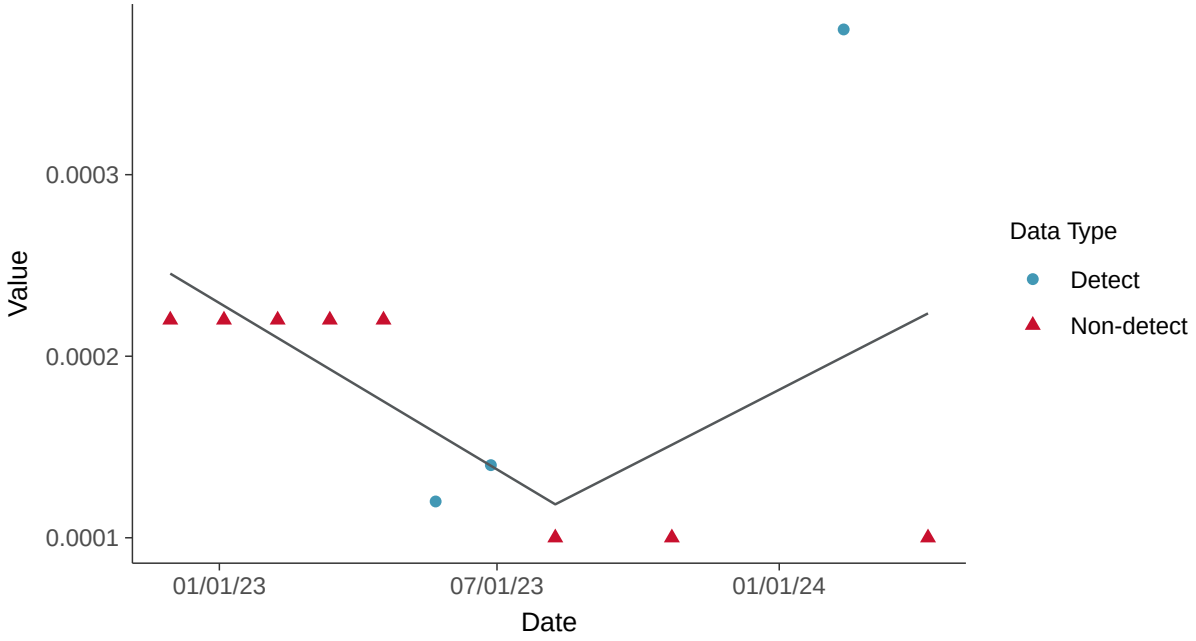
Normal Q-Q plot using ROS Imputed Estimates

Lead, MW-32 (mg/L)



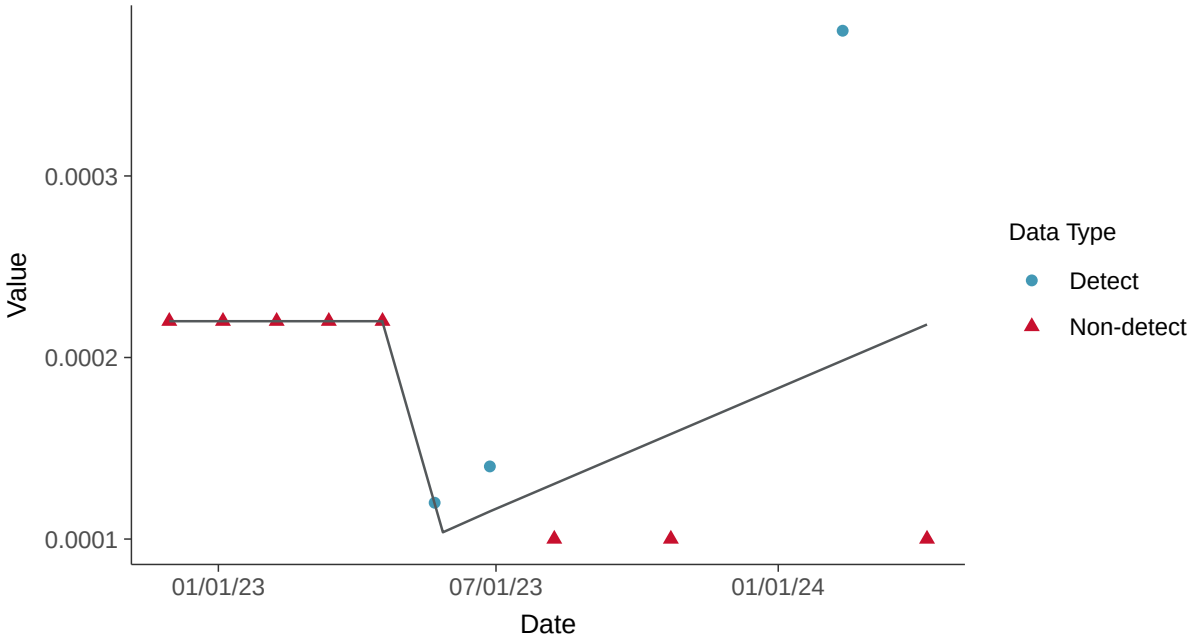
Trend Regression: Piecewise Linear-Linear

Lead, MW-32 (mg/L)



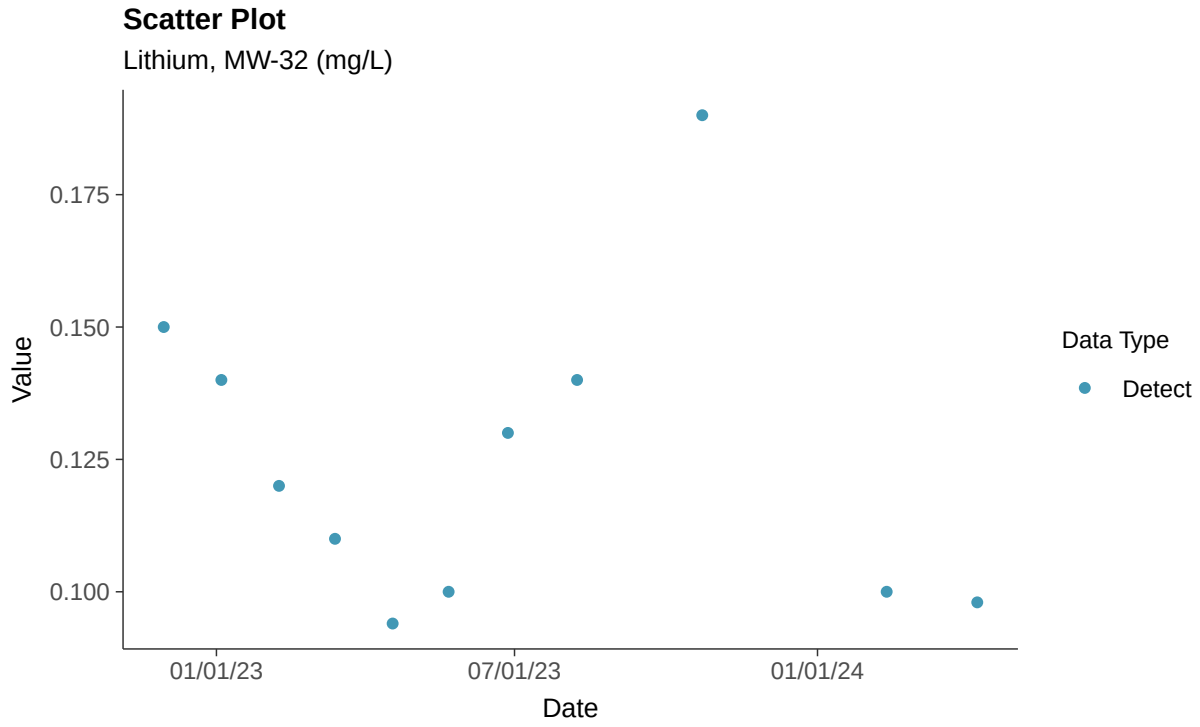
Trend Regression: Piecewise Linear-Linear-Linear

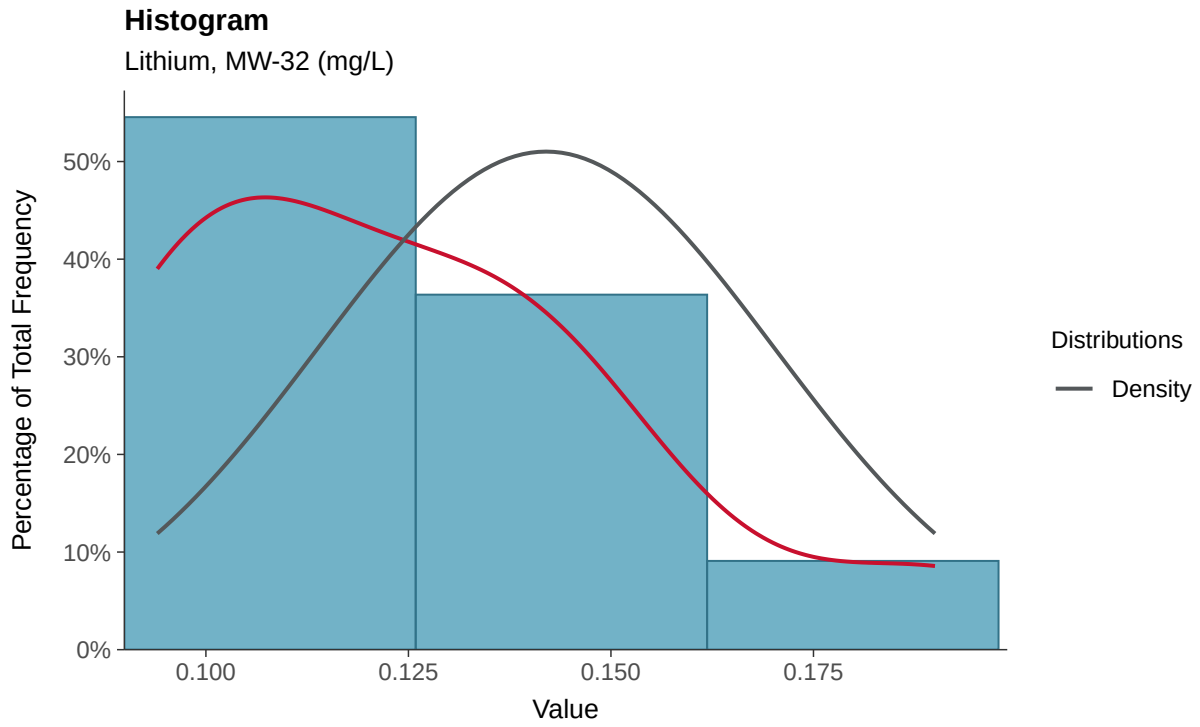
Lead, MW-32 (mg/L)



Appendix IV: Lithium, MW-32

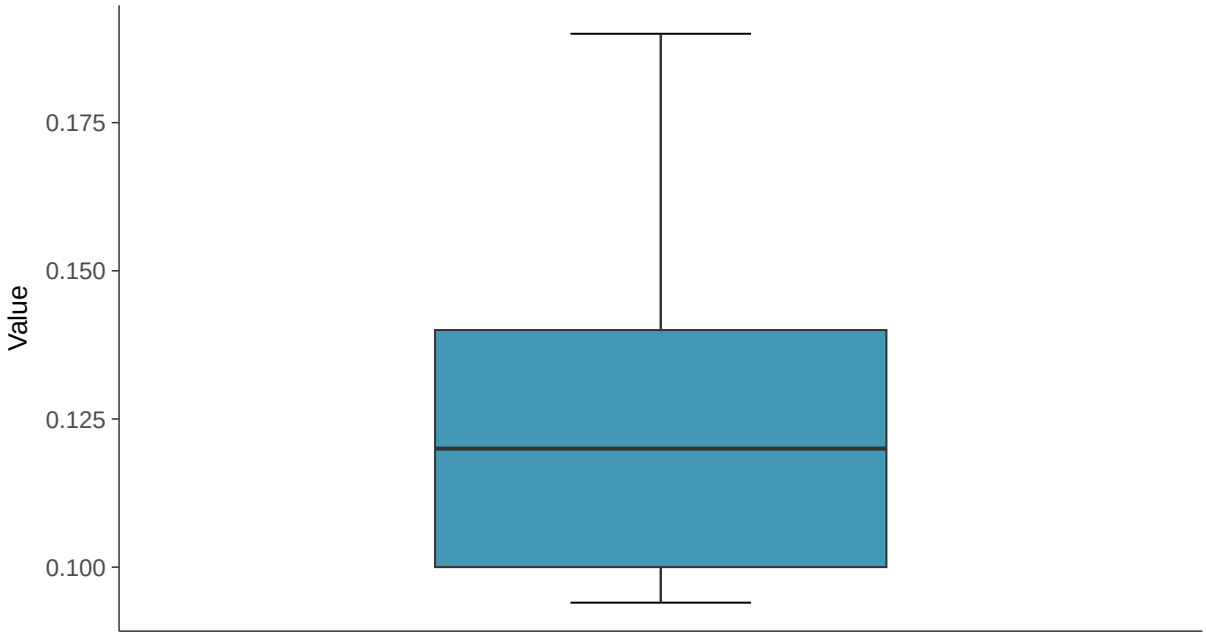
ID: 1_42_5_116





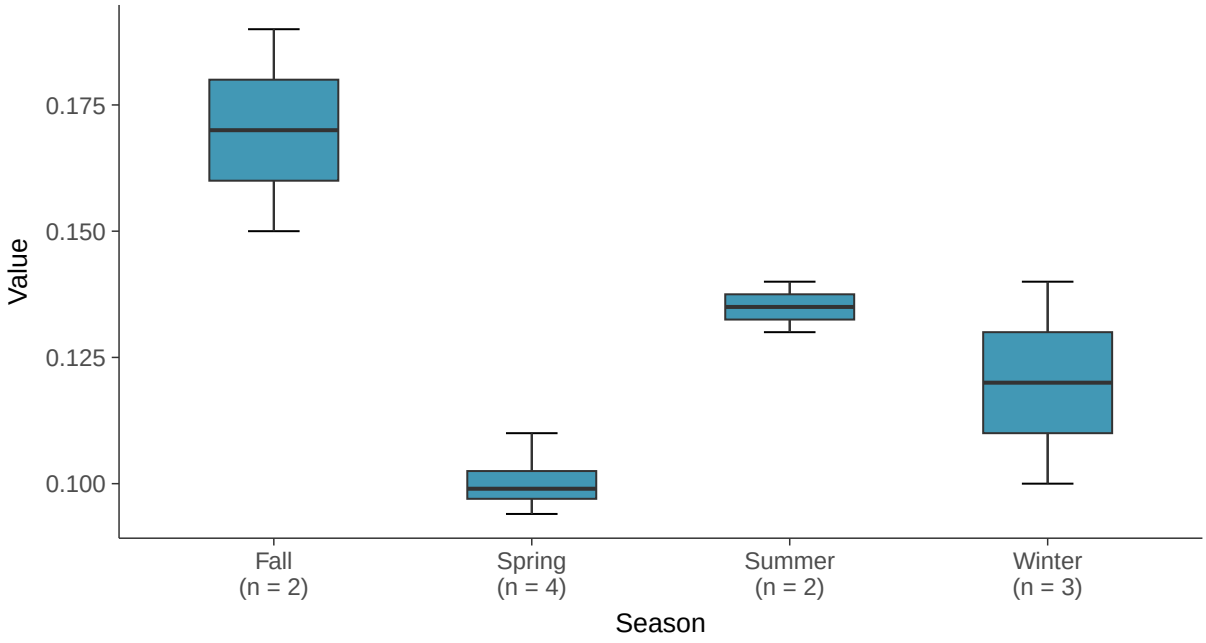
Boxplot

Lithium, MW-32 (mg/L)



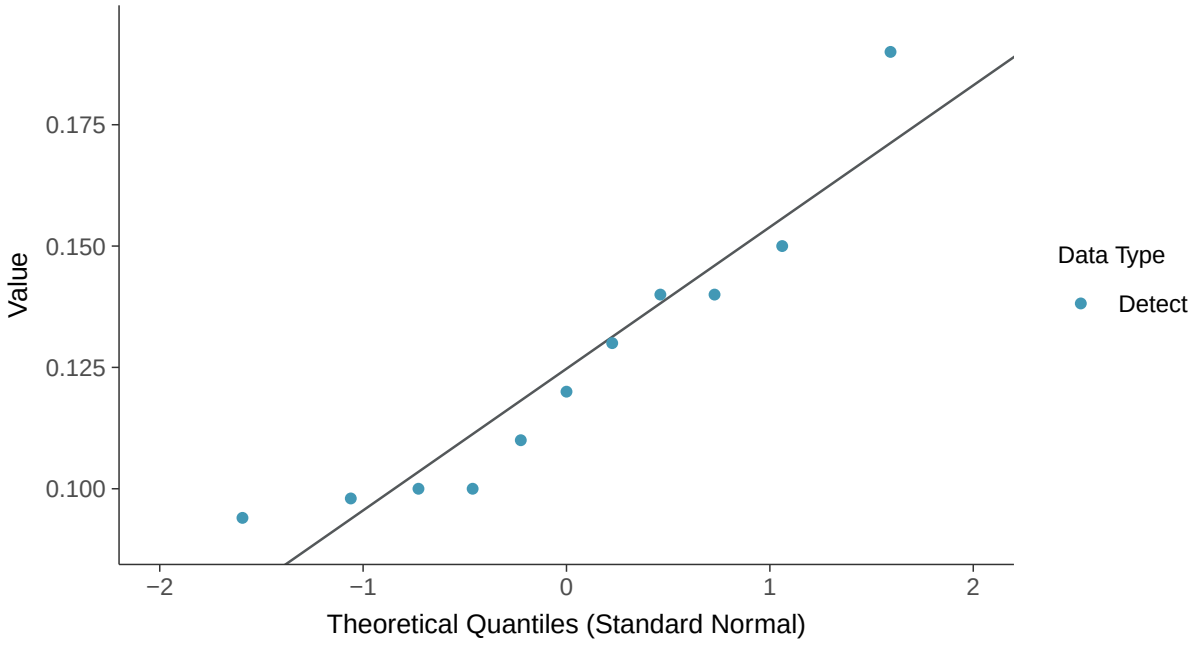
Boxplot by Season

Lithium, MW-32 (mg/L)



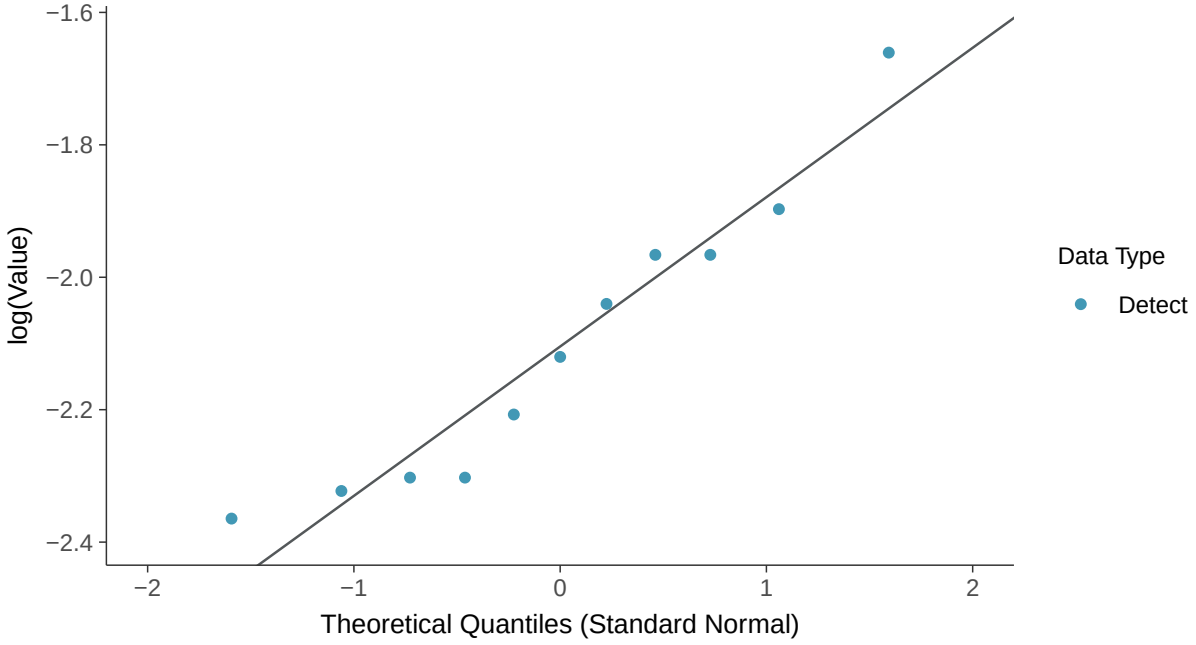
Normal Q-Q plot

Lithium, MW-32 (mg/L)



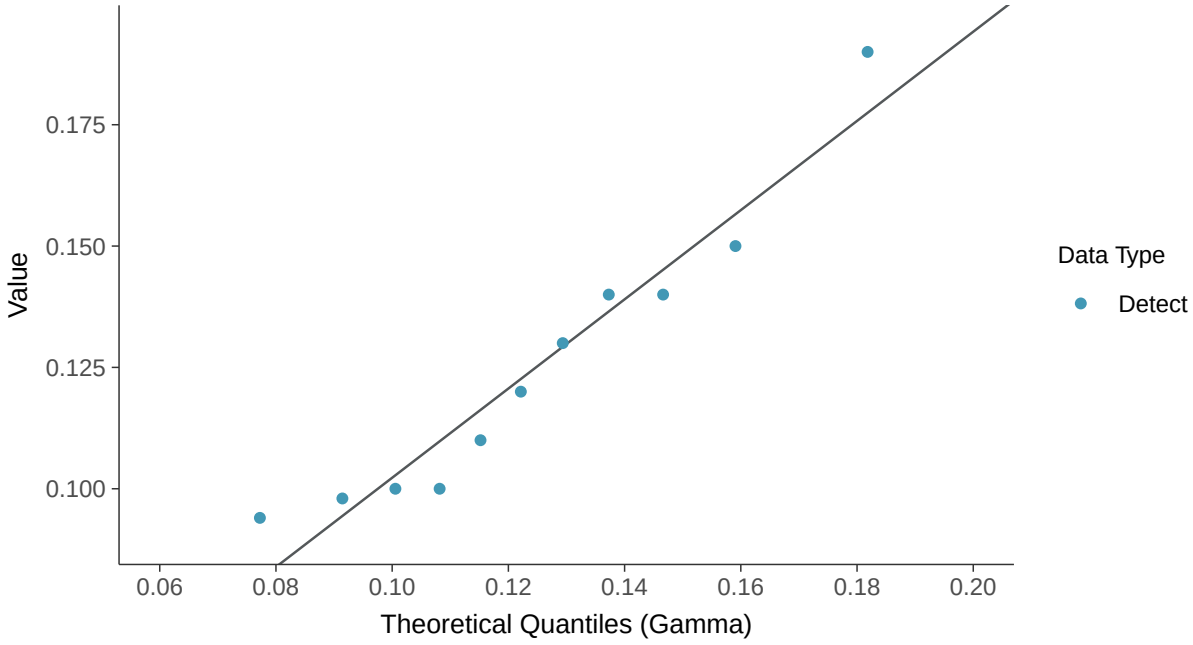
Lognormal Q-Q plot

Lithium, MW-32 (mg/L)



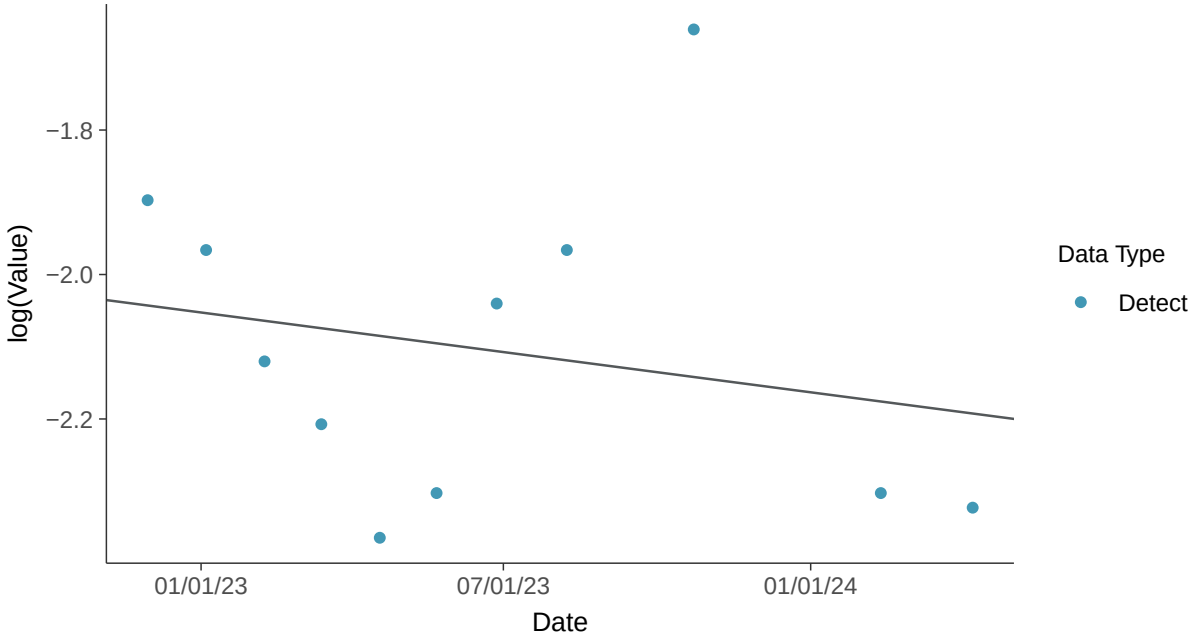
Gamma Q-Q plot

Lithium, MW-32 (mg/L)



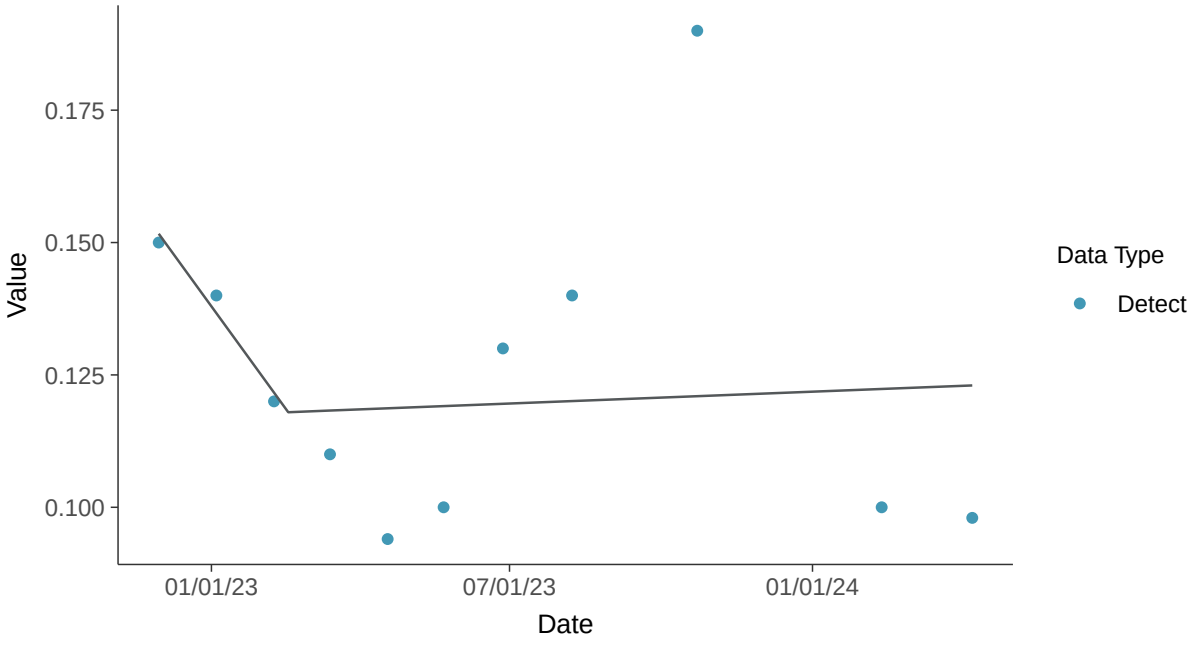
Trend Regression: Lognormal MLE

Lithium, MW-32 (mg/L)



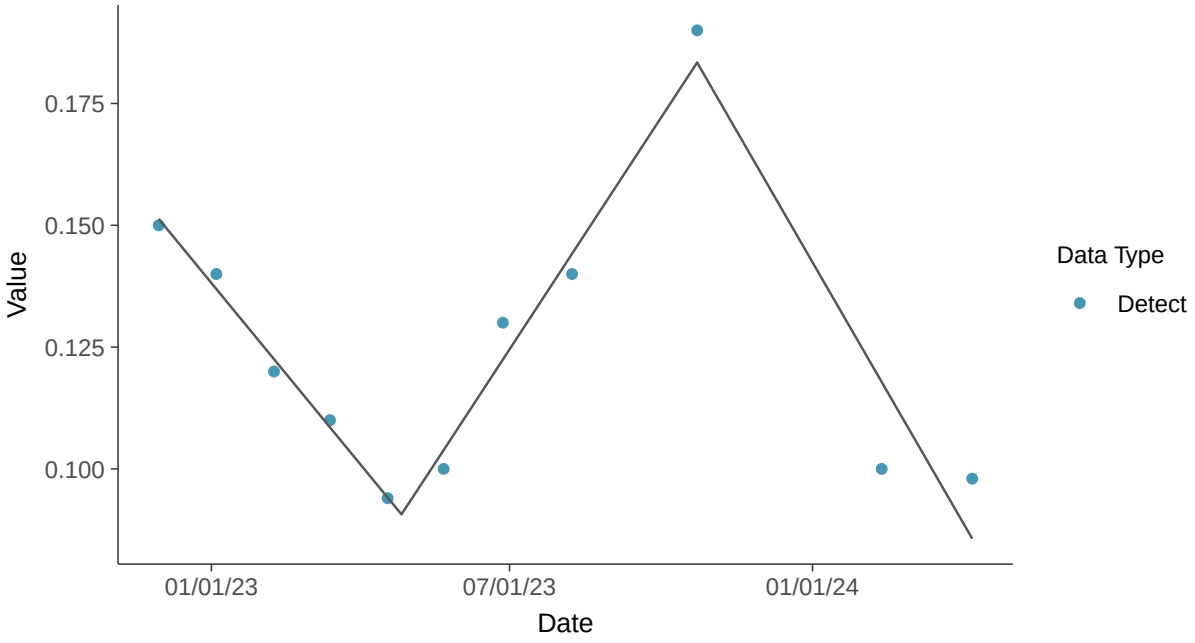
Trend Regression: Piecewise Linear-Linear

Lithium, MW-32 (mg/L)



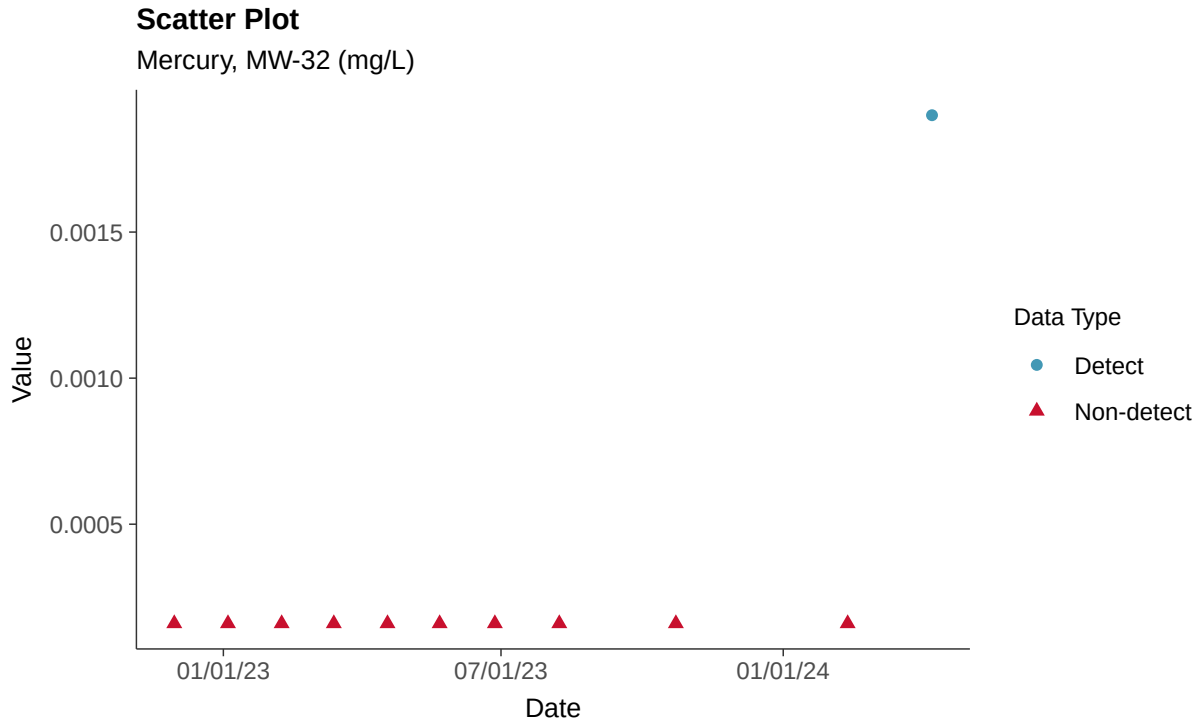
Trend Regression: Piecewise Linear-Linear-Linear

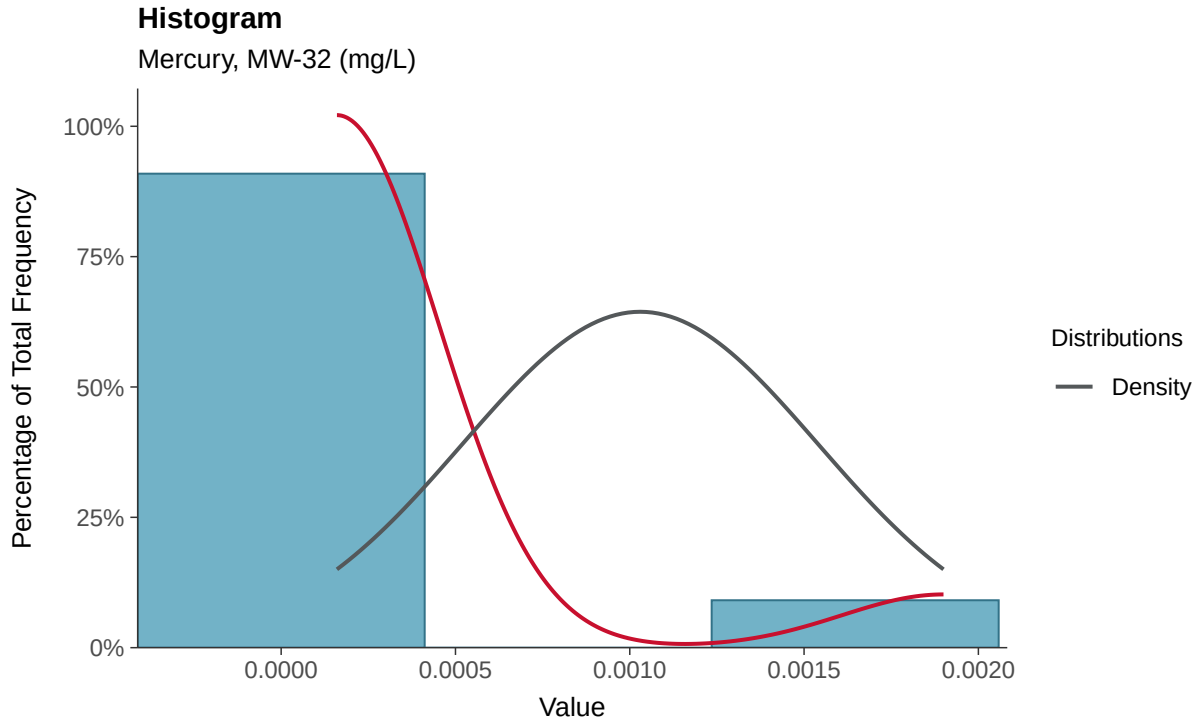
Lithium, MW-32 (mg/L)



Appendix IV: Mercury, MW-32

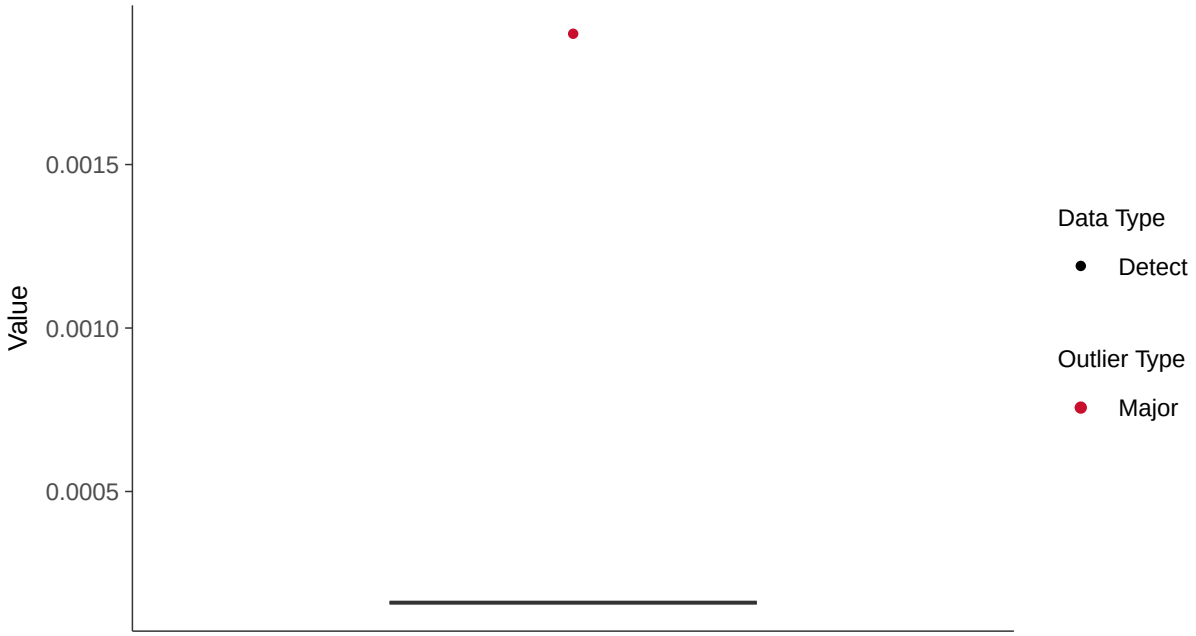
ID: 1_42_5_117





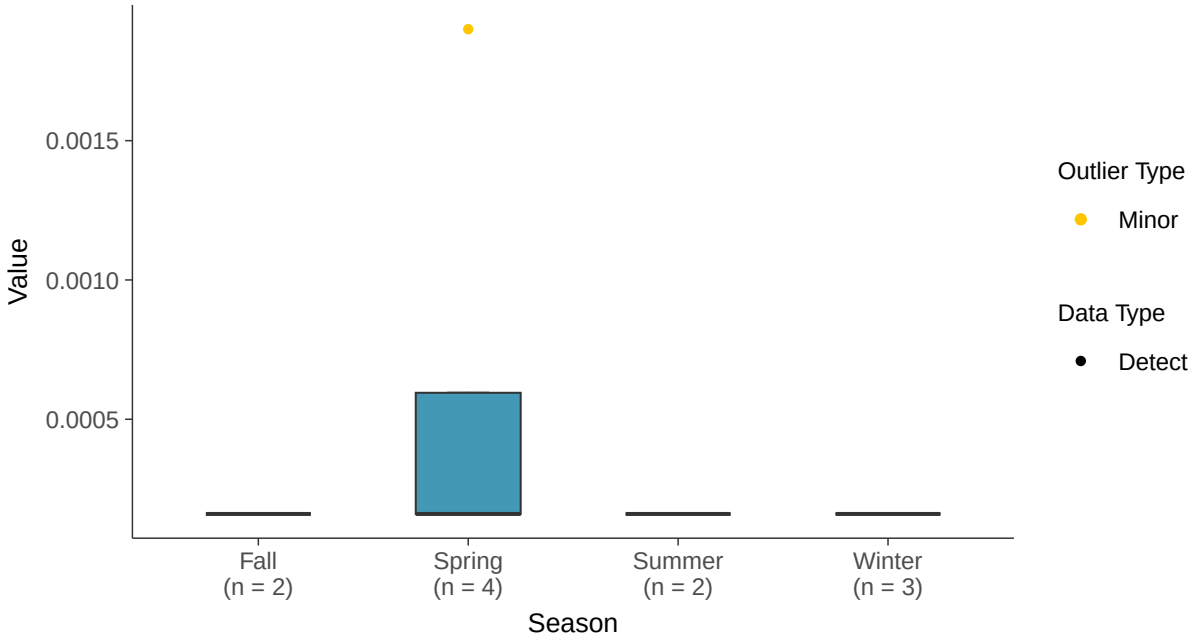
Boxplot

Mercury, MW-32 (mg/L)



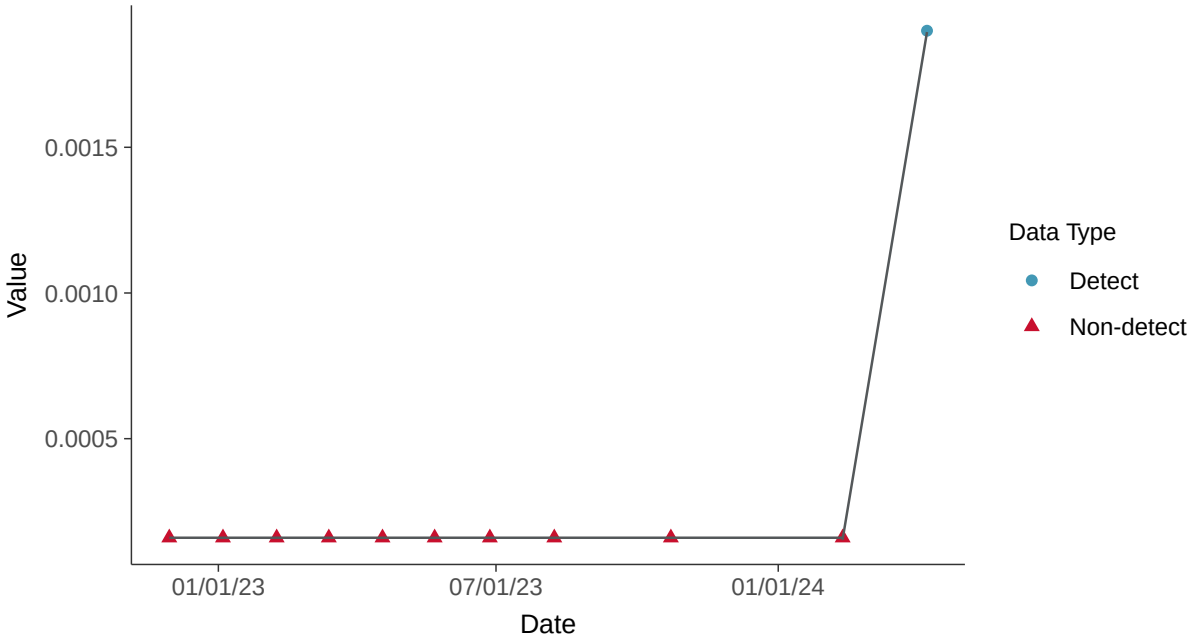
Boxplot by Season

Mercury, MW-32 (mg/L)



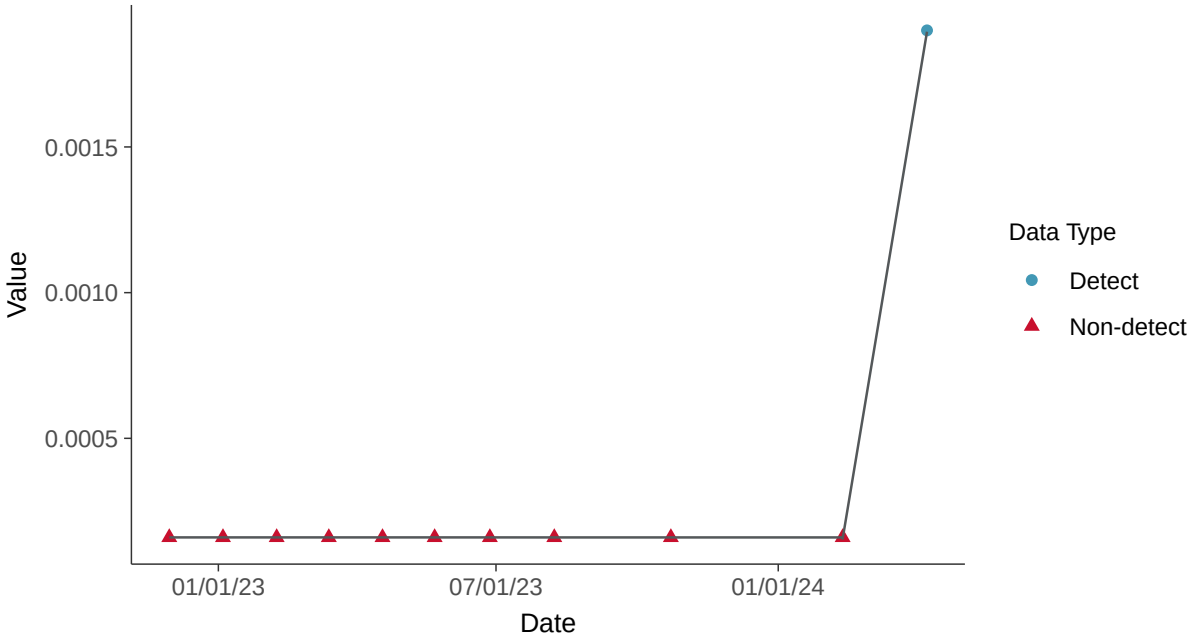
Trend Regression: Piecewise Linear-Linear

Mercury, MW-32 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Mercury, MW-32 (mg/L)

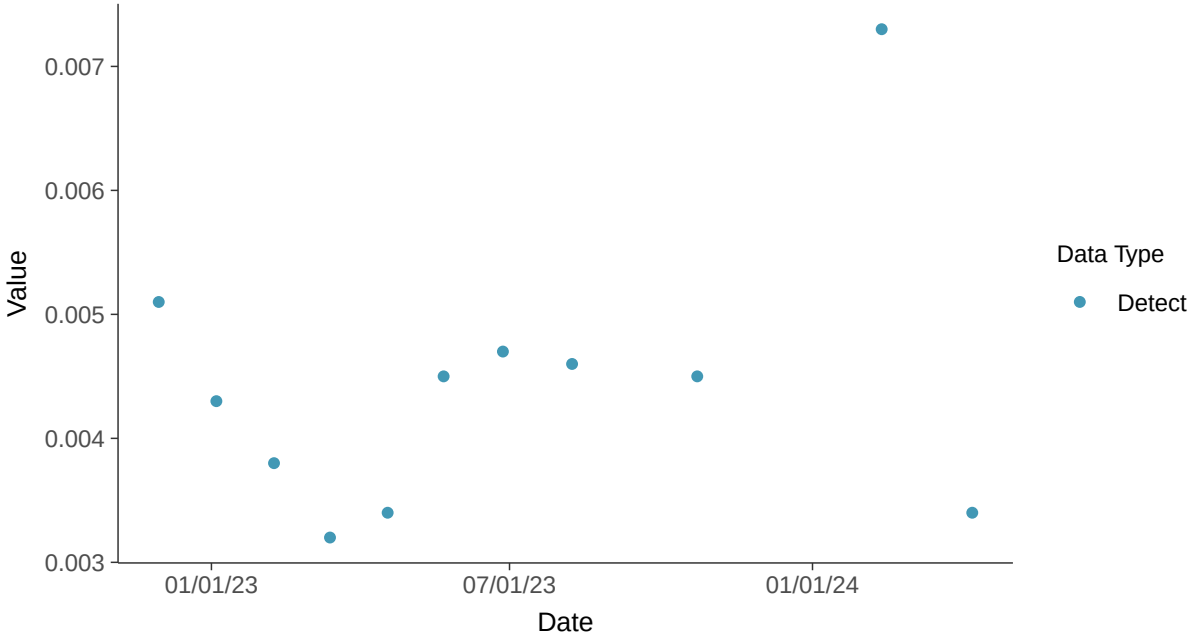


Appendix IV: Molybdenum, MW-32

ID: 1_42_5_118

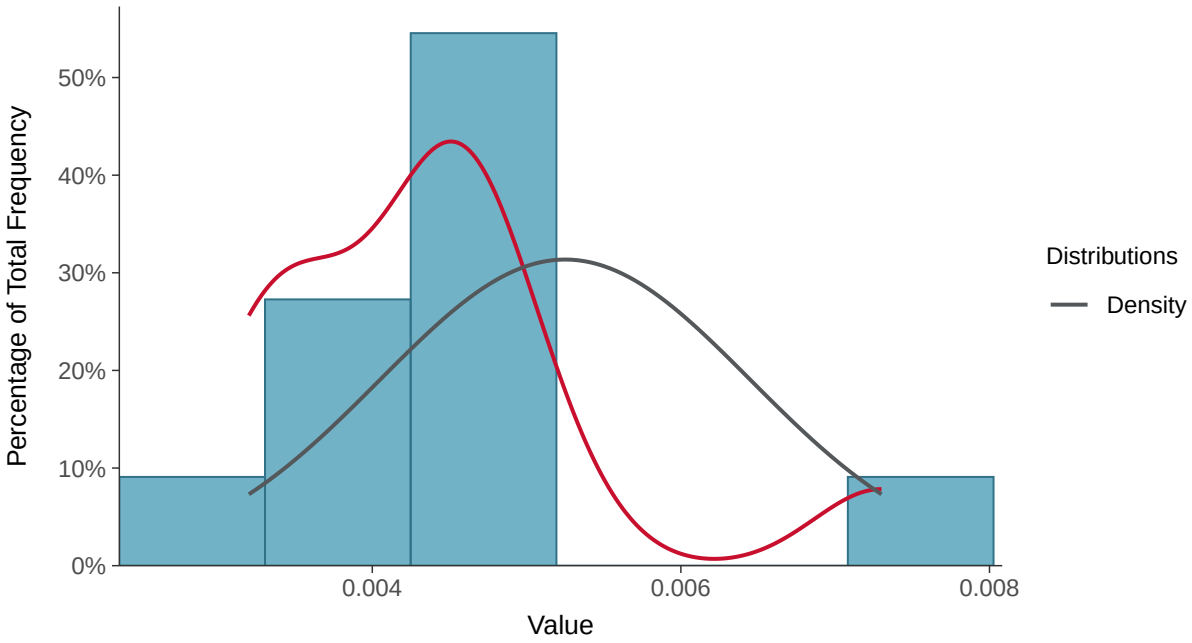
Scatter Plot

Molybdenum, MW-32 (mg/L)



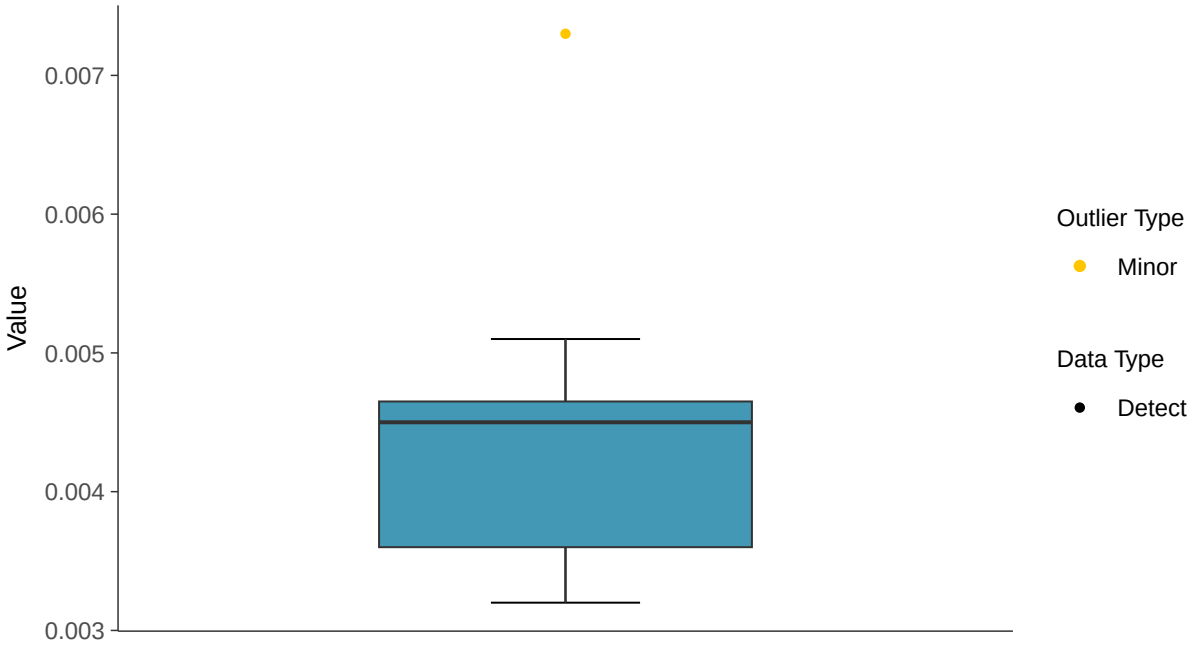
Histogram

Molybdenum, MW-32 (mg/L)



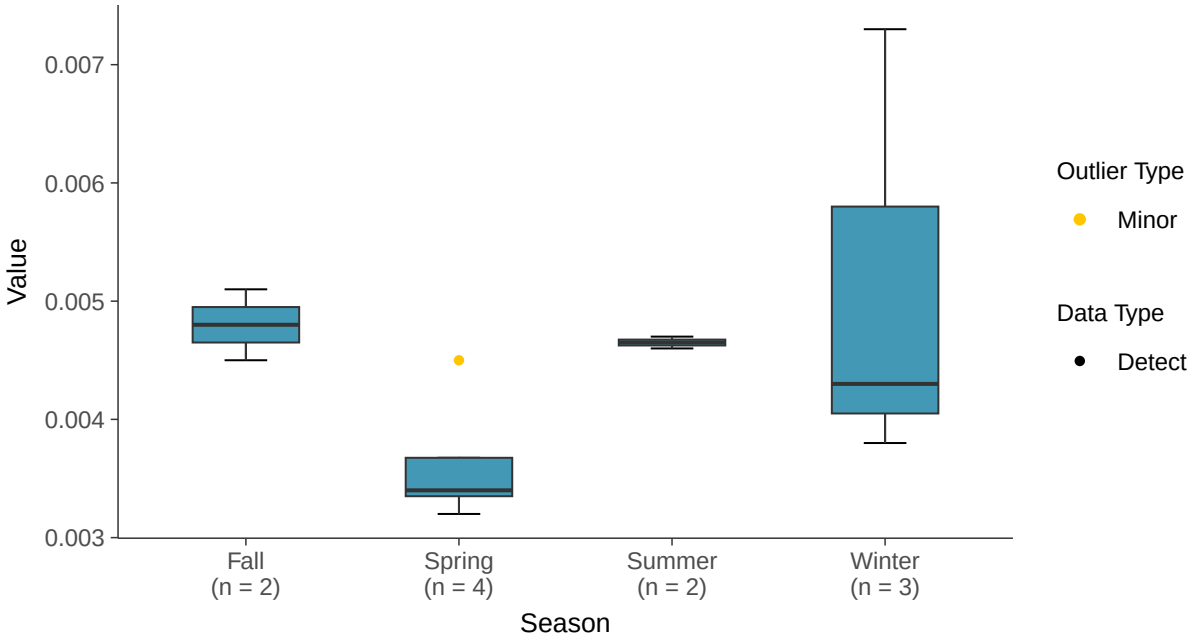
Boxplot

Molybdenum, MW-32 (mg/L)



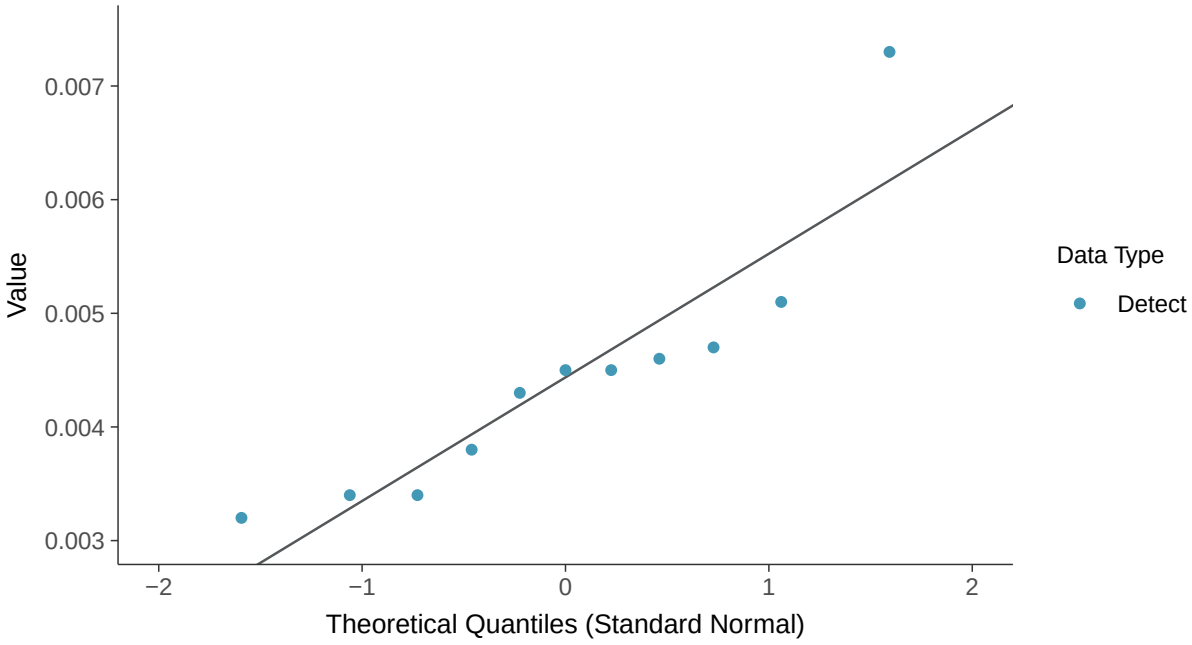
Boxplot by Season

Molybdenum, MW-32 (mg/L)



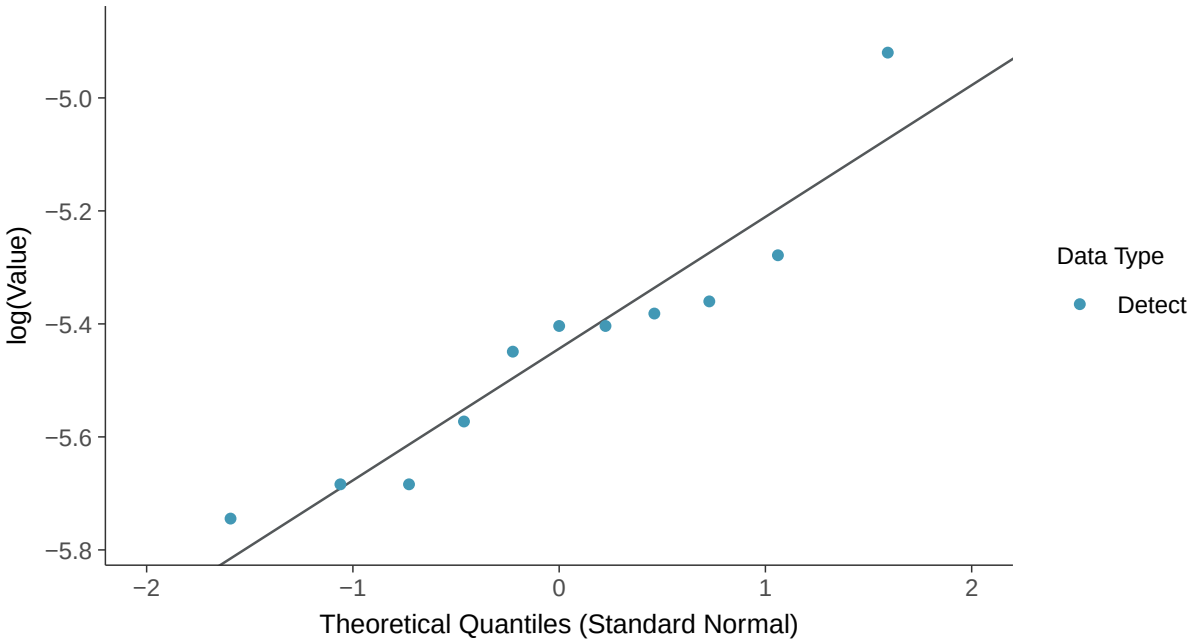
Normal Q-Q plot

Molybdenum, MW-32 (mg/L)



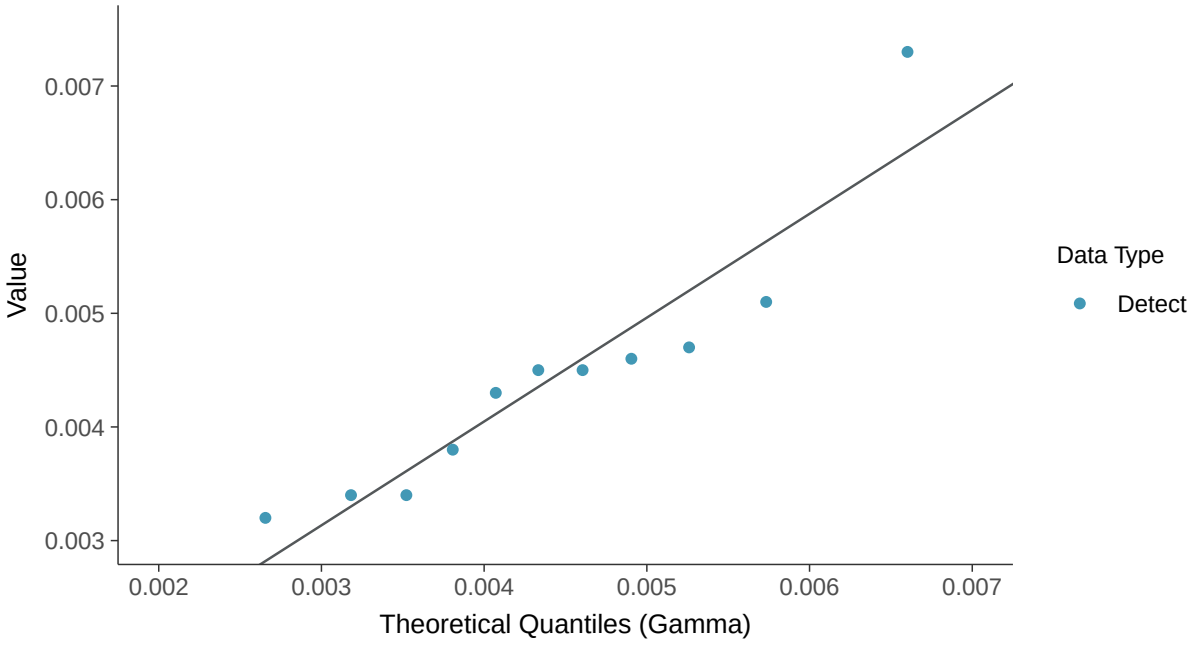
Lognormal Q-Q plot

Molybdenum, MW-32 (mg/L)



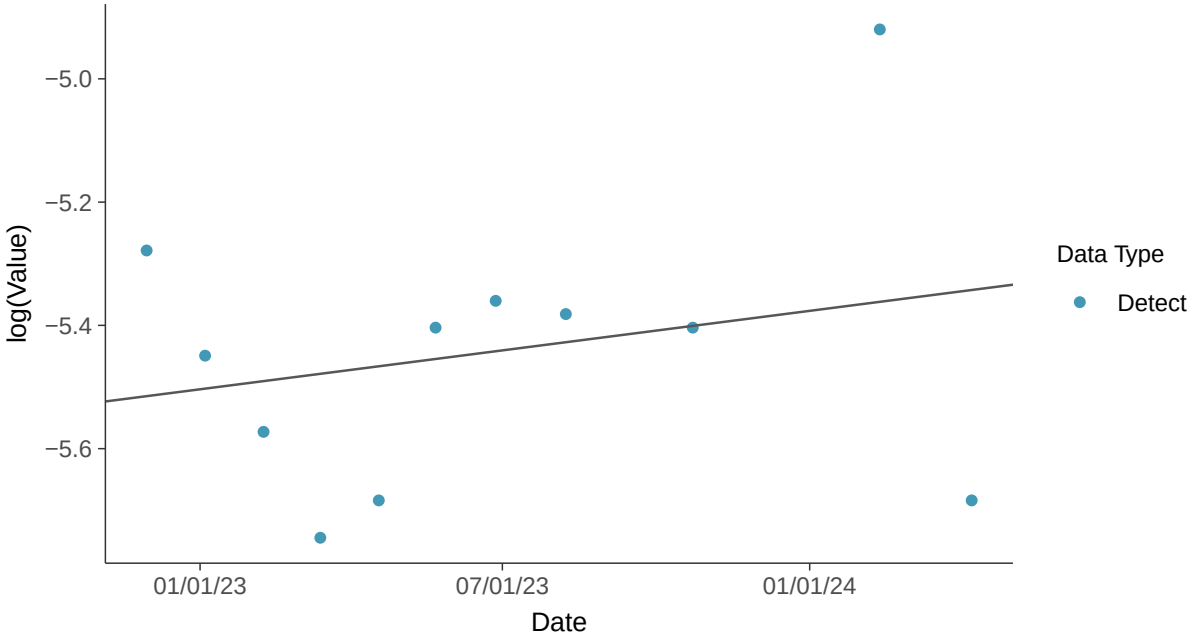
Gamma Q-Q plot

Molybdenum, MW-32 (mg/L)



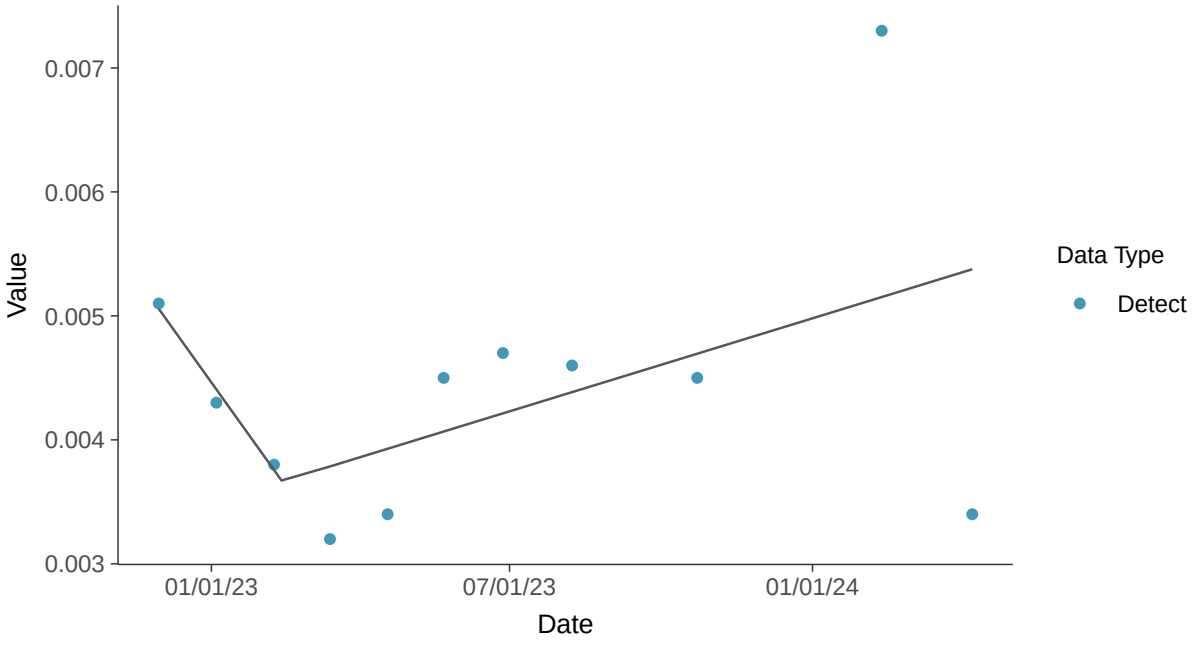
Trend Regression: Lognormal MLE

Molybdenum, MW-32 (mg/L)



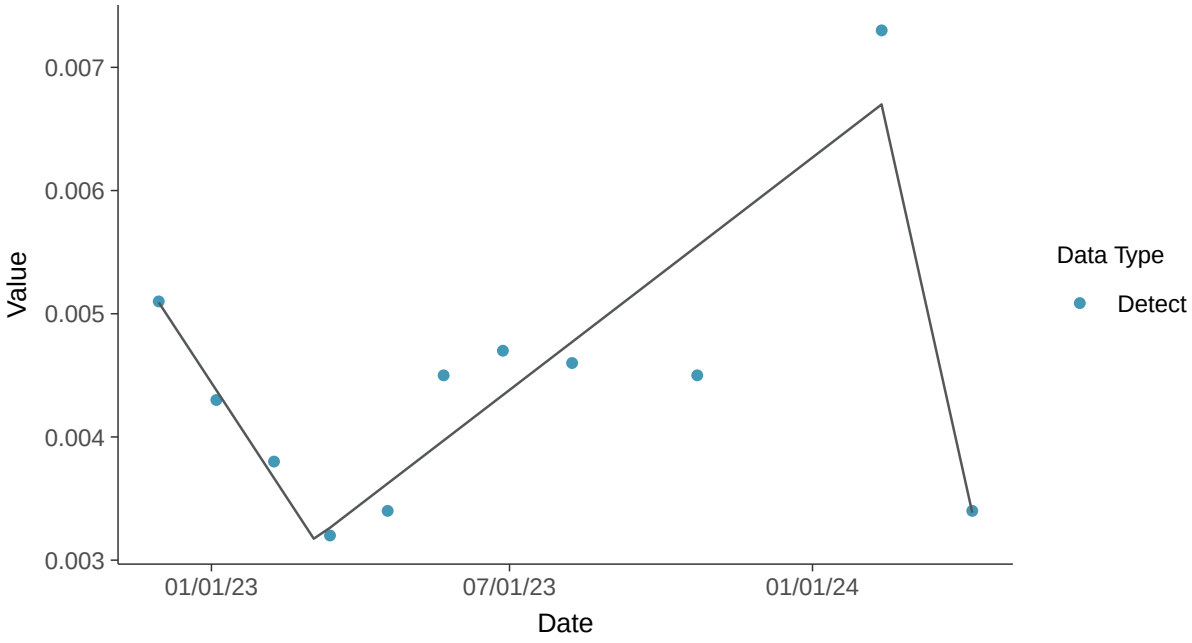
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-32 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-32 (mg/L)

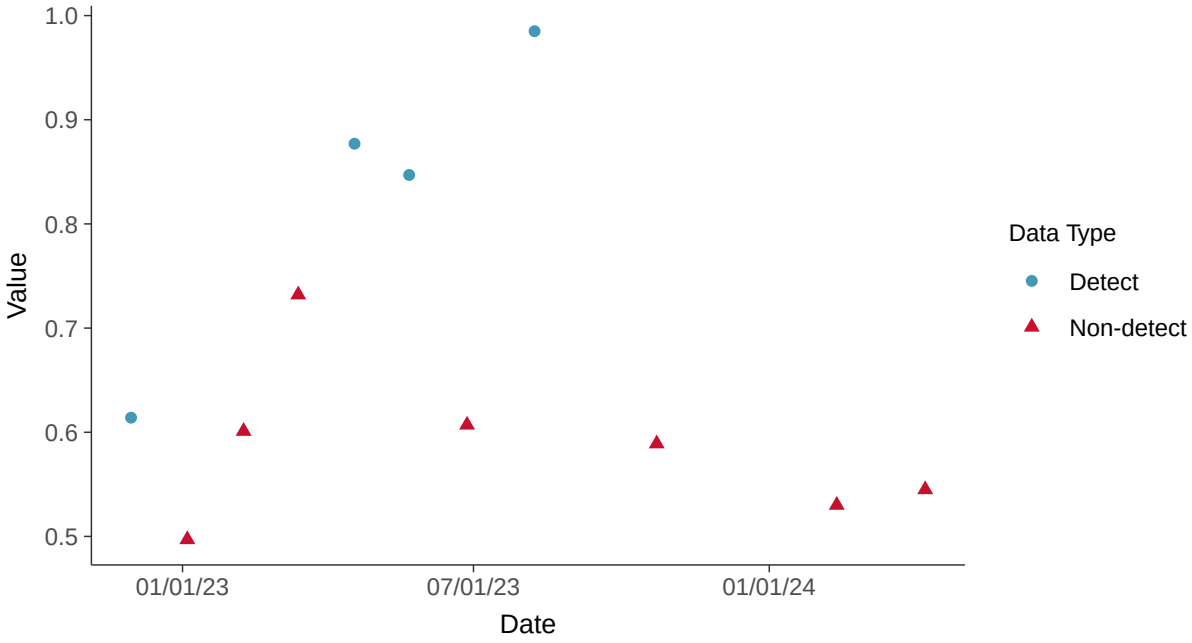


Appendix IV: Radium 226 and 228, MW-32

ID: 1_42_5_121

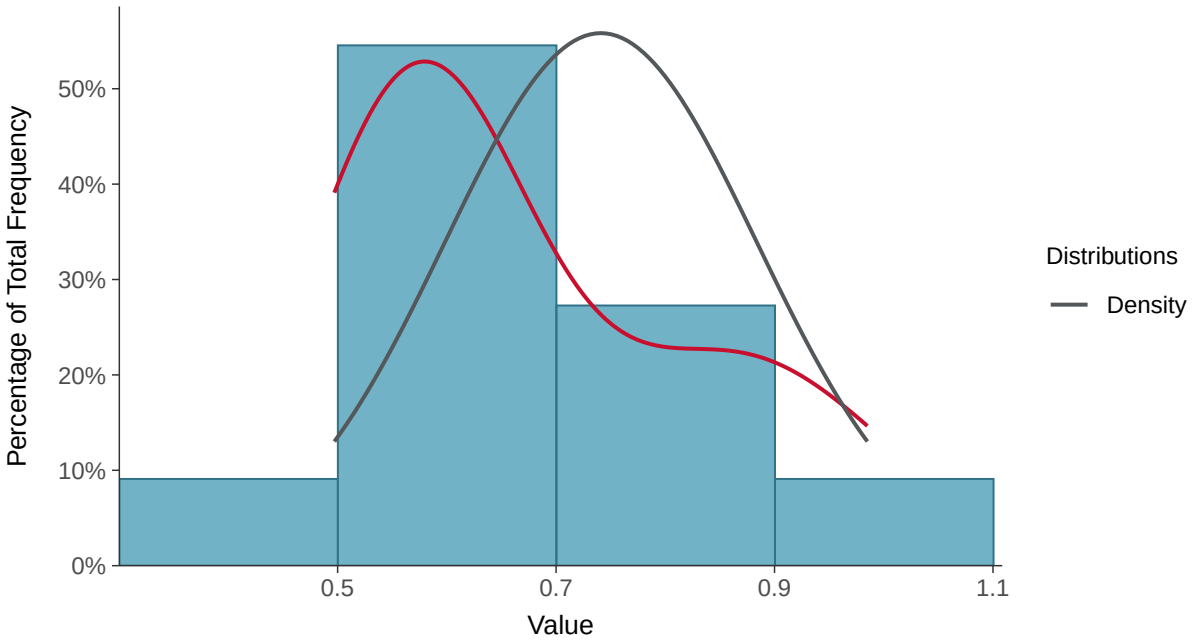
Scatter Plot

Radium 226 and 228, MW-32 (pCi/L)



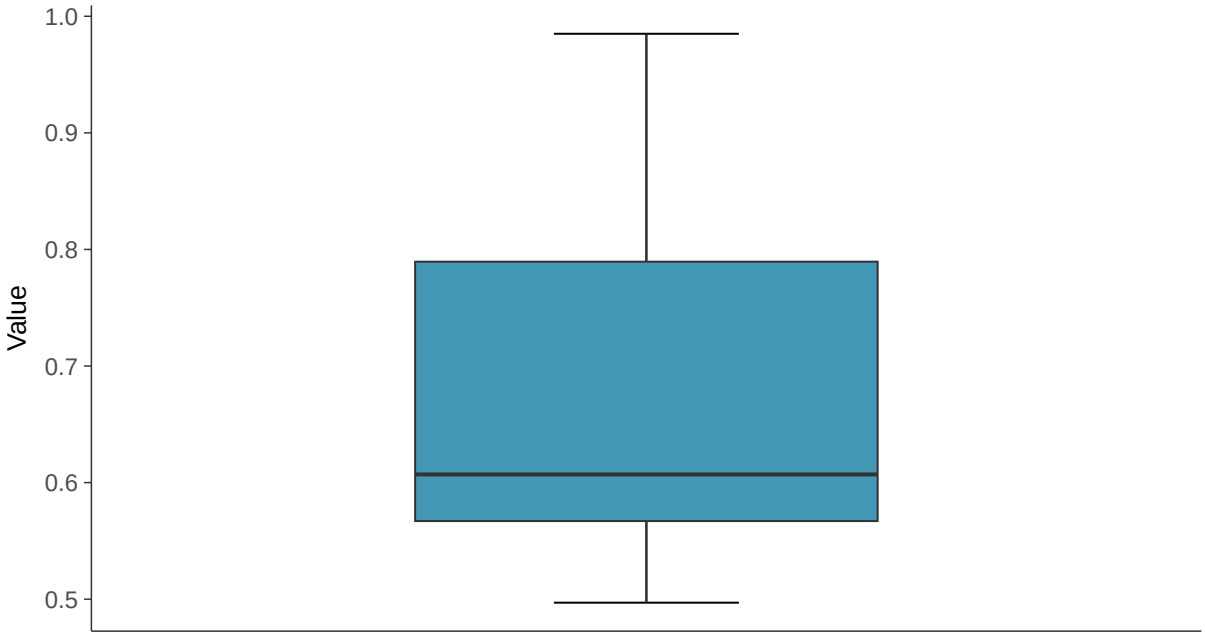
Histogram

Radium 226 and 228, MW-32 (pCi/L)



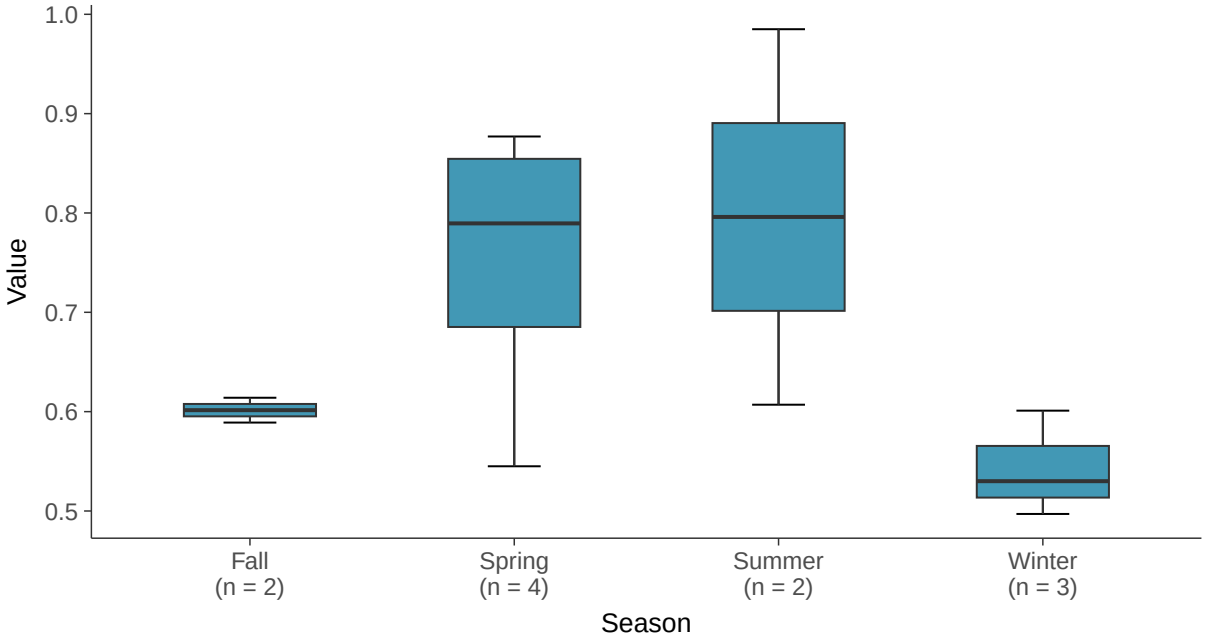
Boxplot

Radium 226 and 228, MW-32 (pCi/L)



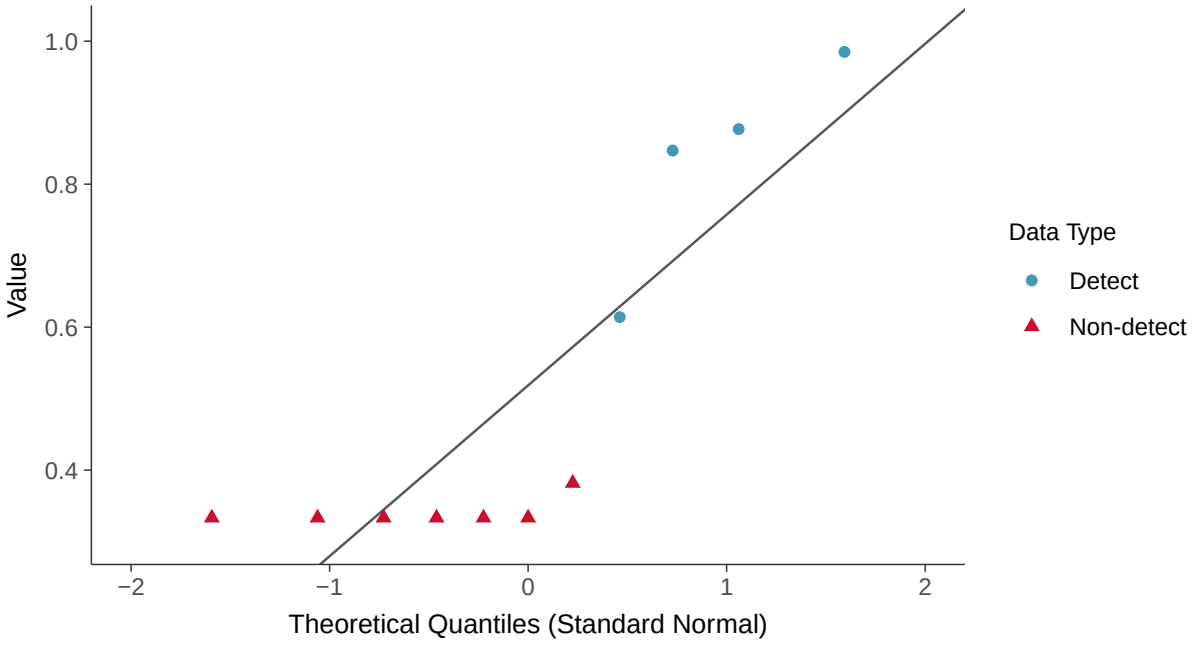
Boxplot by Season

Radium 226 and 228, MW-32 (pCi/L)



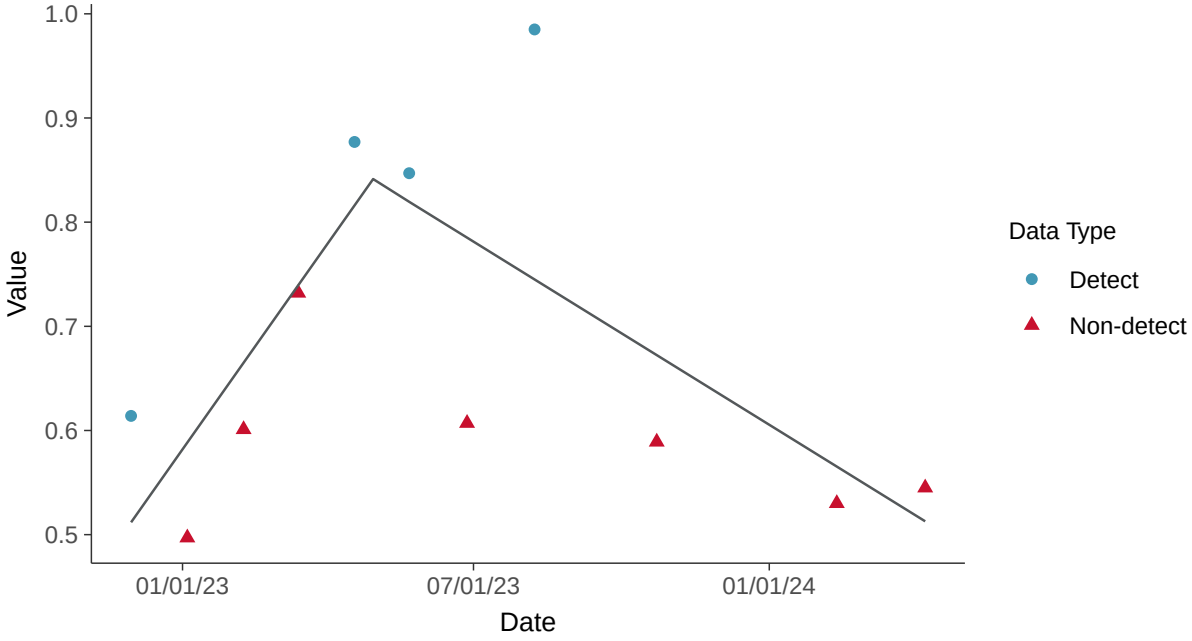
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-32 (pCi/L)



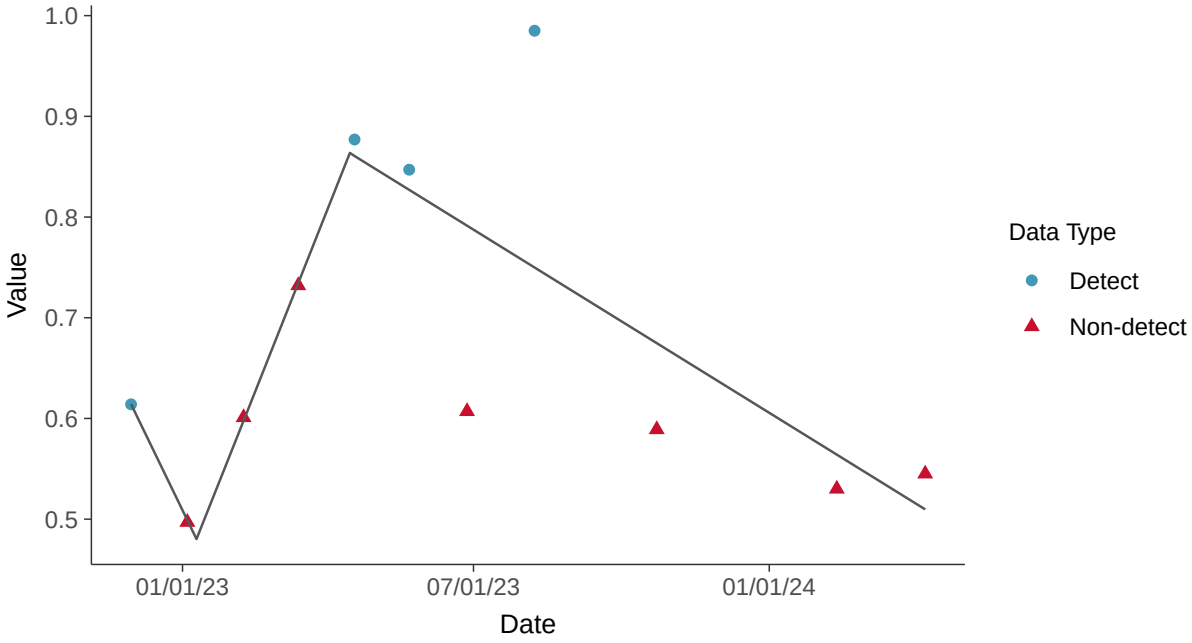
Trend Regression: Piecewise Linear-Linear

Radium 226 and 228, MW-32 (pCi/L)



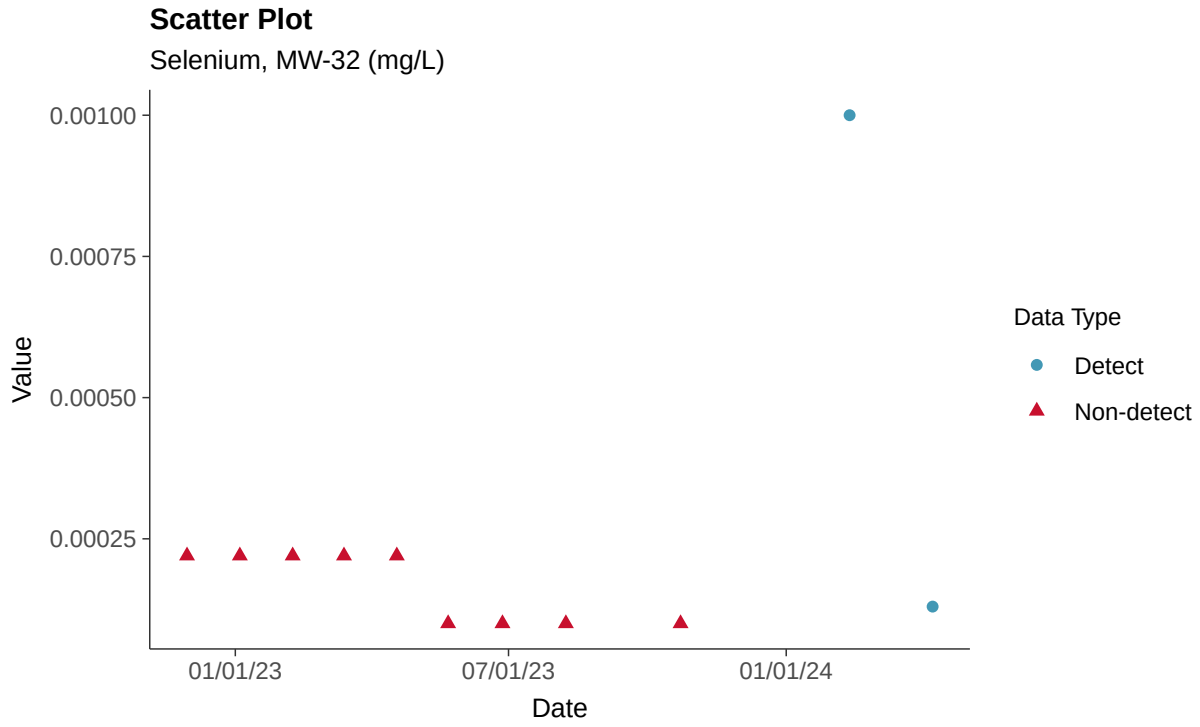
Trend Regression: Piecewise Linear-Linear-Linear

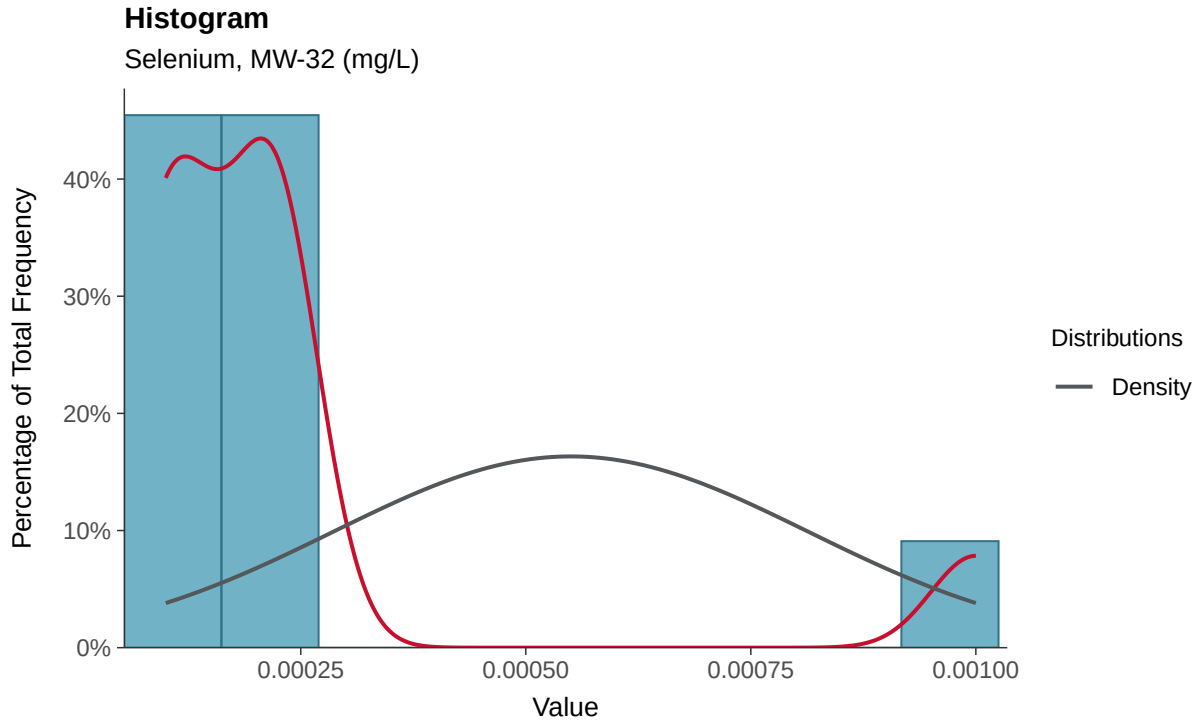
Radium 226 and 228, MW-32 (pCi/L)



Appendix IV: Selenium, MW-32

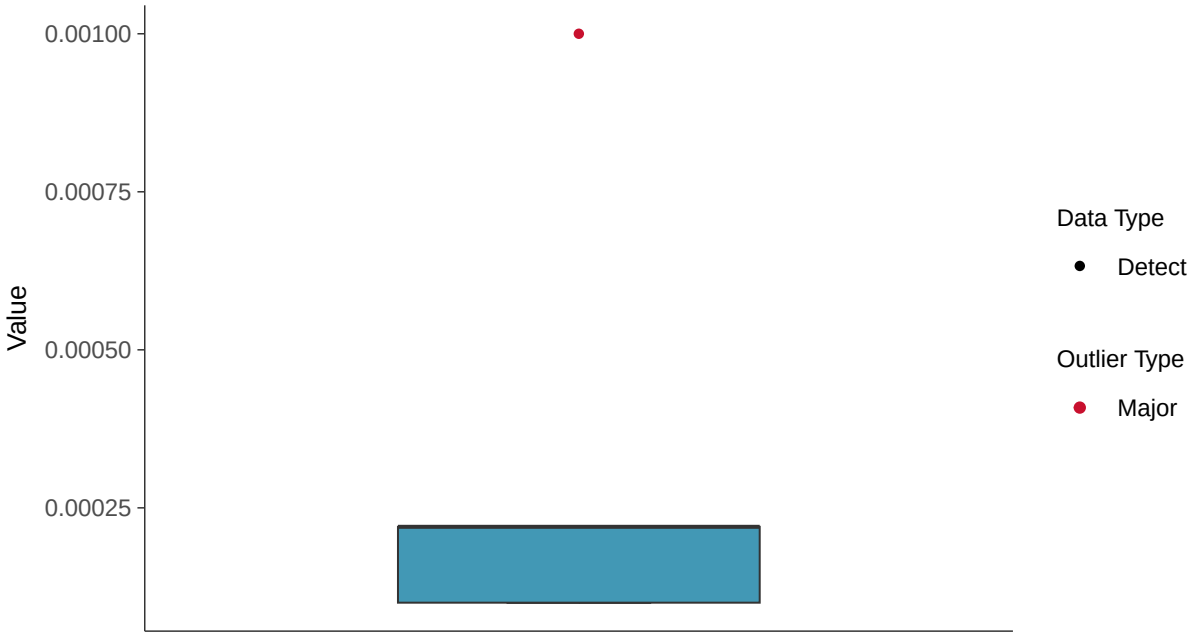
ID: 1_42_5_122





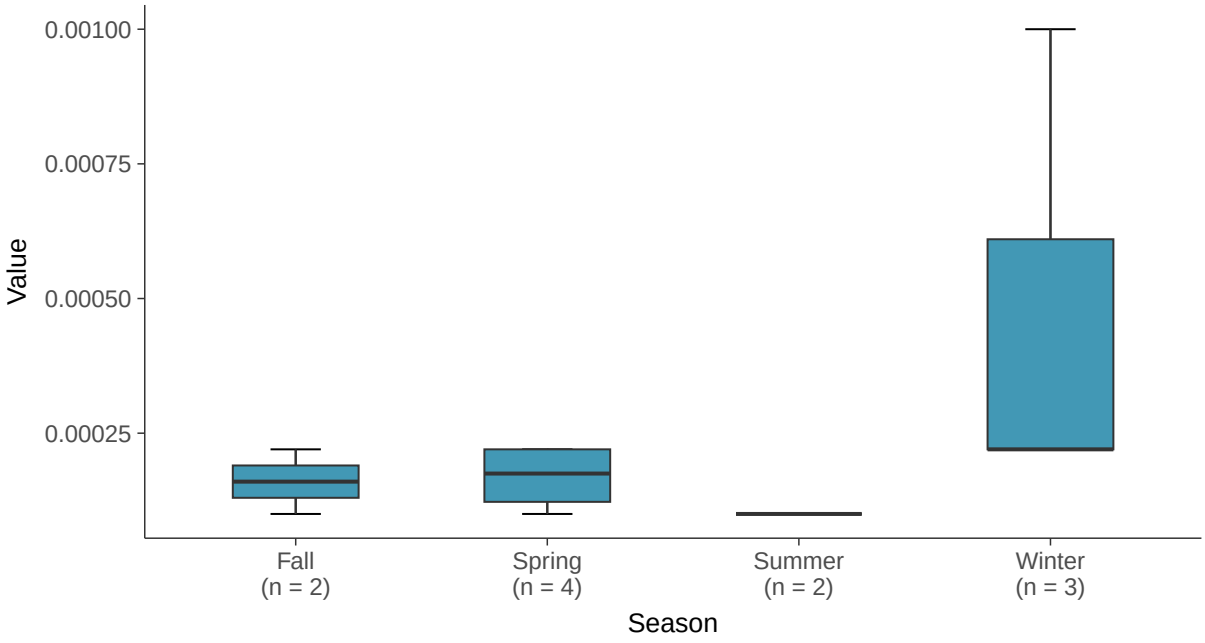
Boxplot

Selenium, MW-32 (mg/L)



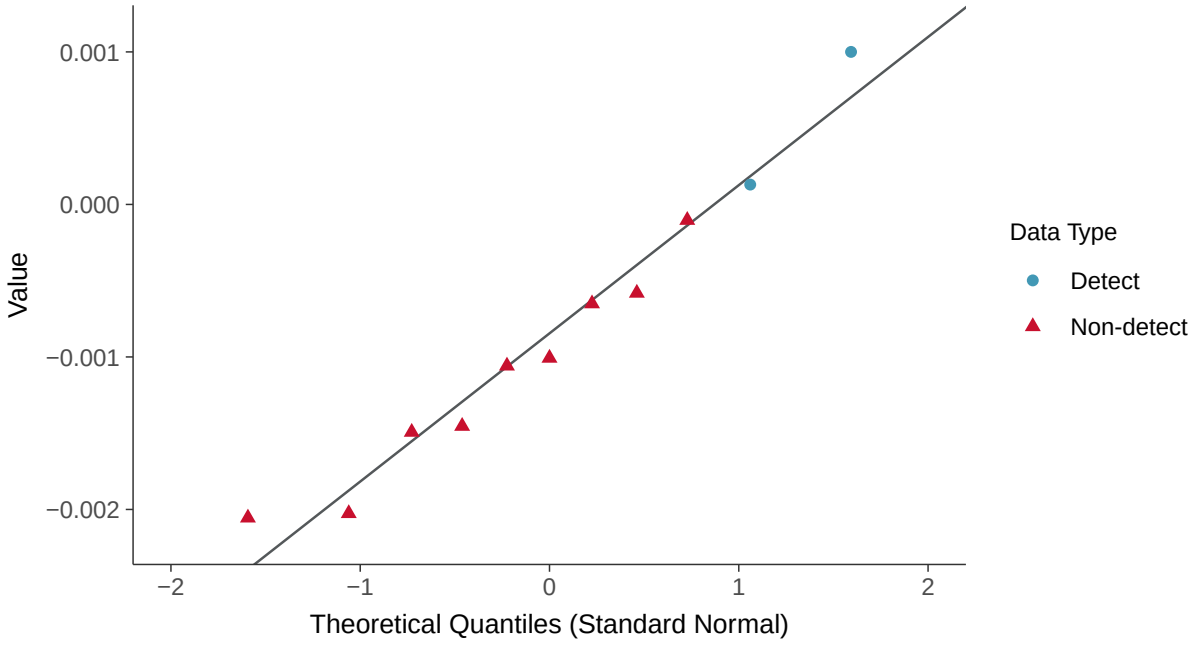
Boxplot by Season

Selenium, MW-32 (mg/L)



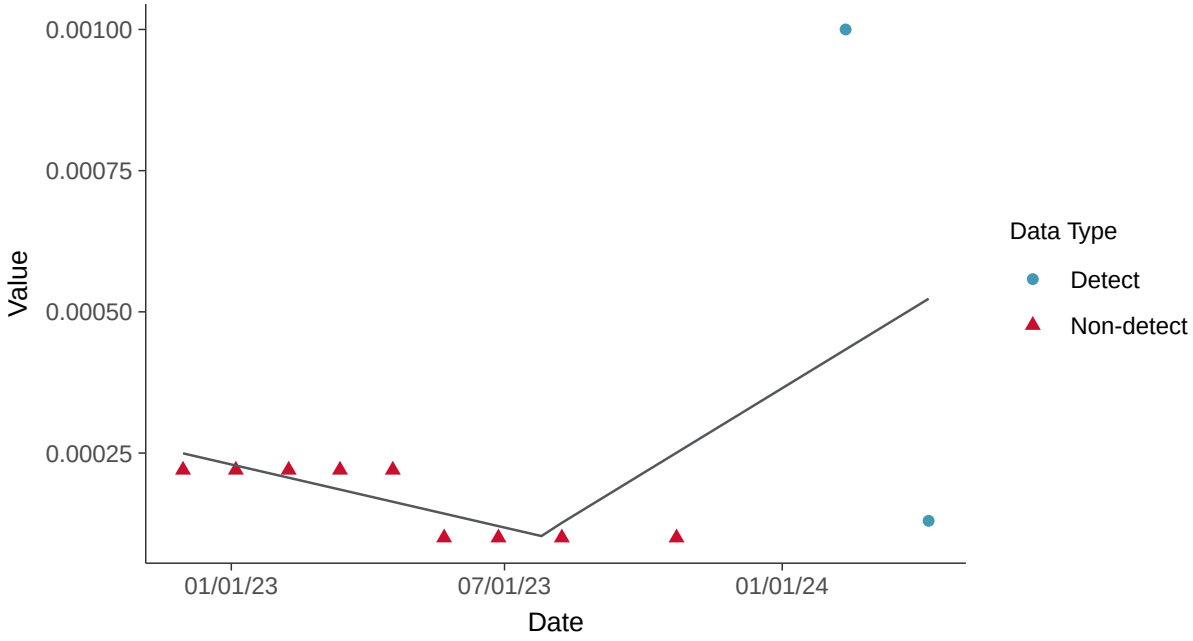
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-32 (mg/L)



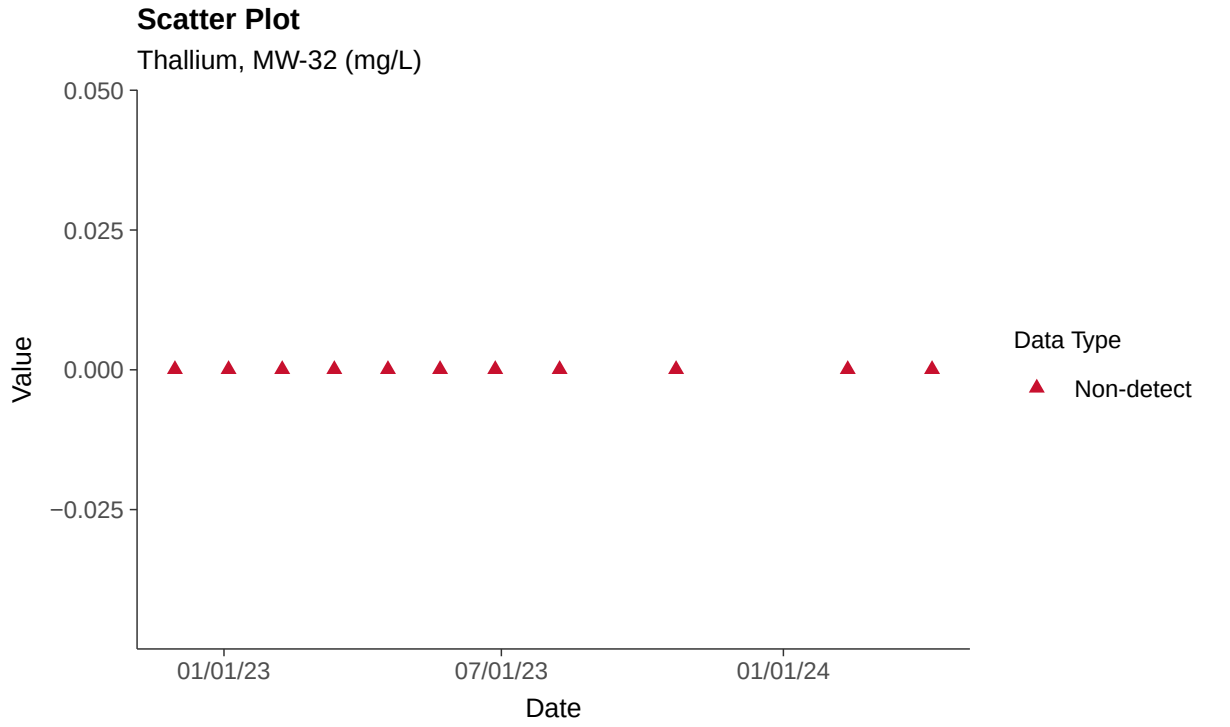
Trend Regression: Piecewise Linear-Linear

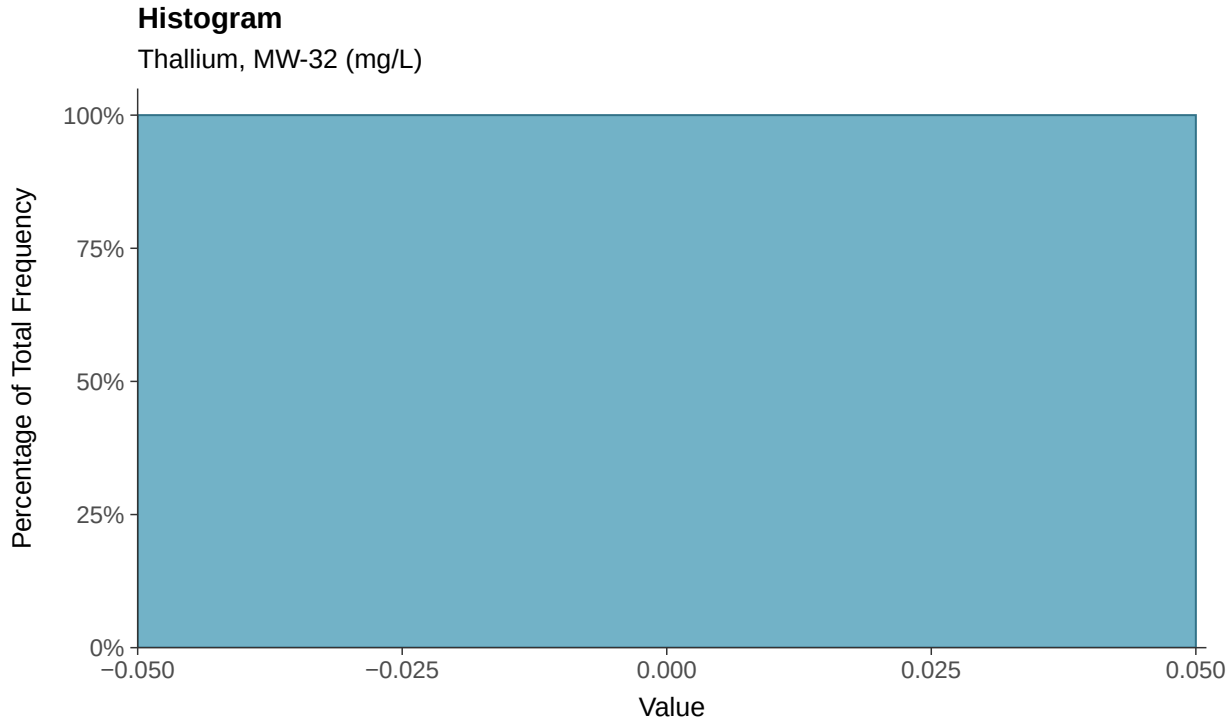
Selenium, MW-32 (mg/L)



Appendix IV: Thallium, MW-32

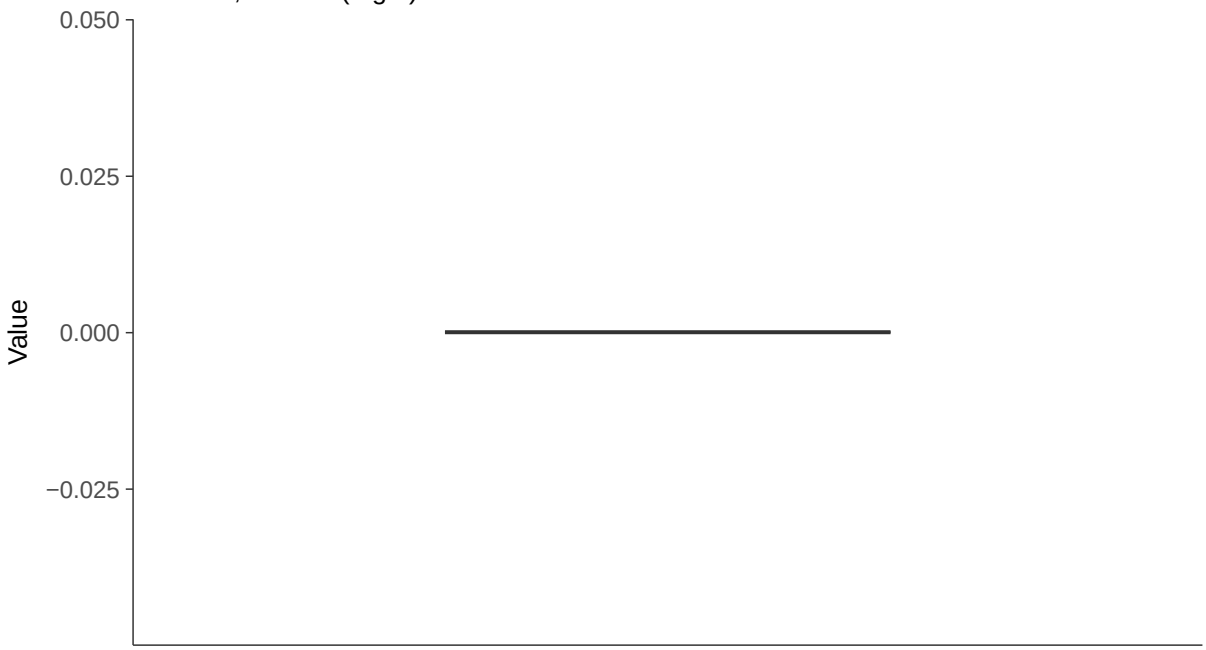
ID: 1_42_5_125





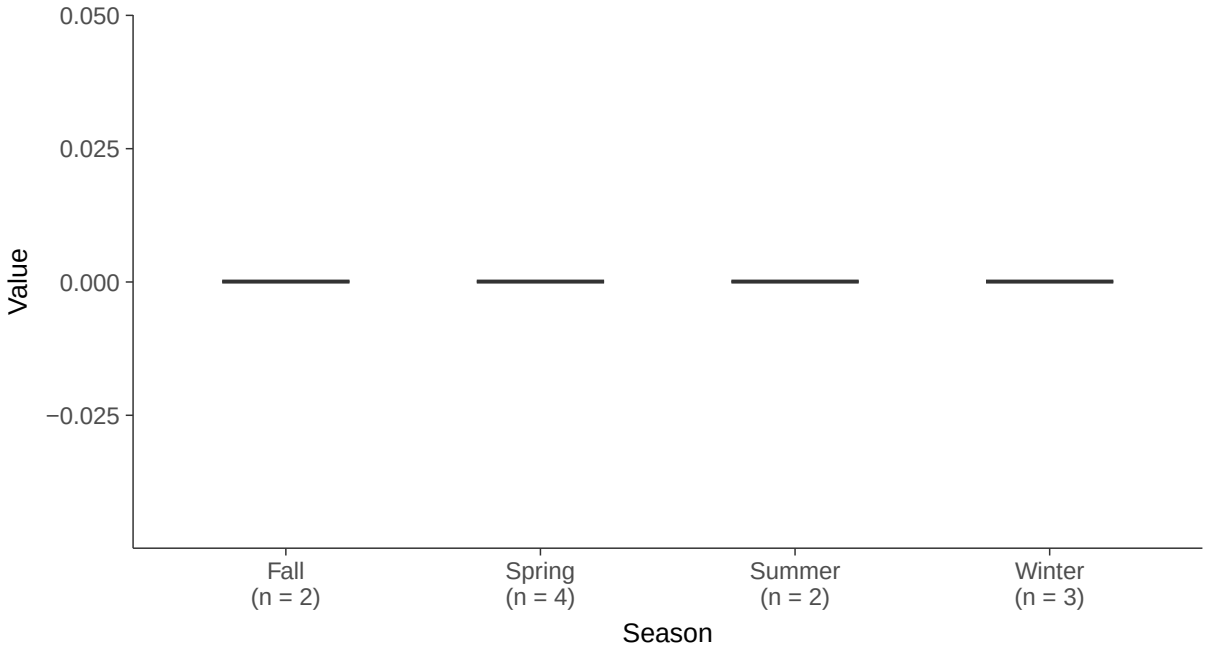
Boxplot

Thallium, MW-32 (mg/L)



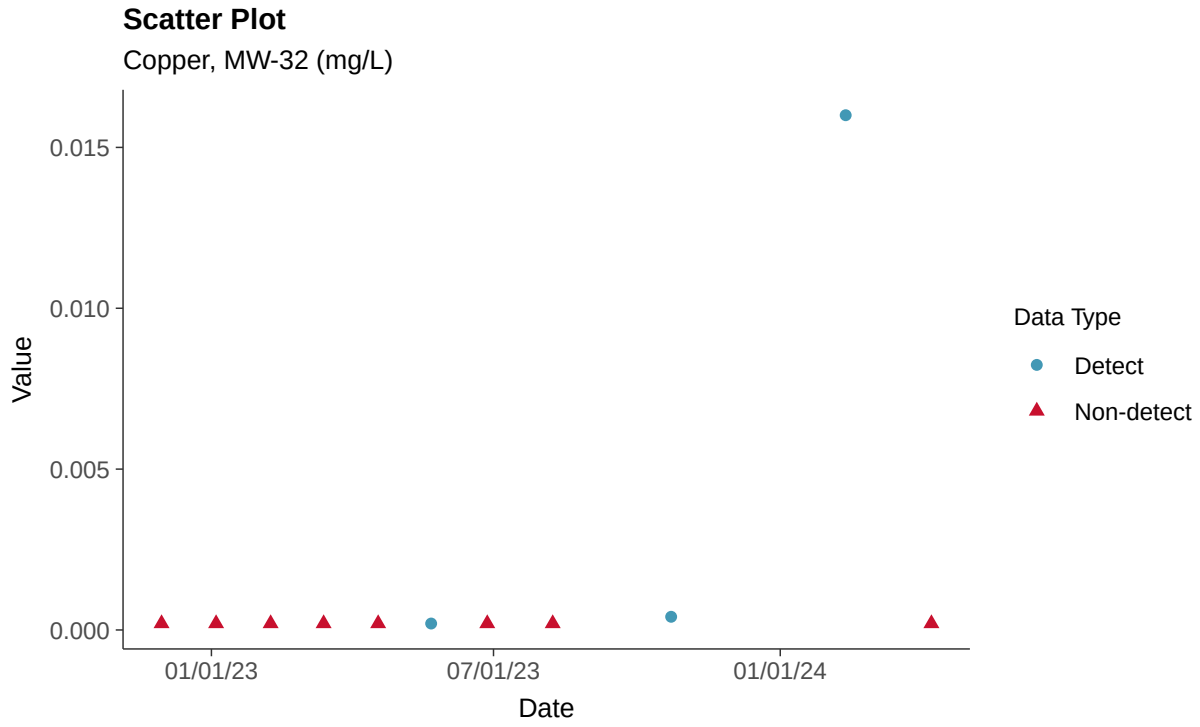
Boxplot by Season

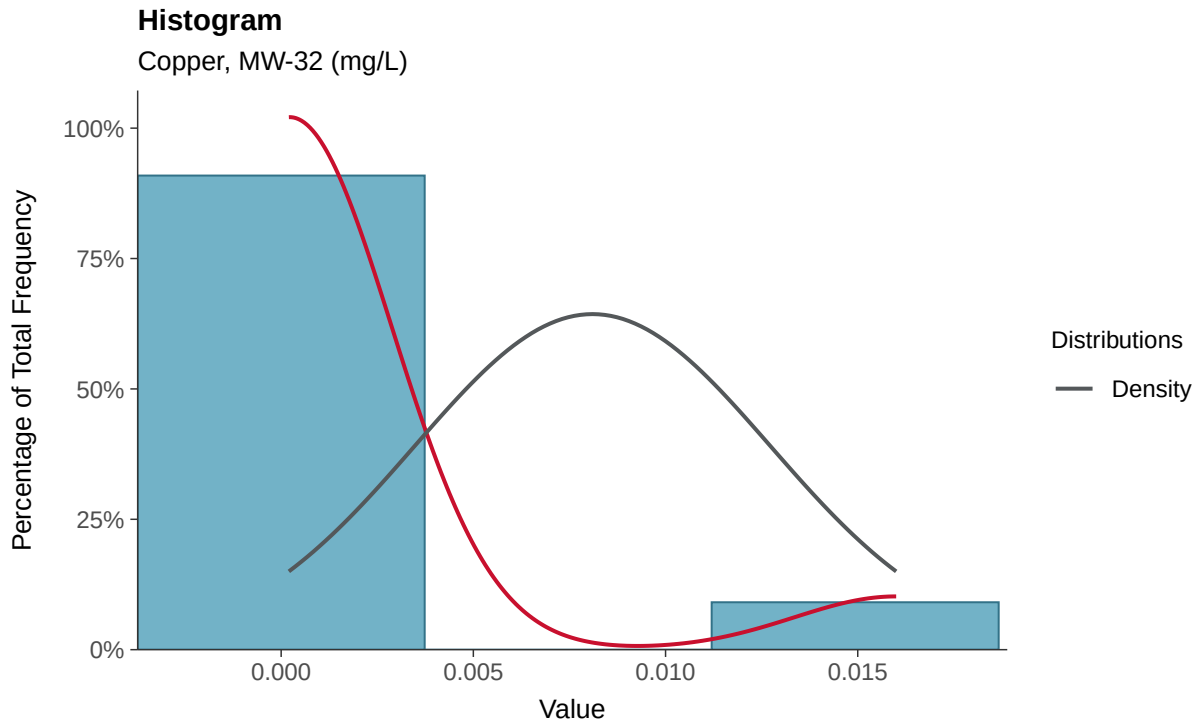
Thallium, MW-32 (mg/L)



Part 115: Copper, MW-32

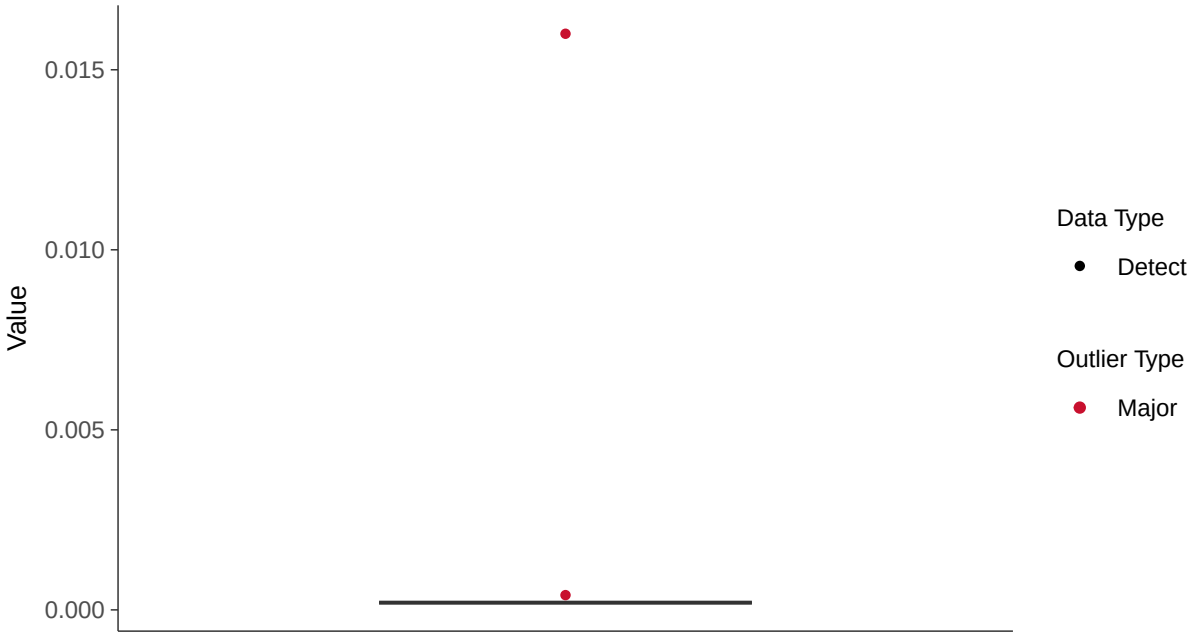
ID: 1_42_6_111





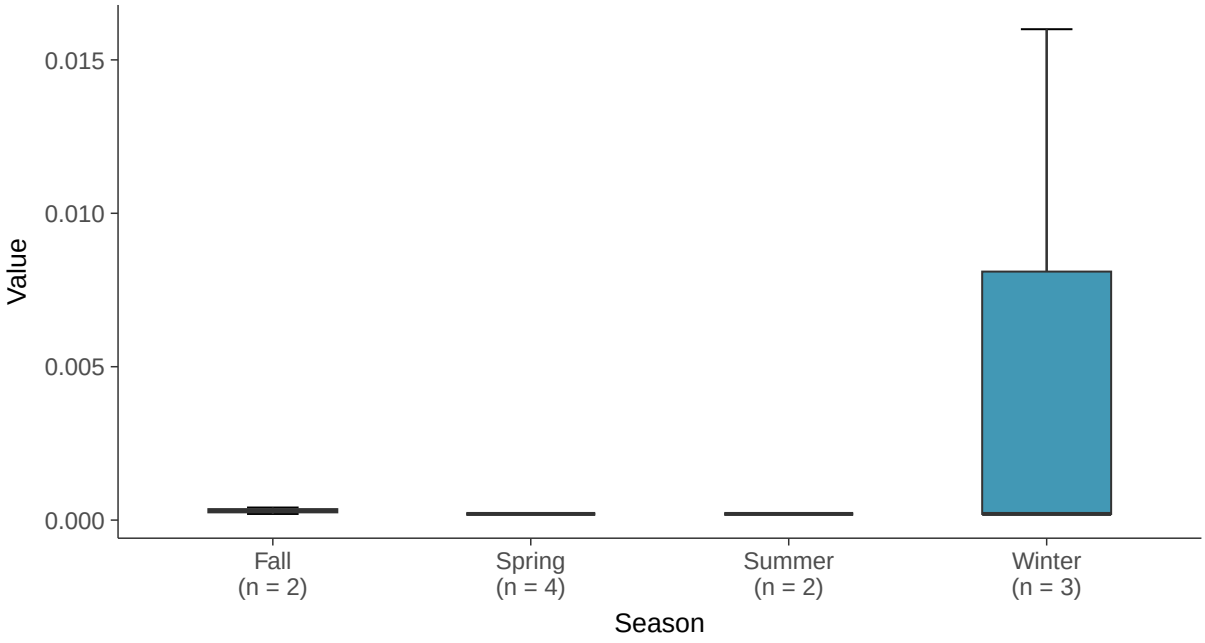
Boxplot

Copper, MW-32 (mg/L)



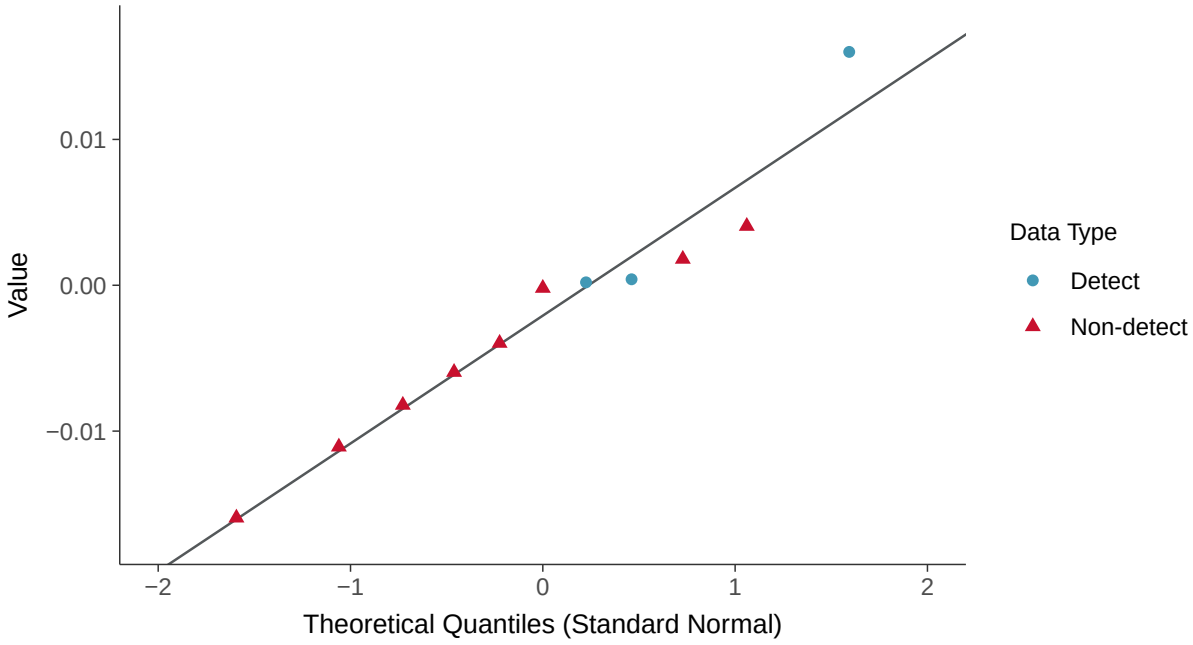
Boxplot by Season

Copper, MW-32 (mg/L)



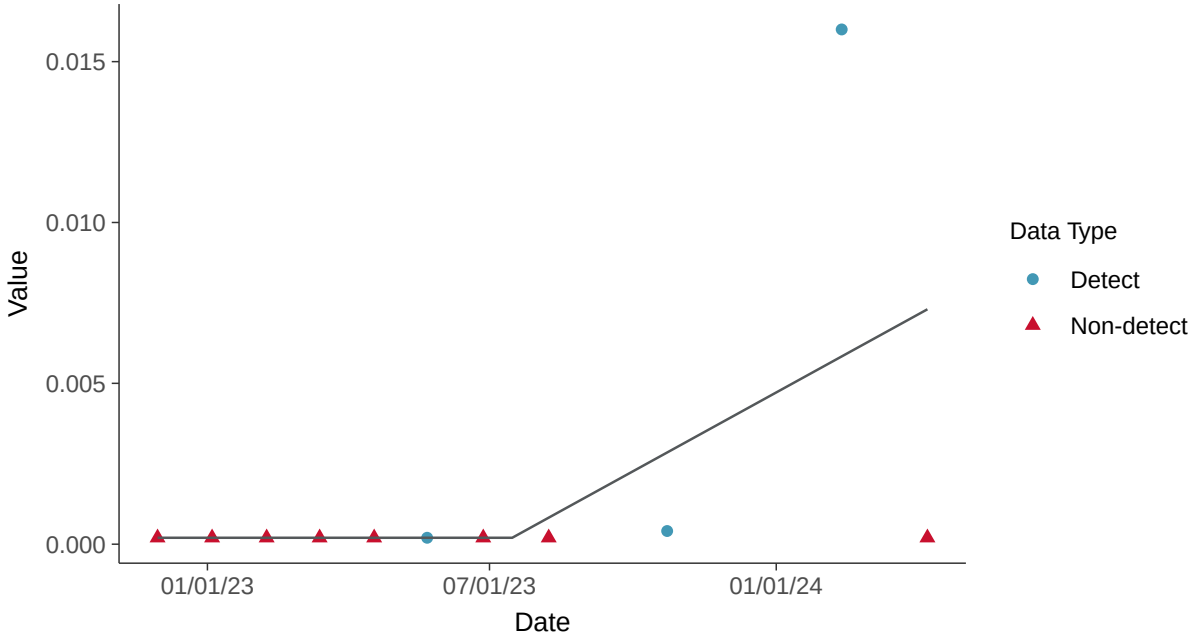
Normal Q-Q plot using ROS Imputed Estimates

Copper, MW-32 (mg/L)



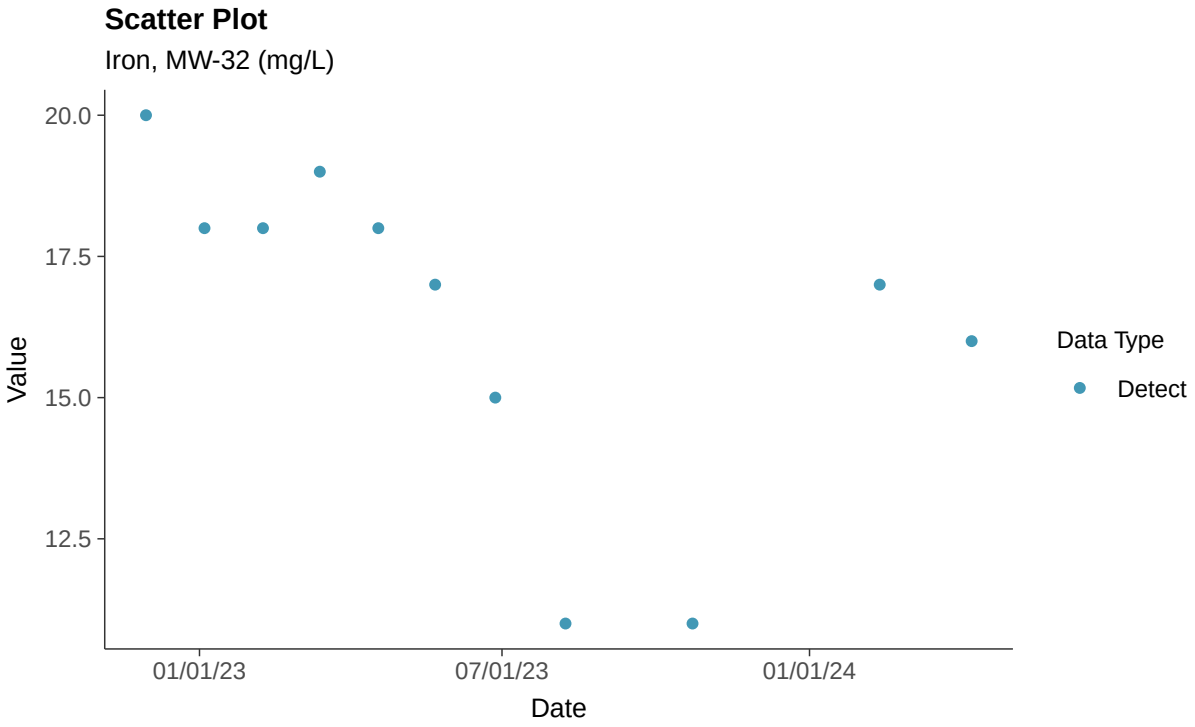
Trend Regression: Piecewise Linear-Linear

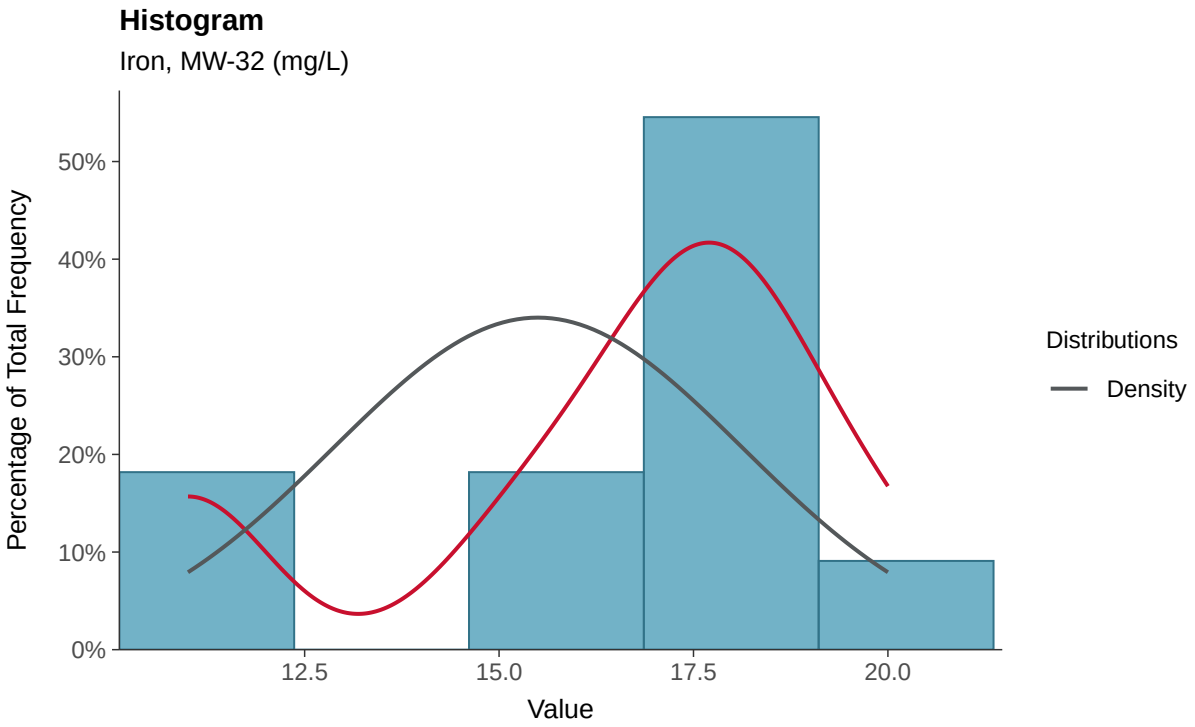
Copper, MW-32 (mg/L)



Part 115: Iron, MW-32

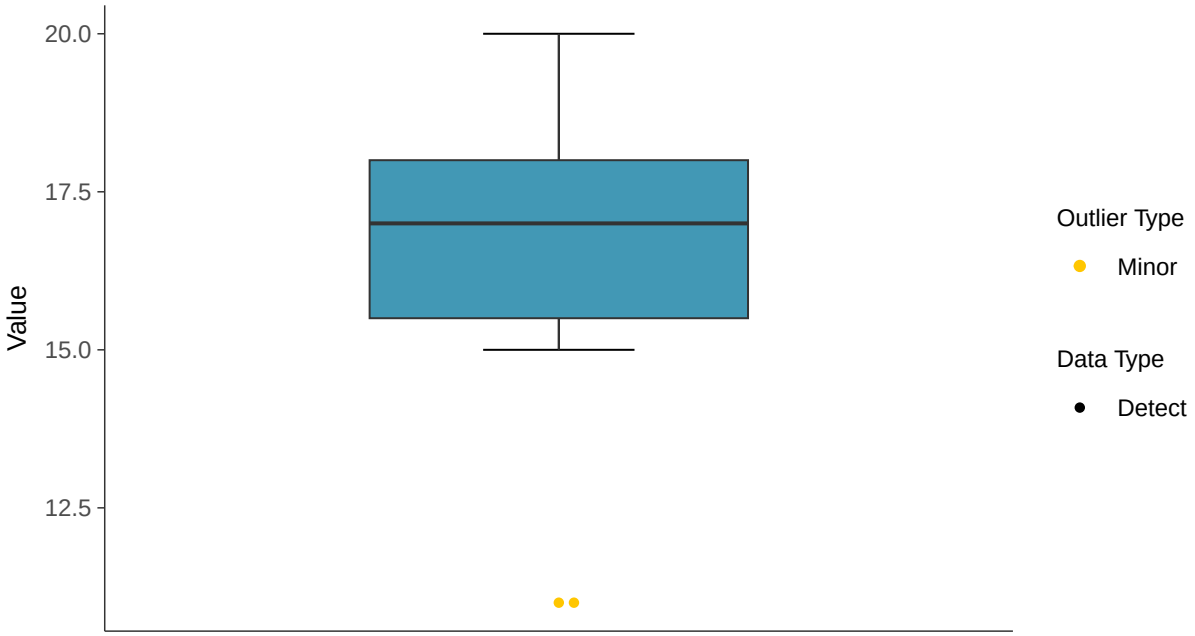
ID: 1_42_6_114





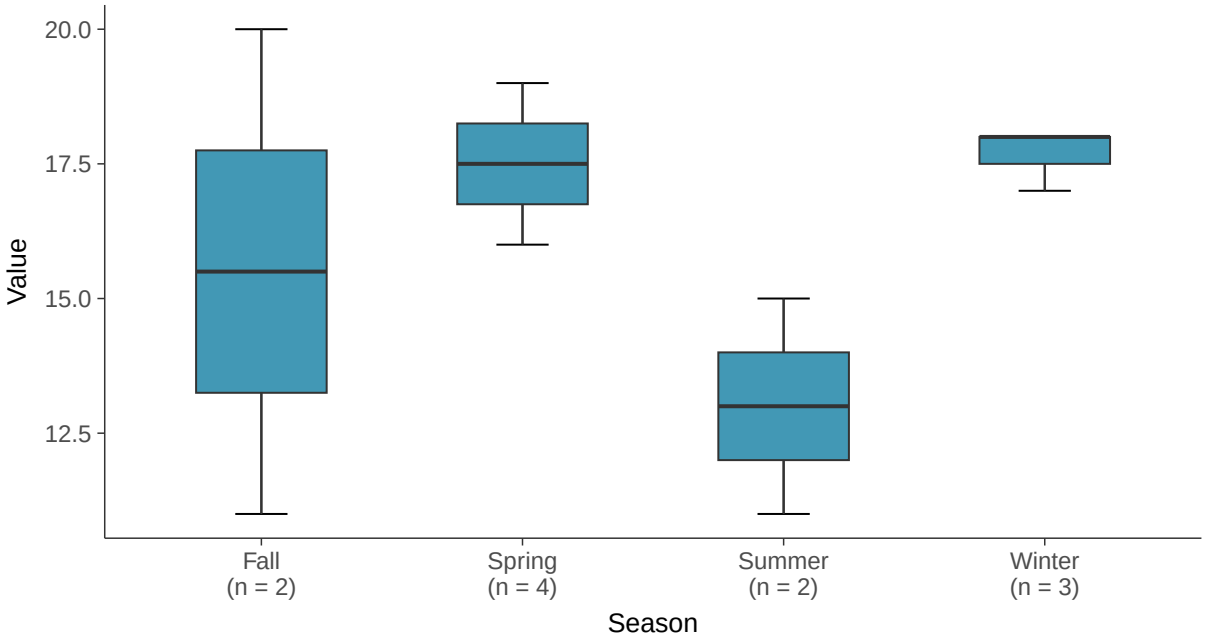
Boxplot

Iron, MW-32 (mg/L)



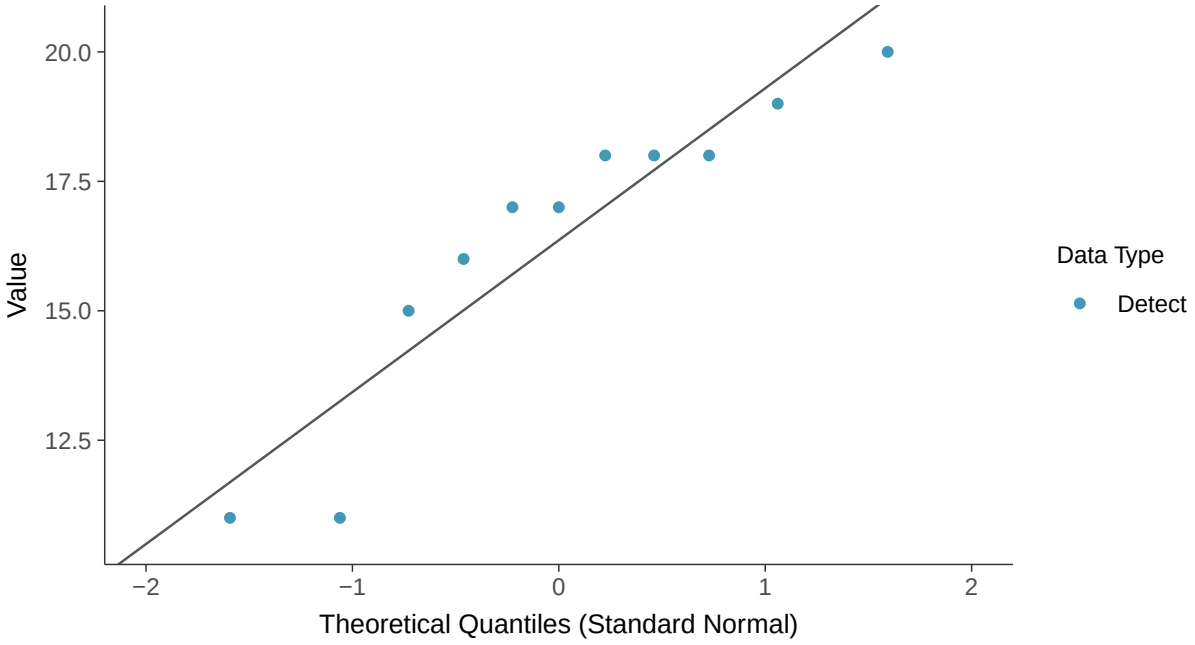
Boxplot by Season

Iron, MW-32 (mg/L)



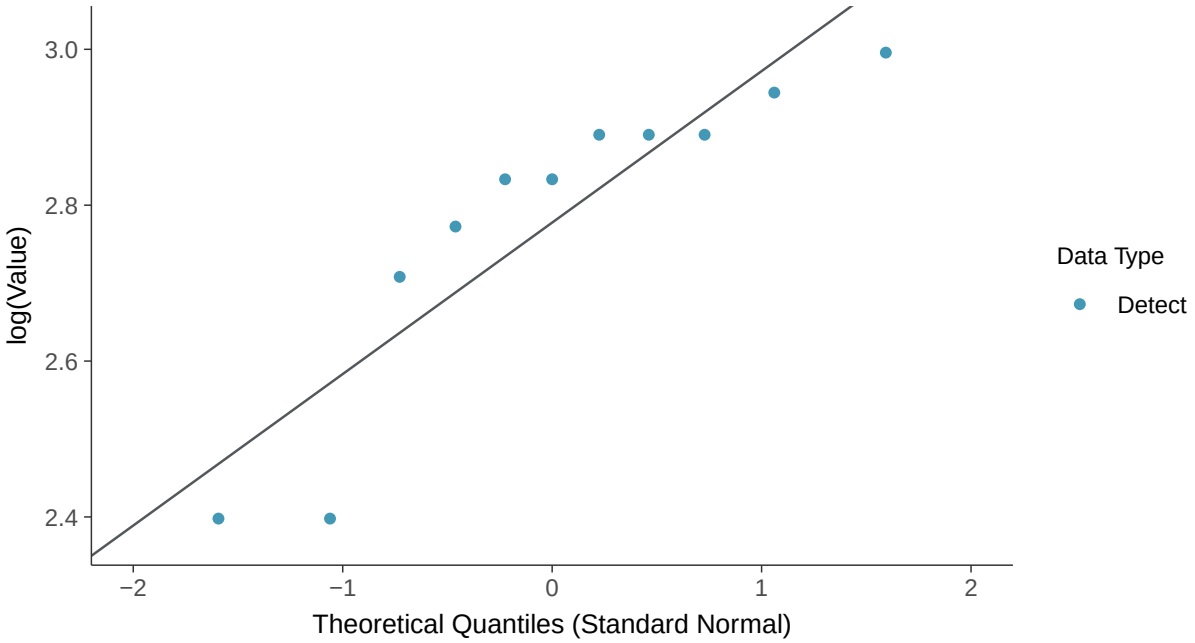
Normal Q-Q plot

Iron, MW-32 (mg/L)



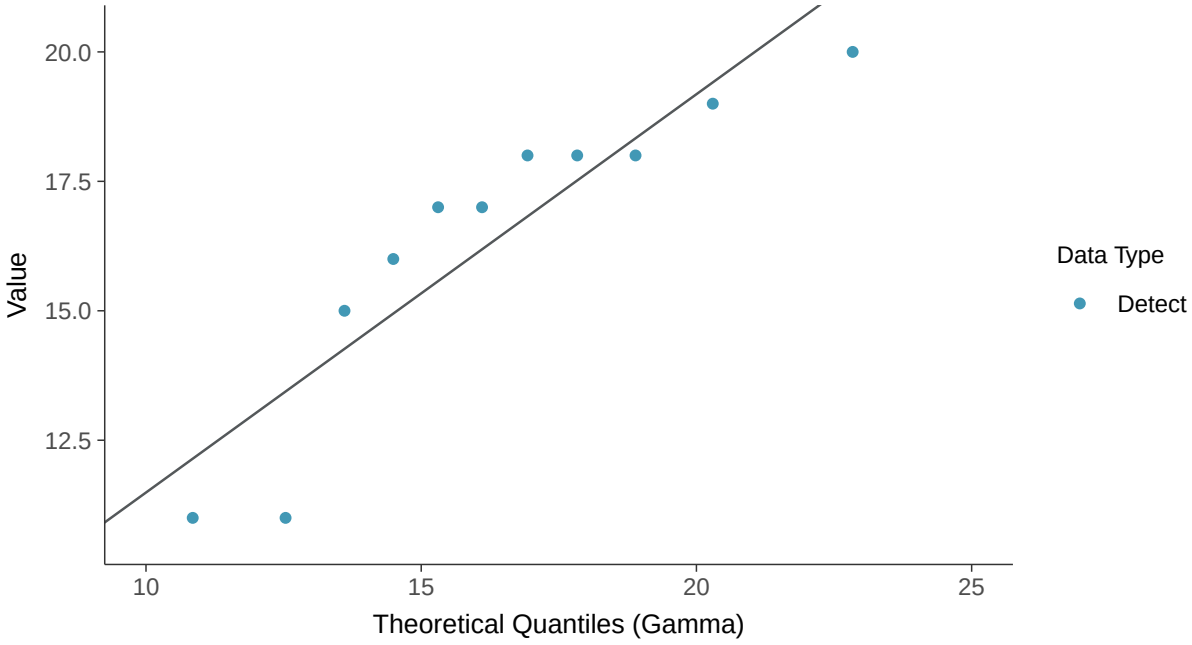
Lognormal Q-Q plot

Iron, MW-32 (mg/L)



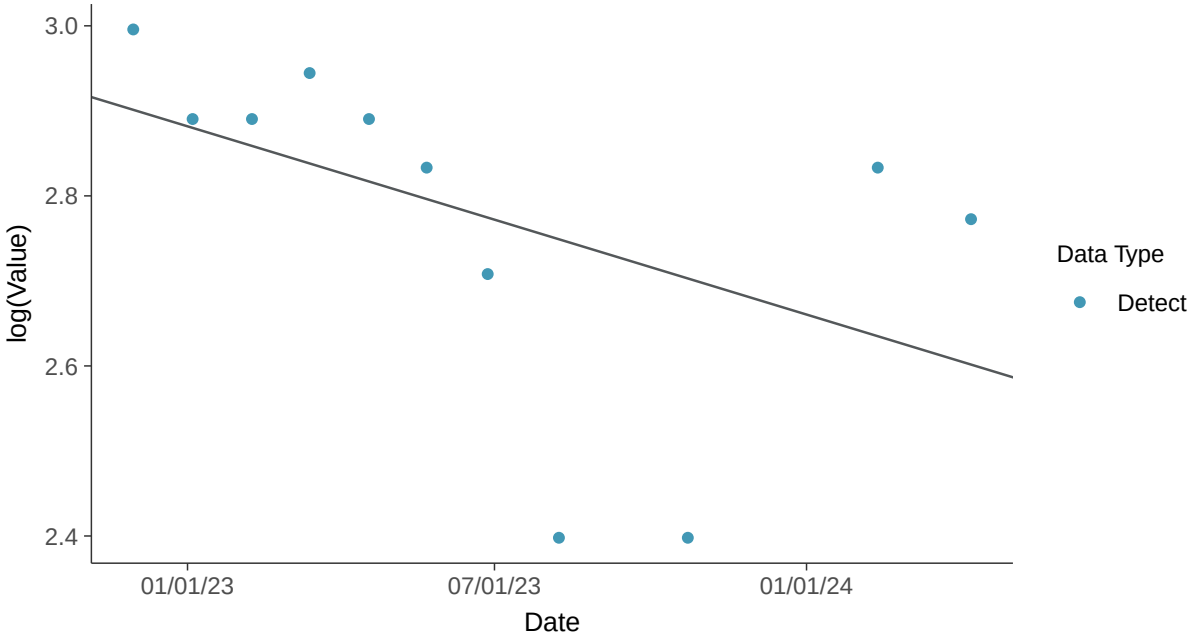
Gamma Q-Q plot

Iron, MW-32 (mg/L)



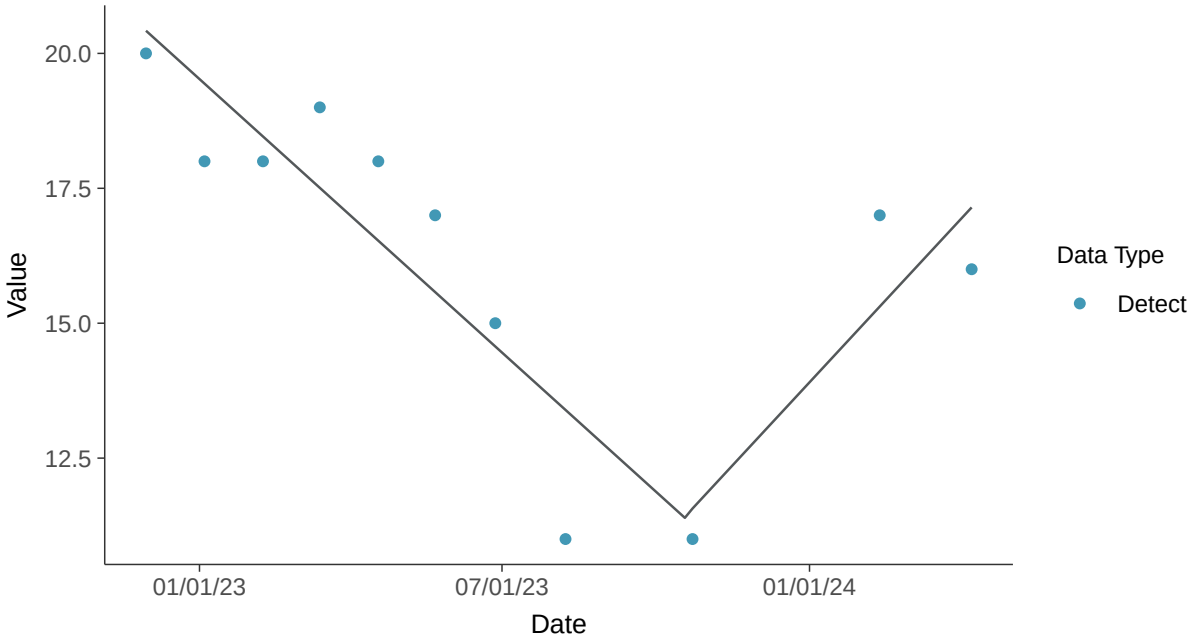
Trend Regression: Lognormal MLE

Iron, MW-32 (mg/L)



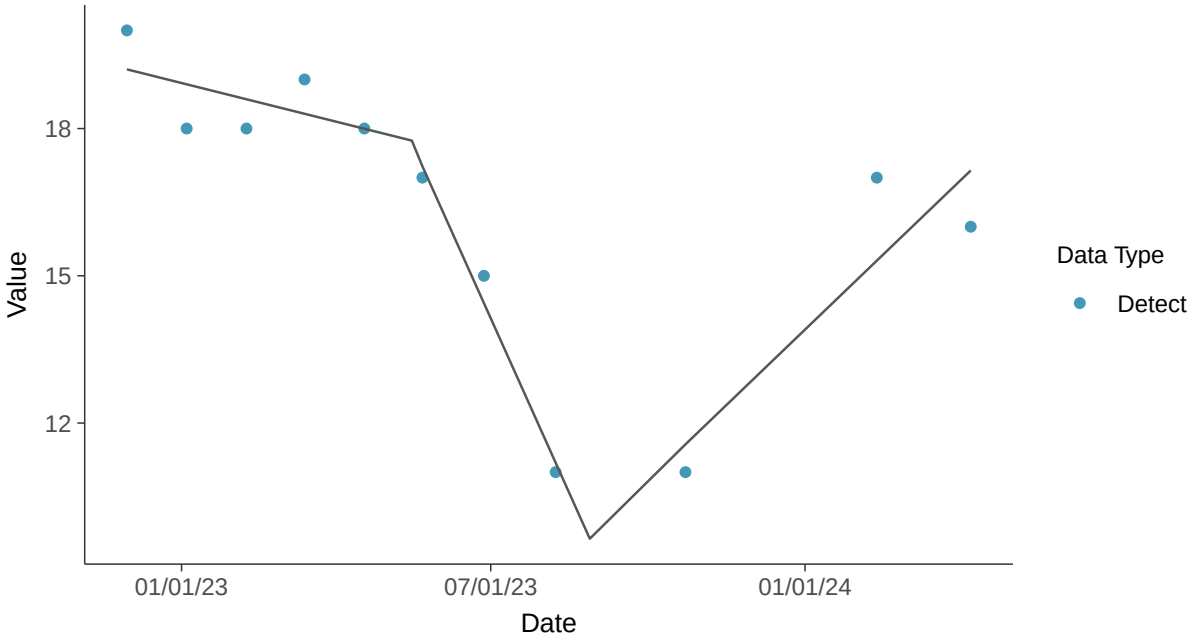
Trend Regression: Piecewise Linear-Linear

Iron, MW-32 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Iron, MW-32 (mg/L)

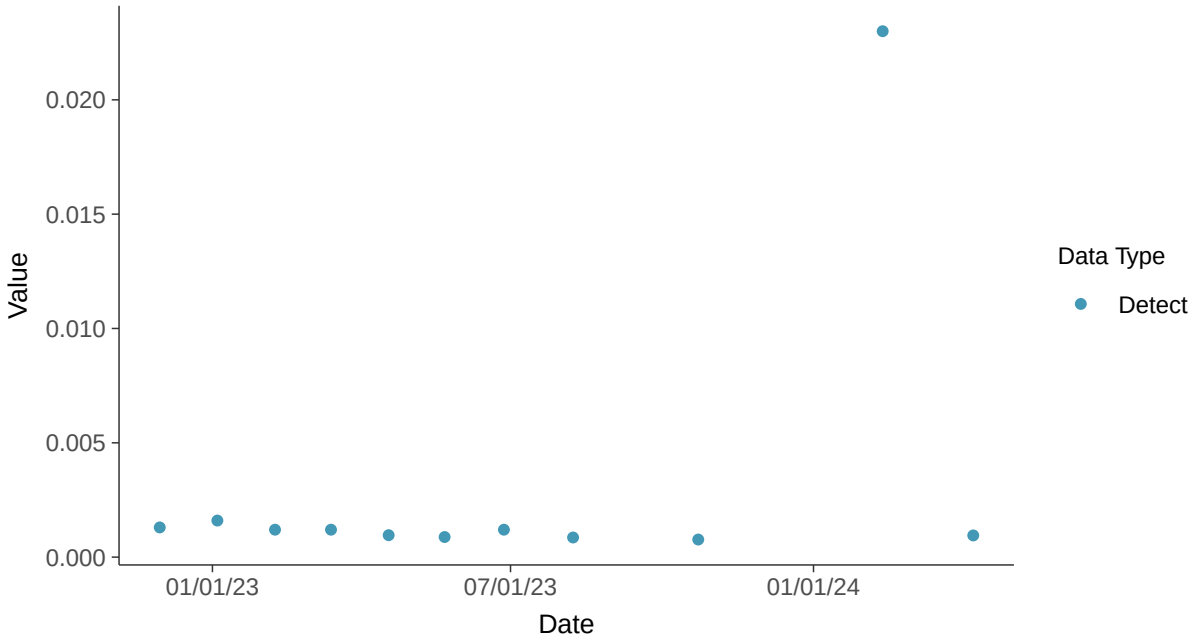


Part 115: Nickel, MW-32

ID: 1_42_6_119

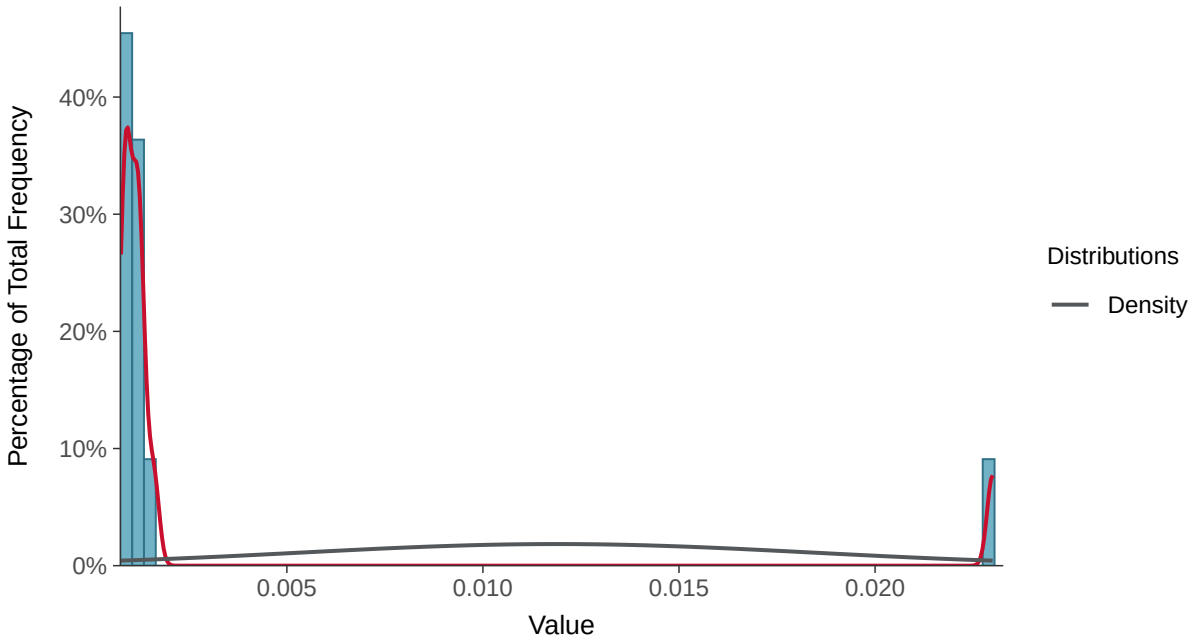
Scatter Plot

Nickel, MW-32 (mg/L)



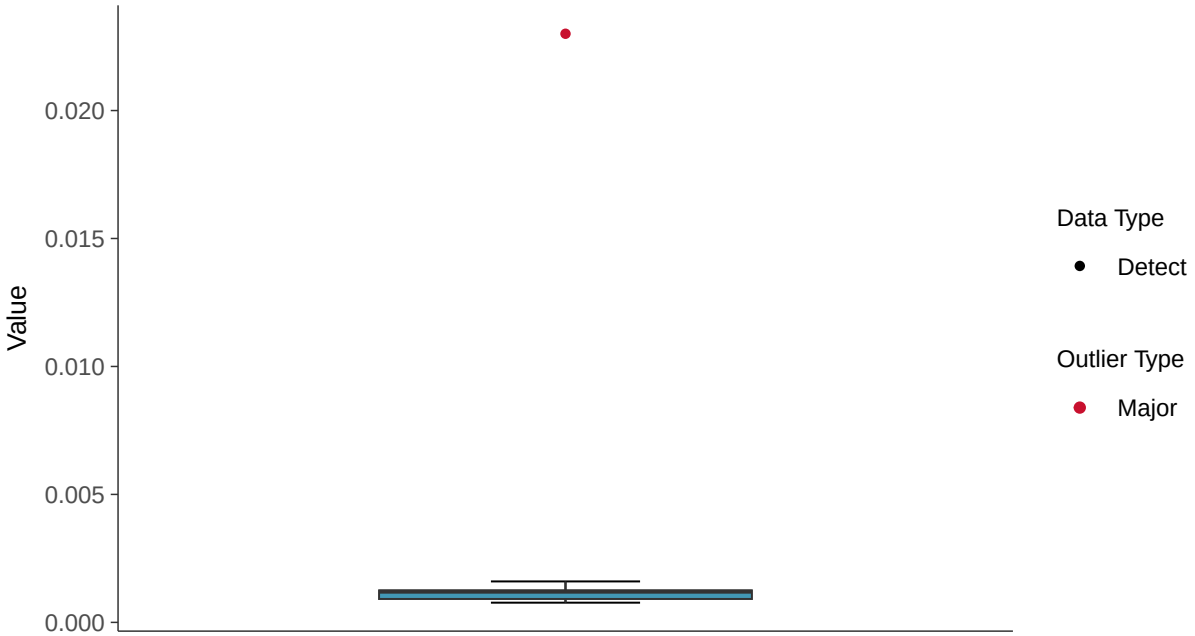
Histogram

Nickel, MW-32 (mg/L)



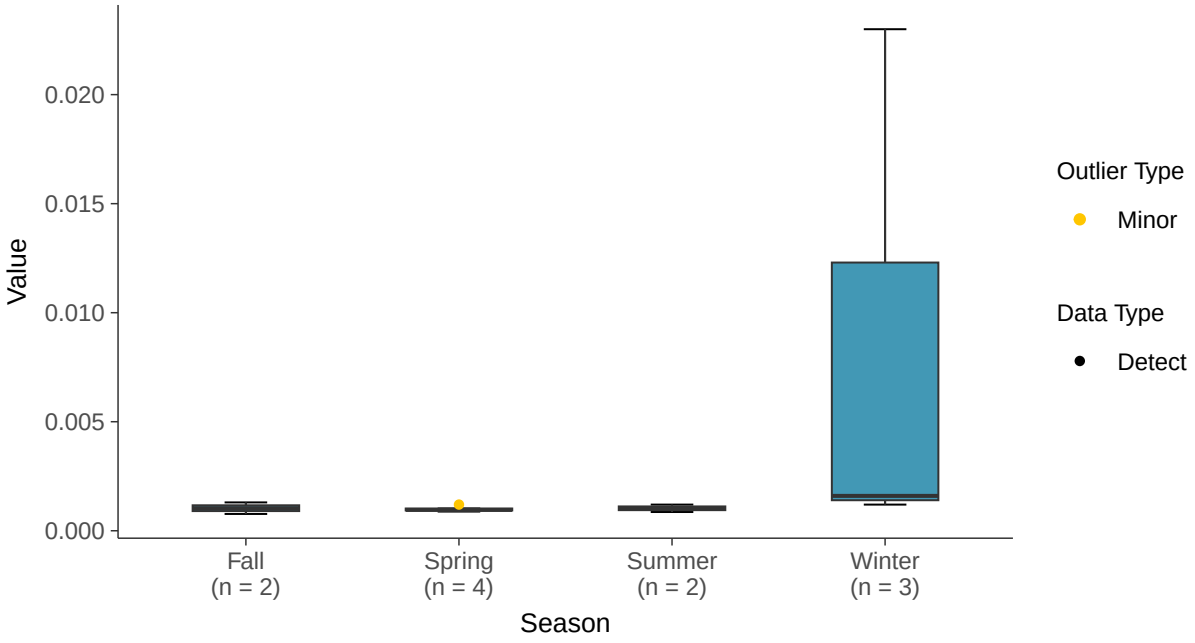
Boxplot

Nickel, MW-32 (mg/L)



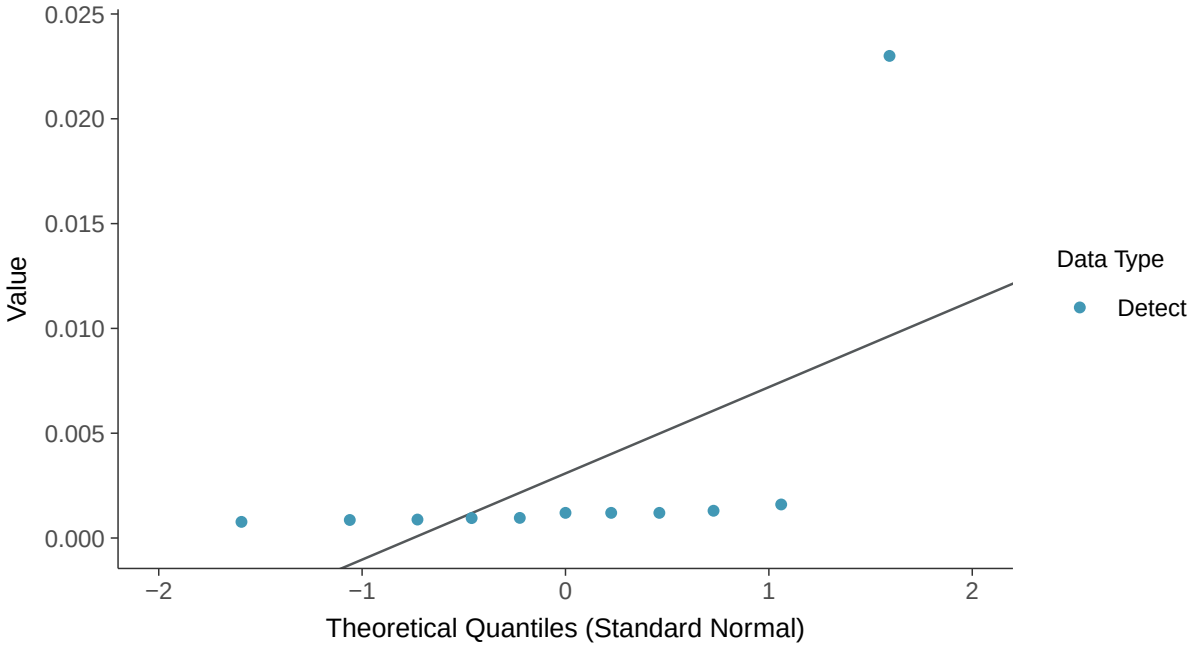
Boxplot by Season

Nickel, MW-32 (mg/L)



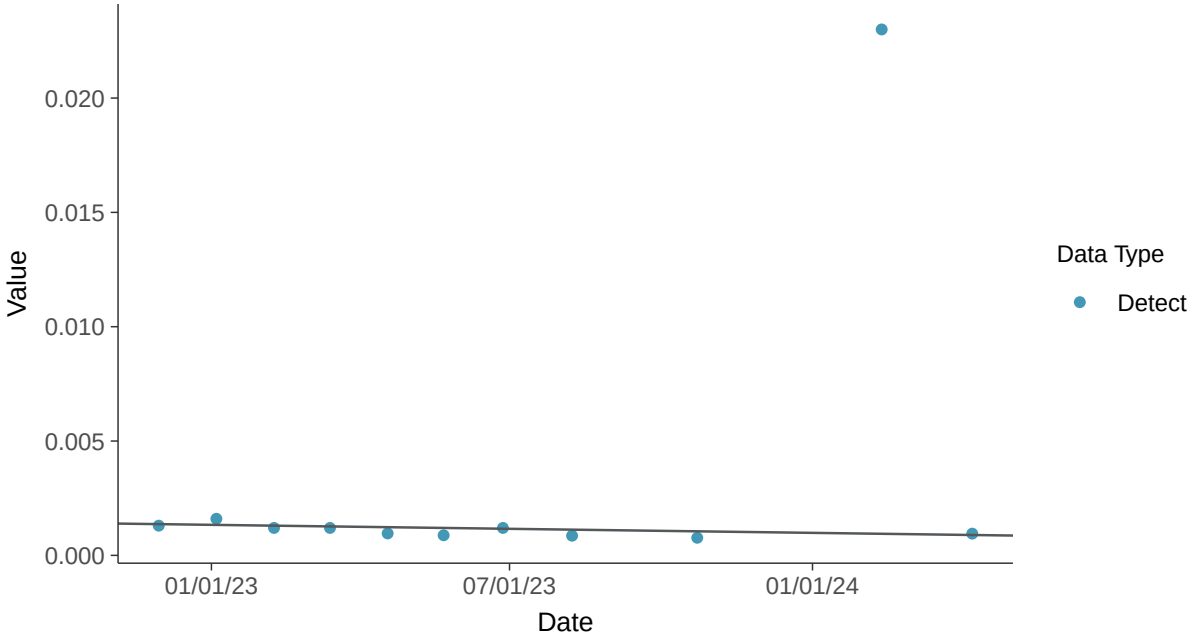
Normal Q-Q plot

Nickel, MW-32 (mg/L)



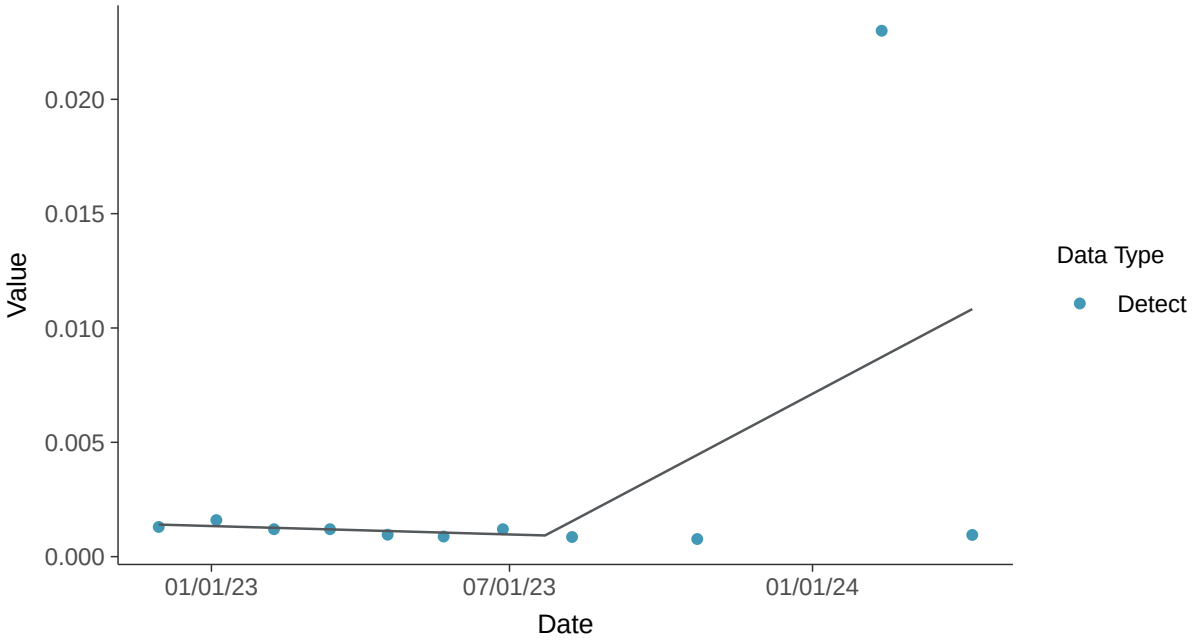
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Nickel, MW-32 (mg/L)



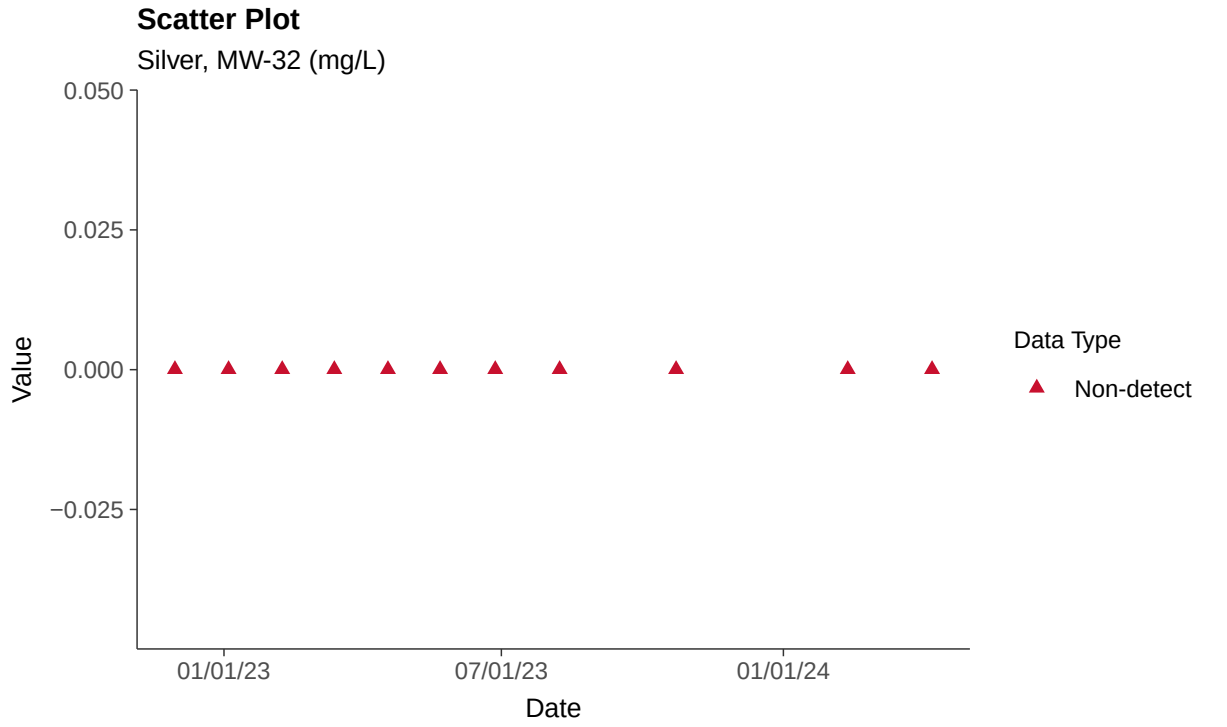
Trend Regression: Piecewise Linear-Linear

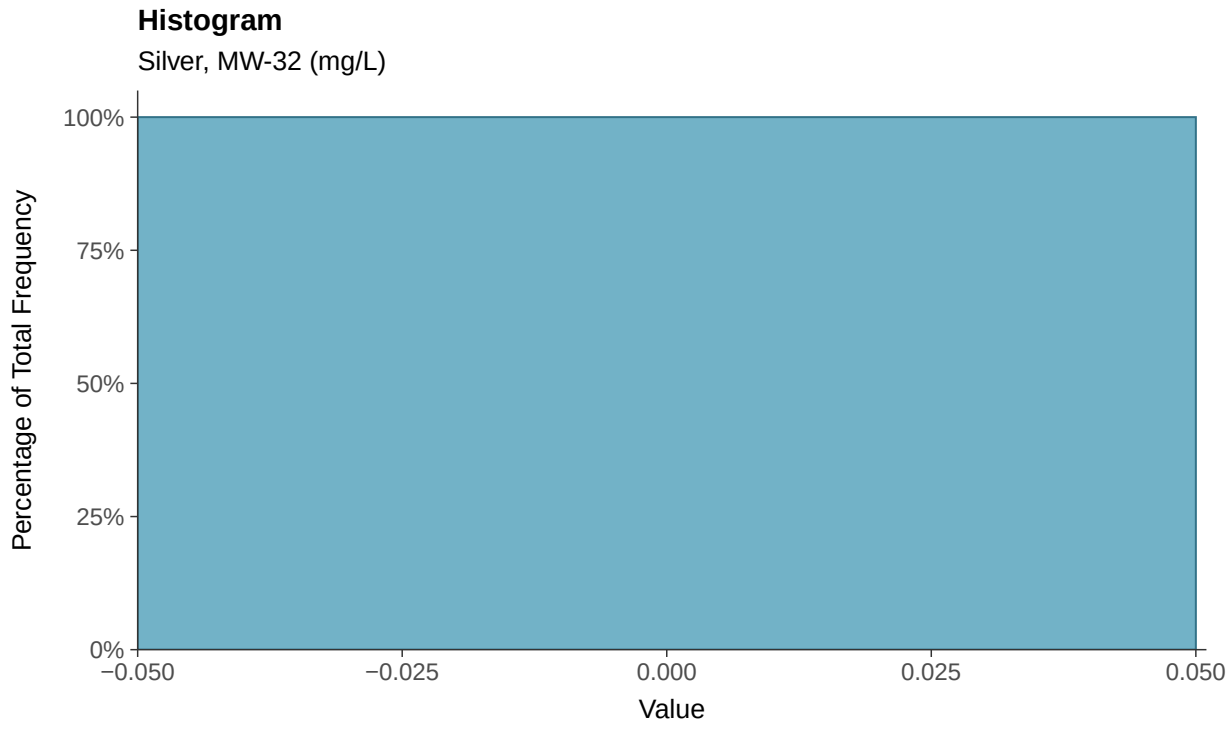
Nickel, MW-32 (mg/L)



Part 115: Silver, MW-32

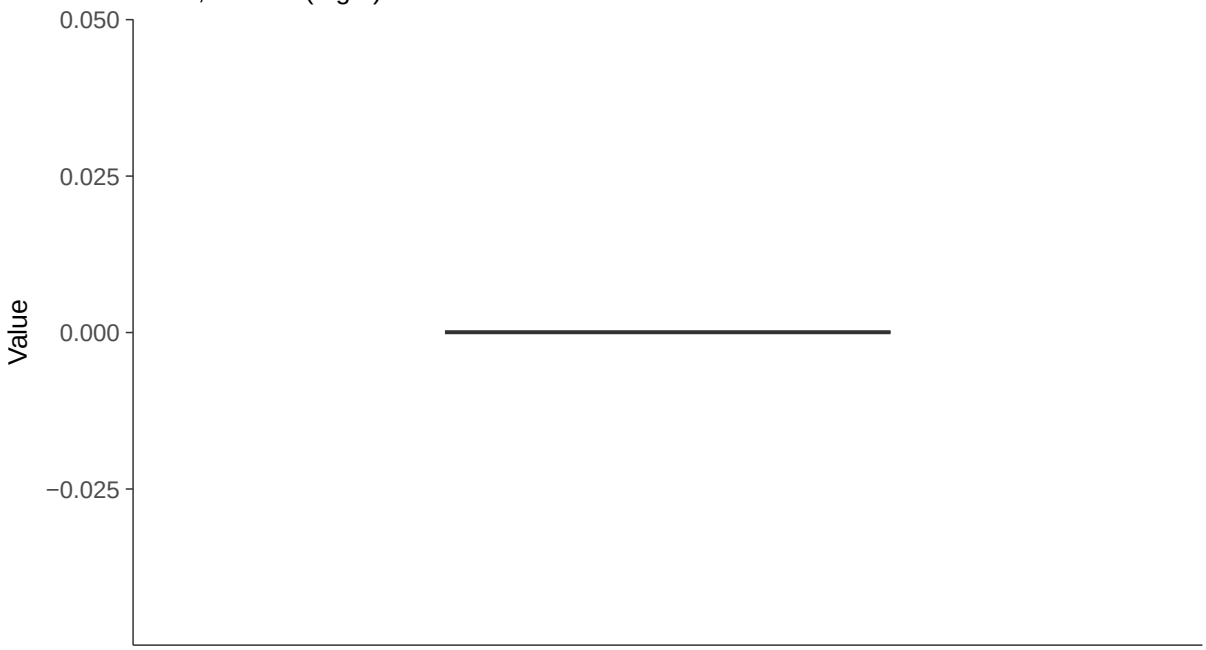
ID: 1_42_6_123





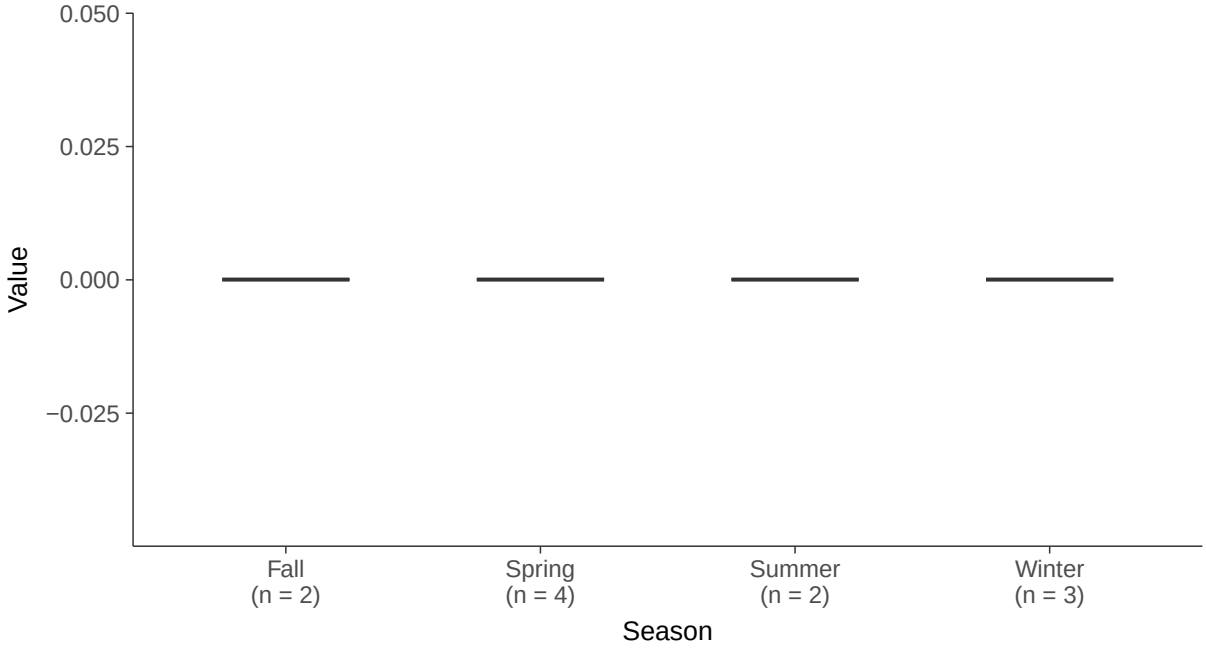
Boxplot

Silver, MW-32 (mg/L)



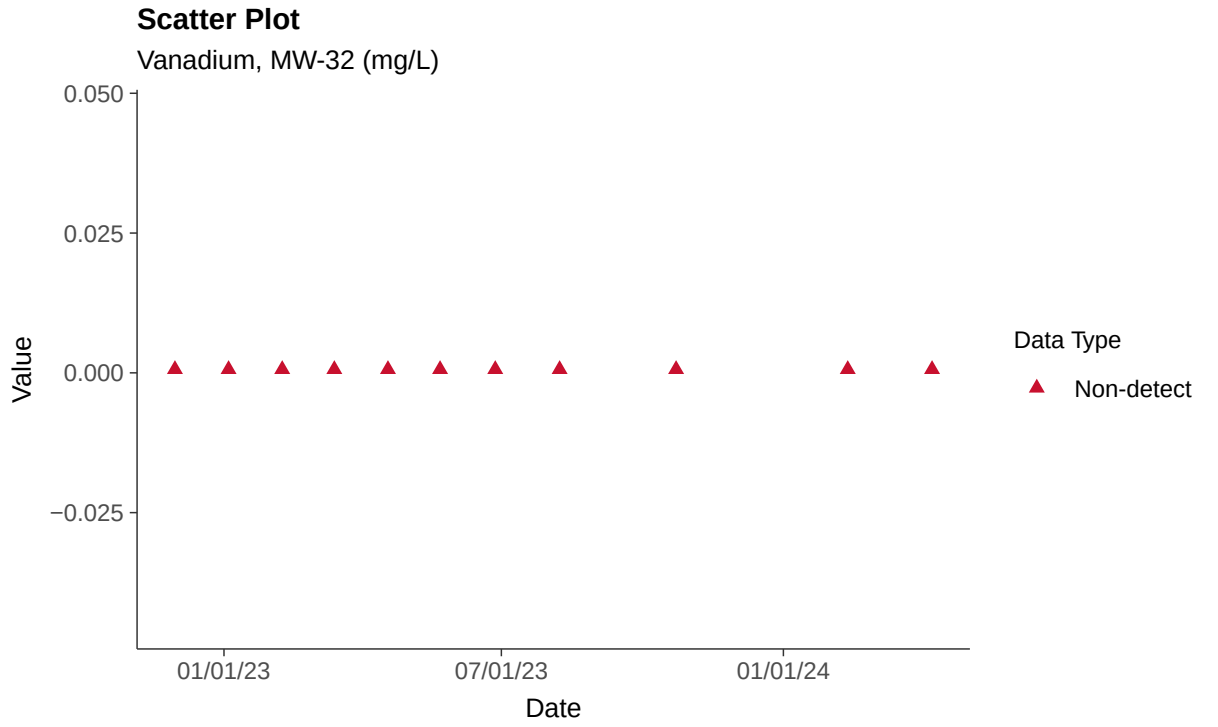
Boxplot by Season

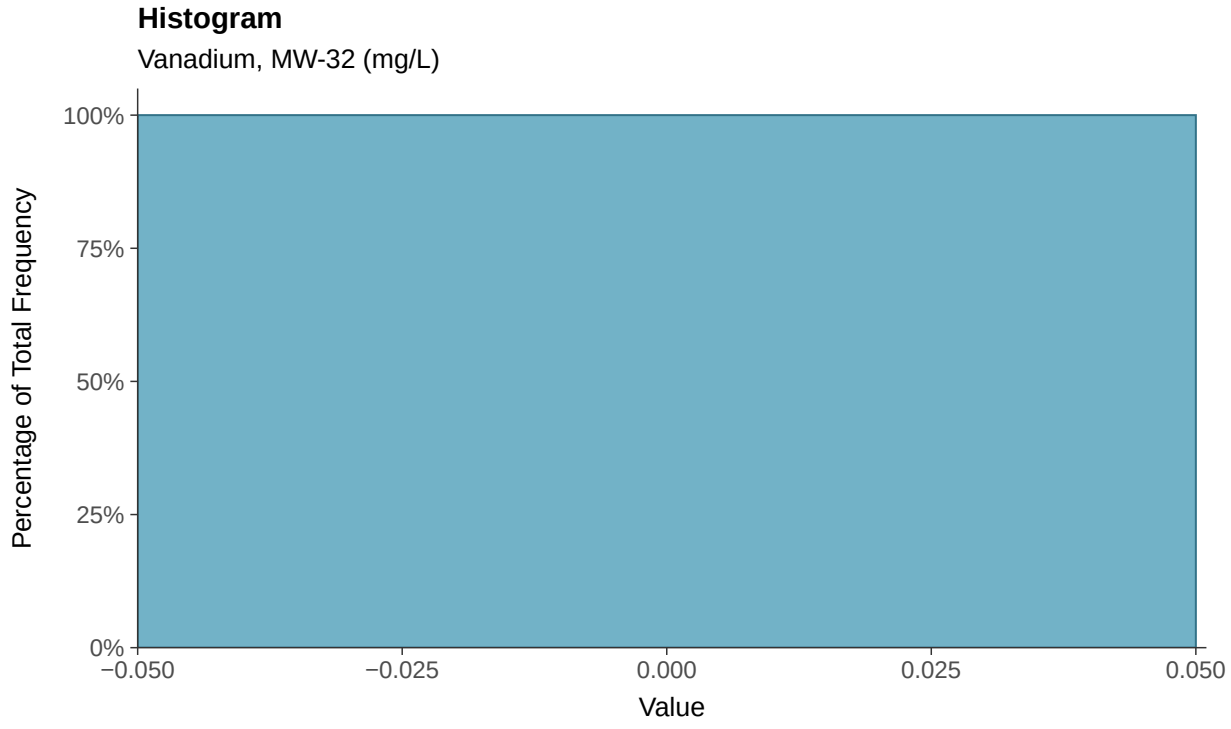
Silver, MW-32 (mg/L)



Part 115: Vanadium, MW-32

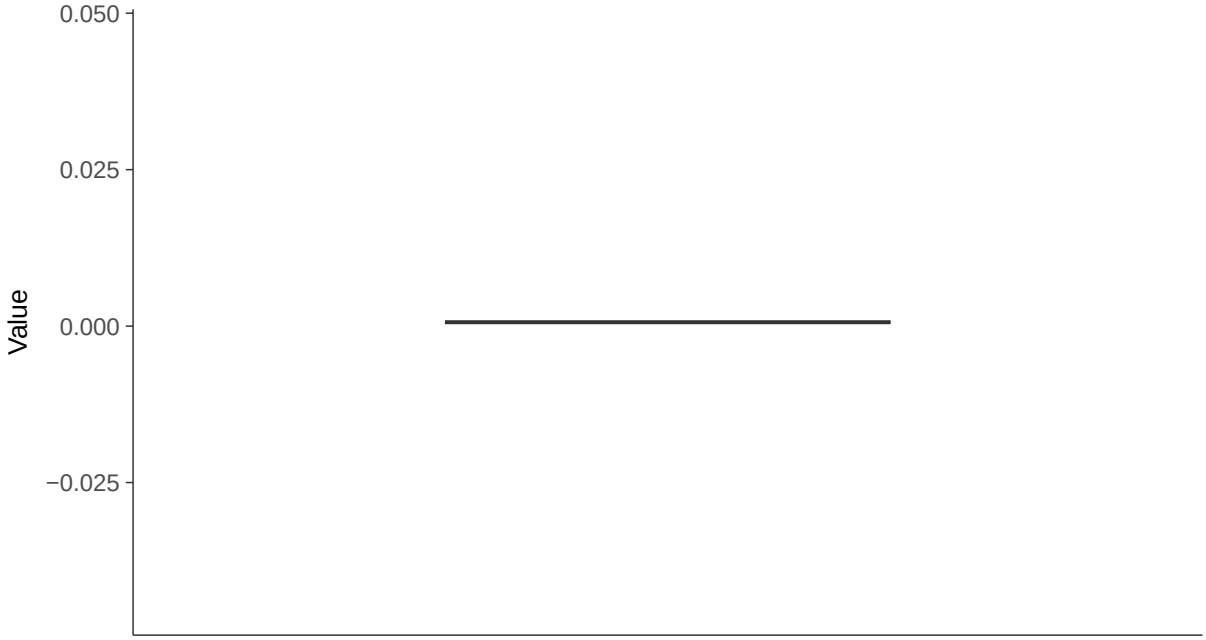
ID: 1_42_6_129





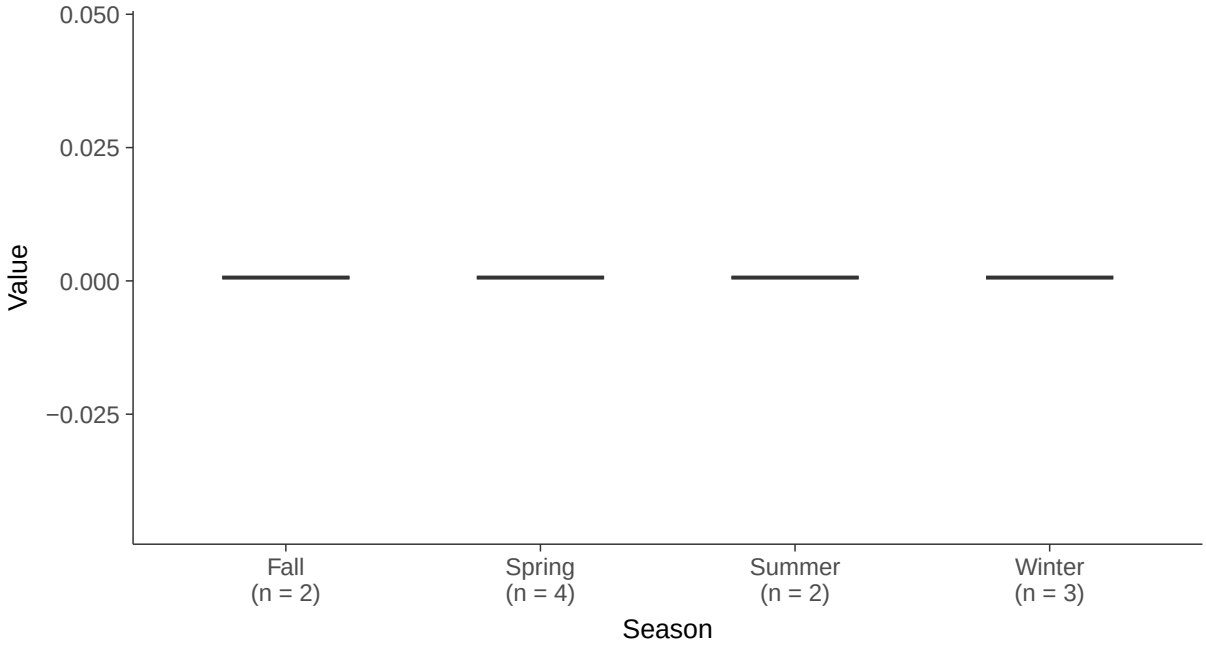
Boxplot

Vanadium, MW-32 (mg/L)



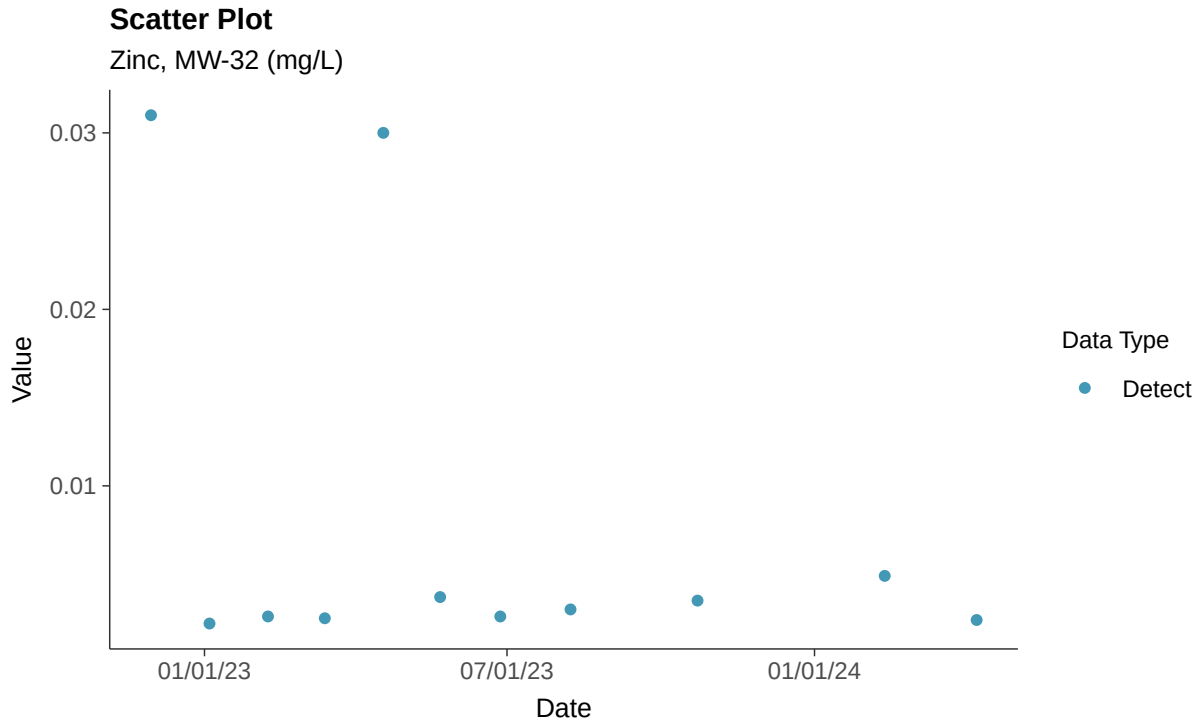
Boxplot by Season

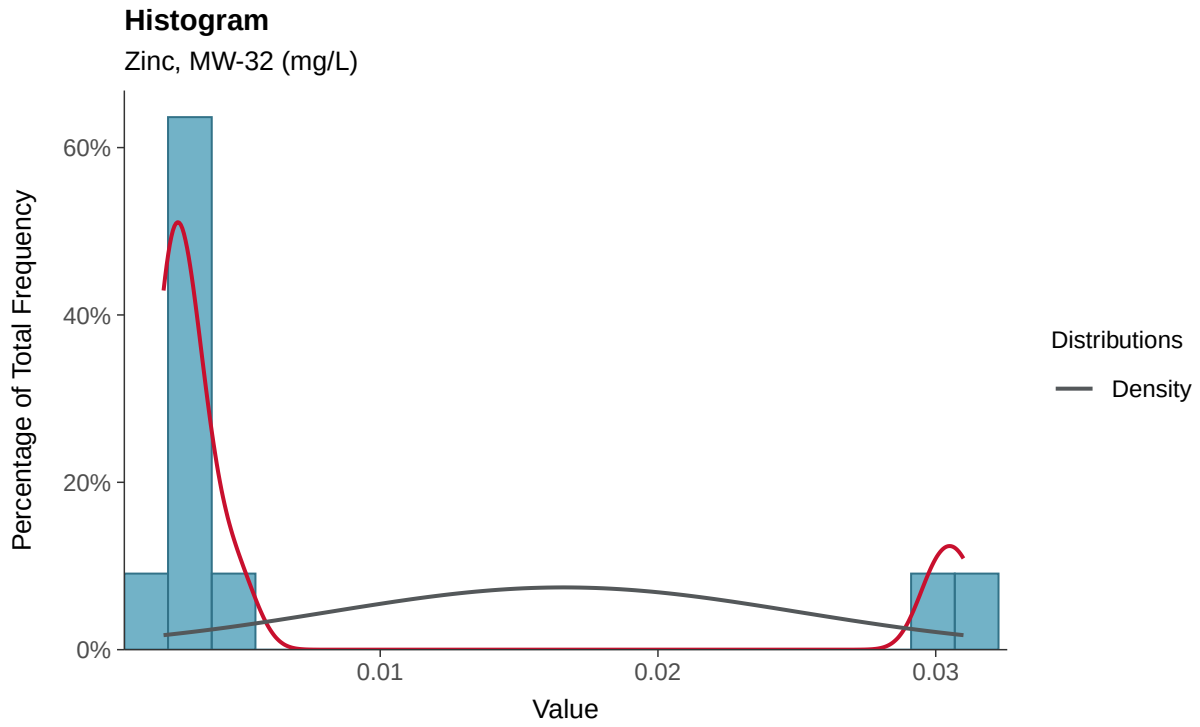
Vanadium, MW-32 (mg/L)



Part 115: Zinc, MW-32

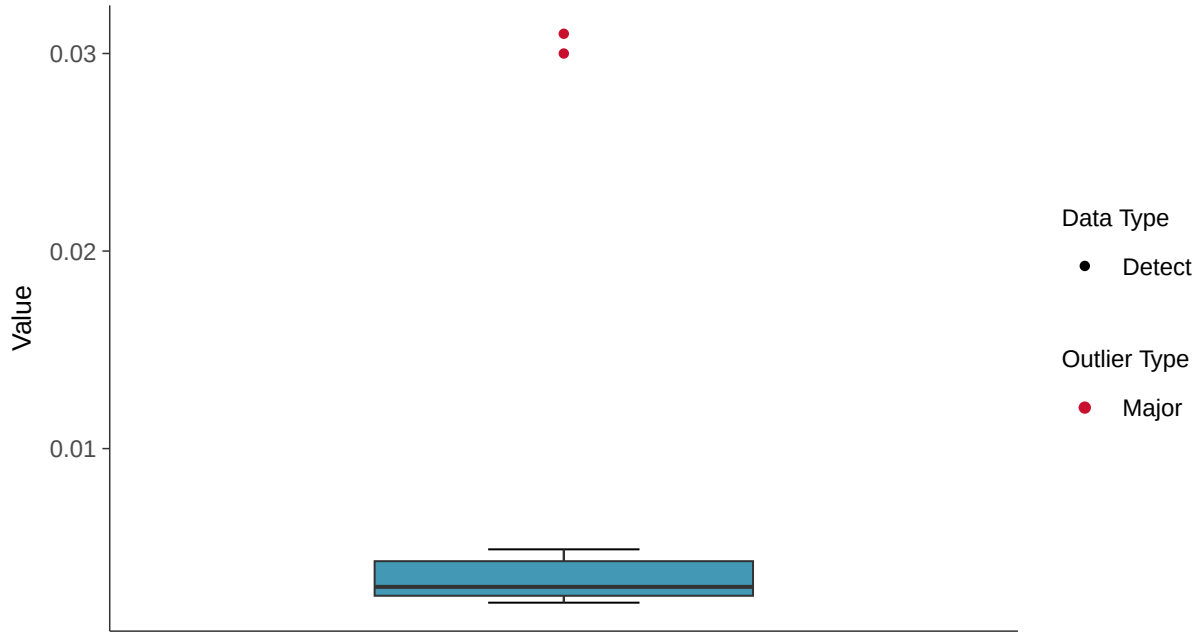
ID: 1_42_6_130





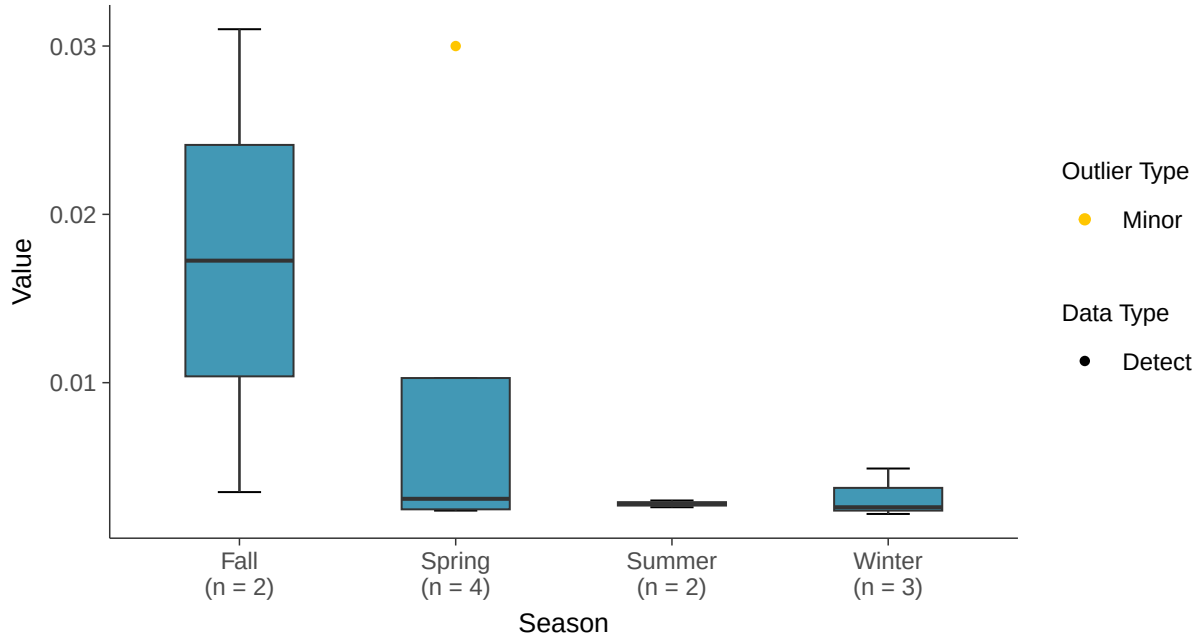
Boxplot

Zinc, MW-32 (mg/L)



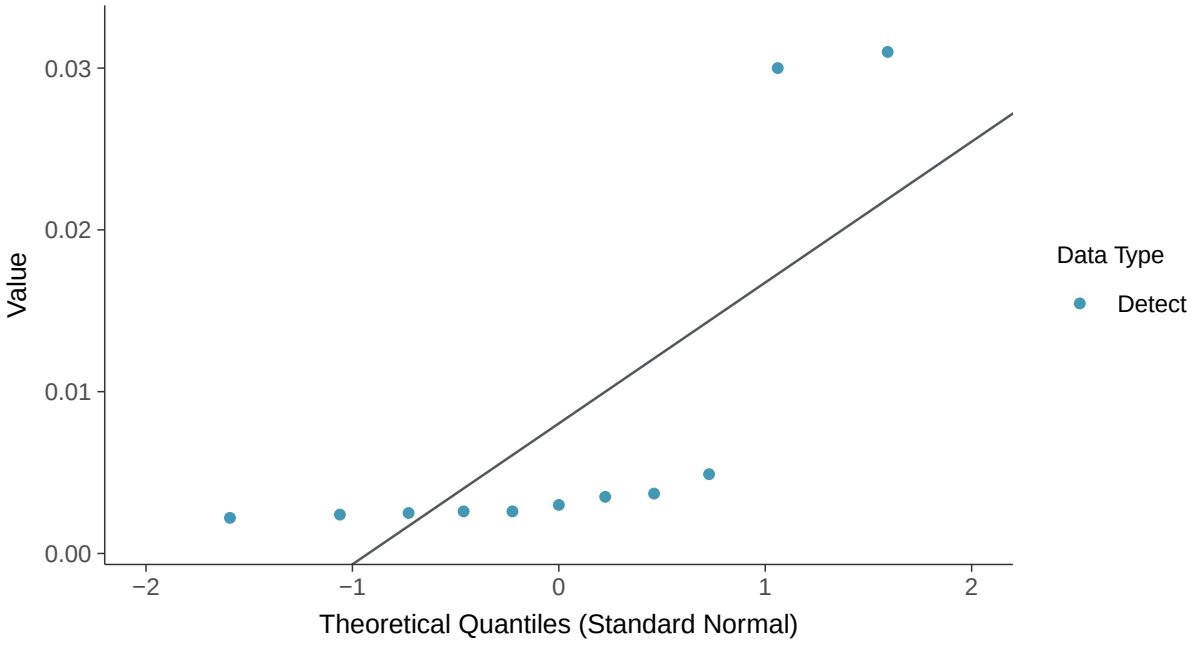
Boxplot by Season

Zinc, MW-32 (mg/L)



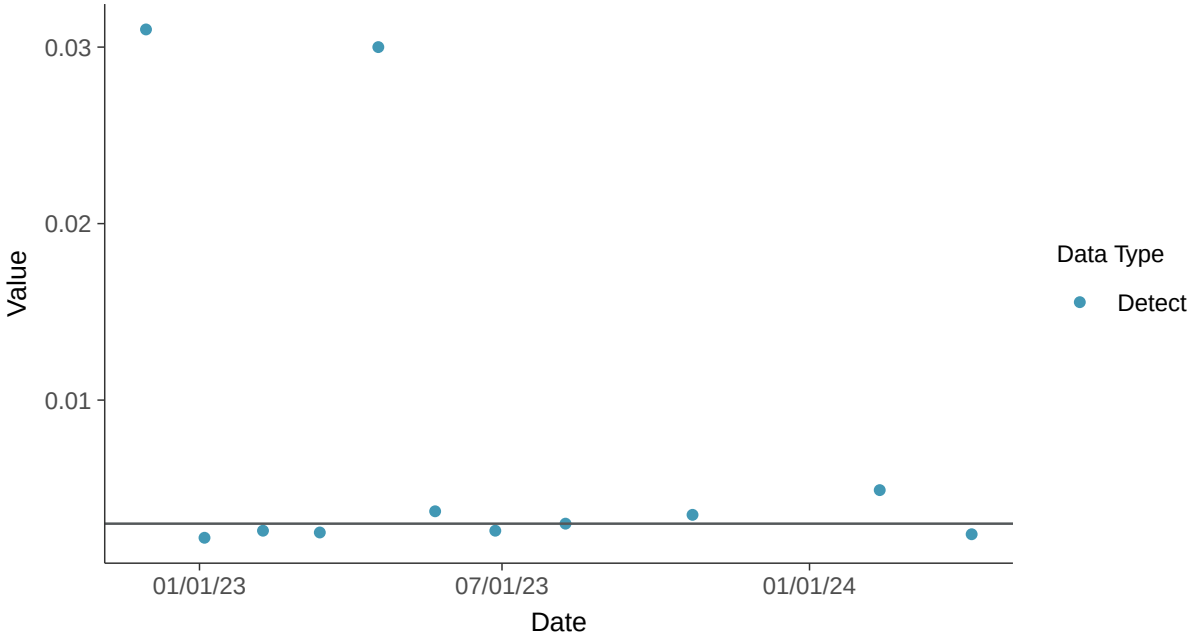
Normal Q-Q plot

Zinc, MW-32 (mg/L)



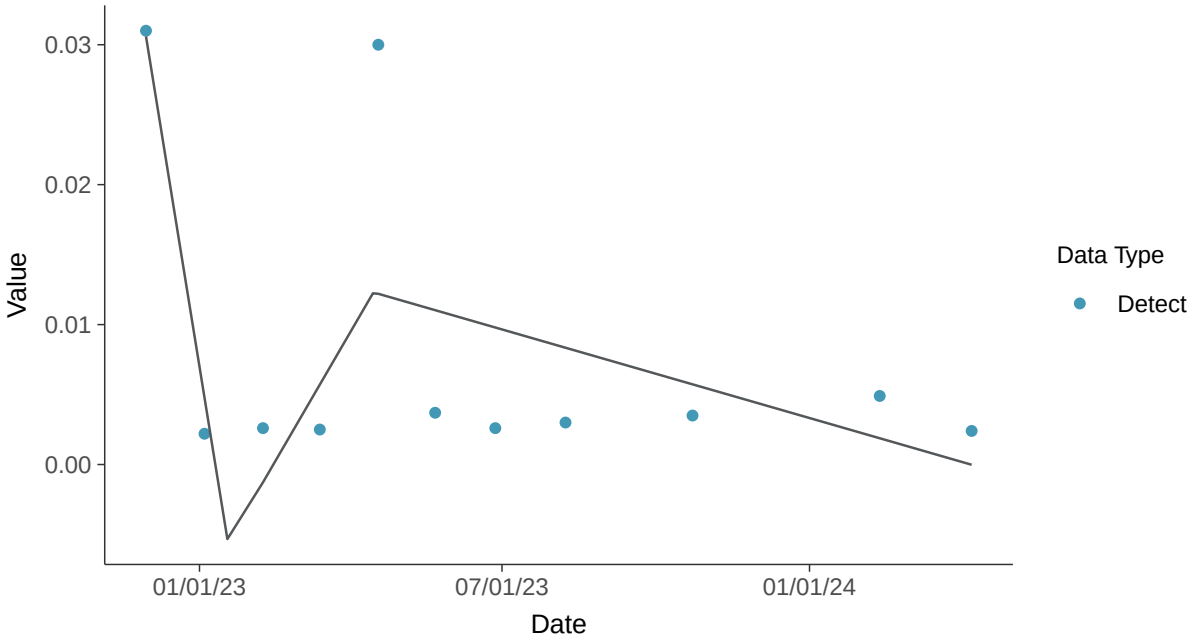
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Zinc, MW-32 (mg/L)



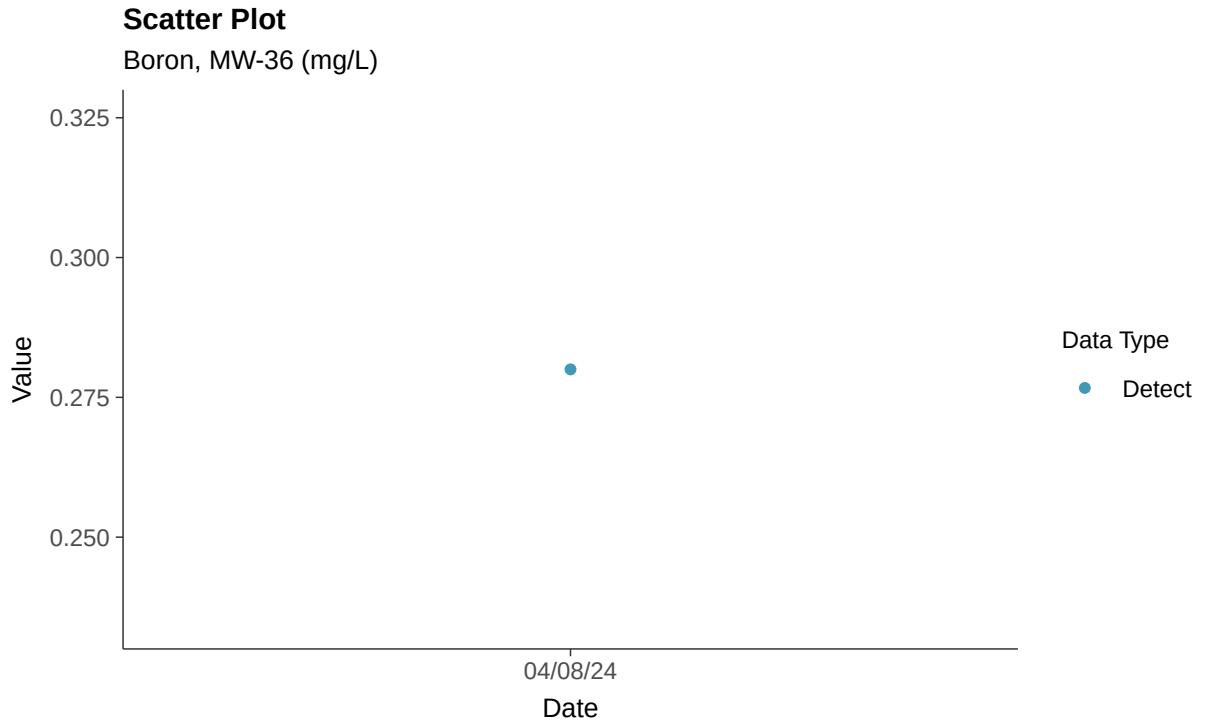
Trend Regression: Piecewise Linear-Linear-Linear

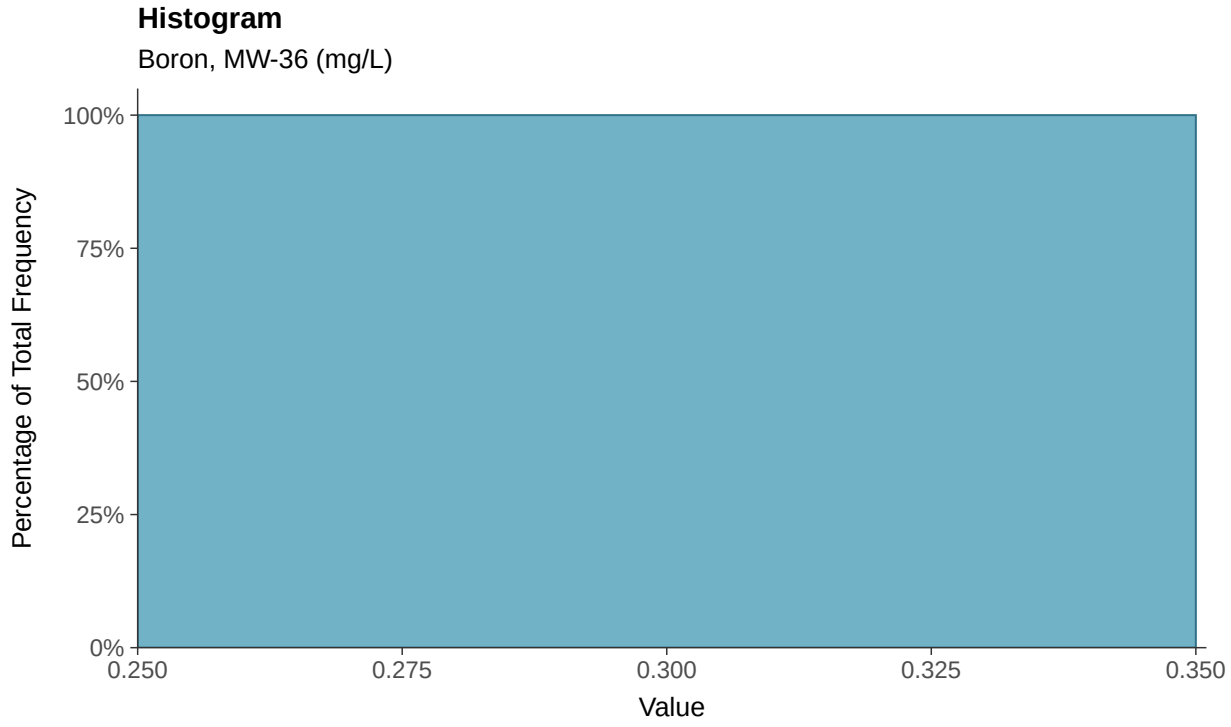
Zinc, MW-32 (mg/L)



Appendix III: Boron, MW-36

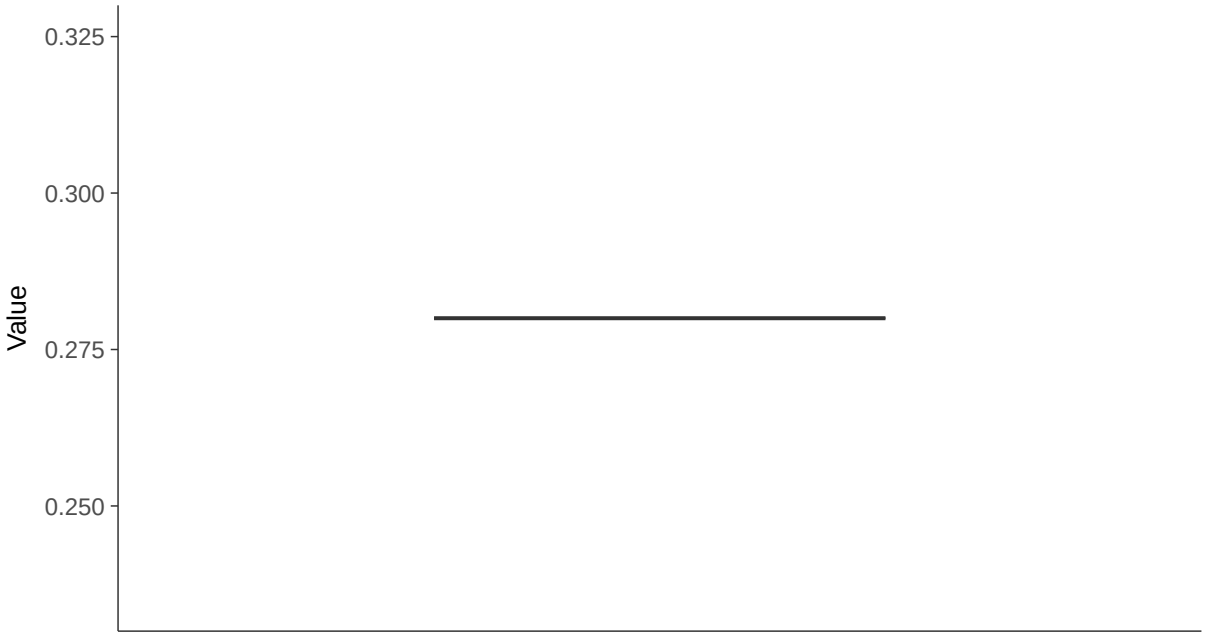
ID: 1_46_4_105





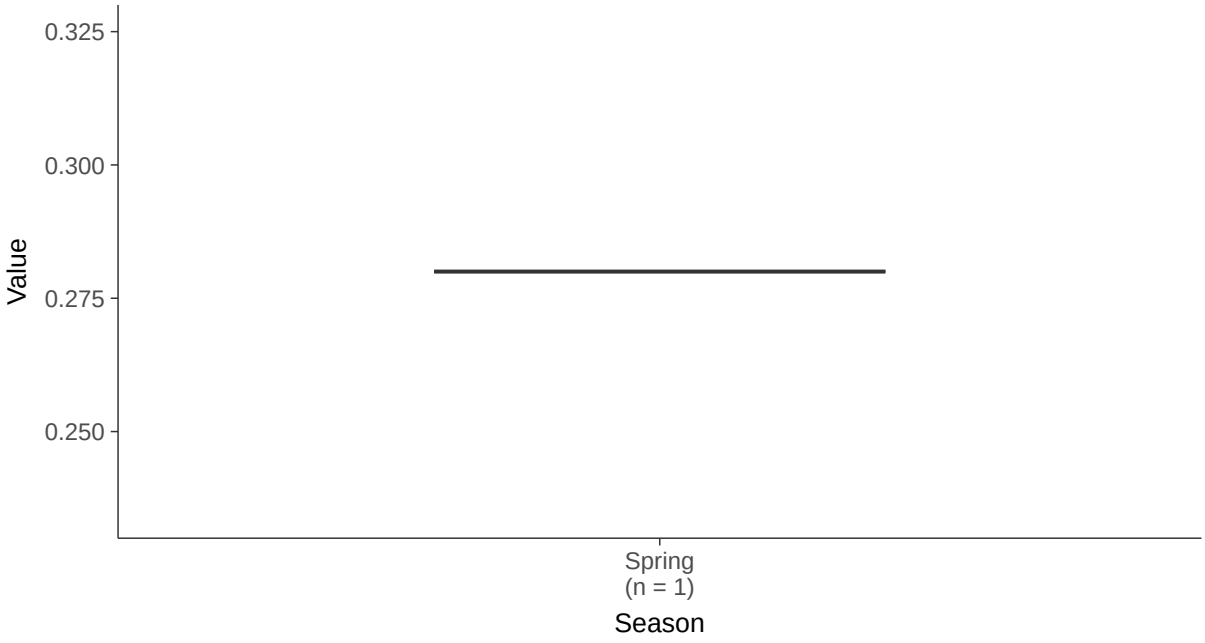
Boxplot

Boron, MW-36 (mg/L)



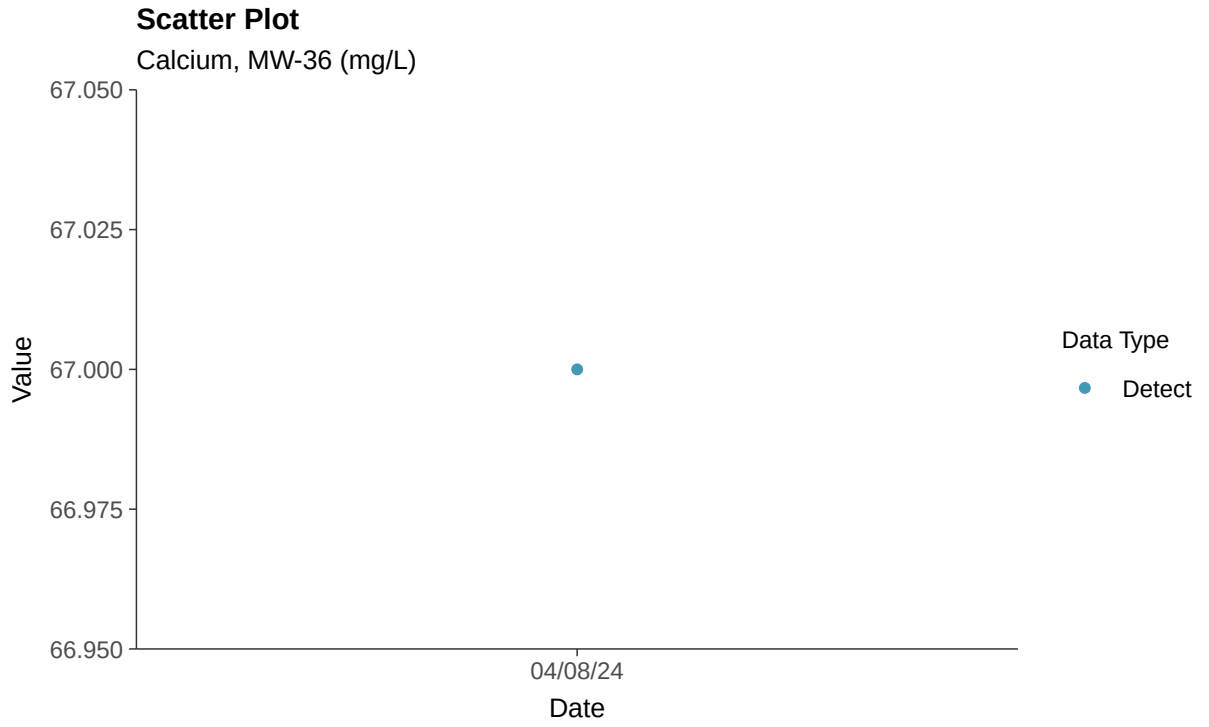
Boxplot by Season

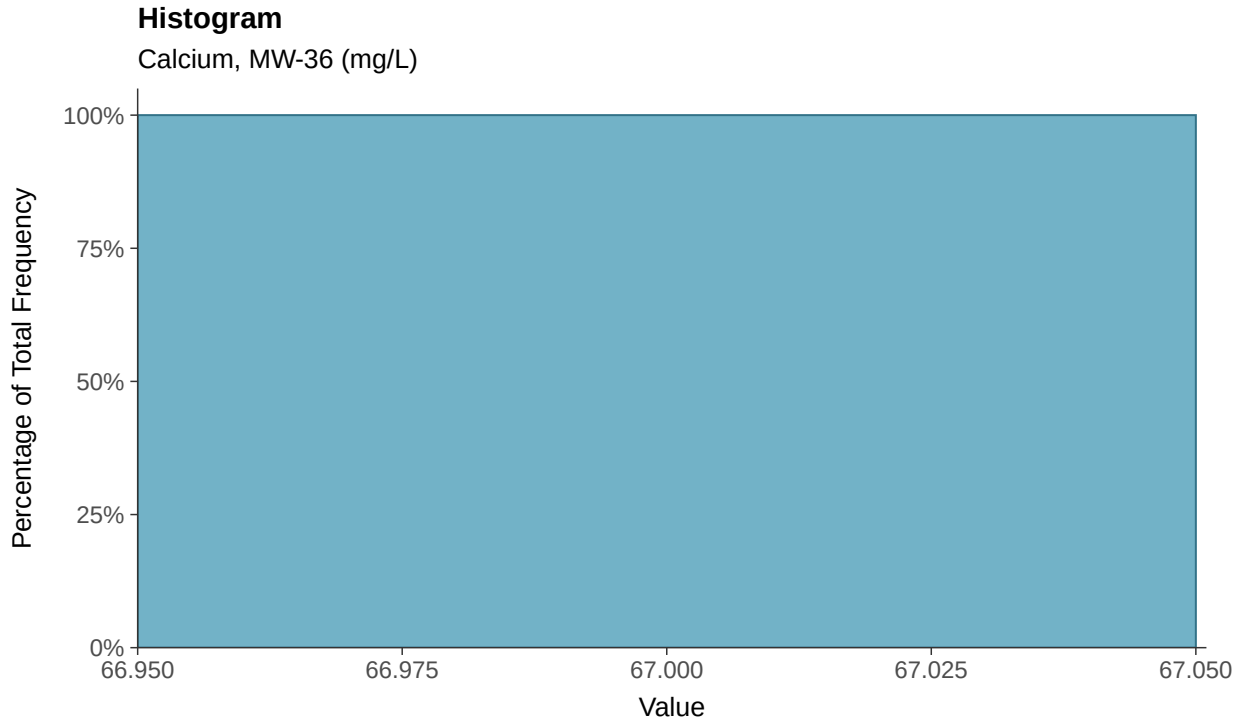
Boron, MW-36 (mg/L)



Appendix III: Calcium, MW-36

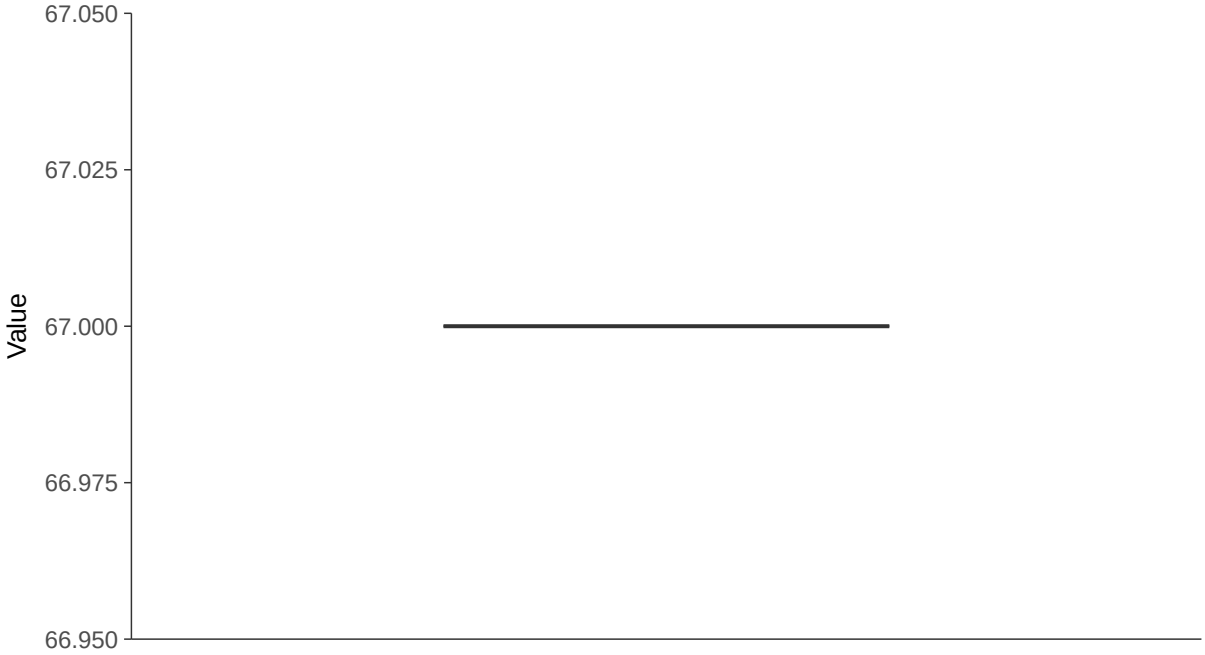
ID: 1_46_4_107





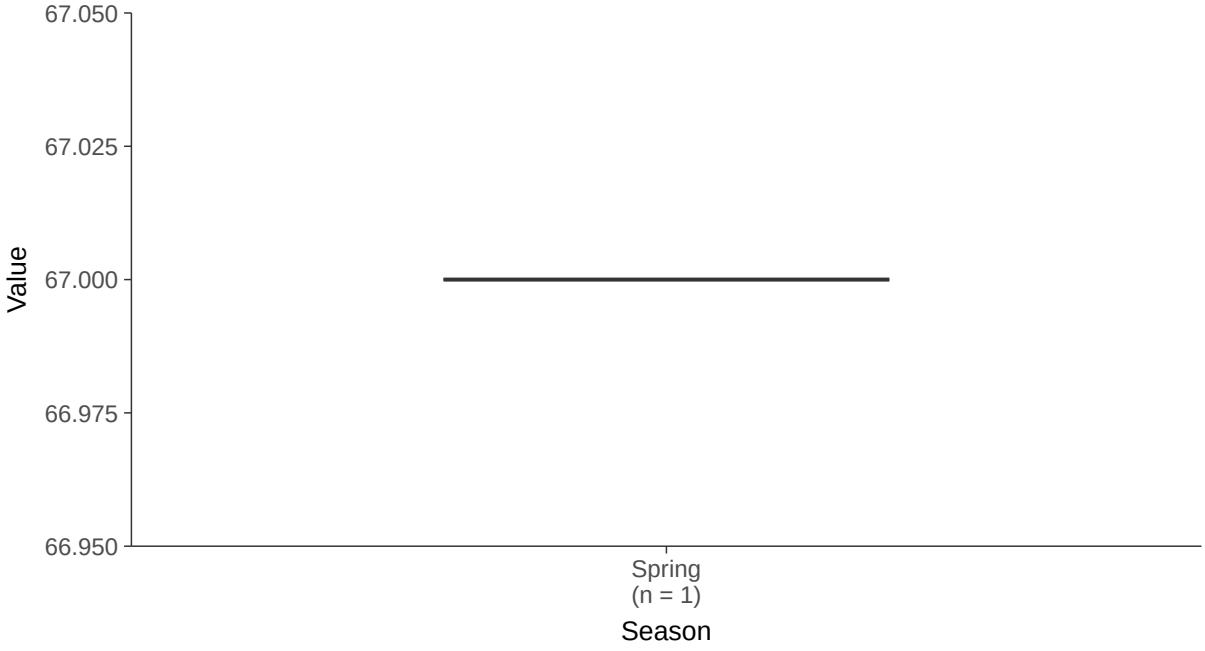
Boxplot

Calcium, MW-36 (mg/L)



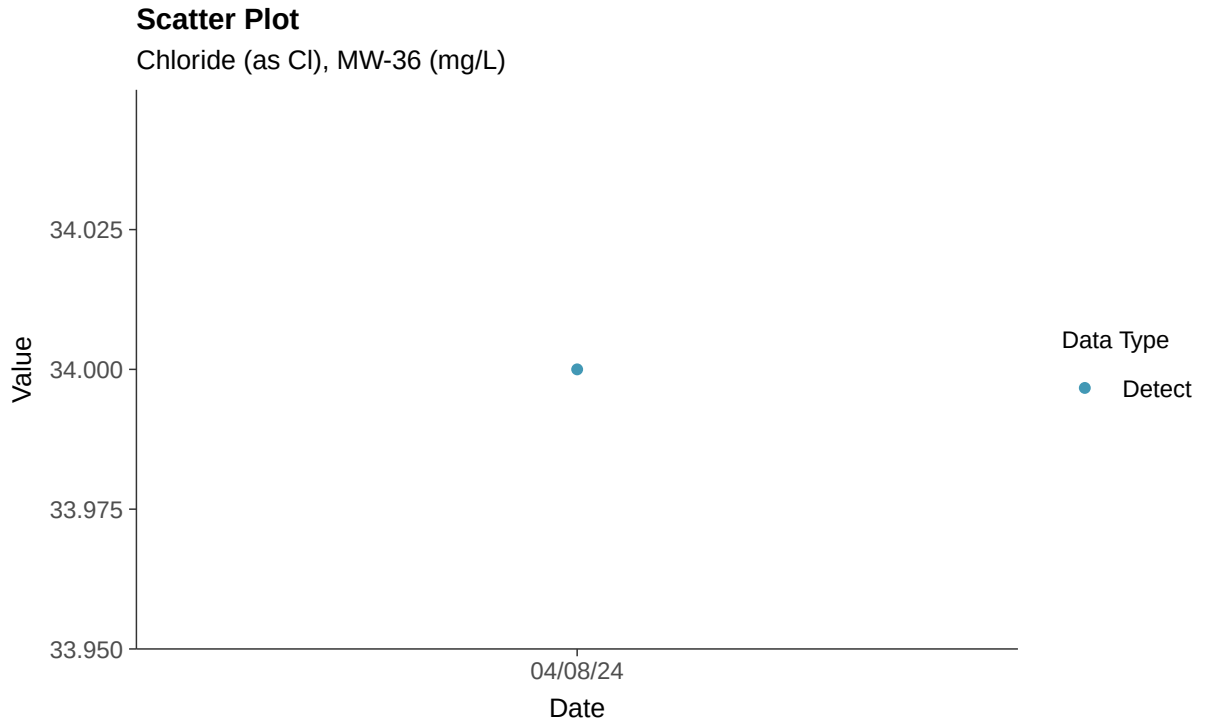
Boxplot by Season

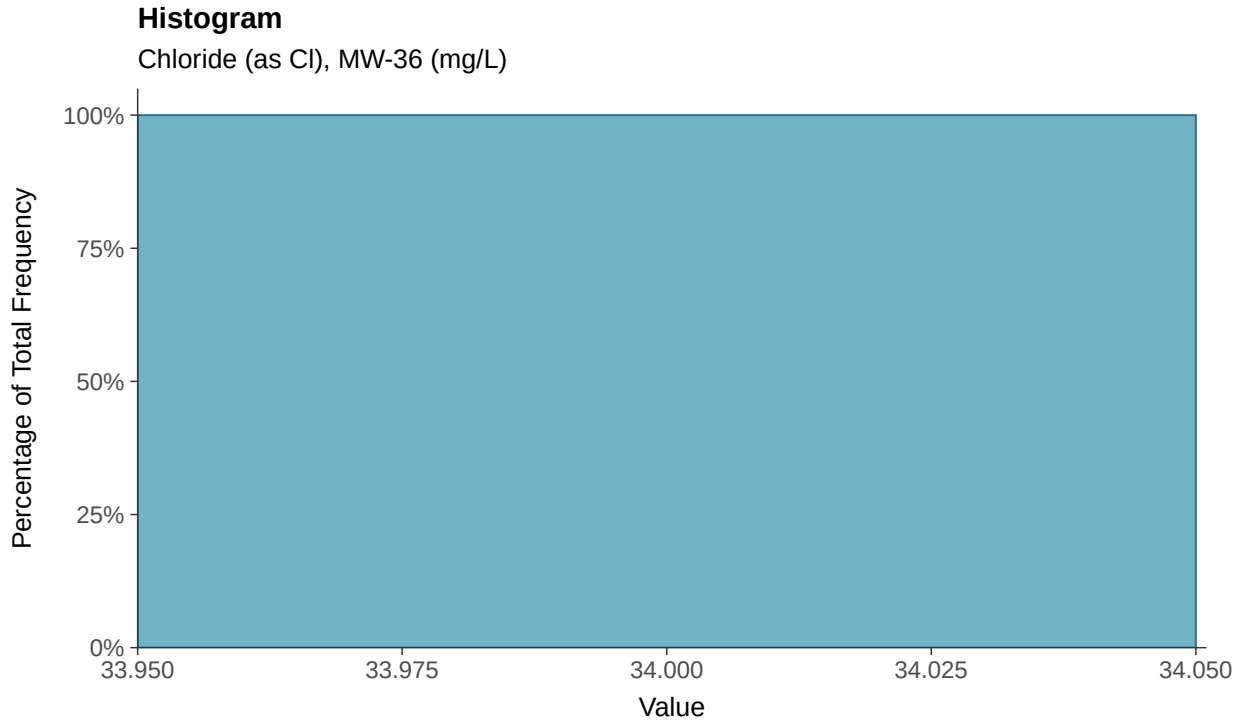
Calcium, MW-36 (mg/L)



Appendix III: Chloride (as Cl), MW-36

ID: 1_46_4_108



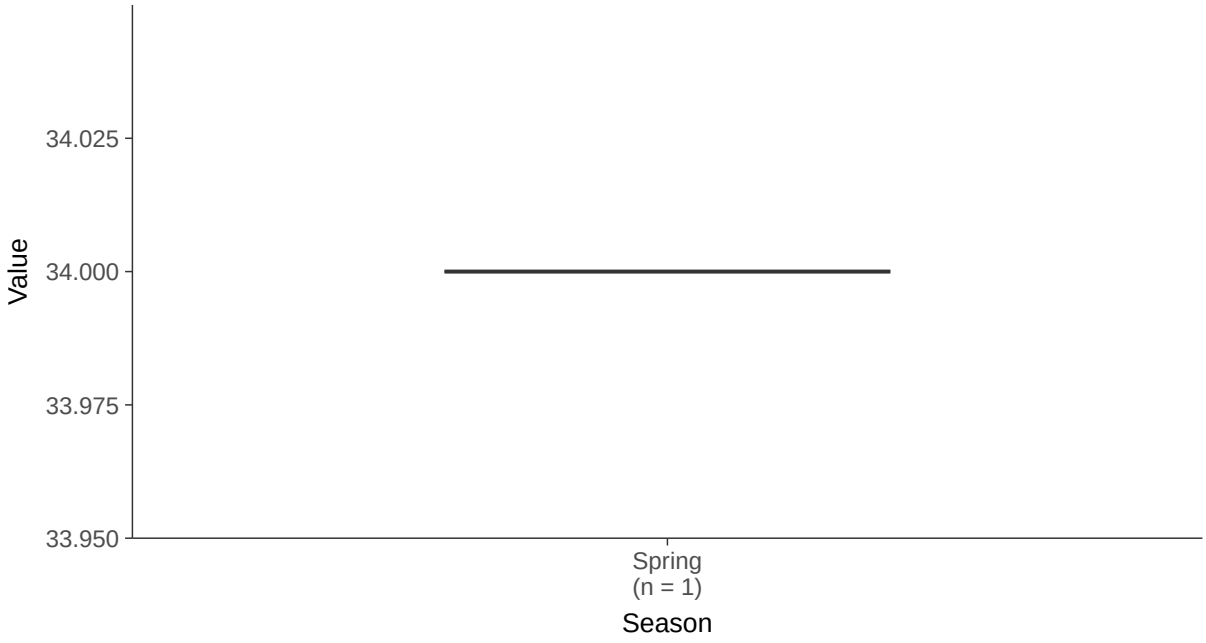


Boxplot

Chloride (as Cl), MW-36 (mg/L)

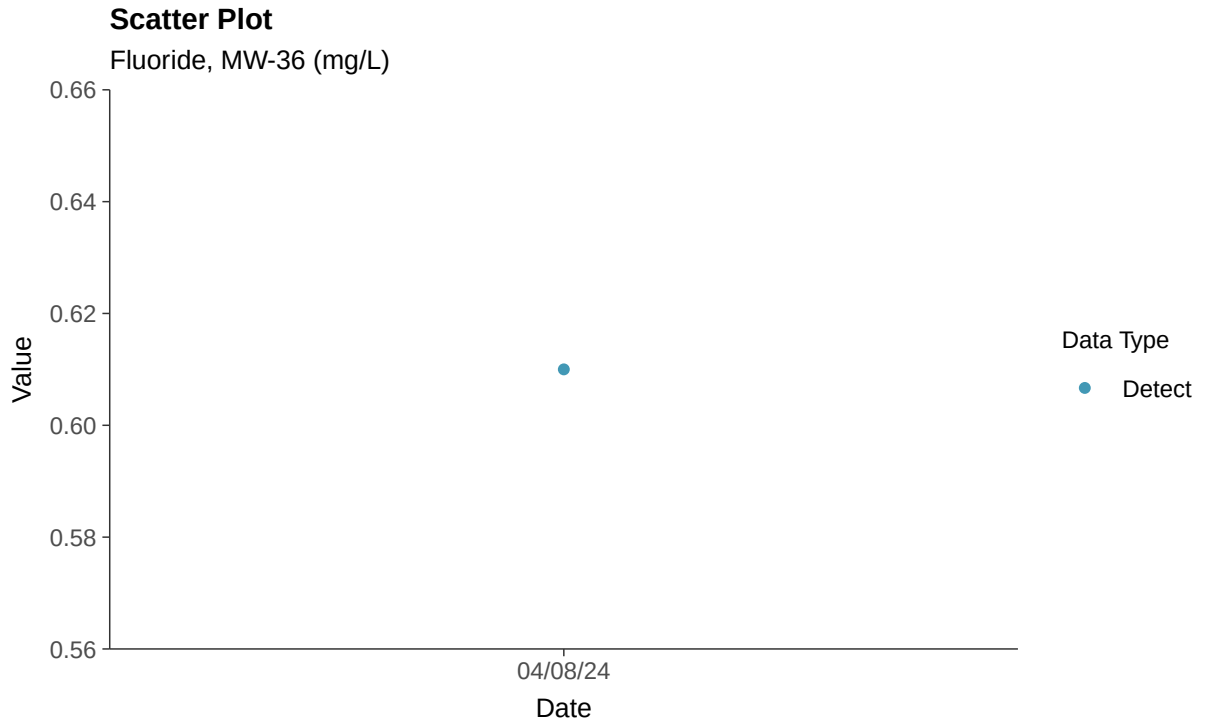
Boxplot by Season

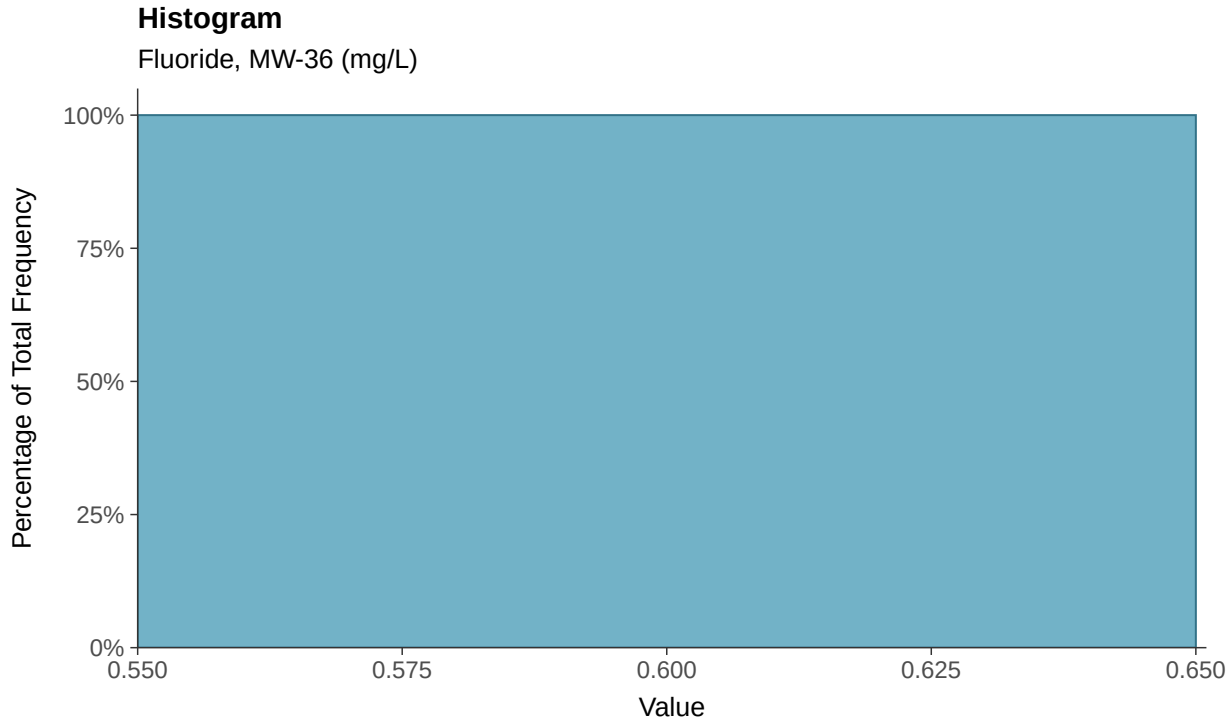
Chloride (as Cl), MW-36 (mg/L)



Appendix III: Fluoride, MW-36

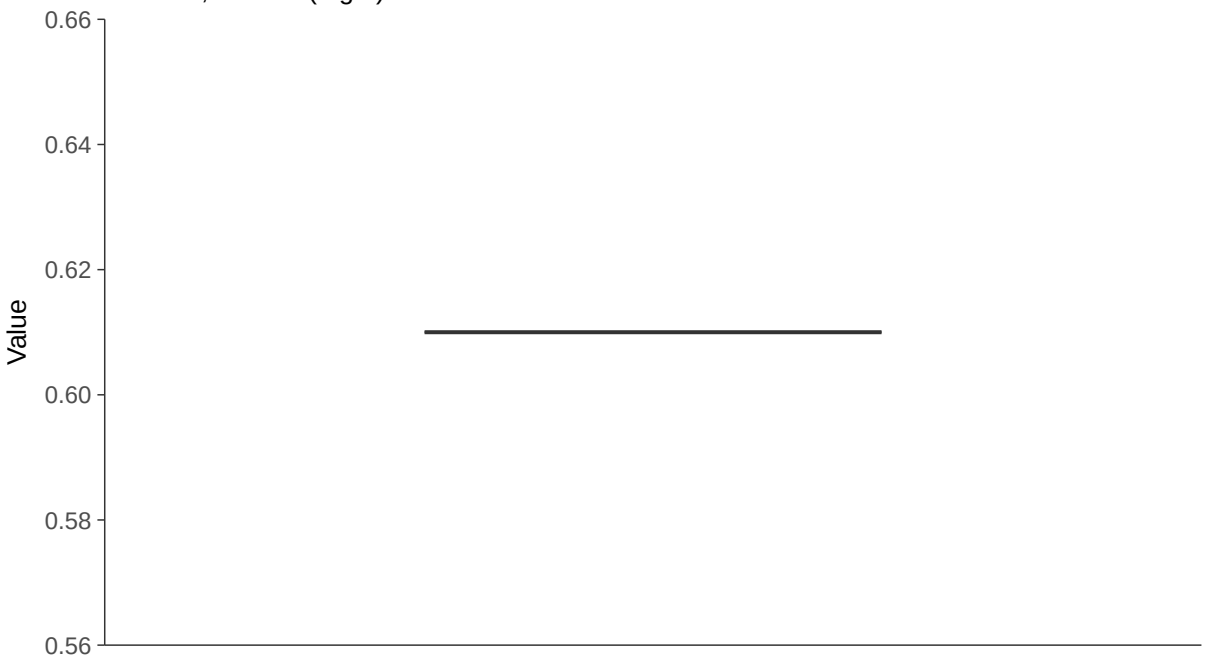
ID: 1_46_4_112





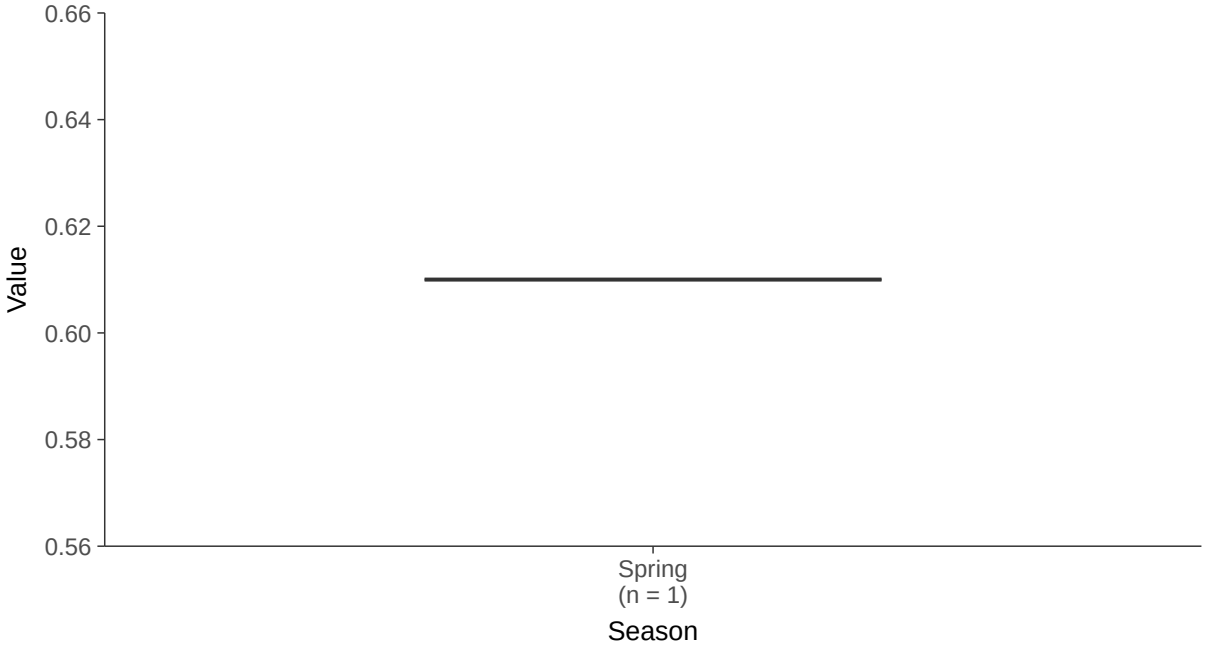
Boxplot

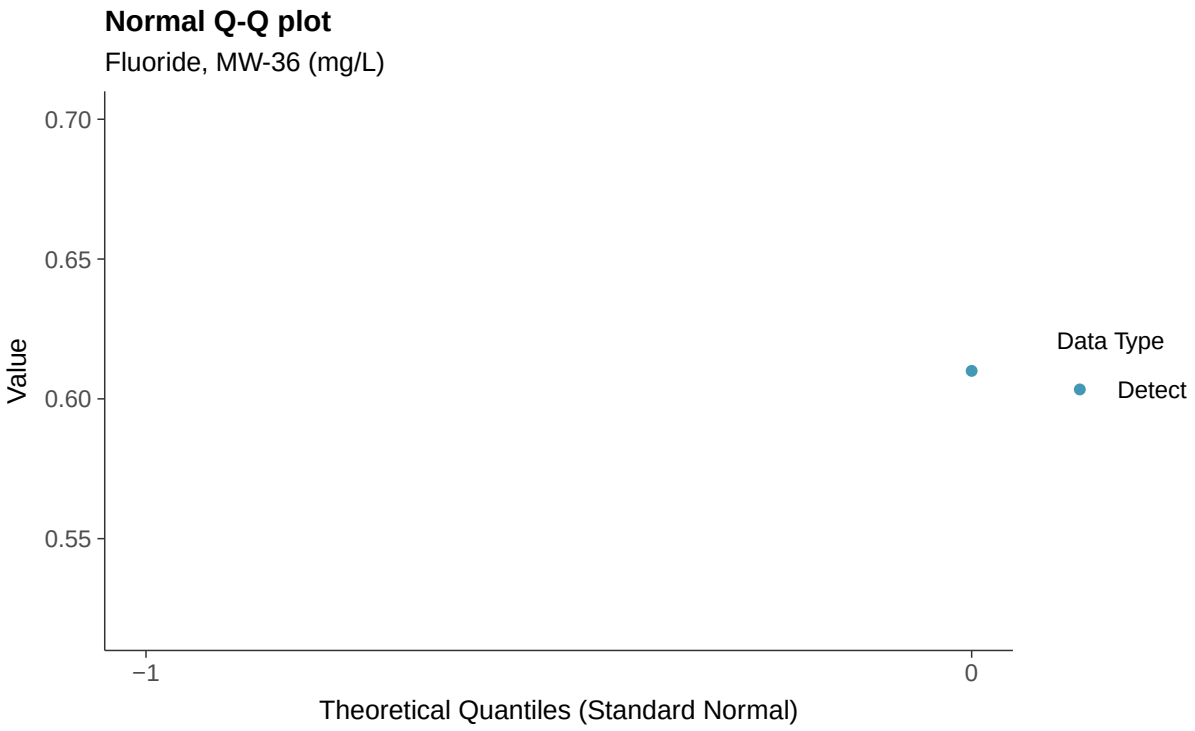
Fluoride, MW-36 (mg/L)



Boxplot by Season

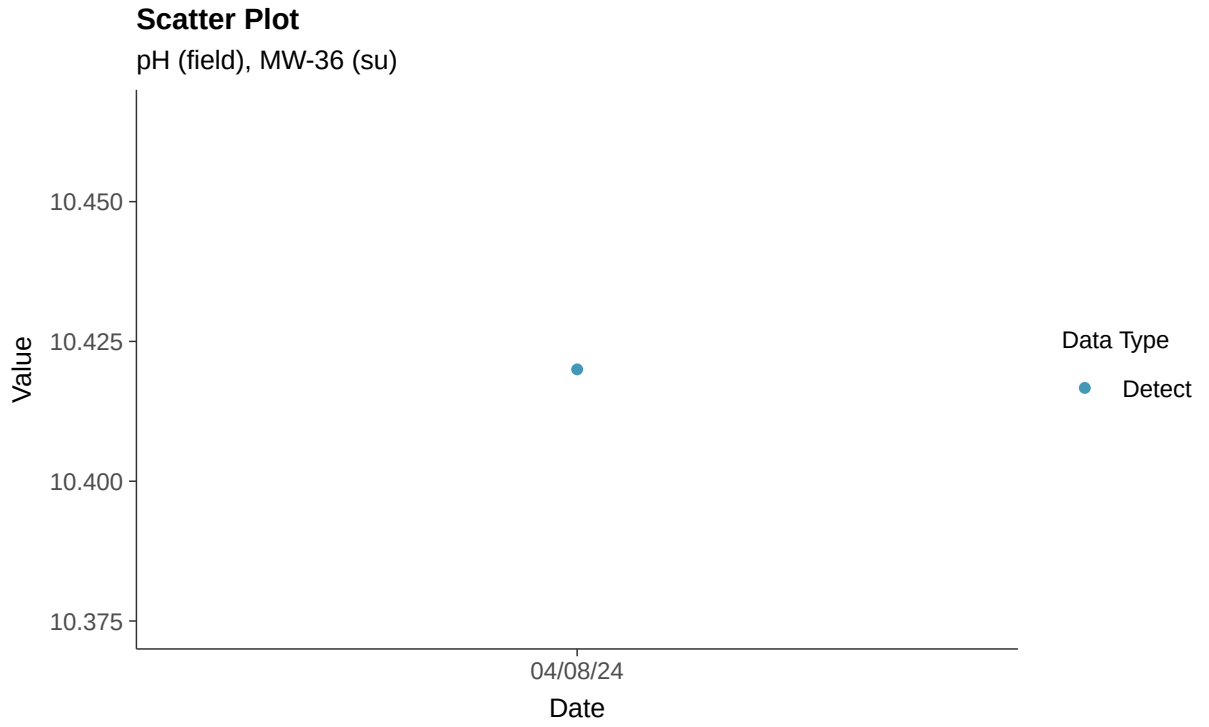
Fluoride, MW-36 (mg/L)

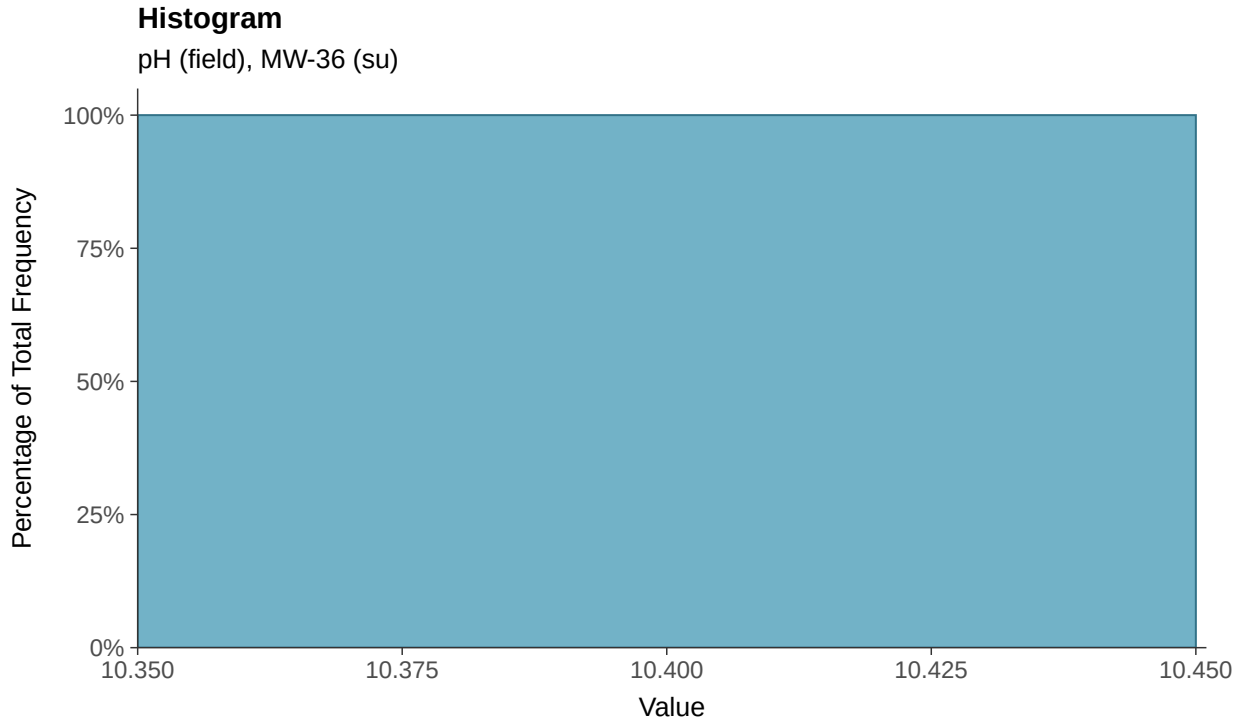



Normal Q-Q plot
Fluoride, MW-36 (mg/L)
0.70
0.65
0.60
0.55
Value
−1
0
Theoretical Quantiles (Standard Normal)
Data Type
Detect

Appendix III: pH (field), MW-36

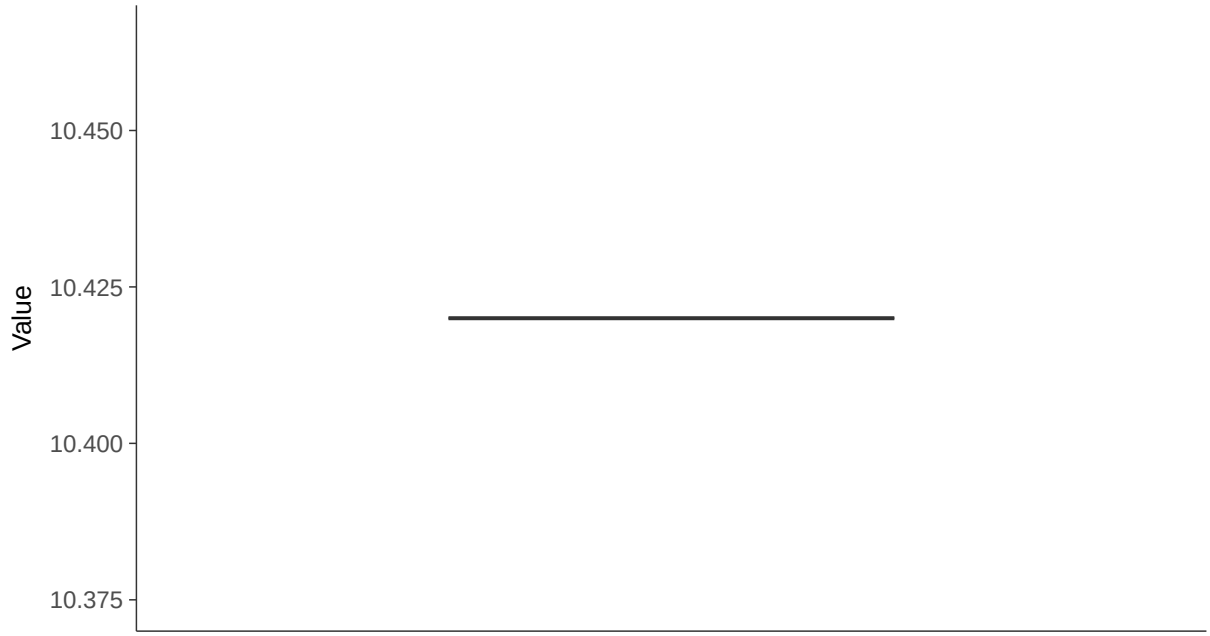
ID: 1_46_4_120





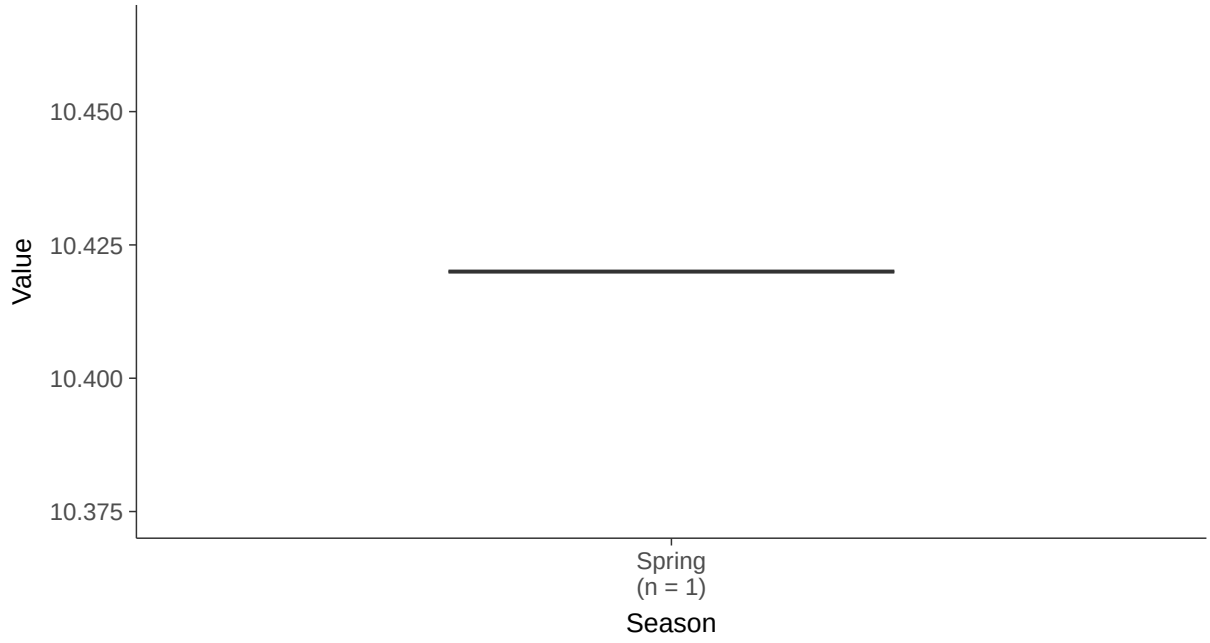
Boxplot

pH (field), MW-36 (su)



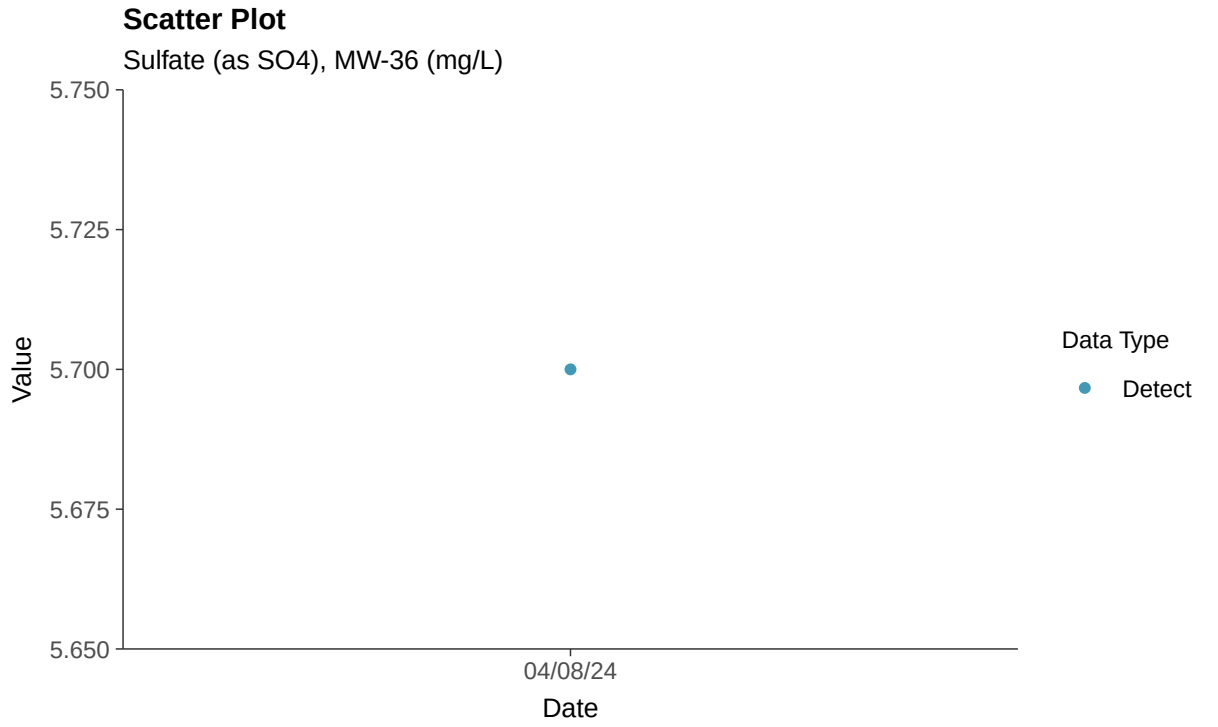
Boxplot by Season

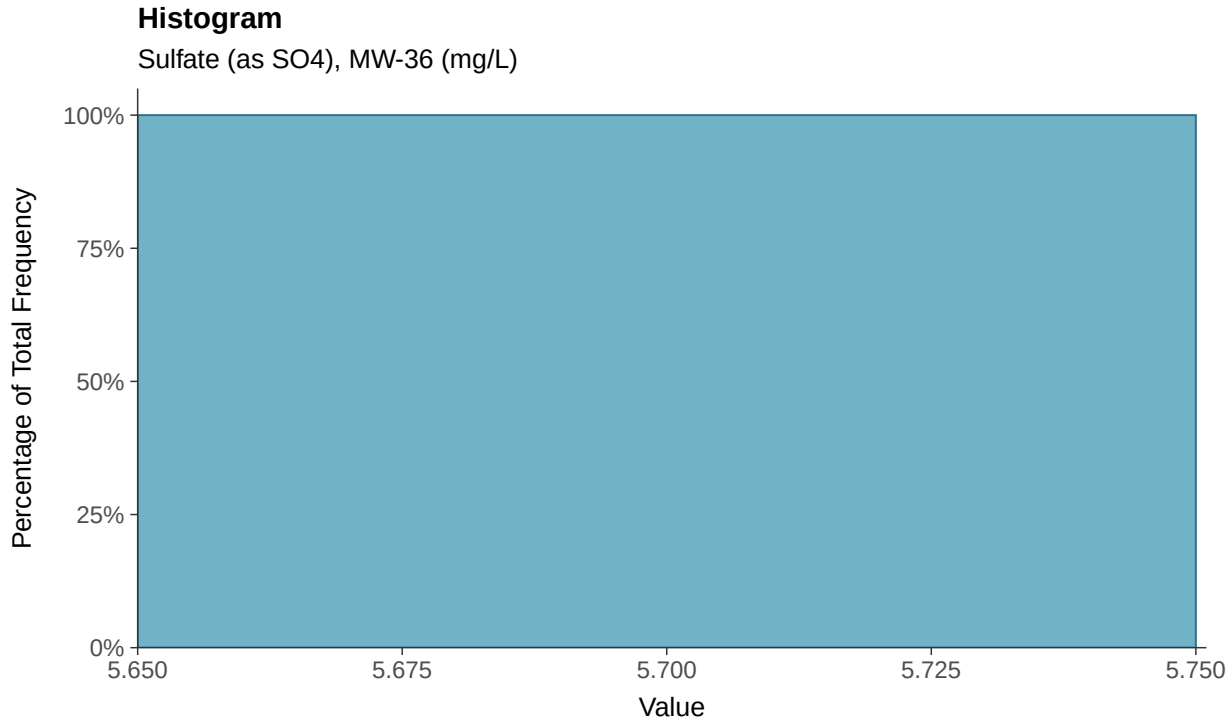
pH (field), MW-36 (su)



Appendix III: Sulfate (as SO4), MW-36

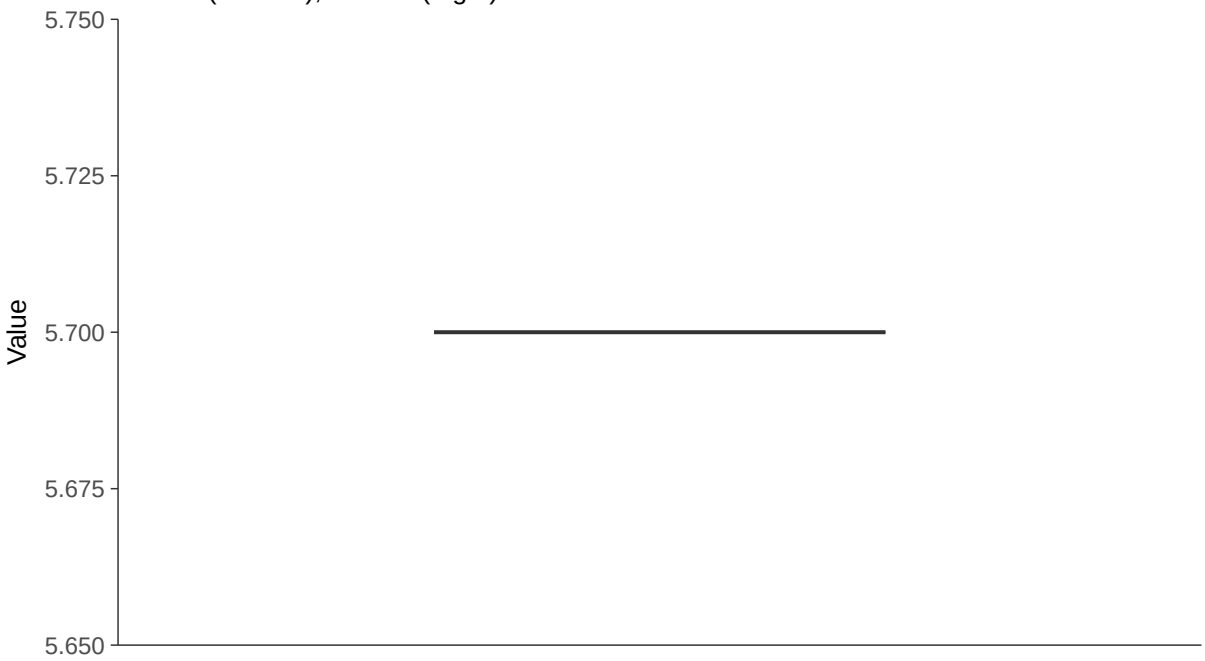
ID: 1_46_4_124





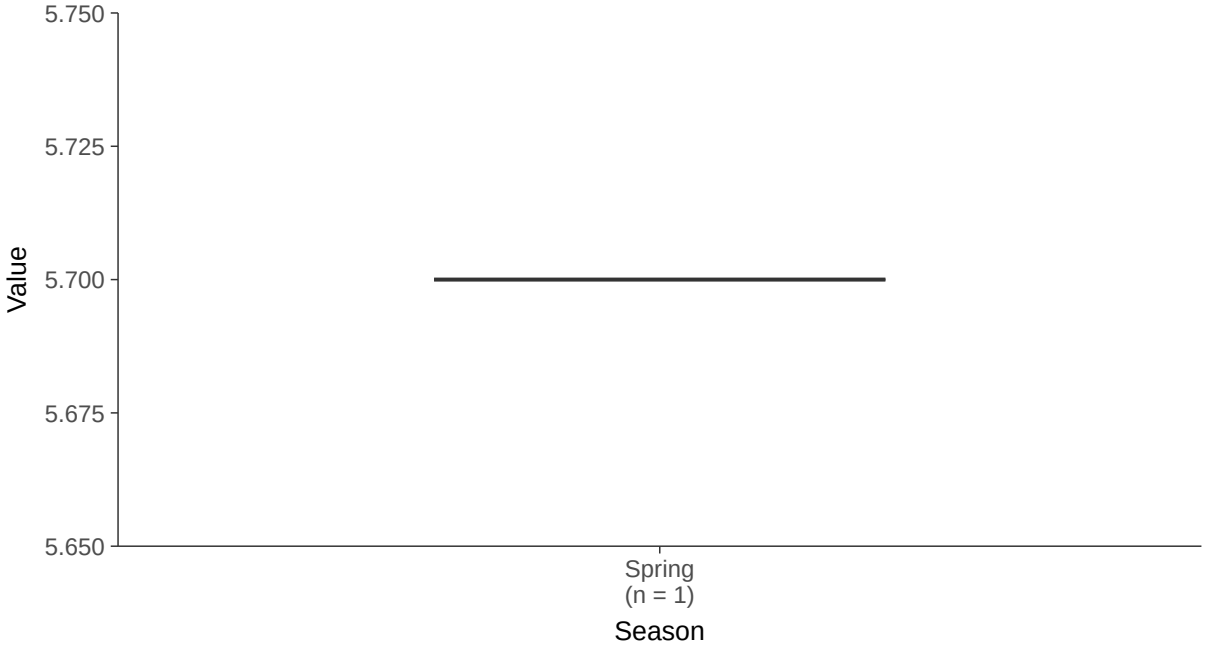
Boxplot

Sulfate (as SO4), MW-36 (mg/L)



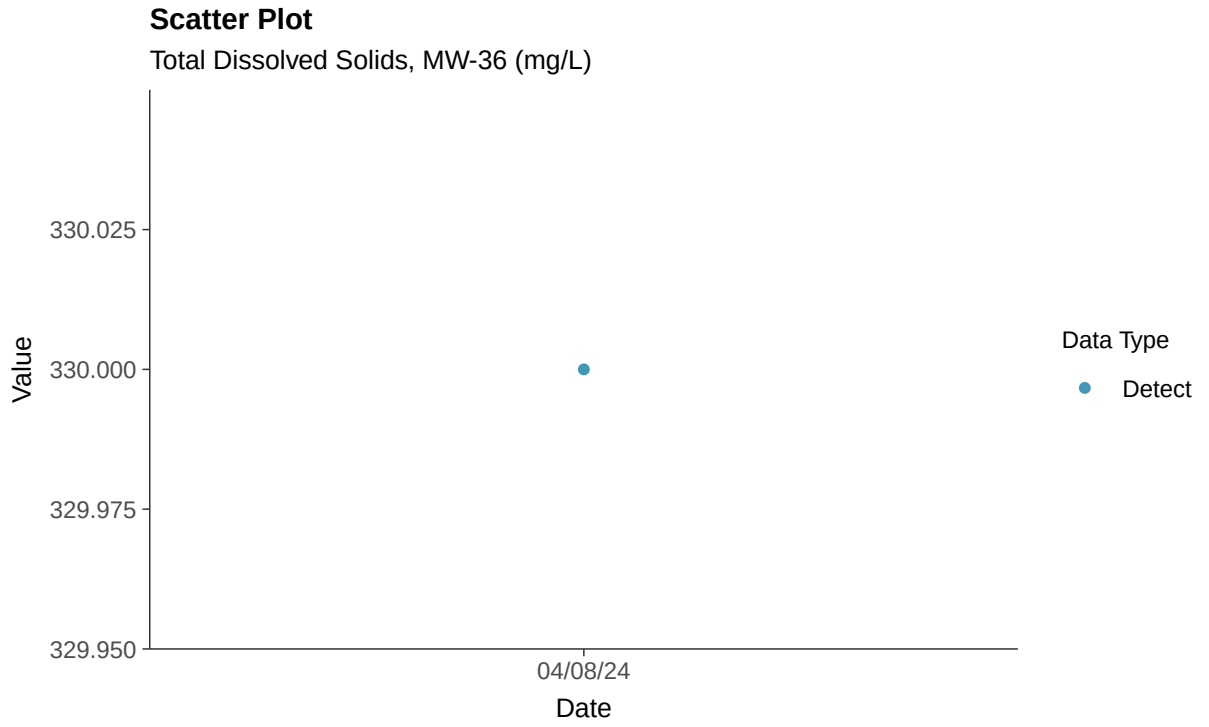
Boxplot by Season

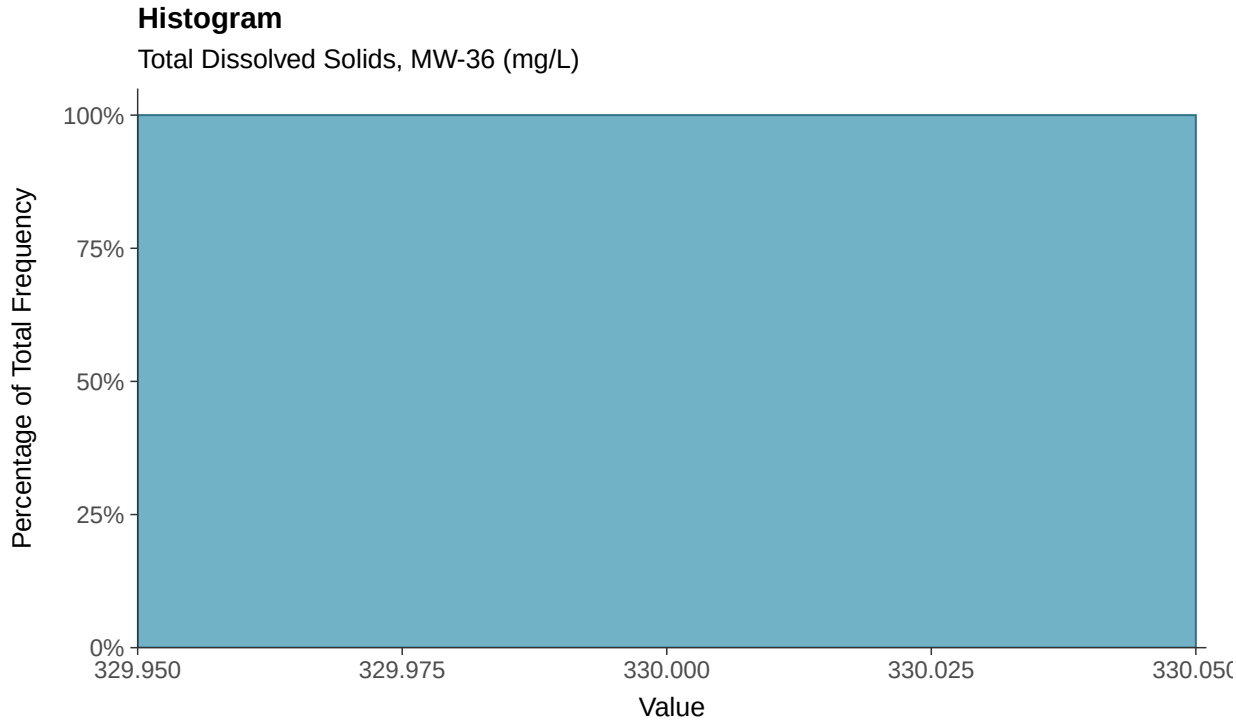
Sulfate (as SO4), MW-36 (mg/L)



Appendix III: Total Dissolved Solids, MW-36

ID: 1_46_4_126



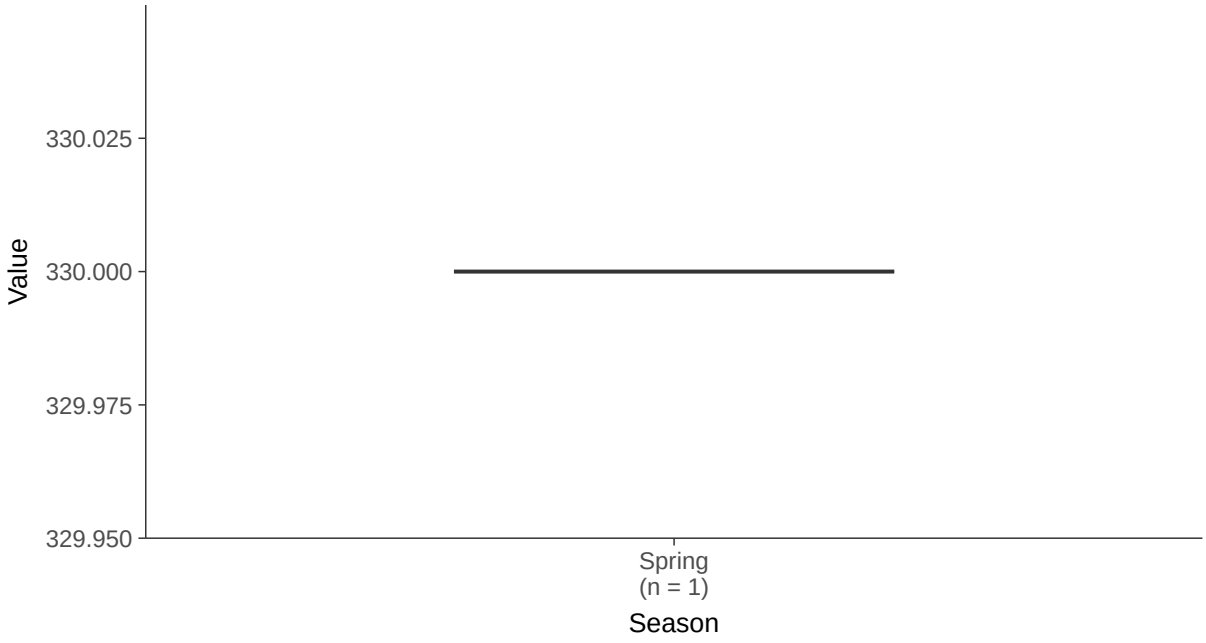


Boxplot

Total Dissolved Solids, MW-36 (mg/L)

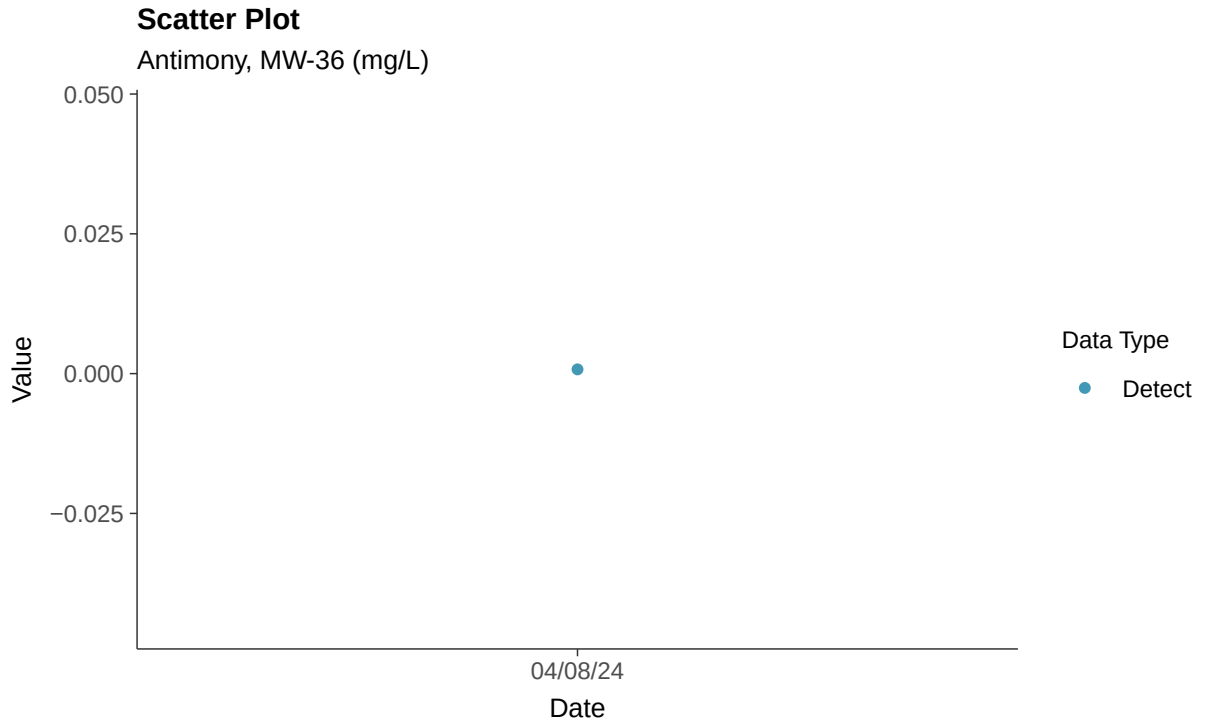
Boxplot by Season

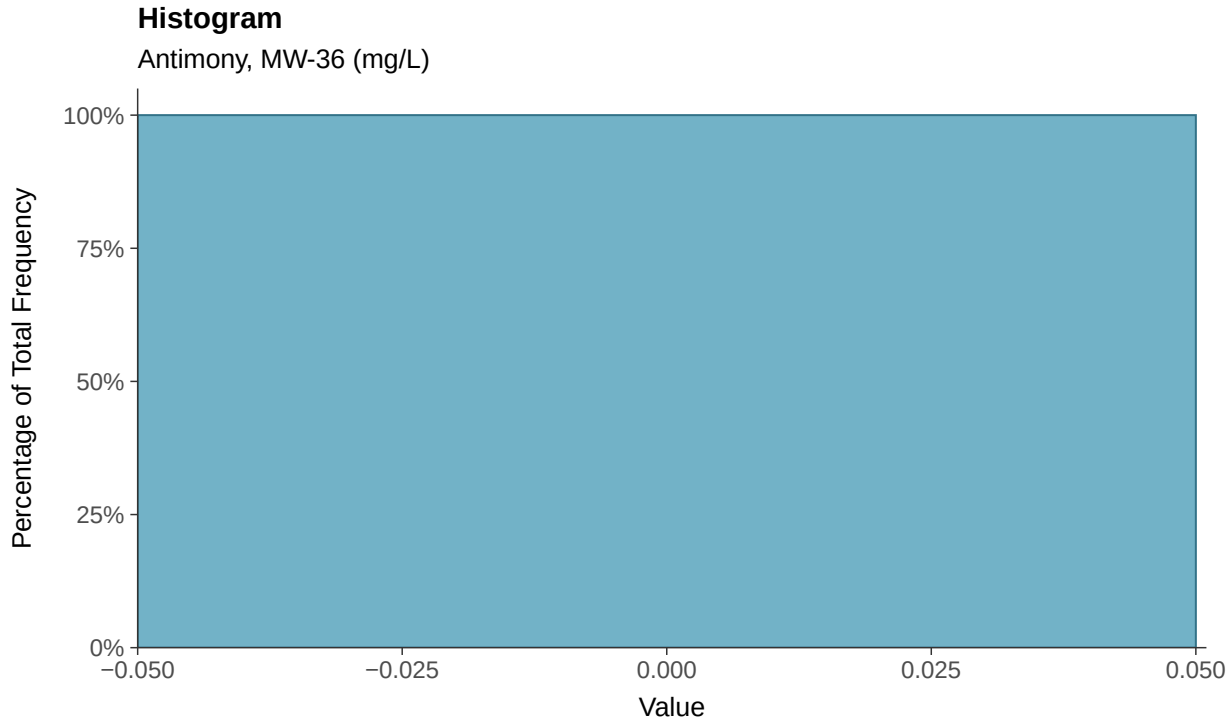
Total Dissolved Solids, MW-36 (mg/L)



Appendix IV: Antimony, MW-36

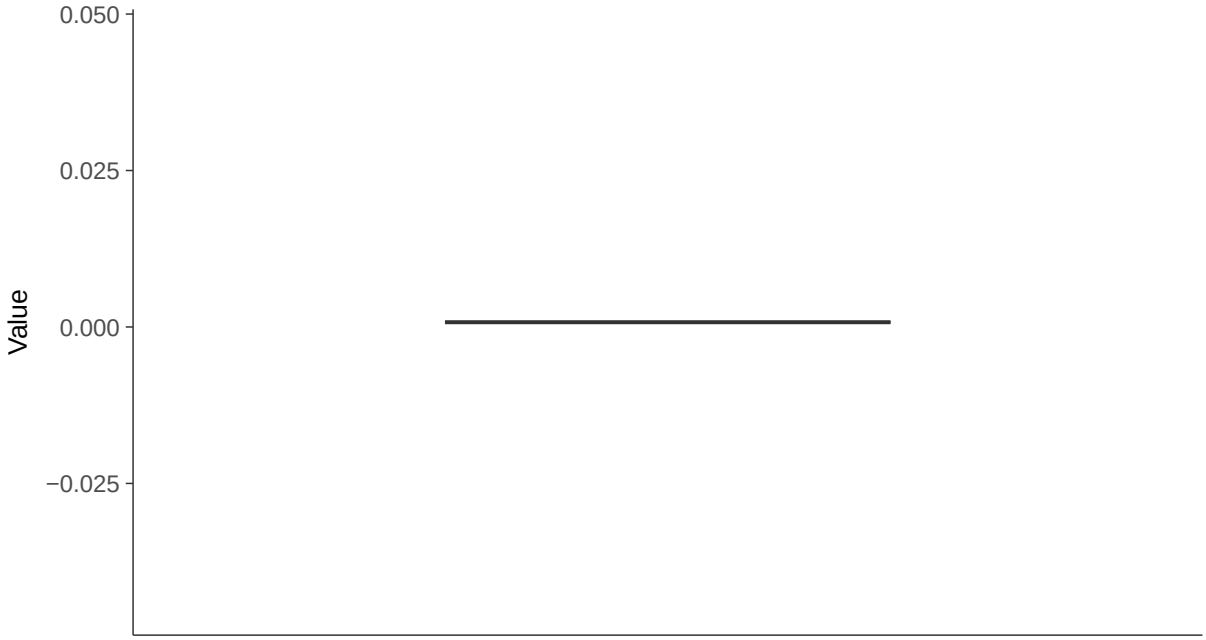
ID: 1_46_5_101





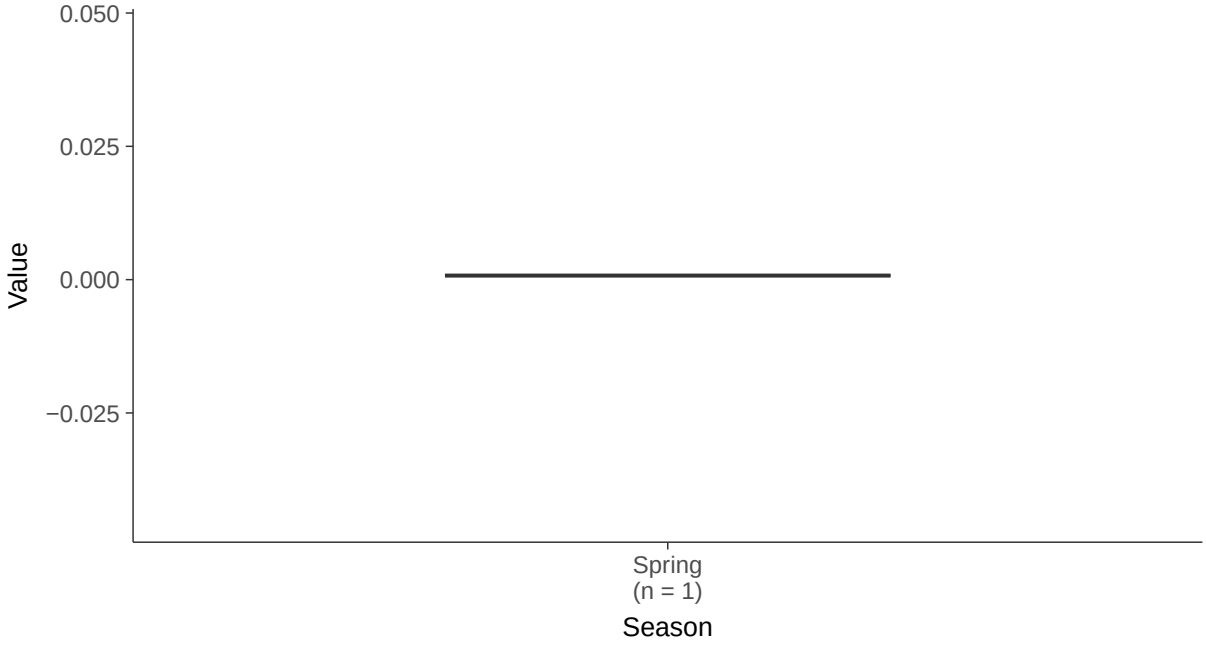
Boxplot

Antimony, MW-36 (mg/L)



Boxplot by Season

Antimony, MW-36 (mg/L)

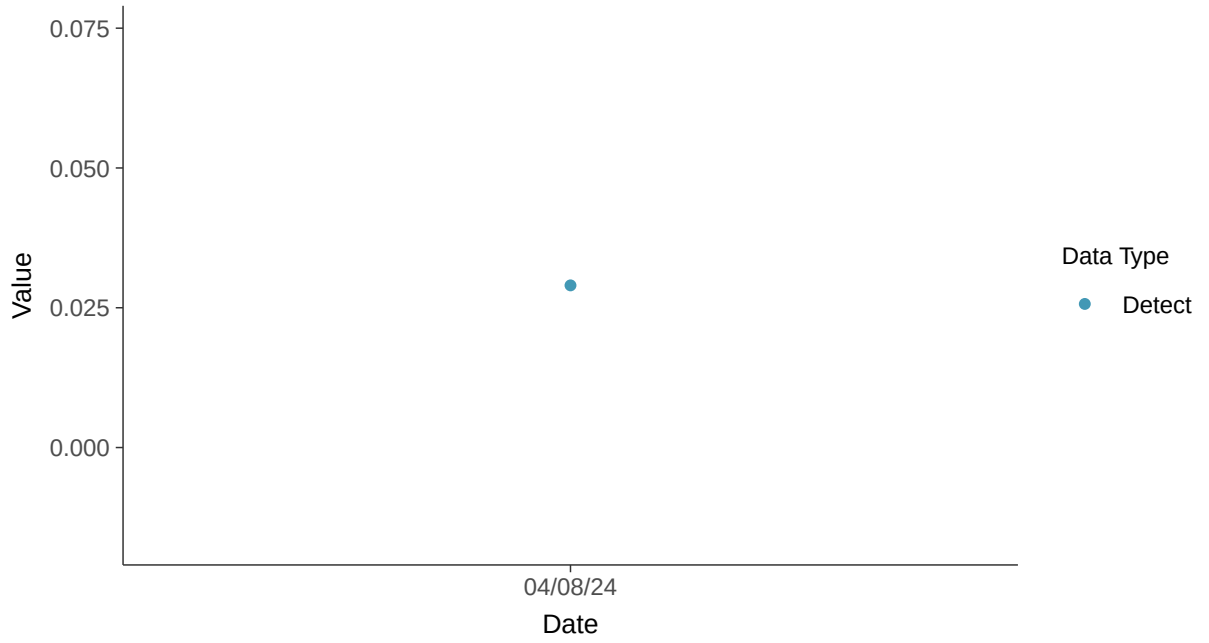


Appendix IV: Arsenic, MW-36

ID: 1_46_5_102

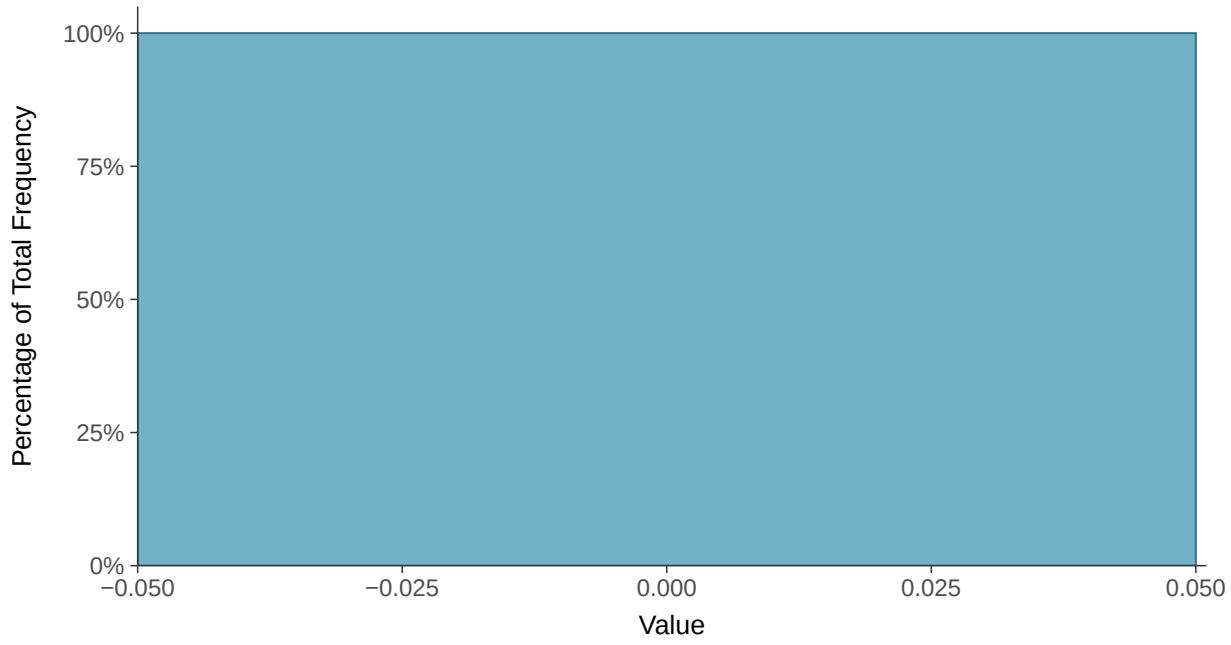
Scatter Plot

Arsenic, MW-36 (mg/L)



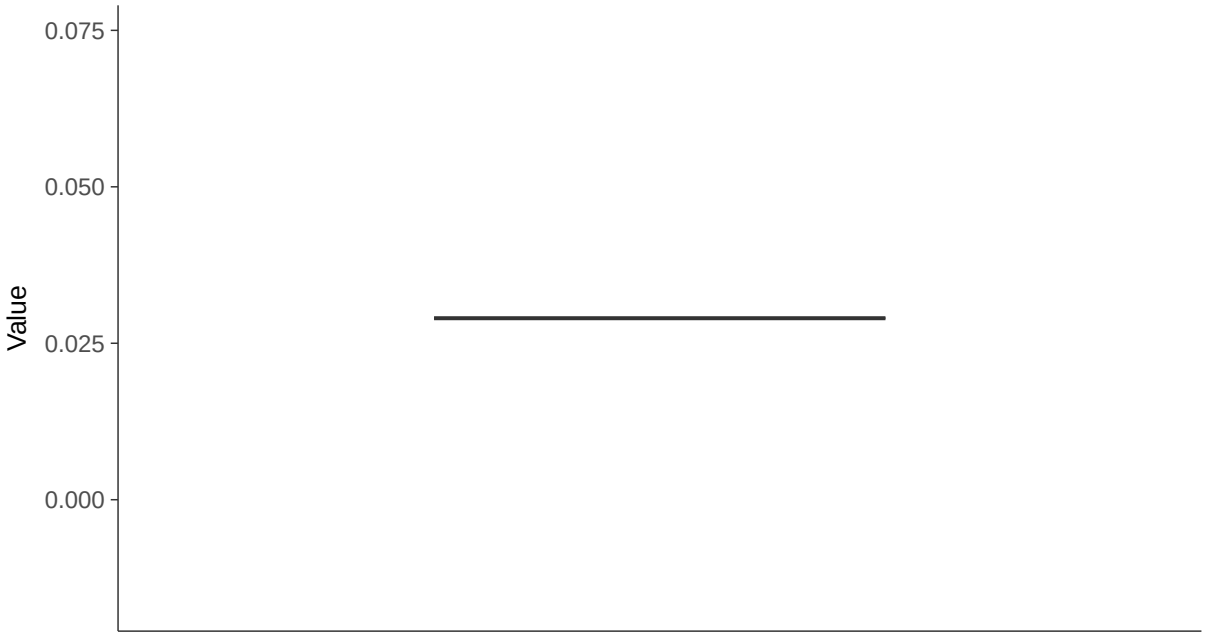
Histogram

Arsenic, MW-36 (mg/L)



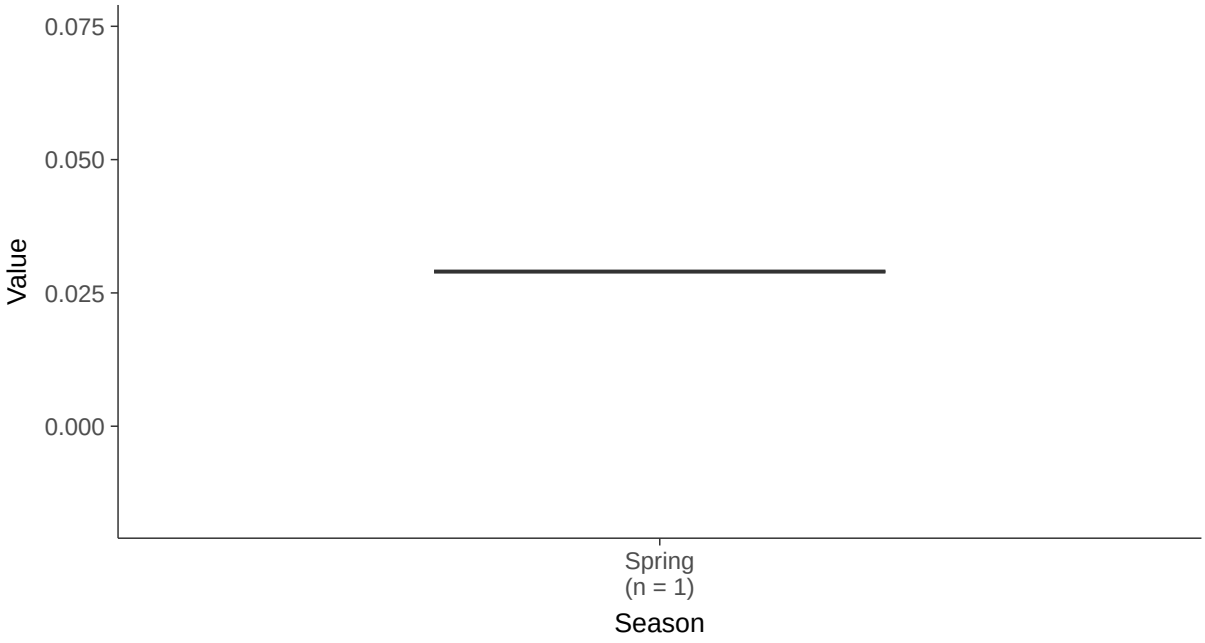
Boxplot

Arsenic, MW-36 (mg/L)



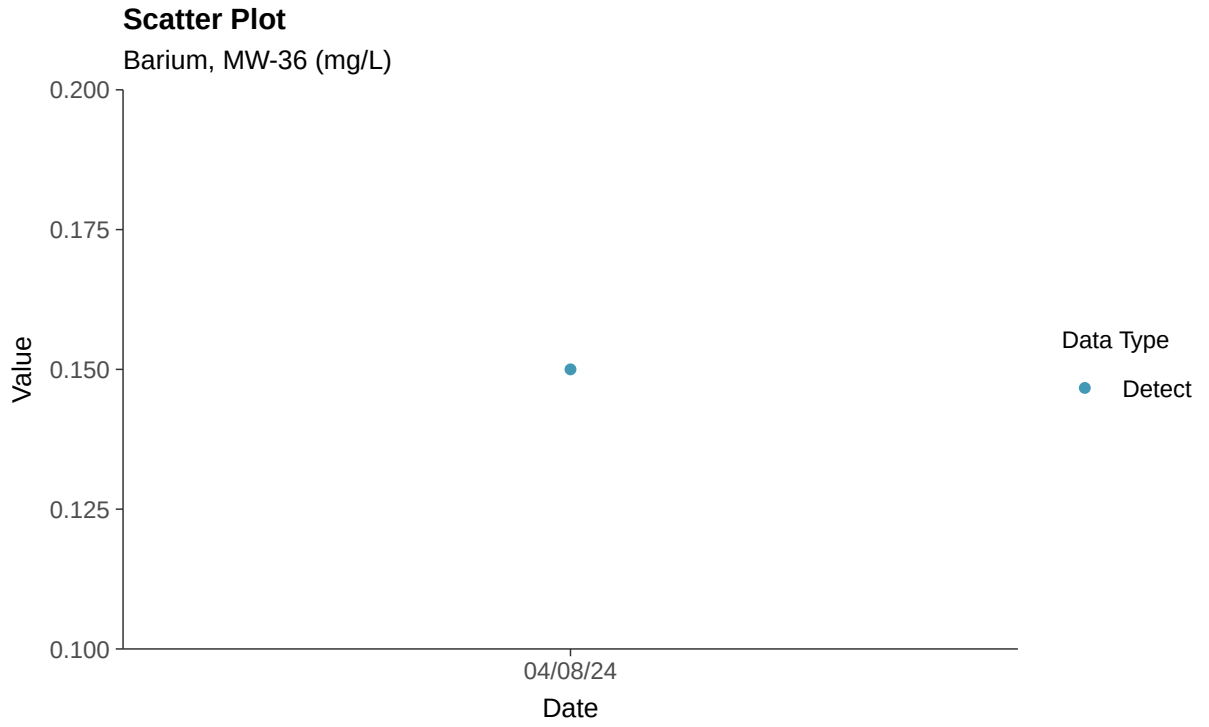
Boxplot by Season

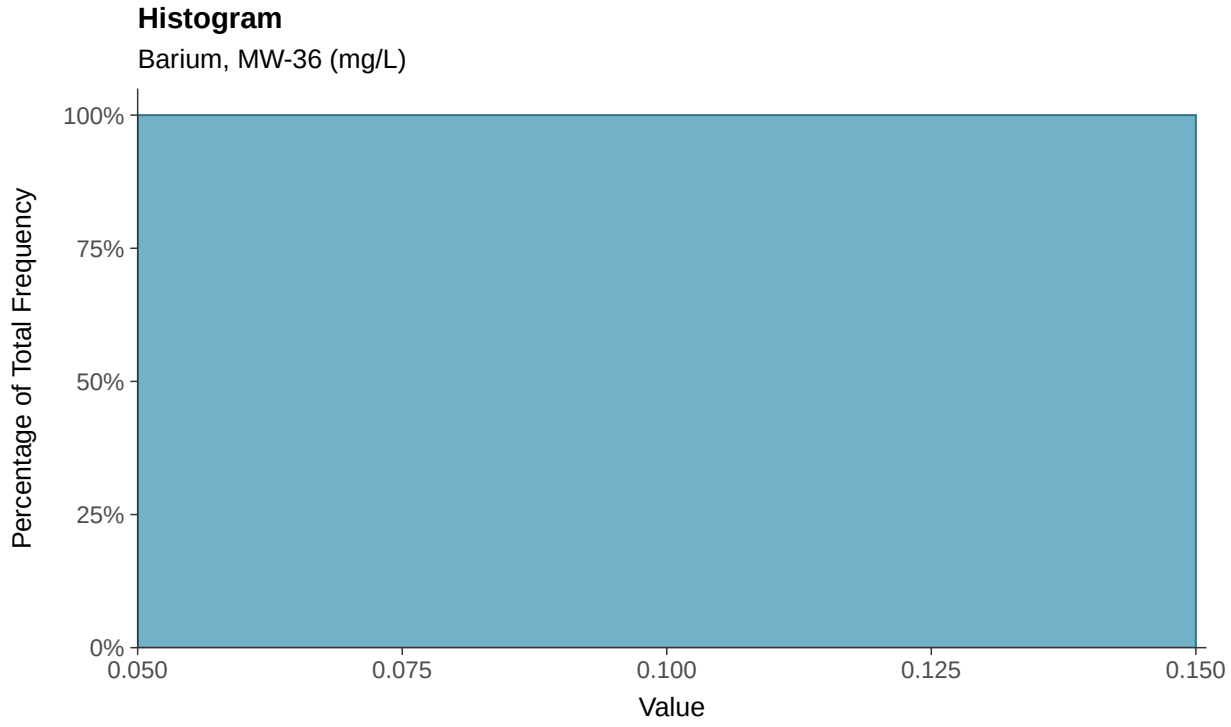
Arsenic, MW-36 (mg/L)



Appendix IV: Barium, MW-36

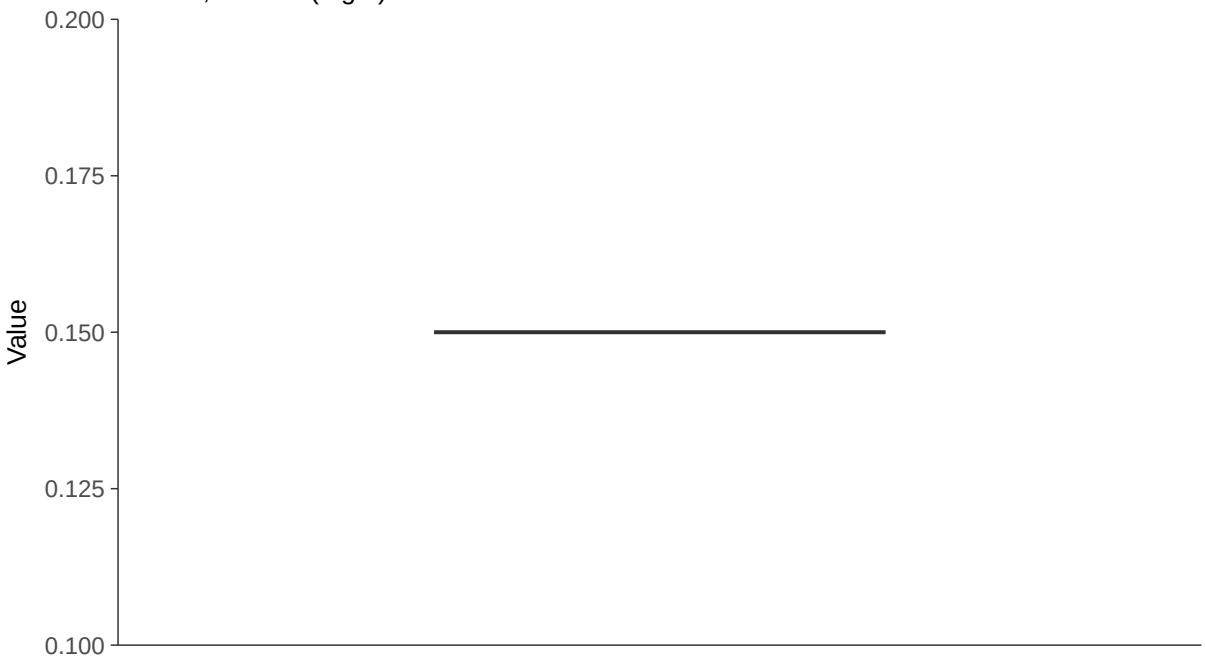
ID: 1_46_5_103





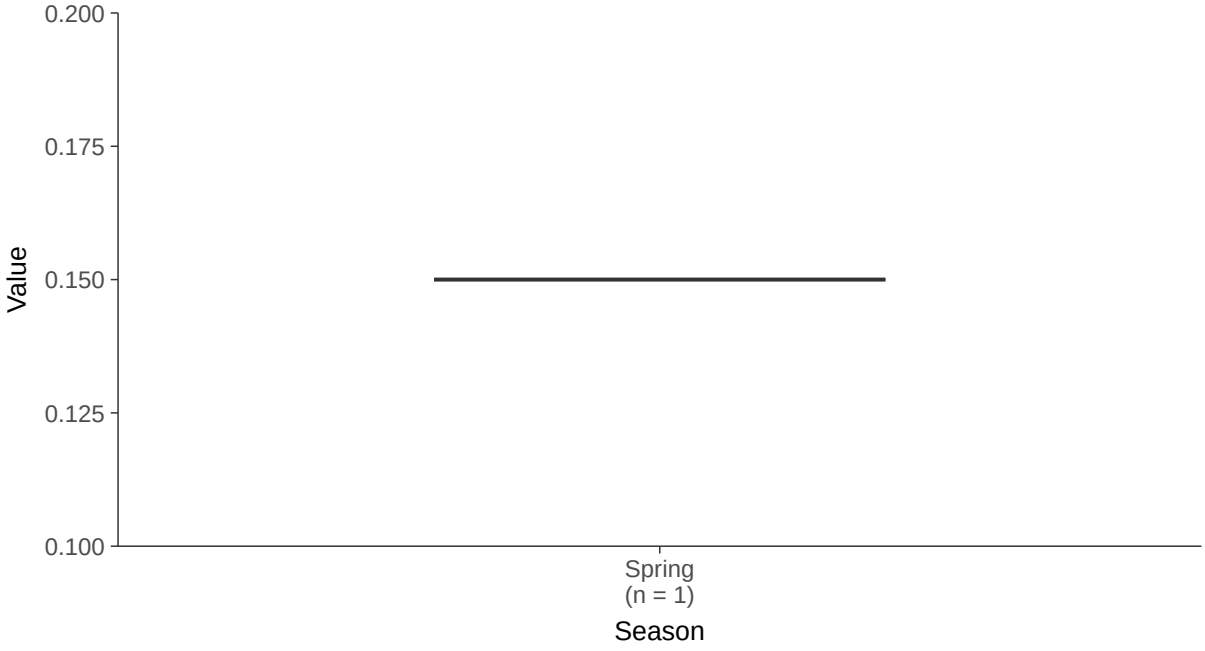
Boxplot

Barium, MW-36 (mg/L)



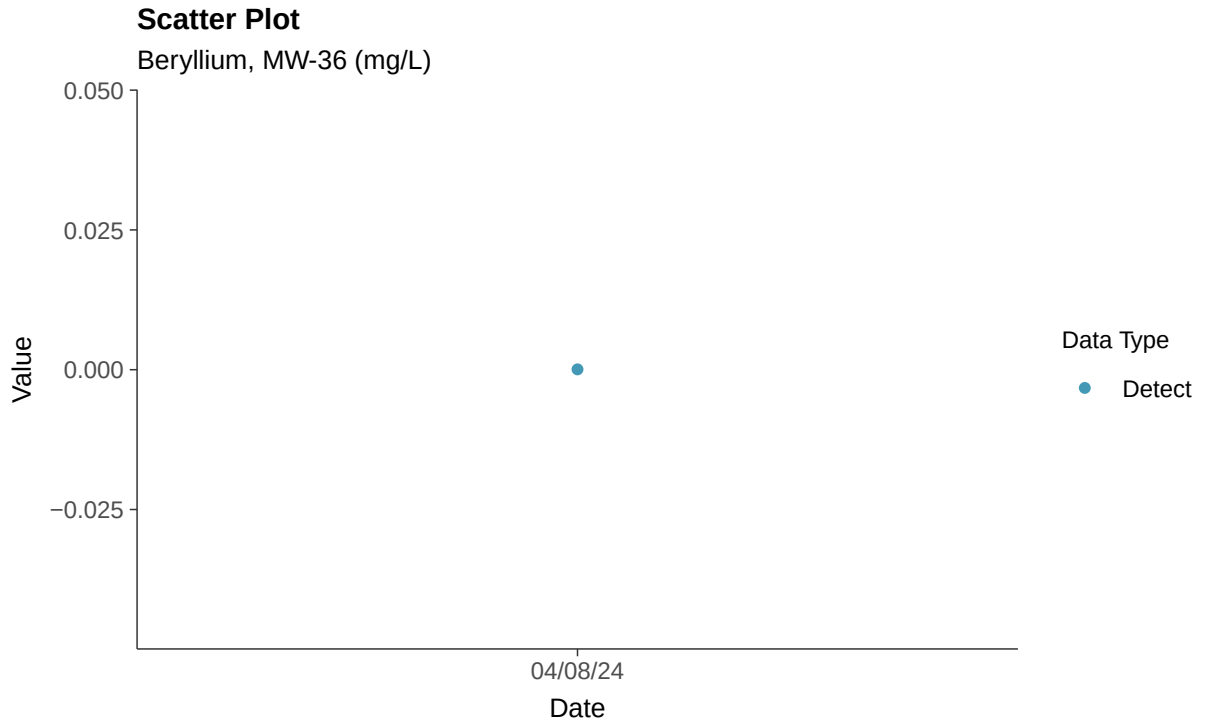
Boxplot by Season

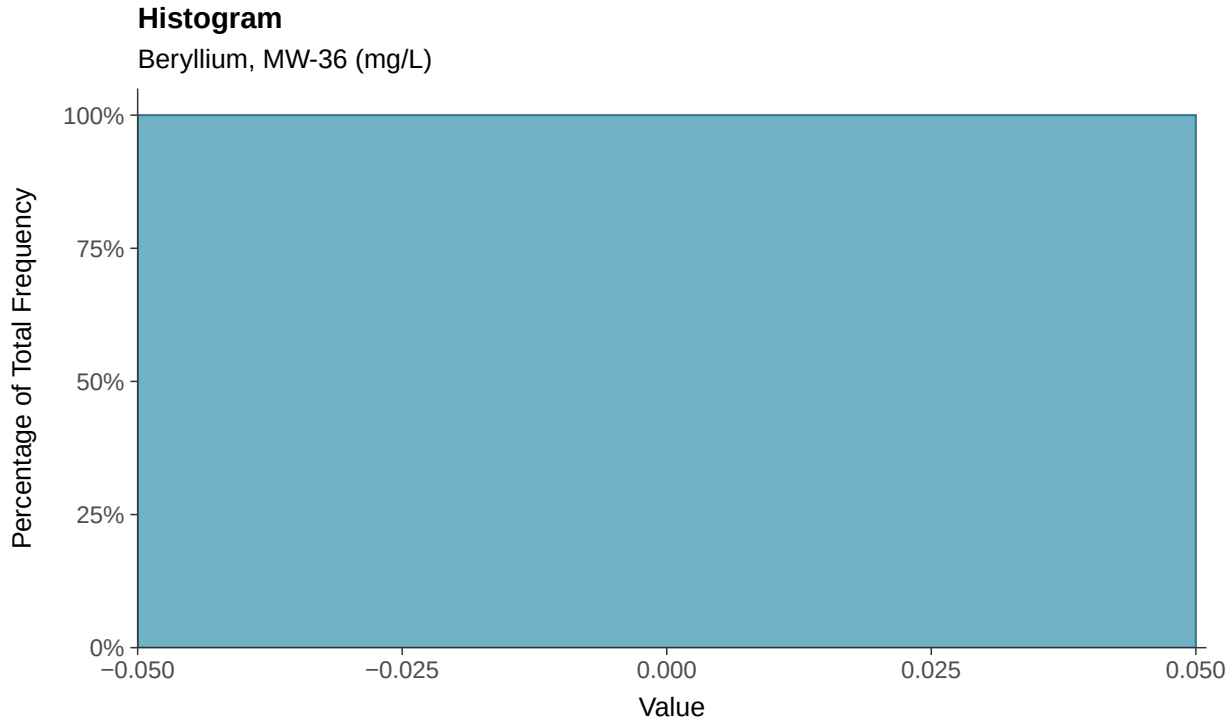
Barium, MW-36 (mg/L)



Appendix IV: Beryllium, MW-36

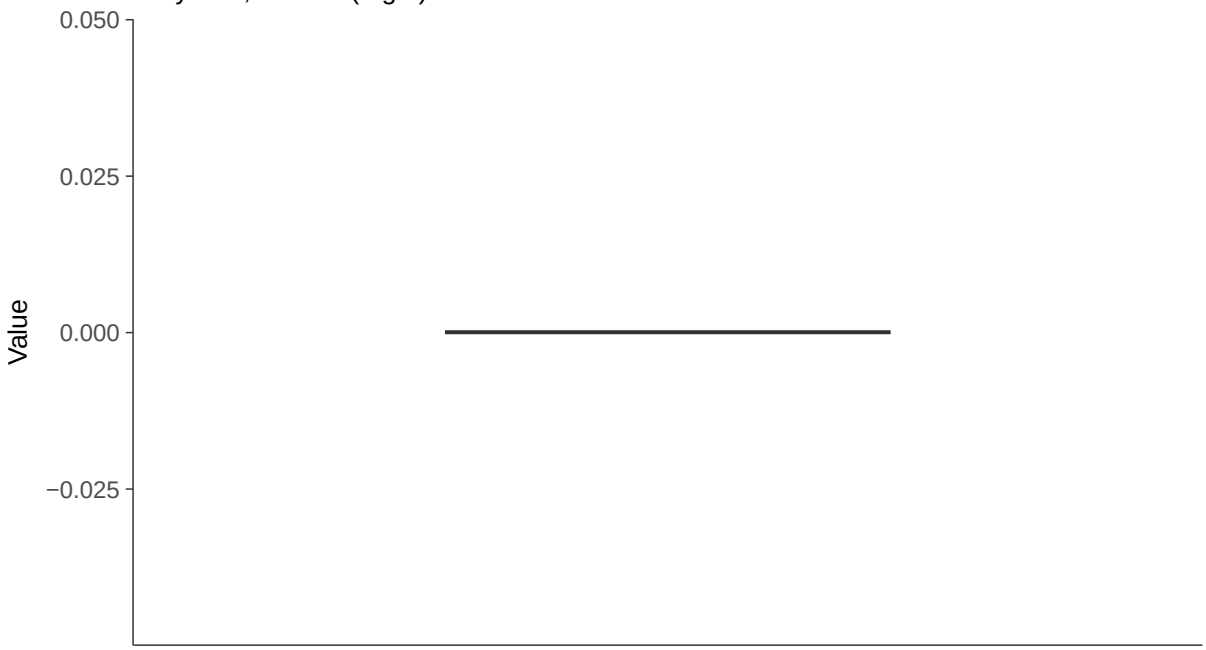
ID: 1_46_5_104





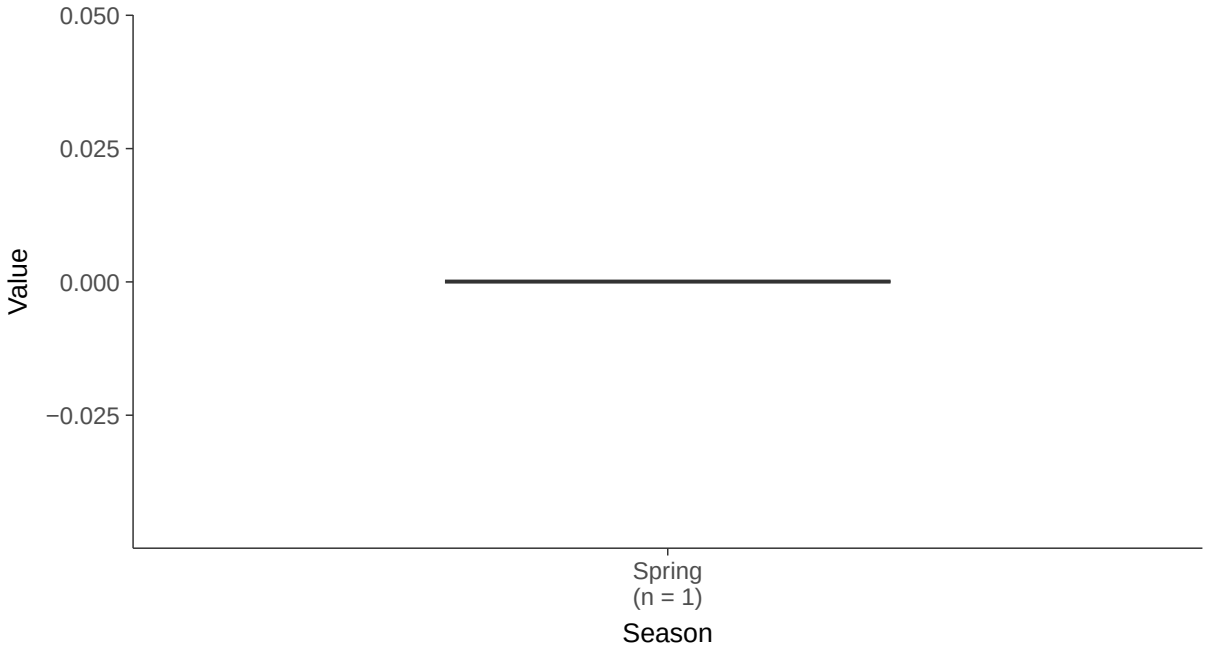
Boxplot

Beryllium, MW-36 (mg/L)



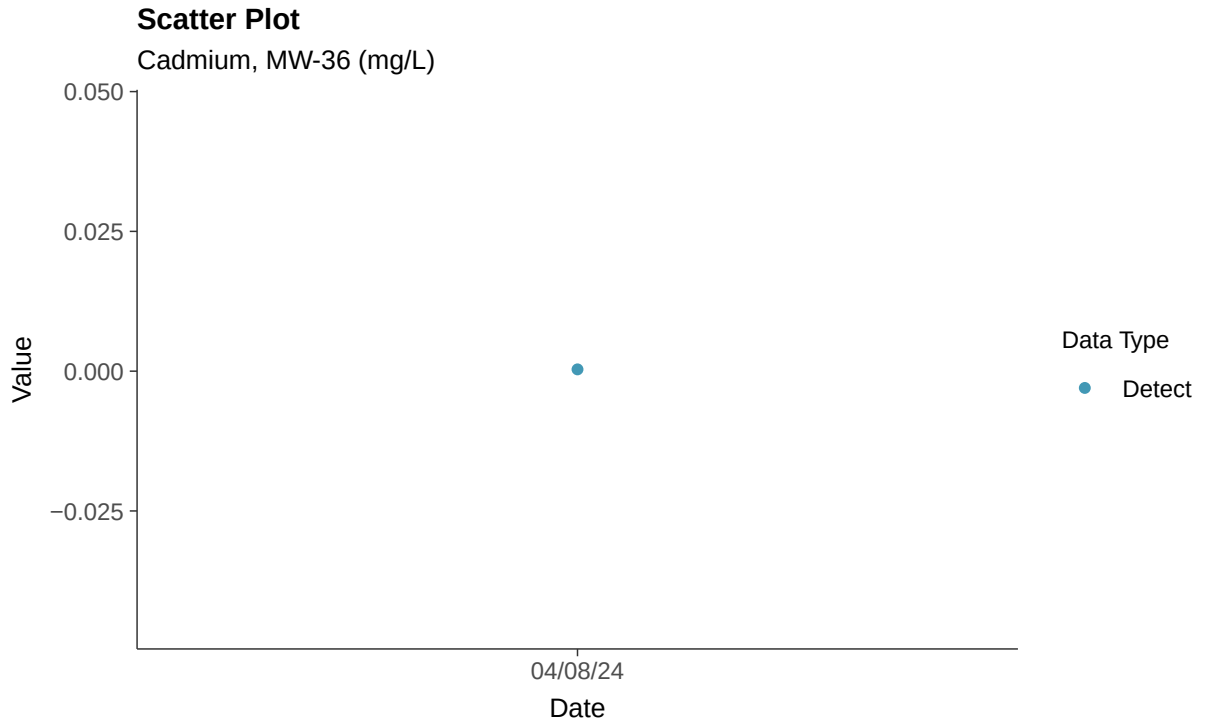
Boxplot by Season

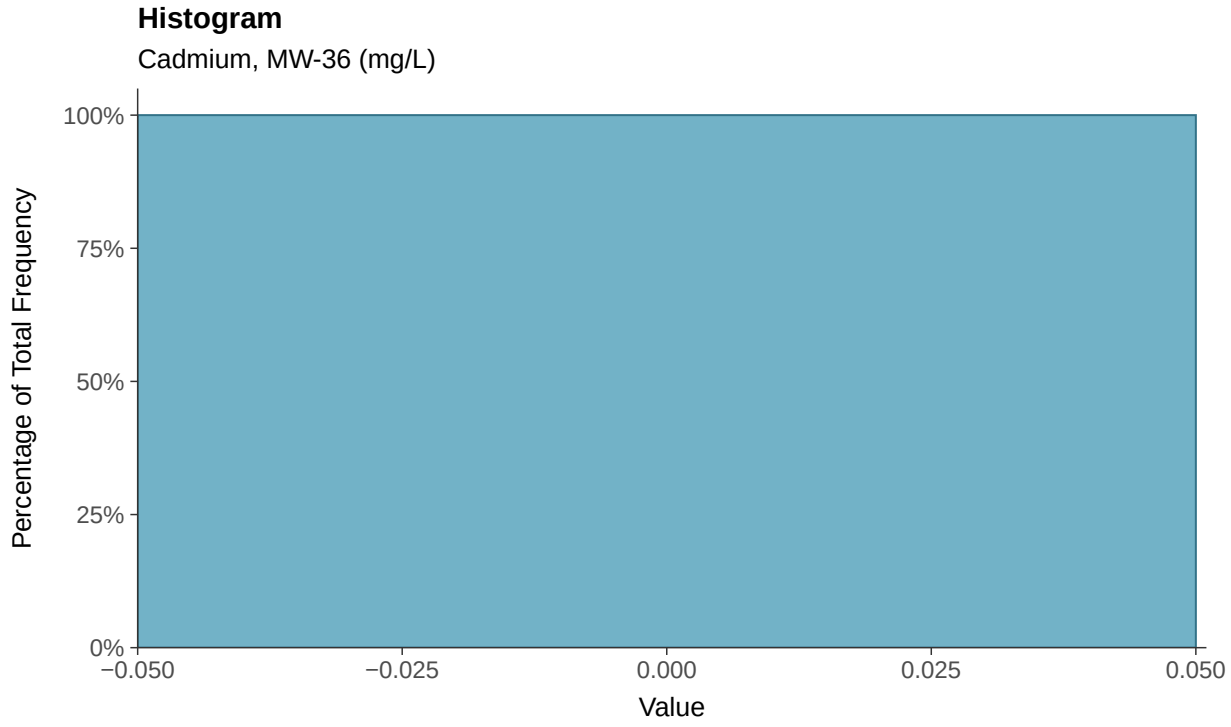
Beryllium, MW-36 (mg/L)



Appendix IV: Cadmium, MW-36

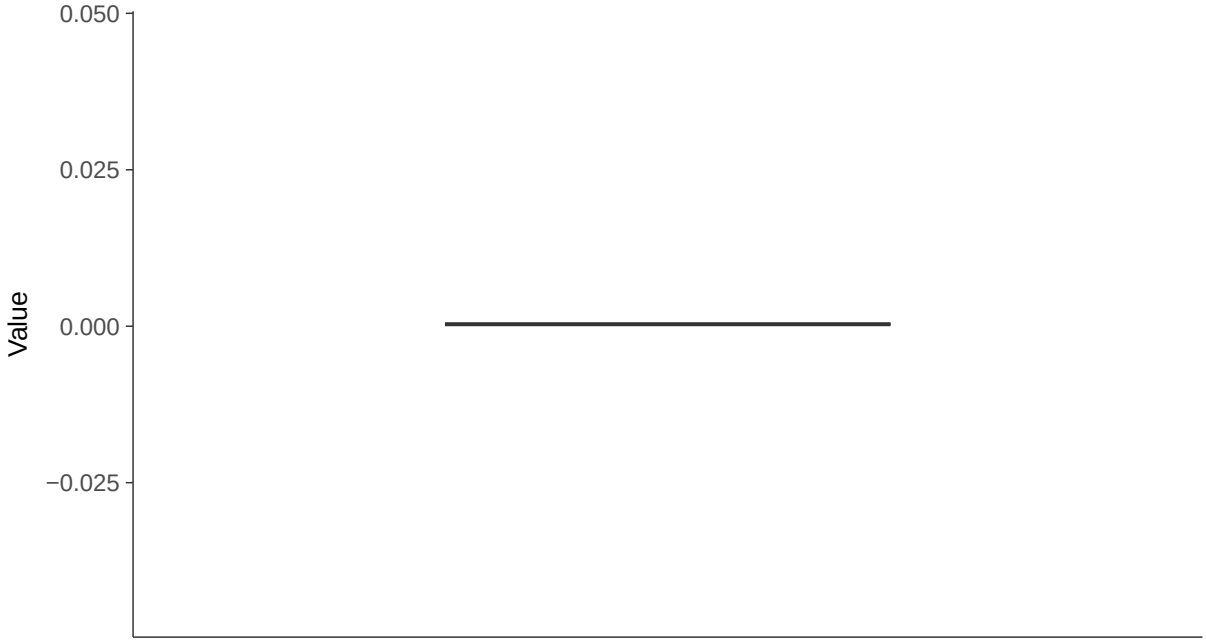
ID: 1_46_5_106





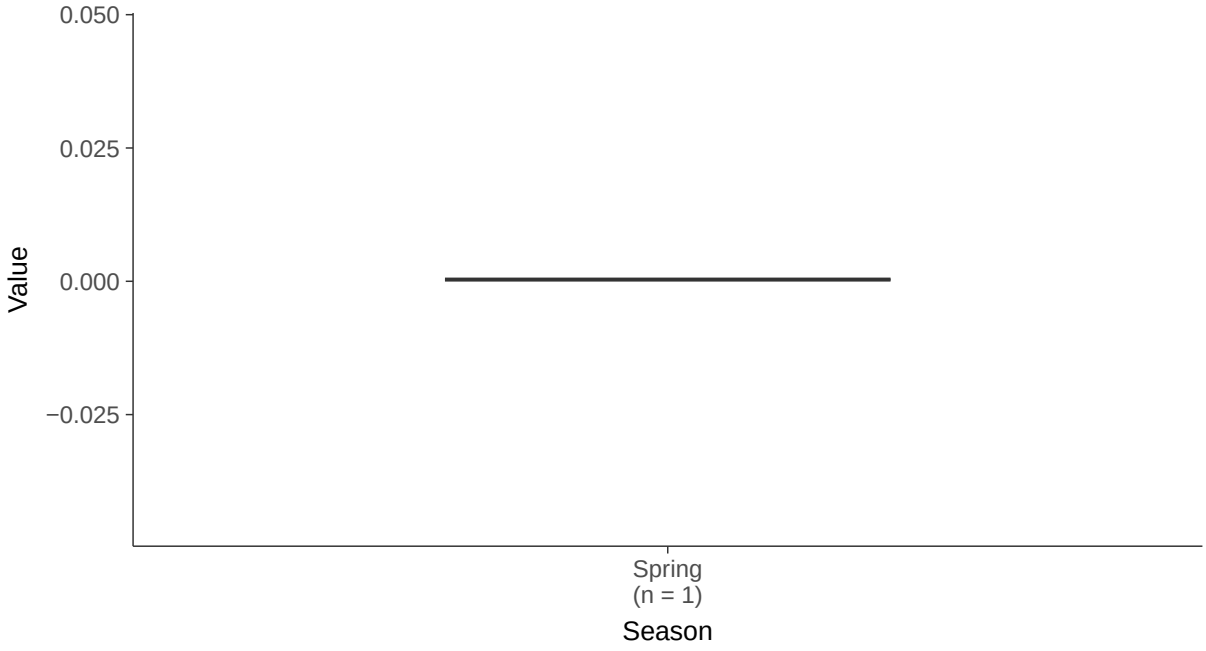
Boxplot

Cadmium, MW-36 (mg/L)



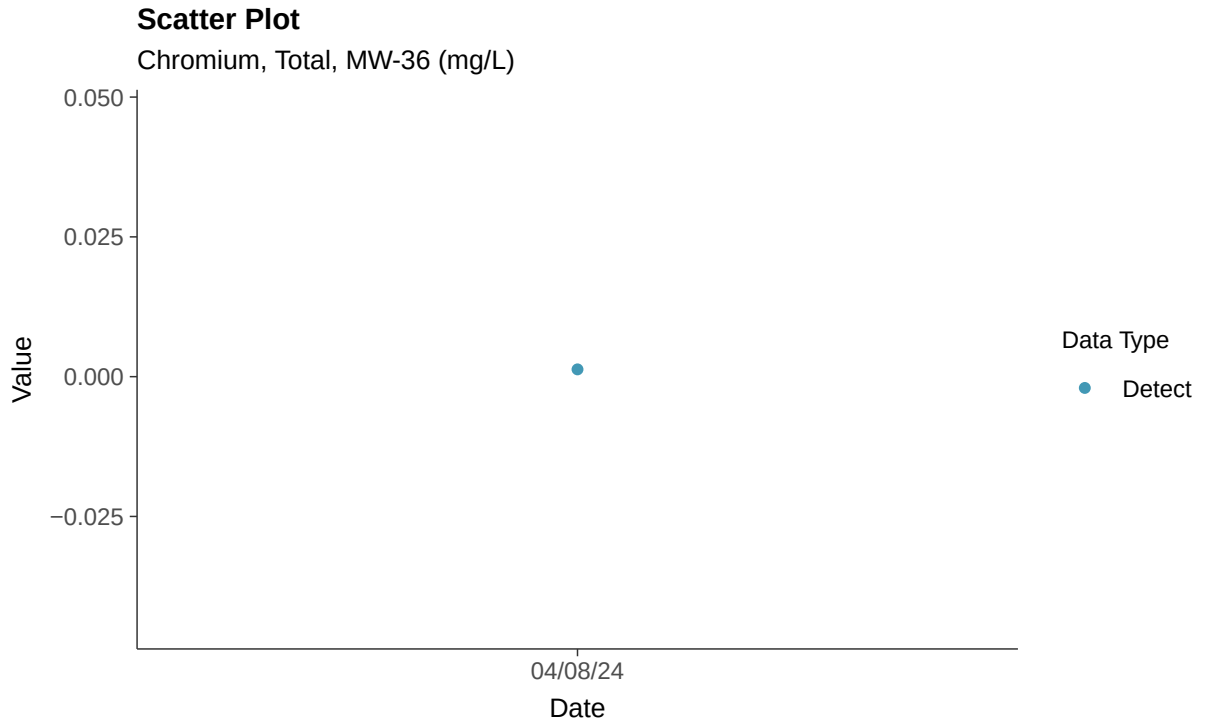
Boxplot by Season

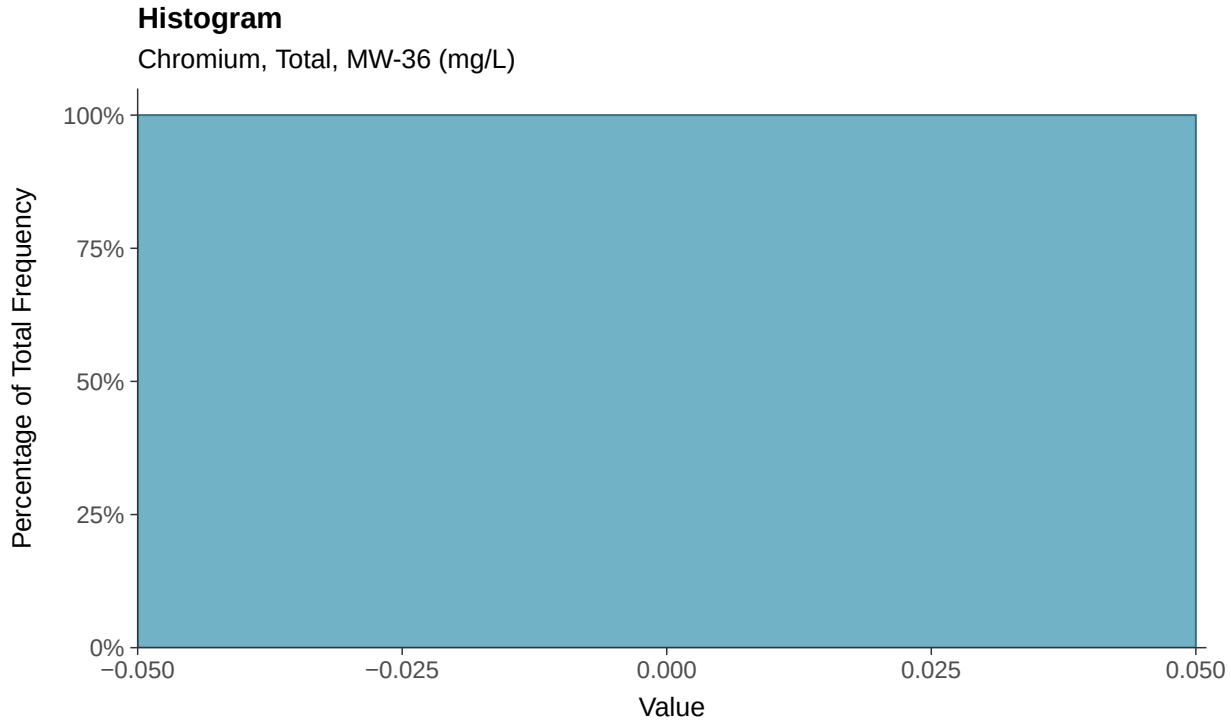
Cadmium, MW-36 (mg/L)



Appendix IV: Chromium, Total, MW-36

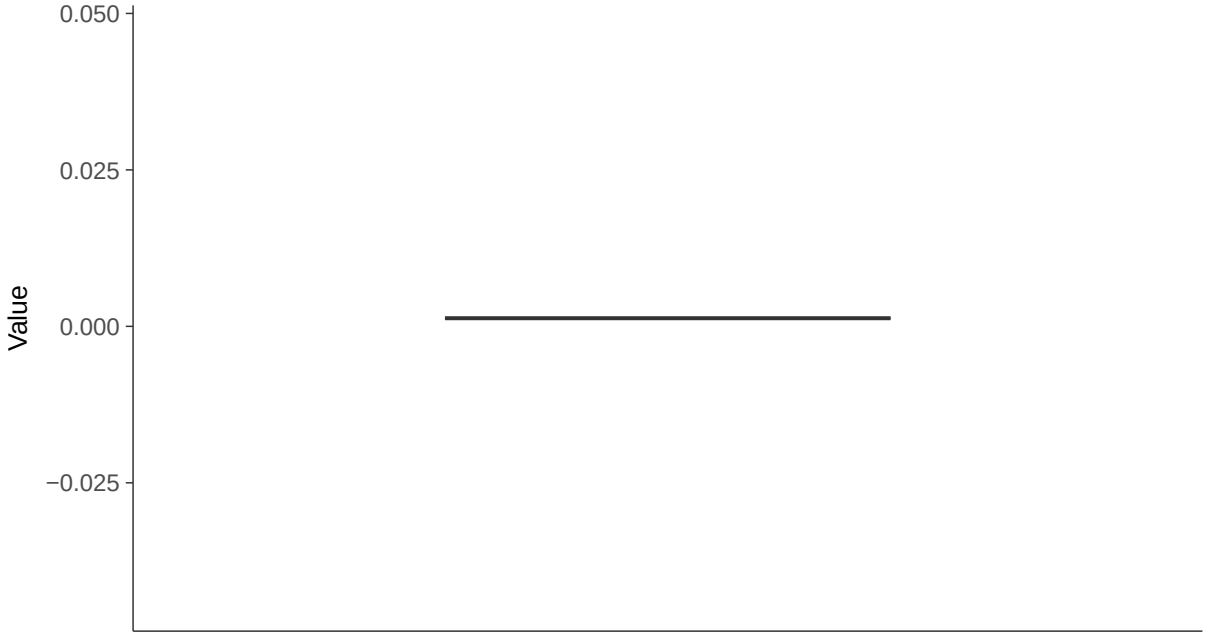
ID: 1_46_5_109





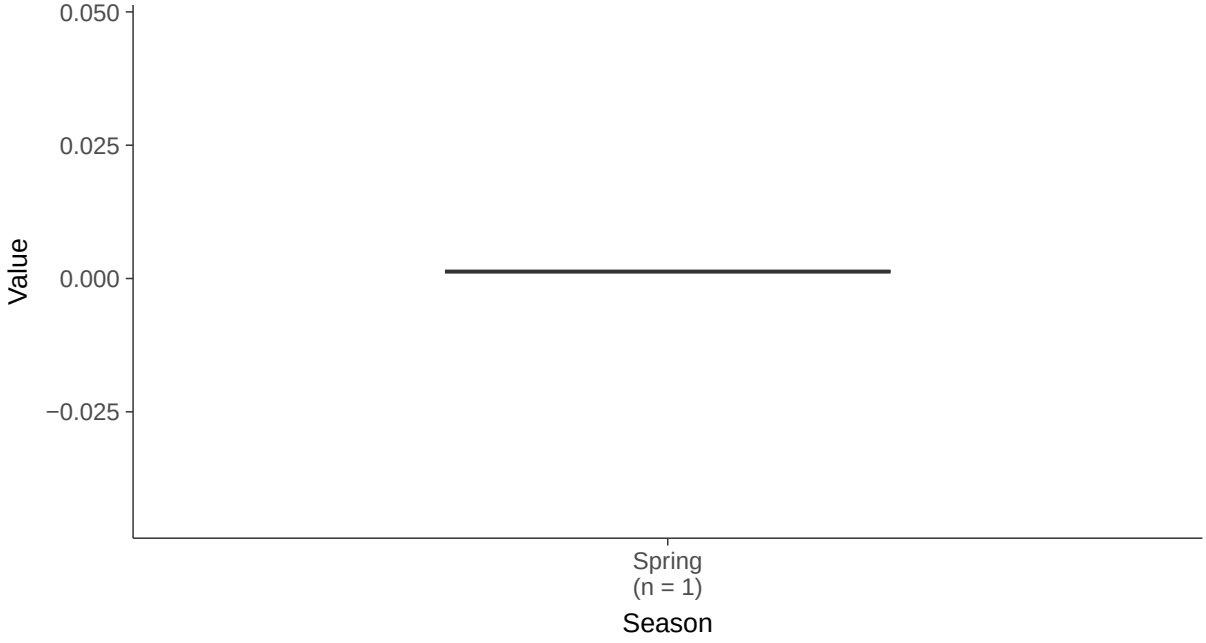
Boxplot

Chromium, Total, MW-36 (mg/L)



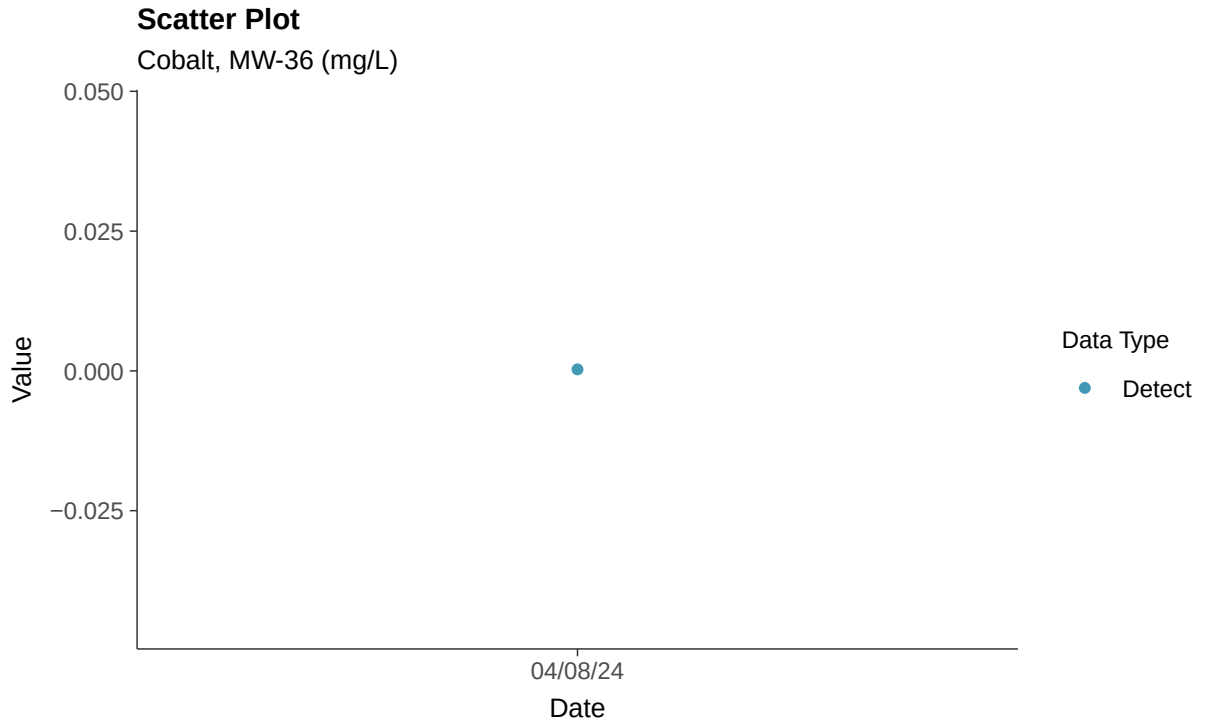
Boxplot by Season

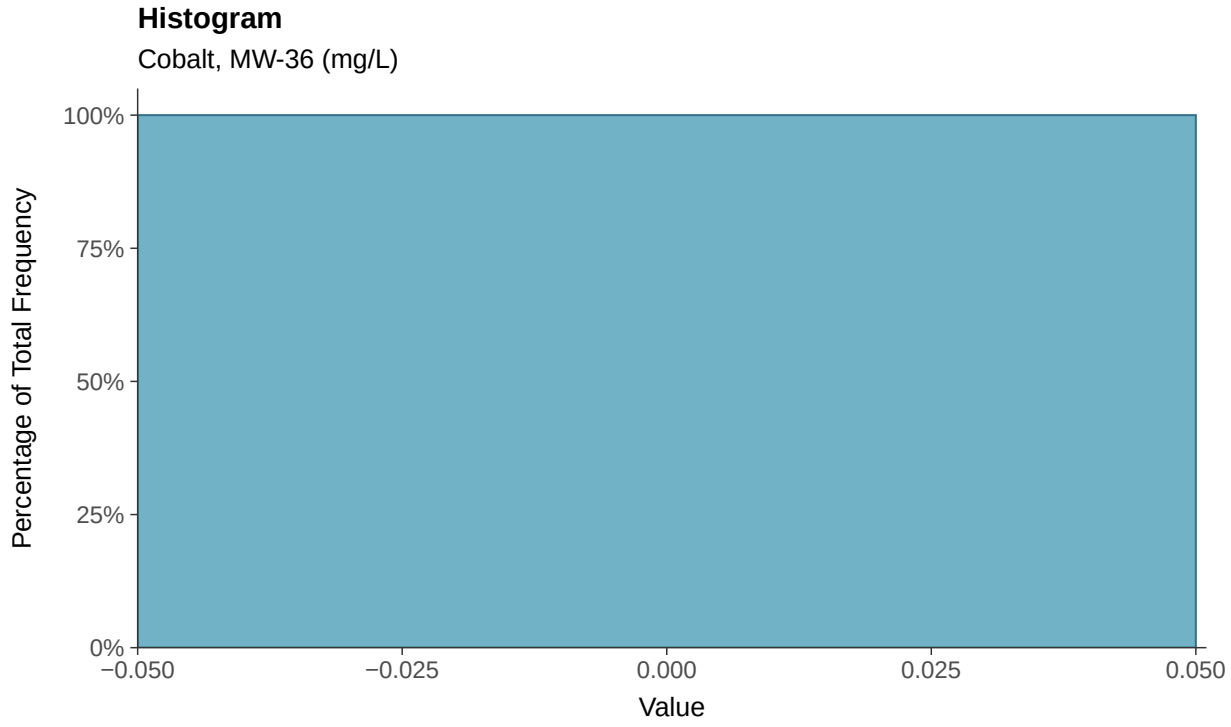
Chromium, Total, MW-36 (mg/L)



Appendix IV: Cobalt, MW-36

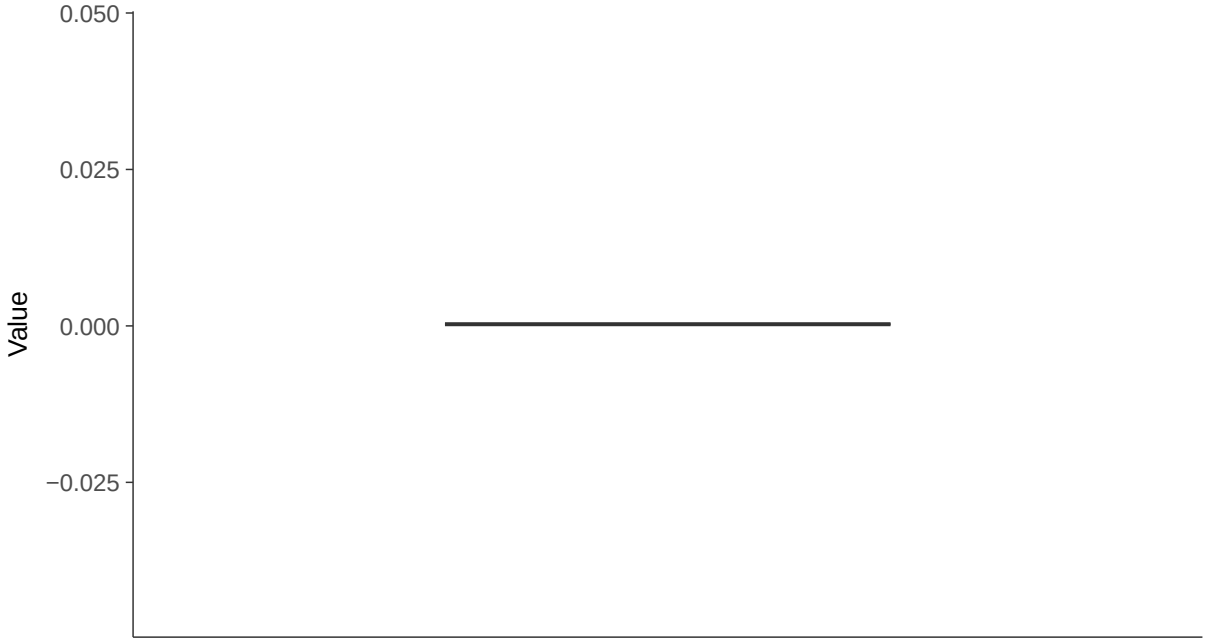
ID: 1_46_5_110





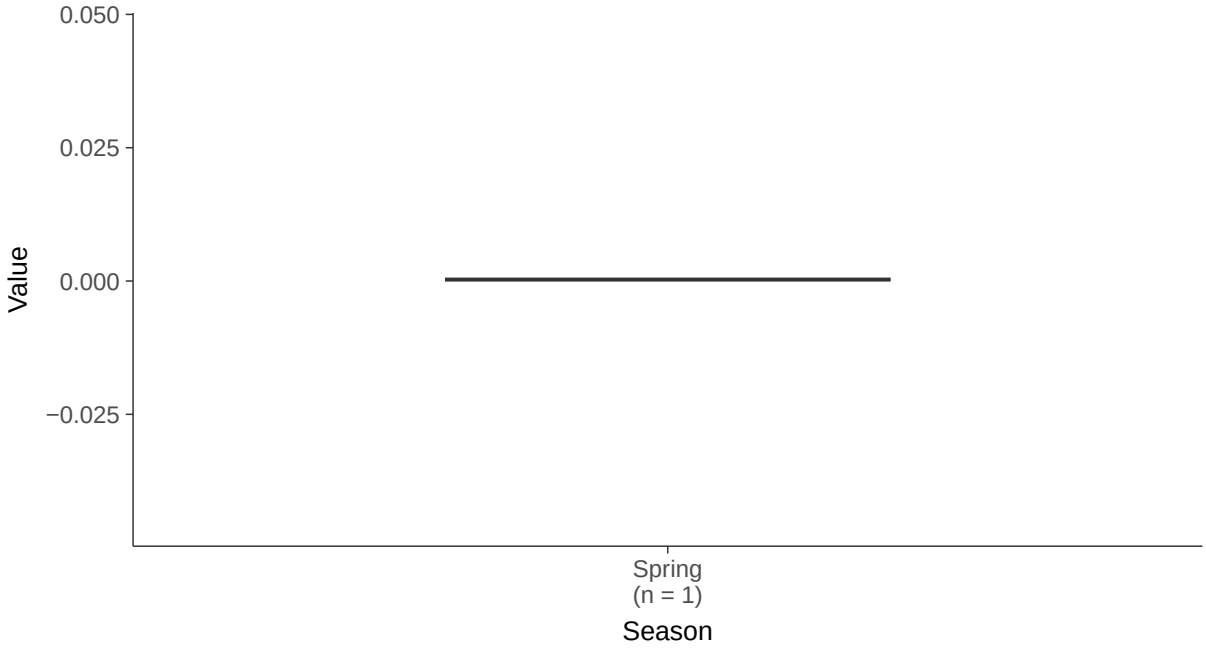
Boxplot

Cobalt, MW-36 (mg/L)



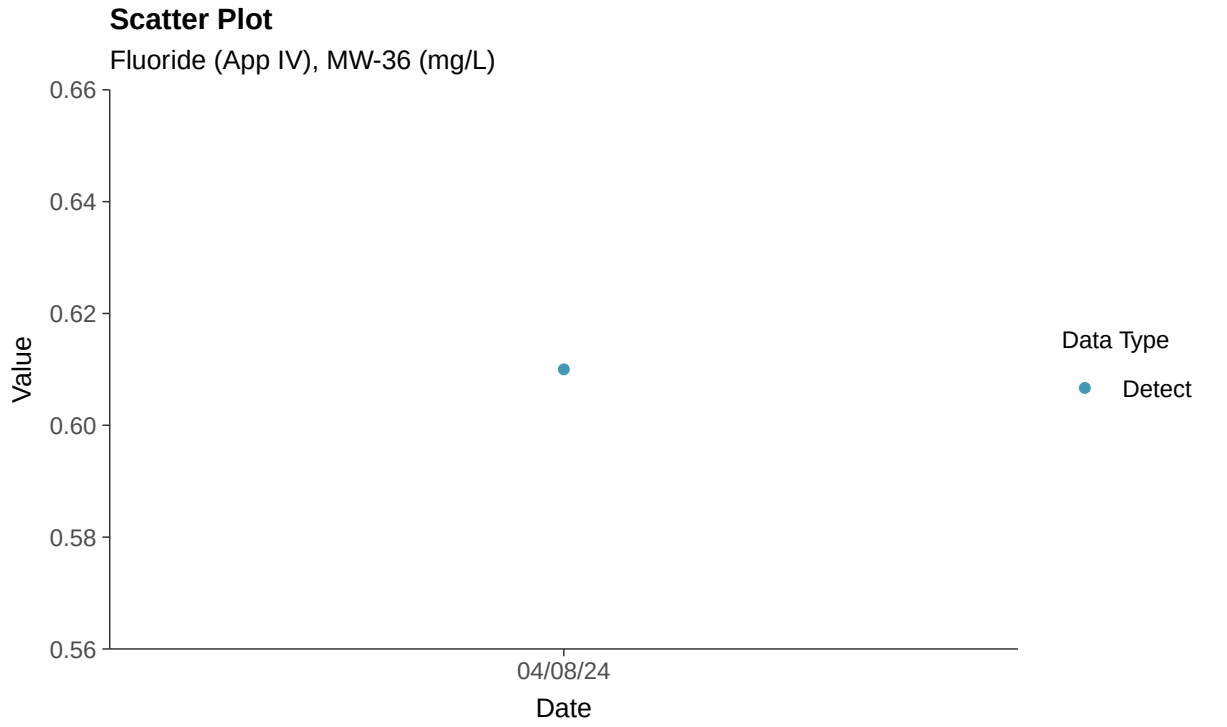
Boxplot by Season

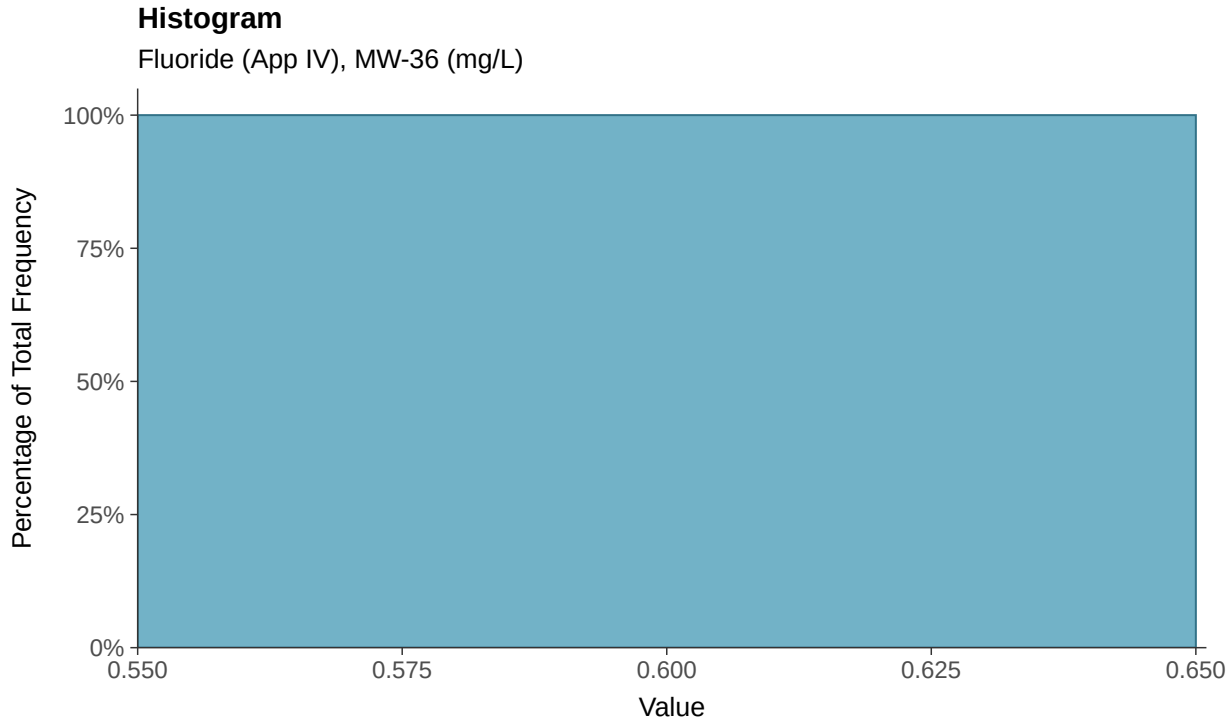
Cobalt, MW-36 (mg/L)



Appendix IV: Fluoride (App IV), MW-36

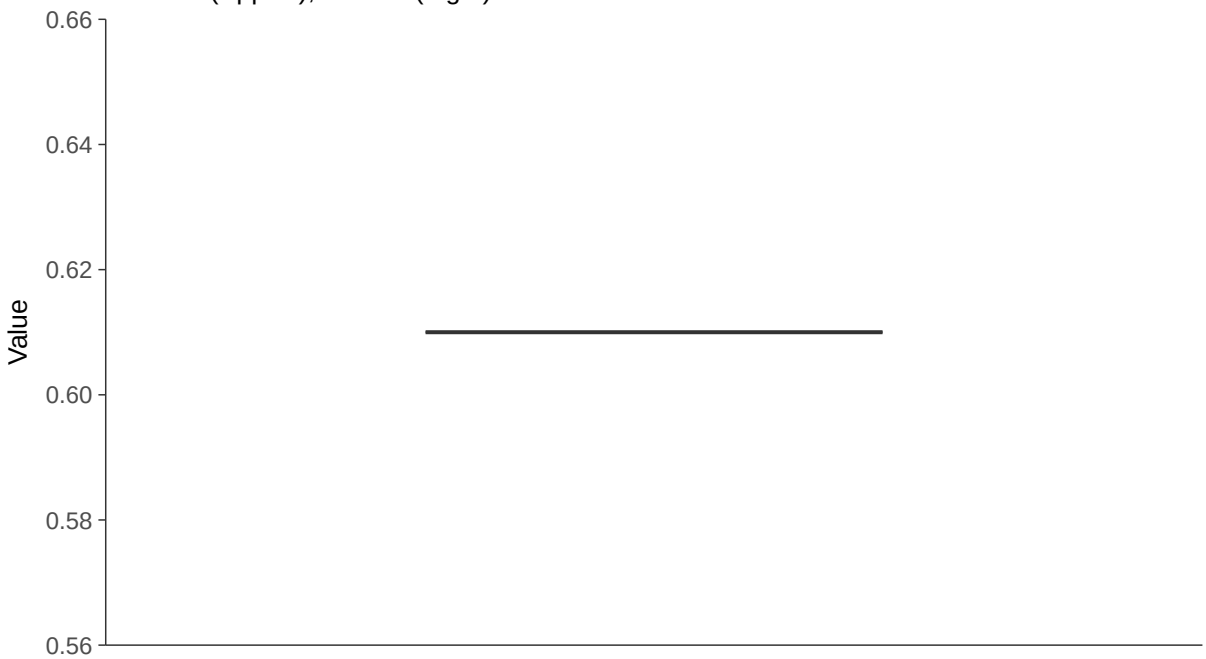
ID: 1_46_5_113





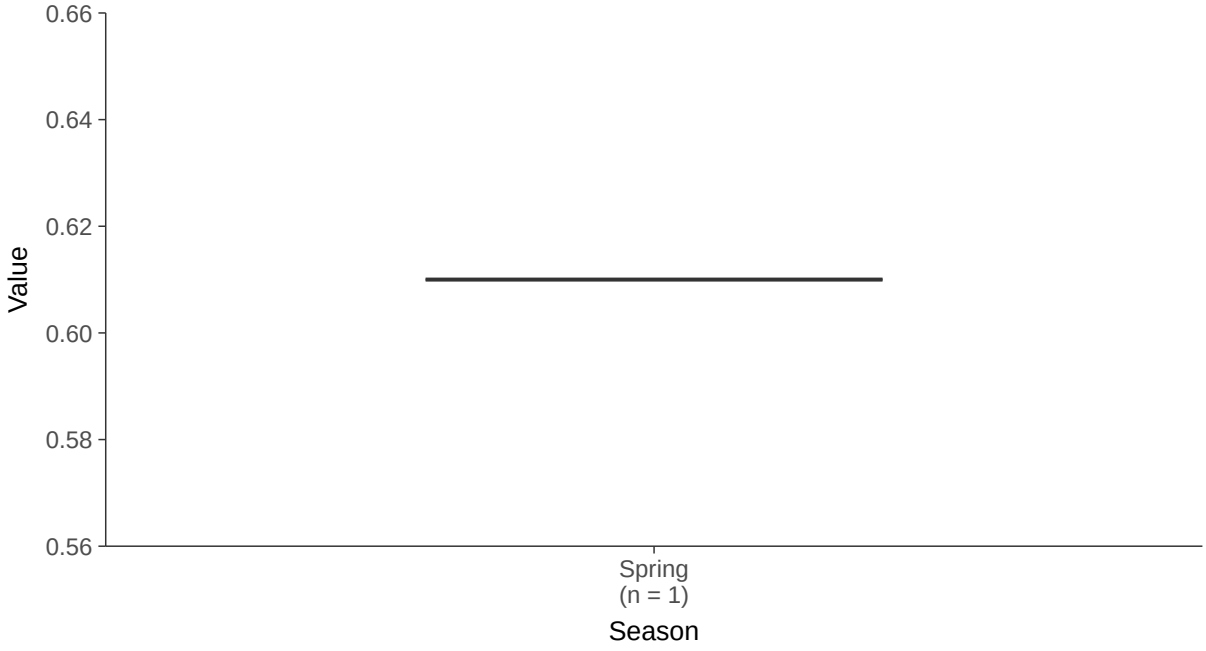
Boxplot

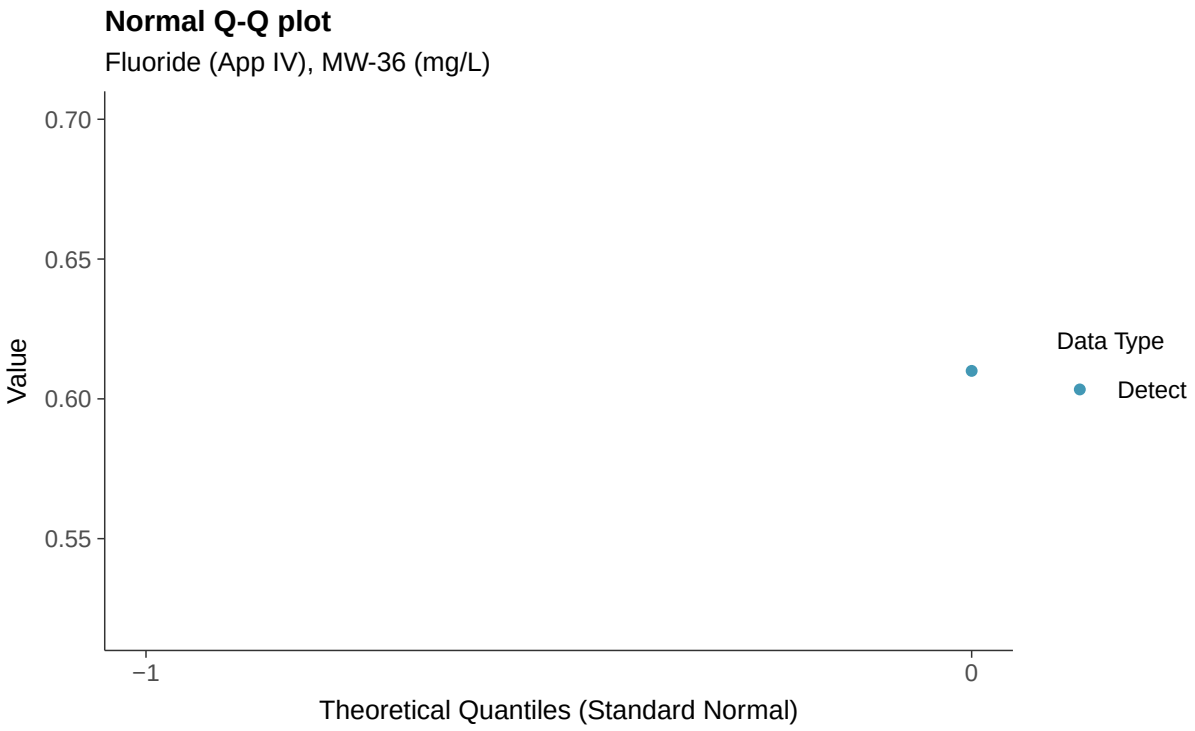
Fluoride (App IV), MW-36 (mg/L)



Boxplot by Season

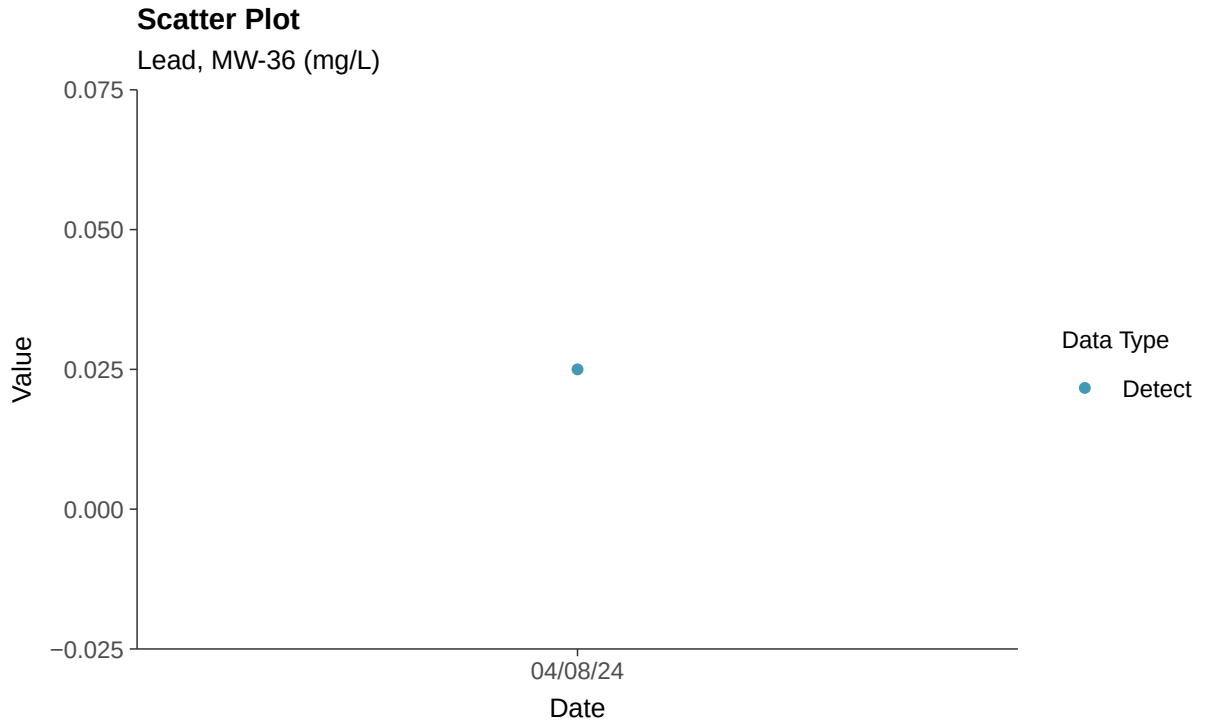
Fluoride (App IV), MW-36 (mg/L)

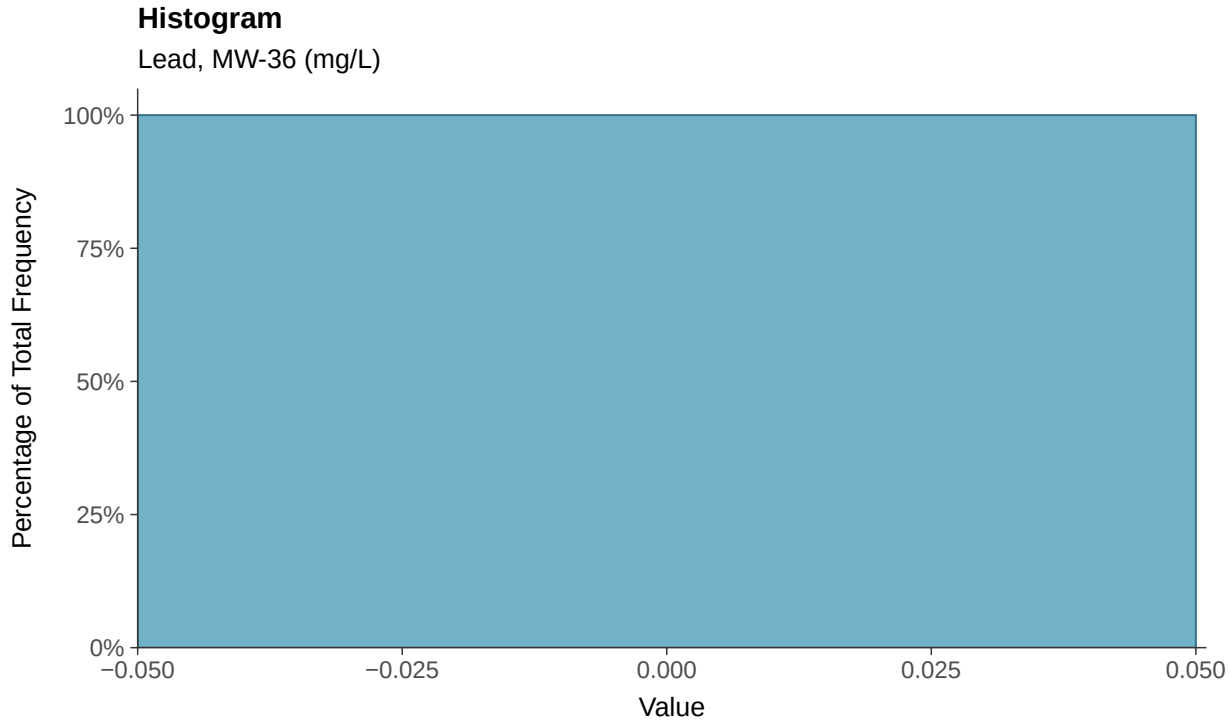



Normal Q-Q plot
Fluoride (App IV), MW-36 (mg/L)
0.70
0.65
0.60
0.55
Value
−1
0
Theoretical Quantiles (Standard Normal)
Data Type
Detect

Appendix IV: Lead, MW-36

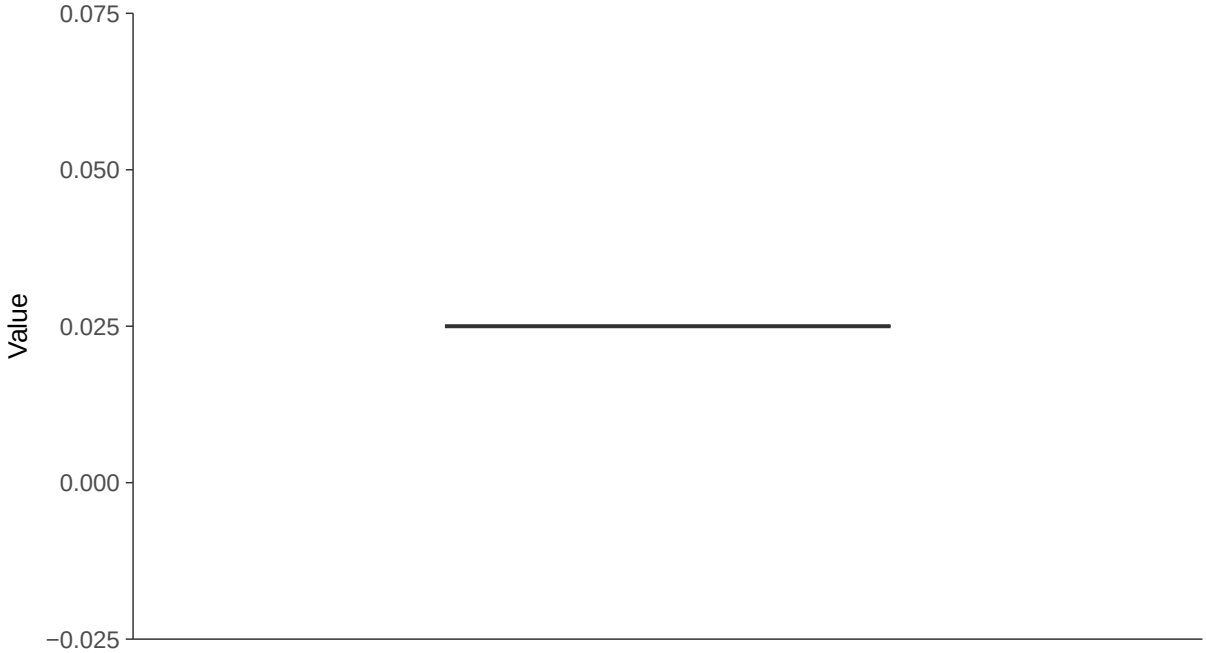
ID: 1_46_5_115





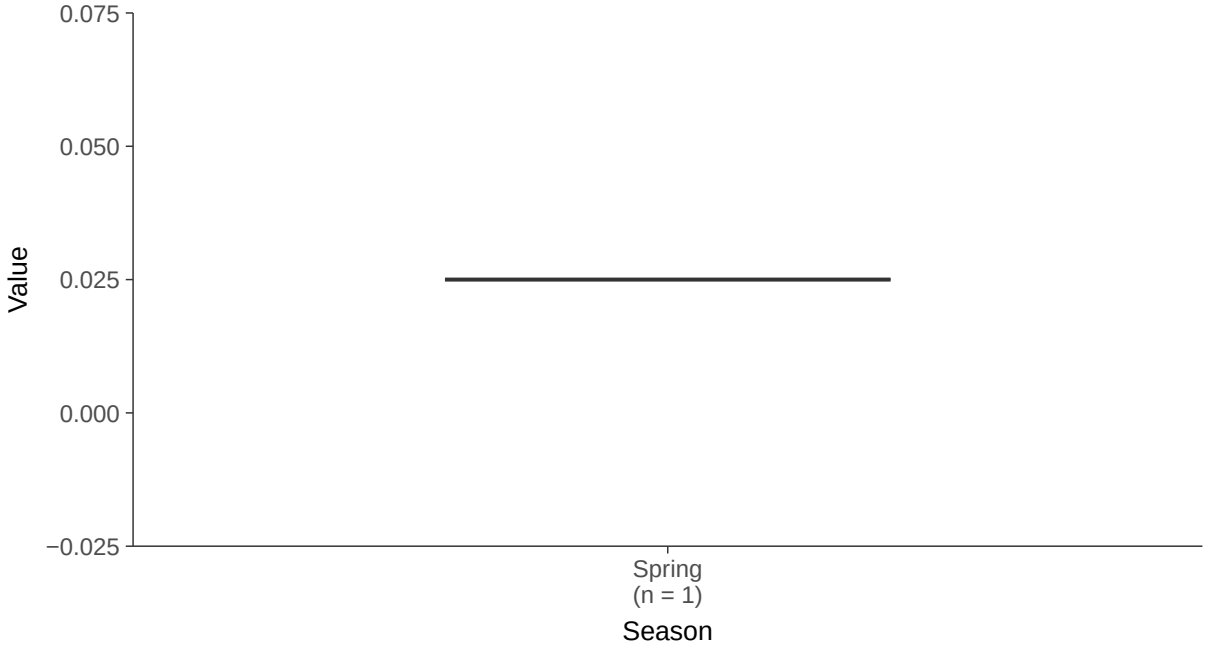
Boxplot

Lead, MW-36 (mg/L)



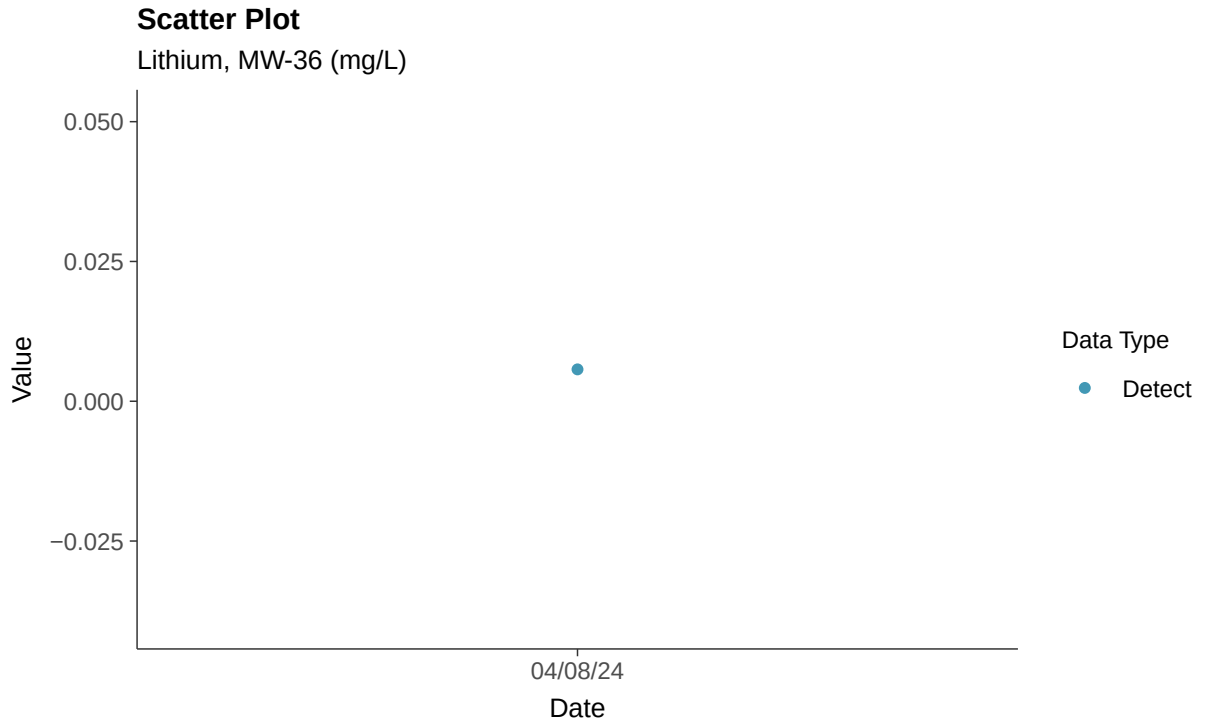
Boxplot by Season

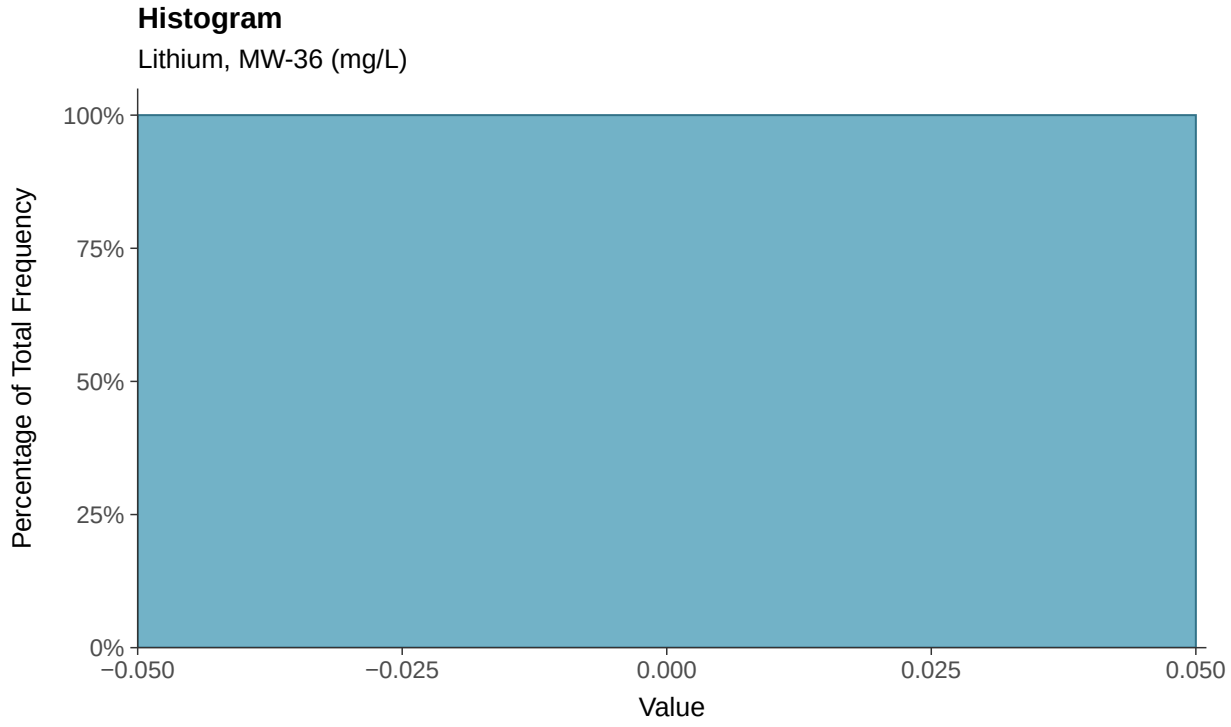
Lead, MW-36 (mg/L)



Appendix IV: Lithium, MW-36

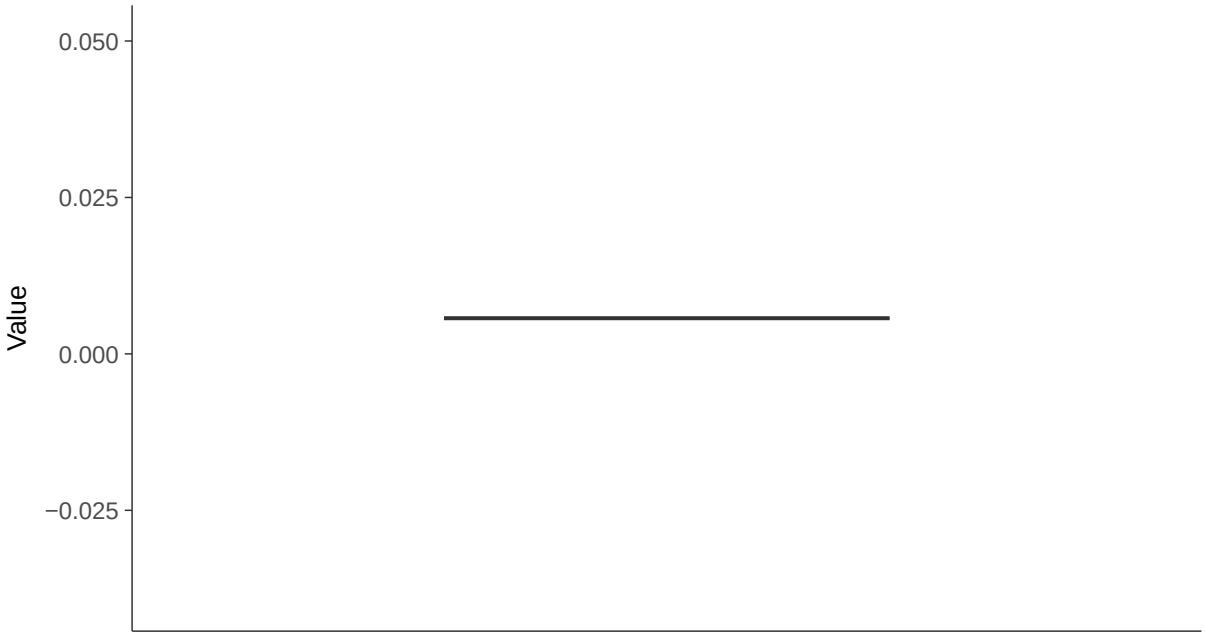
ID: 1_46_5_116





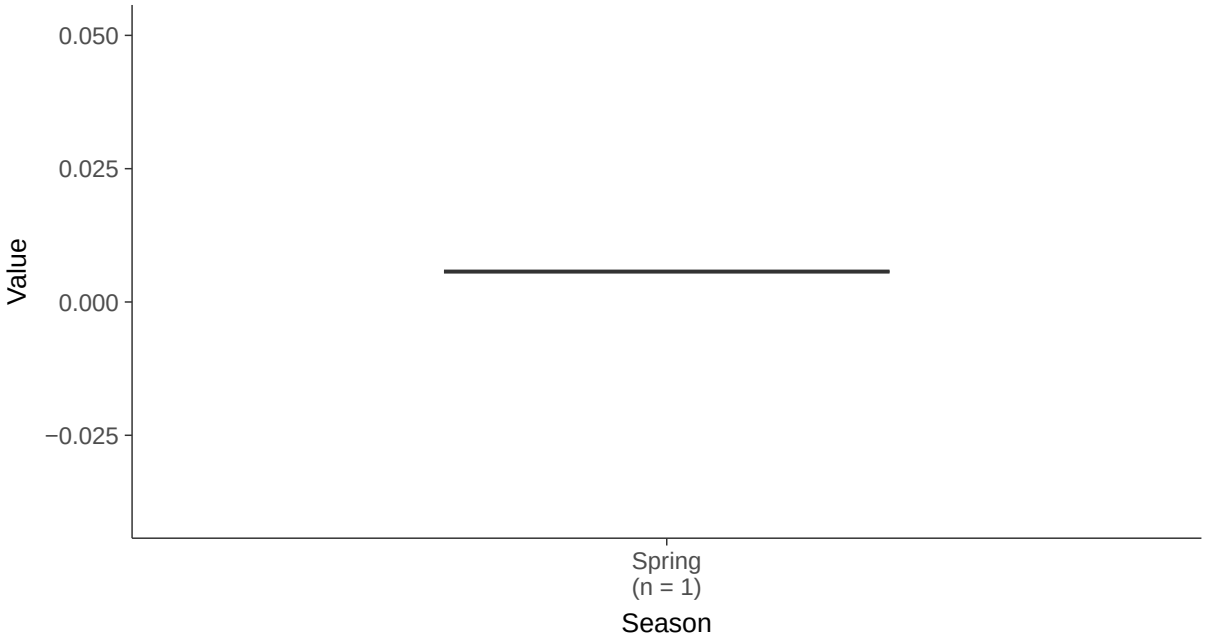
Boxplot

Lithium, MW-36 (mg/L)



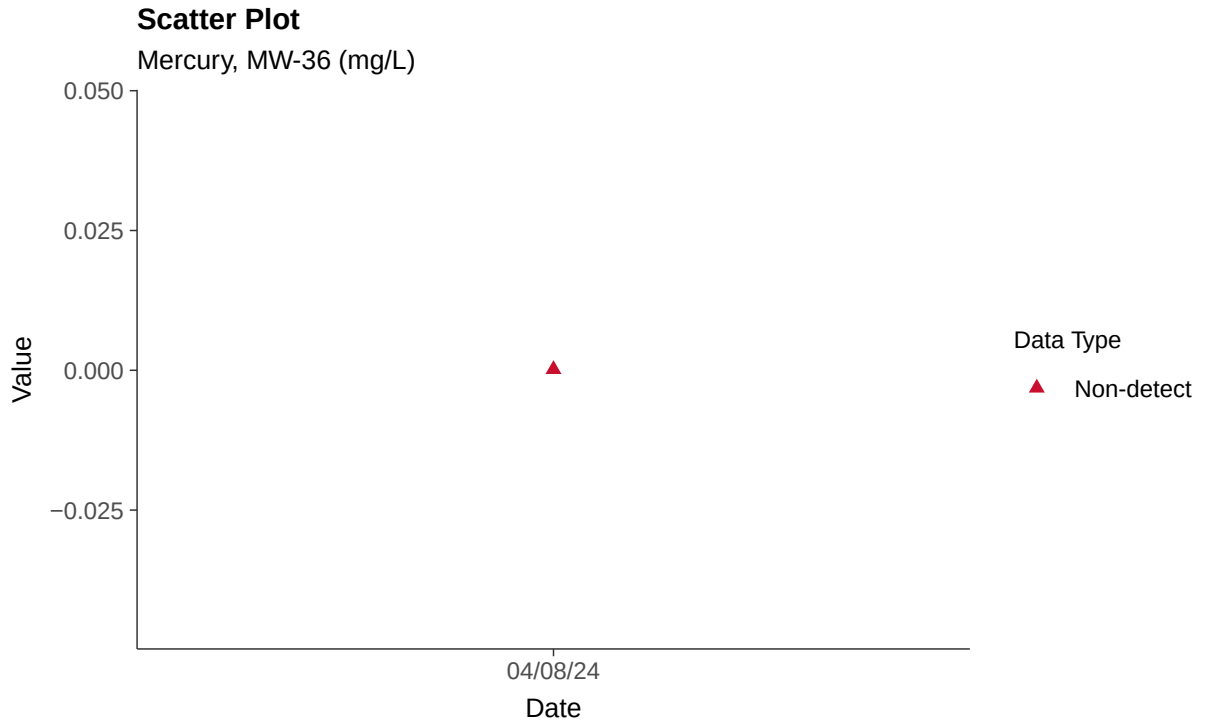
Boxplot by Season

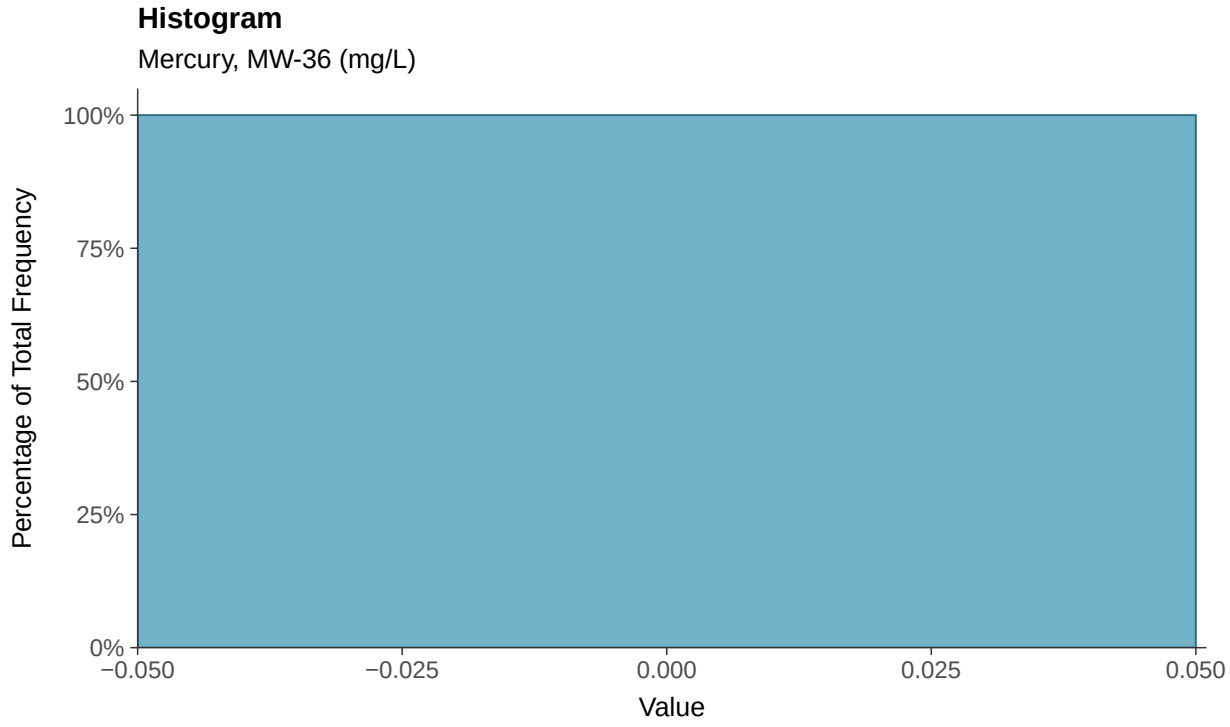
Lithium, MW-36 (mg/L)



Appendix IV: Mercury, MW-36

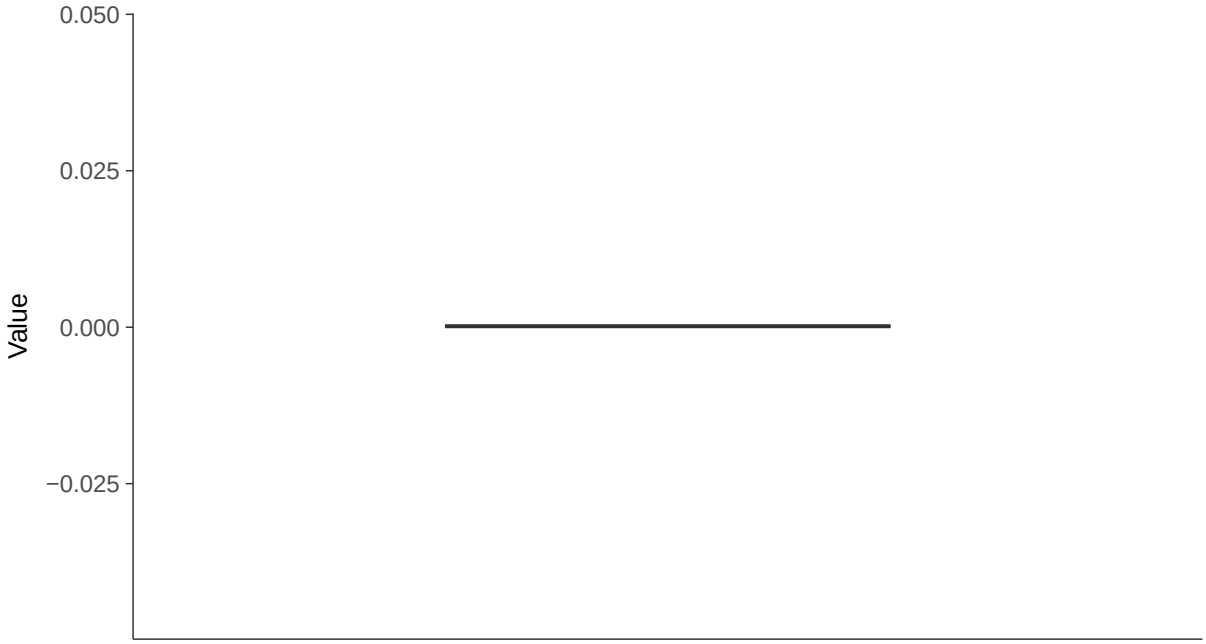
ID: 1_46_5_117





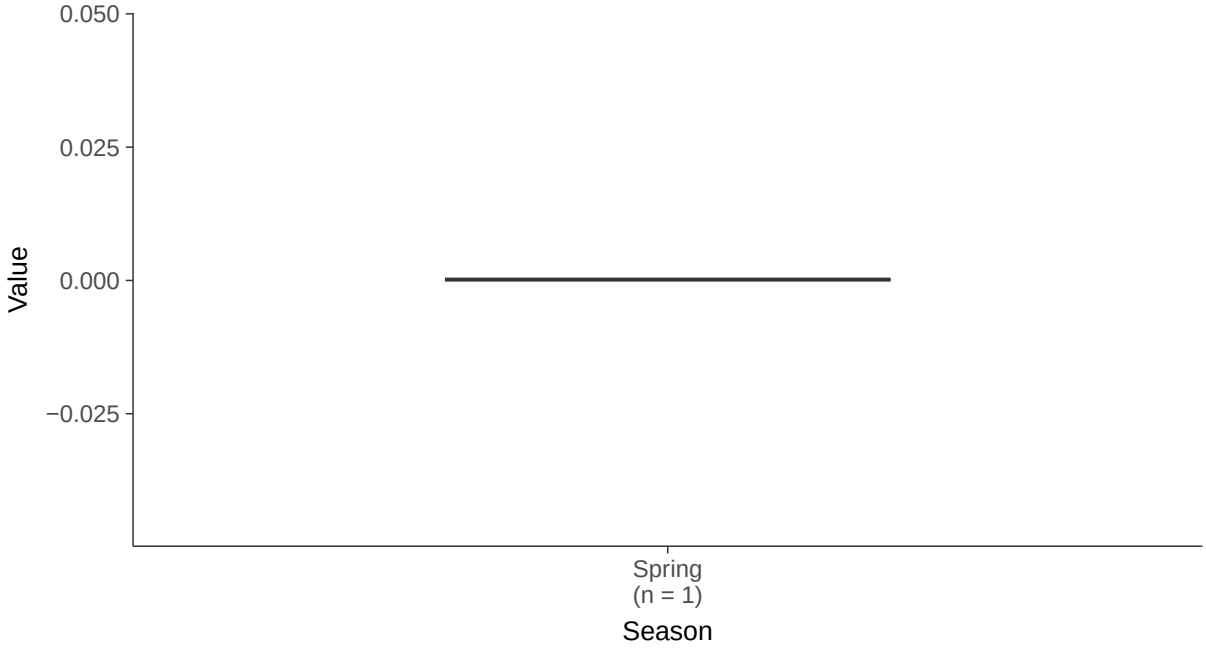
Boxplot

Mercury, MW-36 (mg/L)



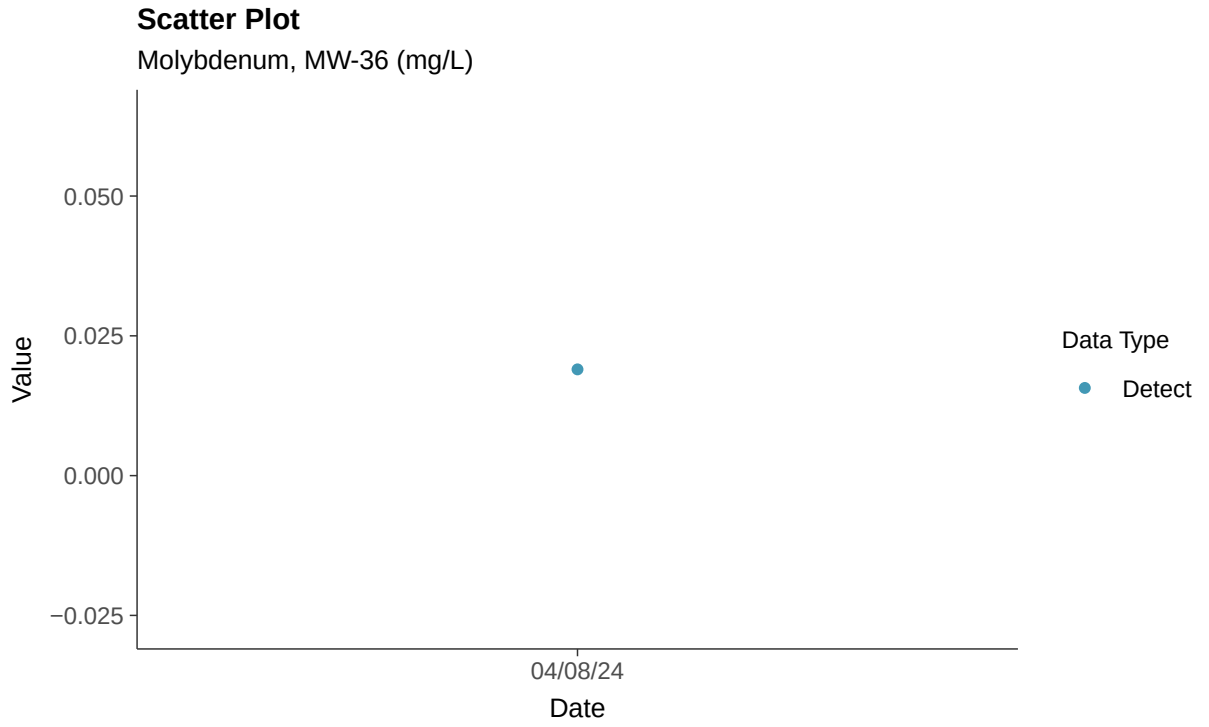
Boxplot by Season

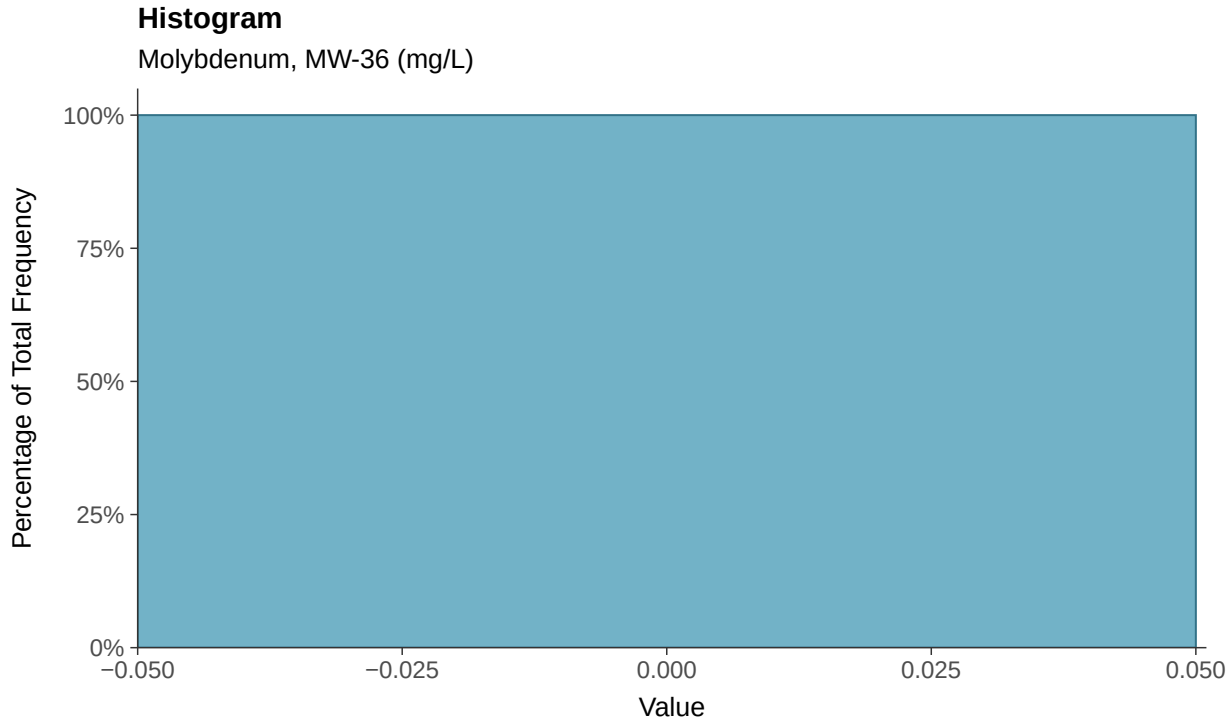
Mercury, MW-36 (mg/L)



Appendix IV: Molybdenum, MW-36

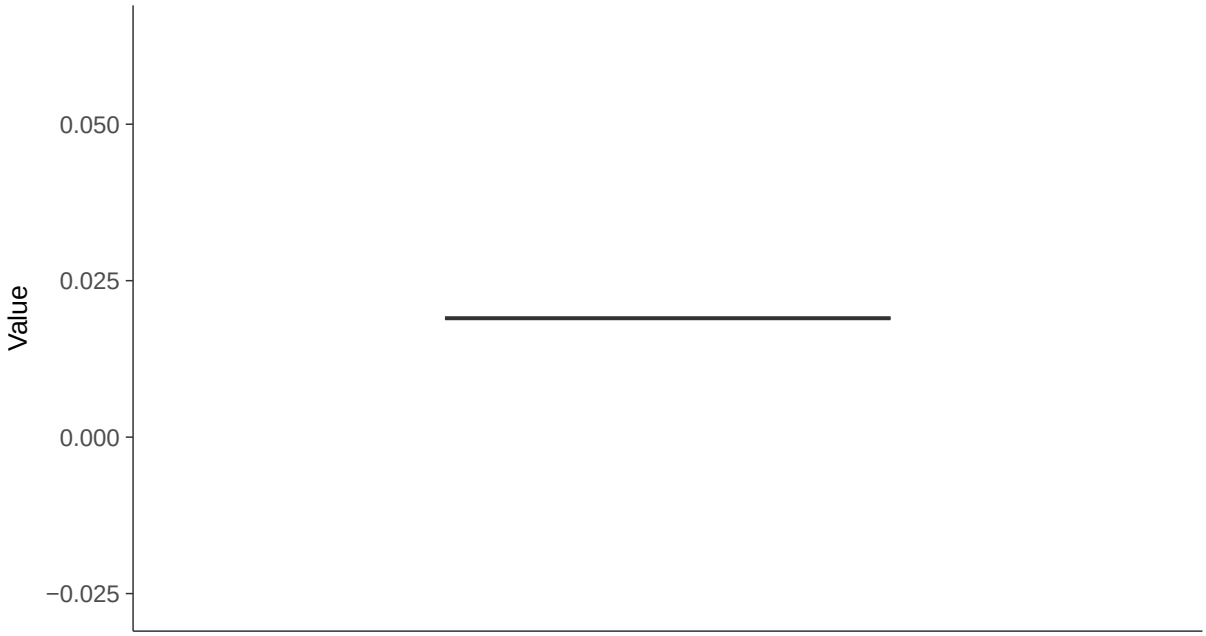
ID: 1_46_5_118





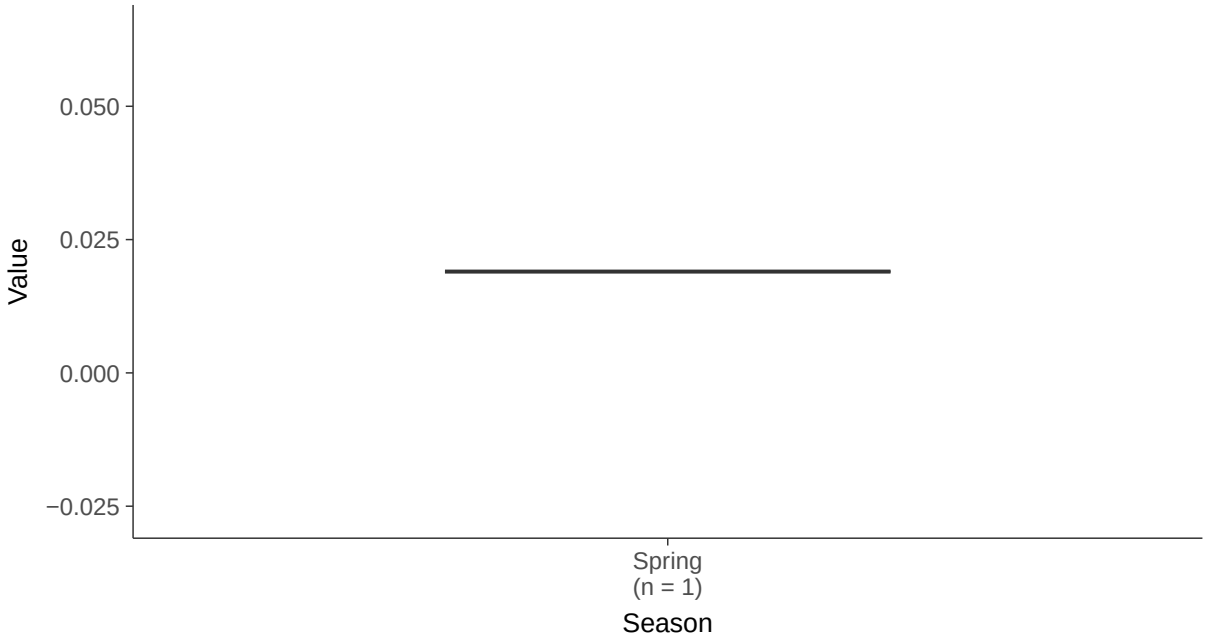
Boxplot

Molybdenum, MW-36 (mg/L)



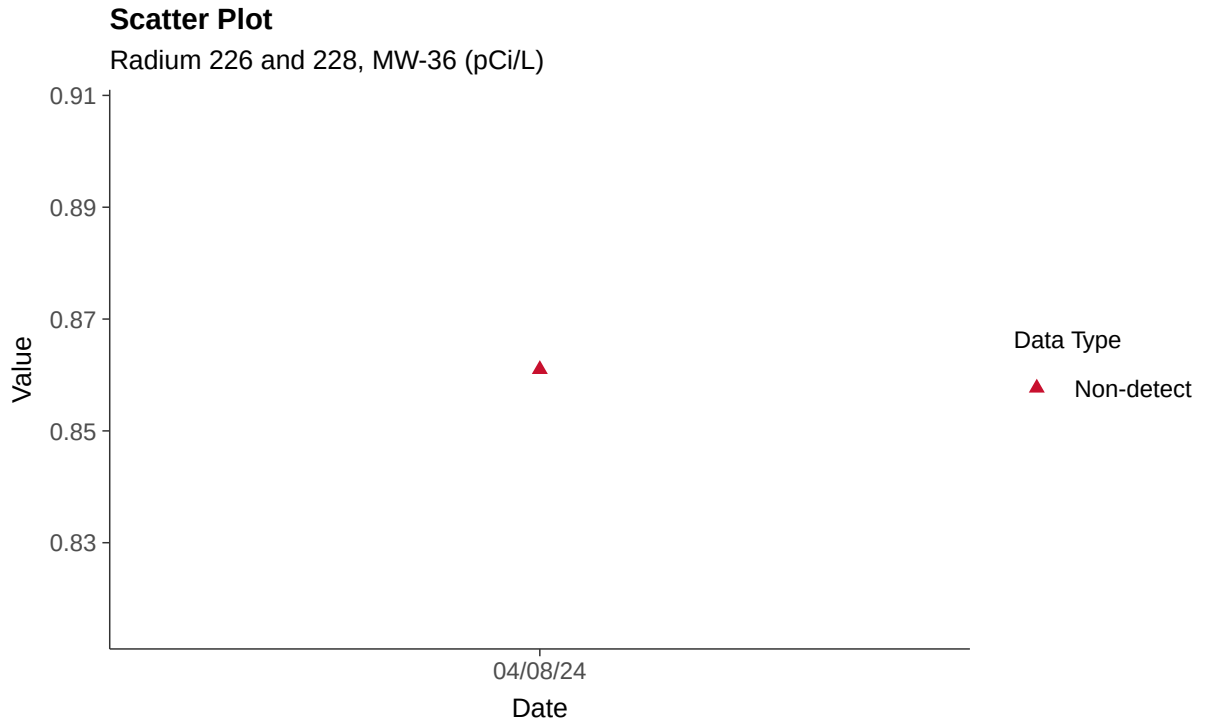
Boxplot by Season

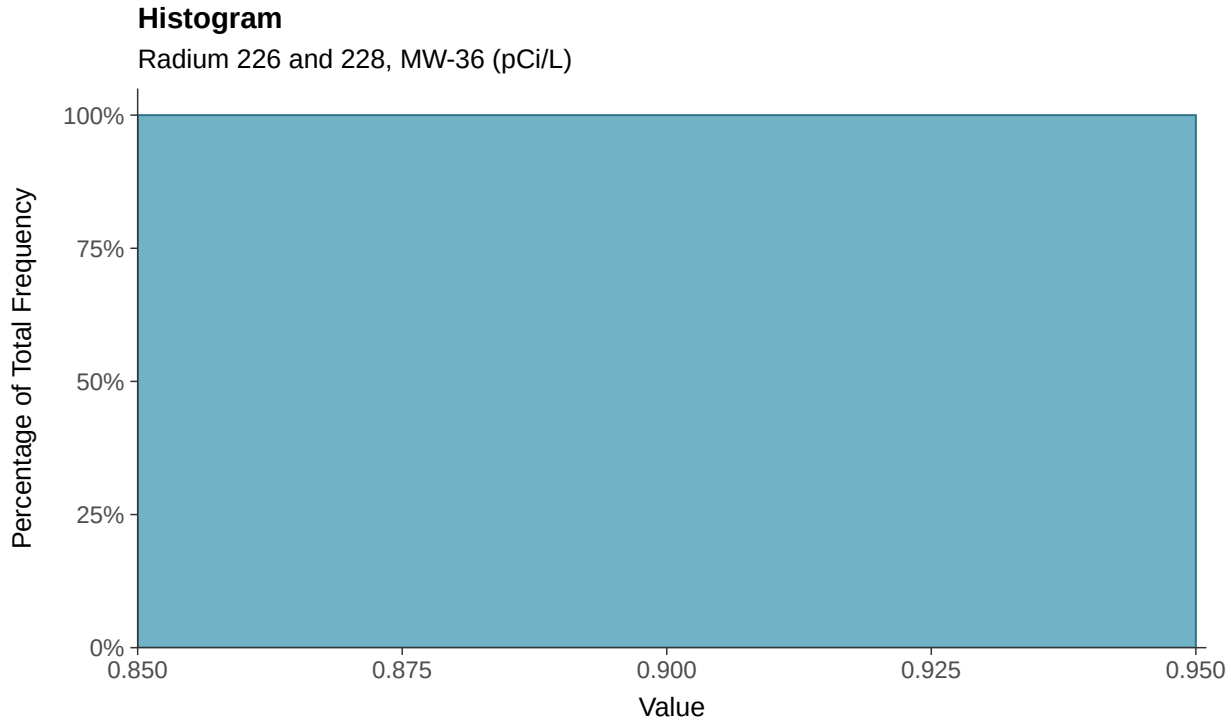
Molybdenum, MW-36 (mg/L)



Appendix IV: Radium 226 and 228, MW-36

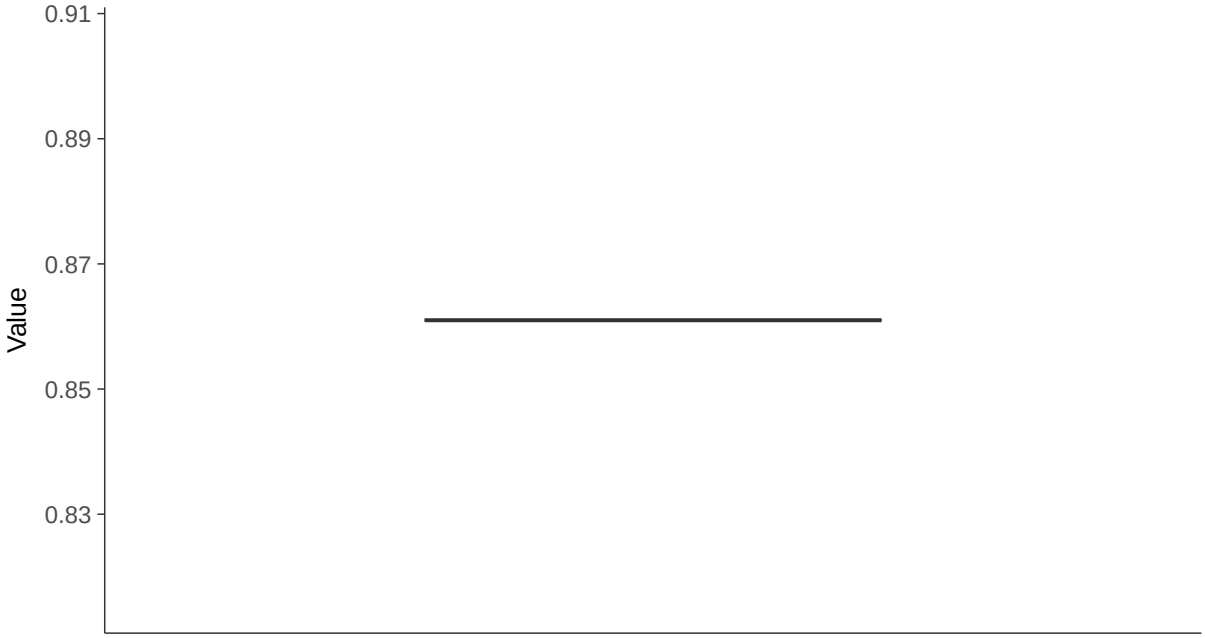
ID: 1_46_5_121





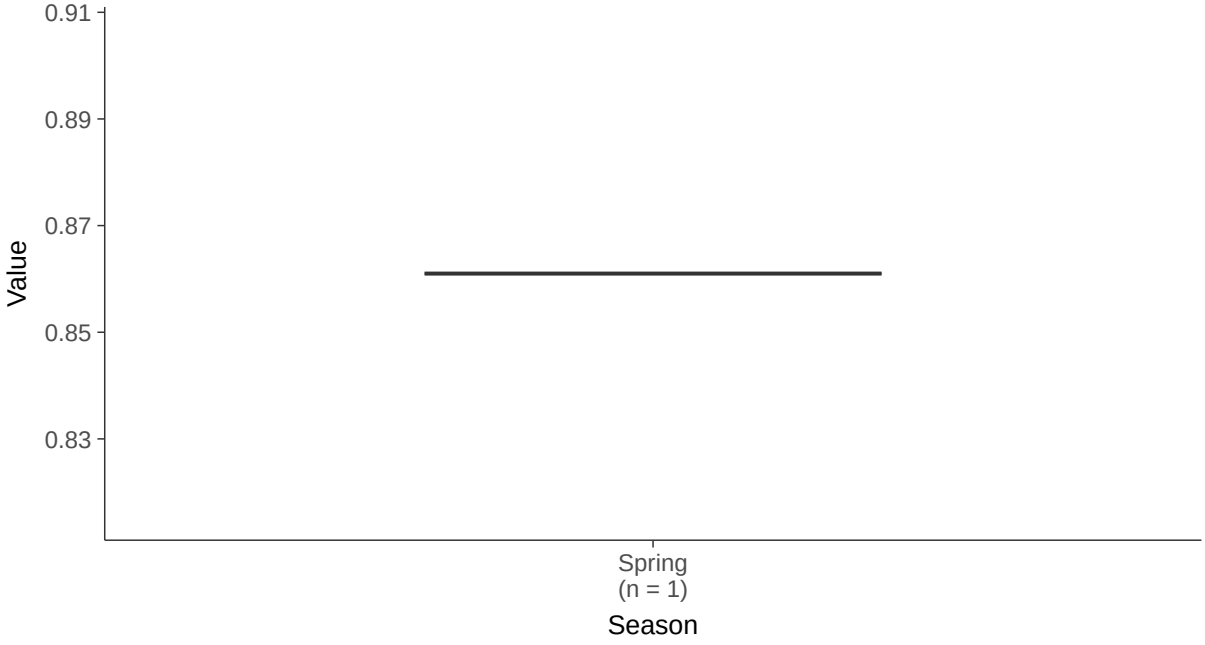
Boxplot

Radium 226 and 228, MW-36 (pCi/L)



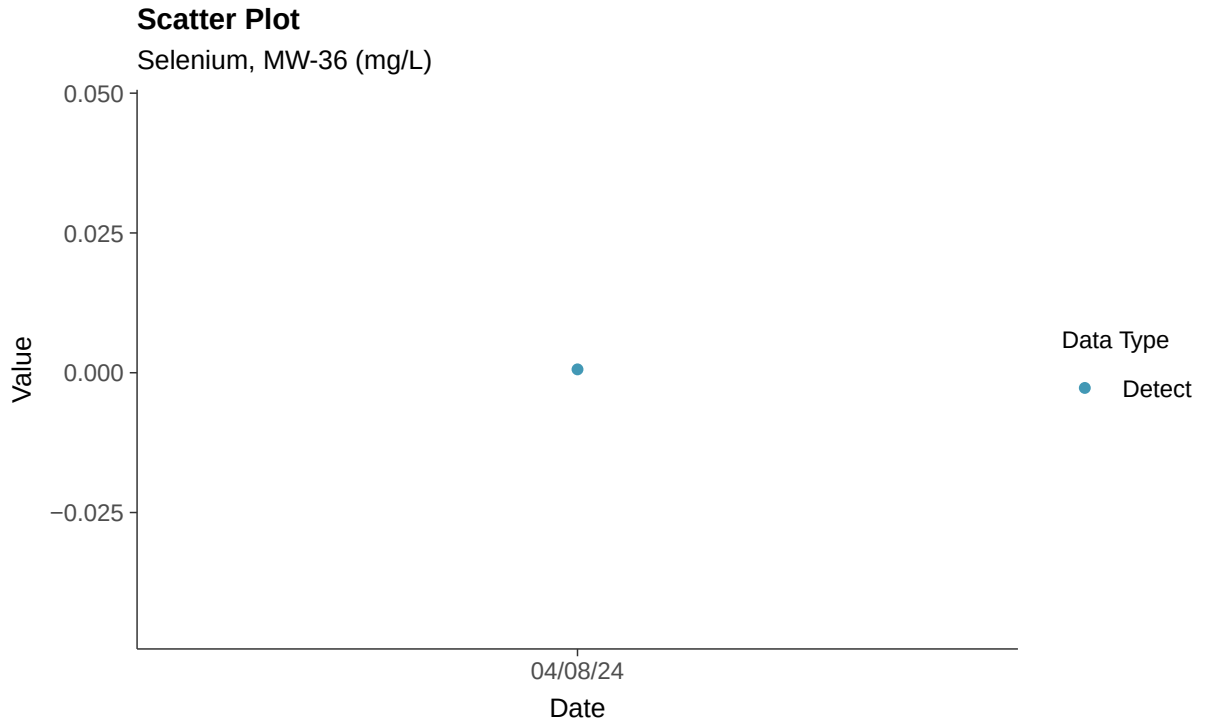
Boxplot by Season

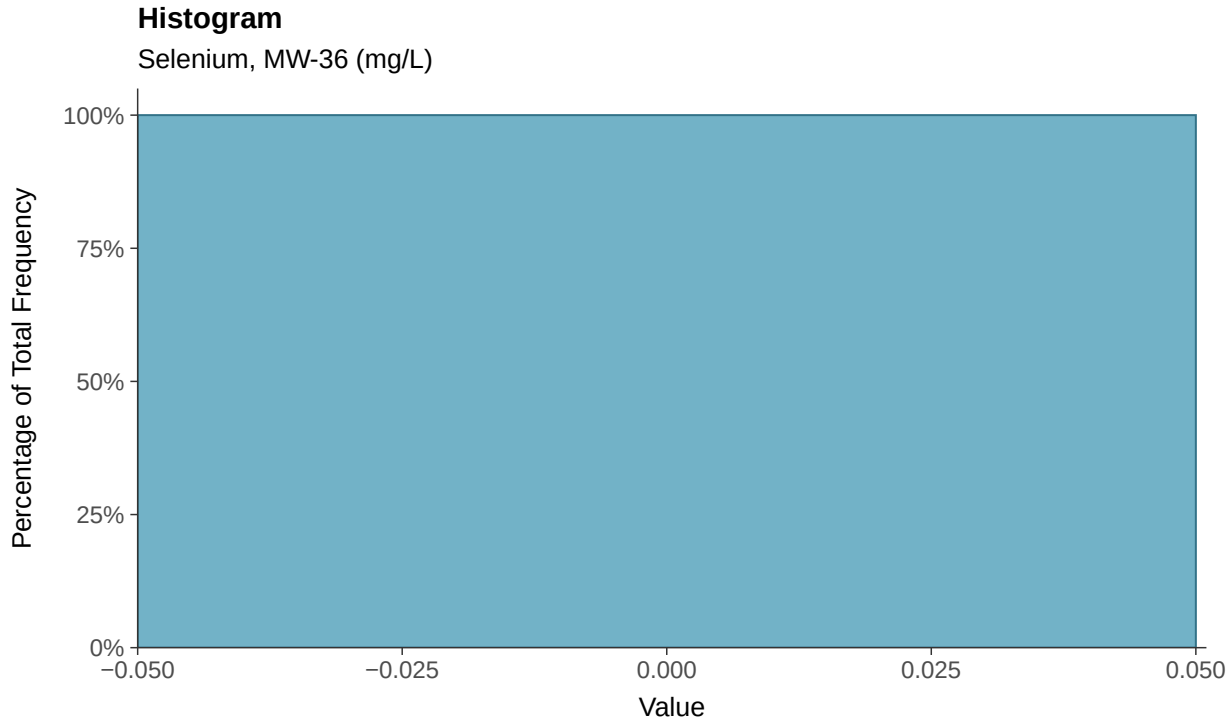
Radium 226 and 228, MW-36 (pCi/L)



Appendix IV: Selenium, MW-36

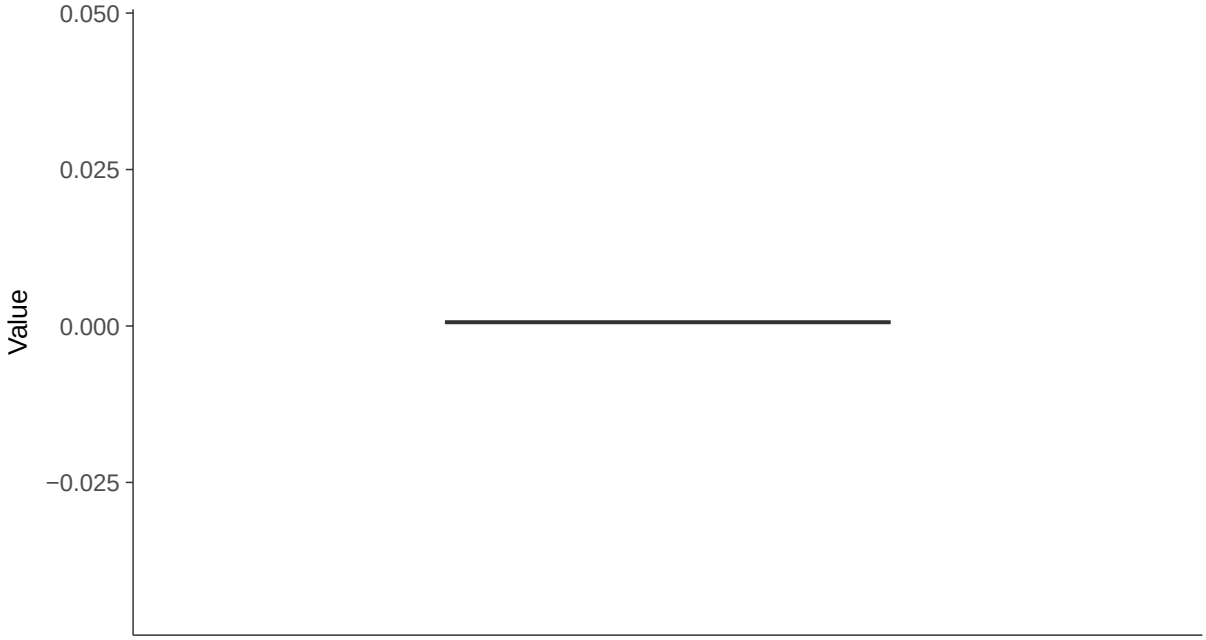
ID: 1_46_5_122





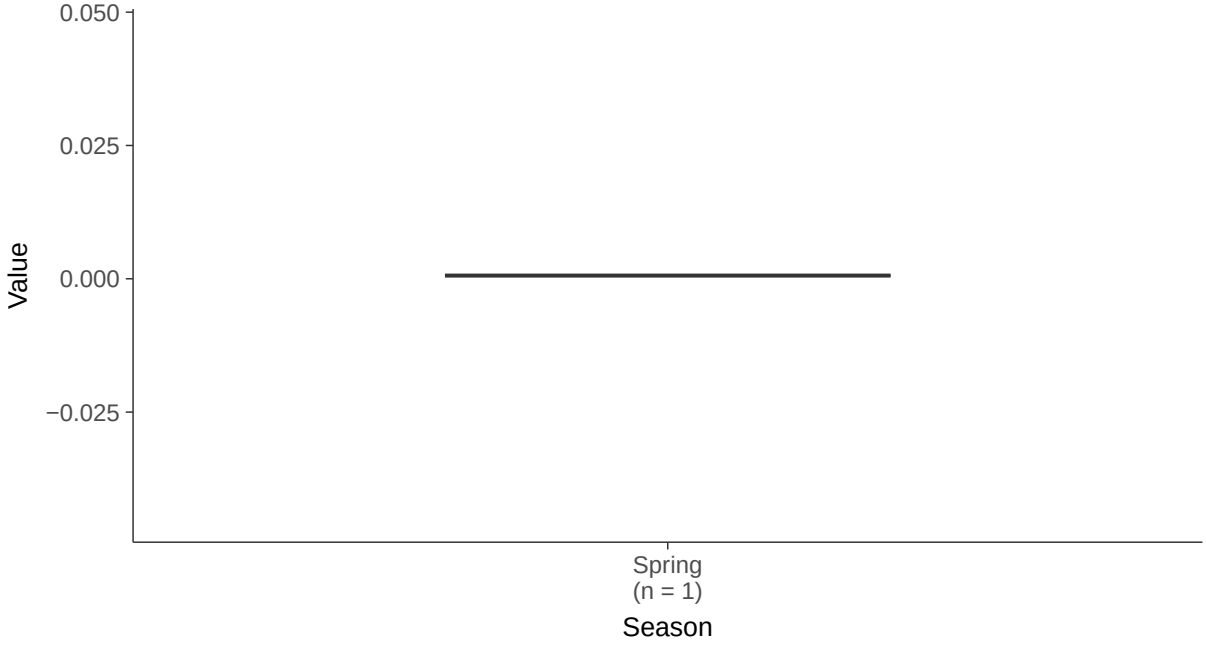
Boxplot

Selenium, MW-36 (mg/L)



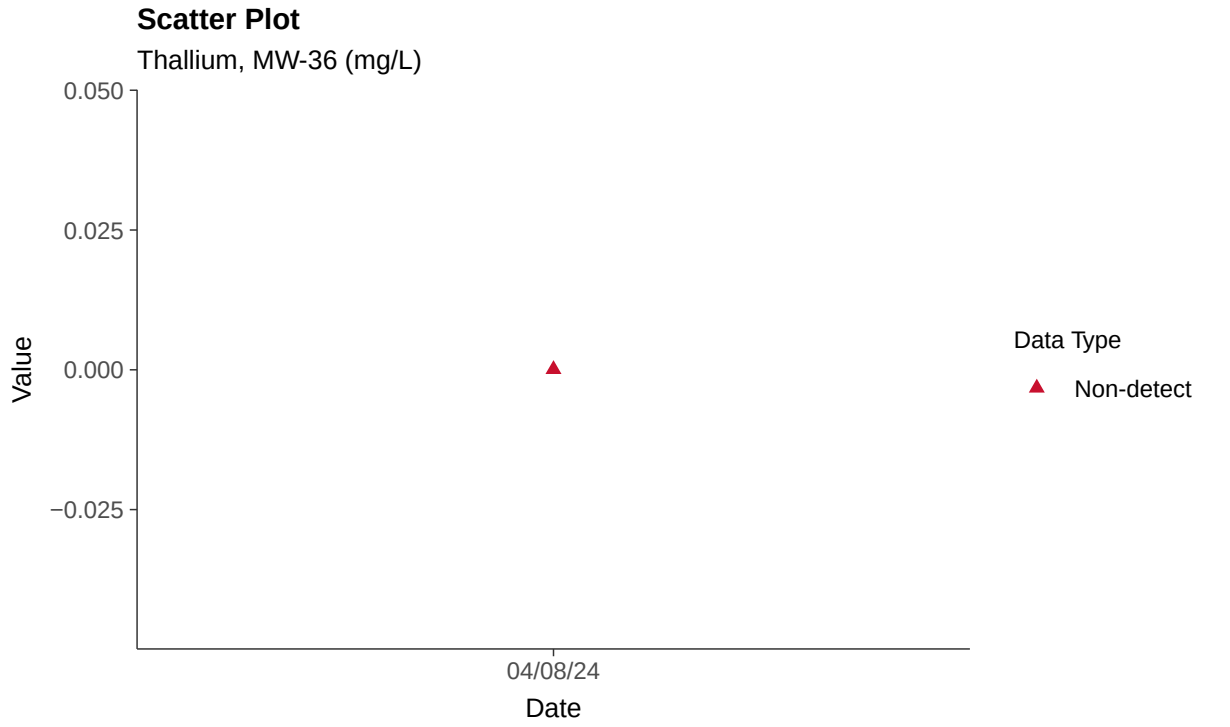
Boxplot by Season

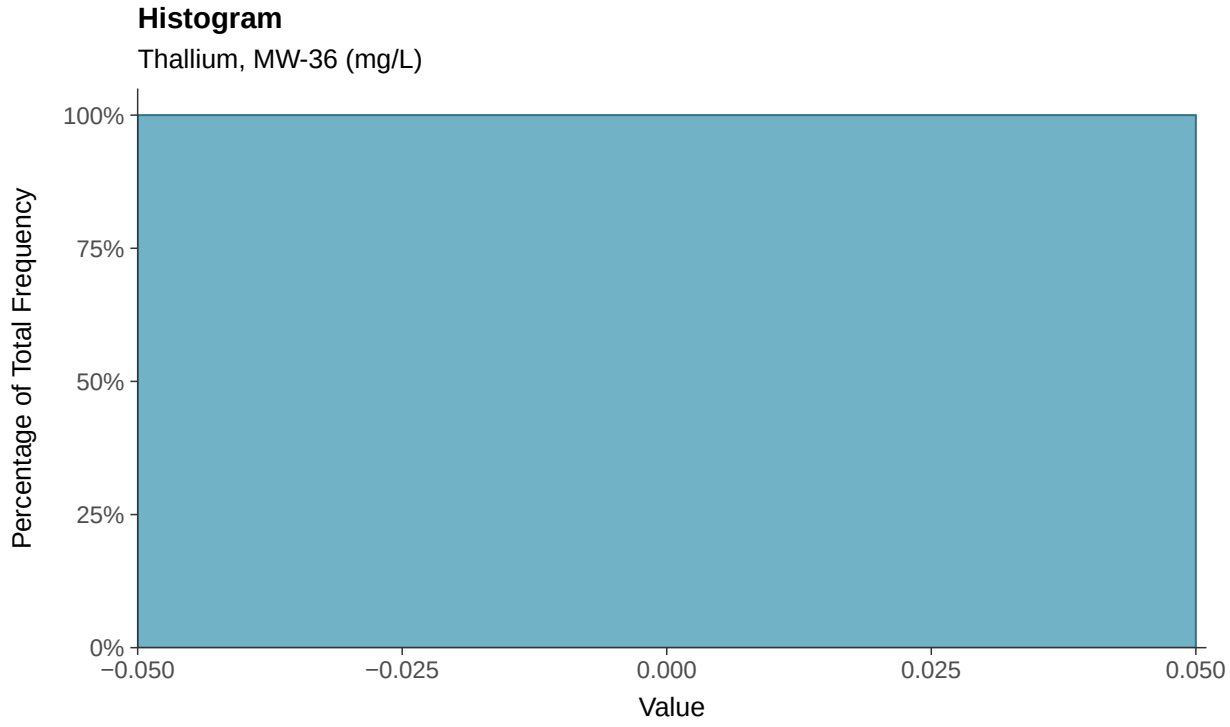
Selenium, MW-36 (mg/L)



Appendix IV: Thallium, MW-36

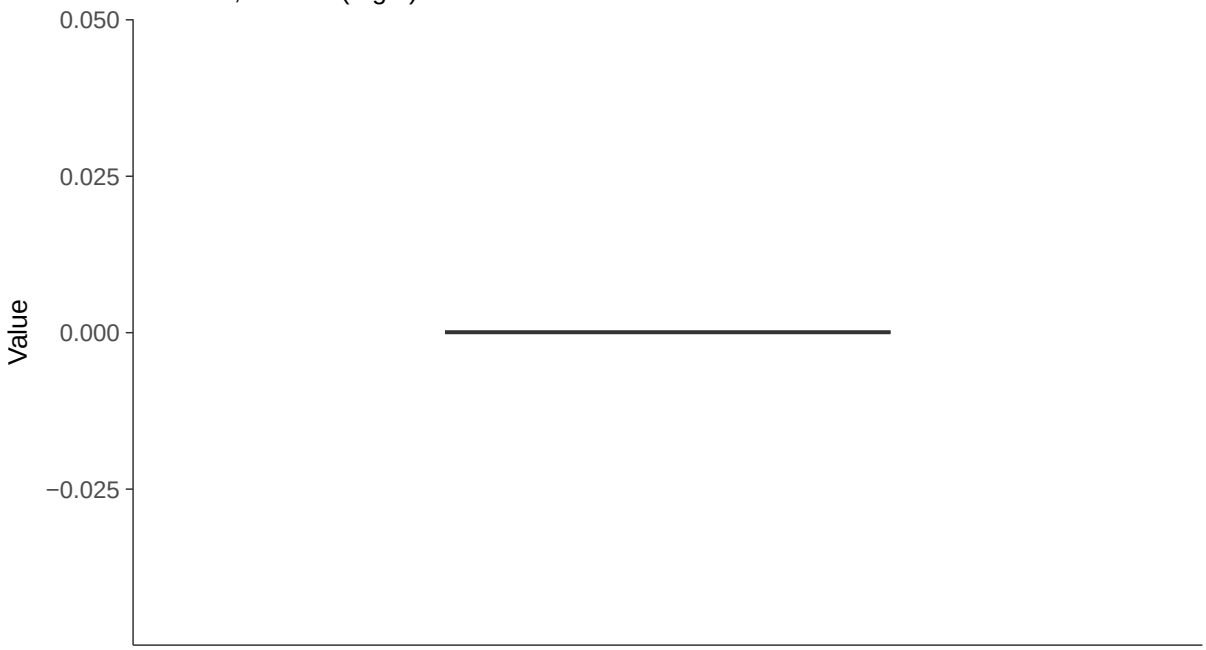
ID: 1_46_5_125





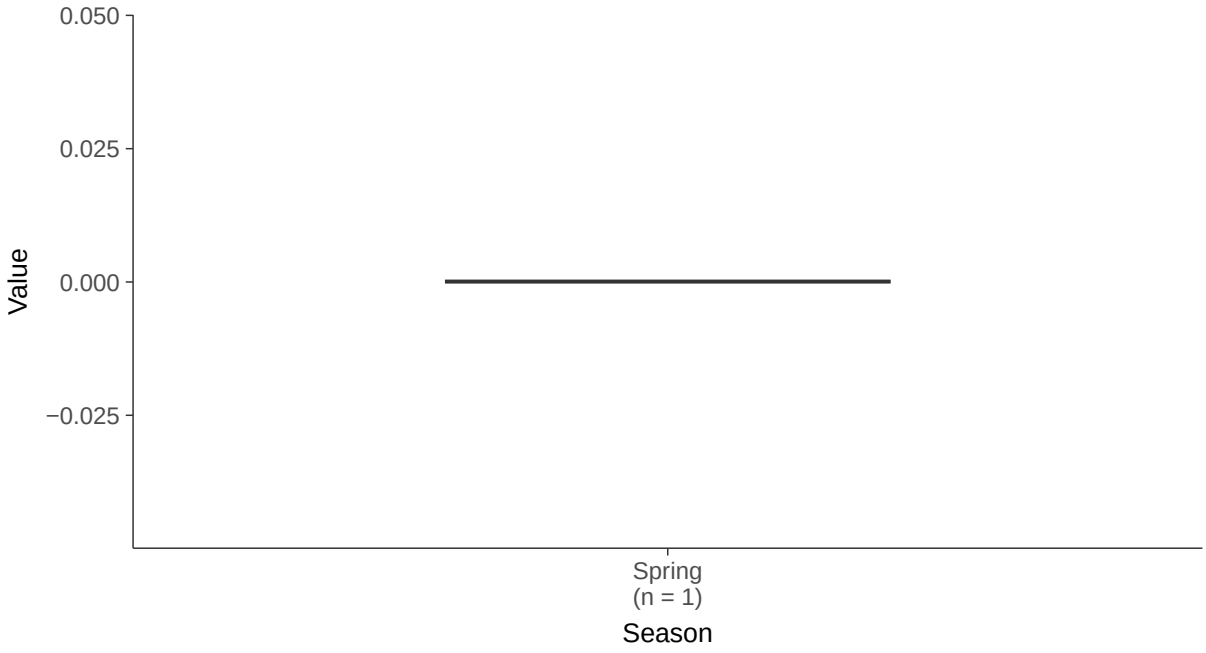
Boxplot

Thallium, MW-36 (mg/L)



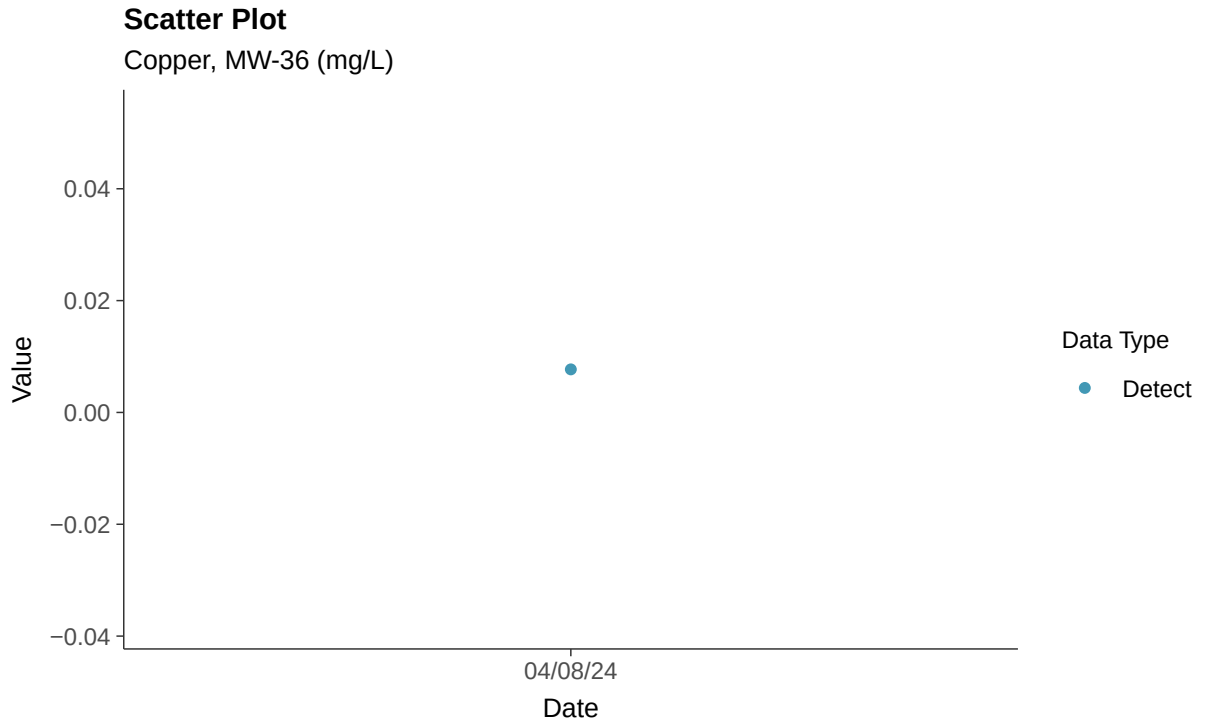
Boxplot by Season

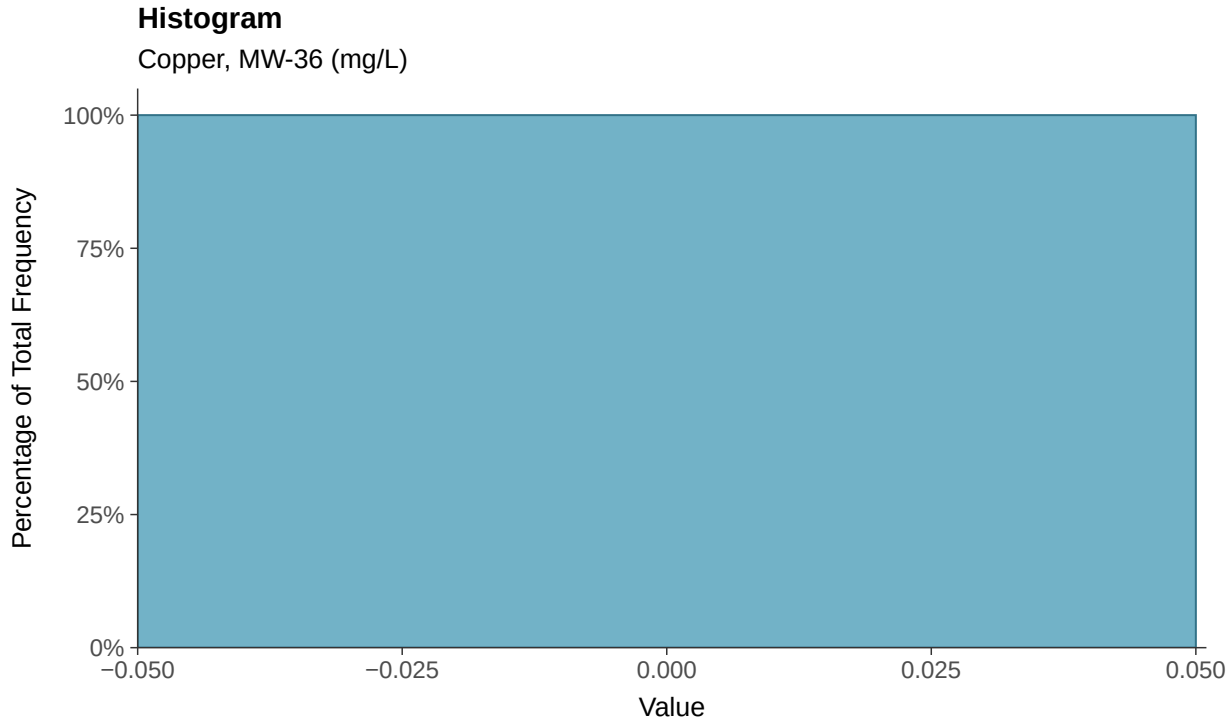
Thallium, MW-36 (mg/L)



Part 115: Copper, MW-36

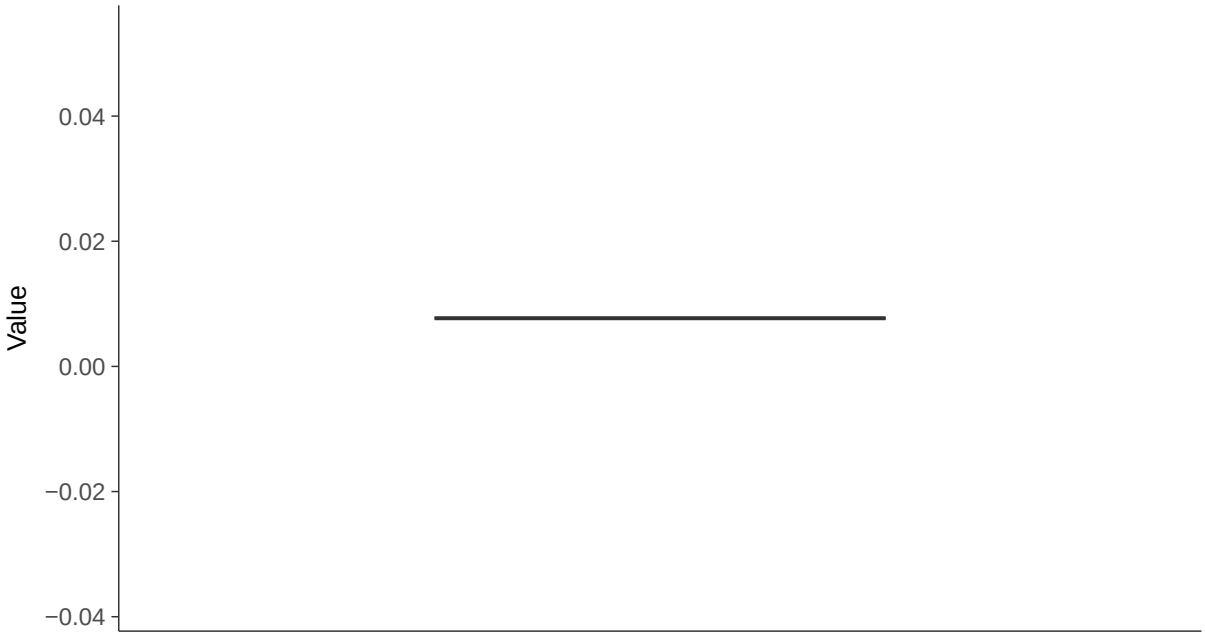
ID: 1_46_6_111





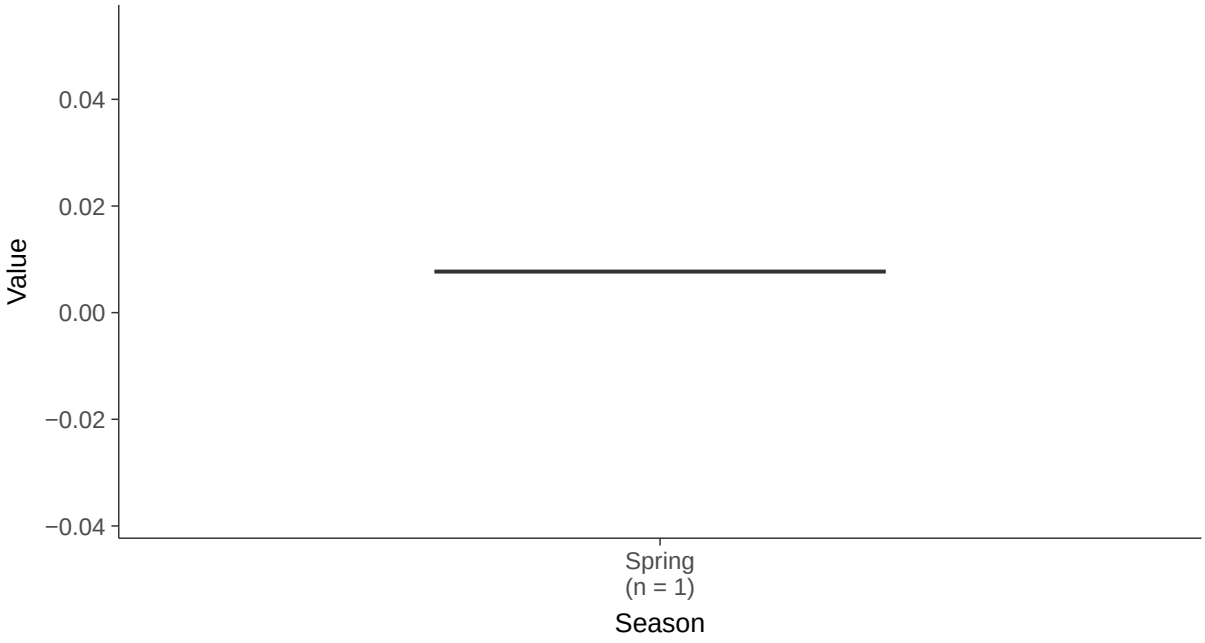
Boxplot

Copper, MW-36 (mg/L)



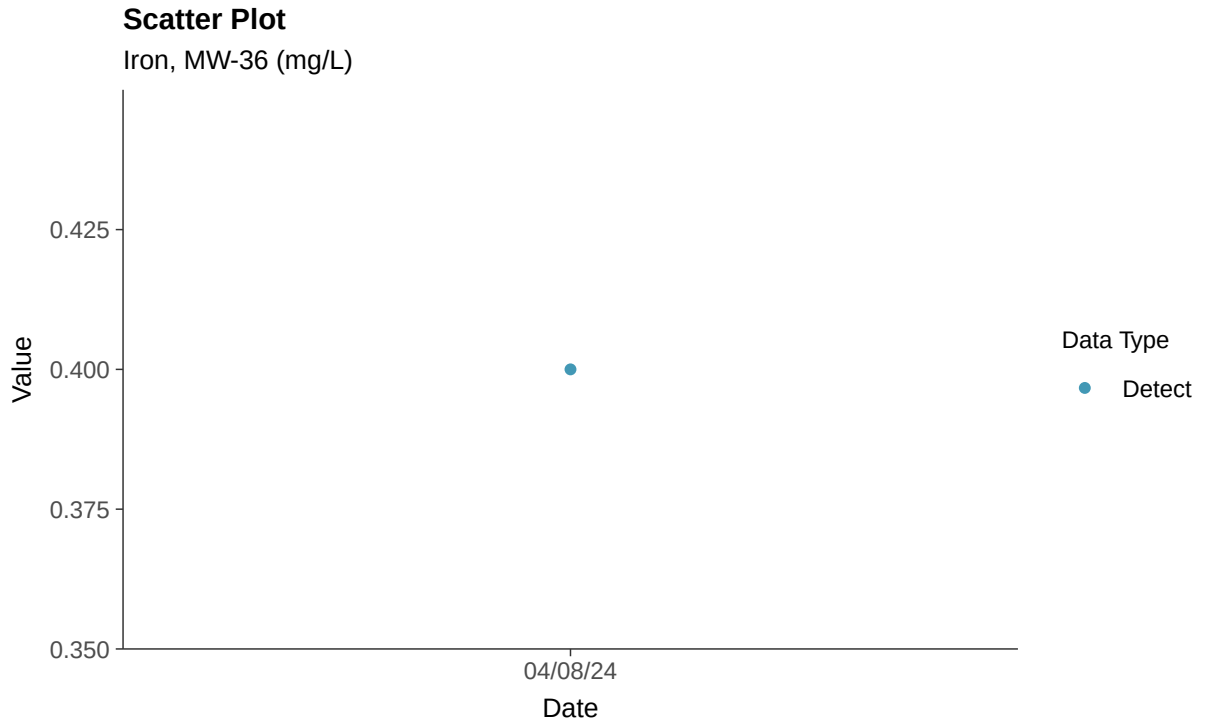
Boxplot by Season

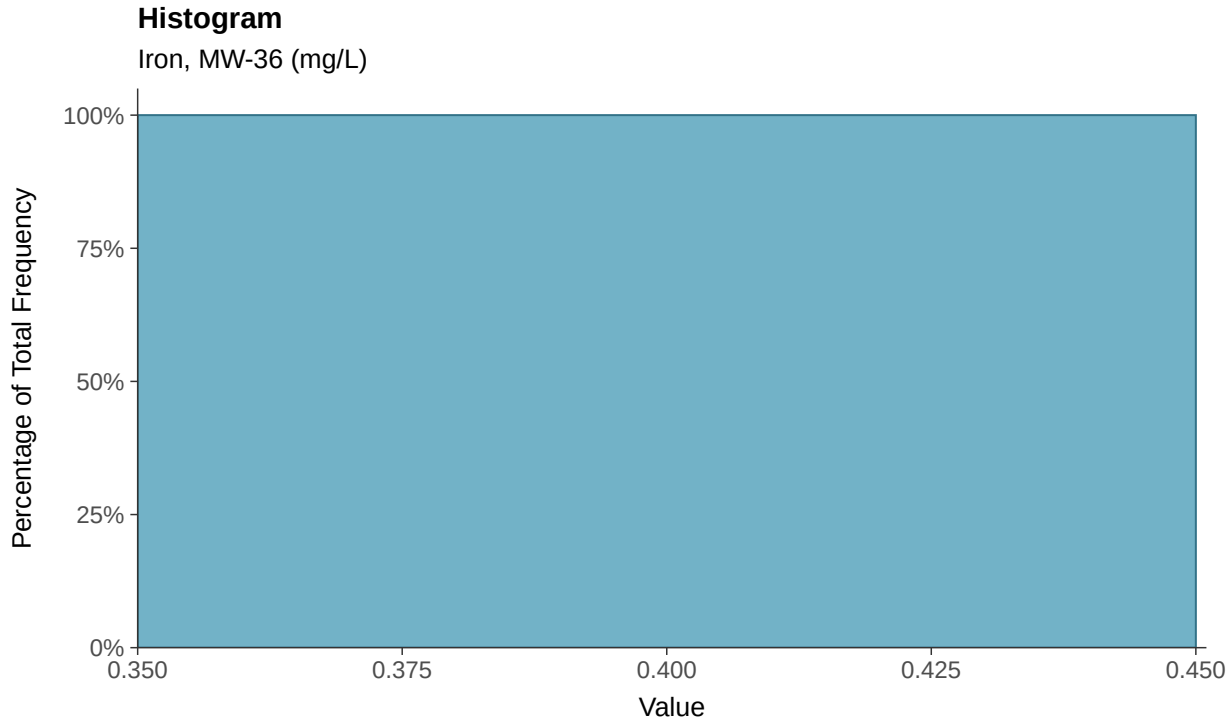
Copper, MW-36 (mg/L)



Part 115: Iron, MW-36

ID: 1_46_6_114



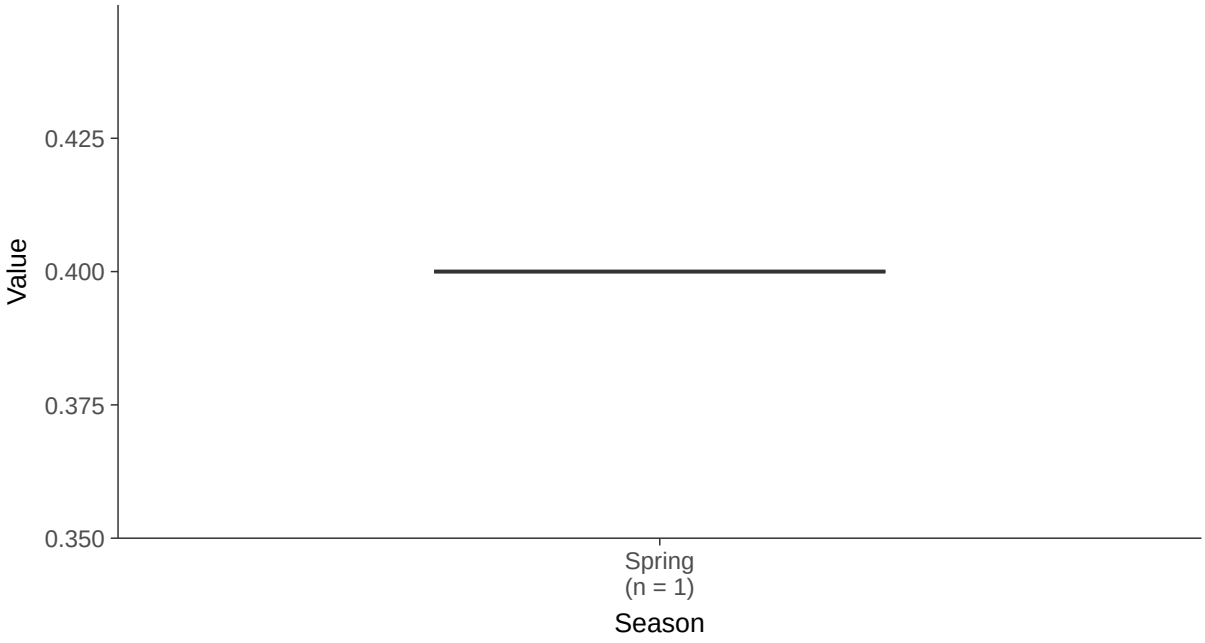


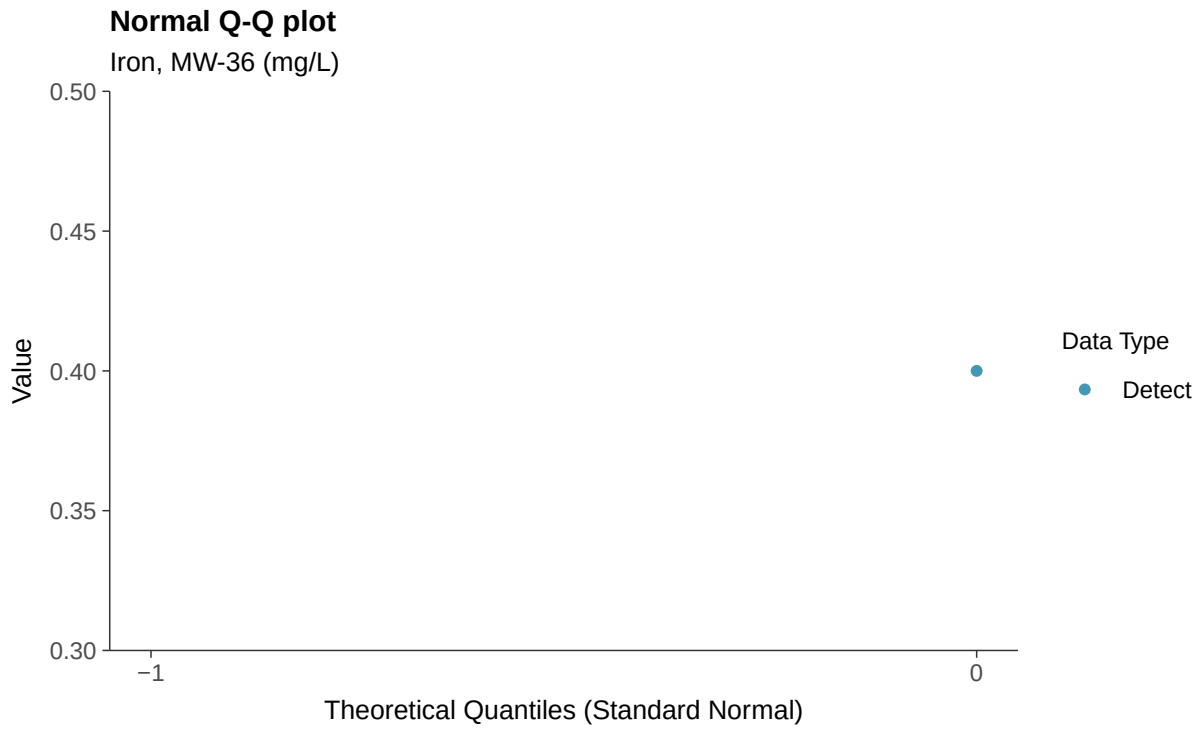
Boxplot

Iron, MW-36 (mg/L)

Boxplot by Season

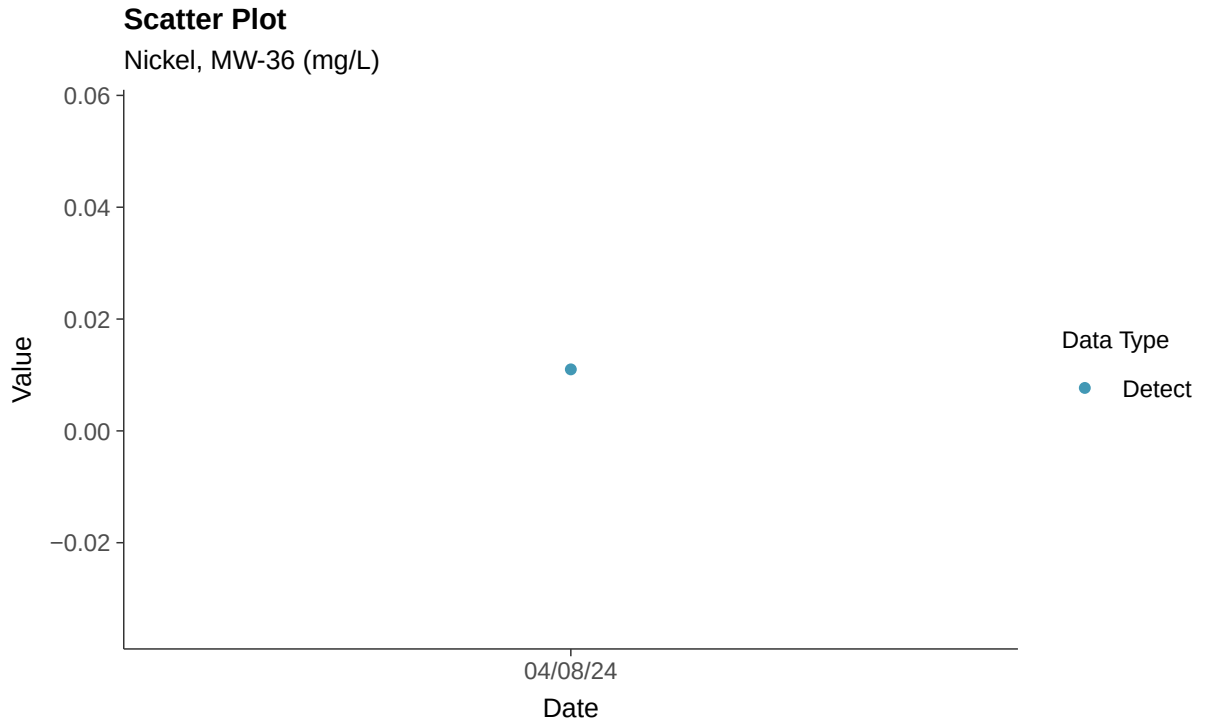
Iron, MW-36 (mg/L)

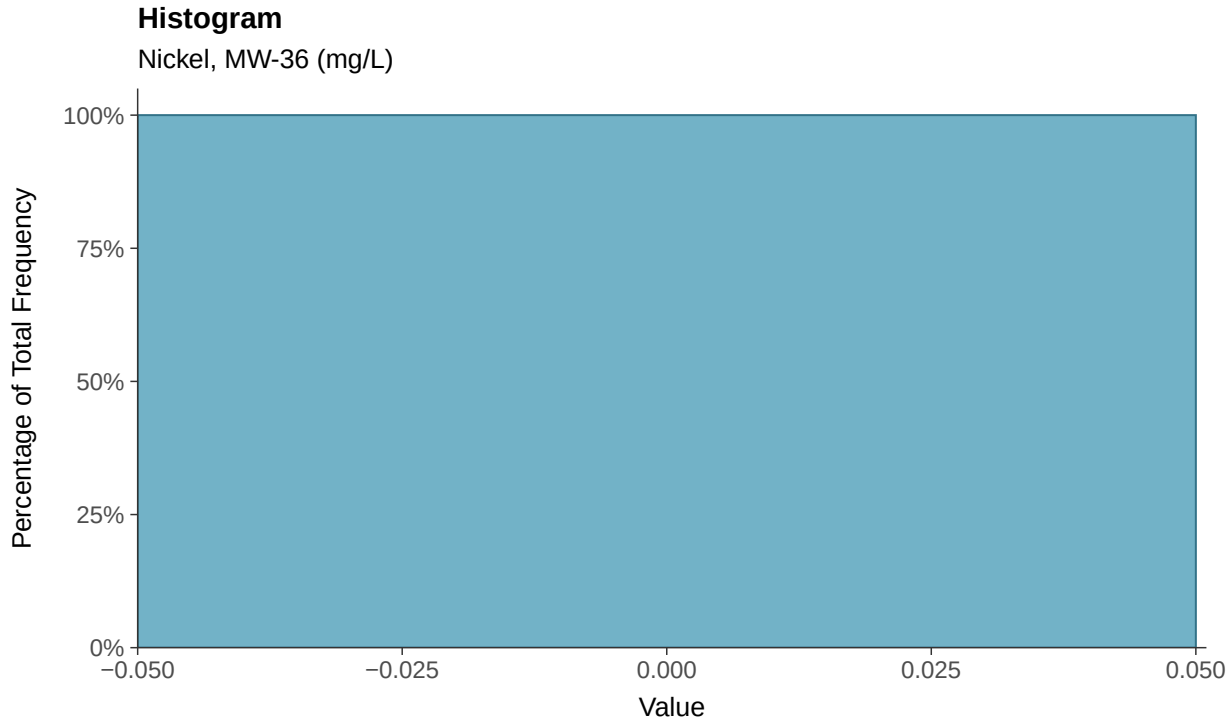



Normal Q-Q plot
Iron, MW-36 (mg/L)
Value
0.50
0.45
0.40
0.35
0.30
−1
0
Theoretical Quantiles (Standard Normal)
Data Type
Detect

Part 115: Nickel, MW-36

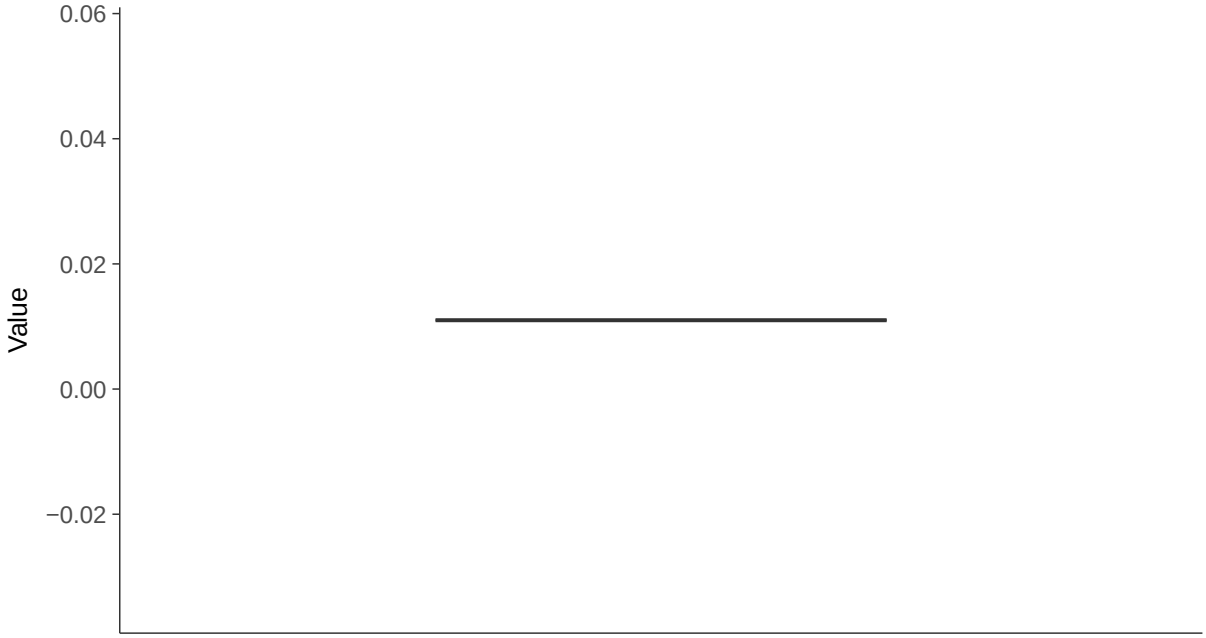
ID: 1_46_6_119





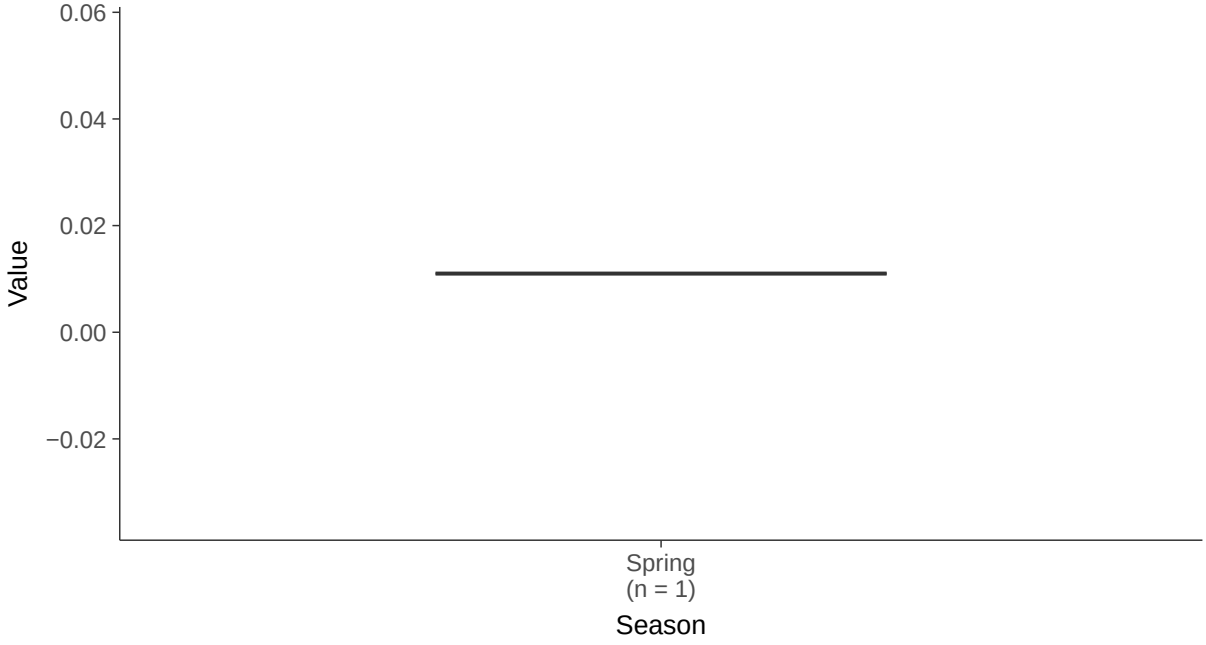
Boxplot

Nickel, MW-36 (mg/L)



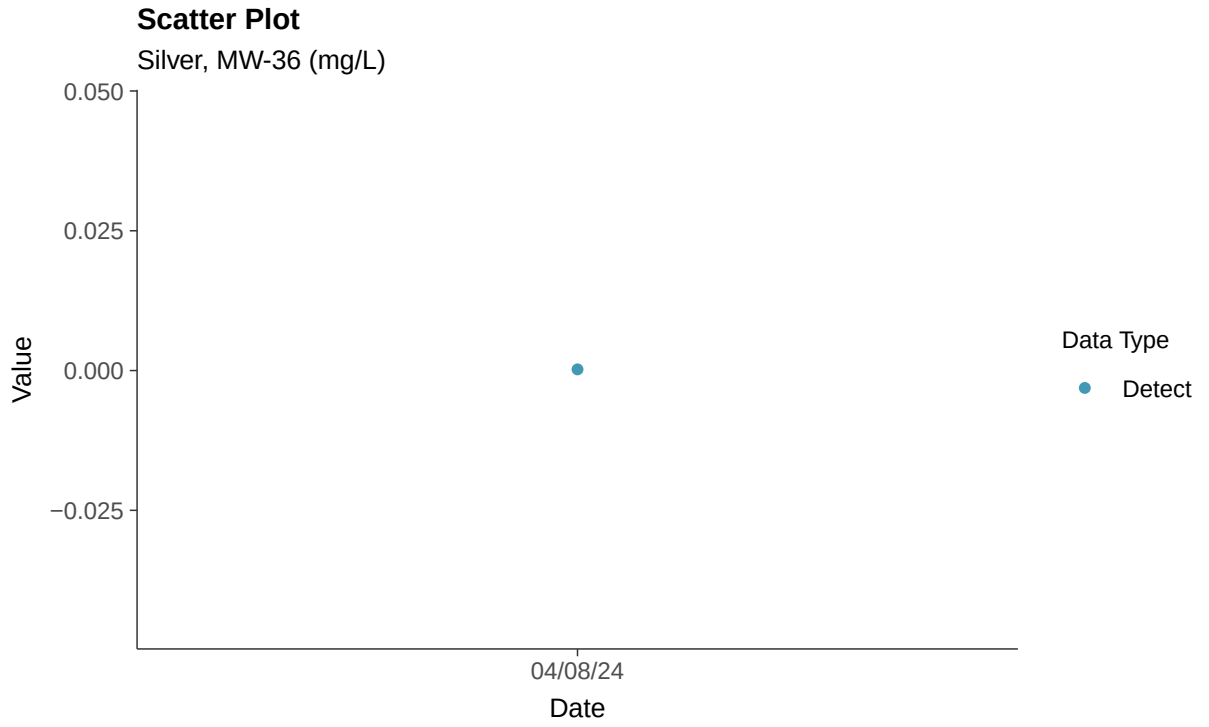
Boxplot by Season

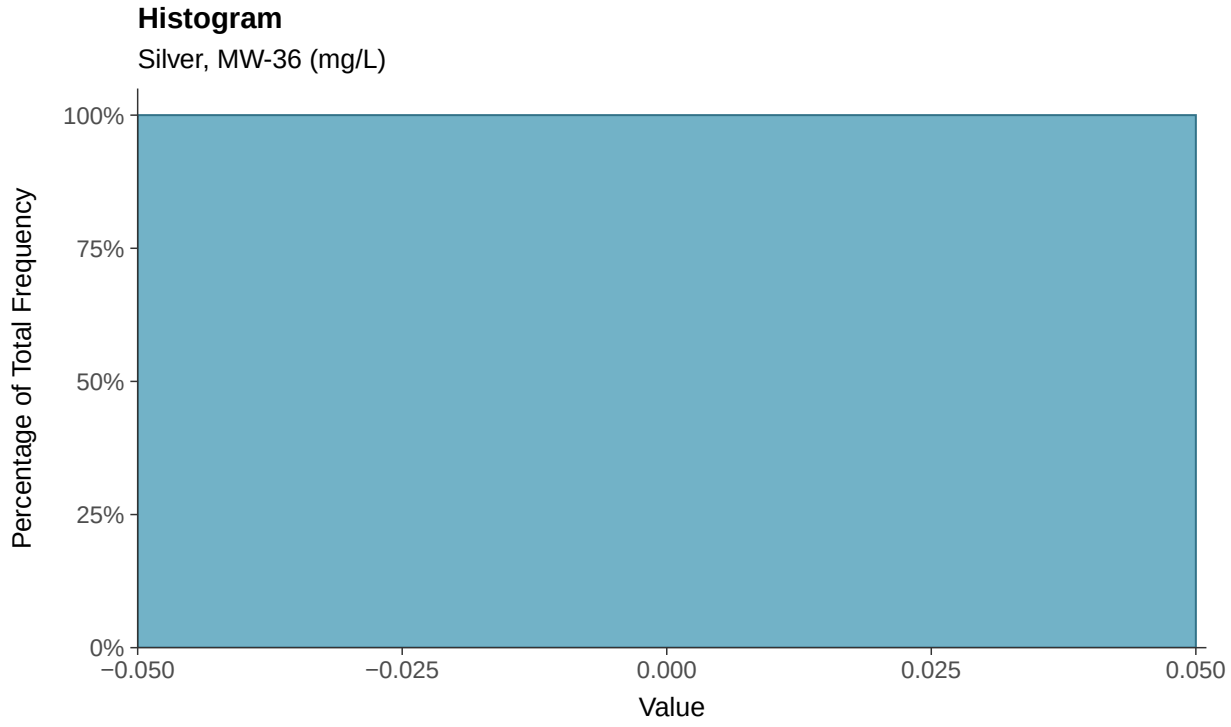
Nickel, MW-36 (mg/L)



Part 115: Silver, MW-36

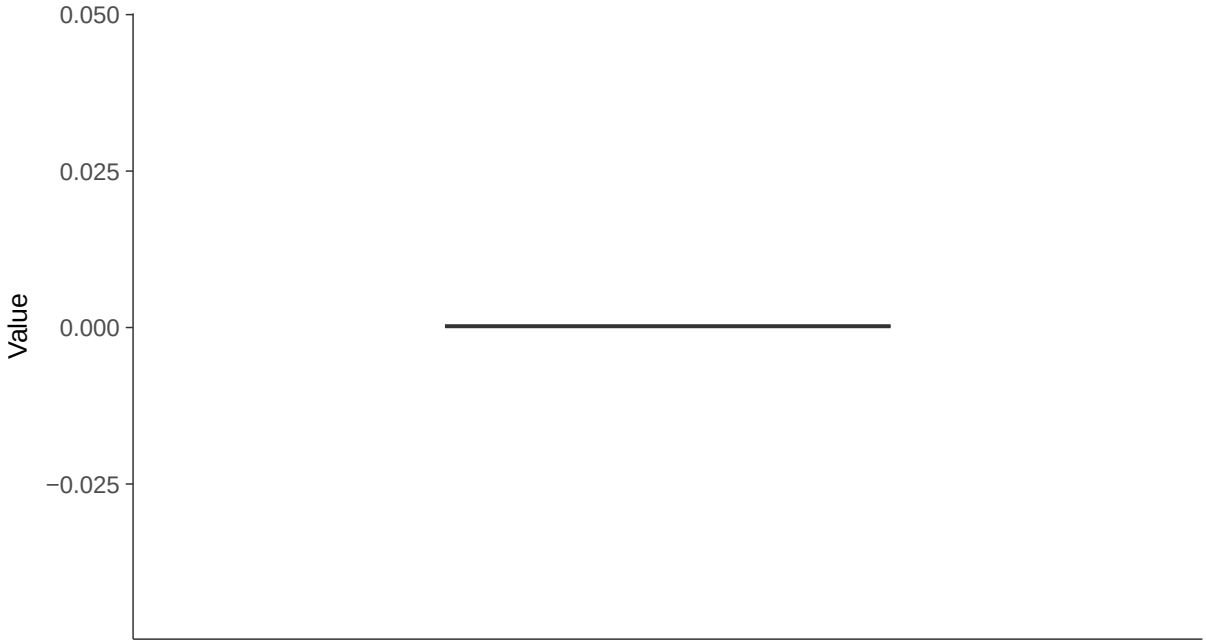
ID: 1_46_6_123





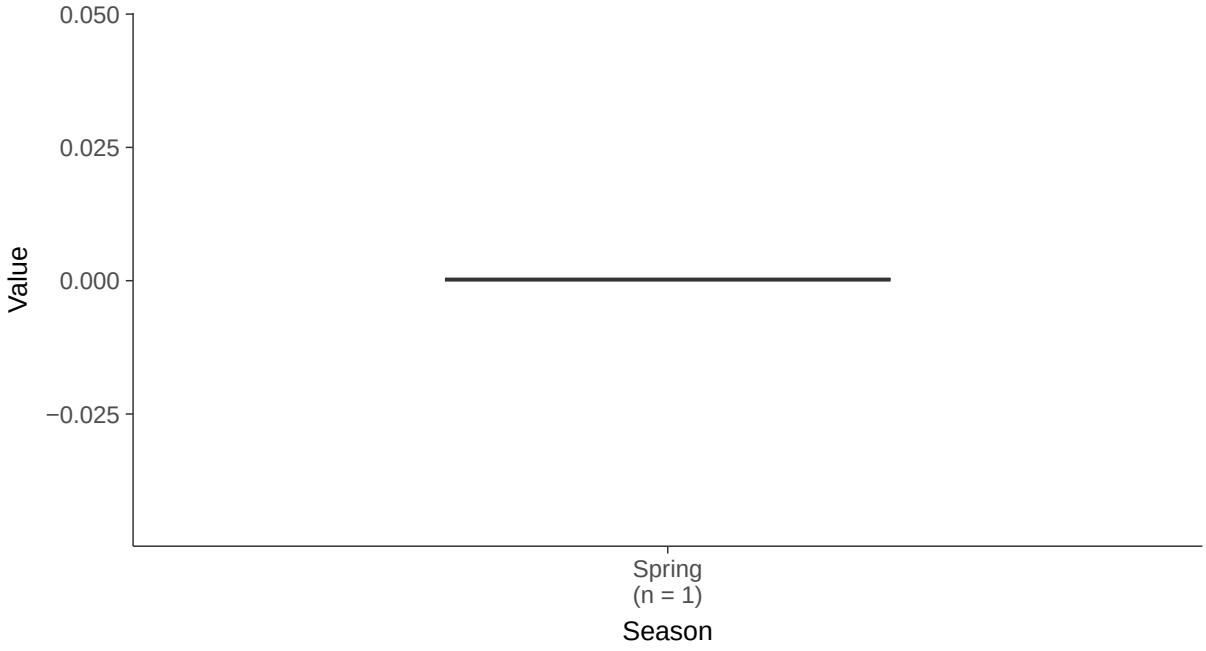
Boxplot

Silver, MW-36 (mg/L)



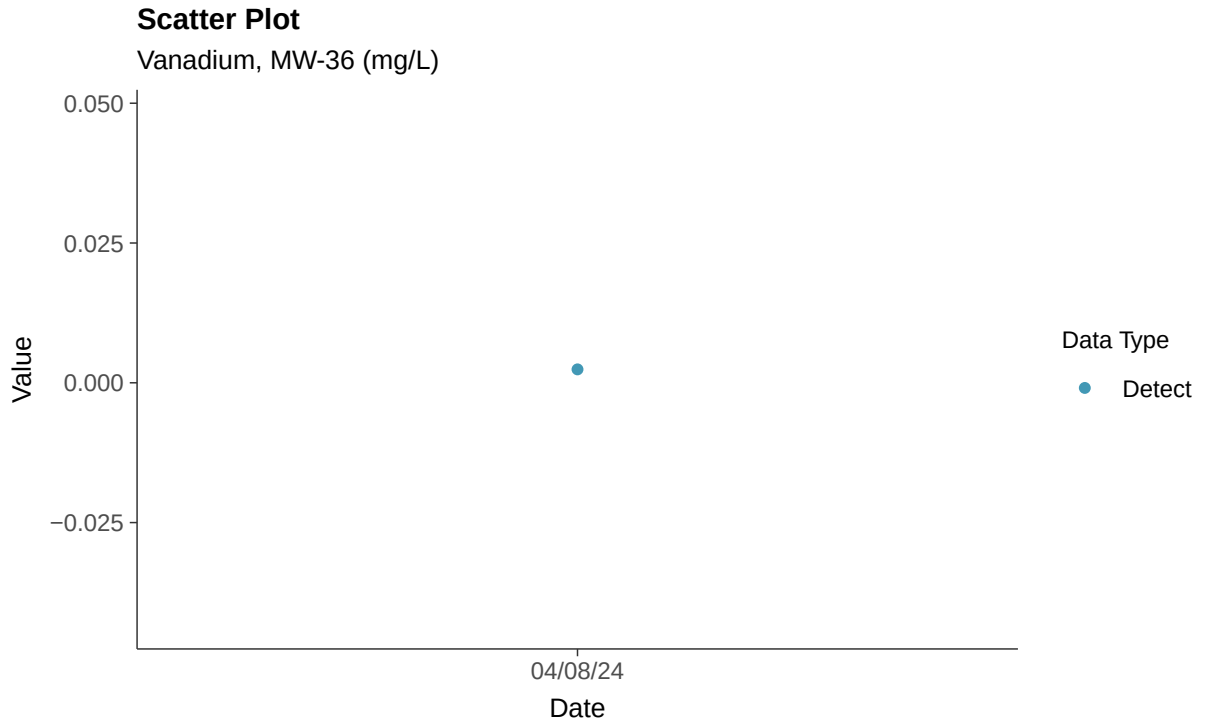
Boxplot by Season

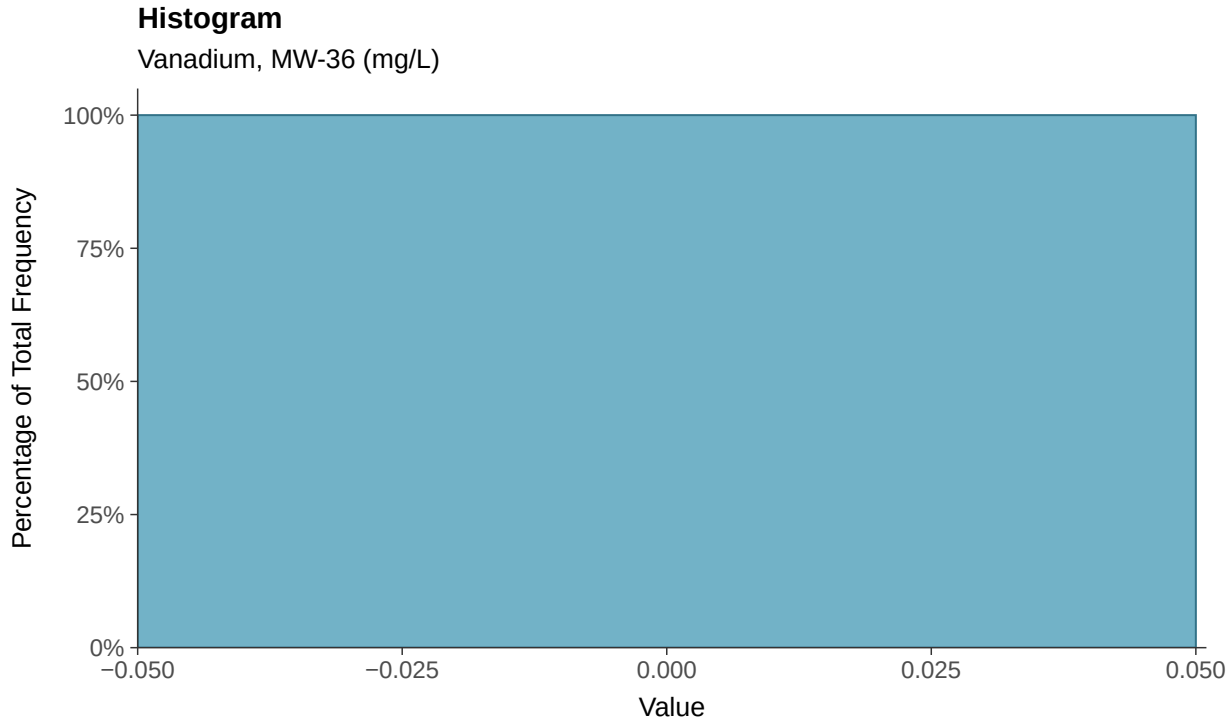
Silver, MW-36 (mg/L)



Part 115: Vanadium, MW-36

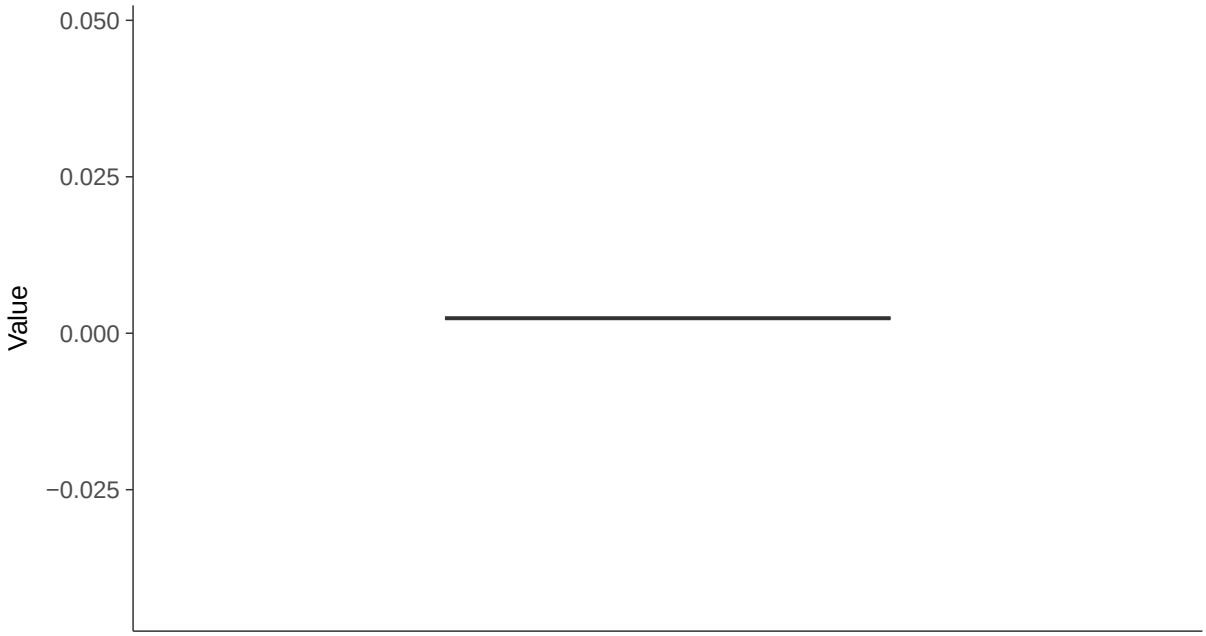
ID: 1_46_6_129





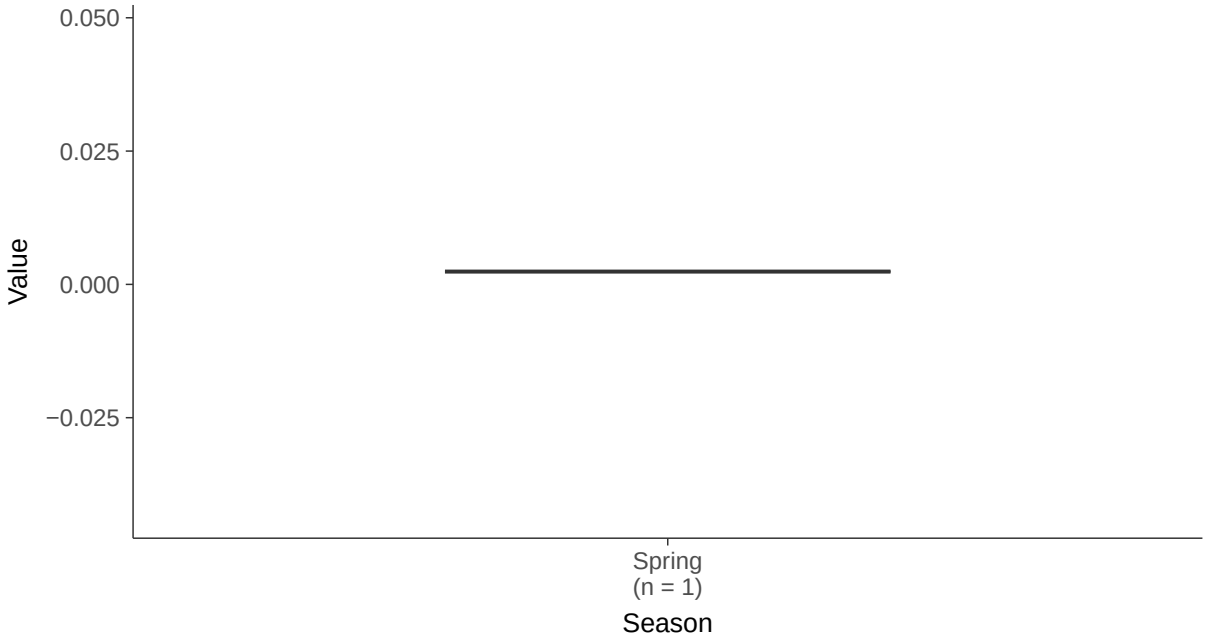
Boxplot

Vanadium, MW-36 (mg/L)



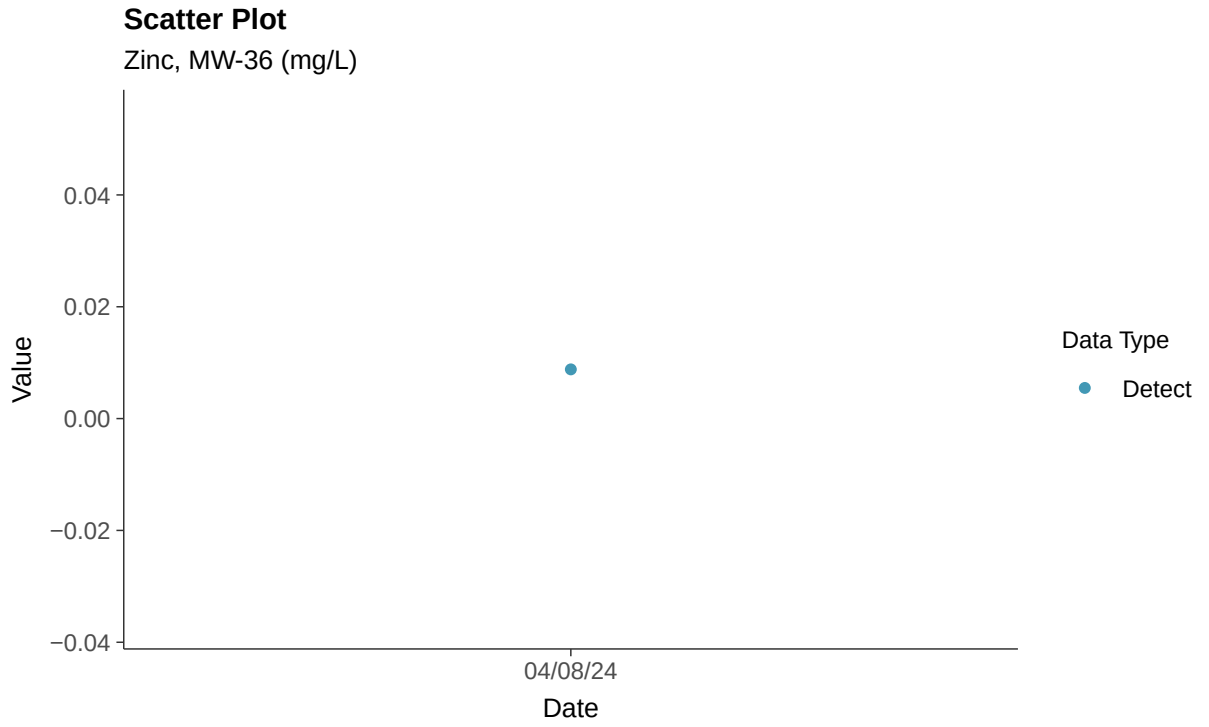
Boxplot by Season

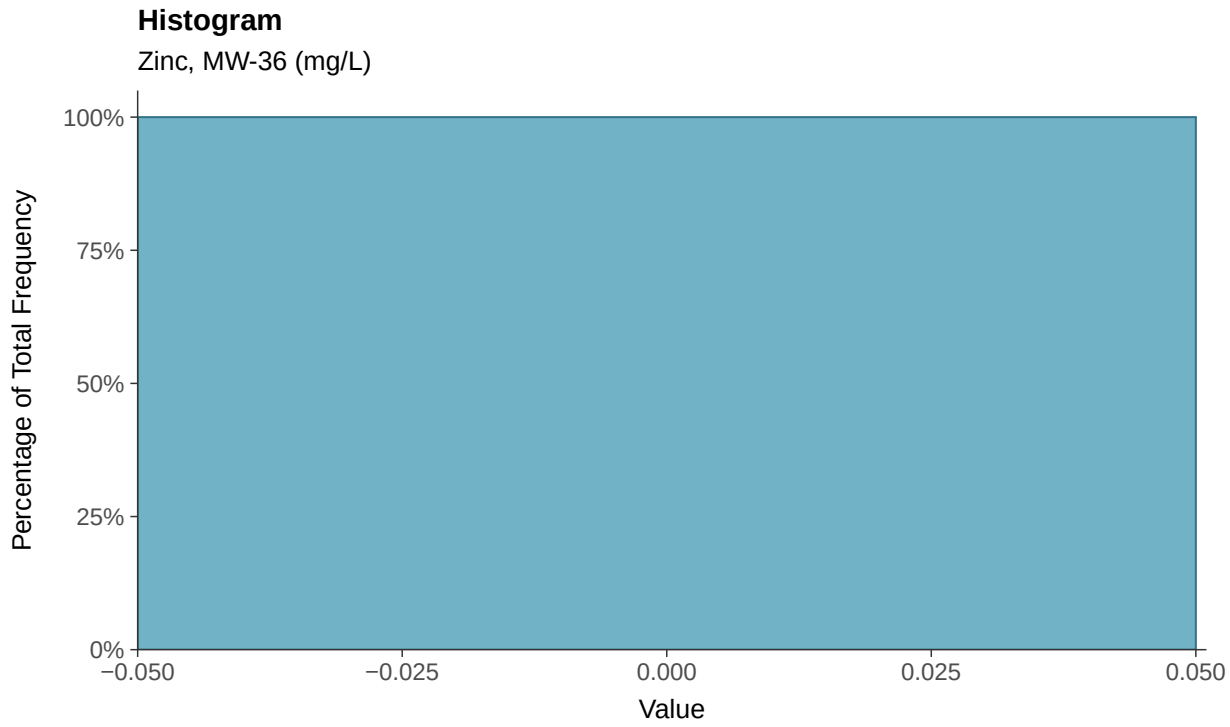
Vanadium, MW-36 (mg/L)



Part 115: Zinc, MW-36

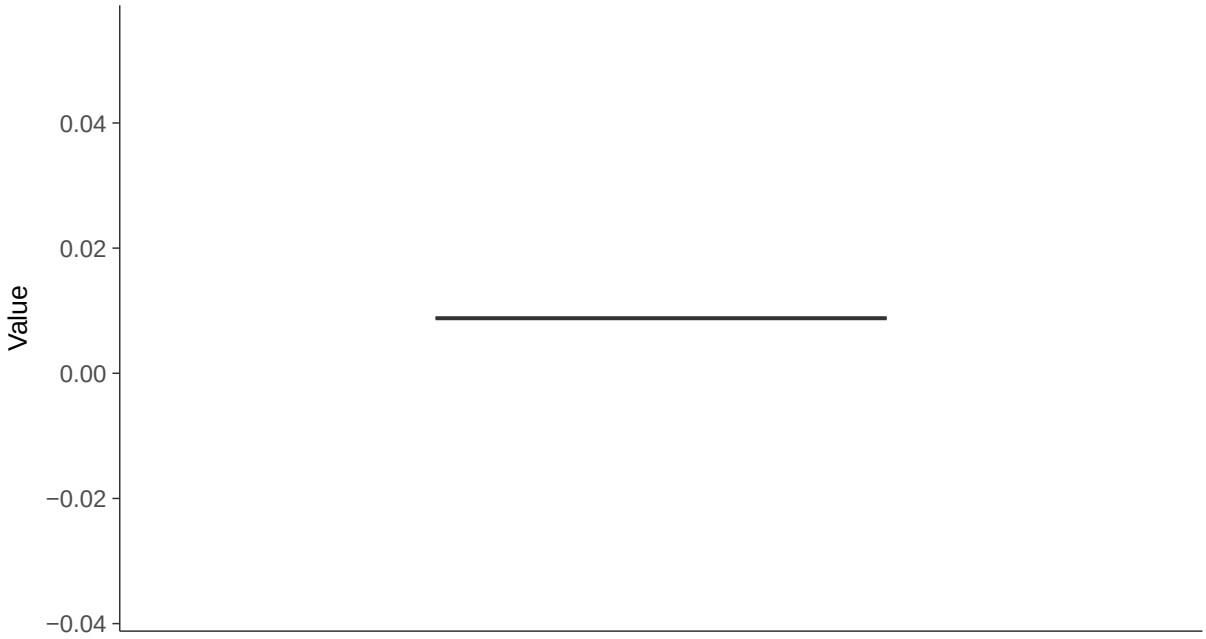
ID: 1_46_6_130





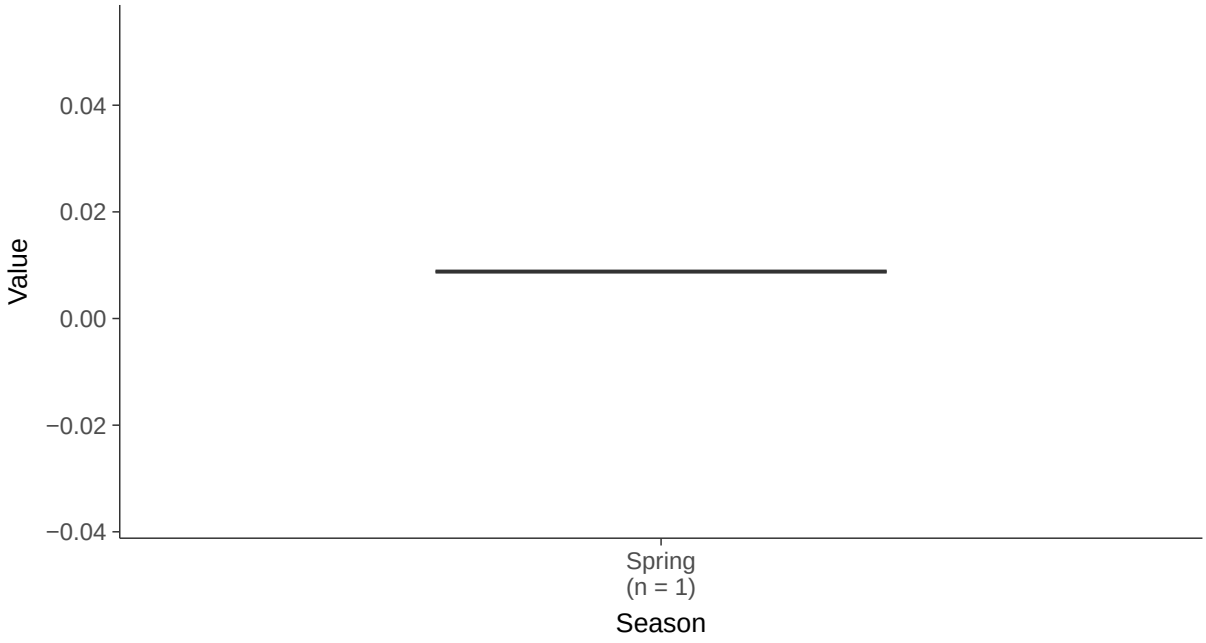
Boxplot

Zinc, MW-36 (mg/L)



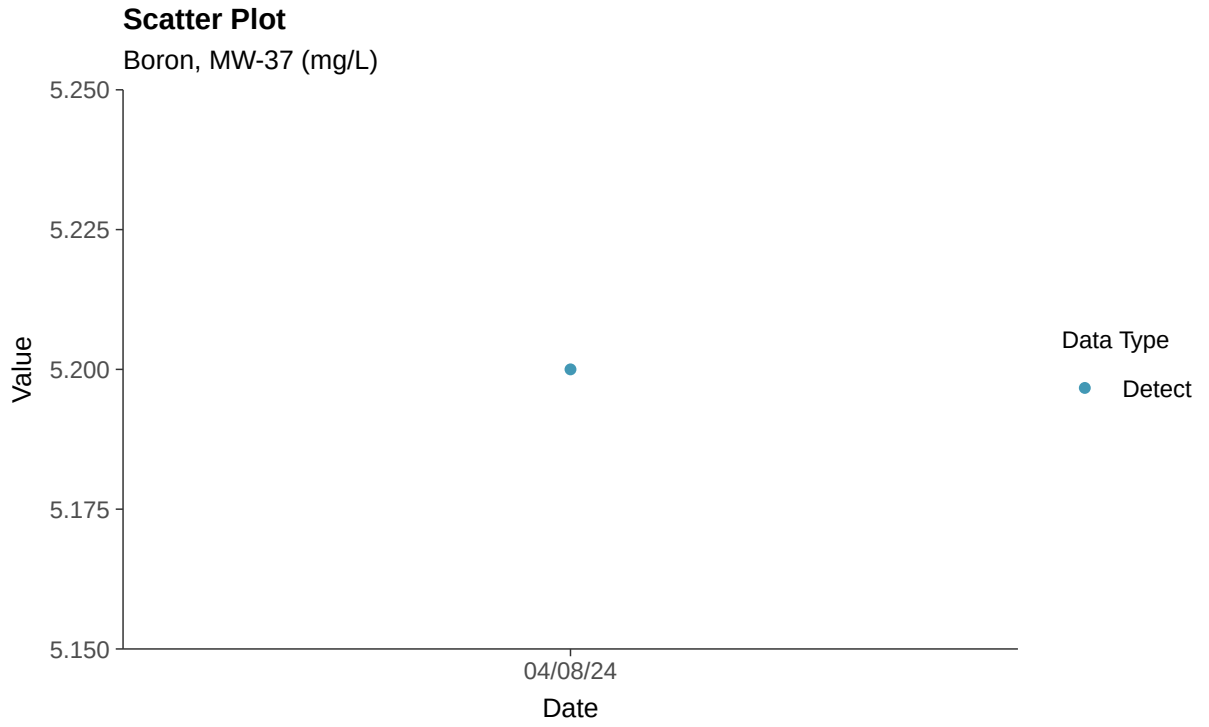
Boxplot by Season

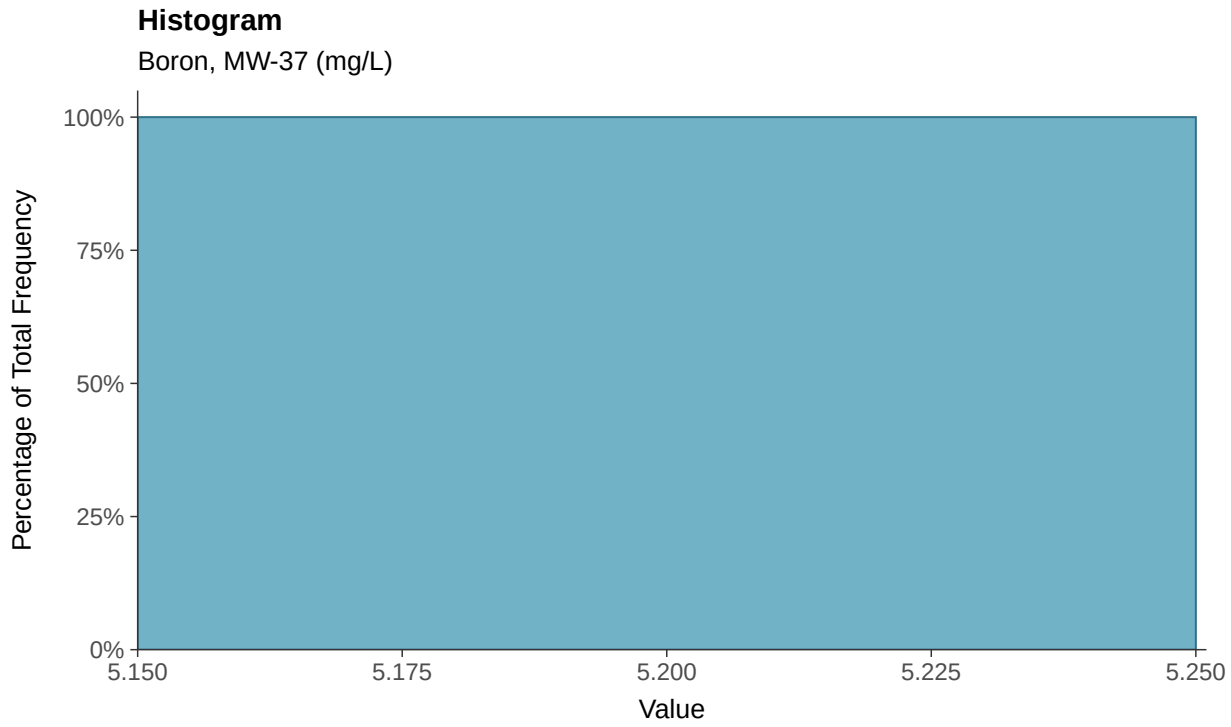
Zinc, MW-36 (mg/L)



Appendix III: Boron, MW-37

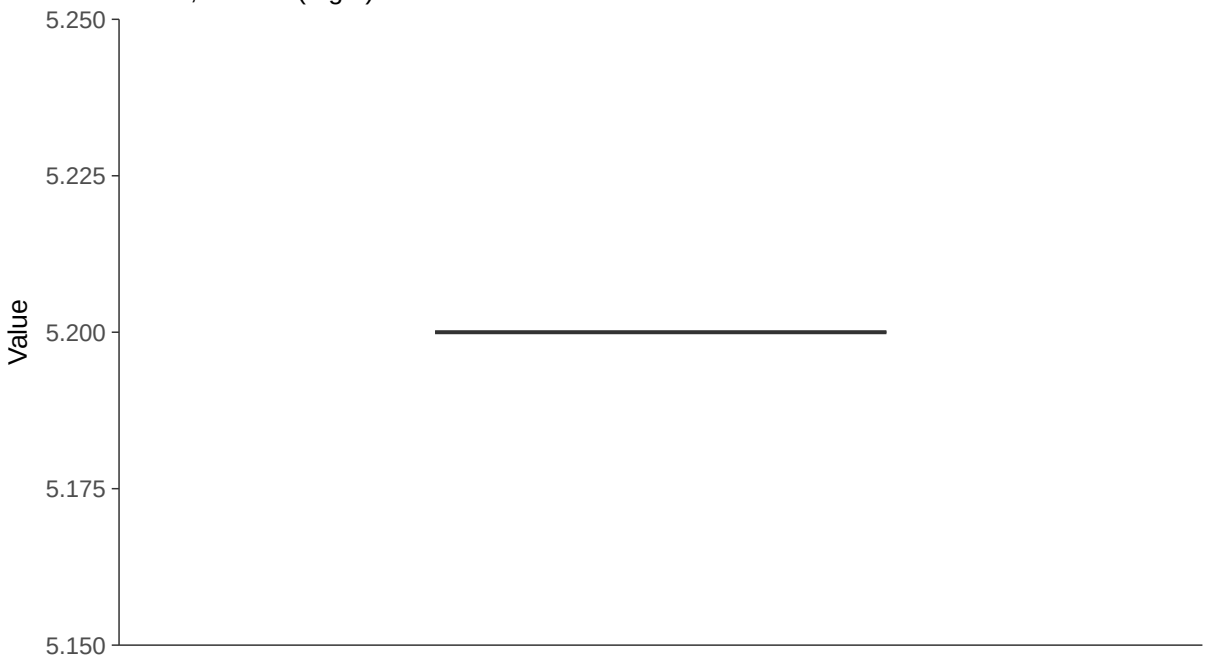
ID: 1_47_4_105





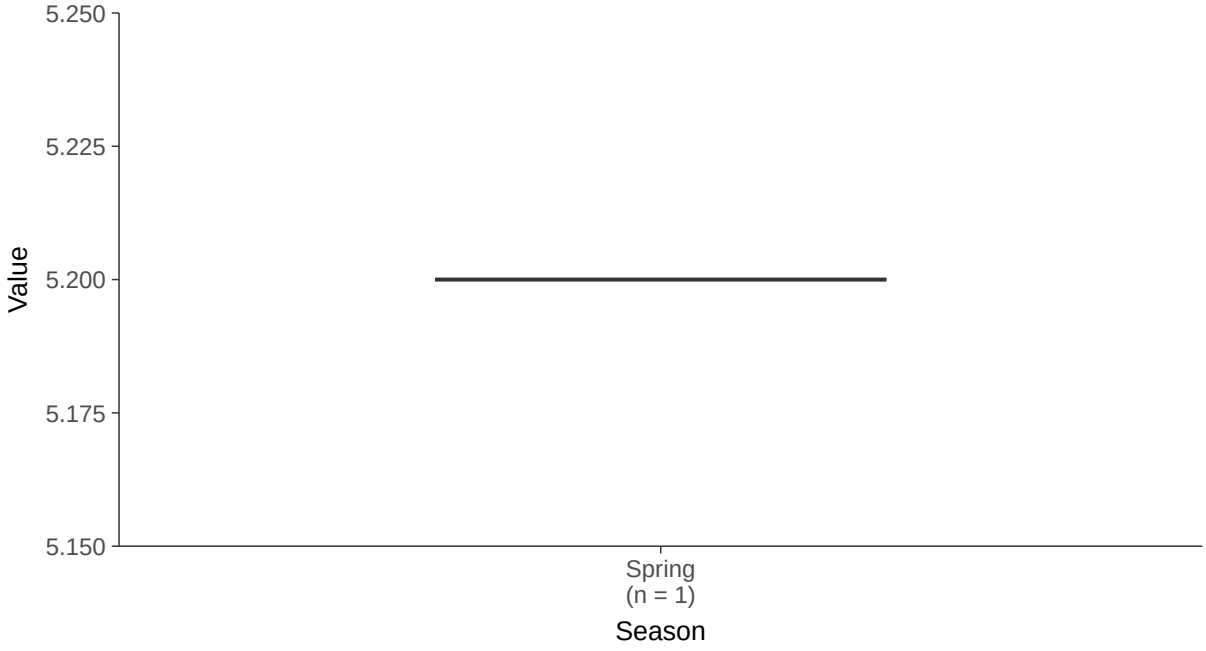
Boxplot

Boron, MW-37 (mg/L)



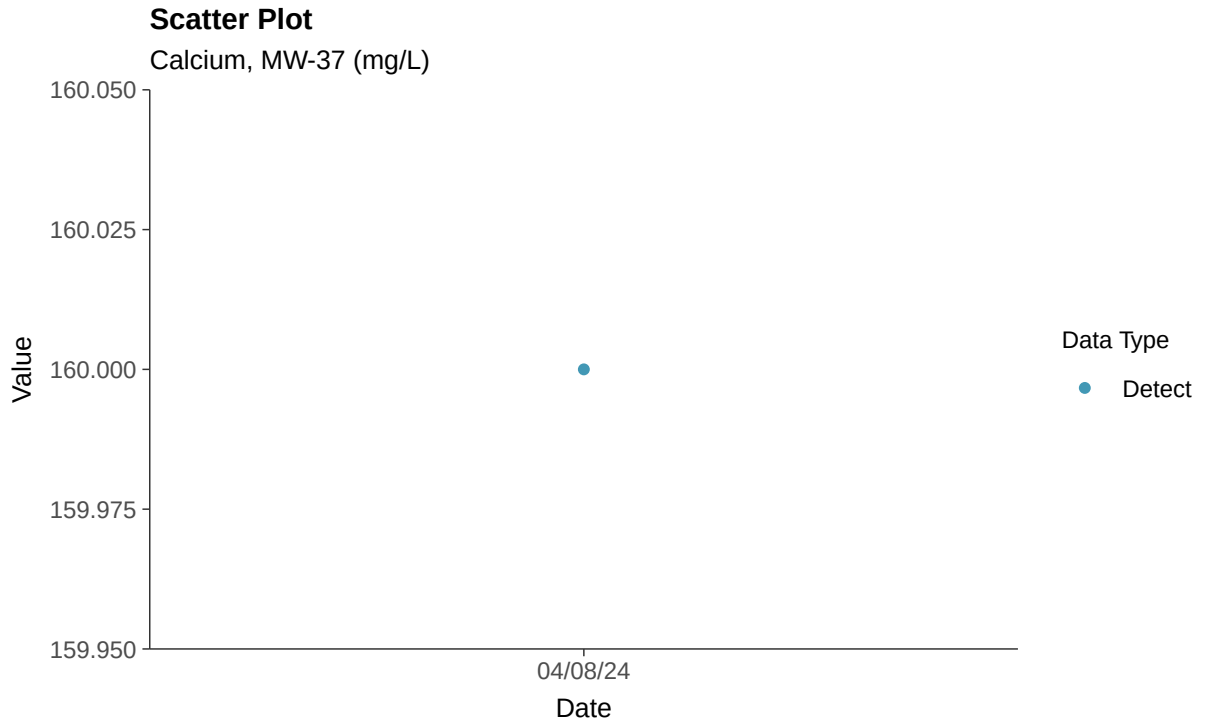
Boxplot by Season

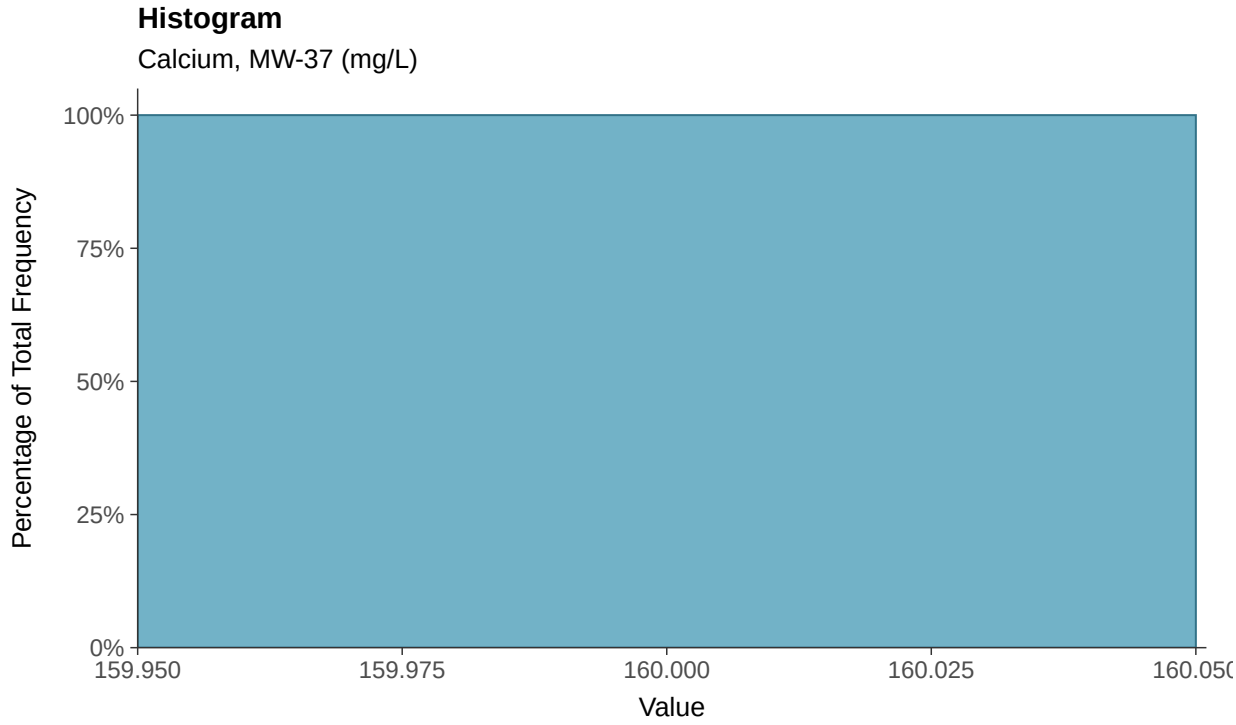
Boron, MW-37 (mg/L)



Appendix III: Calcium, MW-37

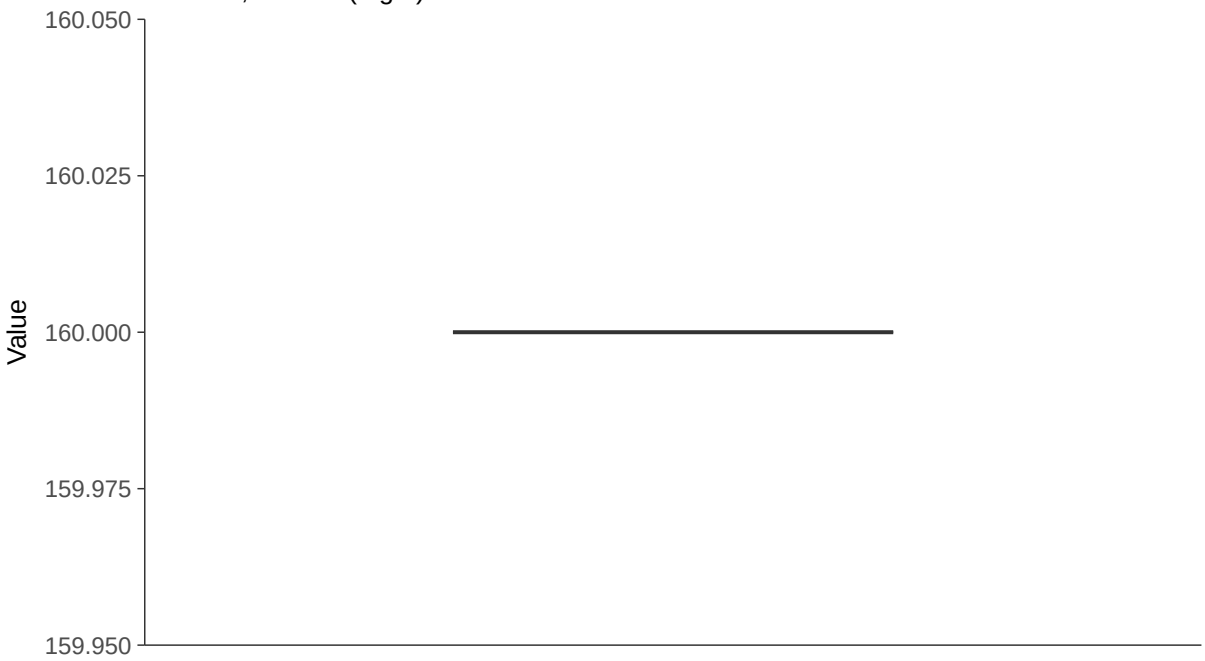
ID: 1_47_4_107





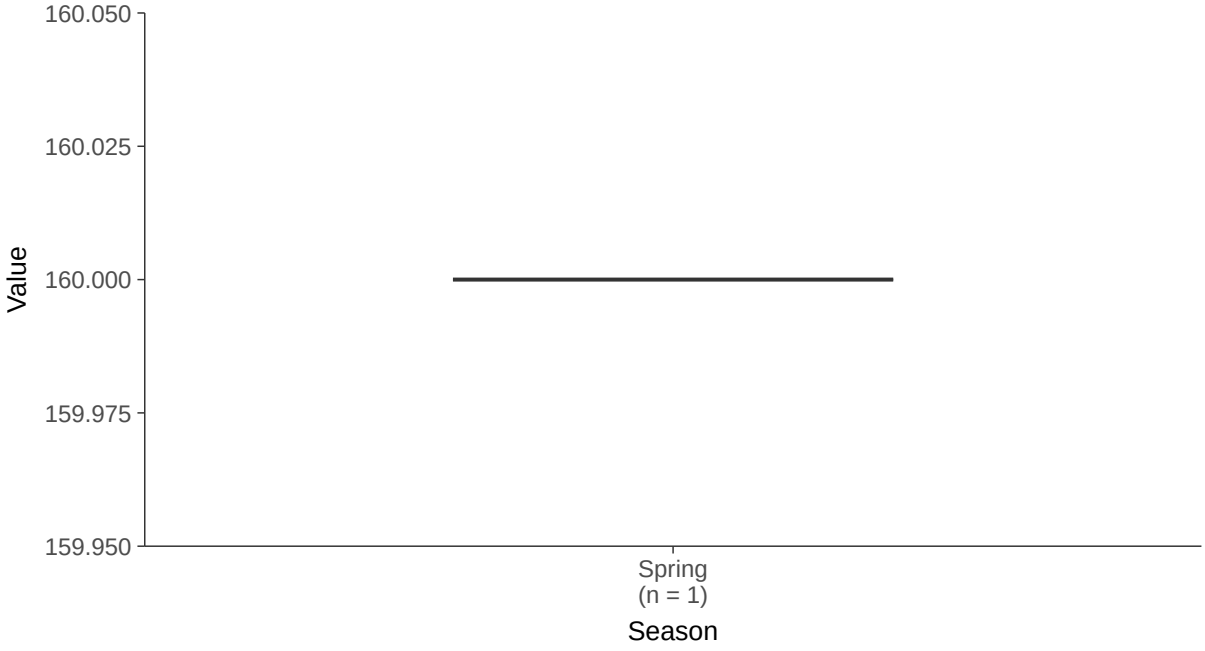
Boxplot

Calcium, MW-37 (mg/L)



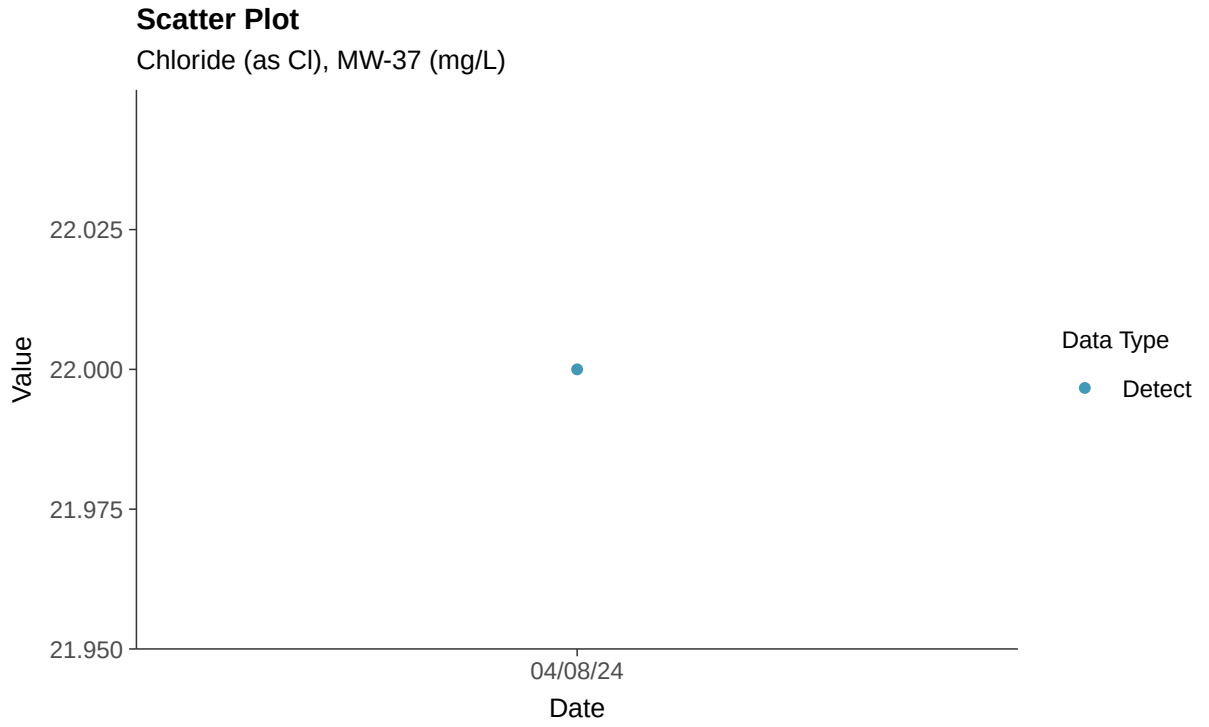
Boxplot by Season

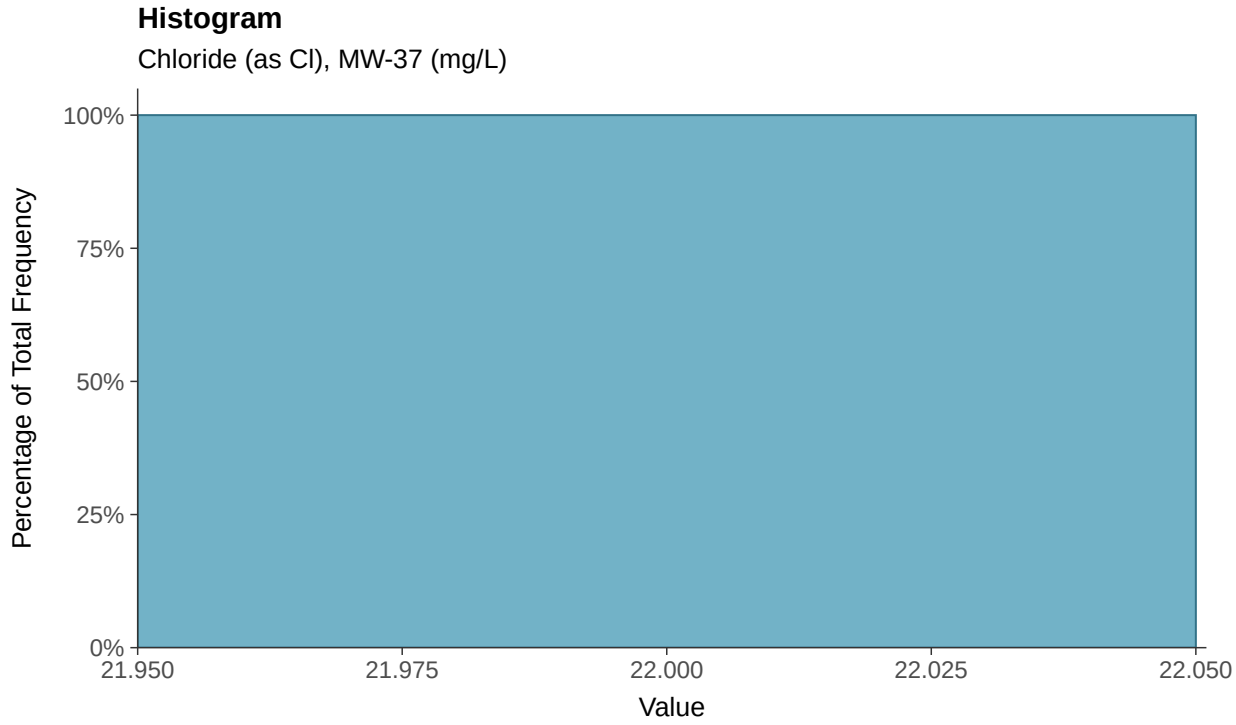
Calcium, MW-37 (mg/L)



Appendix III: Chloride (as Cl), MW-37

ID: 1_47_4_108



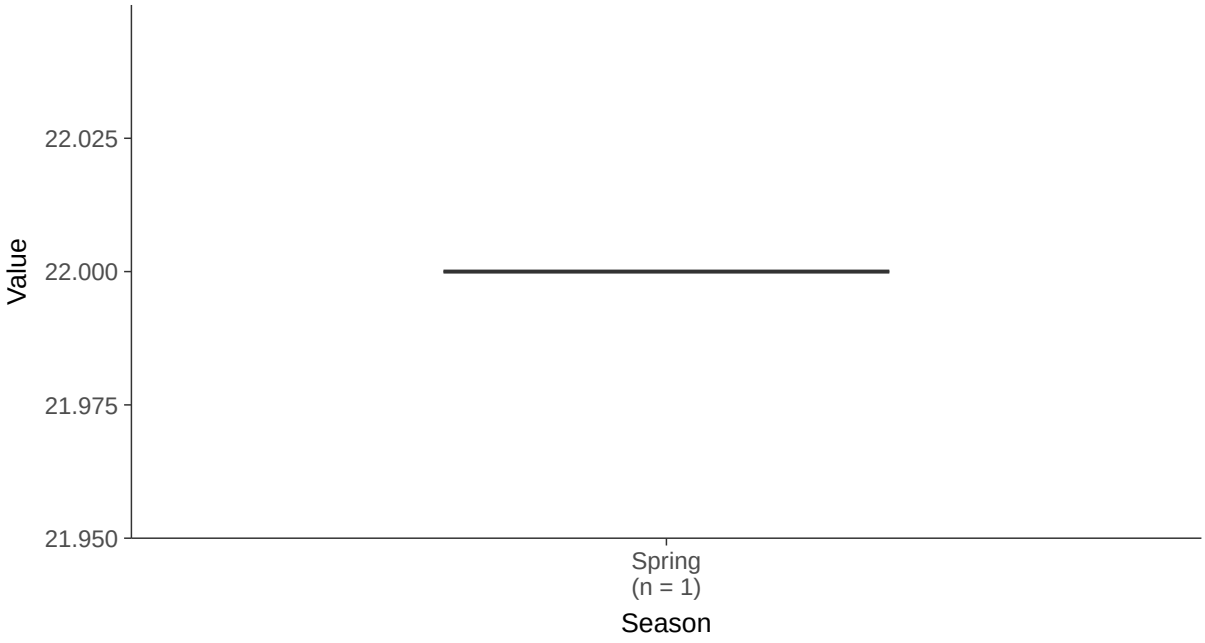


Boxplot

Chloride (as Cl), MW-37 (mg/L)

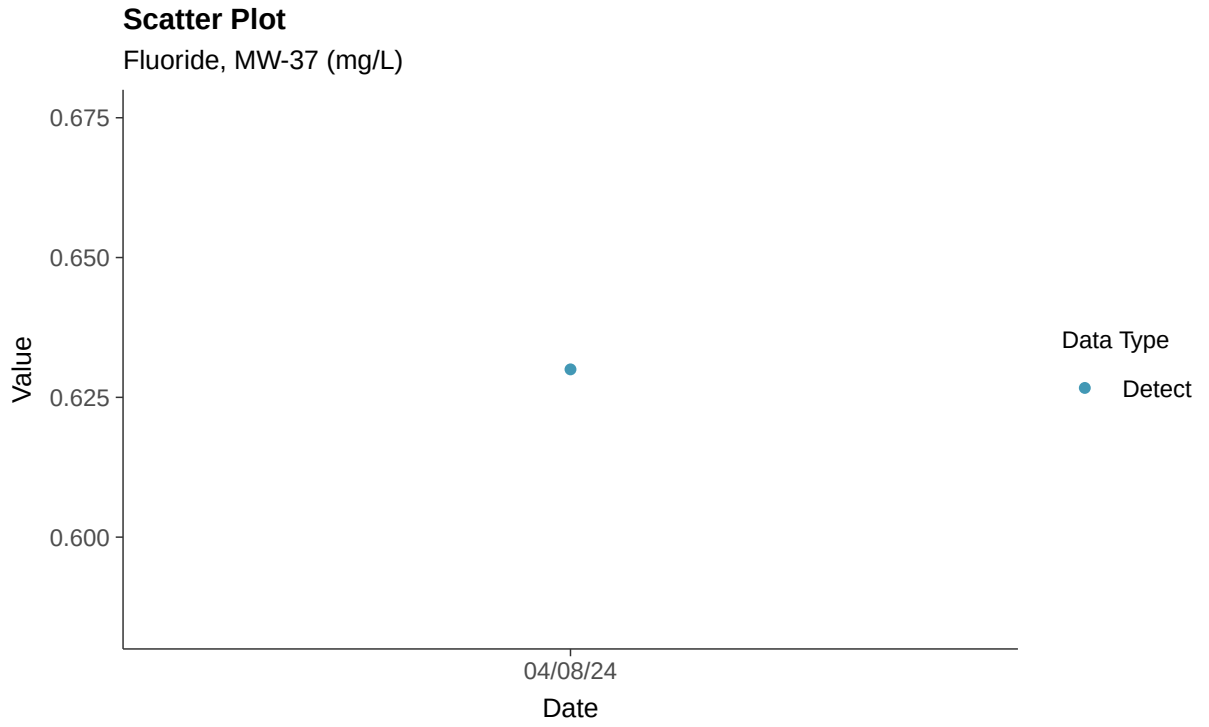
Boxplot by Season

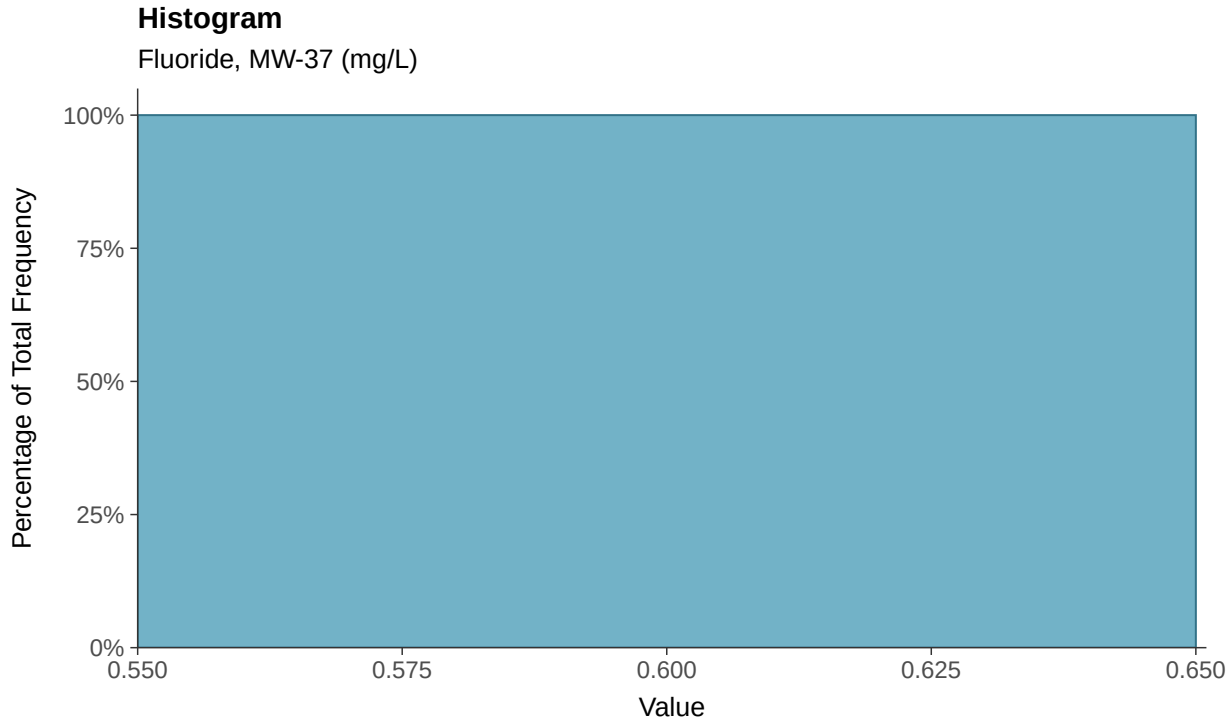
Chloride (as Cl), MW-37 (mg/L)



Appendix III: Fluoride, MW-37

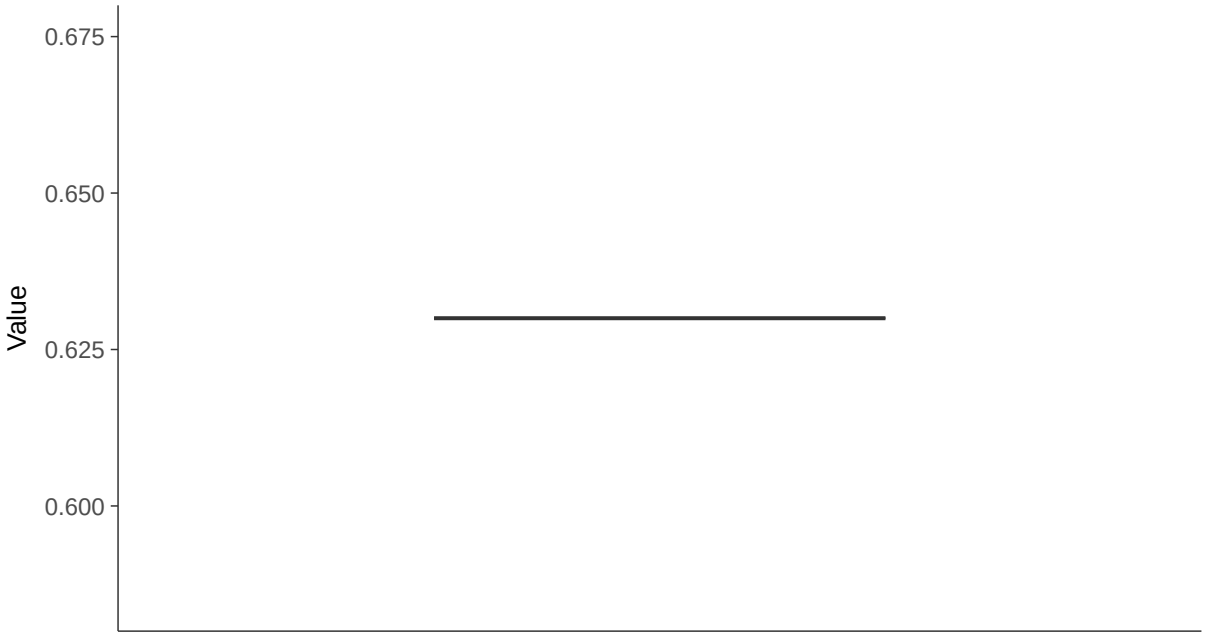
ID: 1_47_4_112





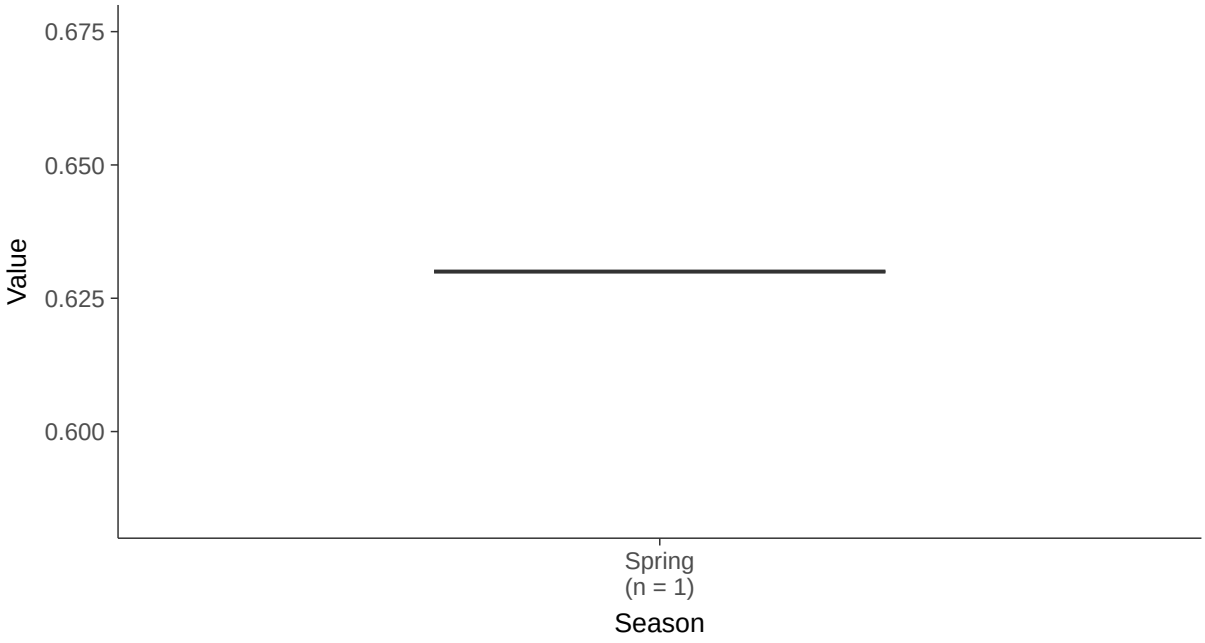
Boxplot

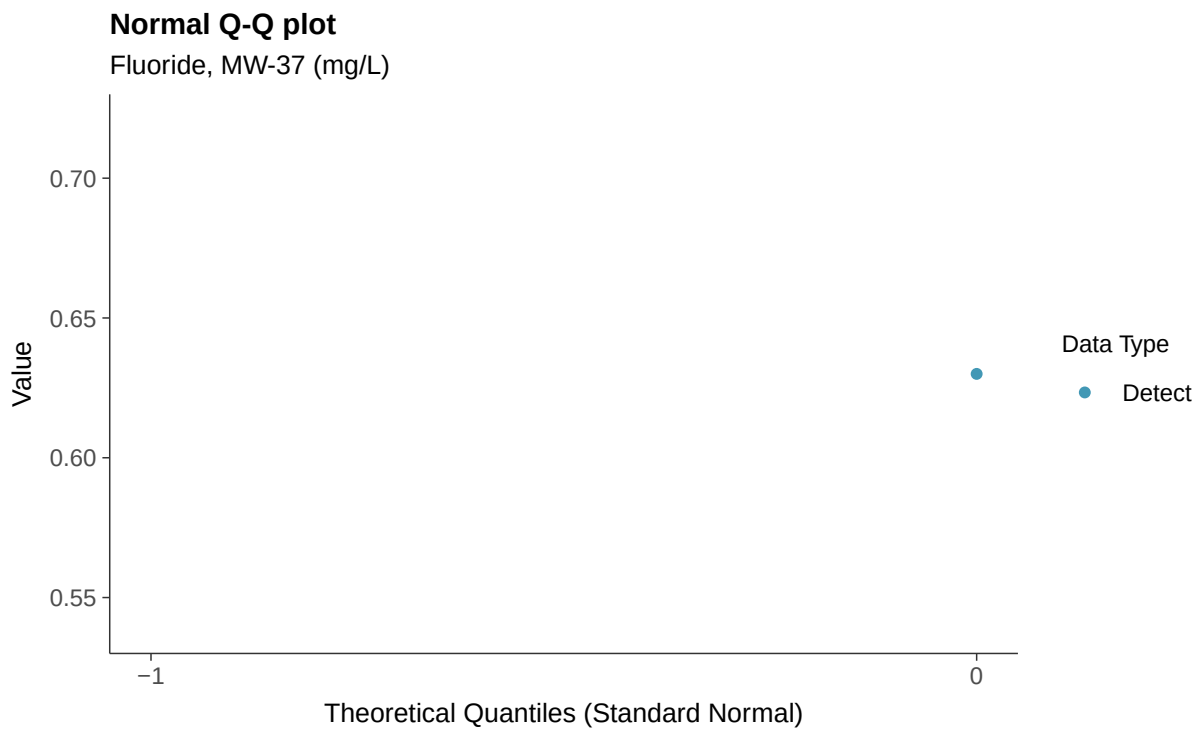
Fluoride, MW-37 (mg/L)



Boxplot by Season

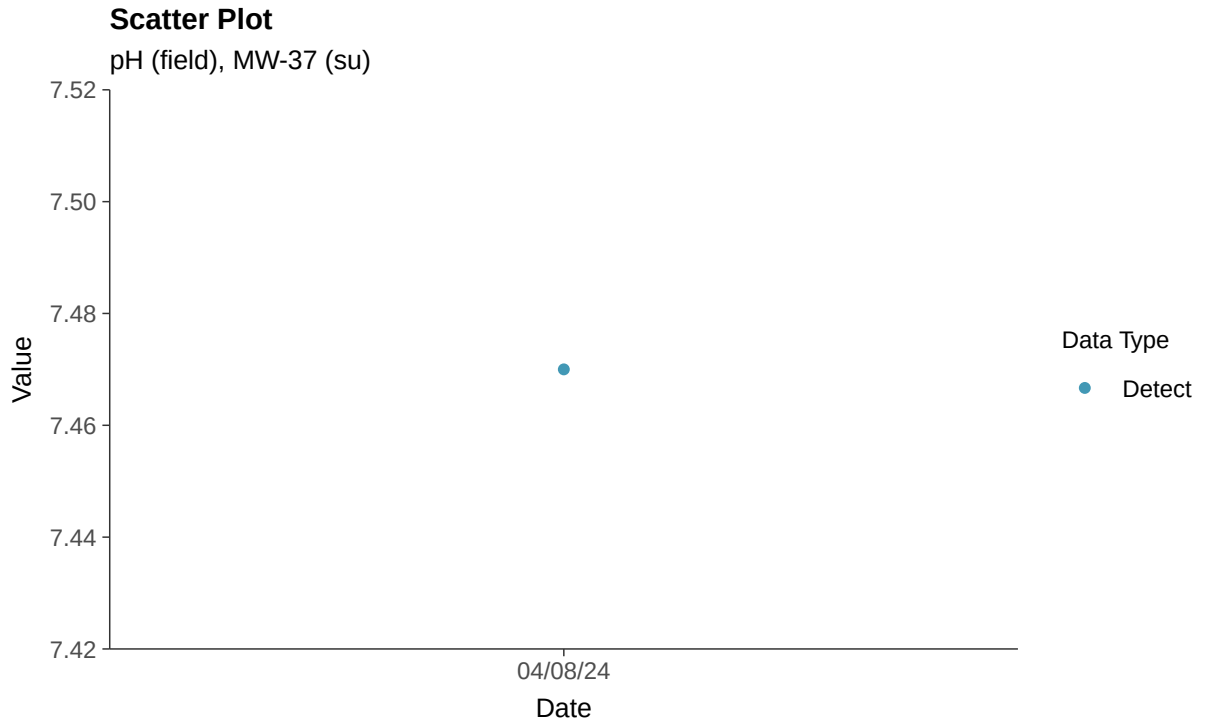
Fluoride, MW-37 (mg/L)

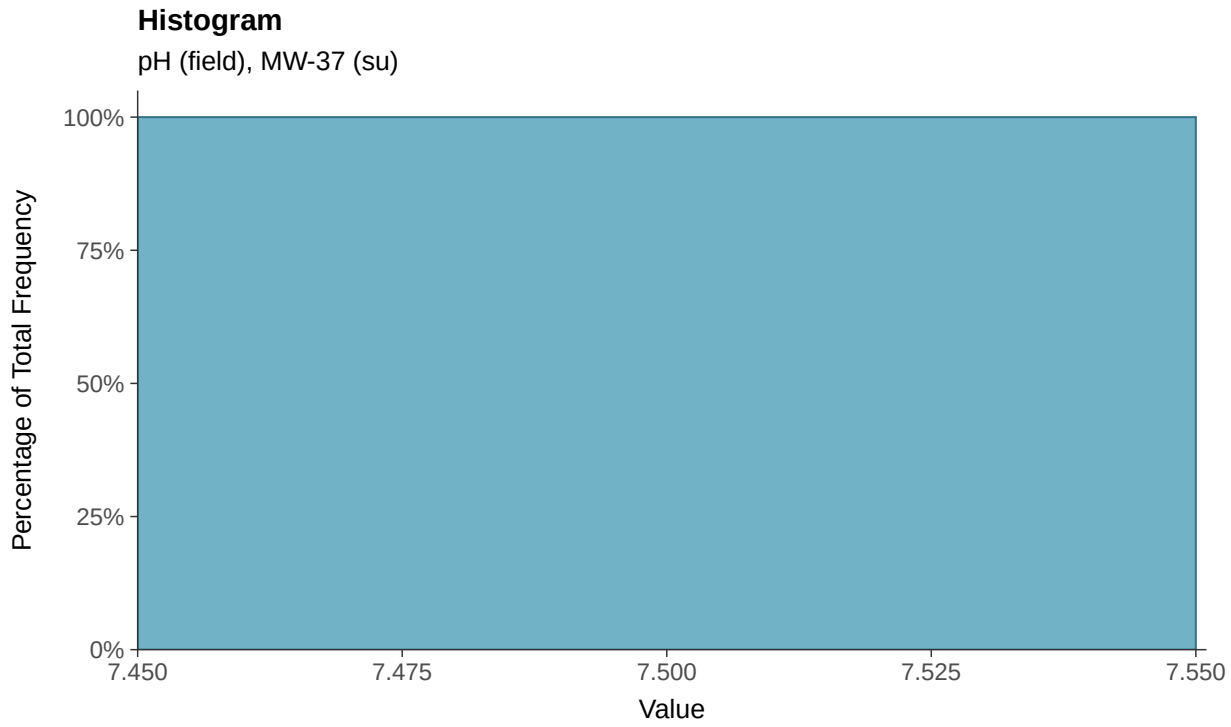



Normal Q-Q plot
Fluoride, MW-37 (mg/L)
Value
0.70
0.65
0.60
0.55
−1
0
Theoretical Quantiles (Standard Normal)
Data Type
Detect

Appendix III: pH (field), MW-37

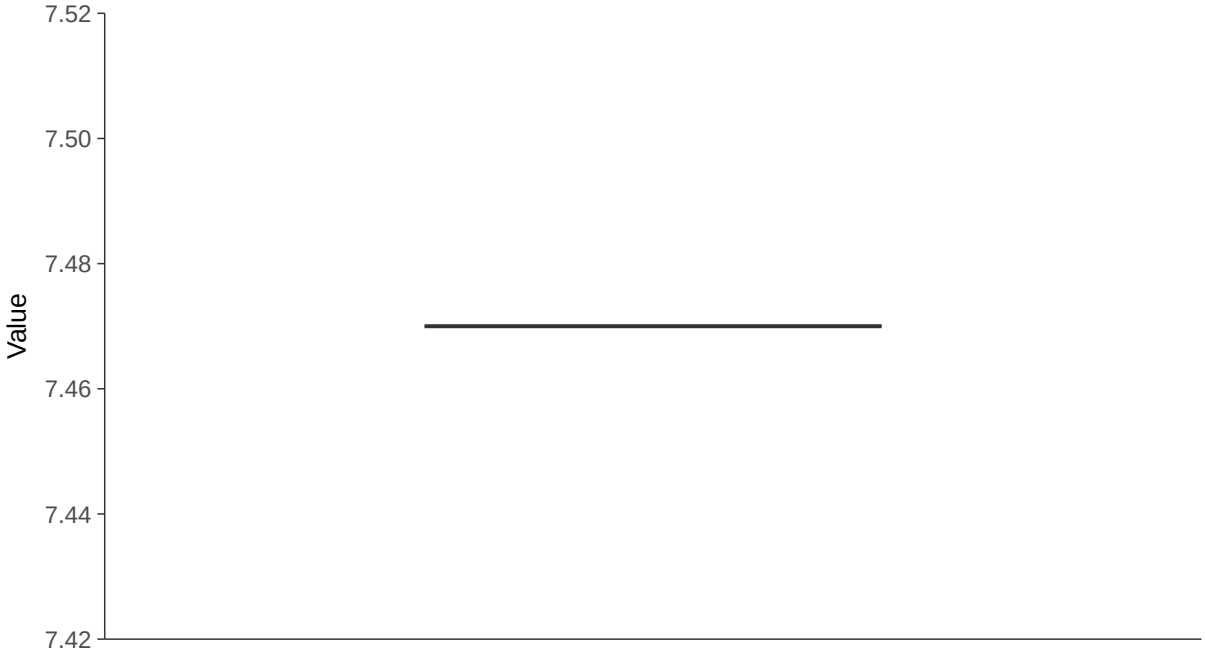
ID: 1_47_4_120





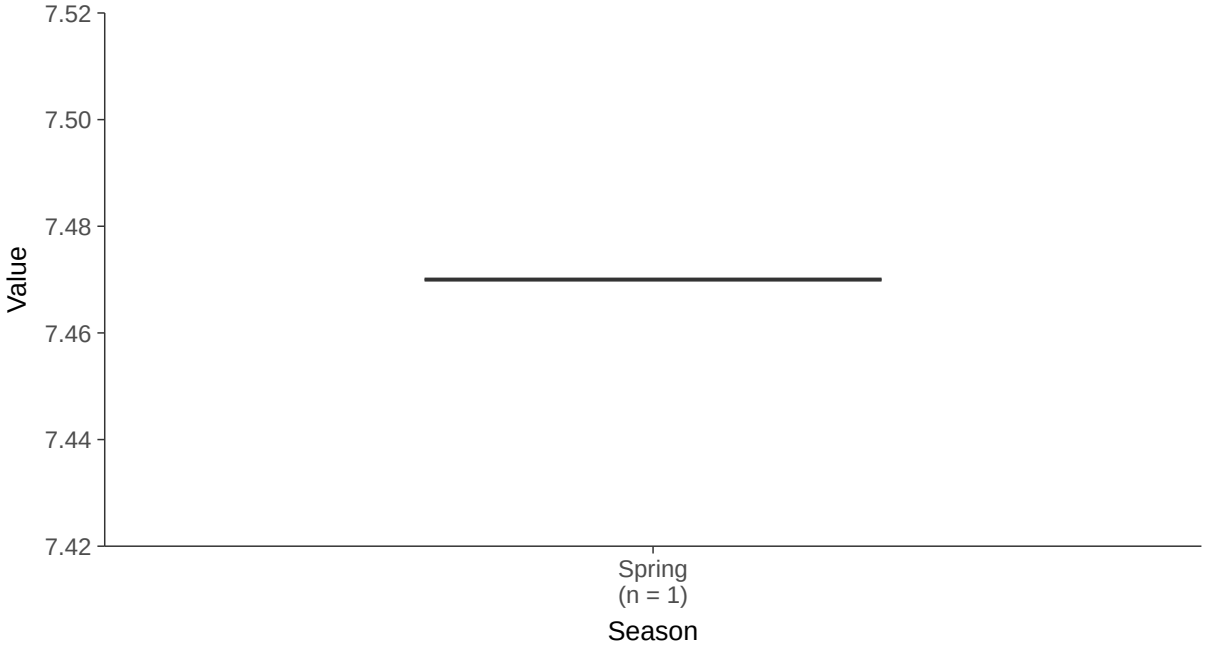
Boxplot

pH (field), MW-37 (su)



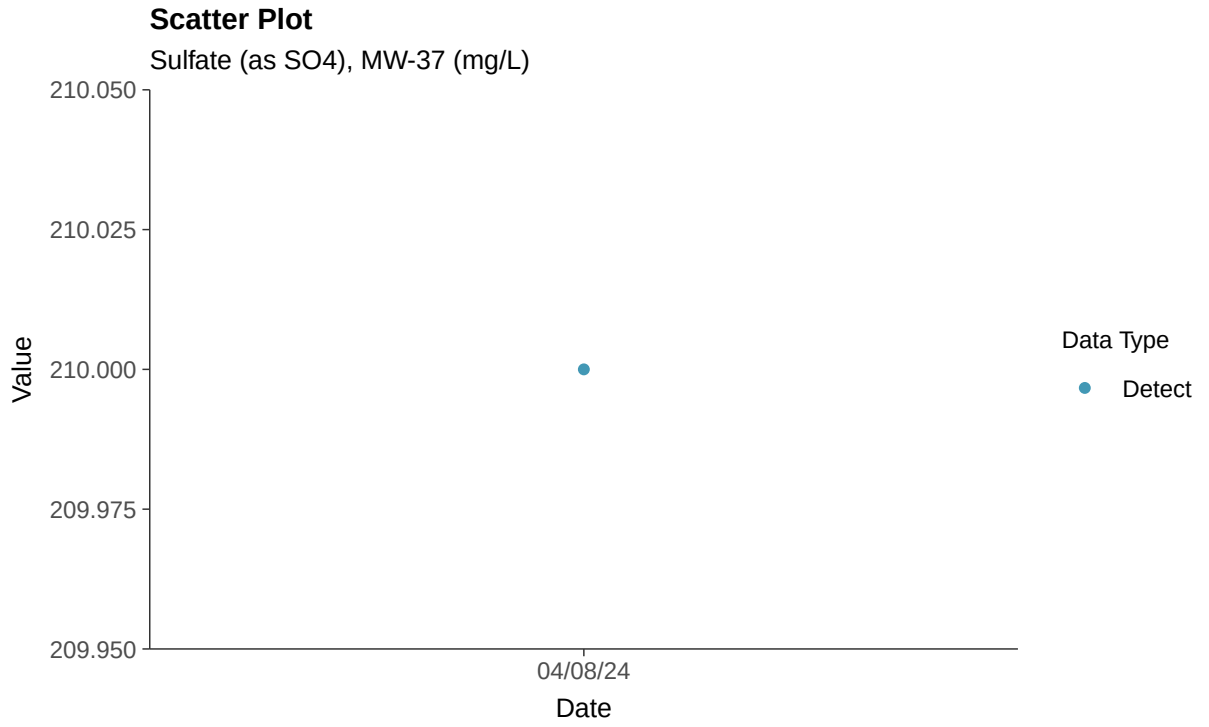
Boxplot by Season

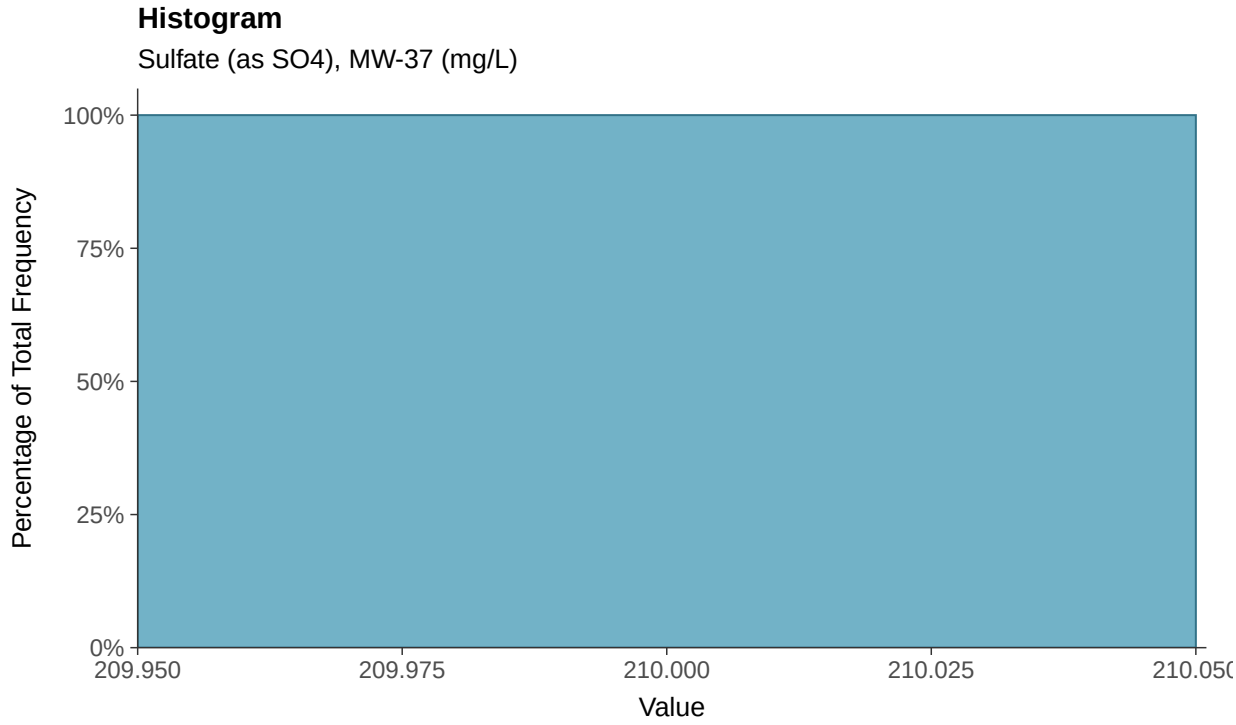
pH (field), MW-37 (su)



Appendix III: Sulfate (as SO4), MW-37

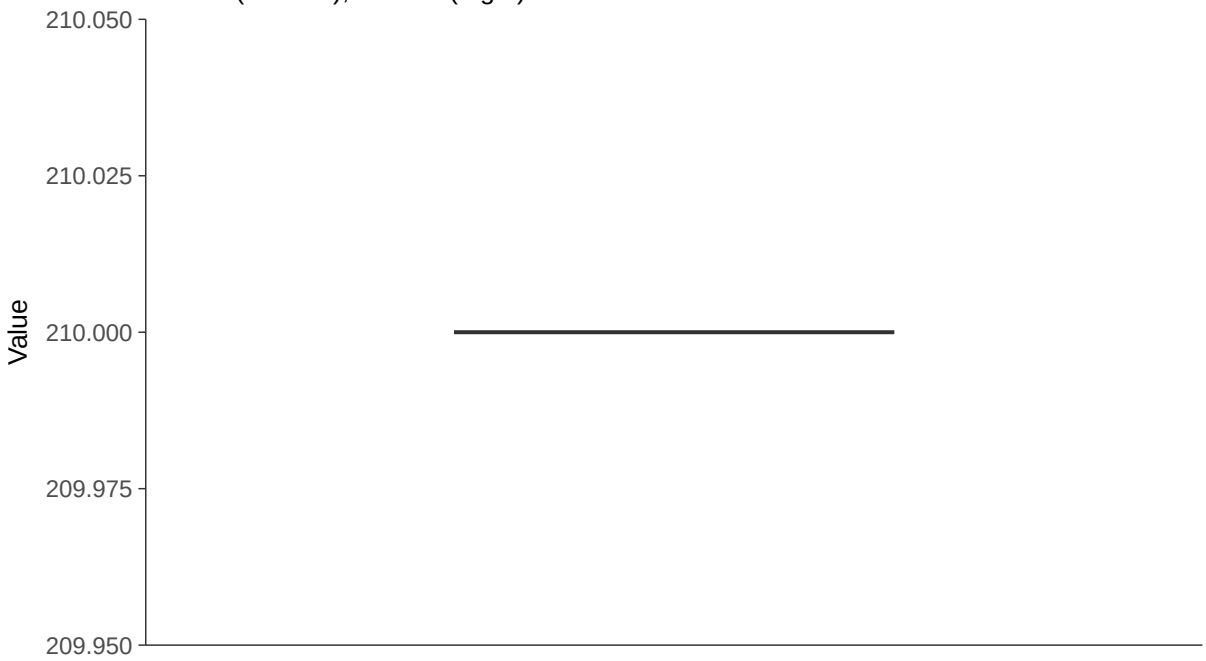
ID: 1_47_4_124





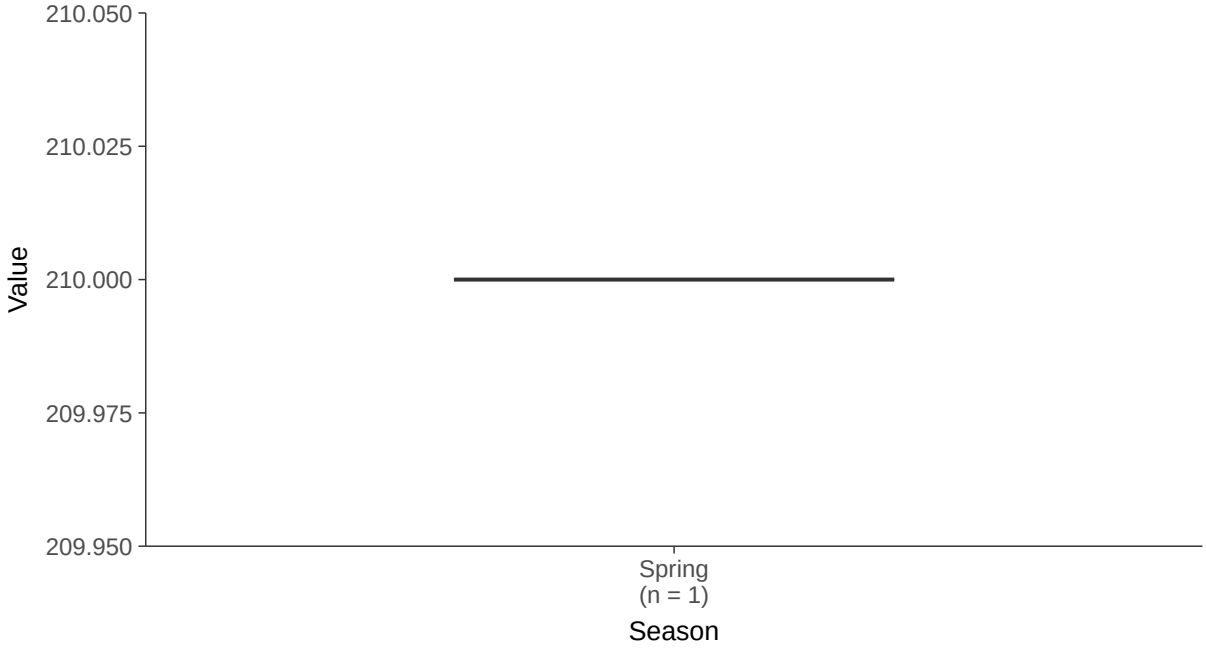
Boxplot

Sulfate (as SO4), MW-37 (mg/L)



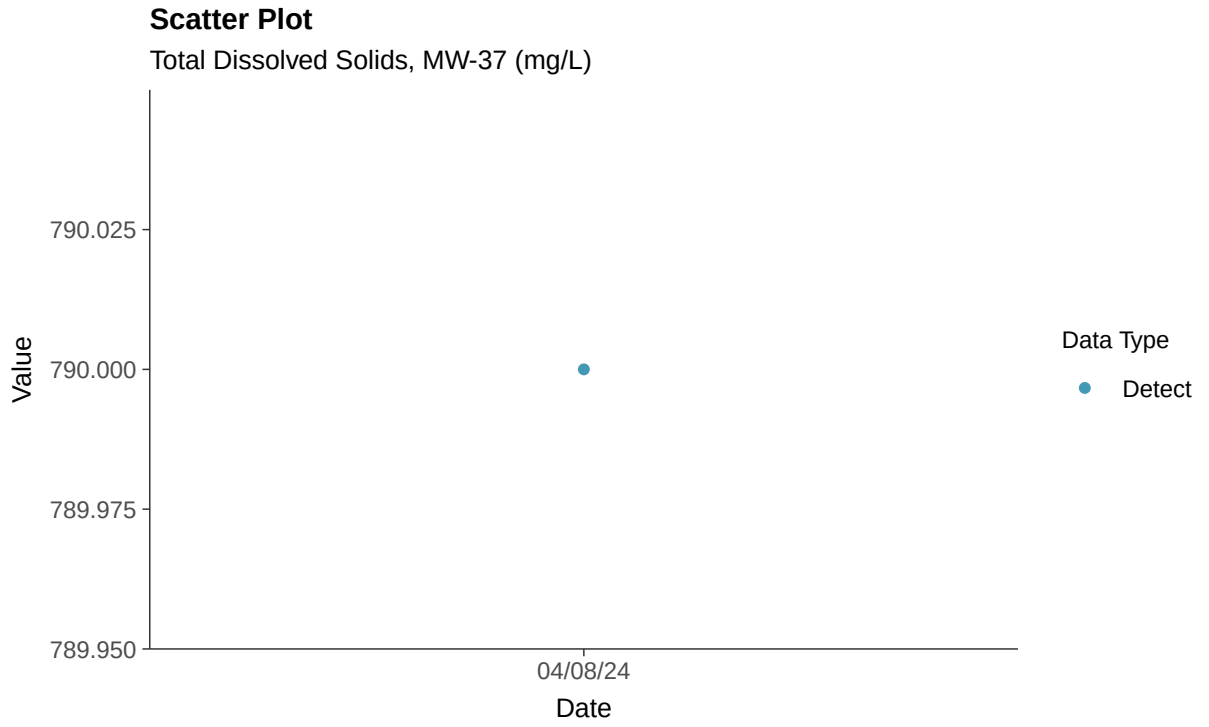
Boxplot by Season

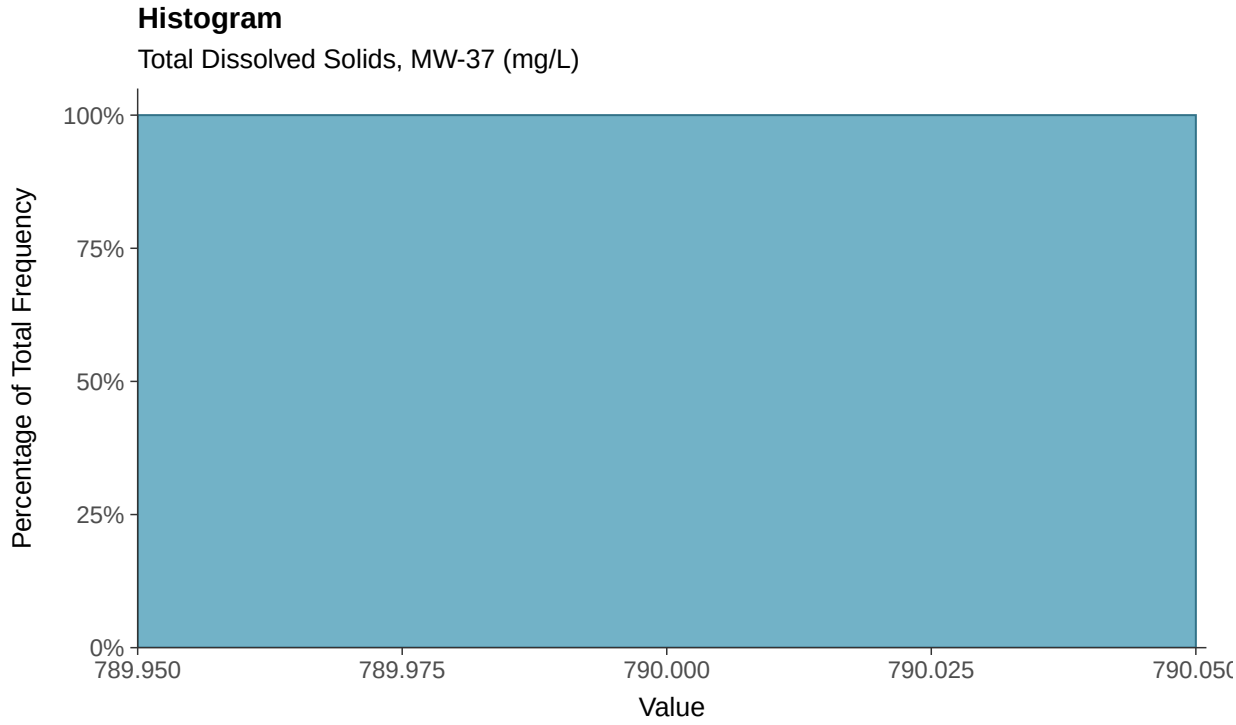
Sulfate (as SO4), MW-37 (mg/L)



Appendix III: Total Dissolved Solids, MW-37

ID: 1_47_4_126



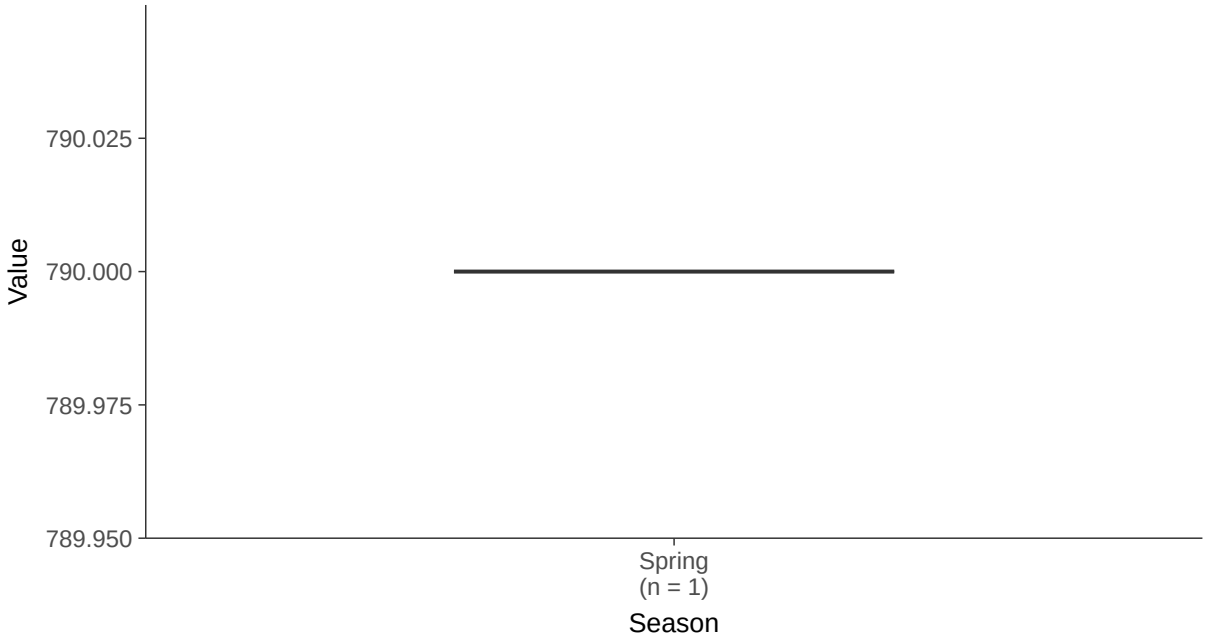


Boxplot

Total Dissolved Solids, MW-37 (mg/L)

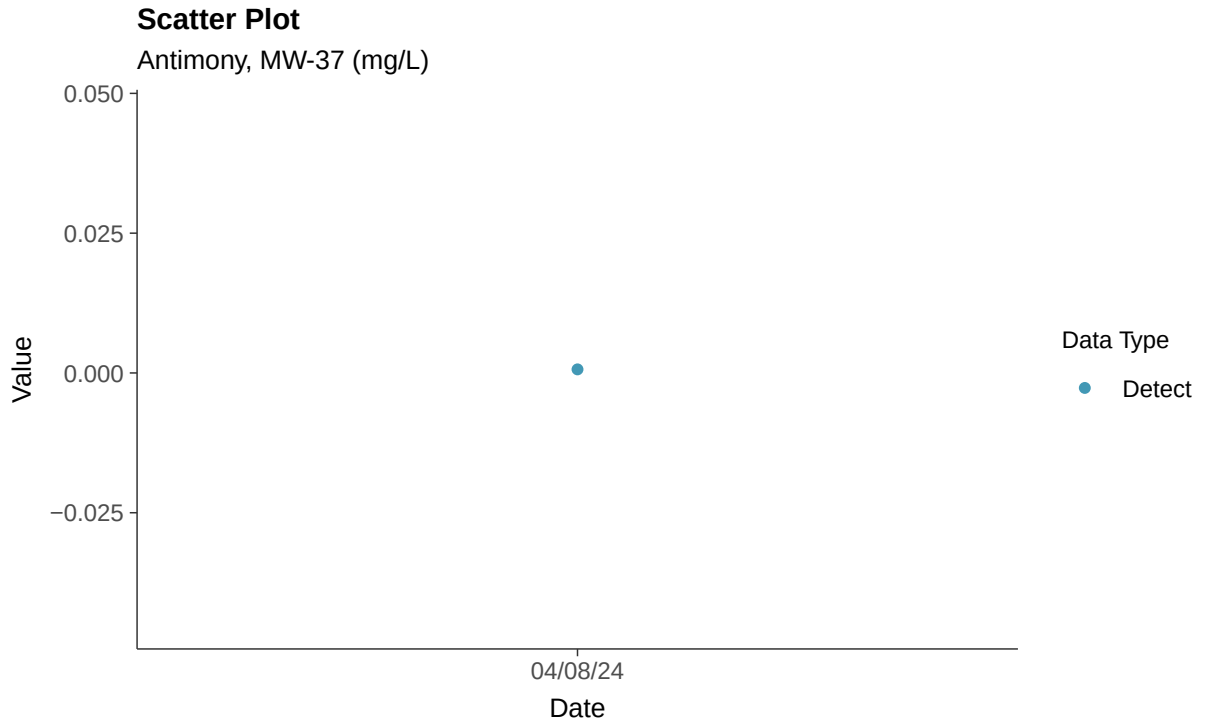
Boxplot by Season

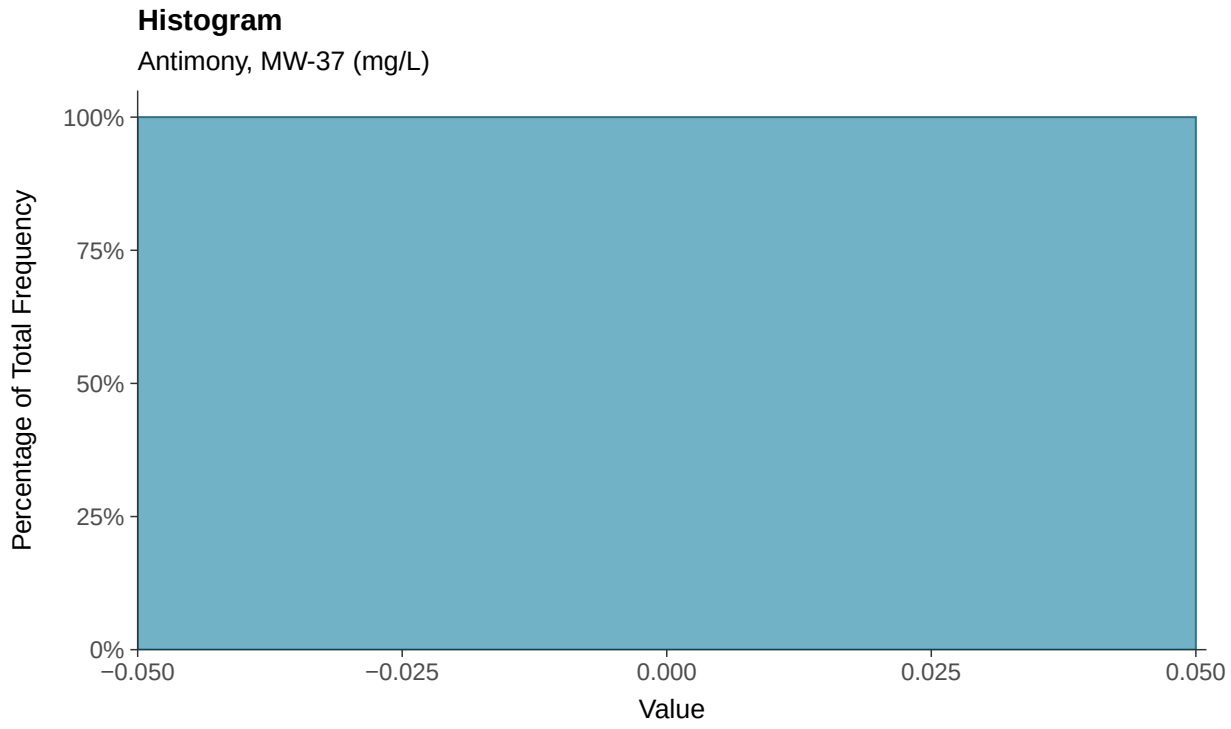
Total Dissolved Solids, MW-37 (mg/L)



Appendix IV: Antimony, MW-37

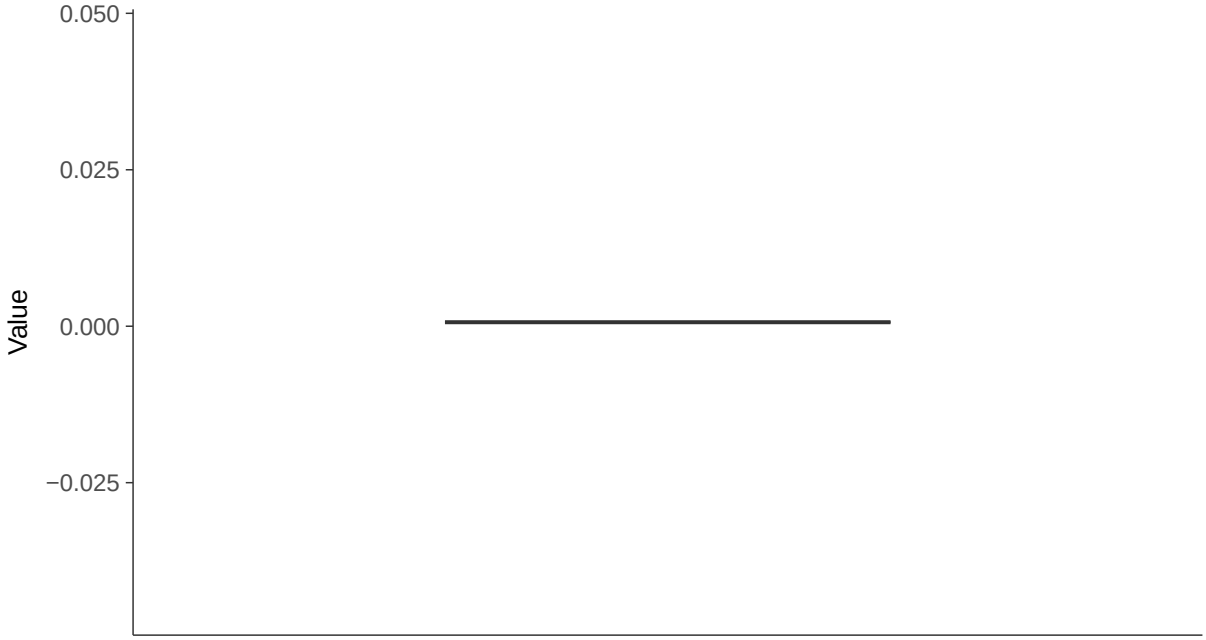
ID: 1_47_5_101





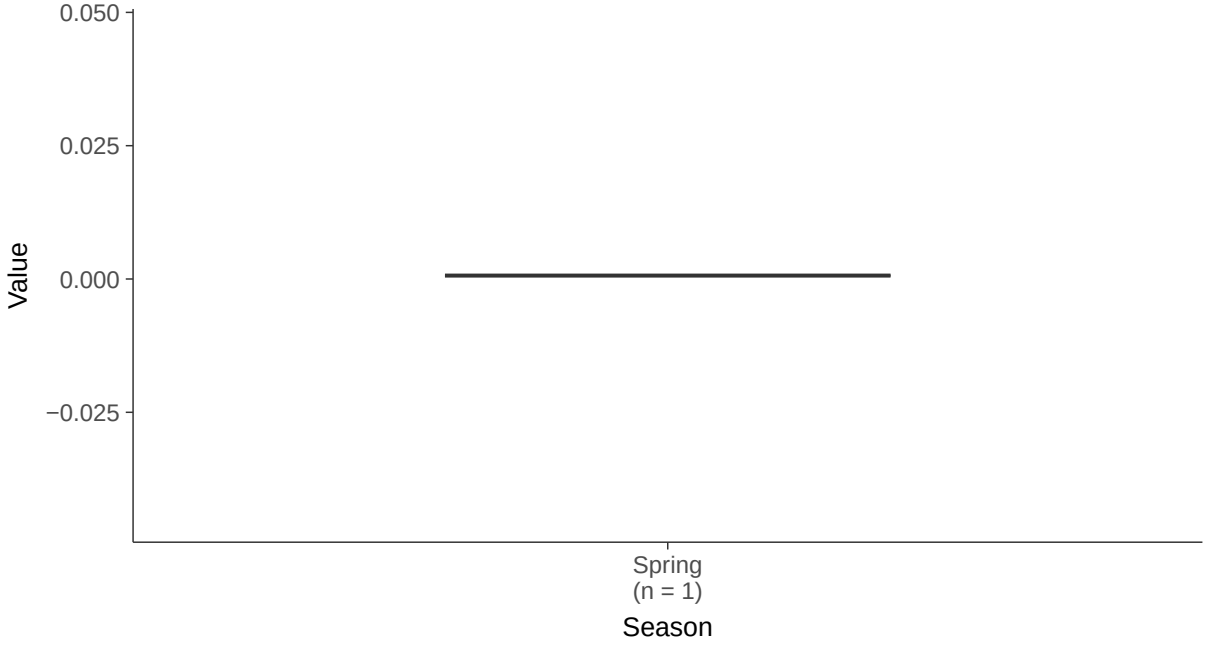
Boxplot

Antimony, MW-37 (mg/L)



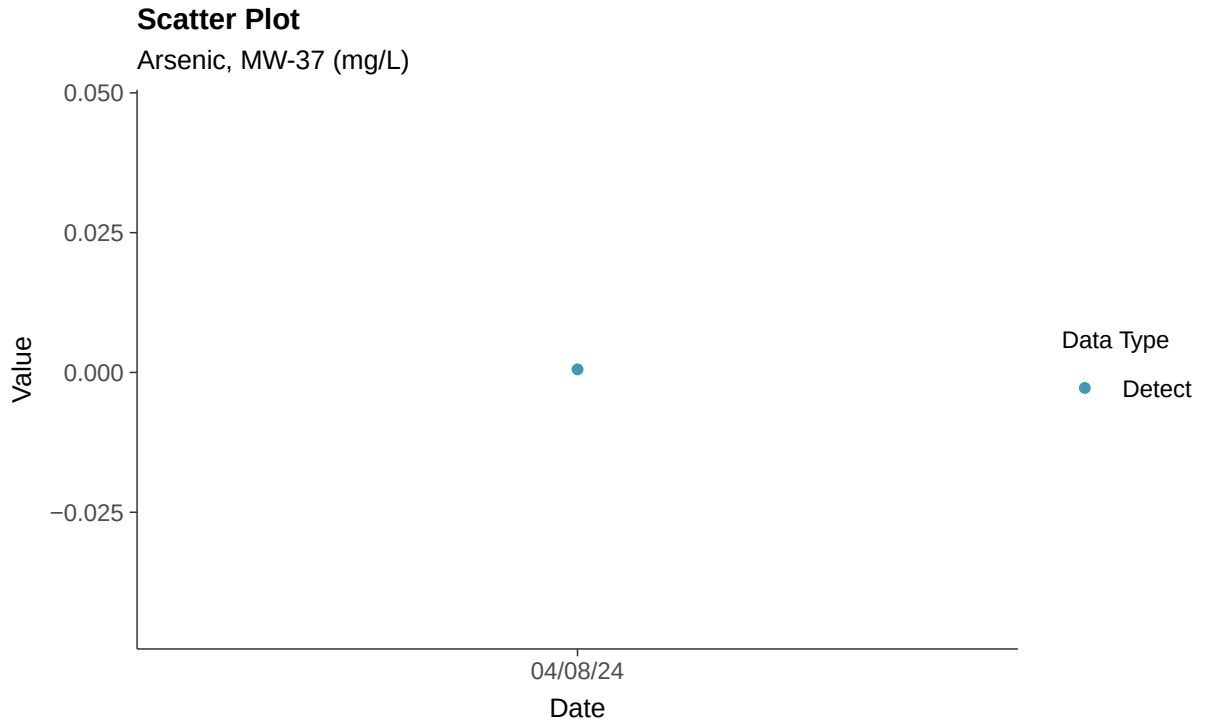
Boxplot by Season

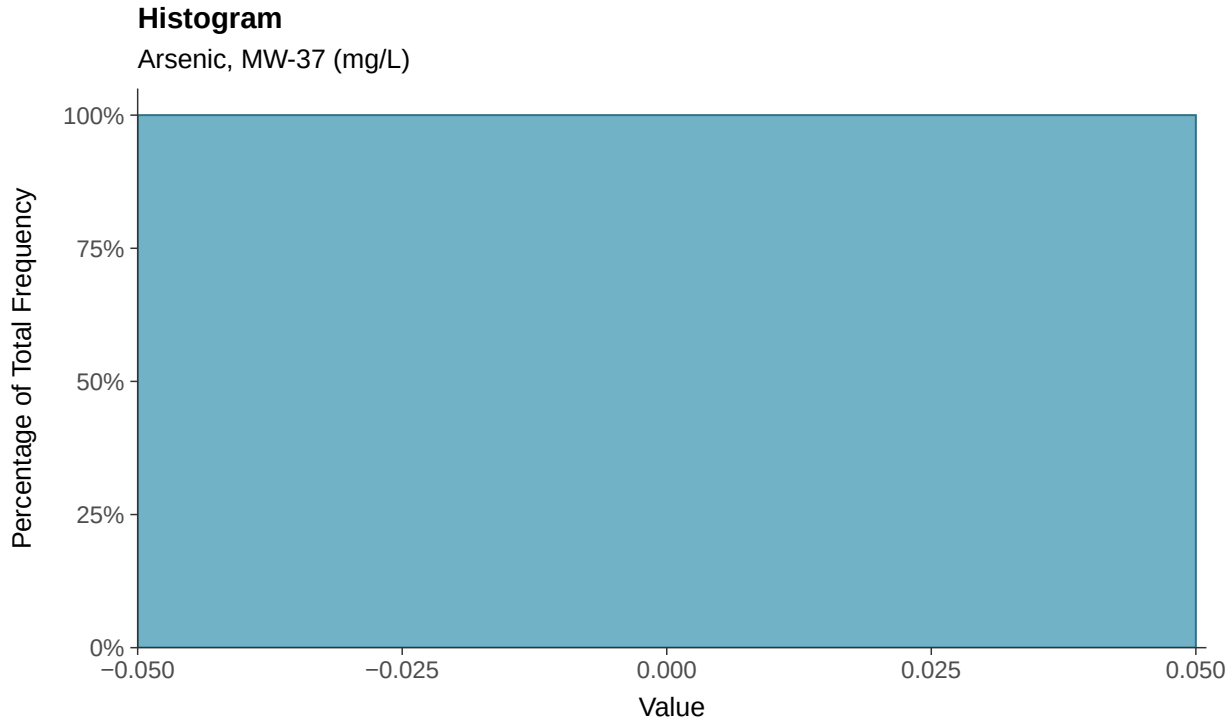
Antimony, MW-37 (mg/L)



Appendix IV: Arsenic, MW-37

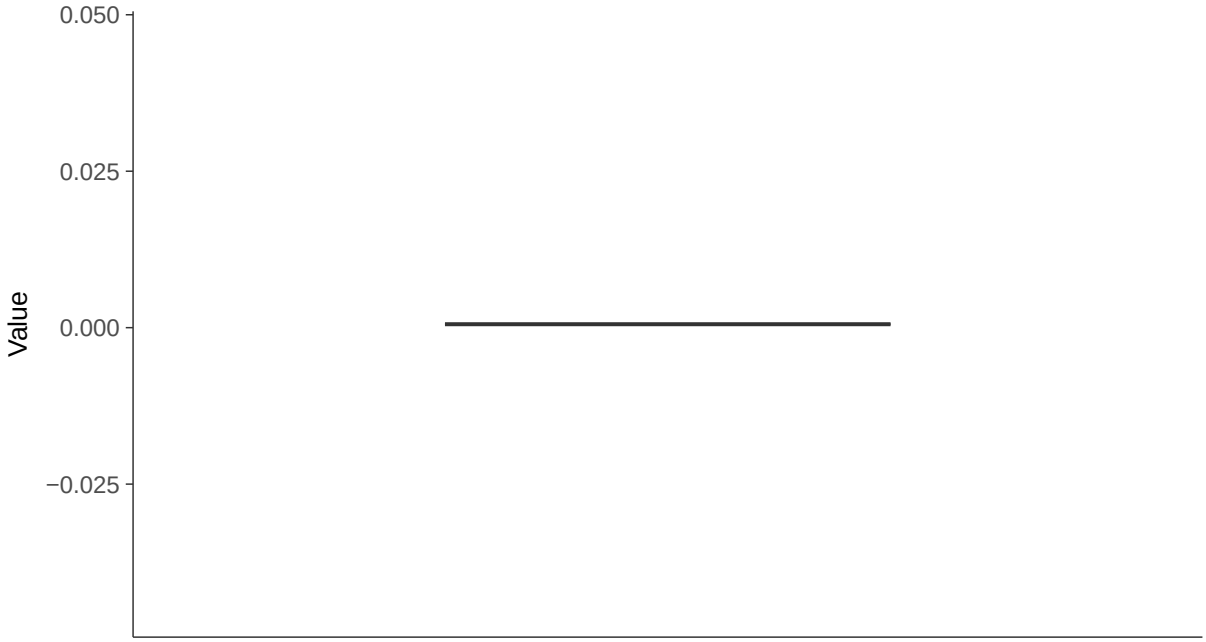
ID: 1_47_5_102





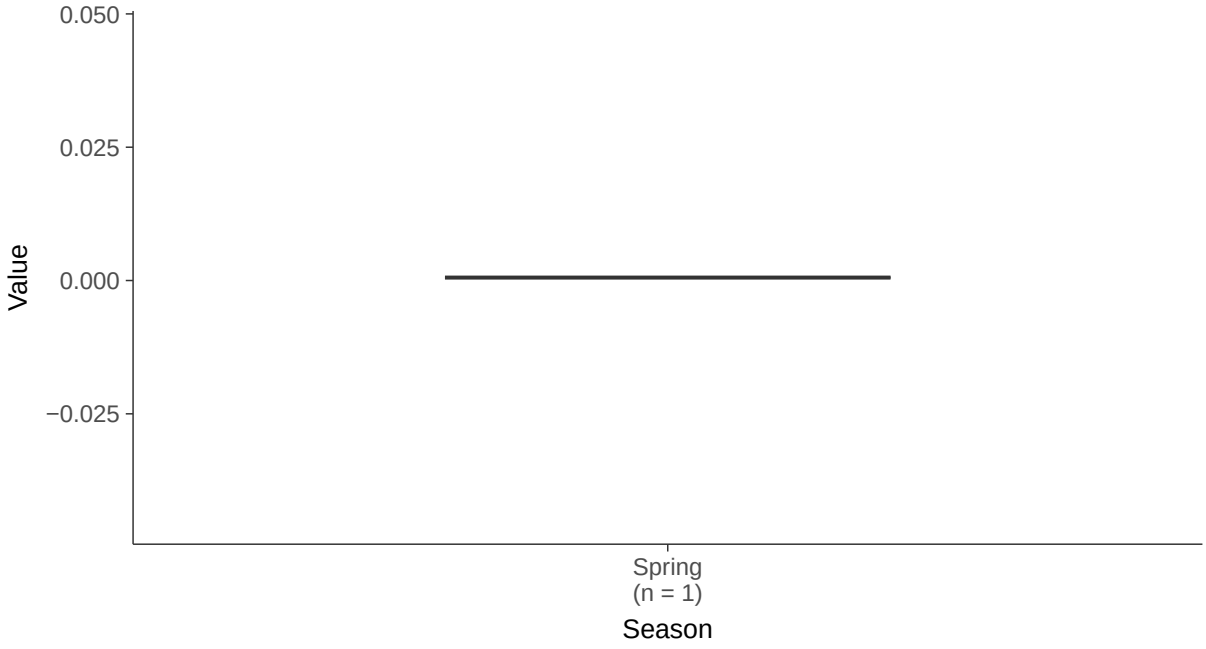
Boxplot

Arsenic, MW-37 (mg/L)



Boxplot by Season

Arsenic, MW-37 (mg/L)

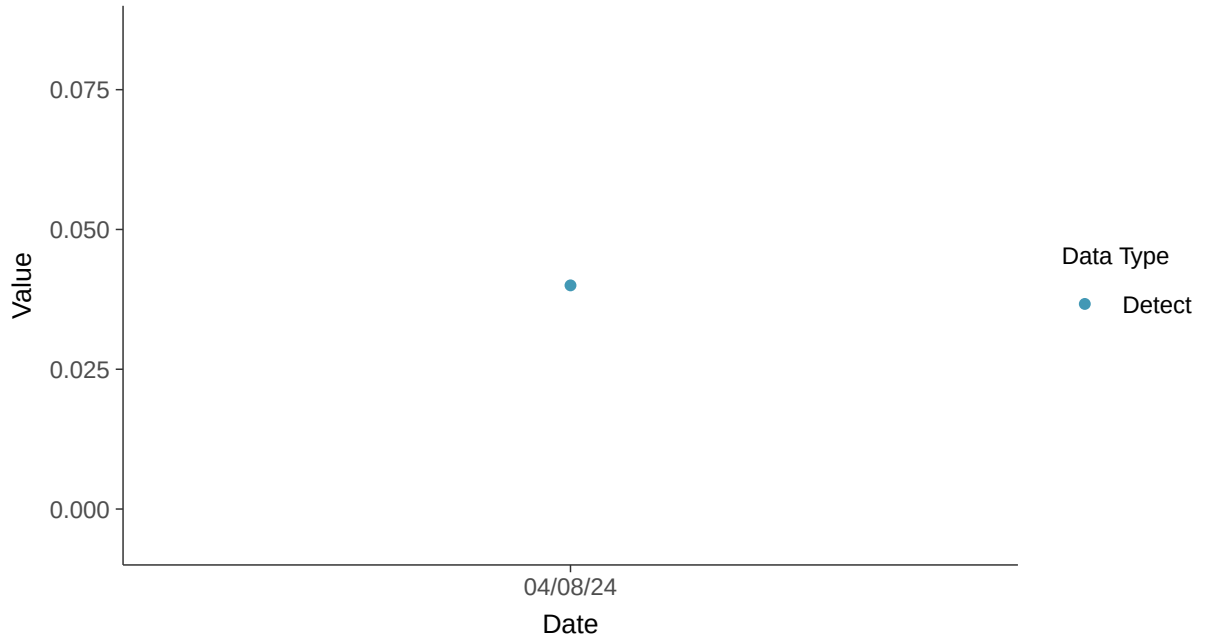


Appendix IV: Barium, MW-37

ID: 1_47_5_103

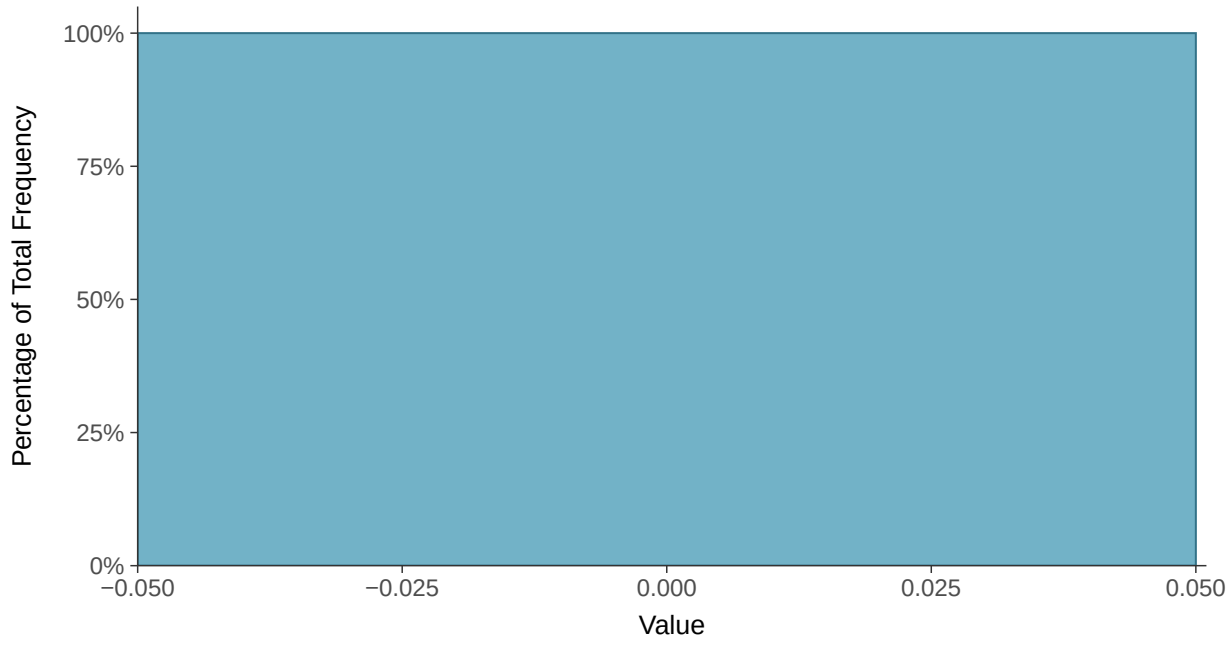
Scatter Plot

Barium, MW-37 (mg/L)



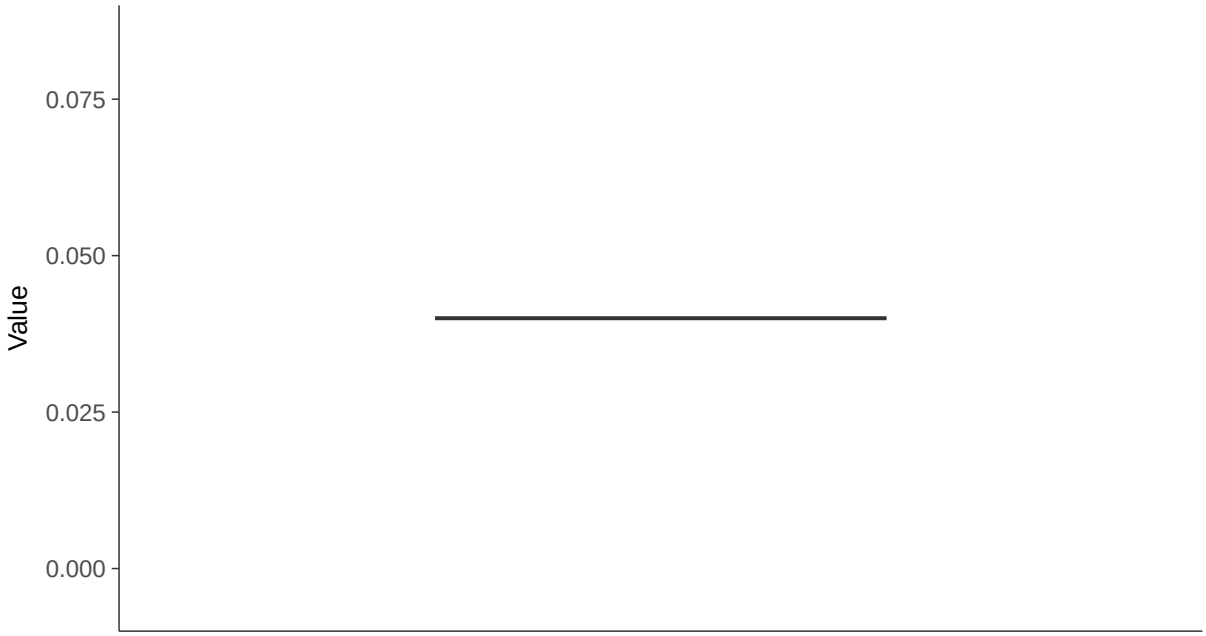
Histogram

Barium, MW-37 (mg/L)



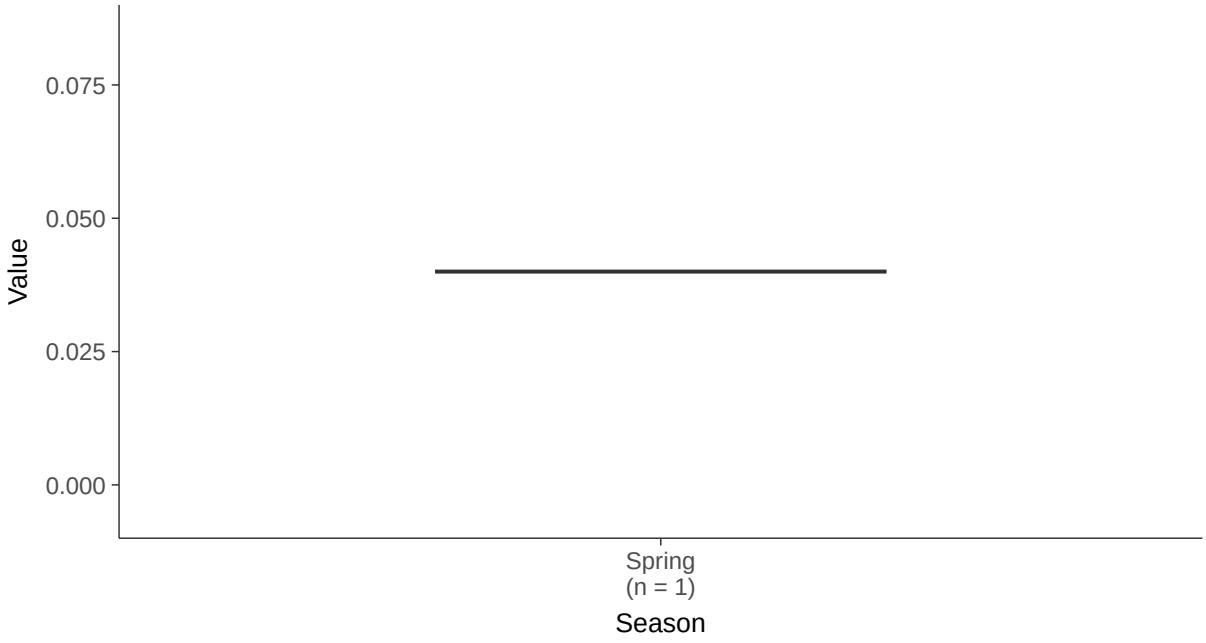
Boxplot

Barium, MW-37 (mg/L)



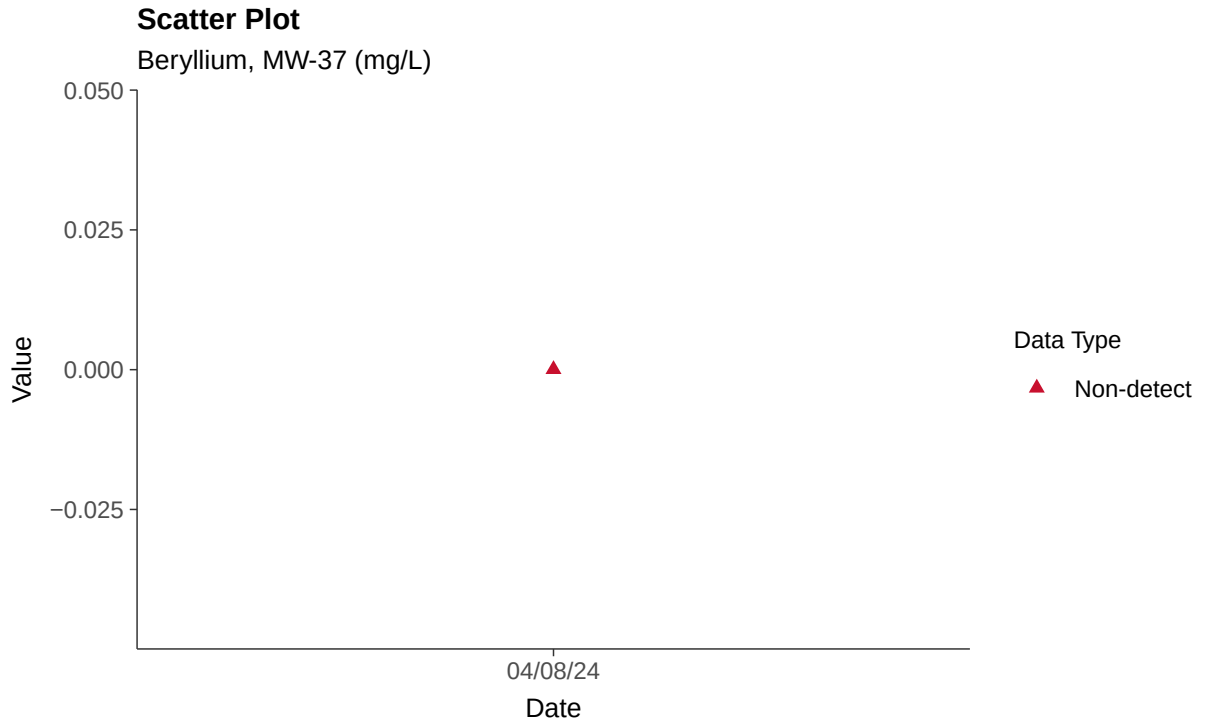
Boxplot by Season

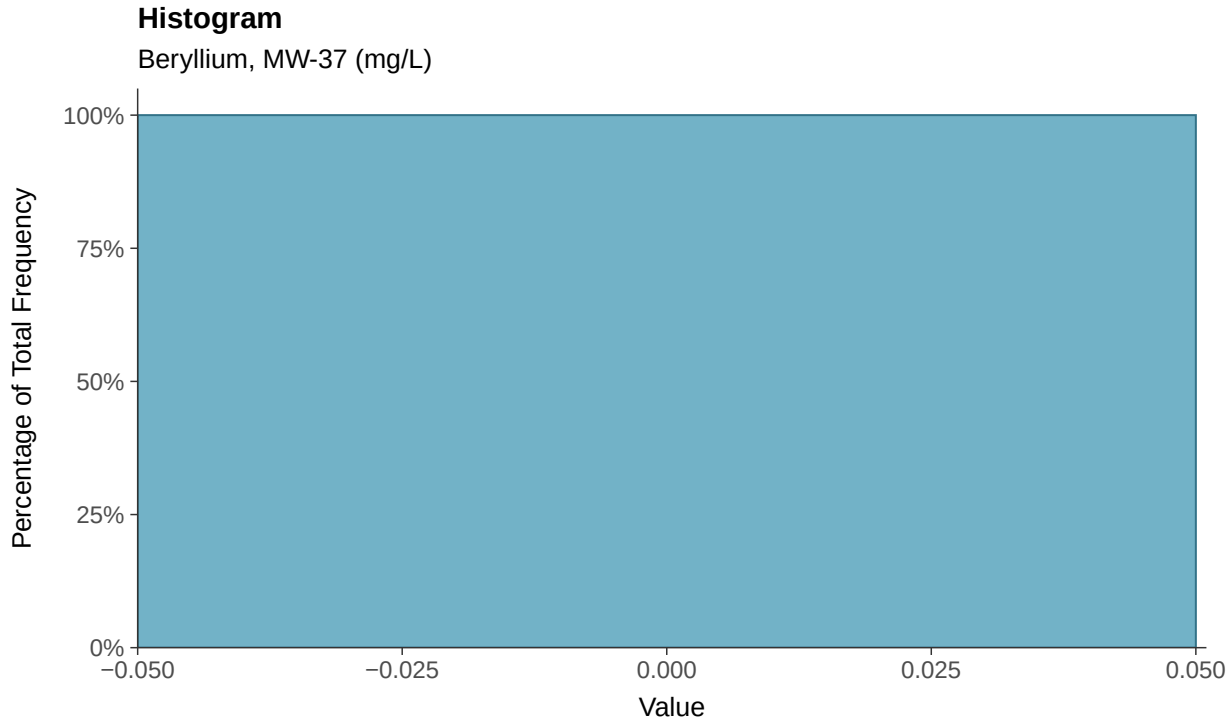
Barium, MW-37 (mg/L)



Appendix IV: Beryllium, MW-37

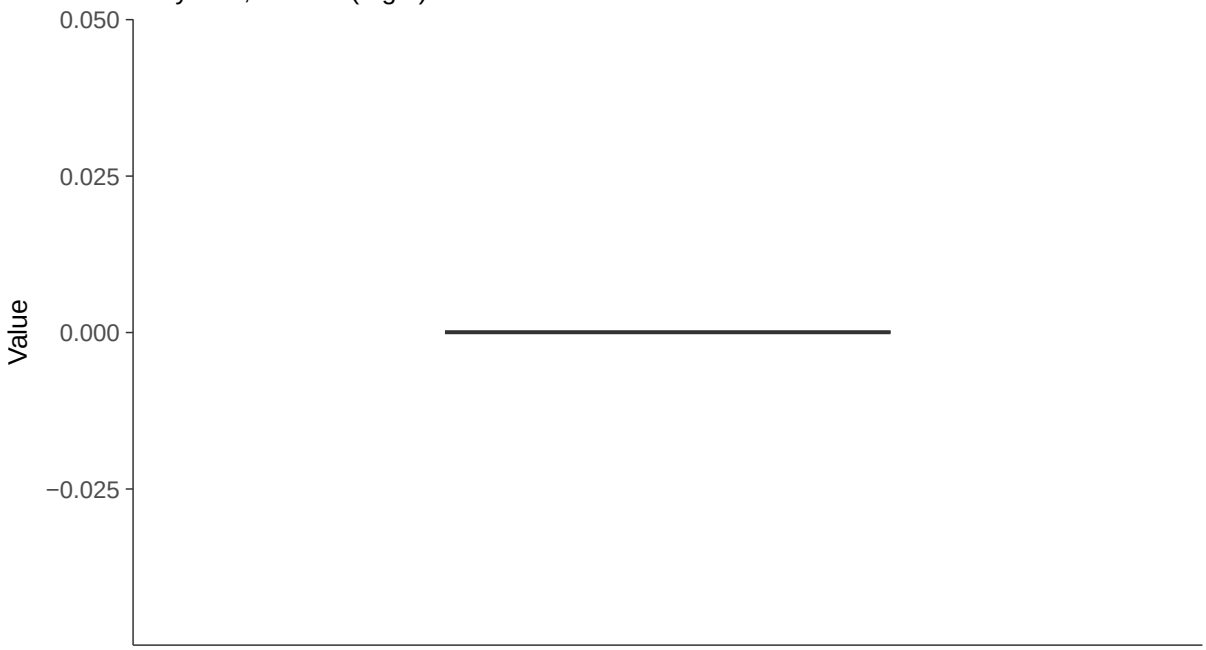
ID: 1_47_5_104





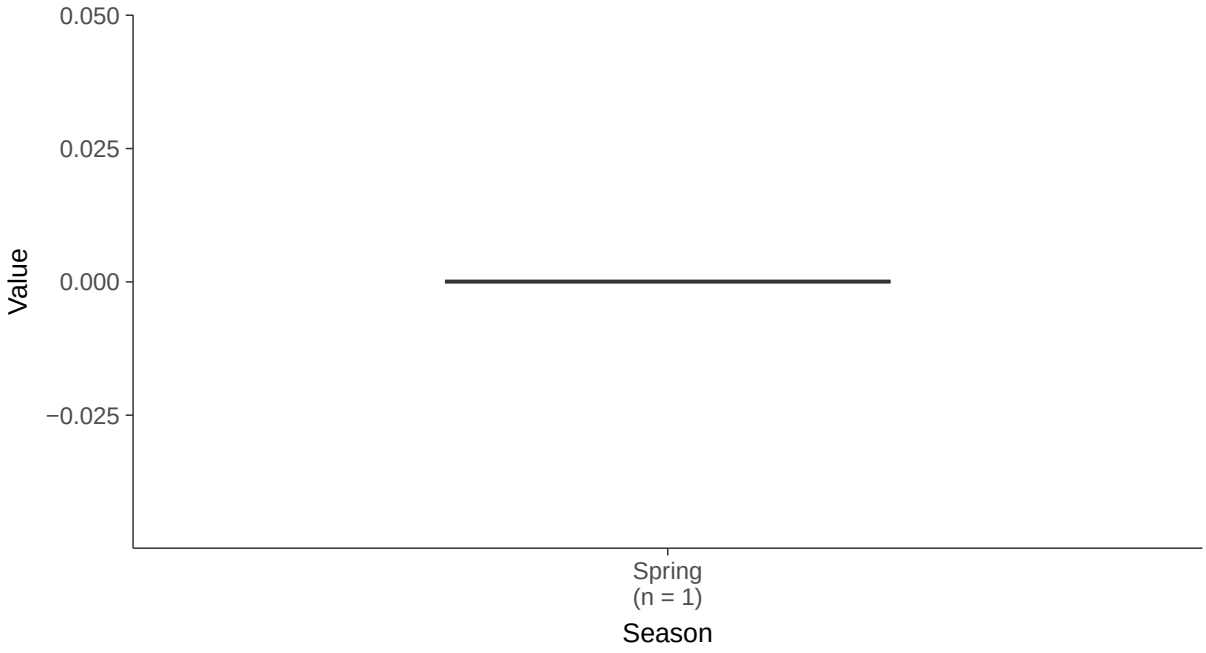
Boxplot

Beryllium, MW-37 (mg/L)



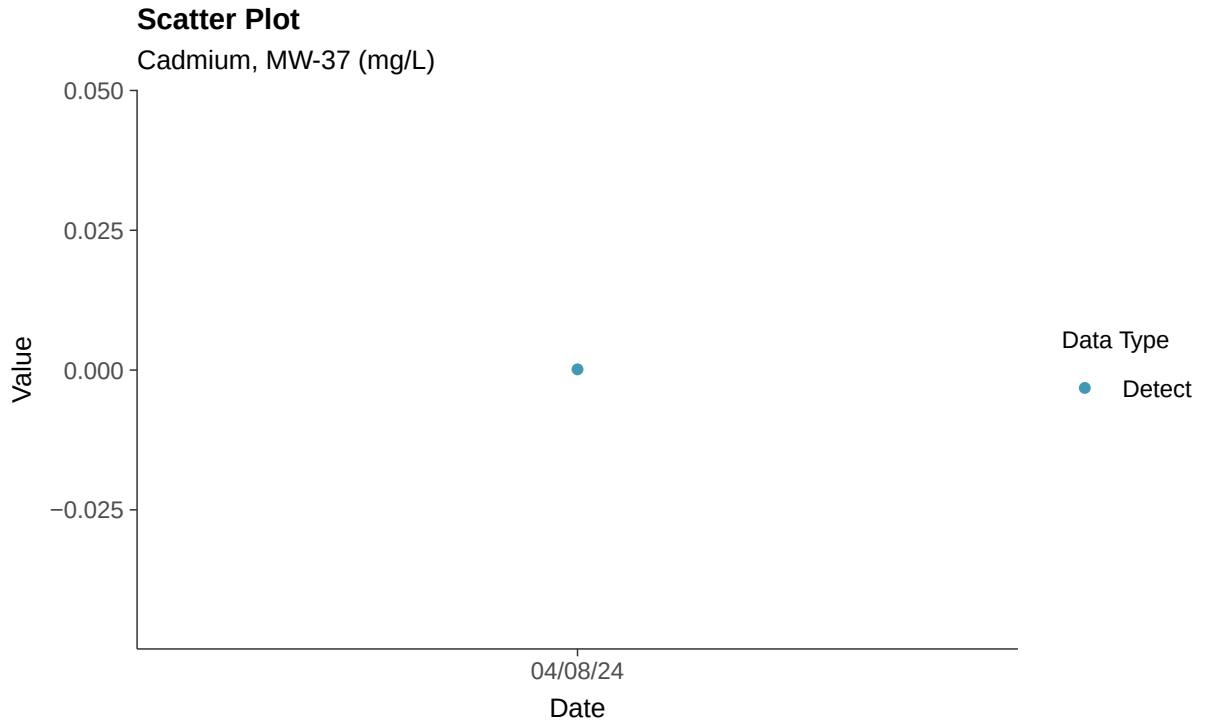
Boxplot by Season

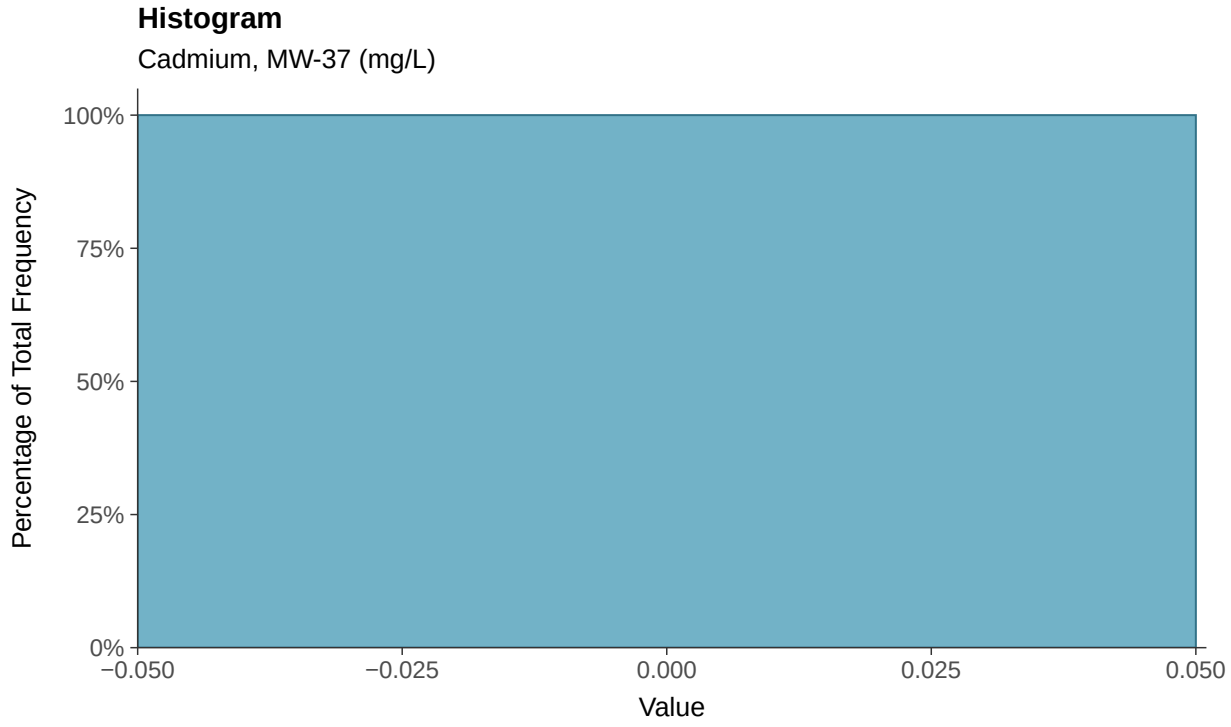
Beryllium, MW-37 (mg/L)



Appendix IV: Cadmium, MW-37

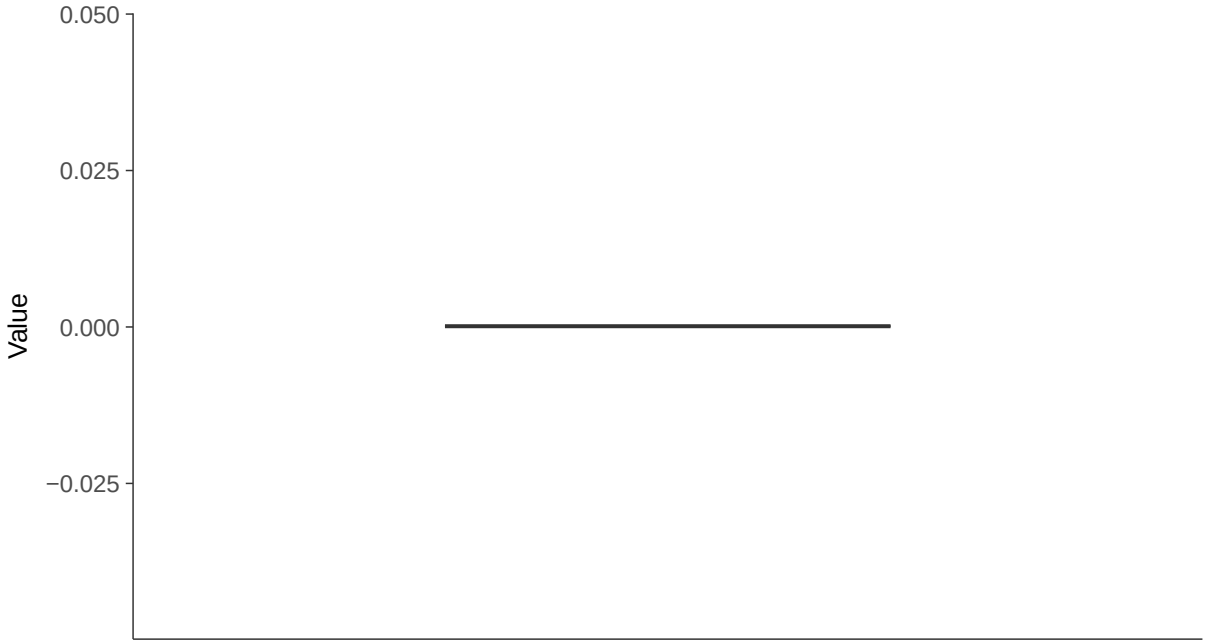
ID: 1_47_5_106





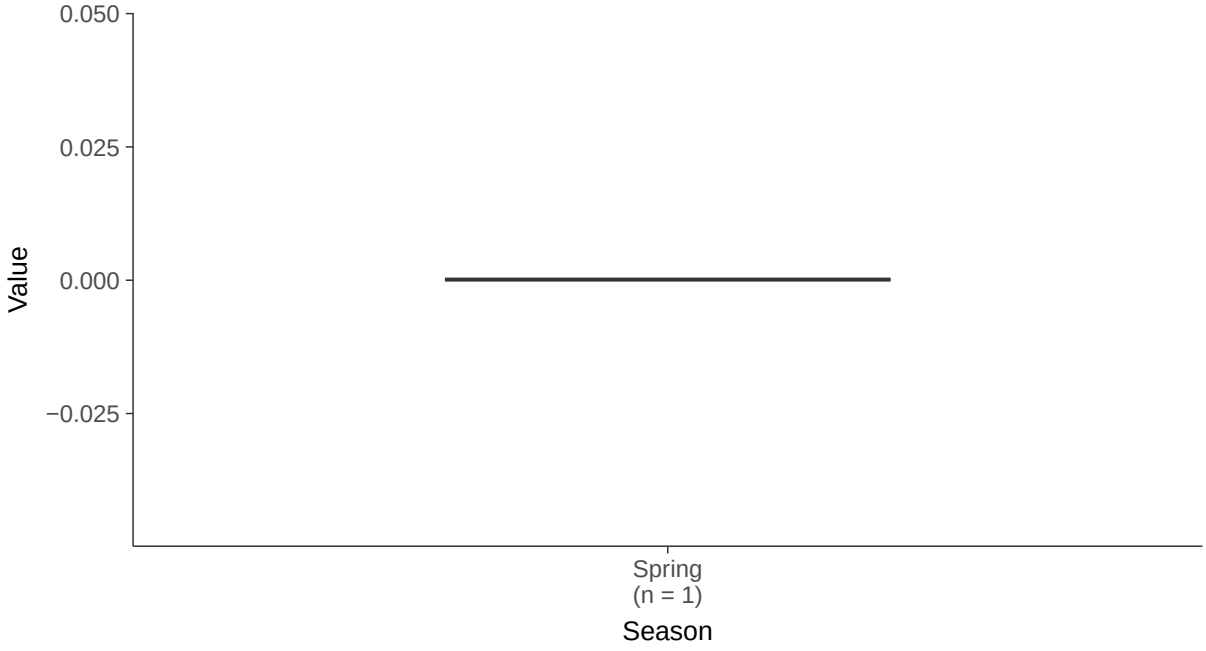
Boxplot

Cadmium, MW-37 (mg/L)



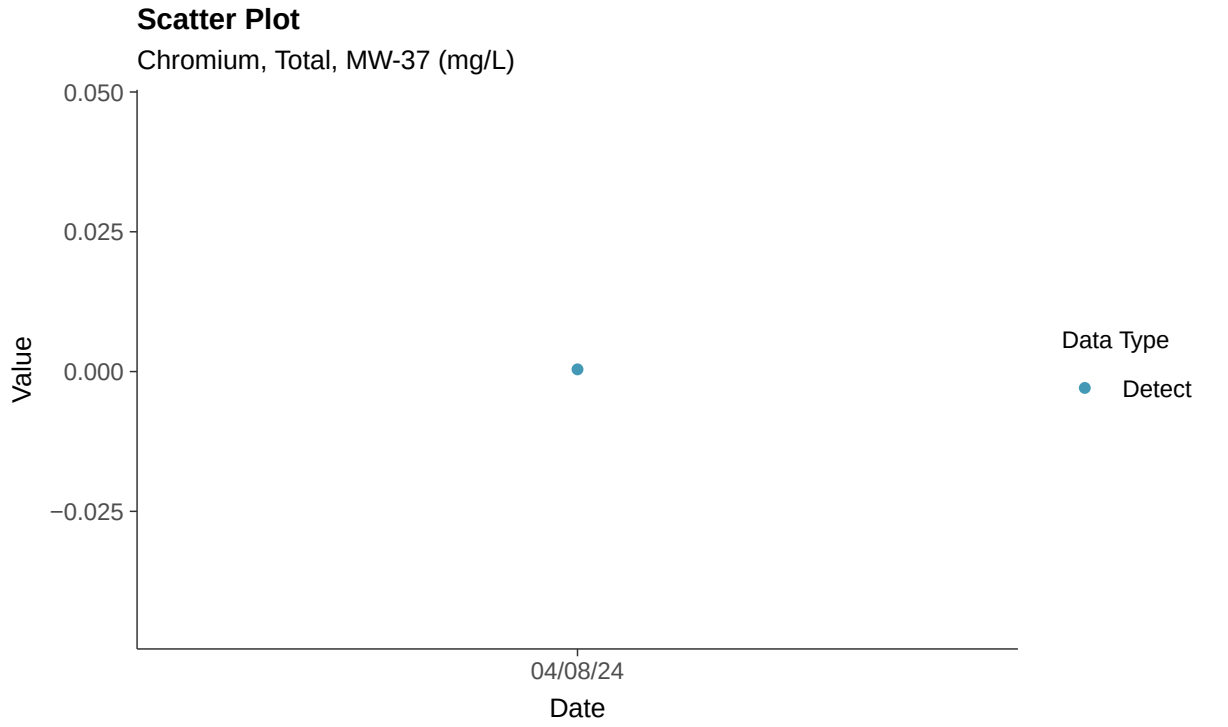
Boxplot by Season

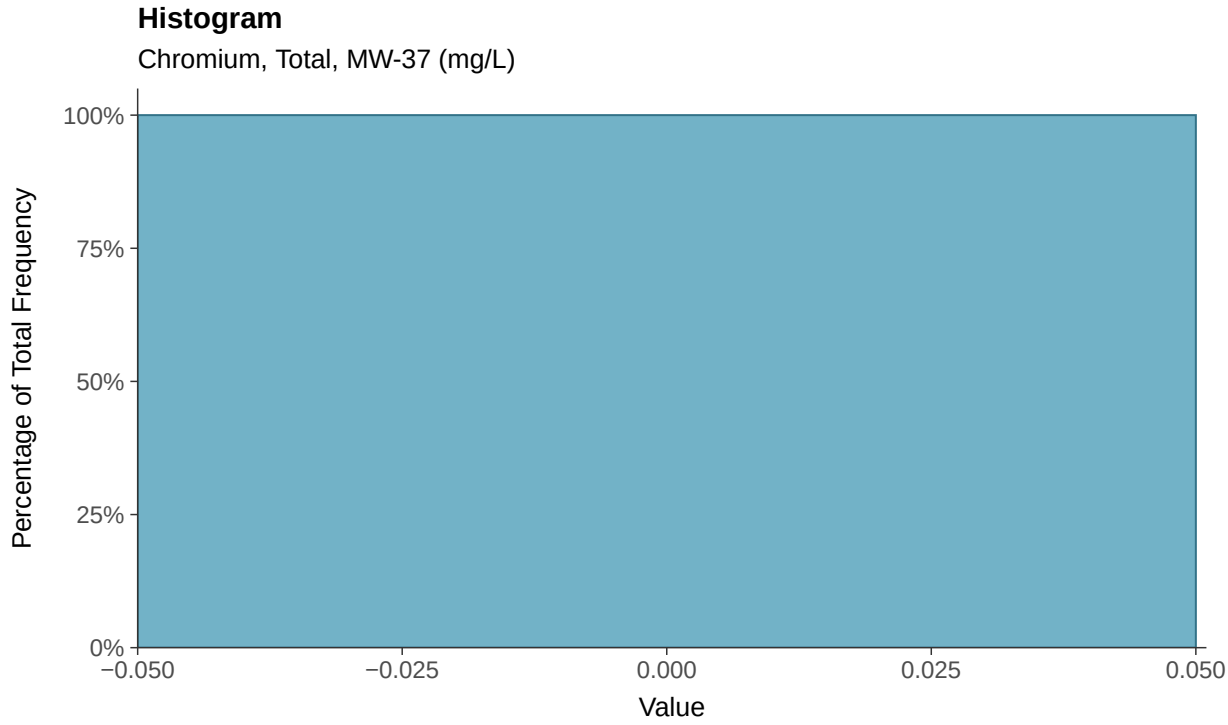
Cadmium, MW-37 (mg/L)



Appendix IV: Chromium, Total, MW-37

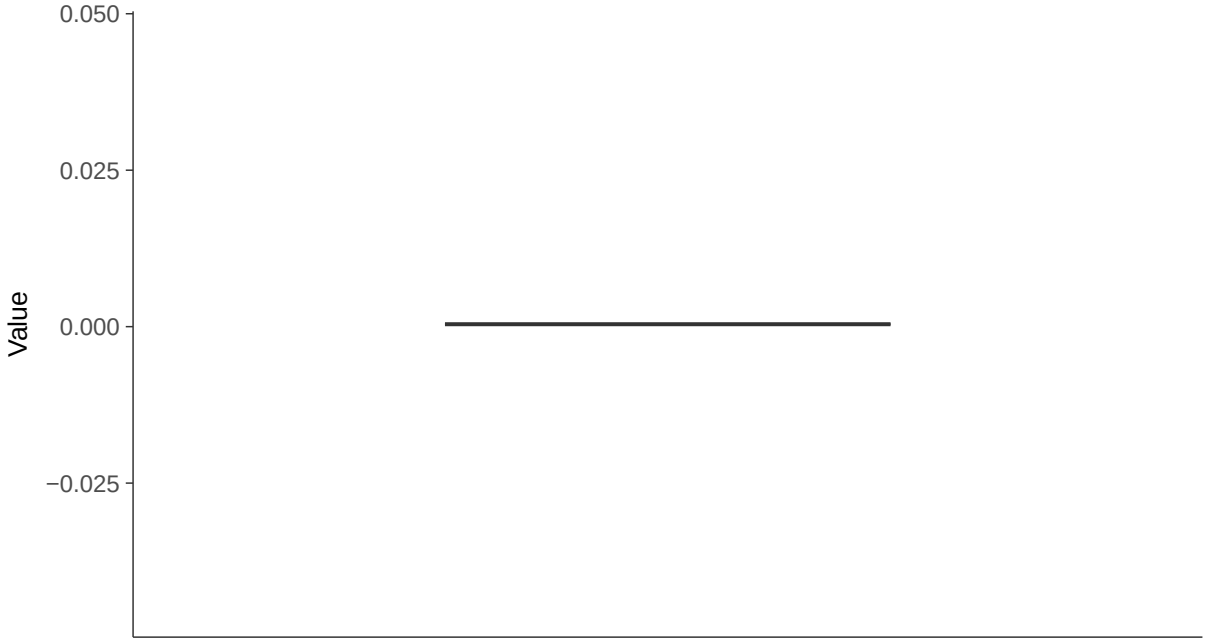
ID: 1_47_5_109





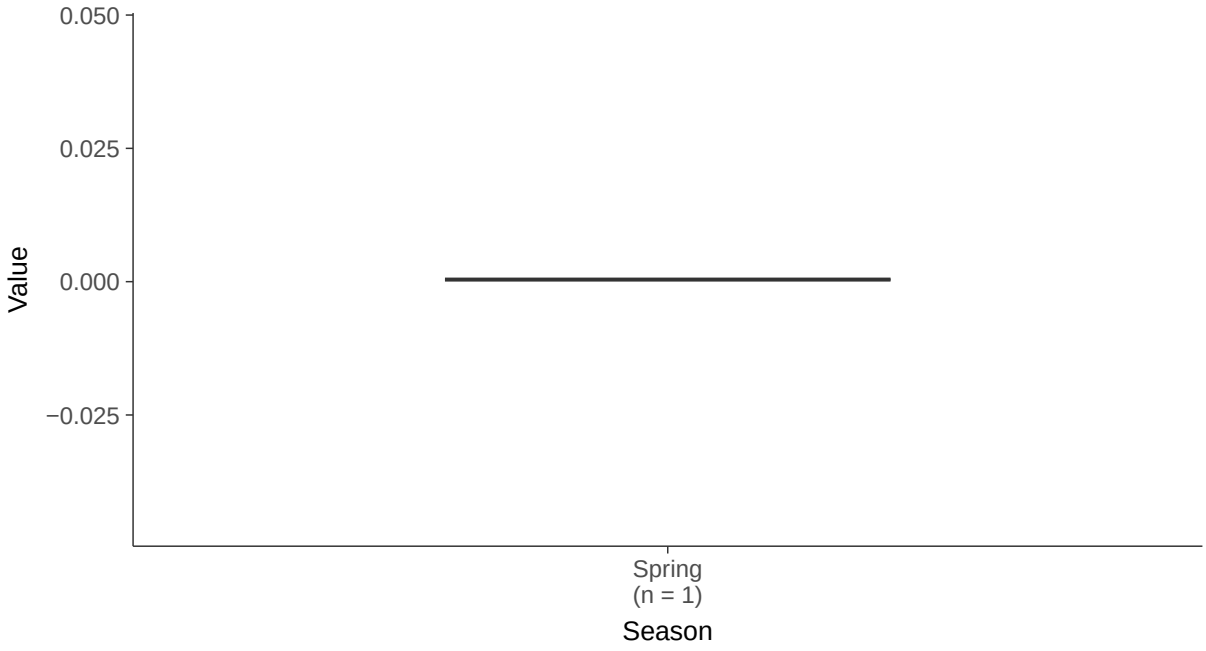
Boxplot

Chromium, Total, MW-37 (mg/L)



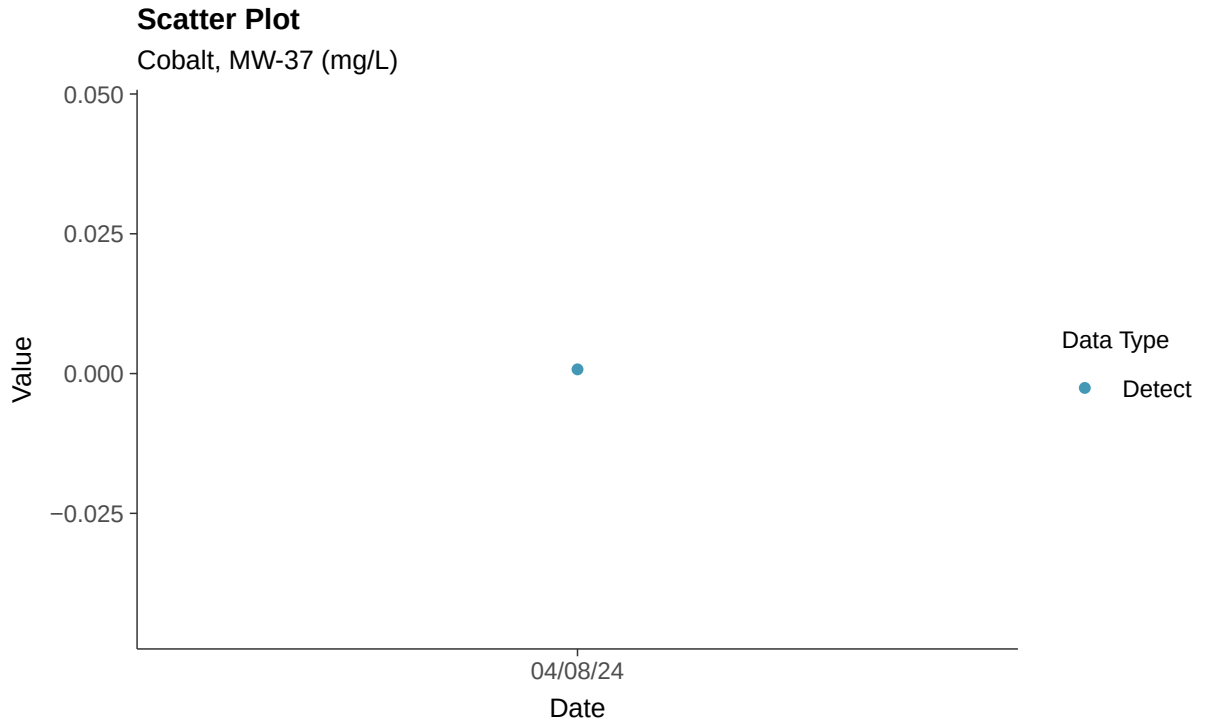
Boxplot by Season

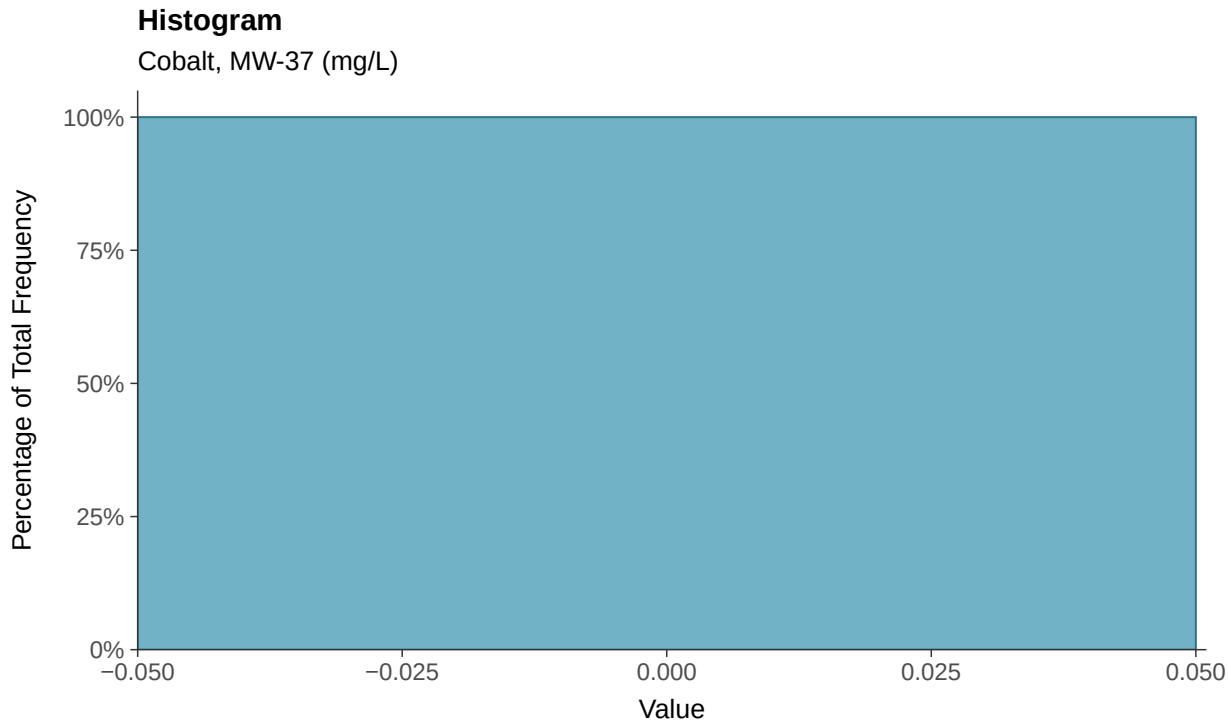
Chromium, Total, MW-37 (mg/L)



Appendix IV: Cobalt, MW-37

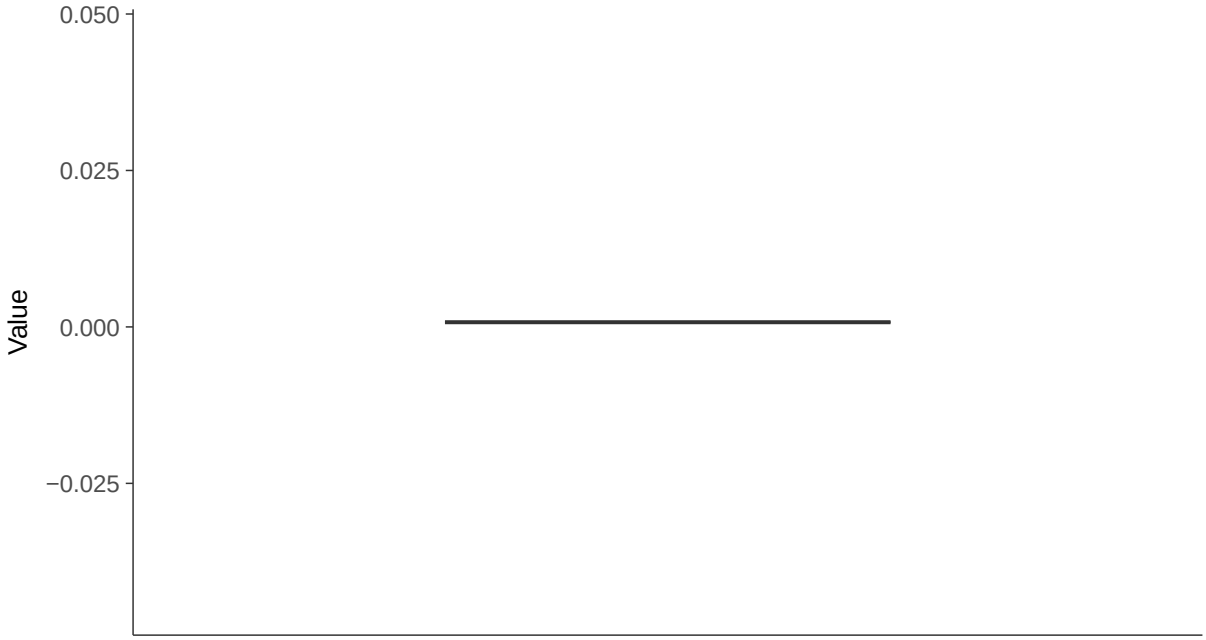
ID: 1_47_5_110





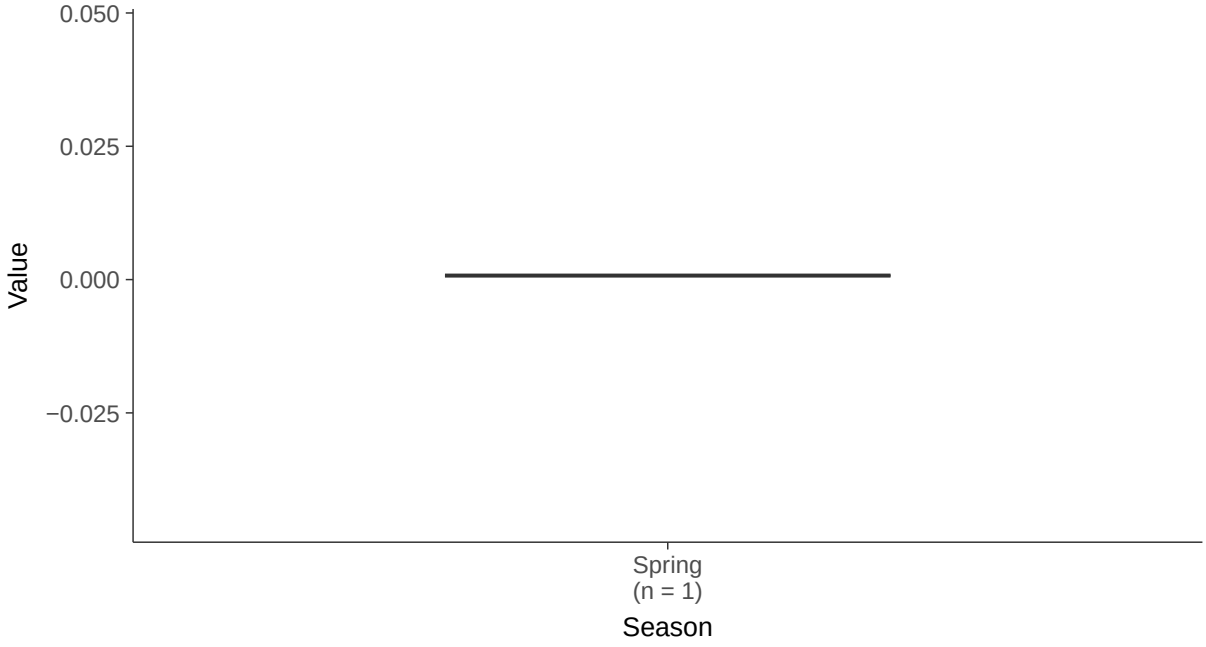
Boxplot

Cobalt, MW-37 (mg/L)



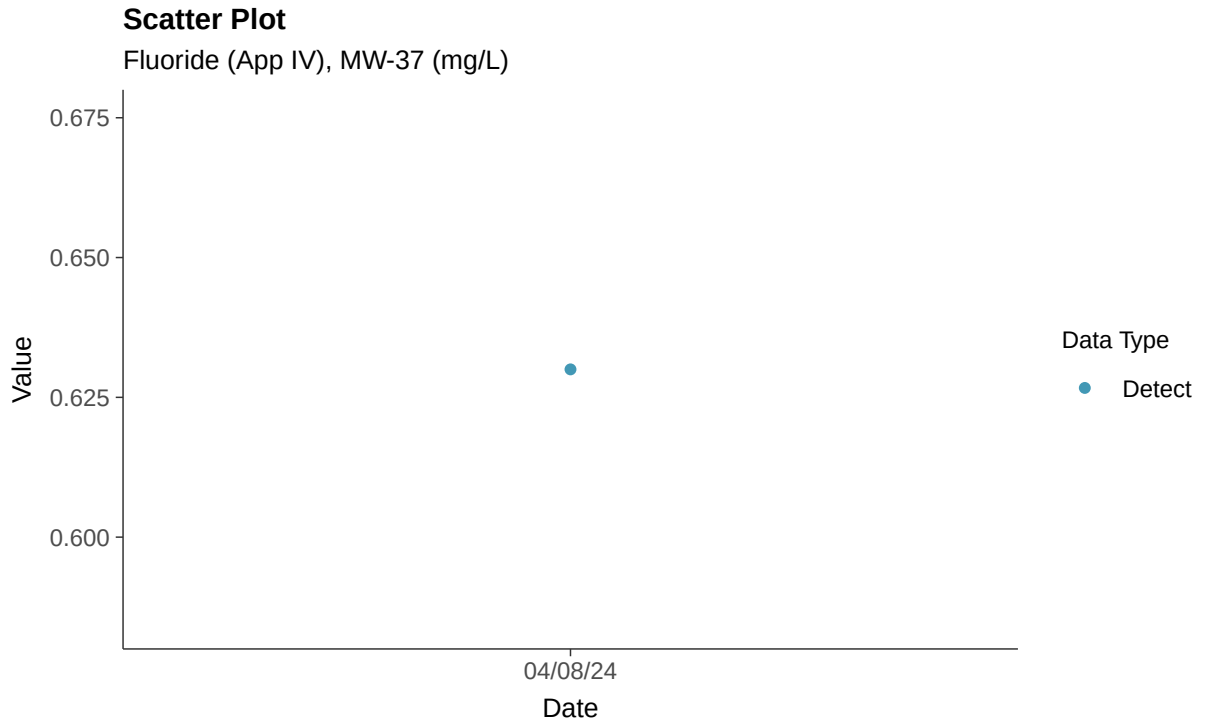
Boxplot by Season

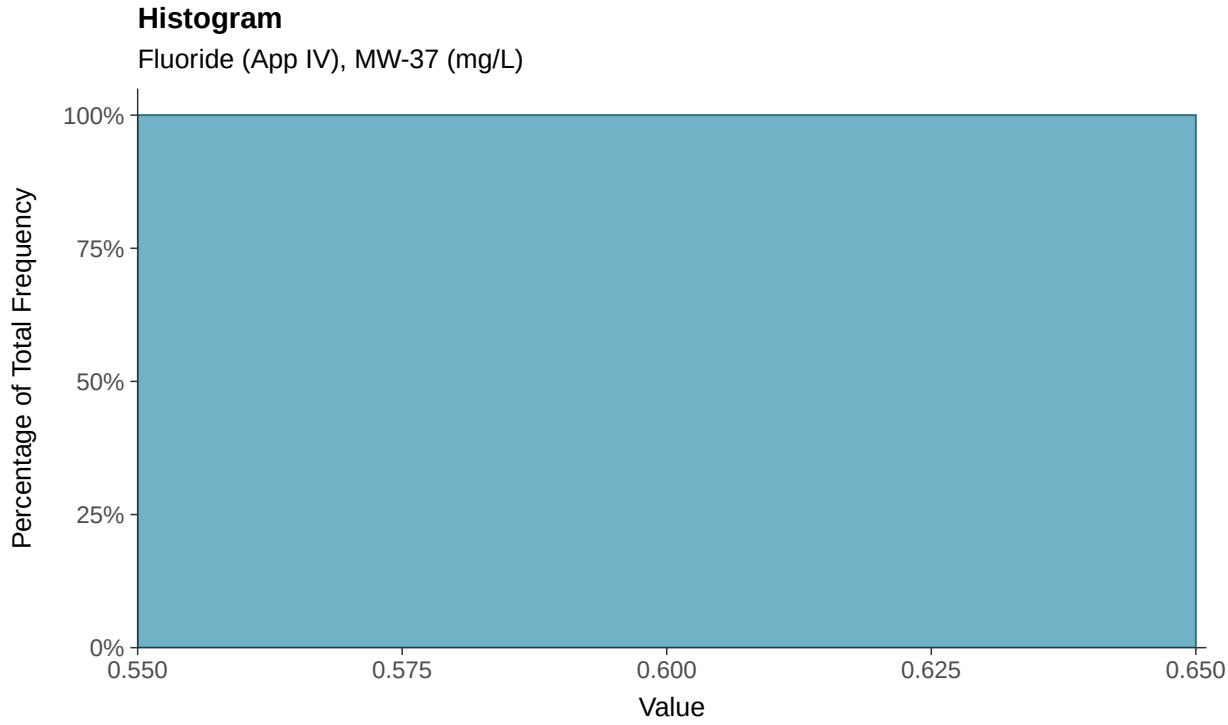
Cobalt, MW-37 (mg/L)



Appendix IV: Fluoride (App IV), MW-37

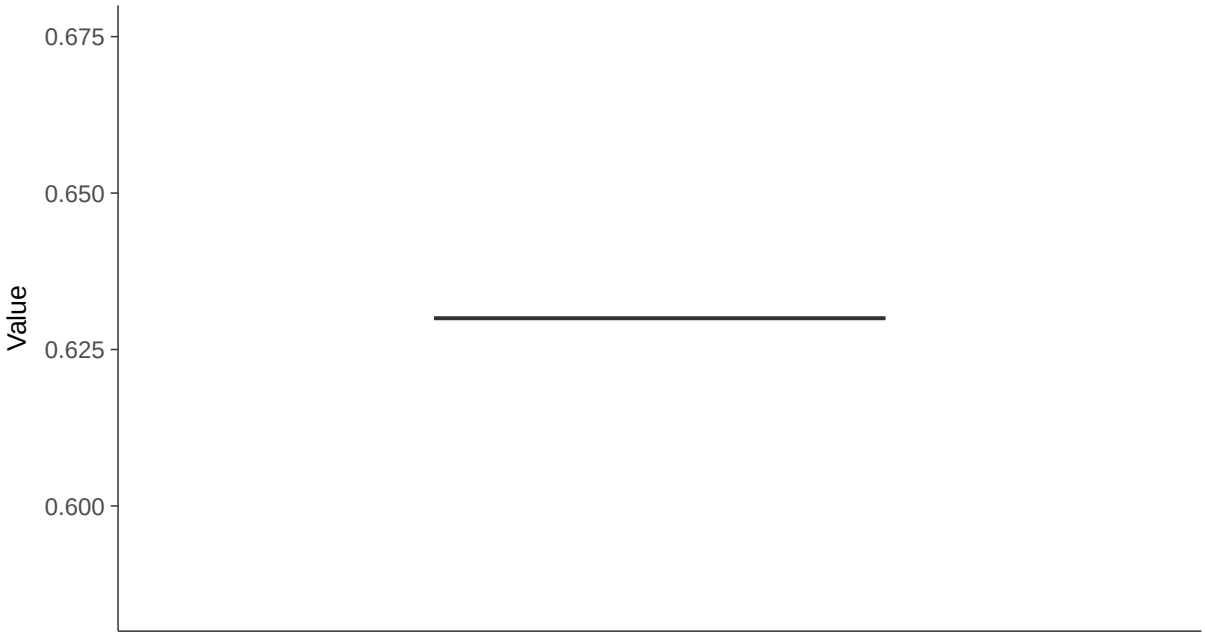
ID: 1_47_5_113





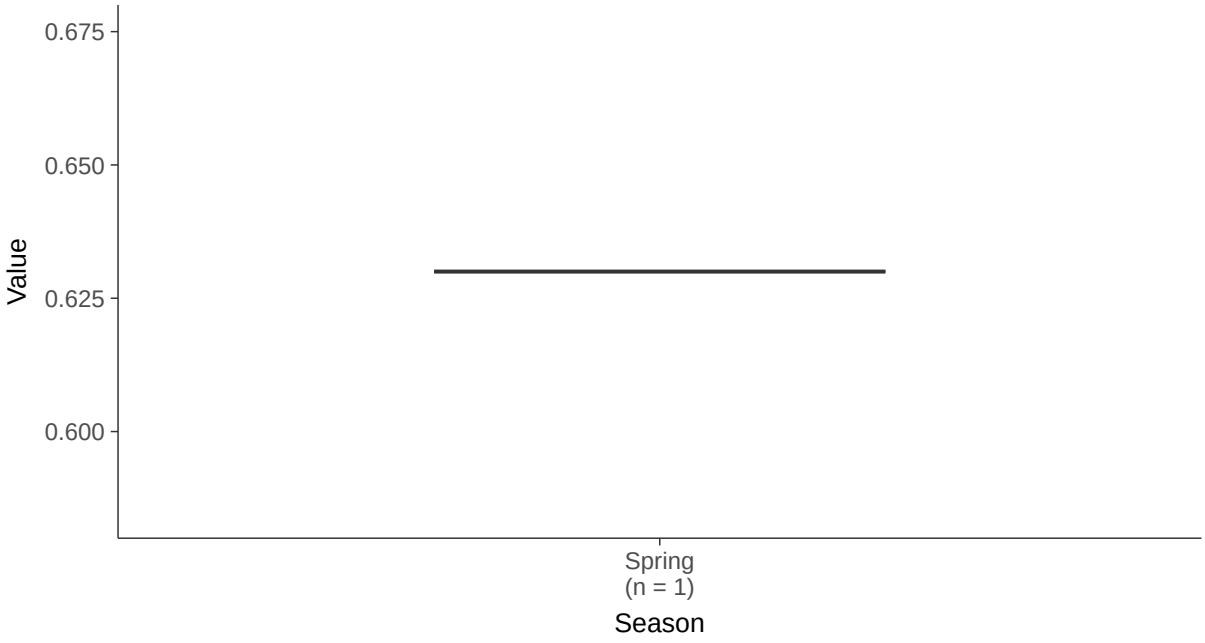
Boxplot

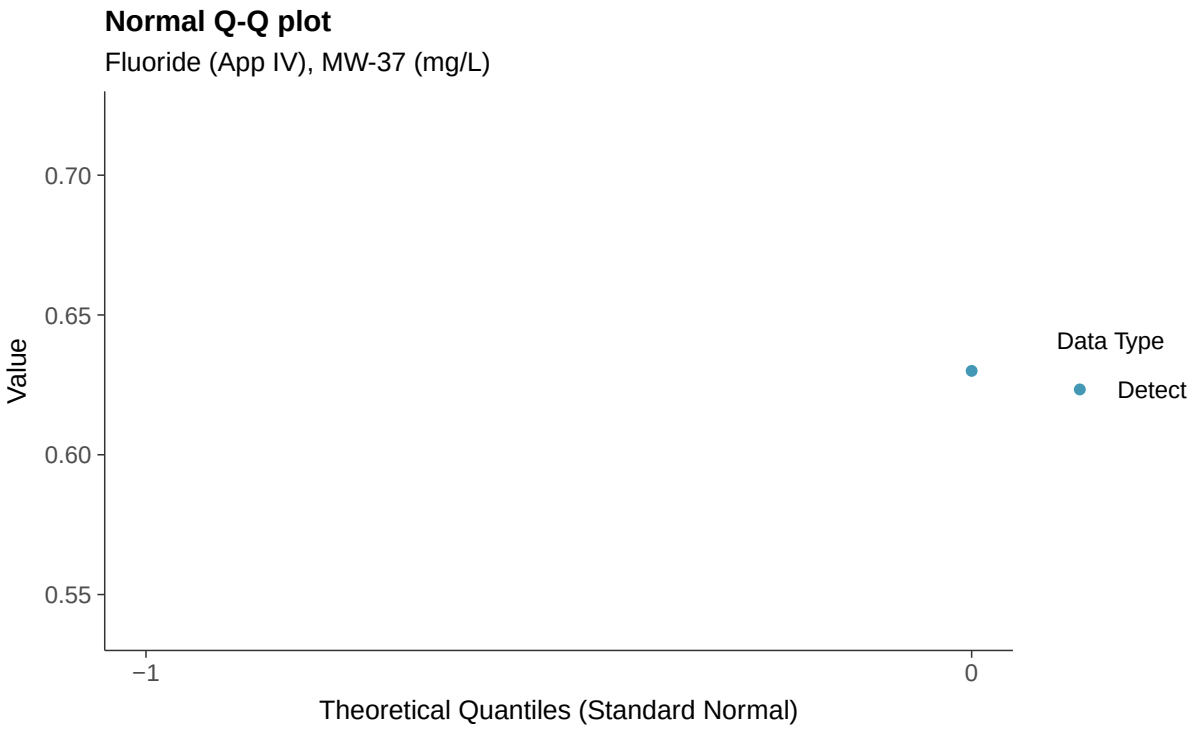
Fluoride (App IV), MW-37 (mg/L)



Boxplot by Season

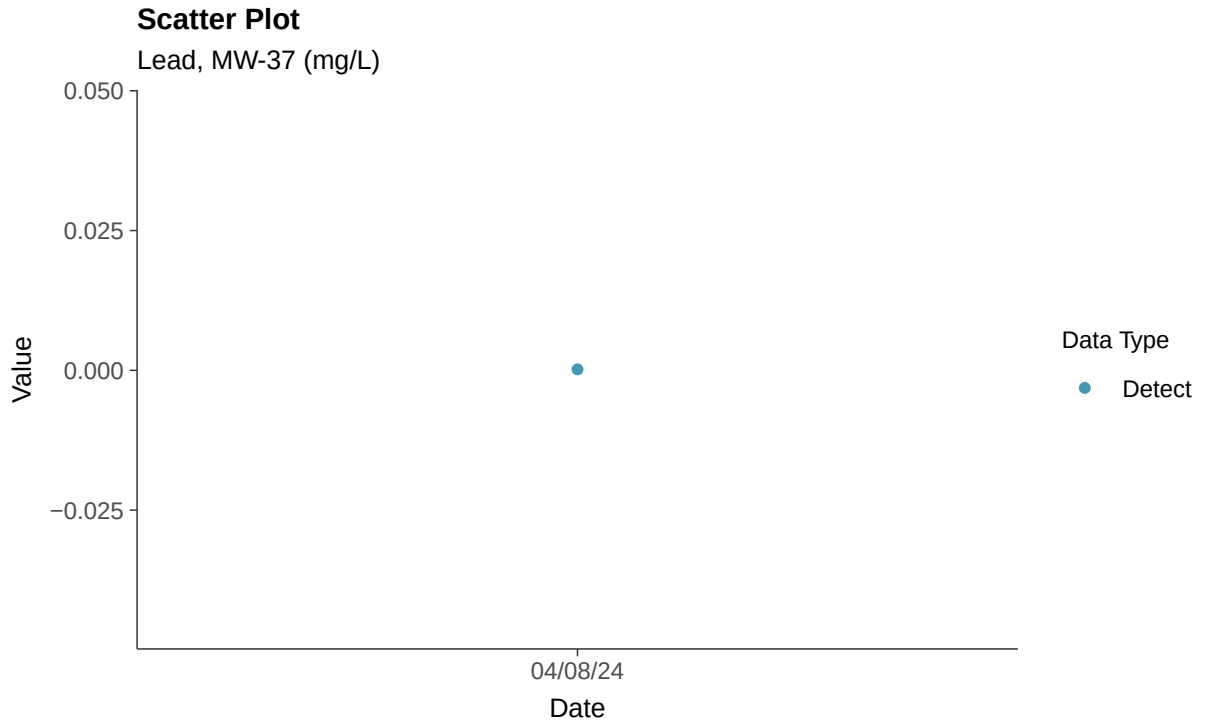
Fluoride (App IV), MW-37 (mg/L)

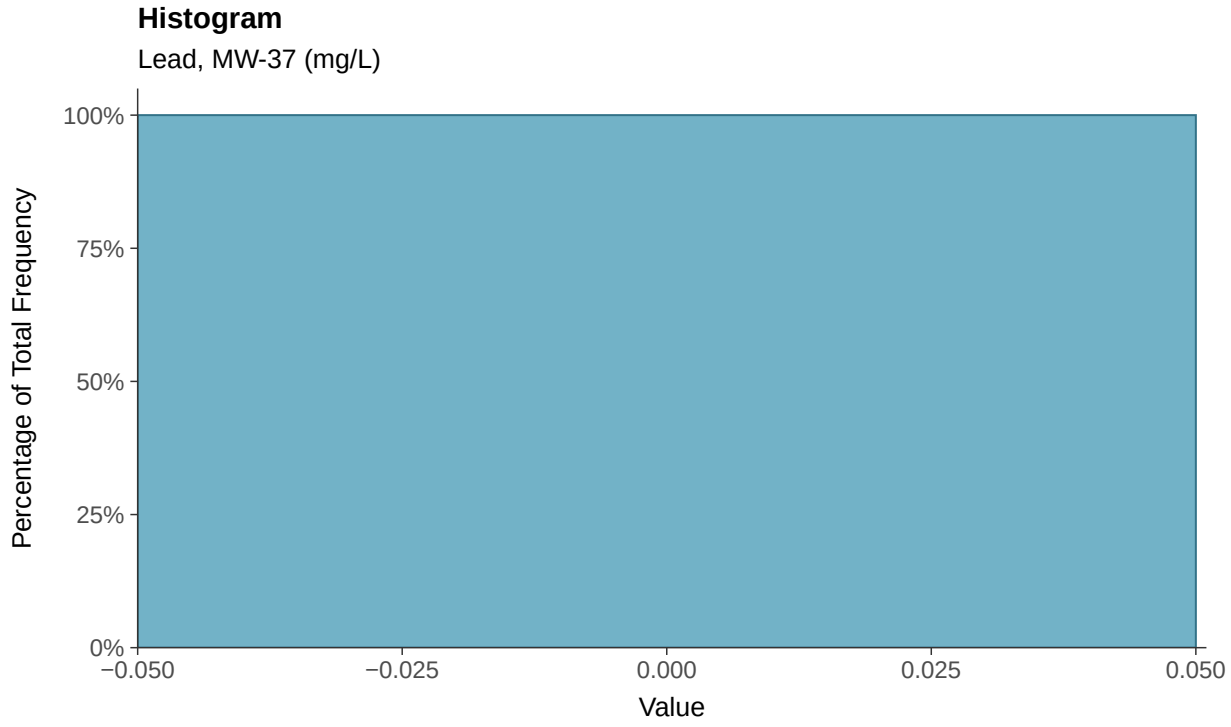



Normal Q-Q plot
Fluoride (App IV), MW-37 (mg/L)
Value
0.70
0.65
0.60
0.55
−1
0
Theoretical Quantiles (Standard Normal)
Data Type
Detect

Appendix IV: Lead, MW-37

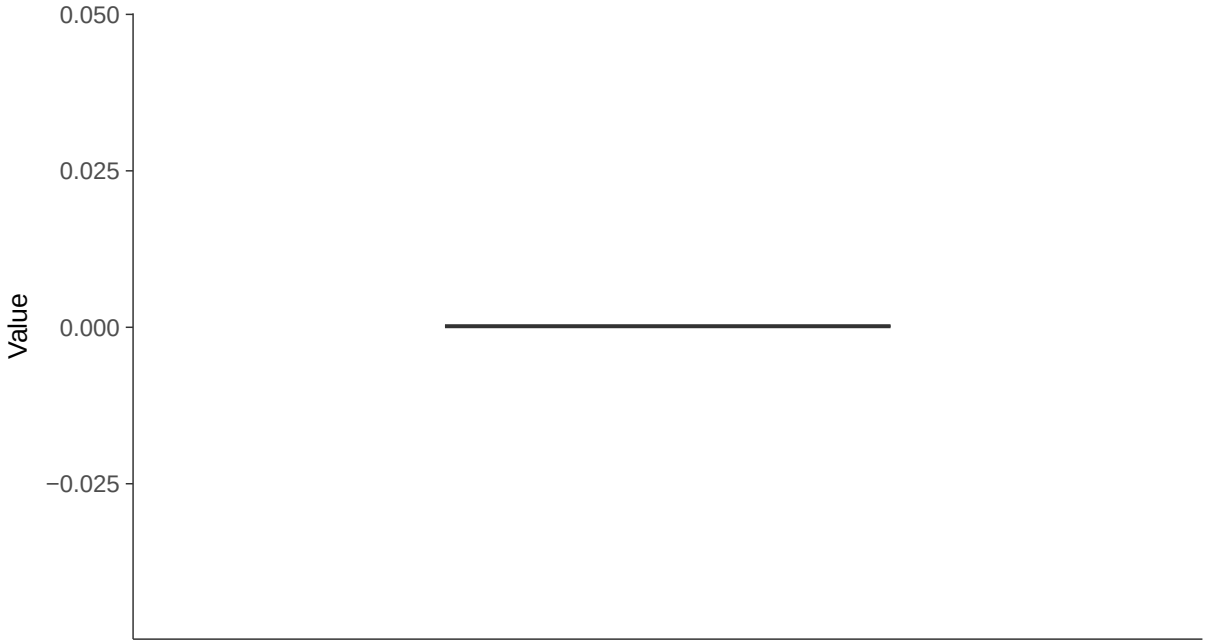
ID: 1_47_5_115





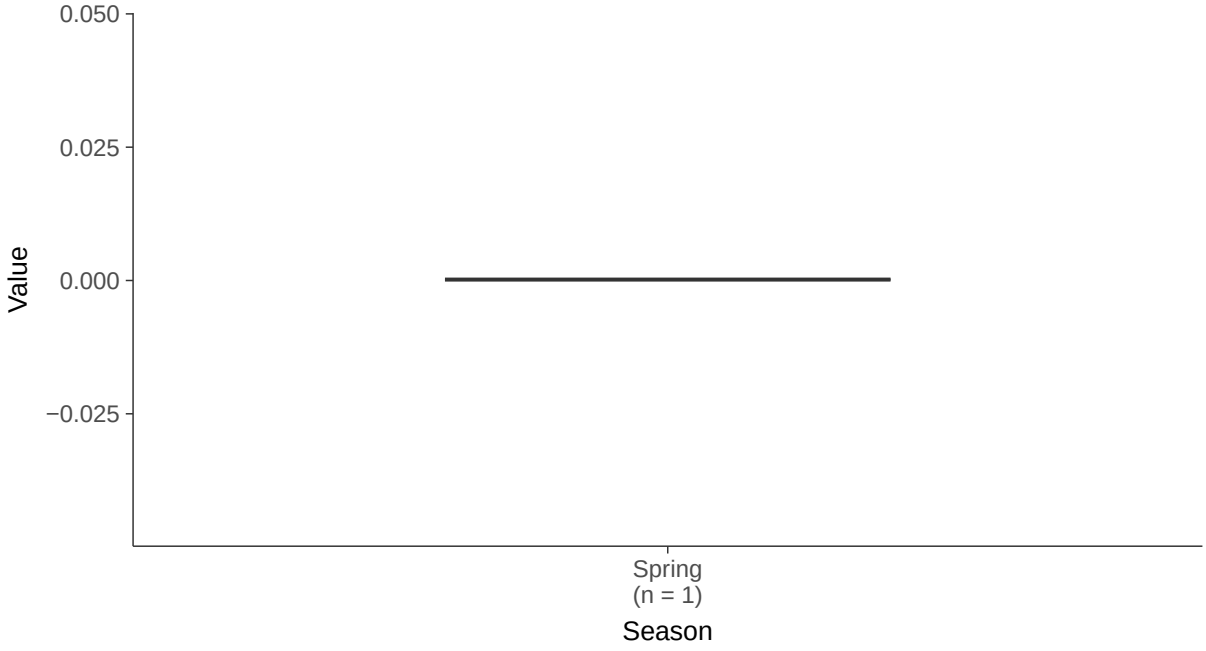
Boxplot

Lead, MW-37 (mg/L)



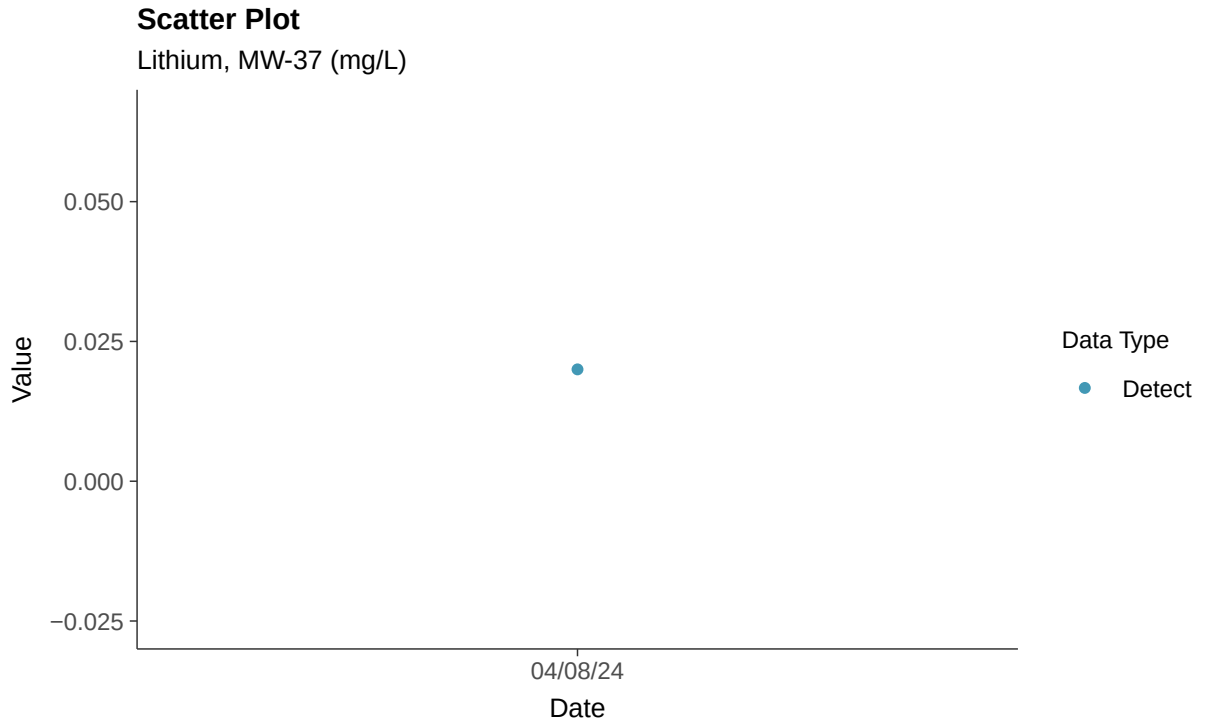
Boxplot by Season

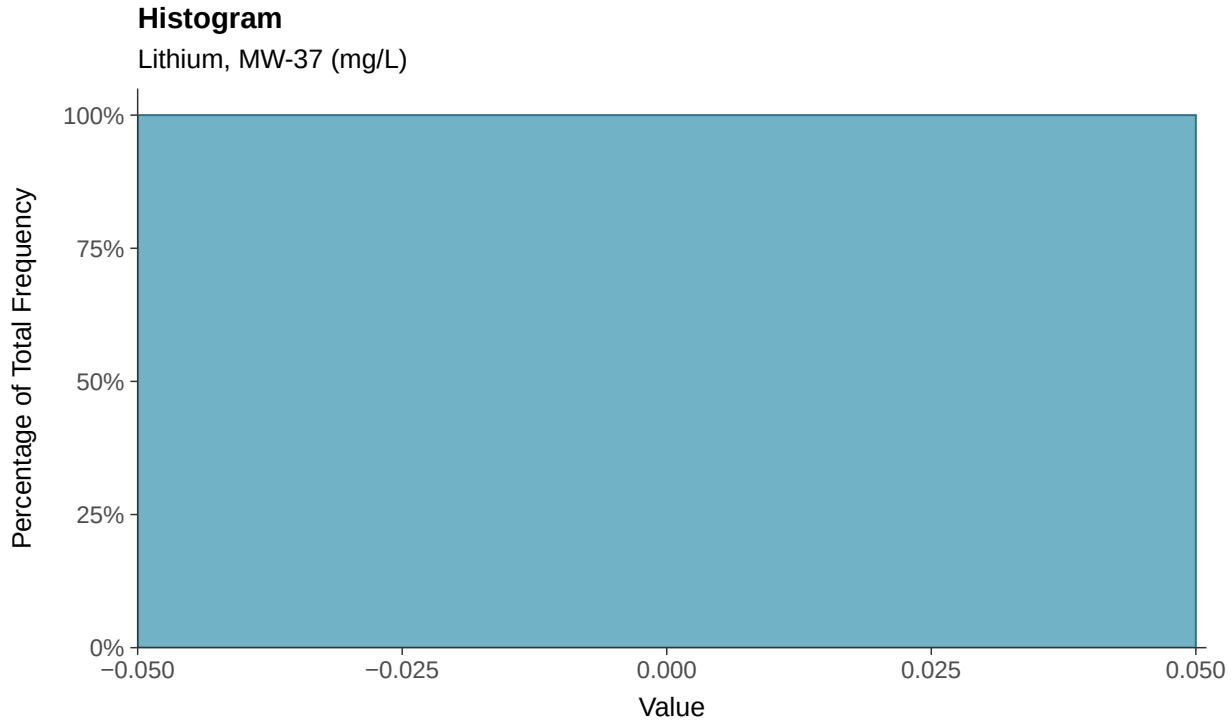
Lead, MW-37 (mg/L)



Appendix IV: Lithium, MW-37

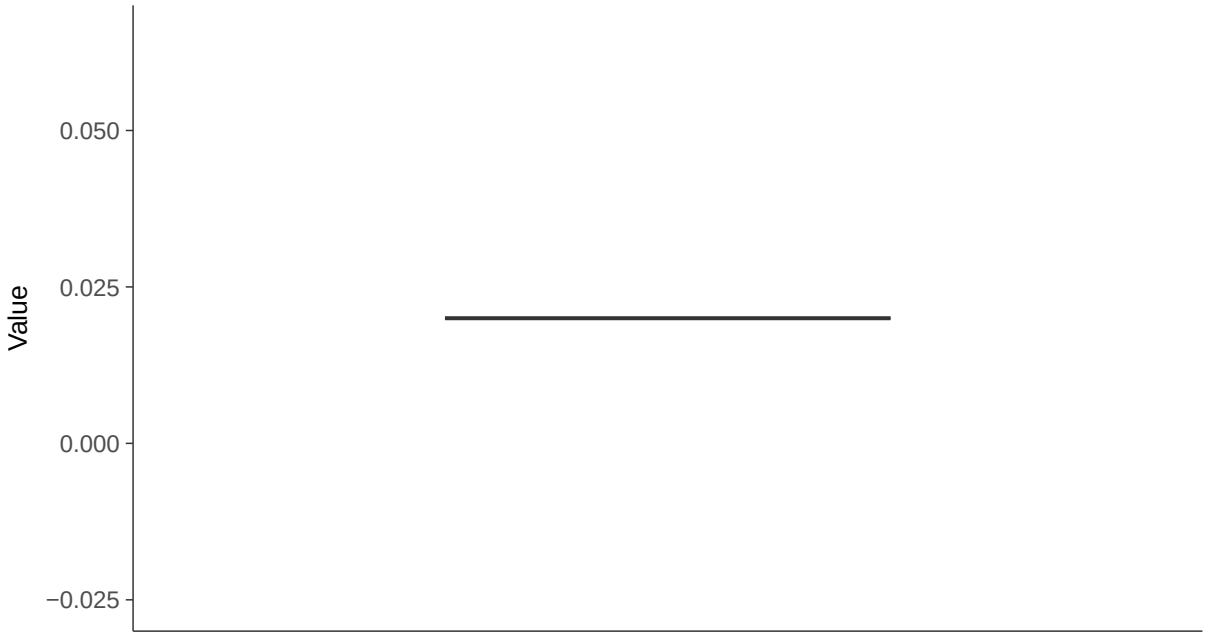
ID: 1_47_5_116





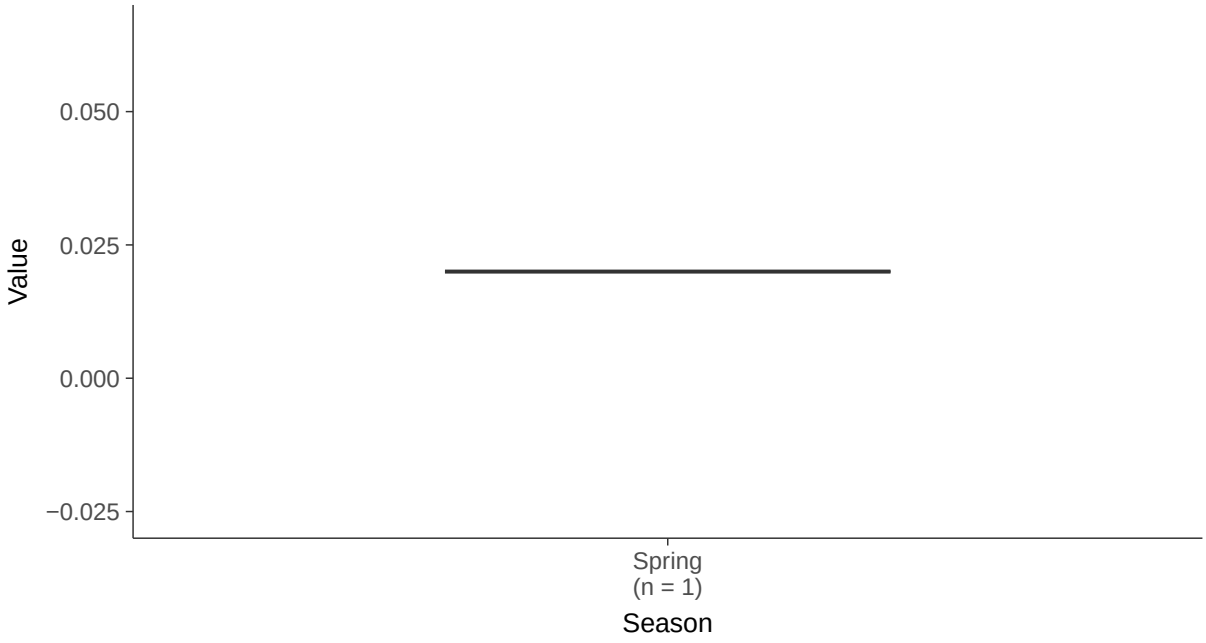
Boxplot

Lithium, MW-37 (mg/L)



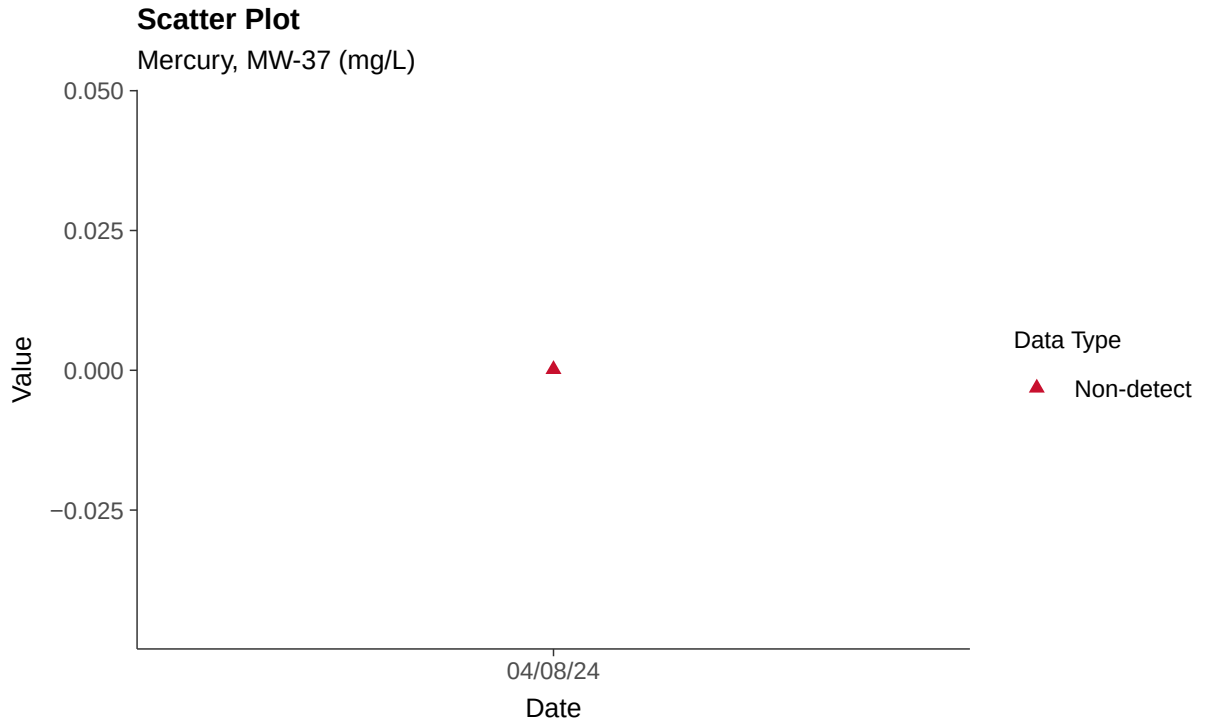
Boxplot by Season

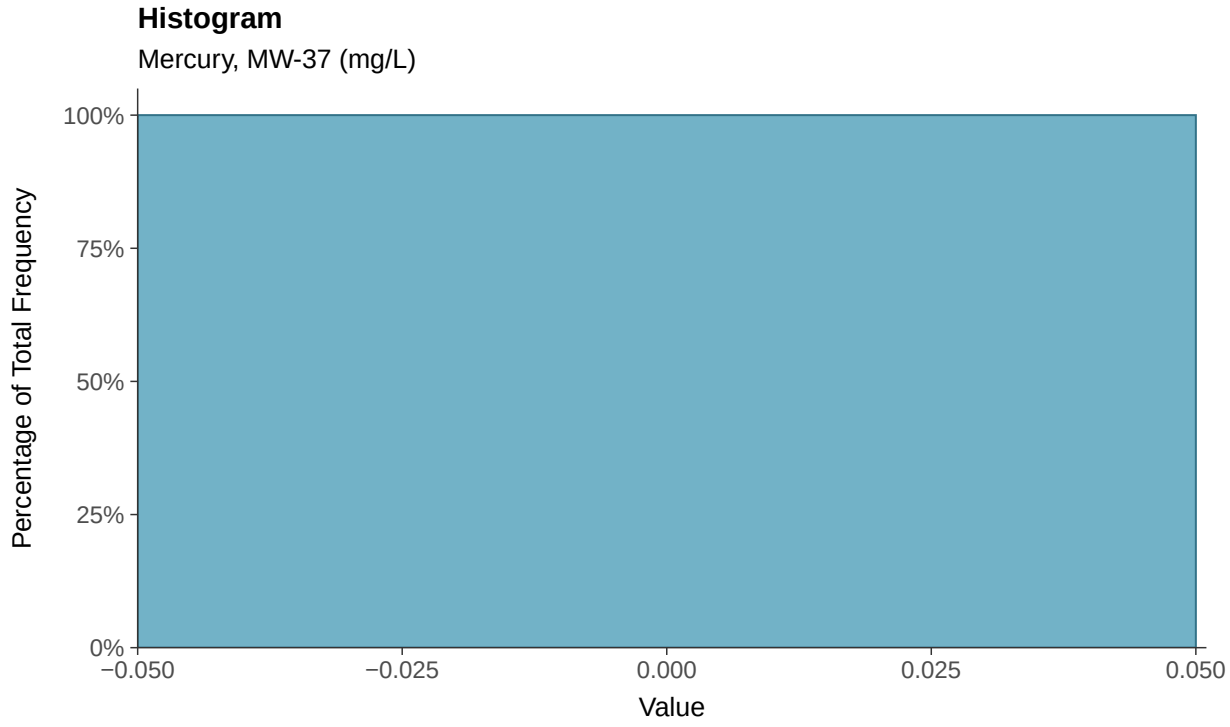
Lithium, MW-37 (mg/L)



Appendix IV: Mercury, MW-37

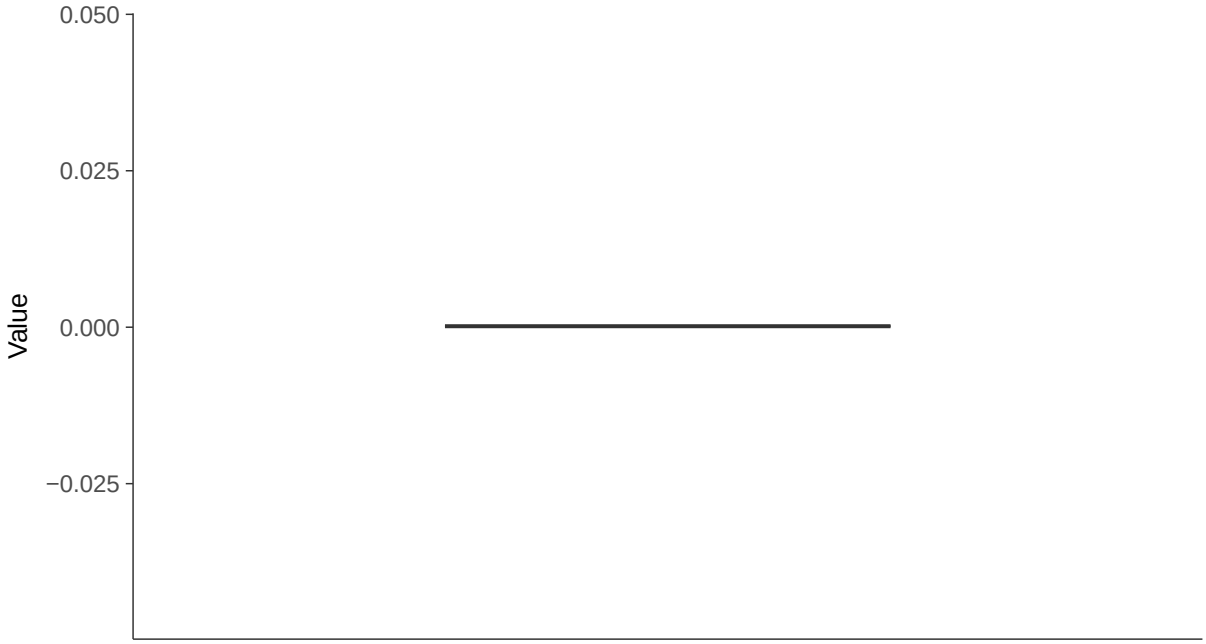
ID: 1_47_5_117





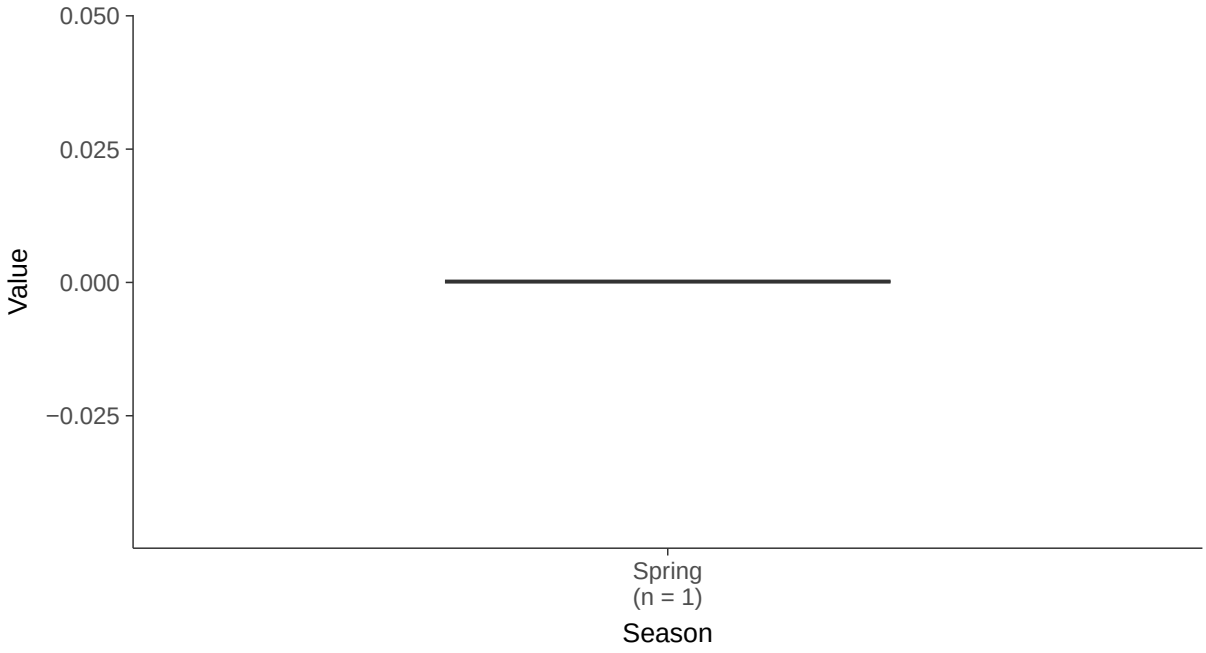
Boxplot

Mercury, MW-37 (mg/L)



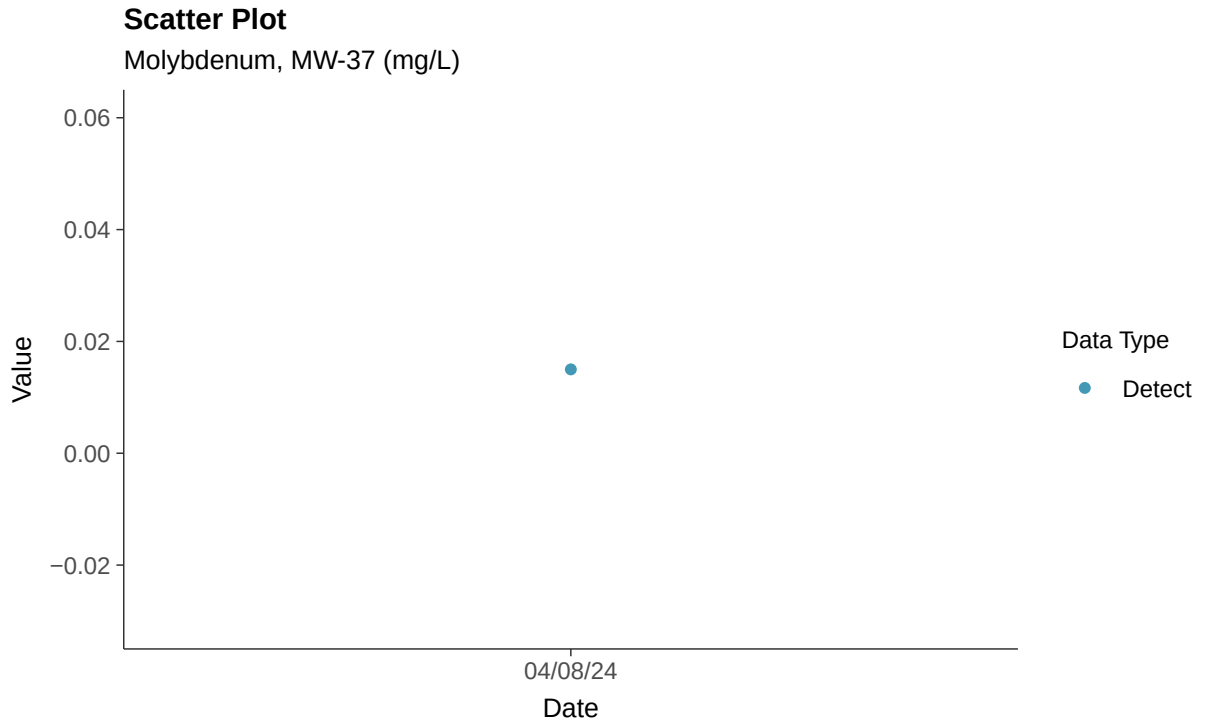
Boxplot by Season

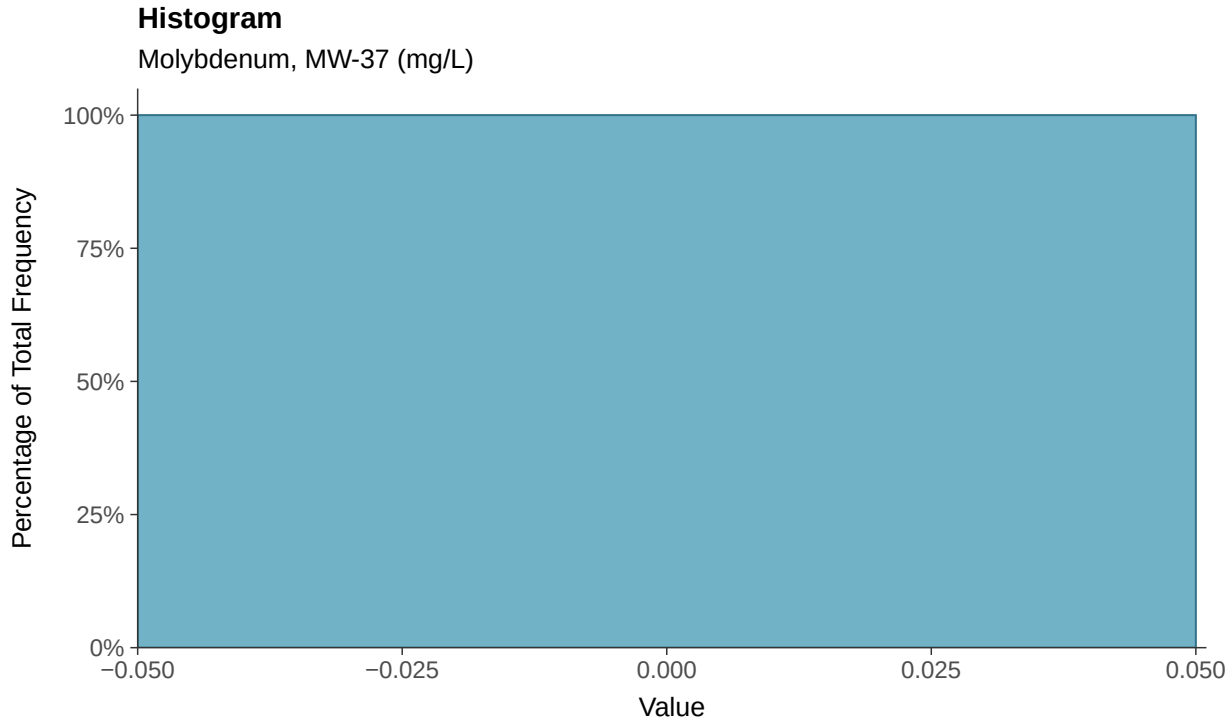
Mercury, MW-37 (mg/L)



Appendix IV: Molybdenum, MW-37

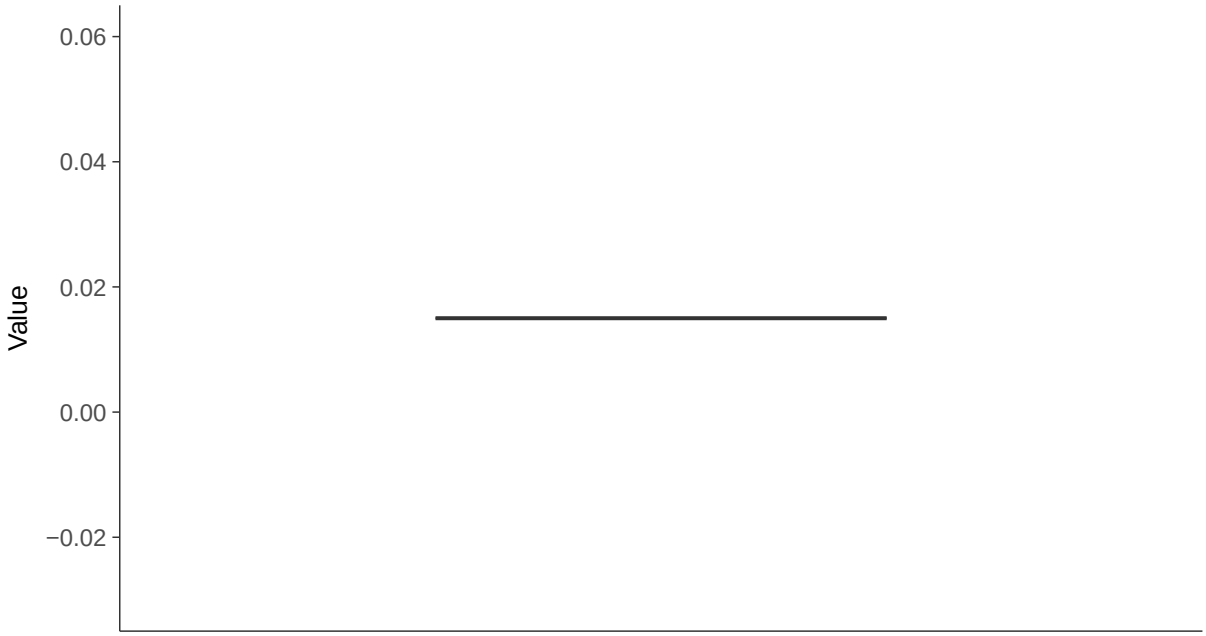
ID: 1_47_5_118





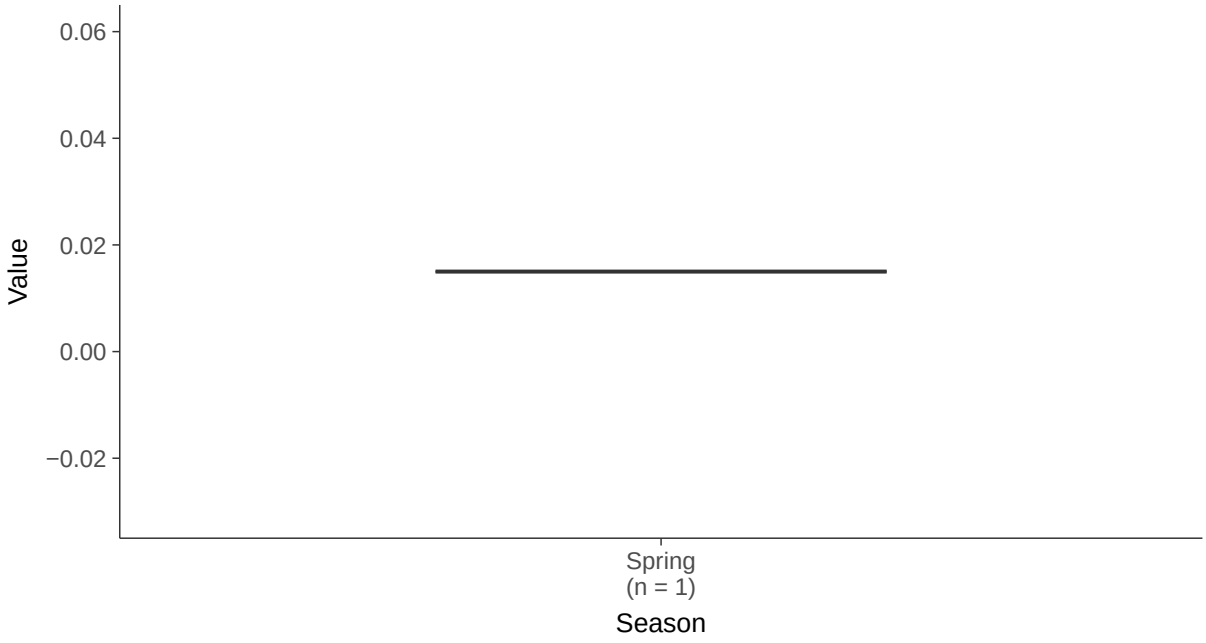
Boxplot

Molybdenum, MW-37 (mg/L)



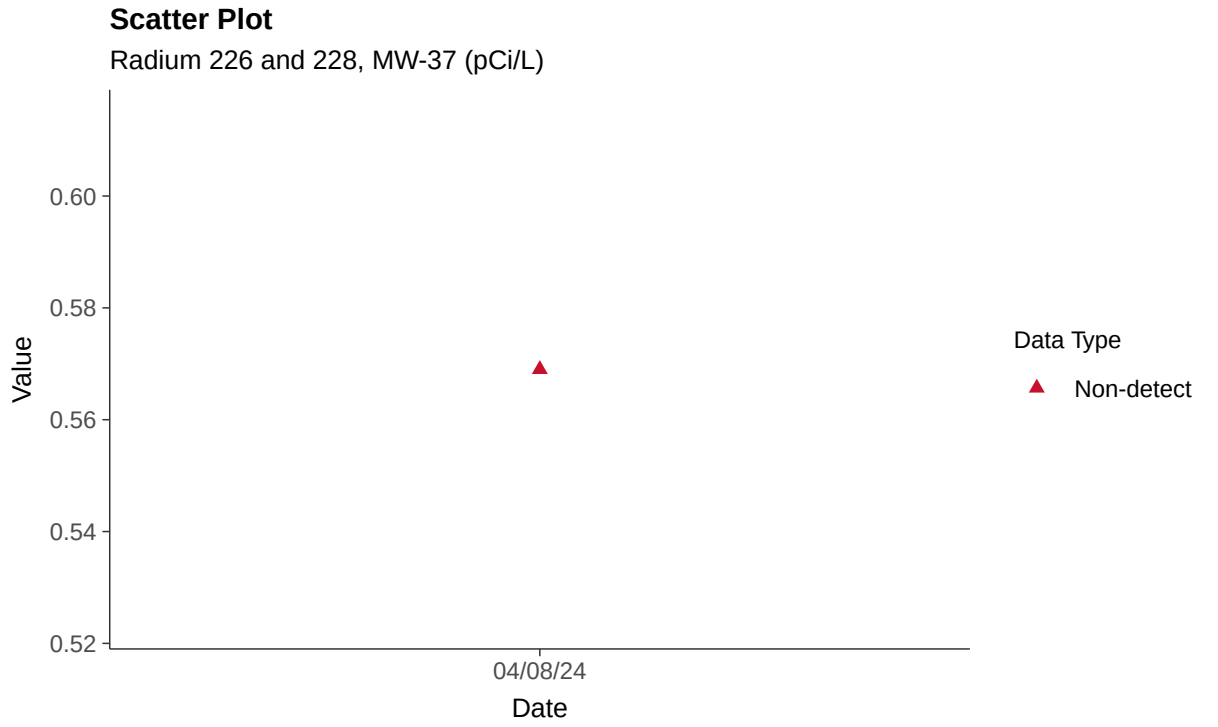
Boxplot by Season

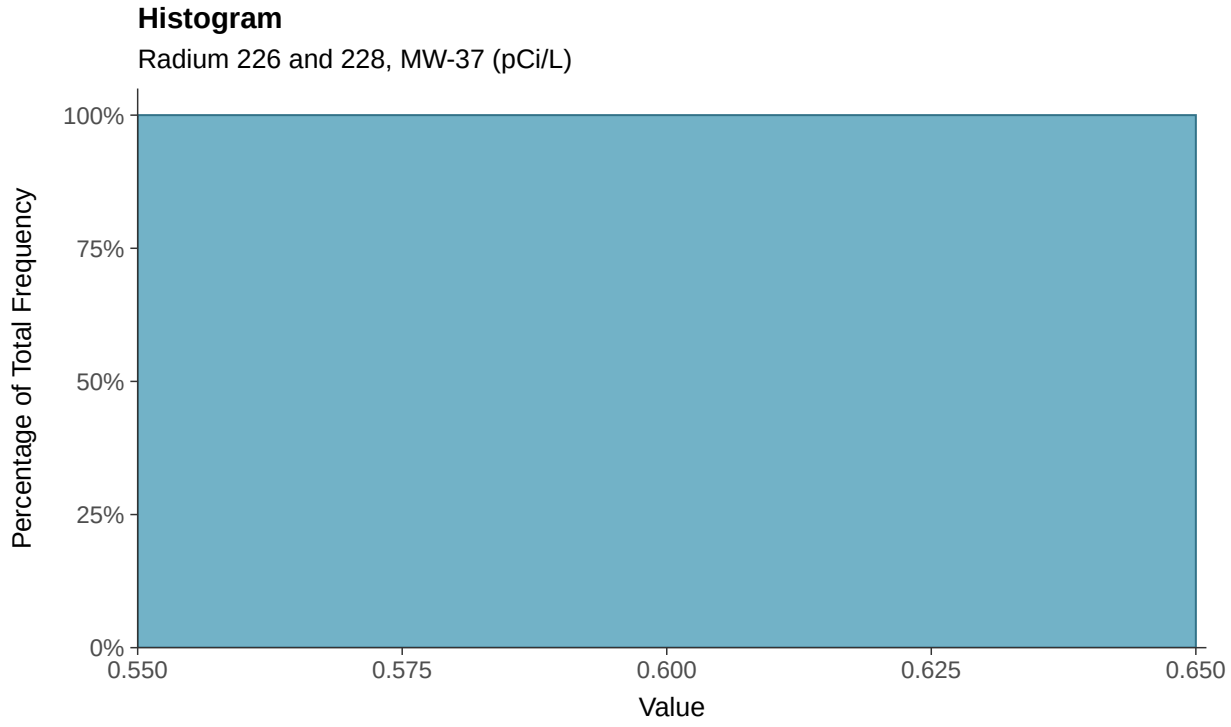
Molybdenum, MW-37 (mg/L)



Appendix IV: Radium 226 and 228, MW-37

ID: 1_47_5_121



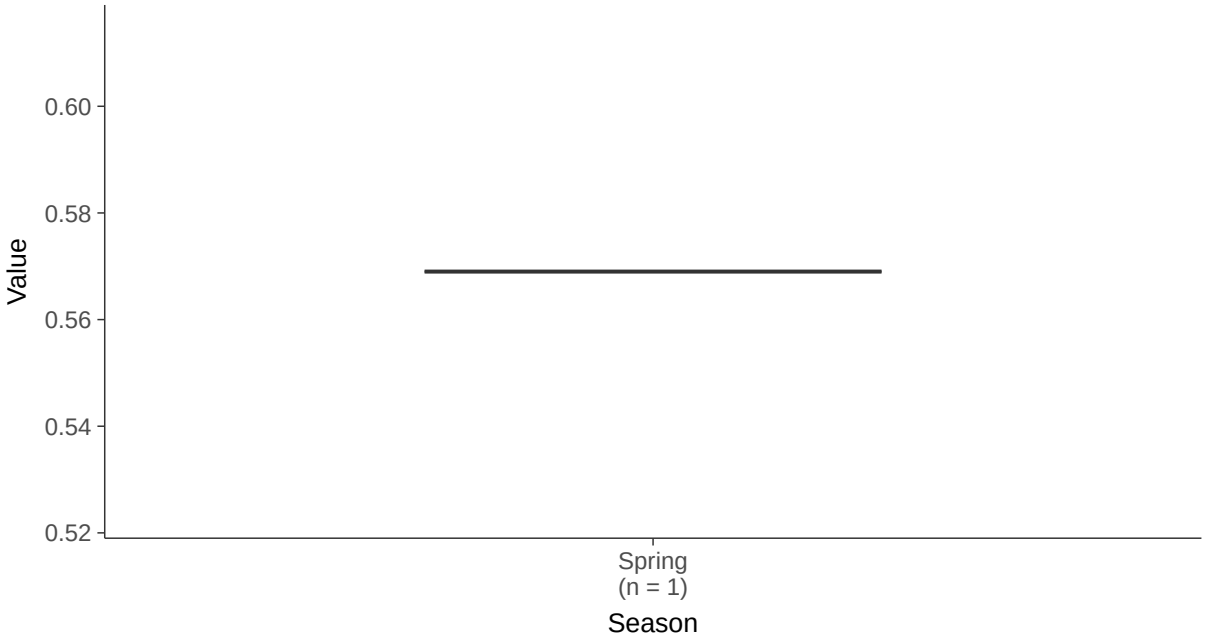


Boxplot

Radium 226 and 228, MW-37 (pCi/L)

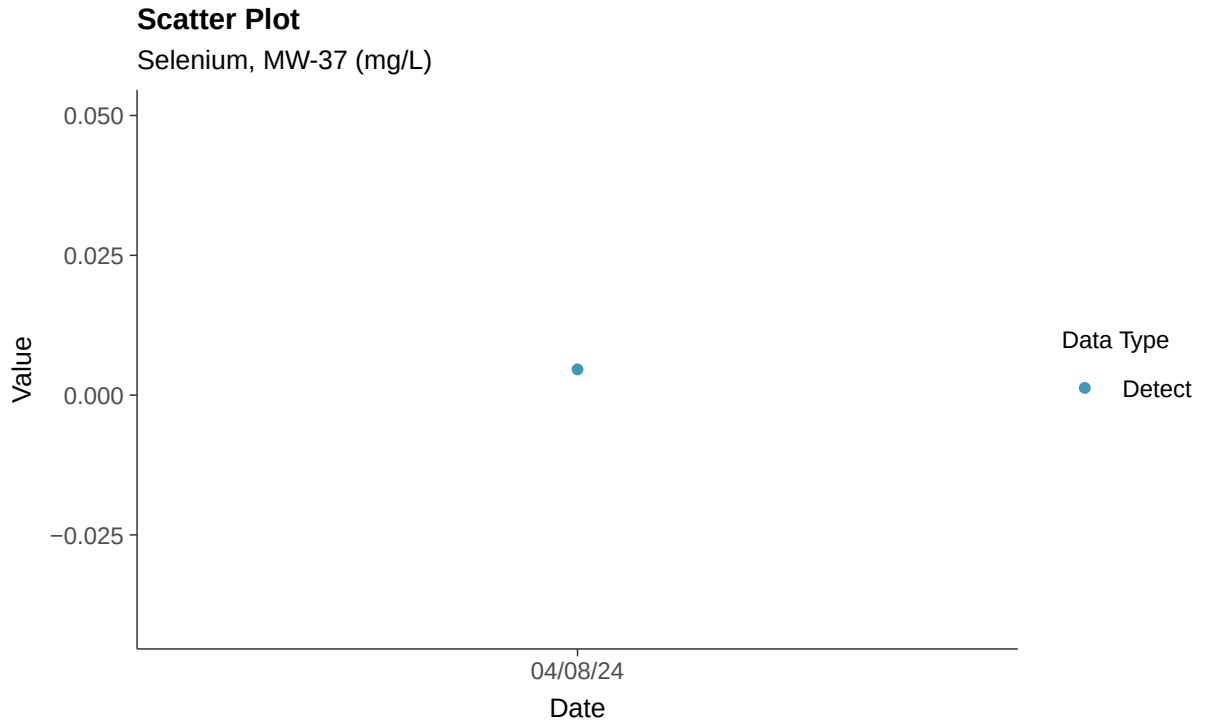
Boxplot by Season

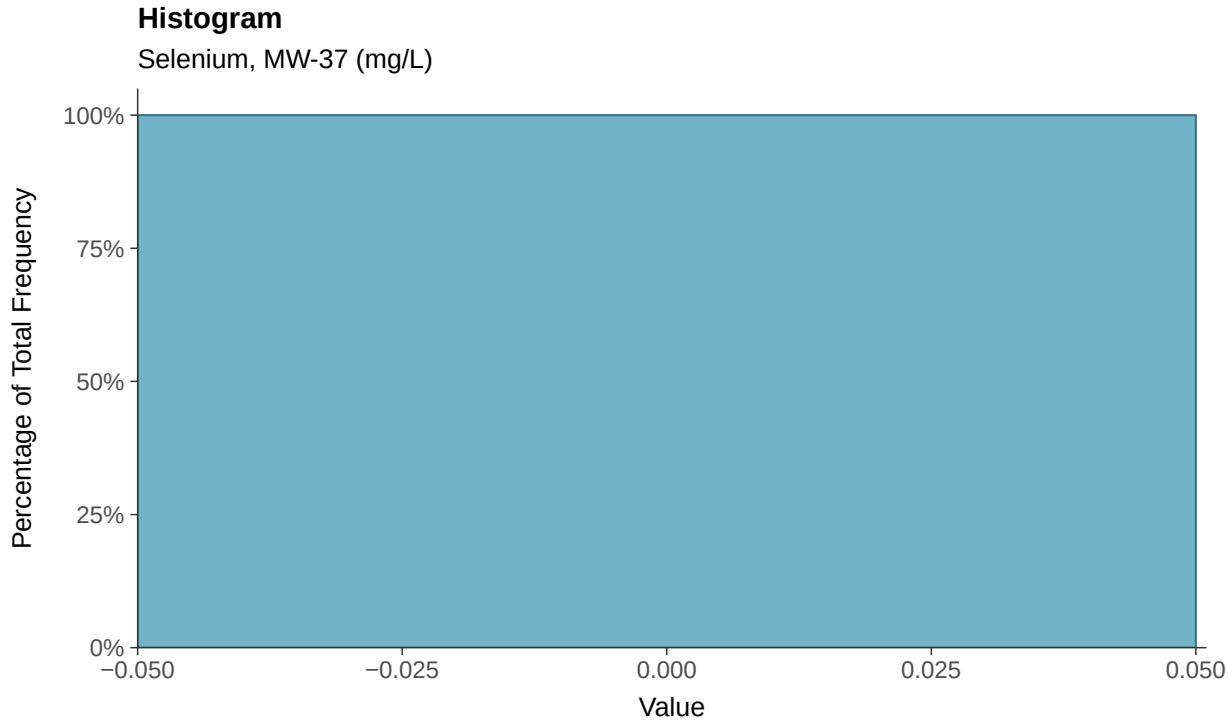
Radium 226 and 228, MW-37 (pCi/L)



Appendix IV: Selenium, MW-37

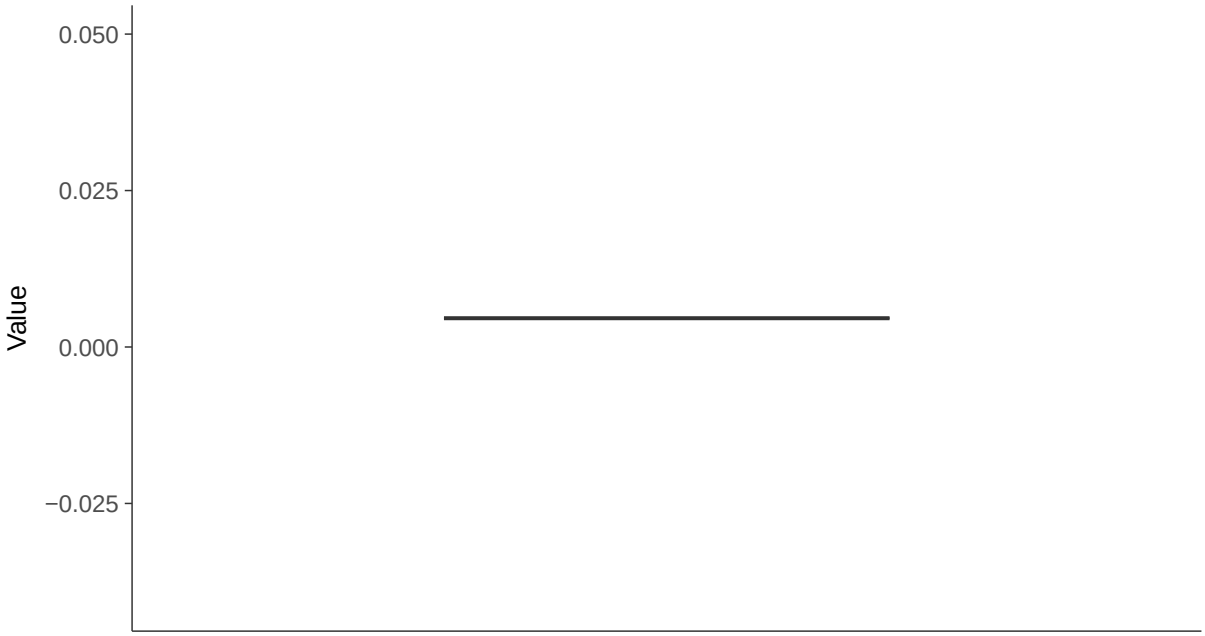
ID: 1_47_5_122





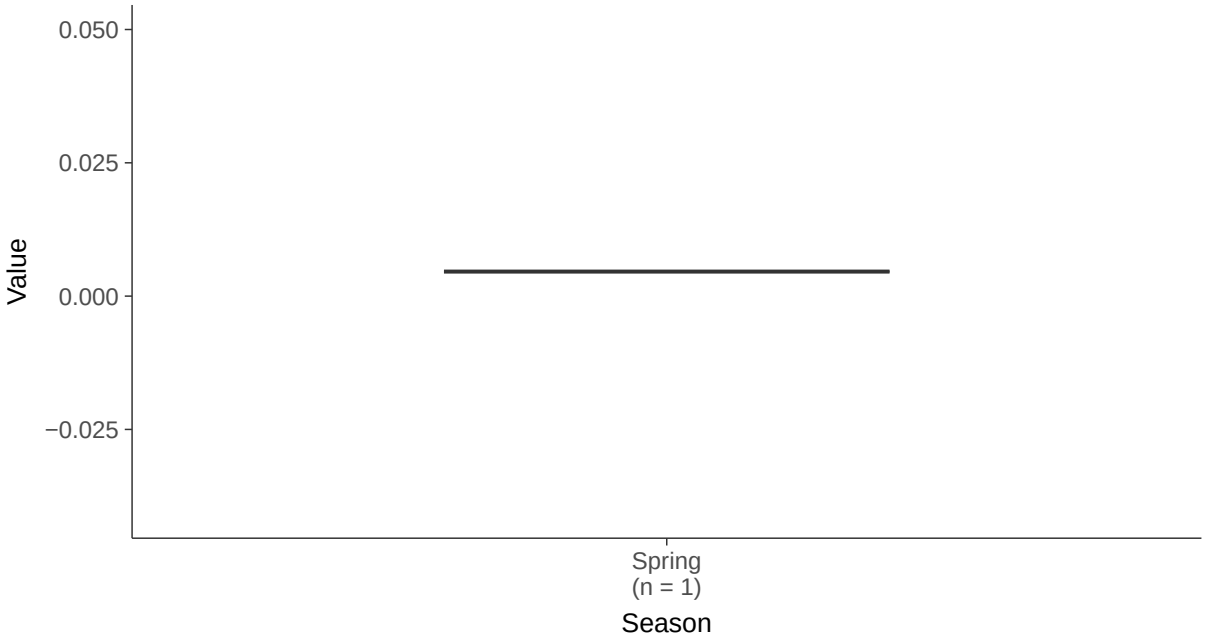
Boxplot

Selenium, MW-37 (mg/L)



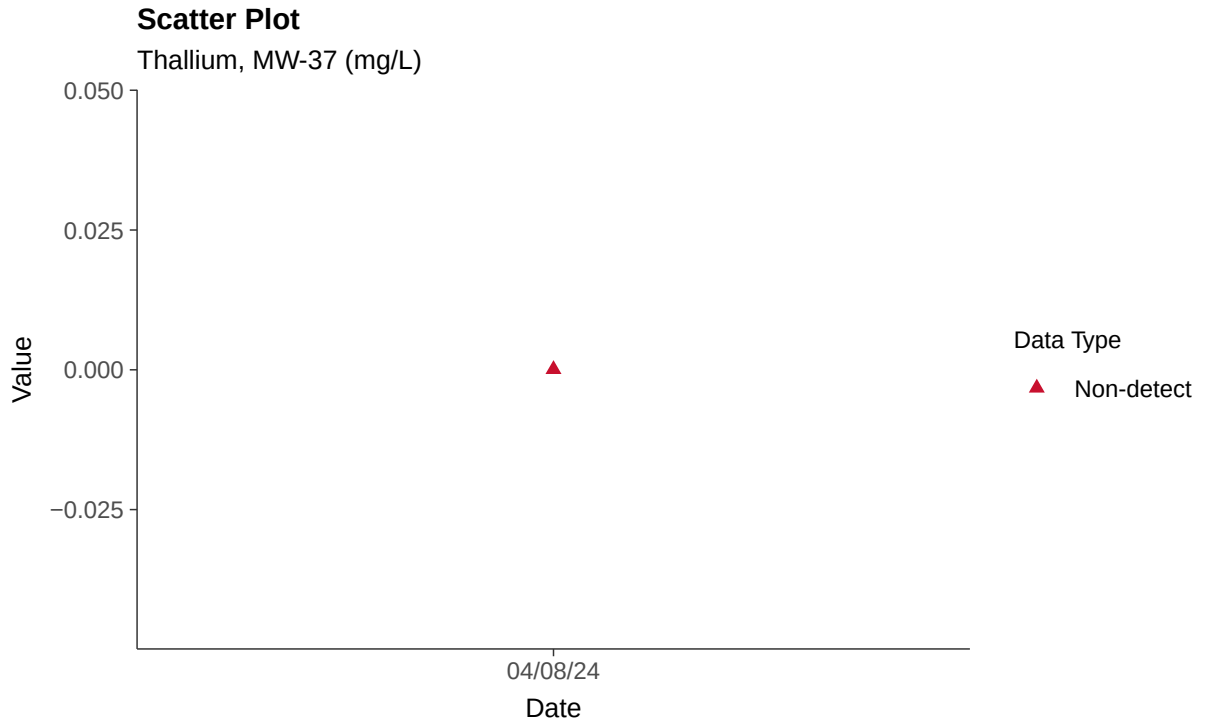
Boxplot by Season

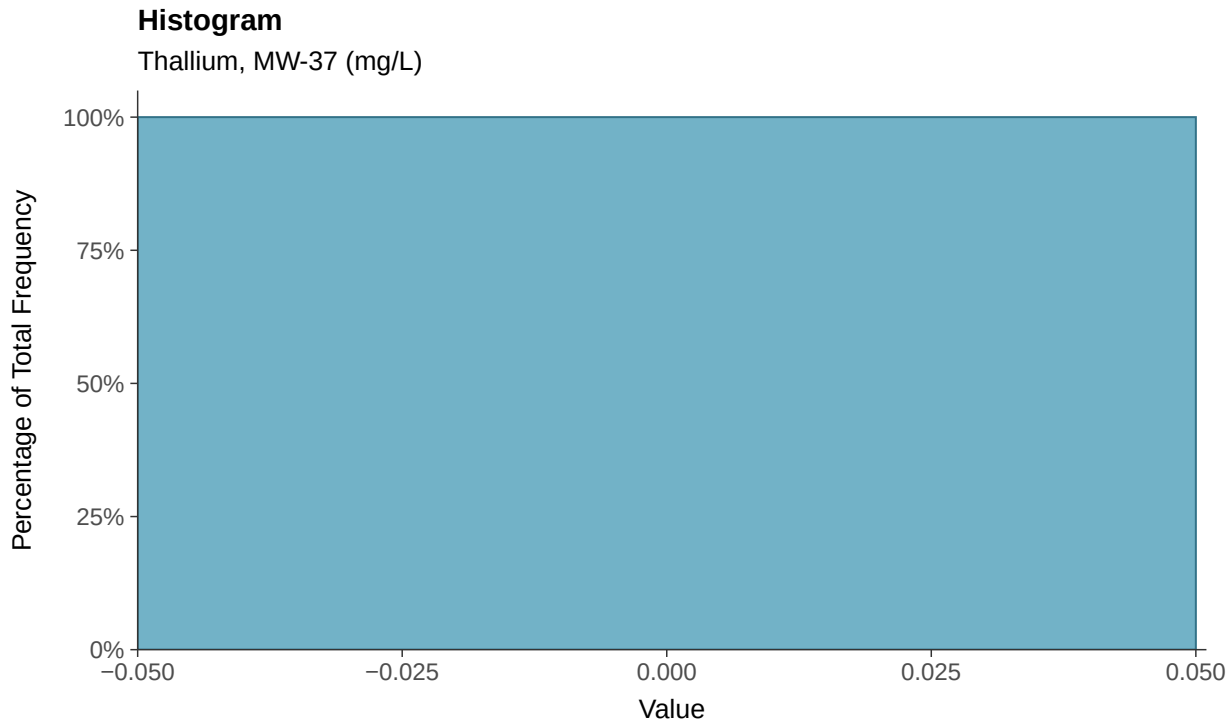
Selenium, MW-37 (mg/L)



Appendix IV: Thallium, MW-37

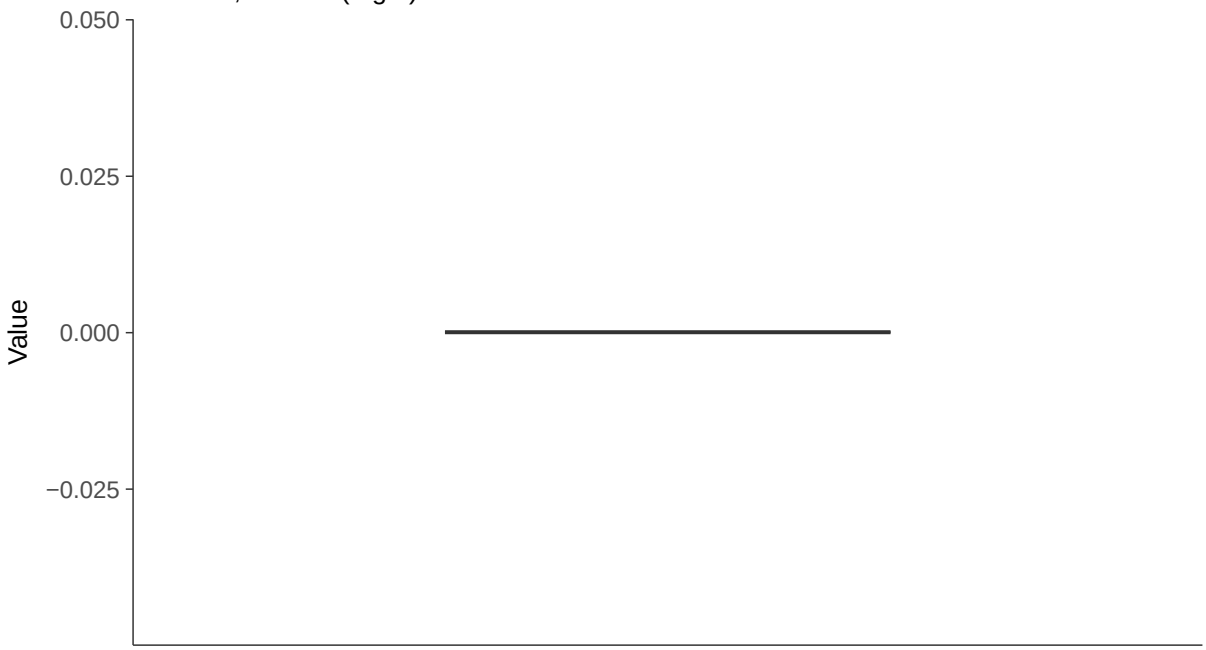
ID: 1_47_5_125





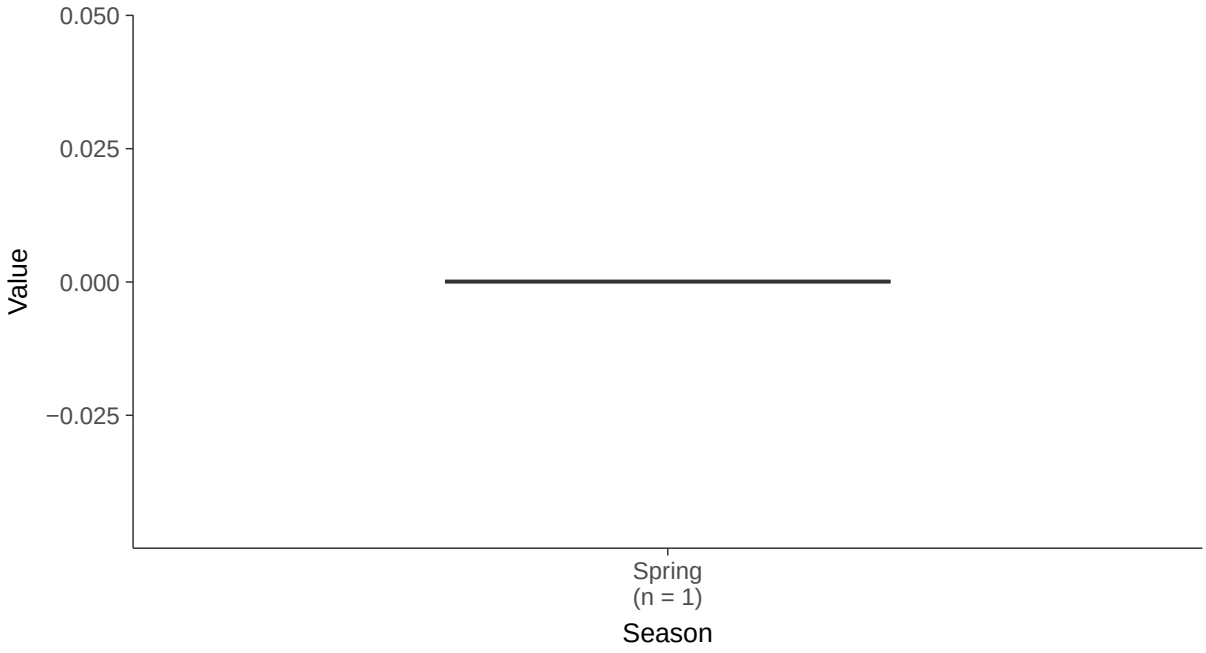
Boxplot

Thallium, MW-37 (mg/L)



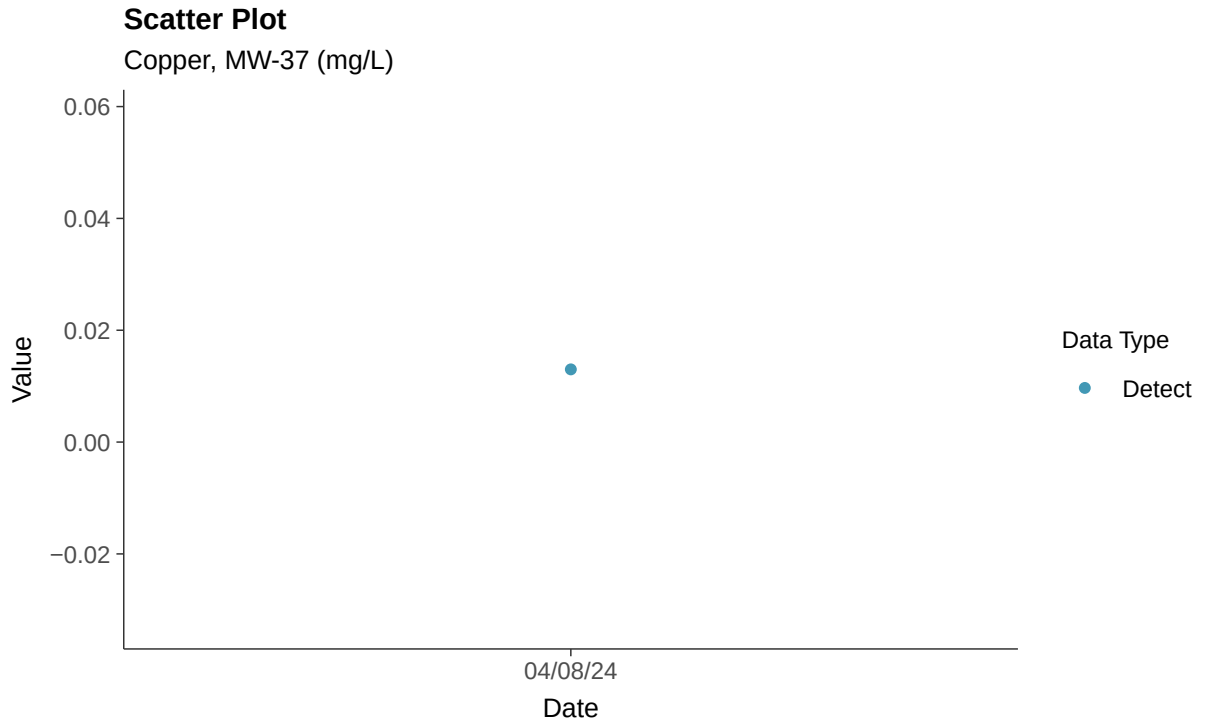
Boxplot by Season

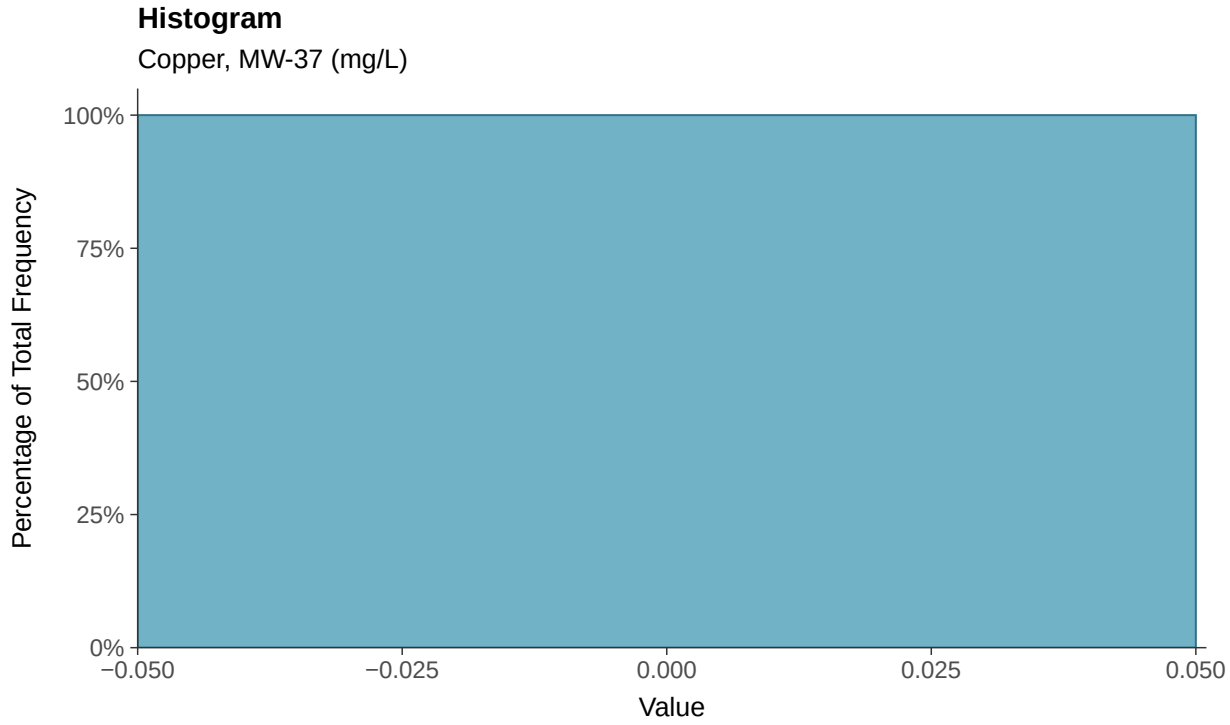
Thallium, MW-37 (mg/L)



Part 115: Copper, MW-37

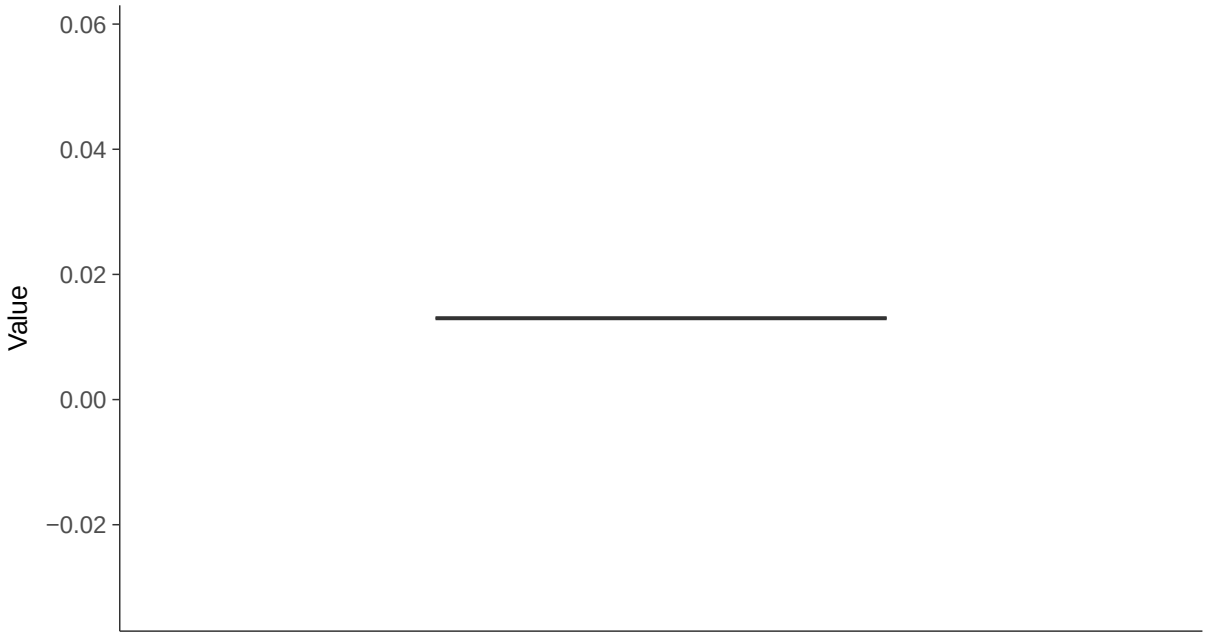
ID: 1_47_6_111





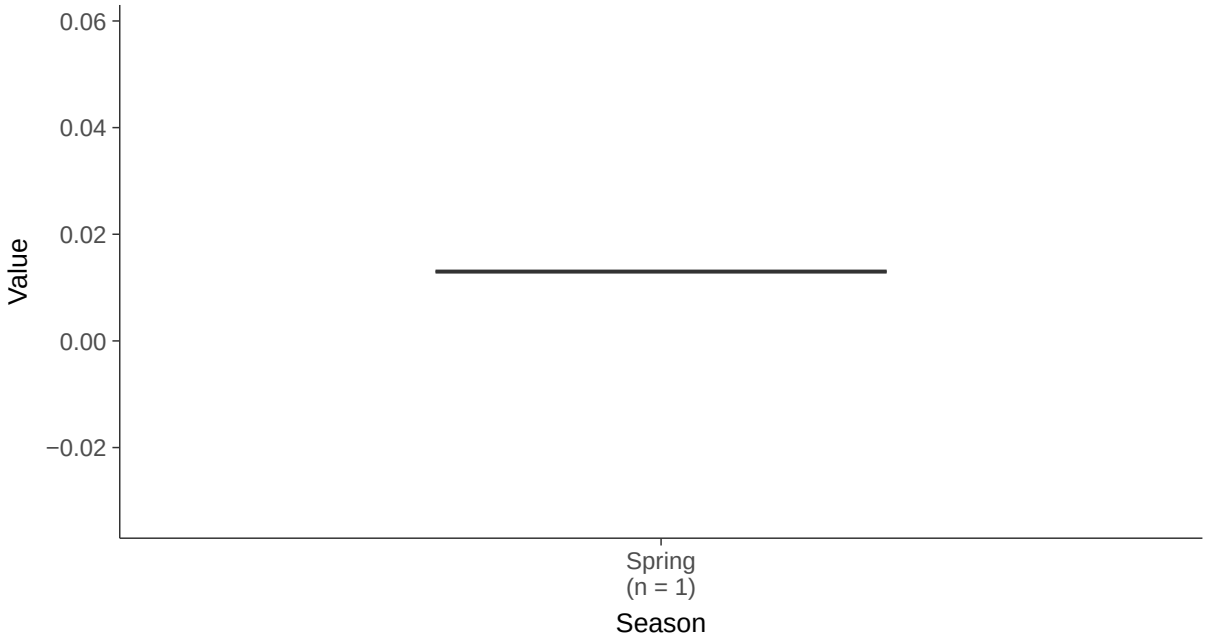
Boxplot

Copper, MW-37 (mg/L)



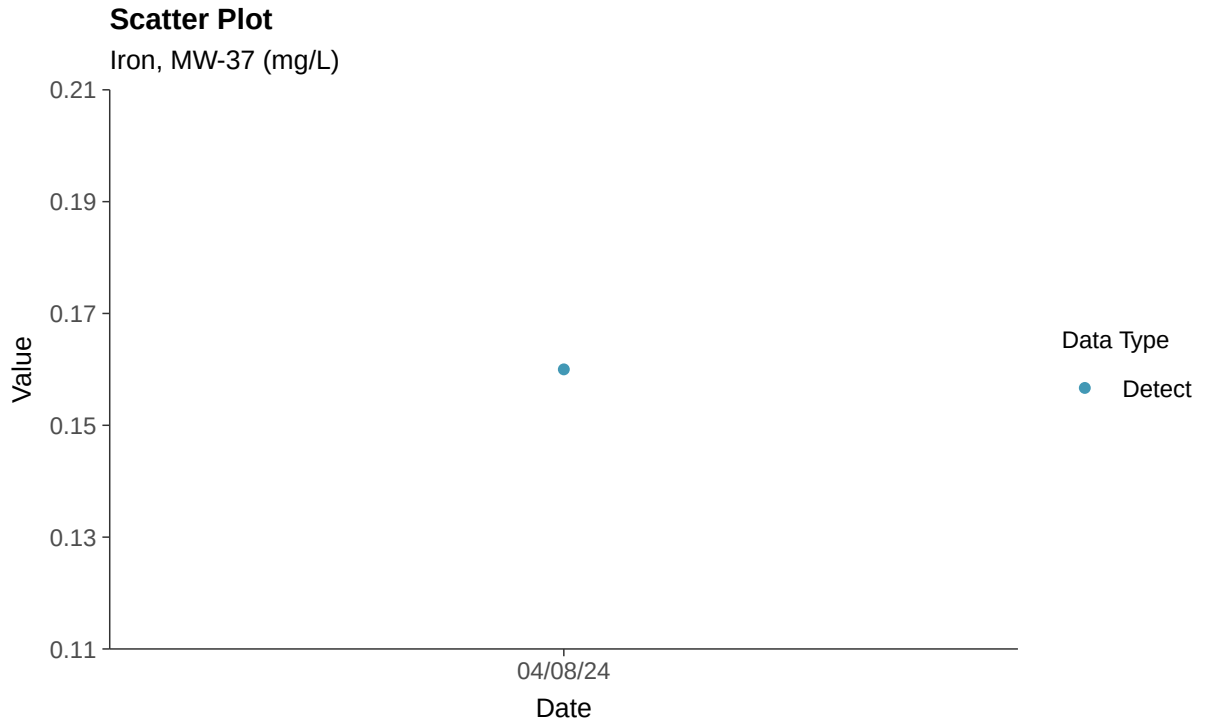
Boxplot by Season

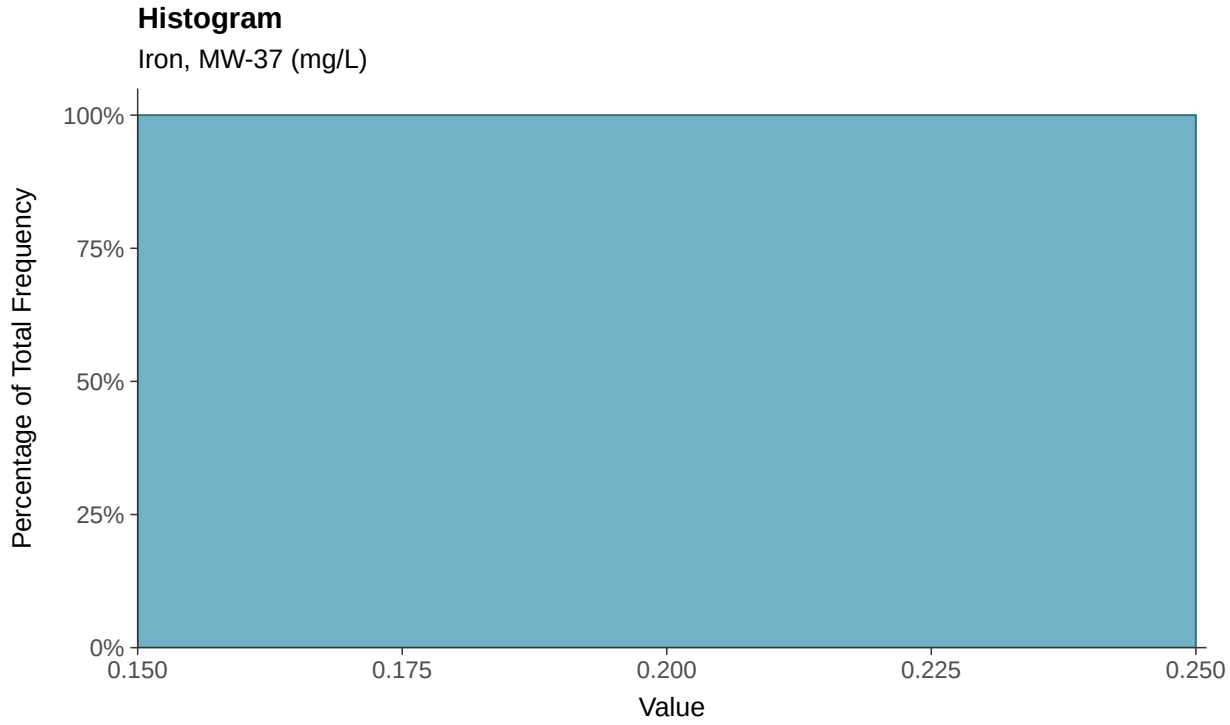
Copper, MW-37 (mg/L)

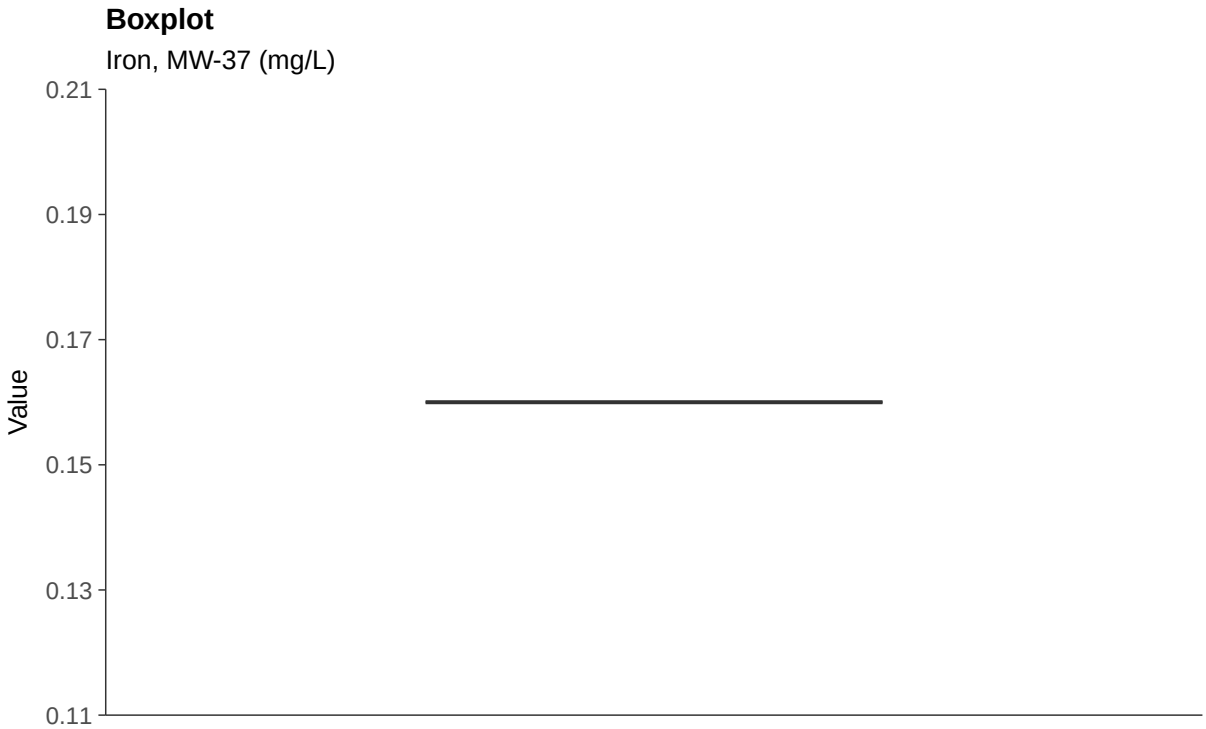


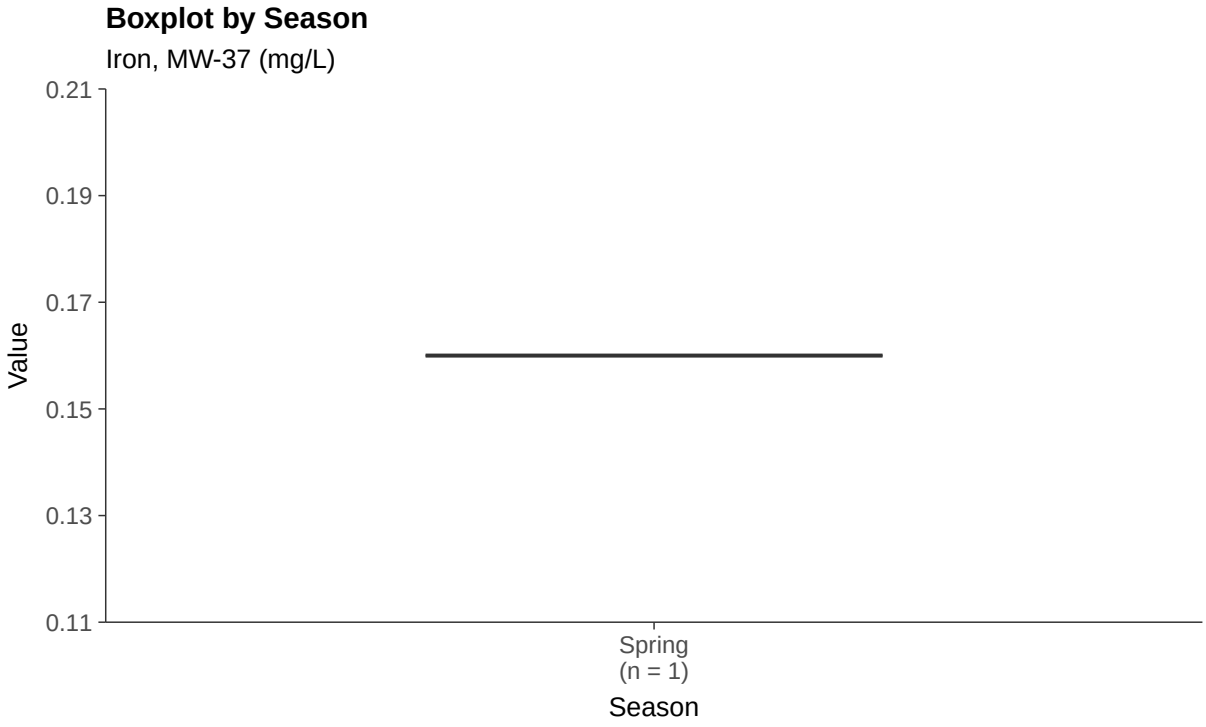
Part 115: Iron, MW-37

ID: 1_47_6_114



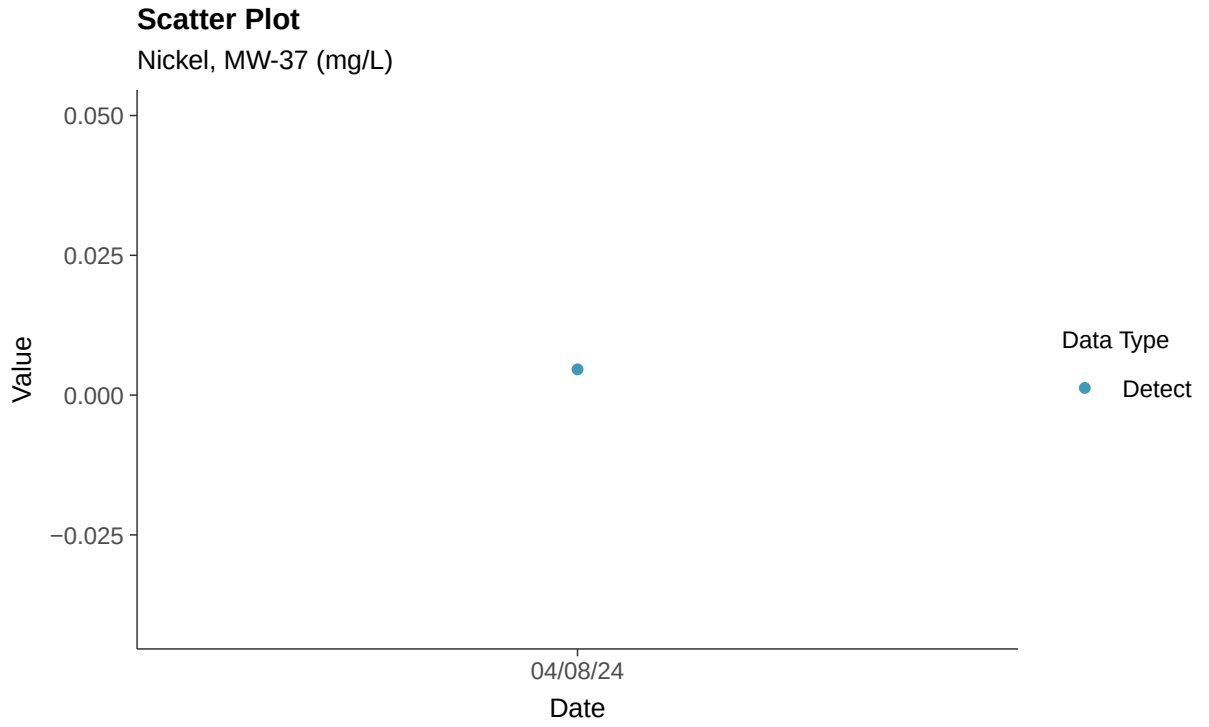


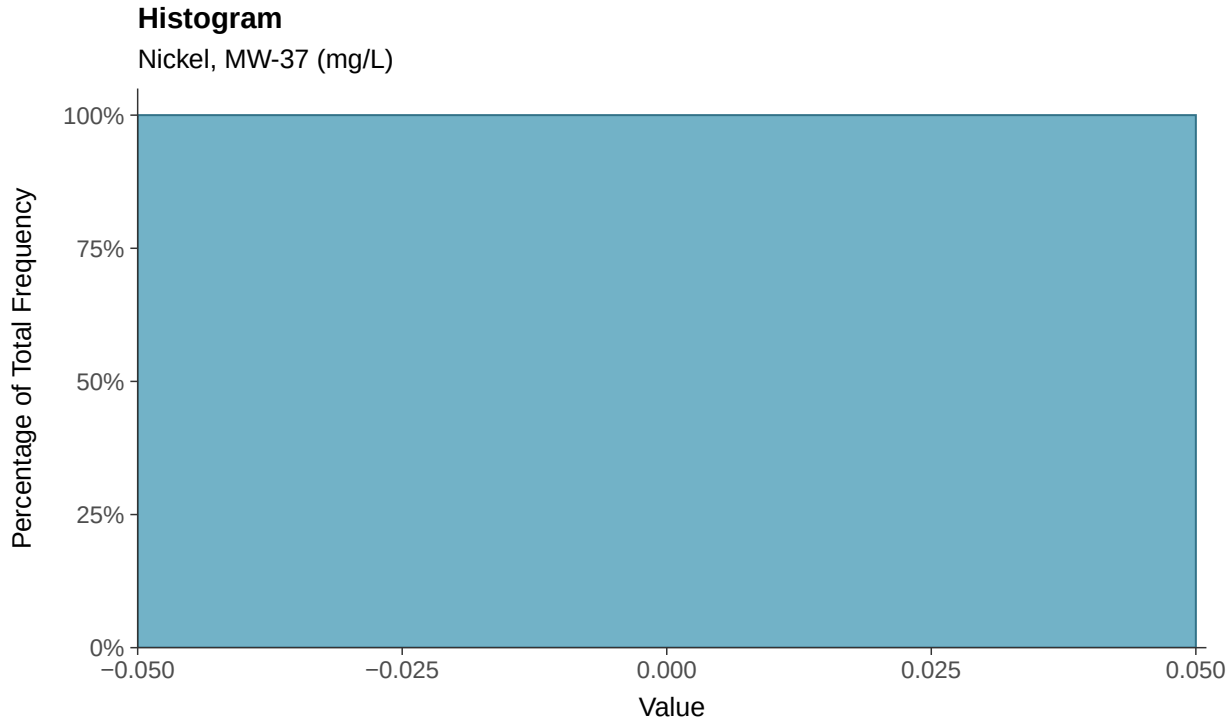

Boxplot
Iron, MW-37 (mg/L)
0.21
0.19
0.17
0.15
0.13
0.11
Value


Boxplot by Season
Iron, MW-37 (mg/L)
0.21
0.19
0.17
0.15
0.13
0.11
Value
Spring
(n = 1)
Season

Part 115: Nickel, MW-37

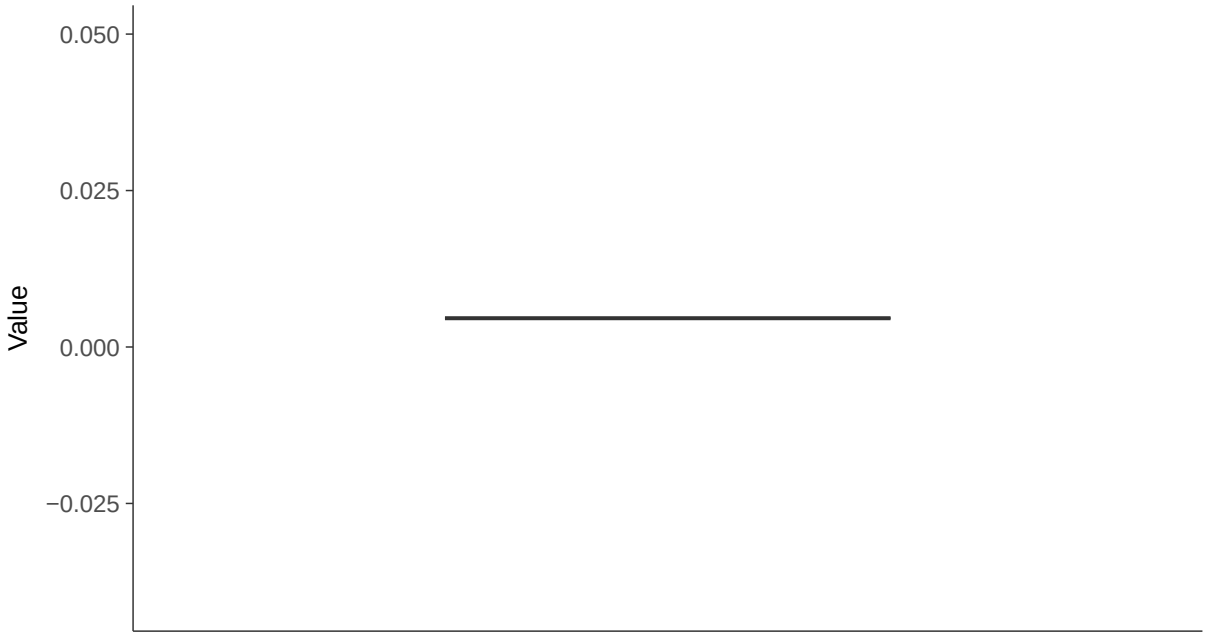
ID: 1_47_6_119





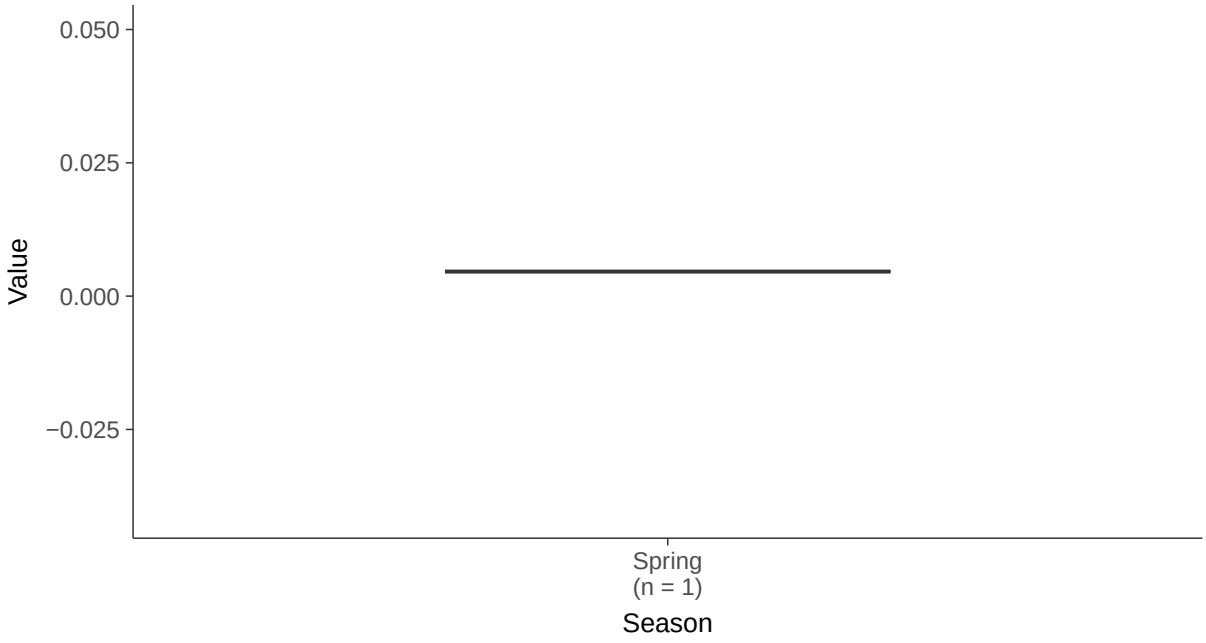
Boxplot

Nickel, MW-37 (mg/L)



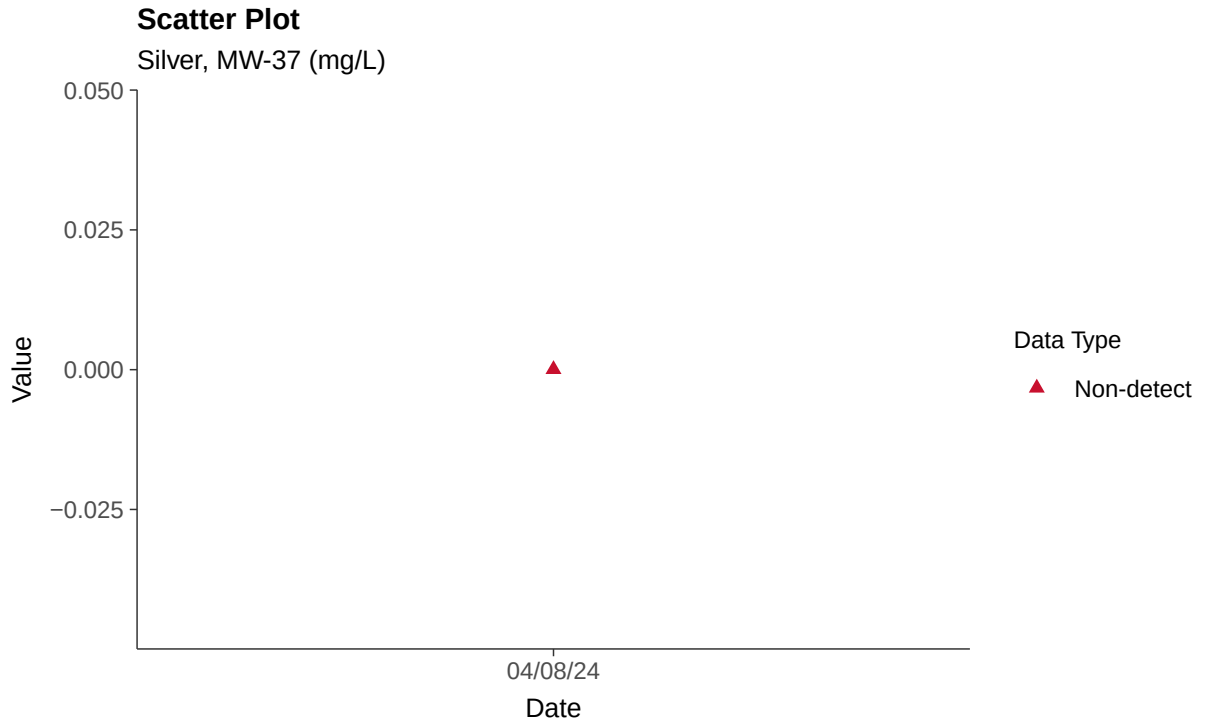
Boxplot by Season

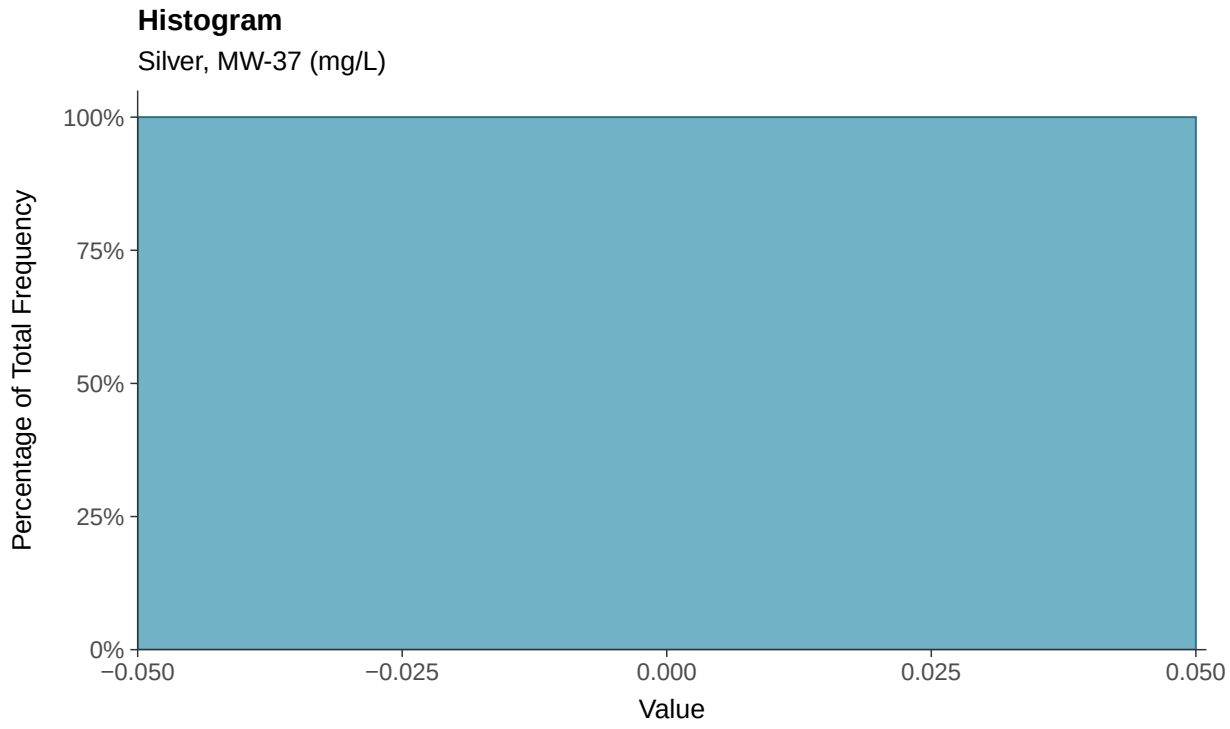
Nickel, MW-37 (mg/L)



Part 115: Silver, MW-37

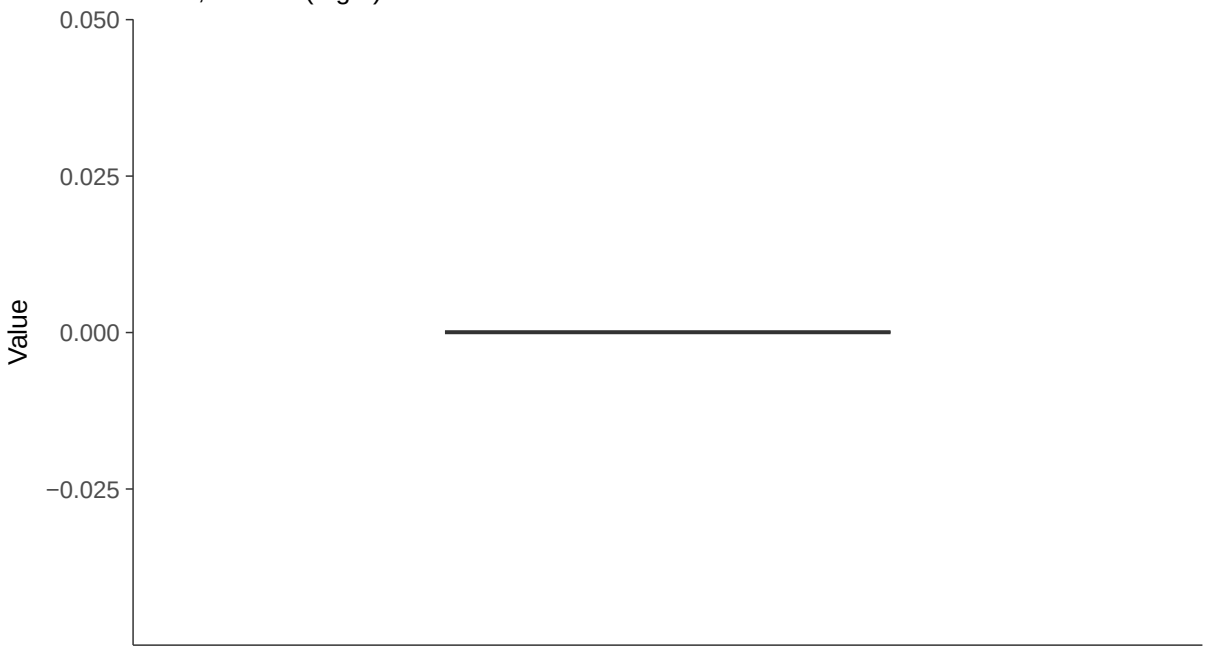
ID: 1_47_6_123





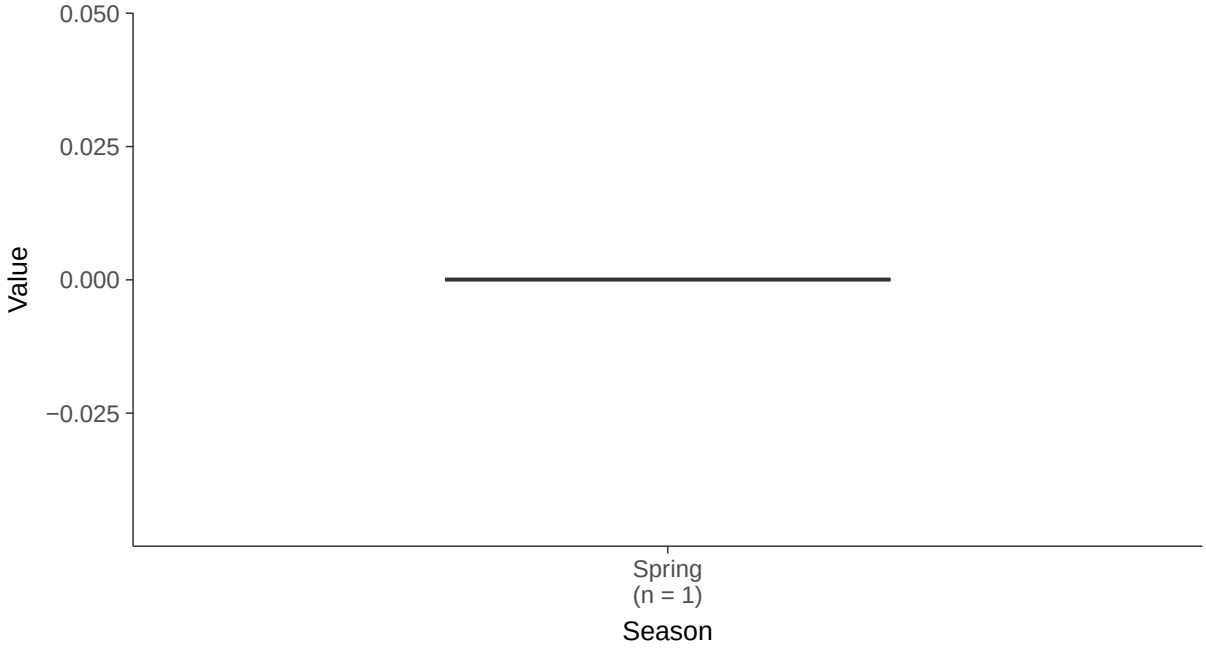
Boxplot

Silver, MW-37 (mg/L)



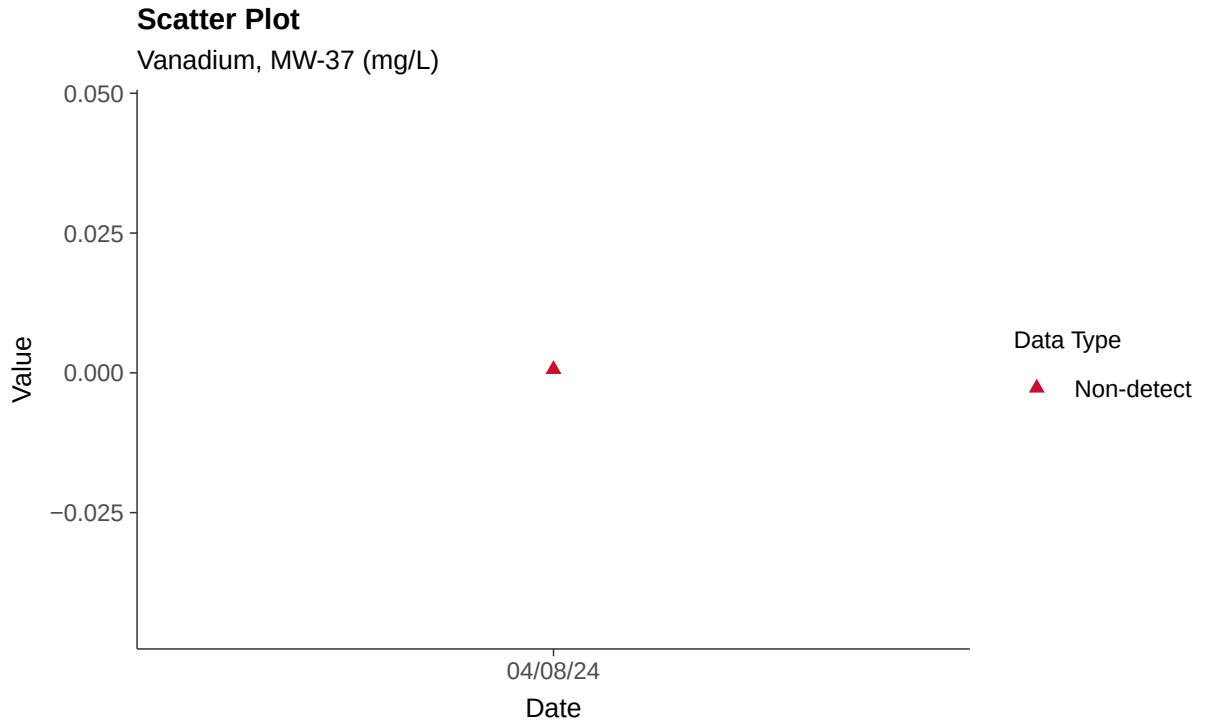
Boxplot by Season

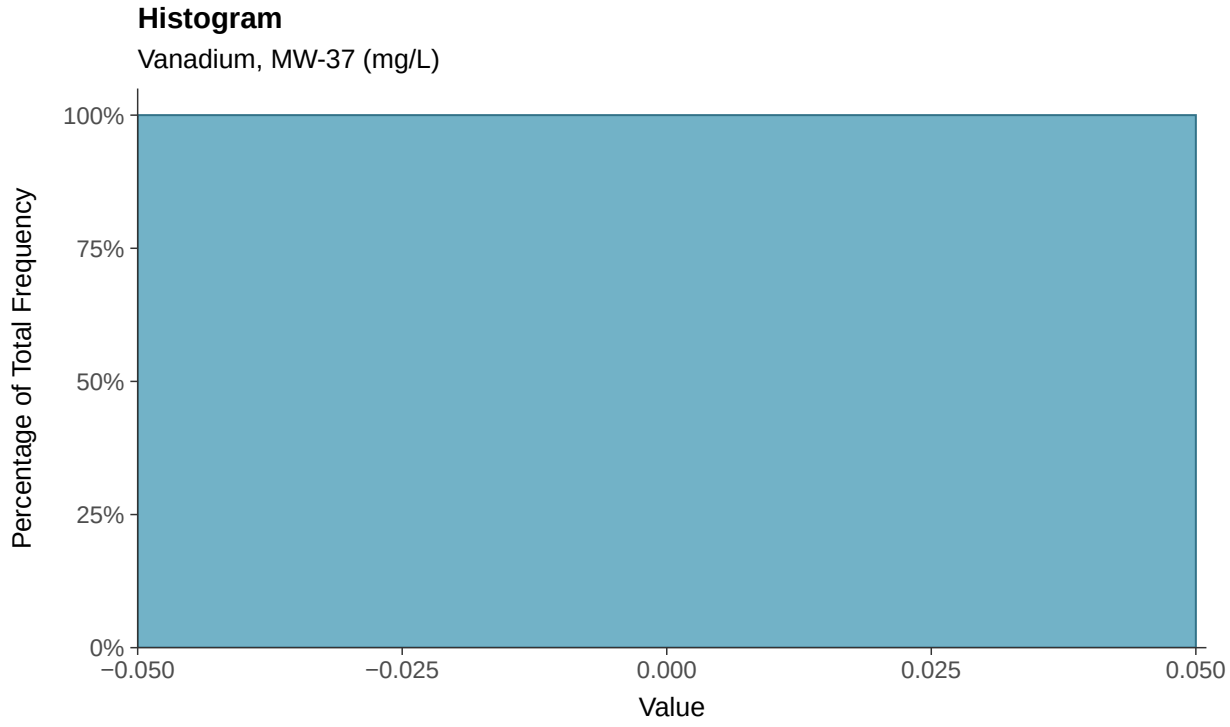
Silver, MW-37 (mg/L)



Part 115: Vanadium, MW-37

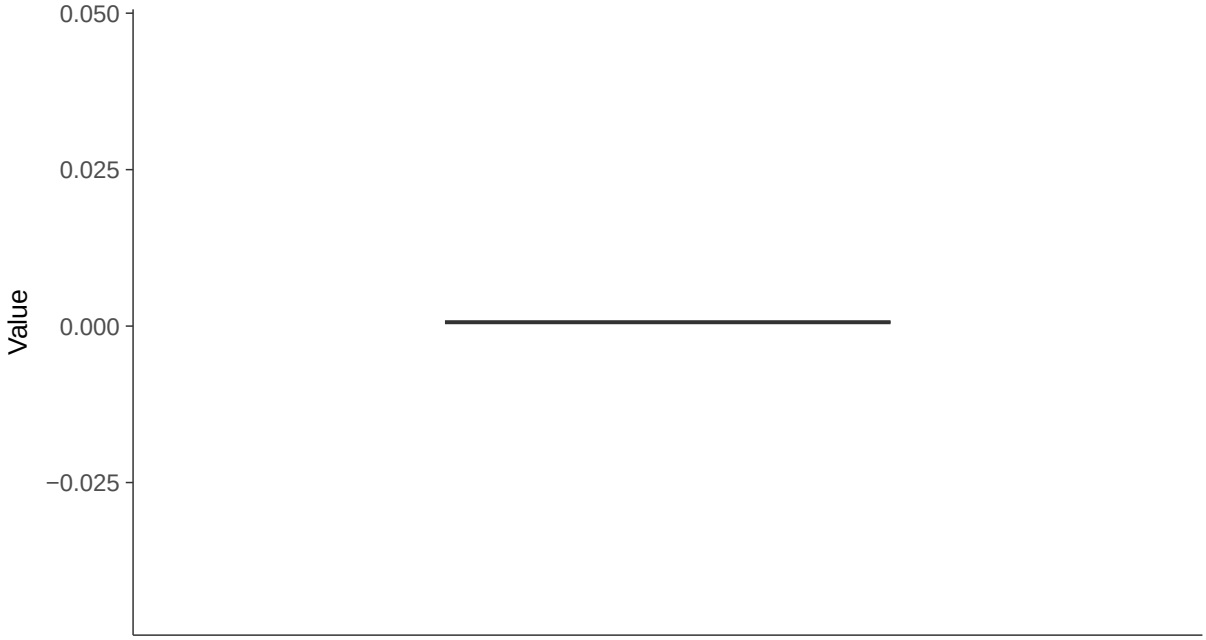
ID: 1_47_6_129





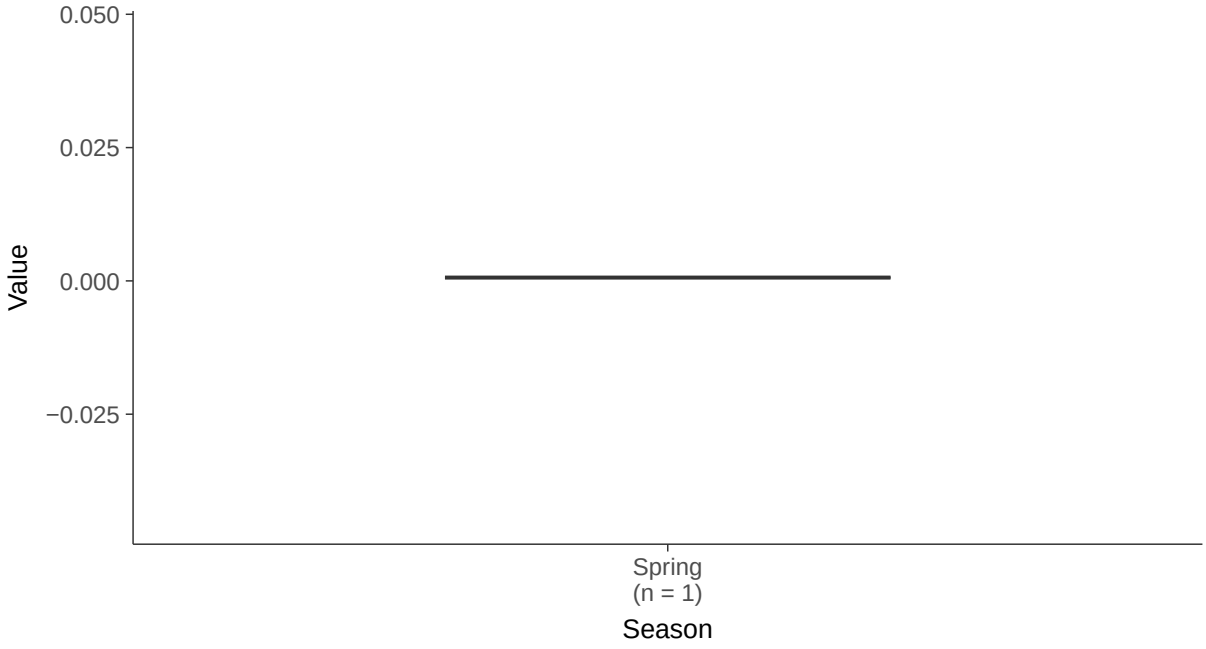
Boxplot

Vanadium, MW-37 (mg/L)



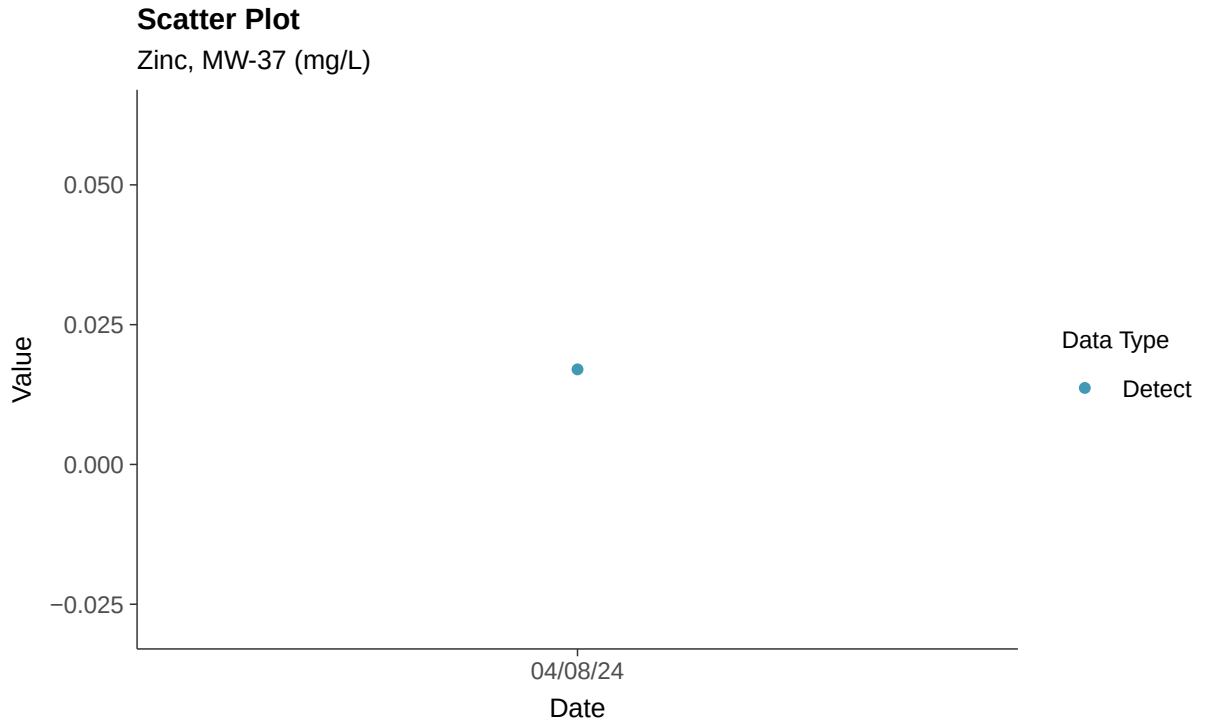
Boxplot by Season

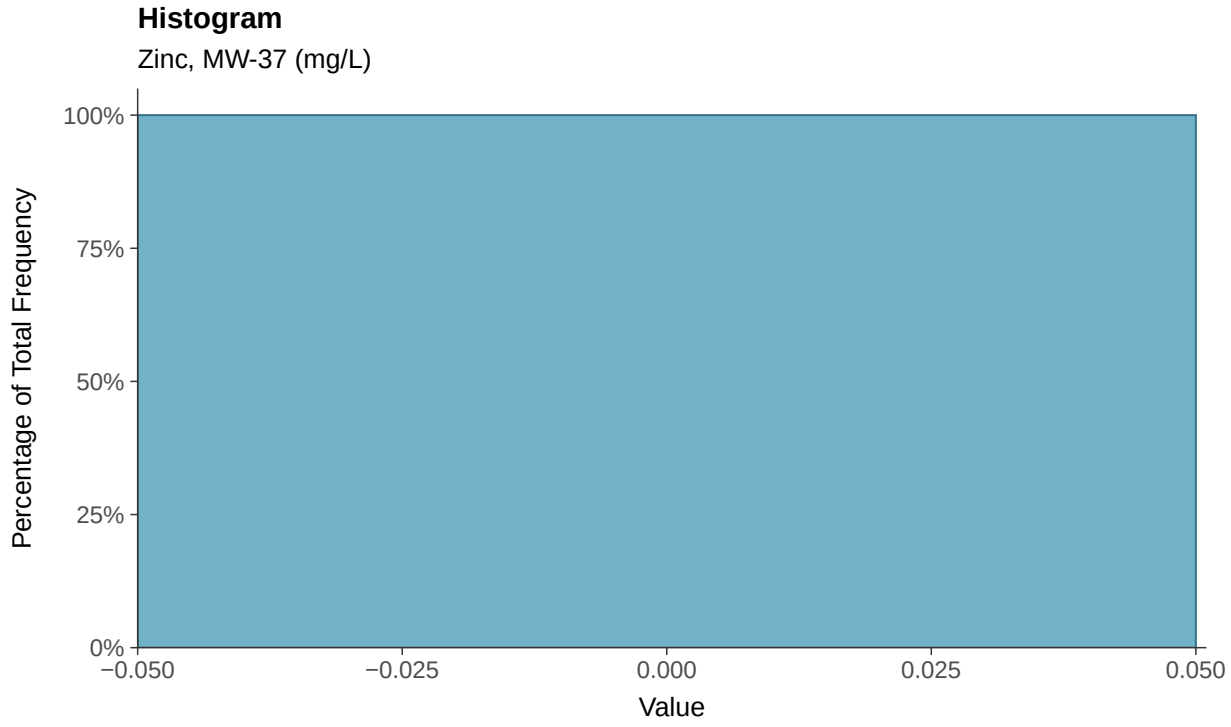
Vanadium, MW-37 (mg/L)



Part 115: Zinc, MW-37

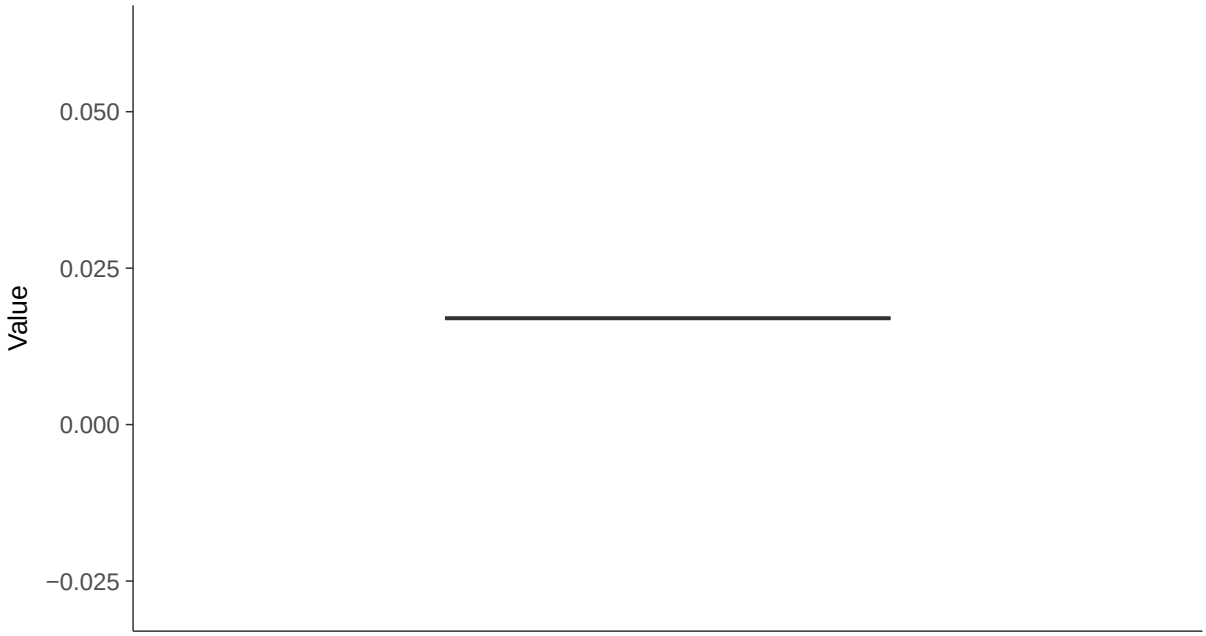
ID: 1_47_6_130





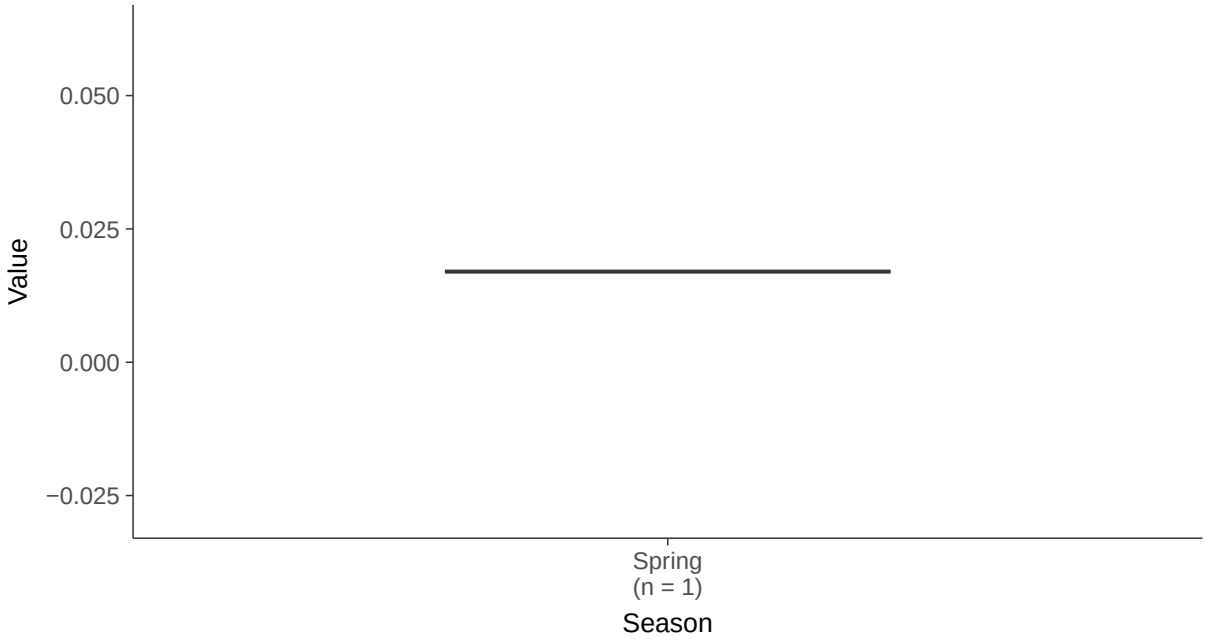
Boxplot

Zinc, MW-37 (mg/L)



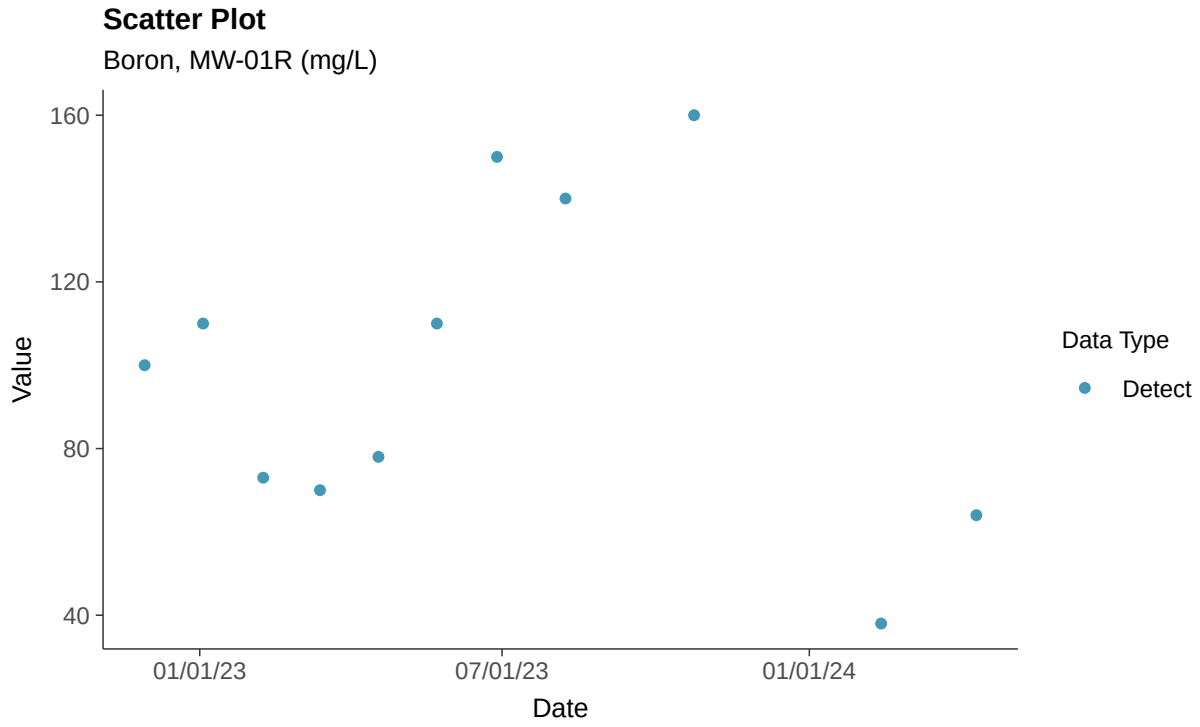
Boxplot by Season

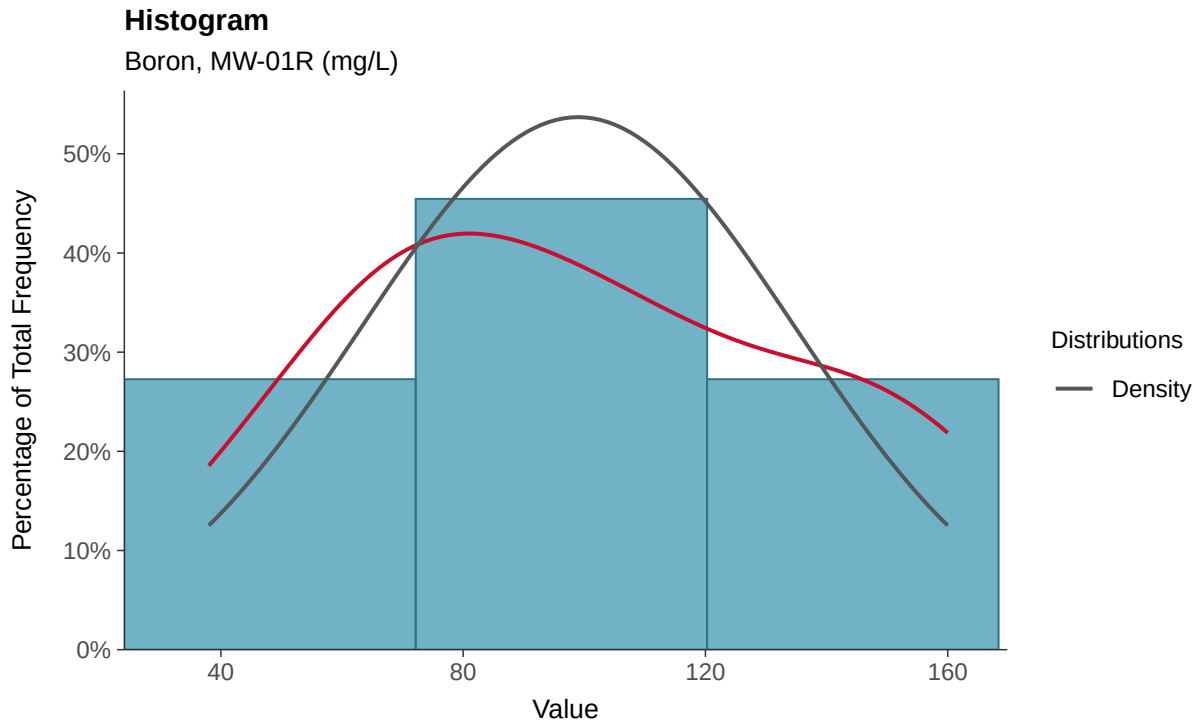
Zinc, MW-37 (mg/L)



Appendix III: Boron, MW-01R

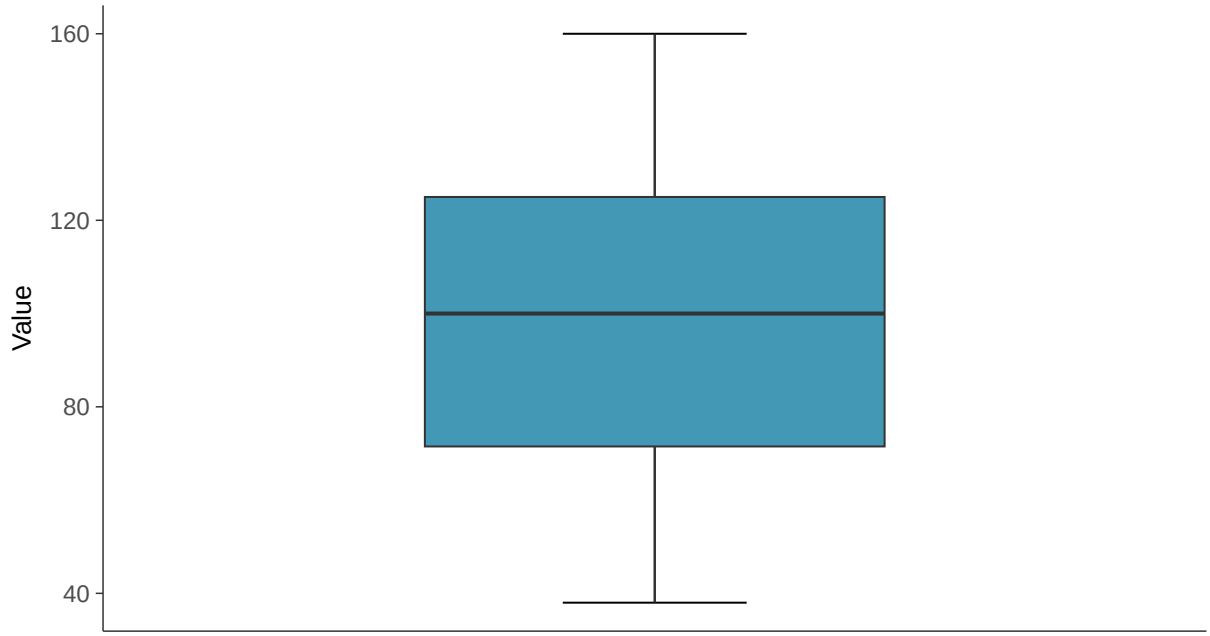
ID: 2_11_4_105





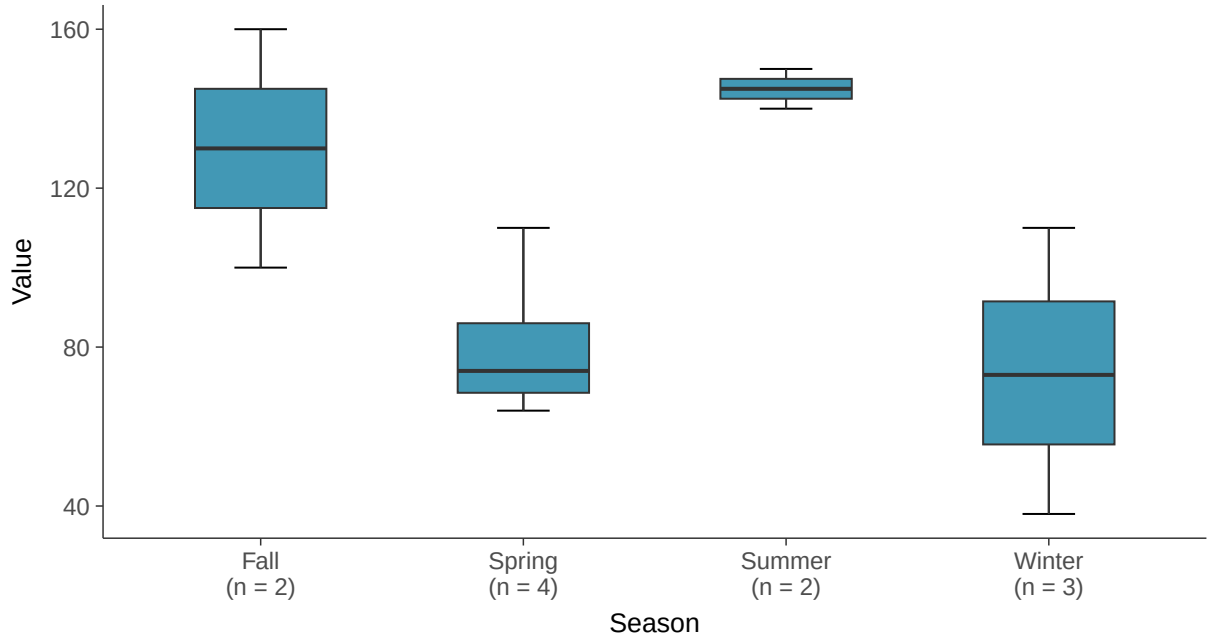
Boxplot

Boron, MW-01R (mg/L)



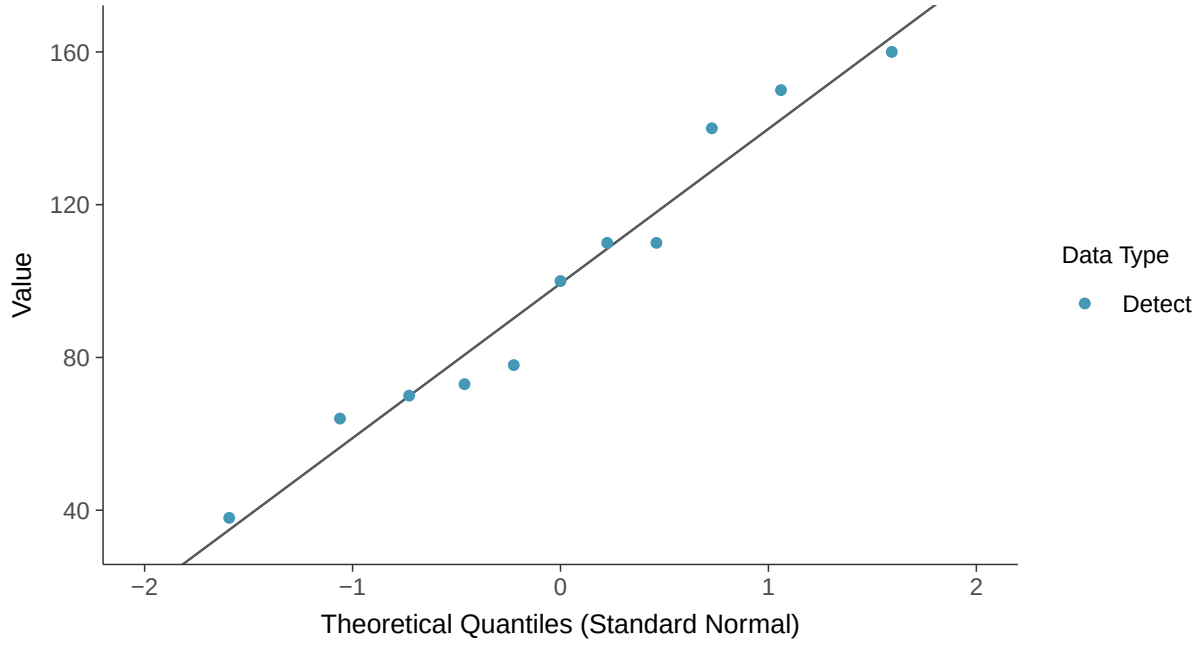
Boxplot by Season

Boron, MW-01R (mg/L)



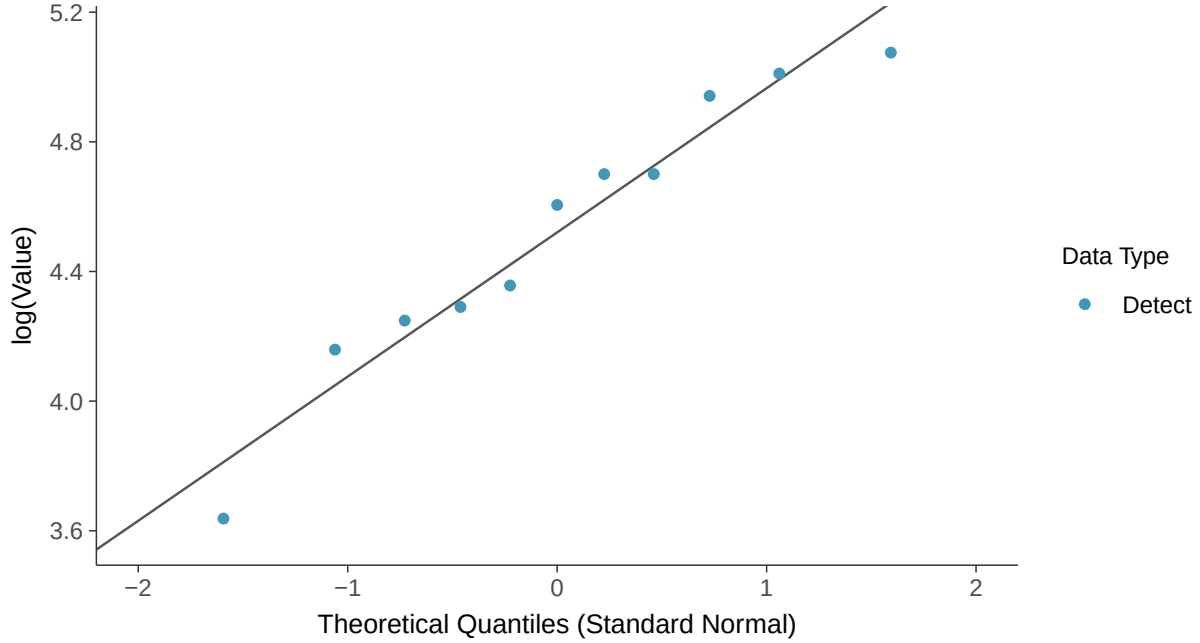
Normal Q-Q plot

Boron, MW-01R (mg/L)



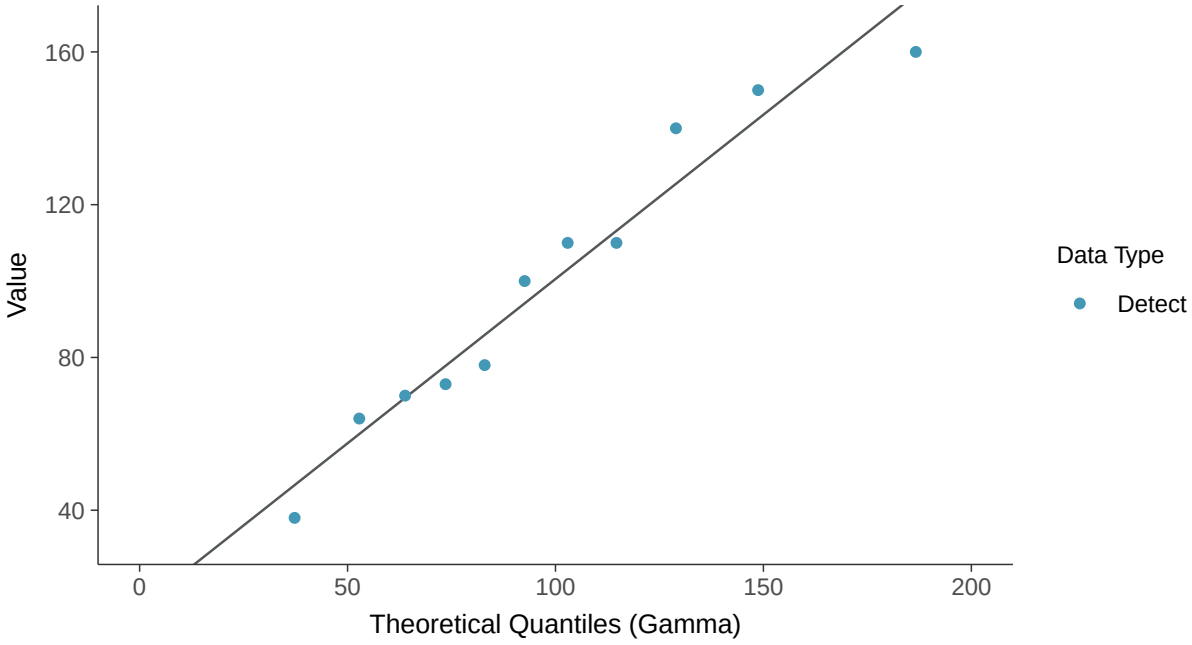
Lognormal Q-Q plot

Boron, MW-01R (mg/L)



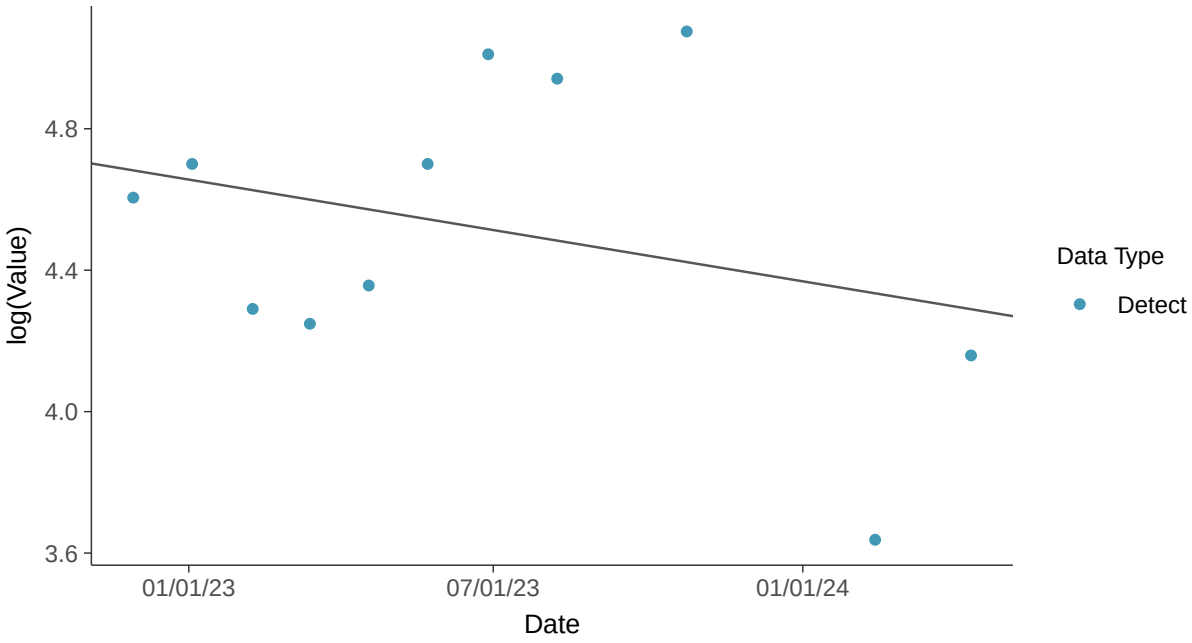
Gamma Q-Q plot

Boron, MW-01R (mg/L)



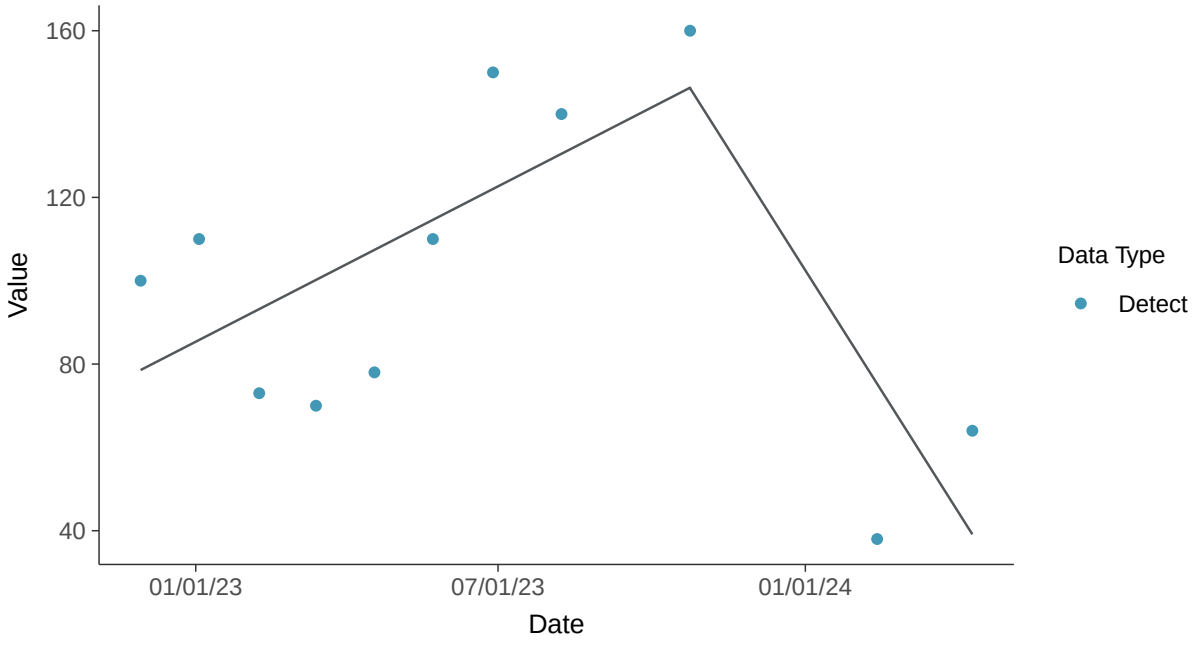
Trend Regression: Lognormal MLE

Boron, MW-01R (mg/L)



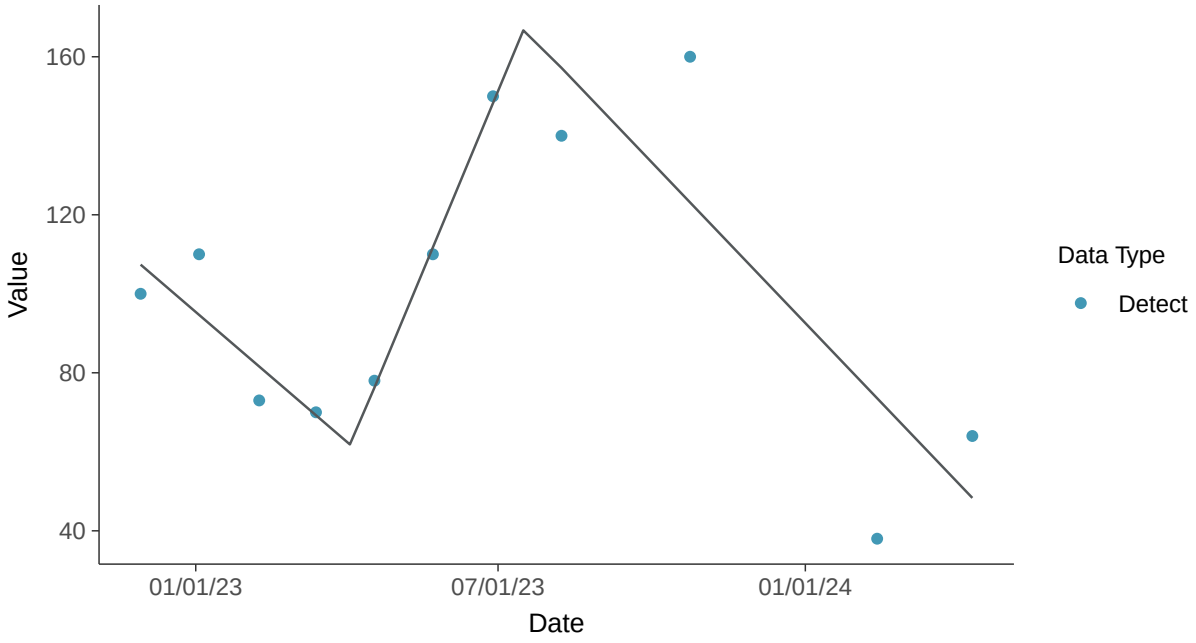
Trend Regression: Piecewise Linear-Linear

Boron, MW-01R (mg/L)



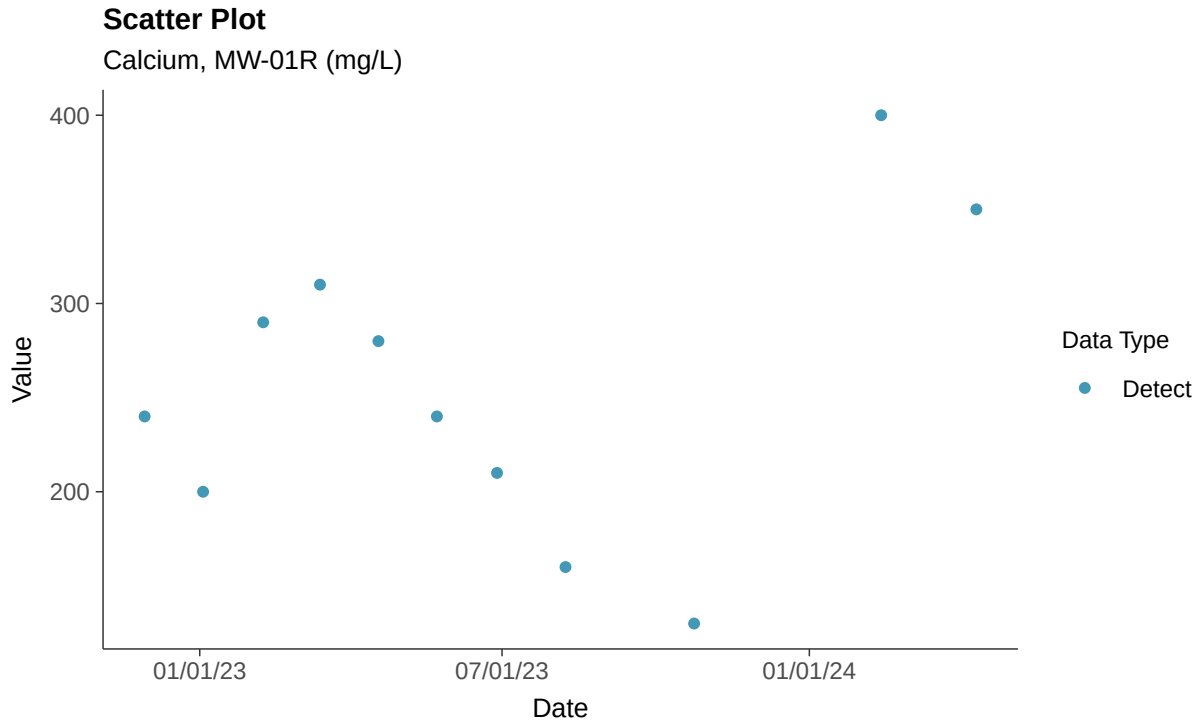
Trend Regression: Piecewise Linear-Linear-Linear

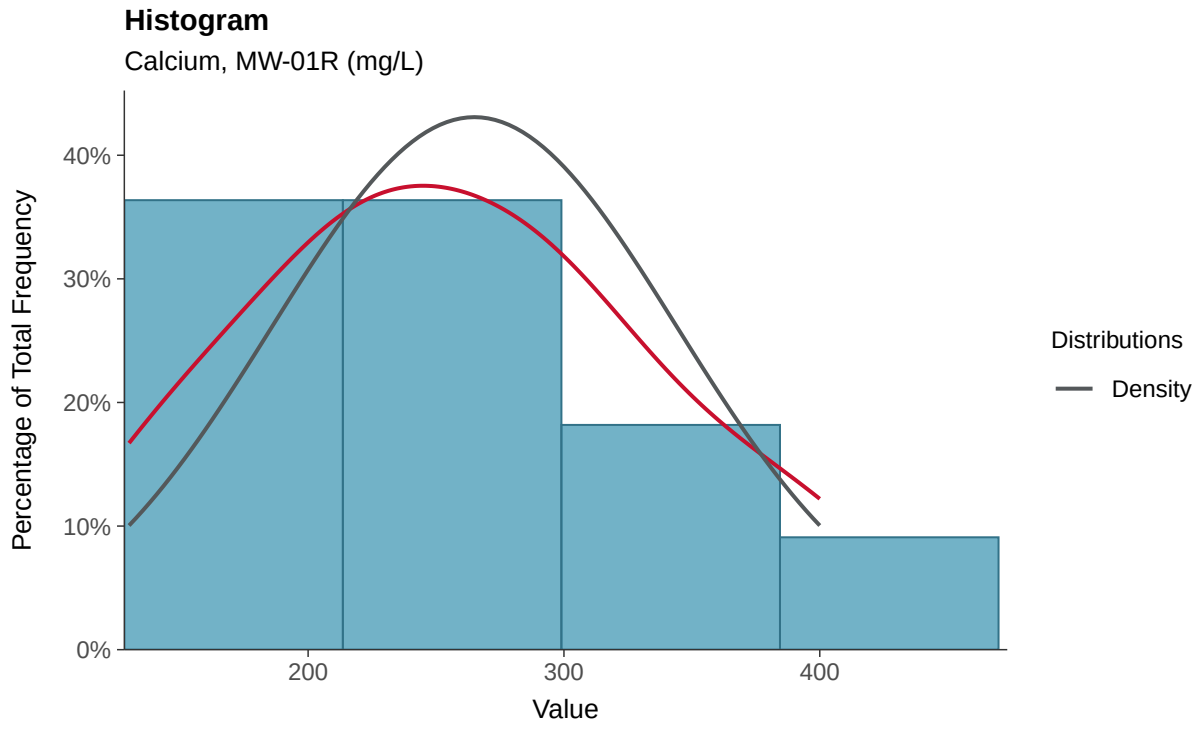
Boron, MW-01R (mg/L)



Appendix III: Calcium, MW-01R

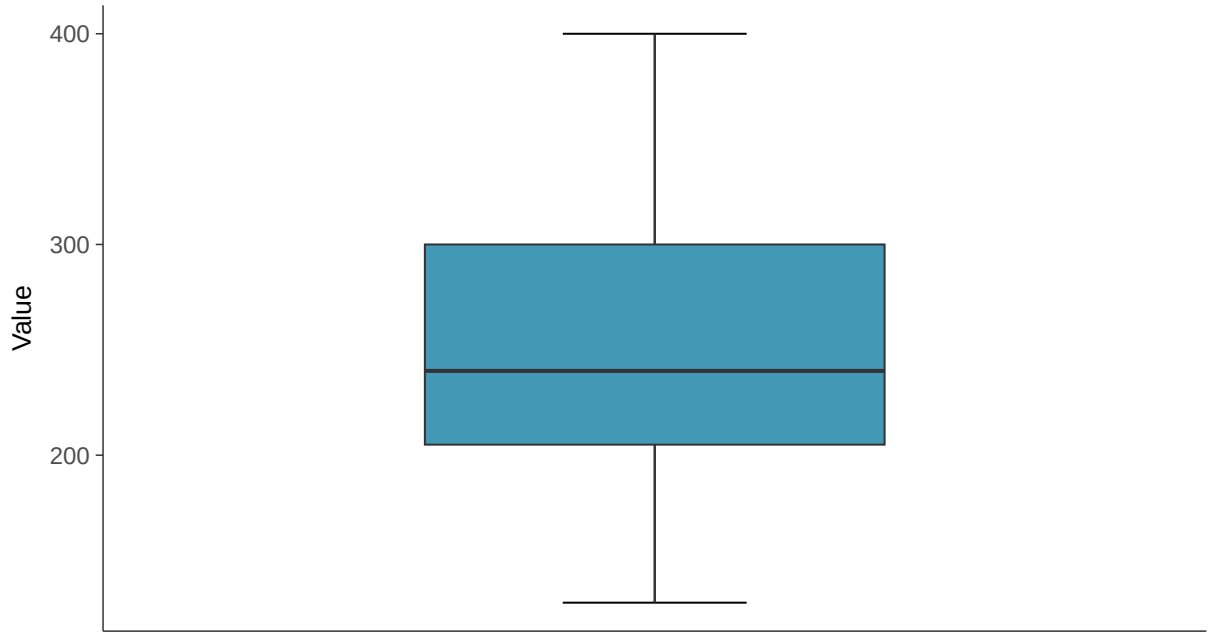
ID: 2_11_4_107





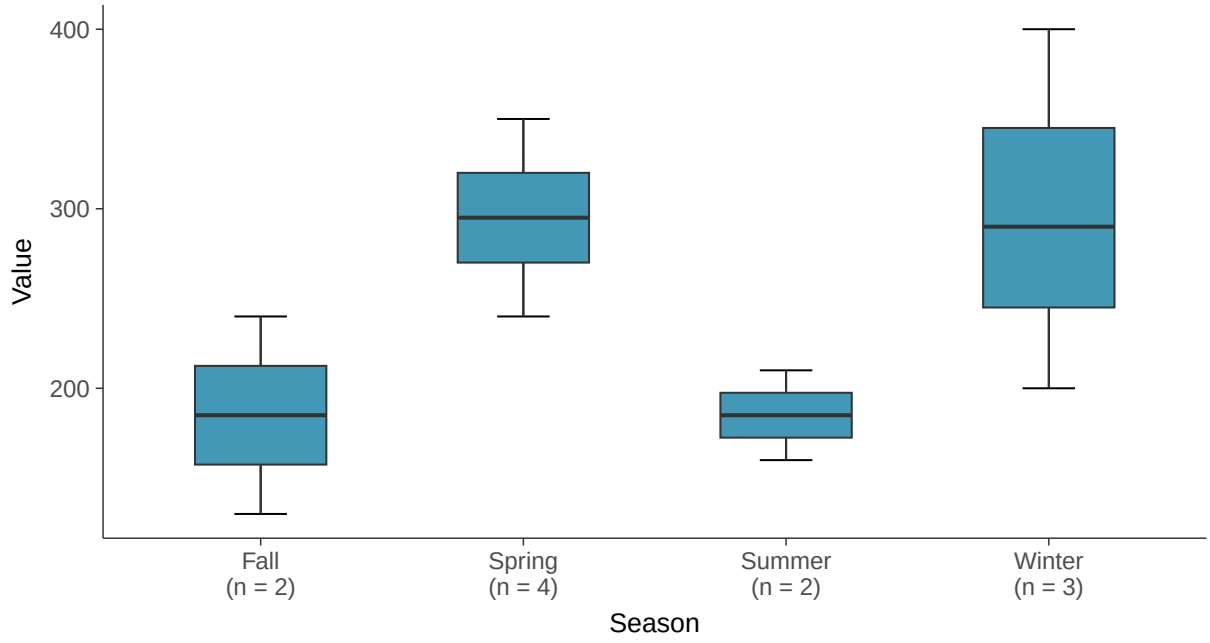
Boxplot

Calcium, MW-01R (mg/L)



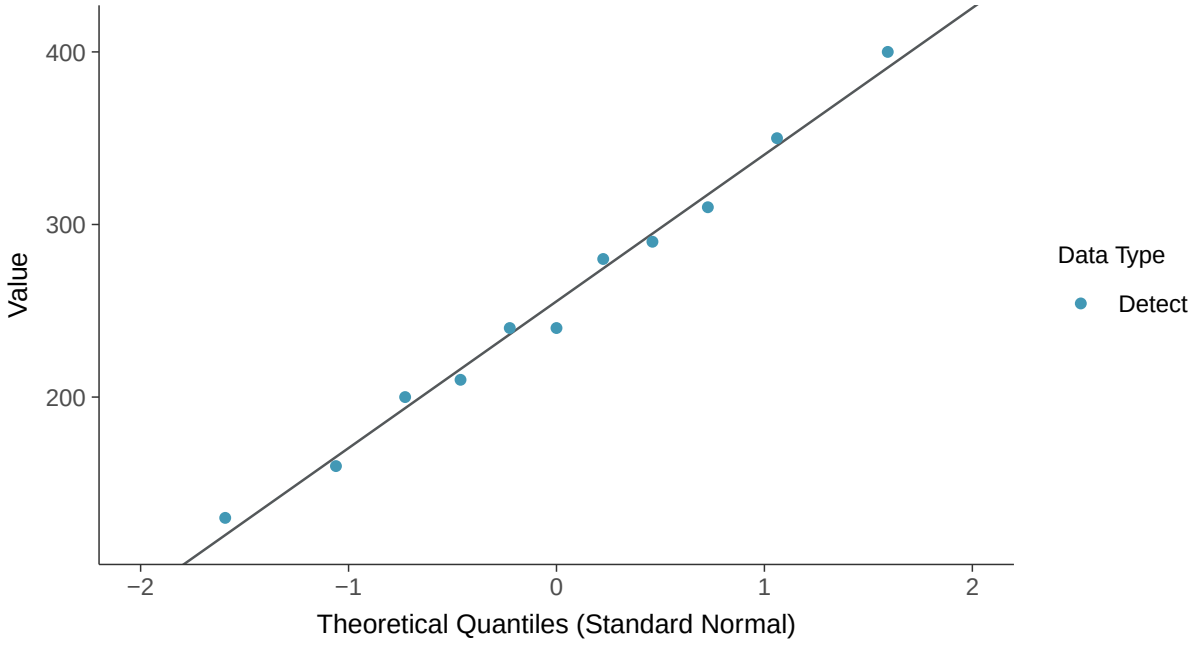
Boxplot by Season

Calcium, MW-01R (mg/L)



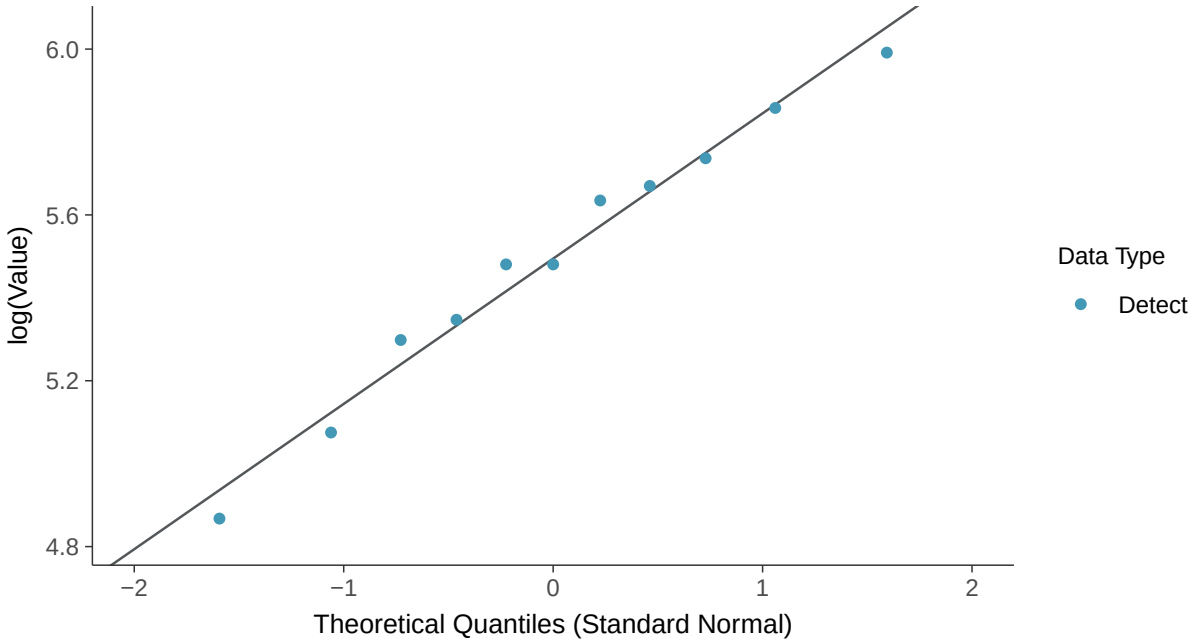
Normal Q-Q plot

Calcium, MW-01R (mg/L)



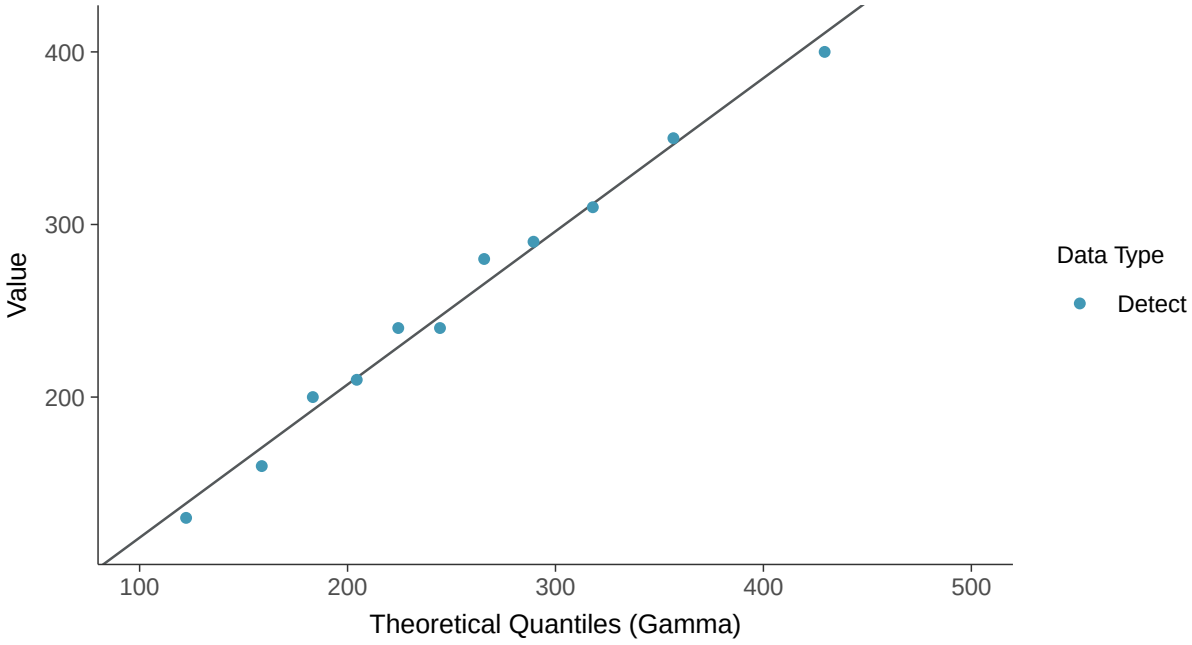
Lognormal Q-Q plot

Calcium, MW-01R (mg/L)



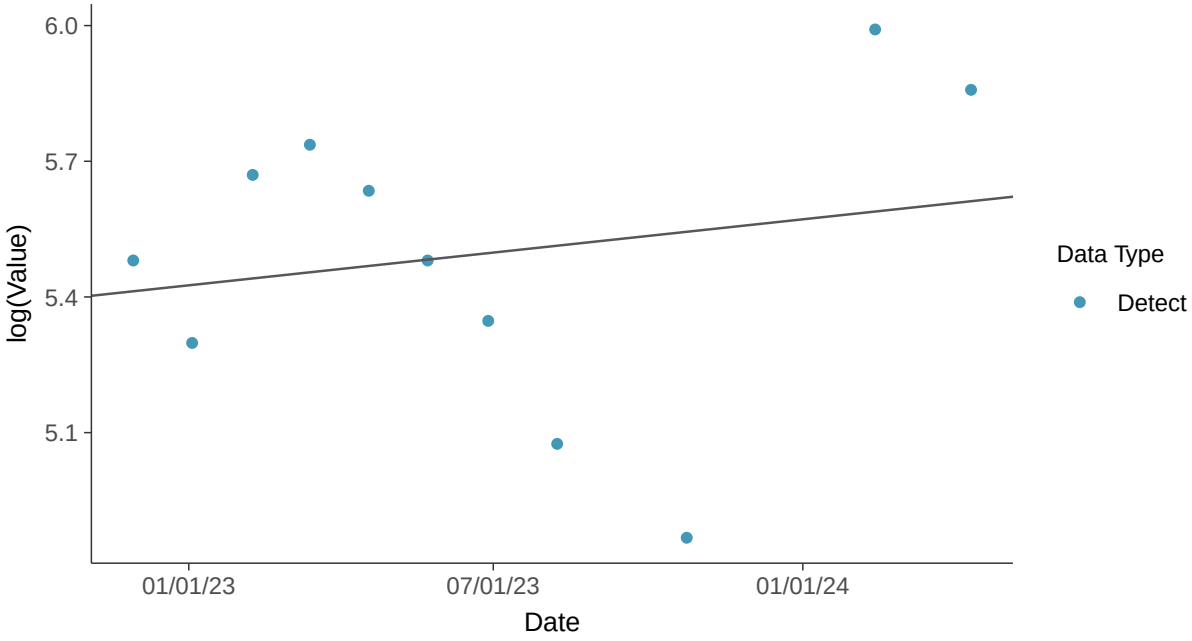
Gamma Q-Q plot

Calcium, MW-01R (mg/L)



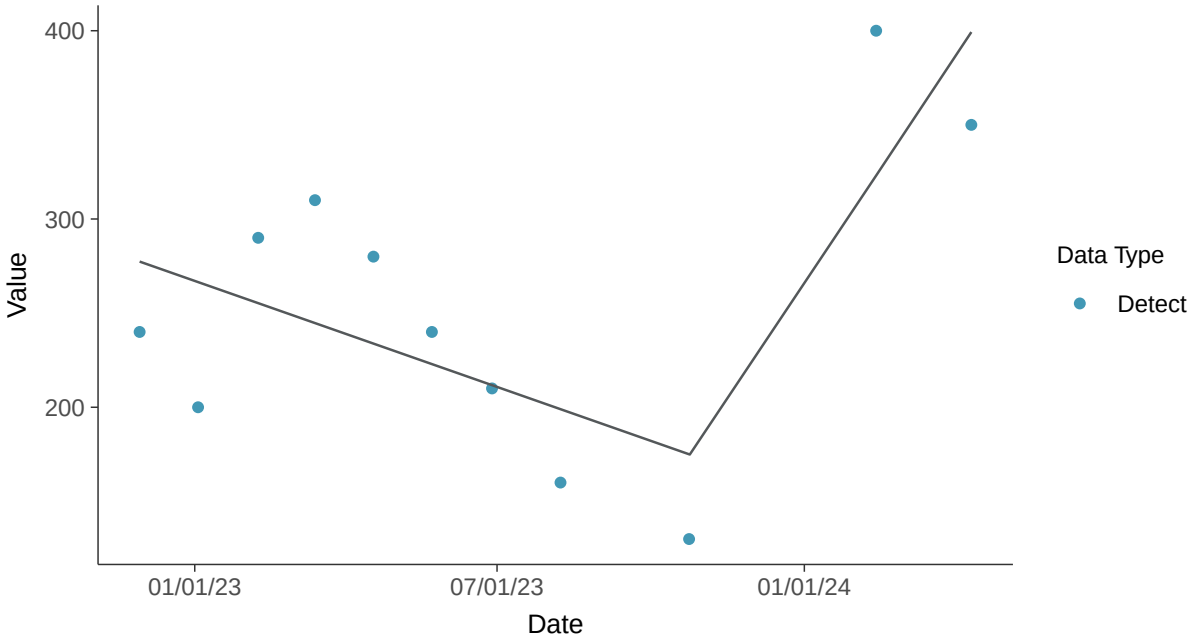
Trend Regression: Lognormal MLE

Calcium, MW-01R (mg/L)



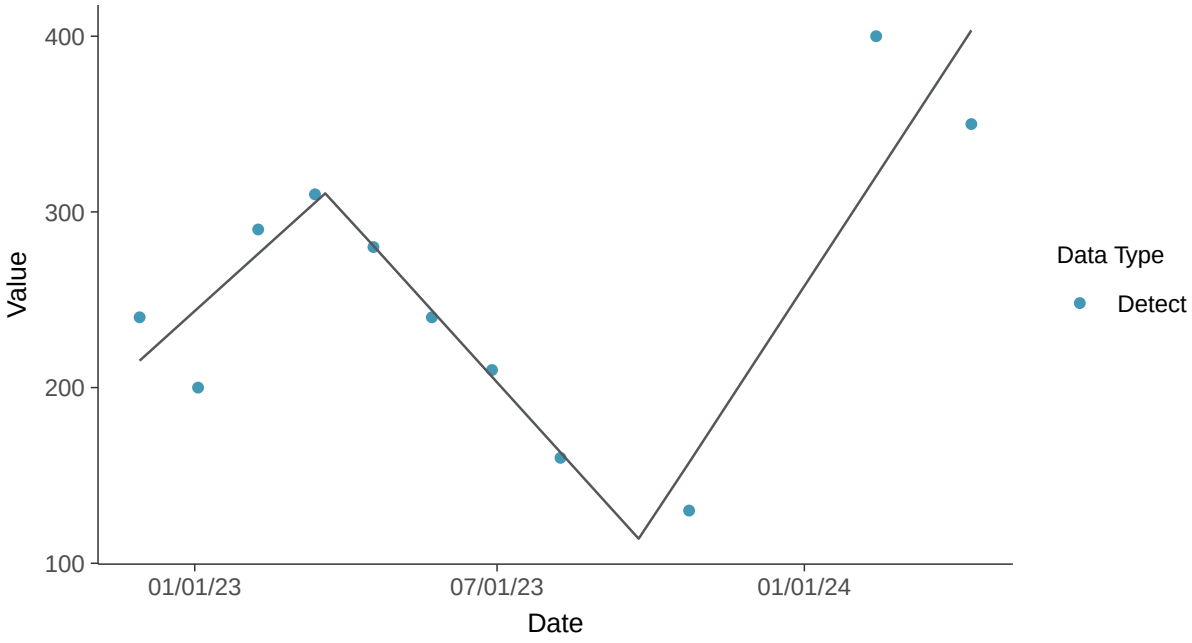
Trend Regression: Piecewise Linear-Linear

Calcium, MW-01R (mg/L)



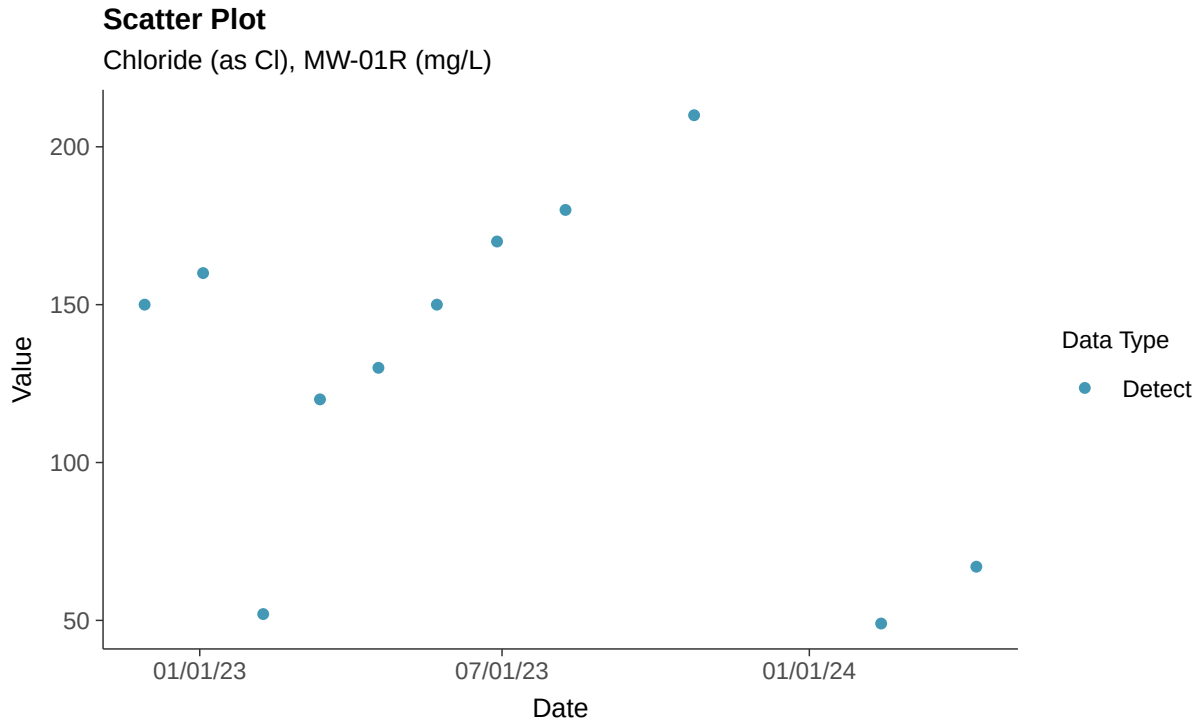
Trend Regression: Piecewise Linear-Linear-Linear

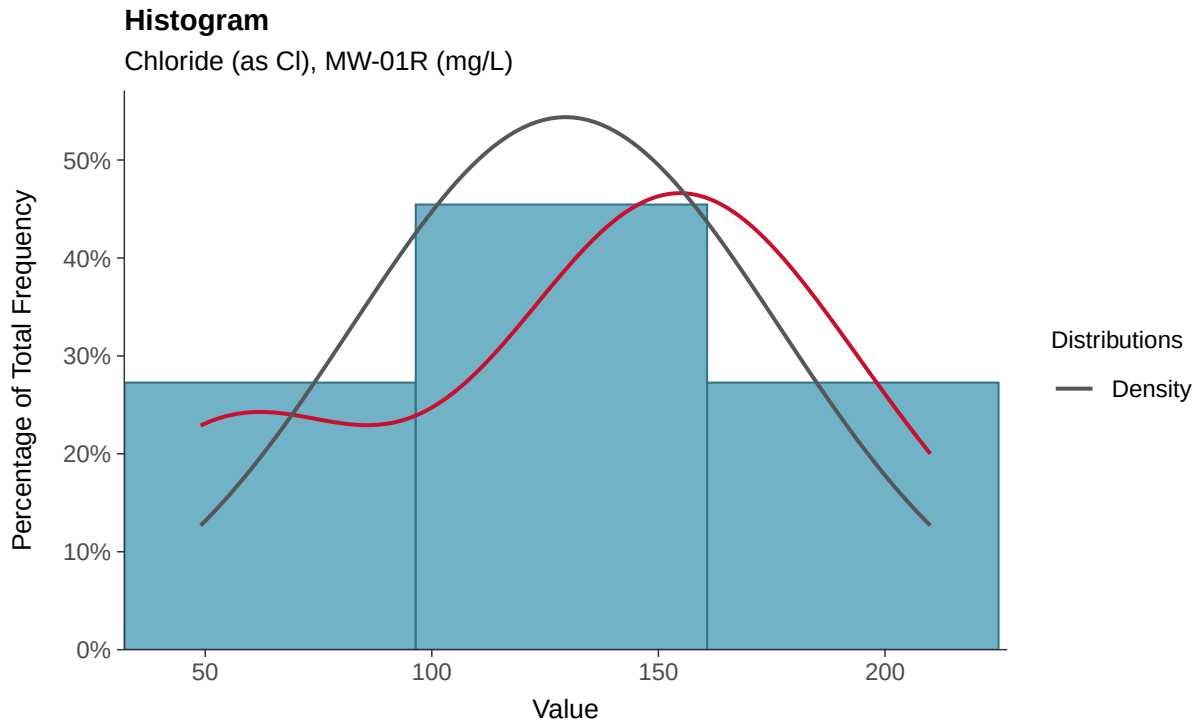
Calcium, MW-01R (mg/L)



Appendix III: Chloride (as Cl), MW-01R

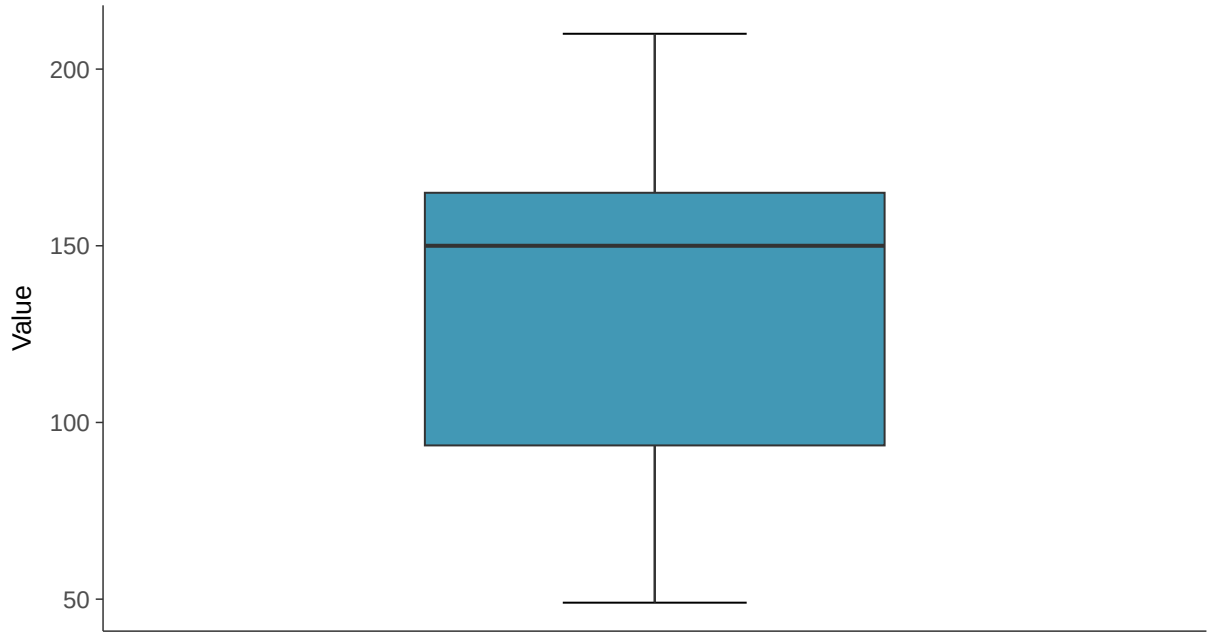
ID: 2_11_4_108





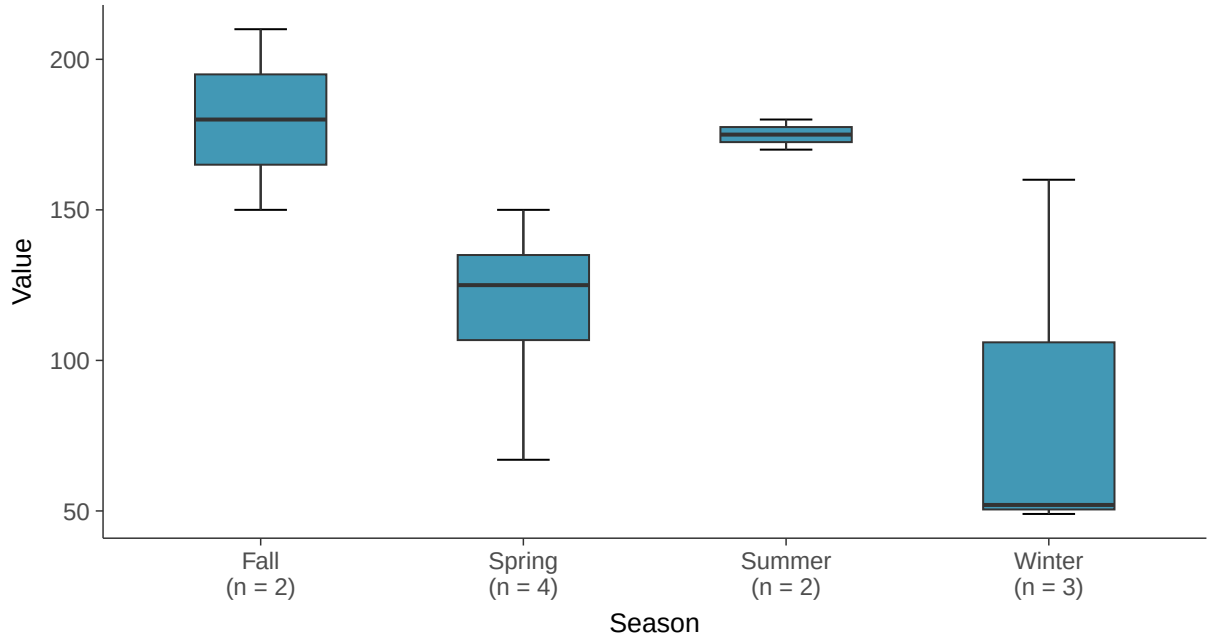
Boxplot

Chloride (as Cl), MW-01R (mg/L)



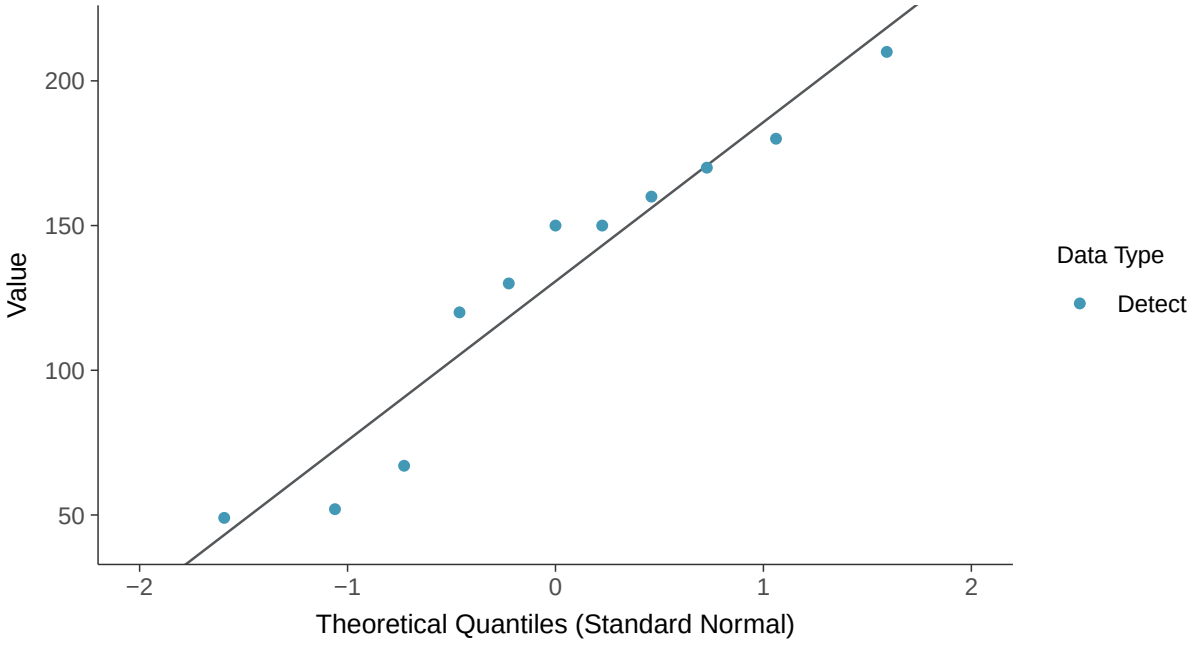
Boxplot by Season

Chloride (as Cl), MW-01R (mg/L)



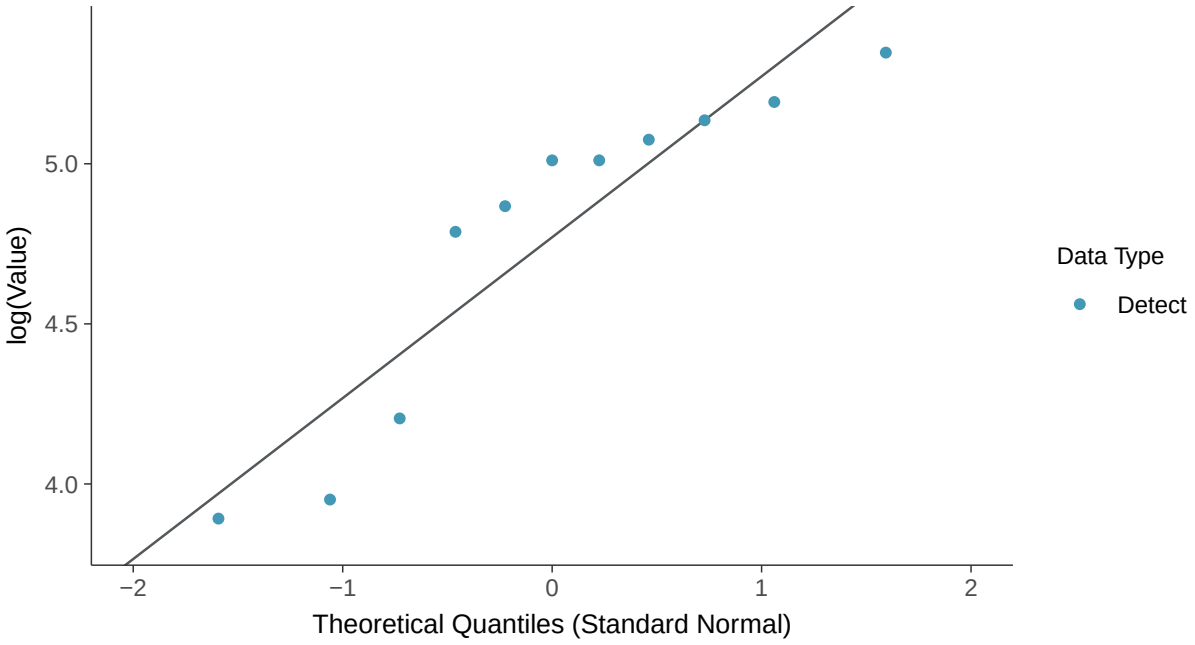
Normal Q-Q plot

Chloride (as Cl), MW-01R (mg/L)



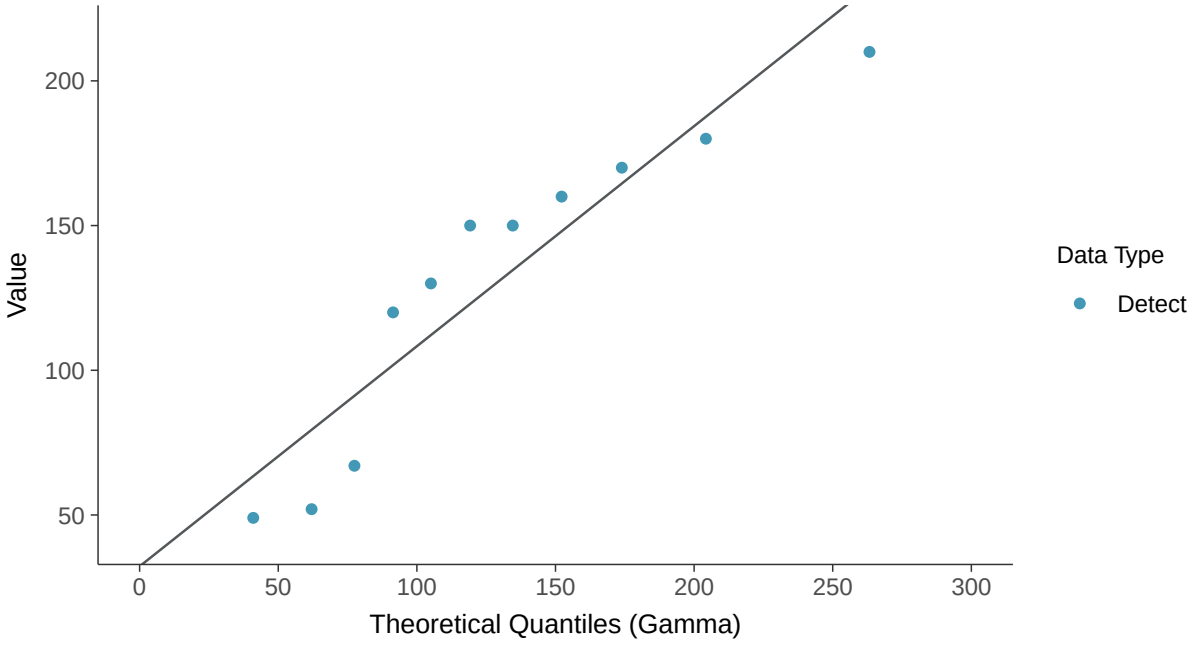
Lognormal Q-Q plot

Chloride (as Cl), MW-01R (mg/L)



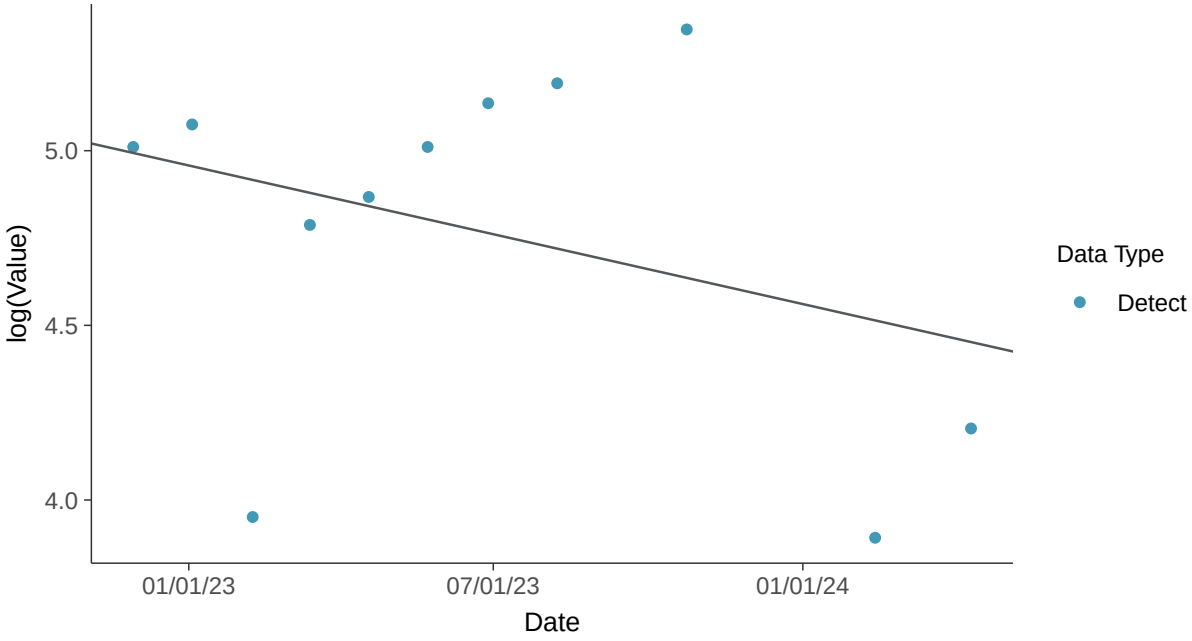
Gamma Q-Q plot

Chloride (as Cl), MW-01R (mg/L)



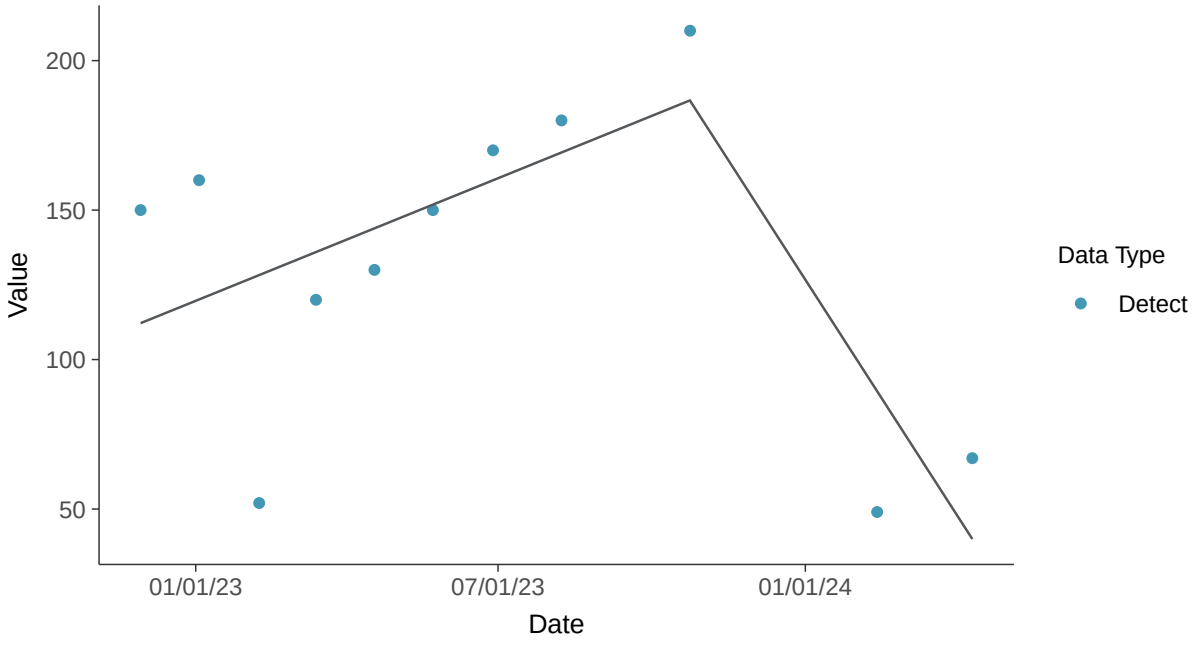
Trend Regression: Lognormal MLE

Chloride (as Cl), MW-01R (mg/L)



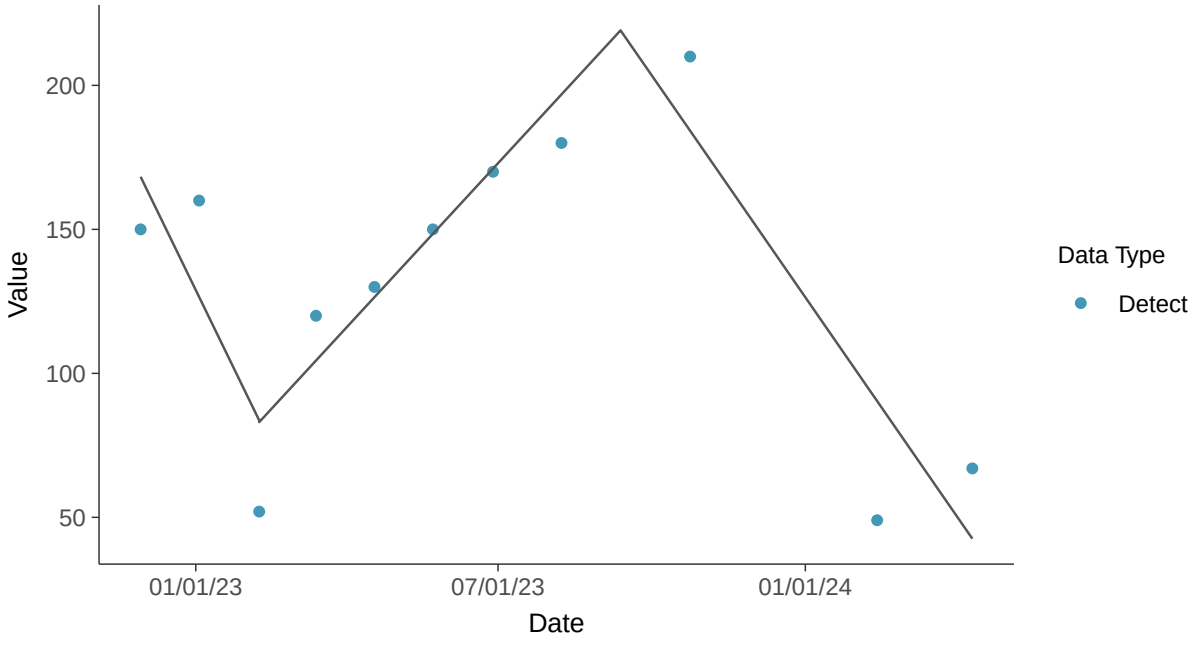
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-01R (mg/L)



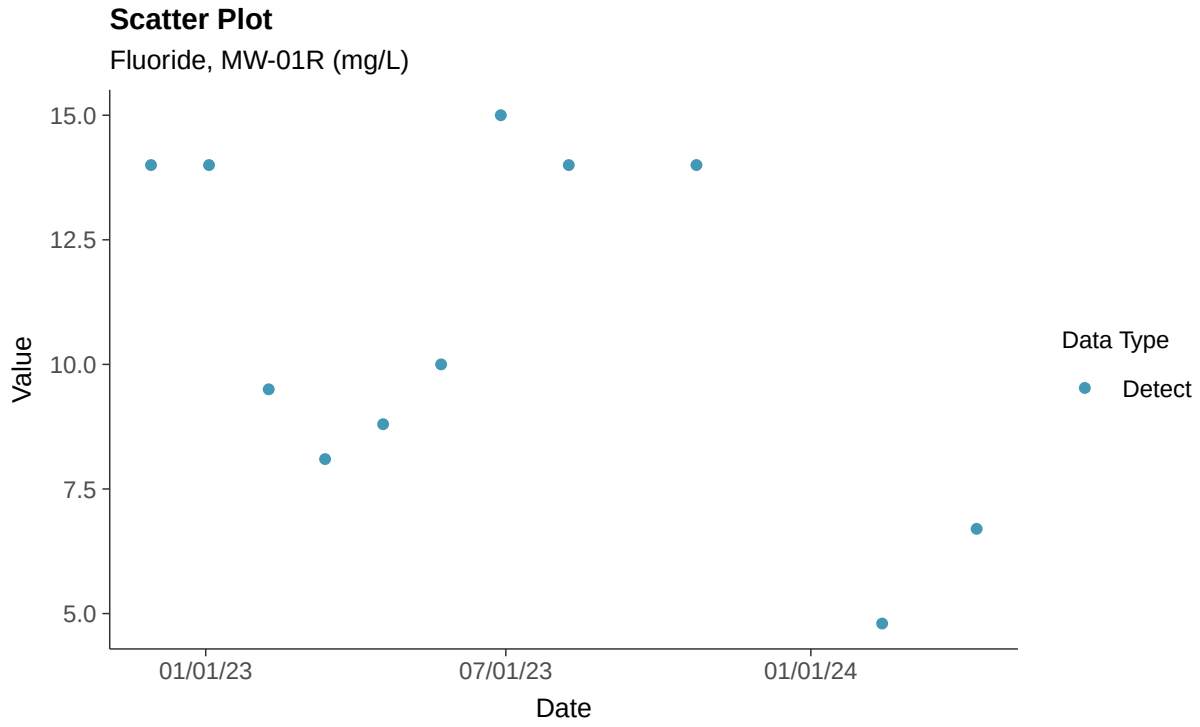
Trend Regression: Piecewise Linear-Linear-Linear

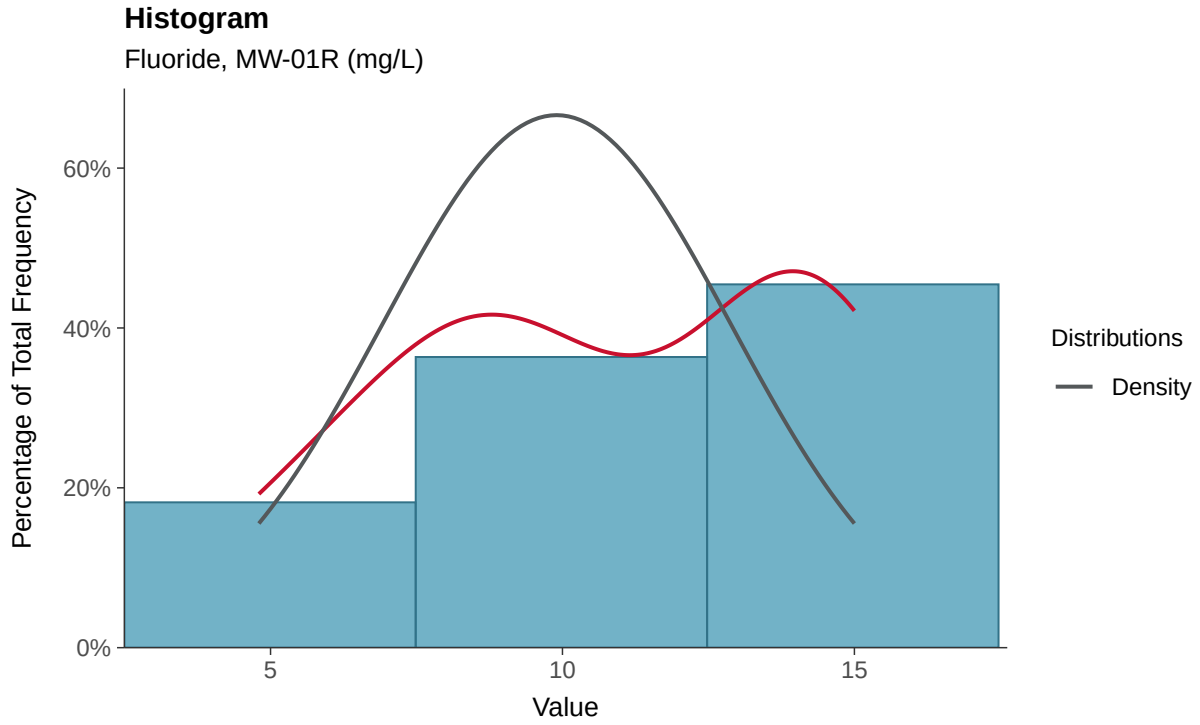
Chloride (as Cl), MW-01R (mg/L)



Appendix III: Fluoride, MW-01R

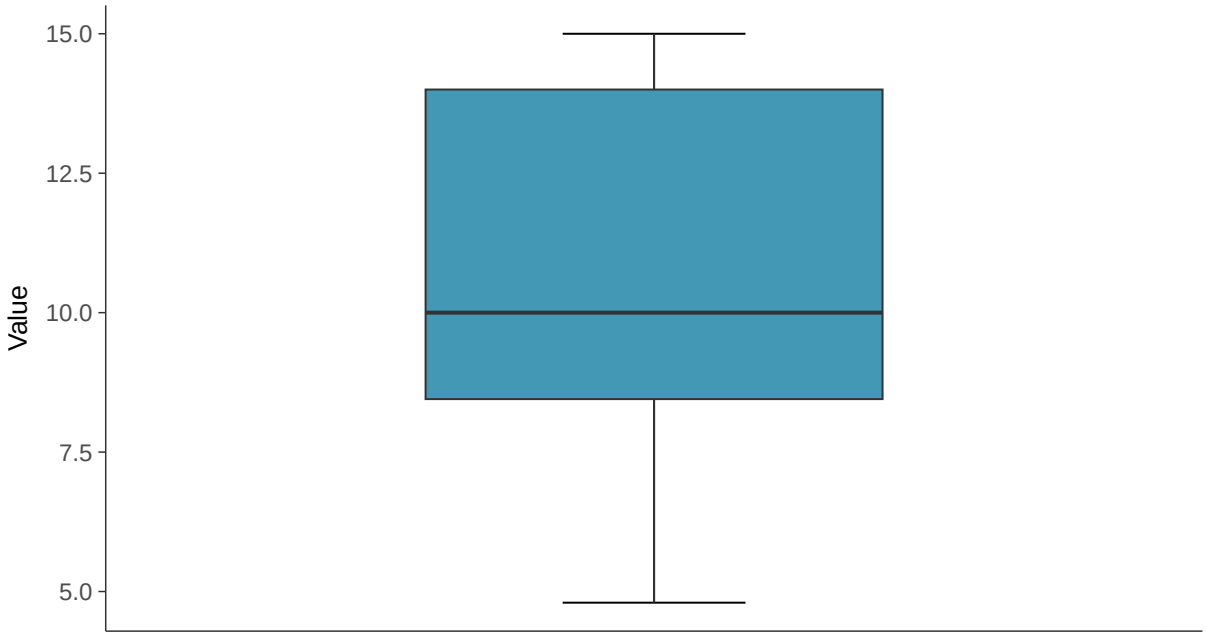
ID: 2_11_4_112





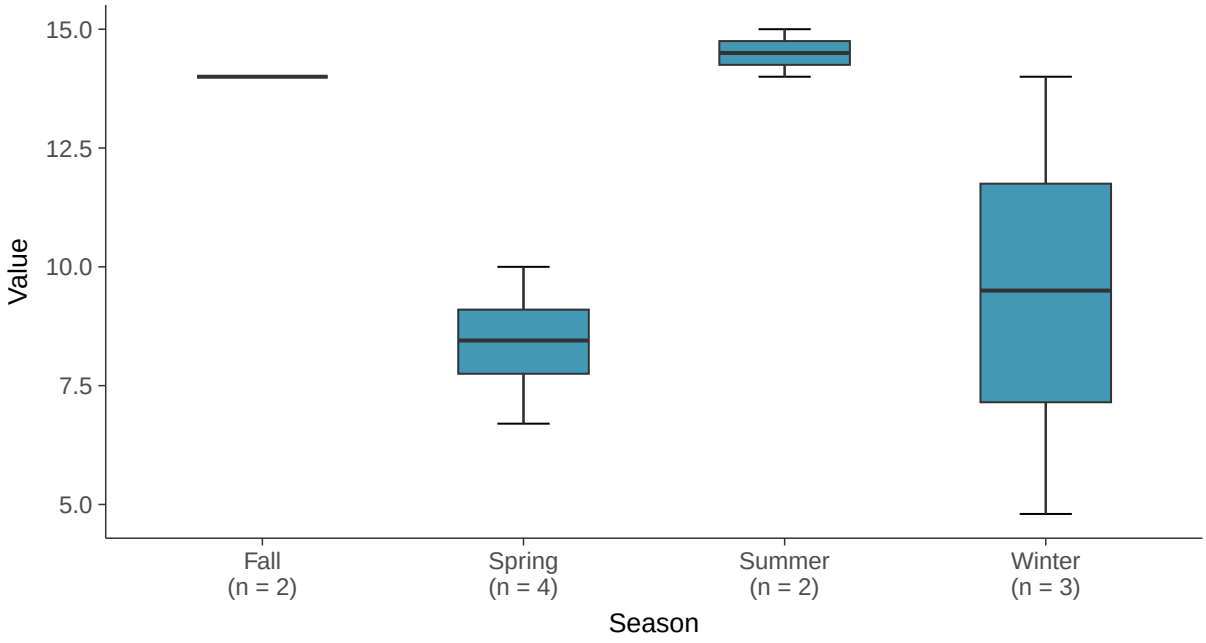
Boxplot

Fluoride, MW-01R (mg/L)



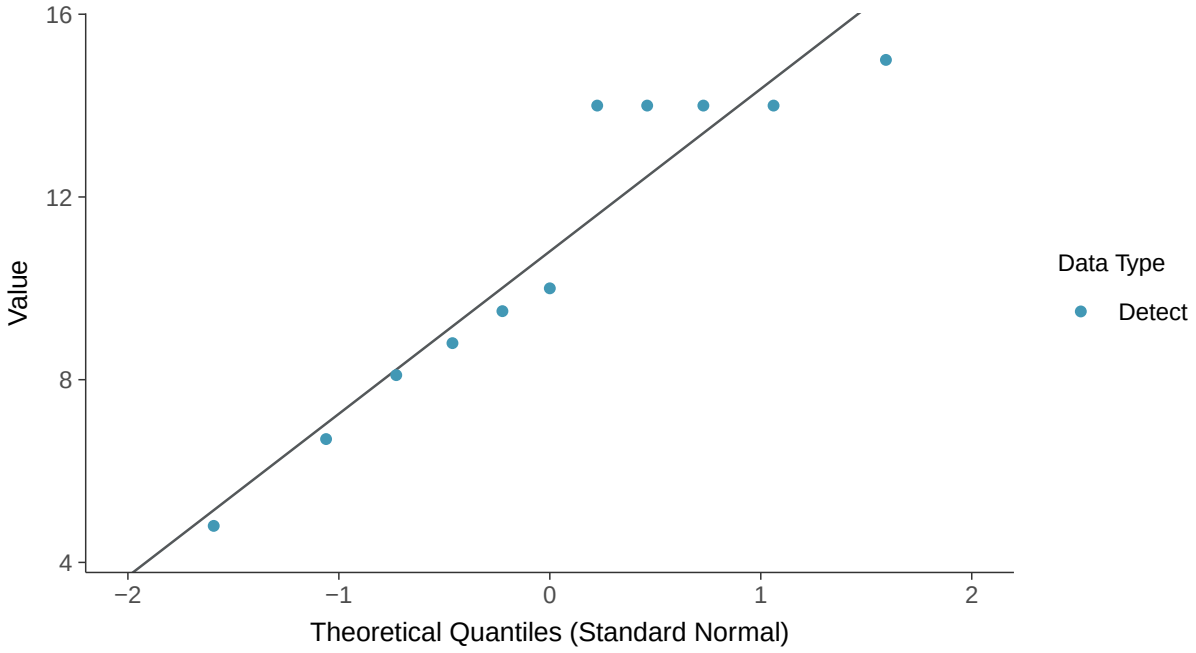
Boxplot by Season

Fluoride, MW-01R (mg/L)



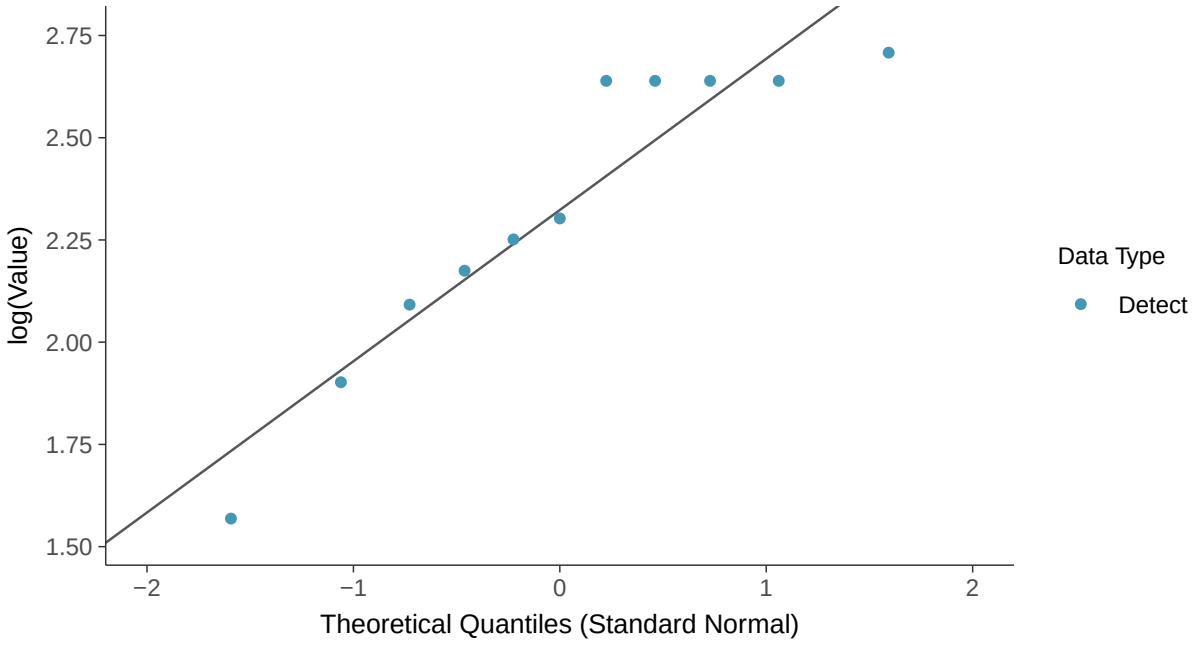
Normal Q-Q plot

Fluoride, MW-01R (mg/L)



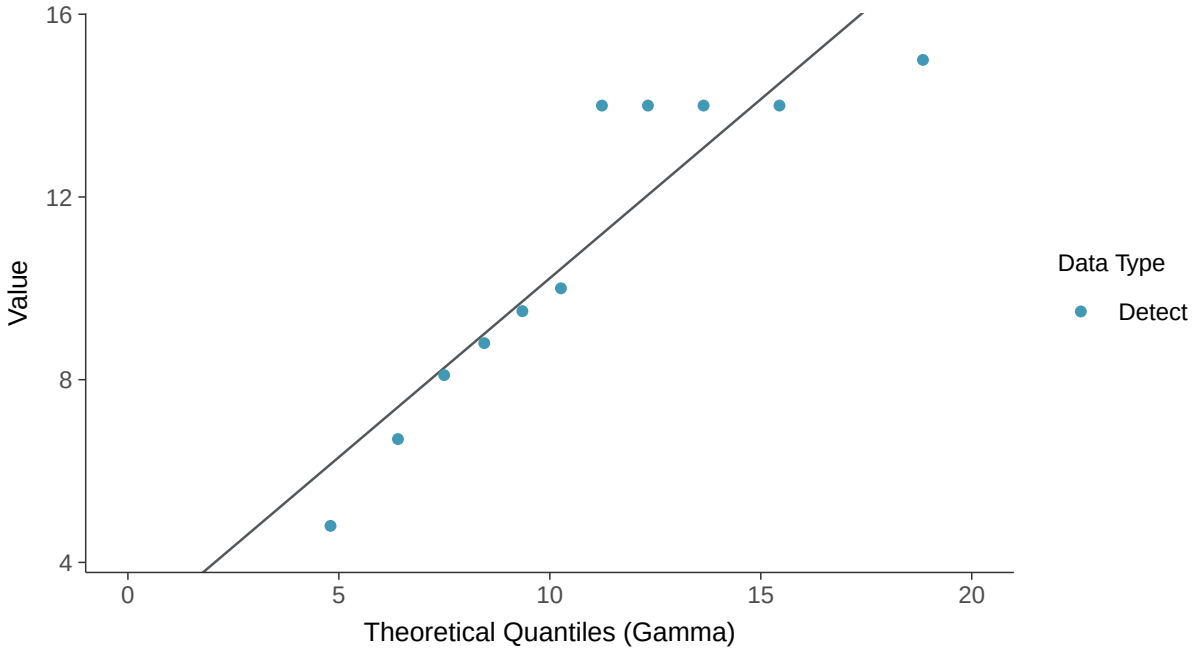
Lognormal Q-Q plot

Fluoride, MW-01R (mg/L)



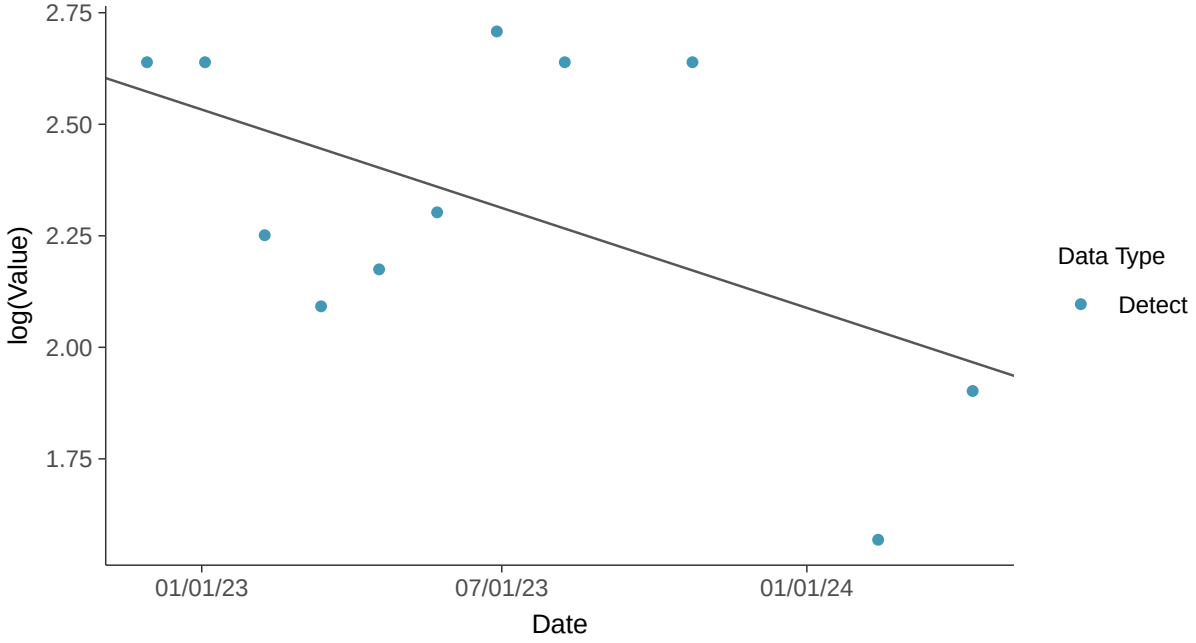
Gamma Q-Q plot

Fluoride, MW-01R (mg/L)



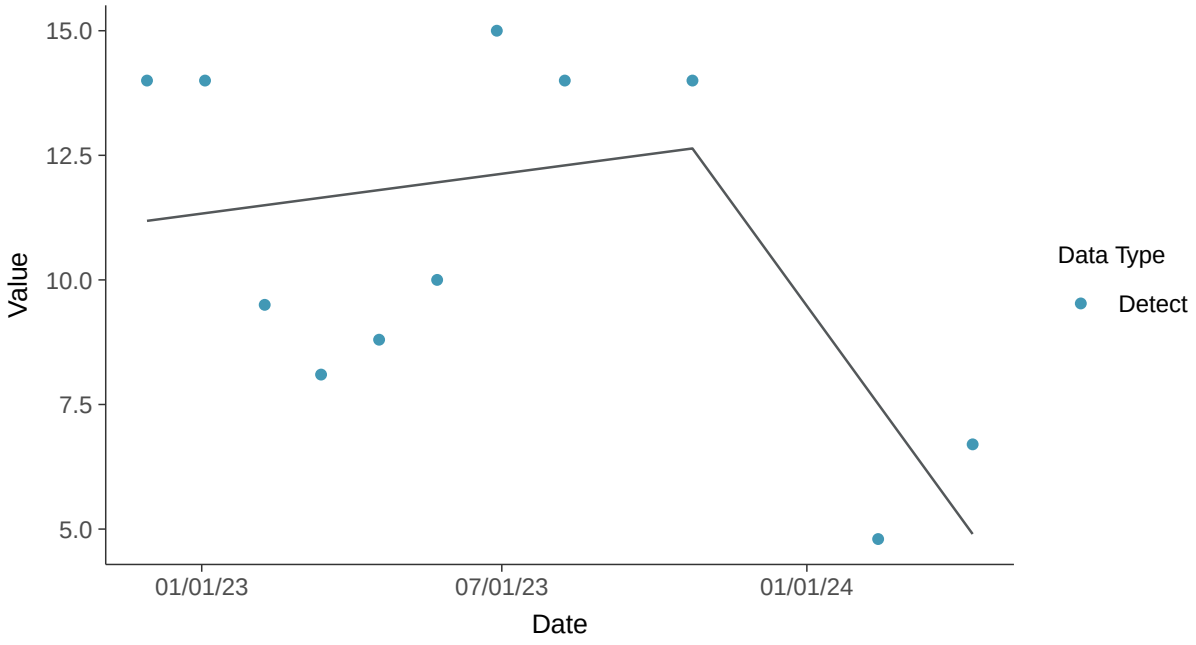
Trend Regression: Lognormal MLE

Fluoride, MW-01R (mg/L)



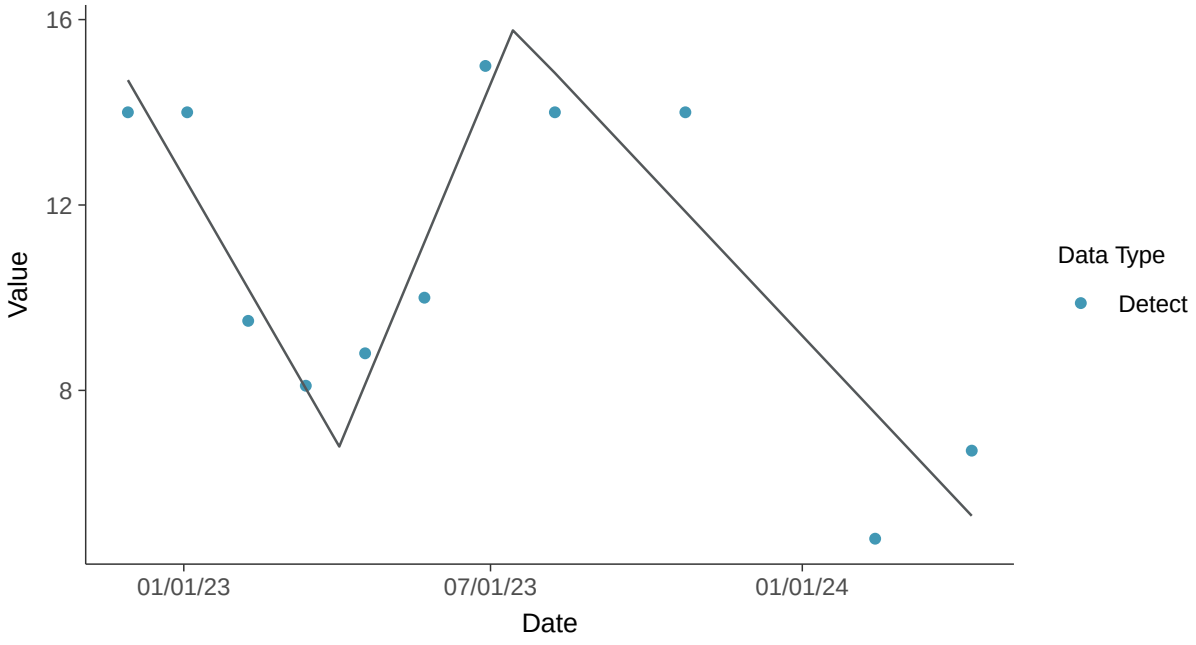
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-01R (mg/L)



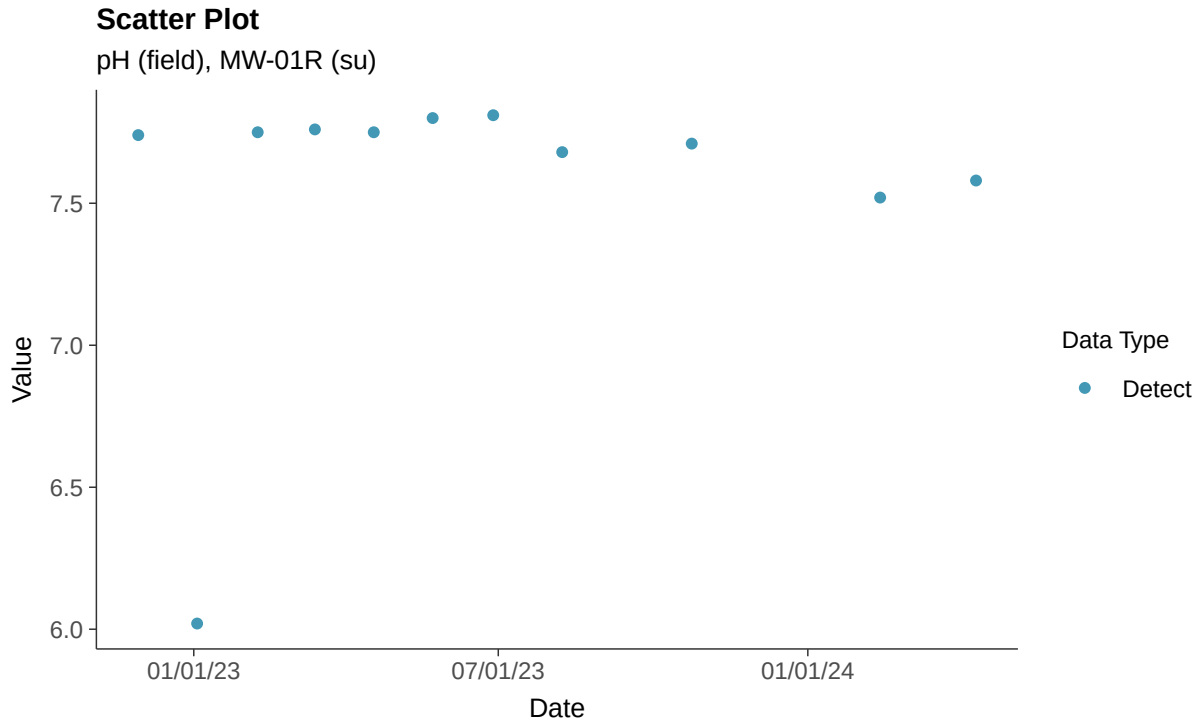
Trend Regression: Piecewise Linear-Linear-Linear

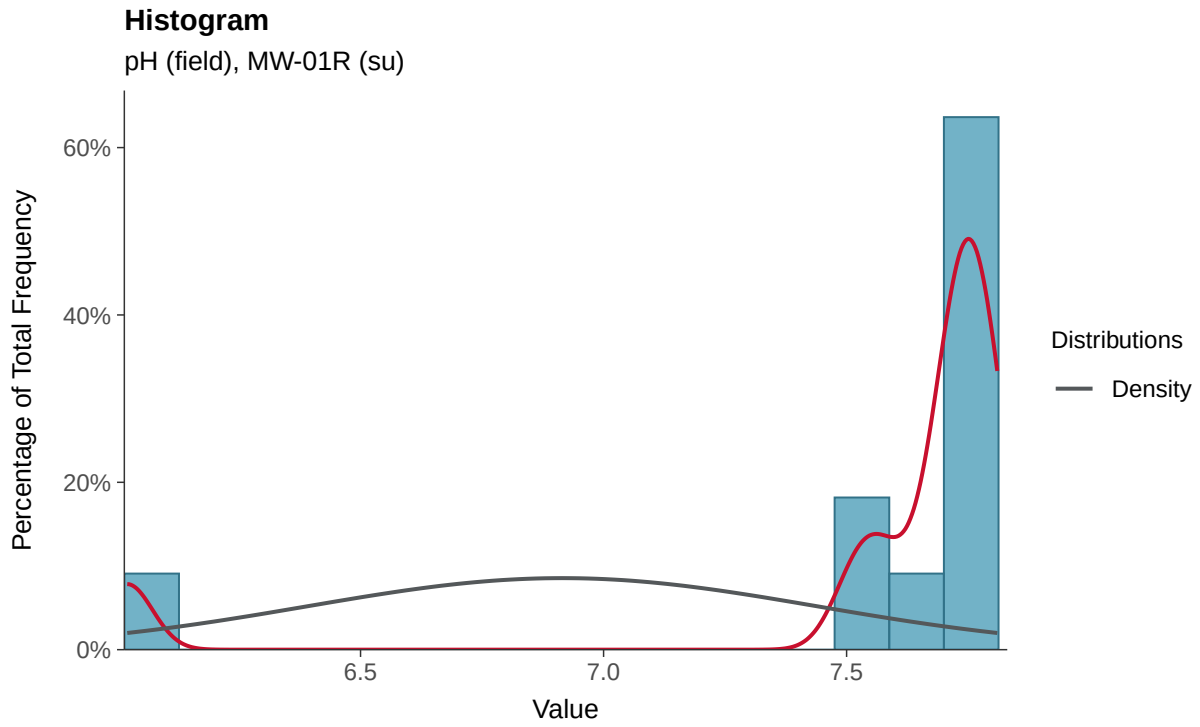
Fluoride, MW-01R (mg/L)



Appendix III: pH (field), MW-01R

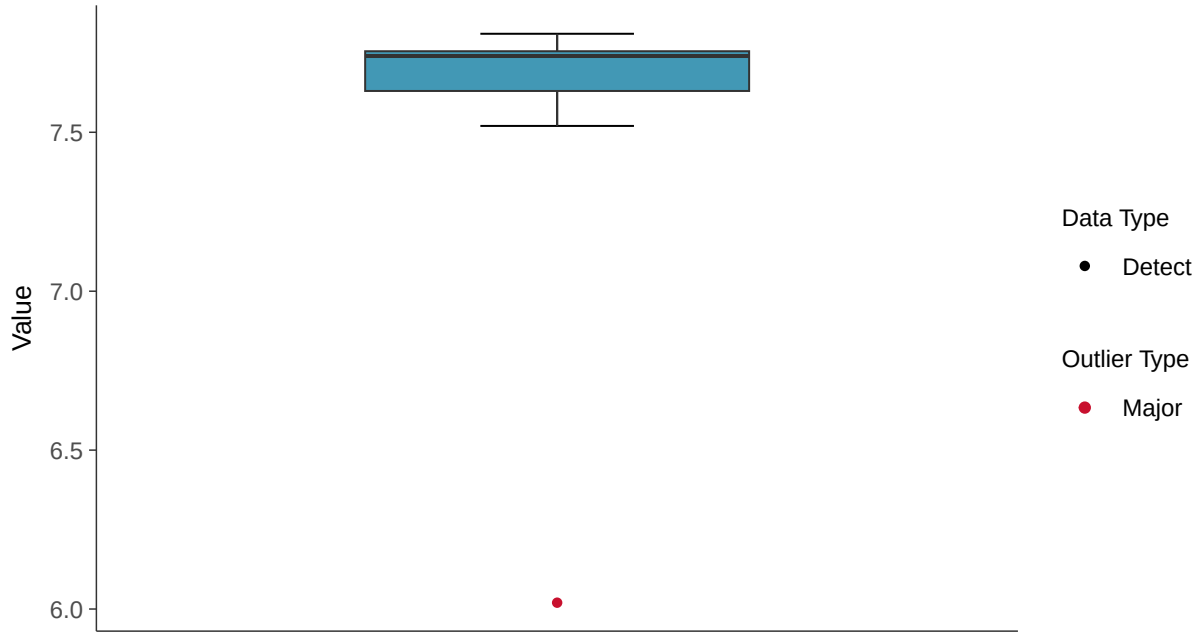
ID: 2_11_4_120





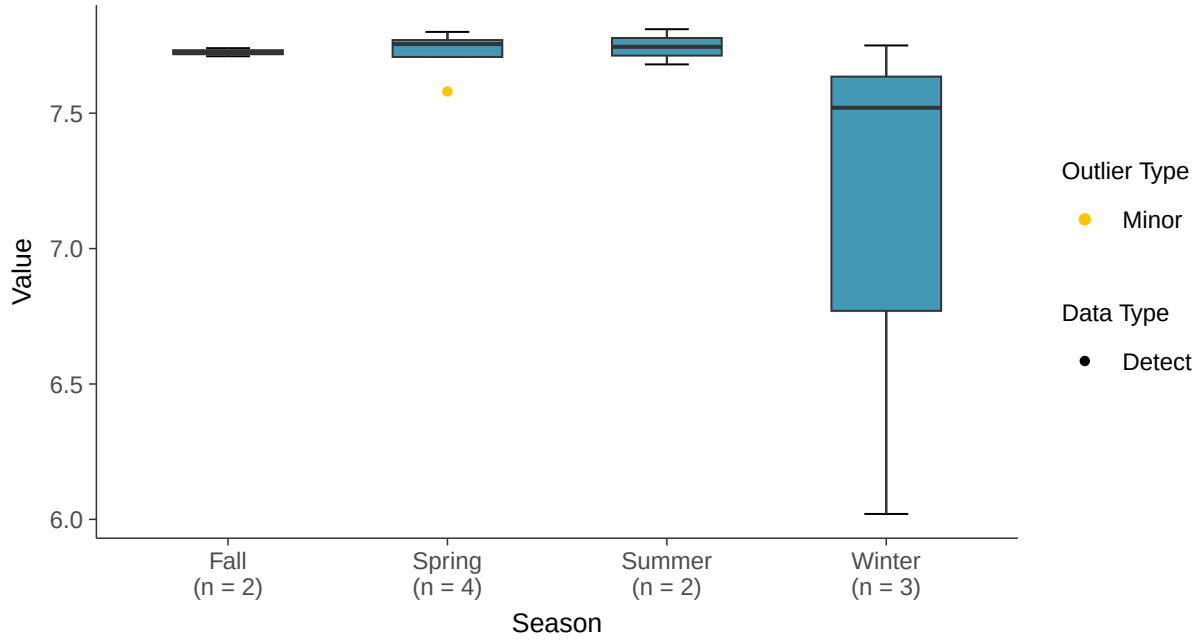
Boxplot

pH (field), MW-01R (su)



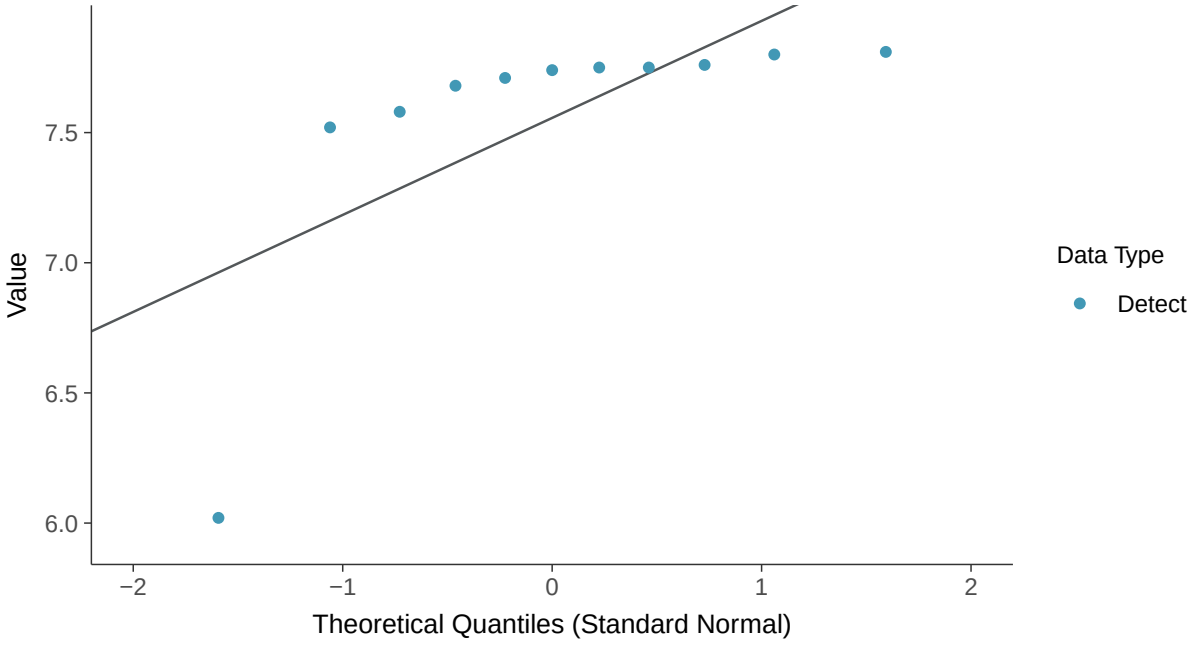
Boxplot by Season

pH (field), MW-01R (su)



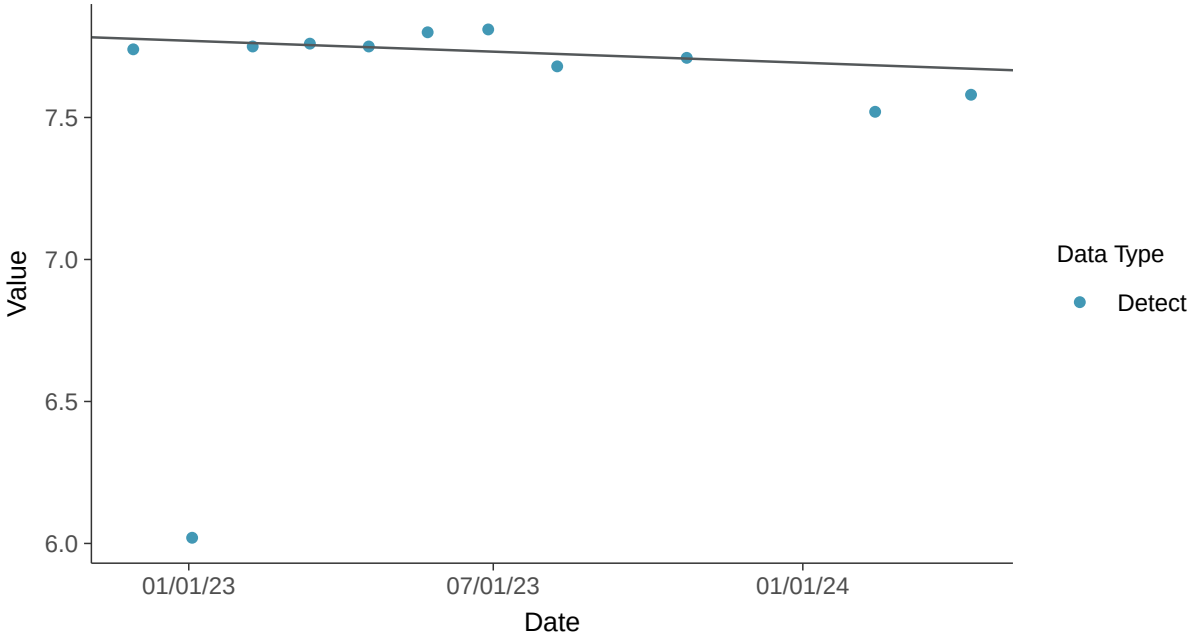
Normal Q-Q plot

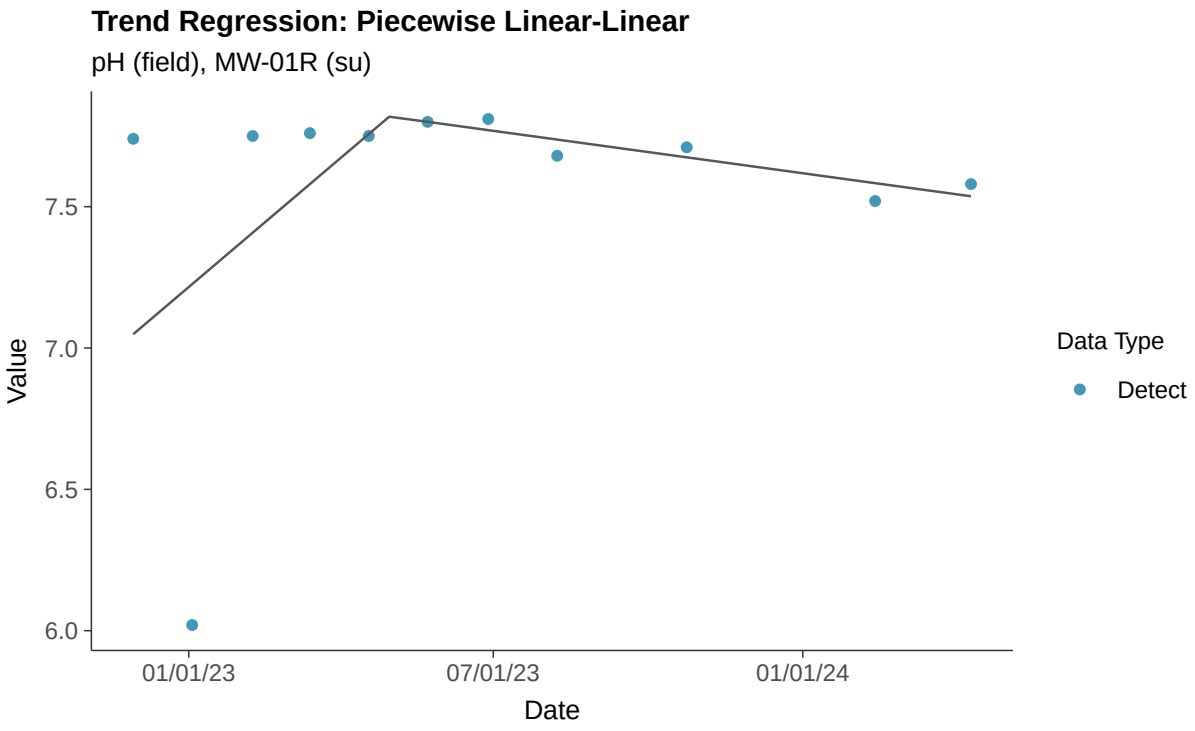
pH (field), MW-01R (su)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

pH (field), MW-01R (su)



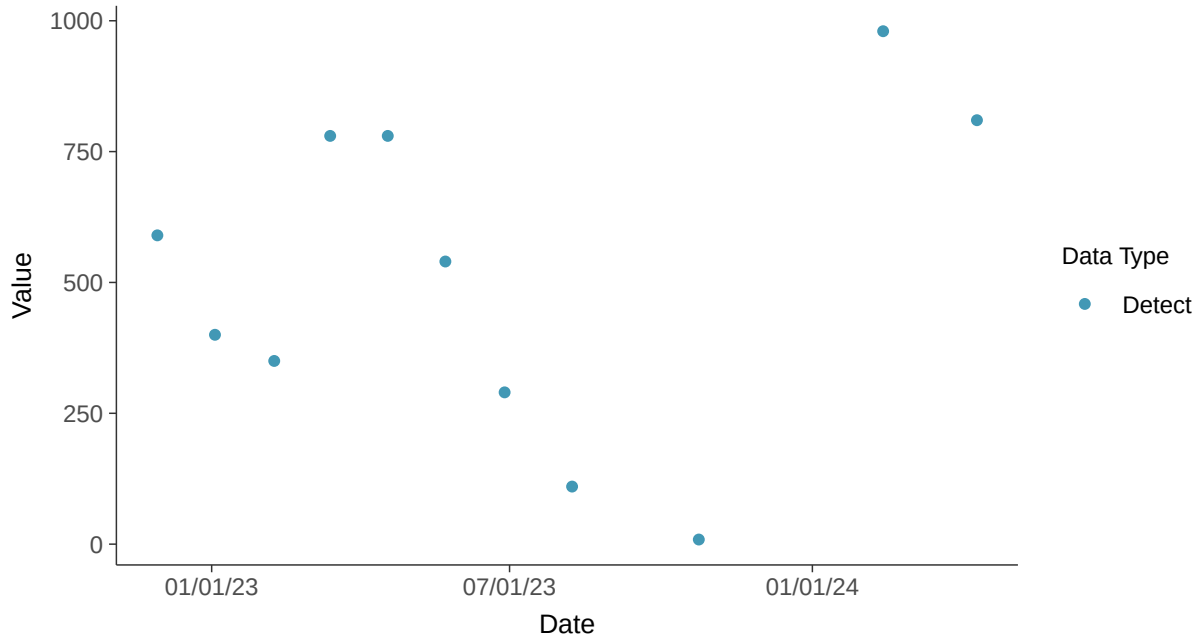

Trend Regression: Piecewise Linear-Linear
pH (field), MW-01R (su)
Value
7.5
7.0
6.5
6.0
01/01/23
07/01/23
01/01/24
Date
Data Type
Detect

Appendix III: Sulfate (as SO4), MW-01R

ID: 2_11_4_124

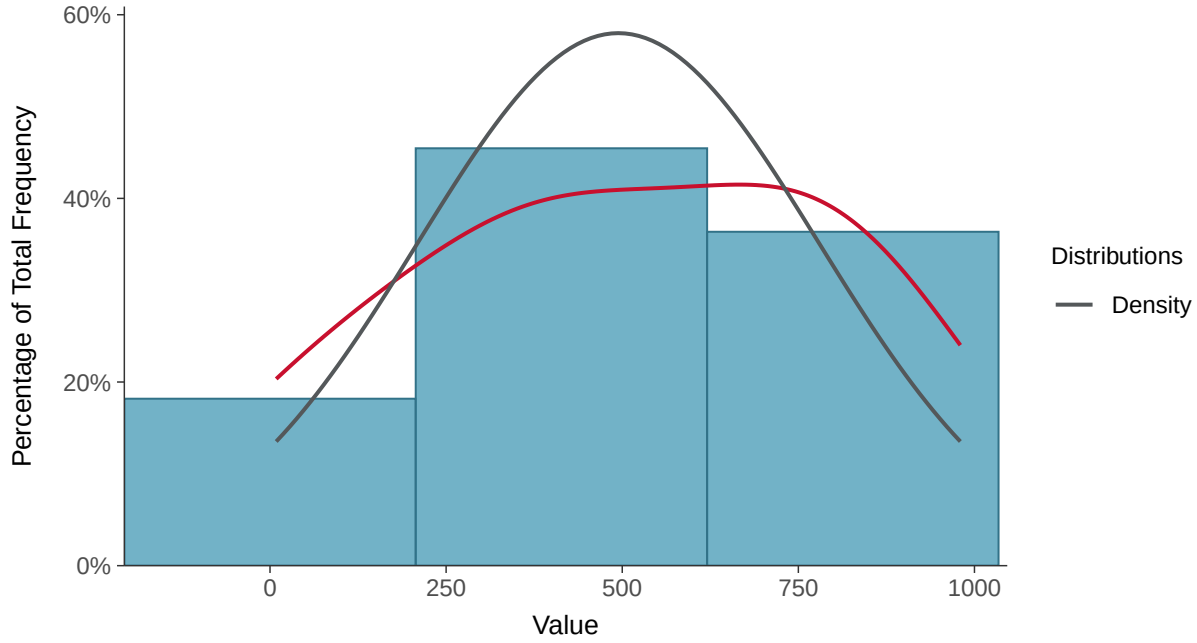
Scatter Plot

Sulfate (as SO4), MW-01R (mg/L)



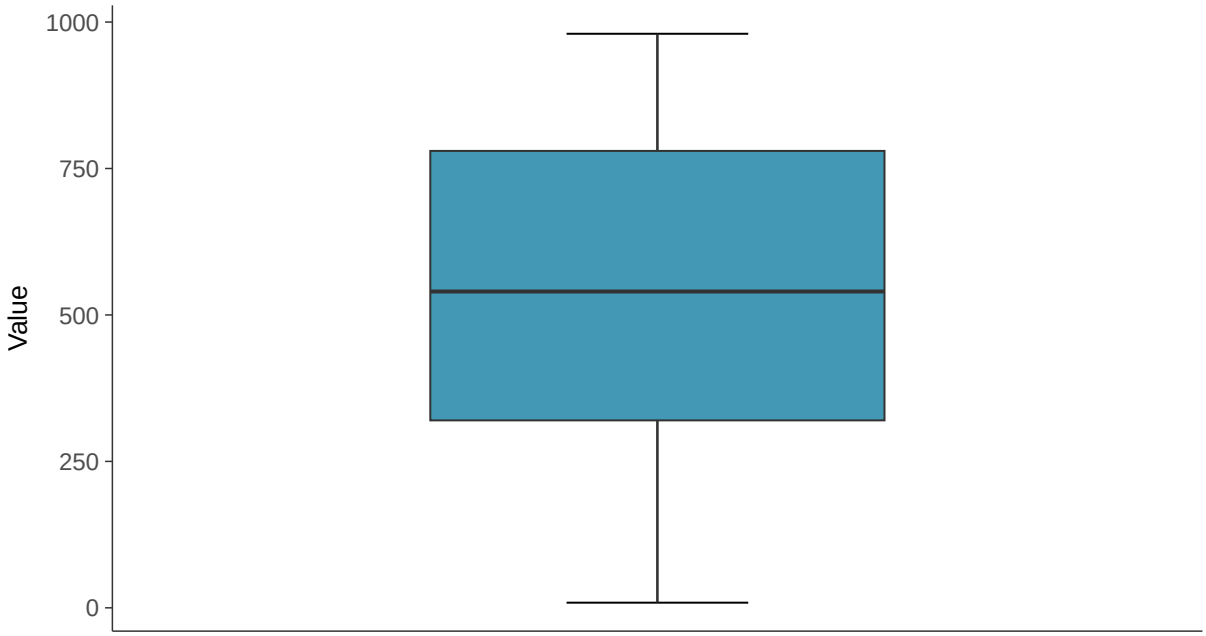
Histogram

Sulfate (as SO4), MW-01R (mg/L)



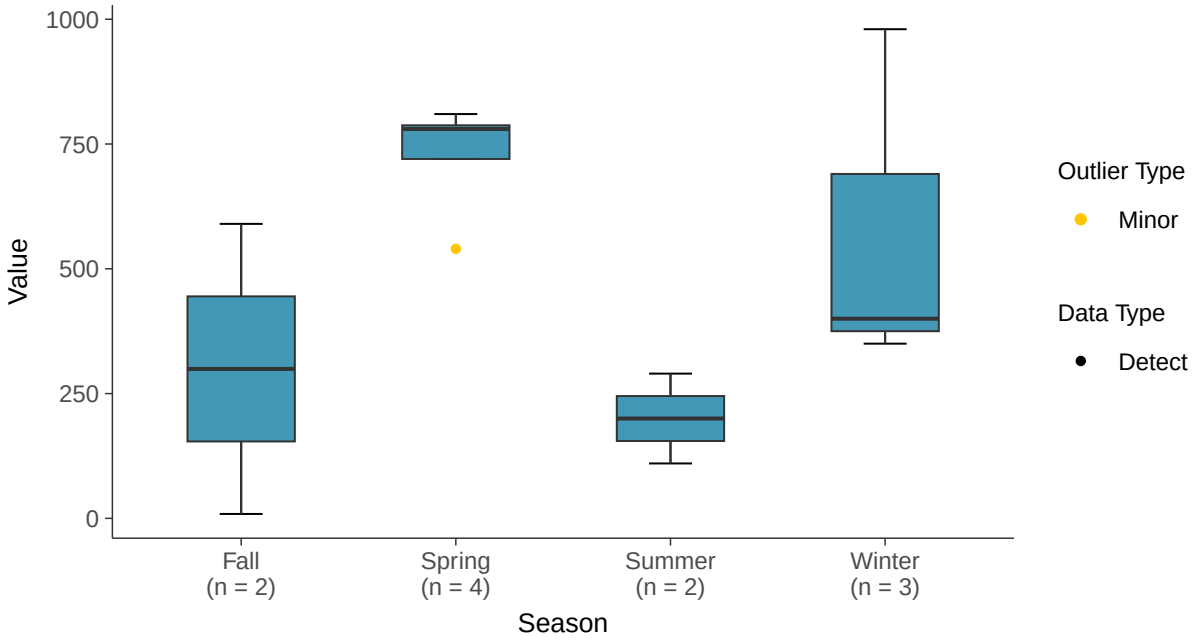
Boxplot

Sulfate (as SO4), MW-01R (mg/L)



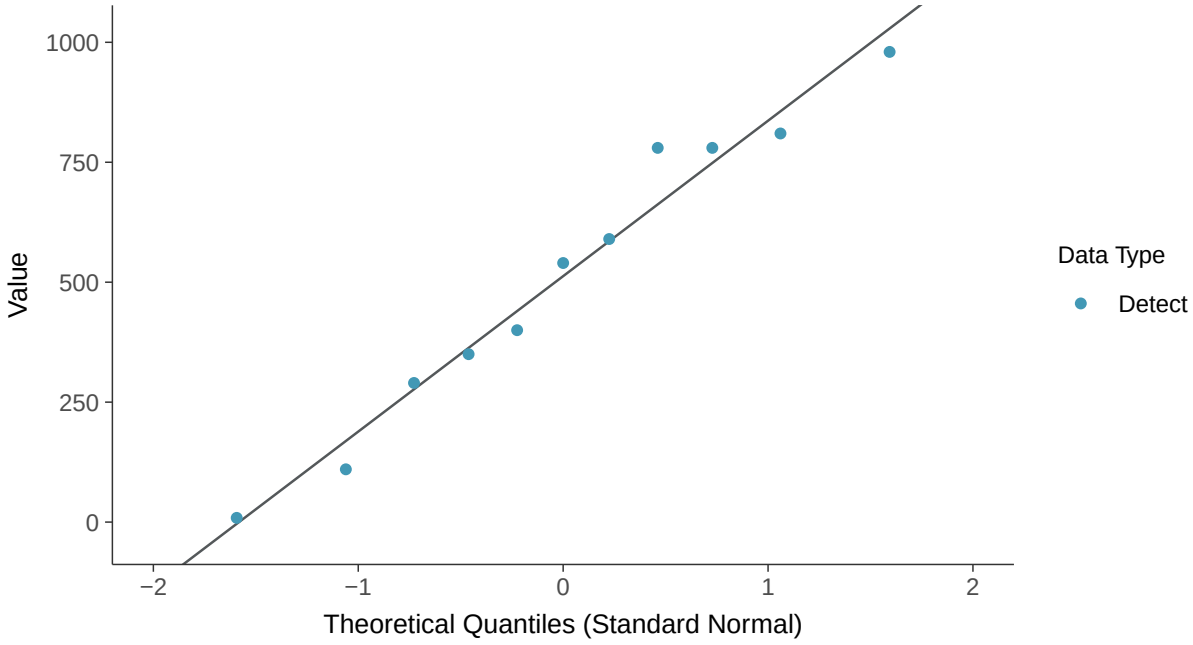
Boxplot by Season

Sulfate (as SO4), MW-01R (mg/L)



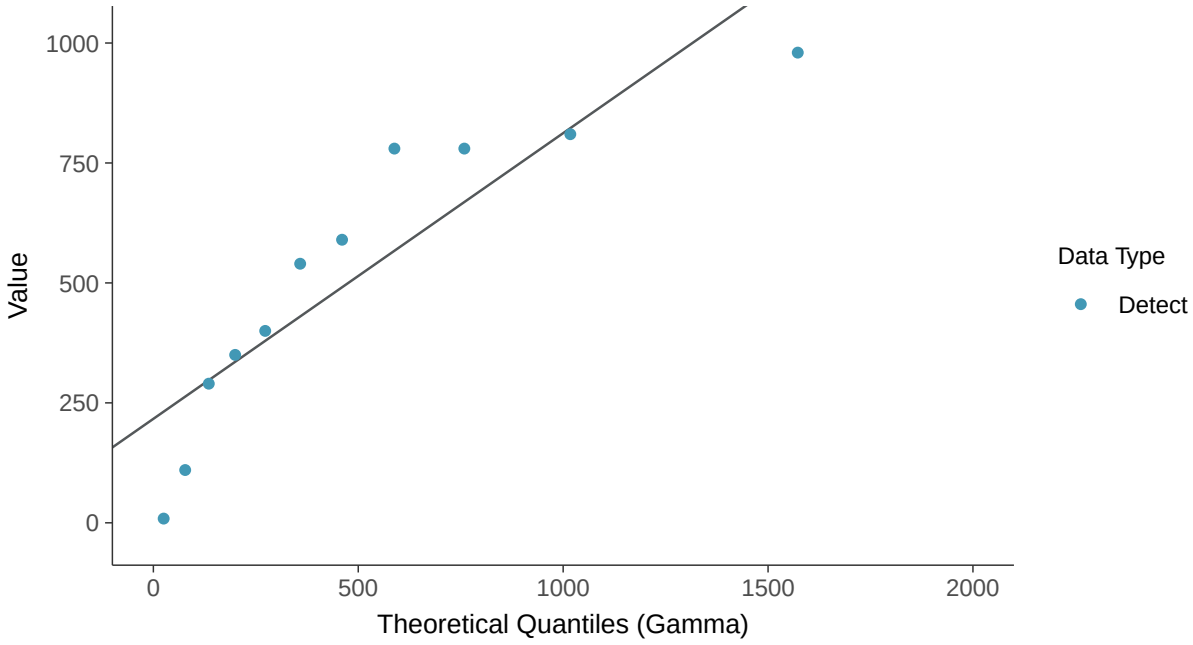
Normal Q-Q plot

Sulfate (as SO4), MW-01R (mg/L)



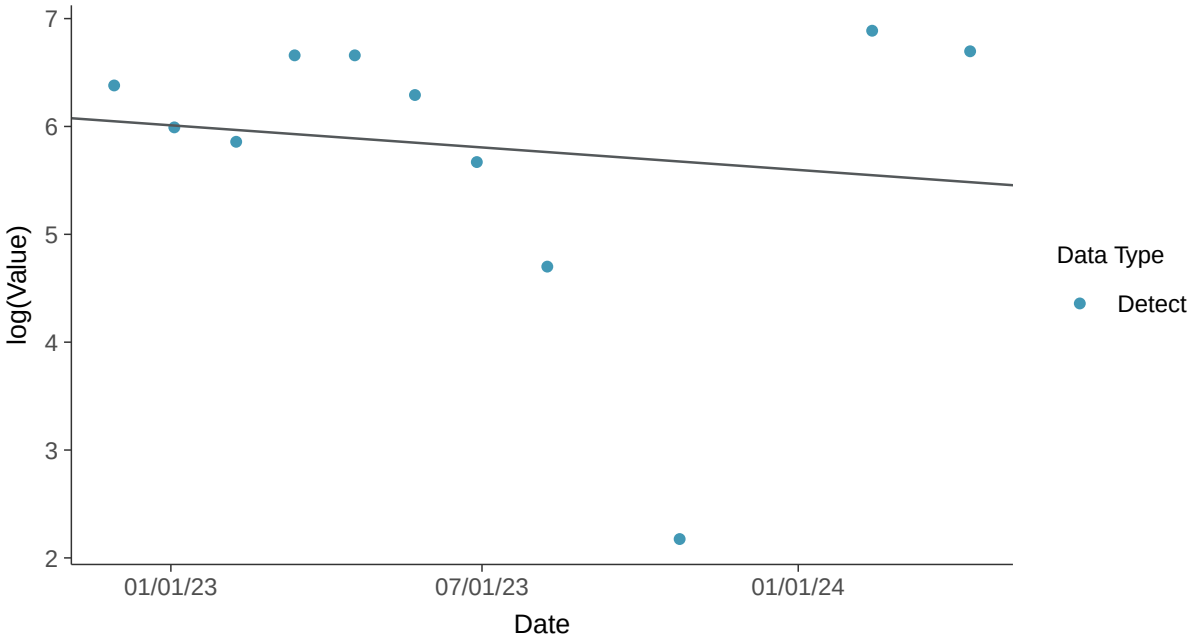
Gamma Q-Q plot

Sulfate (as SO4), MW-01R (mg/L)



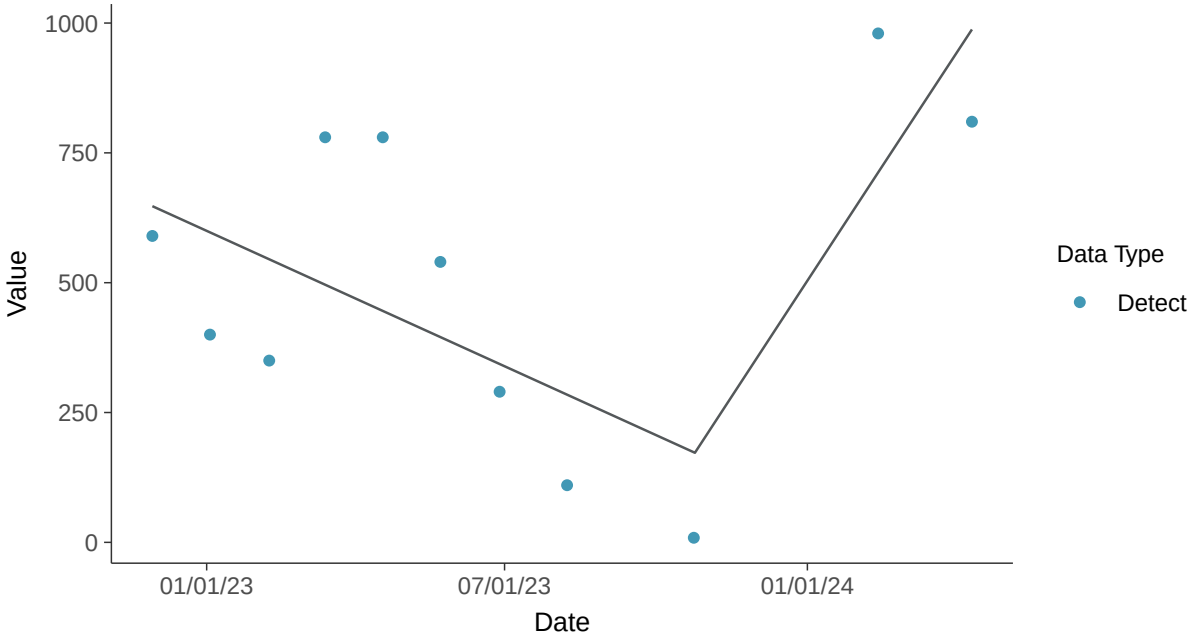
Trend Regression: Lognormal MLE

Sulfate (as SO4), MW-01R (mg/L)



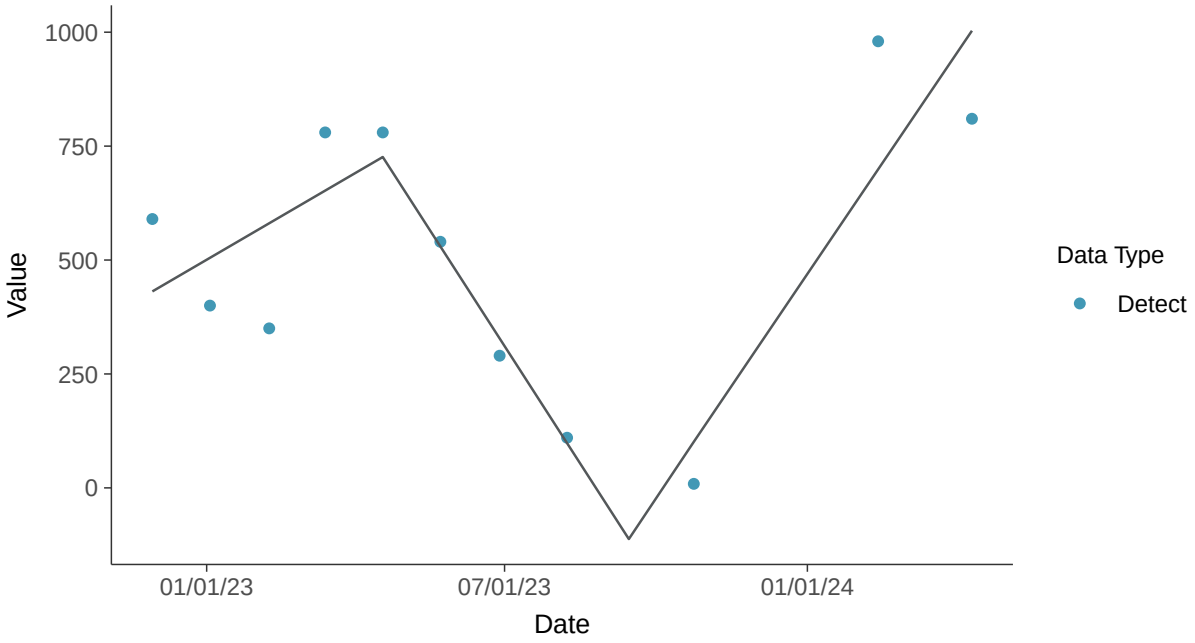
Trend Regression: Piecewise Linear-Linear

Sulfate (as SO4), MW-01R (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Sulfate (as SO4), MW-01R (mg/L)

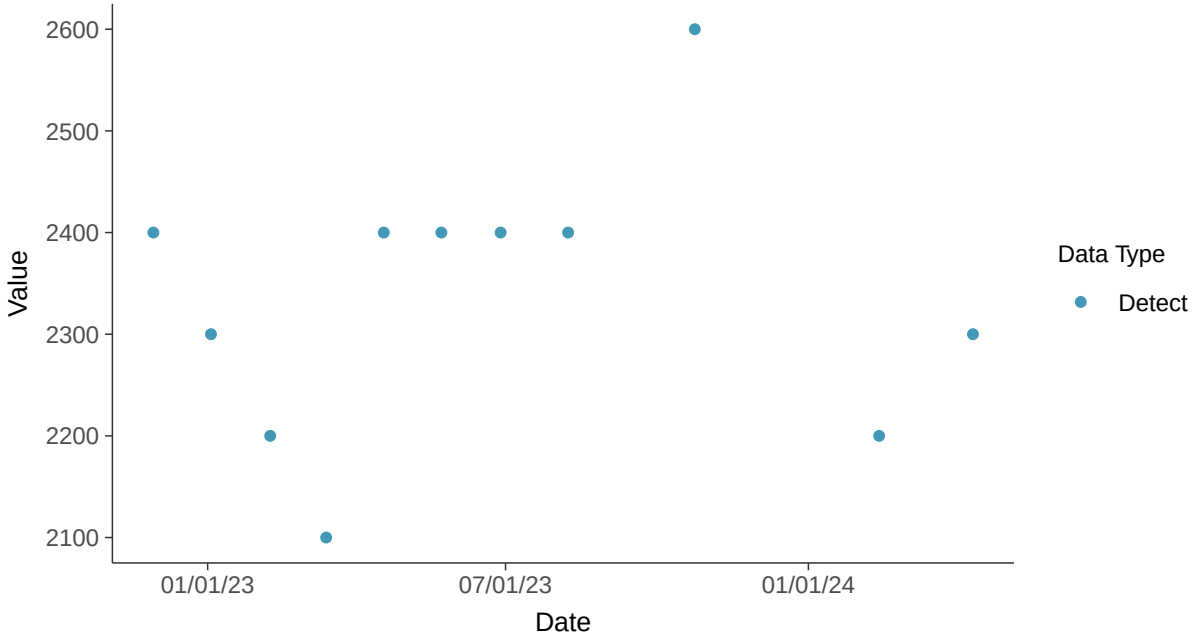


Appendix III: Total Dissolved Solids, MW-01R

ID: 2_11_4_126

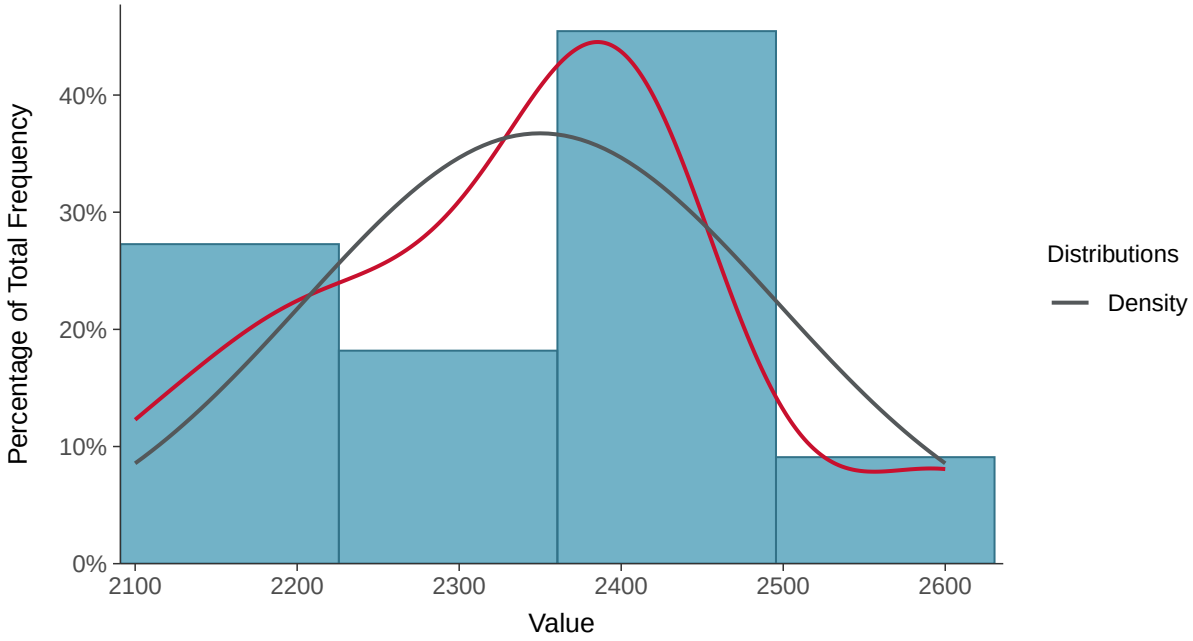
Scatter Plot

Total Dissolved Solids, MW-01R (mg/L)



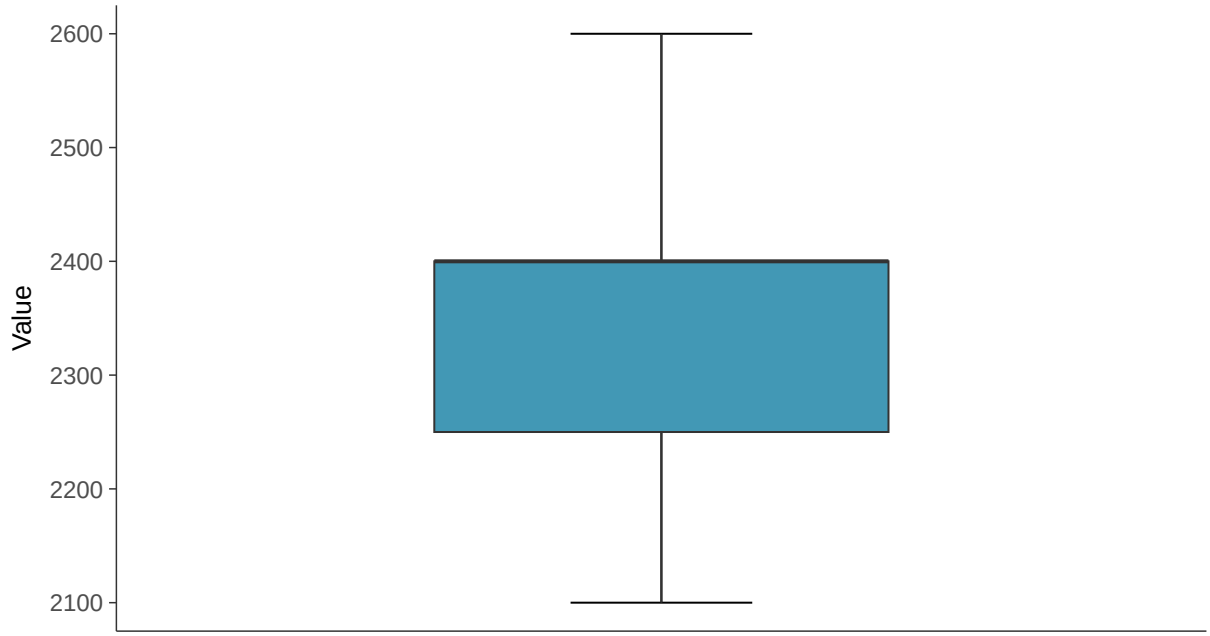
Histogram

Total Dissolved Solids, MW-01R (mg/L)



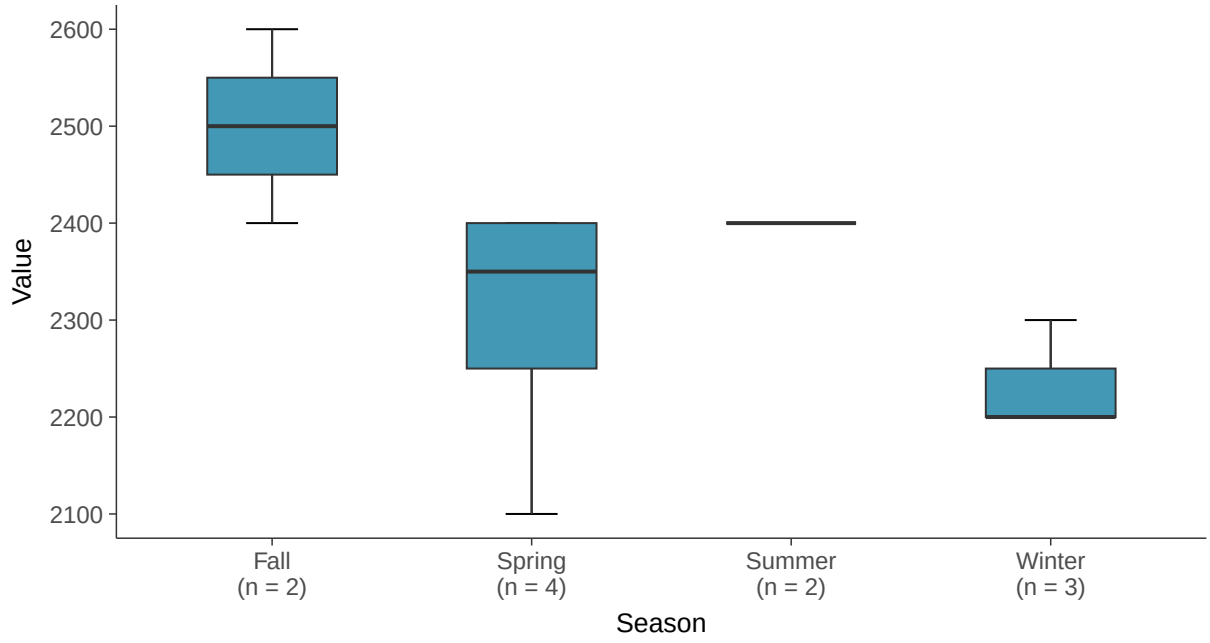
Boxplot

Total Dissolved Solids, MW-01R (mg/L)



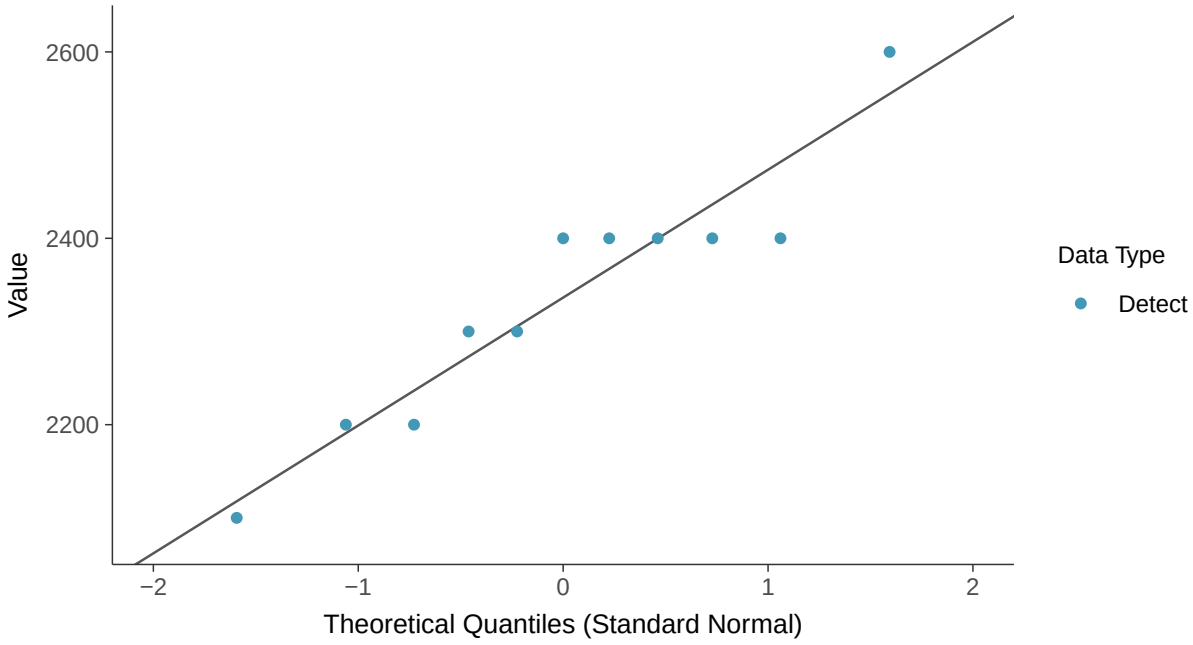
Boxplot by Season

Total Dissolved Solids, MW-01R (mg/L)



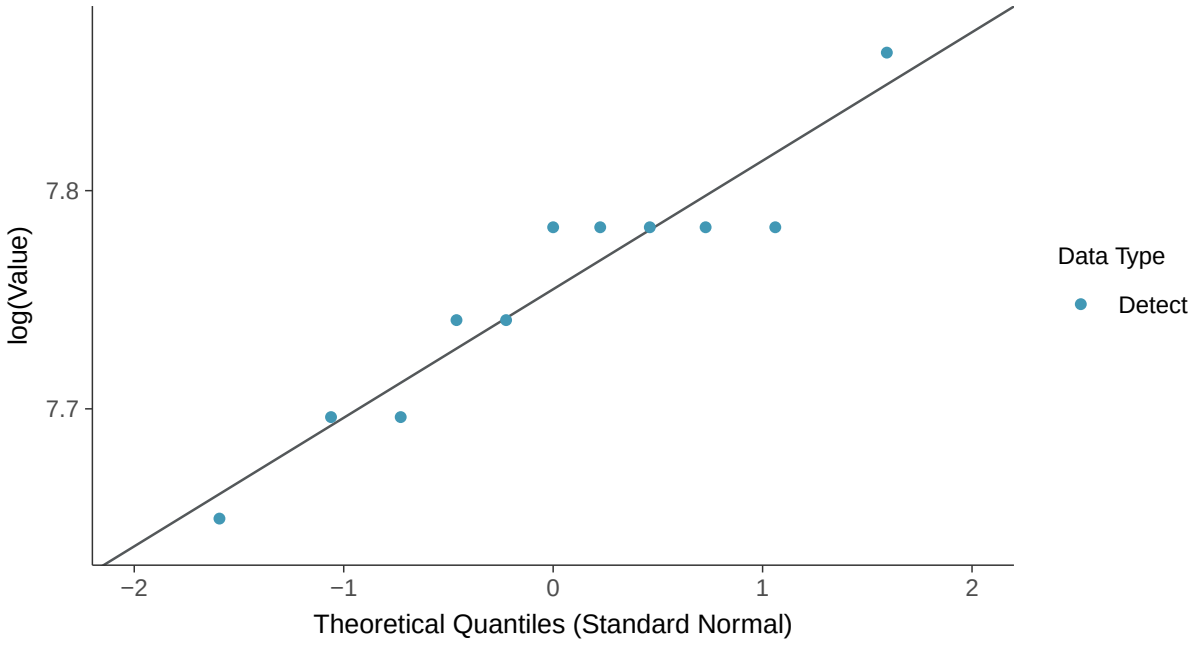
Normal Q-Q plot

Total Dissolved Solids, MW-01R (mg/L)



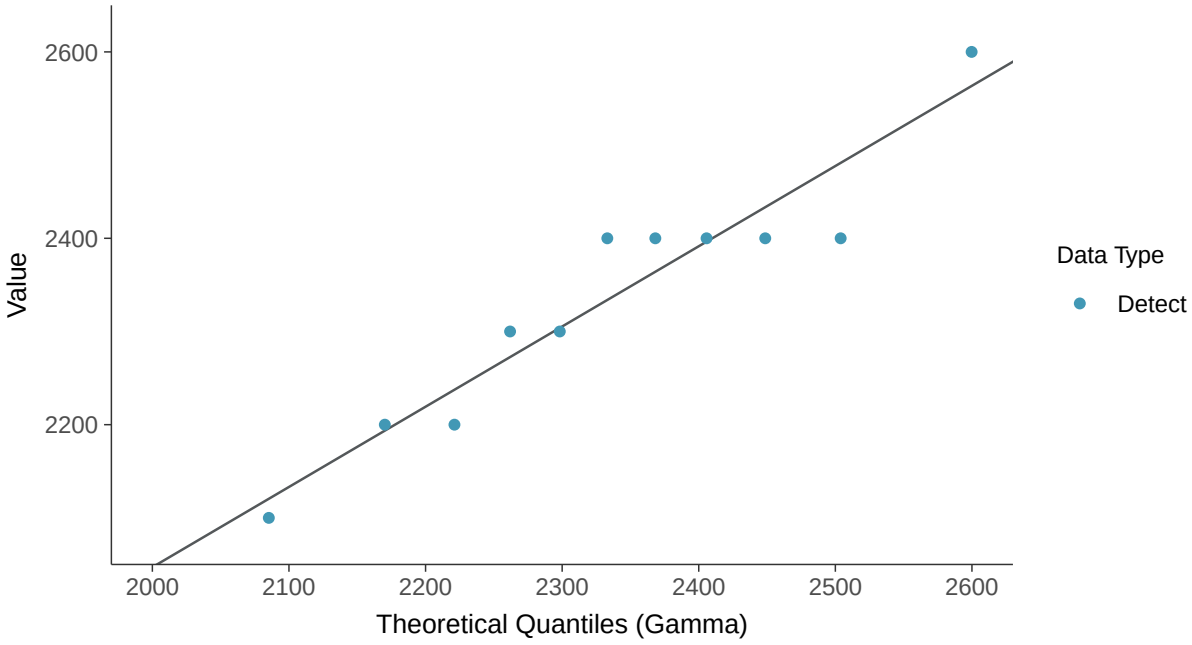
Lognormal Q-Q plot

Total Dissolved Solids, MW-01R (mg/L)



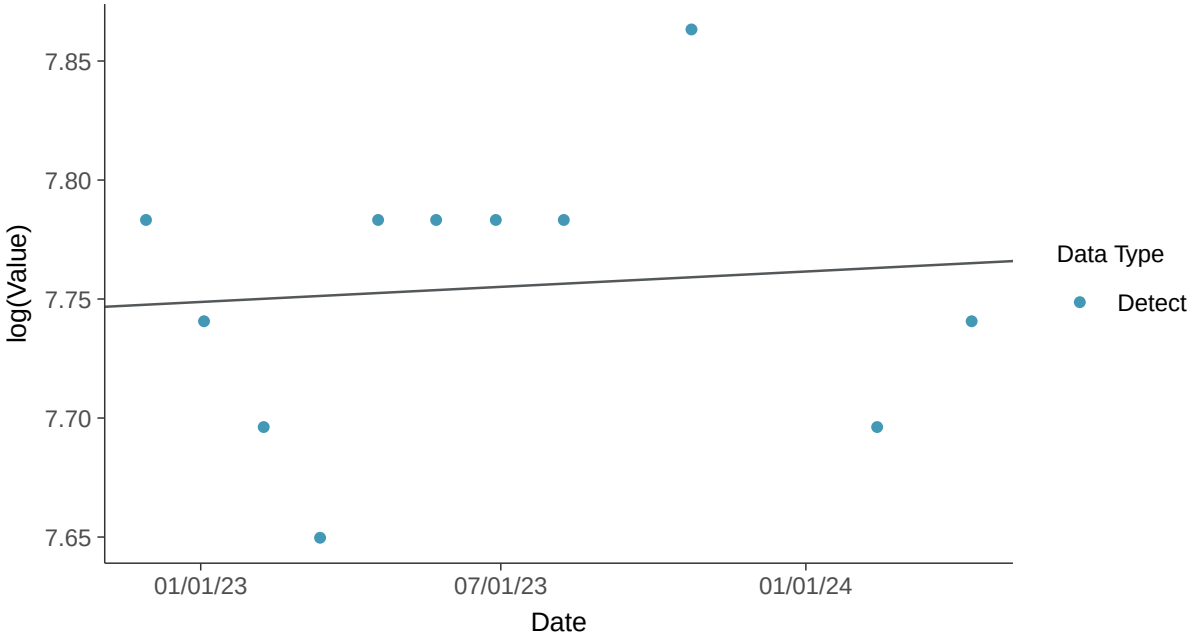
Gamma Q-Q plot

Total Dissolved Solids, MW-01R (mg/L)



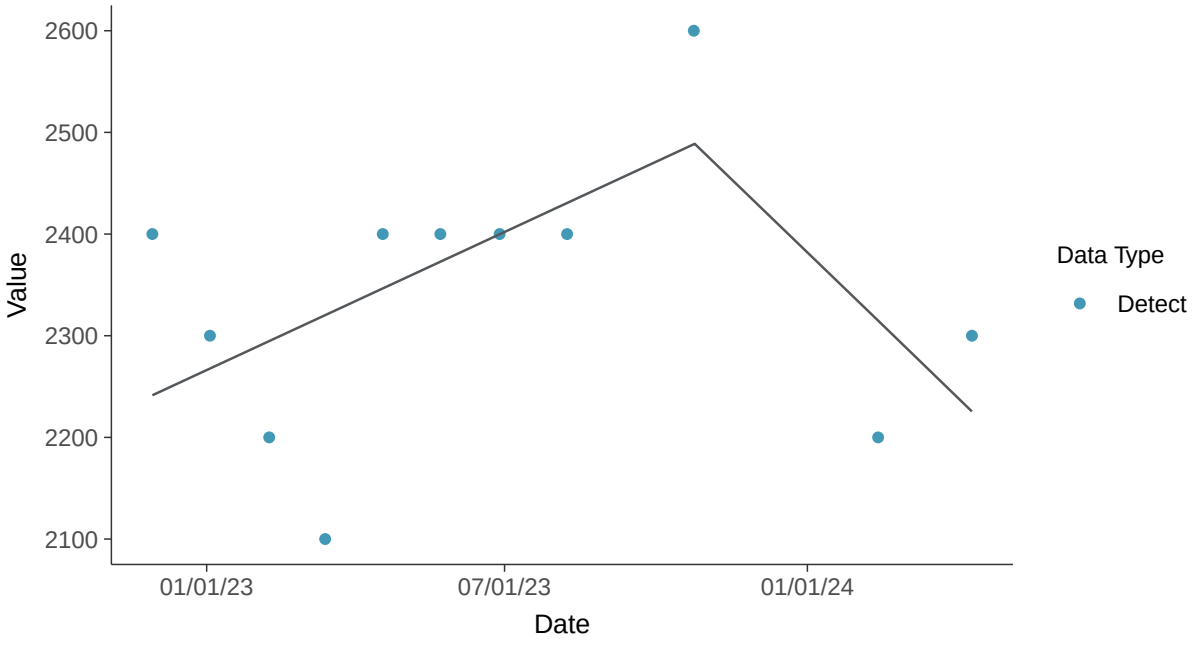
Trend Regression: Lognormal MLE

Total Dissolved Solids, MW-01R (mg/L)



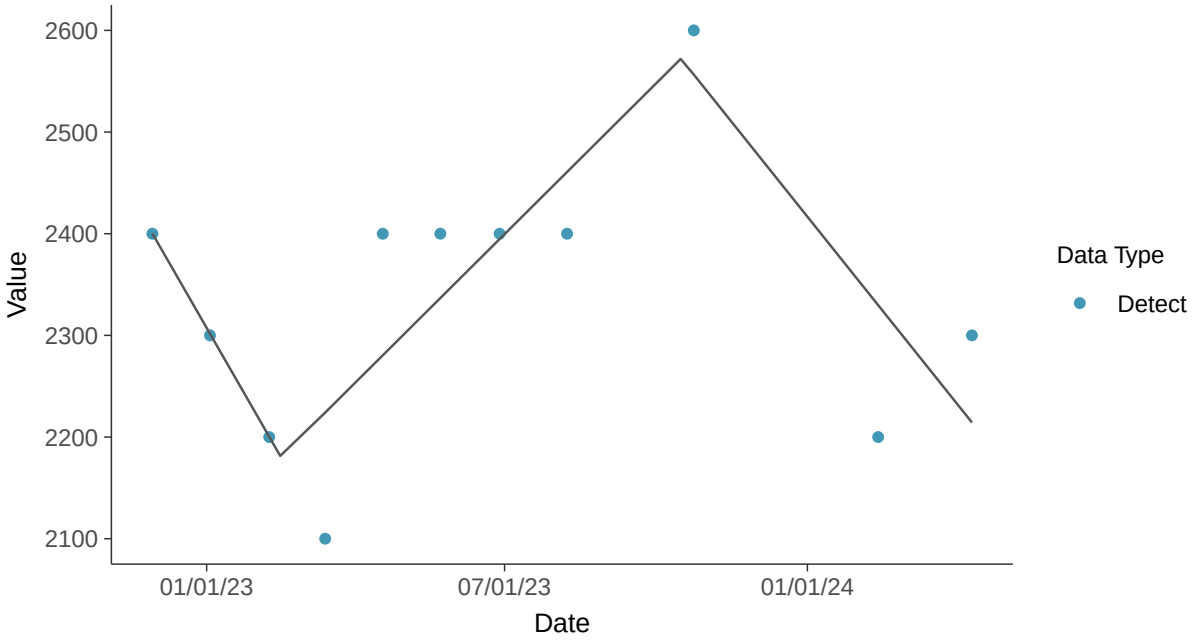
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-01R (mg/L)



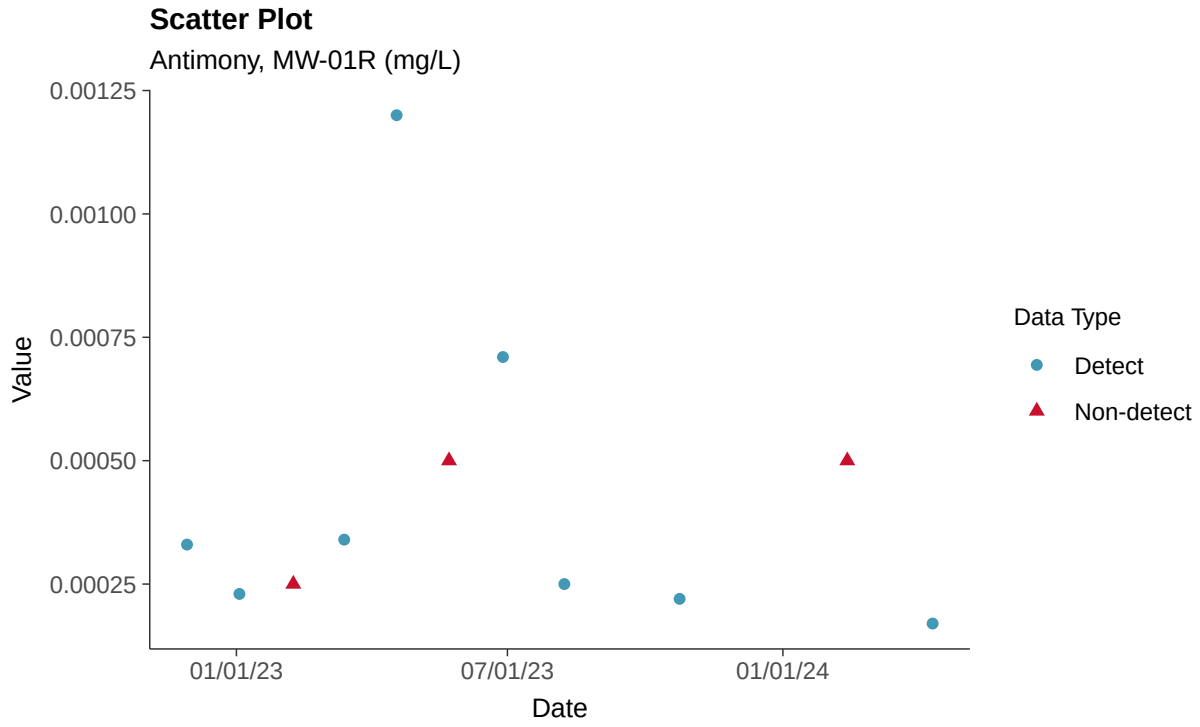
Trend Regression: Piecewise Linear-Linear-Linear

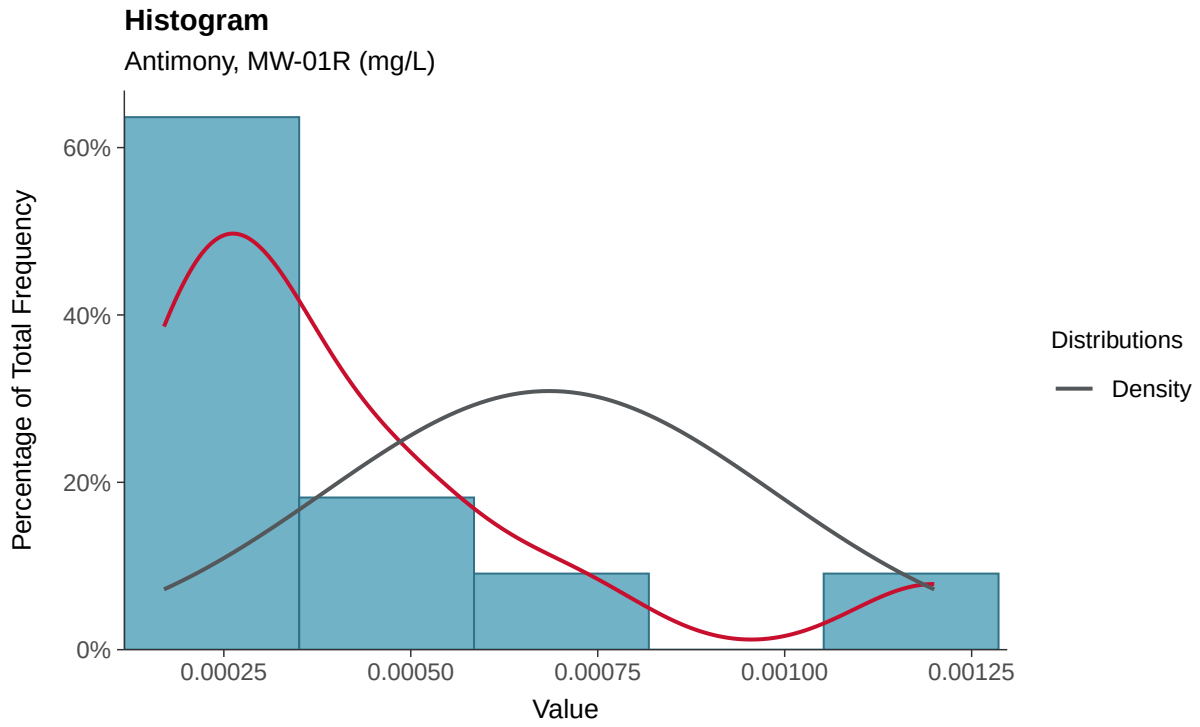
Total Dissolved Solids, MW-01R (mg/L)



Appendix IV: Antimony, MW-01R

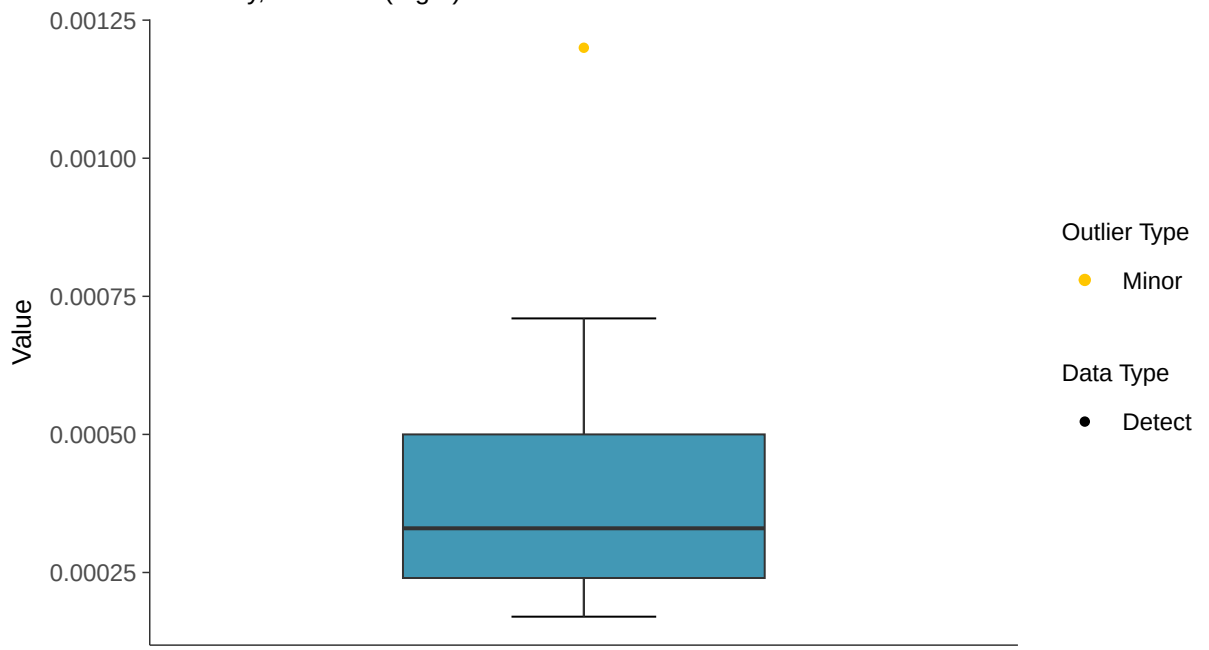
ID: 2_11_5_101





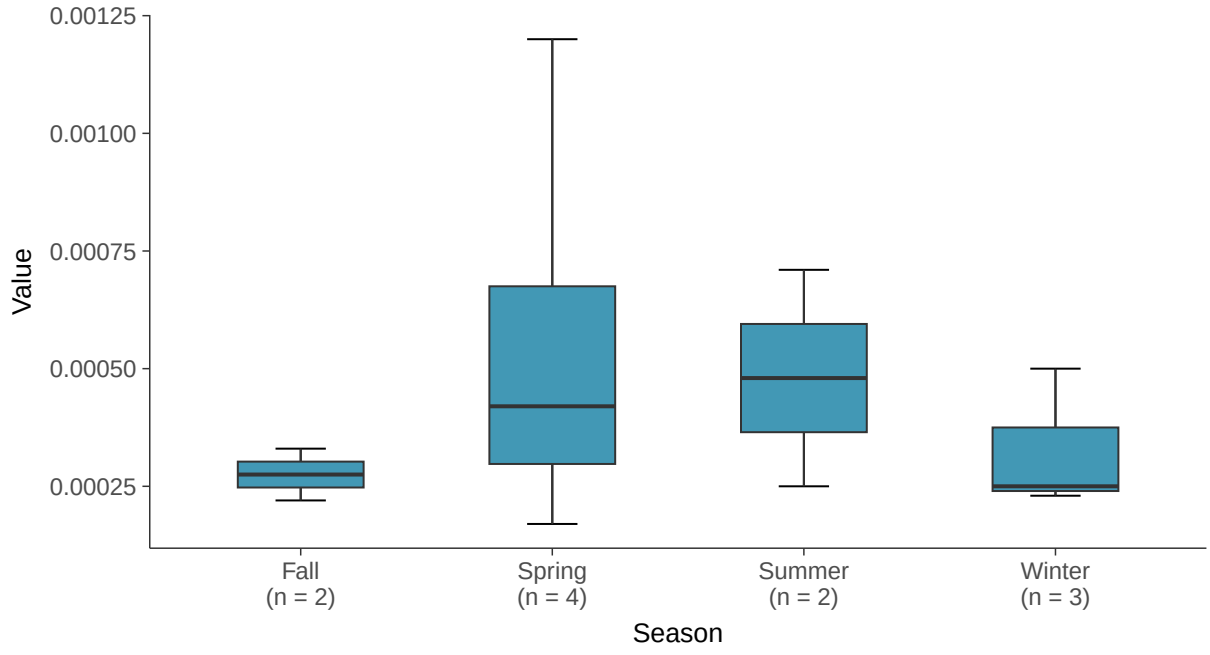
Boxplot

Antimony, MW-01R (mg/L)



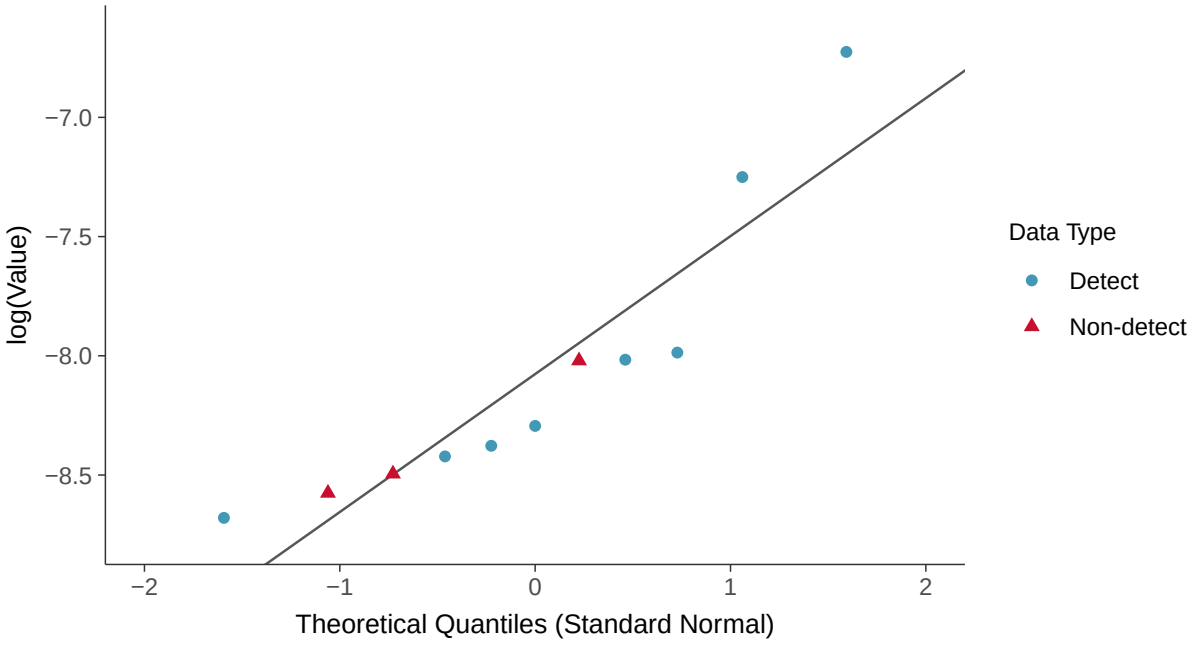
Boxplot by Season

Antimony, MW-01R (mg/L)



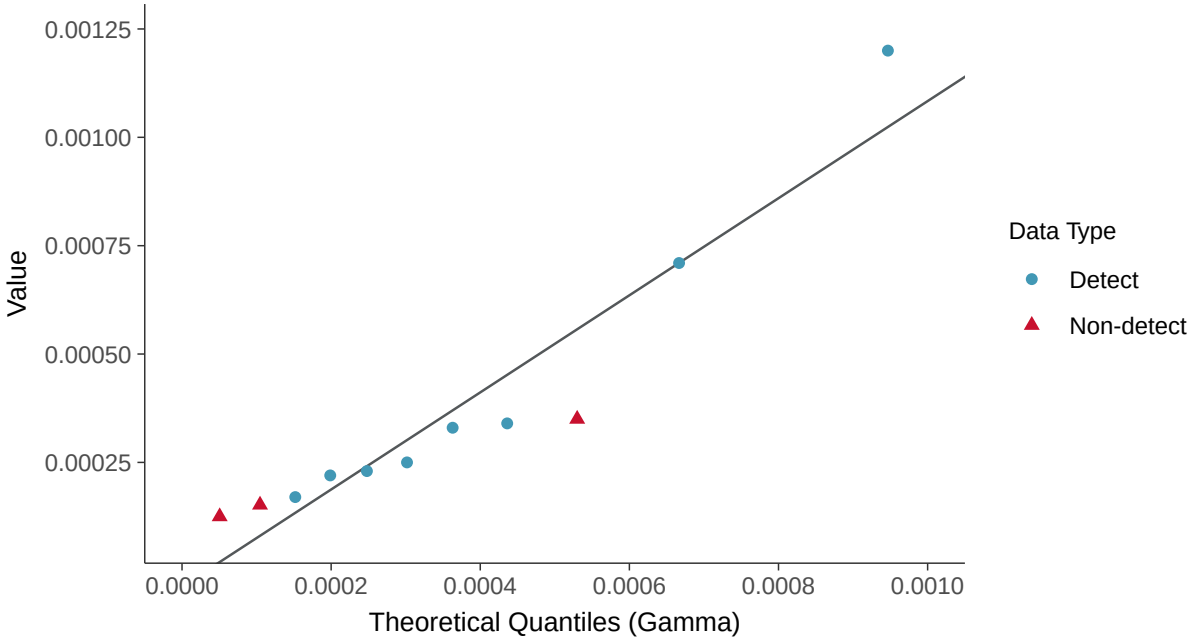
Lognormal Q-Q plot using ROS Imputed Estimates

Antimony, MW-01R (mg/L)



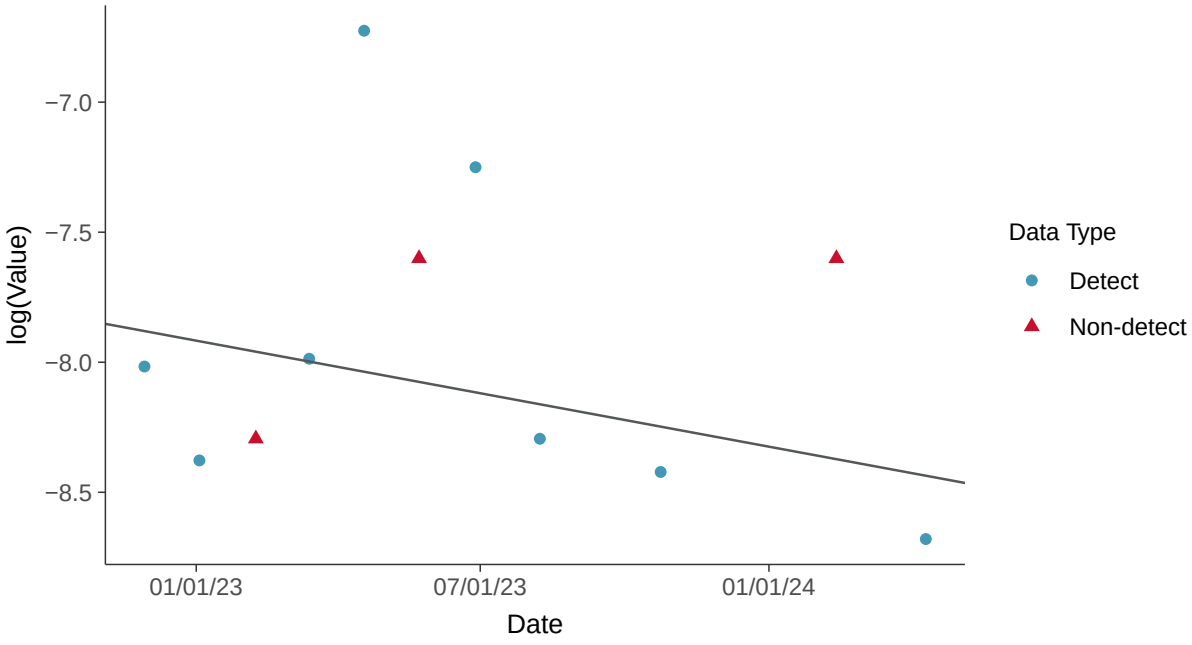
Gamma Q-Q plot using ROS Imputed Estimates

Antimony, MW-01R (mg/L)



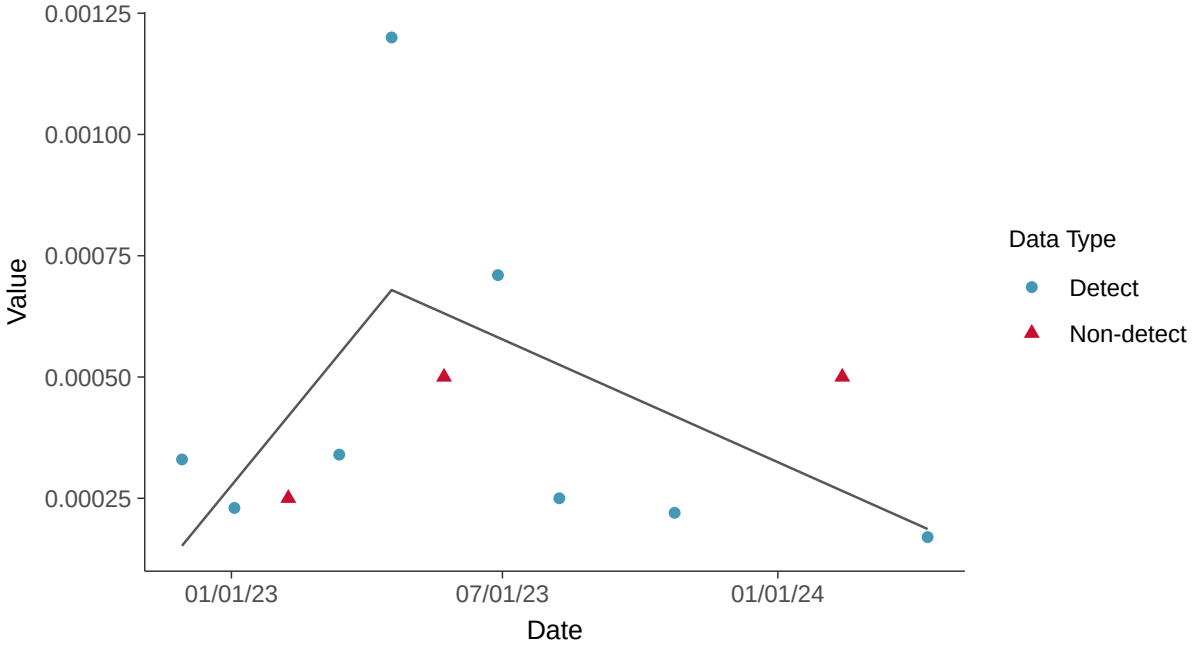
Trend Regression: Lognormal MLE

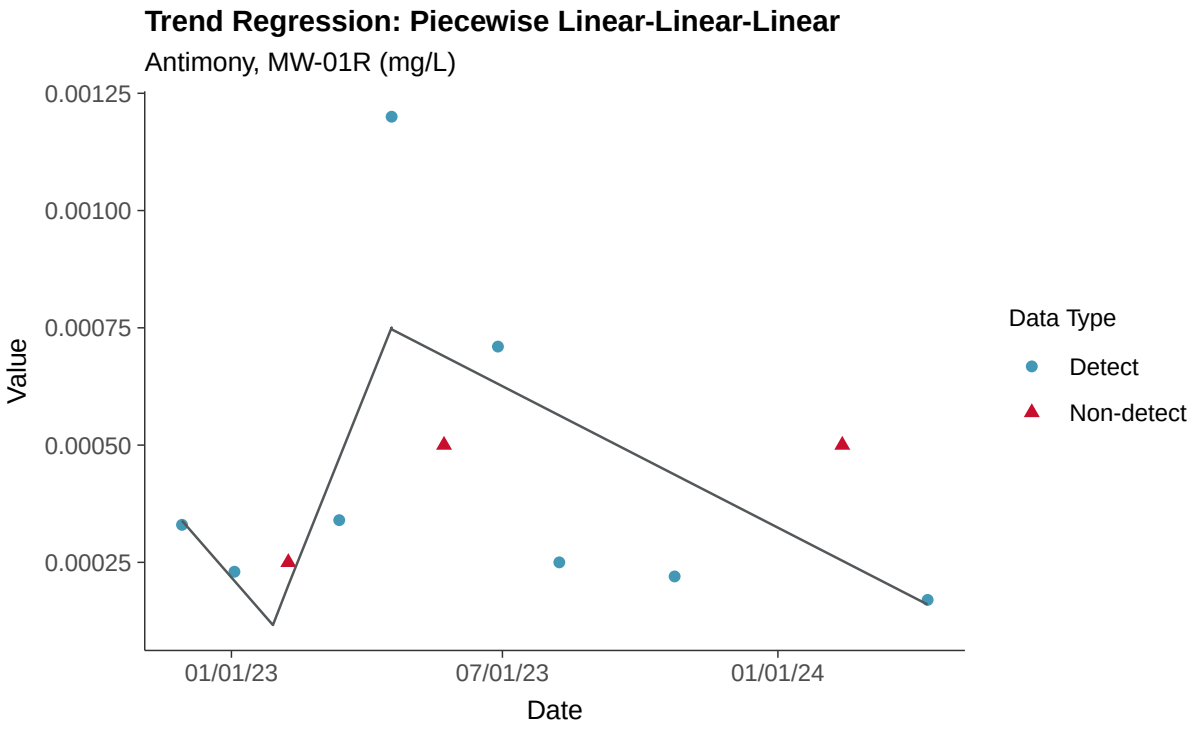
Antimony, MW-01R (mg/L)



Trend Regression: Piecewise Linear-Linear

Antimony, MW-01R (mg/L)



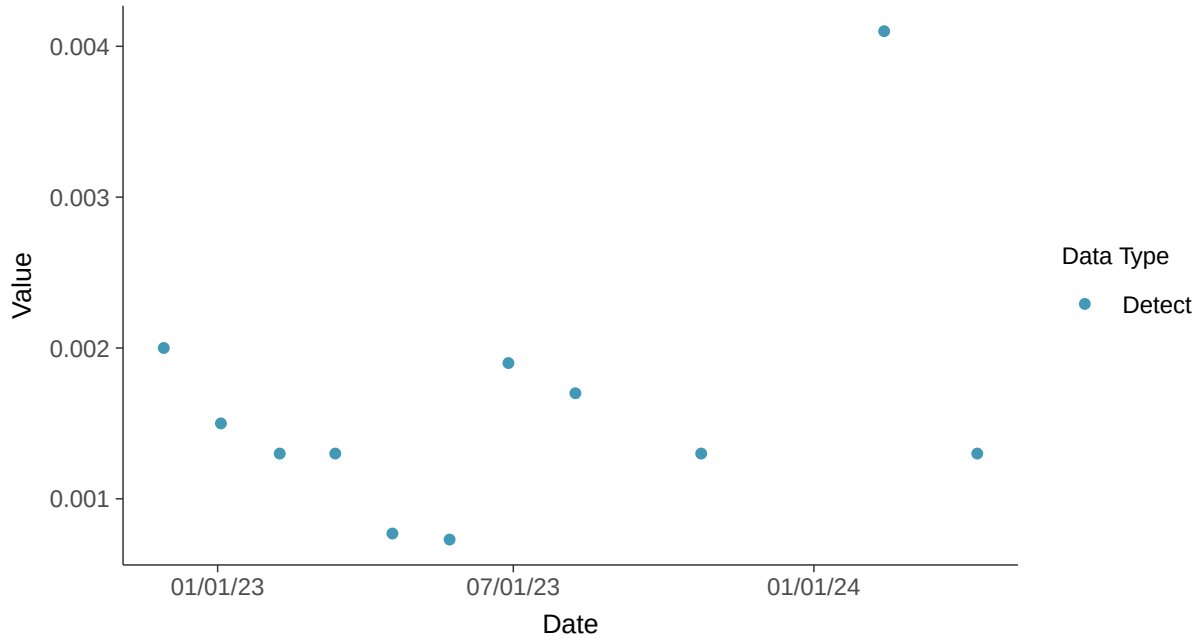

Trend Regression: Piecewise Linear-Linear-Linear
Antimony, MW-01R (mg/L)
0.00125
0.00100
0.00075
0.00050
0.00025
Value
01/01/23
07/01/23
01/01/24
Date
Data Type
Detect
Non-detect

Appendix IV: Arsenic, MW-01R

ID: 2_11_5_102

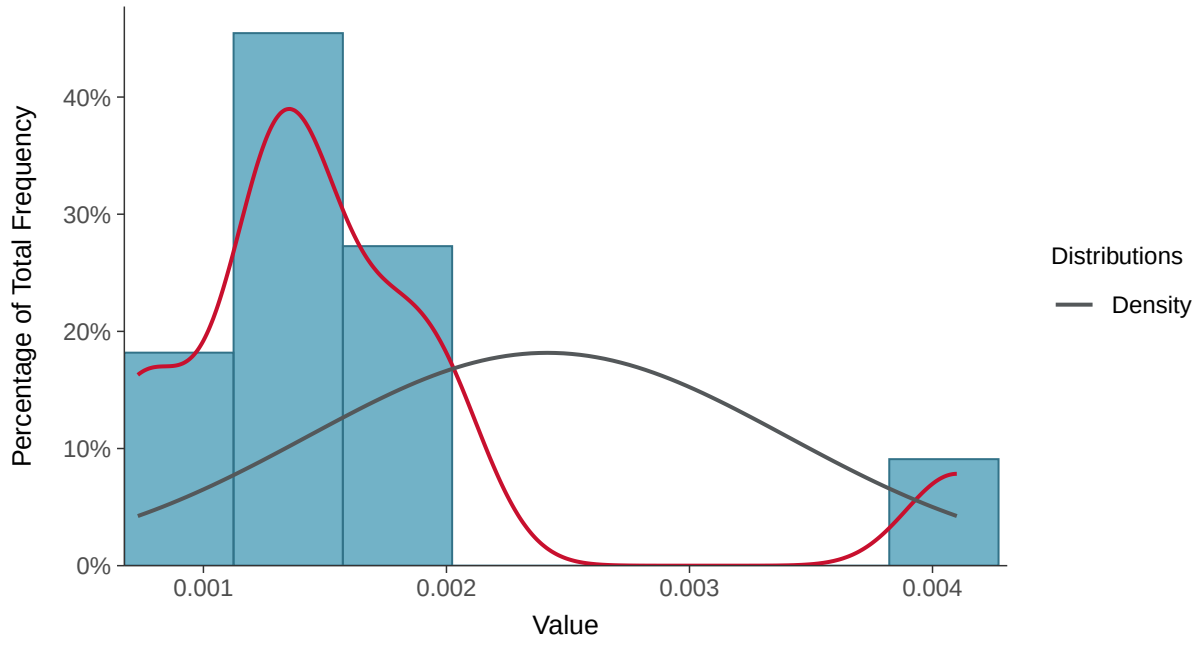
Scatter Plot

Arsenic, MW-01R (mg/L)



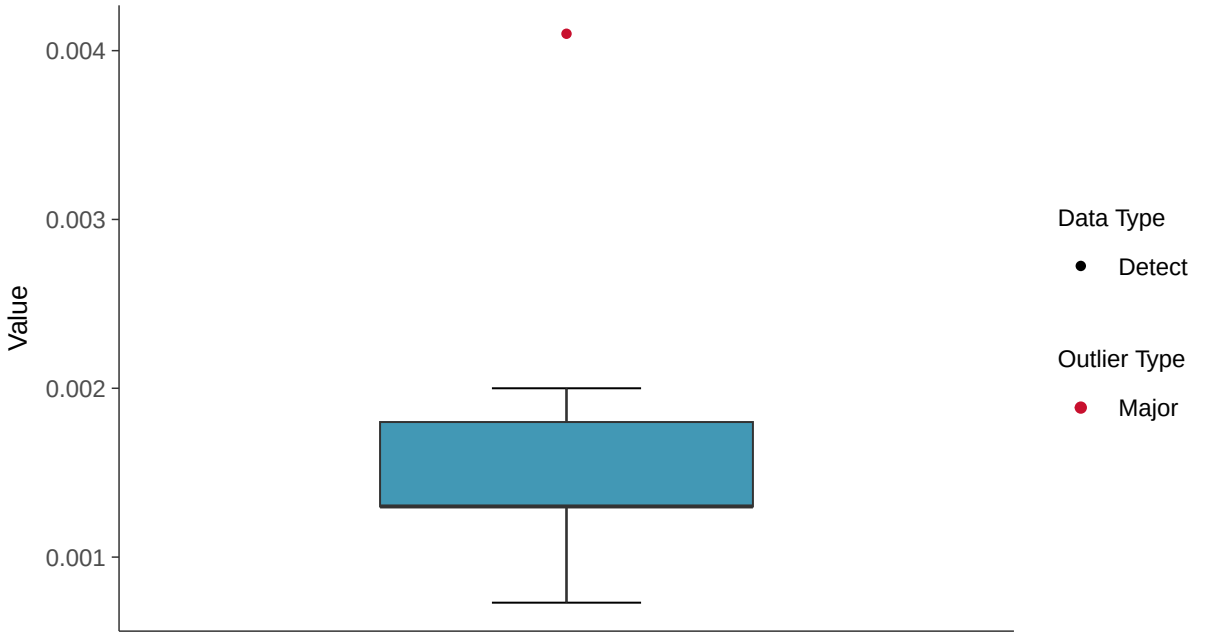
Histogram

Arsenic, MW-01R (mg/L)



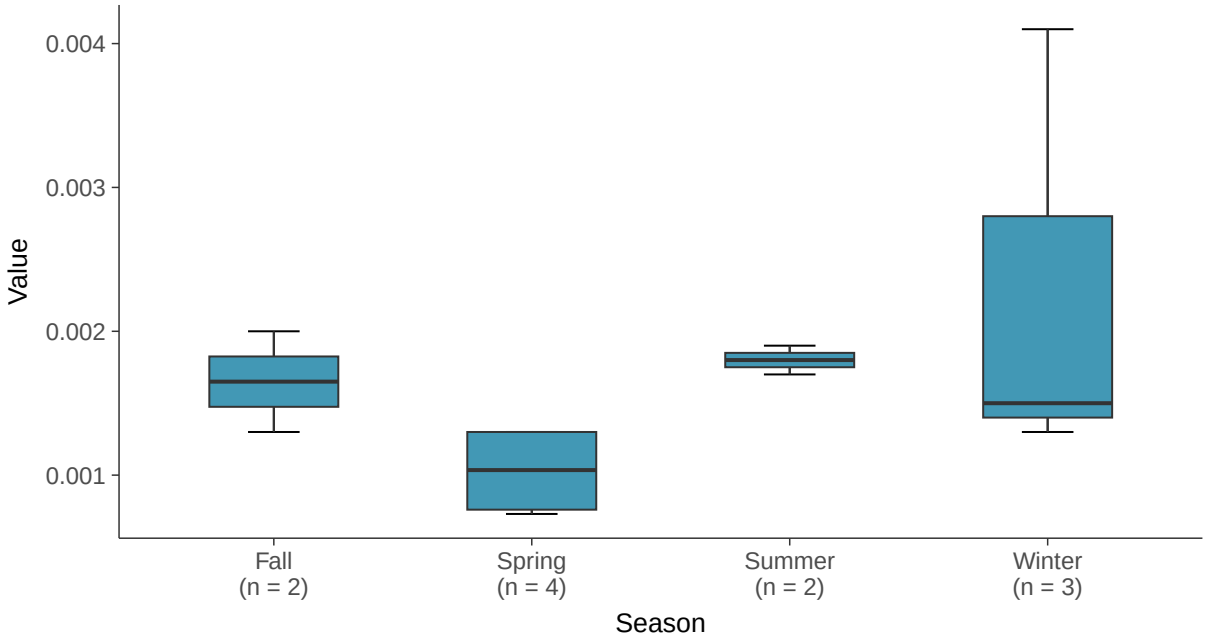
Boxplot

Arsenic, MW-01R (mg/L)



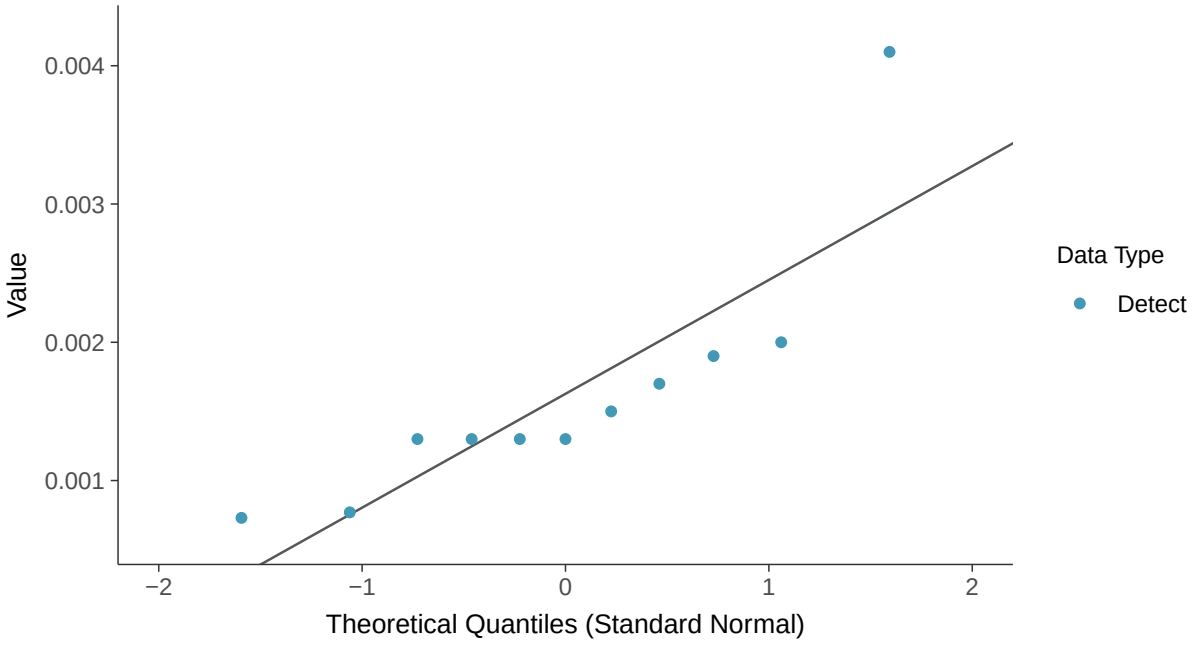
Boxplot by Season

Arsenic, MW-01R (mg/L)



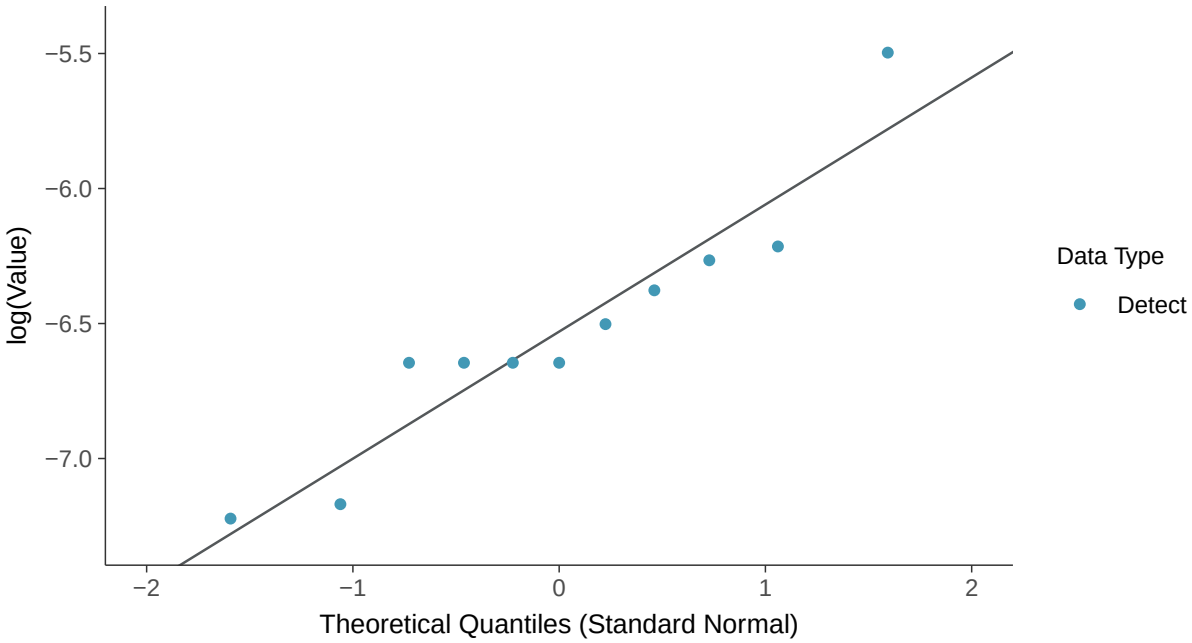
Normal Q-Q plot

Arsenic, MW-01R (mg/L)



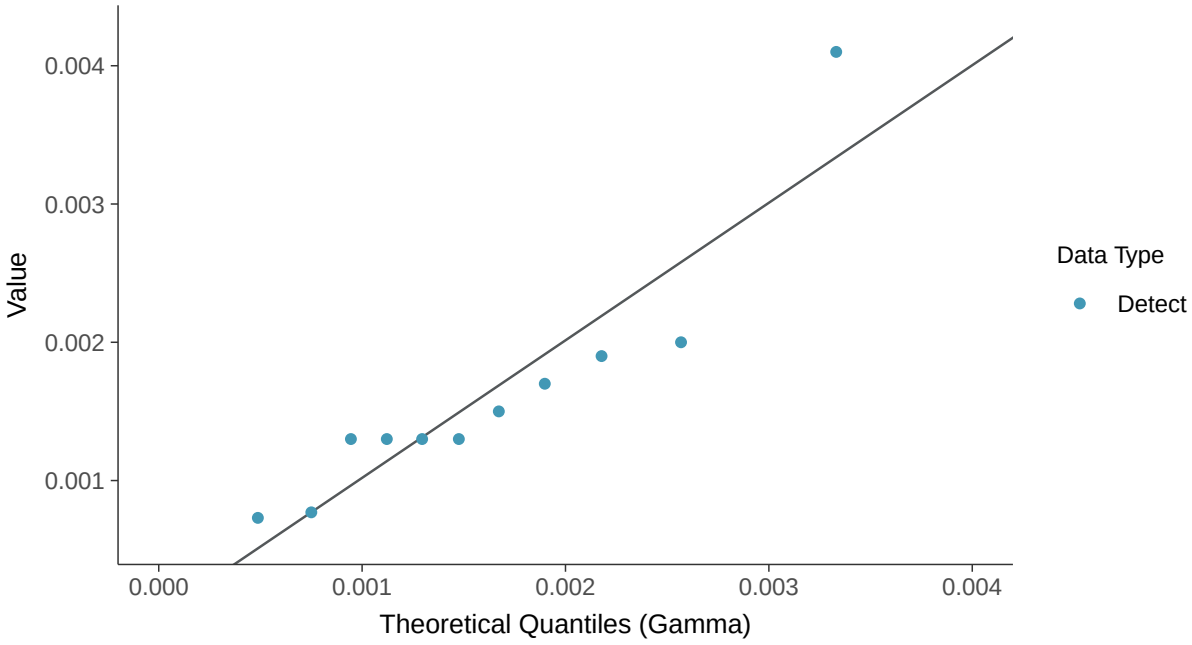
Lognormal Q-Q plot

Arsenic, MW-01R (mg/L)



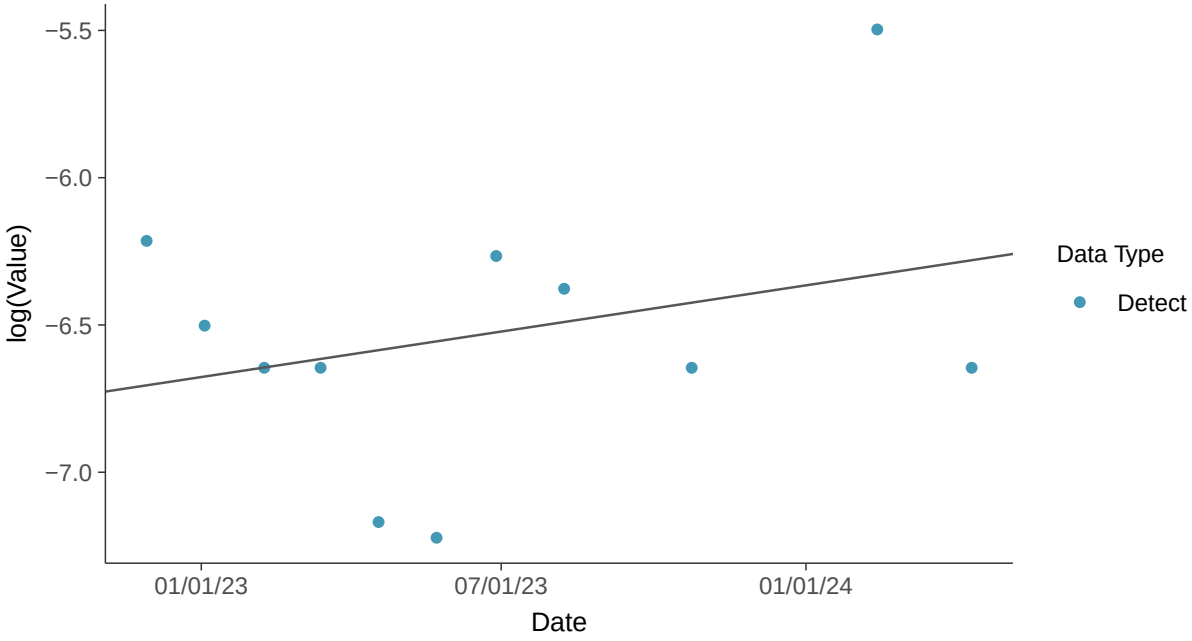
Gamma Q-Q plot

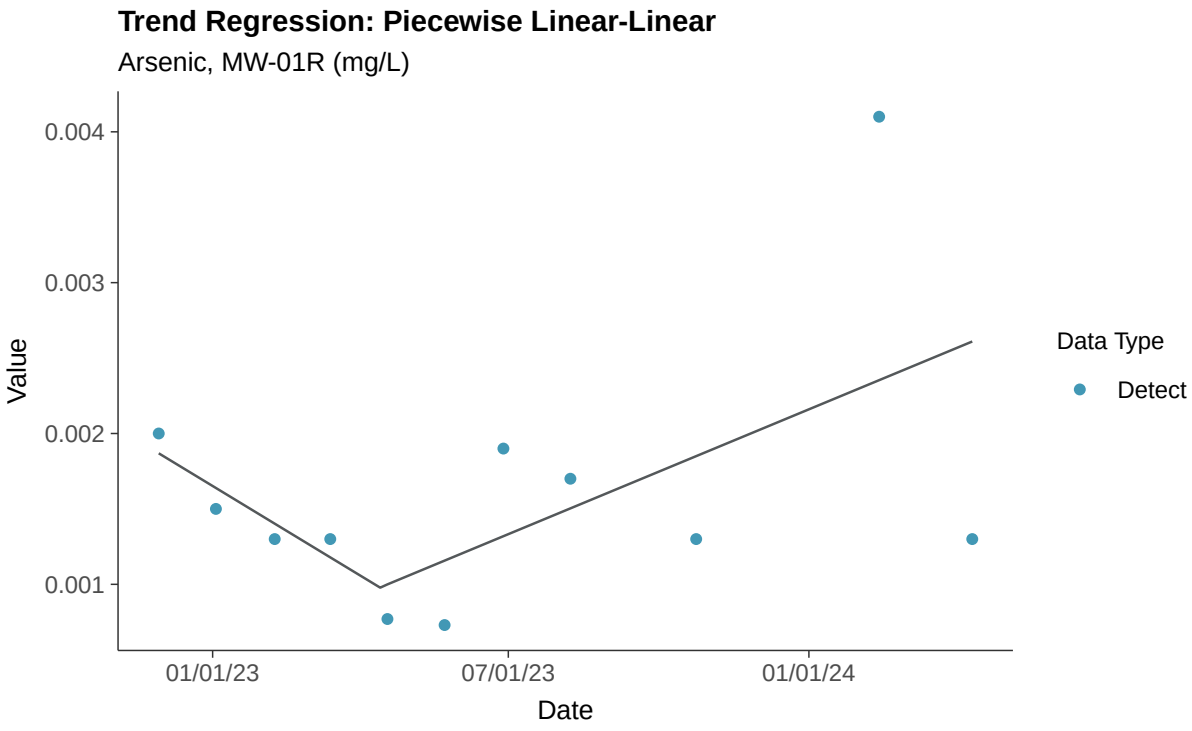
Arsenic, MW-01R (mg/L)



Trend Regression: Lognormal MLE

Arsenic, MW-01R (mg/L)



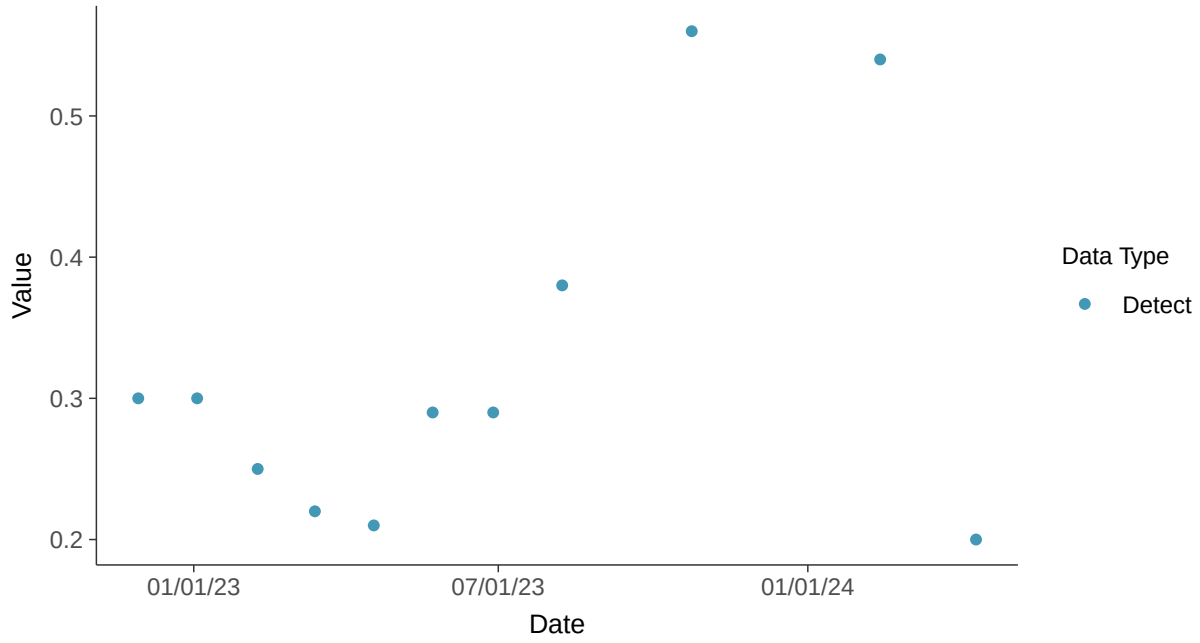

Trend Regression: Piecewise Linear-Linear
Arsenic, MW-01R (mg/L)
0.004
0.003
0.002
0.001
Value
01/01/23
07/01/23
01/01/24
Date
Data Type
Detect

Appendix IV: Barium, MW-01R

ID: 2_11_5_103

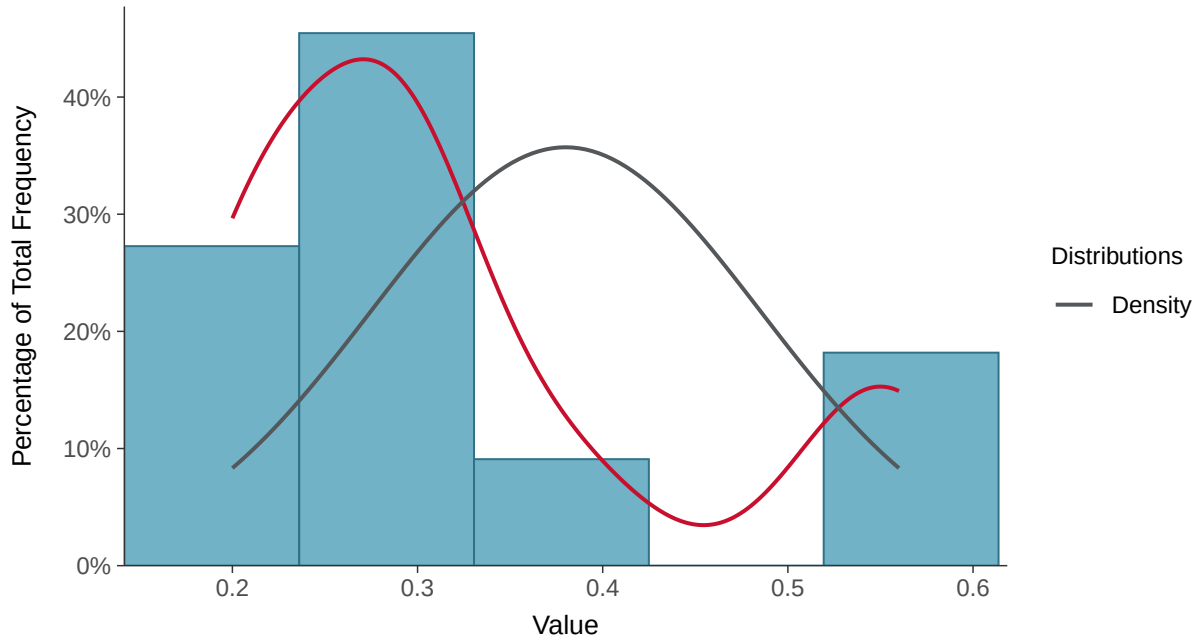
Scatter Plot

Barium, MW-01R (mg/L)



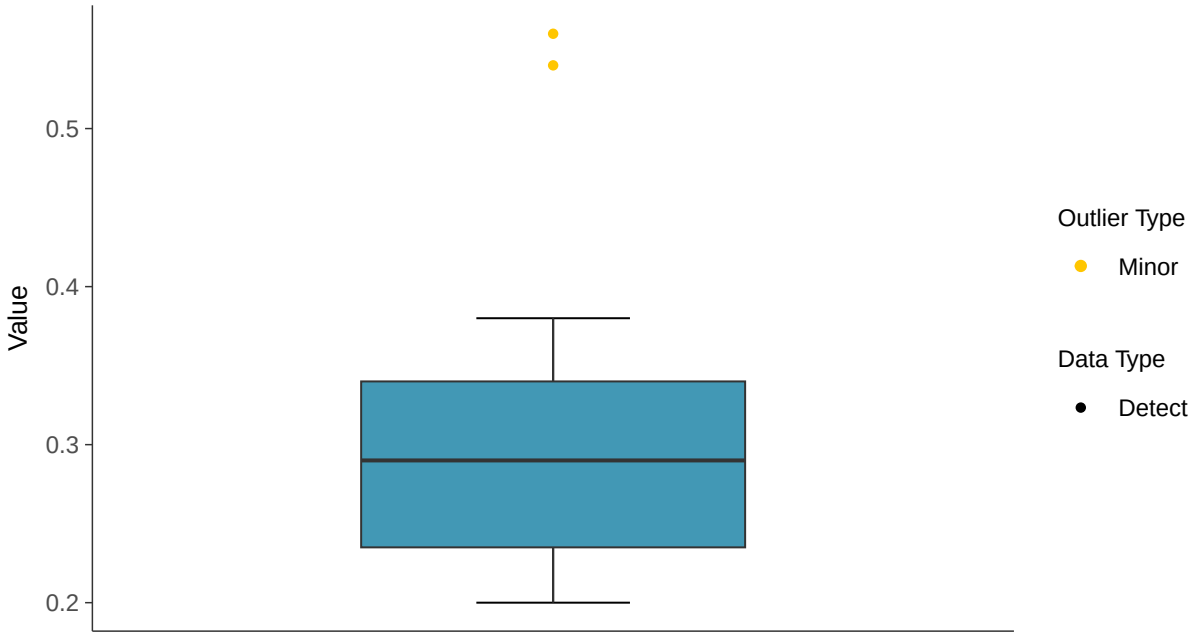
Histogram

Barium, MW-01R (mg/L)



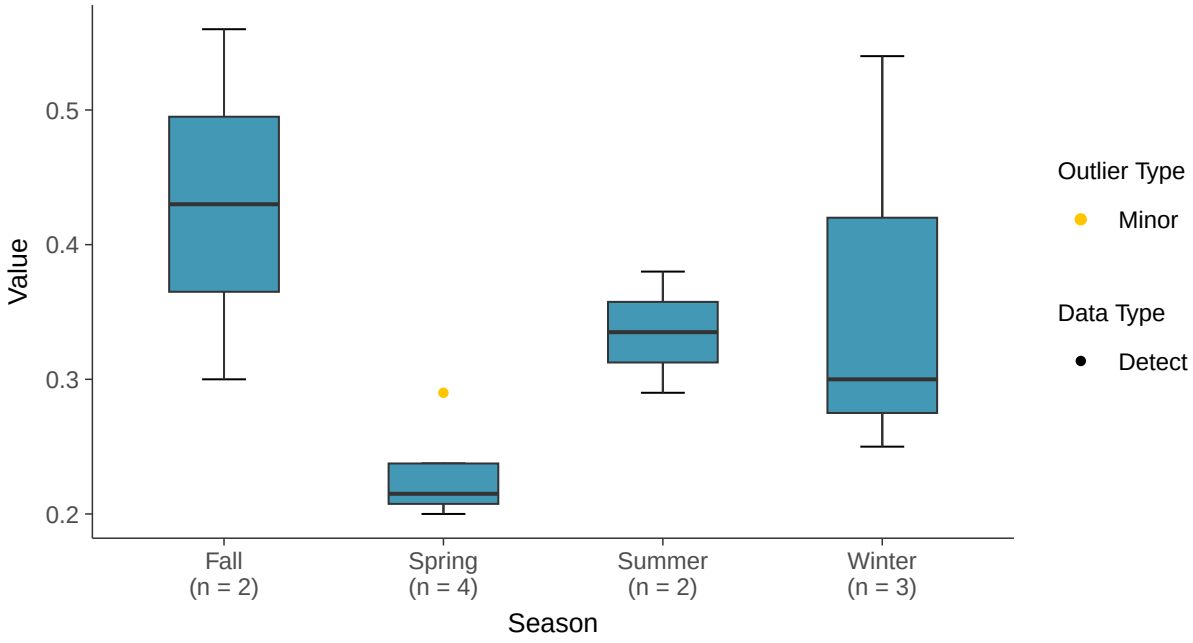
Boxplot

Barium, MW-01R (mg/L)



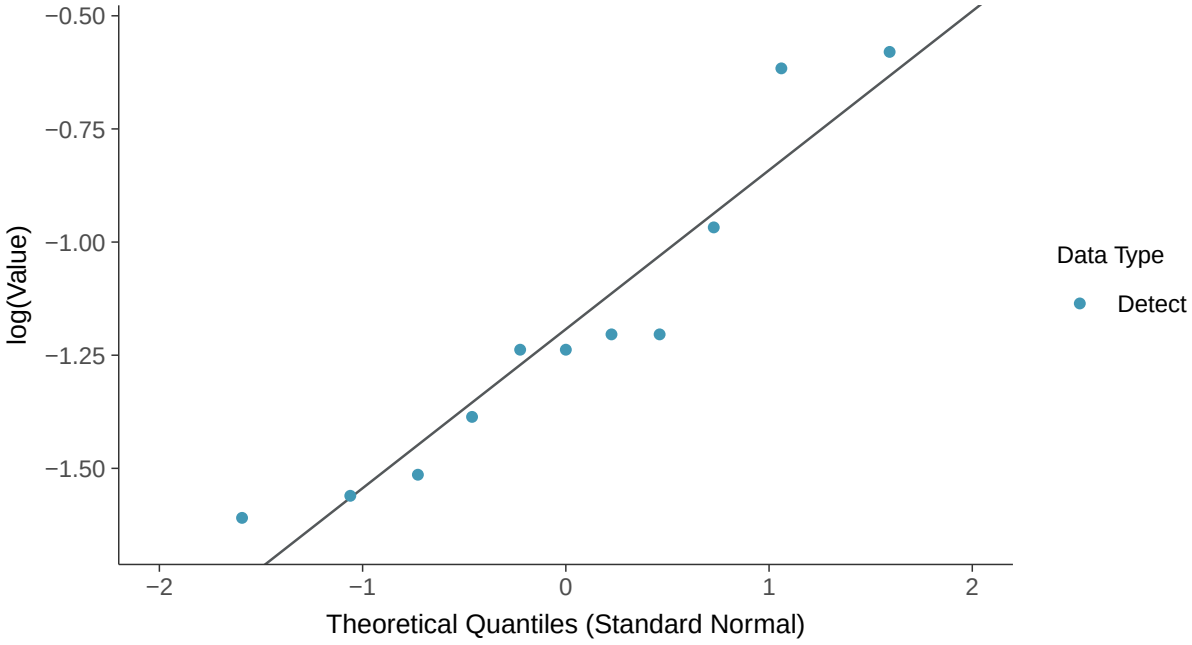
Boxplot by Season

Barium, MW-01R (mg/L)



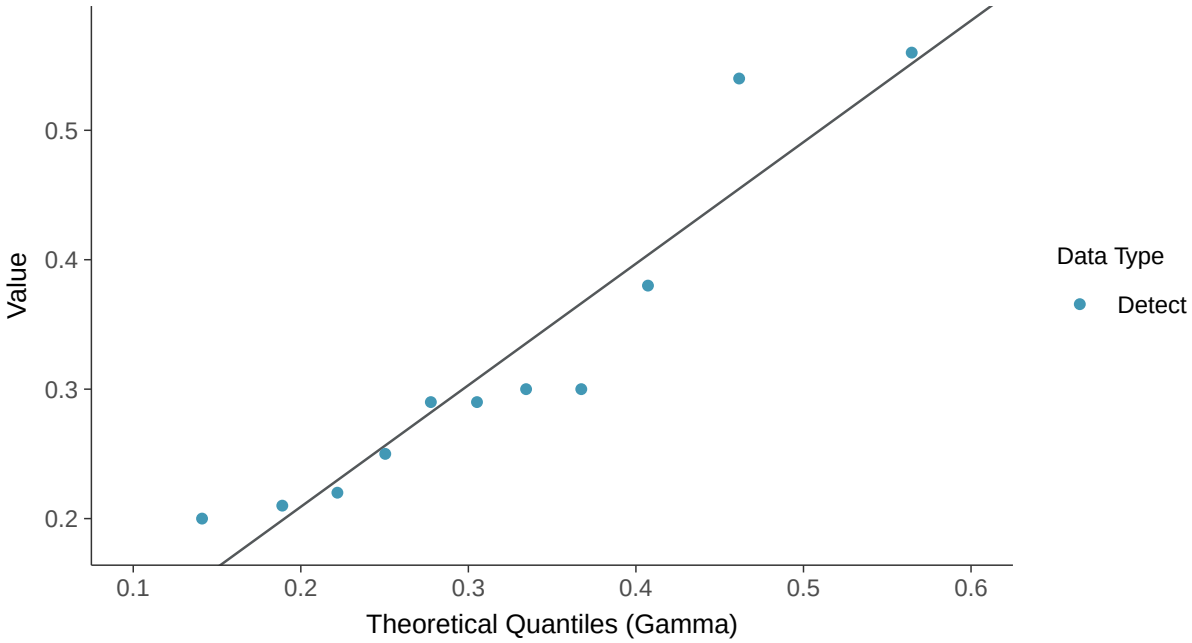
Lognormal Q-Q plot

Barium, MW-01R (mg/L)



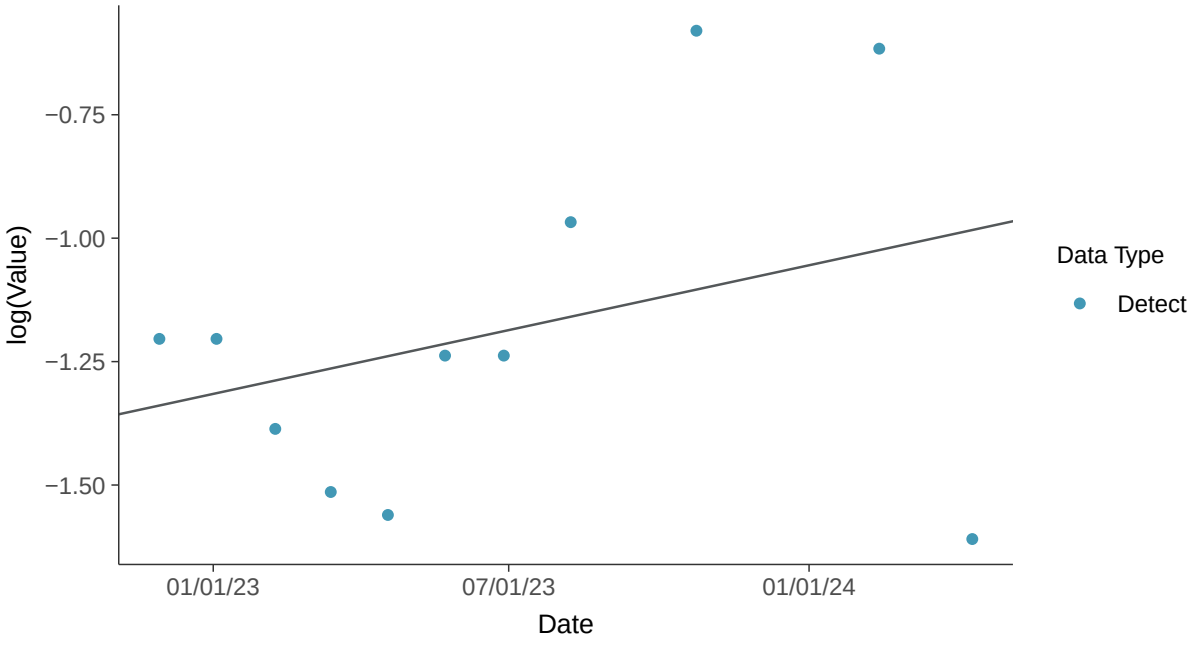
Gamma Q-Q plot

Barium, MW-01R (mg/L)



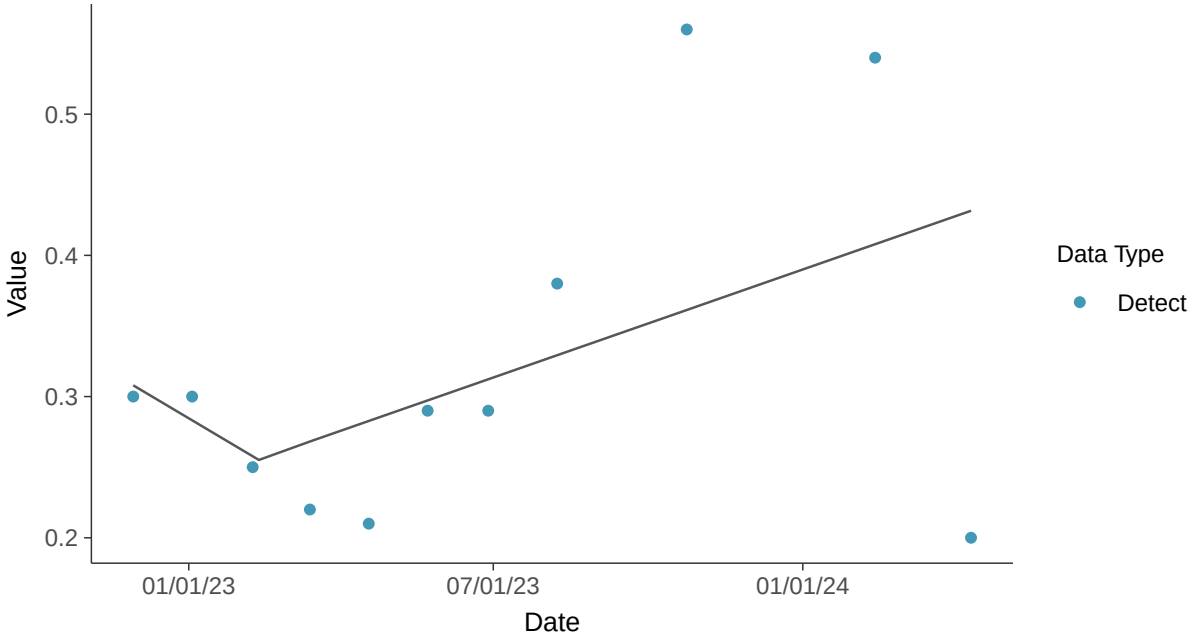
Trend Regression: Lognormal MLE

Barium, MW-01R (mg/L)



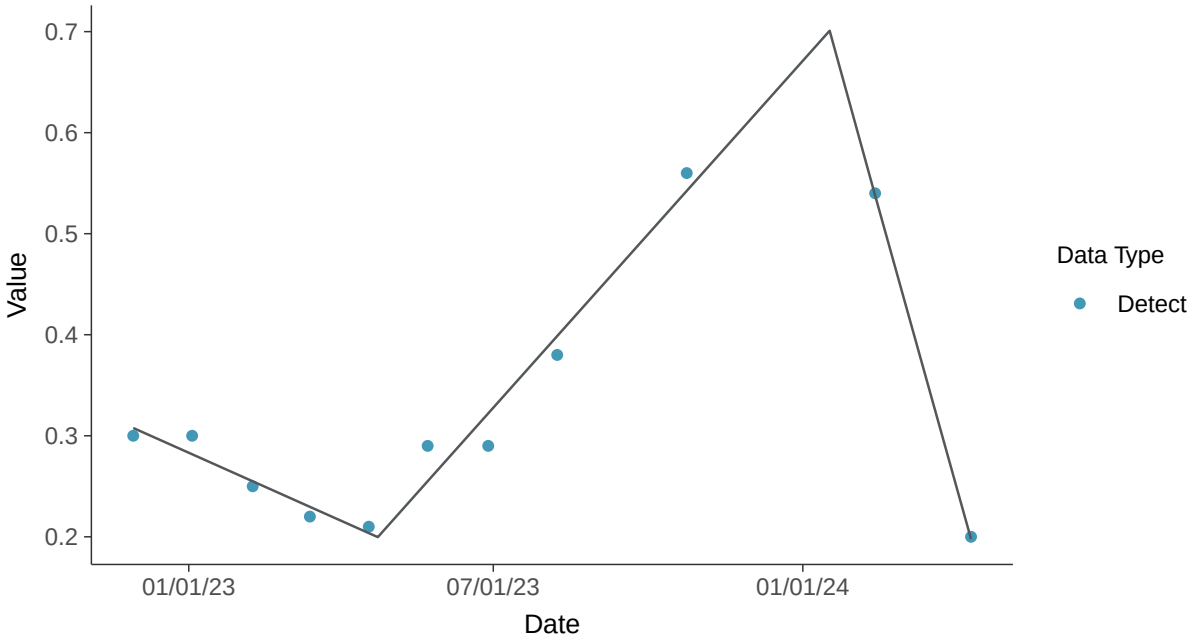
Trend Regression: Piecewise Linear-Linear

Barium, MW-01R (mg/L)



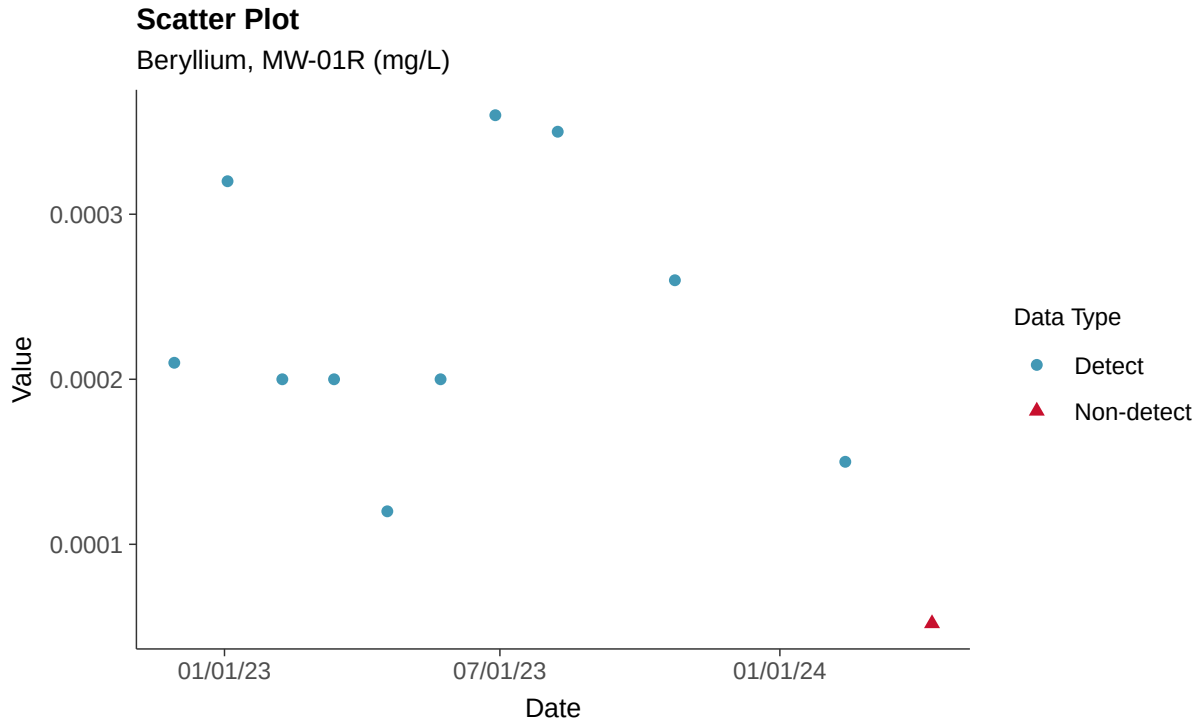
Trend Regression: Piecewise Linear-Linear-Linear

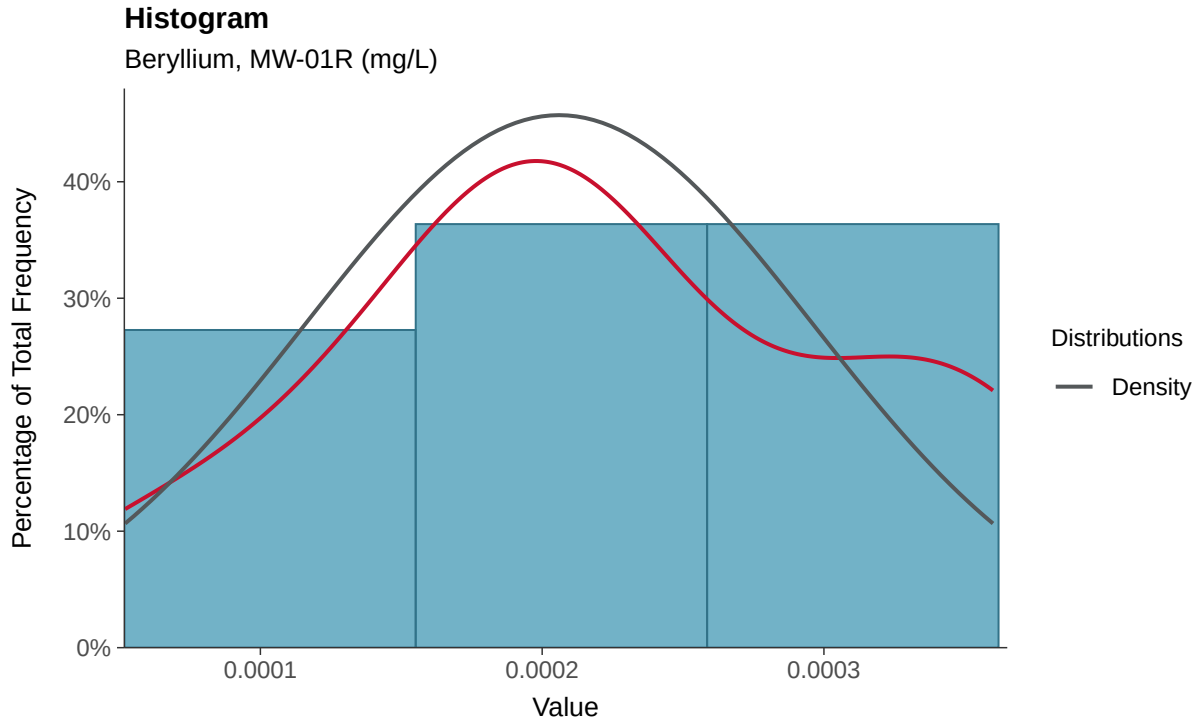
Barium, MW-01R (mg/L)



Appendix IV: Beryllium, MW-01R

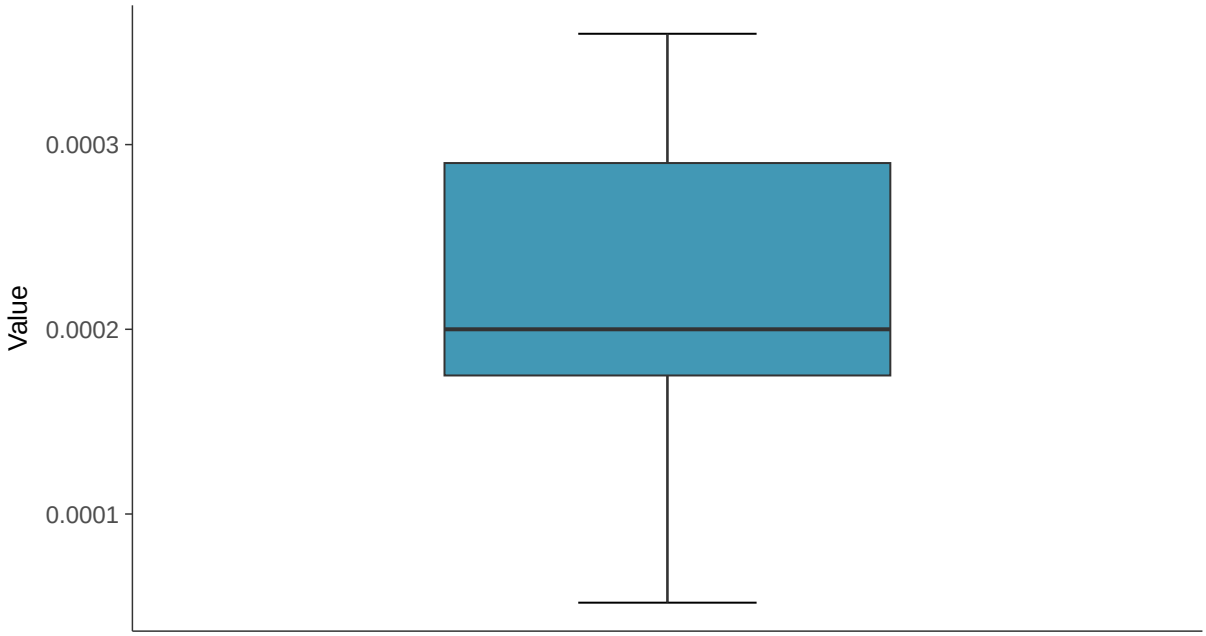
ID: 2_11_5_104





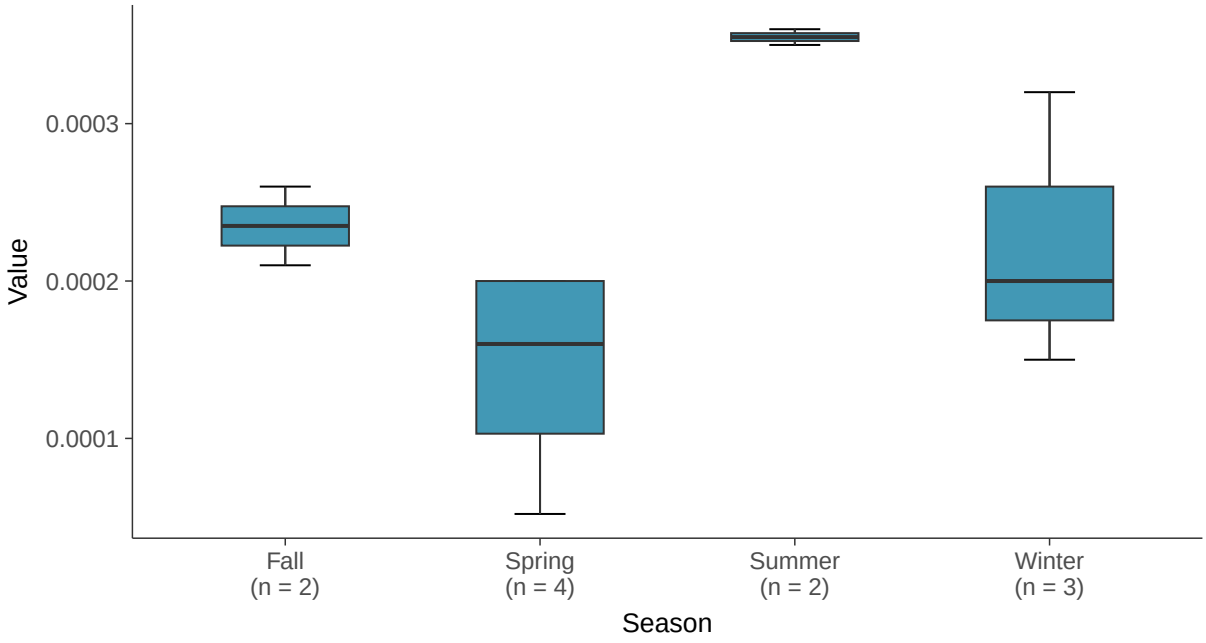
Boxplot

Beryllium, MW-01R (mg/L)



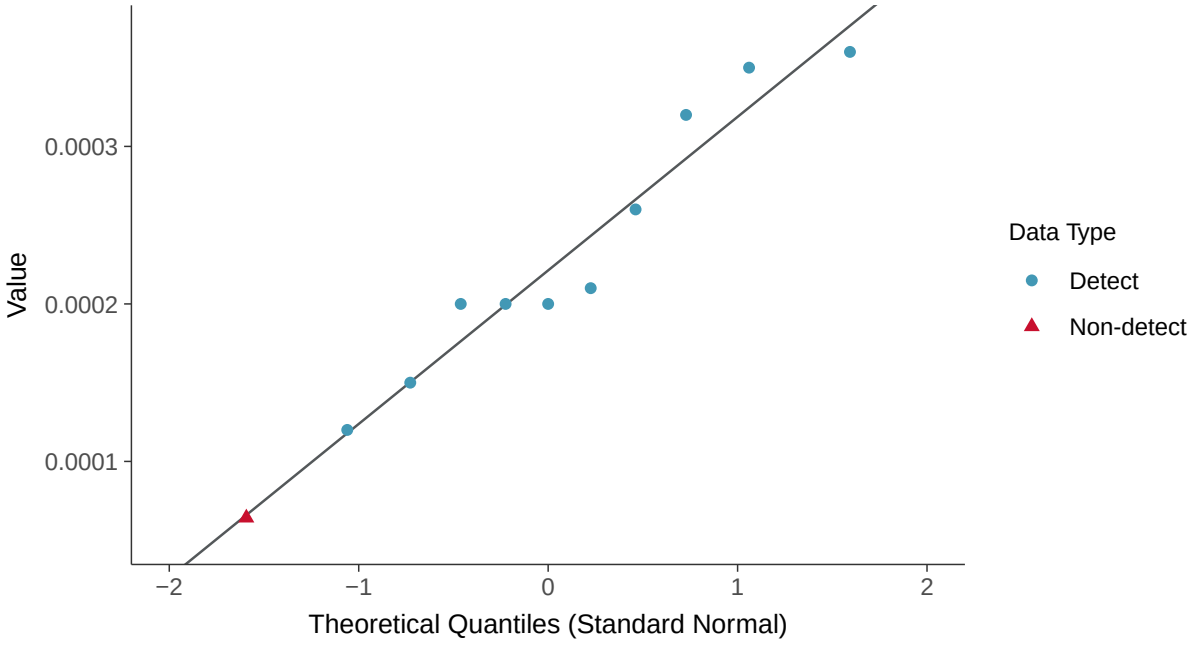
Boxplot by Season

Beryllium, MW-01R (mg/L)



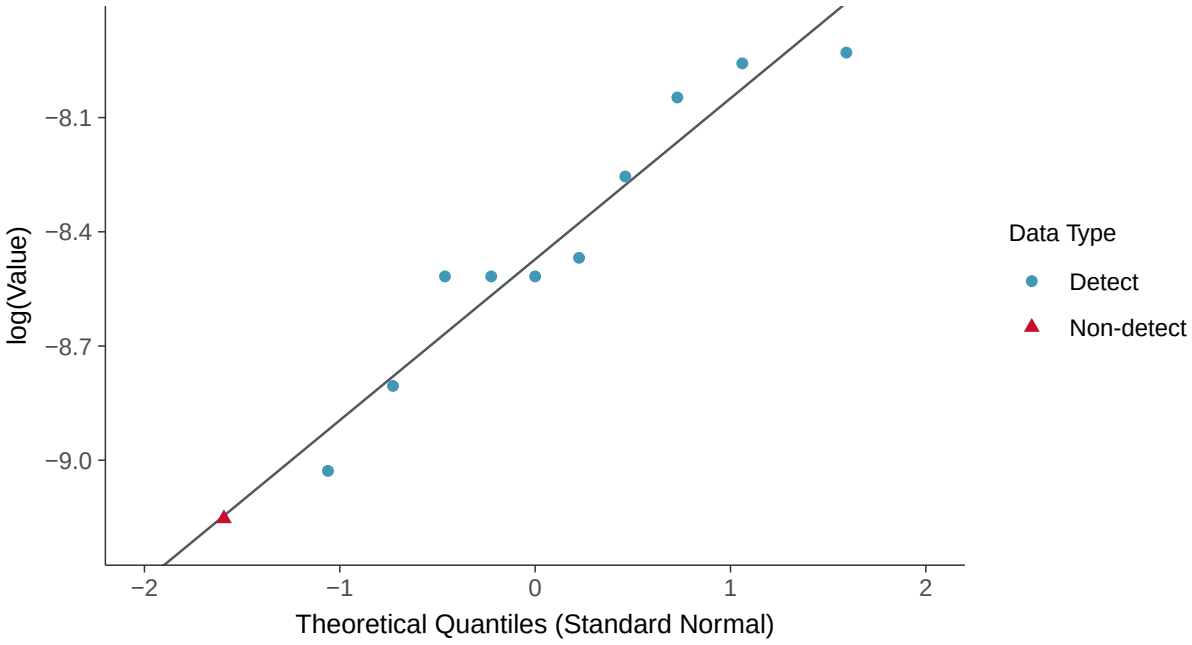
Normal Q-Q plot using ROS Imputed Estimates

Beryllium, MW-01R (mg/L)



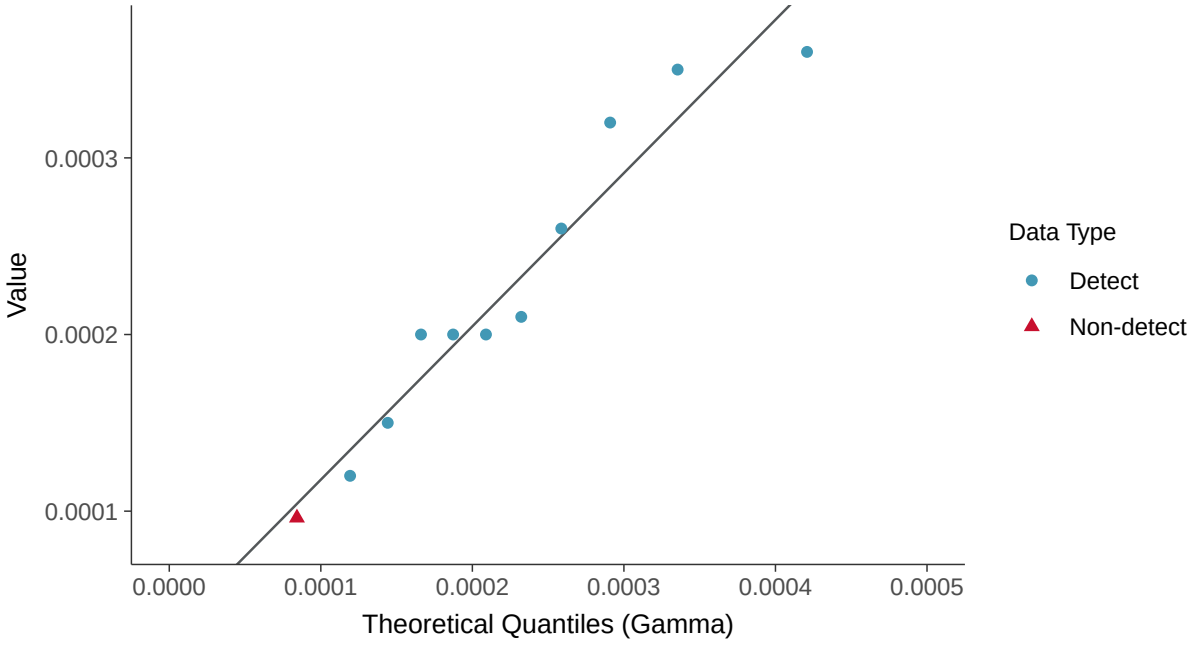
Lognormal Q-Q plot using ROS Imputed Estimates

Beryllium, MW-01R (mg/L)



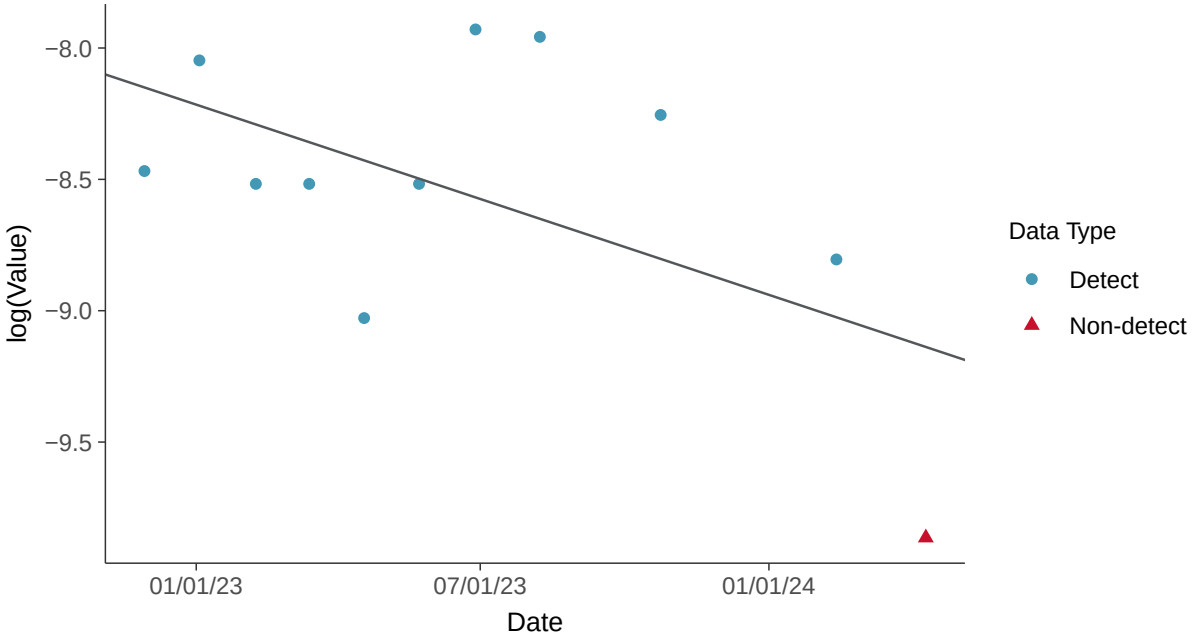
Gamma Q-Q plot using ROS Imputed Estimates

Beryllium, MW-01R (mg/L)



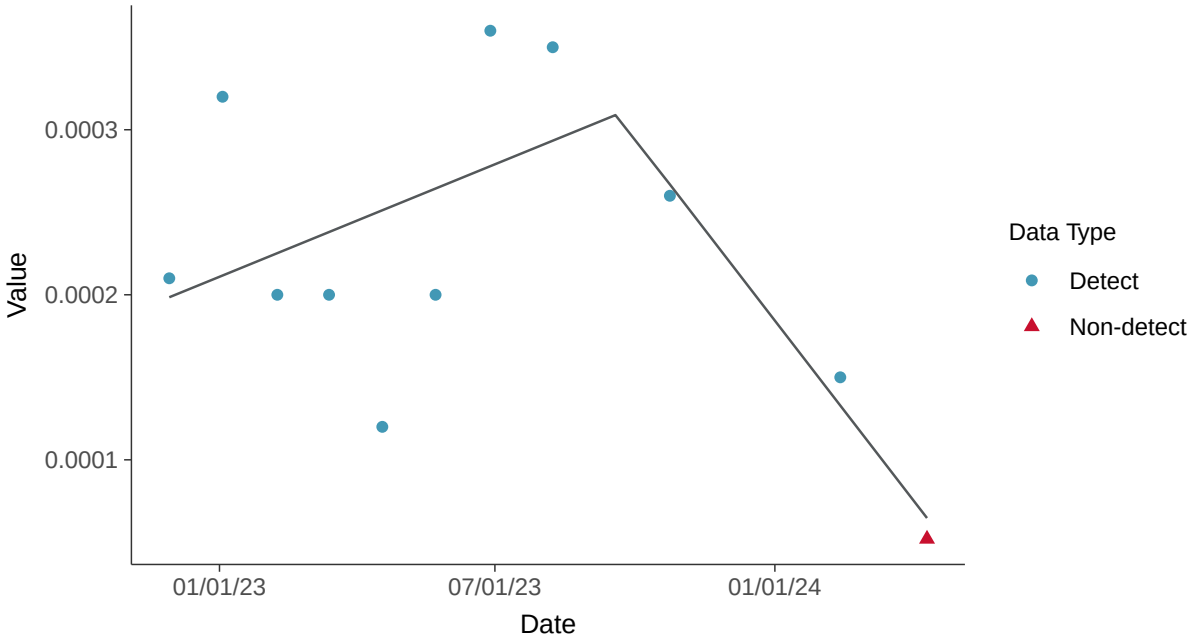
Trend Regression: Lognormal MLE

Beryllium, MW-01R (mg/L)



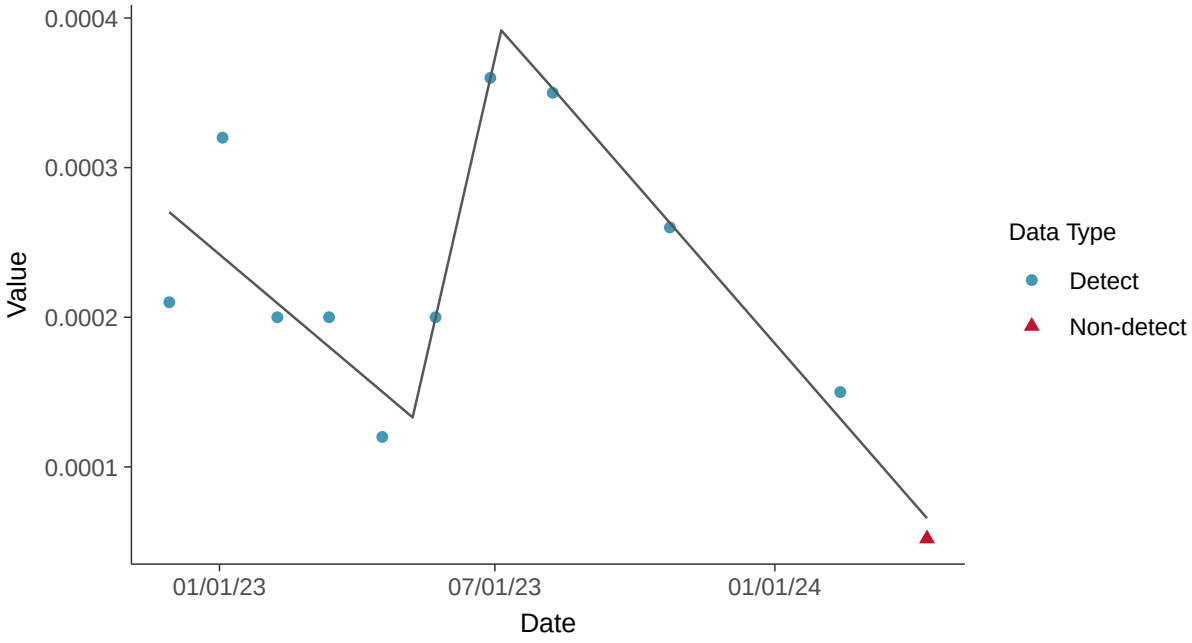
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-01R (mg/L)



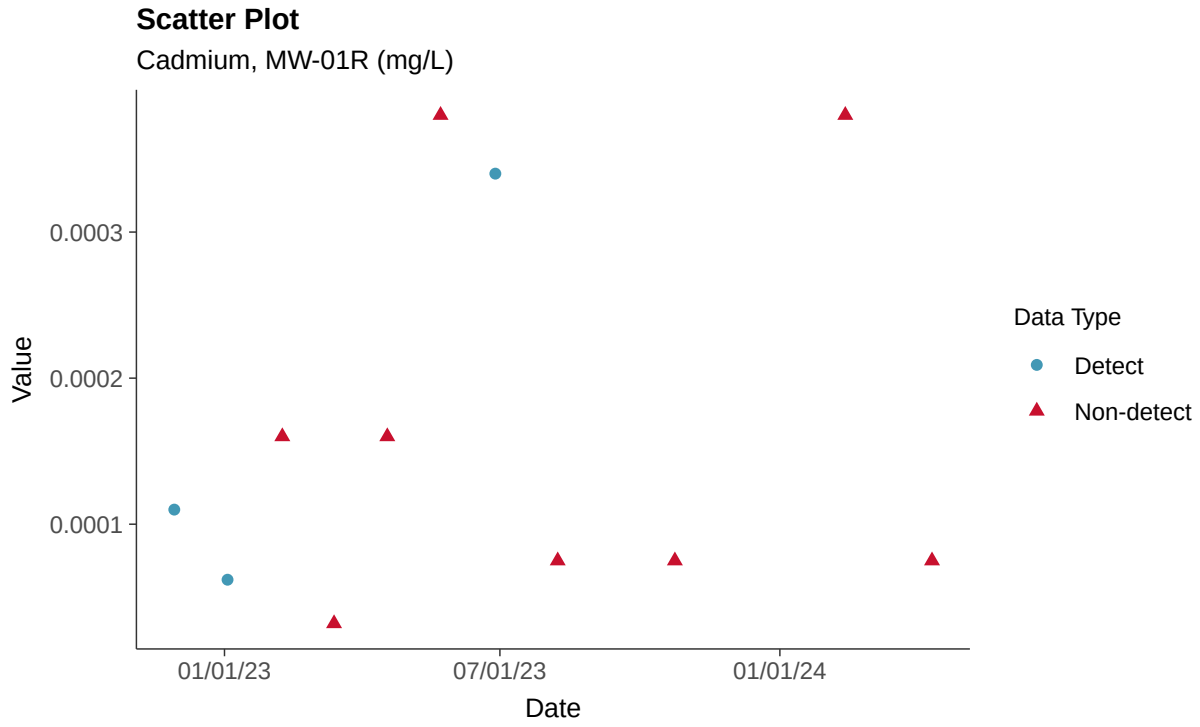
Trend Regression: Piecewise Linear-Linear-Linear

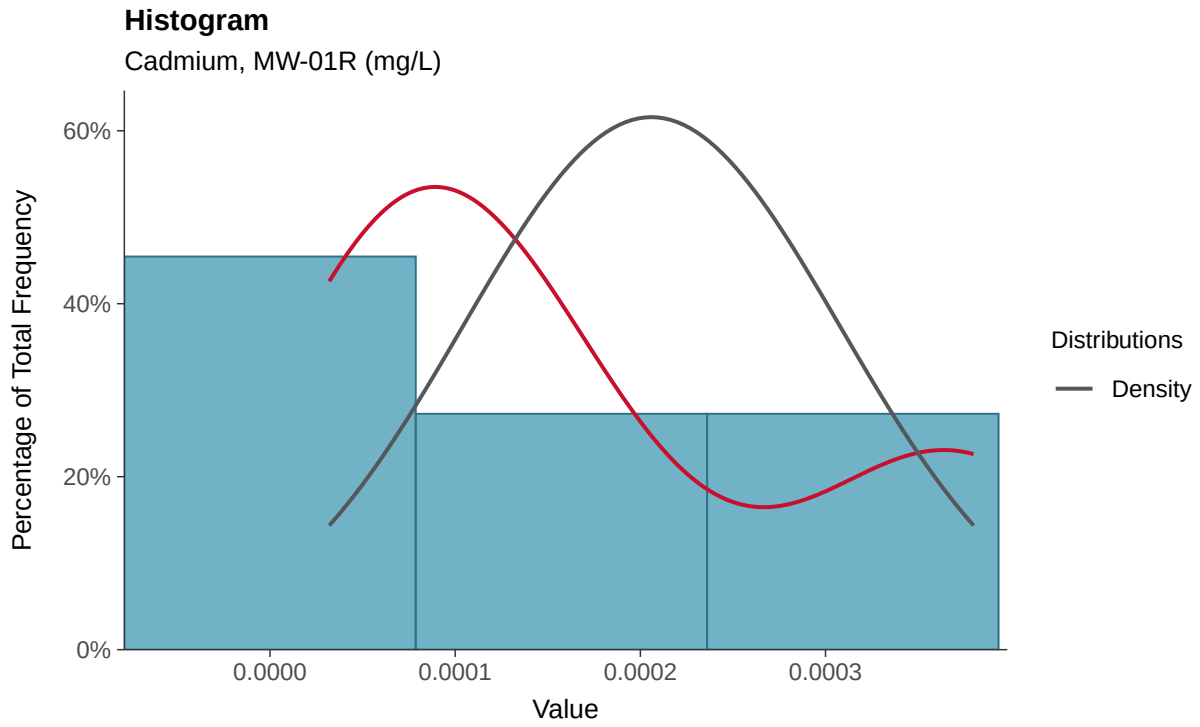
Beryllium, MW-01R (mg/L)



Appendix IV: Cadmium, MW-01R

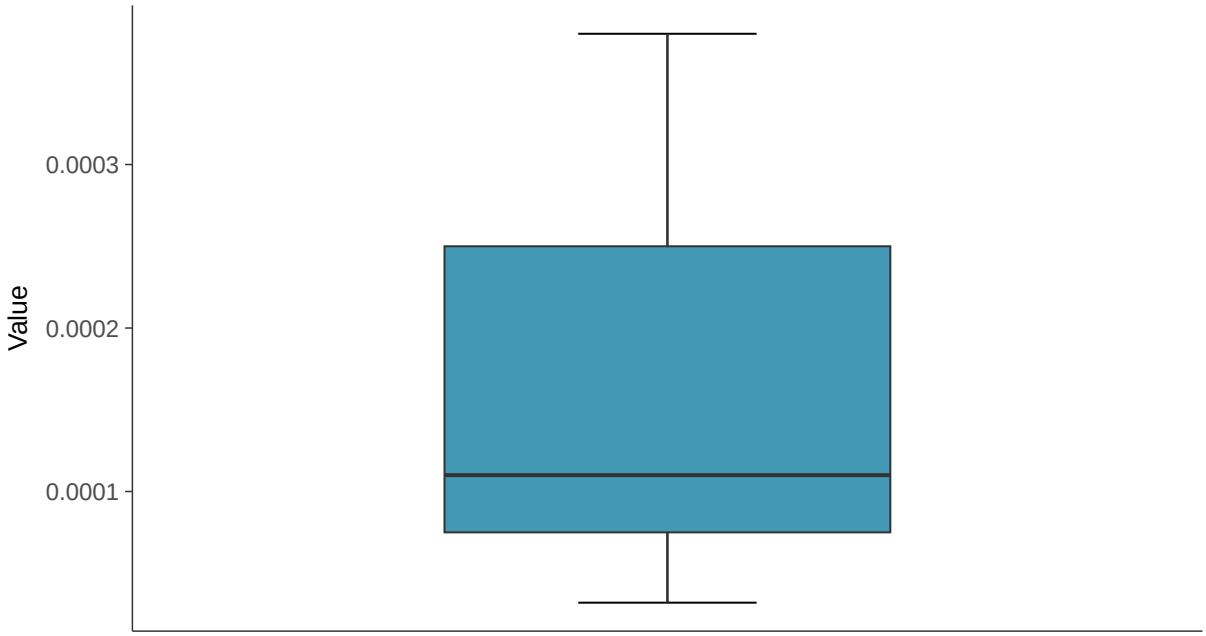
ID: 2_11_5_106





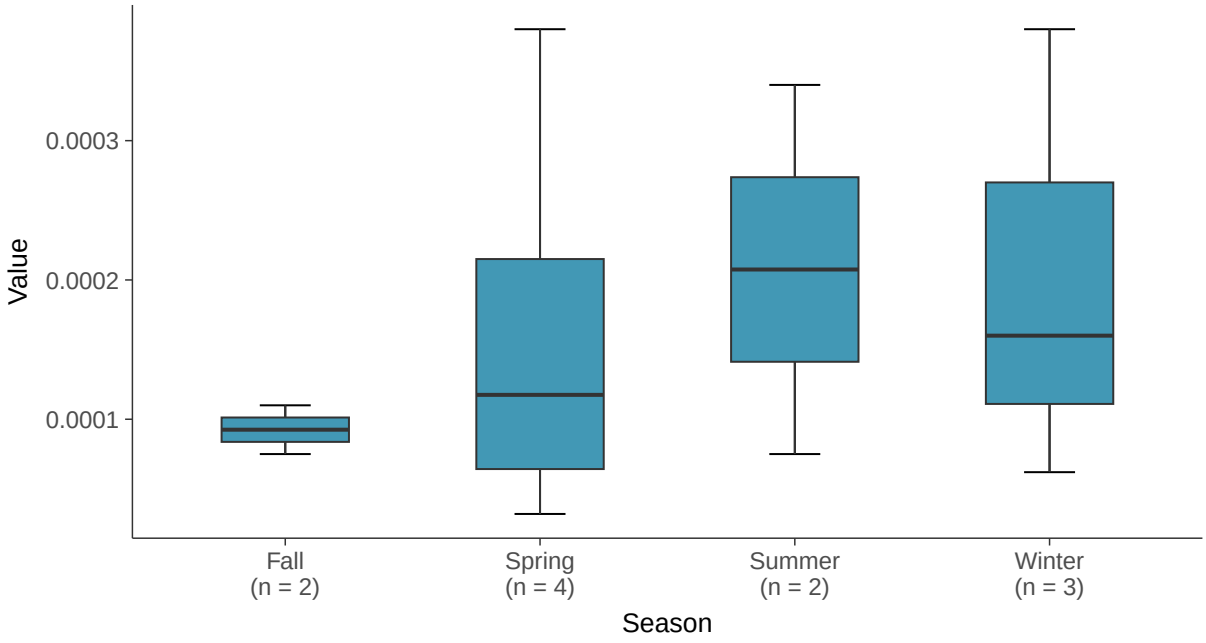
Boxplot

Cadmium, MW-01R (mg/L)



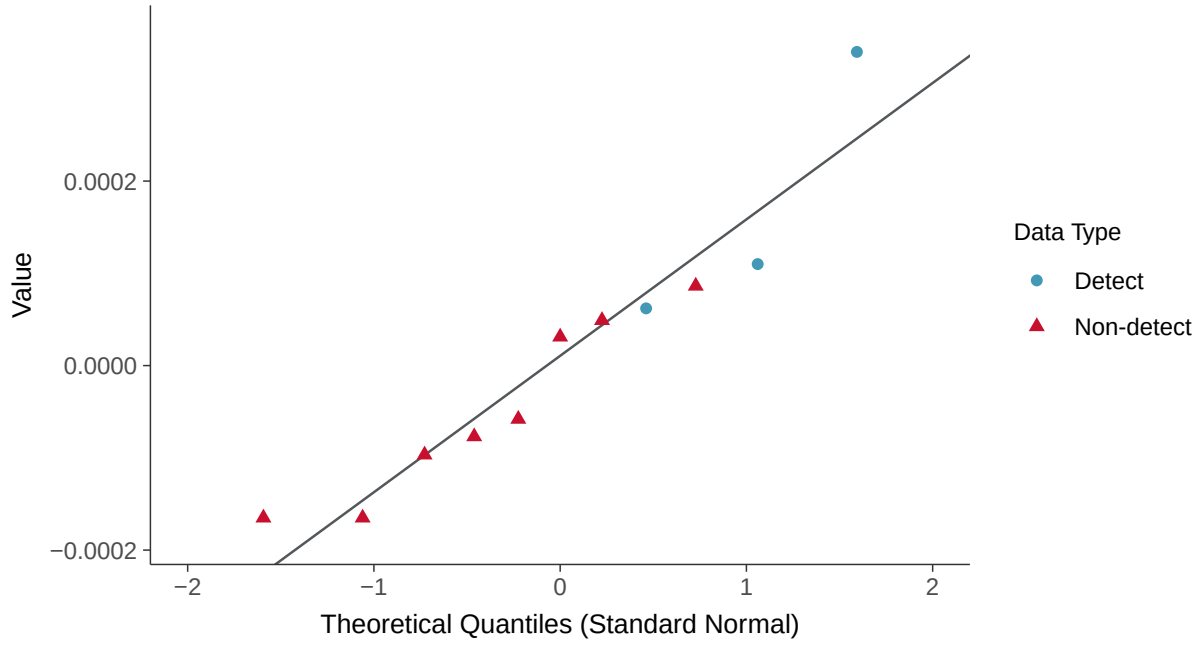
Boxplot by Season

Cadmium, MW-01R (mg/L)



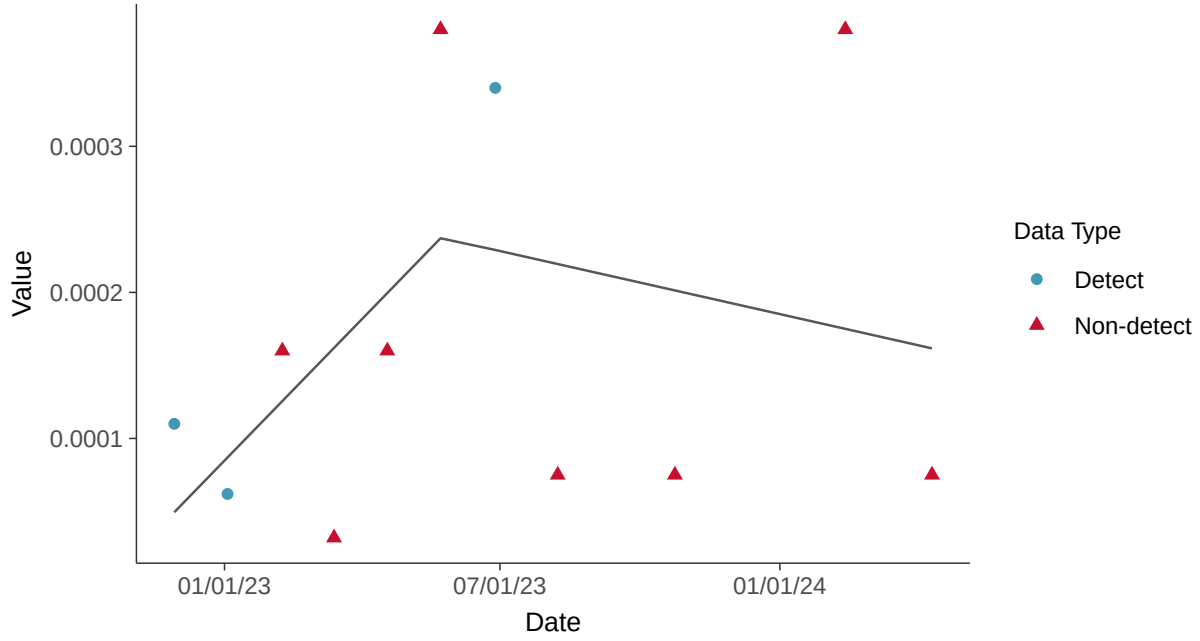
Normal Q-Q plot using ROS Imputed Estimates

Cadmium, MW-01R (mg/L)



Trend Regression: Piecewise Linear-Linear

Cadmium, MW-01R (mg/L)

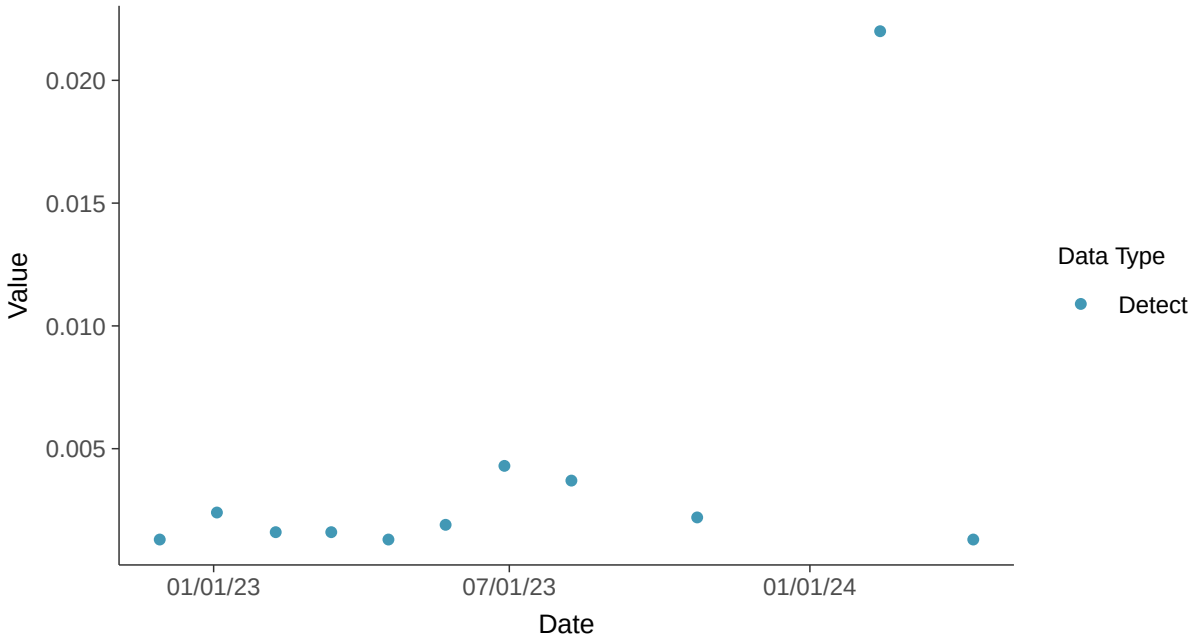


Appendix IV: Chromium, Total, MW-01R

ID: 2_11_5_109

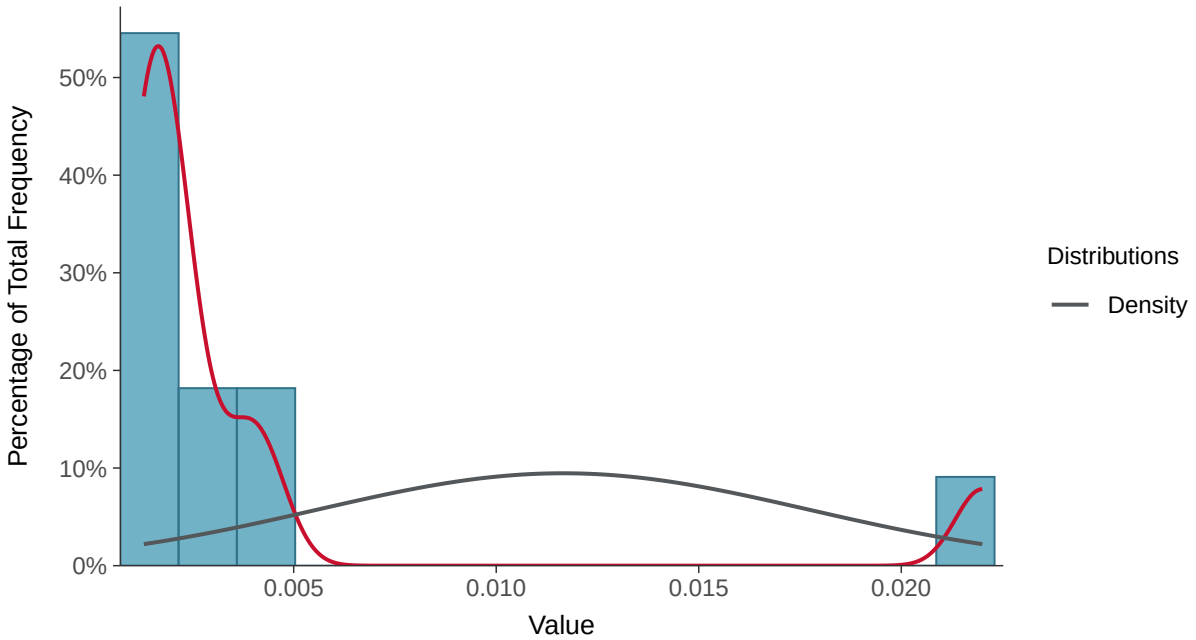
Scatter Plot

Chromium, Total, MW-01R (mg/L)



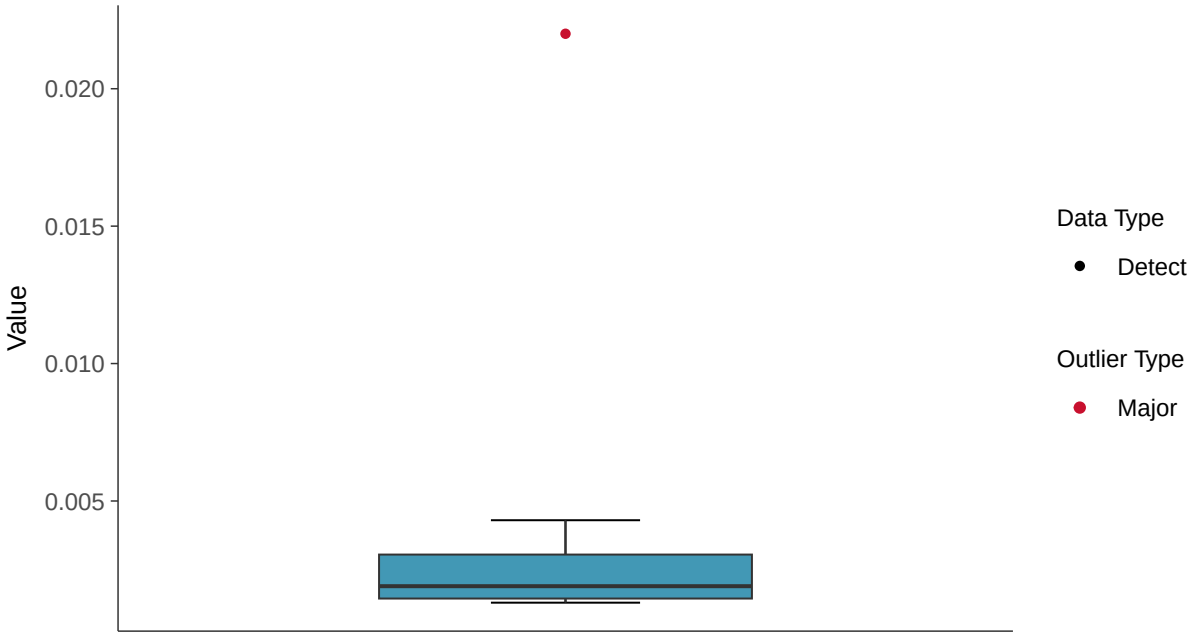
Histogram

Chromium, Total, MW-01R (mg/L)



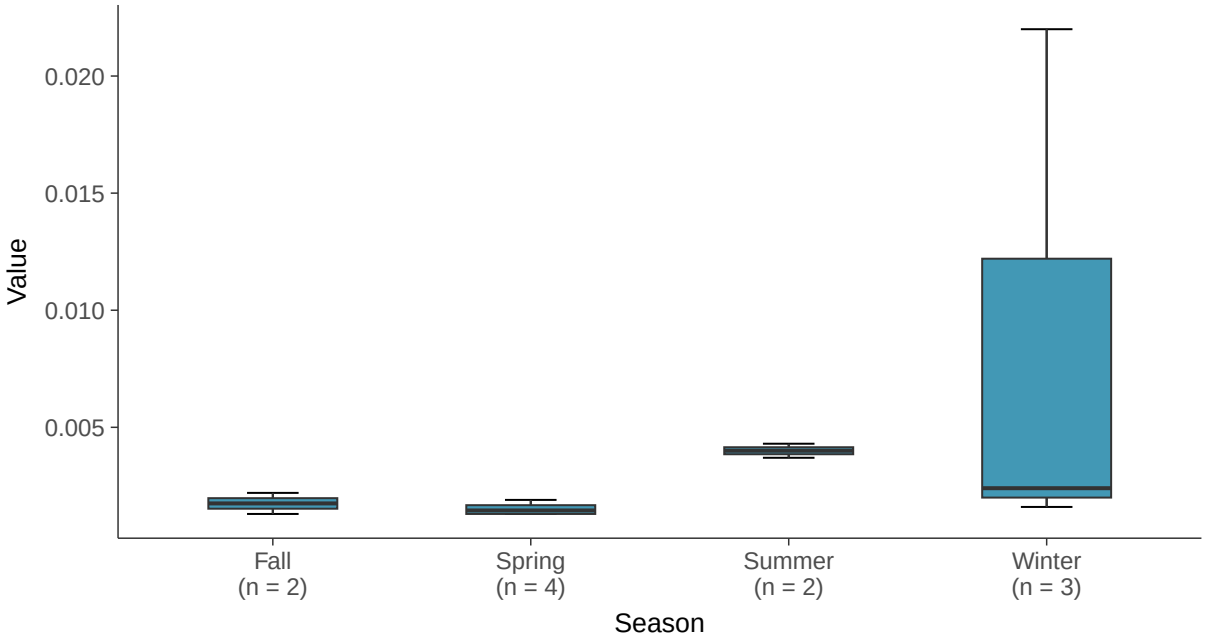
Boxplot

Chromium, Total, MW-01R (mg/L)



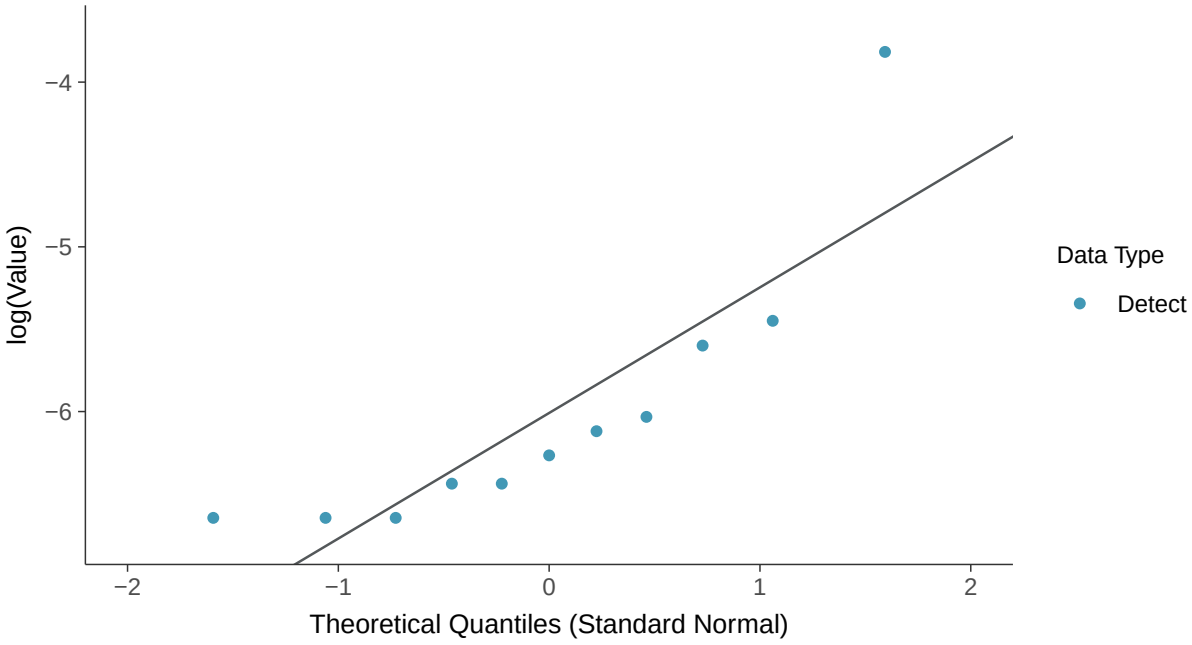
Boxplot by Season

Chromium, Total, MW-01R (mg/L)



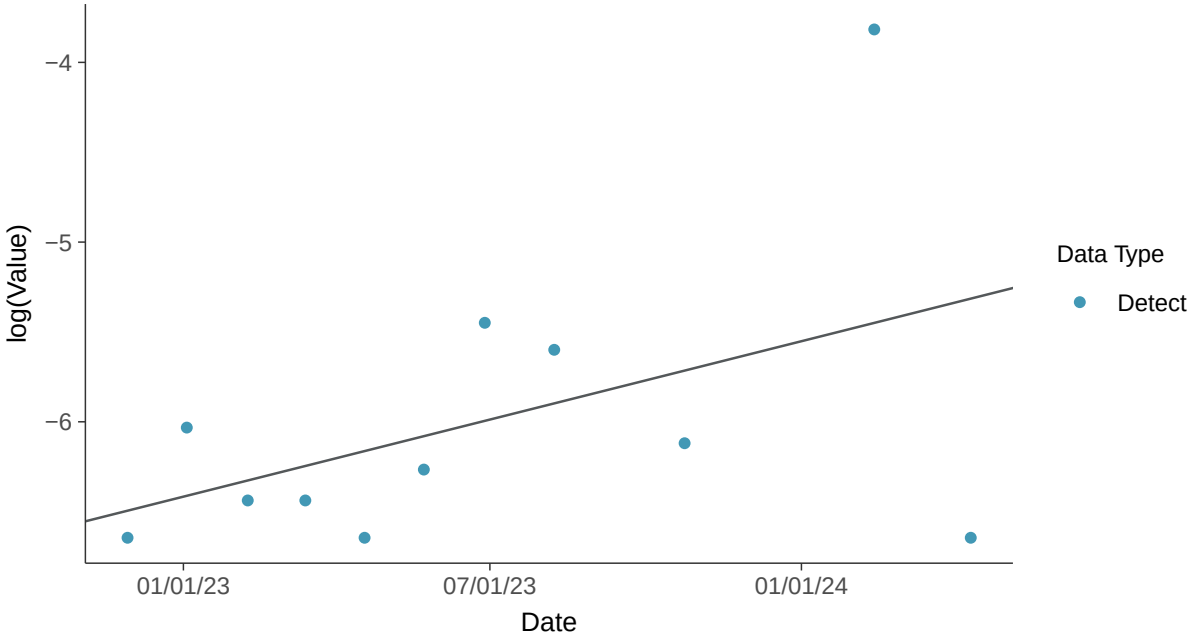
Lognormal Q-Q plot

Chromium, Total, MW-01R (mg/L)



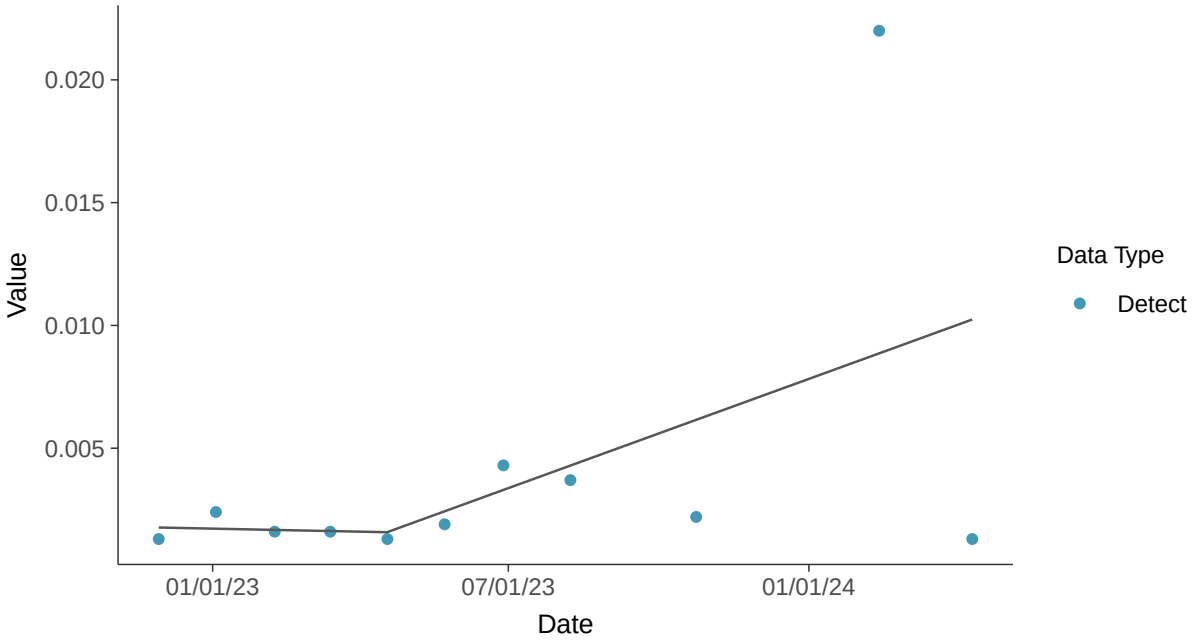
Trend Regression: Lognormal MLE

Chromium, Total, MW-01R (mg/L)



Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-01R (mg/L)

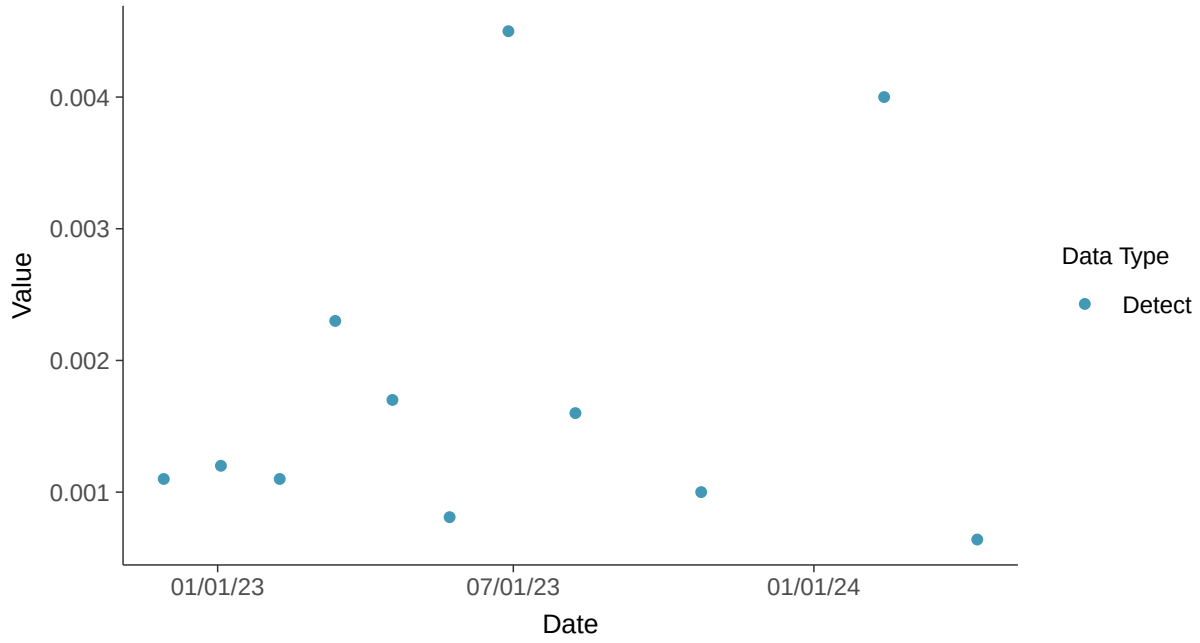


Appendix IV: Cobalt, MW-01R

ID: 2_11_5_110

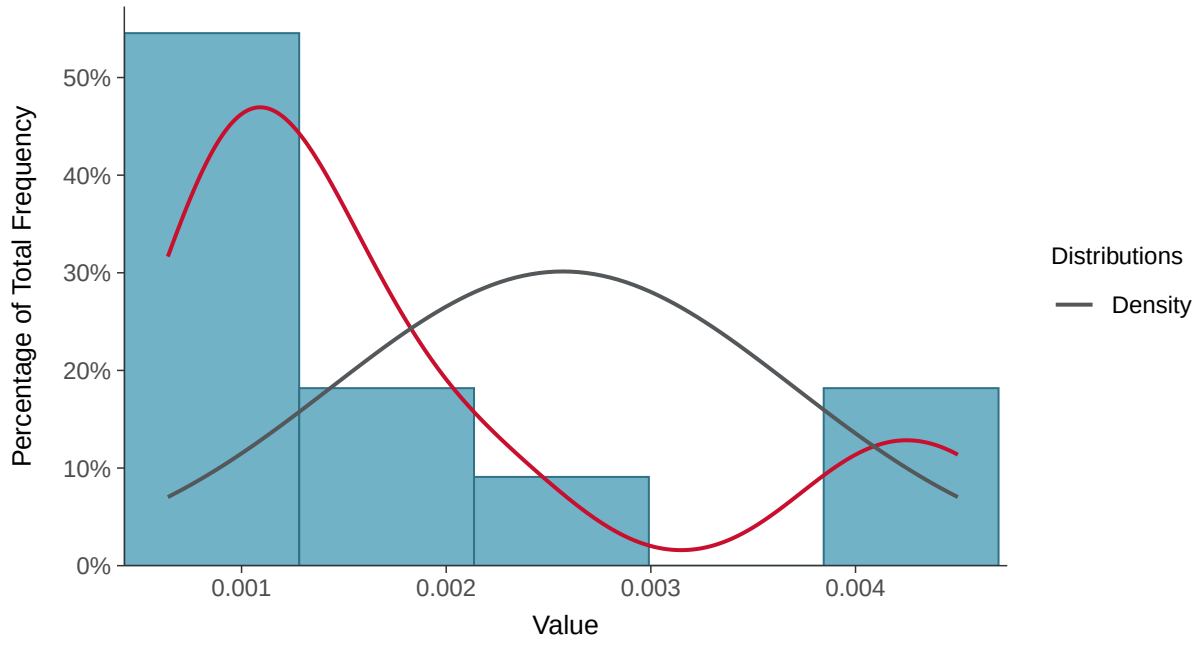
Scatter Plot

Cobalt, MW-01R (mg/L)



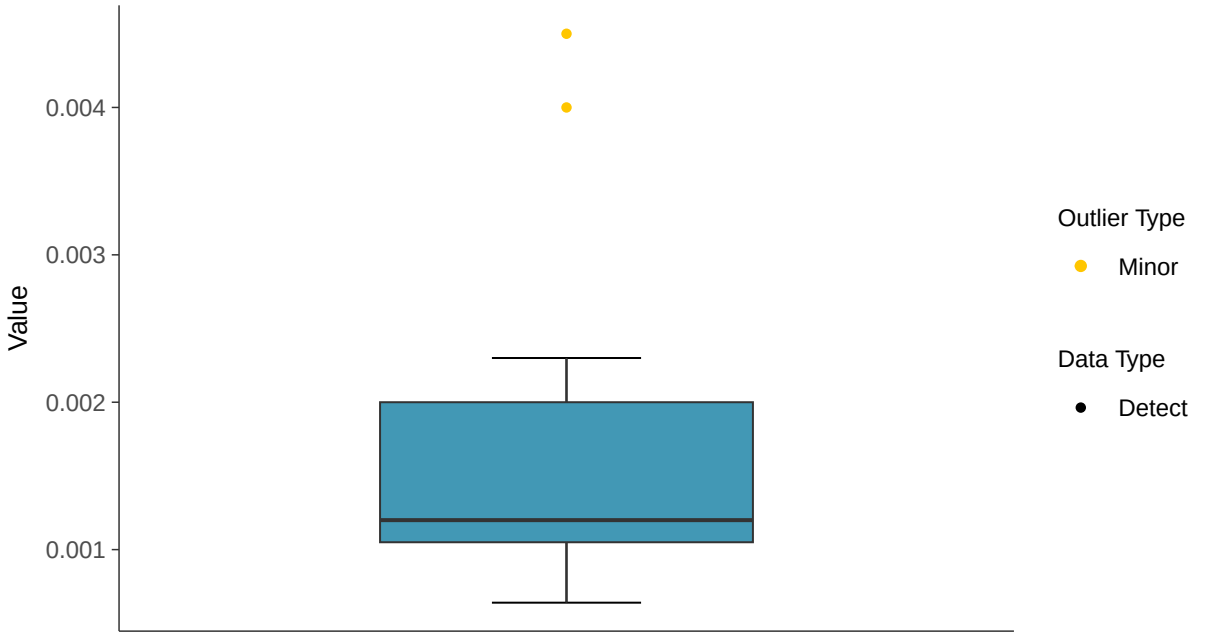
Histogram

Cobalt, MW-01R (mg/L)



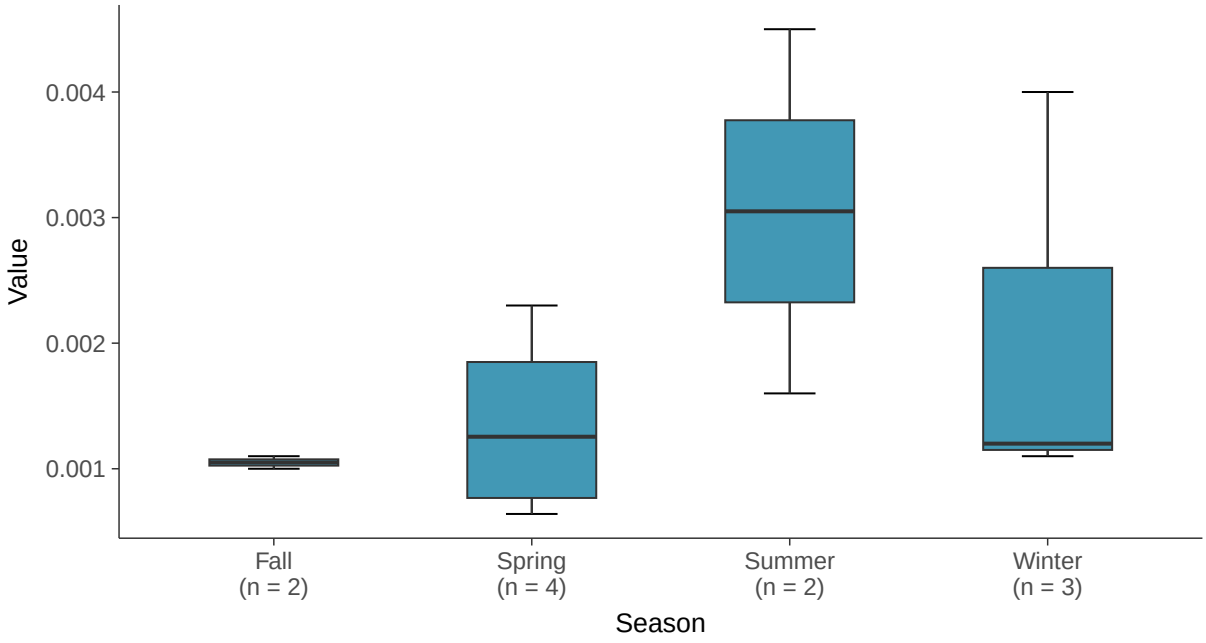
Boxplot

Cobalt, MW-01R (mg/L)



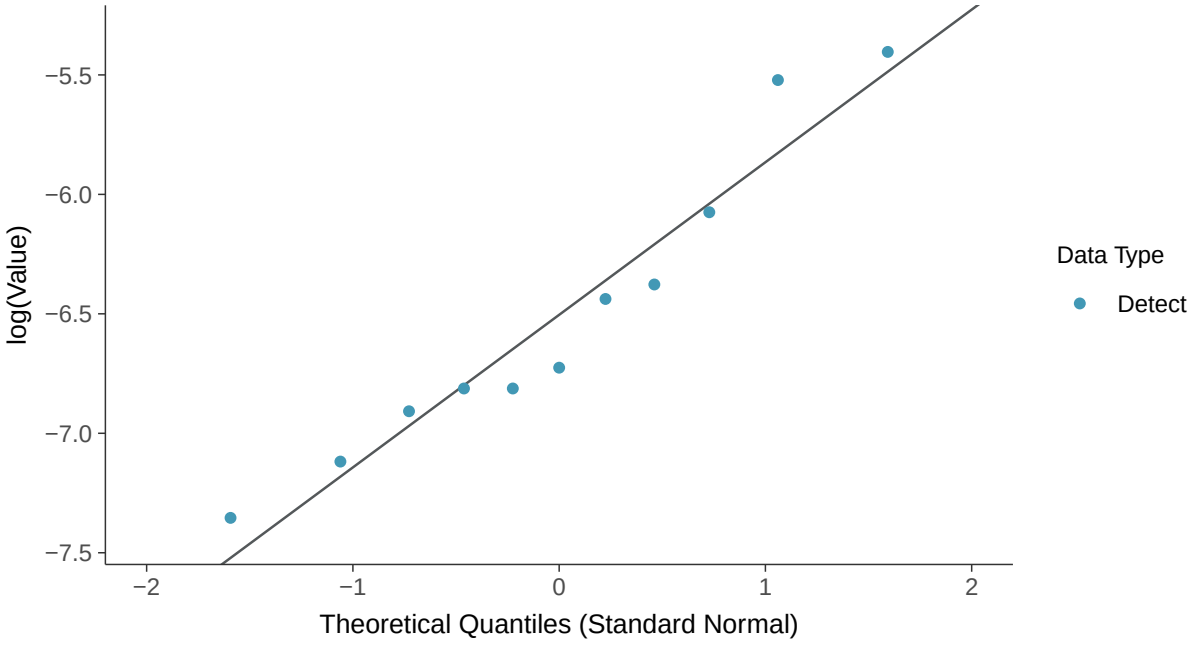
Boxplot by Season

Cobalt, MW-01R (mg/L)



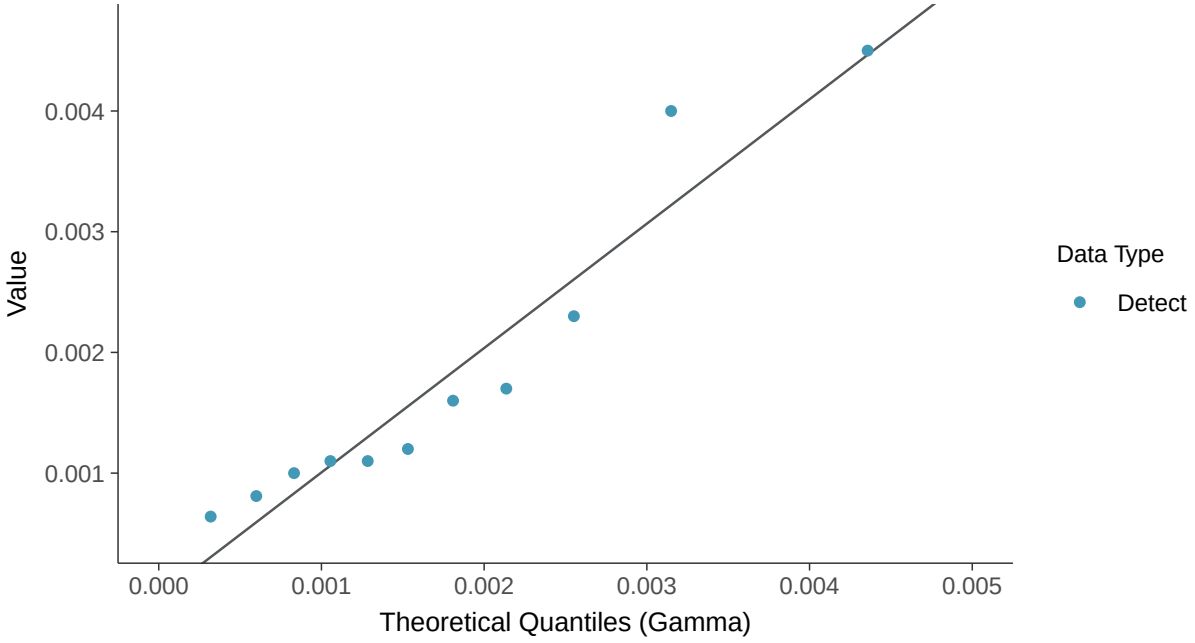
Lognormal Q-Q plot

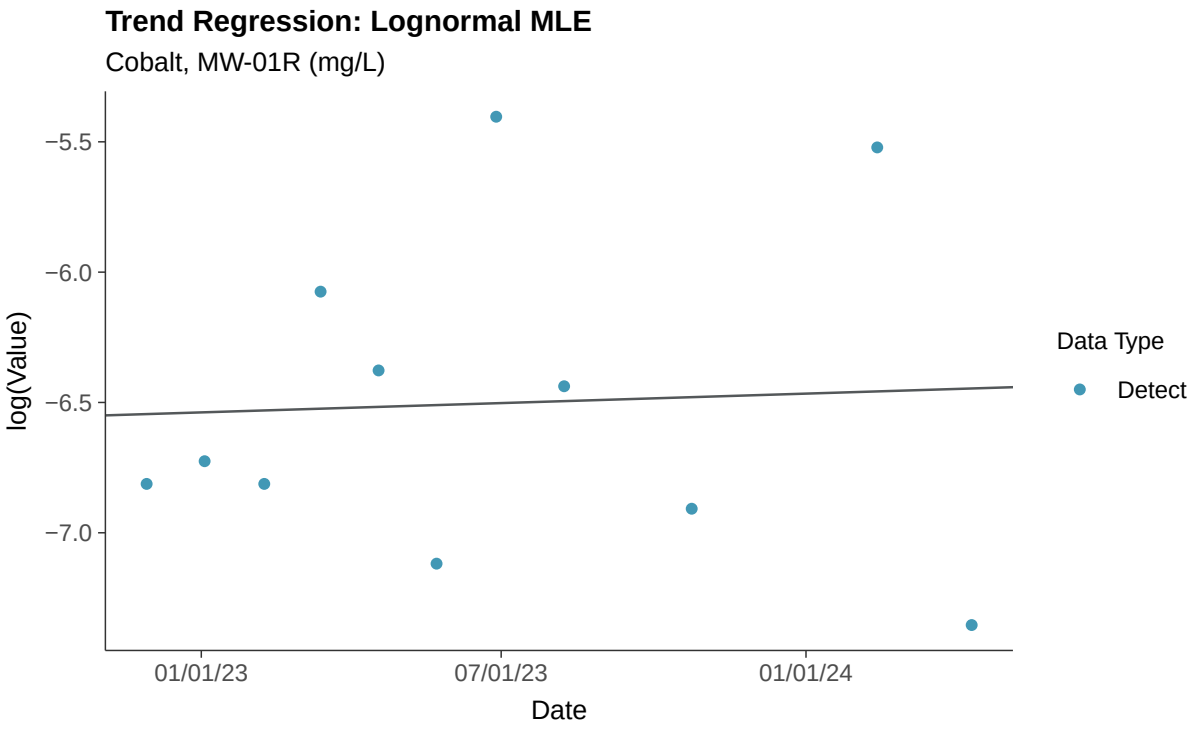
Cobalt, MW-01R (mg/L)



Gamma Q-Q plot

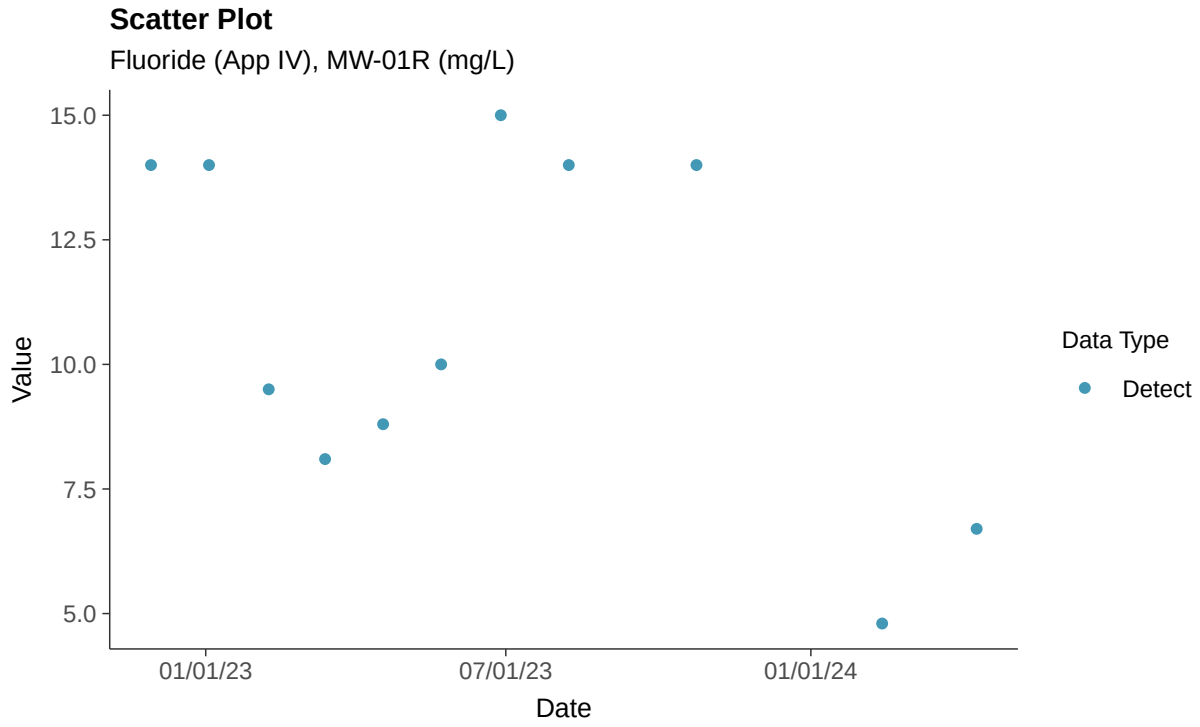
Cobalt, MW-01R (mg/L)

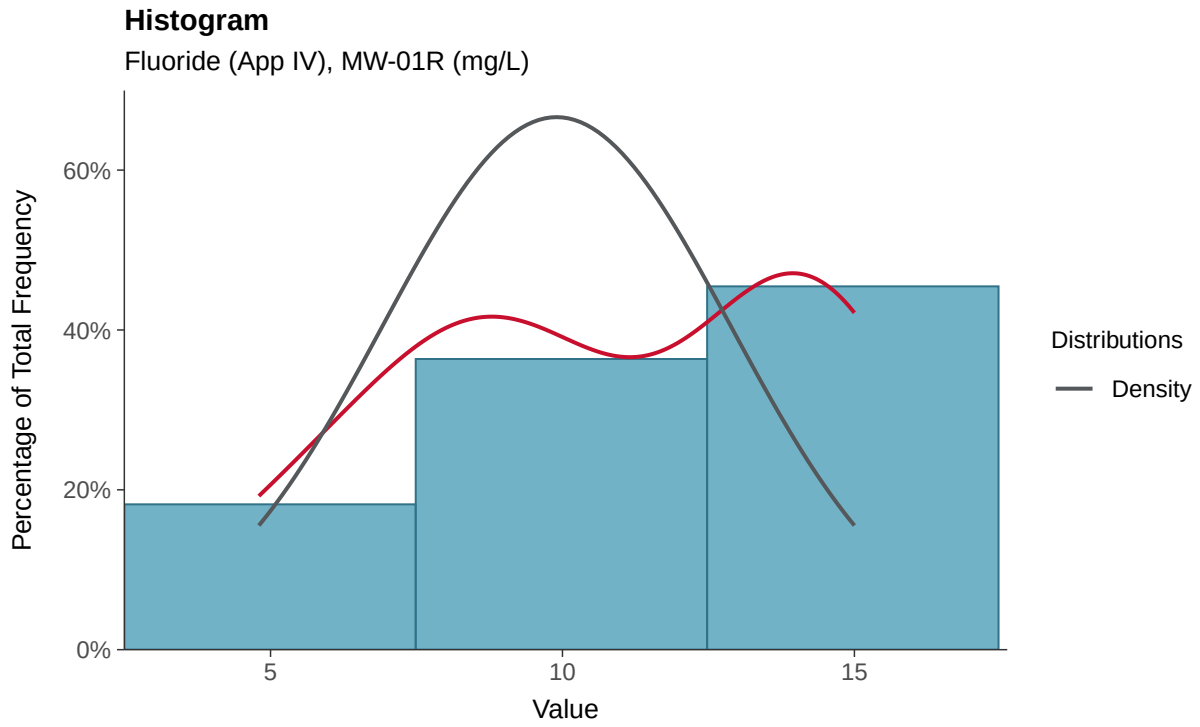



Trend Regression: Lognormal MLE
Cobalt, MW-01R (mg/L)
log(Value)
−5.5
−6.0
−6.5
−7.0
01/01/23
07/01/23
01/01/24
Date
Data Type
Detect

Appendix IV: Fluoride (App IV), MW-01R

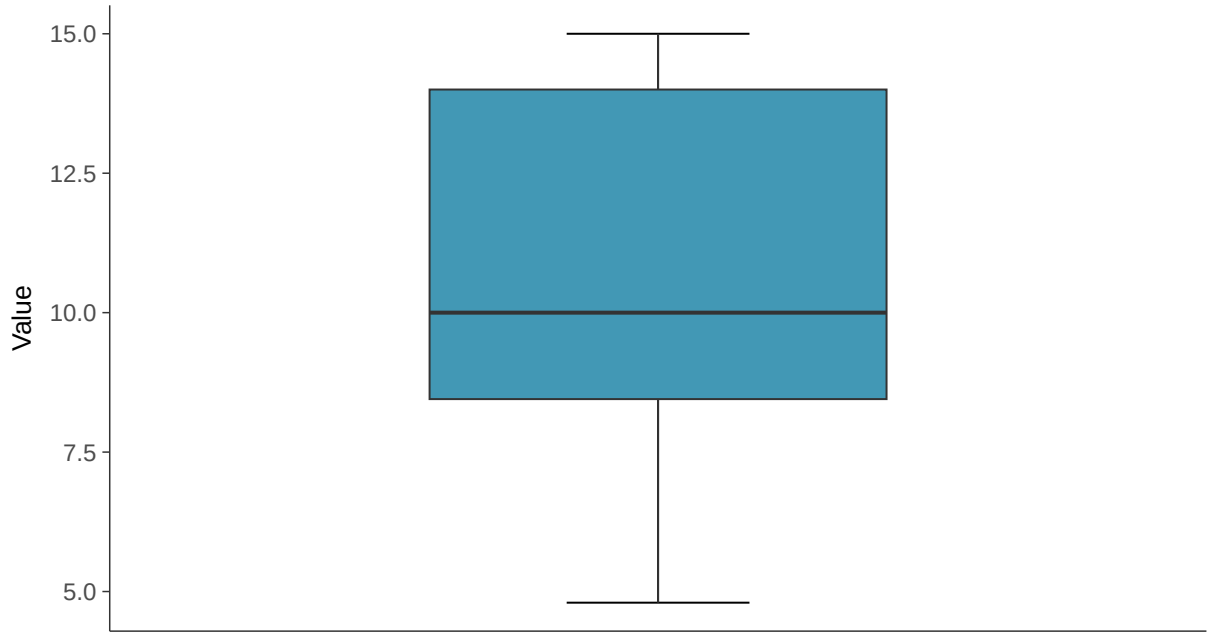
ID: 2_11_5_113





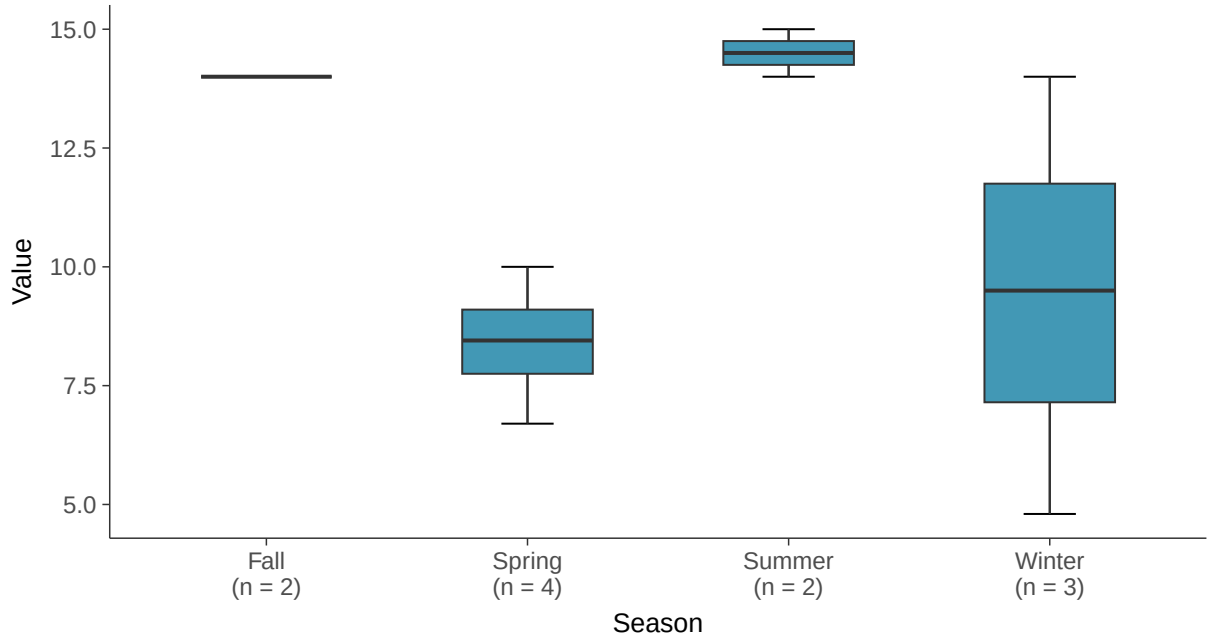
Boxplot

Fluoride (App IV), MW-01R (mg/L)



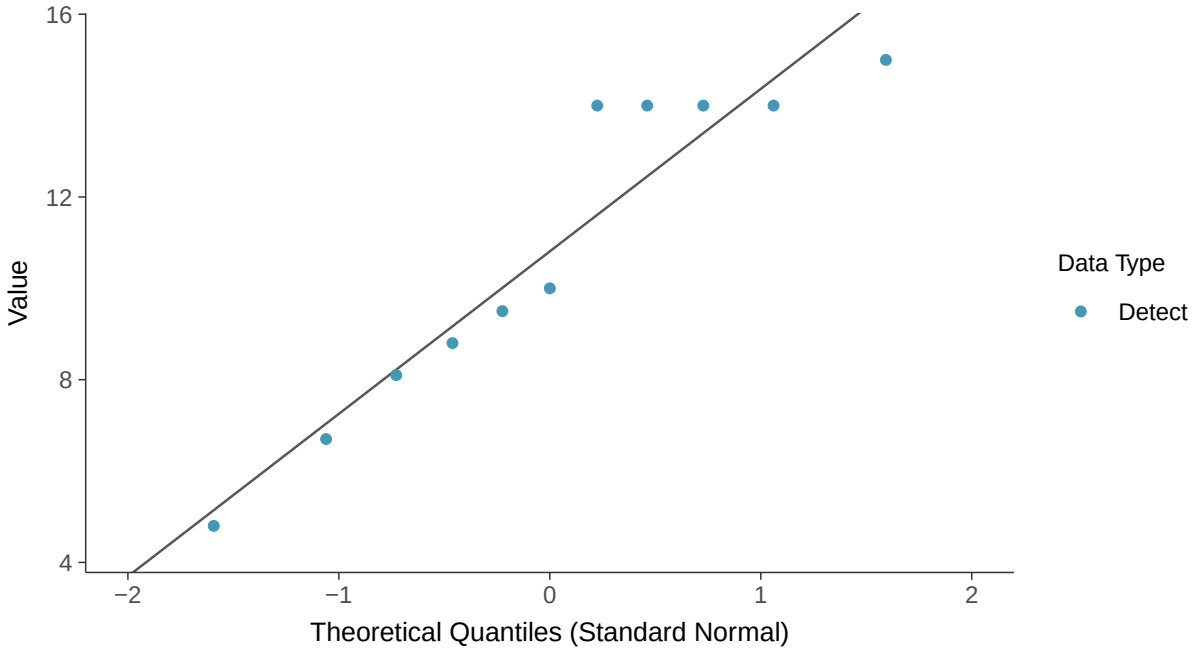
Boxplot by Season

Fluoride (App IV), MW-01R (mg/L)



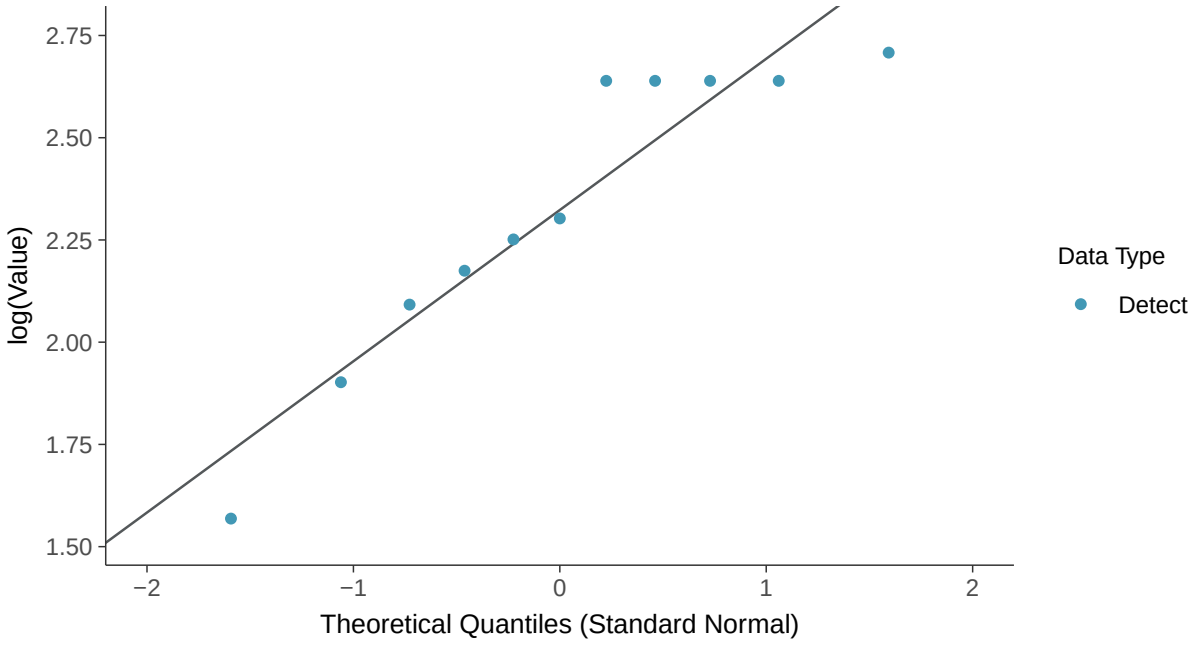
Normal Q-Q plot

Fluoride (App IV), MW-01R (mg/L)



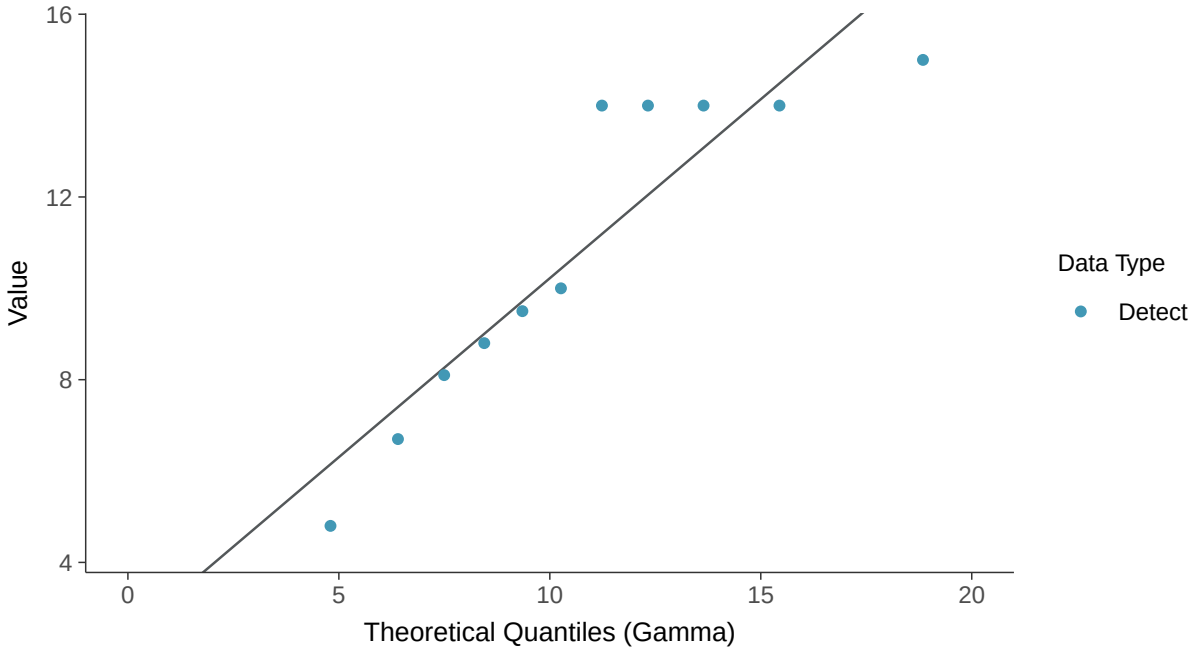
Lognormal Q-Q plot

Fluoride (App IV), MW-01R (mg/L)



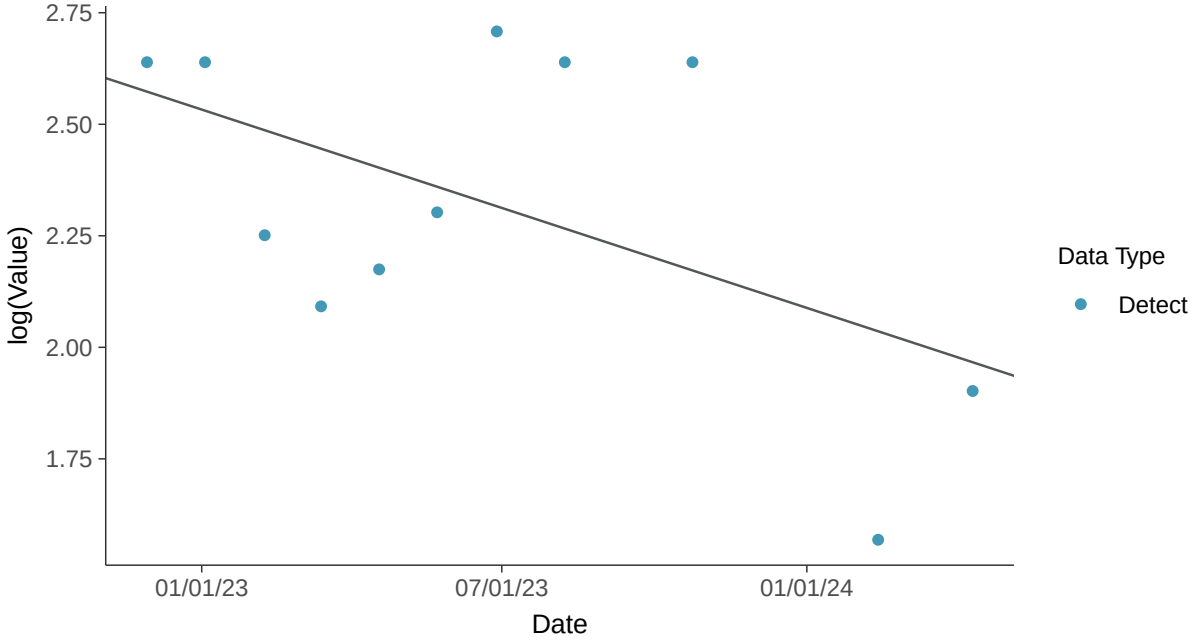
Gamma Q-Q plot

Fluoride (App IV), MW-01R (mg/L)



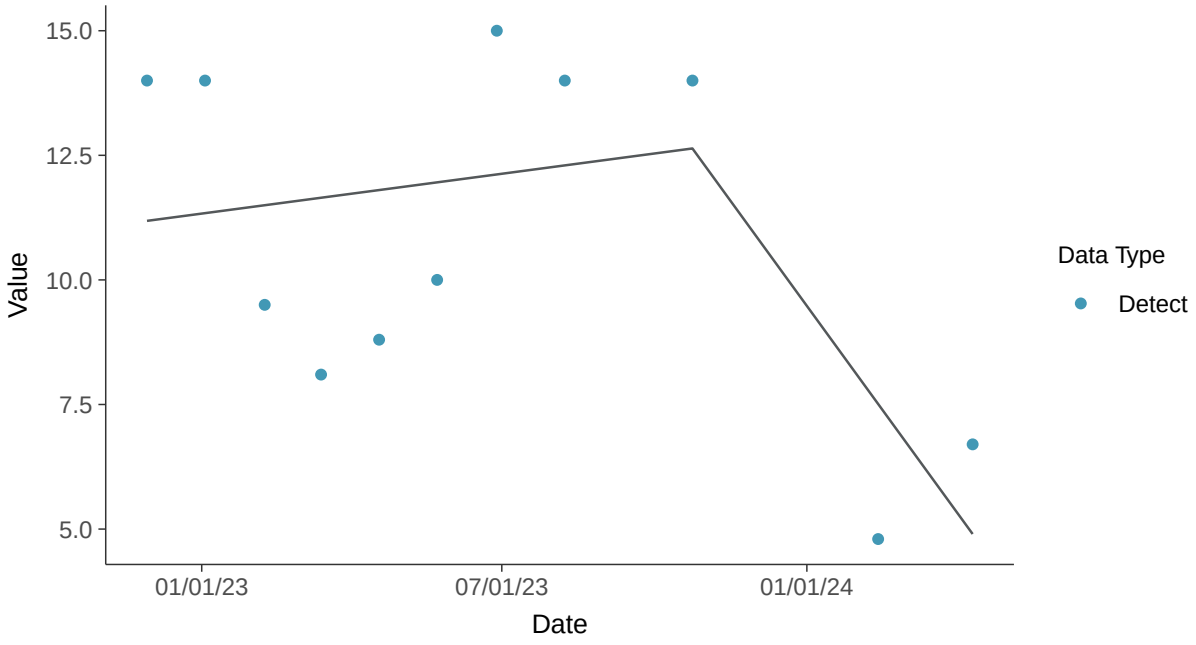
Trend Regression: Lognormal MLE

Fluoride (App IV), MW-01R (mg/L)



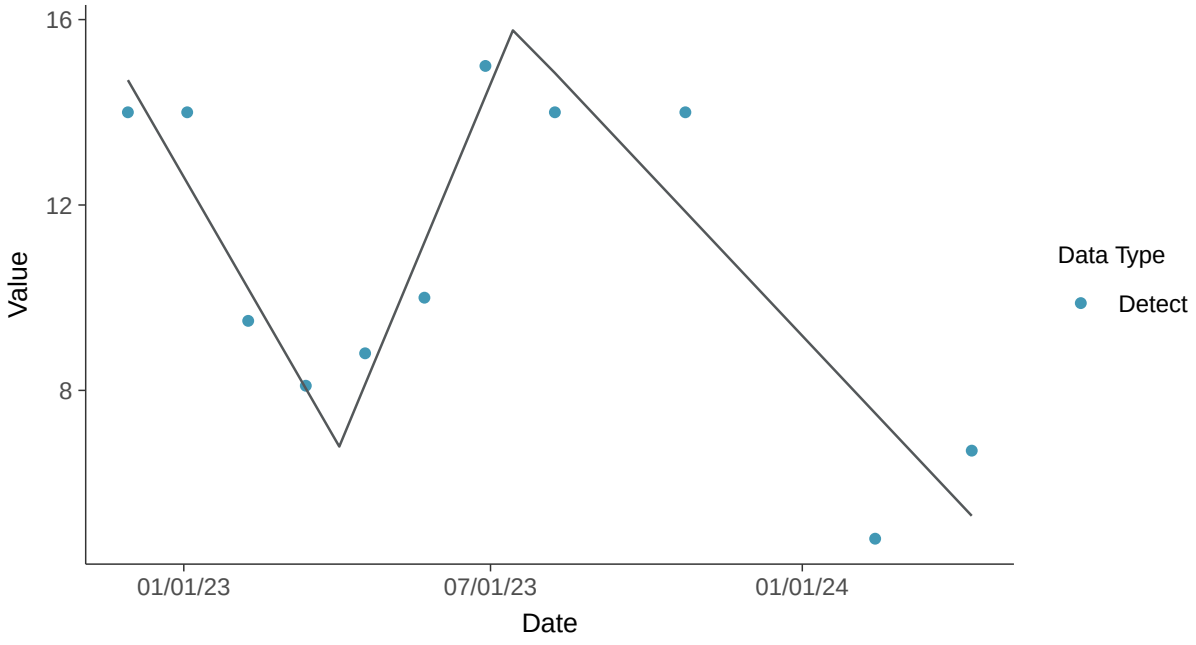
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-01R (mg/L)



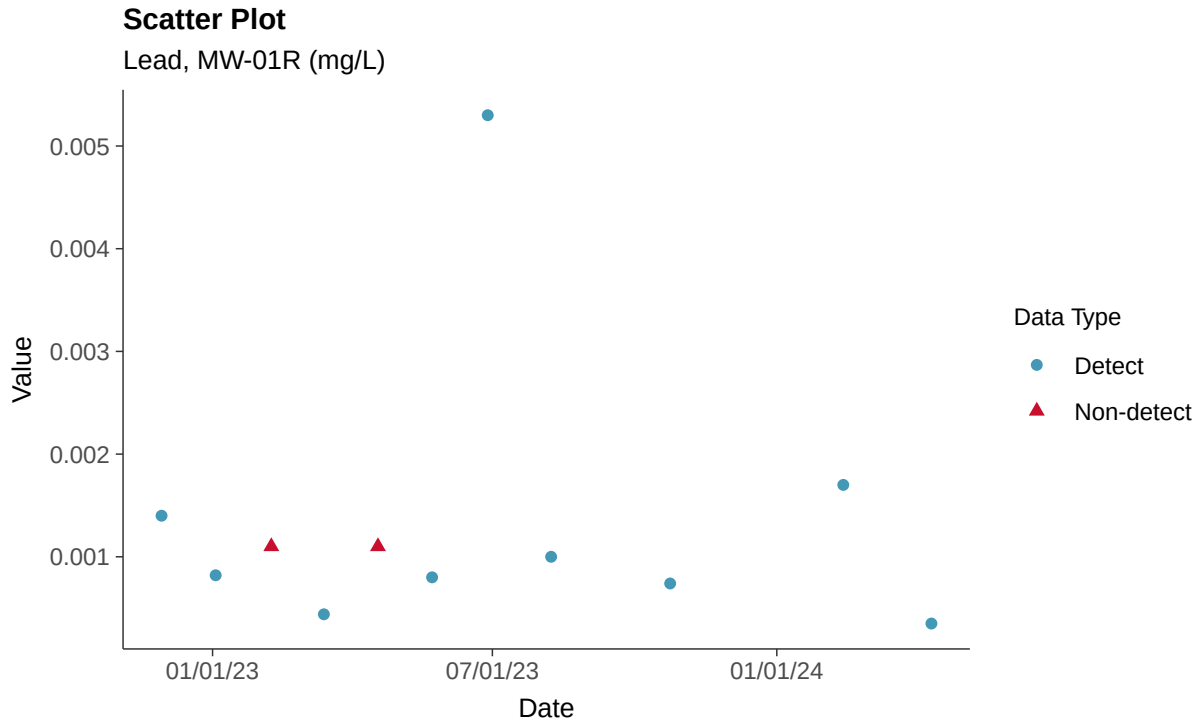
Trend Regression: Piecewise Linear-Linear-Linear

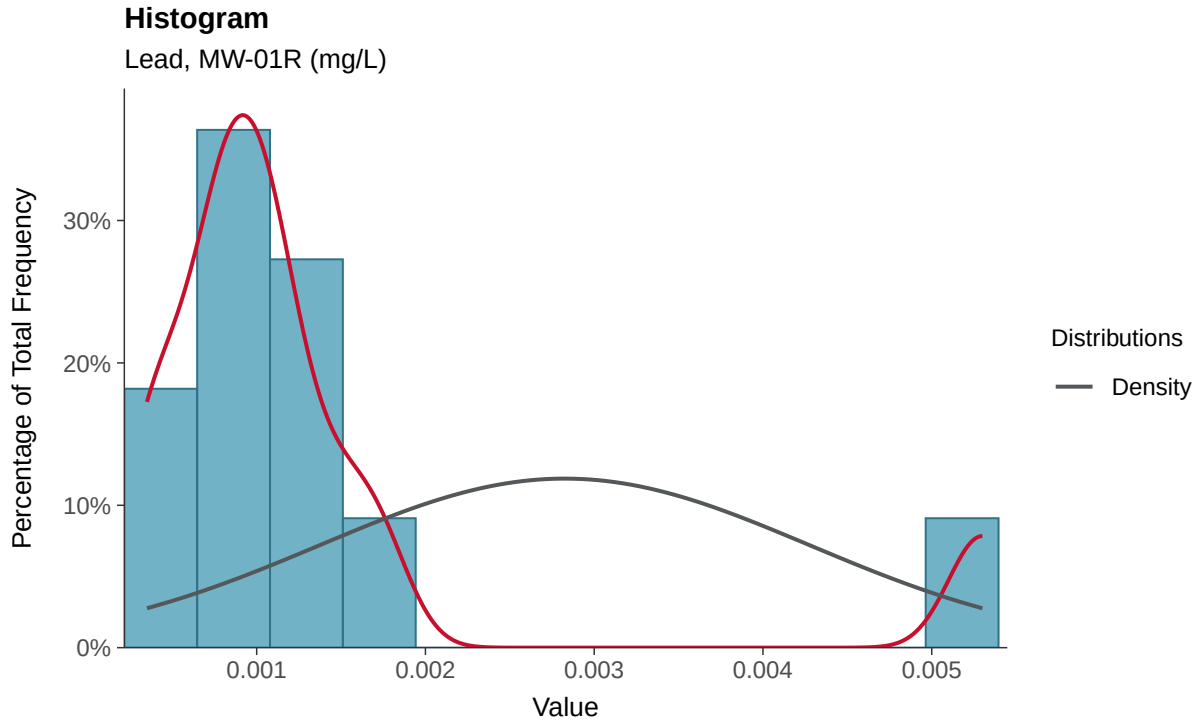
Fluoride (App IV), MW-01R (mg/L)



Appendix IV: Lead, MW-01R

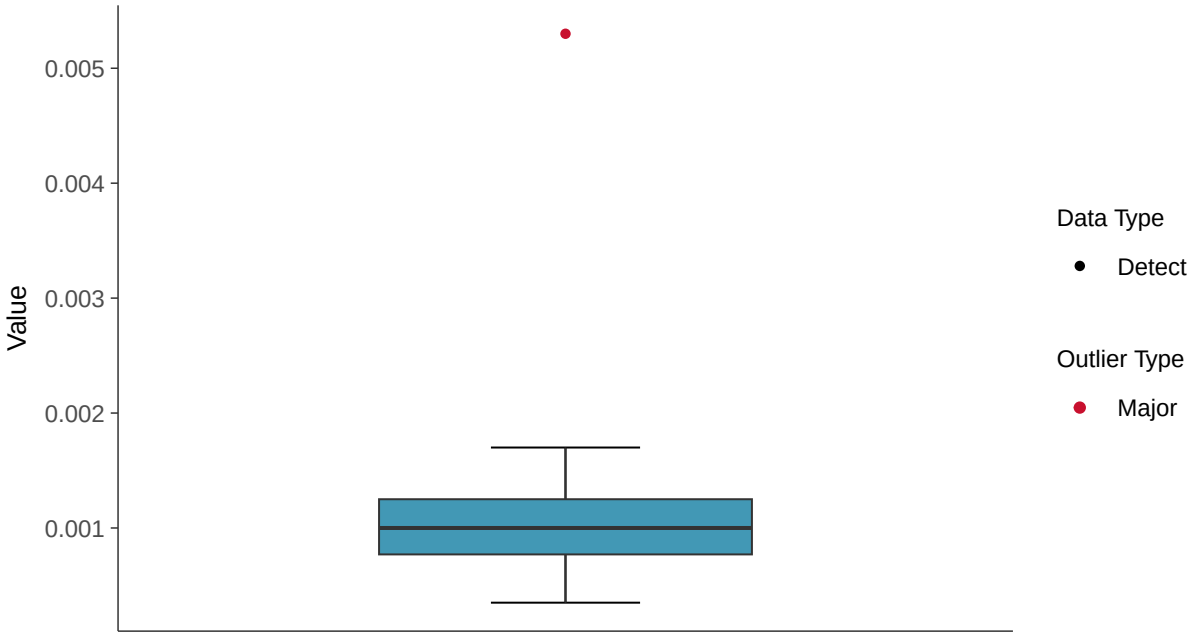
ID: 2_11_5_115





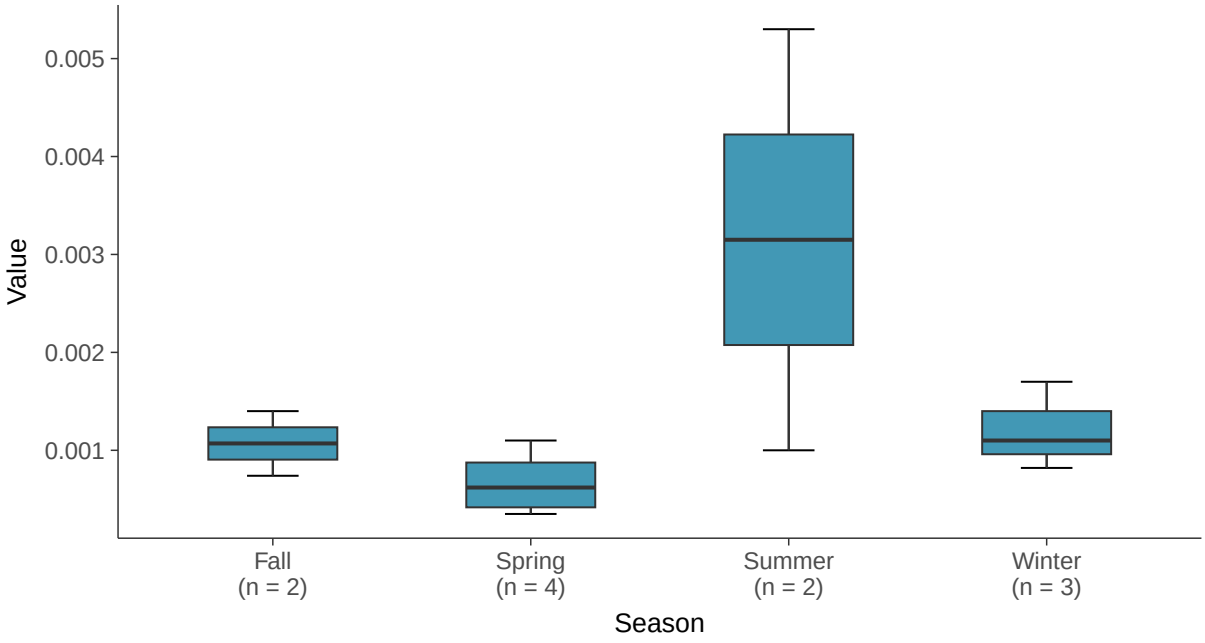
Boxplot

Lead, MW-01R (mg/L)



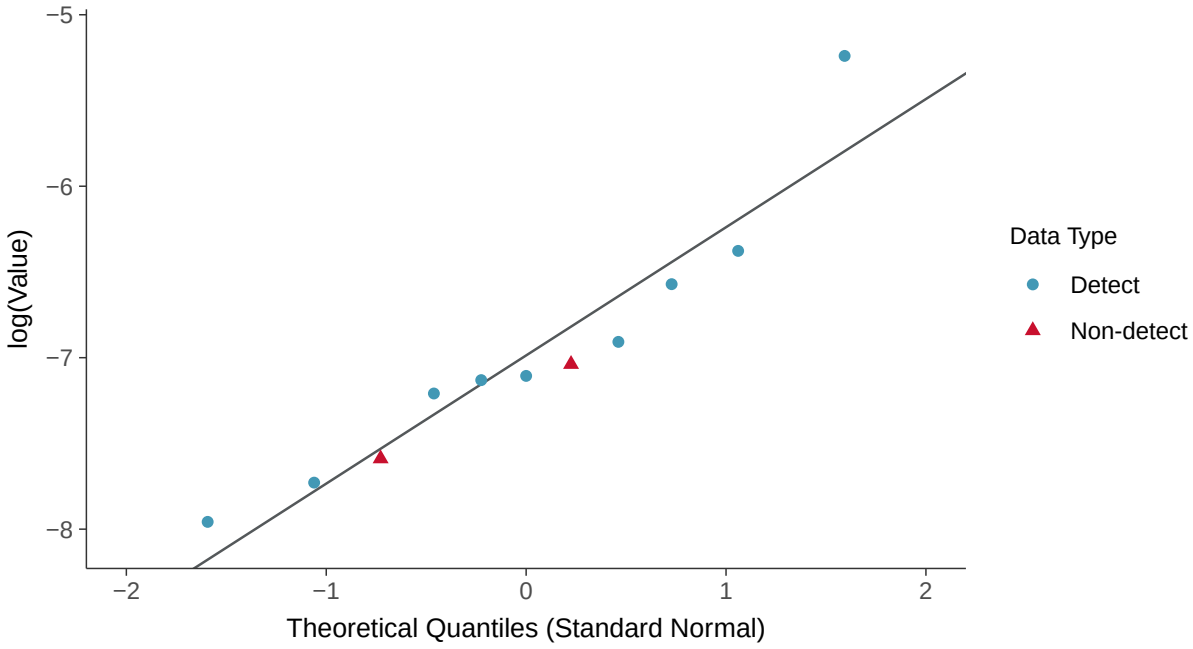
Boxplot by Season

Lead, MW-01R (mg/L)



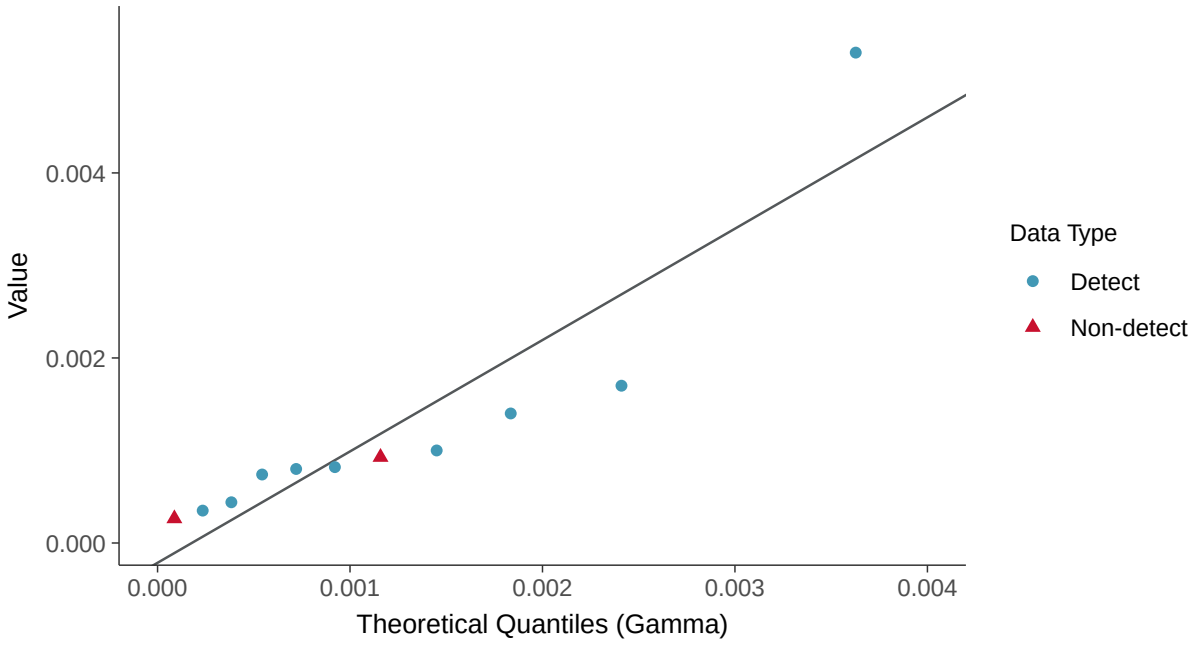
Lognormal Q-Q plot using ROS Imputed Estimates

Lead, MW-01R (mg/L)



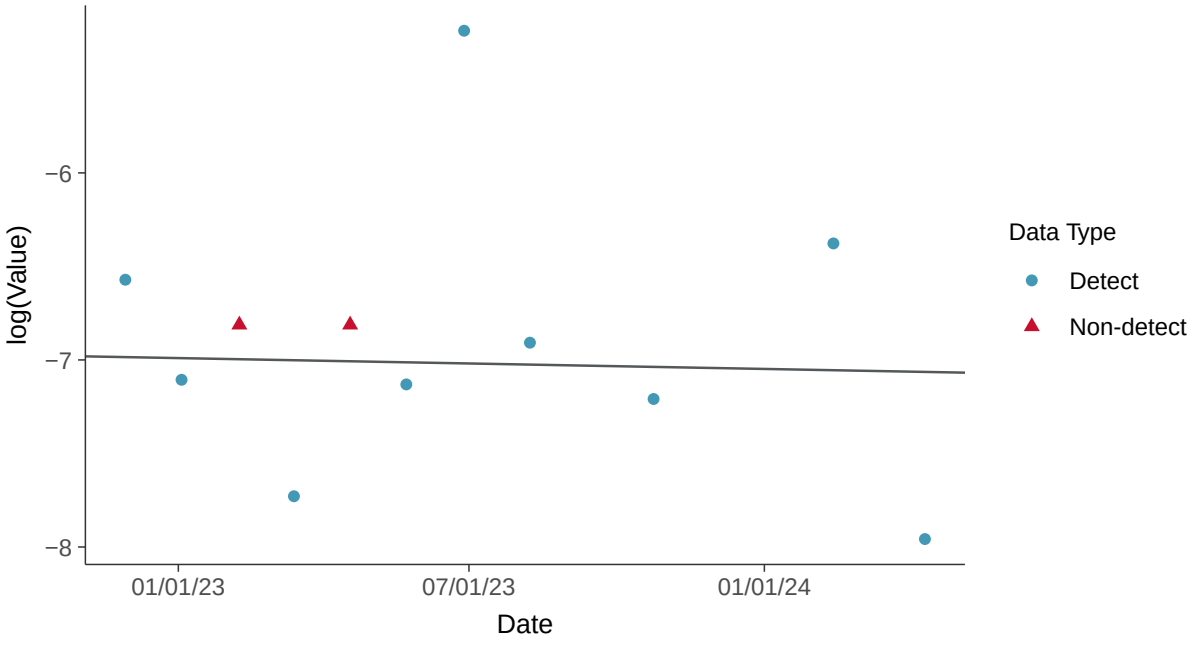
Gamma Q-Q plot using ROS Imputed Estimates

Lead, MW-01R (mg/L)



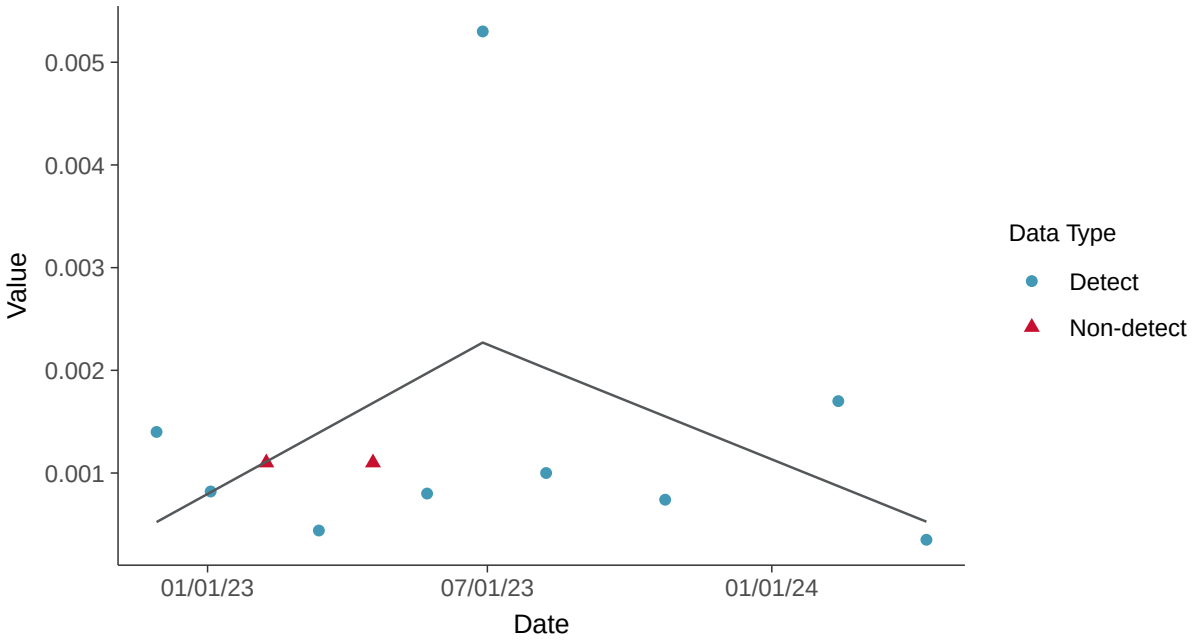
Trend Regression: Lognormal MLE

Lead, MW-01R (mg/L)



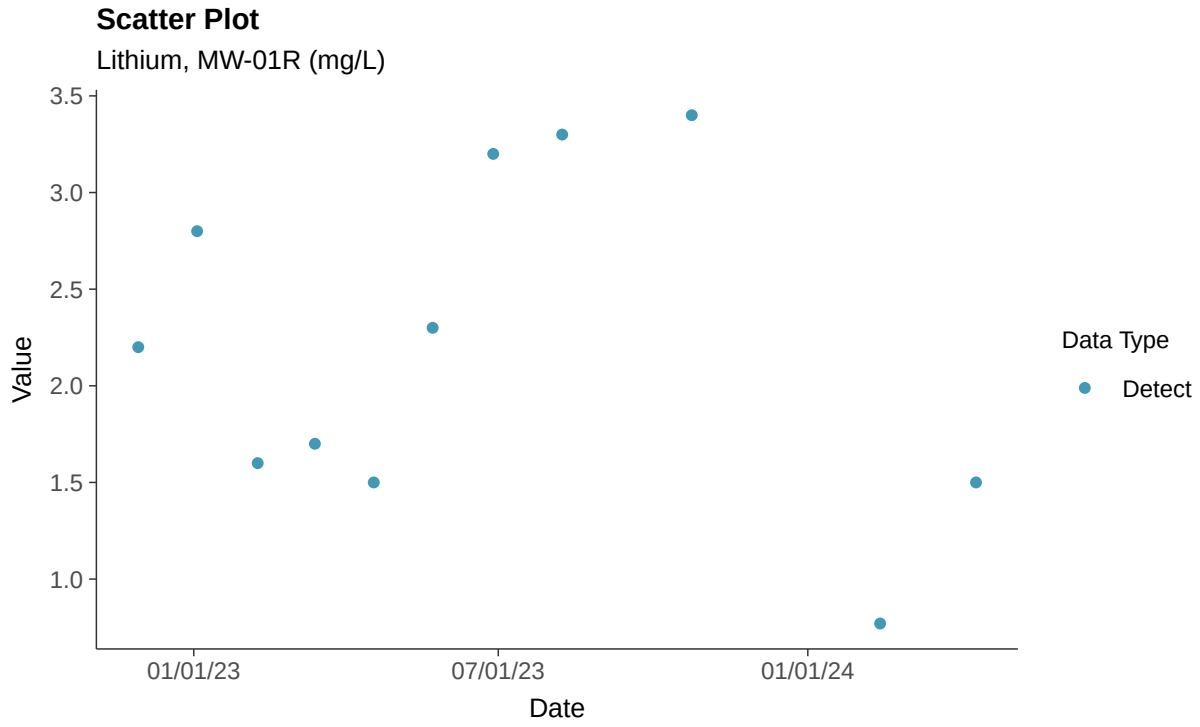
Trend Regression: Piecewise Linear-Linear

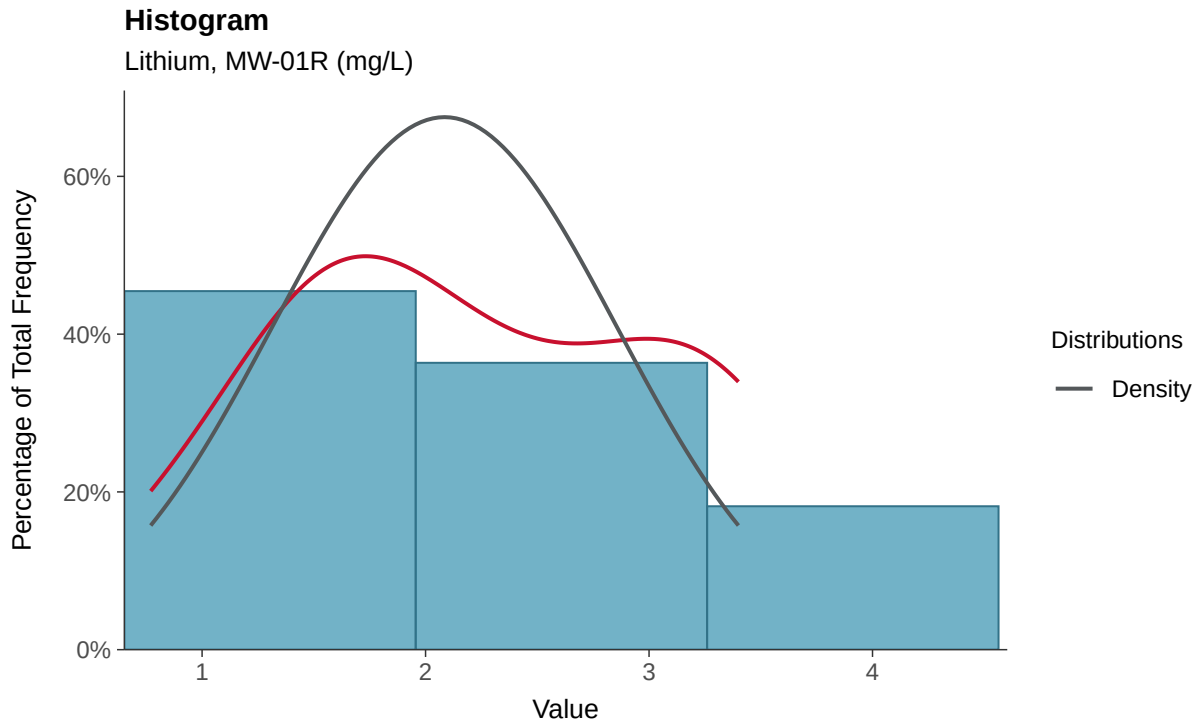
Lead, MW-01R (mg/L)



Appendix IV: Lithium, MW-01R

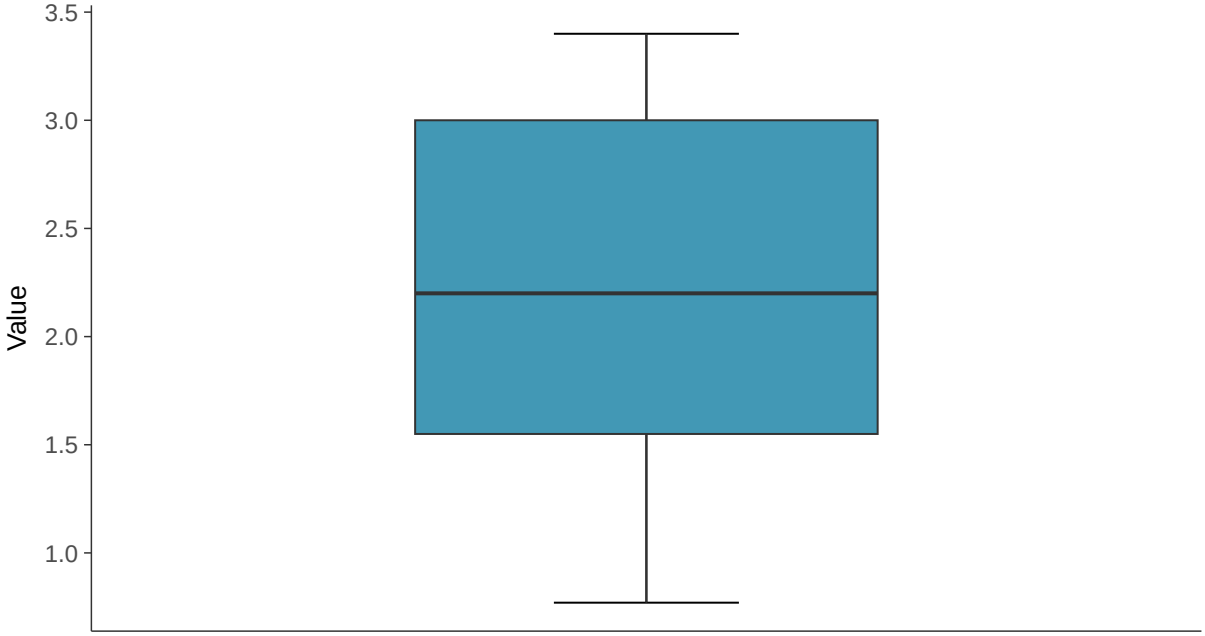
ID: 2_11_5_116





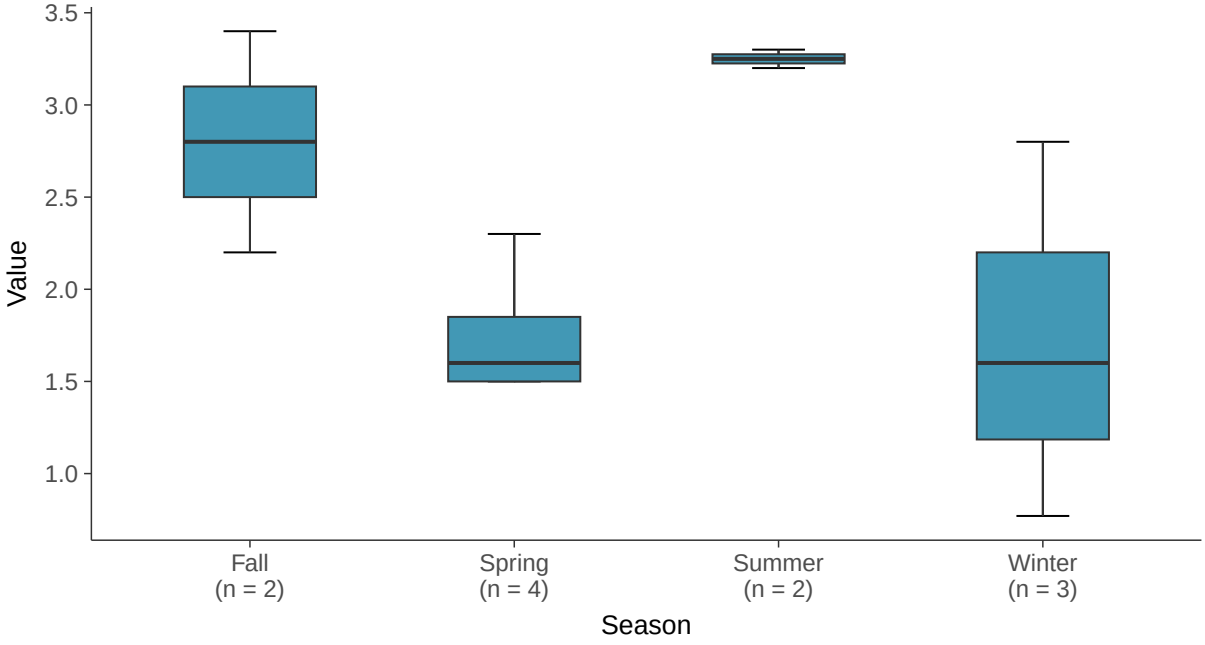
Boxplot

Lithium, MW-01R (mg/L)



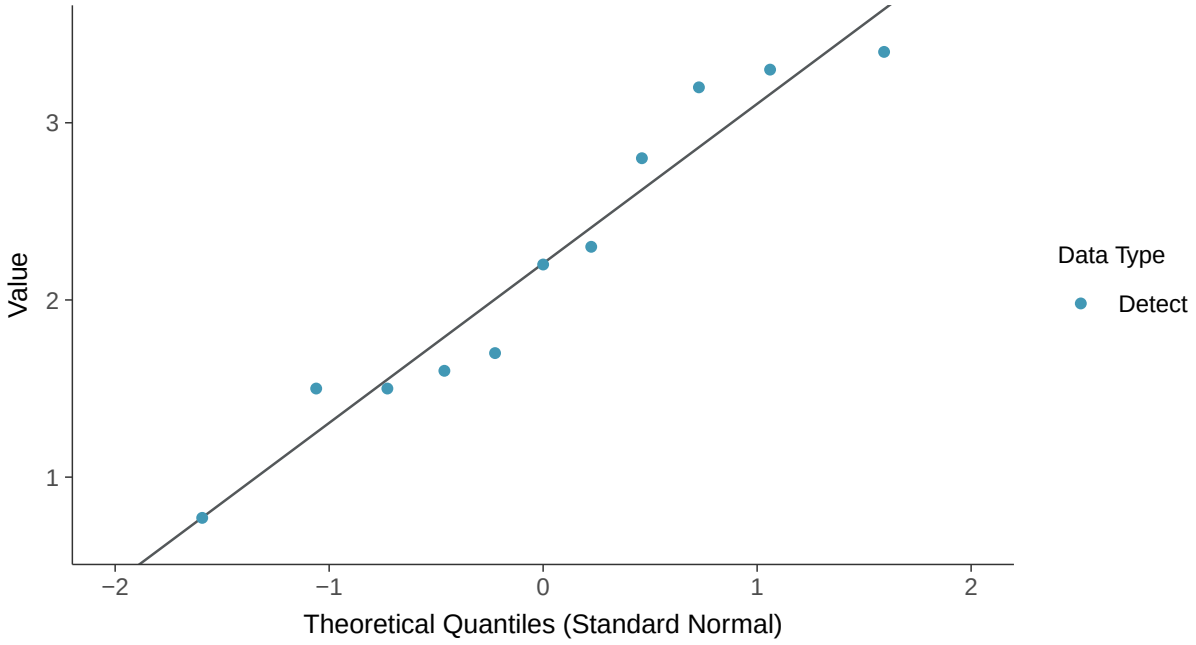
Boxplot by Season

Lithium, MW-01R (mg/L)



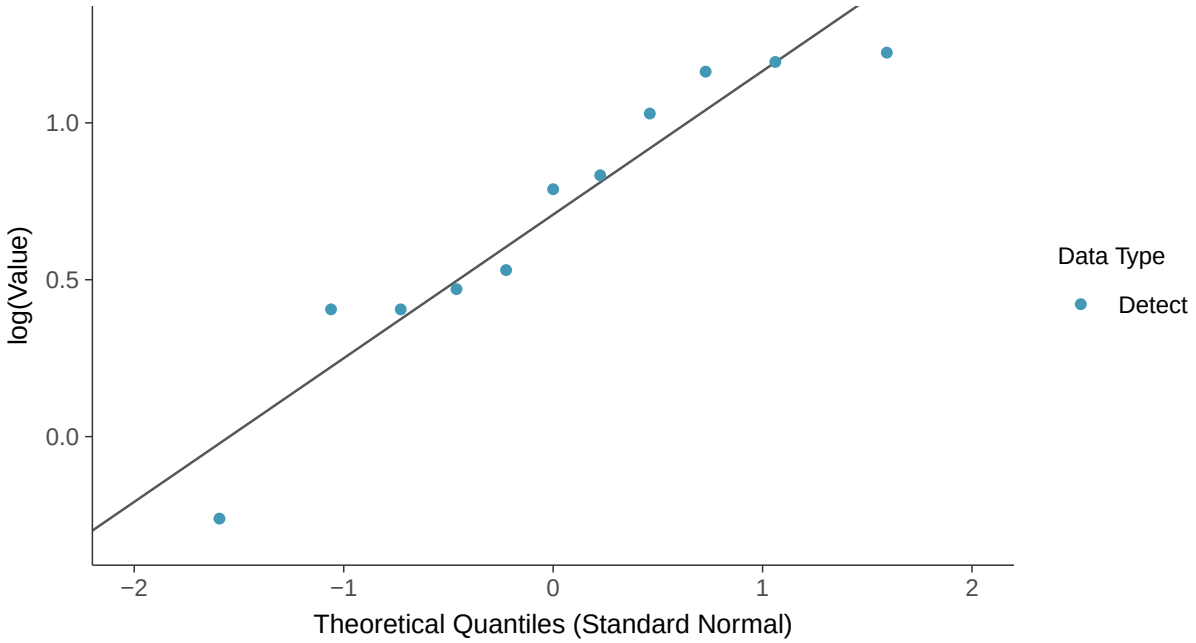
Normal Q-Q plot

Lithium, MW-01R (mg/L)



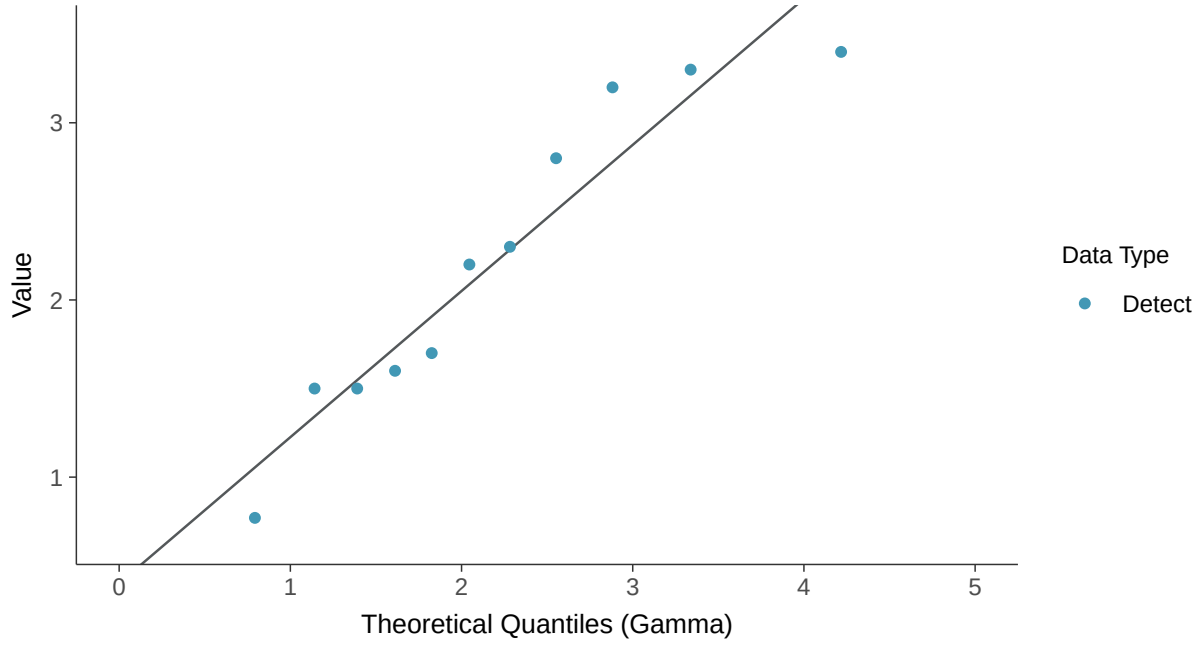
Lognormal Q-Q plot

Lithium, MW-01R (mg/L)



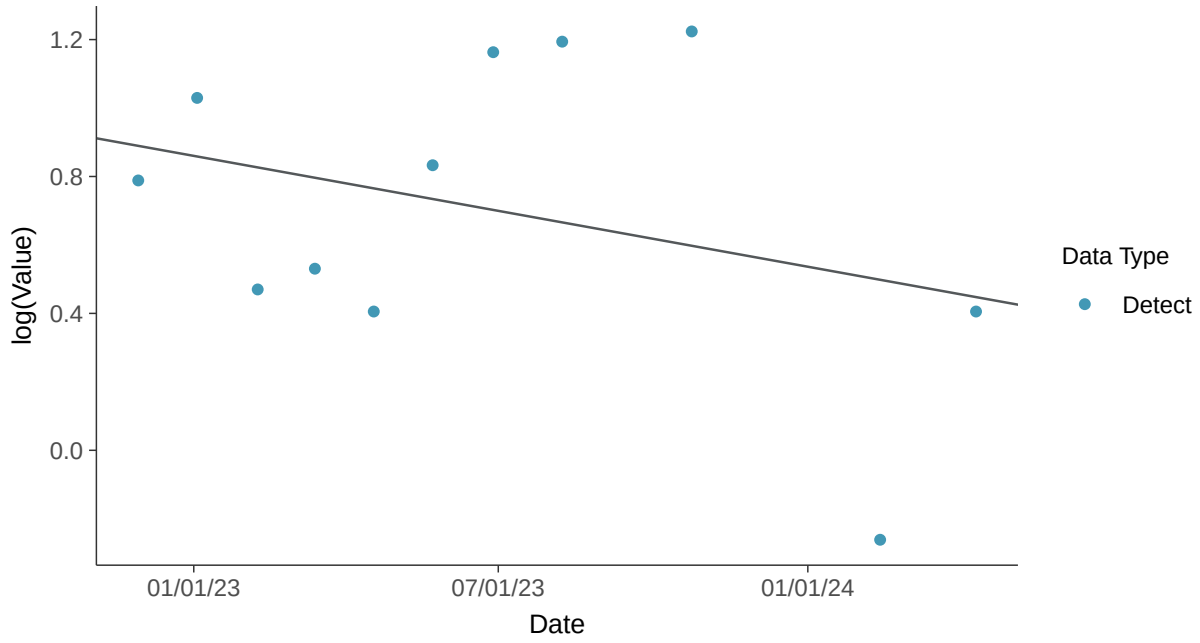
Gamma Q-Q plot

Lithium, MW-01R (mg/L)



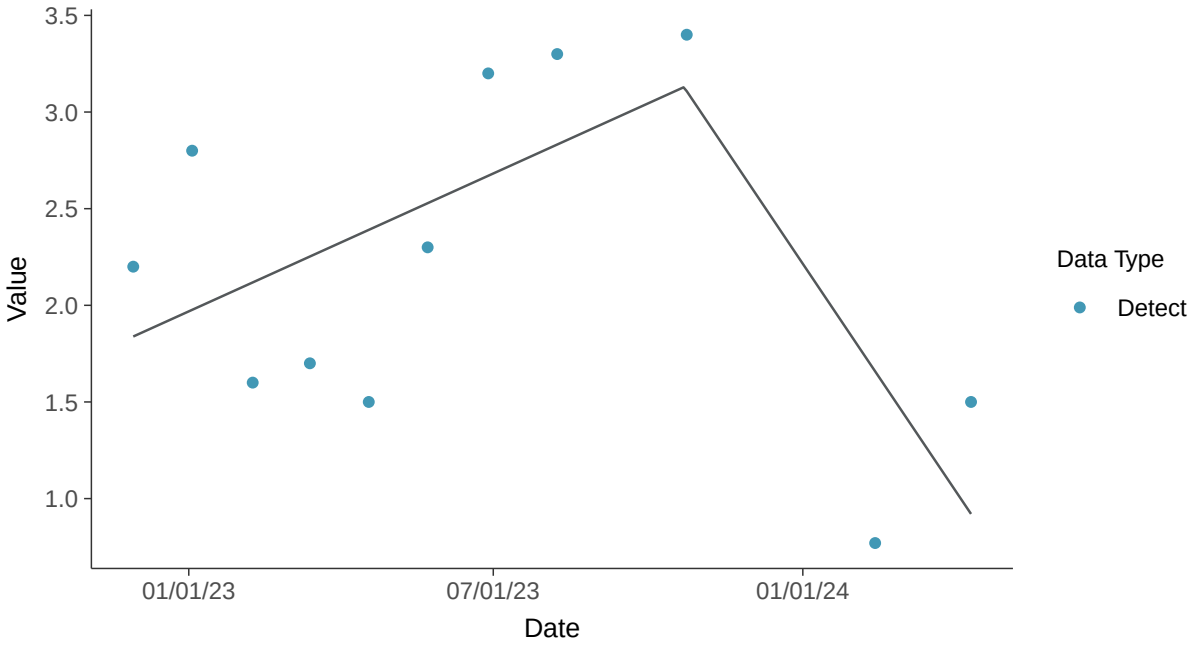
Trend Regression: Lognormal MLE

Lithium, MW-01R (mg/L)



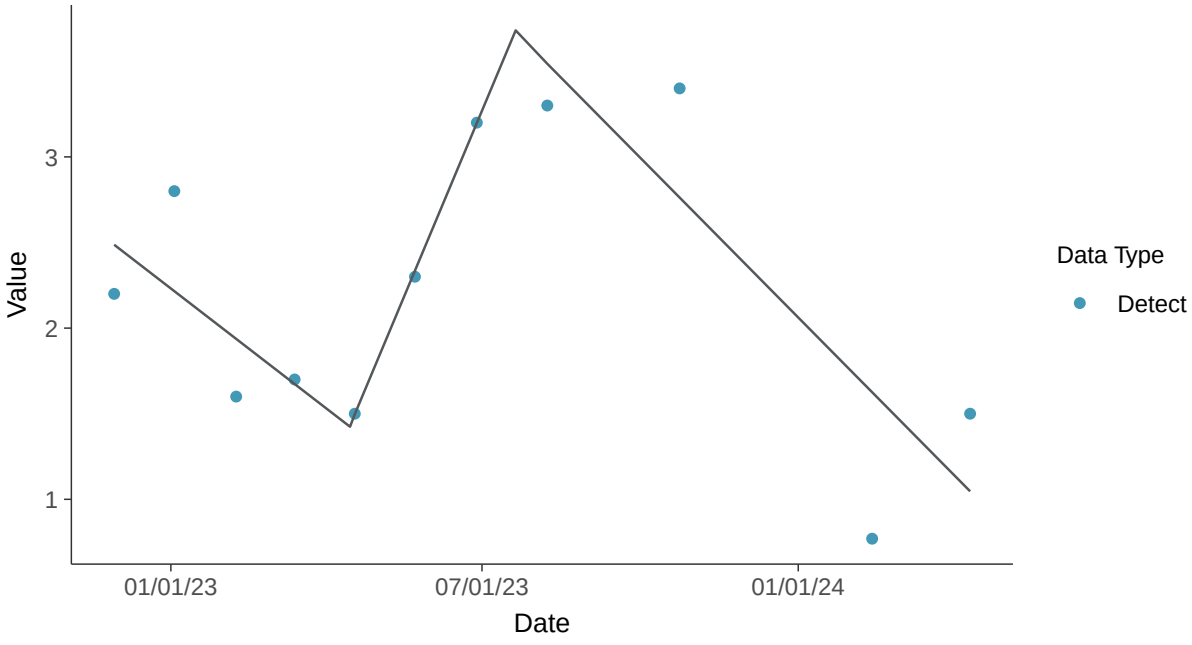
Trend Regression: Piecewise Linear-Linear

Lithium, MW-01R (mg/L)



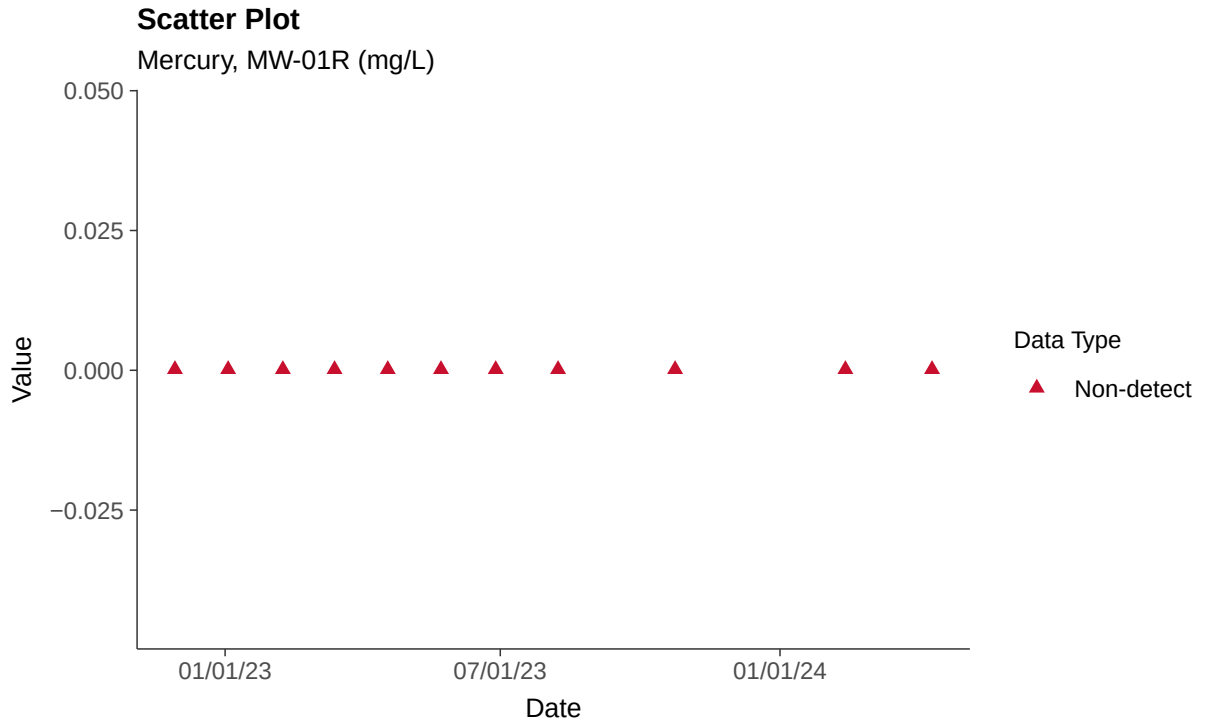
Trend Regression: Piecewise Linear-Linear-Linear

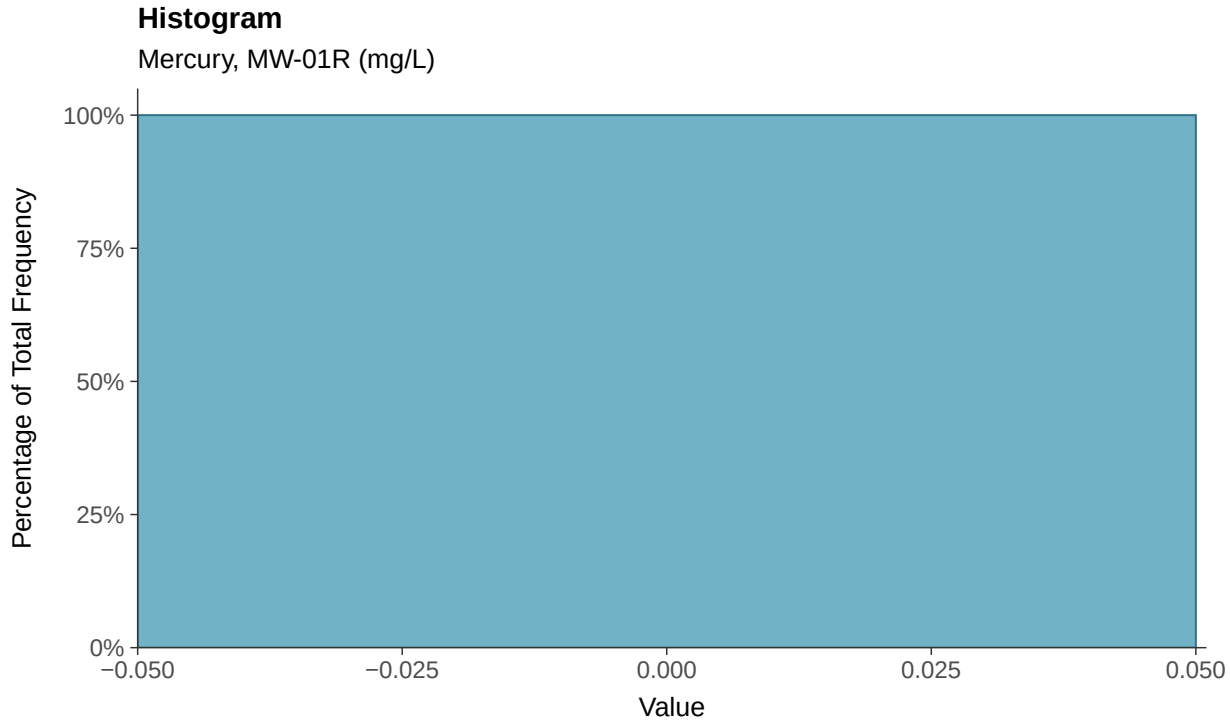
Lithium, MW-01R (mg/L)



Appendix IV: Mercury, MW-01R

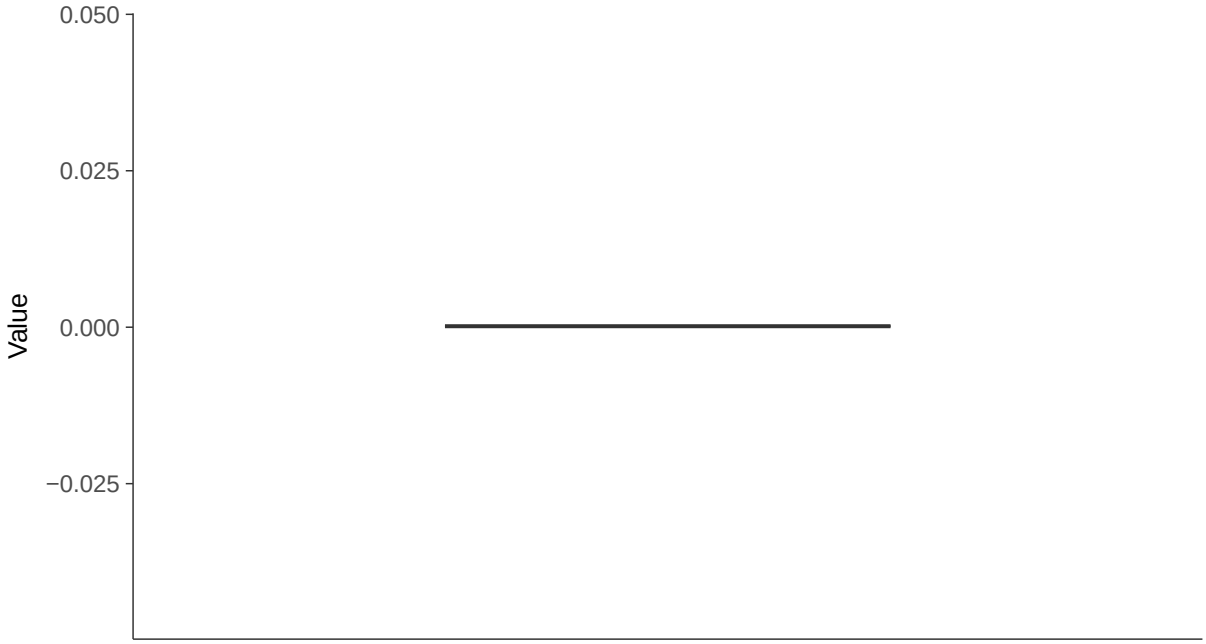
ID: 2_11_5_117





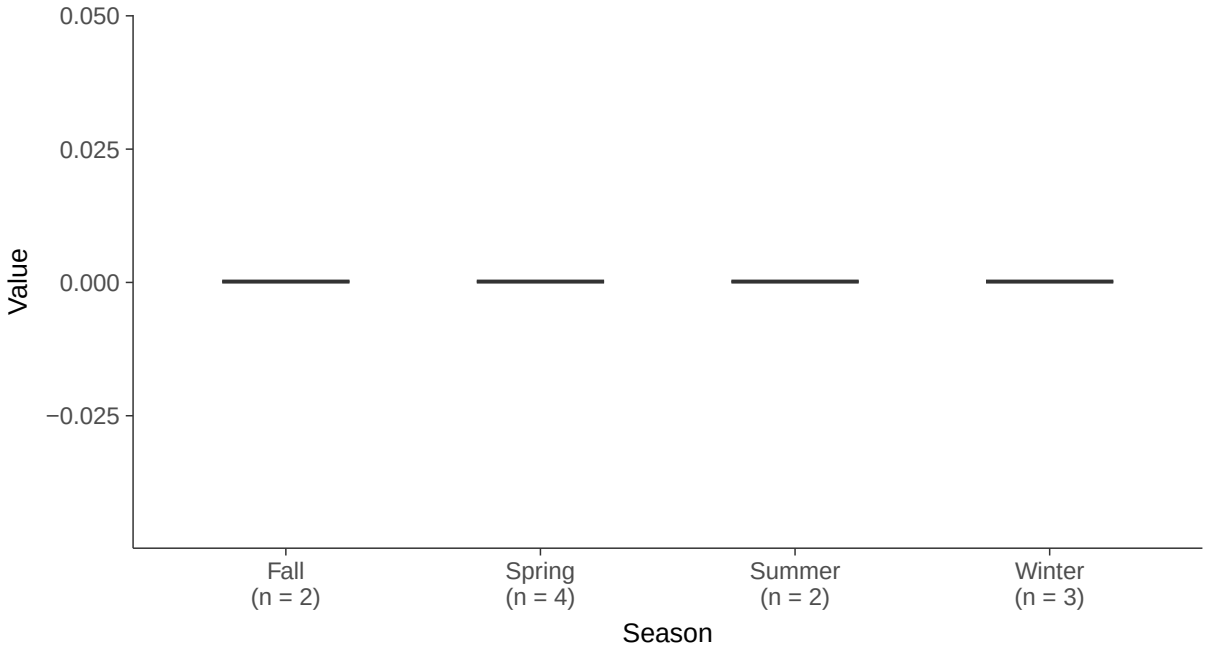
Boxplot

Mercury, MW-01R (mg/L)



Boxplot by Season

Mercury, MW-01R (mg/L)

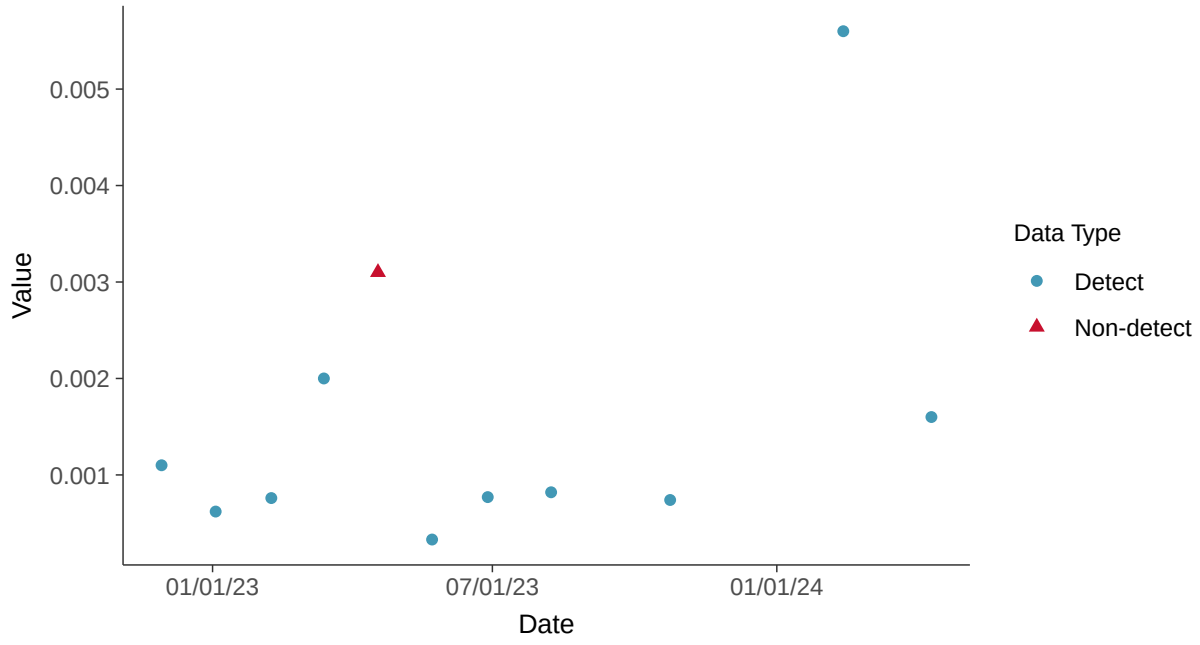


Appendix IV: Molybdenum, MW-01R

ID: 2_11_5_118

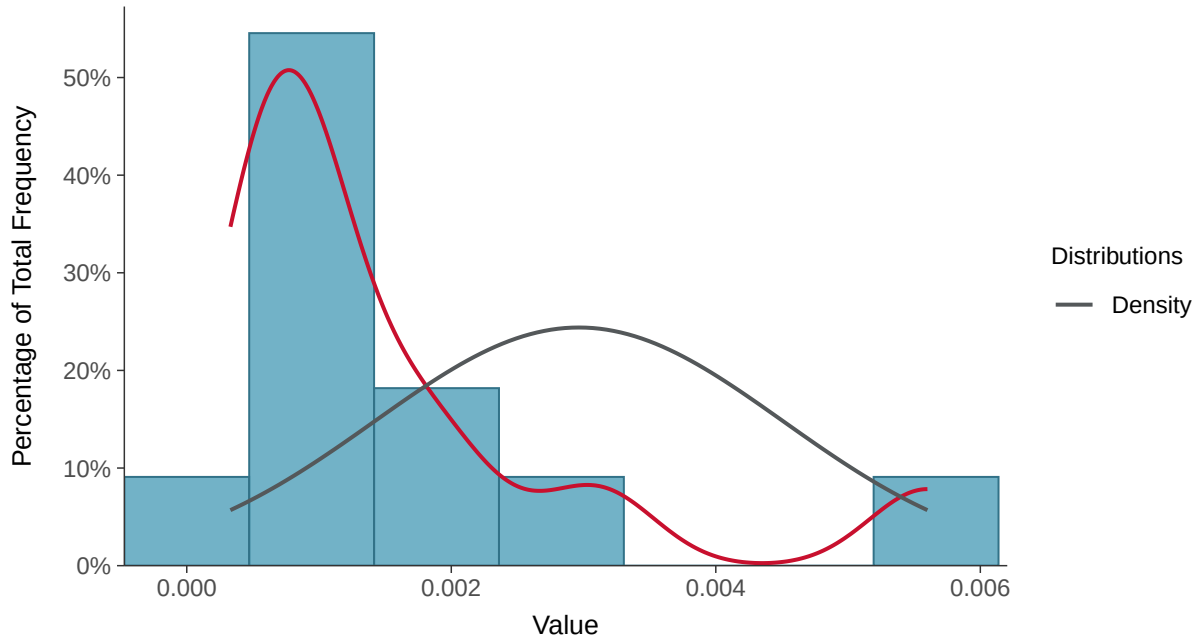
Scatter Plot

Molybdenum, MW-01R (mg/L)



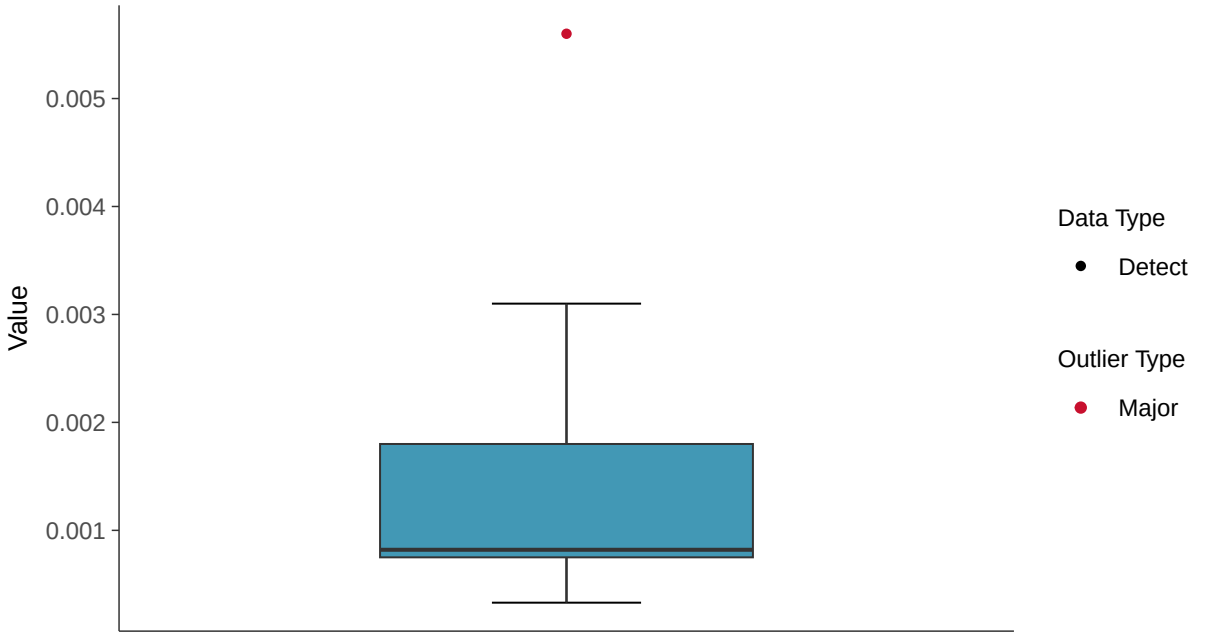
Histogram

Molybdenum, MW-01R (mg/L)



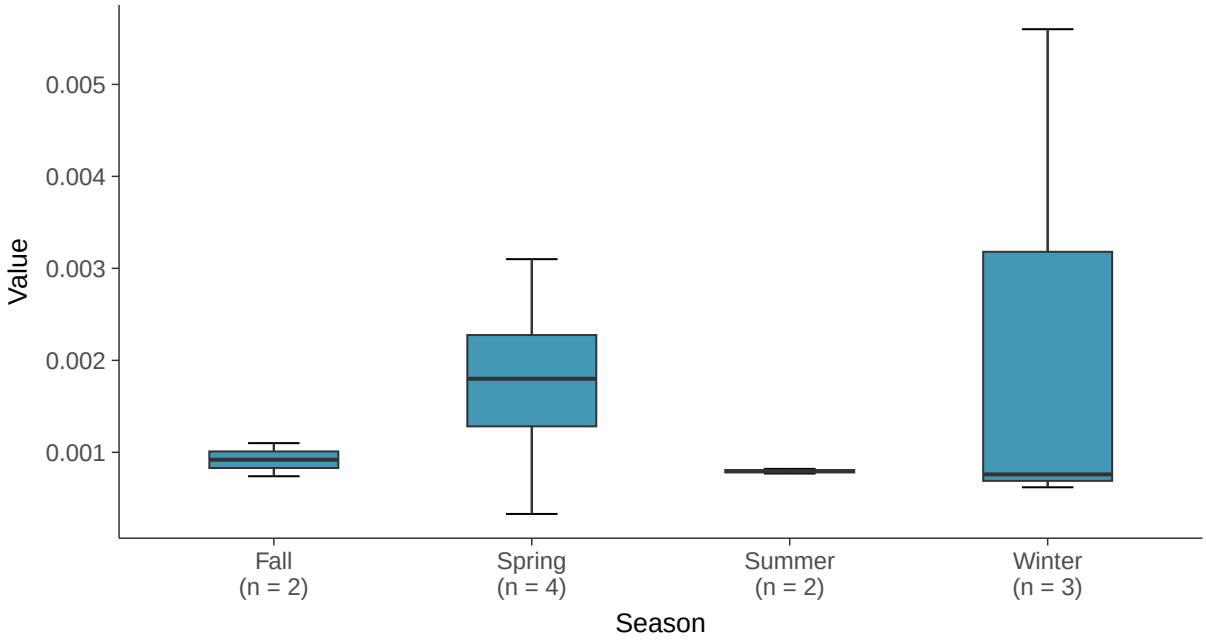
Boxplot

Molybdenum, MW-01R (mg/L)



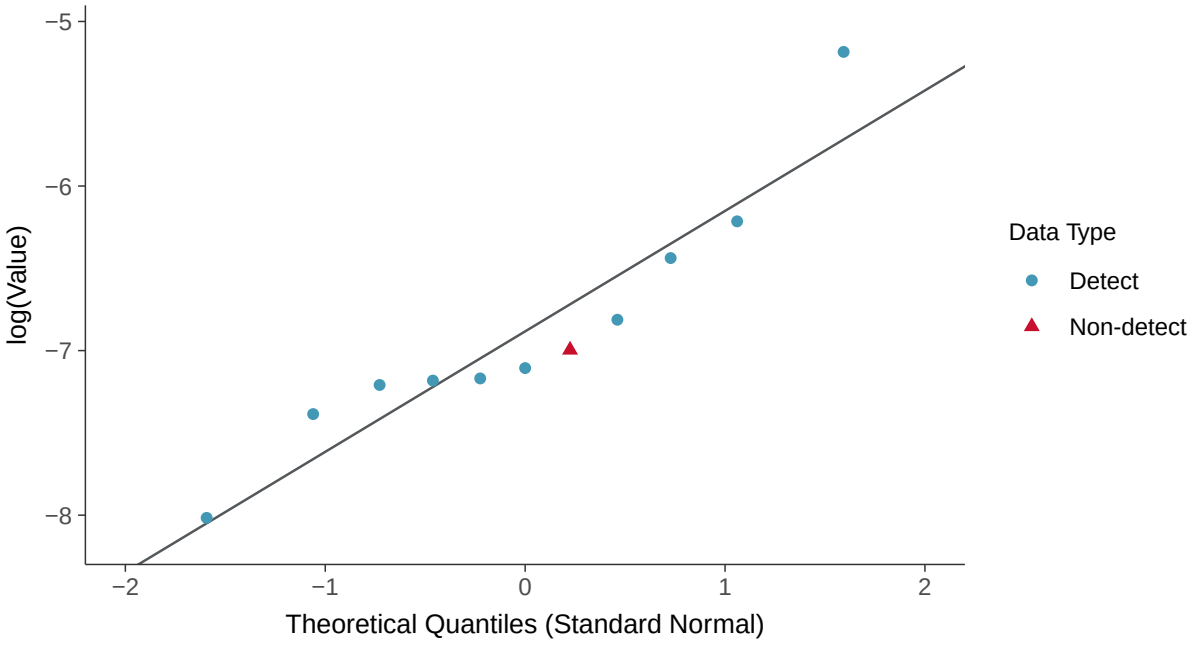
Boxplot by Season

Molybdenum, MW-01R (mg/L)



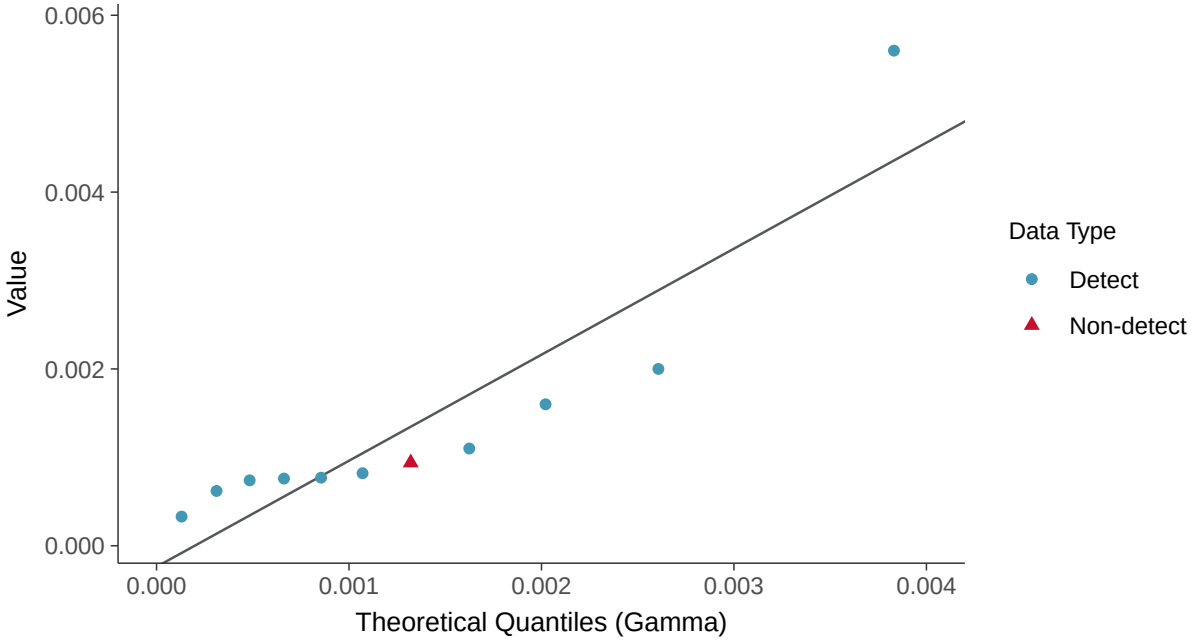
Lognormal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-01R (mg/L)



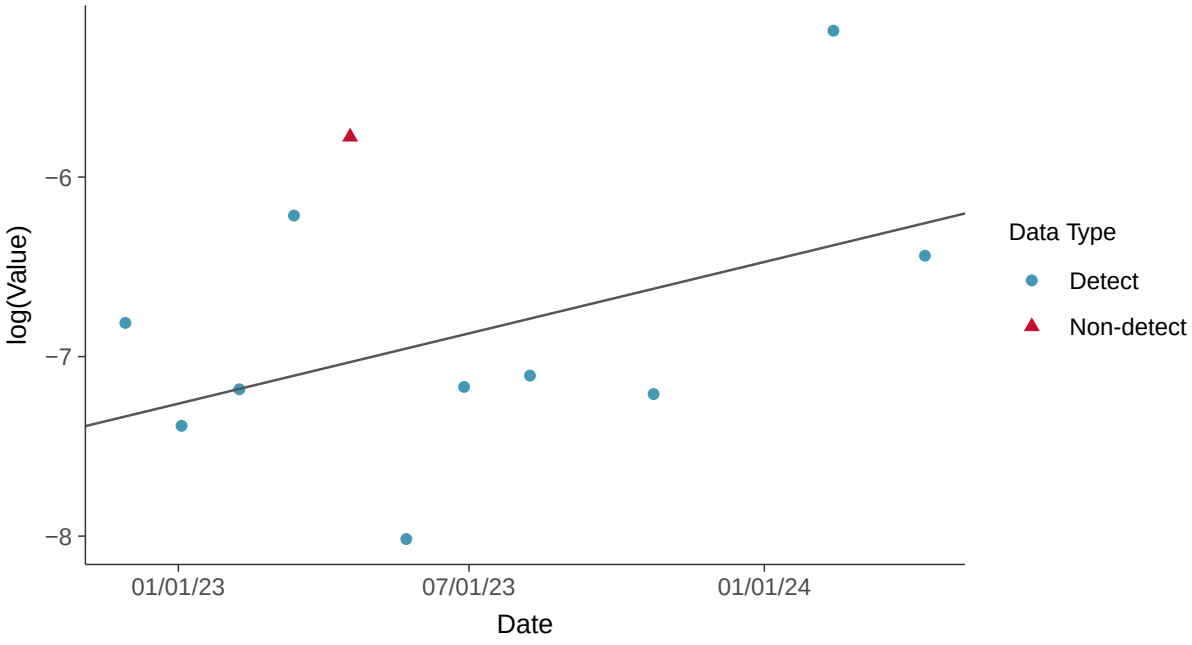
Gamma Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-01R (mg/L)



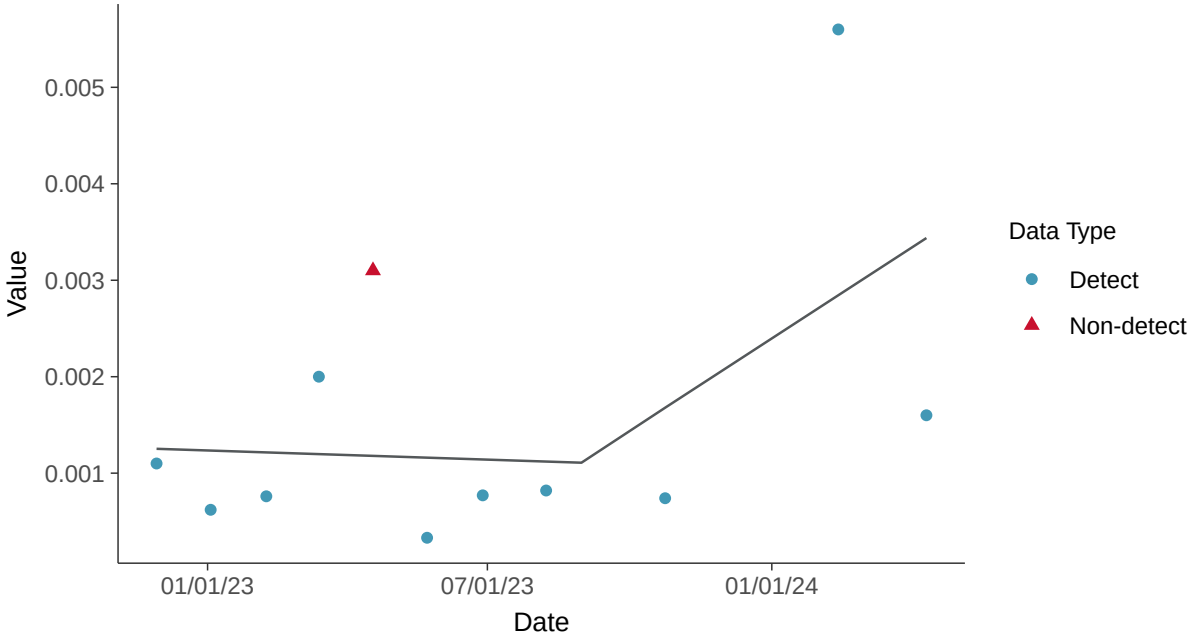
Trend Regression: Lognormal MLE

Molybdenum, MW-01R (mg/L)



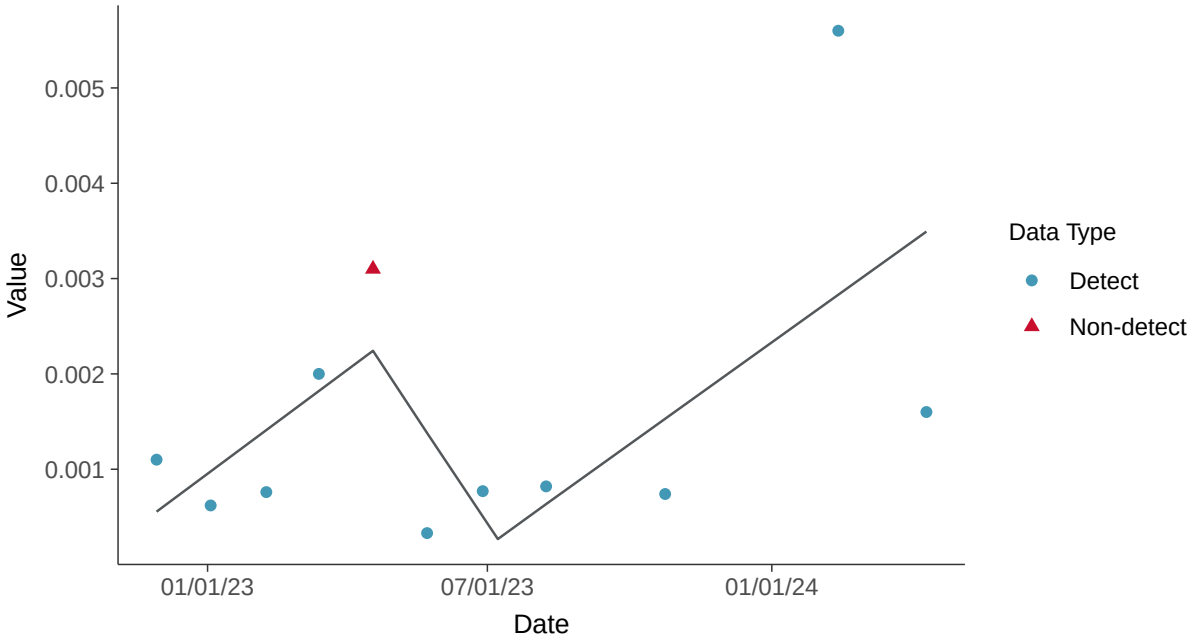
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-01R (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-01R (mg/L)

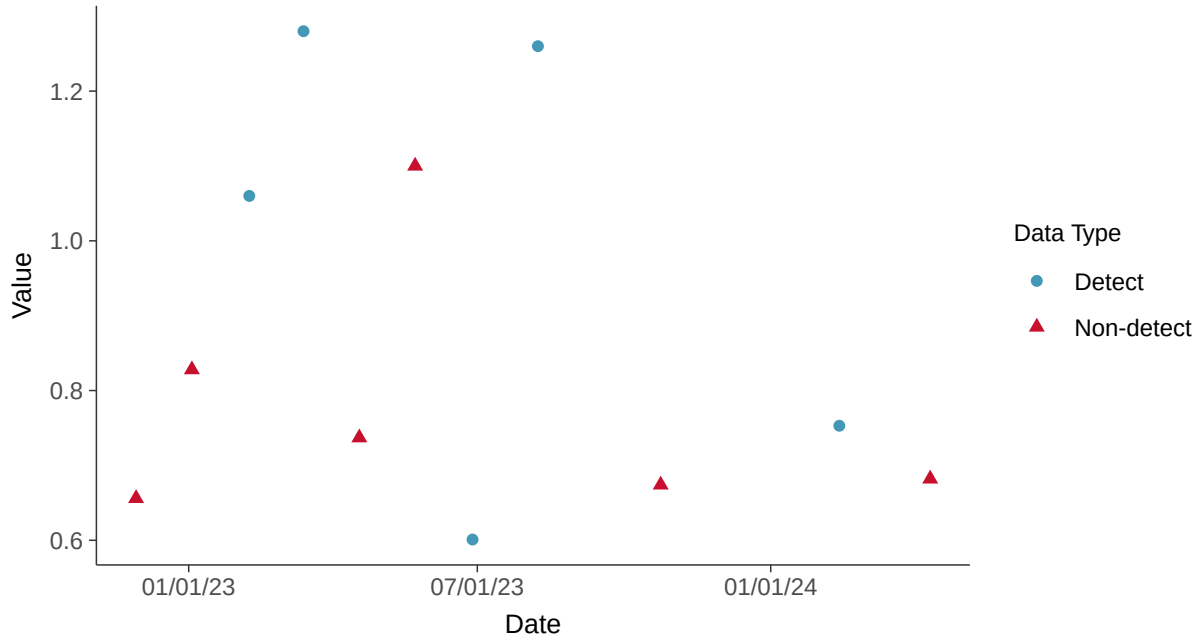


Appendix IV: Radium 226 and 228, MW-01R

ID: 2_11_5_121

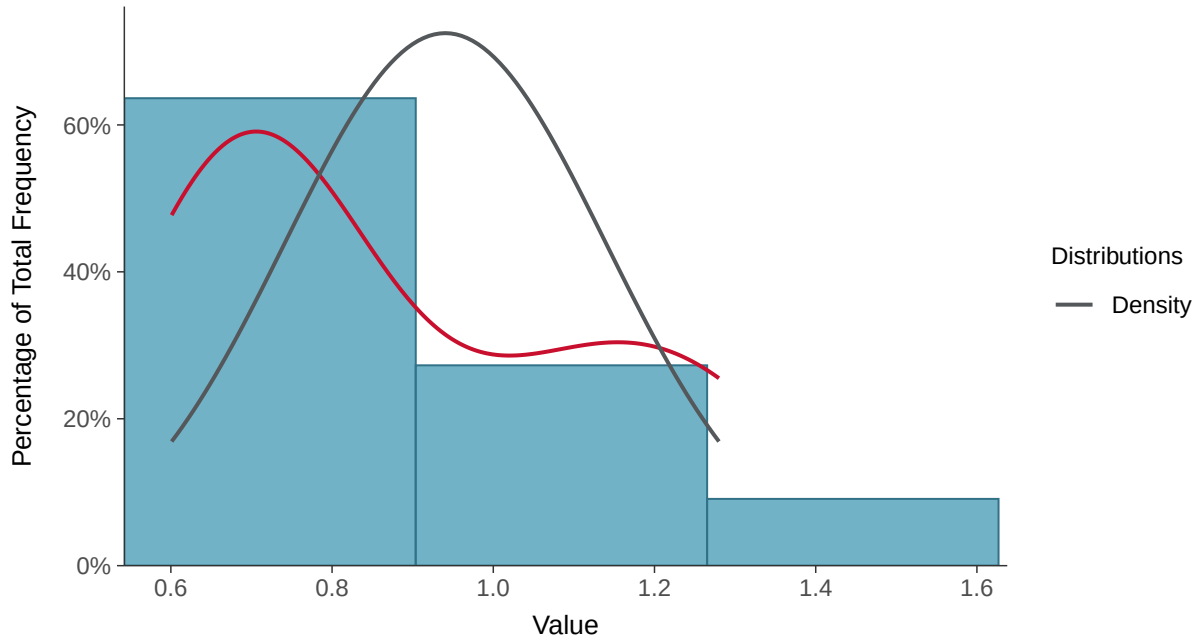
Scatter Plot

Radium 226 and 228, MW-01R (pCi/L)



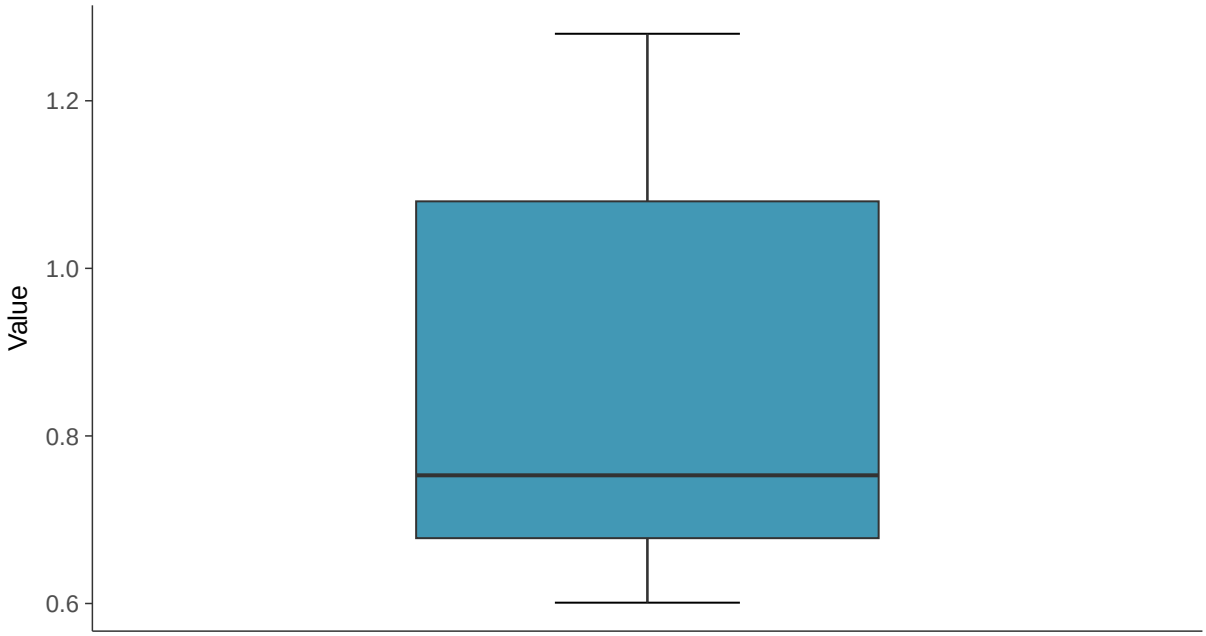
Histogram

Radium 226 and 228, MW-01R (pCi/L)



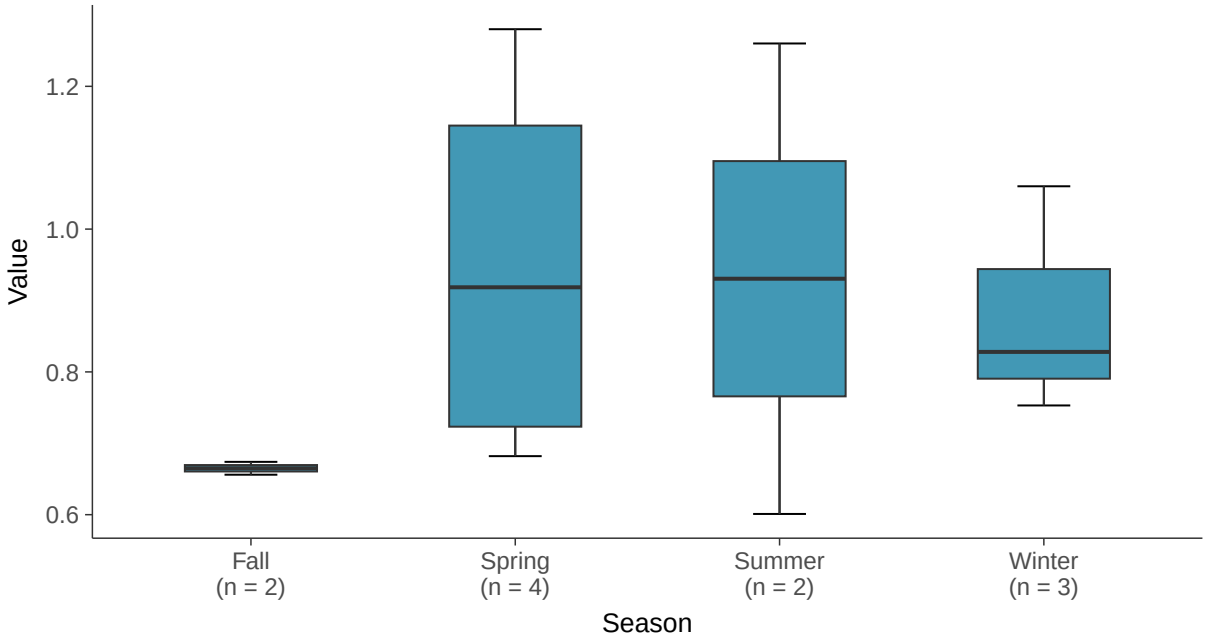
Boxplot

Radium 226 and 228, MW-01R (pCi/L)



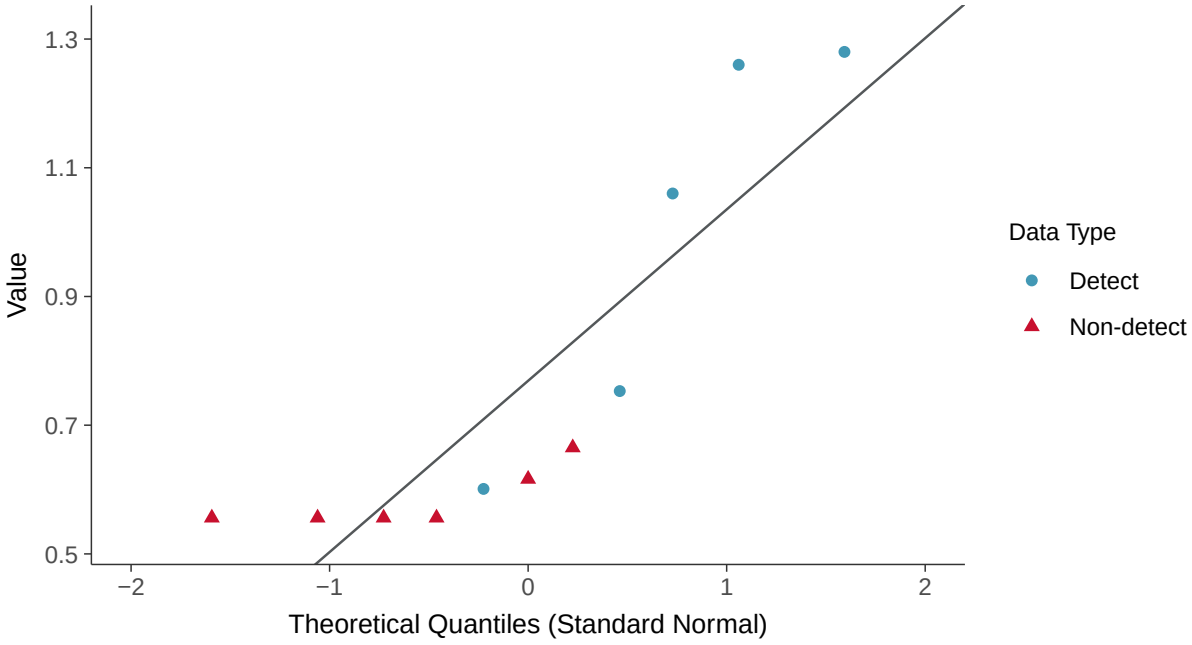
Boxplot by Season

Radium 226 and 228, MW-01R (pCi/L)



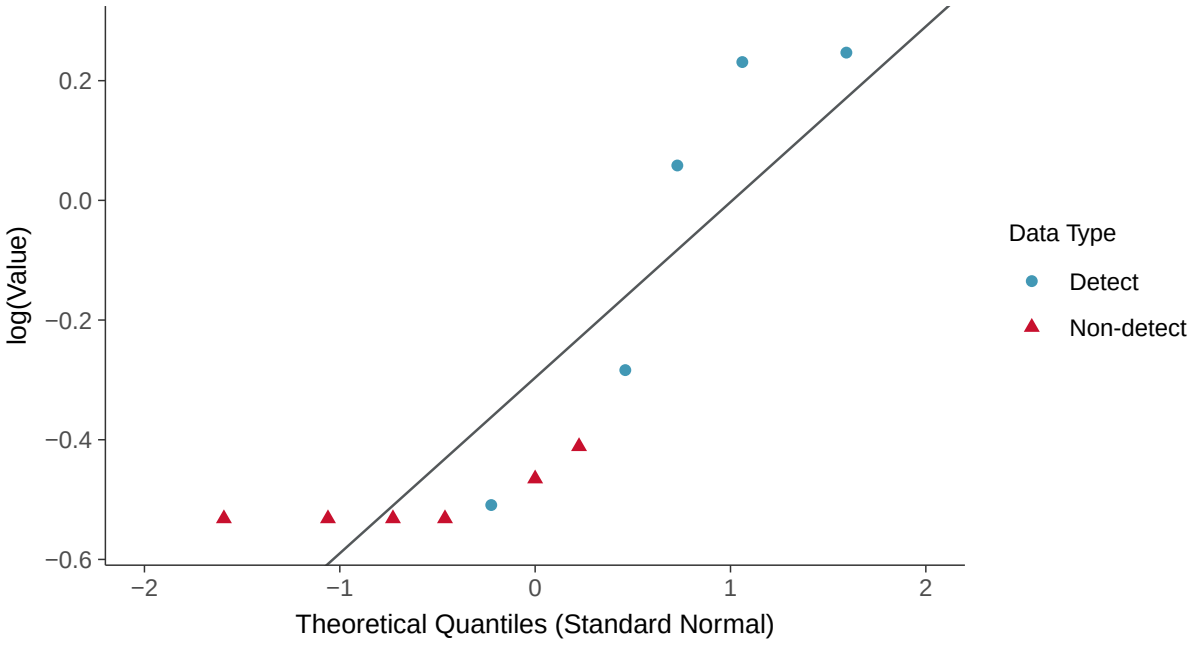
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-01R (pCi/L)



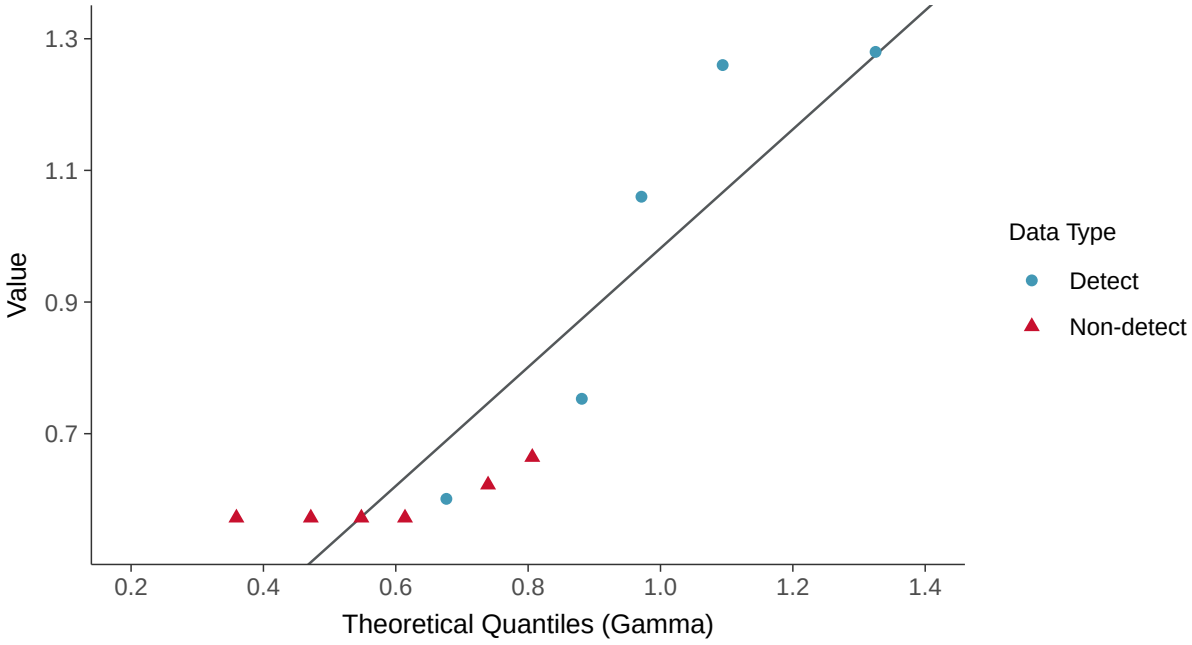
Lognormal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-01R (pCi/L)



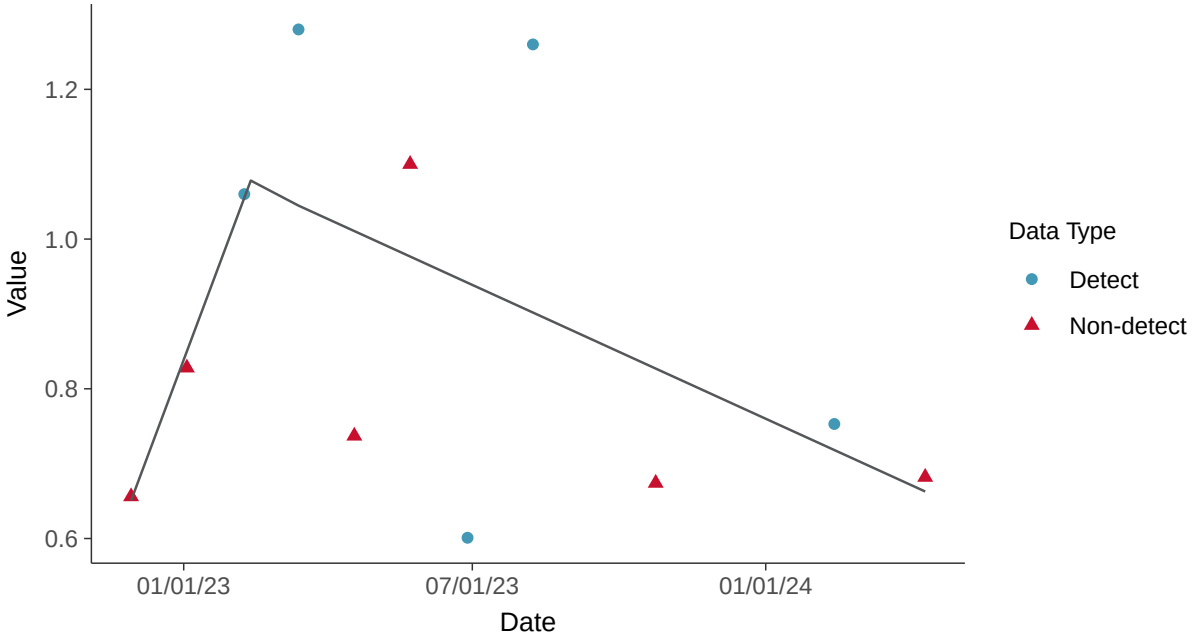
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-01R (pCi/L)



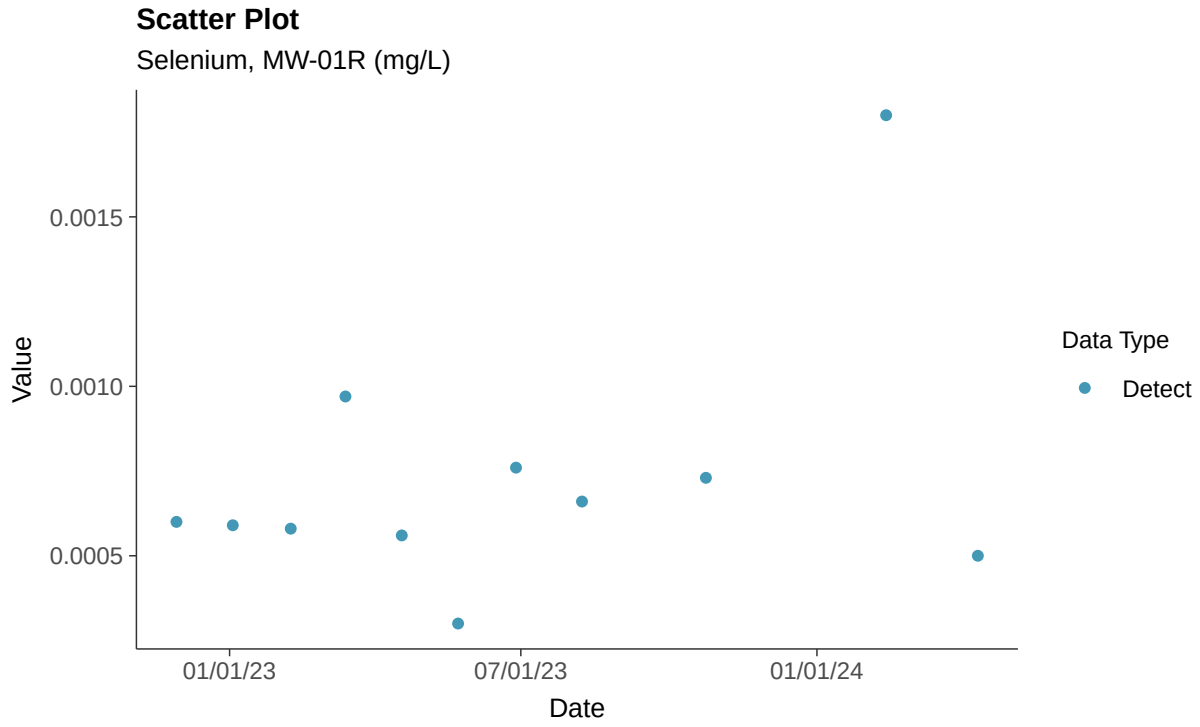
Trend Regression: Piecewise Linear-Linear

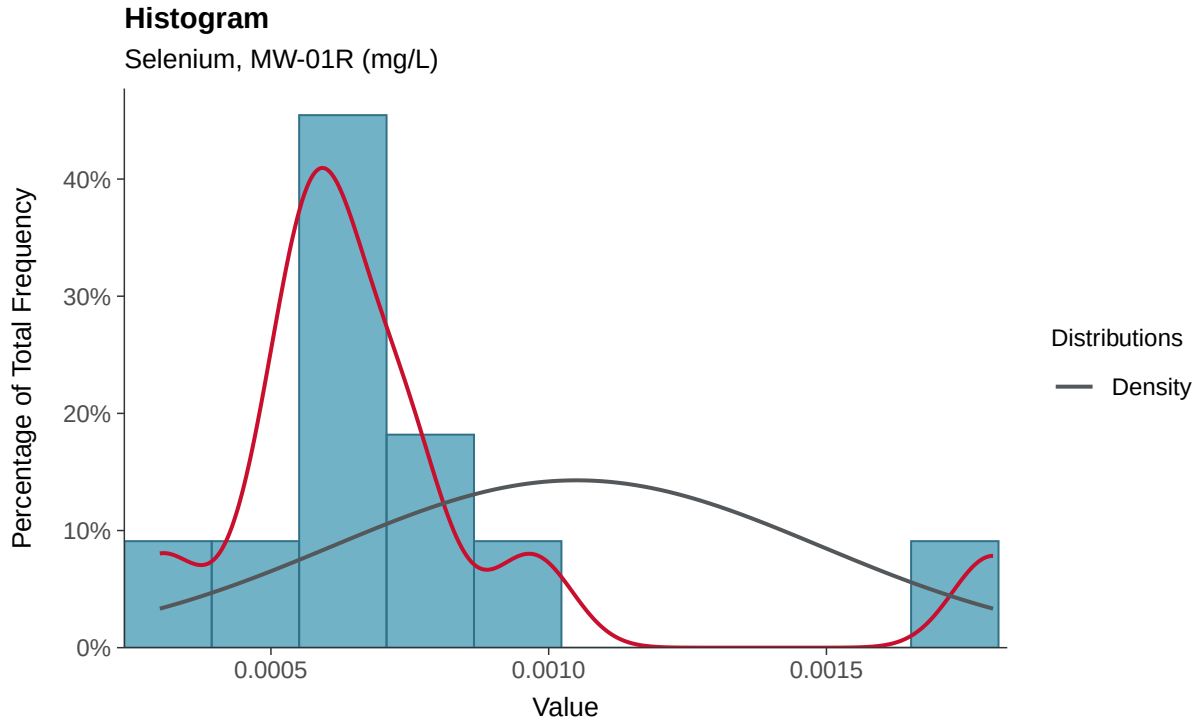
Radium 226 and 228, MW-01R (pCi/L)



Appendix IV: Selenium, MW-01R

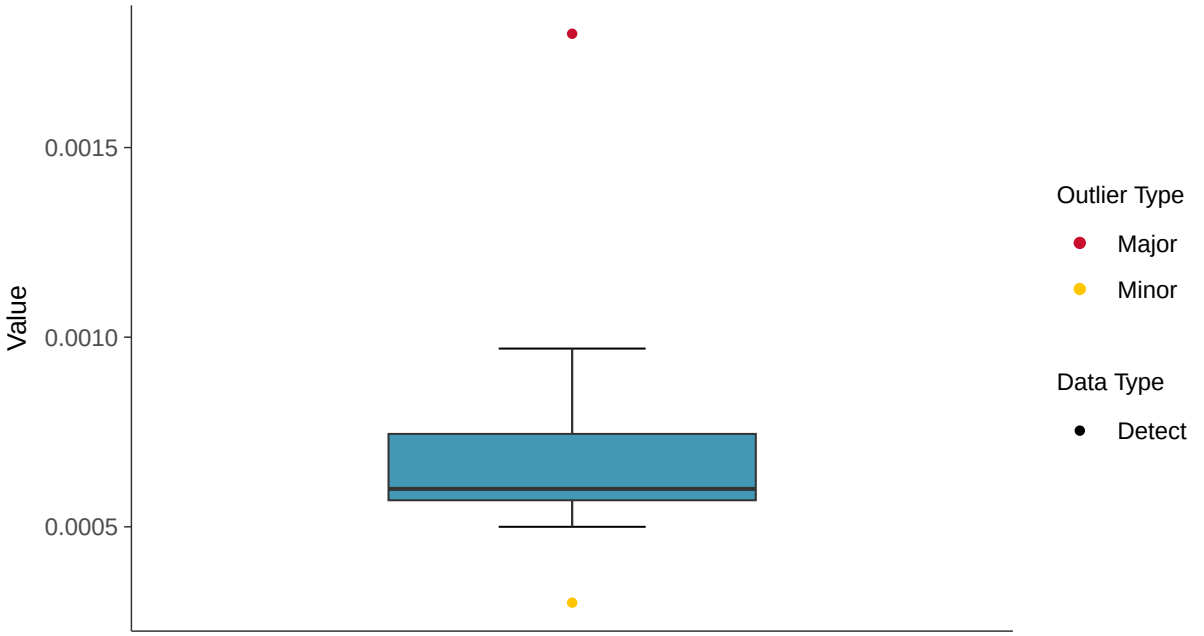
ID: 2_11_5_122





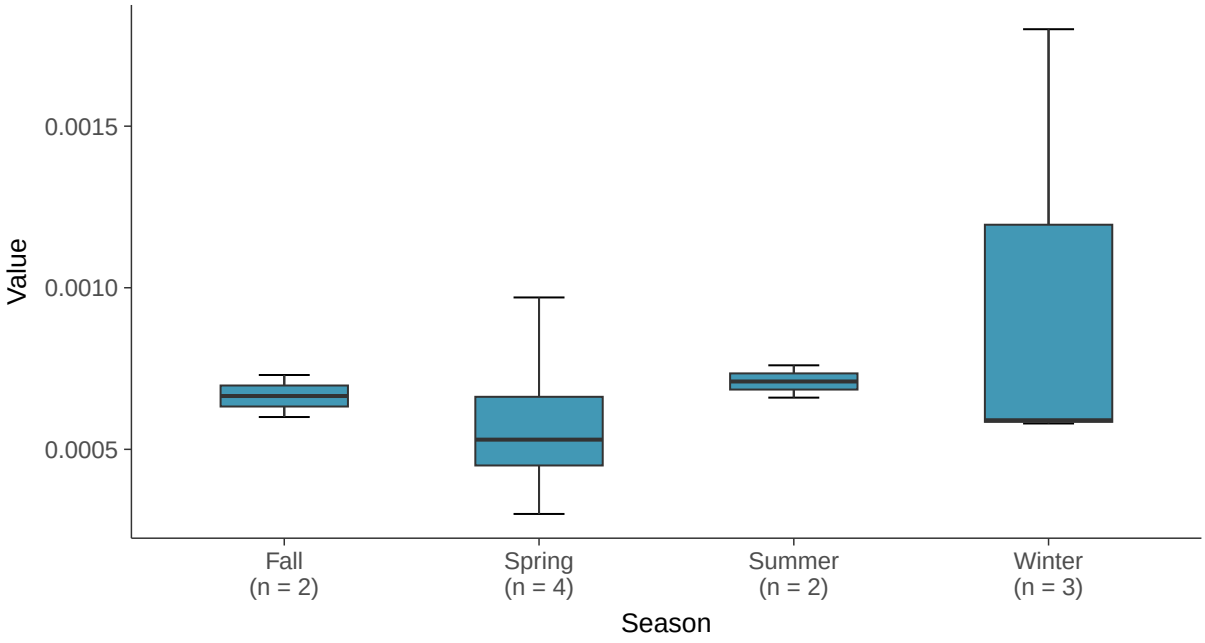
Boxplot

Selenium, MW-01R (mg/L)



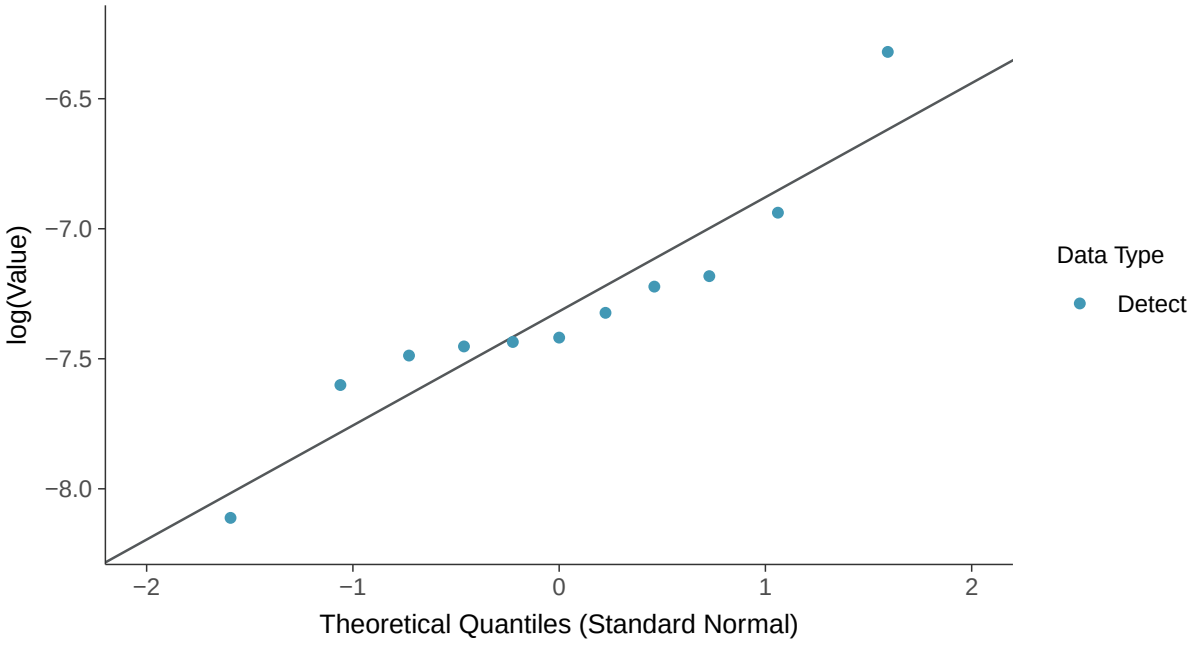
Boxplot by Season

Selenium, MW-01R (mg/L)



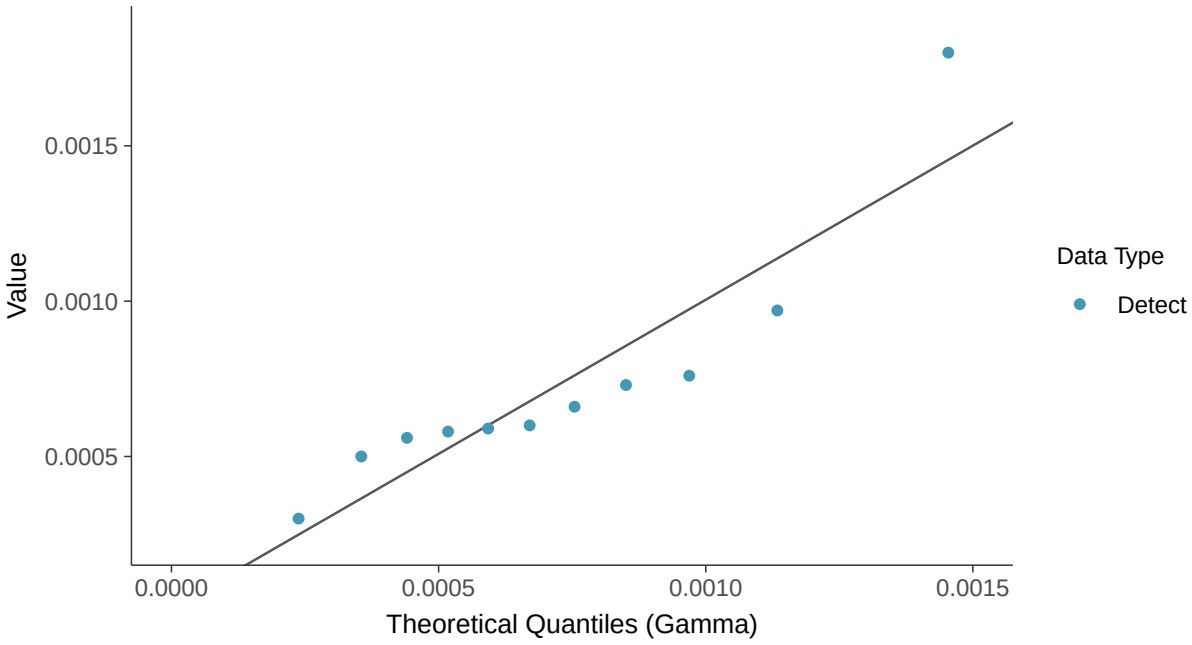
Lognormal Q-Q plot

Selenium, MW-01R (mg/L)



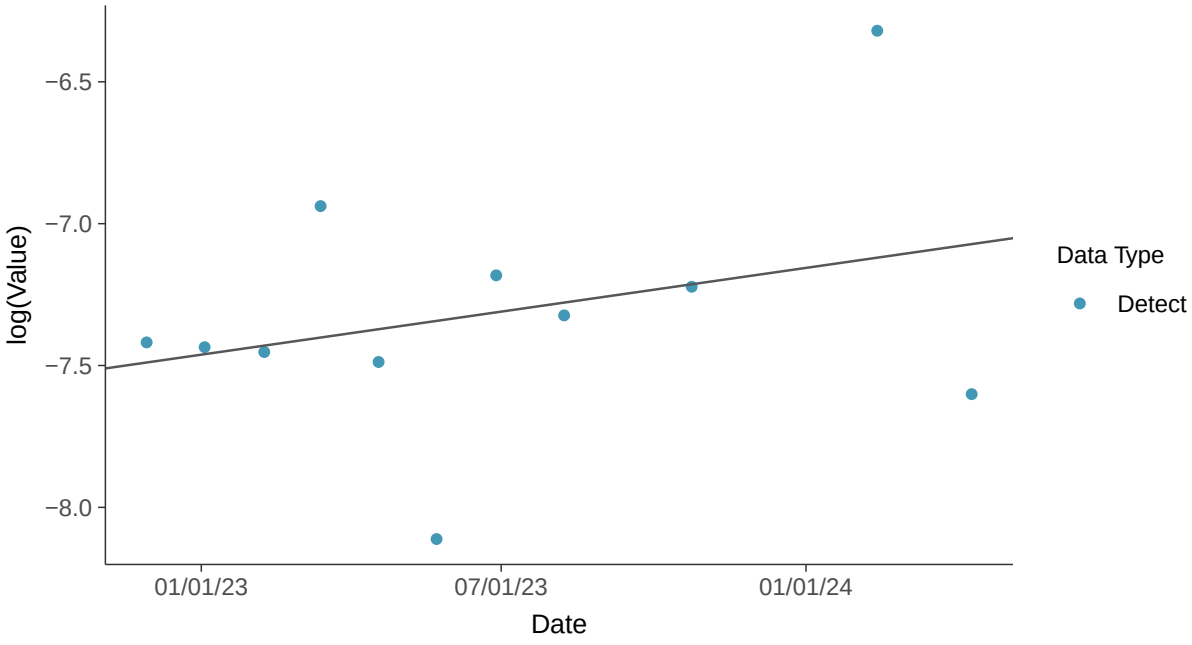
Gamma Q-Q plot

Selenium, MW-01R (mg/L)



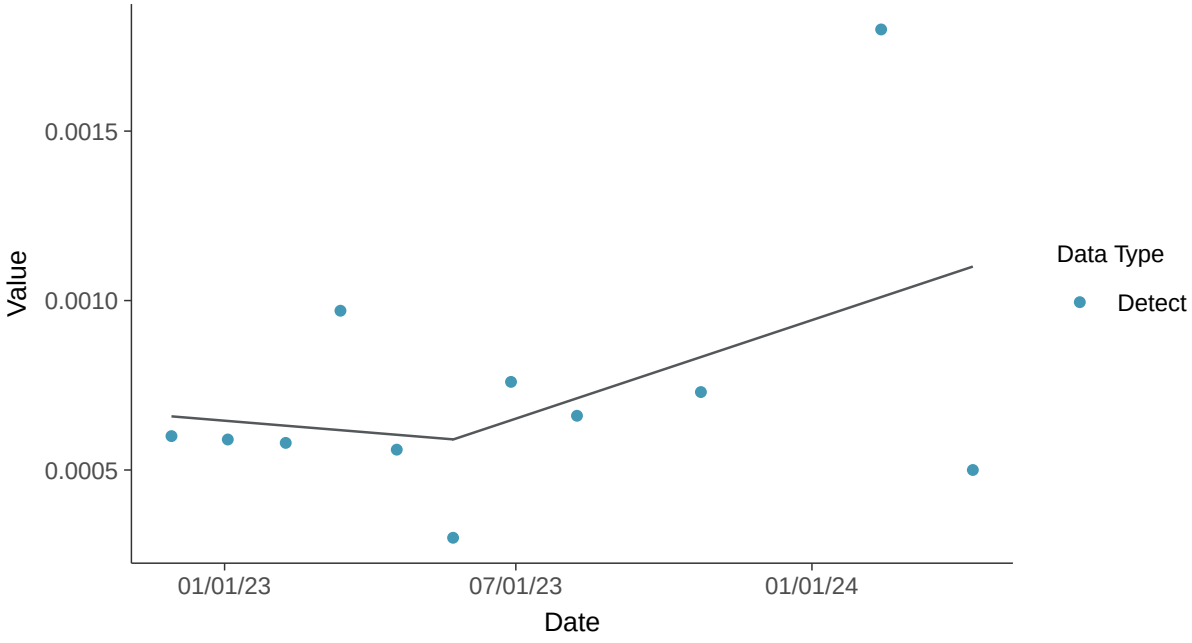
Trend Regression: Lognormal MLE

Selenium, MW-01R (mg/L)



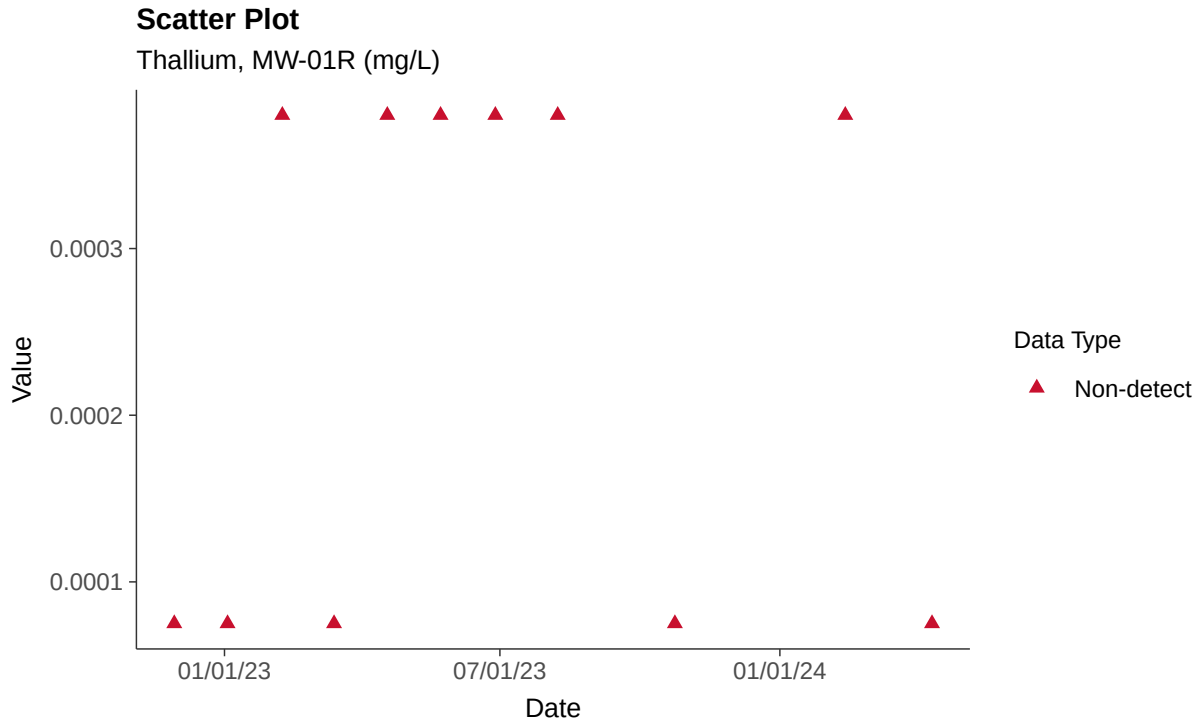
Trend Regression: Piecewise Linear-Linear

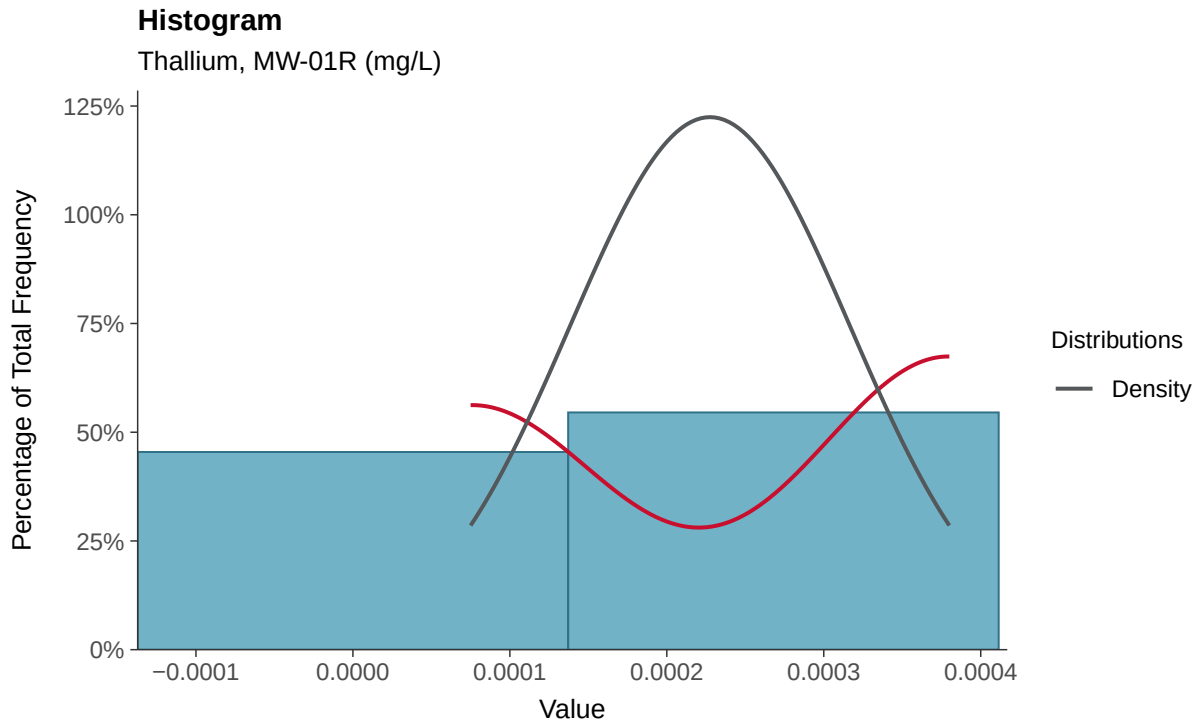
Selenium, MW-01R (mg/L)



Appendix IV: Thallium, MW-01R

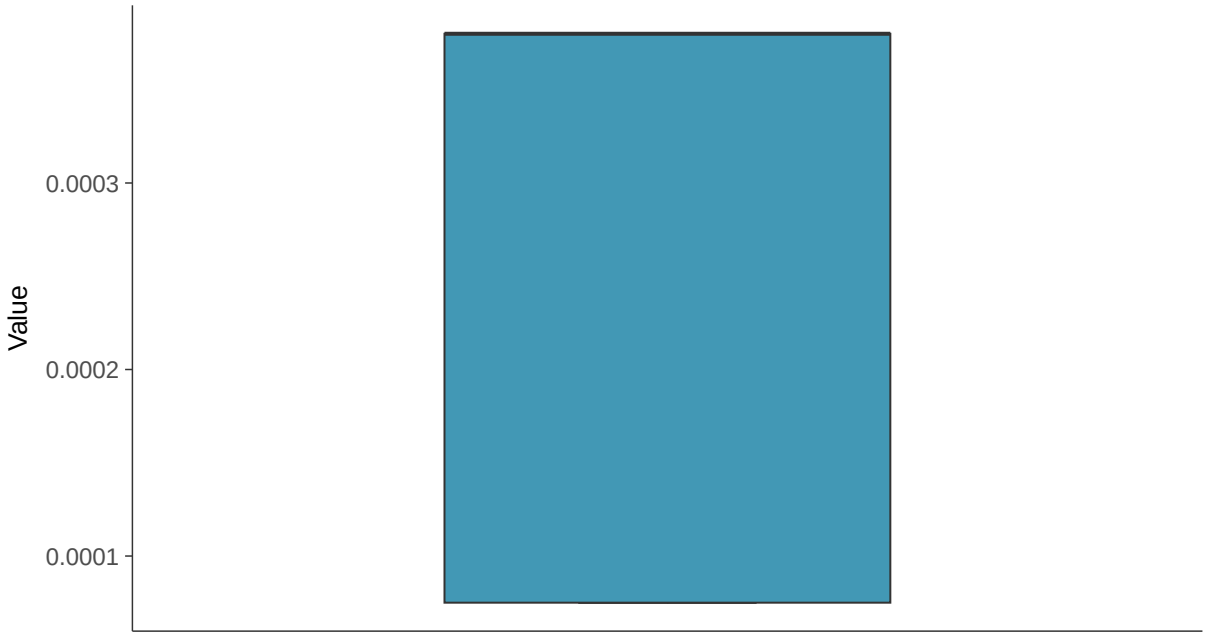
ID: 2_11_5_125





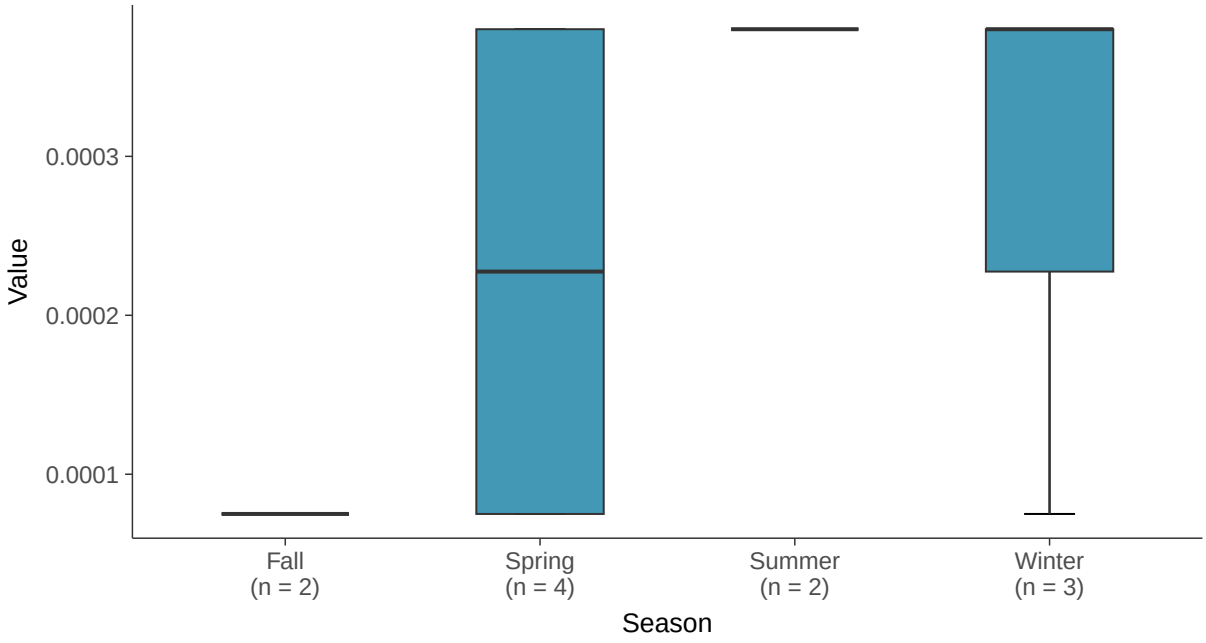
Boxplot

Thallium, MW-01R (mg/L)



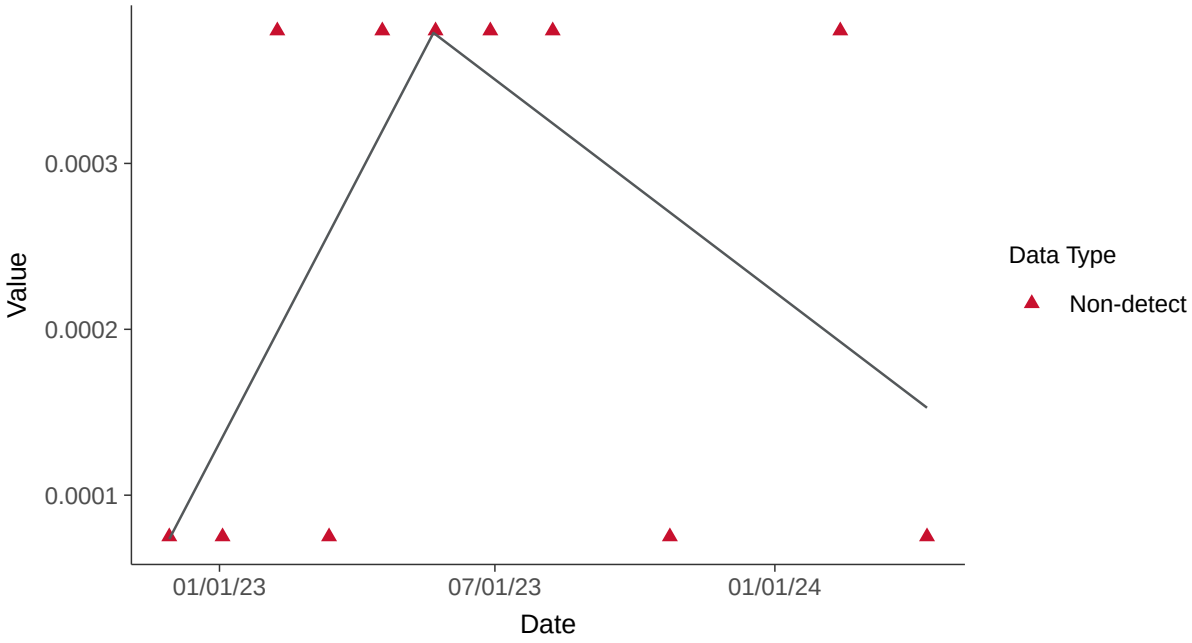
Boxplot by Season

Thallium, MW-01R (mg/L)



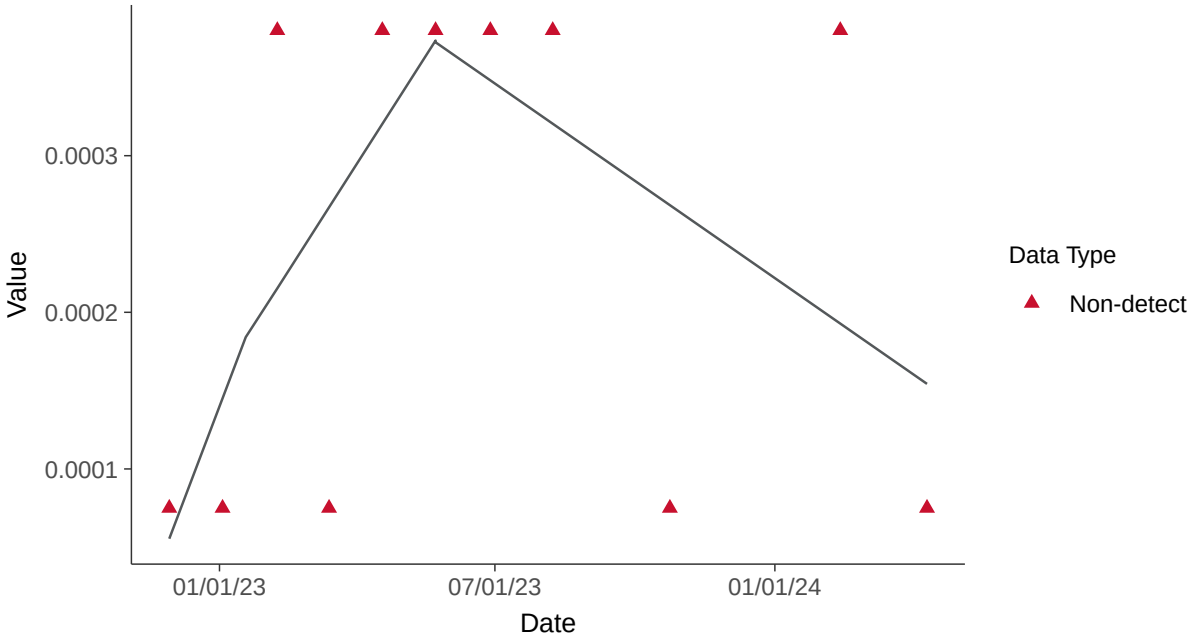
Trend Regression: Piecewise Linear-Linear

Thallium, MW-01R (mg/L)



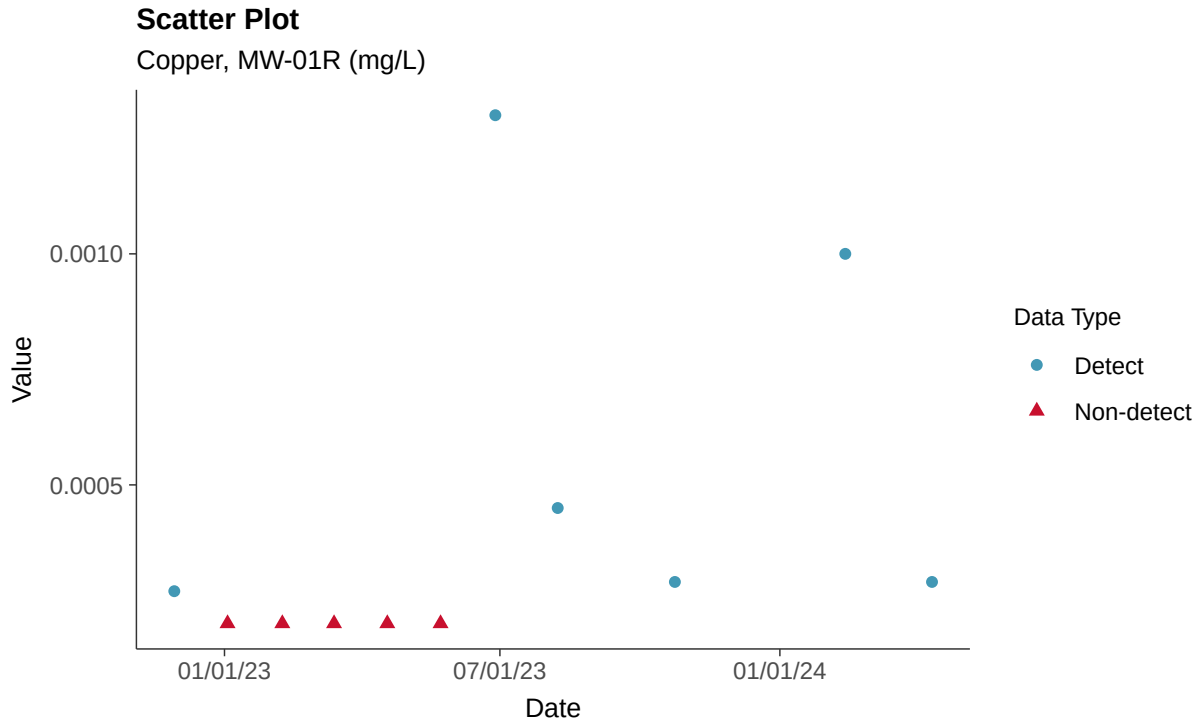
Trend Regression: Piecewise Linear-Linear-Linear

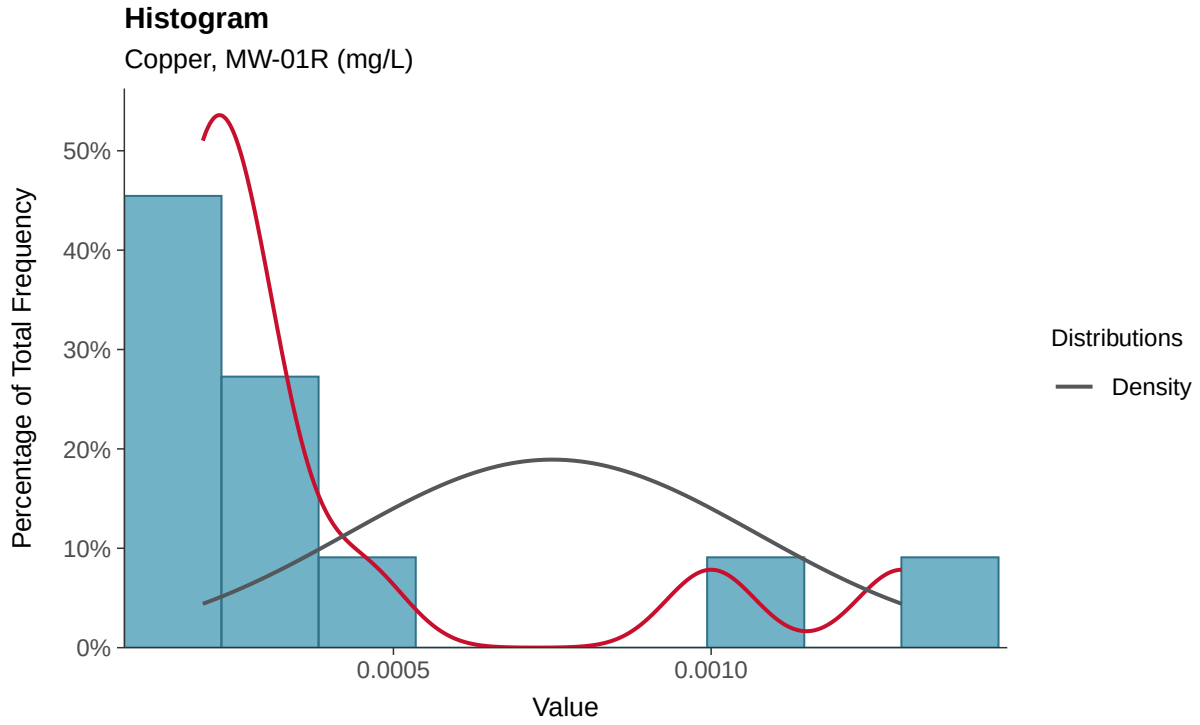
Thallium, MW-01R (mg/L)



Part 115: Copper, MW-01R

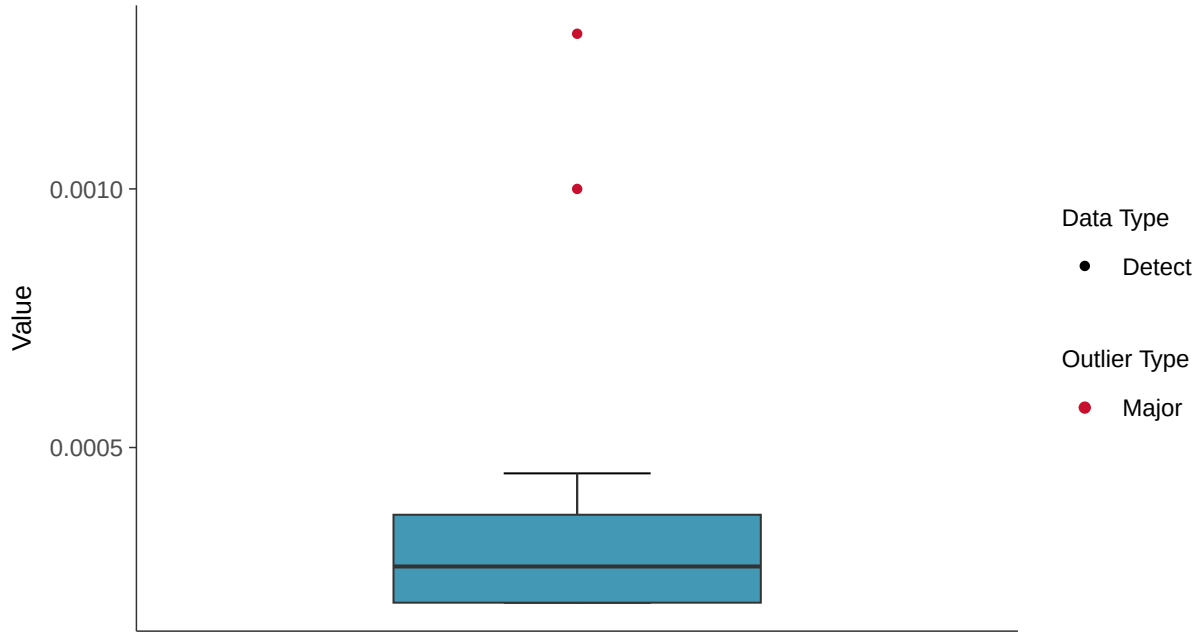
ID: 2_11_6_111





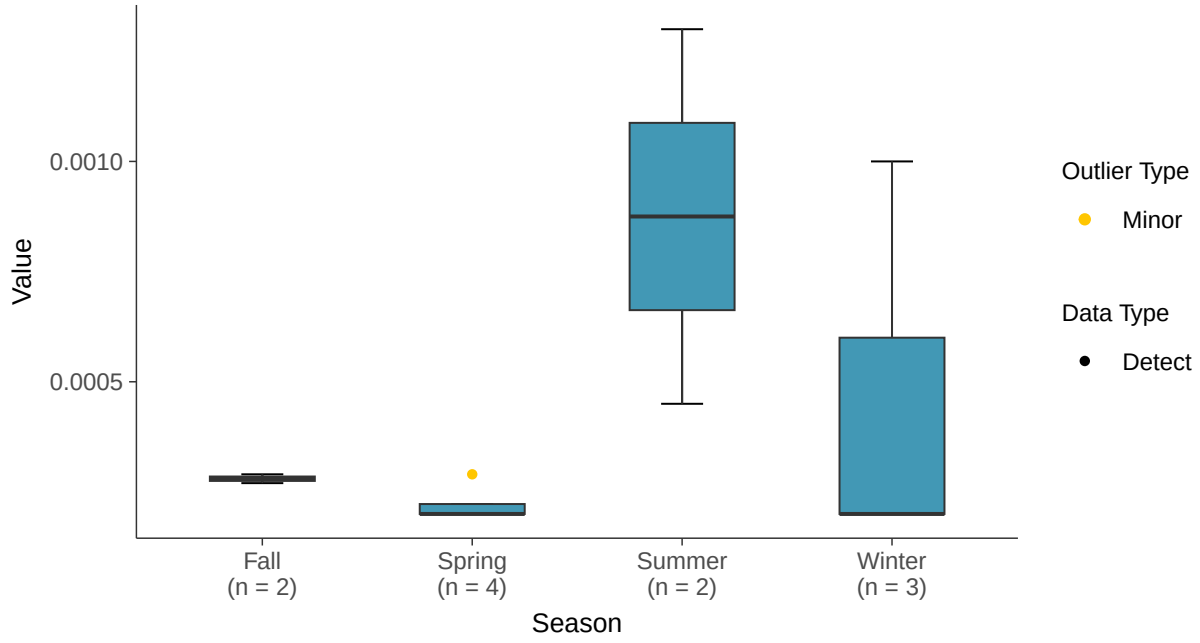
Boxplot

Copper, MW-01R (mg/L)



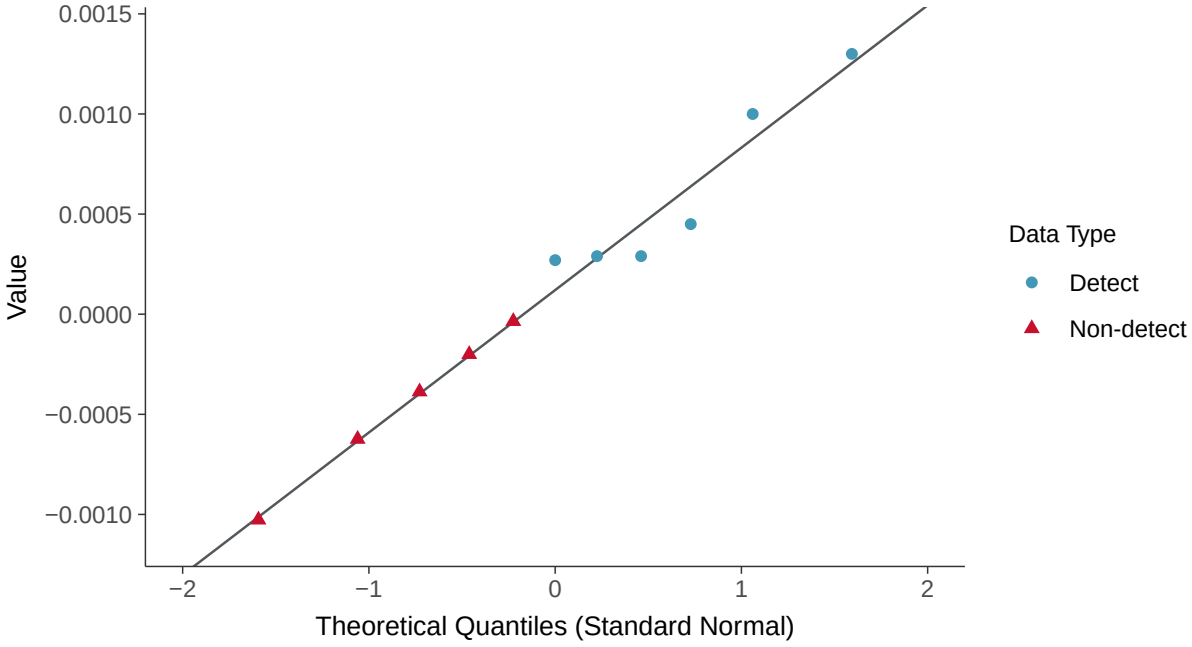
Boxplot by Season

Copper, MW-01R (mg/L)



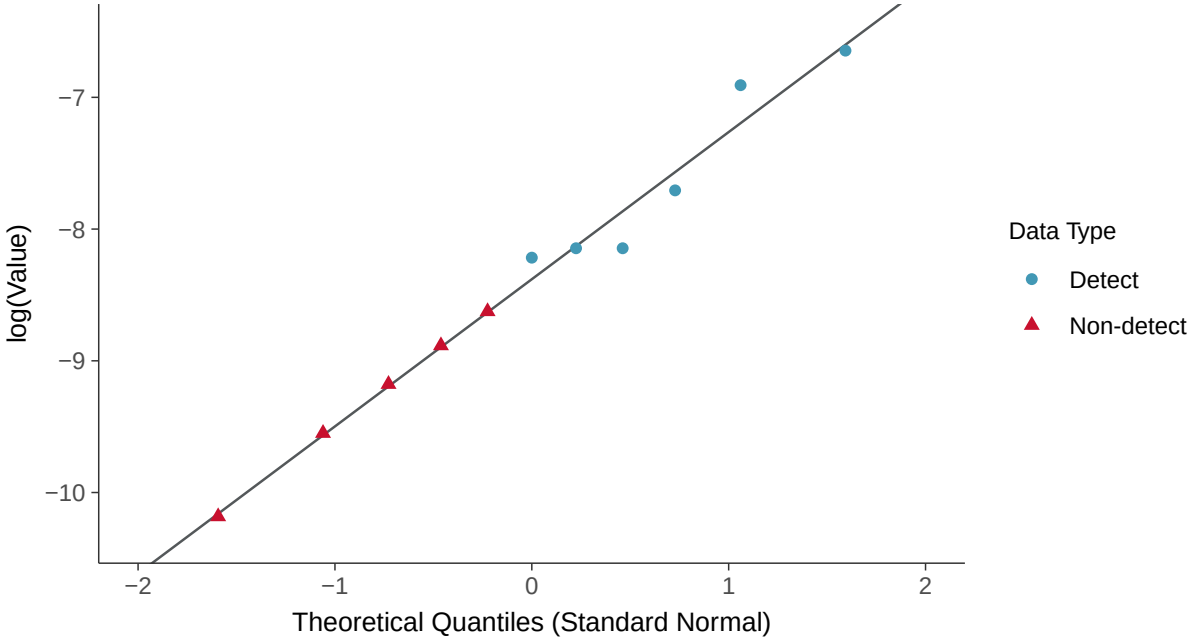
Normal Q-Q plot using ROS Imputed Estimates

Copper, MW-01R (mg/L)



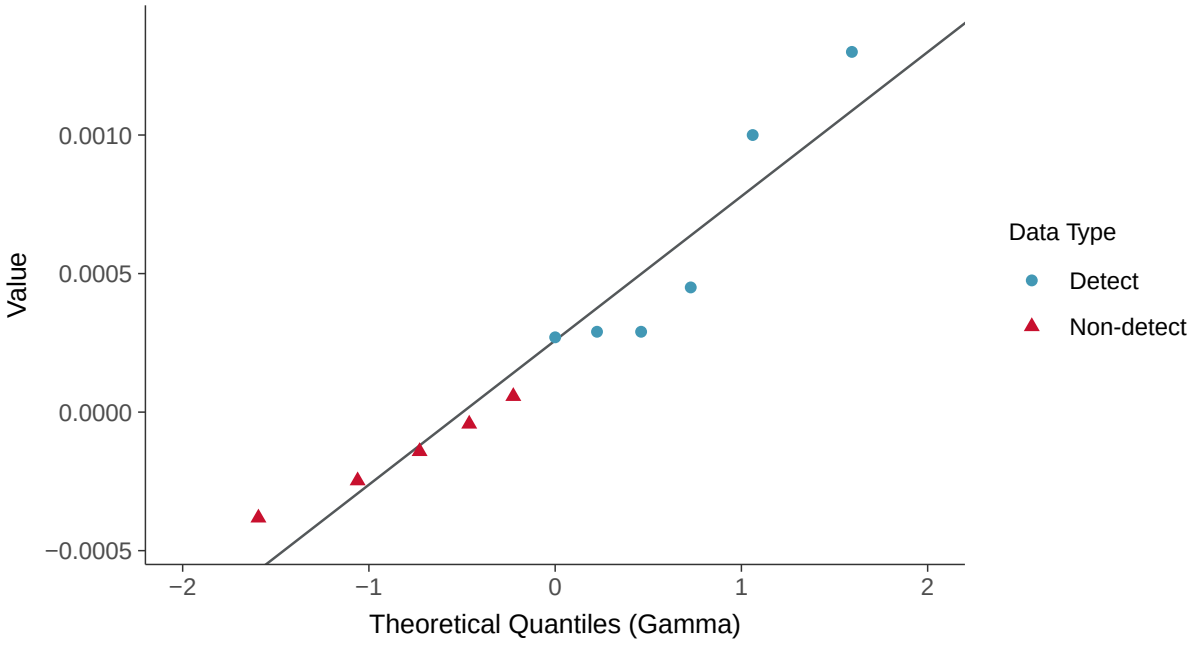
Lognormal Q-Q plot using ROS Imputed Estimates

Copper, MW-01R (mg/L)



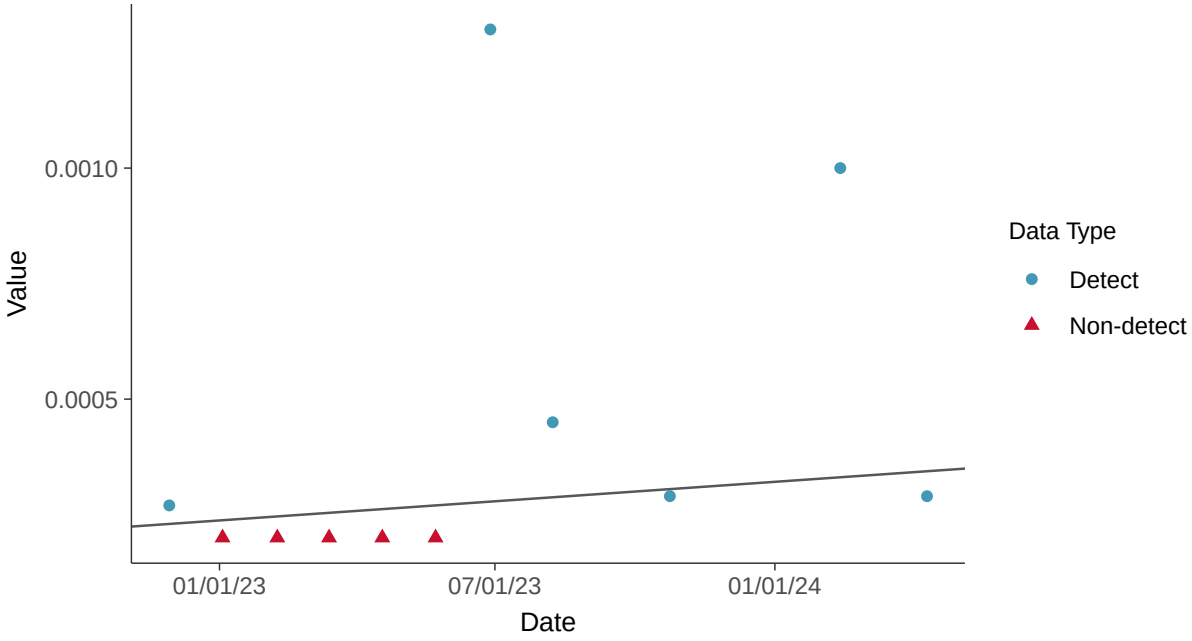
Gamma Q-Q plot using ROS Imputed Estimates

Copper, MW-01R (mg/L)



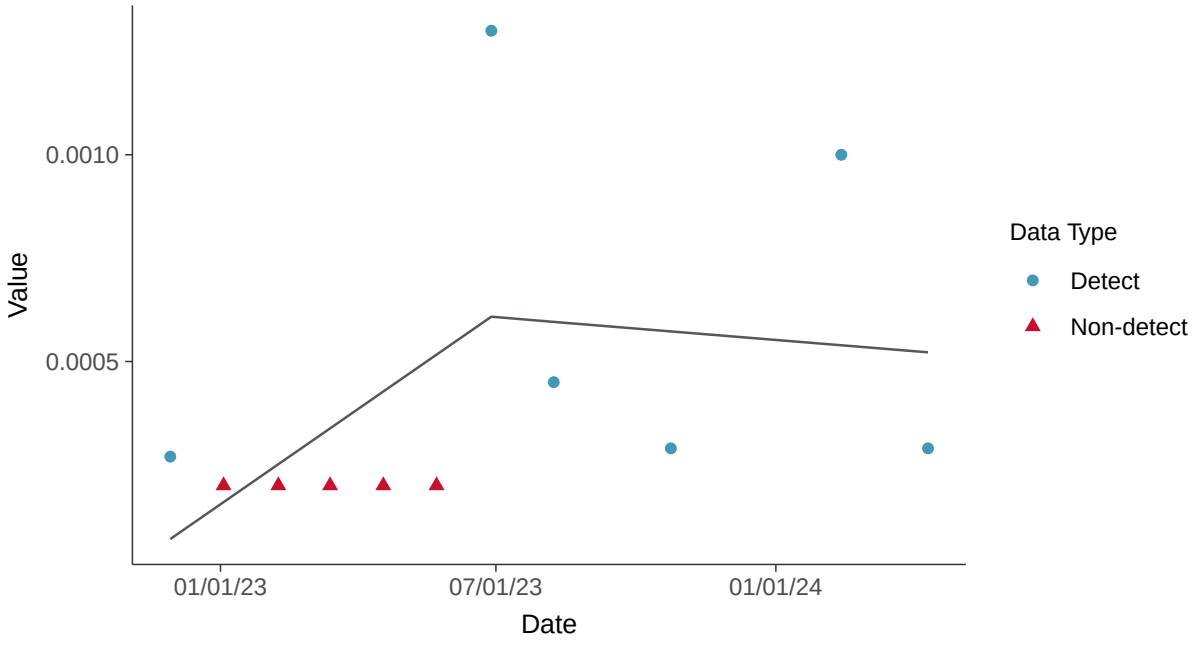
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Copper, MW-01R (mg/L)



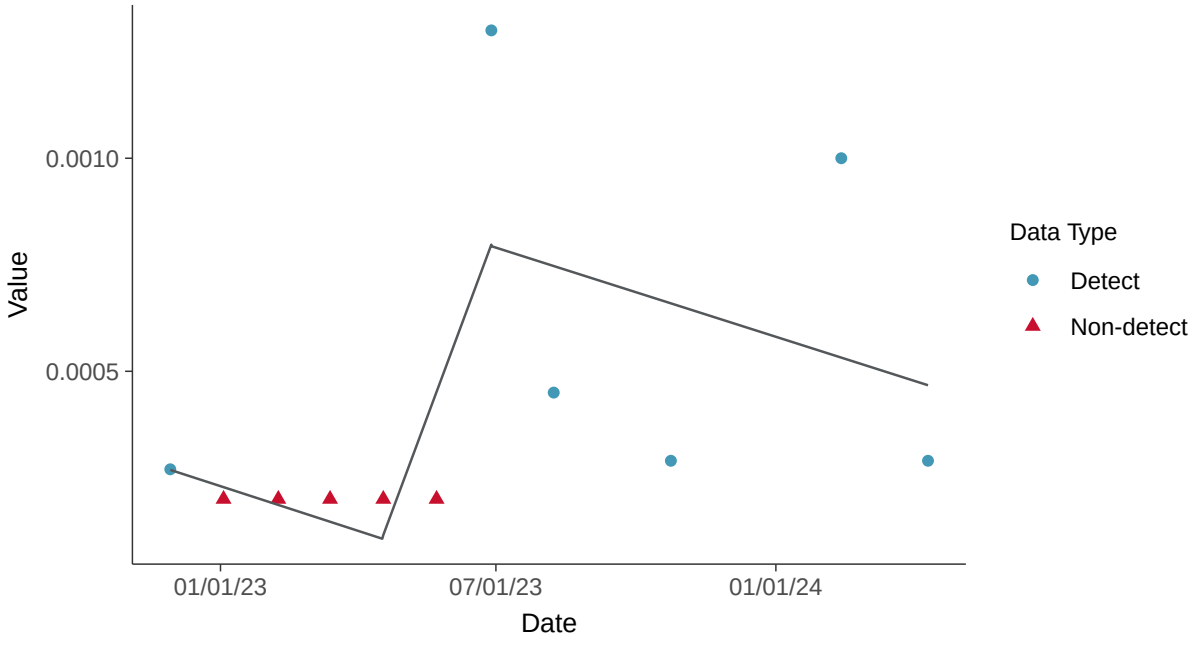
Trend Regression: Piecewise Linear-Linear

Copper, MW-01R (mg/L)



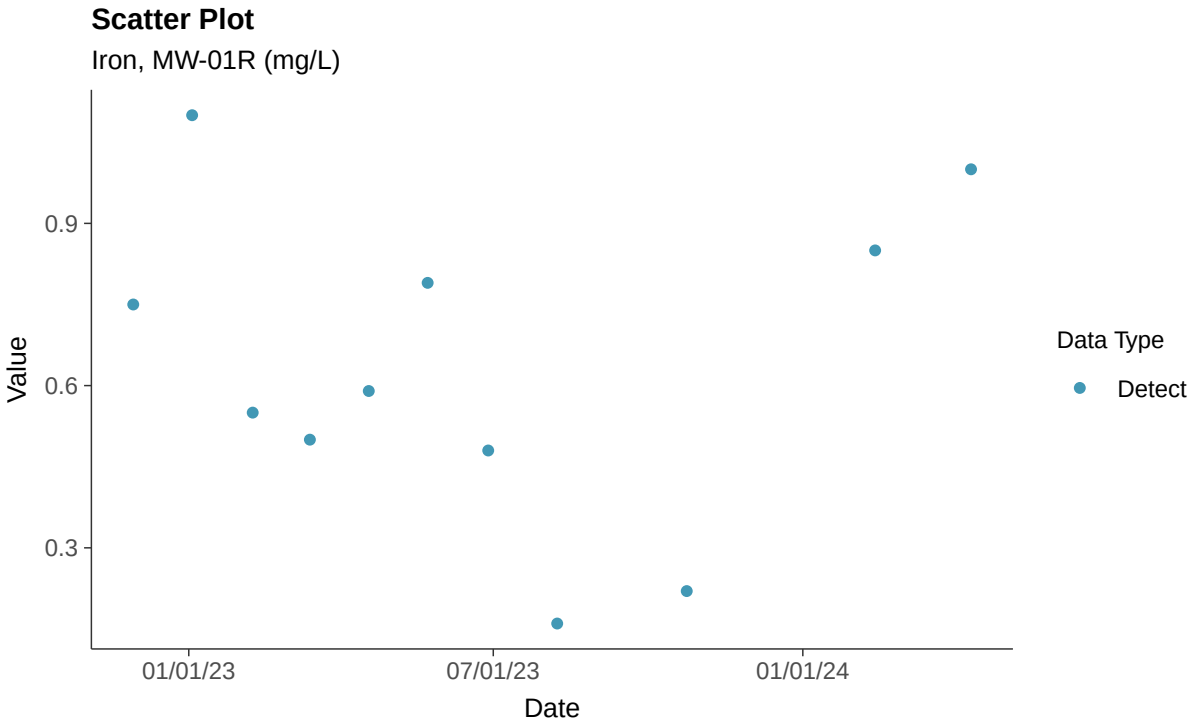
Trend Regression: Piecewise Linear-Linear-Linear

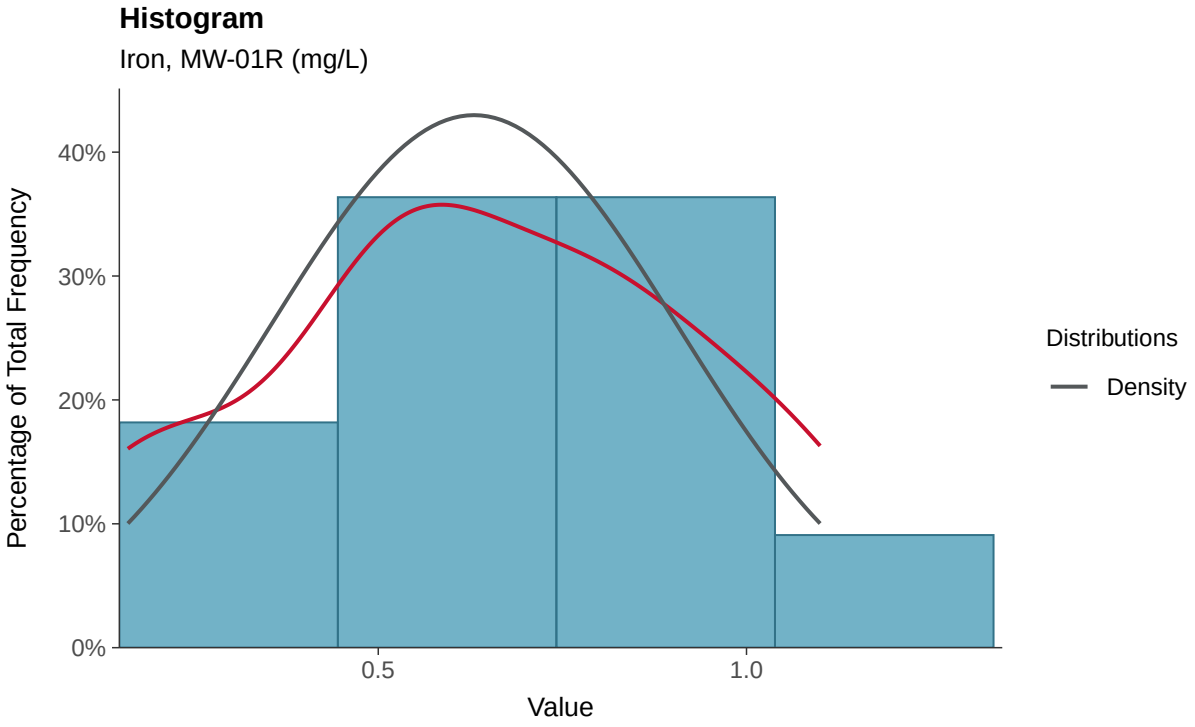
Copper, MW-01R (mg/L)



Part 115: Iron, MW-01R

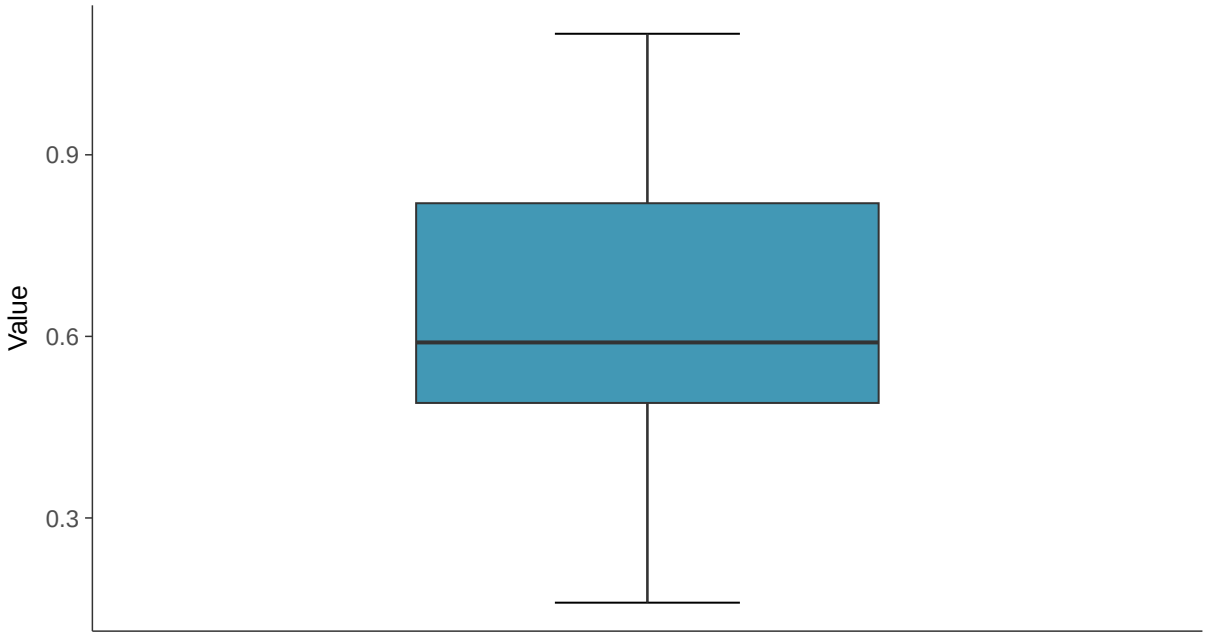
ID: 2_11_6_114





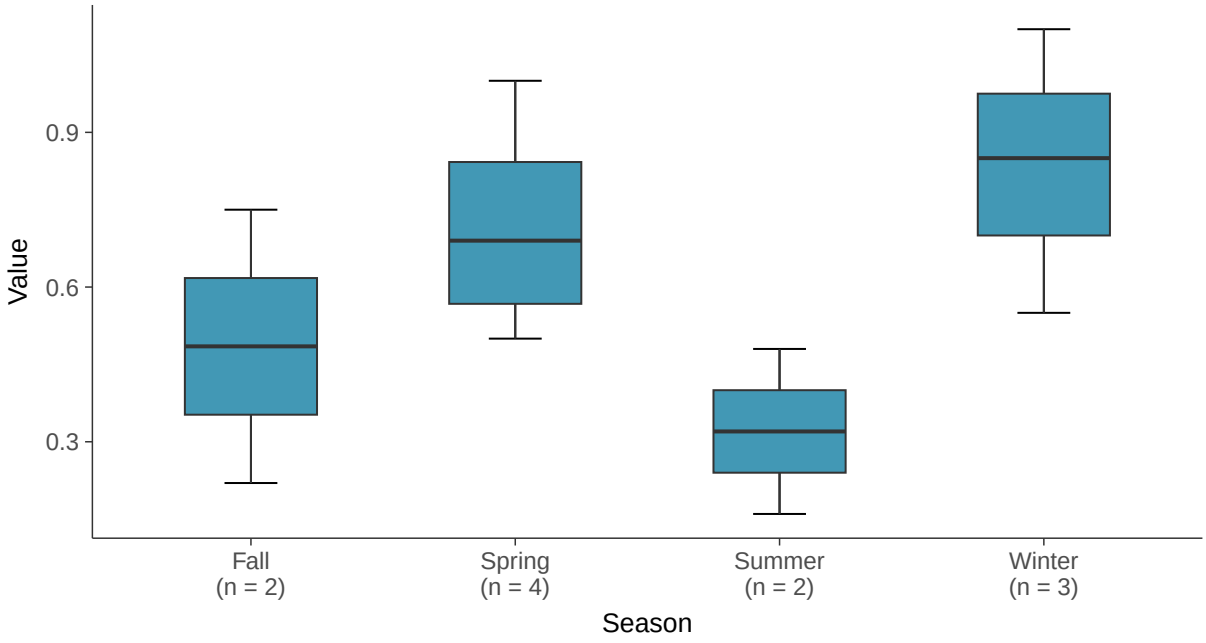
Boxplot

Iron, MW-01R (mg/L)



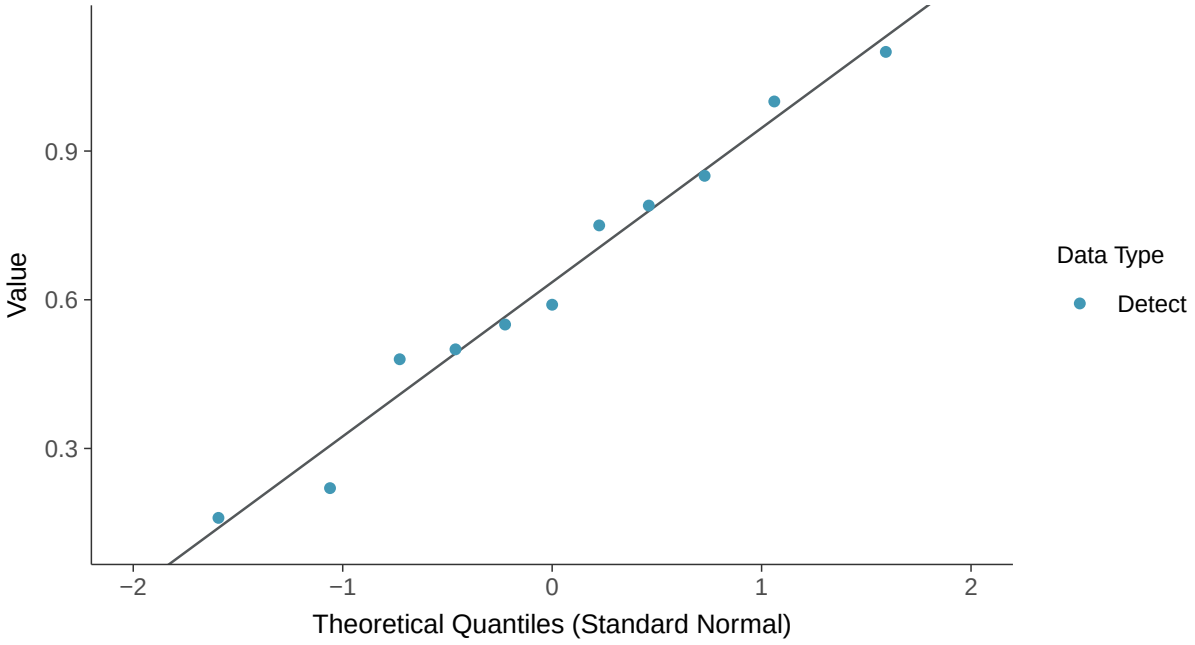
Boxplot by Season

Iron, MW-01R (mg/L)



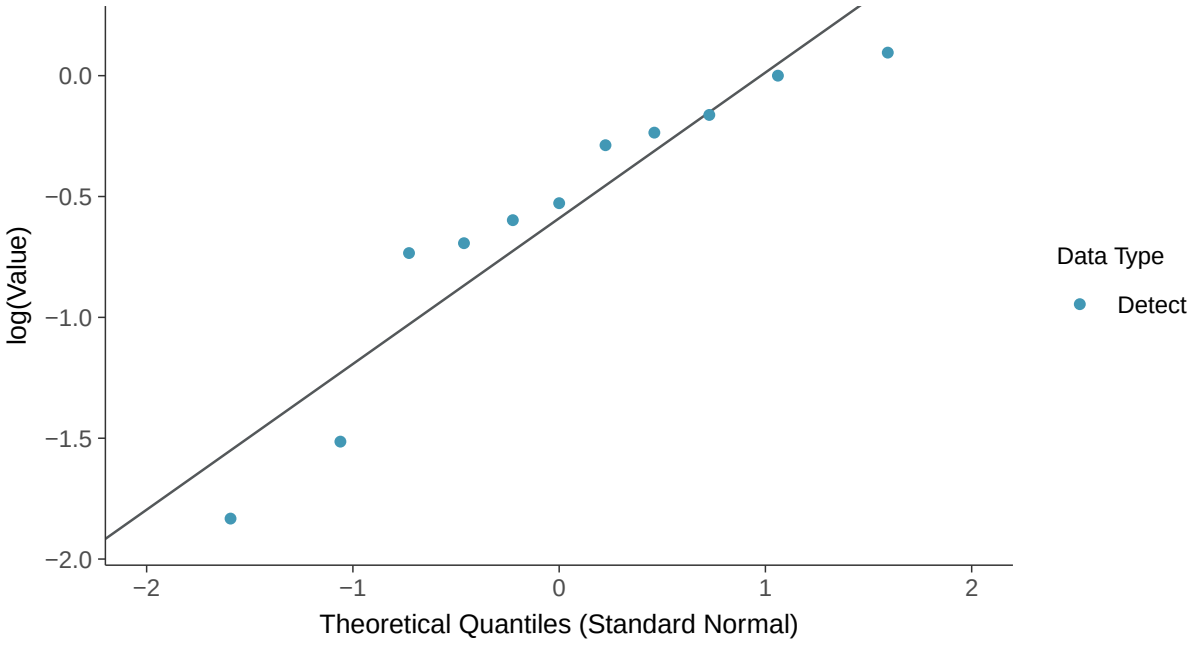
Normal Q-Q plot

Iron, MW-01R (mg/L)



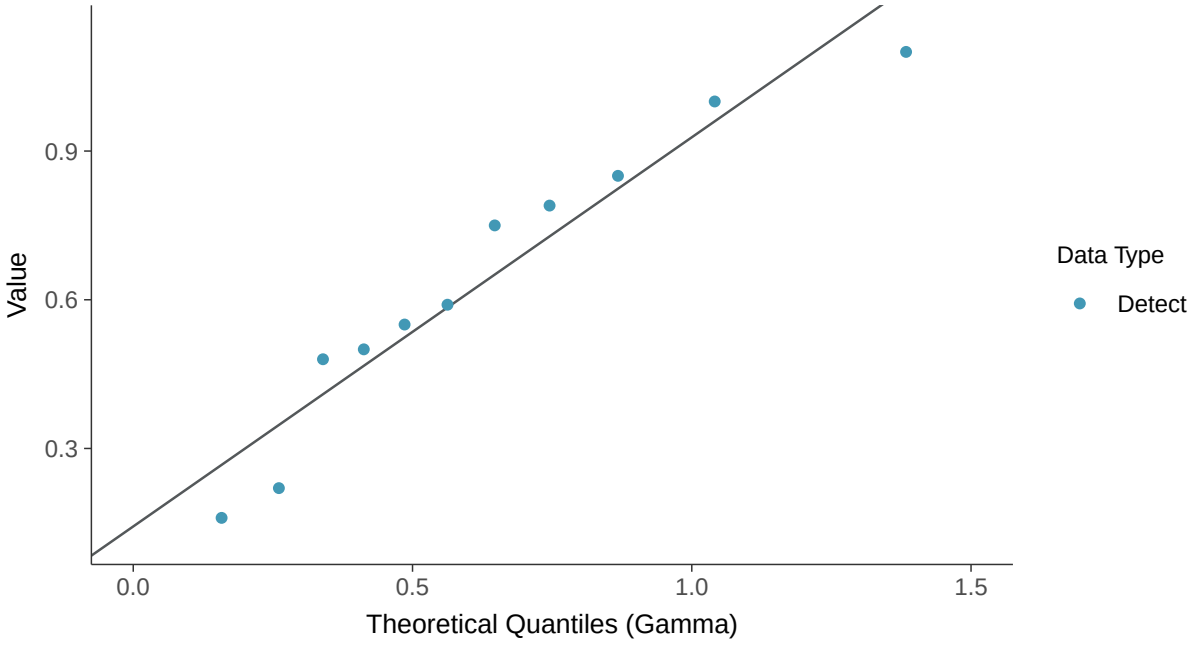
Lognormal Q-Q plot

Iron, MW-01R (mg/L)



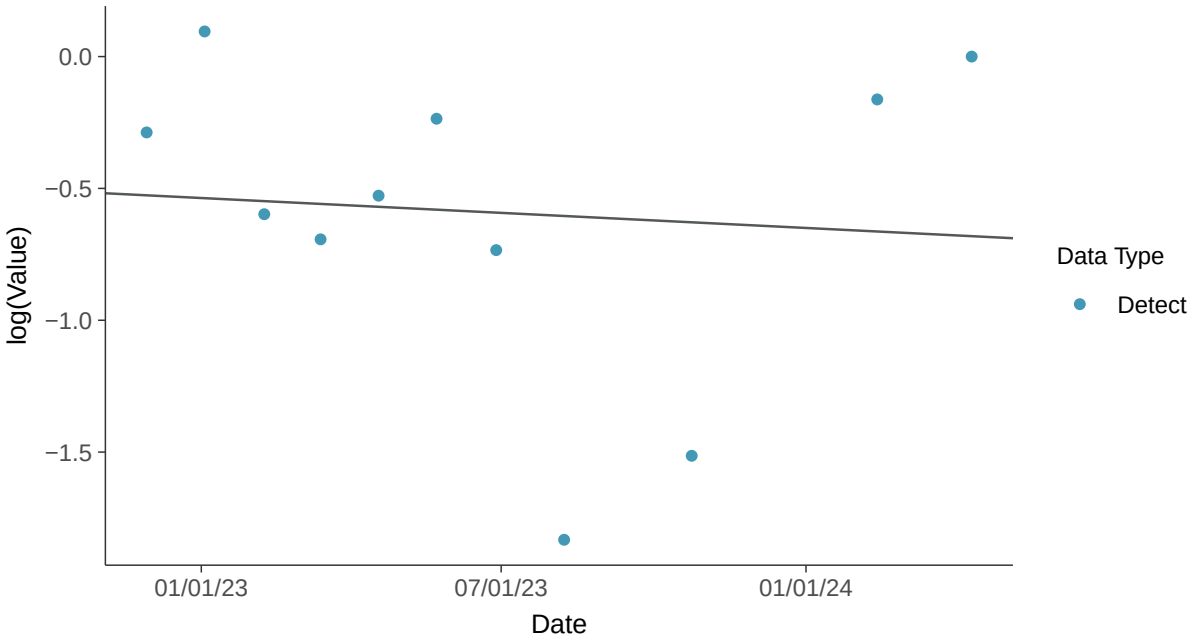
Gamma Q-Q plot

Iron, MW-01R (mg/L)



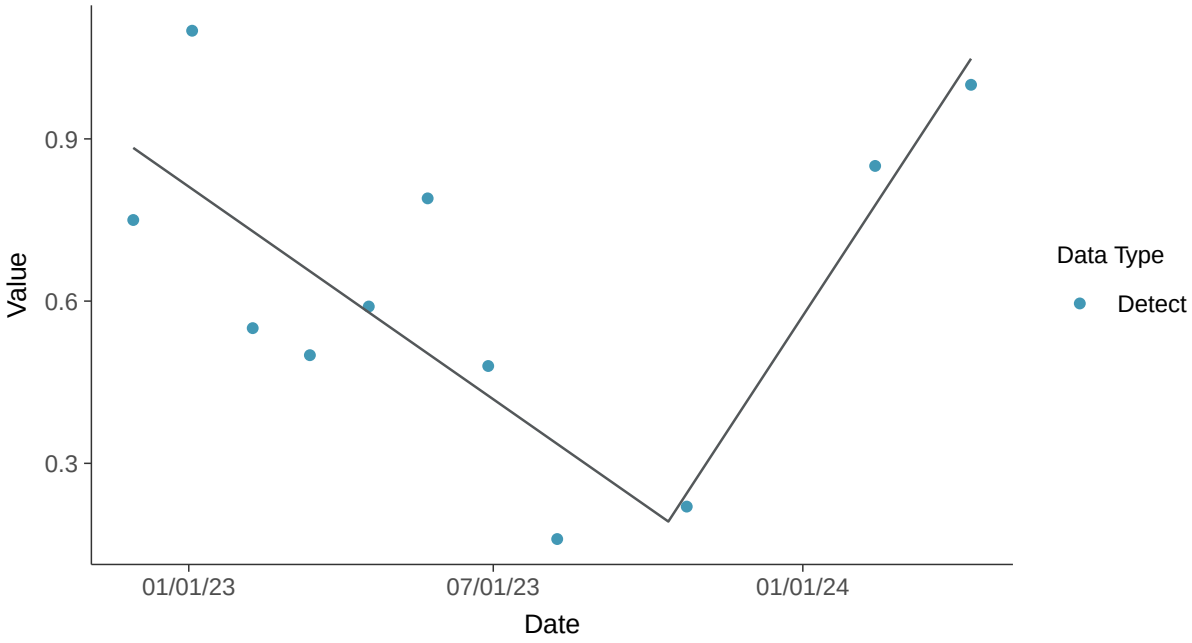
Trend Regression: Lognormal MLE

Iron, MW-01R (mg/L)



Trend Regression: Piecewise Linear-Linear

Iron, MW-01R (mg/L)

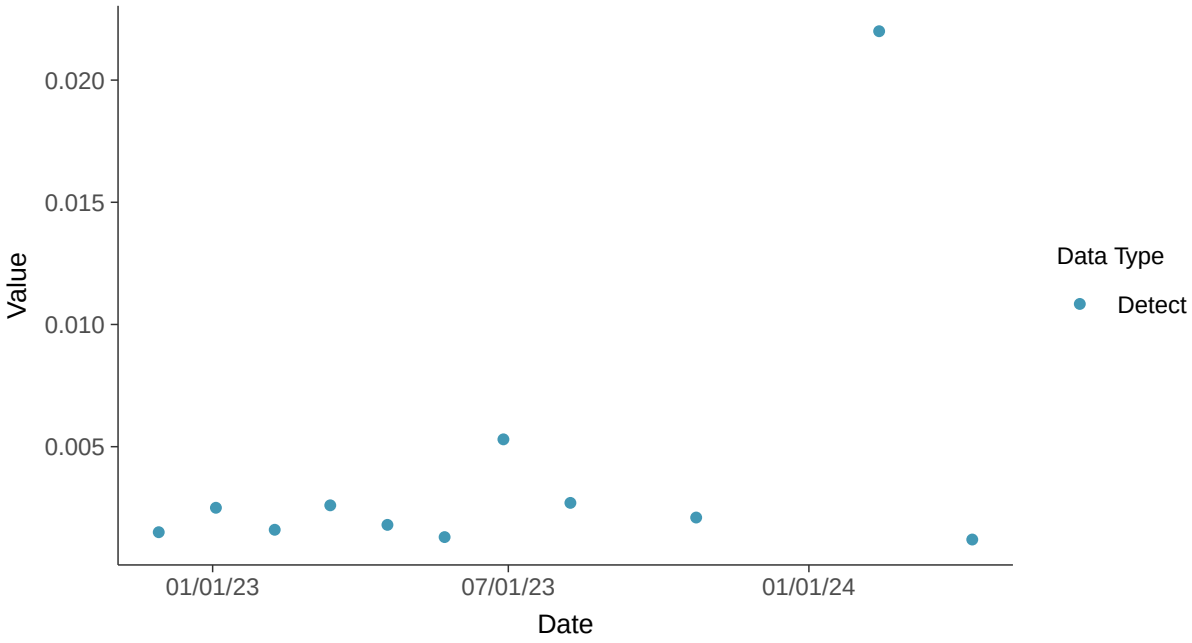


Part 115: Nickel, MW-01R

ID: 2_11_6_119

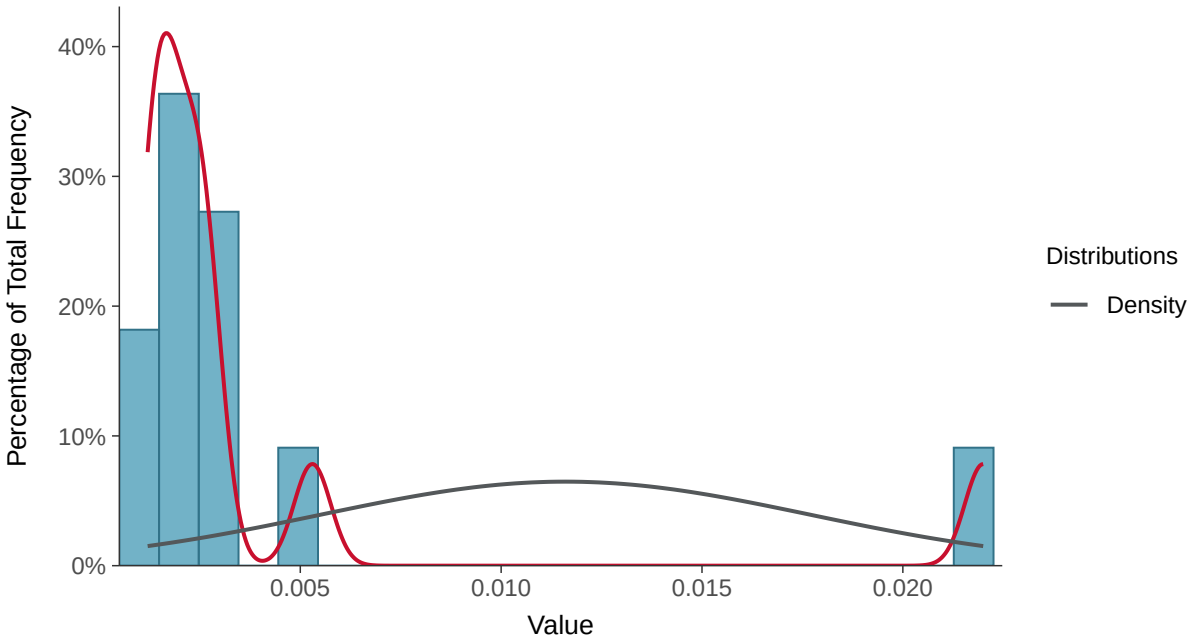
Scatter Plot

Nickel, MW-01R (mg/L)



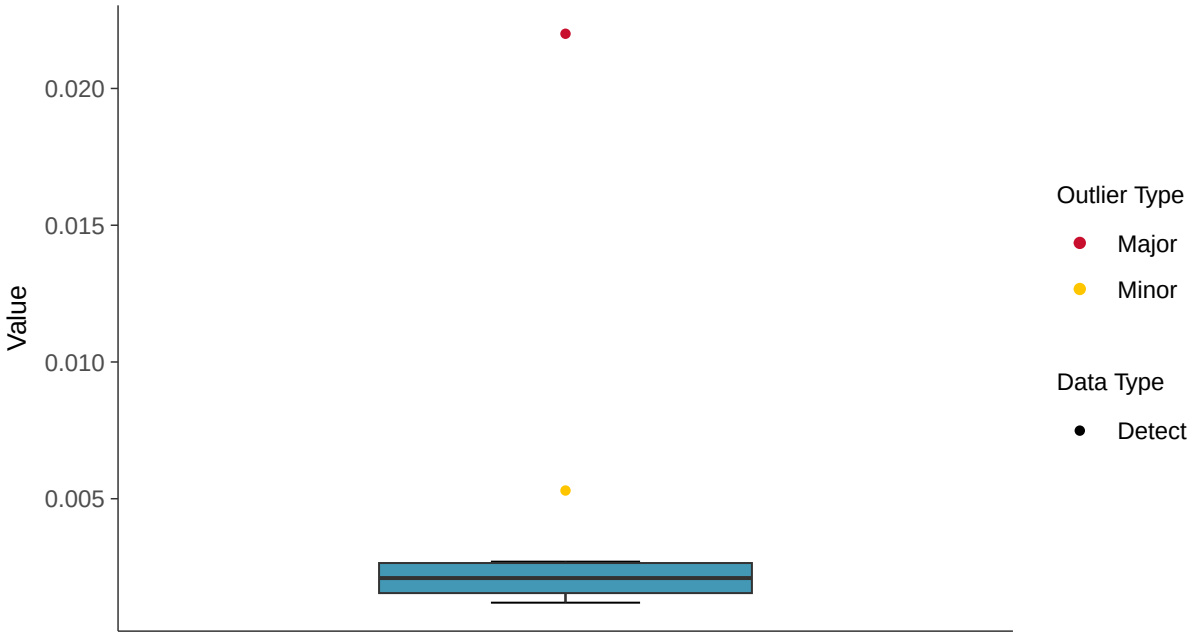
Histogram

Nickel, MW-01R (mg/L)



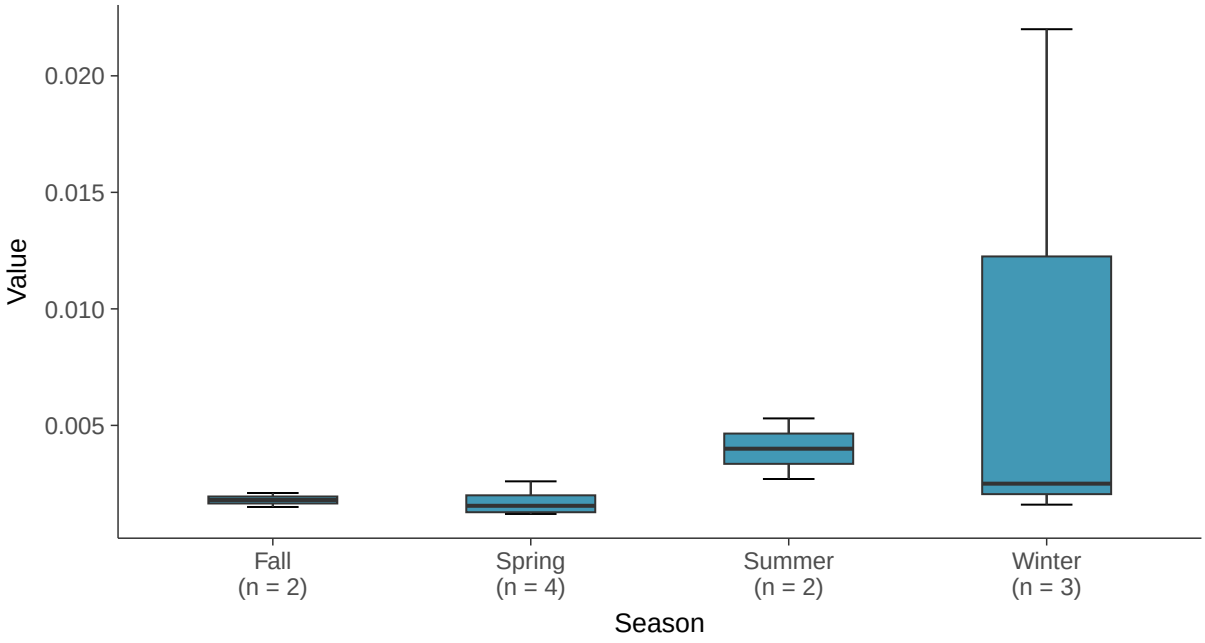
Boxplot

Nickel, MW-01R (mg/L)



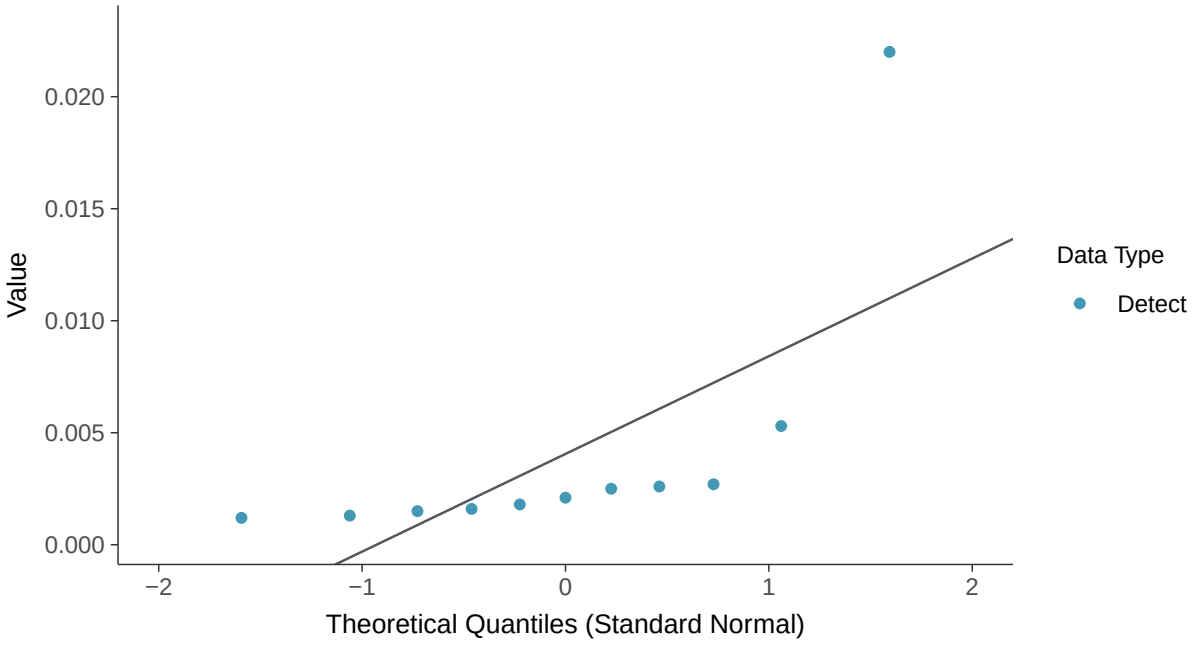
Boxplot by Season

Nickel, MW-01R (mg/L)



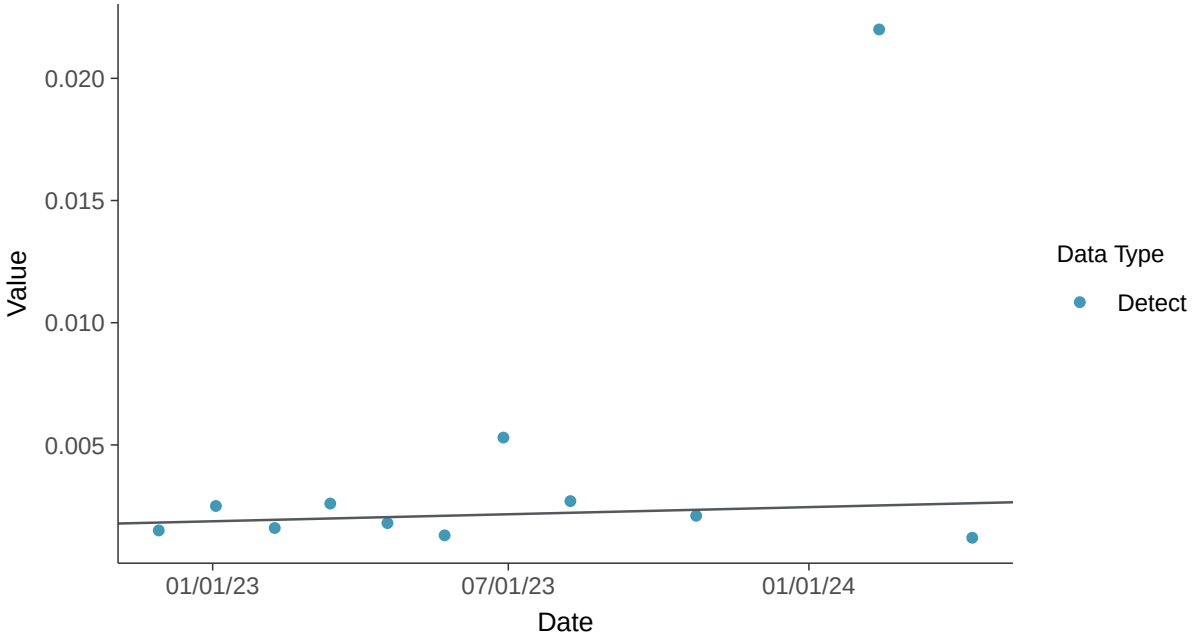
Normal Q-Q plot

Nickel, MW-01R (mg/L)



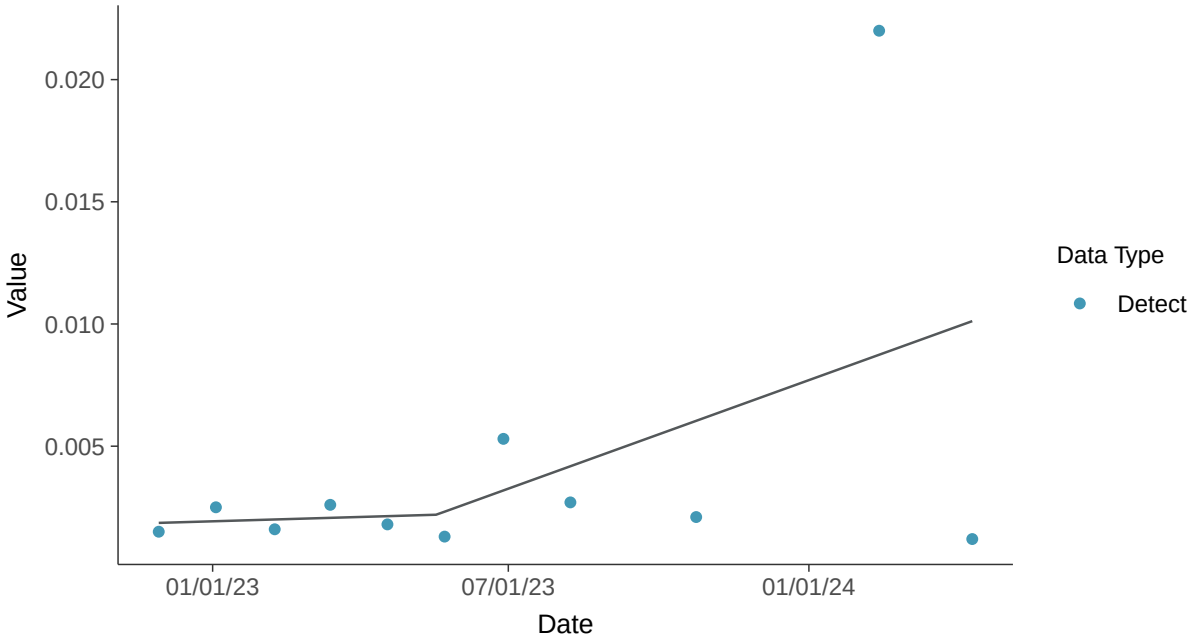
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Nickel, MW-01R (mg/L)



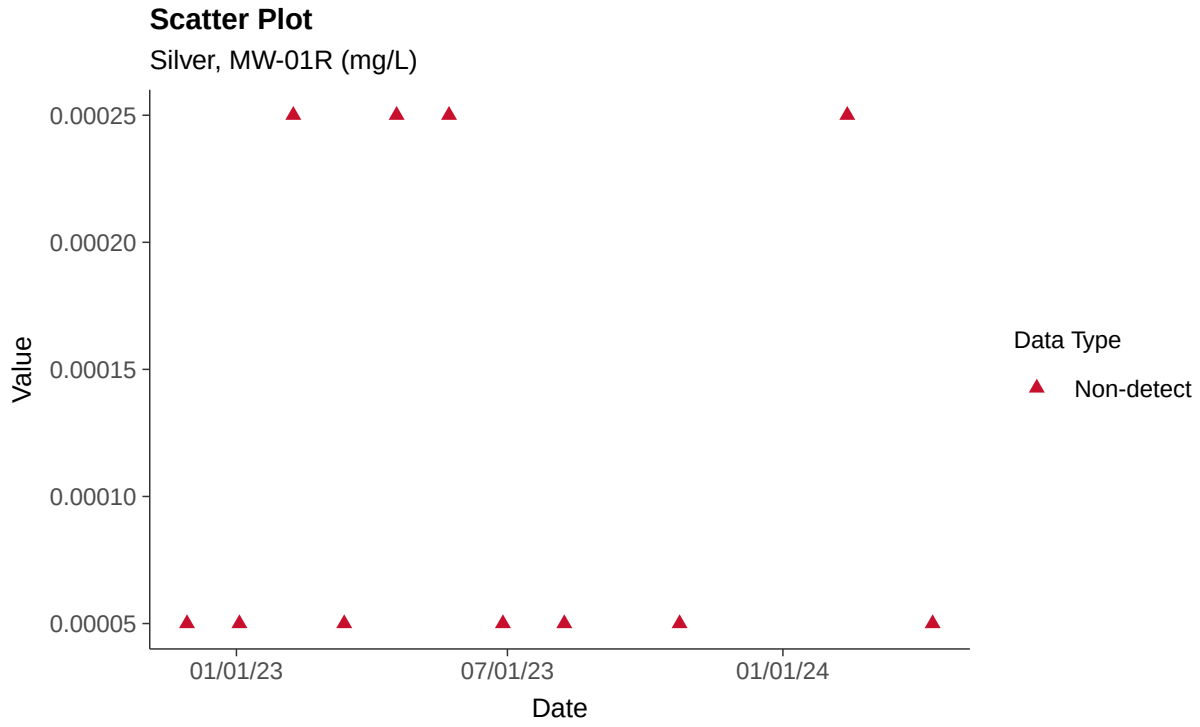
Trend Regression: Piecewise Linear-Linear

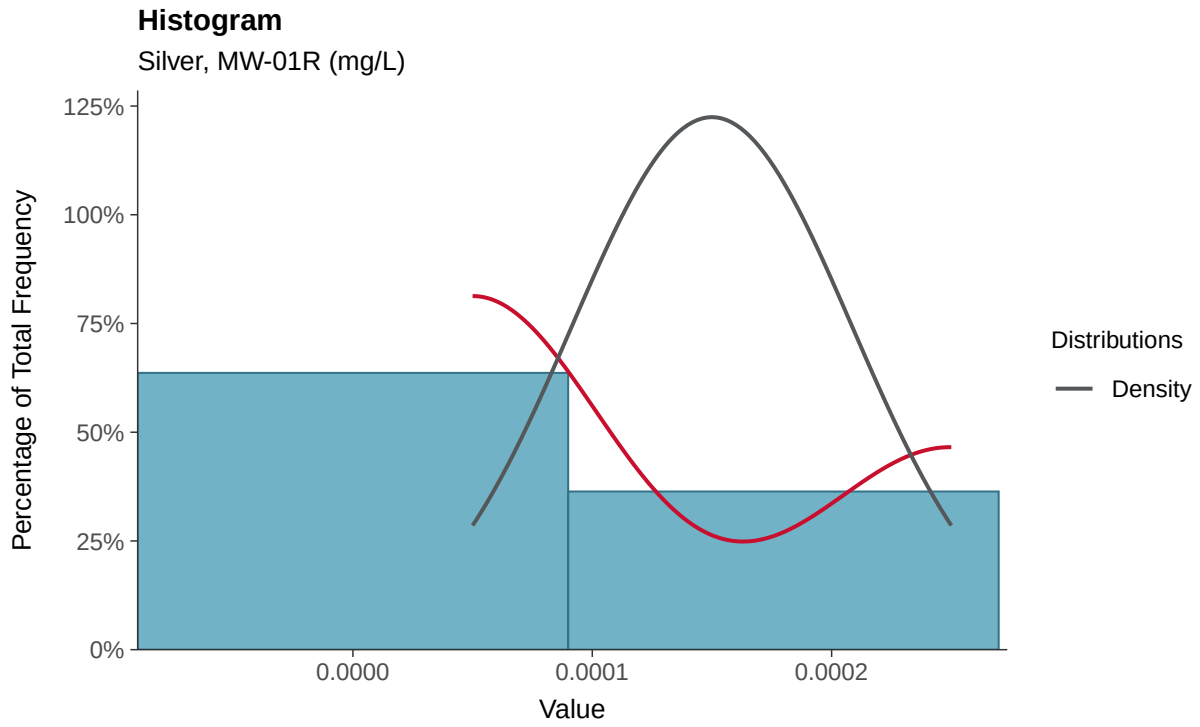
Nickel, MW-01R (mg/L)



Part 115: Silver, MW-01R

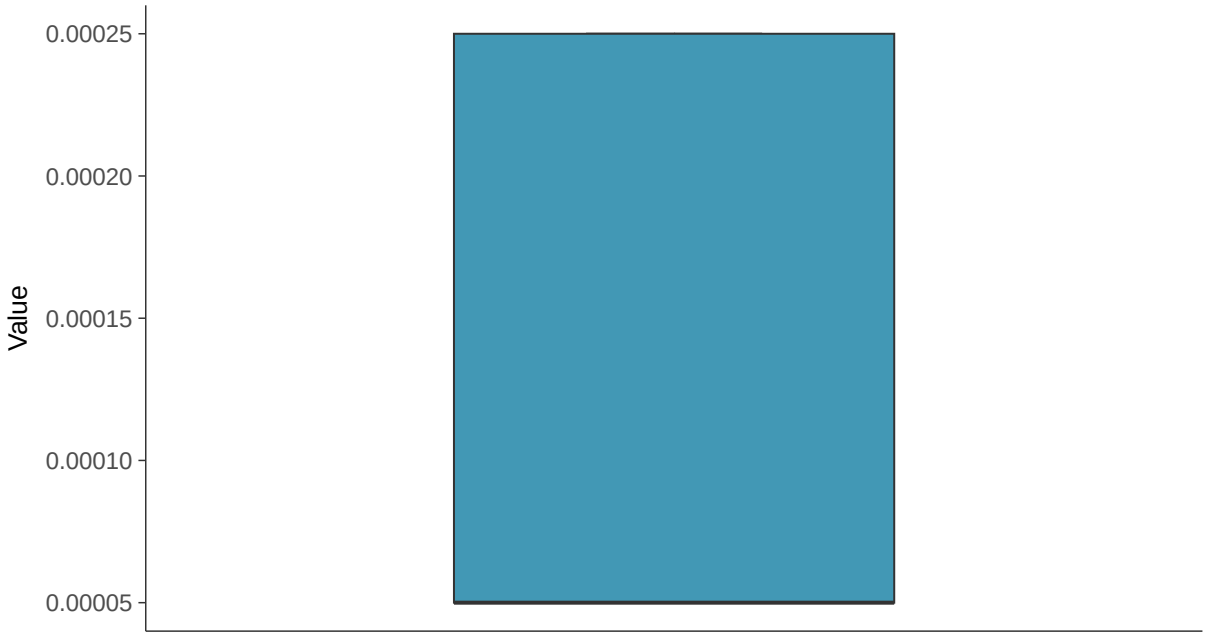
ID: 2_11_6_123





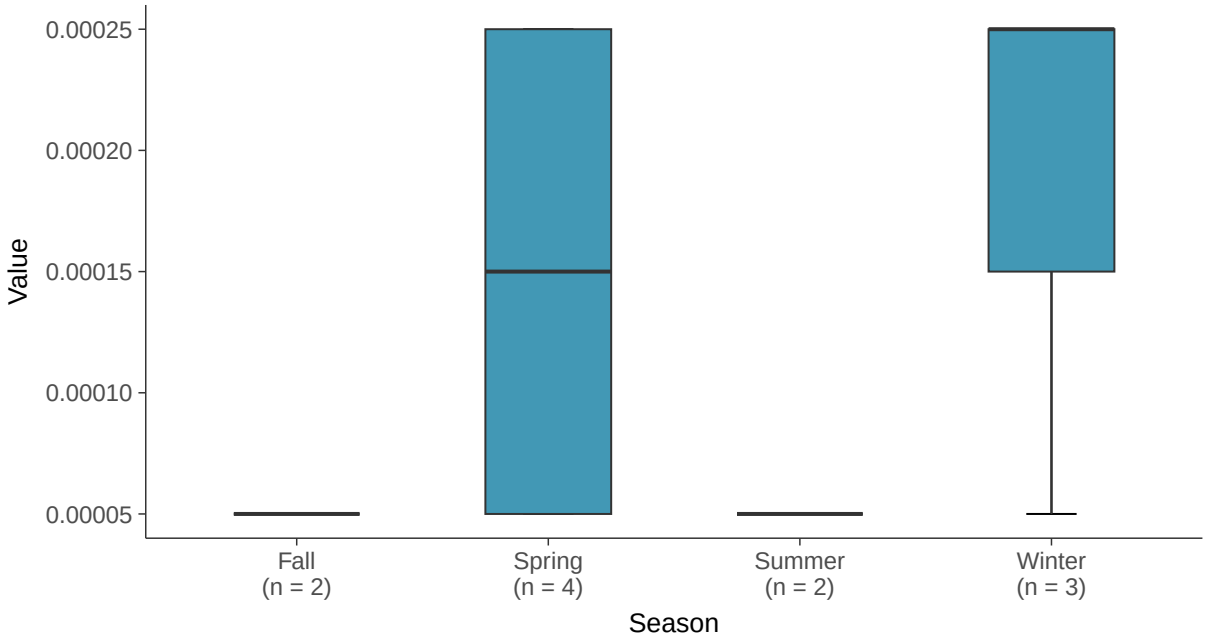
Boxplot

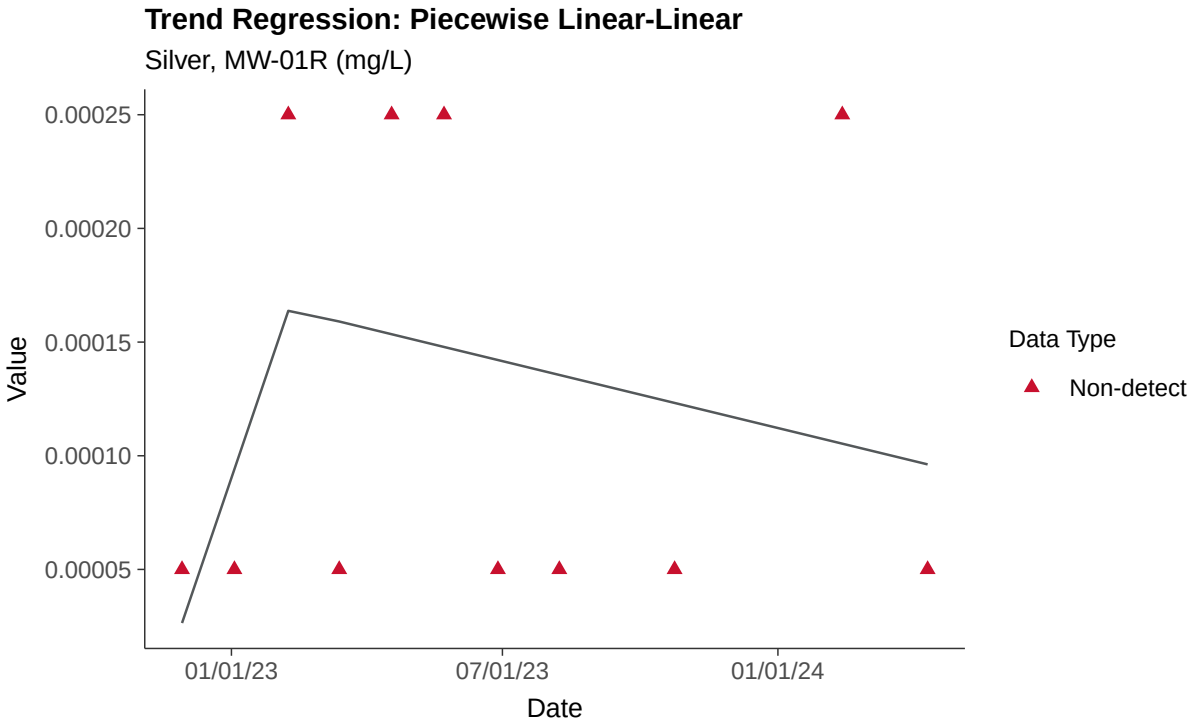
Silver, MW-01R (mg/L)



Boxplot by Season

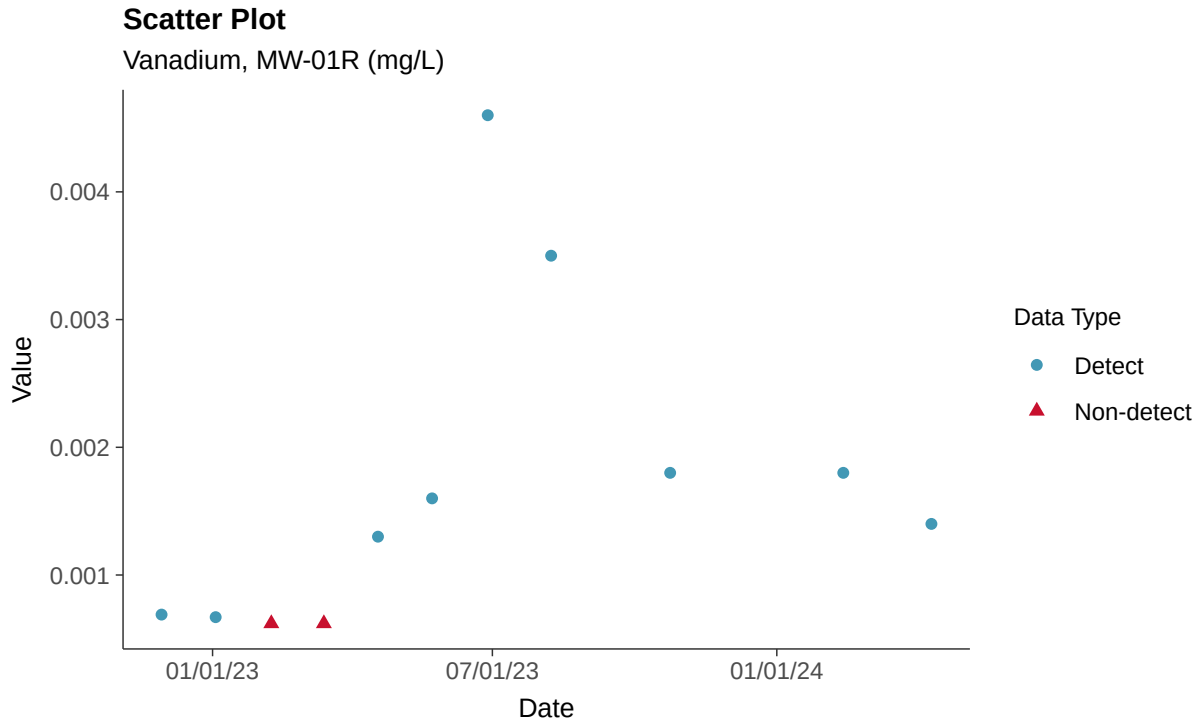
Silver, MW-01R (mg/L)

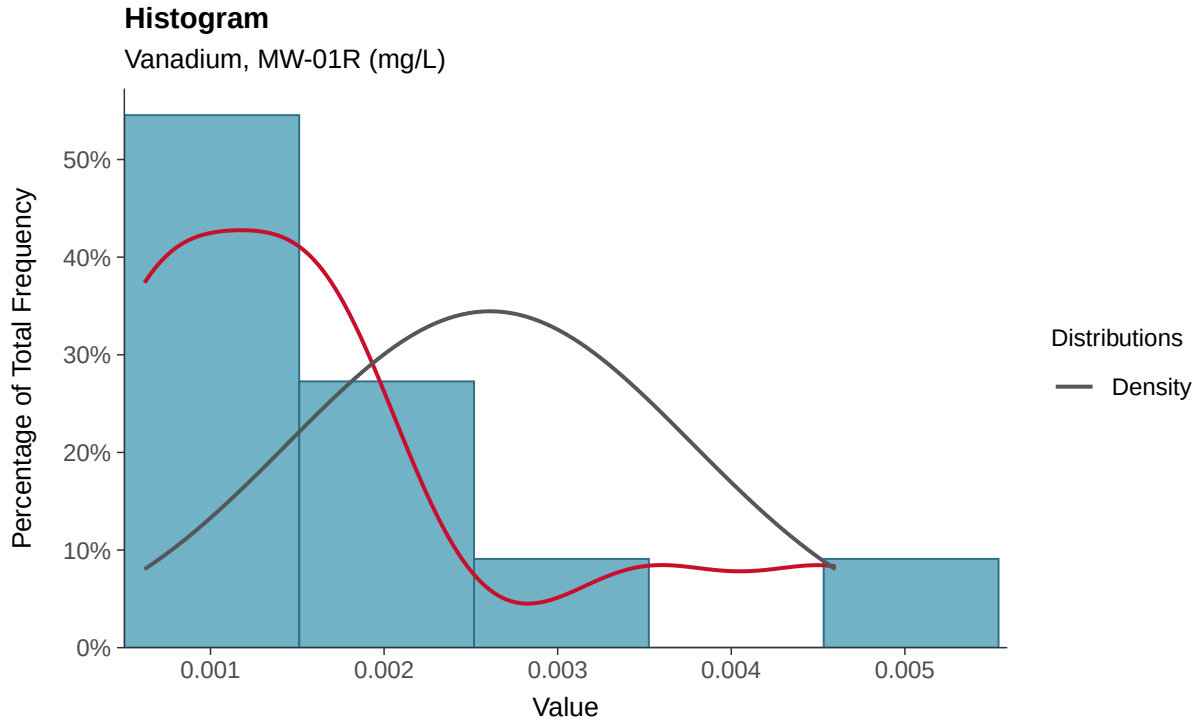



Trend Regression: Piecewise Linear-Linear
Silver, MW-01R (mg/L)
0.00025
0.00020
0.00015
0.00010
0.00005
Value
01/01/23
07/01/23
01/01/24
Date
Data Type
Non-detect

Part 115: Vanadium, MW-01R

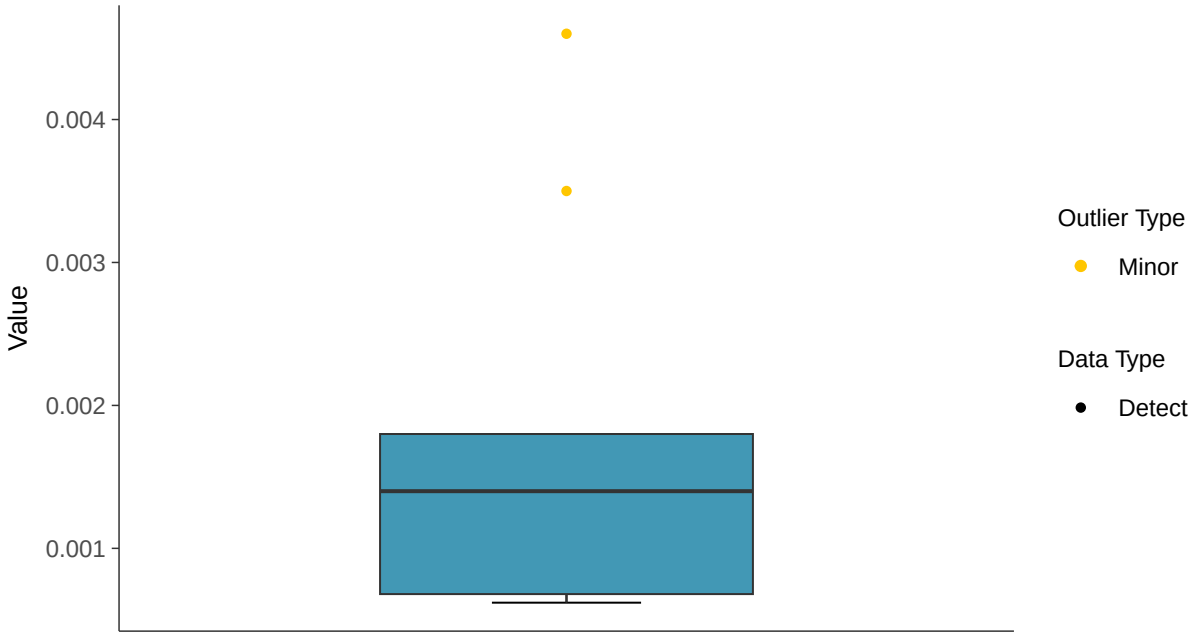
ID: 2_11_6_129





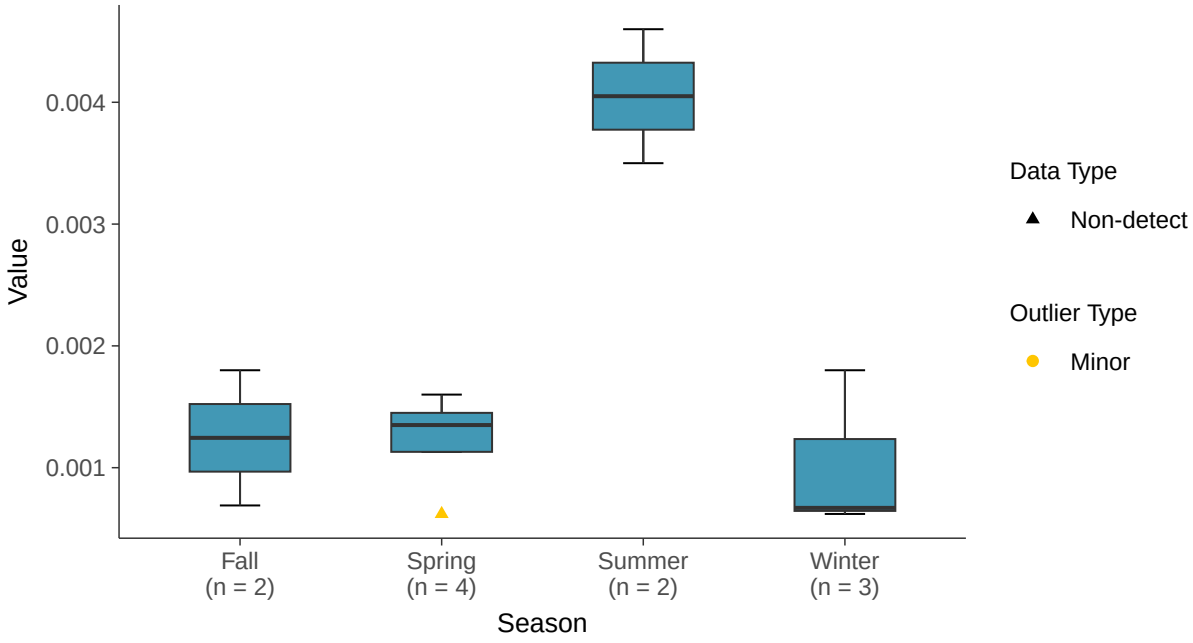
Boxplot

Vanadium, MW-01R (mg/L)



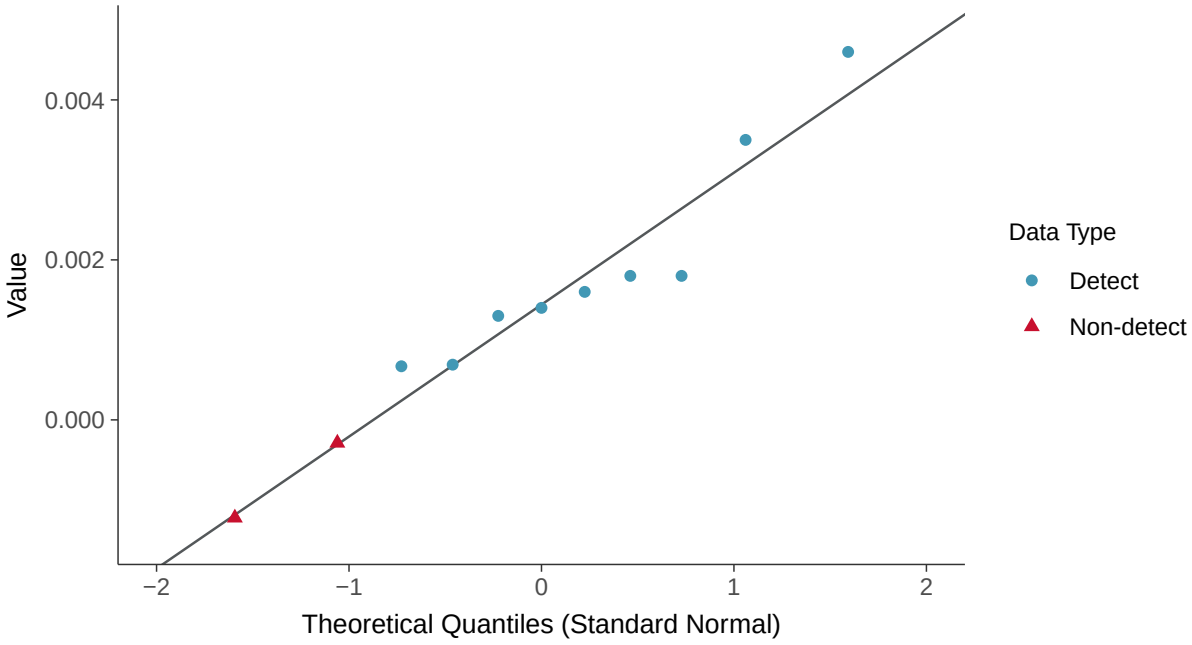
Boxplot by Season

Vanadium, MW-01R (mg/L)



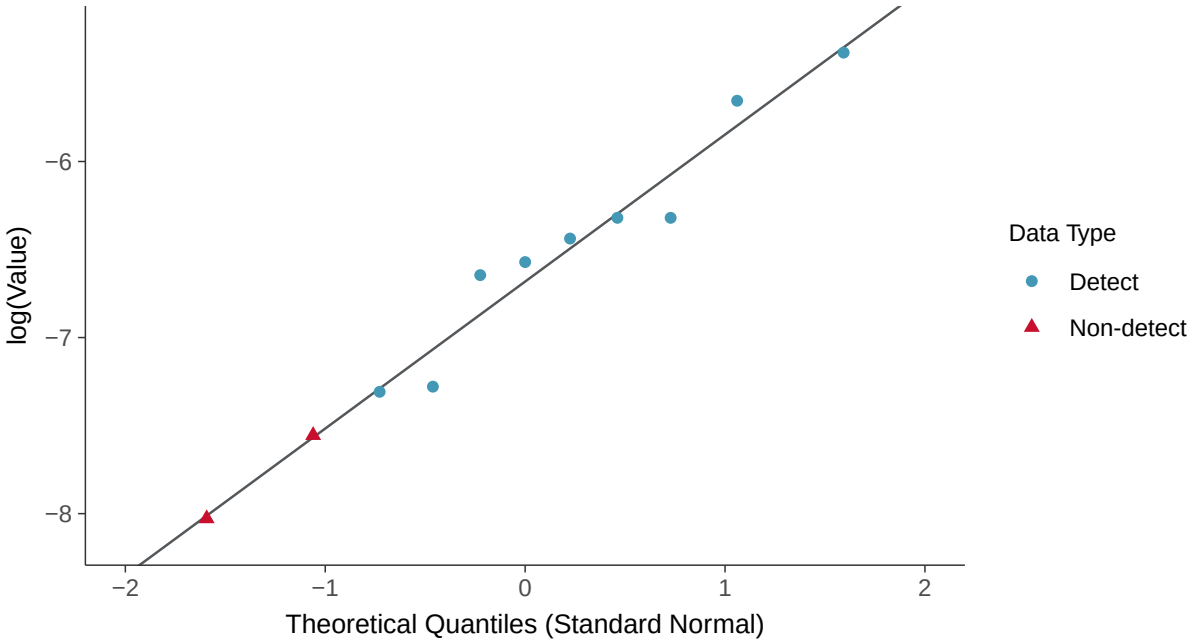
Normal Q-Q plot using ROS Imputed Estimates

Vanadium, MW-01R (mg/L)



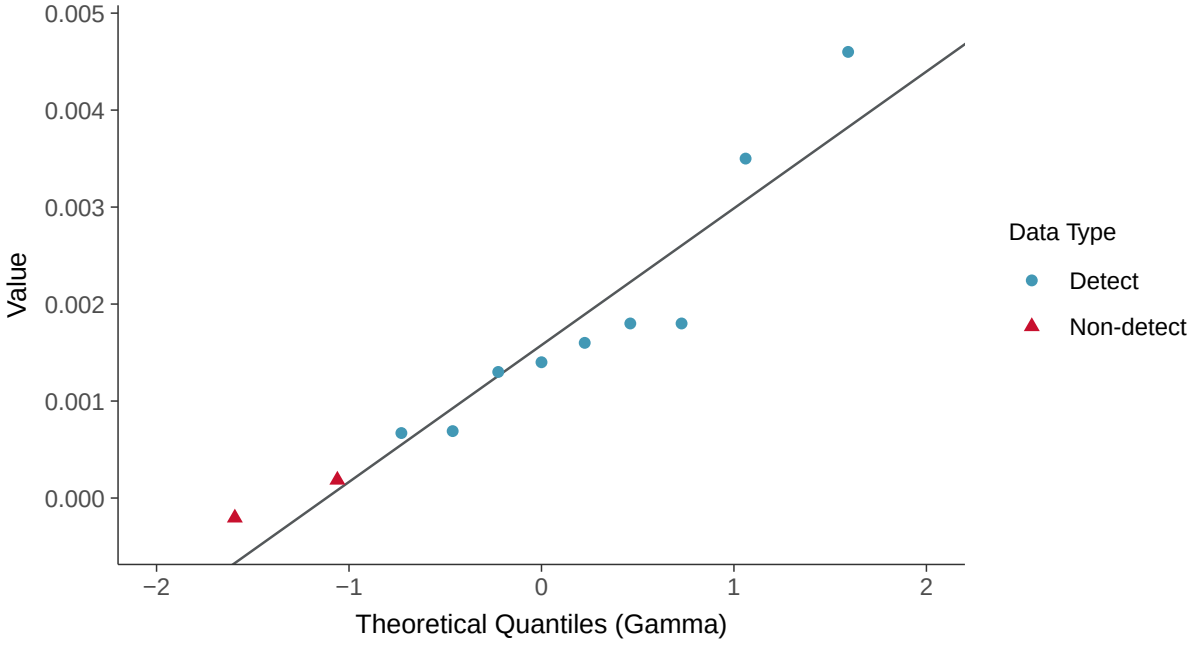
Lognormal Q-Q plot using ROS Imputed Estimates

Vanadium, MW-01R (mg/L)



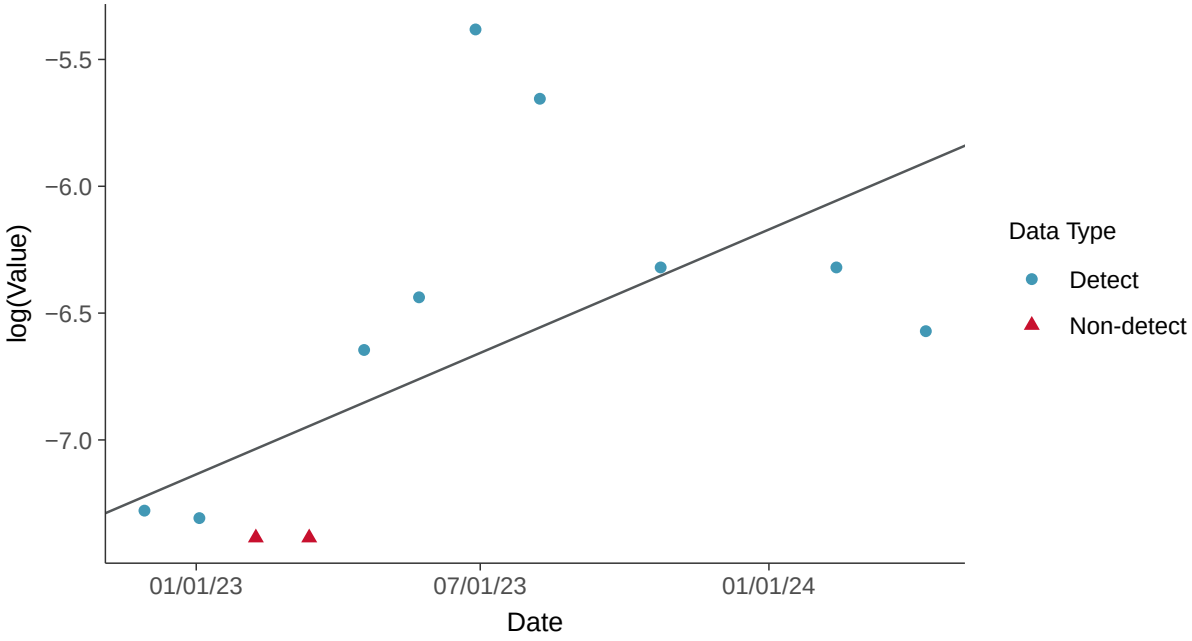
Gamma Q-Q plot using ROS Imputed Estimates

Vanadium, MW-01R (mg/L)



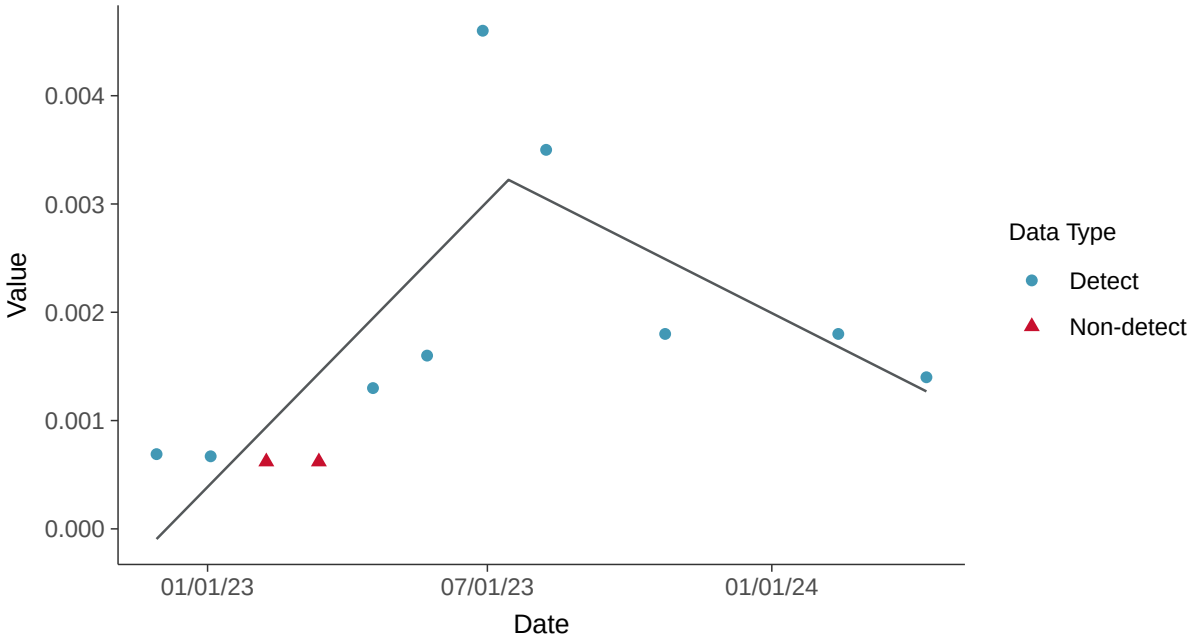
Trend Regression: Lognormal MLE

Vanadium, MW-01R (mg/L)



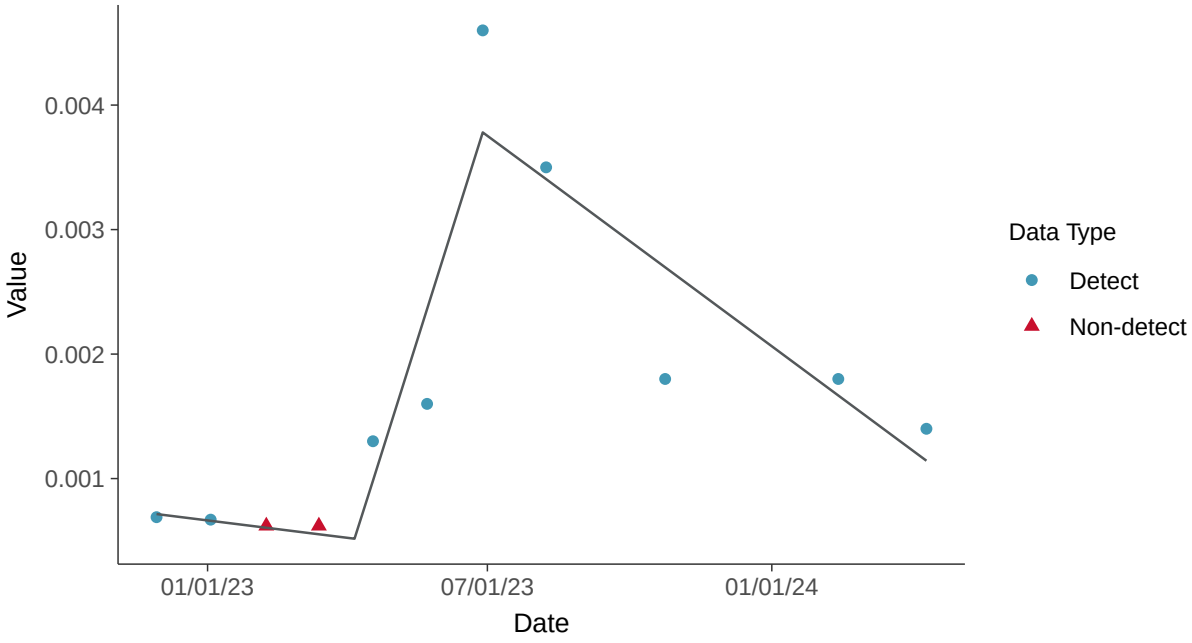
Trend Regression: Piecewise Linear-Linear

Vanadium, MW-01R (mg/L)



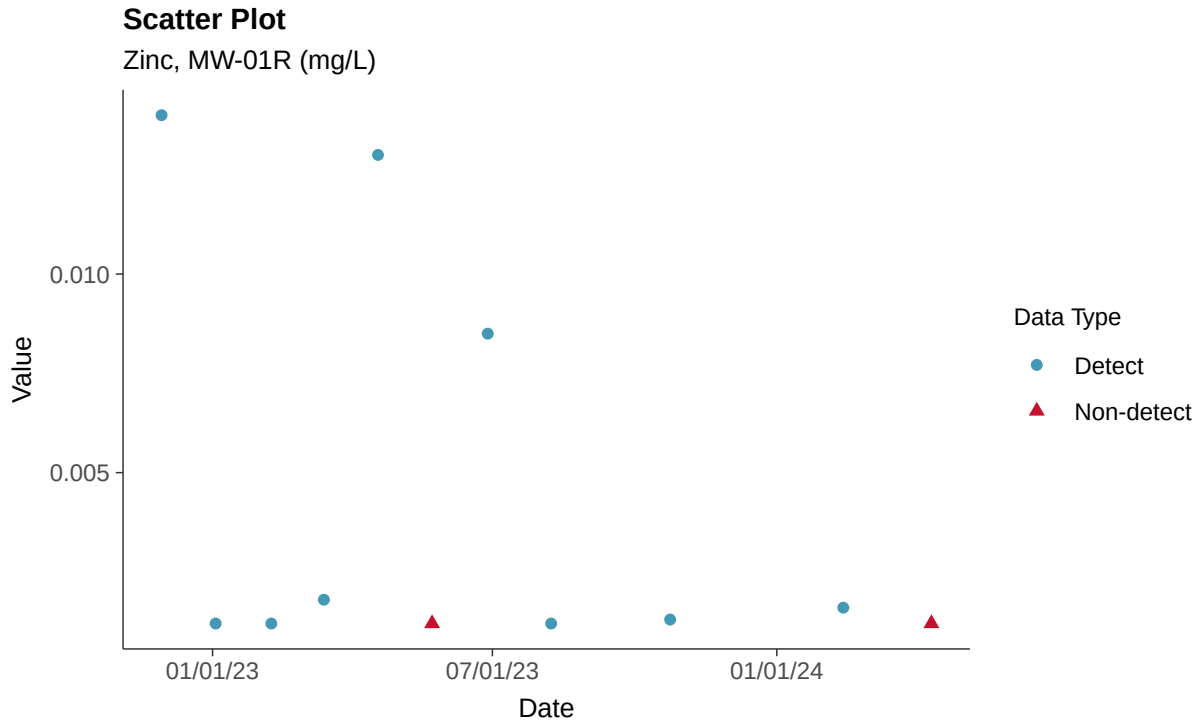
Trend Regression: Piecewise Linear-Linear-Linear

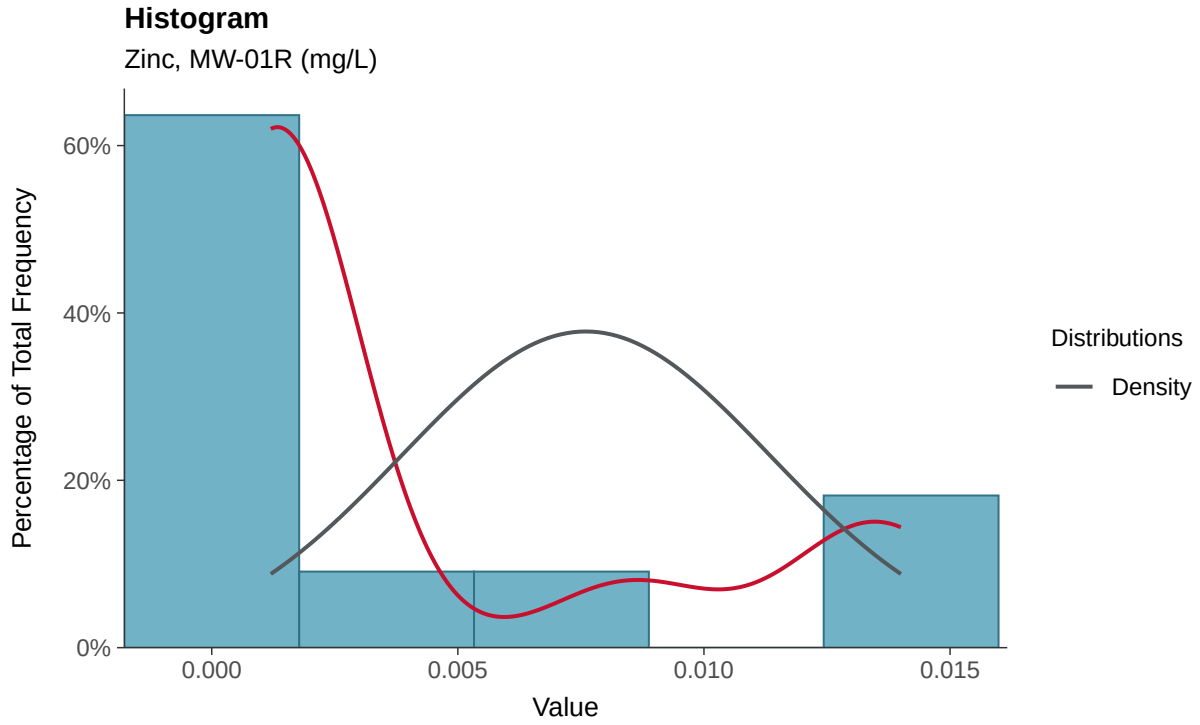
Vanadium, MW-01R (mg/L)



Part 115: Zinc, MW-01R

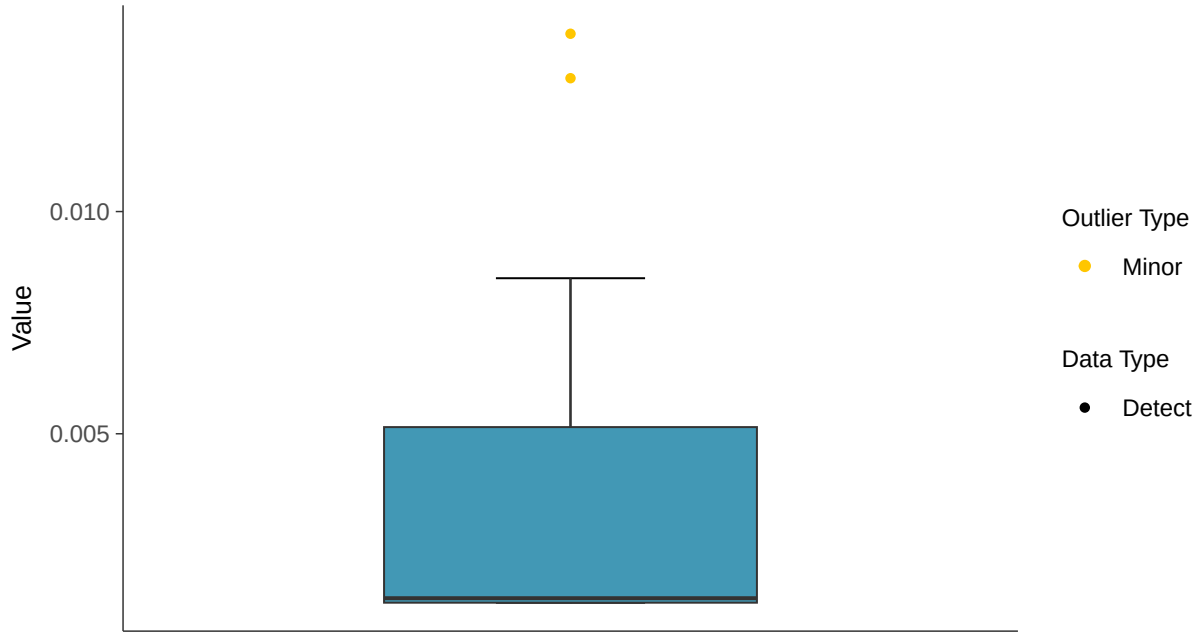
ID: 2_11_6_130





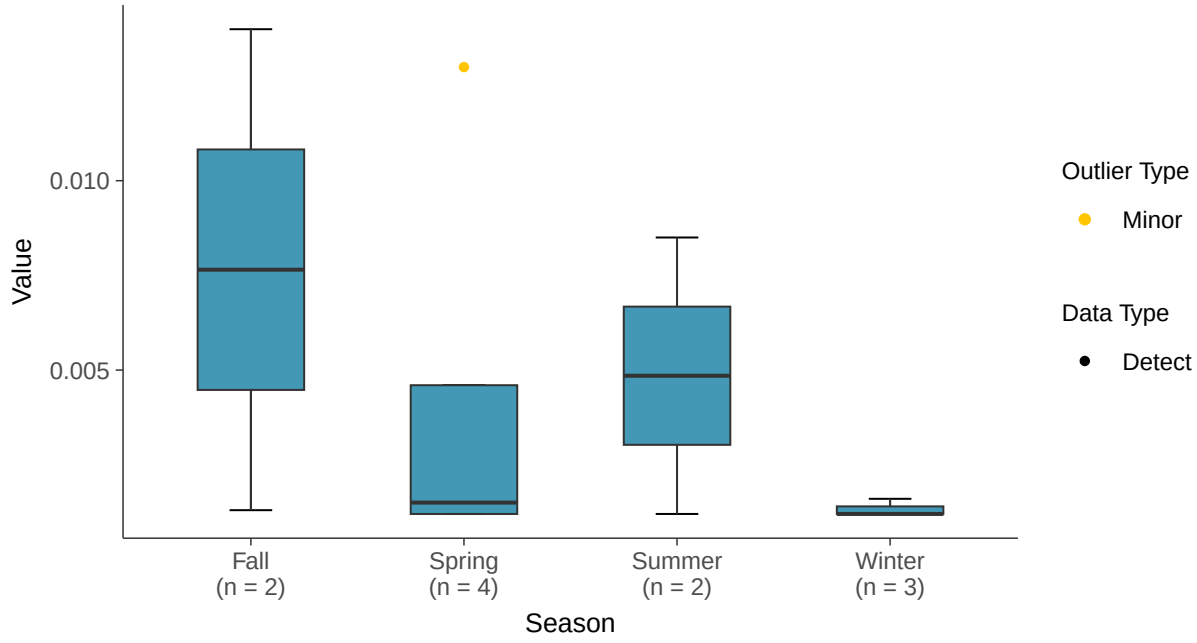
Boxplot

Zinc, MW-01R (mg/L)



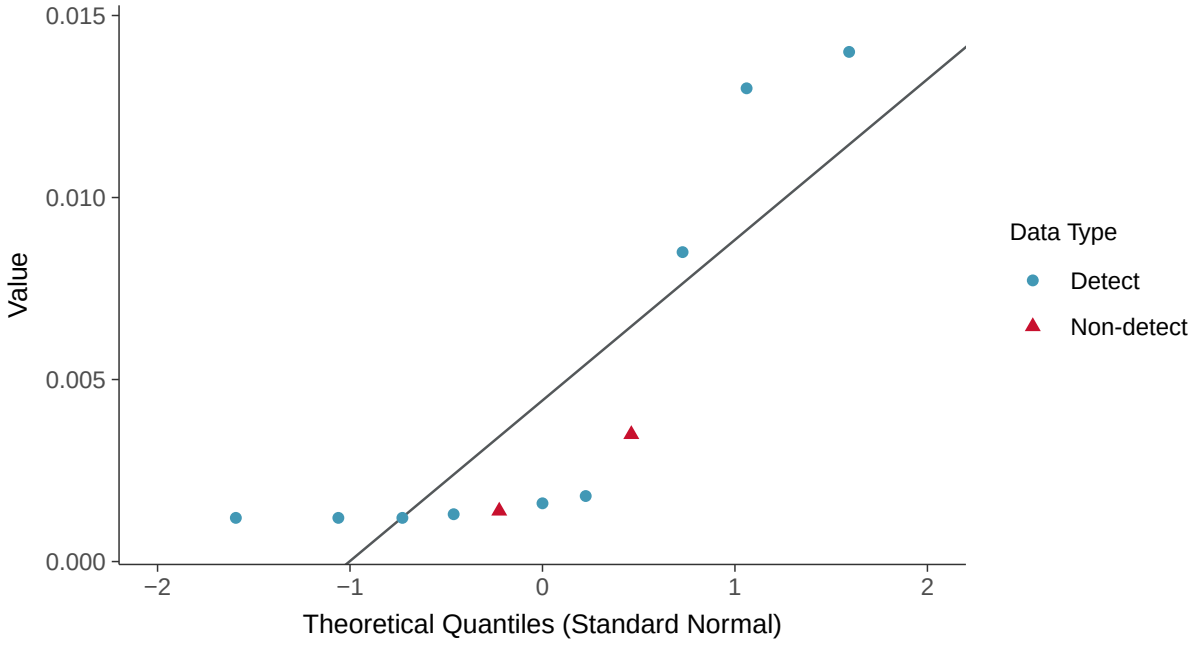
Boxplot by Season

Zinc, MW-01R (mg/L)



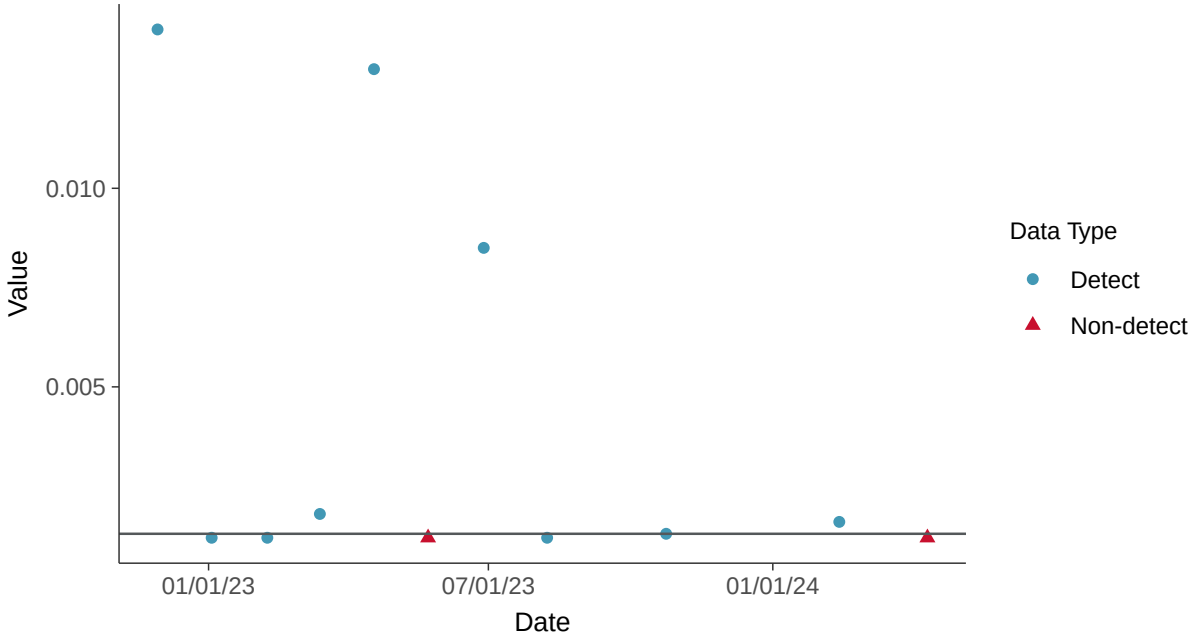
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-01R (mg/L)



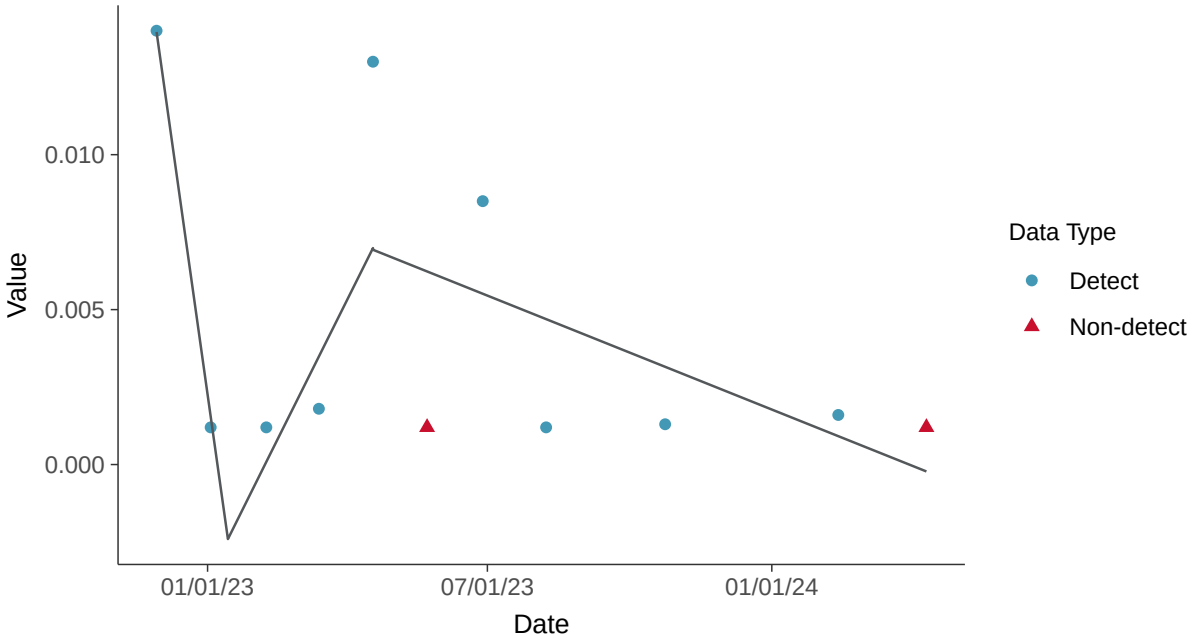
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Zinc, MW-01R (mg/L)



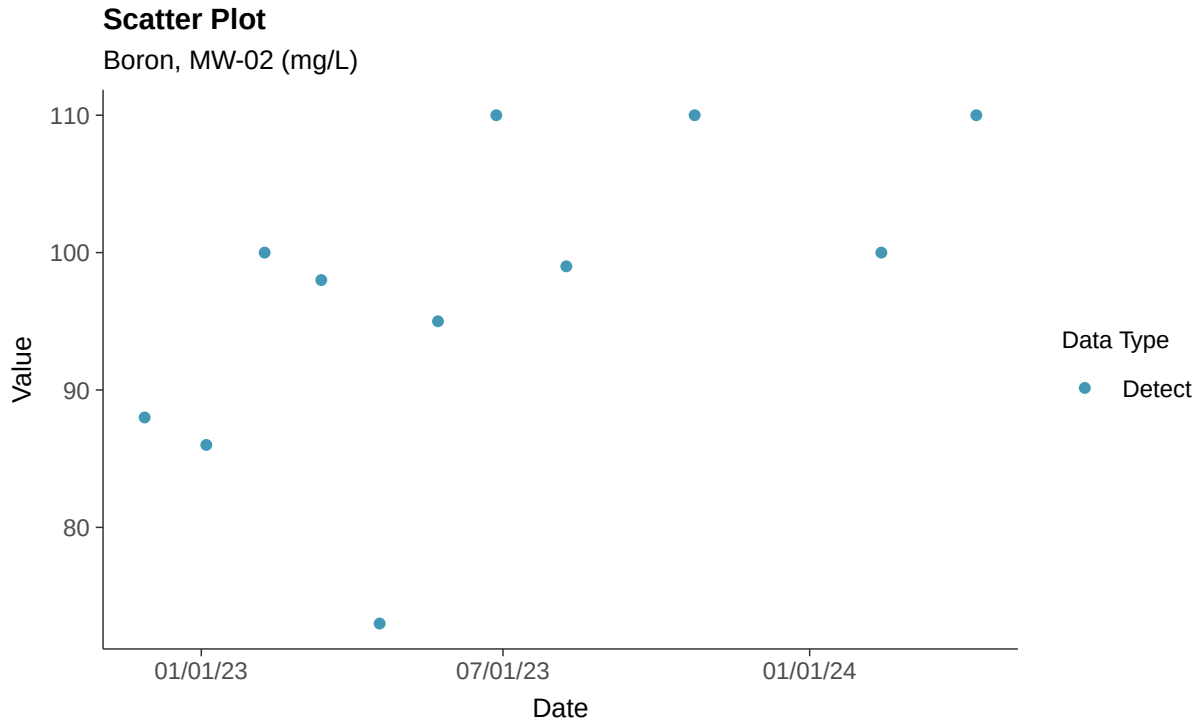
Trend Regression: Piecewise Linear-Linear-Linear

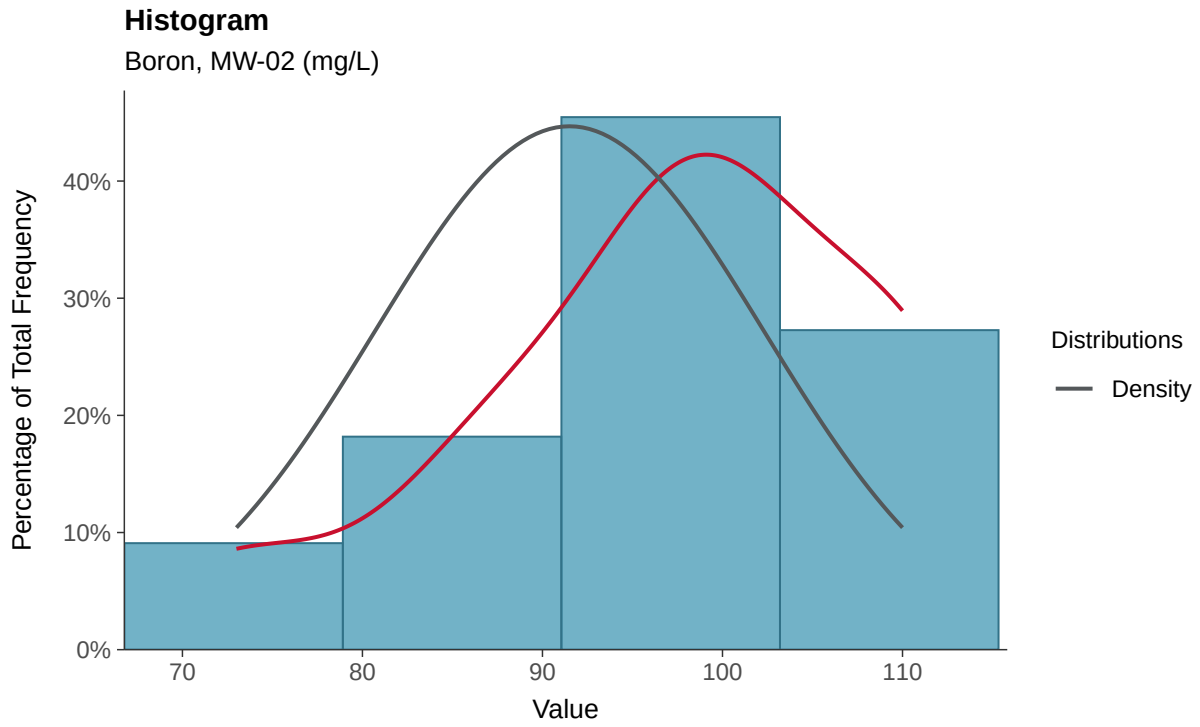
Zinc, MW-01R (mg/L)



Appendix III: Boron, MW-02

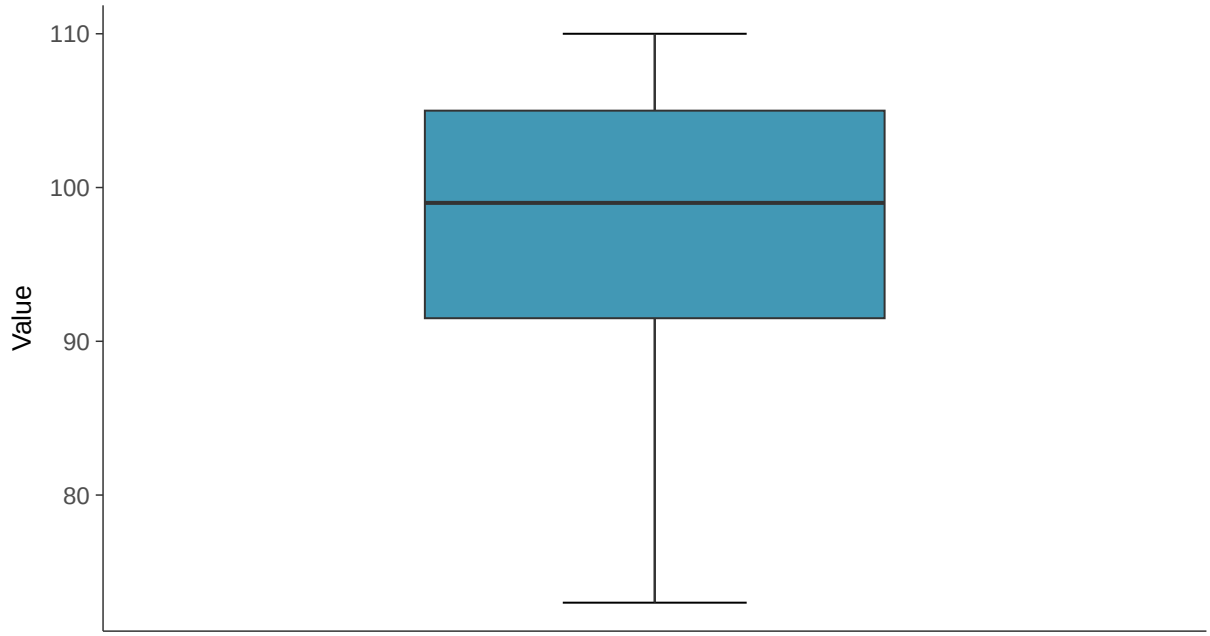
ID: 2_12_4_105





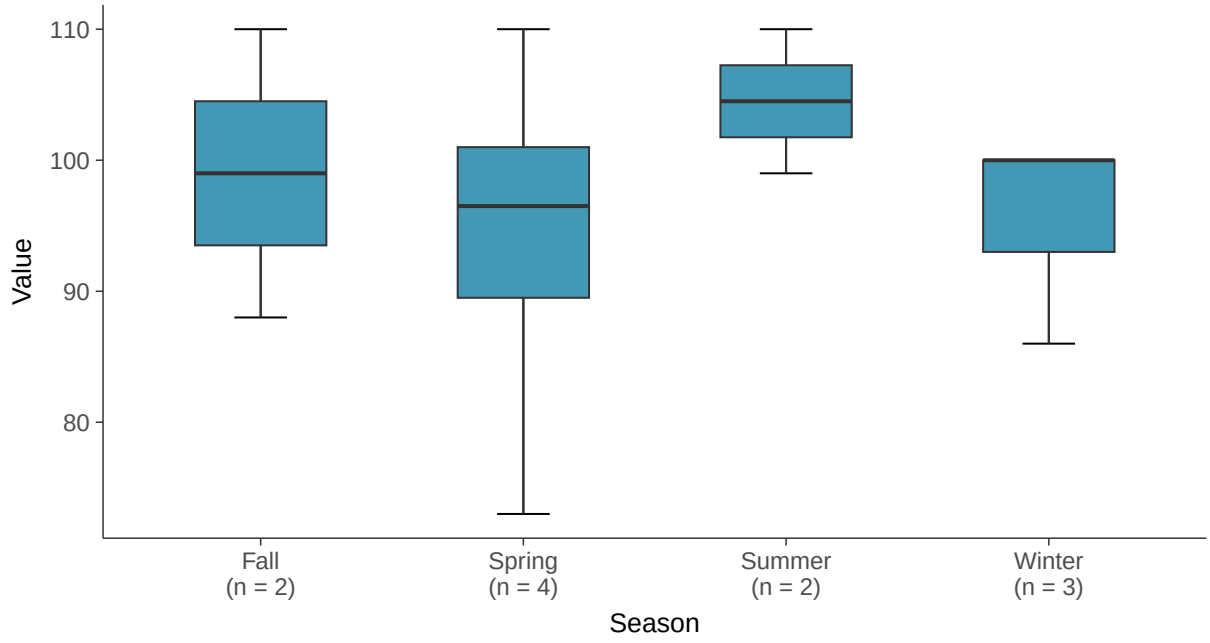
Boxplot

Boron, MW-02 (mg/L)



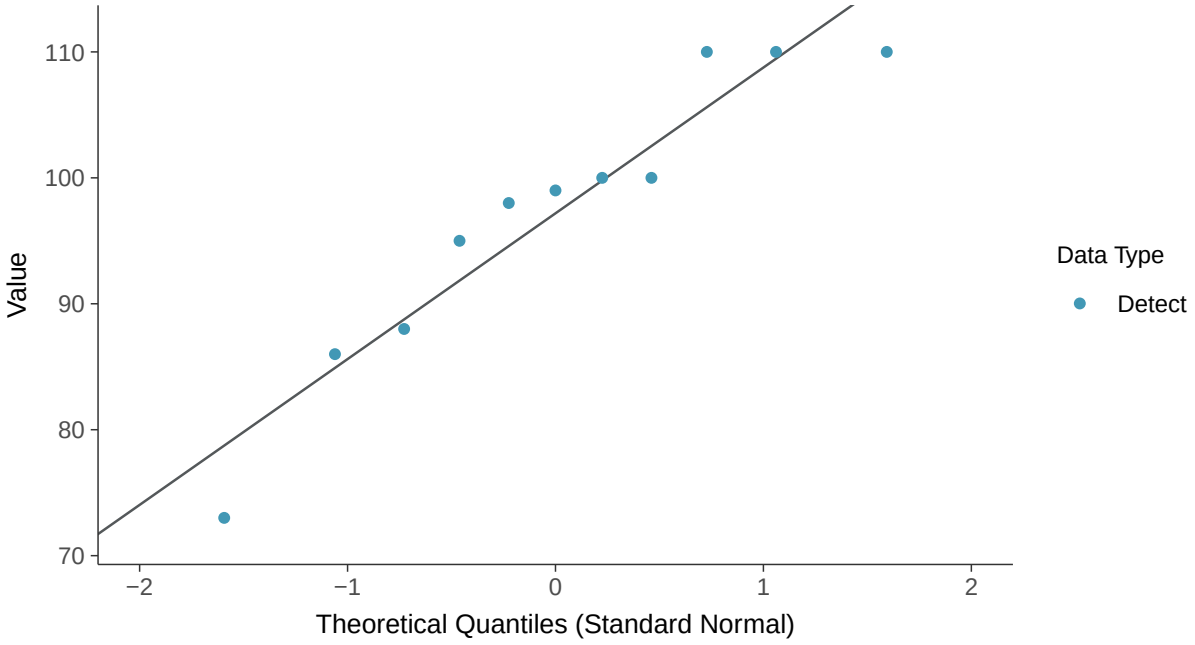
Boxplot by Season

Boron, MW-02 (mg/L)



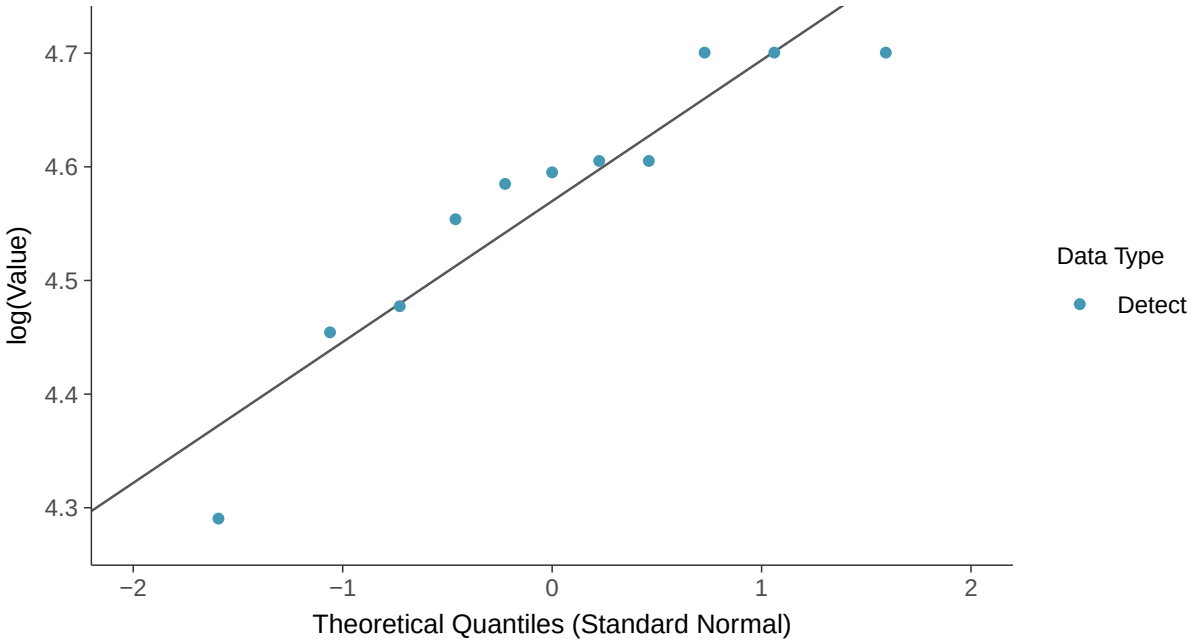
Normal Q-Q plot

Boron, MW-02 (mg/L)



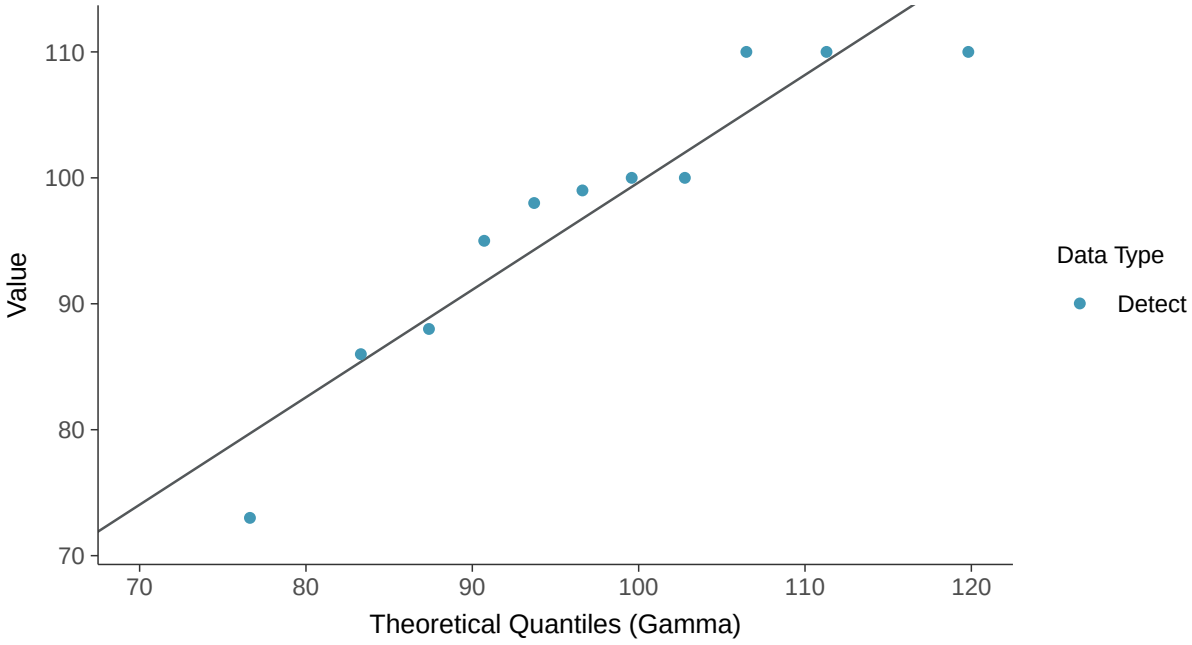
Lognormal Q-Q plot

Boron, MW-02 (mg/L)



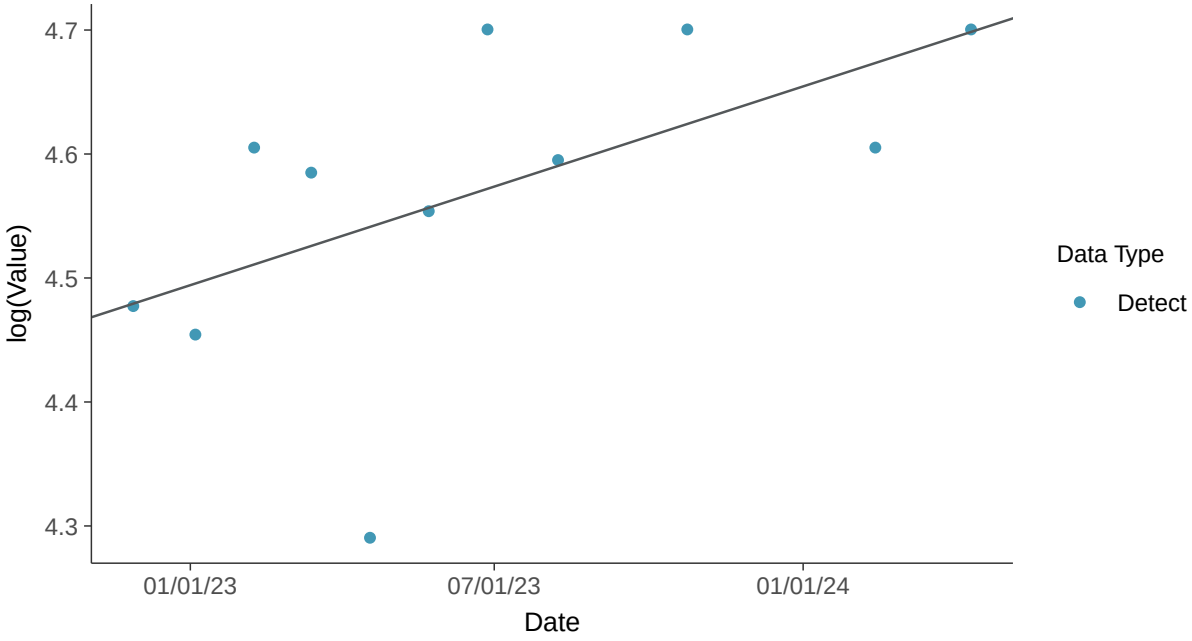
Gamma Q-Q plot

Boron, MW-02 (mg/L)



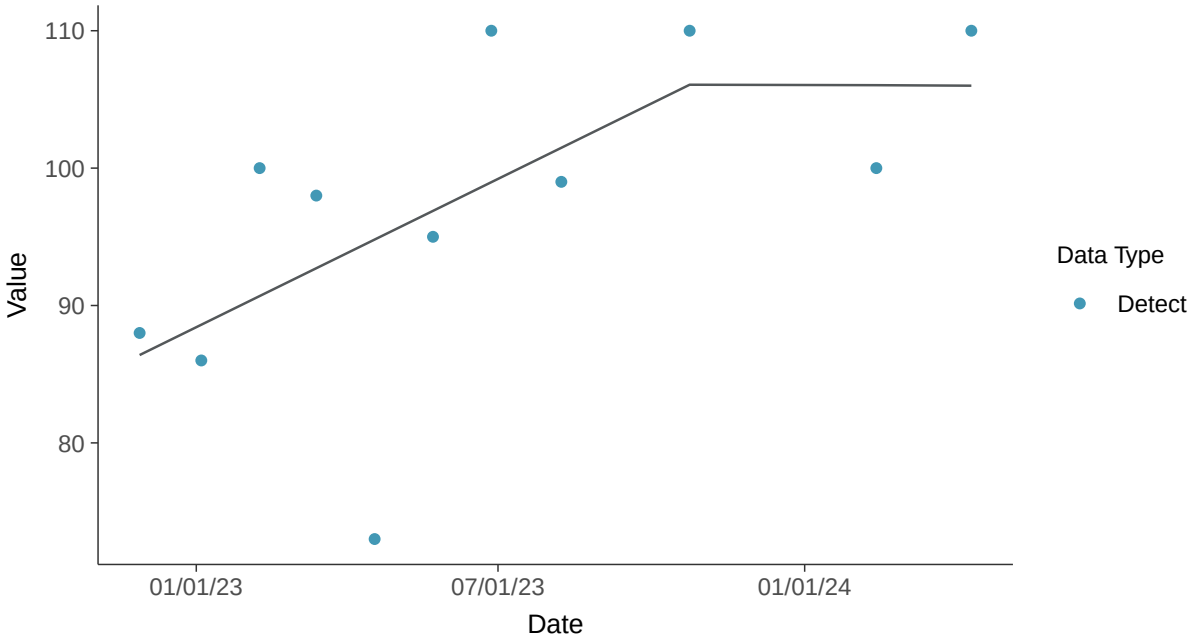
Trend Regression: Lognormal MLE

Boron, MW-02 (mg/L)



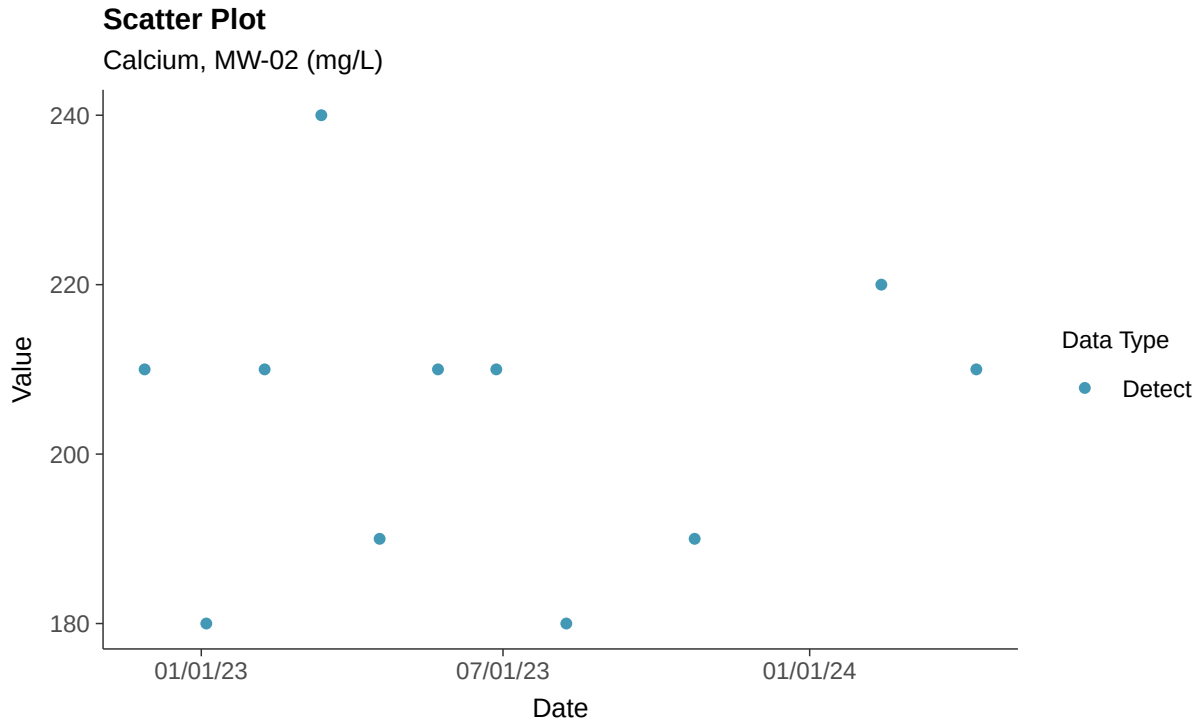
Trend Regression: Piecewise Linear-Linear

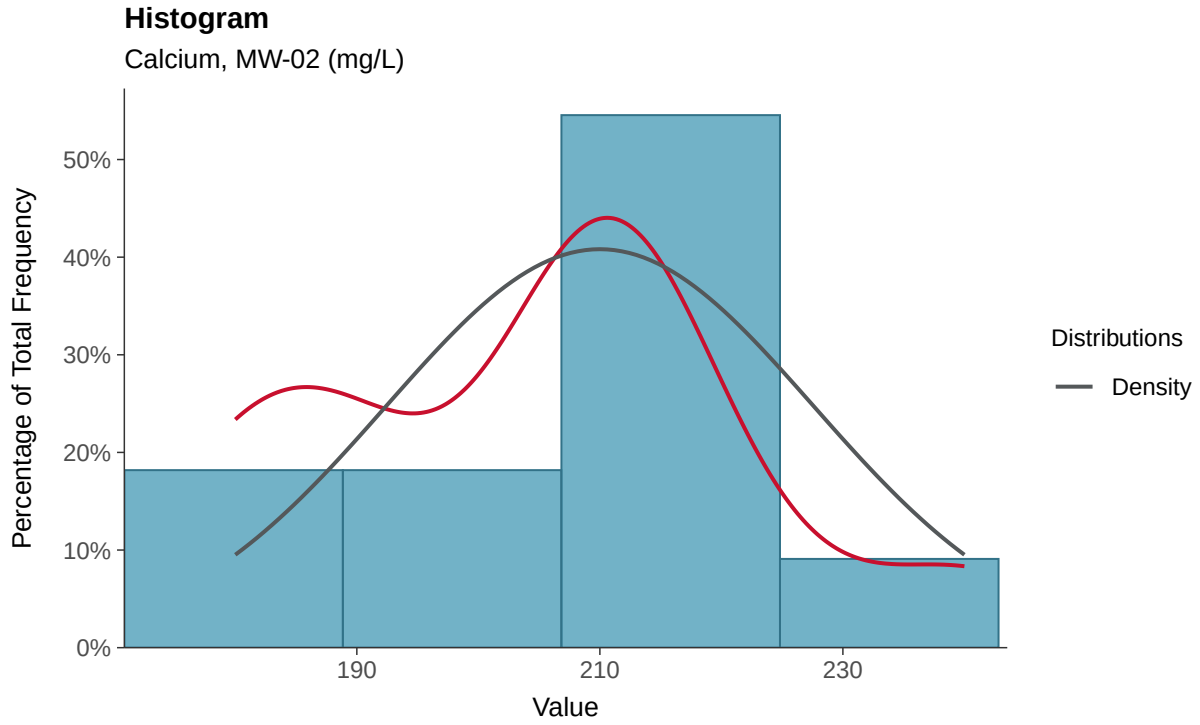
Boron, MW-02 (mg/L)



Appendix III: Calcium, MW-02

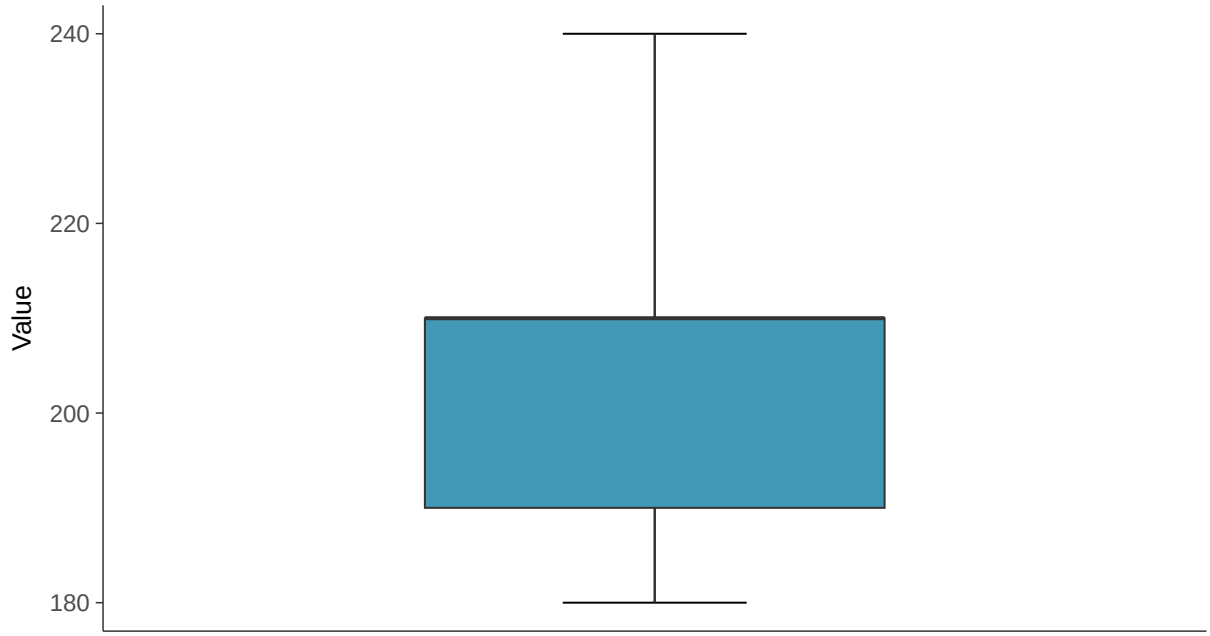
ID: 2_12_4_107





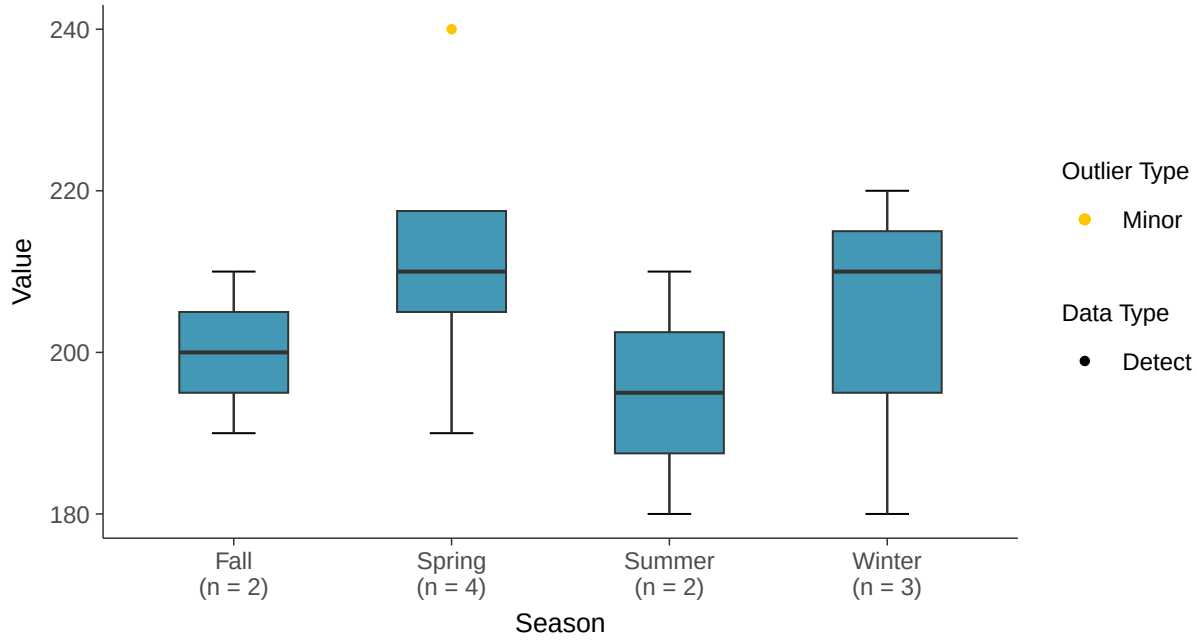
Boxplot

Calcium, MW-02 (mg/L)



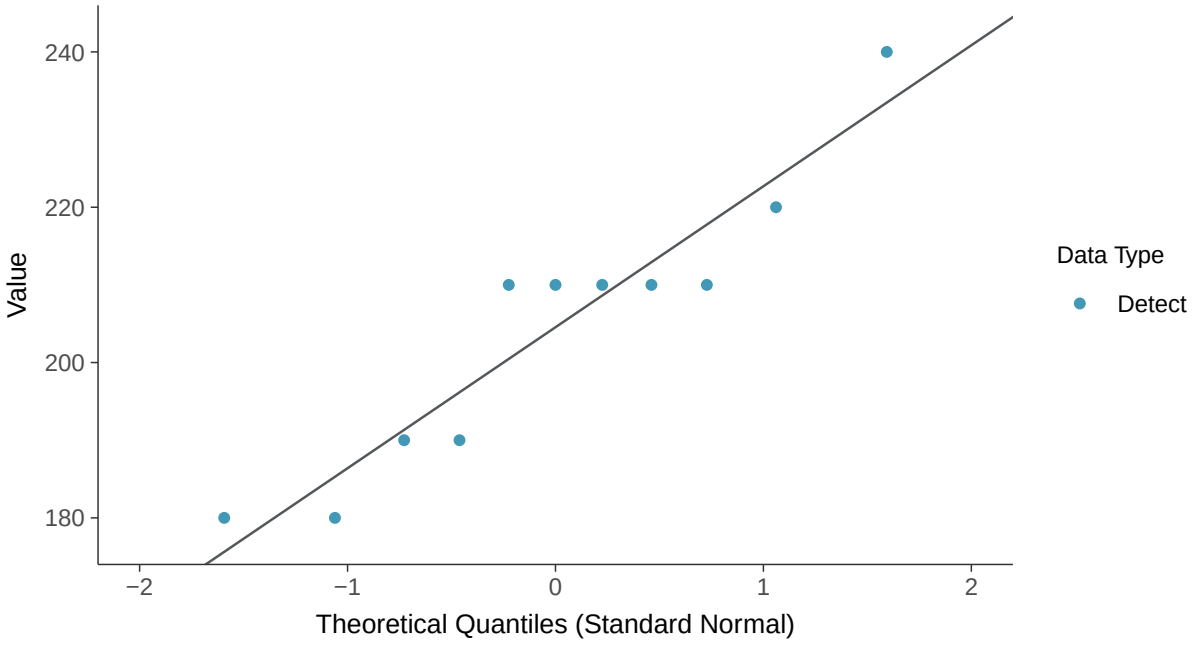
Boxplot by Season

Calcium, MW-02 (mg/L)



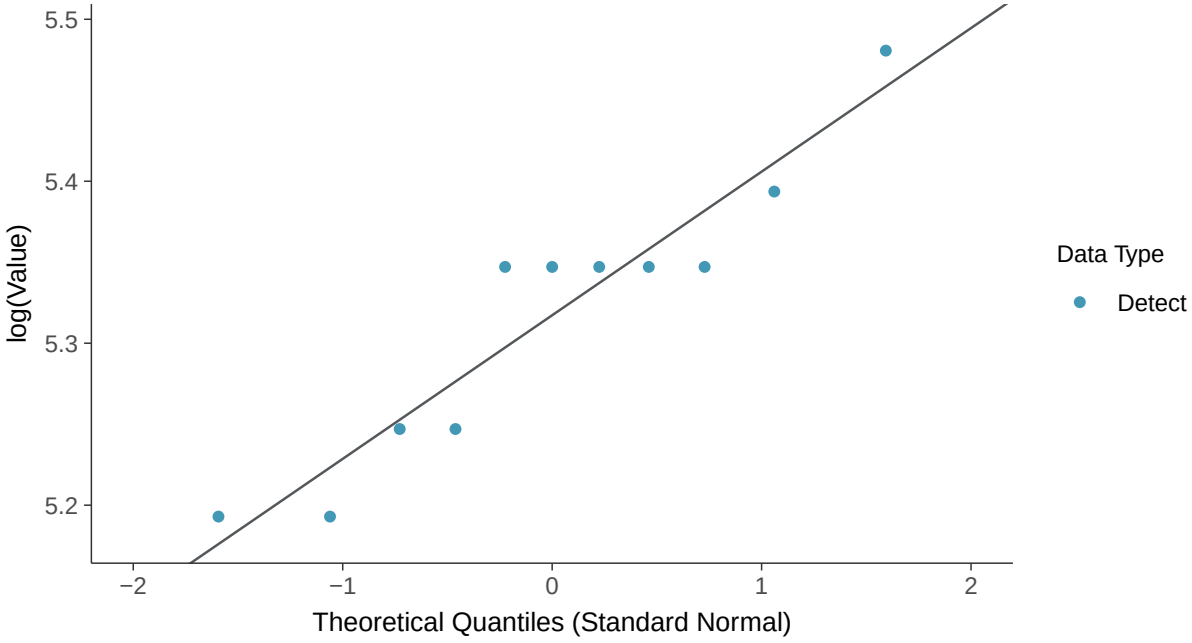
Normal Q-Q plot

Calcium, MW-02 (mg/L)



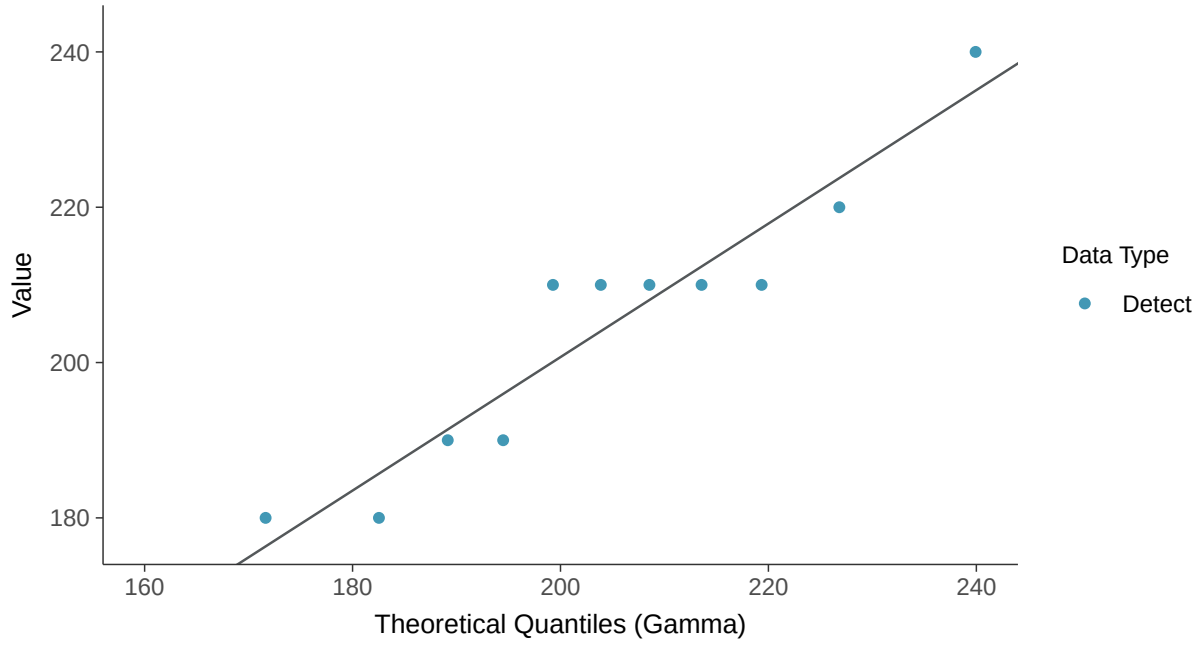
Lognormal Q-Q plot

Calcium, MW-02 (mg/L)



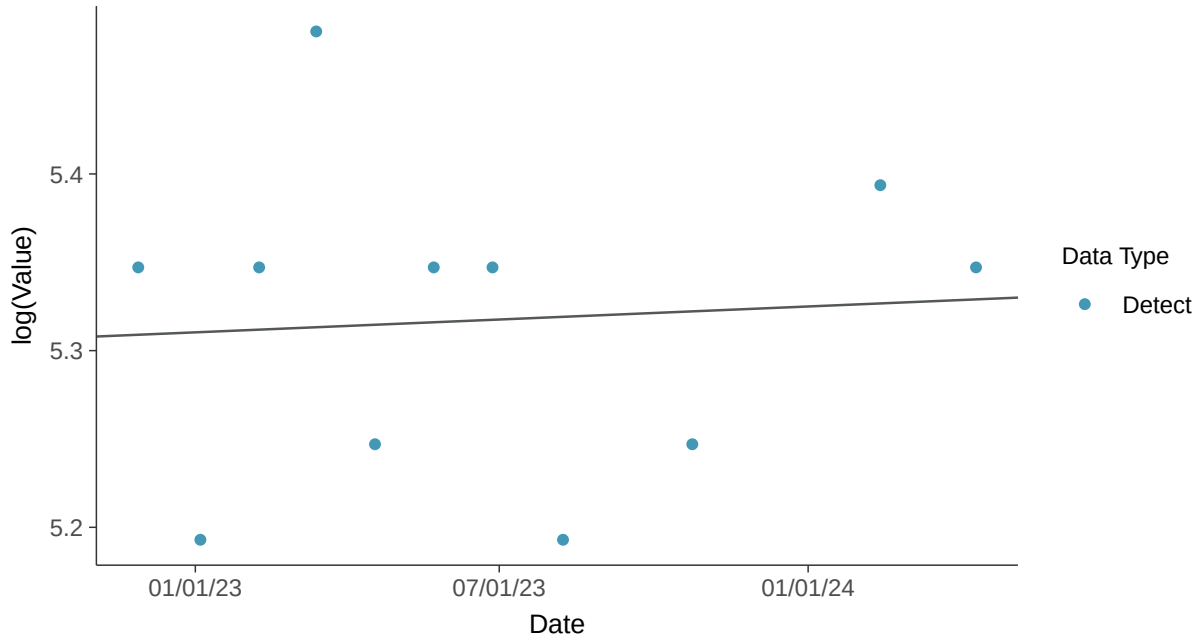
Gamma Q-Q plot

Calcium, MW-02 (mg/L)



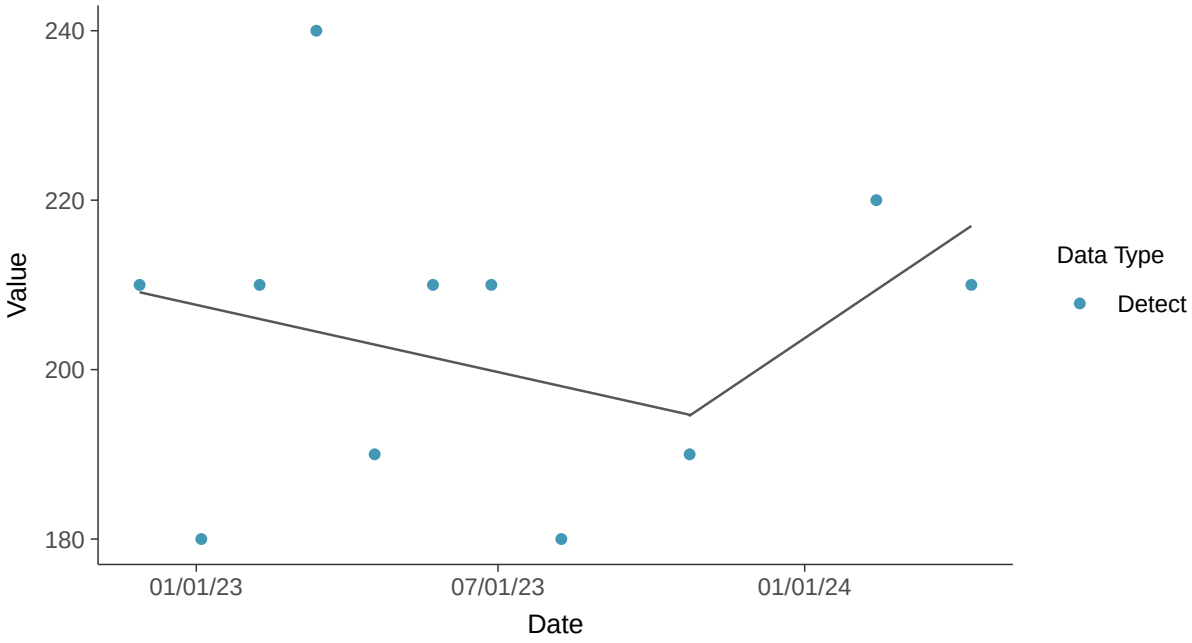
Trend Regression: Lognormal MLE

Calcium, MW-02 (mg/L)



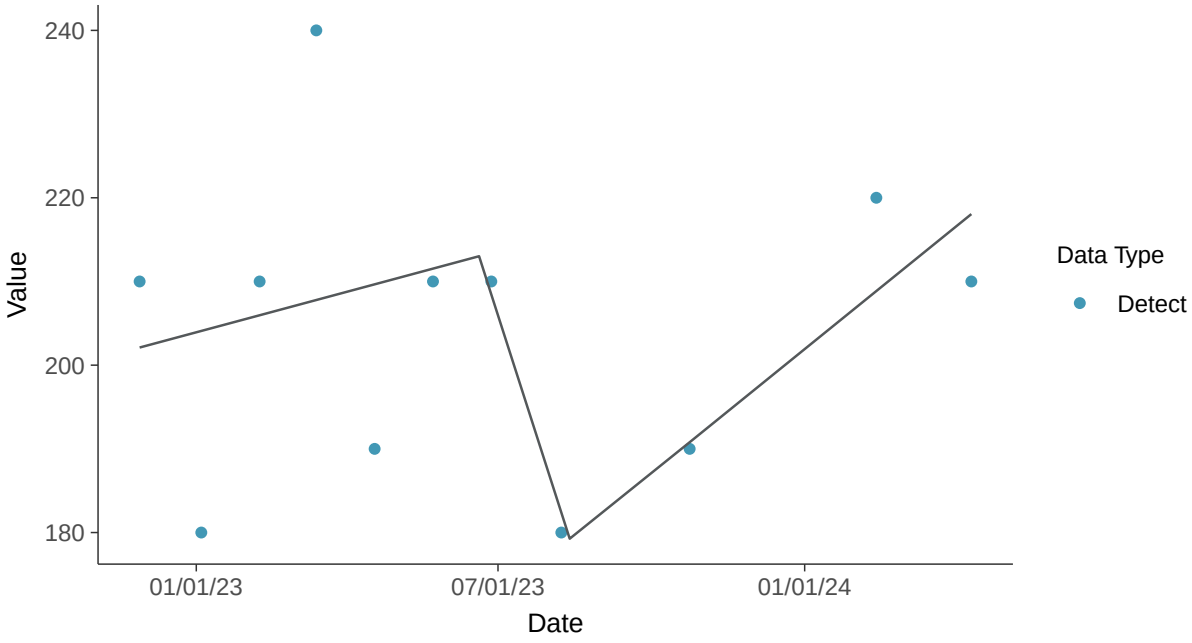
Trend Regression: Piecewise Linear-Linear

Calcium, MW-02 (mg/L)



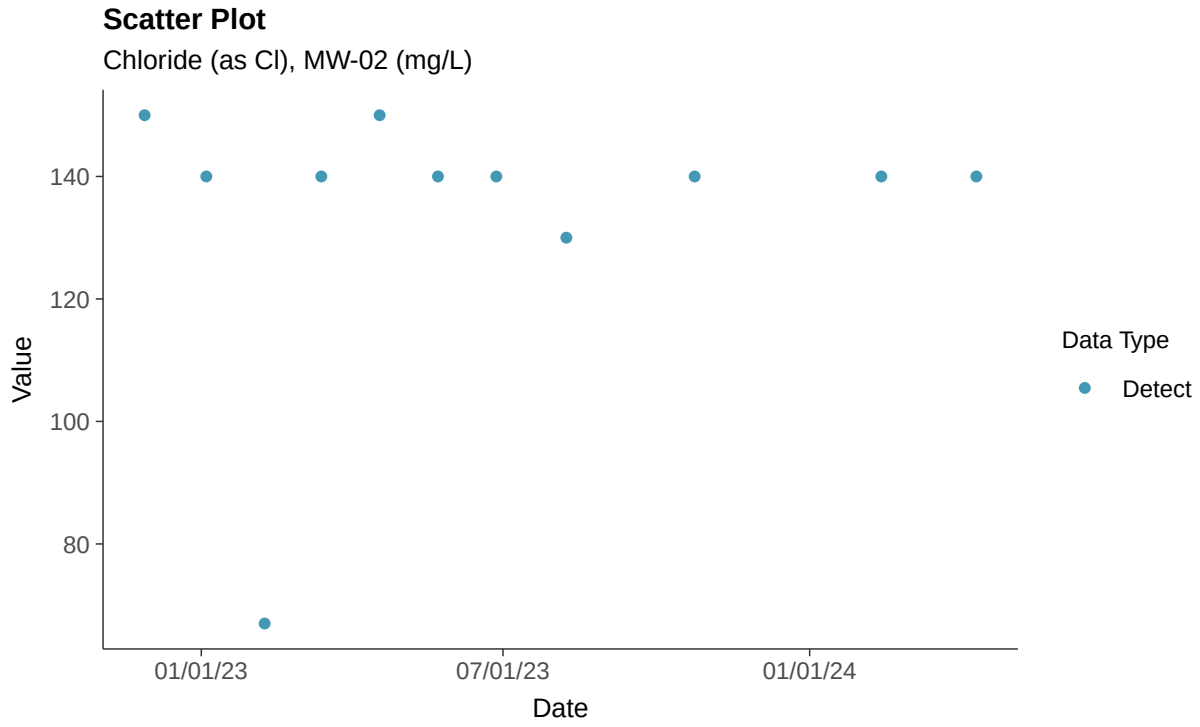
Trend Regression: Piecewise Linear-Linear-Linear

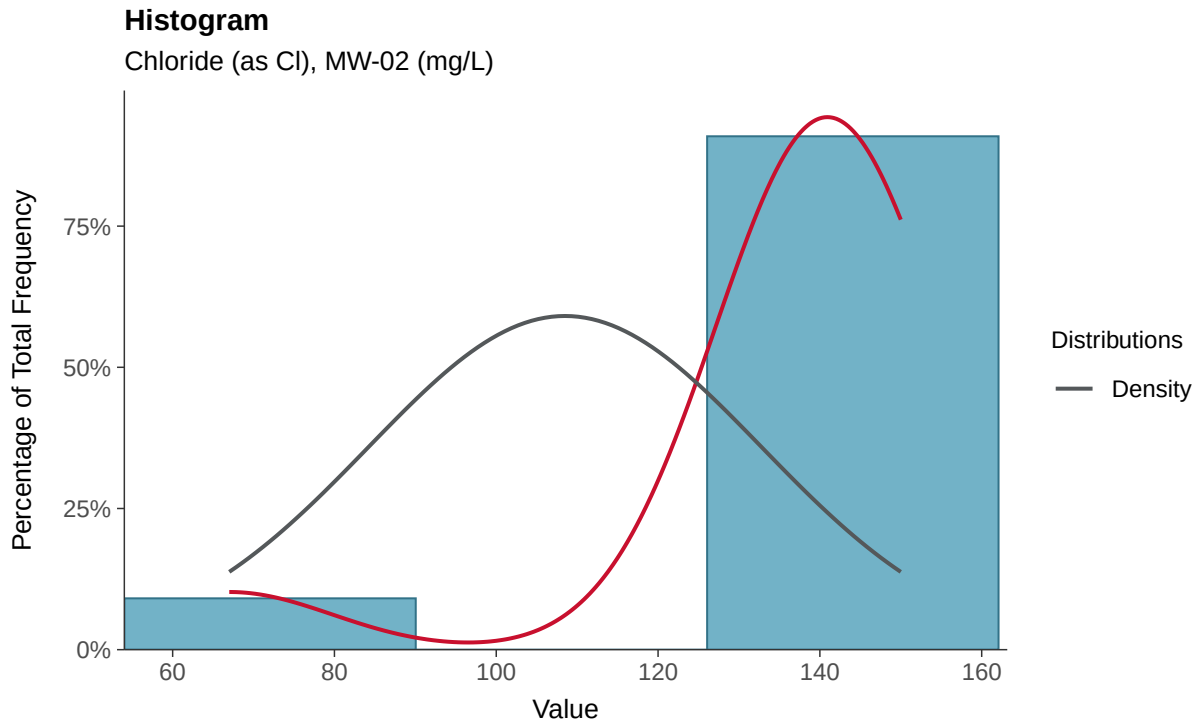
Calcium, MW-02 (mg/L)



Appendix III: Chloride (as Cl), MW-02

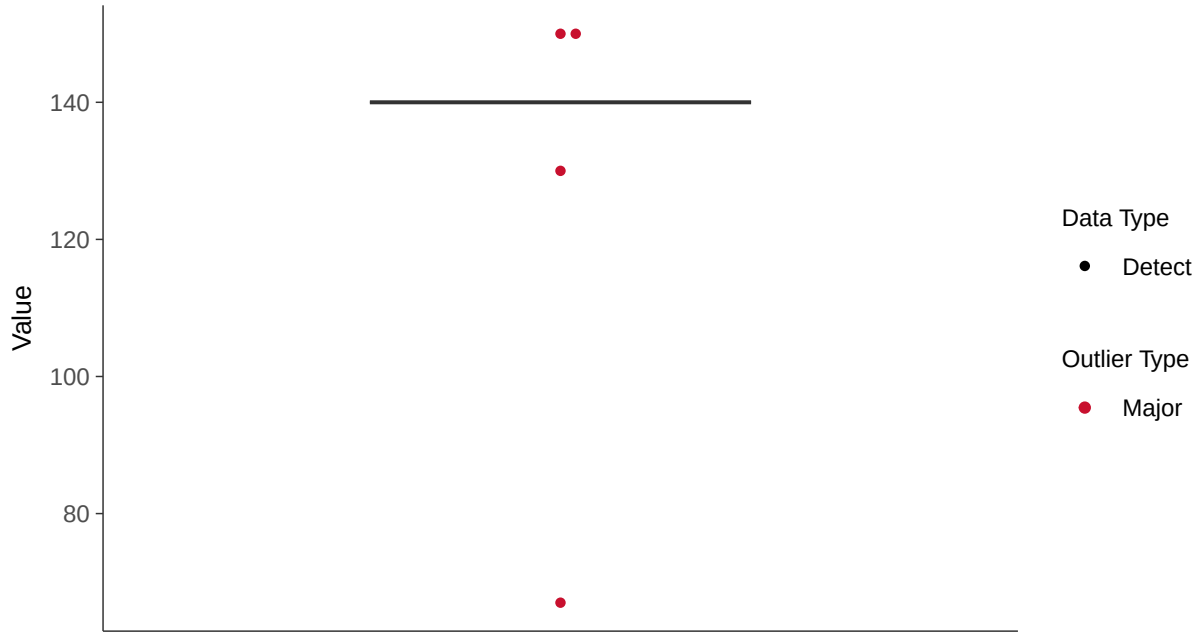
ID: 2_12_4_108





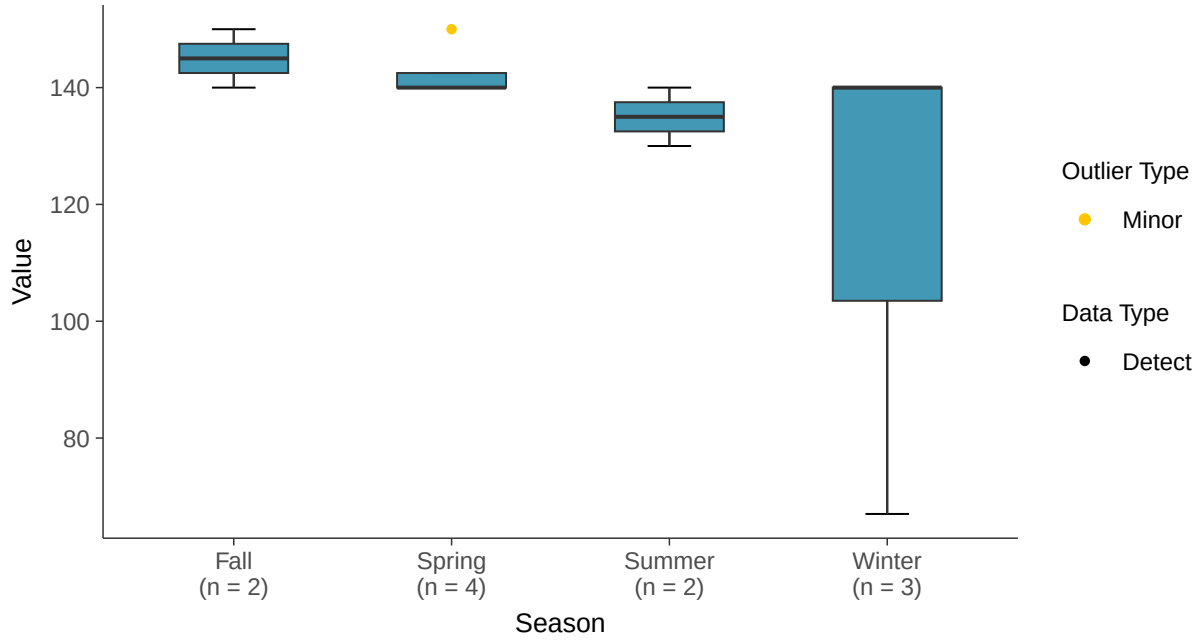
Boxplot

Chloride (as Cl), MW-02 (mg/L)



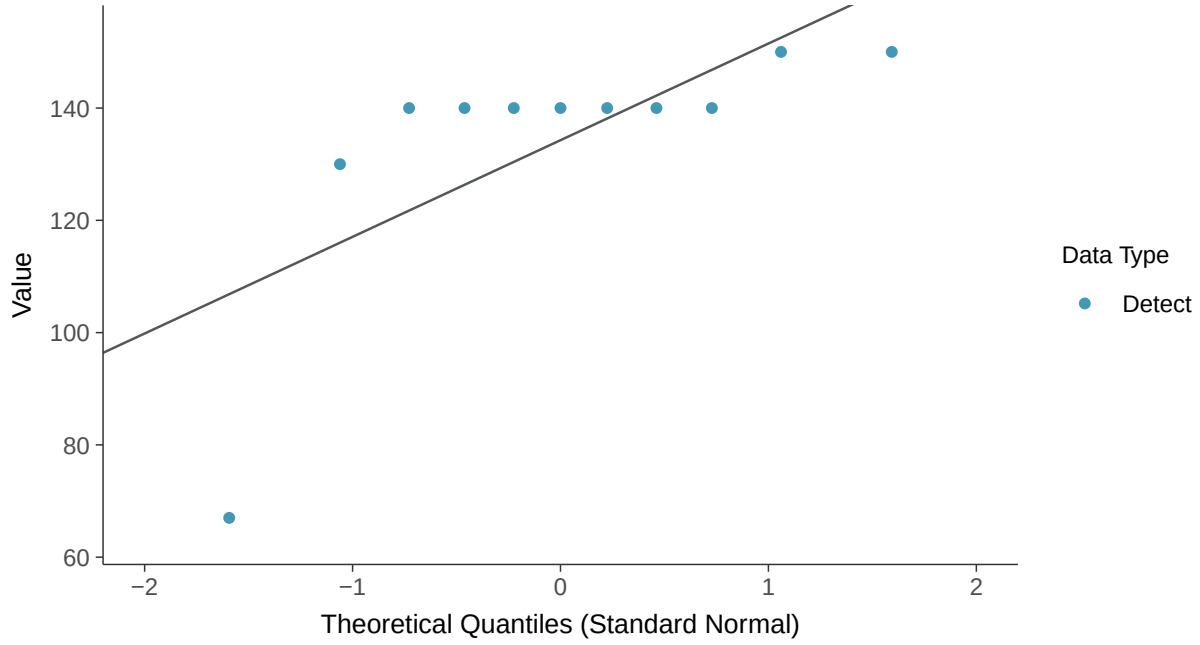
Boxplot by Season

Chloride (as Cl), MW-02 (mg/L)



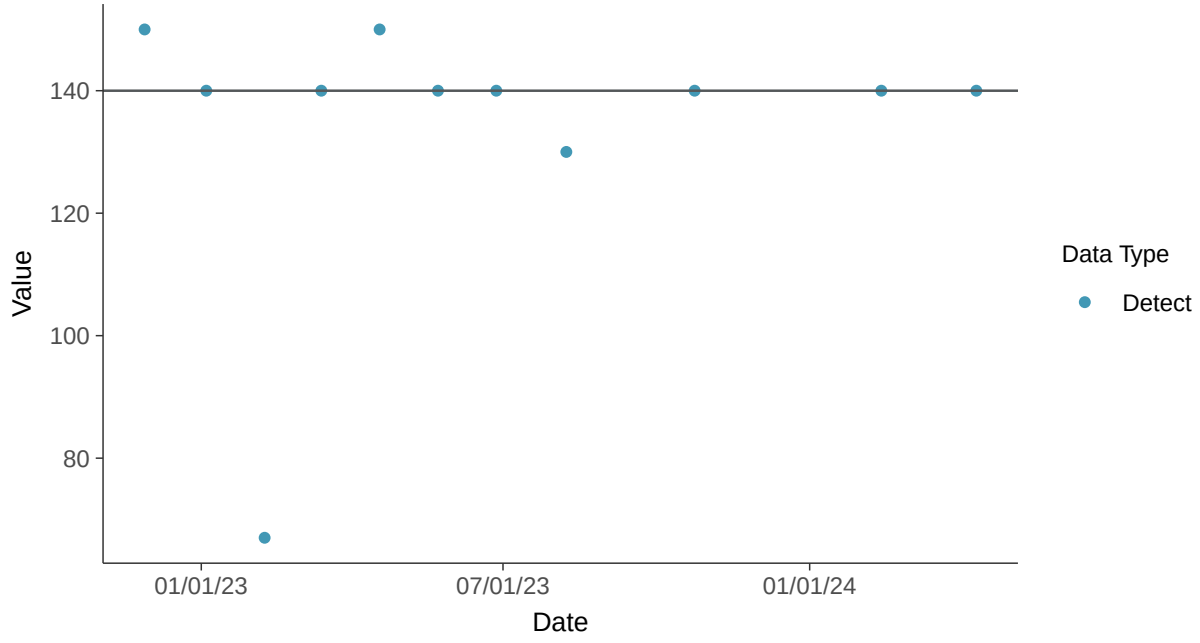
Normal Q-Q plot

Chloride (as Cl), MW-02 (mg/L)



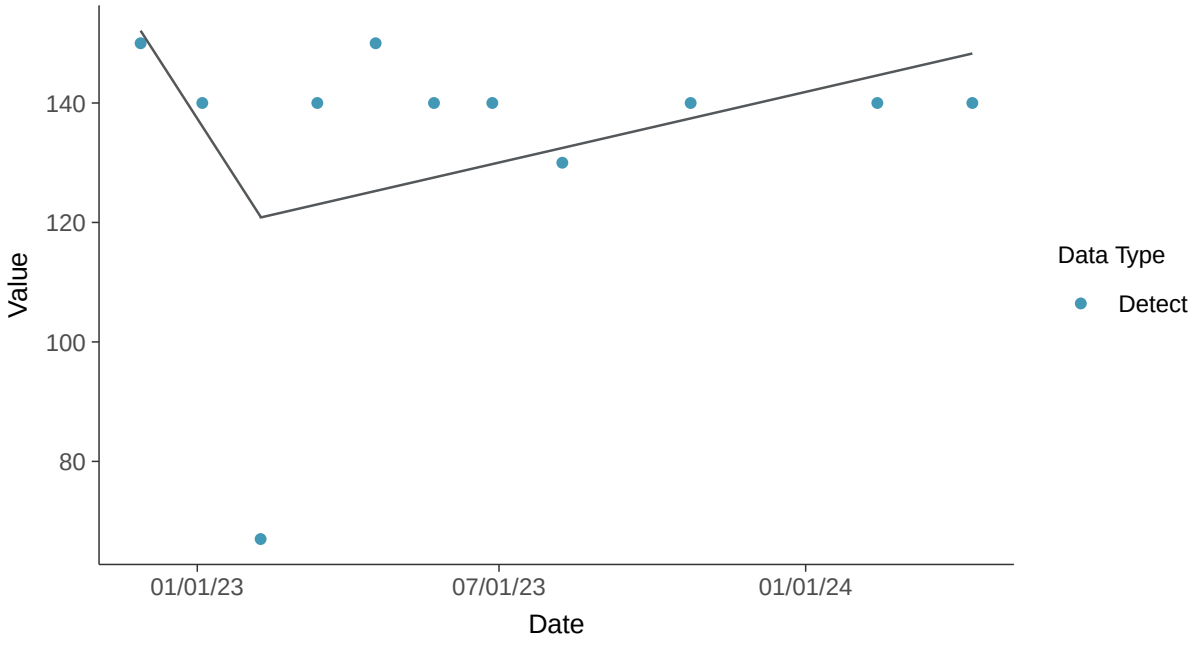
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Chloride (as Cl), MW-02 (mg/L)



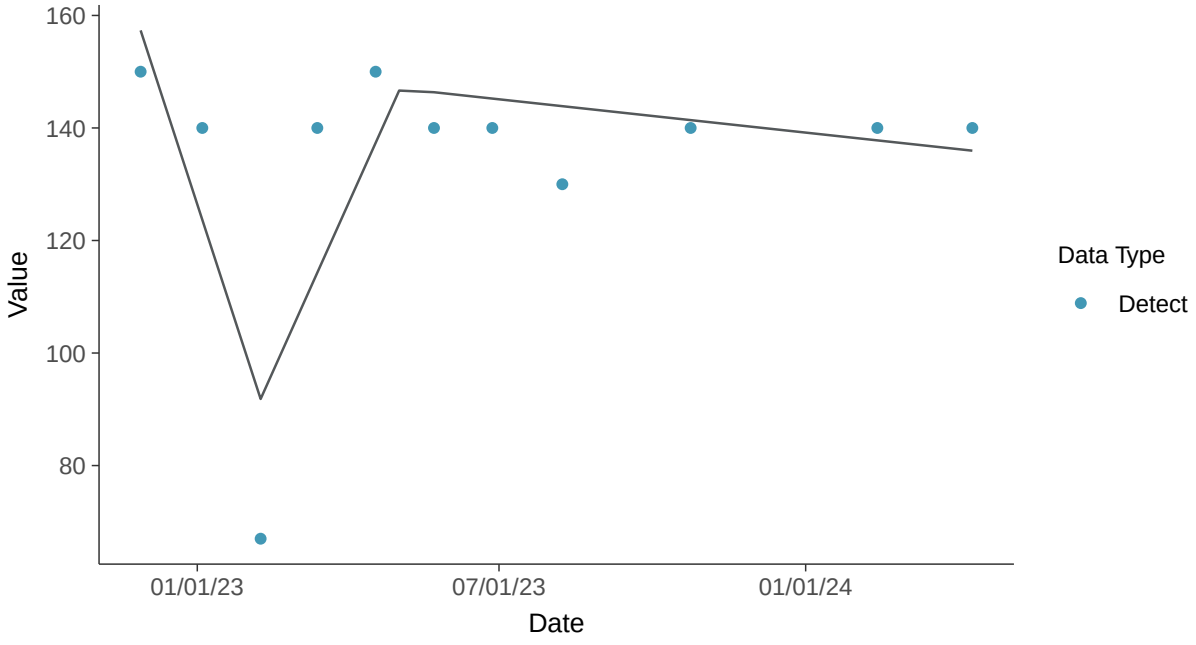
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-02 (mg/L)



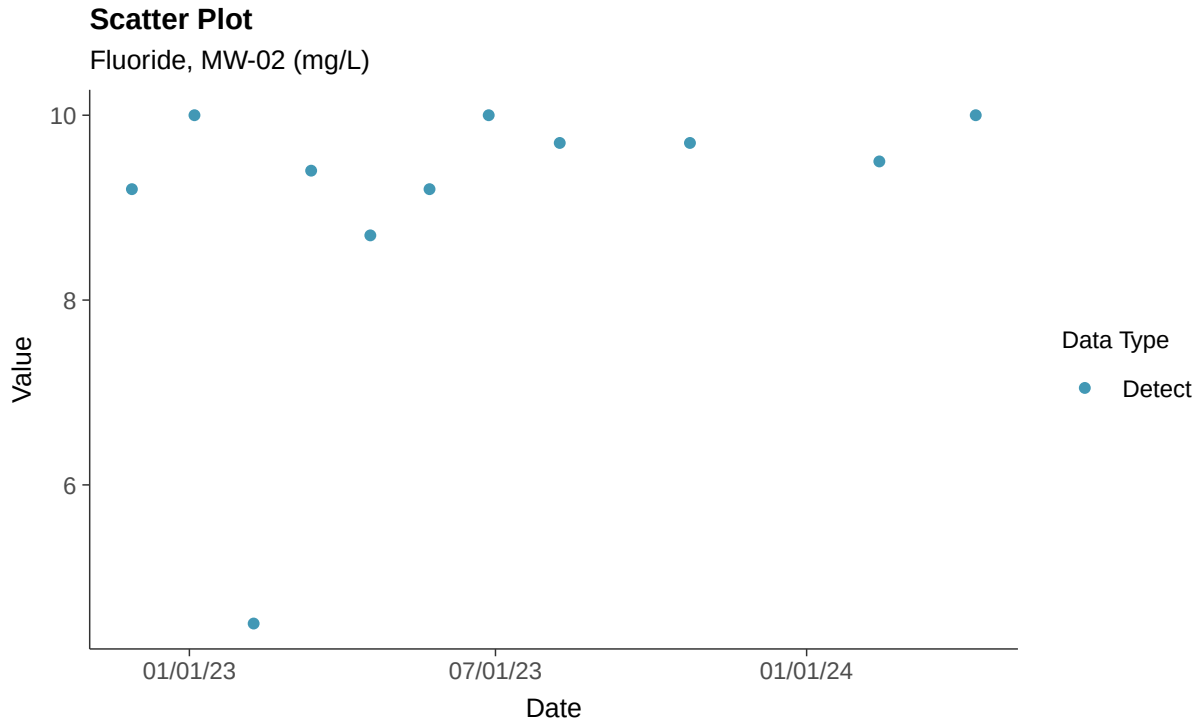
Trend Regression: Piecewise Linear-Linear-Linear

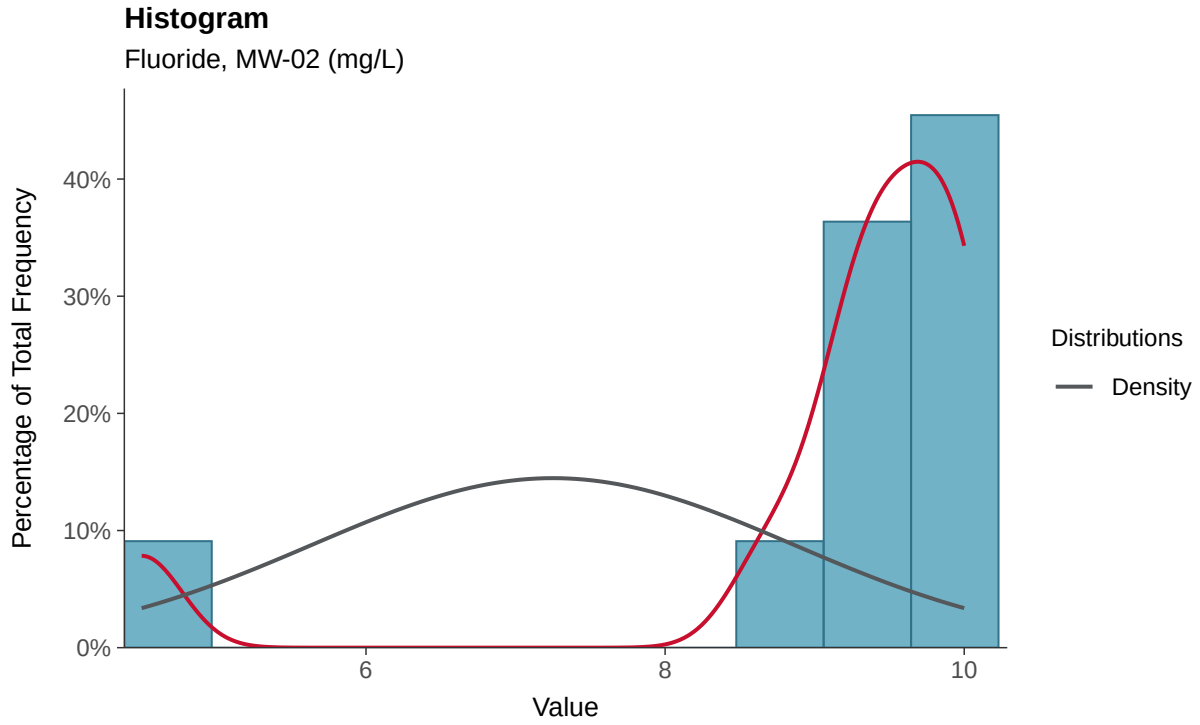
Chloride (as Cl), MW-02 (mg/L)



Appendix III: Fluoride, MW-02

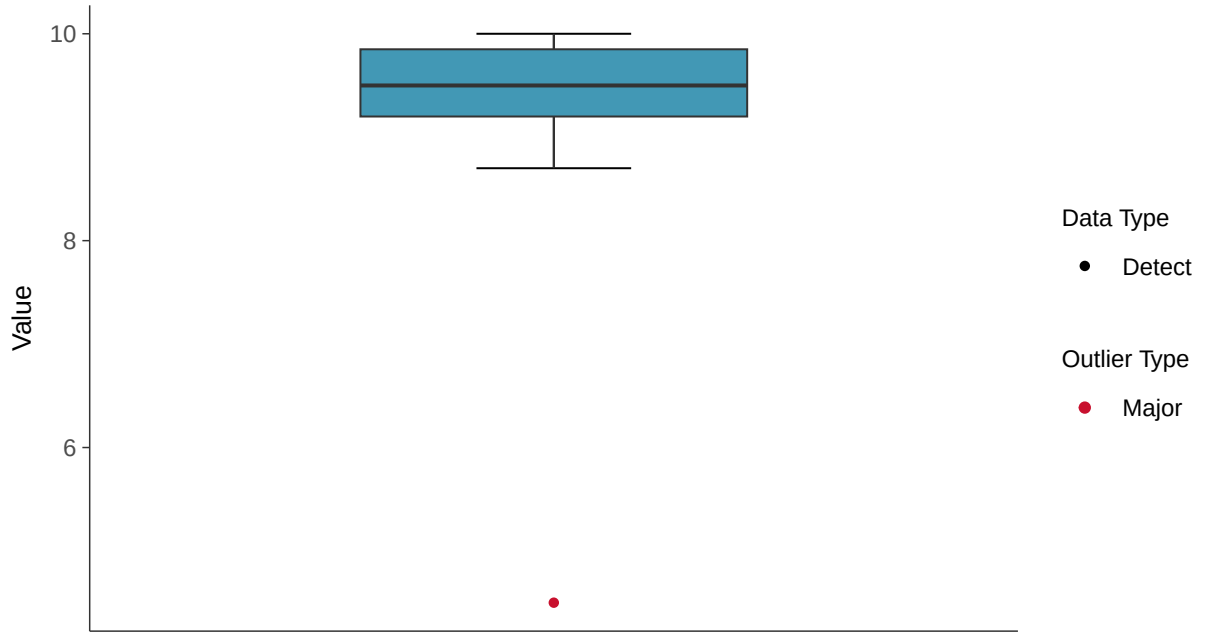
ID: 2_12_4_112





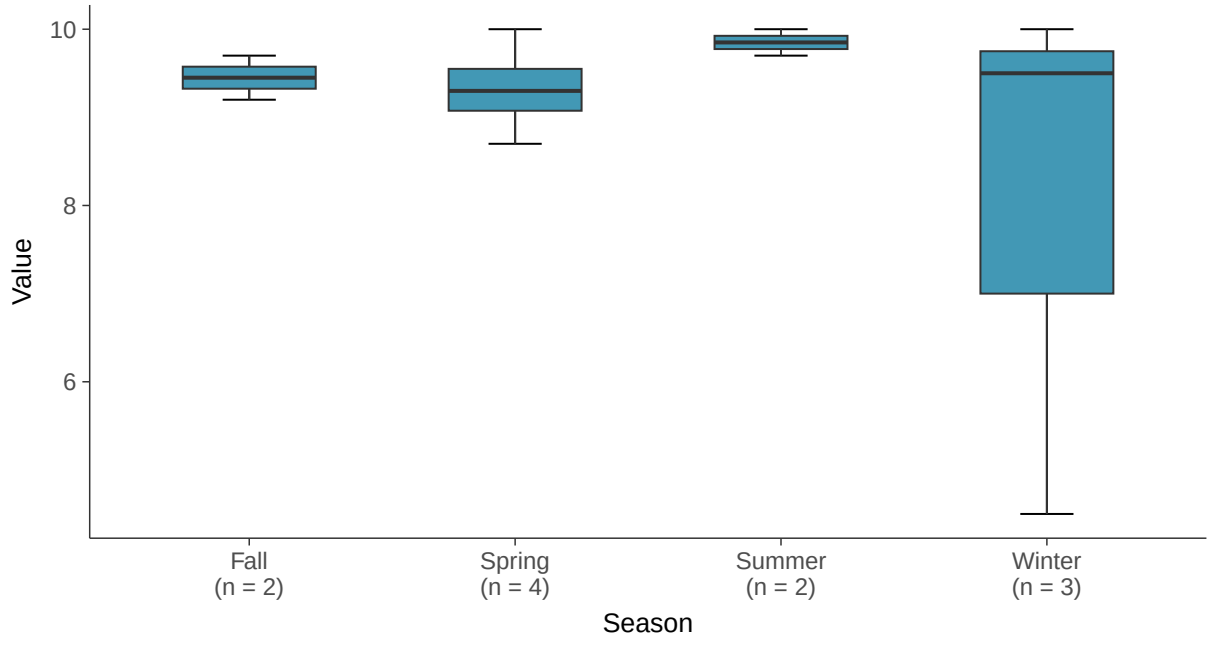
Boxplot

Fluoride, MW-02 (mg/L)



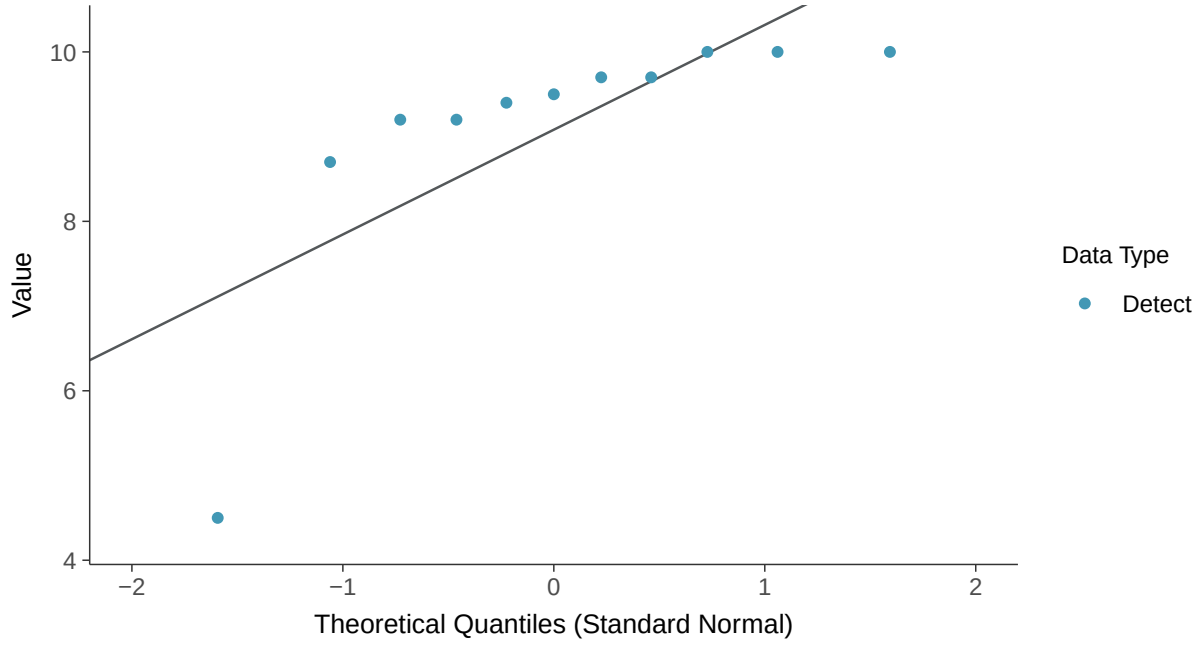
Boxplot by Season

Fluoride, MW-02 (mg/L)



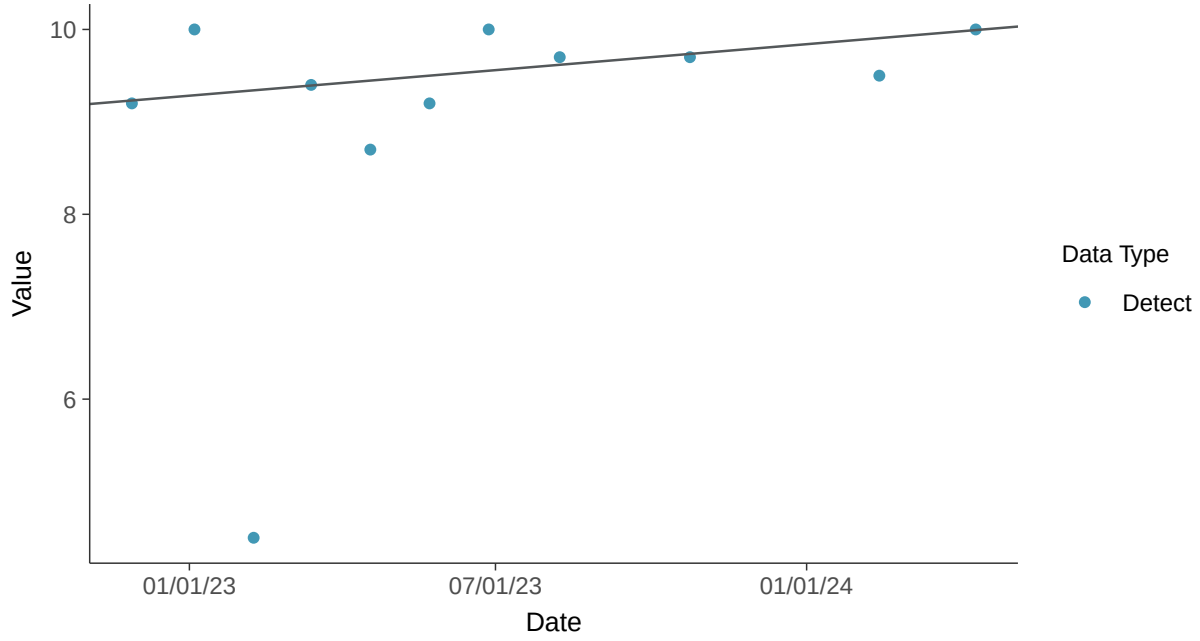
Normal Q-Q plot

Fluoride, MW-02 (mg/L)



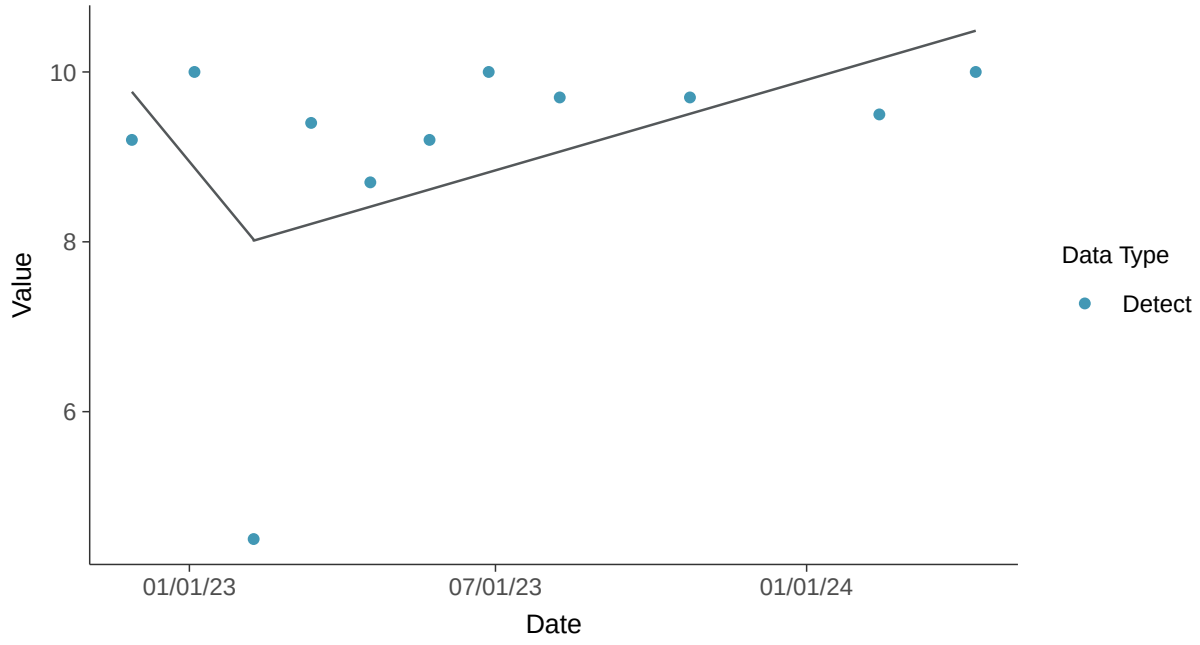
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Fluoride, MW-02 (mg/L)



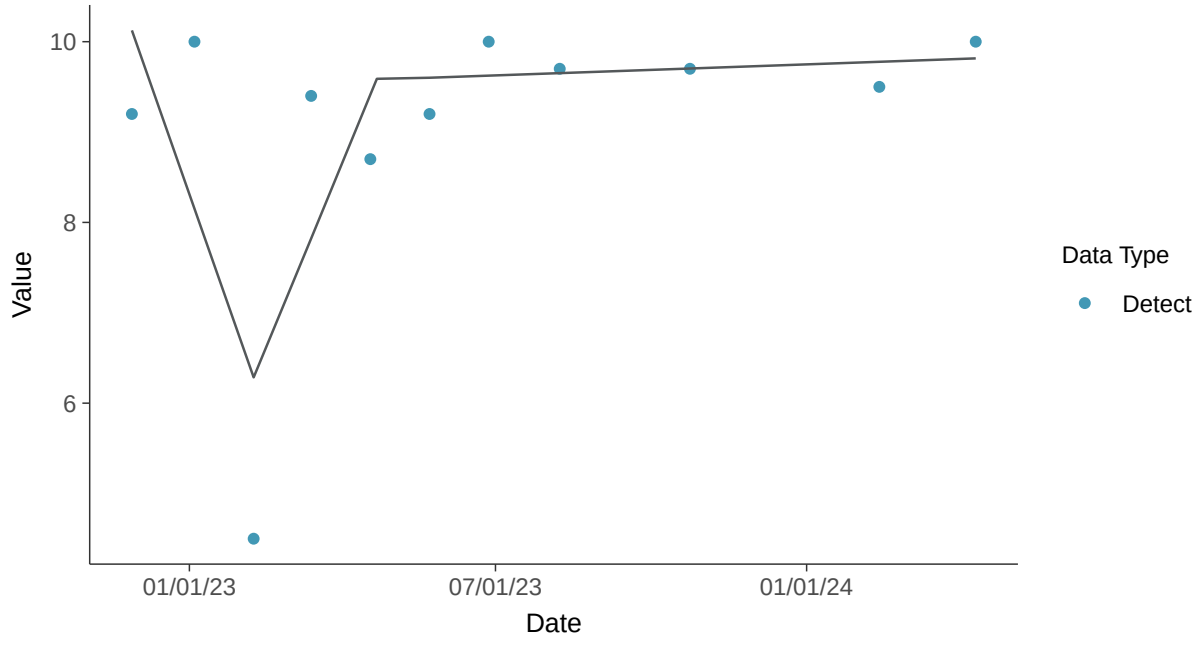
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-02 (mg/L)



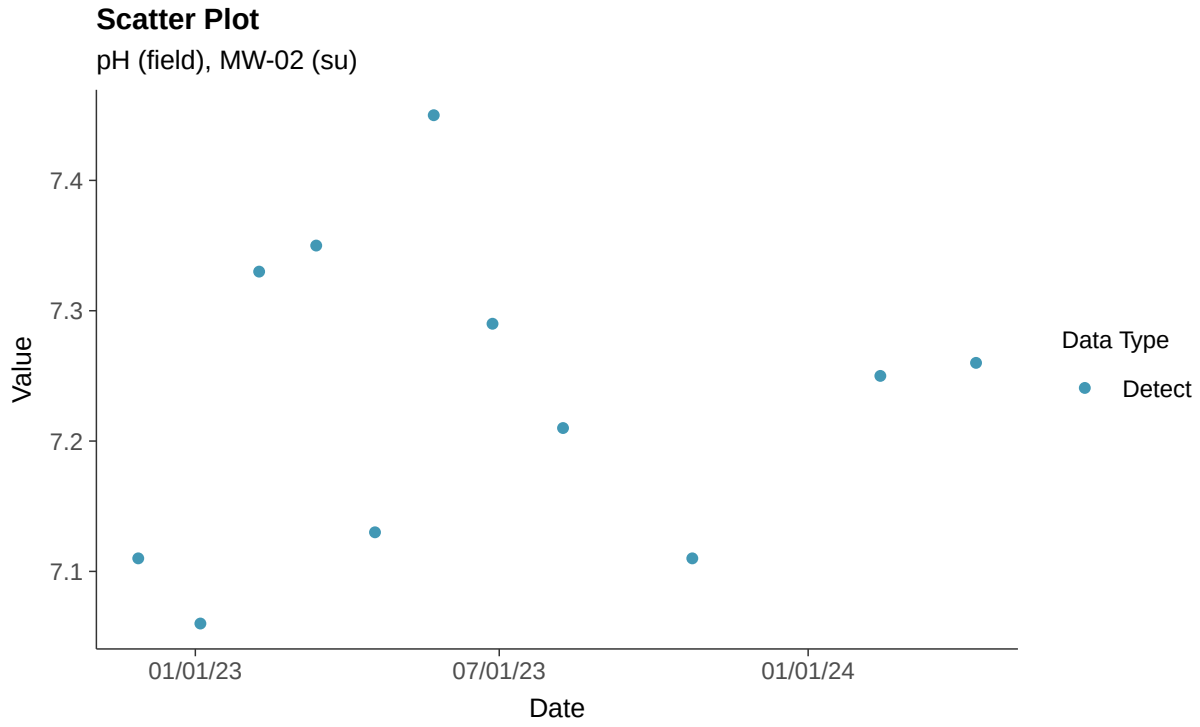
Trend Regression: Piecewise Linear-Linear-Linear

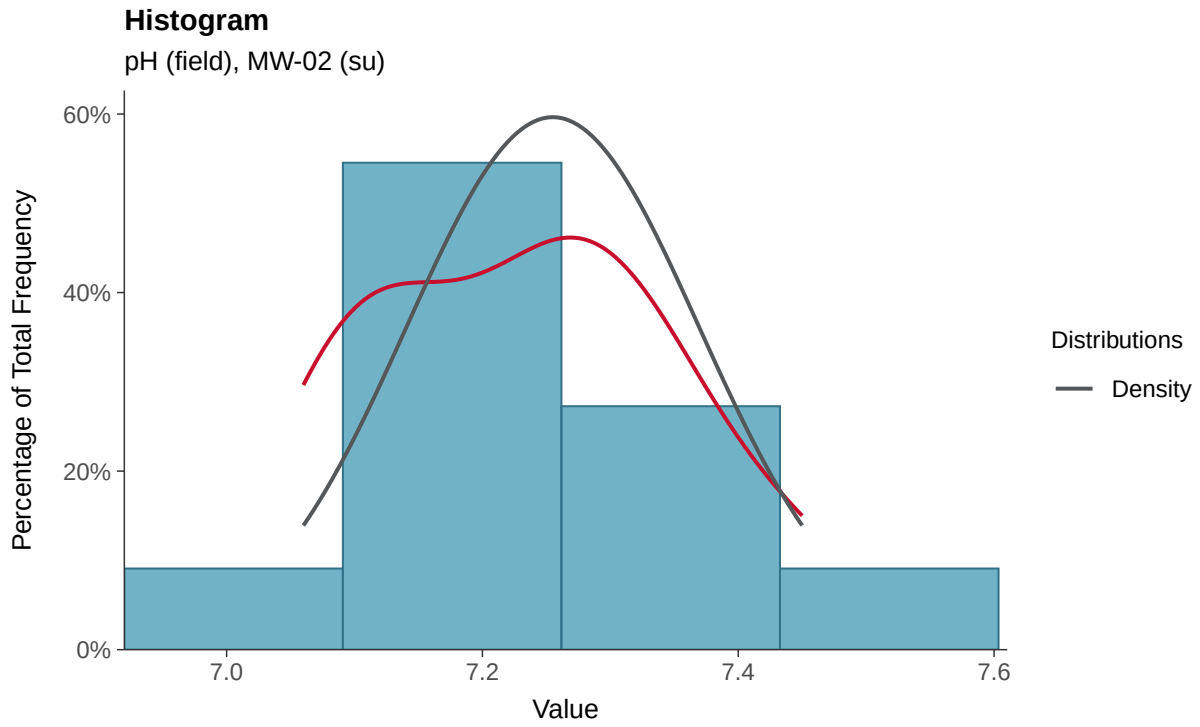
Fluoride, MW-02 (mg/L)



Appendix III: pH (field), MW-02

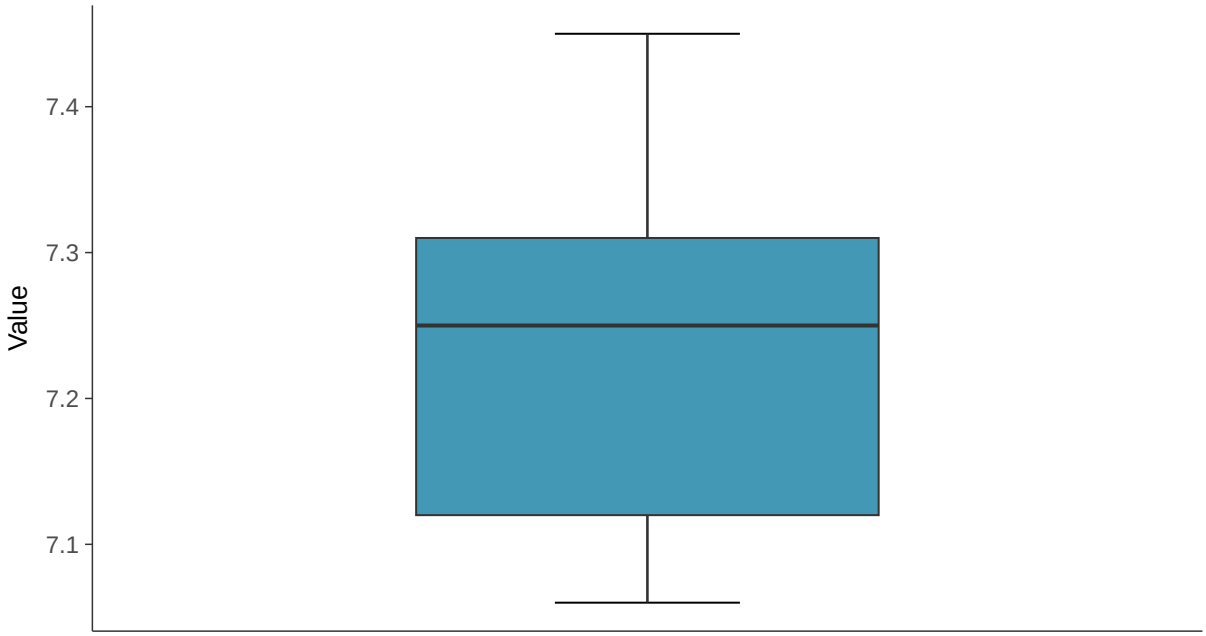
ID: 2_12_4_120





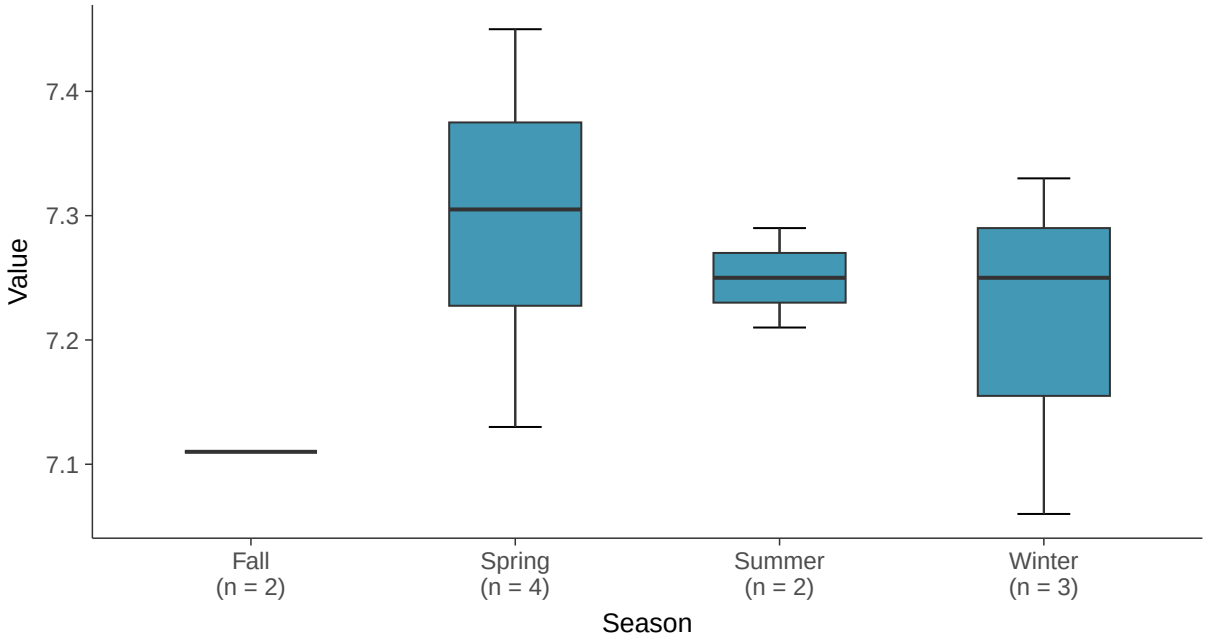
Boxplot

pH (field), MW-02 (su)



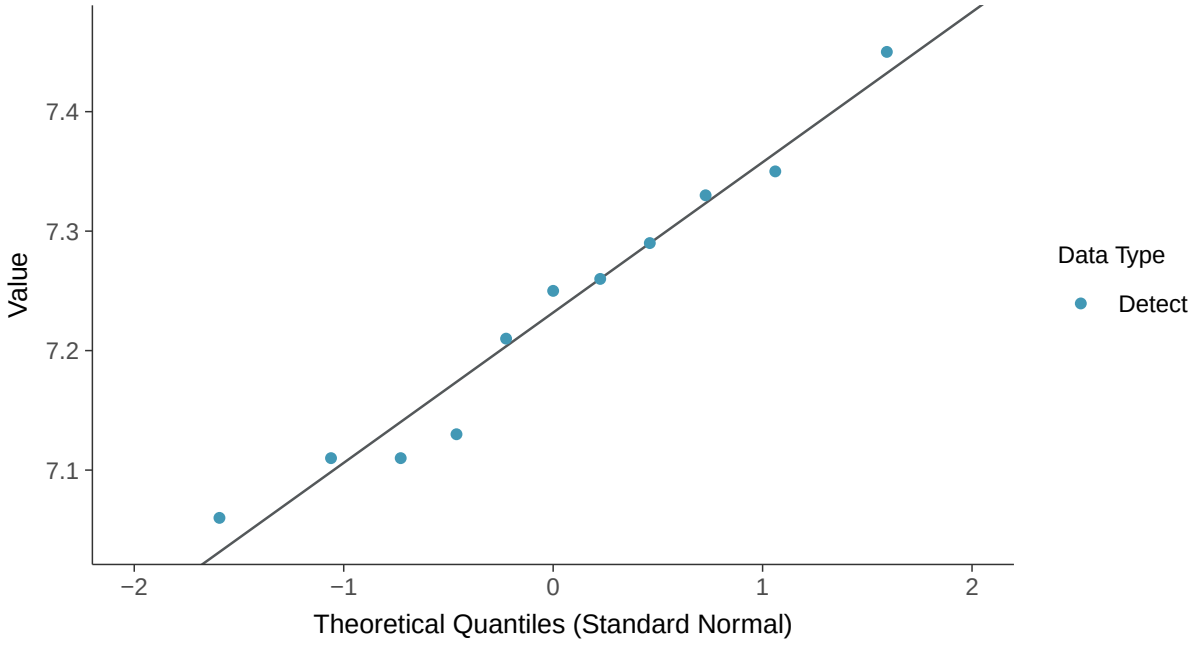
Boxplot by Season

pH (field), MW-02 (su)



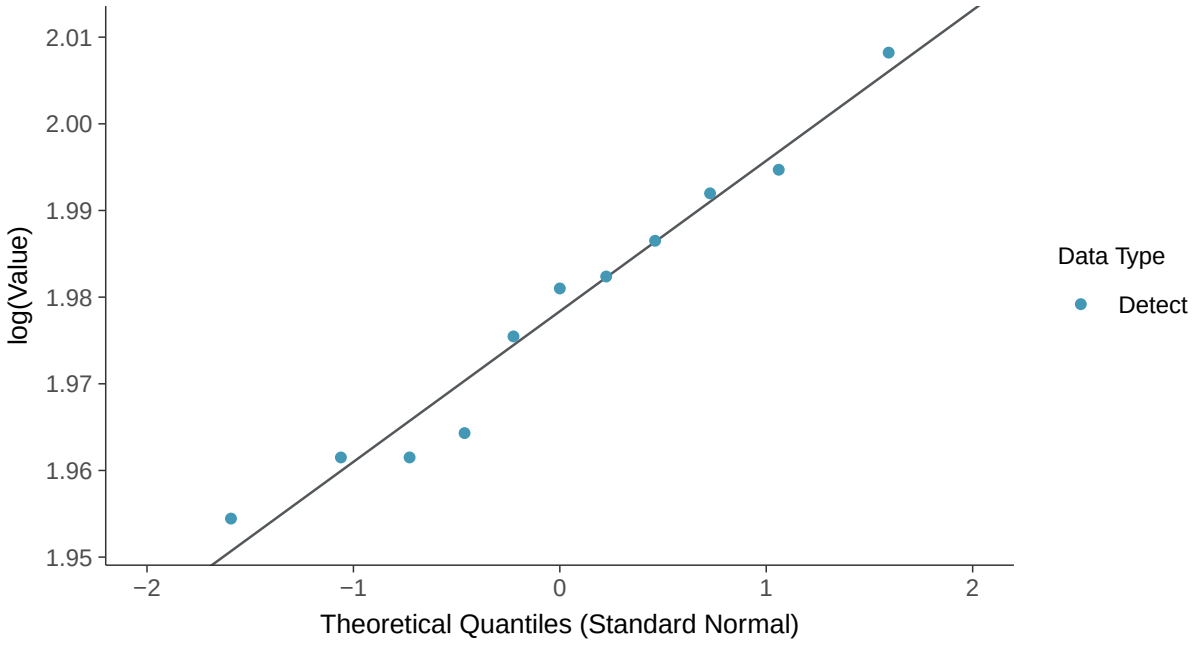
Normal Q-Q plot

pH (field), MW-02 (su)



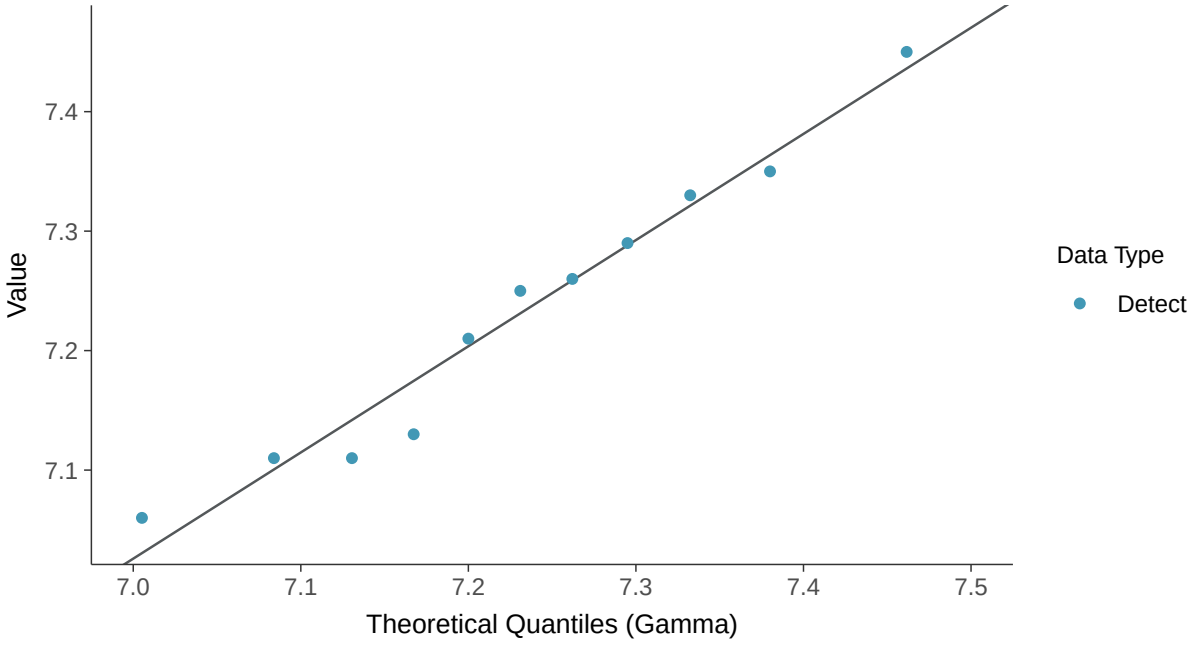
Lognormal Q-Q plot

pH (field), MW-02 (su)



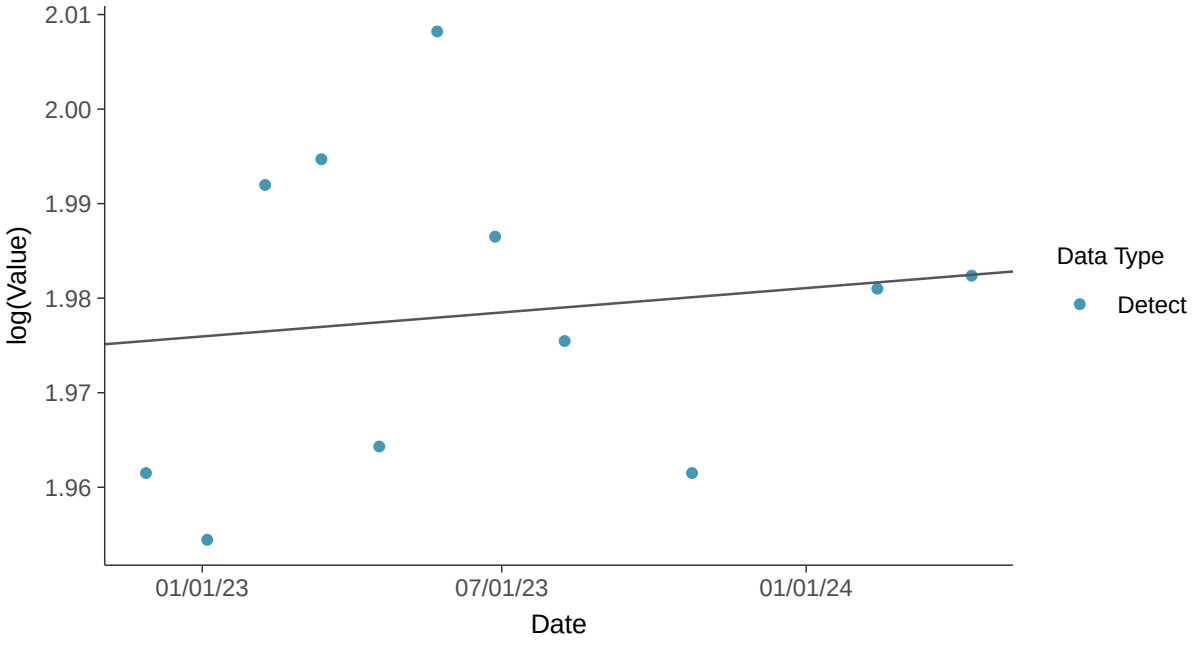
Gamma Q-Q plot

pH (field), MW-02 (su)



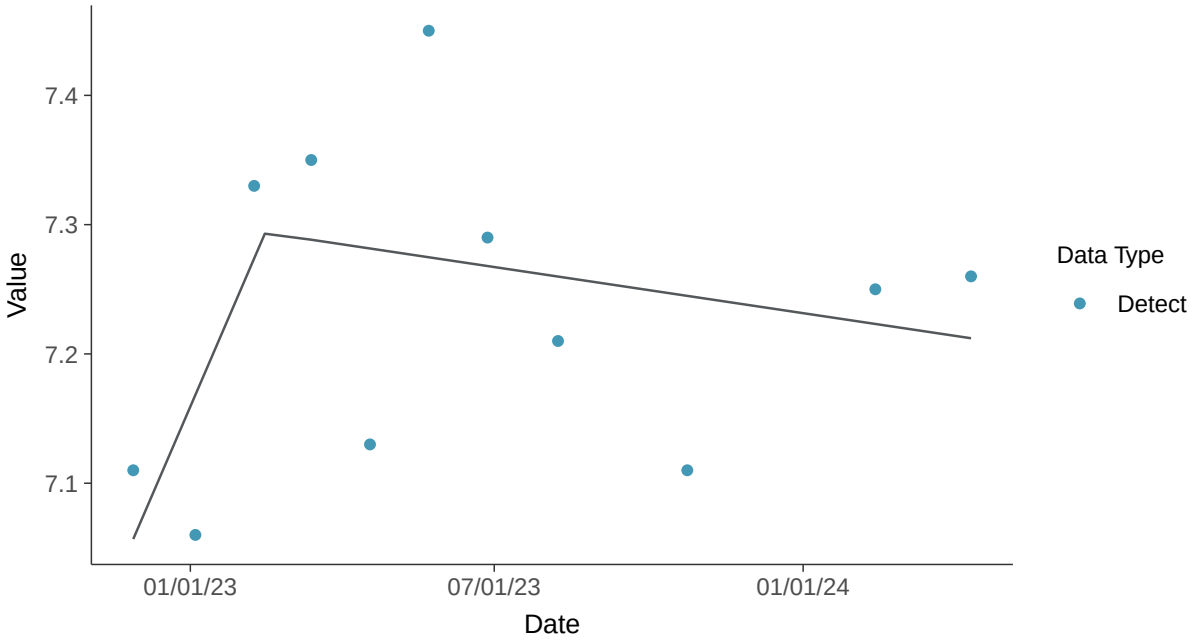
Trend Regression: Lognormal MLE

pH (field), MW-02 (su)



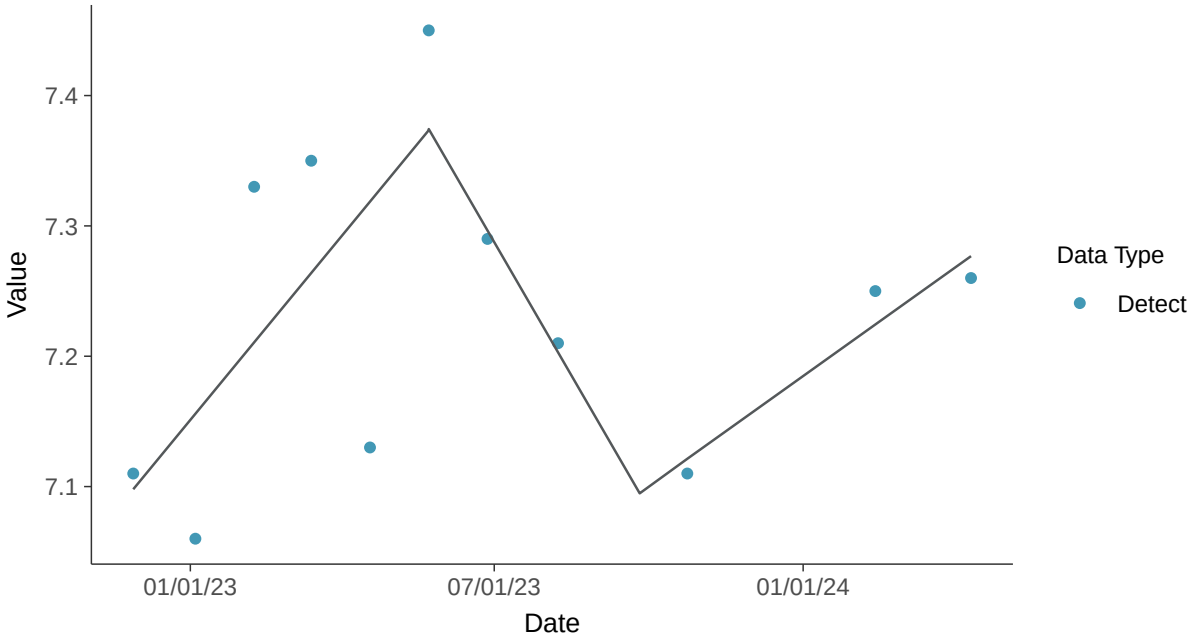
Trend Regression: Piecewise Linear-Linear

pH (field), MW-02 (su)



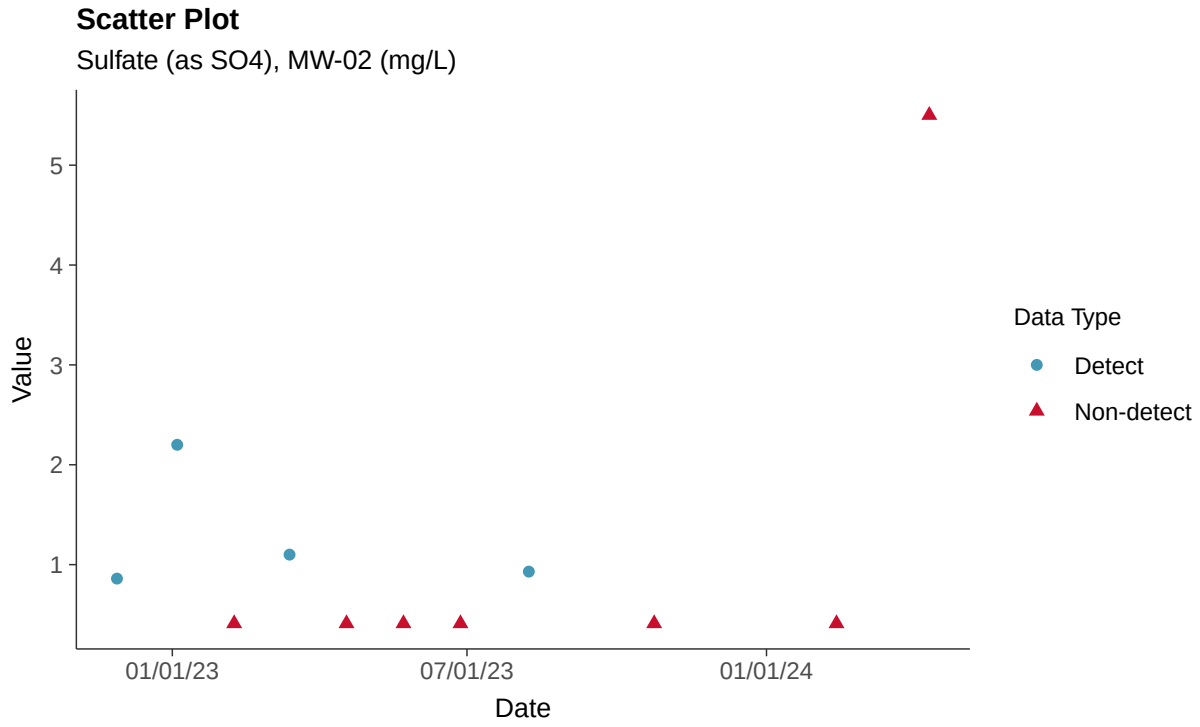
Trend Regression: Piecewise Linear-Linear-Linear

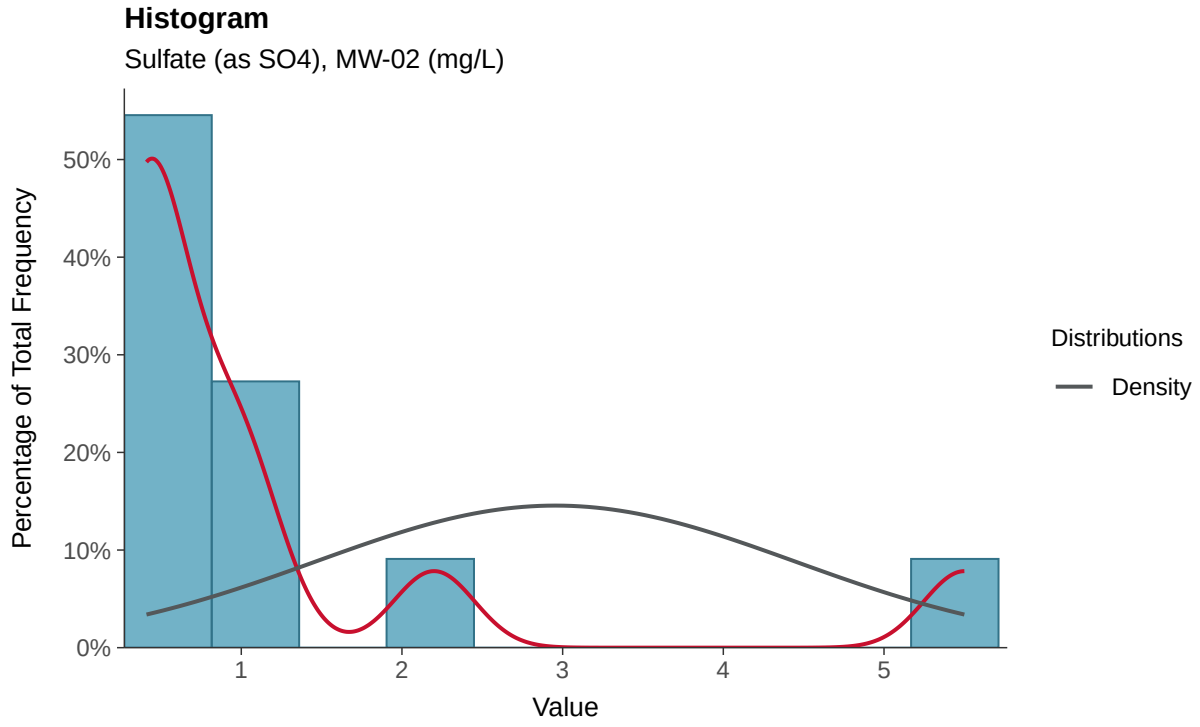
pH (field), MW-02 (su)



Appendix III: Sulfate (as SO4), MW-02

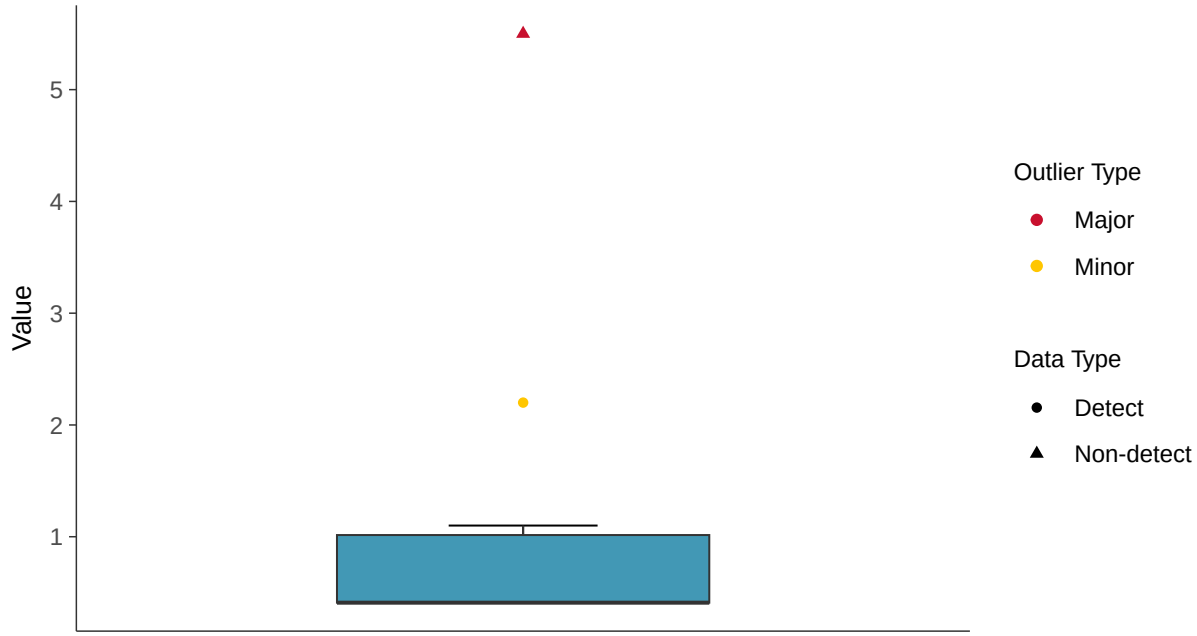
ID: 2_12_4_124





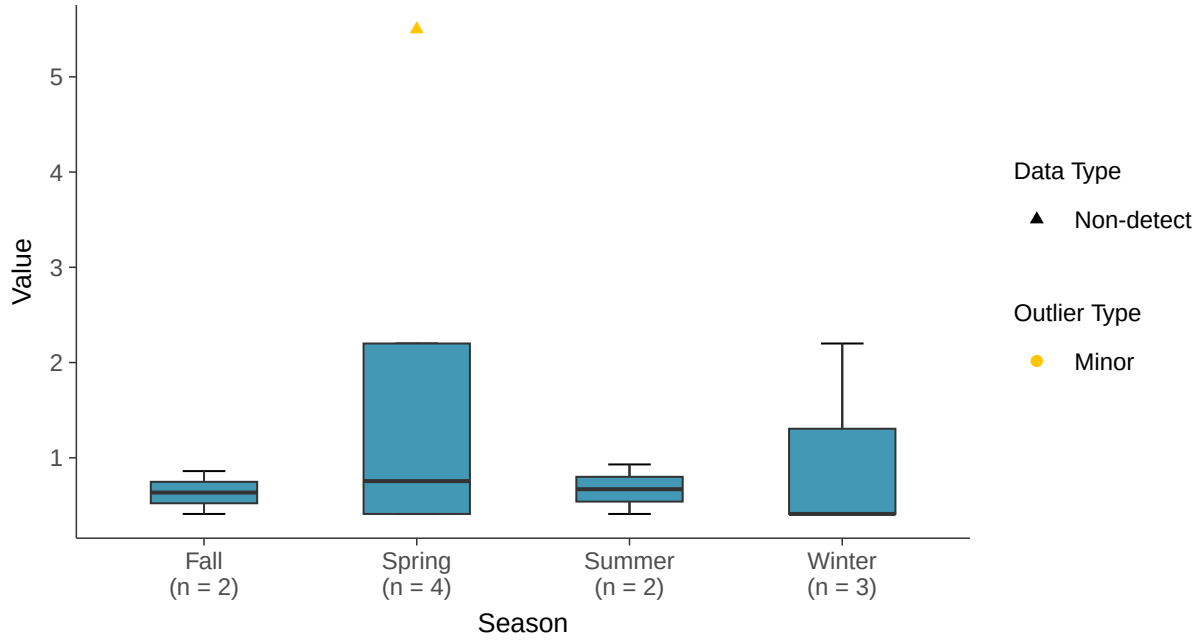
Boxplot

Sulfate (as SO4), MW-02 (mg/L)



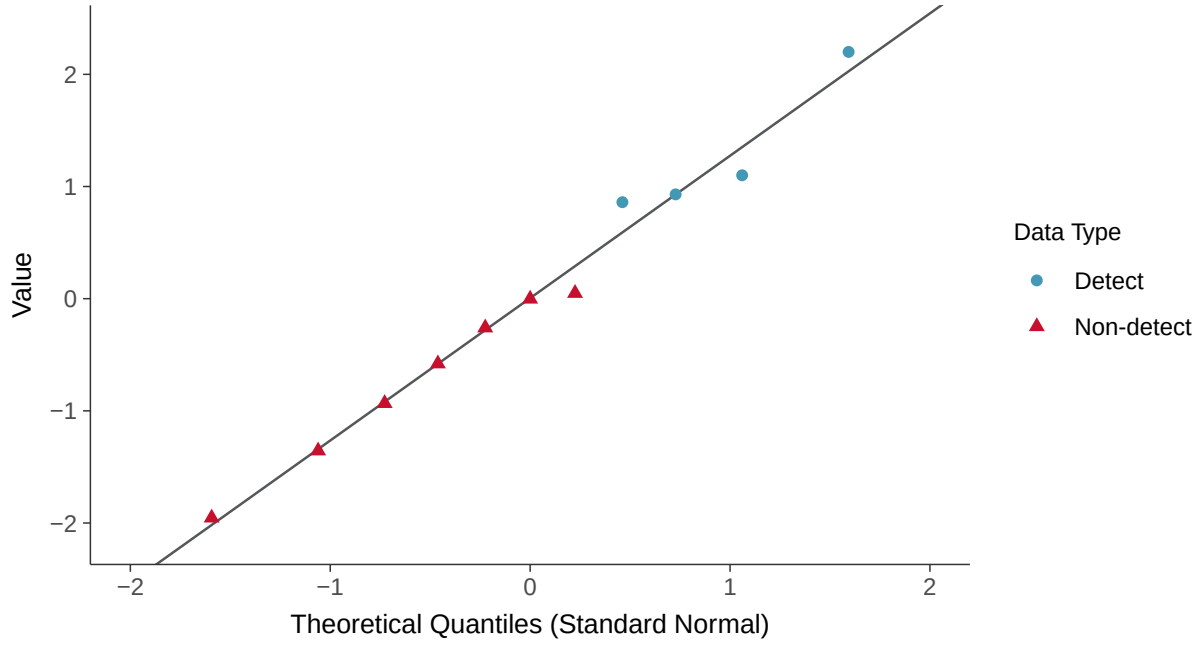
Boxplot by Season

Sulfate (as SO4), MW-02 (mg/L)



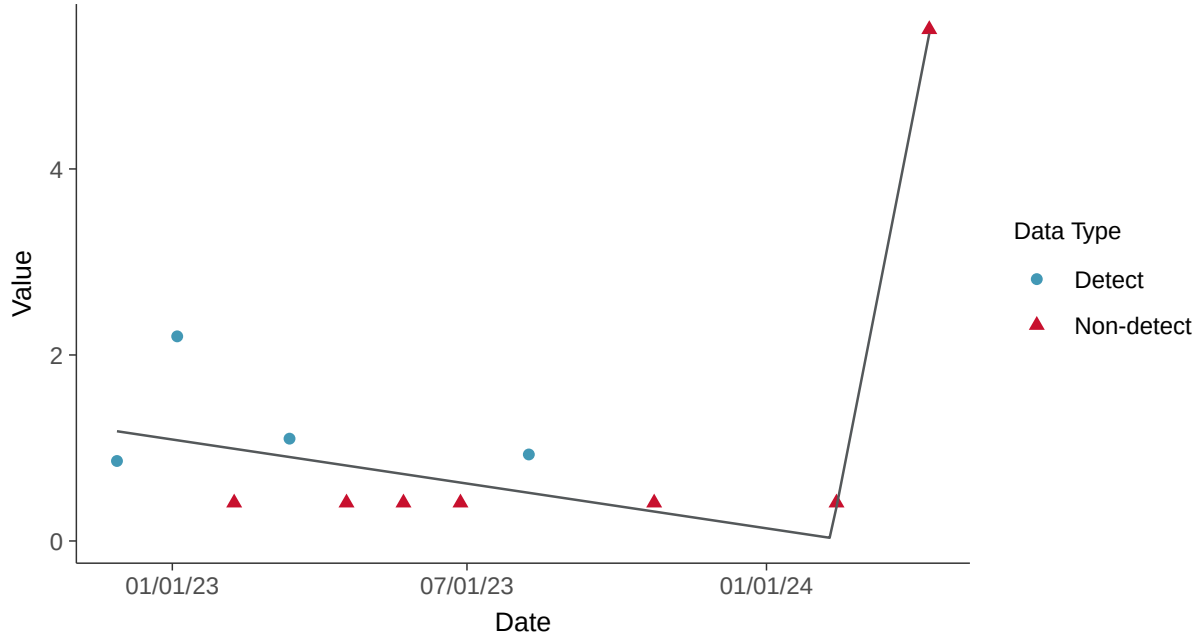
Normal Q-Q plot using ROS Imputed Estimates

Sulfate (as SO4), MW-02 (mg/L)



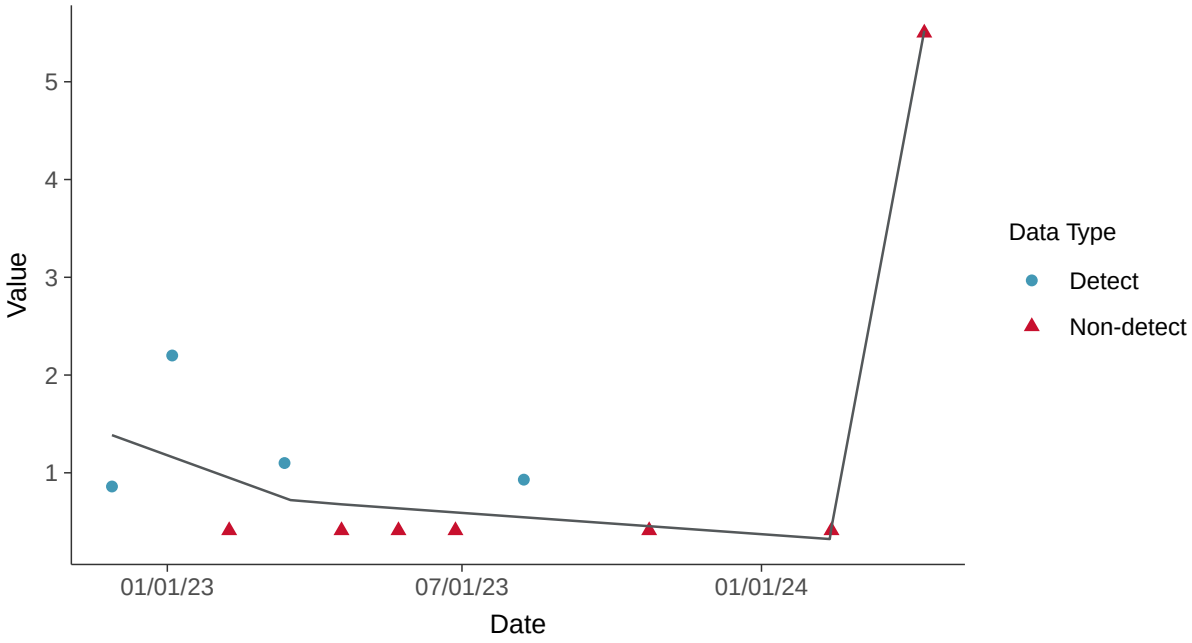
Trend Regression: Piecewise Linear-Linear

Sulfate (as SO4), MW-02 (mg/L)



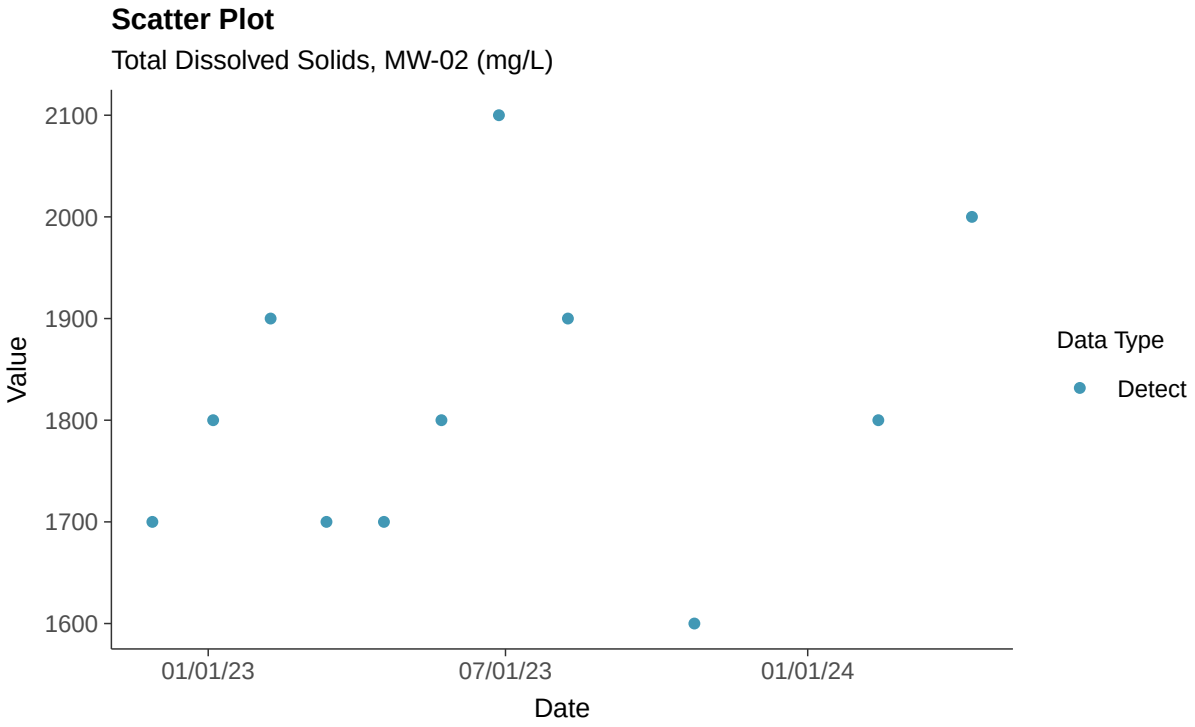
Trend Regression: Piecewise Linear-Linear-Linear

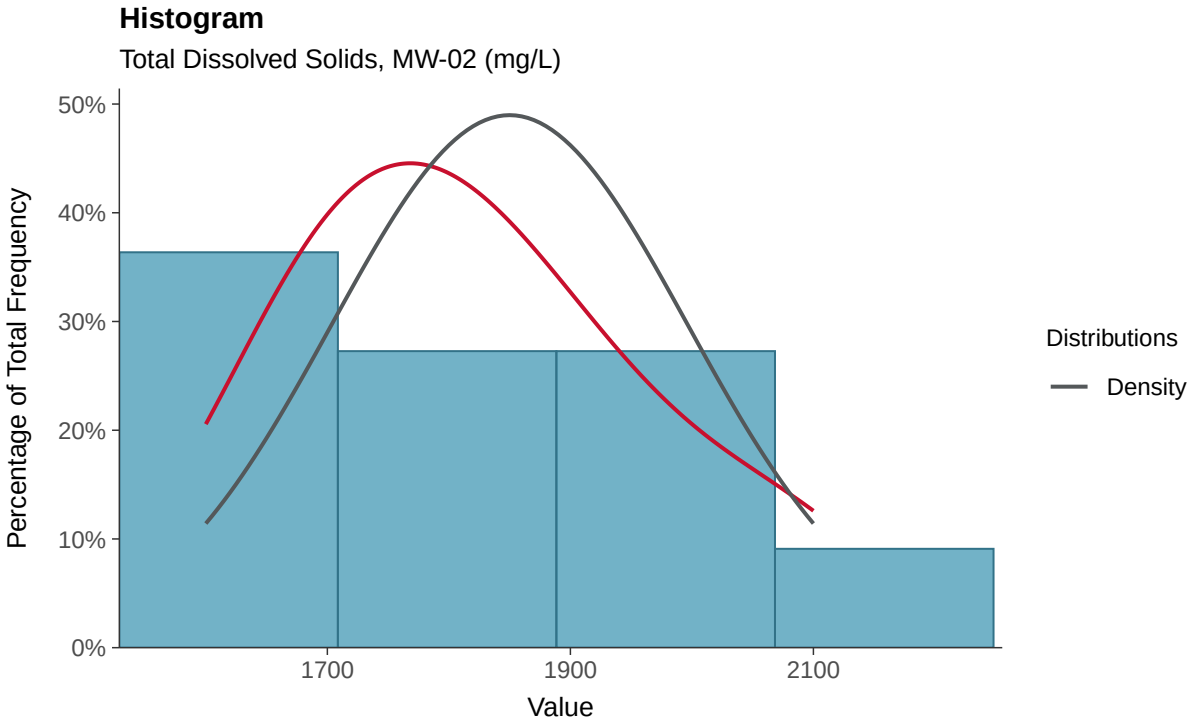
Sulfate (as SO4), MW-02 (mg/L)



Appendix III: Total Dissolved Solids, MW-02

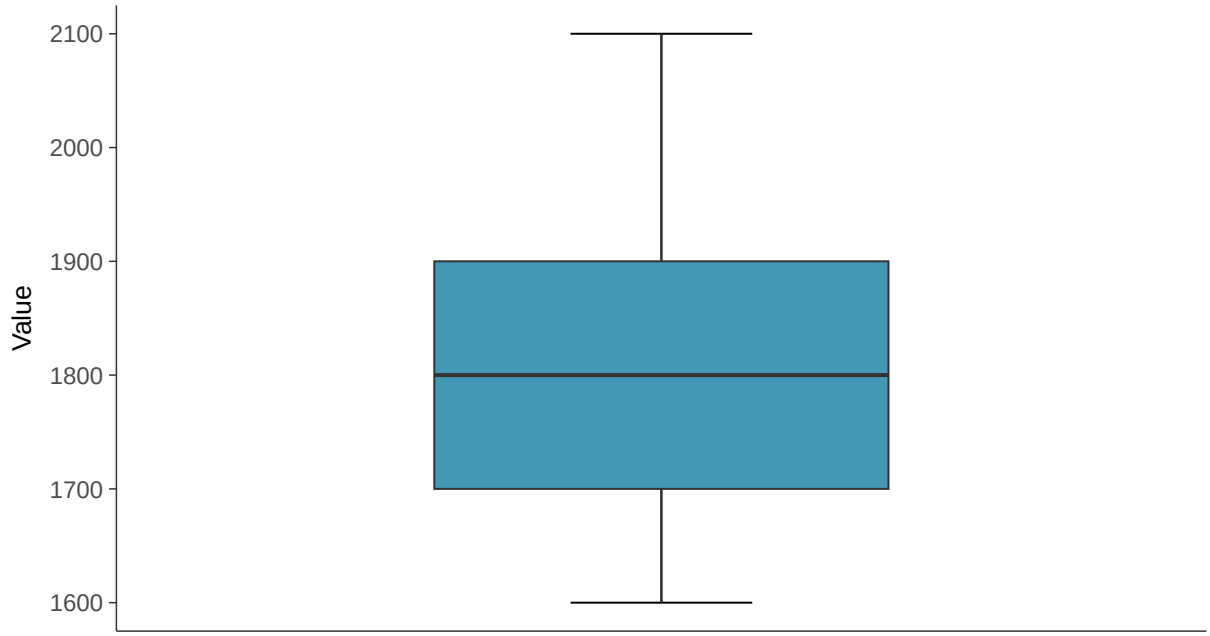
ID: 2_12_4_126





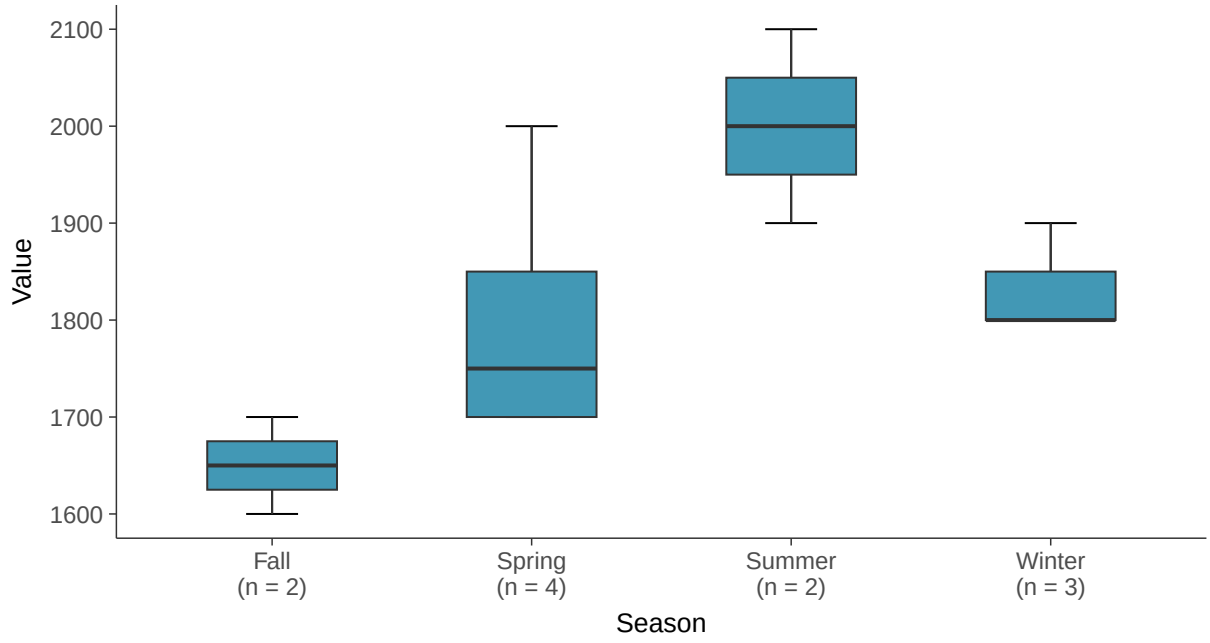
Boxplot

Total Dissolved Solids, MW-02 (mg/L)



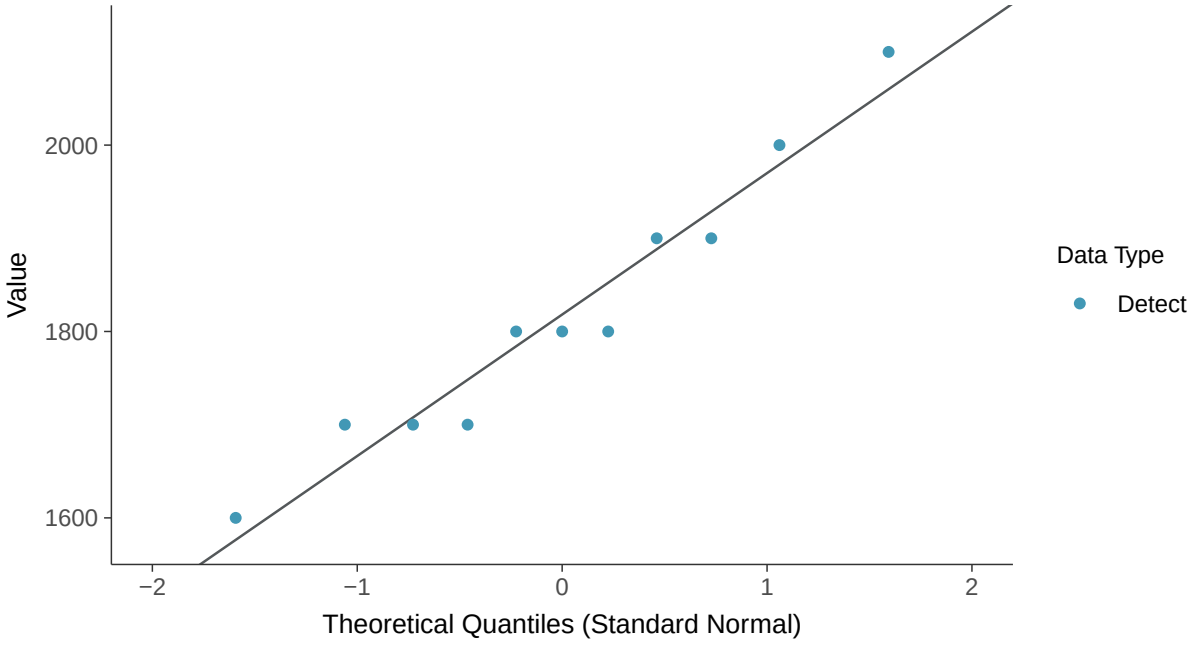
Boxplot by Season

Total Dissolved Solids, MW-02 (mg/L)



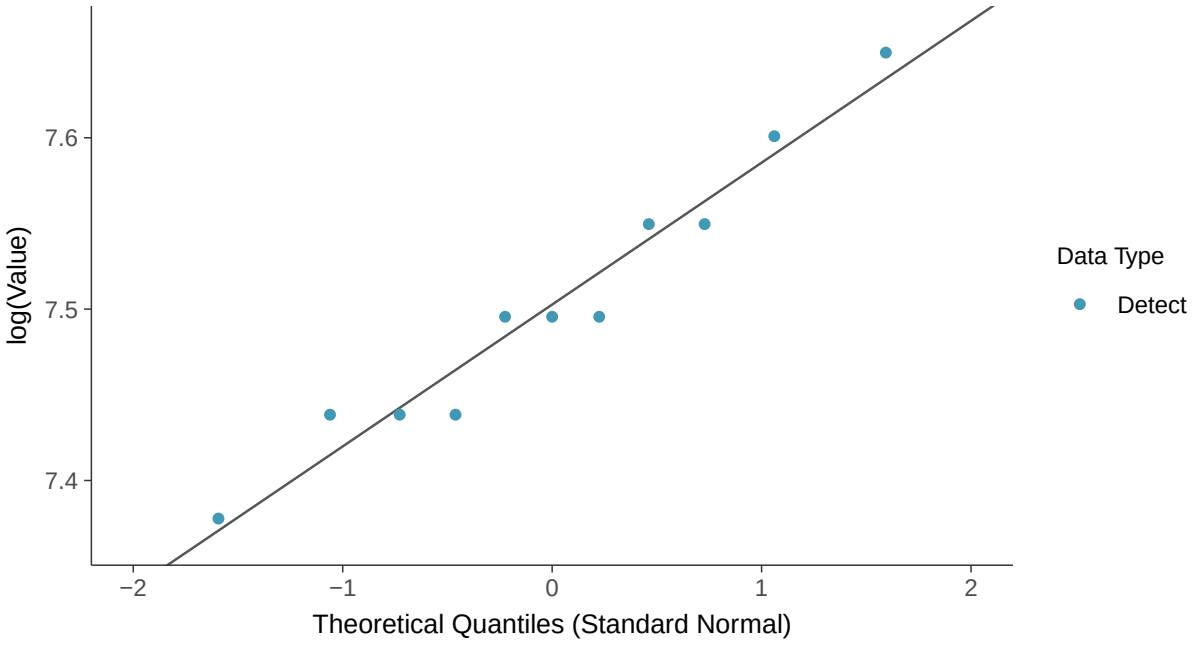
Normal Q-Q plot

Total Dissolved Solids, MW-02 (mg/L)



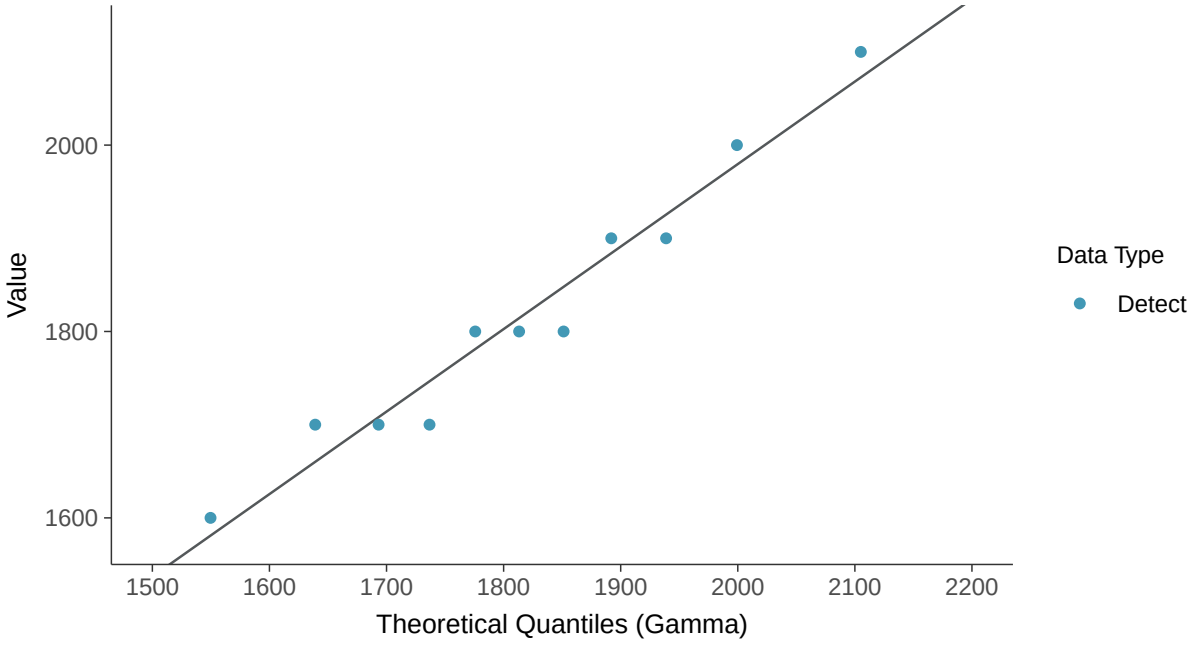
Lognormal Q-Q plot

Total Dissolved Solids, MW-02 (mg/L)



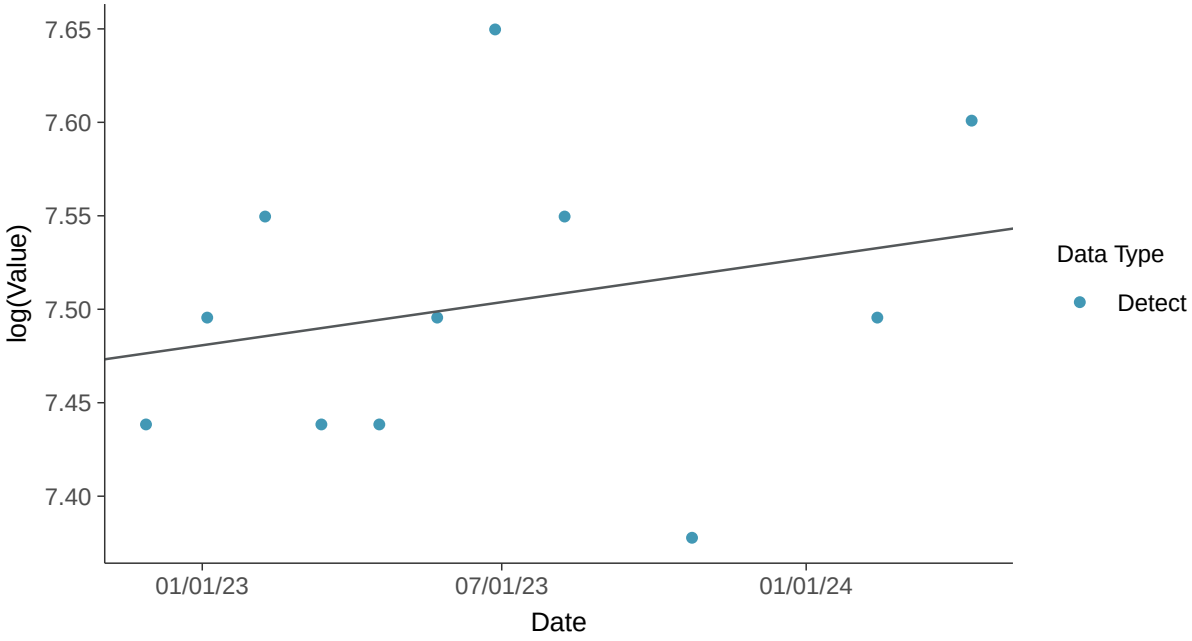
Gamma Q-Q plot

Total Dissolved Solids, MW-02 (mg/L)



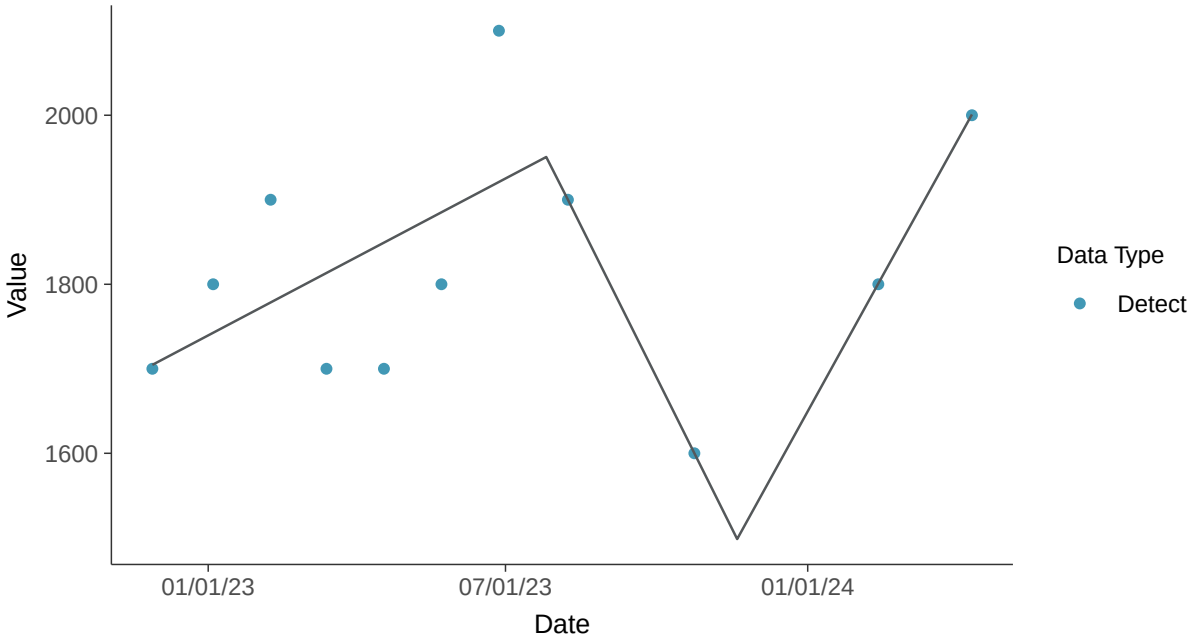
Trend Regression: Lognormal MLE

Total Dissolved Solids, MW-02 (mg/L)



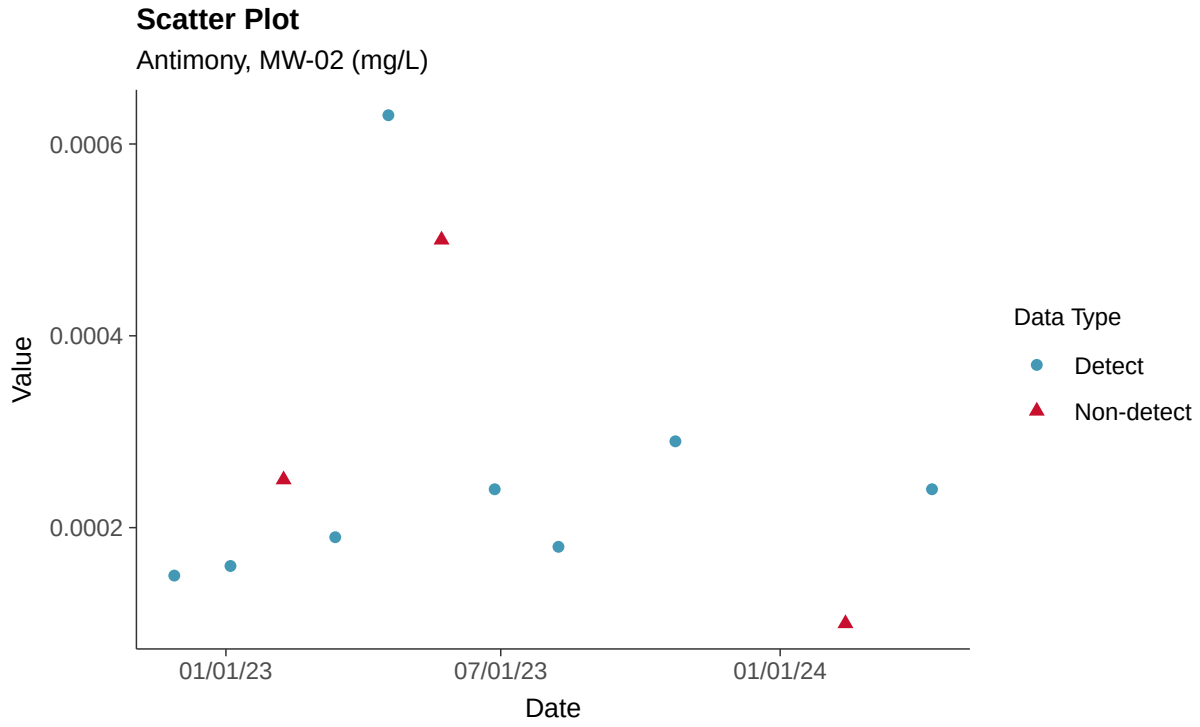
Trend Regression: Piecewise Linear-Linear-Linear

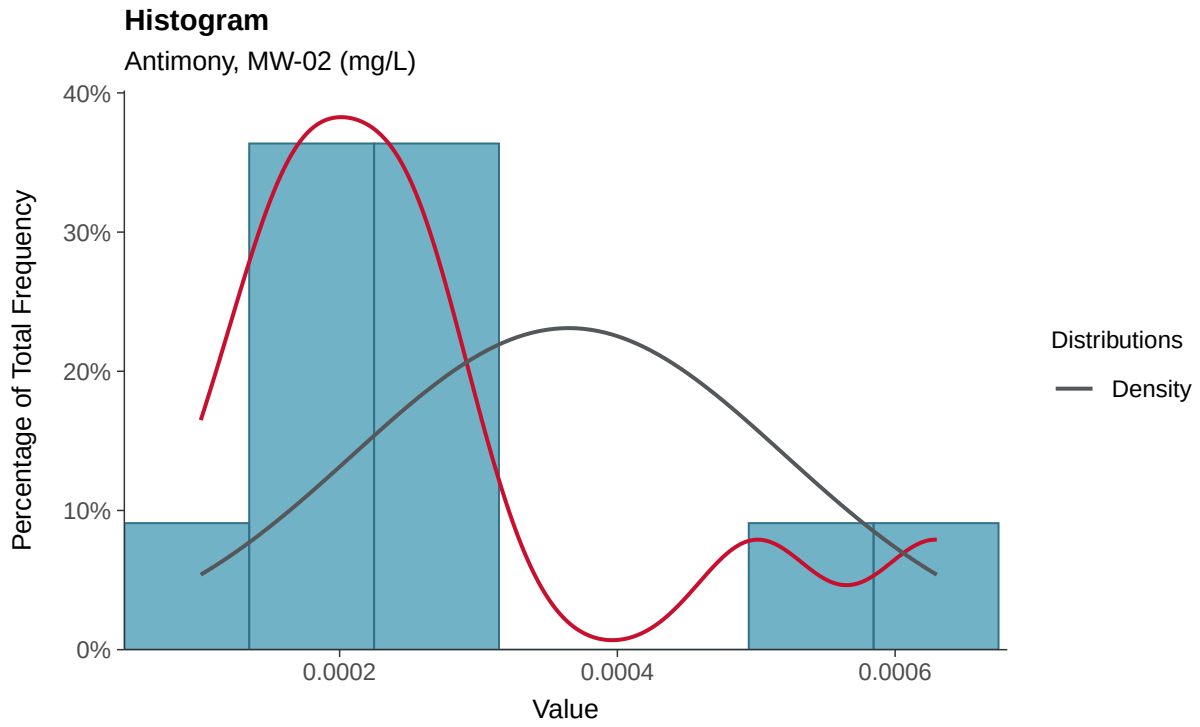
Total Dissolved Solids, MW-02 (mg/L)



Appendix IV: Antimony, MW-02

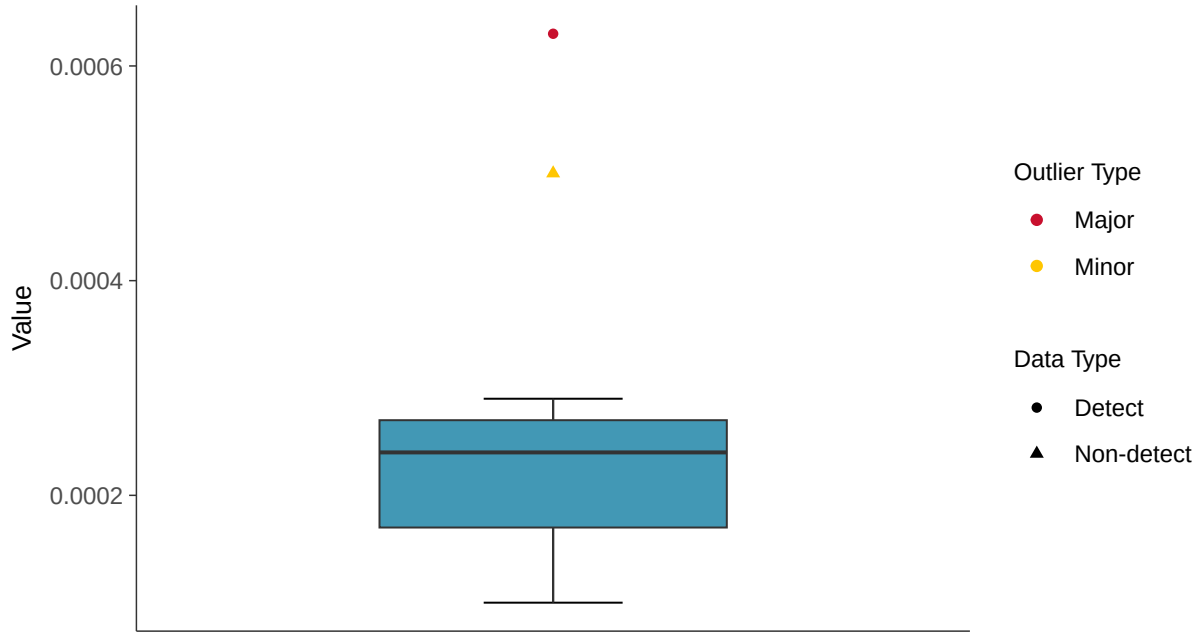
ID: 2_12_5_101





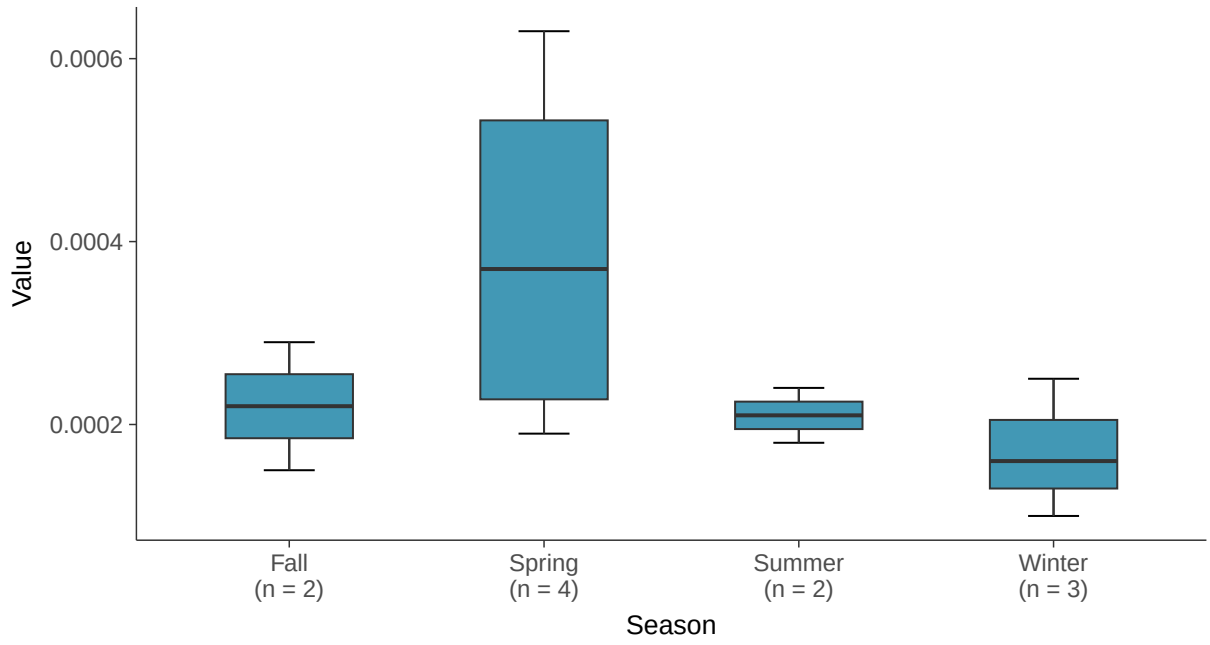
Boxplot

Antimony, MW-02 (mg/L)



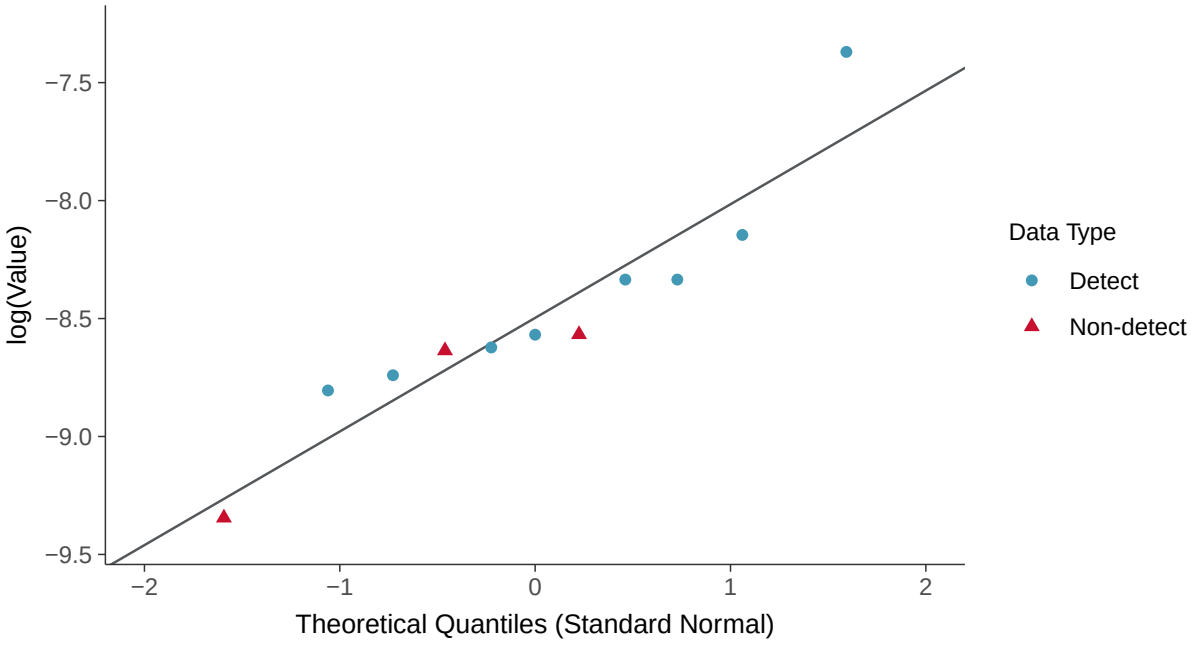
Boxplot by Season

Antimony, MW-02 (mg/L)



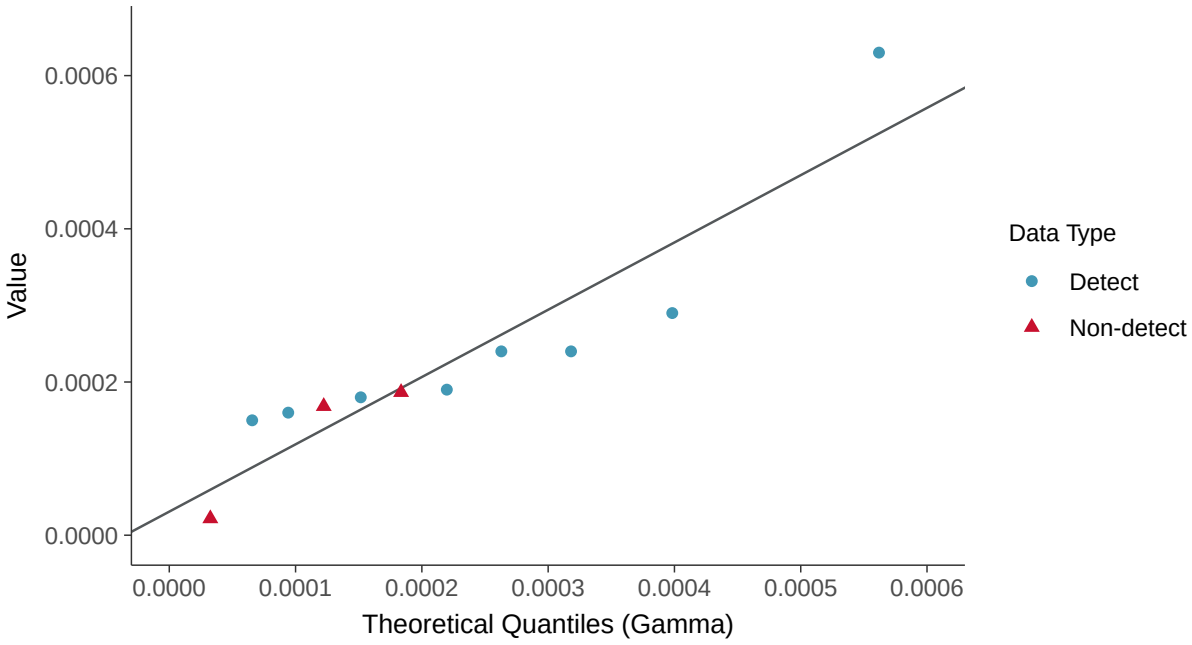
Lognormal Q-Q plot using ROS Imputed Estimates

Antimony, MW-02 (mg/L)



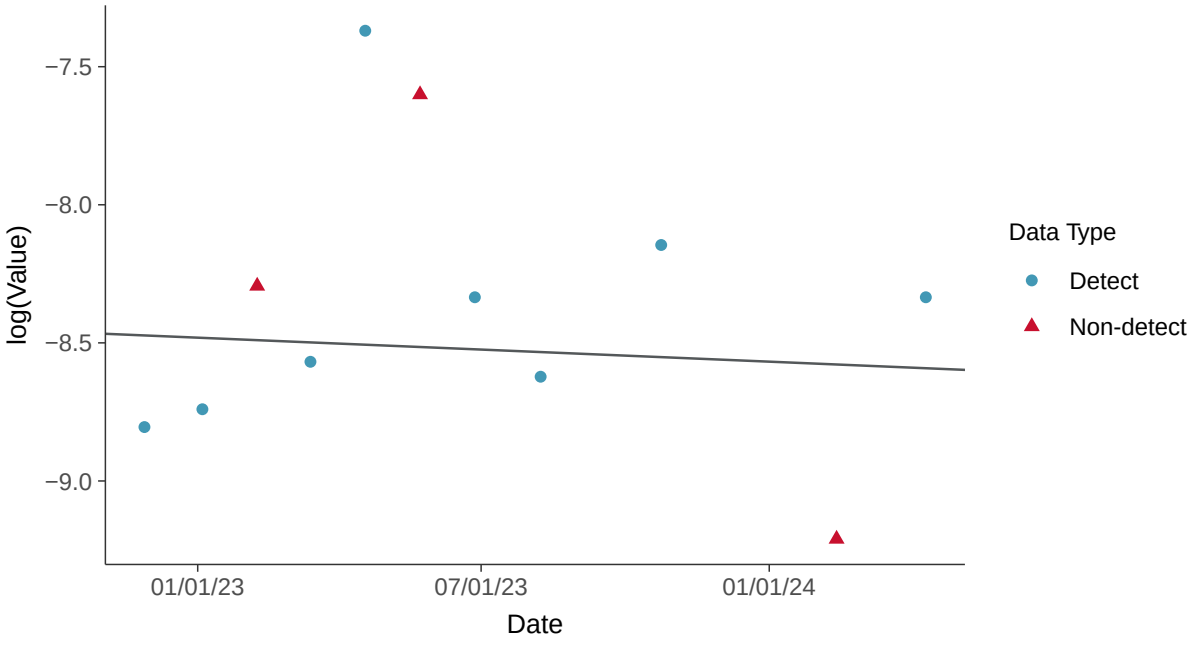
Gamma Q-Q plot using ROS Imputed Estimates

Antimony, MW-02 (mg/L)



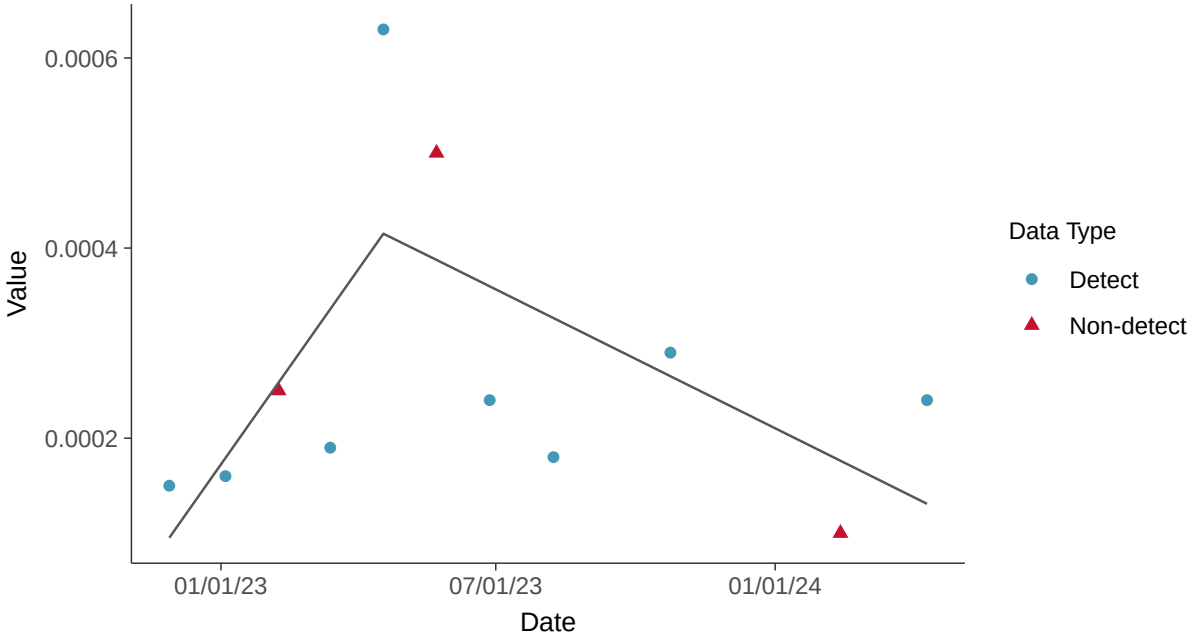
Trend Regression: Lognormal MLE

Antimony, MW-02 (mg/L)



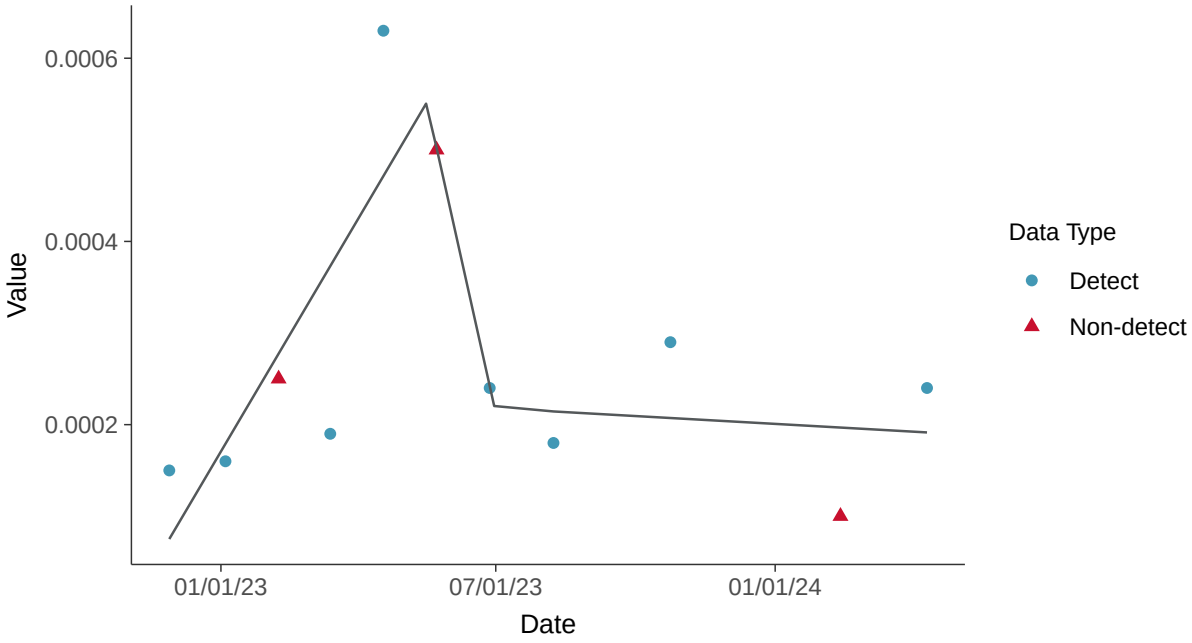
Trend Regression: Piecewise Linear-Linear

Antimony, MW-02 (mg/L)



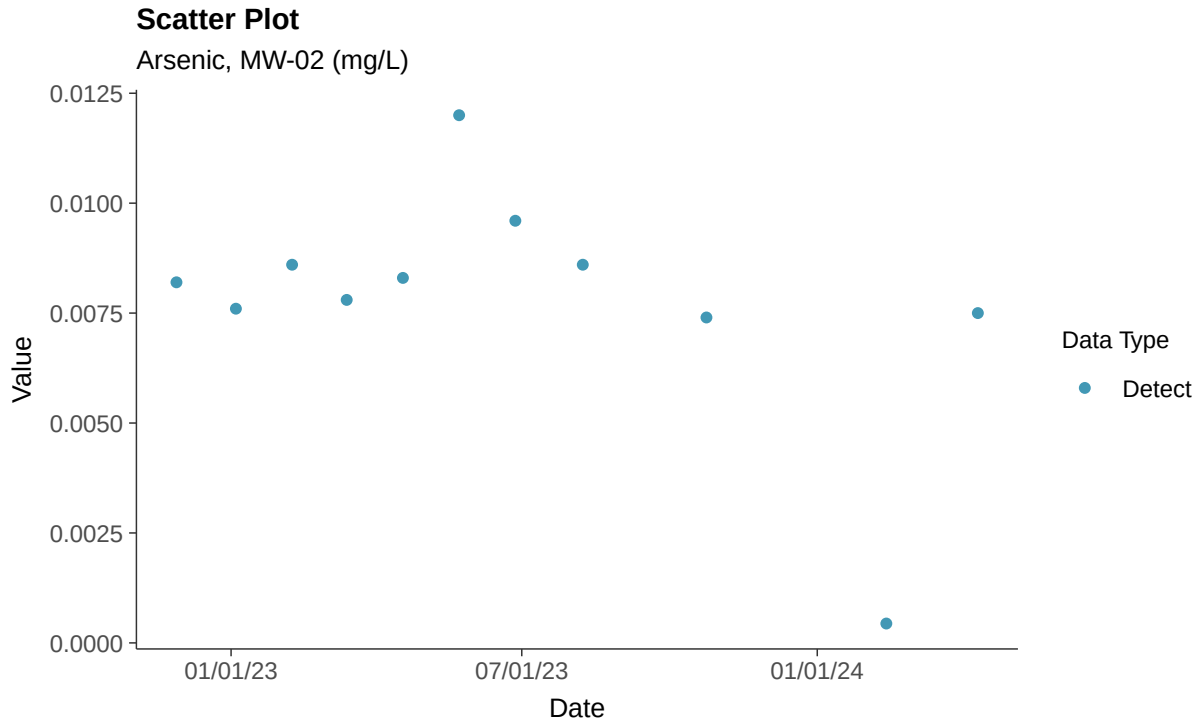
Trend Regression: Piecewise Linear-Linear-Linear

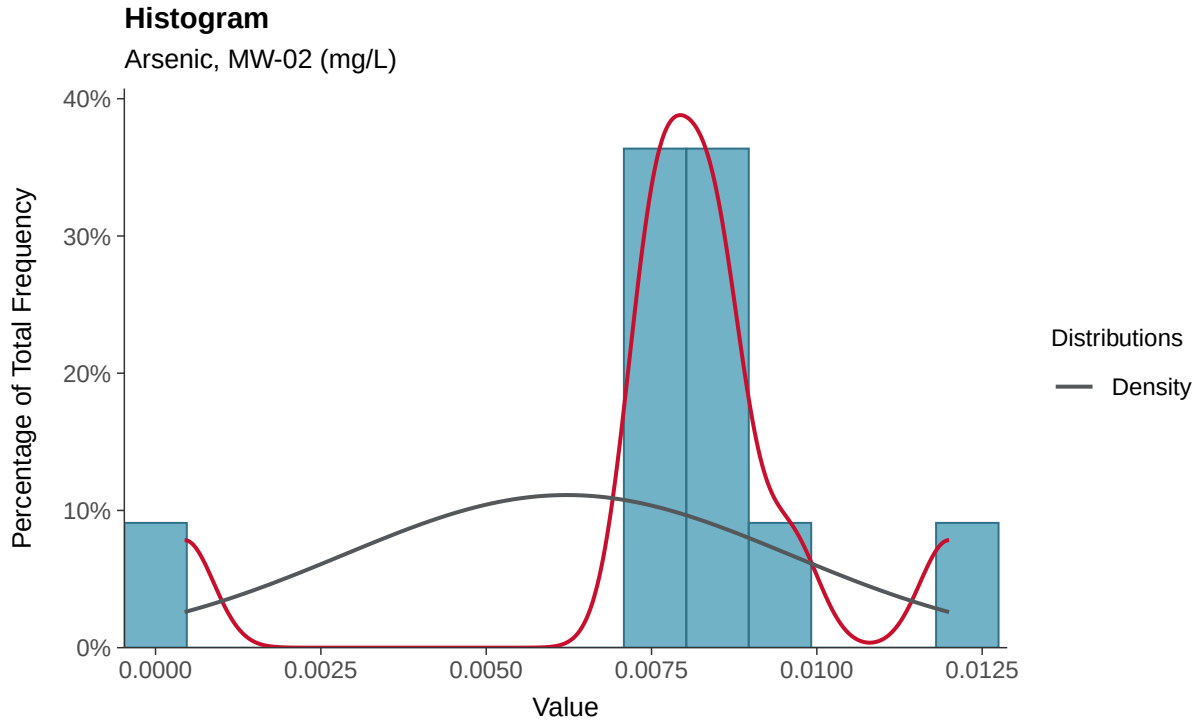
Antimony, MW-02 (mg/L)



Appendix IV: Arsenic, MW-02

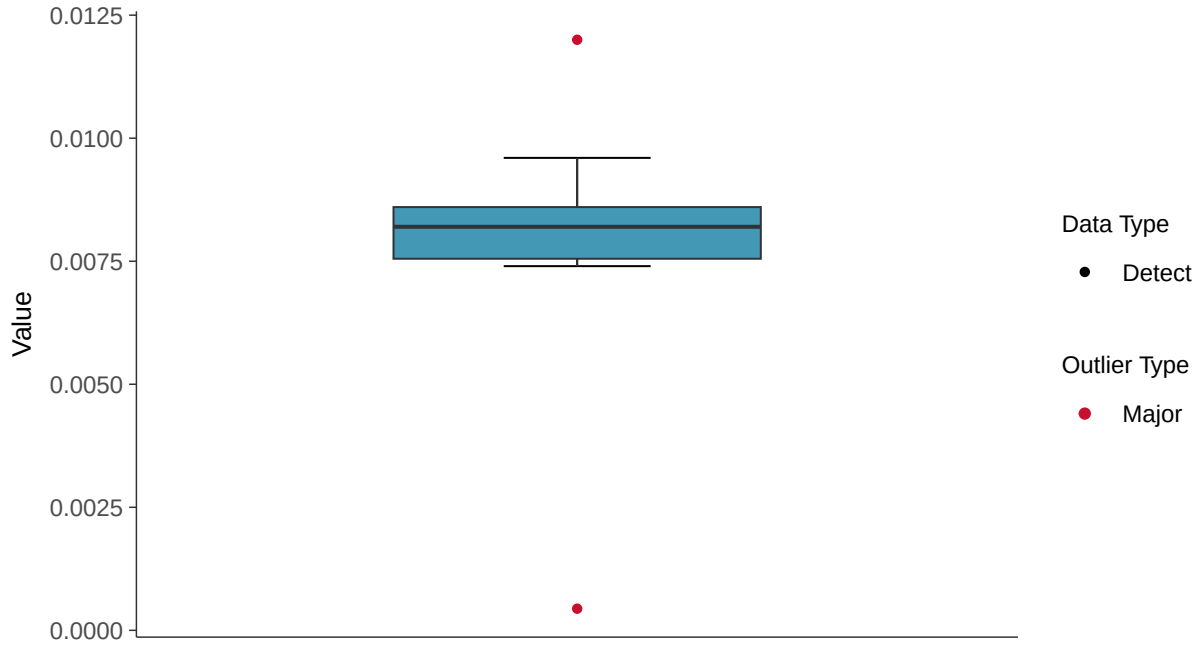
ID: 2_12_5_102





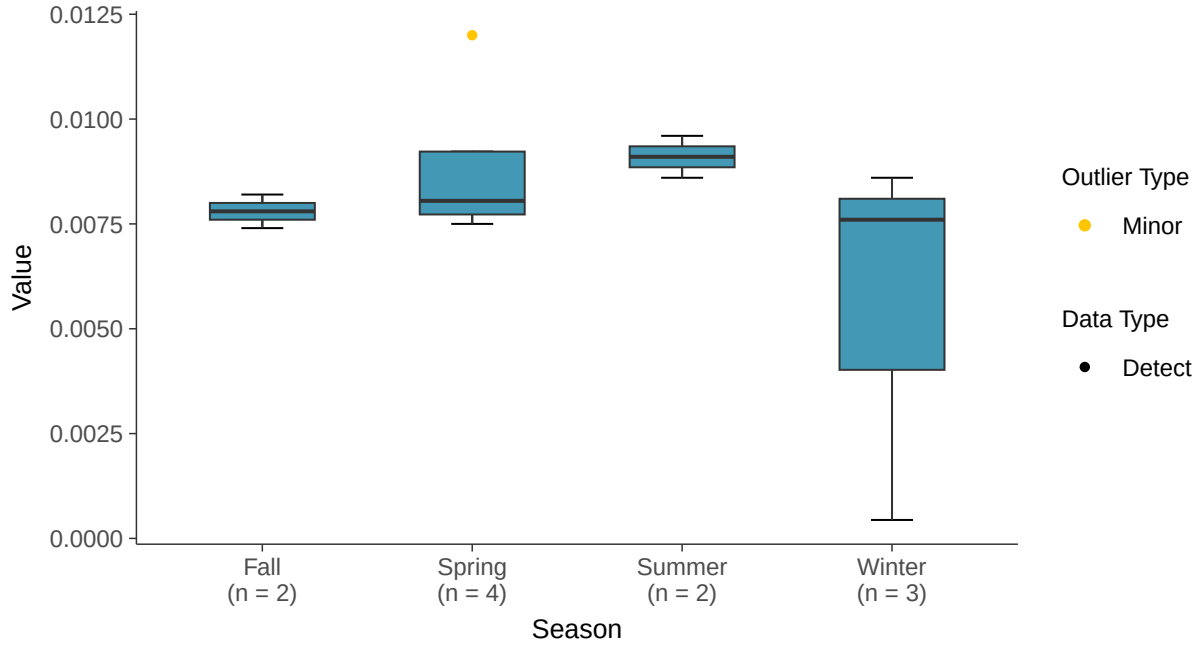
Boxplot

Arsenic, MW-02 (mg/L)



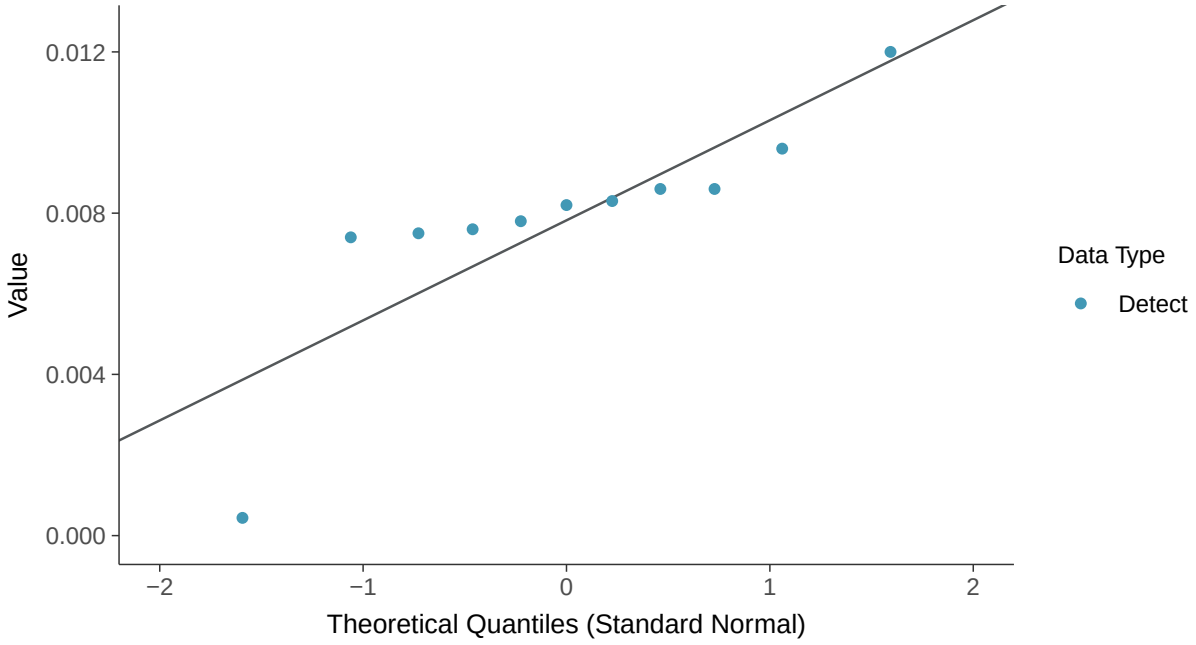
Boxplot by Season

Arsenic, MW-02 (mg/L)



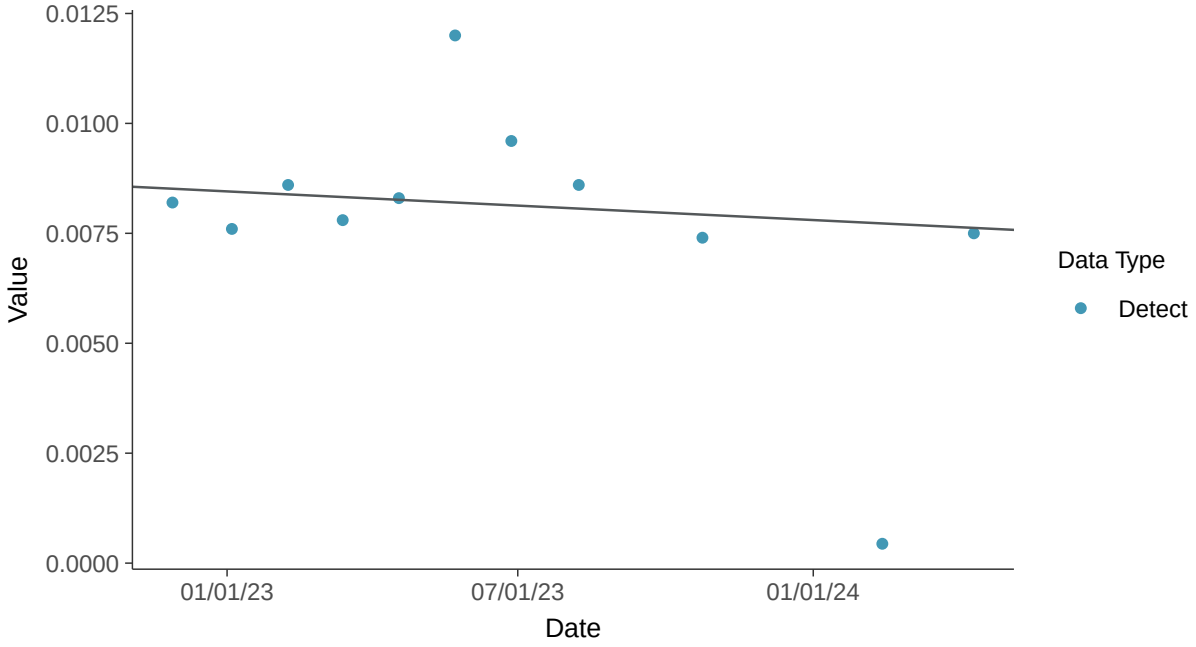
Normal Q-Q plot

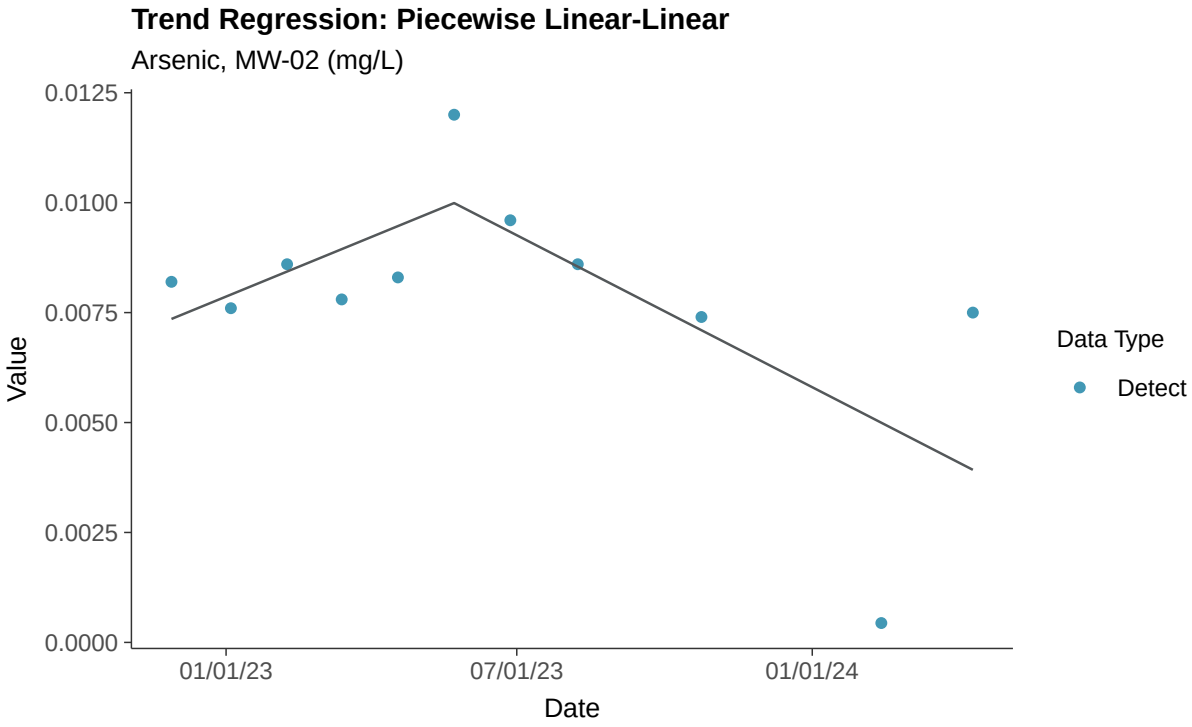
Arsenic, MW-02 (mg/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

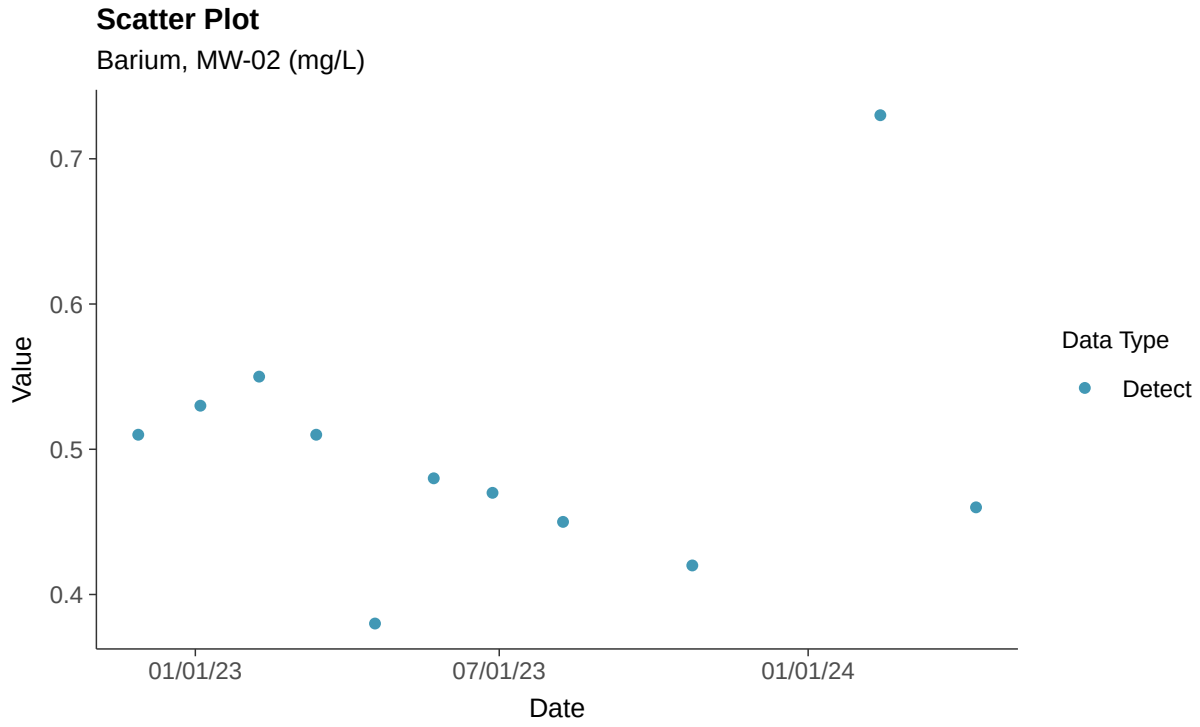
Arsenic, MW-02 (mg/L)

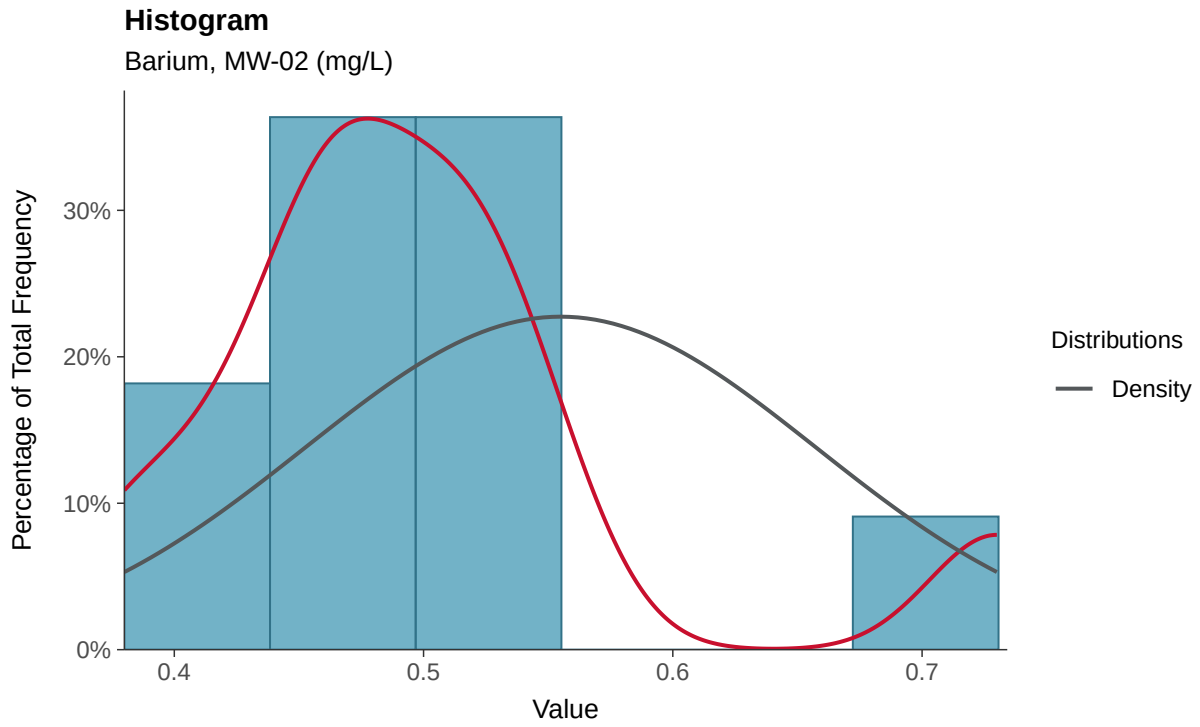



Trend Regression: Piecewise Linear-Linear
Arsenic, MW-02 (mg/L)
0.0125
0.0100
0.0075
0.0050
0.0025
0.0000
Value
01/01/23
07/01/23
01/01/24
Date
Data Type
Detect

Appendix IV: Barium, MW-02

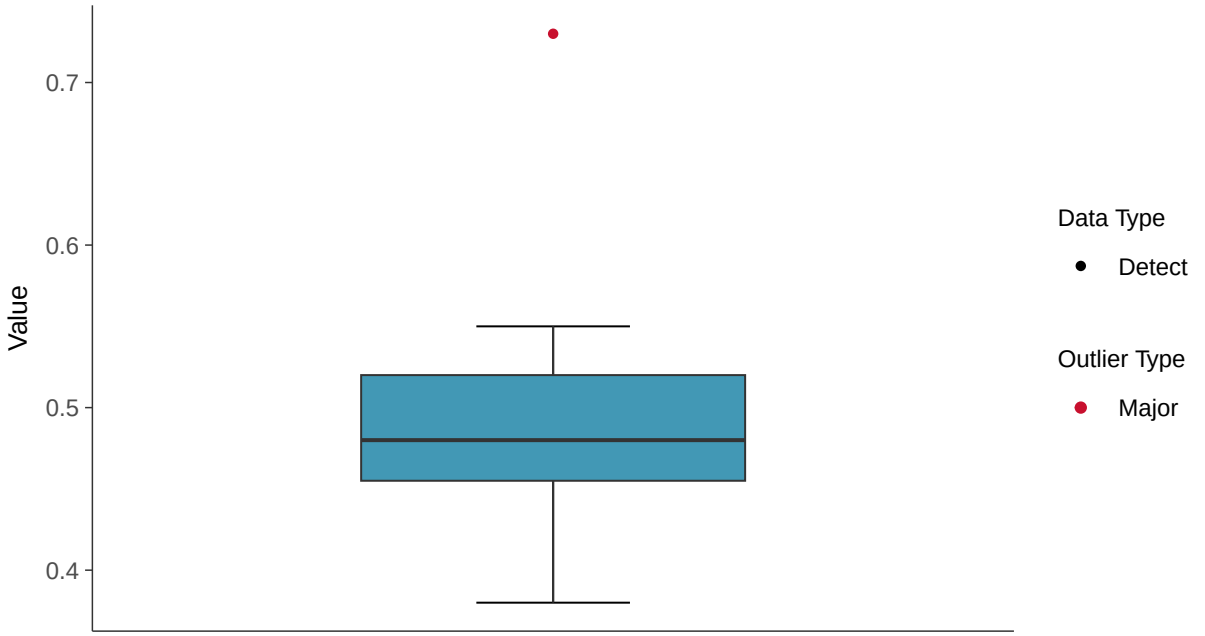
ID: 2_12_5_103





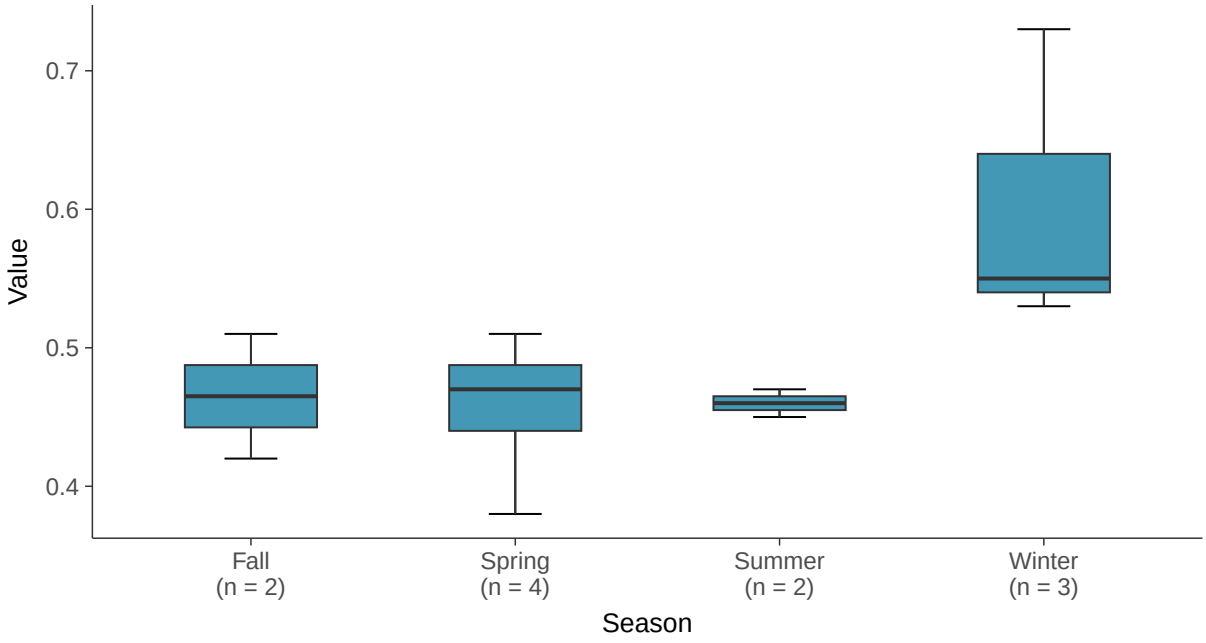
Boxplot

Barium, MW-02 (mg/L)



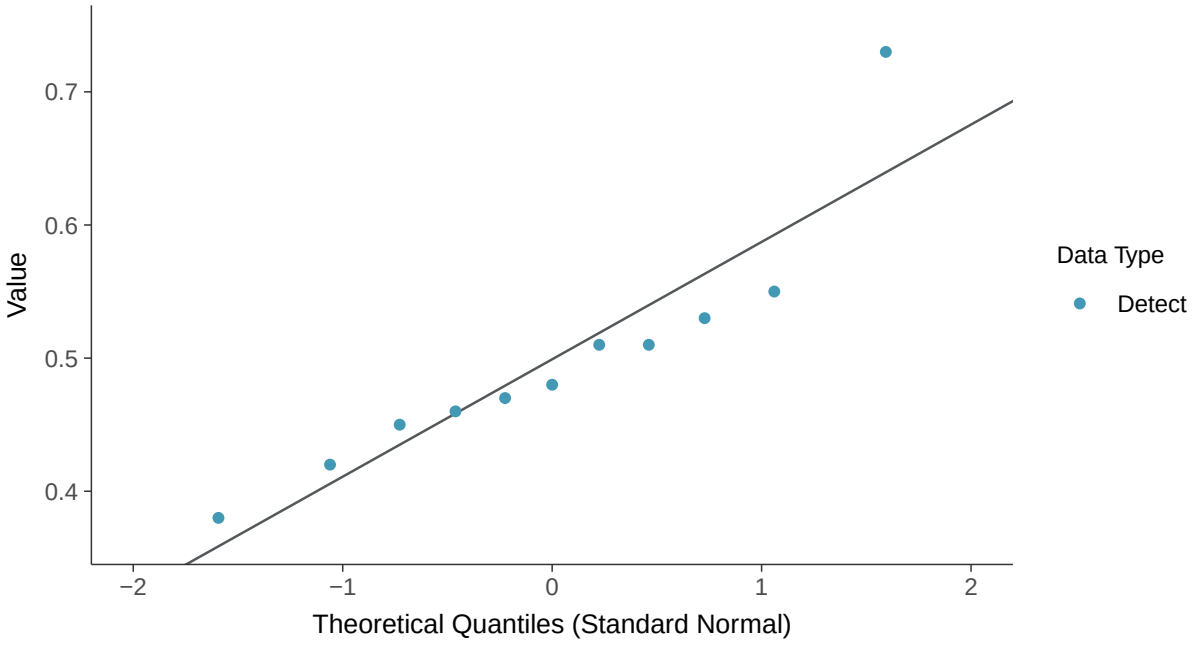
Boxplot by Season

Barium, MW-02 (mg/L)



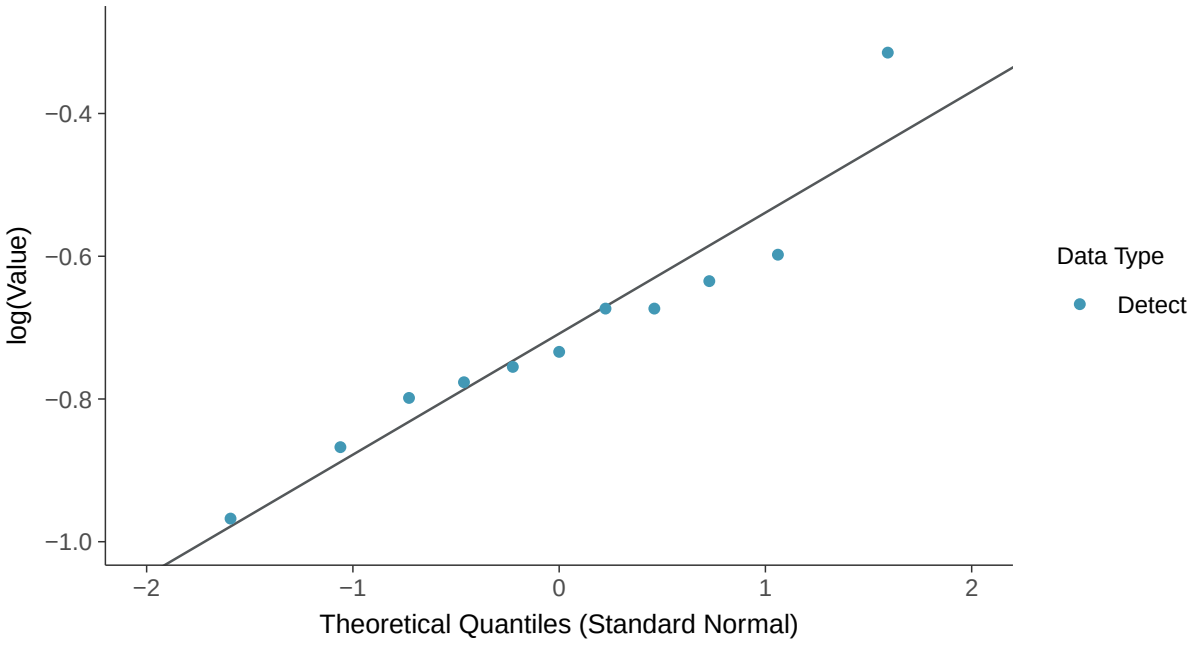
Normal Q-Q plot

Barium, MW-02 (mg/L)



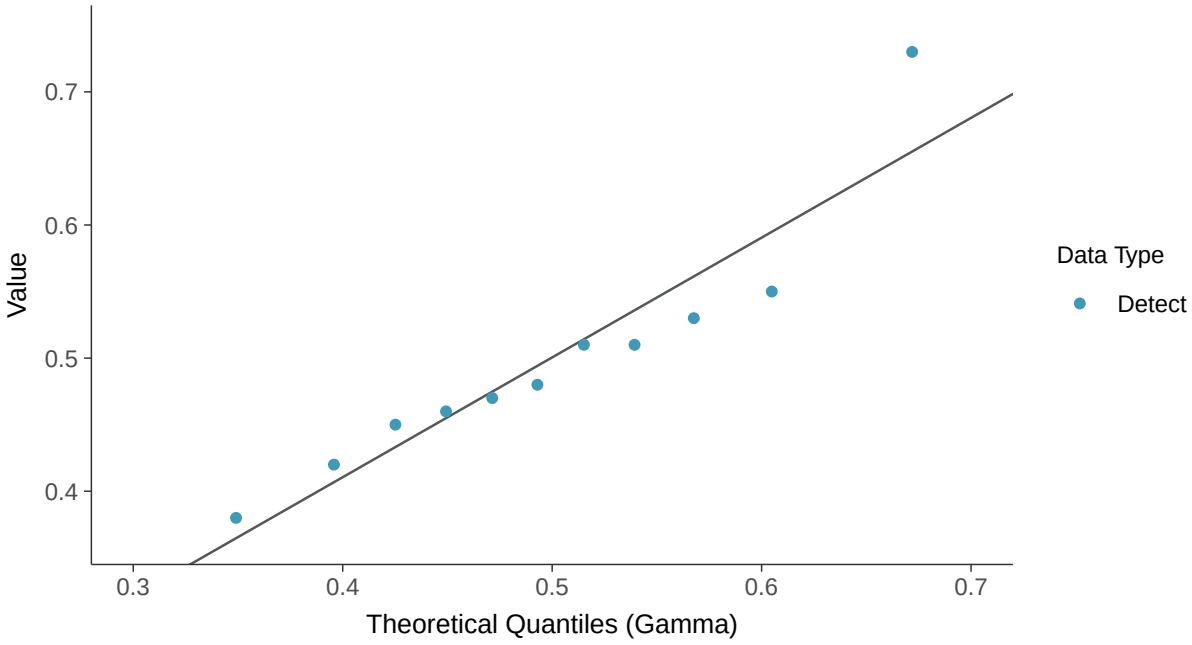
Lognormal Q-Q plot

Barium, MW-02 (mg/L)



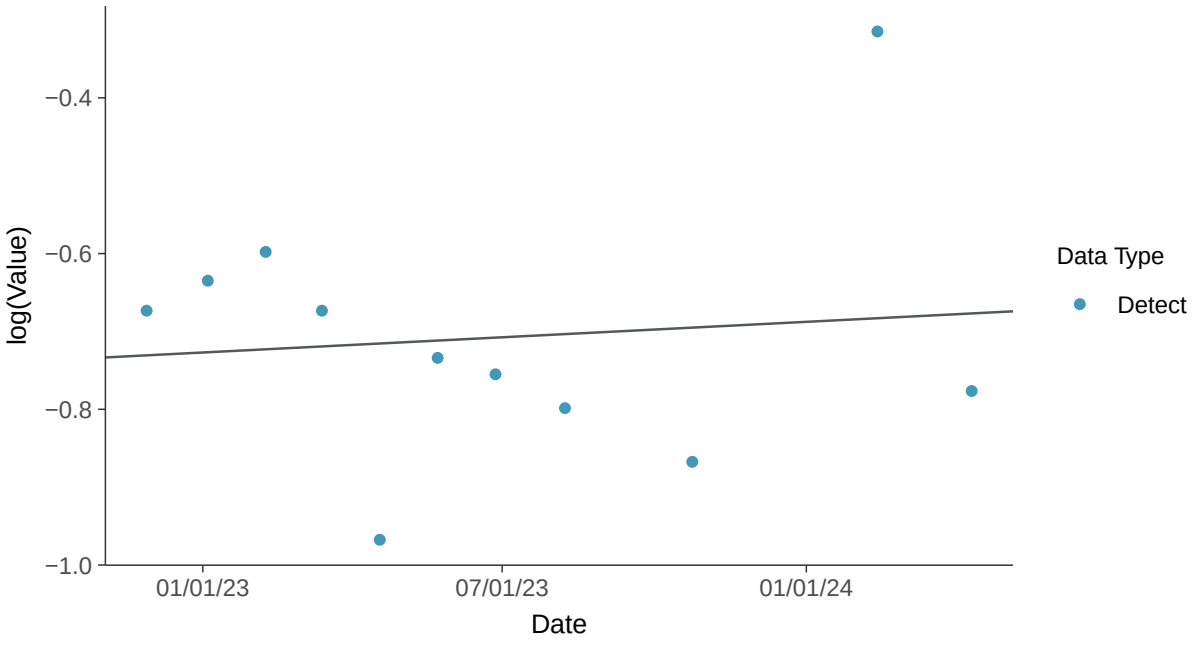
Gamma Q-Q plot

Barium, MW-02 (mg/L)



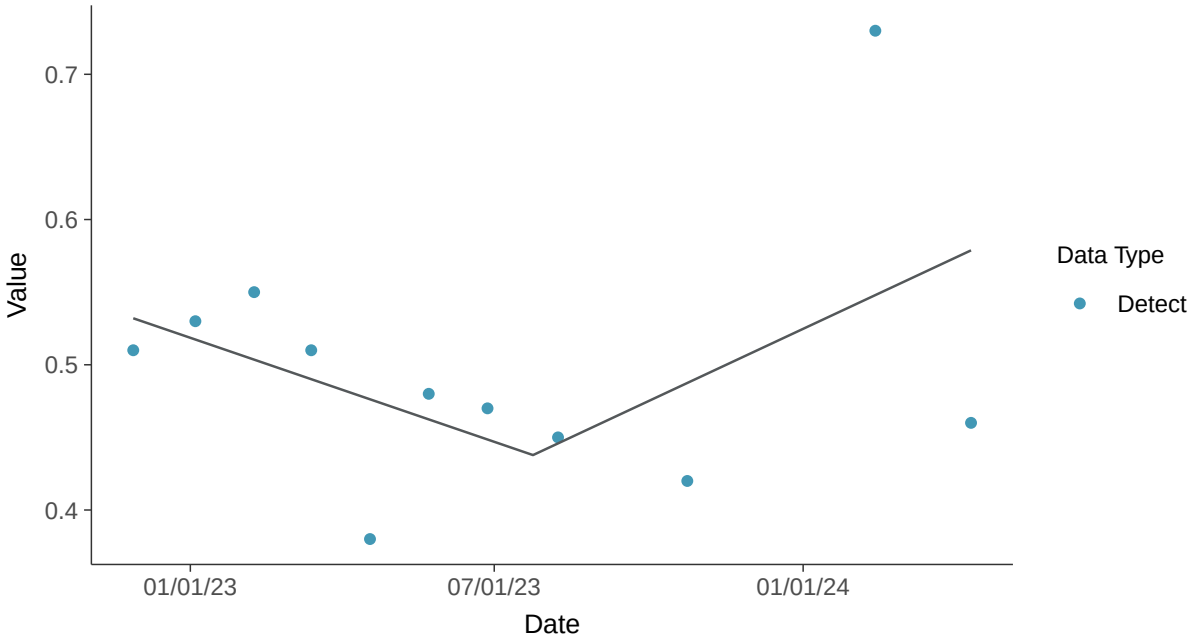
Trend Regression: Lognormal MLE

Barium, MW-02 (mg/L)



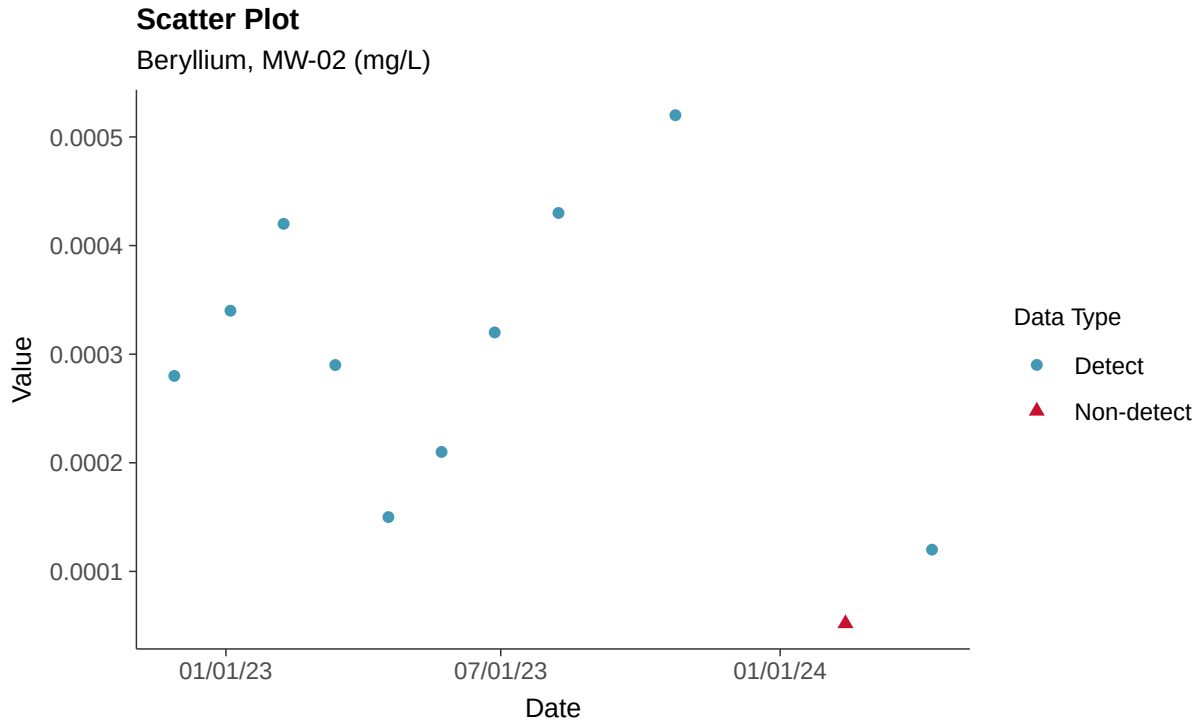
Trend Regression: Piecewise Linear-Linear

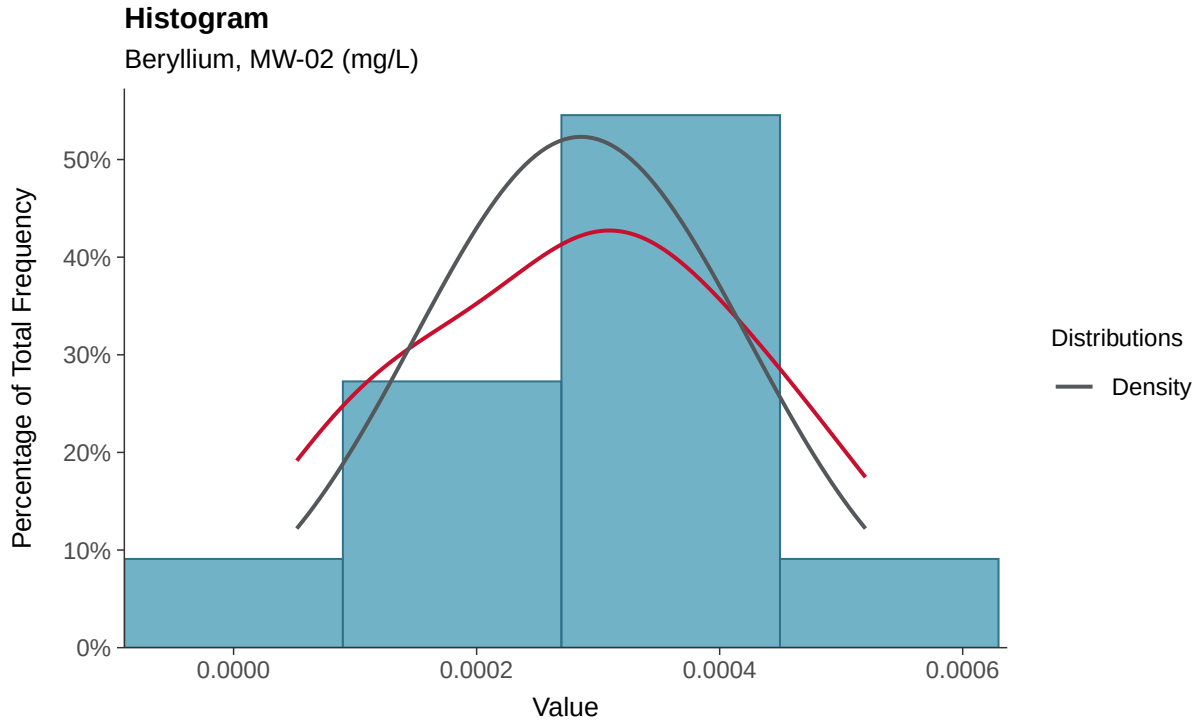
Barium, MW-02 (mg/L)



Appendix IV: Beryllium, MW-02

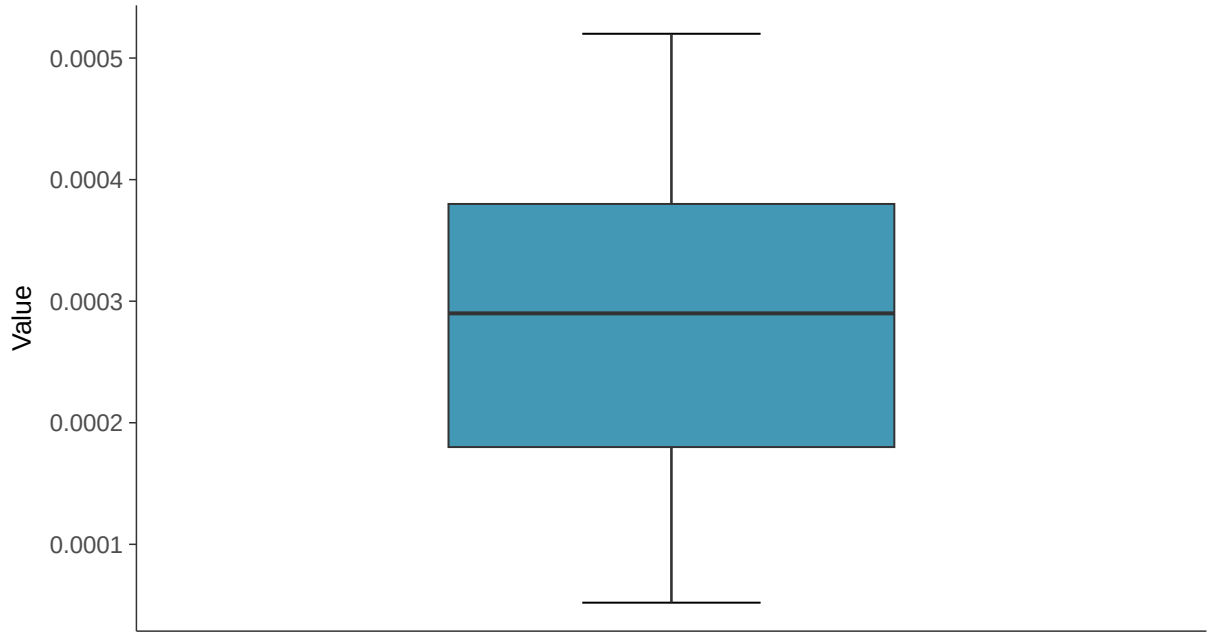
ID: 2_12_5_104





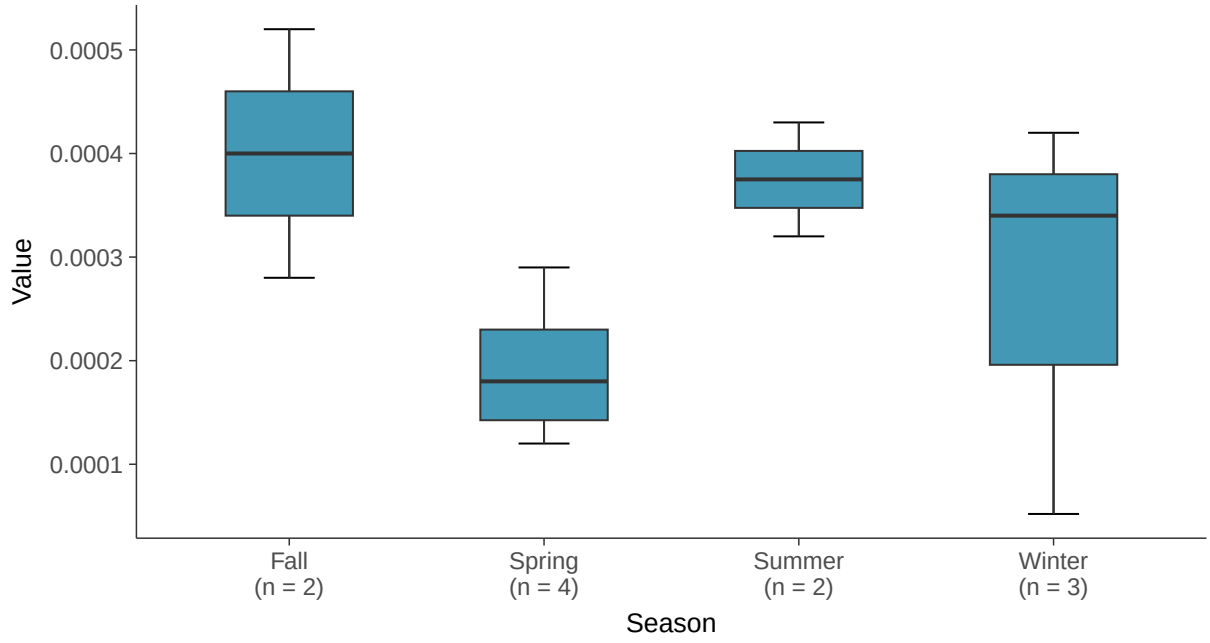
Boxplot

Beryllium, MW-02 (mg/L)



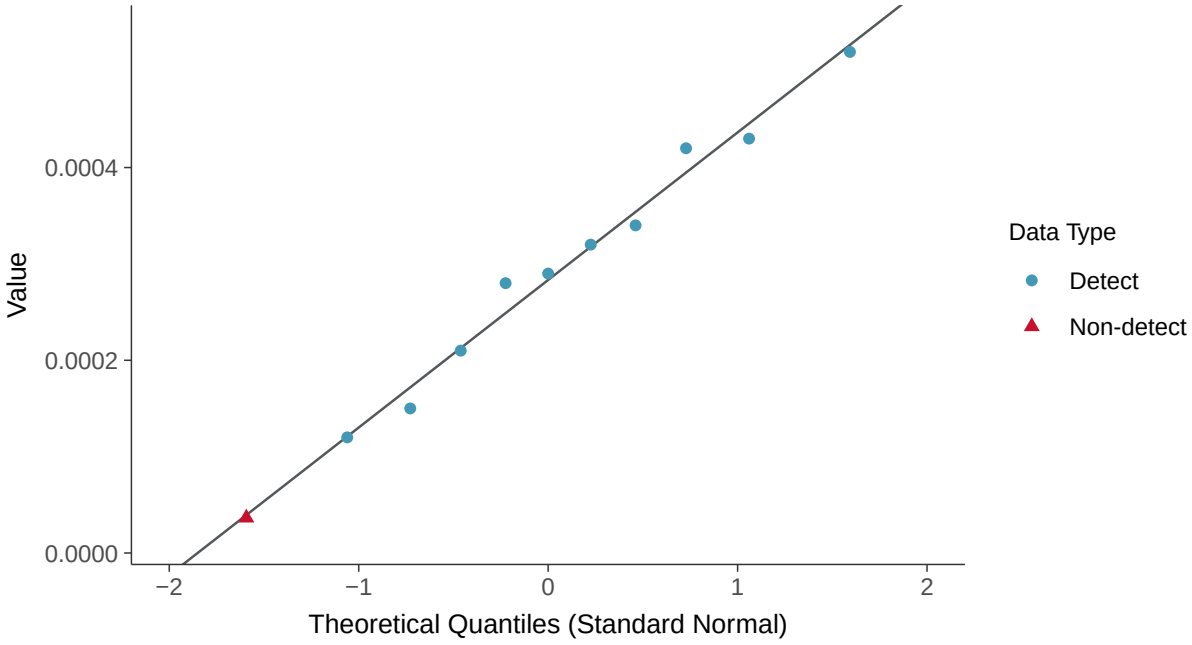
Boxplot by Season

Beryllium, MW-02 (mg/L)



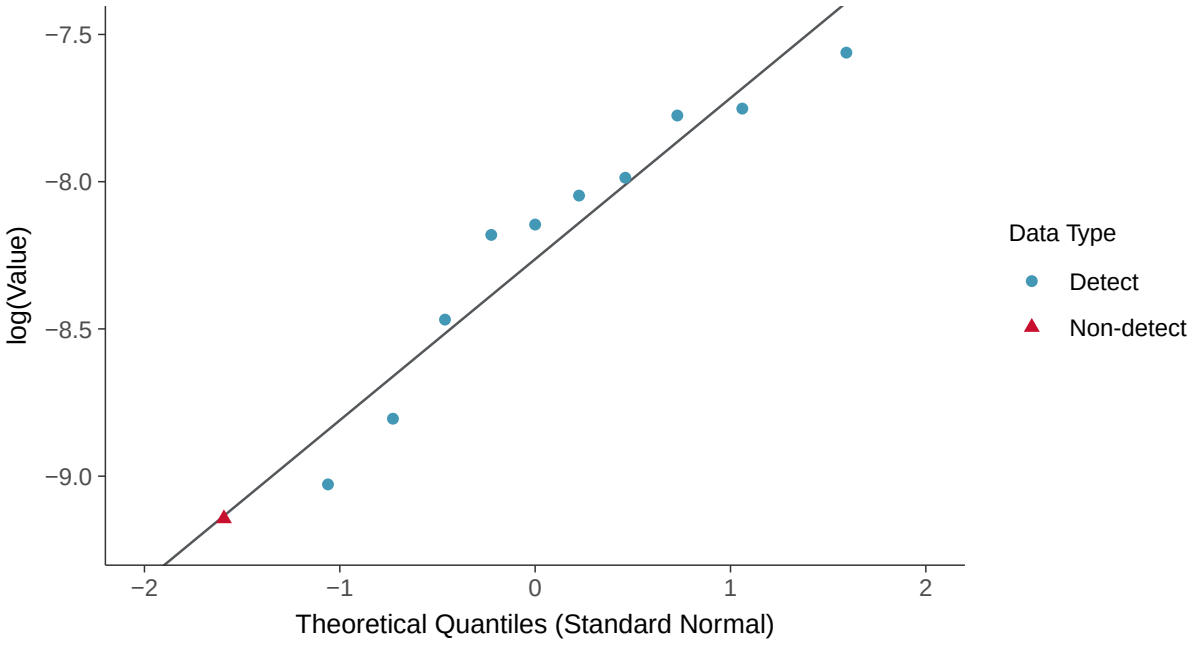
Normal Q-Q plot using ROS Imputed Estimates

Beryllium, MW-02 (mg/L)



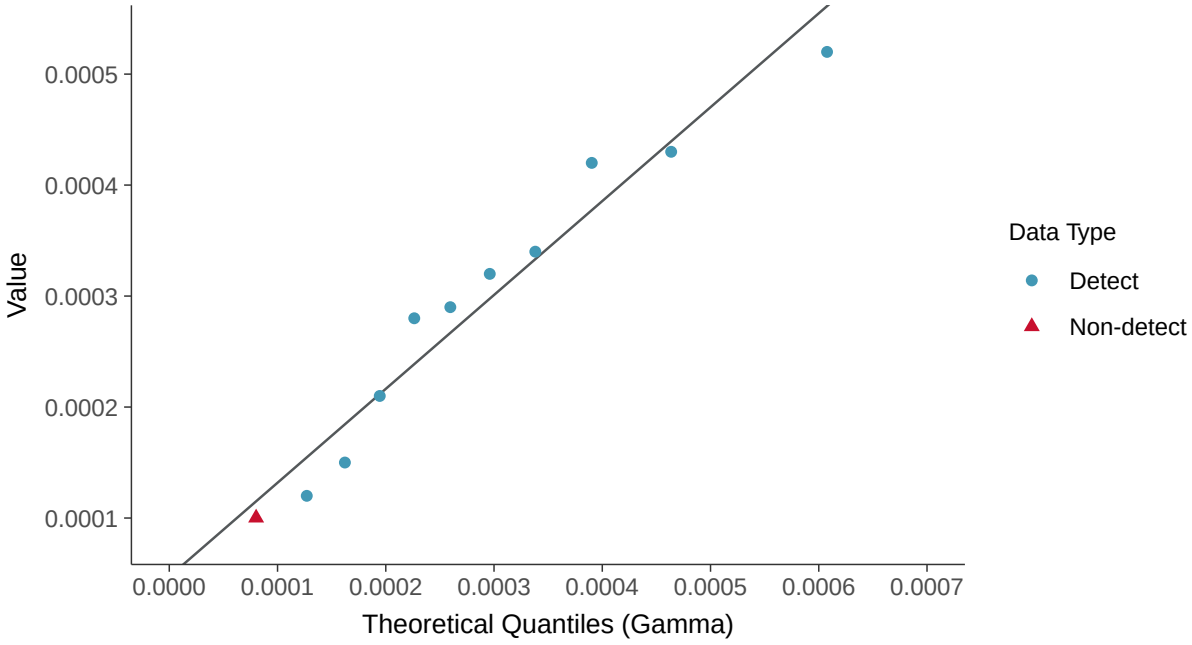
Lognormal Q-Q plot using ROS Imputed Estimates

Beryllium, MW-02 (mg/L)



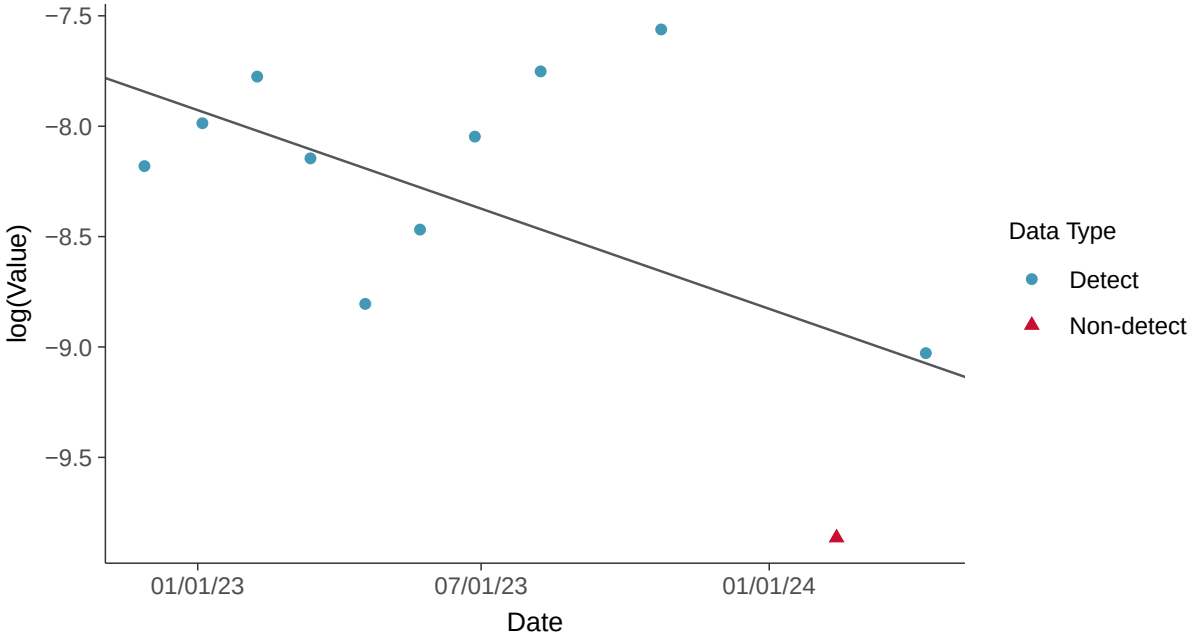
Gamma Q-Q plot using ROS Imputed Estimates

Beryllium, MW-02 (mg/L)



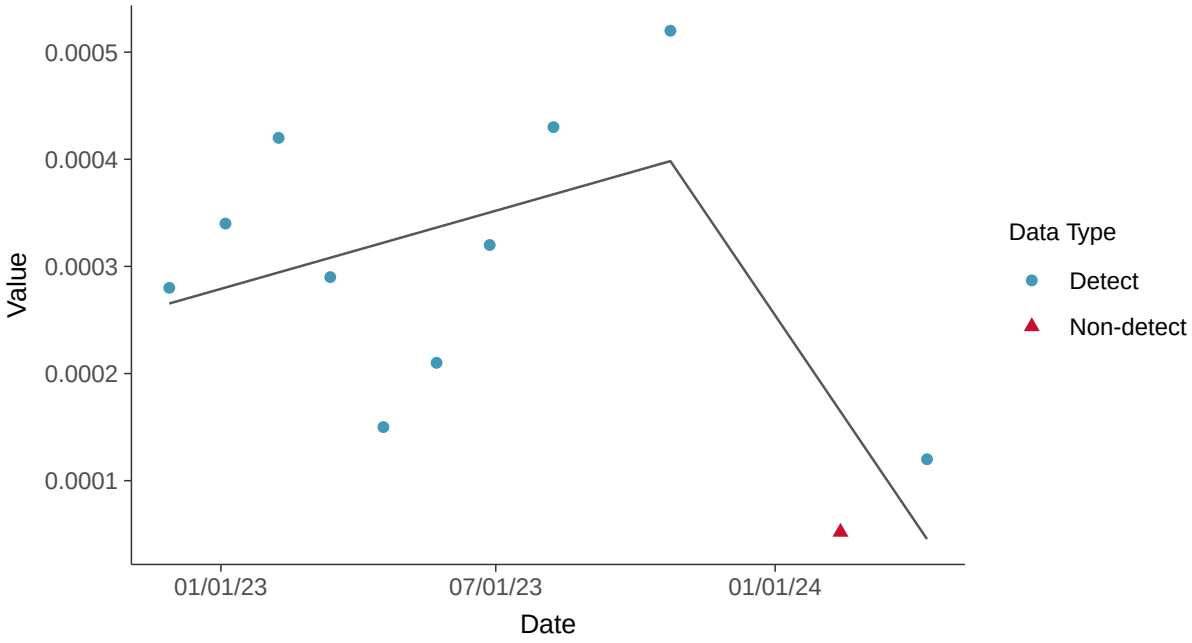
Trend Regression: Lognormal MLE

Beryllium, MW-02 (mg/L)



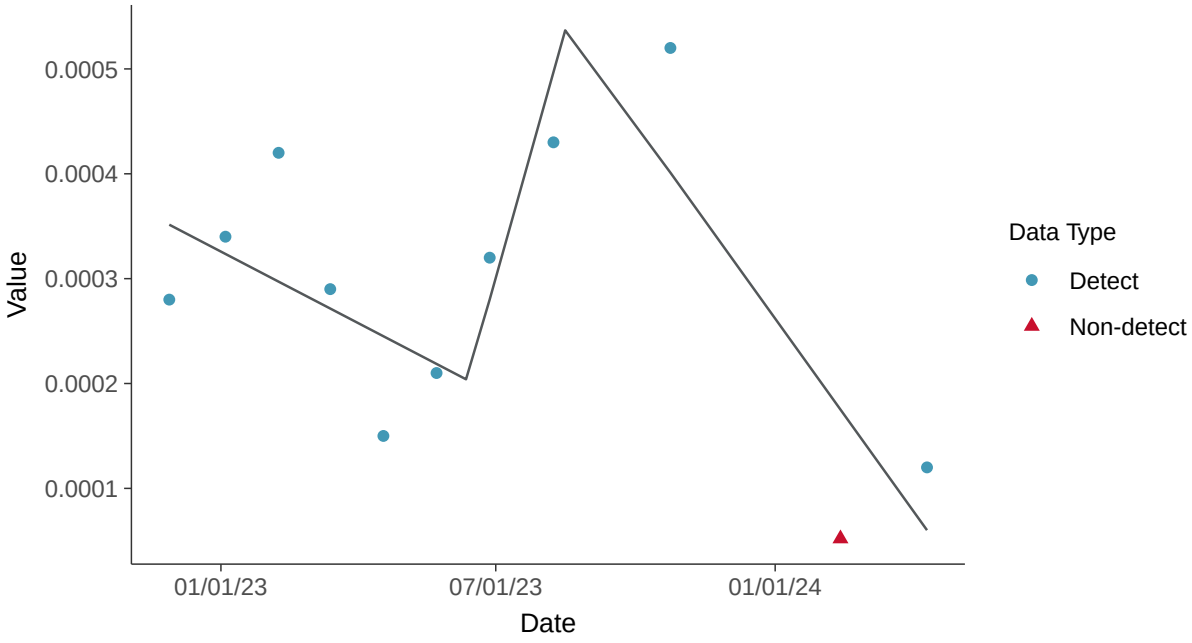
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-02 (mg/L)



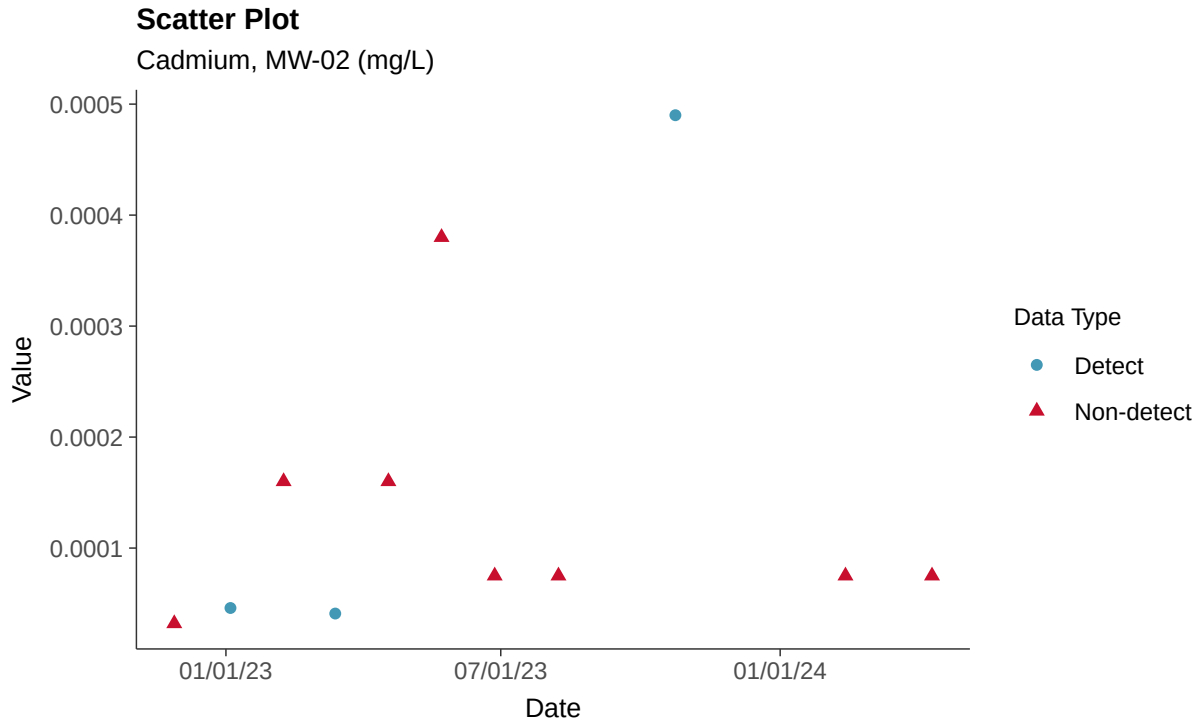
Trend Regression: Piecewise Linear-Linear-Linear

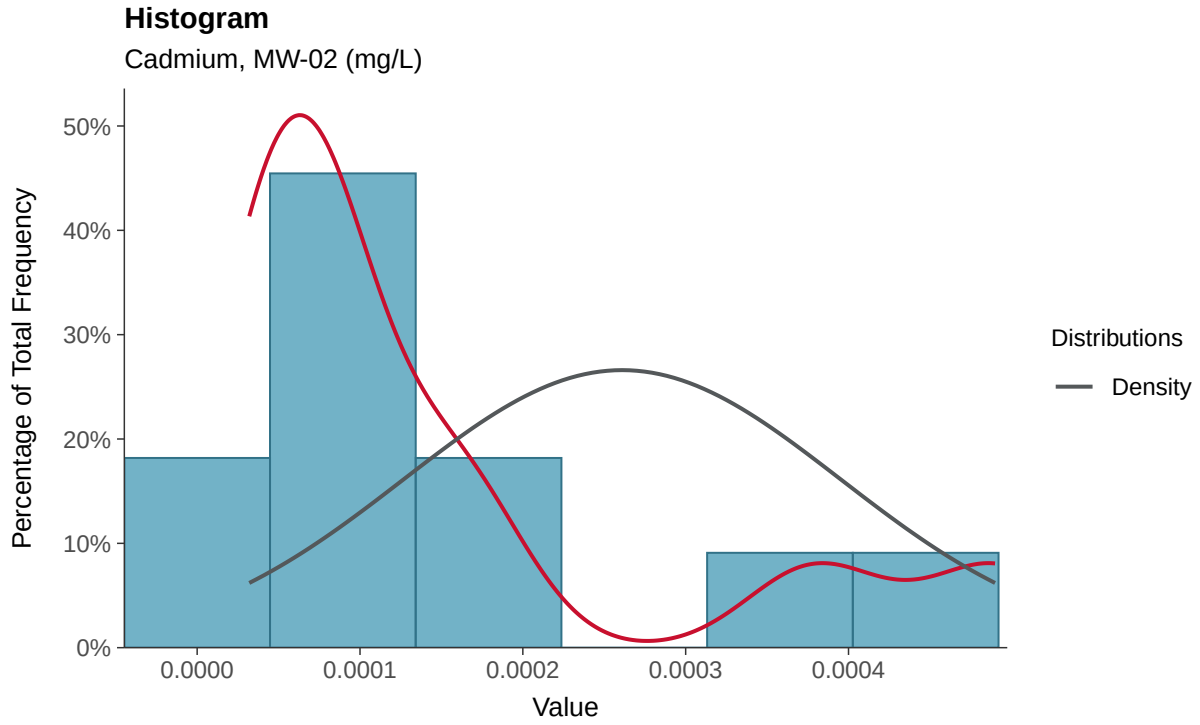
Beryllium, MW-02 (mg/L)



Appendix IV: Cadmium, MW-02

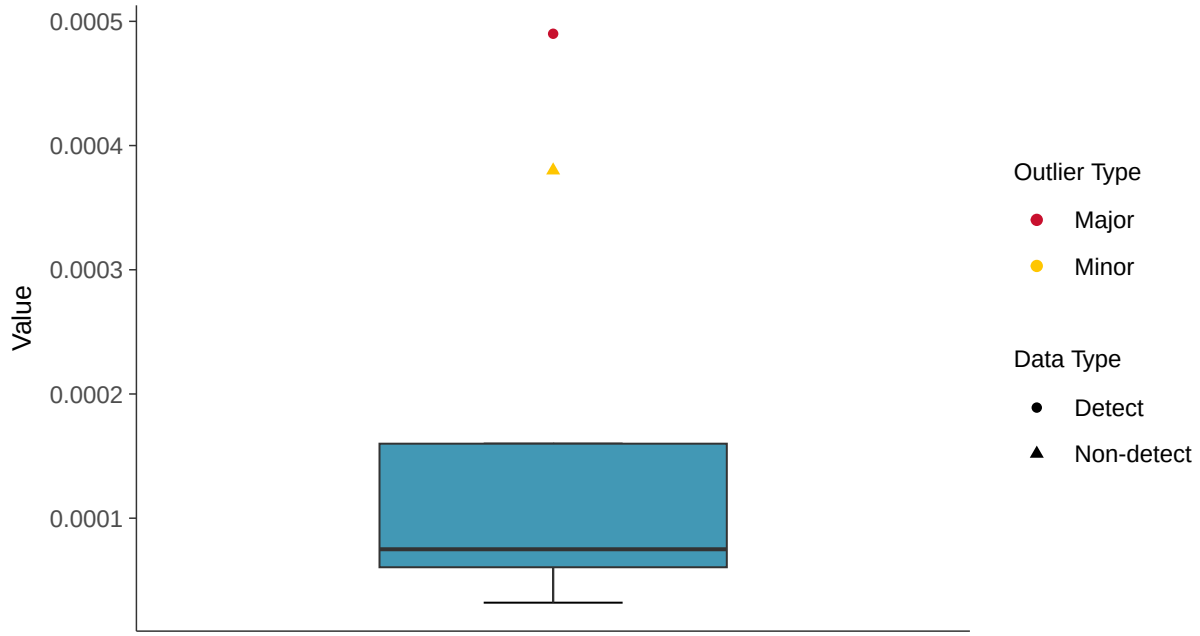
ID: 2_12_5_106





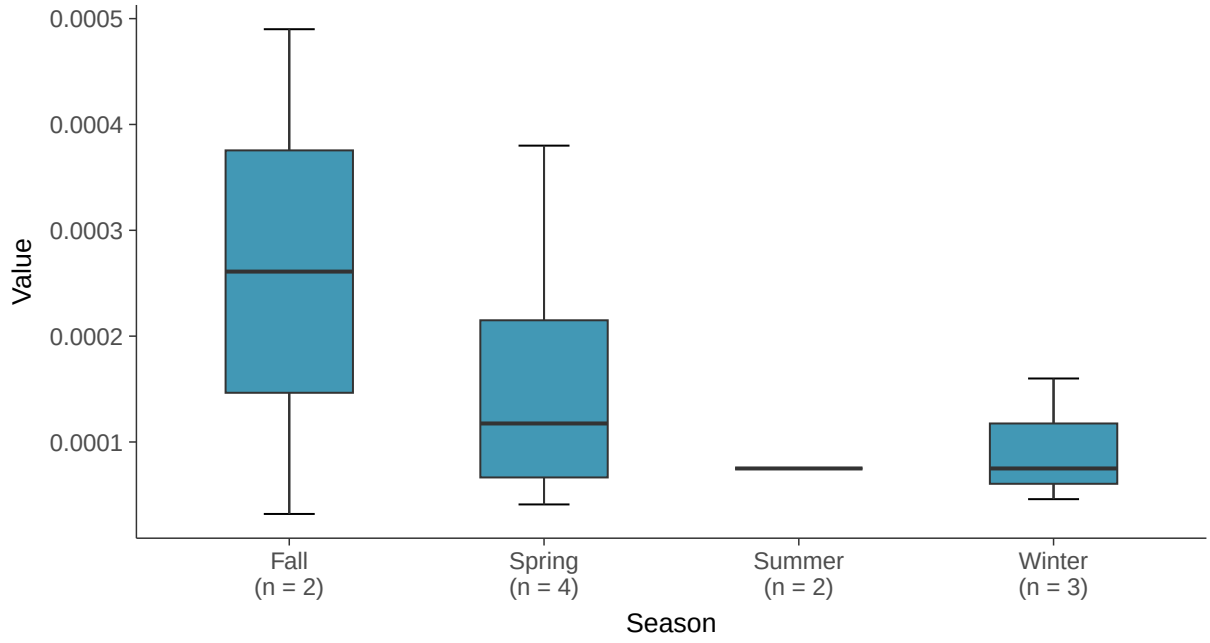
Boxplot

Cadmium, MW-02 (mg/L)



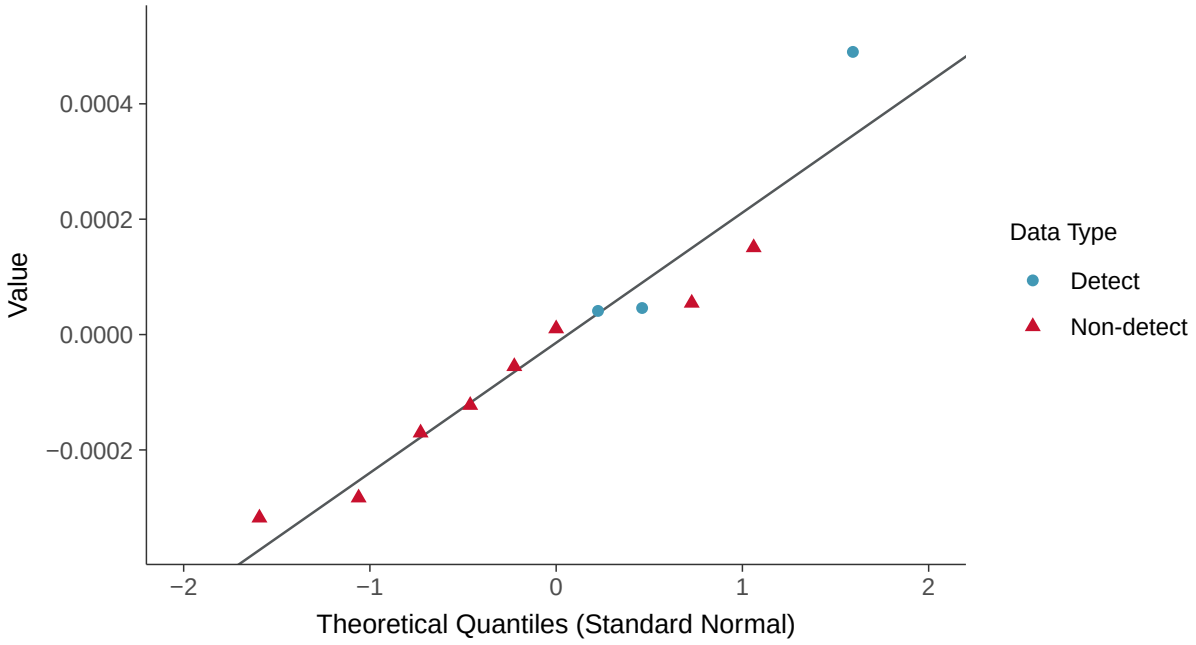
Boxplot by Season

Cadmium, MW-02 (mg/L)



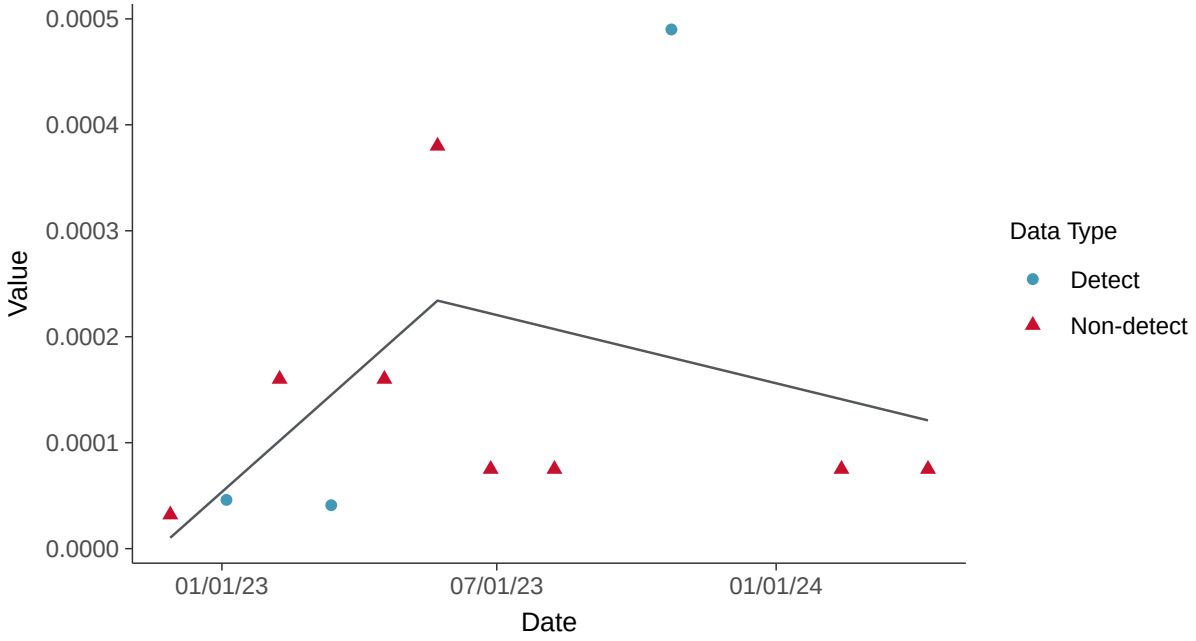
Normal Q-Q plot using ROS Imputed Estimates

Cadmium, MW-02 (mg/L)



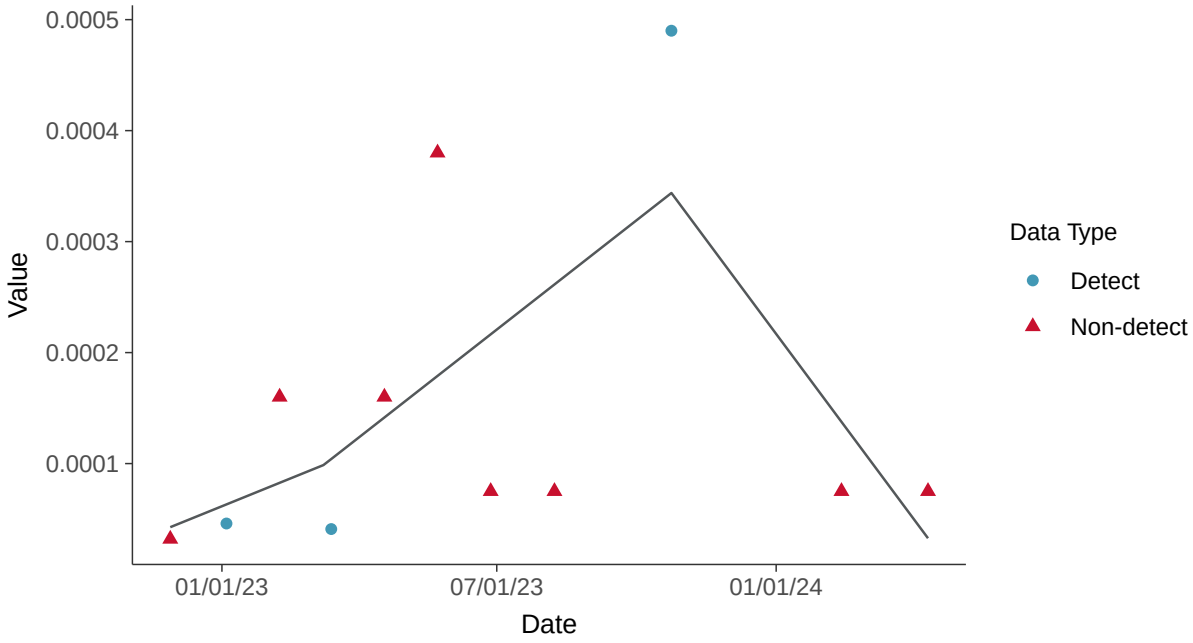
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-02 (mg/L)



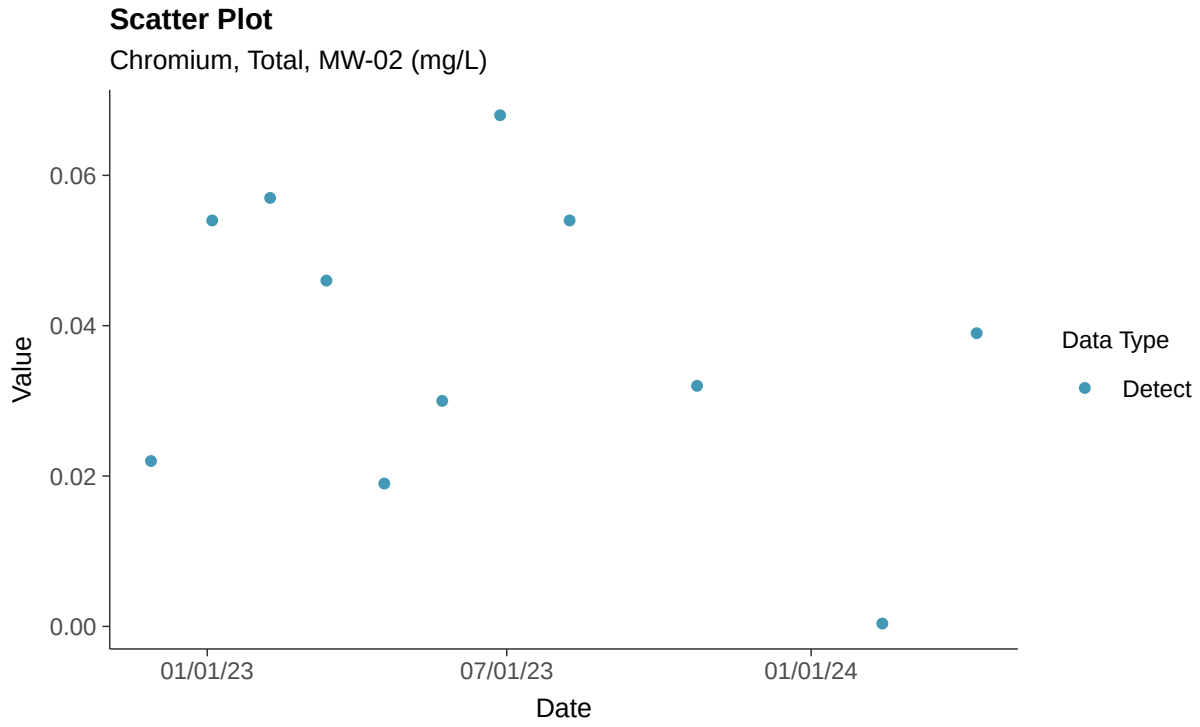
Trend Regression: Piecewise Linear-Linear-Linear

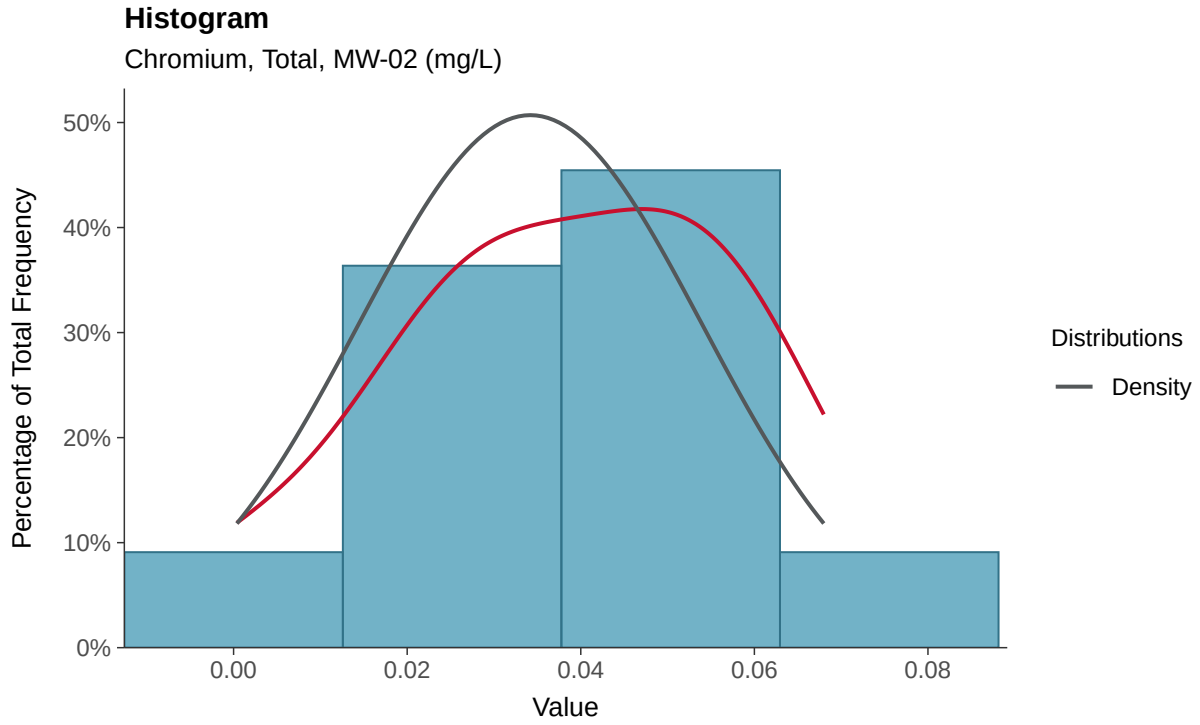
Cadmium, MW-02 (mg/L)



Appendix IV: Chromium, Total, MW-02

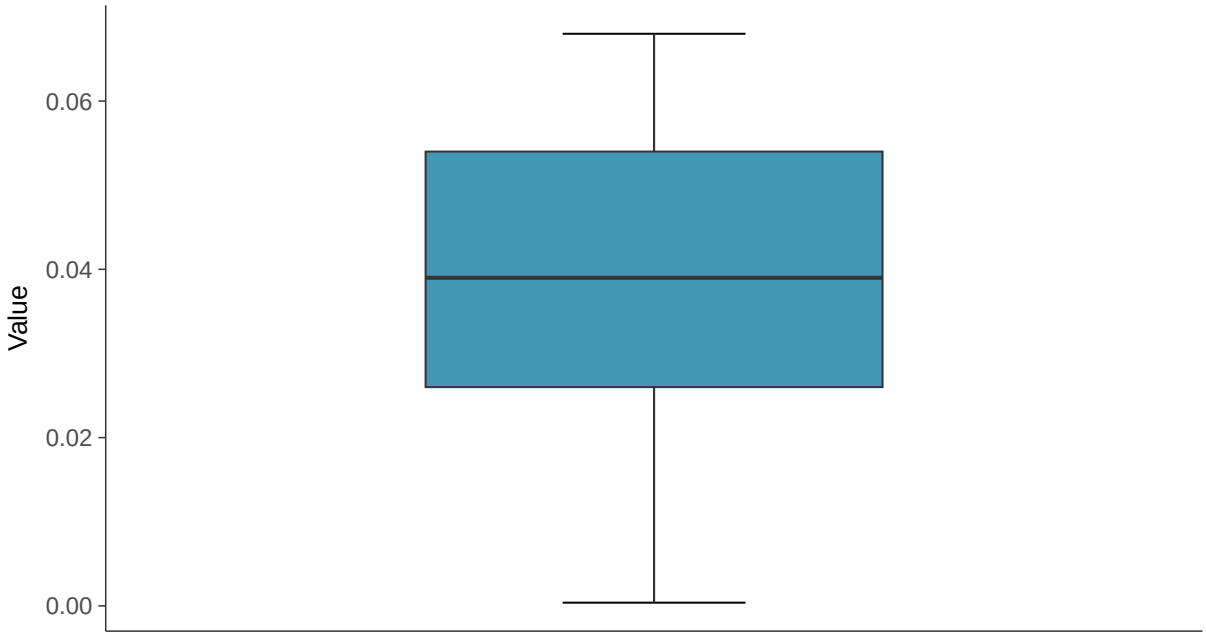
ID: 2_12_5_109





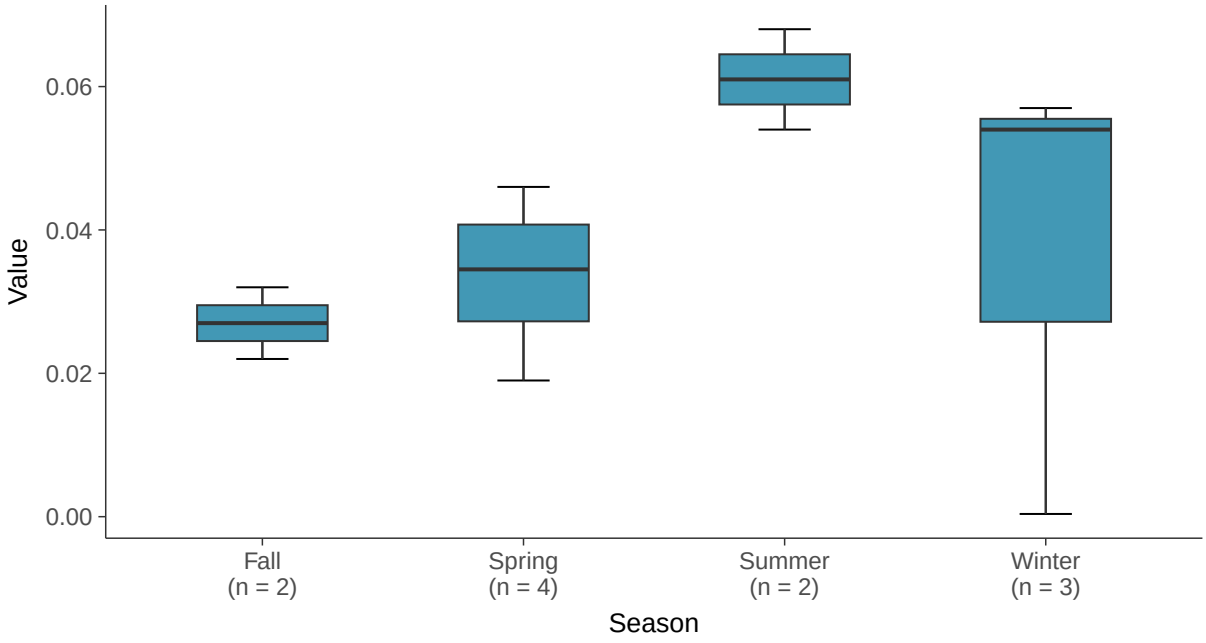
Boxplot

Chromium, Total, MW-02 (mg/L)



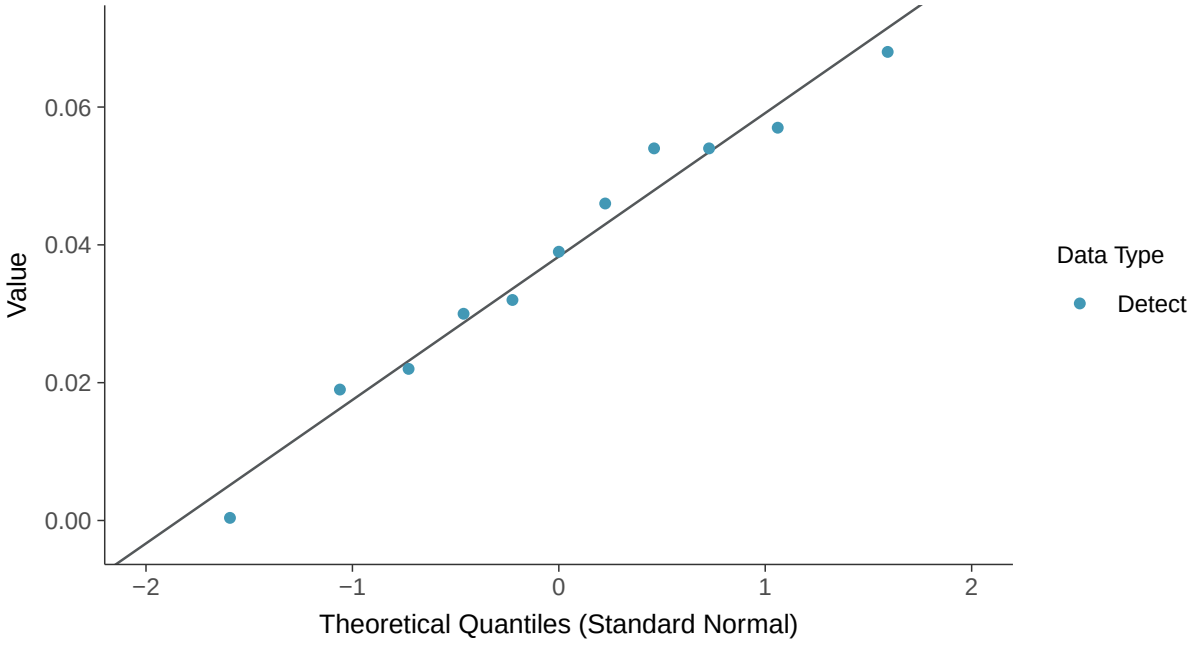
Boxplot by Season

Chromium, Total, MW-02 (mg/L)



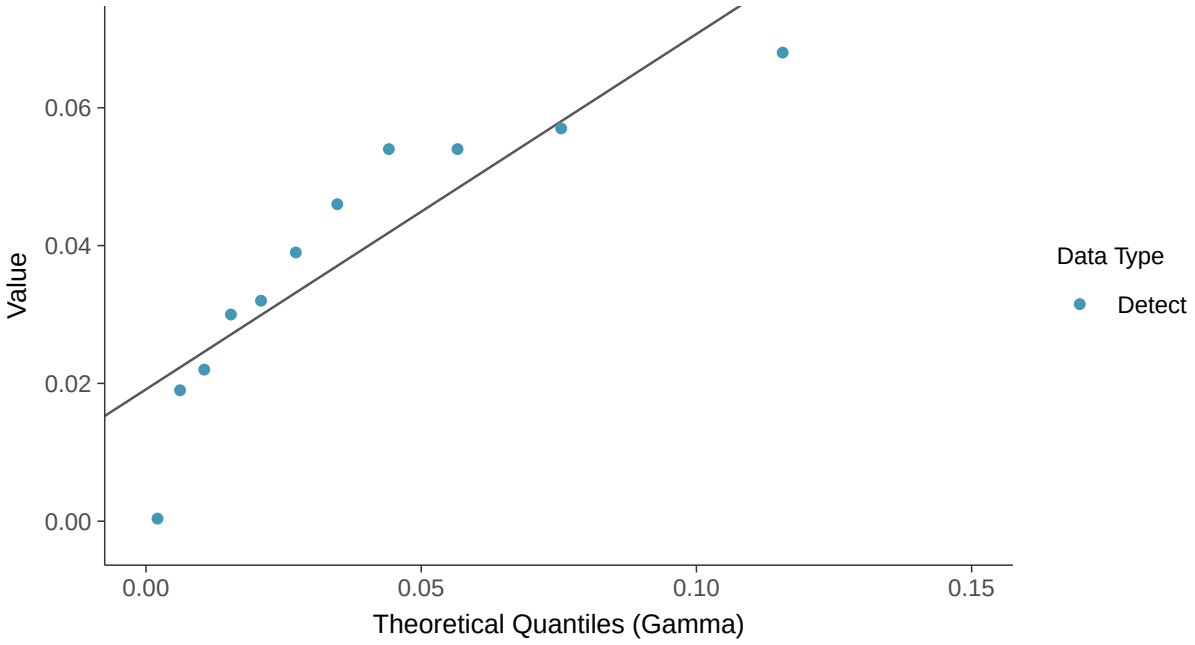
Normal Q-Q plot

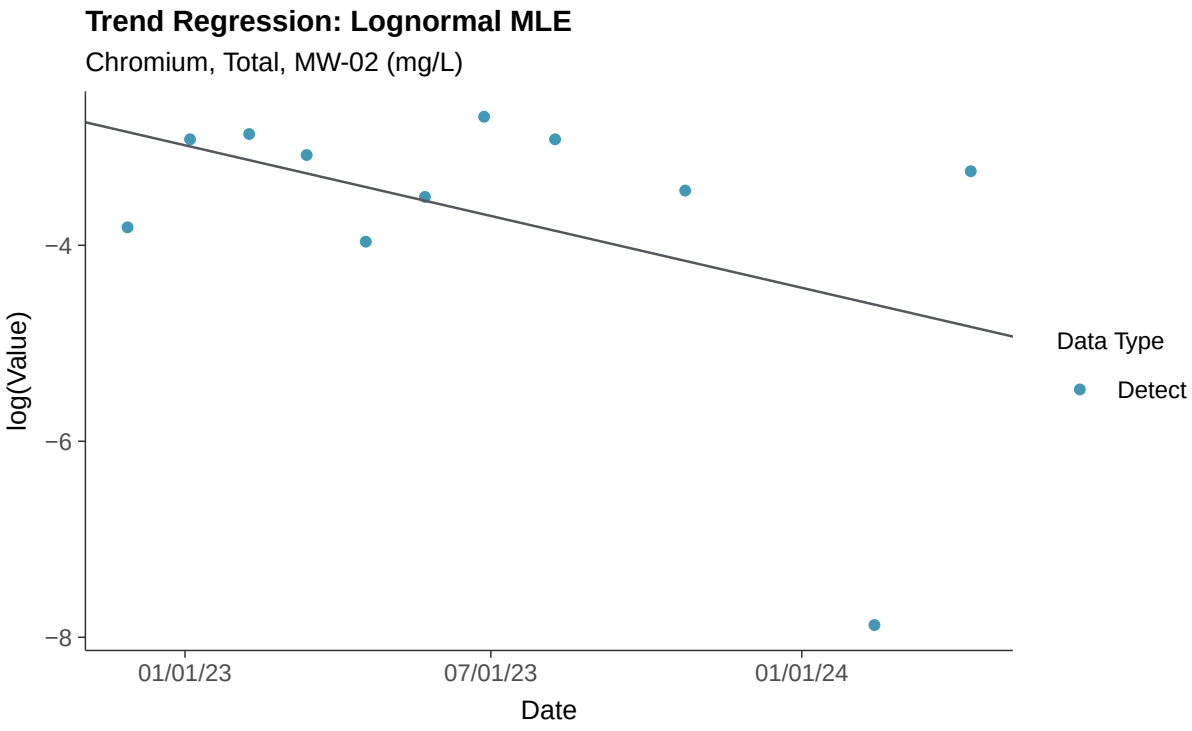
Chromium, Total, MW-02 (mg/L)



Gamma Q-Q plot

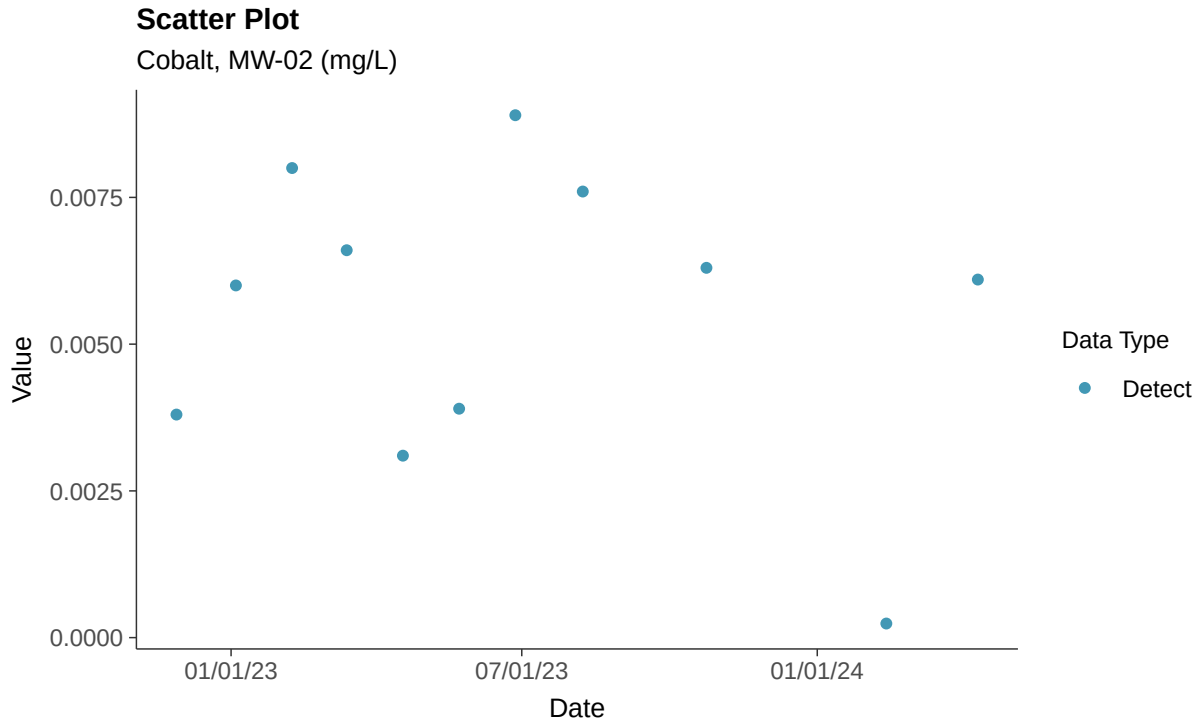
Chromium, Total, MW-02 (mg/L)

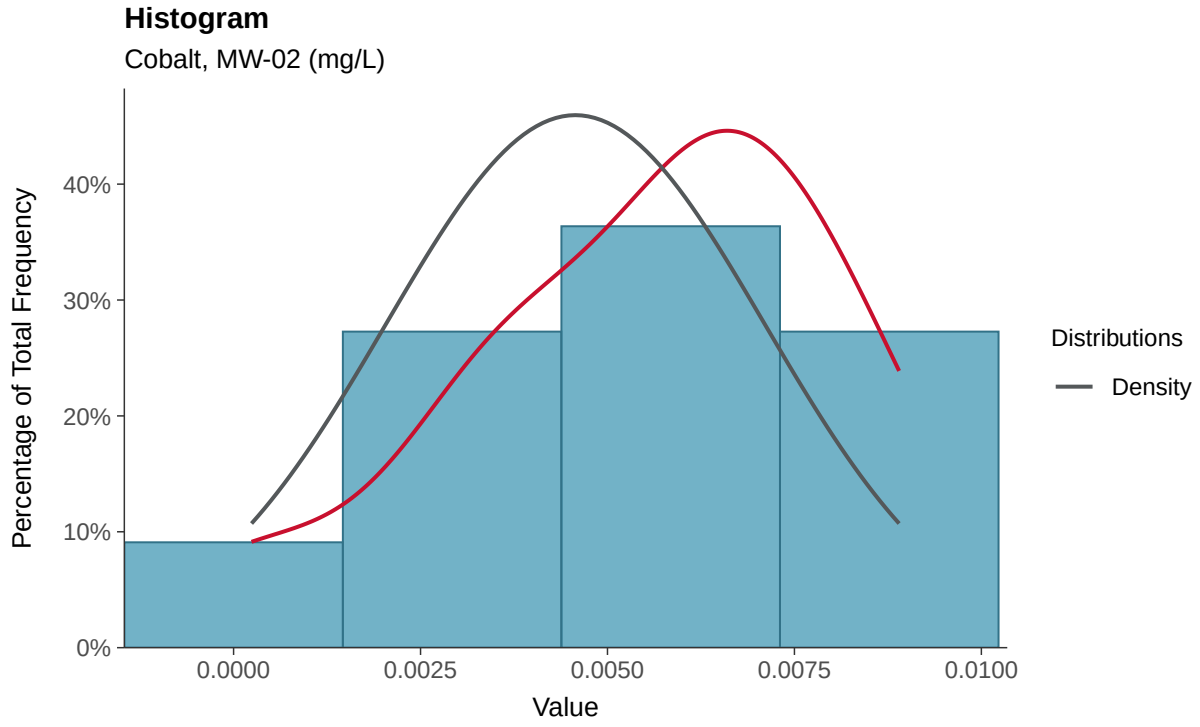



Trend Regression: Lognormal MLE
Chromium, Total, MW-02 (mg/L)
log(Value)
−4
−6
−8
01/01/23
07/01/23
01/01/24
Date
Data Type
Detect

Appendix IV: Cobalt, MW-02

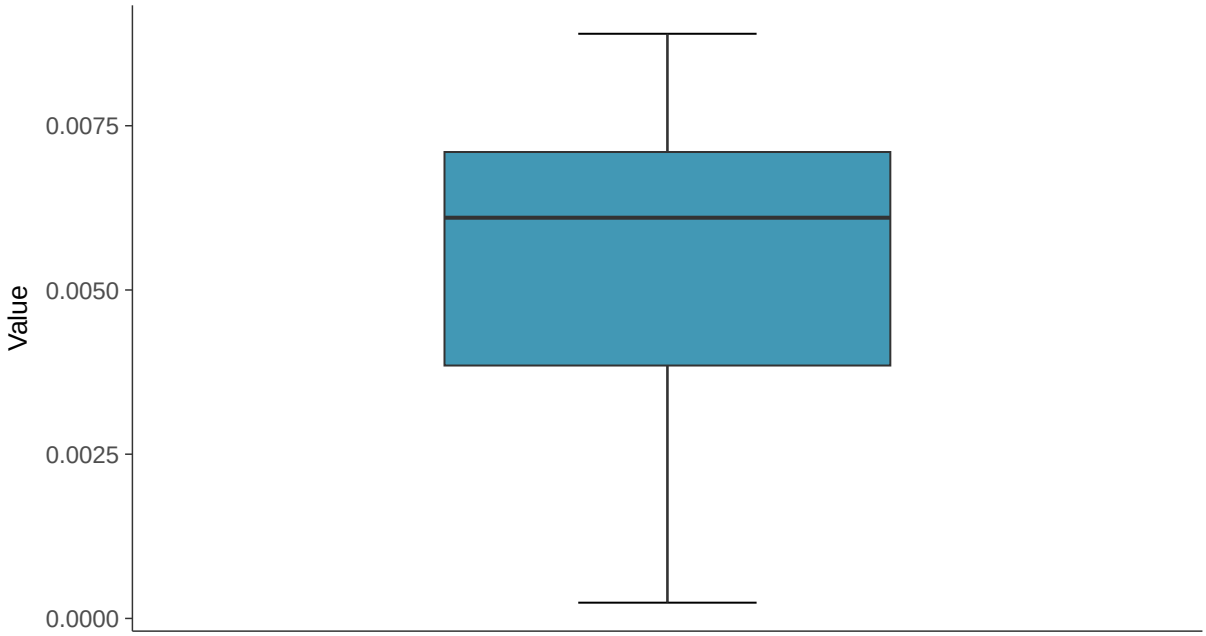
ID: 2_12_5_110





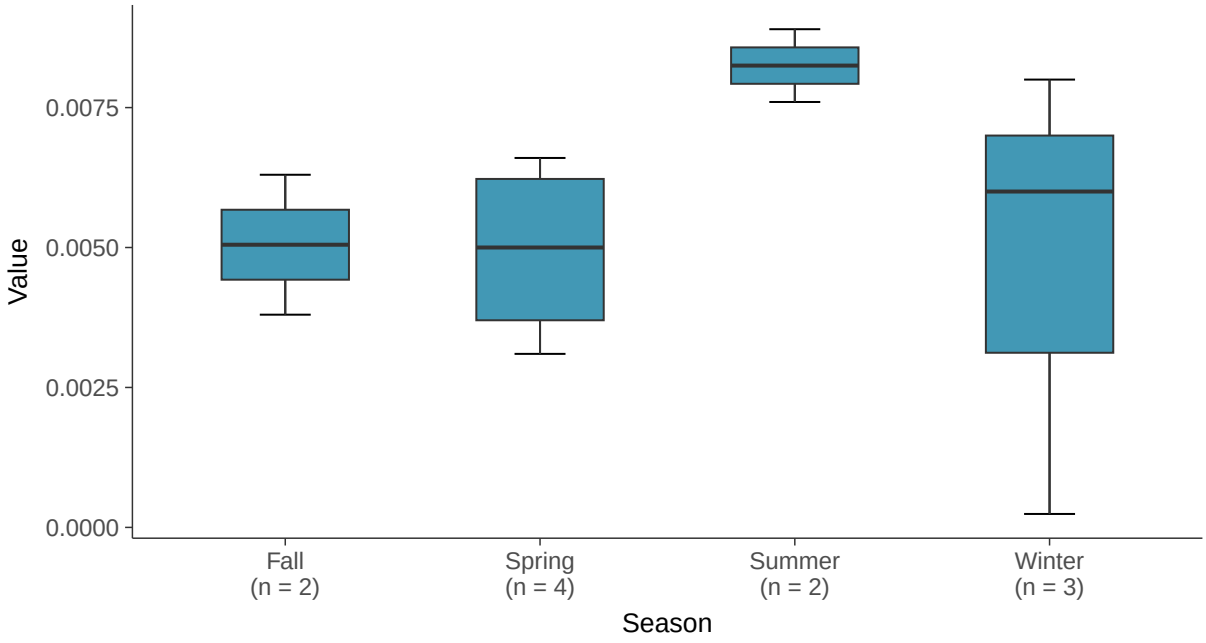
Boxplot

Cobalt, MW-02 (mg/L)



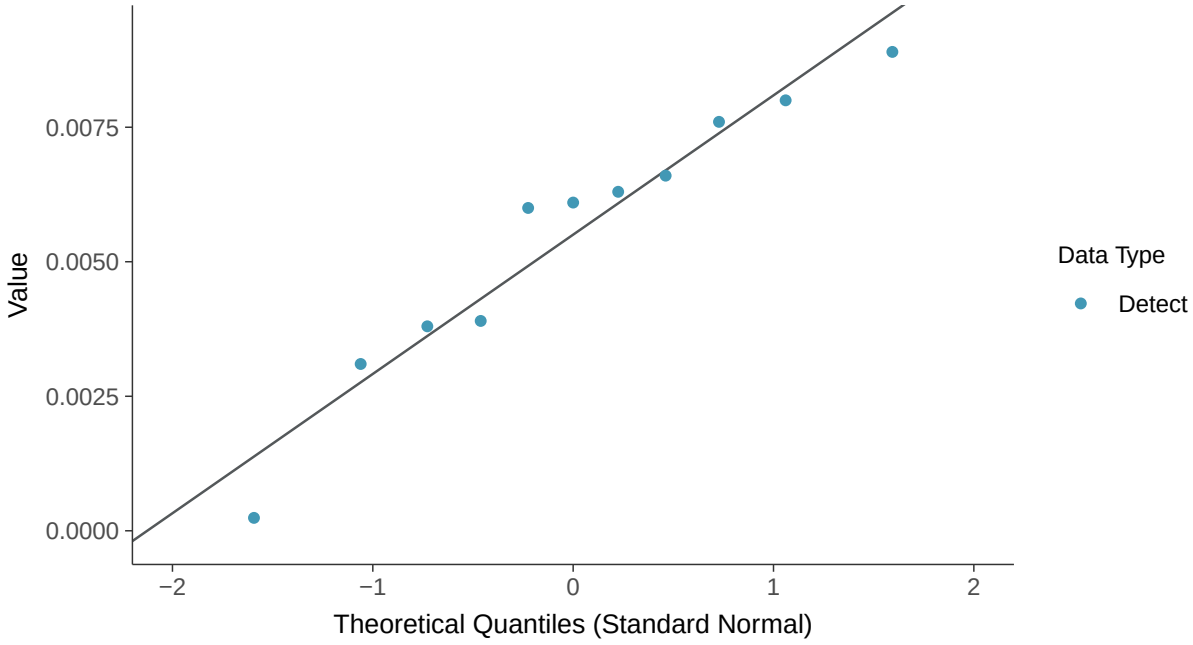
Boxplot by Season

Cobalt, MW-02 (mg/L)



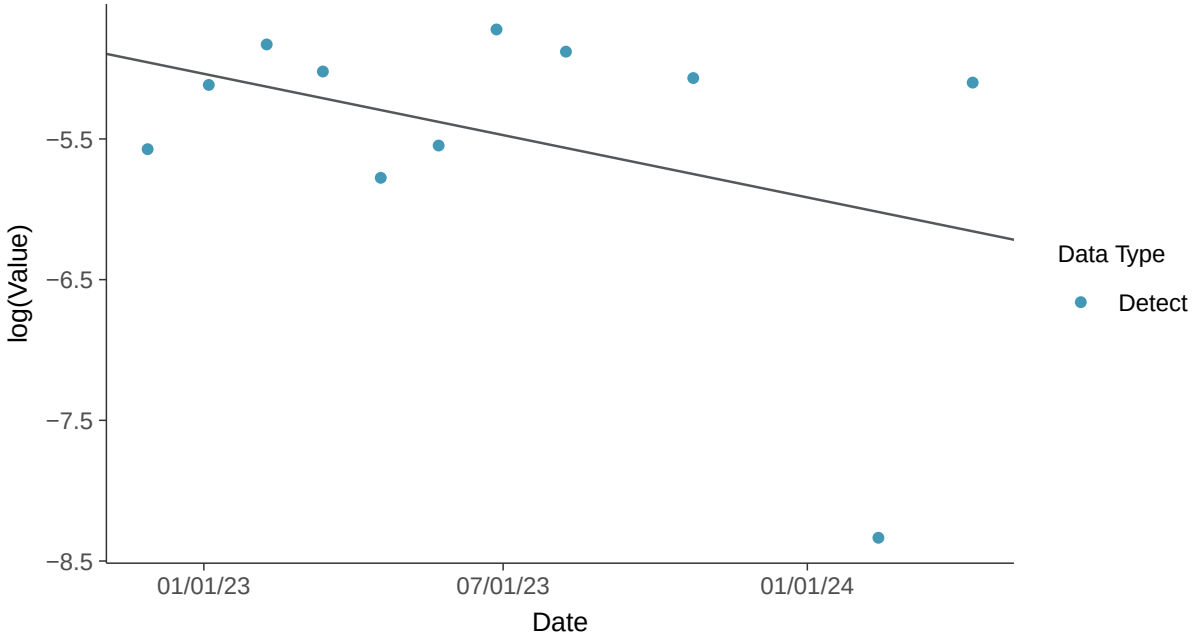
Normal Q-Q plot

Cobalt, MW-02 (mg/L)



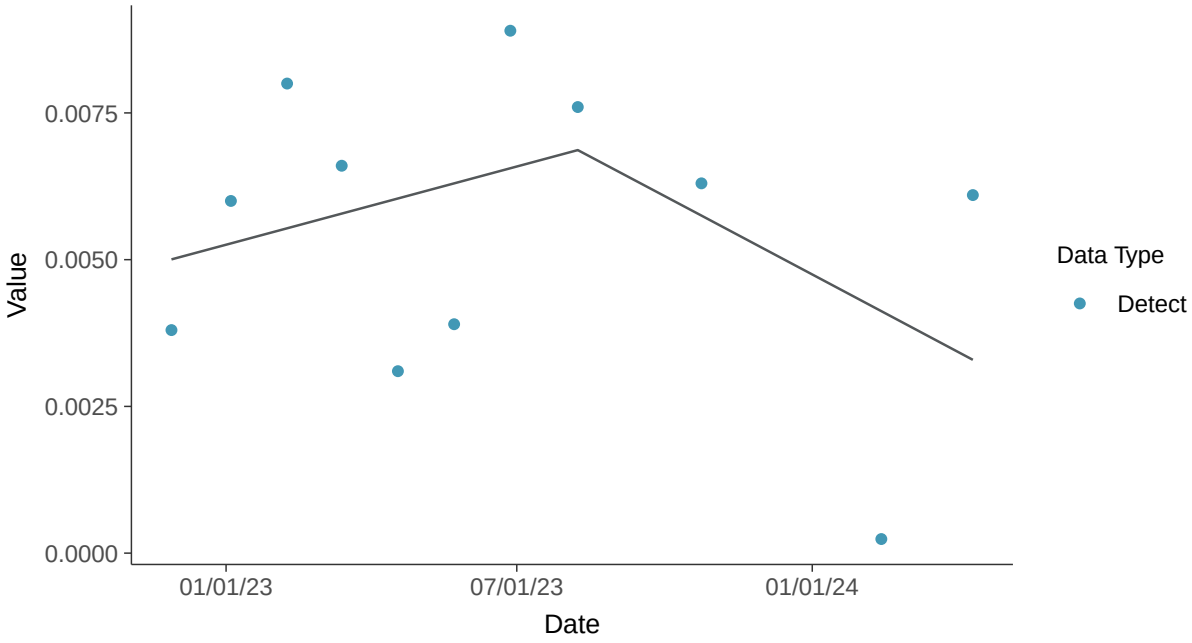
Trend Regression: Lognormal MLE

Cobalt, MW-02 (mg/L)



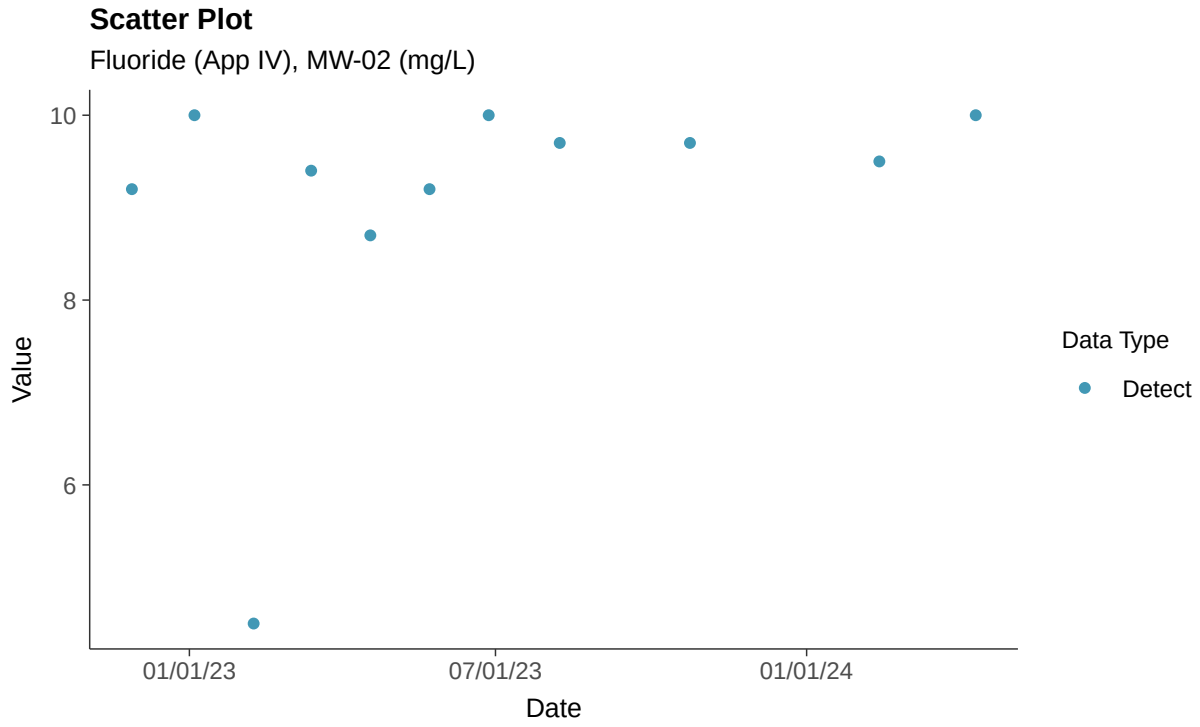
Trend Regression: Piecewise Linear-Linear

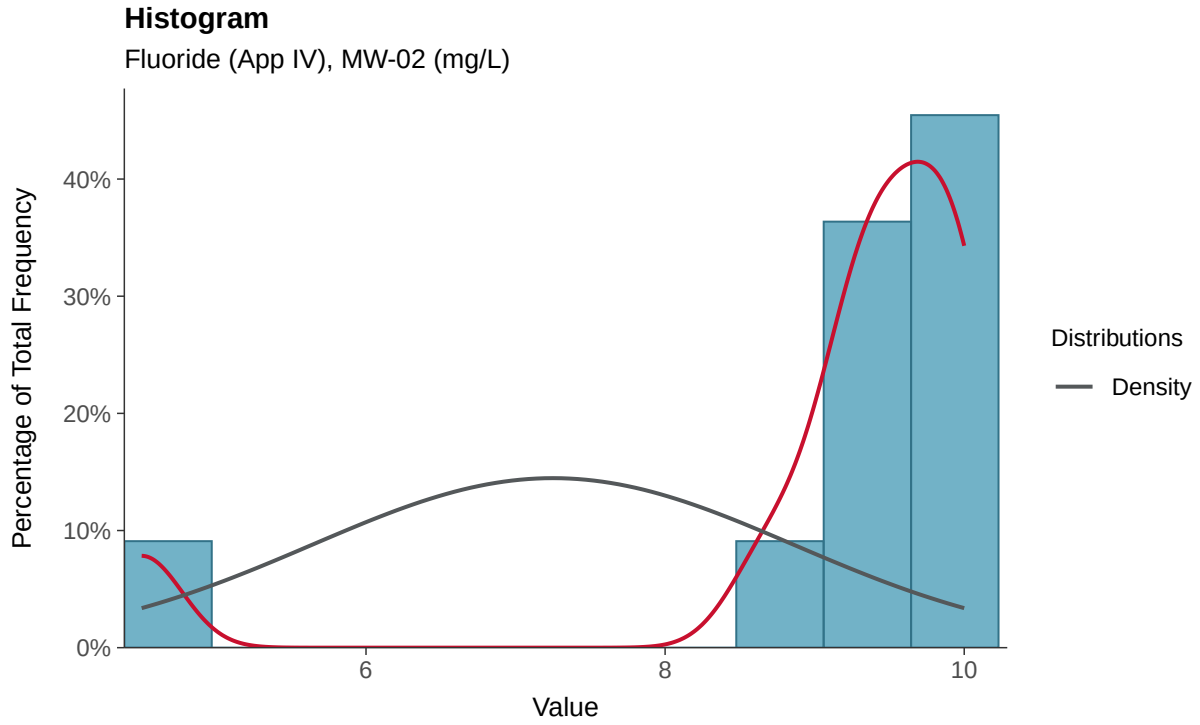
Cobalt, MW-02 (mg/L)



Appendix IV: Fluoride (App IV), MW-02

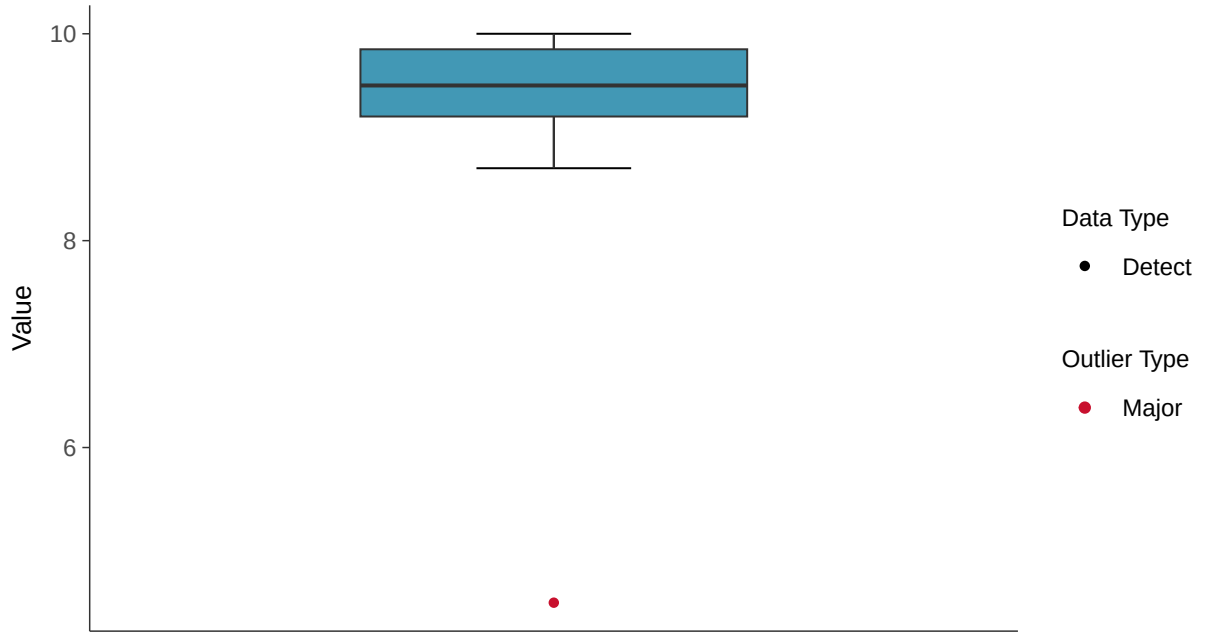
ID: 2_12_5_113





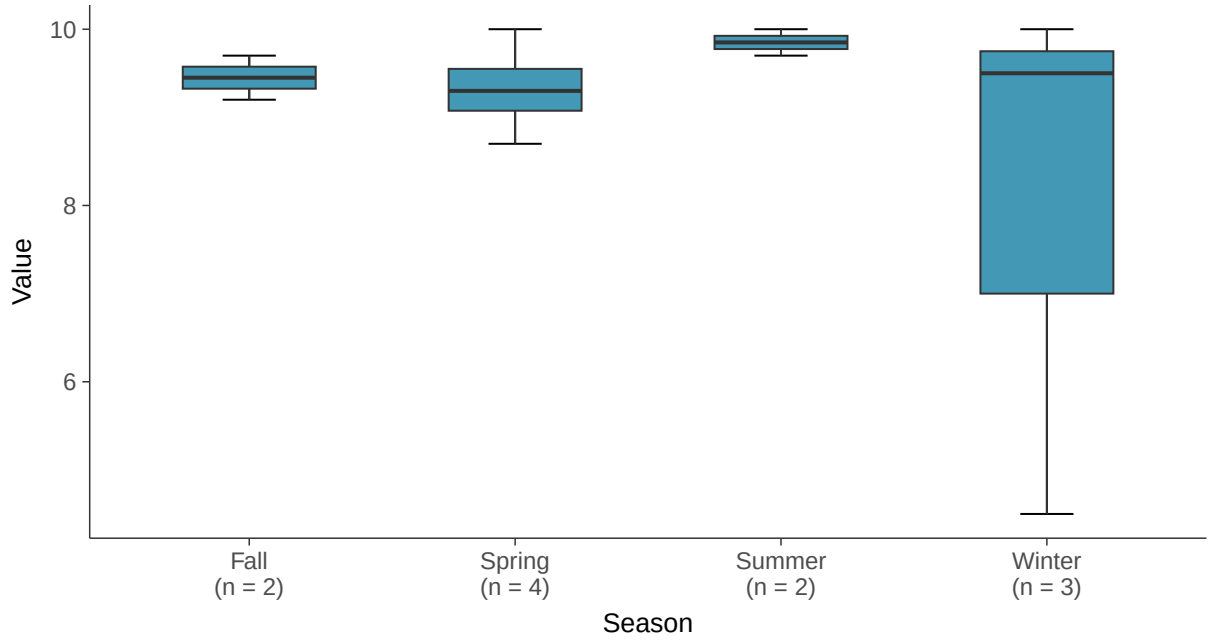
Boxplot

Fluoride (App IV), MW-02 (mg/L)



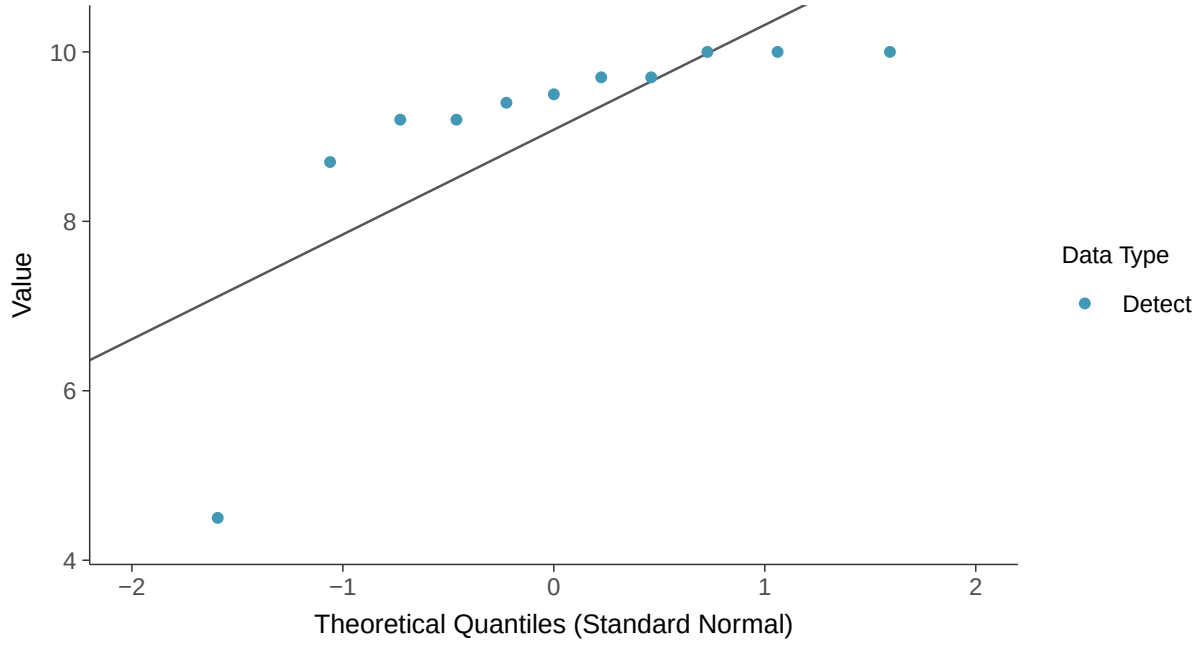
Boxplot by Season

Fluoride (App IV), MW-02 (mg/L)



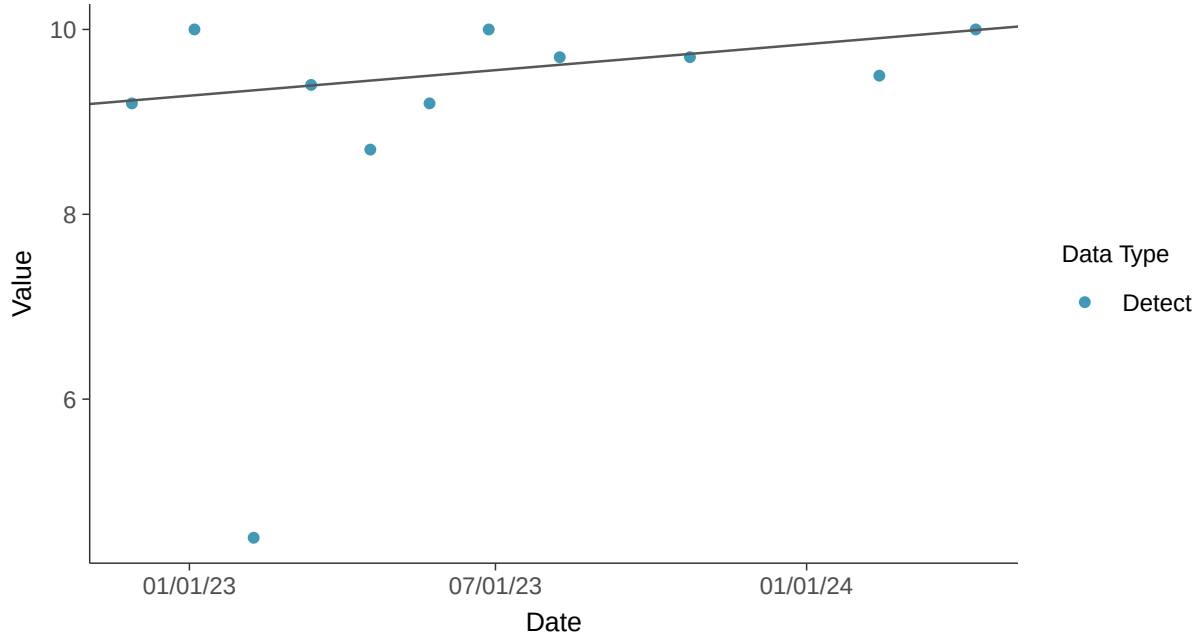
Normal Q-Q plot

Fluoride (App IV), MW-02 (mg/L)



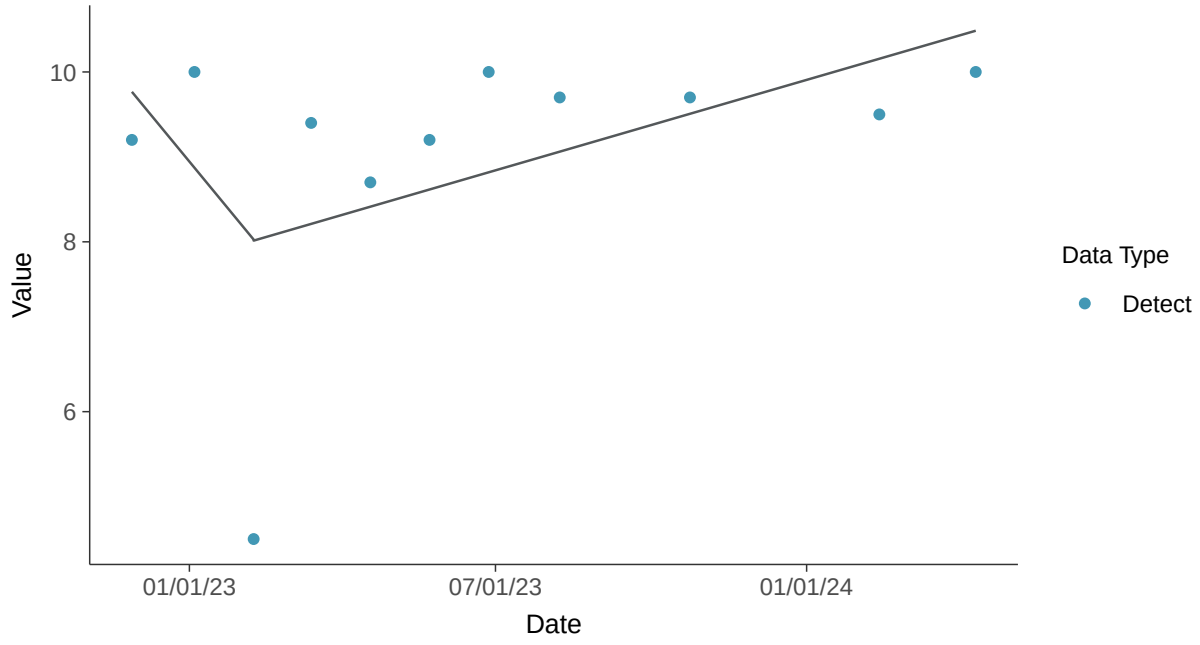
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Fluoride (App IV), MW-02 (mg/L)



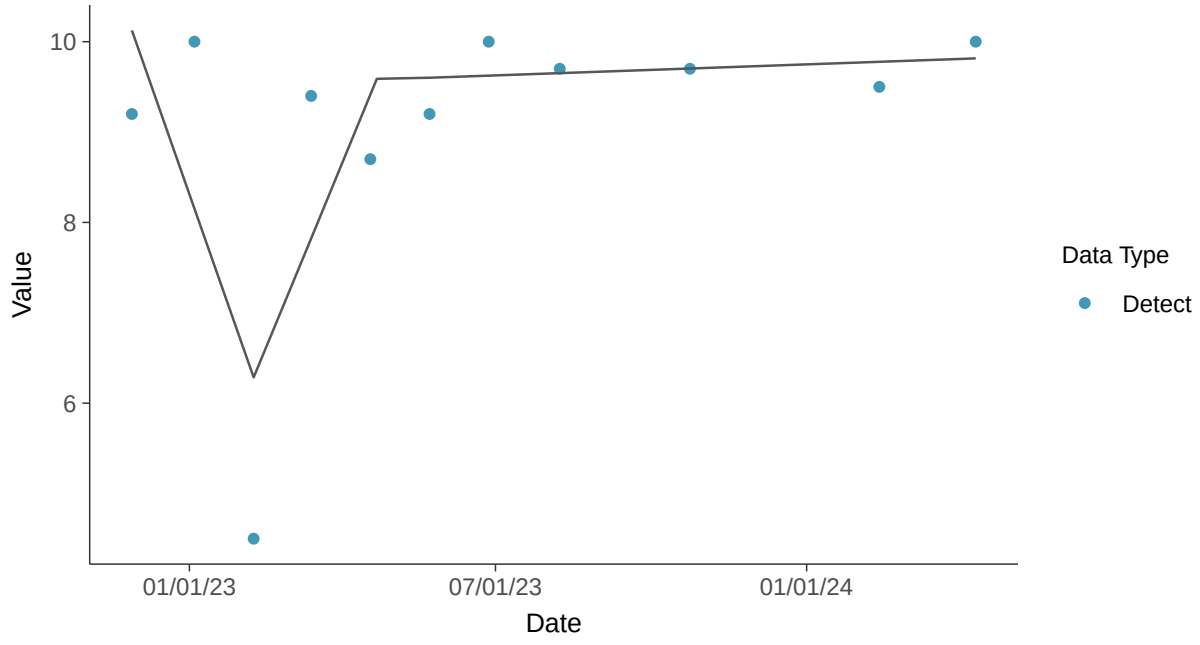
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-02 (mg/L)



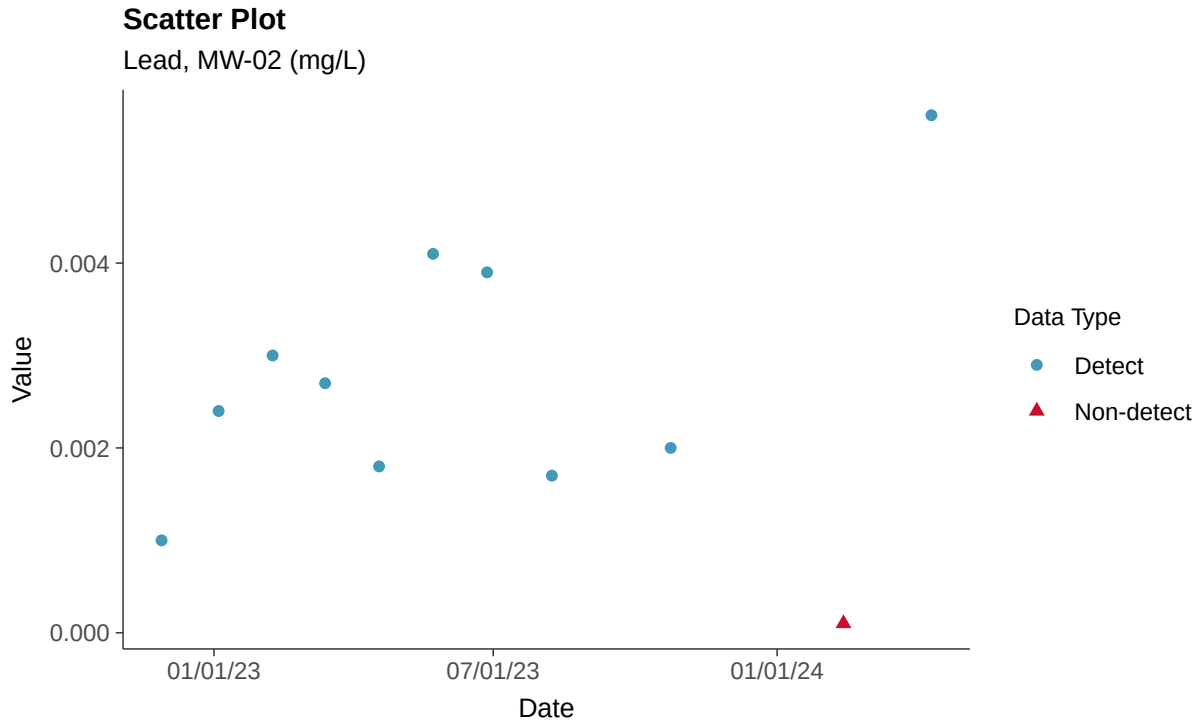
Trend Regression: Piecewise Linear-Linear-Linear

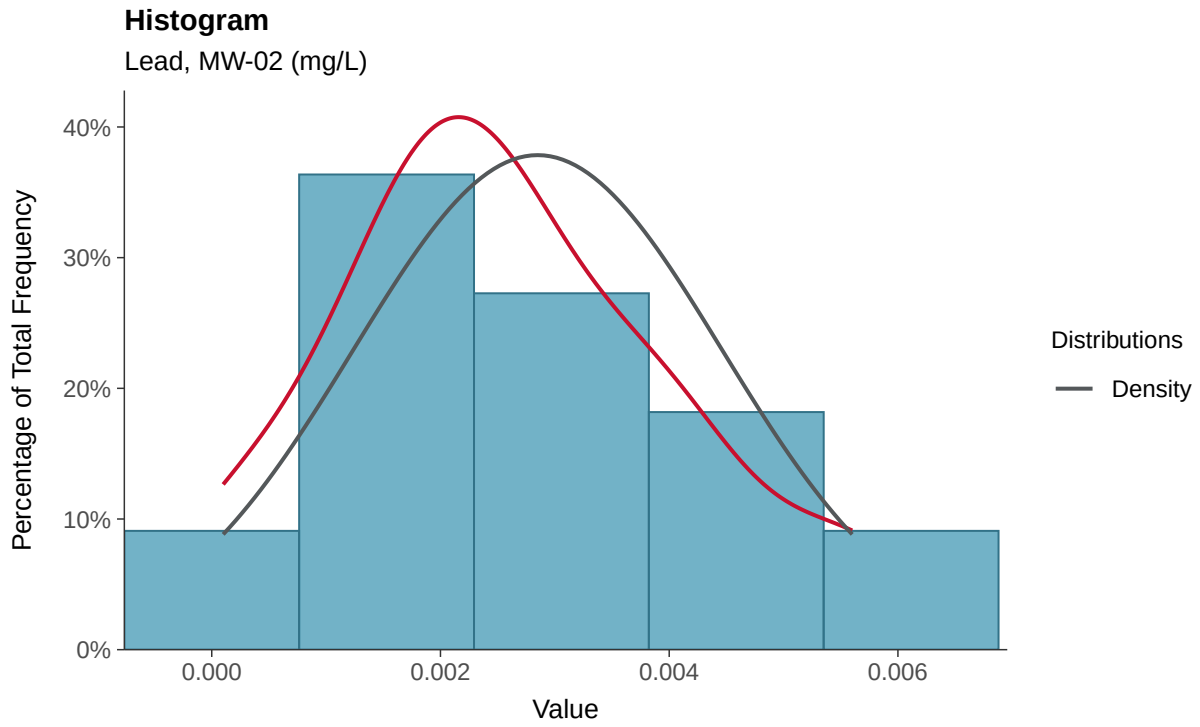
Fluoride (App IV), MW-02 (mg/L)



Appendix IV: Lead, MW-02

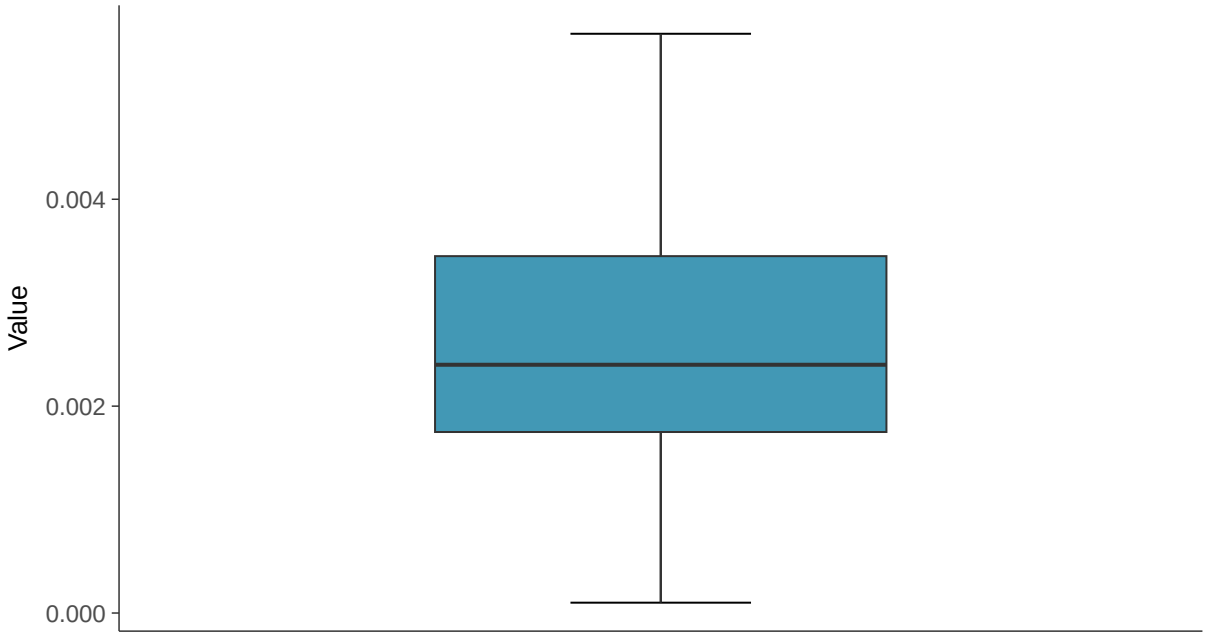
ID: 2_12_5_115





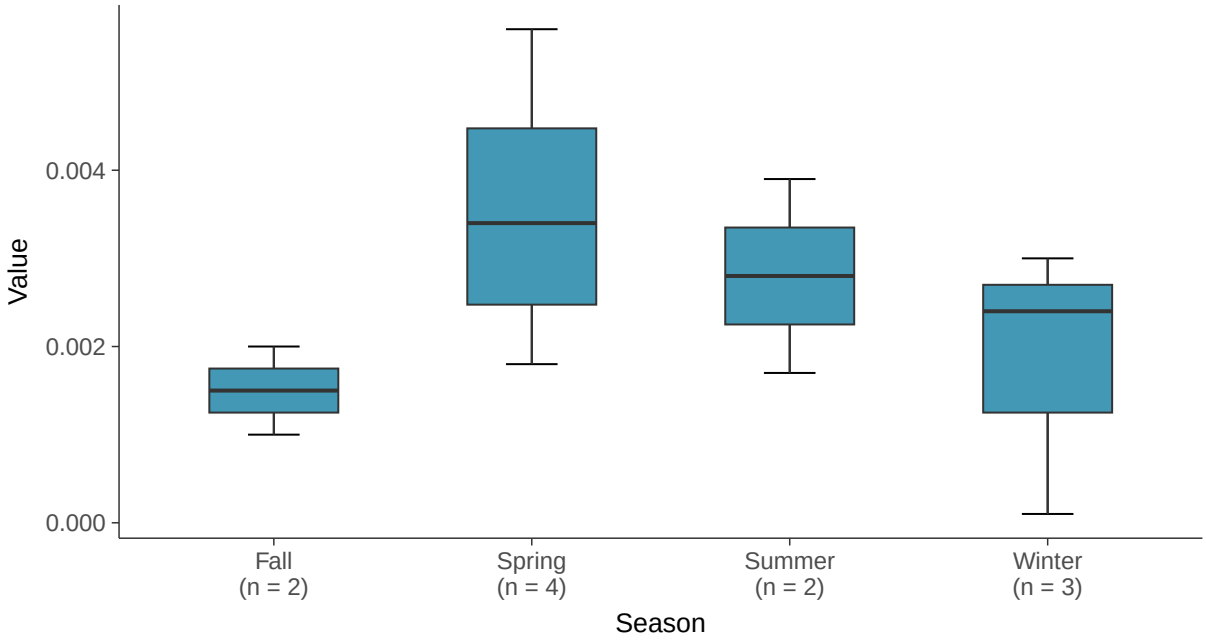
Boxplot

Lead, MW-02 (mg/L)



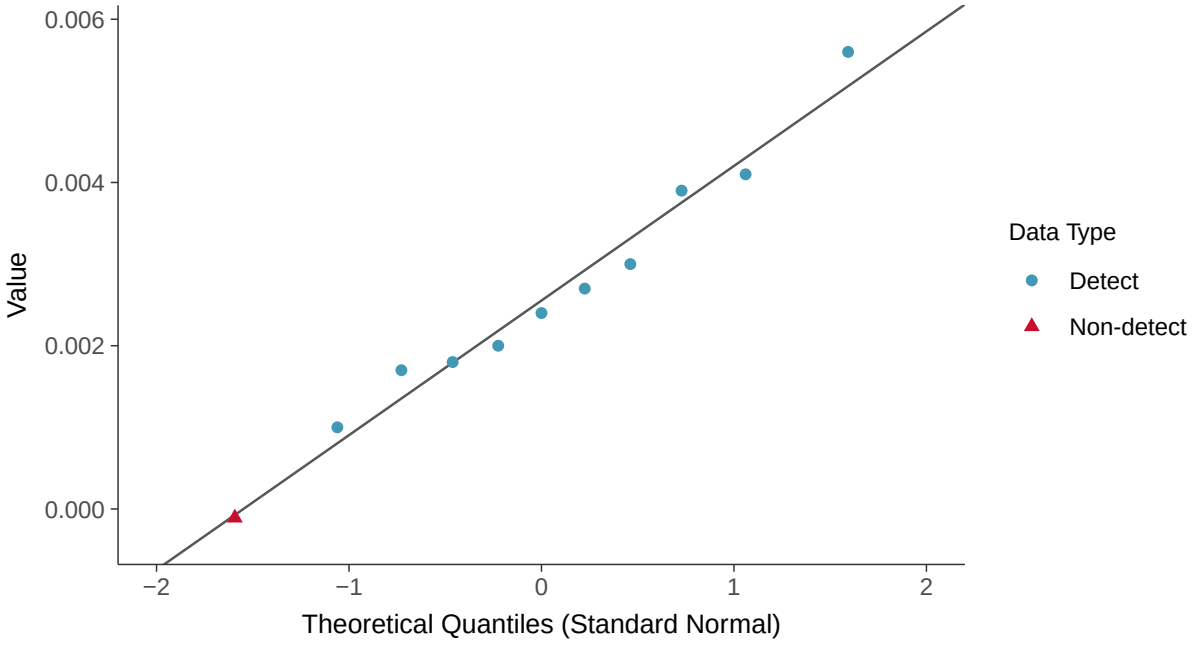
Boxplot by Season

Lead, MW-02 (mg/L)



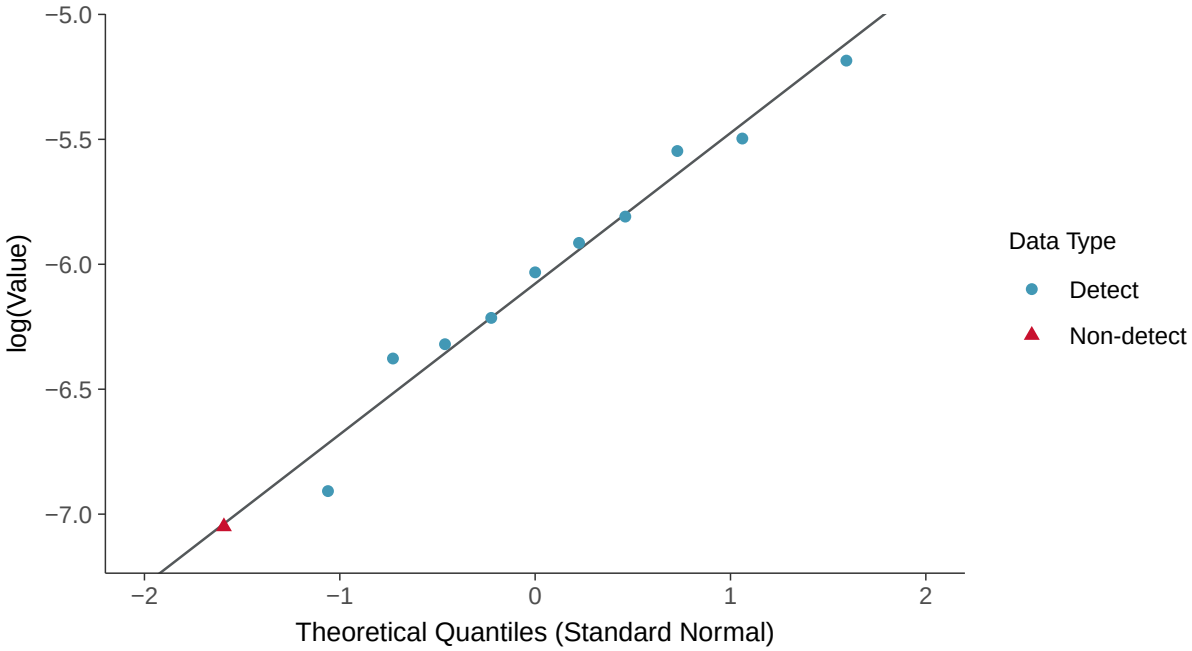
Normal Q-Q plot using ROS Imputed Estimates

Lead, MW-02 (mg/L)



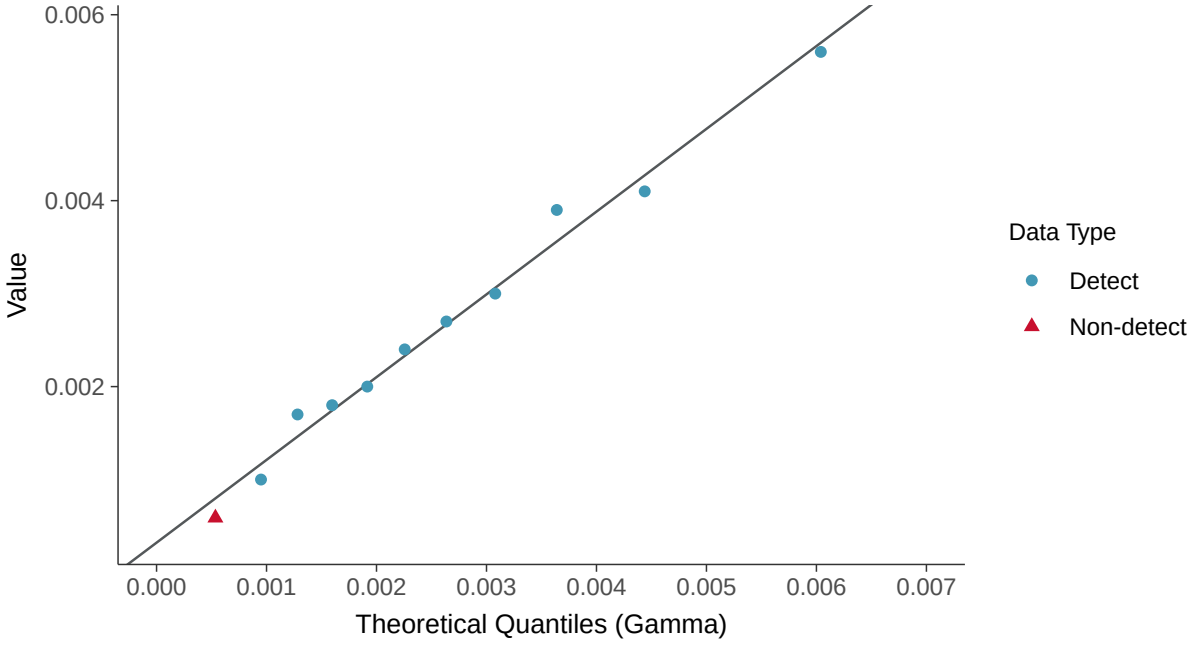
Lognormal Q-Q plot using ROS Imputed Estimates

Lead, MW-02 (mg/L)



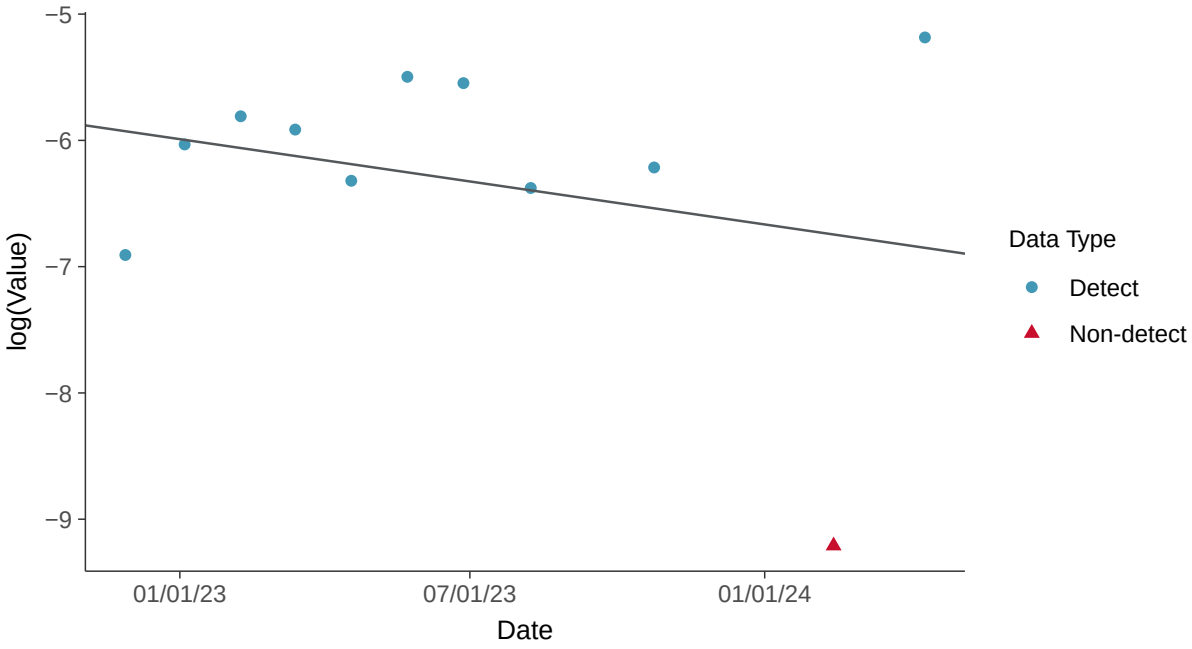
Gamma Q-Q plot using ROS Imputed Estimates

Lead, MW-02 (mg/L)



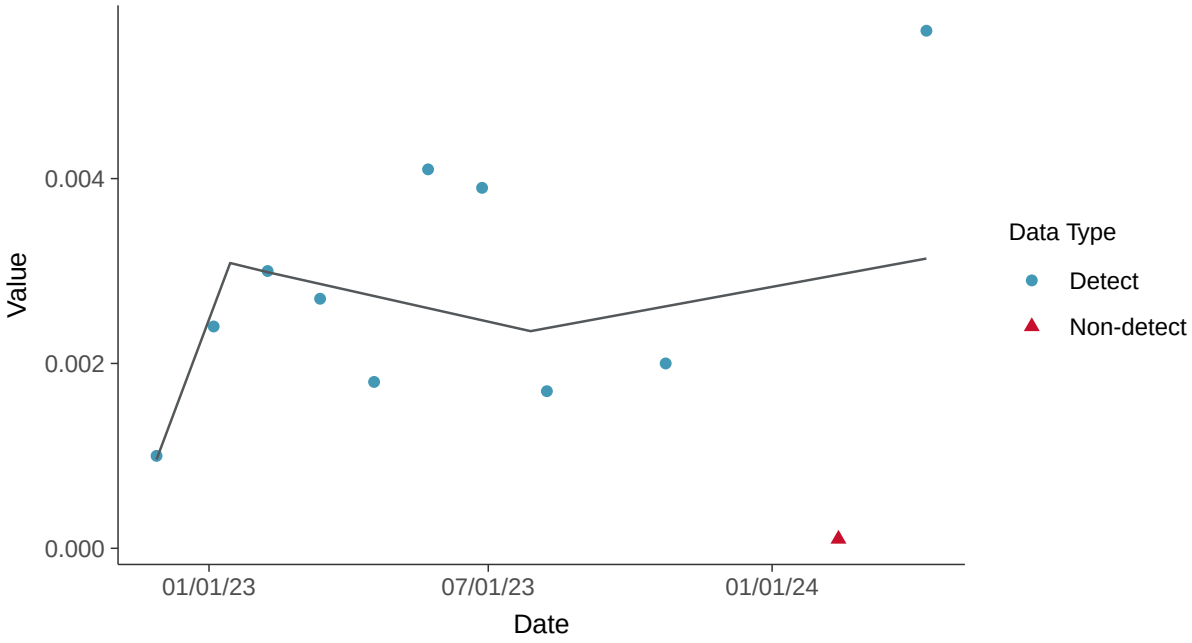
Trend Regression: Lognormal MLE

Lead, MW-02 (mg/L)



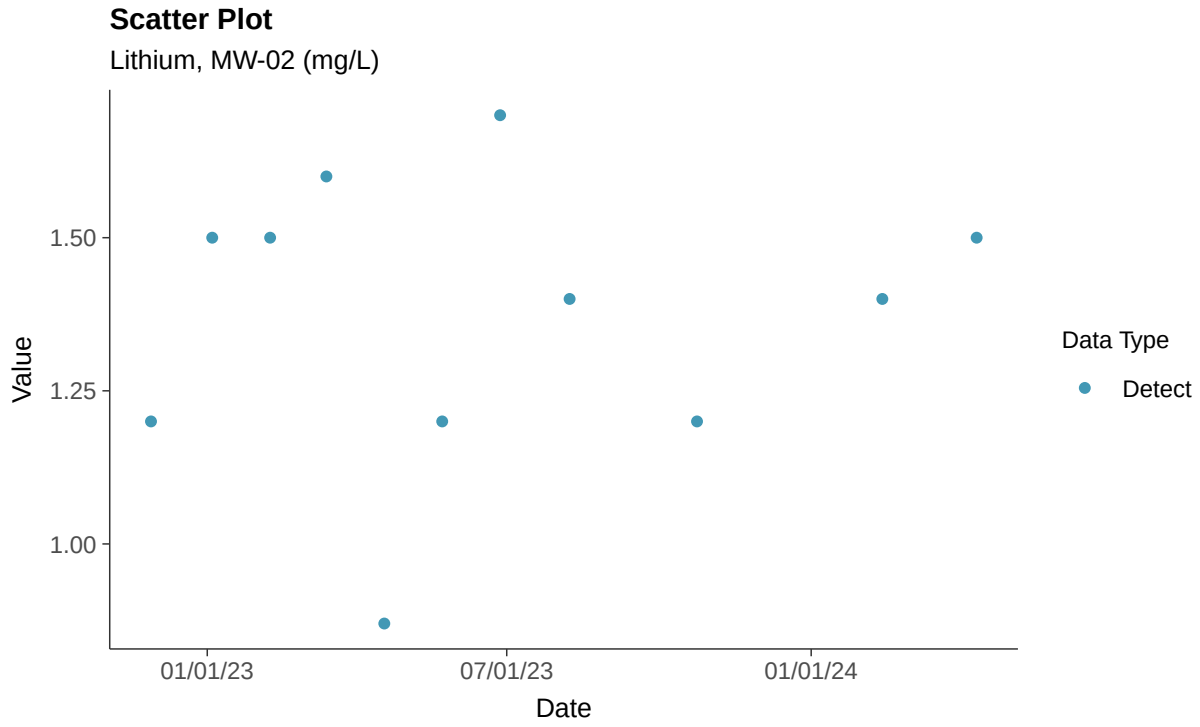
Trend Regression: Piecewise Linear-Linear-Linear

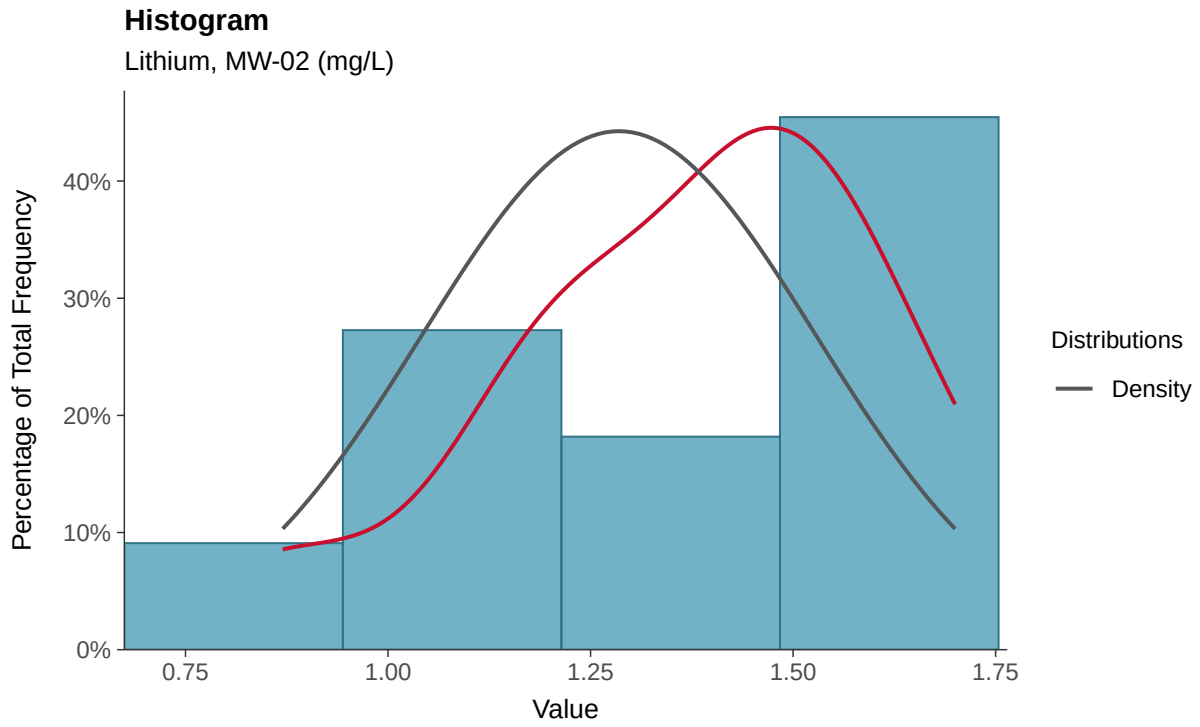
Lead, MW-02 (mg/L)



Appendix IV: Lithium, MW-02

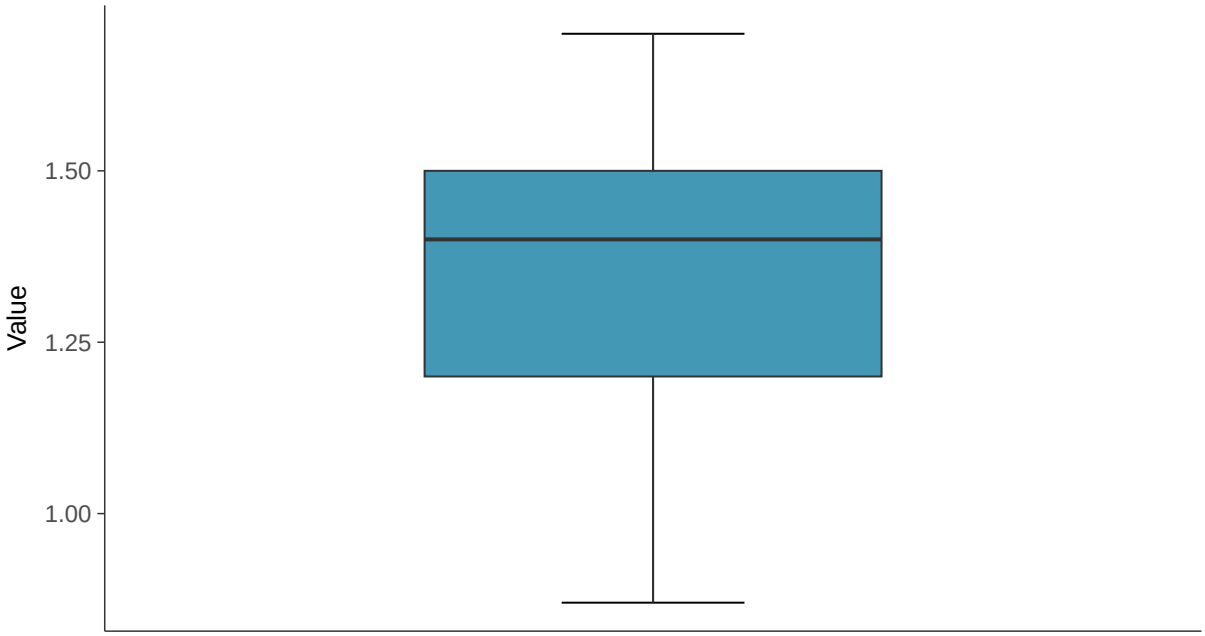
ID: 2_12_5_116





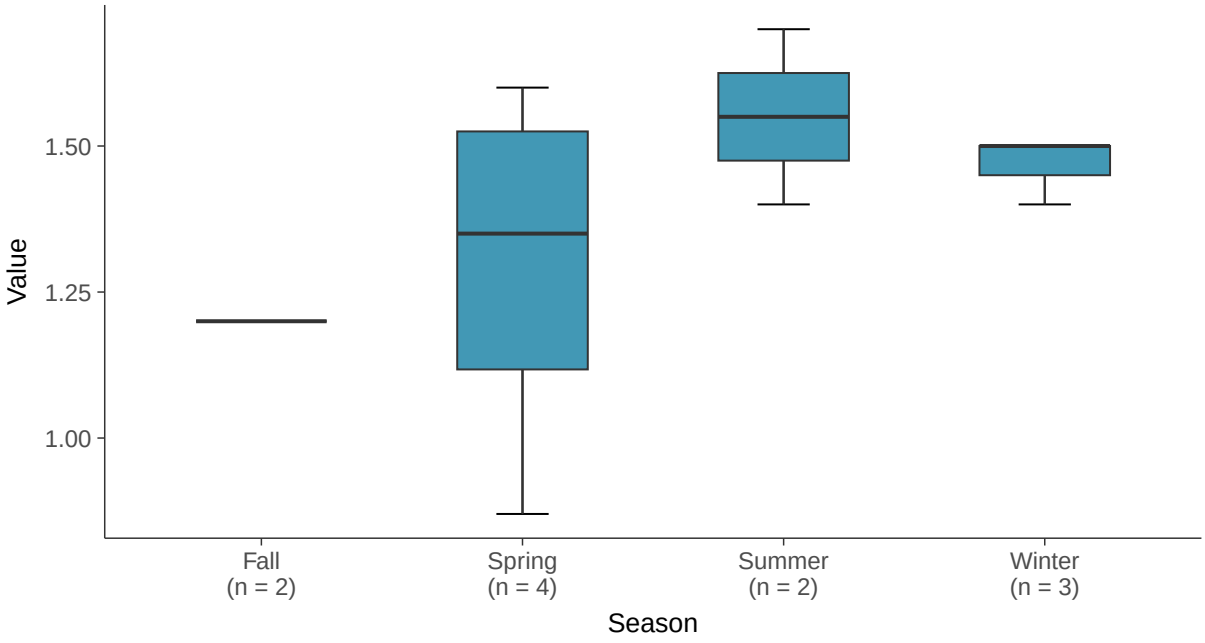
Boxplot

Lithium, MW-02 (mg/L)



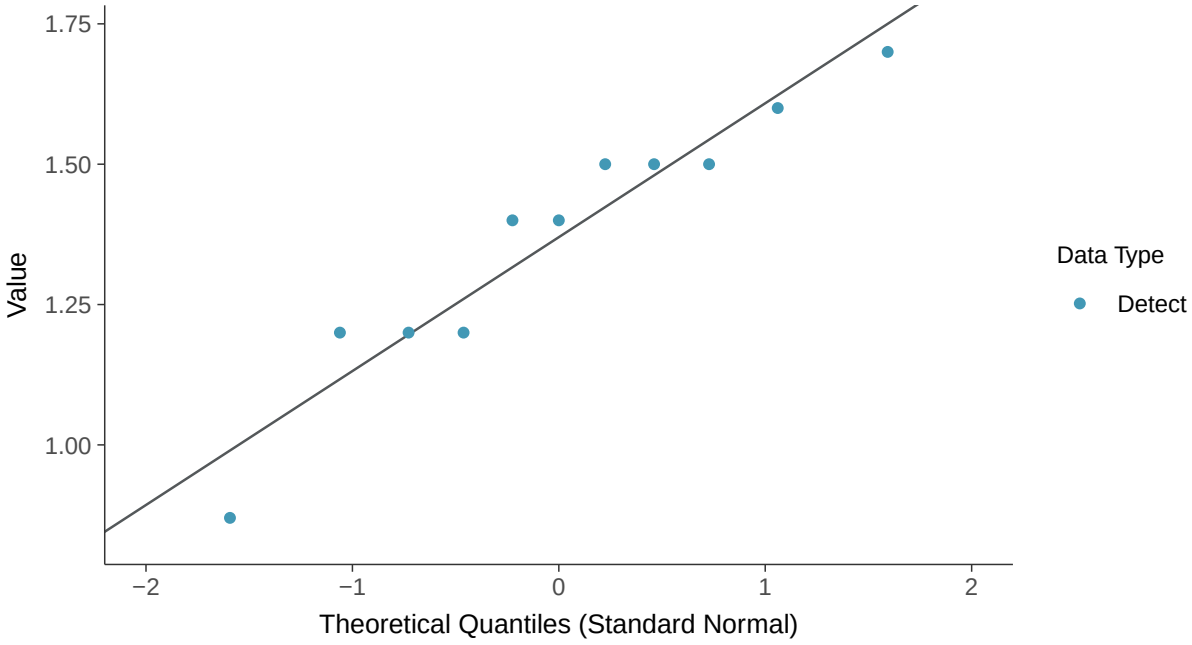
Boxplot by Season

Lithium, MW-02 (mg/L)



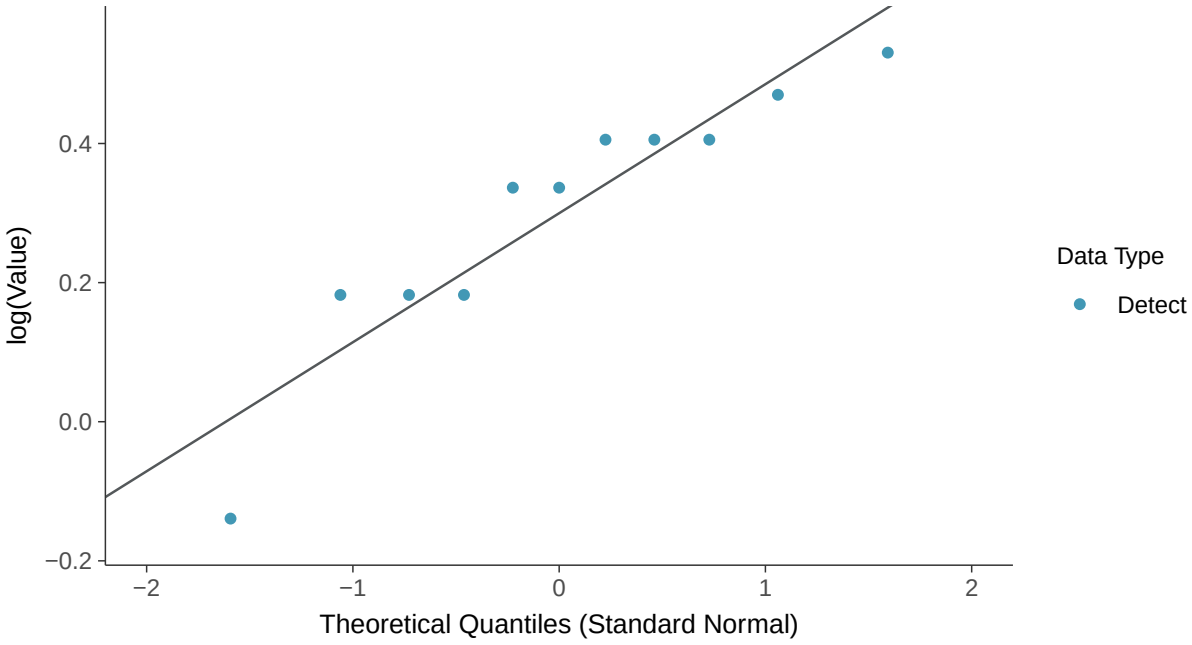
Normal Q-Q plot

Lithium, MW-02 (mg/L)



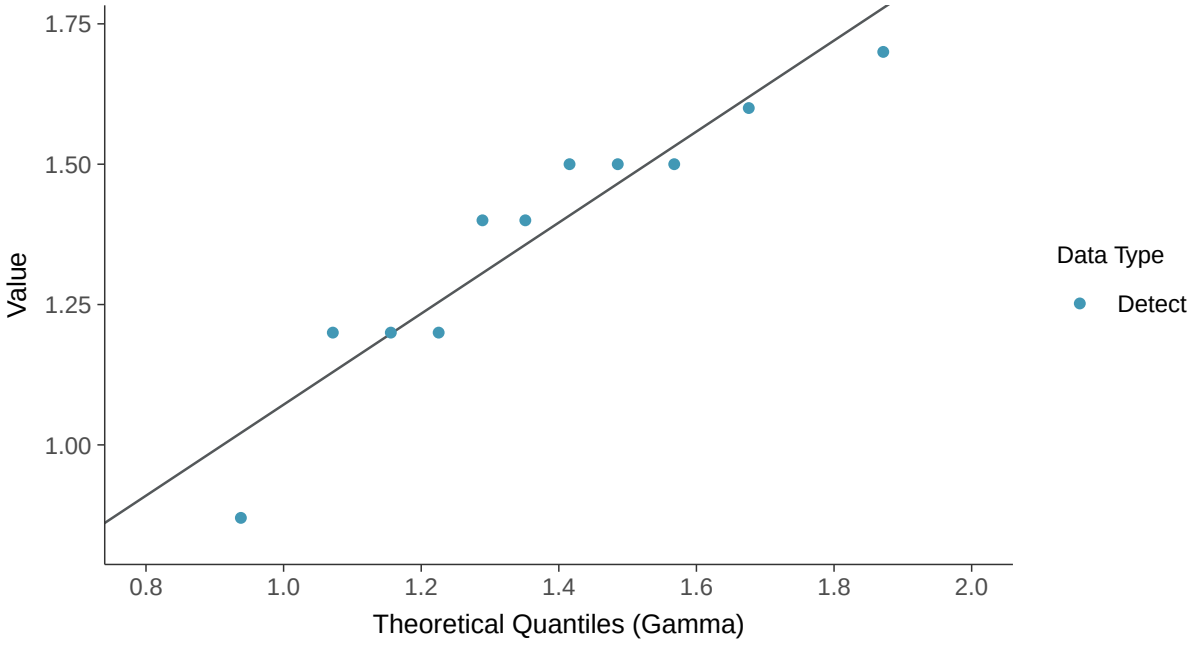
Lognormal Q-Q plot

Lithium, MW-02 (mg/L)



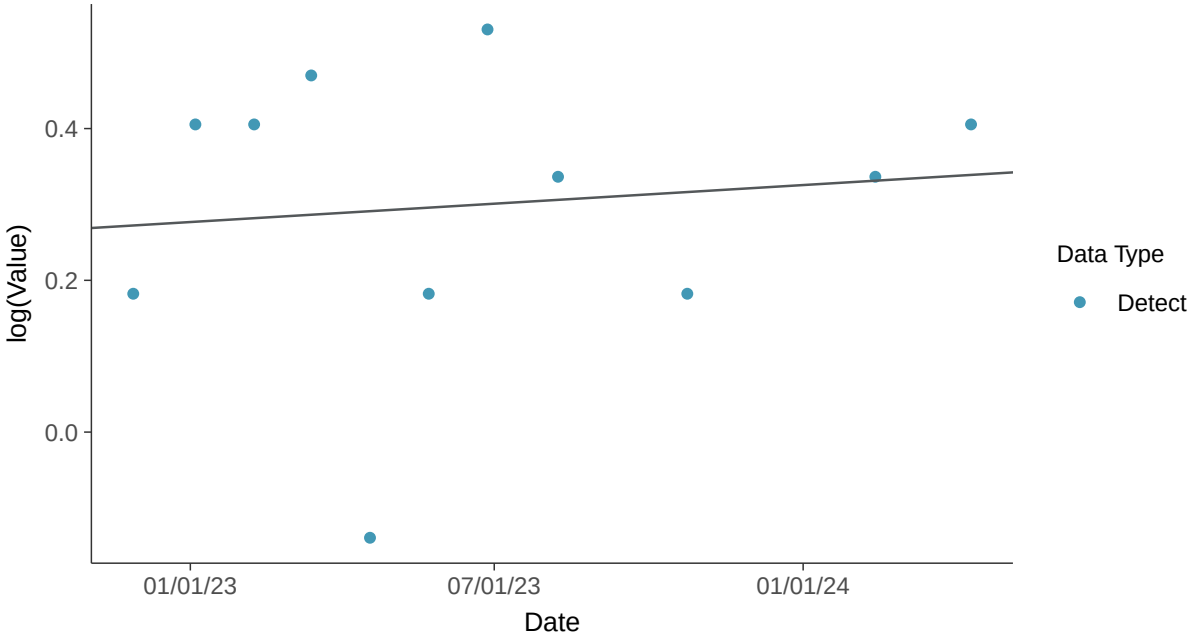
Gamma Q-Q plot

Lithium, MW-02 (mg/L)



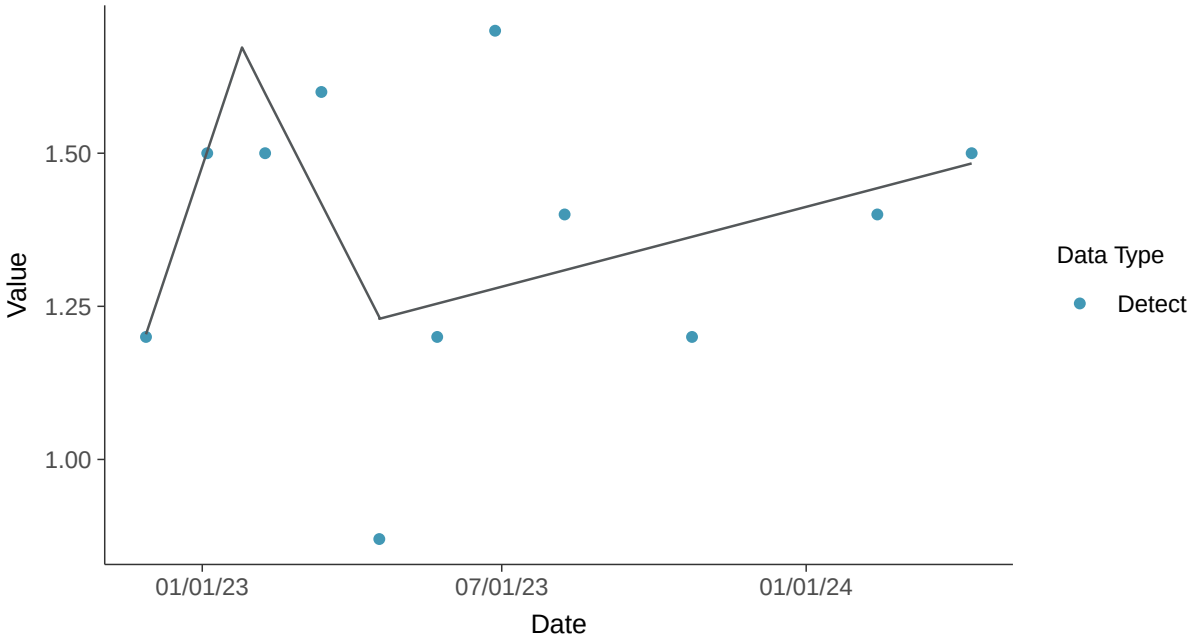
Trend Regression: Lognormal MLE

Lithium, MW-02 (mg/L)



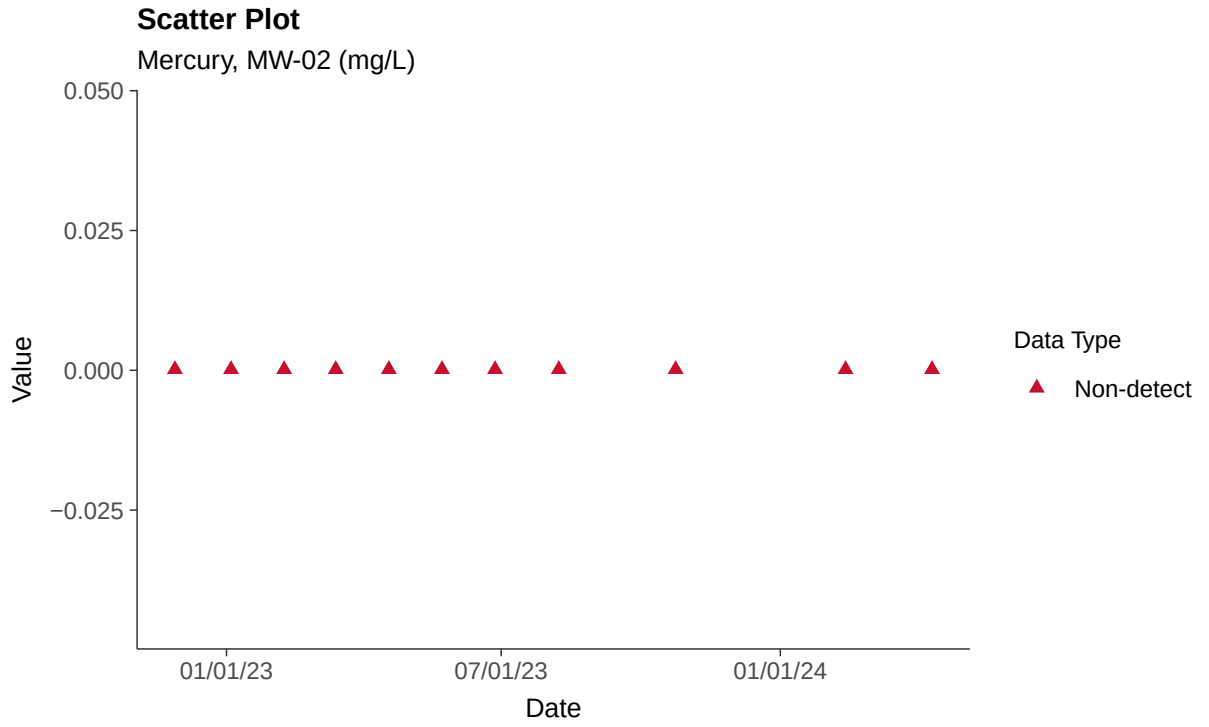
Trend Regression: Piecewise Linear-Linear-Linear

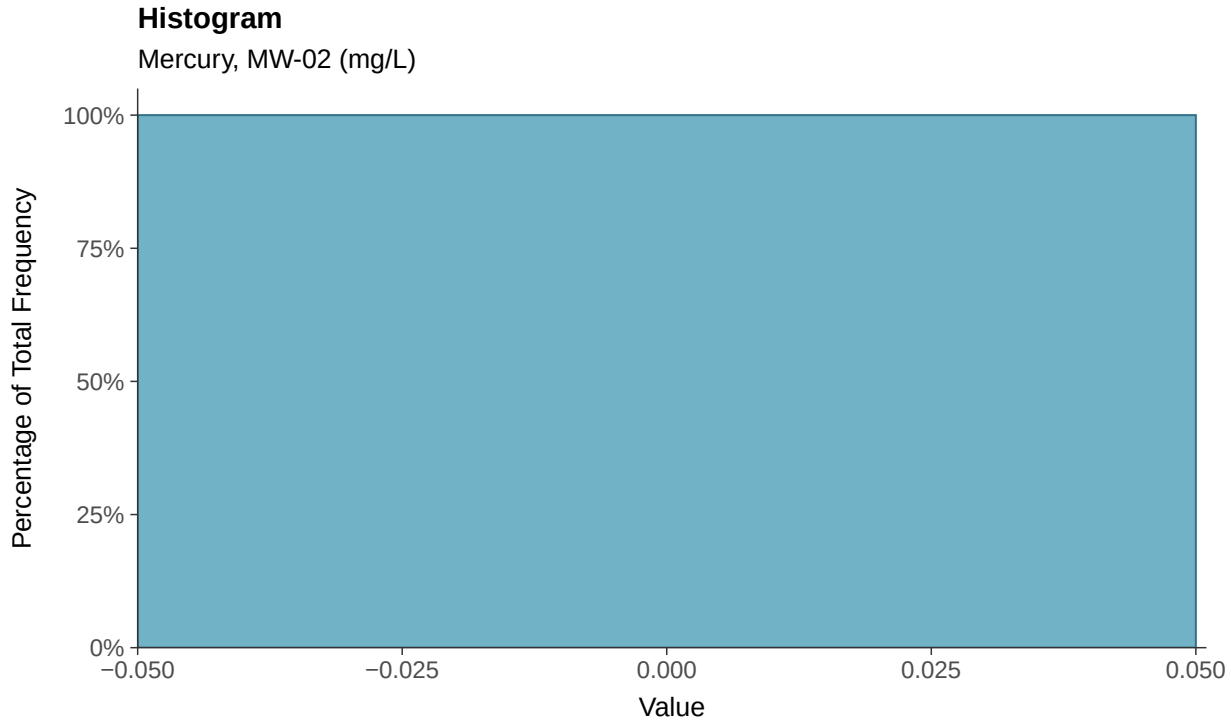
Lithium, MW-02 (mg/L)

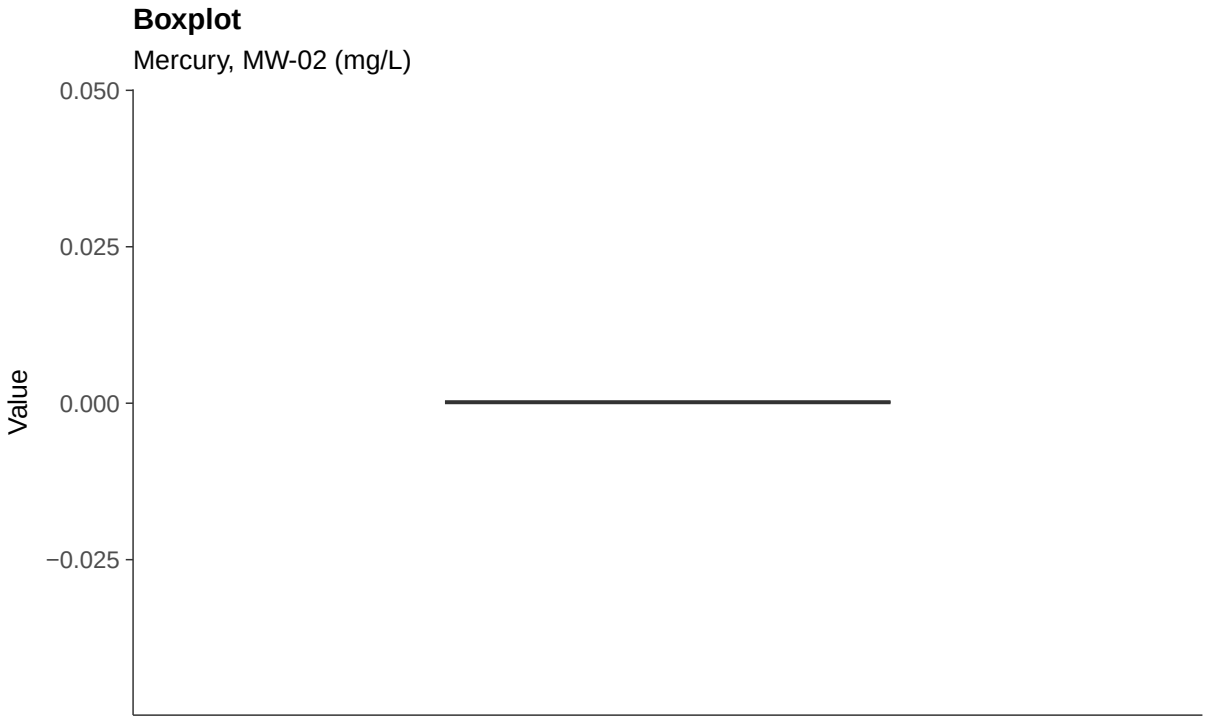


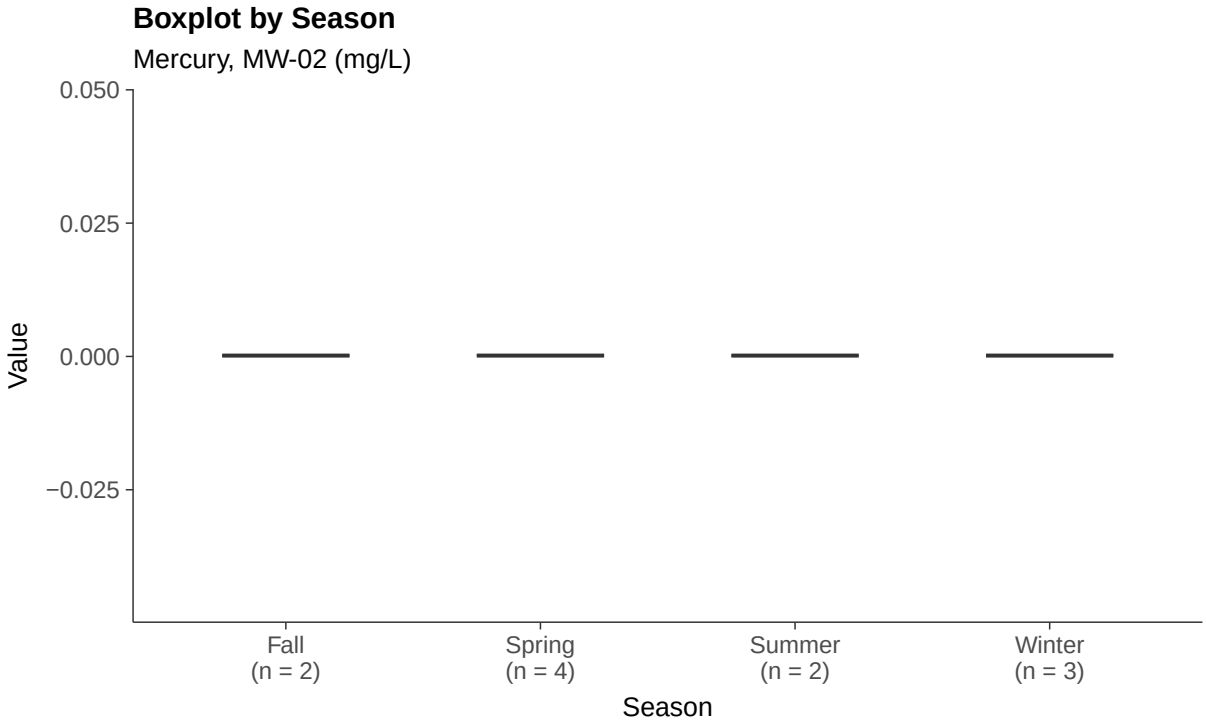
Appendix IV: Mercury, MW-02

ID: 2_12_5_117



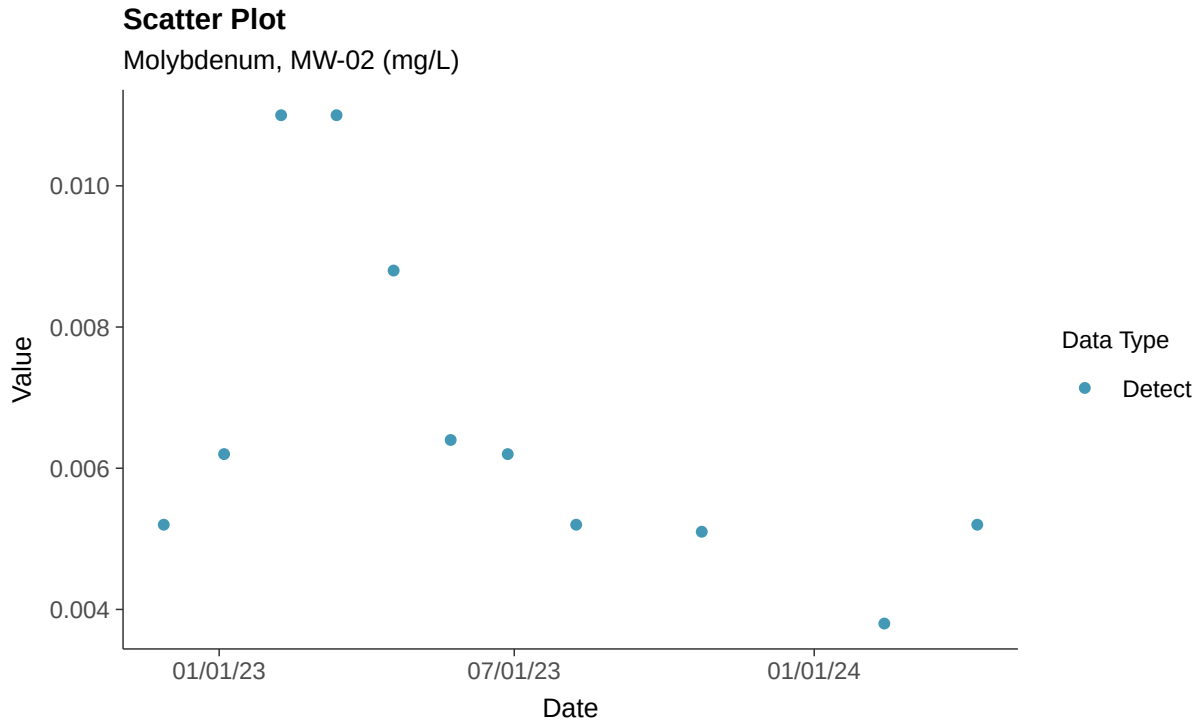


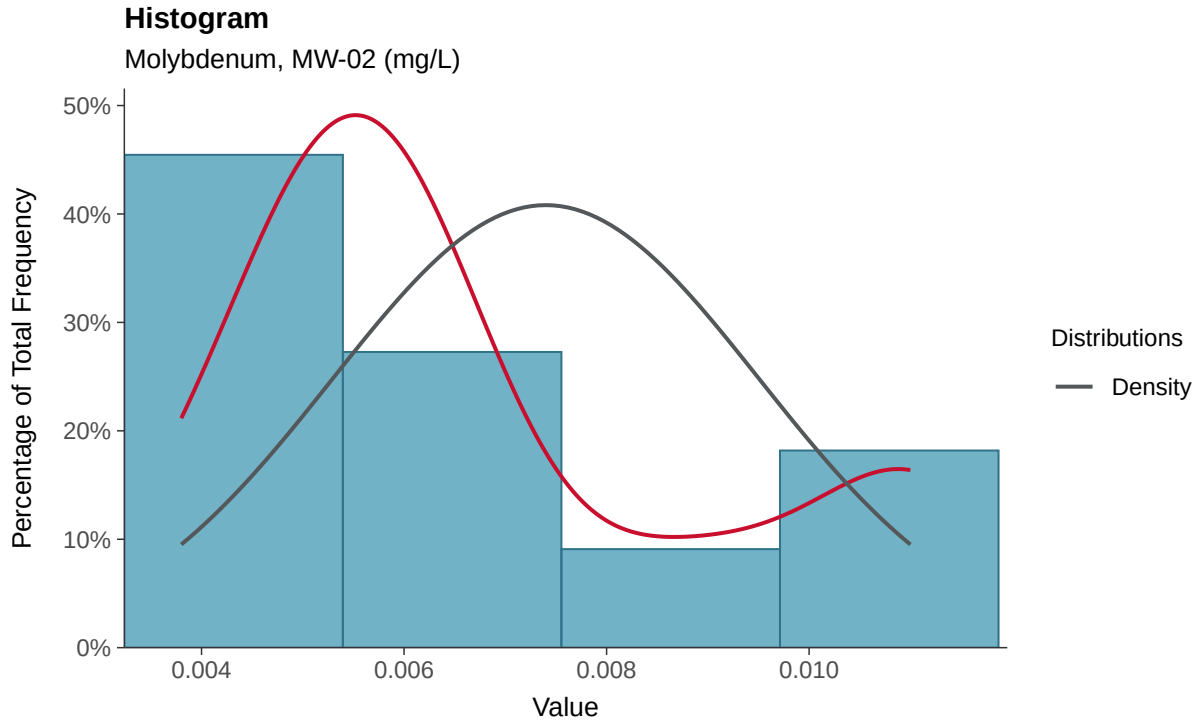

Boxplot
Mercury, MW-02 (mg/L)
0.050
0.025
0.000
−0.025
Value


Boxplot by Season
Mercury, MW-02 (mg/L)
0.050
0.025
0.000
−0.025
Value
Fall
(n = 2)
Spring
(n = 4)
Summer
(n = 2)
Winter
(n = 3)
Season

Appendix IV: Molybdenum, MW-02

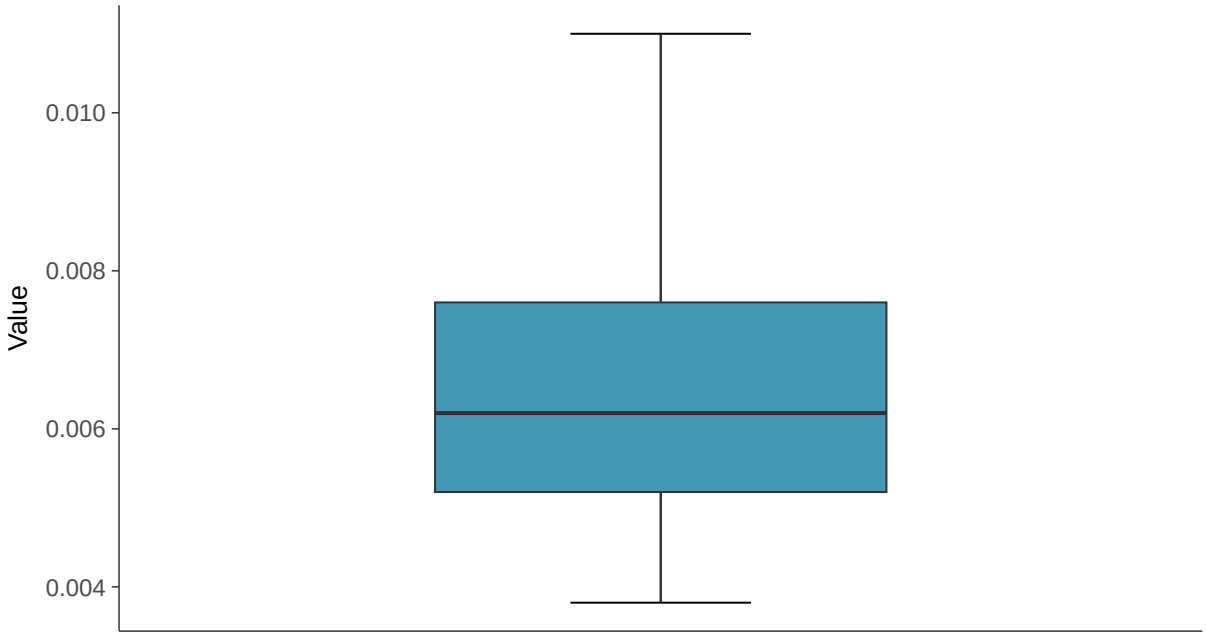
ID: 2_12_5_118





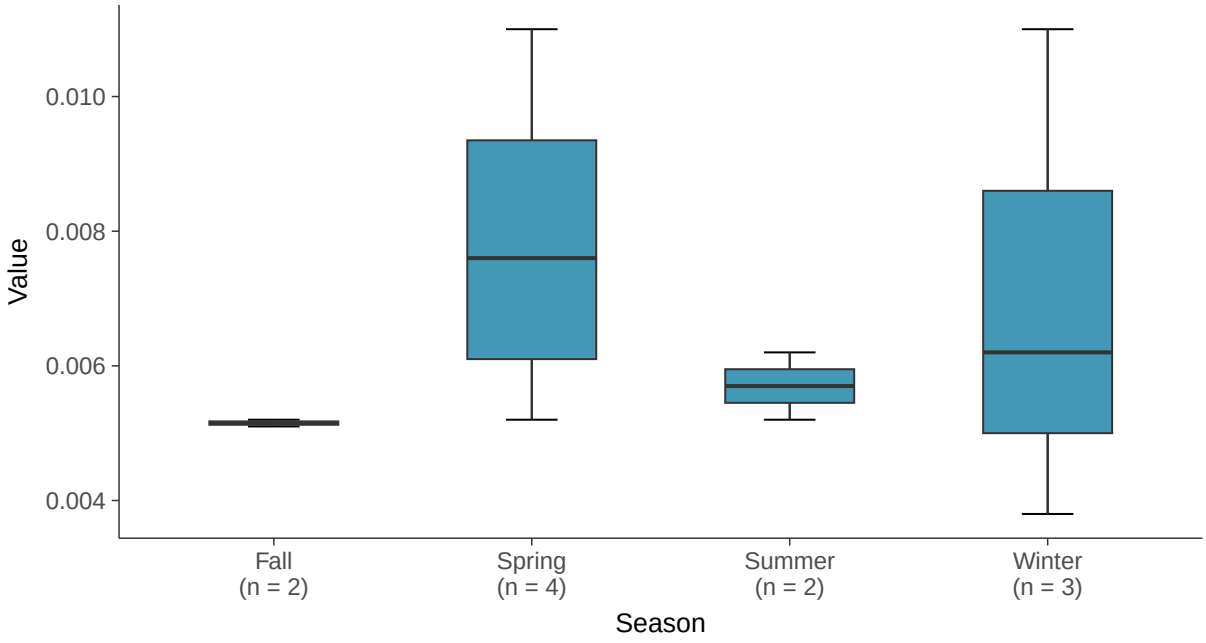
Boxplot

Molybdenum, MW-02 (mg/L)



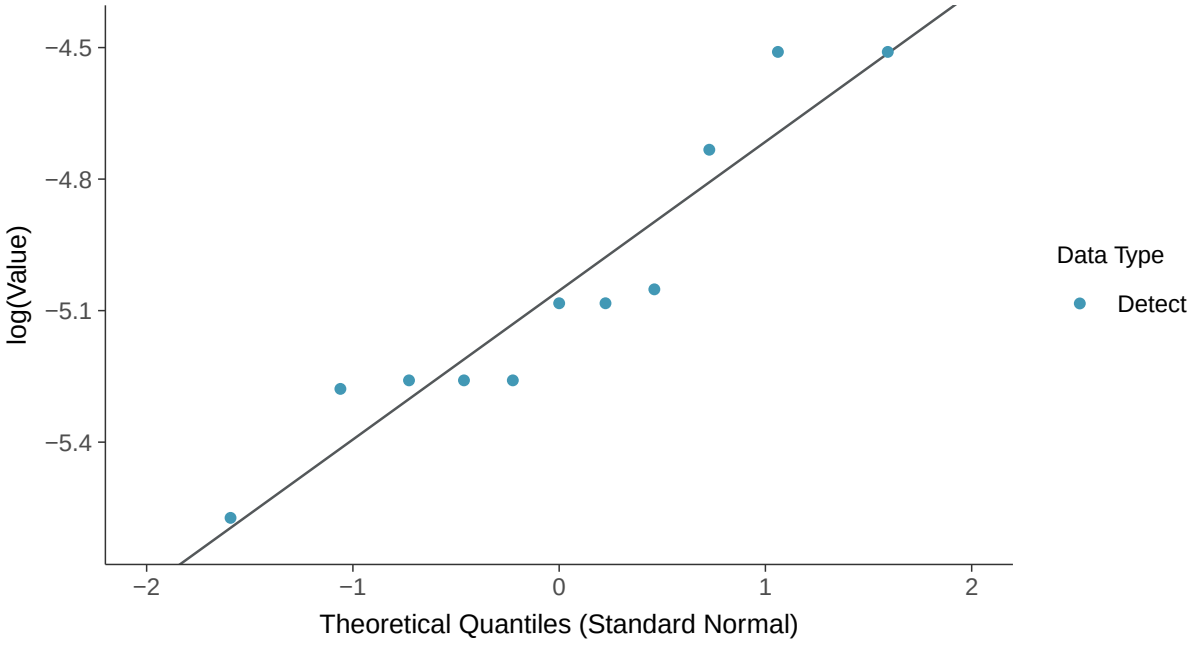
Boxplot by Season

Molybdenum, MW-02 (mg/L)



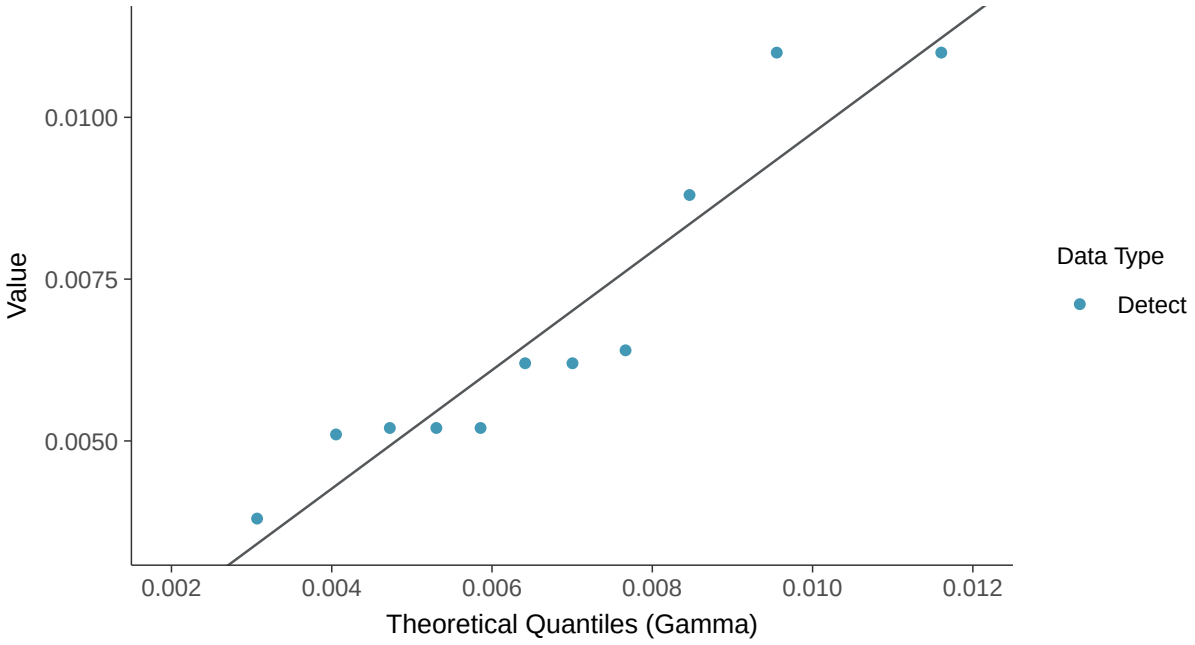
Lognormal Q-Q plot

Molybdenum, MW-02 (mg/L)



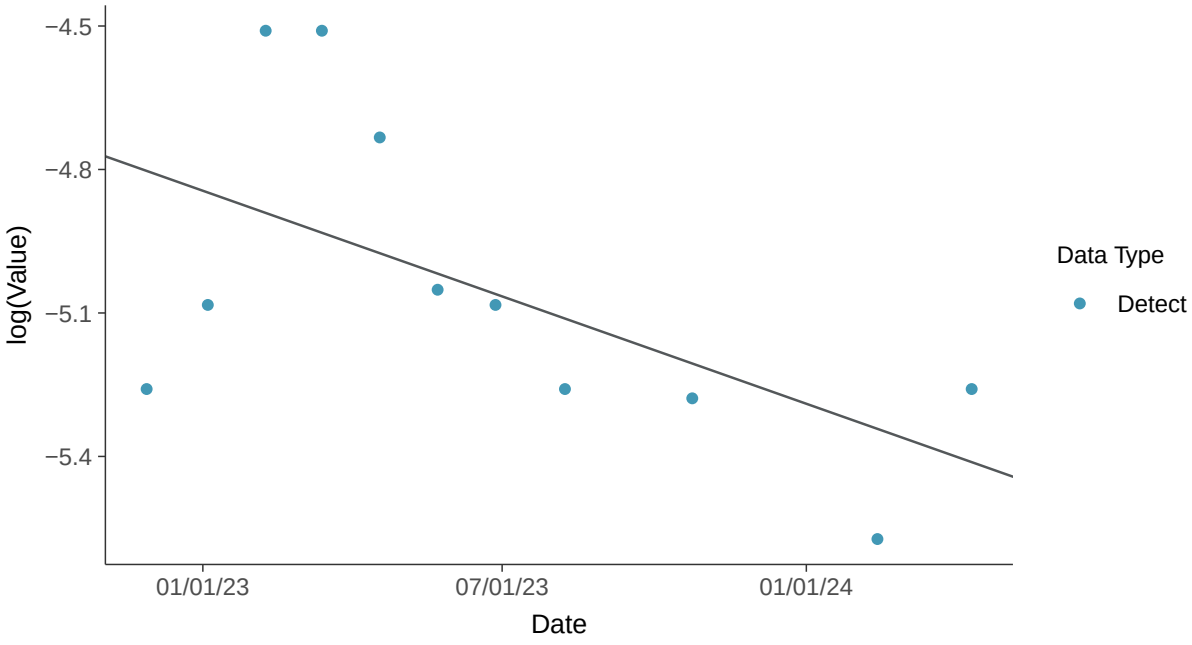
Gamma Q-Q plot

Molybdenum, MW-02 (mg/L)



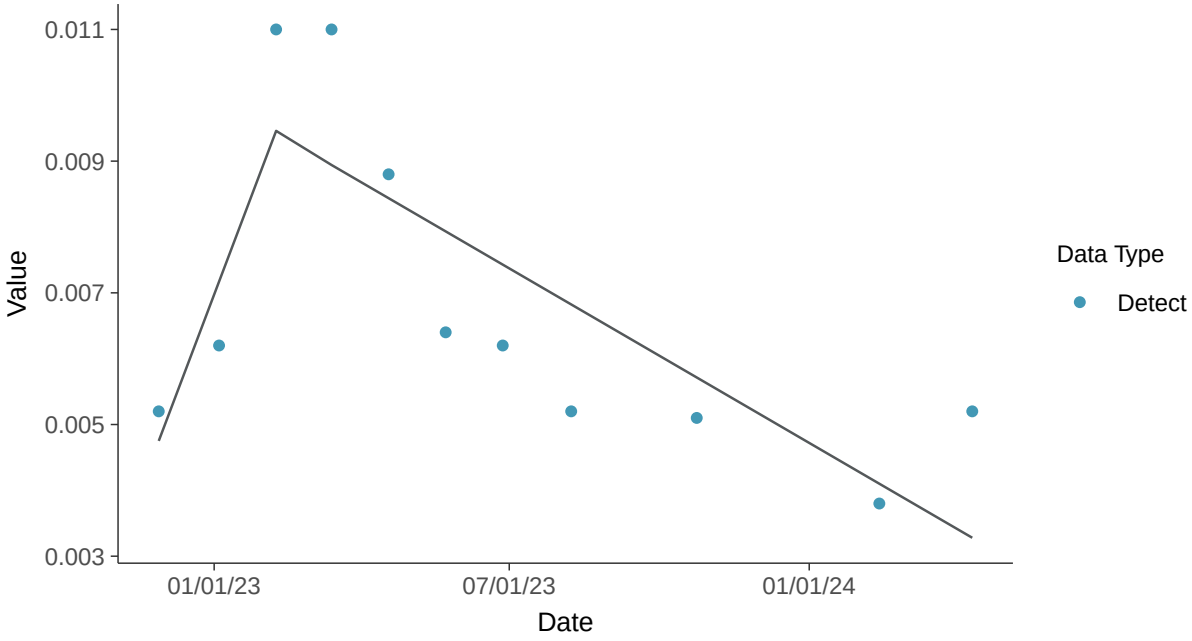
Trend Regression: Lognormal MLE

Molybdenum, MW-02 (mg/L)



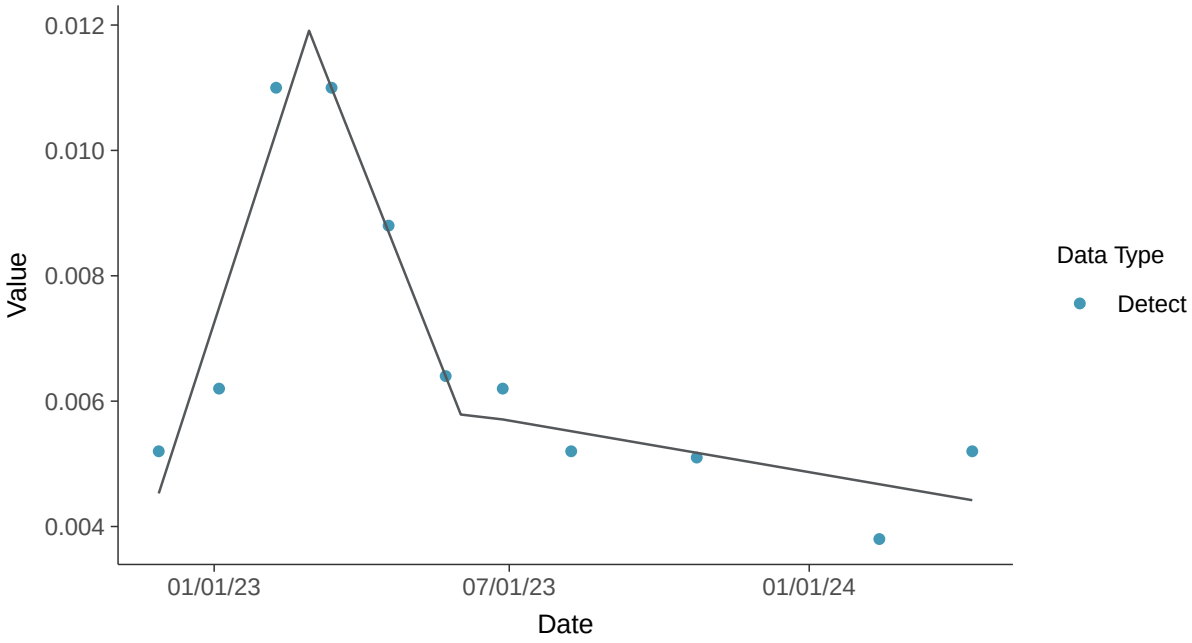
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-02 (mg/L)



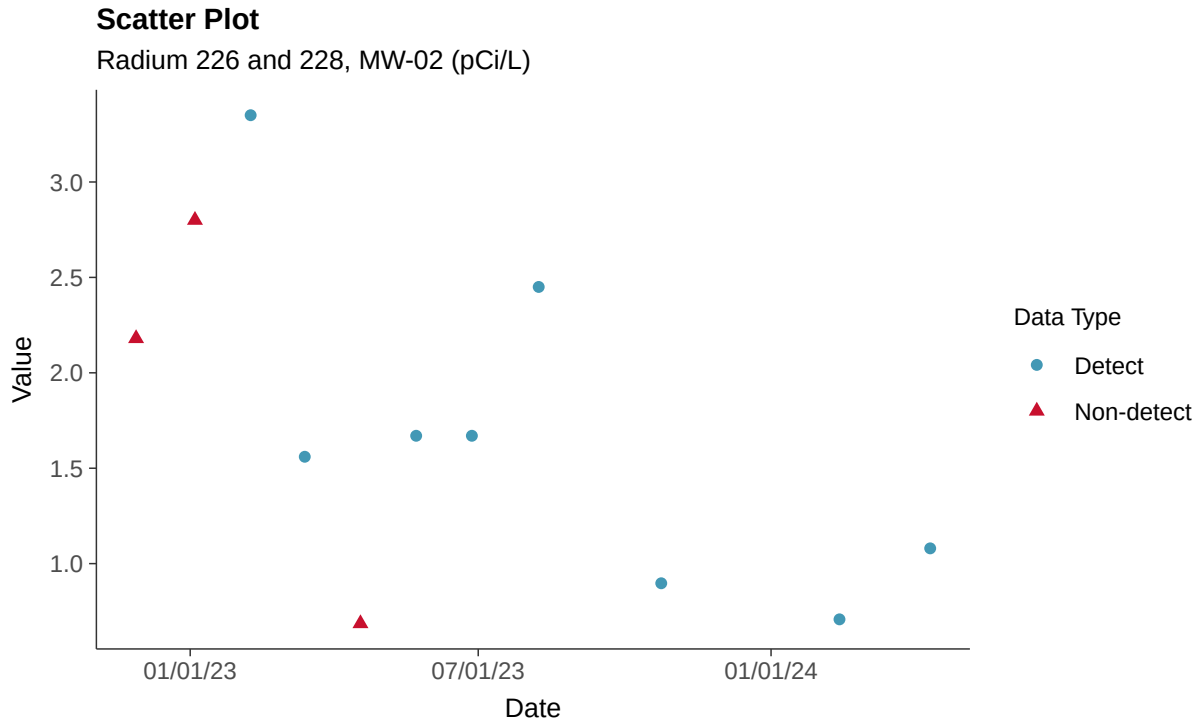
Trend Regression: Piecewise Linear-Linear-Linear

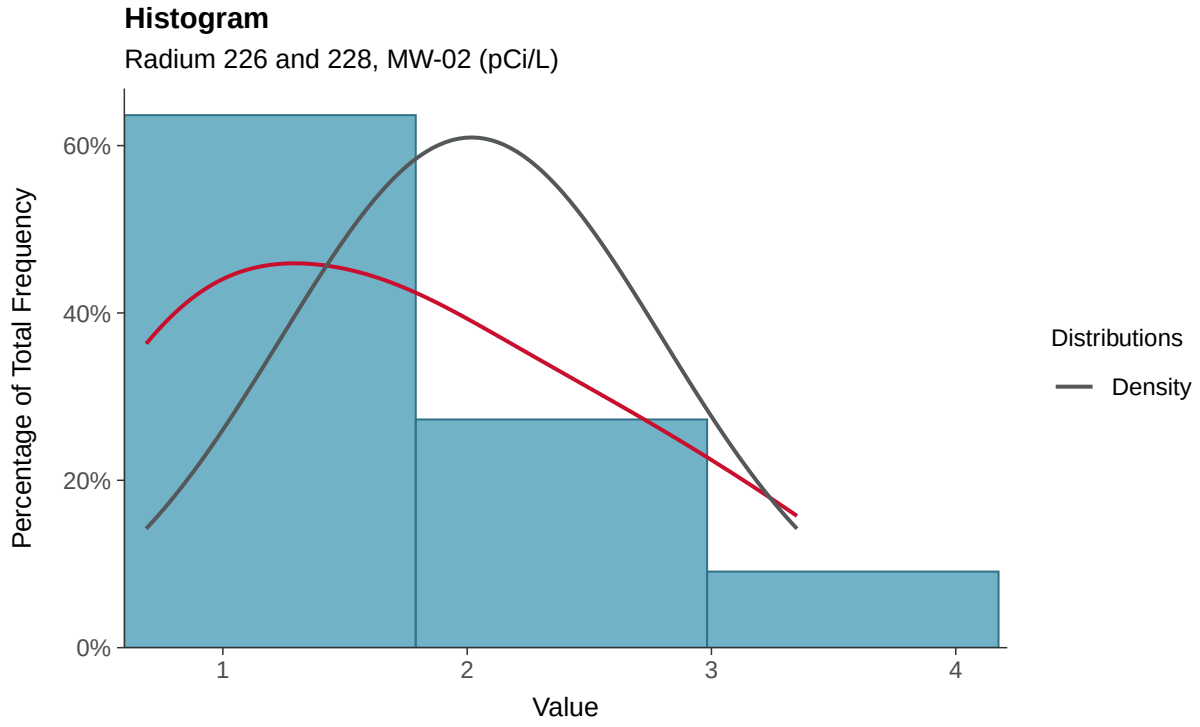
Molybdenum, MW-02 (mg/L)



Appendix IV: Radium 226 and 228, MW-02

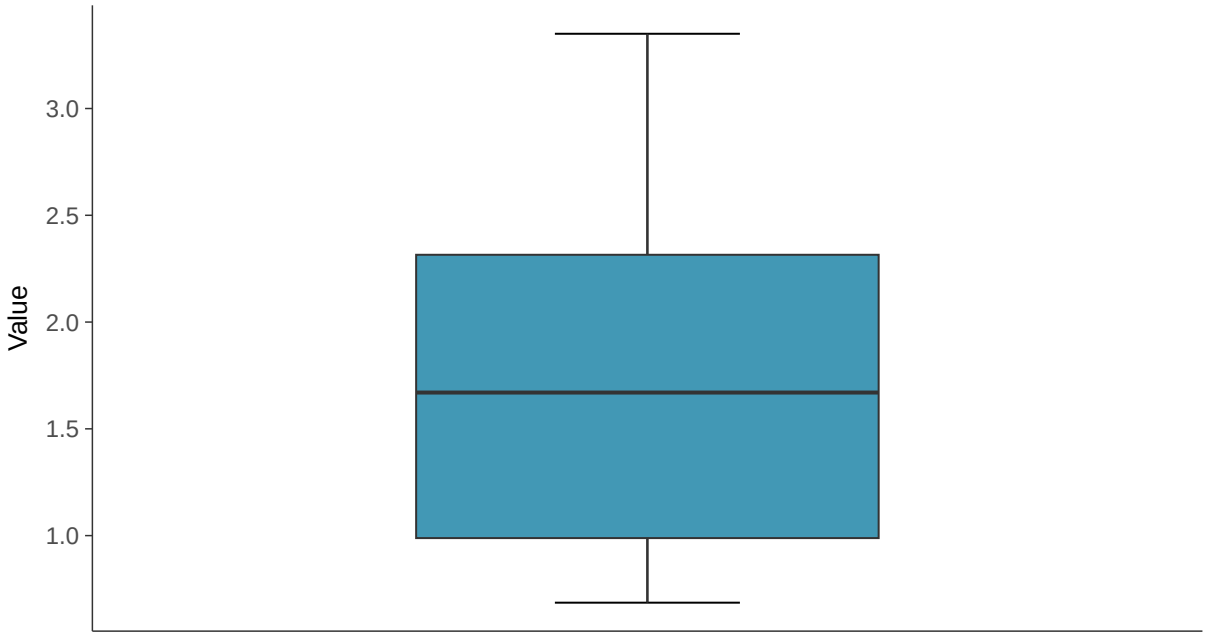
ID: 2_12_5_121





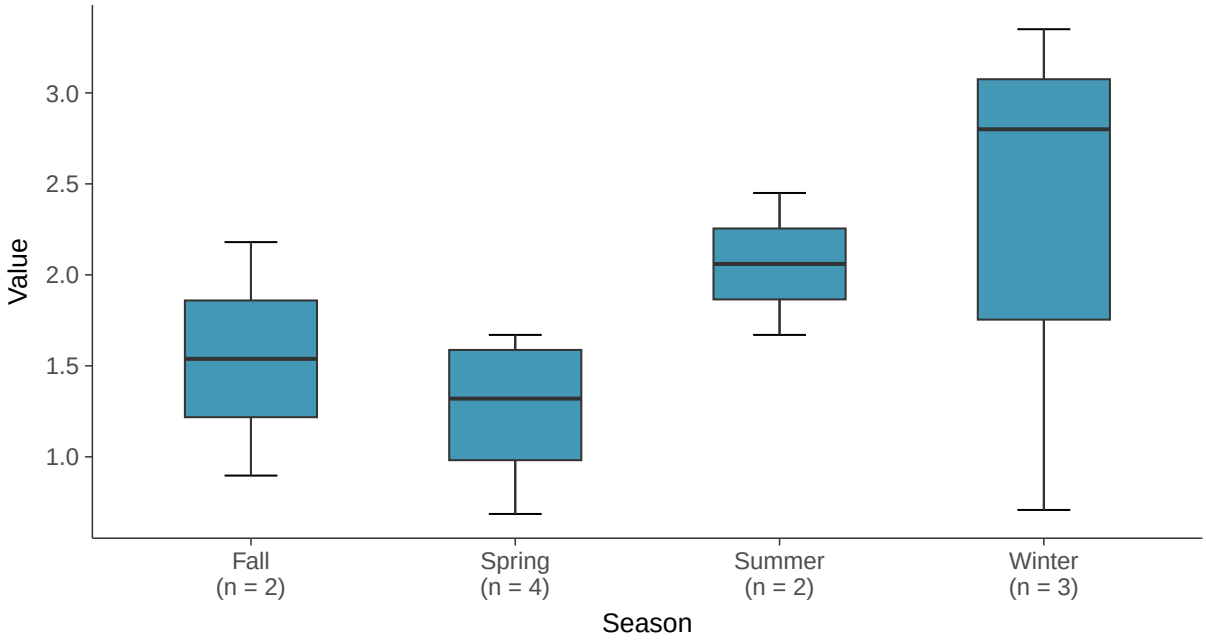
Boxplot

Radium 226 and 228, MW-02 (pCi/L)



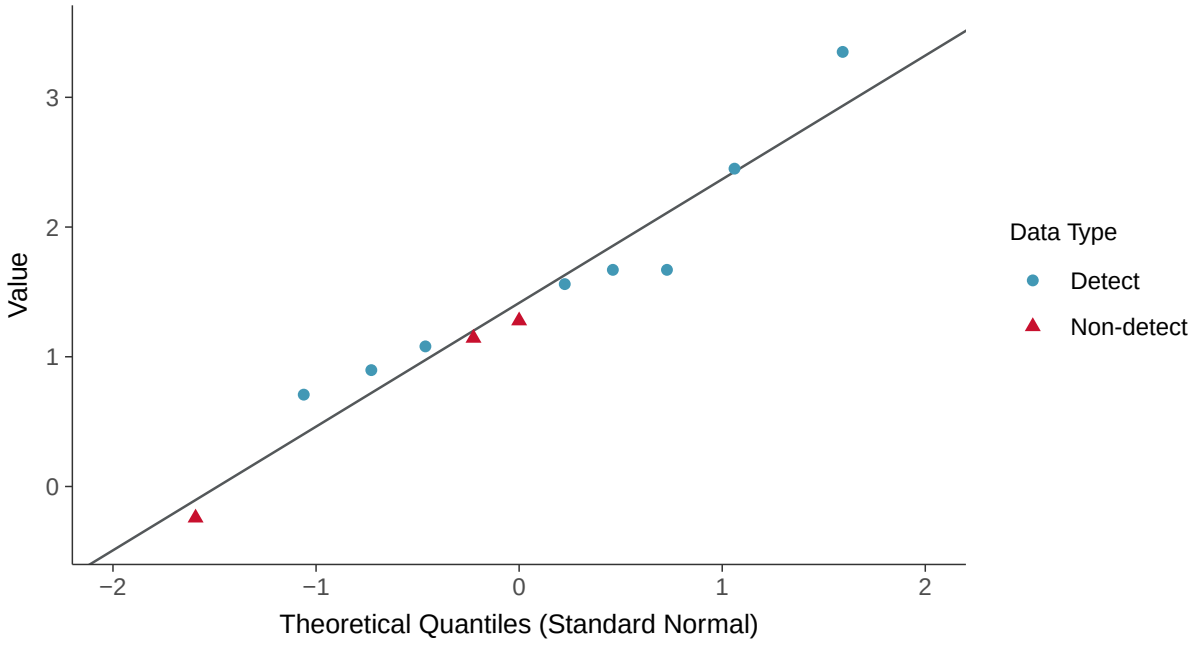
Boxplot by Season

Radium 226 and 228, MW-02 (pCi/L)



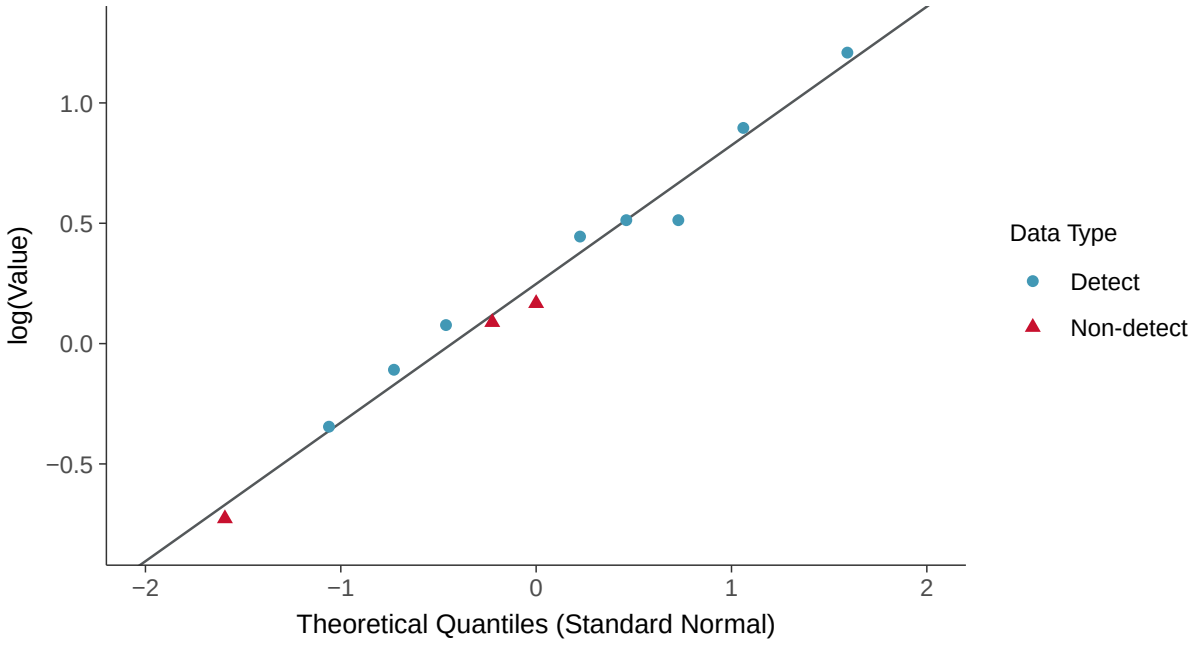
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-02 (pCi/L)



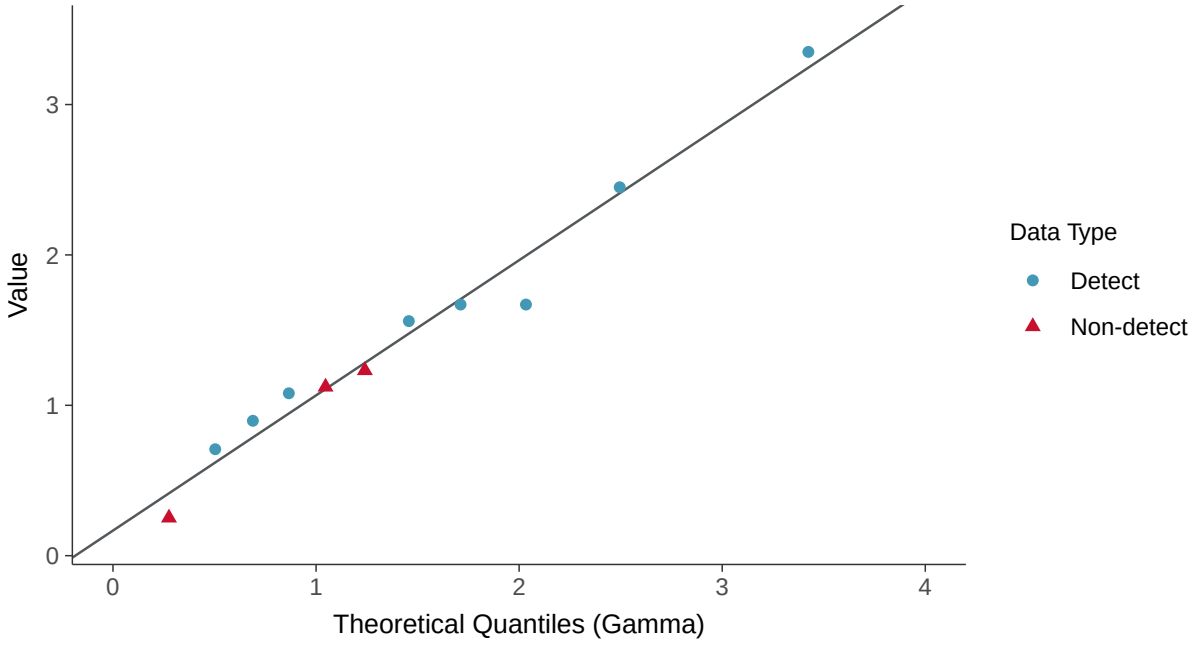
Lognormal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-02 (pCi/L)



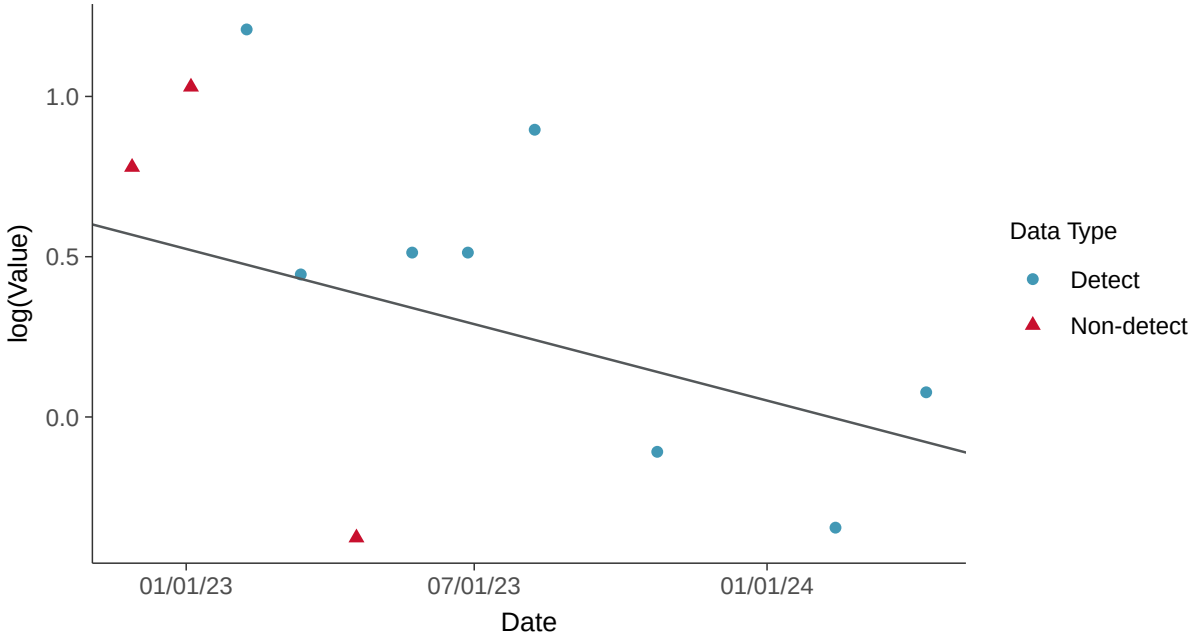
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-02 (pCi/L)



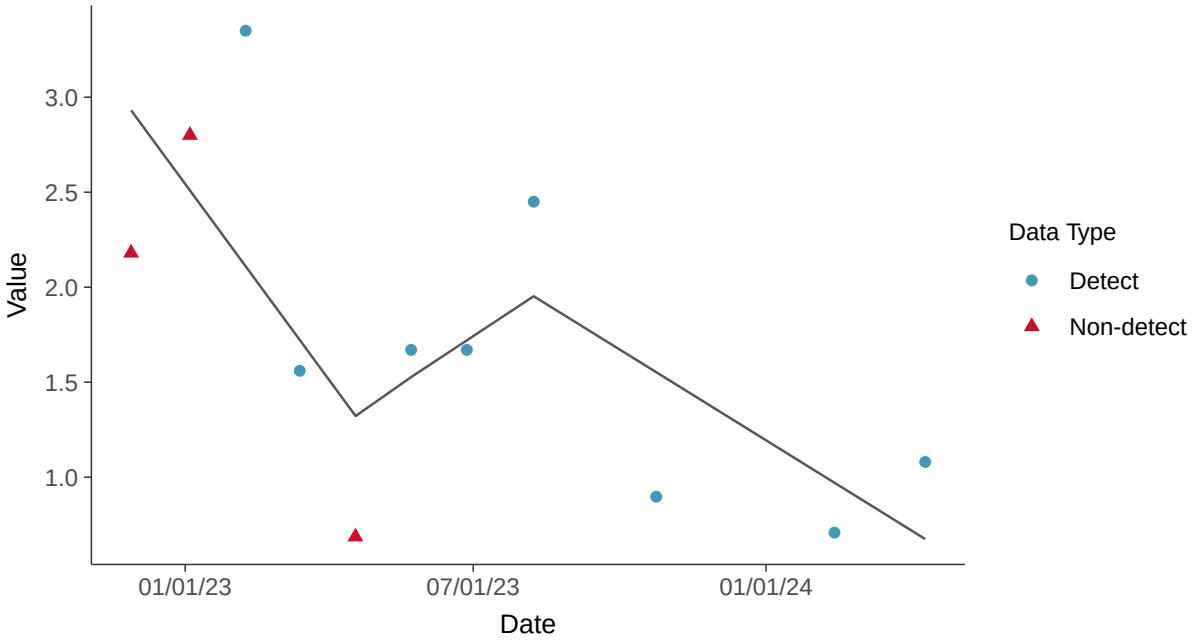
Trend Regression: Lognormal MLE

Radium 226 and 228, MW-02 (pCi/L)



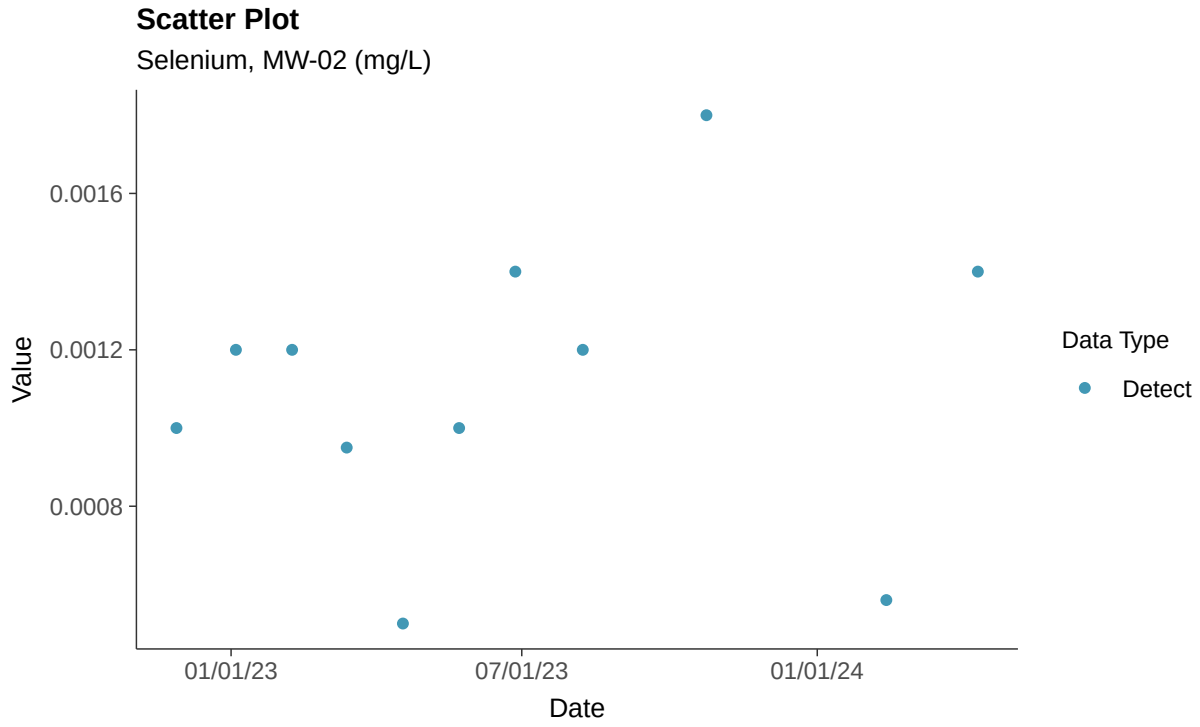
Trend Regression: Piecewise Linear-Linear-Linear

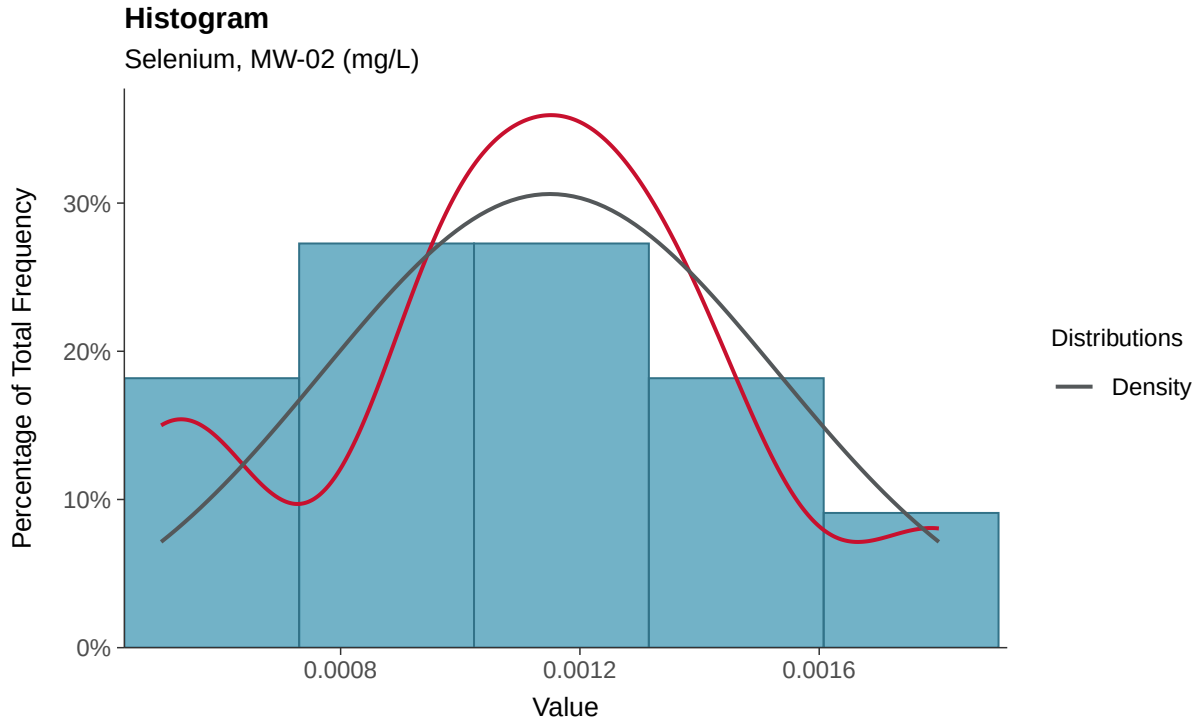
Radium 226 and 228, MW-02 (pCi/L)



Appendix IV: Selenium, MW-02

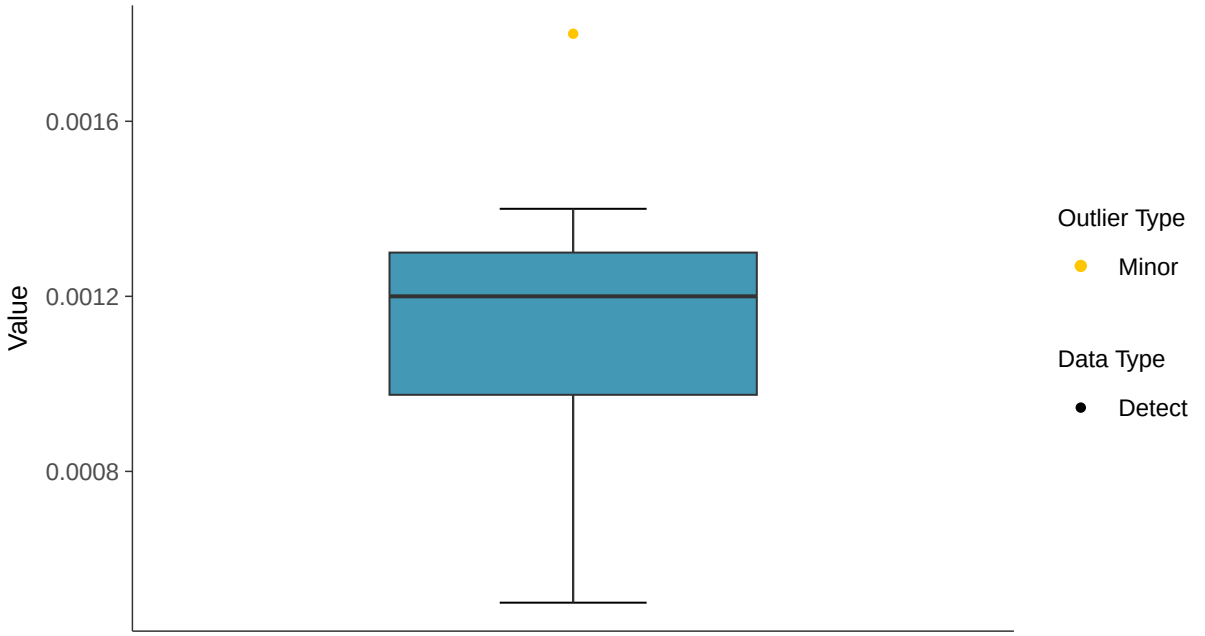
ID: 2_12_5_122





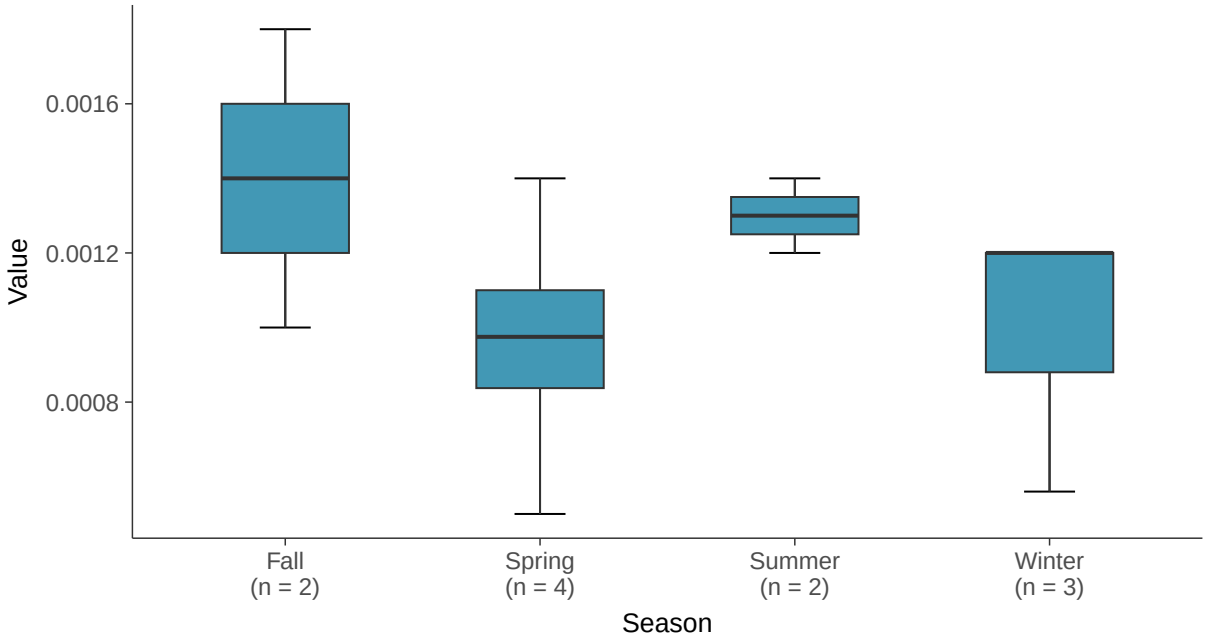
Boxplot

Selenium, MW-02 (mg/L)



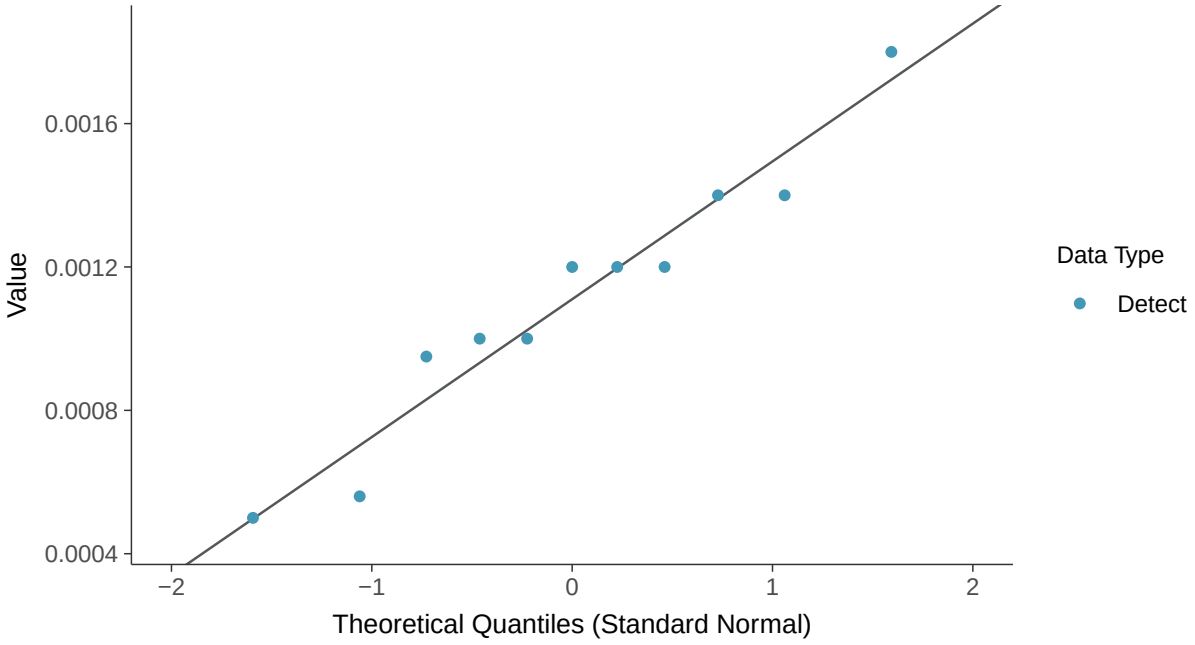
Boxplot by Season

Selenium, MW-02 (mg/L)



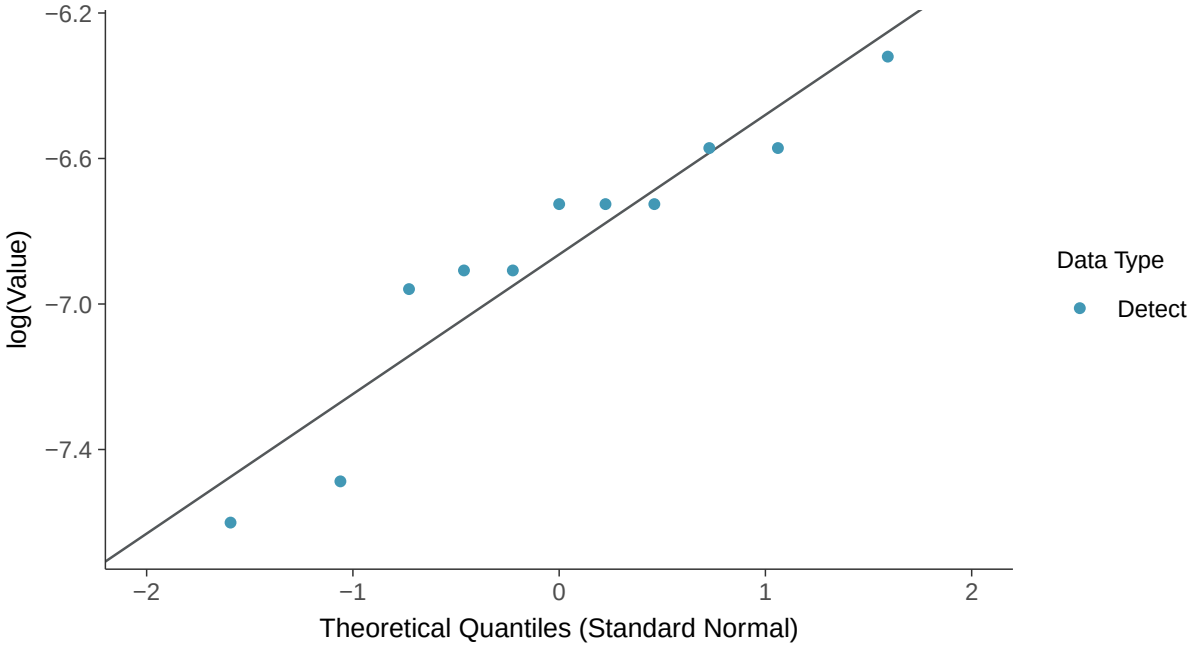
Normal Q-Q plot

Selenium, MW-02 (mg/L)



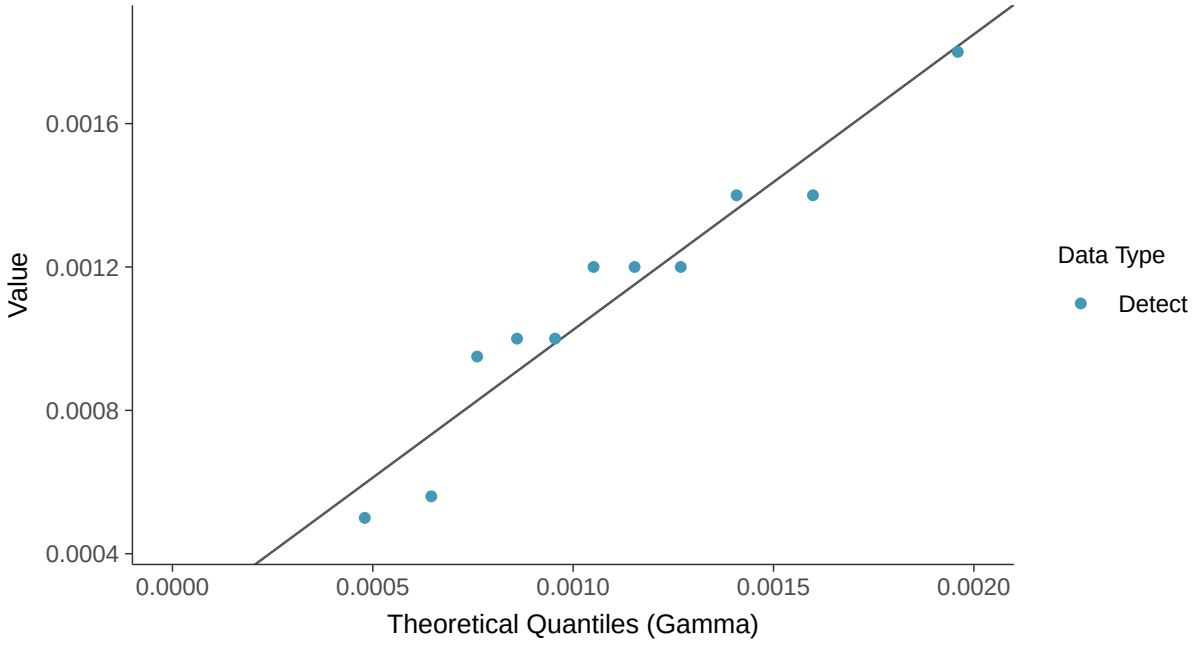
Lognormal Q-Q plot

Selenium, MW-02 (mg/L)



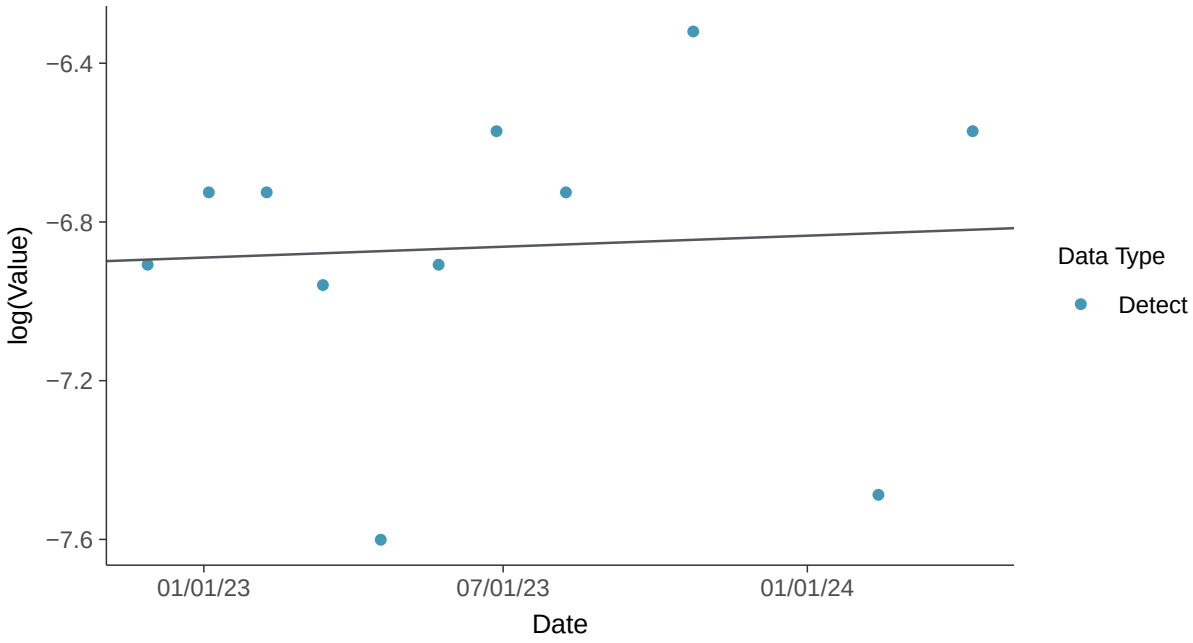
Gamma Q-Q plot

Selenium, MW-02 (mg/L)



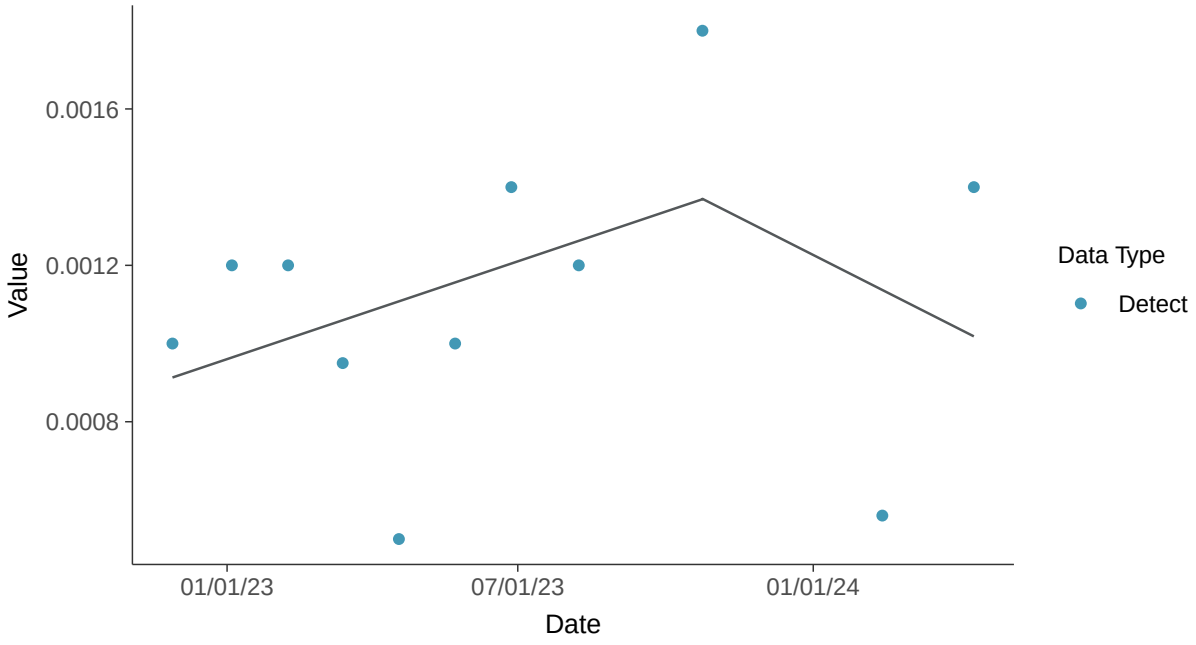
Trend Regression: Lognormal MLE

Selenium, MW-02 (mg/L)



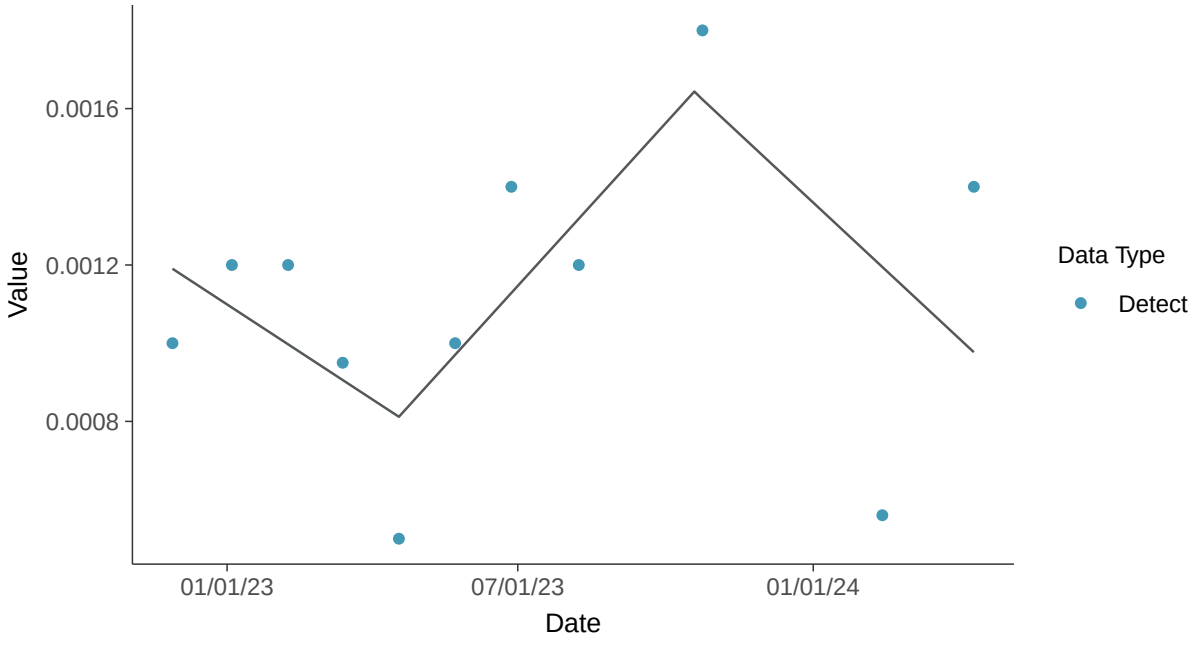
Trend Regression: Piecewise Linear-Linear

Selenium, MW-02 (mg/L)



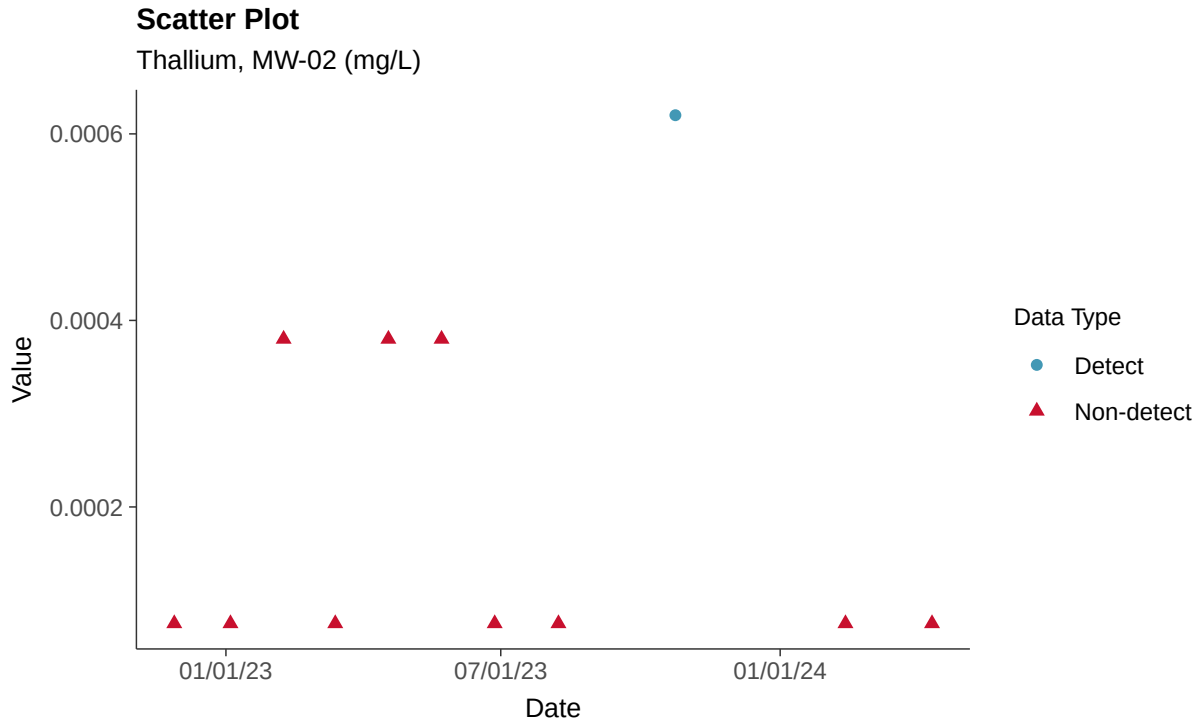
Trend Regression: Piecewise Linear-Linear-Linear

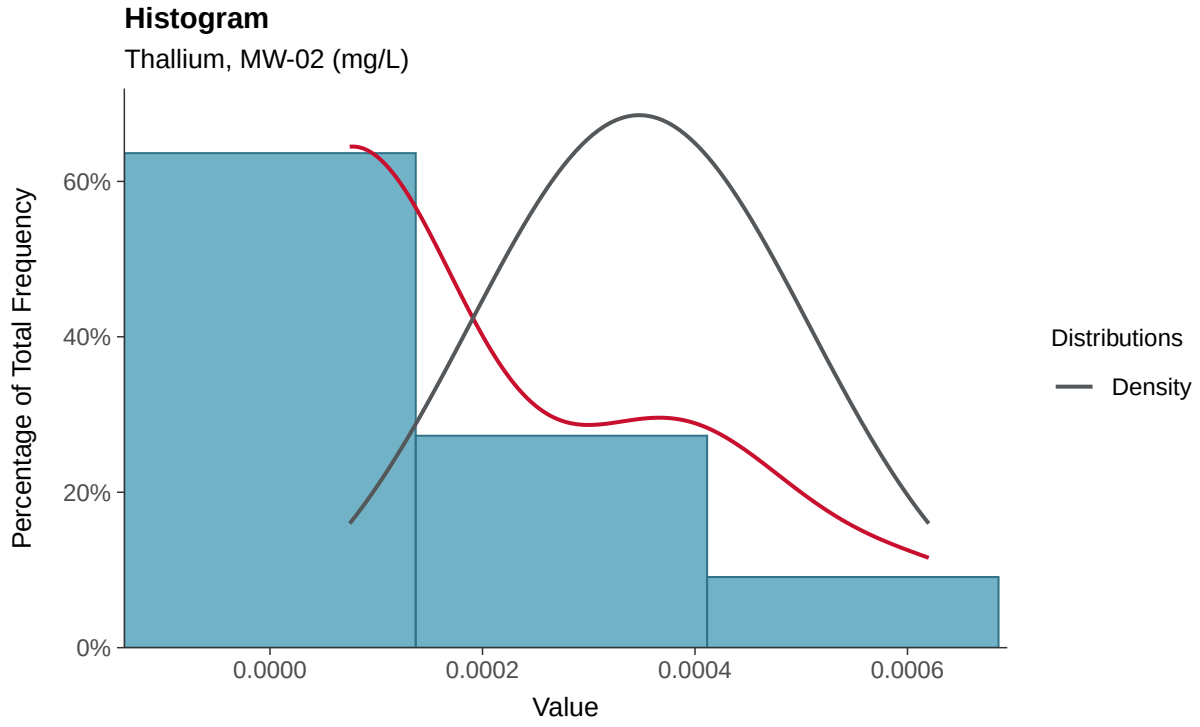
Selenium, MW-02 (mg/L)



Appendix IV: Thallium, MW-02

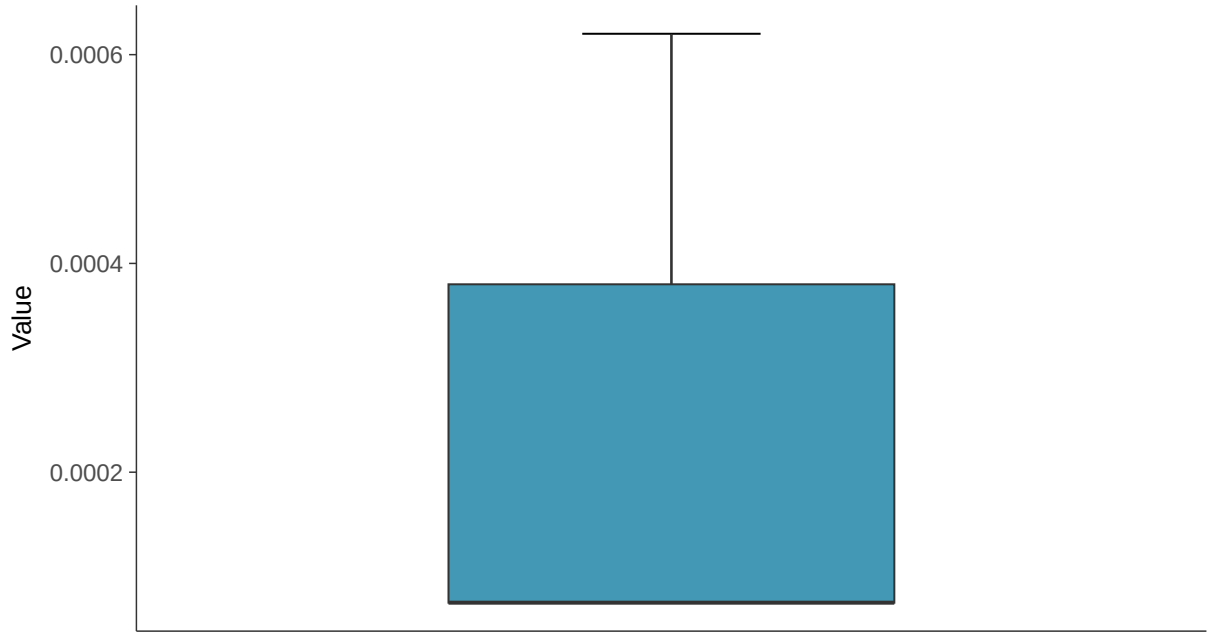
ID: 2_12_5_125





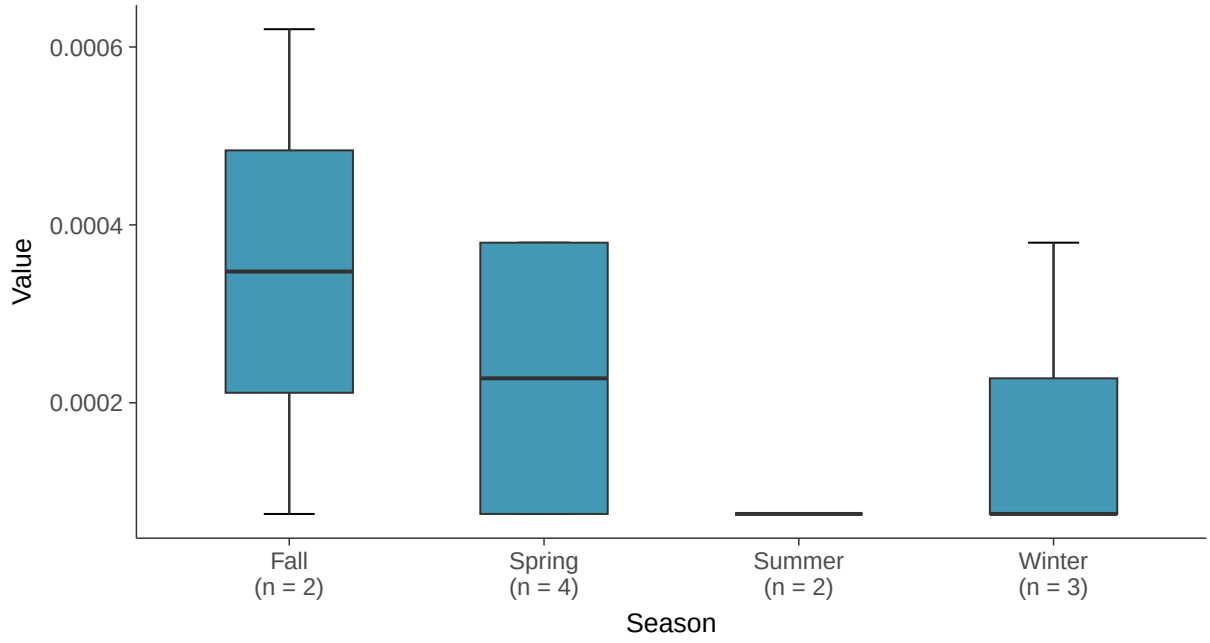
Boxplot

Thallium, MW-02 (mg/L)



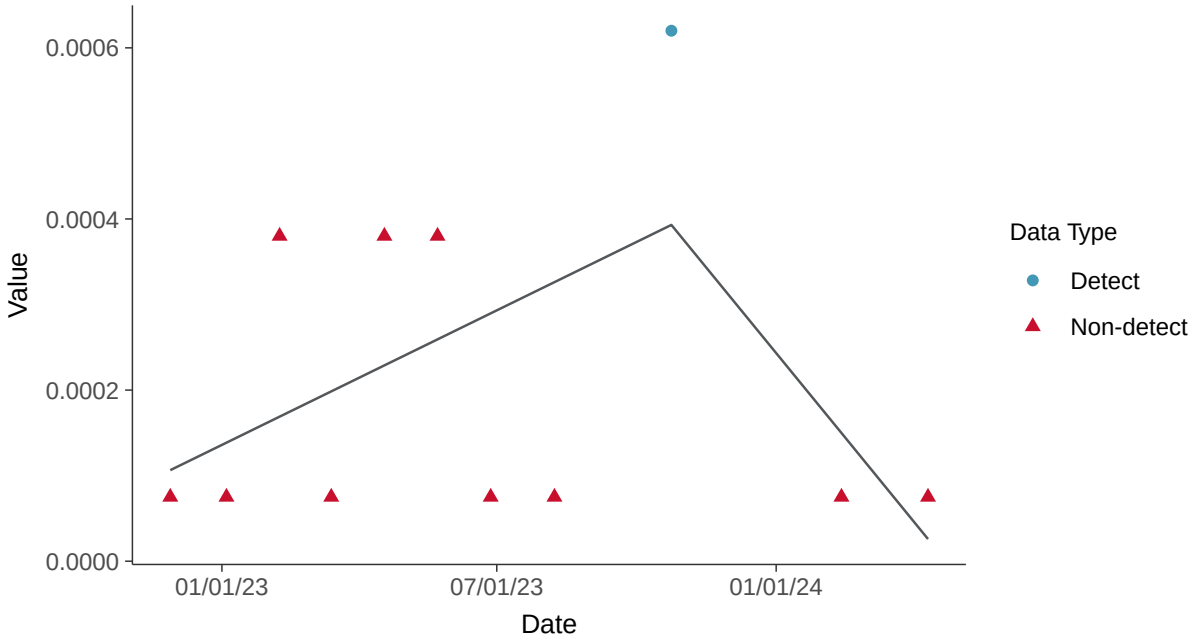
Boxplot by Season

Thallium, MW-02 (mg/L)



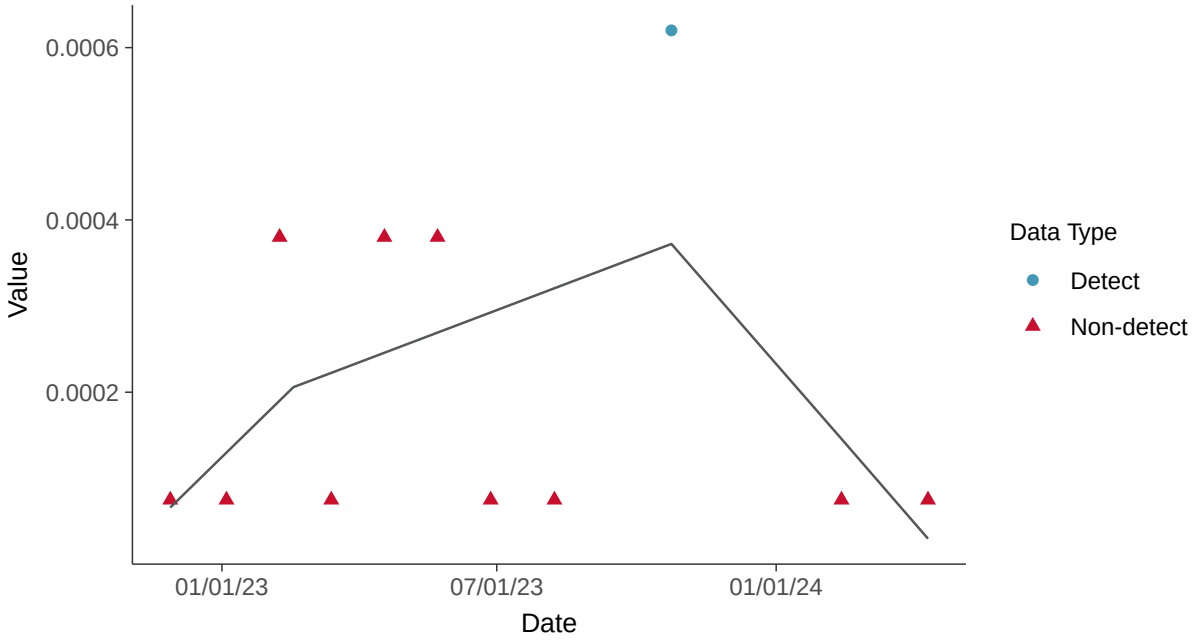
Trend Regression: Piecewise Linear-Linear

Thallium, MW-02 (mg/L)



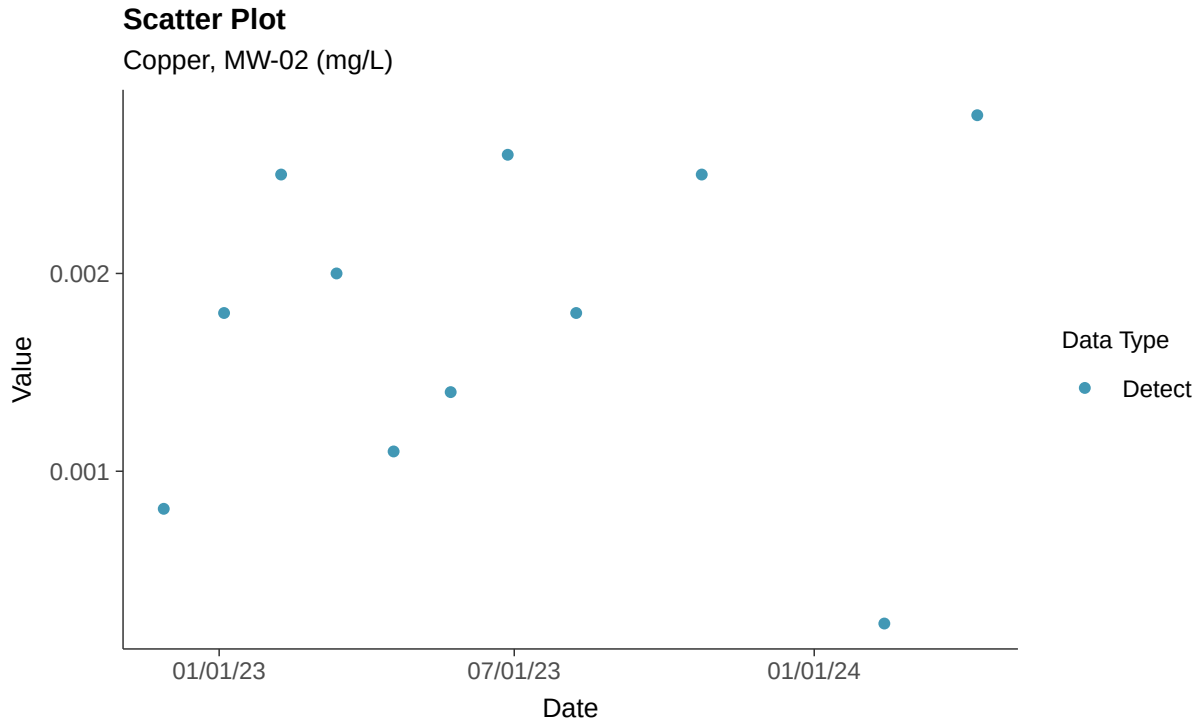
Trend Regression: Piecewise Linear-Linear-Linear

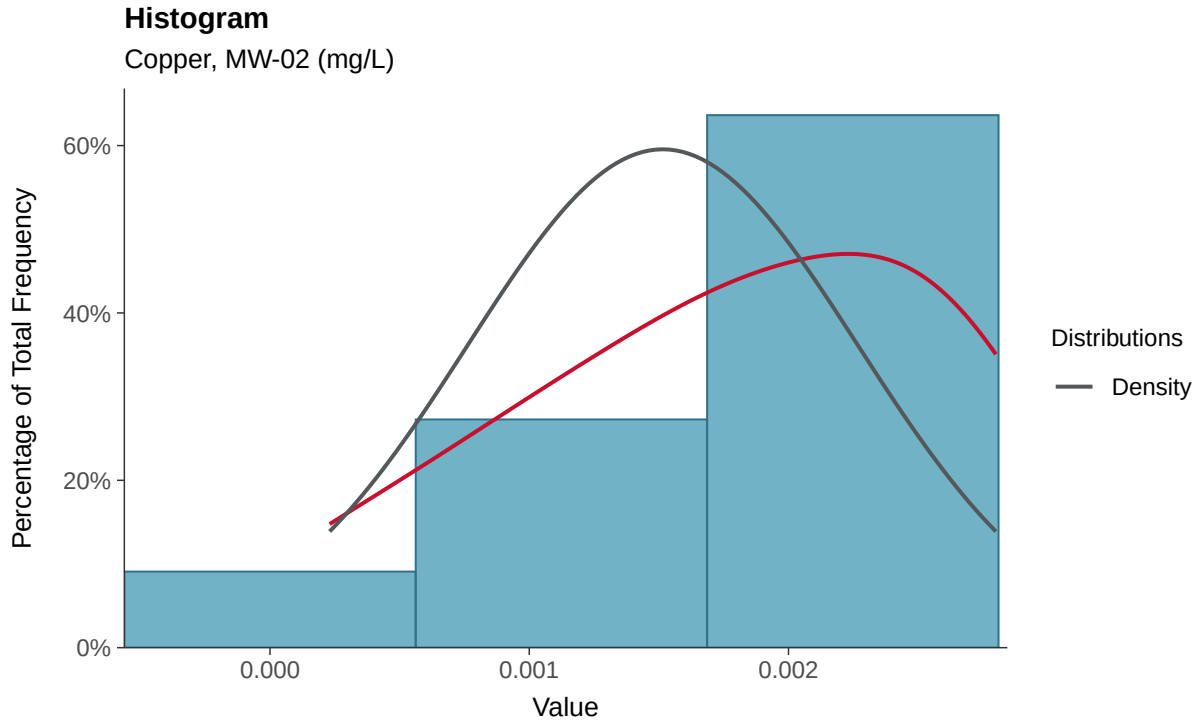
Thallium, MW-02 (mg/L)



Part 115: Copper, MW-02

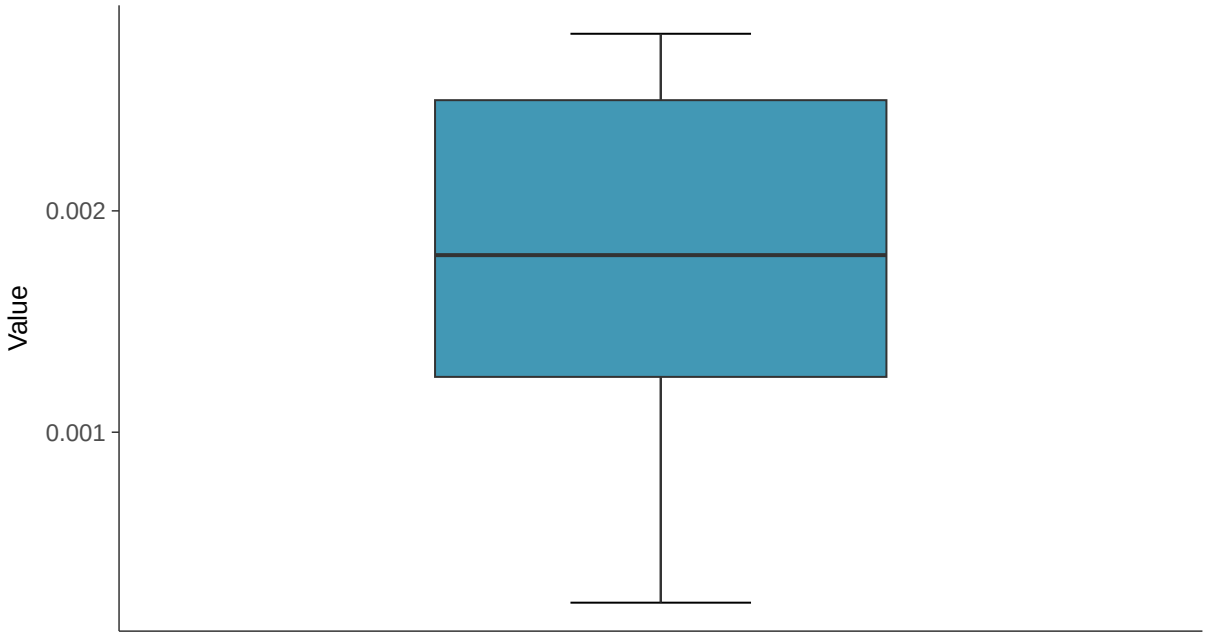
ID: 2_12_6_111





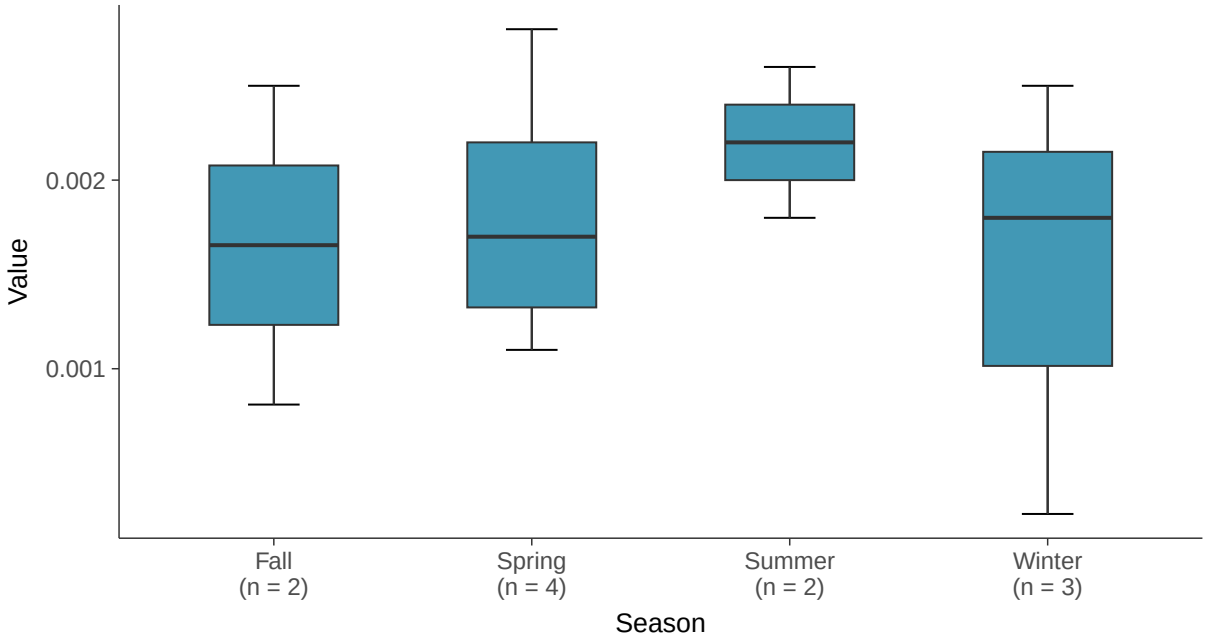
Boxplot

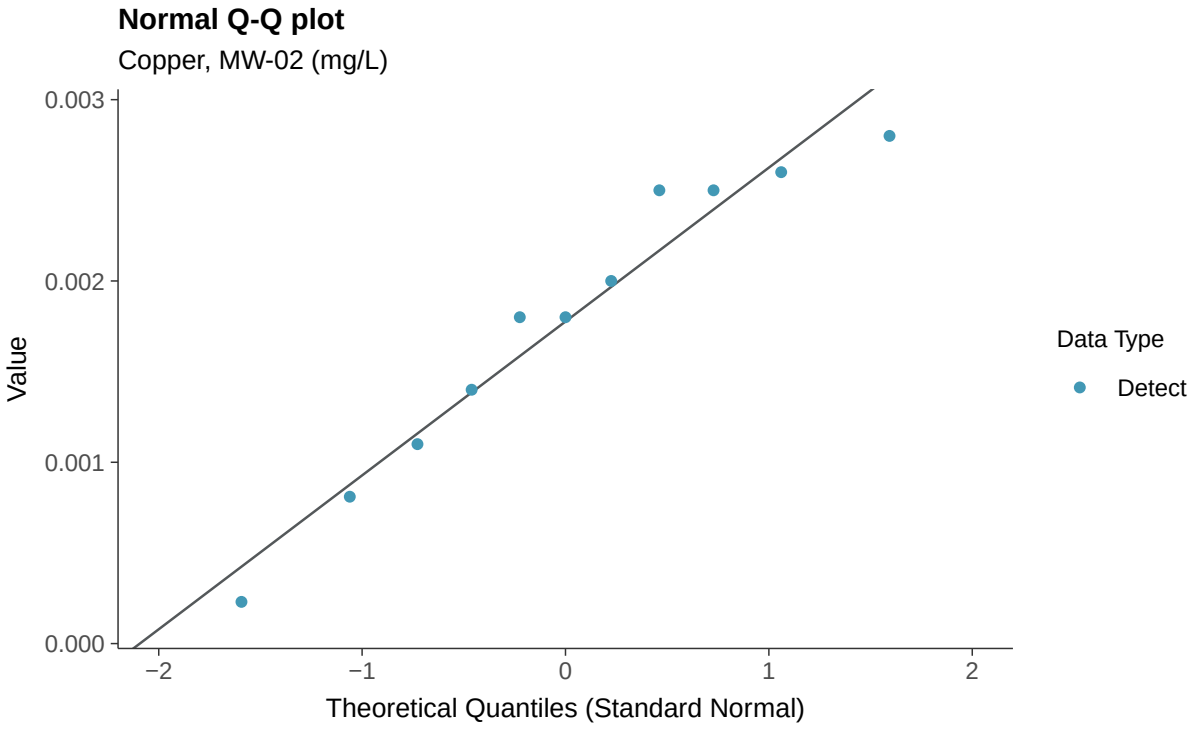
Copper, MW-02 (mg/L)

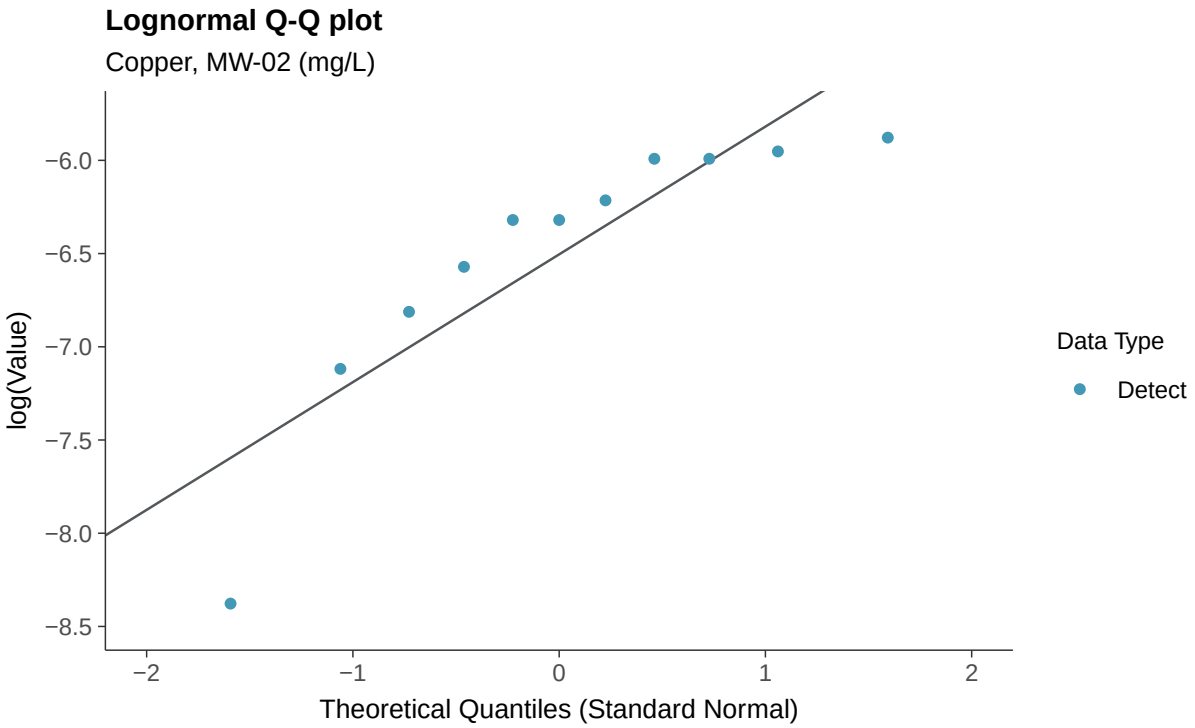


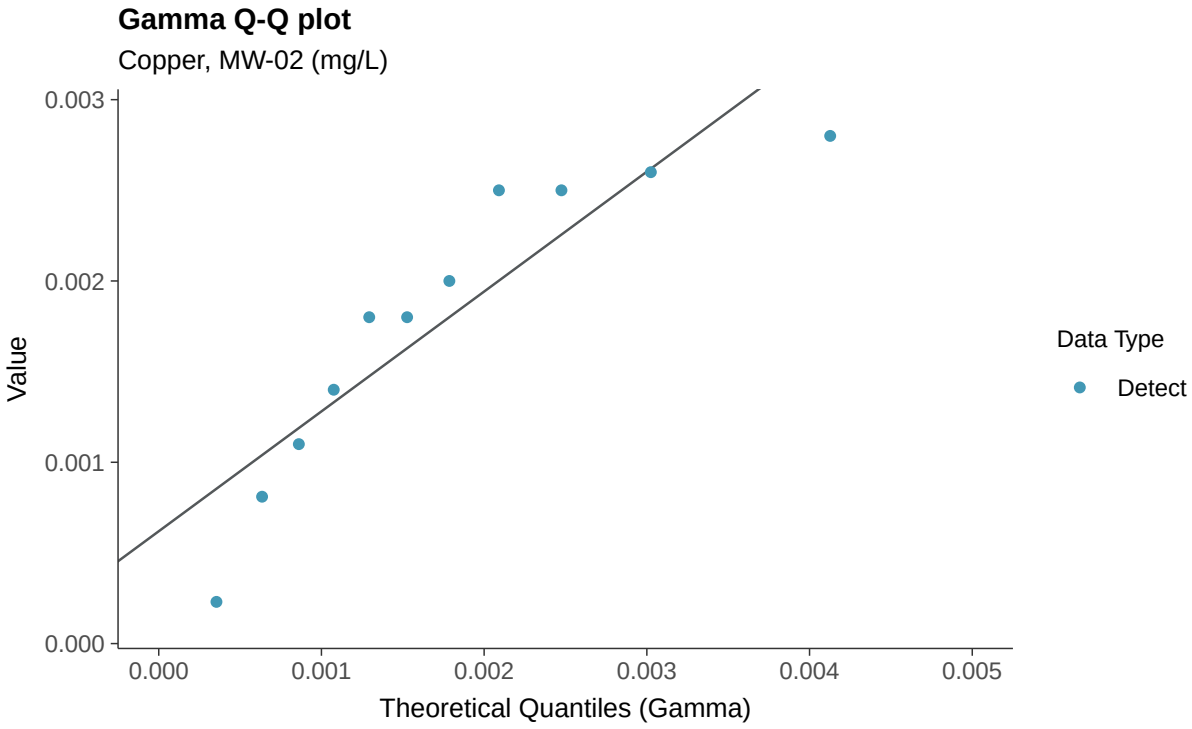
Boxplot by Season

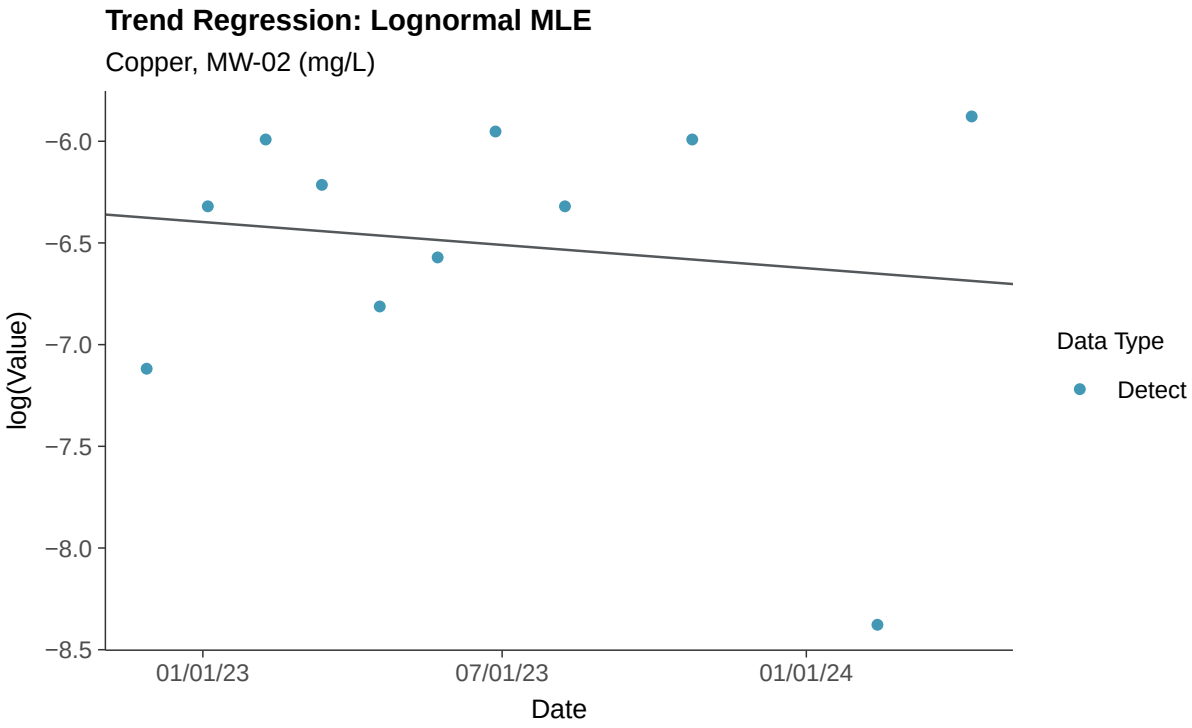
Copper, MW-02 (mg/L)




Normal Q-Q plot
Copper, MW-02 (mg/L)
Value
0.003
0.002
0.001
0.000
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect

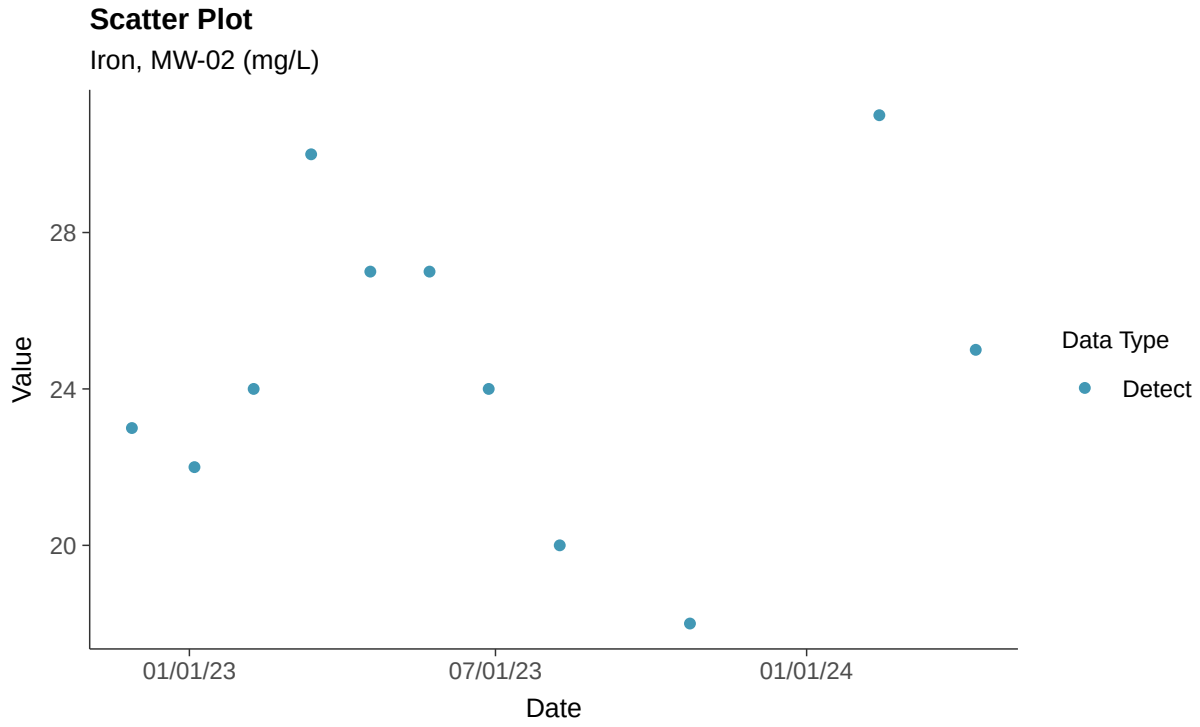

Lognormal Q-Q plot
Copper, MW-02 (mg/L)
log(Value)
−6.0
−6.5
−7.0
−7.5
−8.0
−8.5
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect

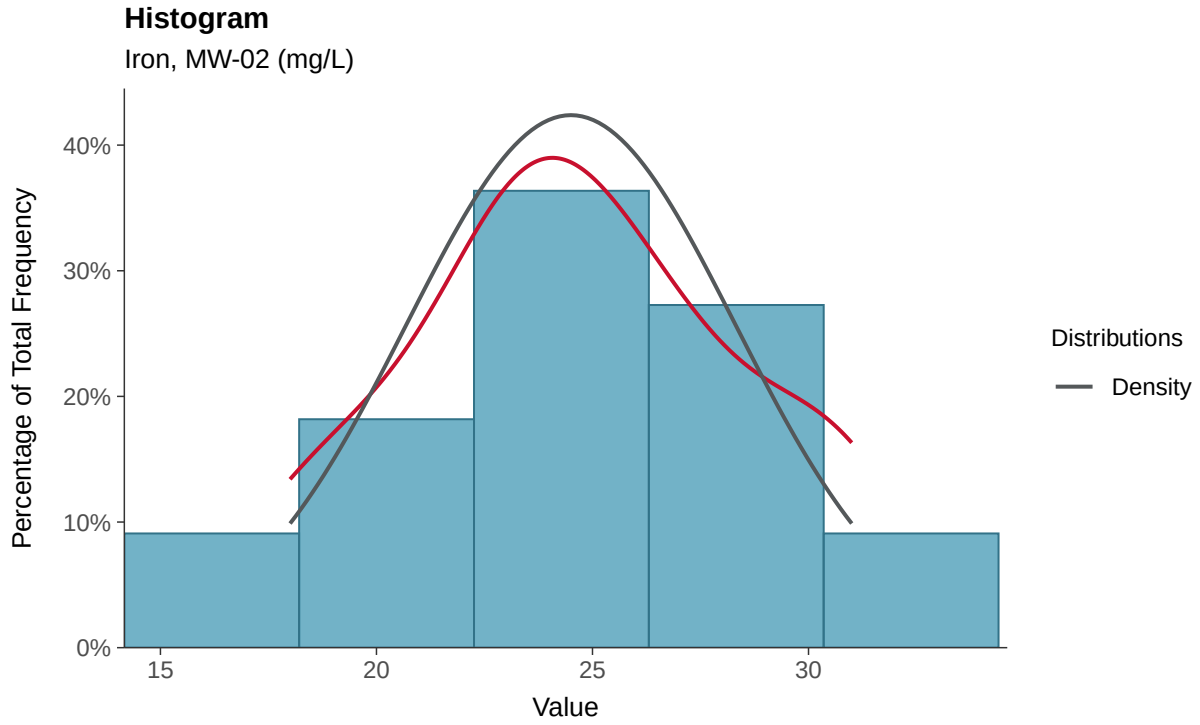

Gamma Q-Q plot
Copper, MW-02 (mg/L)
Value
0.003
0.002
0.001
0.000
0.000
0.001
0.002
0.003
0.004
0.005
Theoretical Quantiles (Gamma)
Data Type
Detect


Trend Regression: Lognormal MLE
Copper, MW-02 (mg/L)
log(Value)
−6.0
−6.5
−7.0
−7.5
−8.0
−8.5
01/01/23
07/01/23
01/01/24
Date
Data Type
Detect

Part 115: Iron, MW-02

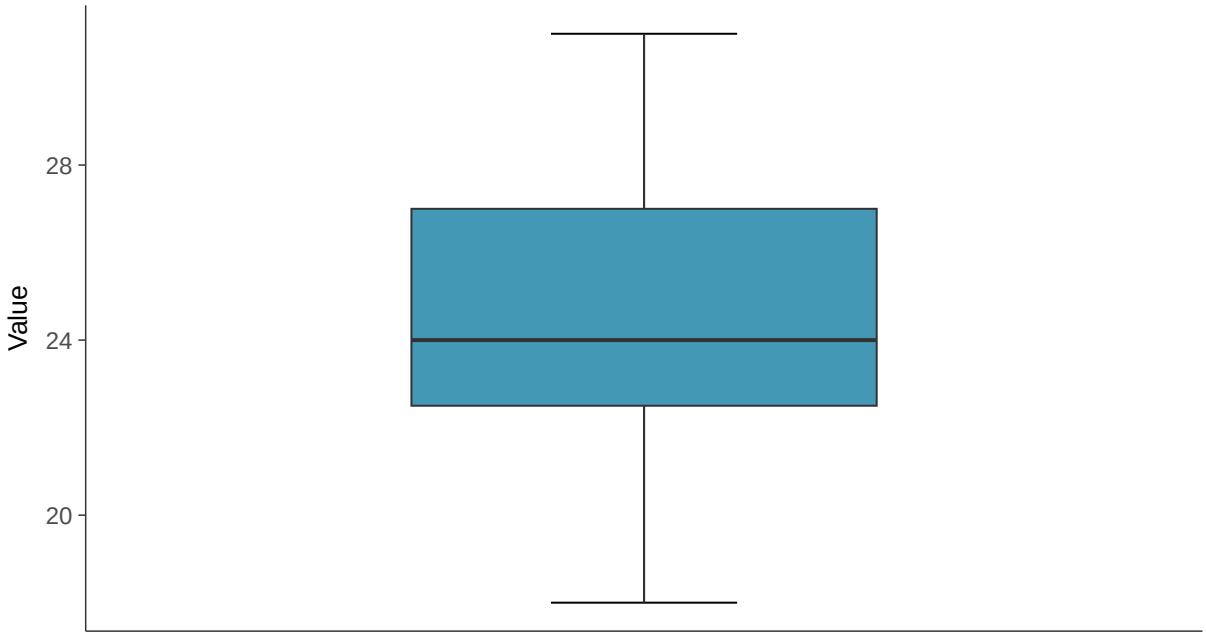
ID: 2_12_6_114





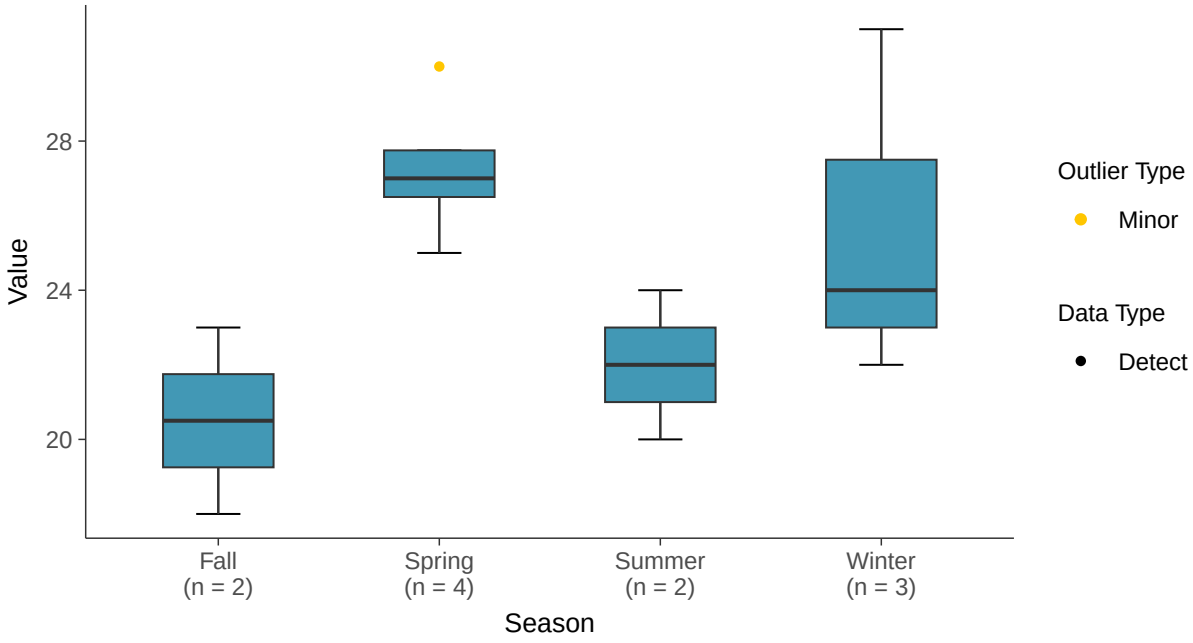
Boxplot

Iron, MW-02 (mg/L)



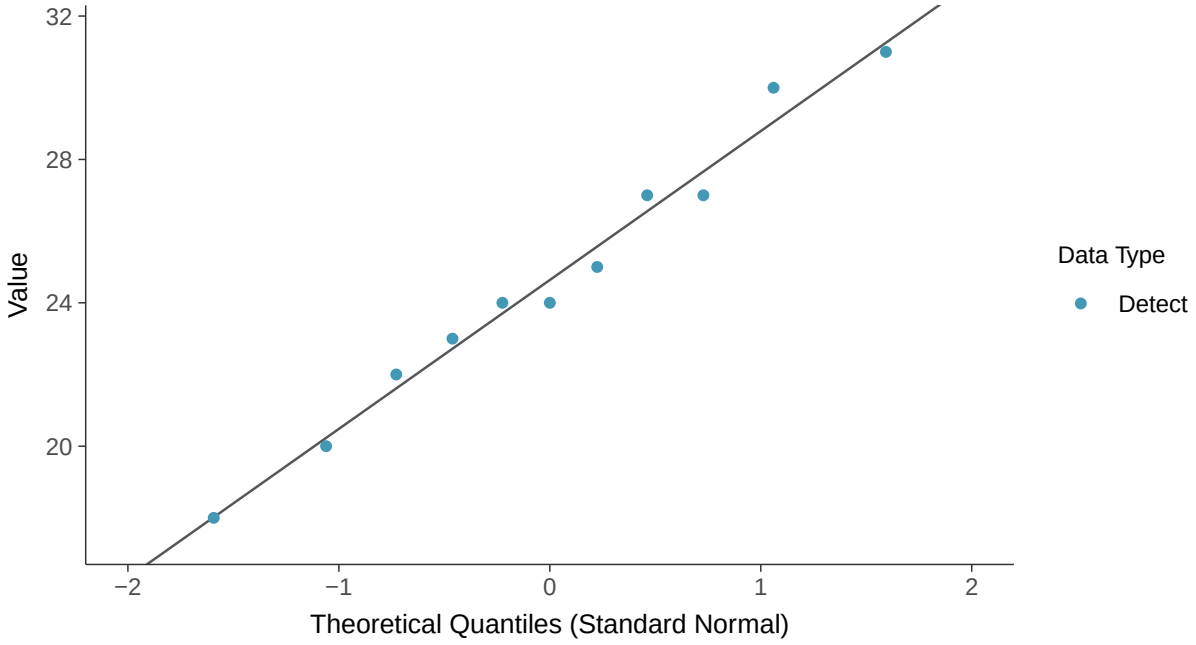
Boxplot by Season

Iron, MW-02 (mg/L)



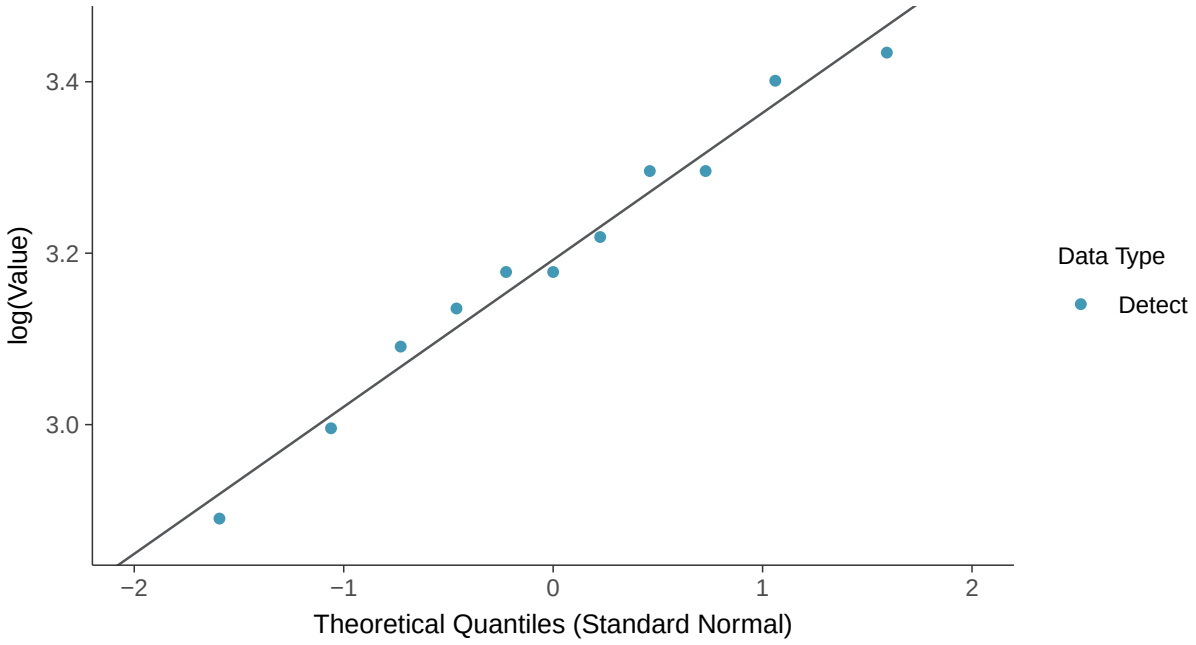
Normal Q-Q plot

Iron, MW-02 (mg/L)



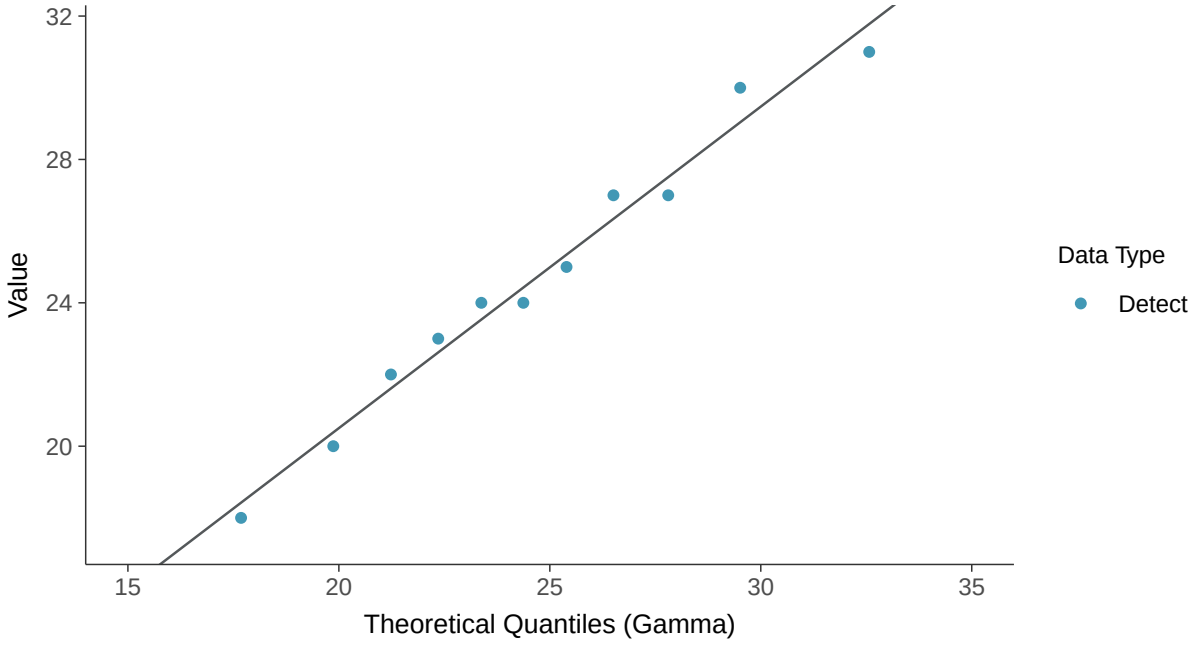
Lognormal Q-Q plot

Iron, MW-02 (mg/L)



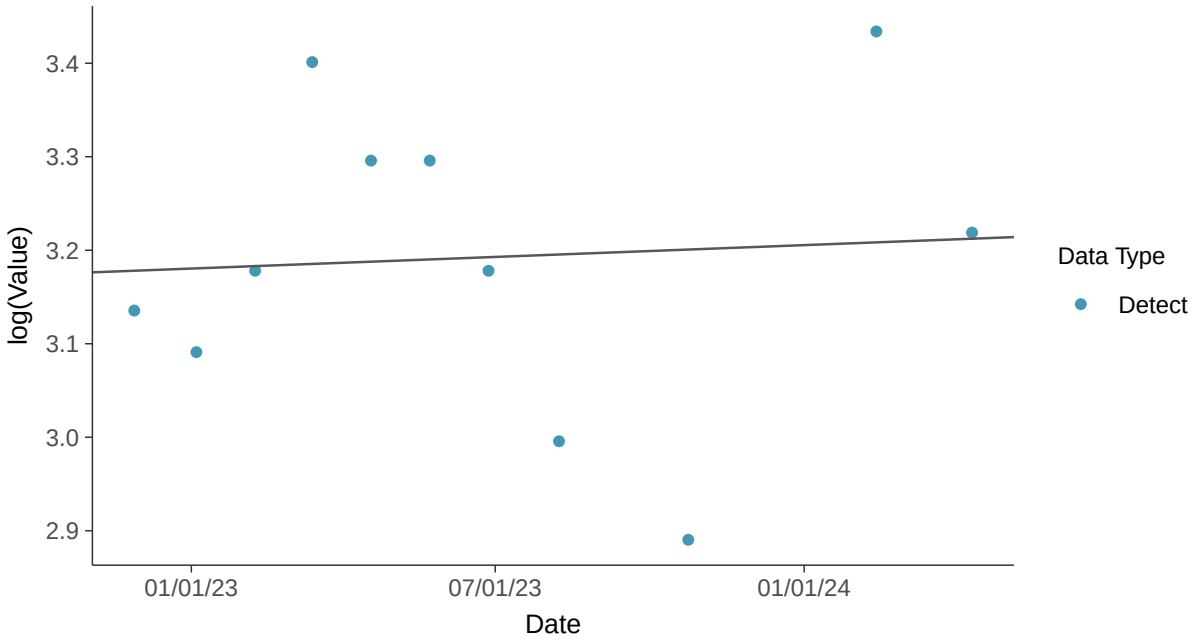
Gamma Q-Q plot

Iron, MW-02 (mg/L)



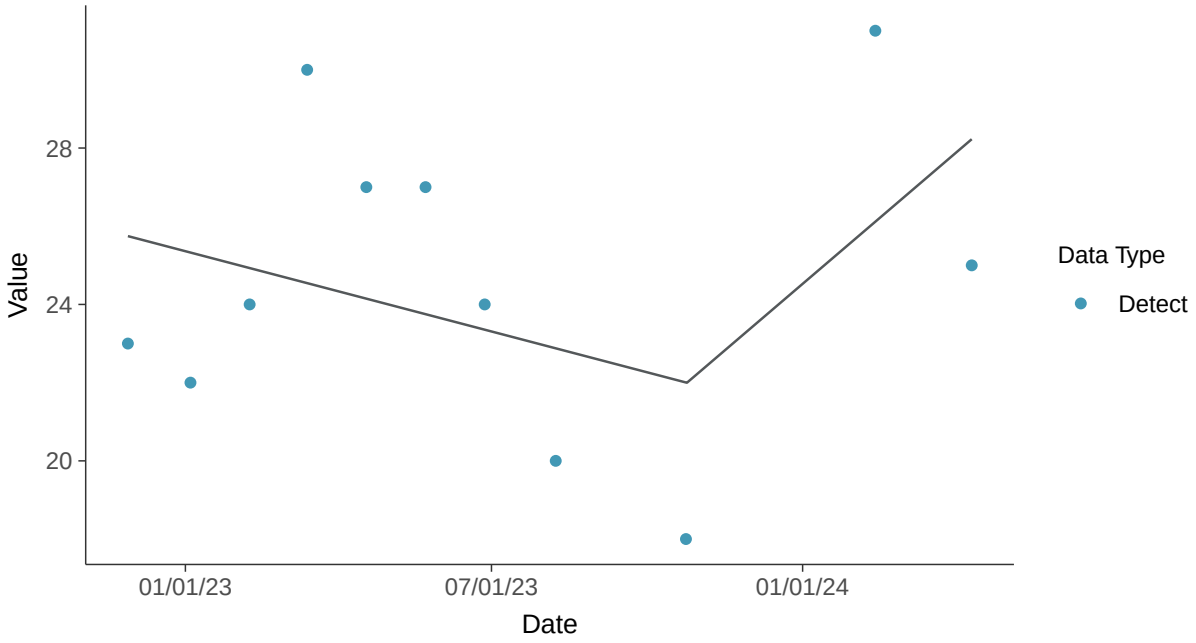
Trend Regression: Lognormal MLE

Iron, MW-02 (mg/L)



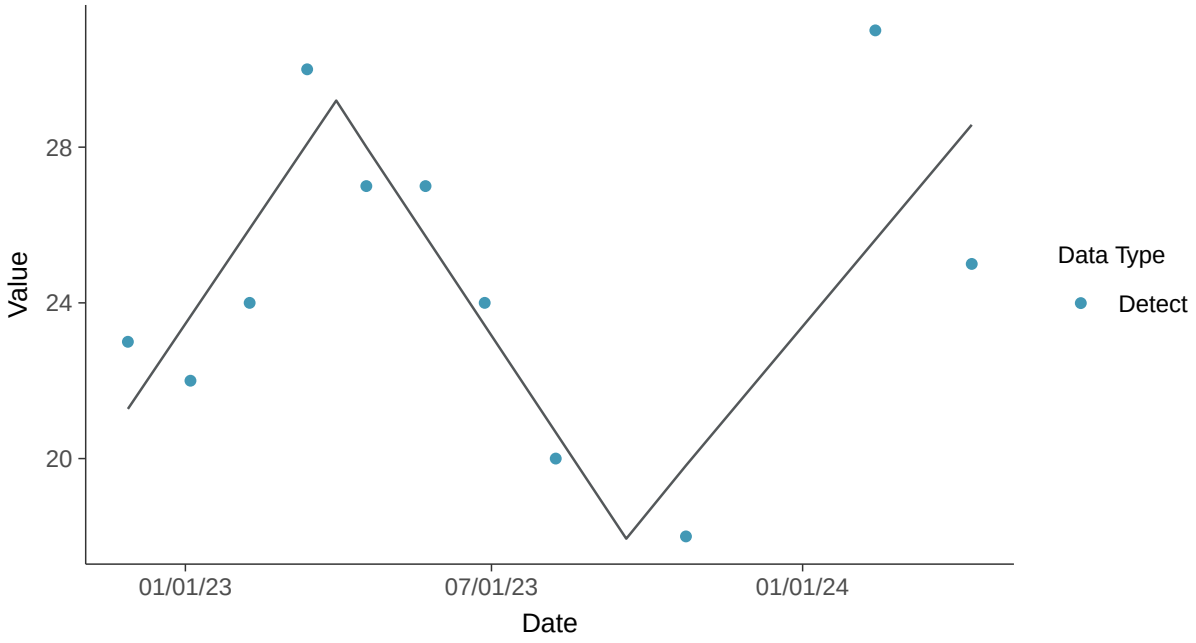
Trend Regression: Piecewise Linear-Linear

Iron, MW-02 (mg/L)



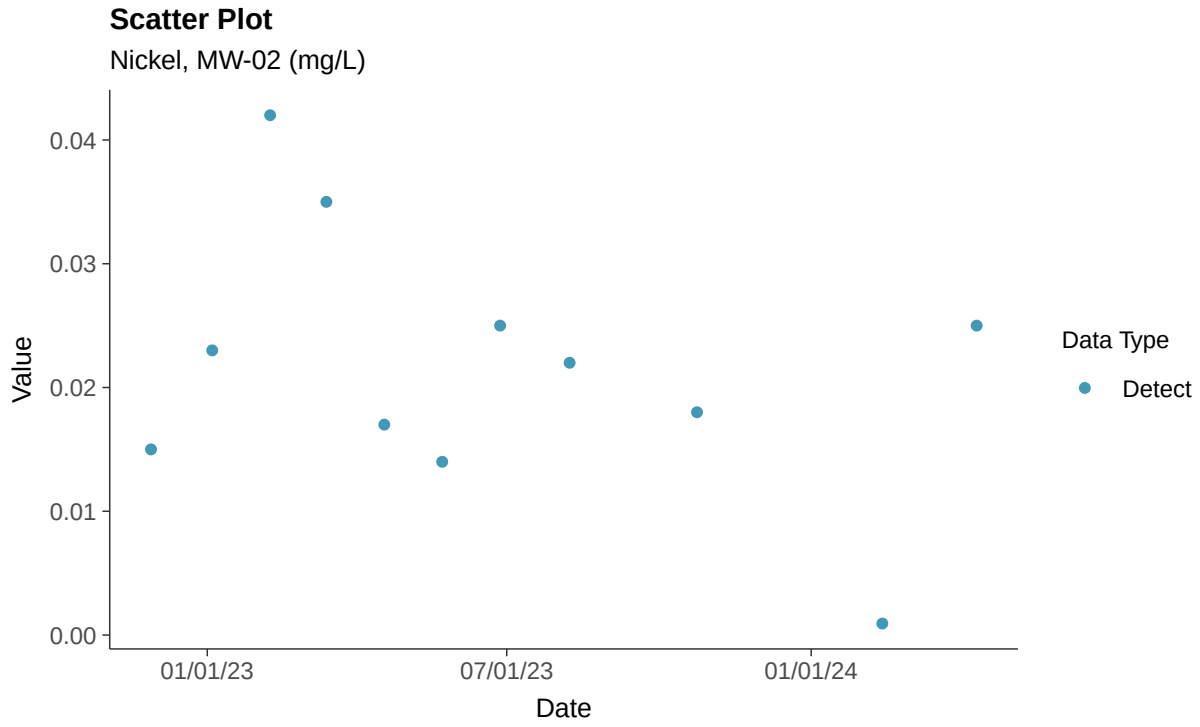
Trend Regression: Piecewise Linear-Linear-Linear

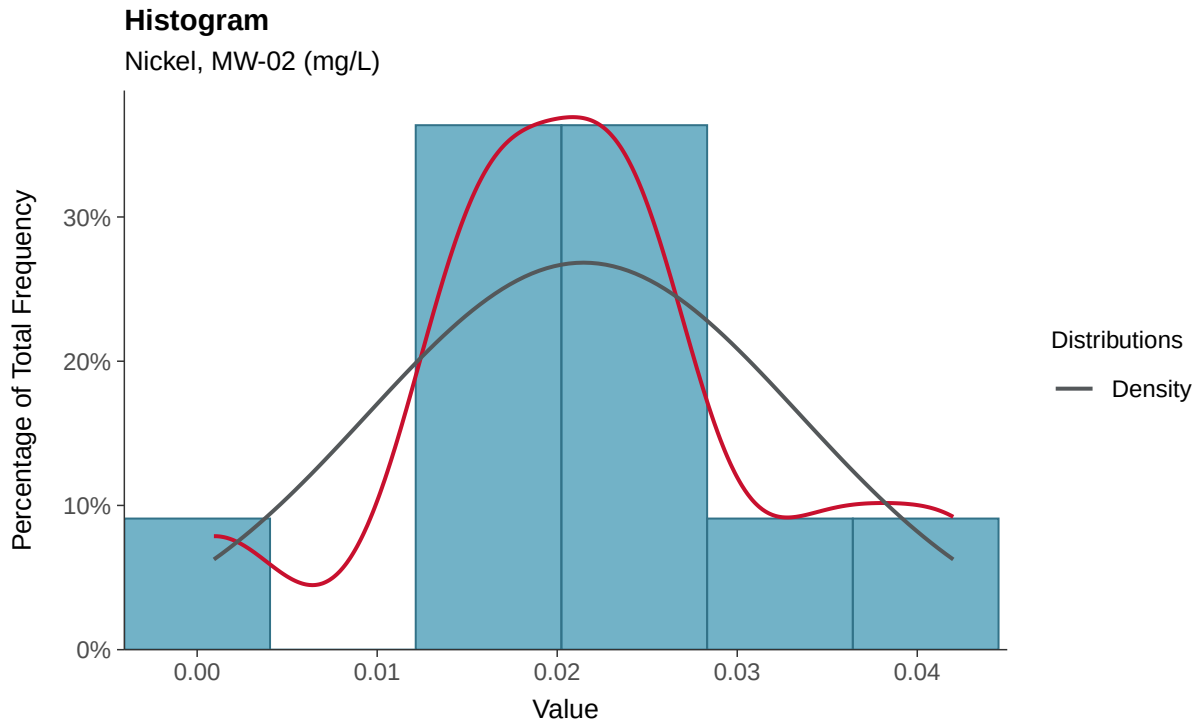
Iron, MW-02 (mg/L)



Part 115: Nickel, MW-02

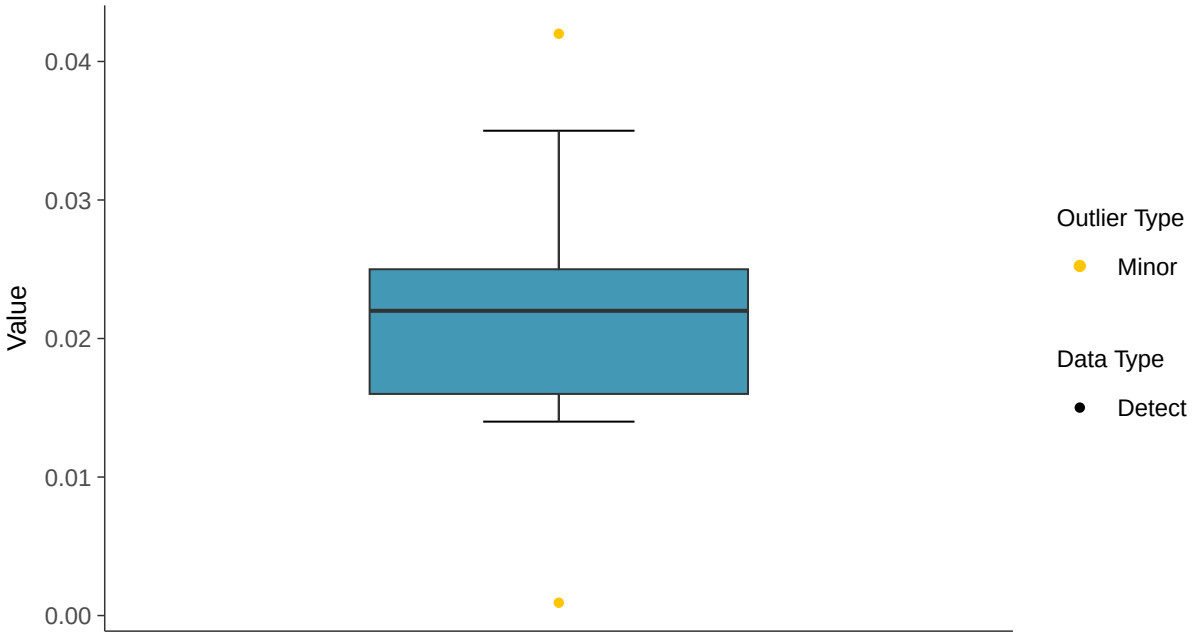
ID: 2_12_6_119





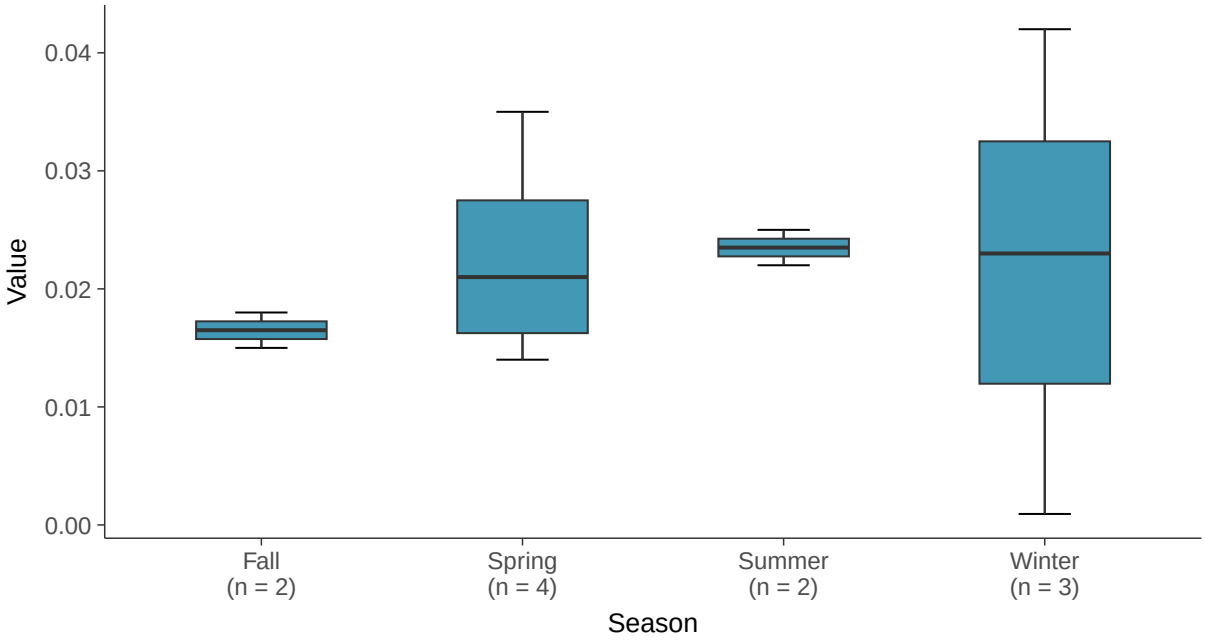
Boxplot

Nickel, MW-02 (mg/L)



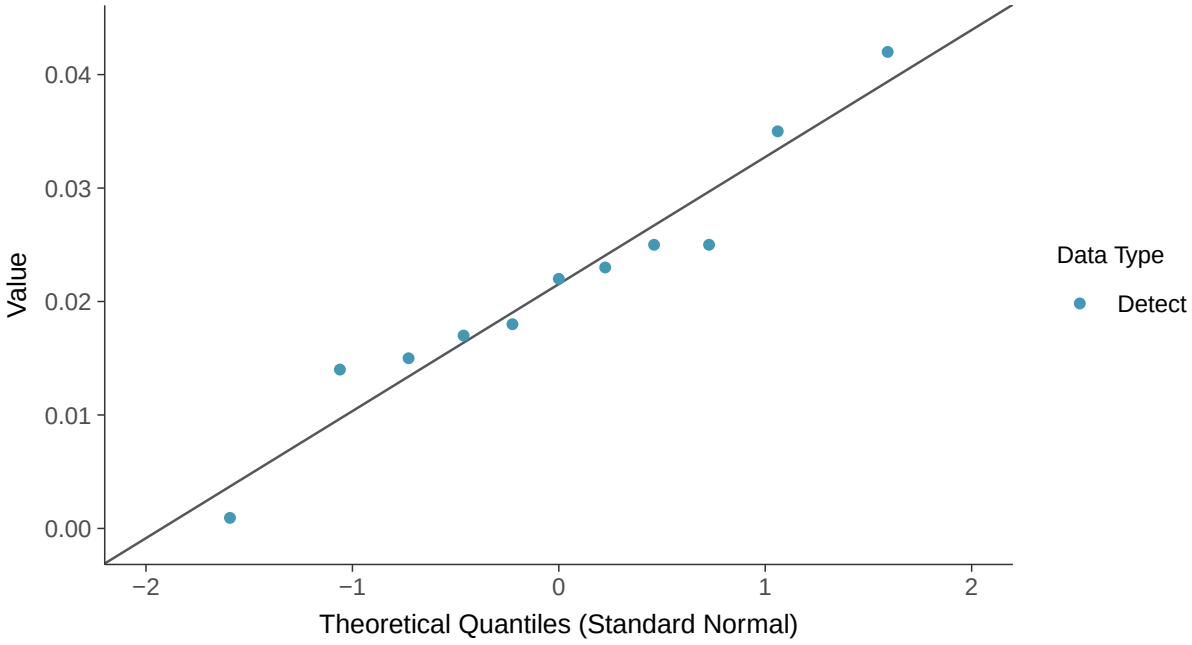
Boxplot by Season

Nickel, MW-02 (mg/L)



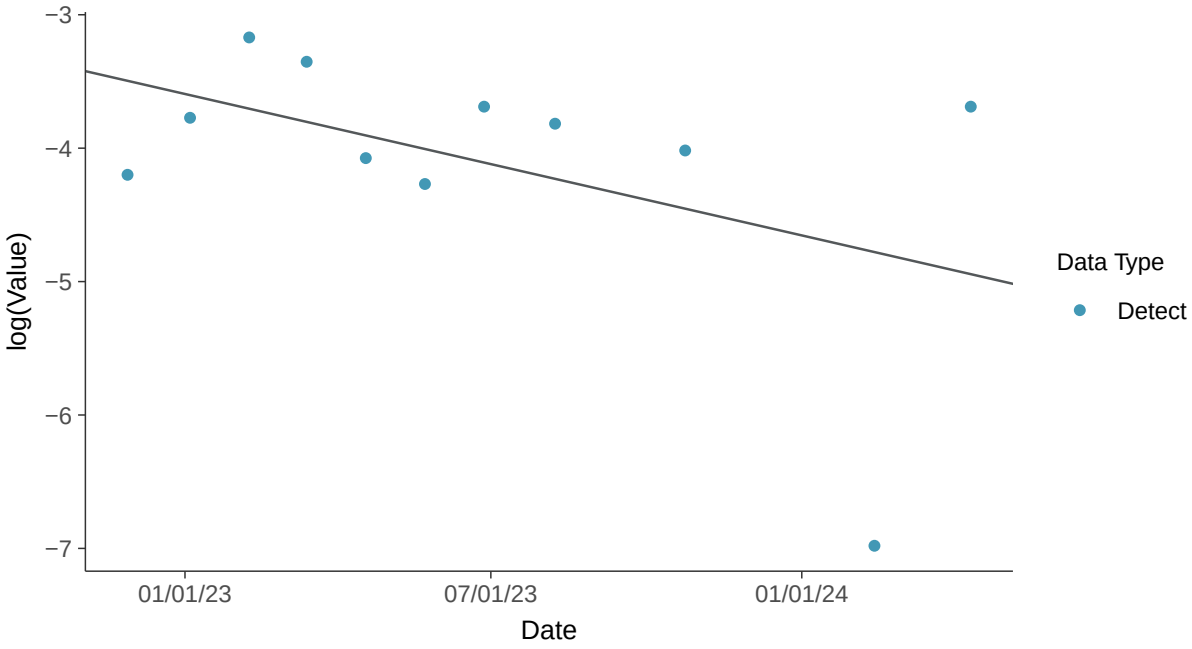
Normal Q-Q plot

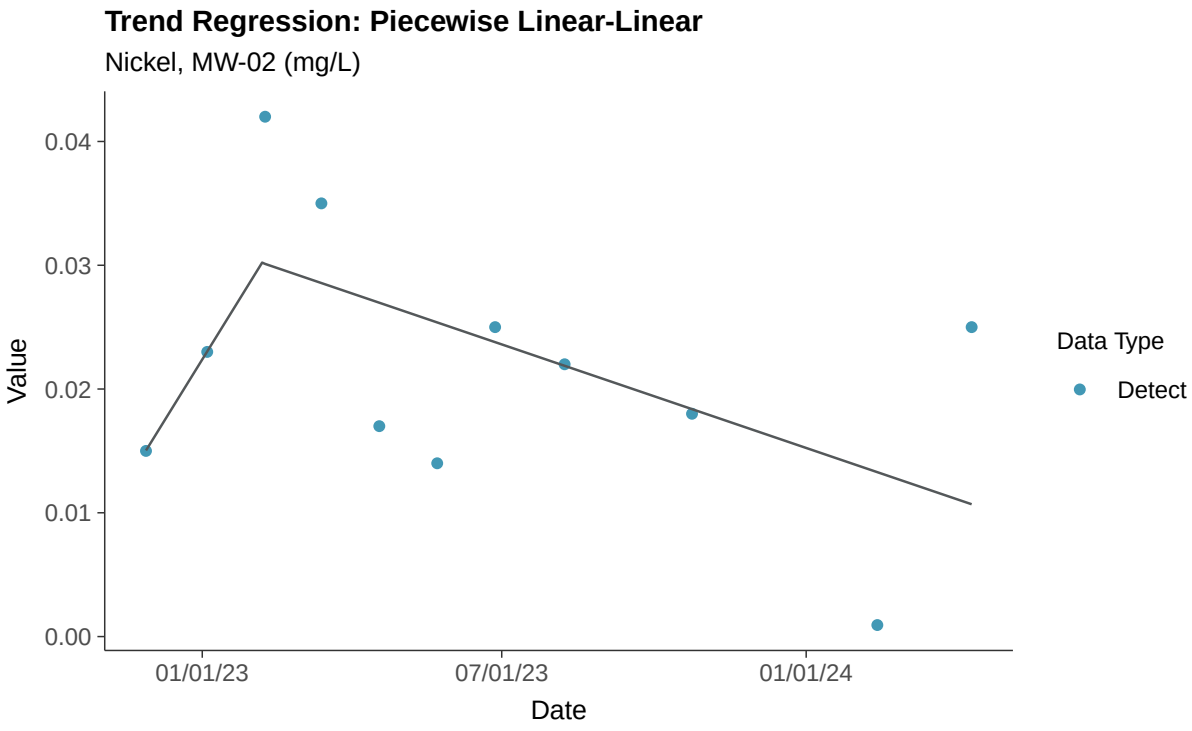
Nickel, MW-02 (mg/L)



Trend Regression: Lognormal MLE

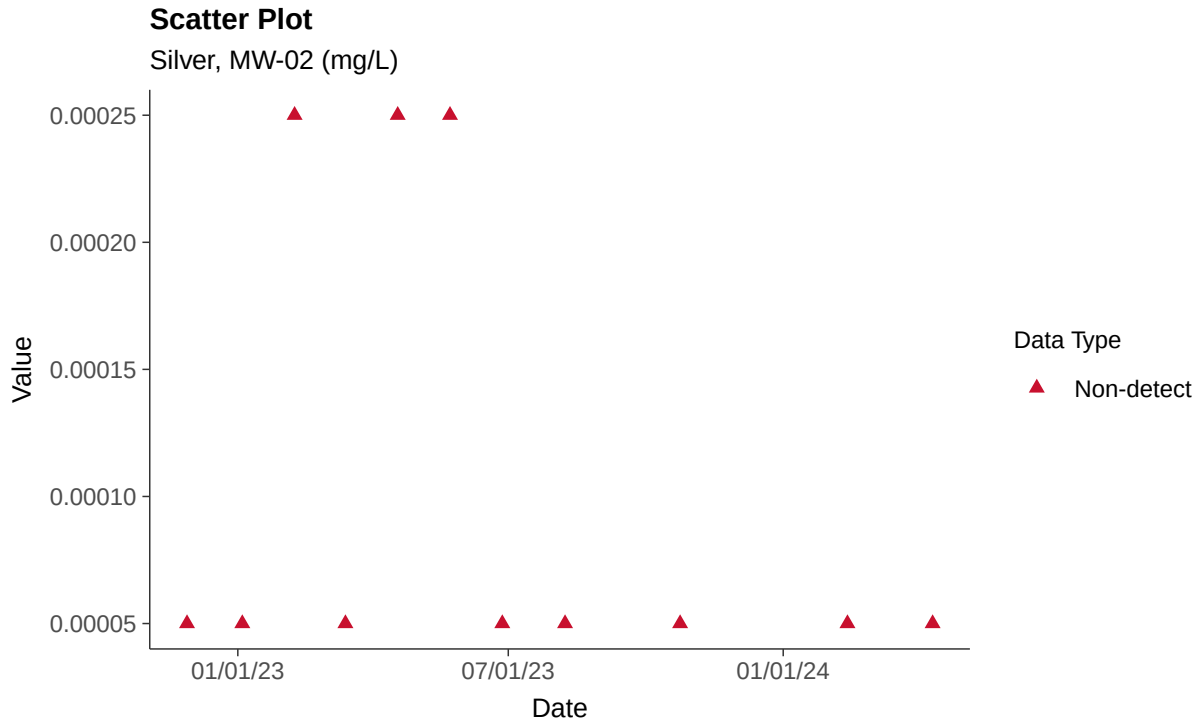
Nickel, MW-02 (mg/L)

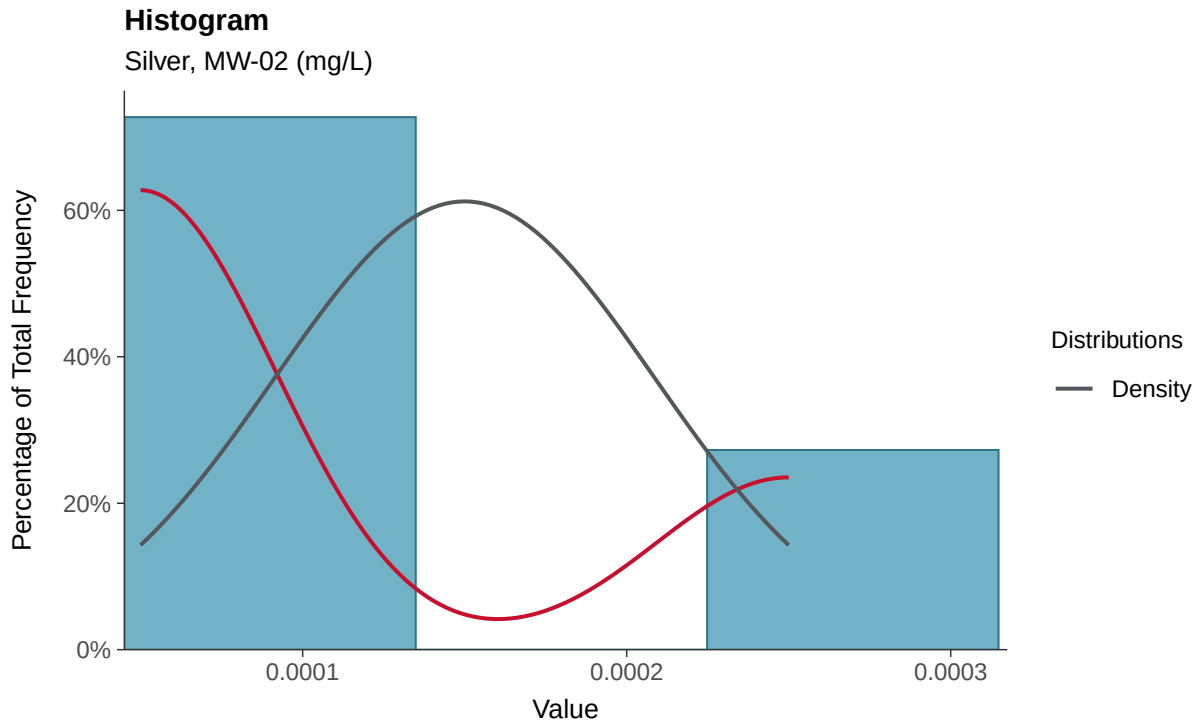



Trend Regression: Piecewise Linear-Linear
Nickel, MW-02 (mg/L)
0.04
0.03
0.02
0.01
0.00
Value
01/01/23
07/01/23
01/01/24
Date
Data Type
Detect

Part 115: Silver, MW-02

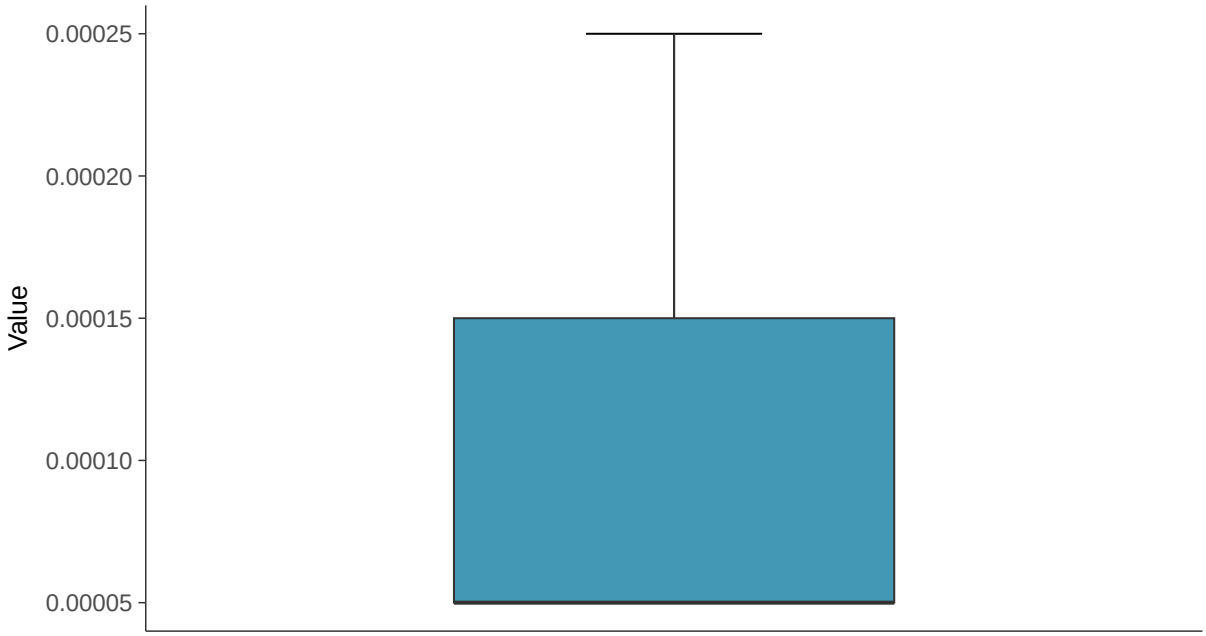
ID: 2_12_6_123





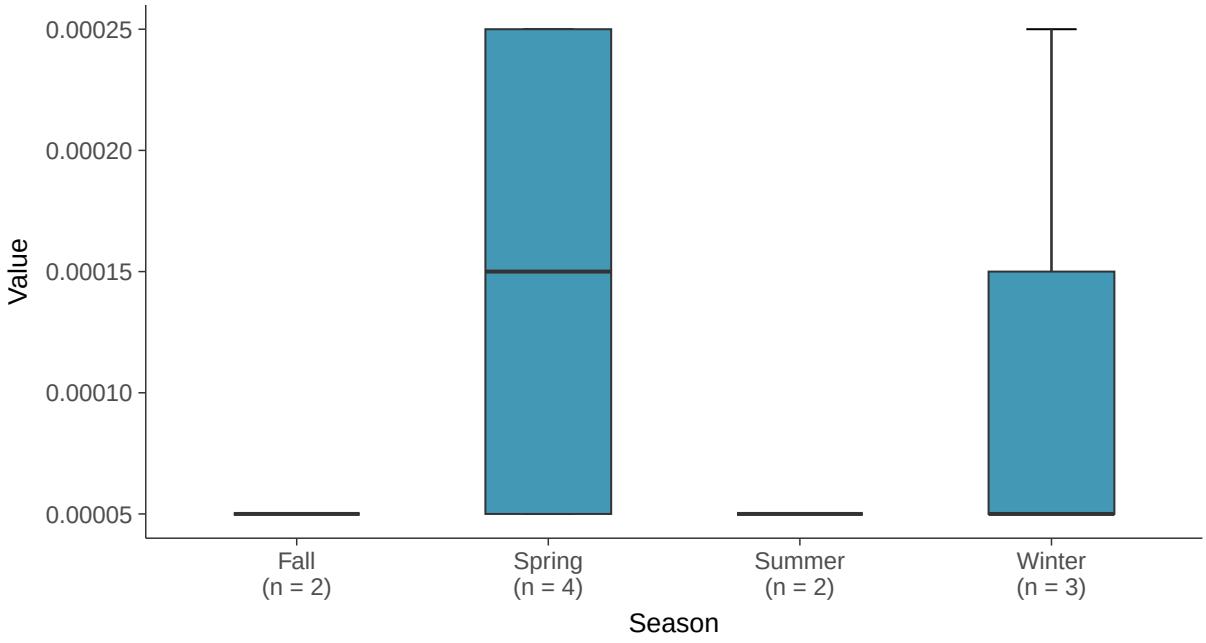
Boxplot

Silver, MW-02 (mg/L)



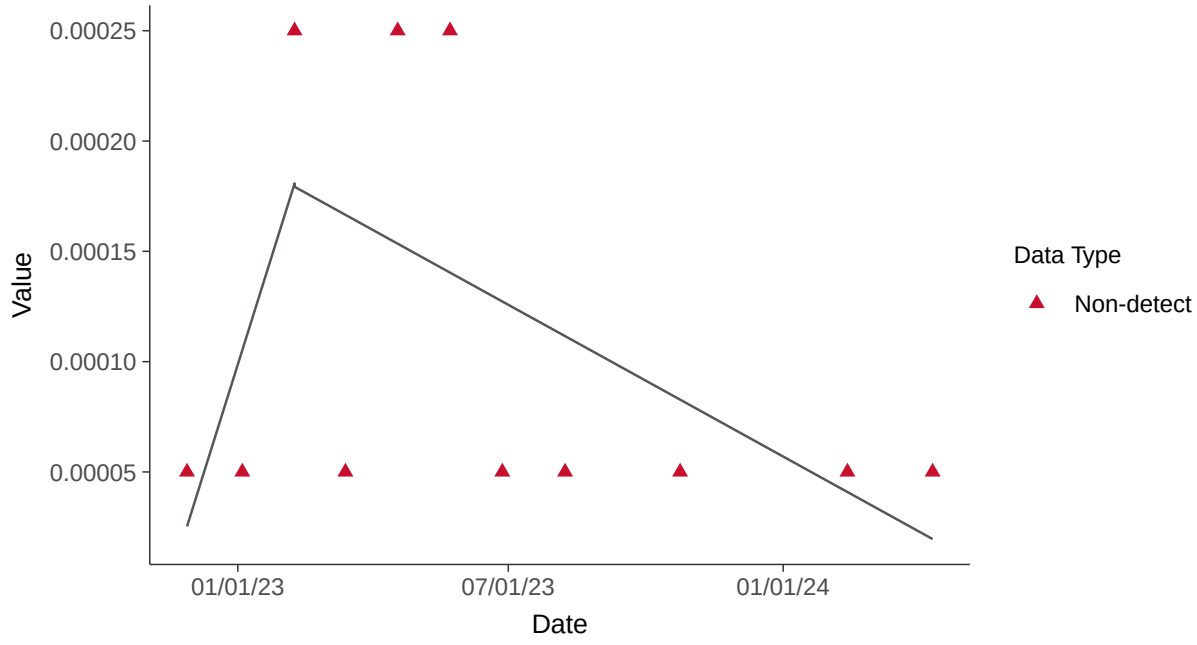
Boxplot by Season

Silver, MW-02 (mg/L)



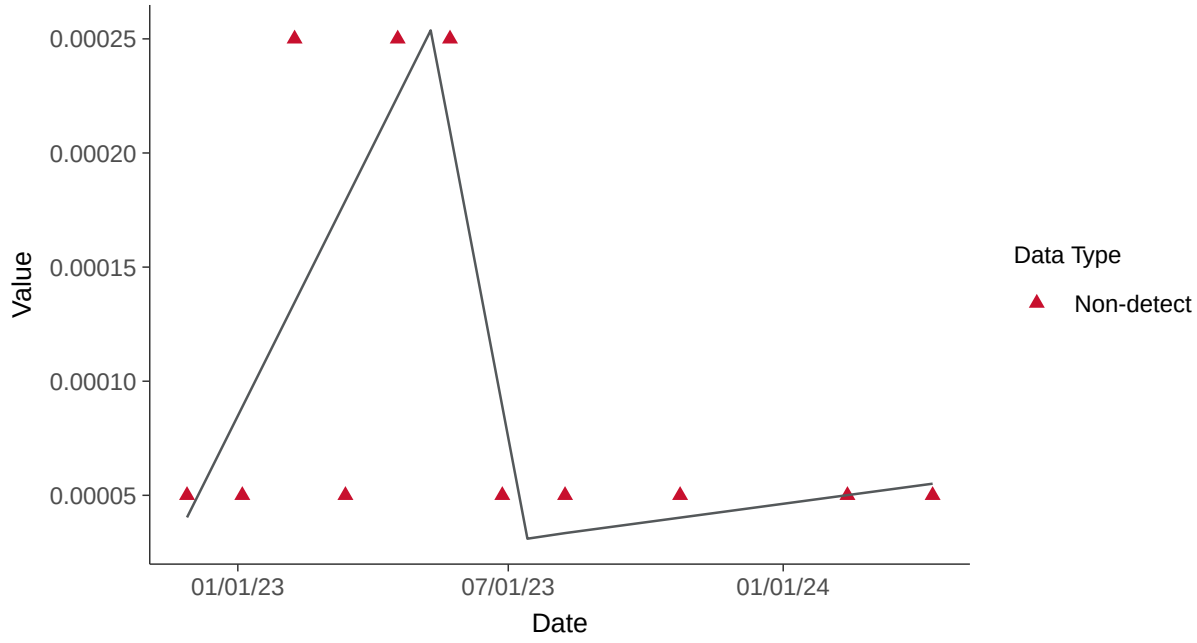
Trend Regression: Piecewise Linear-Linear

Silver, MW-02 (mg/L)



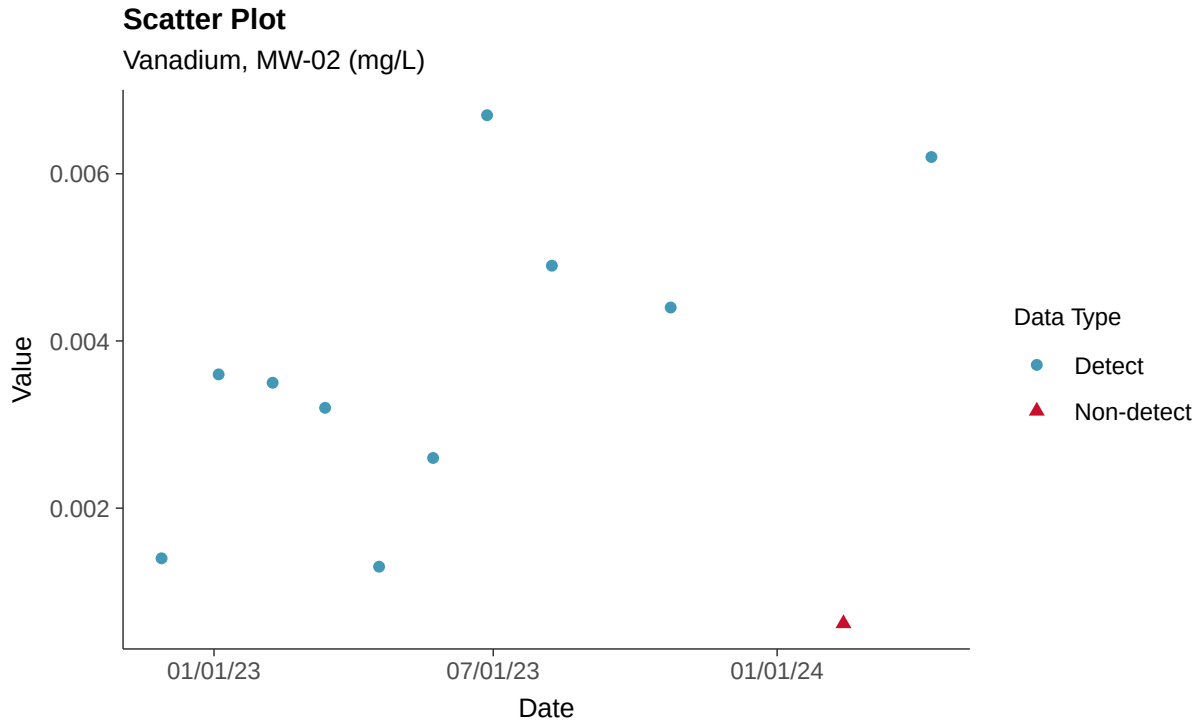
Trend Regression: Piecewise Linear-Linear-Linear

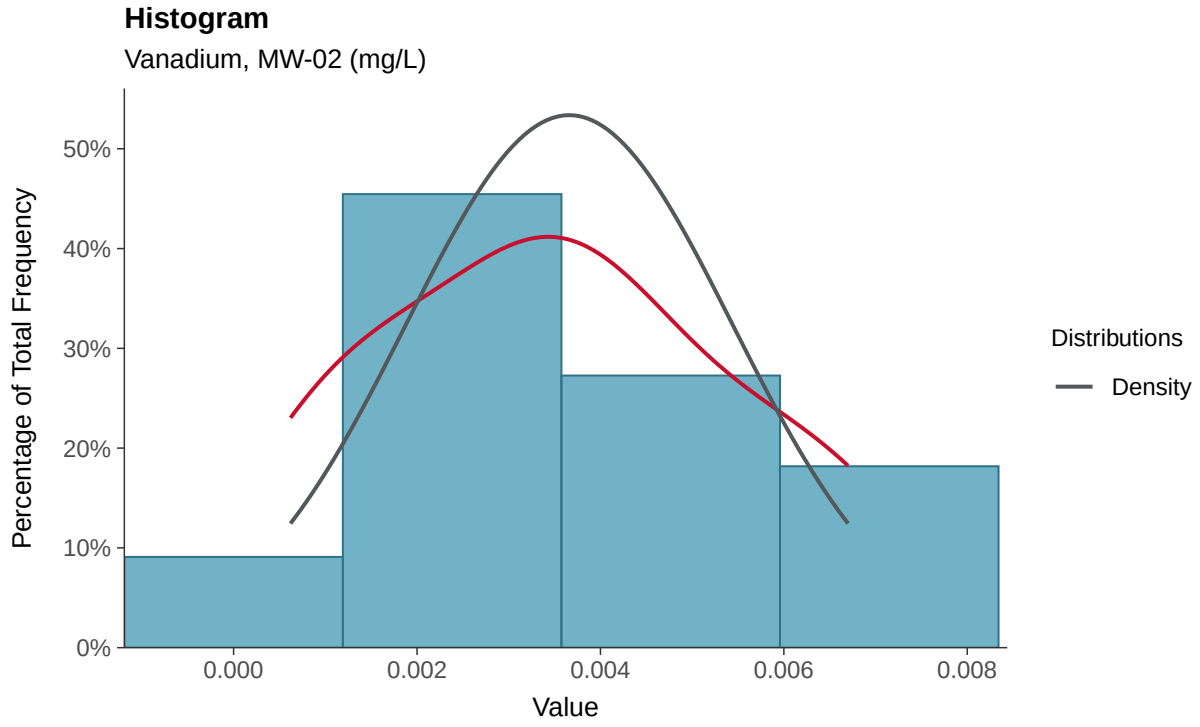
Silver, MW-02 (mg/L)



Part 115: Vanadium, MW-02

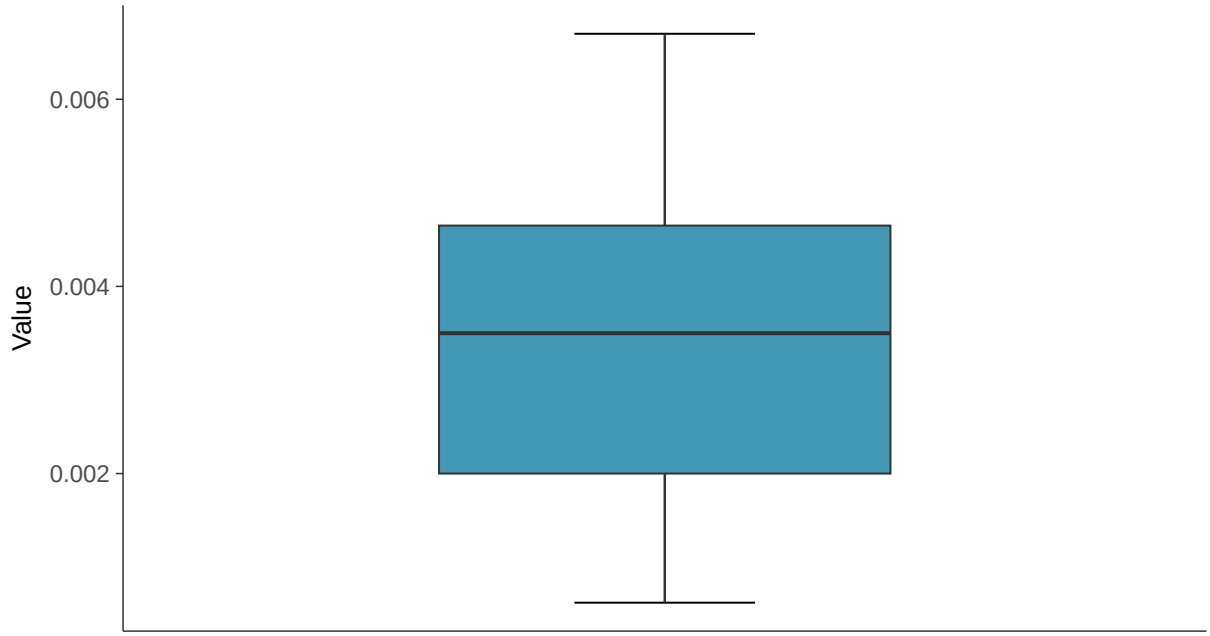
ID: 2_12_6_129





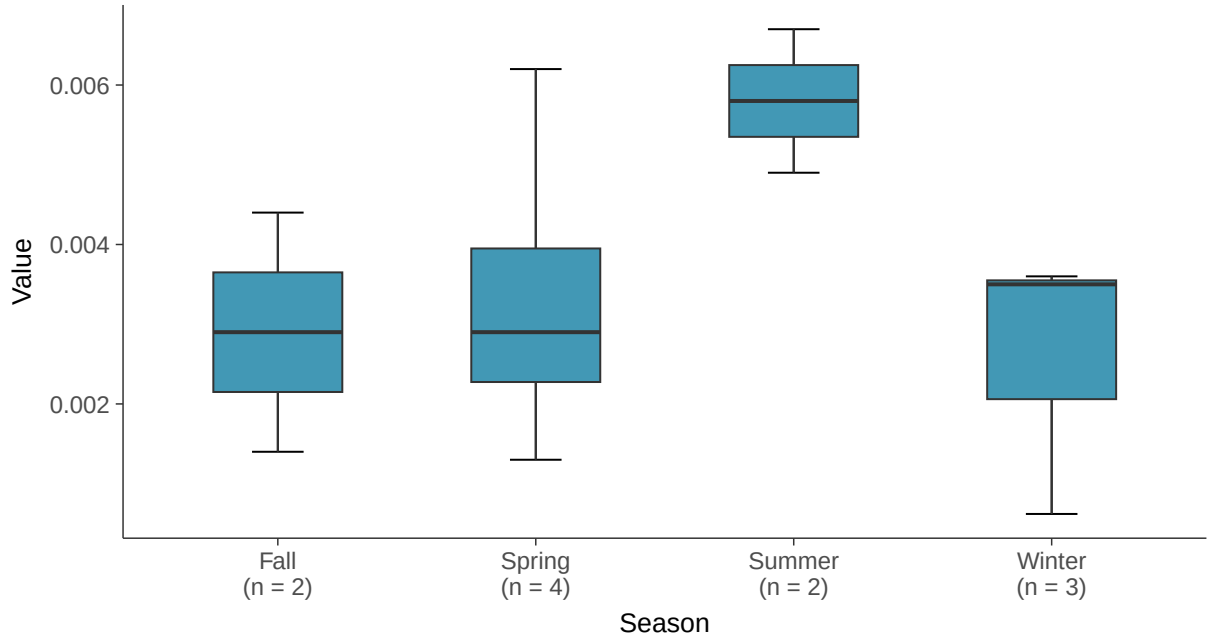
Boxplot

Vanadium, MW-02 (mg/L)



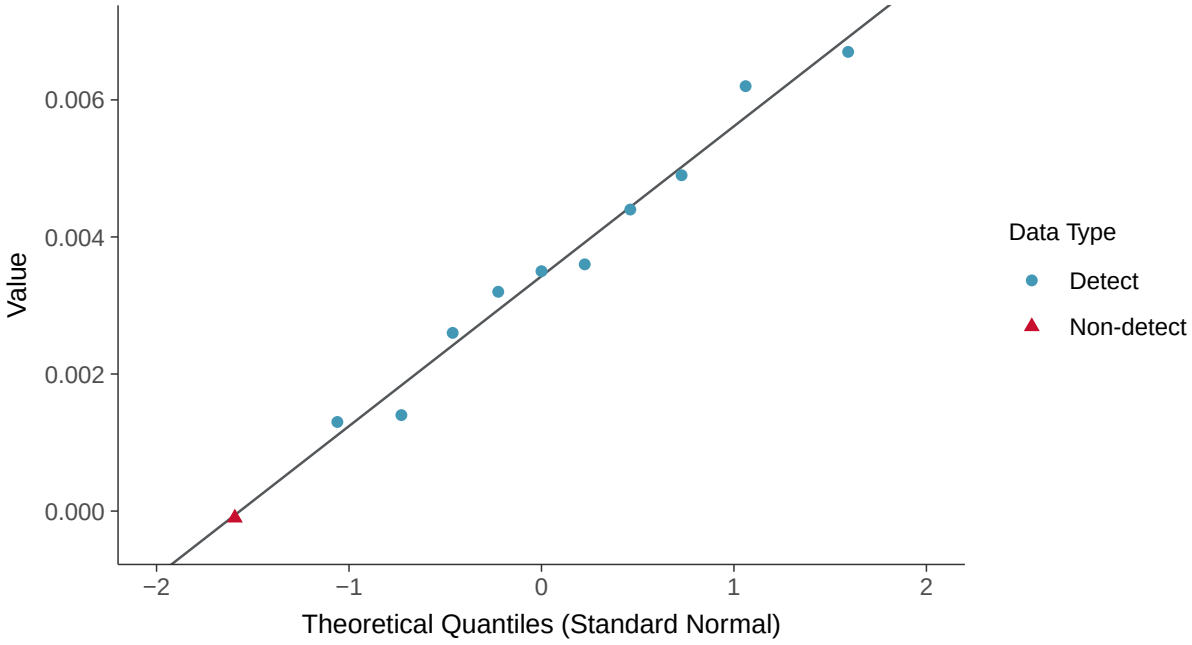
Boxplot by Season

Vanadium, MW-02 (mg/L)



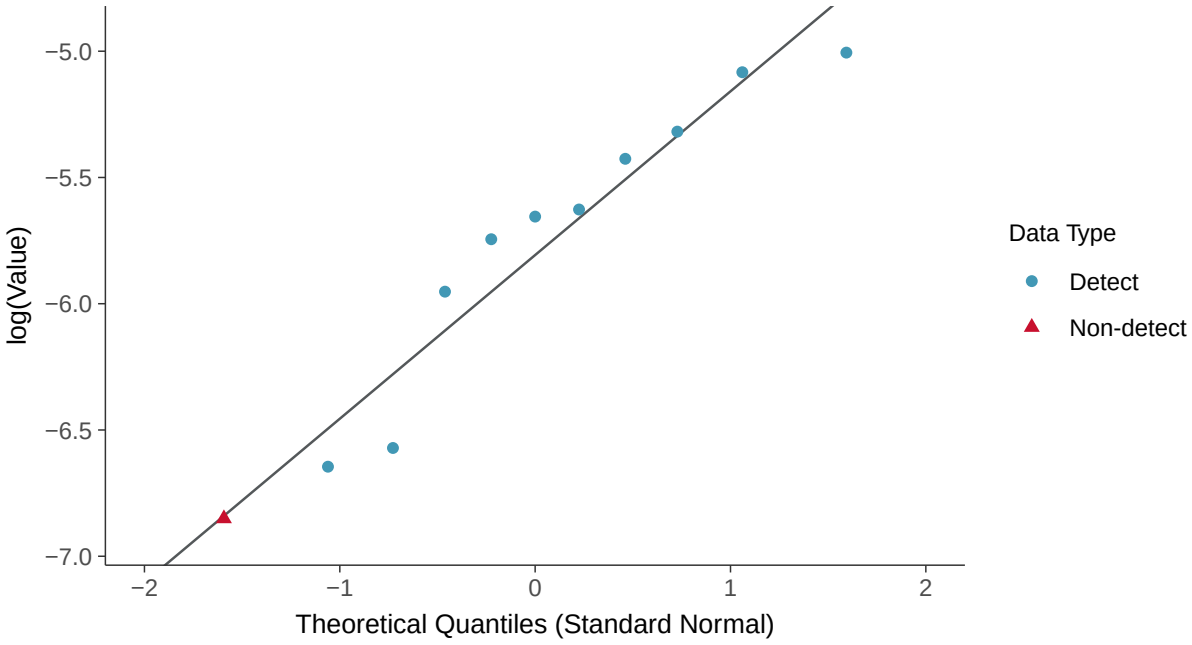
Normal Q-Q plot using ROS Imputed Estimates

Vanadium, MW-02 (mg/L)



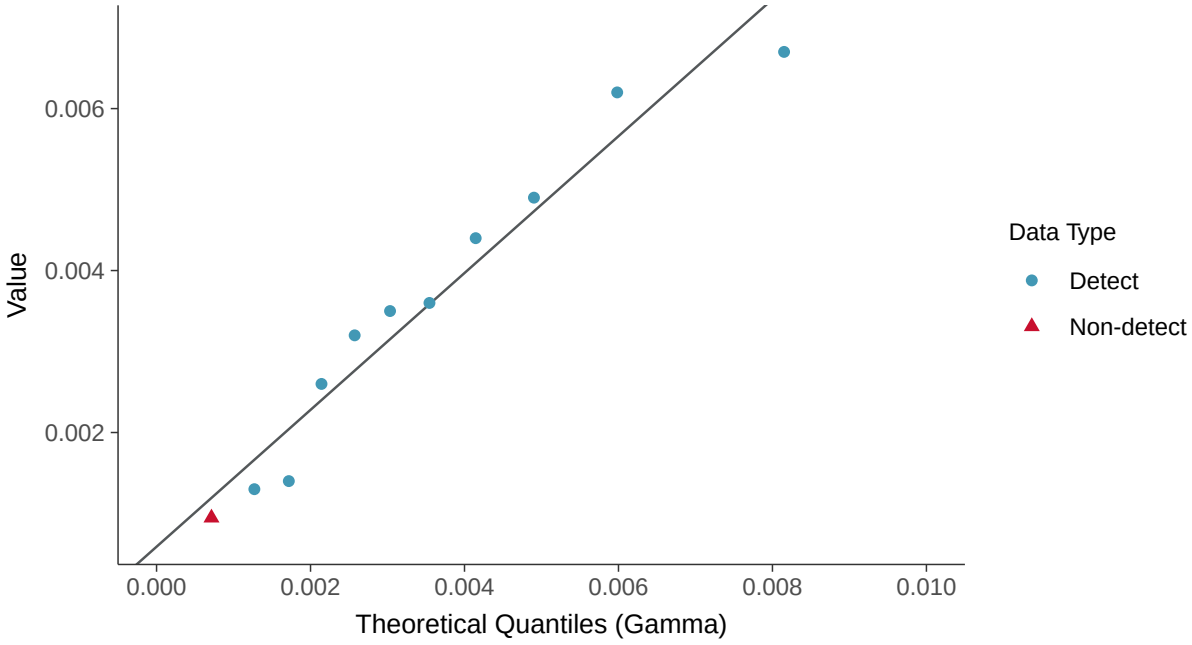
Lognormal Q-Q plot using ROS Imputed Estimates

Vanadium, MW-02 (mg/L)



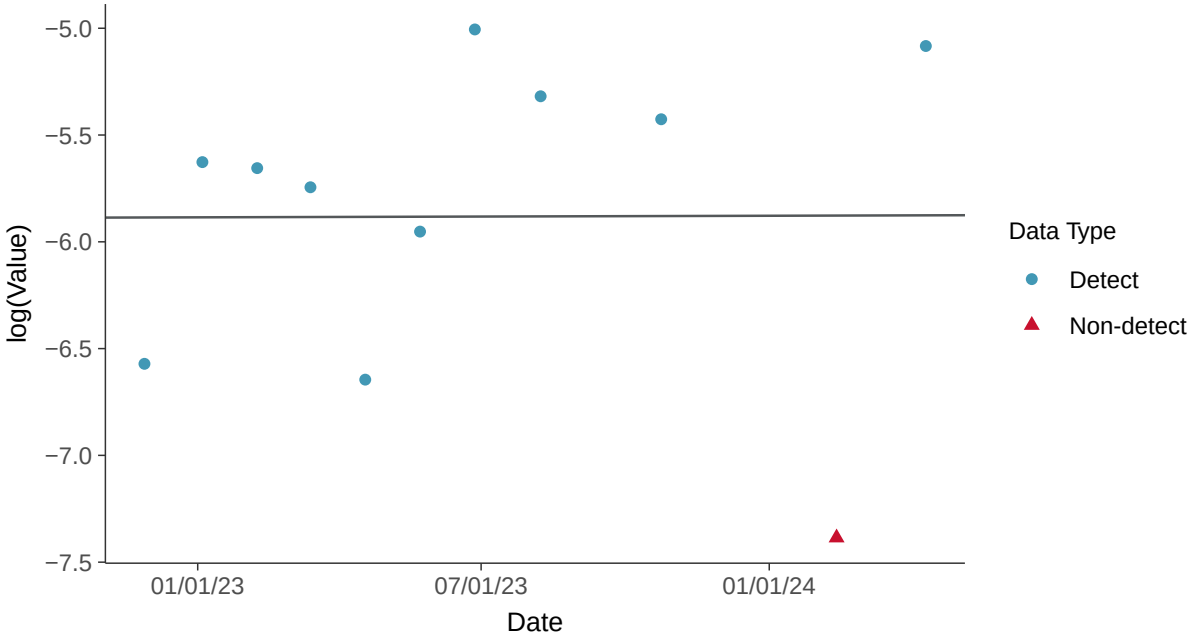
Gamma Q-Q plot using ROS Imputed Estimates

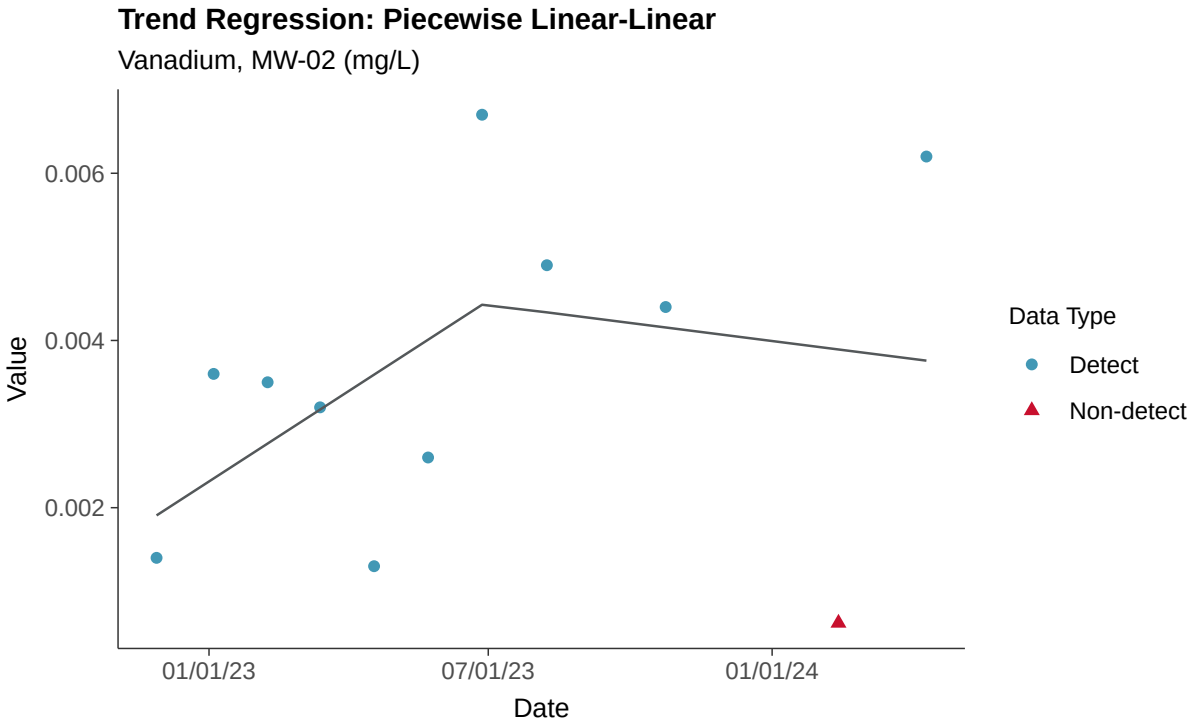
Vanadium, MW-02 (mg/L)



Trend Regression: Lognormal MLE

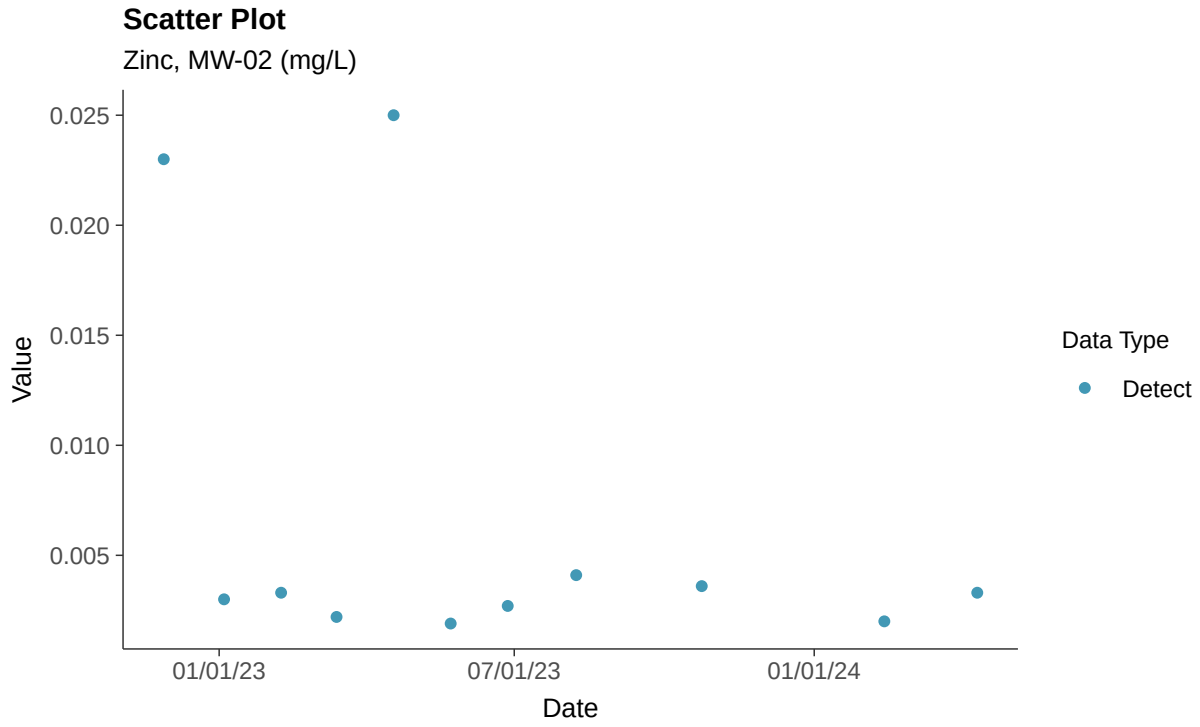
Vanadium, MW-02 (mg/L)

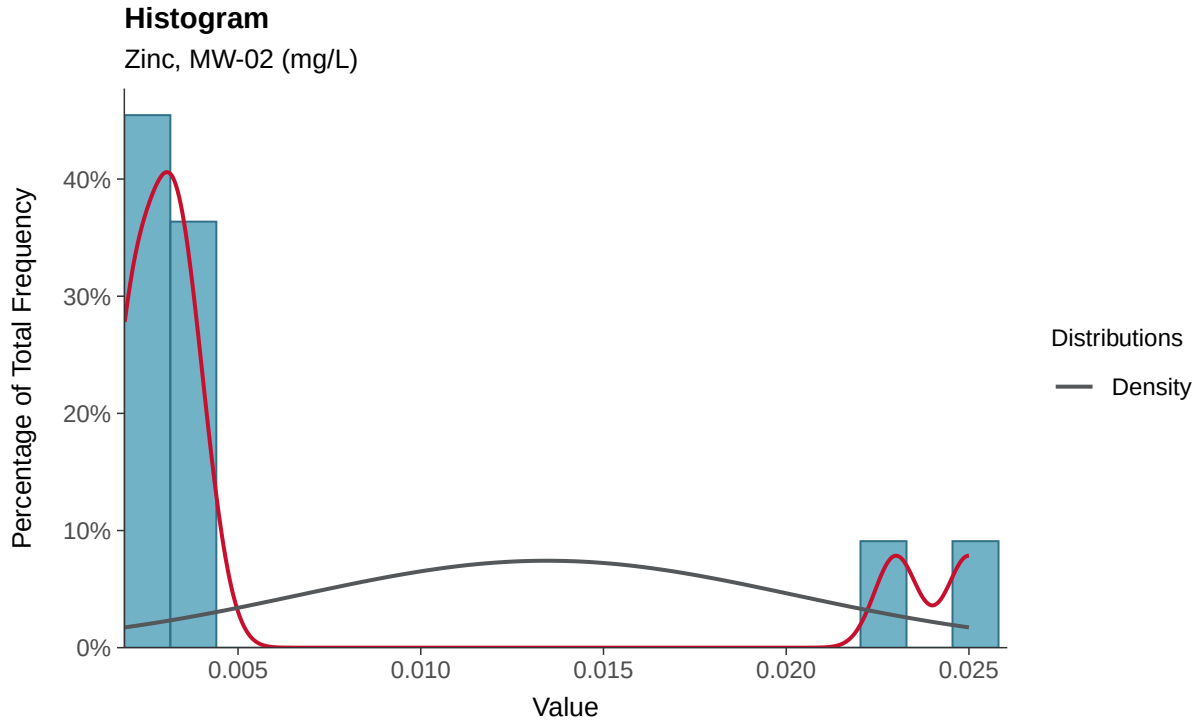



Trend Regression: Piecewise Linear-Linear
Vanadium, MW-02 (mg/L)
Value
0.006
0.004
0.002
01/01/23
07/01/23
01/01/24
Date
Data Type
Detect
Non-detect

Part 115: Zinc, MW-02

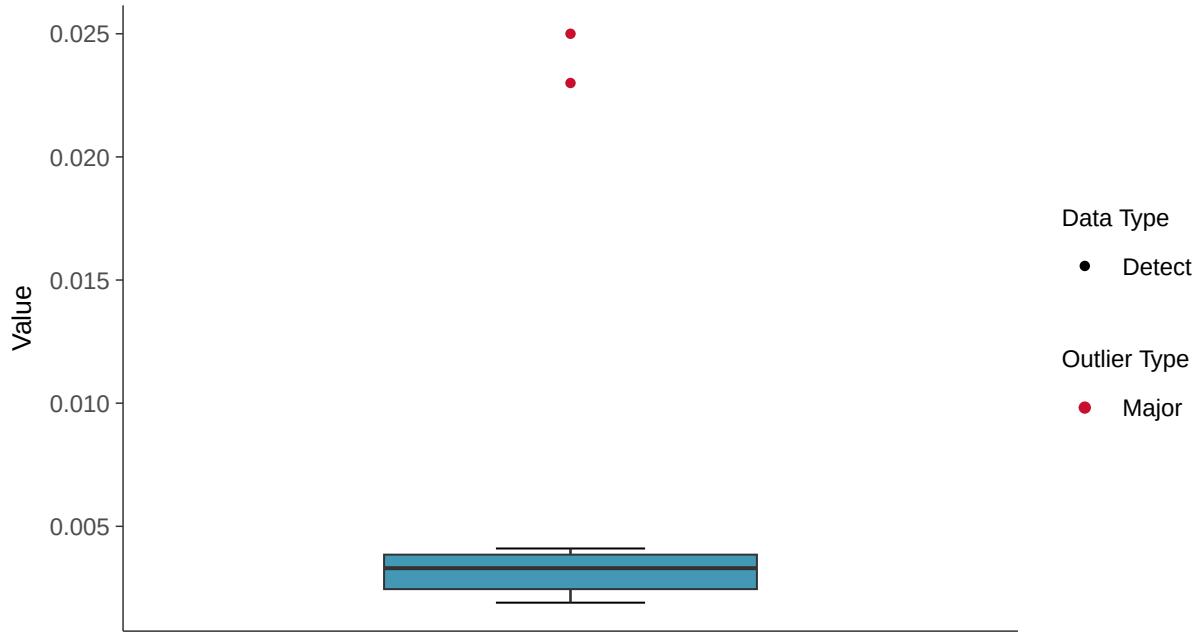
ID: 2_12_6_130





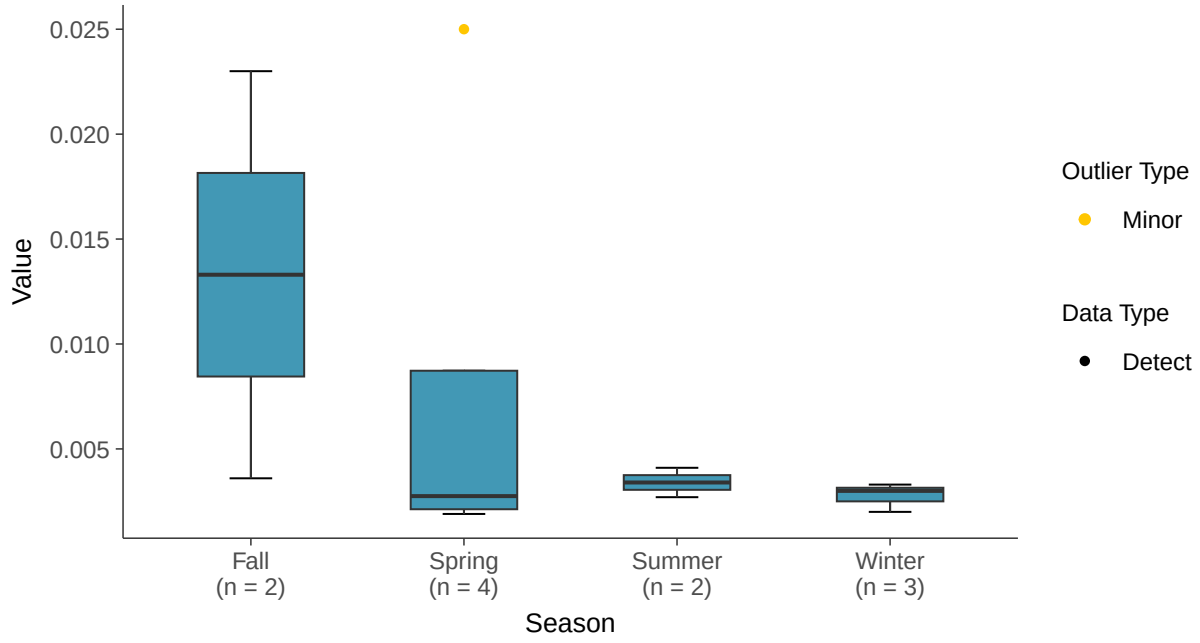
Boxplot

Zinc, MW-02 (mg/L)



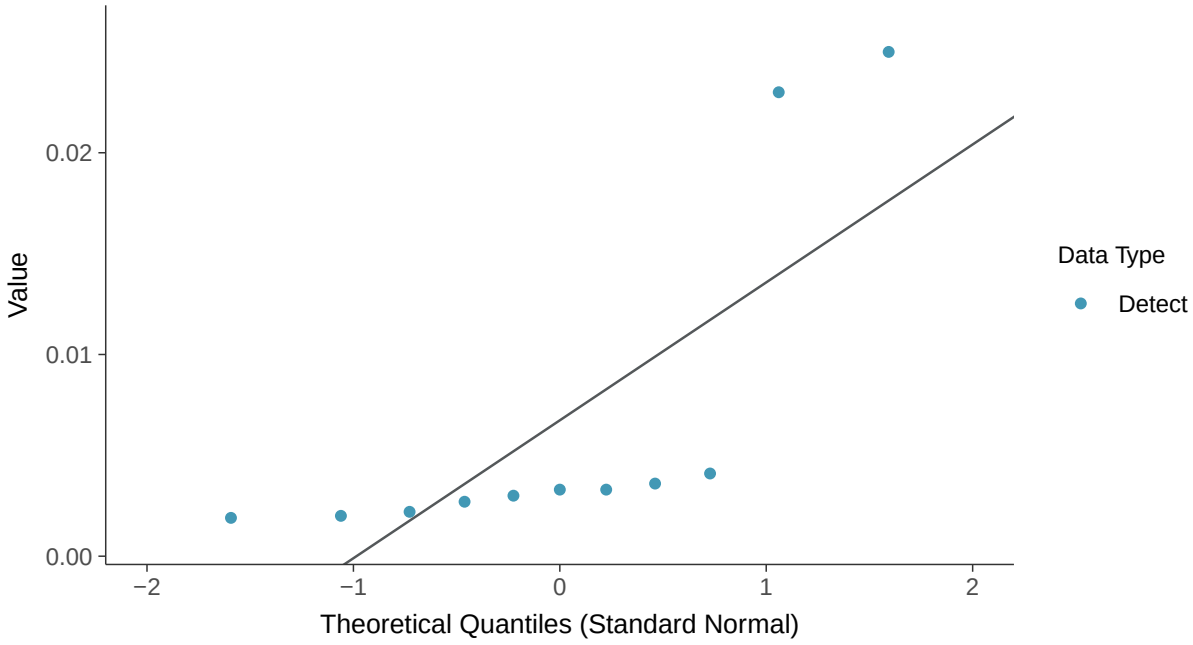
Boxplot by Season

Zinc, MW-02 (mg/L)



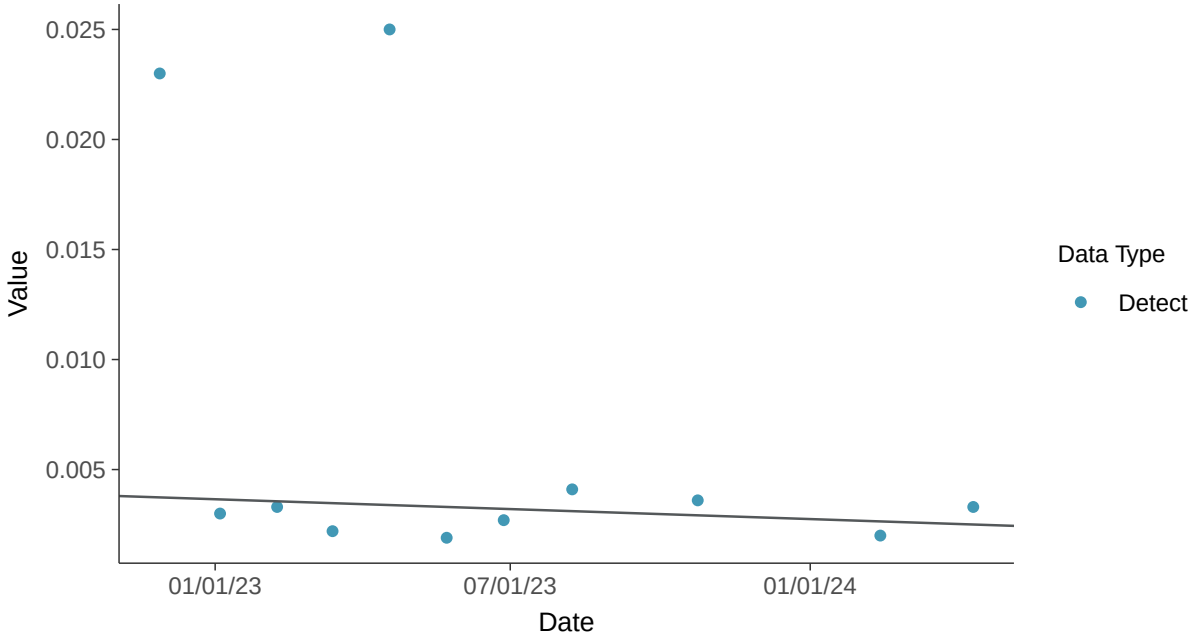
Normal Q-Q plot

Zinc, MW-02 (mg/L)



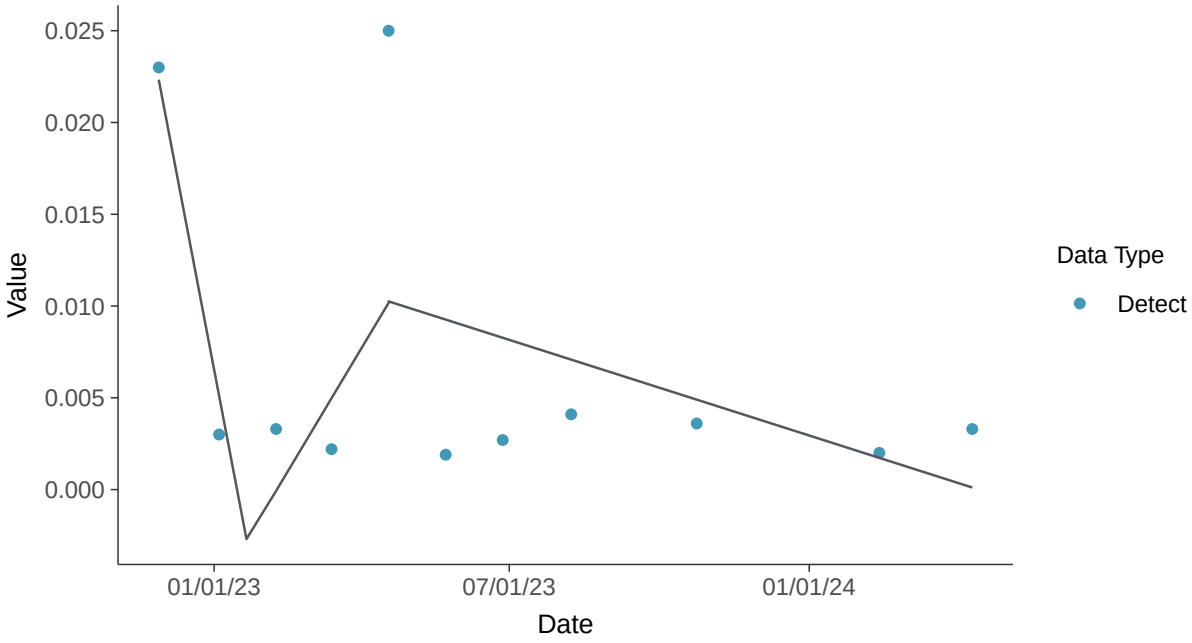
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Zinc, MW-02 (mg/L)



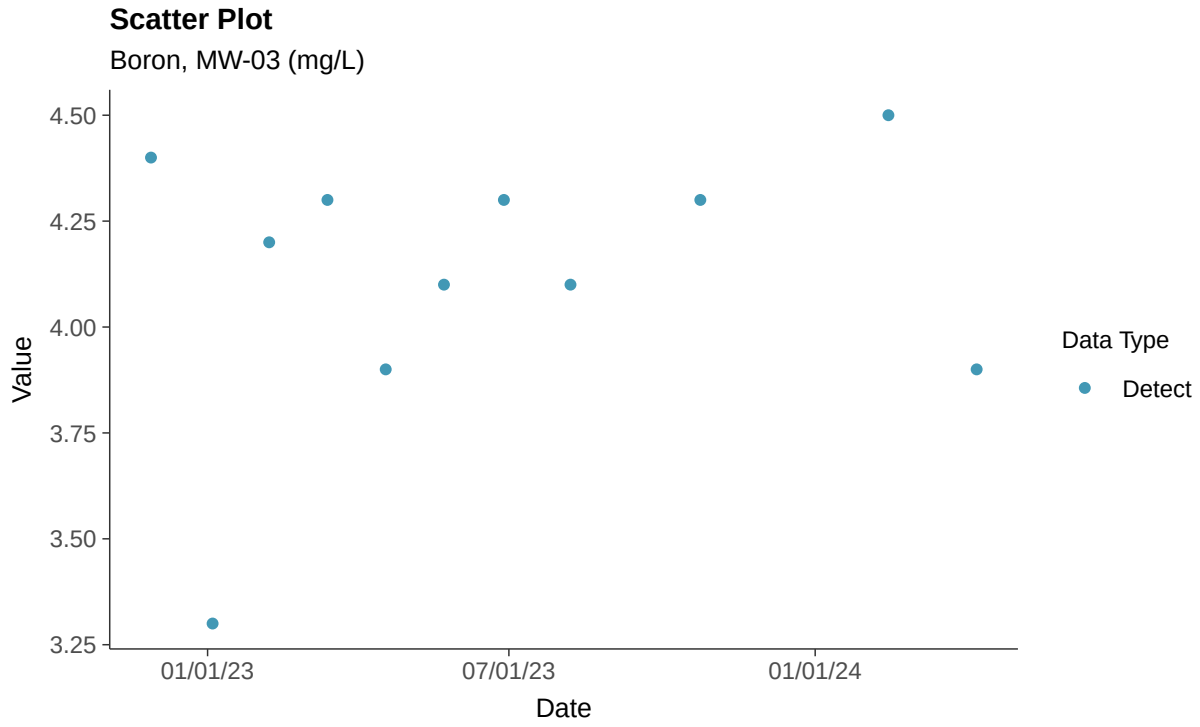
Trend Regression: Piecewise Linear-Linear-Linear

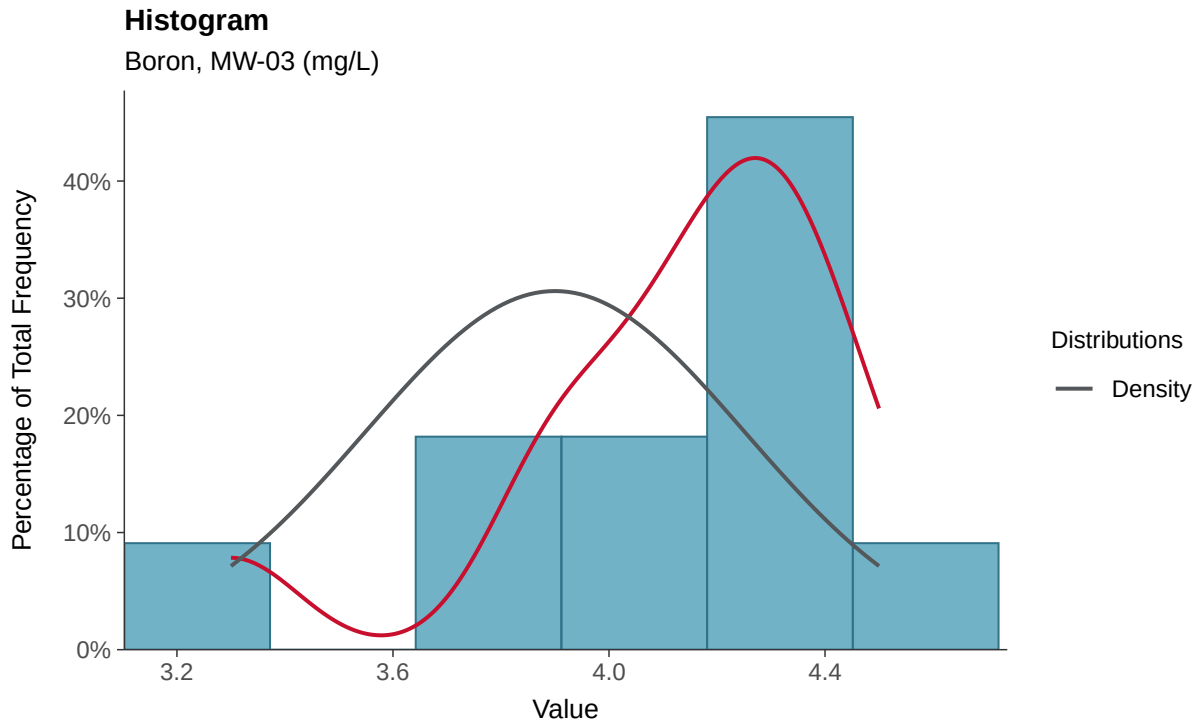
Zinc, MW-02 (mg/L)



Appendix III: Boron, MW-03

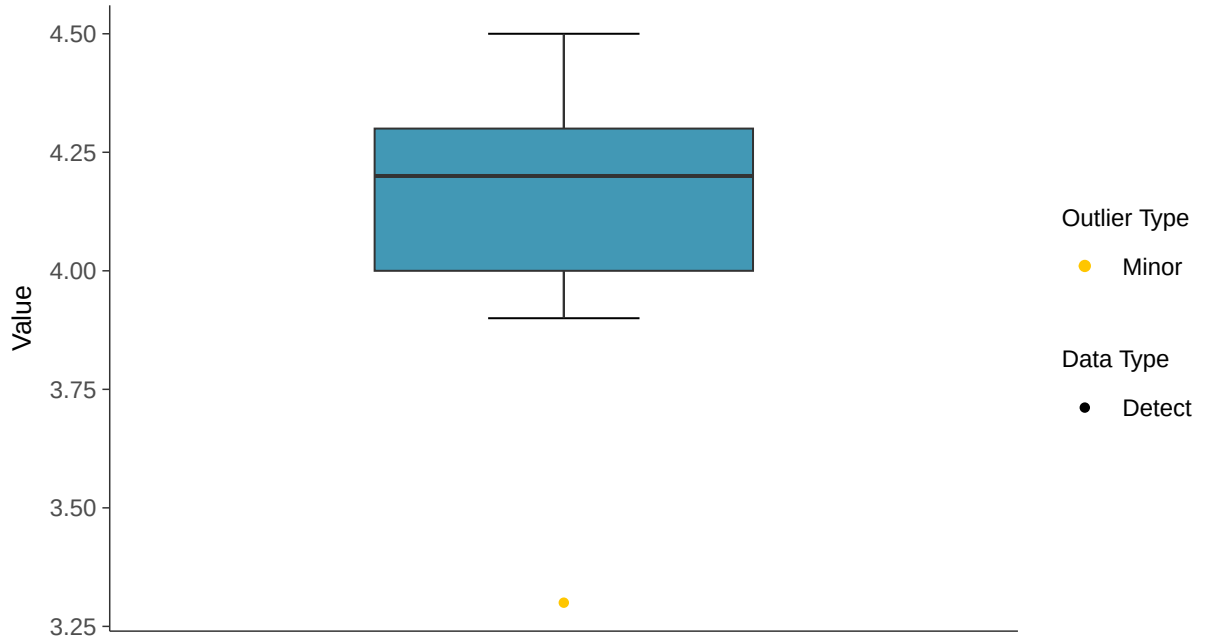
ID: 2_13_4_105





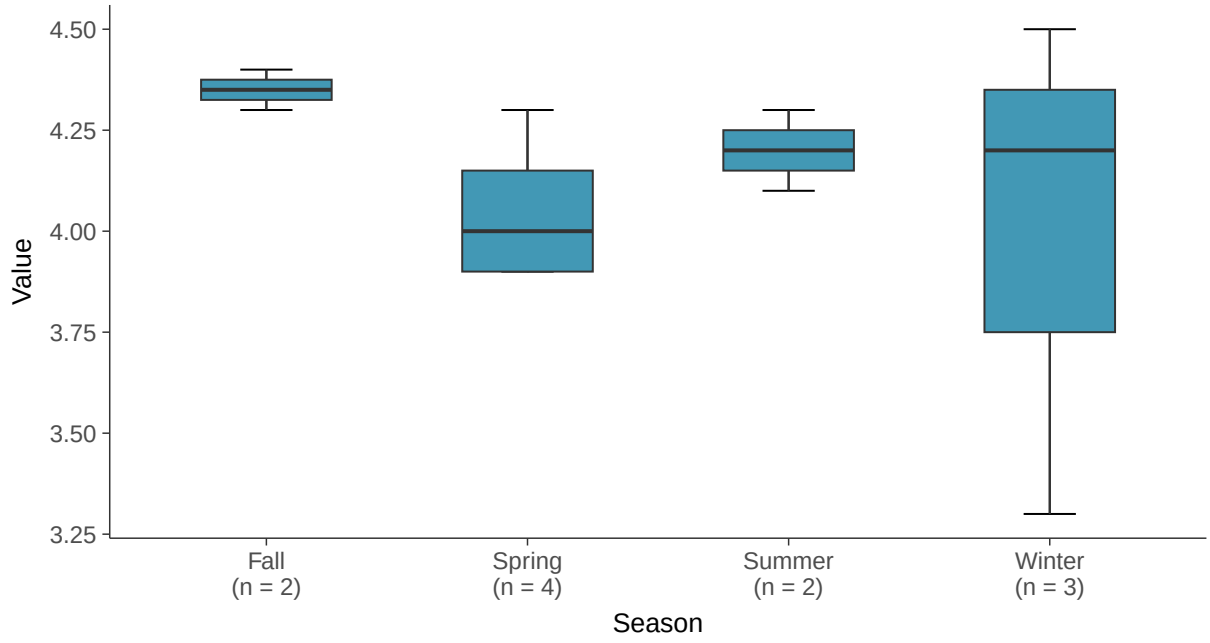
Boxplot

Boron, MW-03 (mg/L)



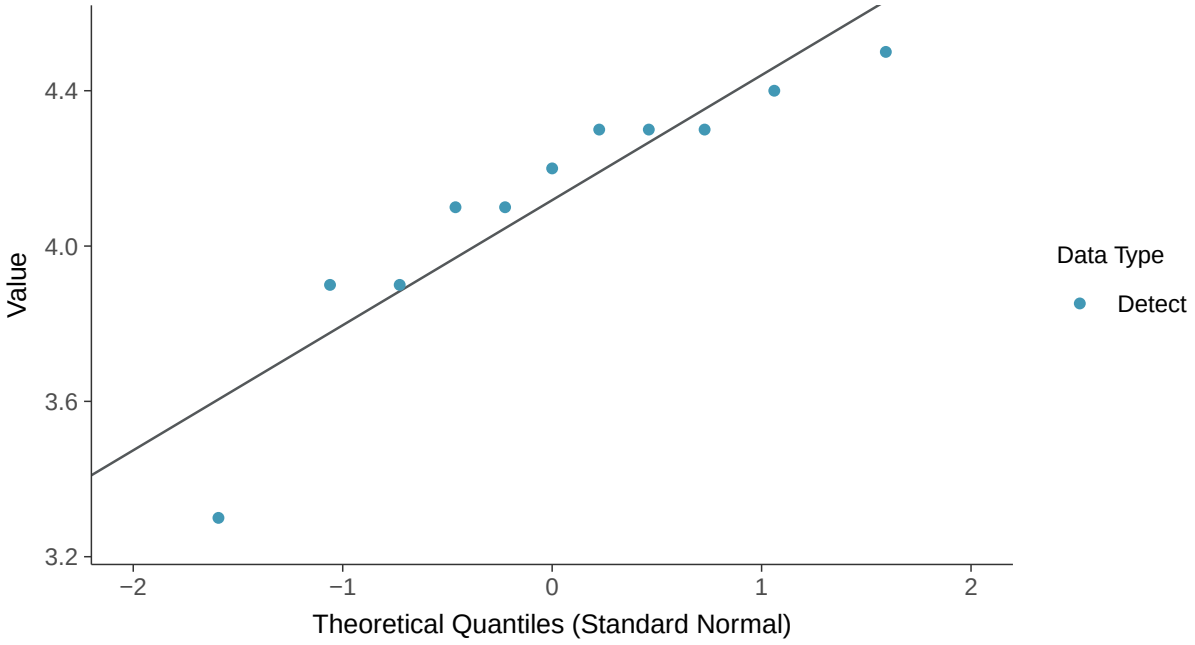
Boxplot by Season

Boron, MW-03 (mg/L)



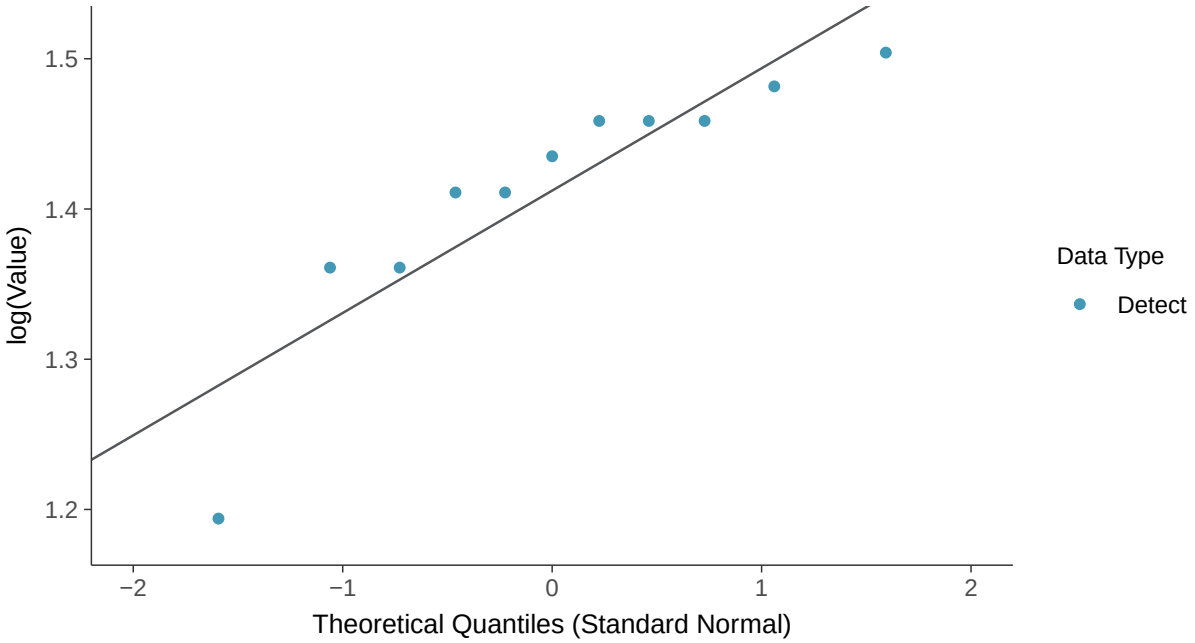
Normal Q-Q plot

Boron, MW-03 (mg/L)



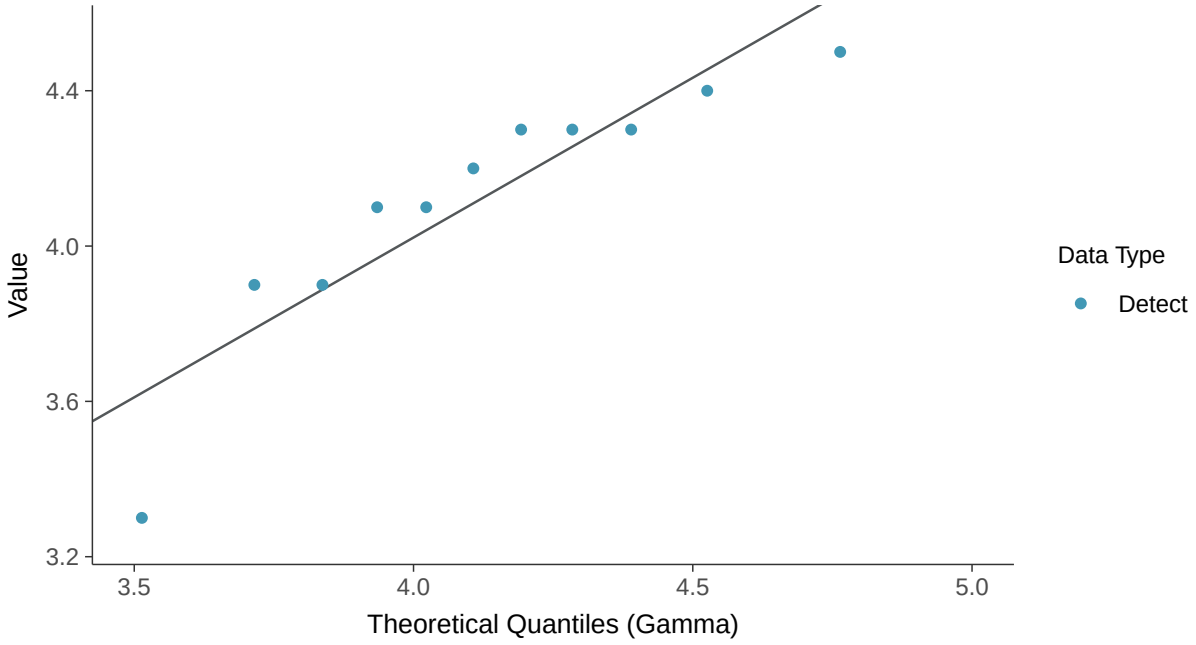
Lognormal Q-Q plot

Boron, MW-03 (mg/L)



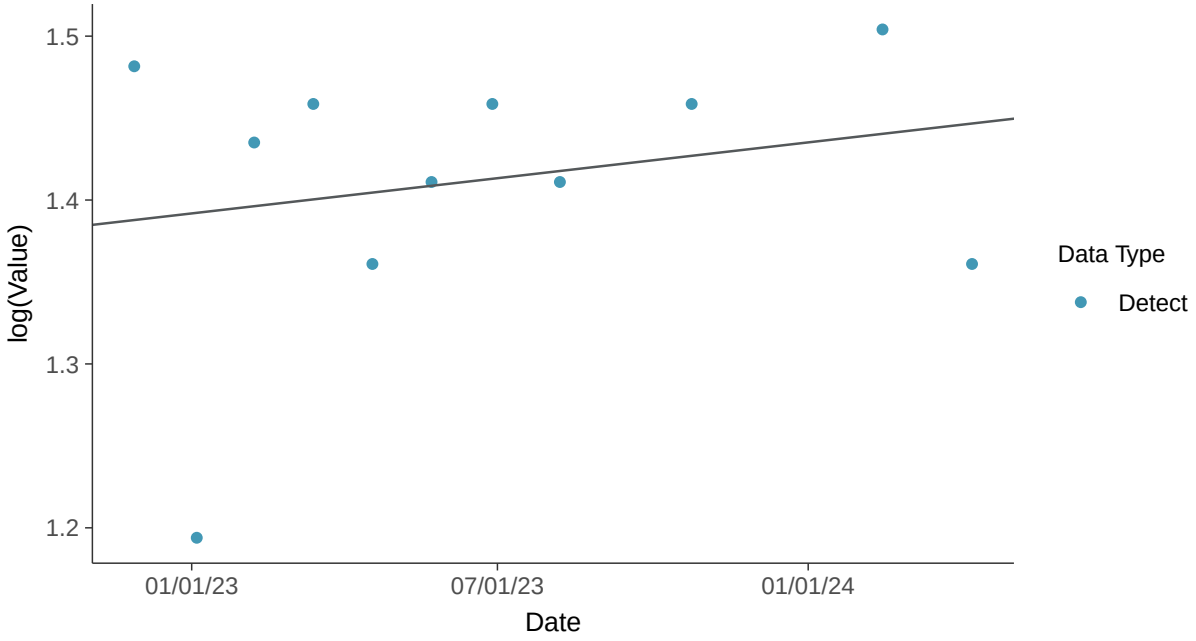
Gamma Q-Q plot

Boron, MW-03 (mg/L)



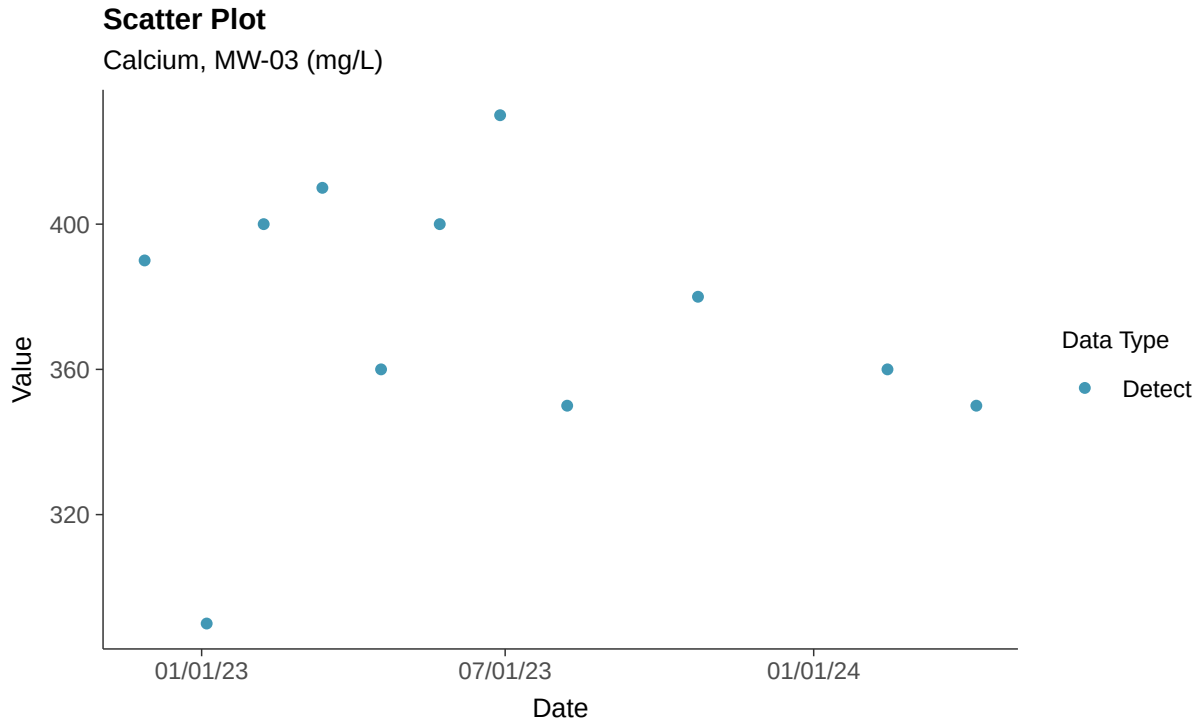
Trend Regression: Lognormal MLE

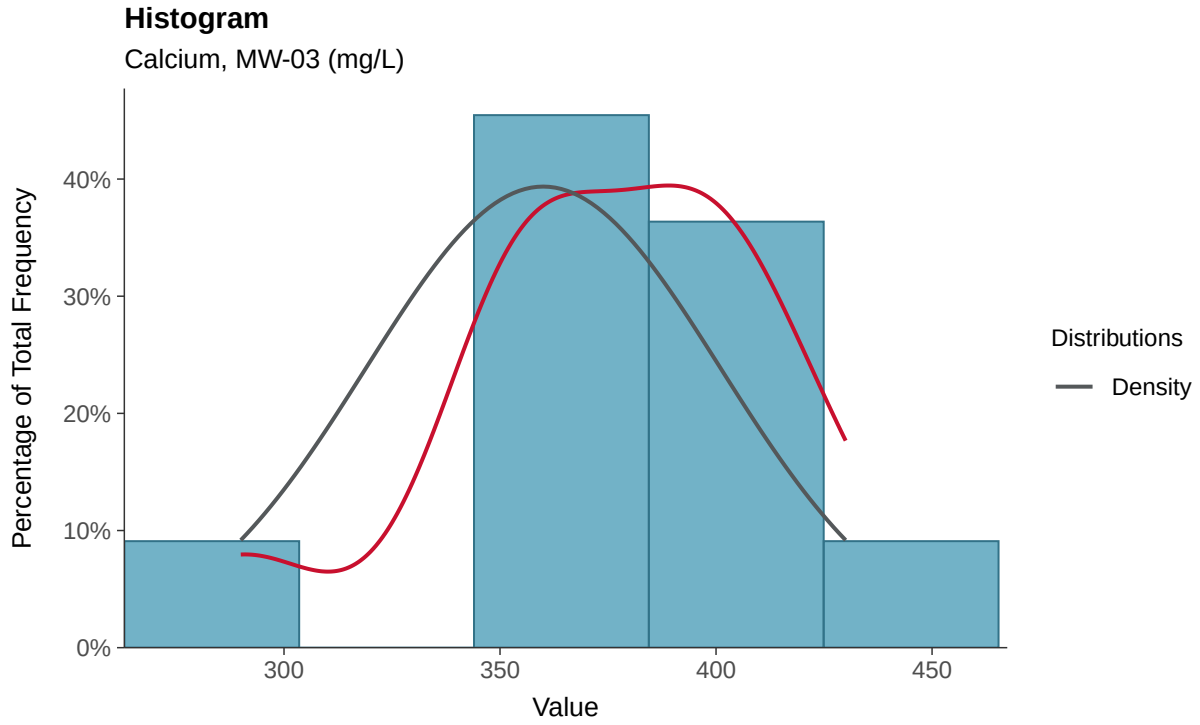
Boron, MW-03 (mg/L)



Appendix III: Calcium, MW-03

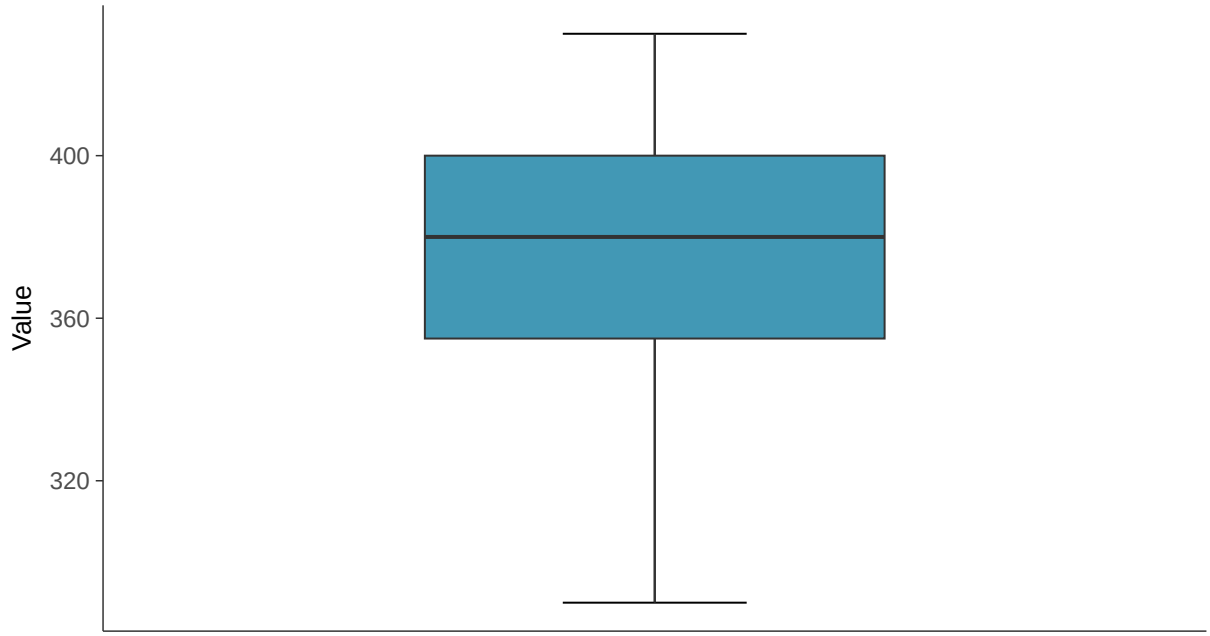
ID: 2_13_4_107





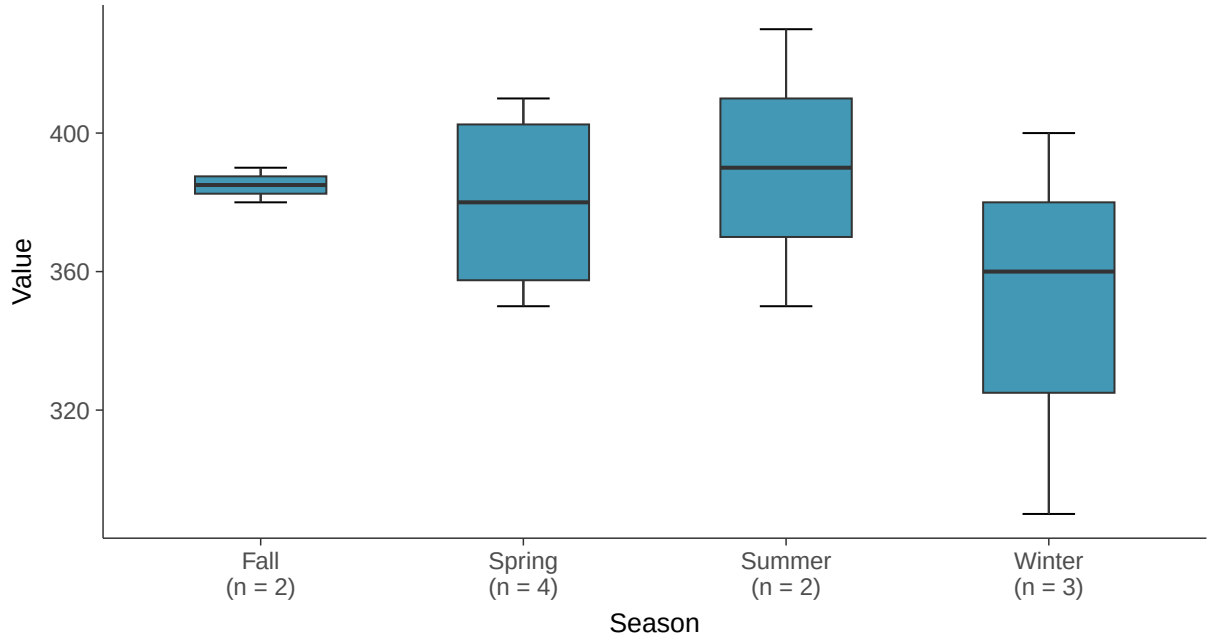
Boxplot

Calcium, MW-03 (mg/L)



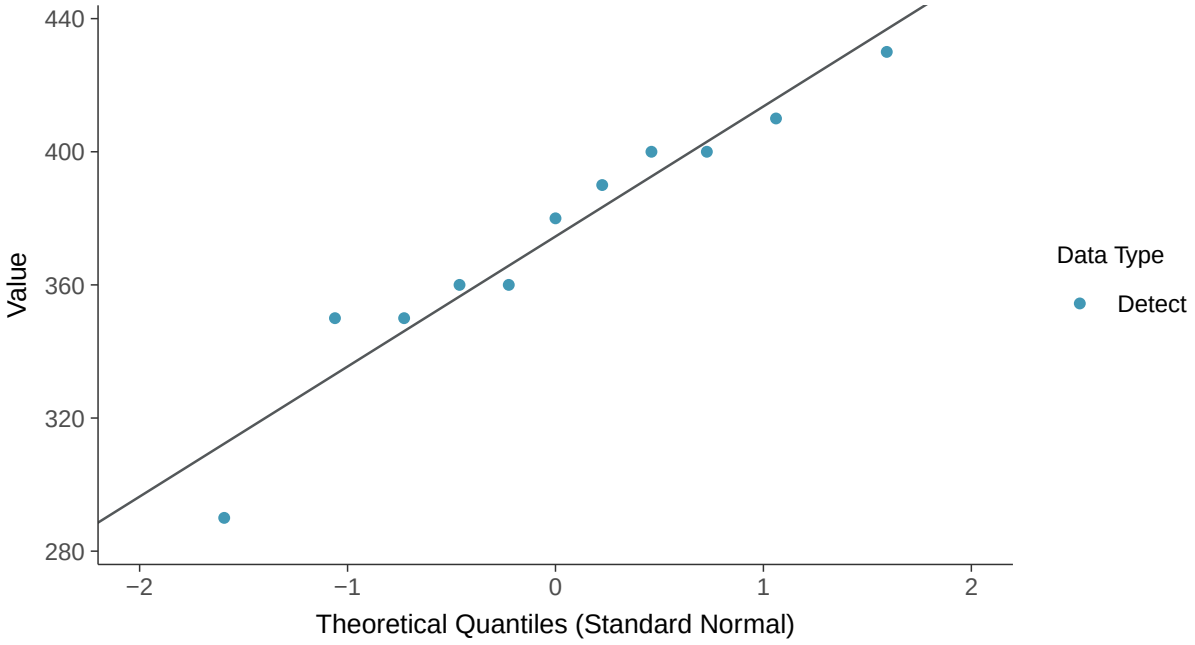
Boxplot by Season

Calcium, MW-03 (mg/L)



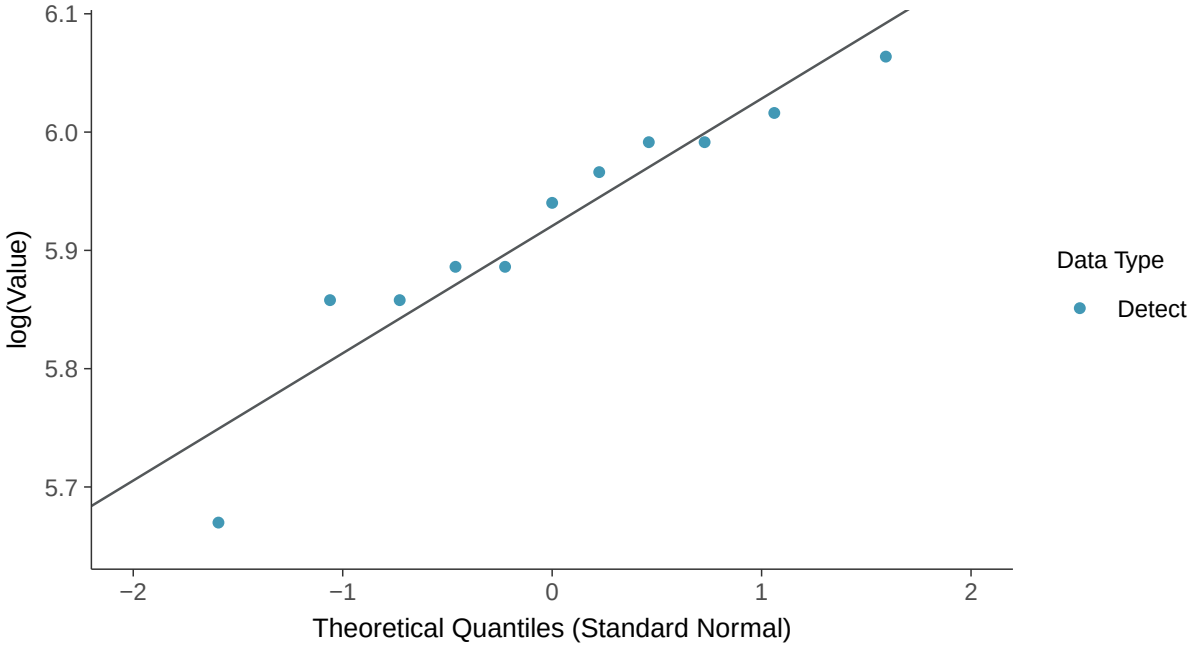
Normal Q-Q plot

Calcium, MW-03 (mg/L)



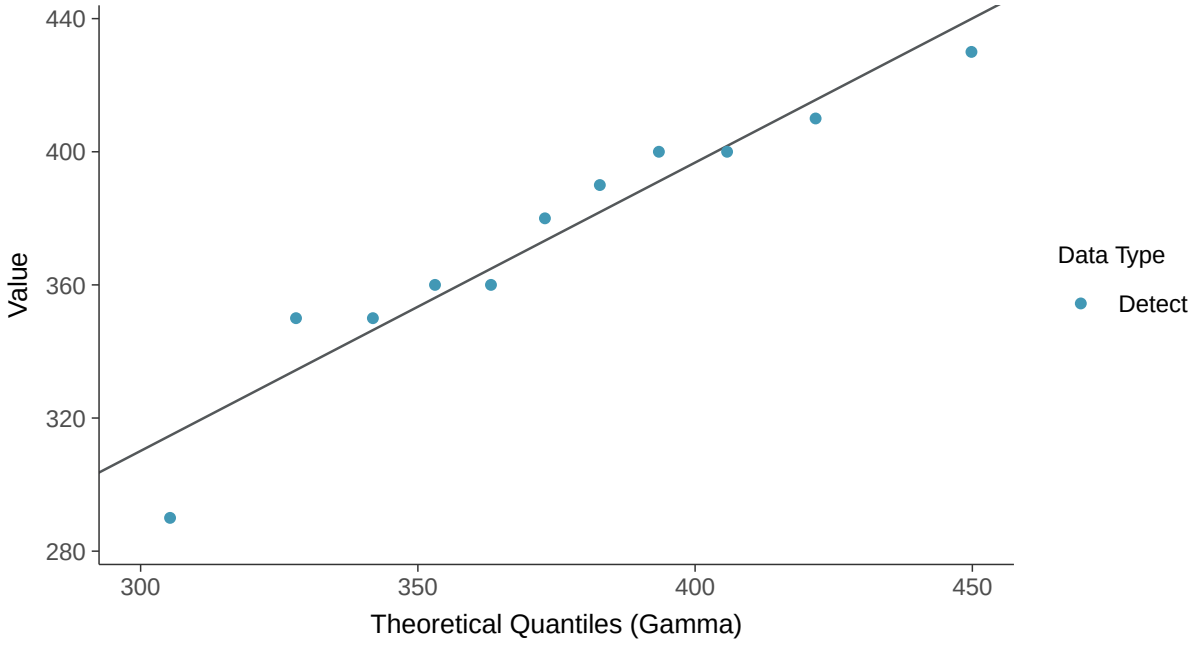
Lognormal Q-Q plot

Calcium, MW-03 (mg/L)



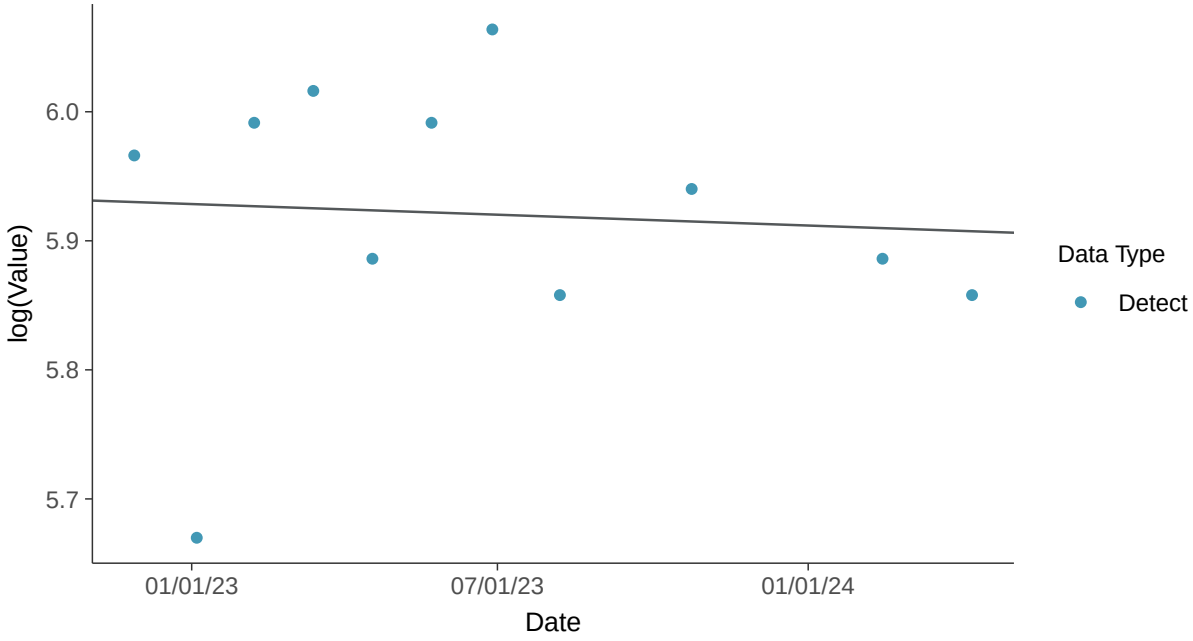
Gamma Q-Q plot

Calcium, MW-03 (mg/L)



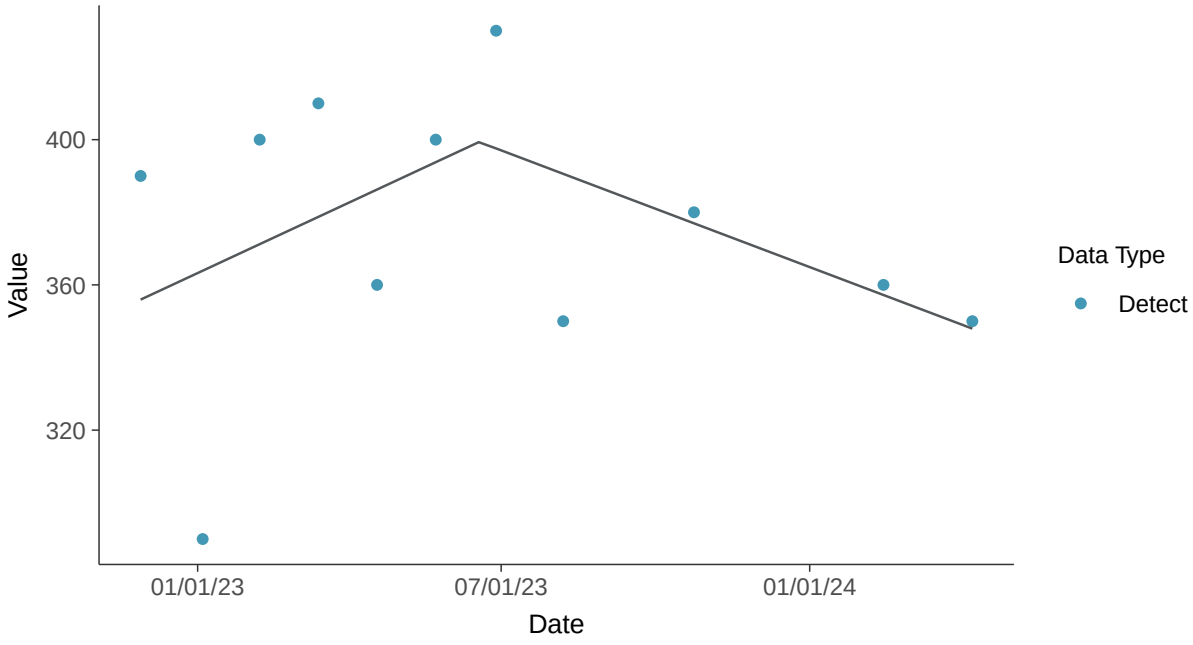
Trend Regression: Lognormal MLE

Calcium, MW-03 (mg/L)



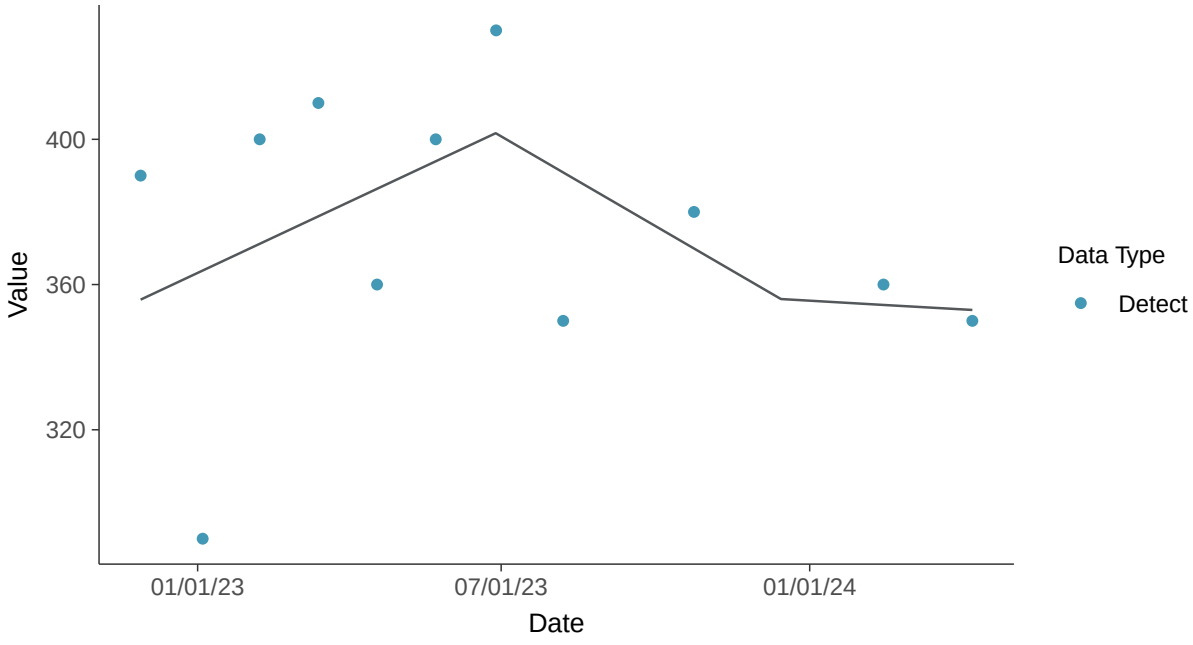
Trend Regression: Piecewise Linear-Linear

Calcium, MW-03 (mg/L)



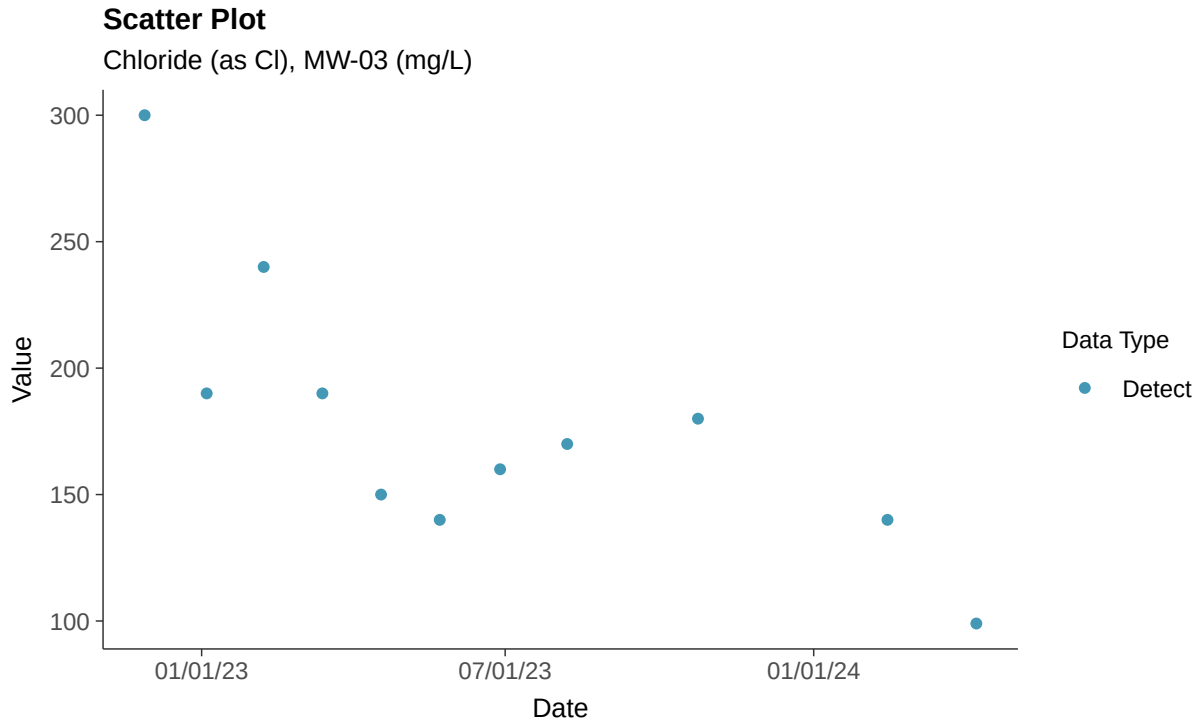
Trend Regression: Piecewise Linear-Linear-Linear

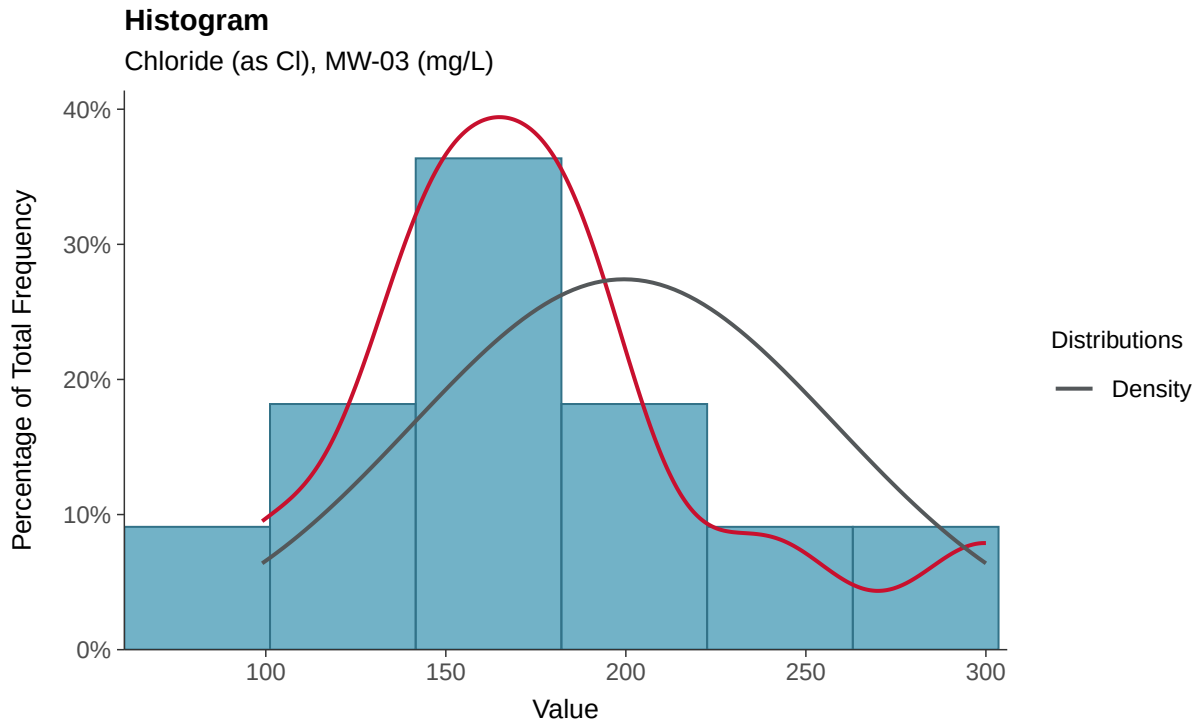
Calcium, MW-03 (mg/L)



Appendix III: Chloride (as Cl), MW-03

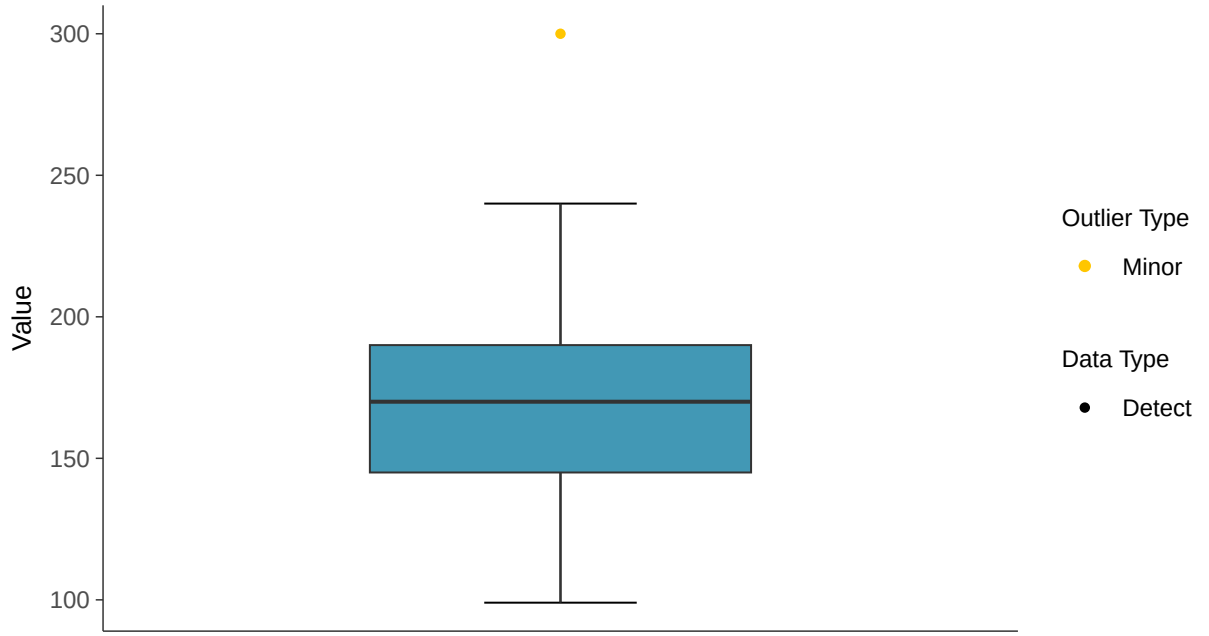
ID: 2_13_4_108





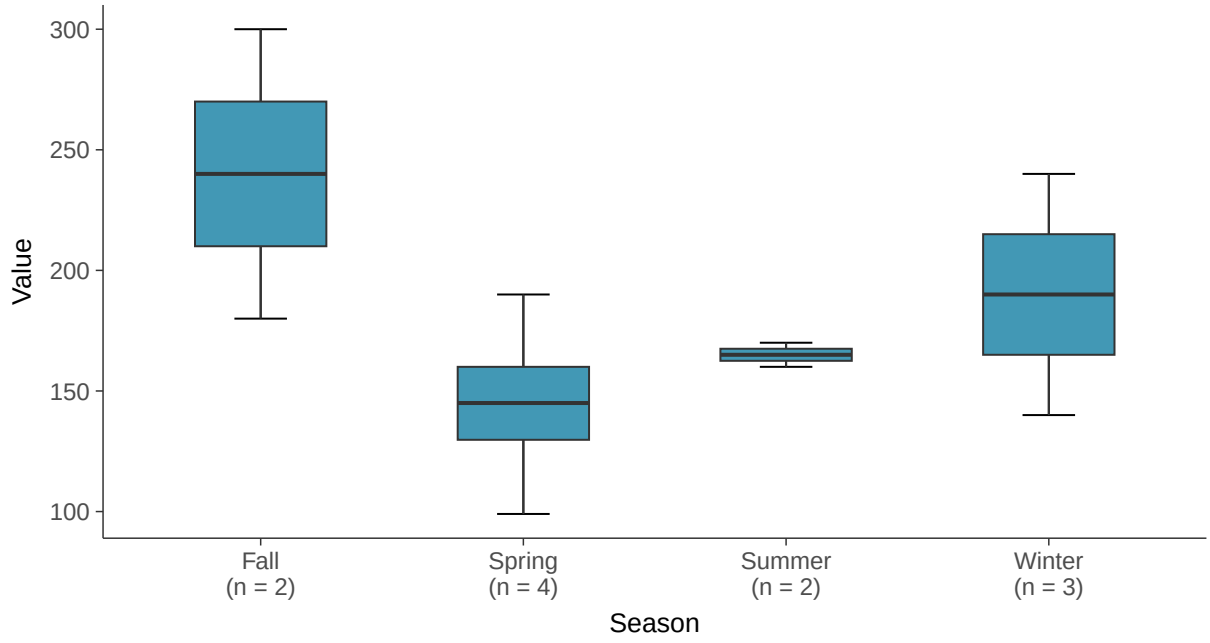
Boxplot

Chloride (as Cl), MW-03 (mg/L)



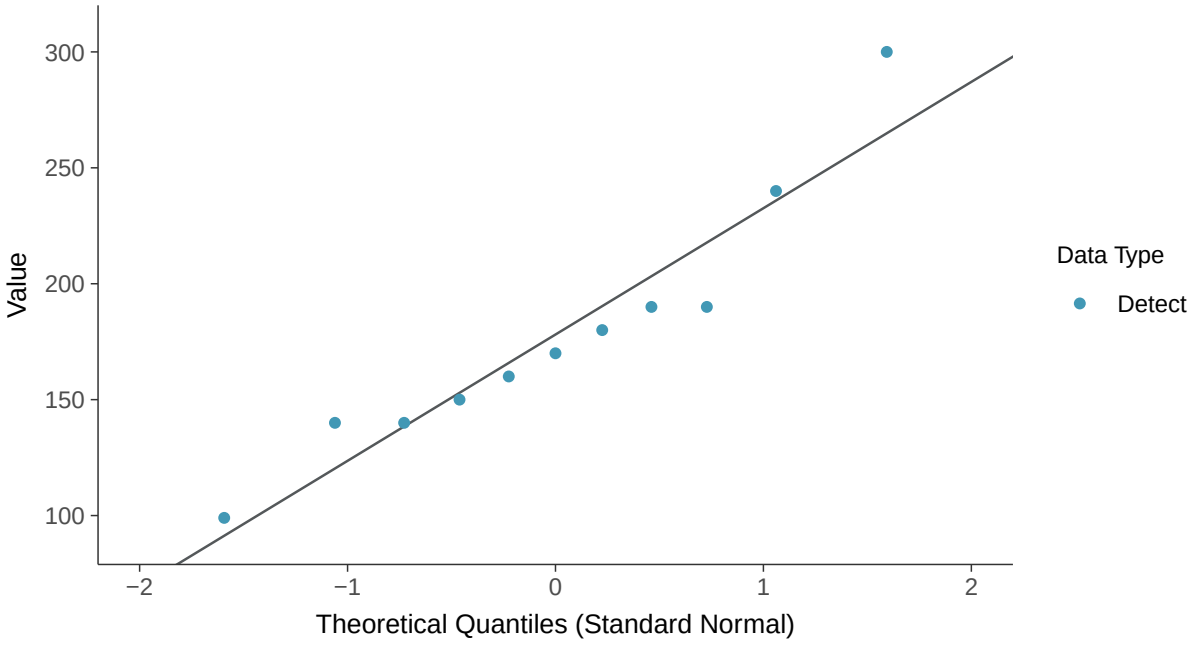
Boxplot by Season

Chloride (as Cl), MW-03 (mg/L)



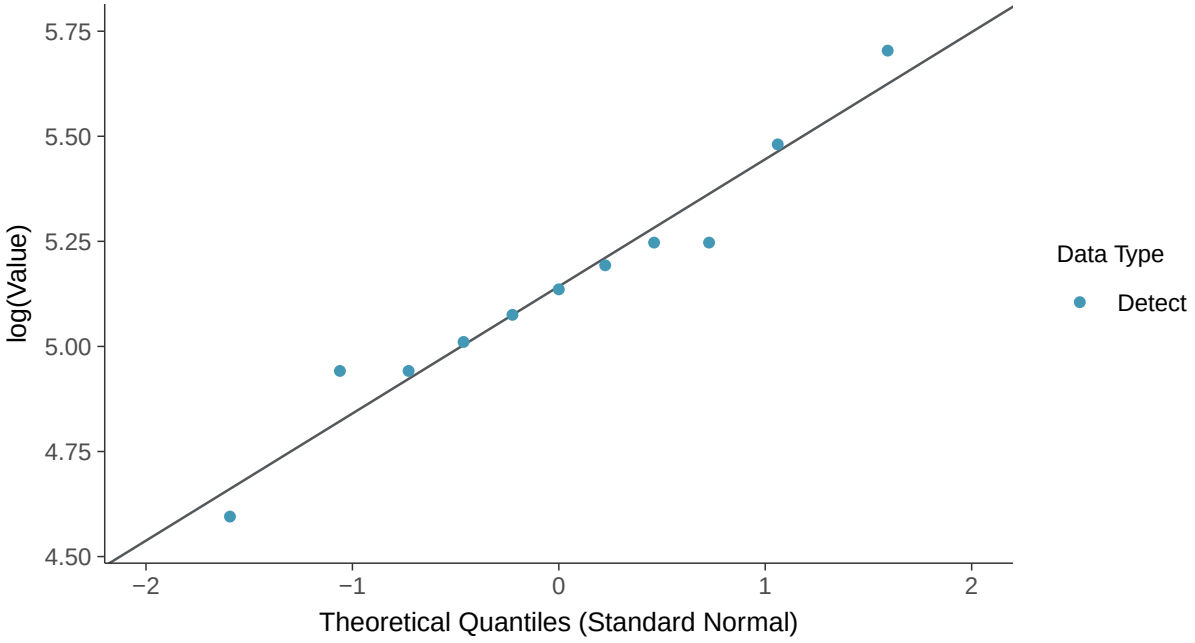
Normal Q-Q plot

Chloride (as Cl), MW-03 (mg/L)



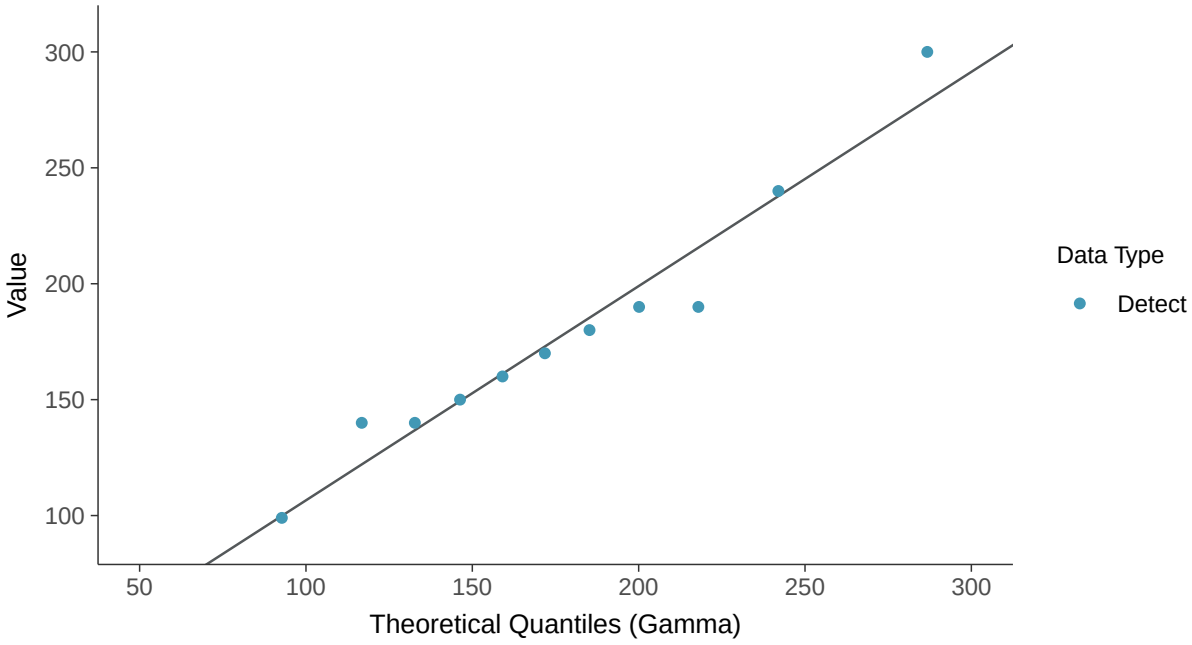
Lognormal Q-Q plot

Chloride (as Cl), MW-03 (mg/L)



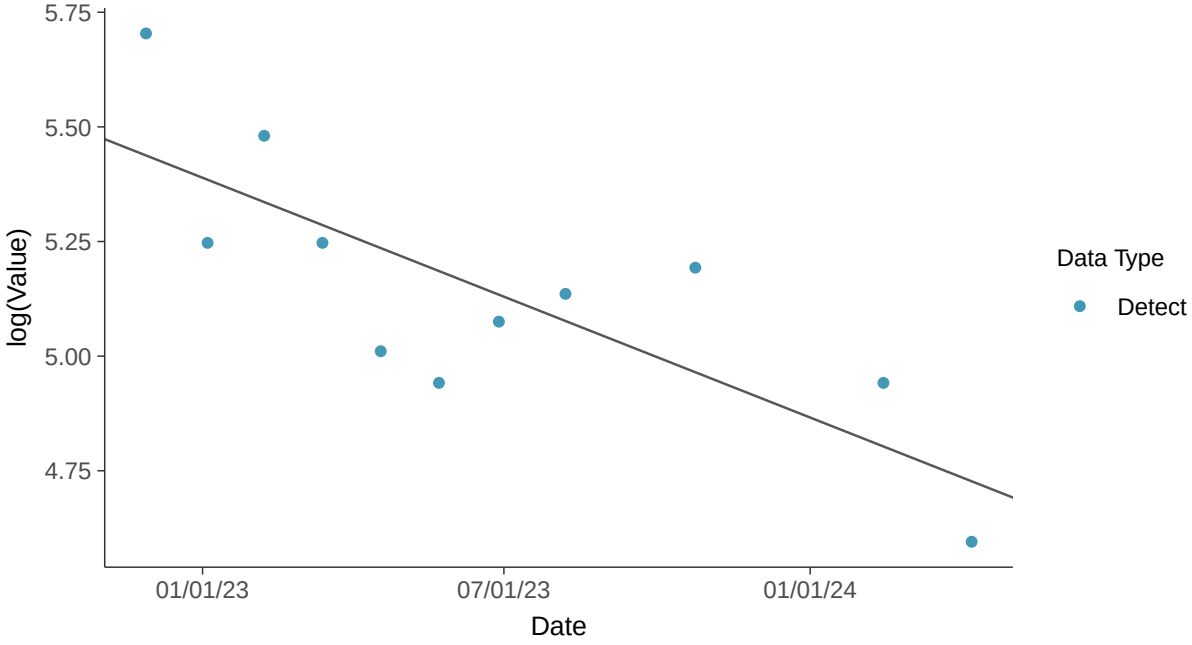
Gamma Q-Q plot

Chloride (as Cl), MW-03 (mg/L)



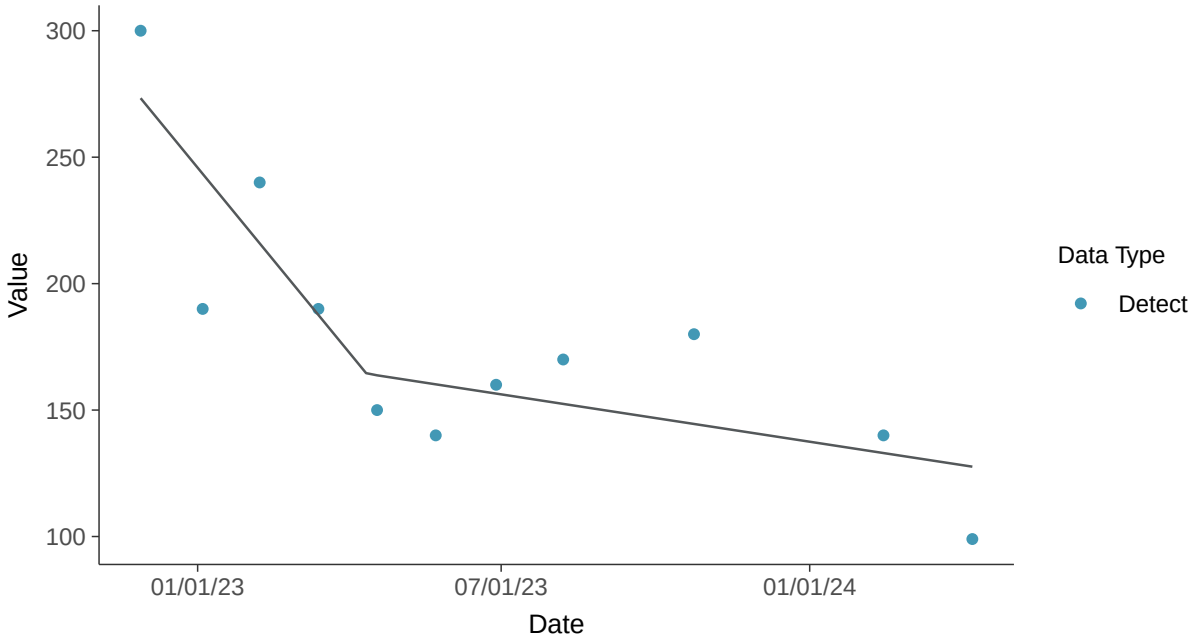
Trend Regression: Lognormal MLE

Chloride (as Cl), MW-03 (mg/L)



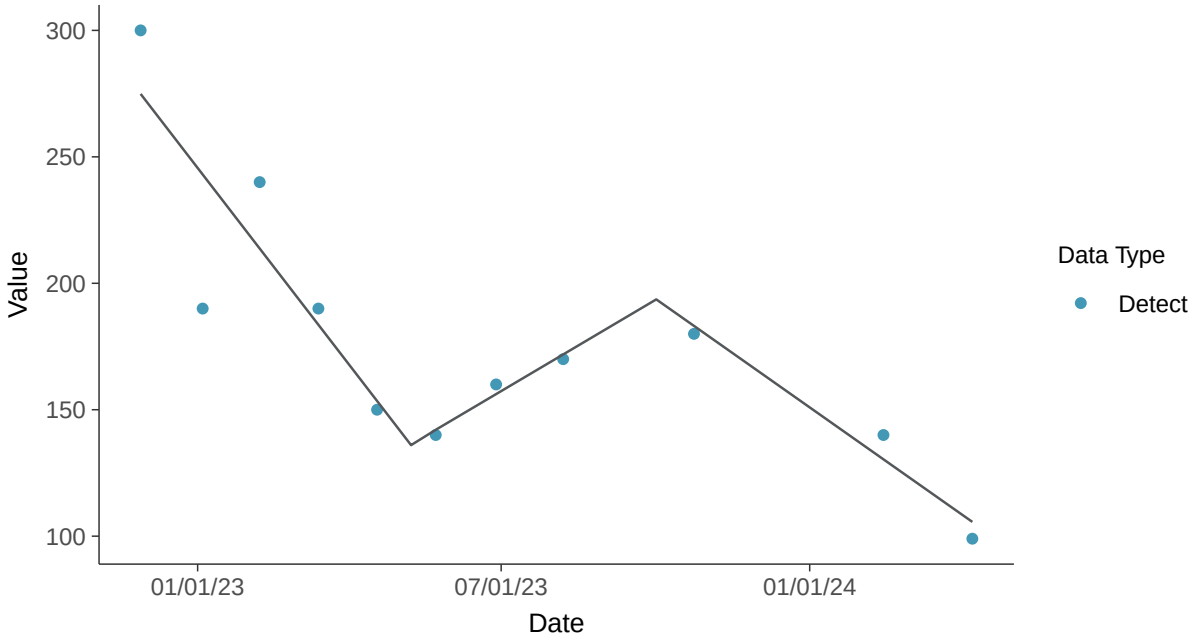
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-03 (mg/L)



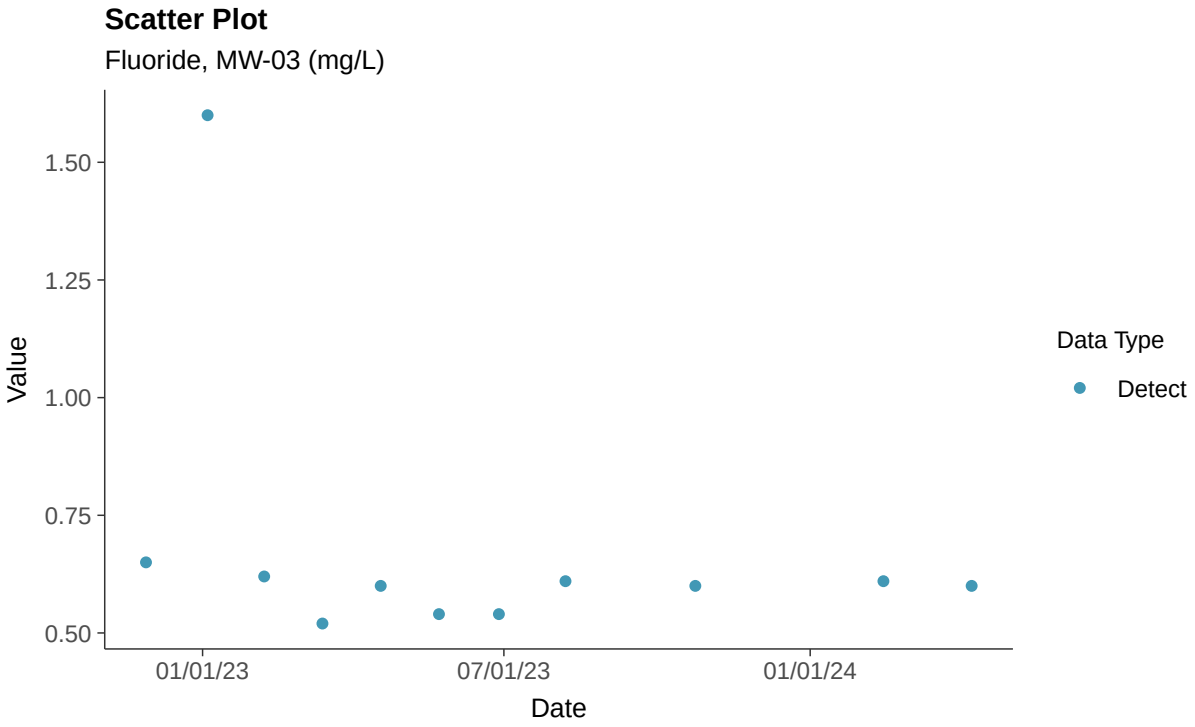
Trend Regression: Piecewise Linear-Linear-Linear

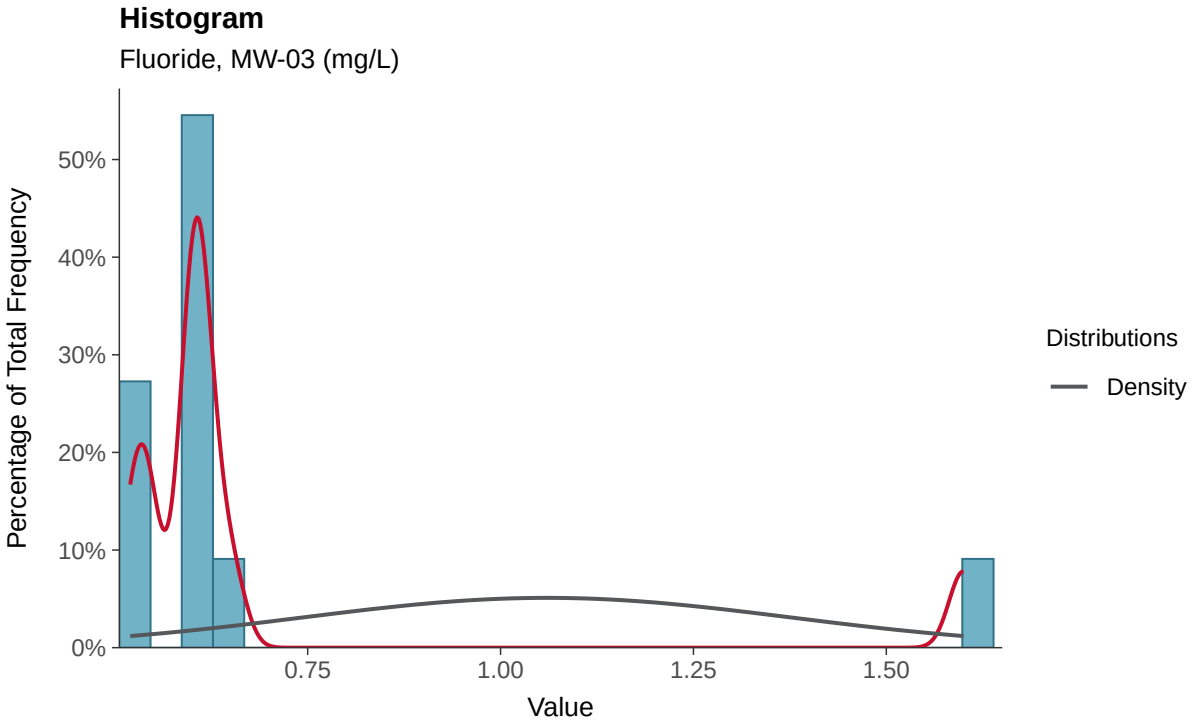
Chloride (as Cl), MW-03 (mg/L)



Appendix III: Fluoride, MW-03

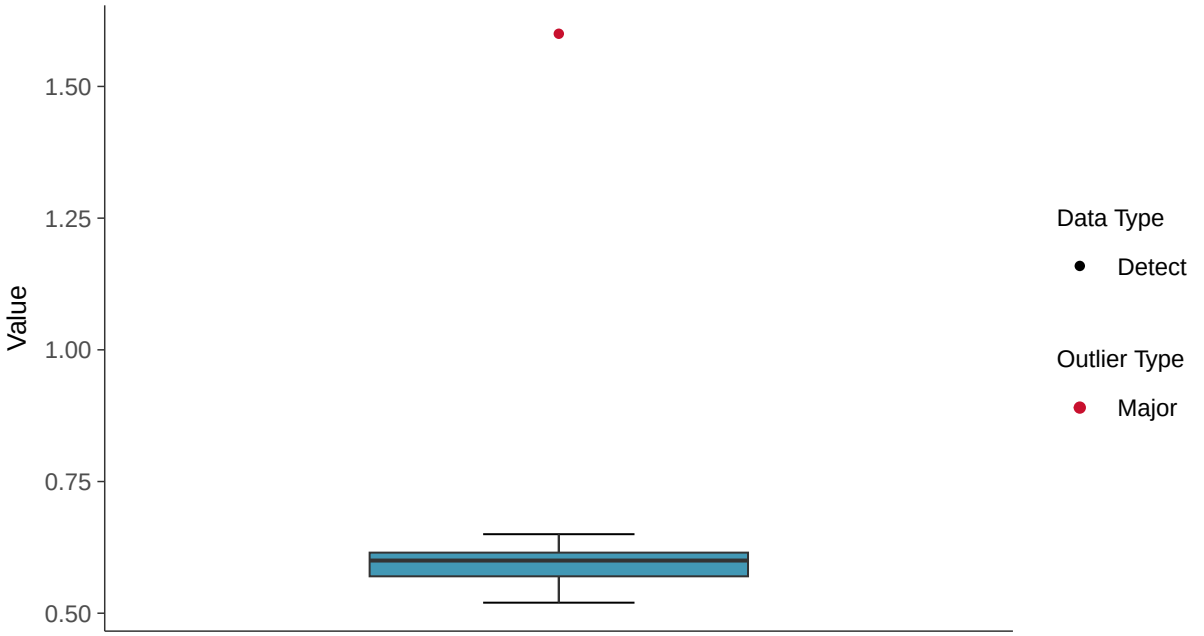
ID: 2_13_4_112





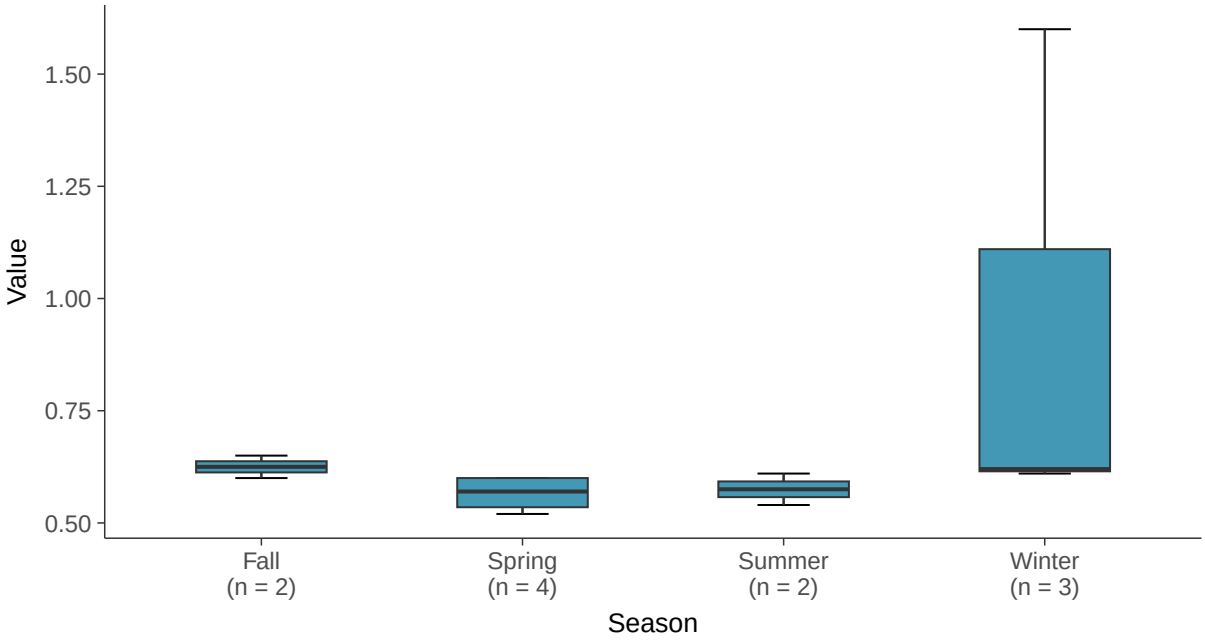
Boxplot

Fluoride, MW-03 (mg/L)



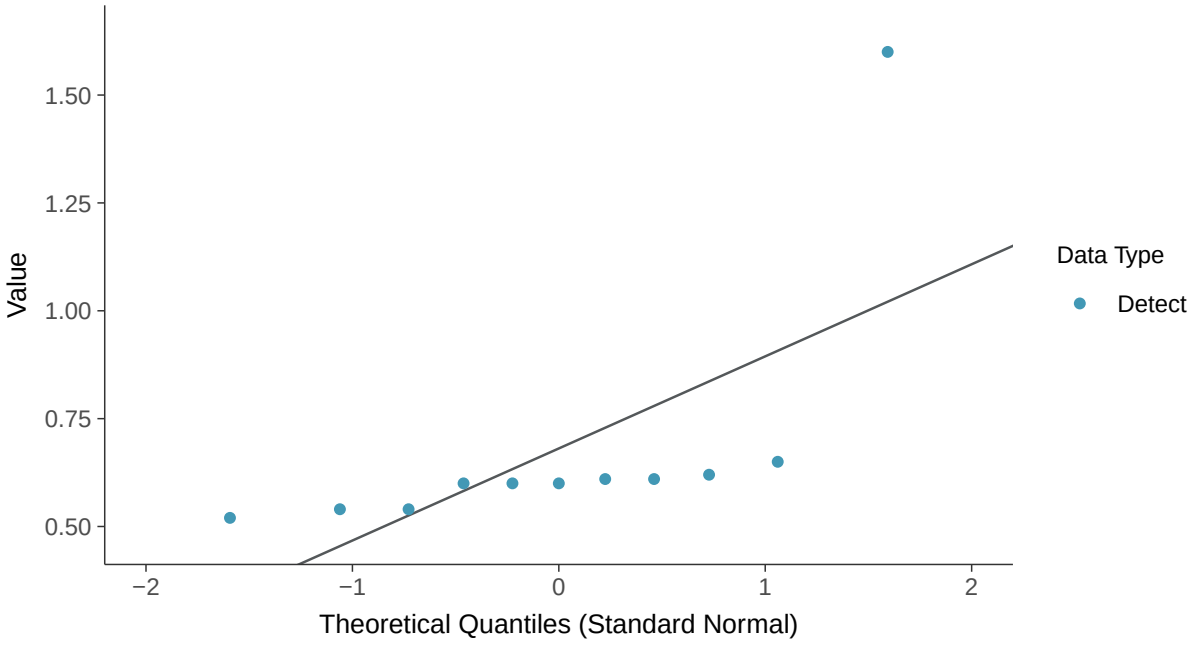
Boxplot by Season

Fluoride, MW-03 (mg/L)



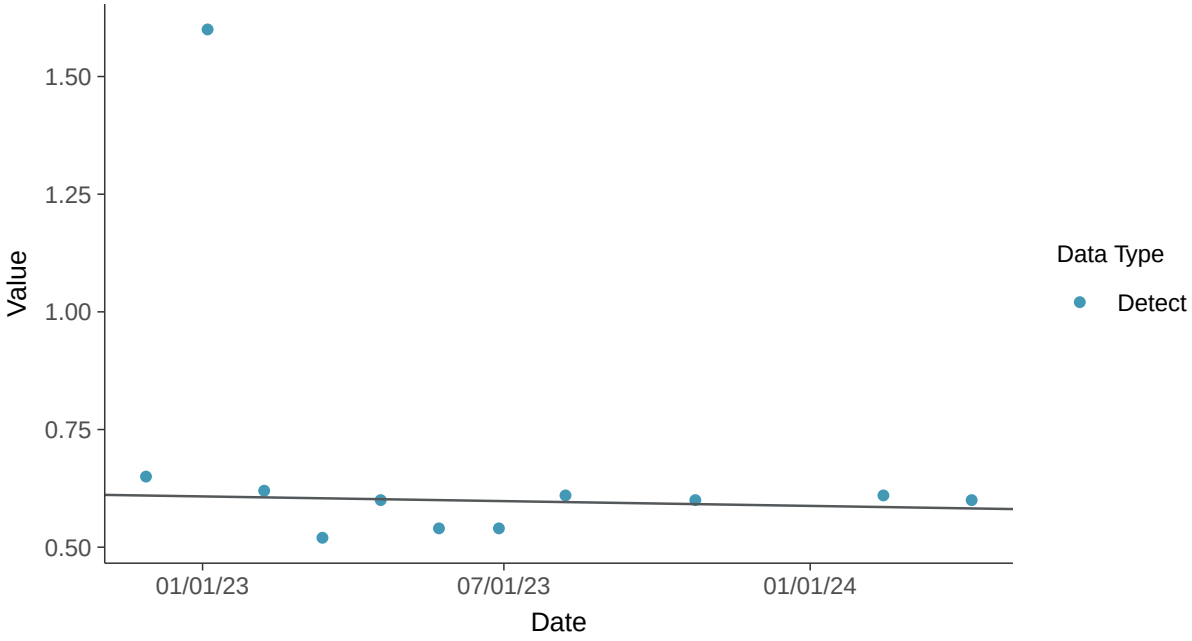
Normal Q-Q plot

Fluoride, MW-03 (mg/L)



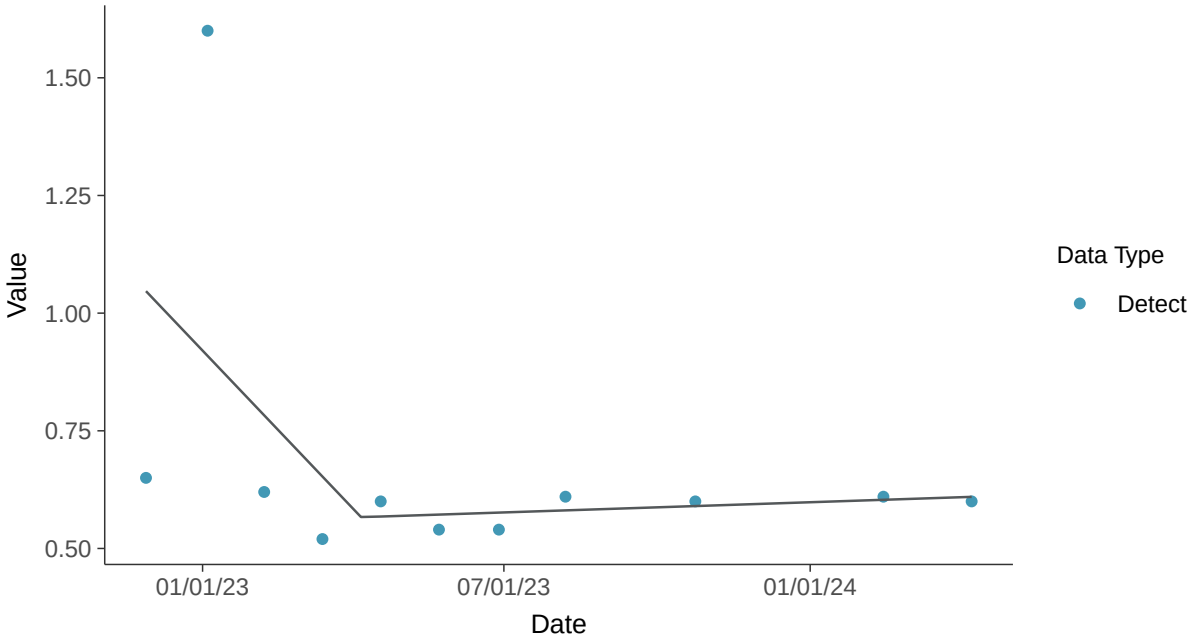
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Fluoride, MW-03 (mg/L)



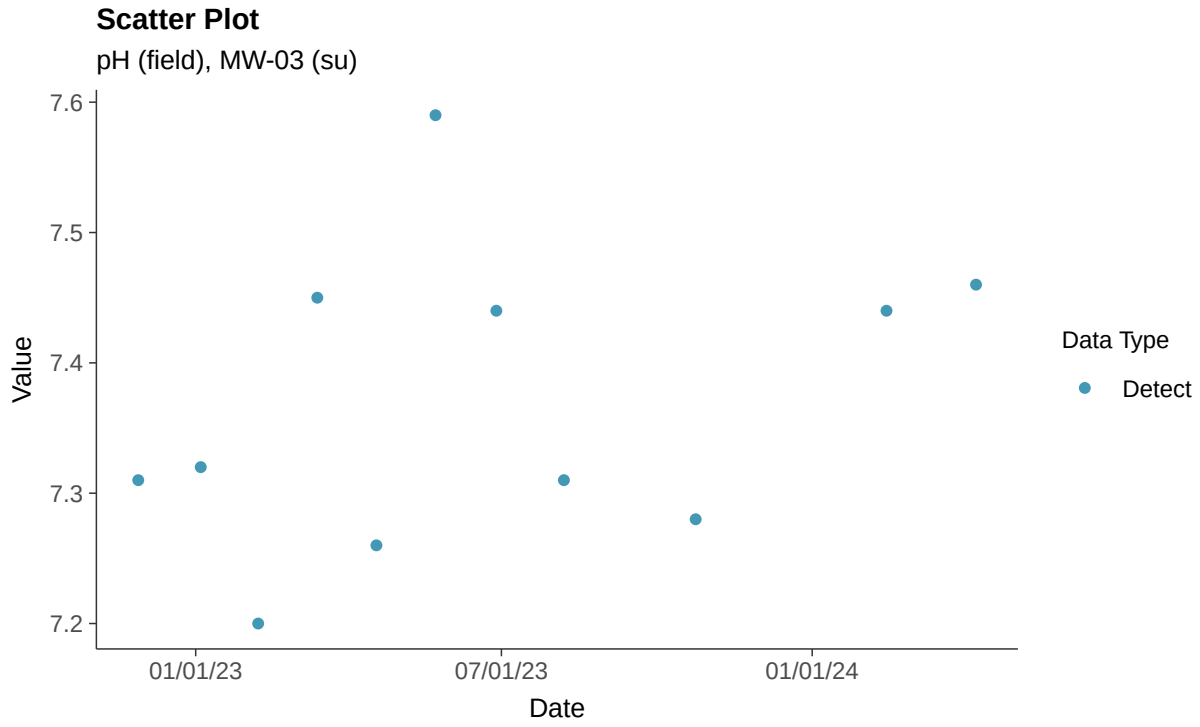
Trend Regression: Piecewise Linear-Linear

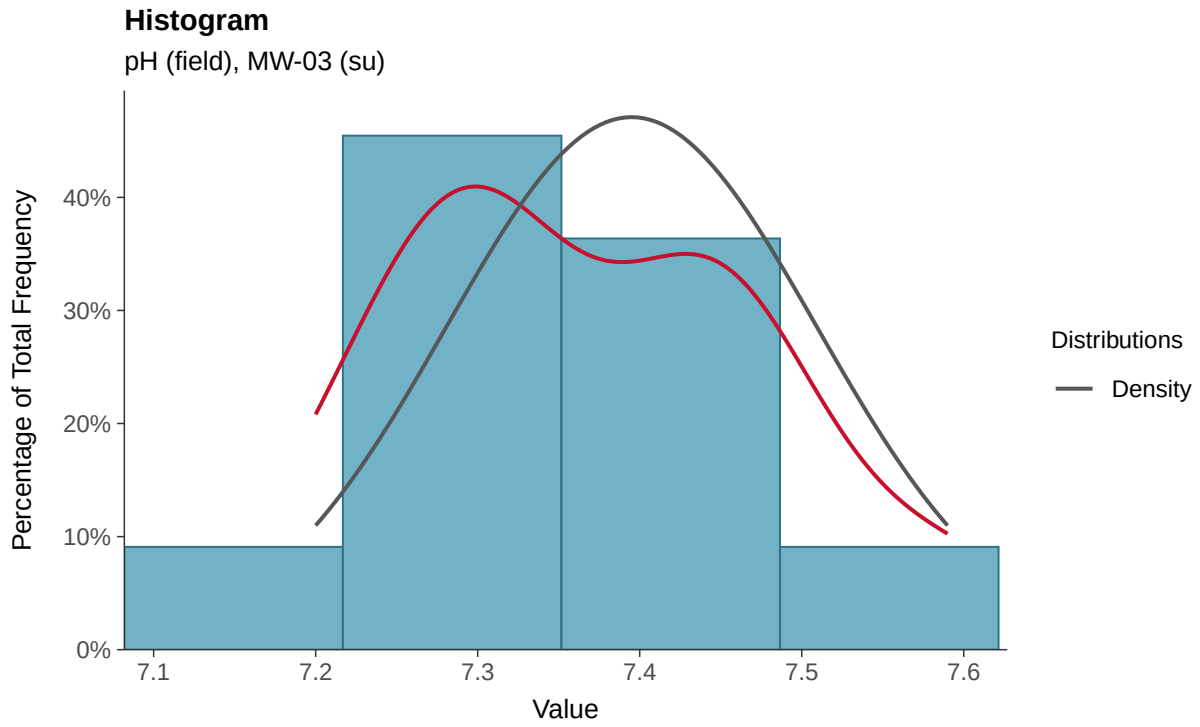
Fluoride, MW-03 (mg/L)



Appendix III: pH (field), MW-03

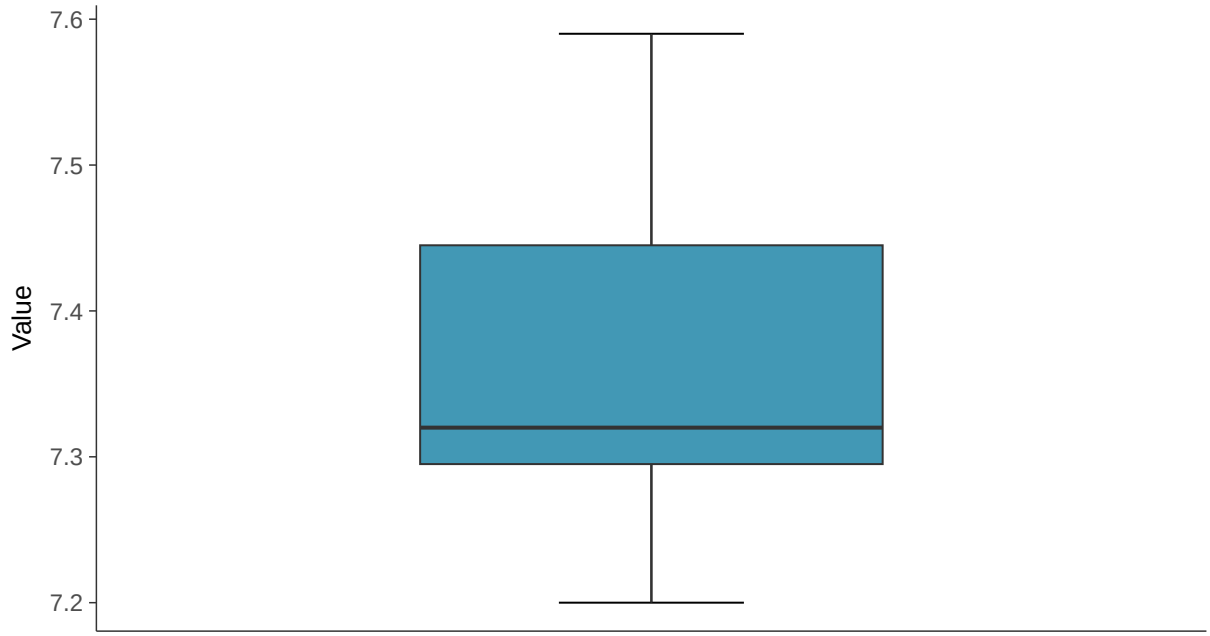
ID: 2_13_4_120





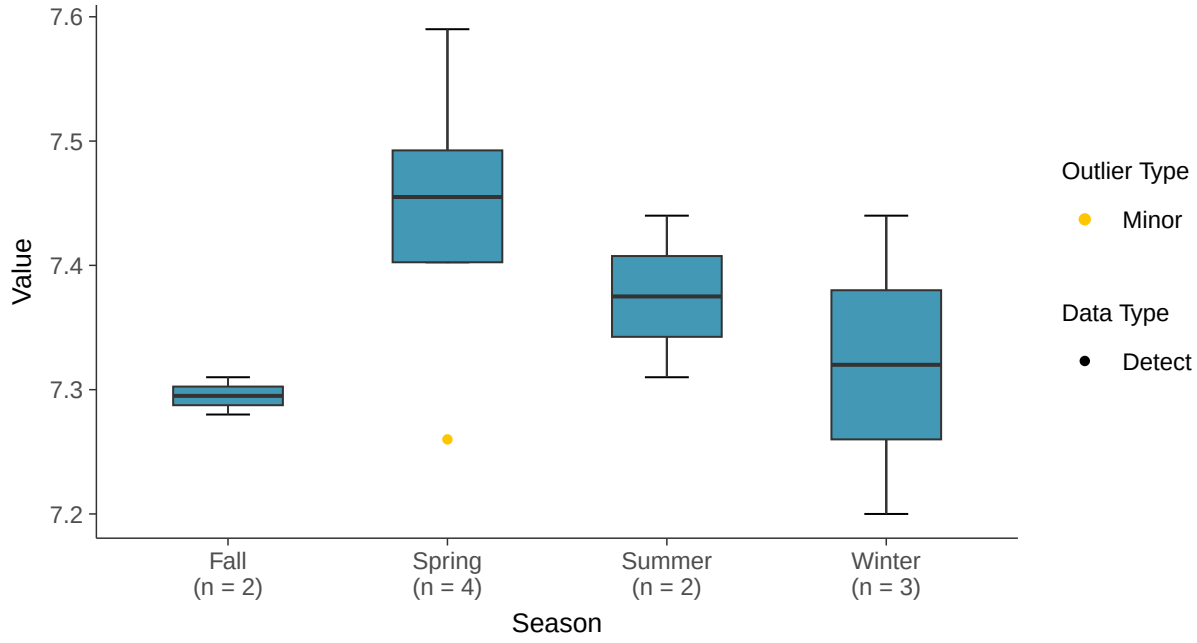
Boxplot

pH (field), MW-03 (su)



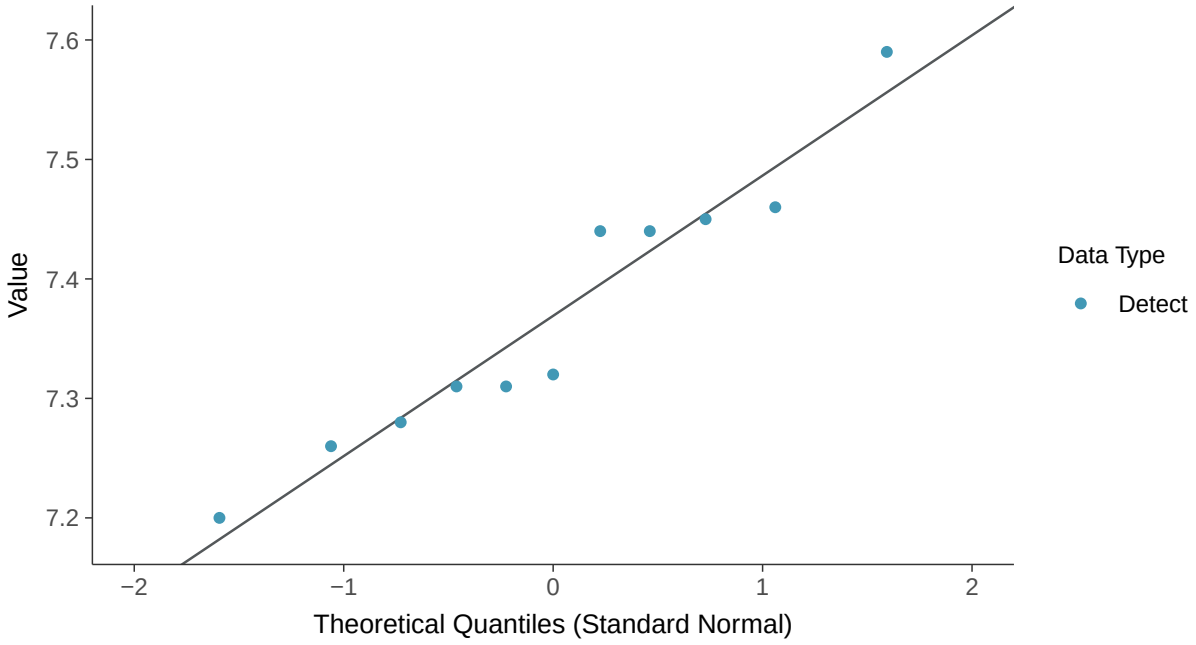
Boxplot by Season

pH (field), MW-03 (su)



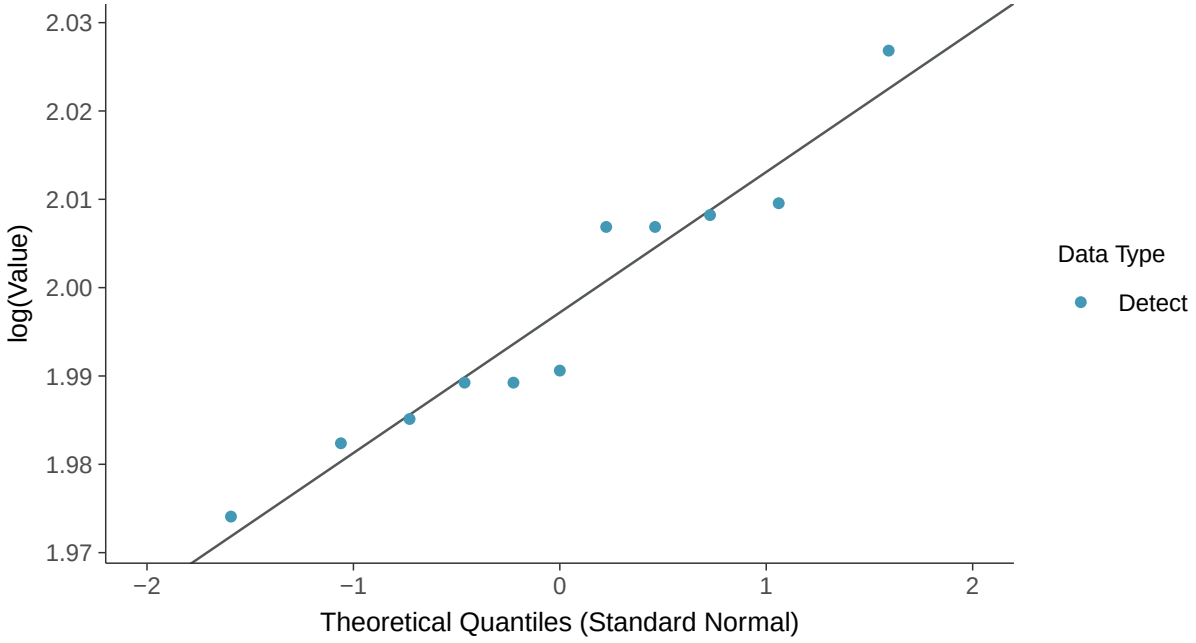
Normal Q-Q plot

pH (field), MW-03 (su)



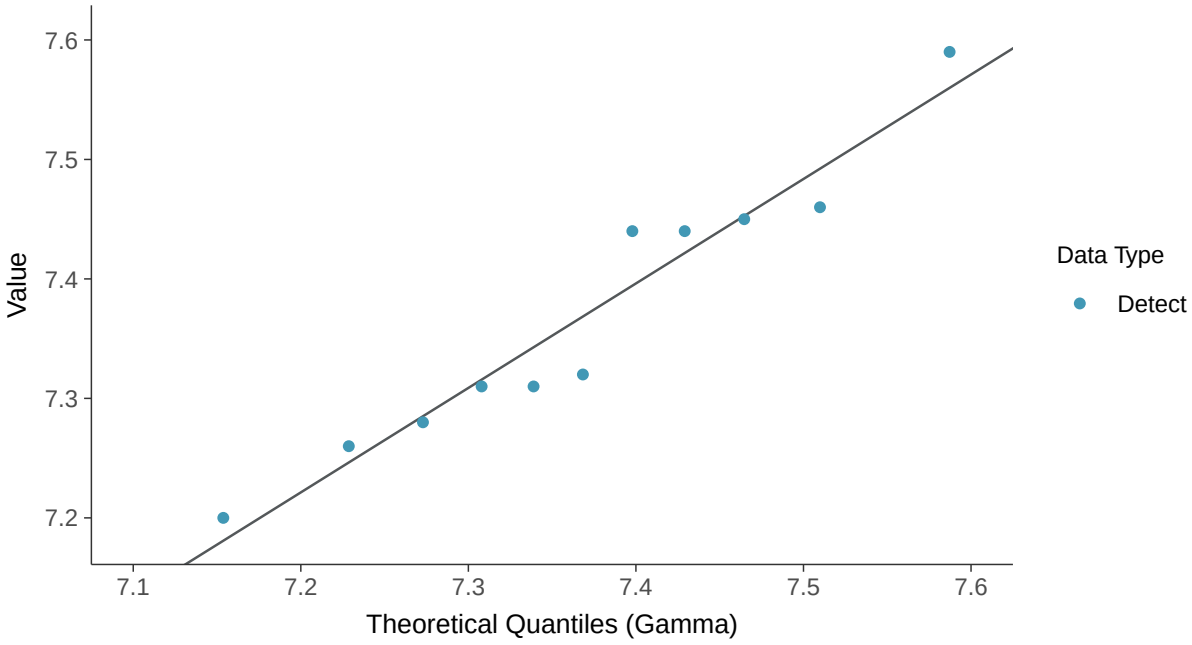
Lognormal Q-Q plot

pH (field), MW-03 (su)



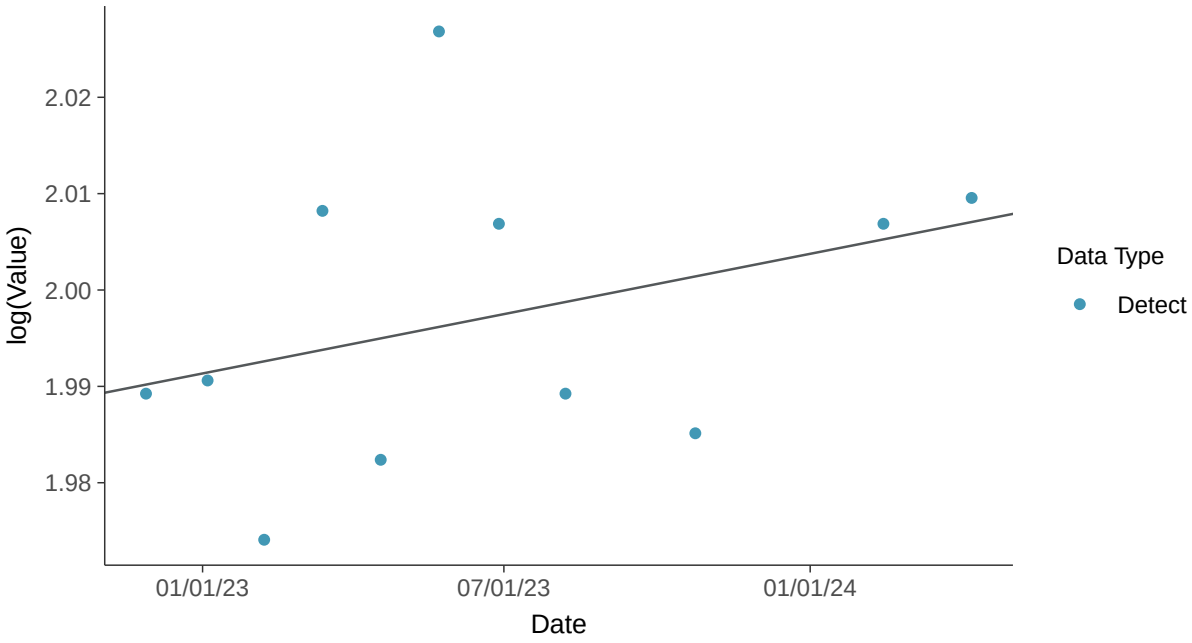
Gamma Q-Q plot

pH (field), MW-03 (su)



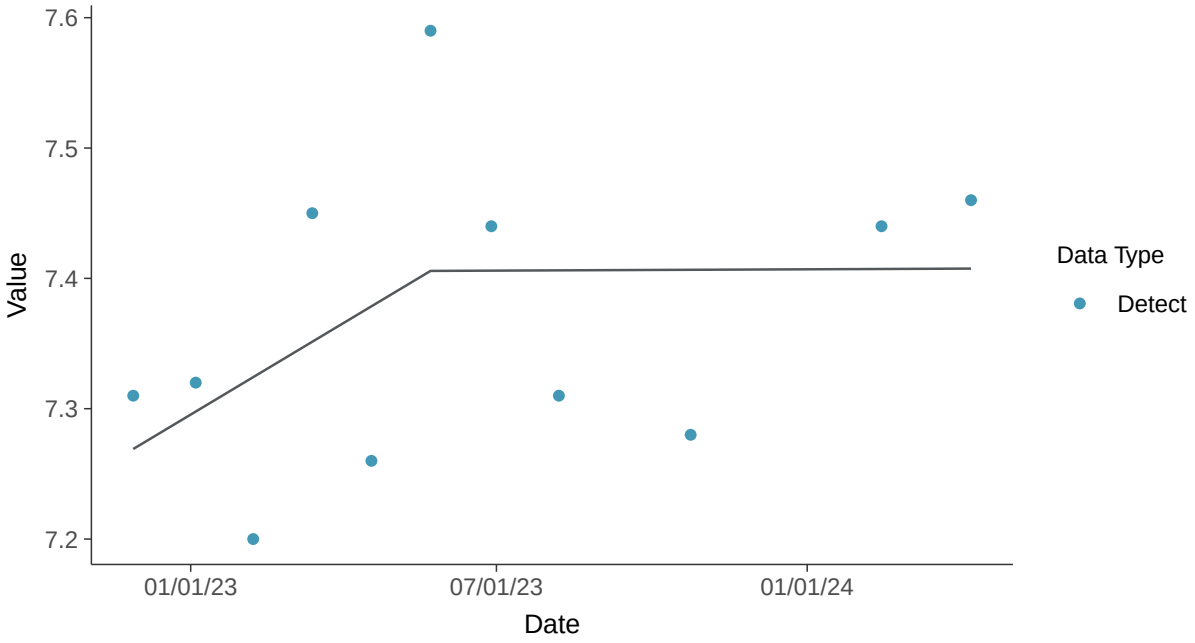
Trend Regression: Lognormal MLE

pH (field), MW-03 (su)



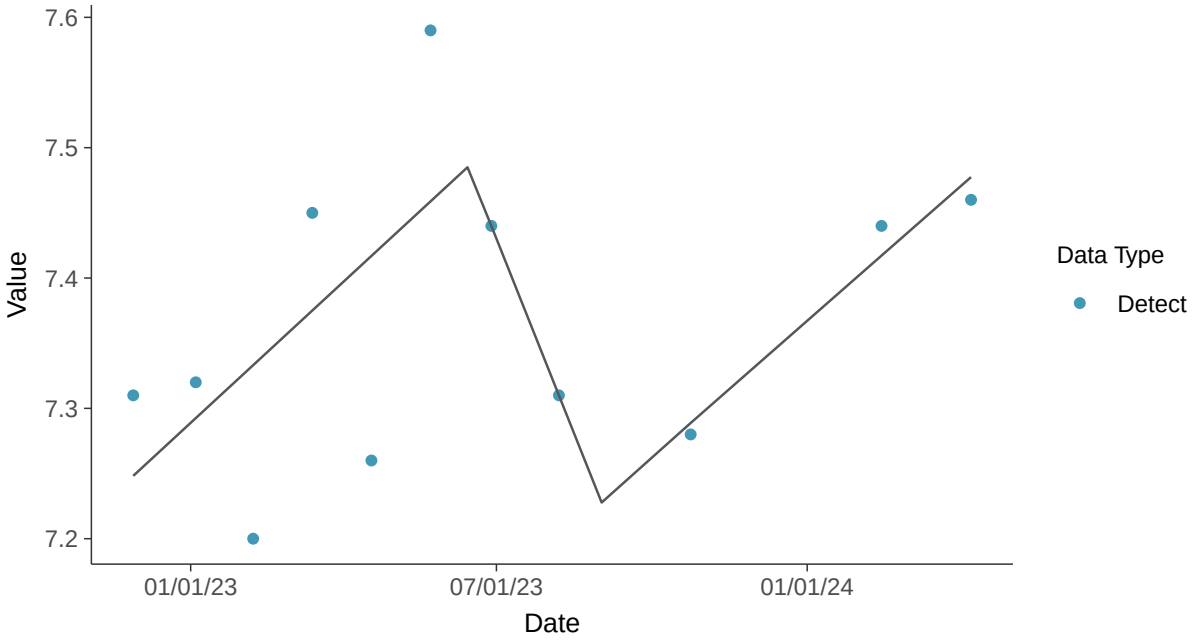
Trend Regression: Piecewise Linear-Linear

pH (field), MW-03 (su)



Trend Regression: Piecewise Linear-Linear-Linear

pH (field), MW-03 (su)

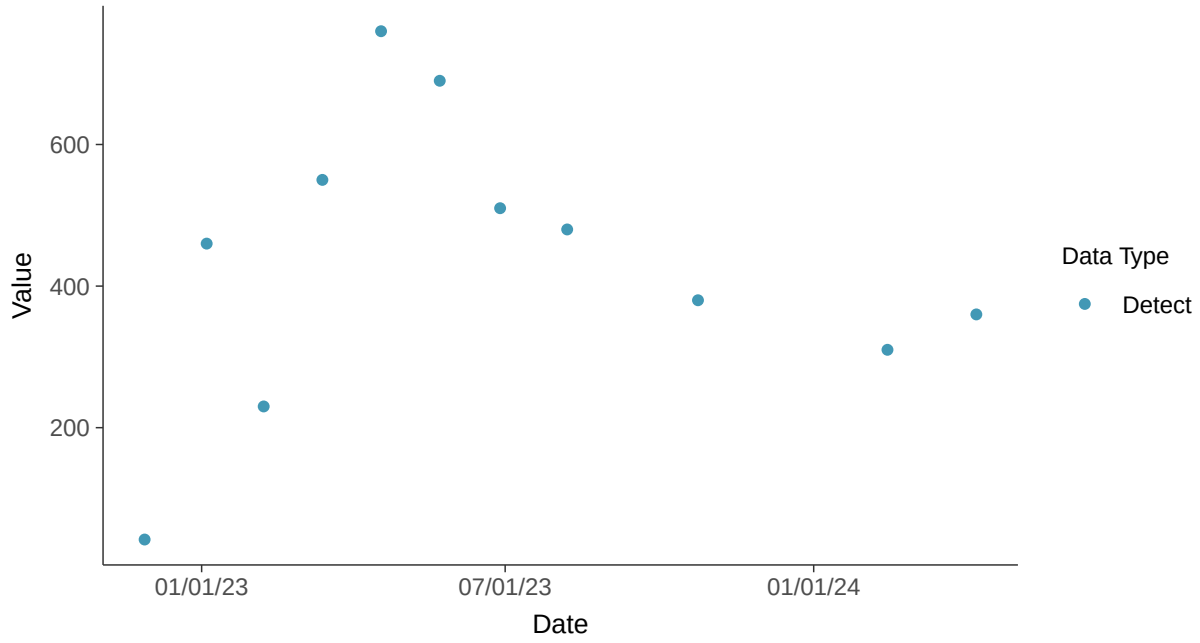


Appendix III: Sulfate (as SO4), MW-03

ID: 2_13_4_124

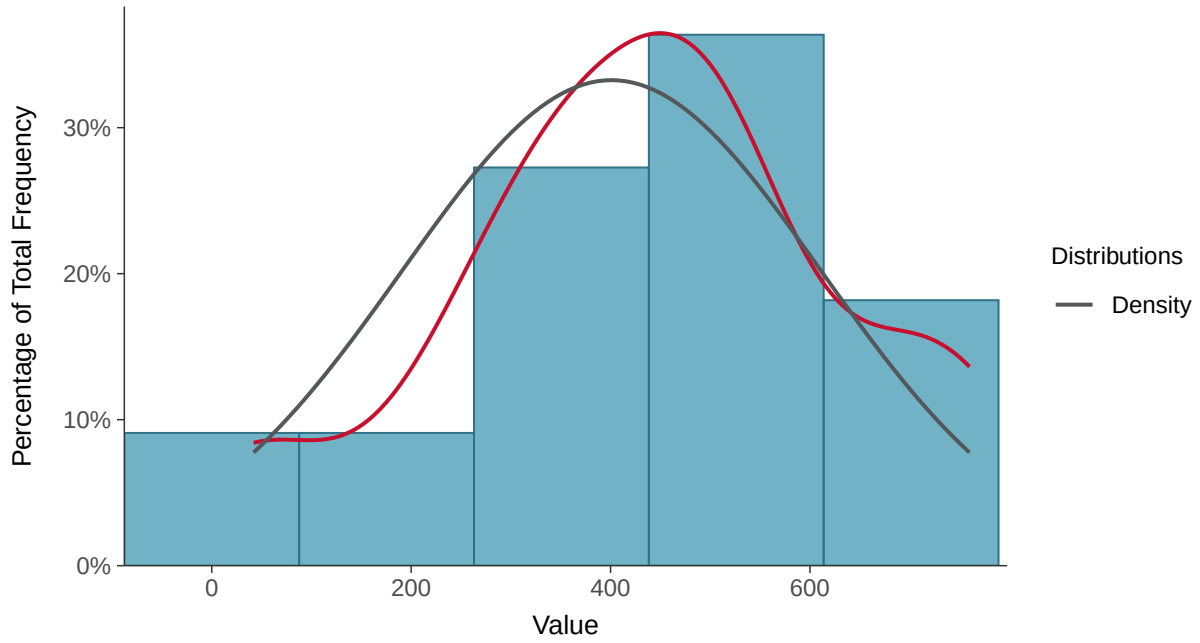
Scatter Plot

Sulfate (as SO4), MW-03 (mg/L)



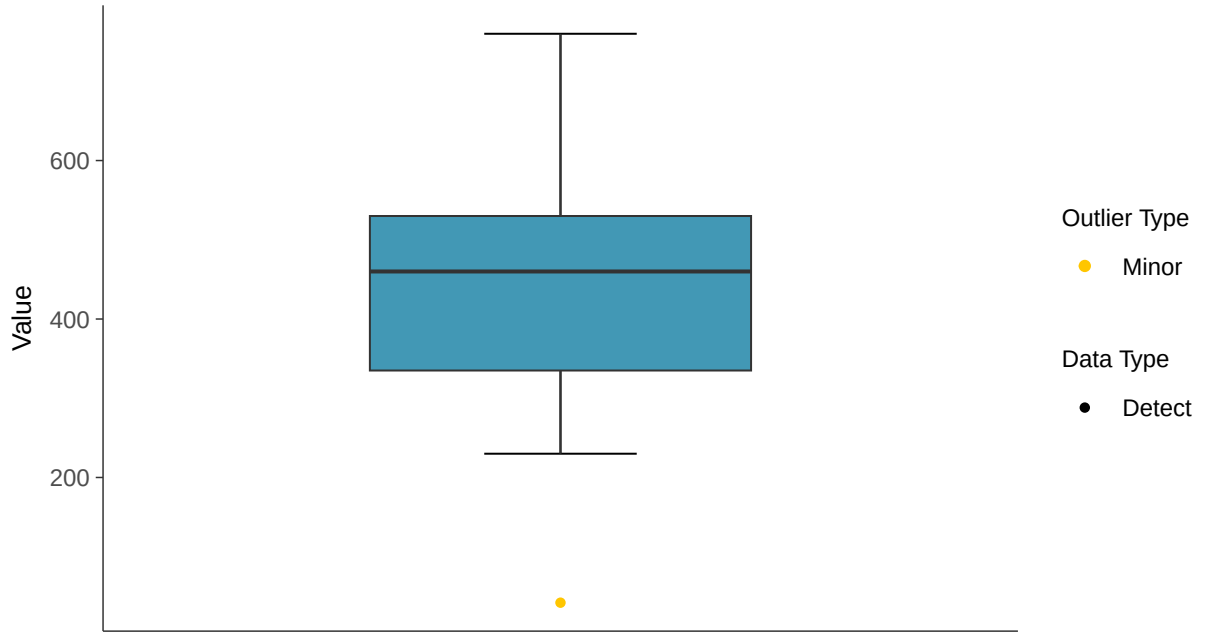
Histogram

Sulfate (as SO4), MW-03 (mg/L)



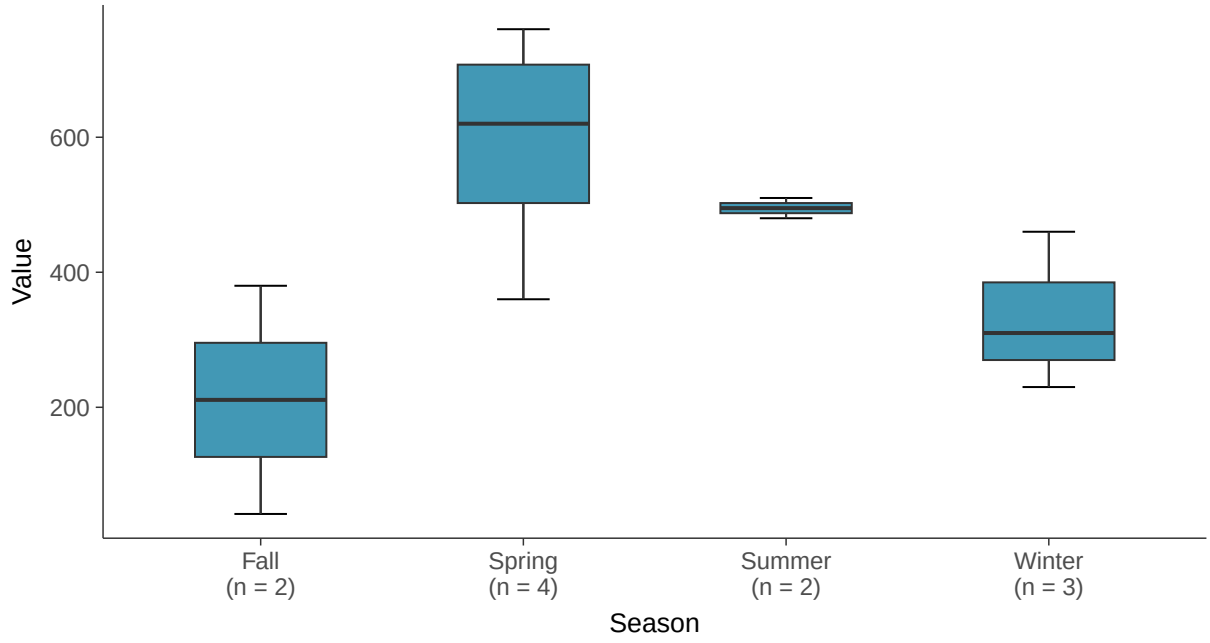
Boxplot

Sulfate (as SO4), MW-03 (mg/L)



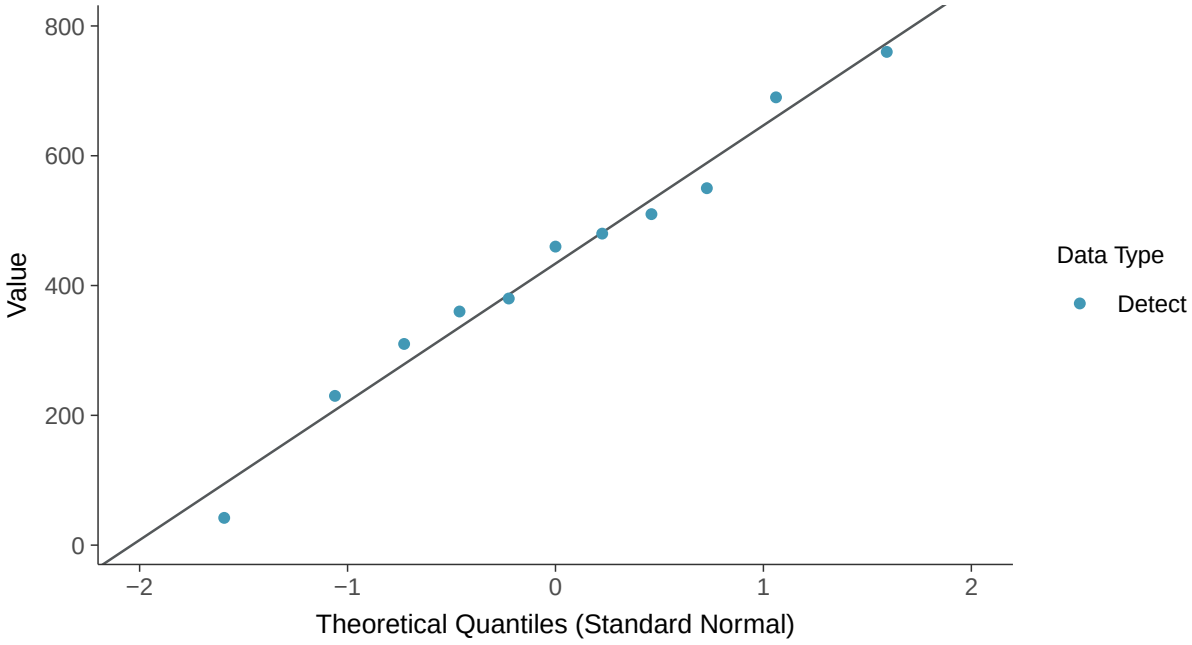
Boxplot by Season

Sulfate (as SO4), MW-03 (mg/L)



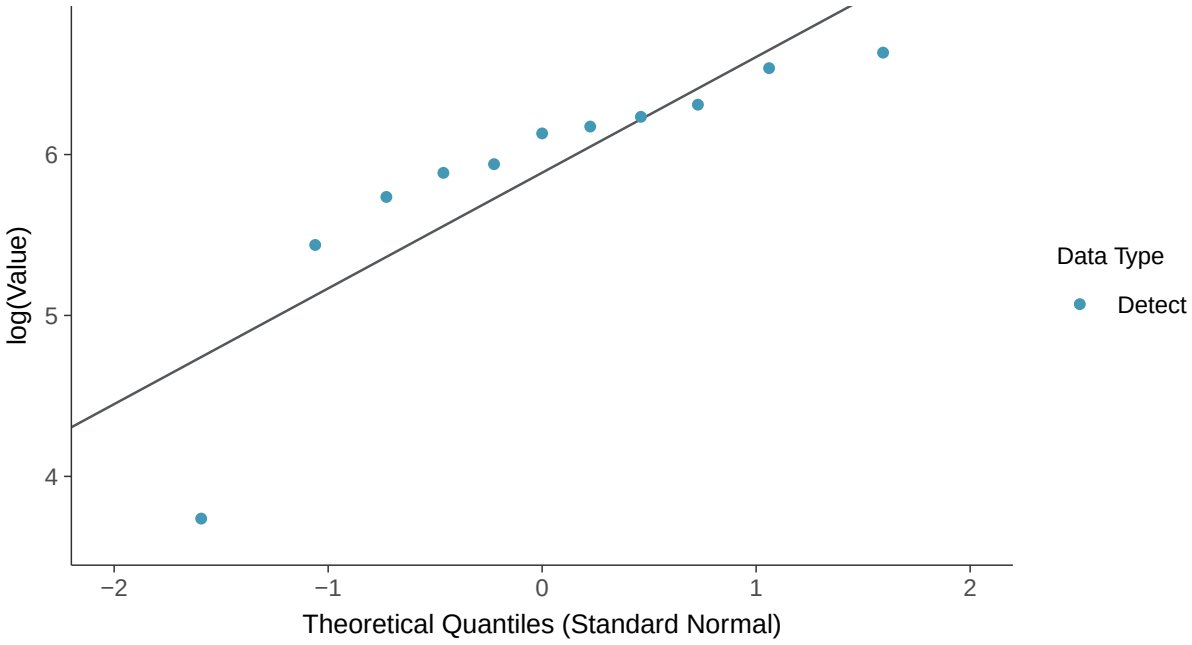
Normal Q-Q plot

Sulfate (as SO4), MW-03 (mg/L)



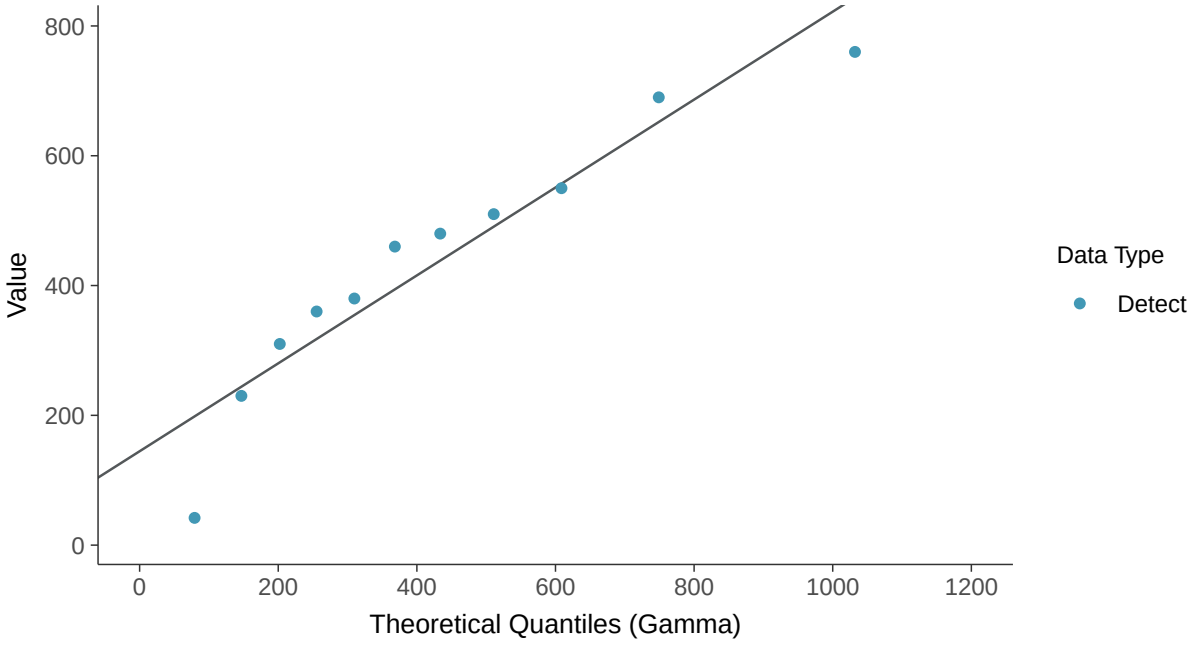
Lognormal Q-Q plot

Sulfate (as SO4), MW-03 (mg/L)



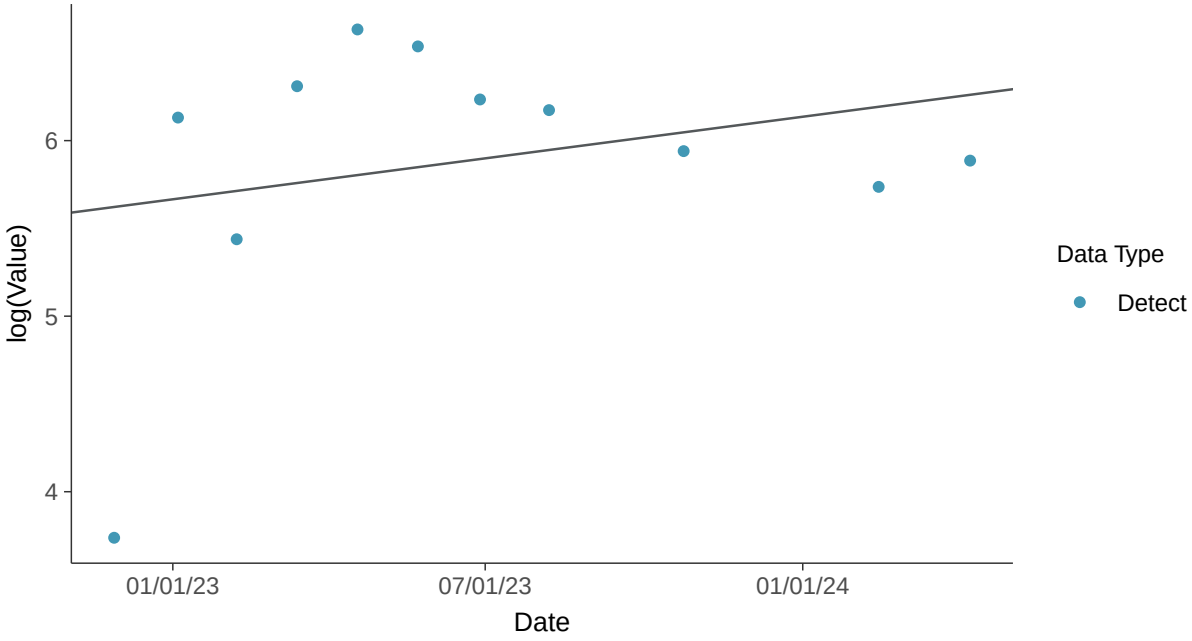
Gamma Q-Q plot

Sulfate (as SO4), MW-03 (mg/L)



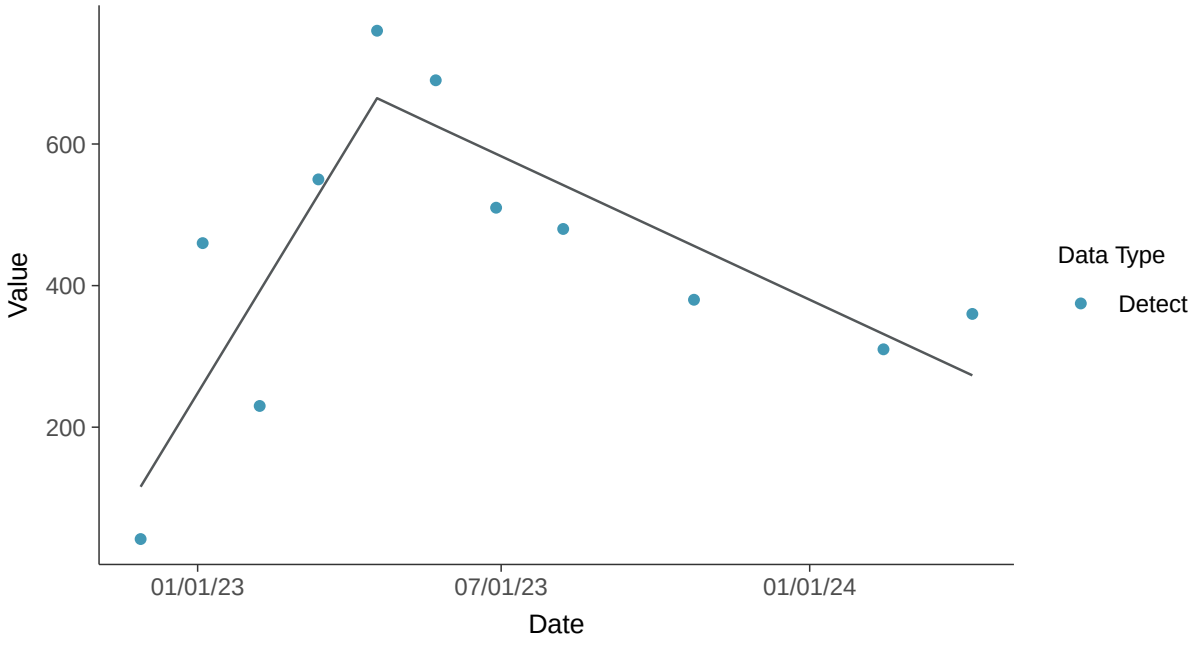
Trend Regression: Lognormal MLE

Sulfate (as SO4), MW-03 (mg/L)



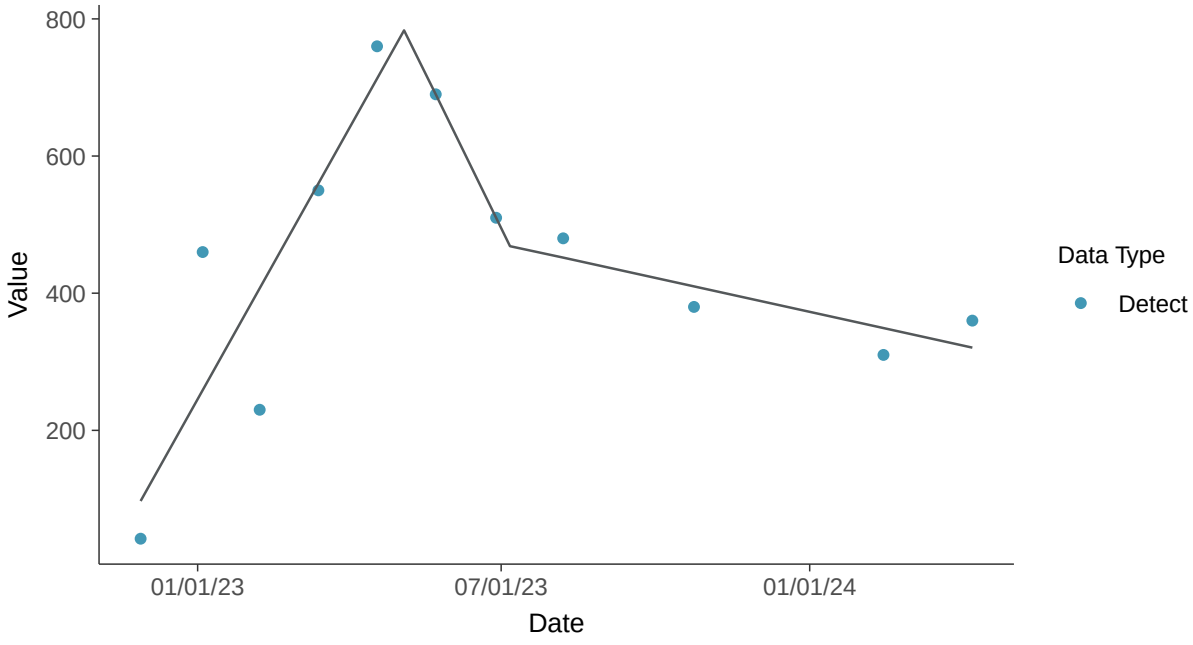
Trend Regression: Piecewise Linear-Linear

Sulfate (as SO4), MW-03 (mg/L)



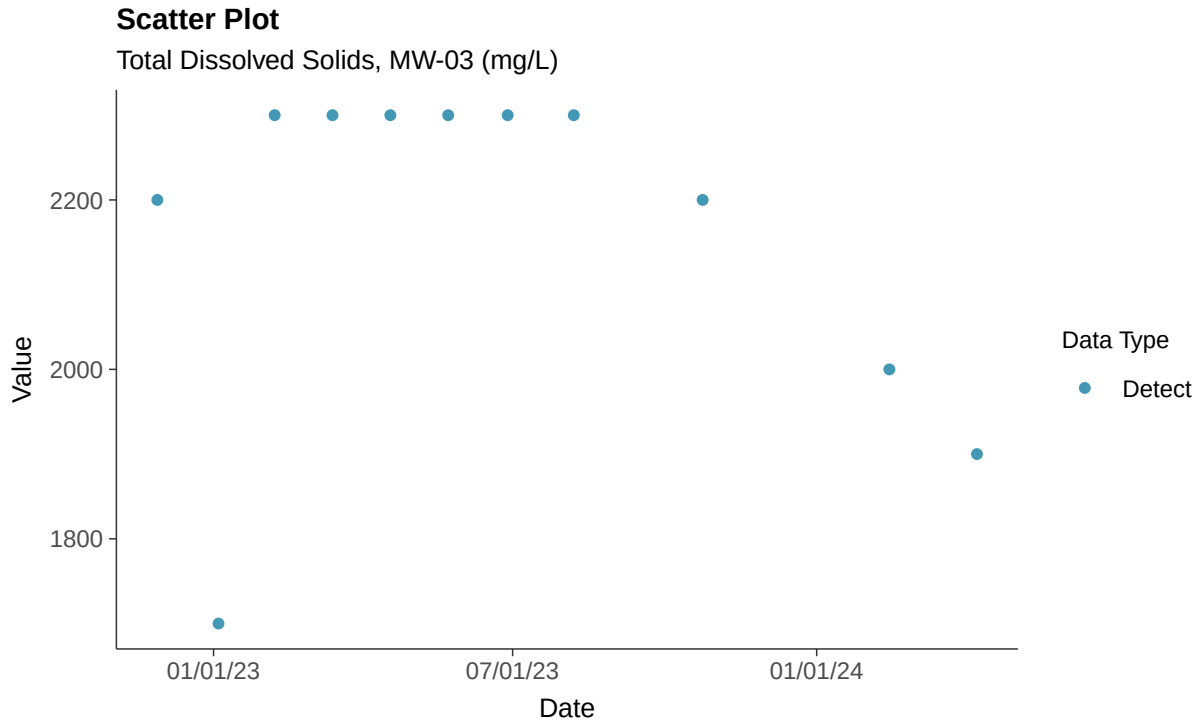
Trend Regression: Piecewise Linear-Linear-Linear

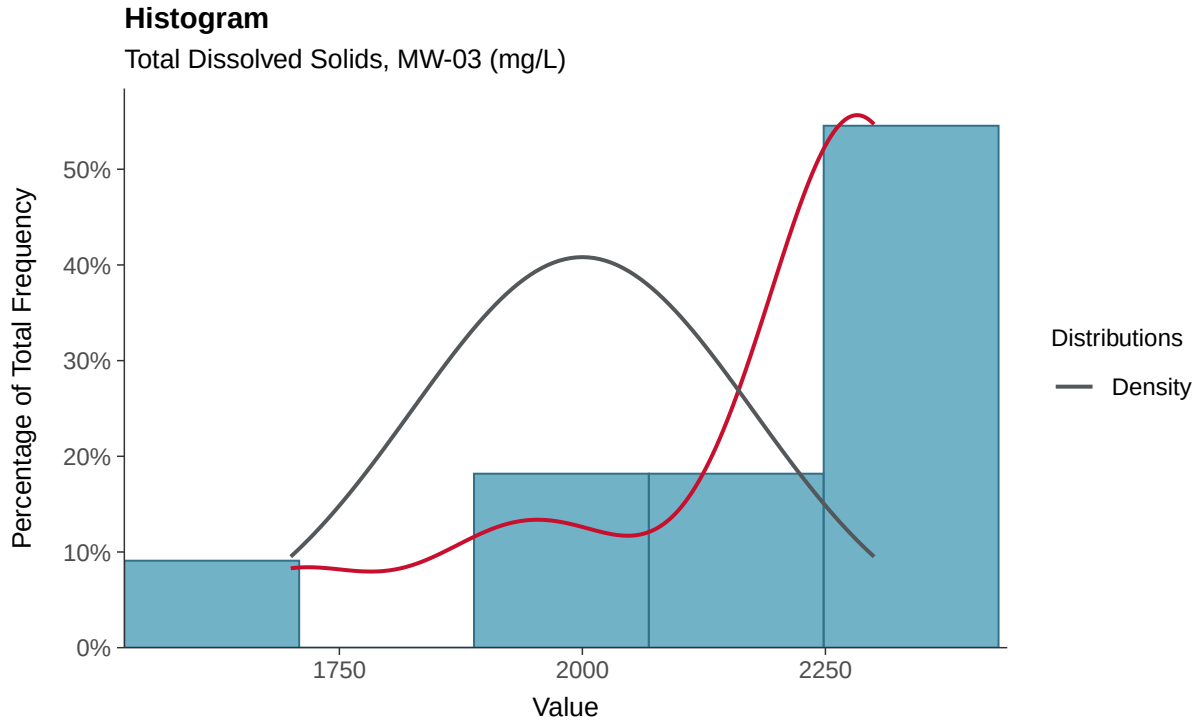
Sulfate (as SO4), MW-03 (mg/L)



Appendix III: Total Dissolved Solids, MW-03

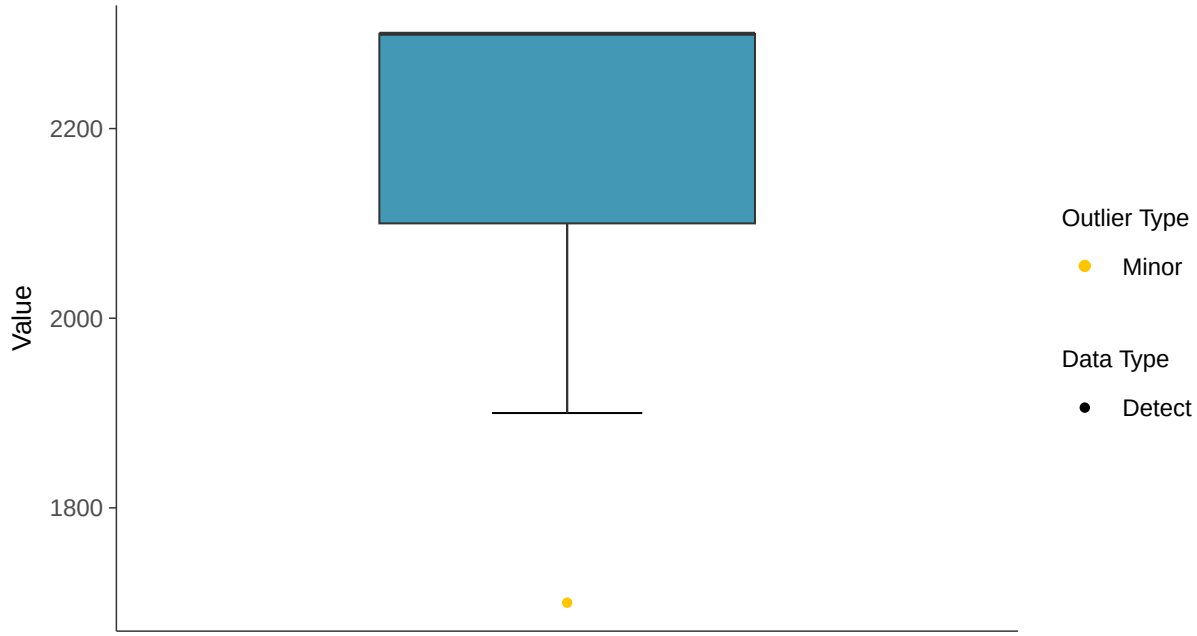
ID: 2_13_4_126





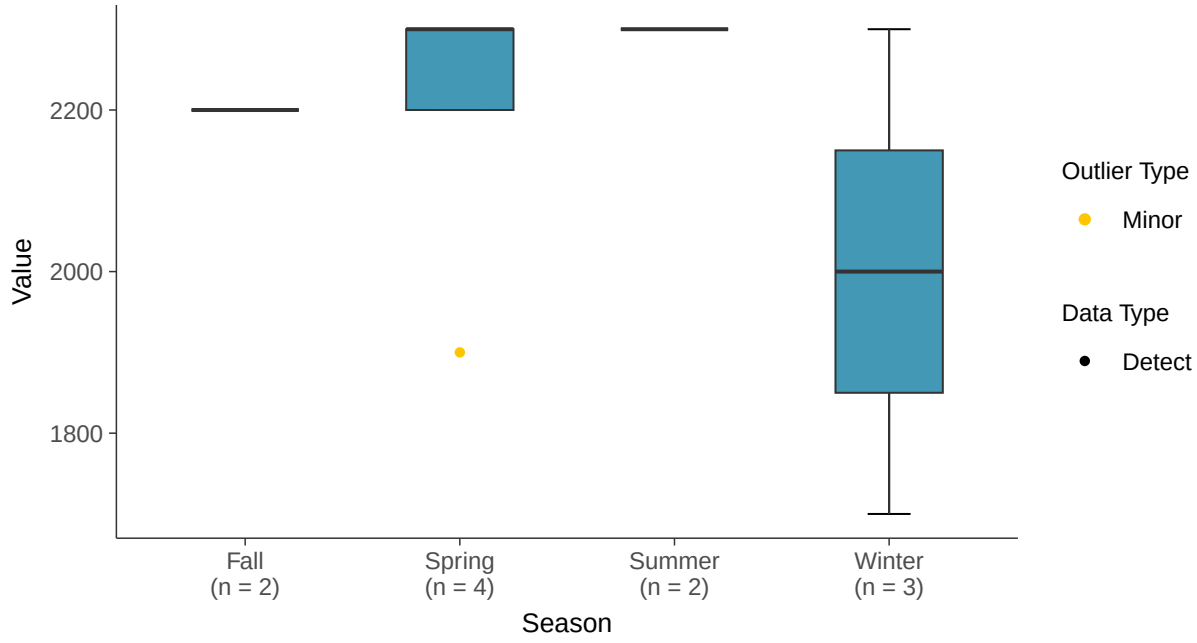
Boxplot

Total Dissolved Solids, MW-03 (mg/L)



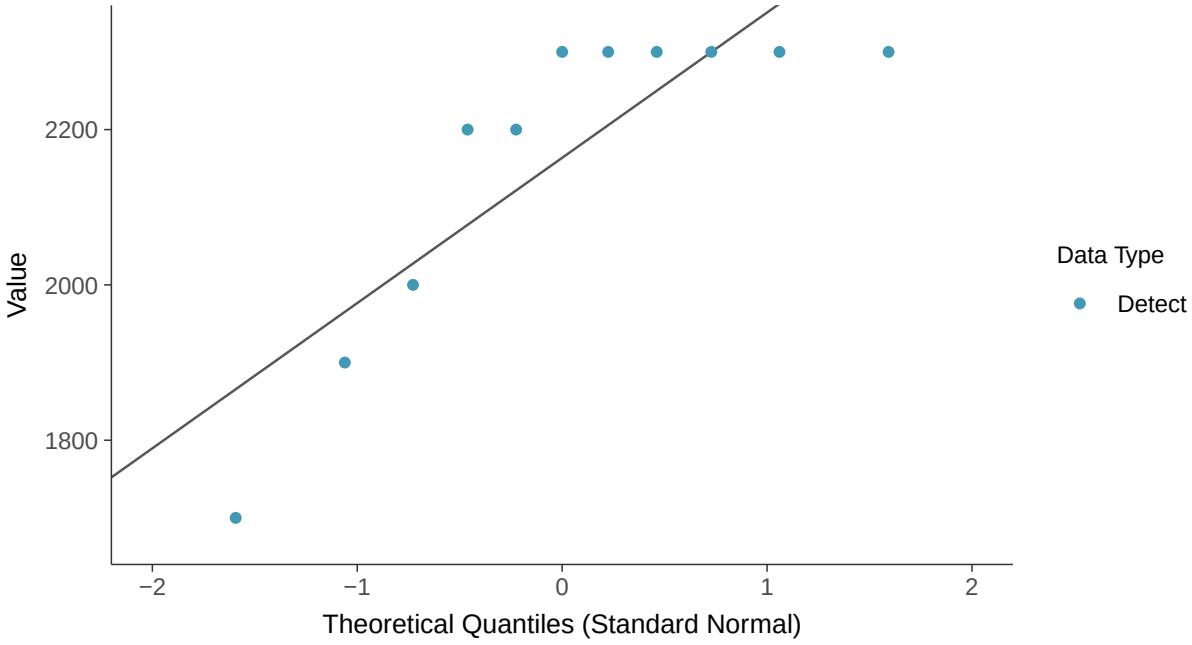
Boxplot by Season

Total Dissolved Solids, MW-03 (mg/L)



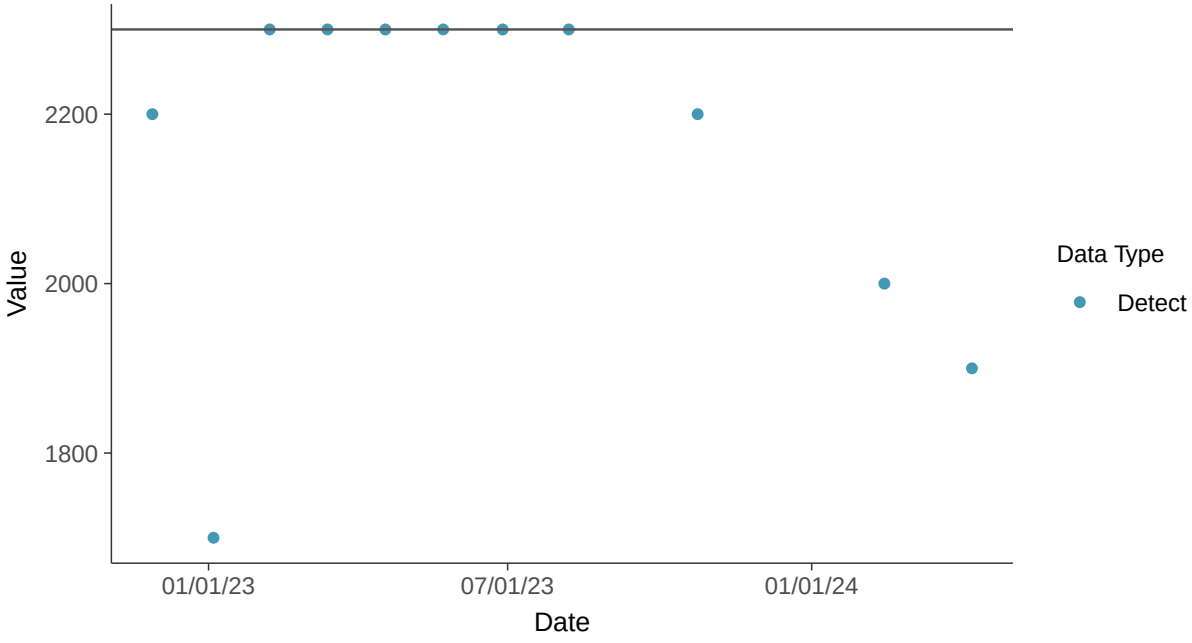
Normal Q-Q plot

Total Dissolved Solids, MW-03 (mg/L)



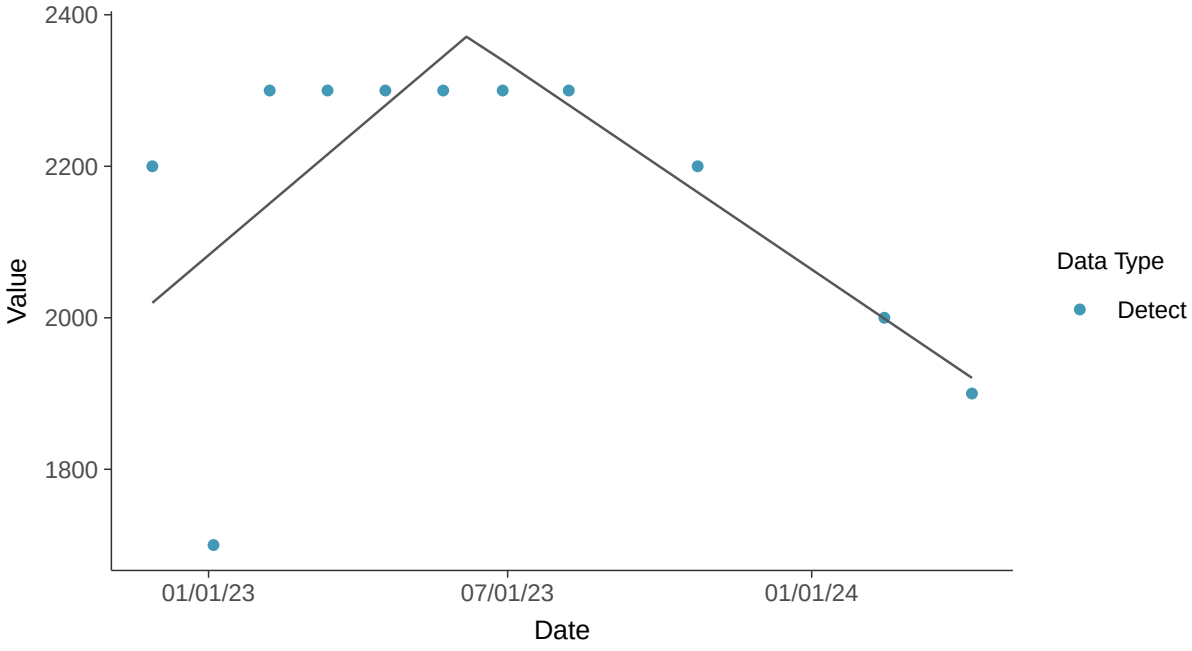
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Total Dissolved Solids, MW-03 (mg/L)



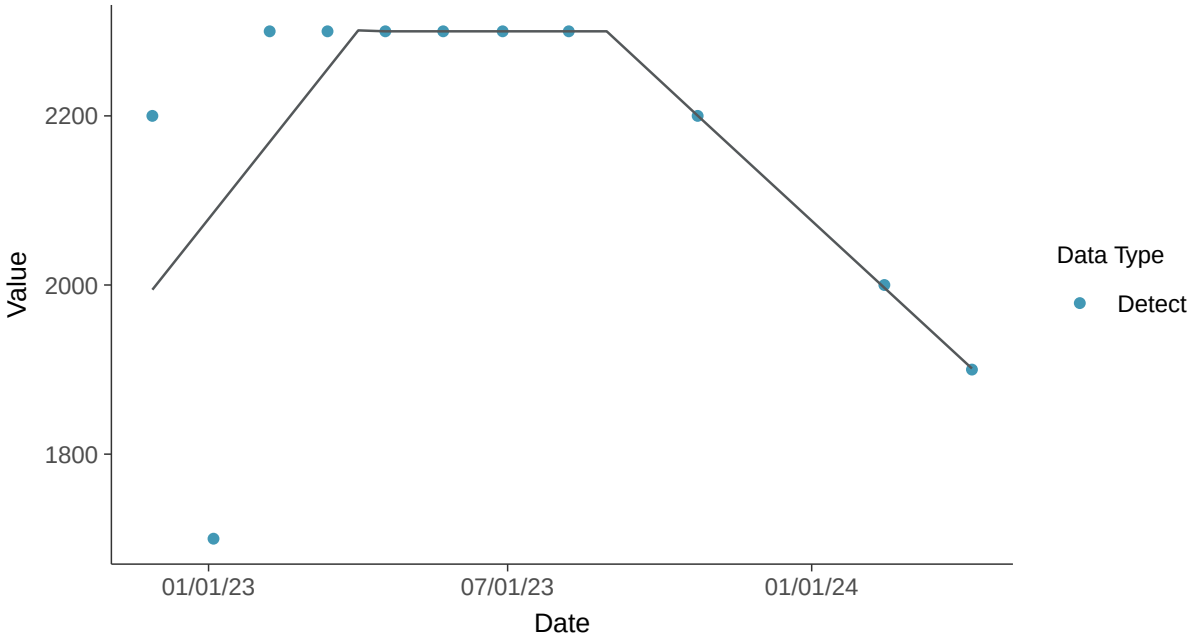
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-03 (mg/L)



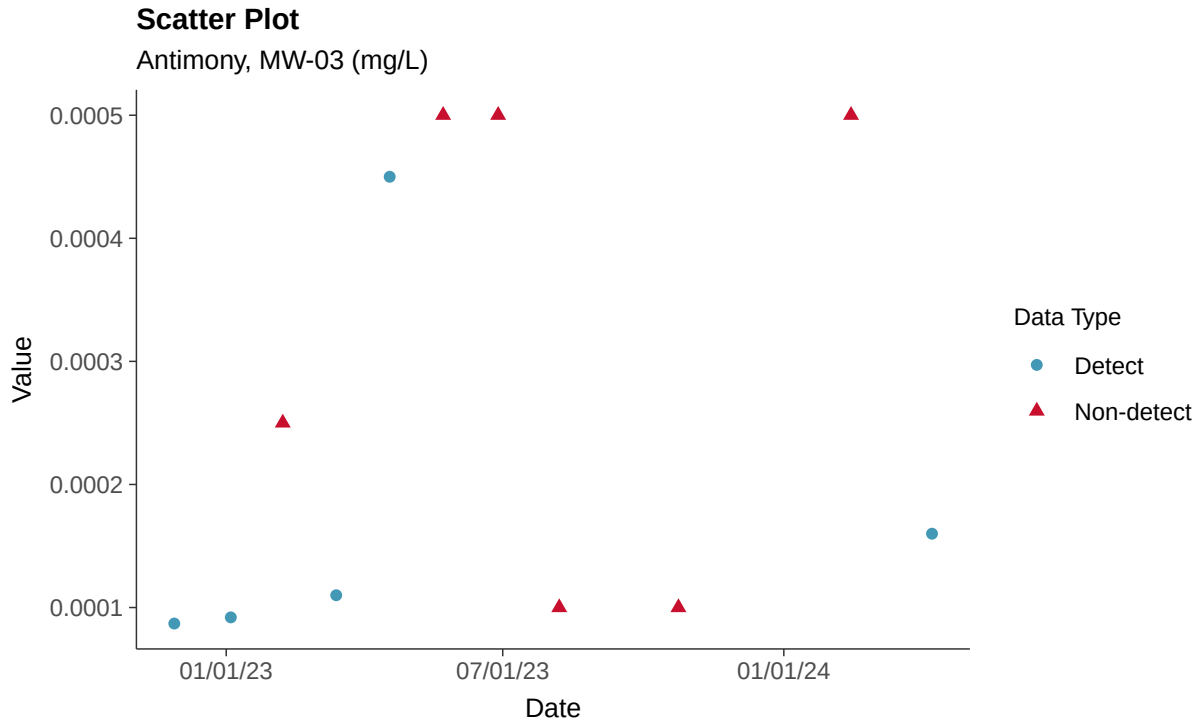
Trend Regression: Piecewise Linear-Linear-Linear

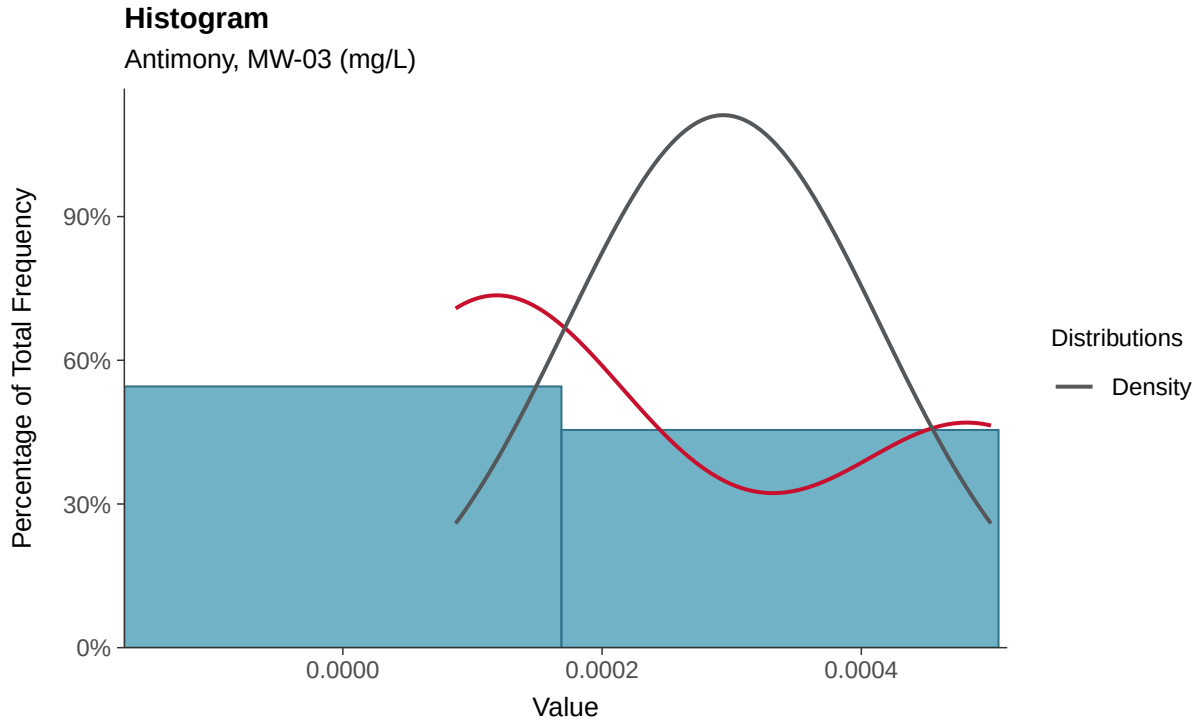
Total Dissolved Solids, MW-03 (mg/L)



Appendix IV: Antimony, MW-03

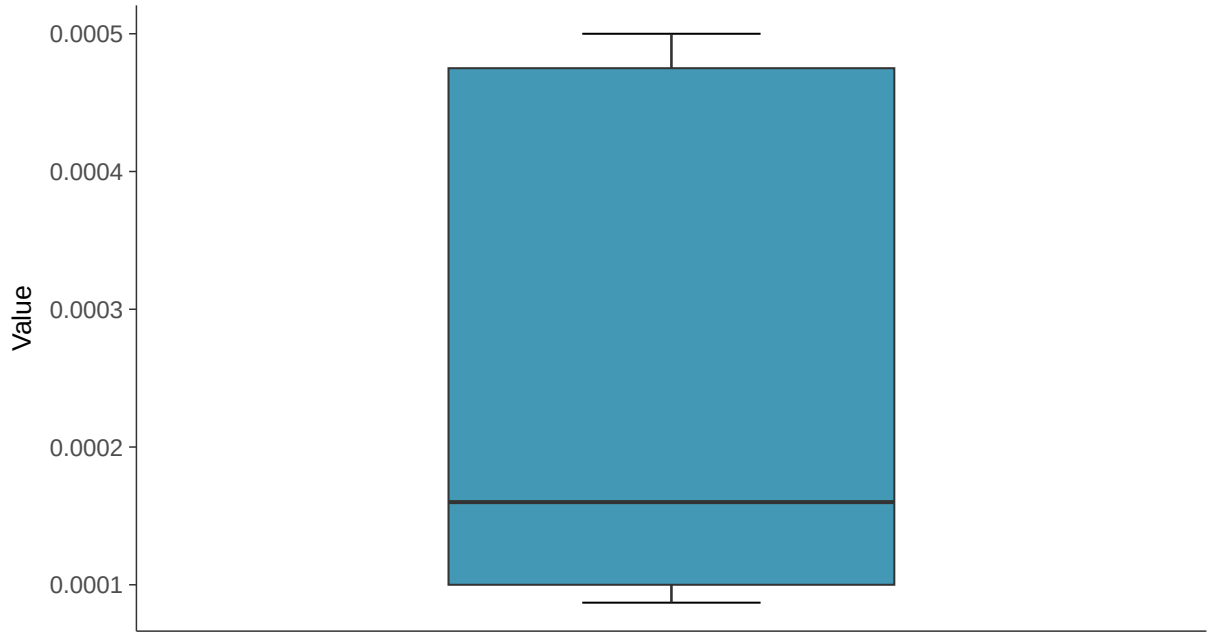
ID: 2_13_5_101





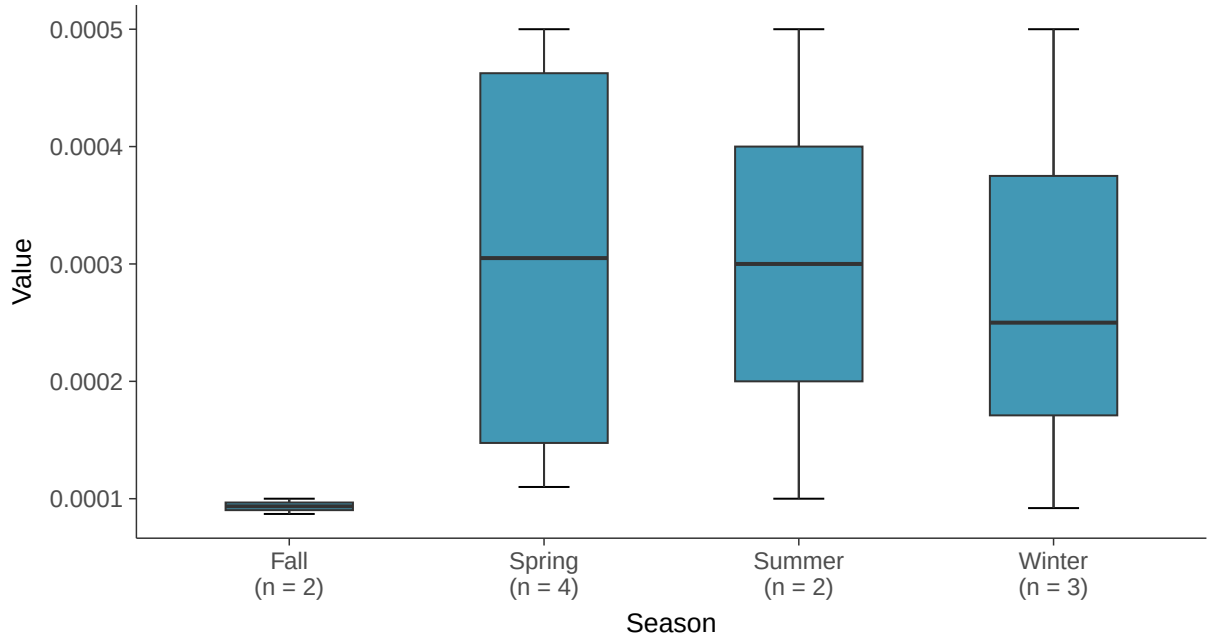
Boxplot

Antimony, MW-03 (mg/L)



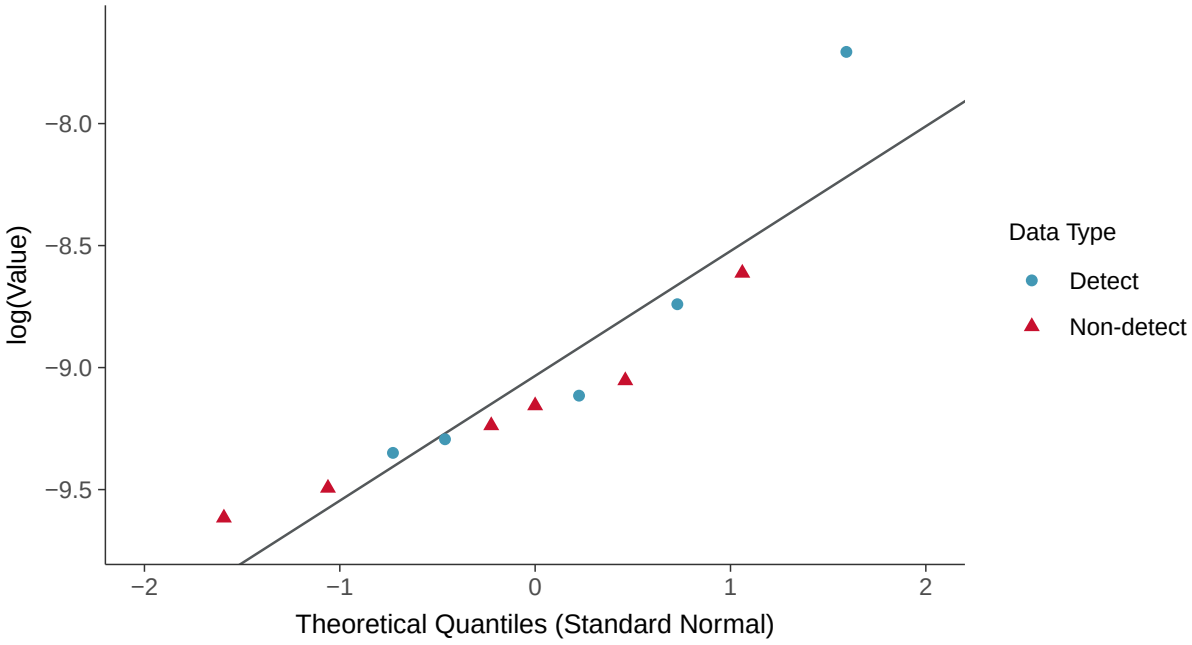
Boxplot by Season

Antimony, MW-03 (mg/L)



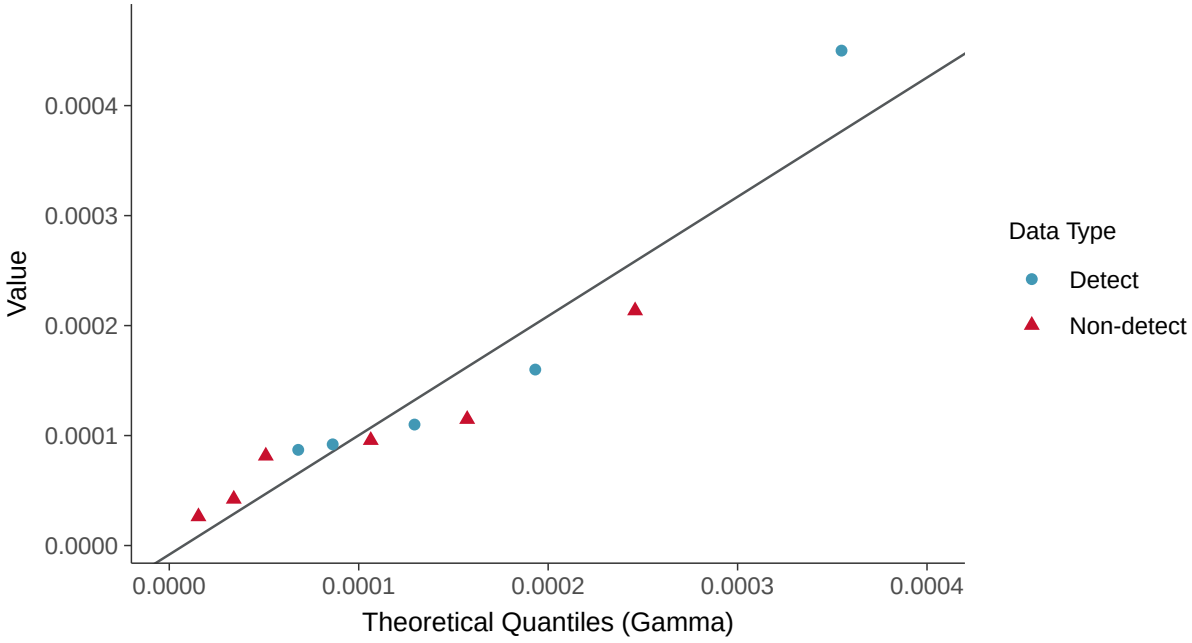
Lognormal Q-Q plot using ROS Imputed Estimates

Antimony, MW-03 (mg/L)



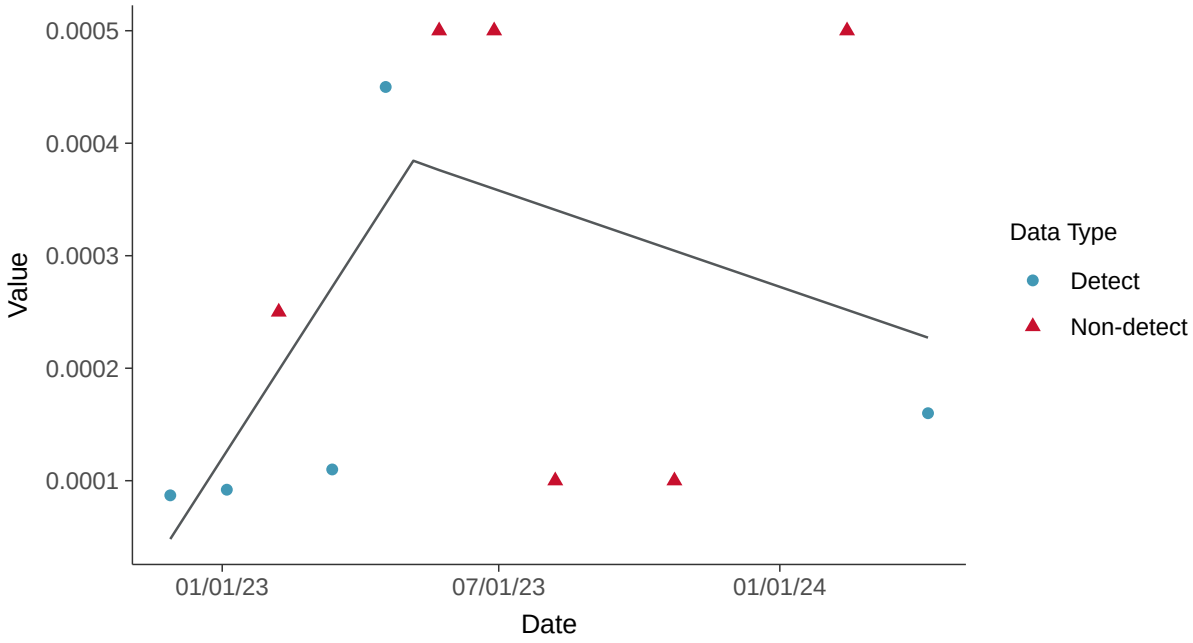
Gamma Q-Q plot using ROS Imputed Estimates

Antimony, MW-03 (mg/L)



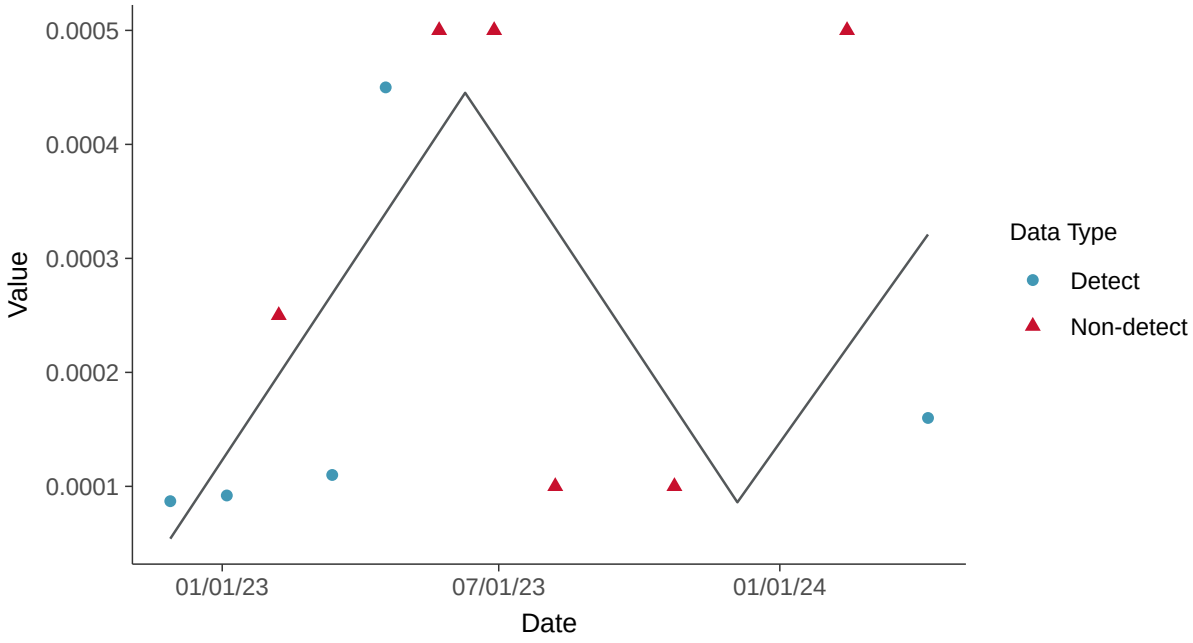
Trend Regression: Piecewise Linear-Linear

Antimony, MW-03 (mg/L)



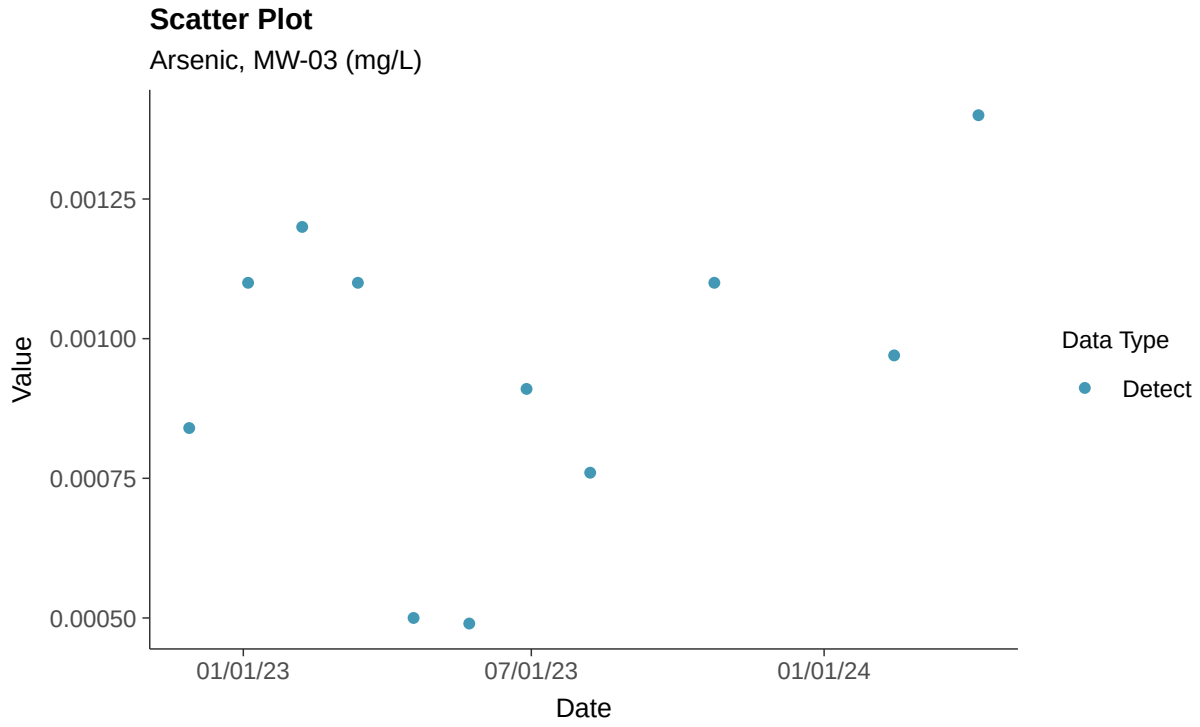
Trend Regression: Piecewise Linear-Linear-Linear

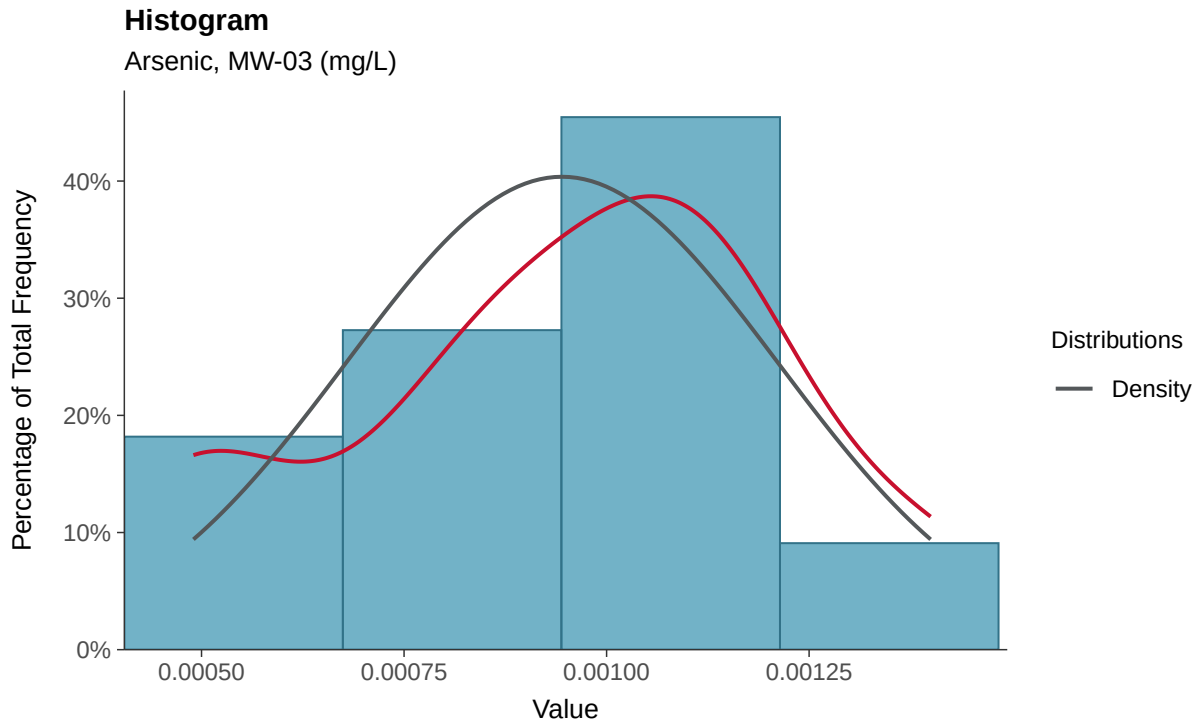
Antimony, MW-03 (mg/L)



Appendix IV: Arsenic, MW-03

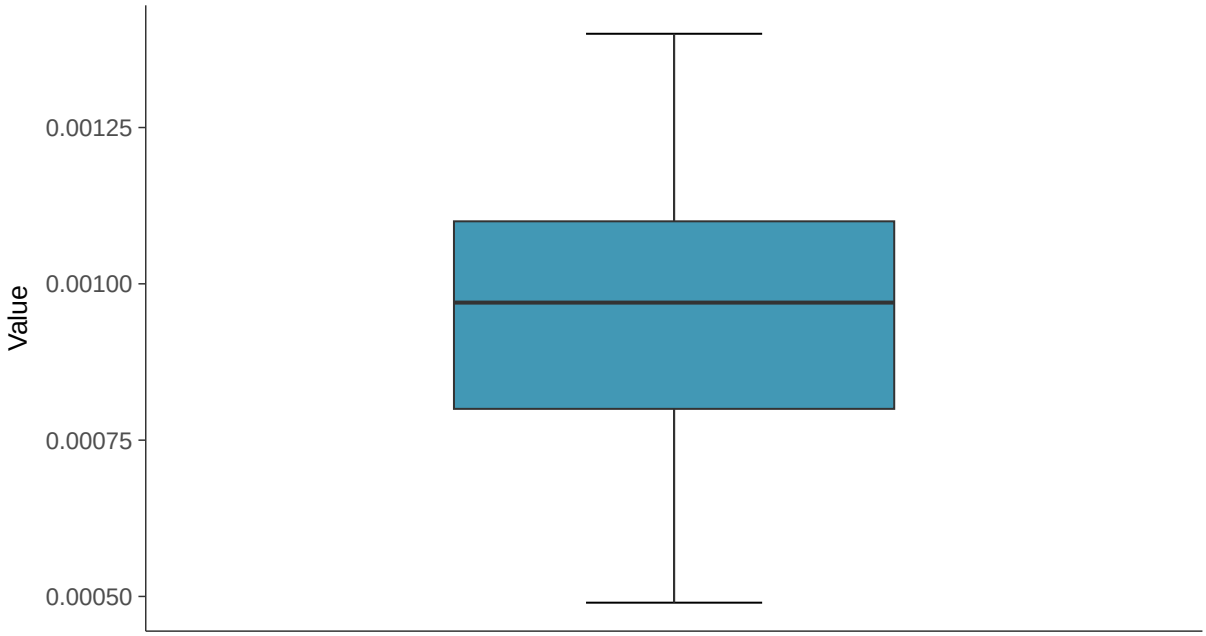
ID: 2_13_5_102





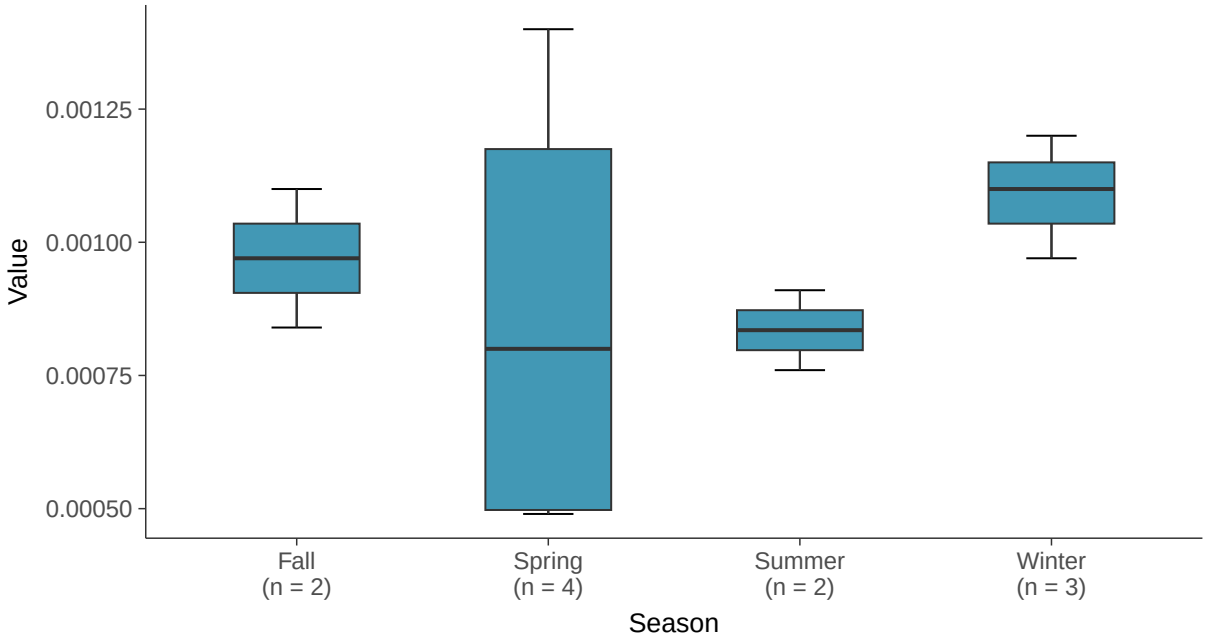
Boxplot

Arsenic, MW-03 (mg/L)



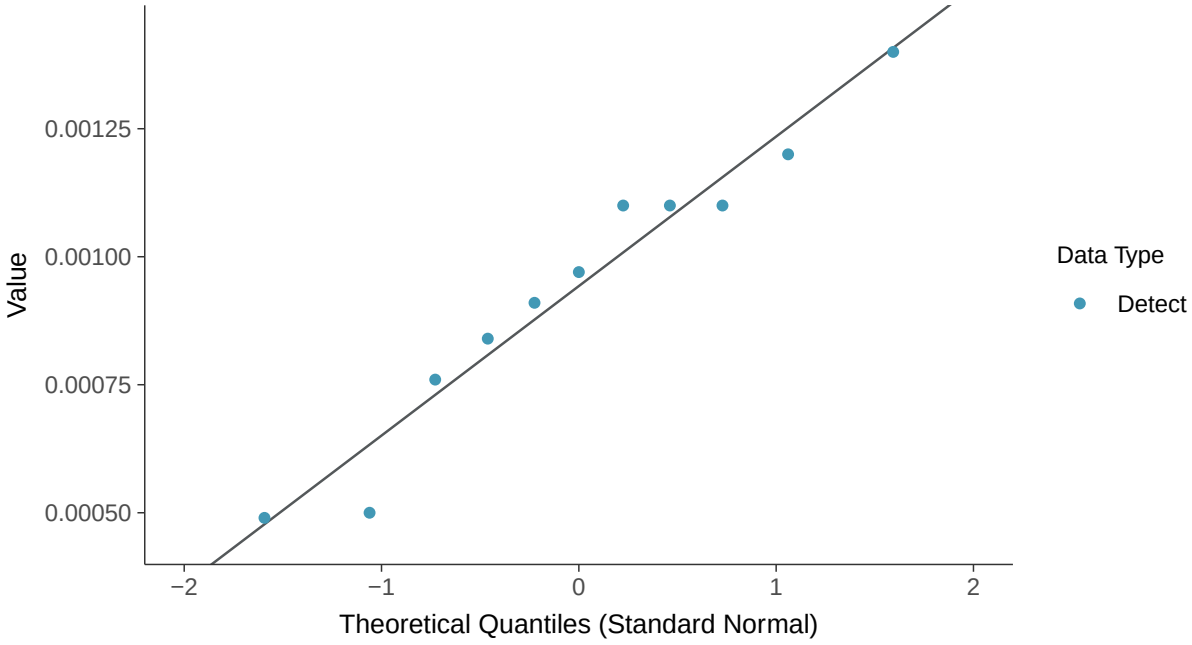
Boxplot by Season

Arsenic, MW-03 (mg/L)



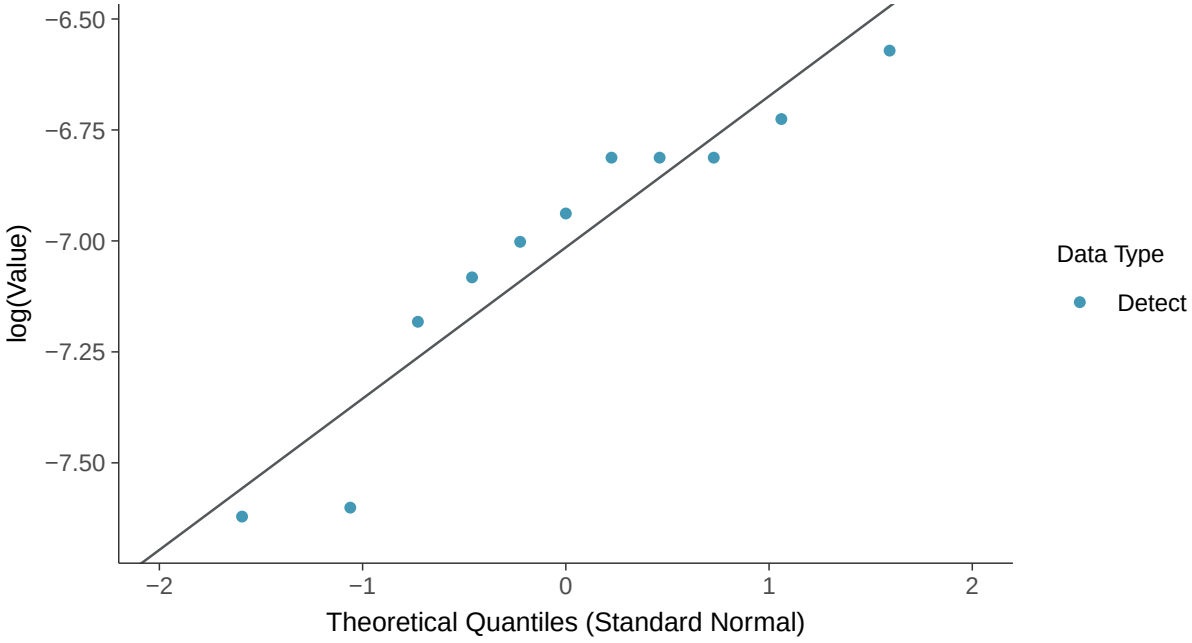
Normal Q-Q plot

Arsenic, MW-03 (mg/L)



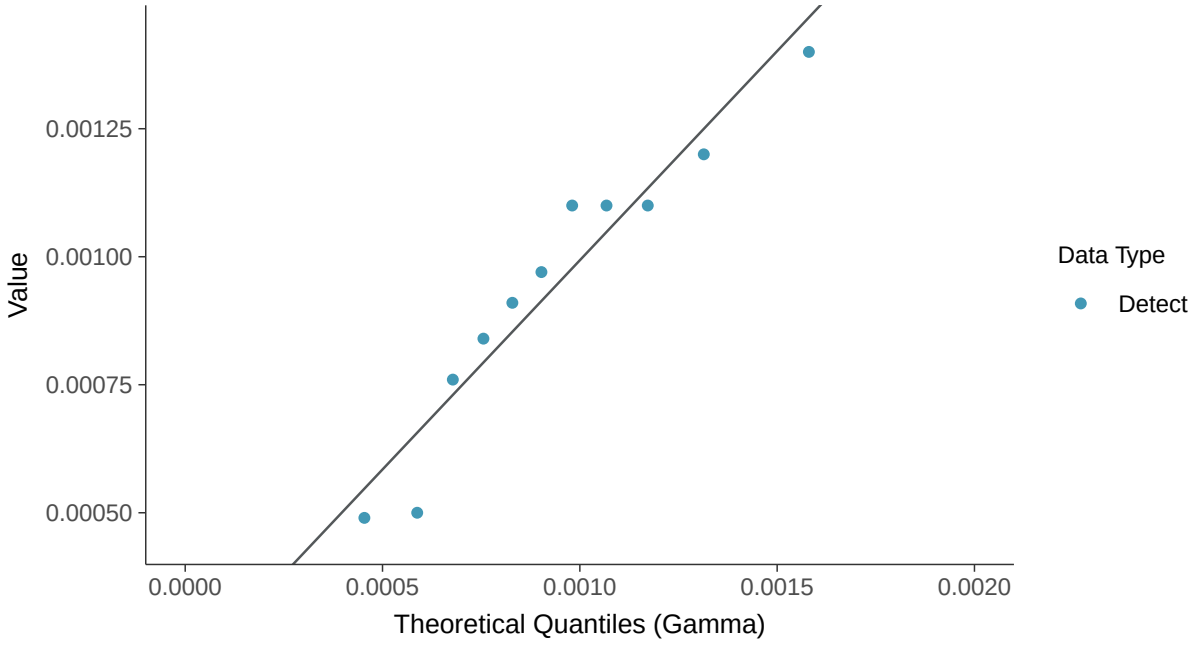
Lognormal Q-Q plot

Arsenic, MW-03 (mg/L)



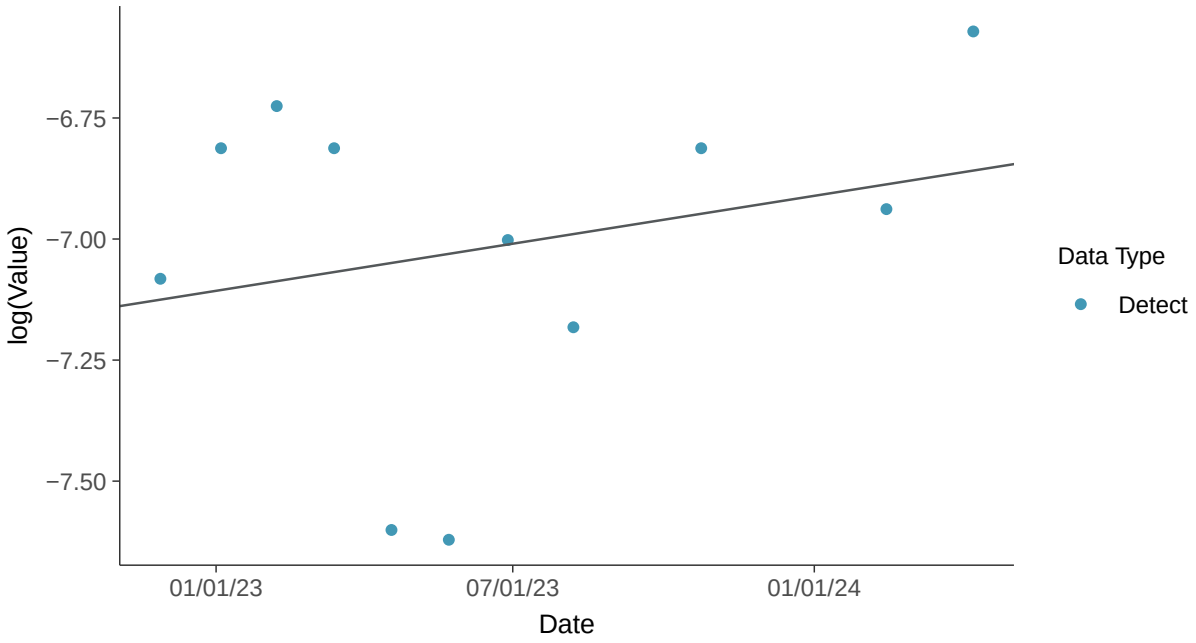
Gamma Q-Q plot

Arsenic, MW-03 (mg/L)



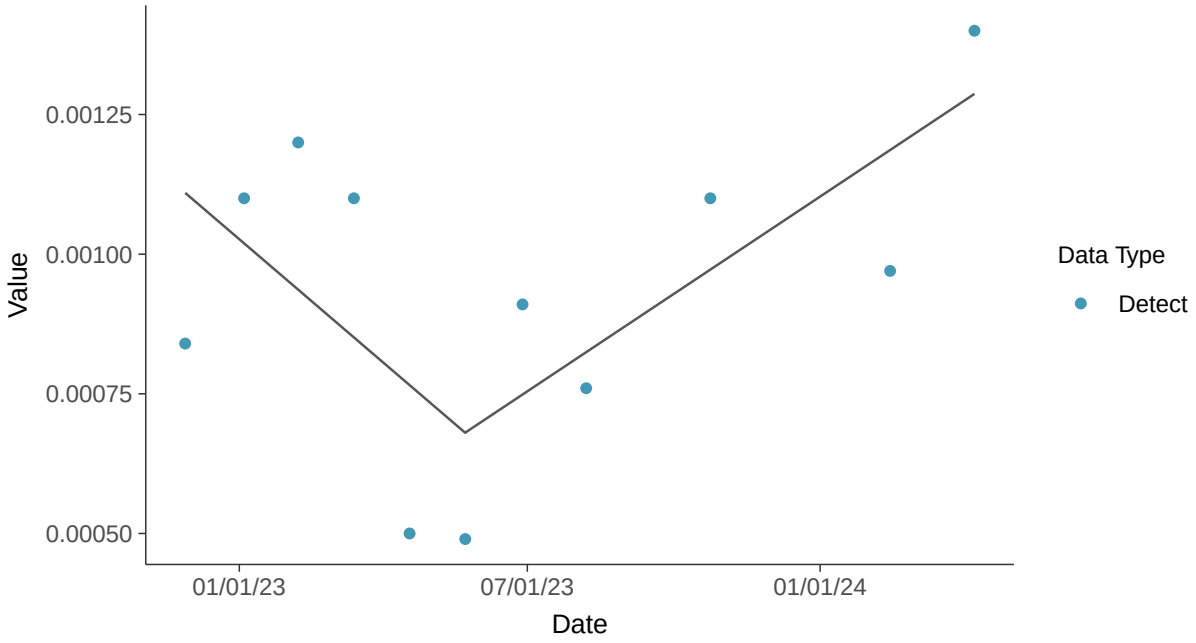
Trend Regression: Lognormal MLE

Arsenic, MW-03 (mg/L)



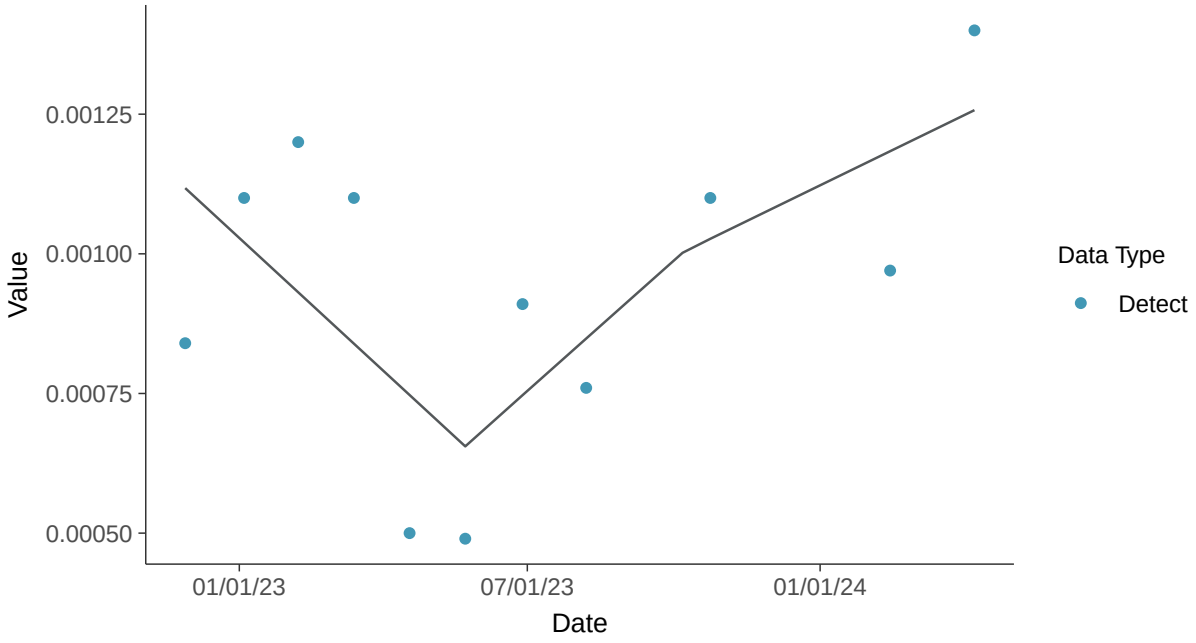
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-03 (mg/L)



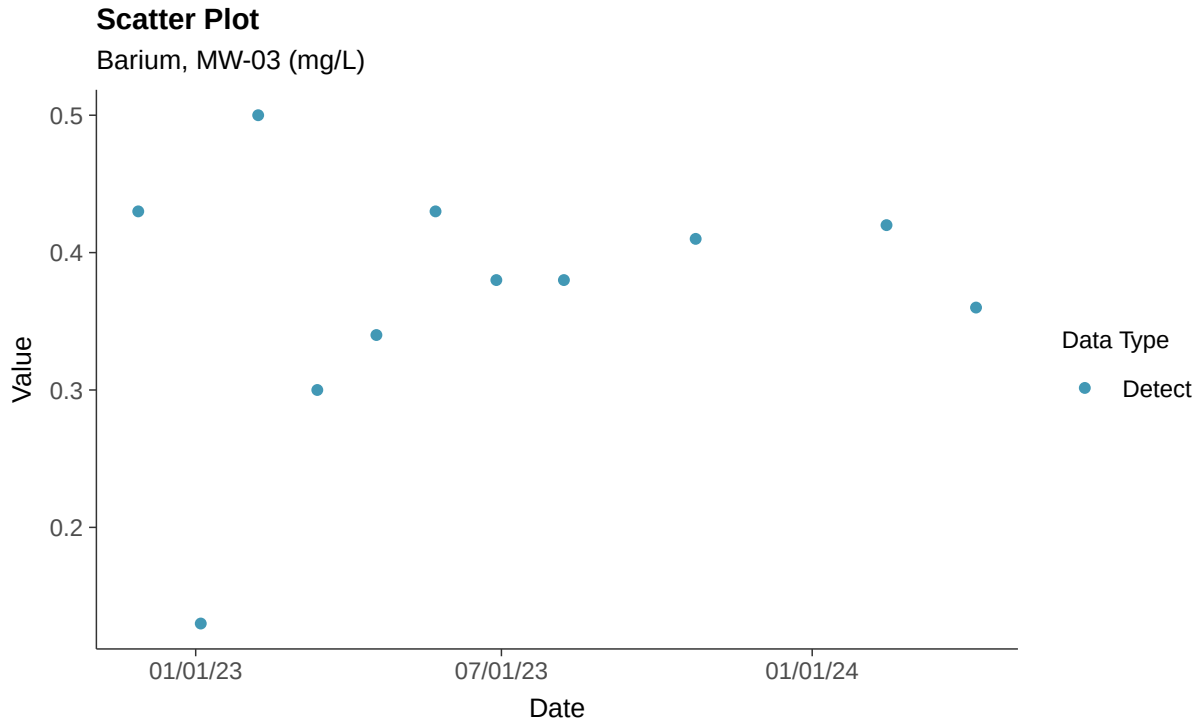
Trend Regression: Piecewise Linear-Linear-Linear

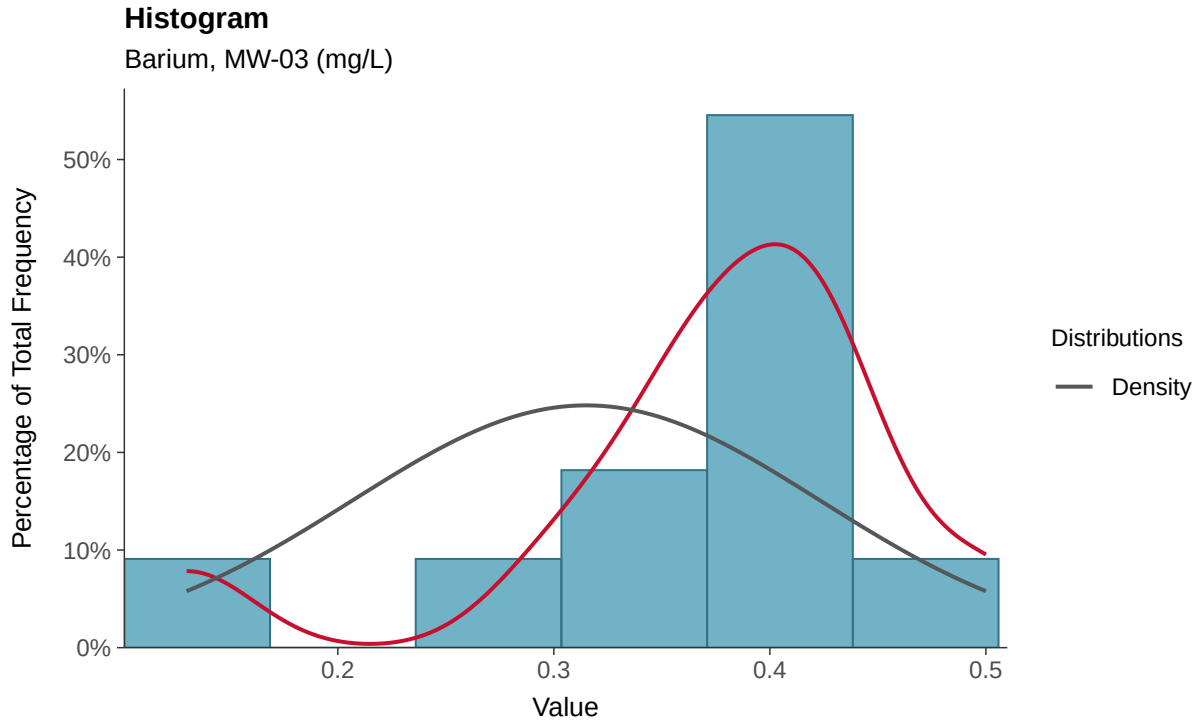
Arsenic, MW-03 (mg/L)



Appendix IV: Barium, MW-03

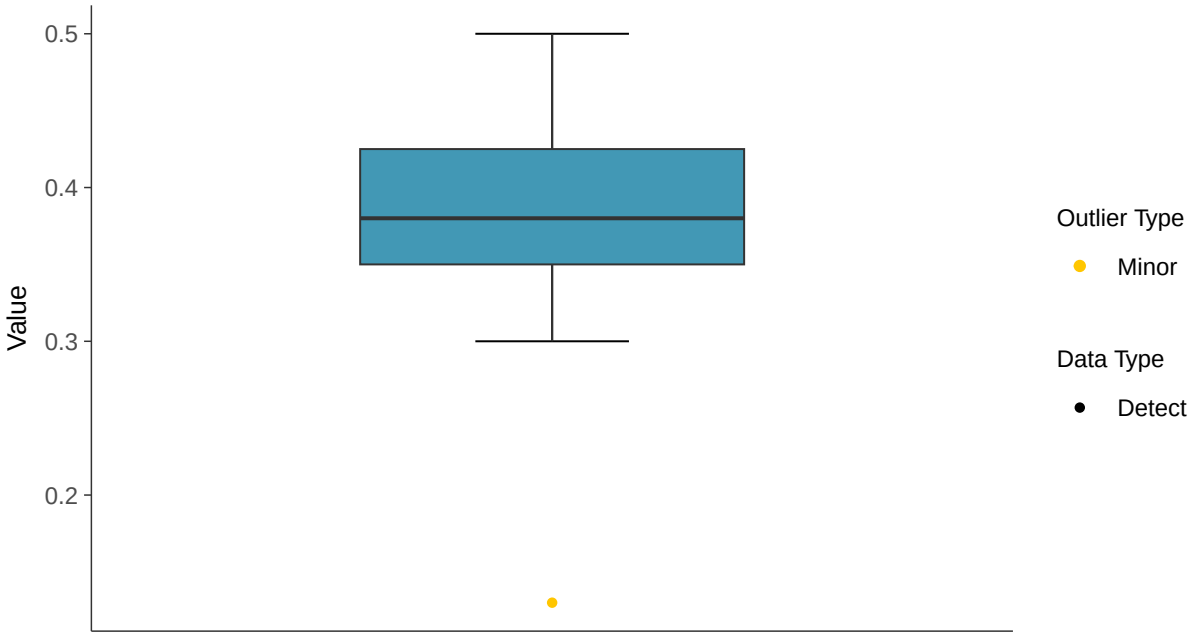
ID: 2_13_5_103





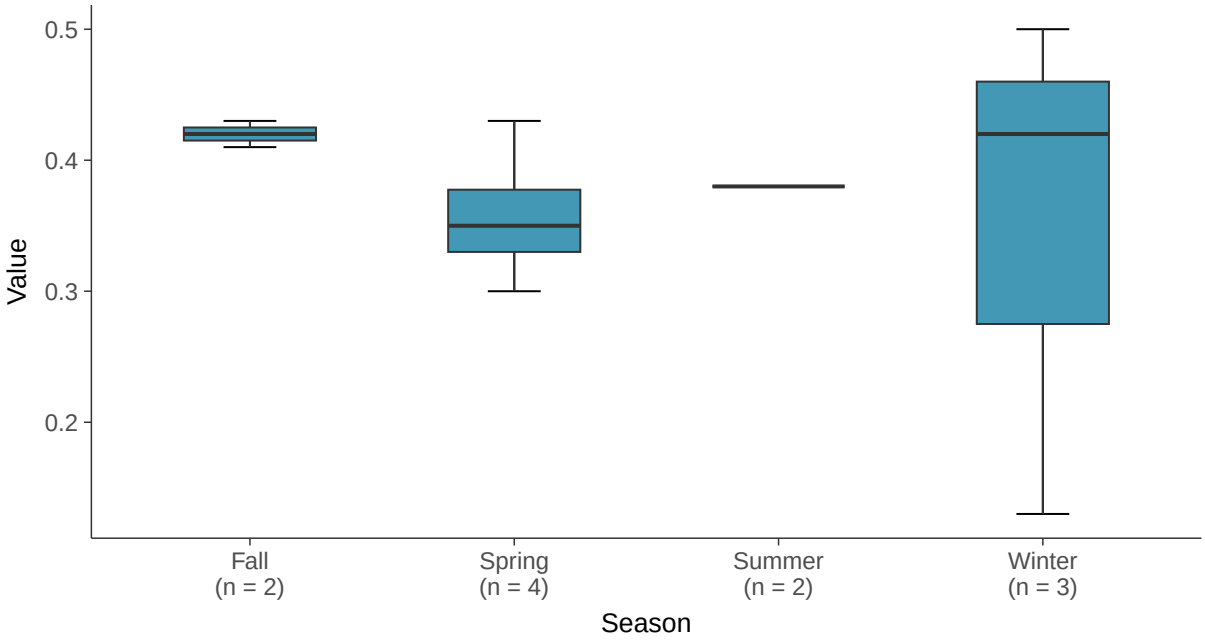
Boxplot

Barium, MW-03 (mg/L)



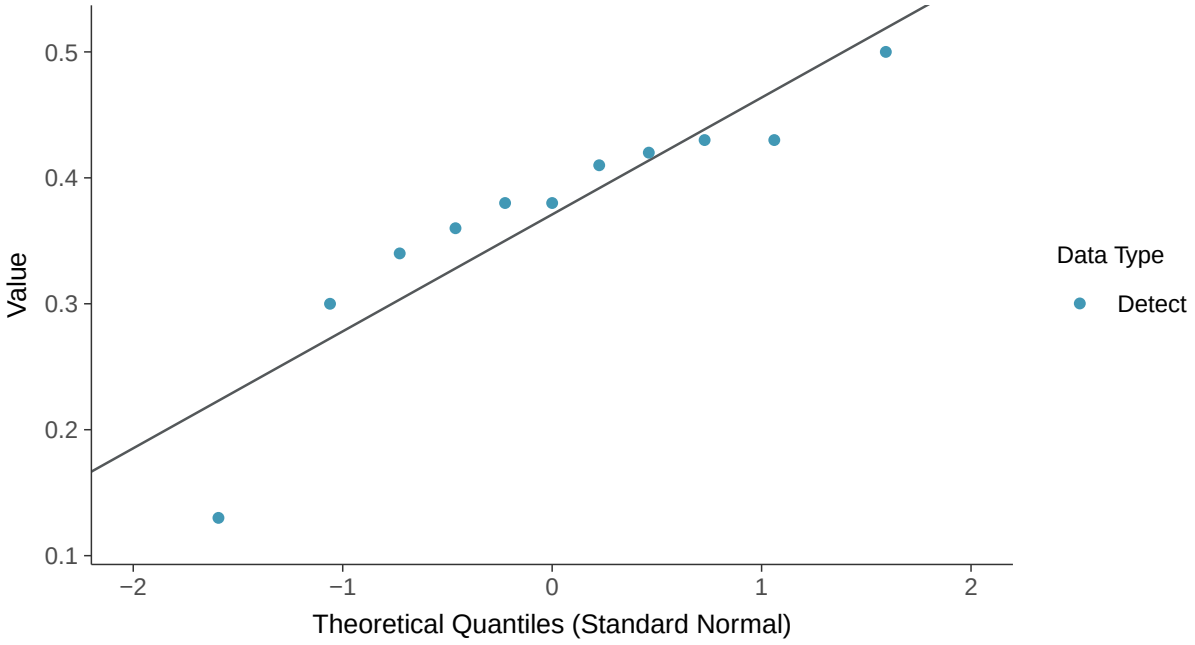
Boxplot by Season

Barium, MW-03 (mg/L)



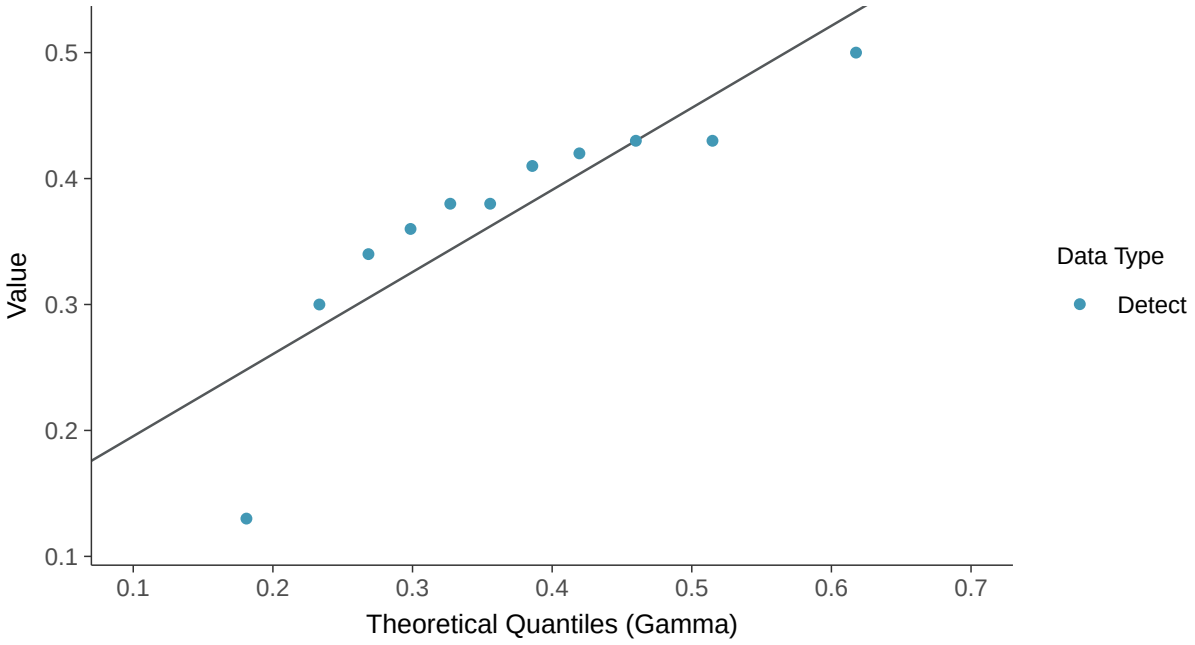
Normal Q-Q plot

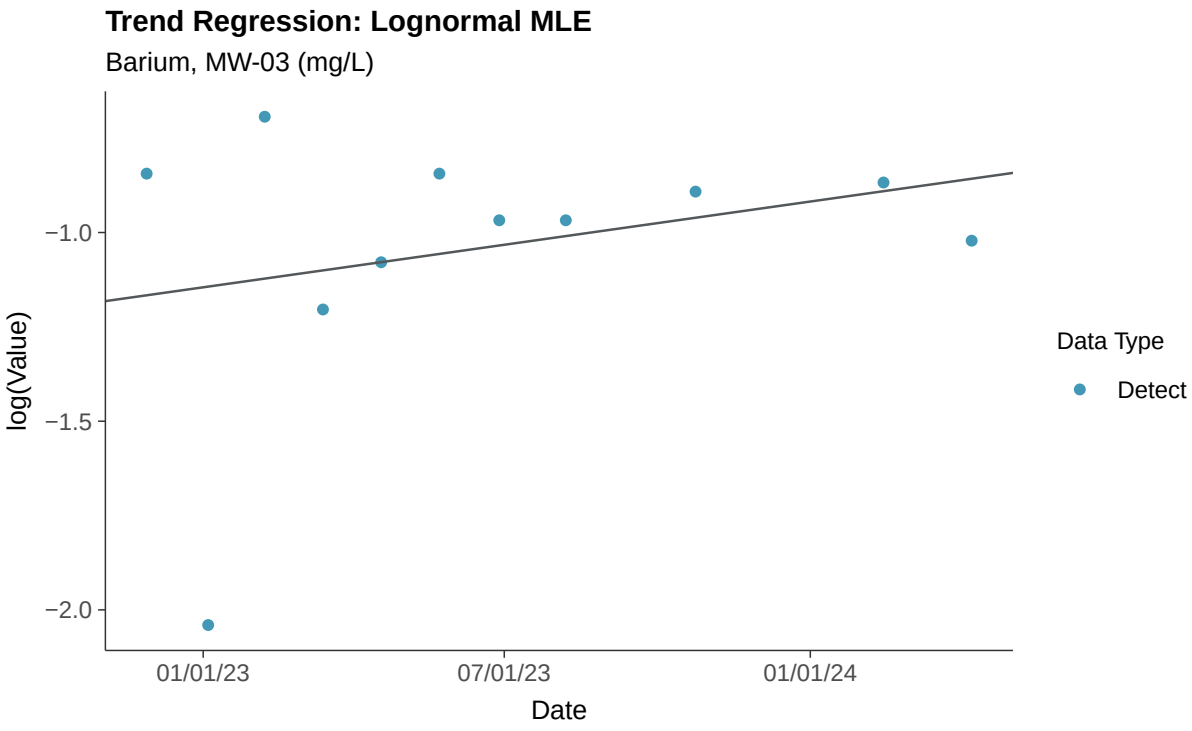
Barium, MW-03 (mg/L)



Gamma Q-Q plot

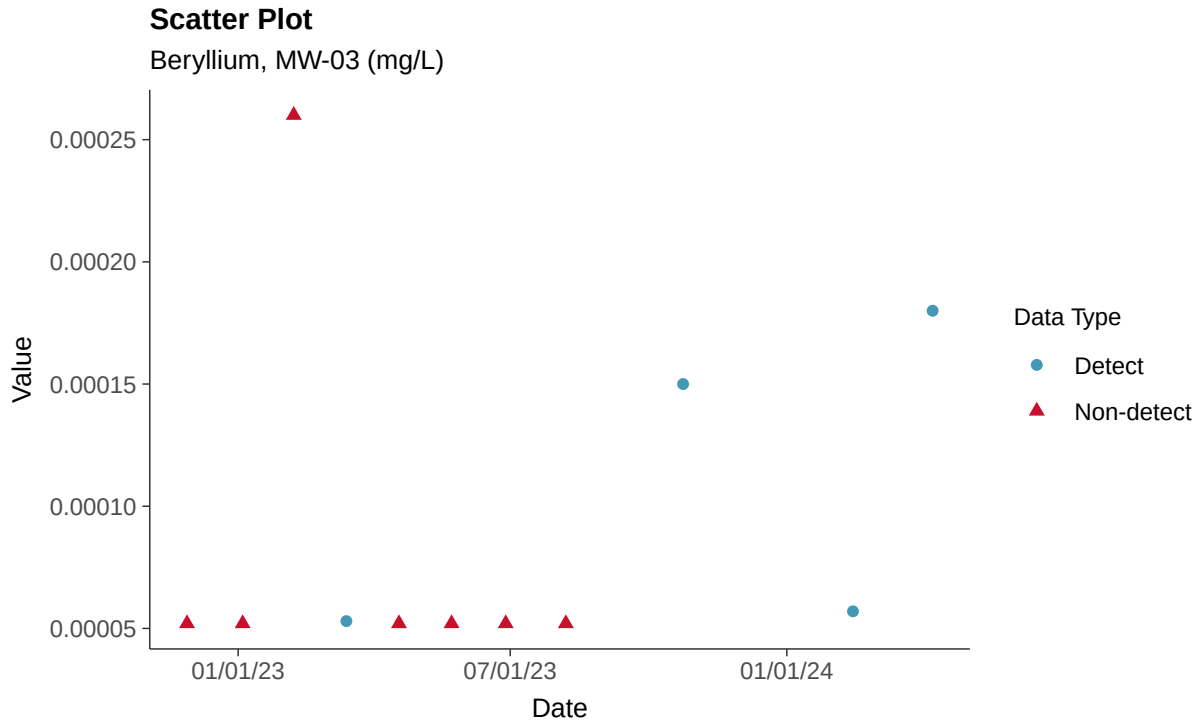
Barium, MW-03 (mg/L)

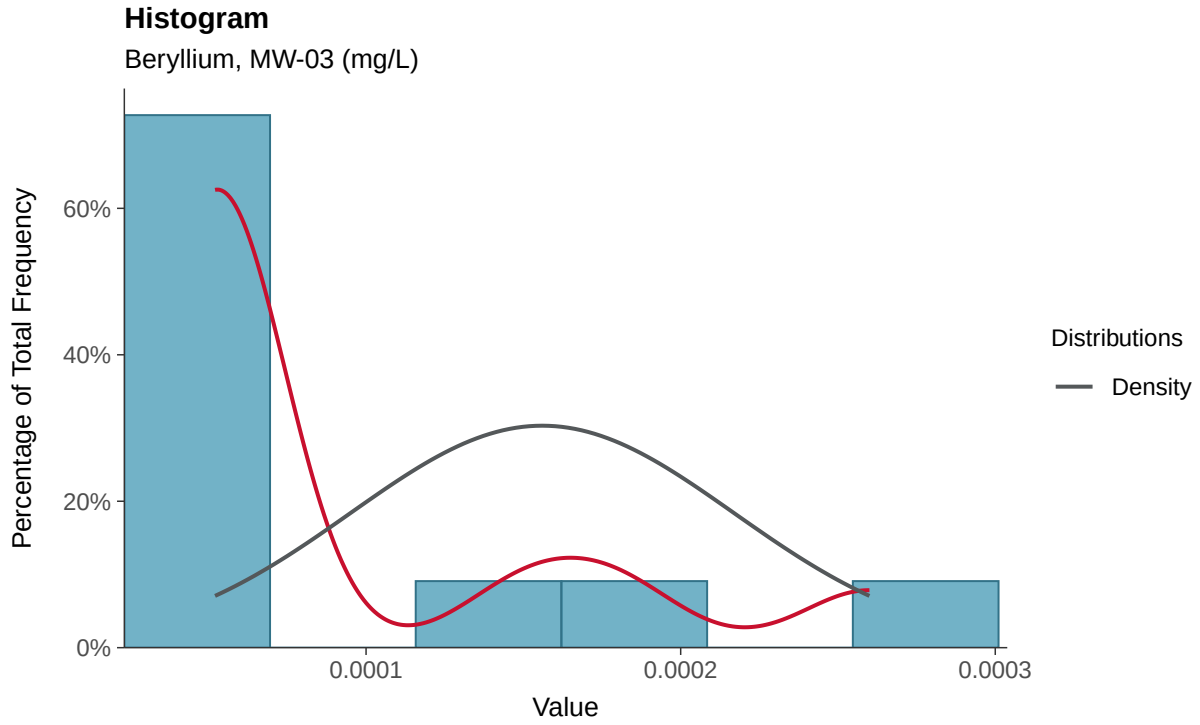



Trend Regression: Lognormal MLE
Barium, MW-03 (mg/L)
log(Value)
−1.0
−1.5
−2.0
01/01/23
07/01/23
01/01/24
Date
Data Type
Detect

Appendix IV: Beryllium, MW-03

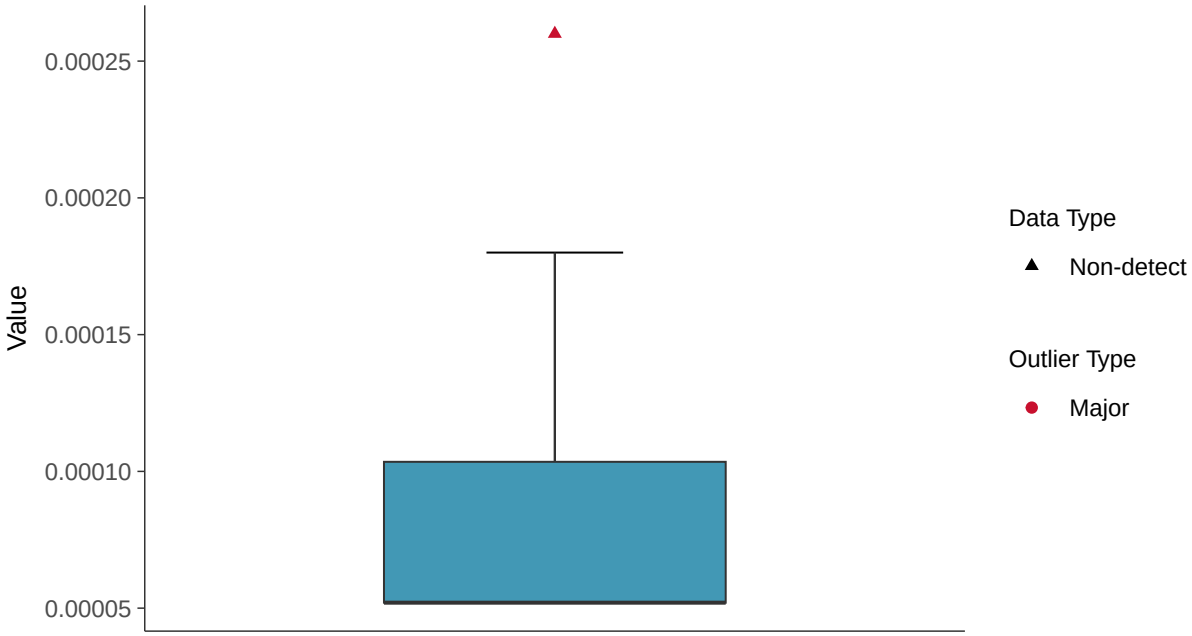
ID: 2_13_5_104





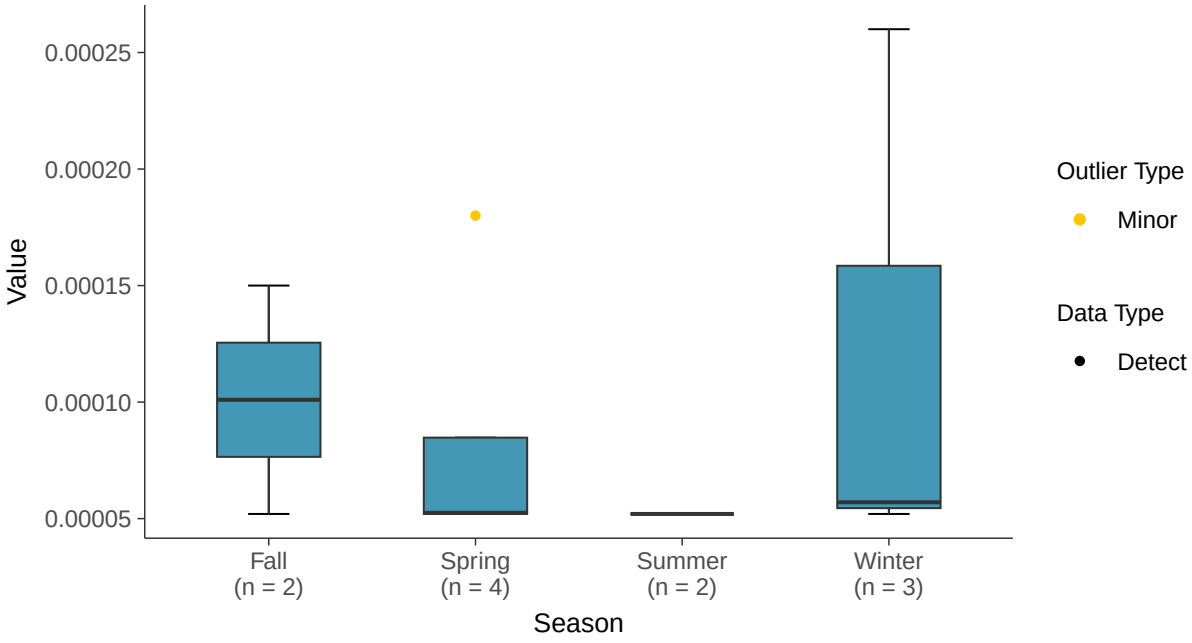
Boxplot

Beryllium, MW-03 (mg/L)



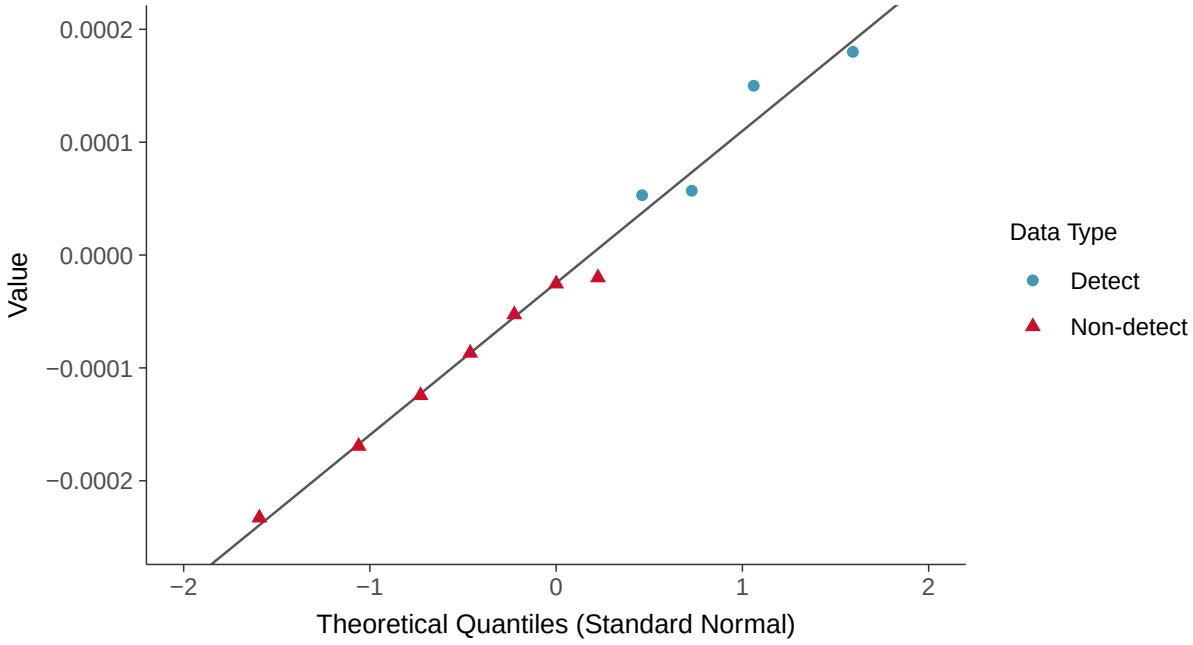
Boxplot by Season

Beryllium, MW-03 (mg/L)



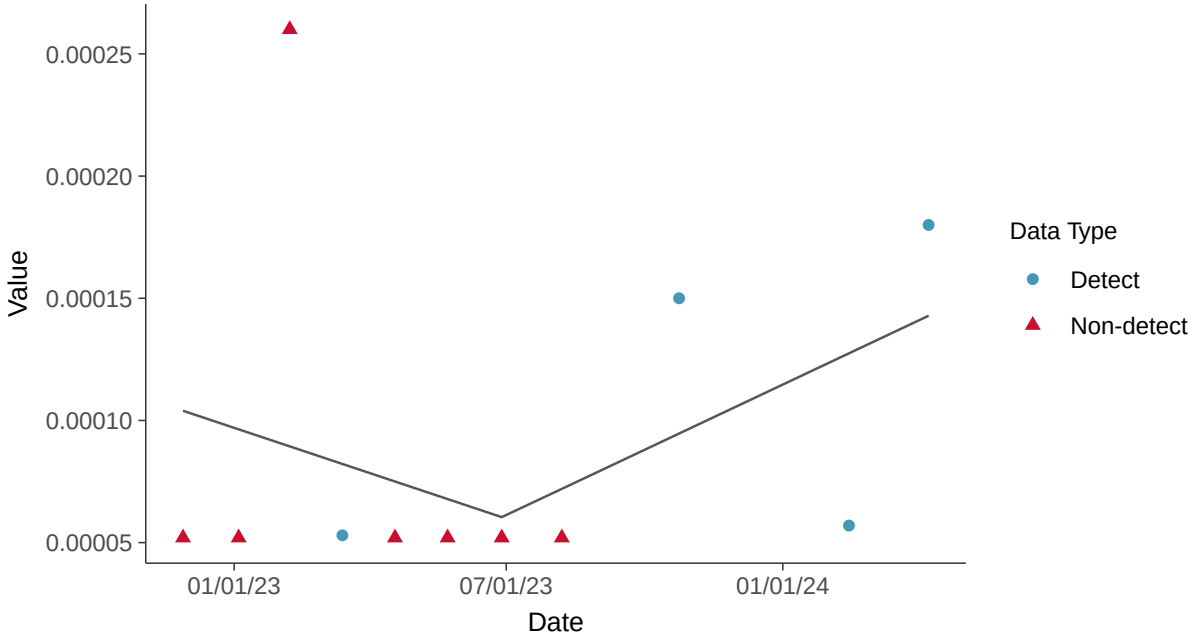
Normal Q-Q plot using ROS Imputed Estimates

Beryllium, MW-03 (mg/L)



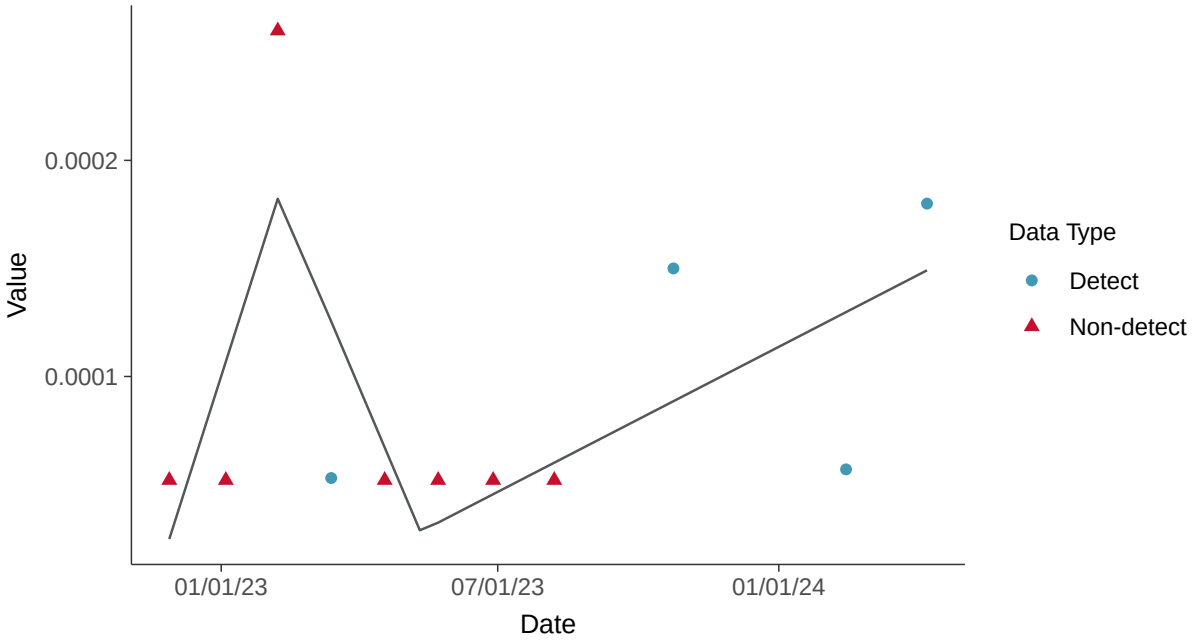
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-03 (mg/L)



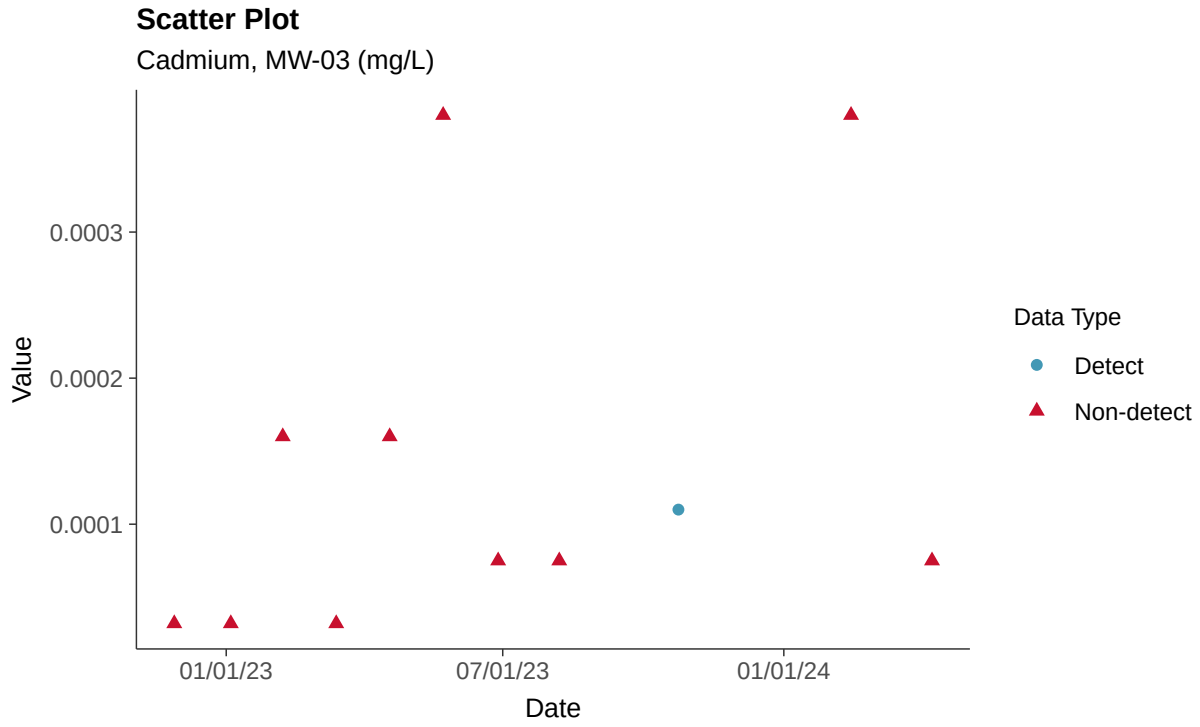
Trend Regression: Piecewise Linear-Linear-Linear

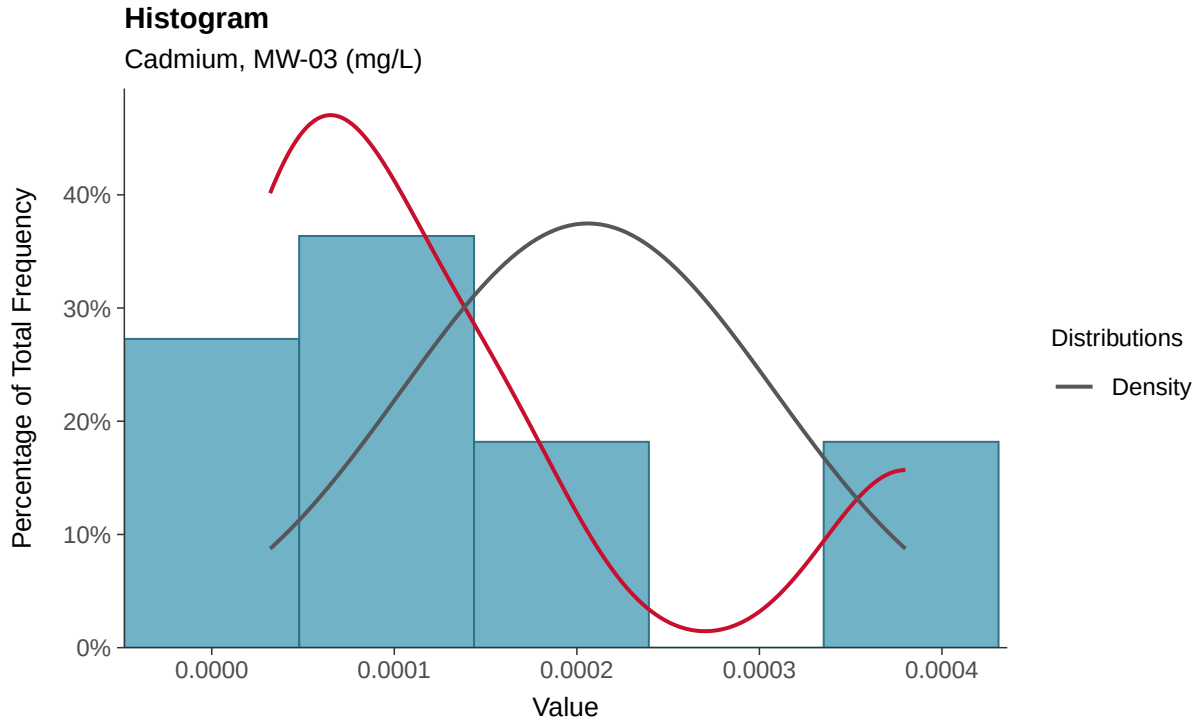
Beryllium, MW-03 (mg/L)



Appendix IV: Cadmium, MW-03

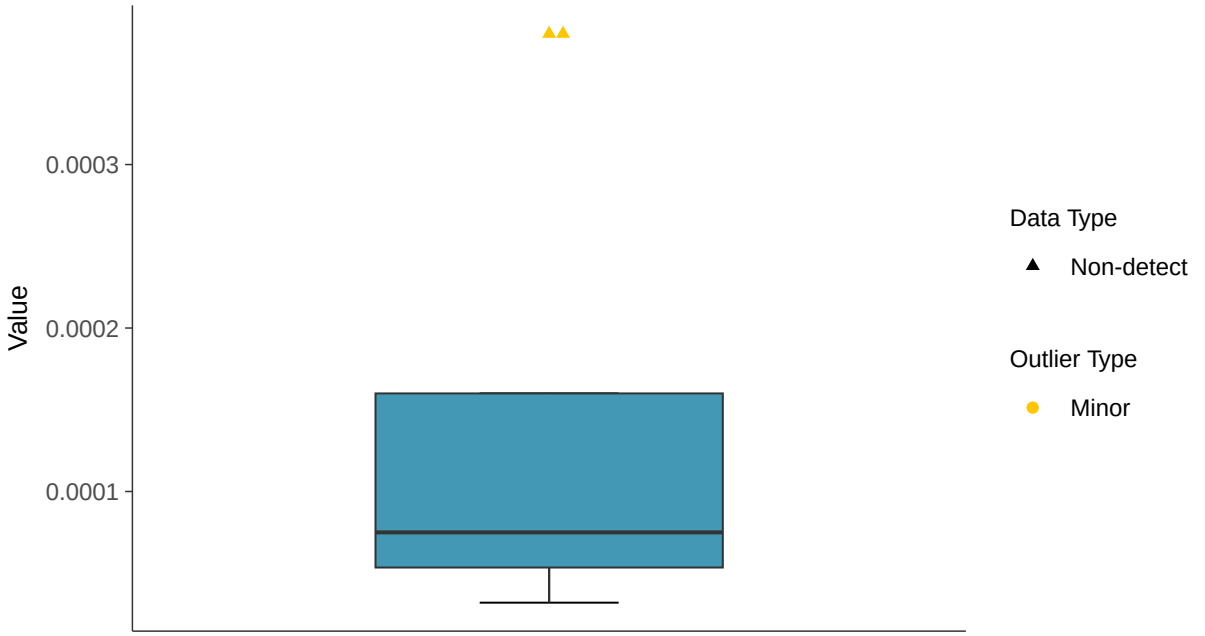
ID: 2_13_5_106





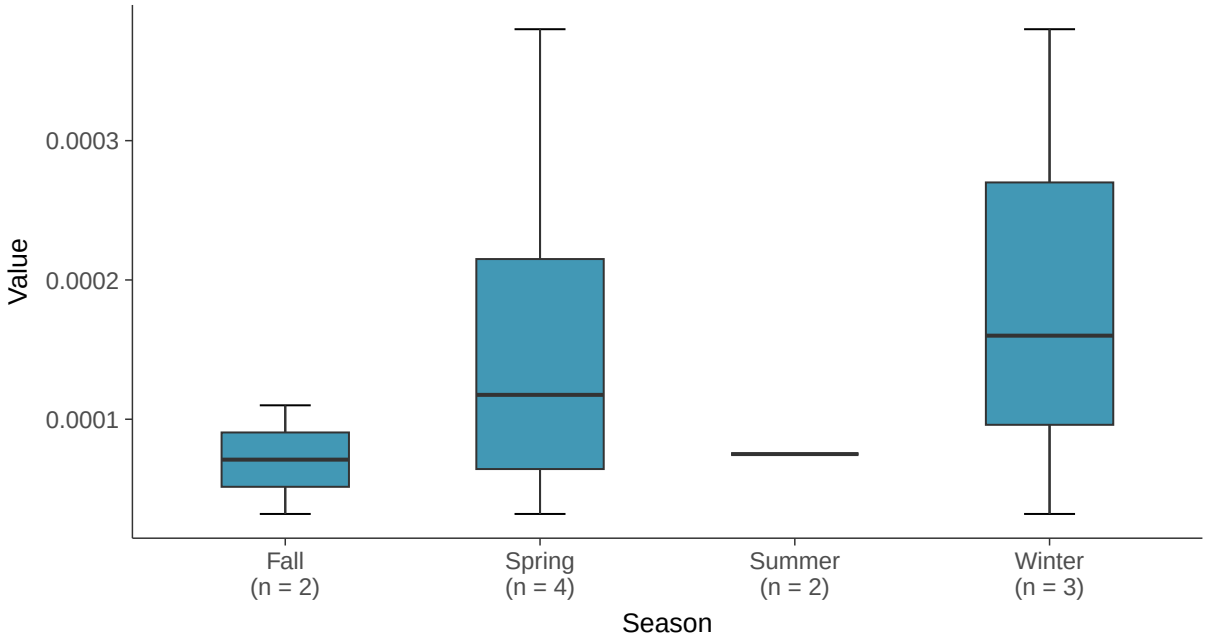
Boxplot

Cadmium, MW-03 (mg/L)



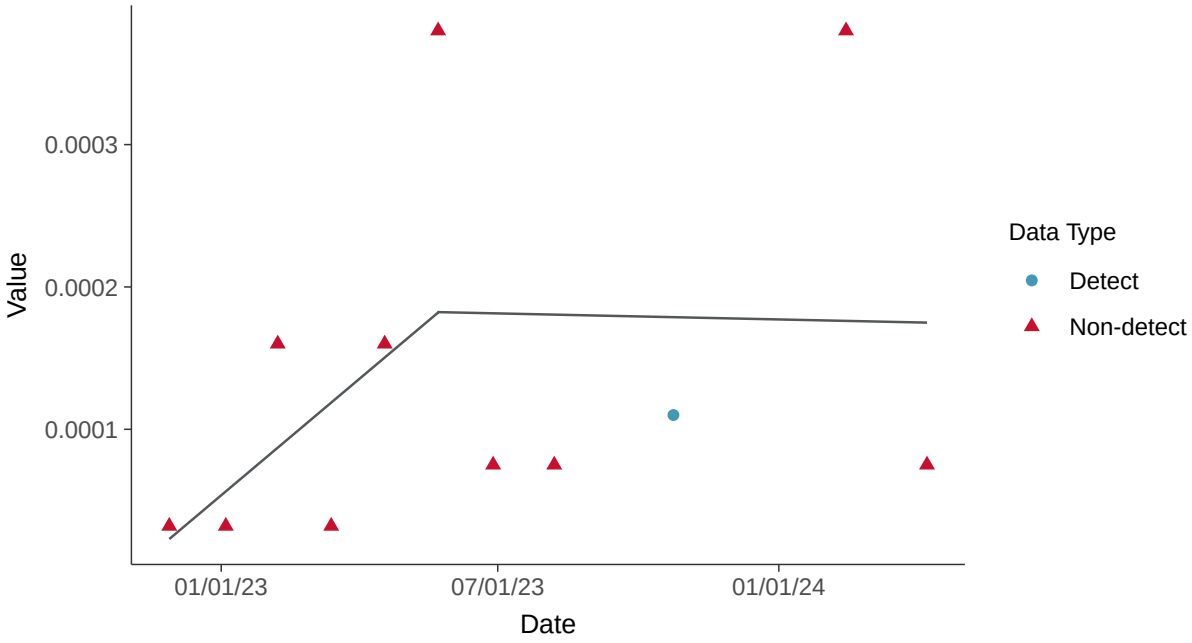
Boxplot by Season

Cadmium, MW-03 (mg/L)



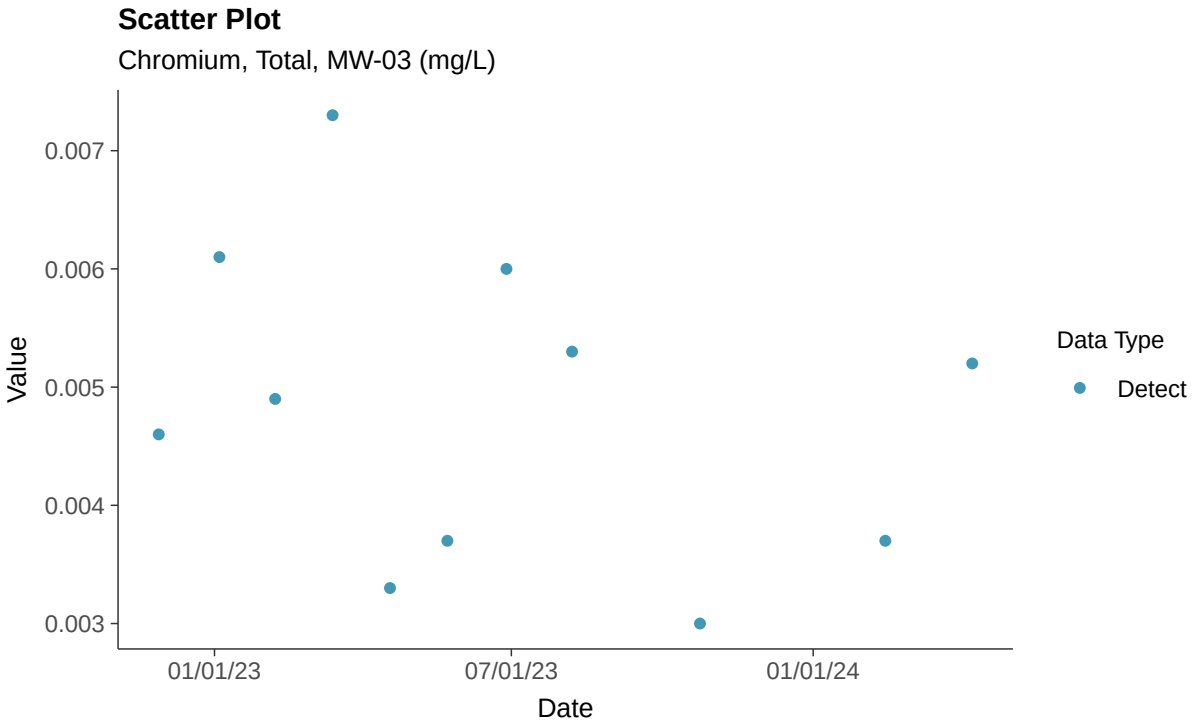
Trend Regression: Piecewise Linear-Linear

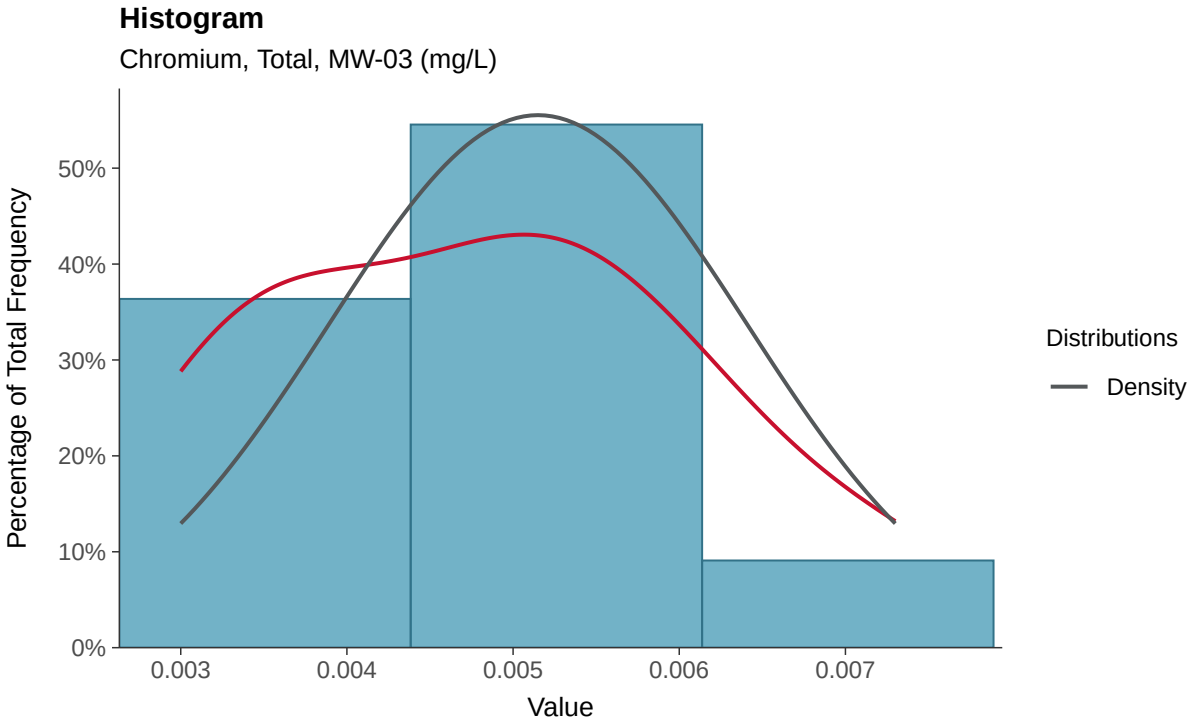
Cadmium, MW-03 (mg/L)



Appendix IV: Chromium, Total, MW-03

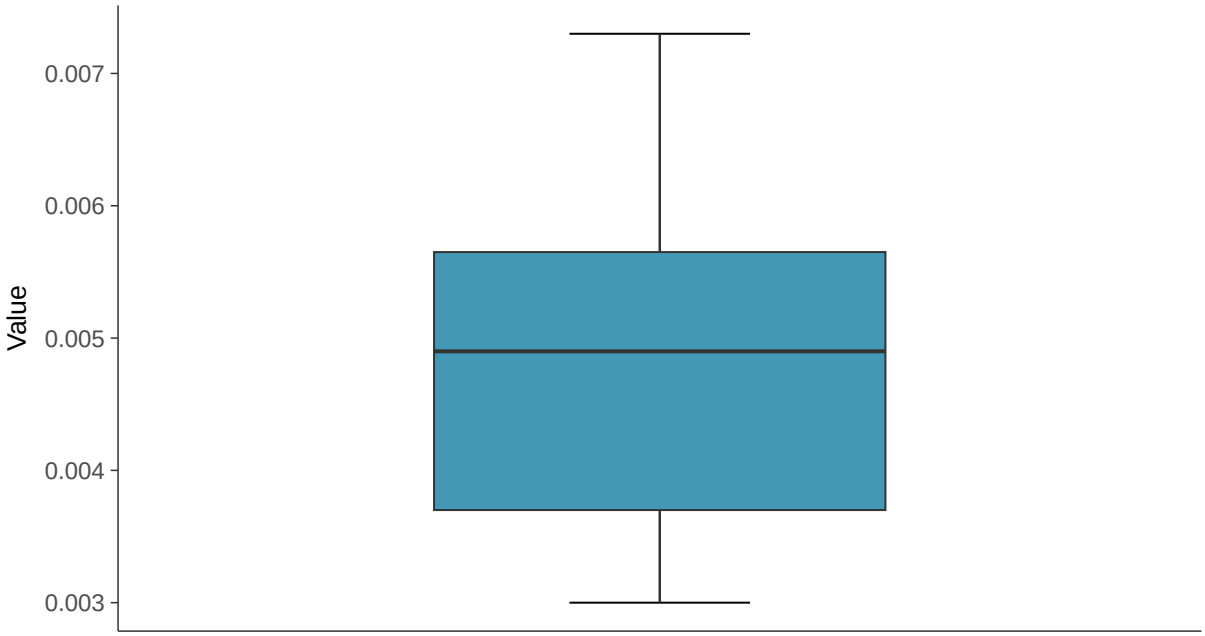
ID: 2_13_5_109





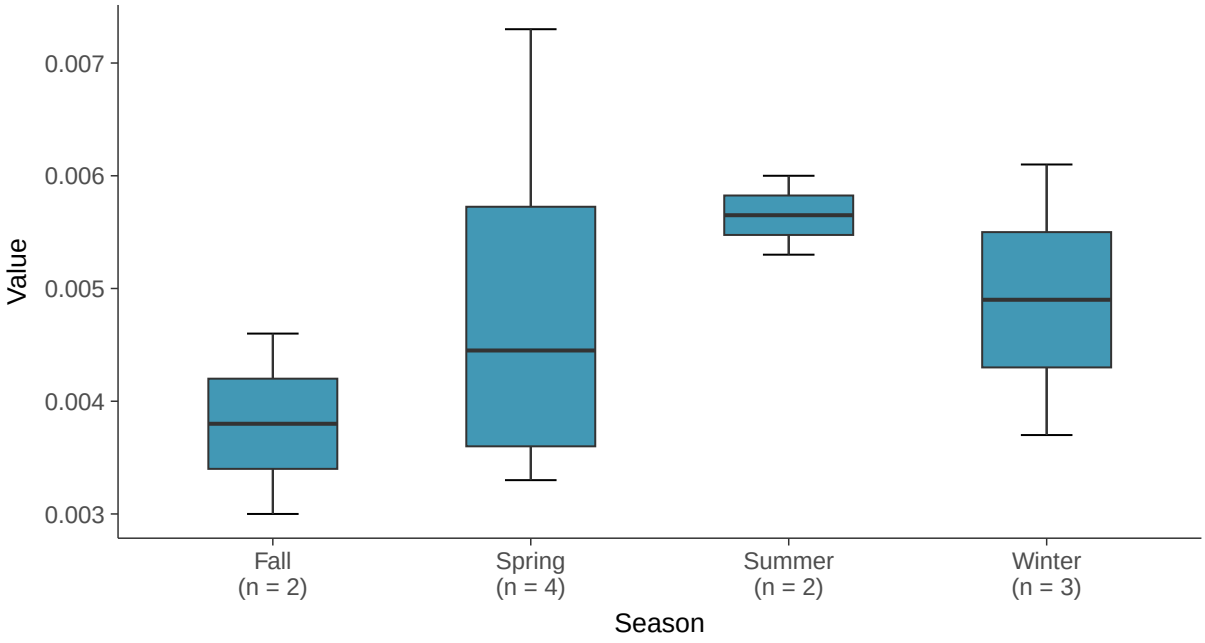
Boxplot

Chromium, Total, MW-03 (mg/L)



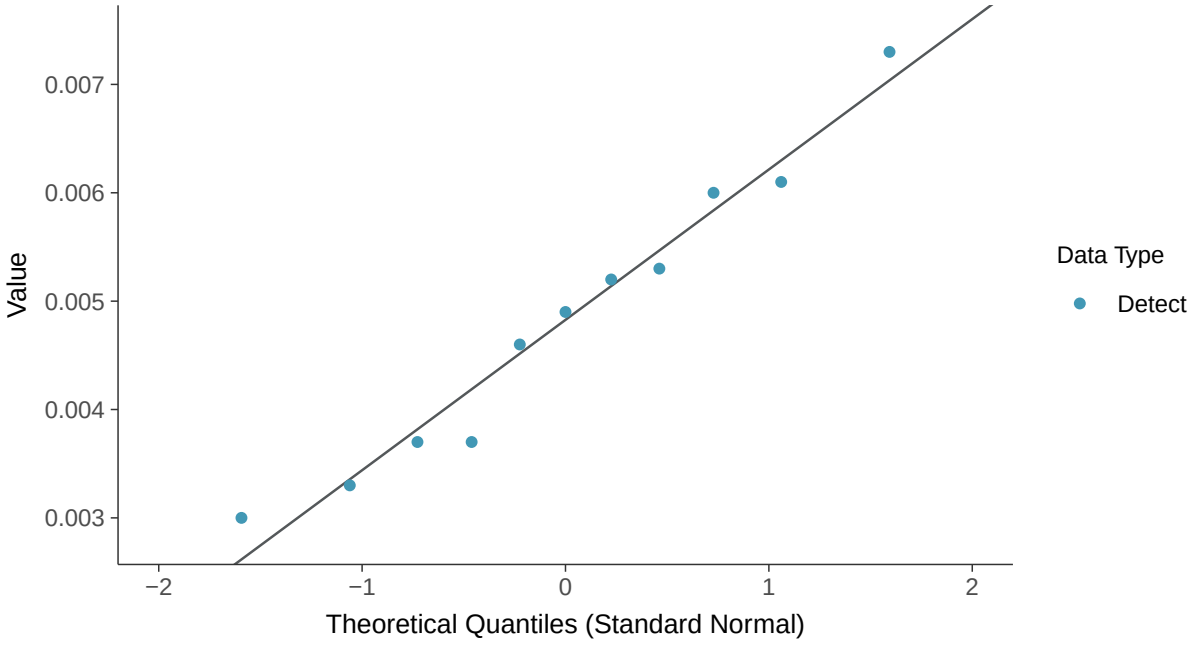
Boxplot by Season

Chromium, Total, MW-03 (mg/L)



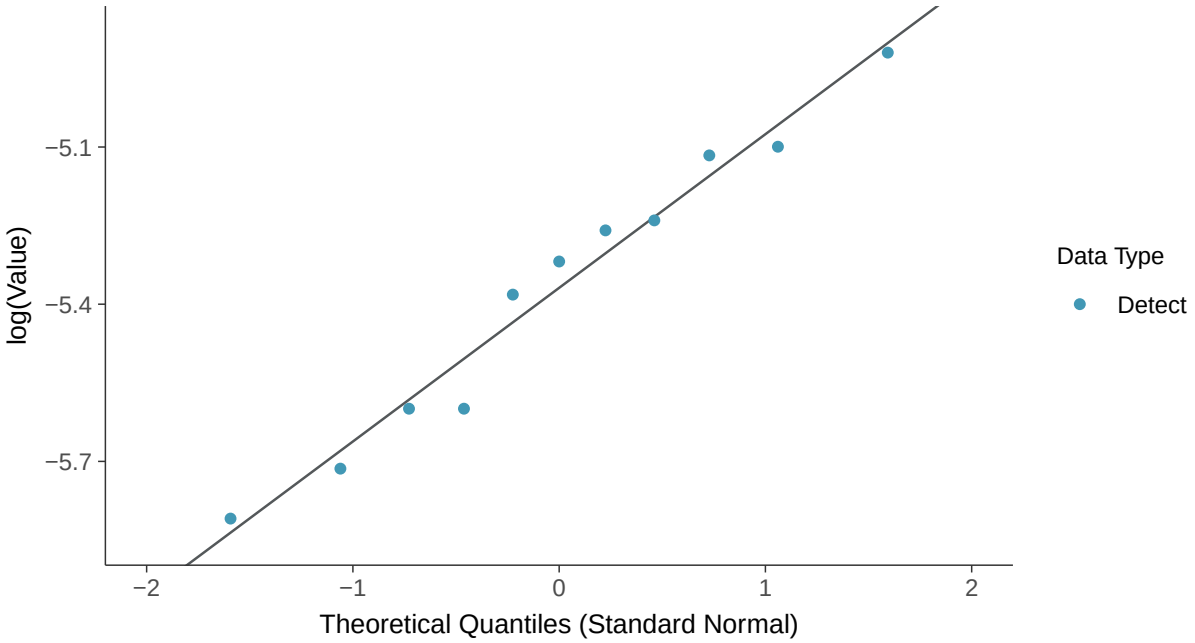
Normal Q-Q plot

Chromium, Total, MW-03 (mg/L)



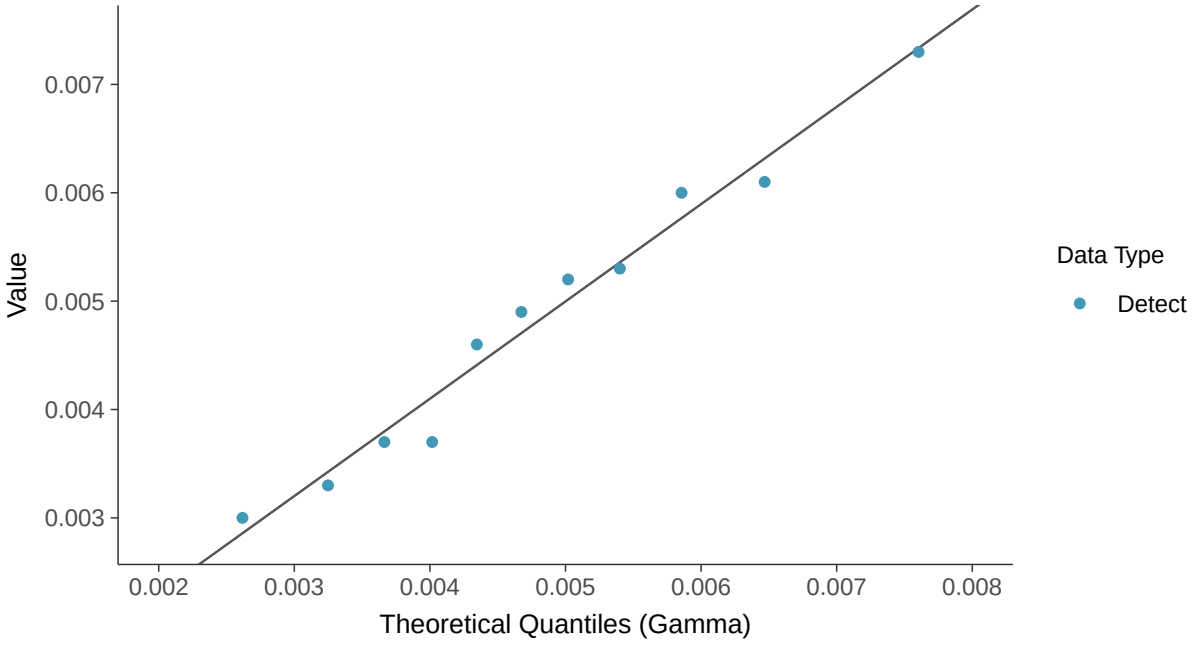
Lognormal Q-Q plot

Chromium, Total, MW-03 (mg/L)



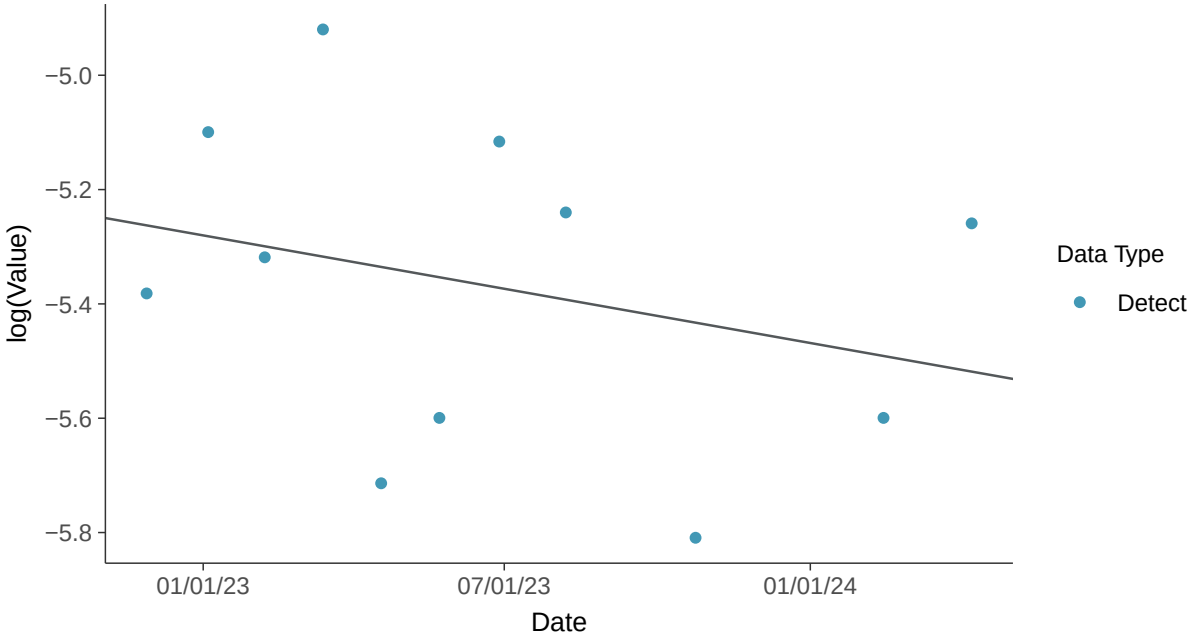
Gamma Q-Q plot

Chromium, Total, MW-03 (mg/L)



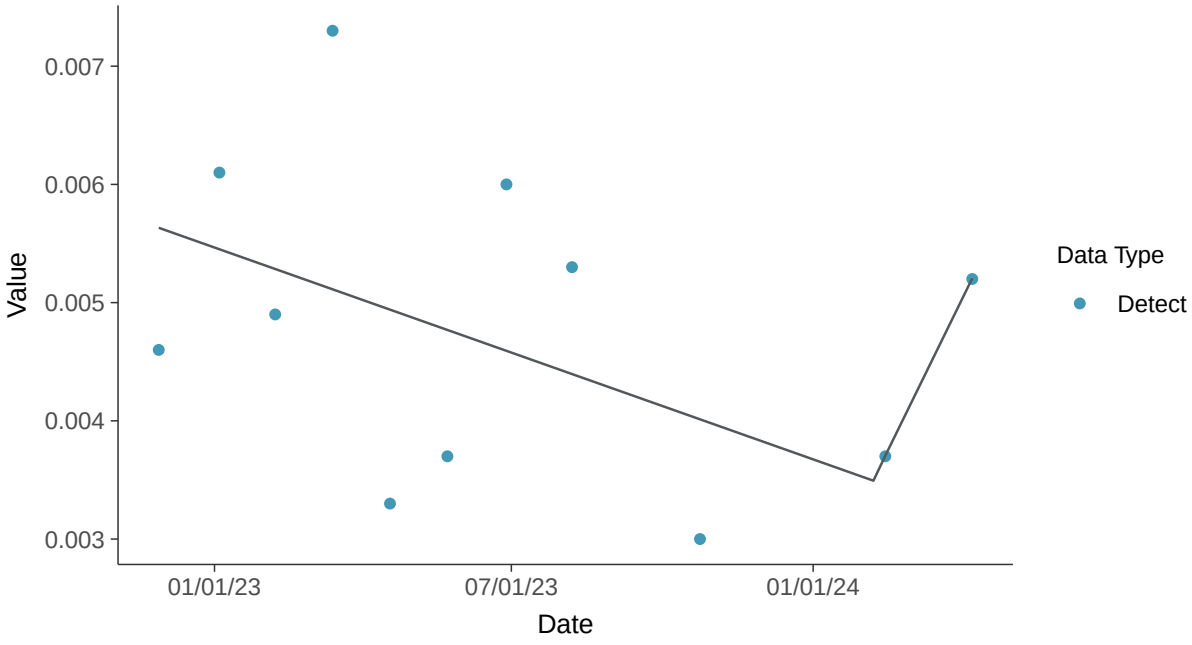
Trend Regression: Lognormal MLE

Chromium, Total, MW-03 (mg/L)



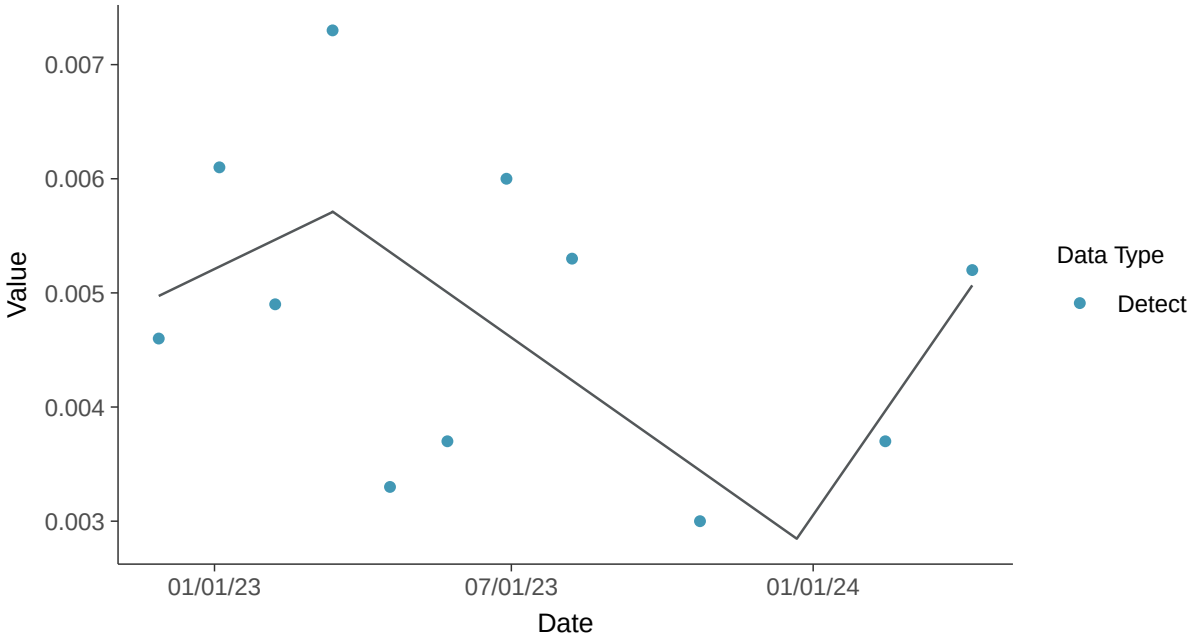
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-03 (mg/L)



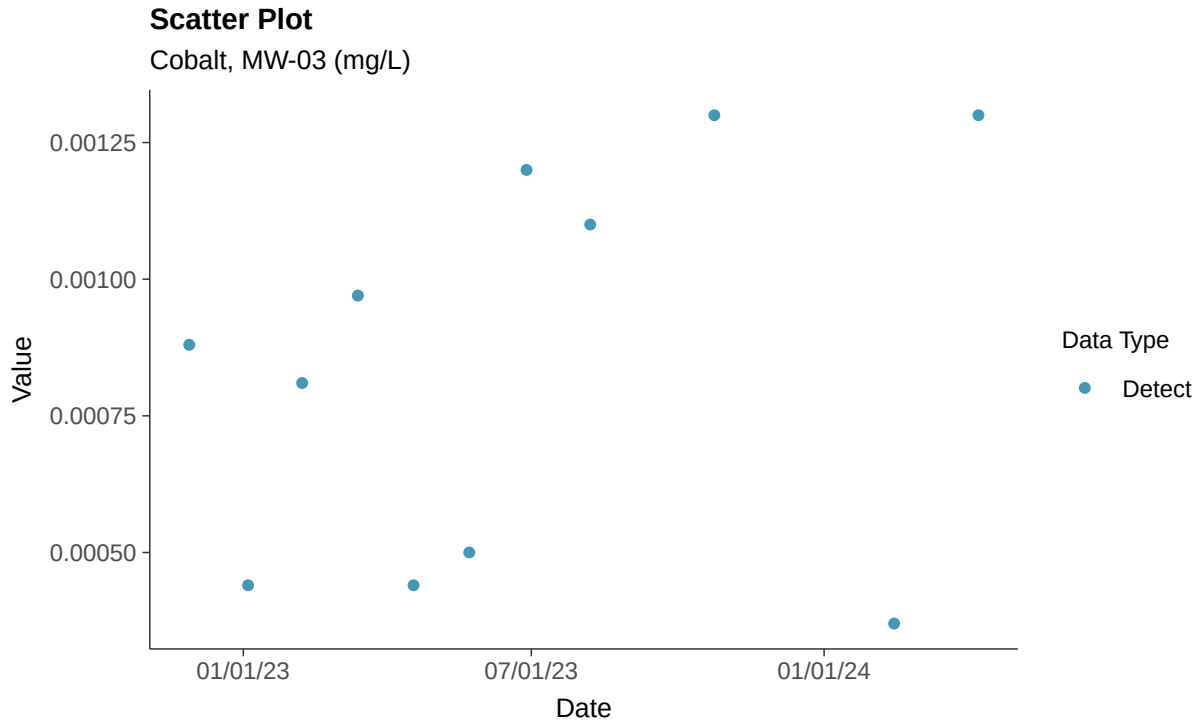
Trend Regression: Piecewise Linear-Linear-Linear

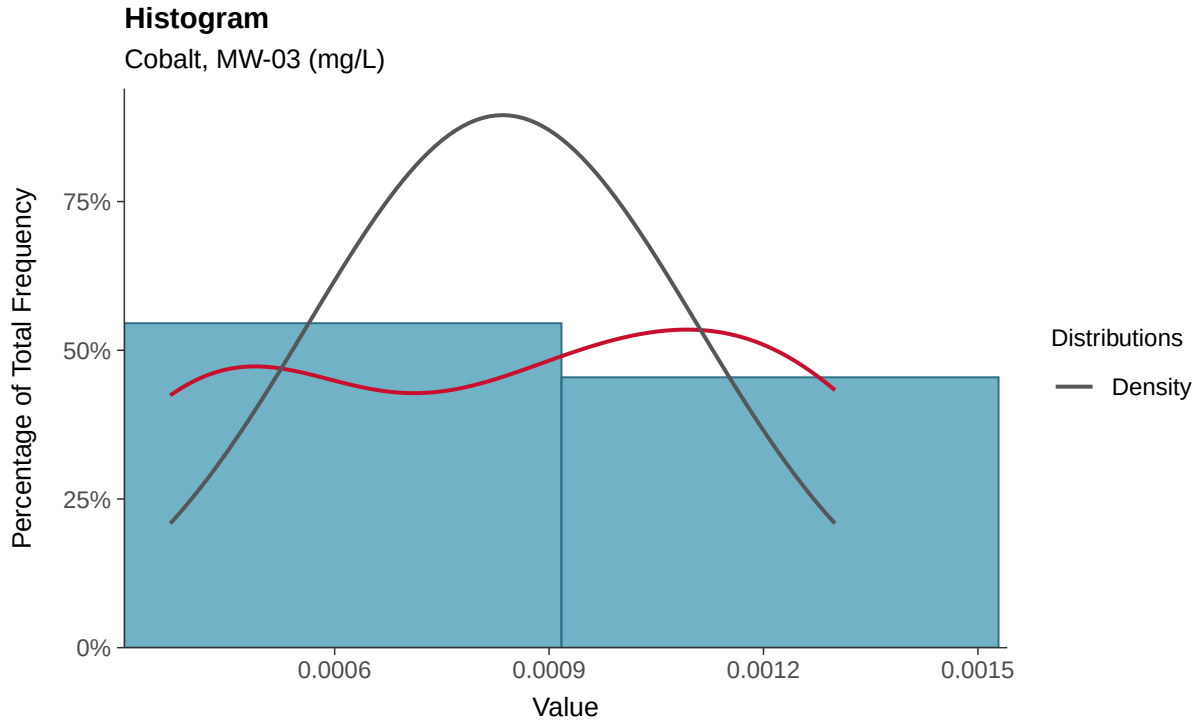
Chromium, Total, MW-03 (mg/L)



Appendix IV: Cobalt, MW-03

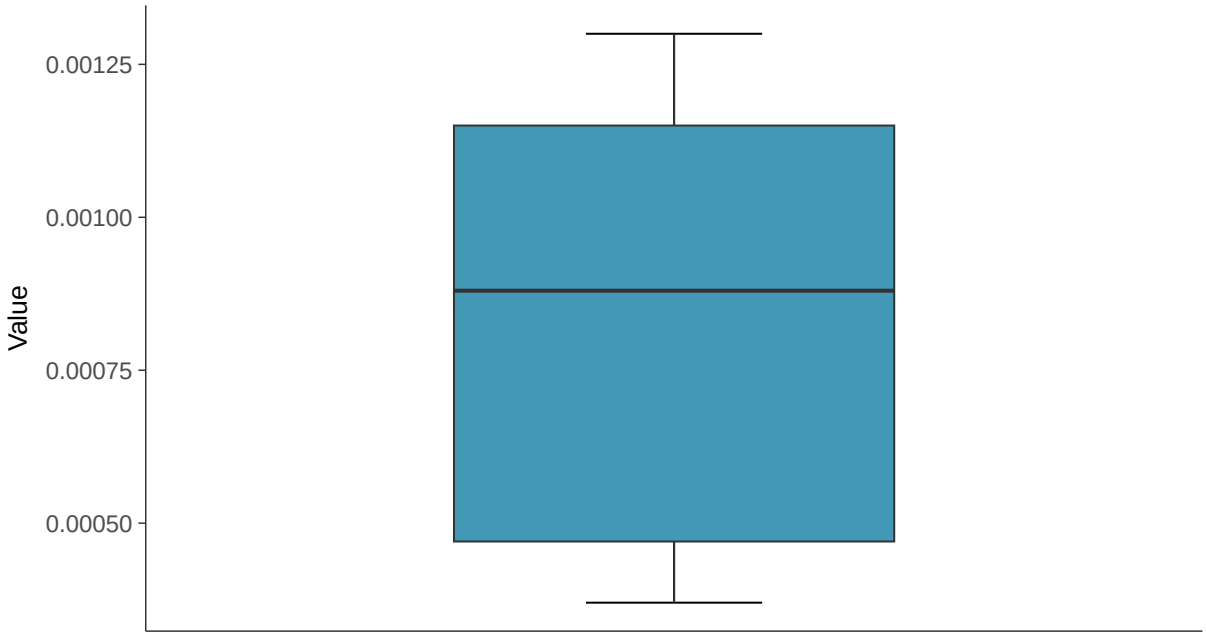
ID: 2_13_5_110





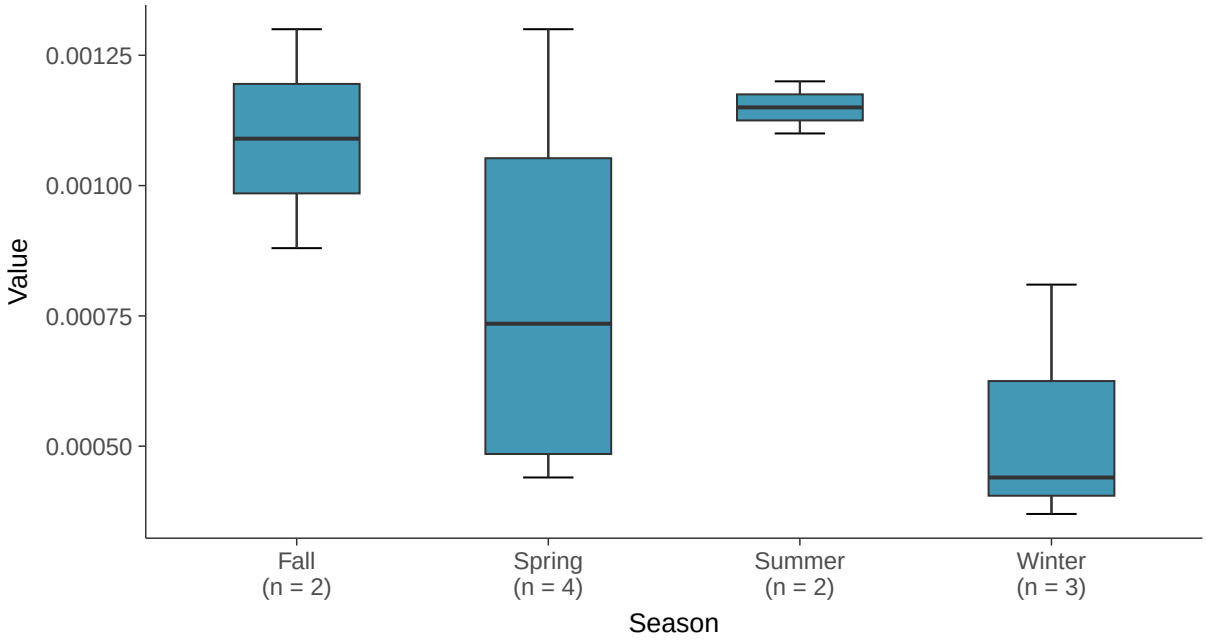
Boxplot

Cobalt, MW-03 (mg/L)



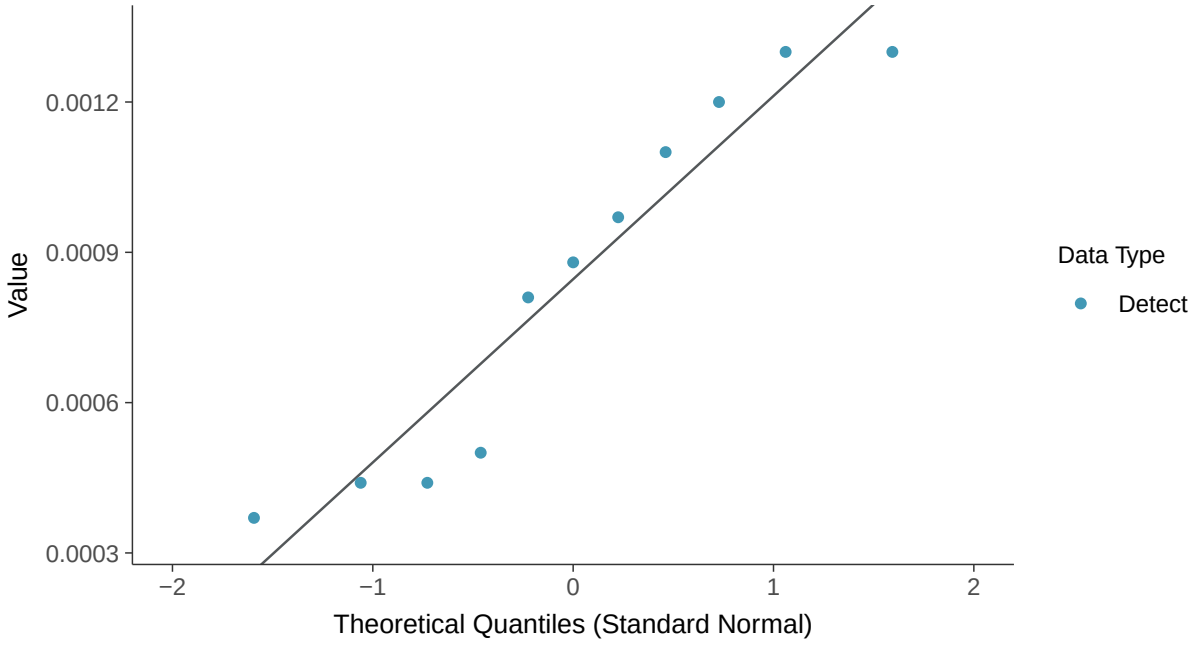
Boxplot by Season

Cobalt, MW-03 (mg/L)



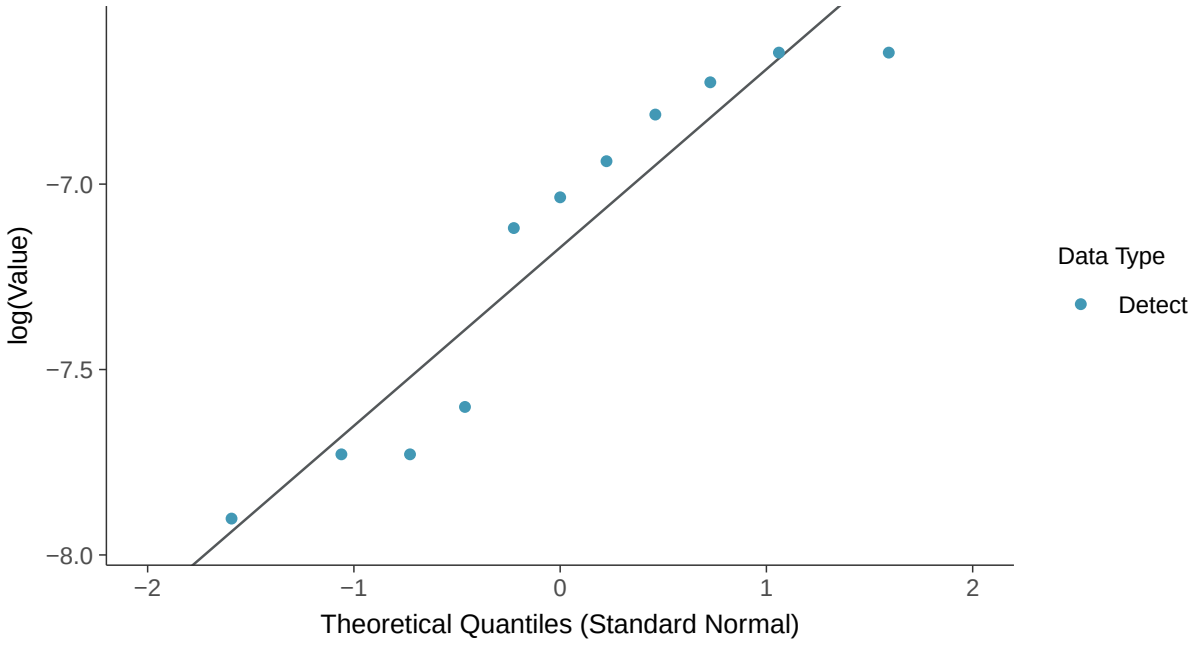
Normal Q-Q plot

Cobalt, MW-03 (mg/L)



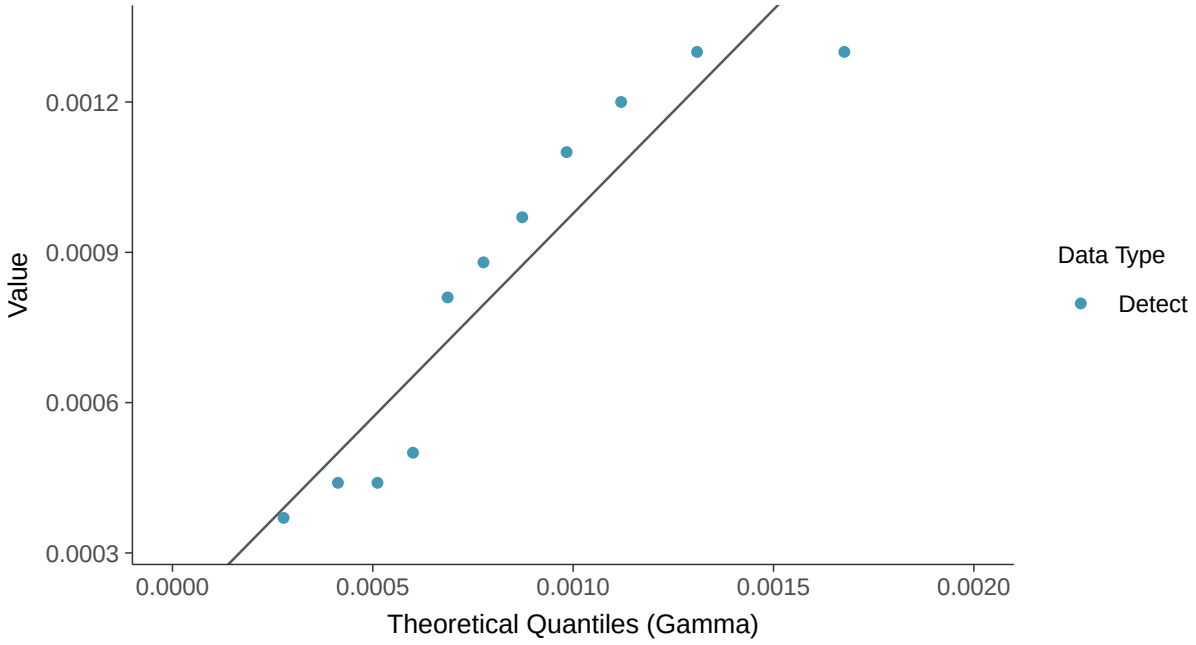
Lognormal Q-Q plot

Cobalt, MW-03 (mg/L)



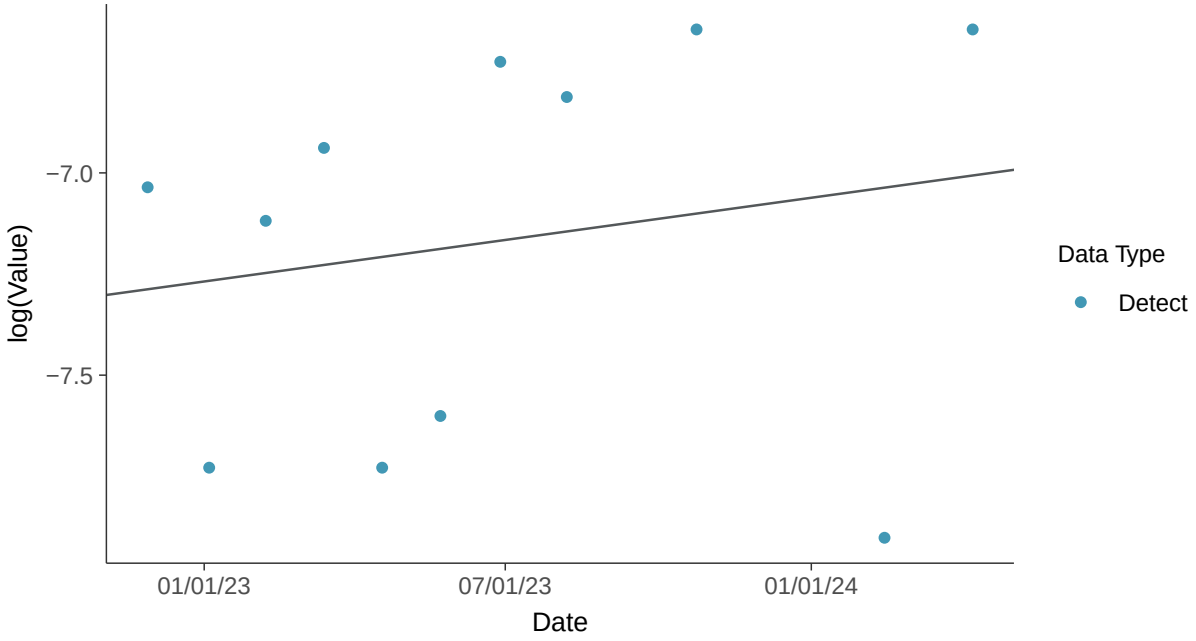
Gamma Q-Q plot

Cobalt, MW-03 (mg/L)



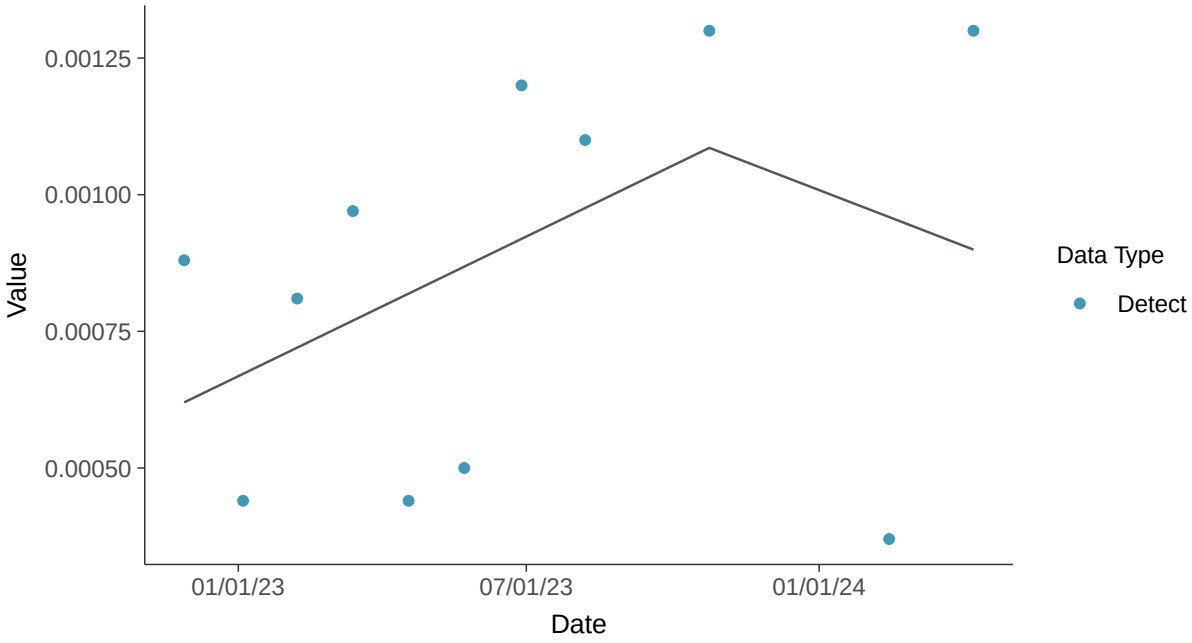
Trend Regression: Lognormal MLE

Cobalt, MW-03 (mg/L)



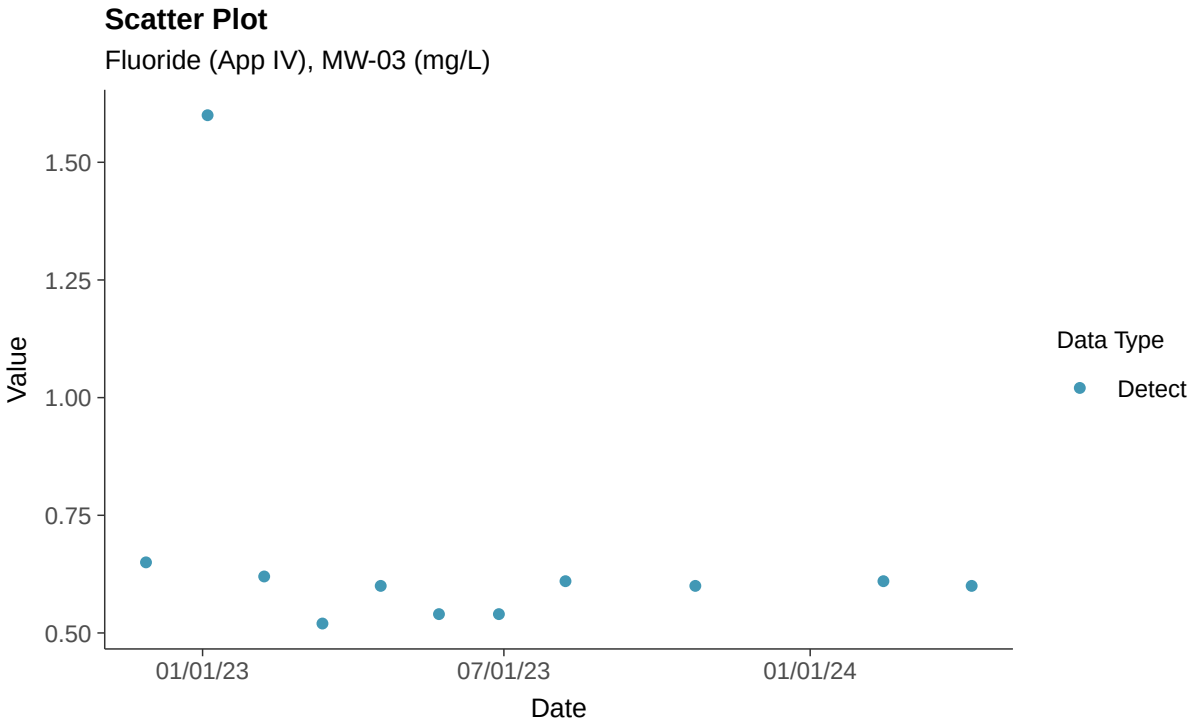
Trend Regression: Piecewise Linear-Linear

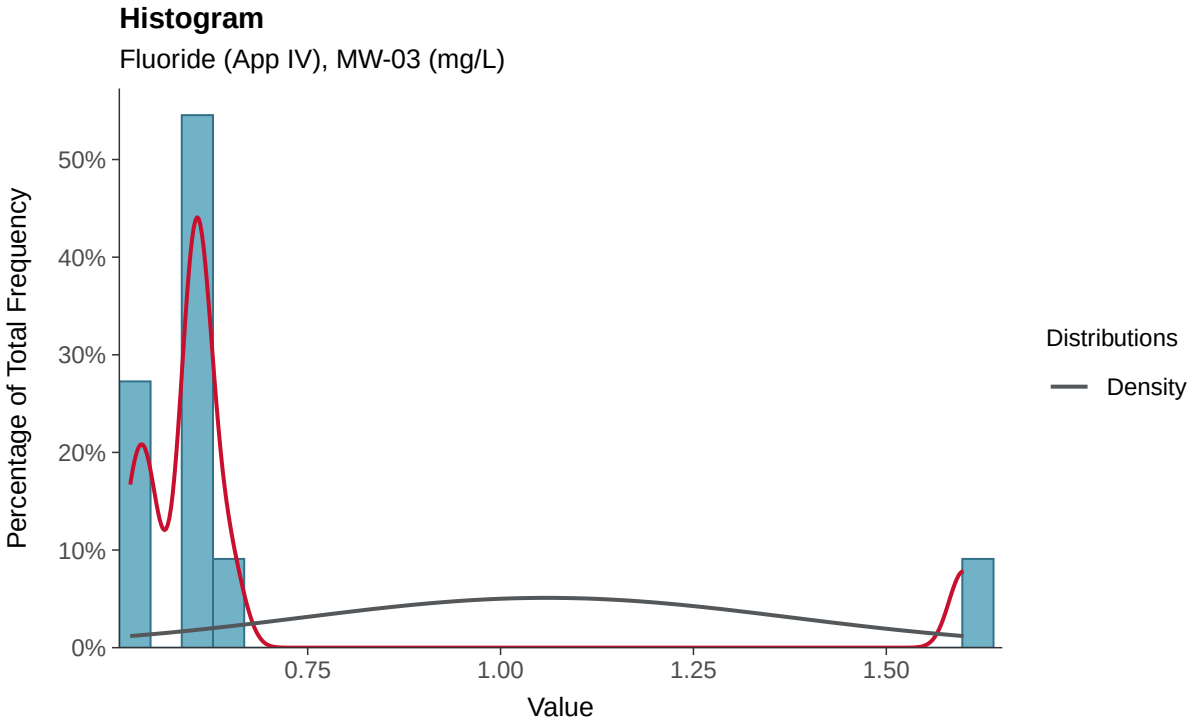
Cobalt, MW-03 (mg/L)



Appendix IV: Fluoride (App IV), MW-03

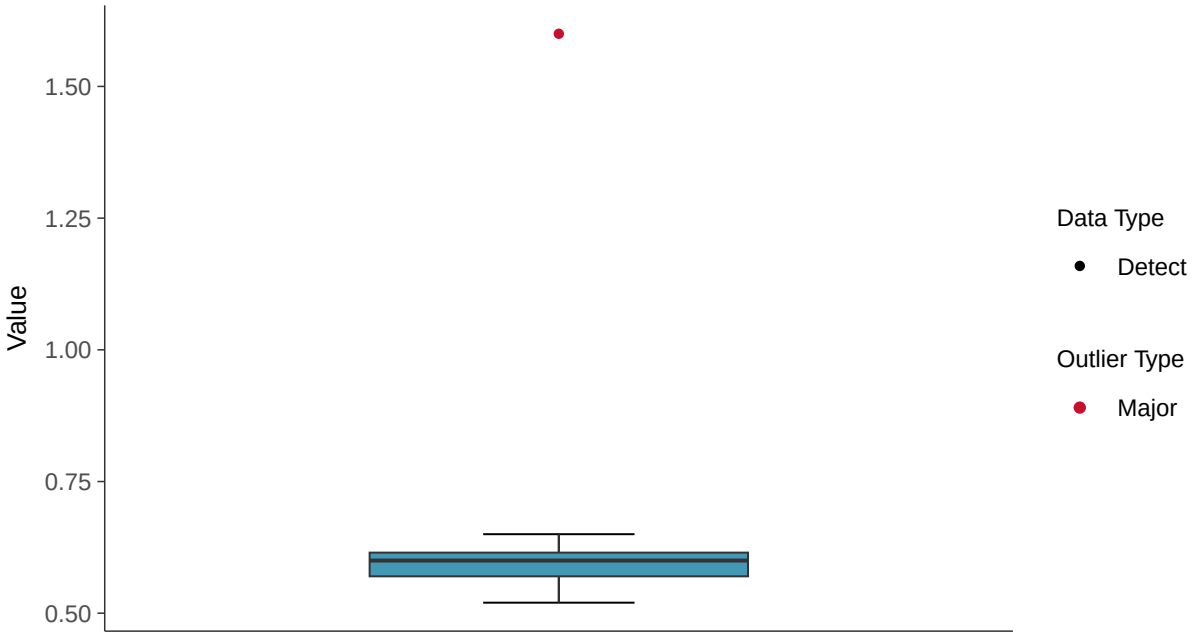
ID: 2_13_5_113





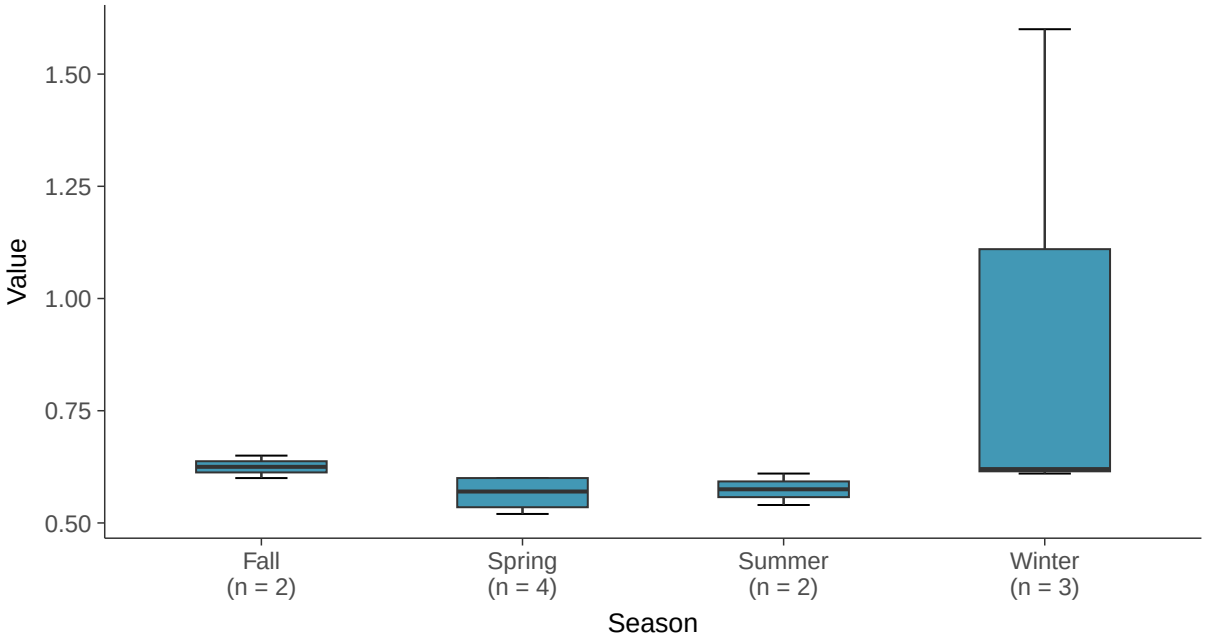
Boxplot

Fluoride (App IV), MW-03 (mg/L)



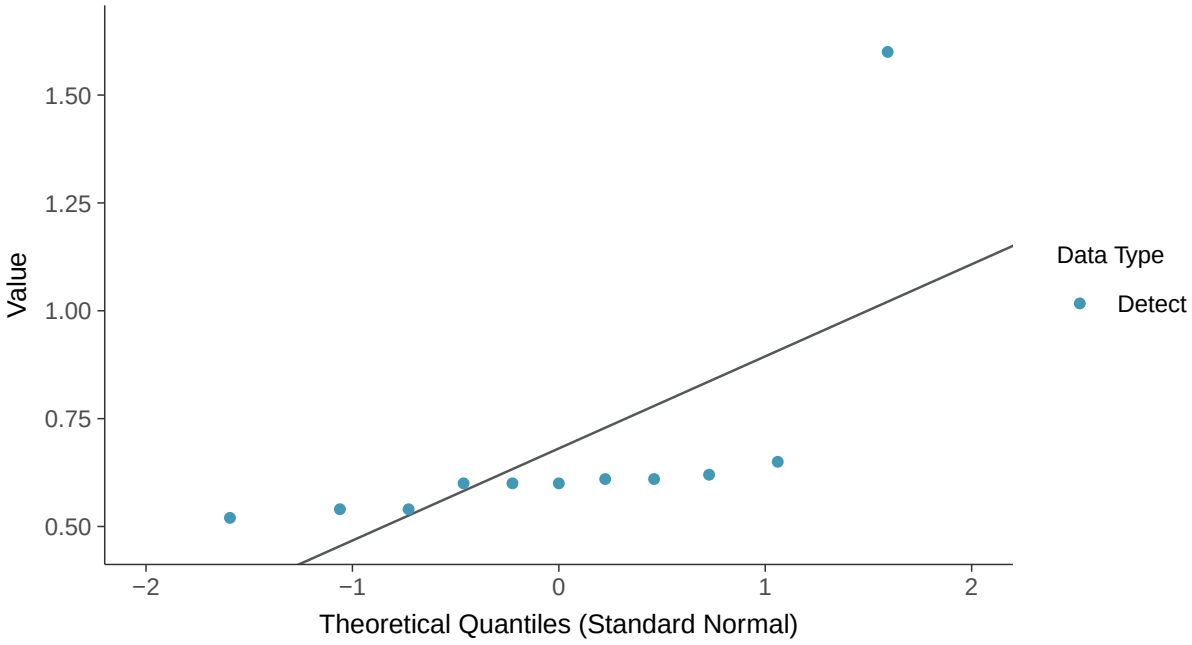
Boxplot by Season

Fluoride (App IV), MW-03 (mg/L)



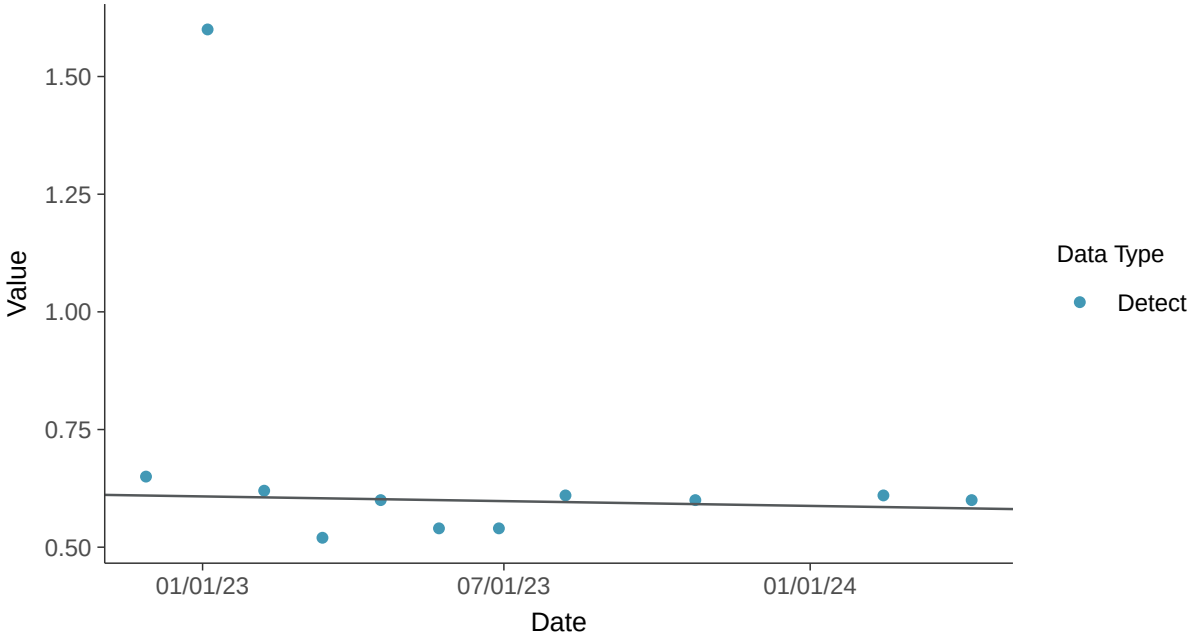
Normal Q-Q plot

Fluoride (App IV), MW-03 (mg/L)



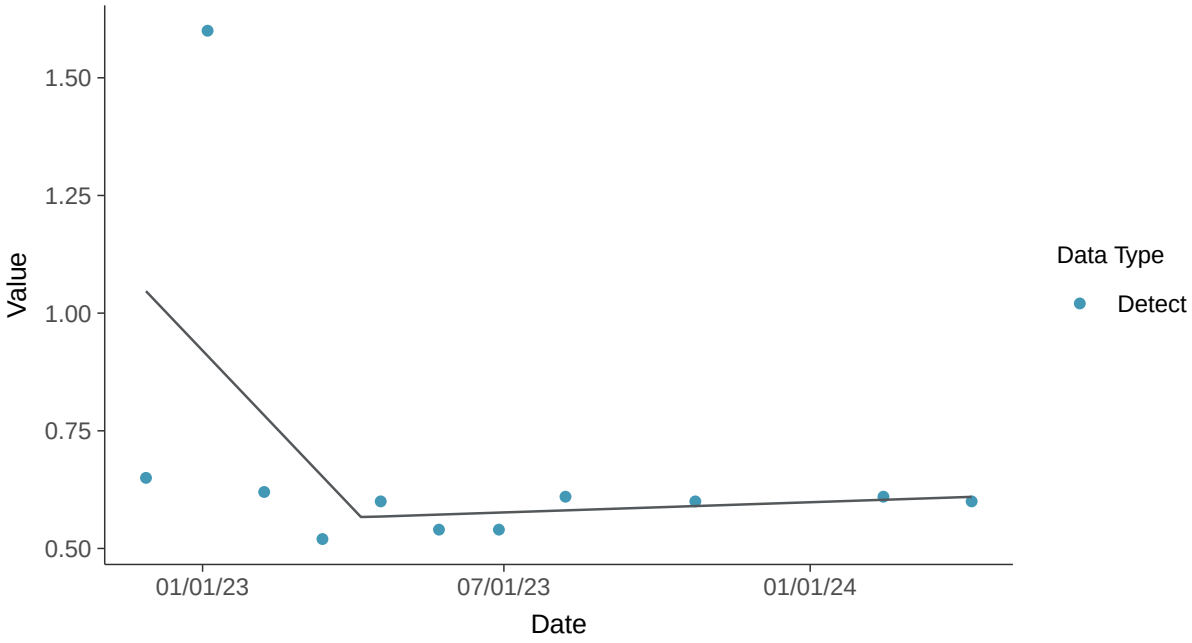
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Fluoride (App IV), MW-03 (mg/L)



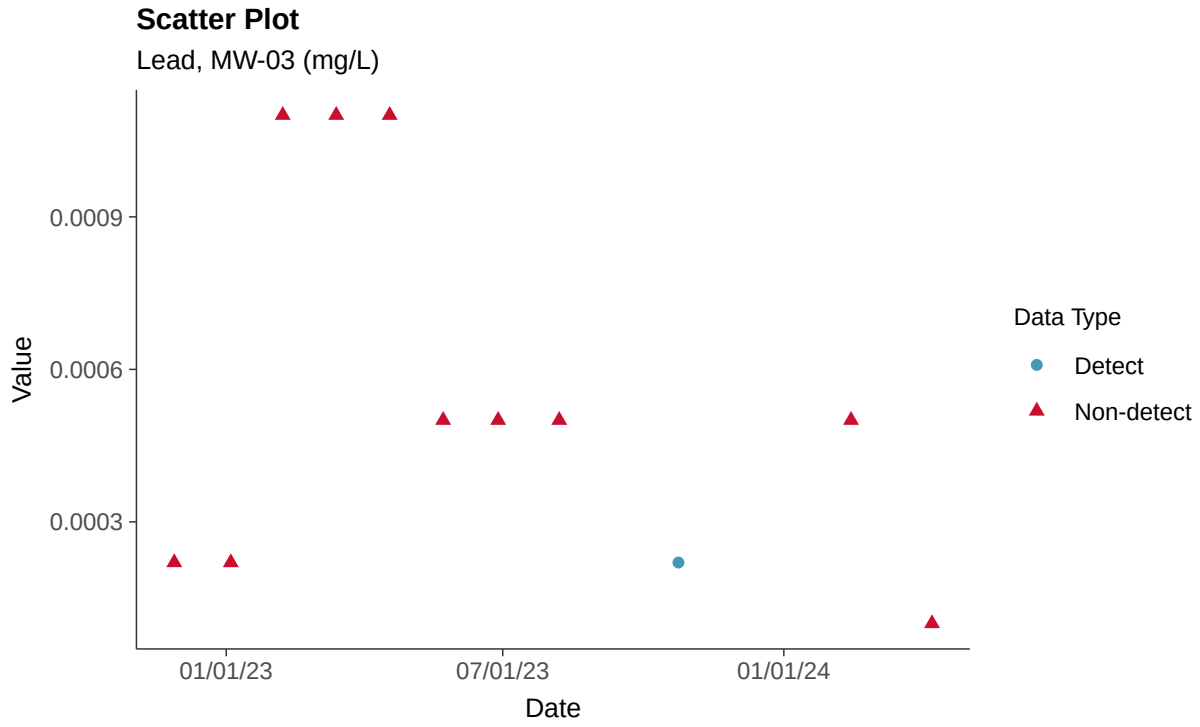
Trend Regression: Piecewise Linear-Linear

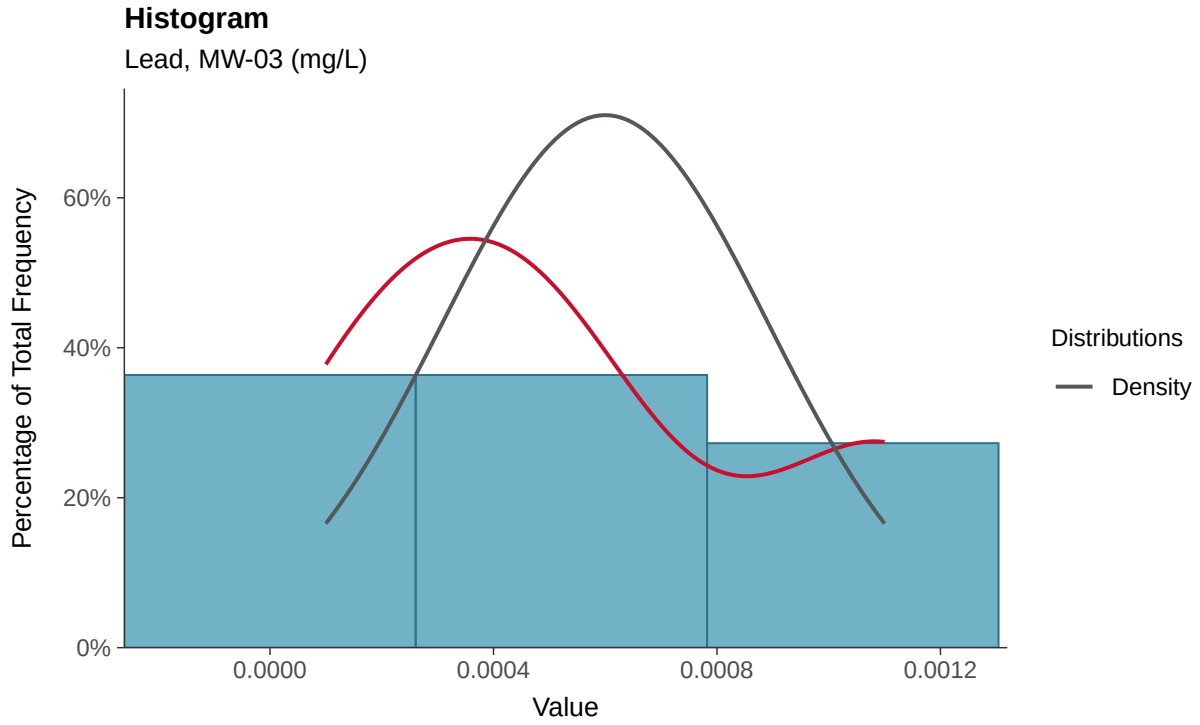
Fluoride (App IV), MW-03 (mg/L)



Appendix IV: Lead, MW-03

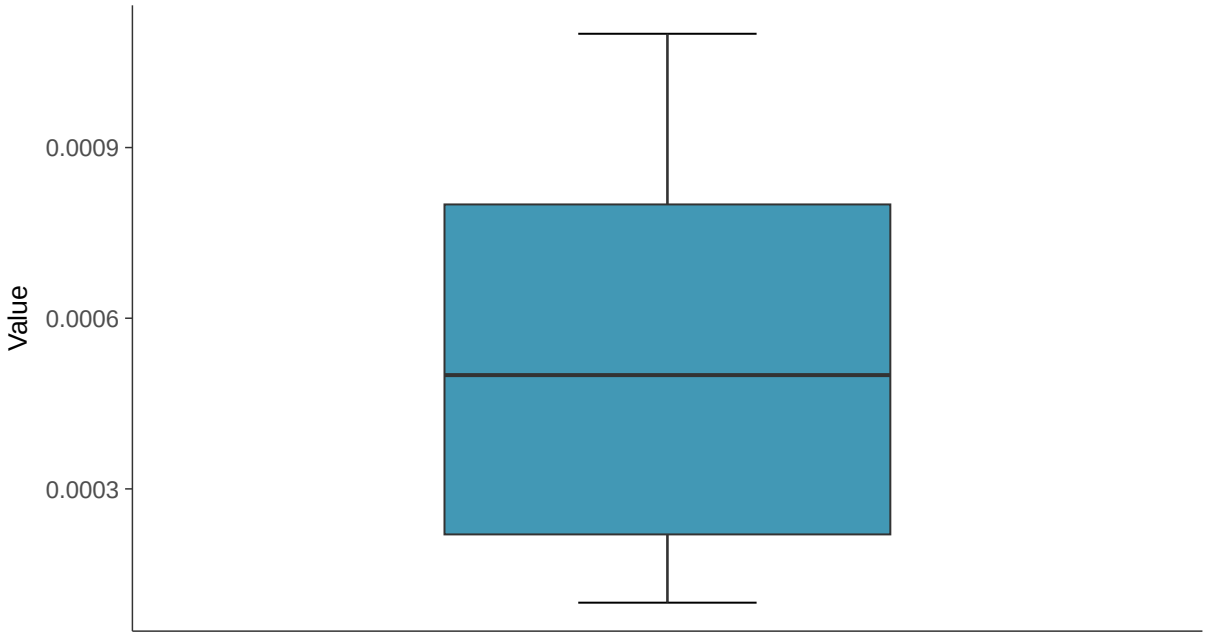
ID: 2_13_5_115





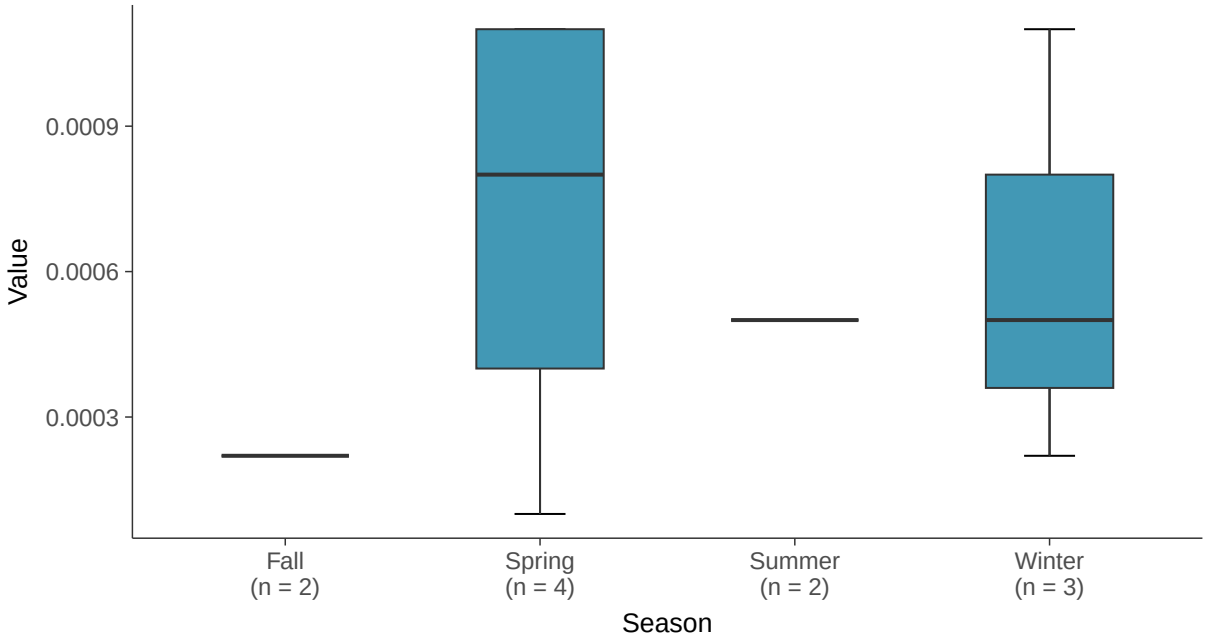
Boxplot

Lead, MW-03 (mg/L)



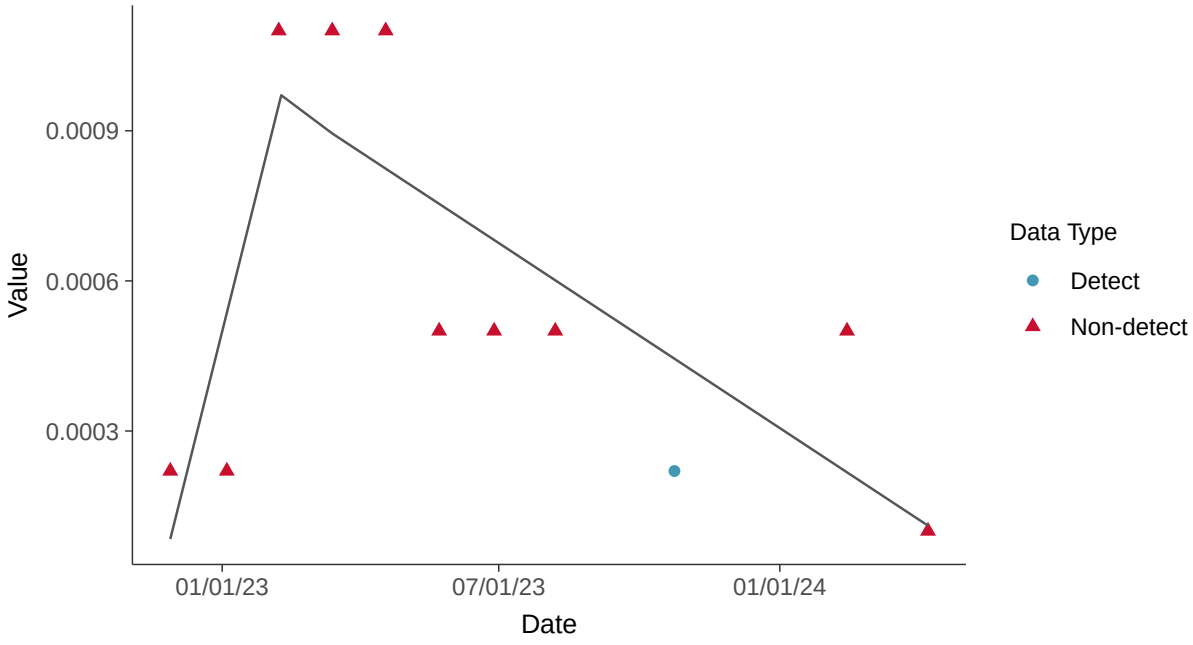
Boxplot by Season

Lead, MW-03 (mg/L)



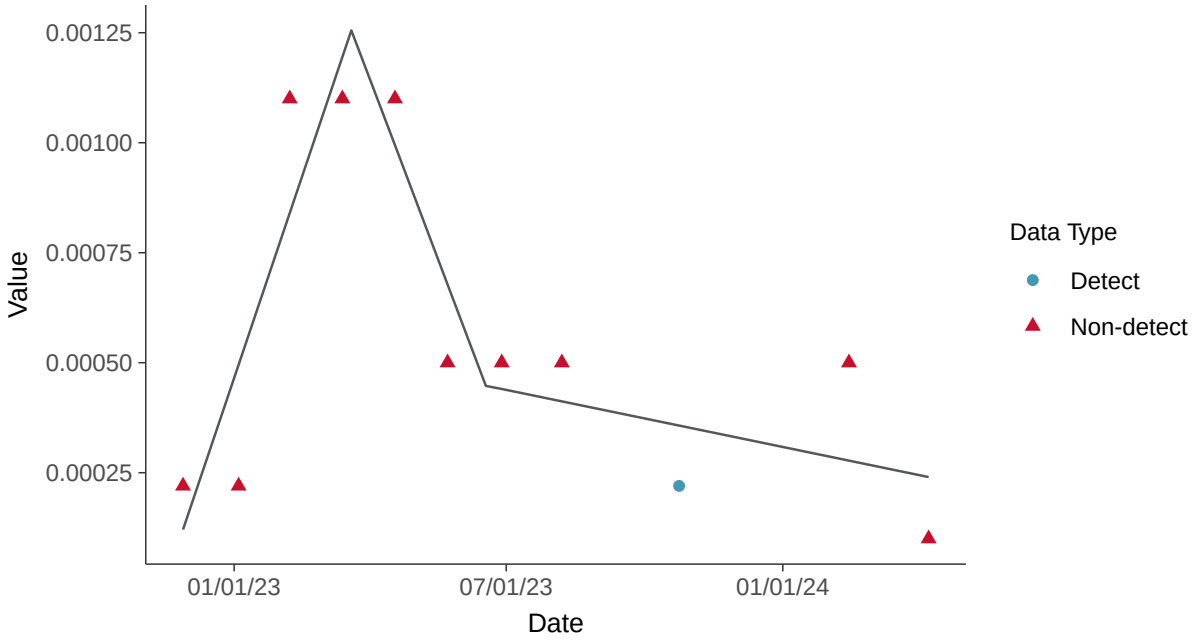
Trend Regression: Piecewise Linear-Linear

Lead, MW-03 (mg/L)



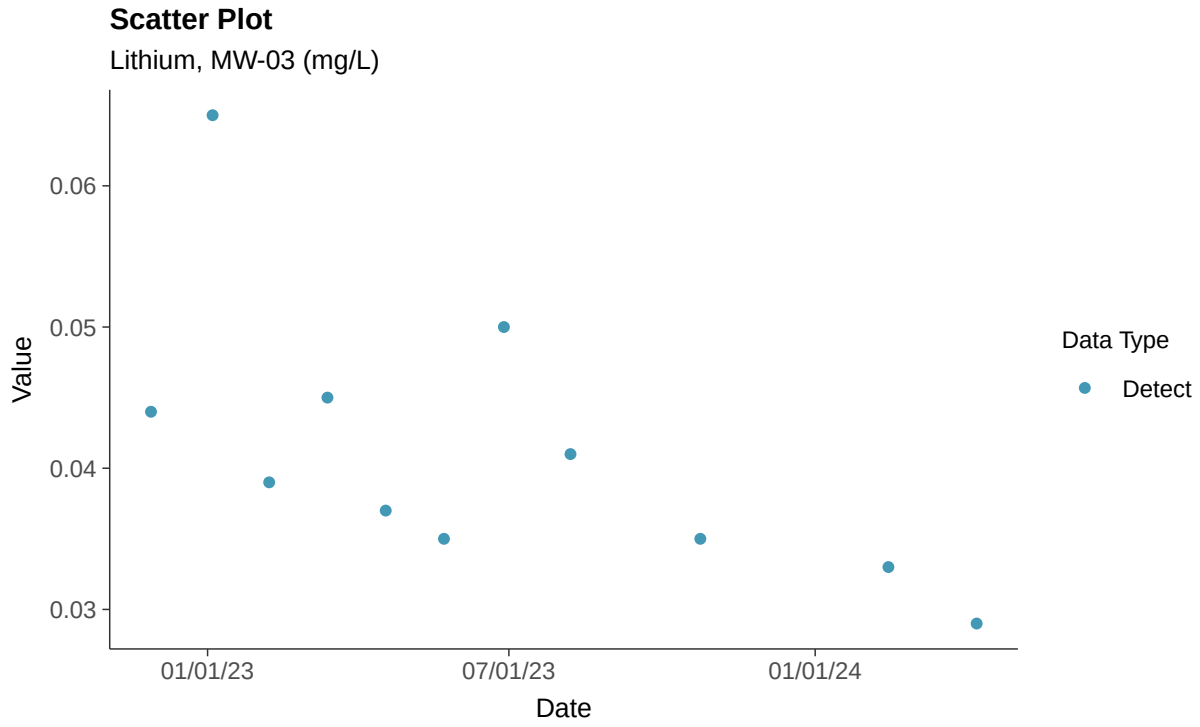
Trend Regression: Piecewise Linear-Linear-Linear

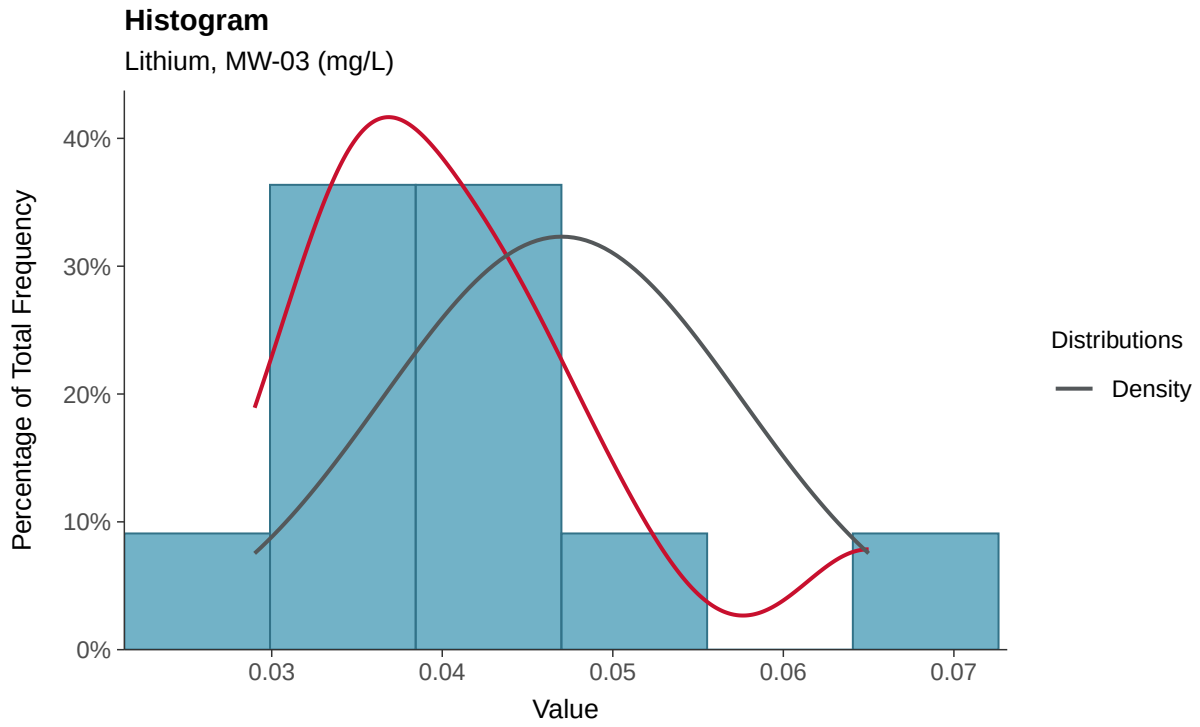
Lead, MW-03 (mg/L)



Appendix IV: Lithium, MW-03

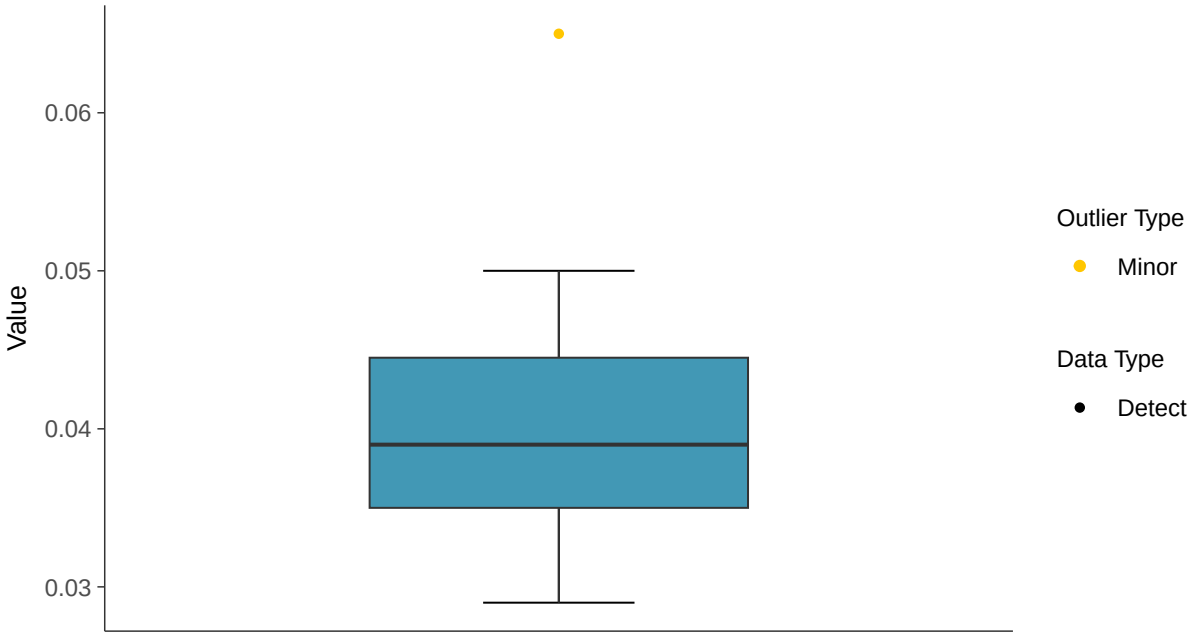
ID: 2_13_5_116





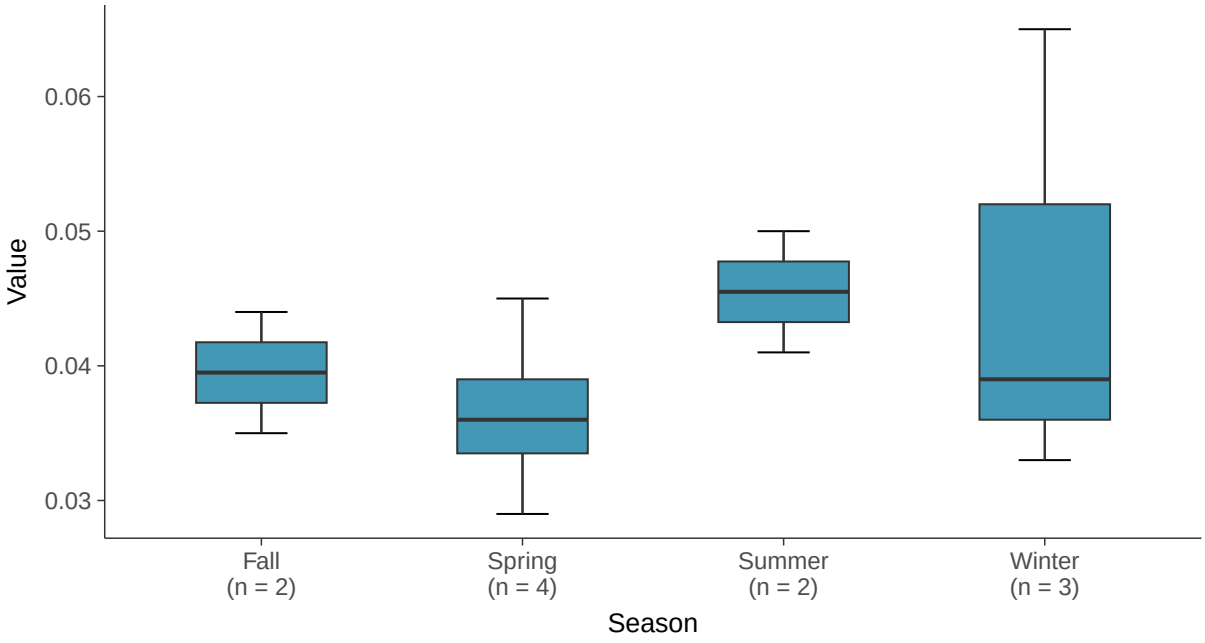
Boxplot

Lithium, MW-03 (mg/L)



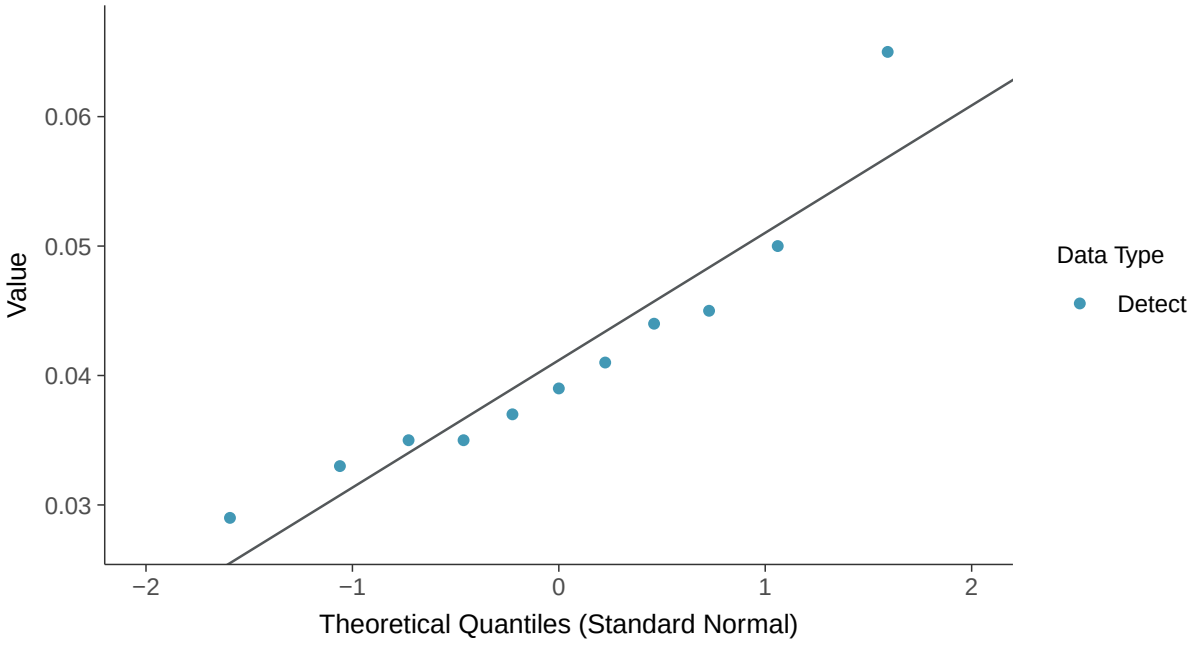
Boxplot by Season

Lithium, MW-03 (mg/L)



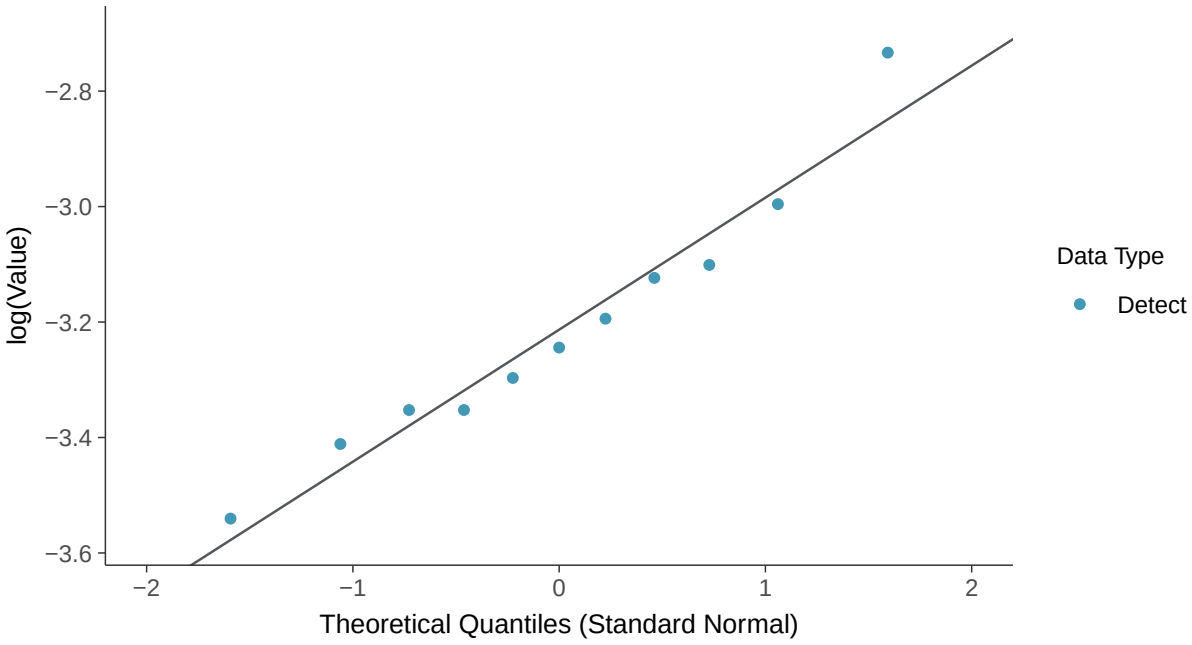
Normal Q-Q plot

Lithium, MW-03 (mg/L)



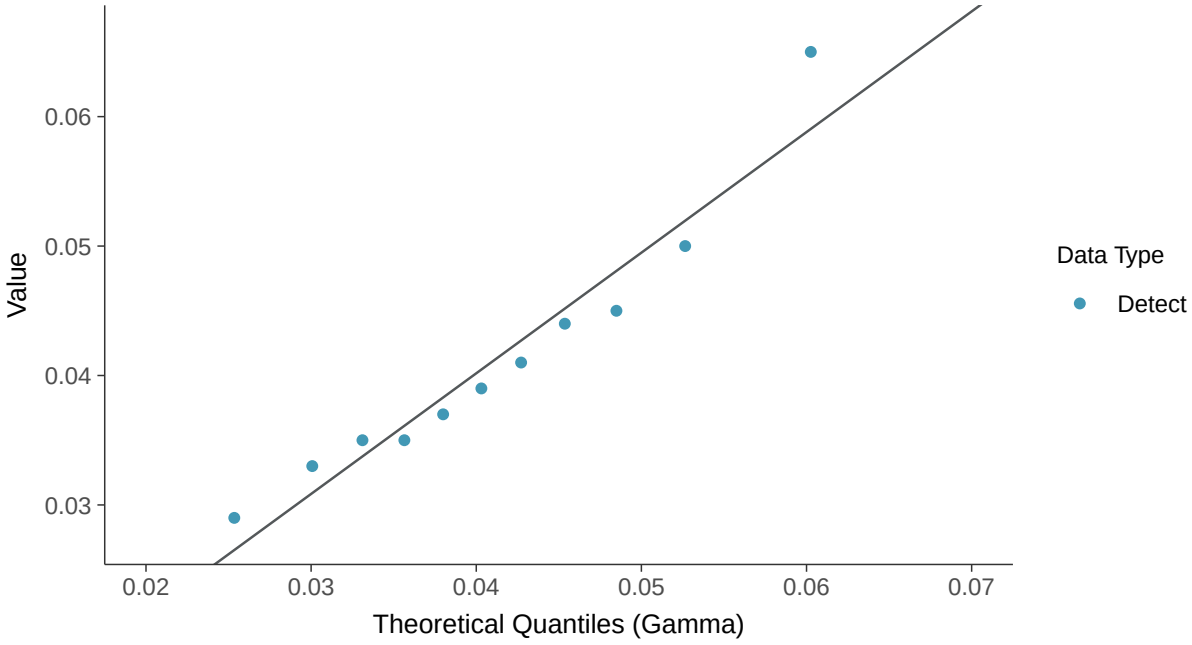
Lognormal Q-Q plot

Lithium, MW-03 (mg/L)



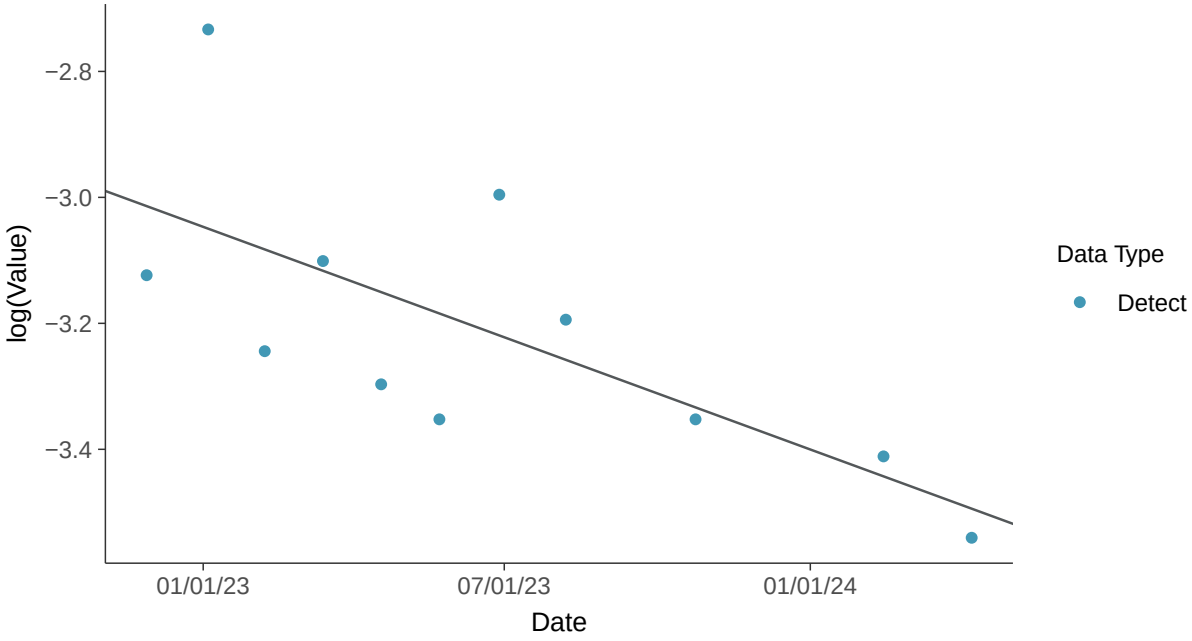
Gamma Q-Q plot

Lithium, MW-03 (mg/L)



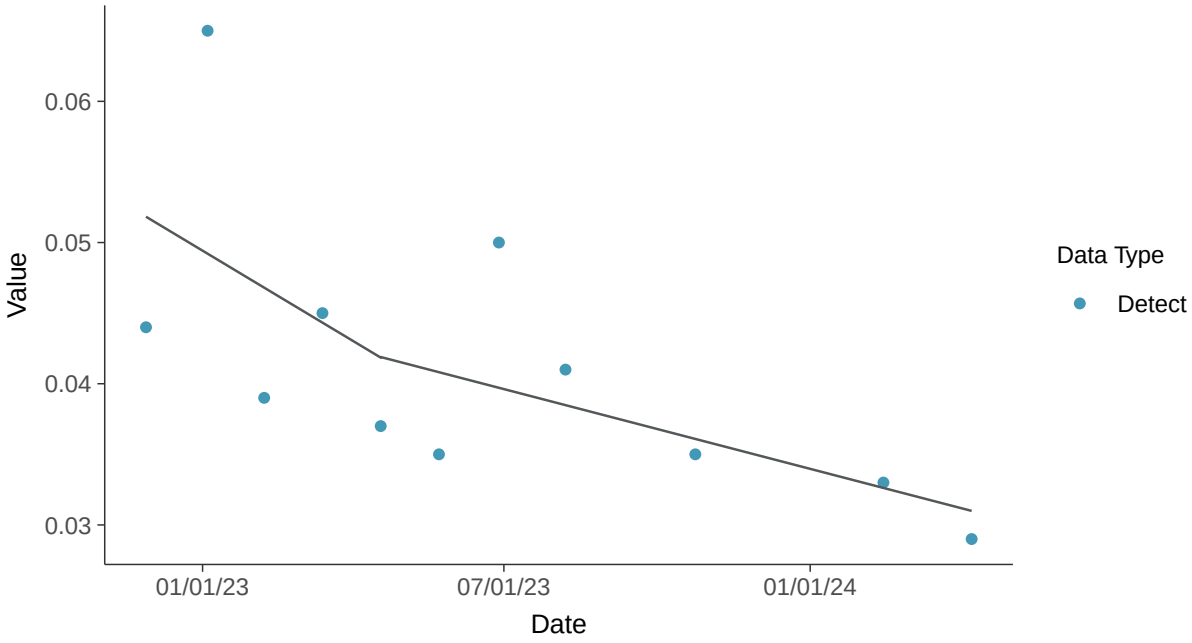
Trend Regression: Lognormal MLE

Lithium, MW-03 (mg/L)



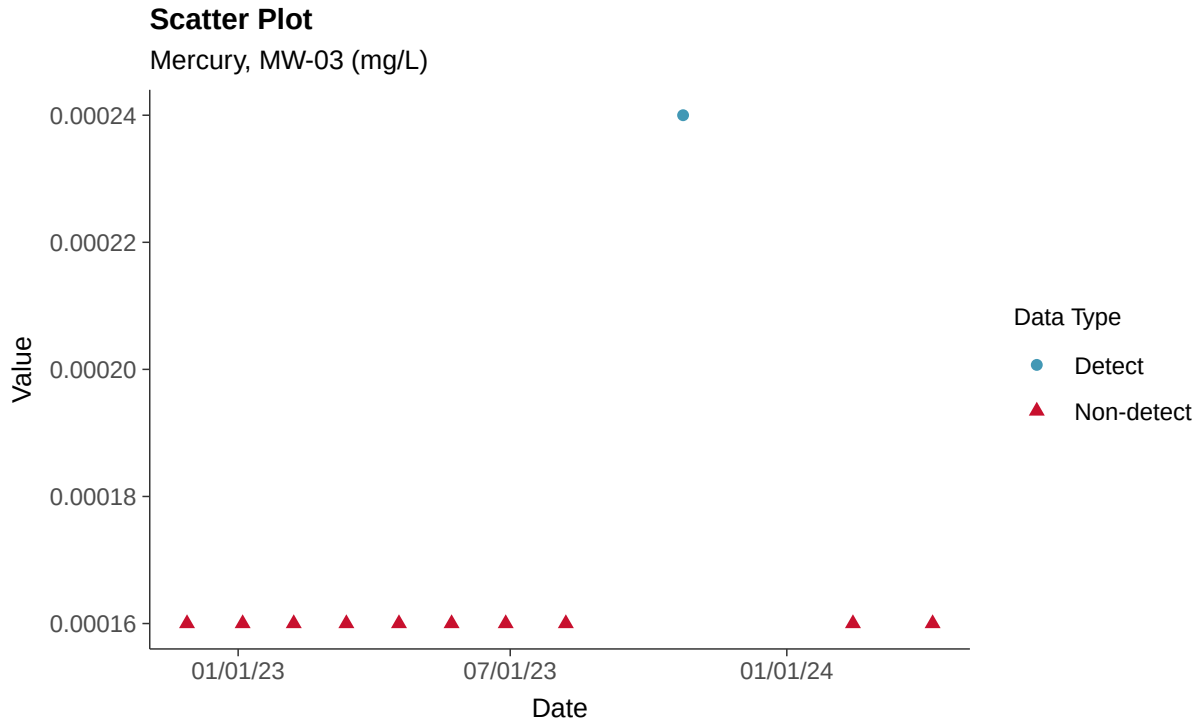
Trend Regression: Piecewise Linear-Linear

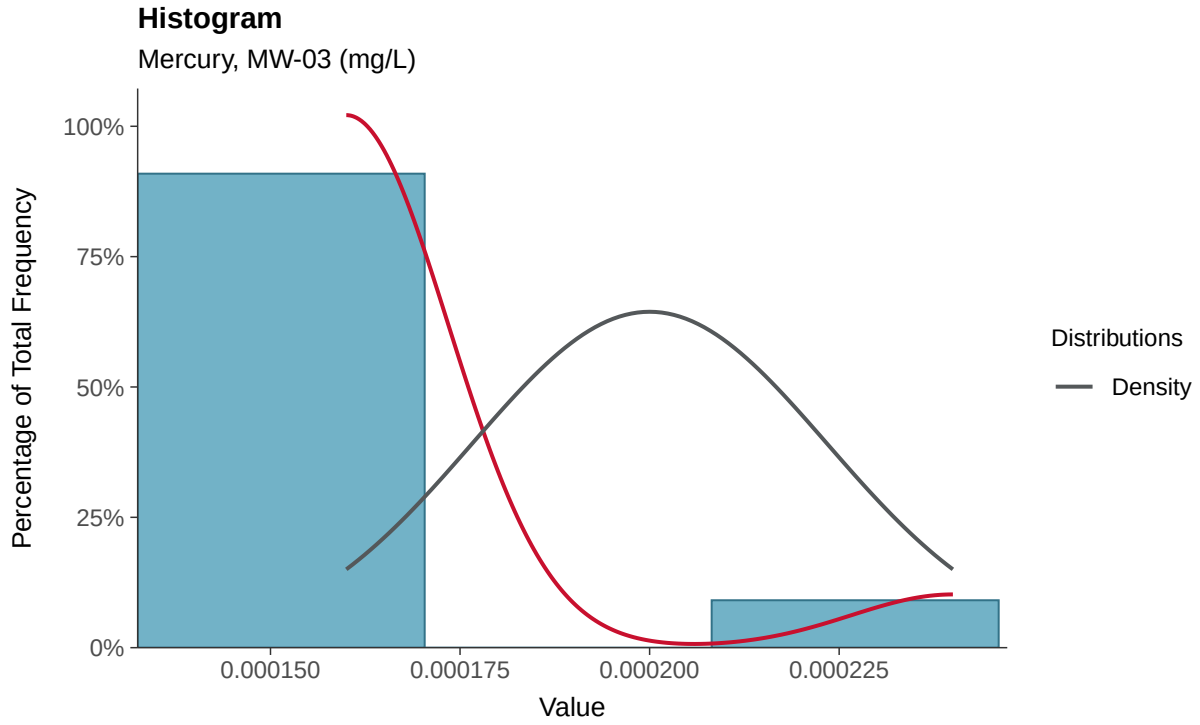
Lithium, MW-03 (mg/L)

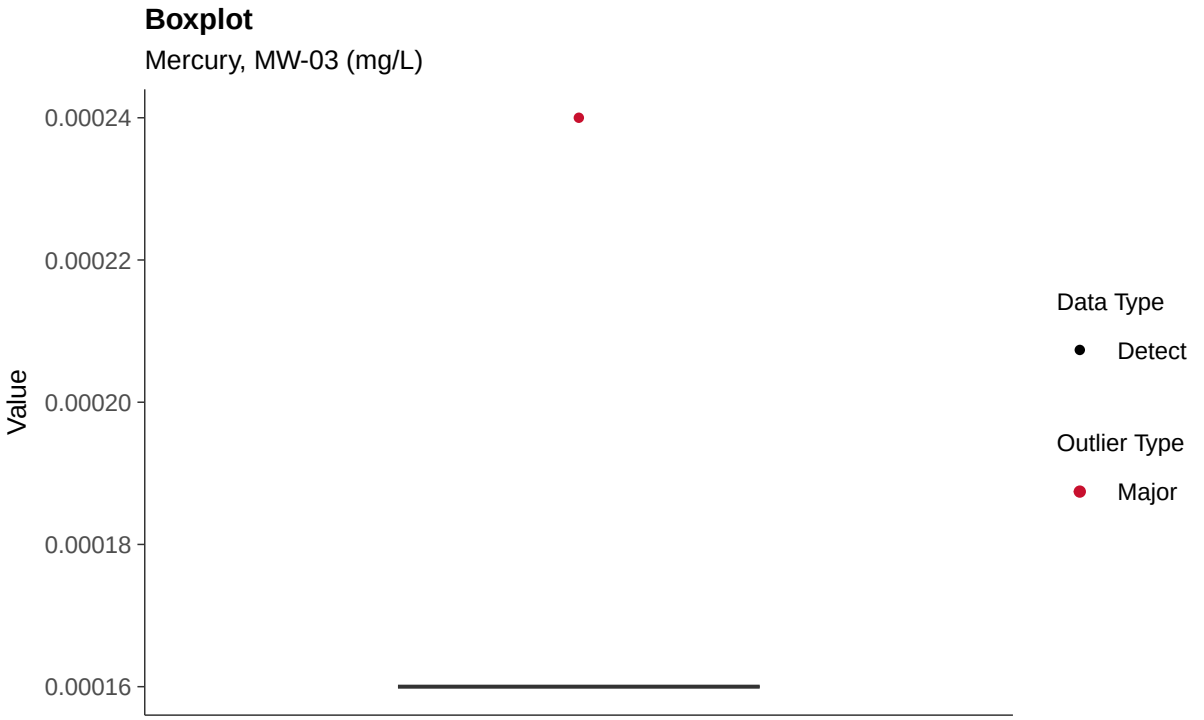


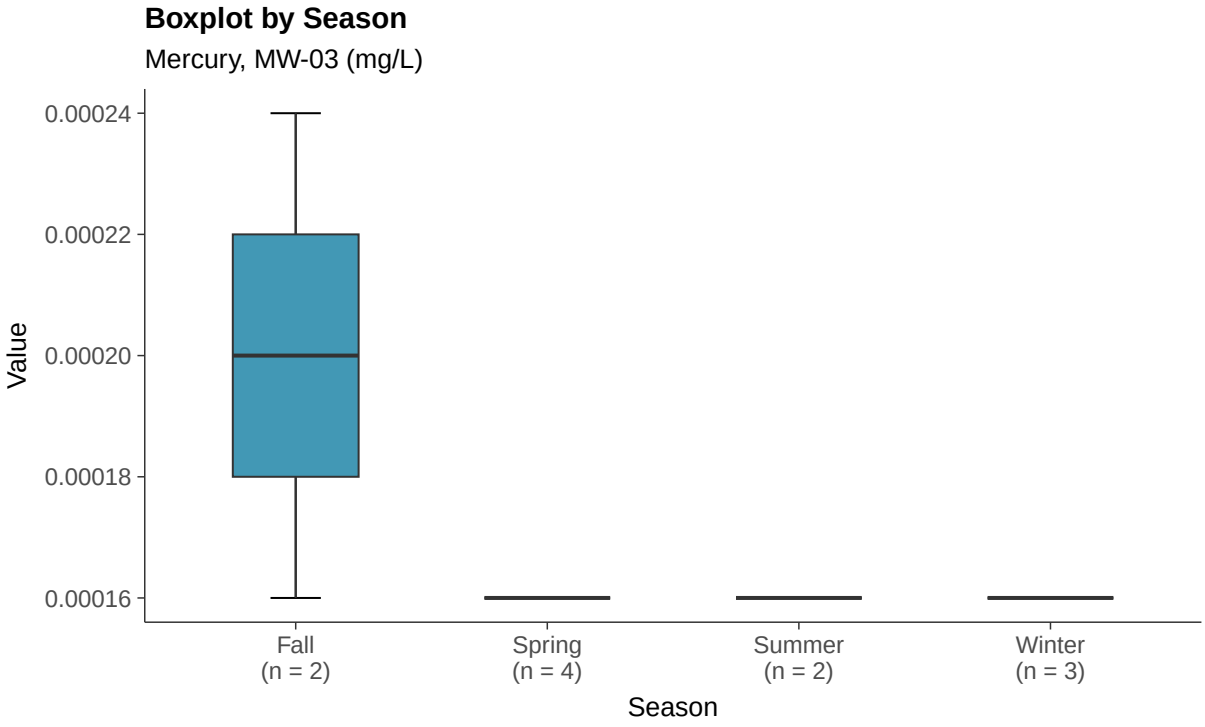
Appendix IV: Mercury, MW-03

ID: 2_13_5_117



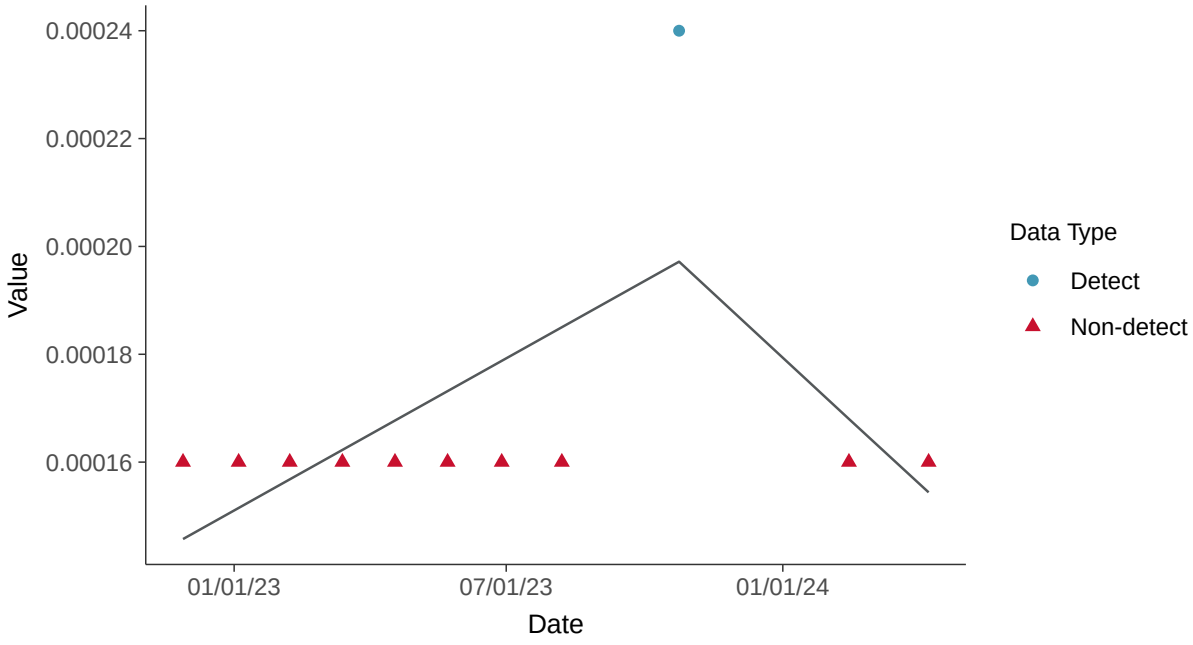



Boxplot
Mercury, MW-03 (mg/L)
0.00024
0.00022
0.00020
0.00018
0.00016
Value
Data Type
Detect
Outlier Type
Major


Boxplot by Season
Mercury, MW-03 (mg/L)
0.00024
0.00022
0.00020
0.00018
0.00016
Value
Fall
(n = 2)
Spring
(n = 4)
Summer
(n = 2)
Winter
(n = 3)
Season

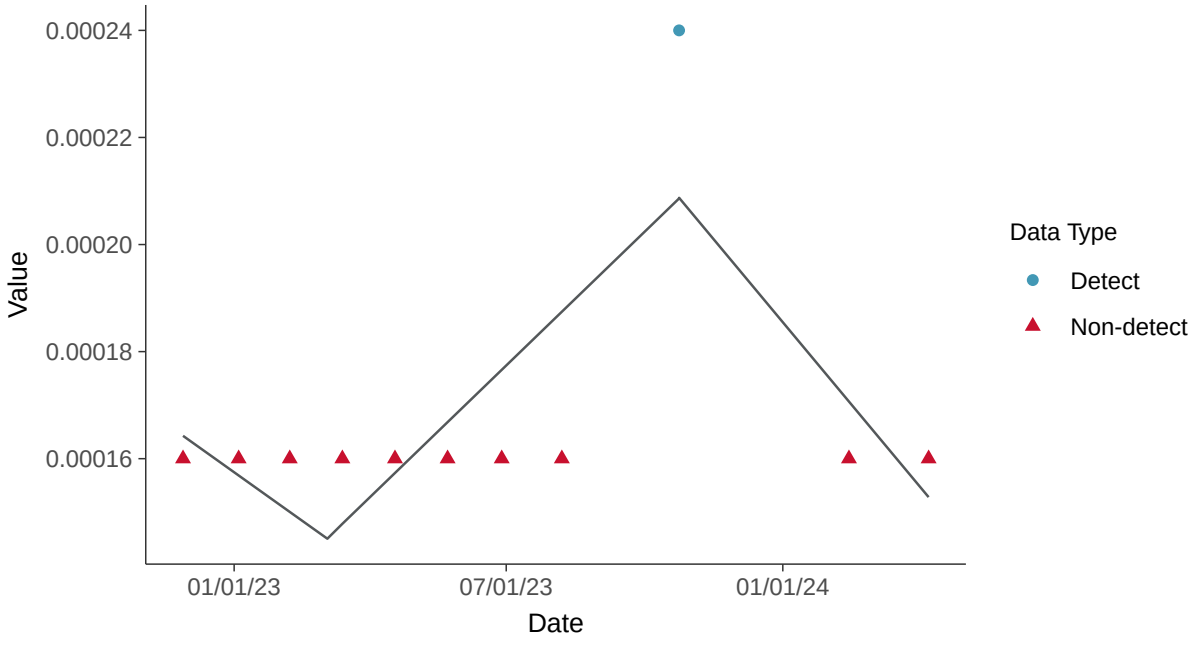
Trend Regression: Piecewise Linear-Linear

Mercury, MW-03 (mg/L)



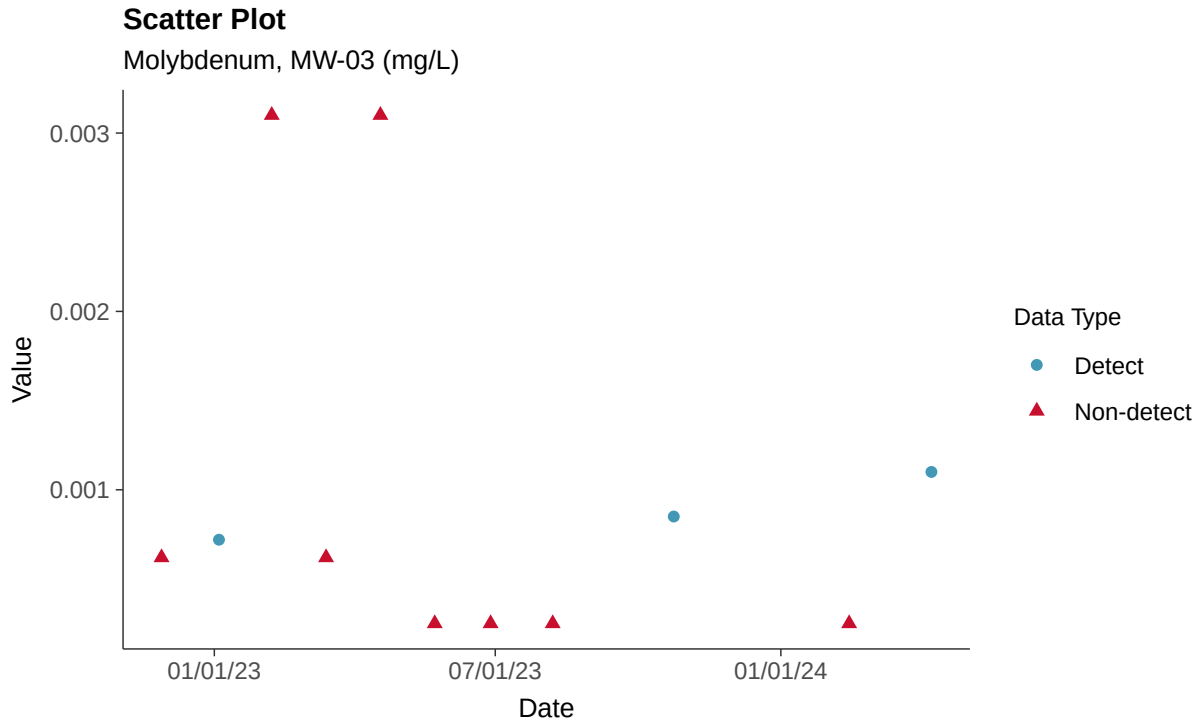
Trend Regression: Piecewise Linear-Linear-Linear

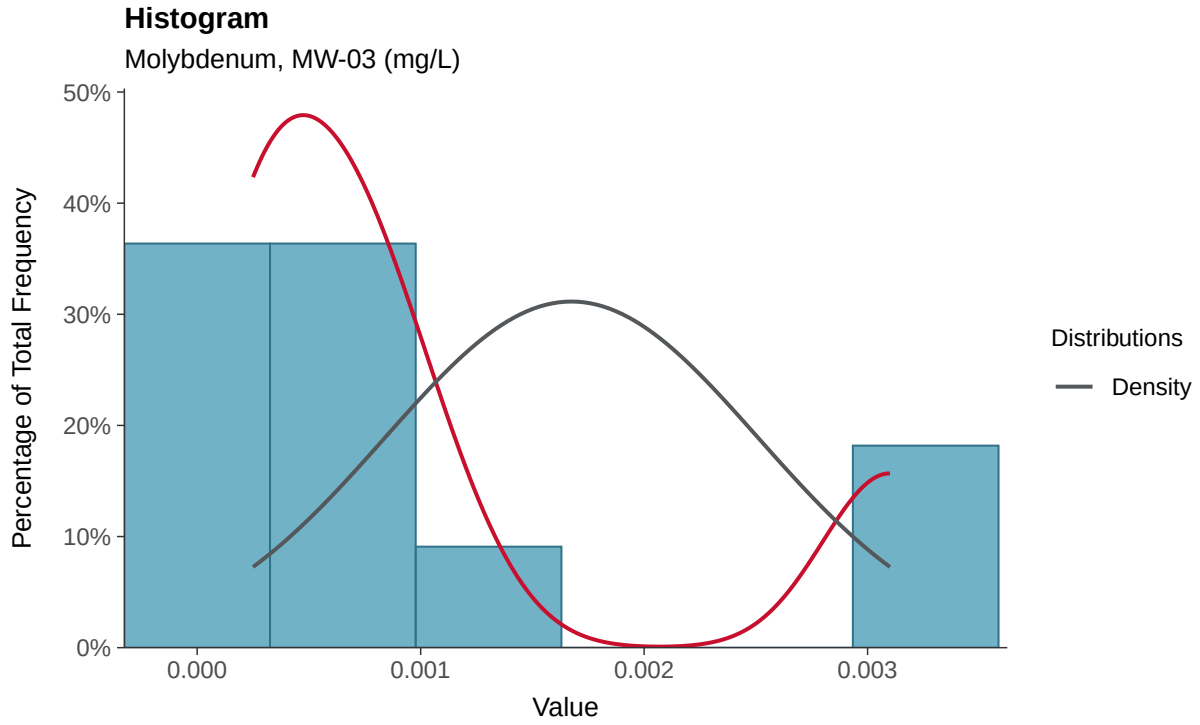
Mercury, MW-03 (mg/L)



Appendix IV: Molybdenum, MW-03

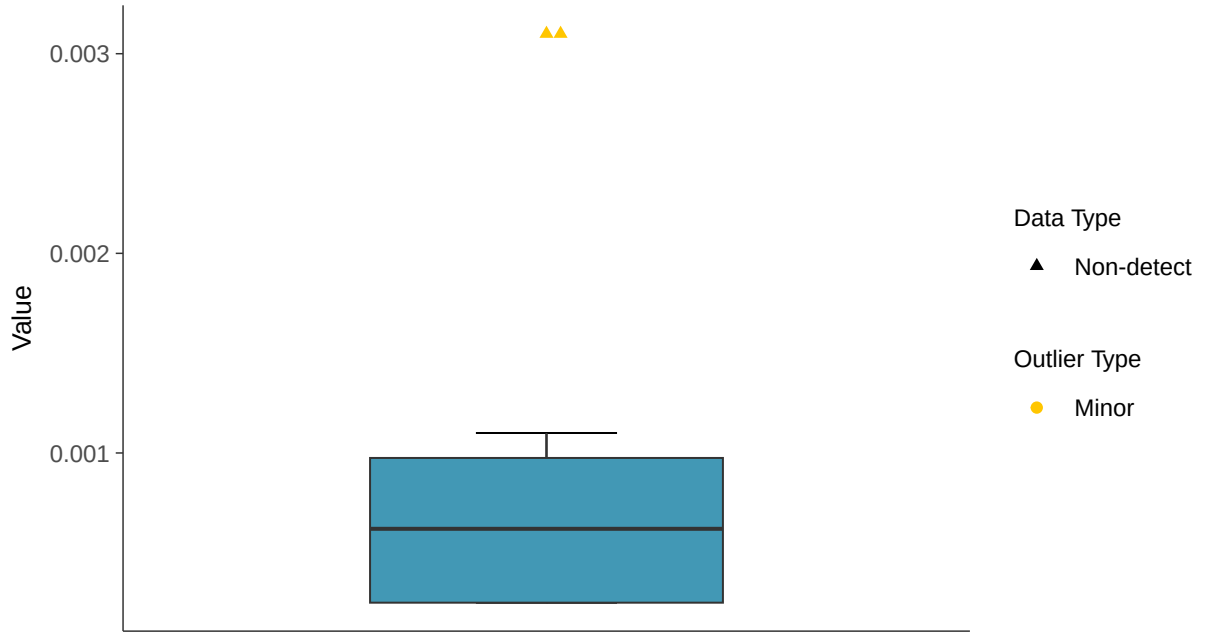
ID: 2_13_5_118





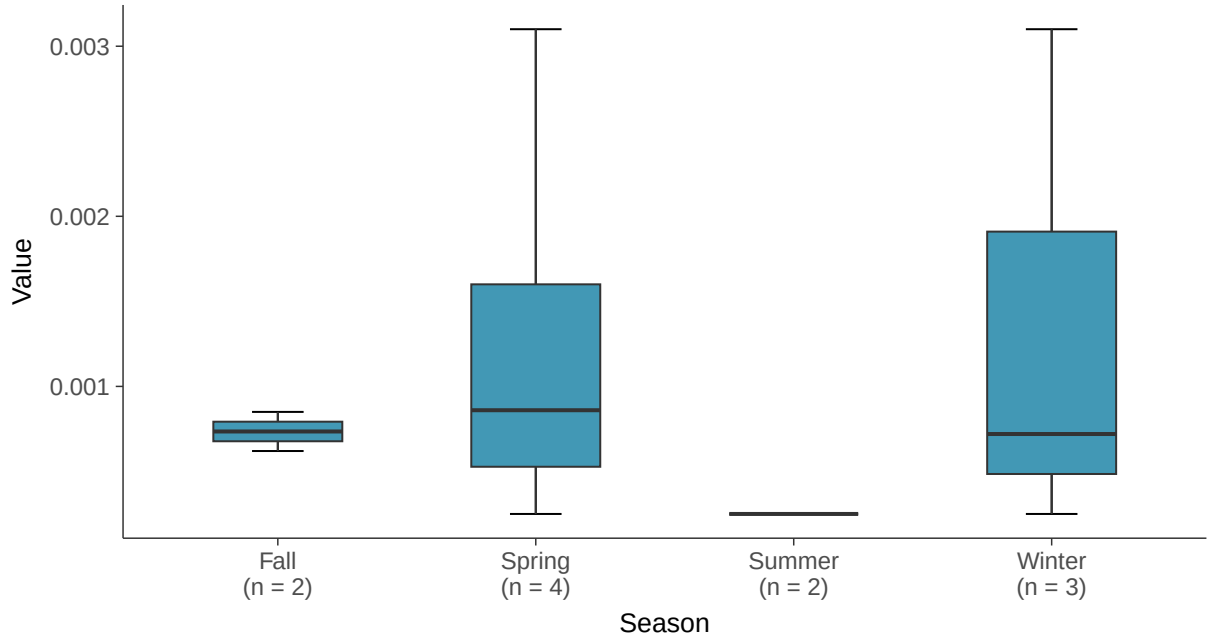
Boxplot

Molybdenum, MW-03 (mg/L)



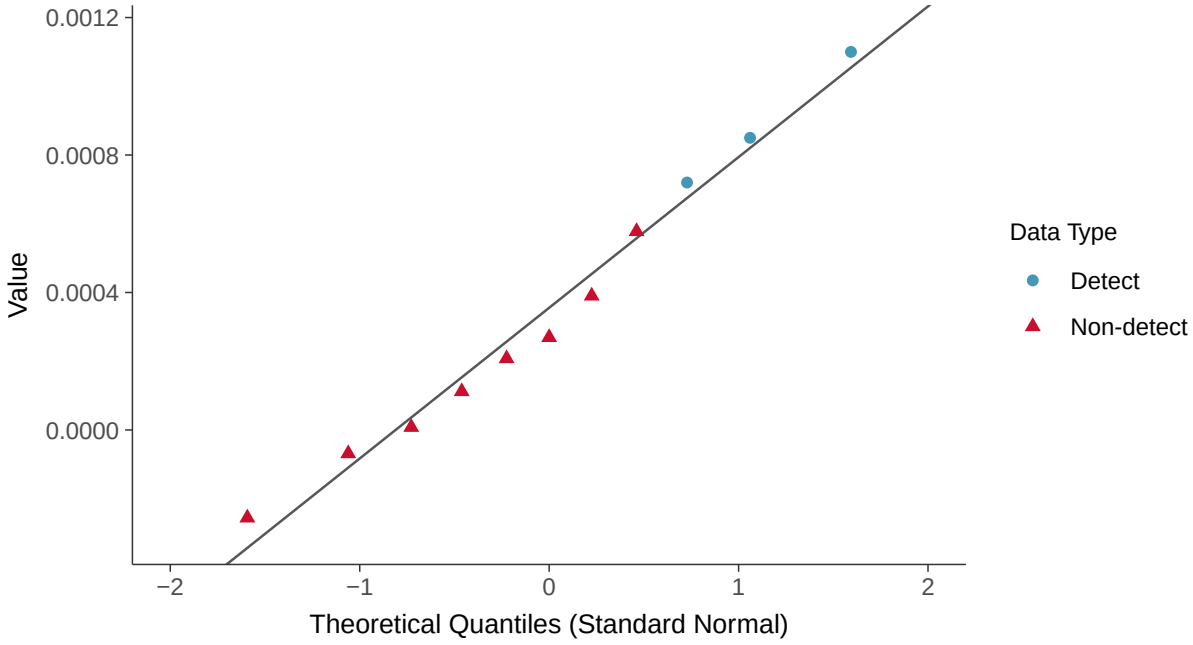
Boxplot by Season

Molybdenum, MW-03 (mg/L)



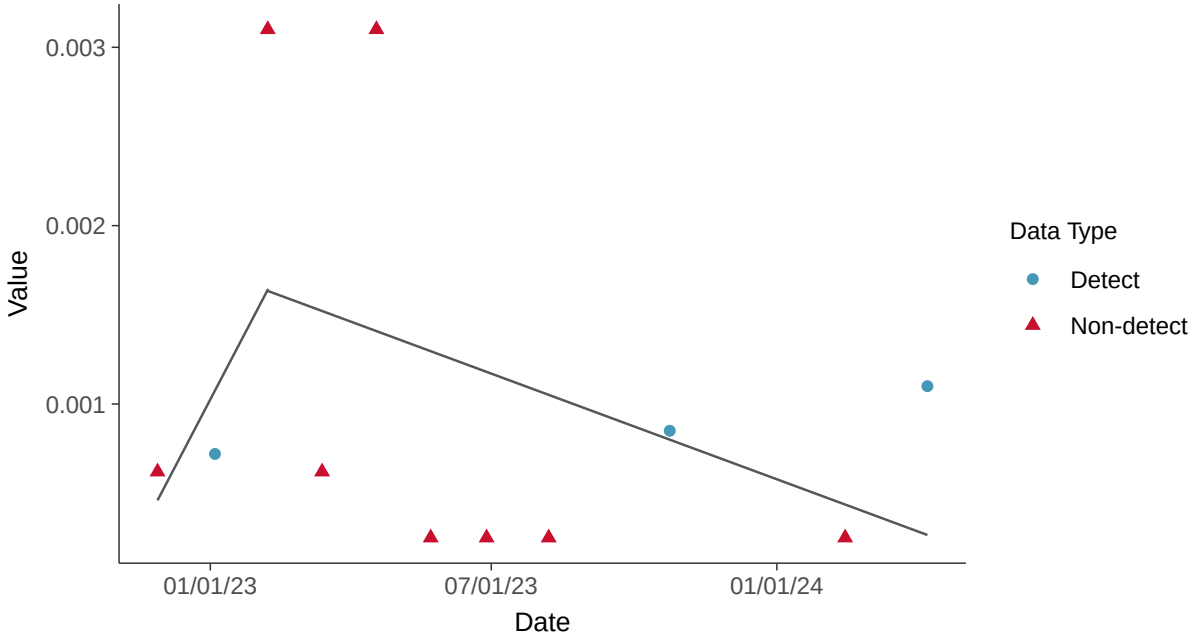
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-03 (mg/L)



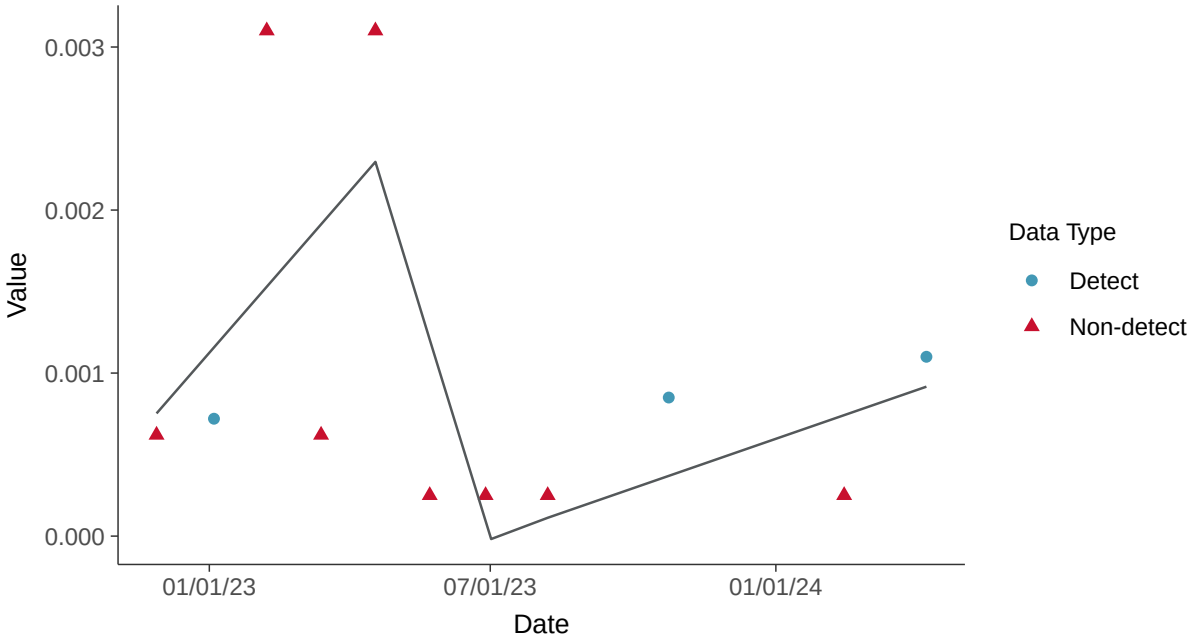
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-03 (mg/L)



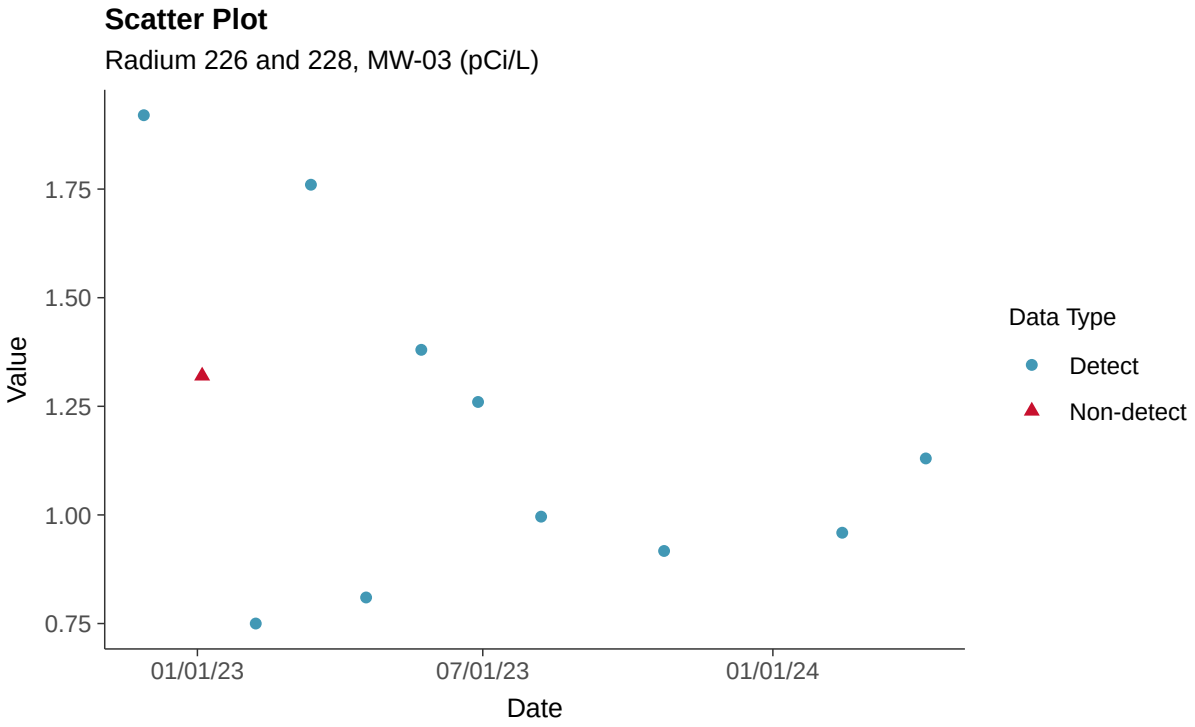
Trend Regression: Piecewise Linear-Linear-Linear

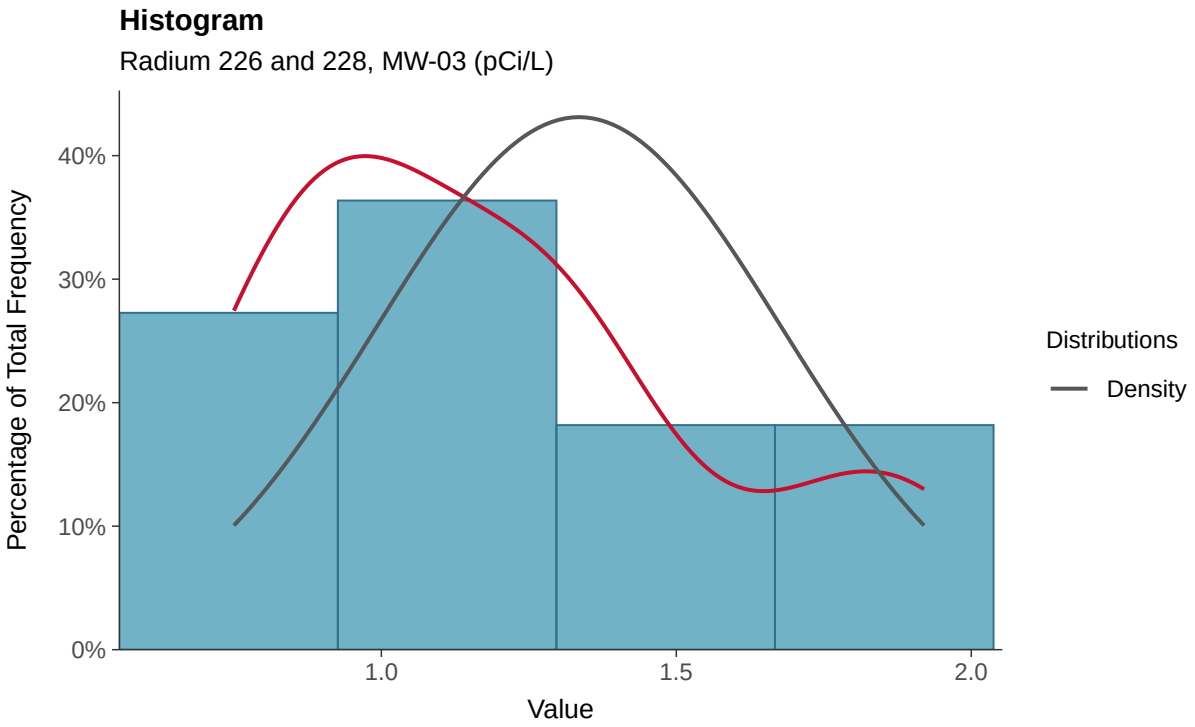
Molybdenum, MW-03 (mg/L)



Appendix IV: Radium 226 and 228, MW-03

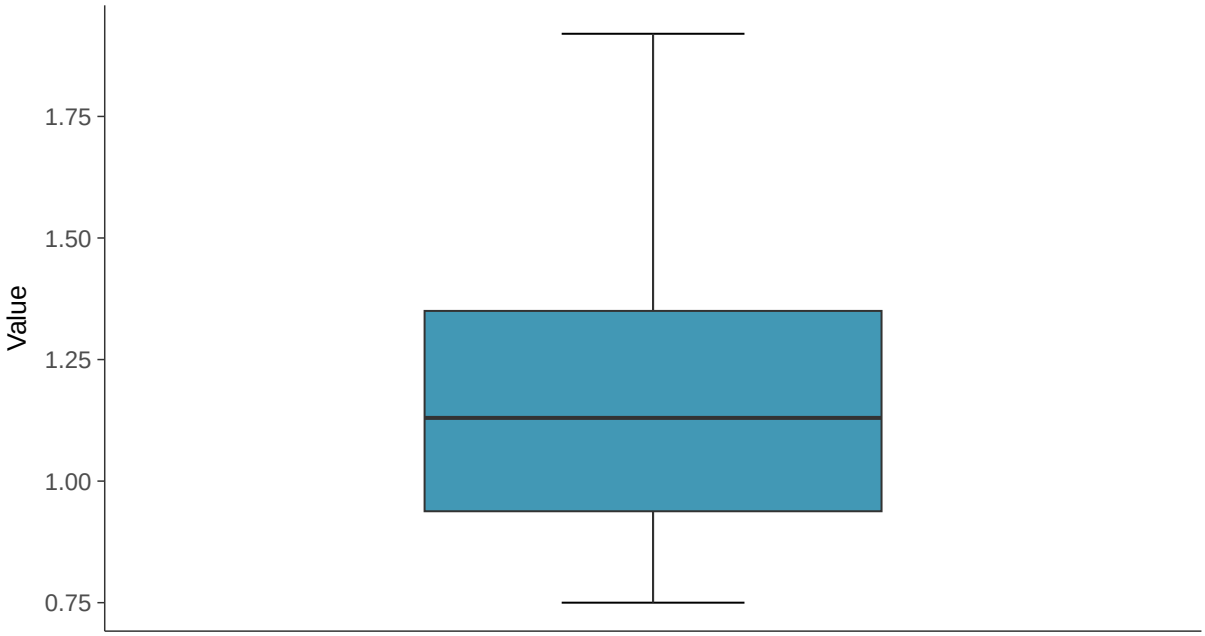
ID: 2_13_5_121





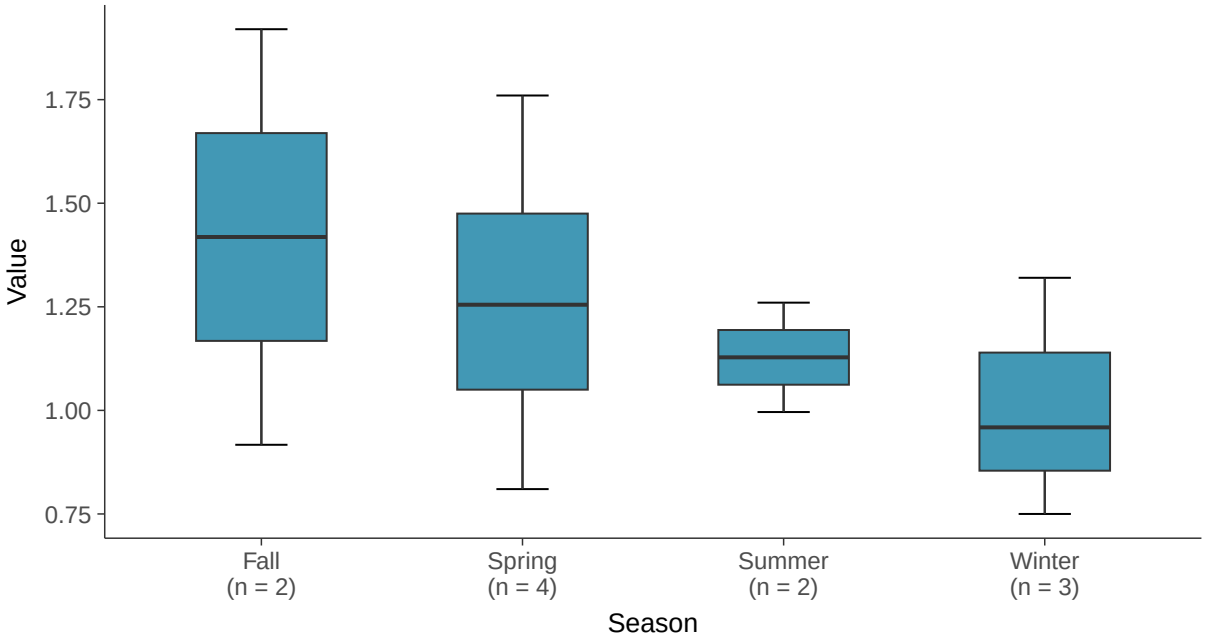
Boxplot

Radium 226 and 228, MW-03 (pCi/L)



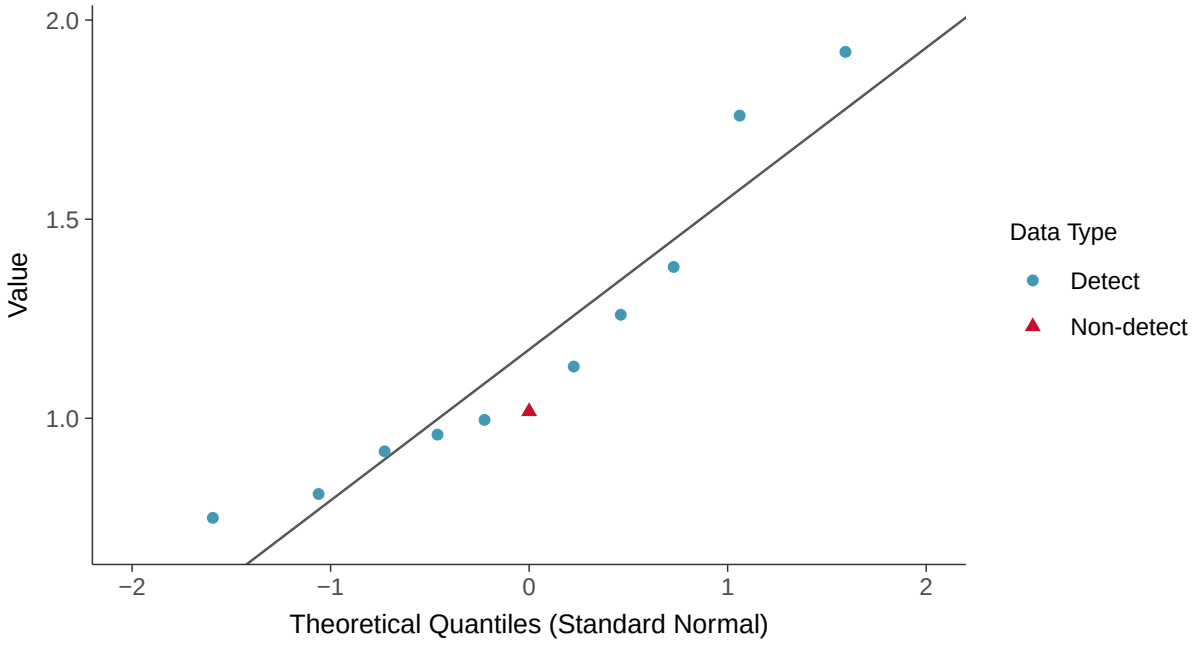
Boxplot by Season

Radium 226 and 228, MW-03 (pCi/L)



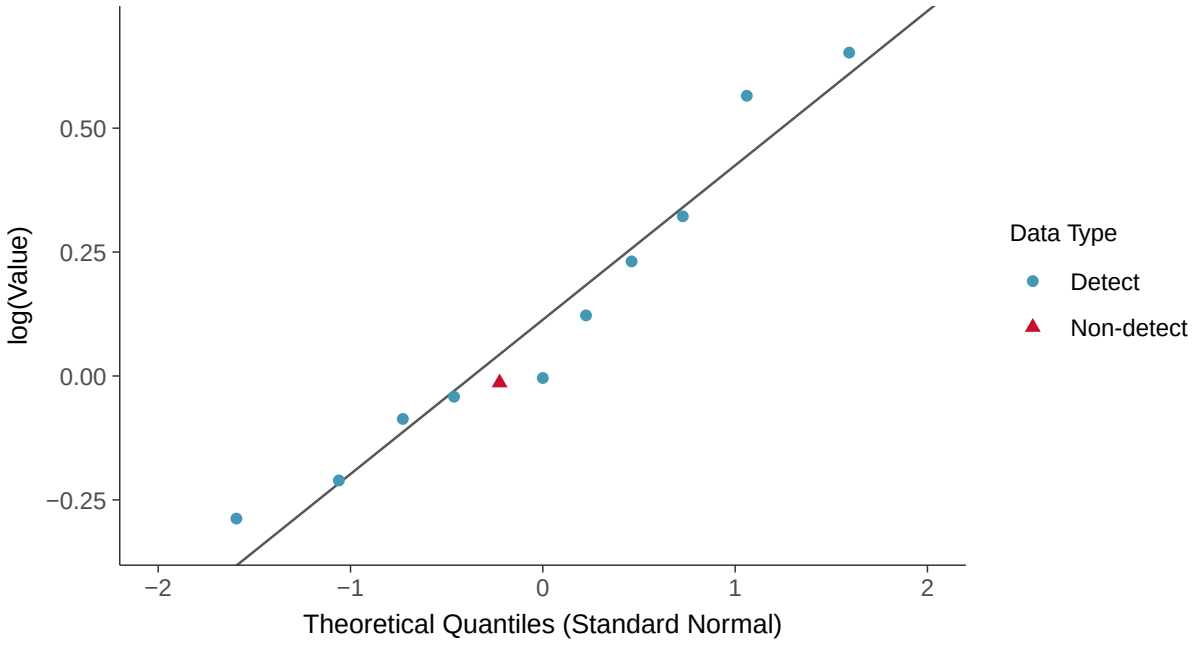
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-03 (pCi/L)



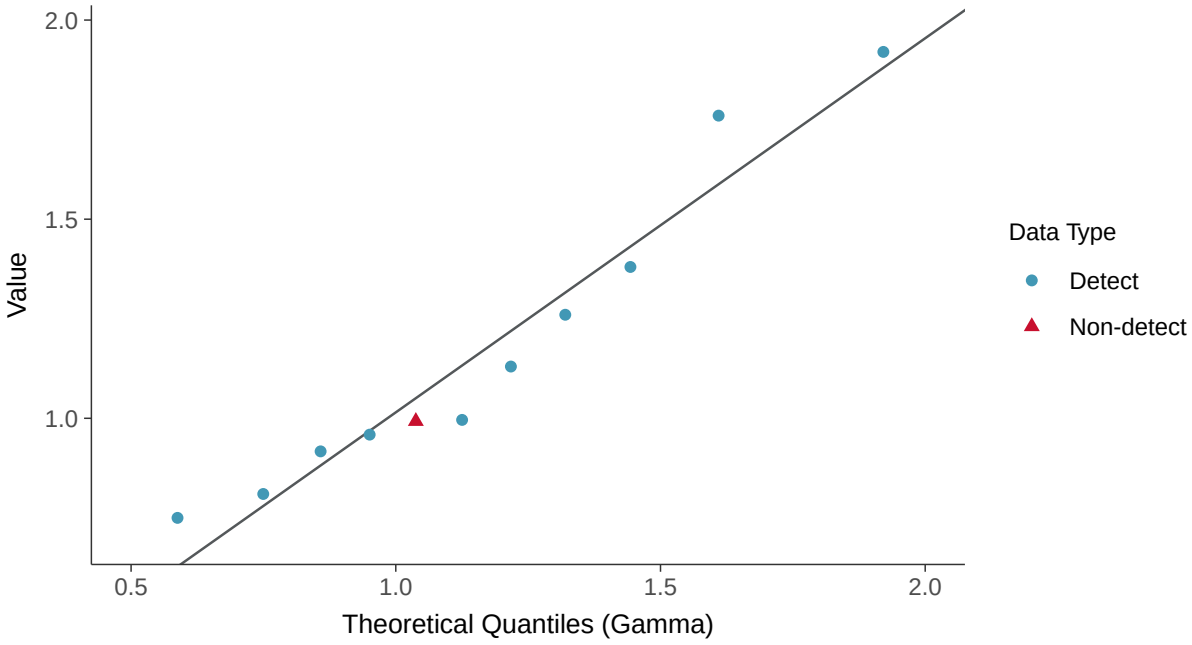
Lognormal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-03 (pCi/L)



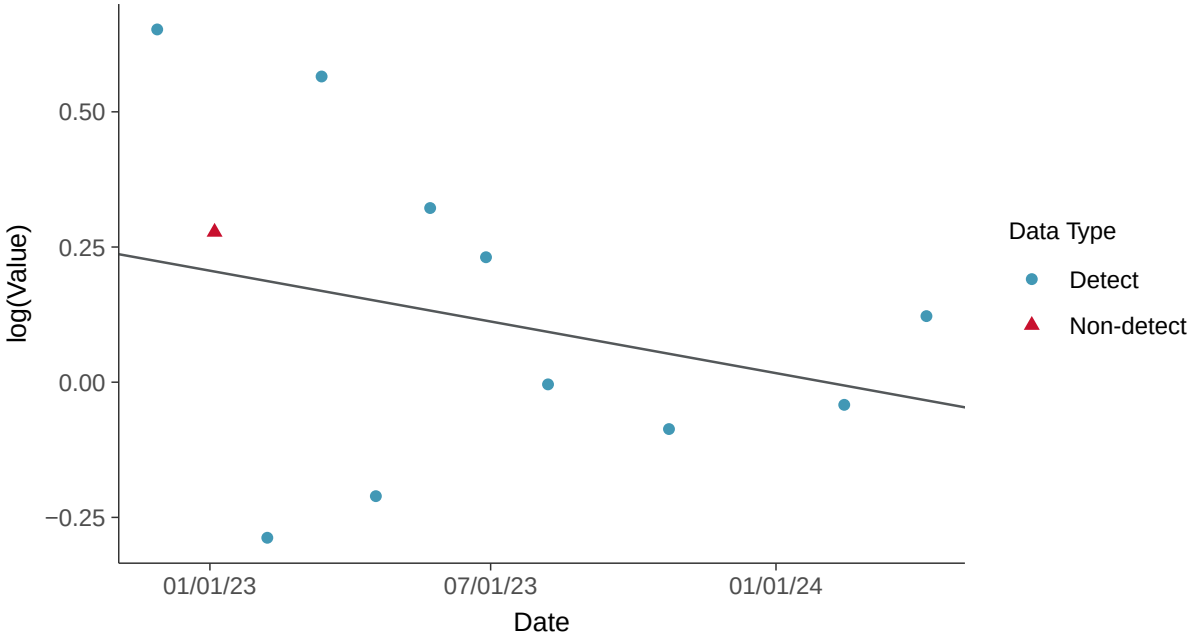
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-03 (pCi/L)



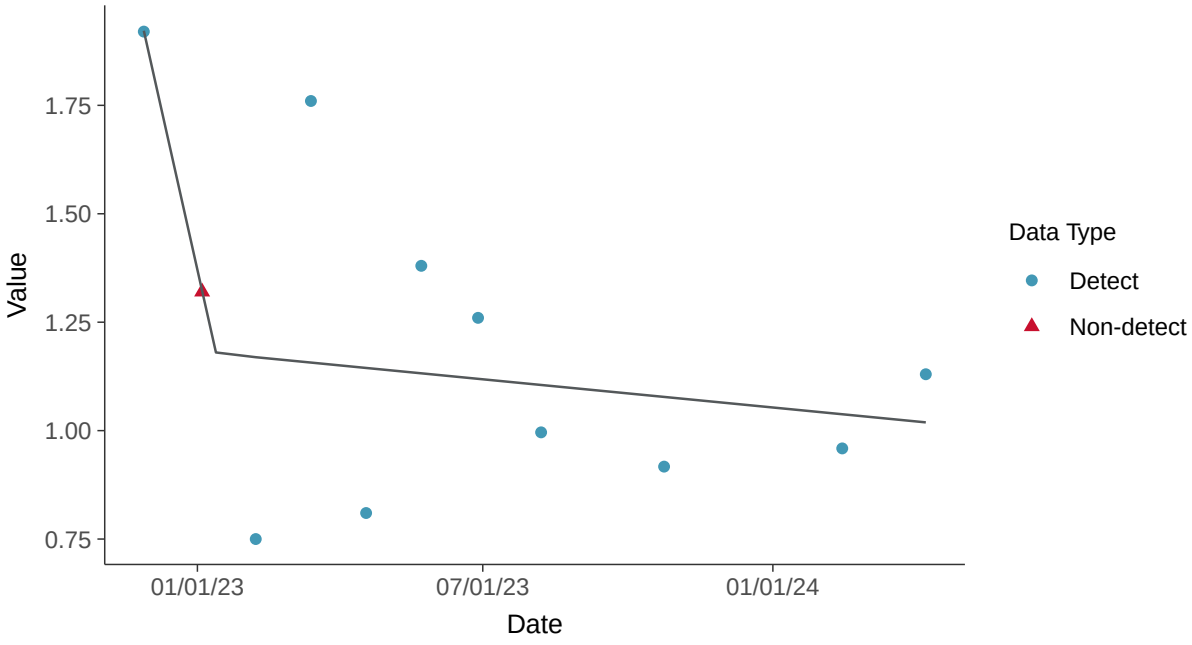
Trend Regression: Lognormal MLE

Radium 226 and 228, MW-03 (pCi/L)



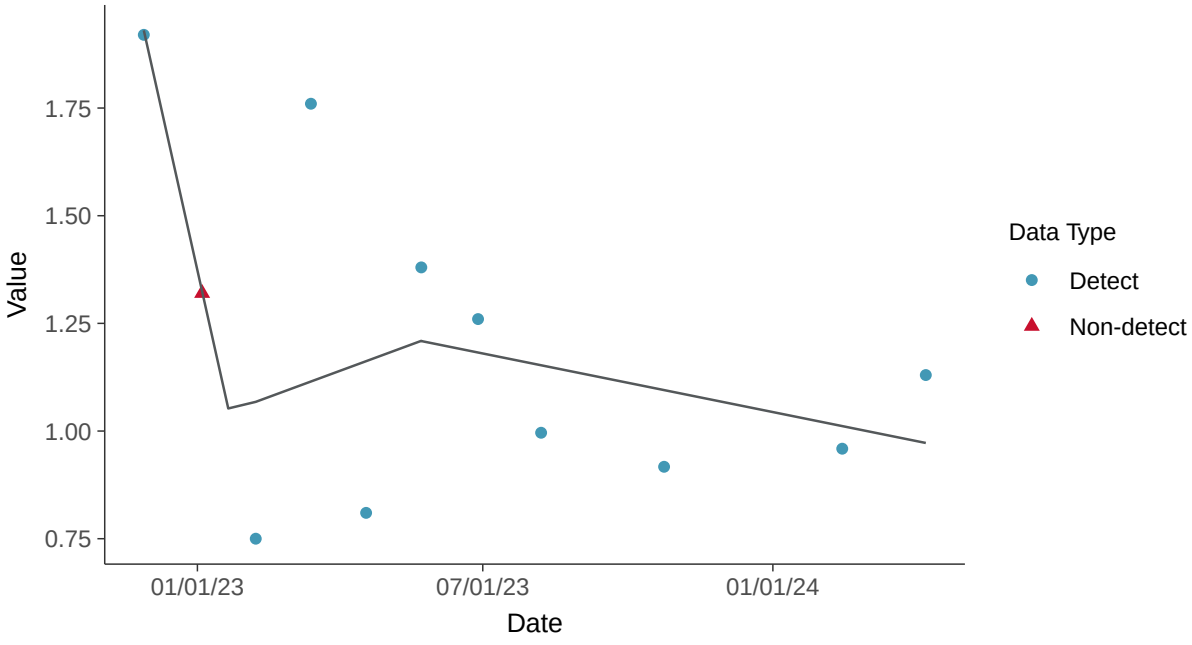
Trend Regression: Piecewise Linear-Linear

Radium 226 and 228, MW-03 (pCi/L)



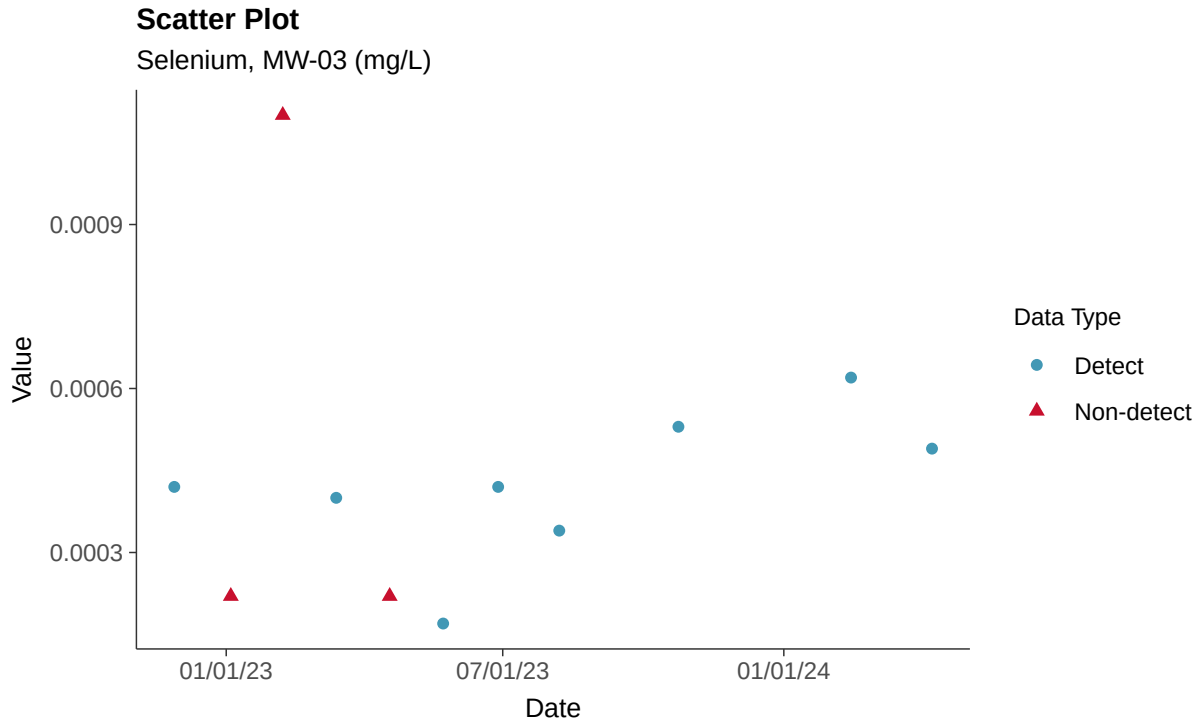
Trend Regression: Piecewise Linear-Linear-Linear

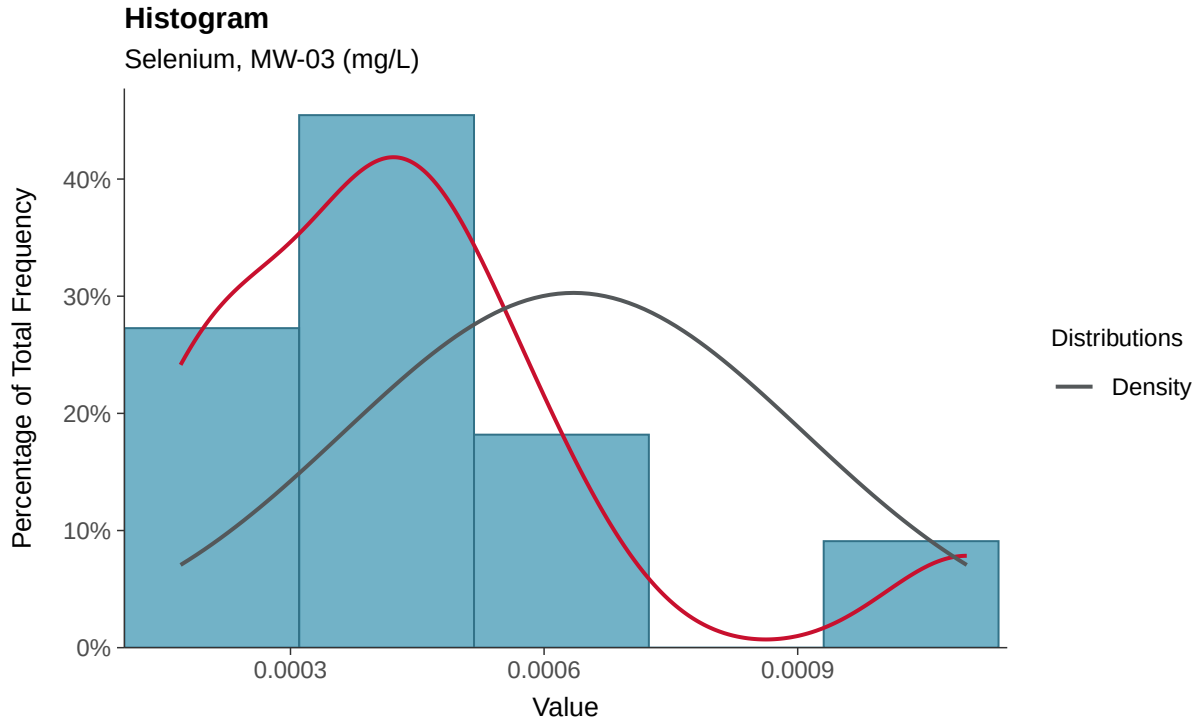
Radium 226 and 228, MW-03 (pCi/L)



Appendix IV: Selenium, MW-03

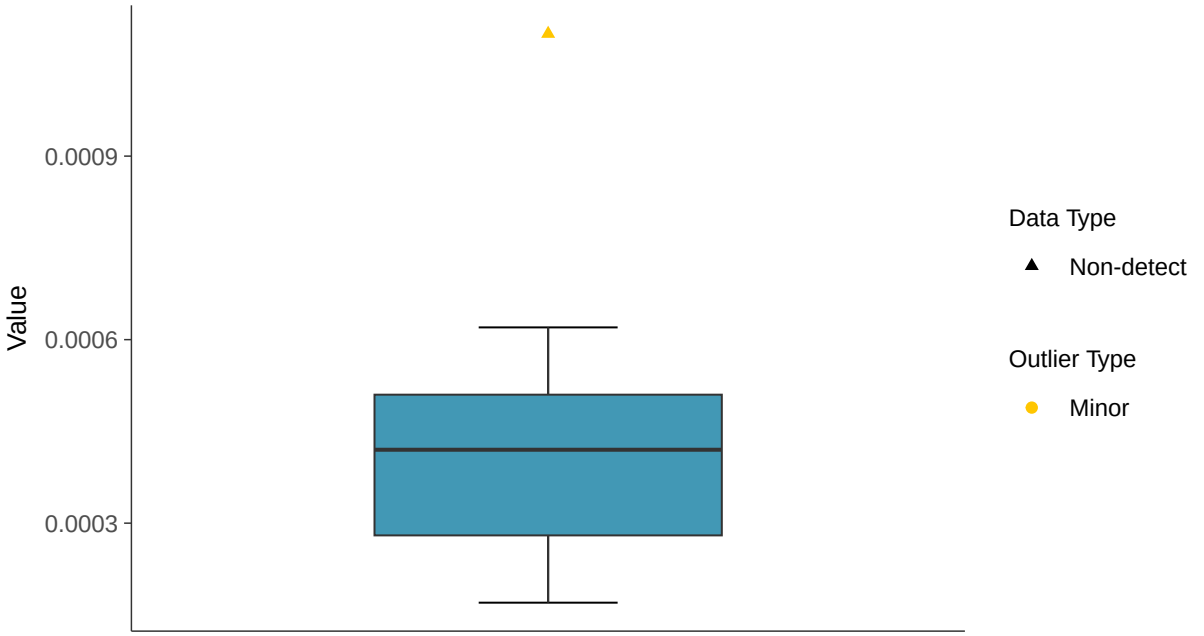
ID: 2_13_5_122





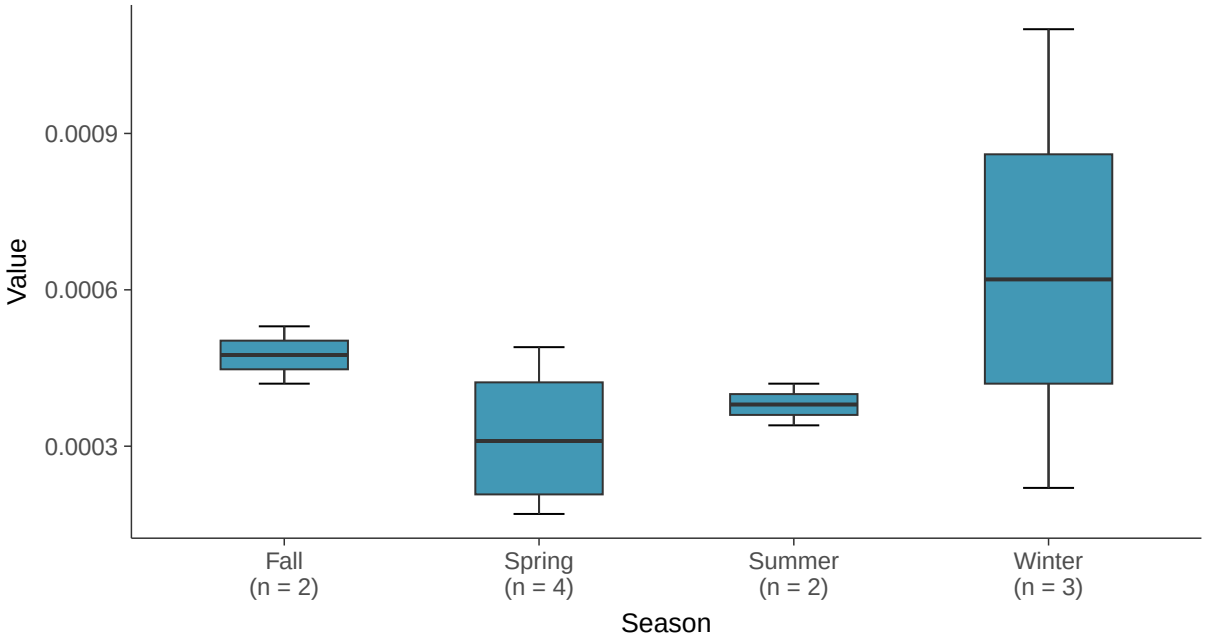
Boxplot

Selenium, MW-03 (mg/L)



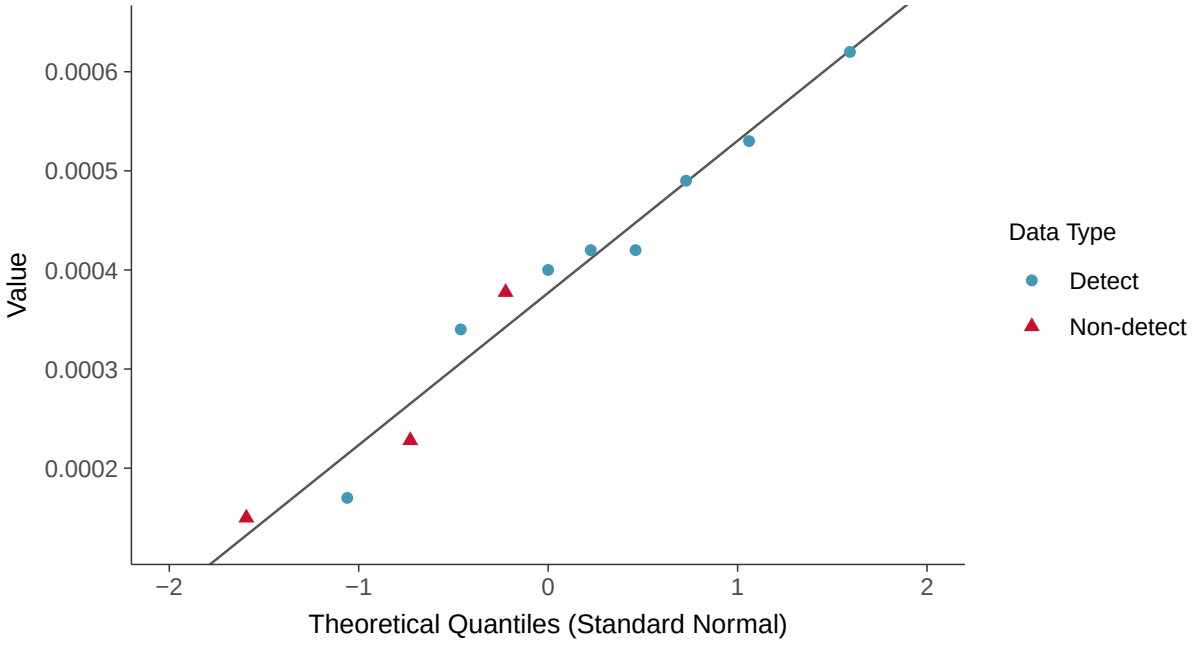
Boxplot by Season

Selenium, MW-03 (mg/L)



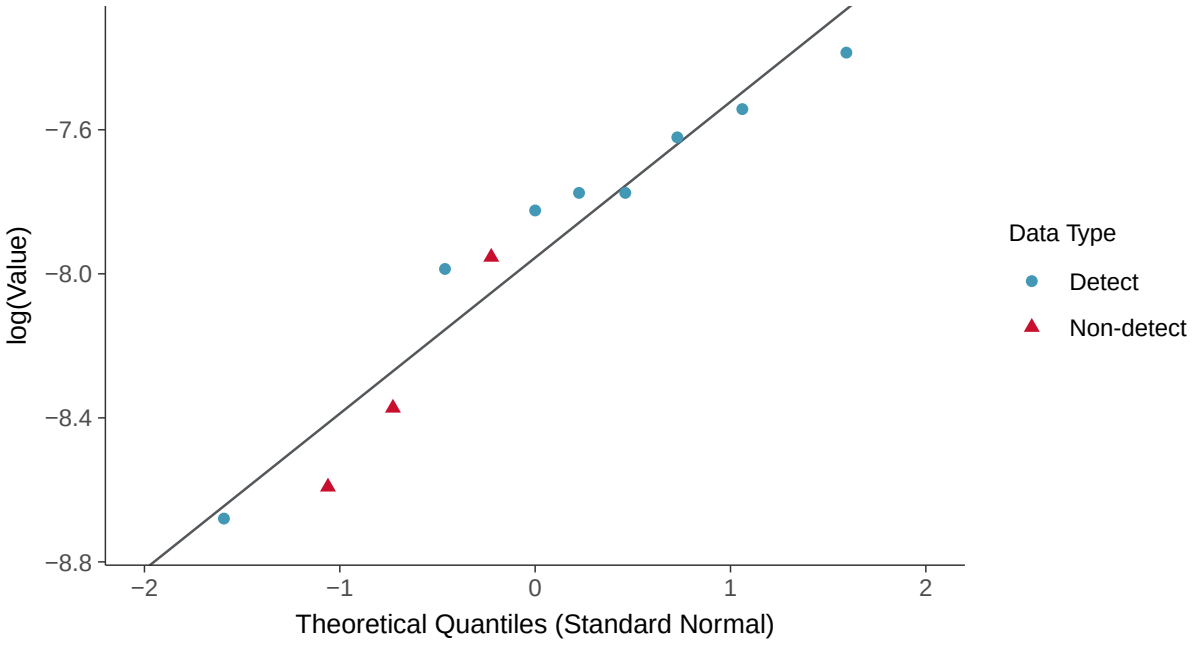
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-03 (mg/L)



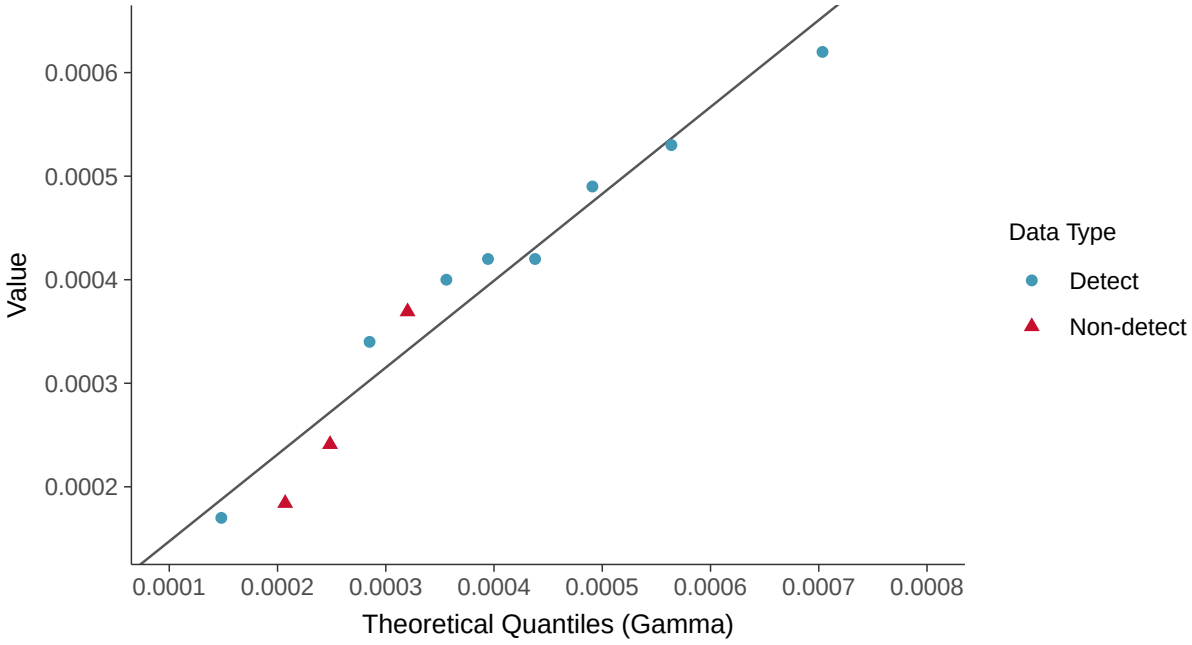
Lognormal Q-Q plot using ROS Imputed Estimates

Selenium, MW-03 (mg/L)



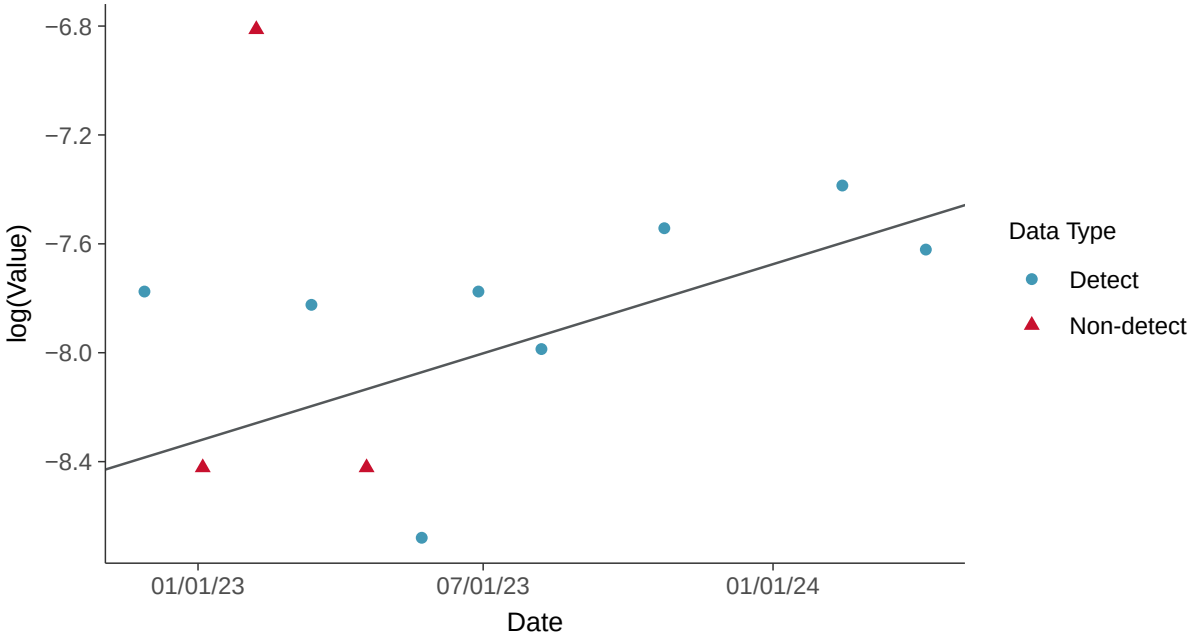
Gamma Q-Q plot using ROS Imputed Estimates

Selenium, MW-03 (mg/L)



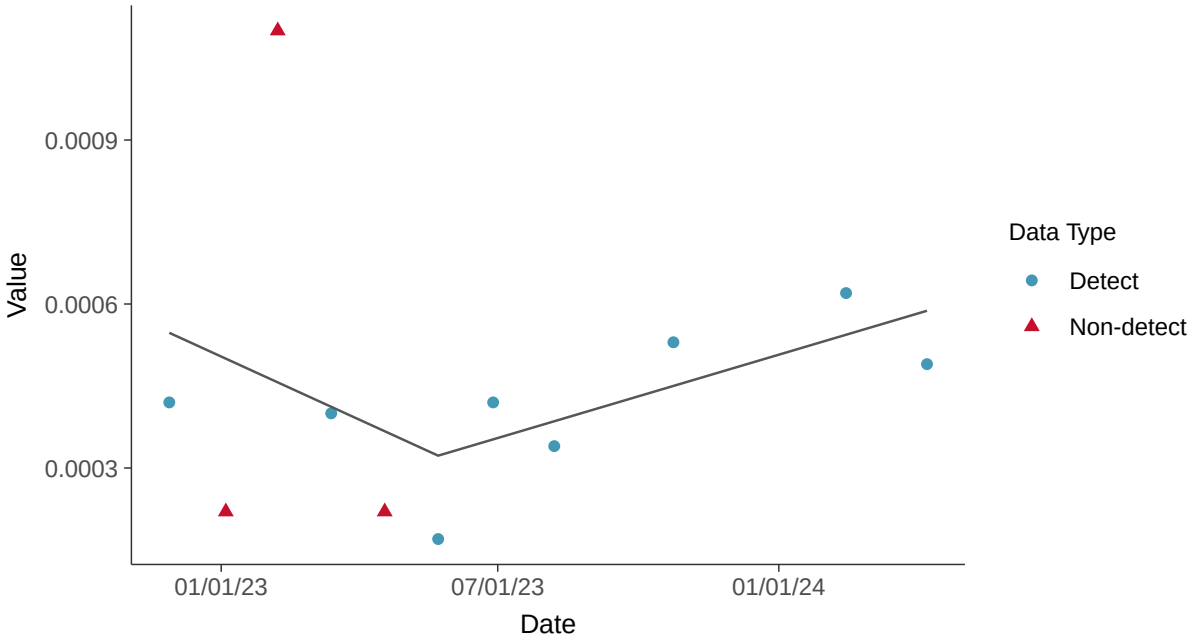
Trend Regression: Lognormal MLE

Selenium, MW-03 (mg/L)



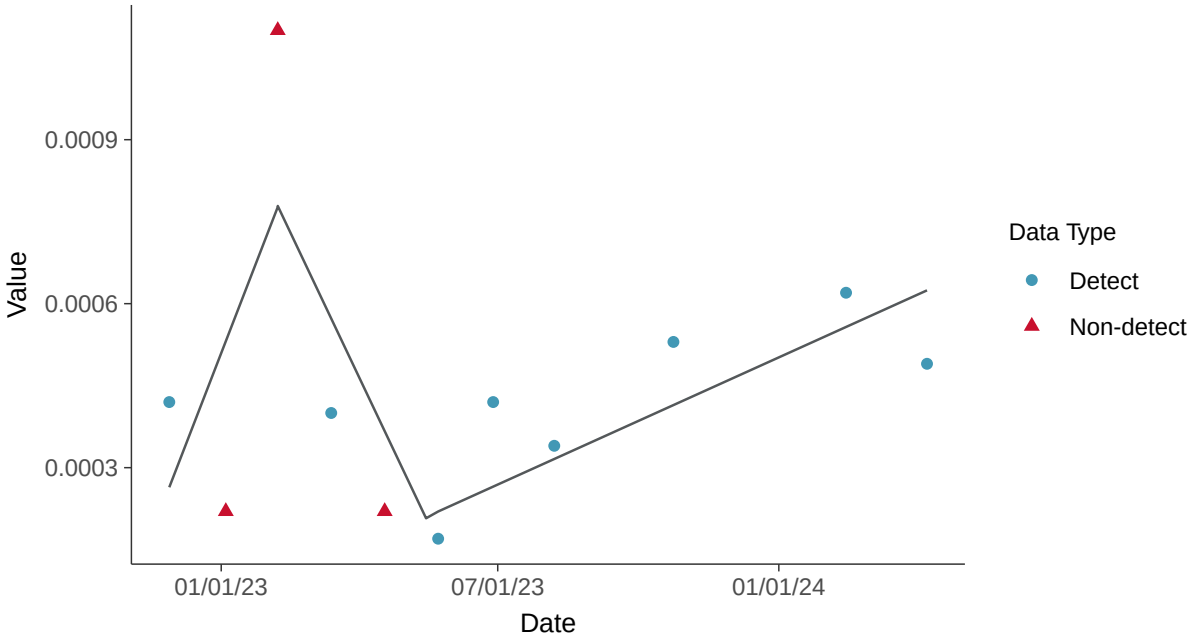
Trend Regression: Piecewise Linear-Linear

Selenium, MW-03 (mg/L)



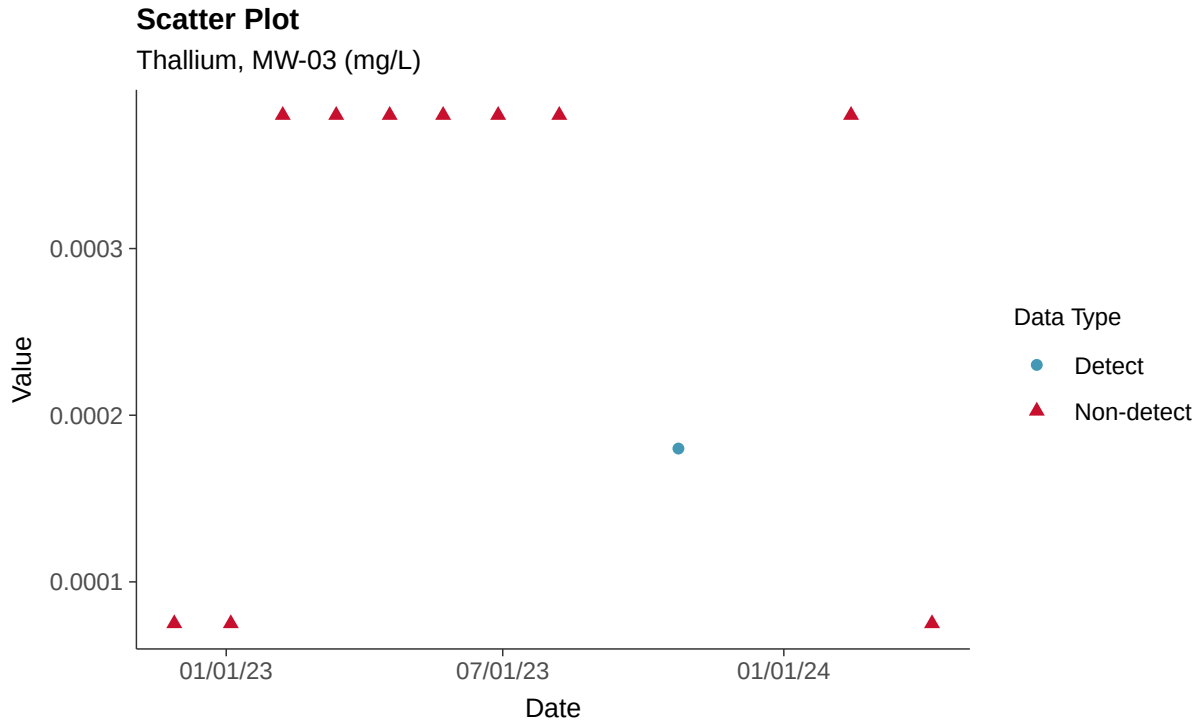
Trend Regression: Piecewise Linear-Linear-Linear

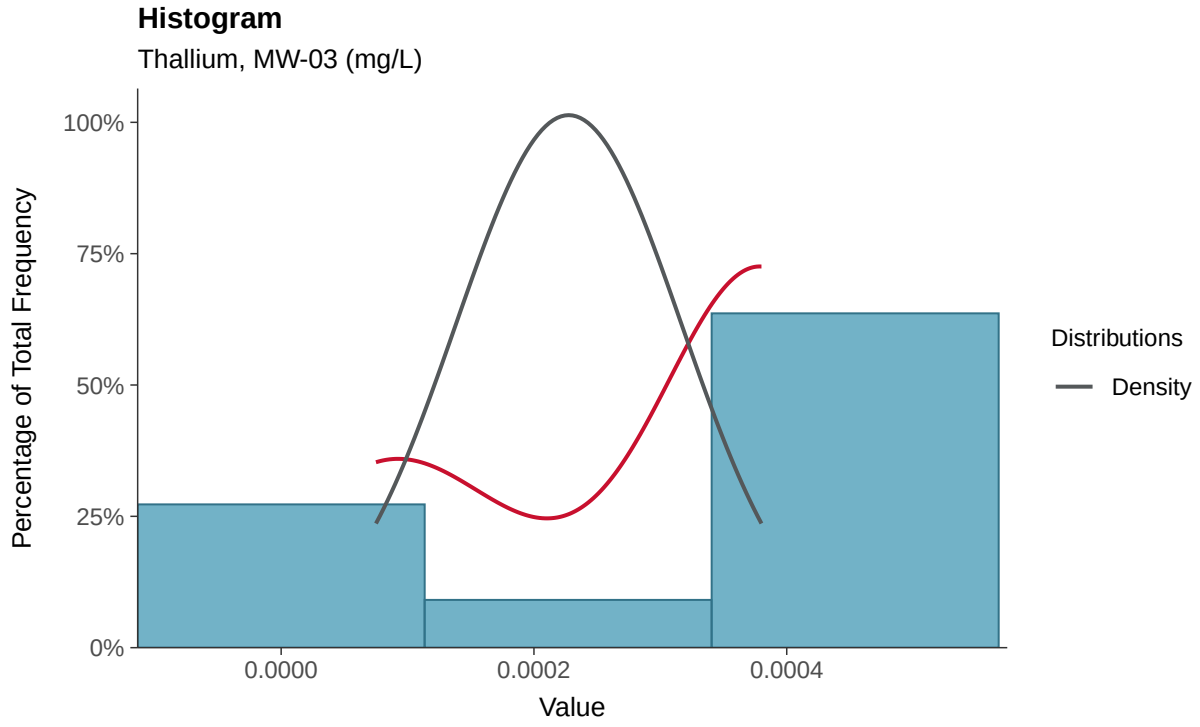
Selenium, MW-03 (mg/L)



Appendix IV: Thallium, MW-03

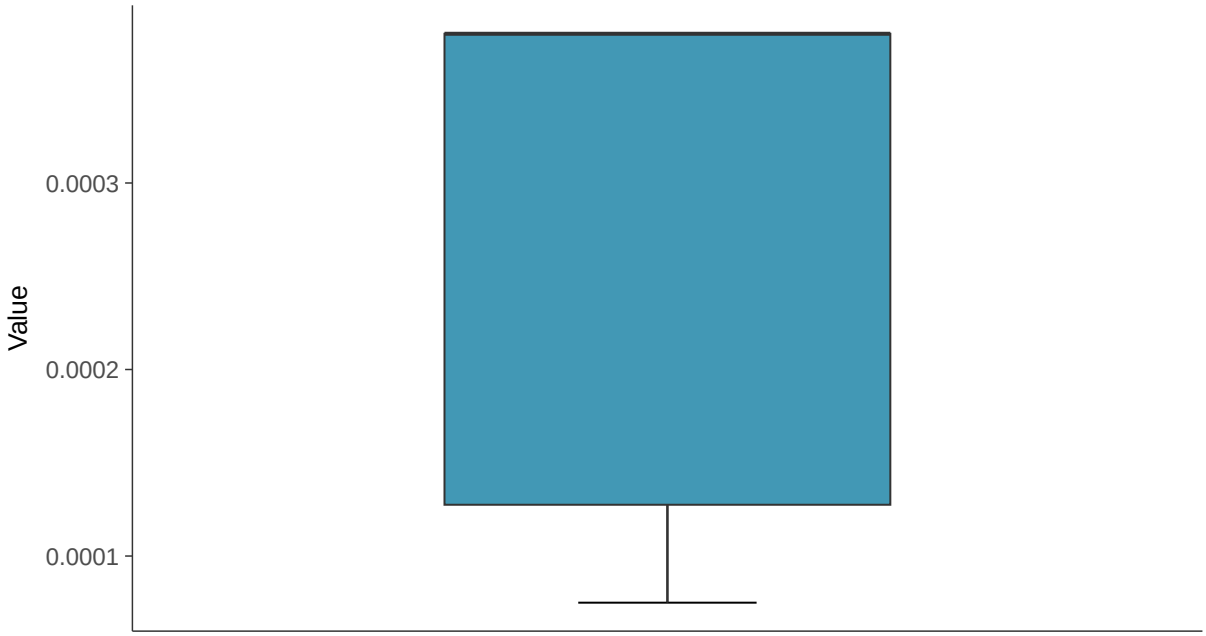
ID: 2_13_5_125





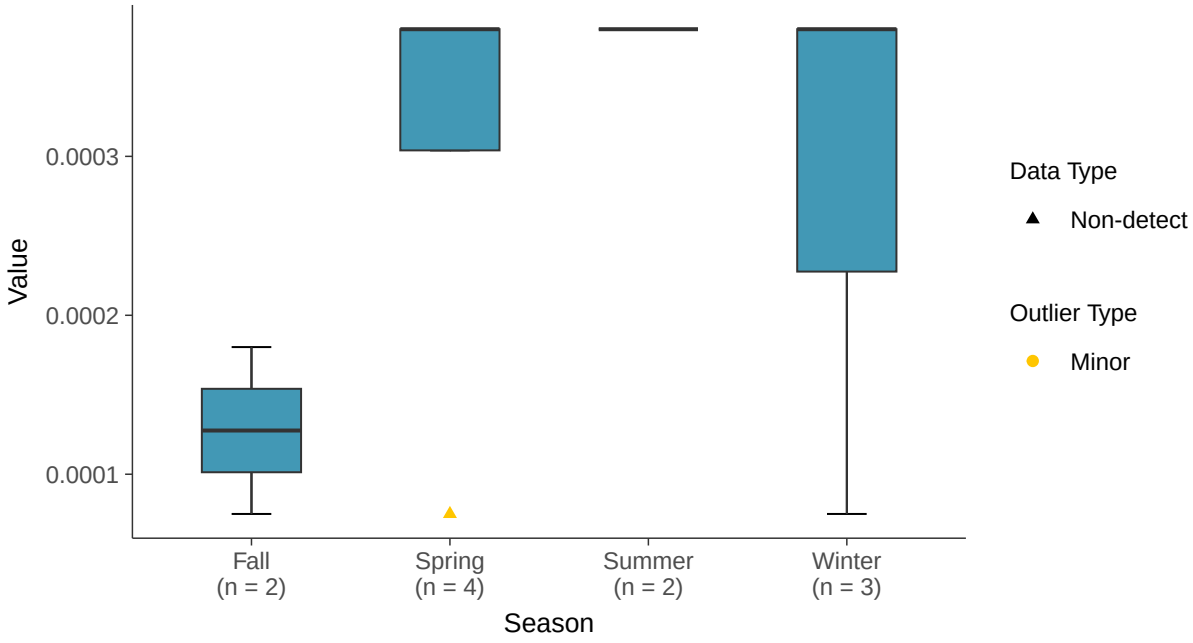
Boxplot

Thallium, MW-03 (mg/L)



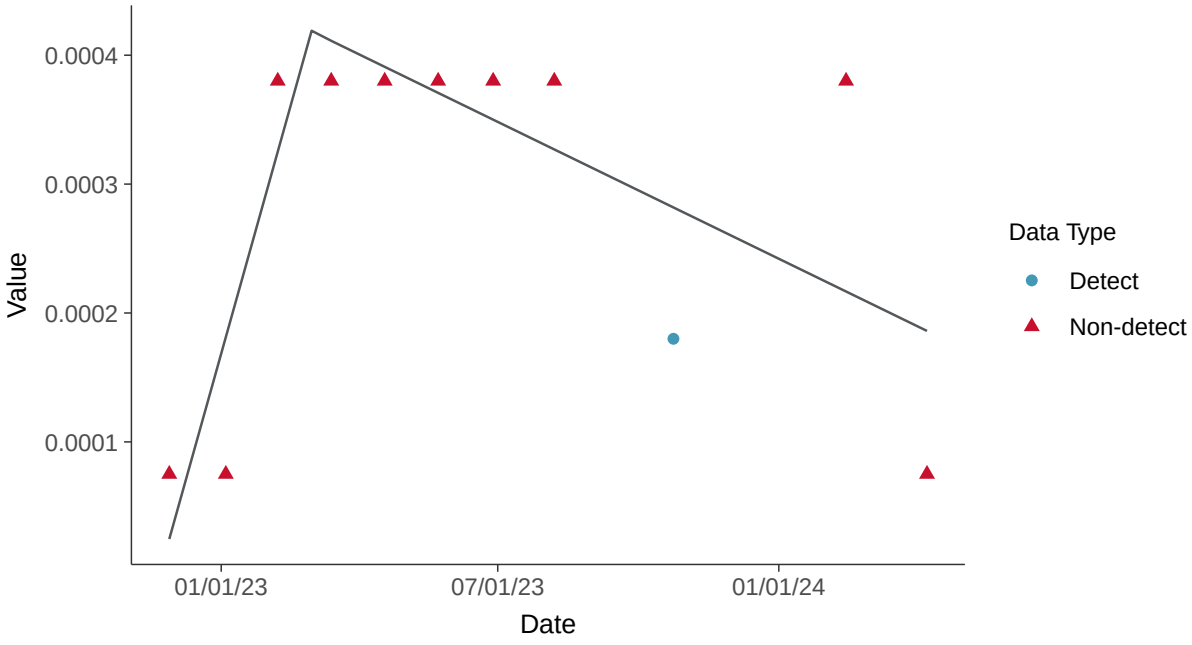
Boxplot by Season

Thallium, MW-03 (mg/L)



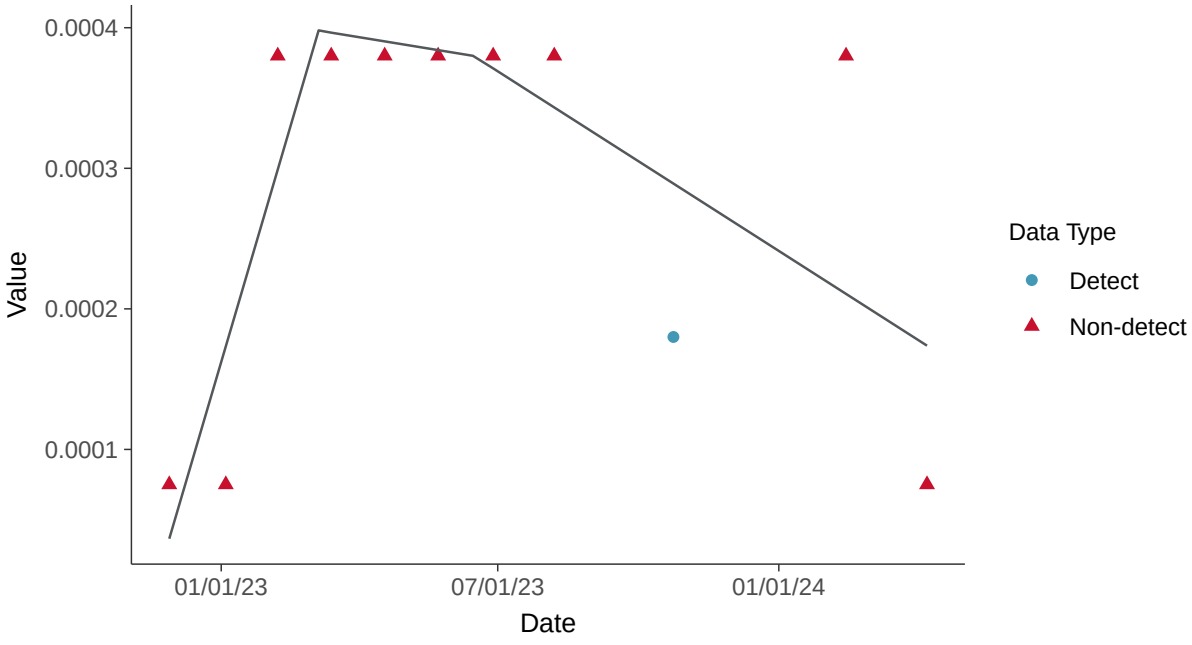
Trend Regression: Piecewise Linear-Linear

Thallium, MW-03 (mg/L)



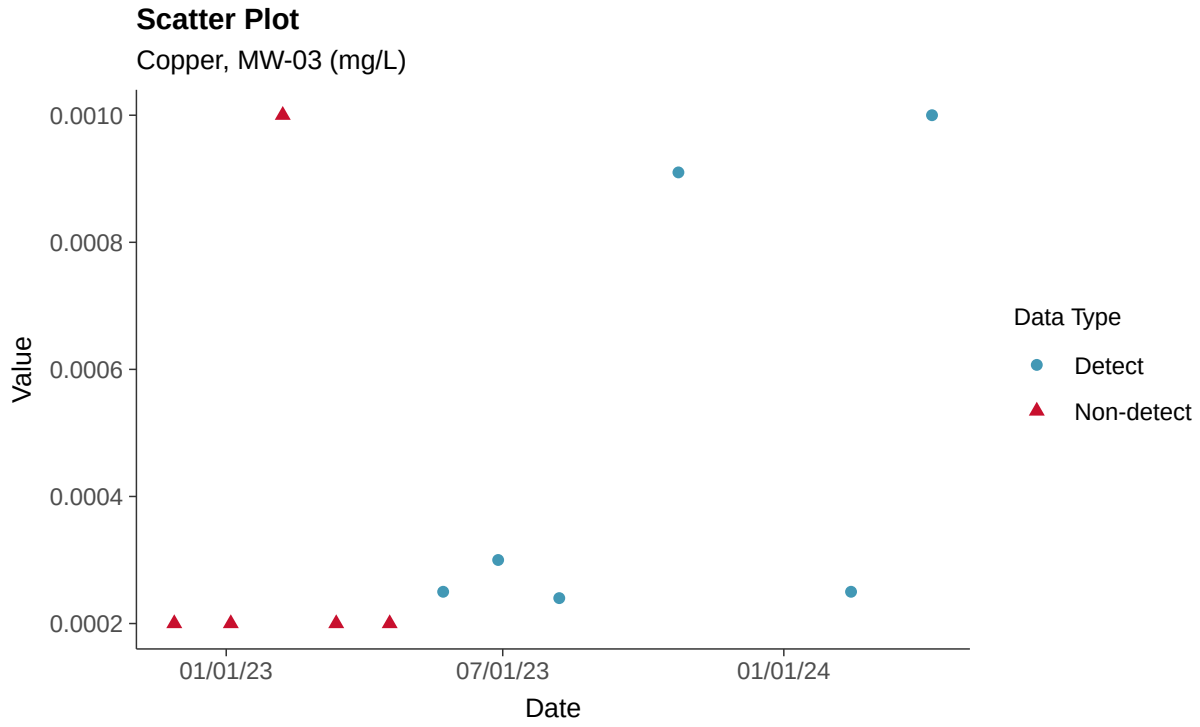
Trend Regression: Piecewise Linear-Linear-Linear

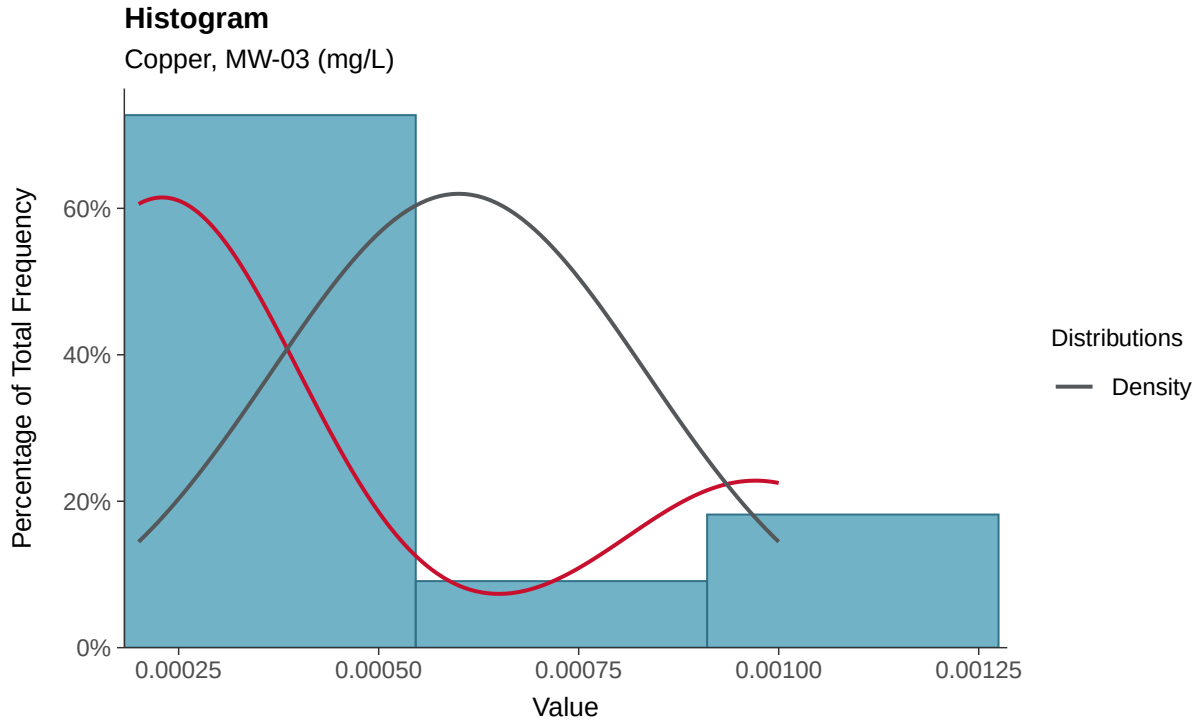
Thallium, MW-03 (mg/L)



Part 115: Copper, MW-03

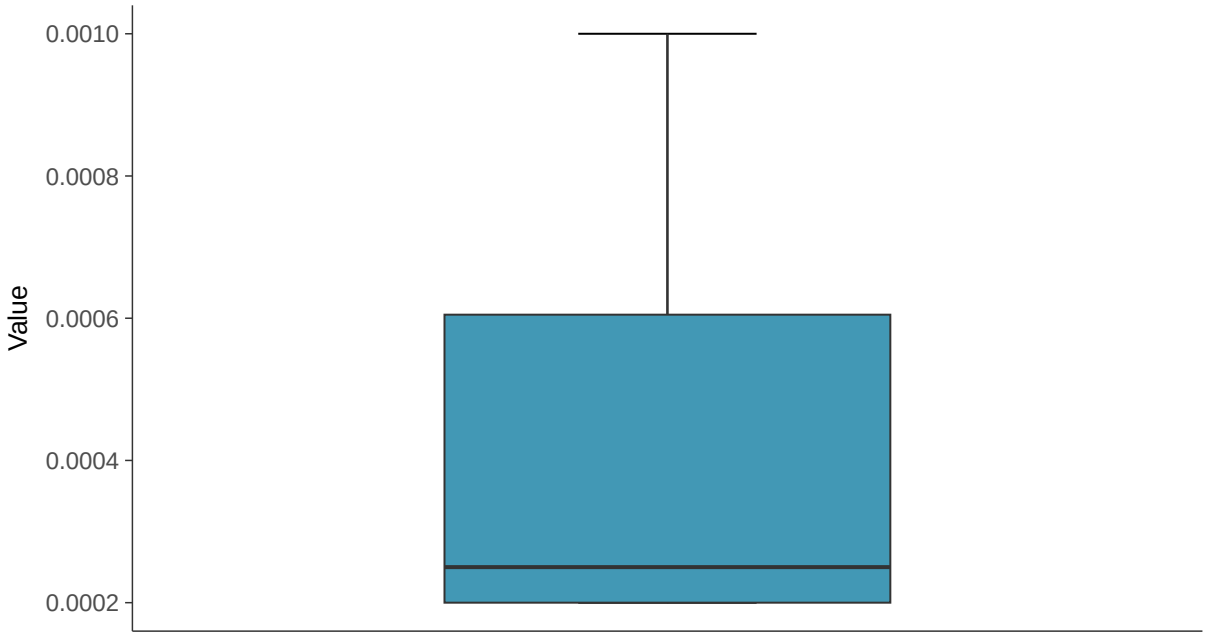
ID: 2_13_6_111





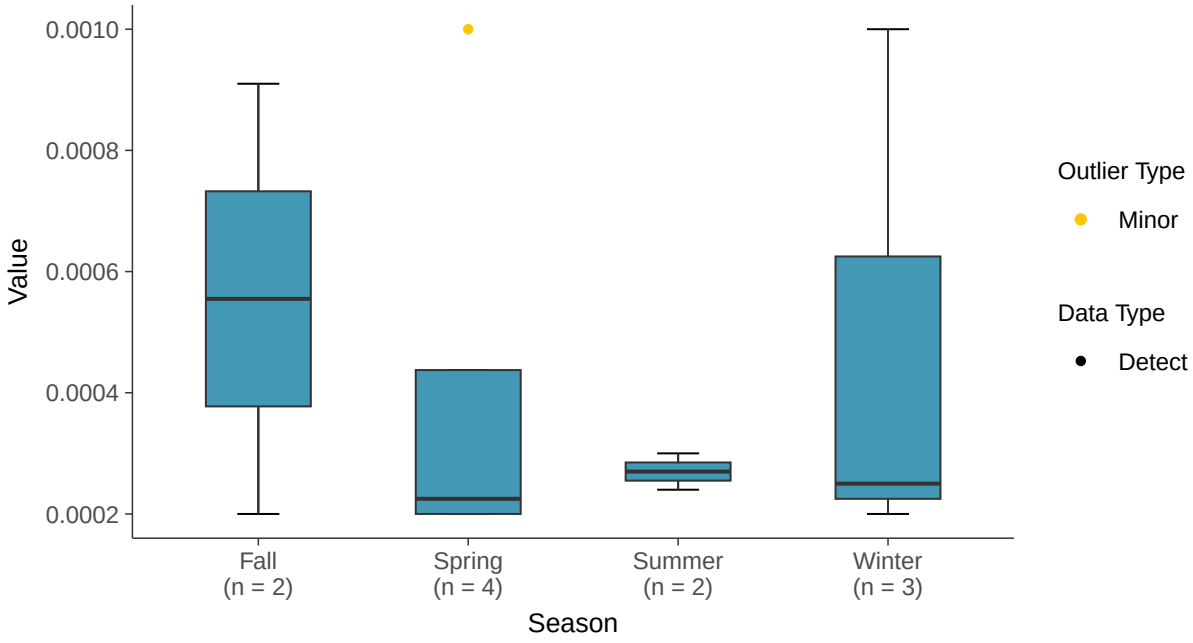
Boxplot

Copper, MW-03 (mg/L)



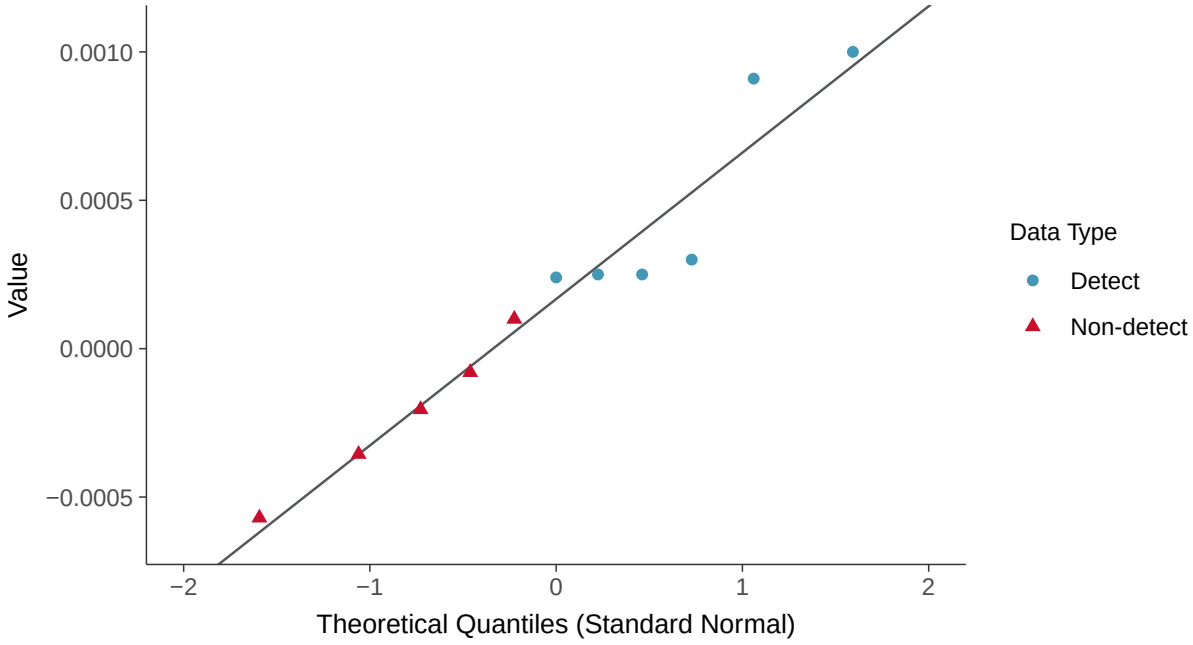
Boxplot by Season

Copper, MW-03 (mg/L)



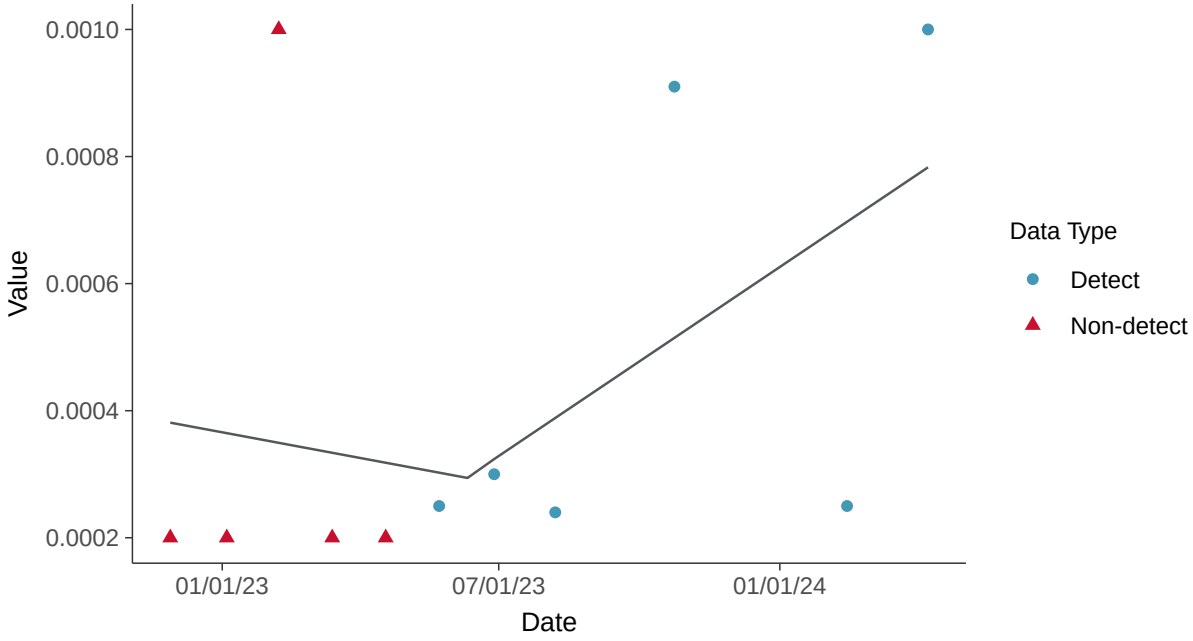
Normal Q-Q plot using ROS Imputed Estimates

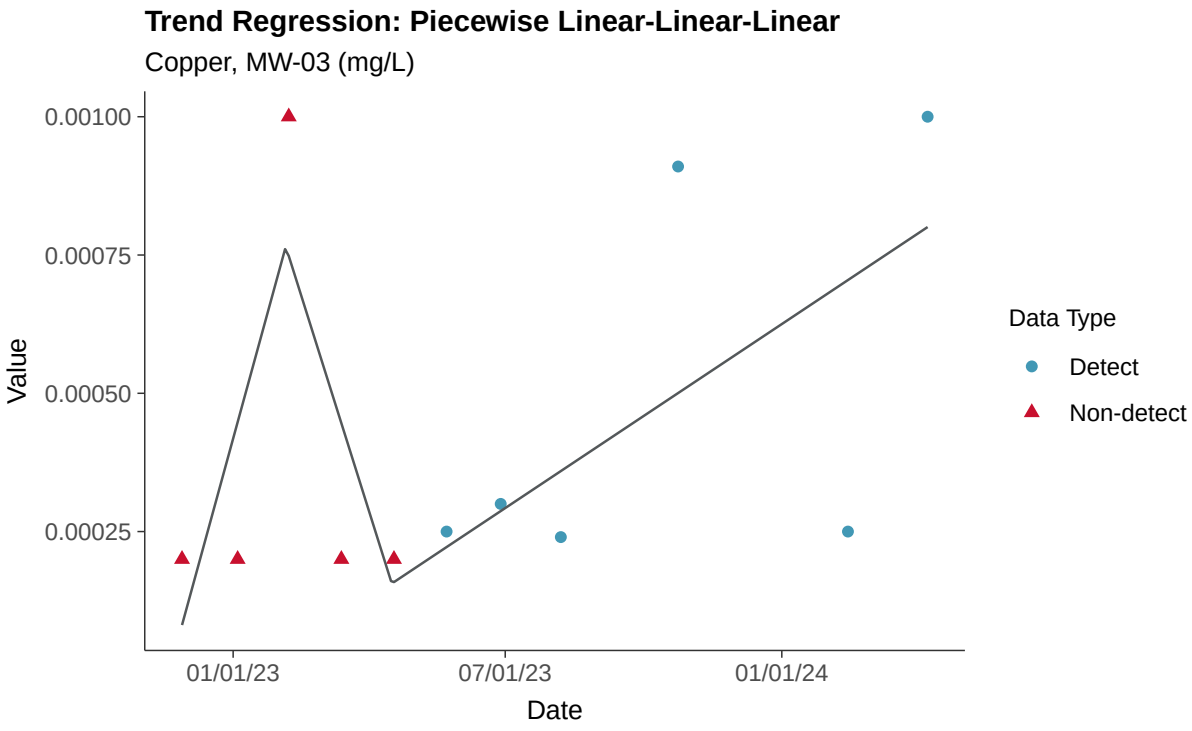
Copper, MW-03 (mg/L)



Trend Regression: Piecewise Linear-Linear

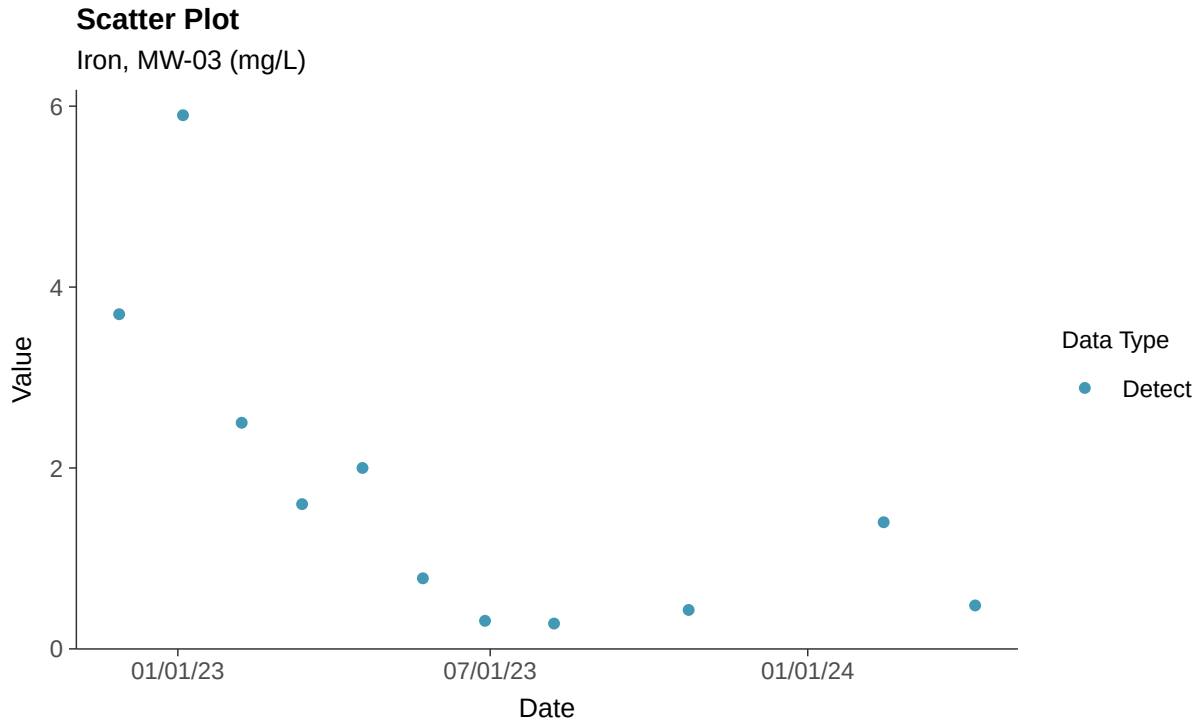
Copper, MW-03 (mg/L)

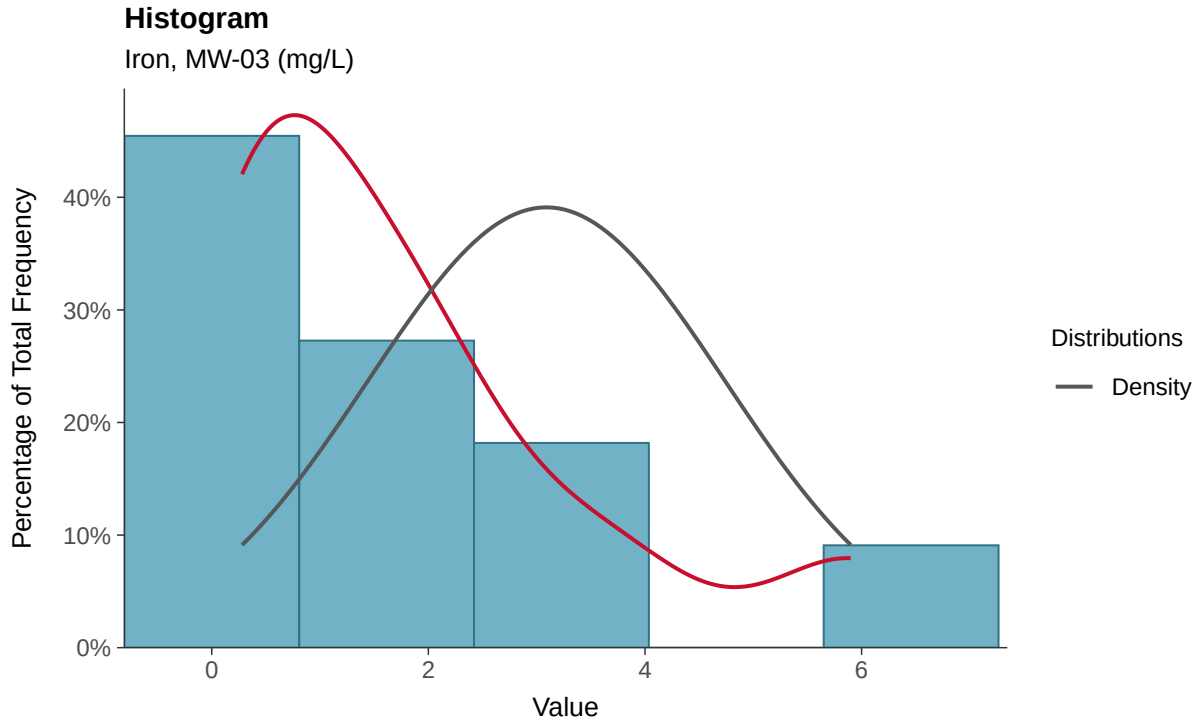



Trend Regression: Piecewise Linear-Linear-Linear
Copper, MW-03 (mg/L)
0.00100
0.00075
0.00050
0.00025
Value
01/01/23
07/01/23
01/01/24
Date
Data Type
Detect
Non-detect

Part 115: Iron, MW-03

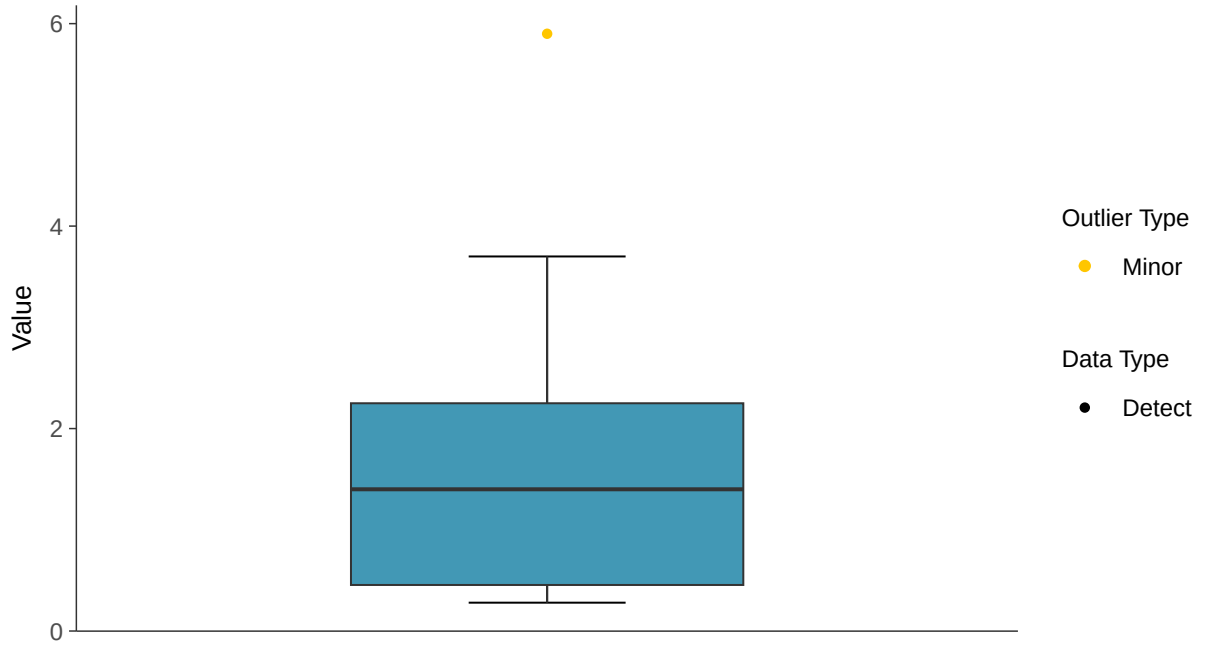
ID: 2_13_6_114





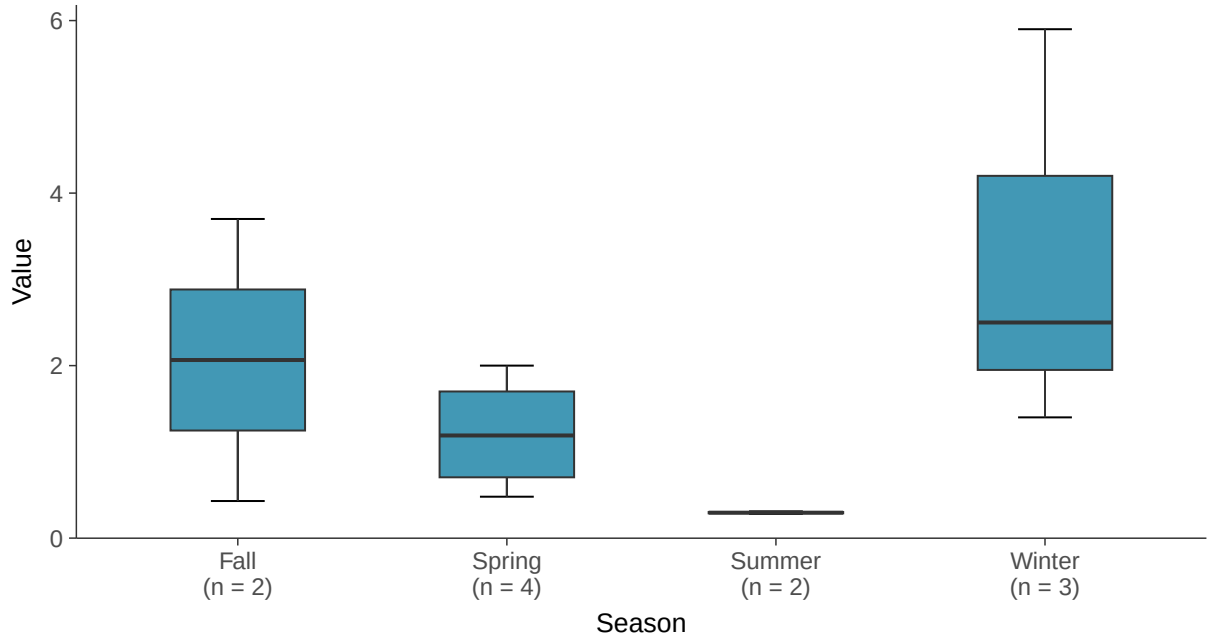
Boxplot

Iron, MW-03 (mg/L)



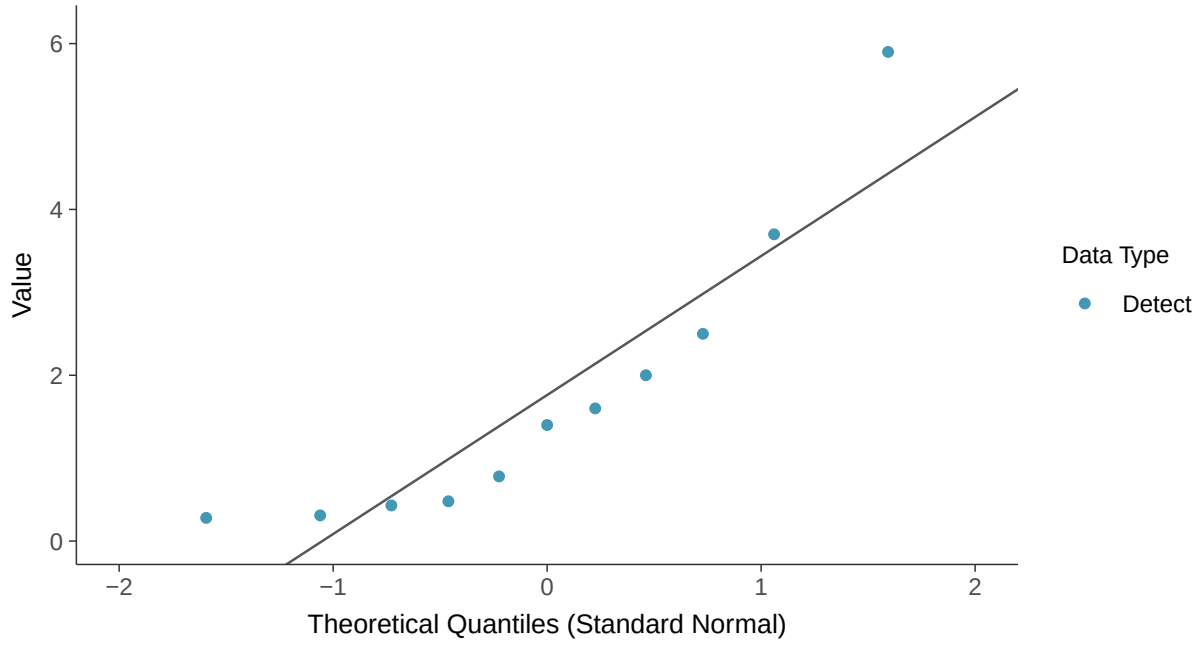
Boxplot by Season

Iron, MW-03 (mg/L)



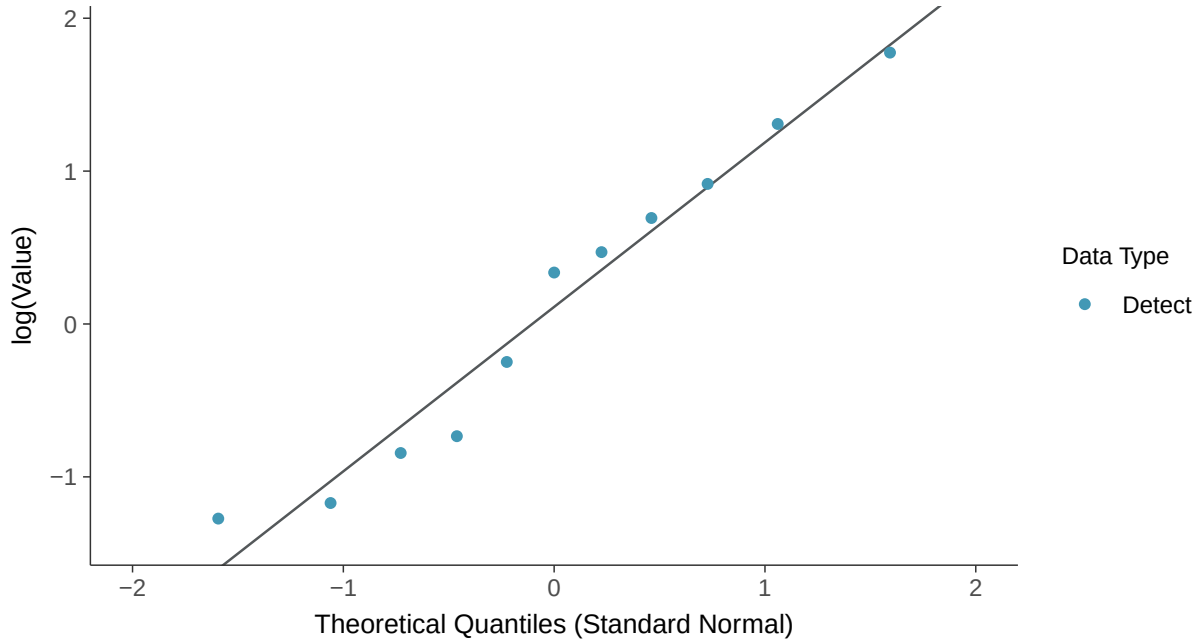
Normal Q-Q plot

Iron, MW-03 (mg/L)



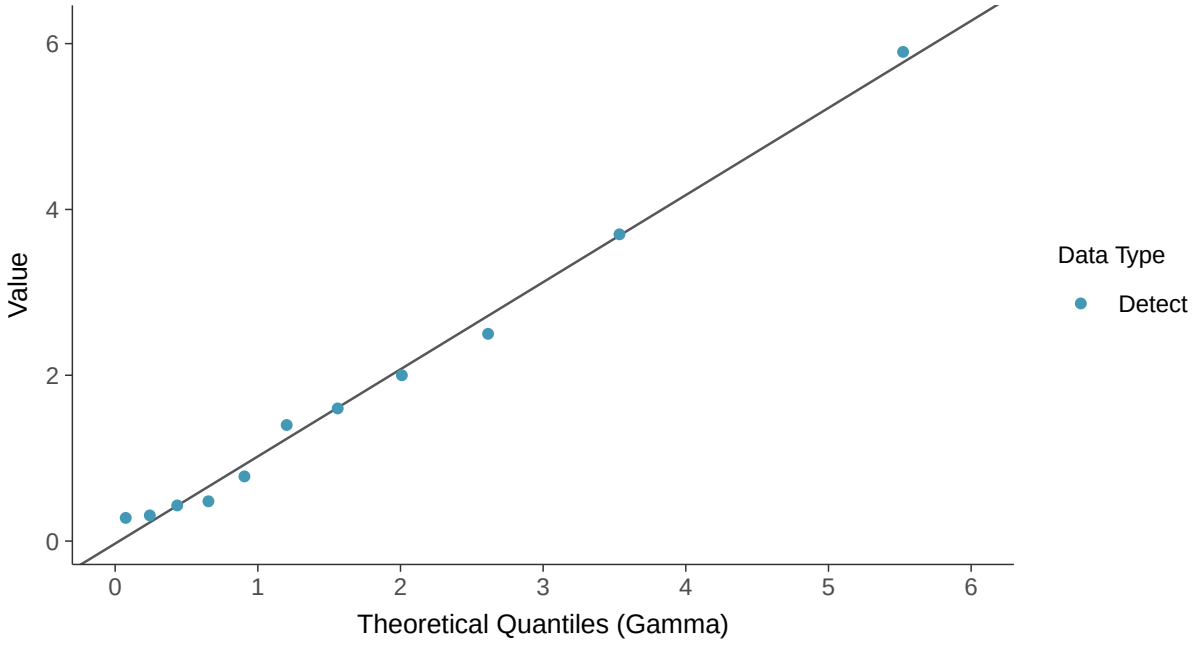
Lognormal Q-Q plot

Iron, MW-03 (mg/L)



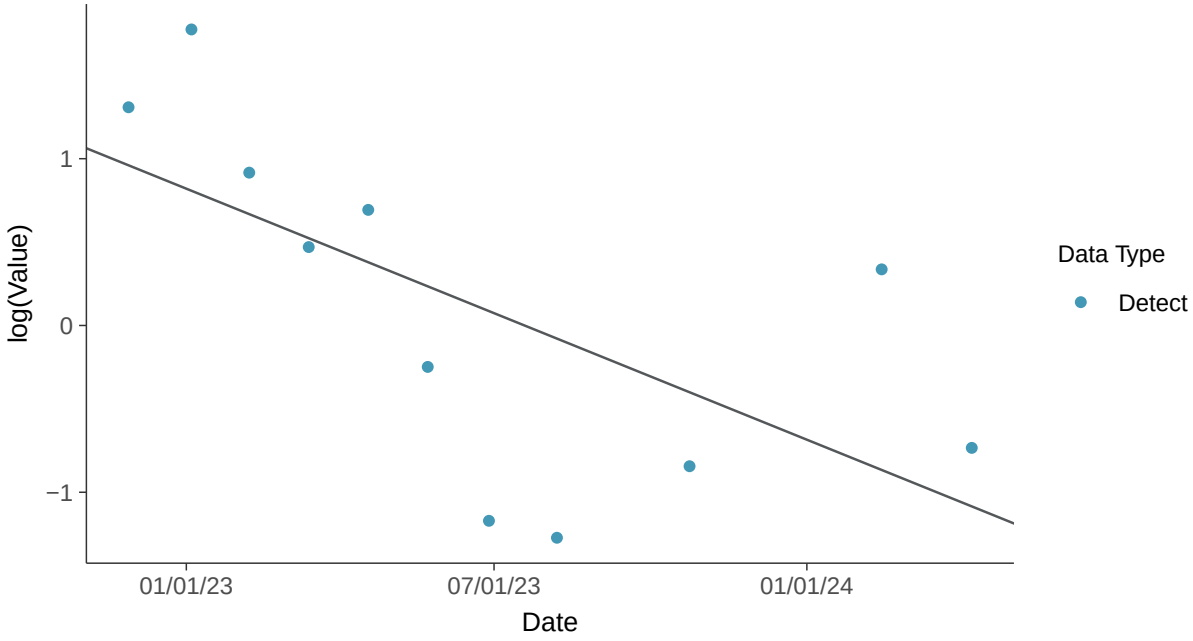
Gamma Q-Q plot

Iron, MW-03 (mg/L)



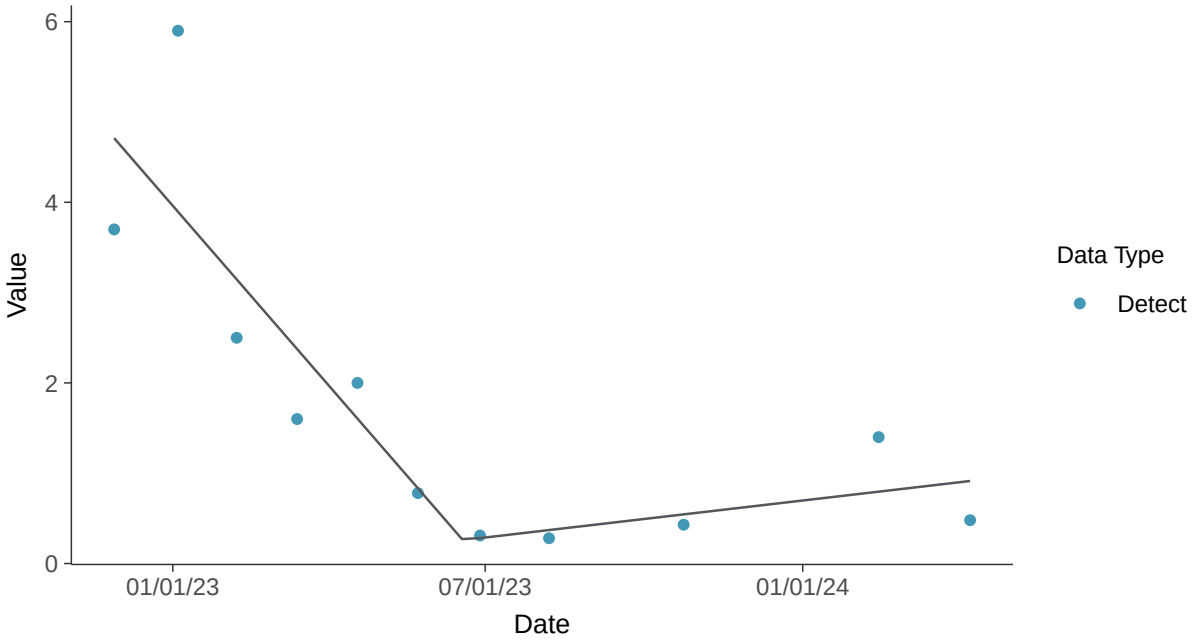
Trend Regression: Lognormal MLE

Iron, MW-03 (mg/L)



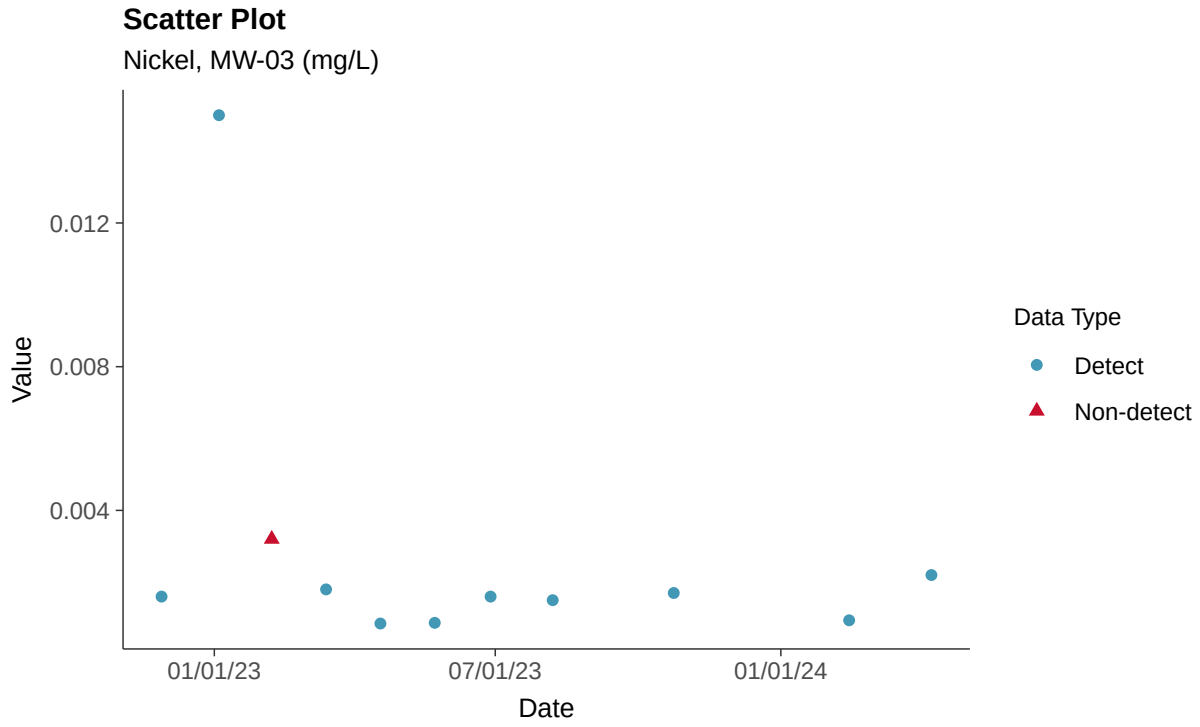
Trend Regression: Piecewise Linear-Linear

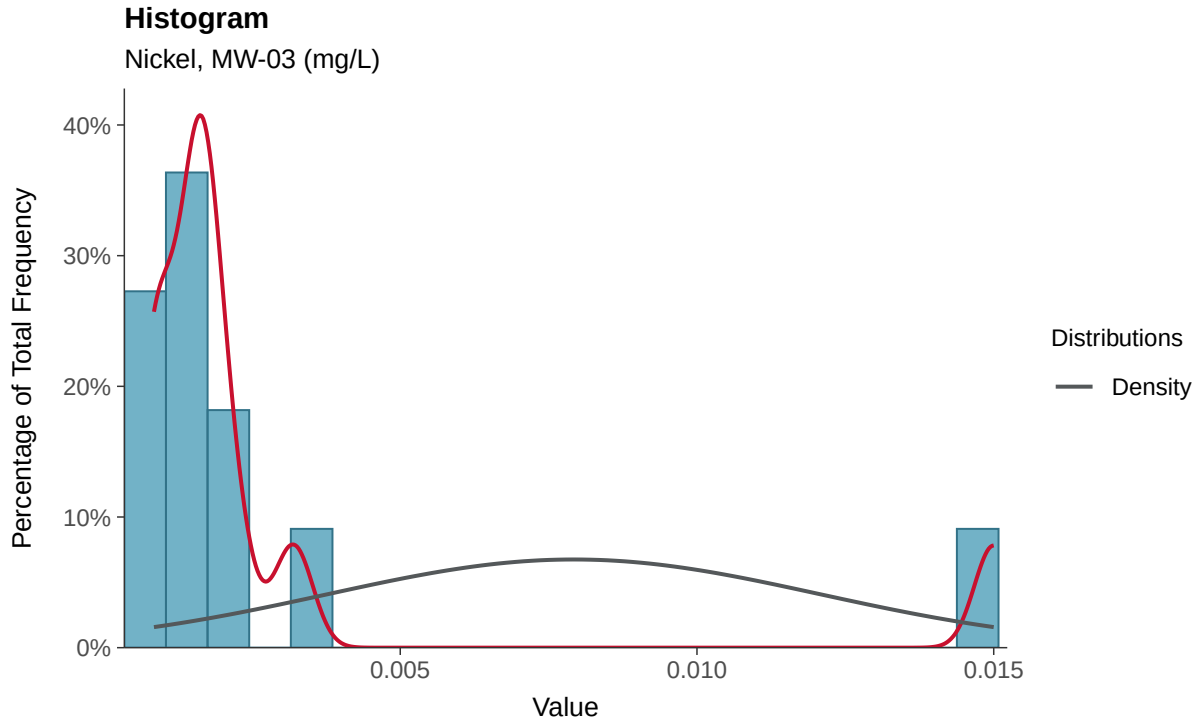
Iron, MW-03 (mg/L)



Part 115: Nickel, MW-03

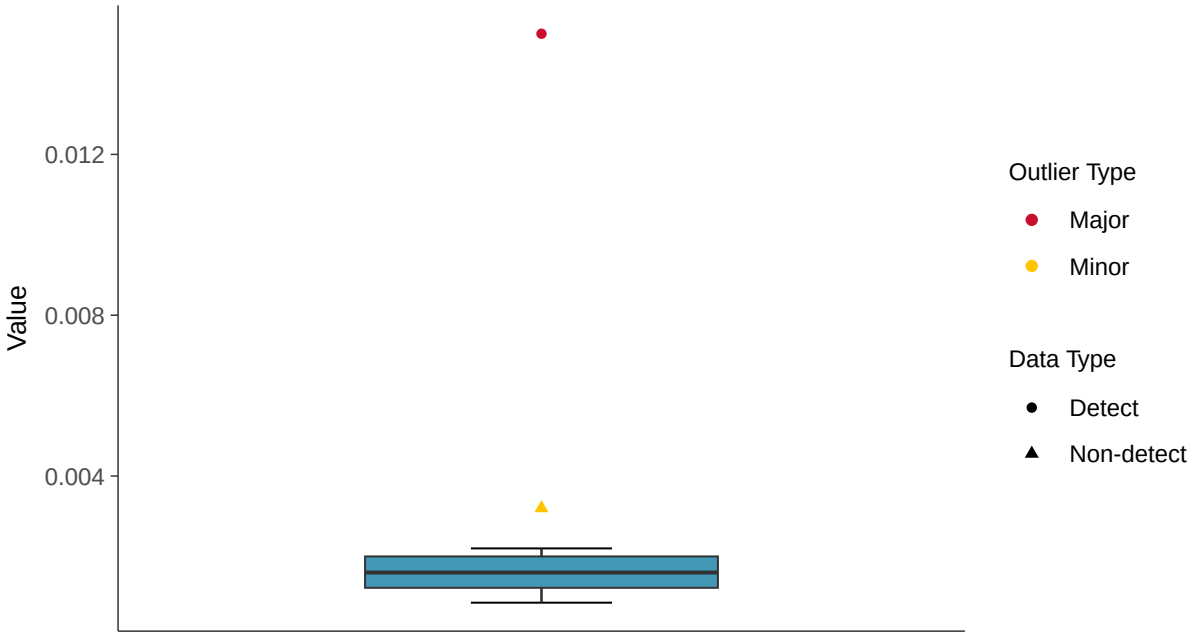
ID: 2_13_6_119





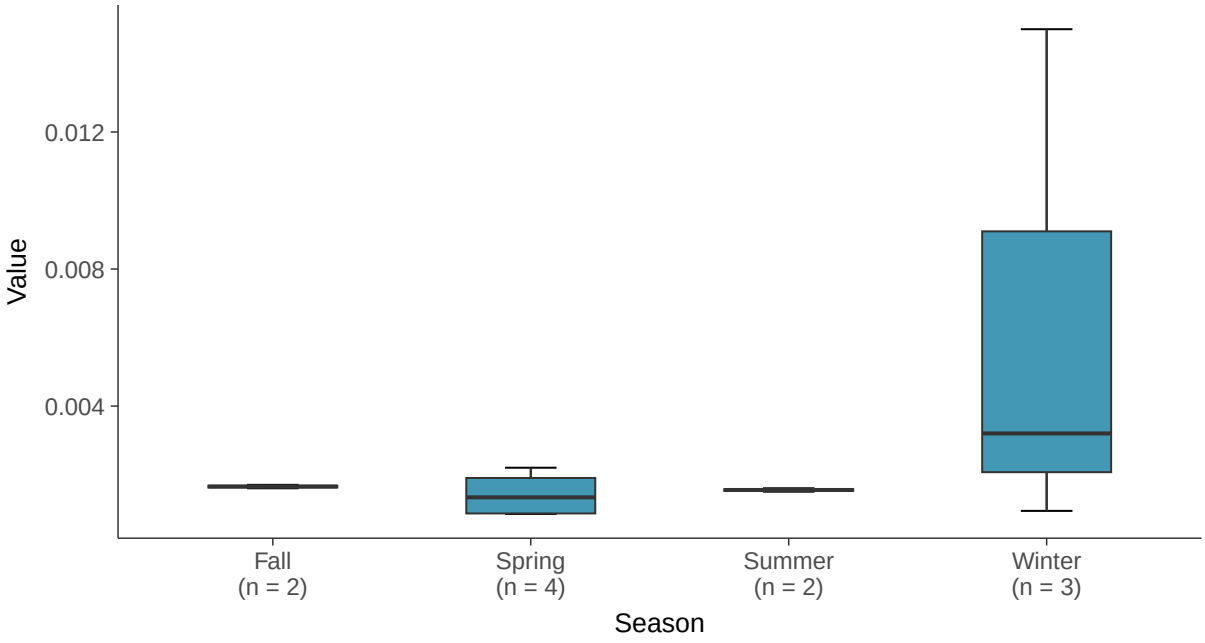
Boxplot

Nickel, MW-03 (mg/L)



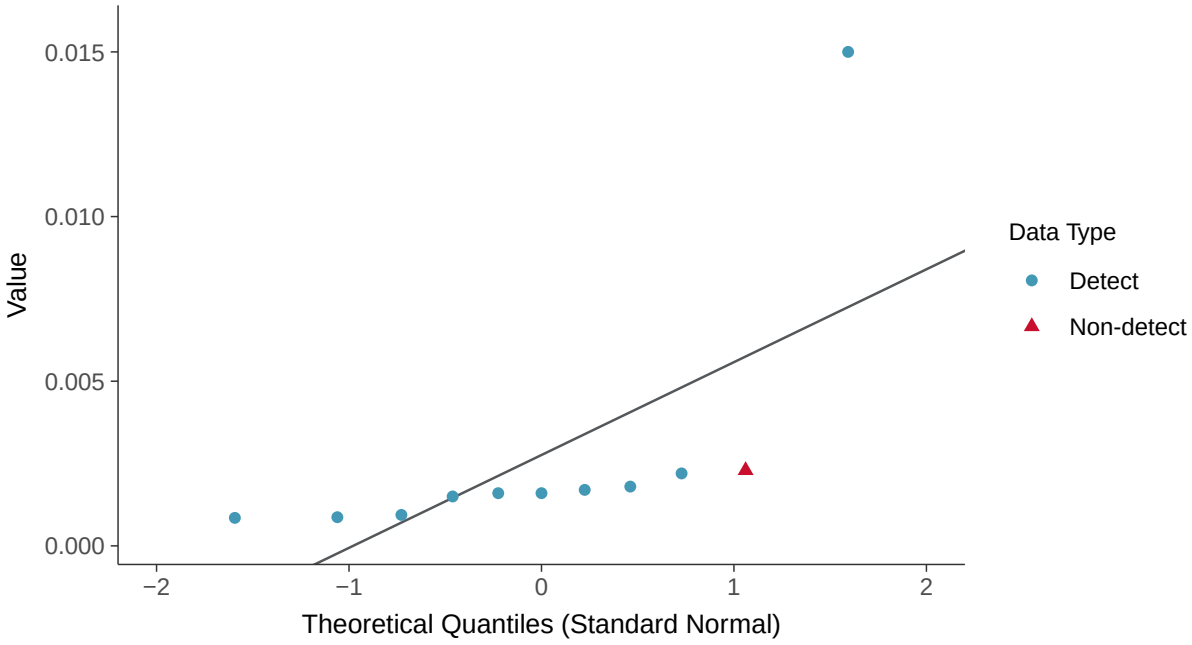
Boxplot by Season

Nickel, MW-03 (mg/L)



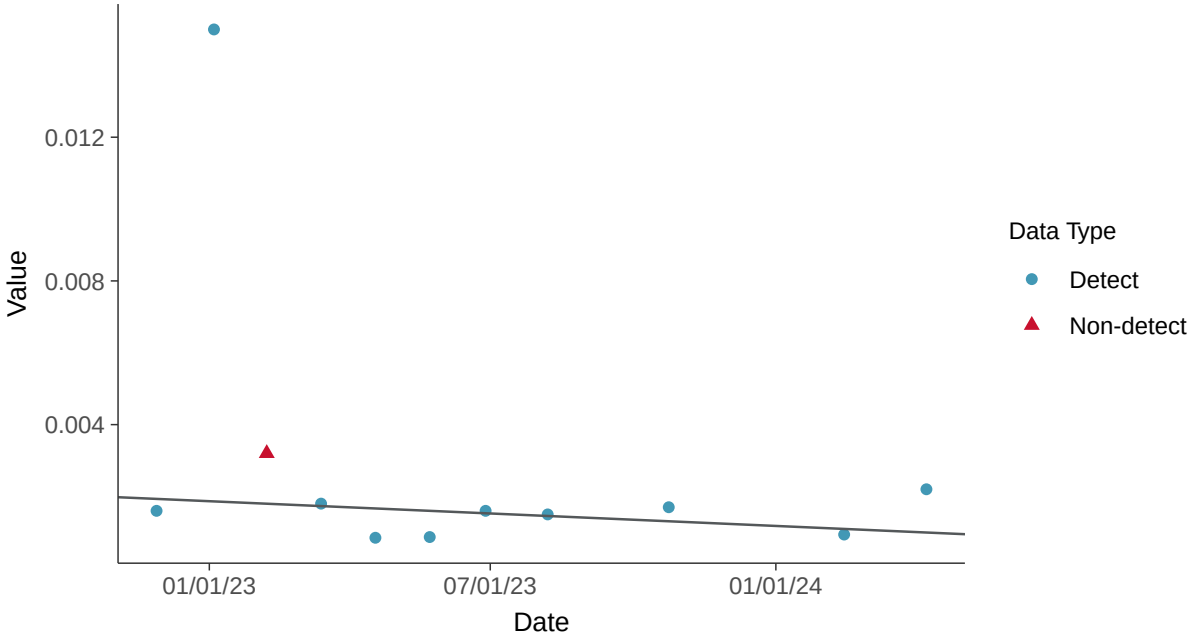
Normal Q-Q plot using ROS Imputed Estimates

Nickel, MW-03 (mg/L)



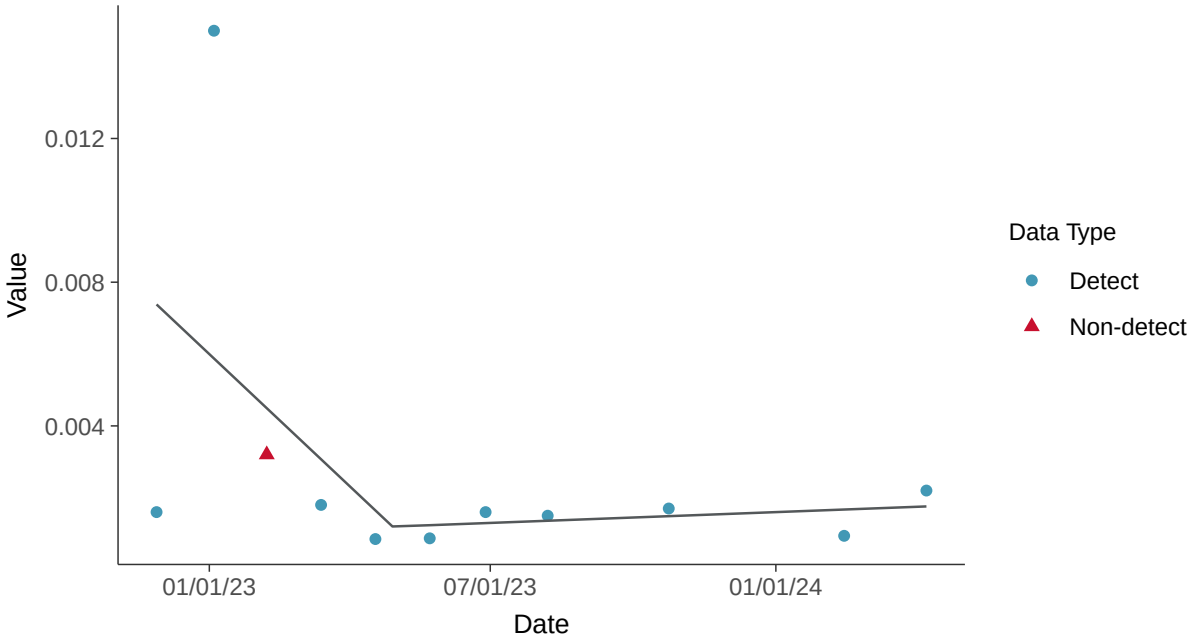
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Nickel, MW-03 (mg/L)



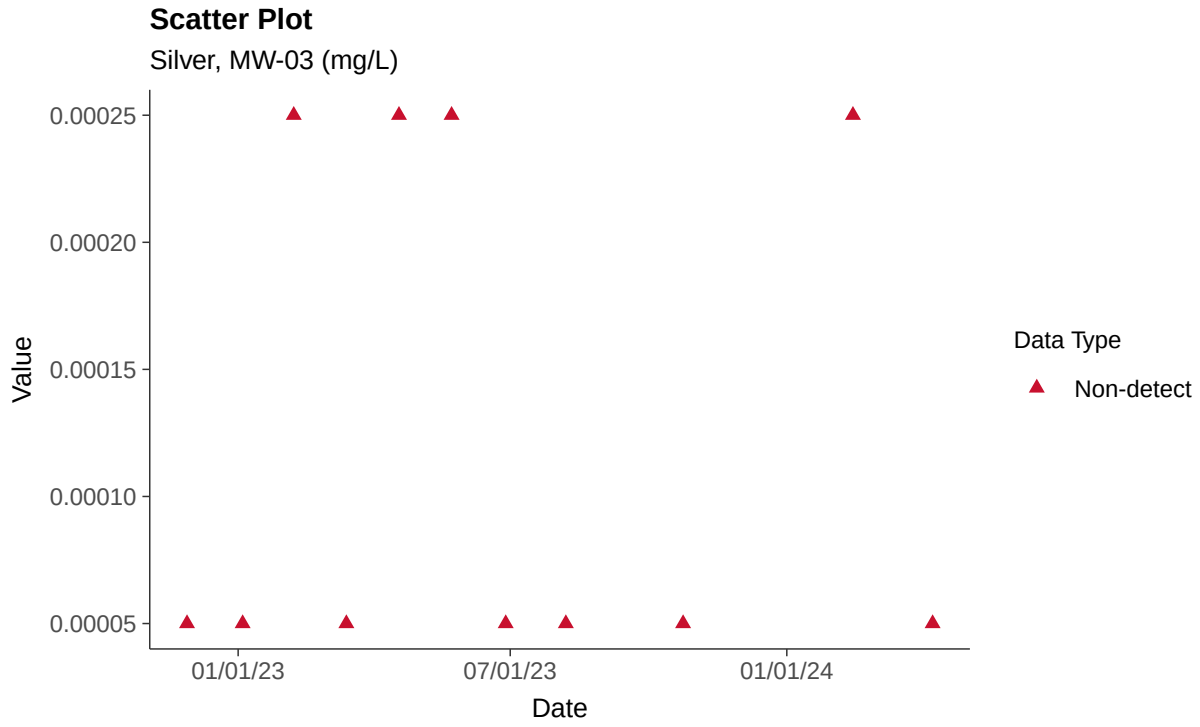
Trend Regression: Piecewise Linear-Linear

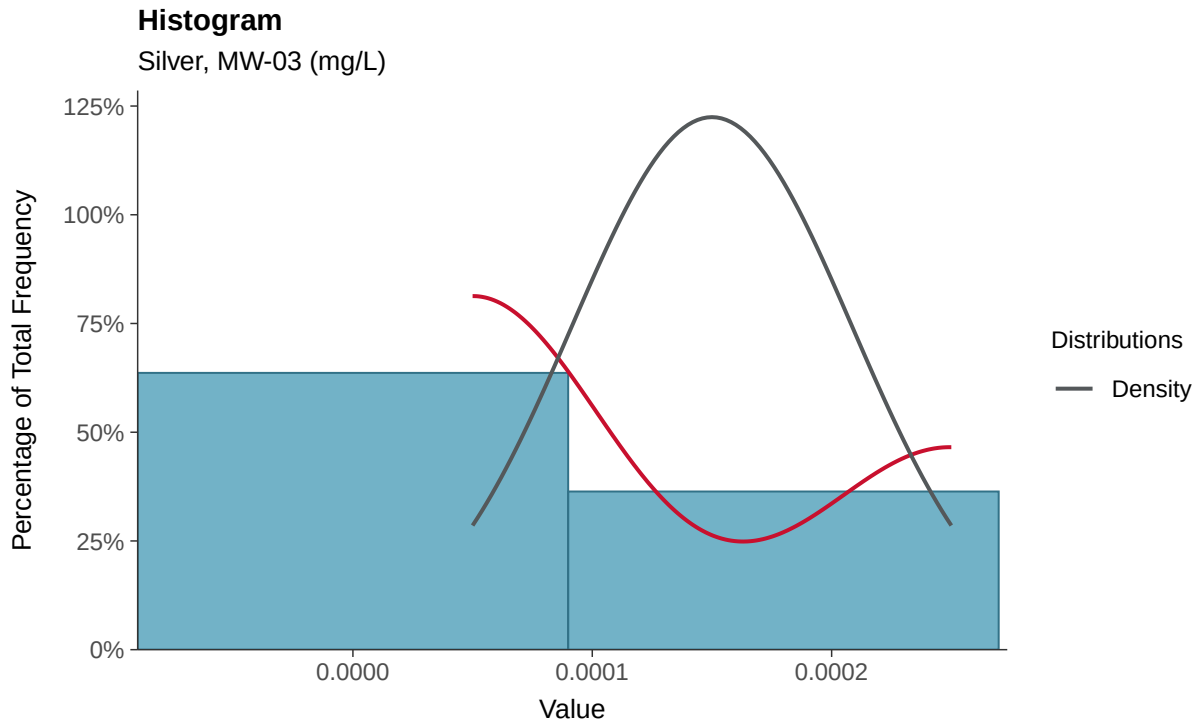
Nickel, MW-03 (mg/L)



Part 115: Silver, MW-03

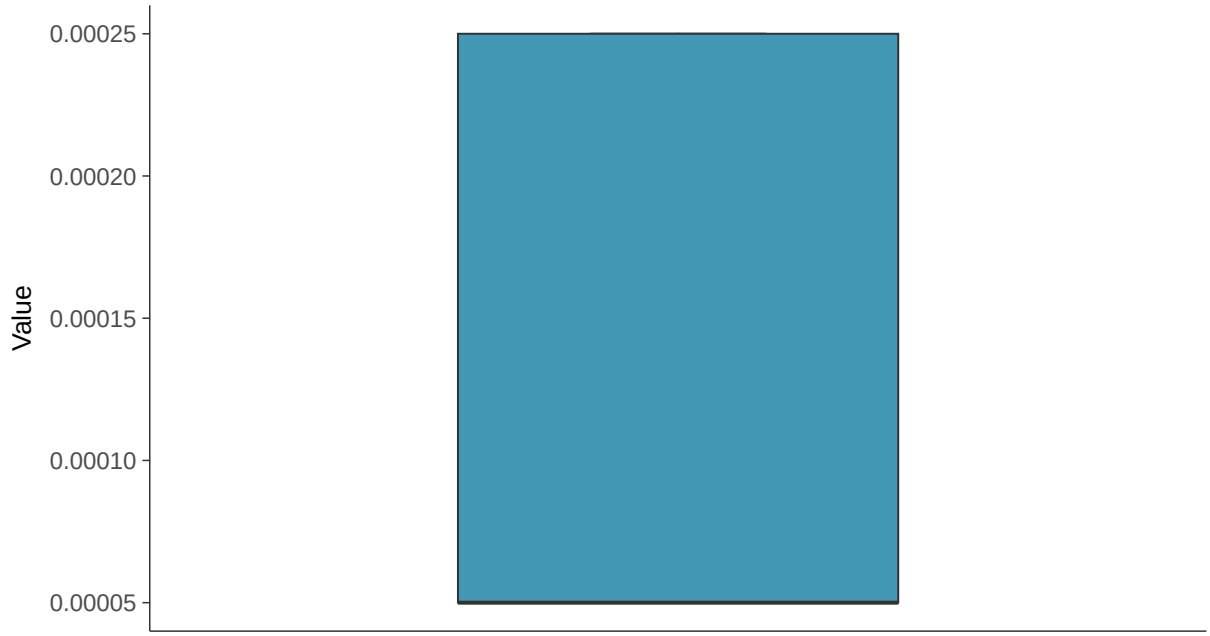
ID: 2_13_6_123





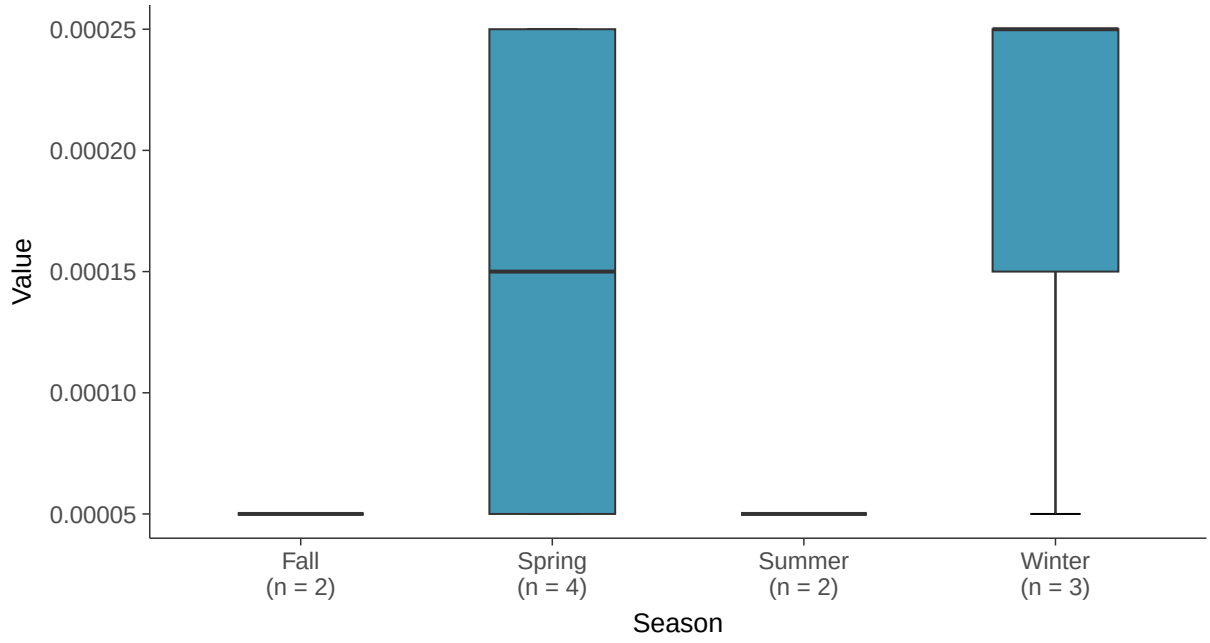
Boxplot

Silver, MW-03 (mg/L)



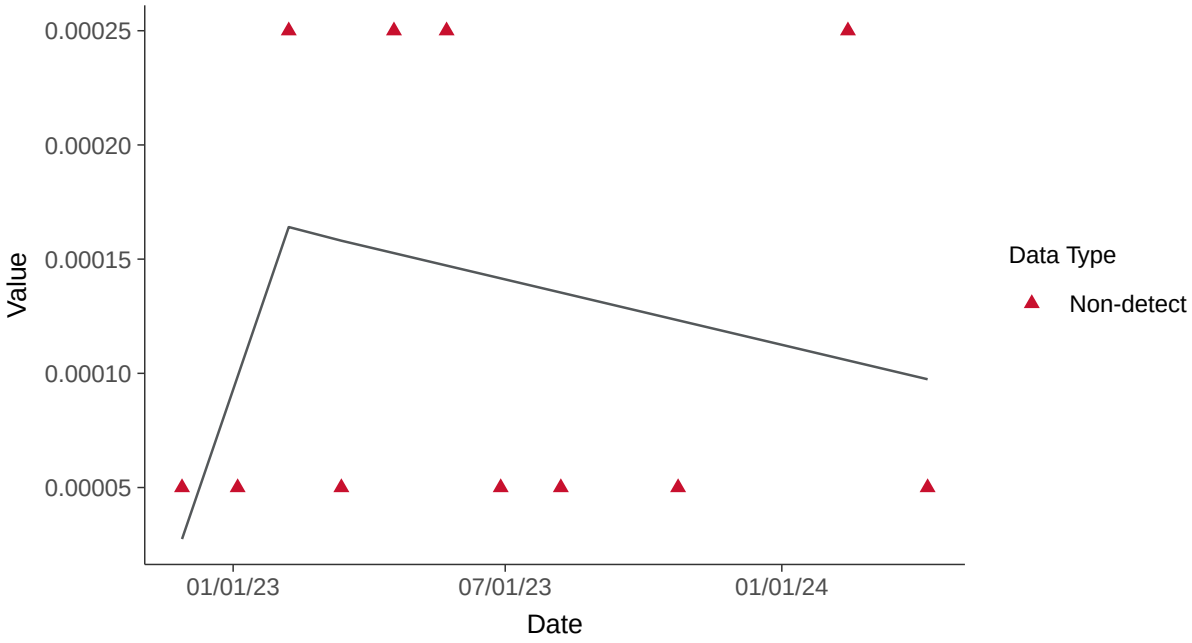
Boxplot by Season

Silver, MW-03 (mg/L)



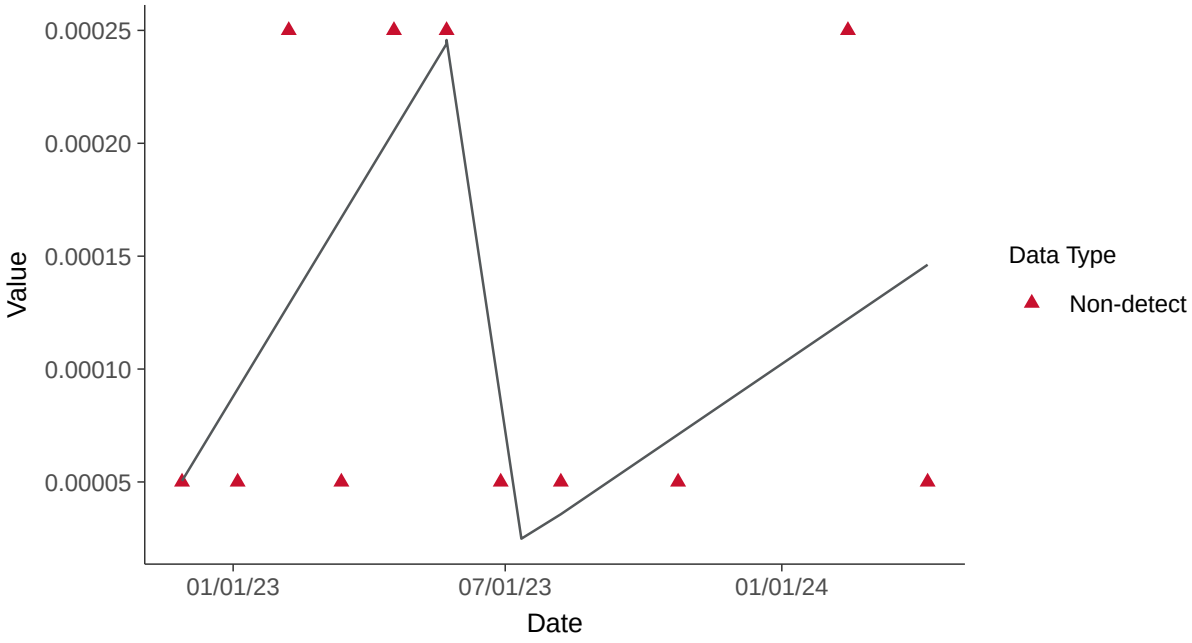
Trend Regression: Piecewise Linear-Linear

Silver, MW-03 (mg/L)



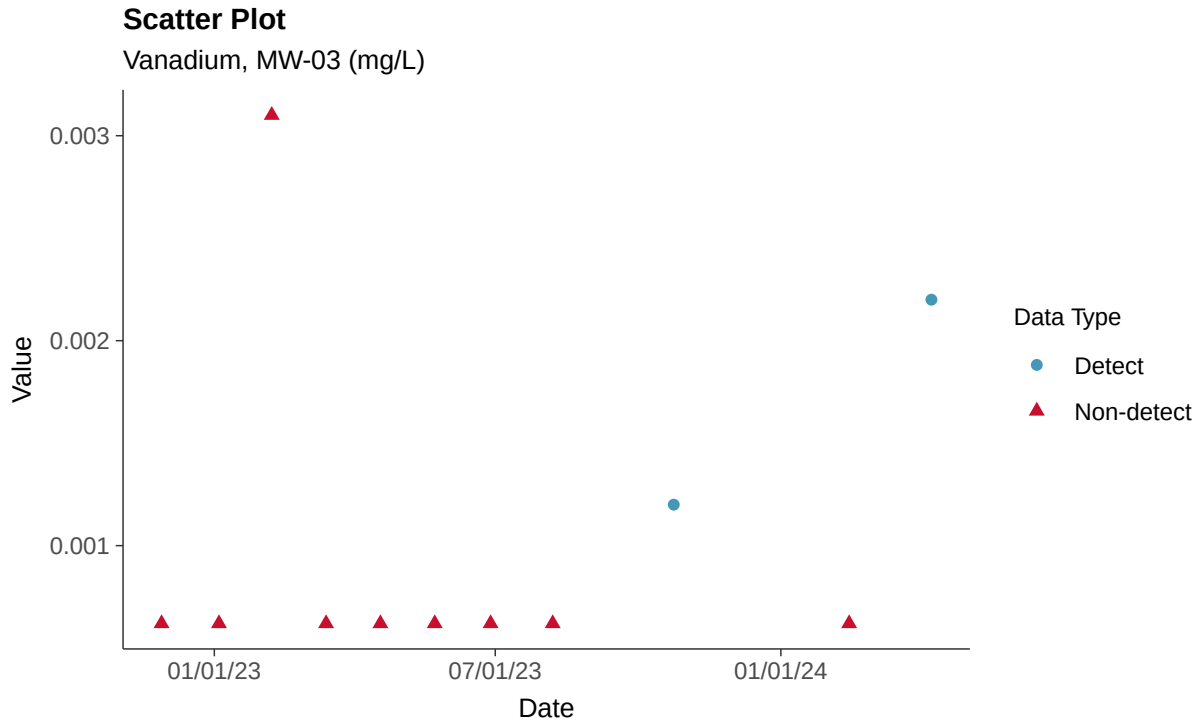
Trend Regression: Piecewise Linear-Linear-Linear

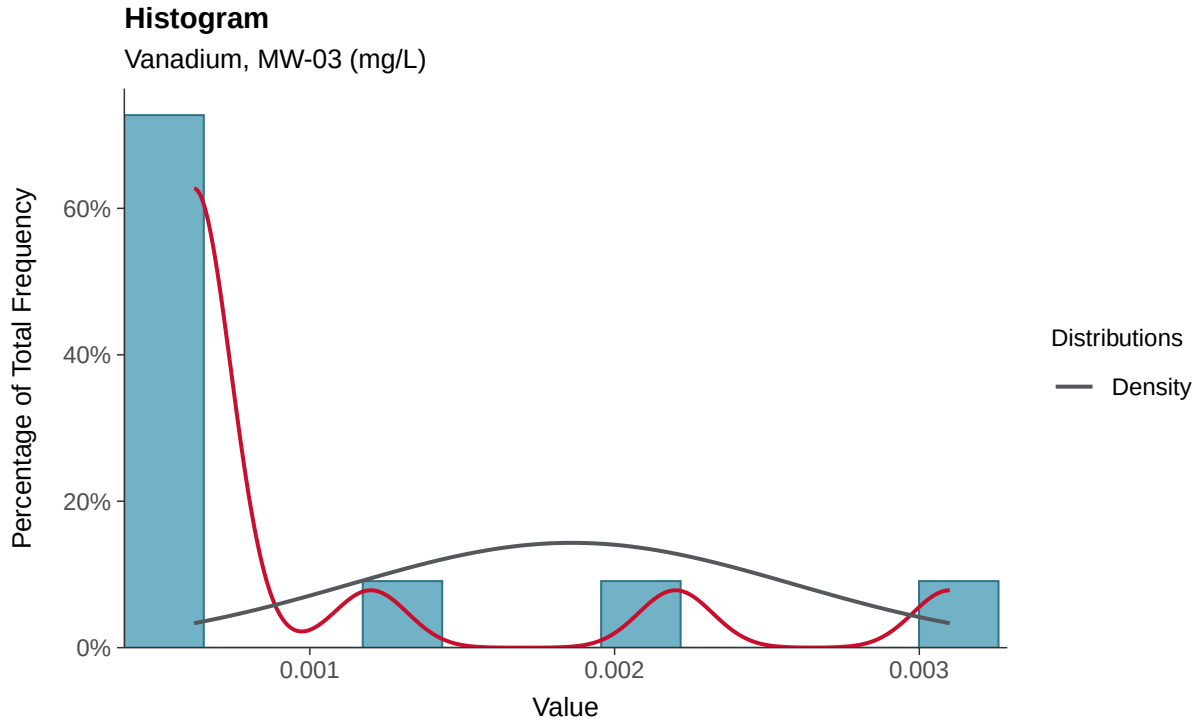
Silver, MW-03 (mg/L)



Part 115: Vanadium, MW-03

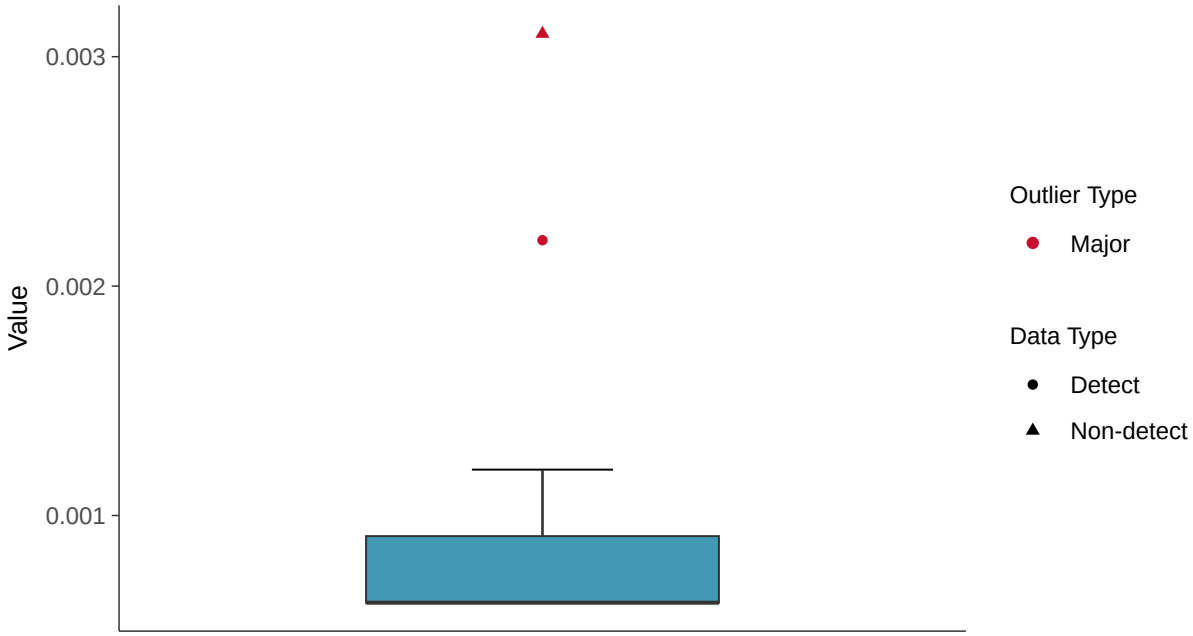
ID: 2_13_6_129





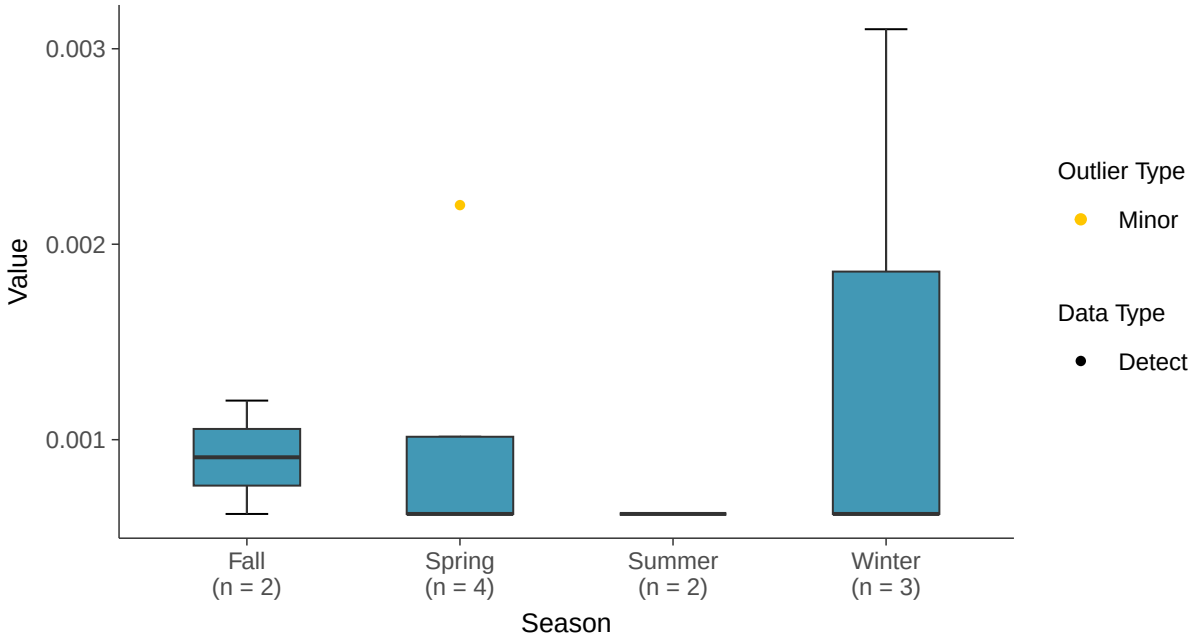
Boxplot

Vanadium, MW-03 (mg/L)



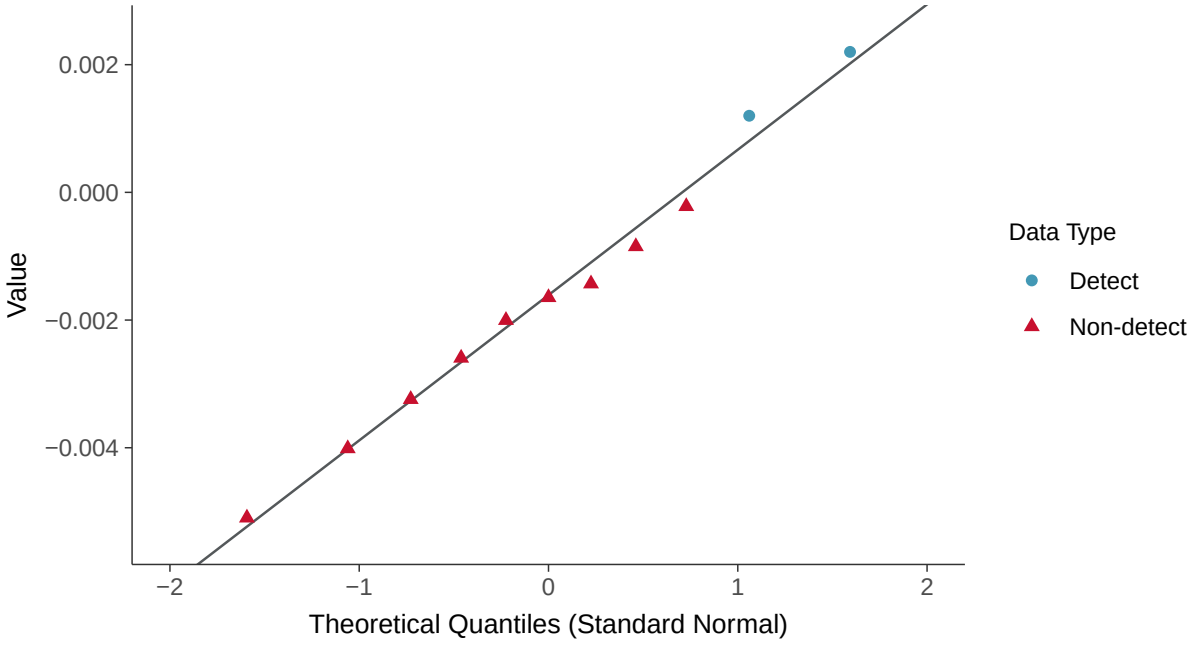
Boxplot by Season

Vanadium, MW-03 (mg/L)



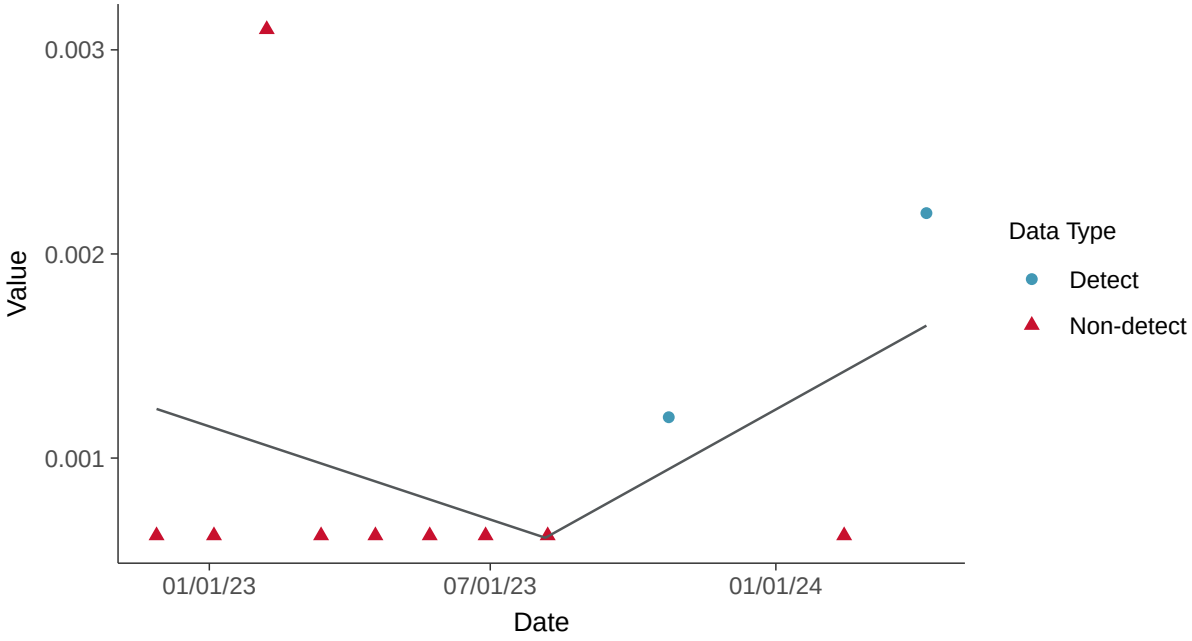
Normal Q-Q plot using ROS Imputed Estimates

Vanadium, MW-03 (mg/L)



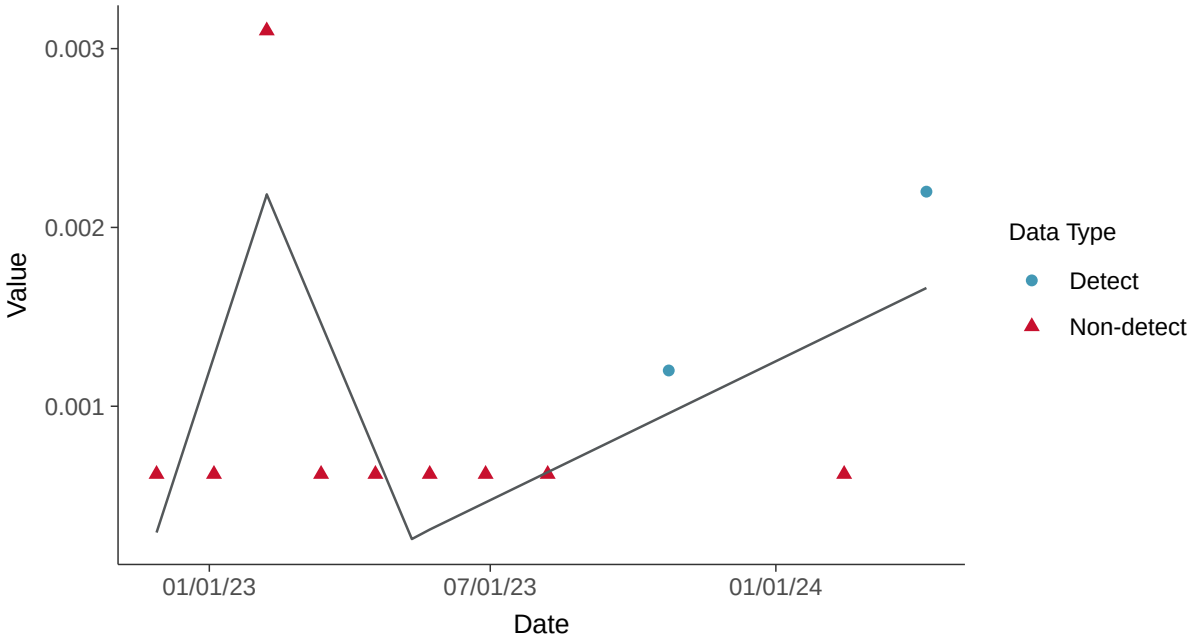
Trend Regression: Piecewise Linear-Linear

Vanadium, MW-03 (mg/L)



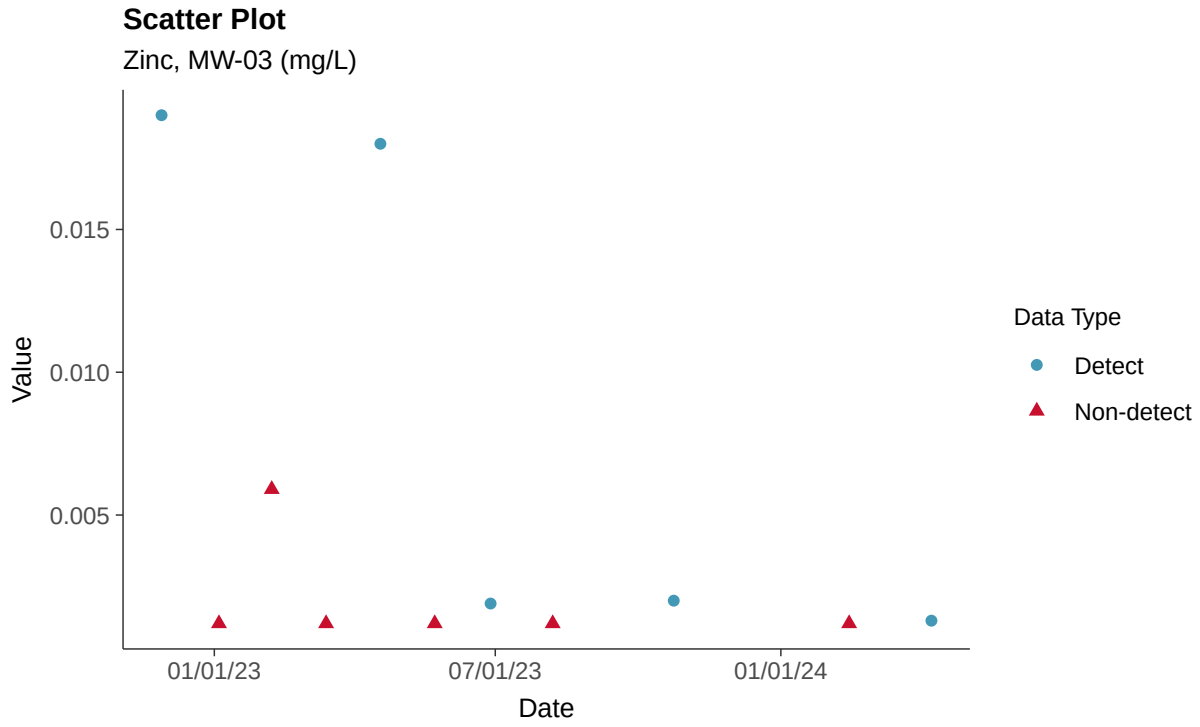
Trend Regression: Piecewise Linear-Linear-Linear

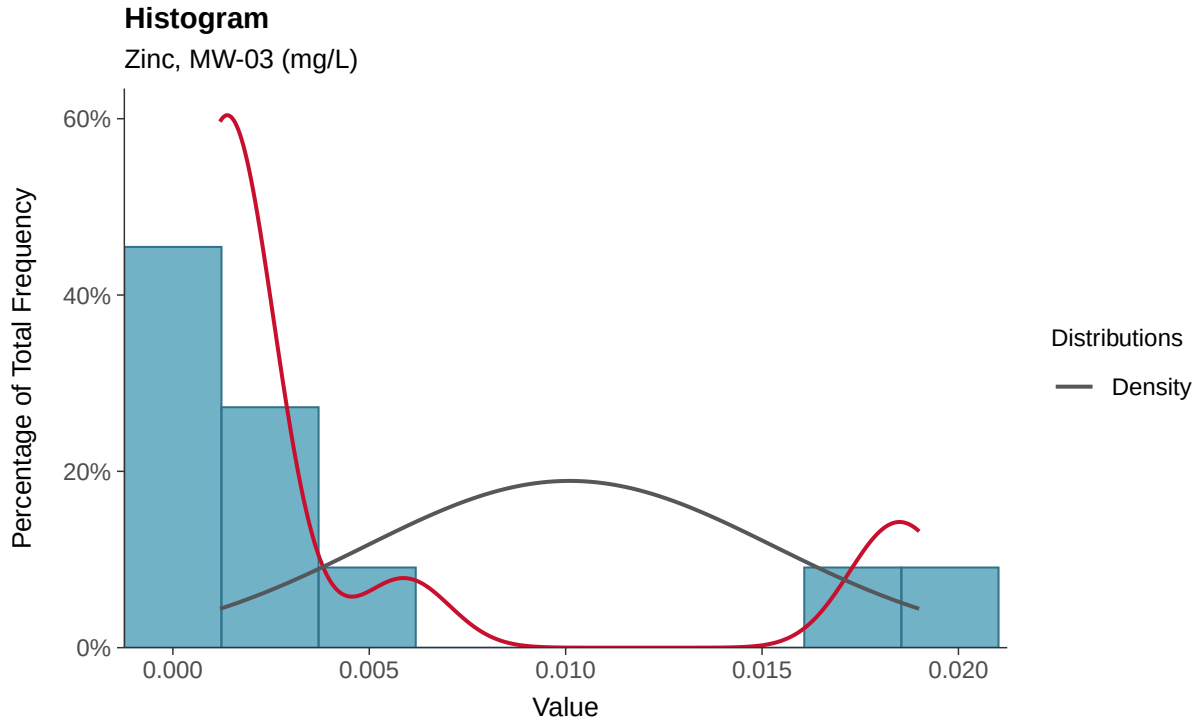
Vanadium, MW-03 (mg/L)



Part 115: Zinc, MW-03

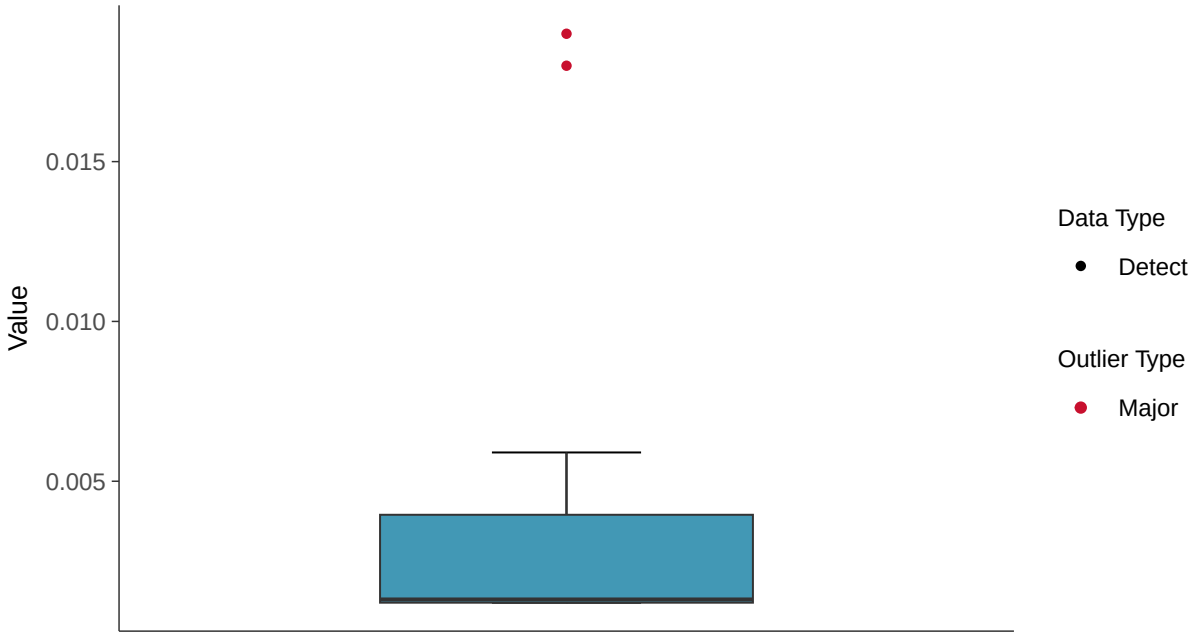
ID: 2_13_6_130





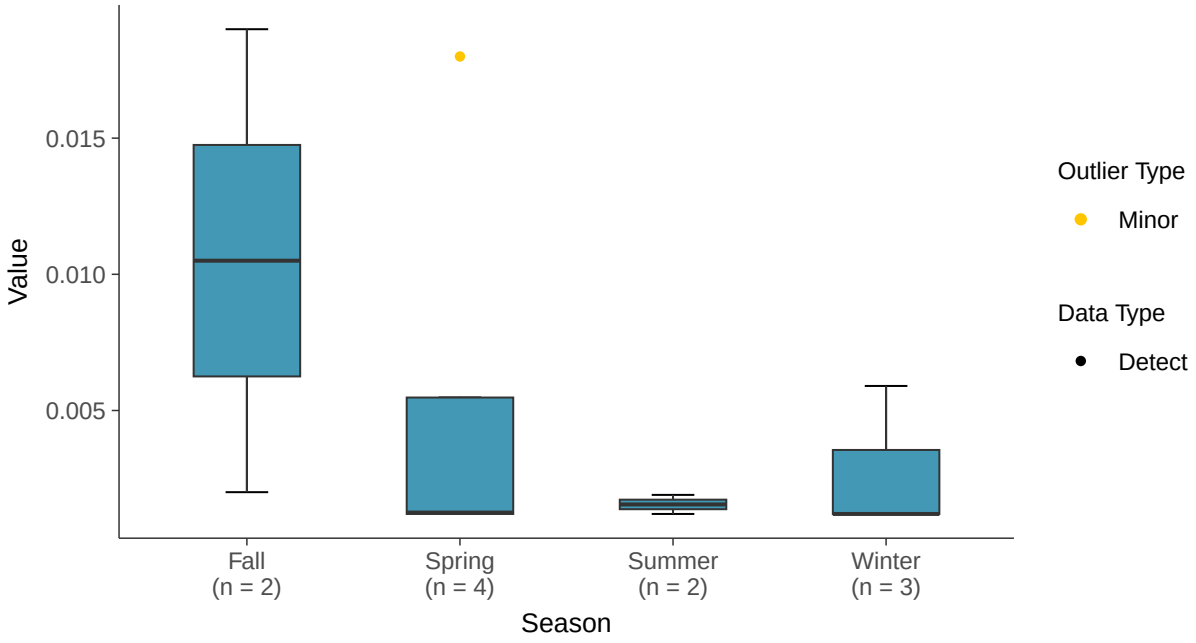
Boxplot

Zinc, MW-03 (mg/L)



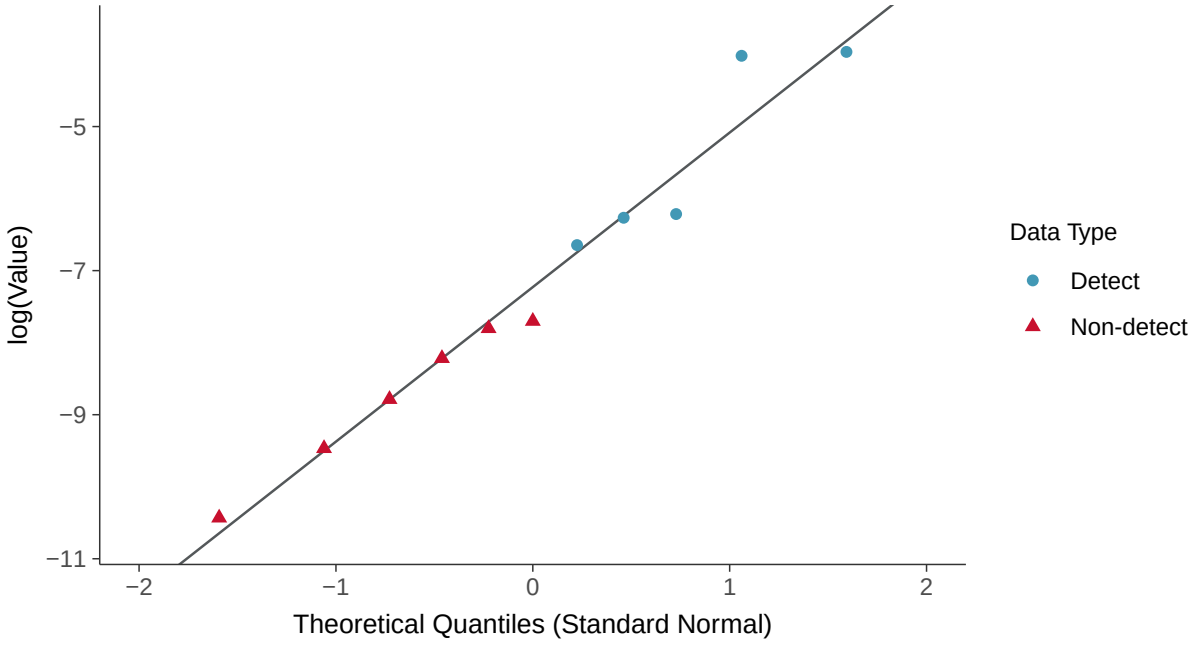
Boxplot by Season

Zinc, MW-03 (mg/L)



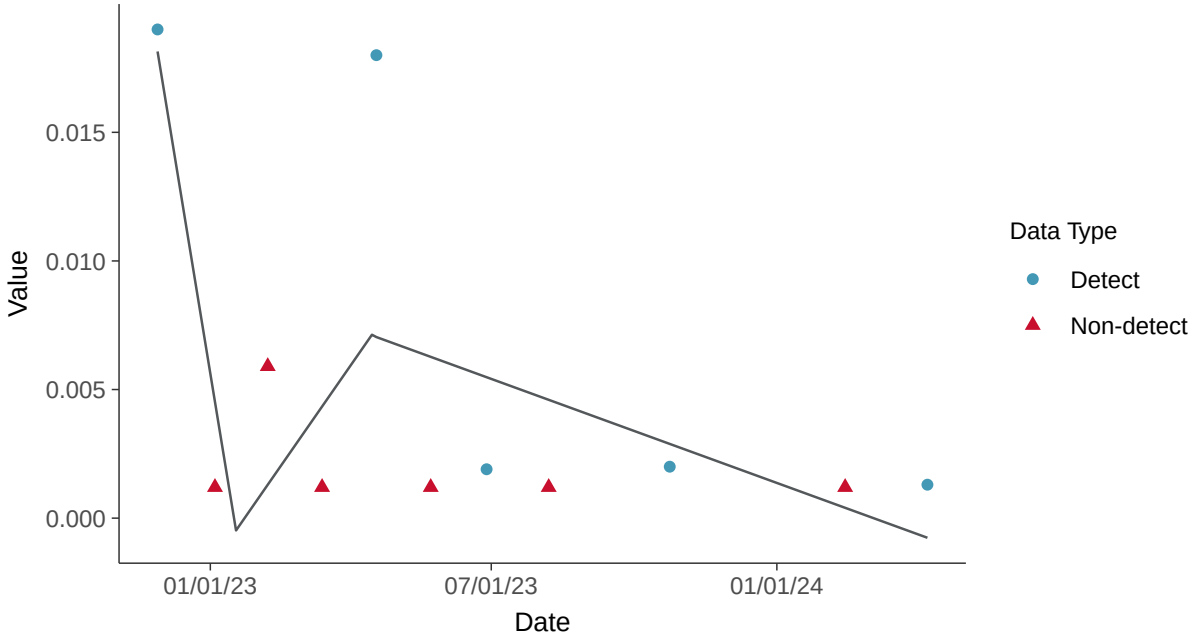
Lognormal Q-Q plot using ROS Imputed Estimates

Zinc, MW-03 (mg/L)



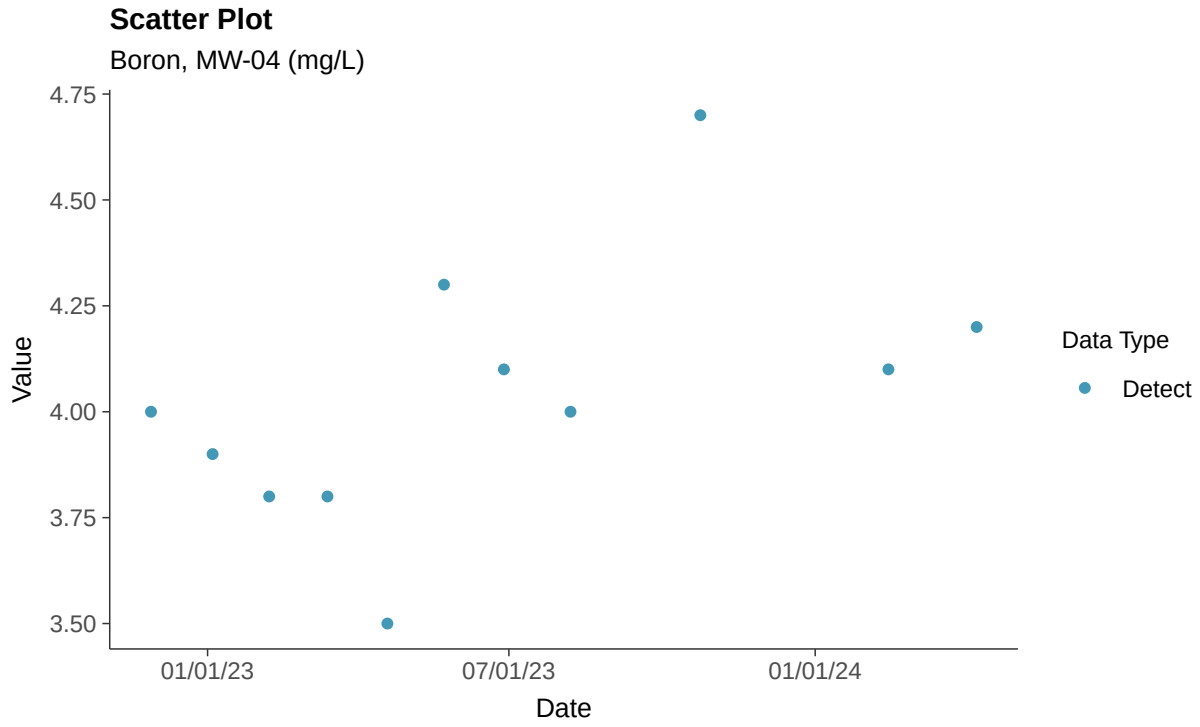
Trend Regression: Piecewise Linear-Linear-Linear

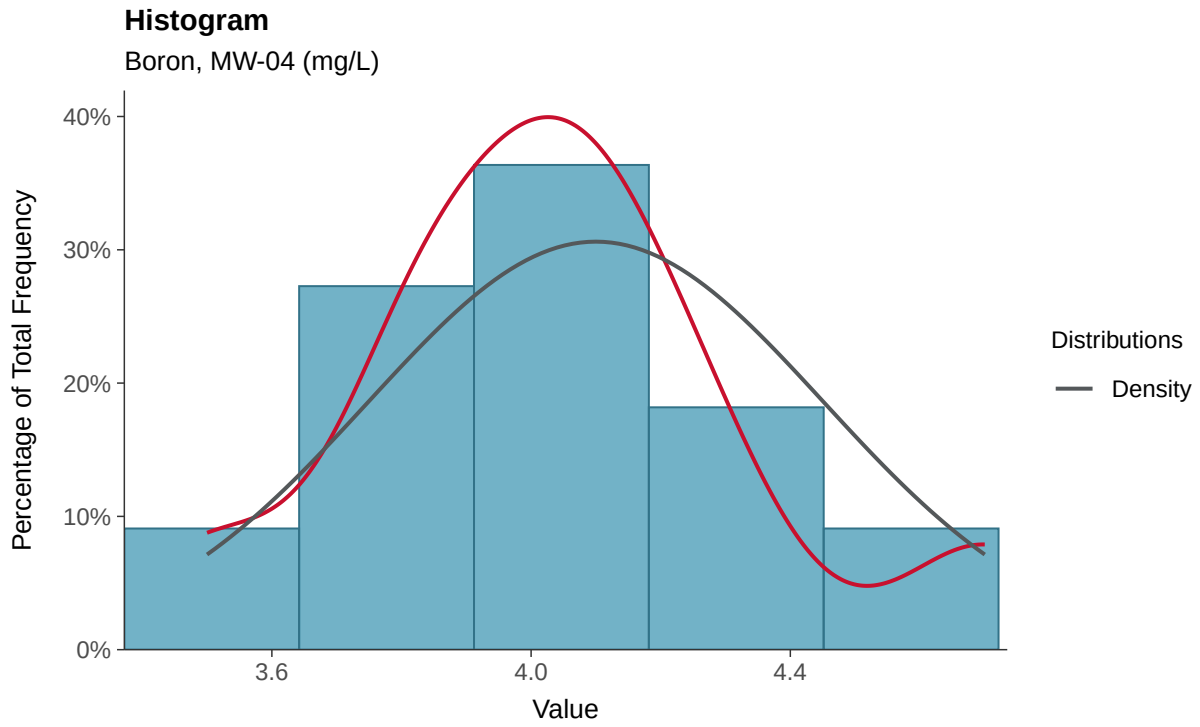
Zinc, MW-03 (mg/L)



Appendix III: Boron, MW-04

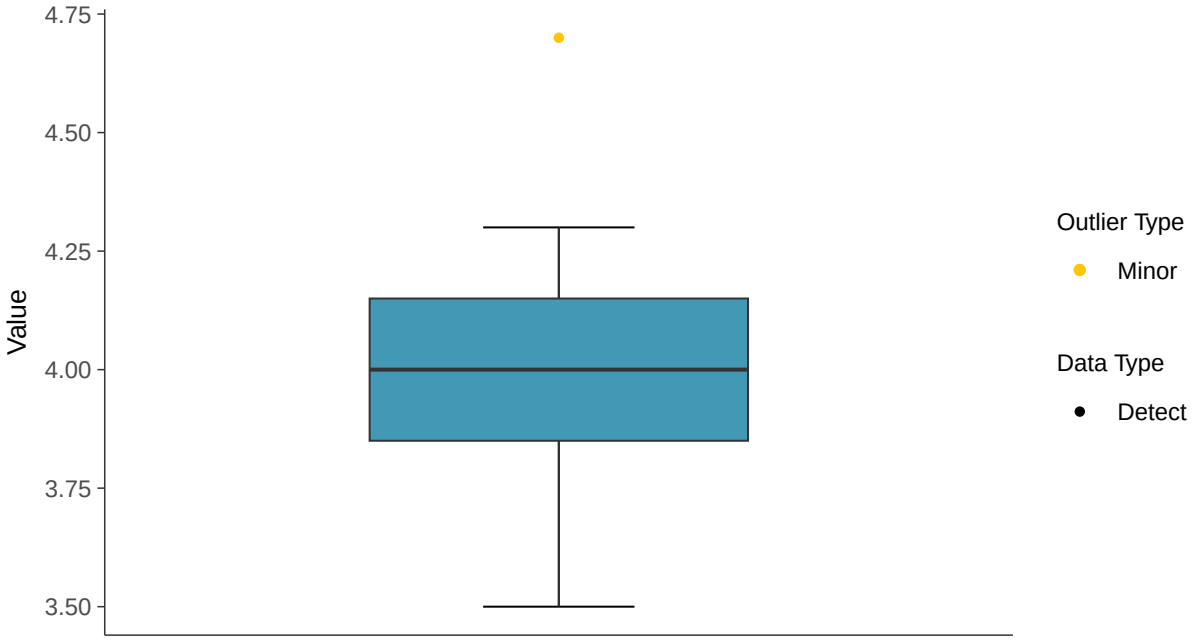
ID: 2_14_4_105





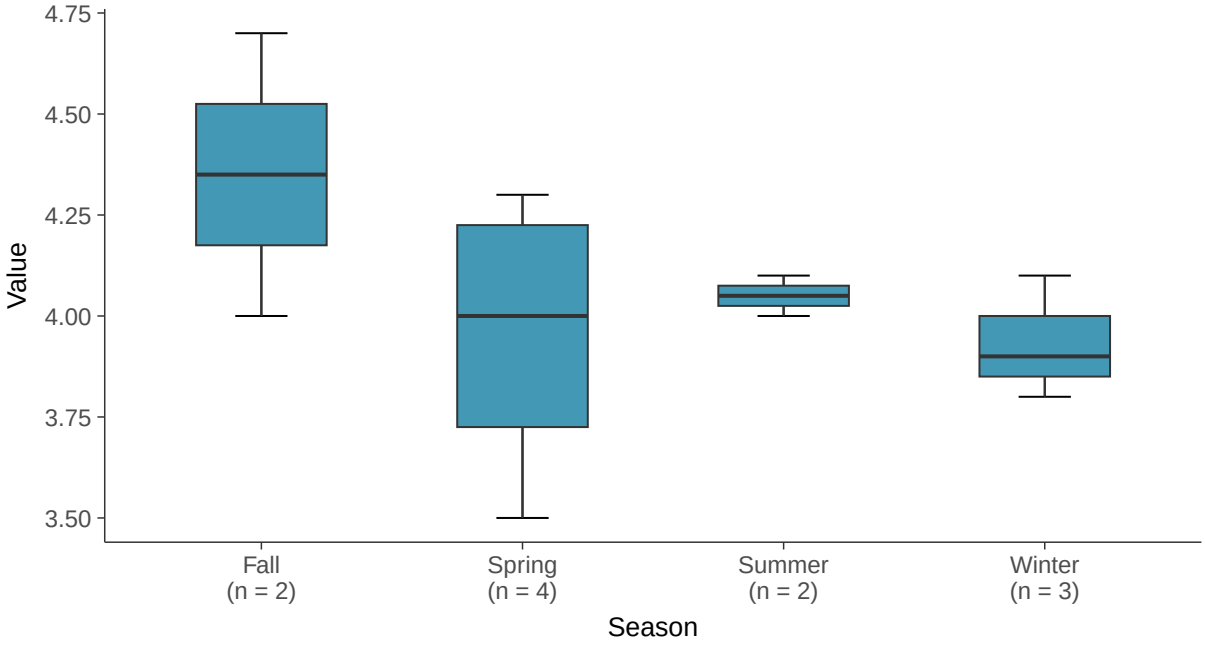
Boxplot

Boron, MW-04 (mg/L)



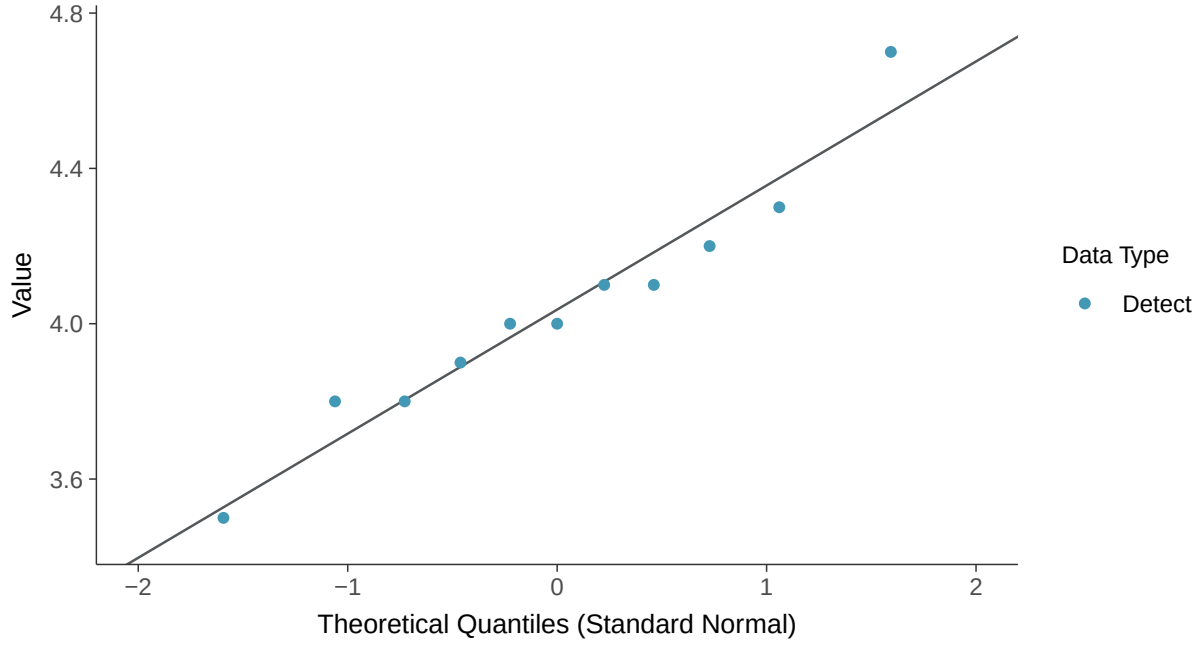
Boxplot by Season

Boron, MW-04 (mg/L)



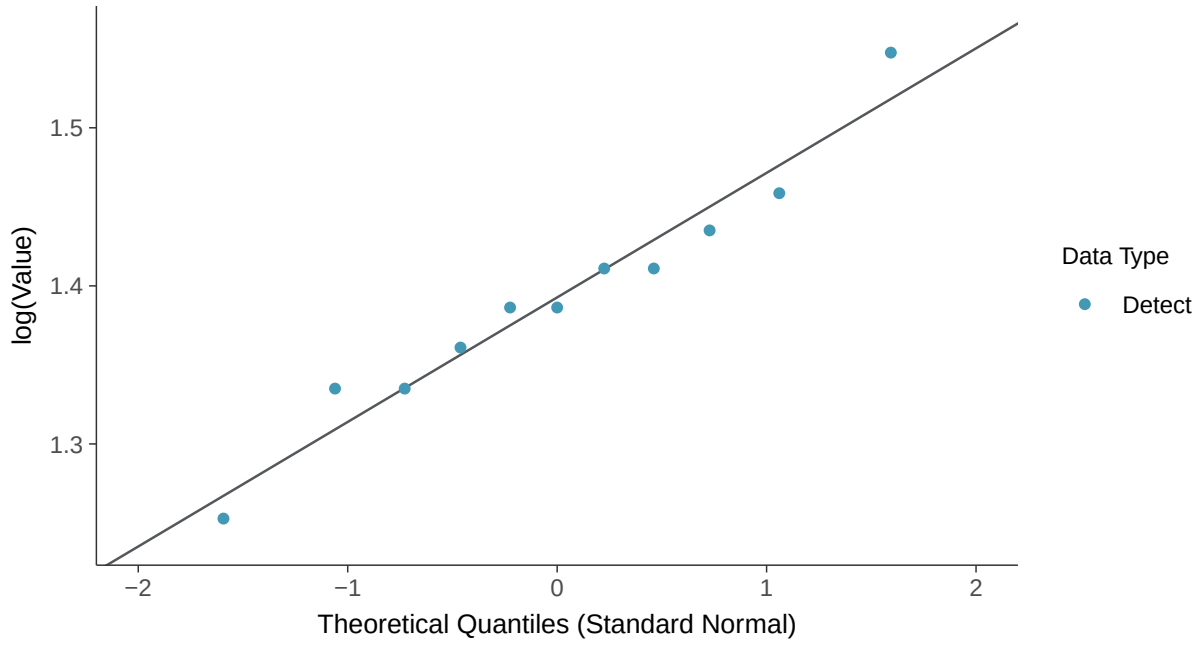
Normal Q-Q plot

Boron, MW-04 (mg/L)



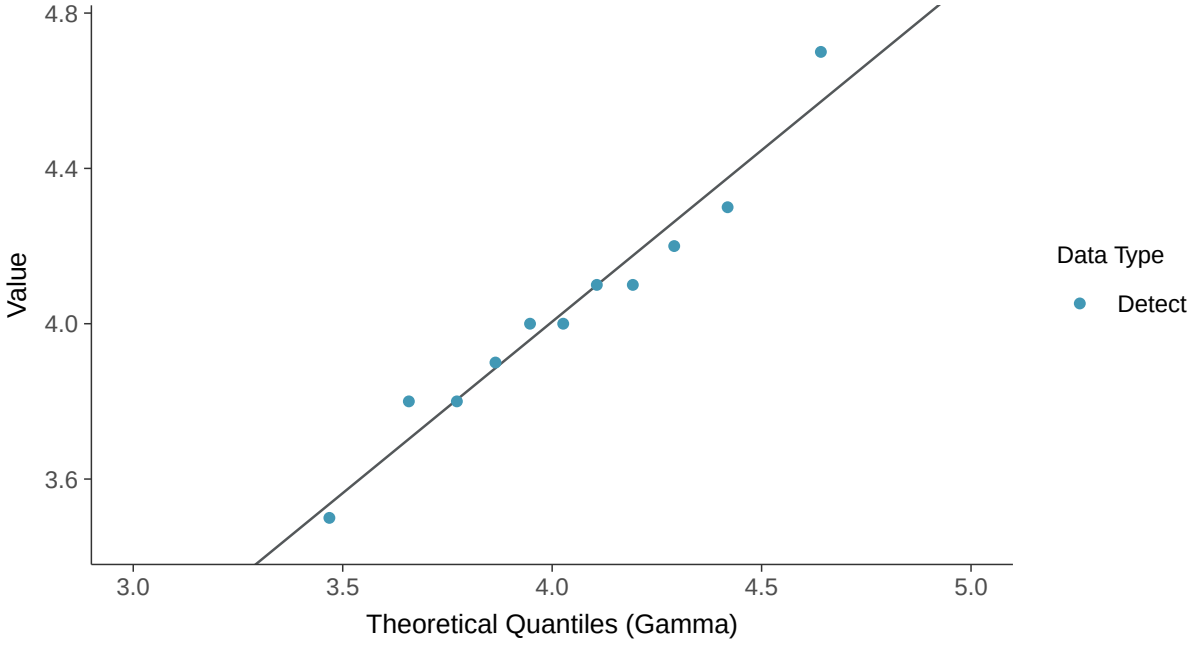
Lognormal Q-Q plot

Boron, MW-04 (mg/L)



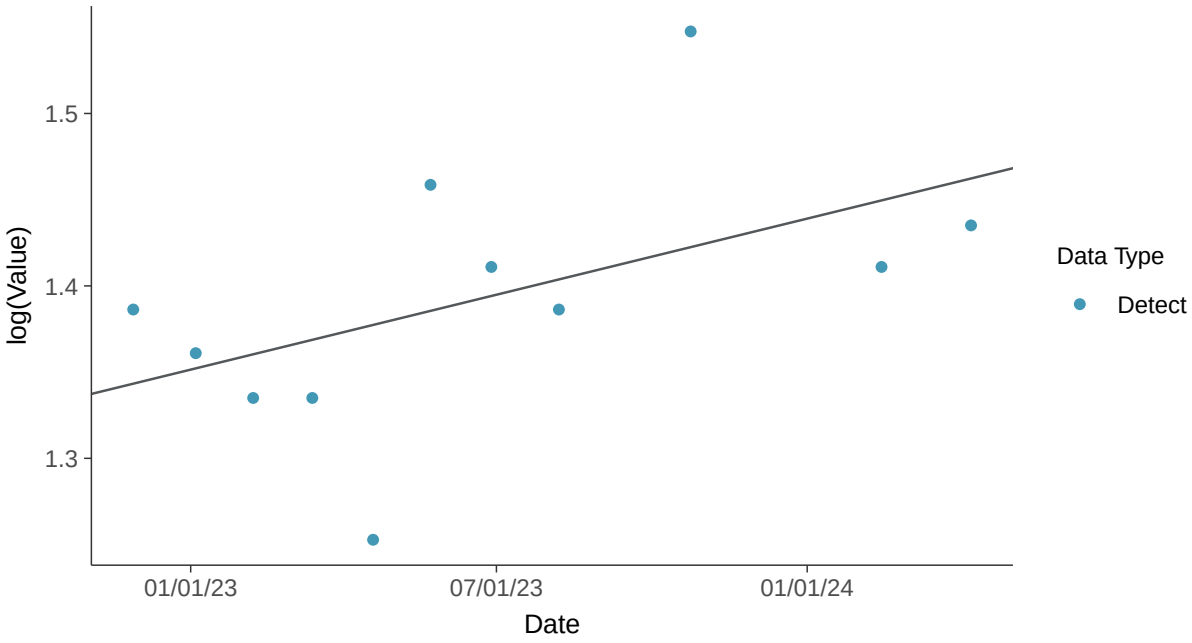
Gamma Q-Q plot

Boron, MW-04 (mg/L)



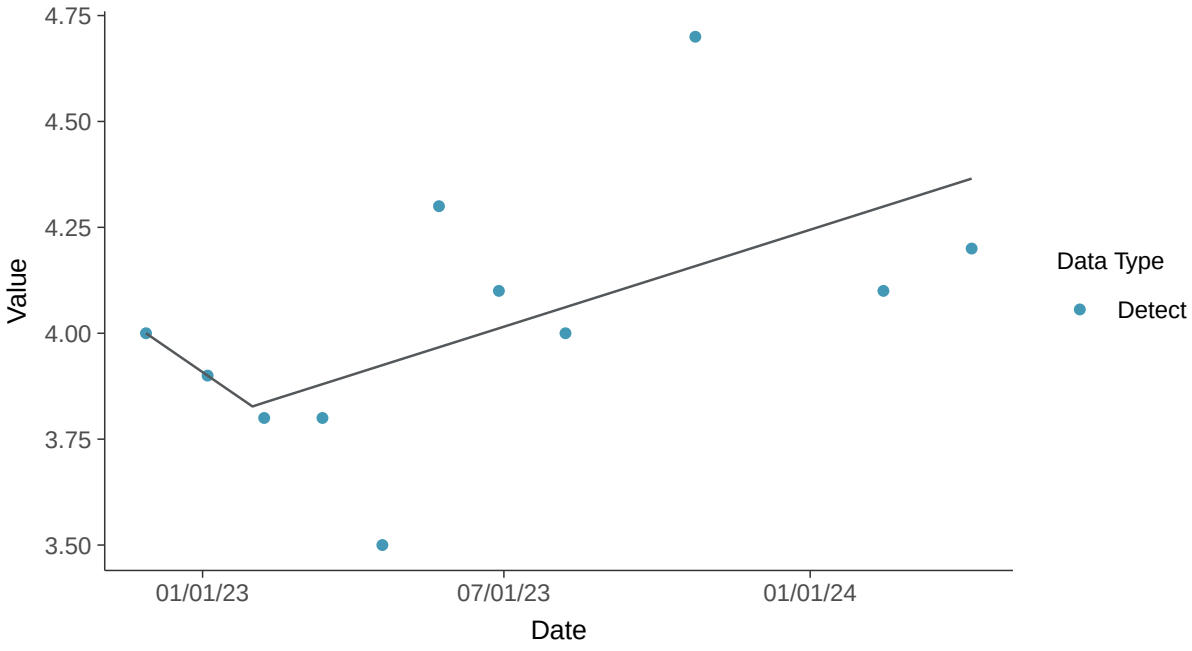
Trend Regression: Lognormal MLE

Boron, MW-04 (mg/L)



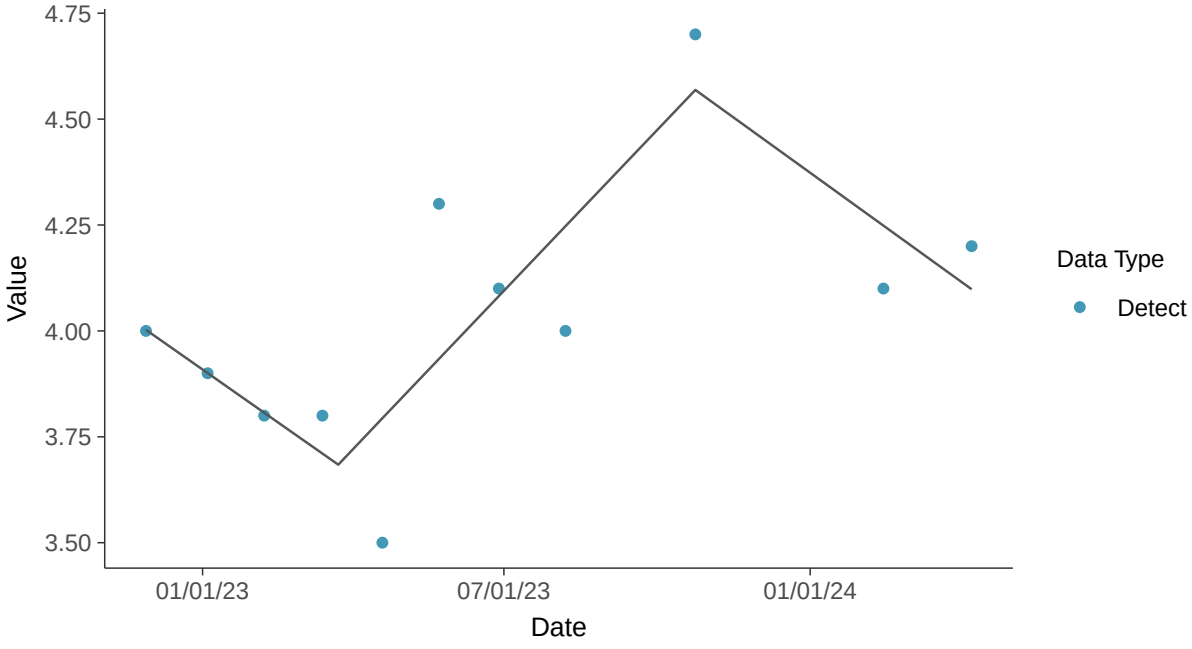
Trend Regression: Piecewise Linear-Linear

Boron, MW-04 (mg/L)



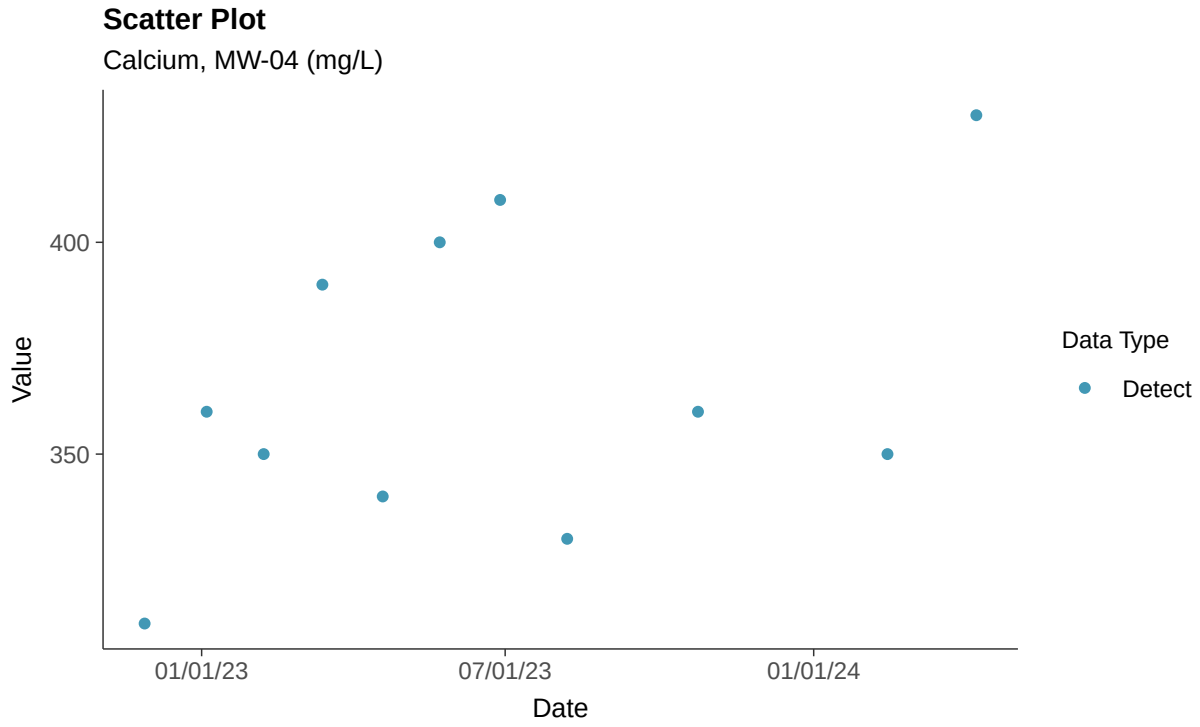
Trend Regression: Piecewise Linear-Linear-Linear

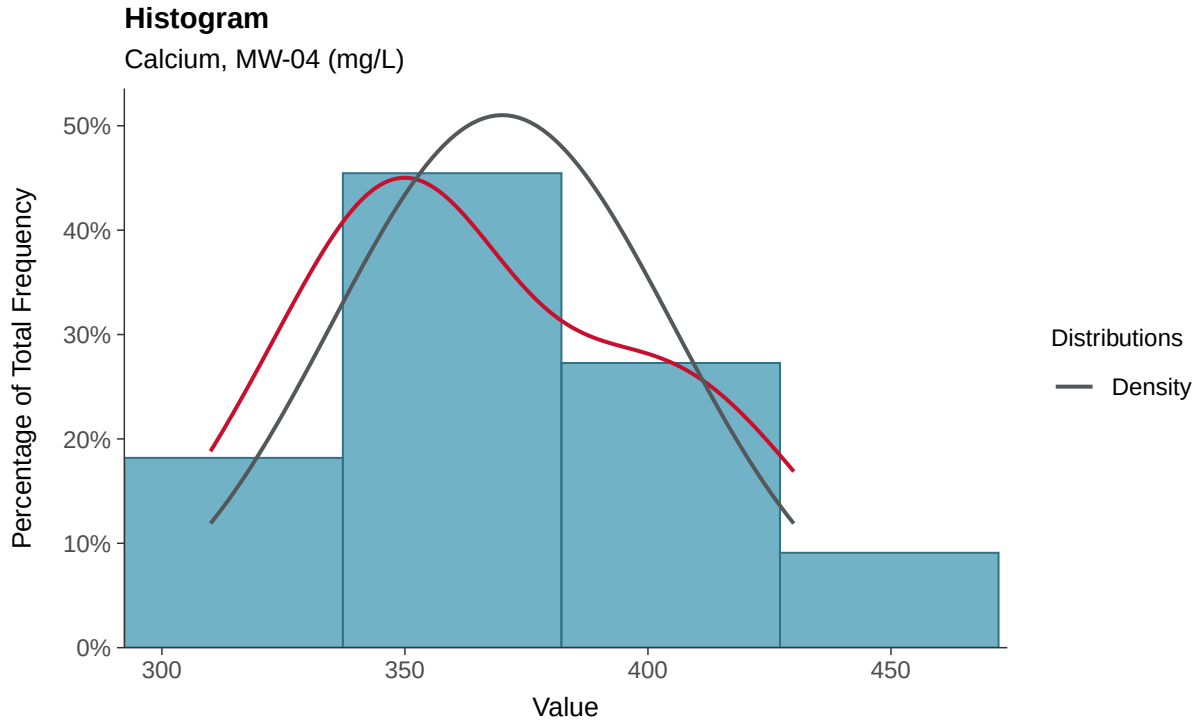
Boron, MW-04 (mg/L)



Appendix III: Calcium, MW-04

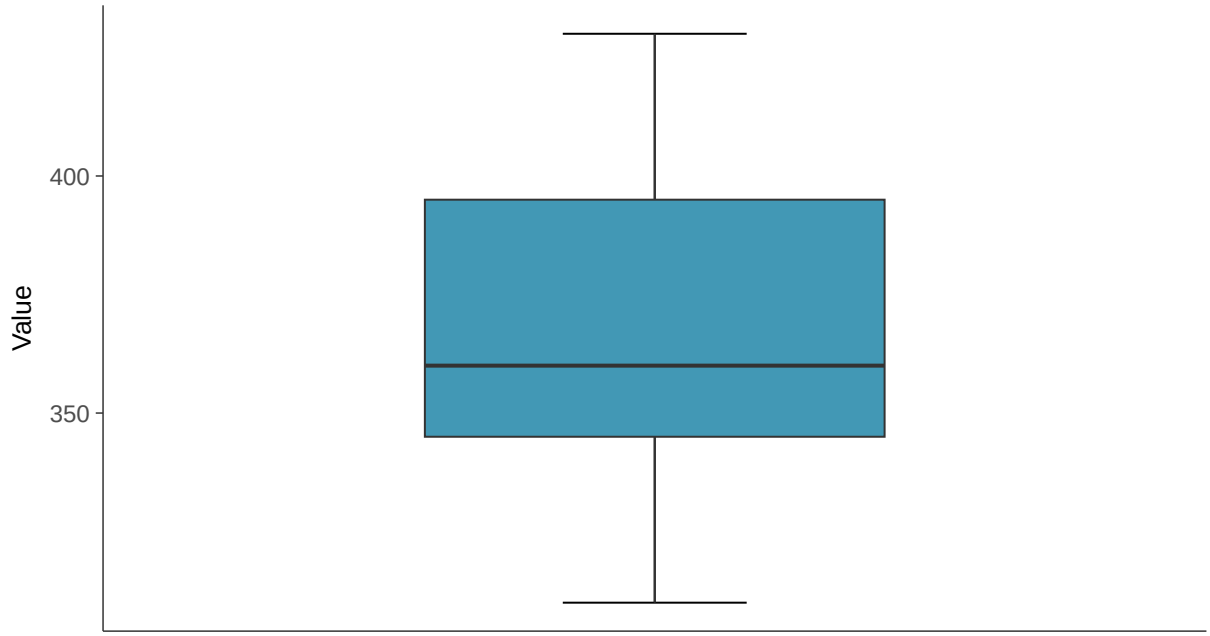
ID: 2_14_4_107





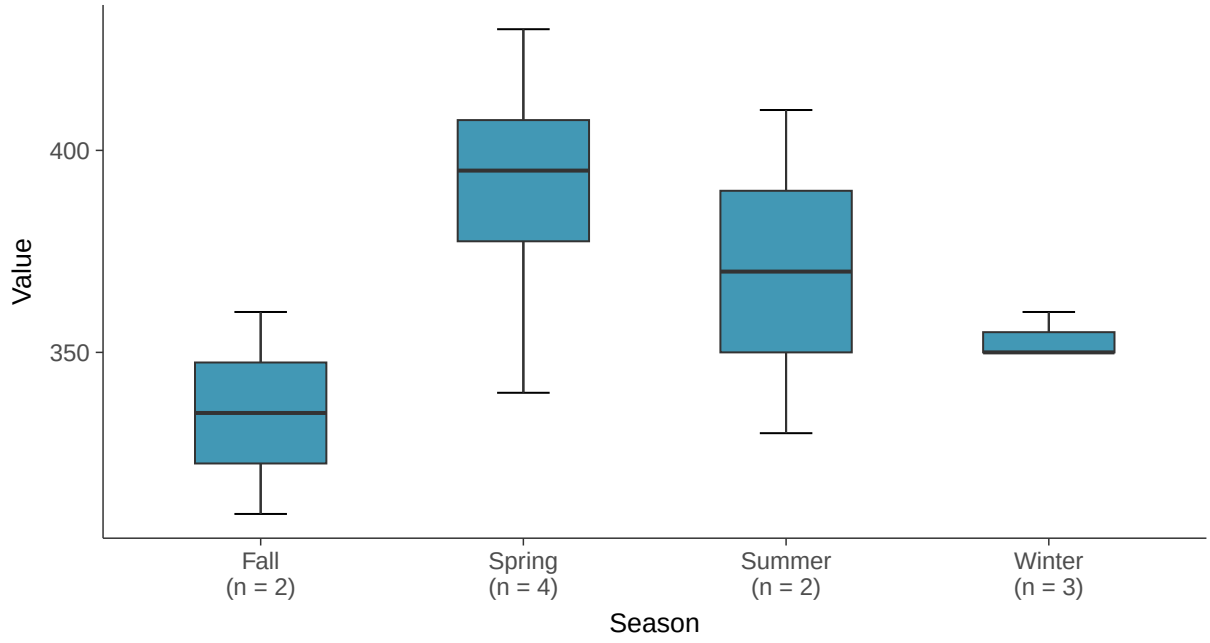
Boxplot

Calcium, MW-04 (mg/L)



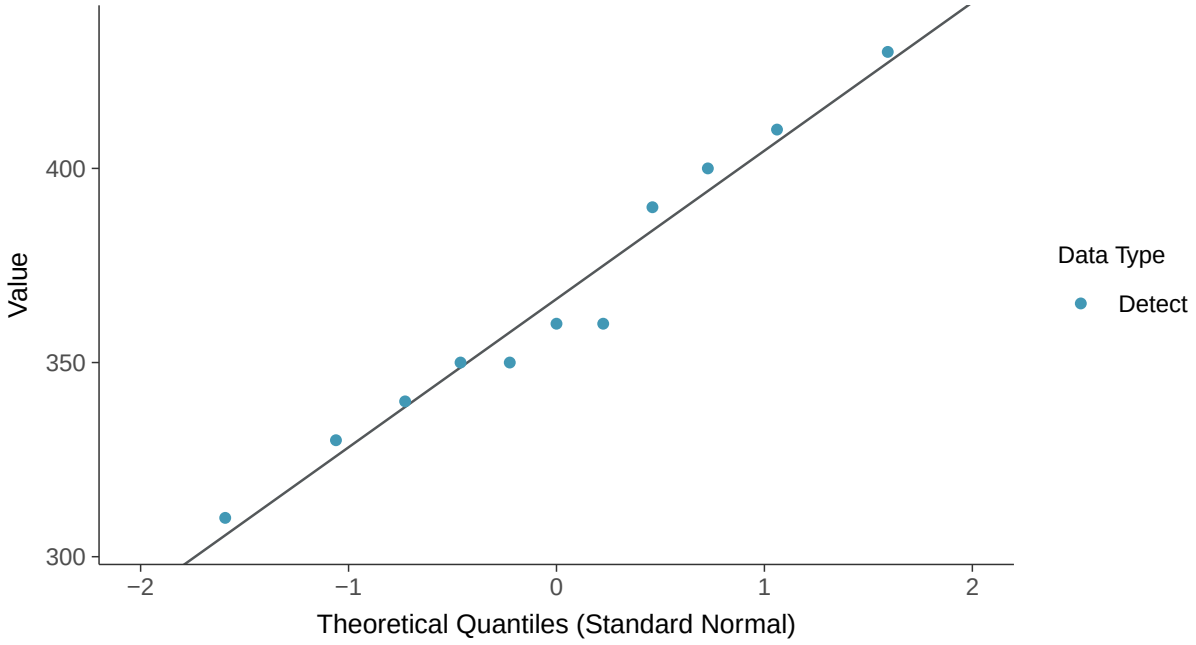
Boxplot by Season

Calcium, MW-04 (mg/L)



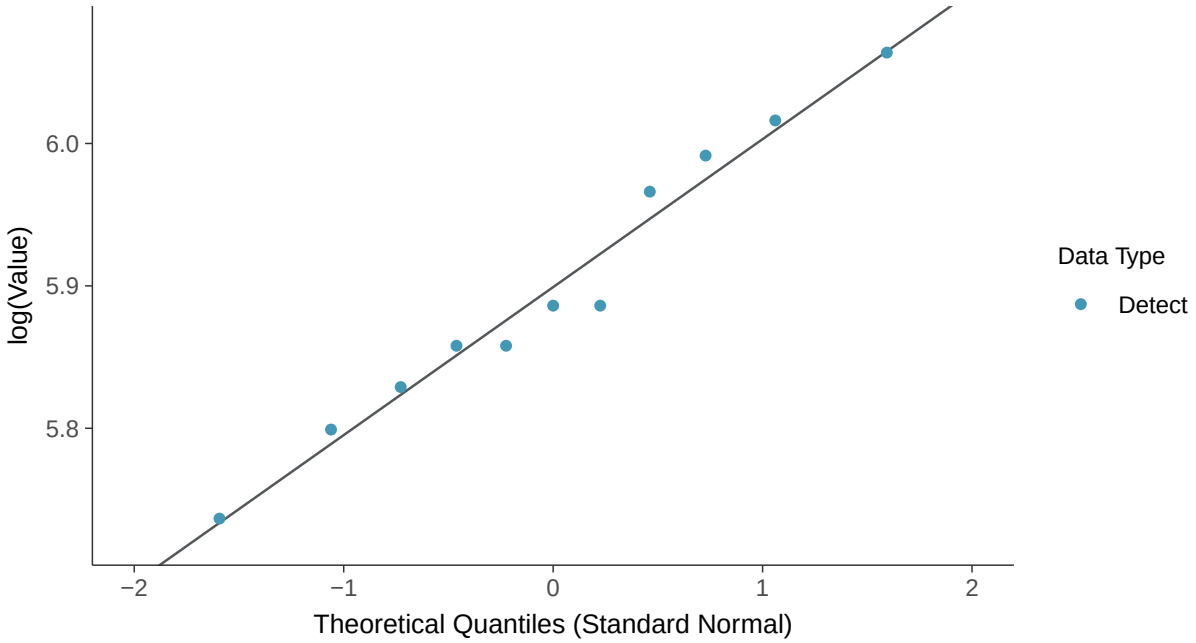
Normal Q-Q plot

Calcium, MW-04 (mg/L)



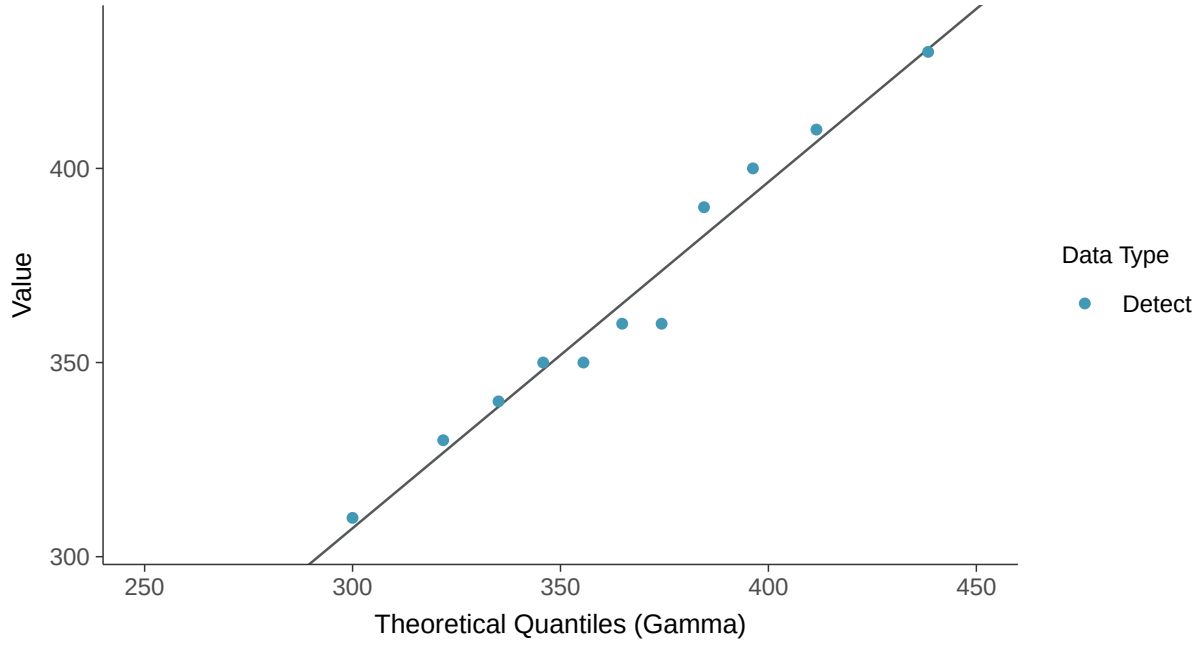
Lognormal Q-Q plot

Calcium, MW-04 (mg/L)



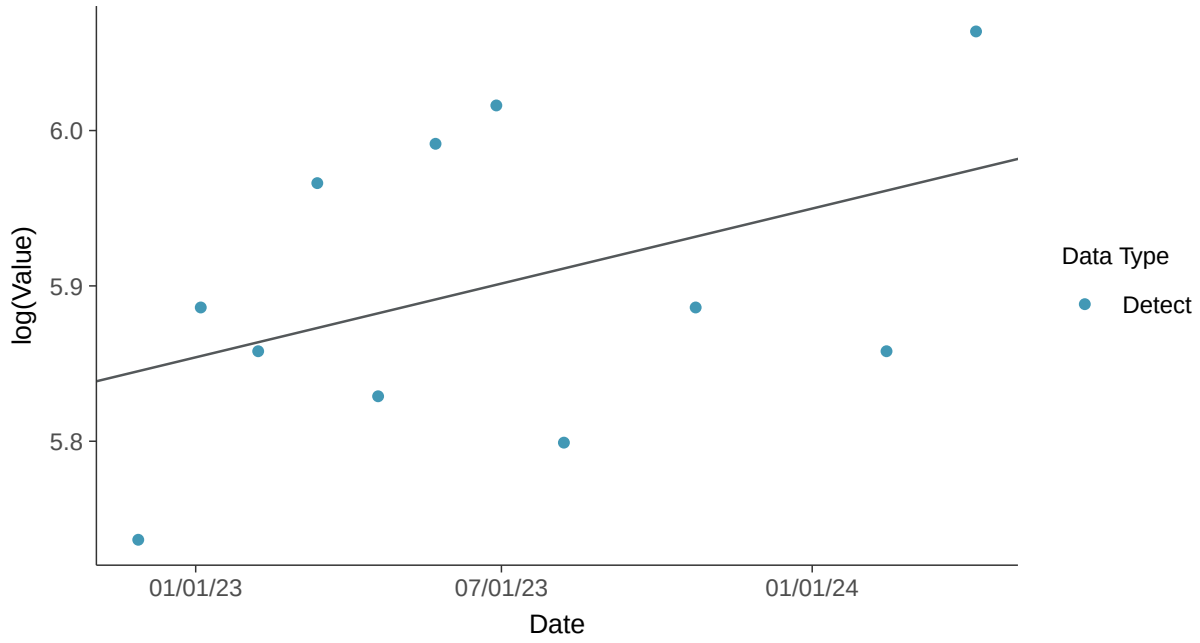
Gamma Q-Q plot

Calcium, MW-04 (mg/L)



Trend Regression: Lognormal MLE

Calcium, MW-04 (mg/L)

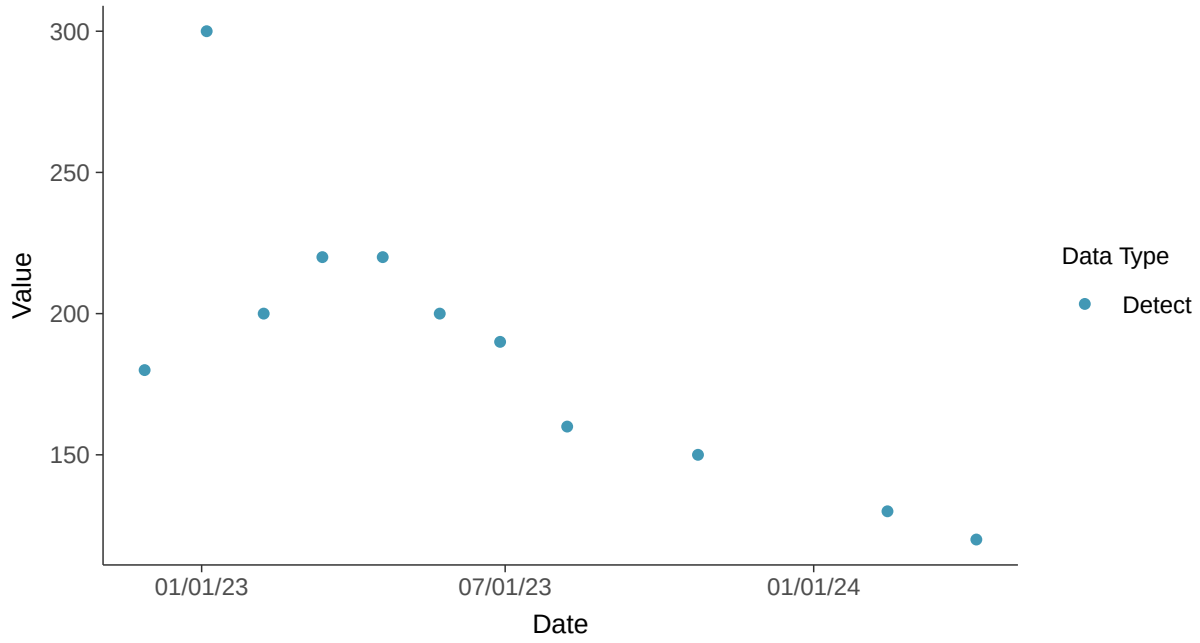


Appendix III: Chloride (as Cl), MW-04

ID: 2_14_4_108

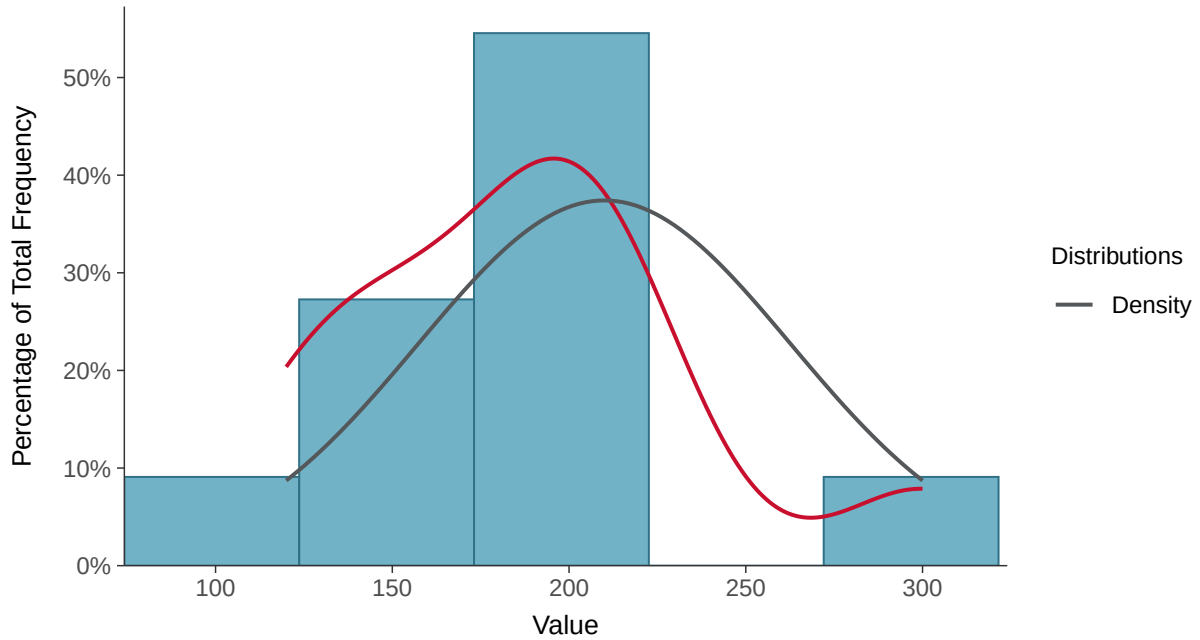
Scatter Plot

Chloride (as Cl), MW-04 (mg/L)



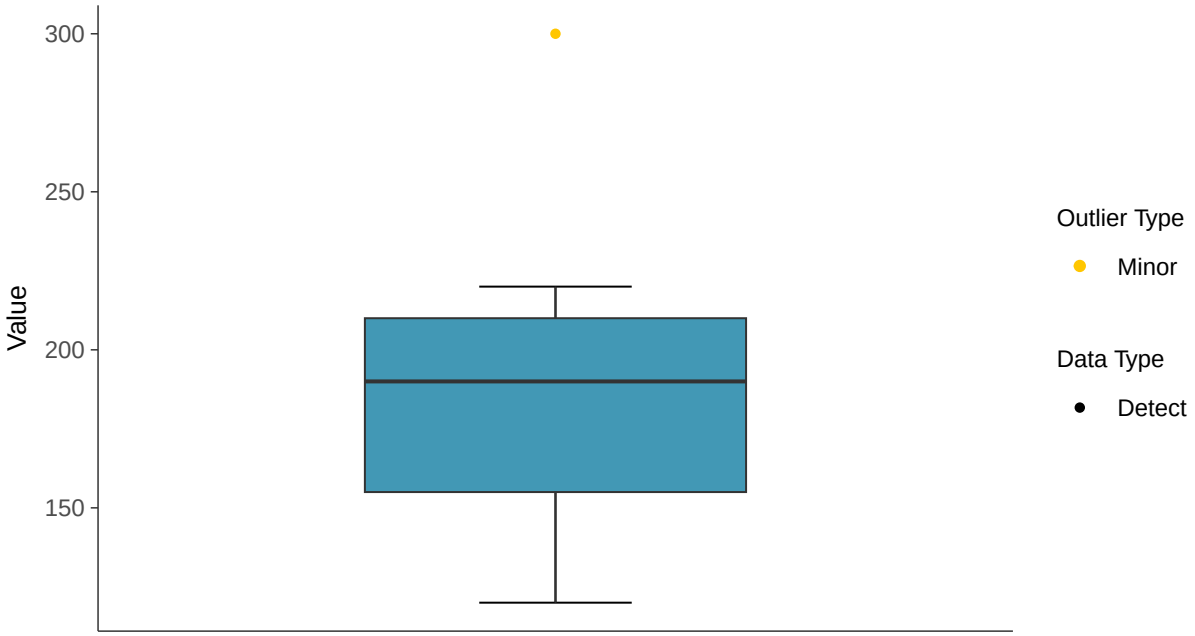
Histogram

Chloride (as Cl), MW-04 (mg/L)



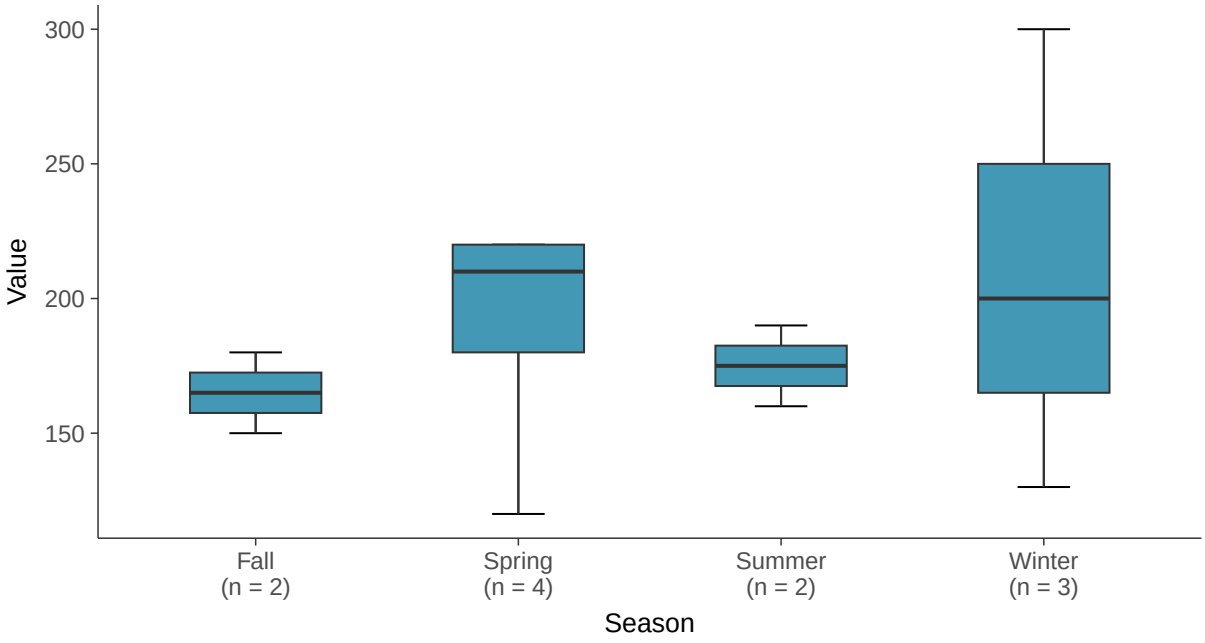
Boxplot

Chloride (as Cl), MW-04 (mg/L)



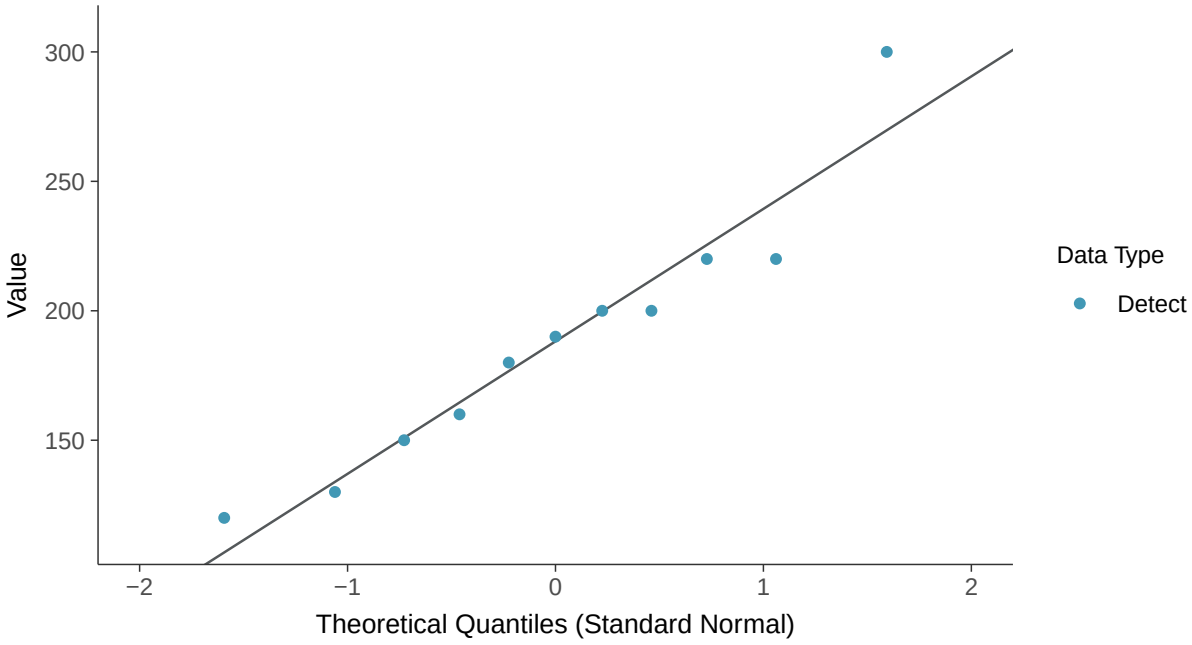
Boxplot by Season

Chloride (as Cl), MW-04 (mg/L)



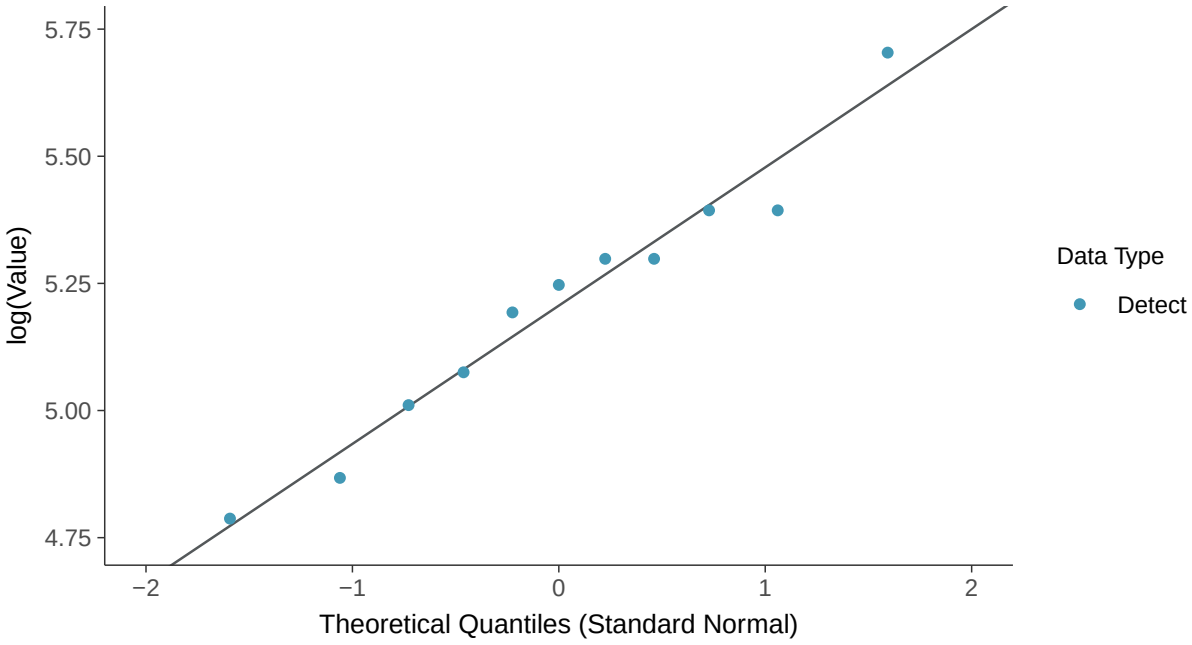
Normal Q-Q plot

Chloride (as Cl), MW-04 (mg/L)



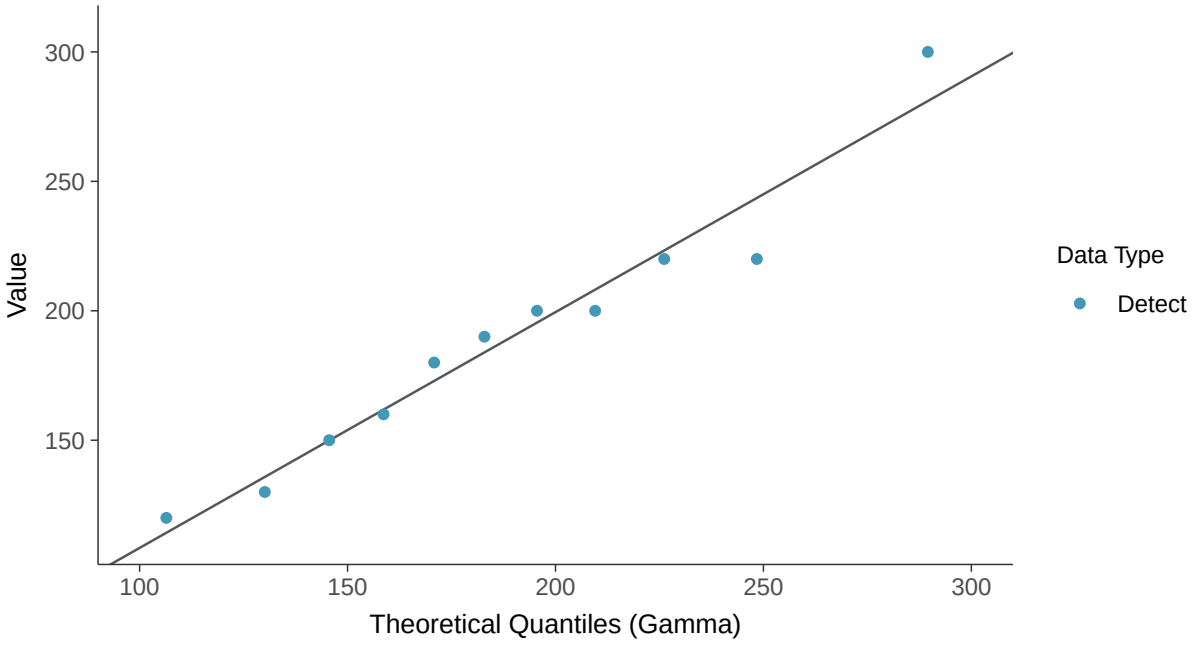
Lognormal Q-Q plot

Chloride (as Cl), MW-04 (mg/L)



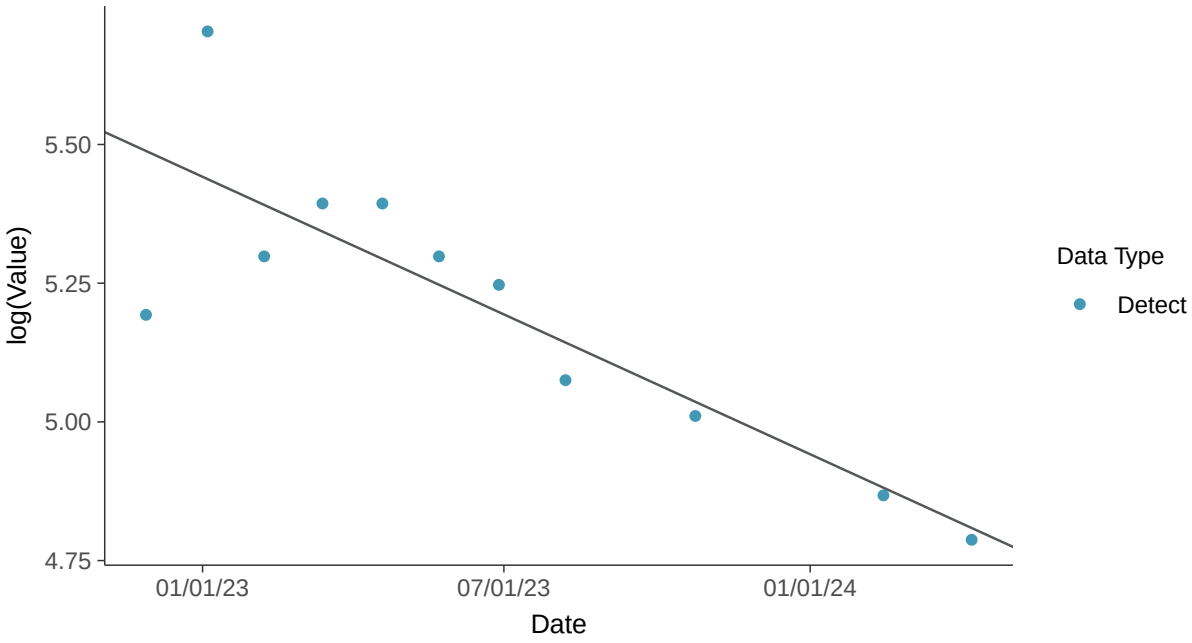
Gamma Q-Q plot

Chloride (as Cl), MW-04 (mg/L)



Trend Regression: Lognormal MLE

Chloride (as Cl), MW-04 (mg/L)

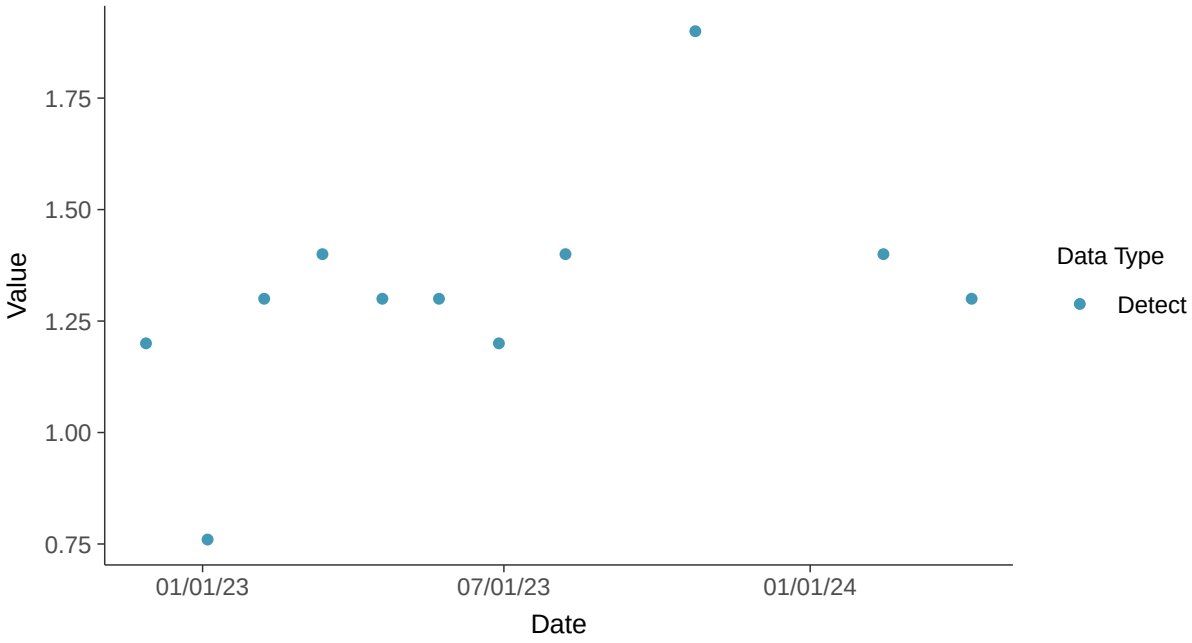


Appendix III: Fluoride, MW-04

ID: 2_14_4_112

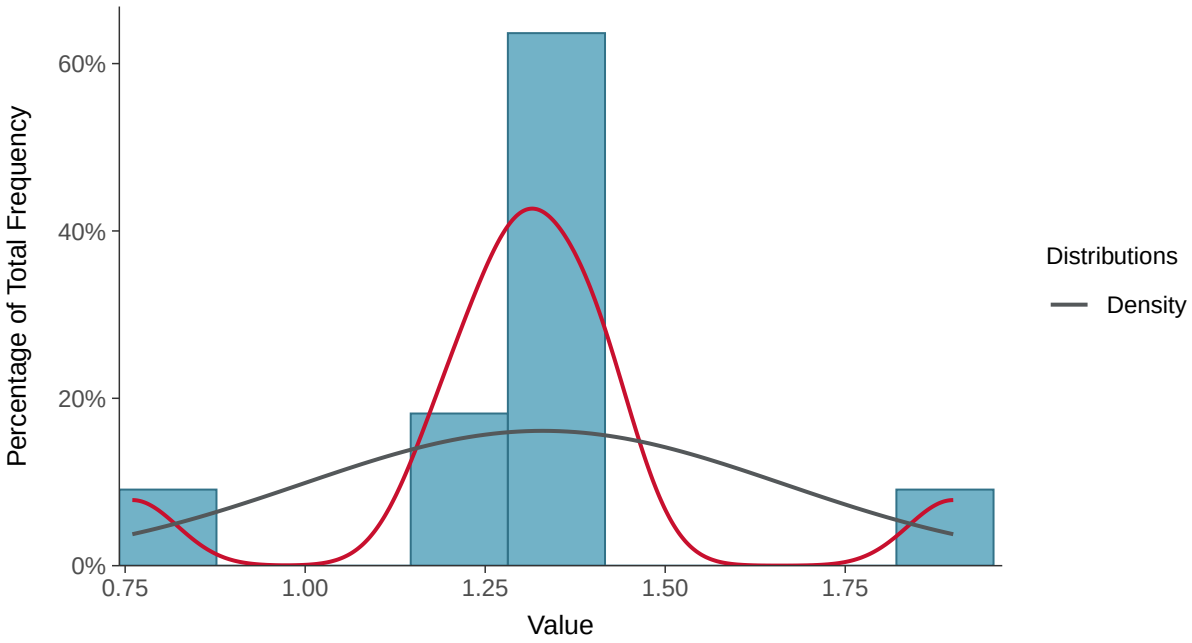
Scatter Plot

Fluoride, MW-04 (mg/L)



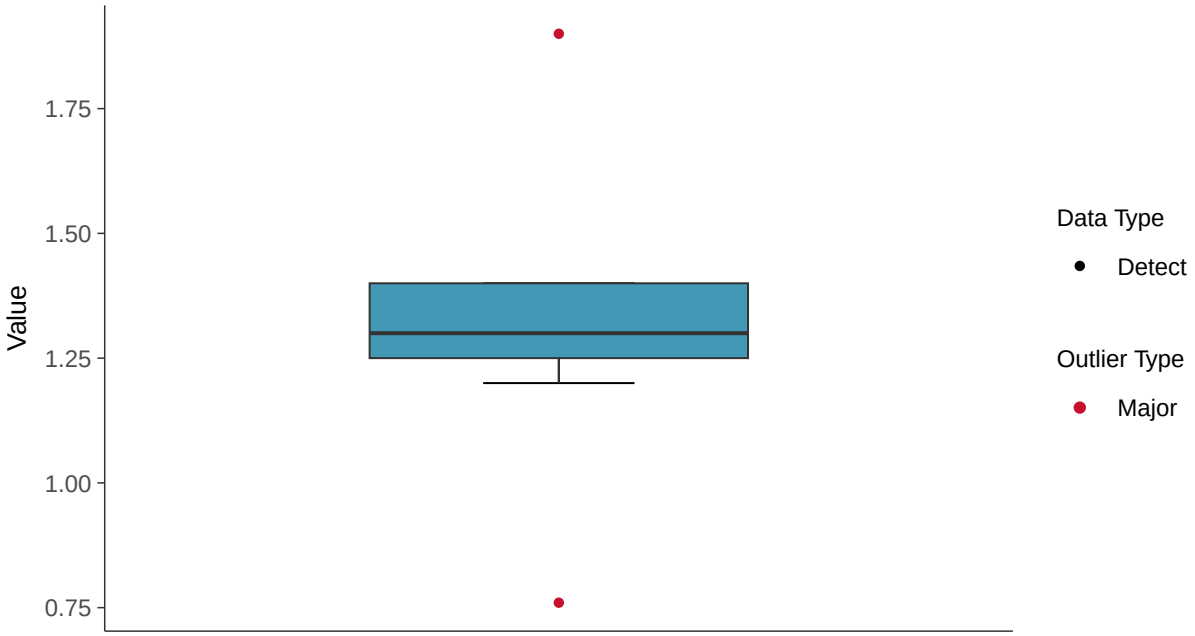
Histogram

Fluoride, MW-04 (mg/L)



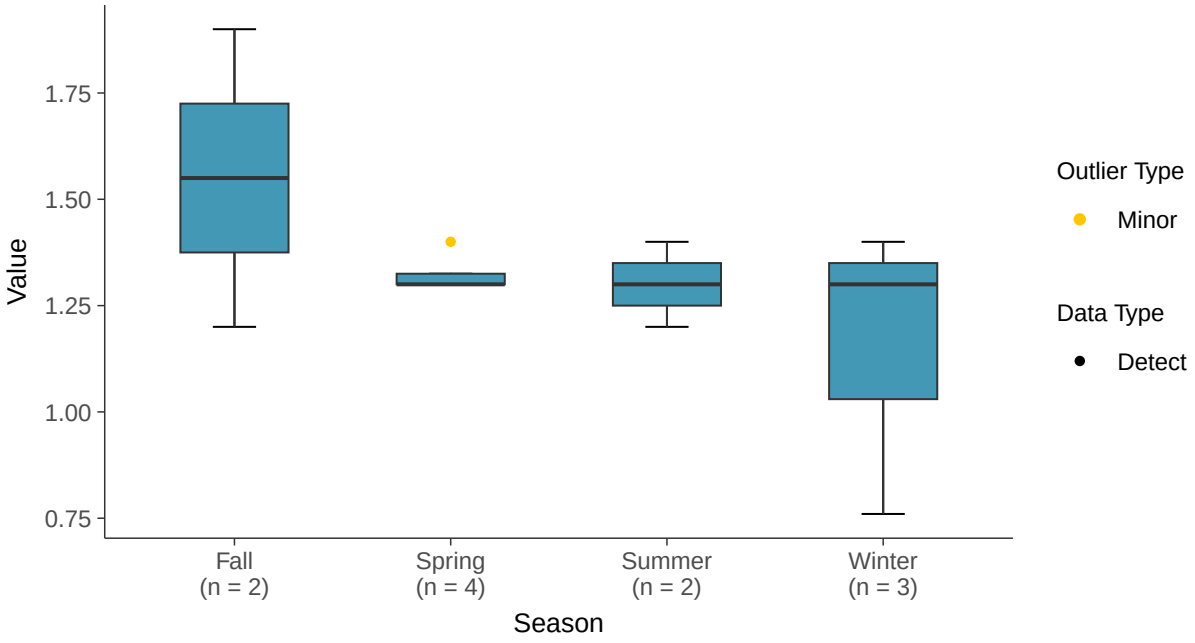
Boxplot

Fluoride, MW-04 (mg/L)



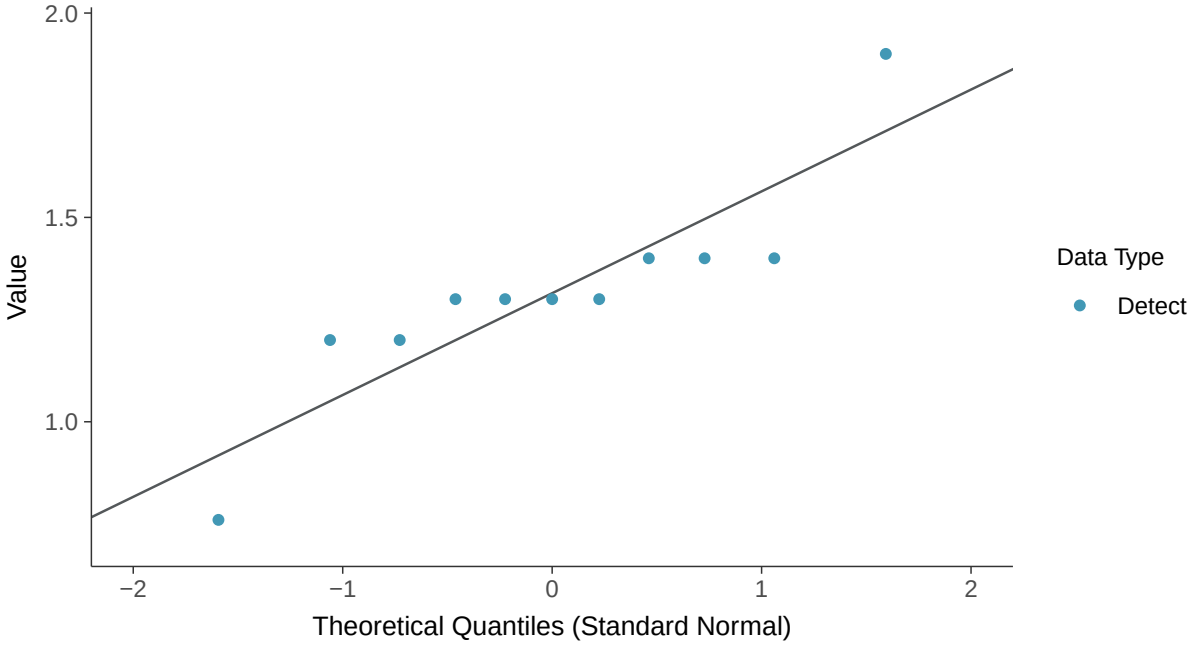
Boxplot by Season

Fluoride, MW-04 (mg/L)



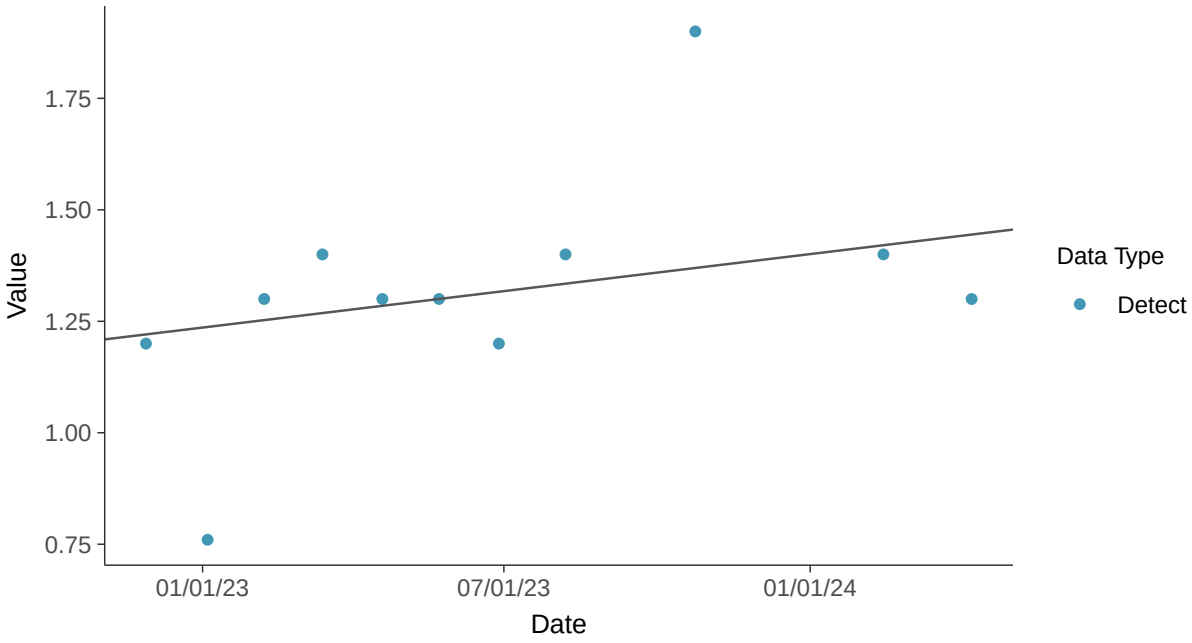
Normal Q-Q plot

Fluoride, MW-04 (mg/L)



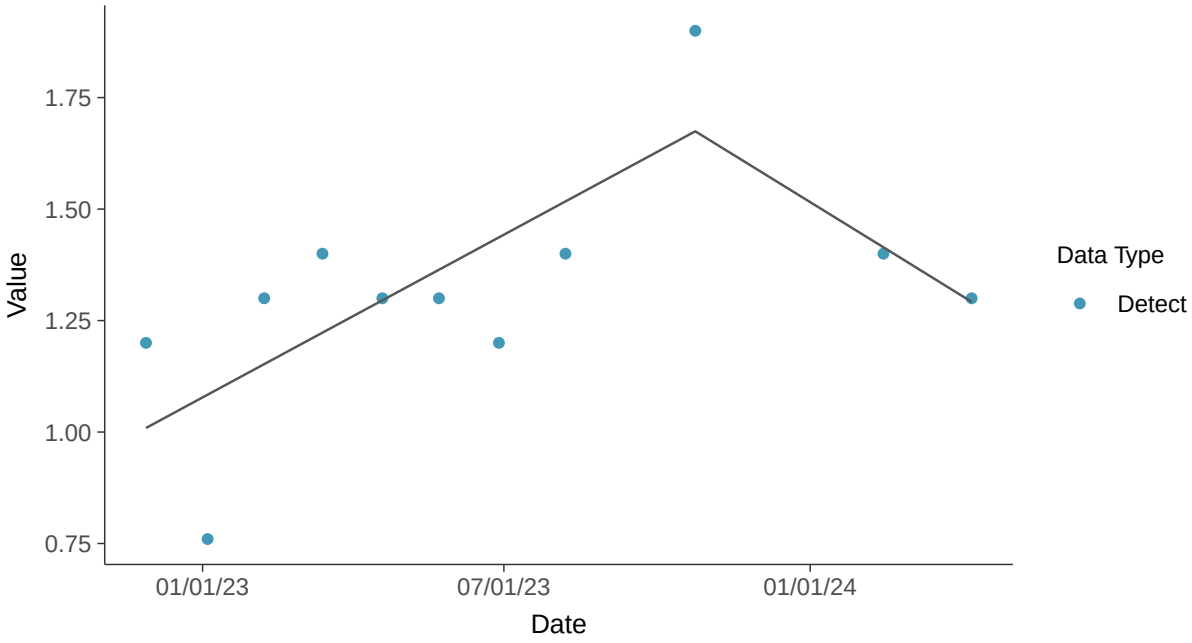
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Fluoride, MW-04 (mg/L)



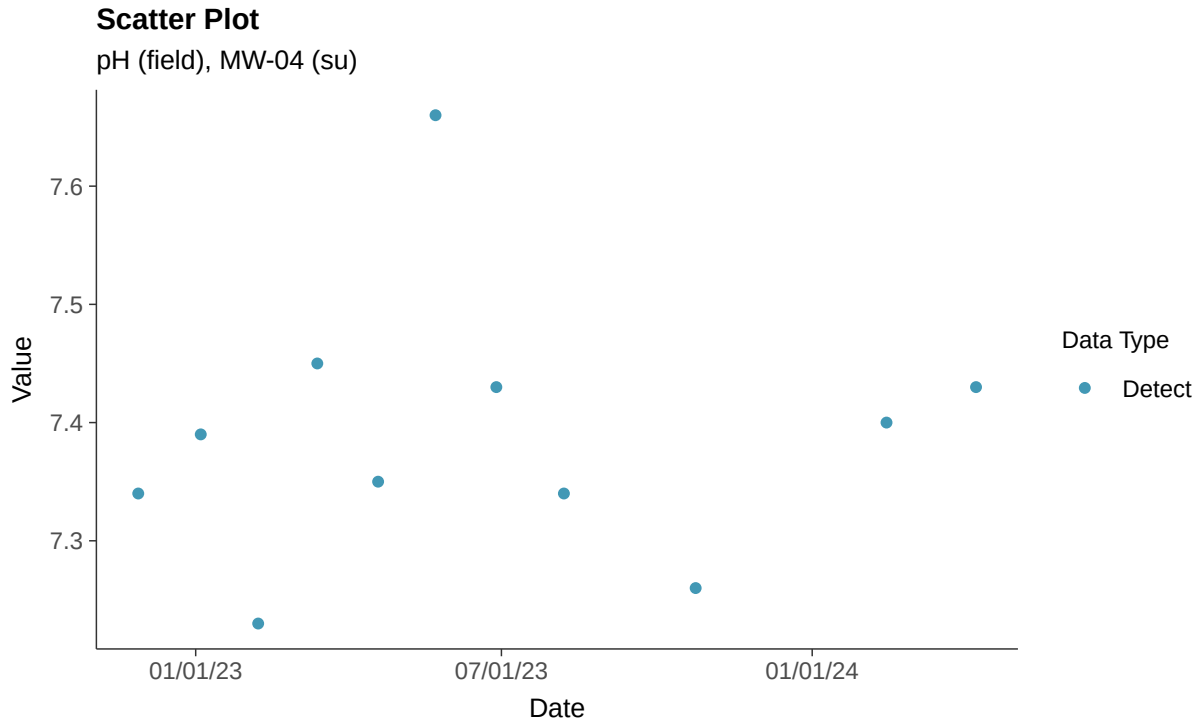
Trend Regression: Piecewise Linear-Linear

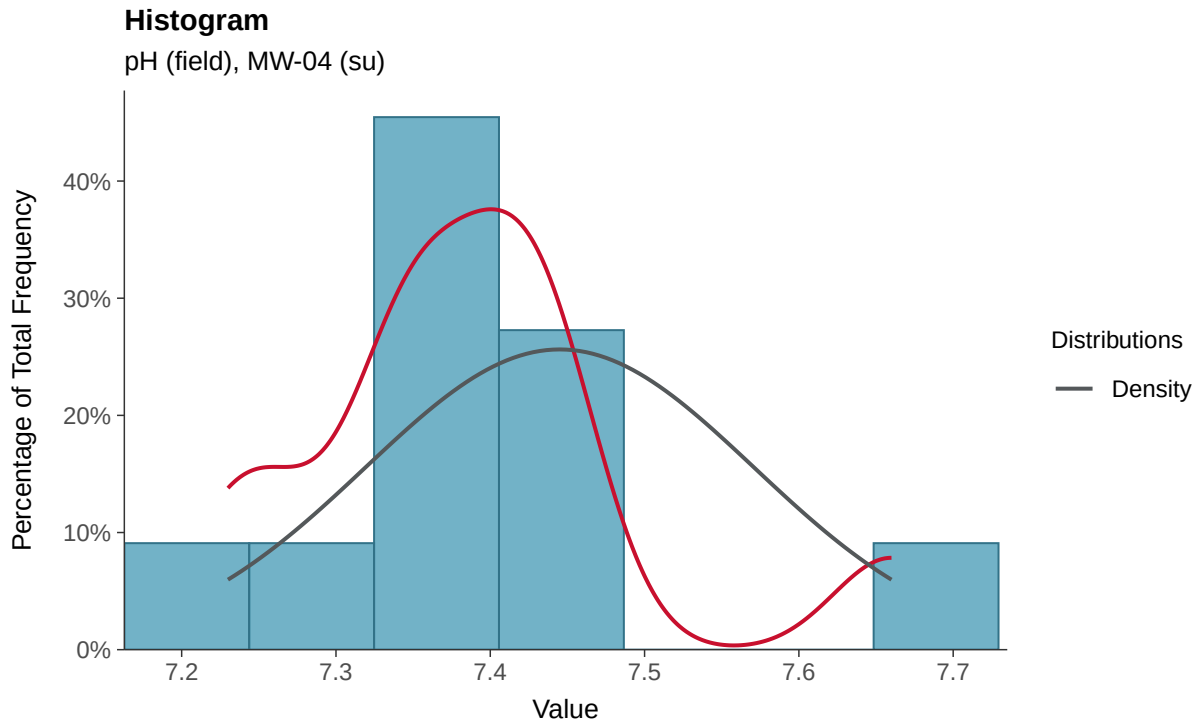
Fluoride, MW-04 (mg/L)



Appendix III: pH (field), MW-04

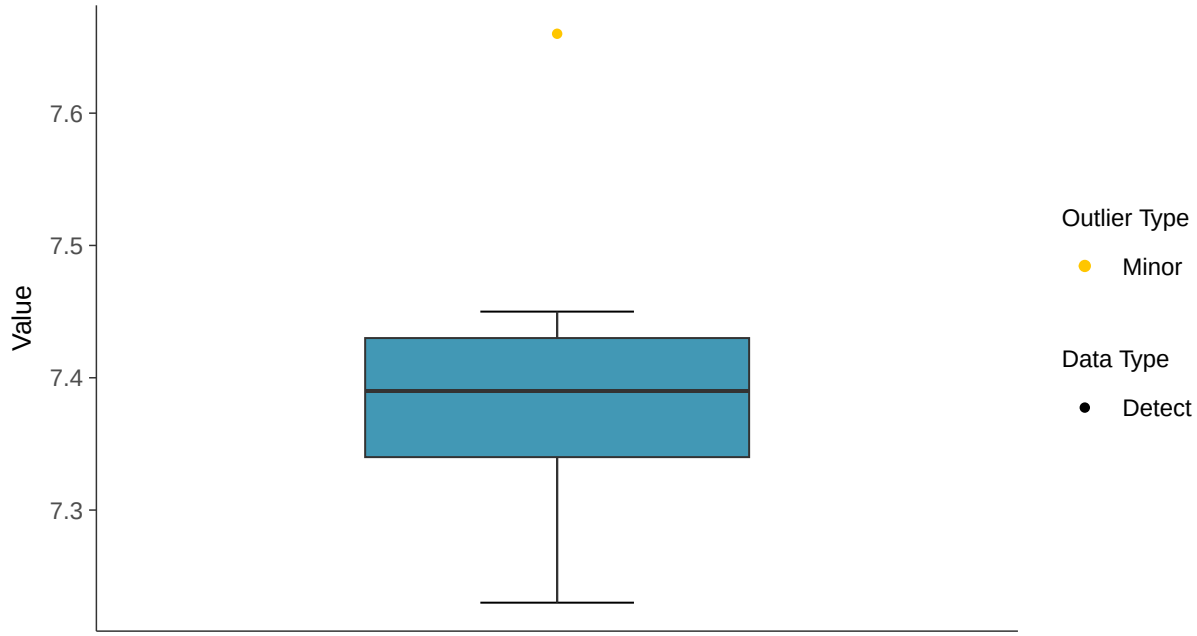
ID: 2_14_4_120





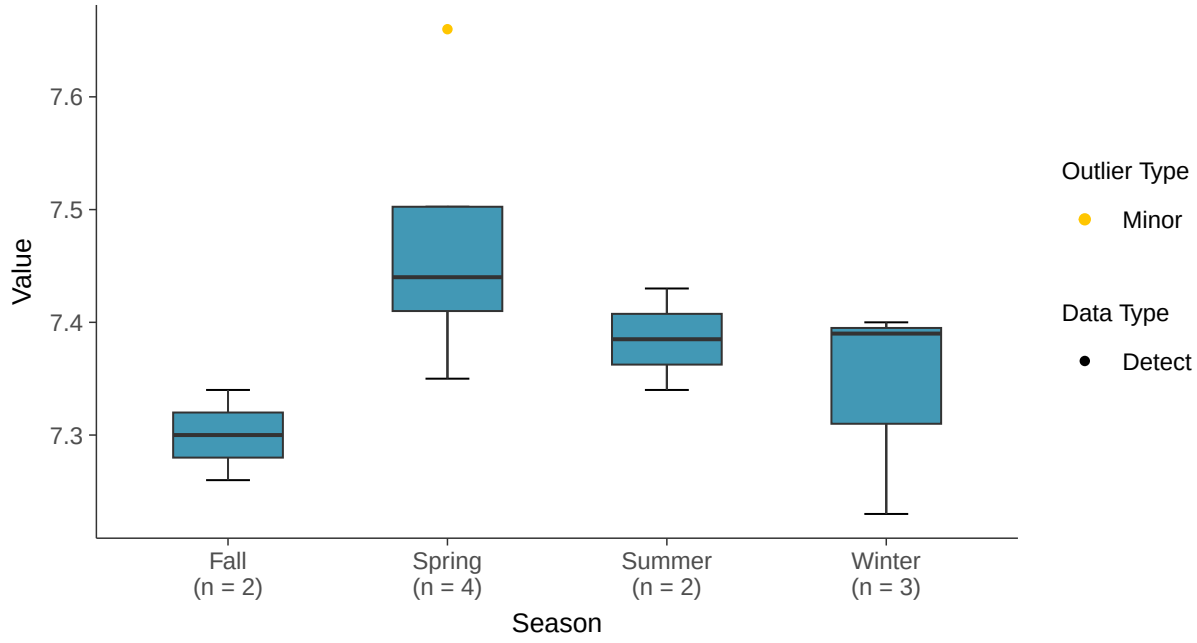
Boxplot

pH (field), MW-04 (su)



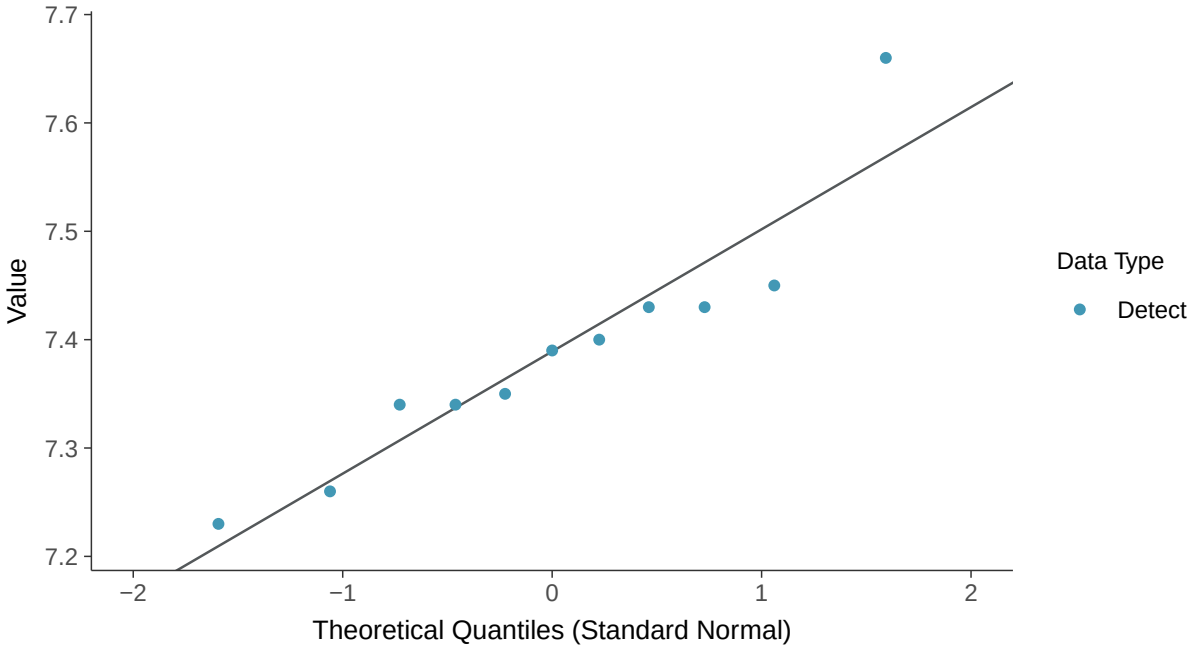
Boxplot by Season

pH (field), MW-04 (su)



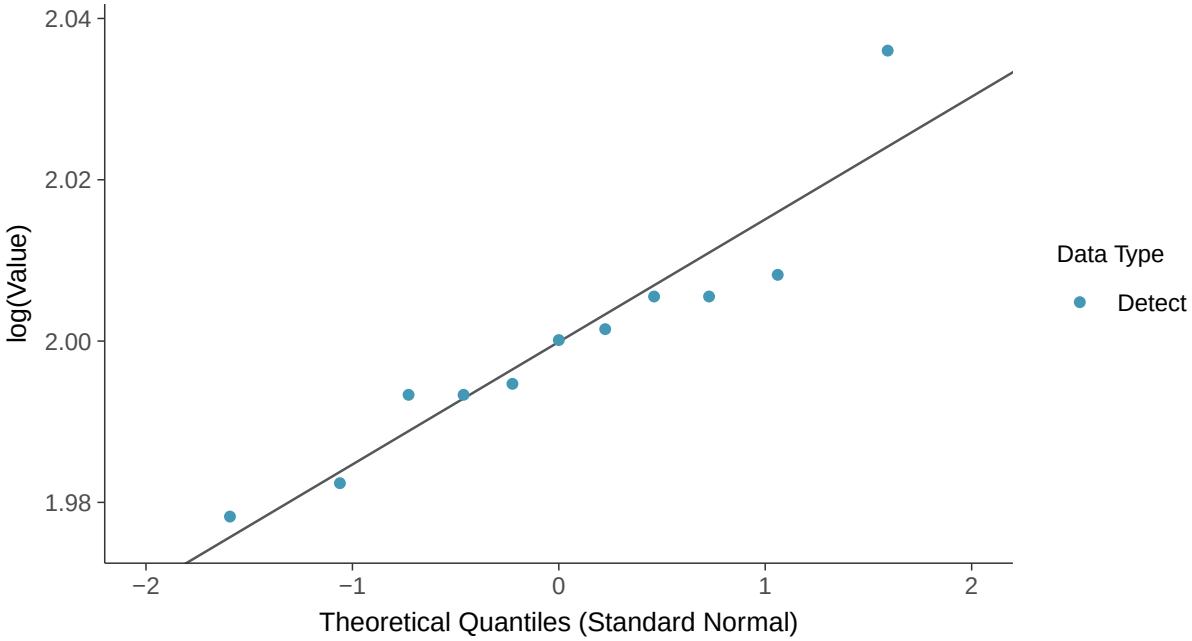
Normal Q-Q plot

pH (field), MW-04 (su)



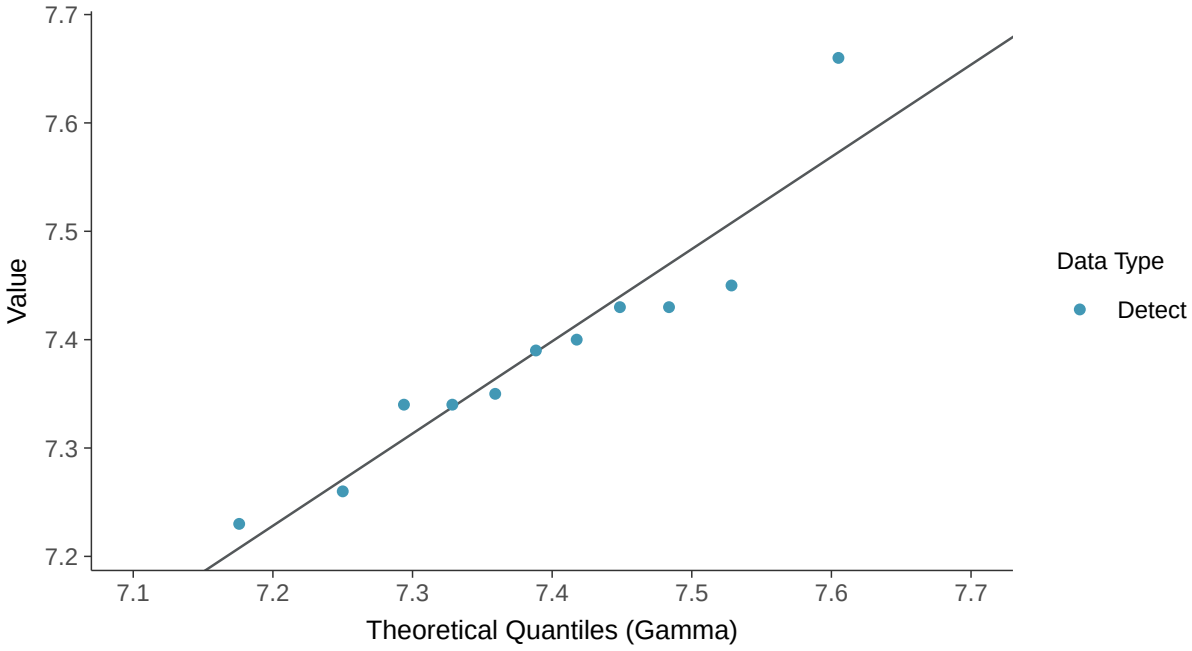
Lognormal Q-Q plot

pH (field), MW-04 (su)



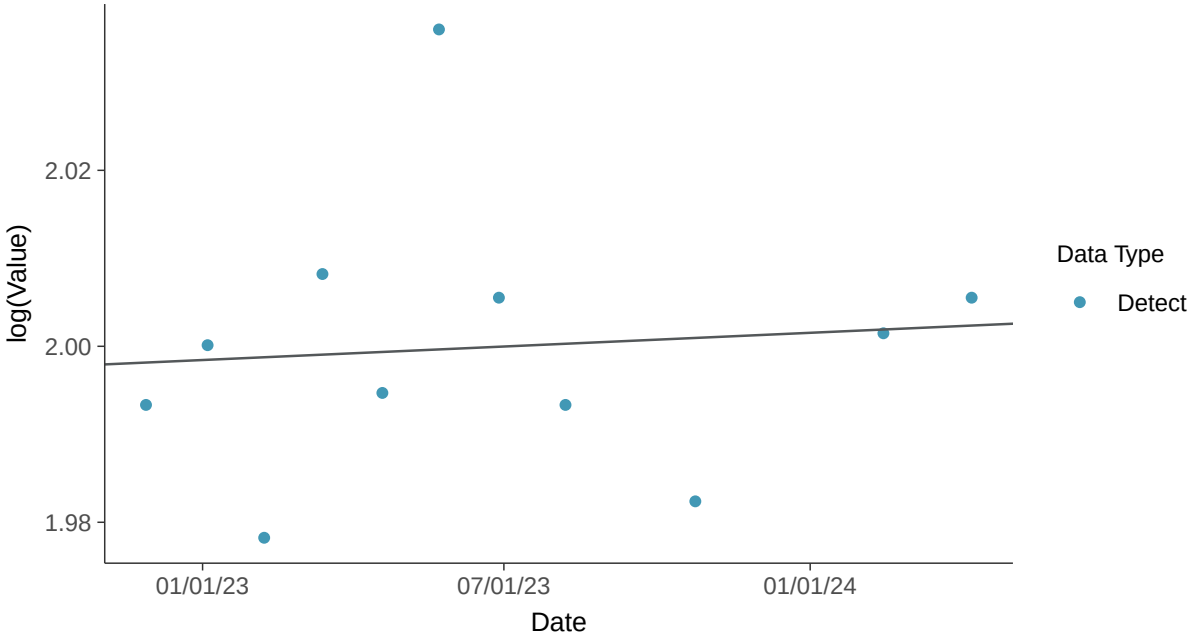
Gamma Q-Q plot

pH (field), MW-04 (su)



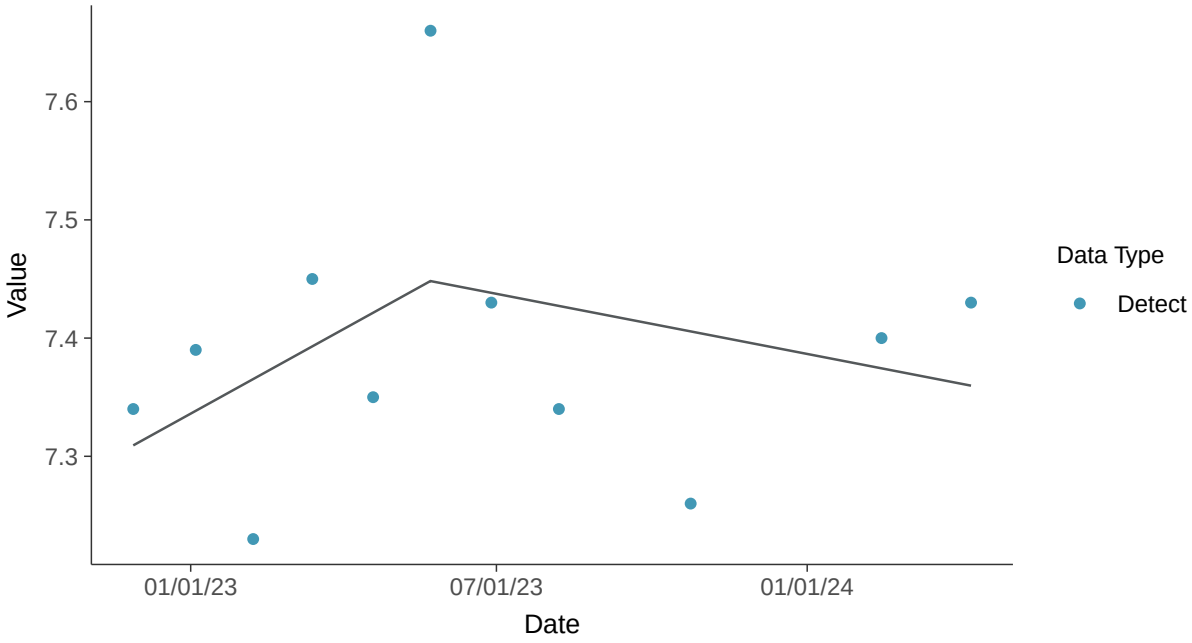
Trend Regression: Lognormal MLE

pH (field), MW-04 (su)



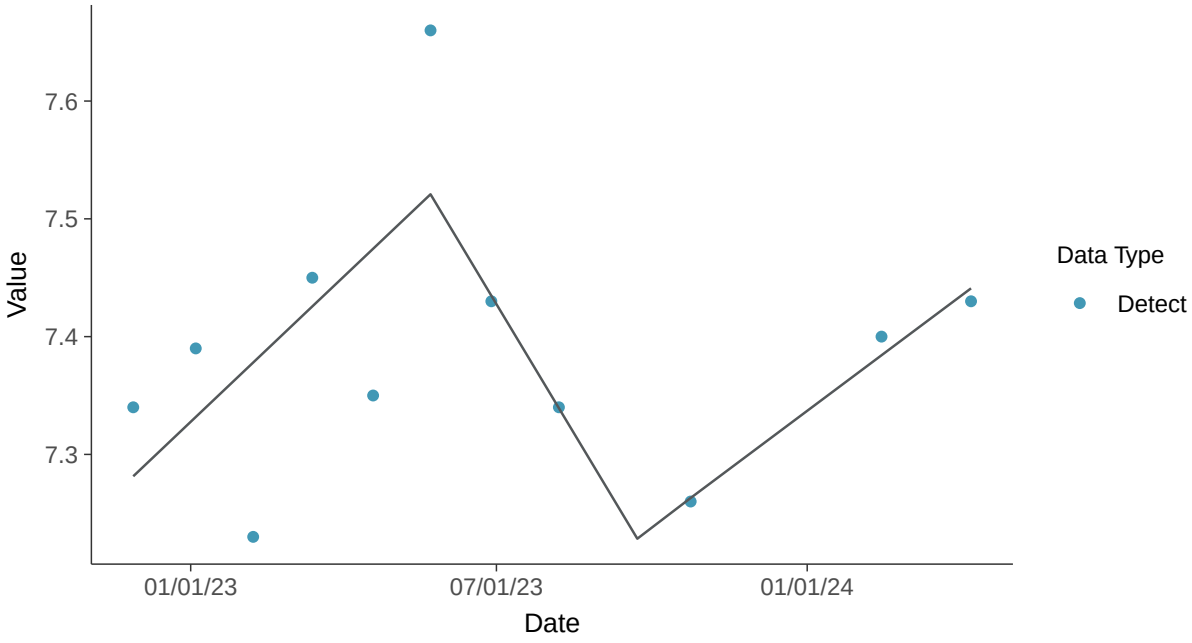
Trend Regression: Piecewise Linear-Linear

pH (field), MW-04 (su)



Trend Regression: Piecewise Linear-Linear-Linear

pH (field), MW-04 (su)

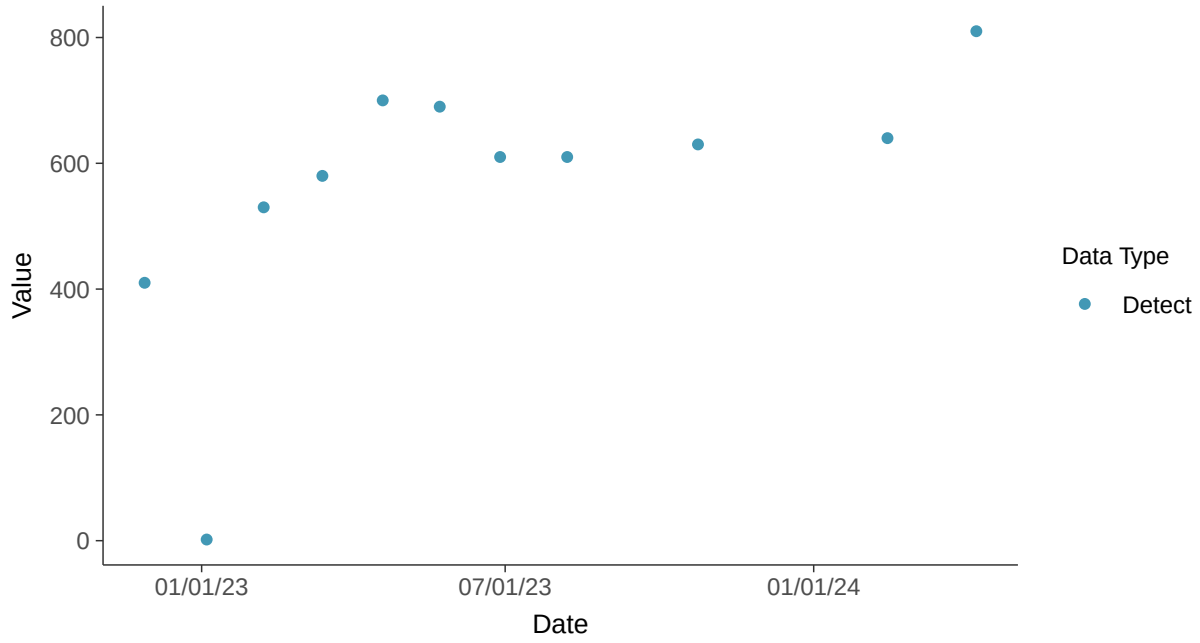


Appendix III: Sulfate (as SO4), MW-04

ID: 2_14_4_124

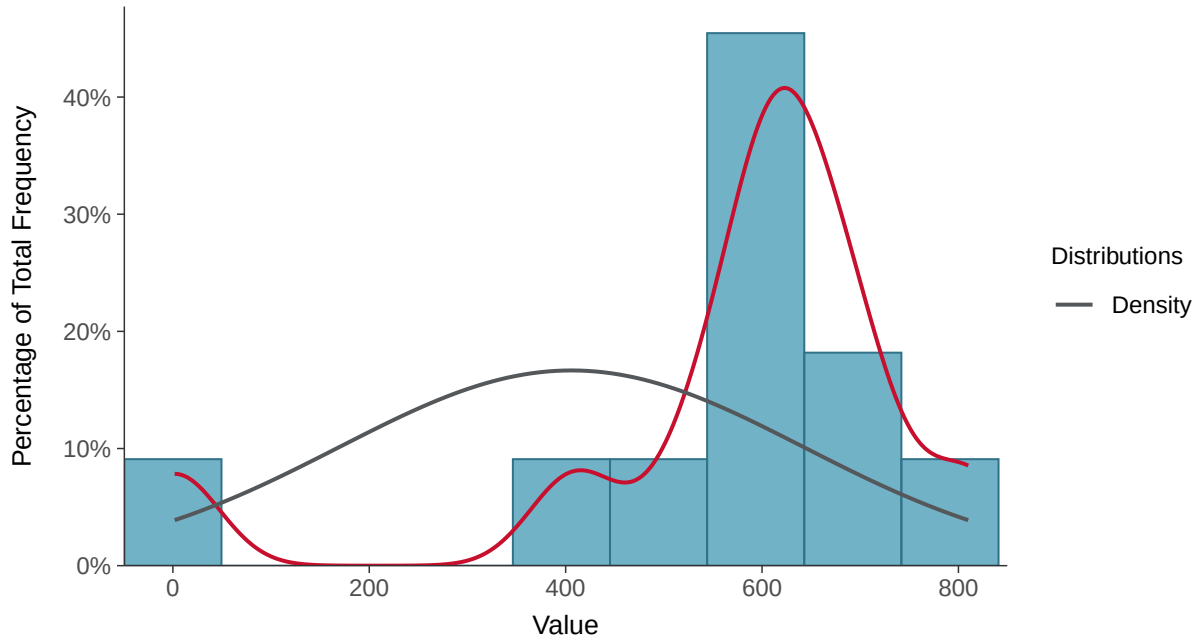
Scatter Plot

Sulfate (as SO4), MW-04 (mg/L)



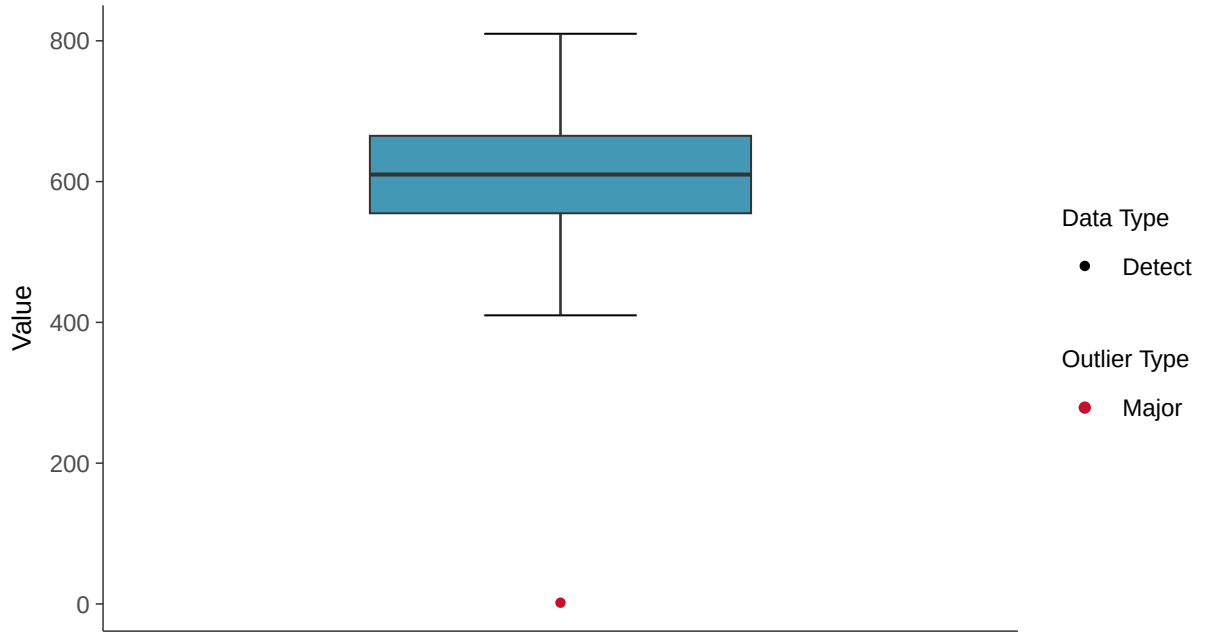
Histogram

Sulfate (as SO4), MW-04 (mg/L)



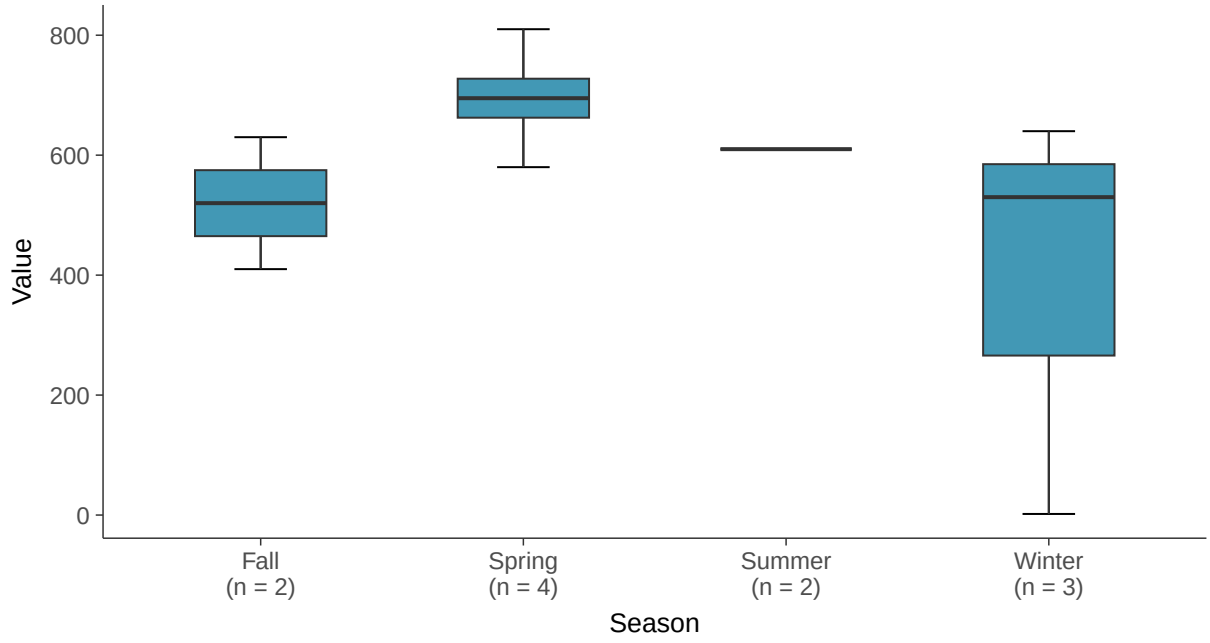
Boxplot

Sulfate (as SO4), MW-04 (mg/L)



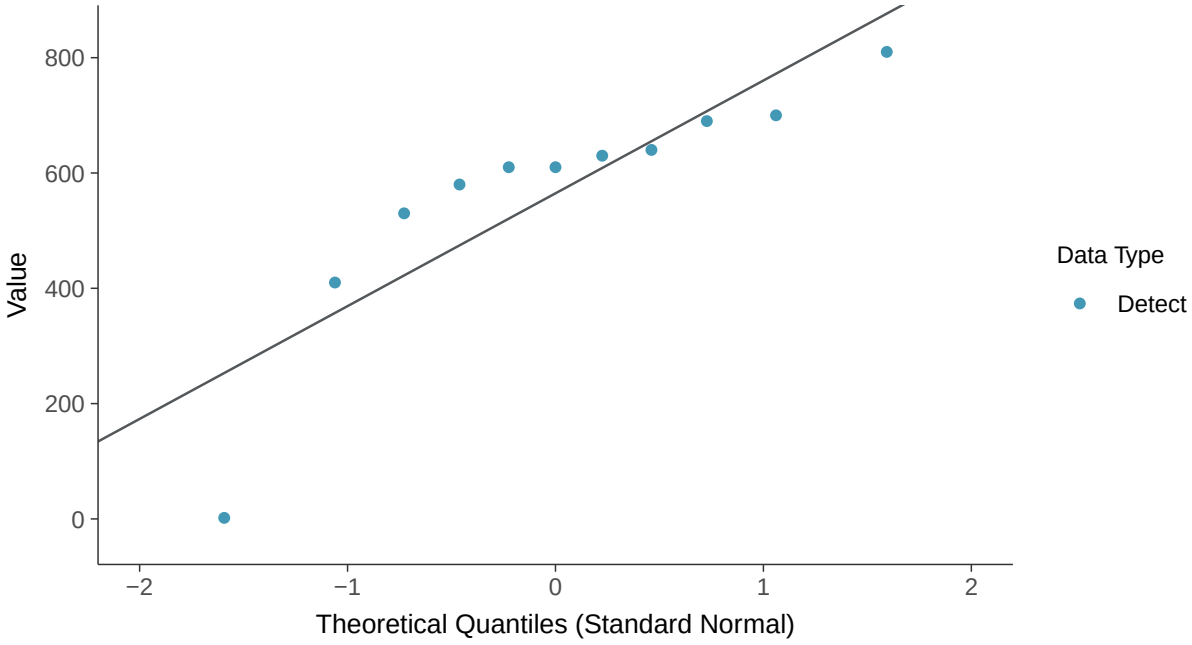
Boxplot by Season

Sulfate (as SO4), MW-04 (mg/L)



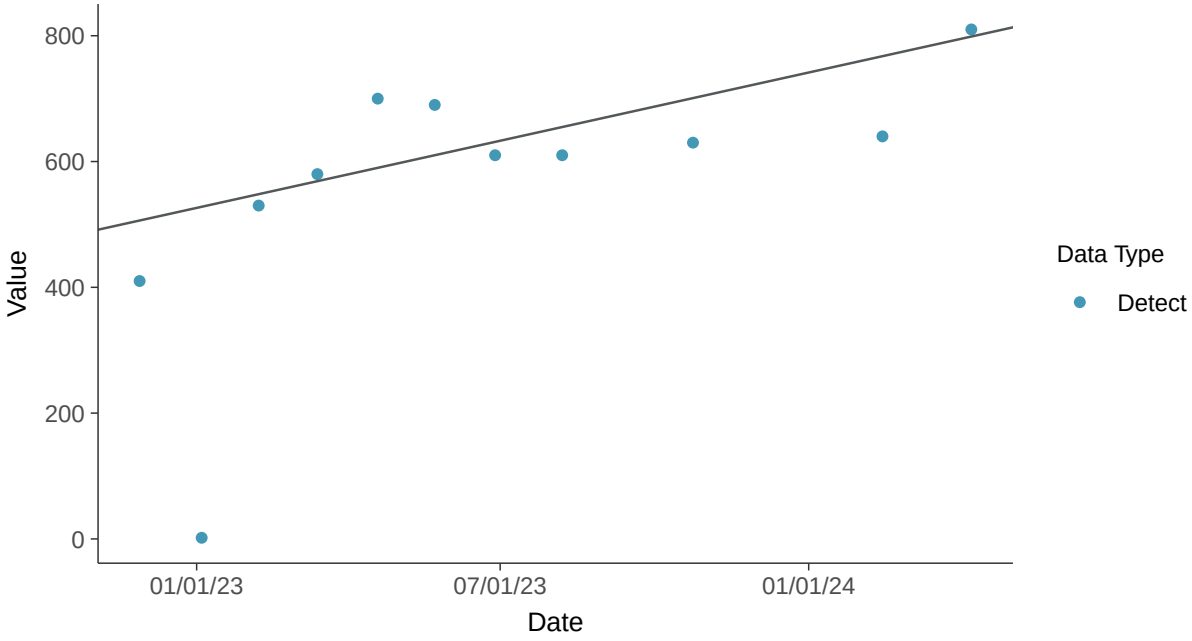
Normal Q-Q plot

Sulfate (as SO4), MW-04 (mg/L)



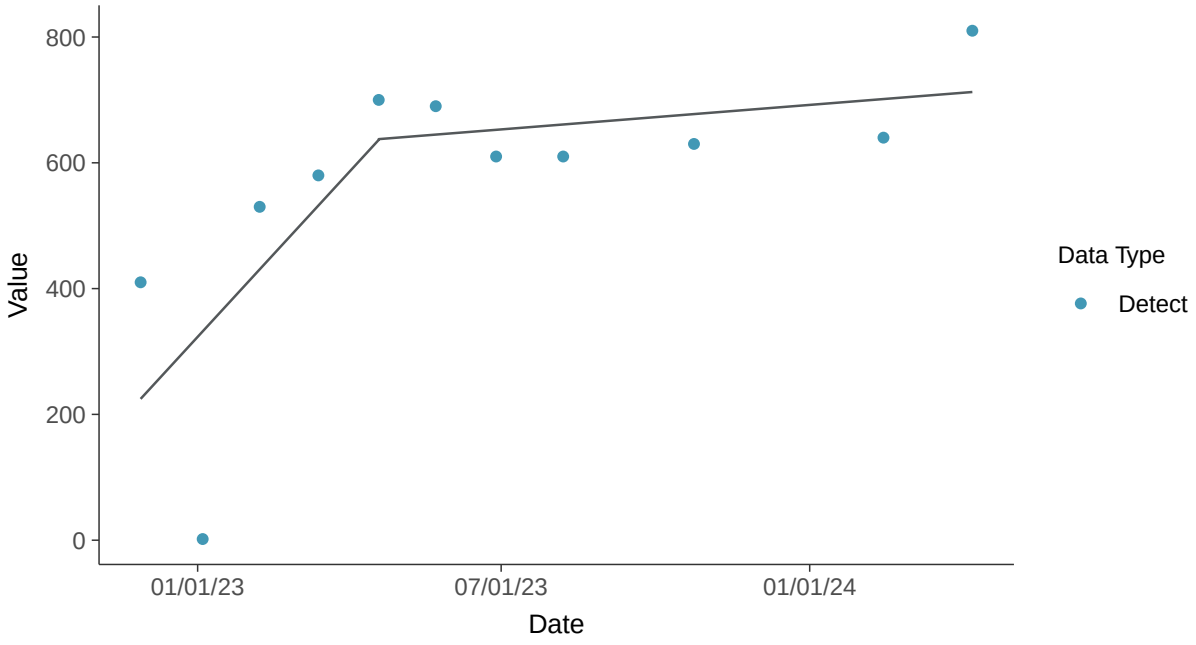
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Sulfate (as SO4), MW-04 (mg/L)



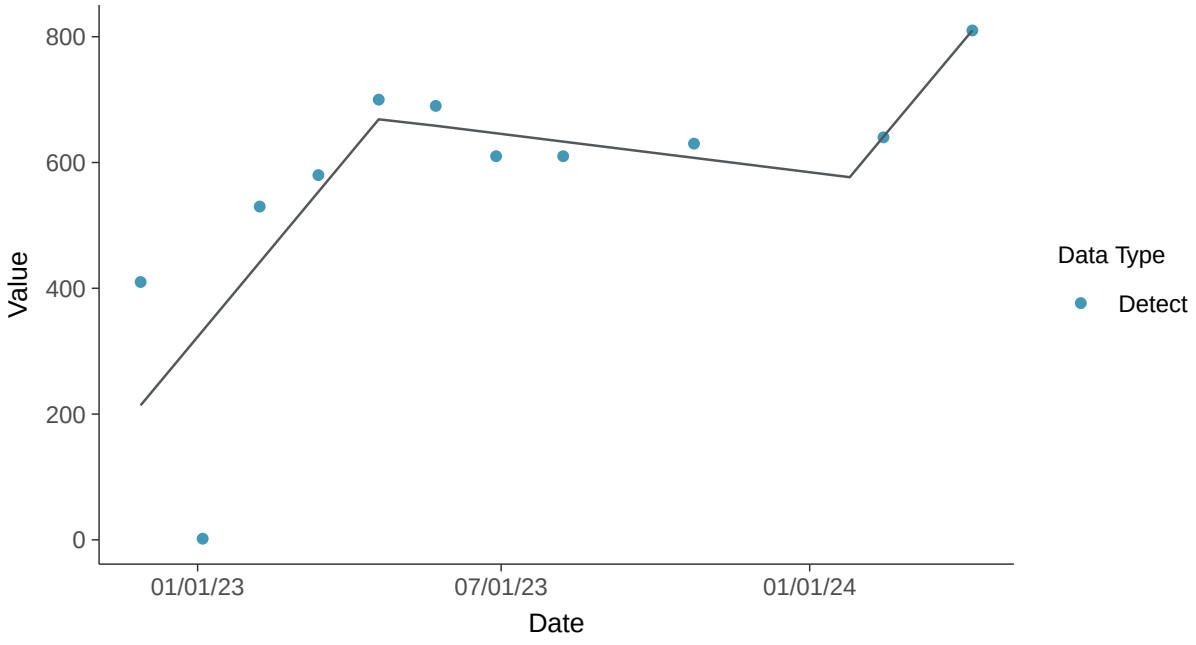
Trend Regression: Piecewise Linear-Linear

Sulfate (as SO4), MW-04 (mg/L)



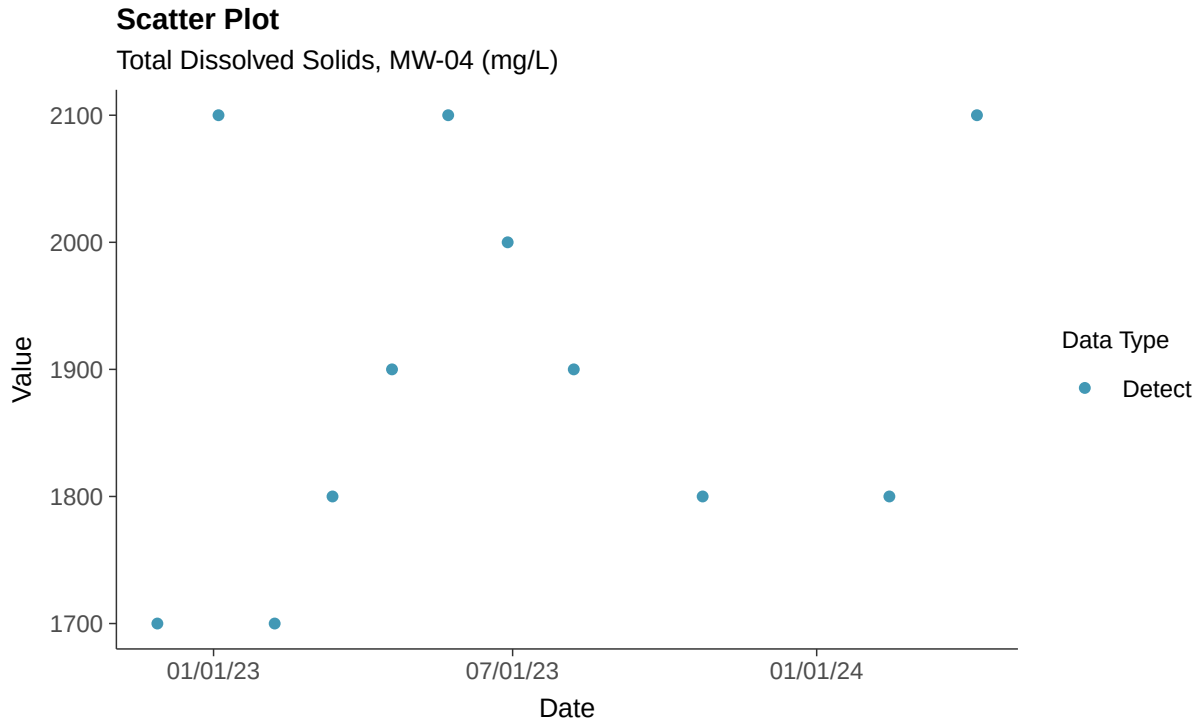
Trend Regression: Piecewise Linear-Linear-Linear

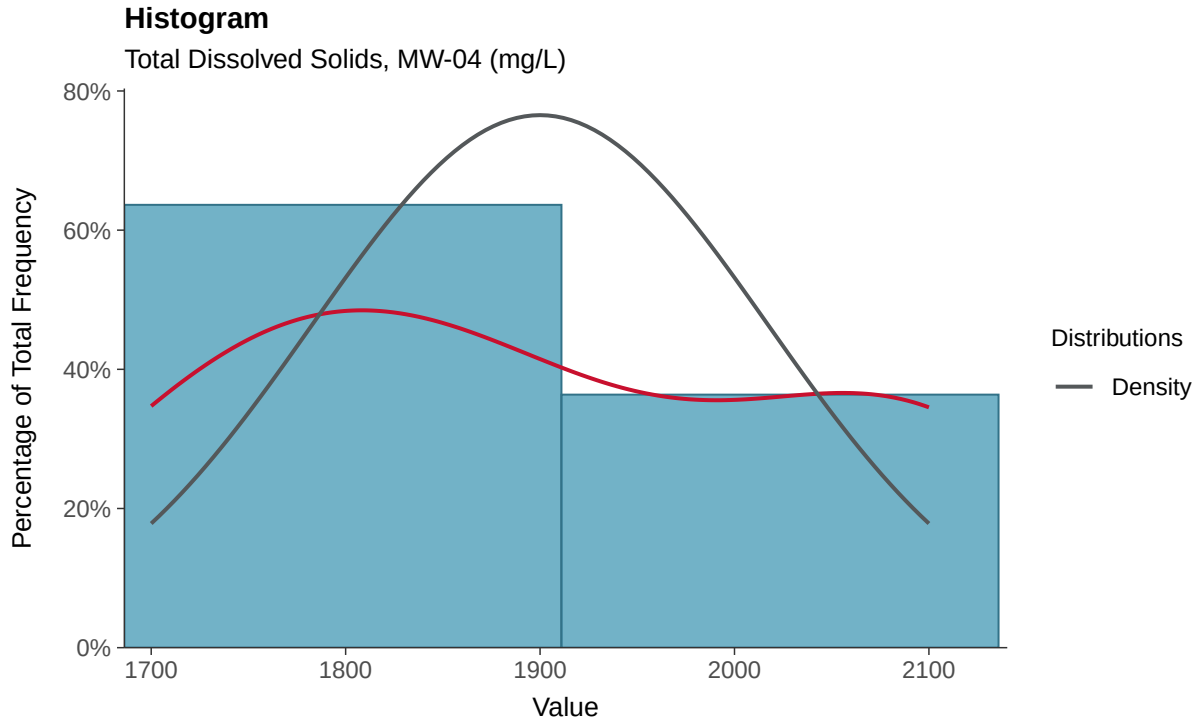
Sulfate (as SO4), MW-04 (mg/L)



Appendix III: Total Dissolved Solids, MW-04

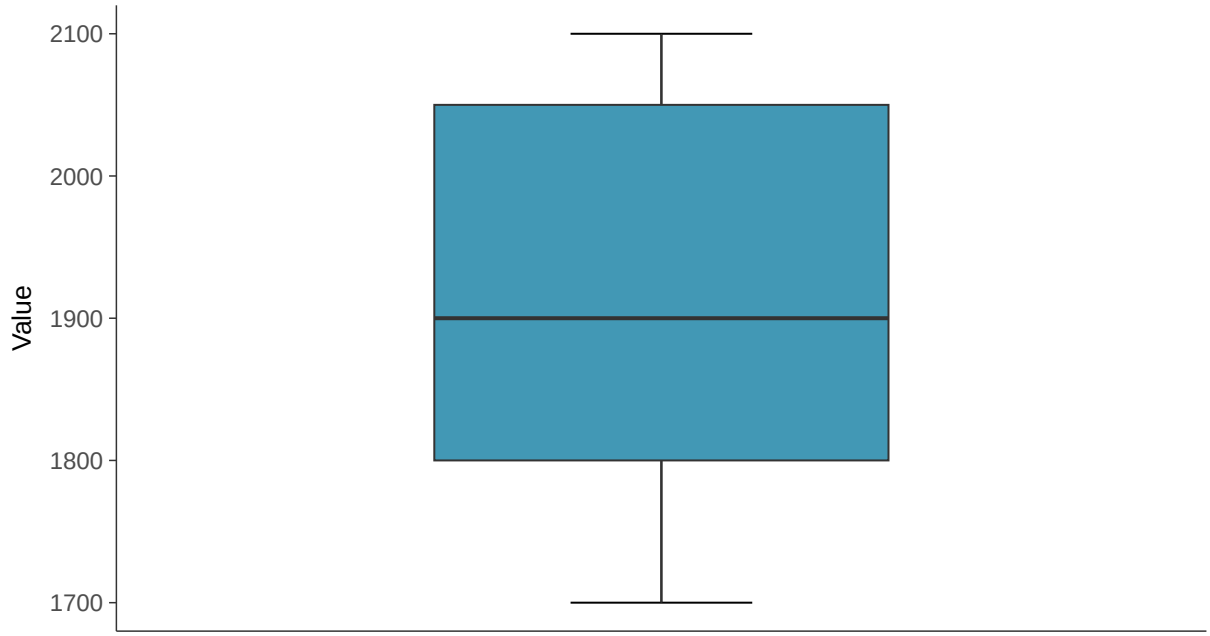
ID: 2_14_4_126





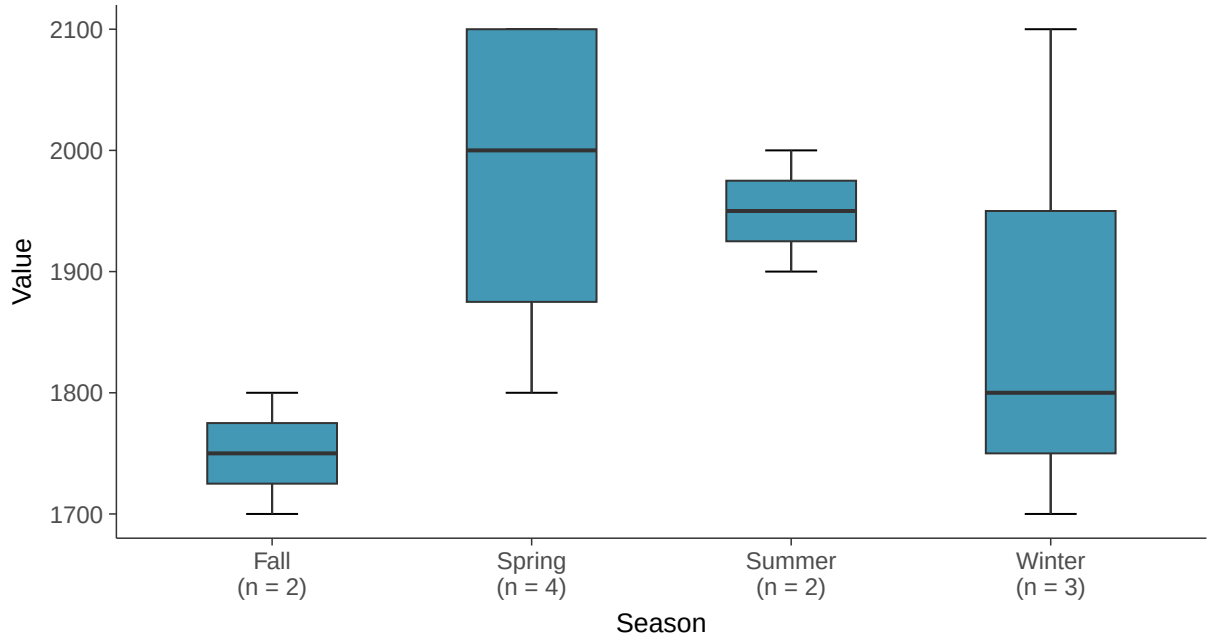
Boxplot

Total Dissolved Solids, MW-04 (mg/L)



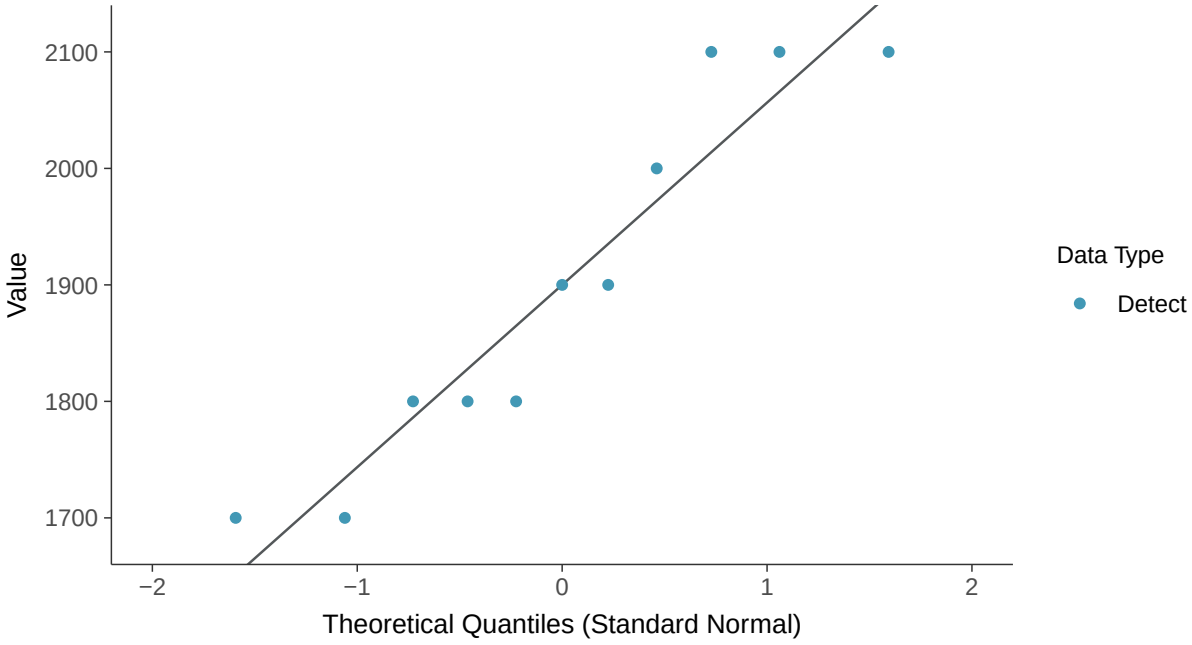
Boxplot by Season

Total Dissolved Solids, MW-04 (mg/L)



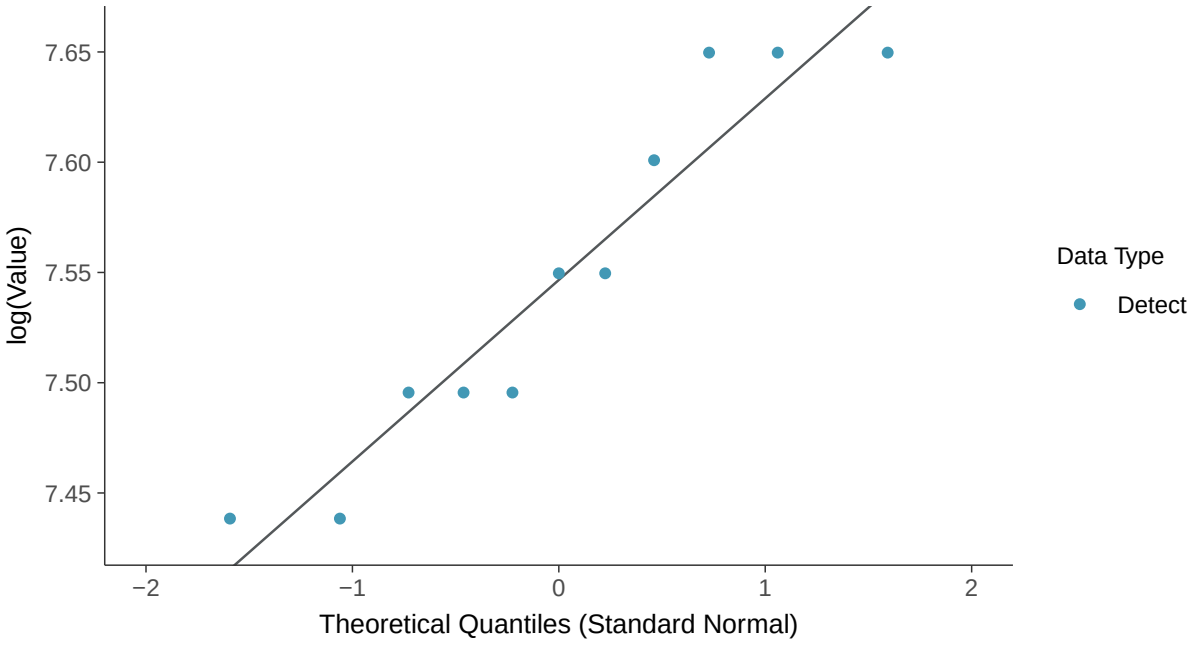
Normal Q-Q plot

Total Dissolved Solids, MW-04 (mg/L)



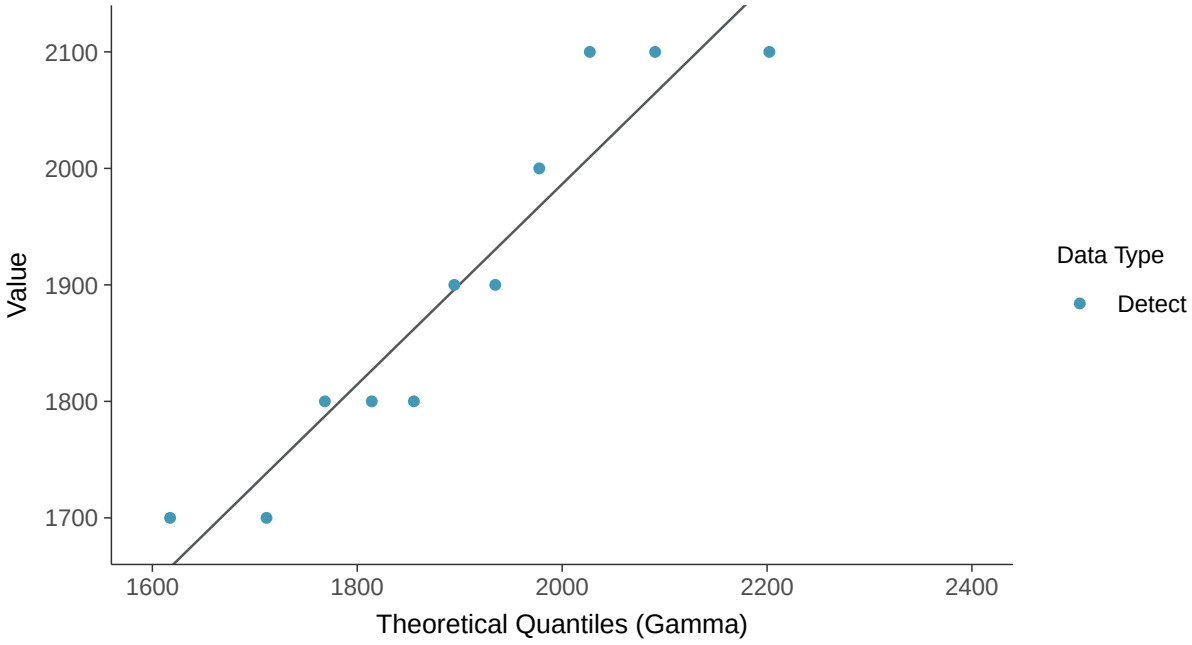
Lognormal Q-Q plot

Total Dissolved Solids, MW-04 (mg/L)



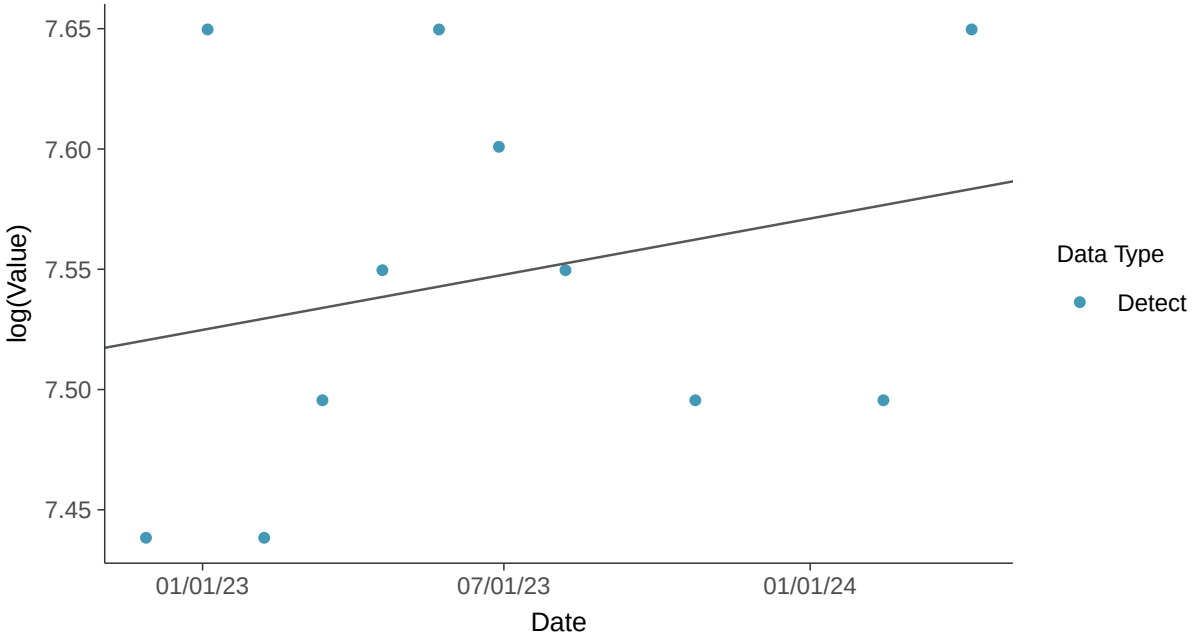
Gamma Q-Q plot

Total Dissolved Solids, MW-04 (mg/L)



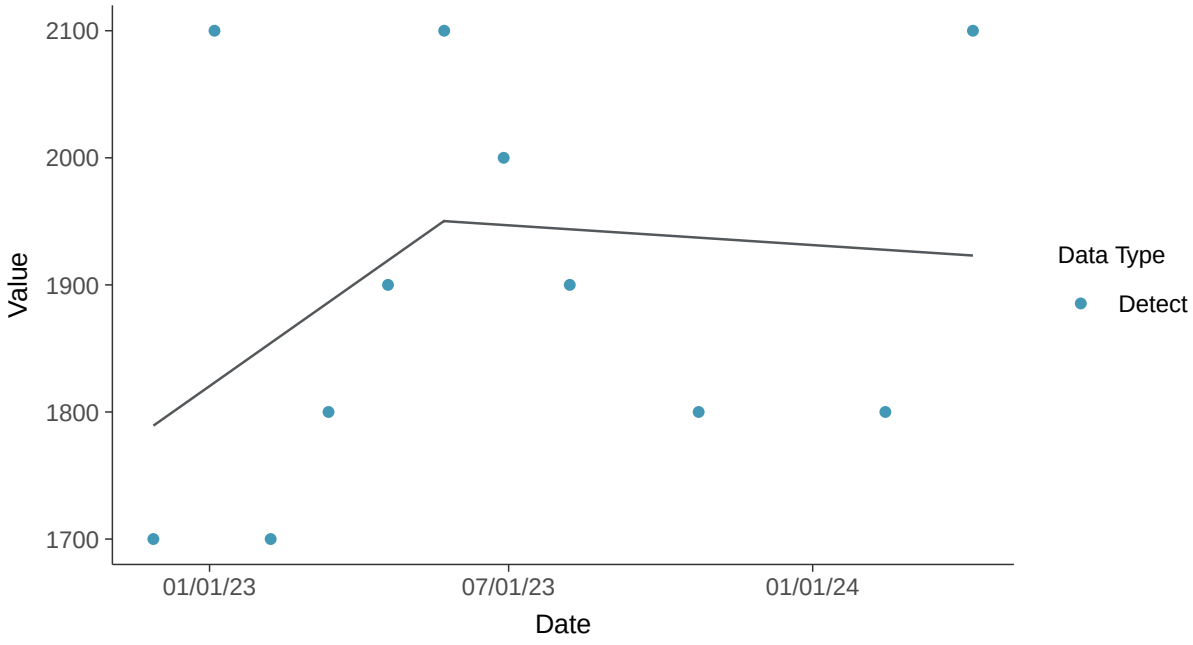
Trend Regression: Lognormal MLE

Total Dissolved Solids, MW-04 (mg/L)



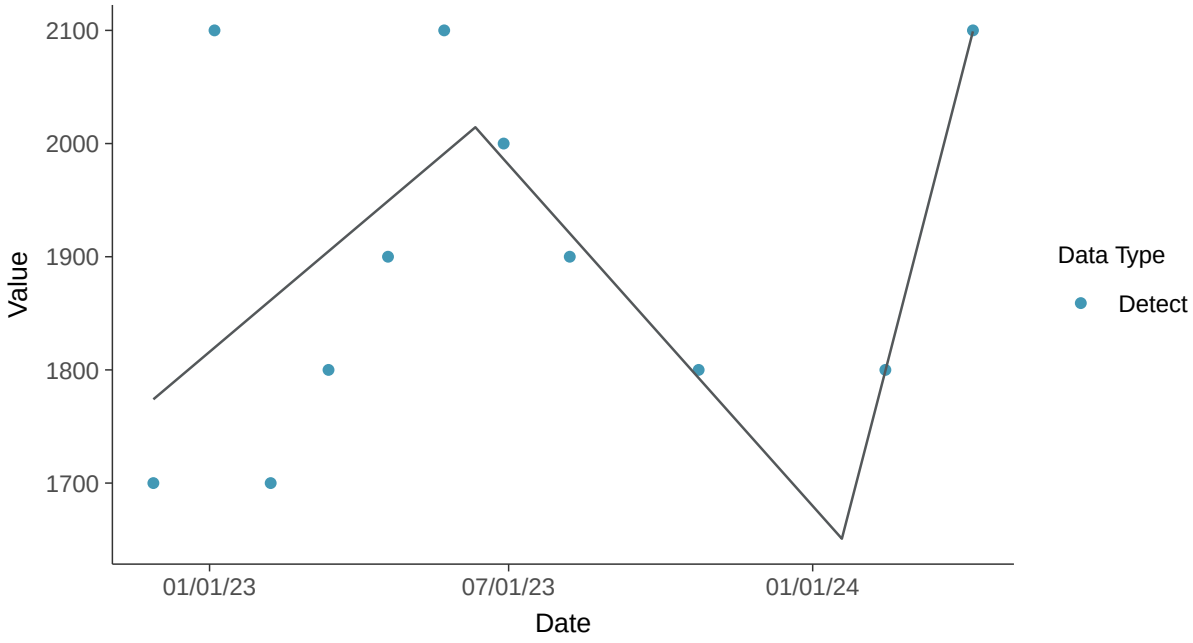
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-04 (mg/L)



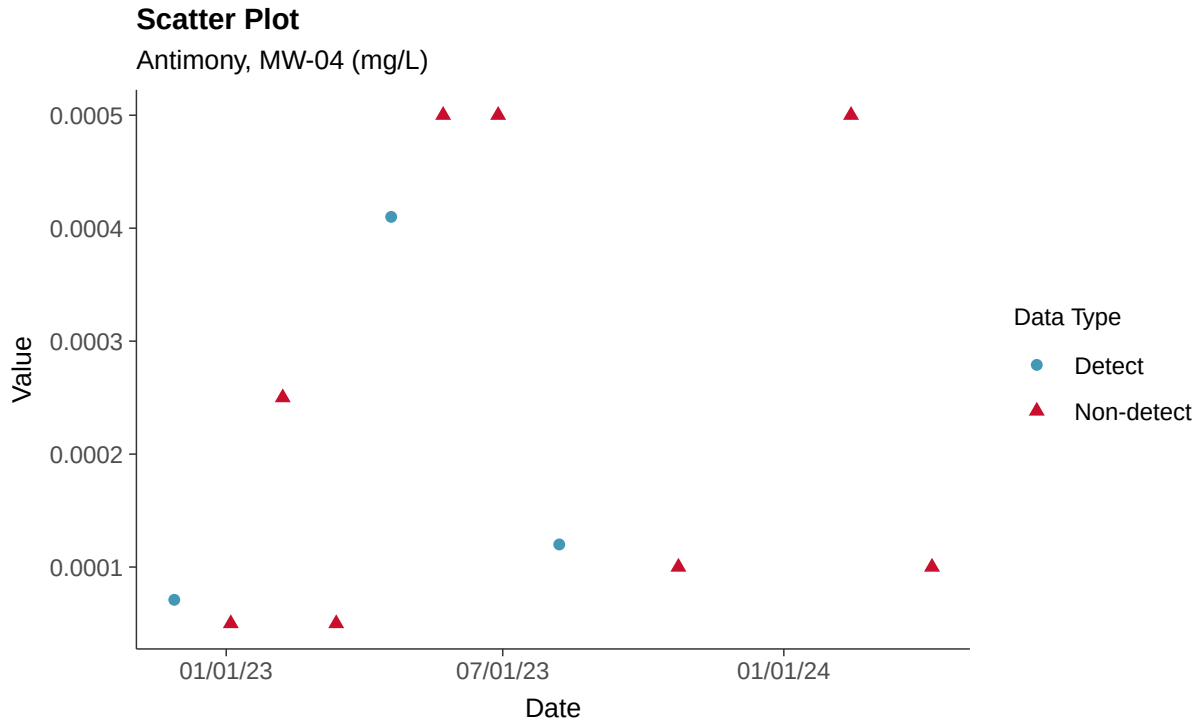
Trend Regression: Piecewise Linear-Linear-Linear

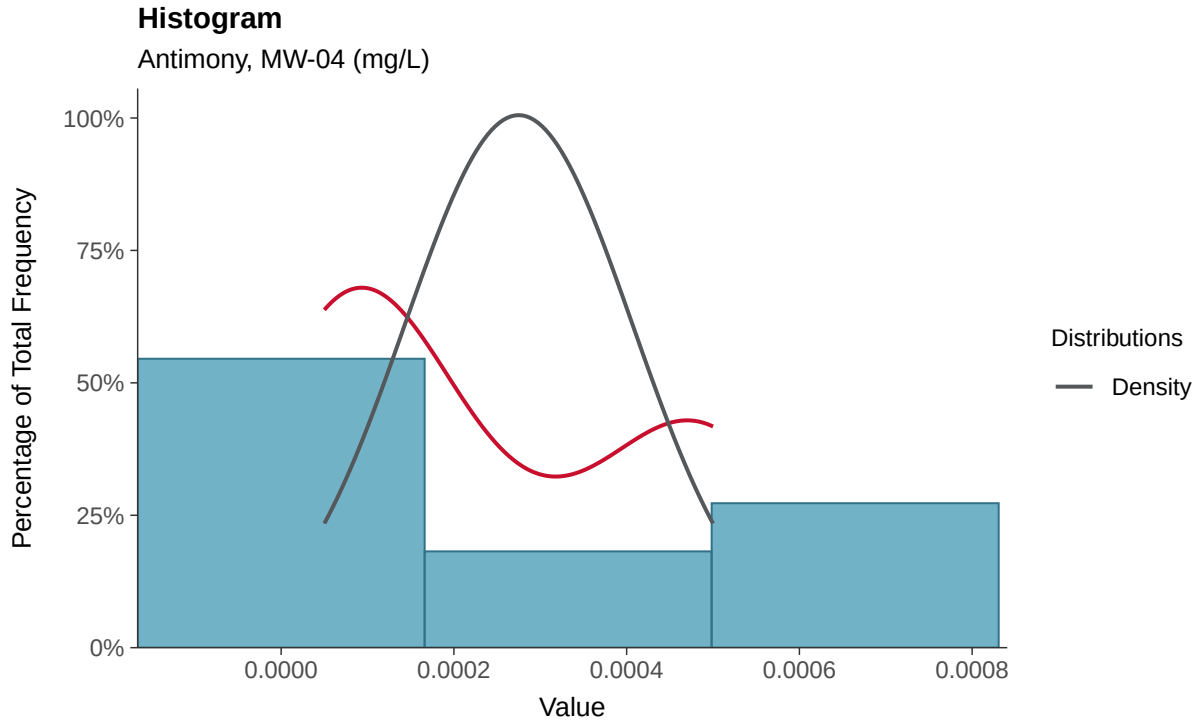
Total Dissolved Solids, MW-04 (mg/L)



Appendix IV: Antimony, MW-04

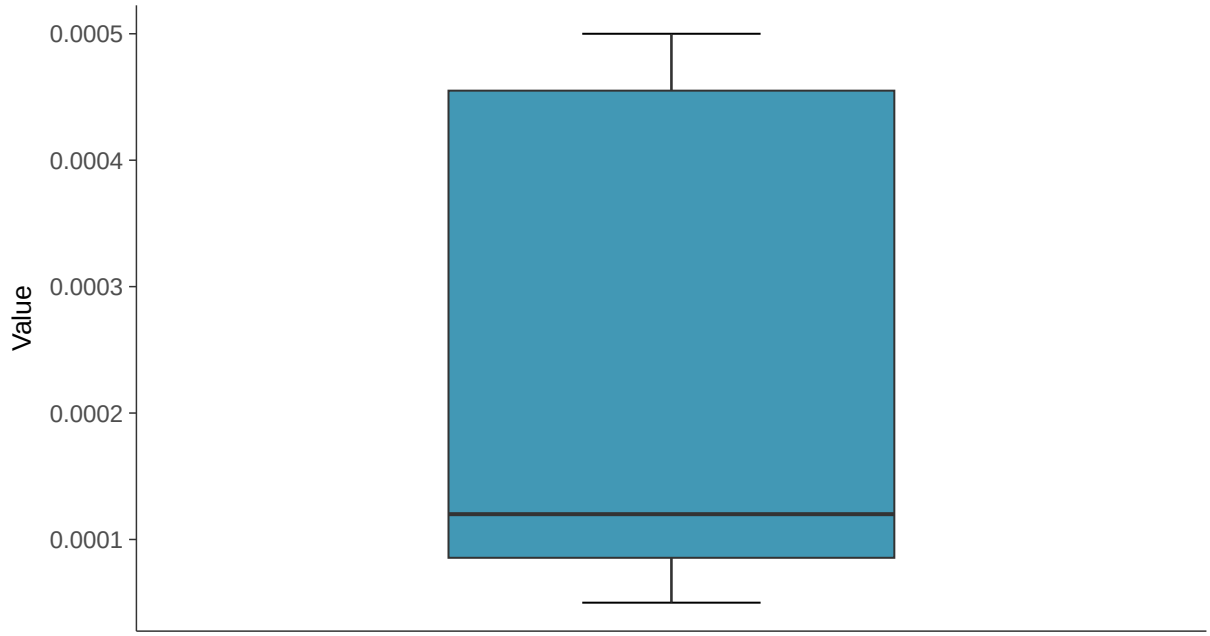
ID: 2_14_5_101





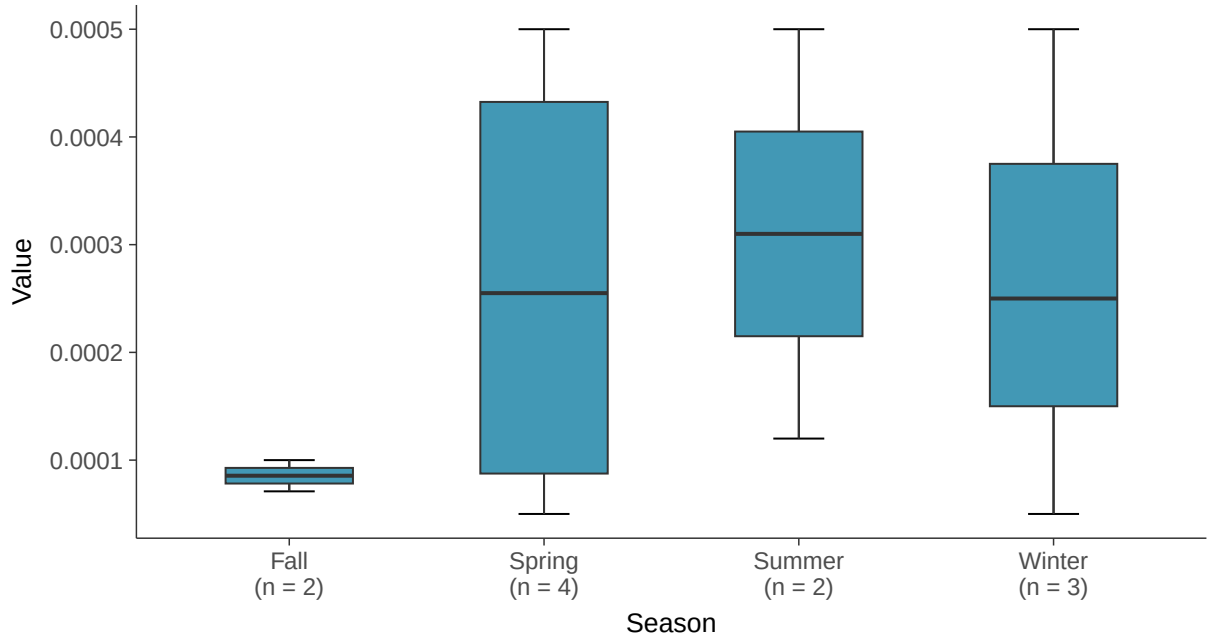
Boxplot

Antimony, MW-04 (mg/L)



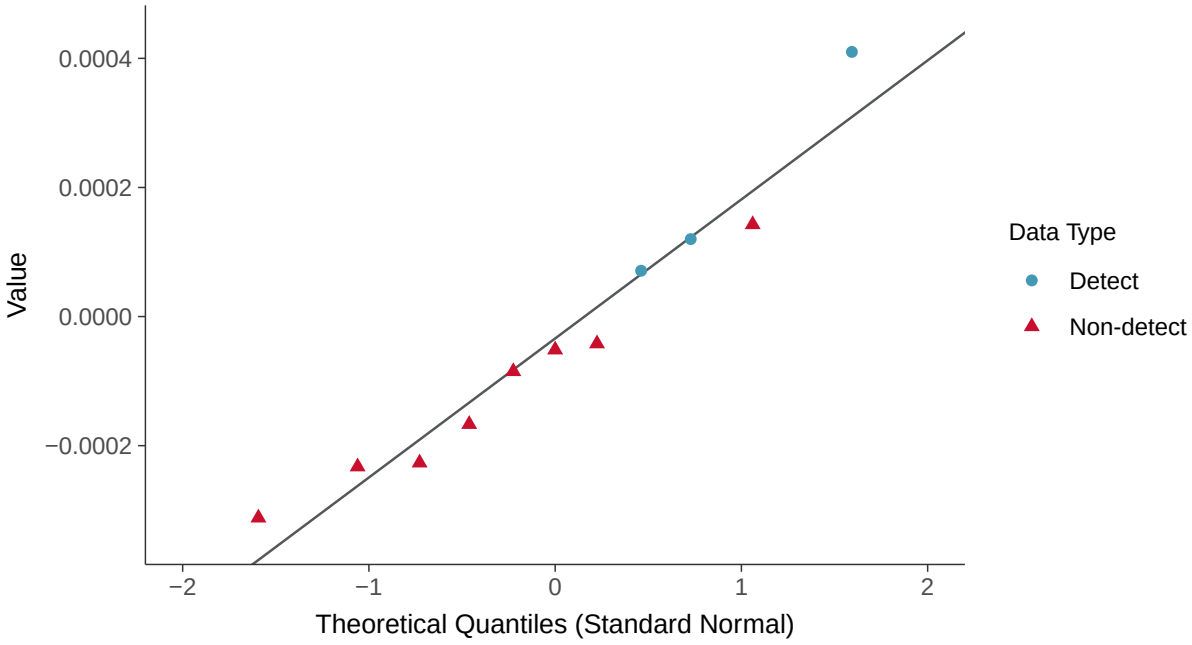
Boxplot by Season

Antimony, MW-04 (mg/L)



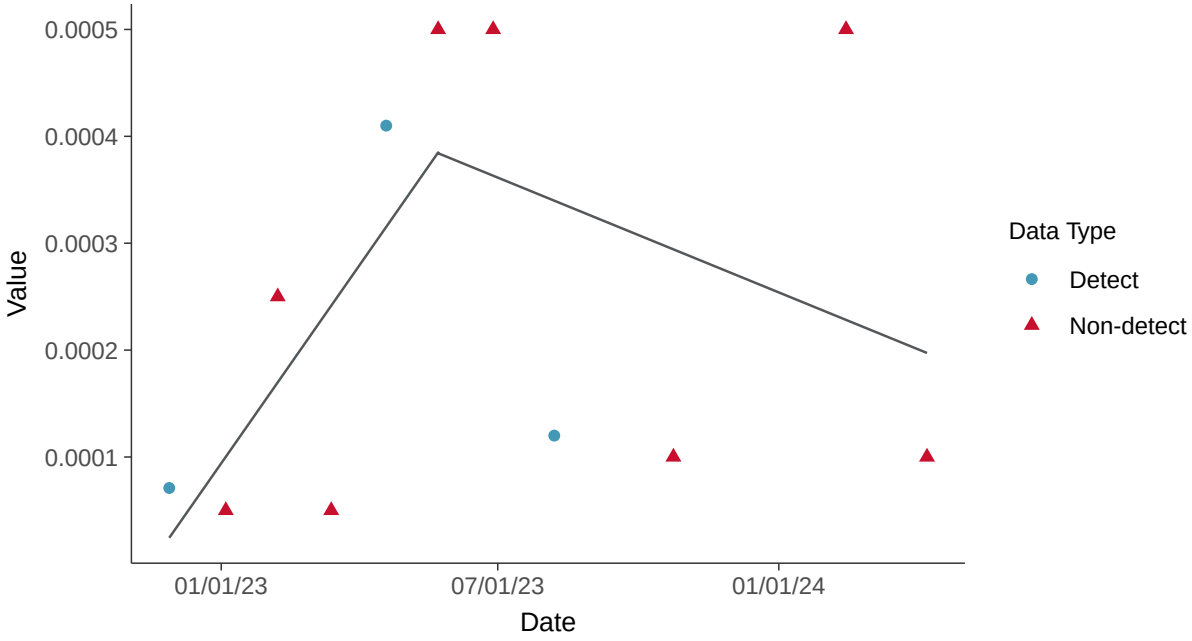
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-04 (mg/L)



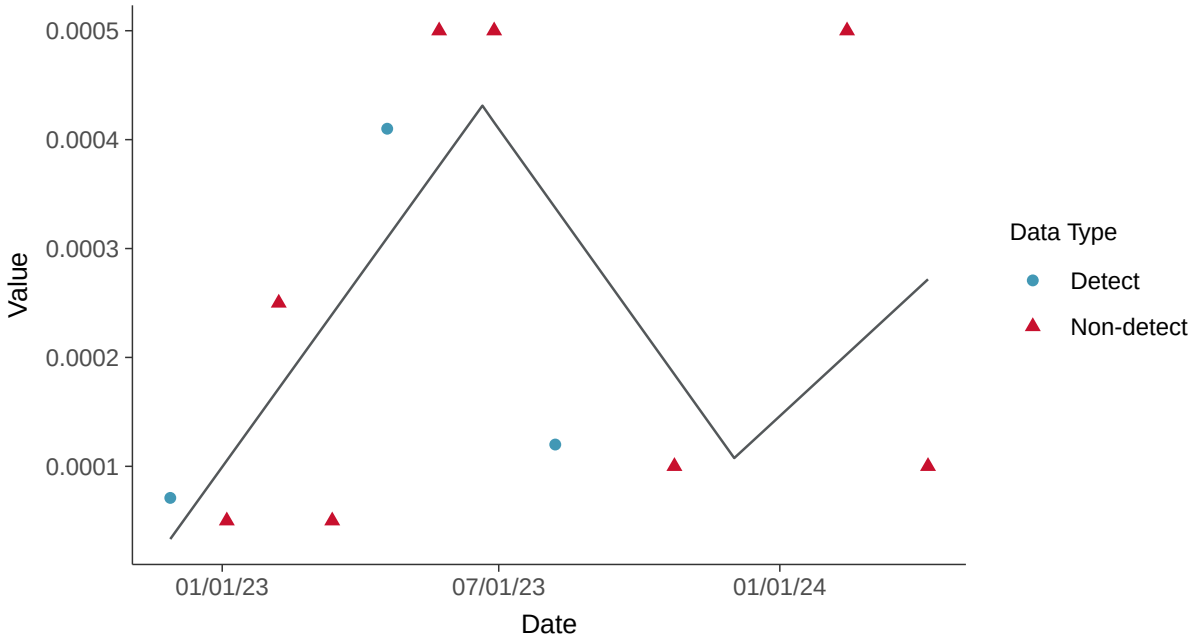
Trend Regression: Piecewise Linear-Linear

Antimony, MW-04 (mg/L)



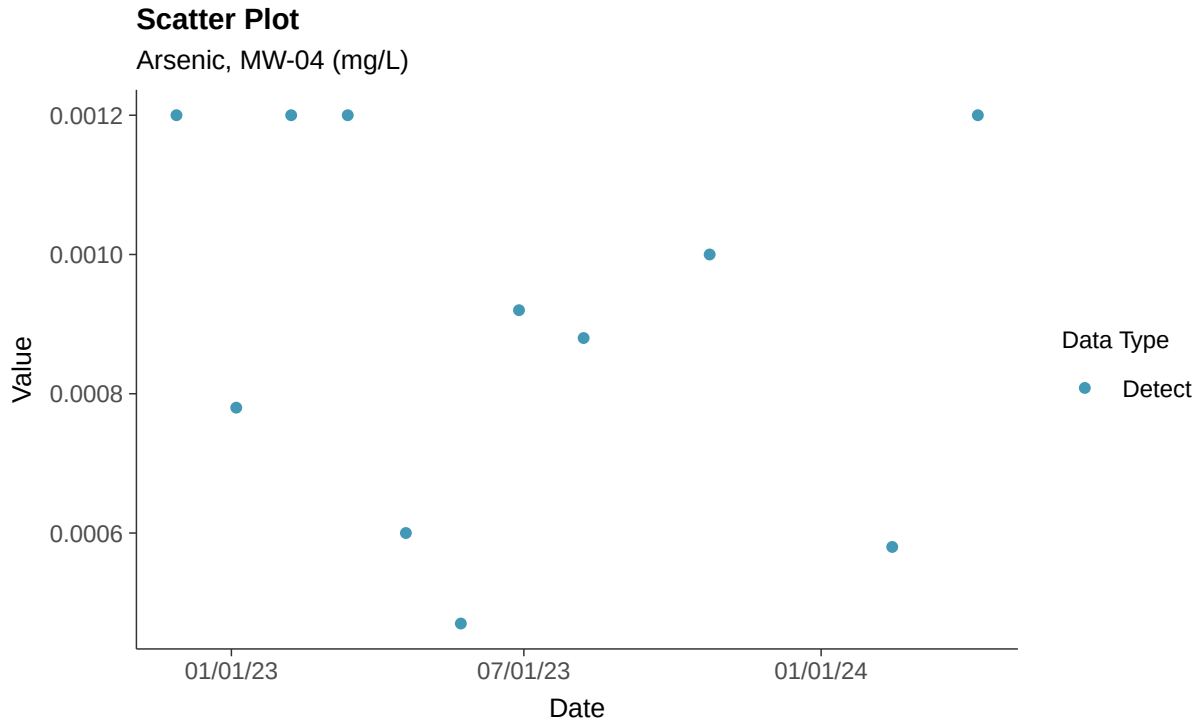
Trend Regression: Piecewise Linear-Linear-Linear

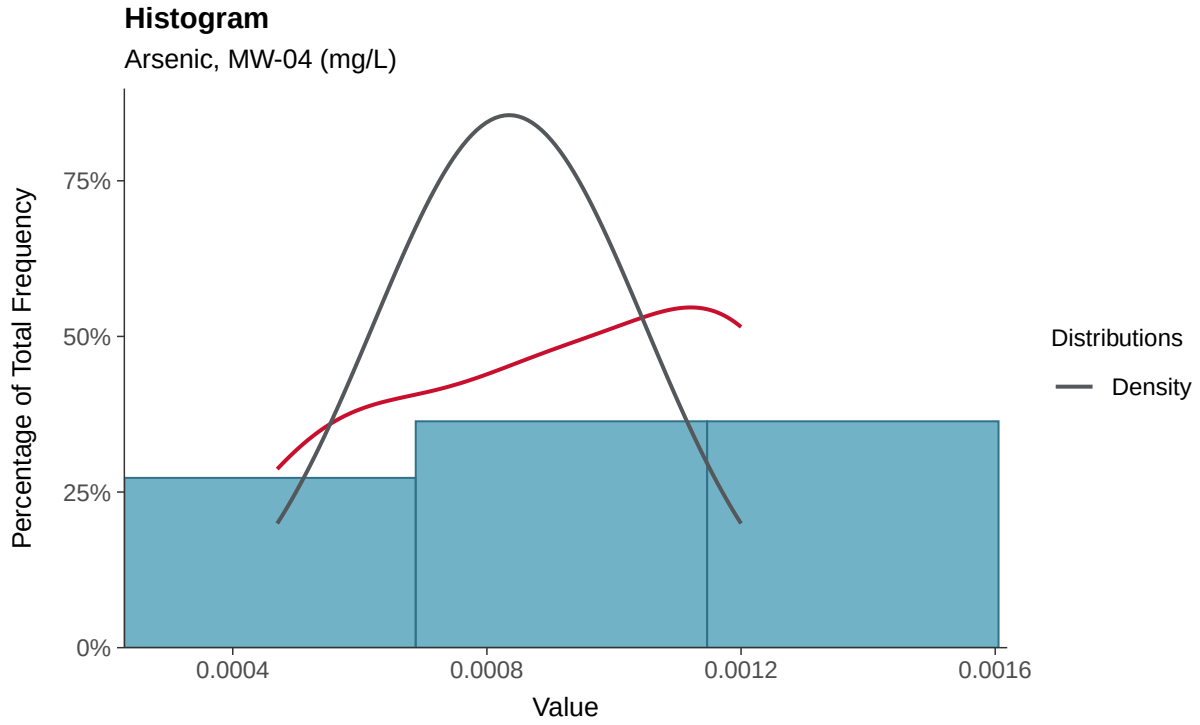
Antimony, MW-04 (mg/L)



Appendix IV: Arsenic, MW-04

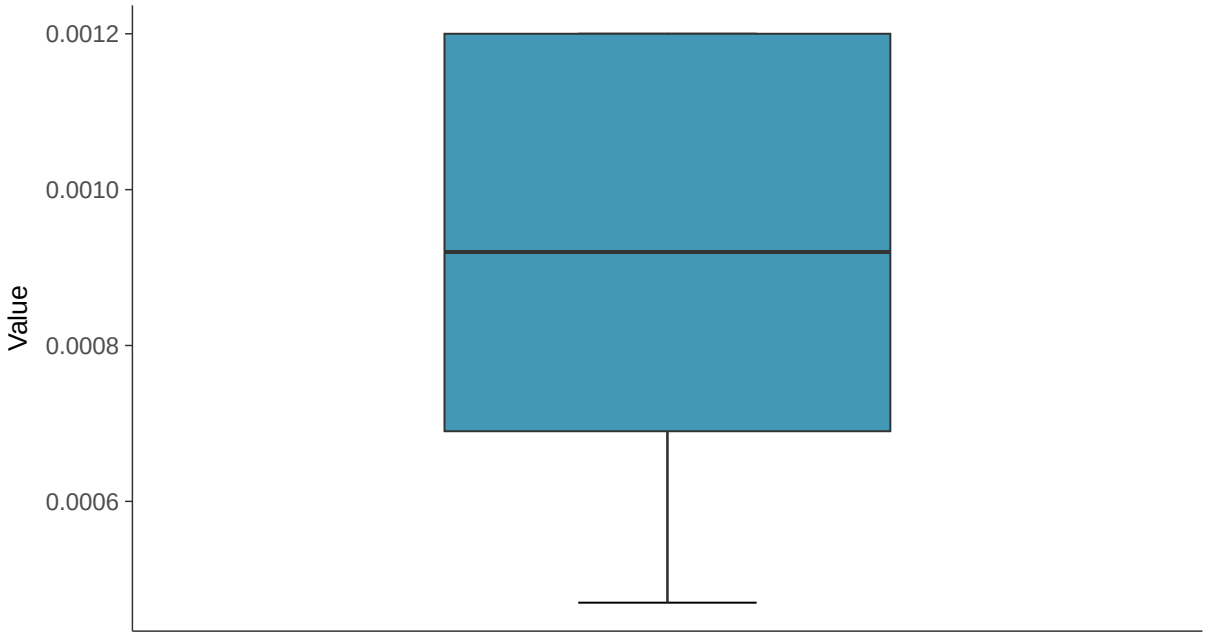
ID: 2_14_5_102





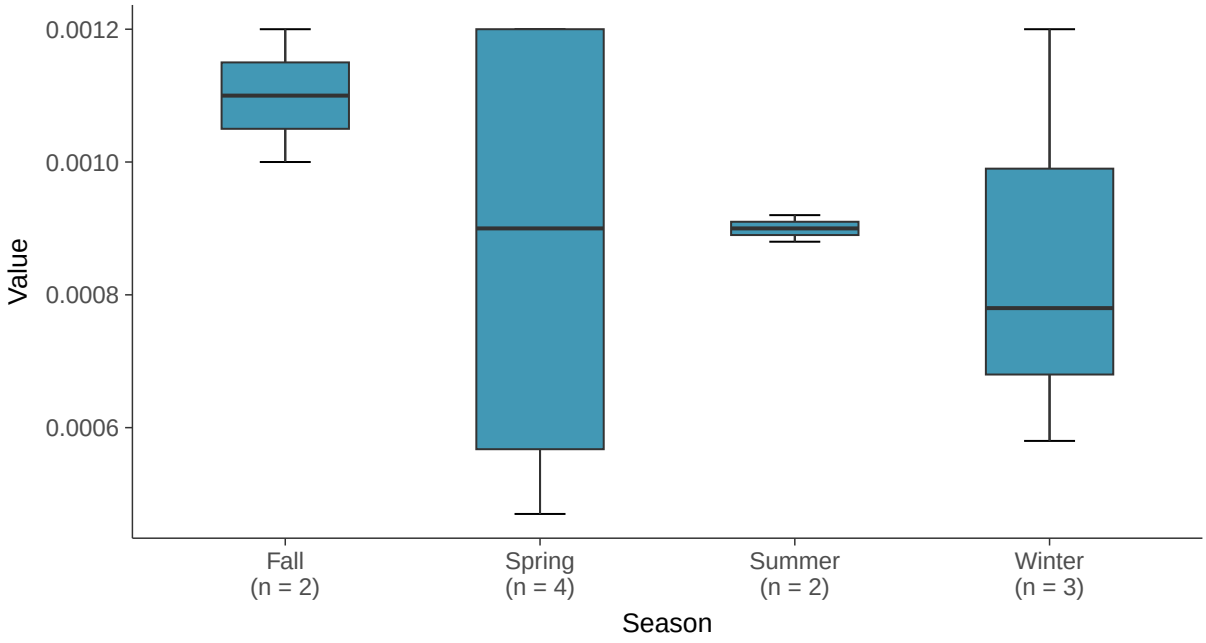
Boxplot

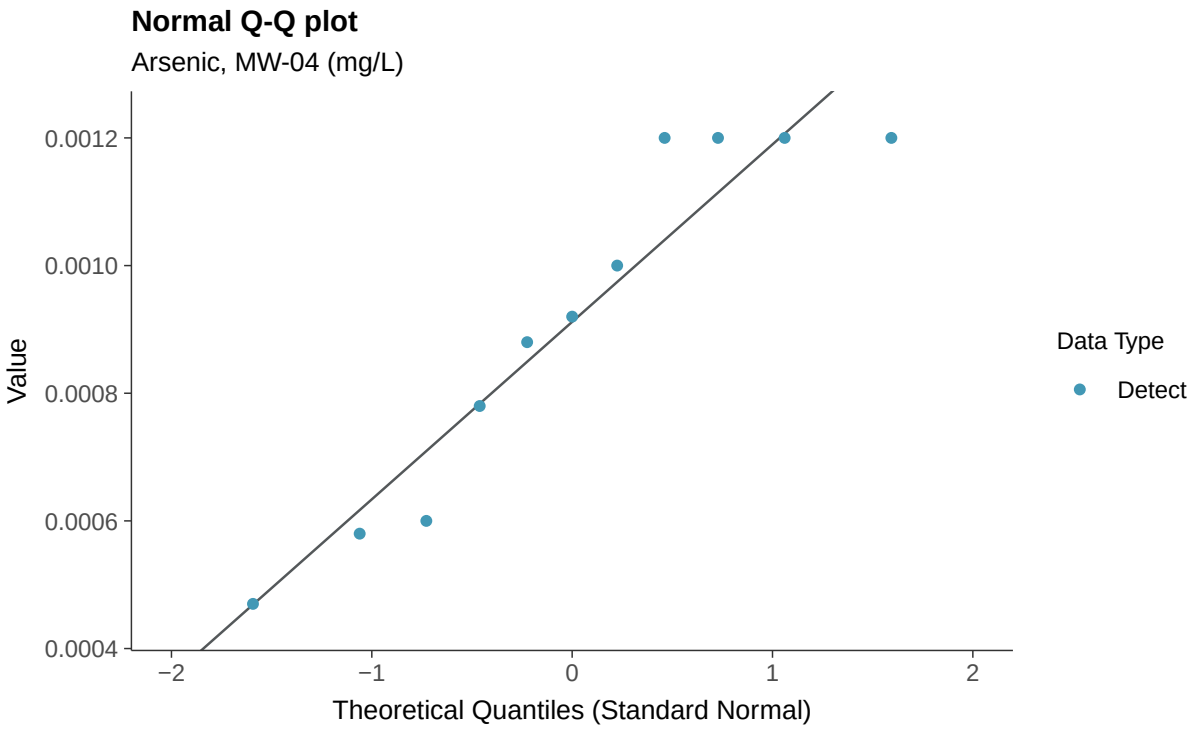
Arsenic, MW-04 (mg/L)

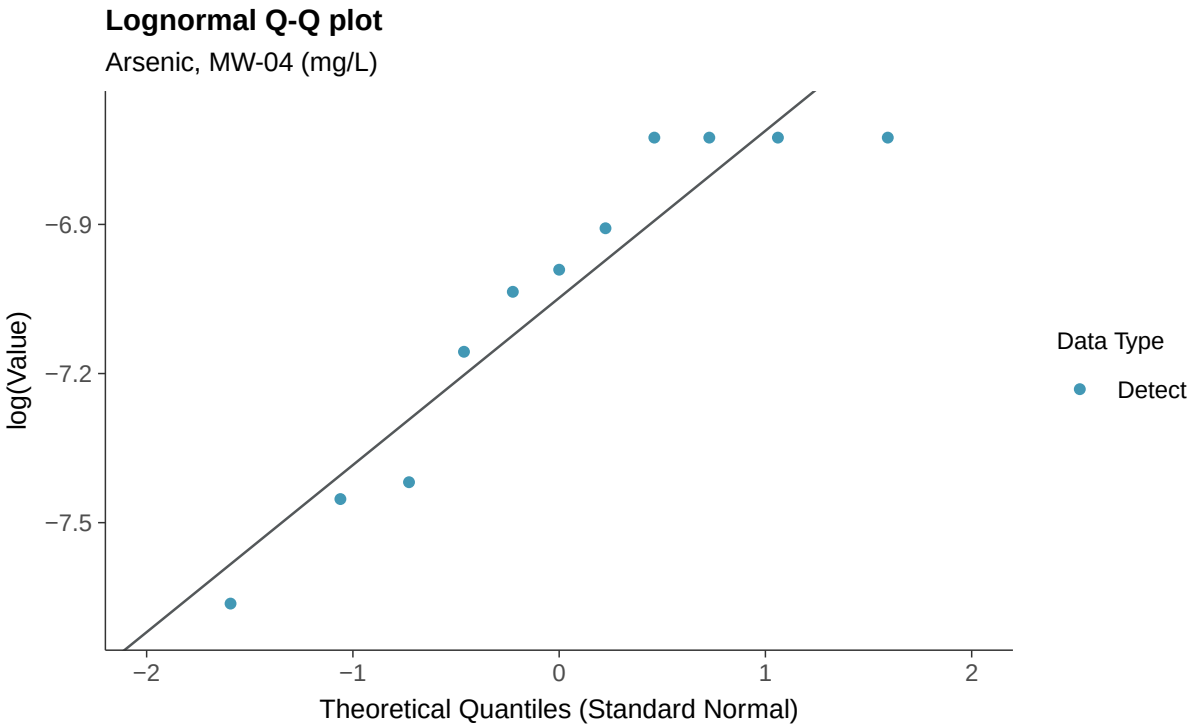


Boxplot by Season

Arsenic, MW-04 (mg/L)

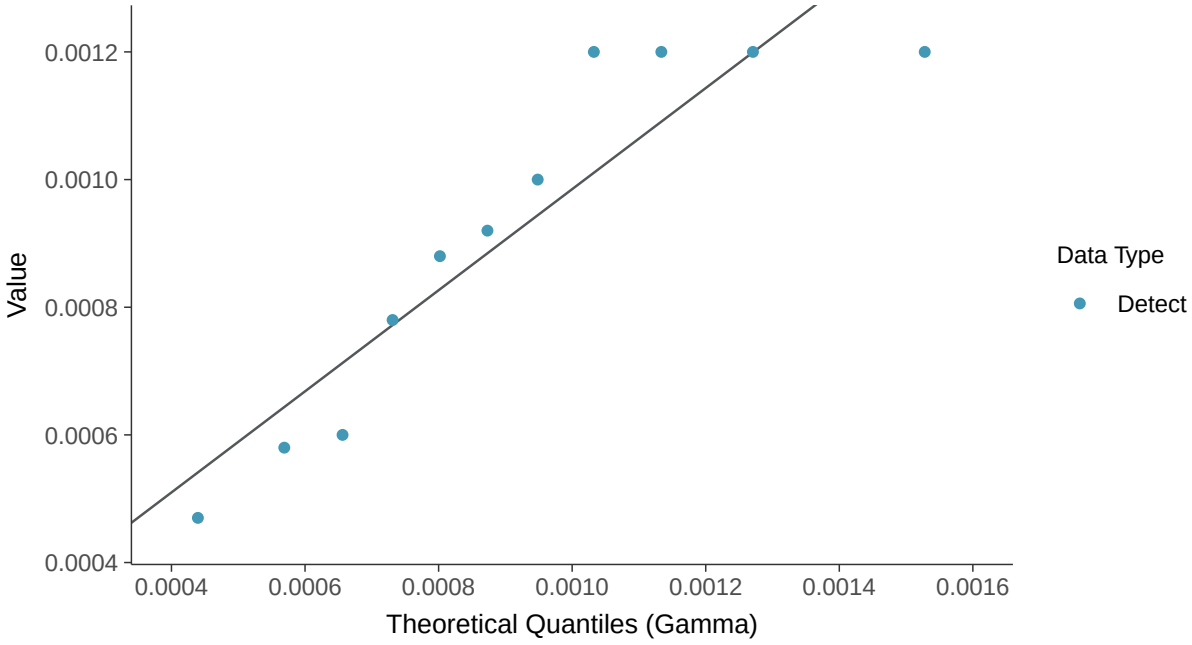



Normal Q-Q plot
Arsenic, MW-04 (mg/L)
Value
0.0012
0.0010
0.0008
0.0006
0.0004
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect


Lognormal Q-Q plot
Arsenic, MW-04 (mg/L)
log(Value)
−6.9
−7.2
−7.5
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect

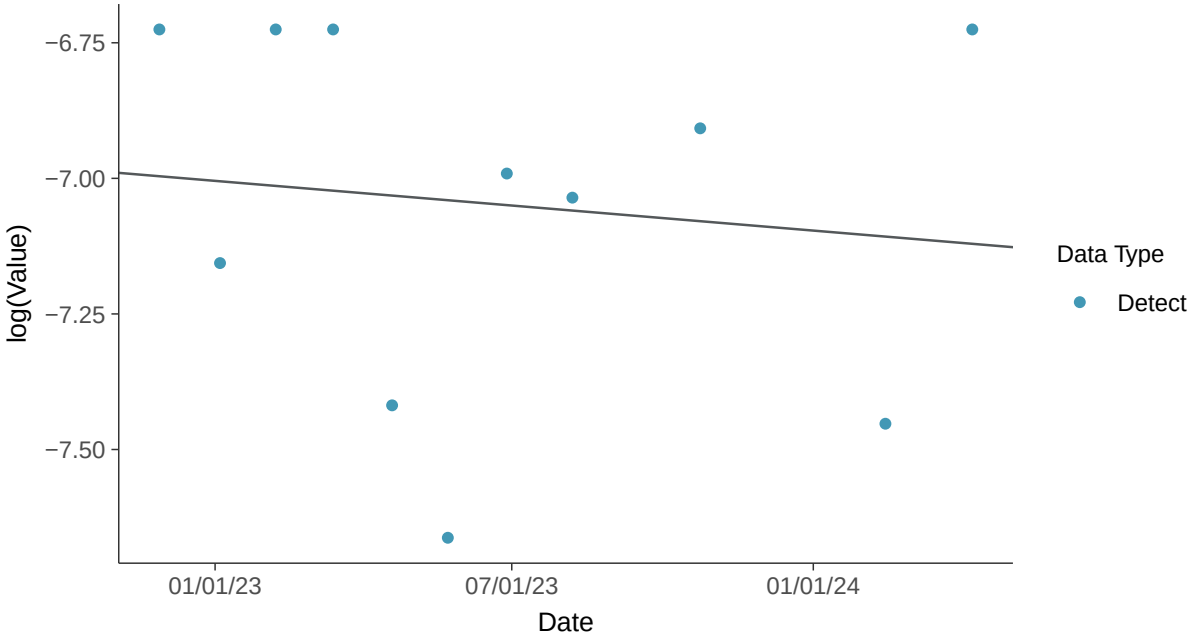
Gamma Q-Q plot

Arsenic, MW-04 (mg/L)



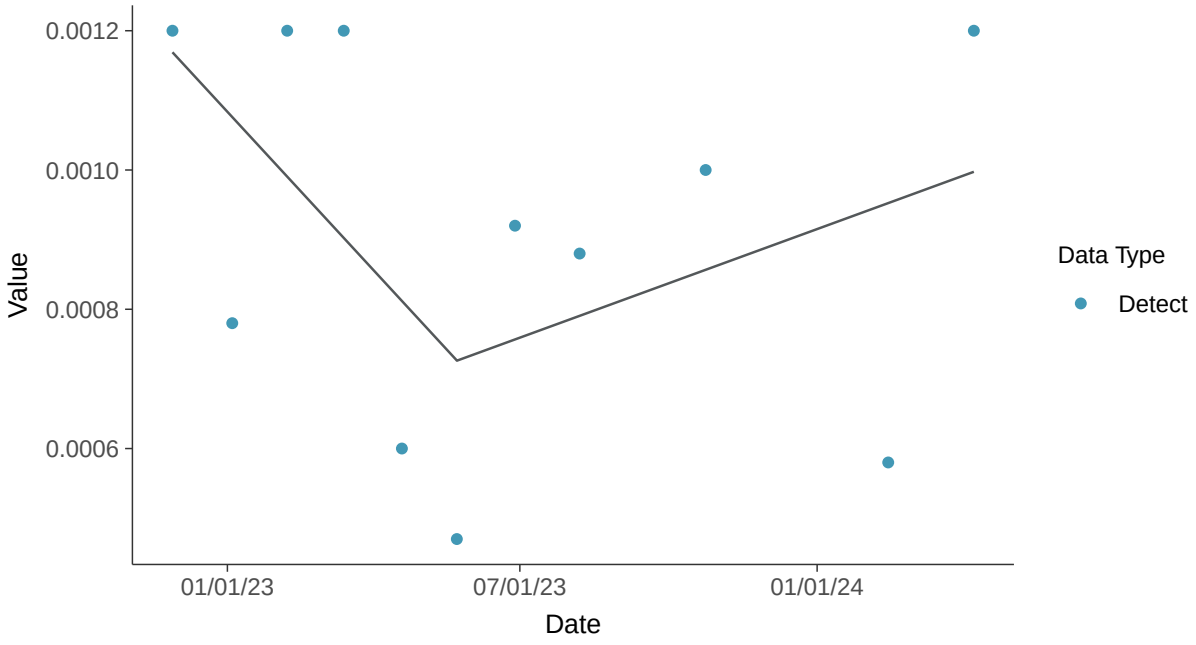
Trend Regression: Lognormal MLE

Arsenic, MW-04 (mg/L)



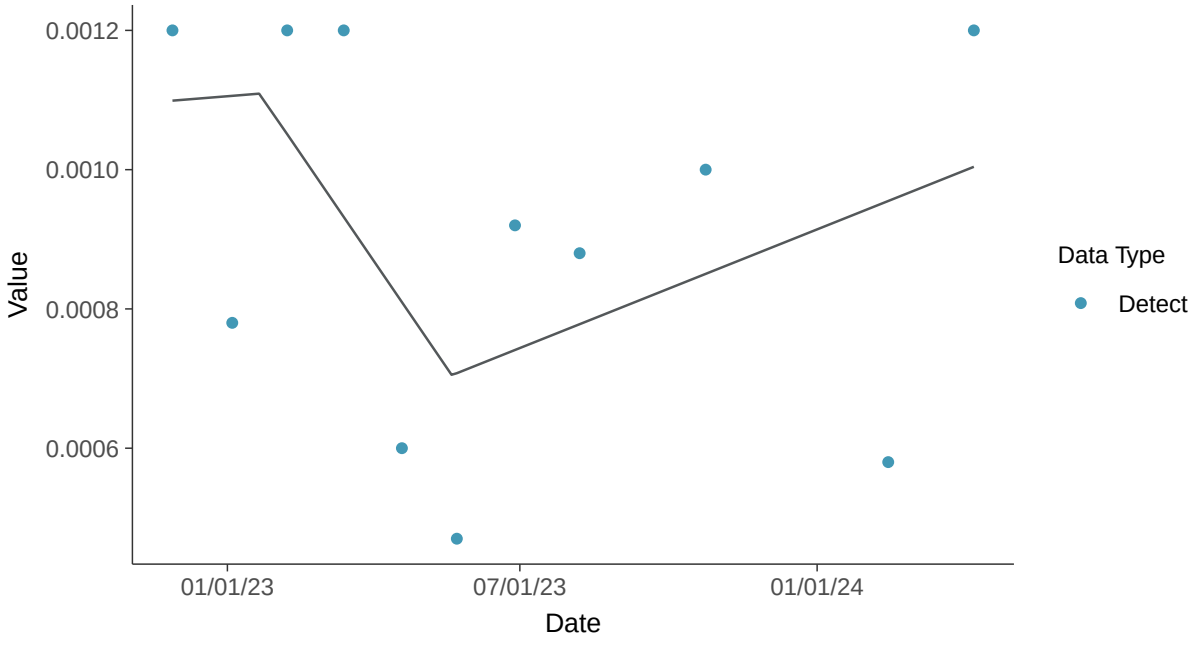
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-04 (mg/L)



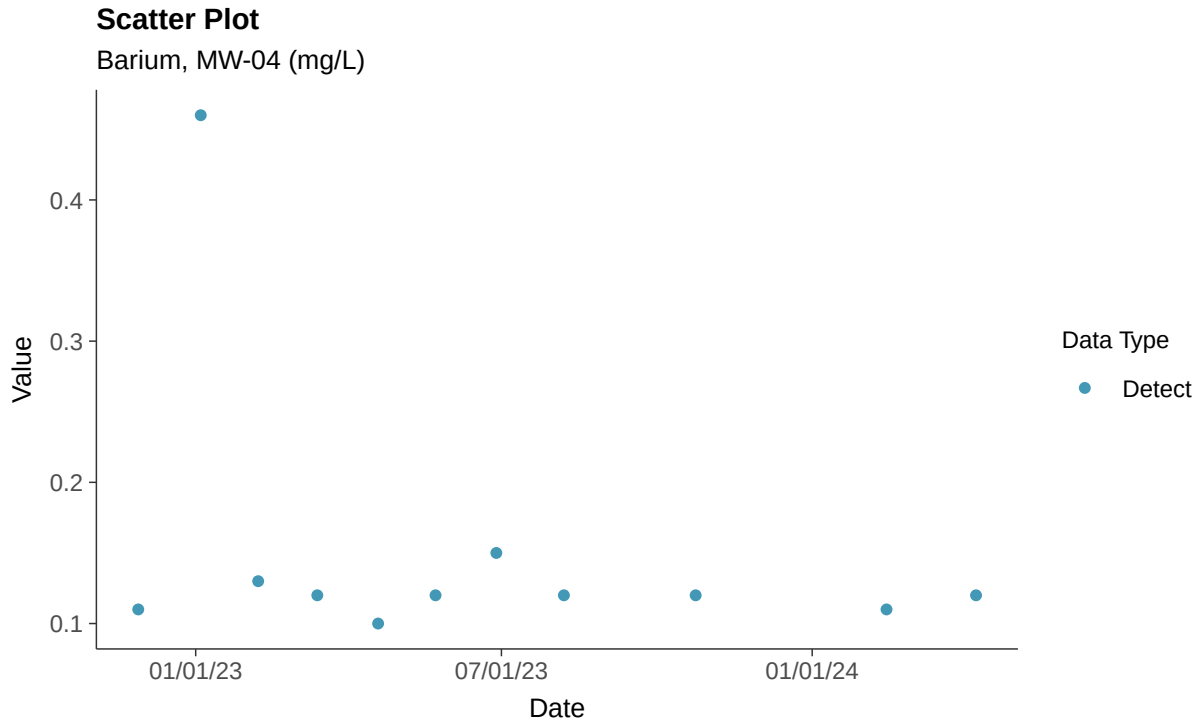
Trend Regression: Piecewise Linear-Linear-Linear

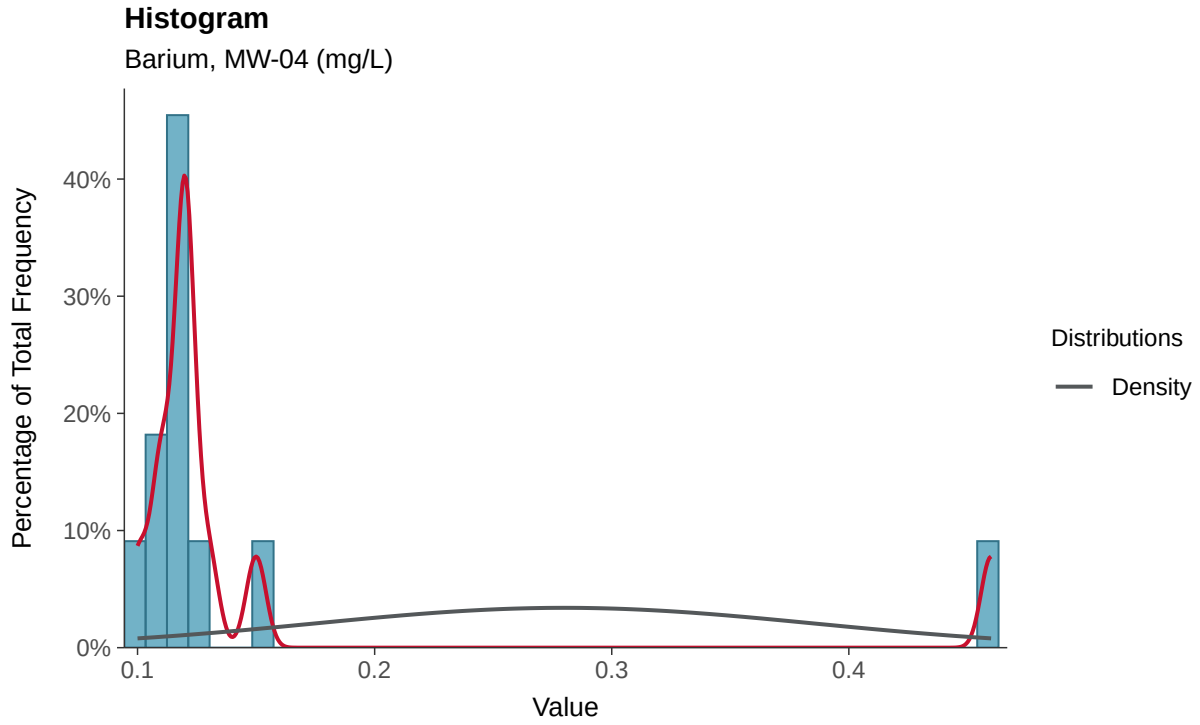
Arsenic, MW-04 (mg/L)



Appendix IV: Barium, MW-04

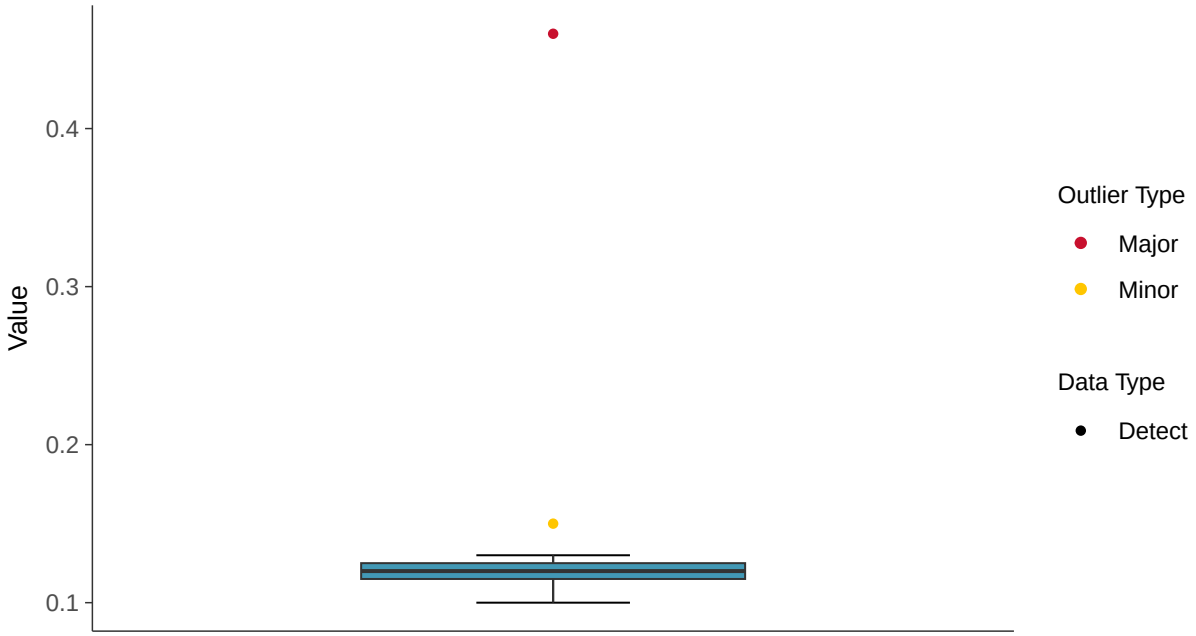
ID: 2_14_5_103





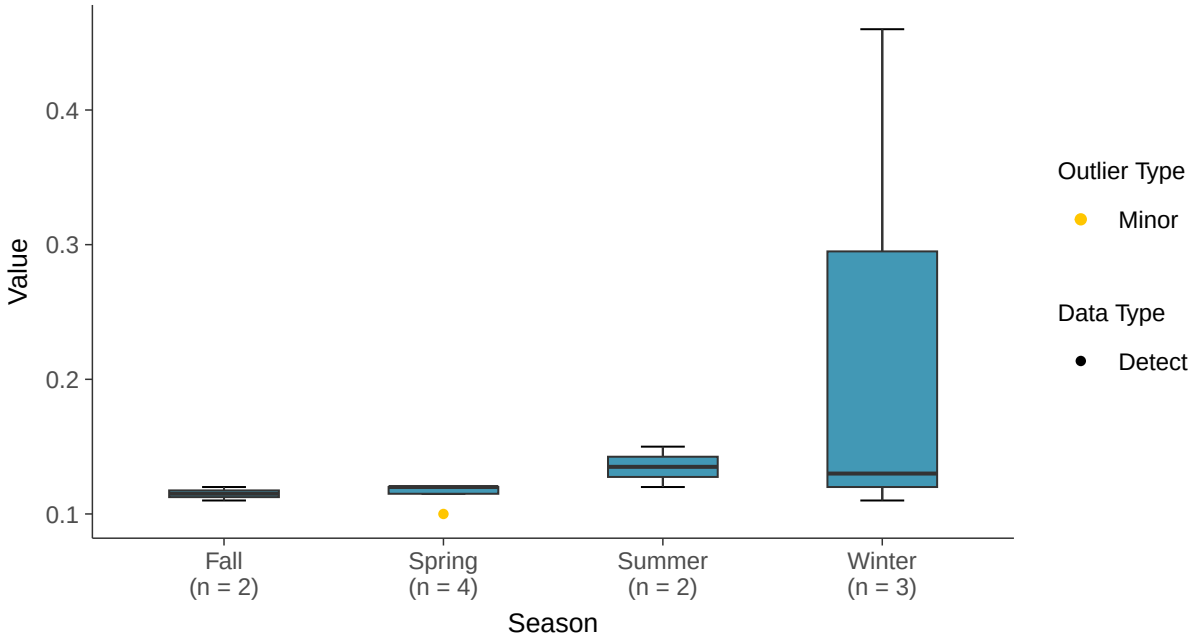
Boxplot

Barium, MW-04 (mg/L)



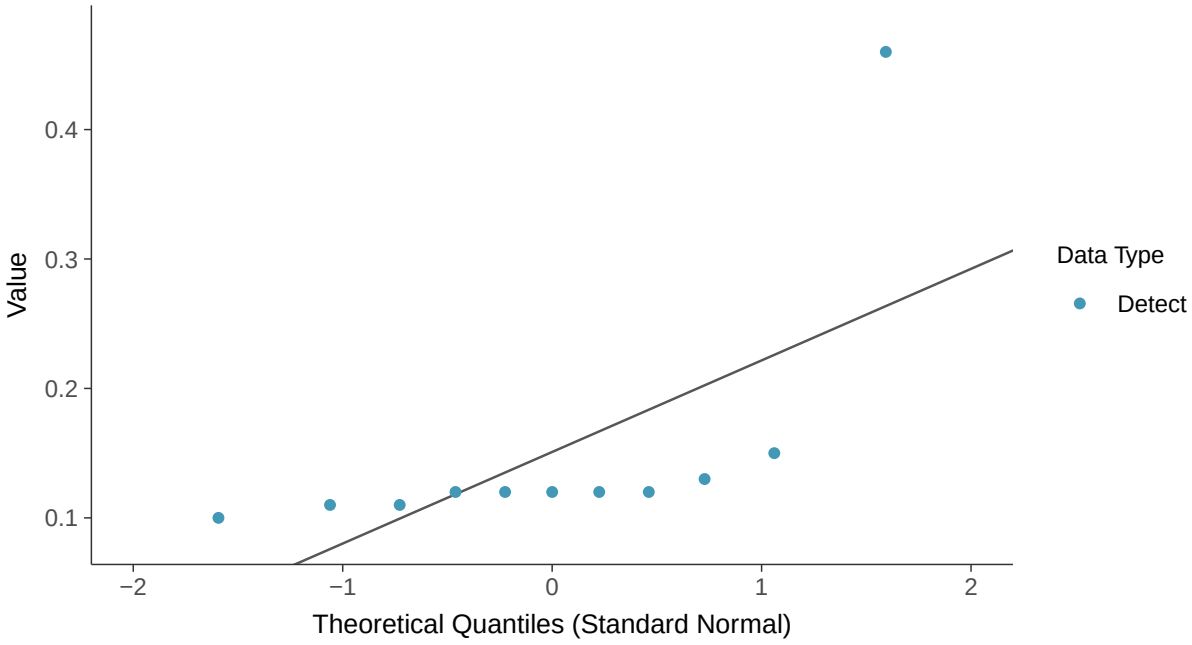
Boxplot by Season

Barium, MW-04 (mg/L)



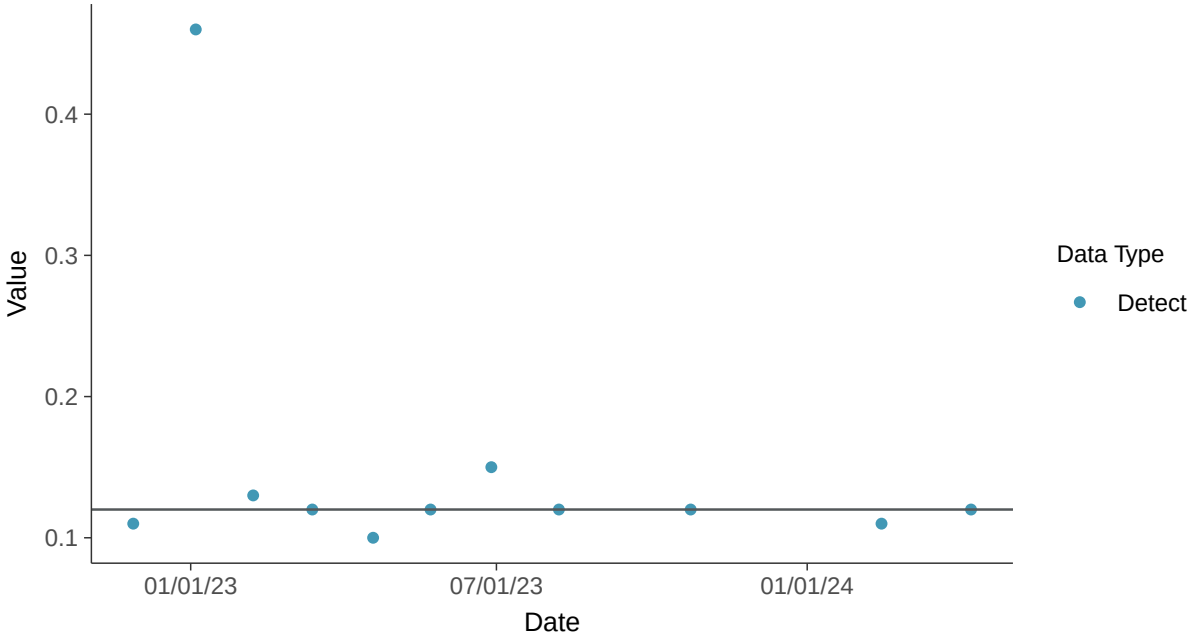
Normal Q-Q plot

Barium, MW-04 (mg/L)



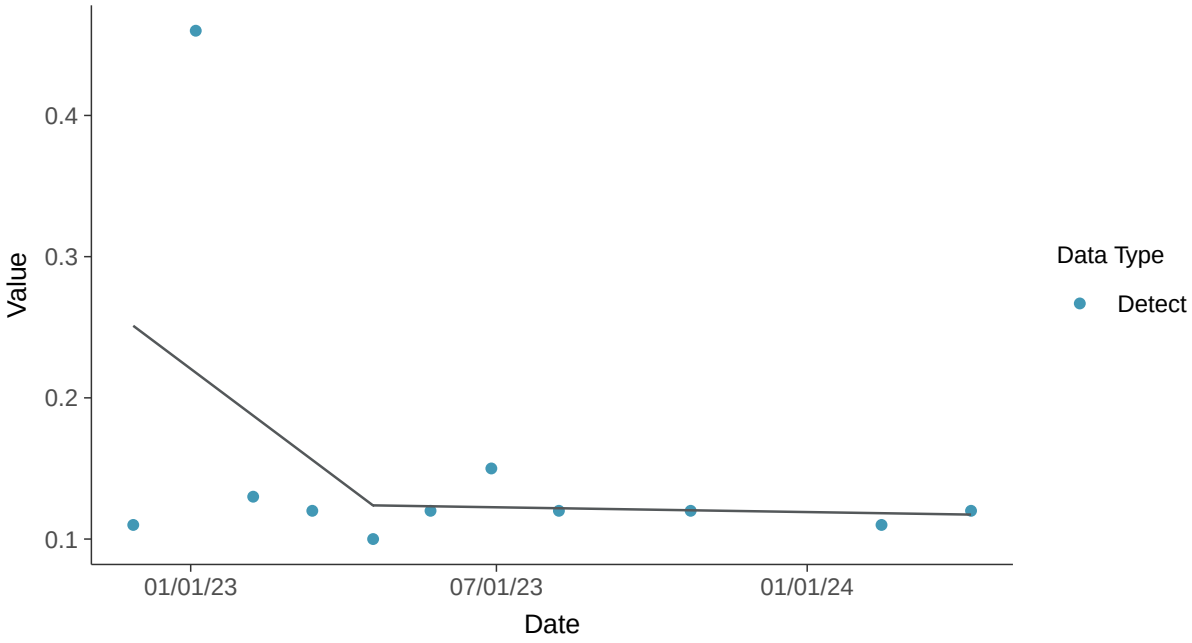
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Barium, MW-04 (mg/L)



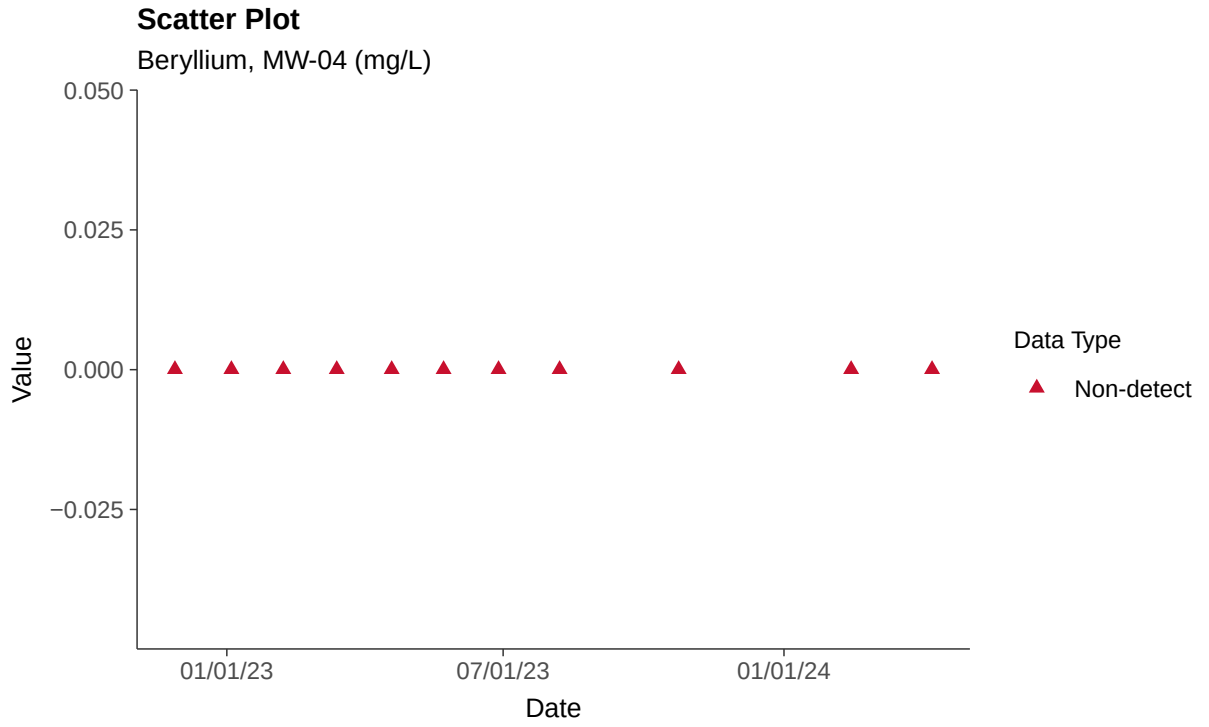
Trend Regression: Piecewise Linear-Linear

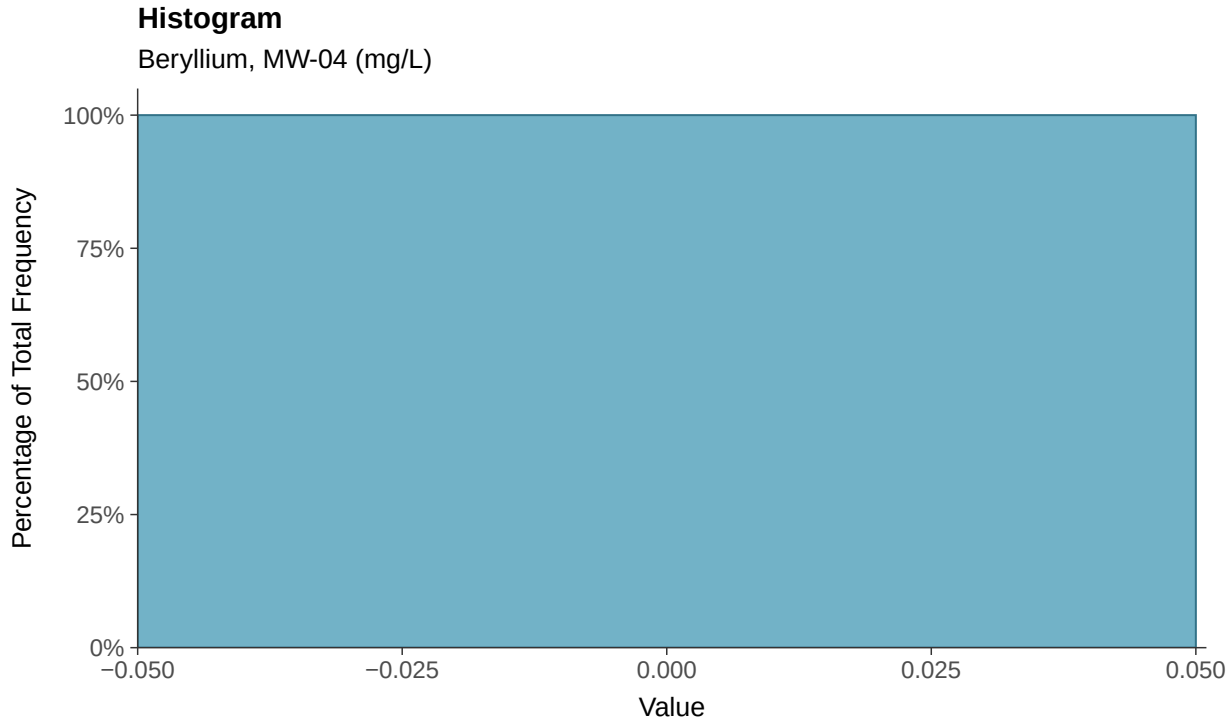
Barium, MW-04 (mg/L)



Appendix IV: Beryllium, MW-04

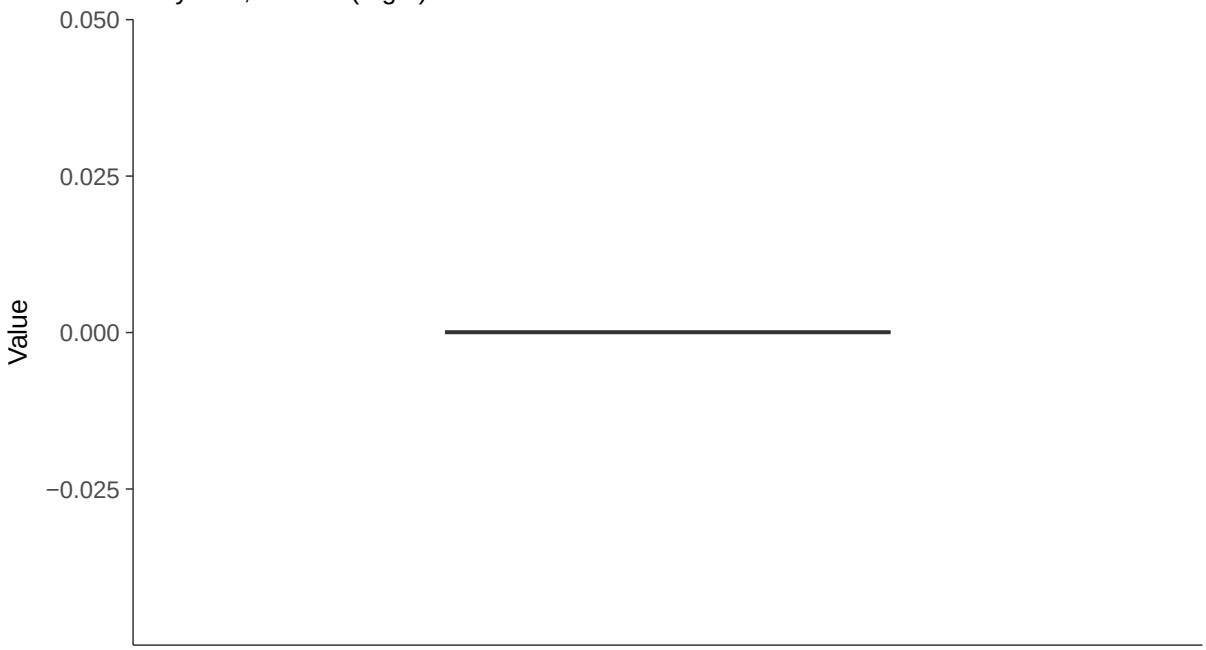
ID: 2_14_5_104





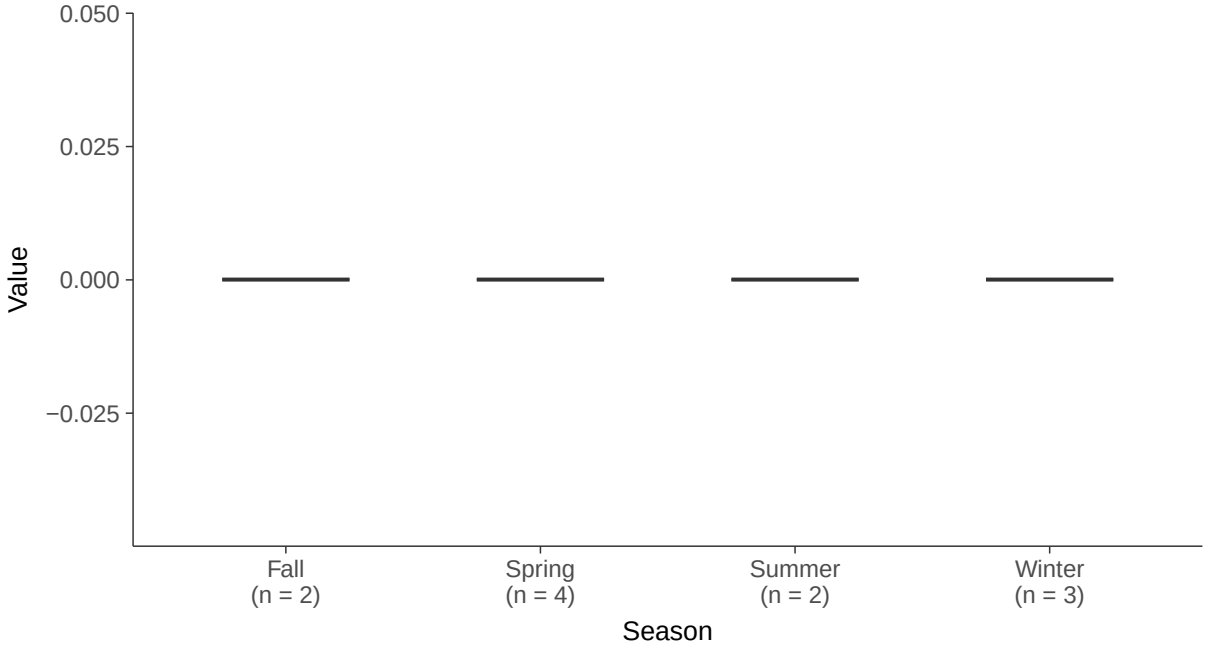
Boxplot

Beryllium, MW-04 (mg/L)



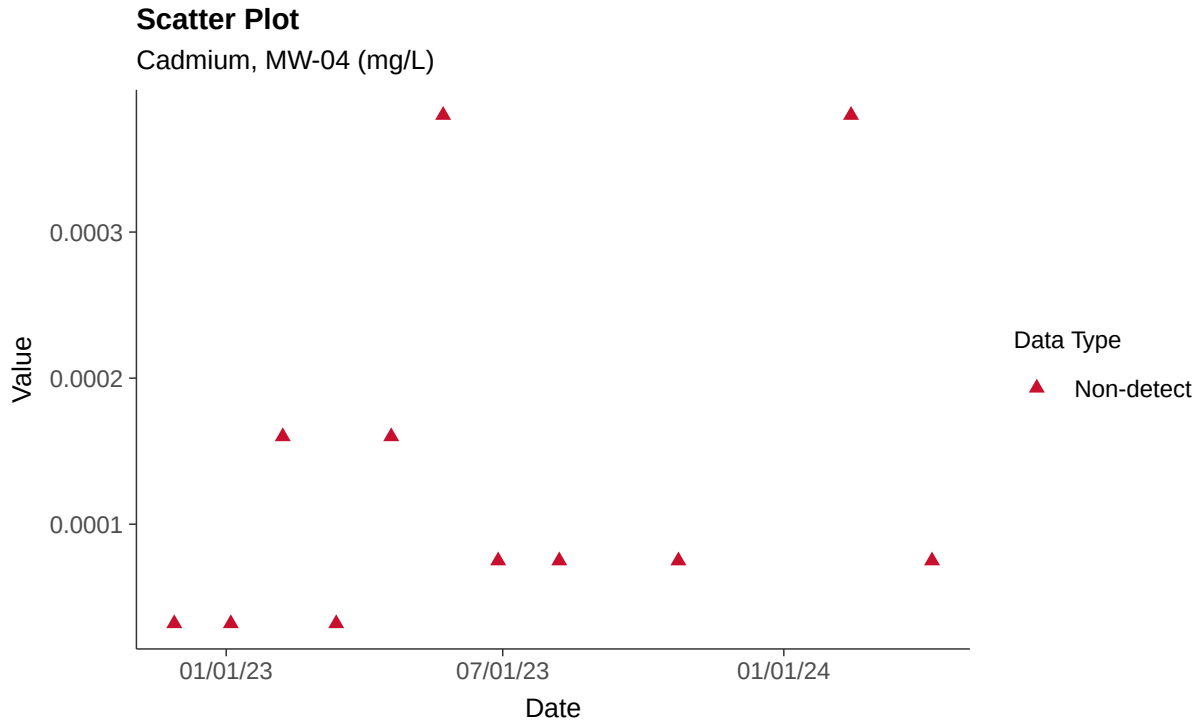
Boxplot by Season

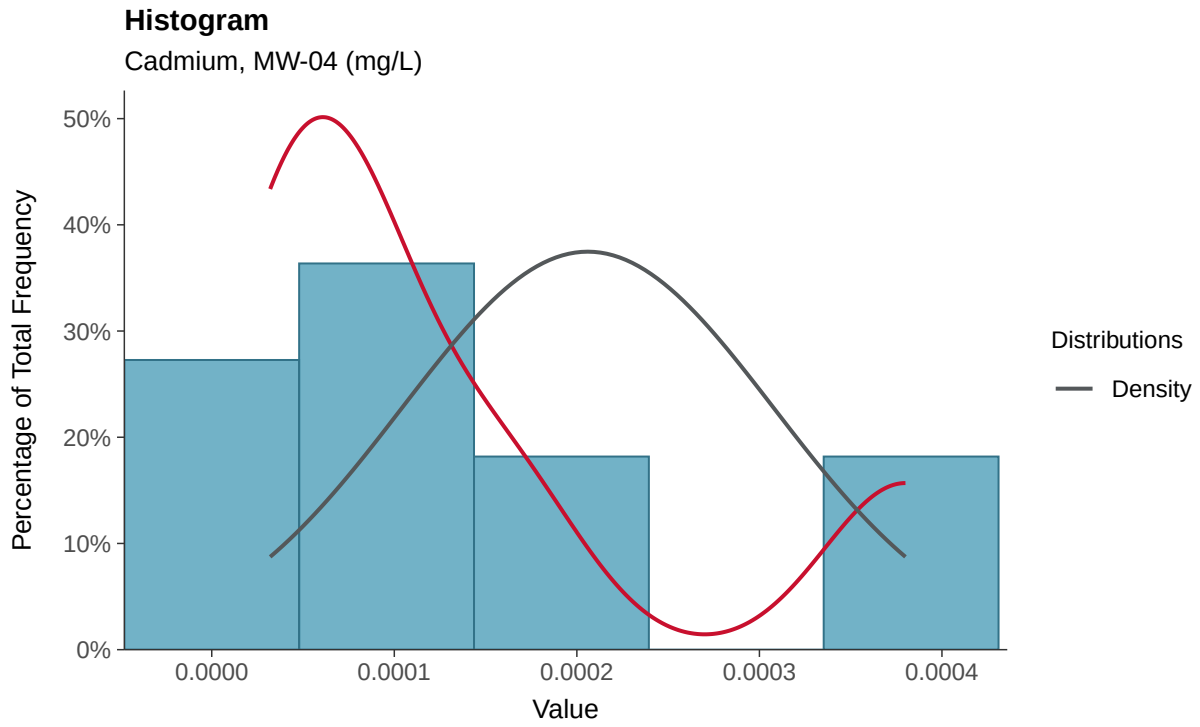
Beryllium, MW-04 (mg/L)



Appendix IV: Cadmium, MW-04

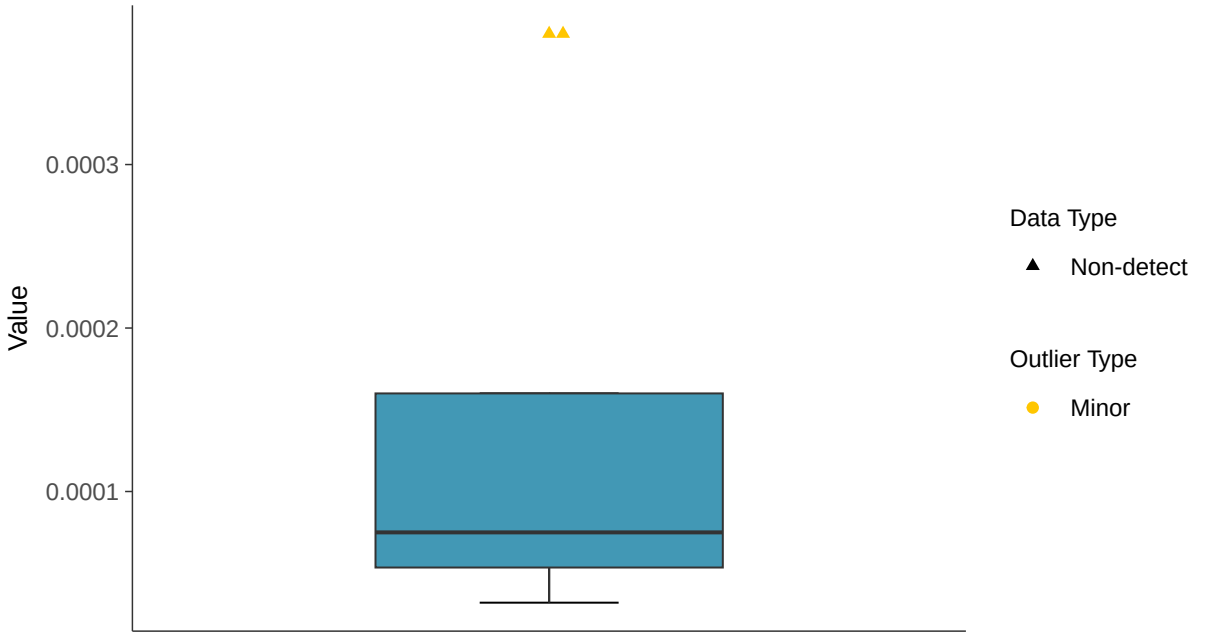
ID: 2_14_5_106





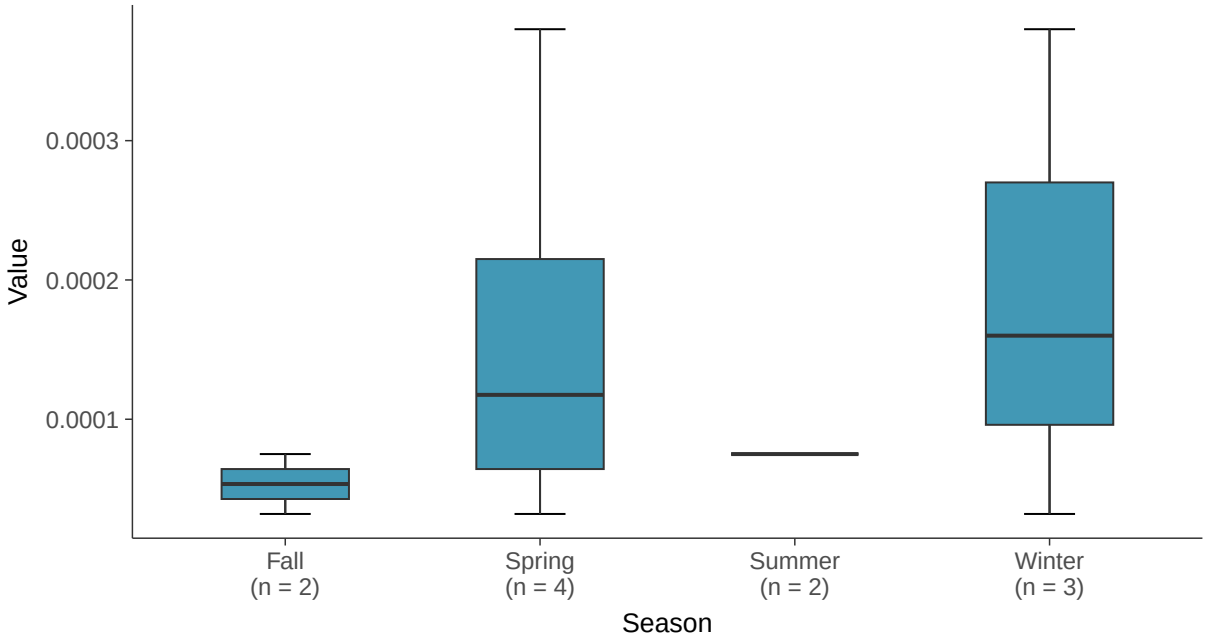
Boxplot

Cadmium, MW-04 (mg/L)



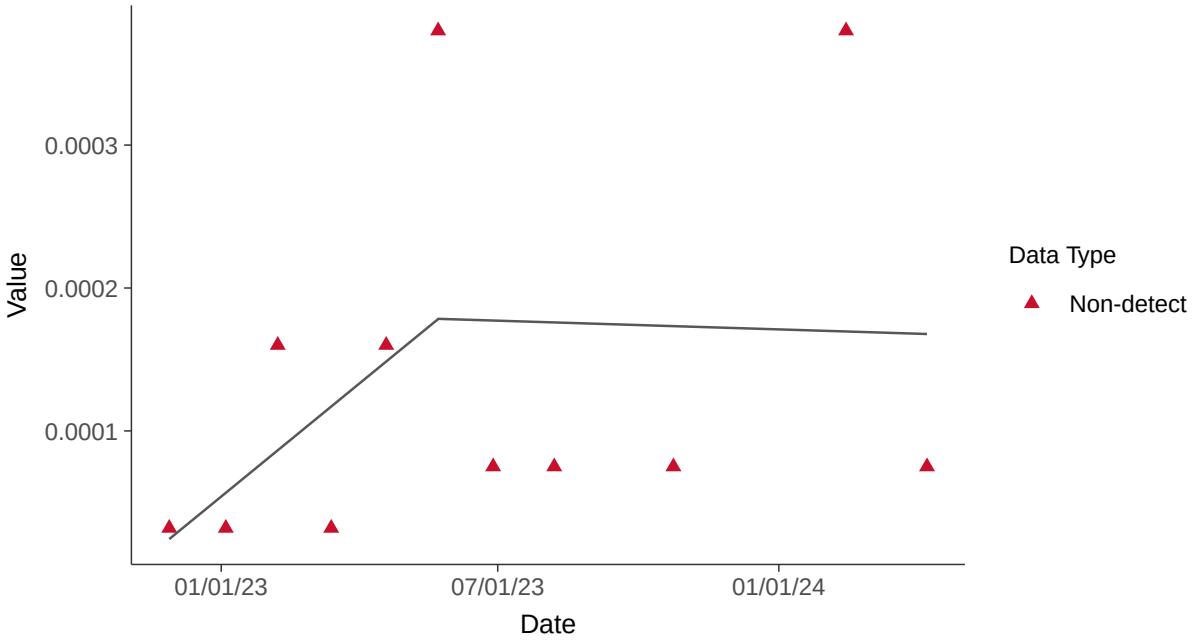
Boxplot by Season

Cadmium, MW-04 (mg/L)



Trend Regression: Piecewise Linear-Linear

Cadmium, MW-04 (mg/L)

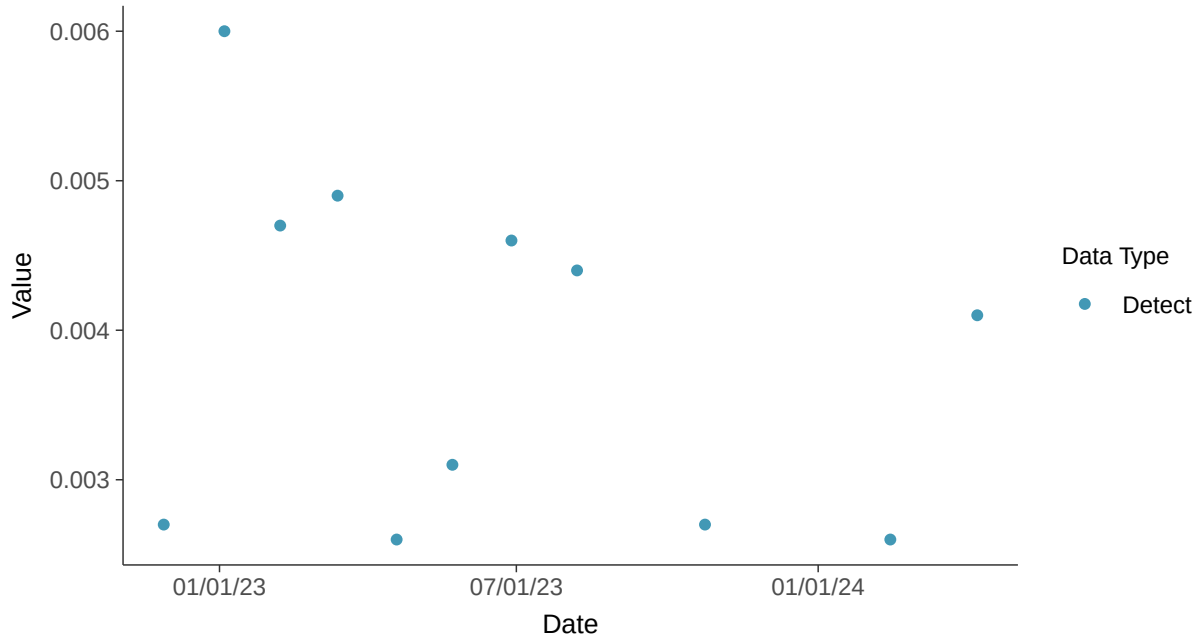


Appendix IV: Chromium, Total, MW-04

ID: 2_14_5_109

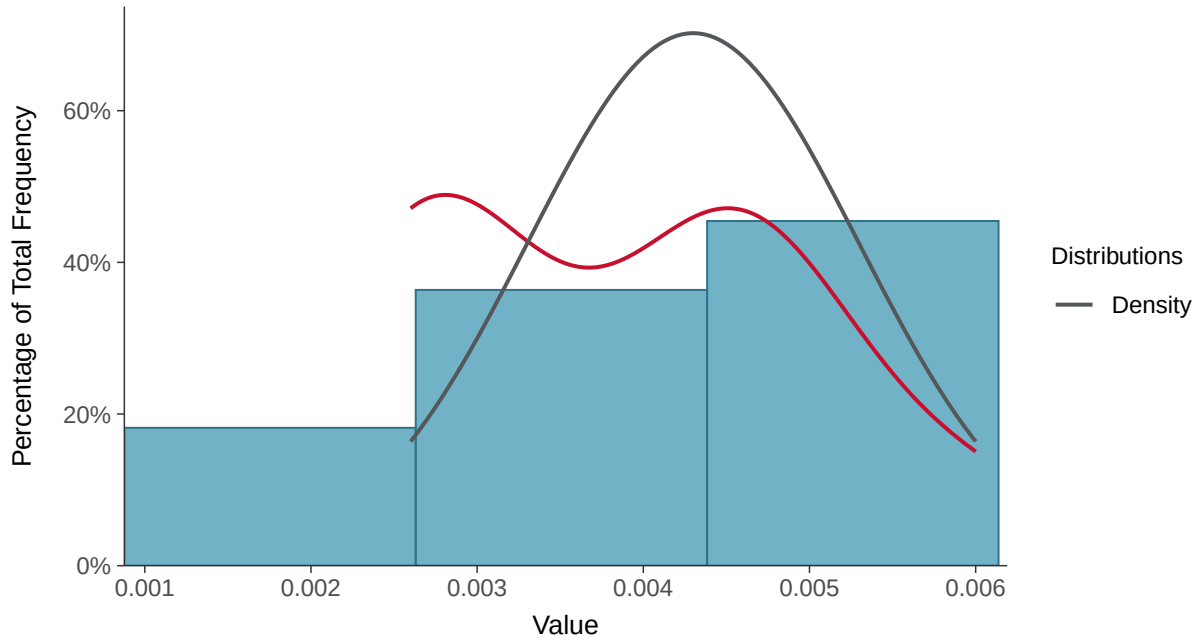
Scatter Plot

Chromium, Total, MW-04 (mg/L)



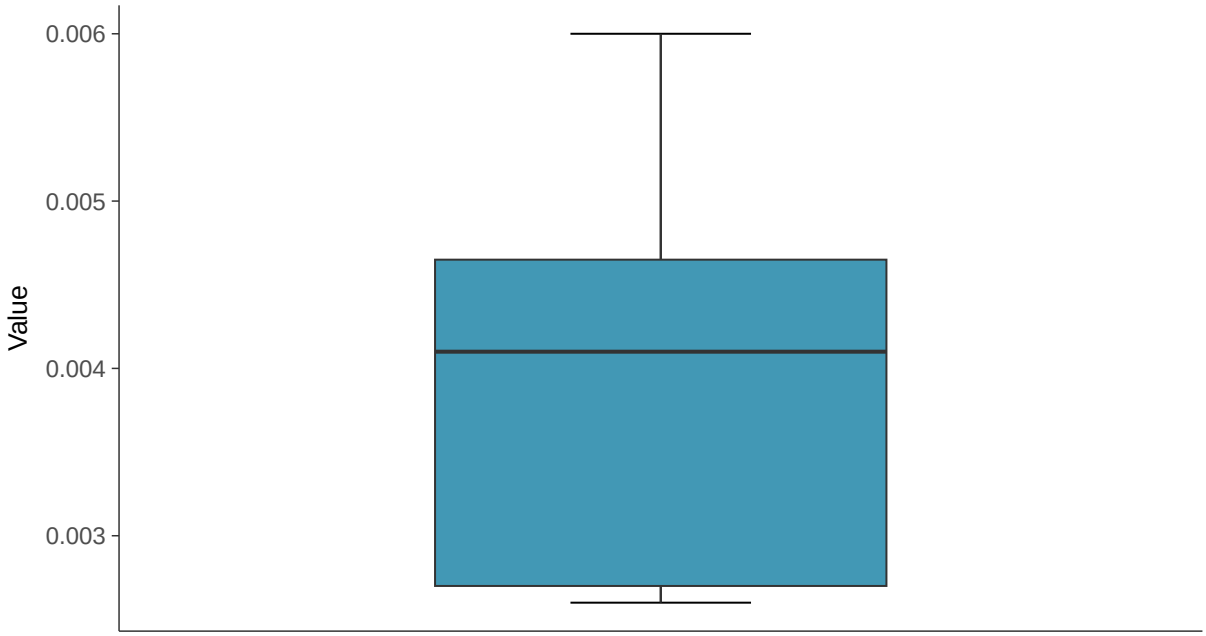
Histogram

Chromium, Total, MW-04 (mg/L)



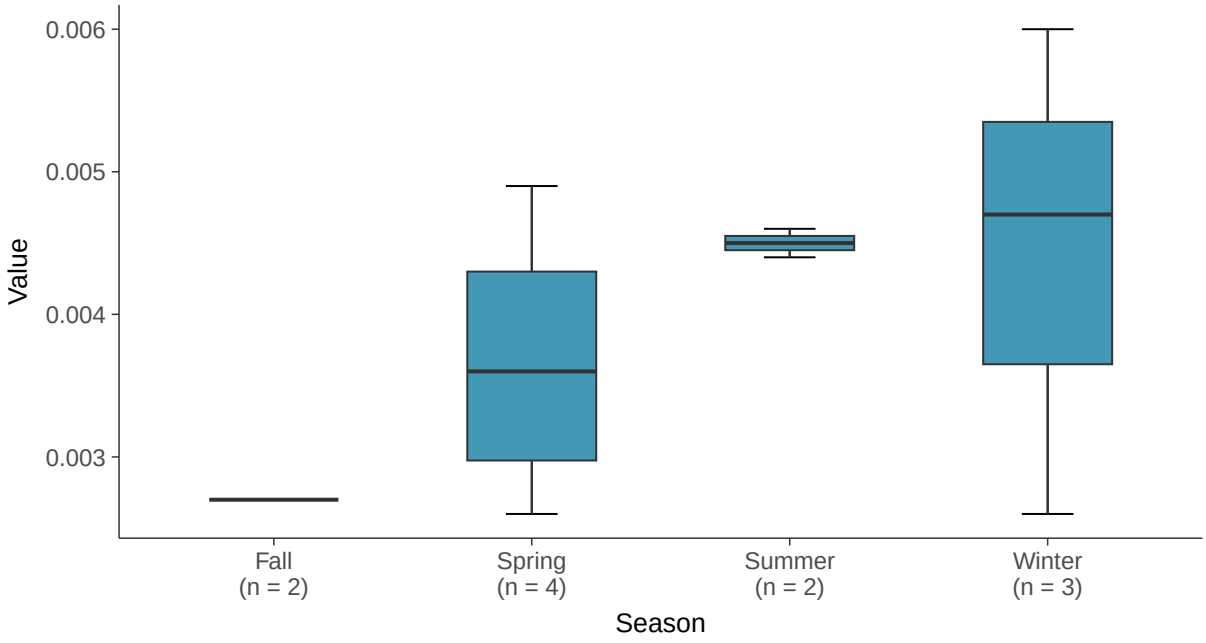
Boxplot

Chromium, Total, MW-04 (mg/L)



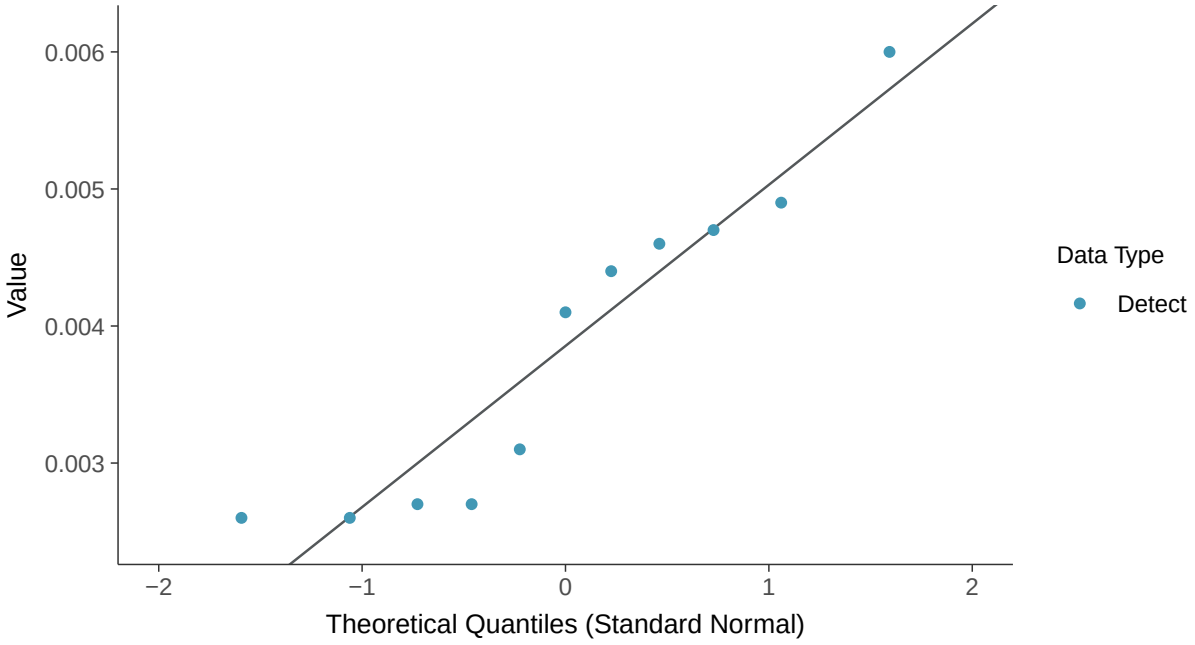
Boxplot by Season

Chromium, Total, MW-04 (mg/L)



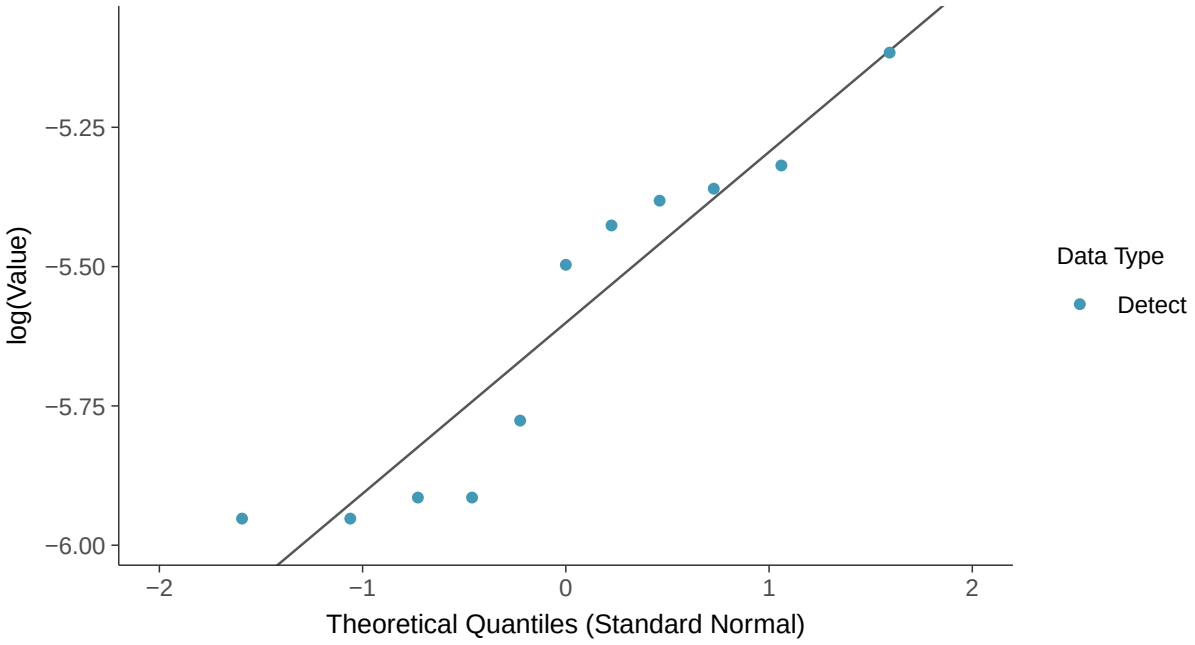
Normal Q-Q plot

Chromium, Total, MW-04 (mg/L)



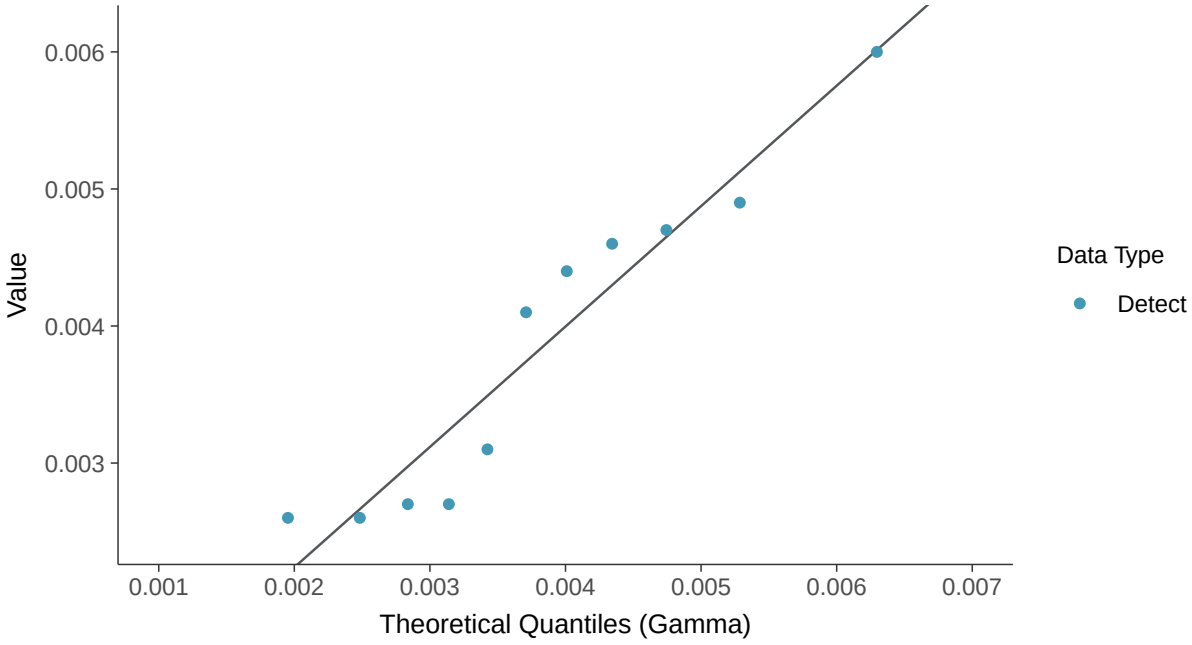
Lognormal Q-Q plot

Chromium, Total, MW-04 (mg/L)



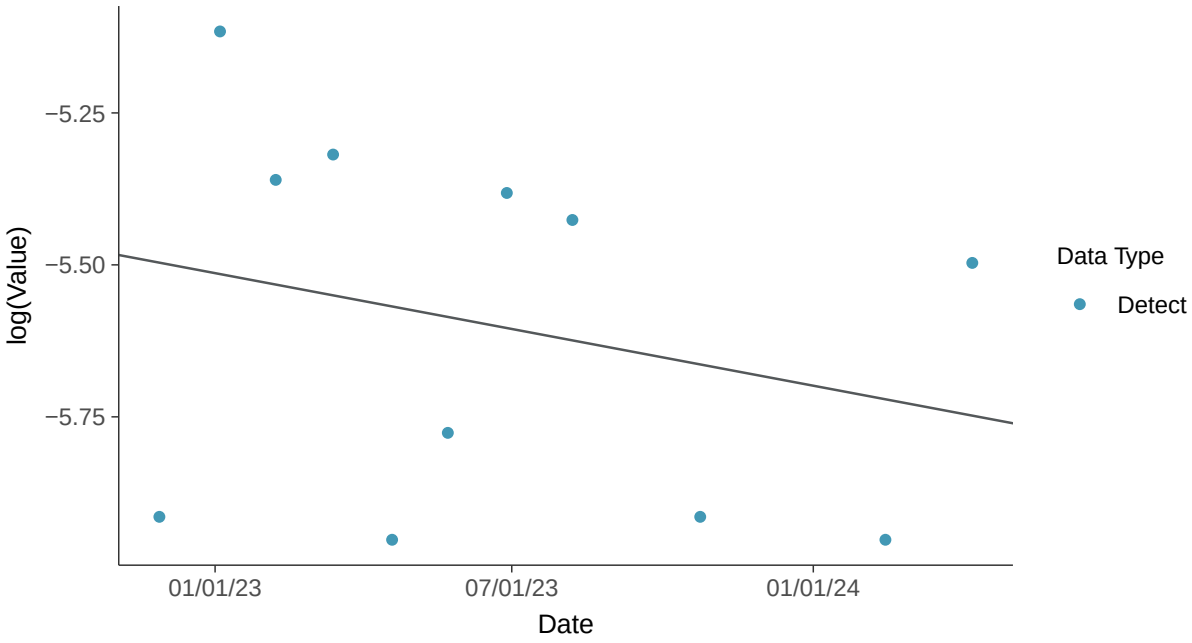
Gamma Q-Q plot

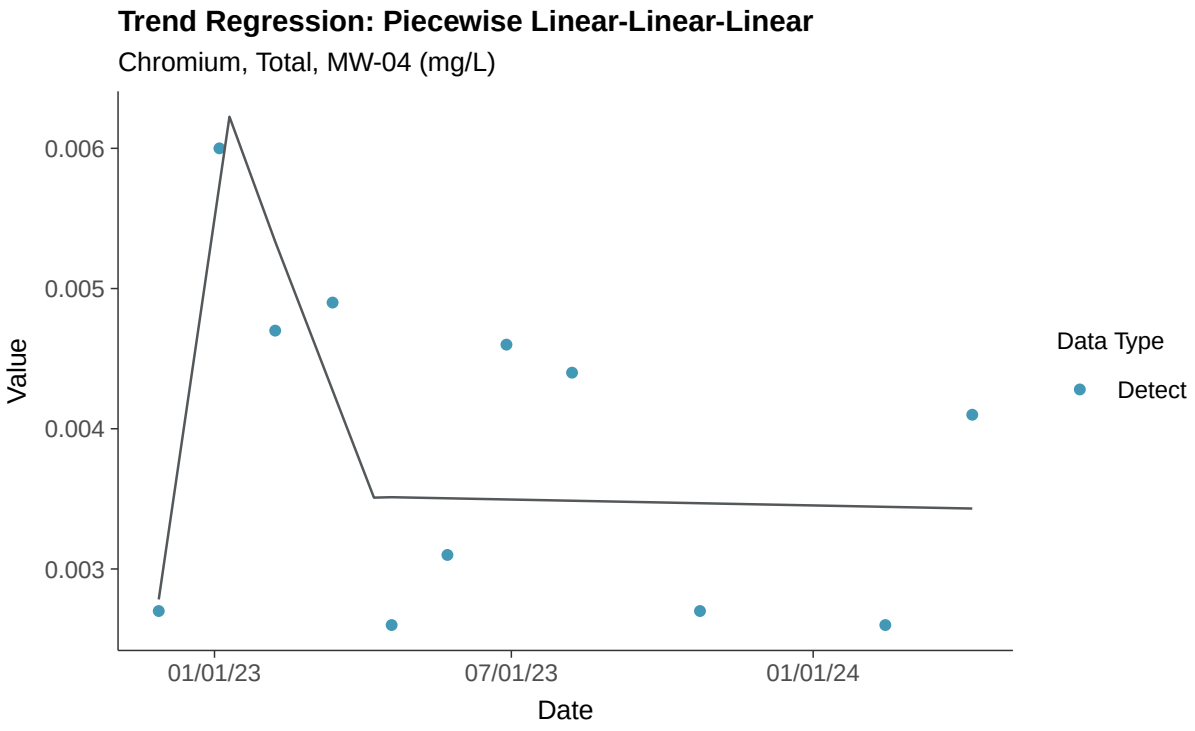
Chromium, Total, MW-04 (mg/L)



Trend Regression: Lognormal MLE

Chromium, Total, MW-04 (mg/L)



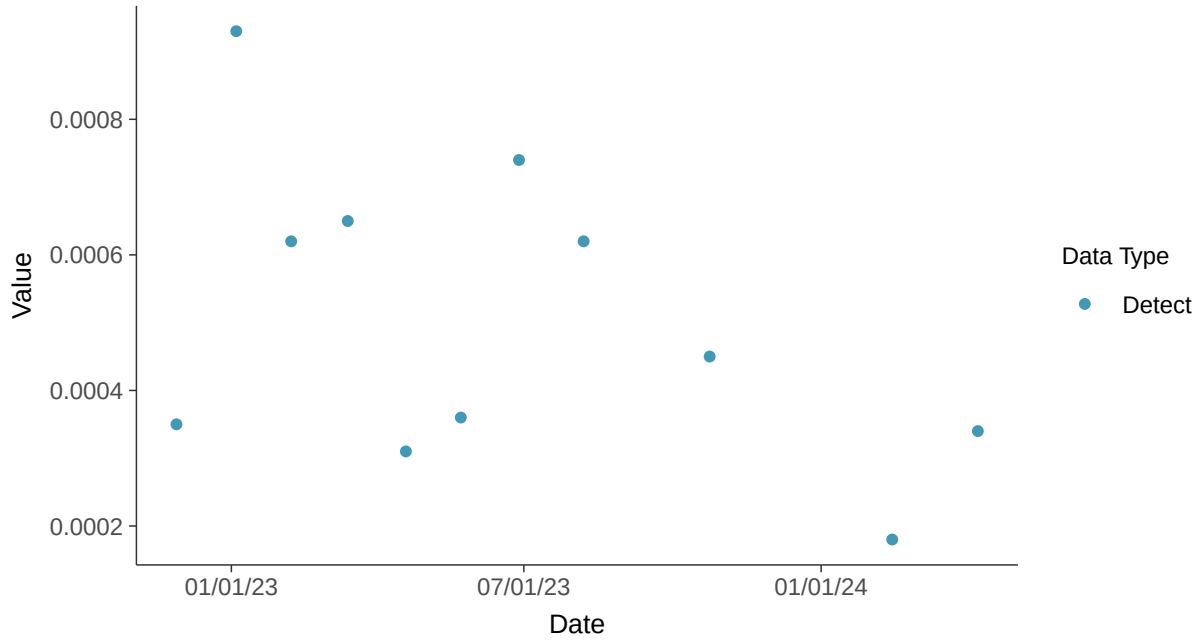

Trend Regression: Piecewise Linear-Linear-Linear
Chromium, Total, MW-04 (mg/L)
0.006
0.005
0.004
0.003
Value
01/01/23
07/01/23
01/01/24
Date
Data Type
Detect

Appendix IV: Cobalt, MW-04

ID: 2_14_5_110

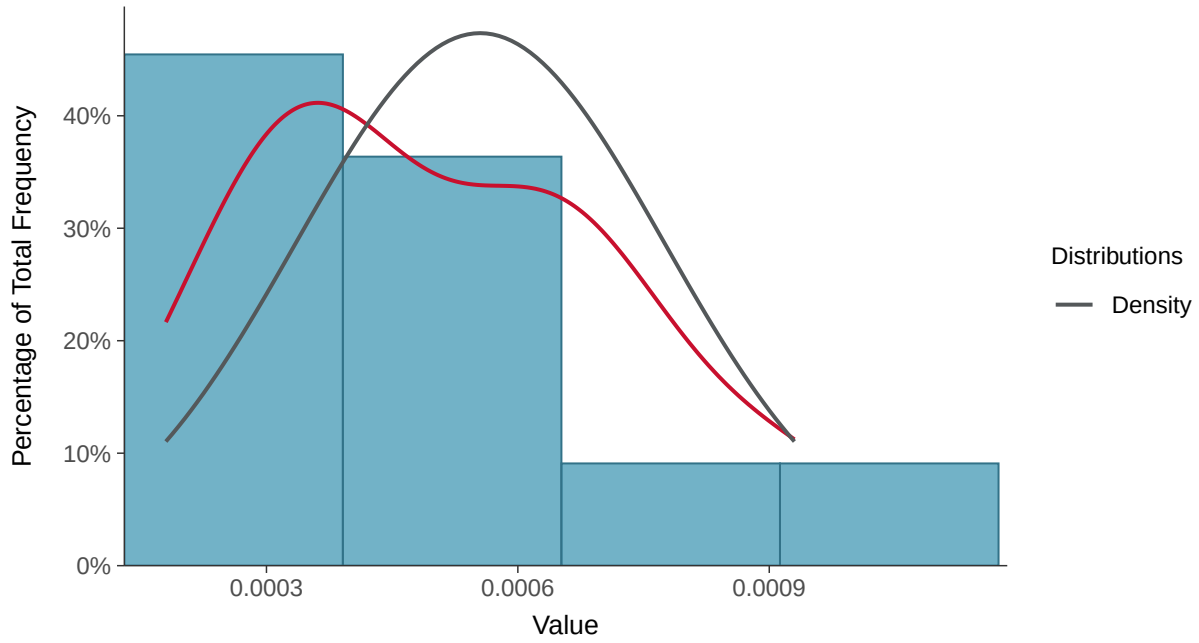
Scatter Plot

Cobalt, MW-04 (mg/L)



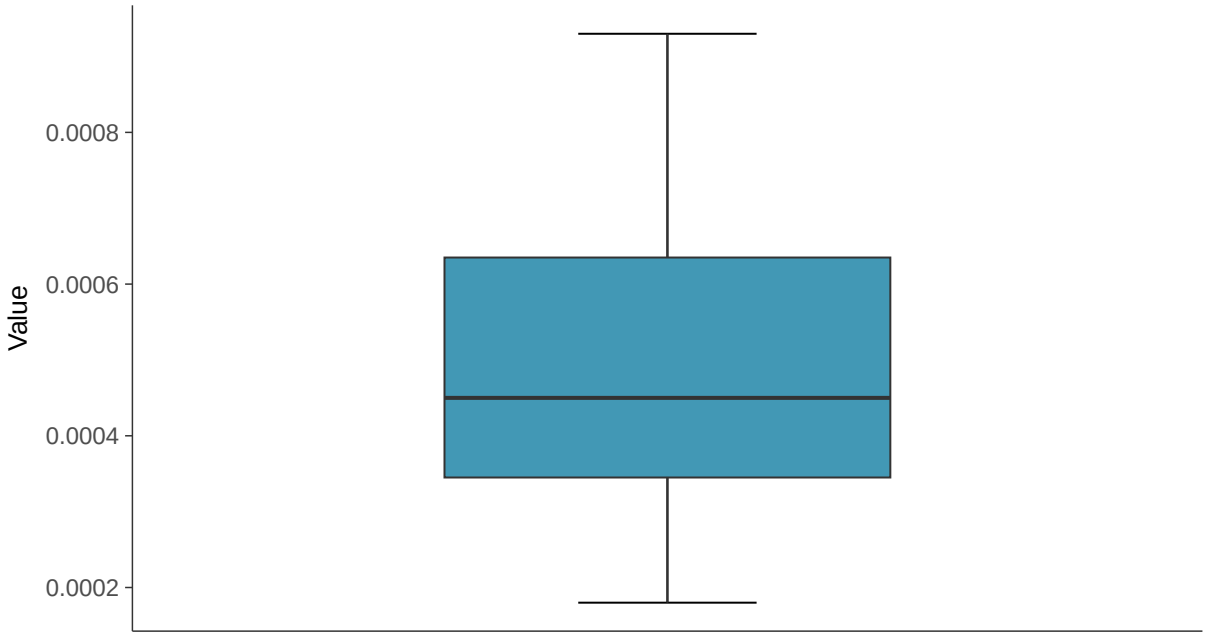
Histogram

Cobalt, MW-04 (mg/L)



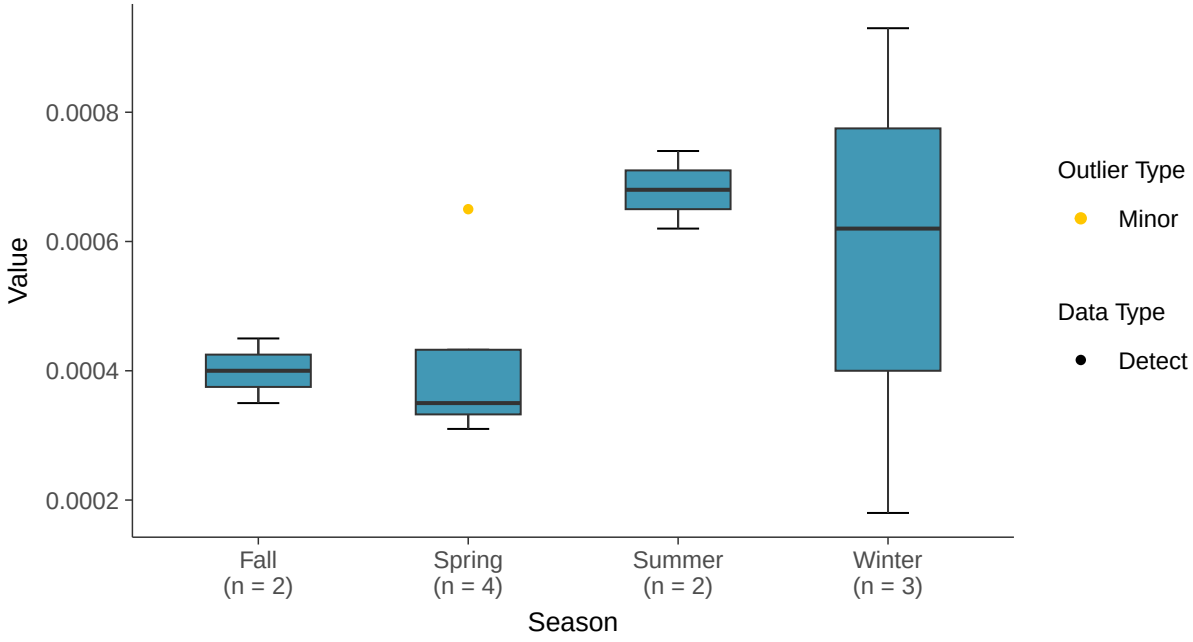
Boxplot

Cobalt, MW-04 (mg/L)



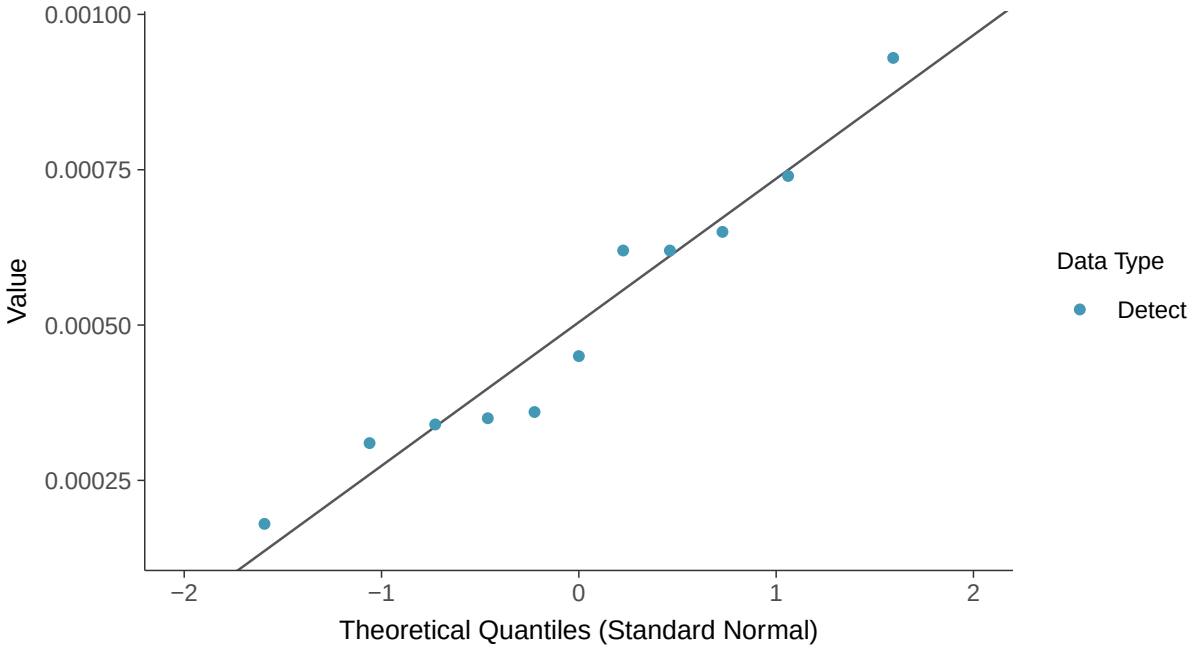
Boxplot by Season

Cobalt, MW-04 (mg/L)



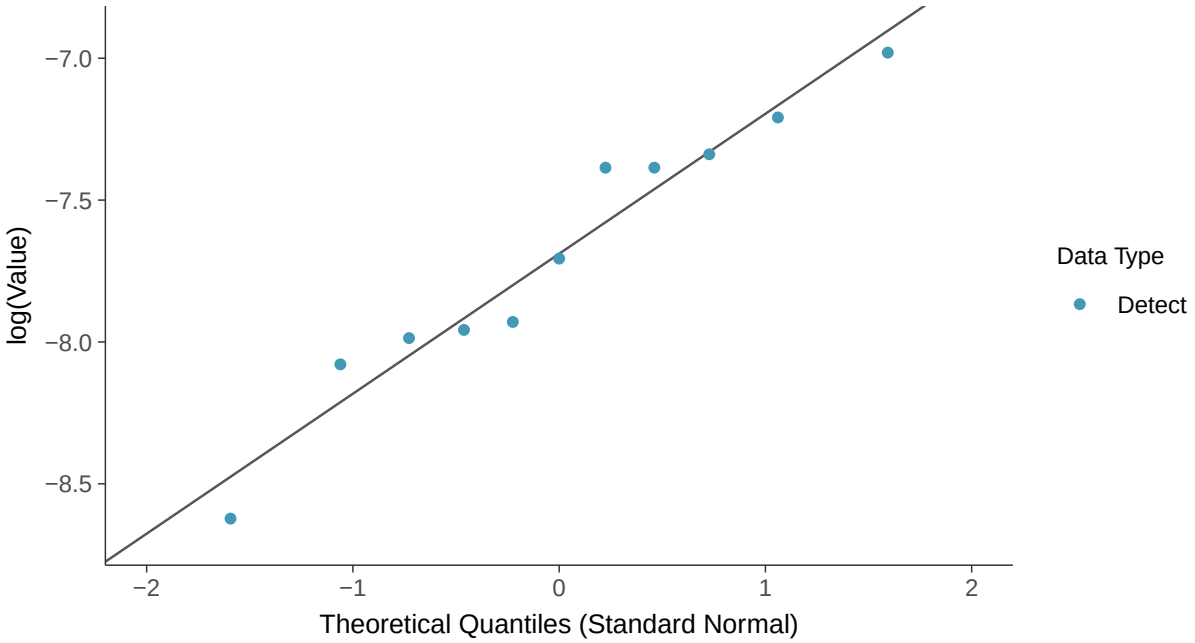
Normal Q-Q plot

Cobalt, MW-04 (mg/L)



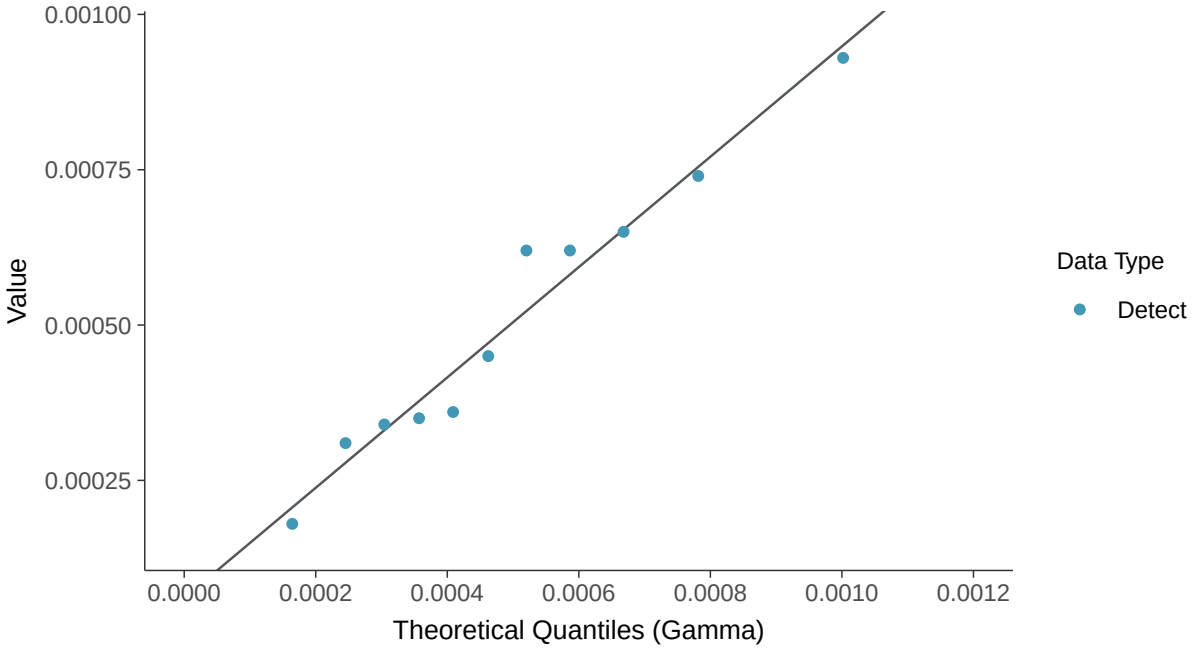
Lognormal Q-Q plot

Cobalt, MW-04 (mg/L)



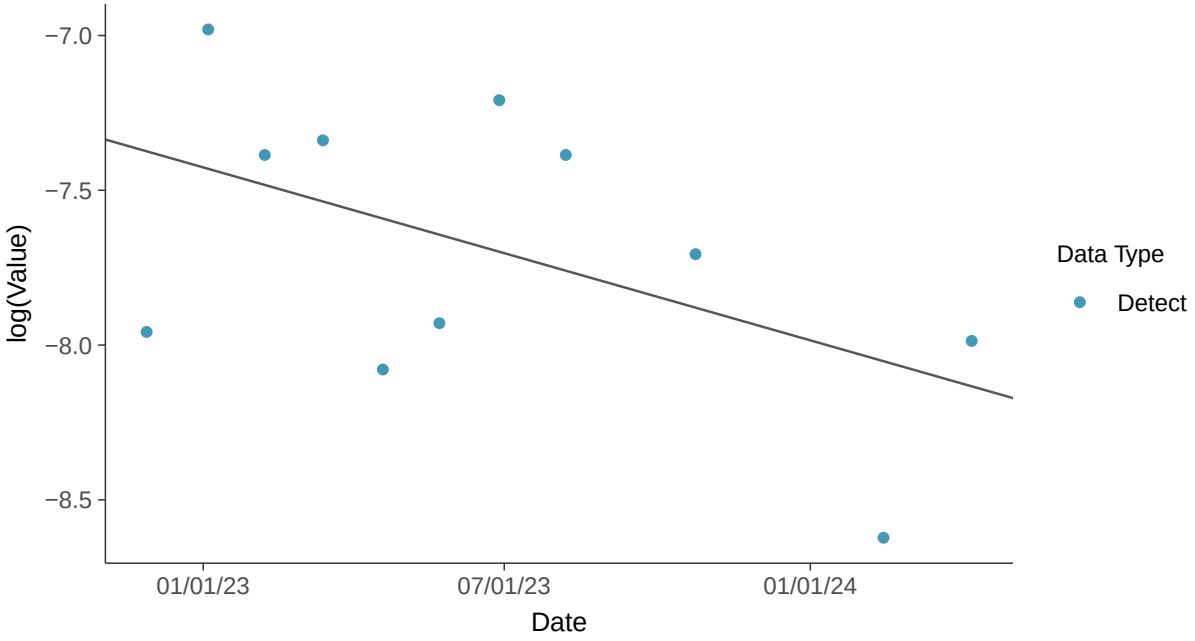
Gamma Q-Q plot

Cobalt, MW-04 (mg/L)



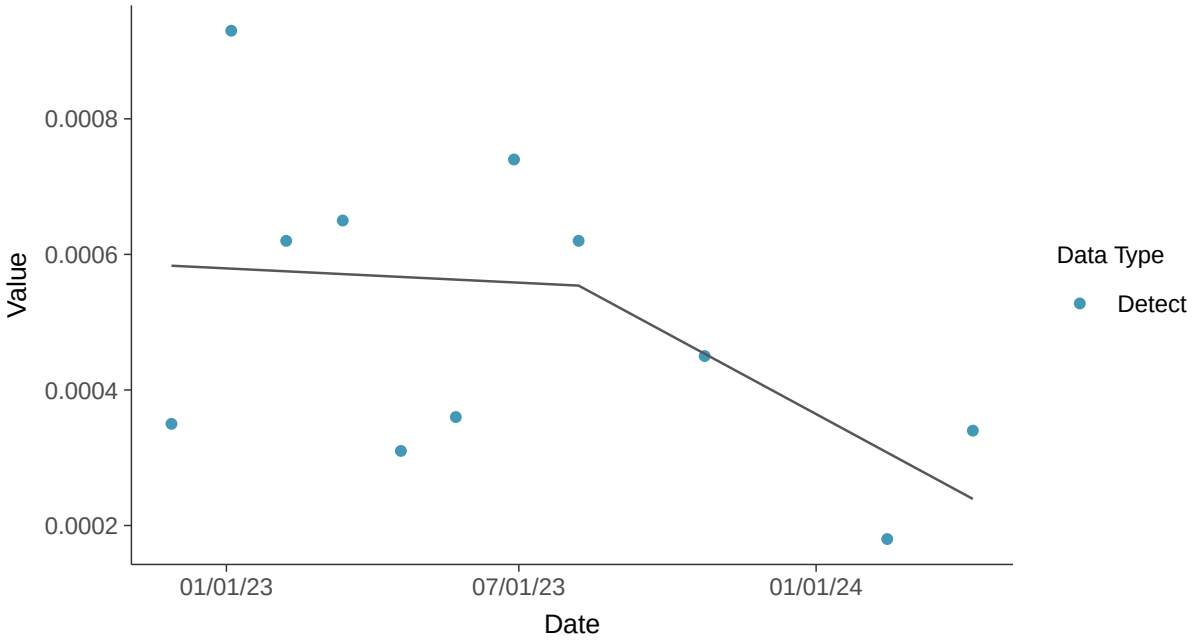
Trend Regression: Lognormal MLE

Cobalt, MW-04 (mg/L)



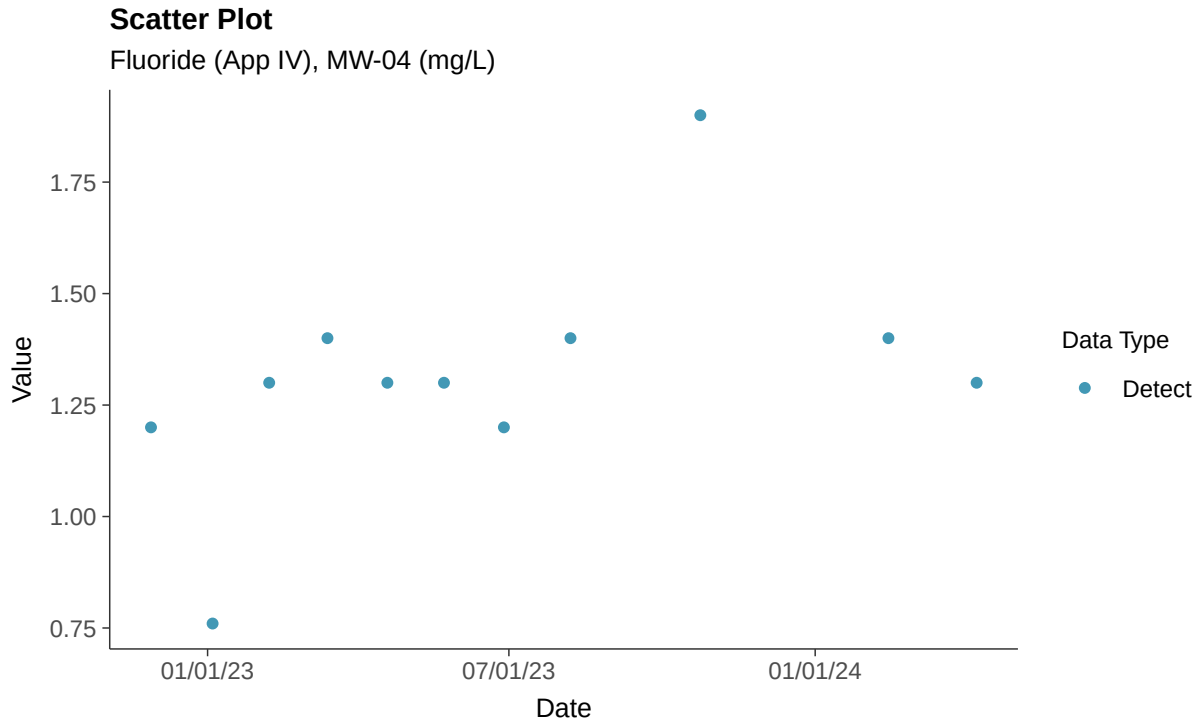
Trend Regression: Piecewise Linear-Linear

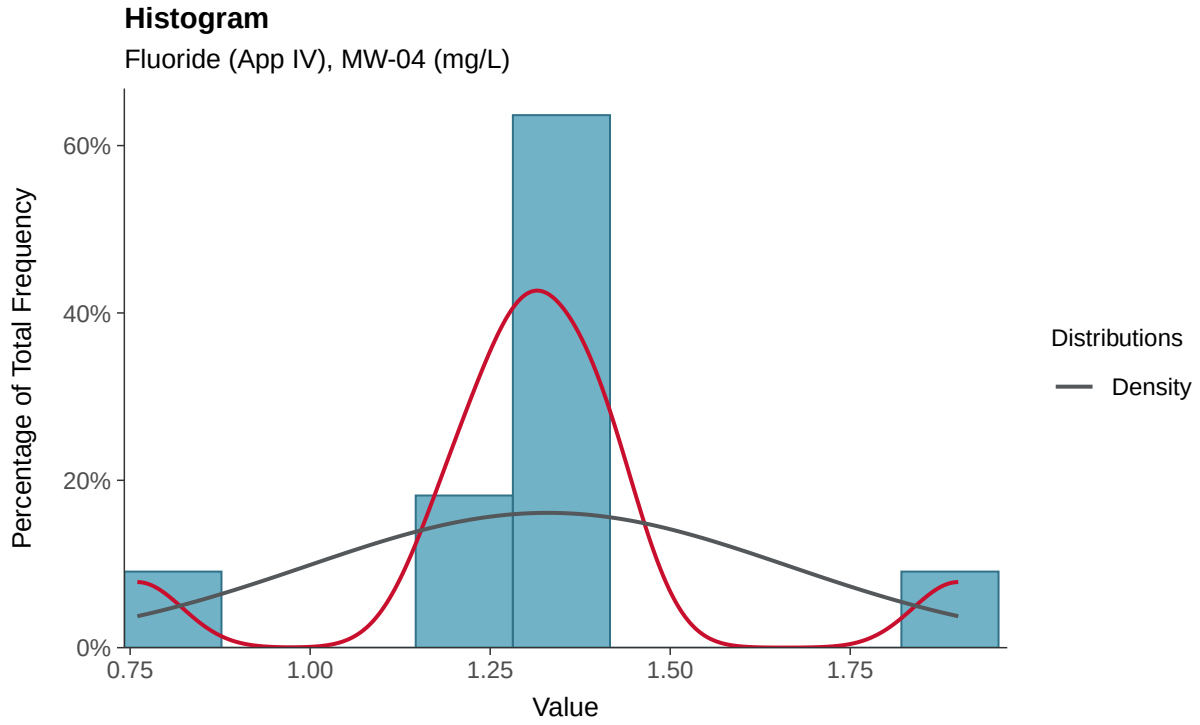
Cobalt, MW-04 (mg/L)



Appendix IV: Fluoride (App IV), MW-04

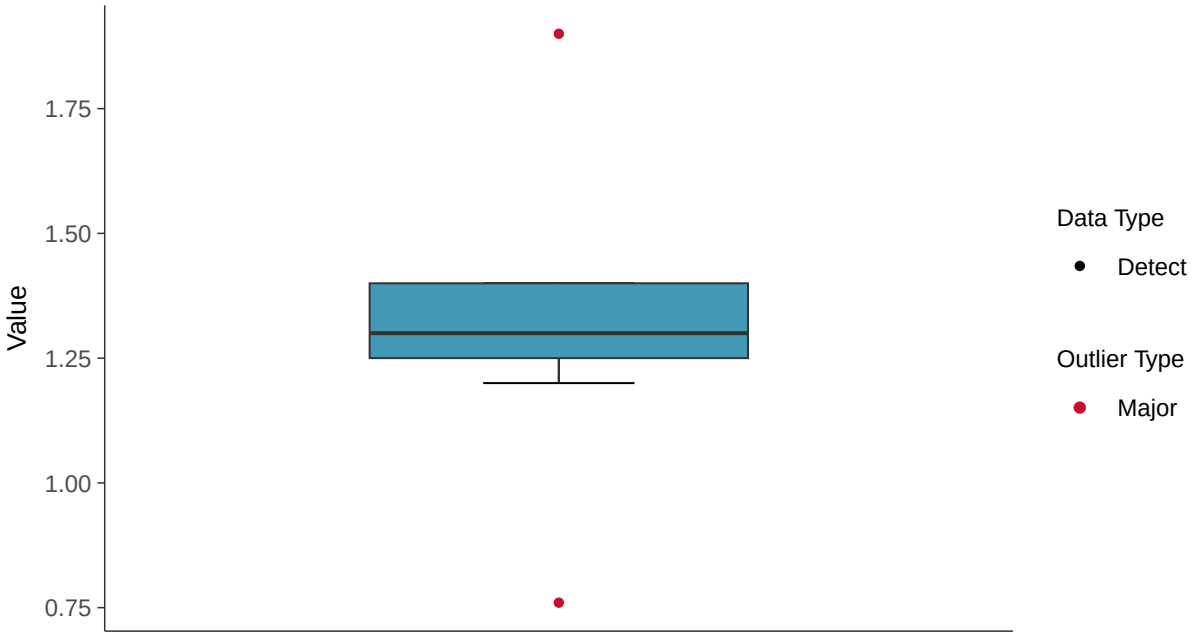
ID: 2_14_5_113





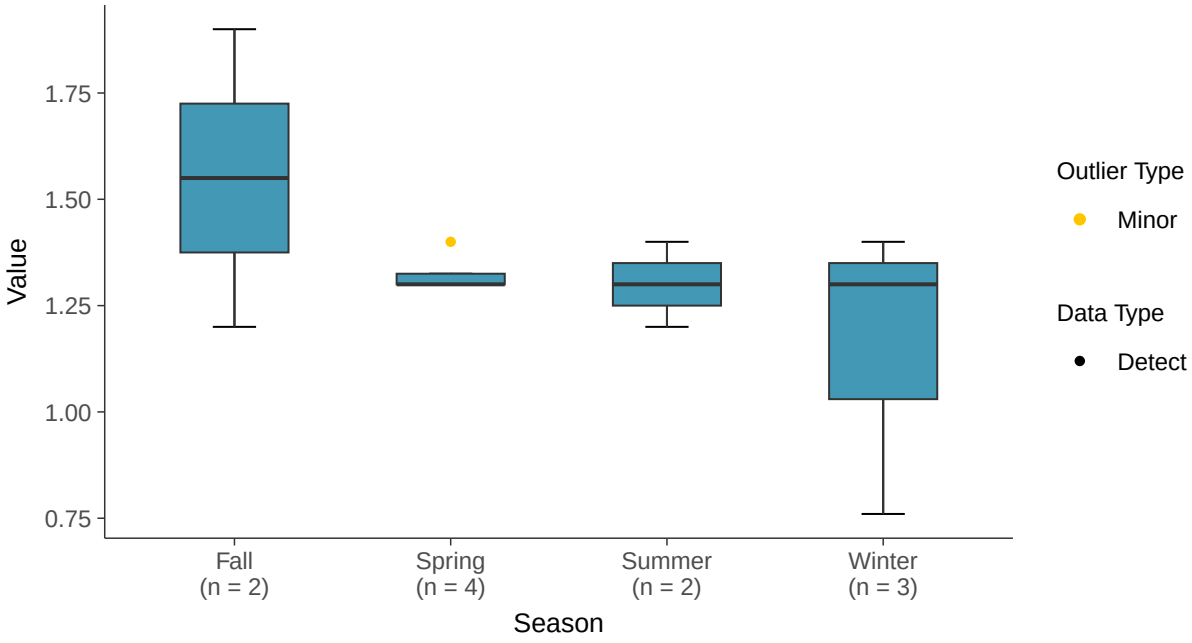
Boxplot

Fluoride (App IV), MW-04 (mg/L)



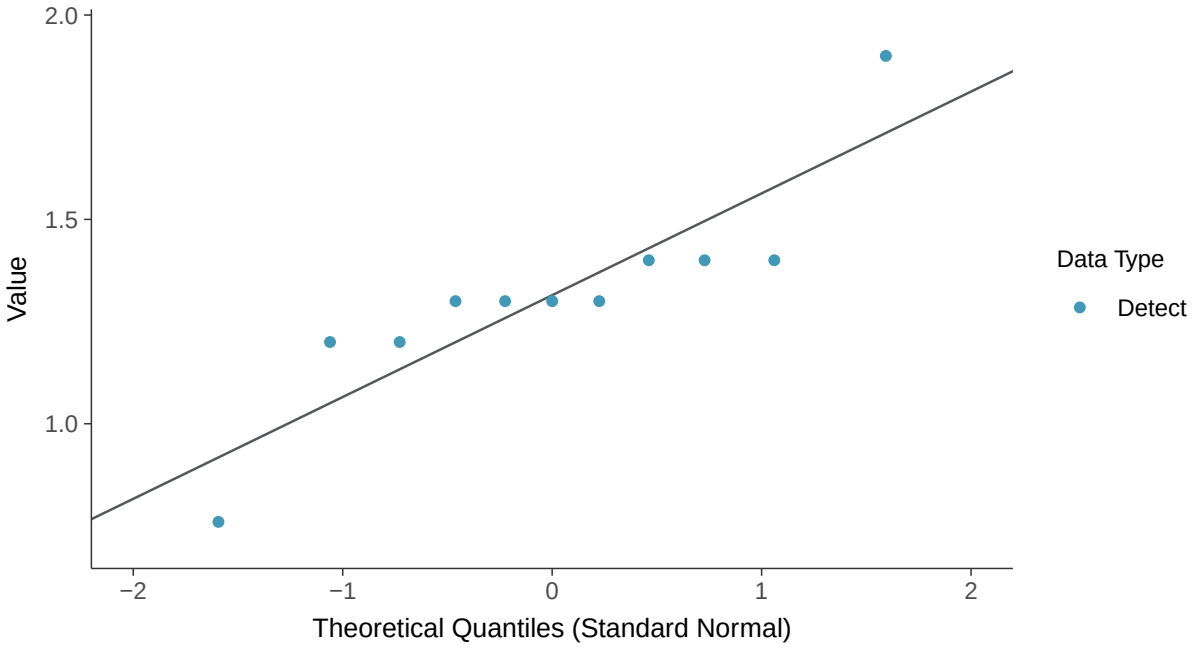
Boxplot by Season

Fluoride (App IV), MW-04 (mg/L)



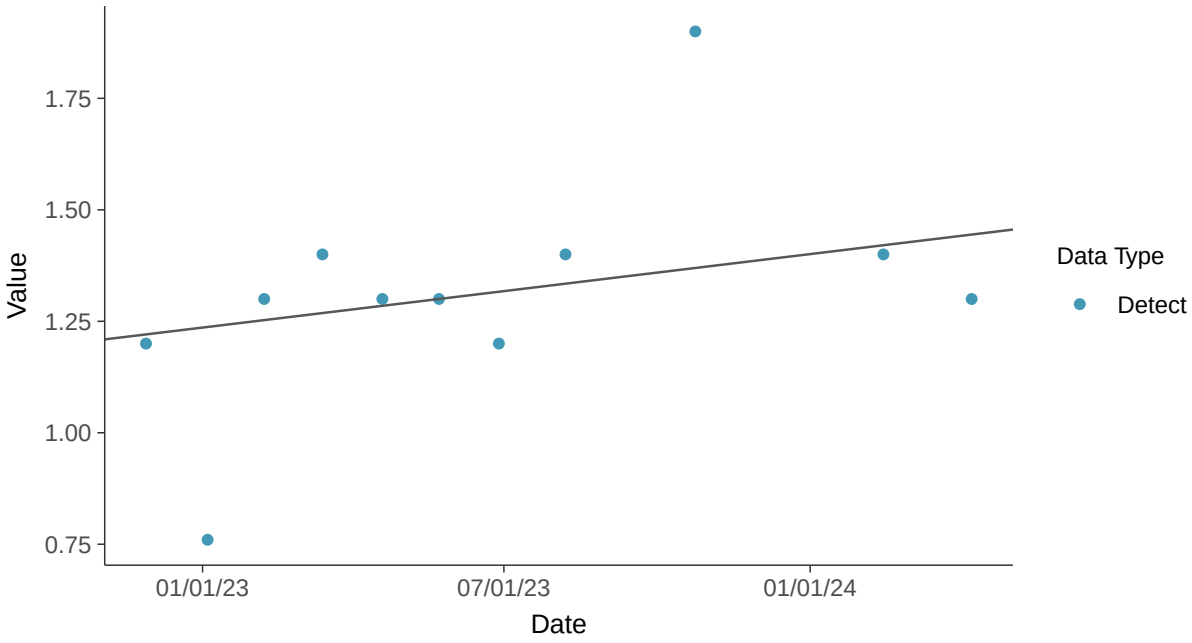
Normal Q-Q plot

Fluoride (App IV), MW-04 (mg/L)



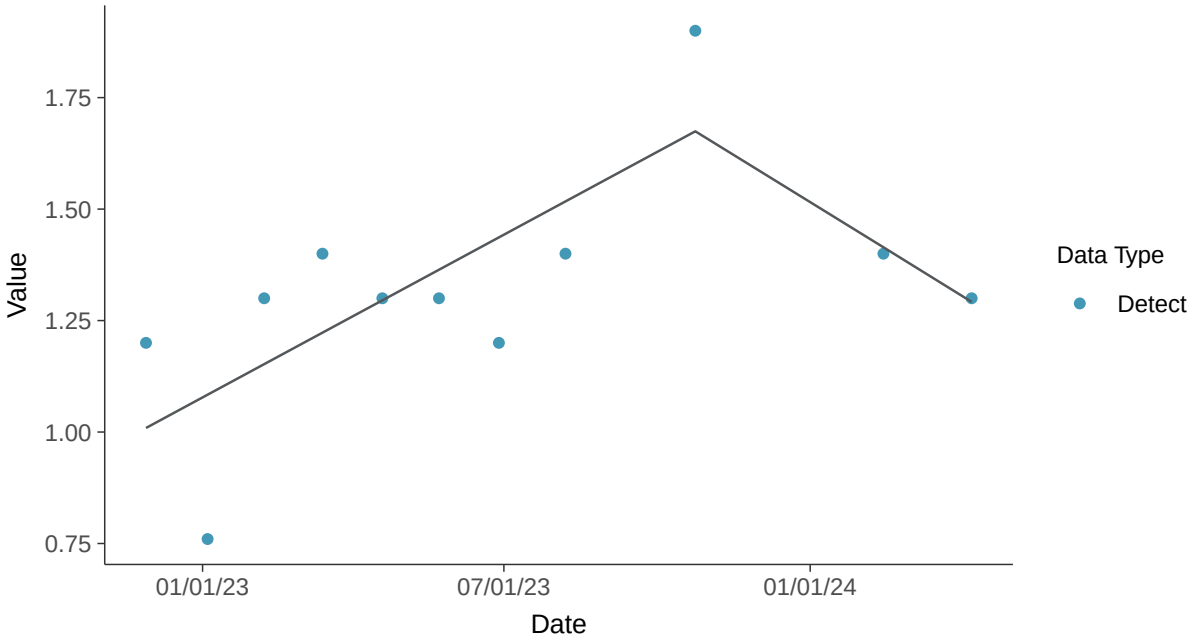
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Fluoride (App IV), MW-04 (mg/L)



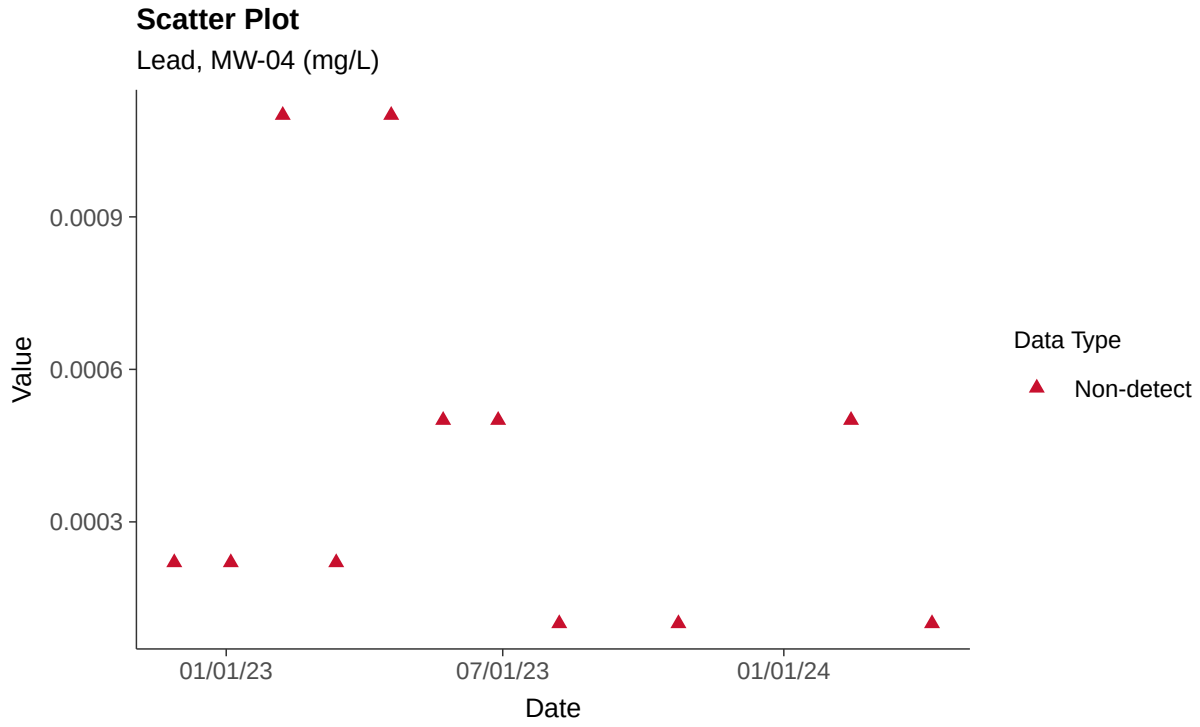
Trend Regression: Piecewise Linear-Linear

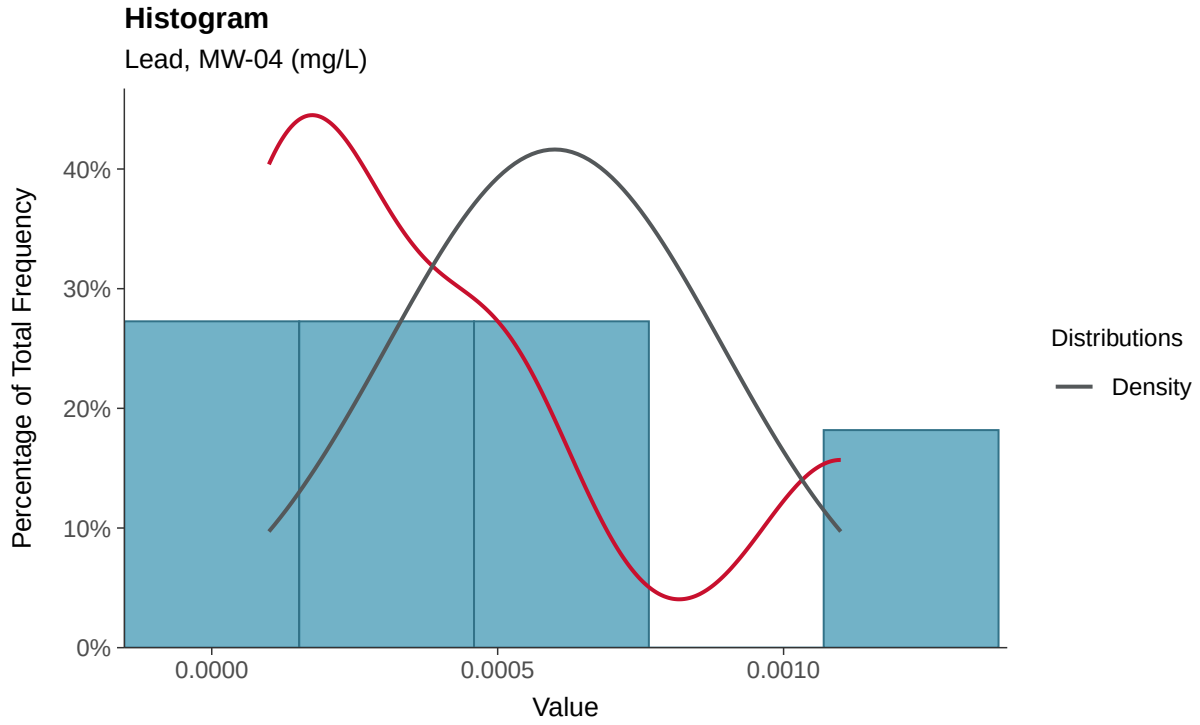
Fluoride (App IV), MW-04 (mg/L)



Appendix IV: Lead, MW-04

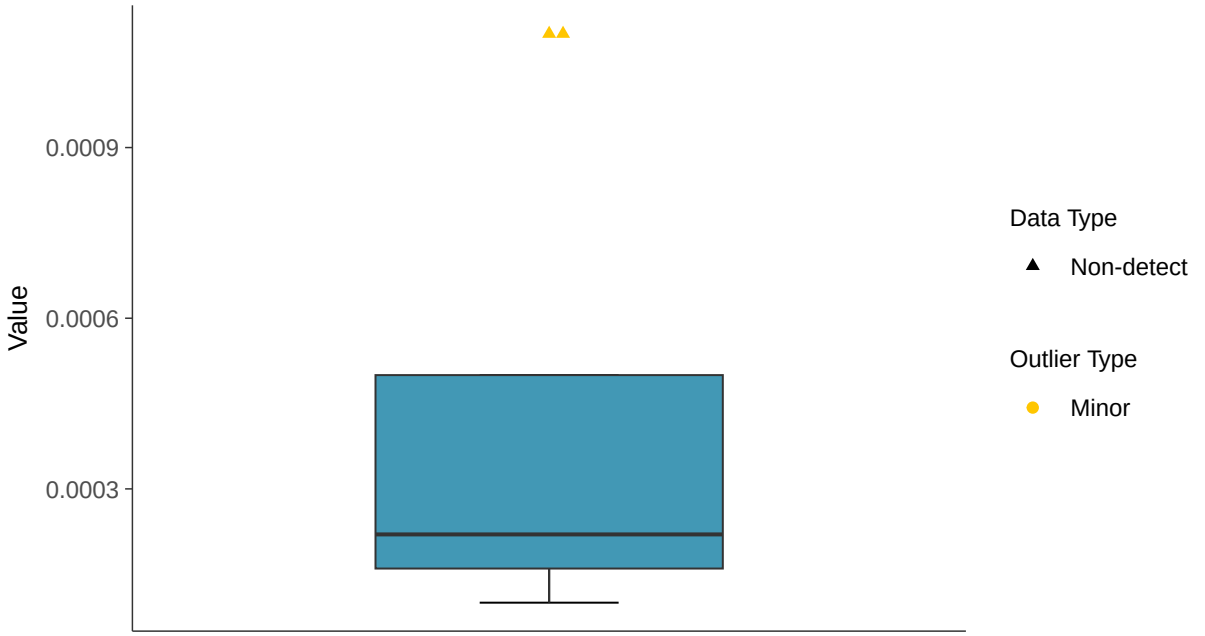
ID: 2_14_5_115





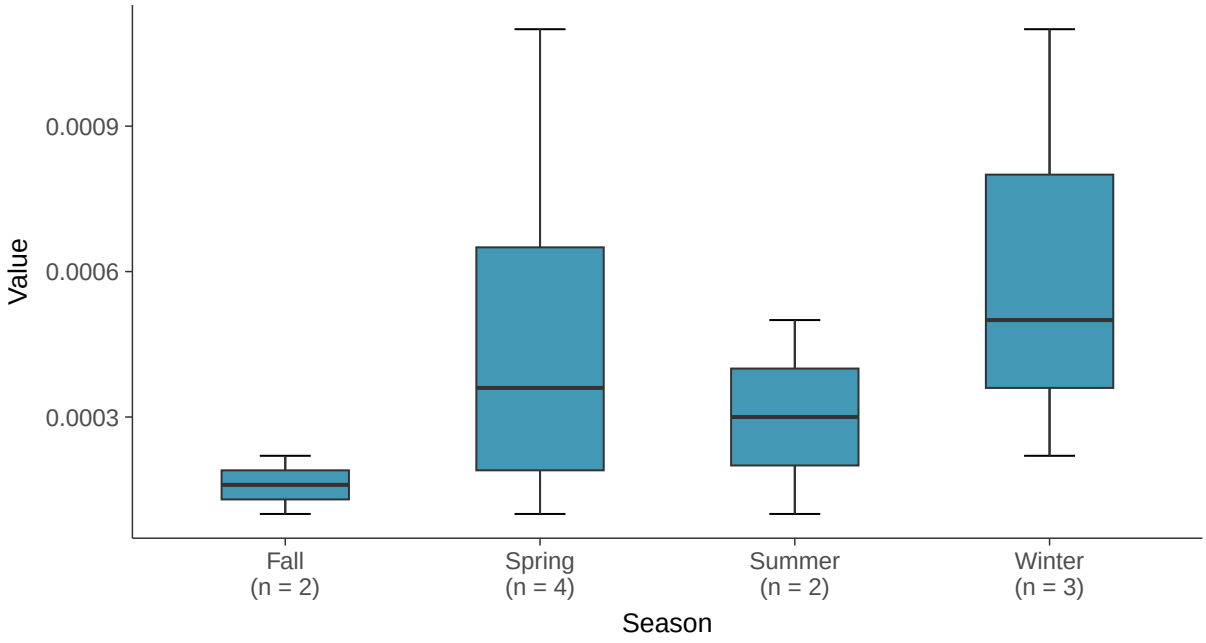
Boxplot

Lead, MW-04 (mg/L)



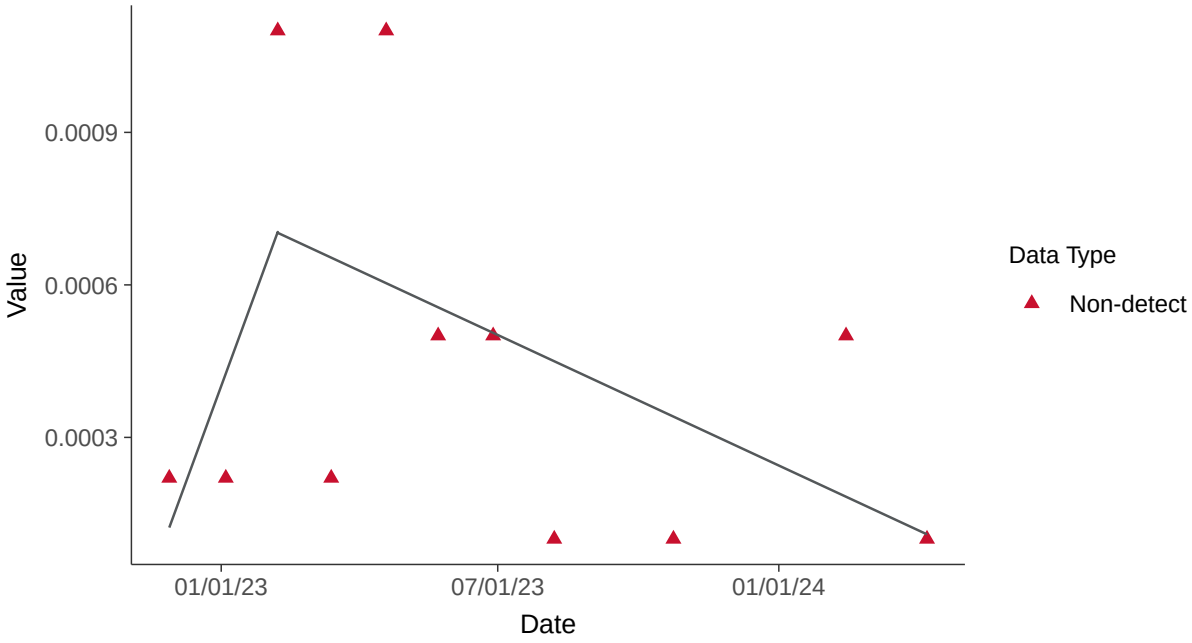
Boxplot by Season

Lead, MW-04 (mg/L)



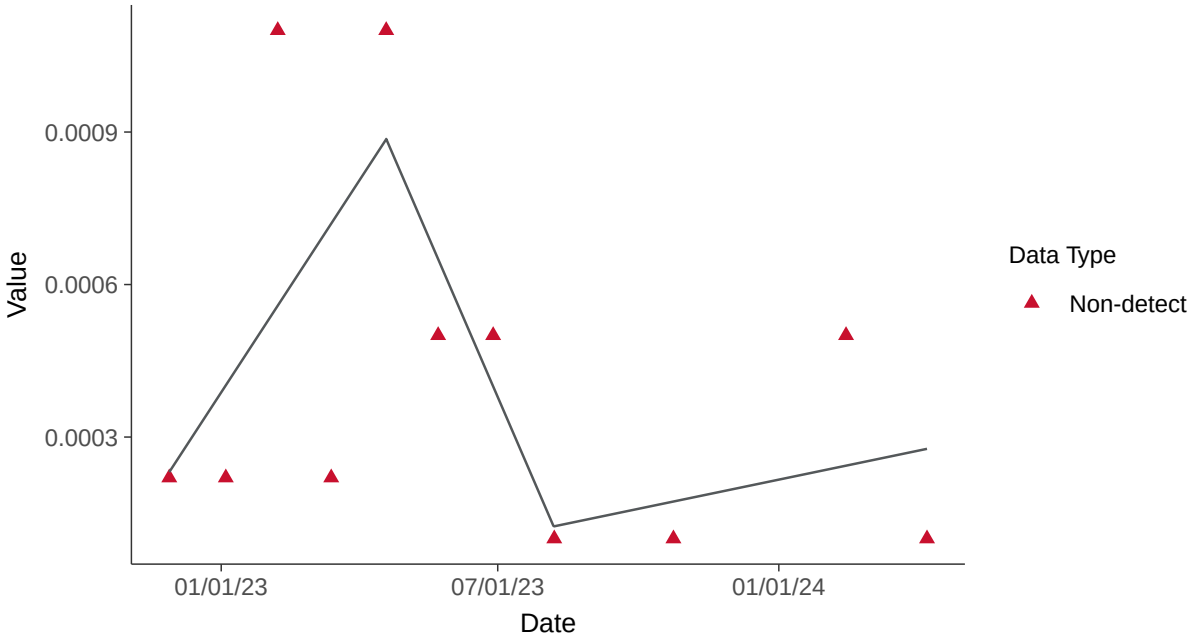
Trend Regression: Piecewise Linear-Linear

Lead, MW-04 (mg/L)



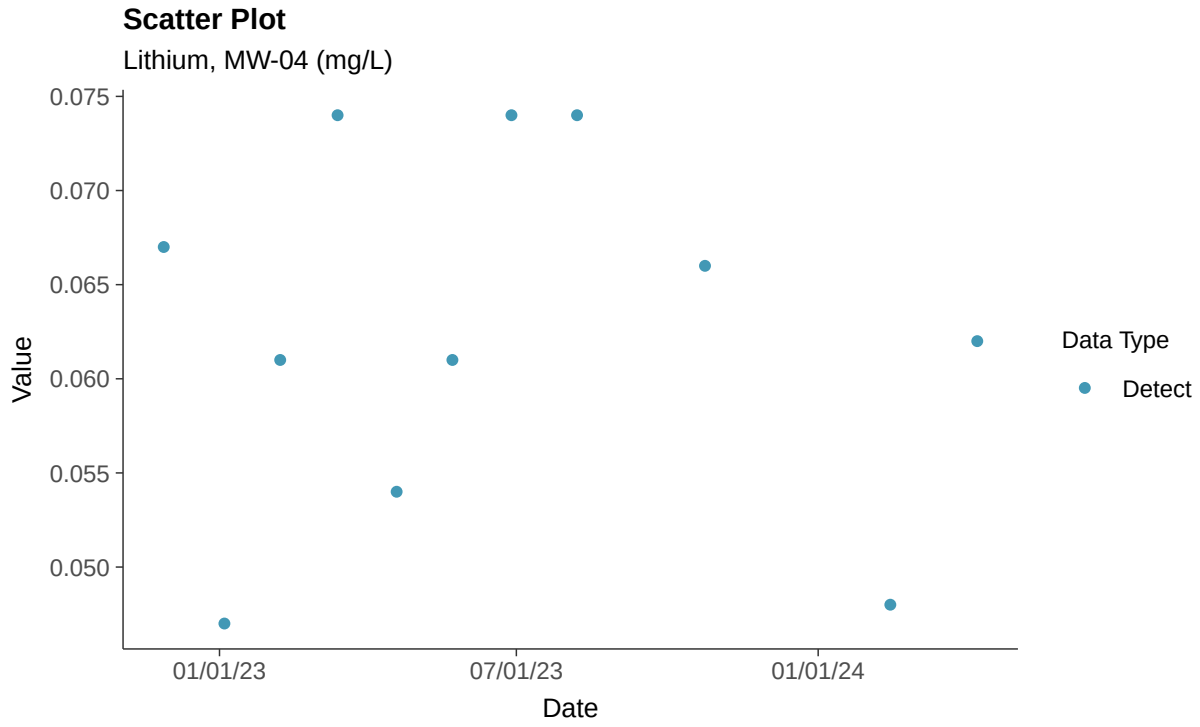
Trend Regression: Piecewise Linear-Linear-Linear

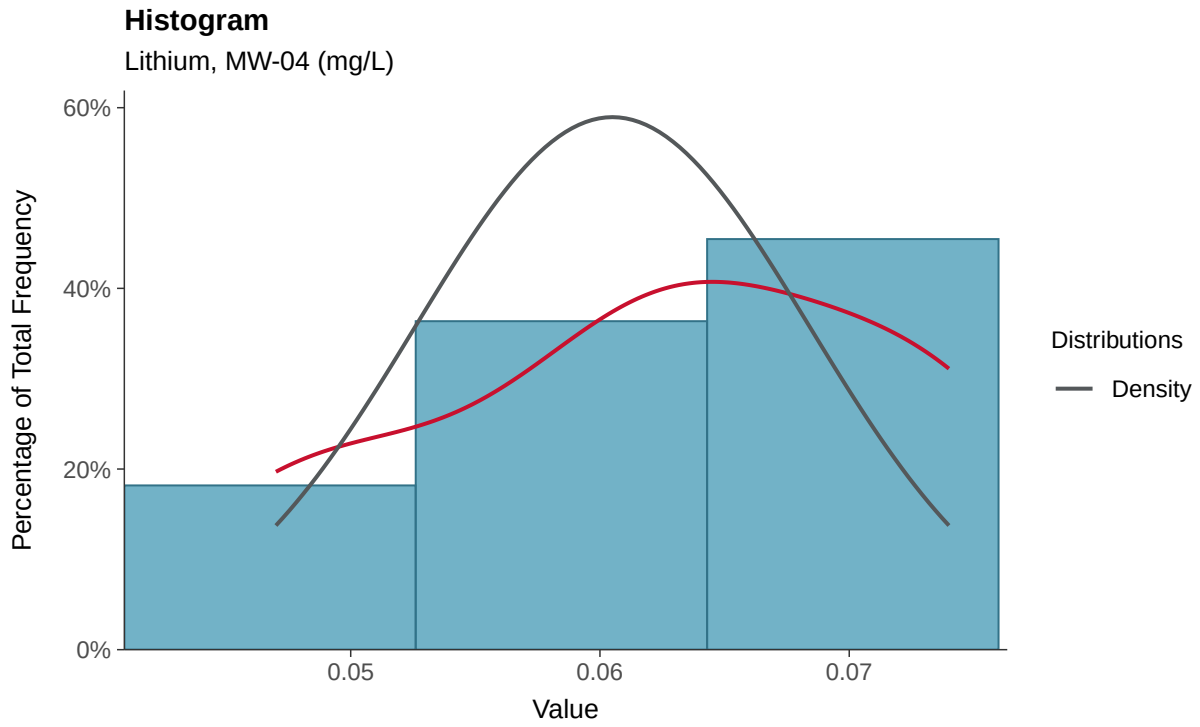
Lead, MW-04 (mg/L)



Appendix IV: Lithium, MW-04

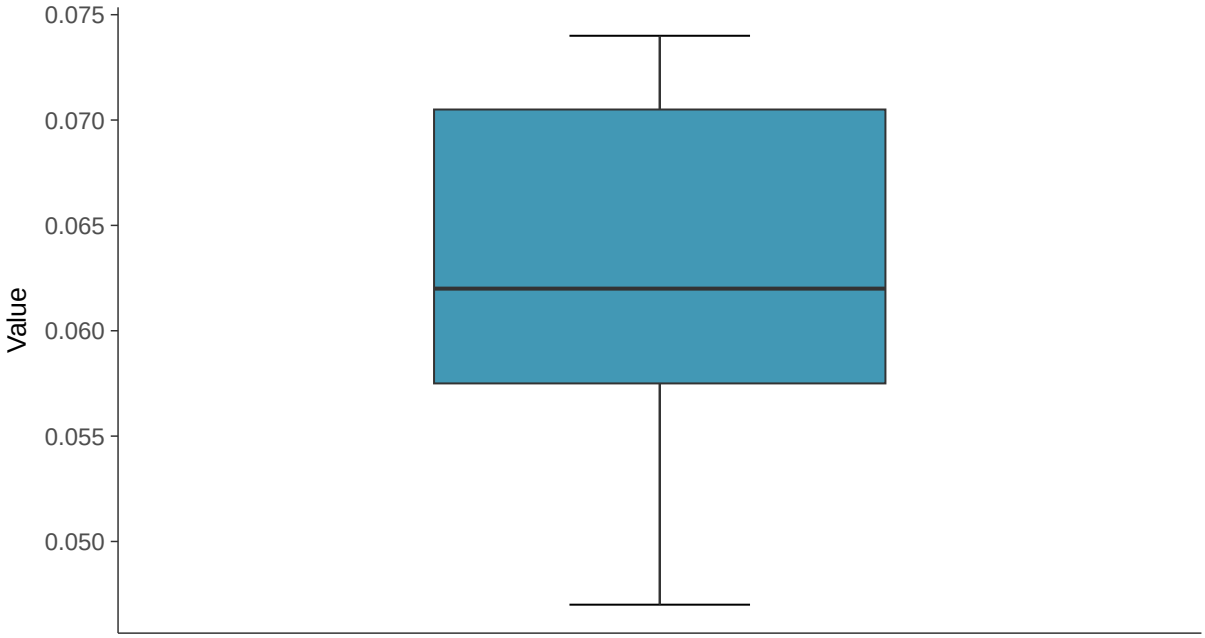
ID: 2_14_5_116





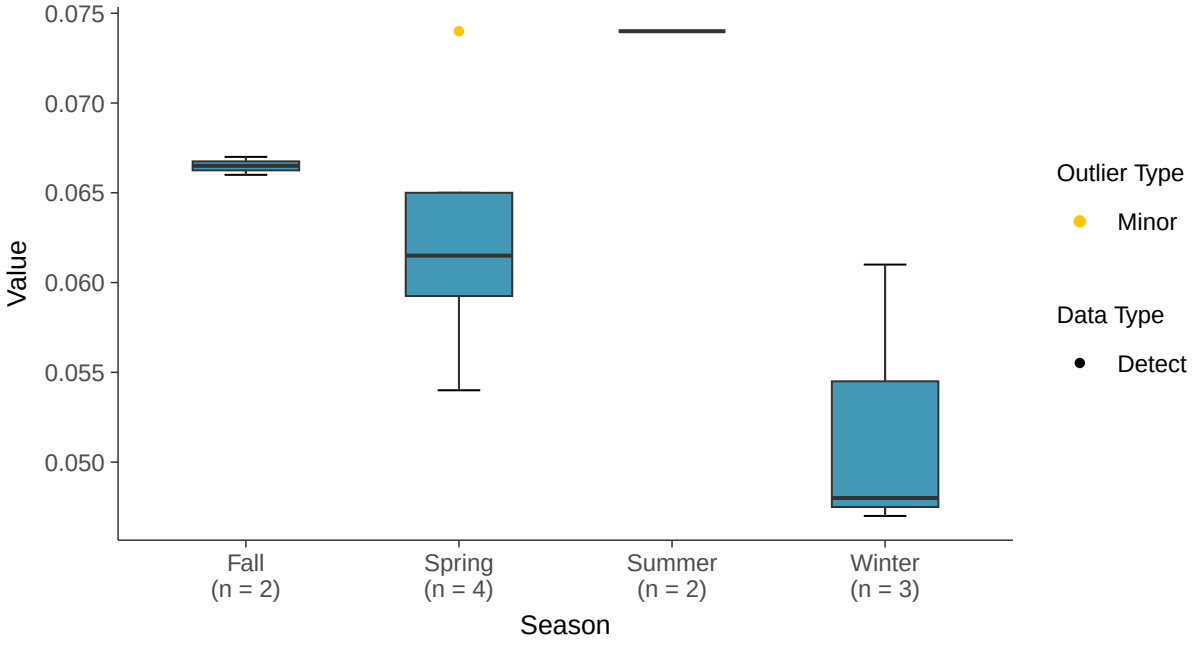
Boxplot

Lithium, MW-04 (mg/L)



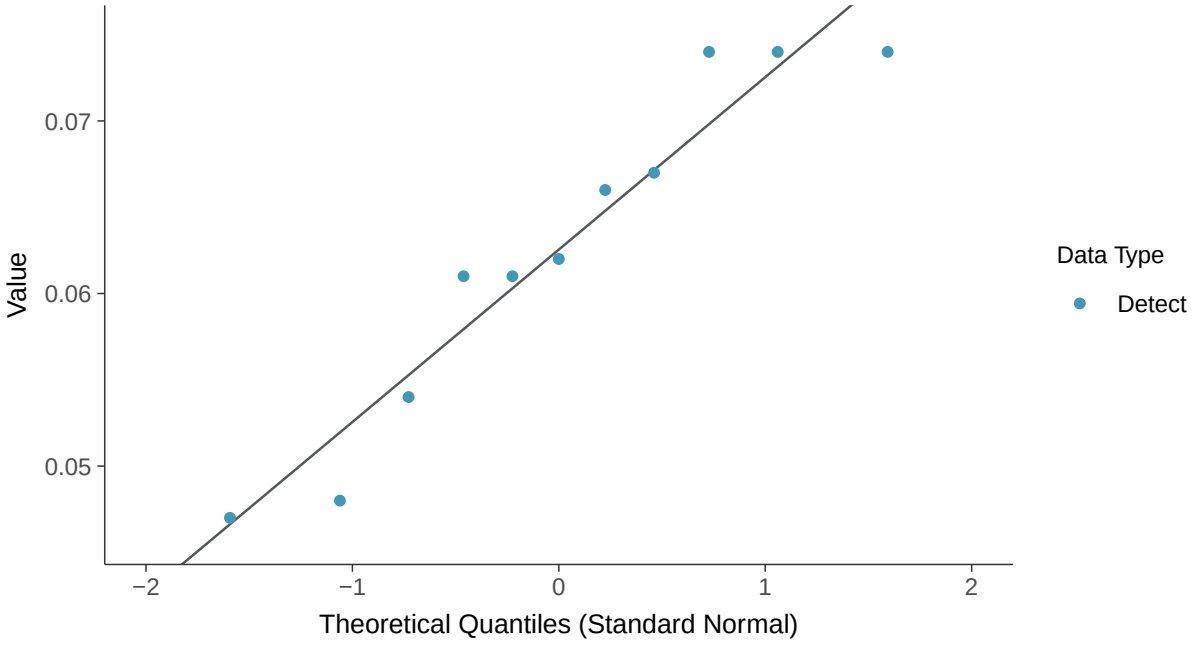
Boxplot by Season

Lithium, MW-04 (mg/L)



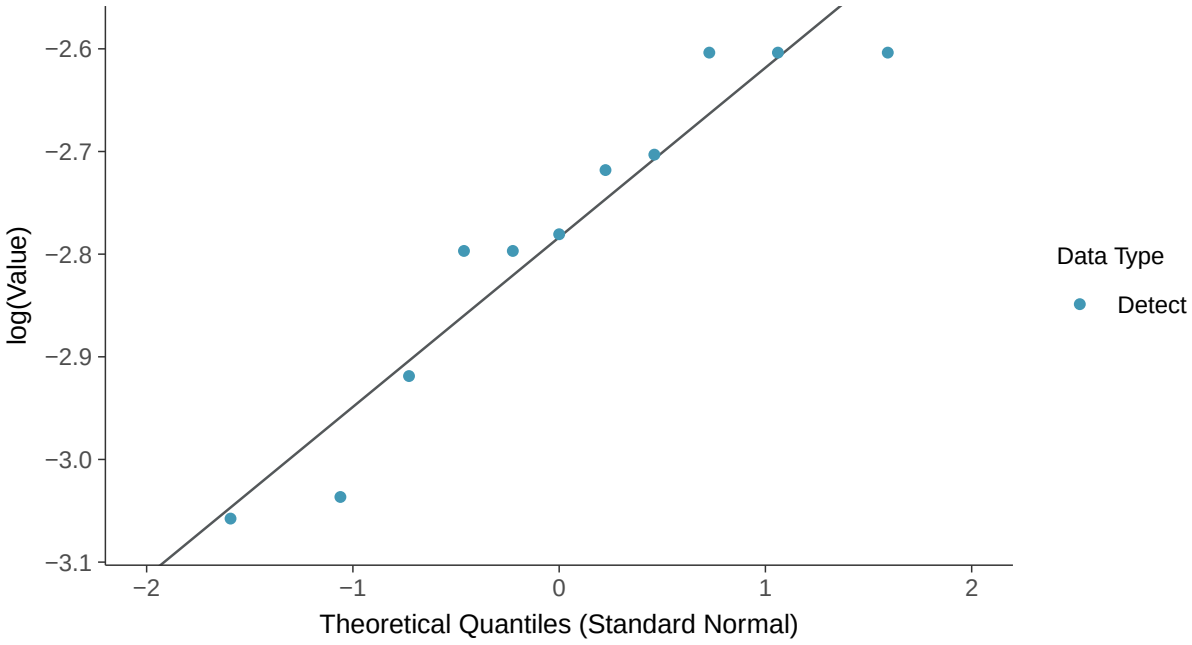
Normal Q-Q plot

Lithium, MW-04 (mg/L)



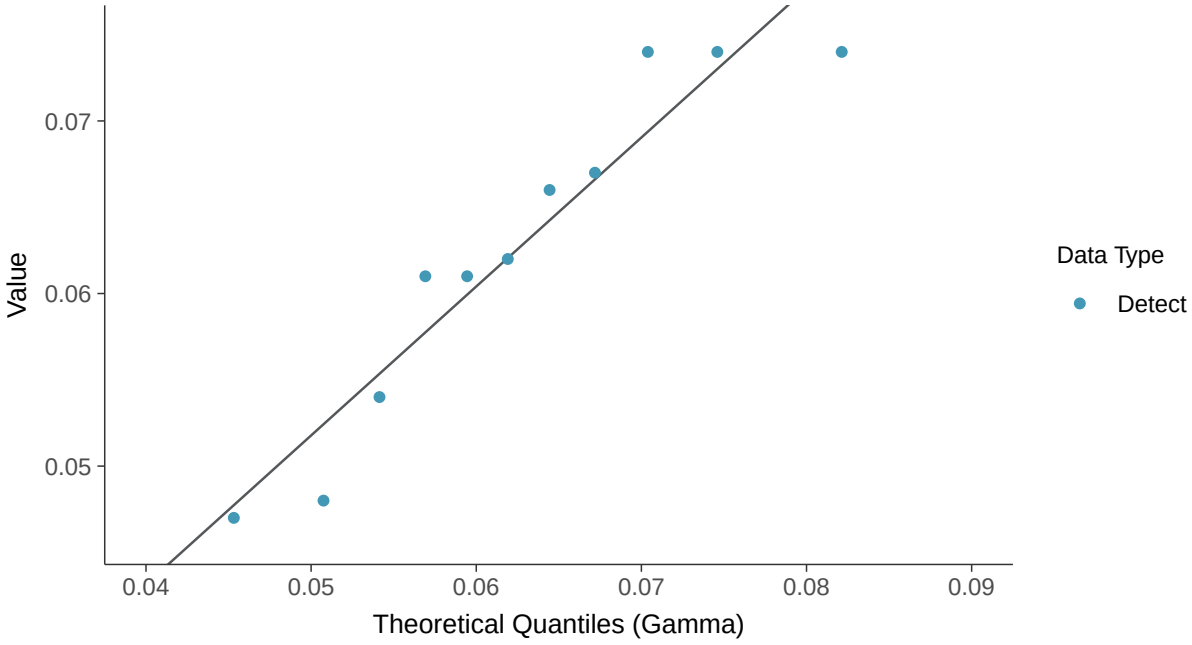
Lognormal Q-Q plot

Lithium, MW-04 (mg/L)



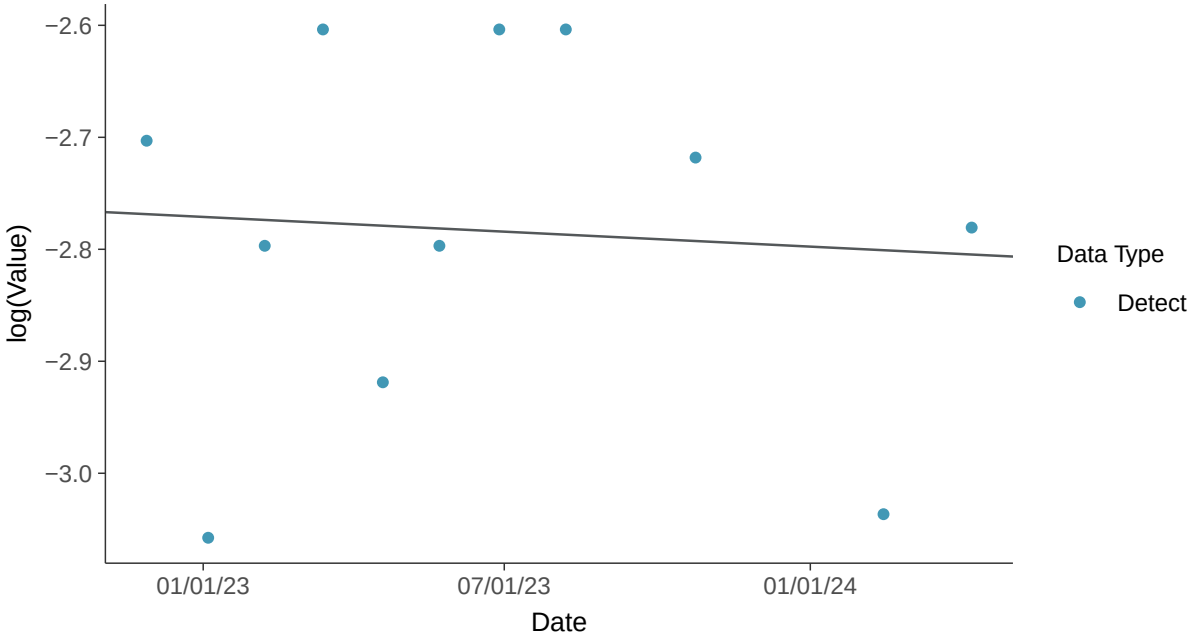
Gamma Q-Q plot

Lithium, MW-04 (mg/L)



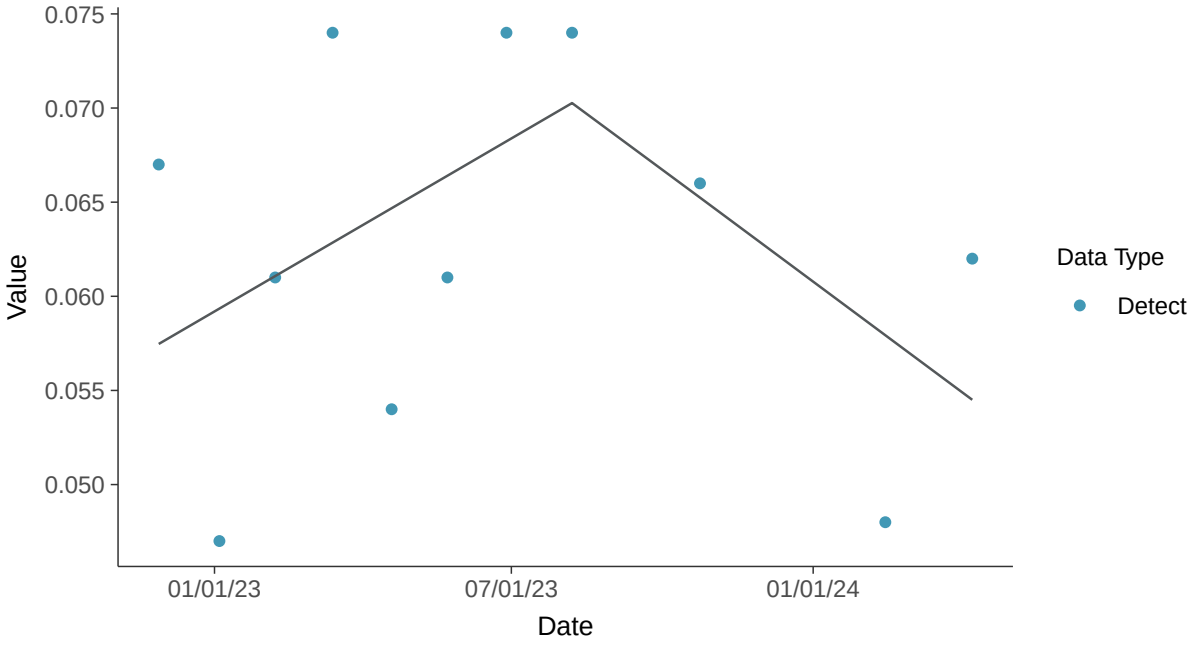
Trend Regression: Lognormal MLE

Lithium, MW-04 (mg/L)



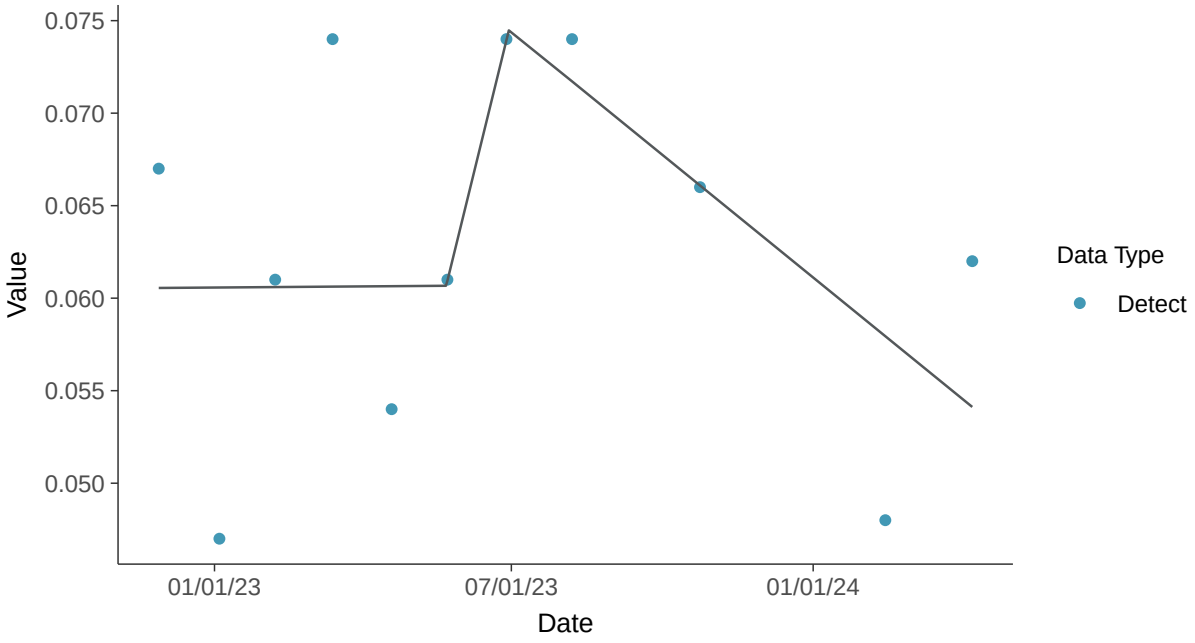
Trend Regression: Piecewise Linear-Linear

Lithium, MW-04 (mg/L)



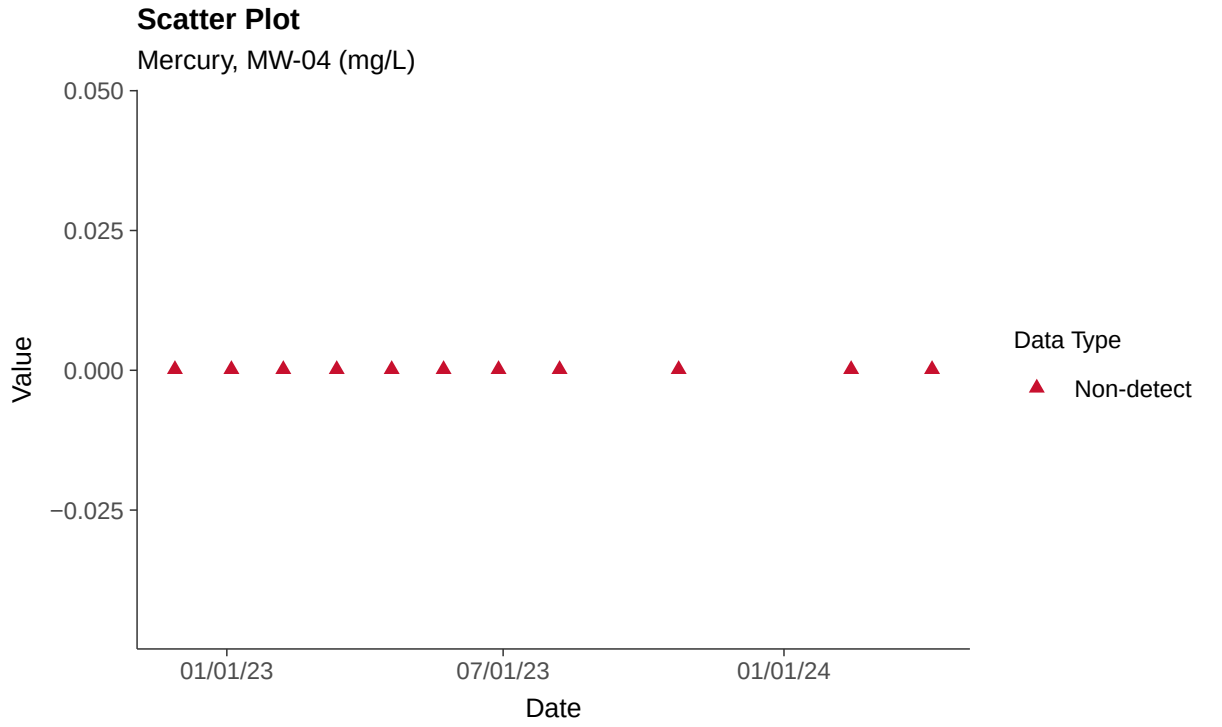
Trend Regression: Piecewise Linear-Linear-Linear

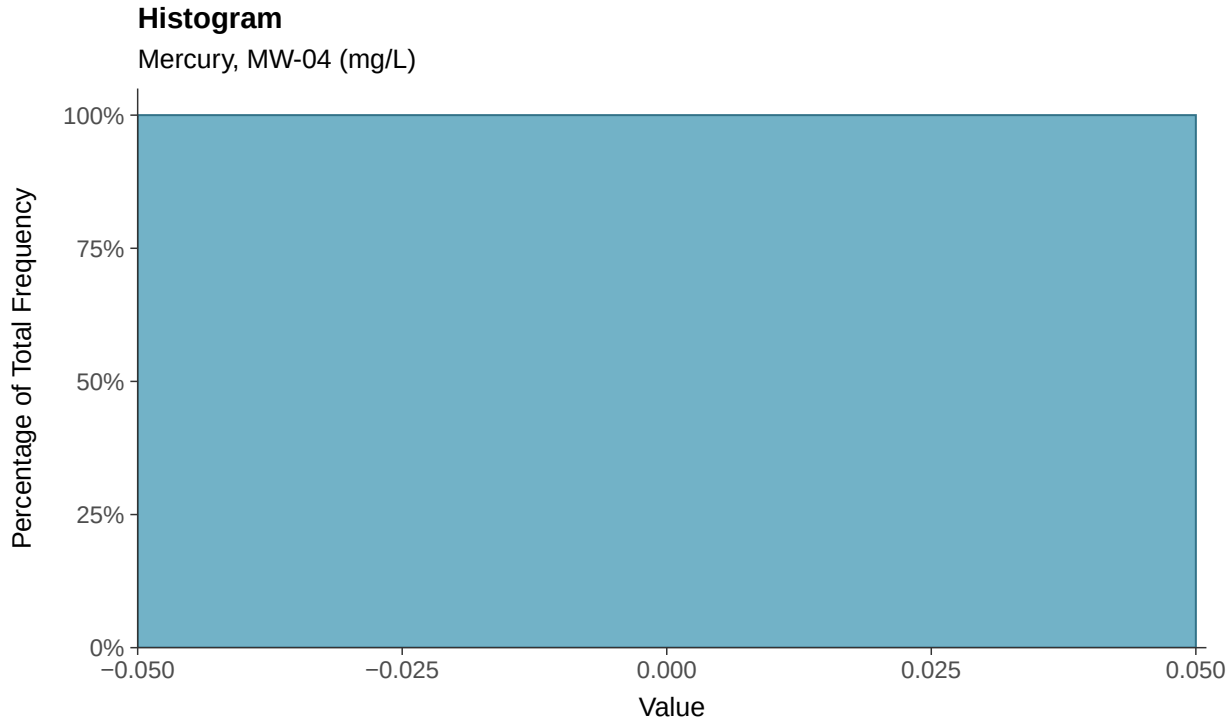
Lithium, MW-04 (mg/L)



Appendix IV: Mercury, MW-04

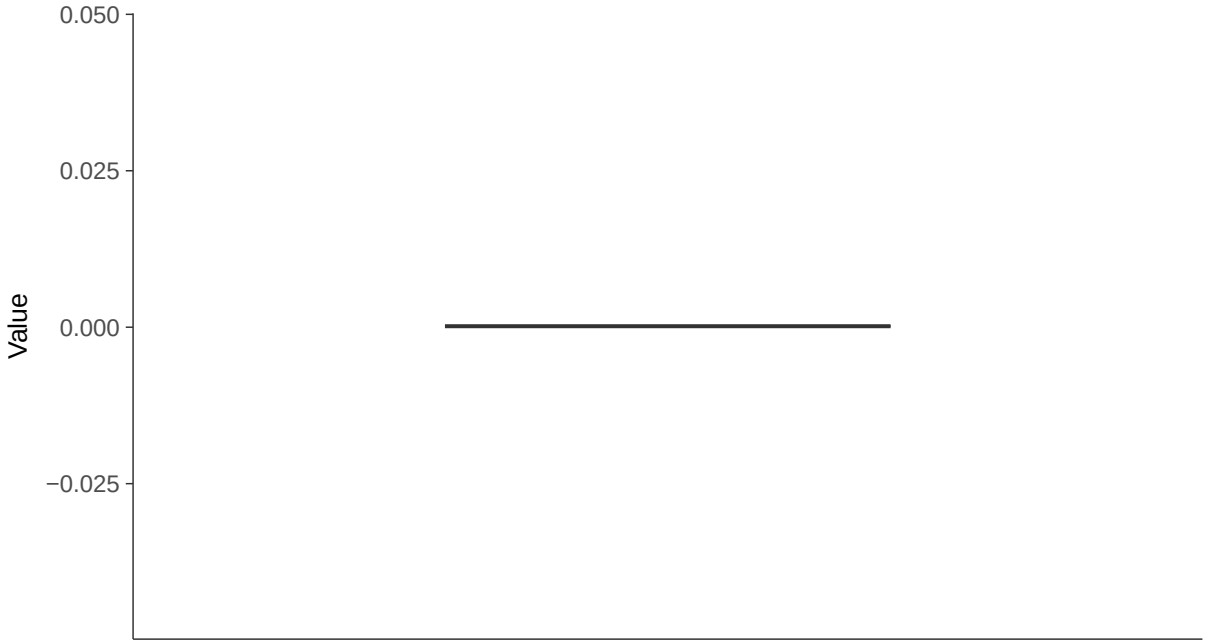
ID: 2_14_5_117





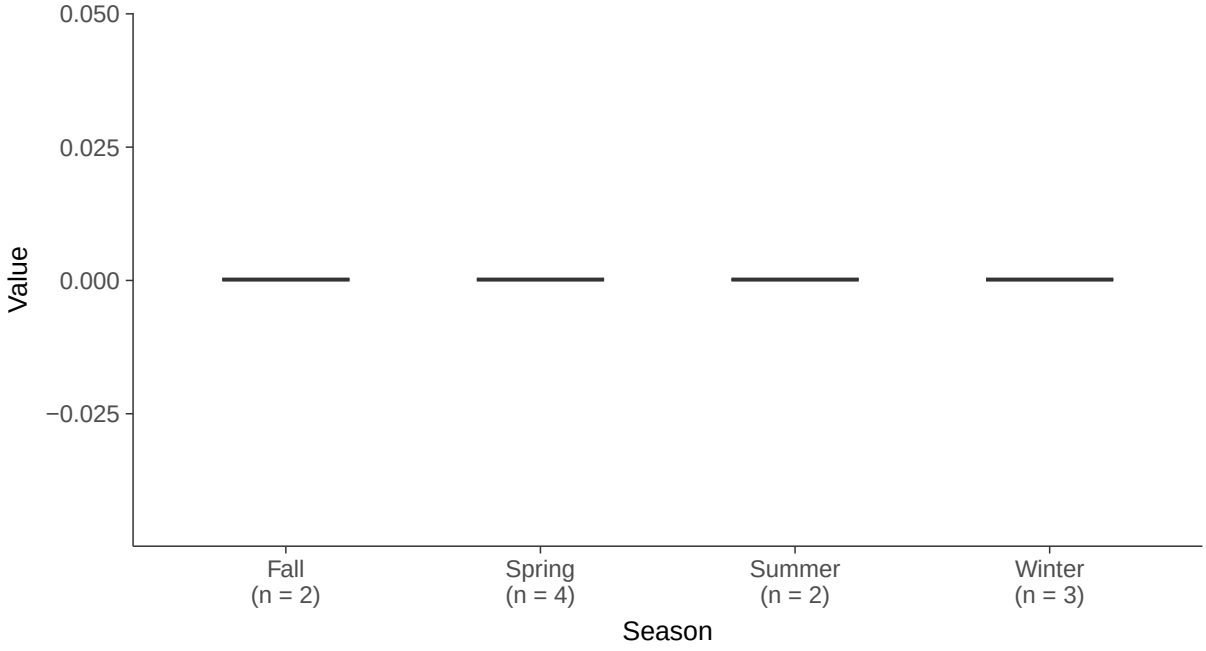
Boxplot

Mercury, MW-04 (mg/L)



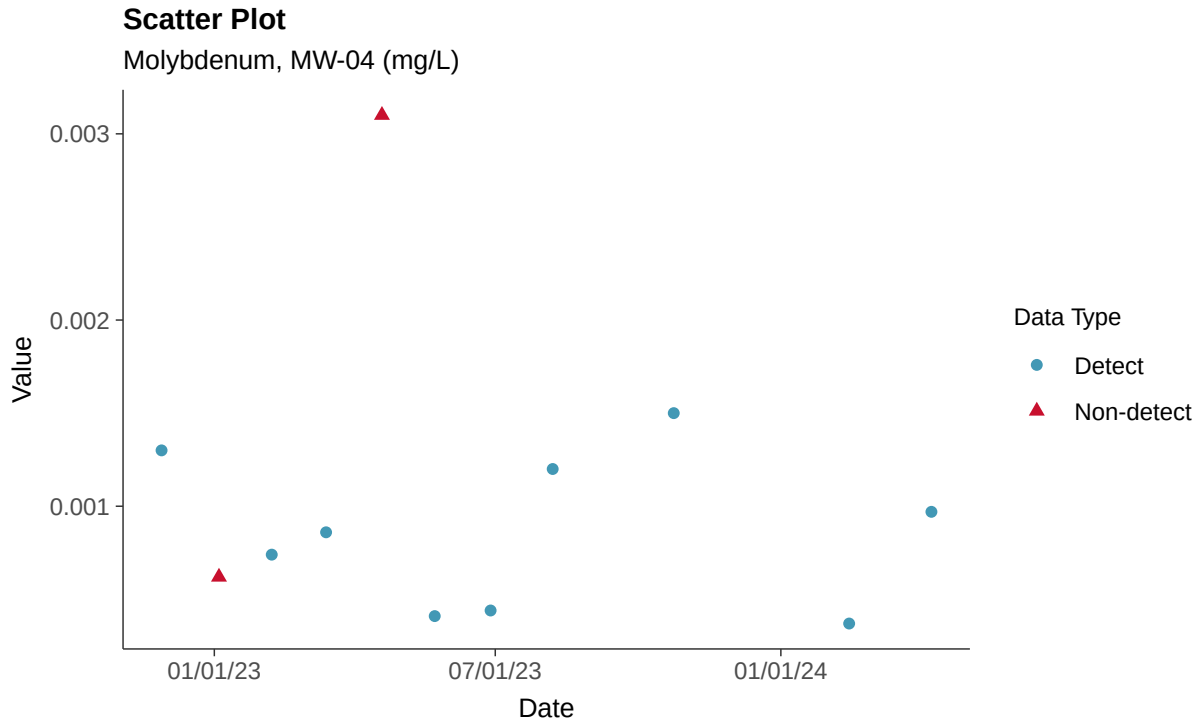
Boxplot by Season

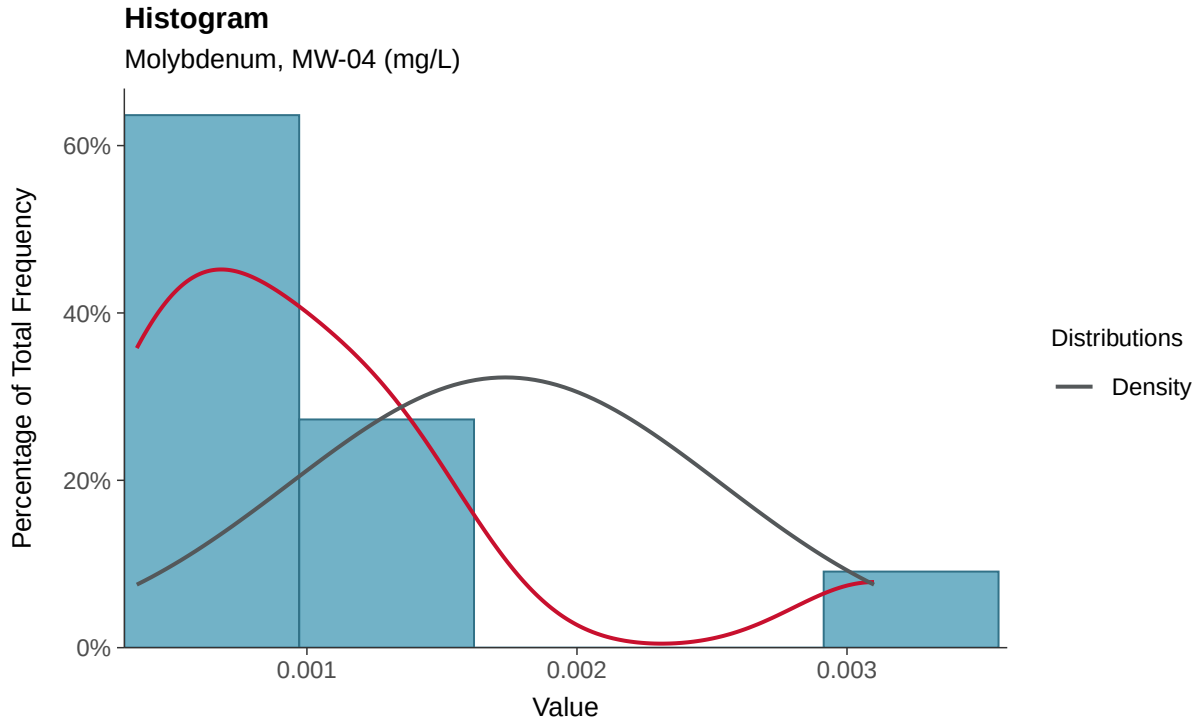
Mercury, MW-04 (mg/L)



Appendix IV: Molybdenum, MW-04

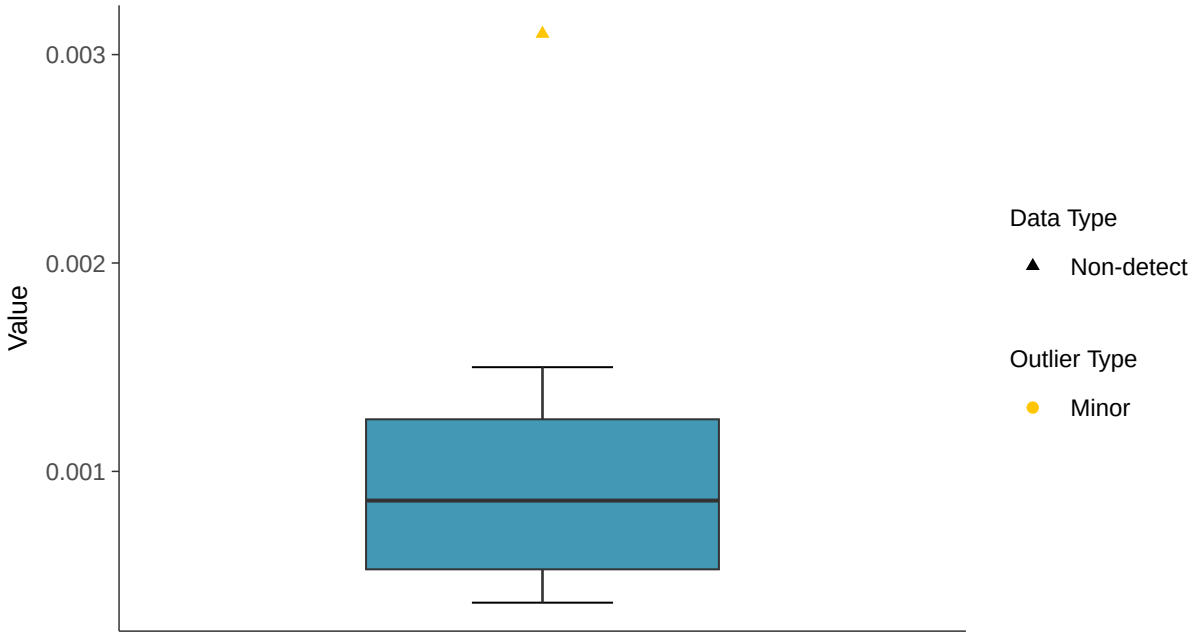
ID: 2_14_5_118





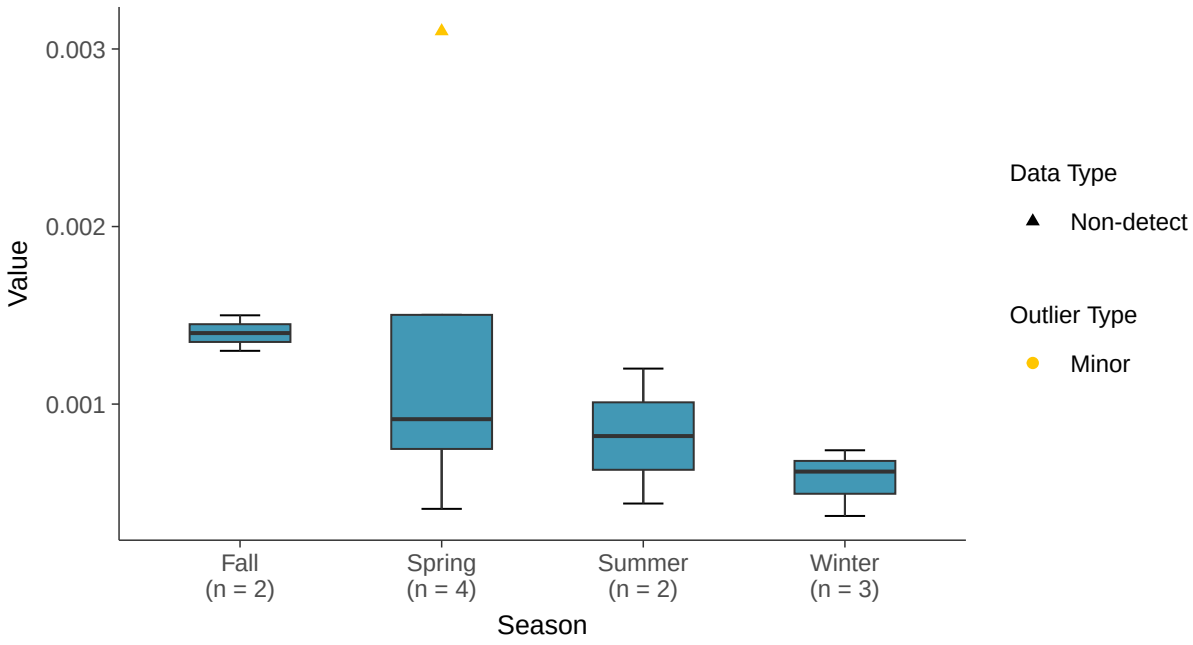
Boxplot

Molybdenum, MW-04 (mg/L)



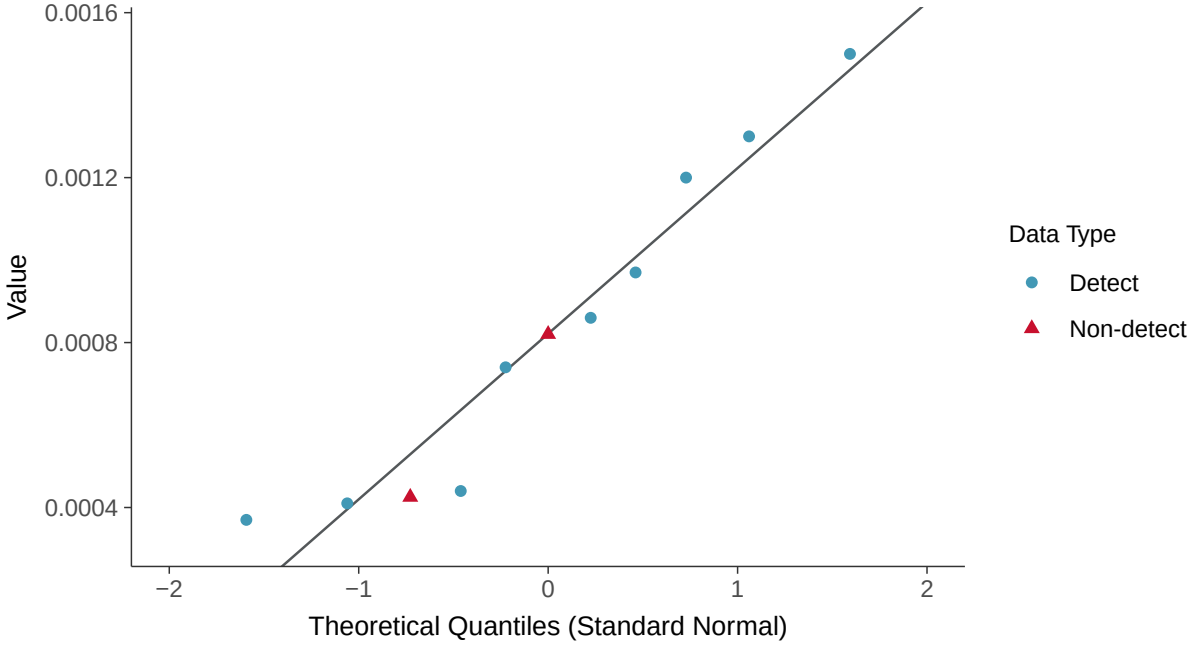
Boxplot by Season

Molybdenum, MW-04 (mg/L)



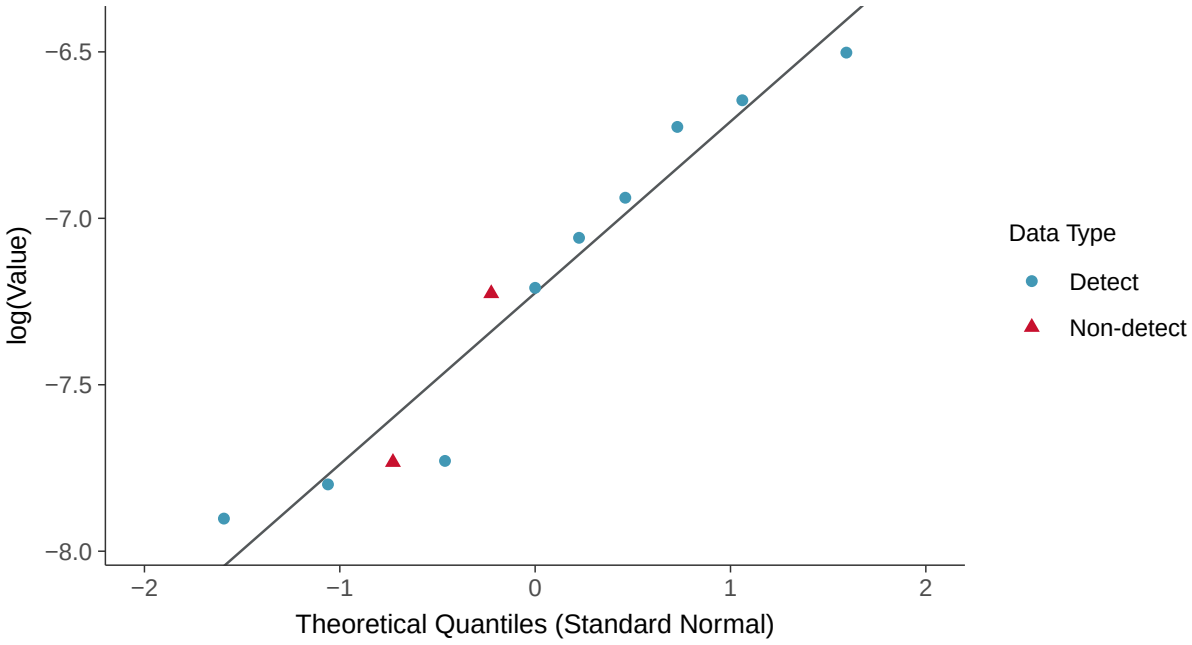
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-04 (mg/L)



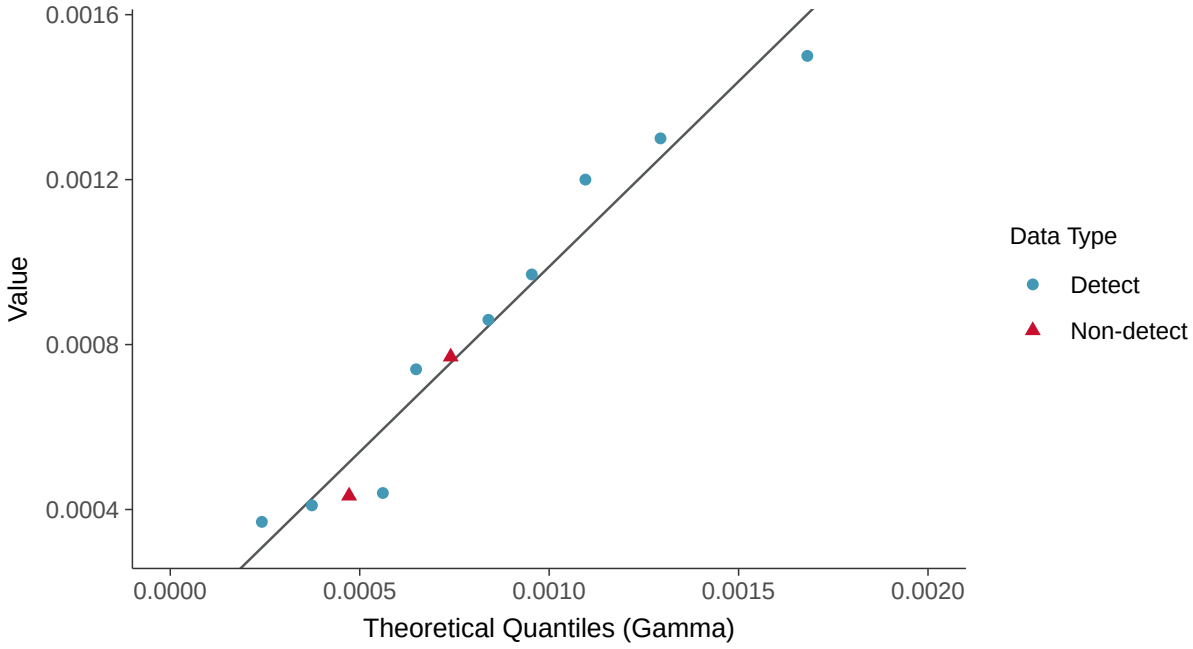
Lognormal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-04 (mg/L)



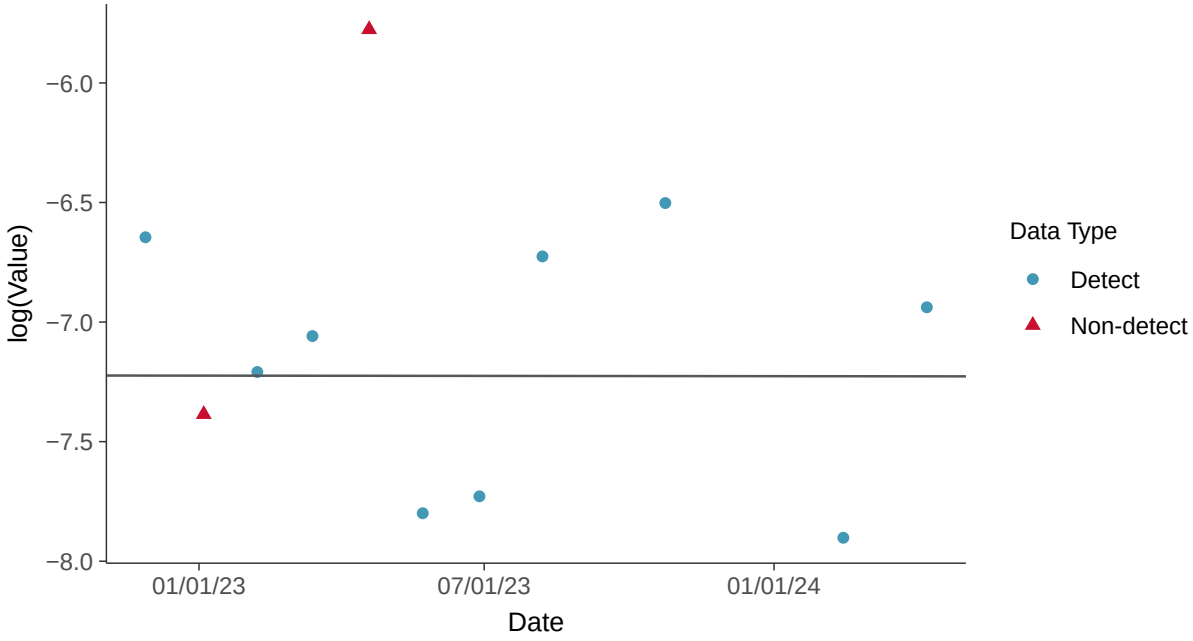
Gamma Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-04 (mg/L)



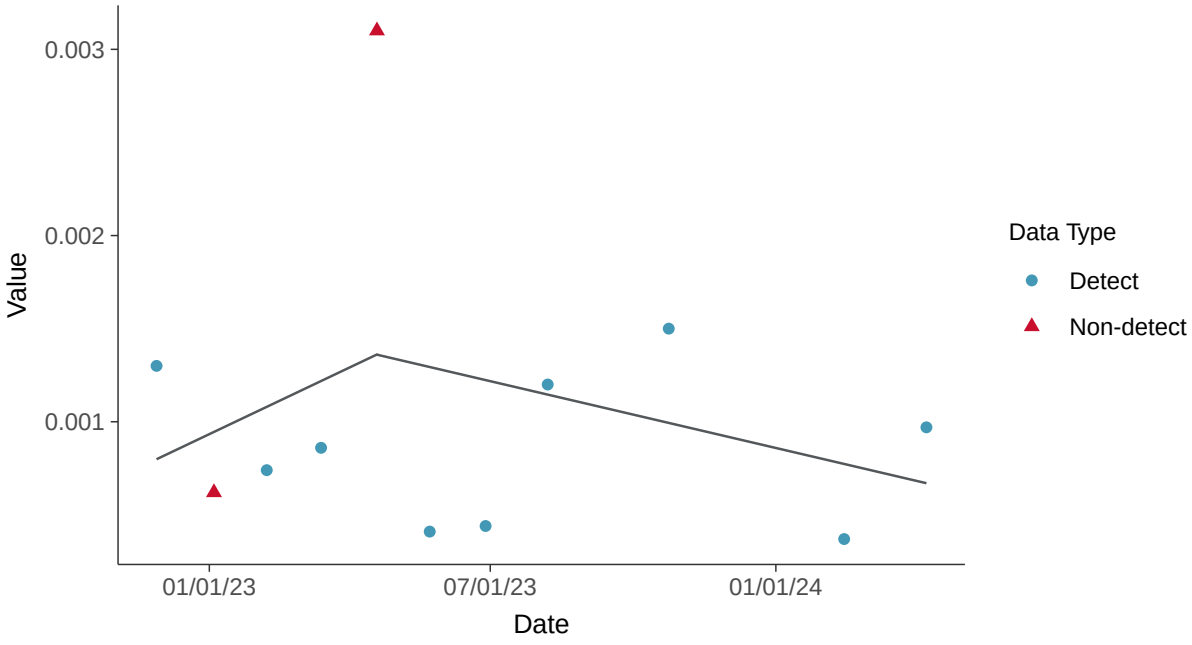
Trend Regression: Lognormal MLE

Molybdenum, MW-04 (mg/L)



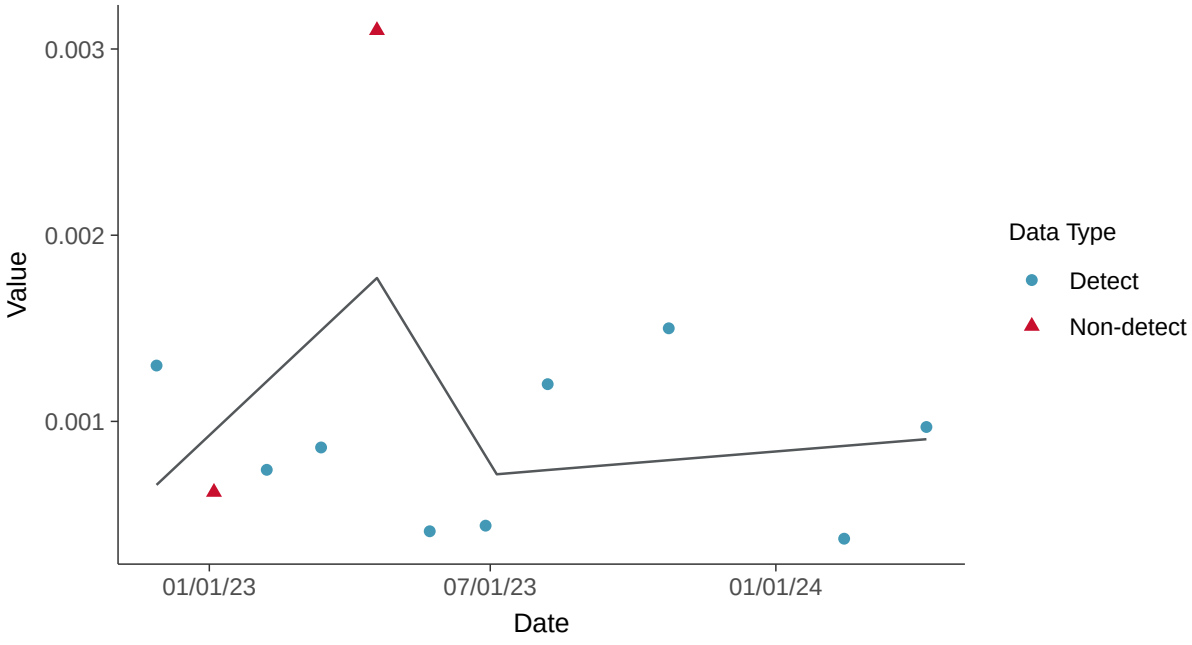
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-04 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-04 (mg/L)

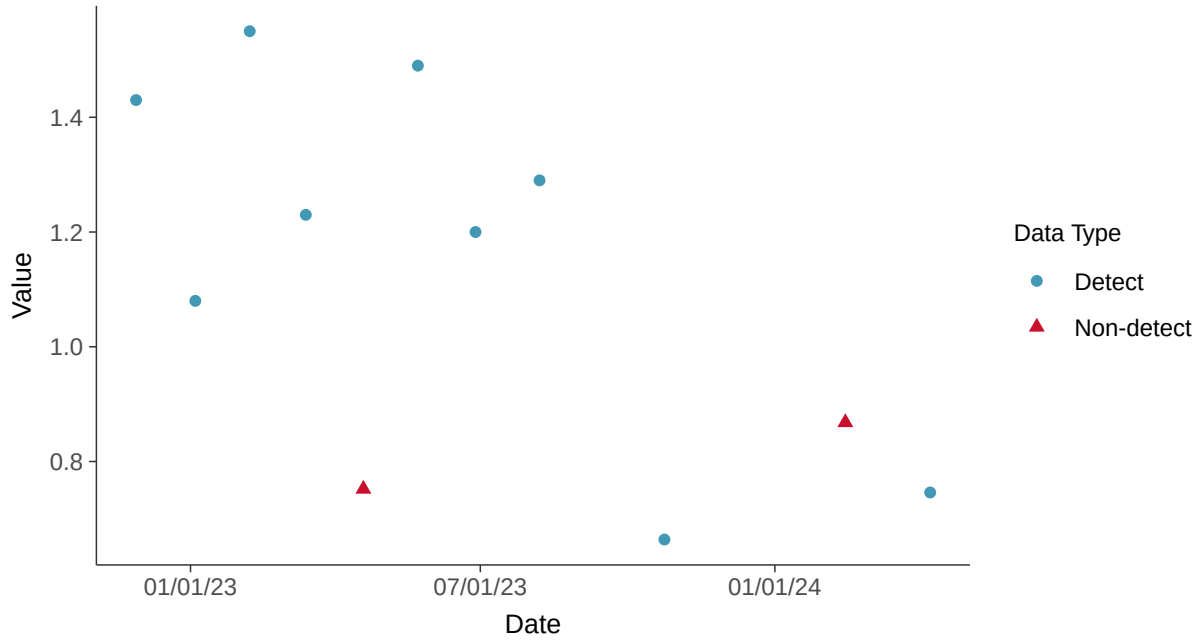


Appendix IV: Radium 226 and 228, MW-04

ID: 2_14_5_121

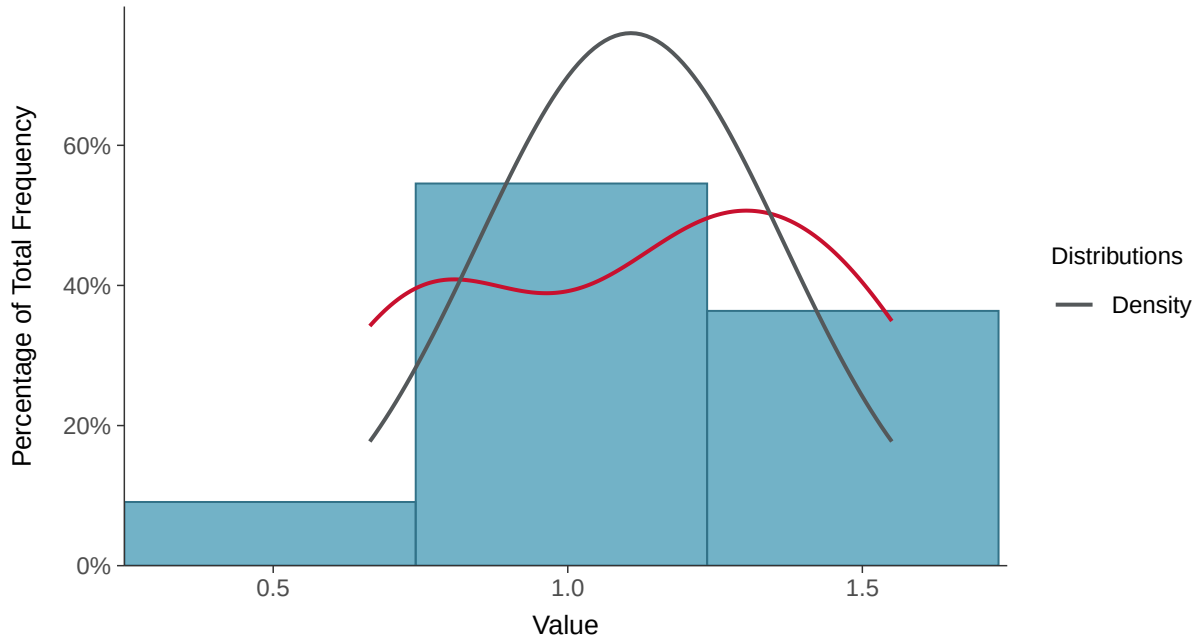
Scatter Plot

Radium 226 and 228, MW-04 (pCi/L)



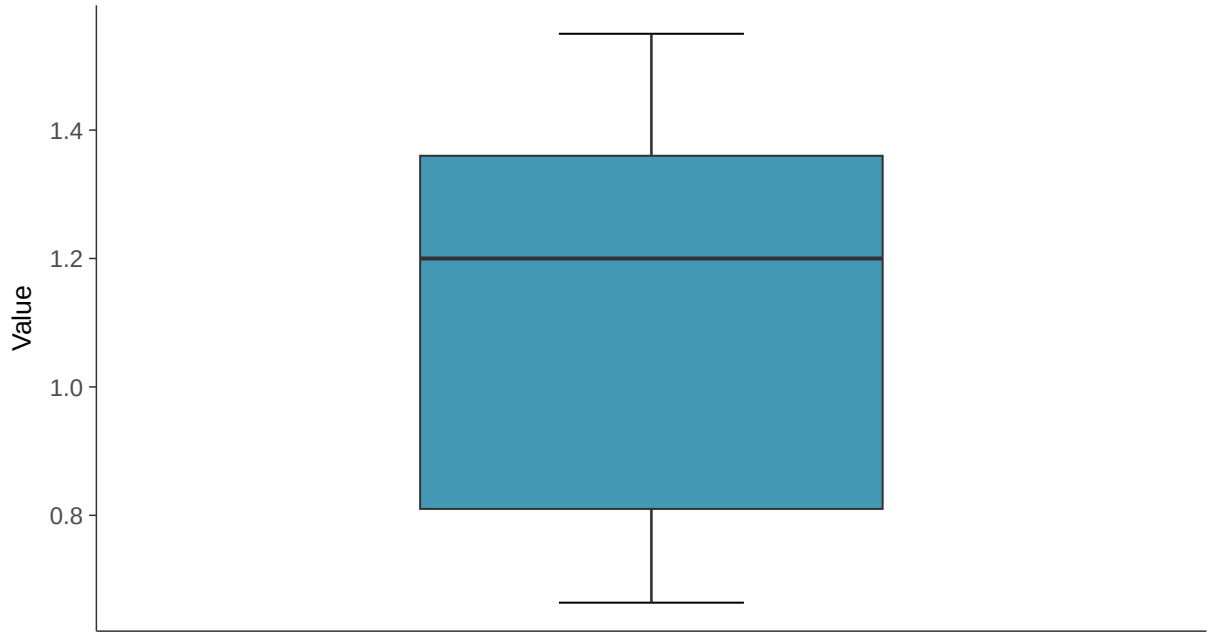
Histogram

Radium 226 and 228, MW-04 (pCi/L)



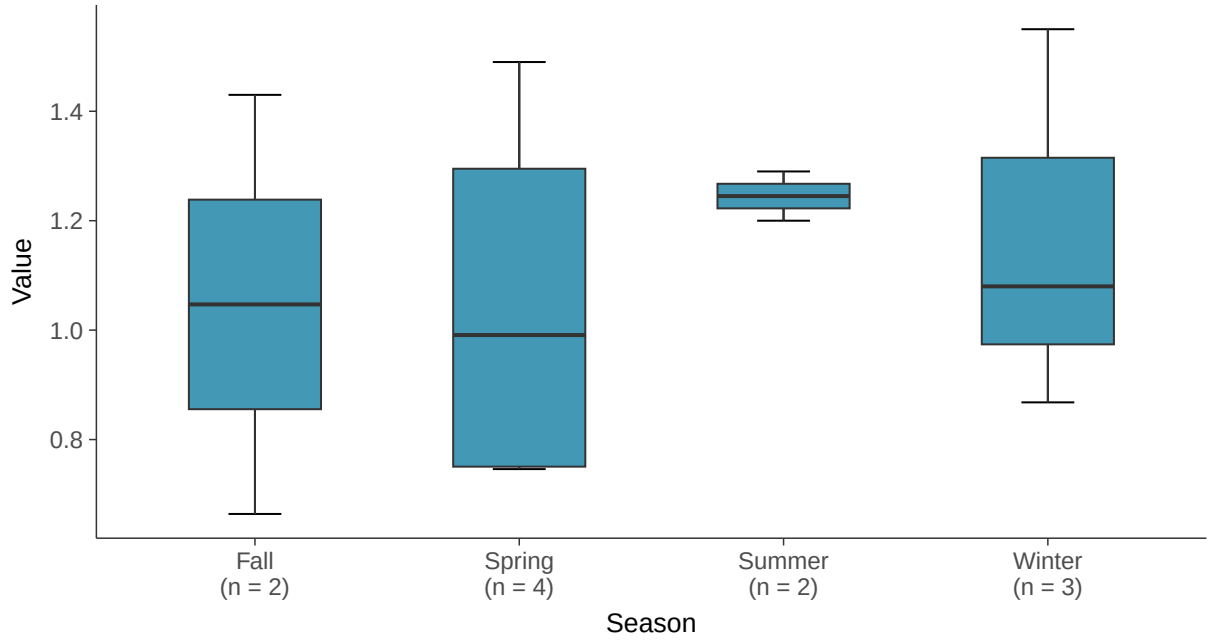
Boxplot

Radium 226 and 228, MW-04 (pCi/L)



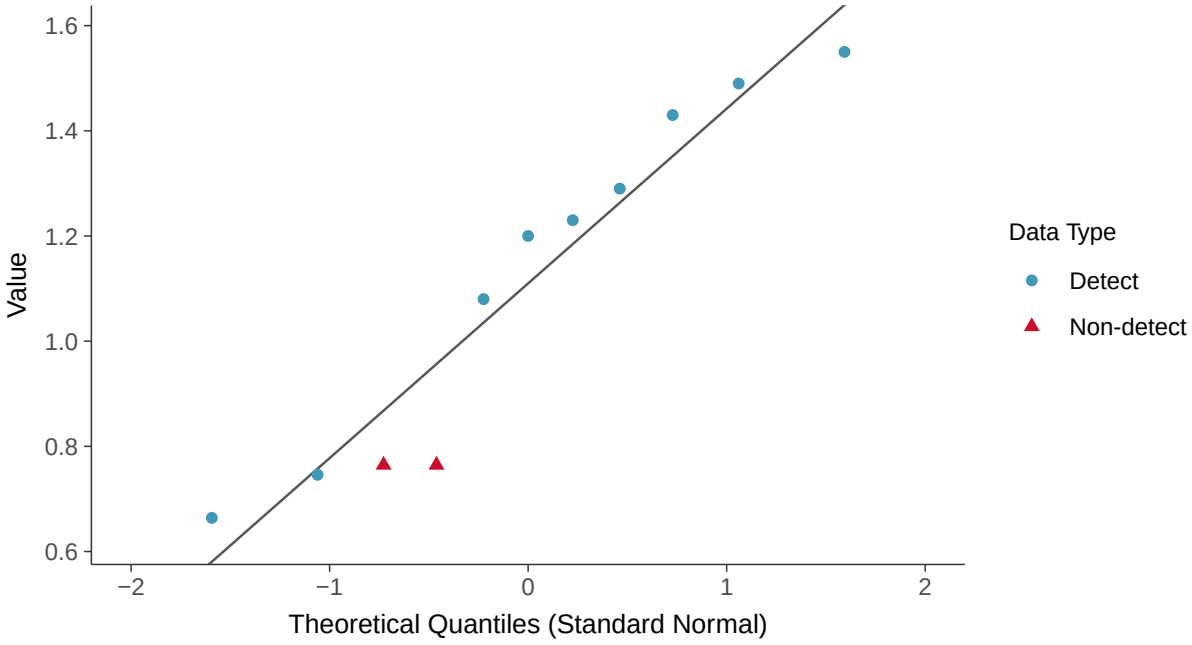
Boxplot by Season

Radium 226 and 228, MW-04 (pCi/L)



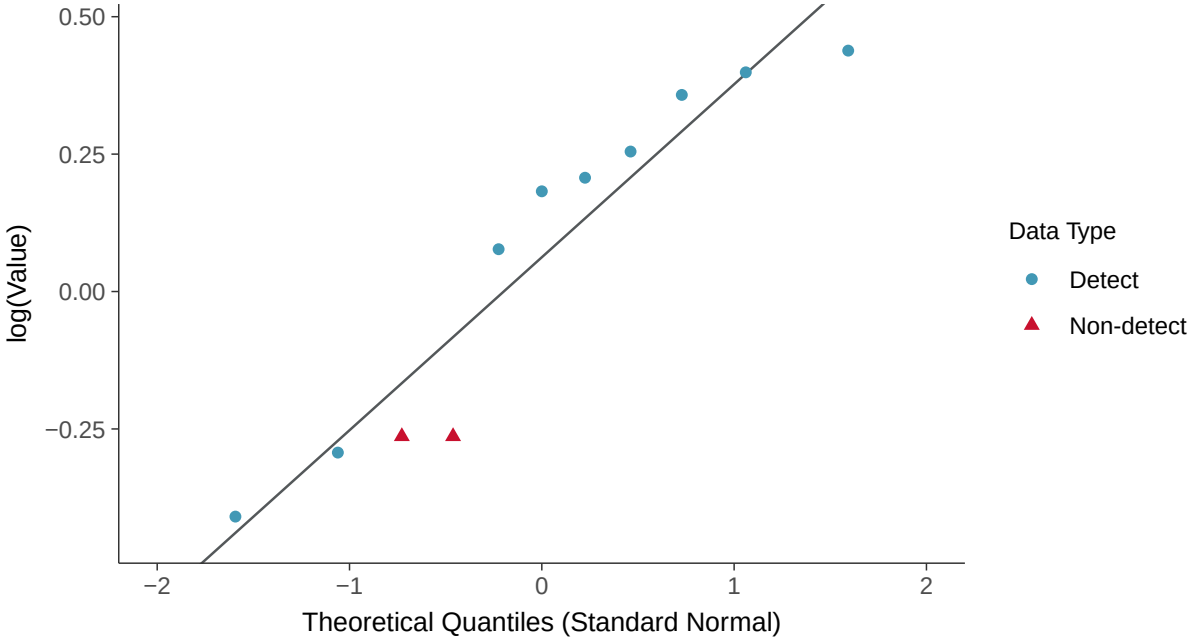
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-04 (pCi/L)



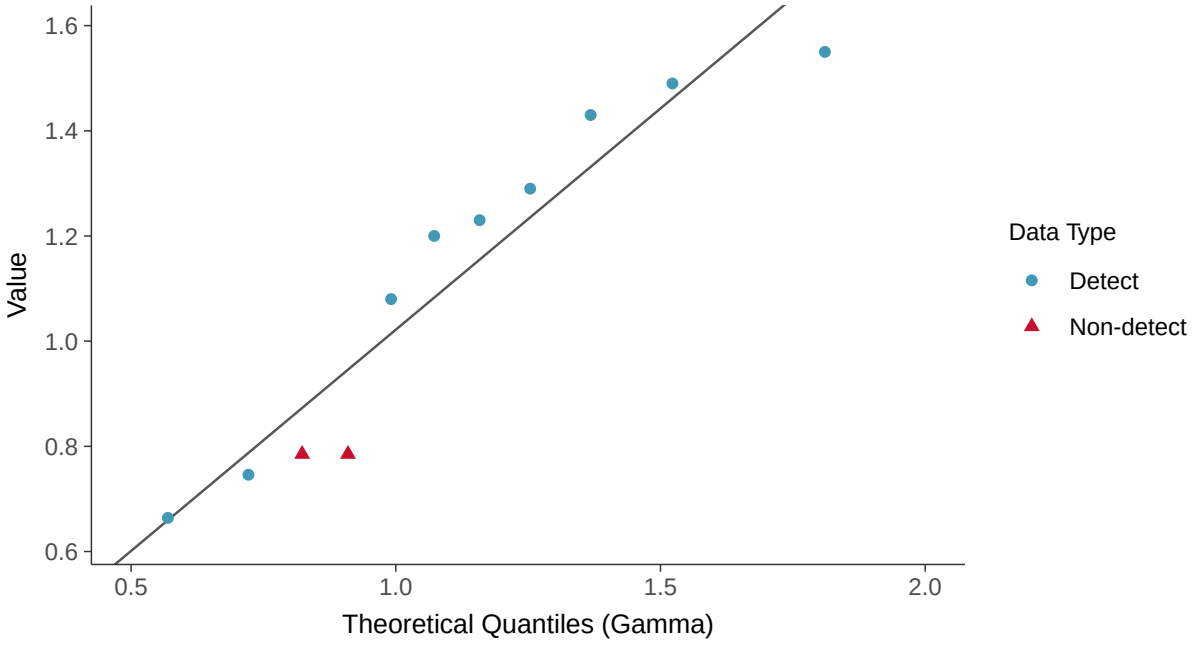
Lognormal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-04 (pCi/L)



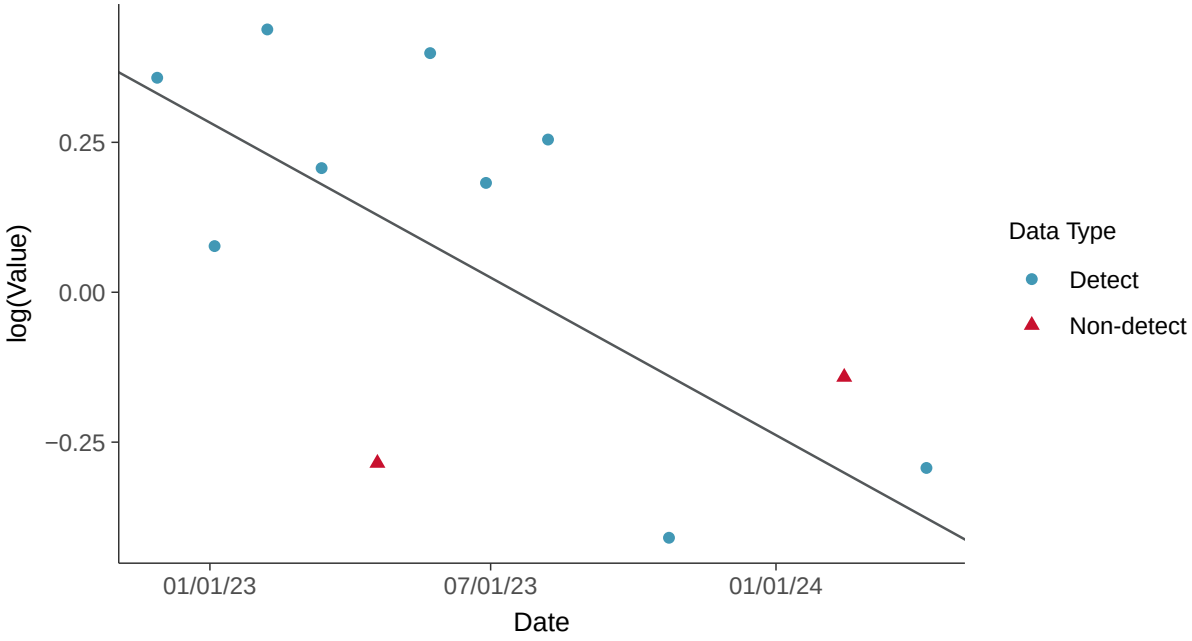
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-04 (pCi/L)



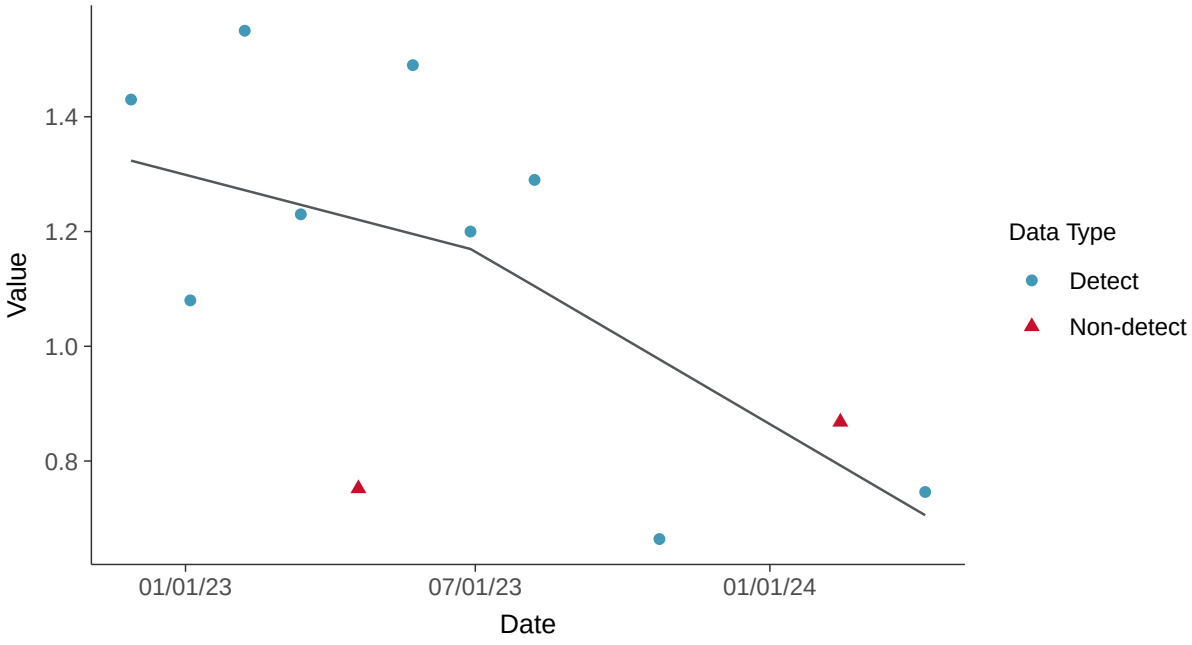
Trend Regression: Lognormal MLE

Radium 226 and 228, MW-04 (pCi/L)



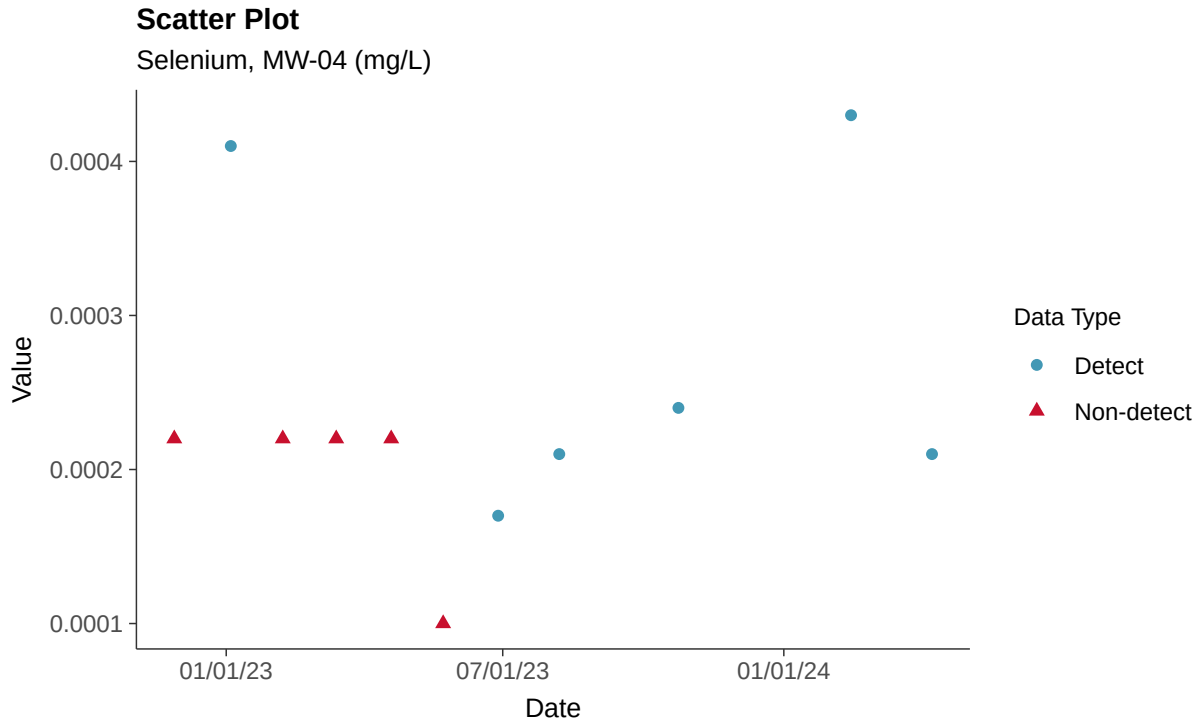
Trend Regression: Piecewise Linear-Linear

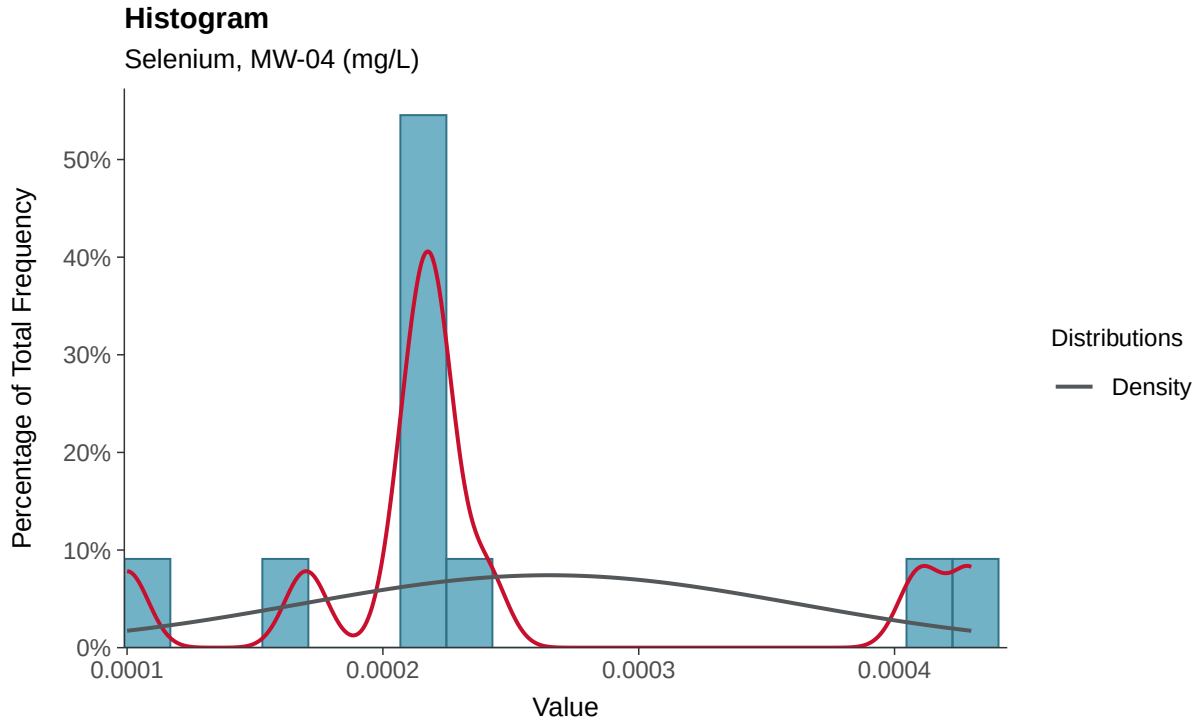
Radium 226 and 228, MW-04 (pCi/L)



Appendix IV: Selenium, MW-04

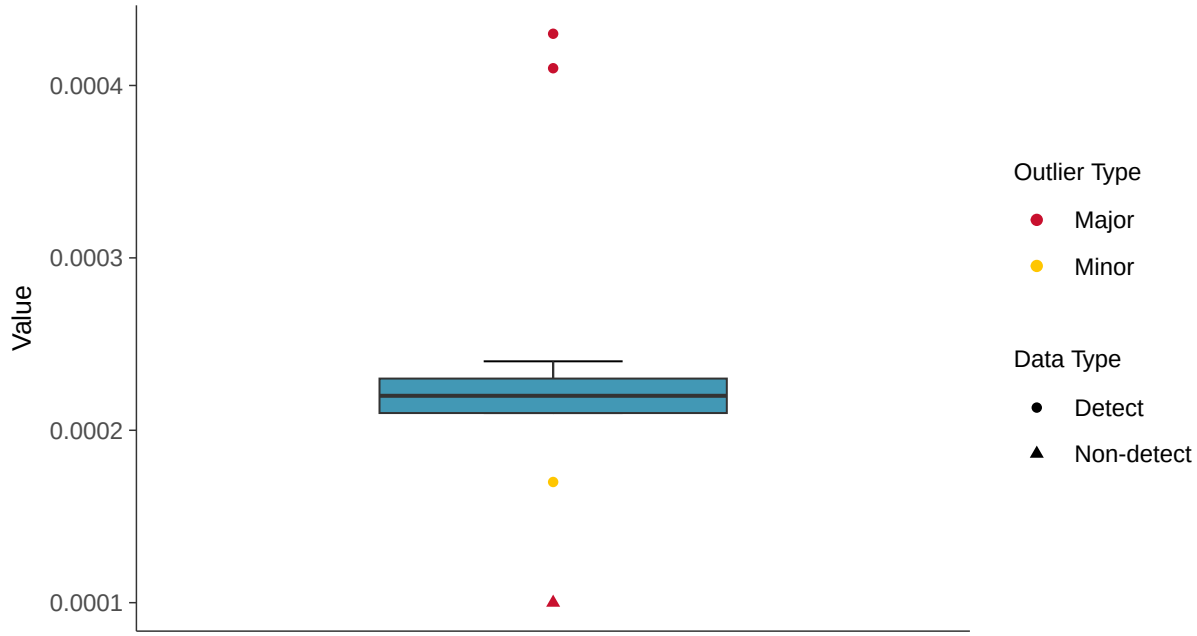
ID: 2_14_5_122





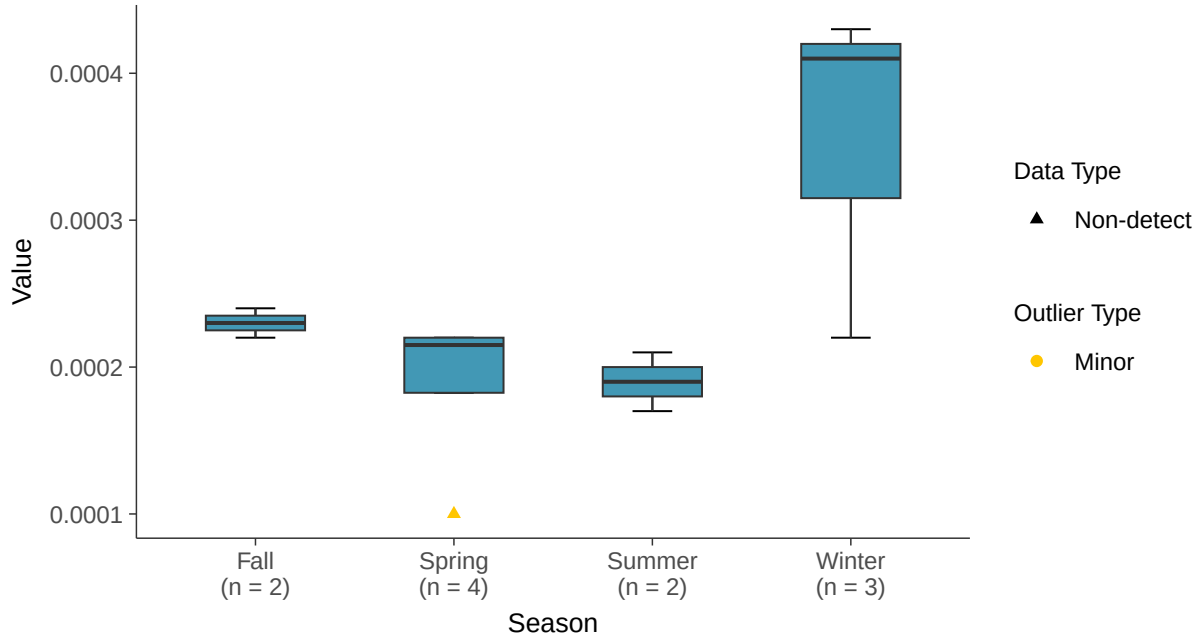
Boxplot

Selenium, MW-04 (mg/L)



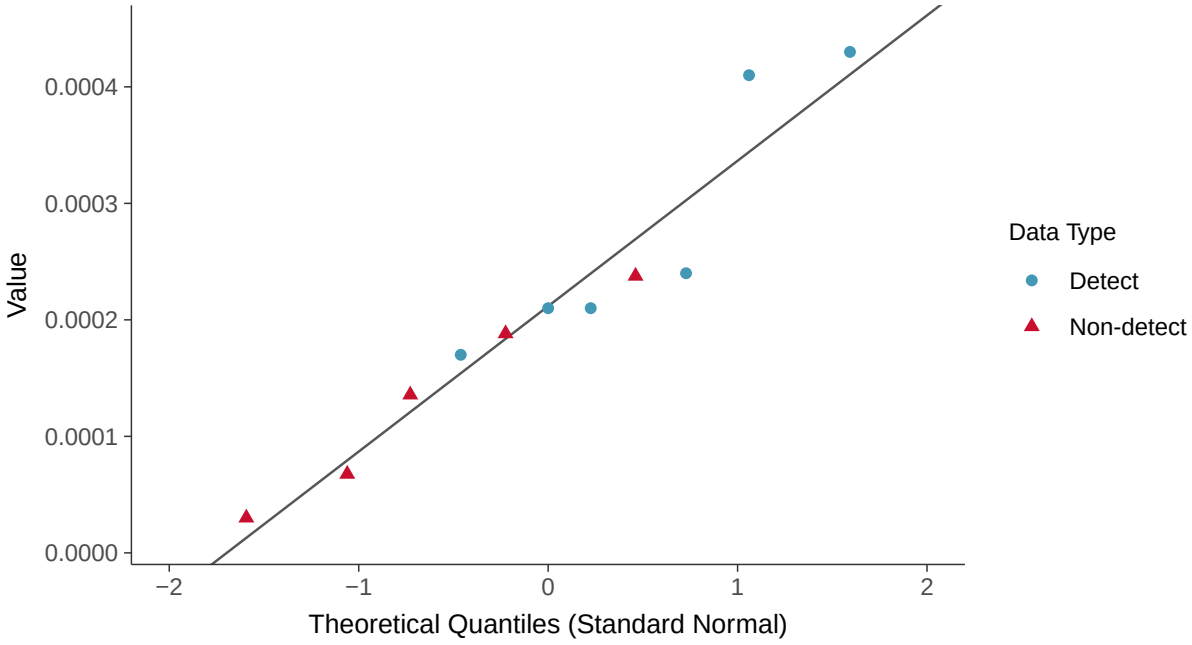
Boxplot by Season

Selenium, MW-04 (mg/L)



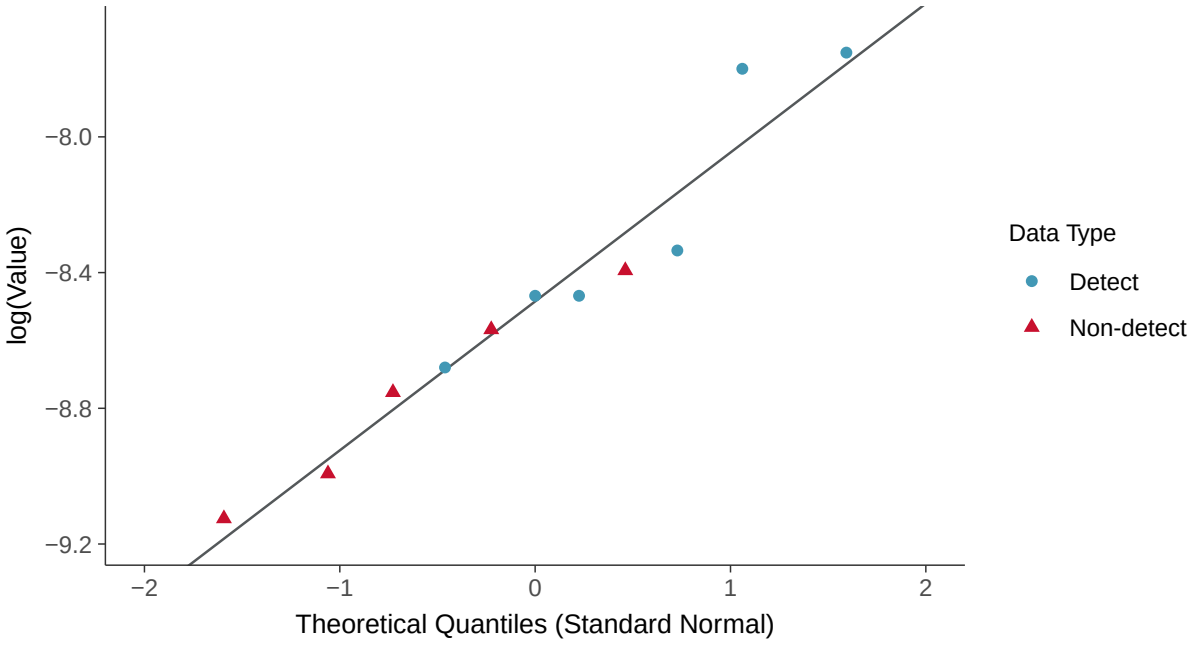
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-04 (mg/L)



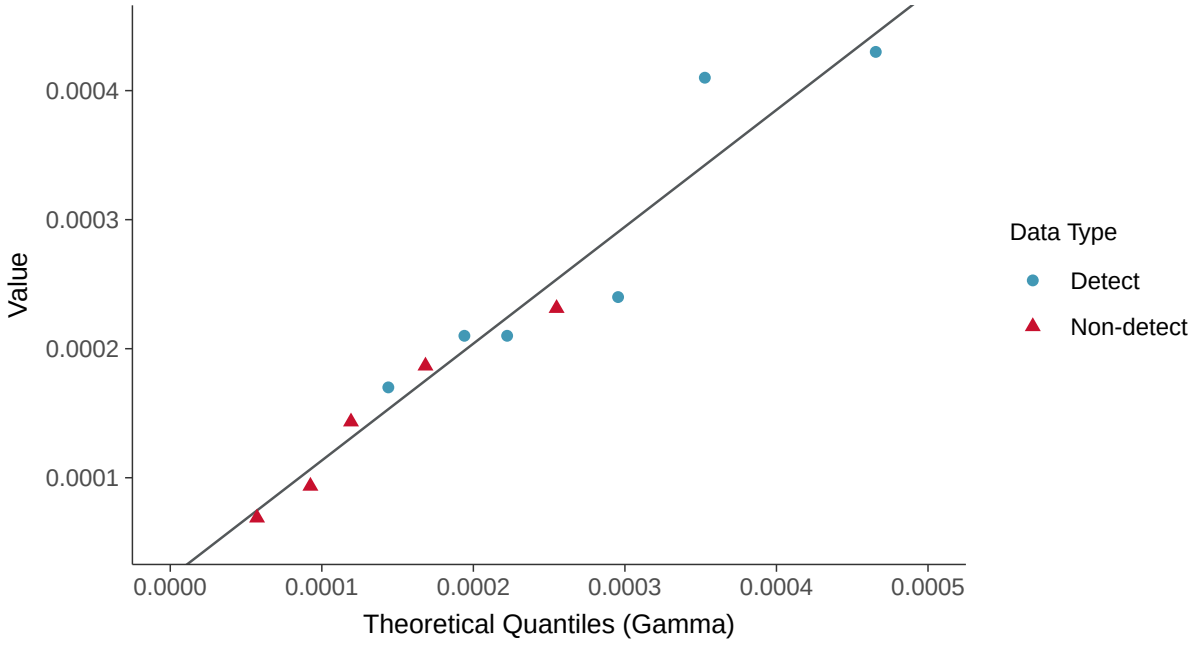
Lognormal Q-Q plot using ROS Imputed Estimates

Selenium, MW-04 (mg/L)



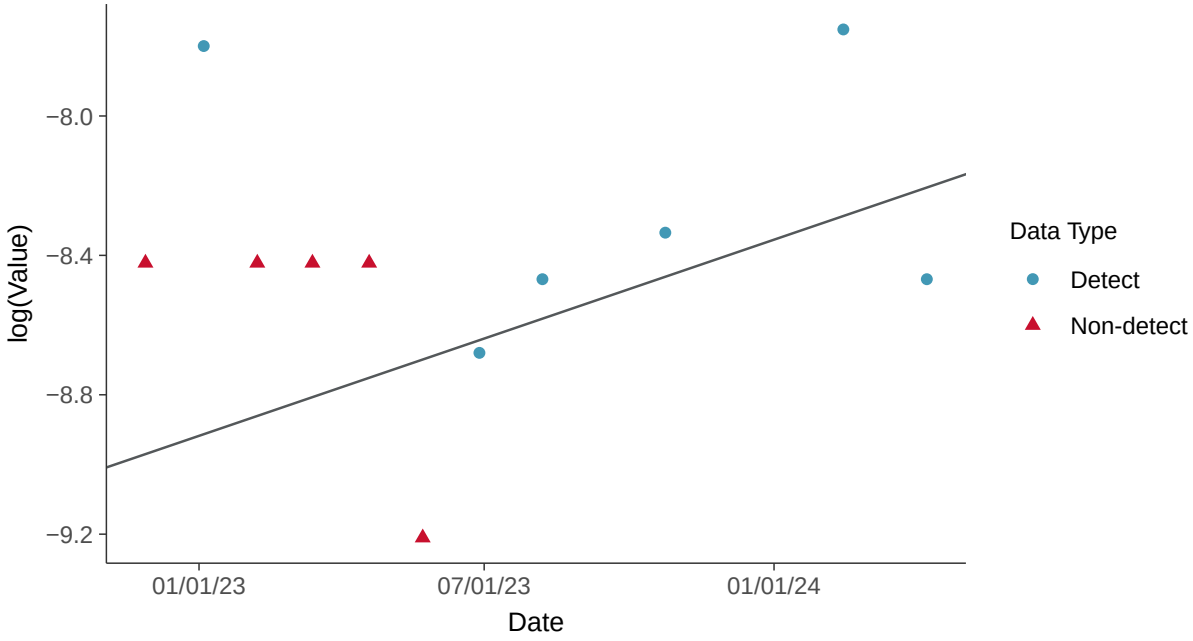
Gamma Q-Q plot using ROS Imputed Estimates

Selenium, MW-04 (mg/L)



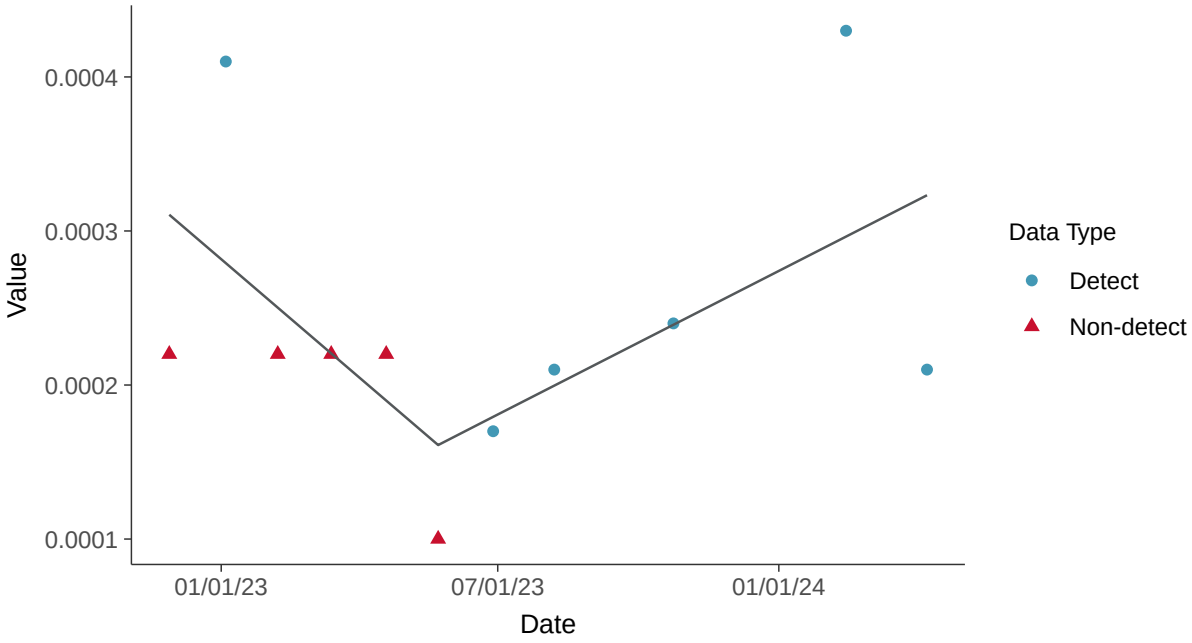
Trend Regression: Lognormal MLE

Selenium, MW-04 (mg/L)



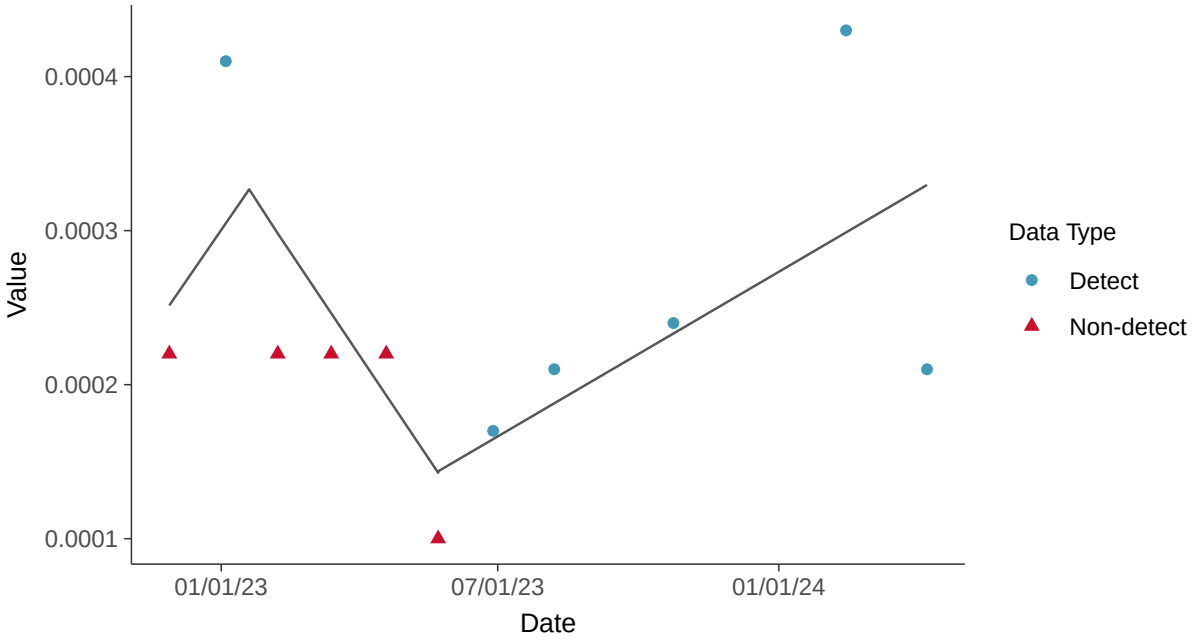
Trend Regression: Piecewise Linear-Linear

Selenium, MW-04 (mg/L)



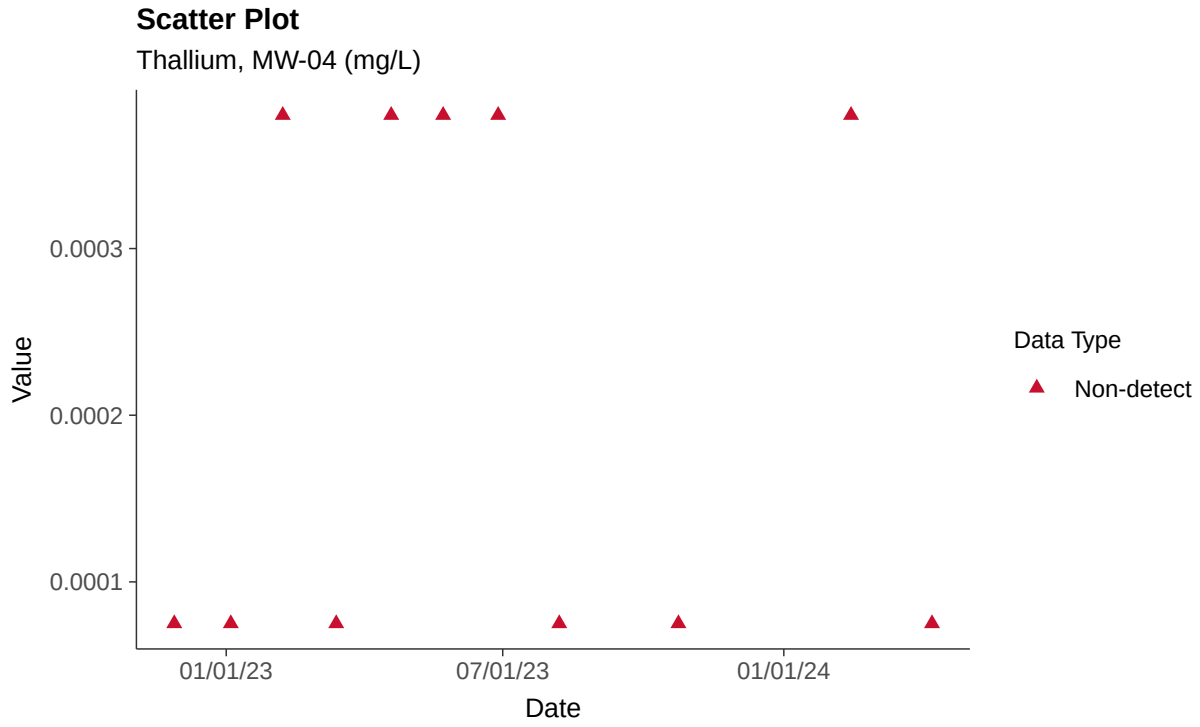
Trend Regression: Piecewise Linear-Linear-Linear

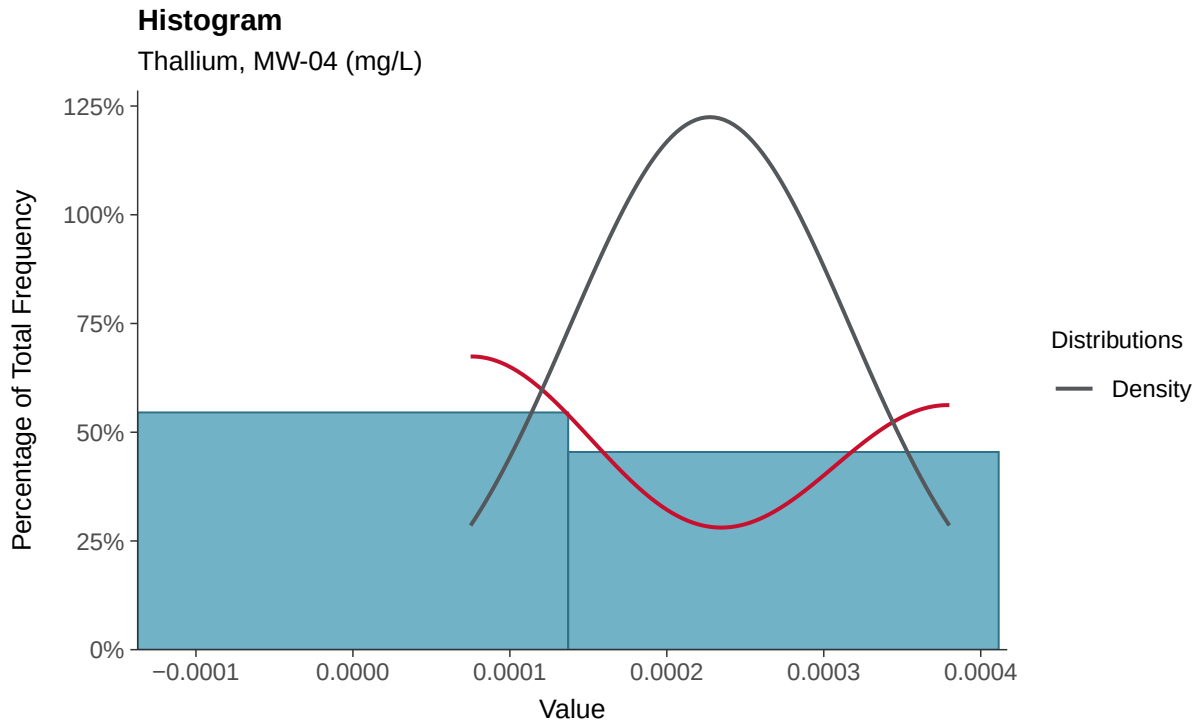
Selenium, MW-04 (mg/L)



Appendix IV: Thallium, MW-04

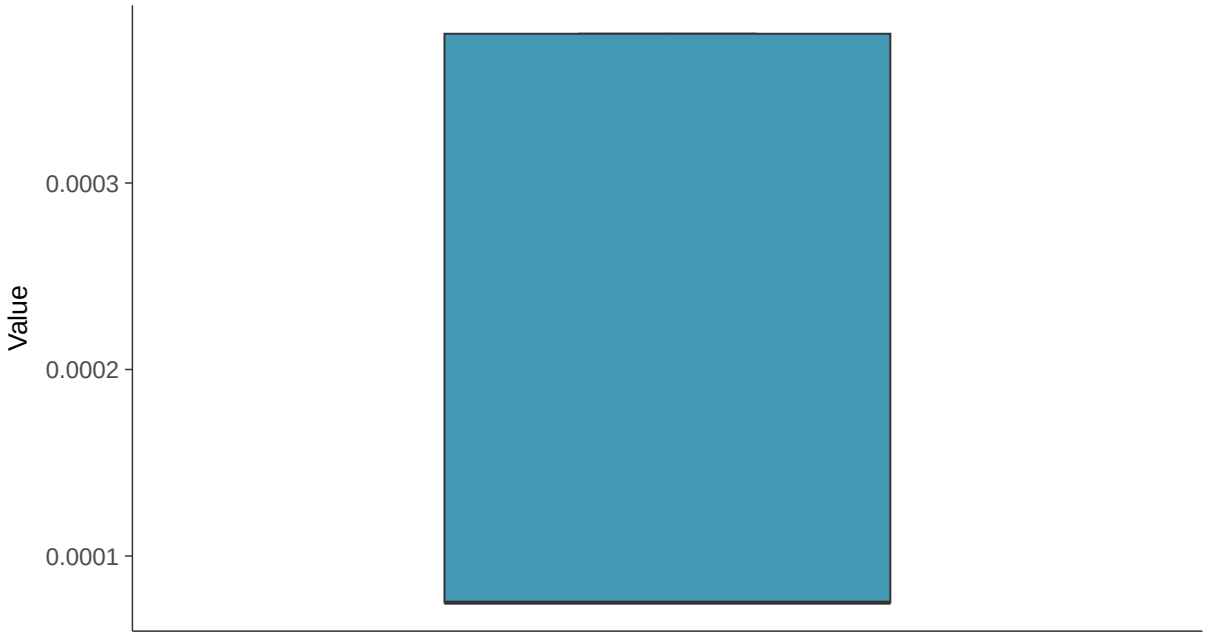
ID: 2_14_5_125





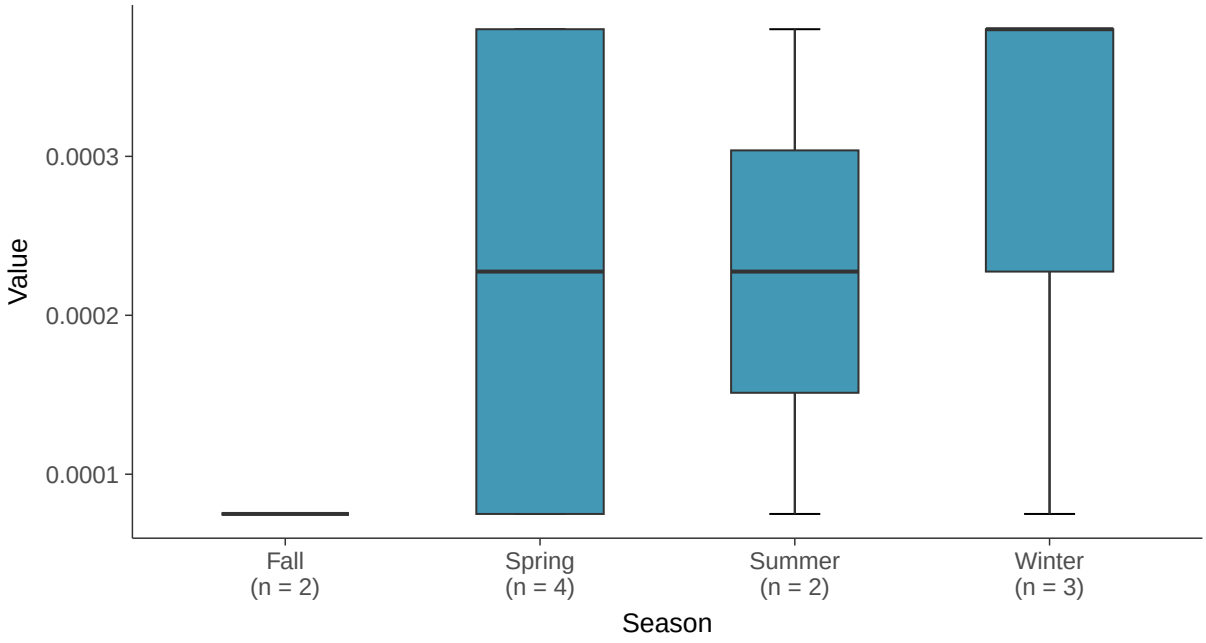
Boxplot

Thallium, MW-04 (mg/L)



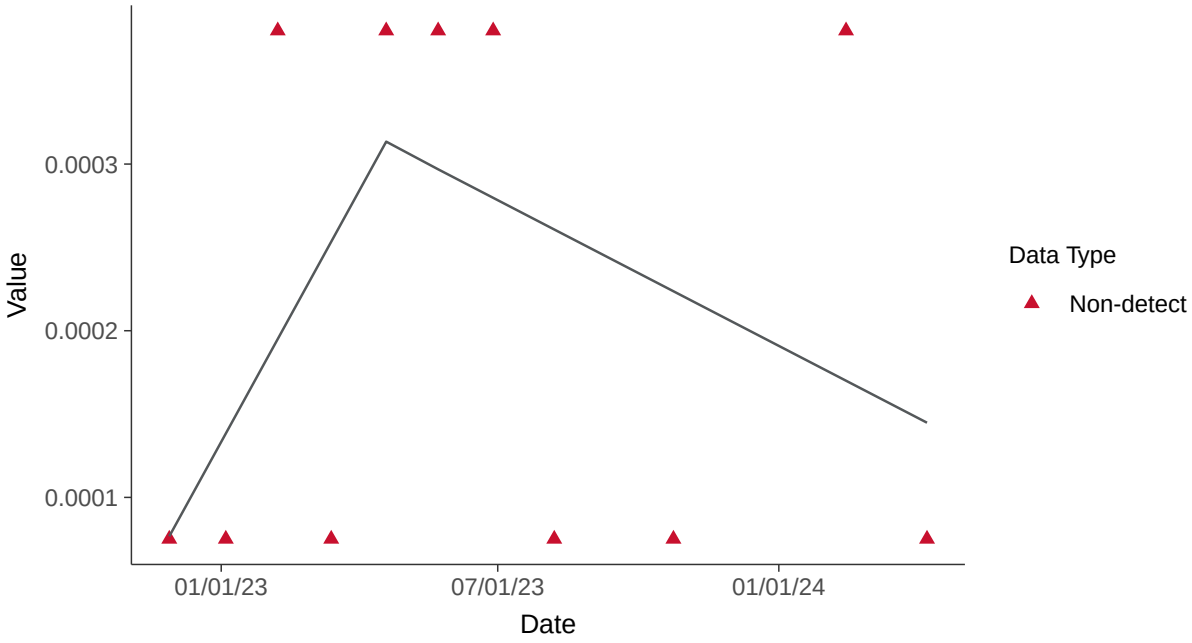
Boxplot by Season

Thallium, MW-04 (mg/L)



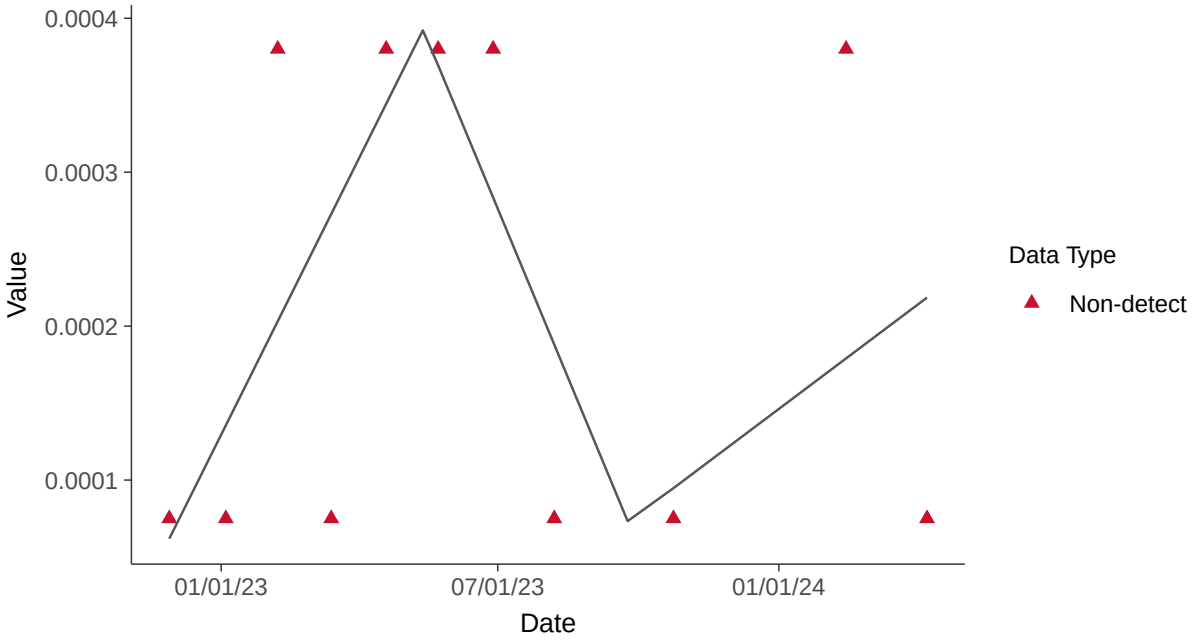
Trend Regression: Piecewise Linear-Linear

Thallium, MW-04 (mg/L)



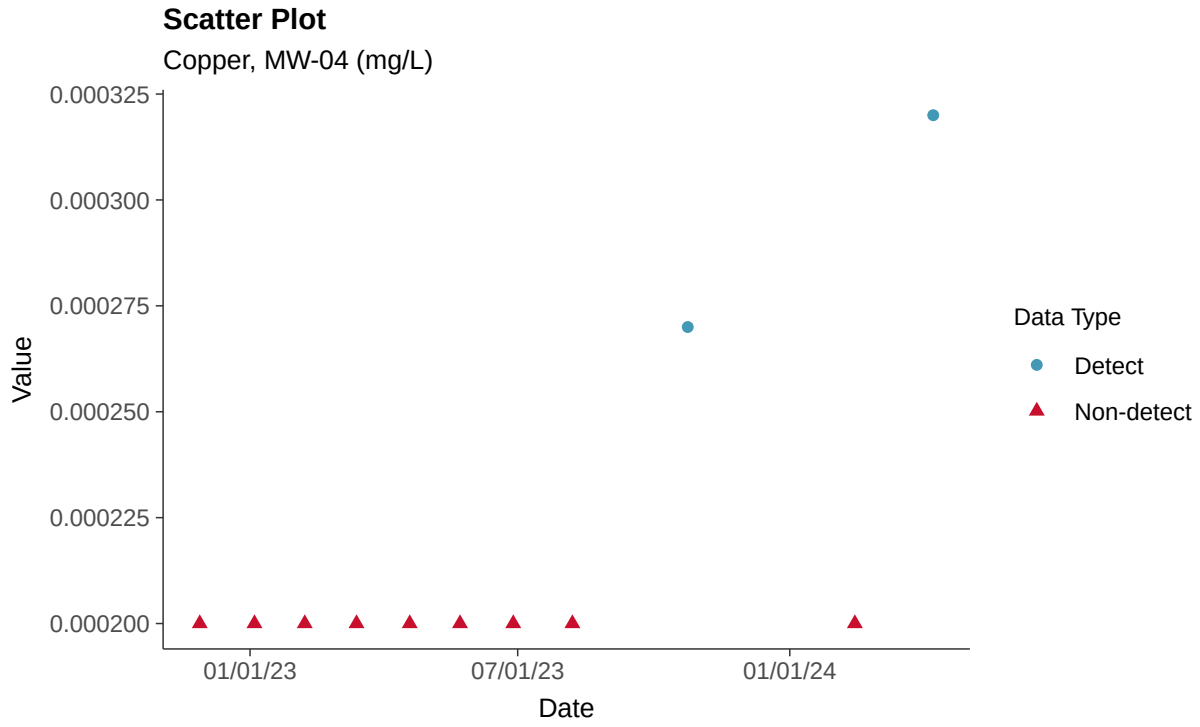
Trend Regression: Piecewise Linear-Linear-Linear

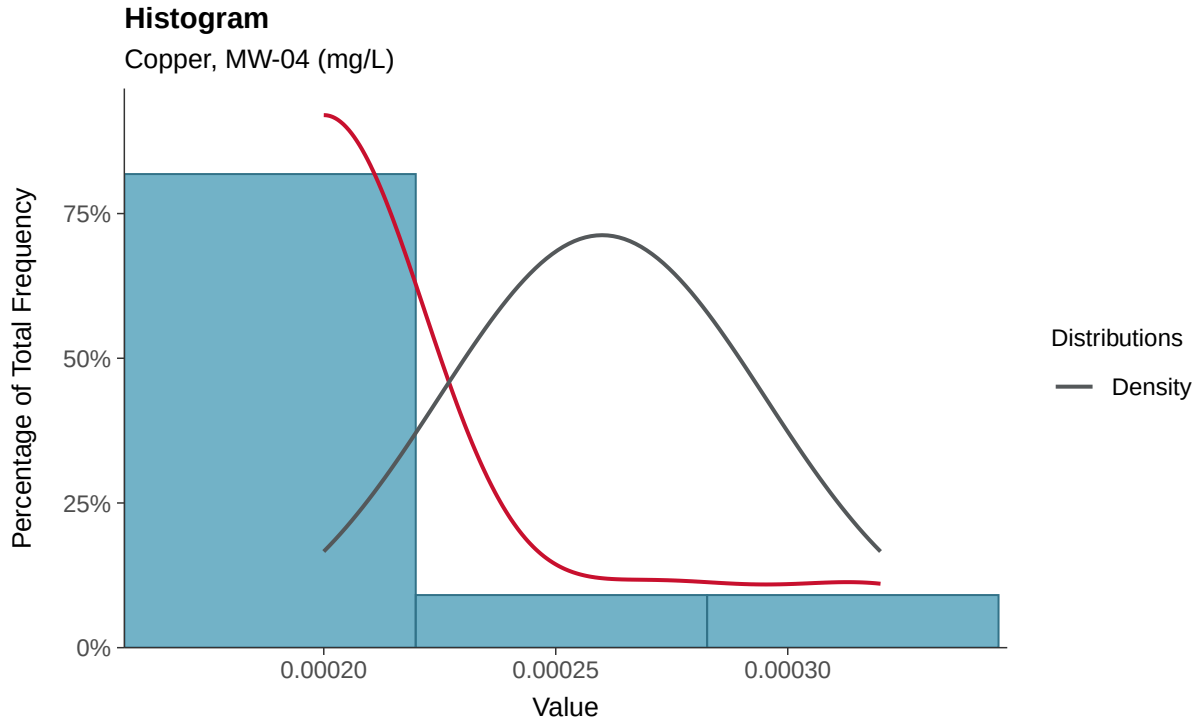
Thallium, MW-04 (mg/L)

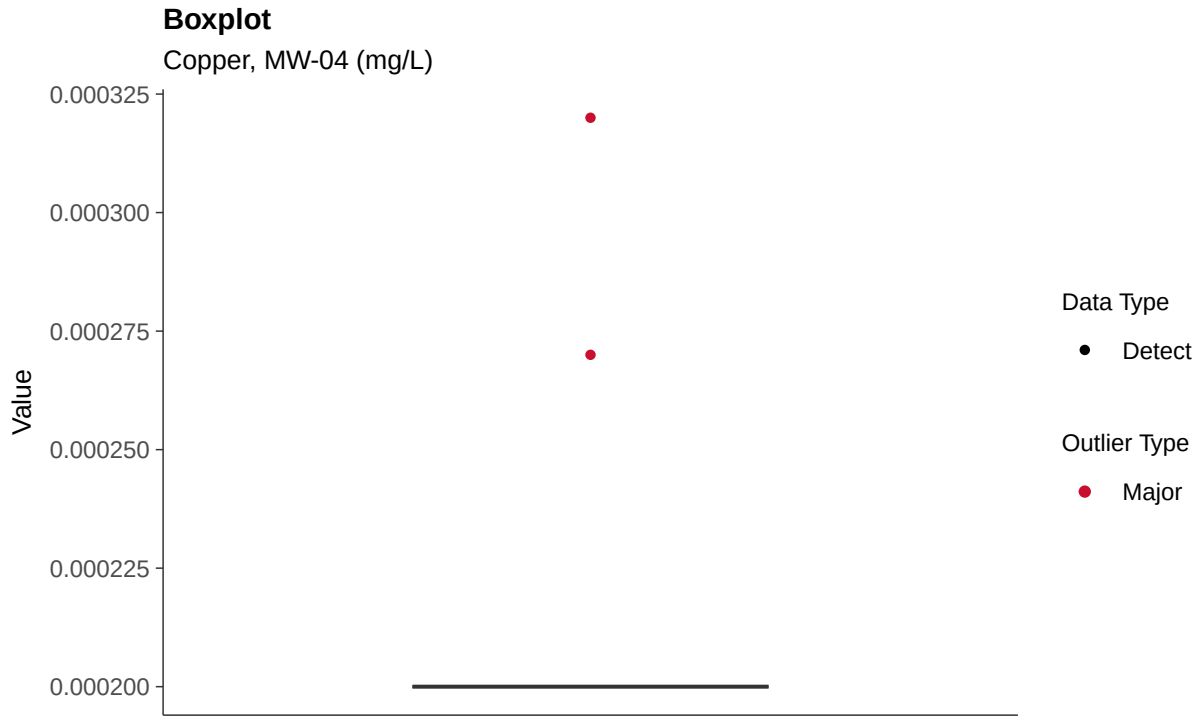


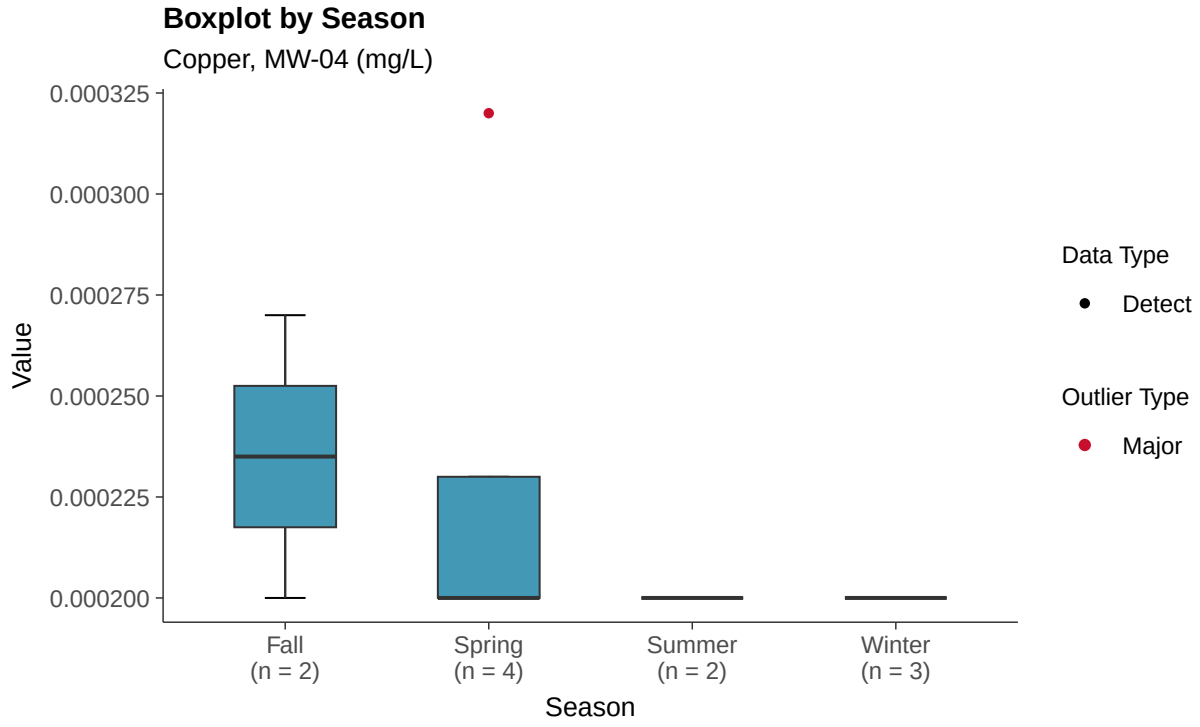
Part 115: Copper, MW-04

ID: 2_14_6_111



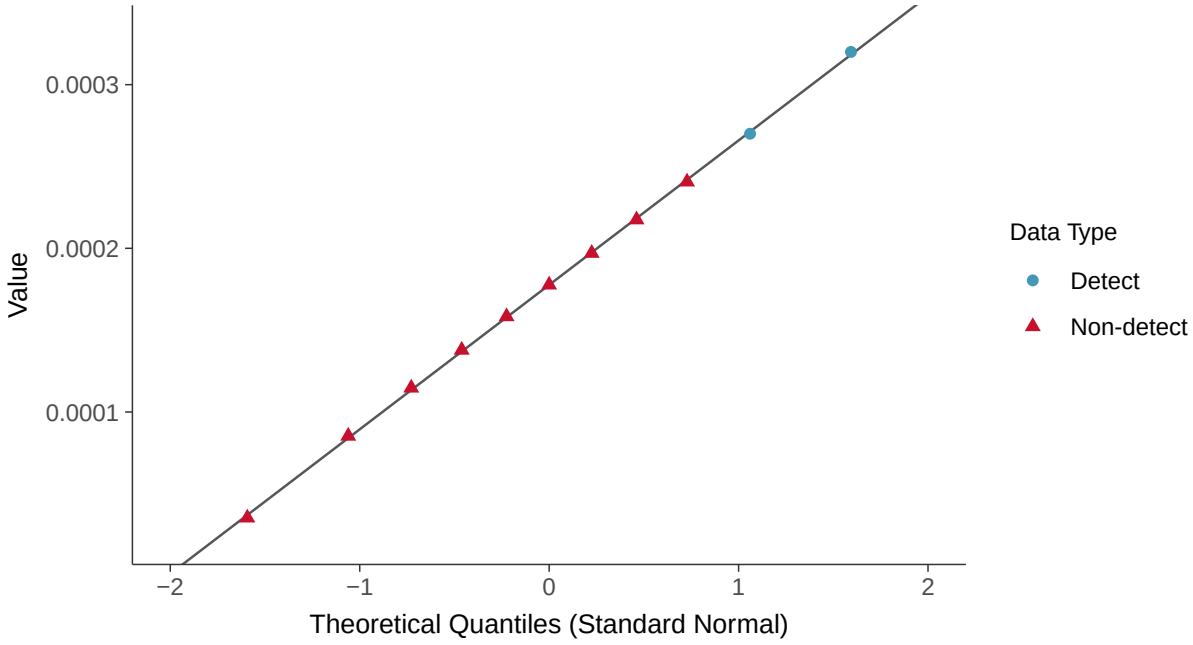



Boxplot
Copper, MW-04 (mg/L)
0.000325
0.000300
0.000275
0.000250
0.000225
0.000200
Value
Data Type
Detect
Outlier Type
Major


Boxplot by Season
Copper, MW-04 (mg/L)
0.000325
0.000300
0.000275
0.000250
0.000225
0.000200
Value
Fall
(n = 2)
Spring
(n = 4)
Summer
(n = 2)
Winter
(n = 3)
Season
Data Type
Detect
Outlier Type
Major

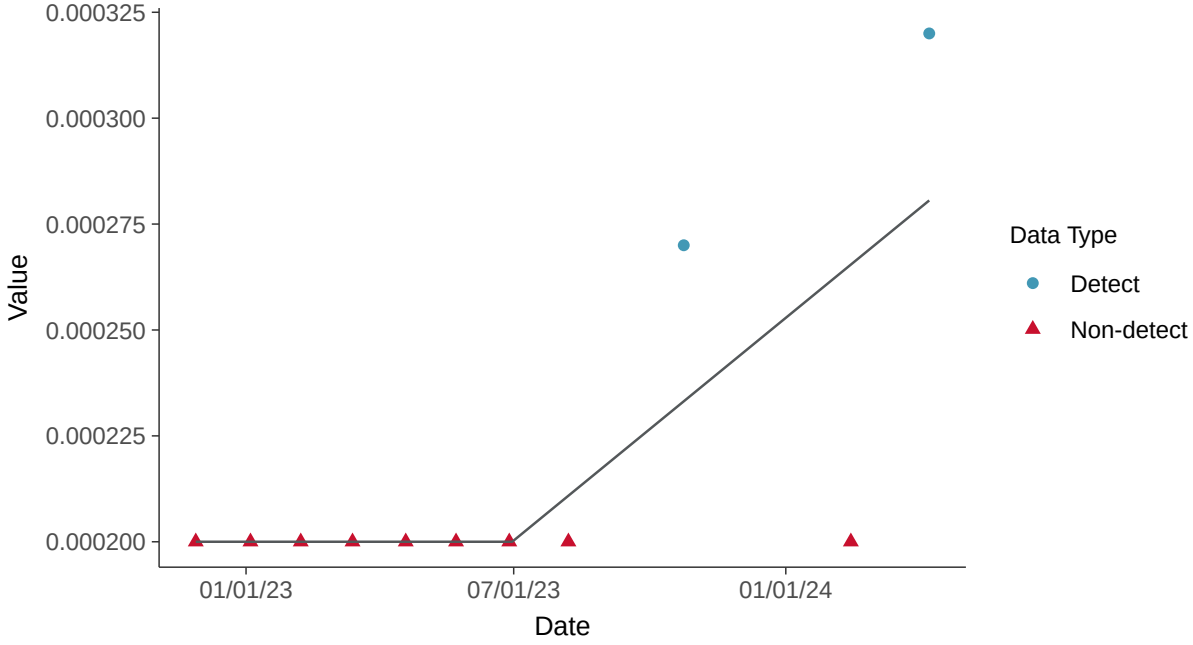
Normal Q-Q plot using ROS Imputed Estimates

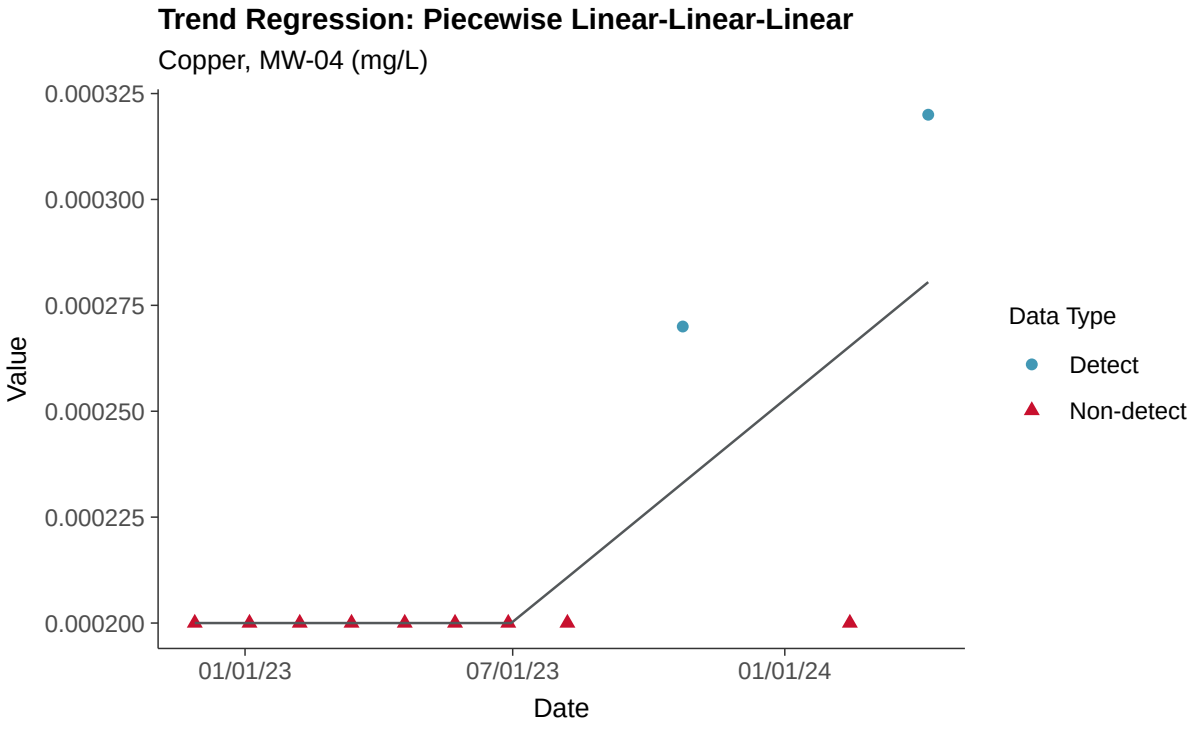
Copper, MW-04 (mg/L)



Trend Regression: Piecewise Linear-Linear

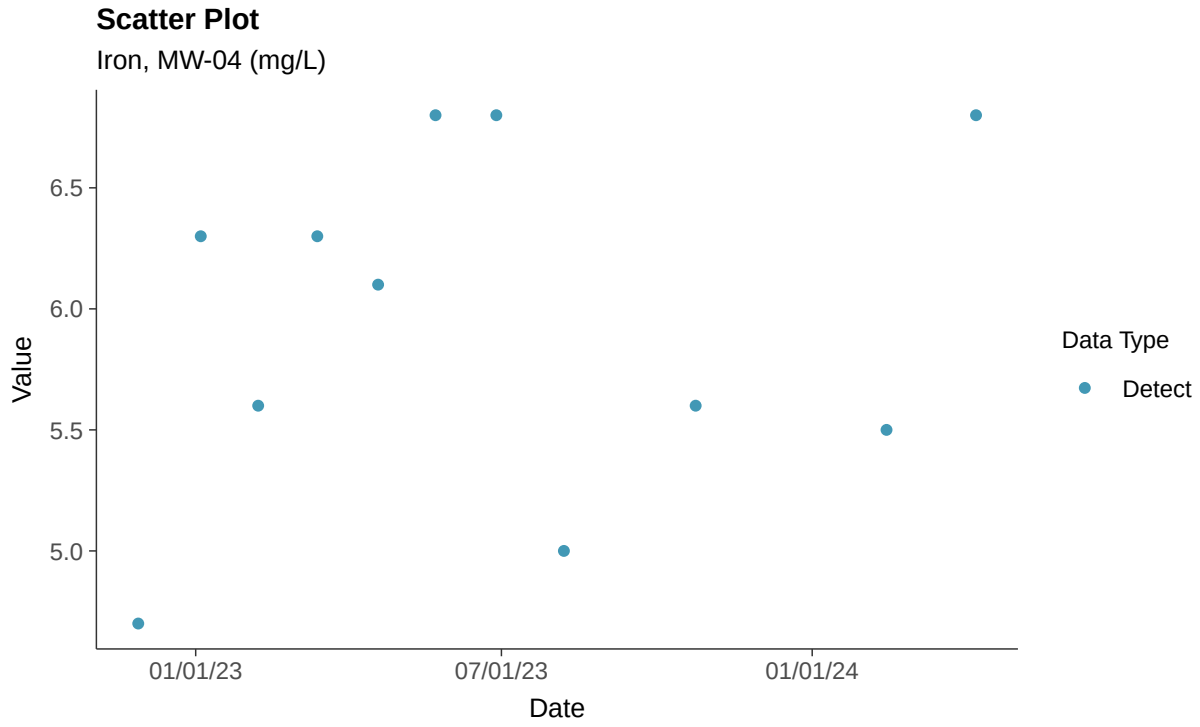
Copper, MW-04 (mg/L)

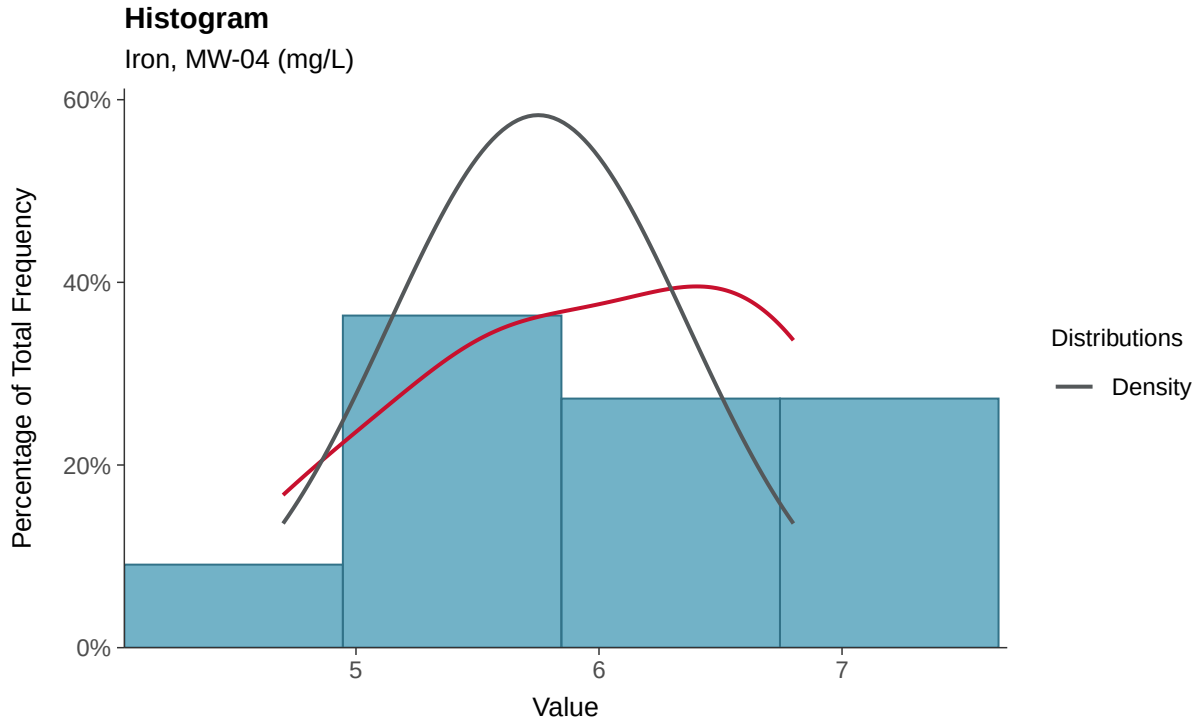



Trend Regression: Piecewise Linear-Linear-Linear
Copper, MW-04 (mg/L)
0.000325
0.000300
0.000275
0.000250
0.000225
0.000200
Value
01/01/23
07/01/23
01/01/24
Date
Data Type
Detect
Non-detect

Part 115: Iron, MW-04

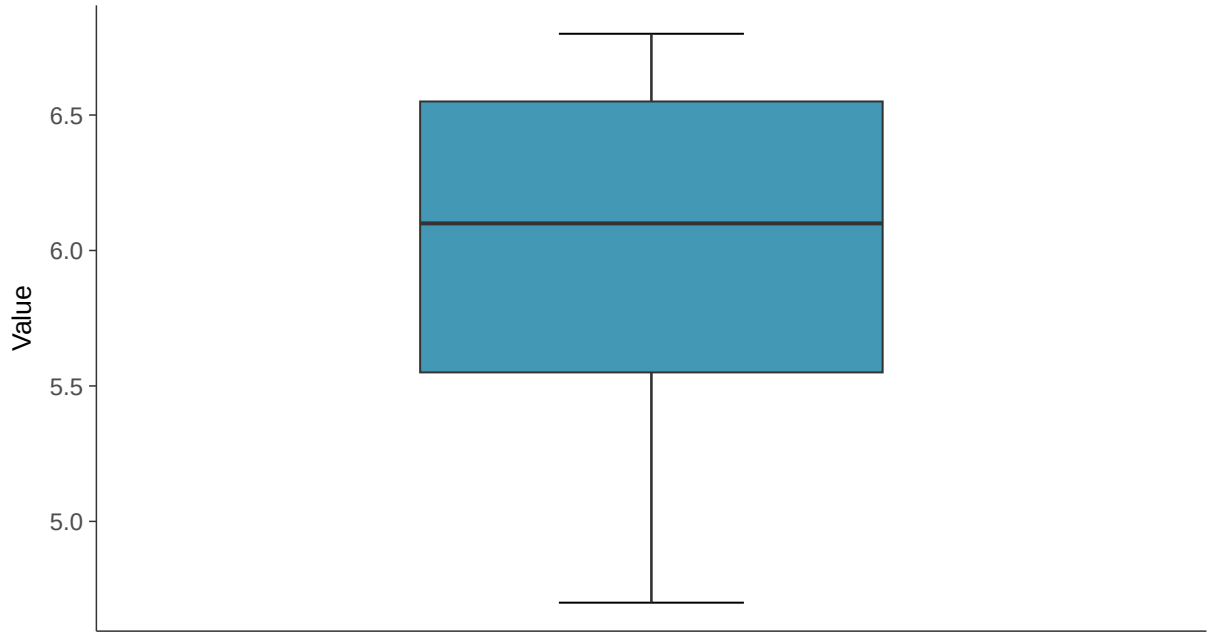
ID: 2_14_6_114





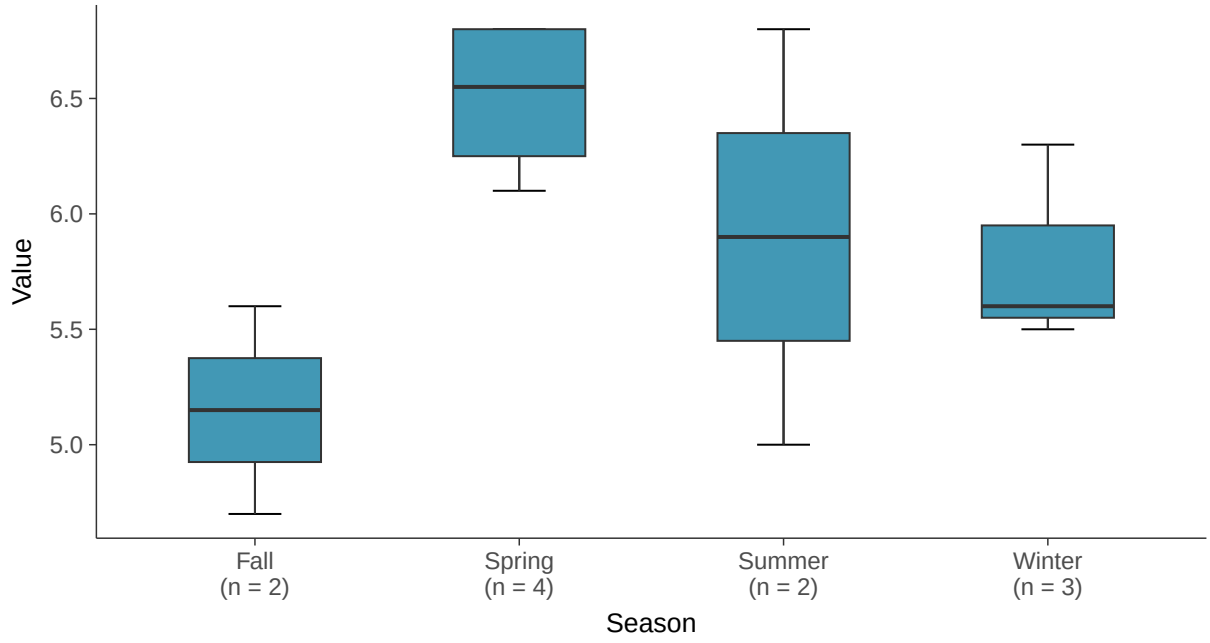
Boxplot

Iron, MW-04 (mg/L)



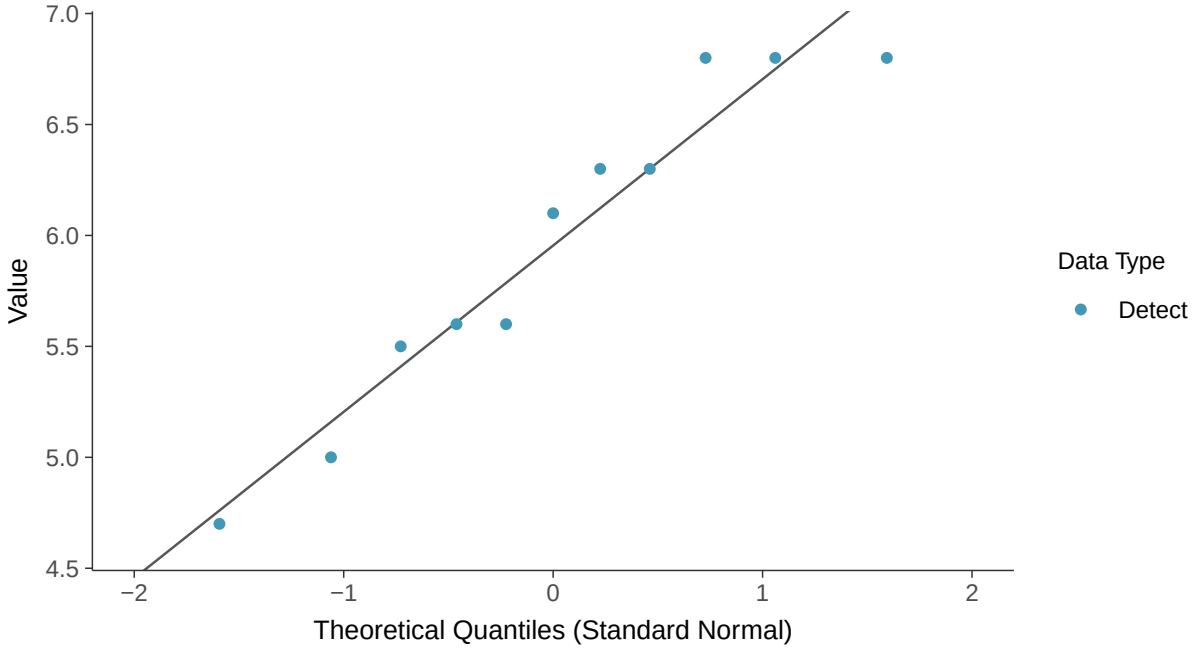
Boxplot by Season

Iron, MW-04 (mg/L)



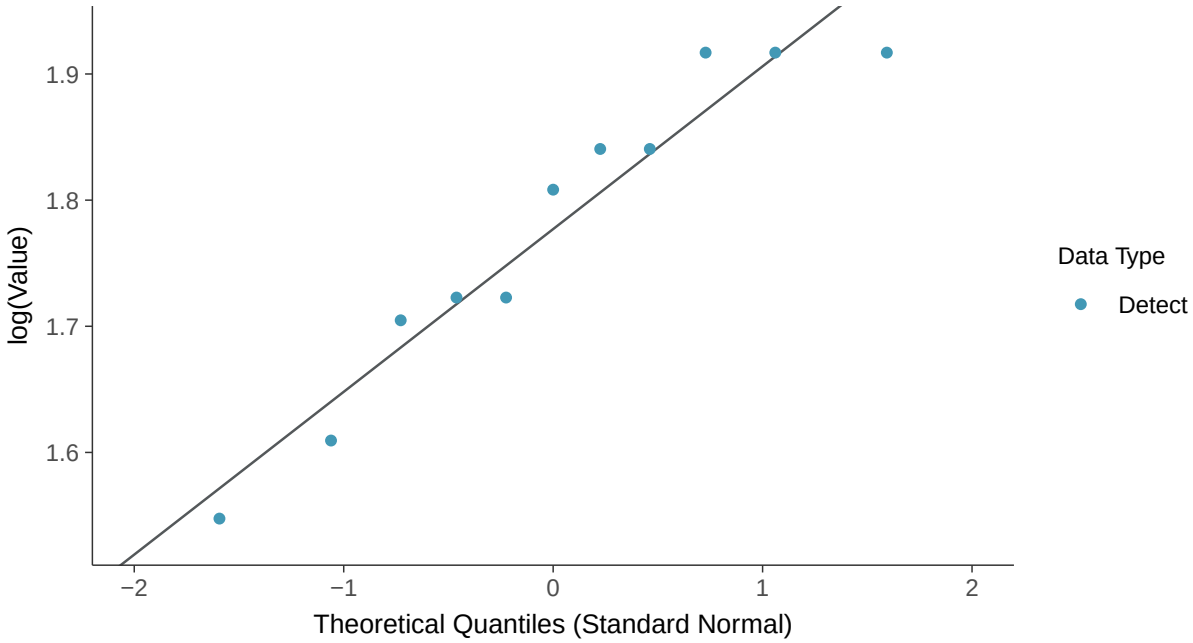
Normal Q-Q plot

Iron, MW-04 (mg/L)



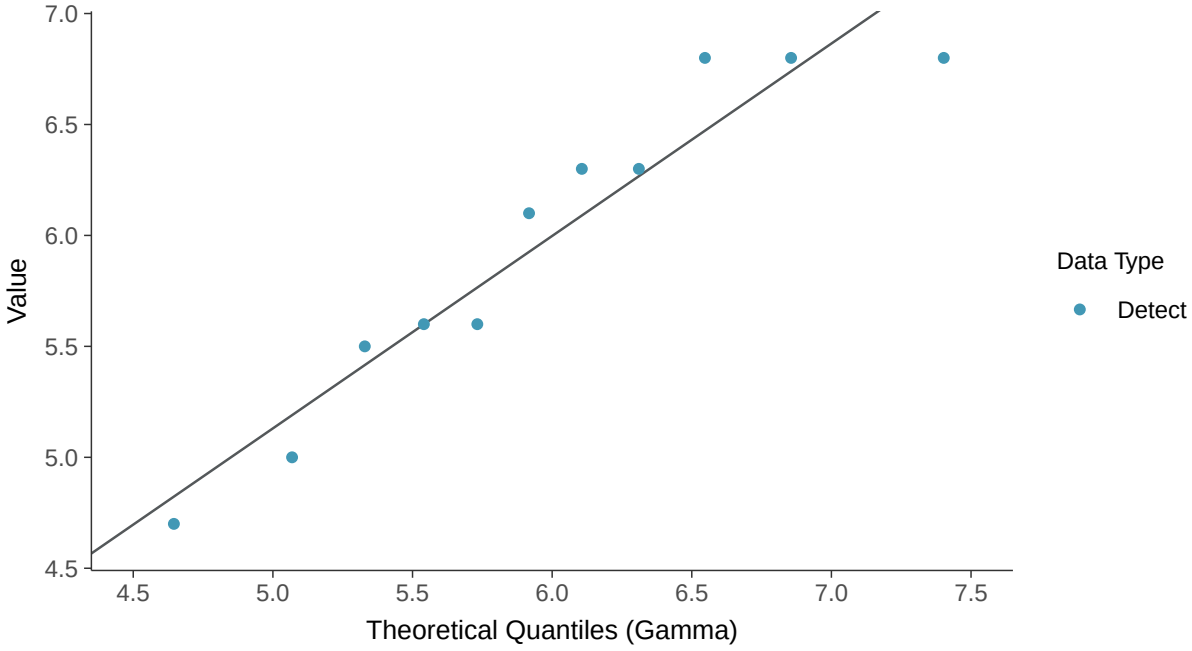
Lognormal Q-Q plot

Iron, MW-04 (mg/L)



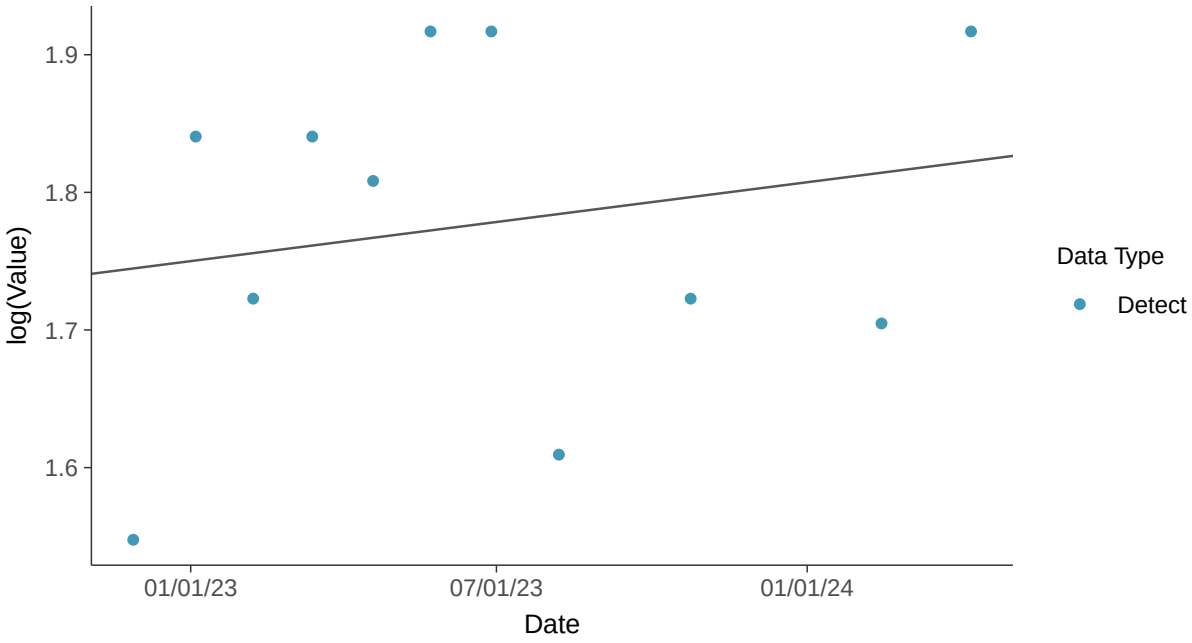
Gamma Q-Q plot

Iron, MW-04 (mg/L)



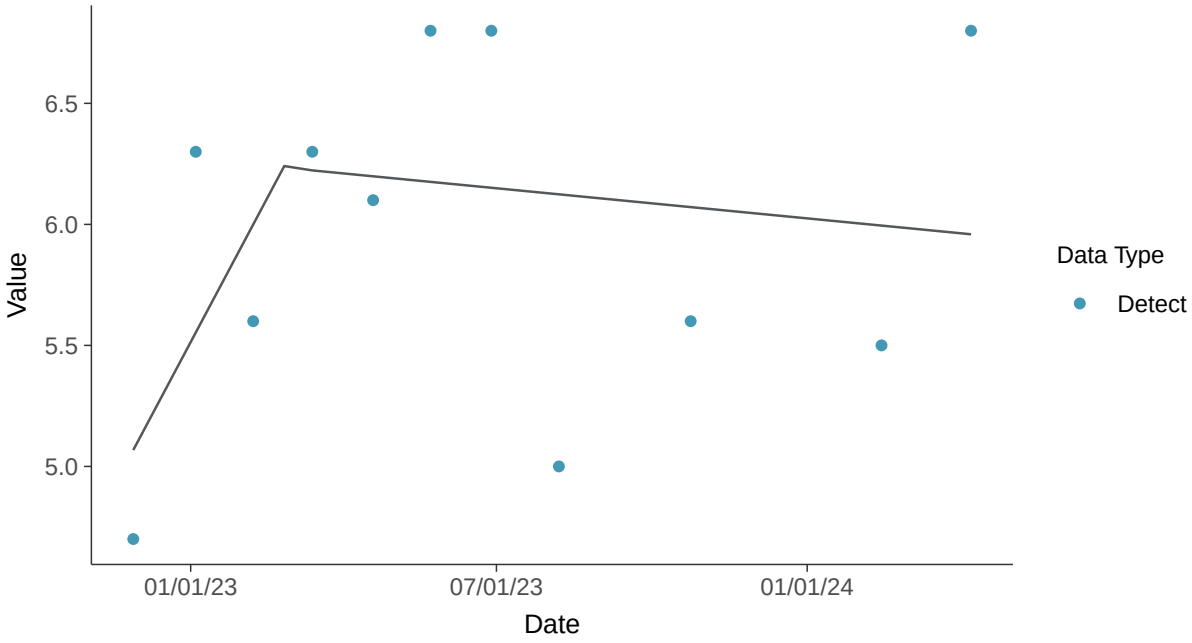
Trend Regression: Lognormal MLE

Iron, MW-04 (mg/L)



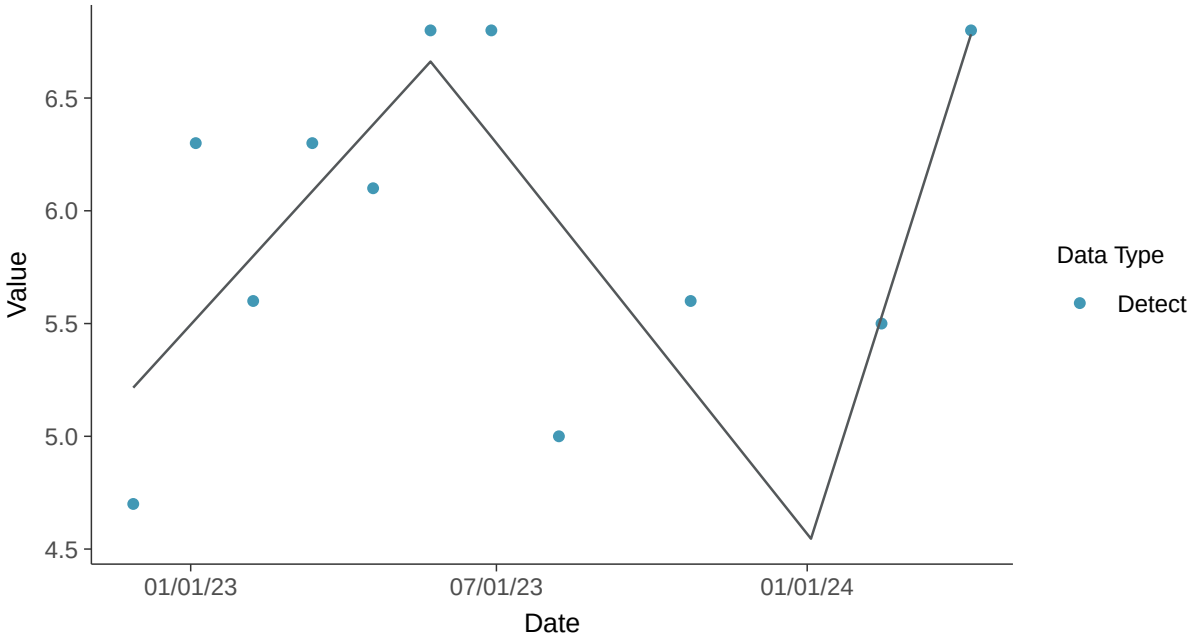
Trend Regression: Piecewise Linear-Linear

Iron, MW-04 (mg/L)



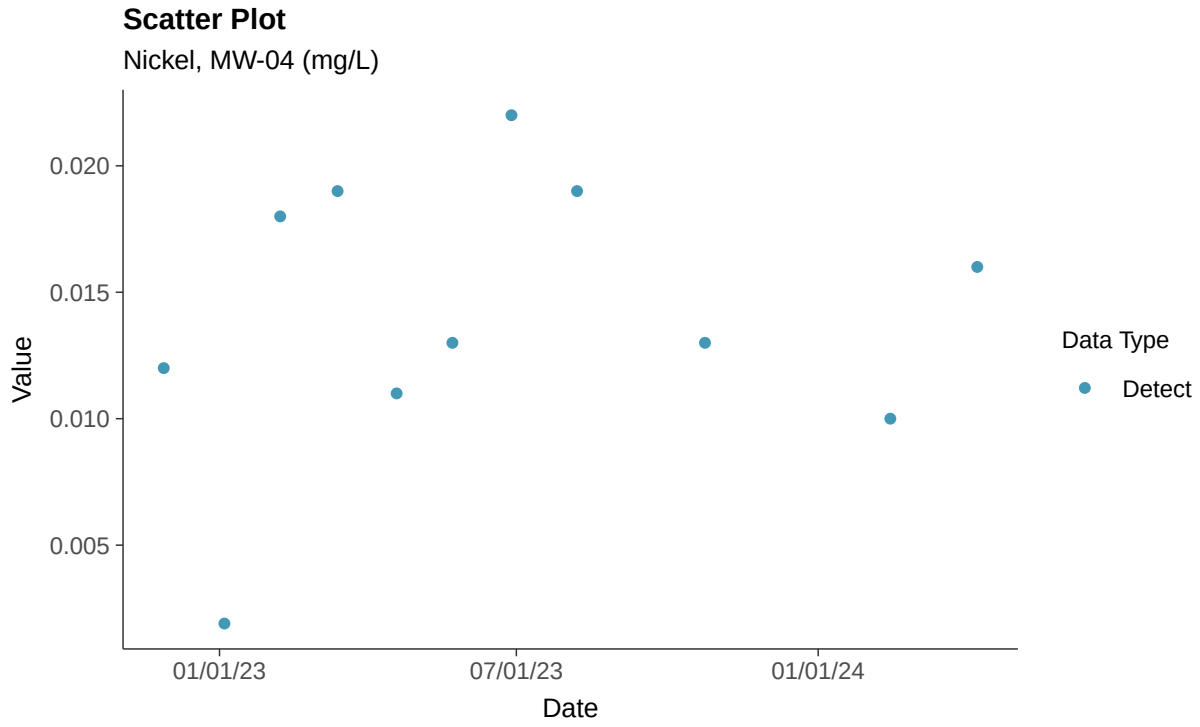
Trend Regression: Piecewise Linear-Linear-Linear

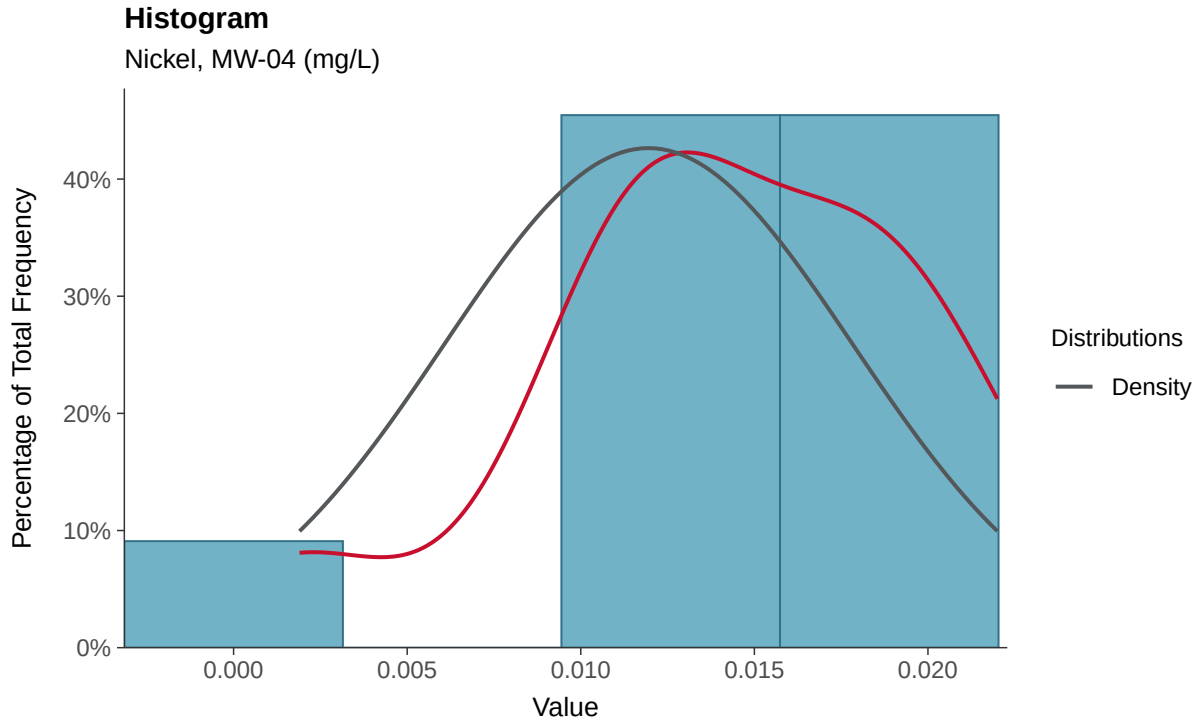
Iron, MW-04 (mg/L)



Part 115: Nickel, MW-04

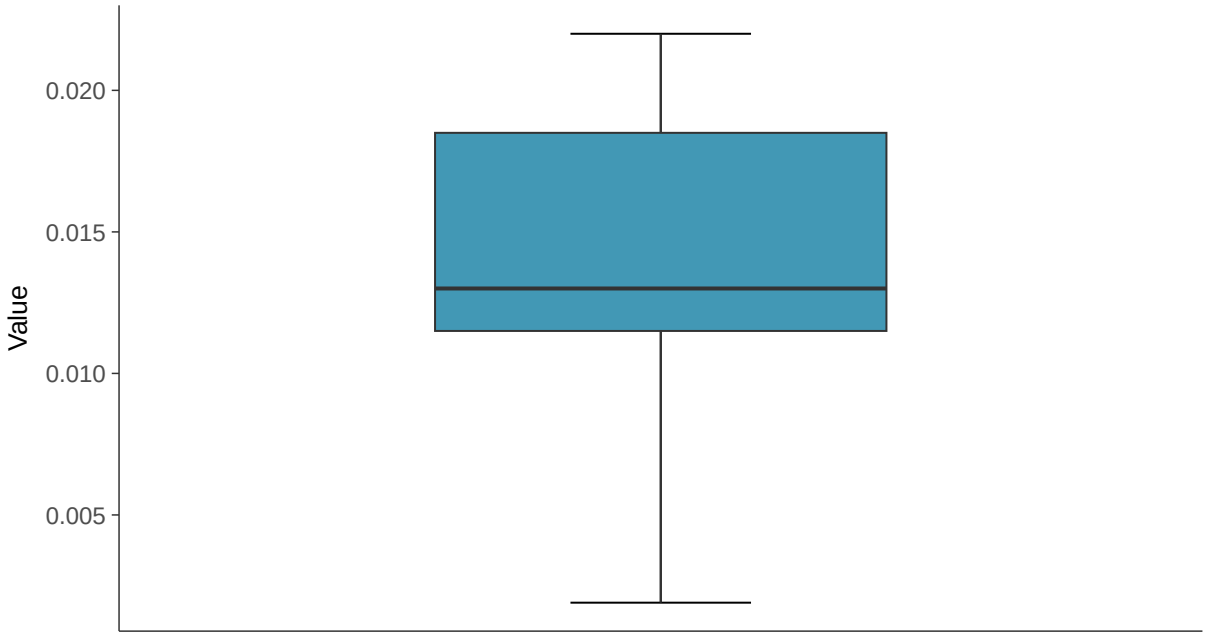
ID: 2_14_6_119





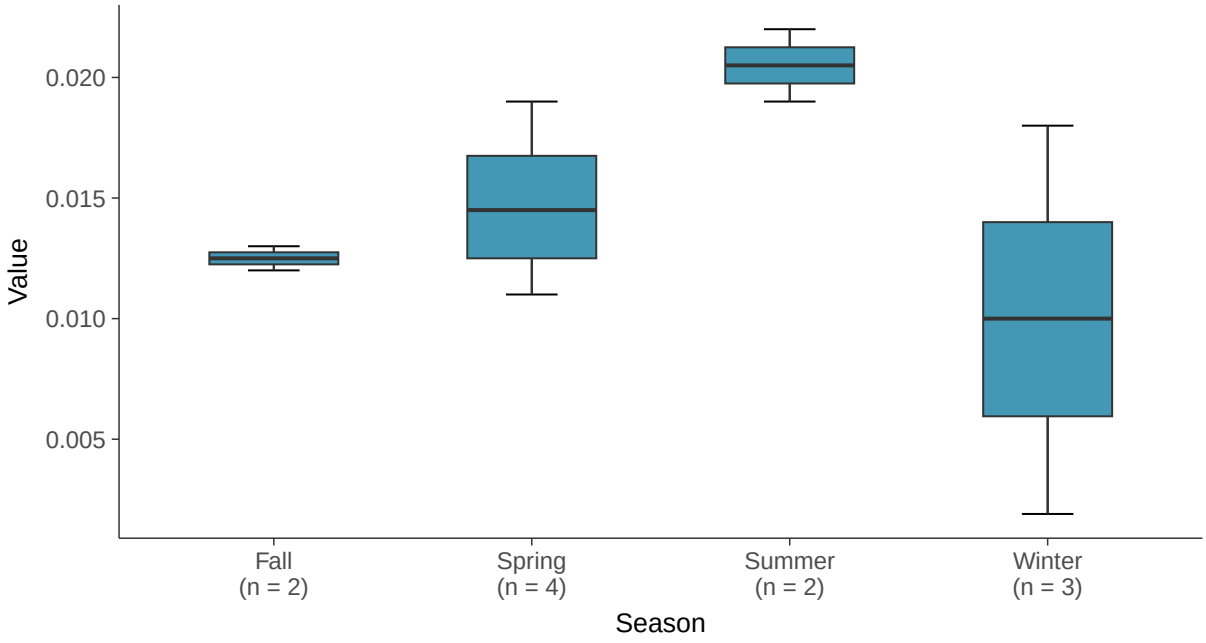
Boxplot

Nickel, MW-04 (mg/L)



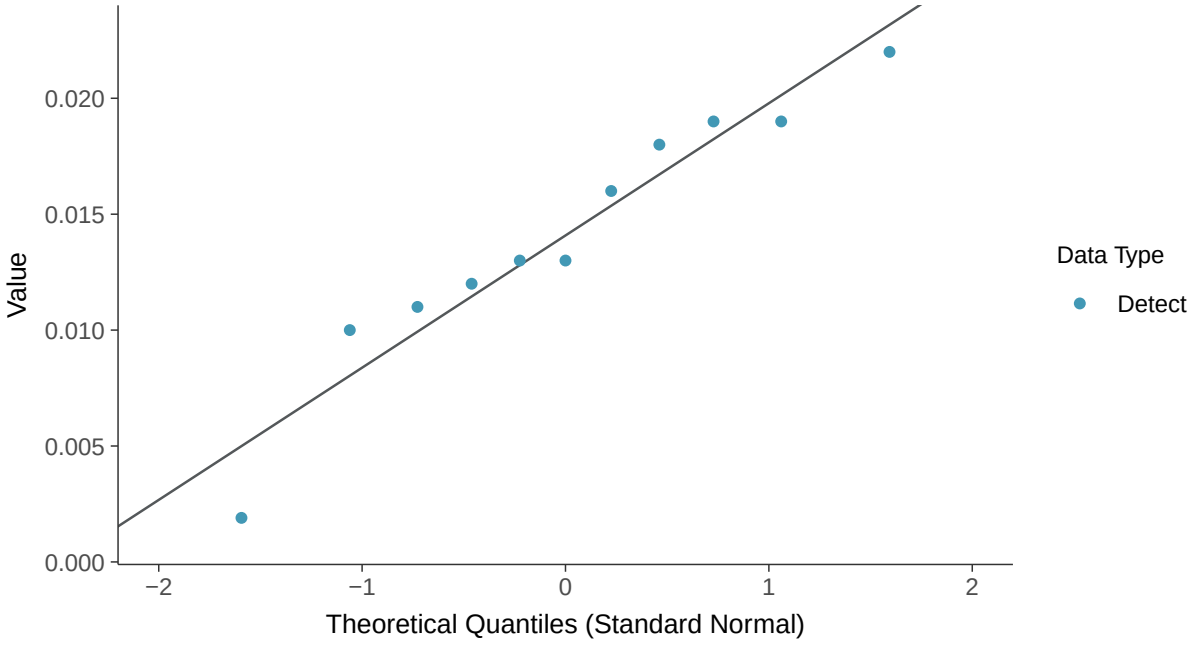
Boxplot by Season

Nickel, MW-04 (mg/L)



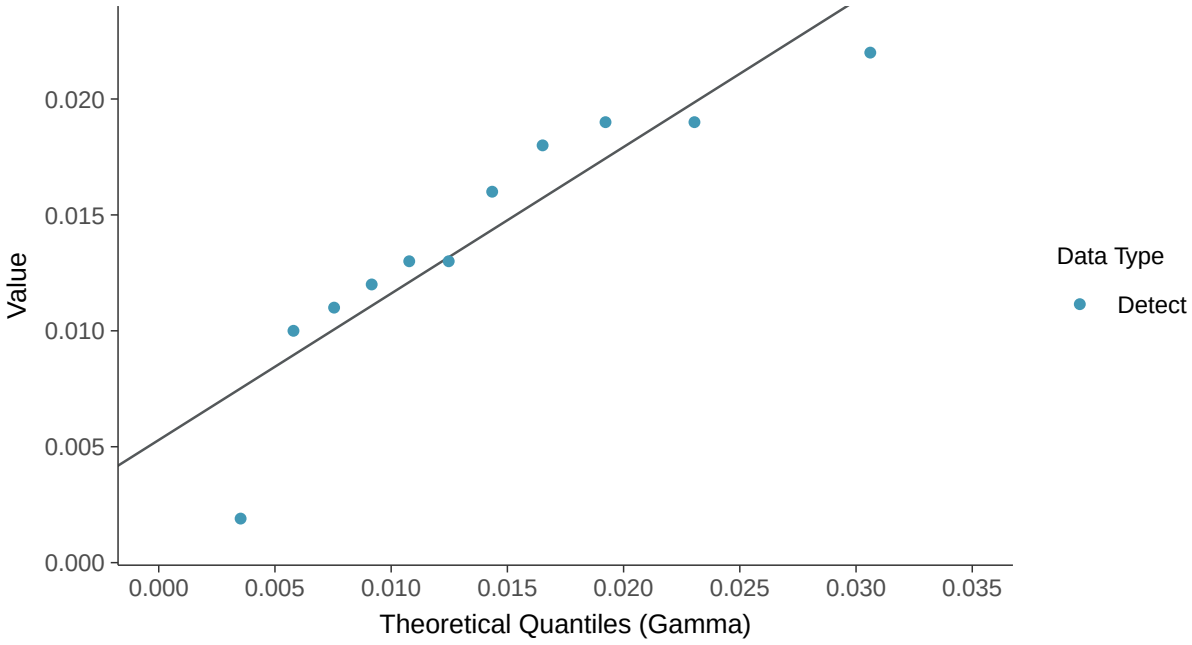
Normal Q-Q plot

Nickel, MW-04 (mg/L)



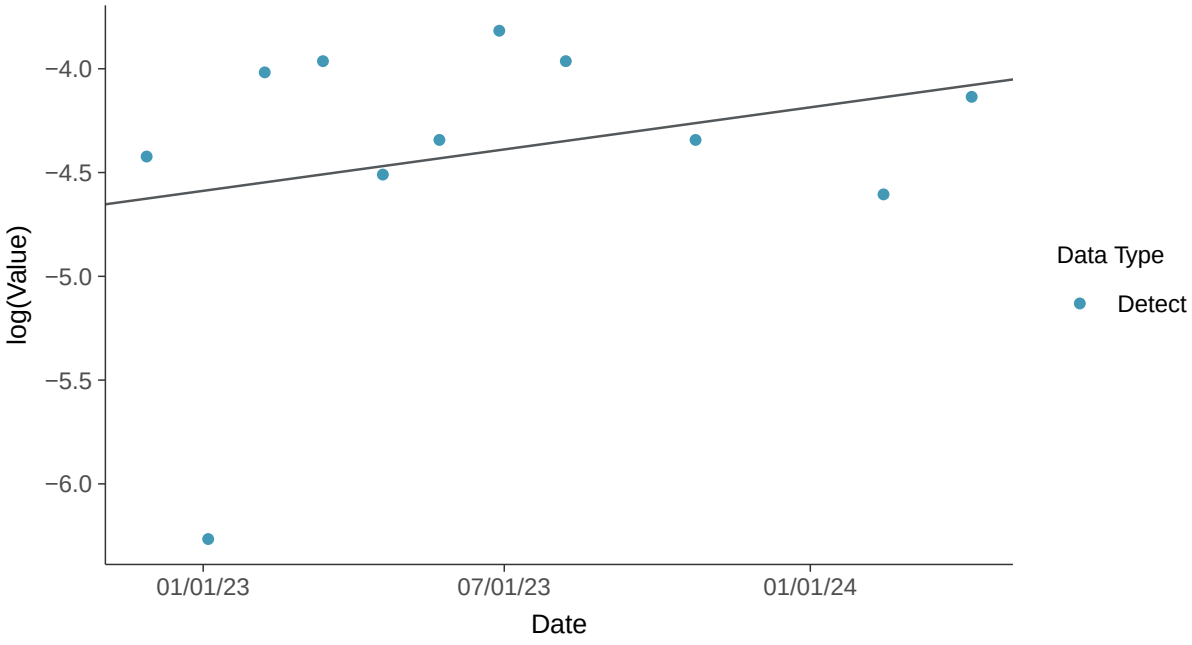
Gamma Q-Q plot

Nickel, MW-04 (mg/L)



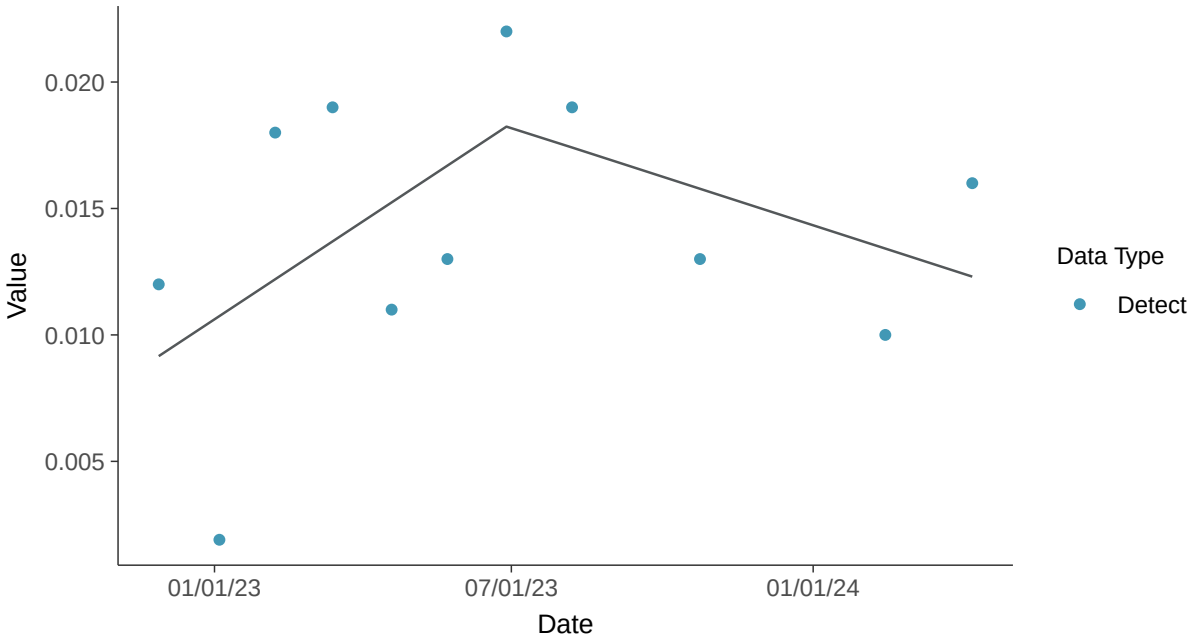
Trend Regression: Lognormal MLE

Nickel, MW-04 (mg/L)



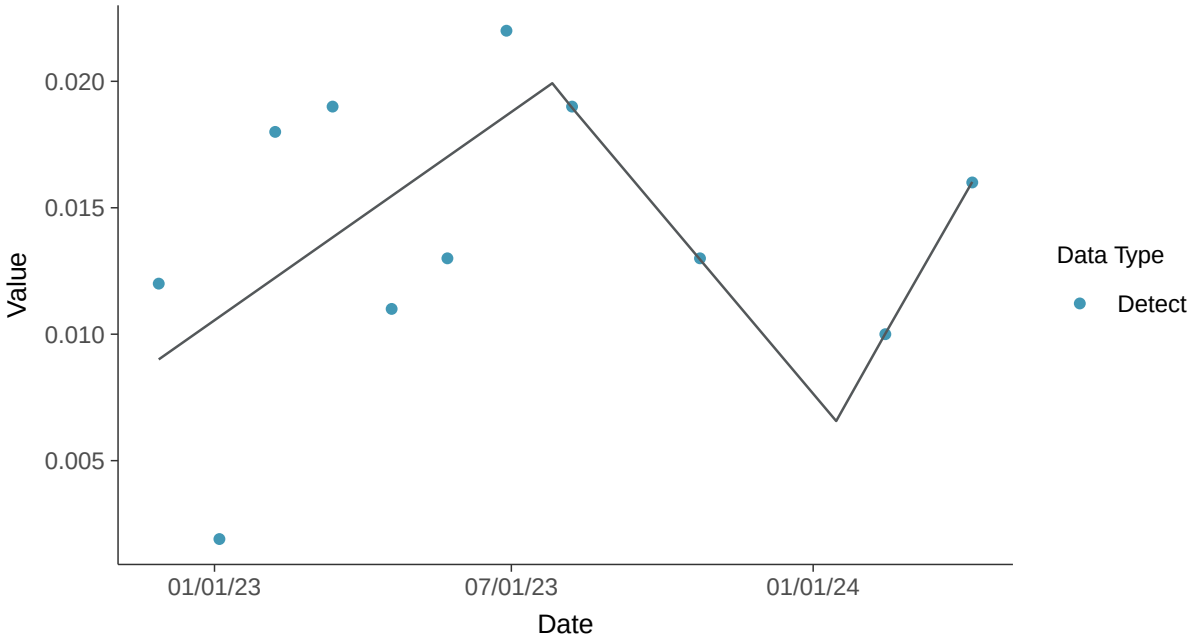
Trend Regression: Piecewise Linear-Linear

Nickel, MW-04 (mg/L)



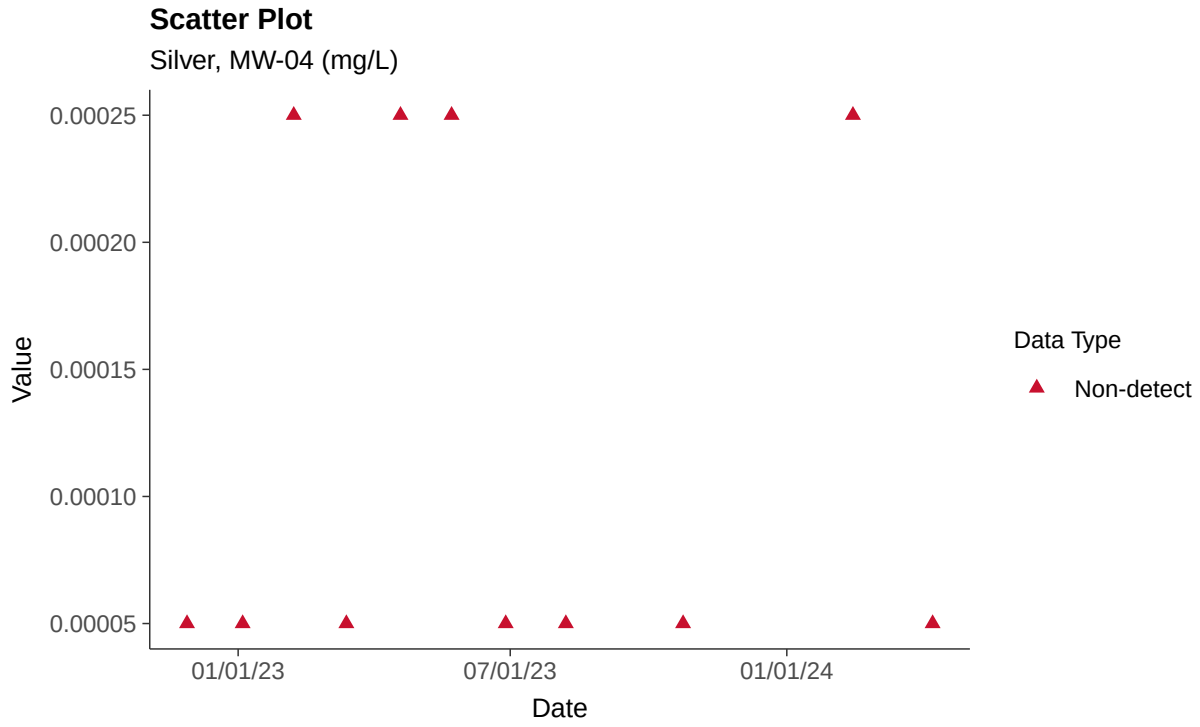
Trend Regression: Piecewise Linear-Linear-Linear

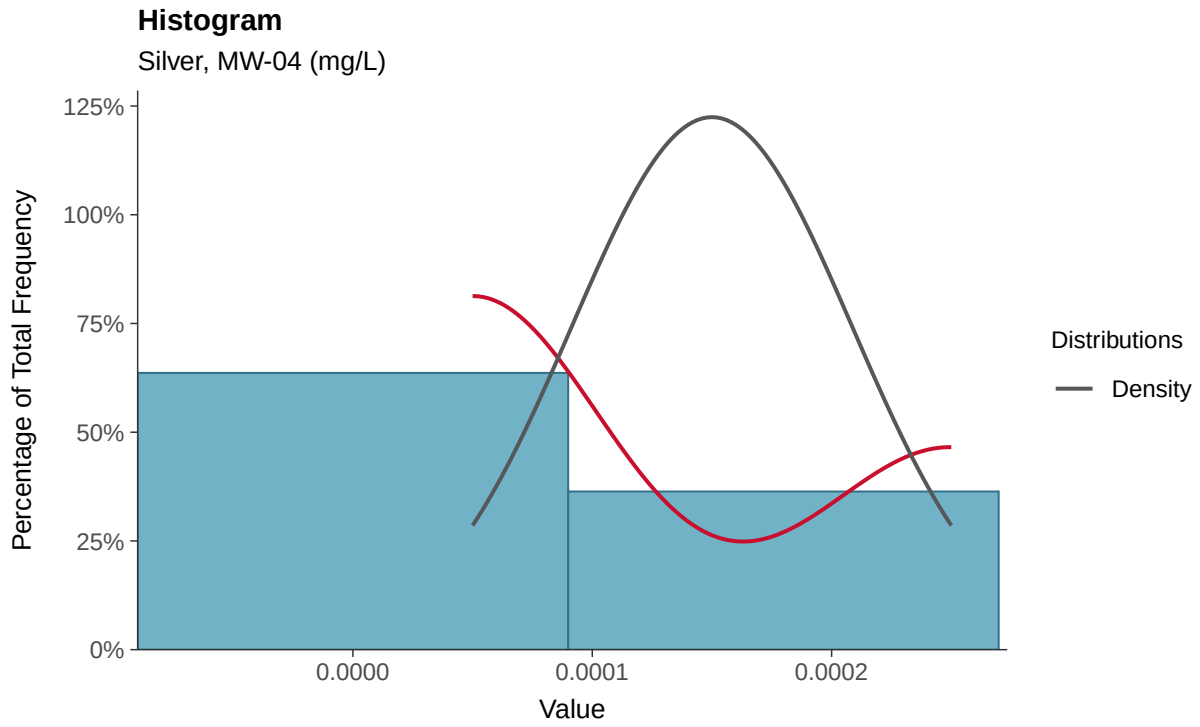
Nickel, MW-04 (mg/L)



Part 115: Silver, MW-04

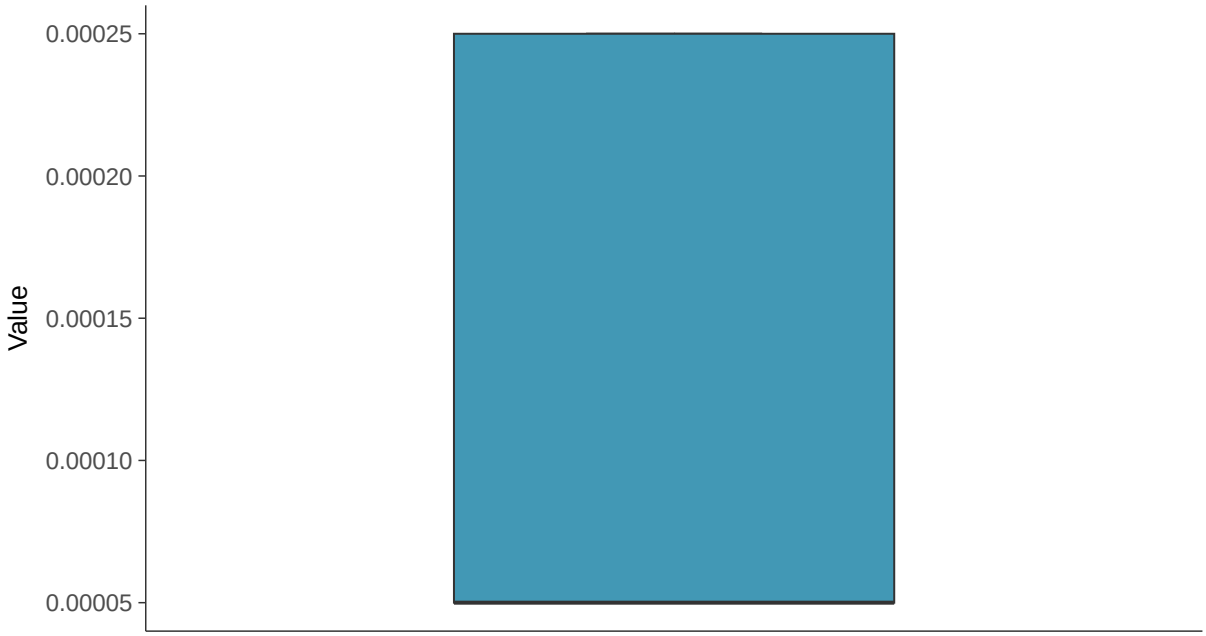
ID: 2_14_6_123





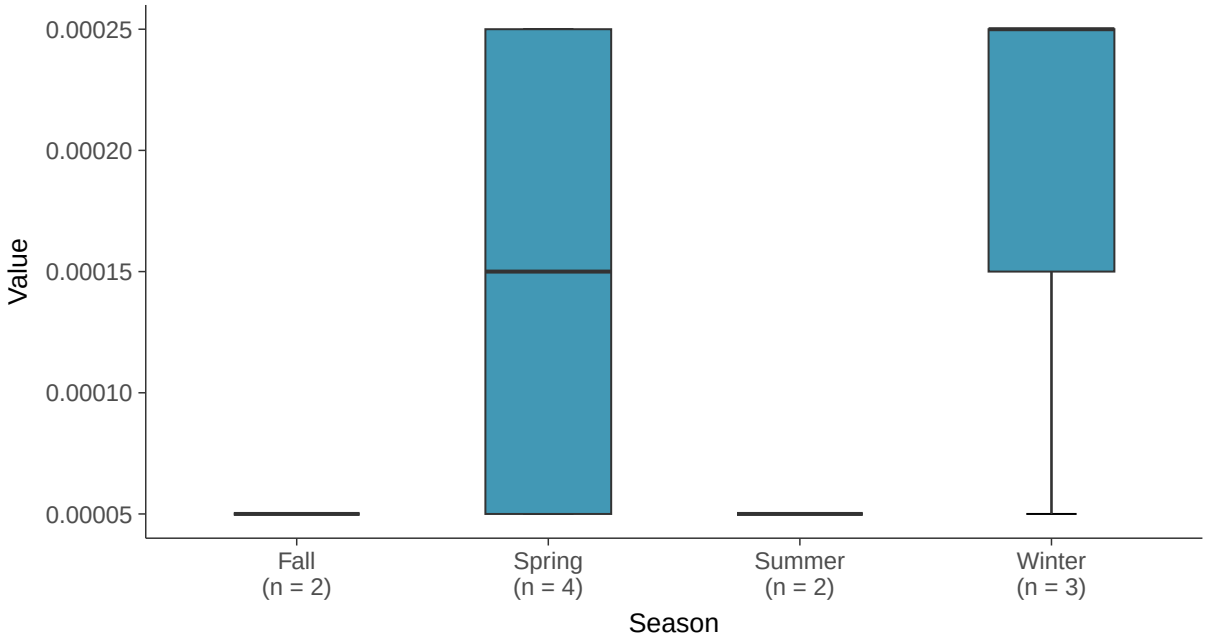
Boxplot

Silver, MW-04 (mg/L)



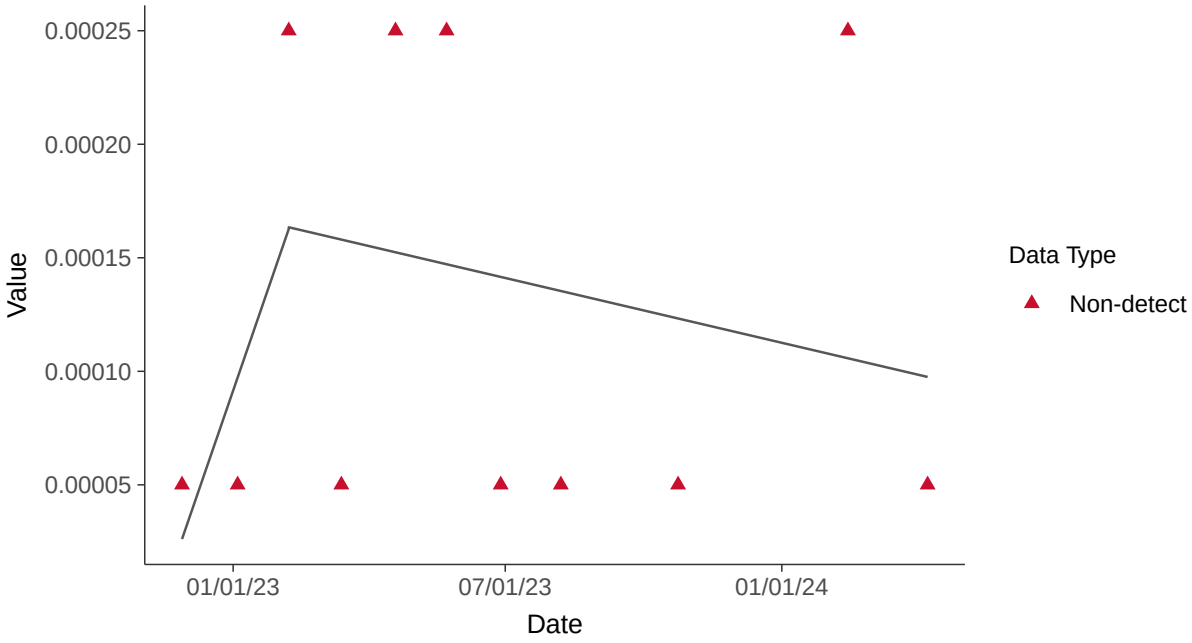
Boxplot by Season

Silver, MW-04 (mg/L)



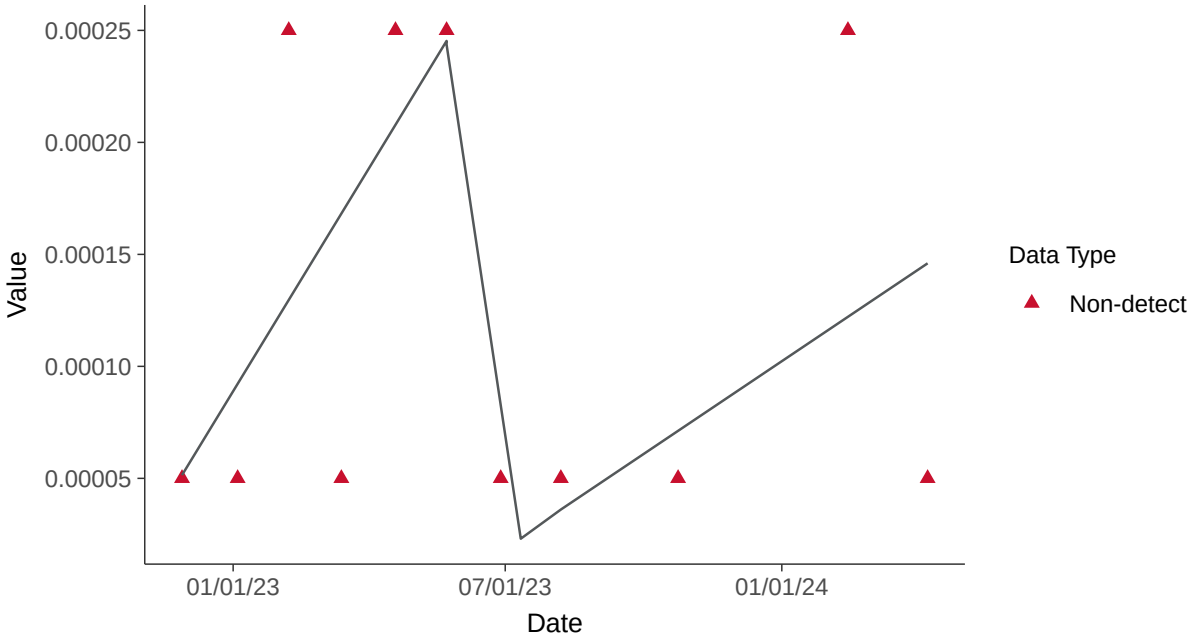
Trend Regression: Piecewise Linear-Linear

Silver, MW-04 (mg/L)



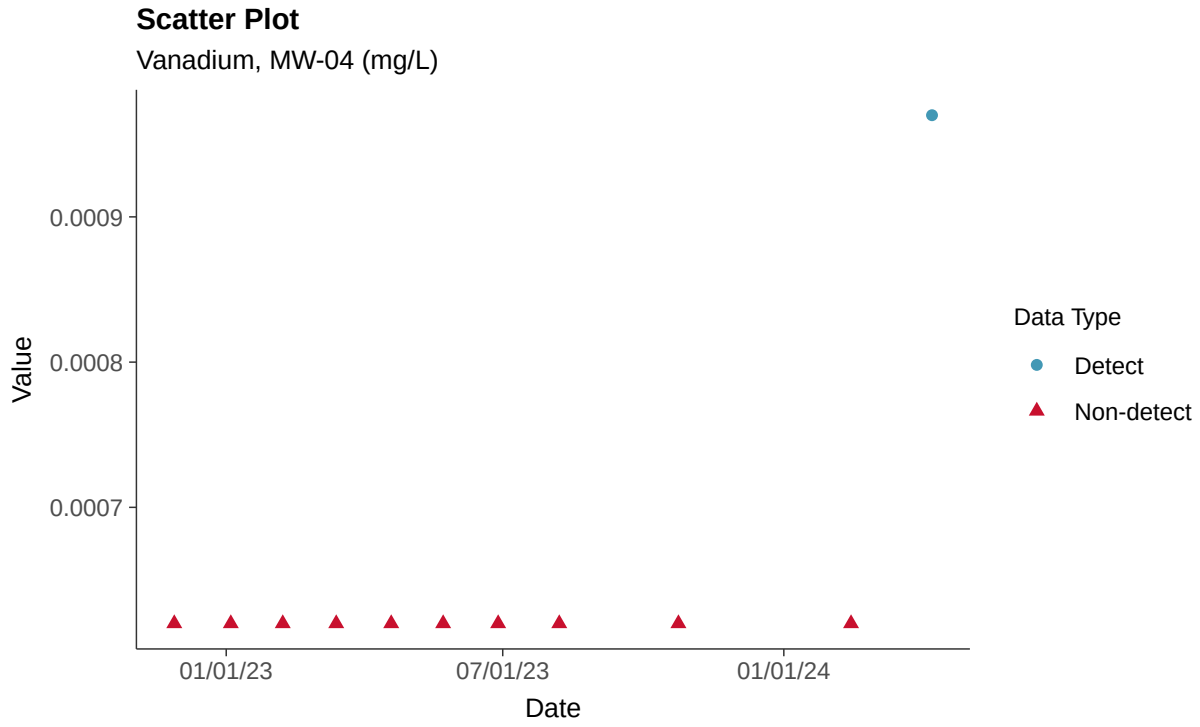
Trend Regression: Piecewise Linear-Linear-Linear

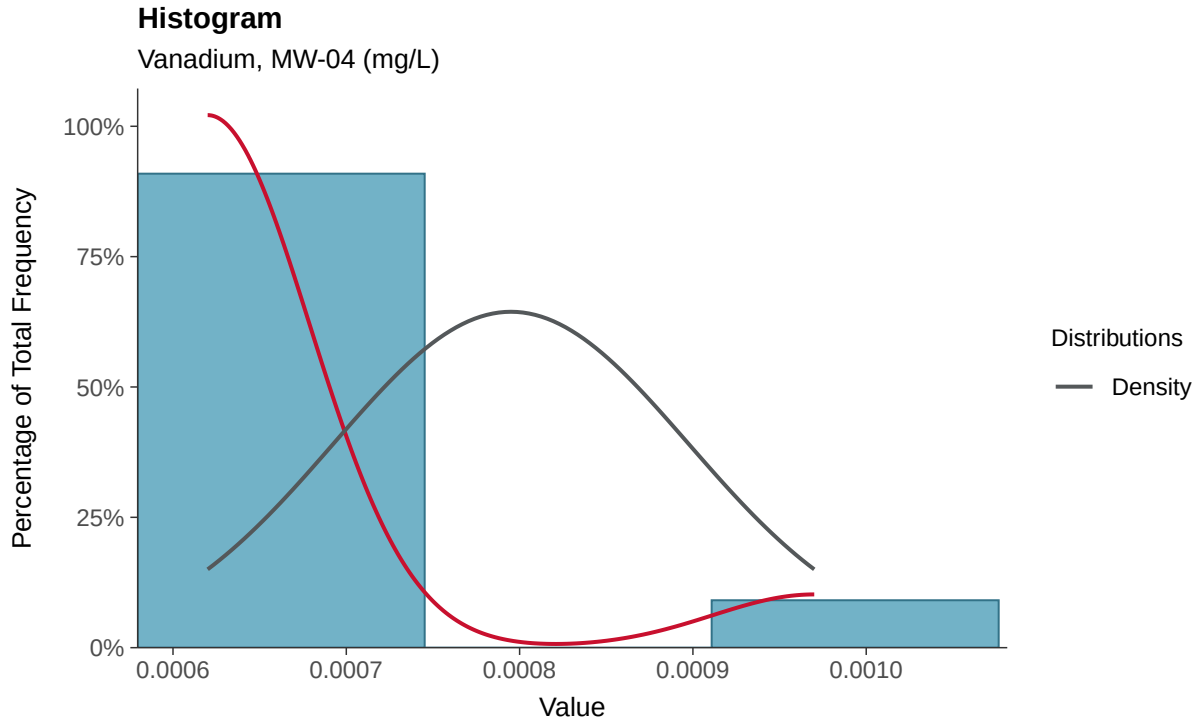
Silver, MW-04 (mg/L)



Part 115: Vanadium, MW-04

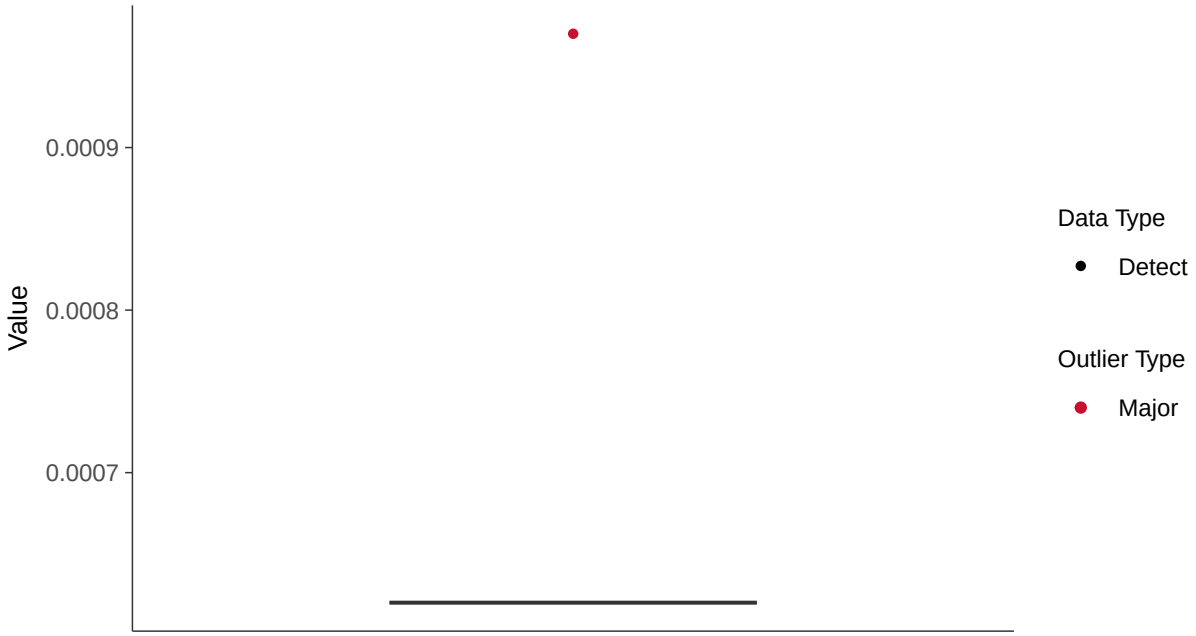
ID: 2_14_6_129





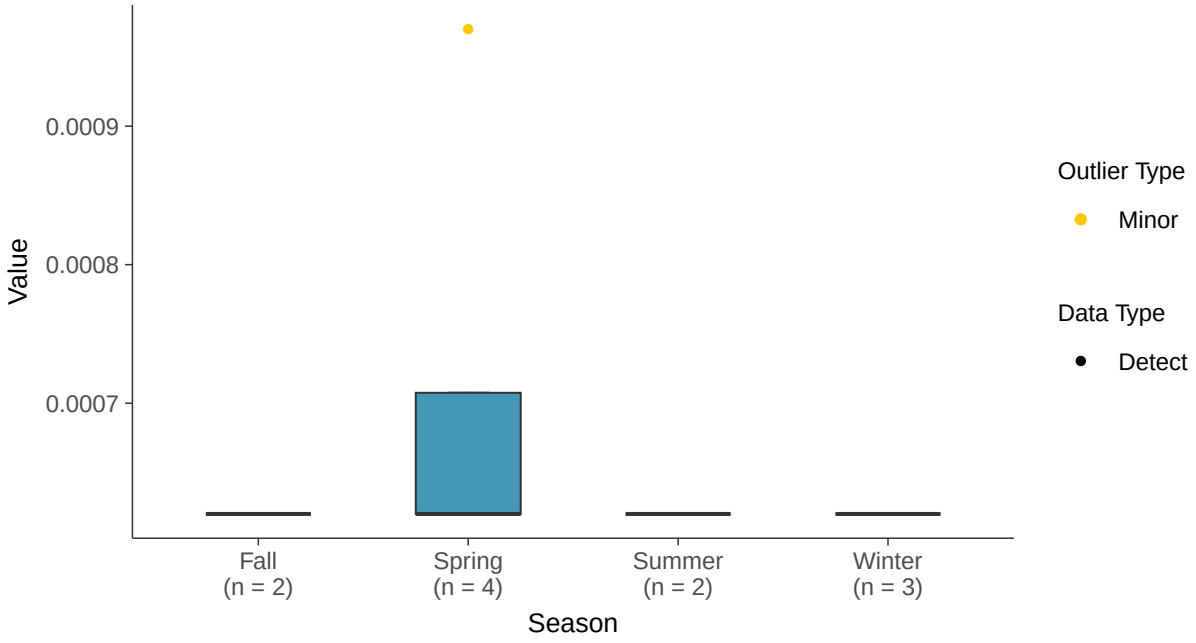
Boxplot

Vanadium, MW-04 (mg/L)



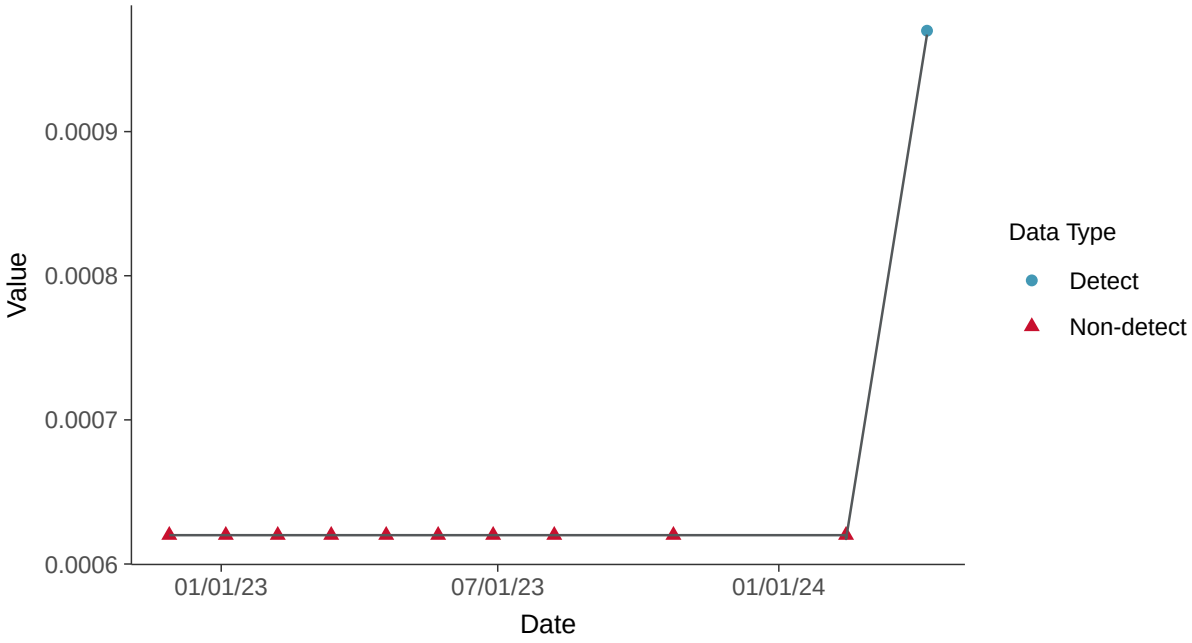
Boxplot by Season

Vanadium, MW-04 (mg/L)



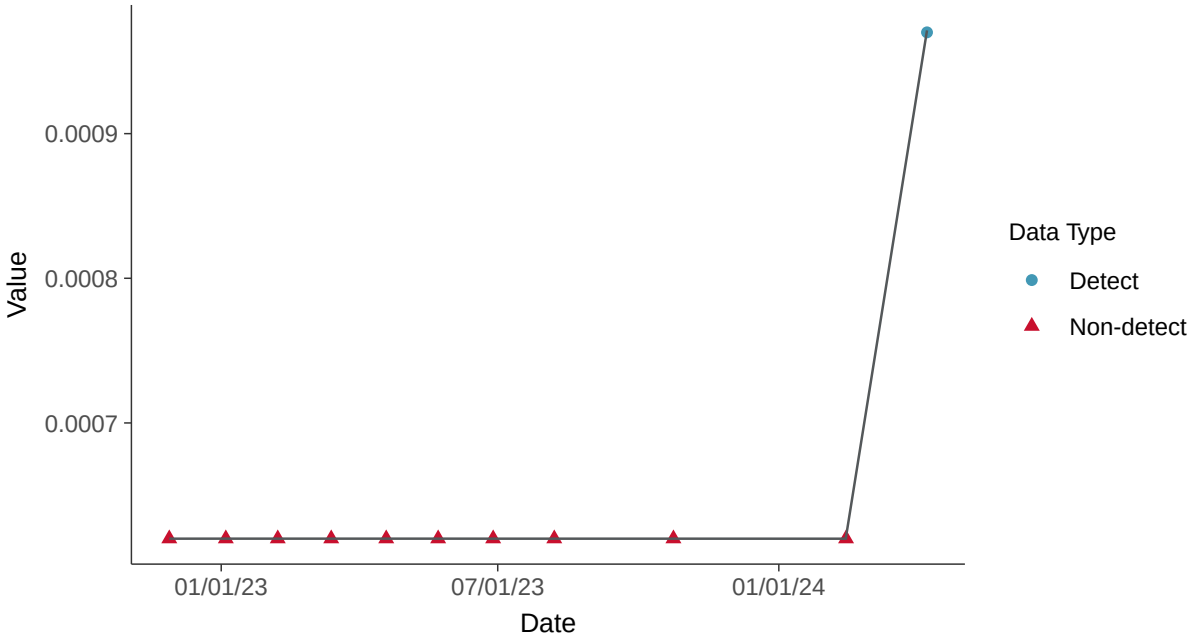
Trend Regression: Piecewise Linear-Linear

Vanadium, MW-04 (mg/L)



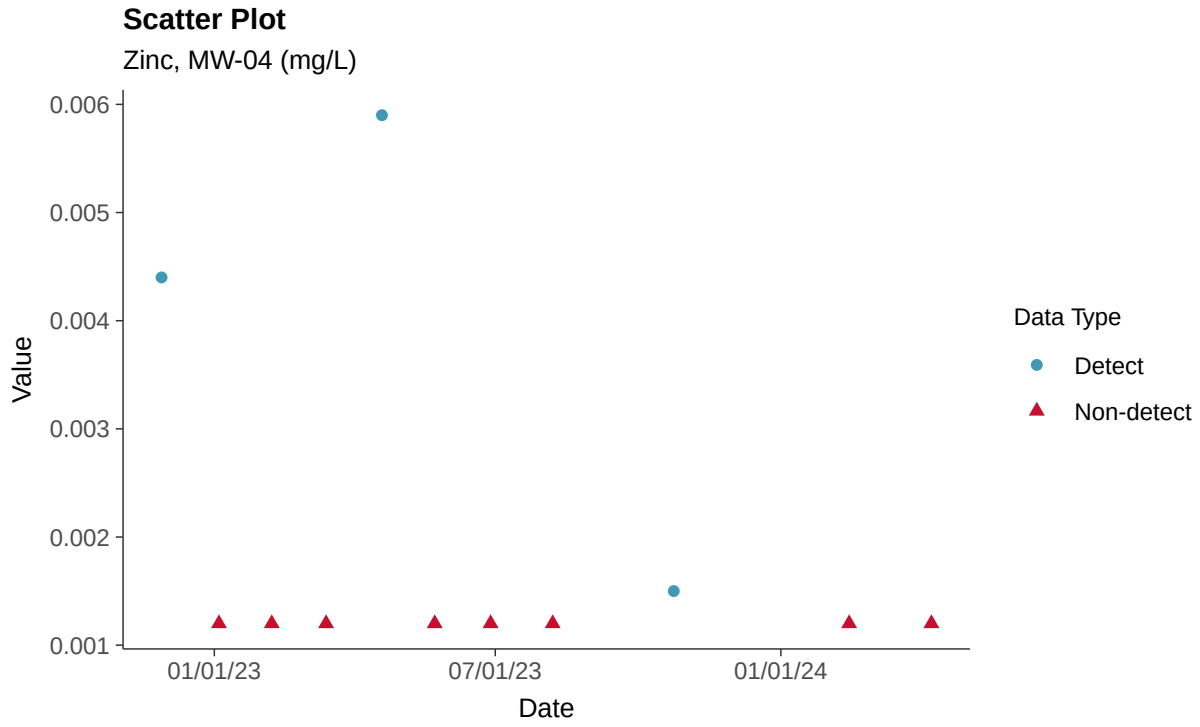
Trend Regression: Piecewise Linear-Linear-Linear

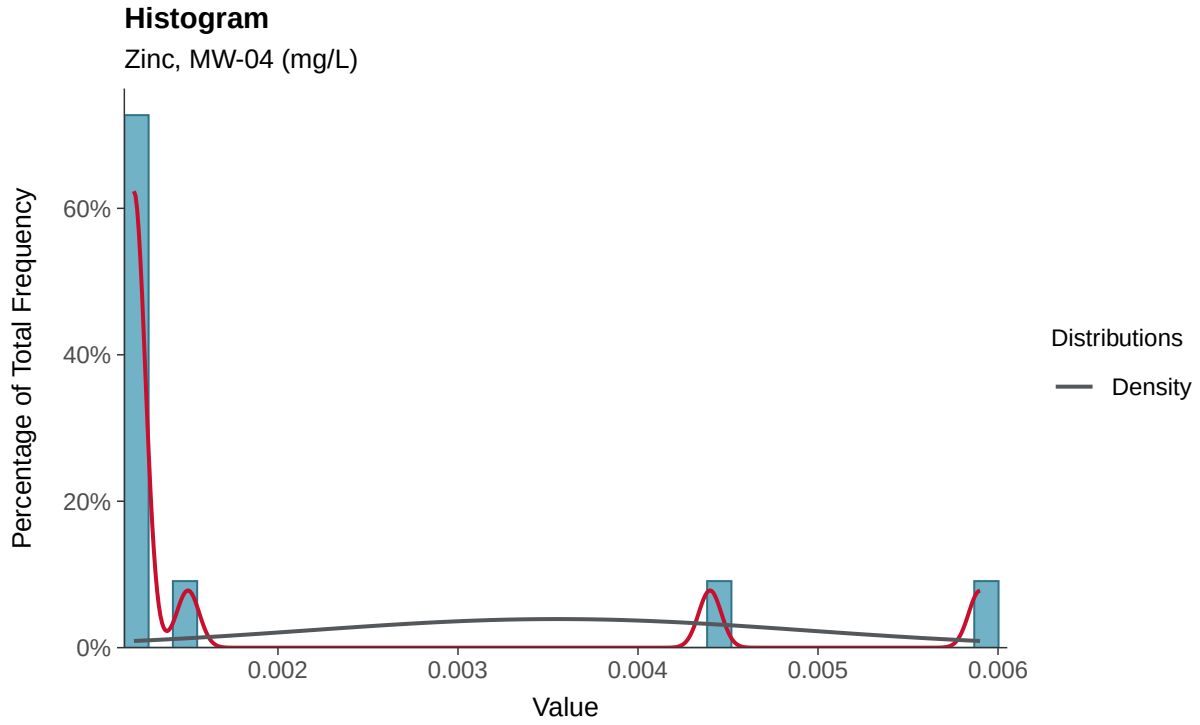
Vanadium, MW-04 (mg/L)



Part 115: Zinc, MW-04

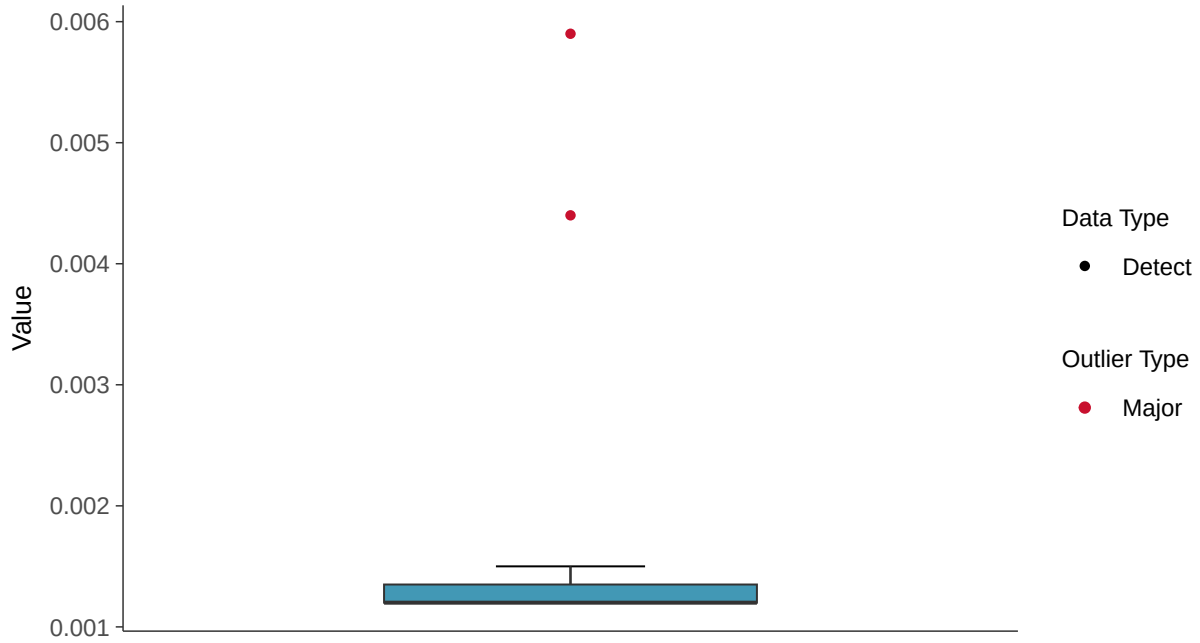
ID: 2_14_6_130





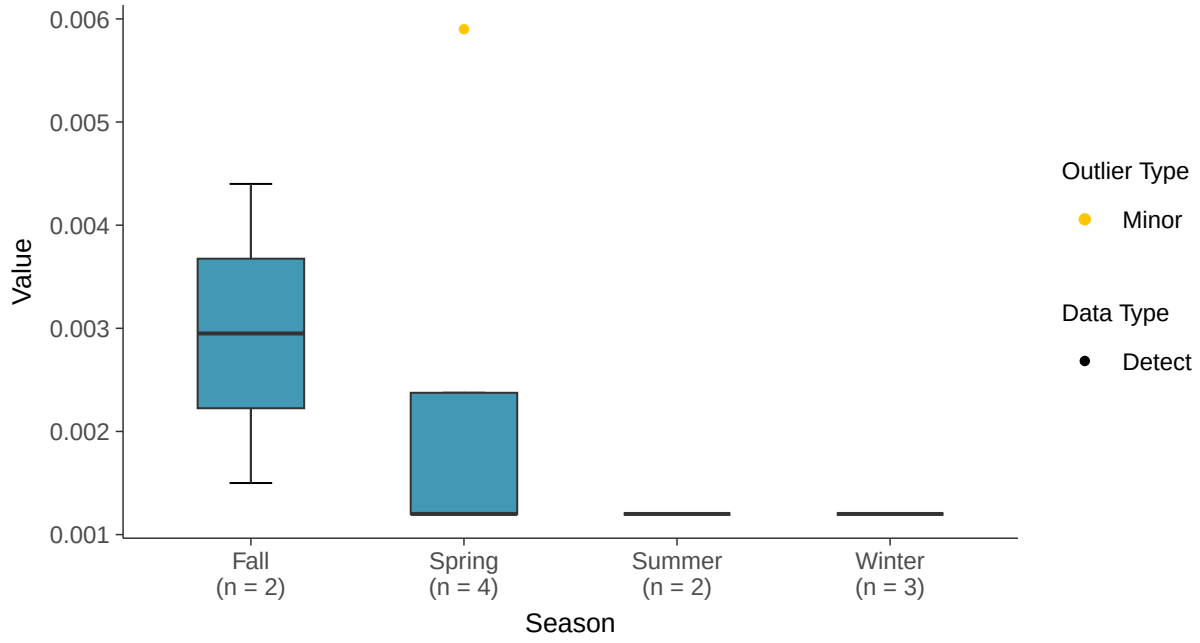
Boxplot

Zinc, MW-04 (mg/L)



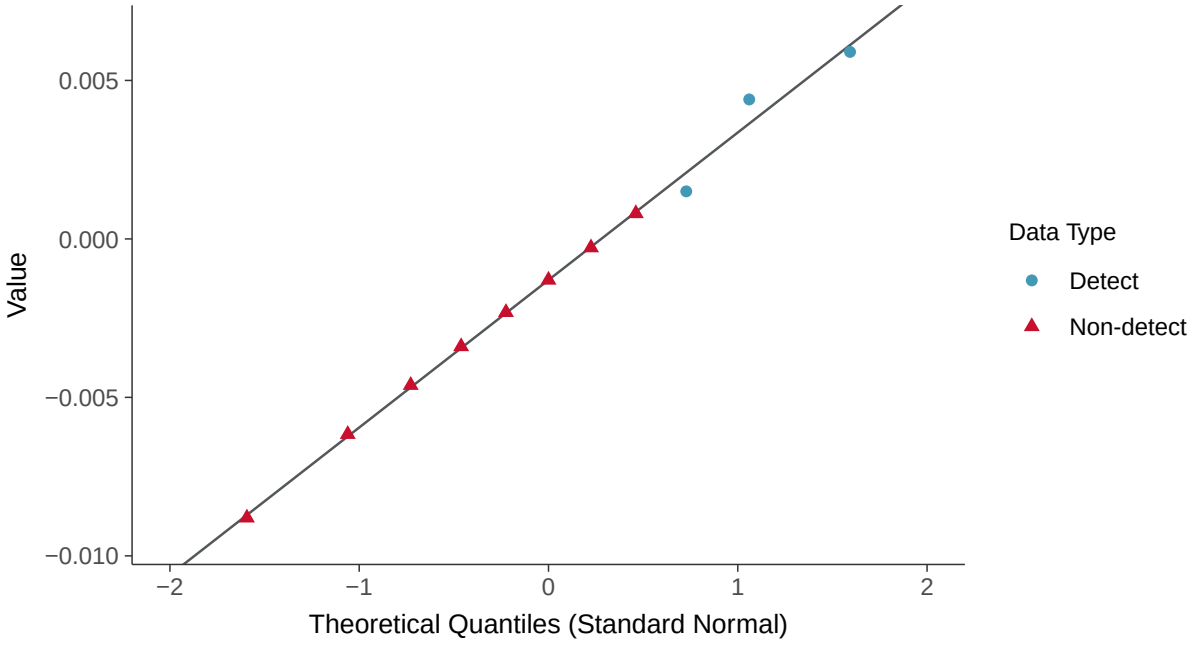
Boxplot by Season

Zinc, MW-04 (mg/L)



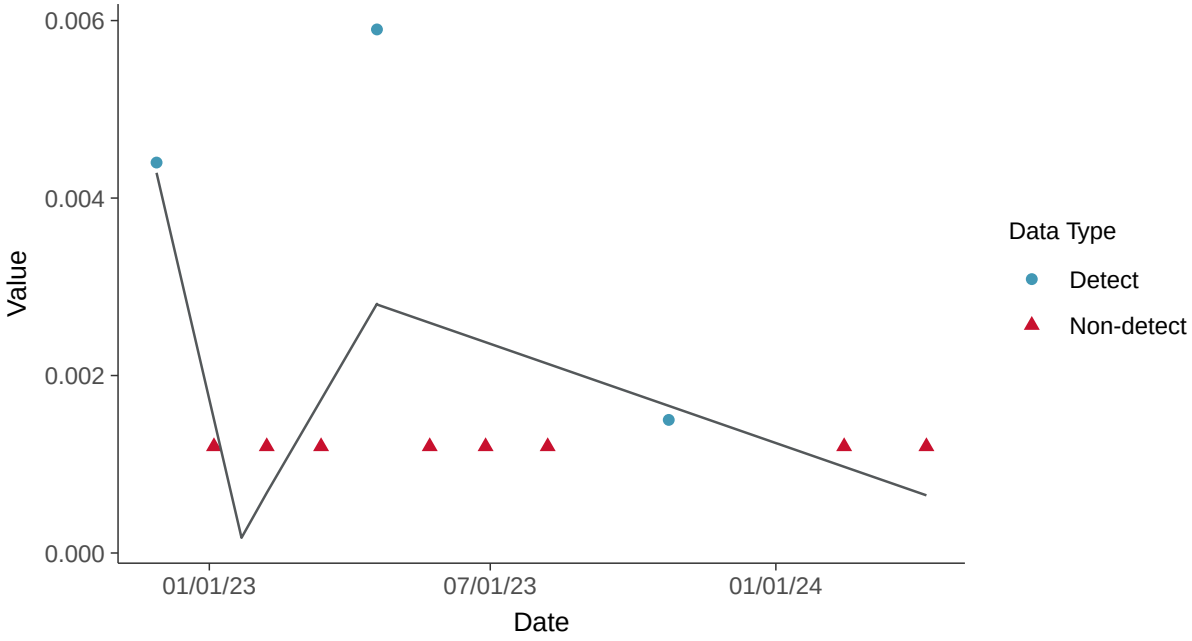
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-04 (mg/L)



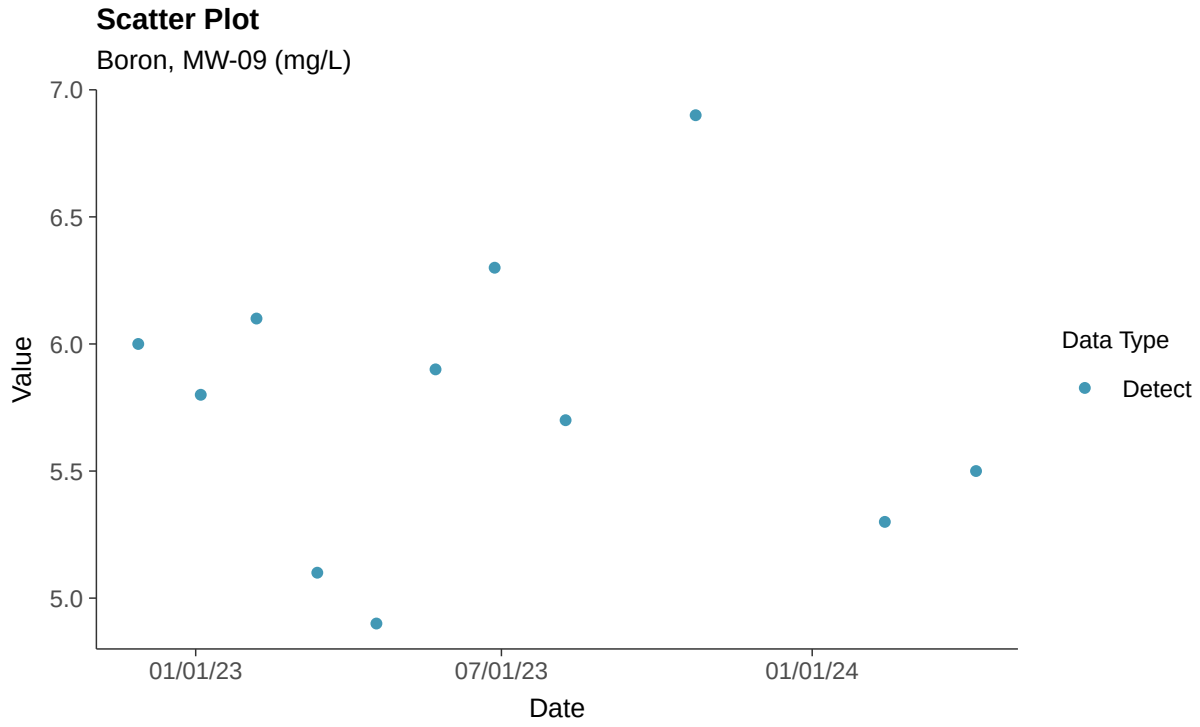
Trend Regression: Piecewise Linear-Linear-Linear

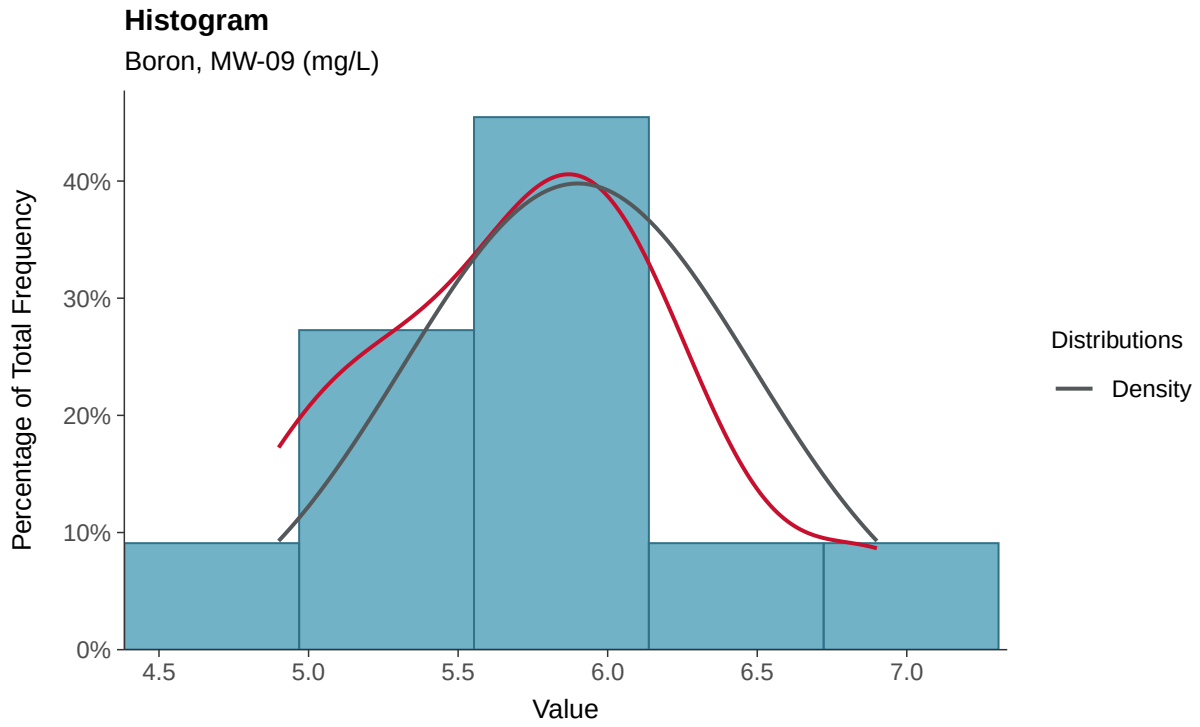
Zinc, MW-04 (mg/L)



Appendix III: Boron, MW-09

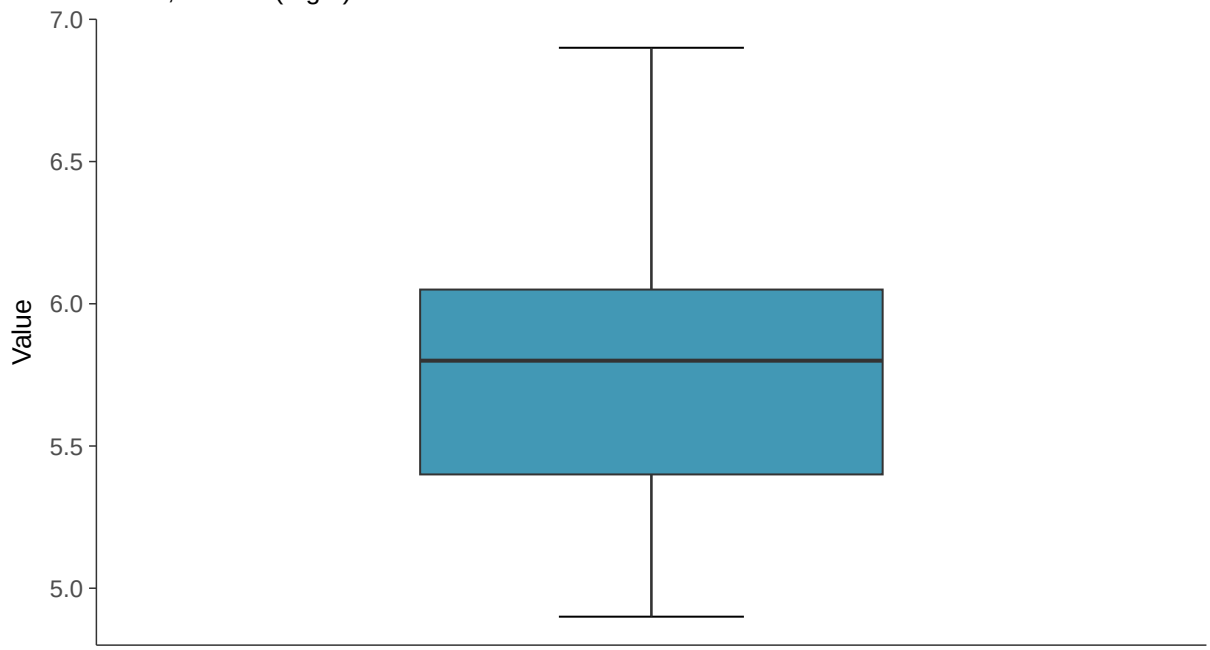
ID: 2_19_4_105





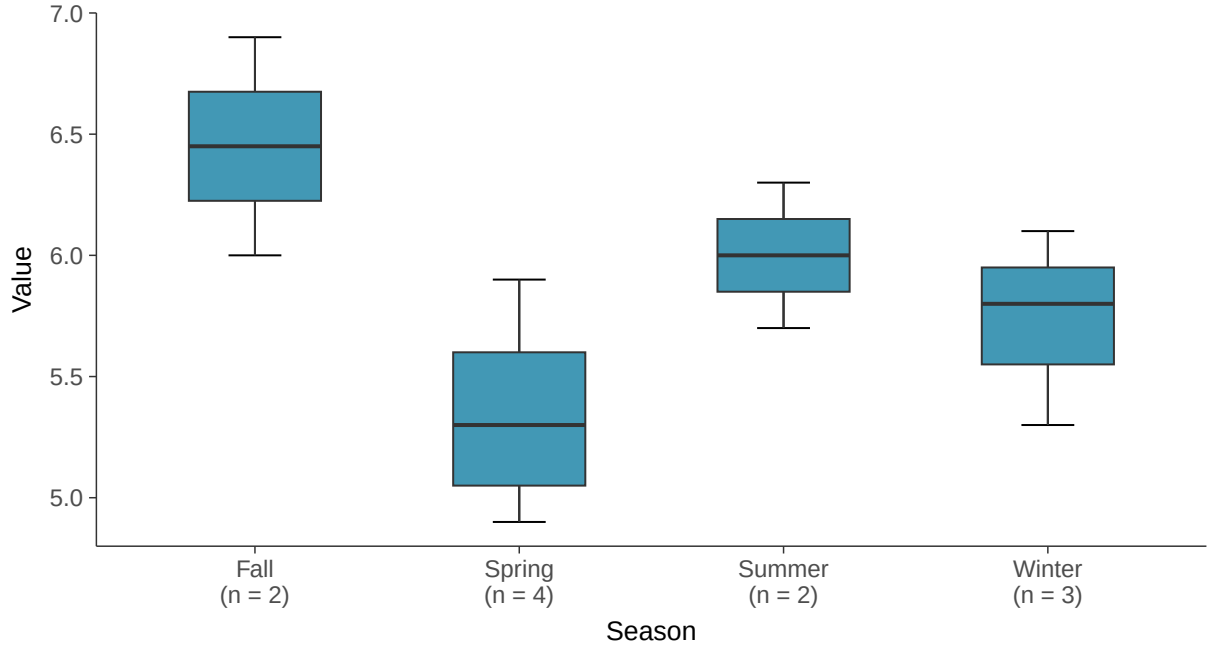
Boxplot

Boron, MW-09 (mg/L)



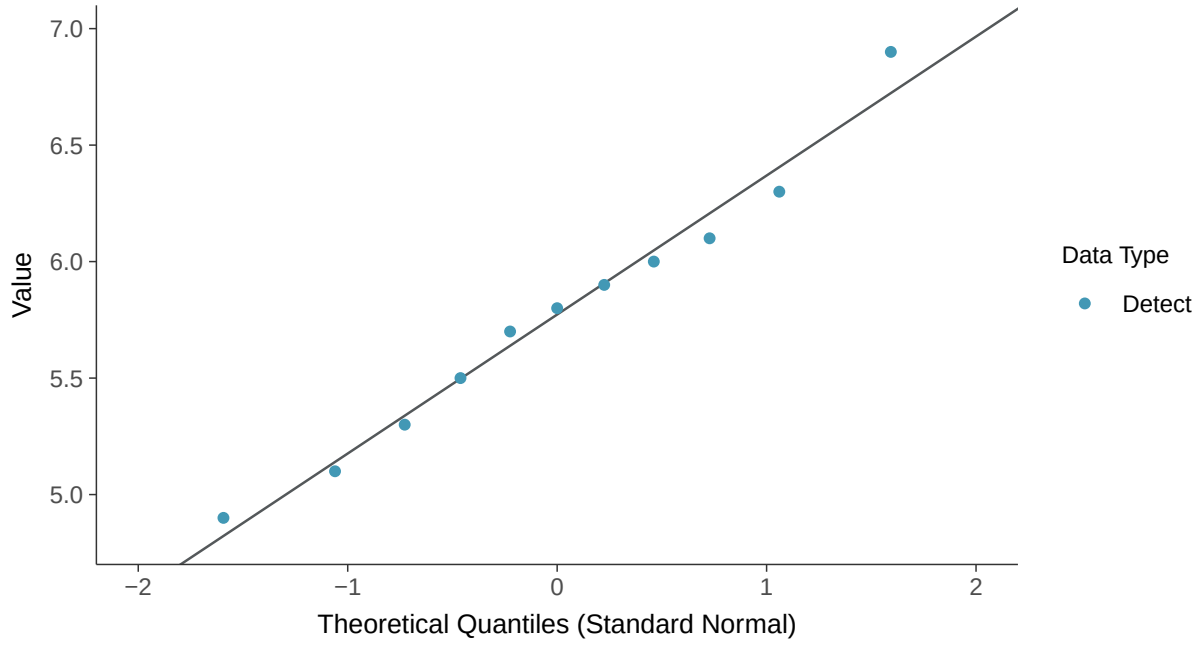
Boxplot by Season

Boron, MW-09 (mg/L)



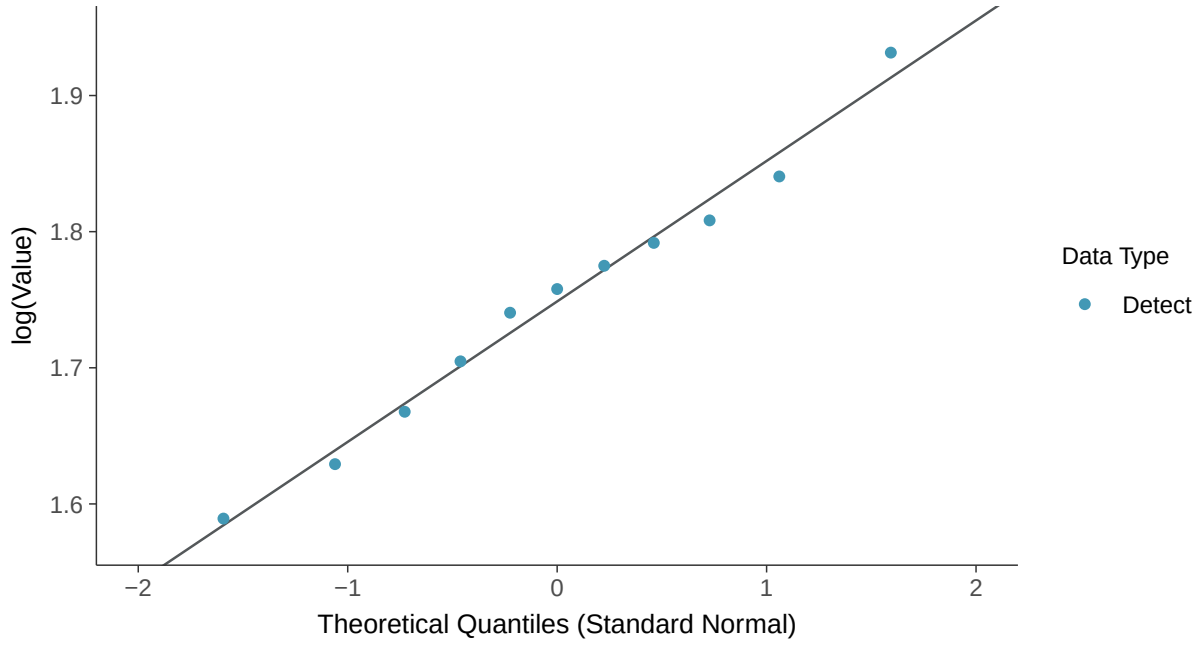
Normal Q-Q plot

Boron, MW-09 (mg/L)



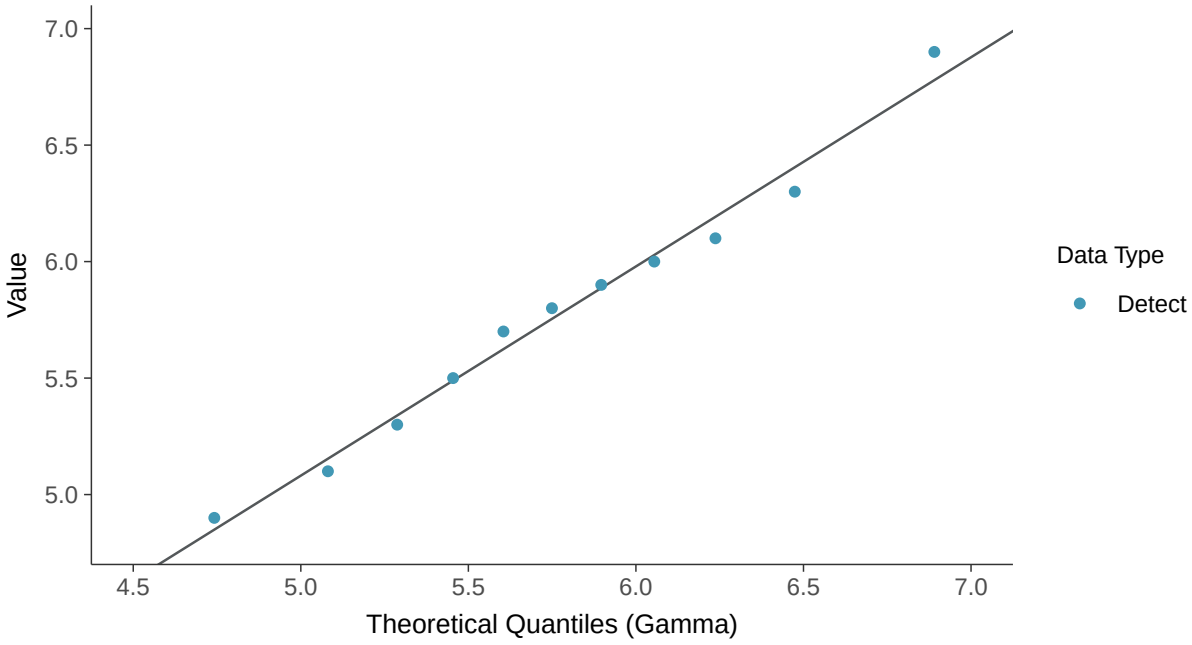
Lognormal Q-Q plot

Boron, MW-09 (mg/L)



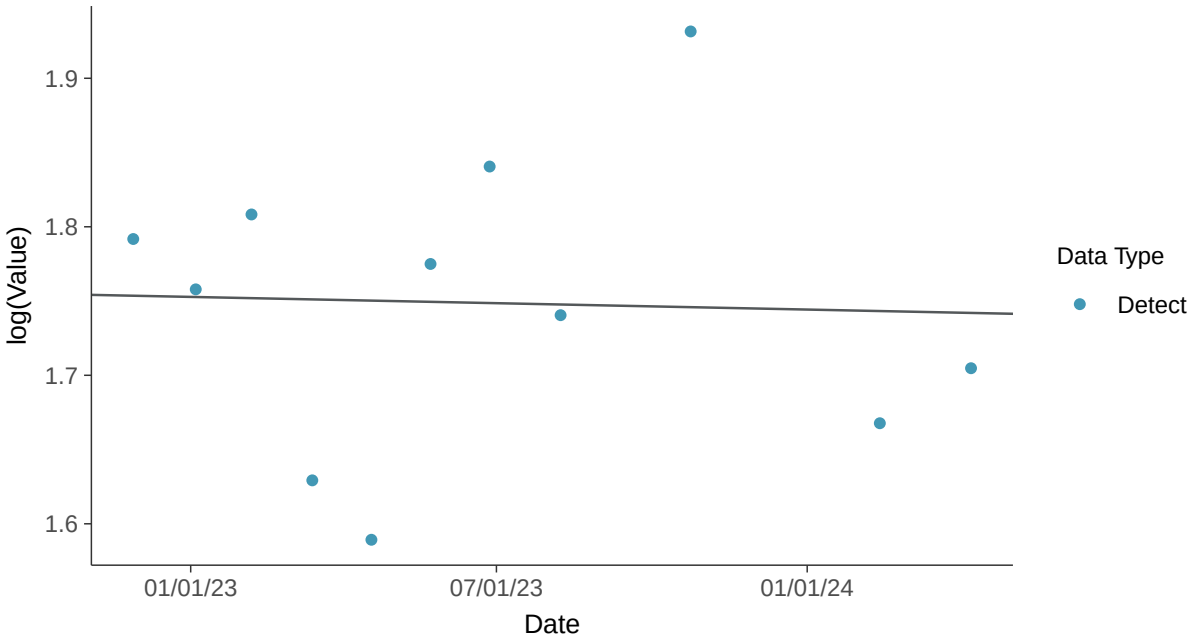
Gamma Q-Q plot

Boron, MW-09 (mg/L)



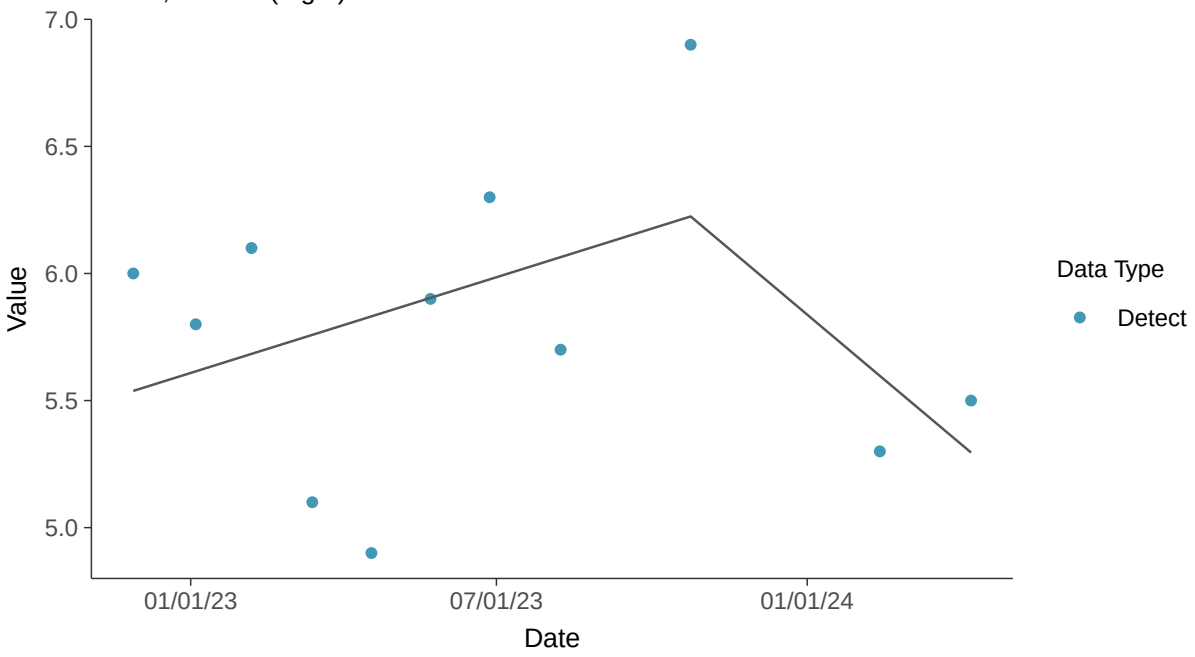
Trend Regression: Lognormal MLE

Boron, MW-09 (mg/L)



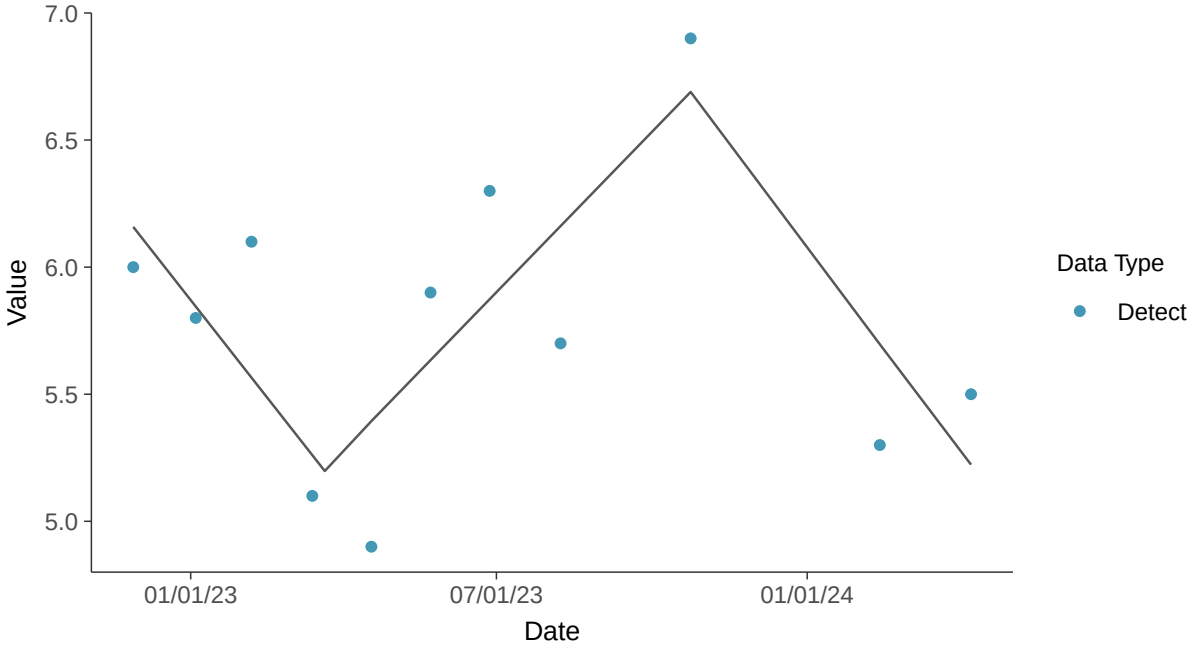
Trend Regression: Piecewise Linear-Linear

Boron, MW-09 (mg/L)



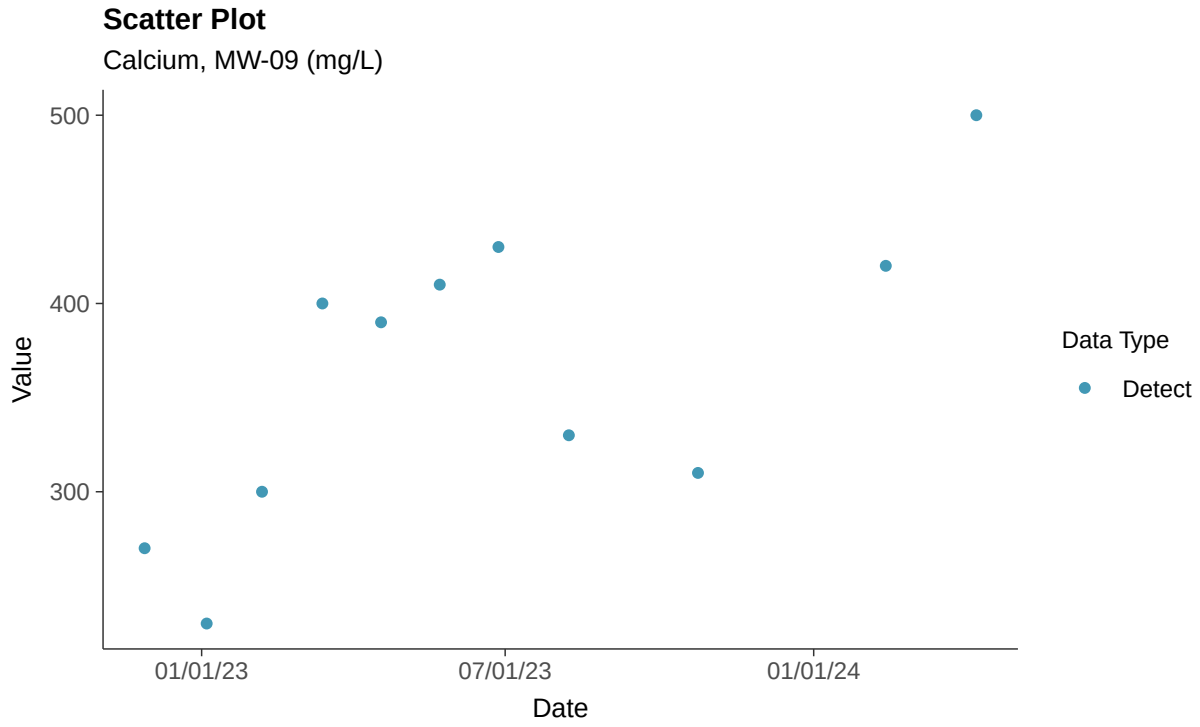
Trend Regression: Piecewise Linear-Linear-Linear

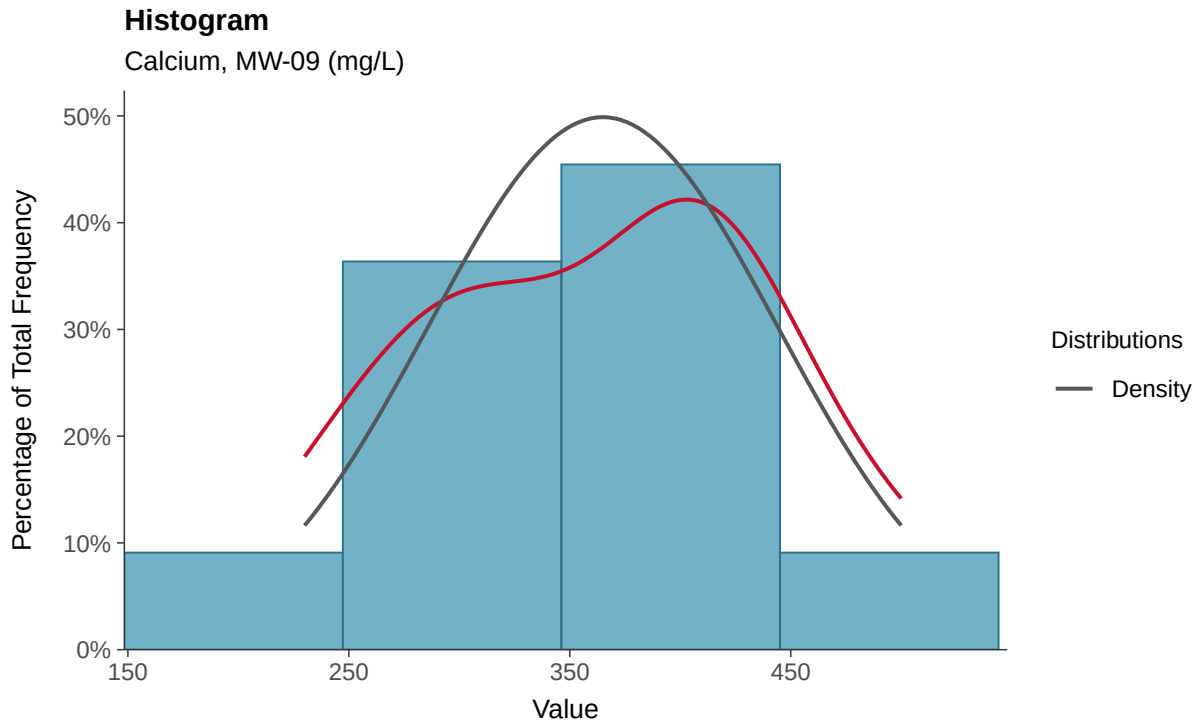
Boron, MW-09 (mg/L)



Appendix III: Calcium, MW-09

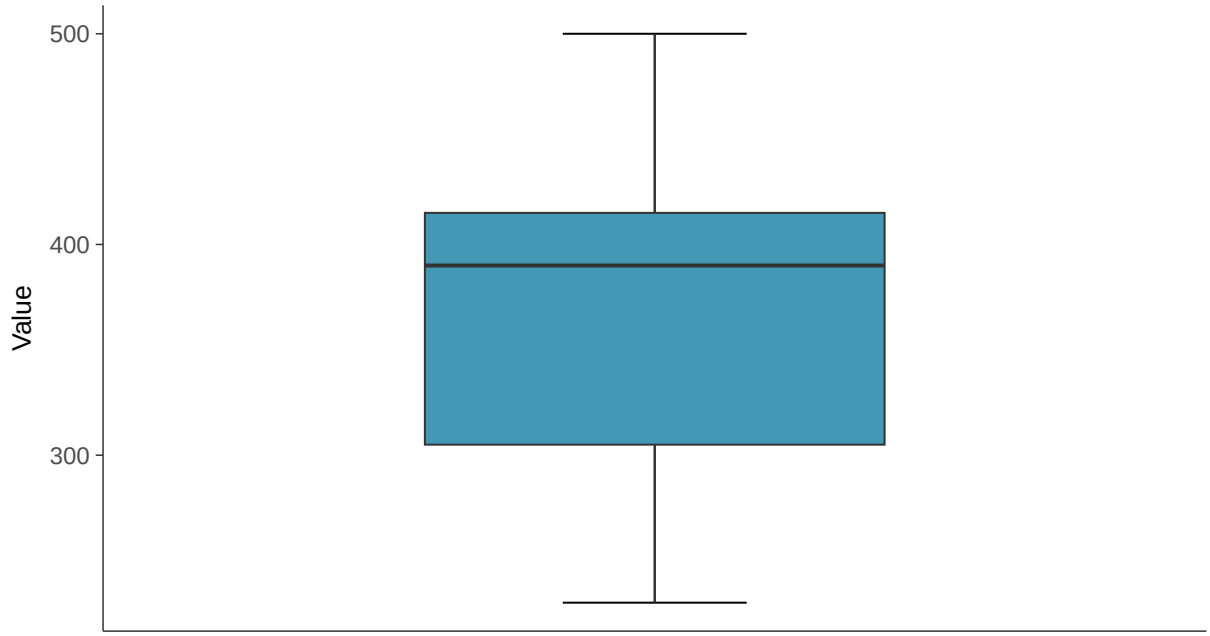
ID: 2_19_4_107





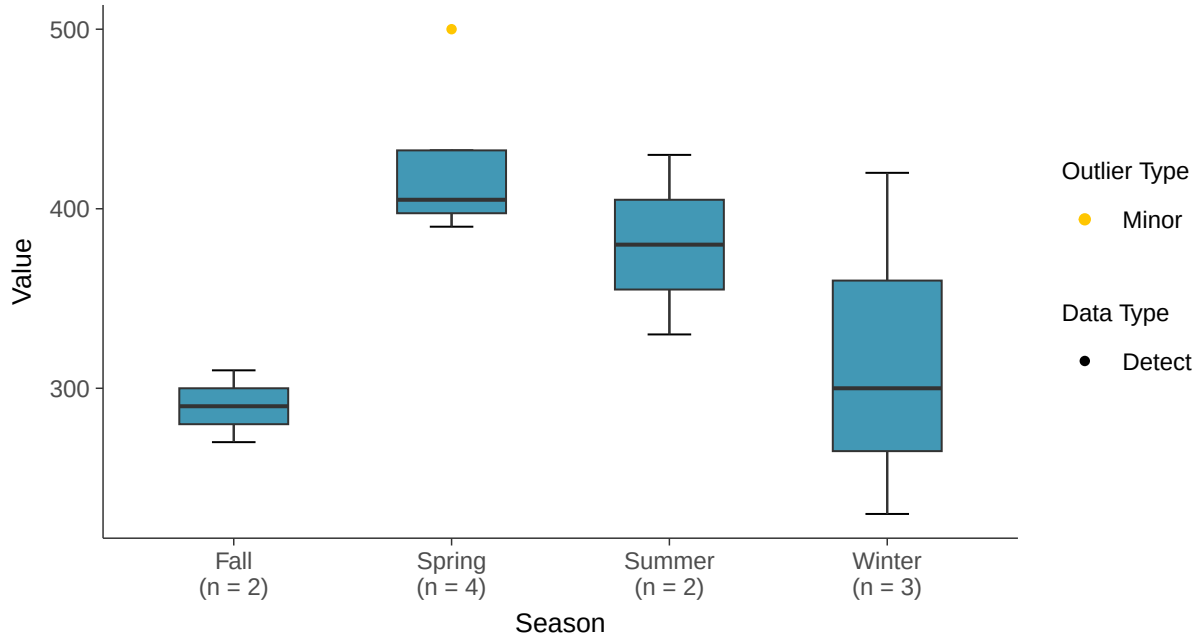
Boxplot

Calcium, MW-09 (mg/L)



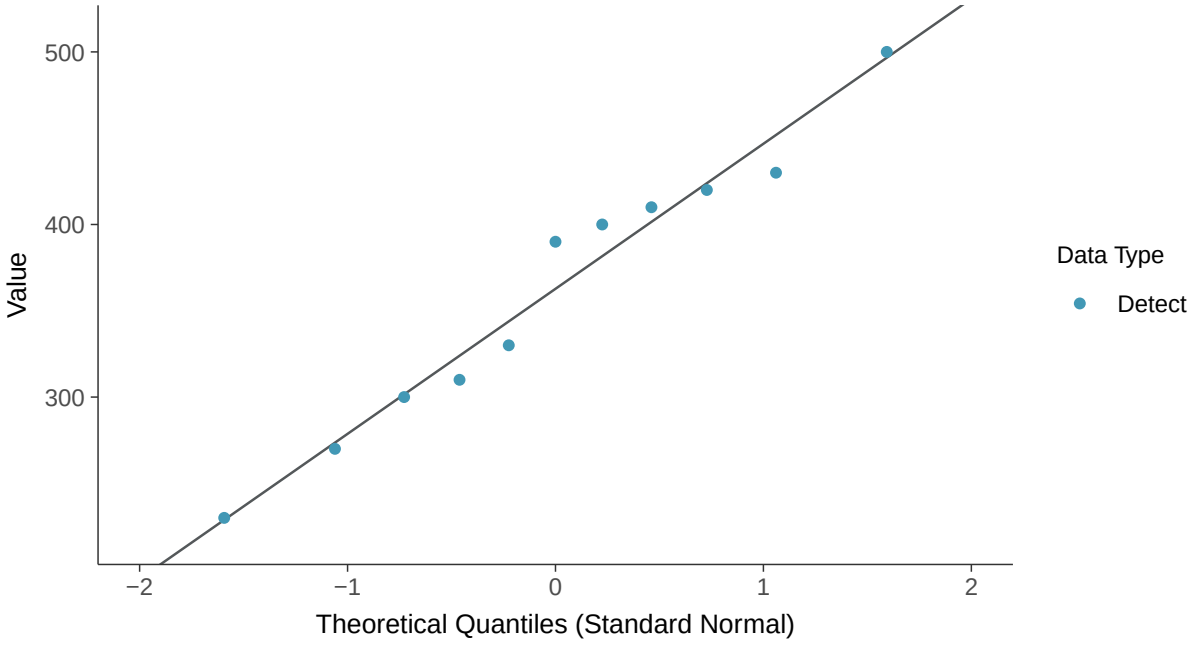
Boxplot by Season

Calcium, MW-09 (mg/L)



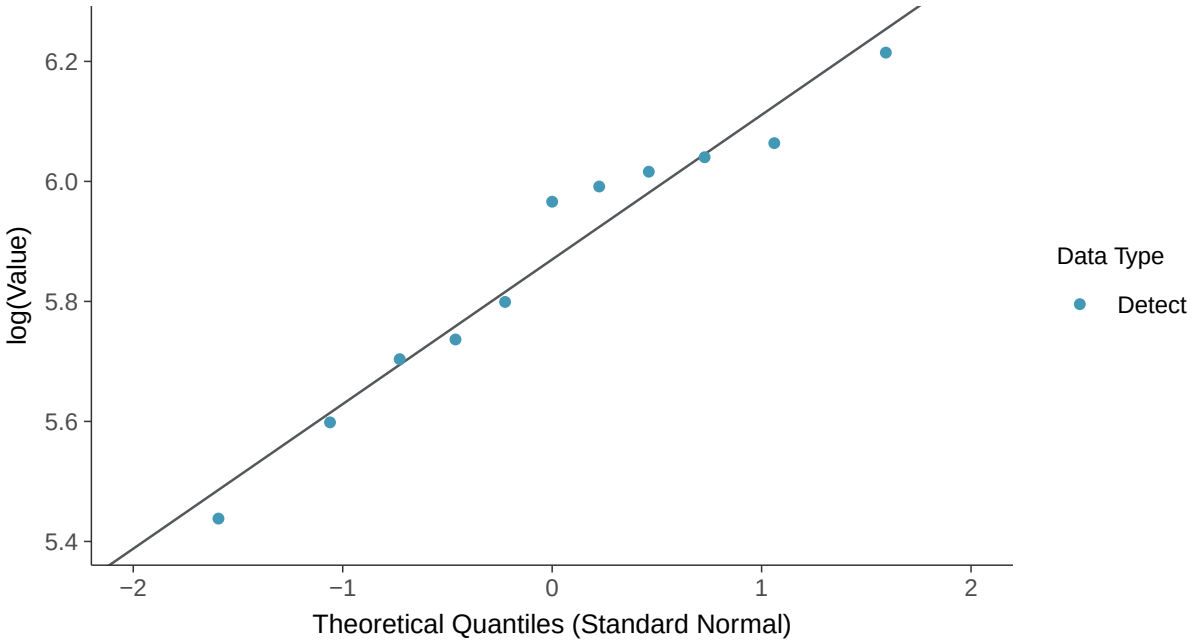
Normal Q-Q plot

Calcium, MW-09 (mg/L)



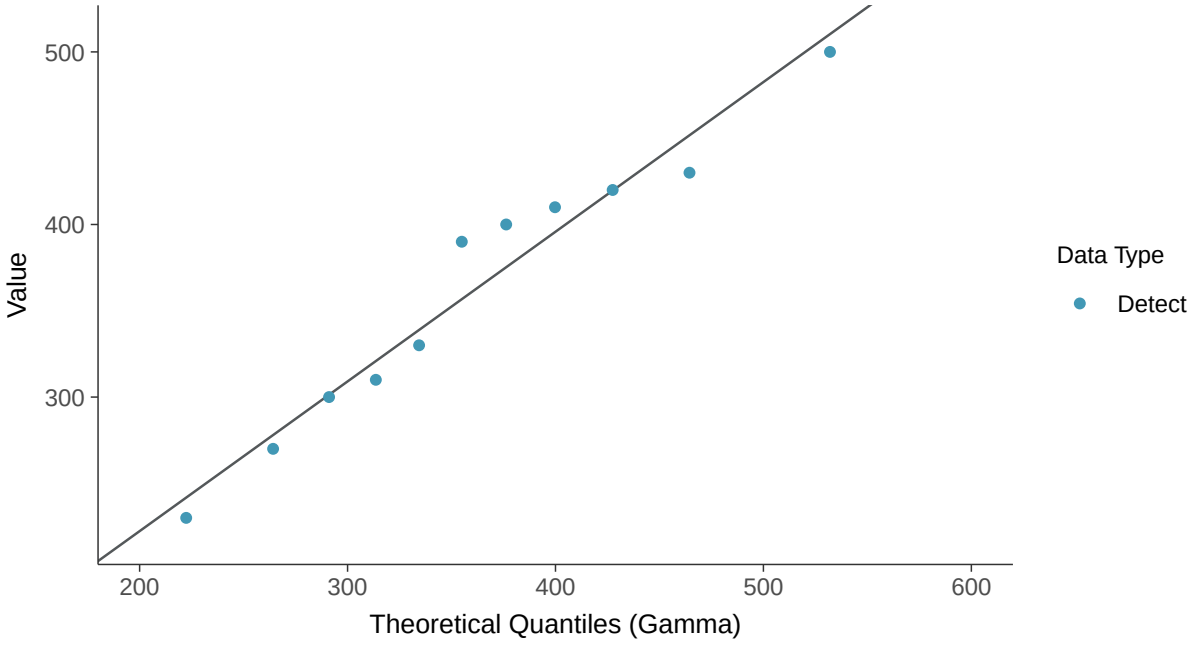
Lognormal Q-Q plot

Calcium, MW-09 (mg/L)



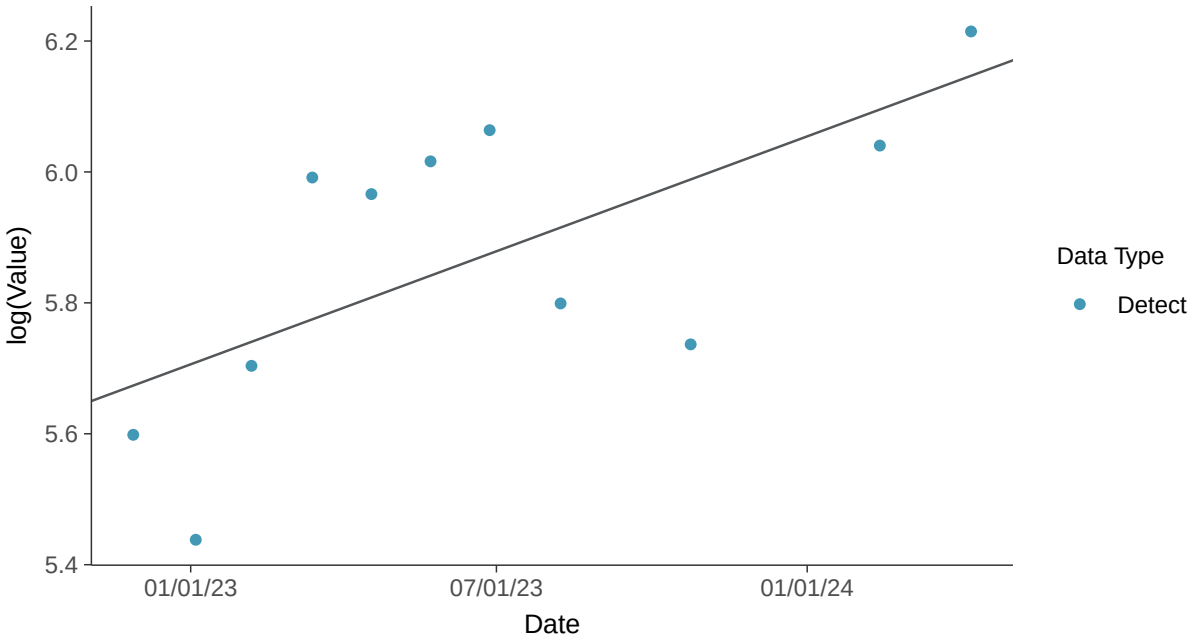
Gamma Q-Q plot

Calcium, MW-09 (mg/L)



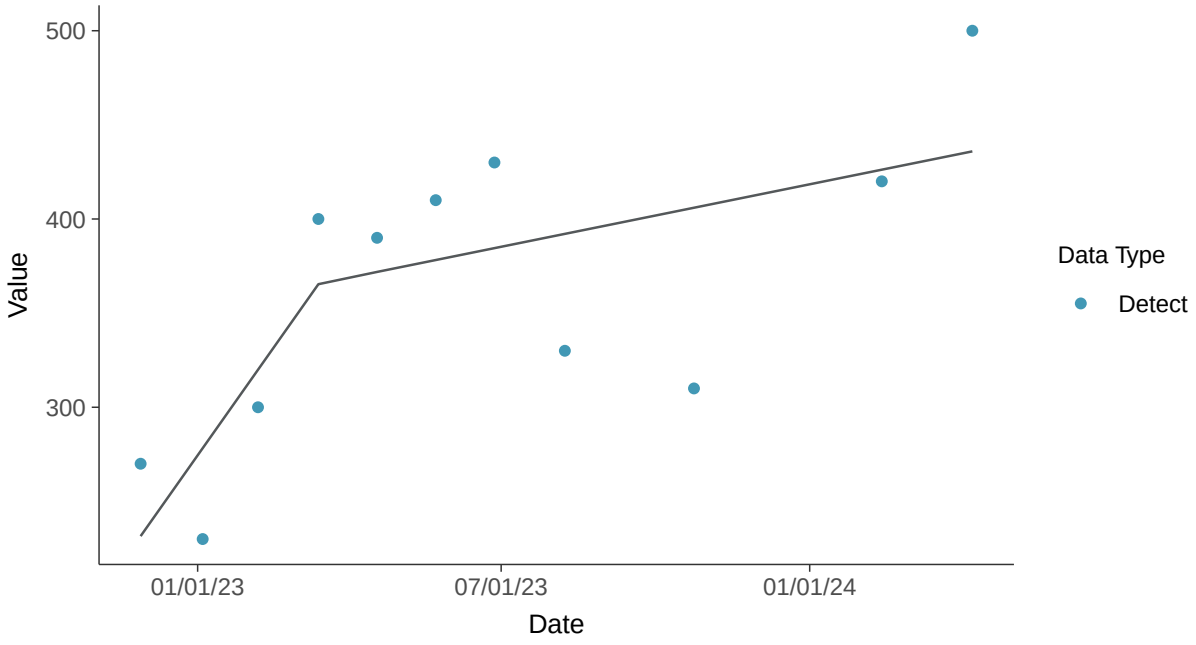
Trend Regression: Lognormal MLE

Calcium, MW-09 (mg/L)



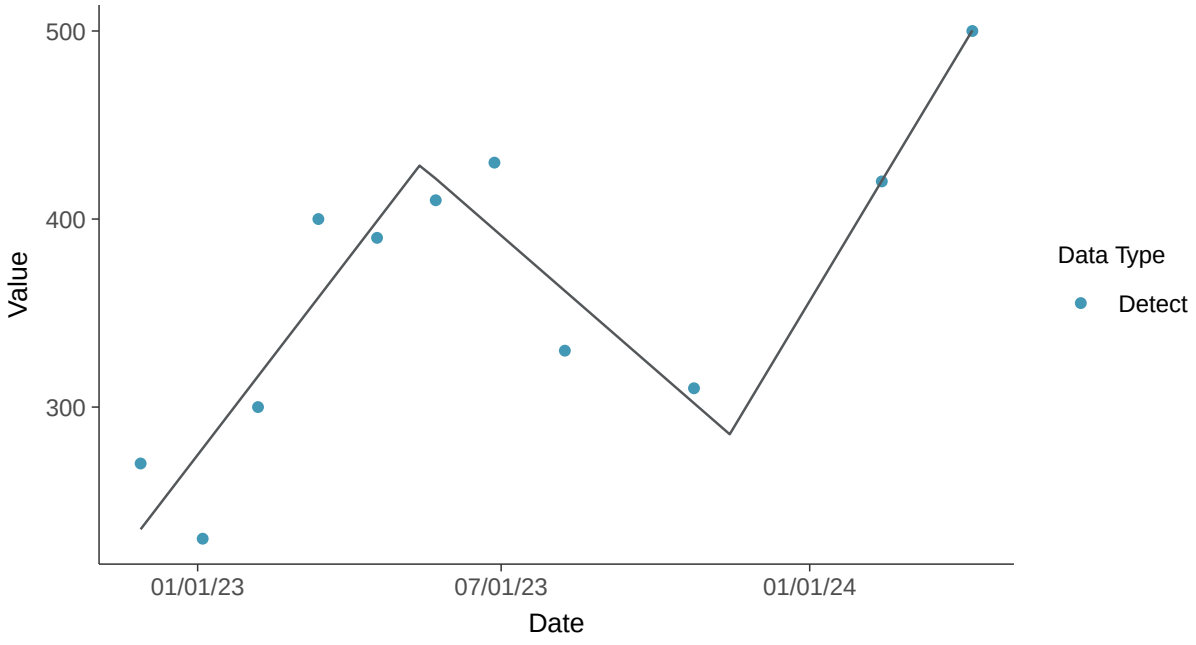
Trend Regression: Piecewise Linear-Linear

Calcium, MW-09 (mg/L)



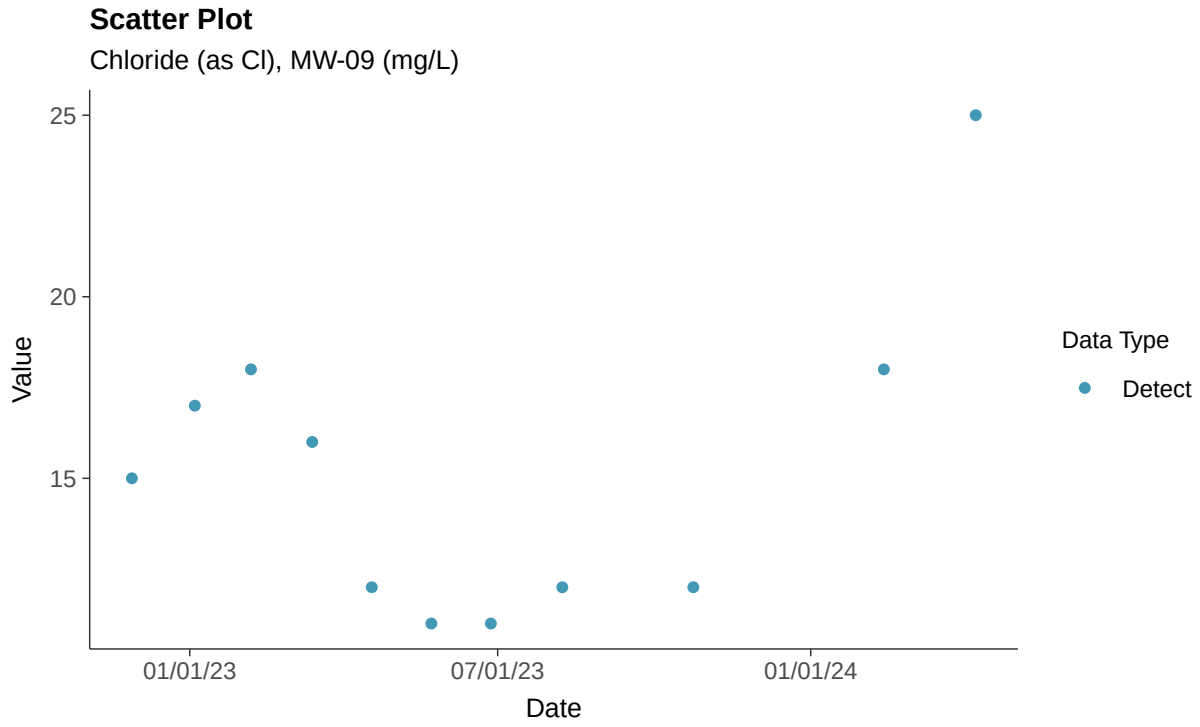
Trend Regression: Piecewise Linear-Linear-Linear

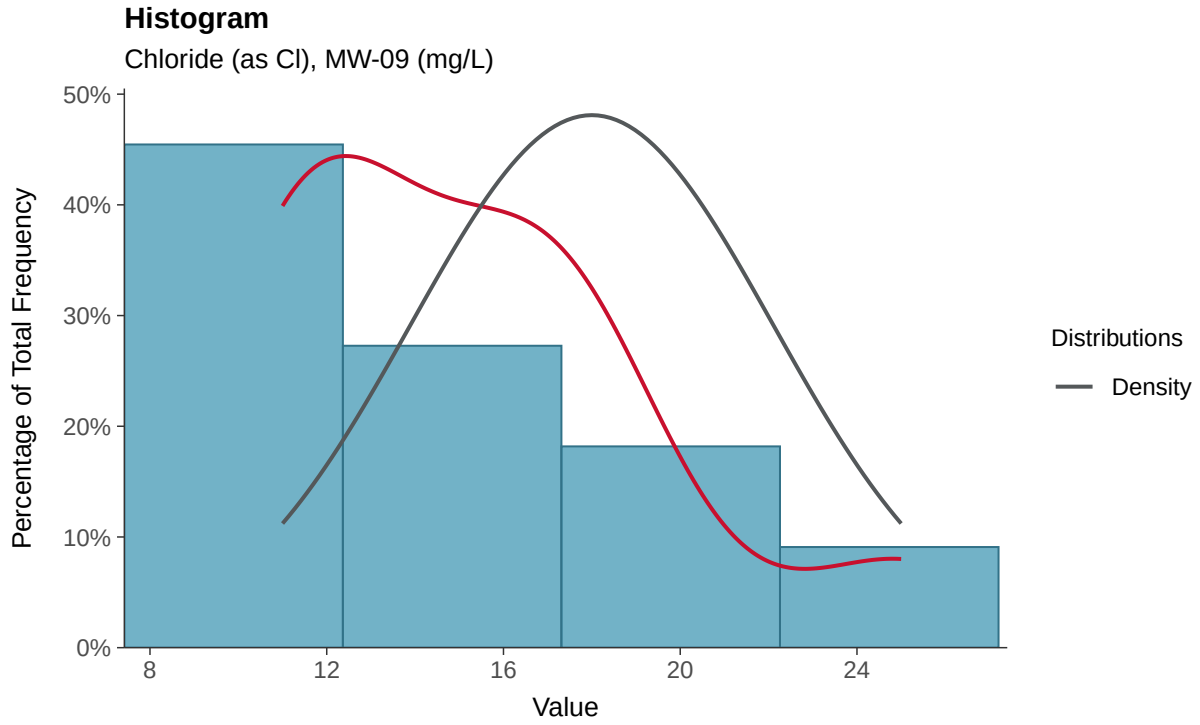
Calcium, MW-09 (mg/L)



Appendix III: Chloride (as Cl), MW-09

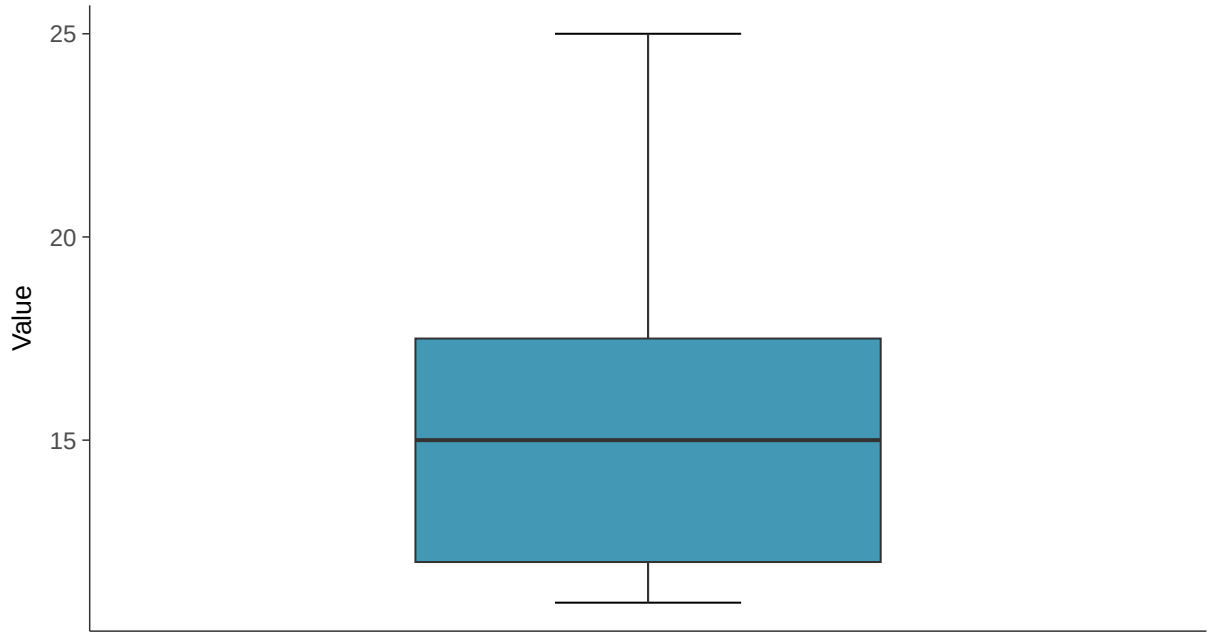
ID: 2_19_4_108





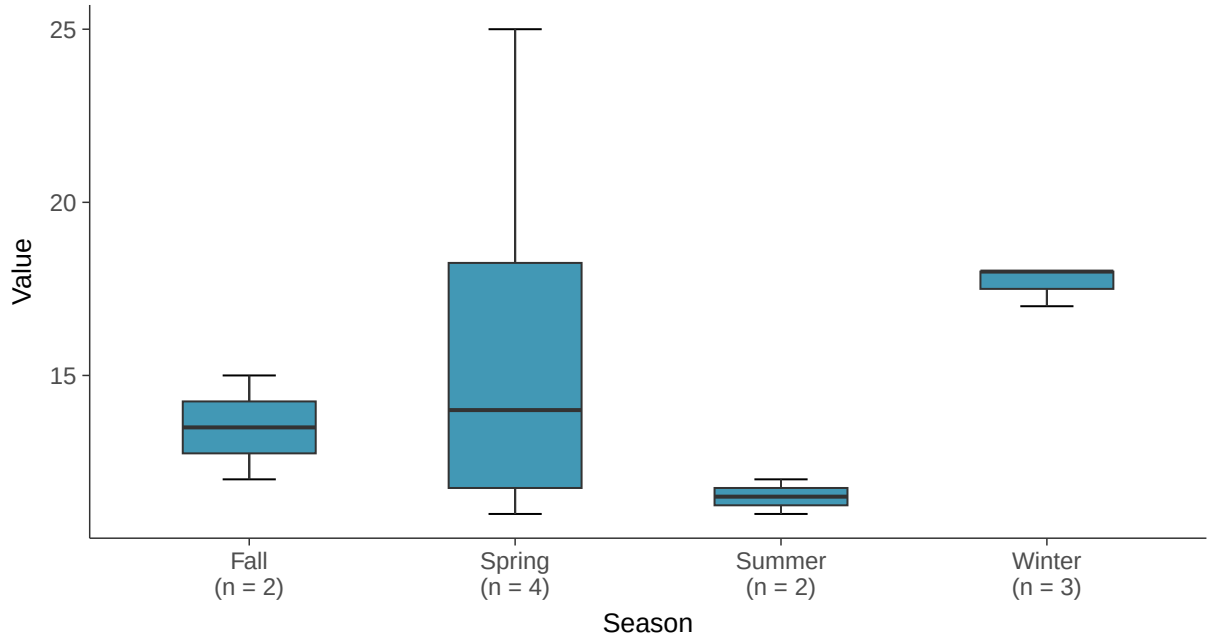
Boxplot

Chloride (as Cl), MW-09 (mg/L)



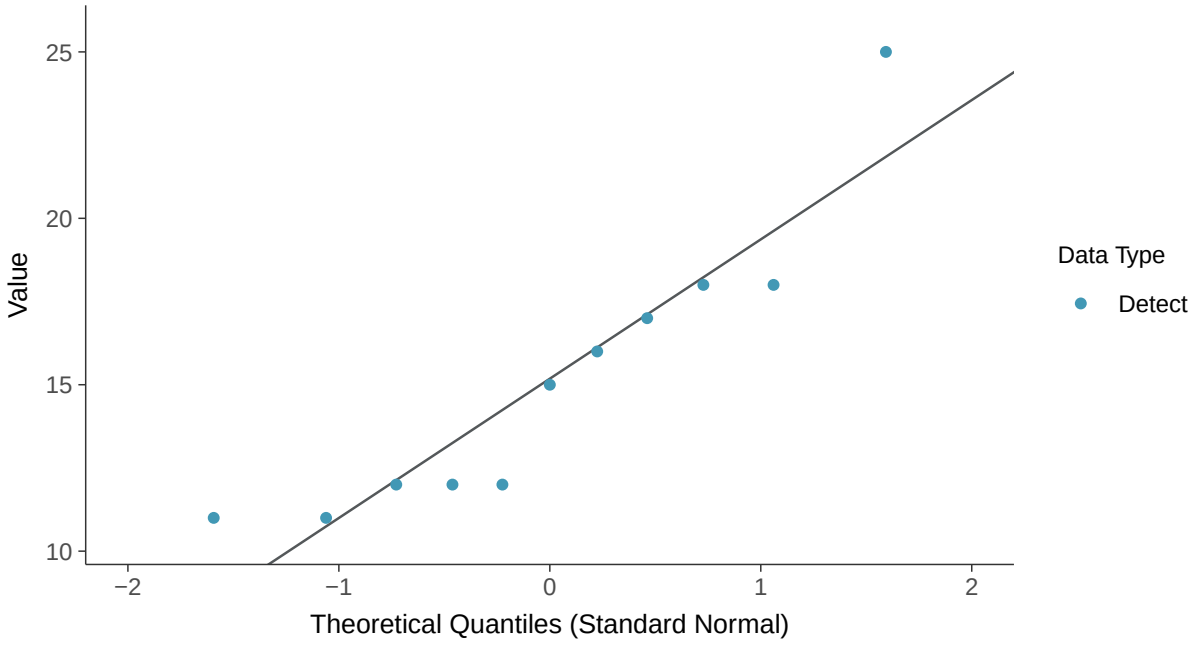
Boxplot by Season

Chloride (as Cl), MW-09 (mg/L)



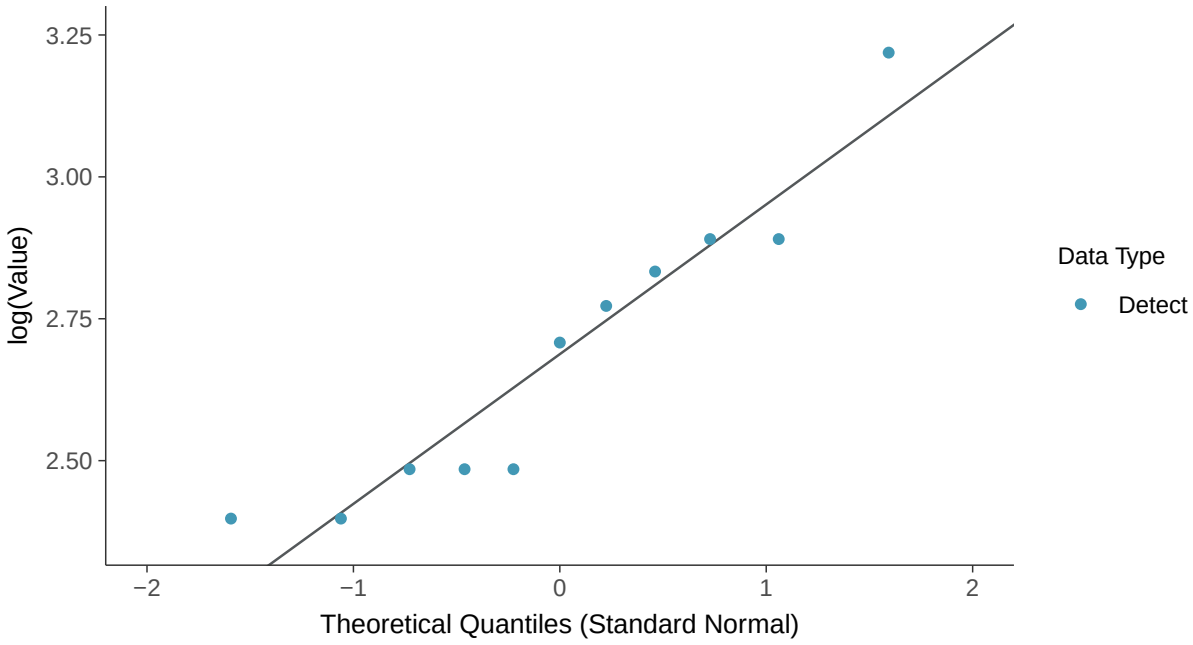
Normal Q-Q plot

Chloride (as Cl), MW-09 (mg/L)



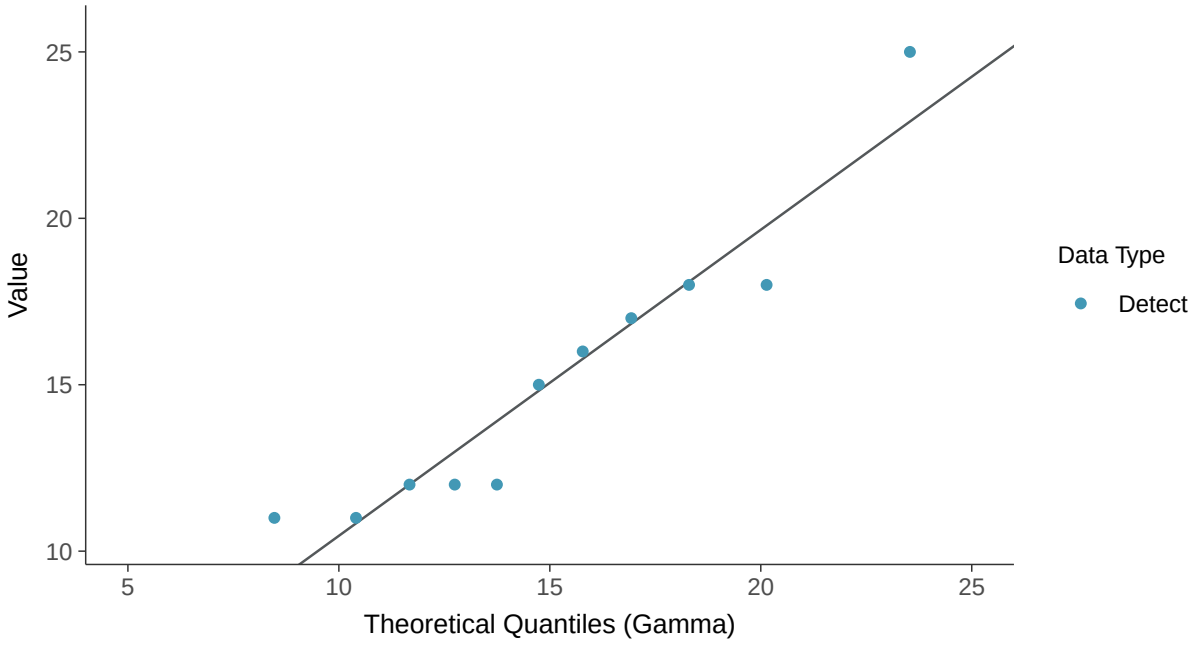
Lognormal Q-Q plot

Chloride (as Cl), MW-09 (mg/L)



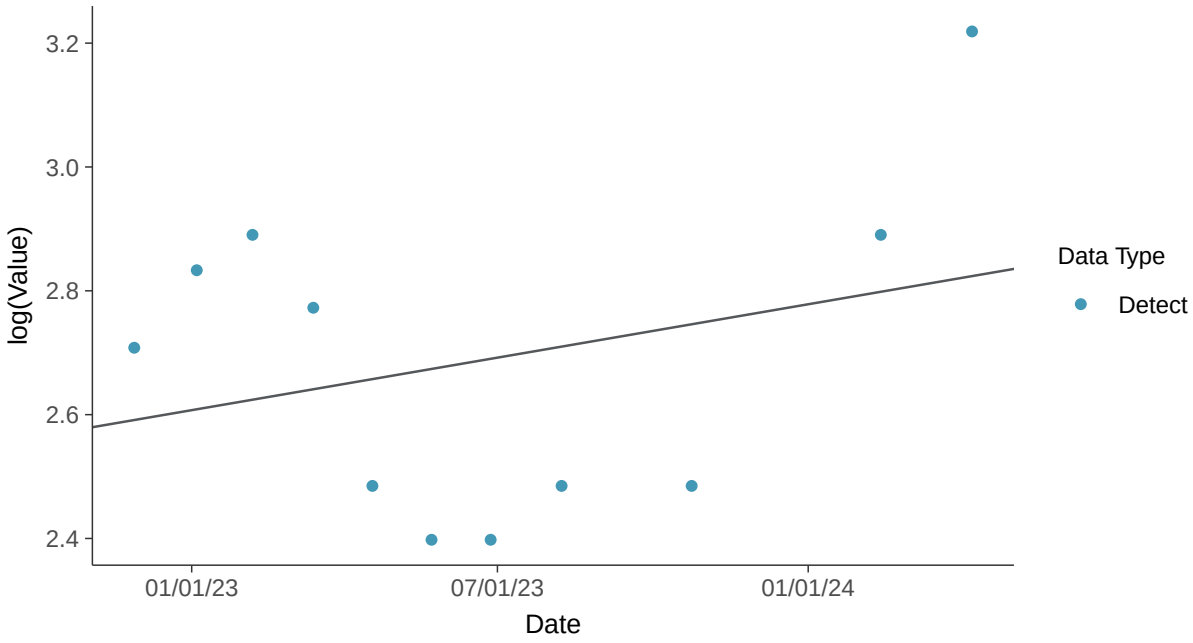
Gamma Q-Q plot

Chloride (as Cl), MW-09 (mg/L)



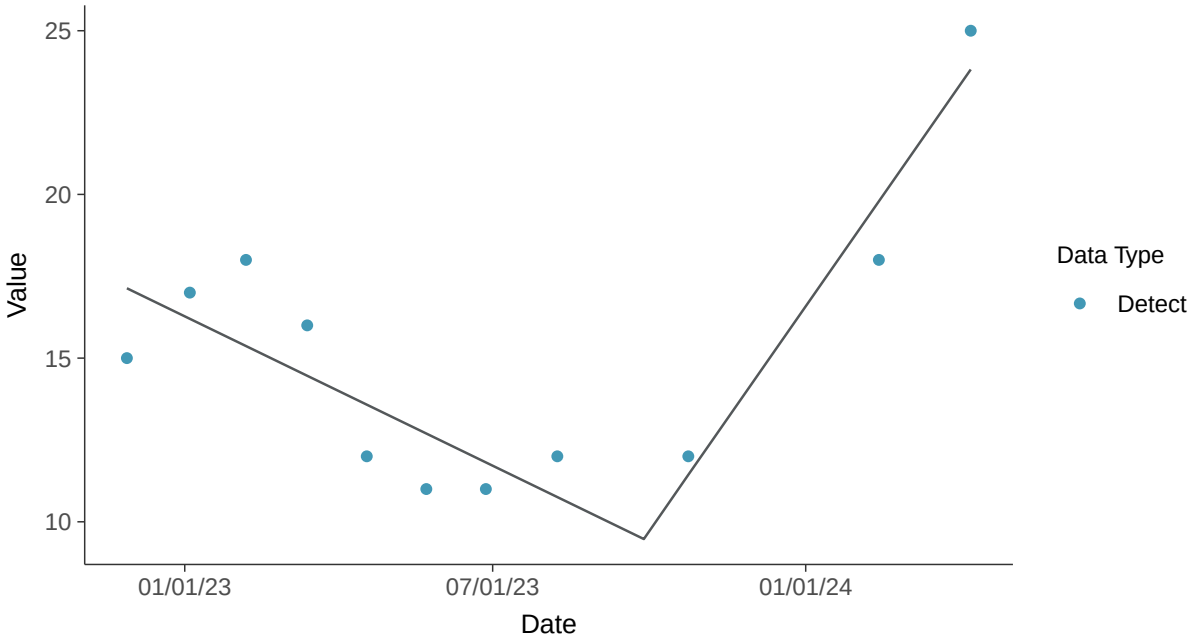
Trend Regression: Lognormal MLE

Chloride (as Cl), MW-09 (mg/L)



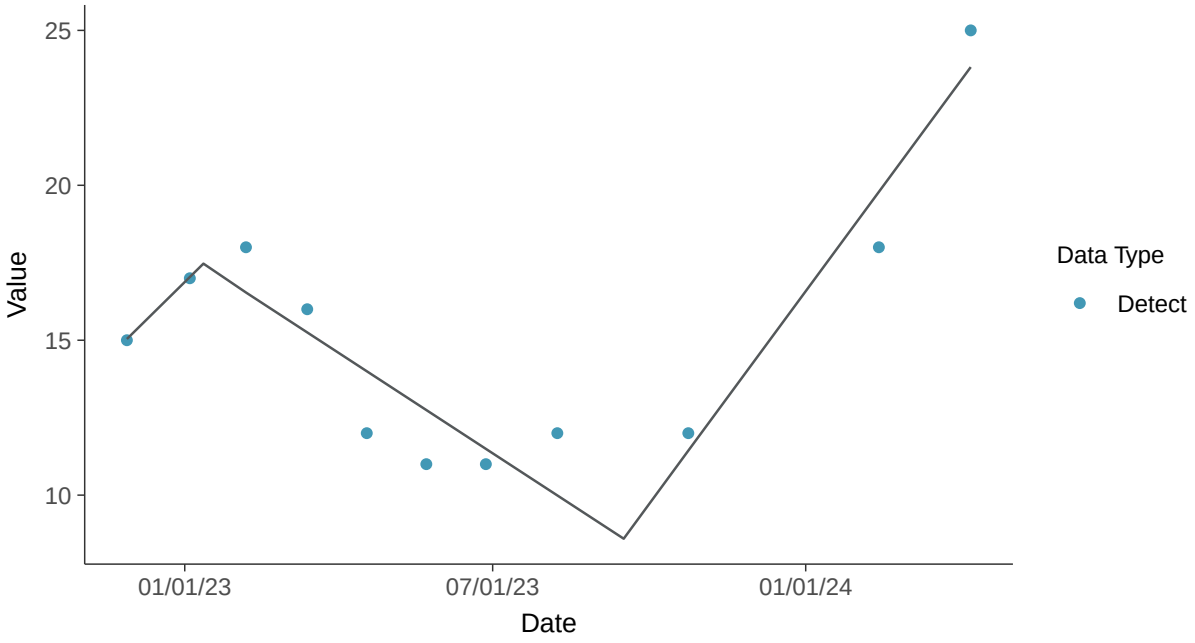
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-09 (mg/L)



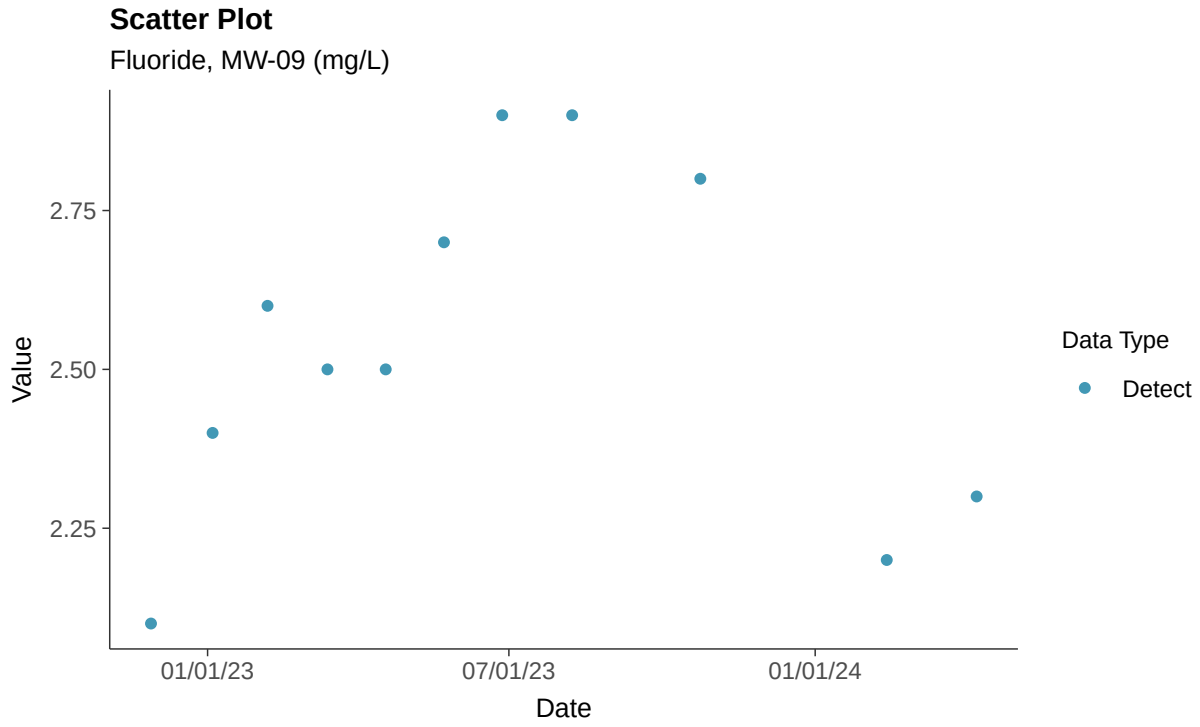
Trend Regression: Piecewise Linear-Linear-Linear

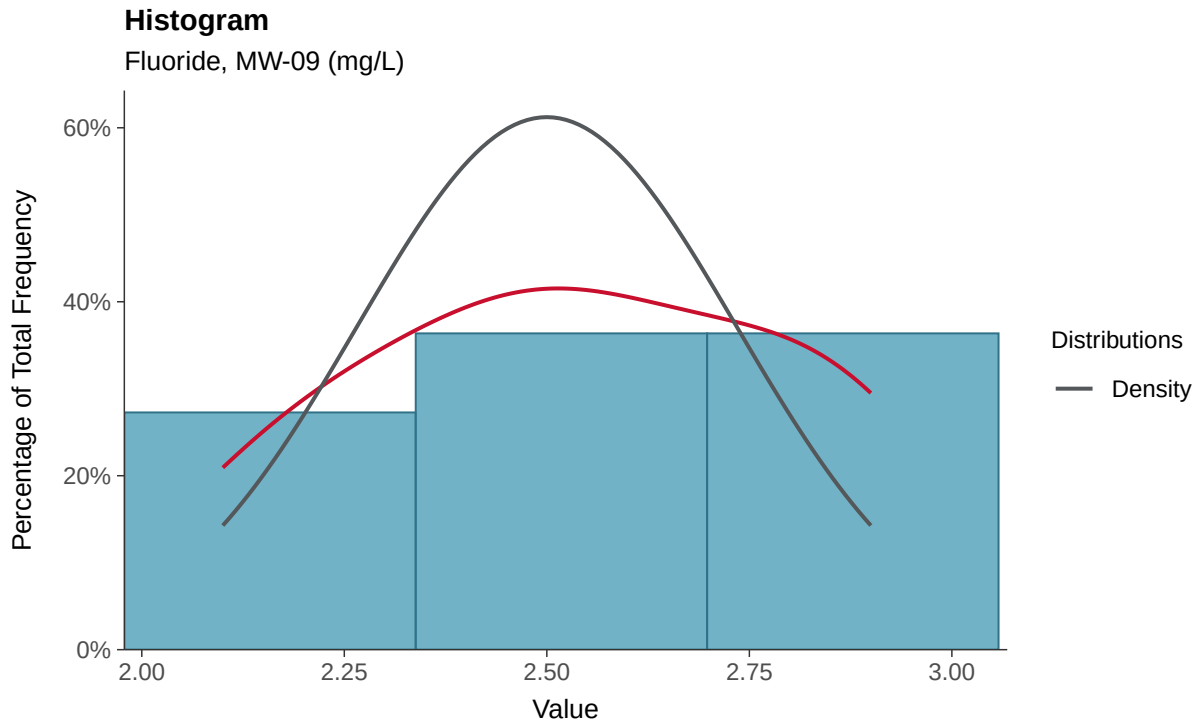
Chloride (as Cl), MW-09 (mg/L)



Appendix III: Fluoride, MW-09

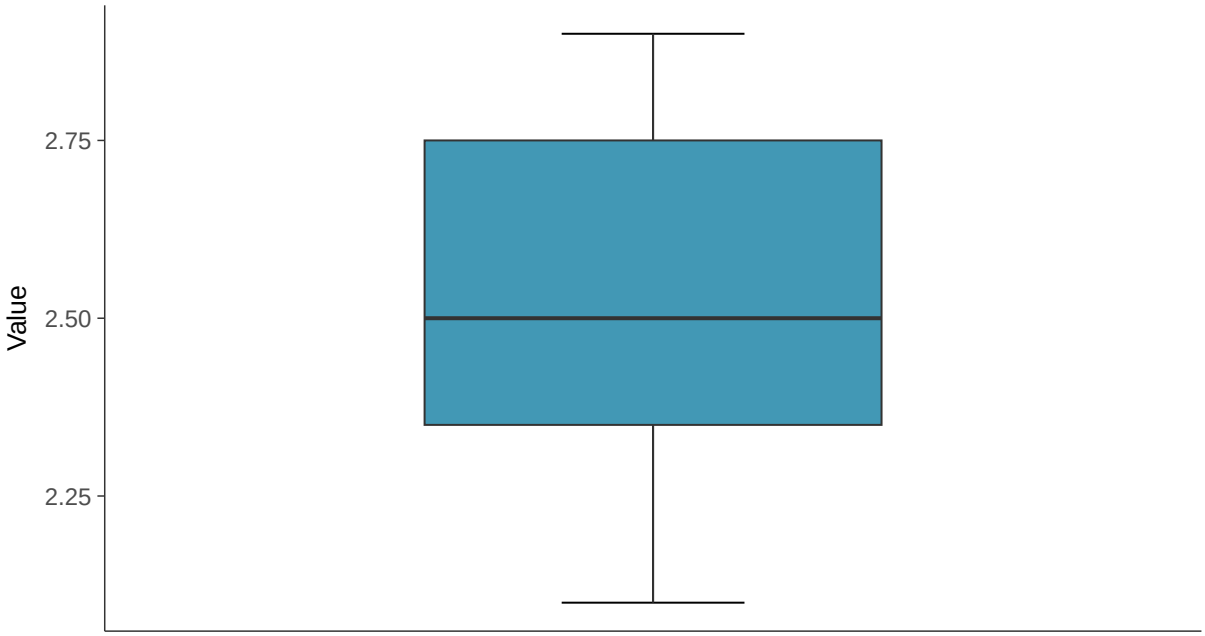
ID: 2_19_4_112





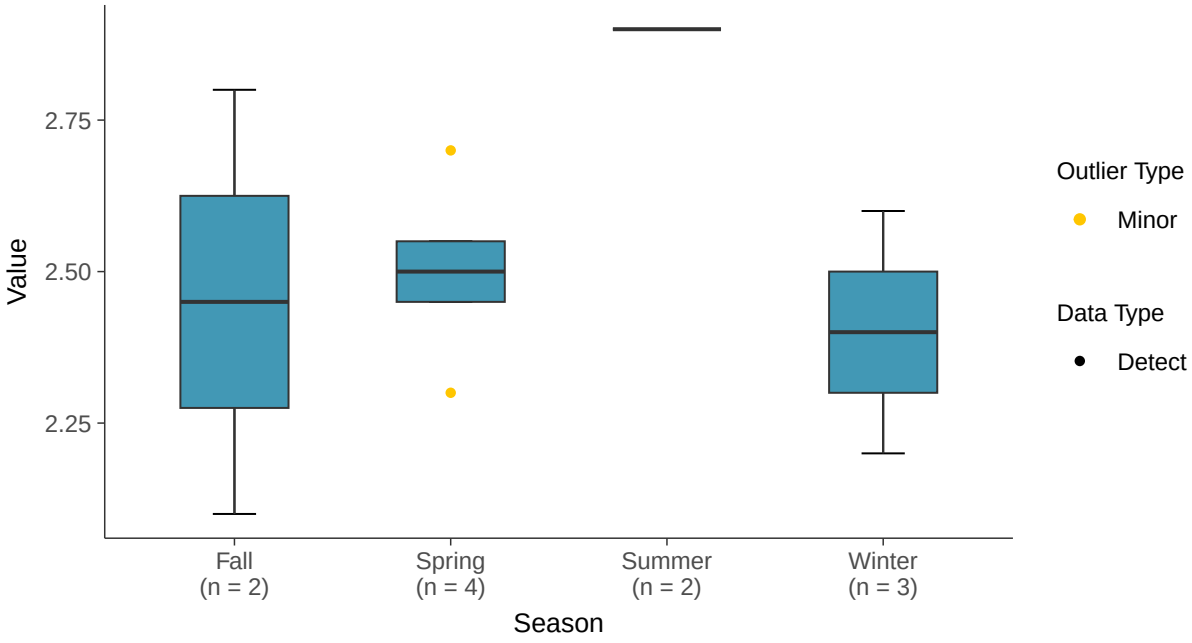
Boxplot

Fluoride, MW-09 (mg/L)



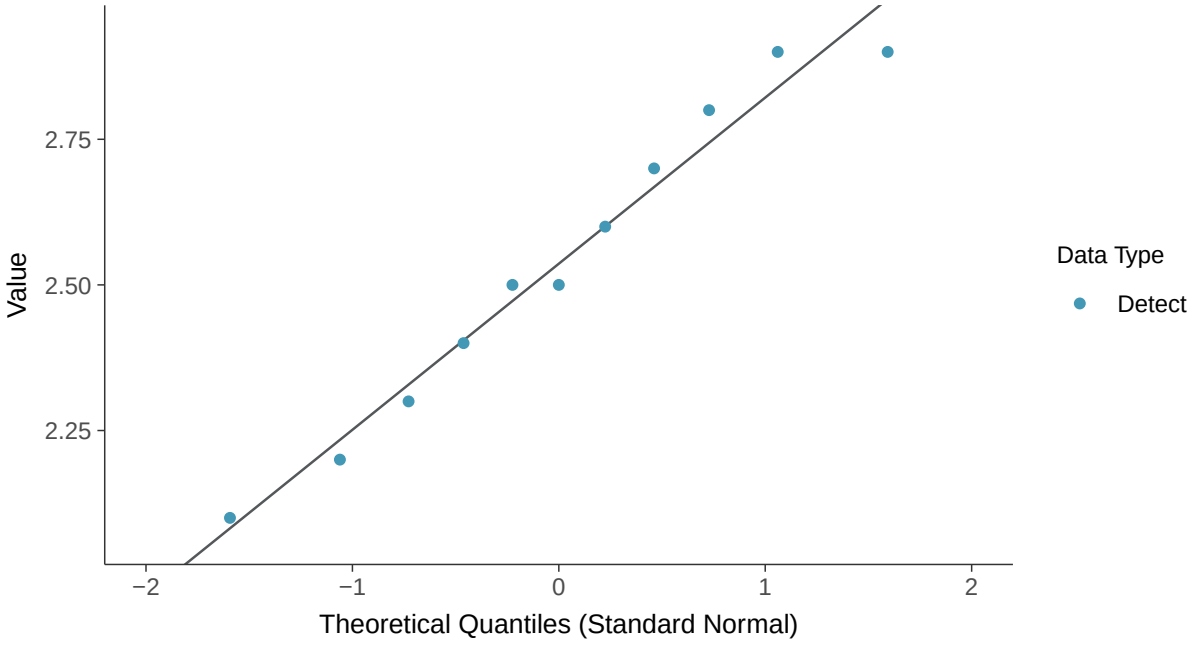
Boxplot by Season

Fluoride, MW-09 (mg/L)



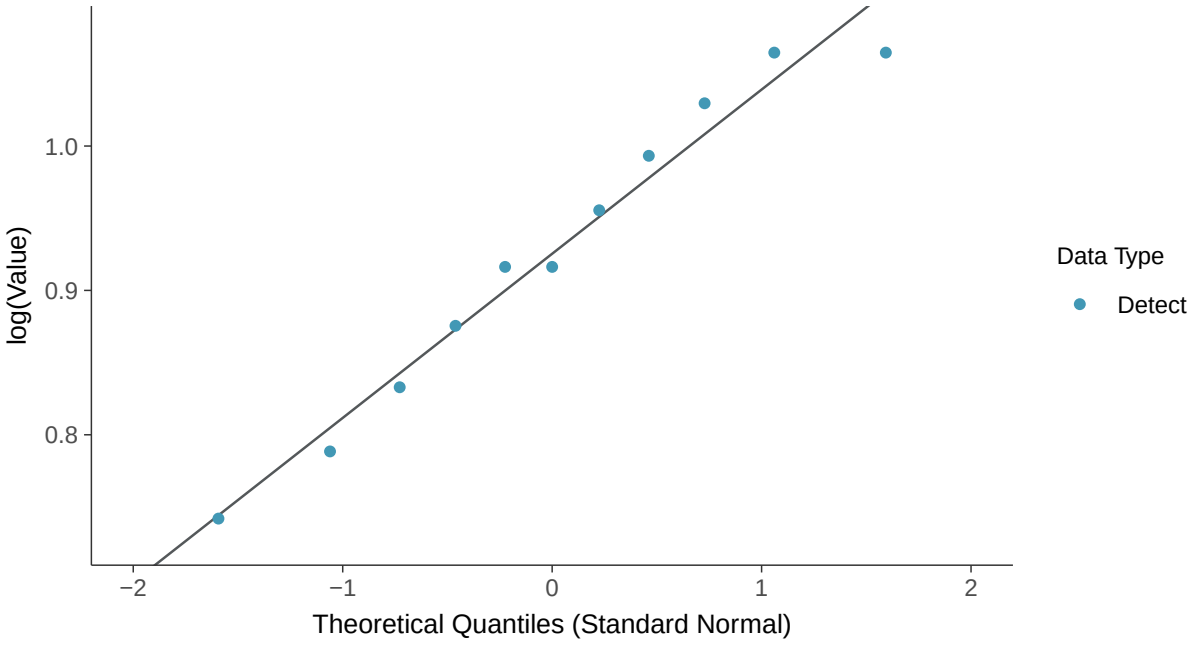
Normal Q-Q plot

Fluoride, MW-09 (mg/L)



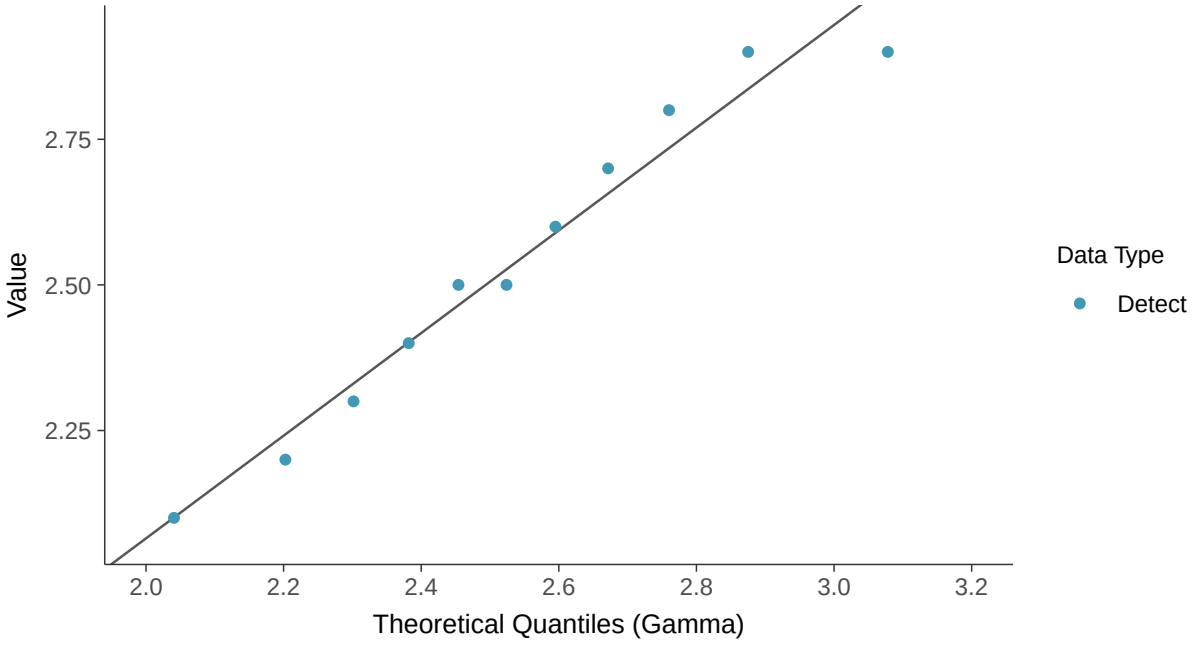
Lognormal Q-Q plot

Fluoride, MW-09 (mg/L)



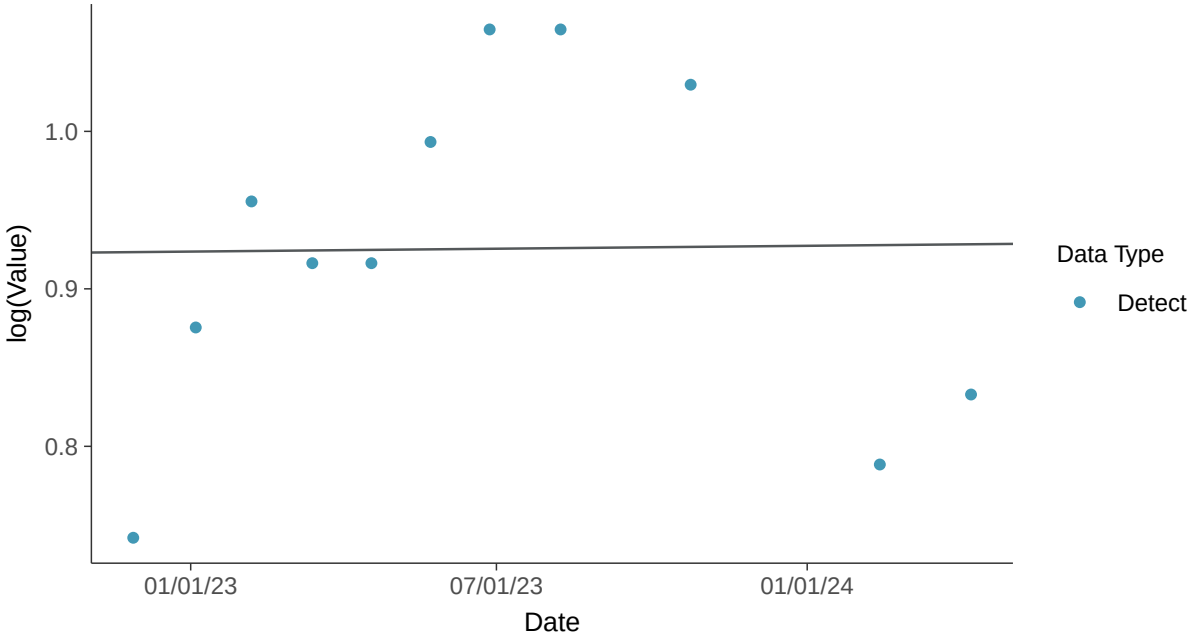
Gamma Q-Q plot

Fluoride, MW-09 (mg/L)



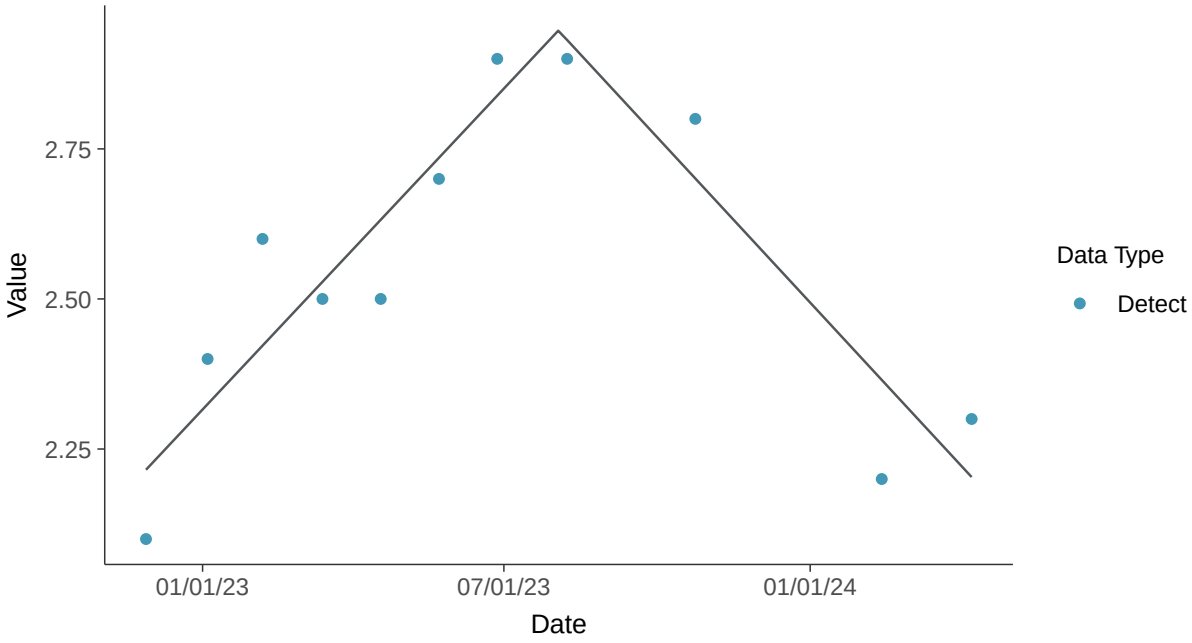
Trend Regression: Lognormal MLE

Fluoride, MW-09 (mg/L)



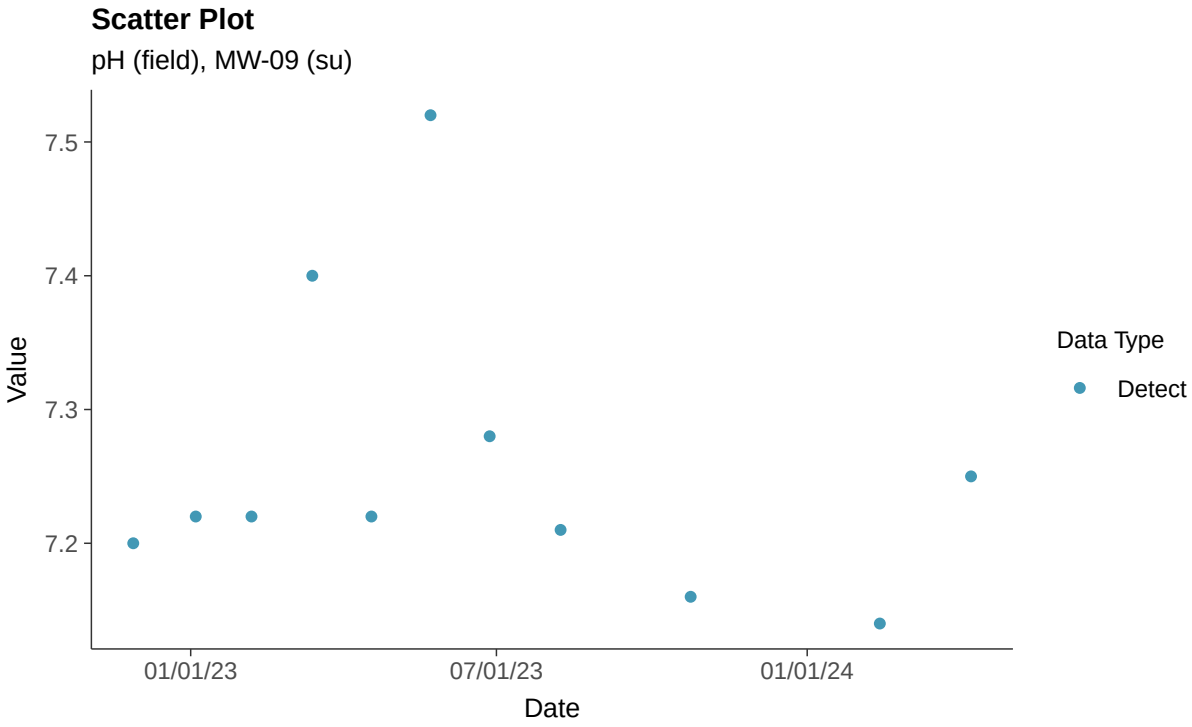
Trend Regression: Piecewise Linear-Linear

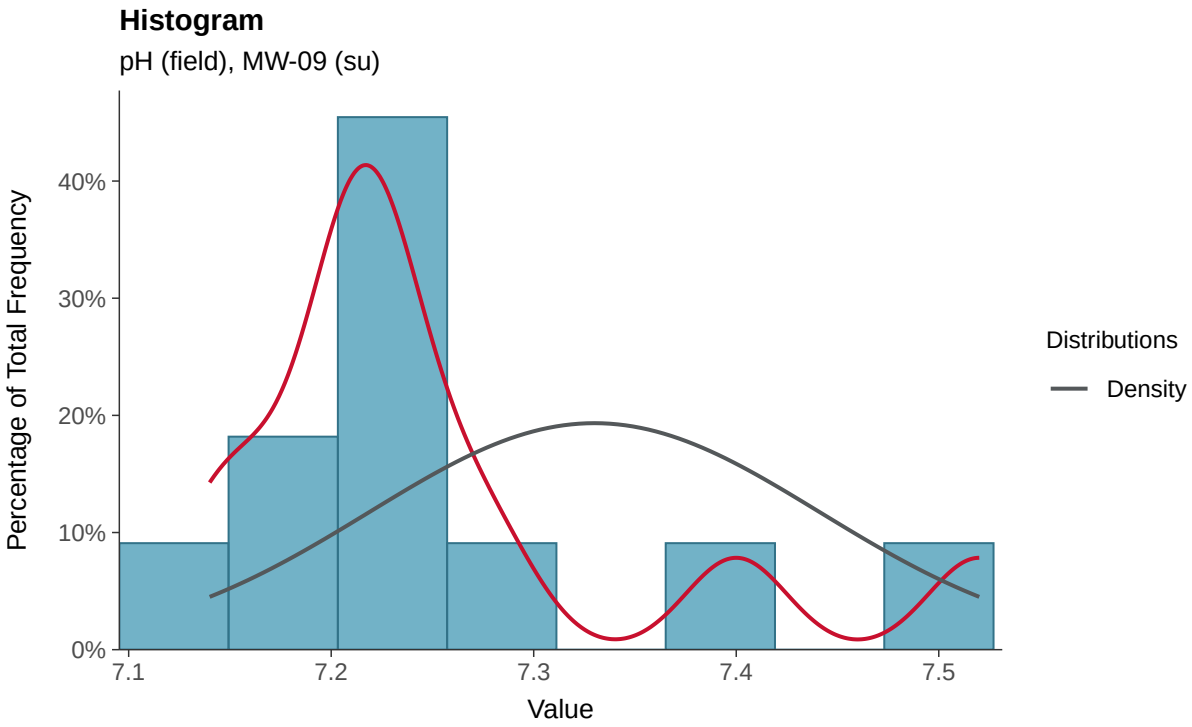
Fluoride, MW-09 (mg/L)



Appendix III: pH (field), MW-09

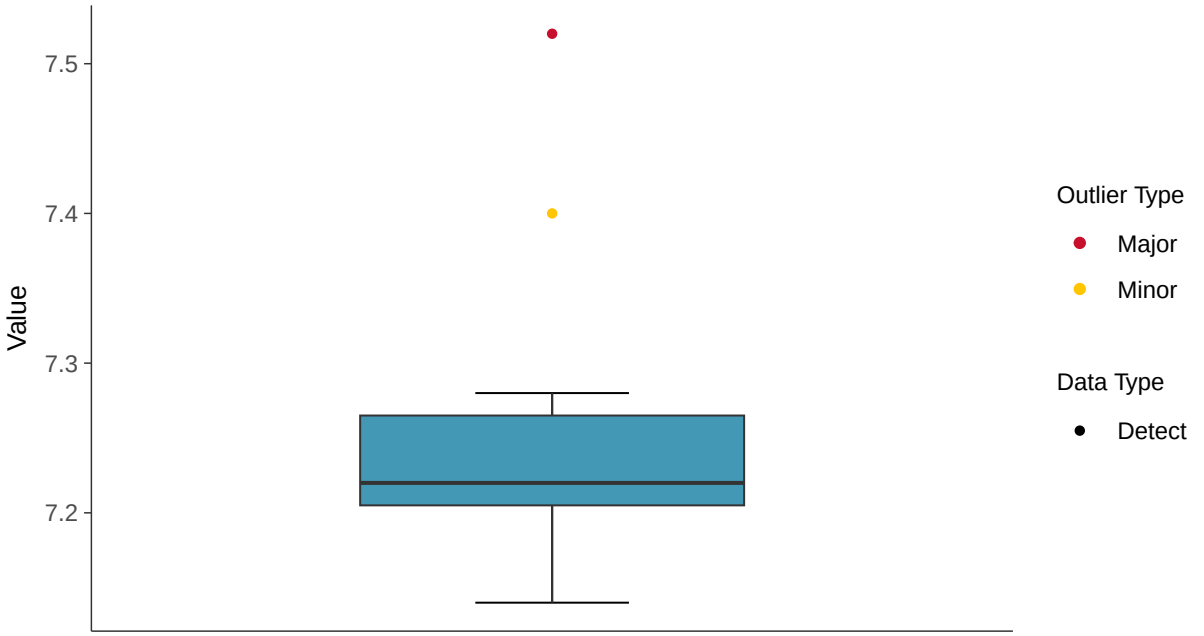
ID: 2_19_4_120





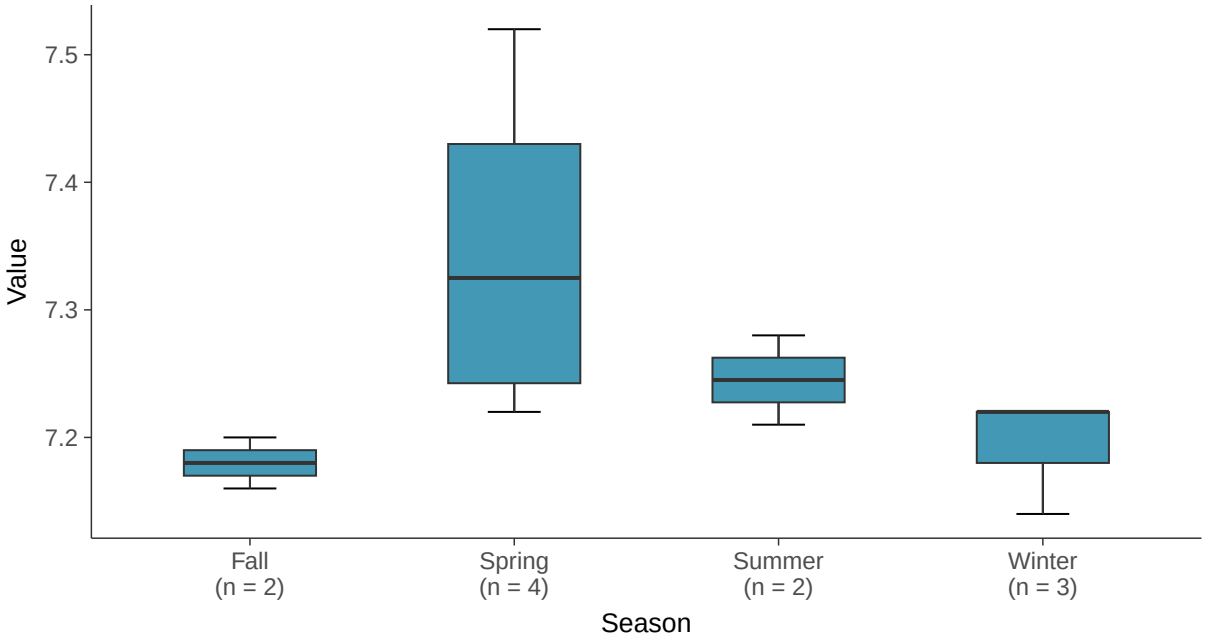
Boxplot

pH (field), MW-09 (su)



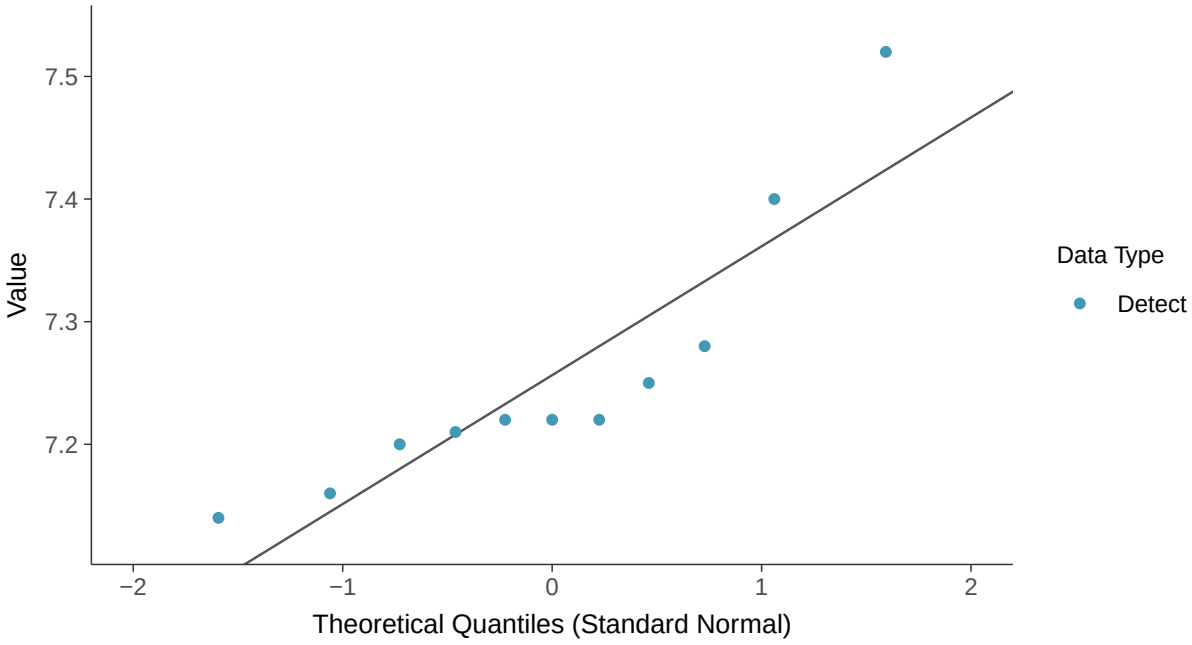
Boxplot by Season

pH (field), MW-09 (su)



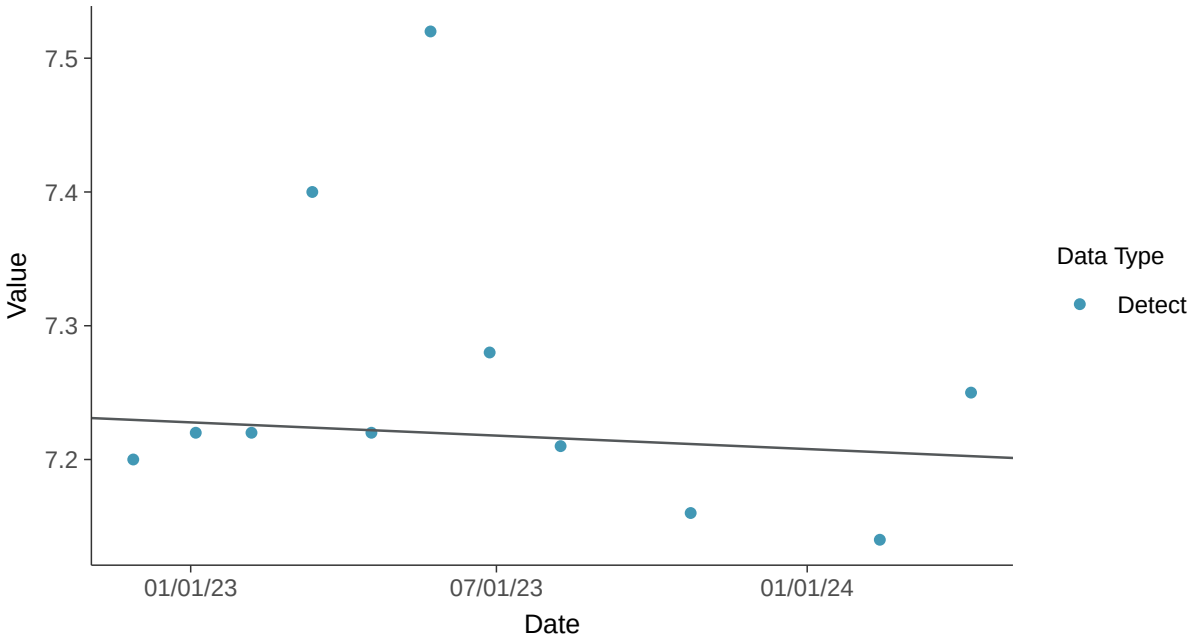
Normal Q-Q plot

pH (field), MW-09 (su)



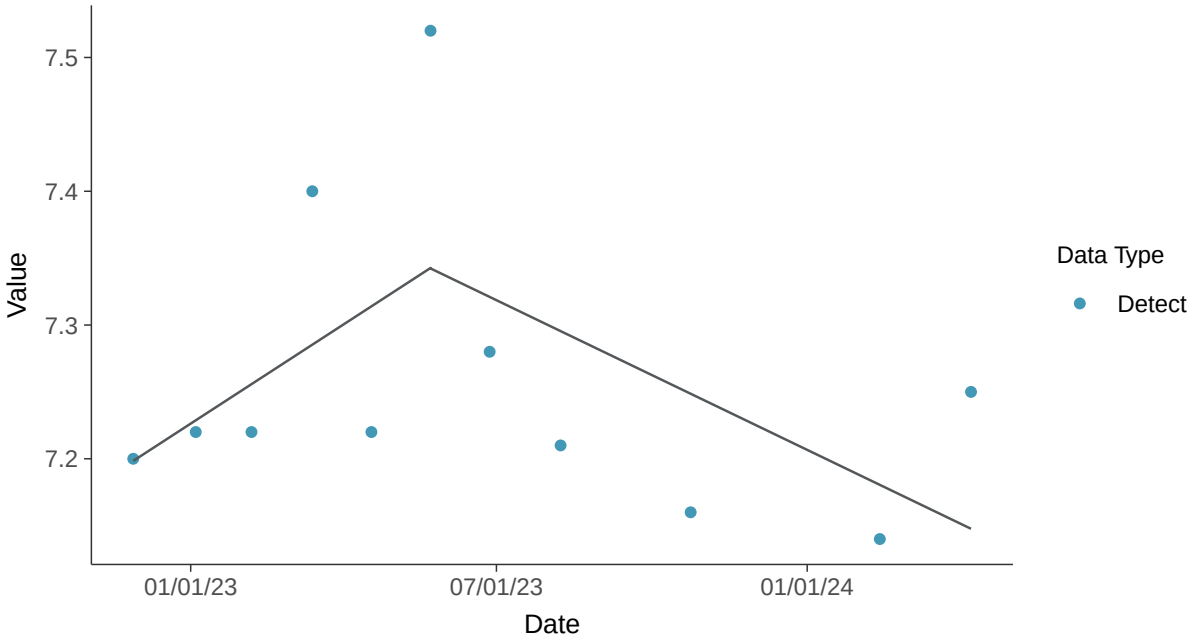
Trend Regression: Mann-Kendall/Theil-Sen Estimate

pH (field), MW-09 (su)



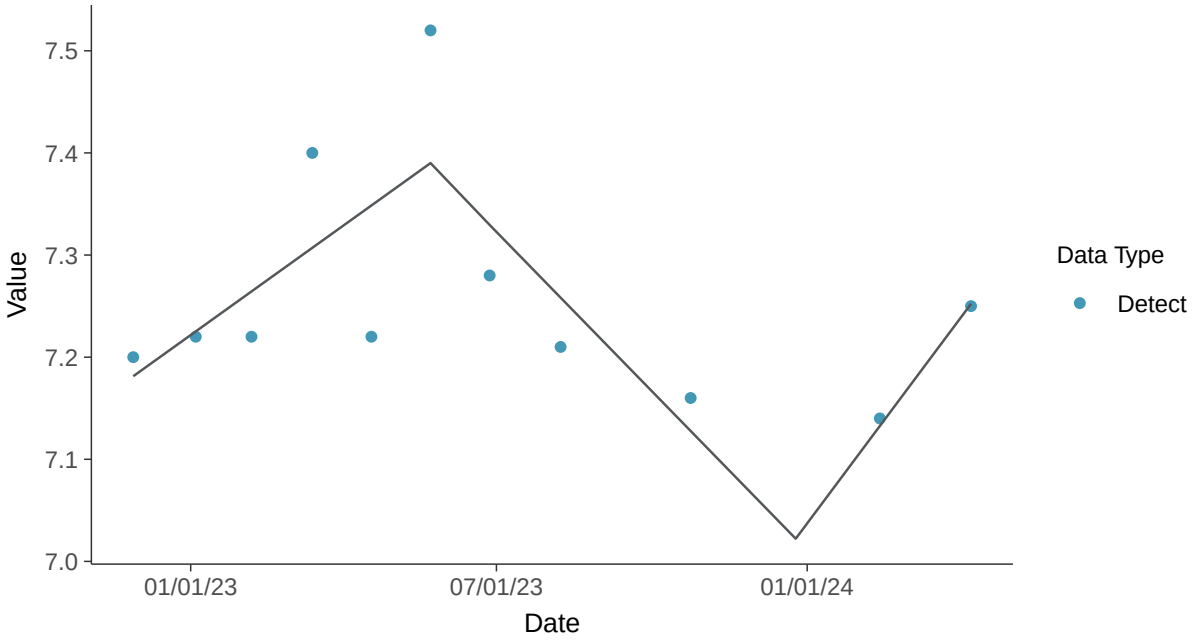
Trend Regression: Piecewise Linear-Linear

pH (field), MW-09 (su)



Trend Regression: Piecewise Linear-Linear-Linear

pH (field), MW-09 (su)

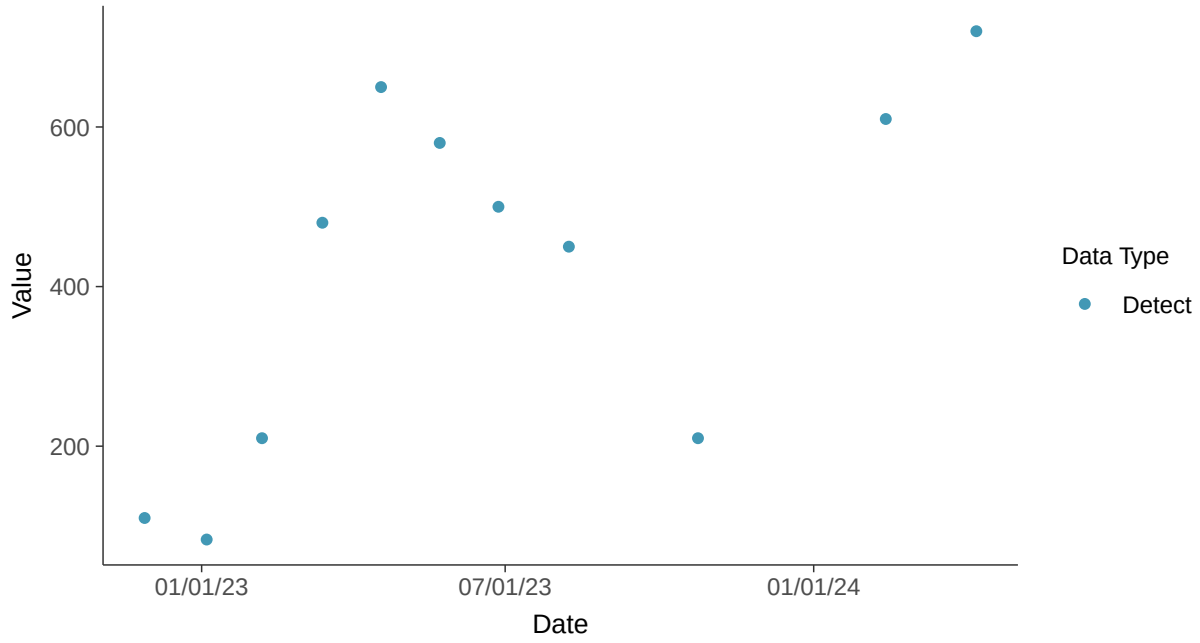


Appendix III: Sulfate (as SO4), MW-09

ID: 2_19_4_124

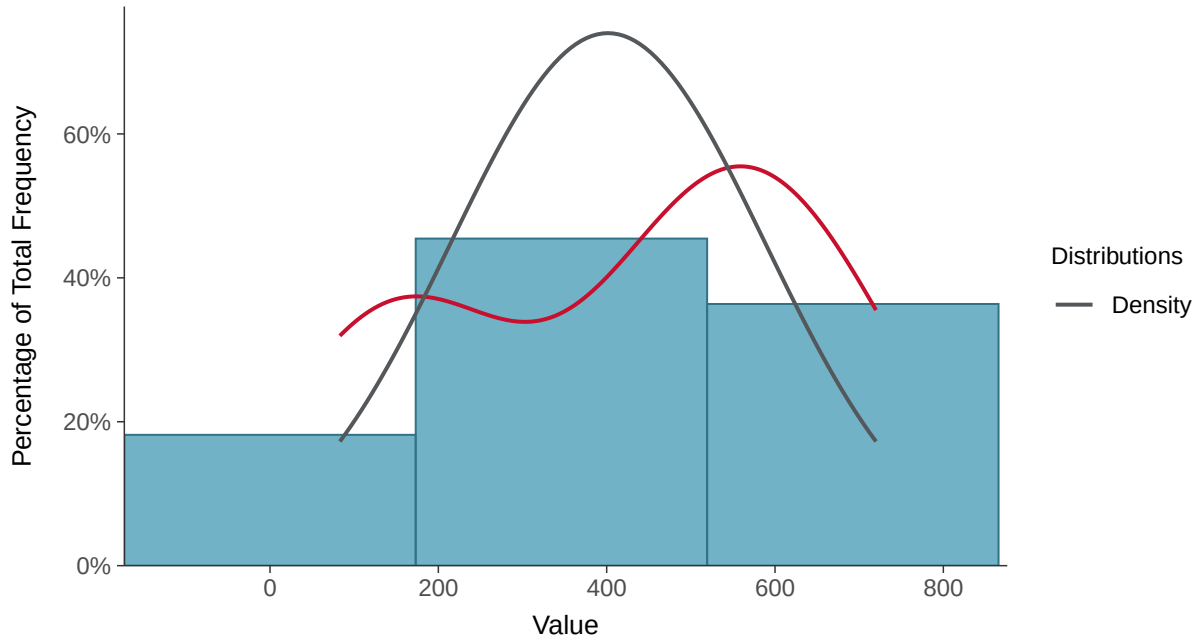
Scatter Plot

Sulfate (as SO4), MW-09 (mg/L)



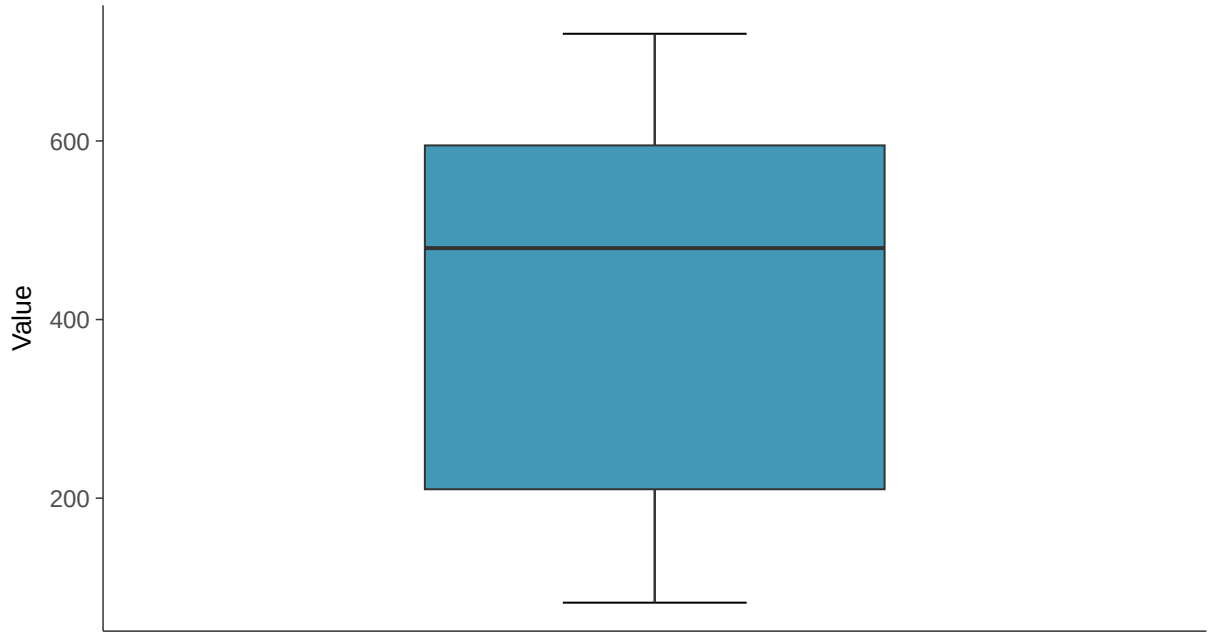
Histogram

Sulfate (as SO4), MW-09 (mg/L)



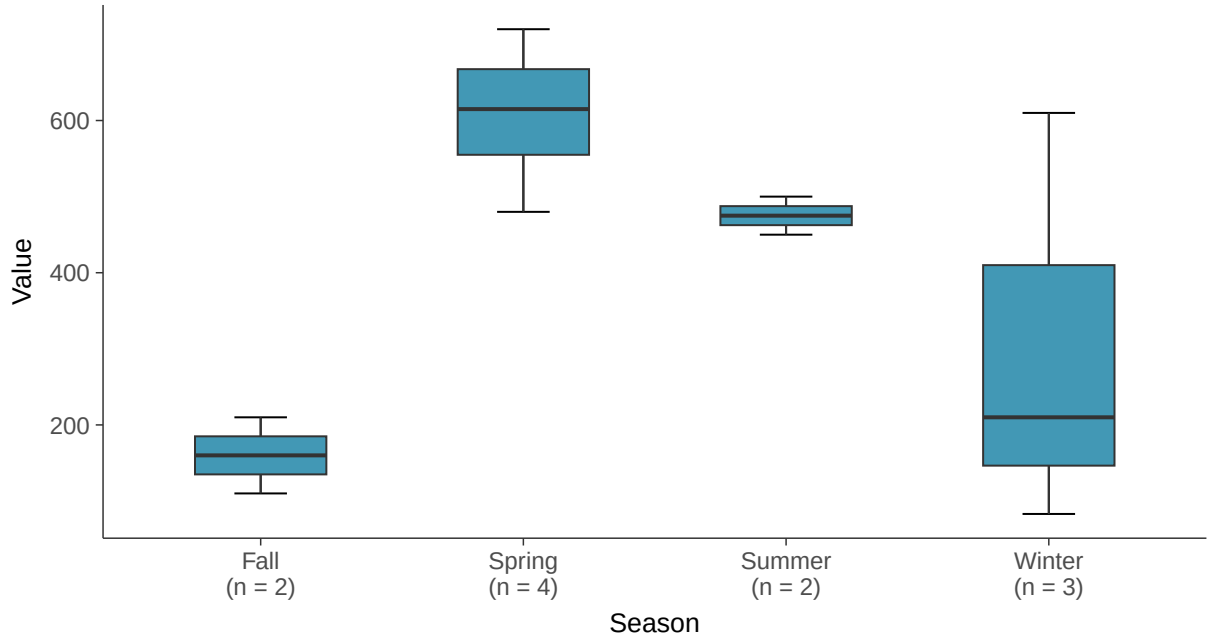
Boxplot

Sulfate (as SO4), MW-09 (mg/L)



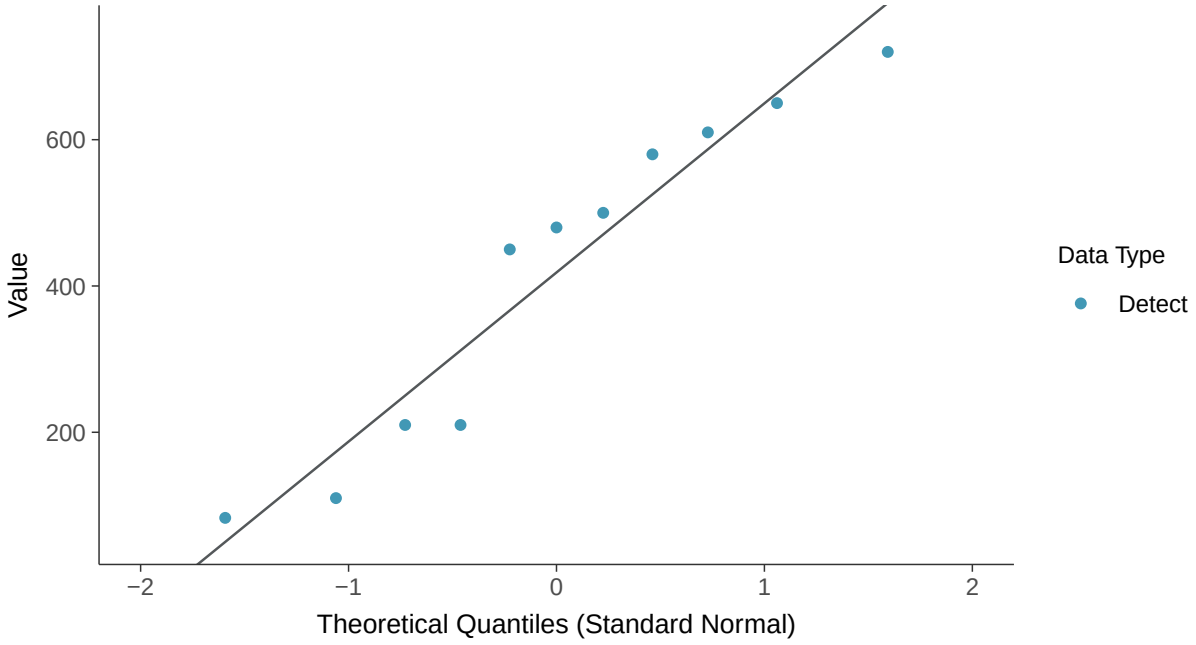
Boxplot by Season

Sulfate (as SO4), MW-09 (mg/L)



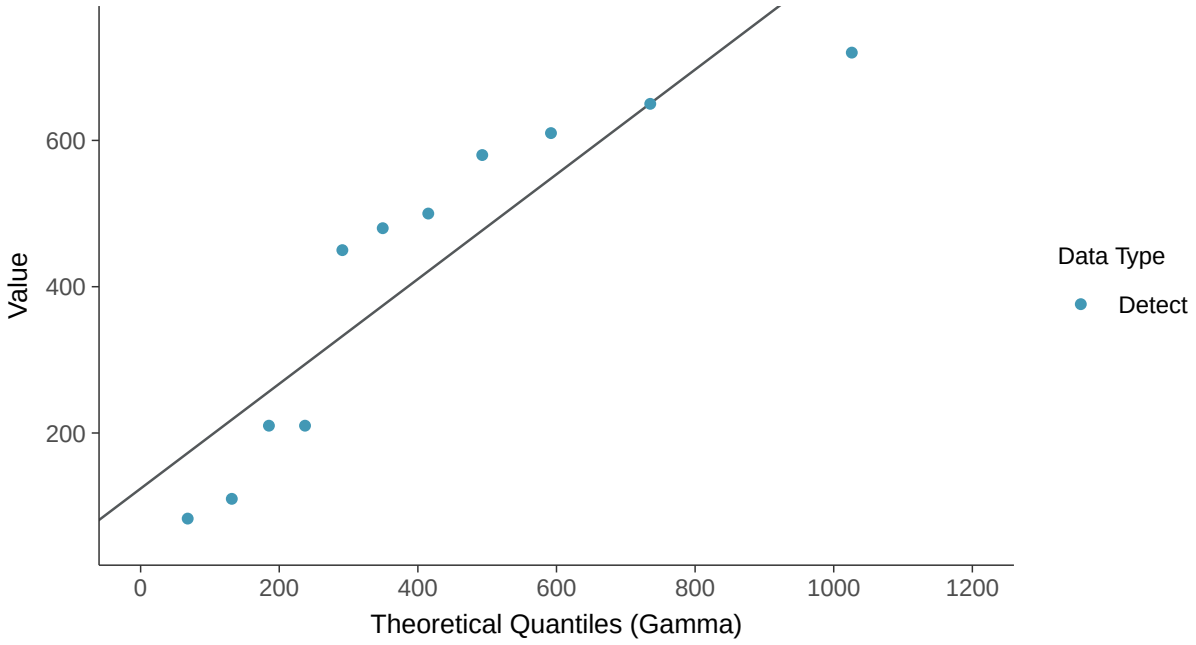
Normal Q-Q plot

Sulfate (as SO4), MW-09 (mg/L)



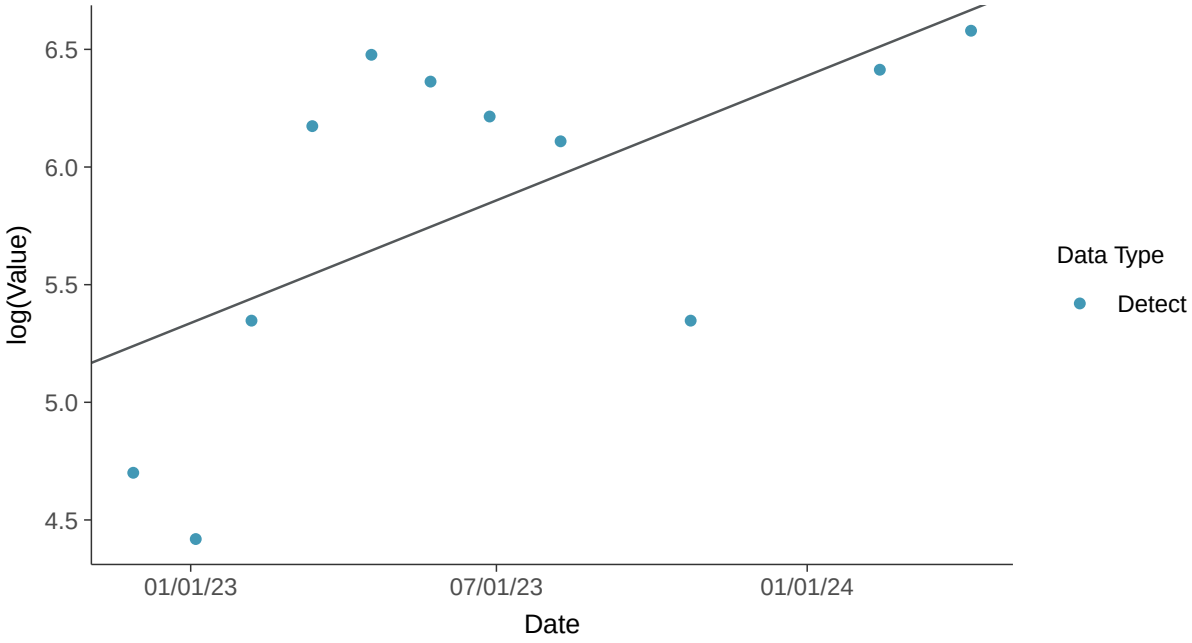
Gamma Q-Q plot

Sulfate (as SO4), MW-09 (mg/L)



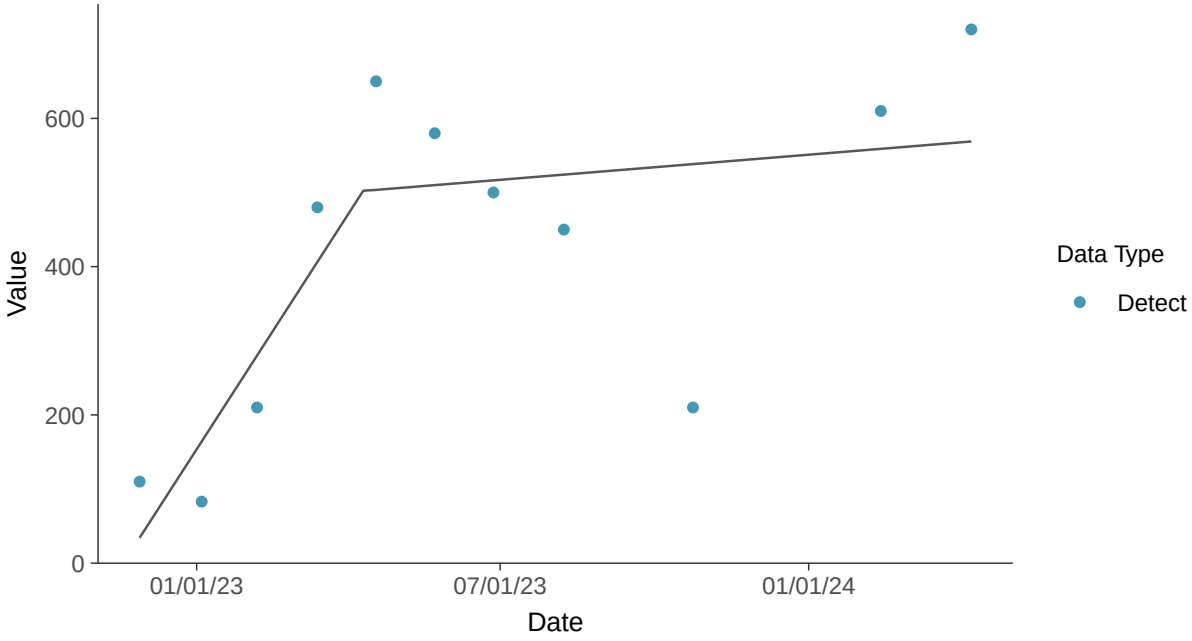
Trend Regression: Lognormal MLE

Sulfate (as SO4), MW-09 (mg/L)



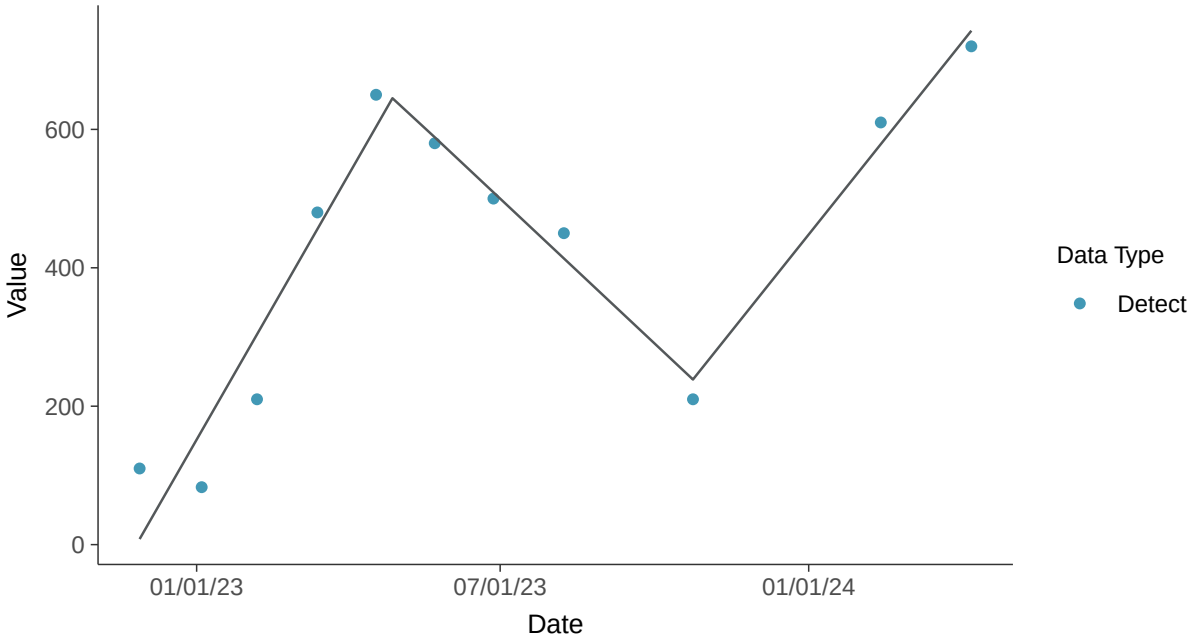
Trend Regression: Piecewise Linear-Linear

Sulfate (as SO4), MW-09 (mg/L)



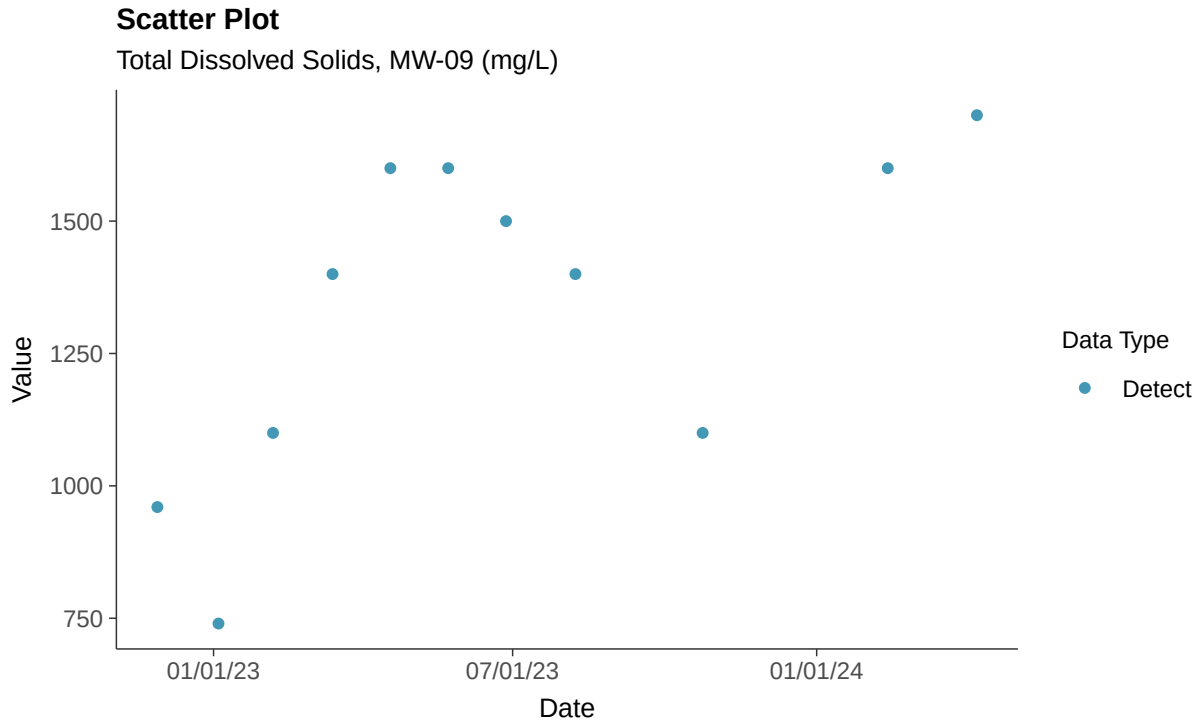
Trend Regression: Piecewise Linear-Linear-Linear

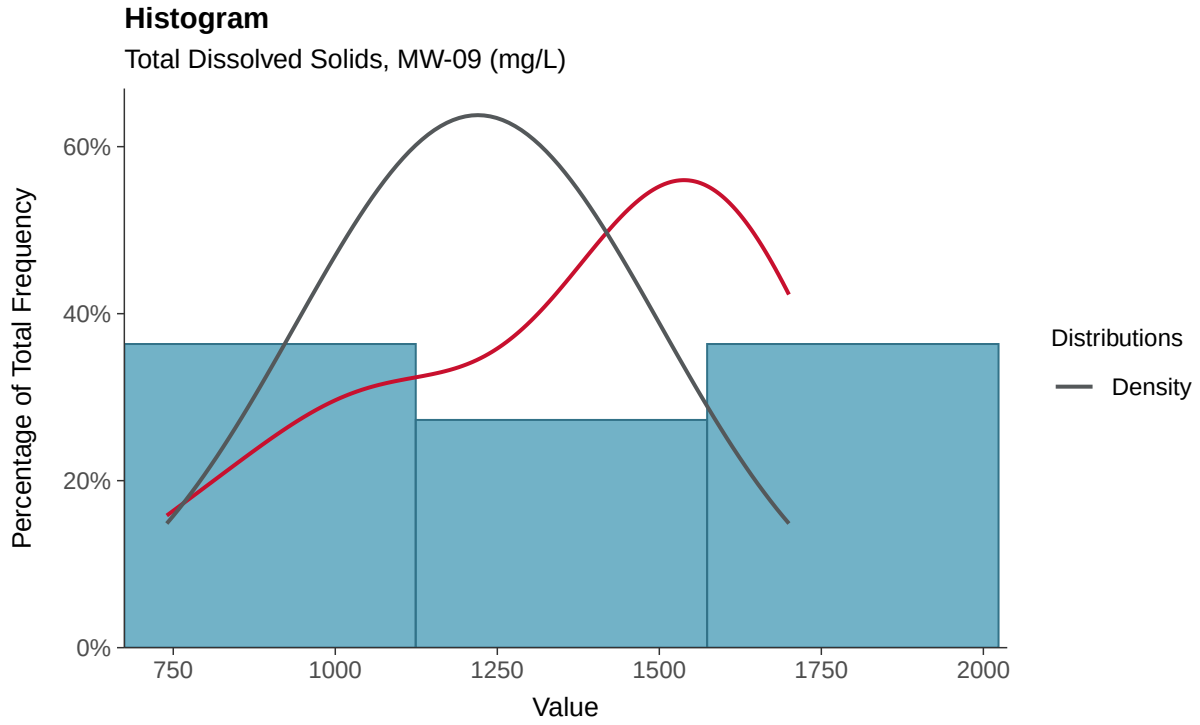
Sulfate (as SO4), MW-09 (mg/L)



Appendix III: Total Dissolved Solids, MW-09

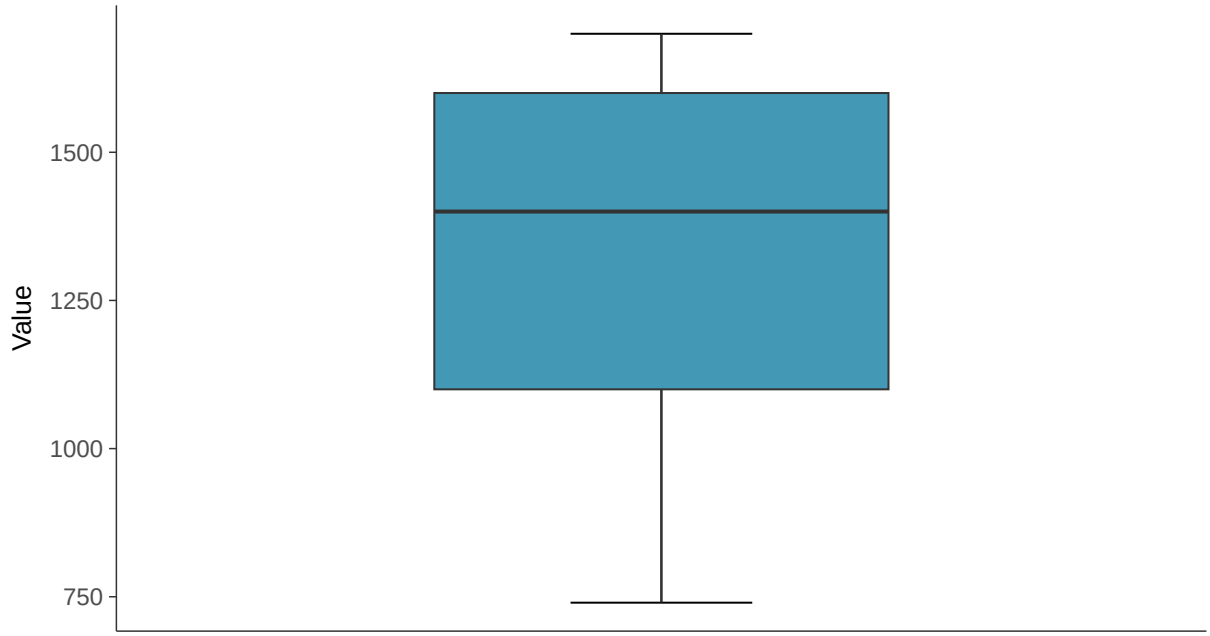
ID: 2_19_4_126





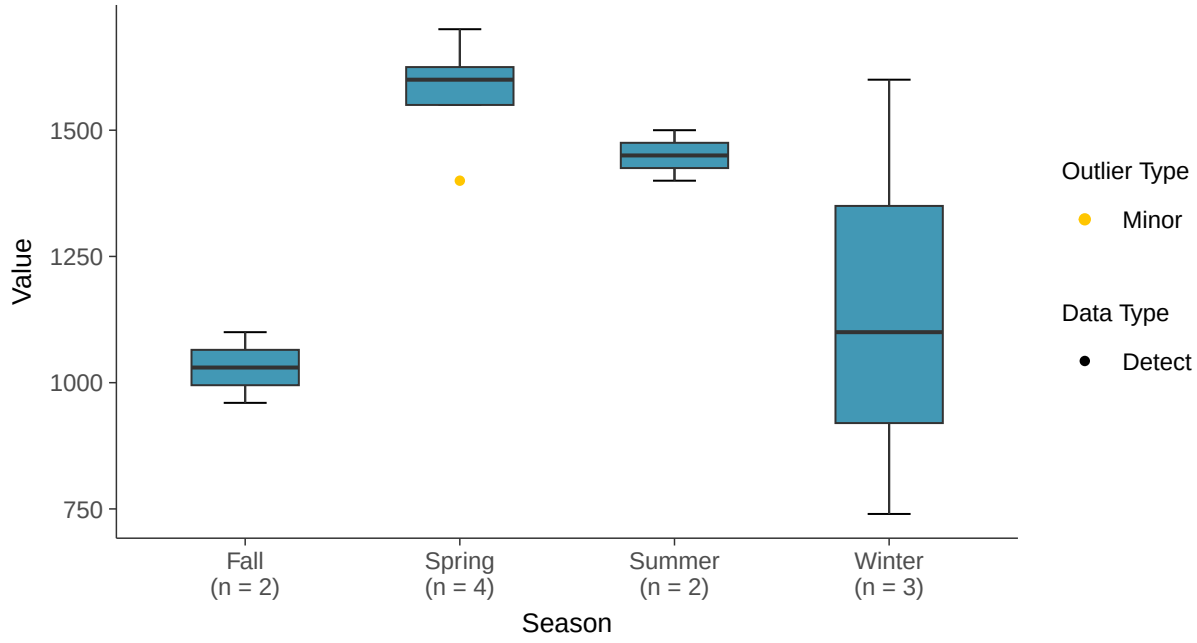
Boxplot

Total Dissolved Solids, MW-09 (mg/L)



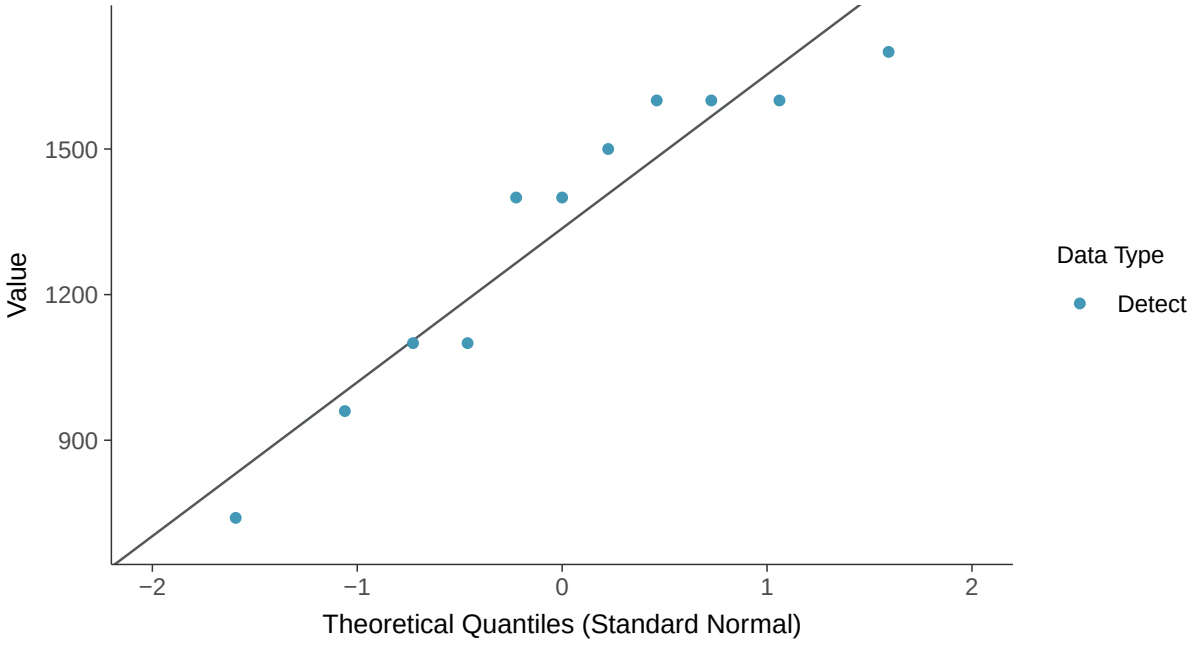
Boxplot by Season

Total Dissolved Solids, MW-09 (mg/L)



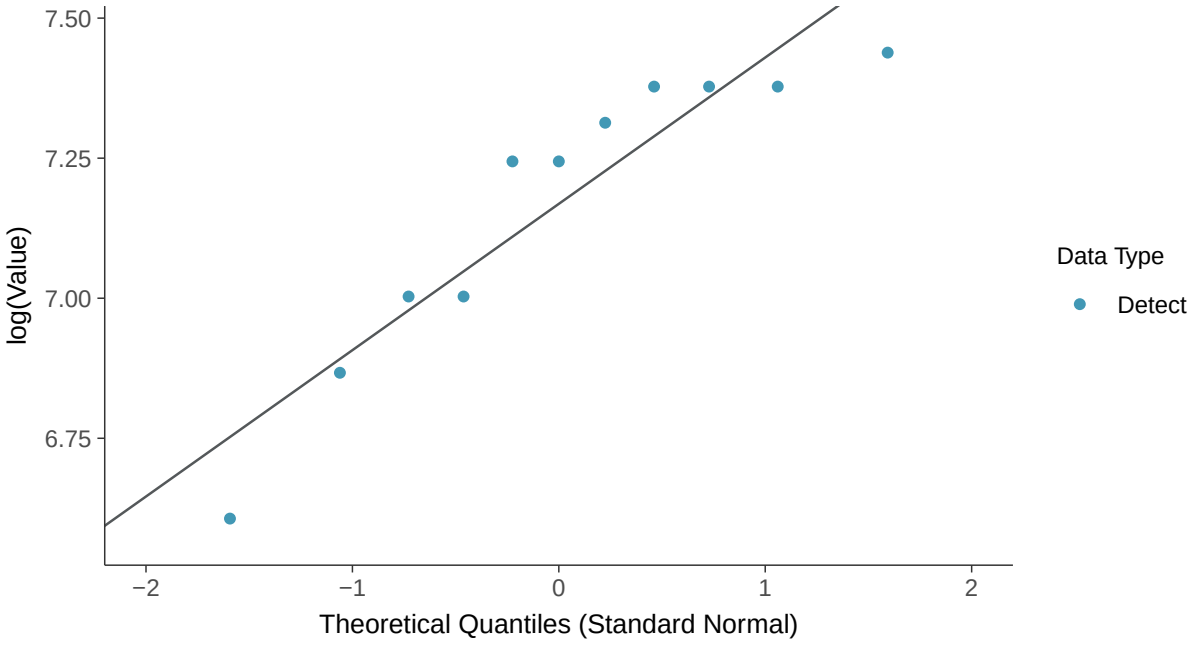
Normal Q-Q plot

Total Dissolved Solids, MW-09 (mg/L)



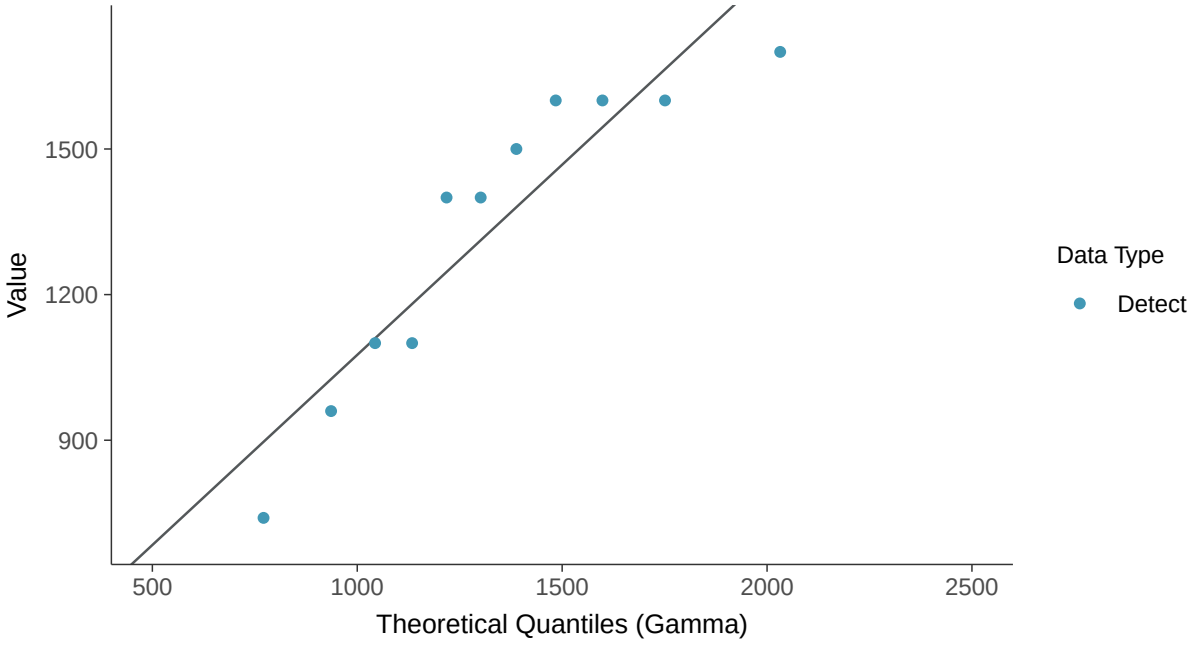
Lognormal Q-Q plot

Total Dissolved Solids, MW-09 (mg/L)



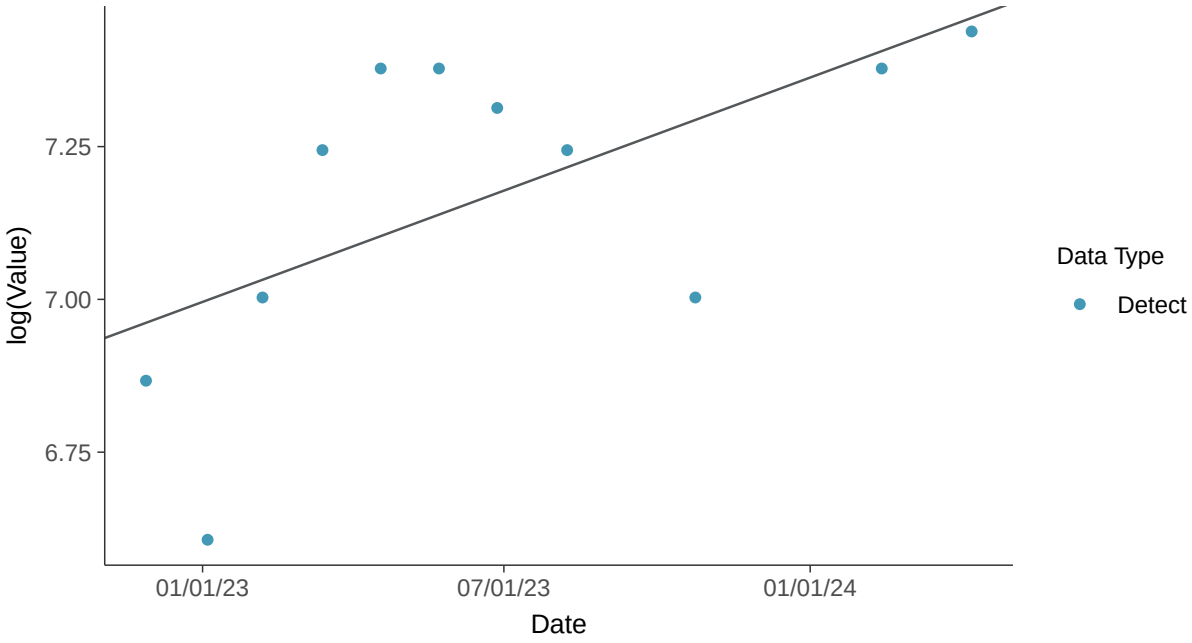
Gamma Q-Q plot

Total Dissolved Solids, MW-09 (mg/L)



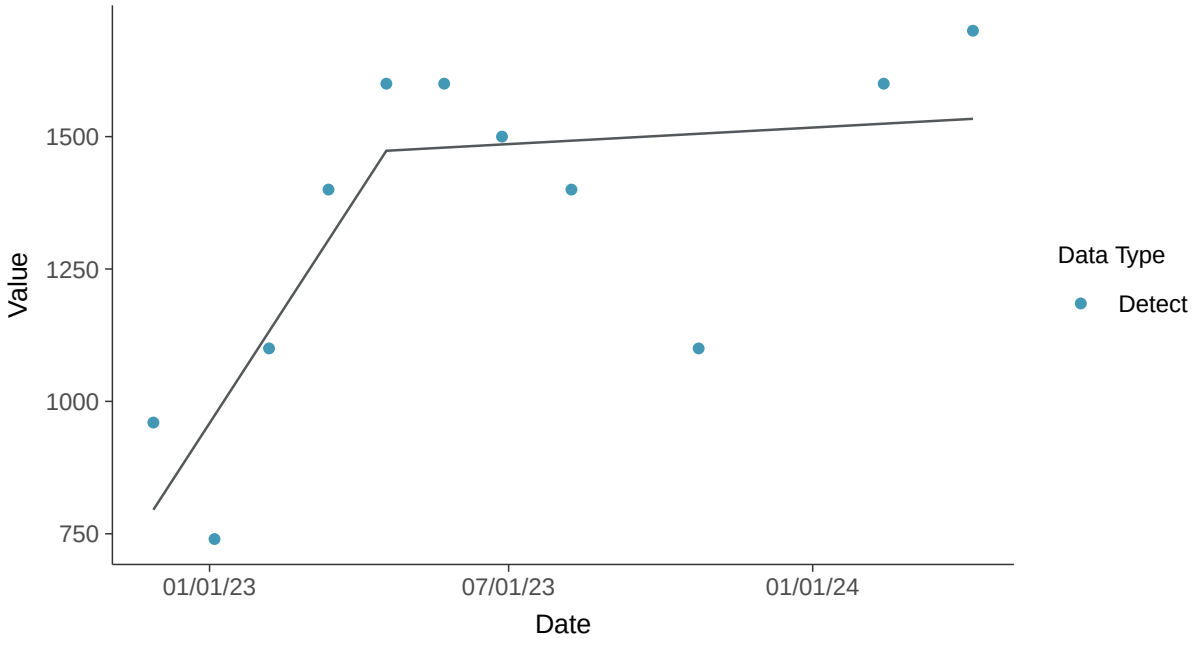
Trend Regression: Lognormal MLE

Total Dissolved Solids, MW-09 (mg/L)



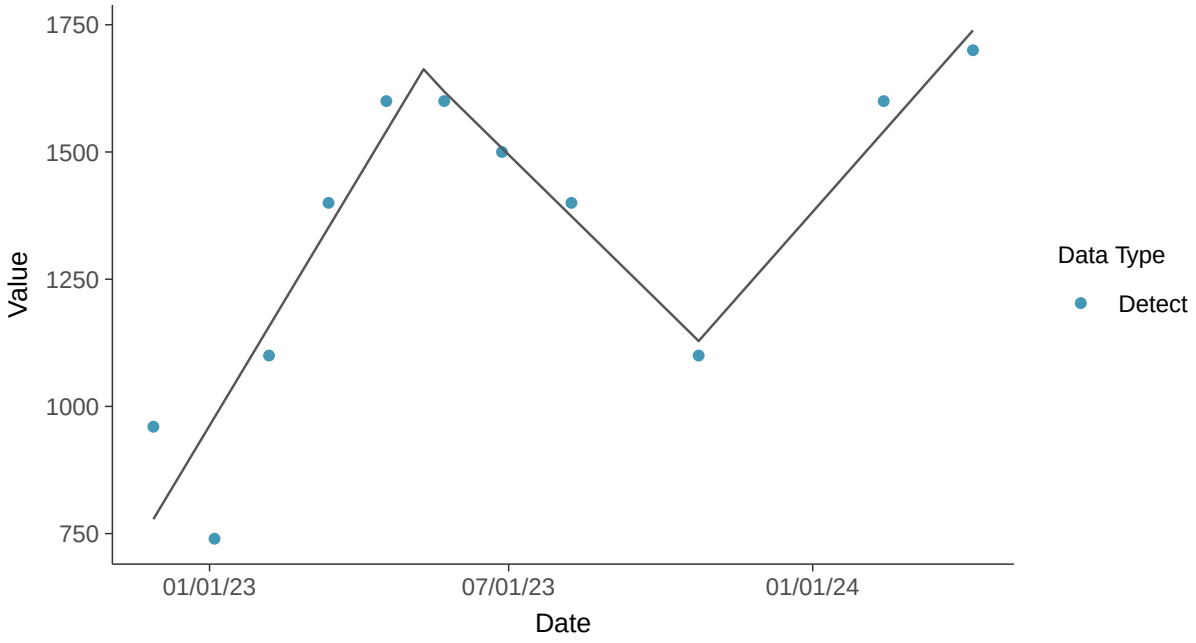
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-09 (mg/L)



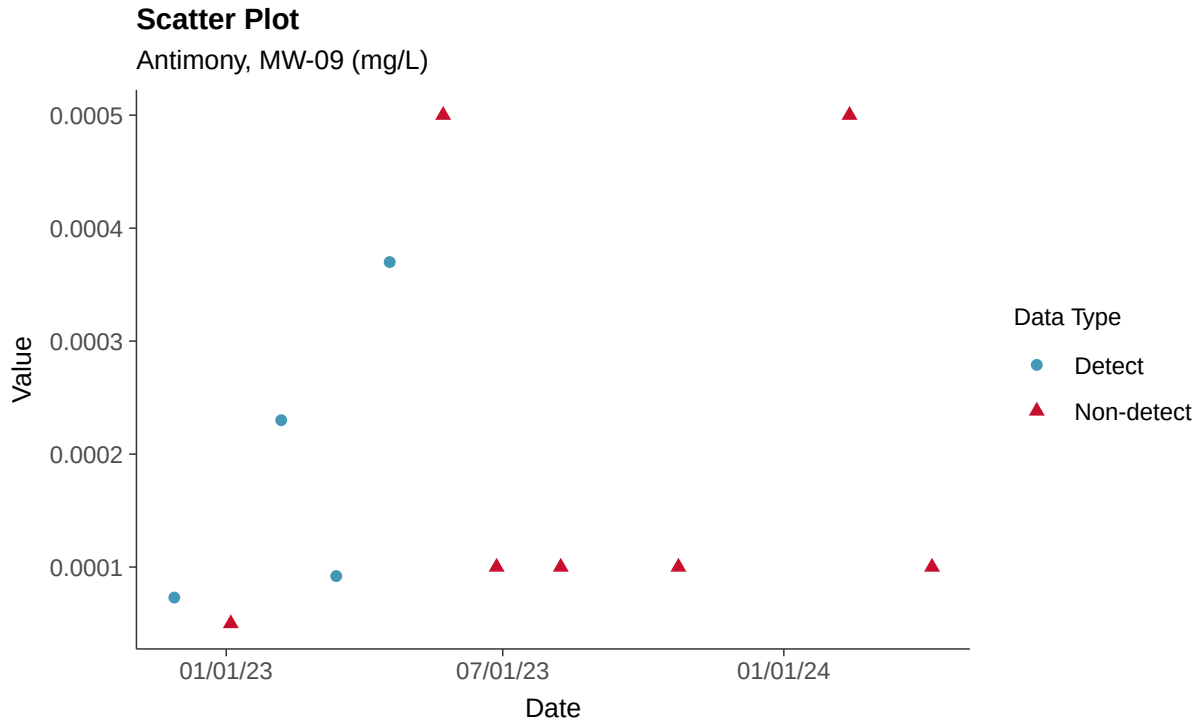
Trend Regression: Piecewise Linear-Linear-Linear

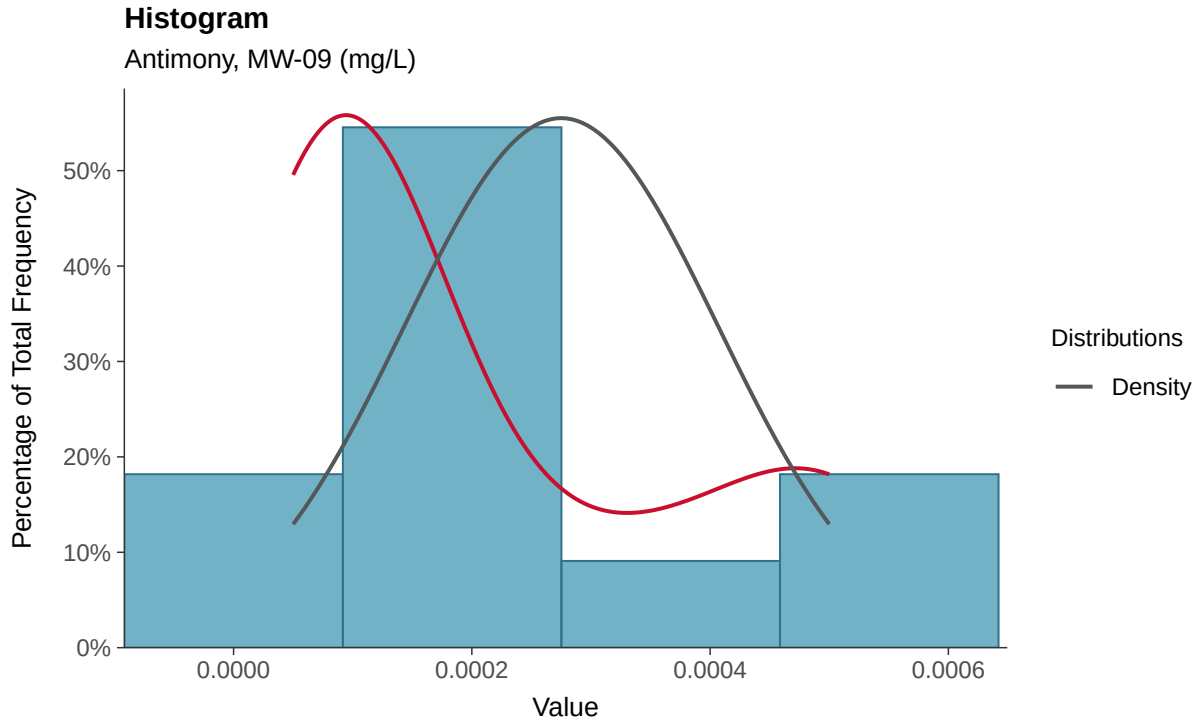
Total Dissolved Solids, MW-09 (mg/L)



Appendix IV: Antimony, MW-09

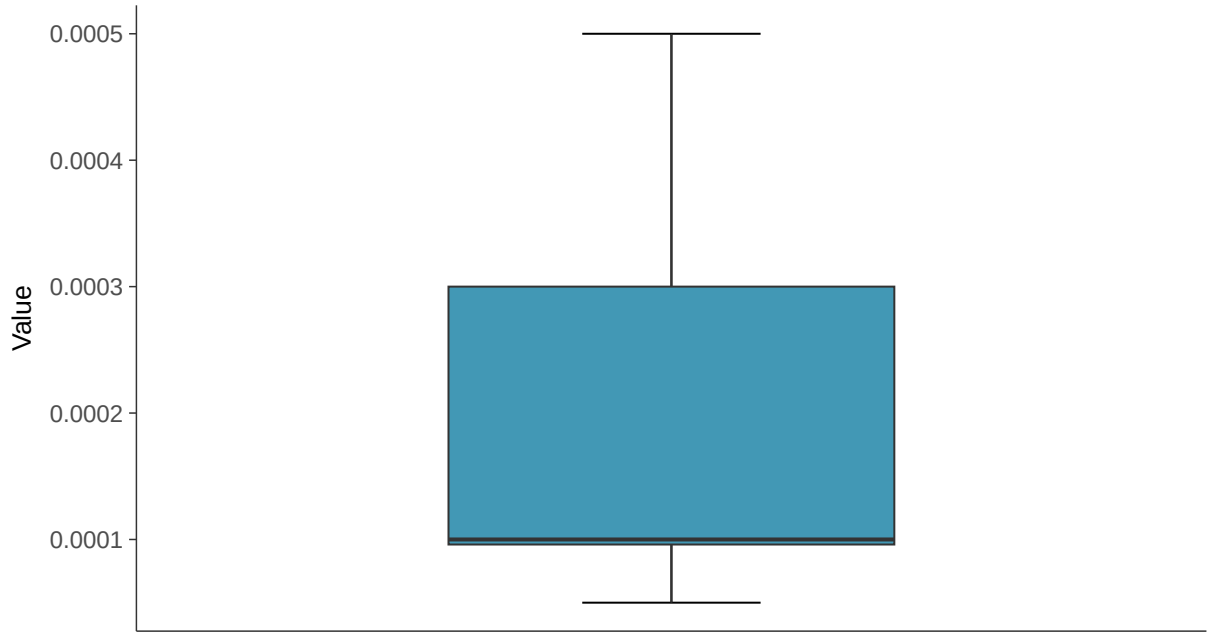
ID: 2_19_5_101





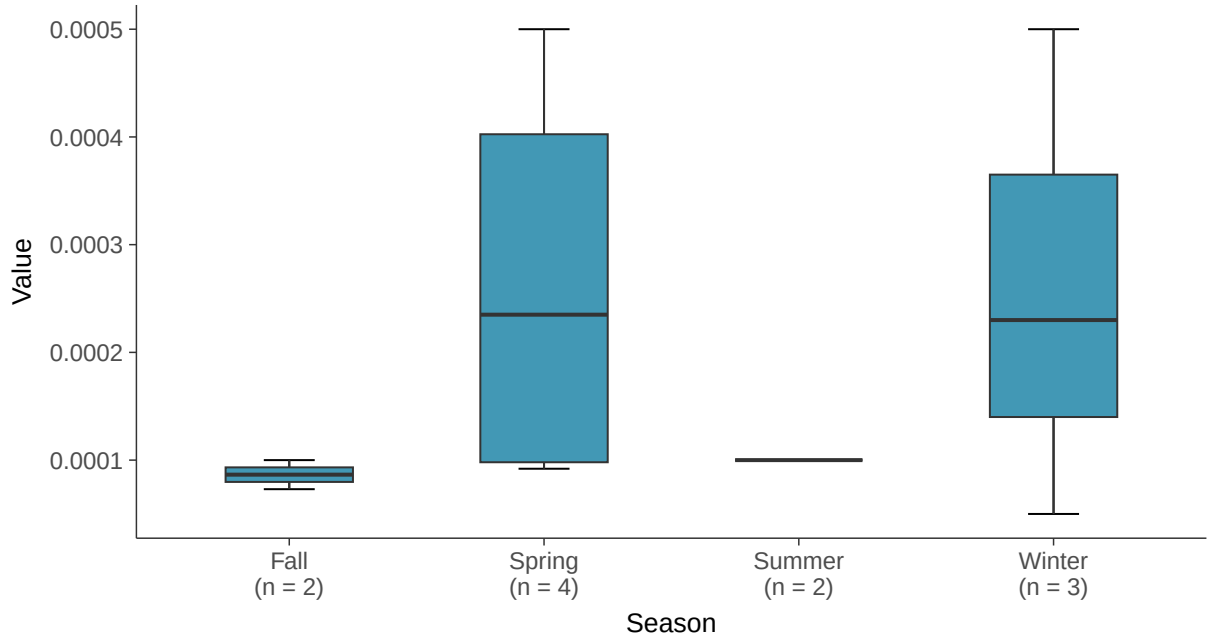
Boxplot

Antimony, MW-09 (mg/L)



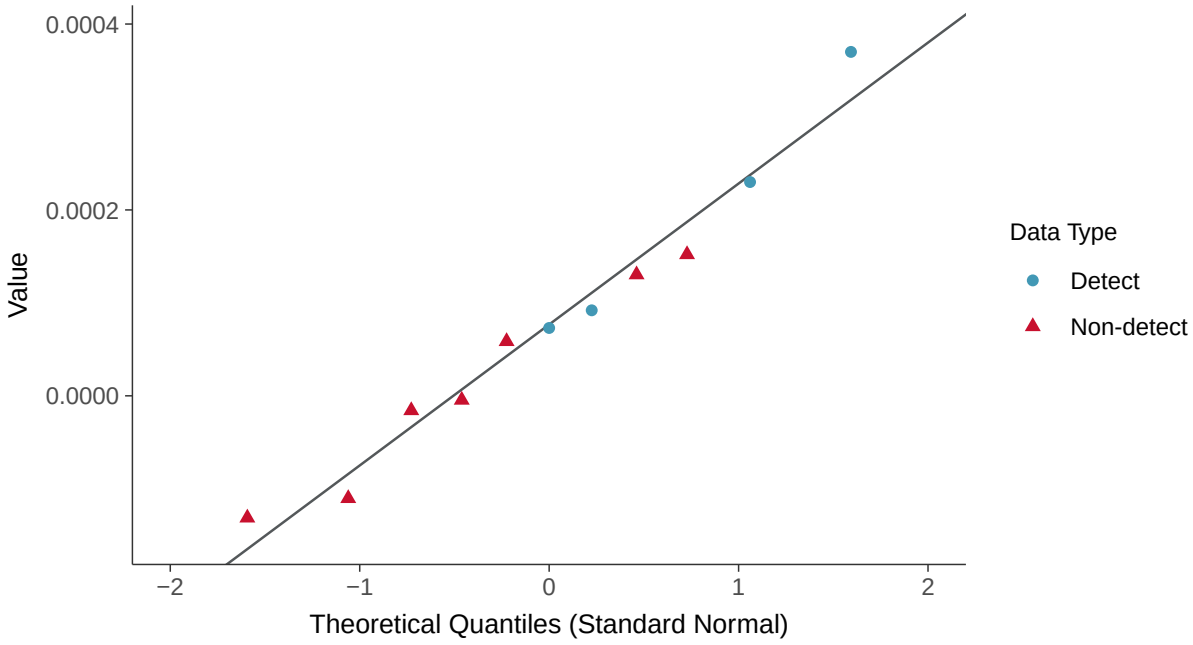
Boxplot by Season

Antimony, MW-09 (mg/L)



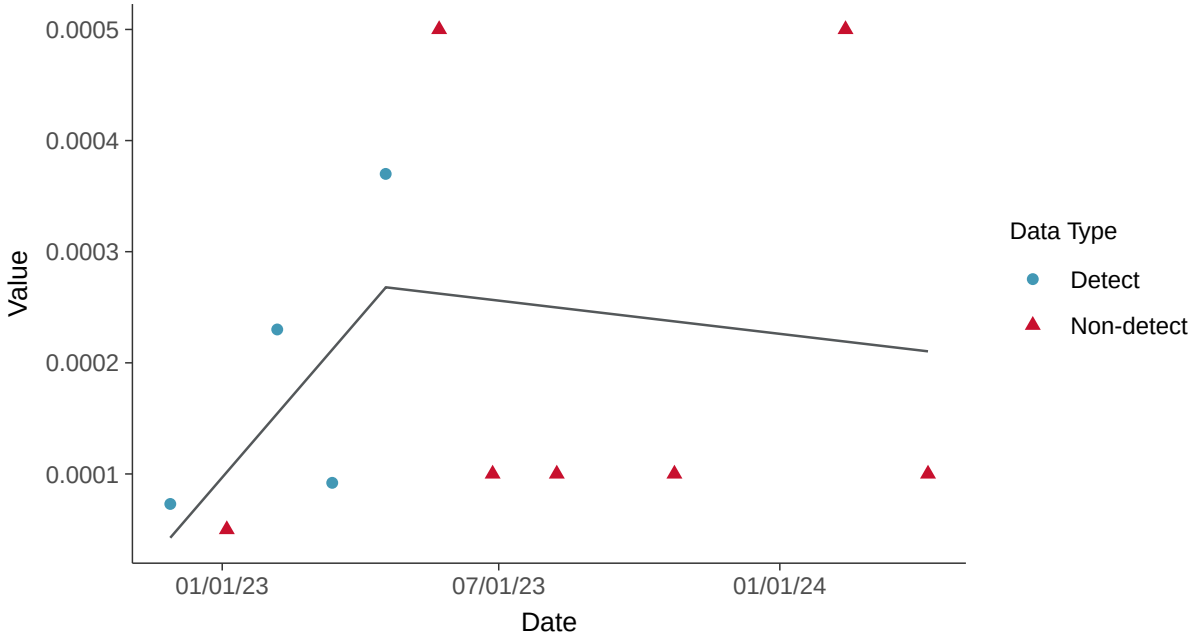
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-09 (mg/L)



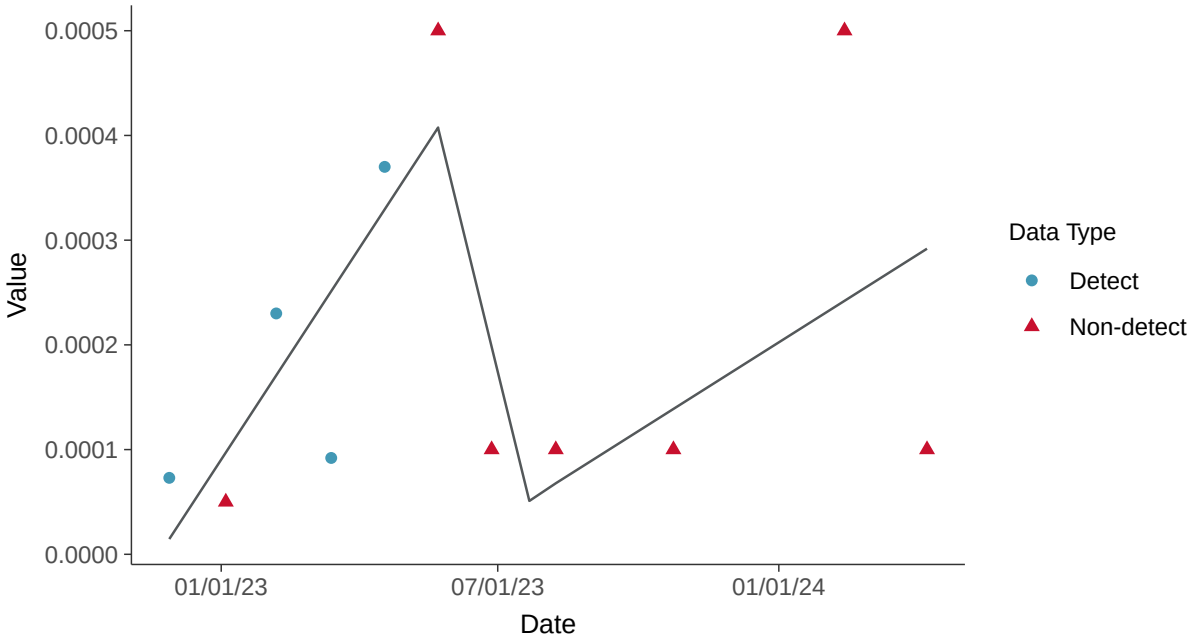
Trend Regression: Piecewise Linear-Linear

Antimony, MW-09 (mg/L)



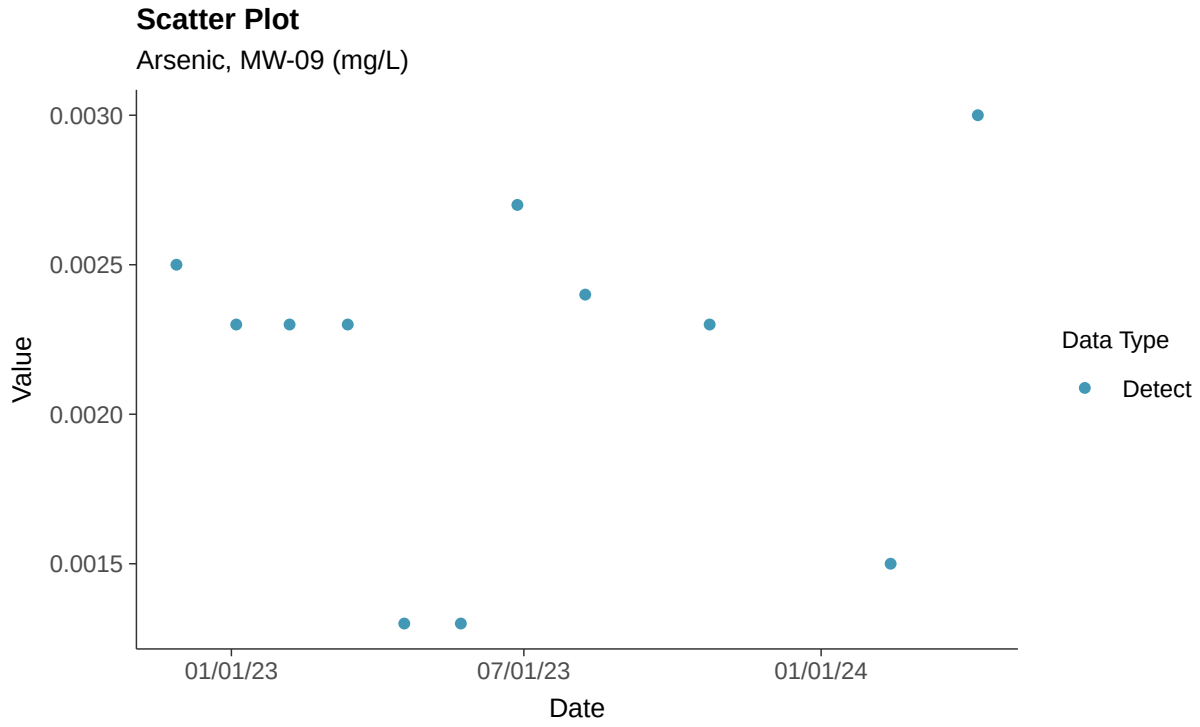
Trend Regression: Piecewise Linear-Linear-Linear

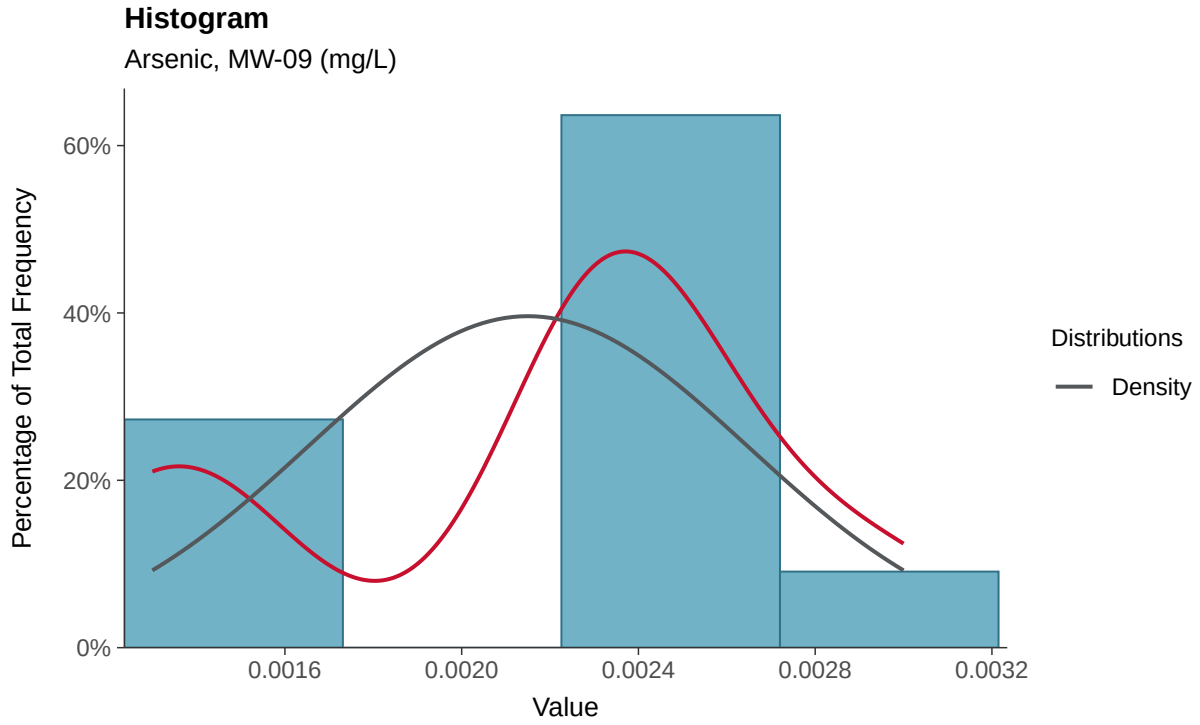
Antimony, MW-09 (mg/L)



Appendix IV: Arsenic, MW-09

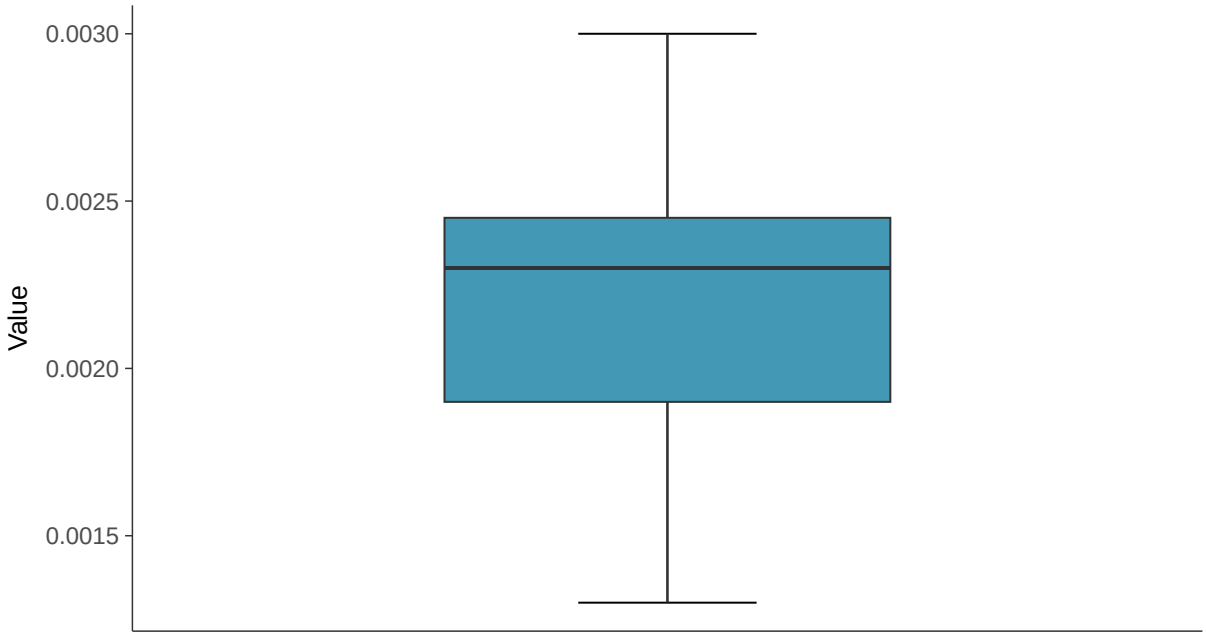
ID: 2_19_5_102





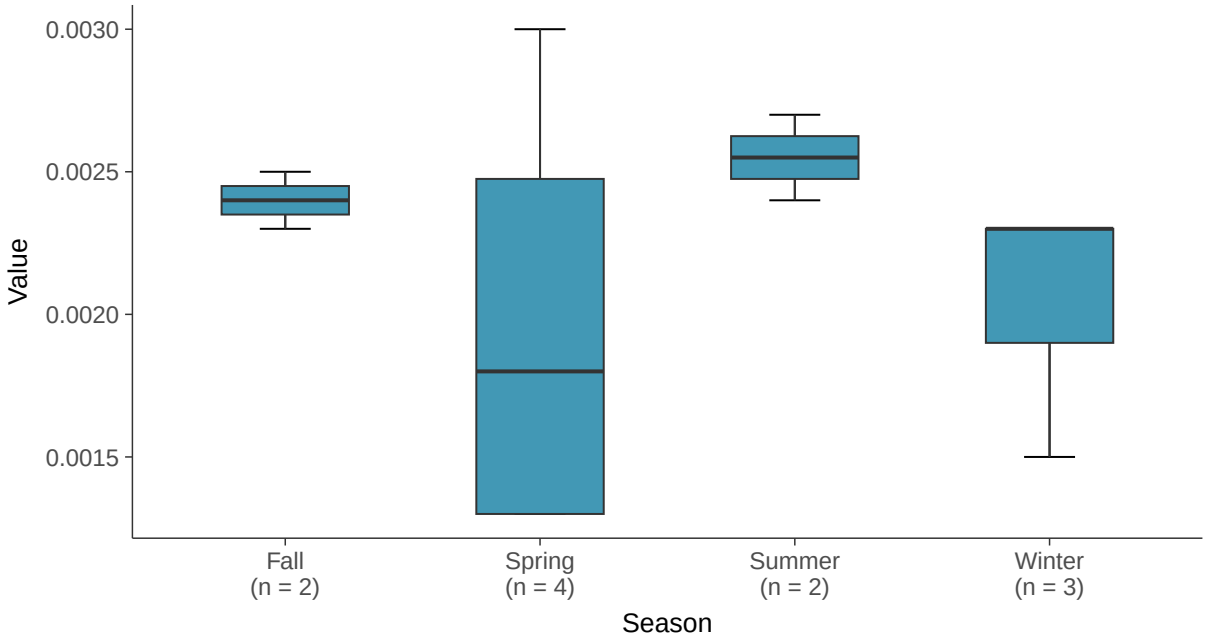
Boxplot

Arsenic, MW-09 (mg/L)



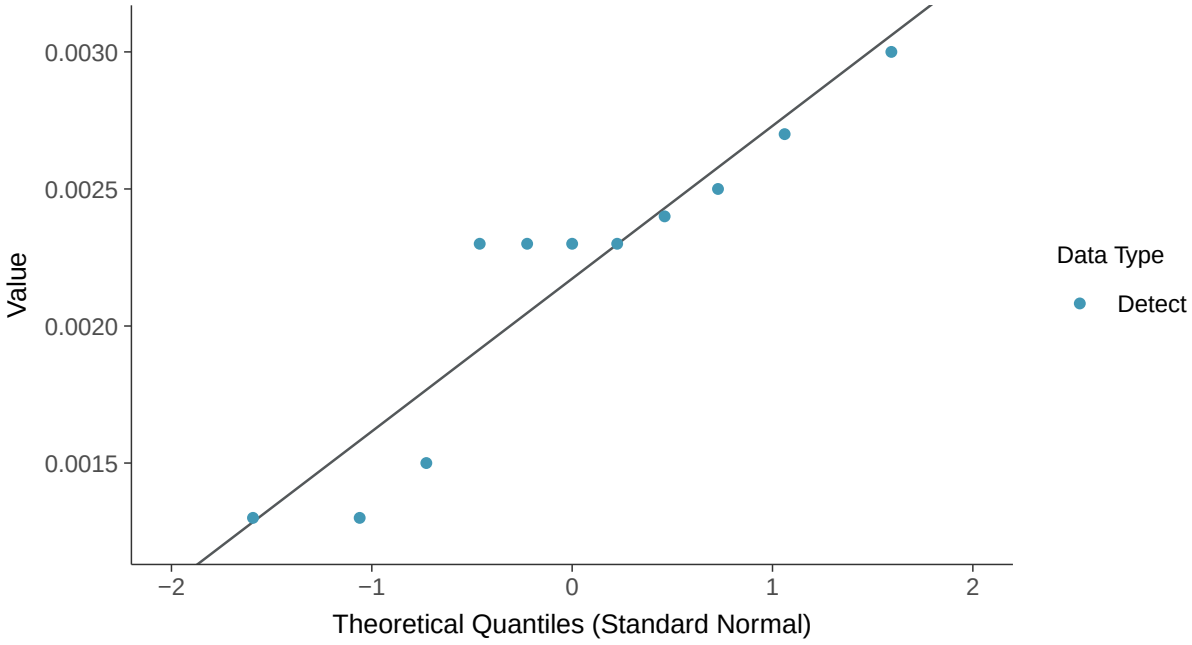
Boxplot by Season

Arsenic, MW-09 (mg/L)



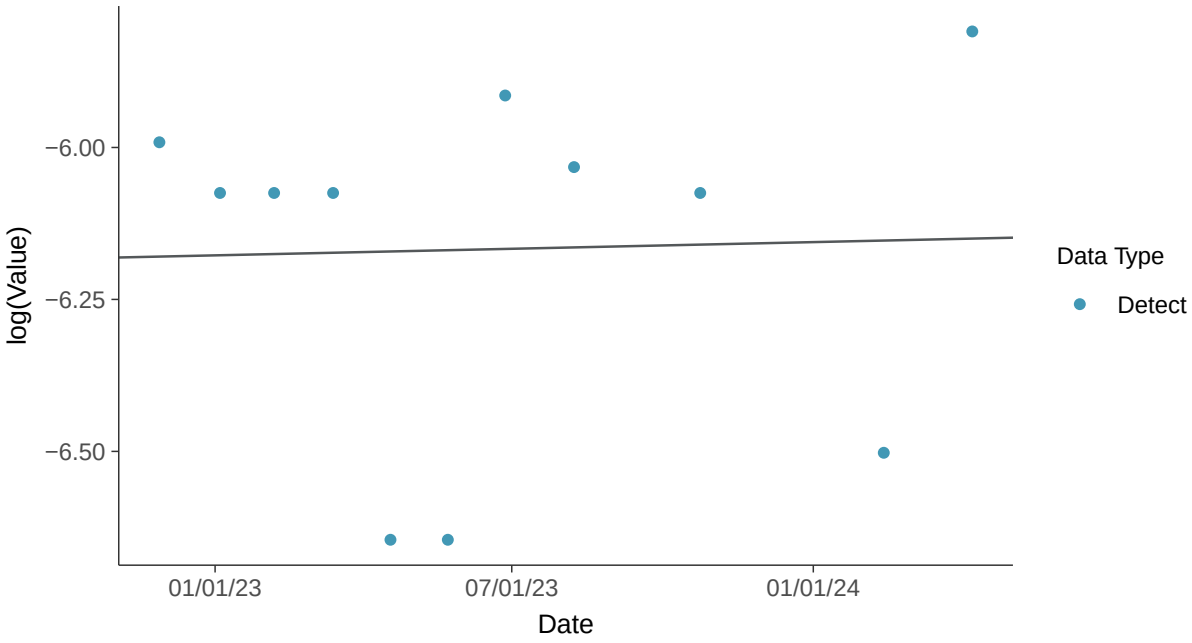
Normal Q-Q plot

Arsenic, MW-09 (mg/L)



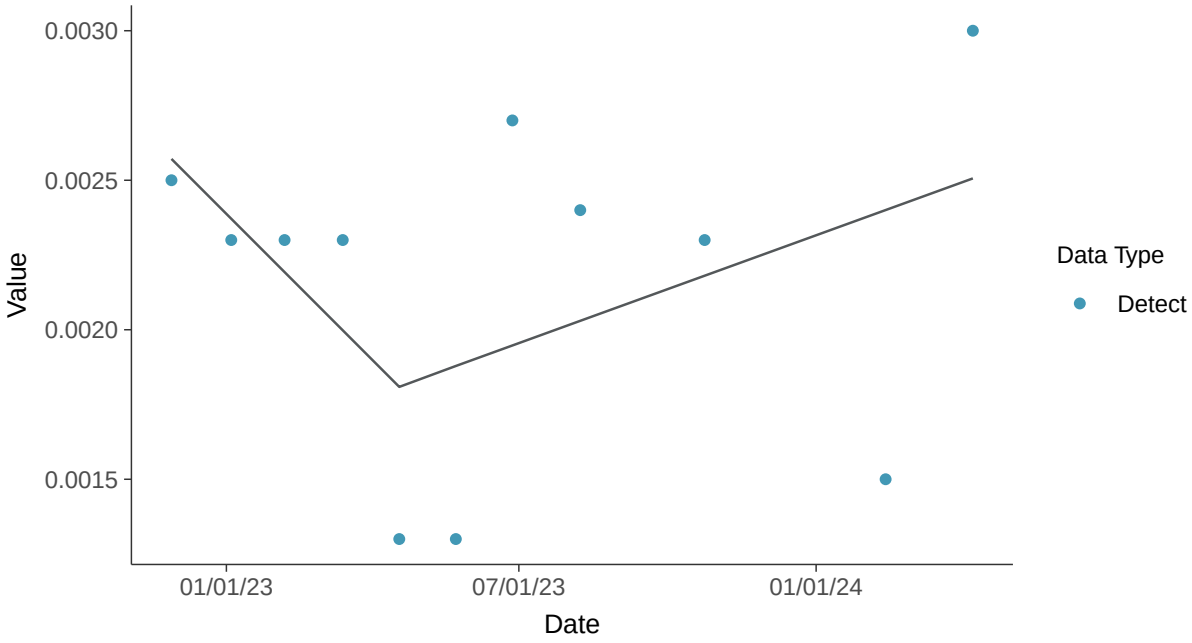
Trend Regression: Lognormal MLE

Arsenic, MW-09 (mg/L)



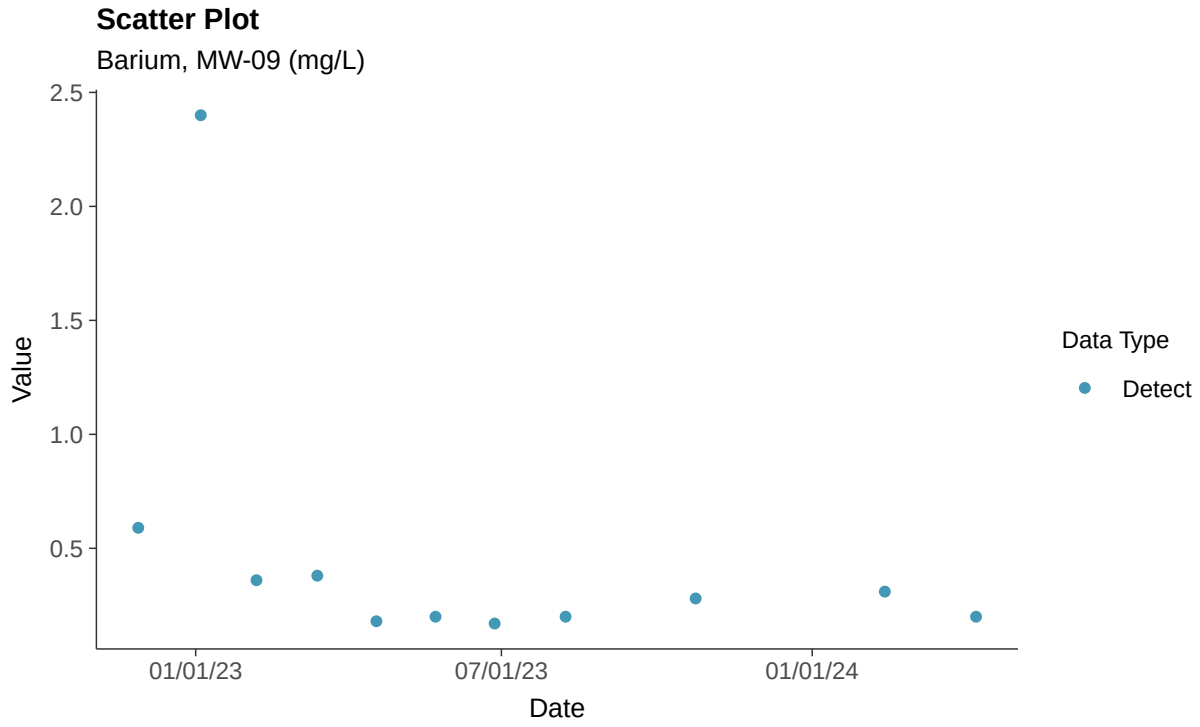
Trend Regression: Piecewise Linear-Linear

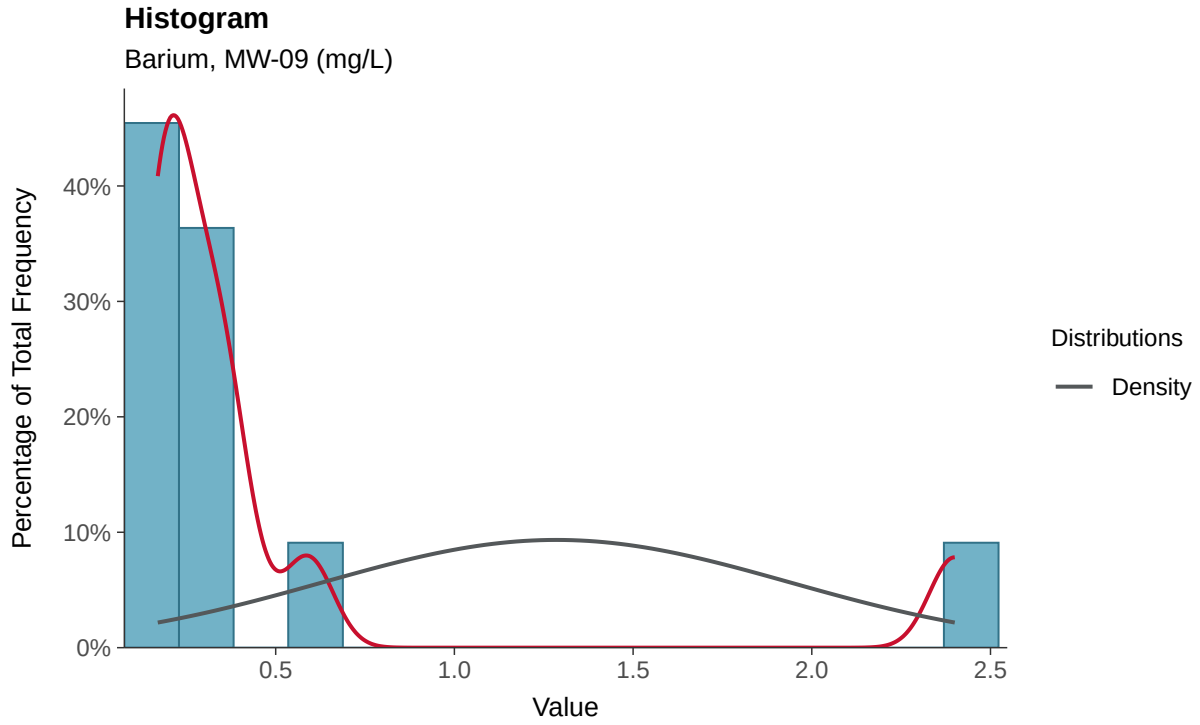
Arsenic, MW-09 (mg/L)



Appendix IV: Barium, MW-09

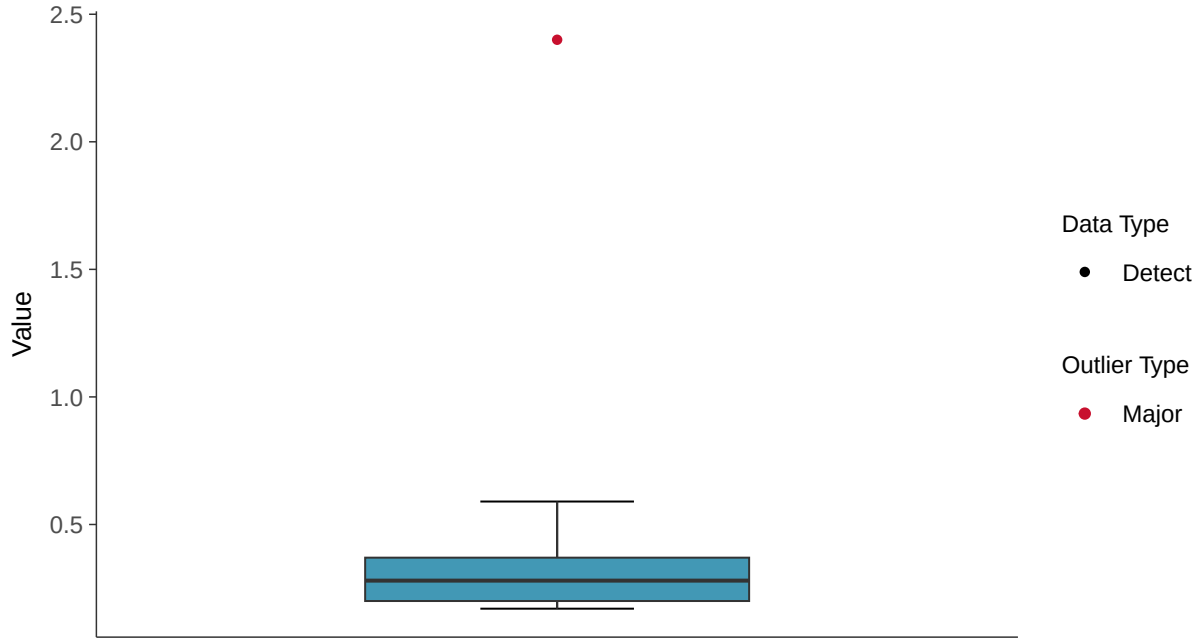
ID: 2_19_5_103





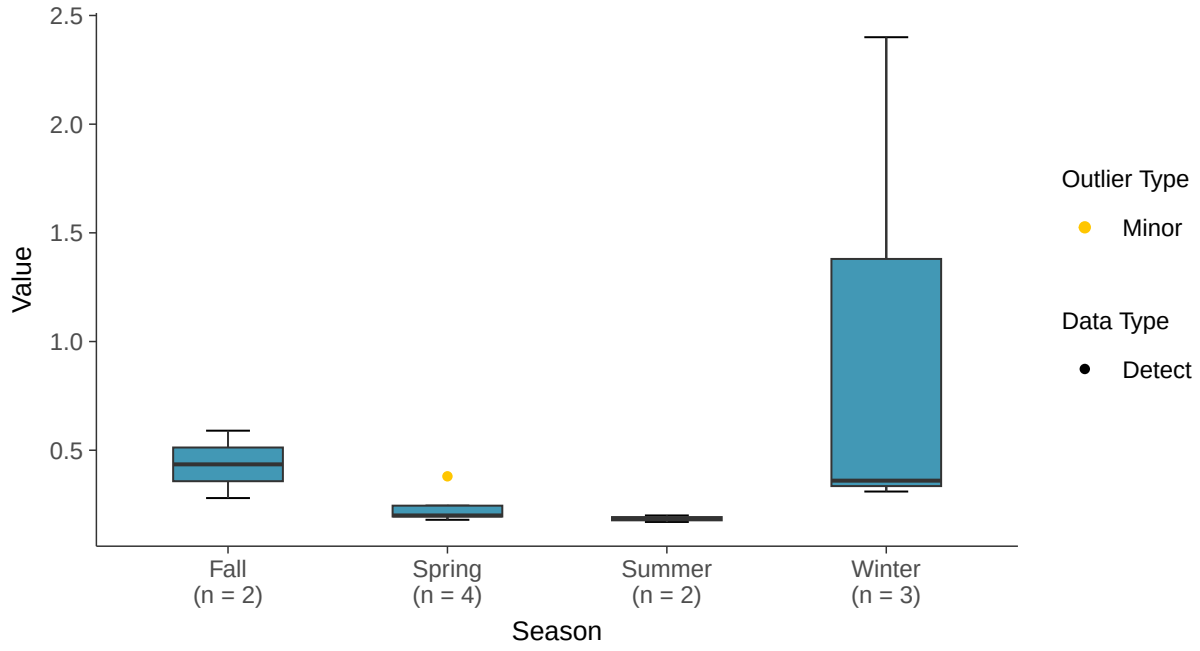
Boxplot

Barium, MW-09 (mg/L)



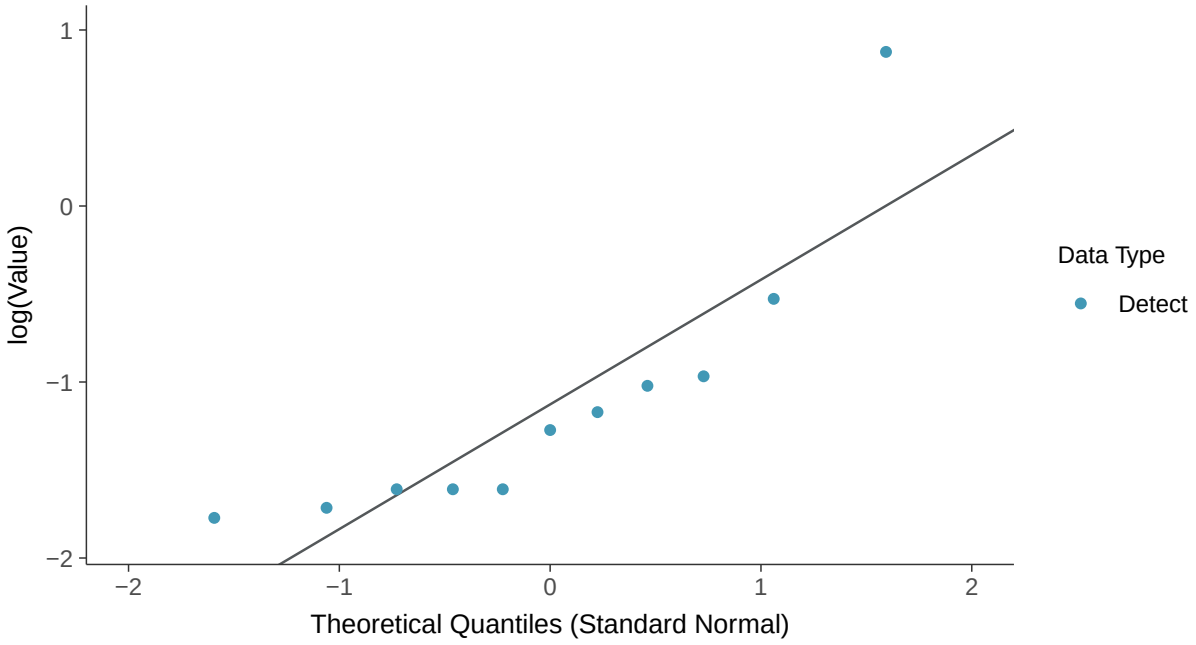
Boxplot by Season

Barium, MW-09 (mg/L)



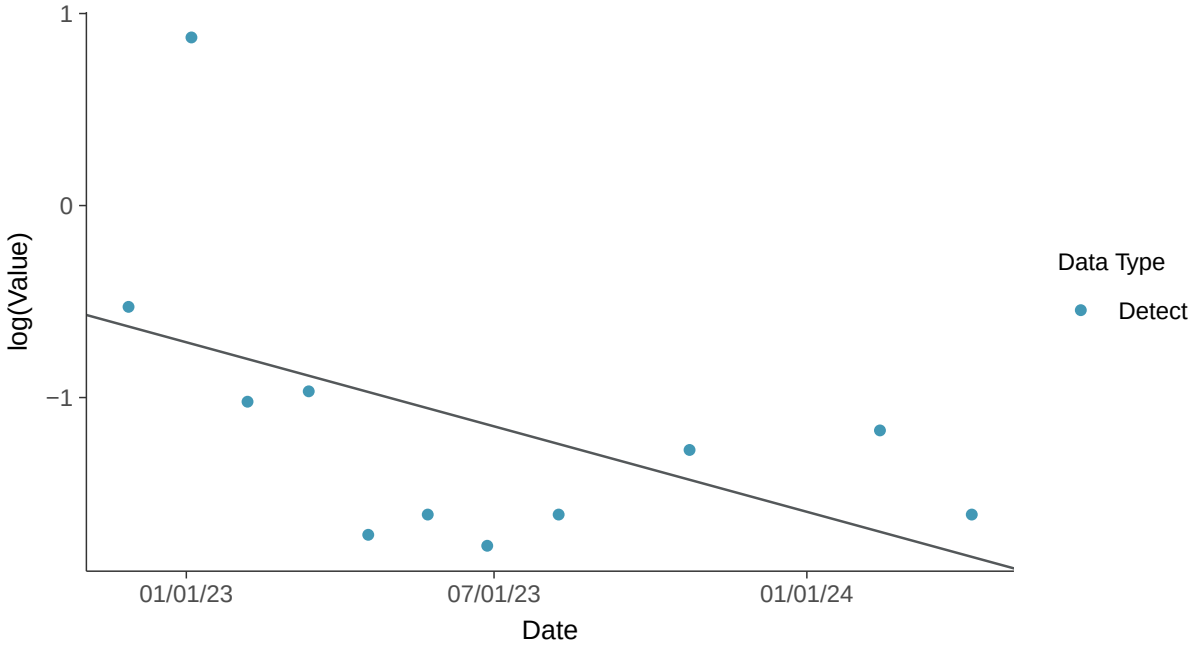
Lognormal Q-Q plot

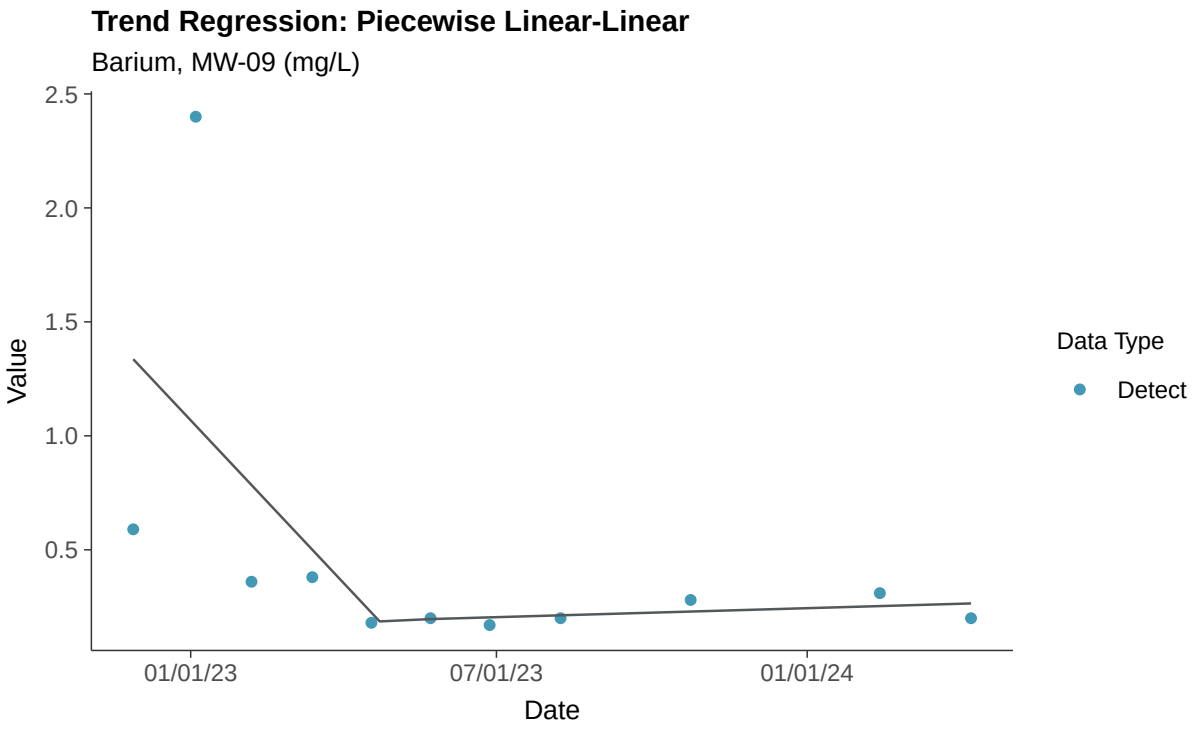
Barium, MW-09 (mg/L)



Trend Regression: Lognormal MLE

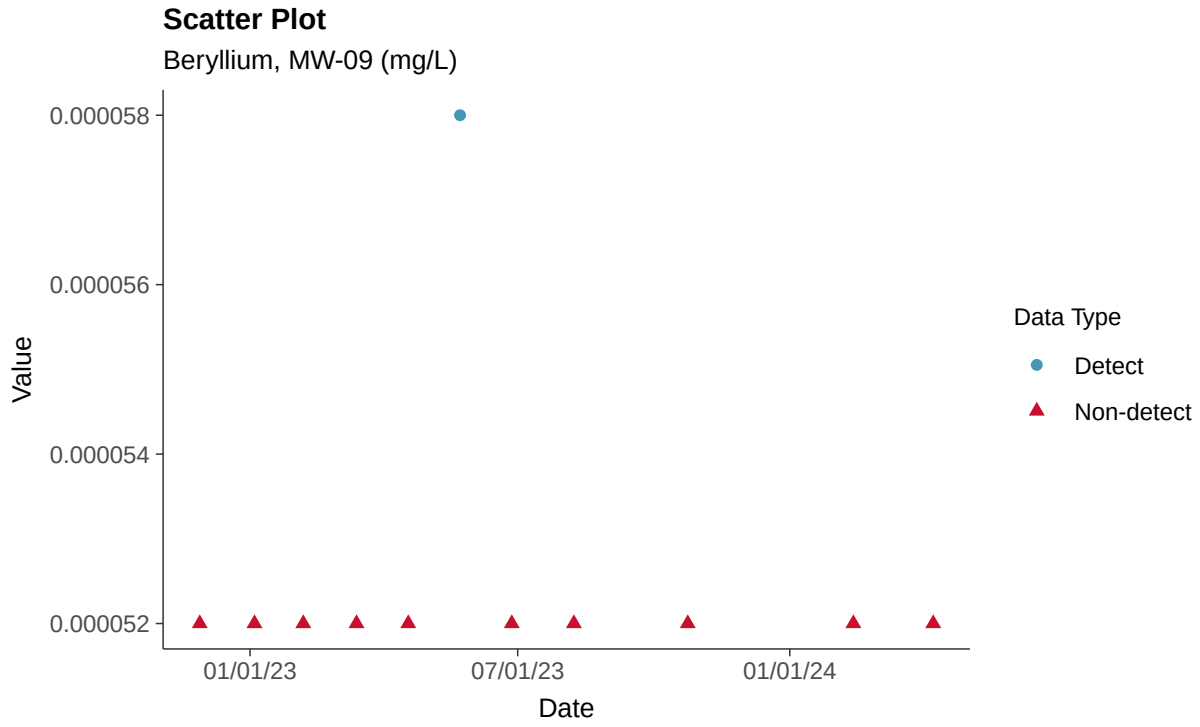
Barium, MW-09 (mg/L)

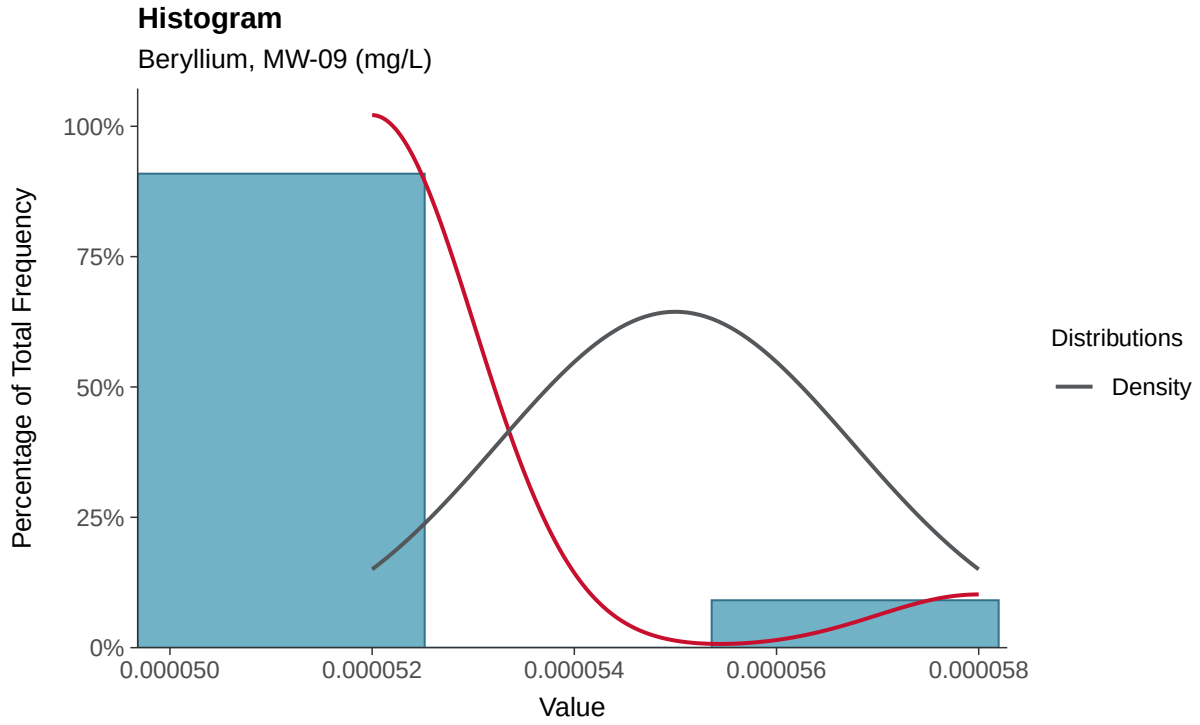



Trend Regression: Piecewise Linear-Linear
Barium, MW-09 (mg/L)
Value
2.5
2.0
1.5
1.0
0.5
01/01/23
07/01/23
01/01/24
Date
Data Type
Detect

Appendix IV: Beryllium, MW-09

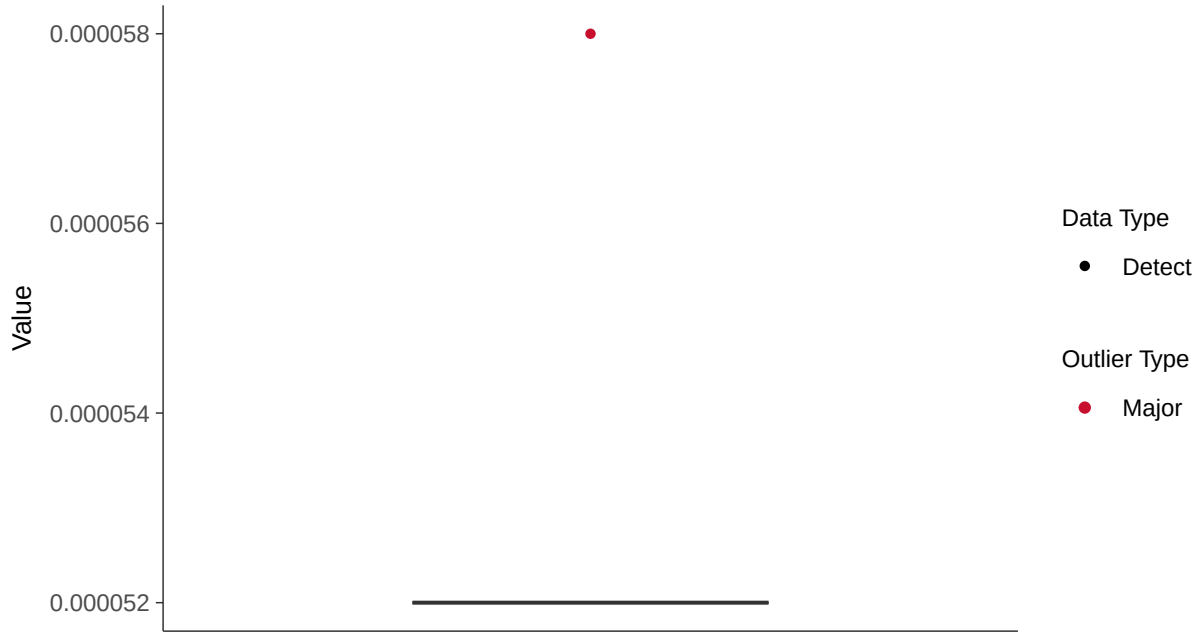
ID: 2_19_5_104





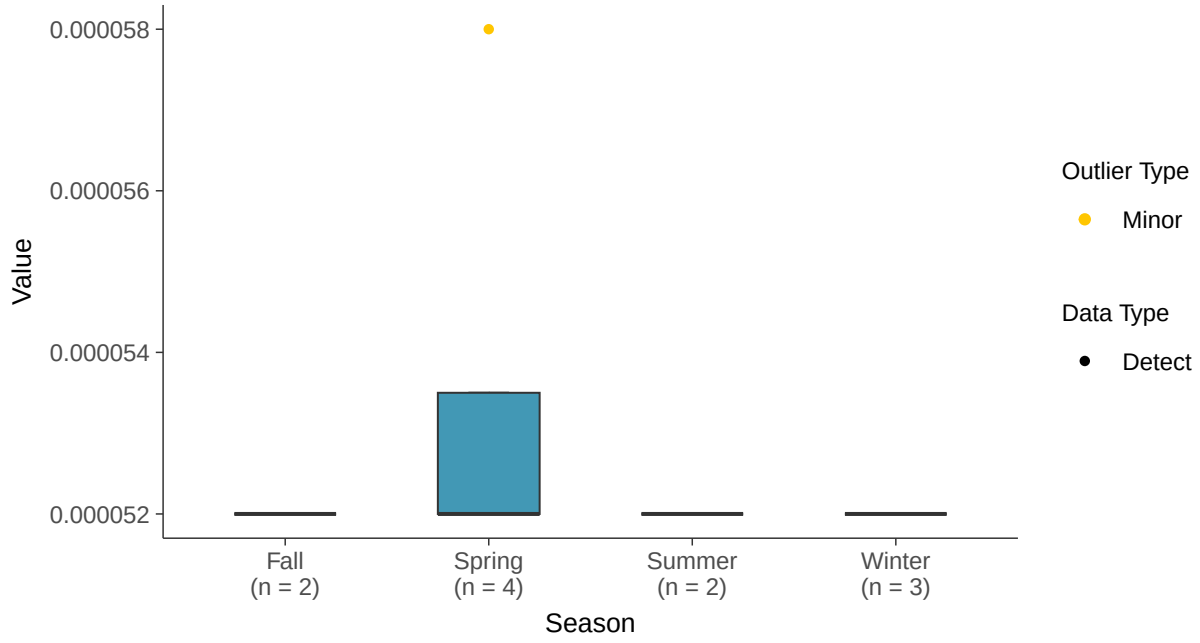
Boxplot

Beryllium, MW-09 (mg/L)



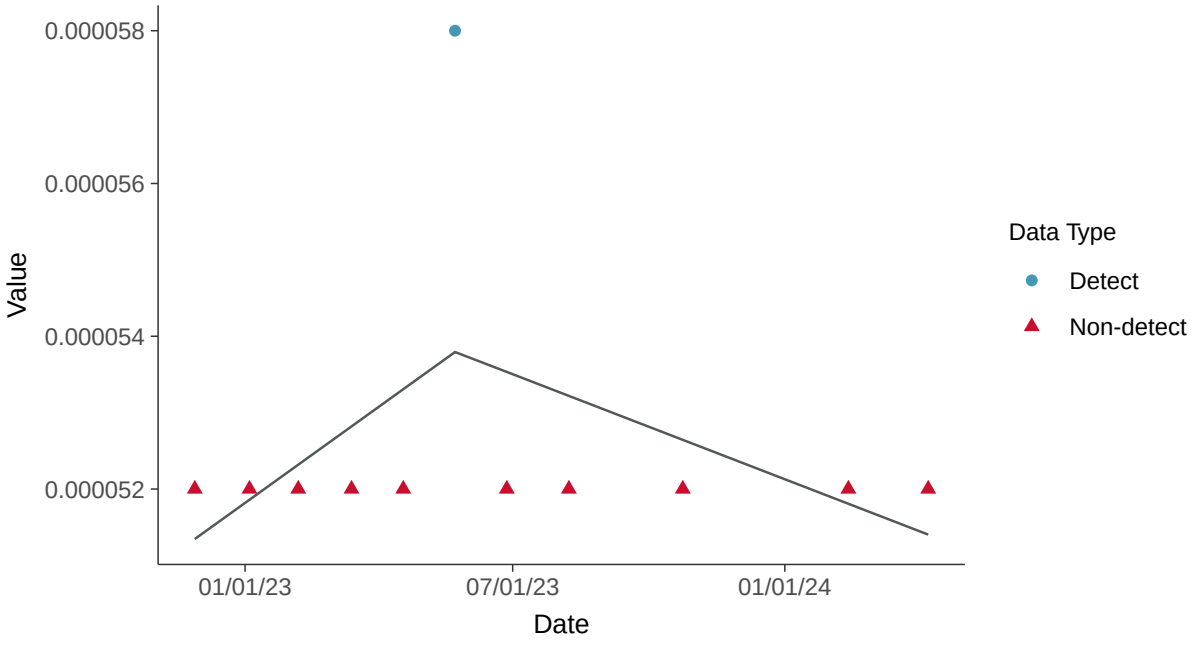
Boxplot by Season

Beryllium, MW-09 (mg/L)



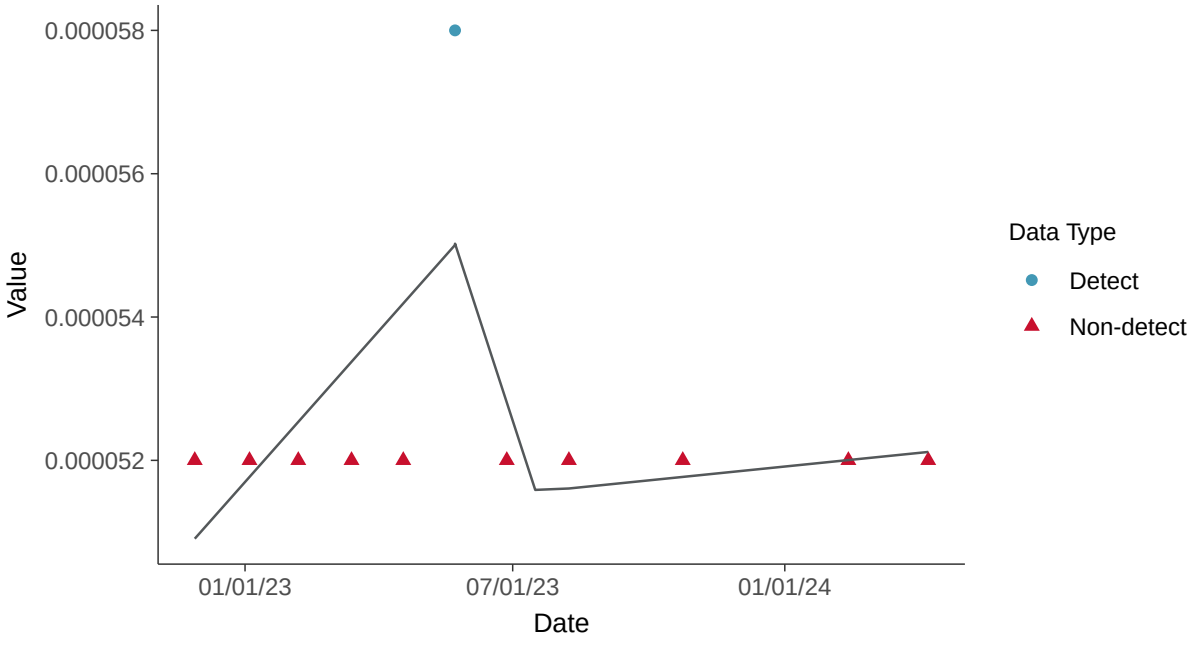
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-09 (mg/L)



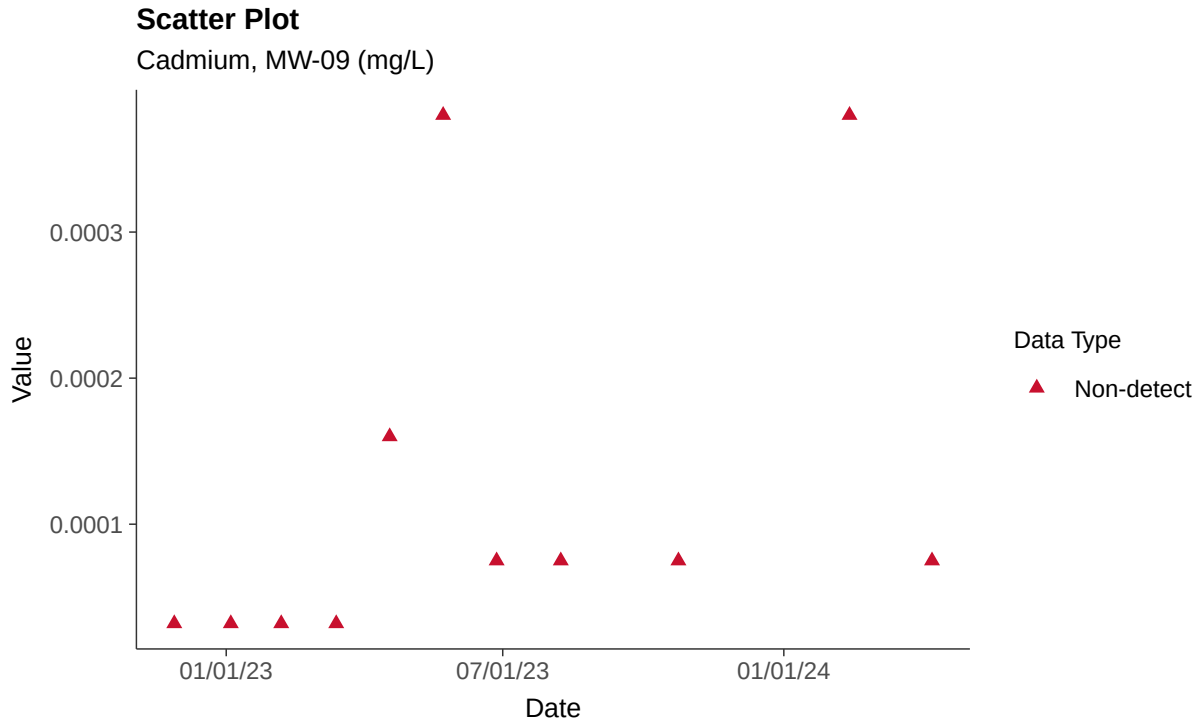
Trend Regression: Piecewise Linear-Linear-Linear

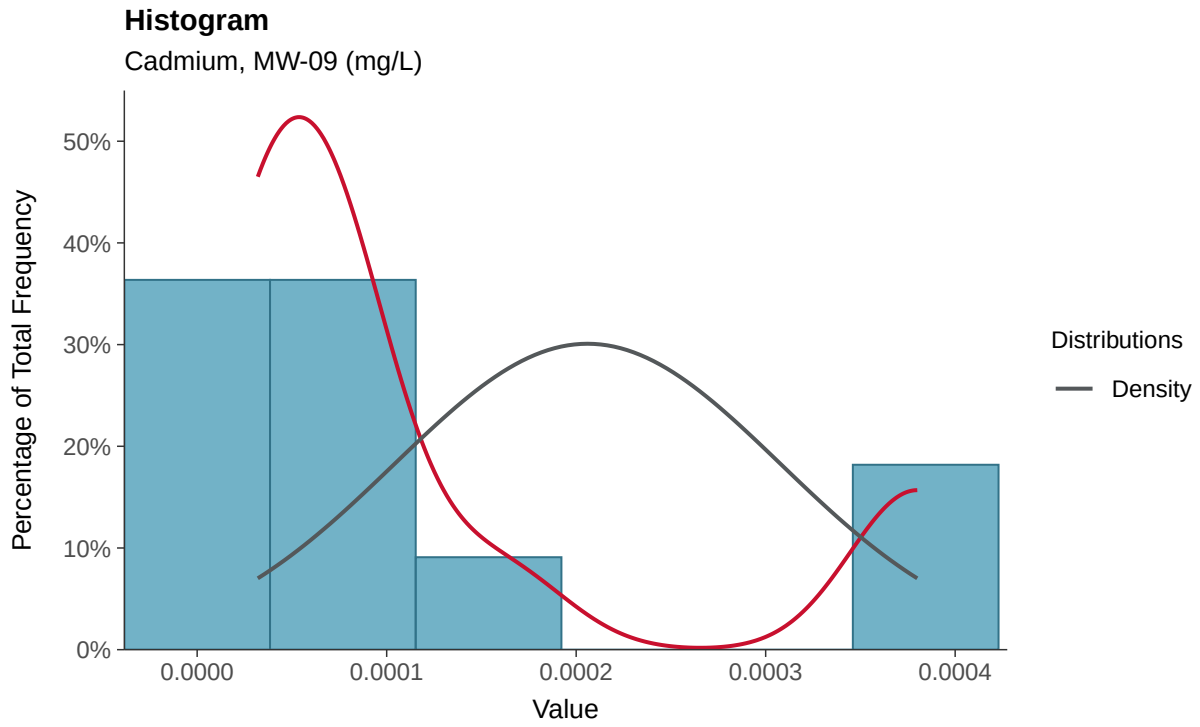
Beryllium, MW-09 (mg/L)



Appendix IV: Cadmium, MW-09

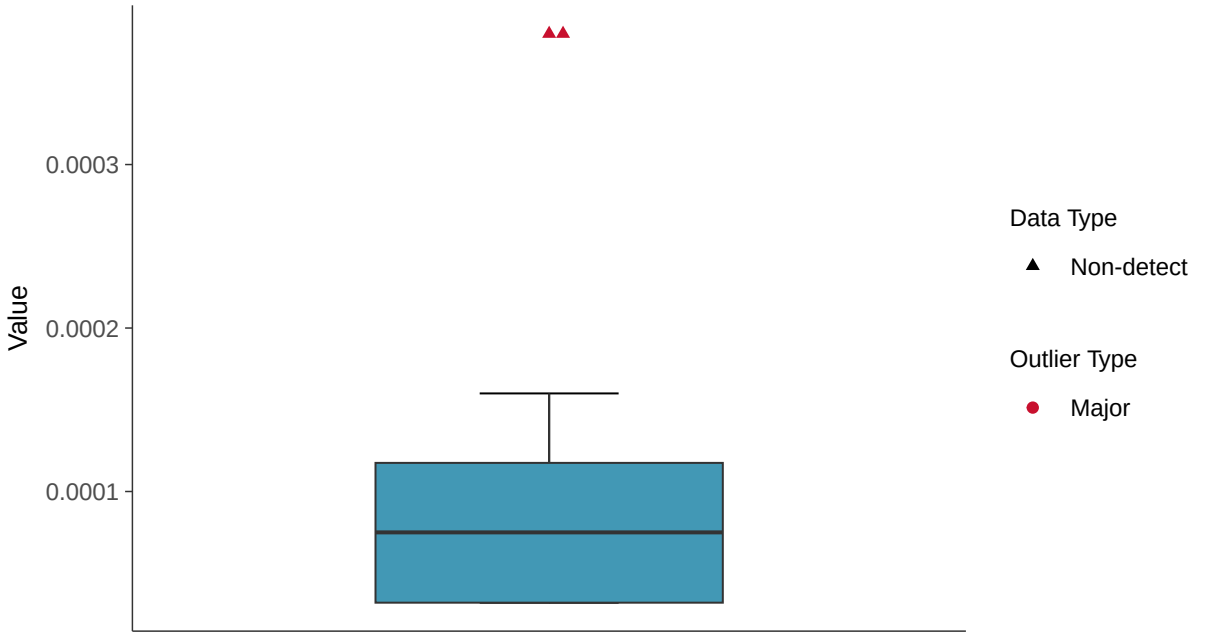
ID: 2_19_5_106





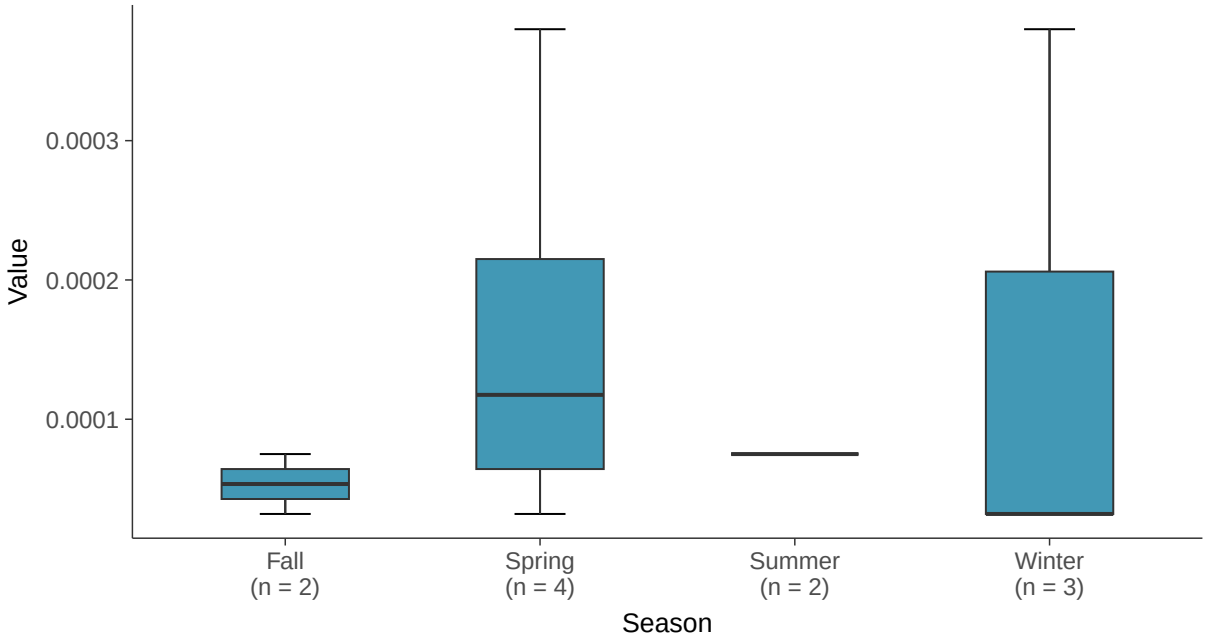
Boxplot

Cadmium, MW-09 (mg/L)



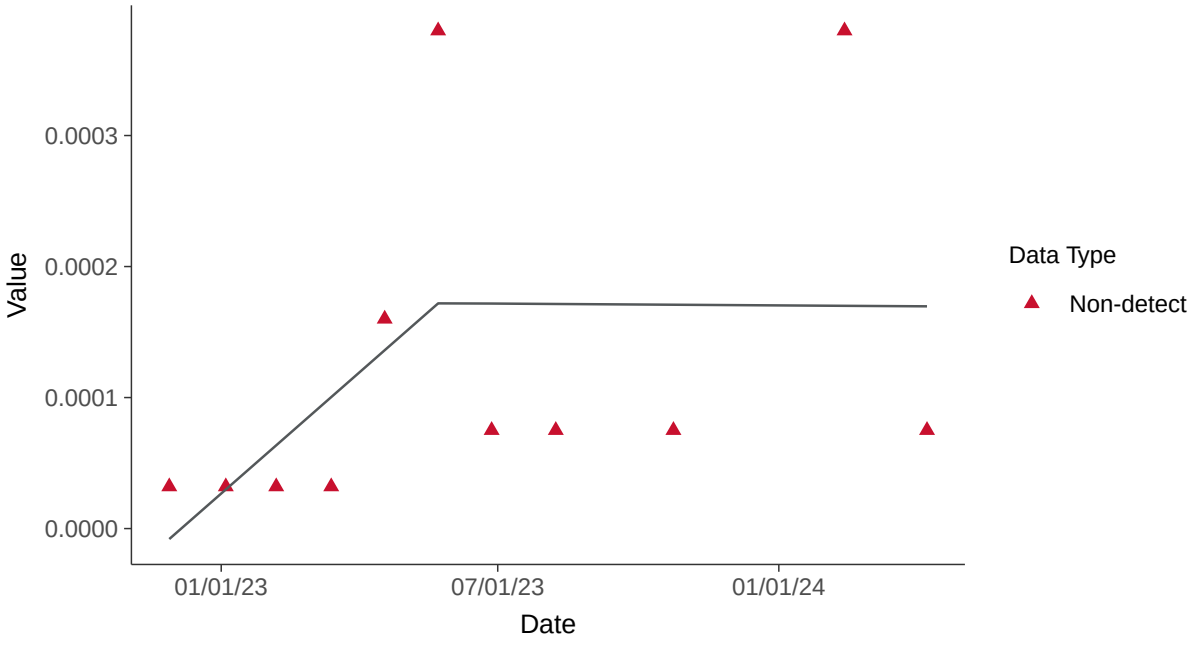
Boxplot by Season

Cadmium, MW-09 (mg/L)



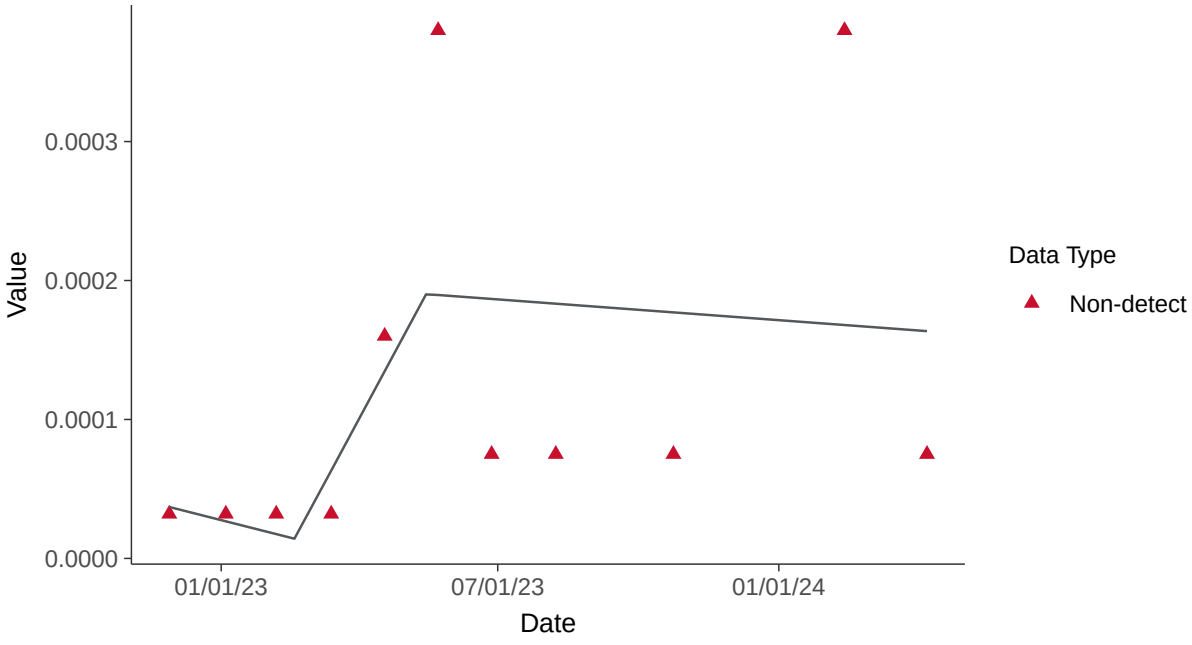
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-09 (mg/L)



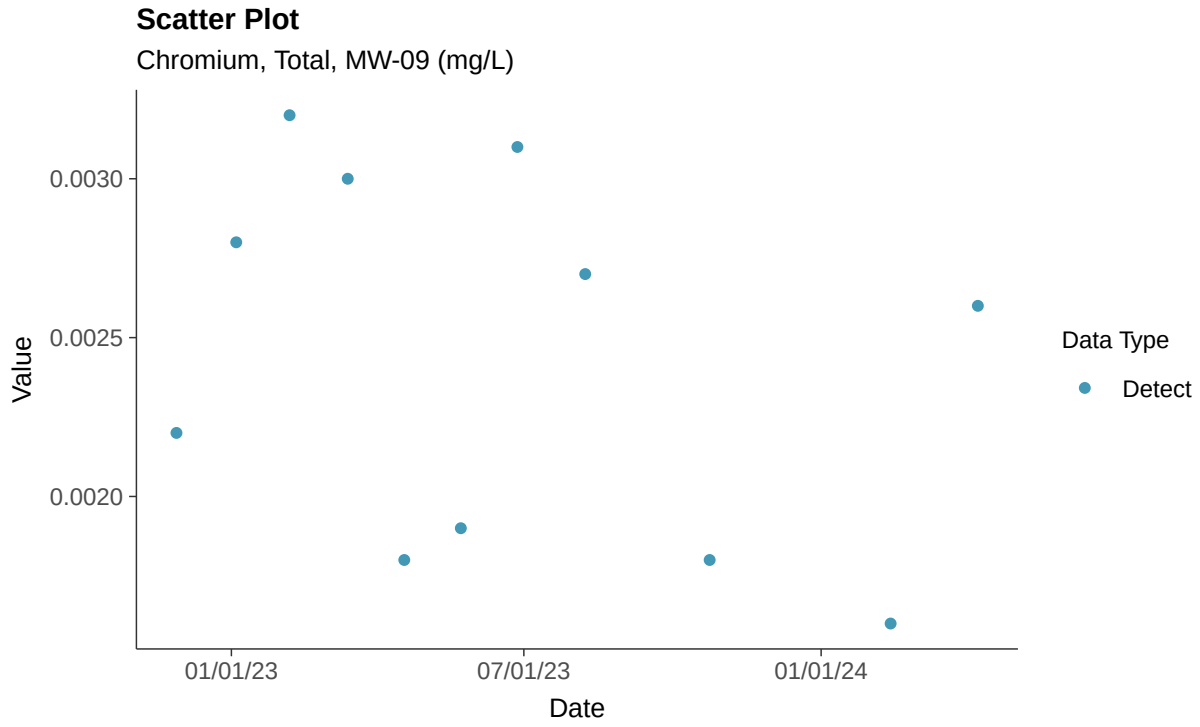
Trend Regression: Piecewise Linear-Linear-Linear

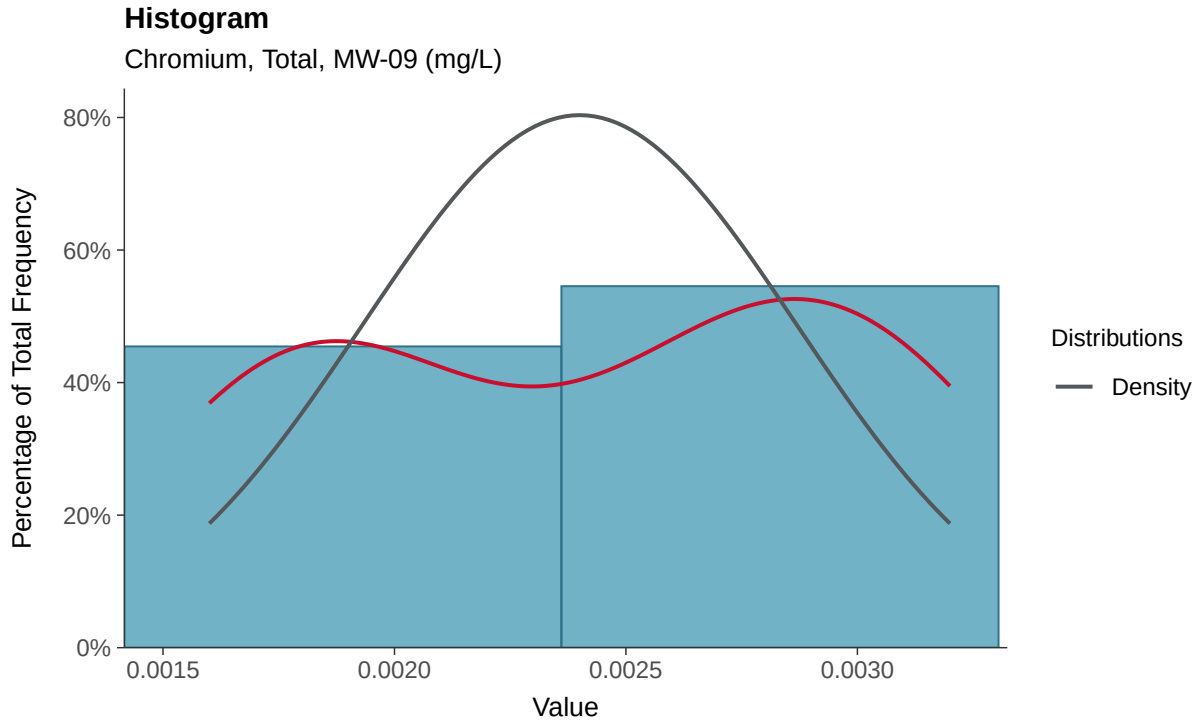
Cadmium, MW-09 (mg/L)



Appendix IV: Chromium, Total, MW-09

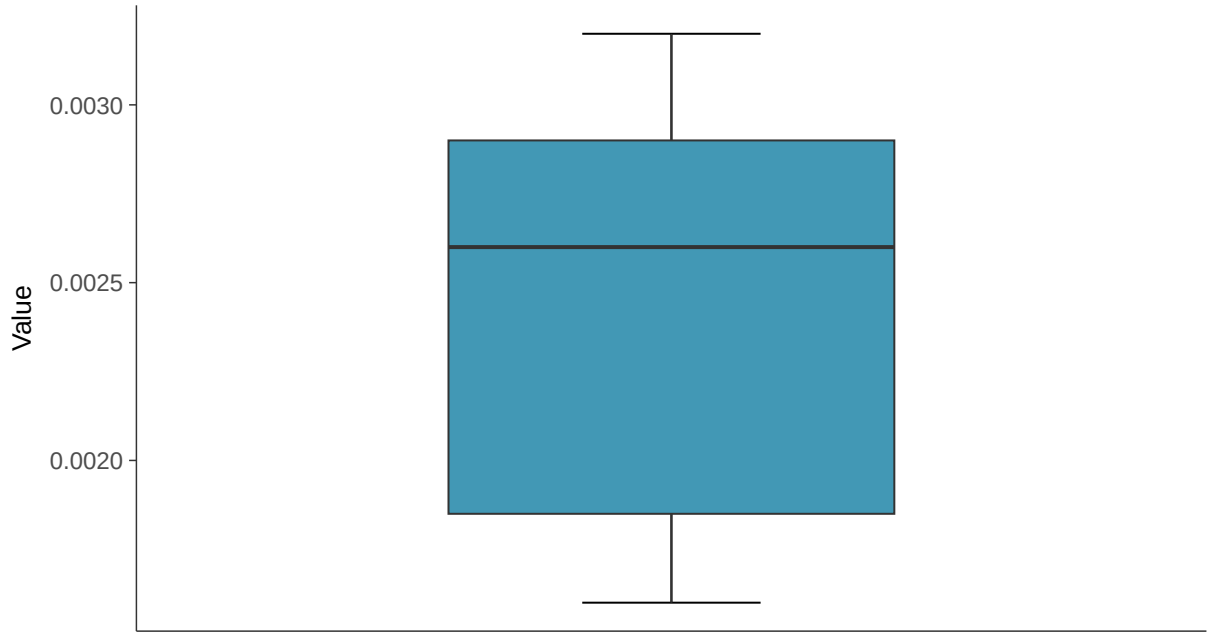
ID: 2_19_5_109





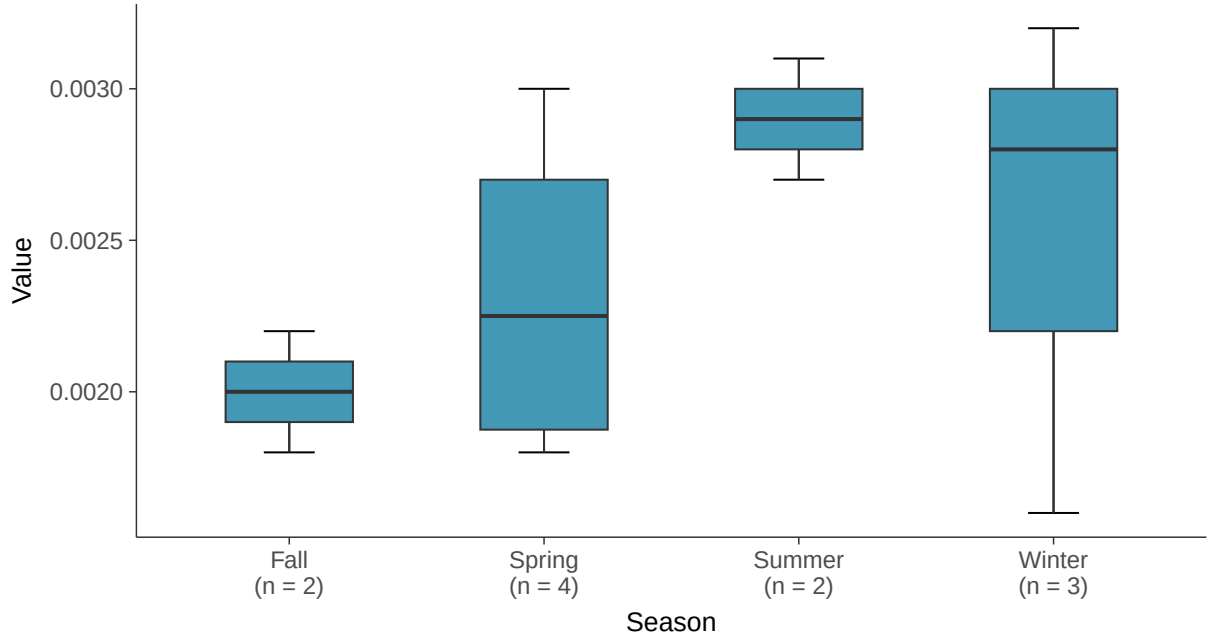
Boxplot

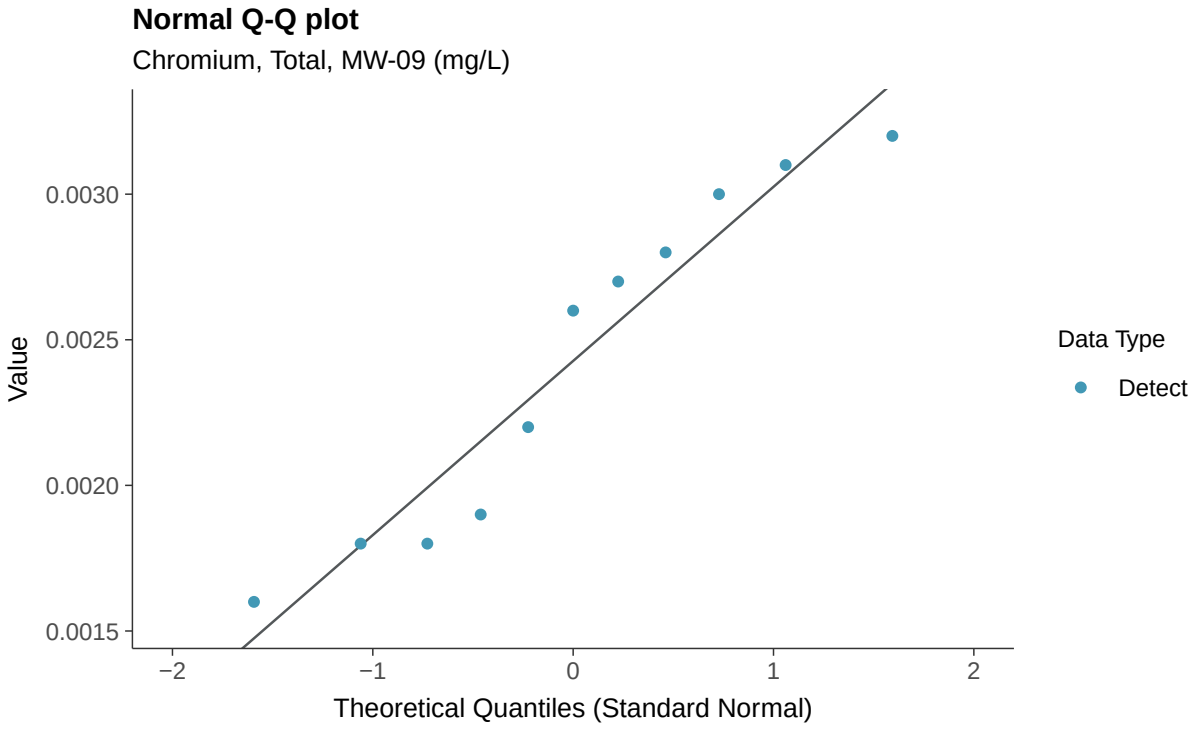
Chromium, Total, MW-09 (mg/L)

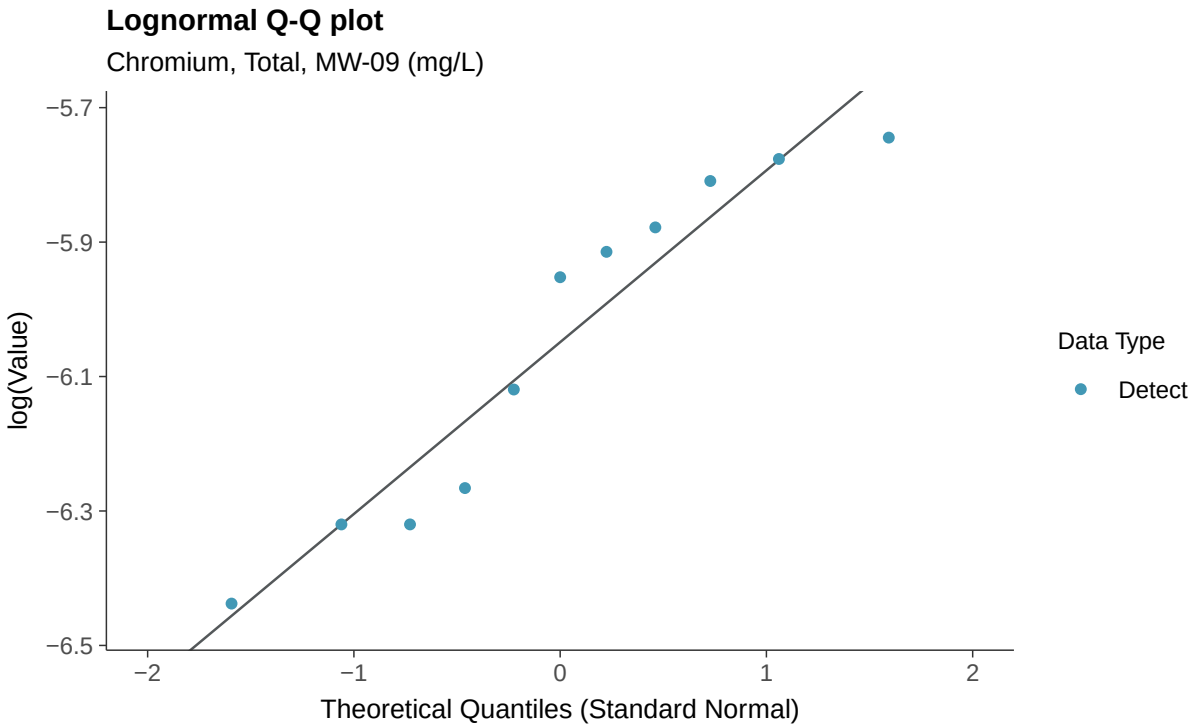


Boxplot by Season

Chromium, Total, MW-09 (mg/L)

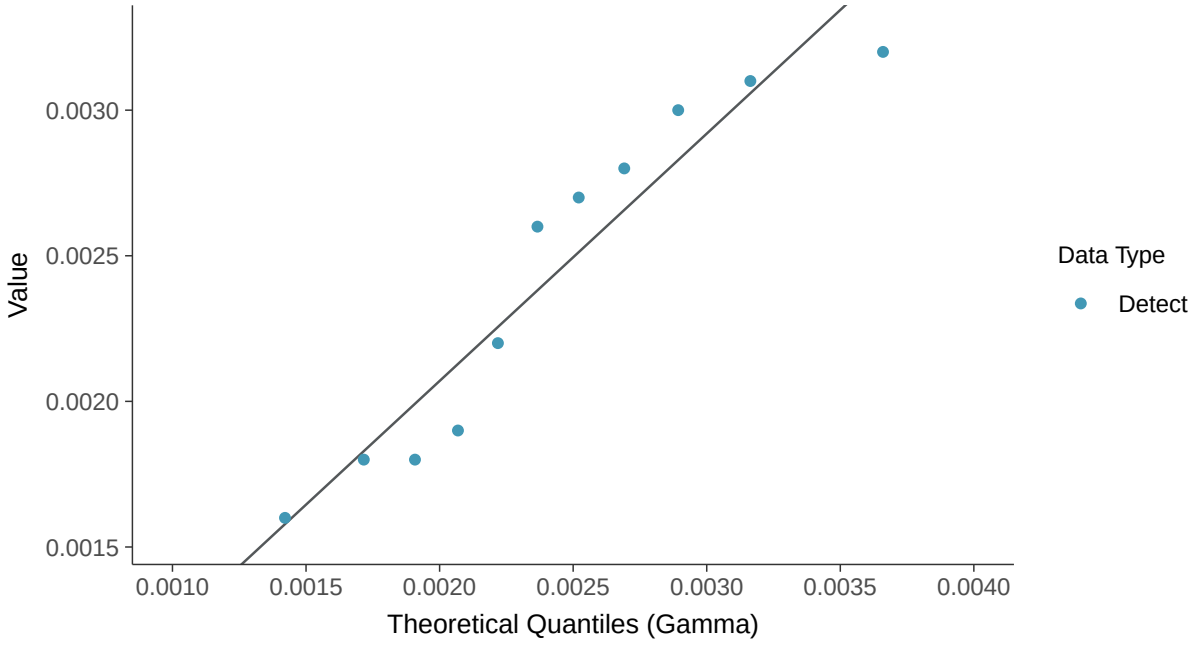



Normal Q-Q plot
Chromium, Total, MW-09 (mg/L)
Value
0.0030
0.0025
0.0020
0.0015
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect


Lognormal Q-Q plot
Chromium, Total, MW-09 (mg/L)
log(Value)
−5.7
−5.9
−6.1
−6.3
−6.5
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect

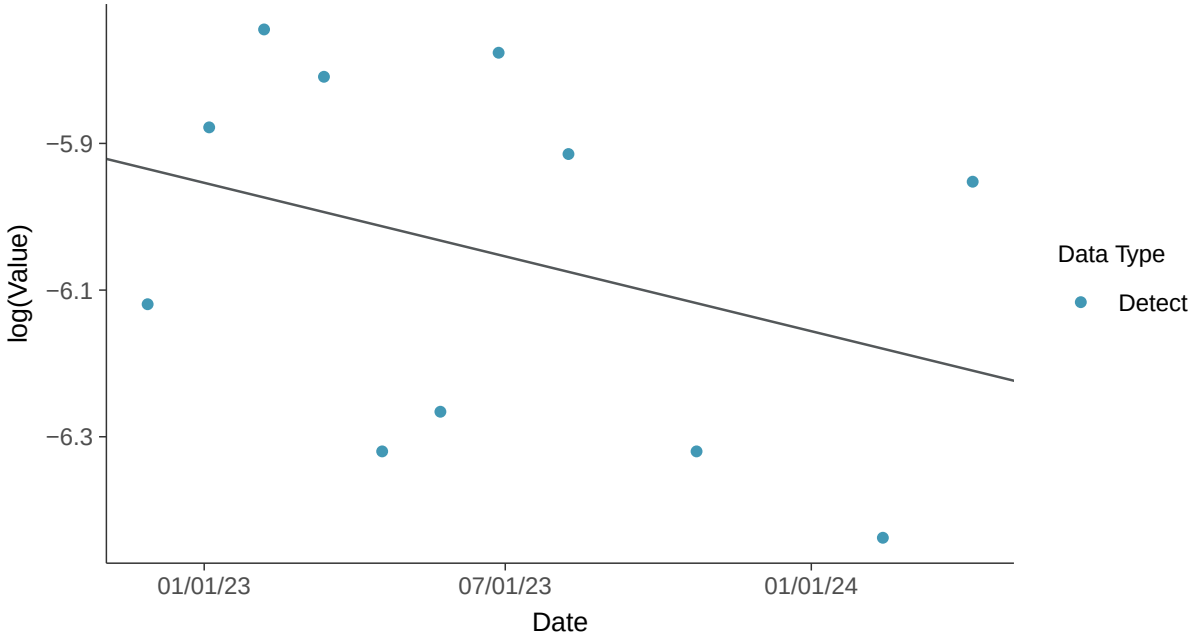
Gamma Q-Q plot

Chromium, Total, MW-09 (mg/L)



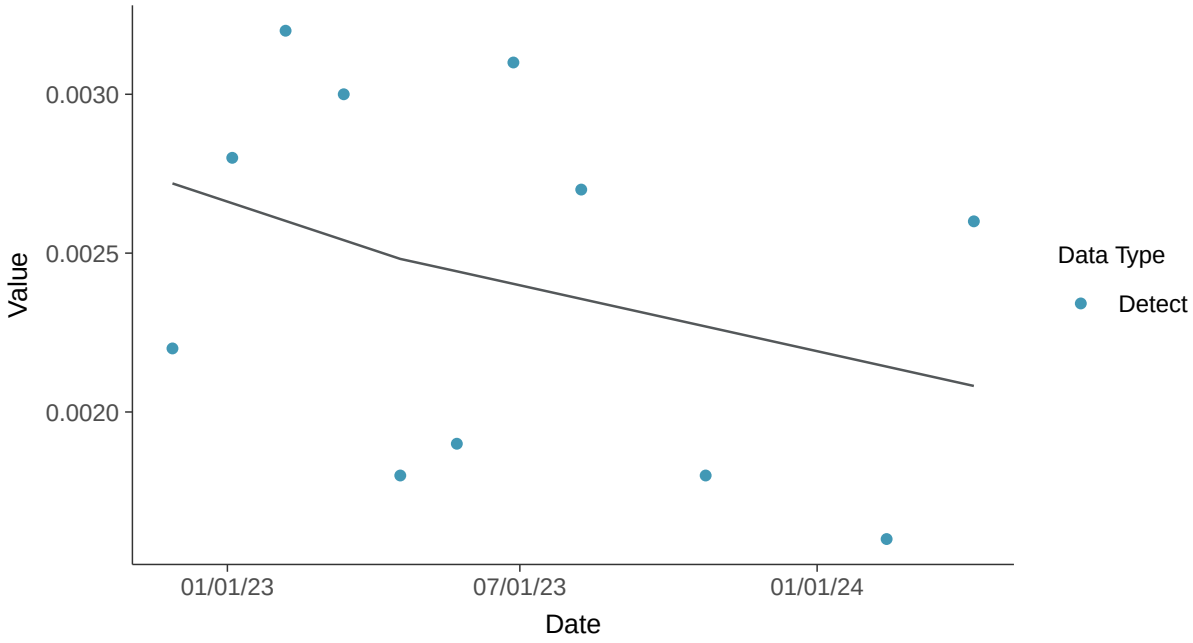
Trend Regression: Lognormal MLE

Chromium, Total, MW-09 (mg/L)



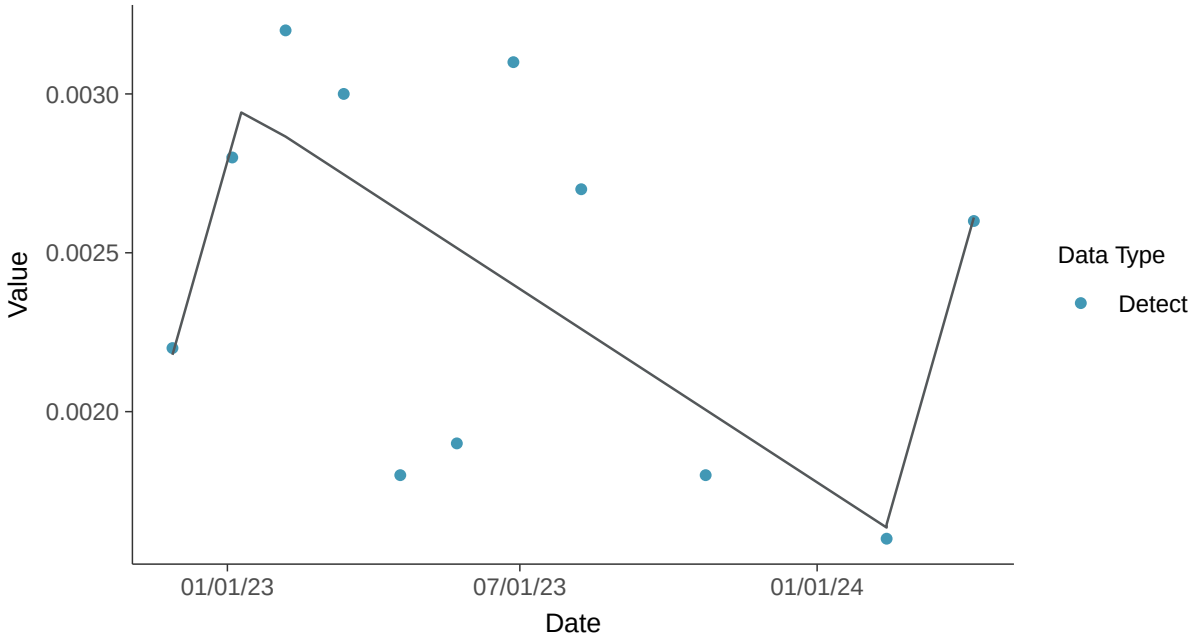
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-09 (mg/L)



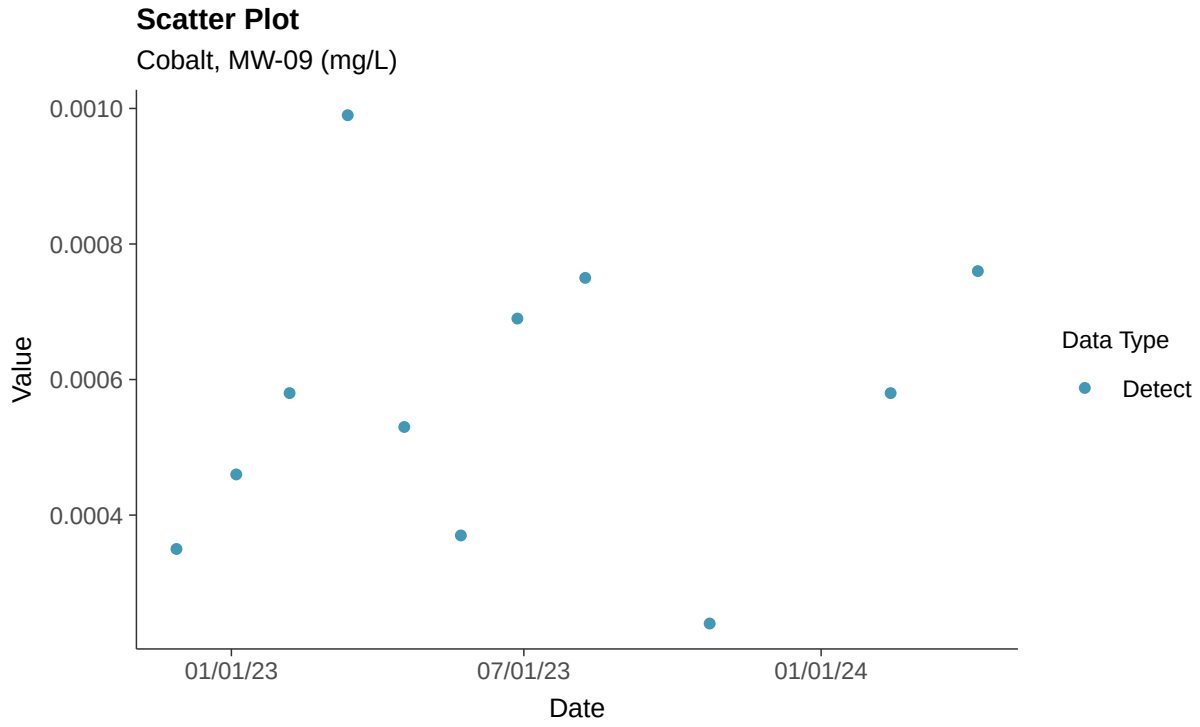
Trend Regression: Piecewise Linear-Linear-Linear

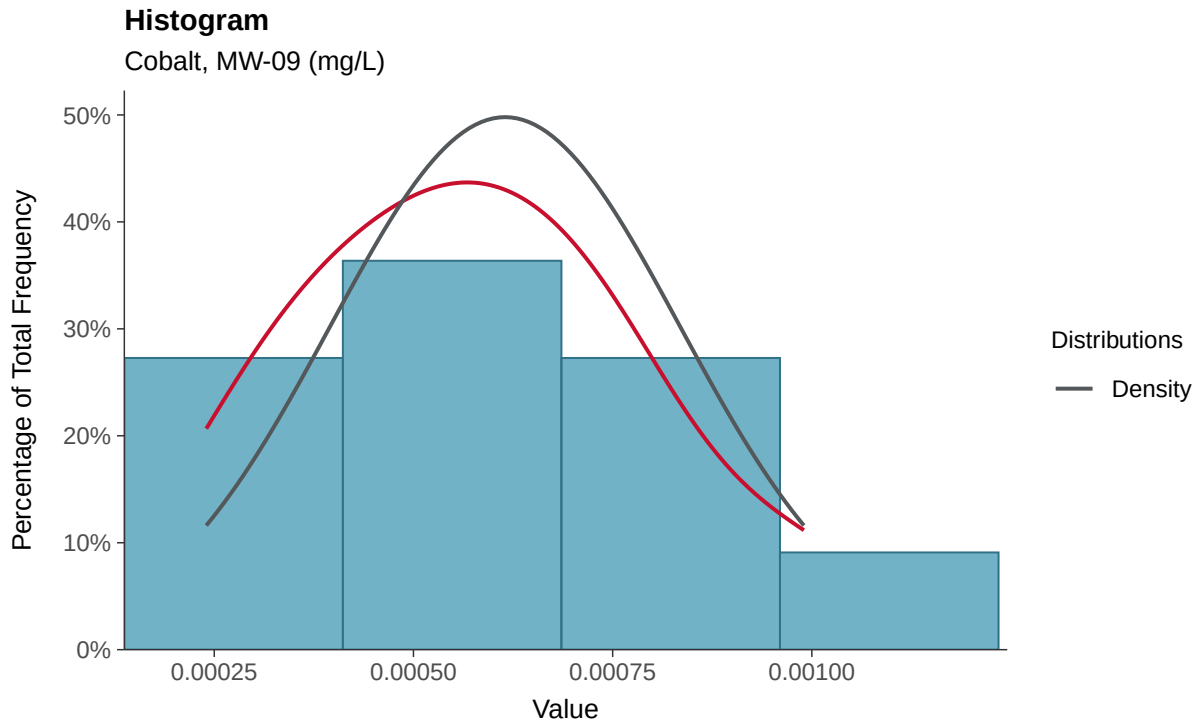
Chromium, Total, MW-09 (mg/L)



Appendix IV: Cobalt, MW-09

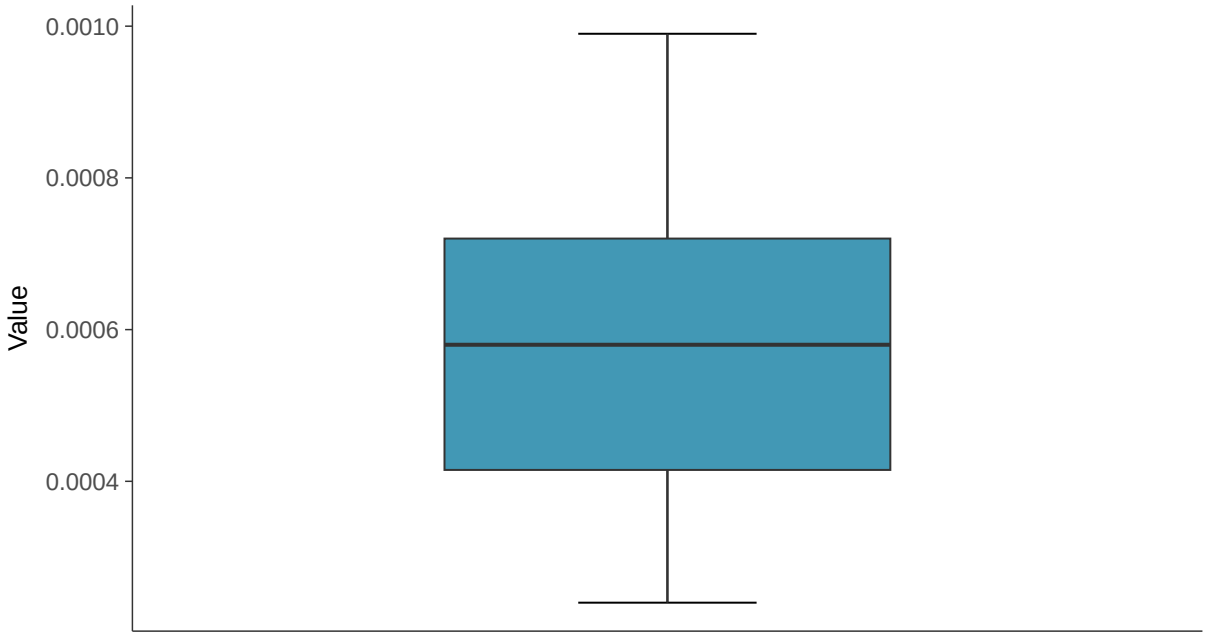
ID: 2_19_5_110





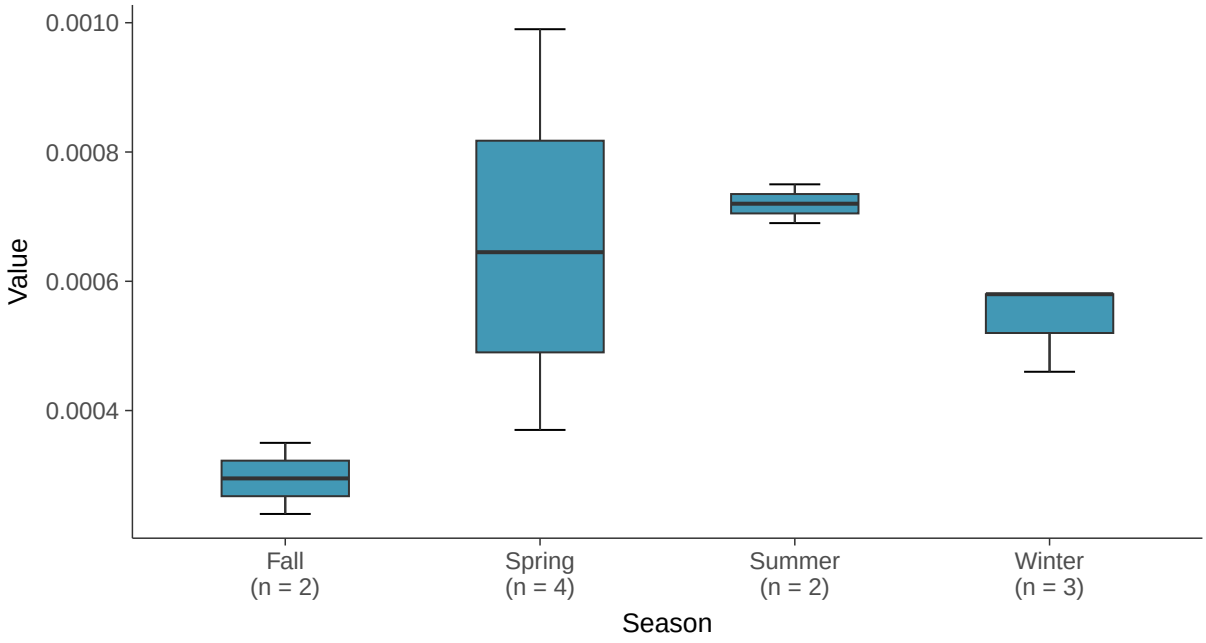
Boxplot

Cobalt, MW-09 (mg/L)



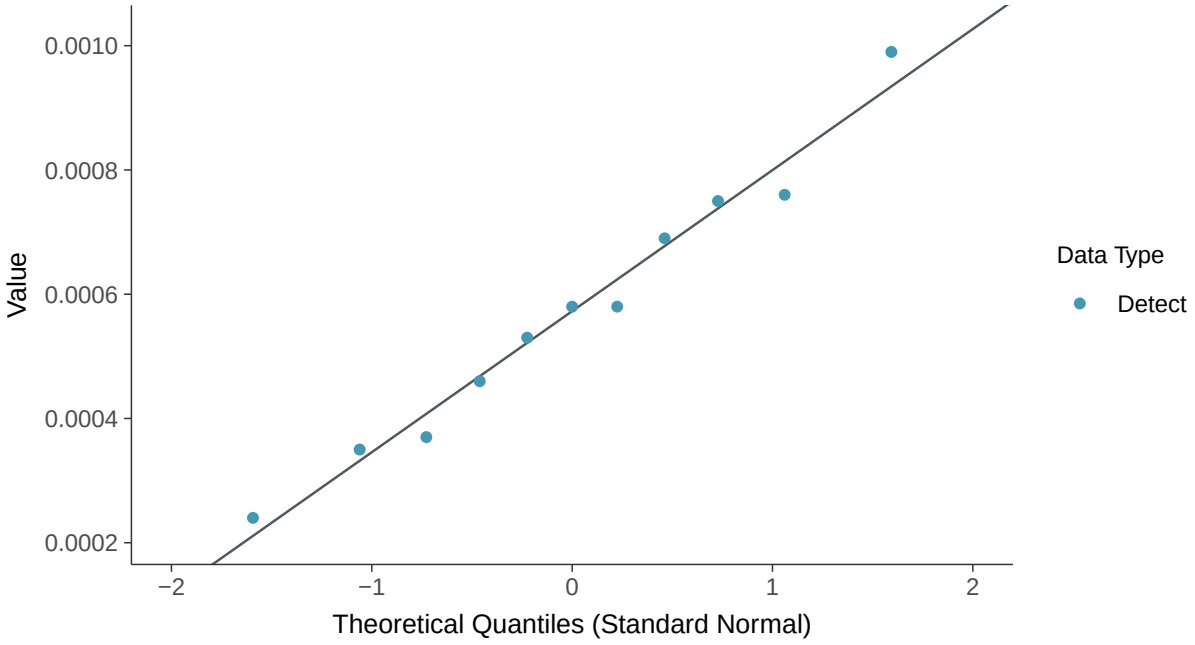
Boxplot by Season

Cobalt, MW-09 (mg/L)



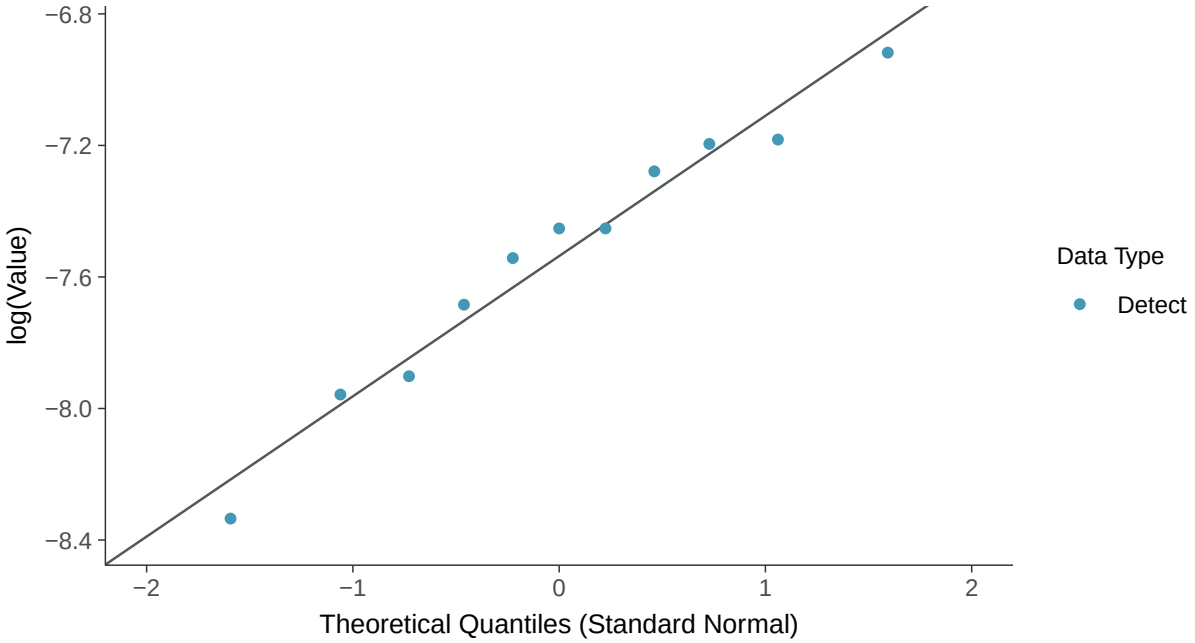
Normal Q-Q plot

Cobalt, MW-09 (mg/L)



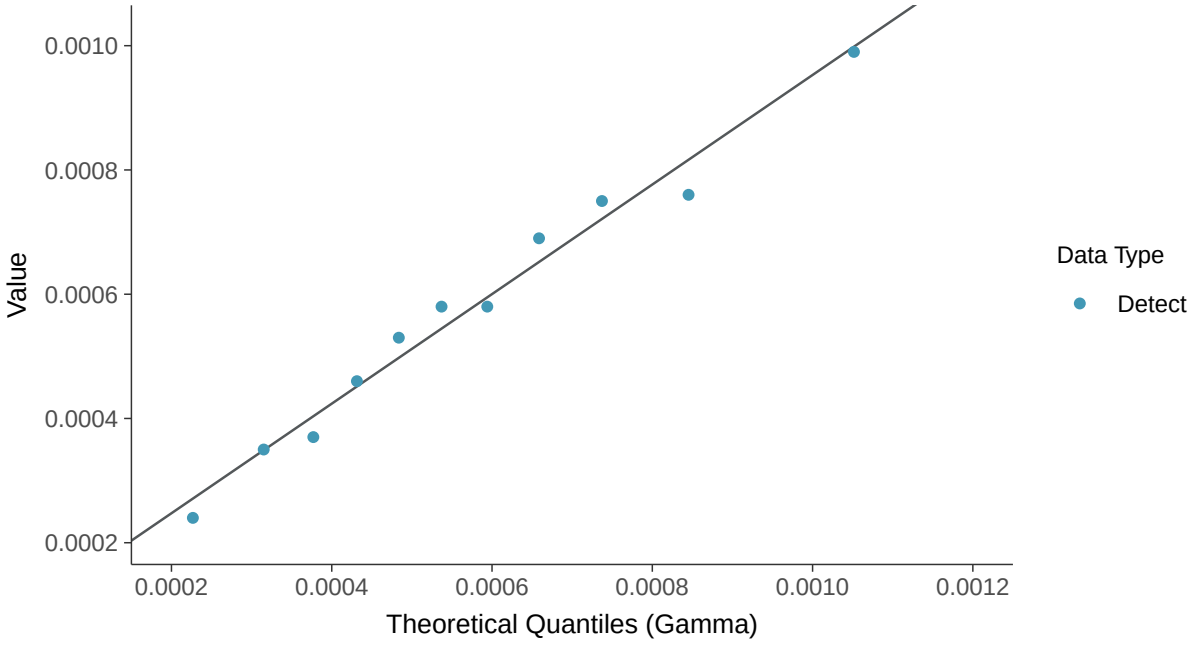
Lognormal Q-Q plot

Cobalt, MW-09 (mg/L)



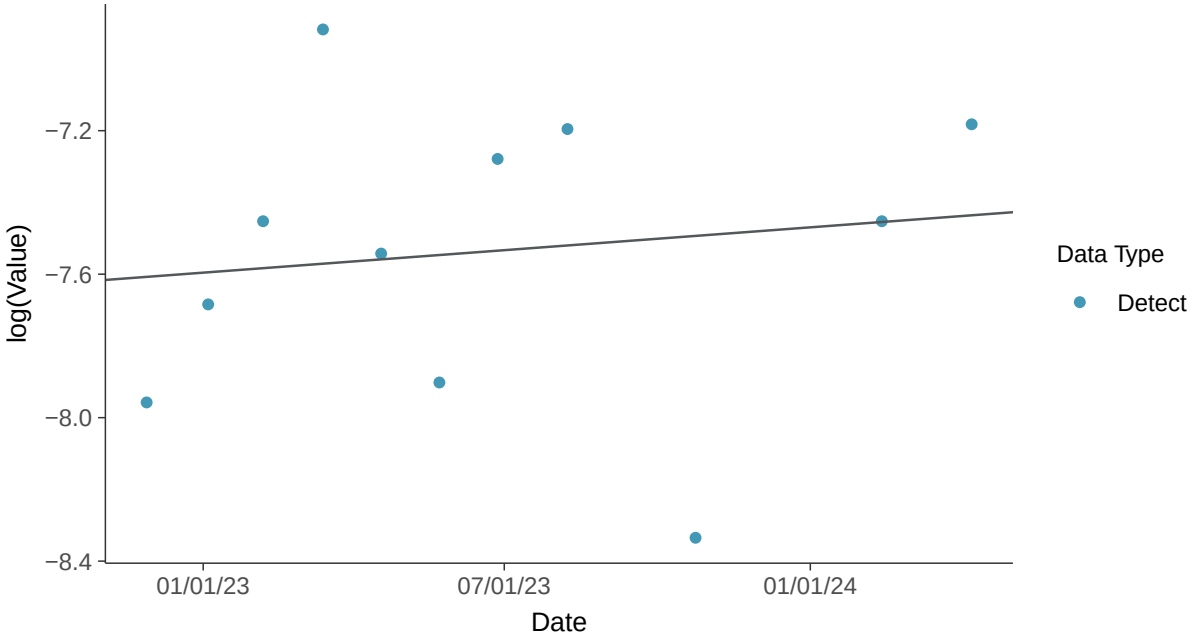
Gamma Q-Q plot

Cobalt, MW-09 (mg/L)



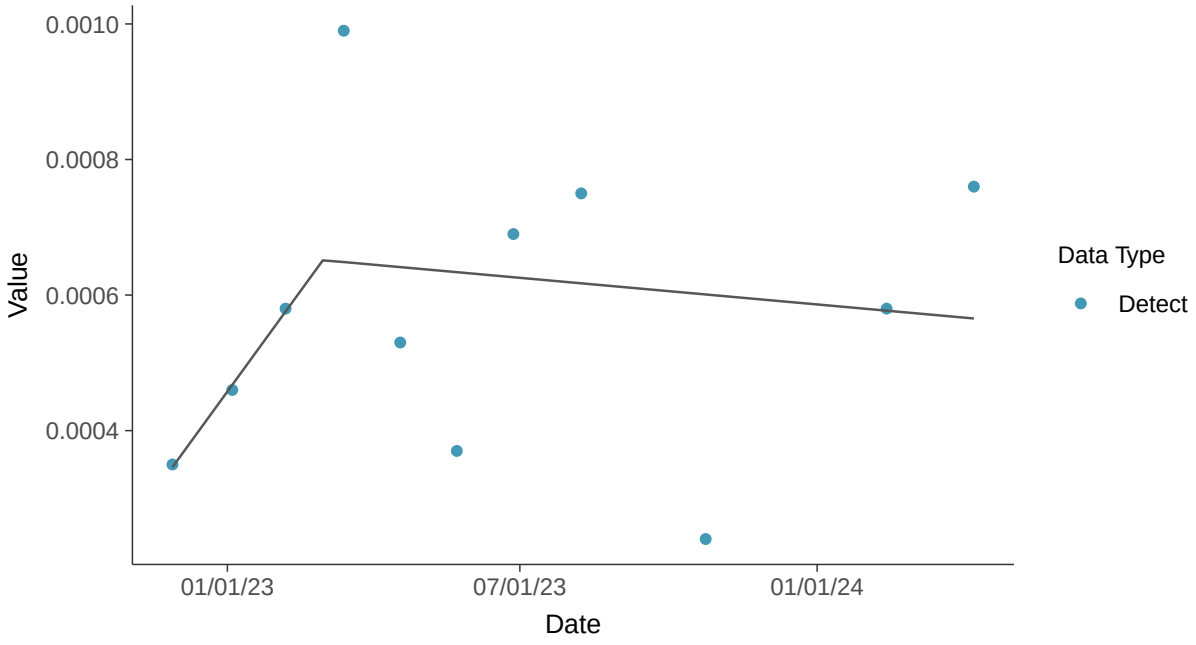
Trend Regression: Lognormal MLE

Cobalt, MW-09 (mg/L)



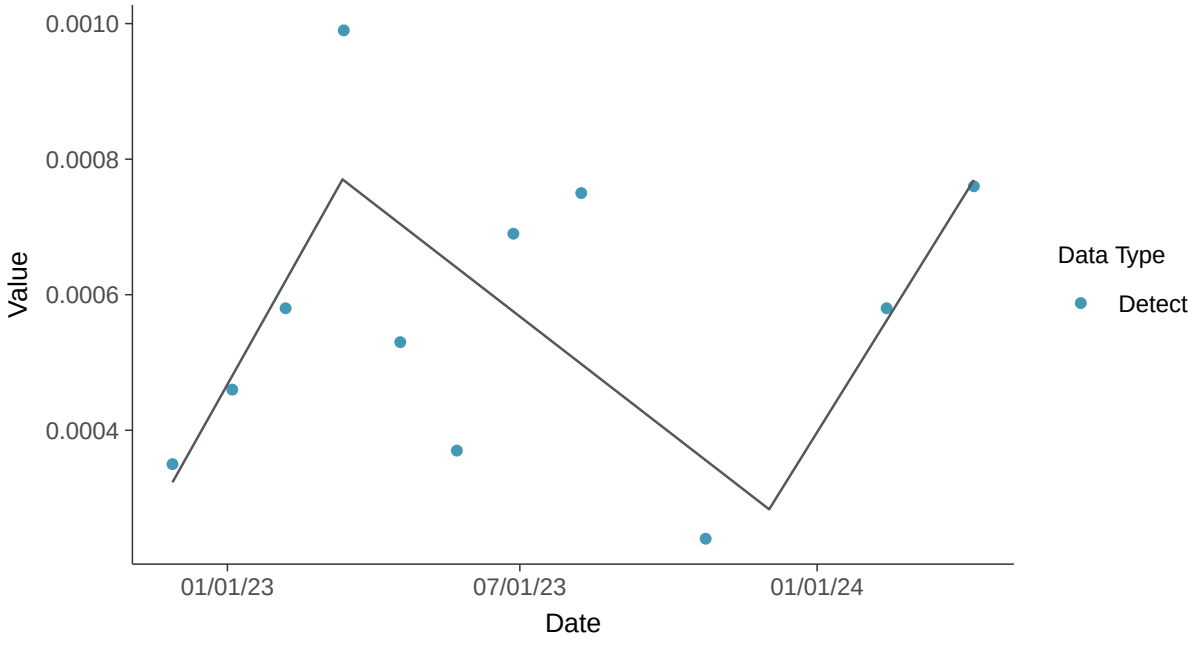
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-09 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cobalt, MW-09 (mg/L)

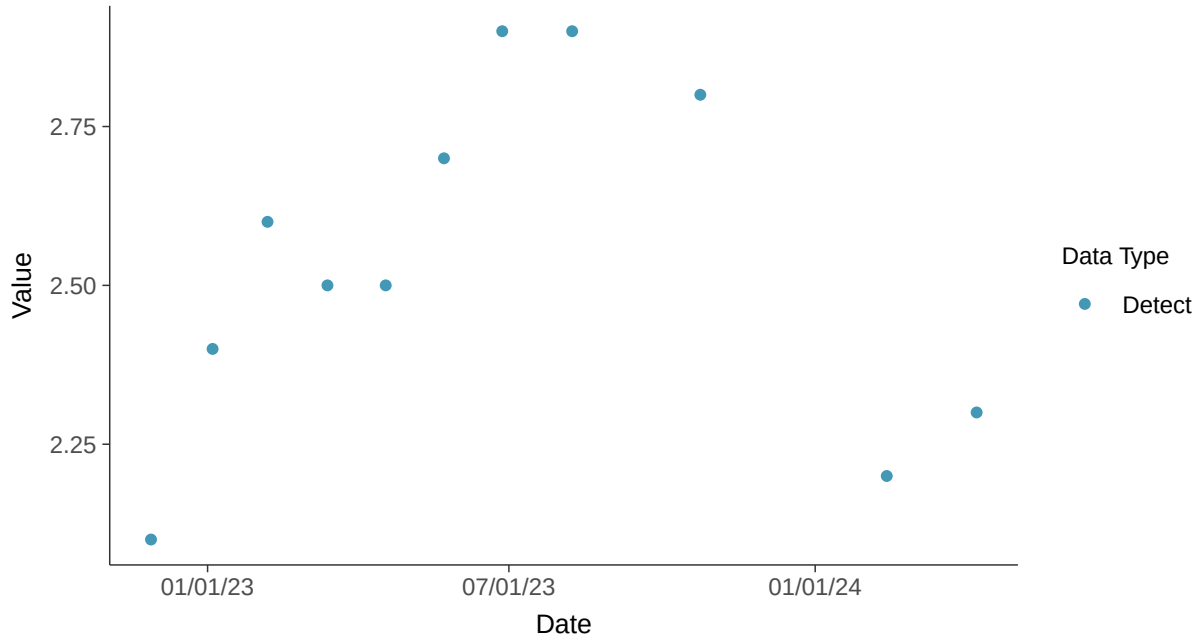


Appendix IV: Fluoride (App IV), MW-09

ID: 2_19_5_113

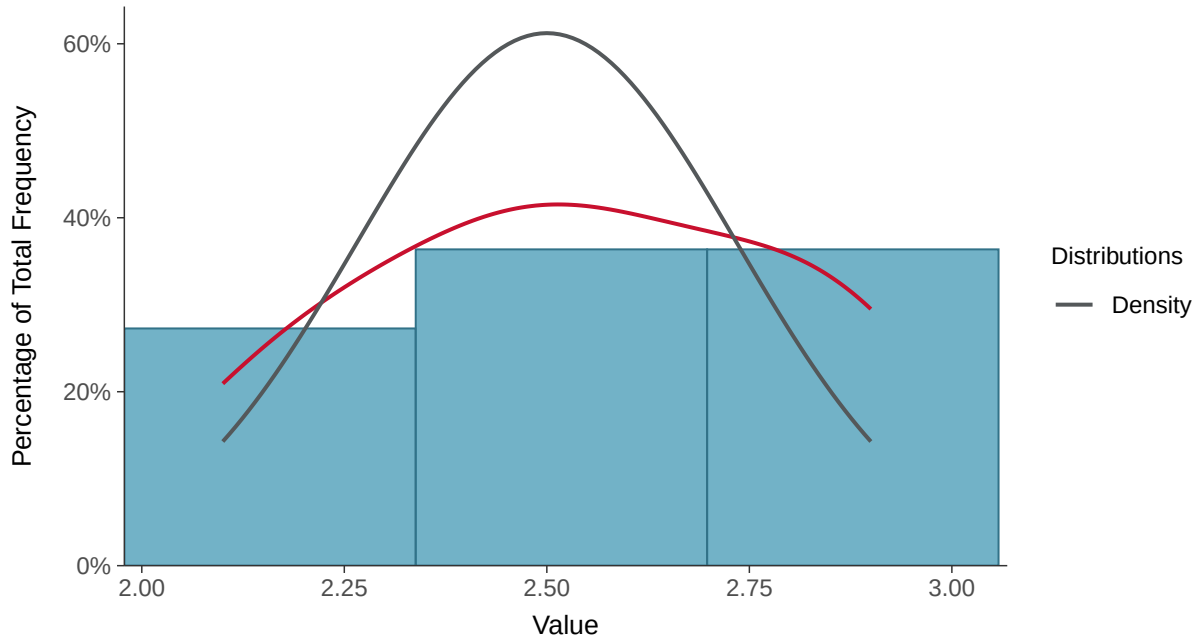
Scatter Plot

Fluoride (App IV), MW-09 (mg/L)



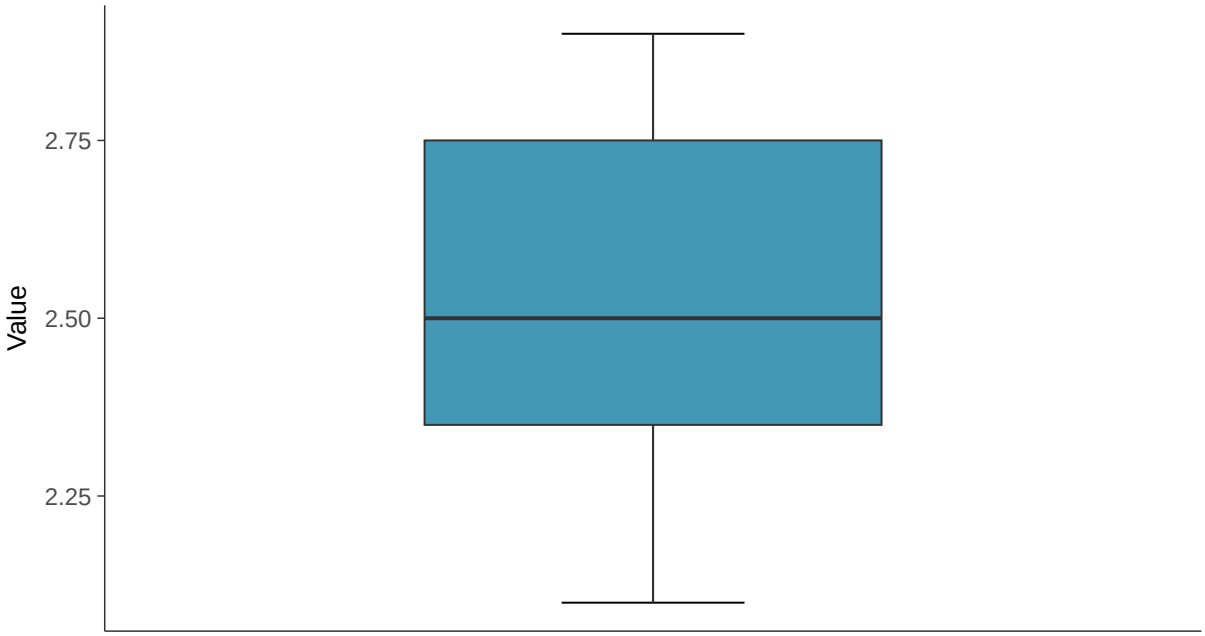
Histogram

Fluoride (App IV), MW-09 (mg/L)



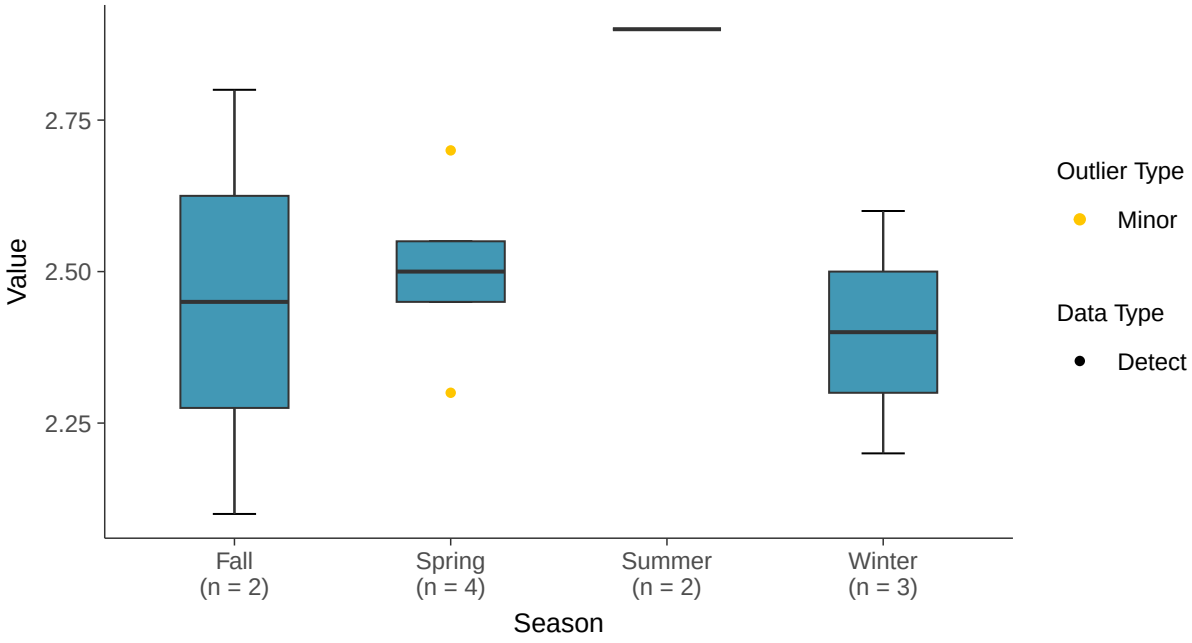
Boxplot

Fluoride (App IV), MW-09 (mg/L)



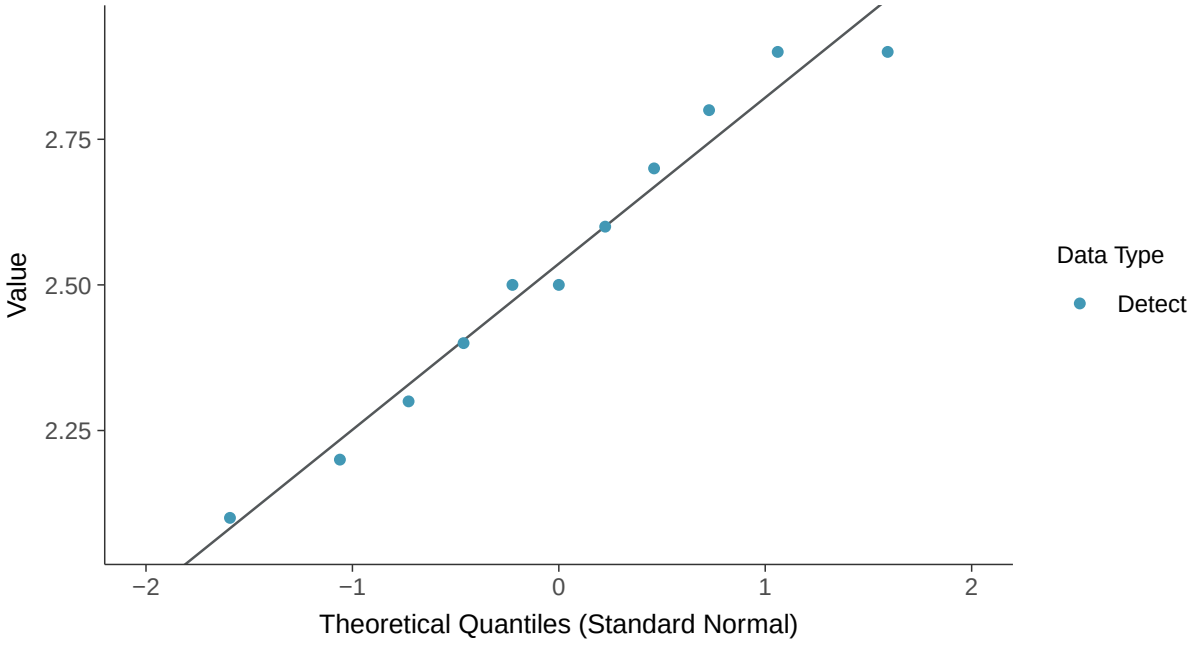
Boxplot by Season

Fluoride (App IV), MW-09 (mg/L)



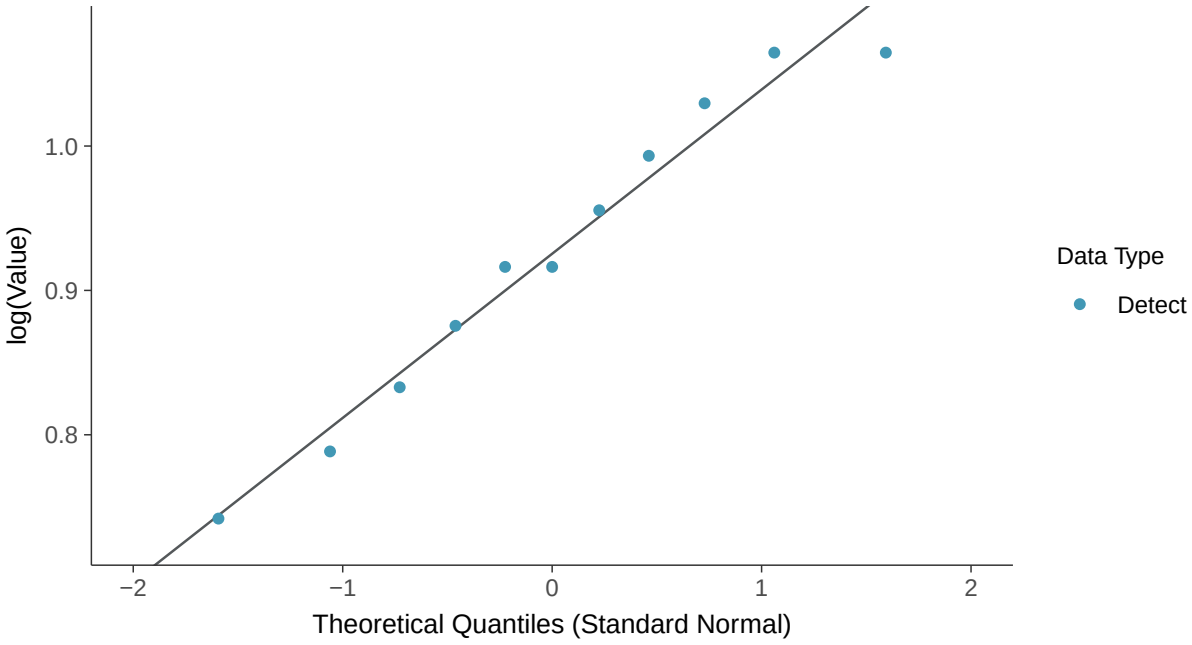
Normal Q-Q plot

Fluoride (App IV), MW-09 (mg/L)



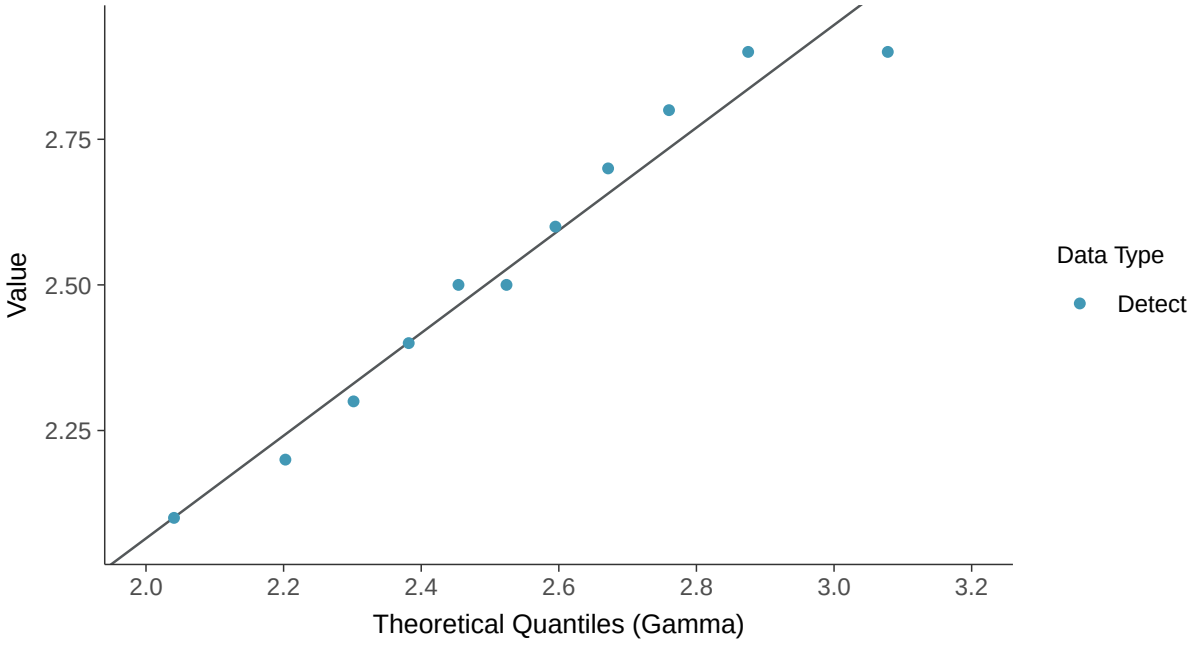
Lognormal Q-Q plot

Fluoride (App IV), MW-09 (mg/L)



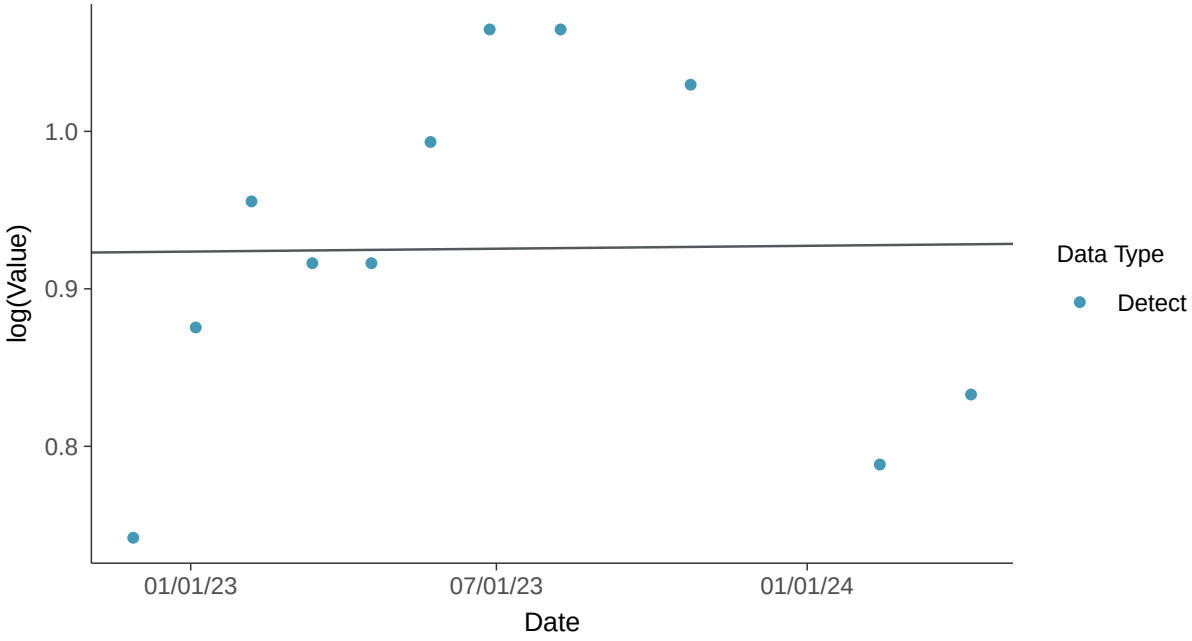
Gamma Q-Q plot

Fluoride (App IV), MW-09 (mg/L)



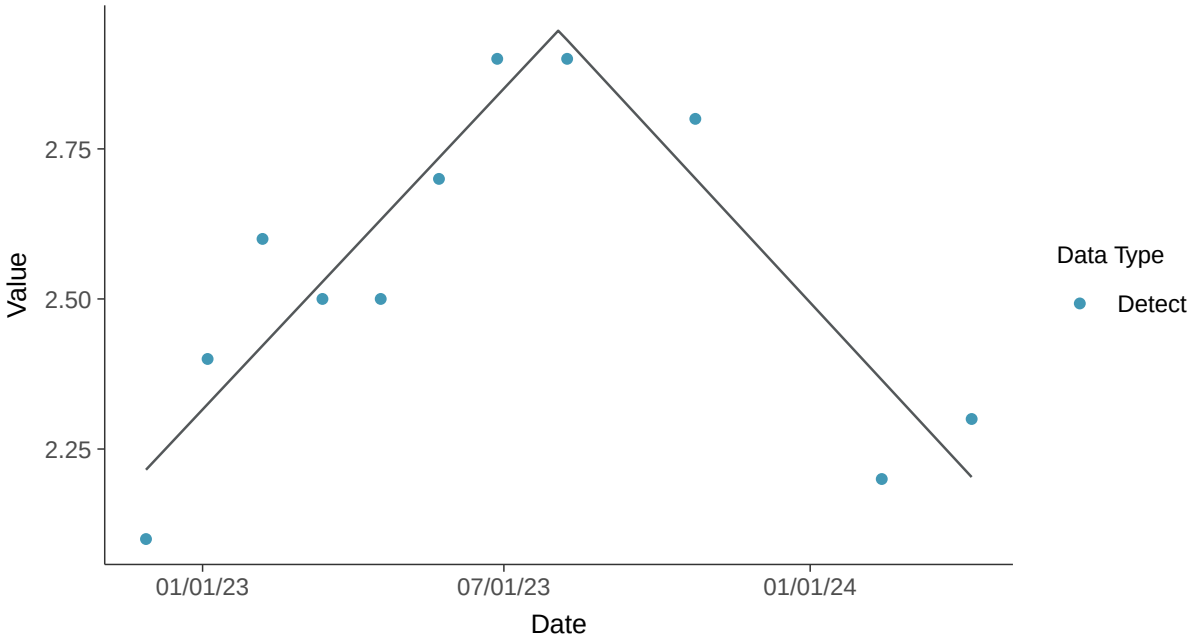
Trend Regression: Lognormal MLE

Fluoride (App IV), MW-09 (mg/L)



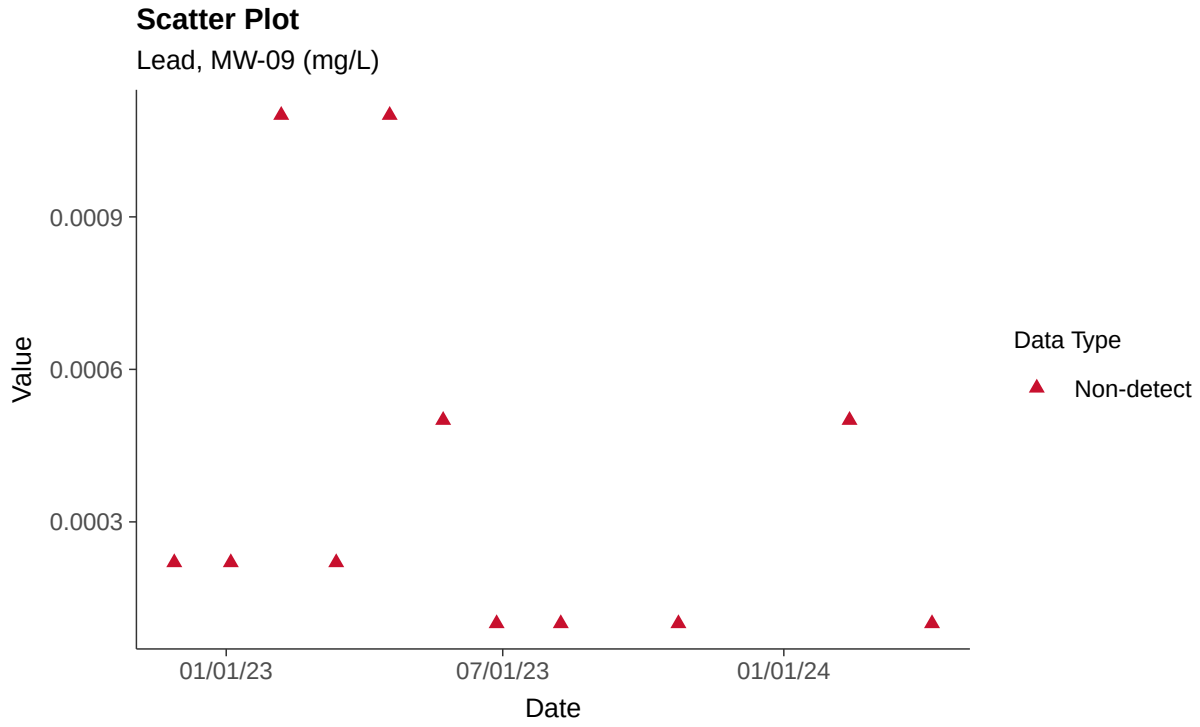
Trend Regression: Piecewise Linear-Linear

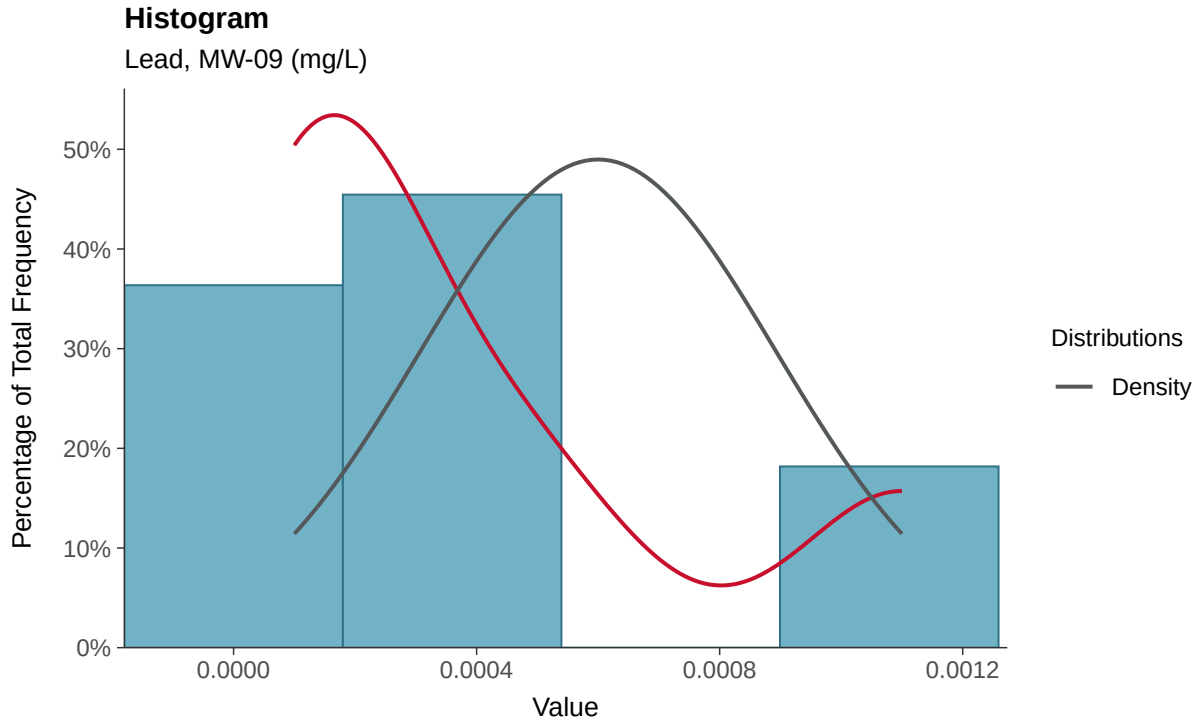
Fluoride (App IV), MW-09 (mg/L)



Appendix IV: Lead, MW-09

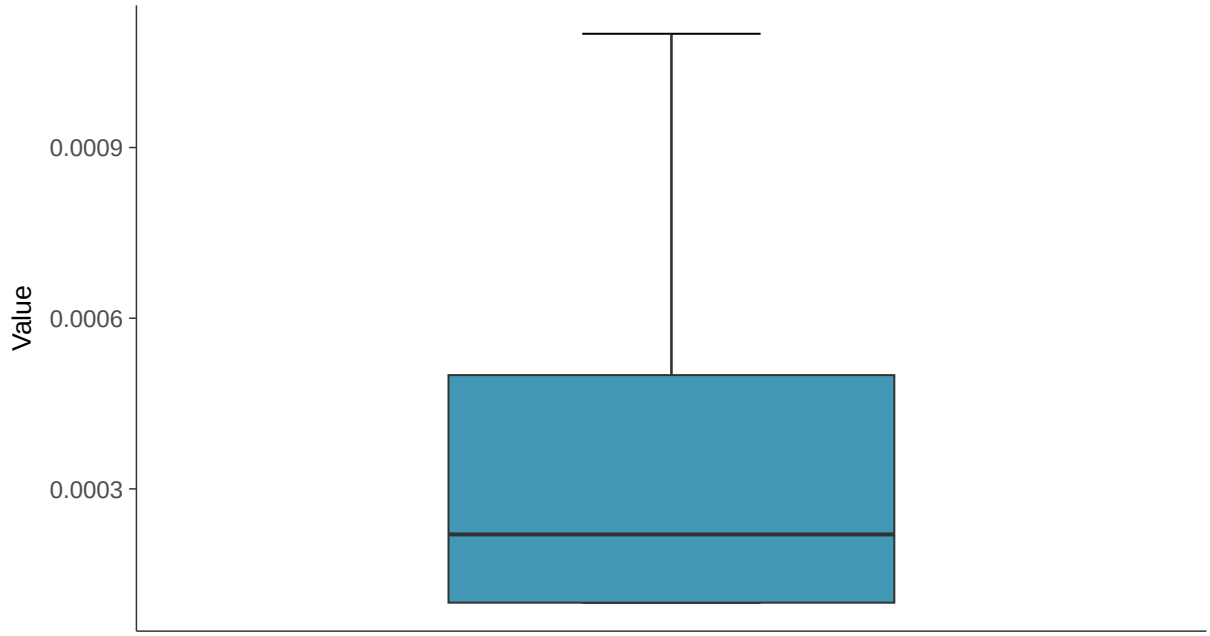
ID: 2_19_5_115





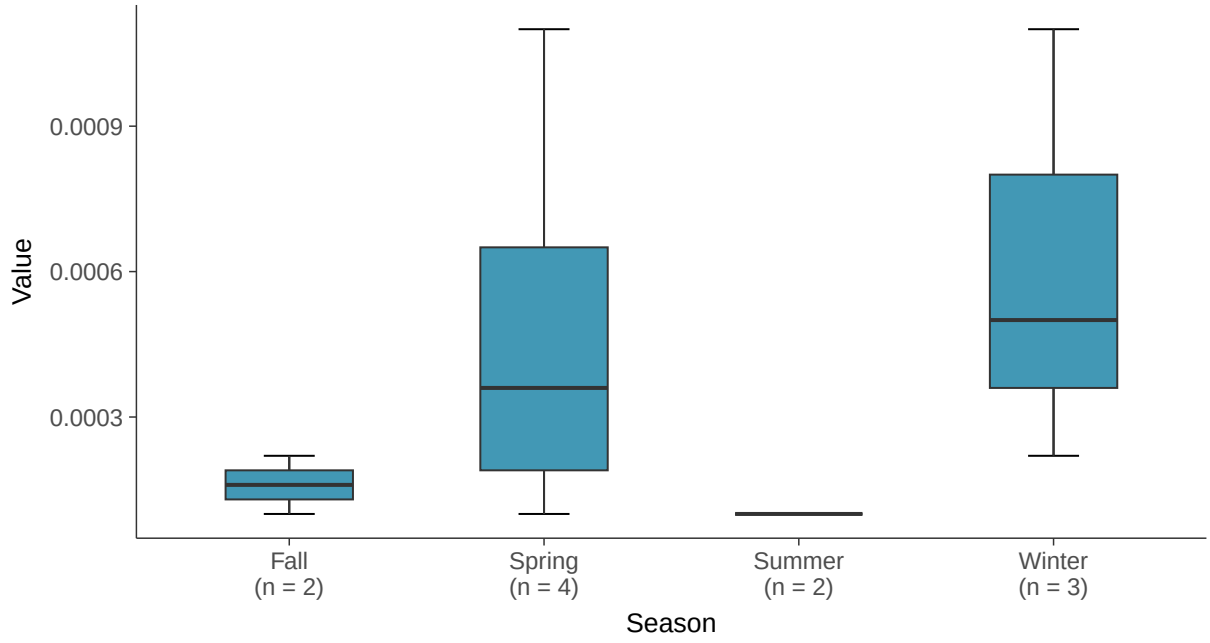
Boxplot

Lead, MW-09 (mg/L)



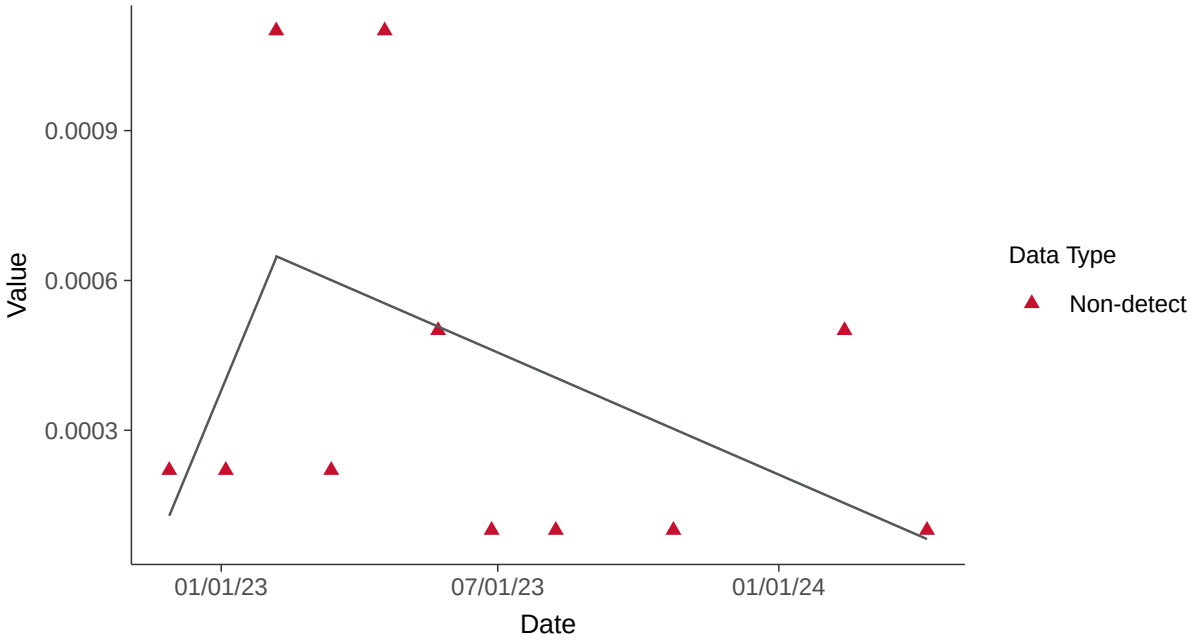
Boxplot by Season

Lead, MW-09 (mg/L)



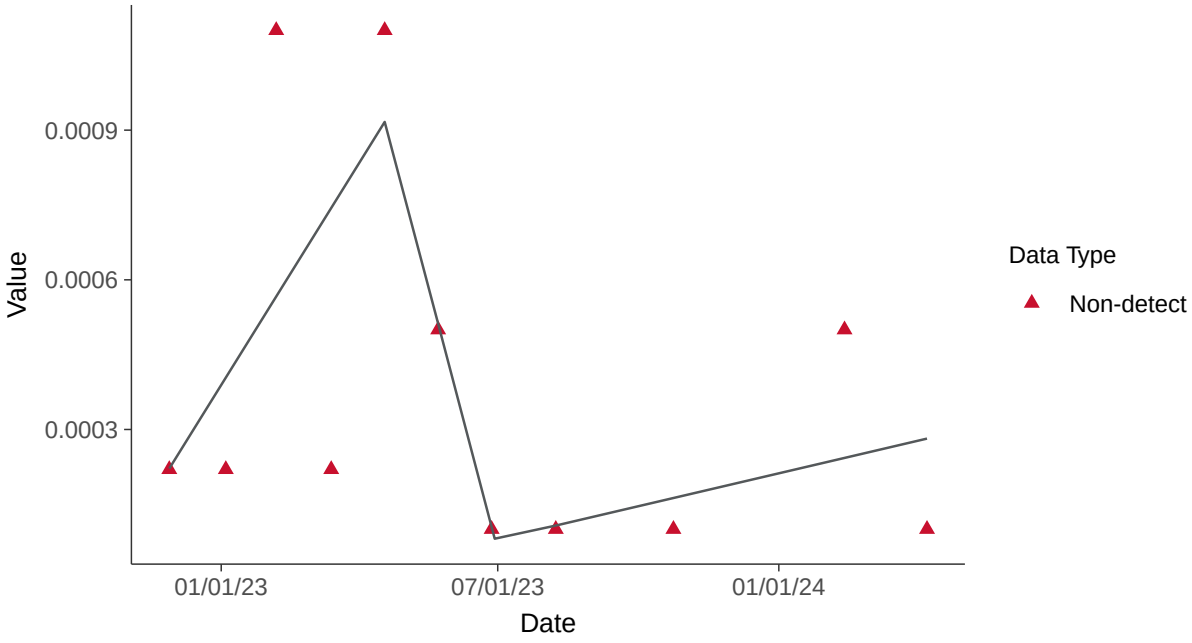
Trend Regression: Piecewise Linear-Linear

Lead, MW-09 (mg/L)



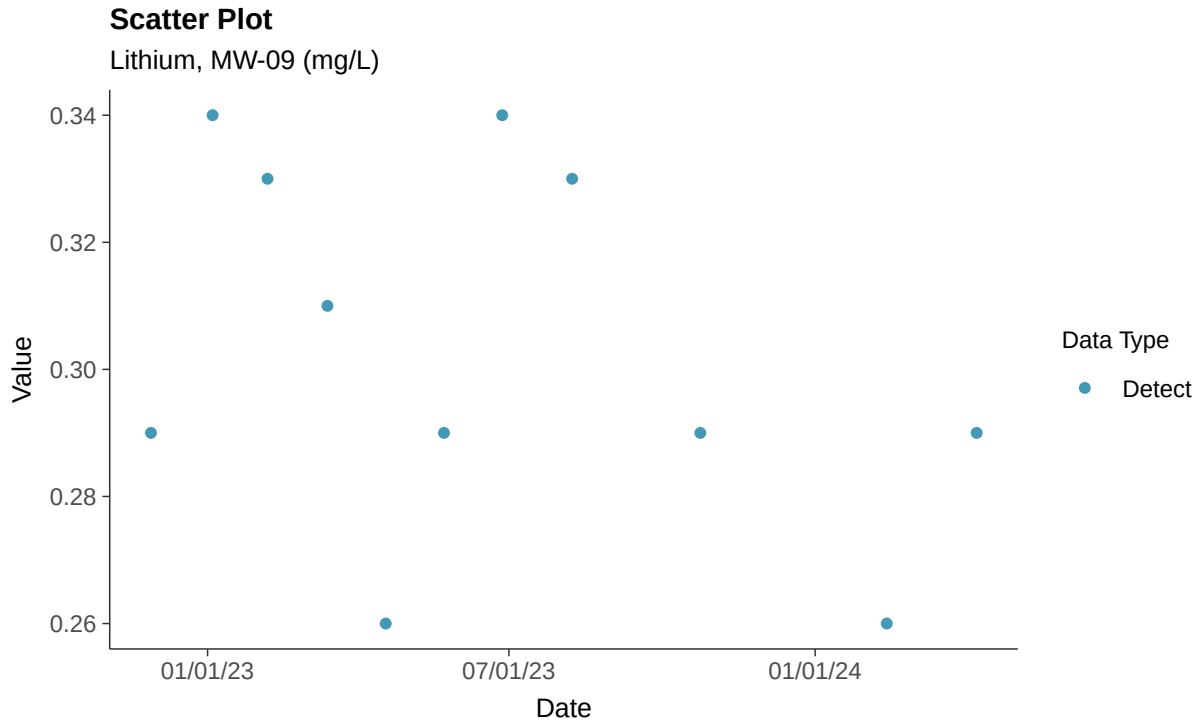
Trend Regression: Piecewise Linear-Linear-Linear

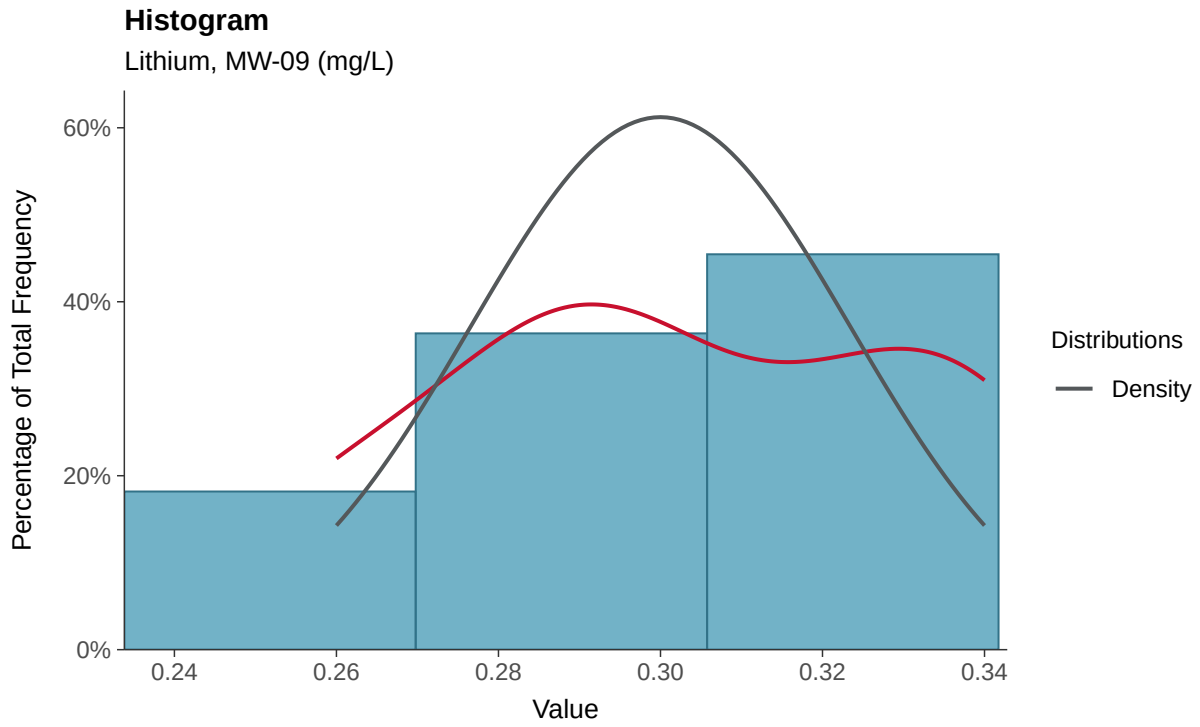
Lead, MW-09 (mg/L)



Appendix IV: Lithium, MW-09

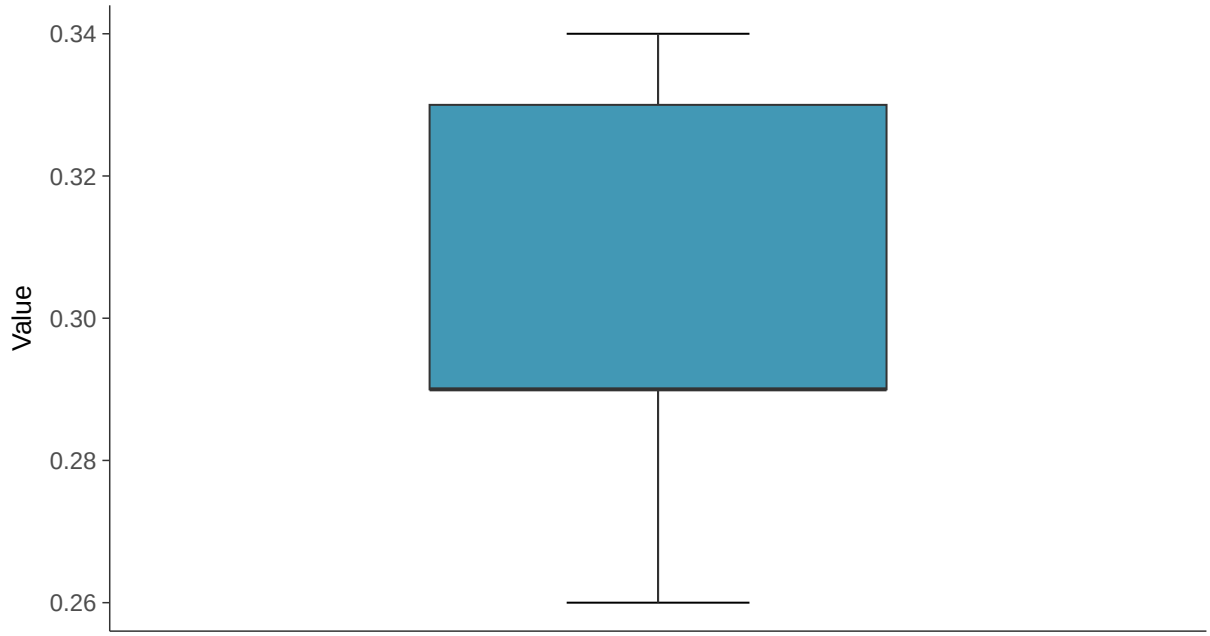
ID: 2_19_5_116





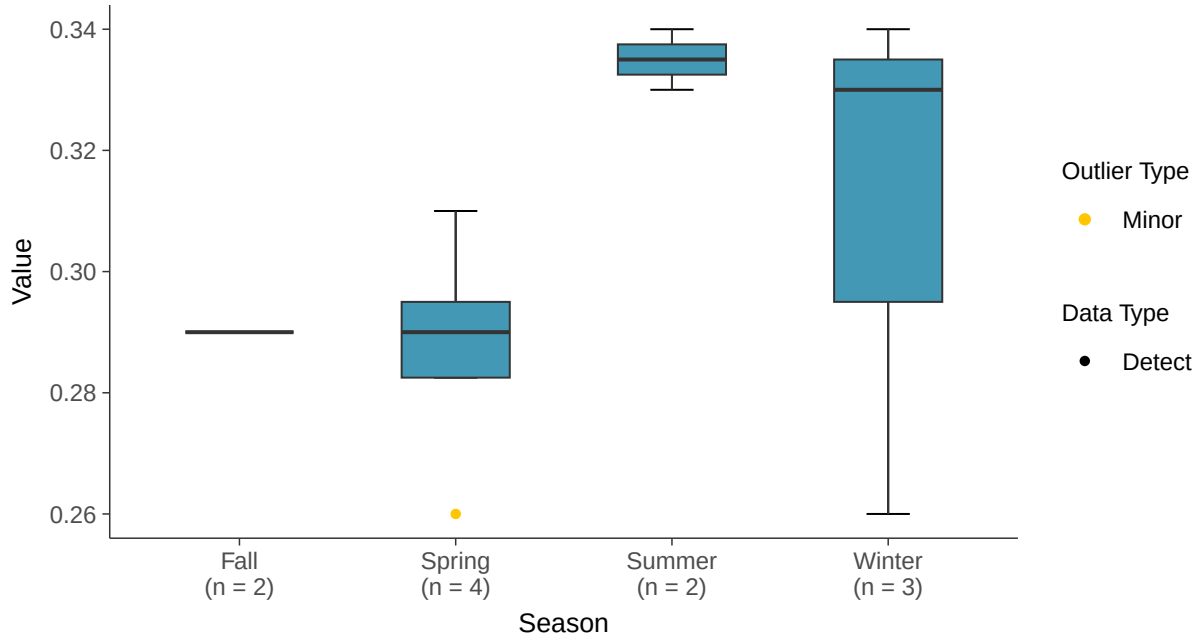
Boxplot

Lithium, MW-09 (mg/L)



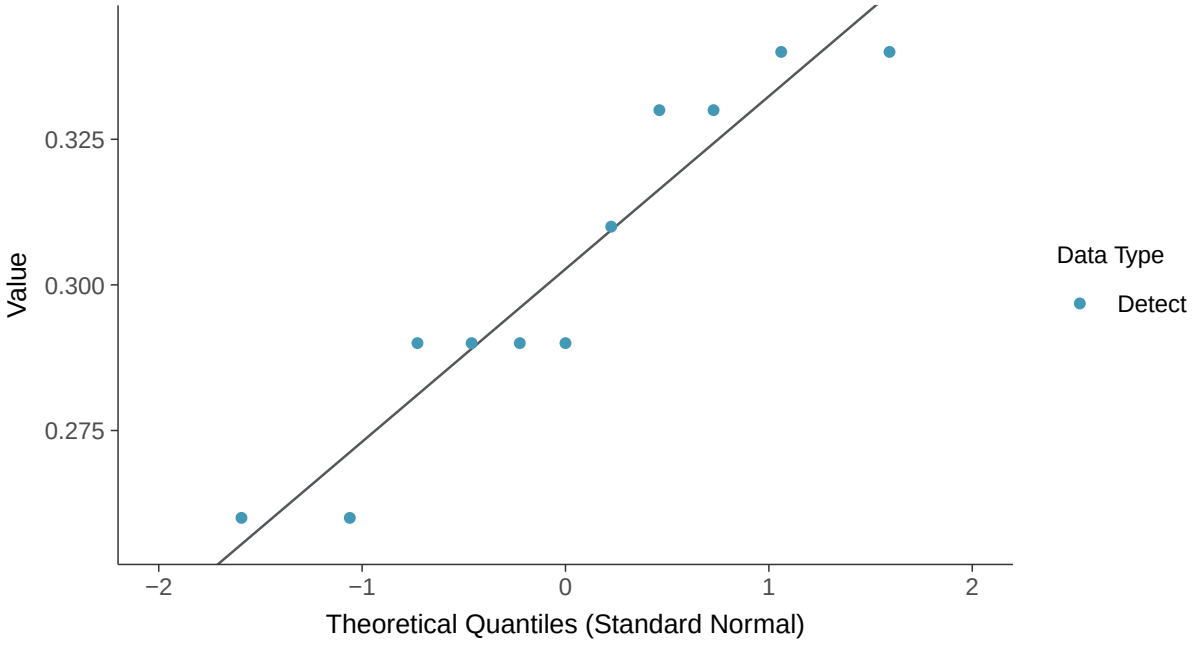
Boxplot by Season

Lithium, MW-09 (mg/L)



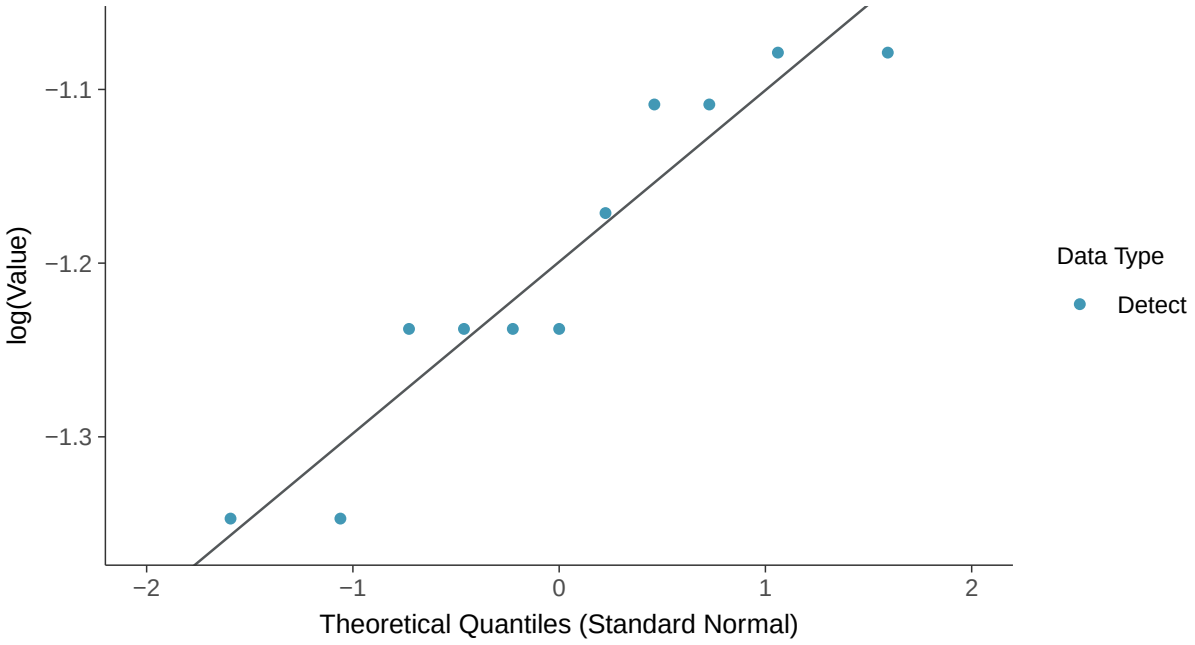
Normal Q-Q plot

Lithium, MW-09 (mg/L)



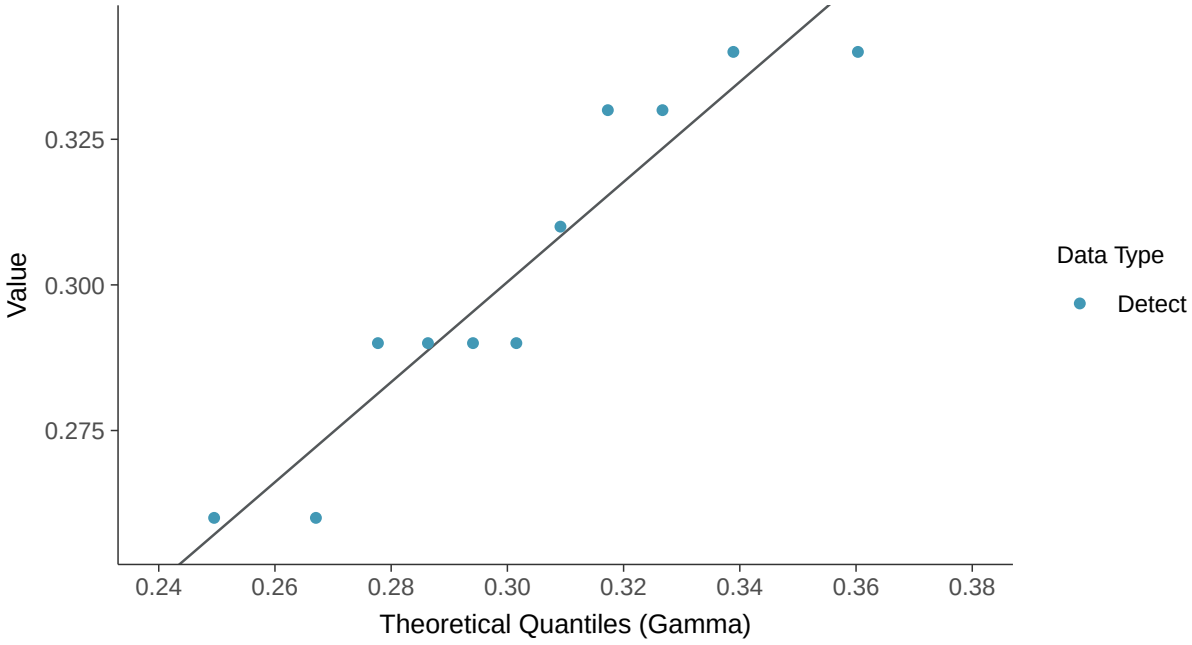
Lognormal Q-Q plot

Lithium, MW-09 (mg/L)



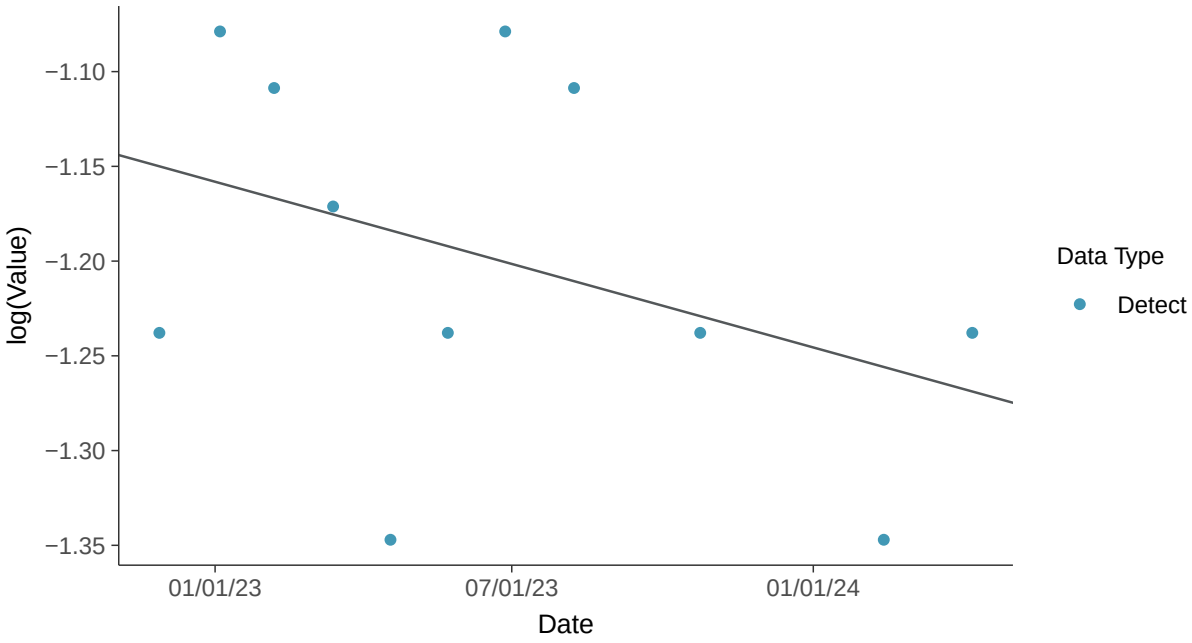
Gamma Q-Q plot

Lithium, MW-09 (mg/L)



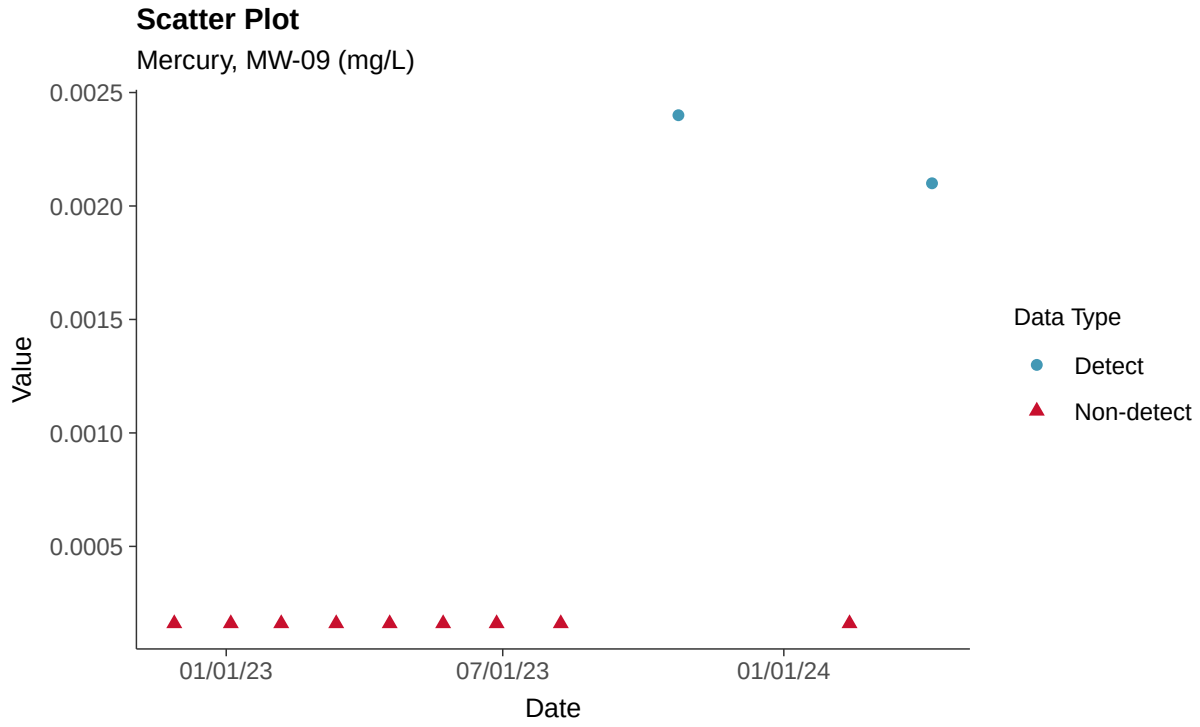
Trend Regression: Lognormal MLE

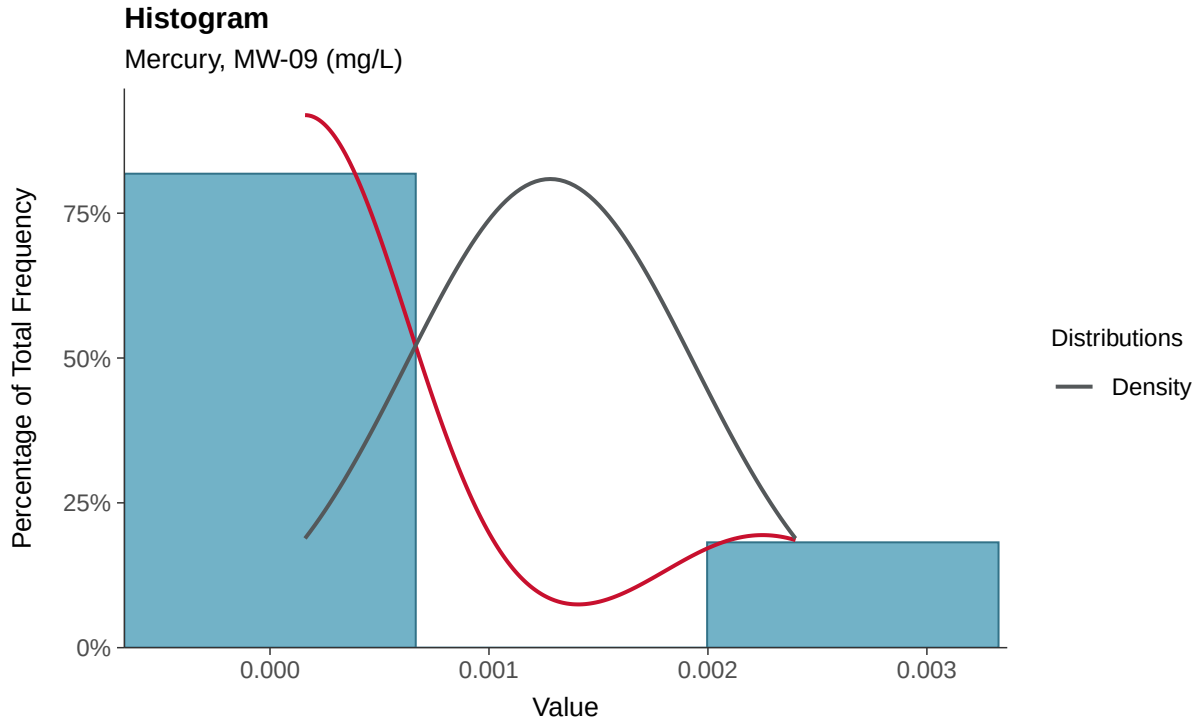
Lithium, MW-09 (mg/L)



Appendix IV: Mercury, MW-09

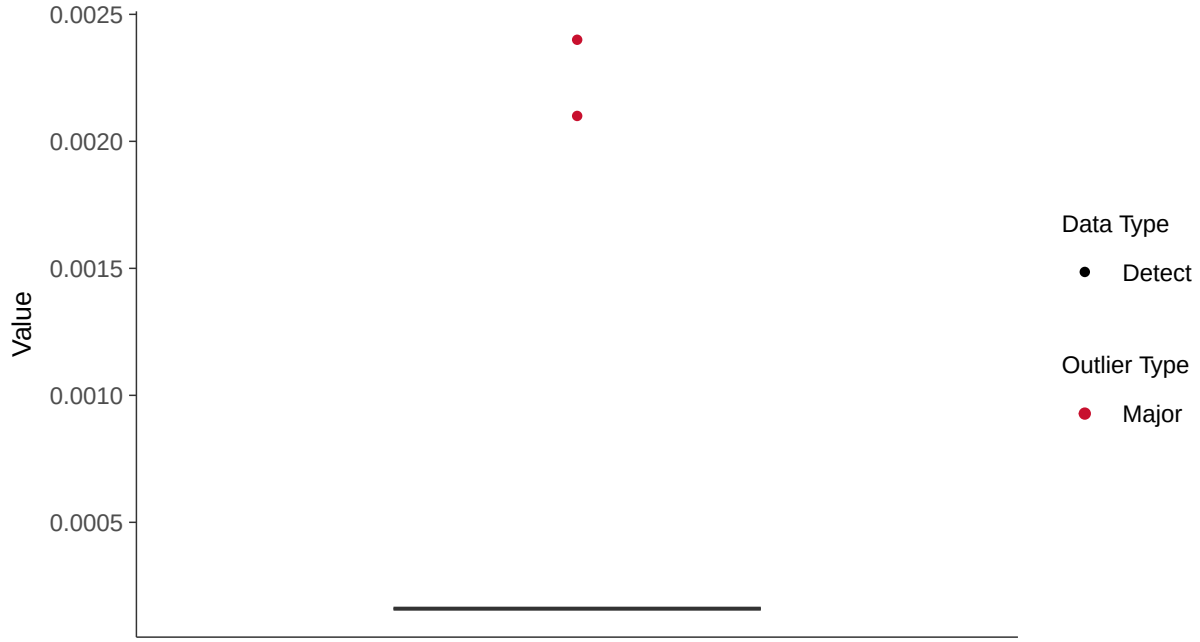
ID: 2_19_5_117





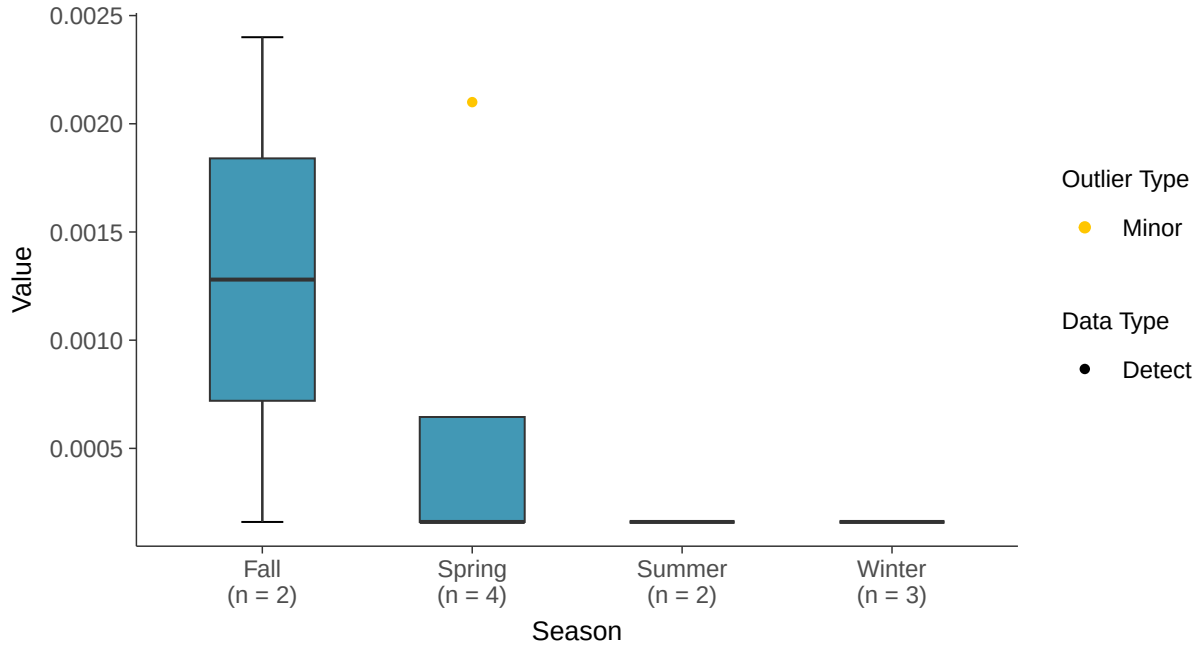
Boxplot

Mercury, MW-09 (mg/L)



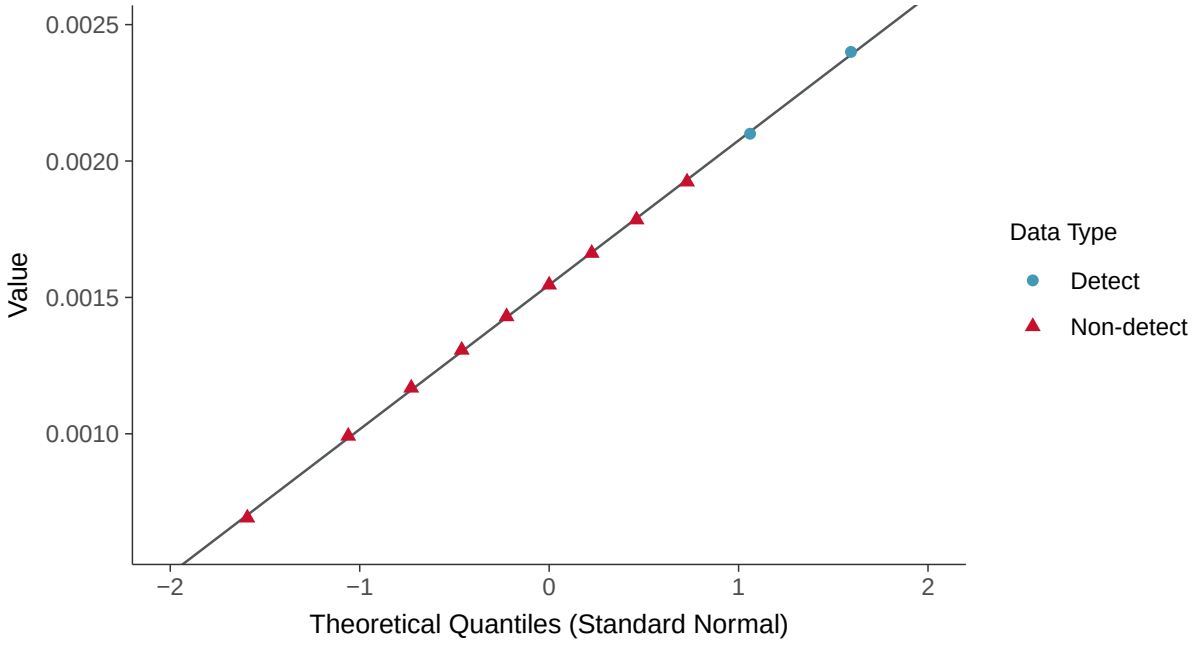
Boxplot by Season

Mercury, MW-09 (mg/L)



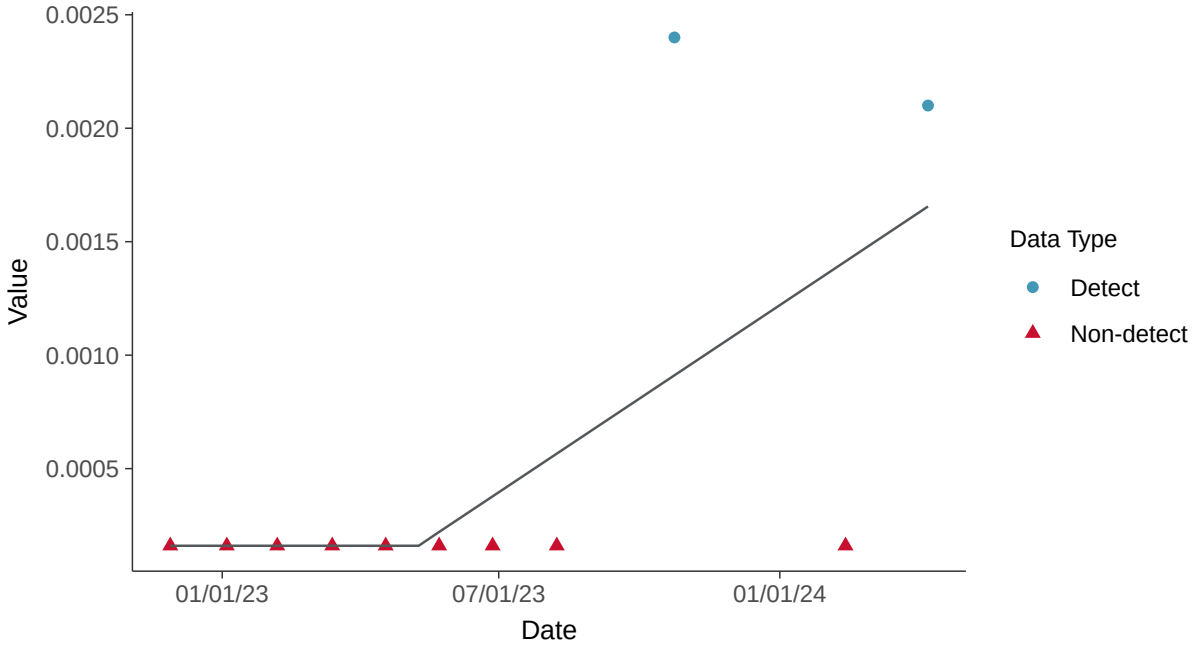
Normal Q-Q plot using ROS Imputed Estimates

Mercury, MW-09 (mg/L)



Trend Regression: Piecewise Linear-Linear

Mercury, MW-09 (mg/L)

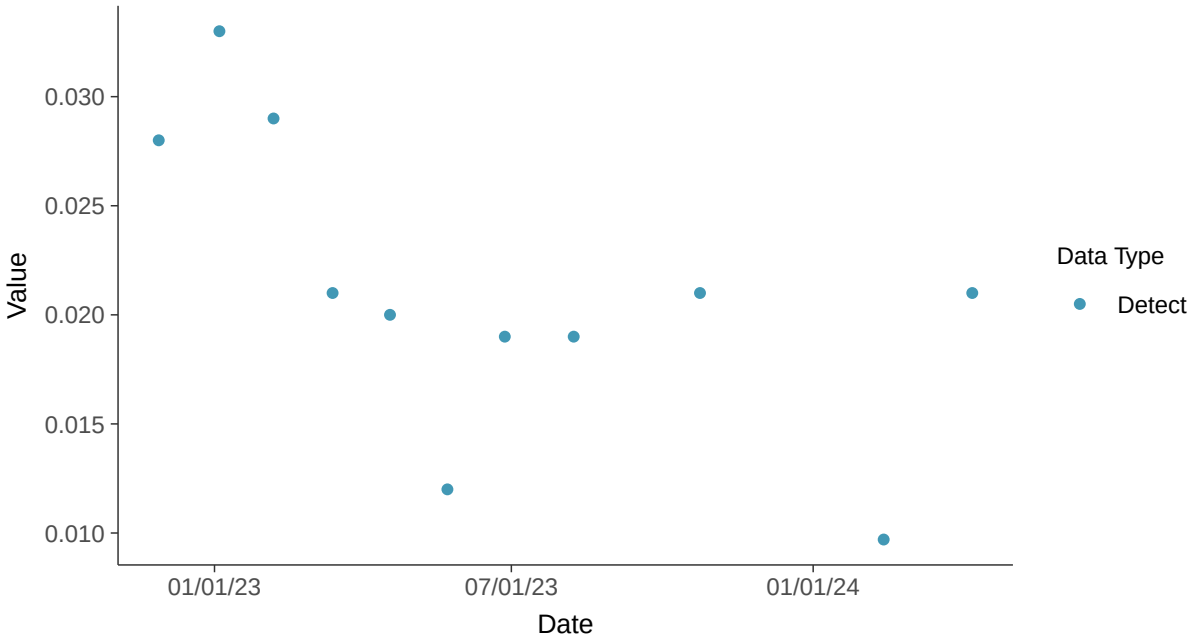


Appendix IV: Molybdenum, MW-09

ID: 2_19_5_118

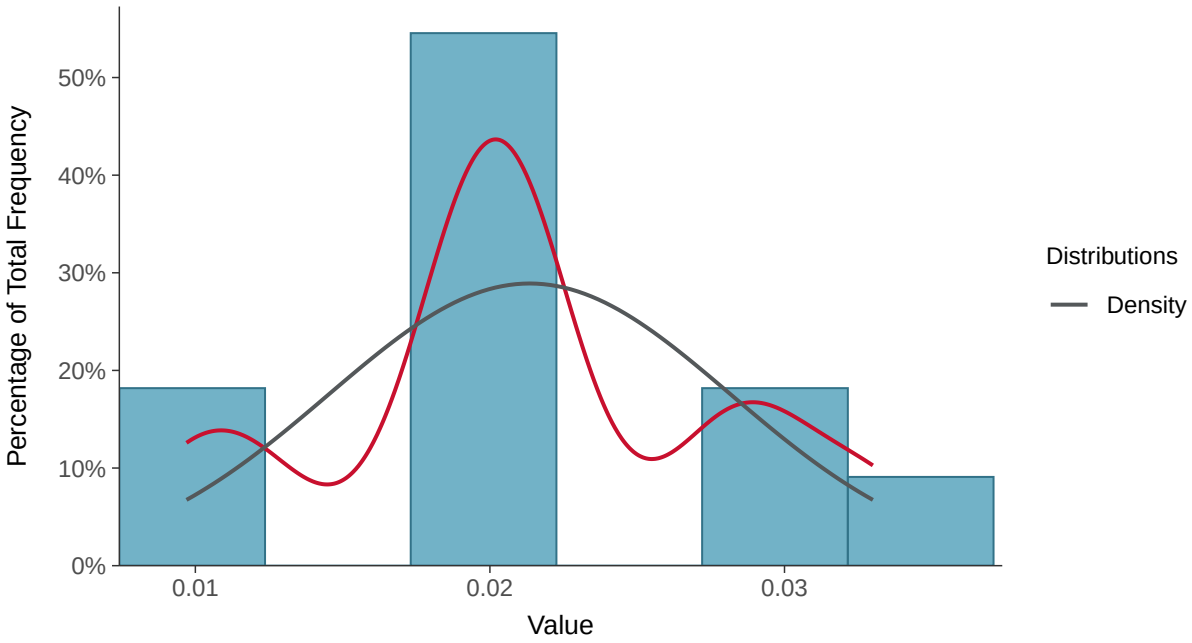
Scatter Plot

Molybdenum, MW-09 (mg/L)



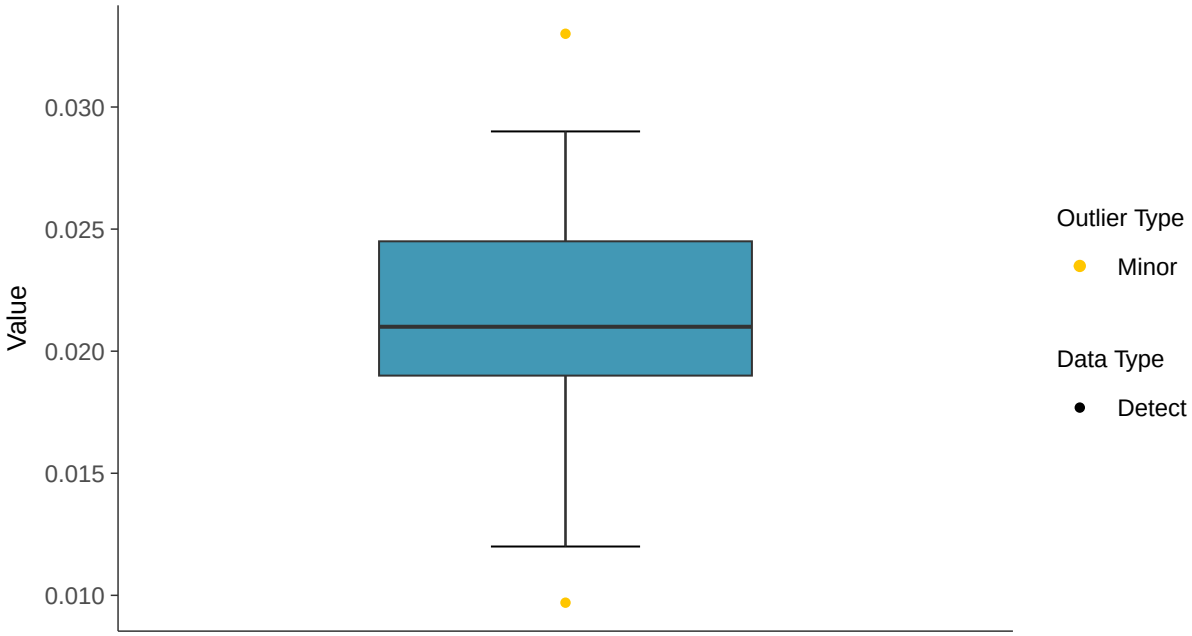
Histogram

Molybdenum, MW-09 (mg/L)



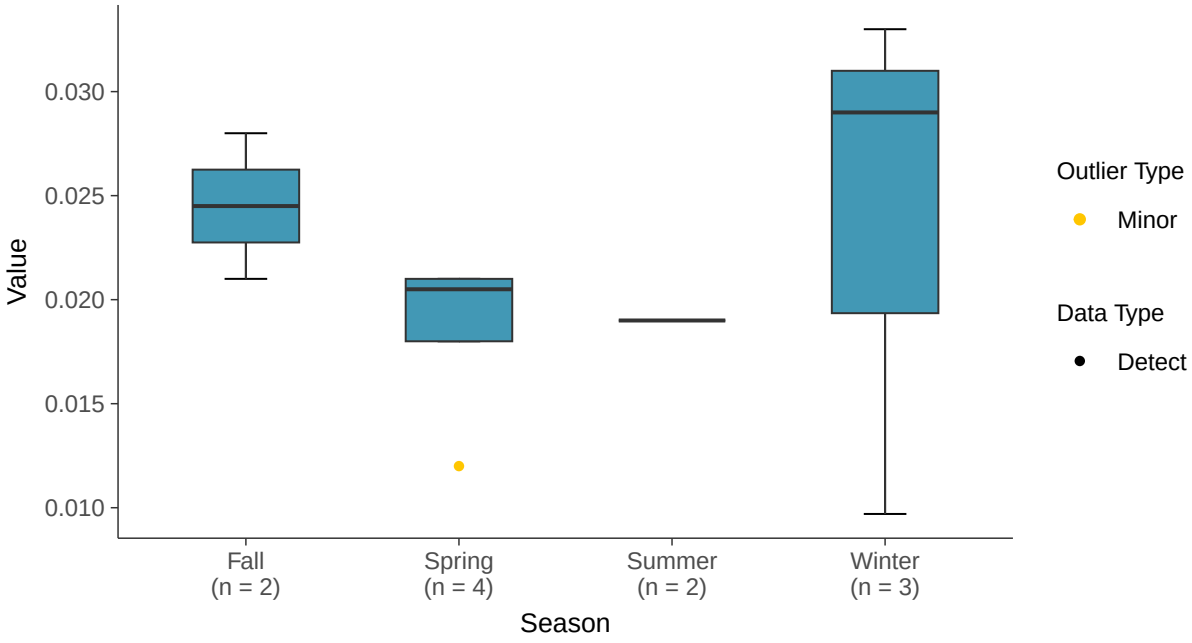
Boxplot

Molybdenum, MW-09 (mg/L)



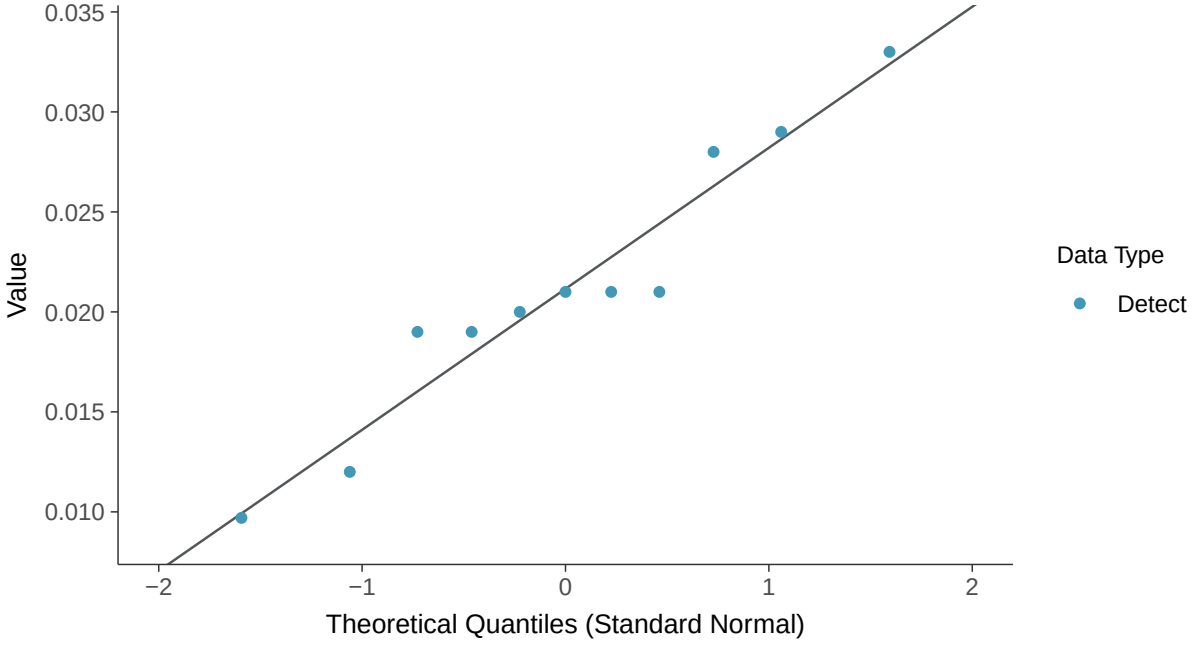
Boxplot by Season

Molybdenum, MW-09 (mg/L)



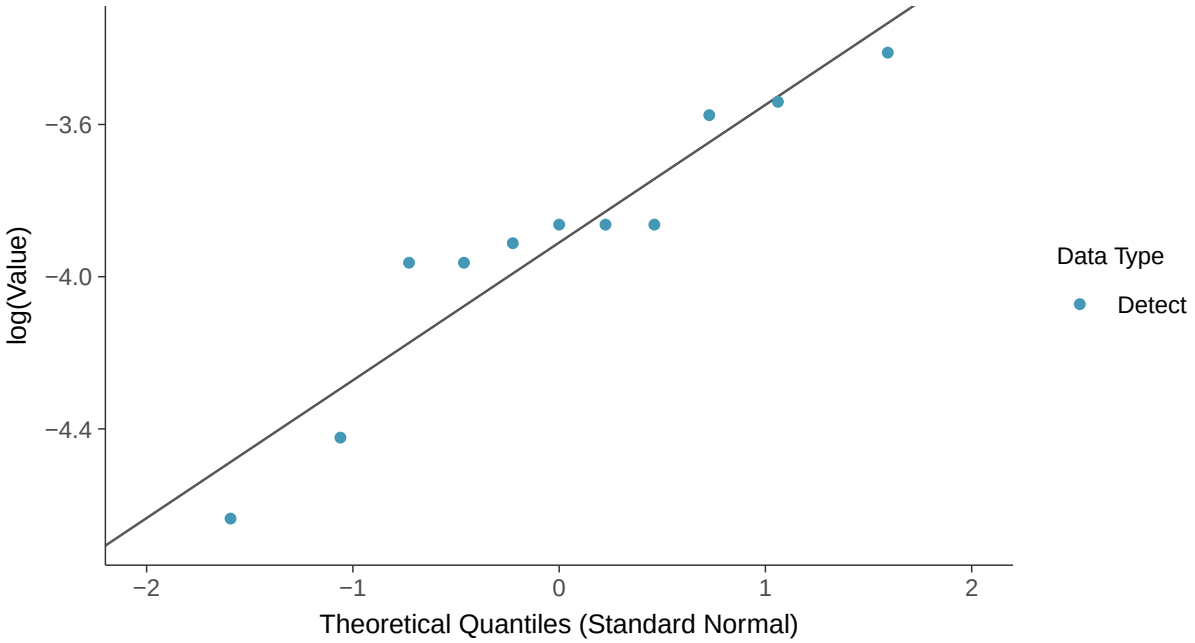
Normal Q-Q plot

Molybdenum, MW-09 (mg/L)



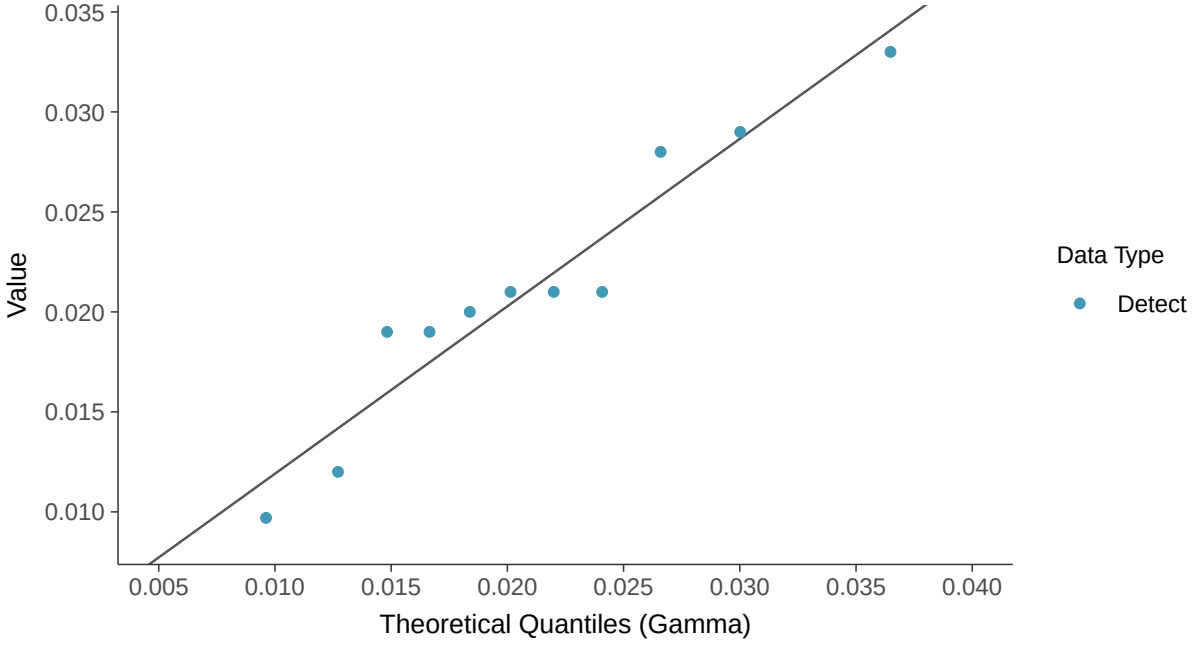
Lognormal Q-Q plot

Molybdenum, MW-09 (mg/L)



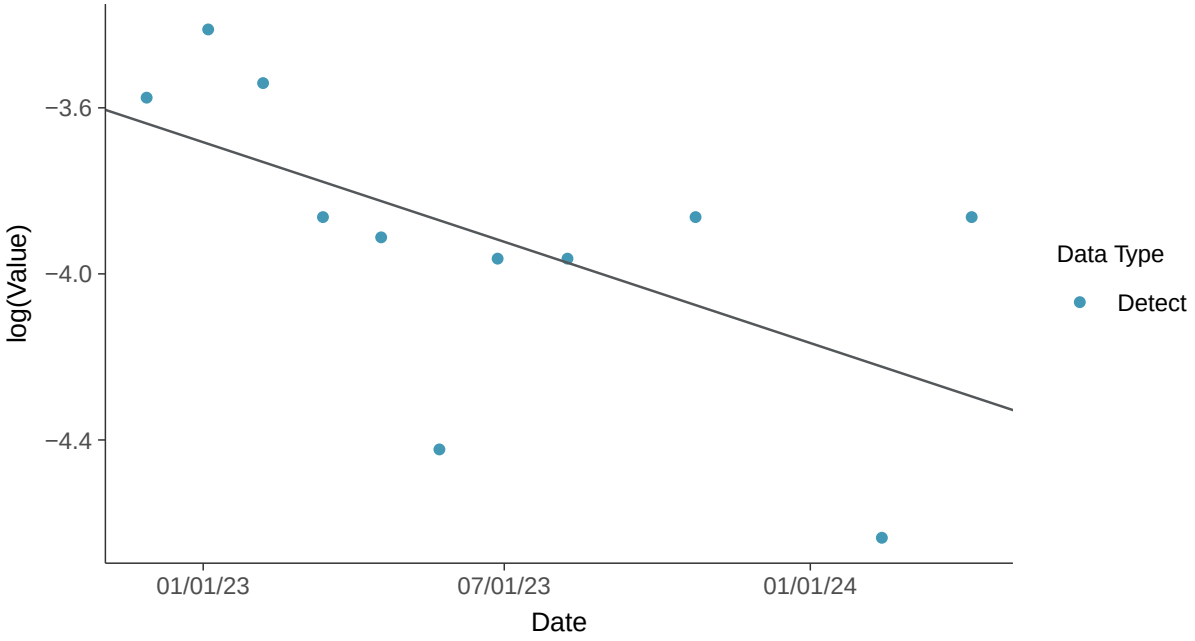
Gamma Q-Q plot

Molybdenum, MW-09 (mg/L)



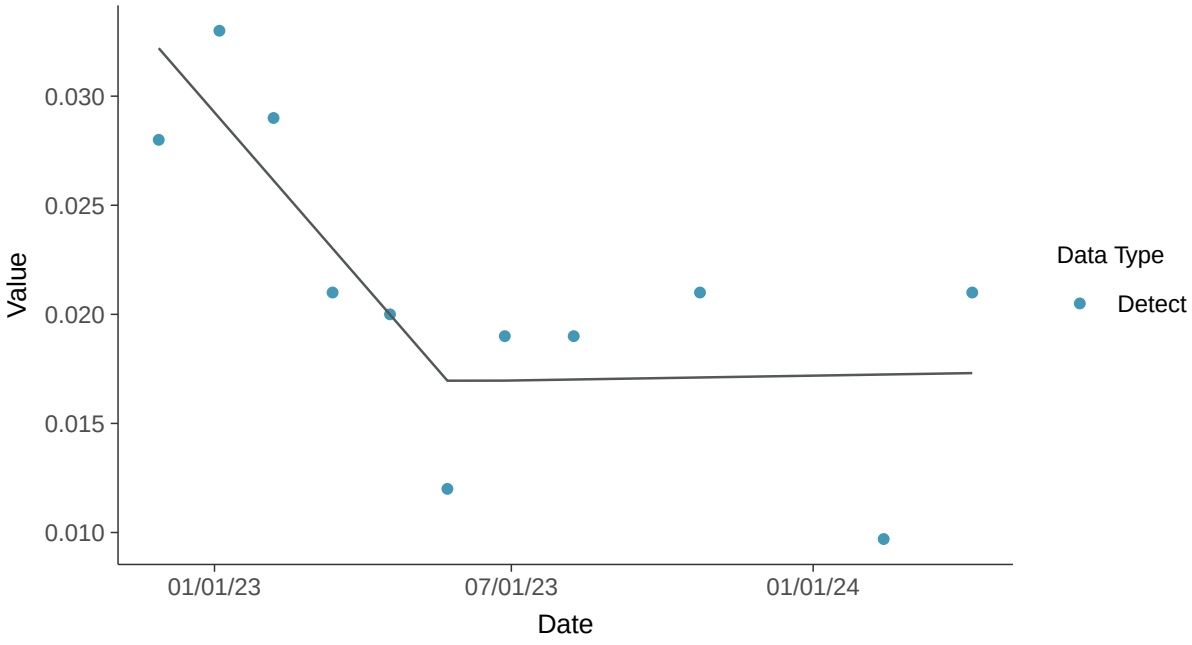
Trend Regression: Lognormal MLE

Molybdenum, MW-09 (mg/L)



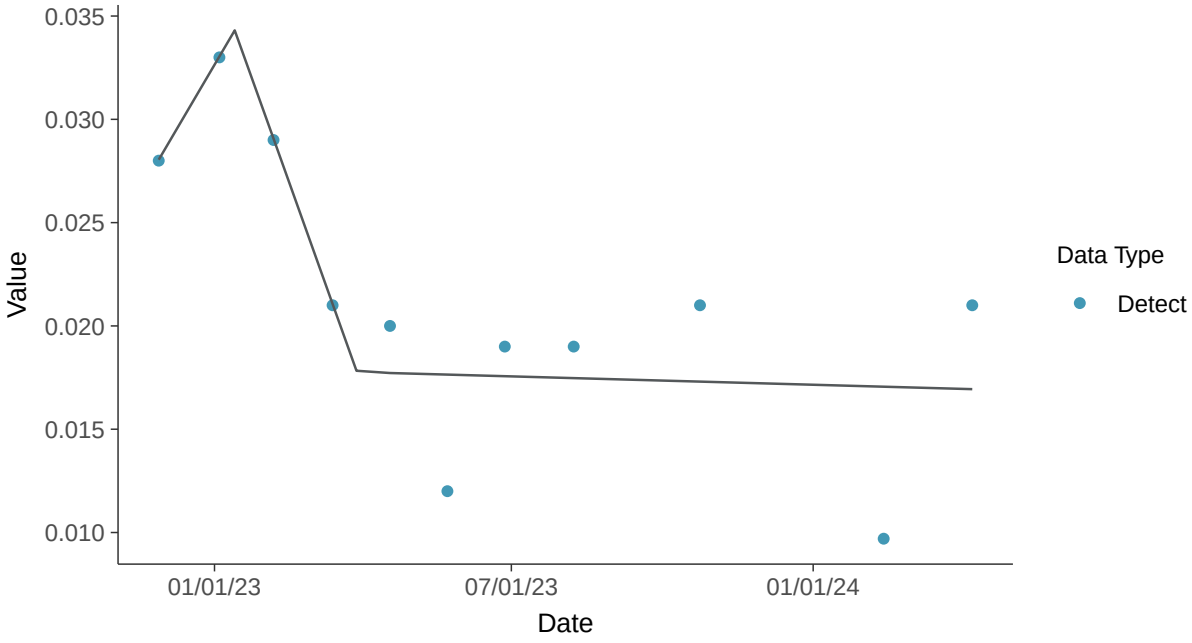
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-09 (mg/L)



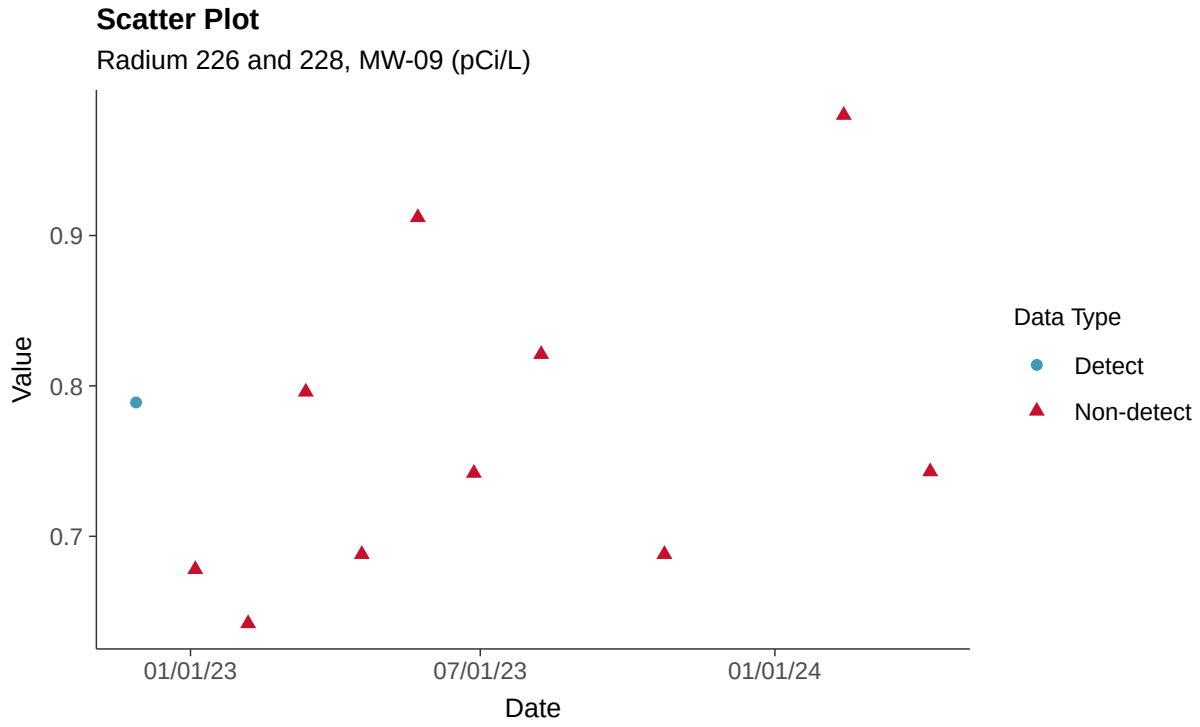
Trend Regression: Piecewise Linear-Linear-Linear

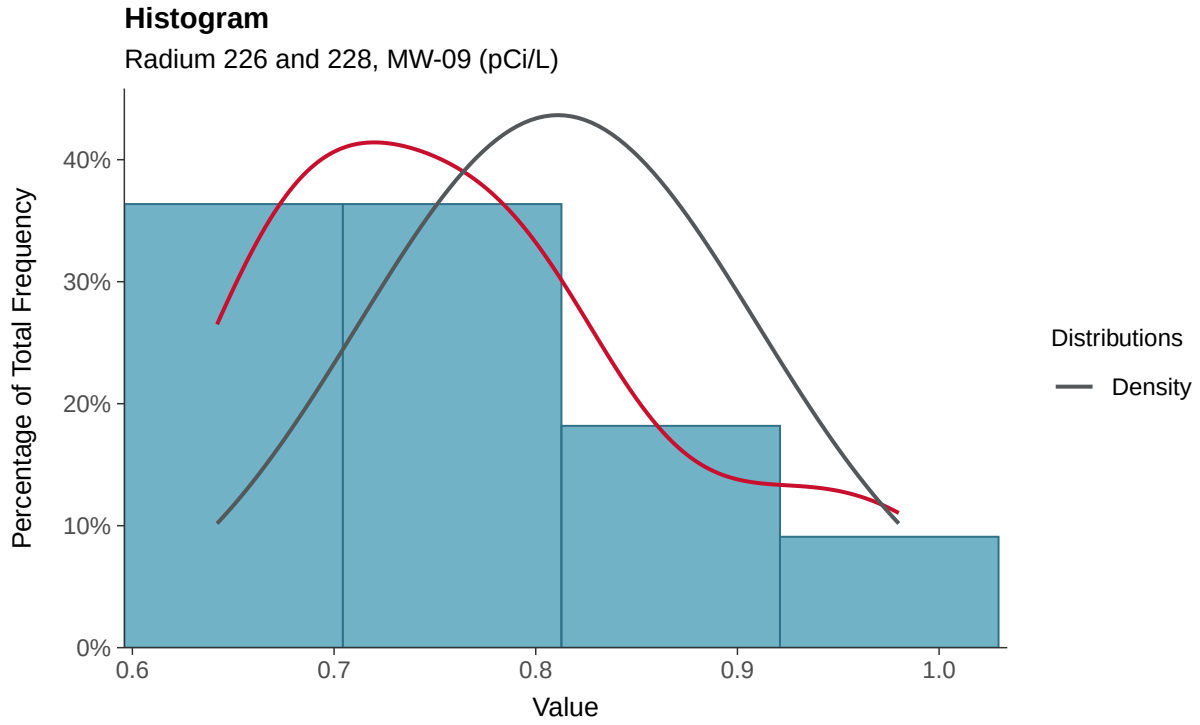
Molybdenum, MW-09 (mg/L)



Appendix IV: Radium 226 and 228, MW-09

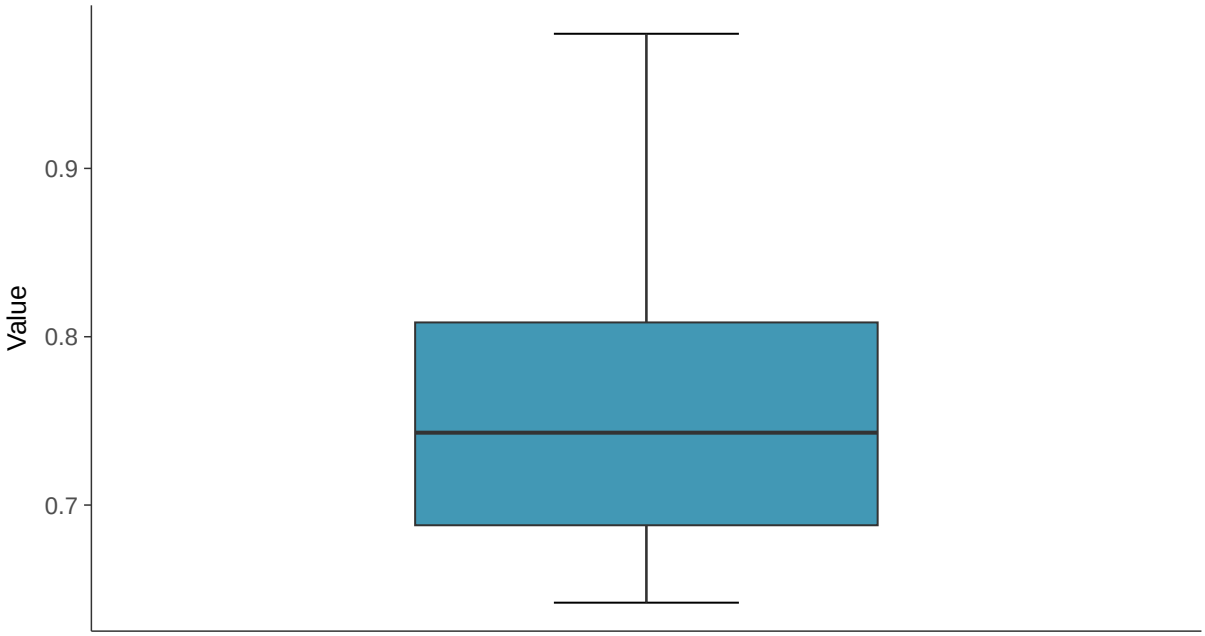
ID: 2_19_5_121





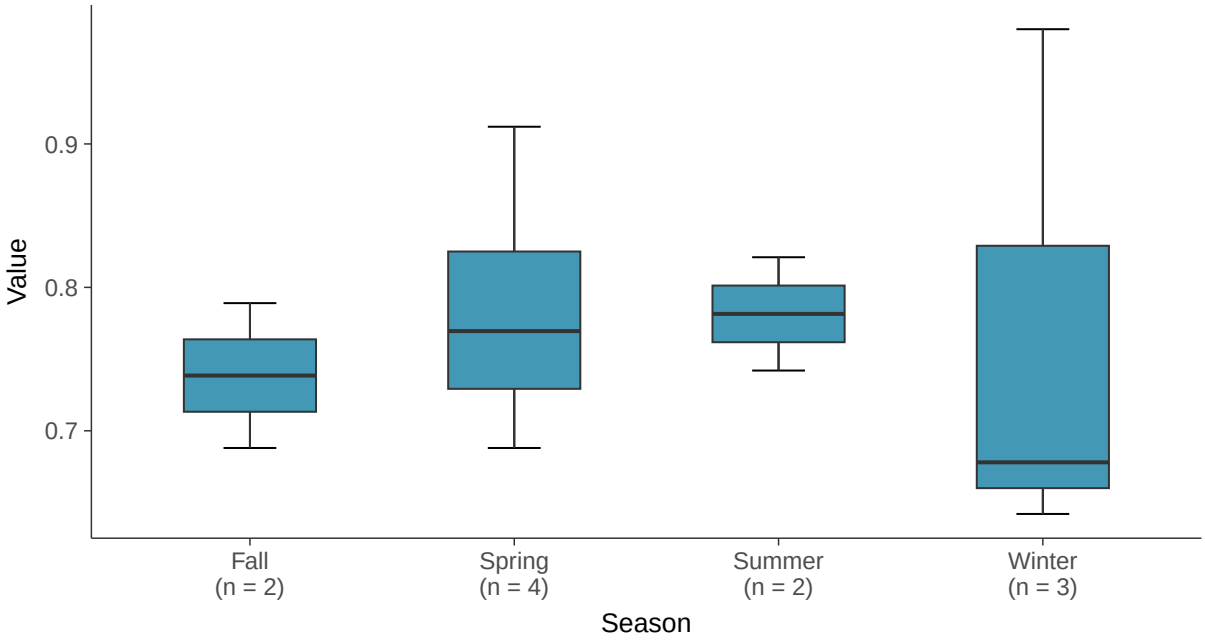
Boxplot

Radium 226 and 228, MW-09 (pCi/L)



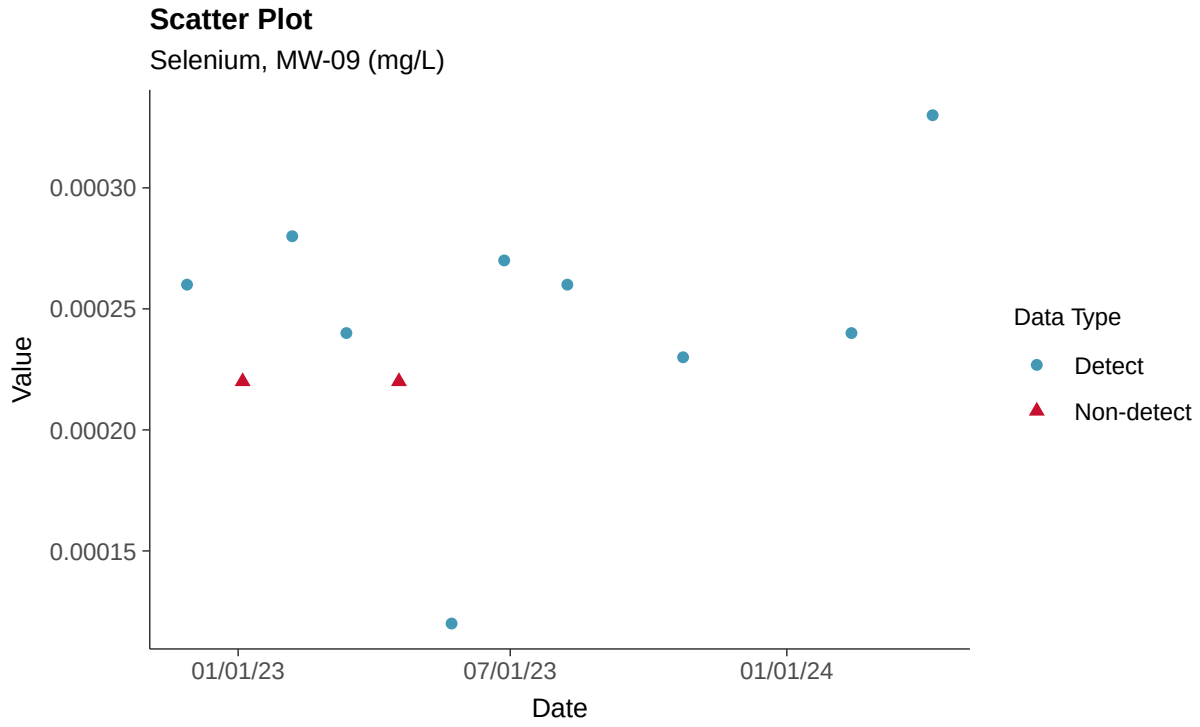
Boxplot by Season

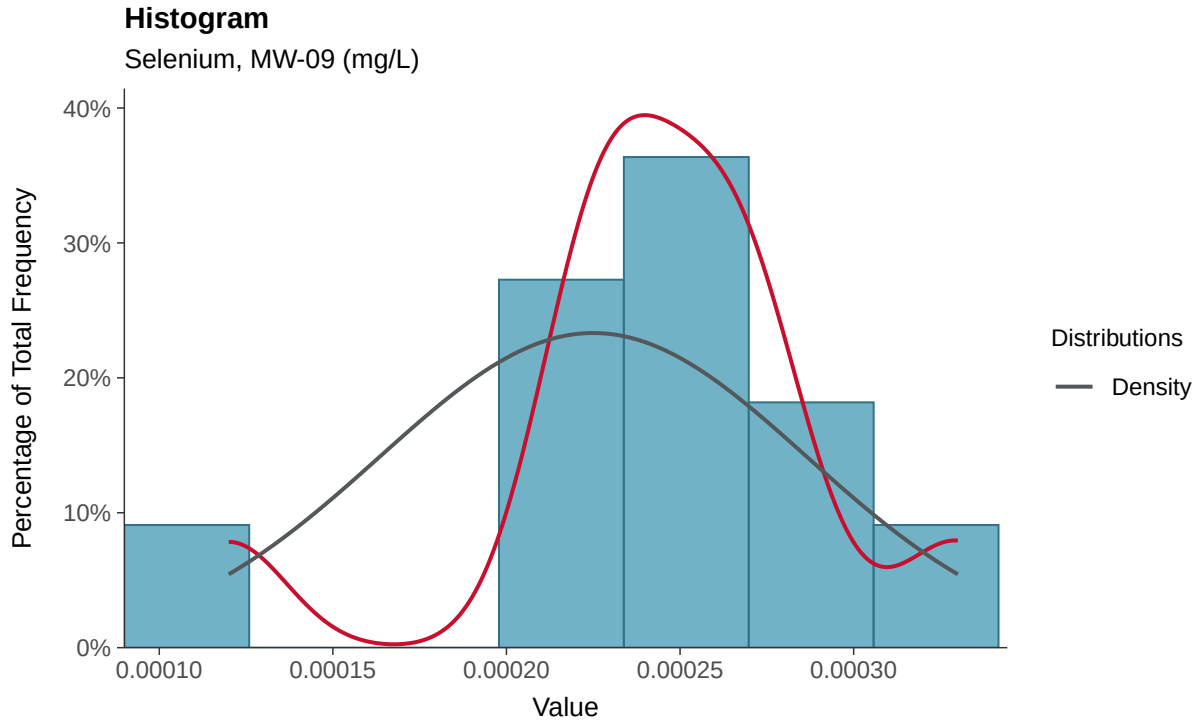
Radium 226 and 228, MW-09 (pCi/L)



Appendix IV: Selenium, MW-09

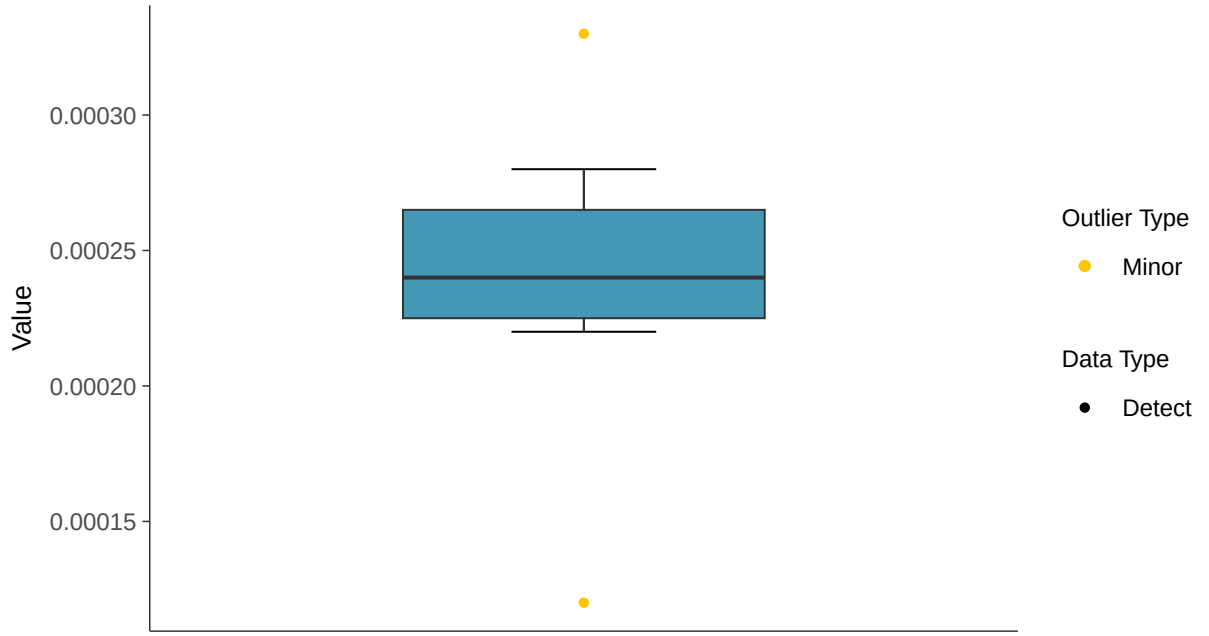
ID: 2_19_5_122





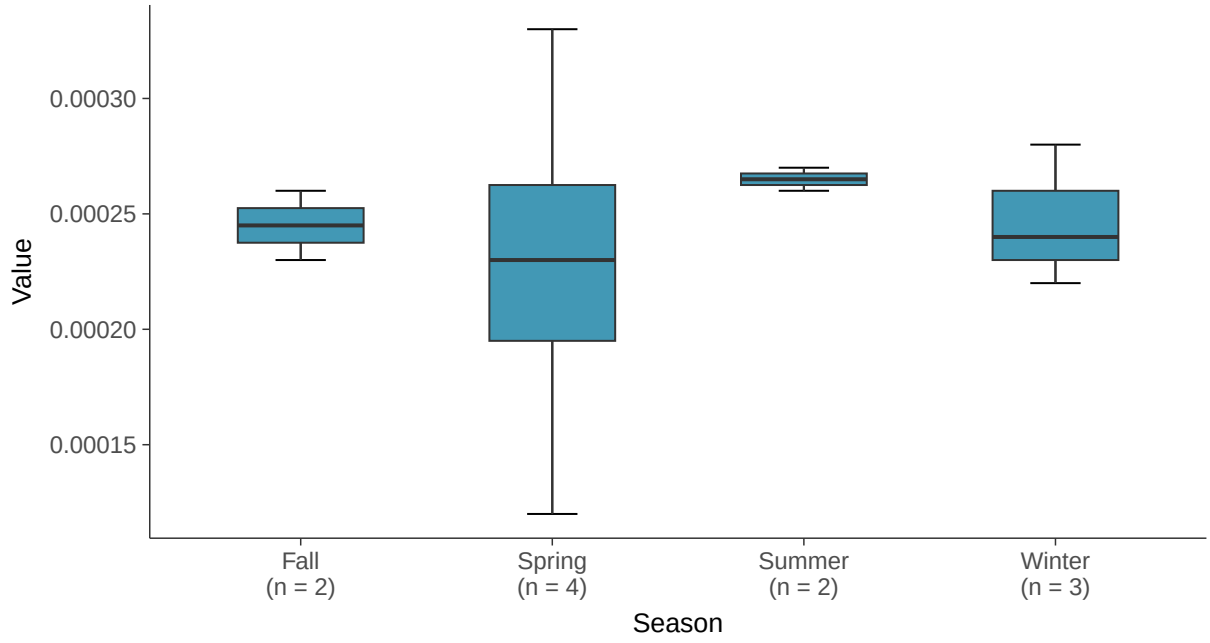
Boxplot

Selenium, MW-09 (mg/L)



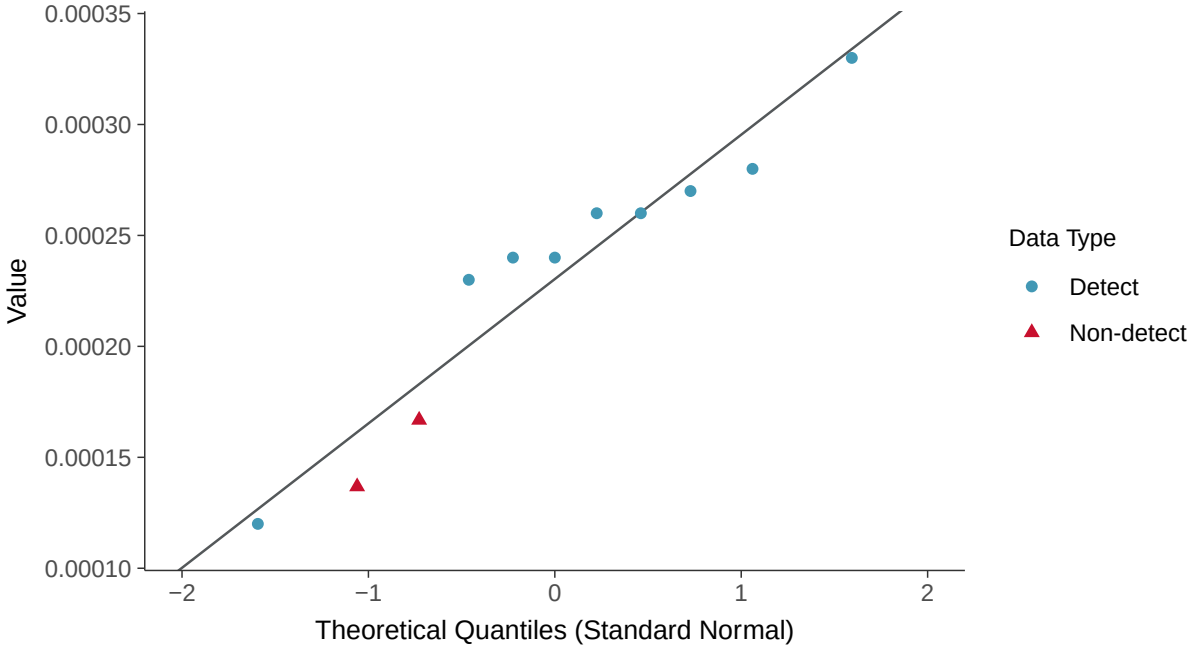
Boxplot by Season

Selenium, MW-09 (mg/L)



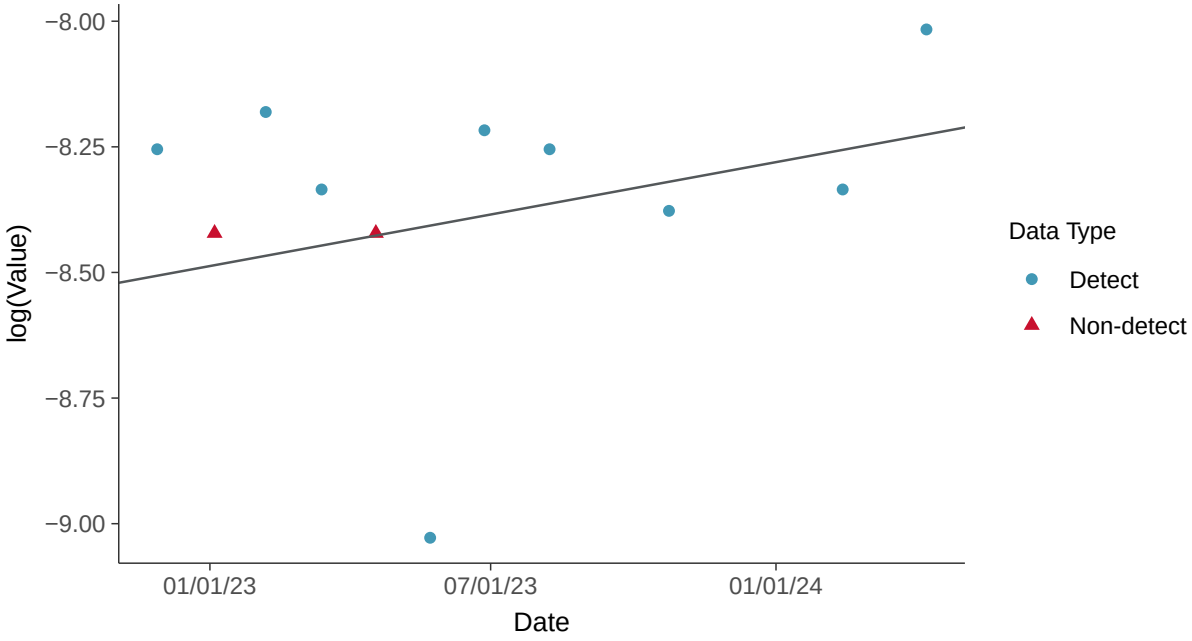
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-09 (mg/L)



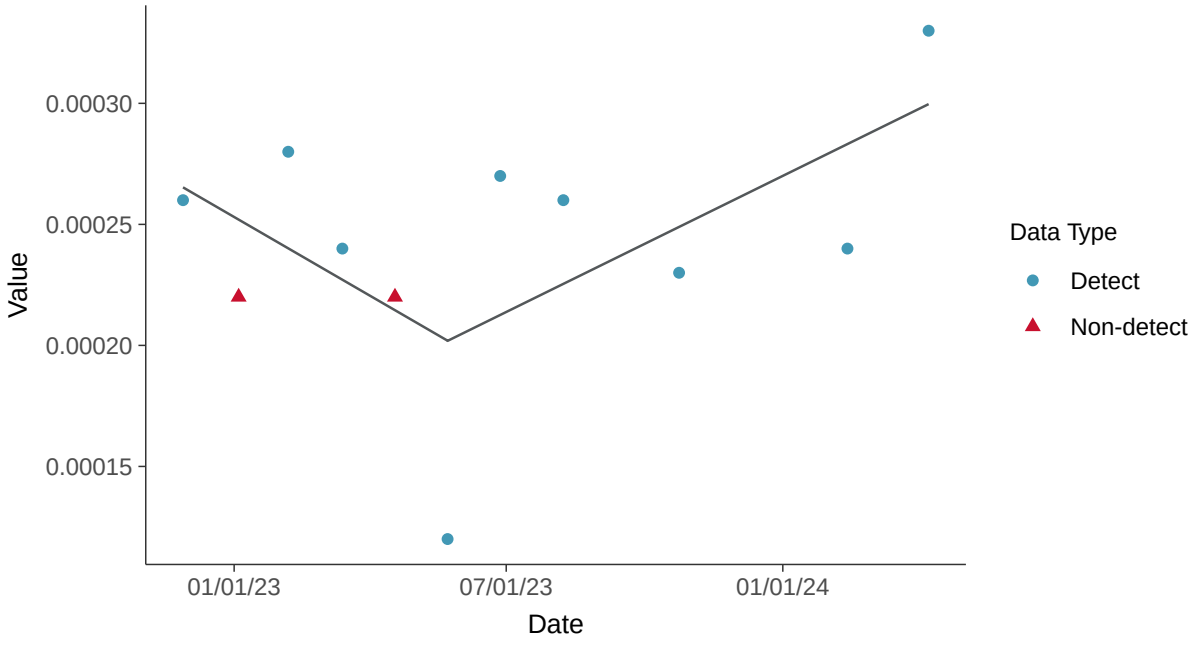
Trend Regression: Lognormal MLE

Selenium, MW-09 (mg/L)



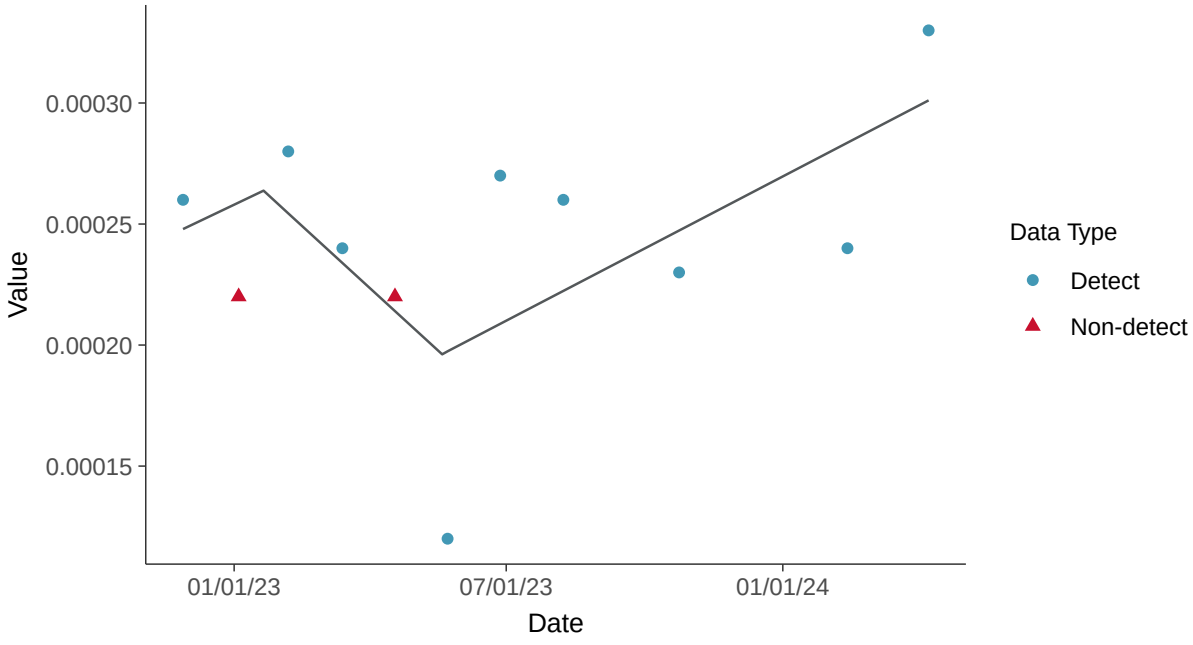
Trend Regression: Piecewise Linear-Linear

Selenium, MW-09 (mg/L)



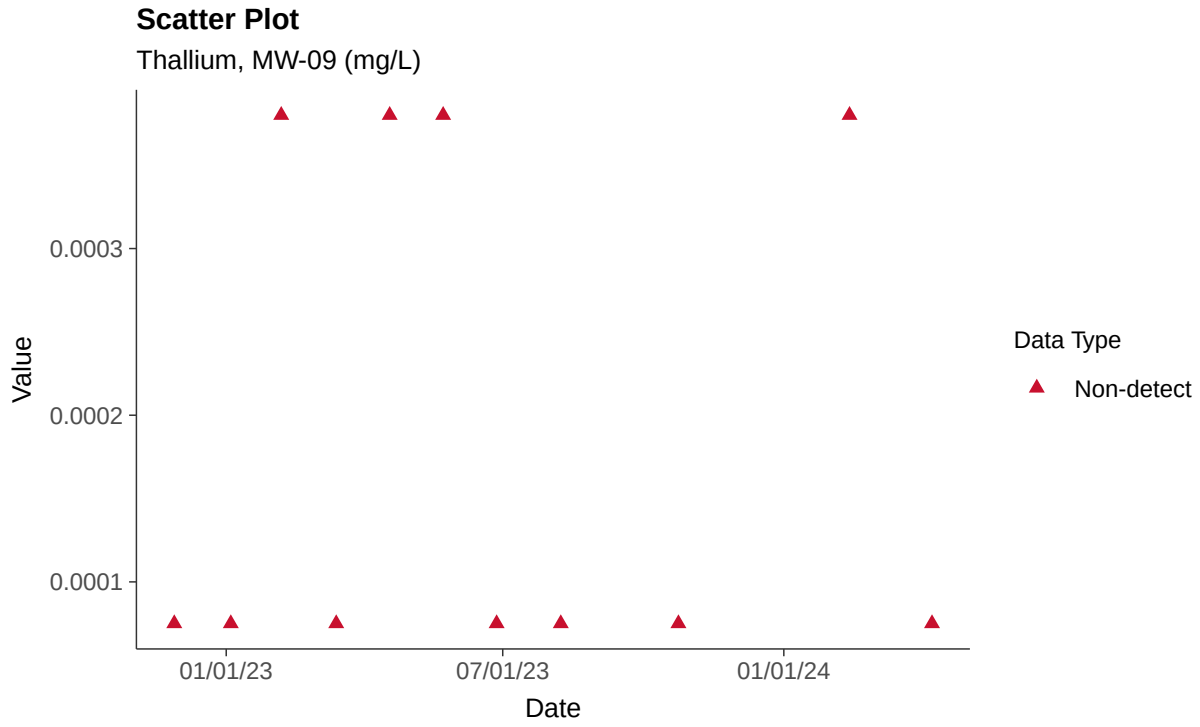
Trend Regression: Piecewise Linear-Linear-Linear

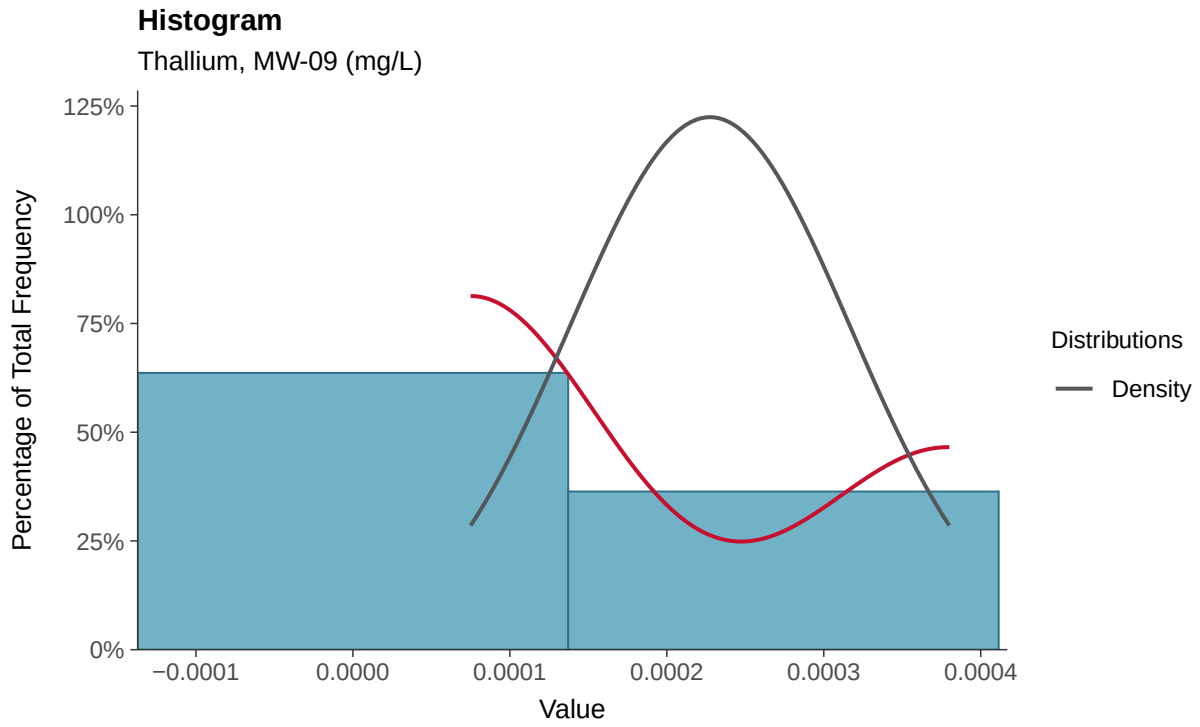
Selenium, MW-09 (mg/L)



Appendix IV: Thallium, MW-09

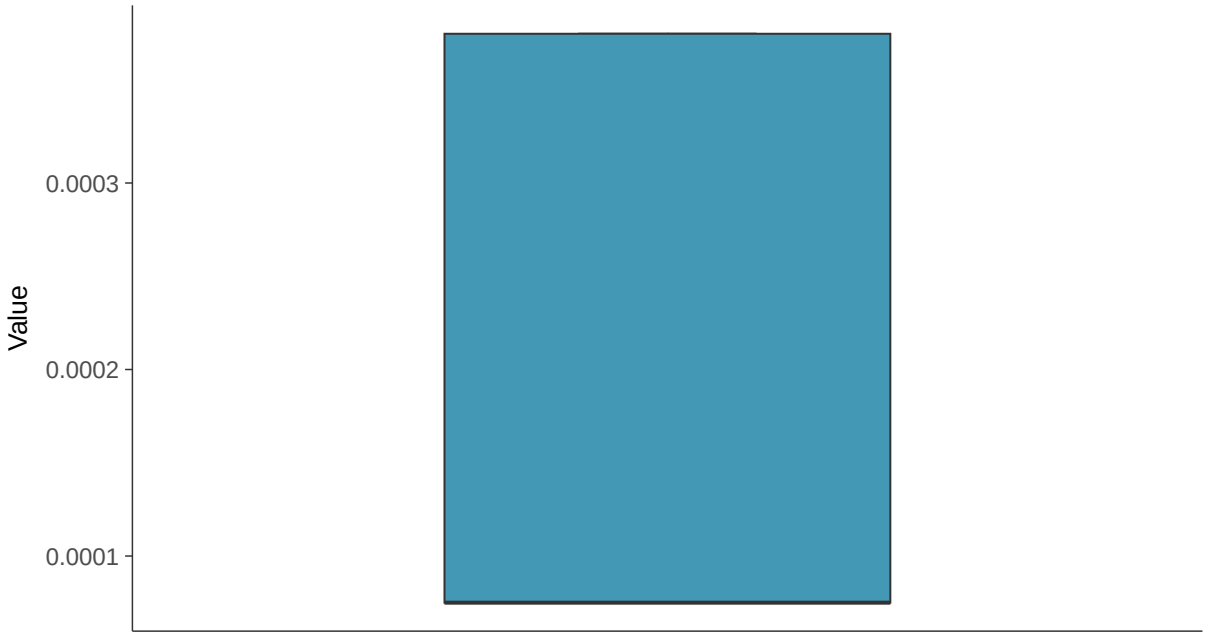
ID: 2_19_5_125





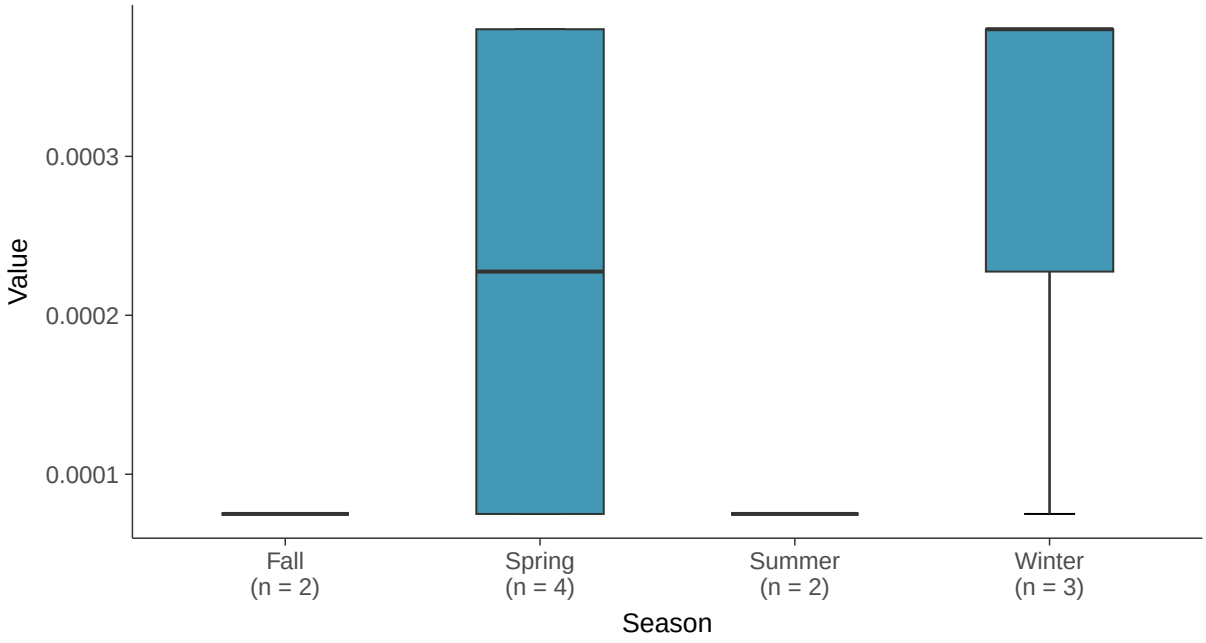
Boxplot

Thallium, MW-09 (mg/L)



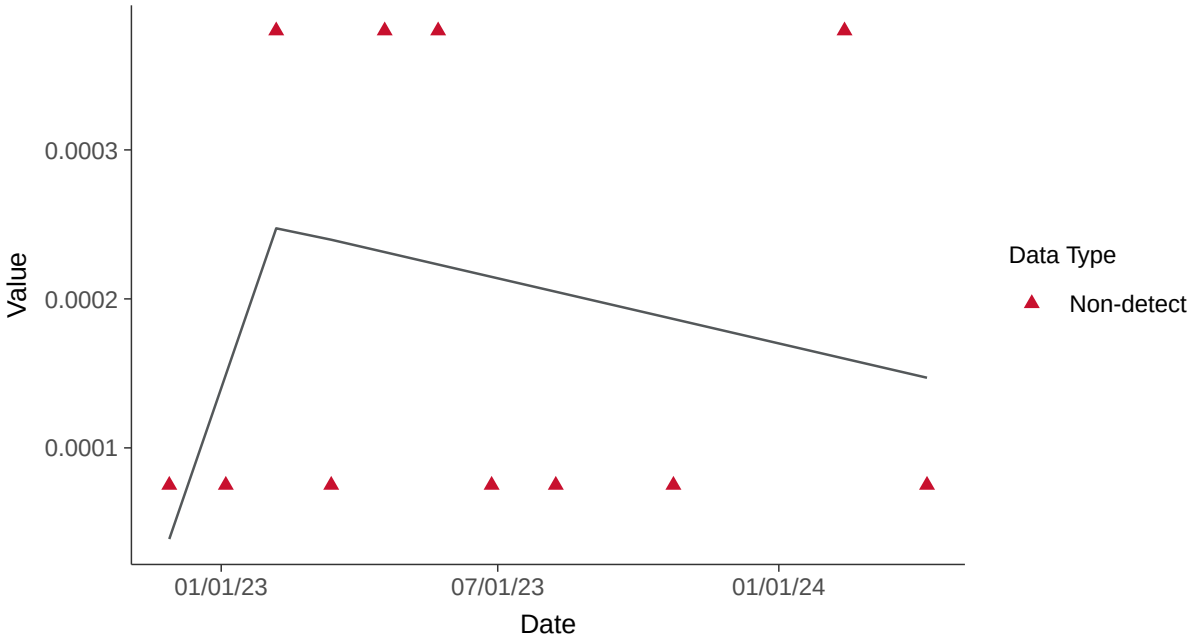
Boxplot by Season

Thallium, MW-09 (mg/L)



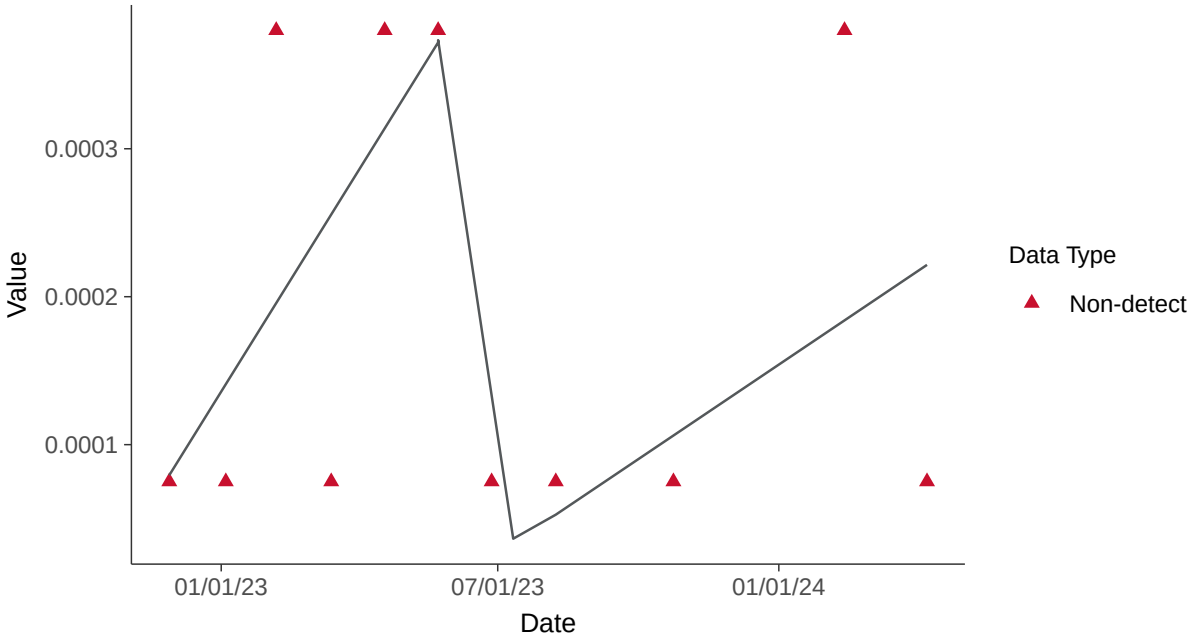
Trend Regression: Piecewise Linear-Linear

Thallium, MW-09 (mg/L)



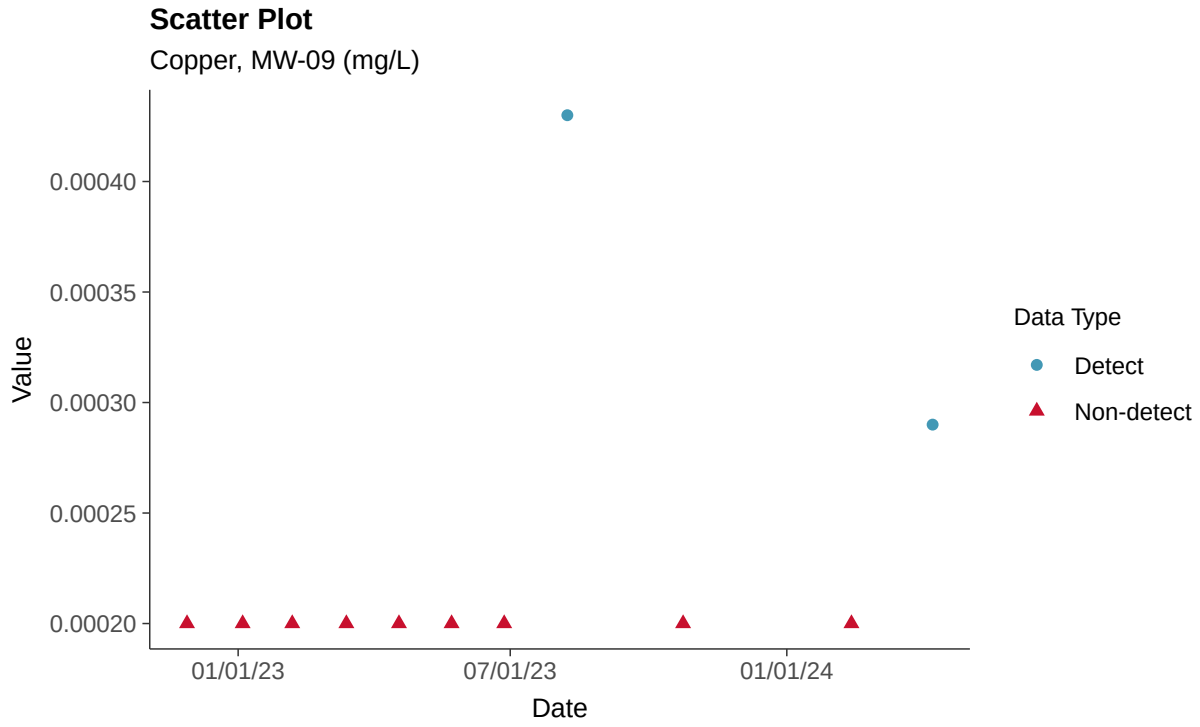
Trend Regression: Piecewise Linear-Linear-Linear

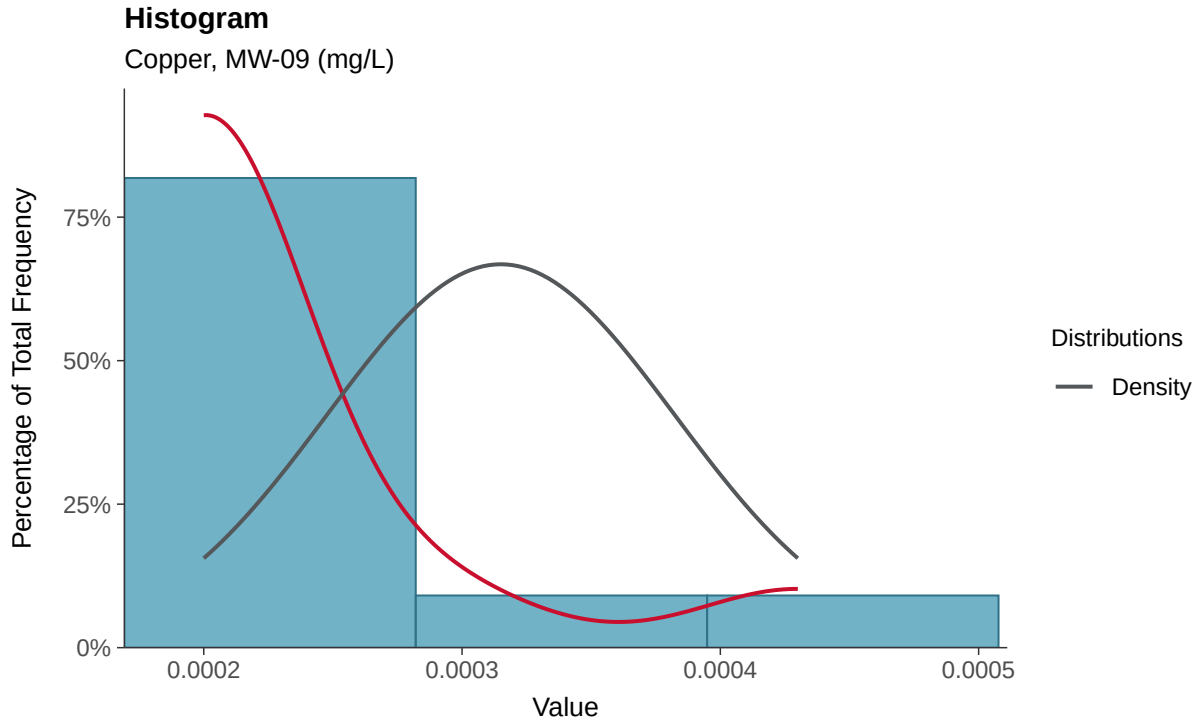
Thallium, MW-09 (mg/L)



Part 115: Copper, MW-09

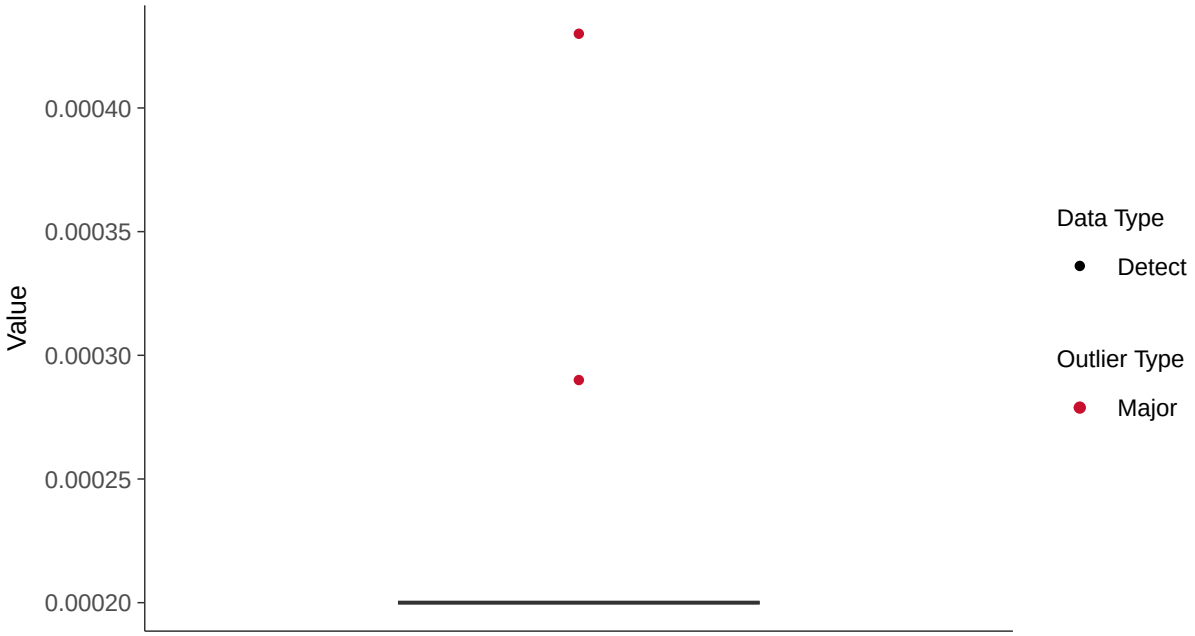
ID: 2_19_6_111





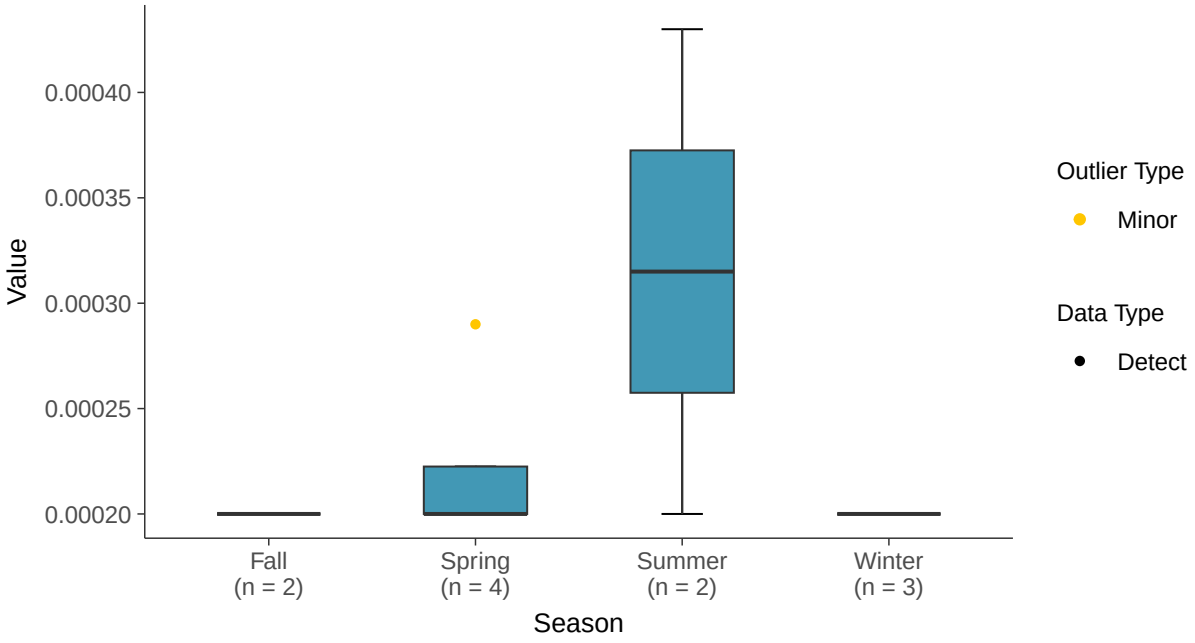
Boxplot

Copper, MW-09 (mg/L)



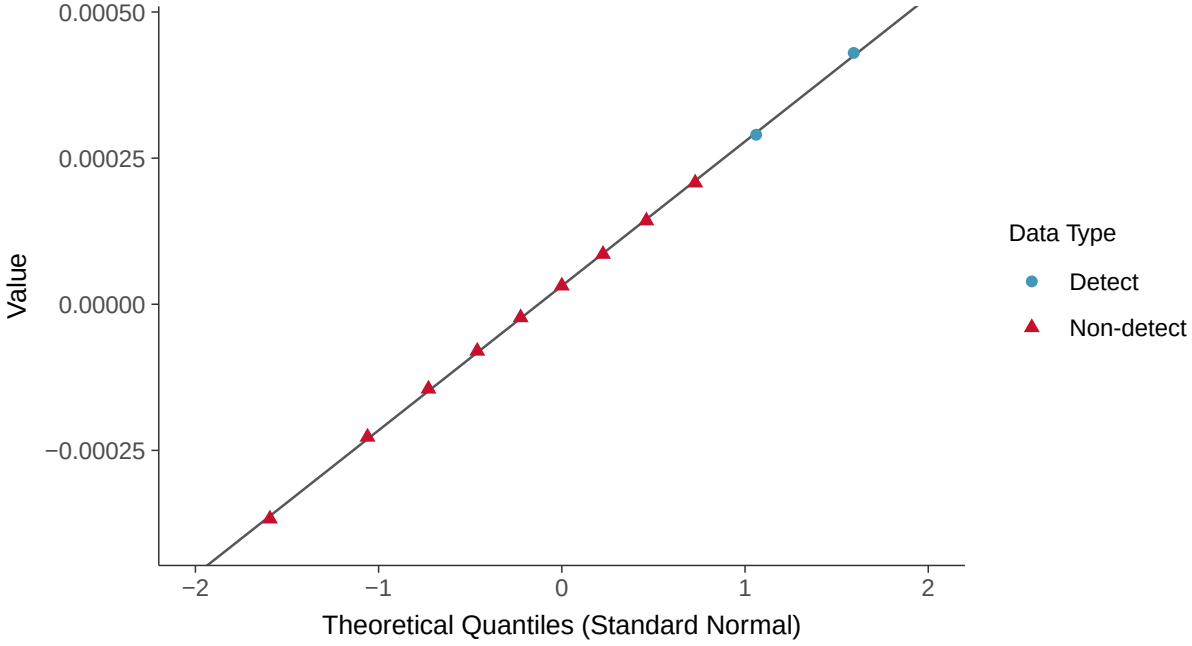
Boxplot by Season

Copper, MW-09 (mg/L)



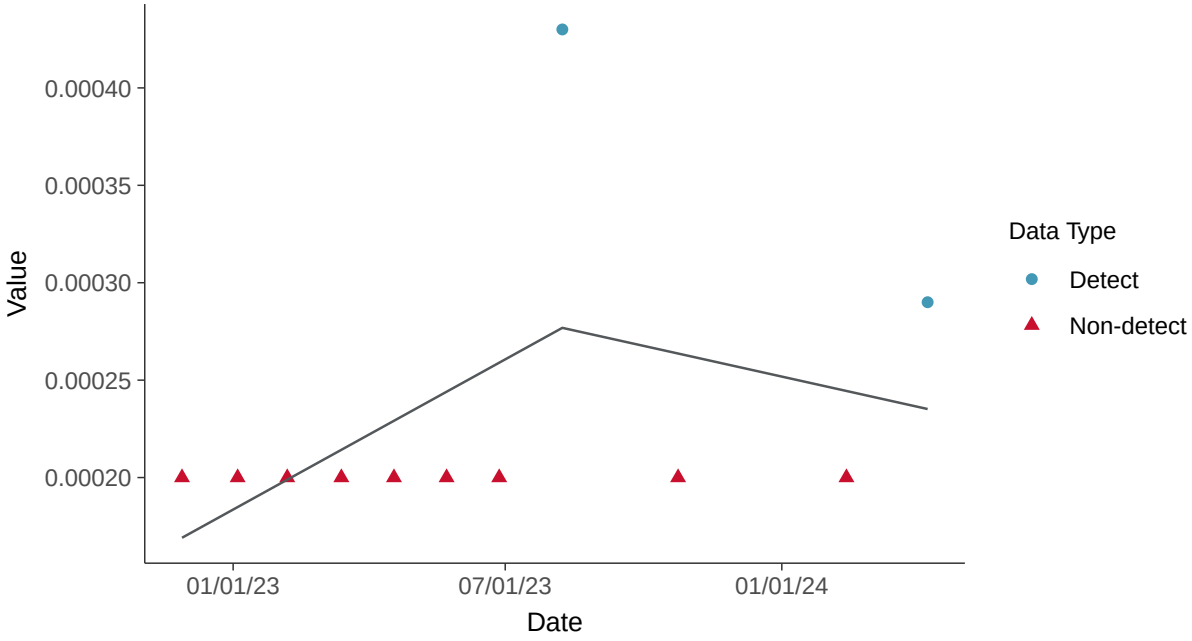
Normal Q-Q plot using ROS Imputed Estimates

Copper, MW-09 (mg/L)



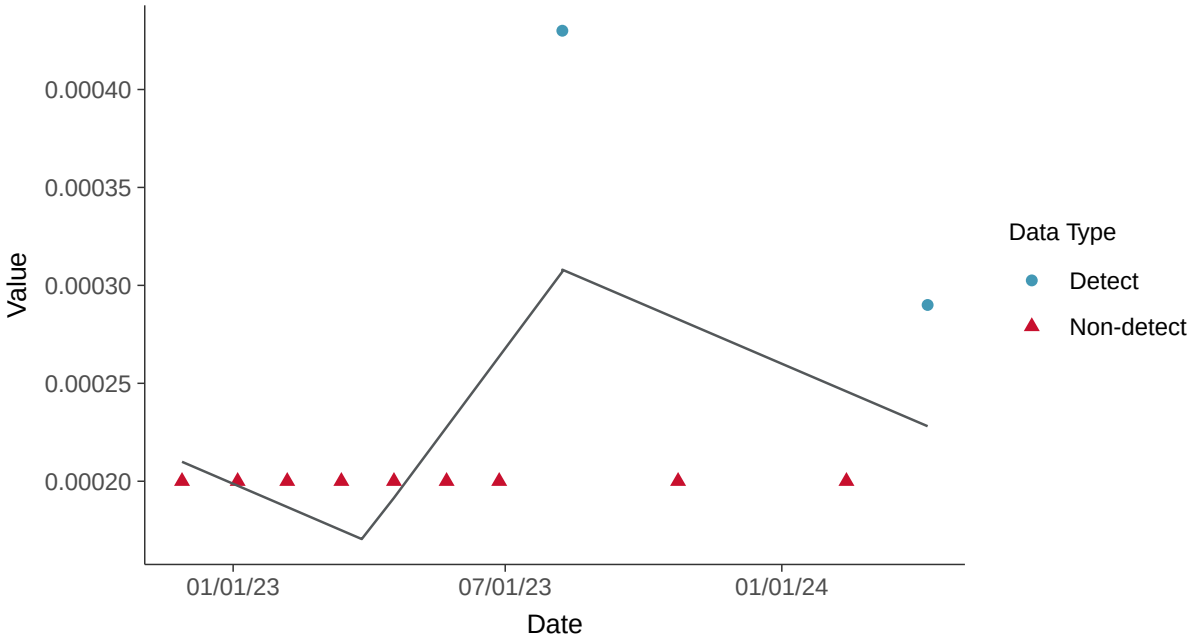
Trend Regression: Piecewise Linear-Linear

Copper, MW-09 (mg/L)



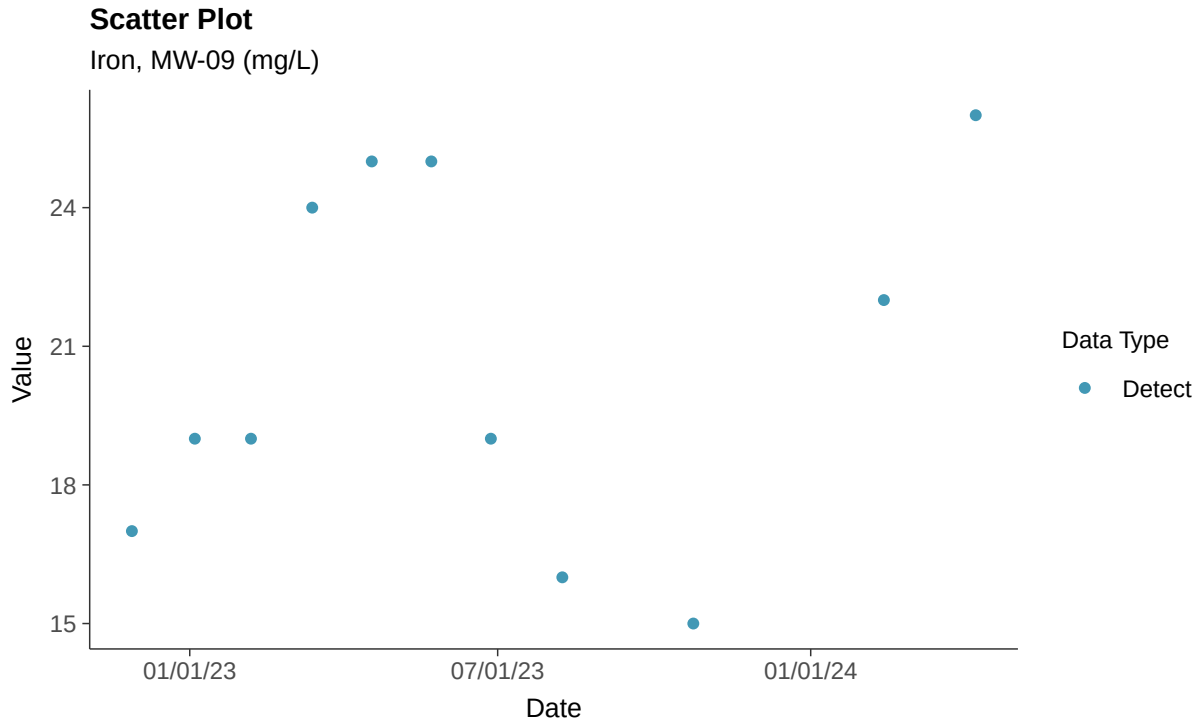
Trend Regression: Piecewise Linear-Linear-Linear

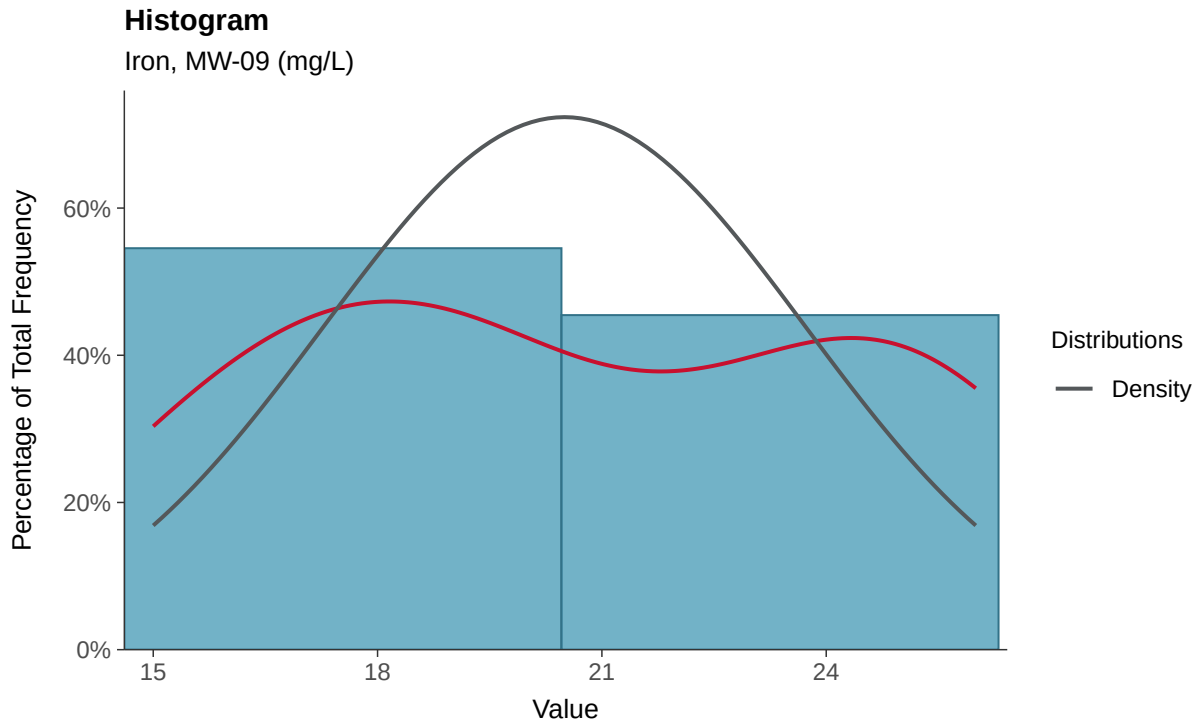
Copper, MW-09 (mg/L)



Part 115: Iron, MW-09

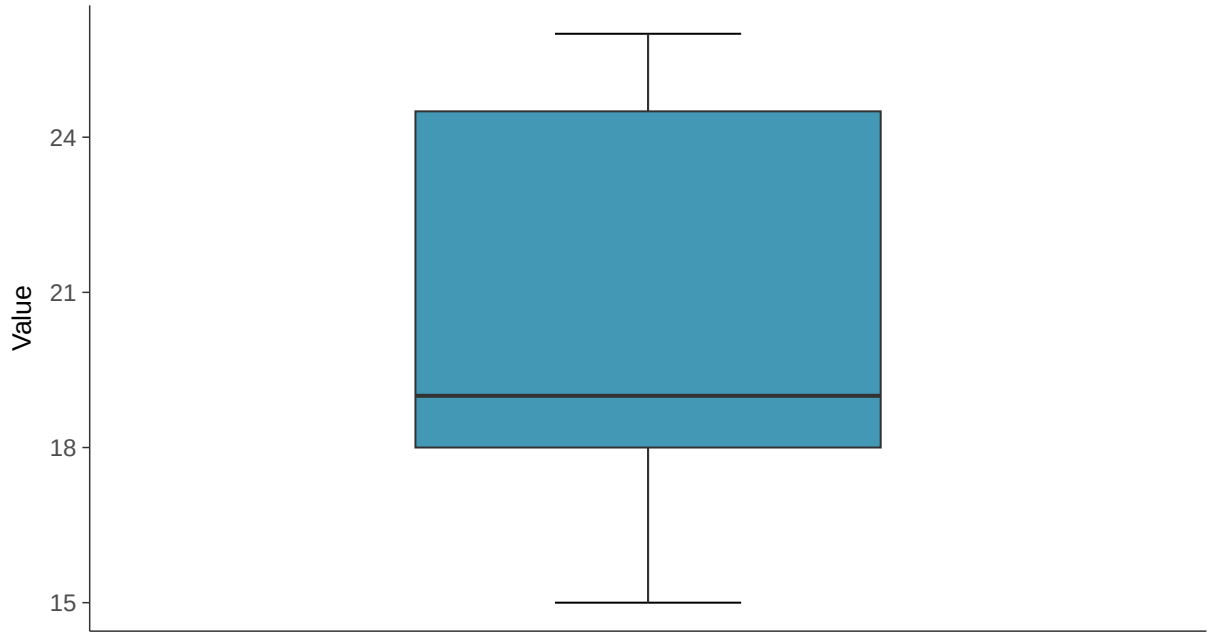
ID: 2_19_6_114





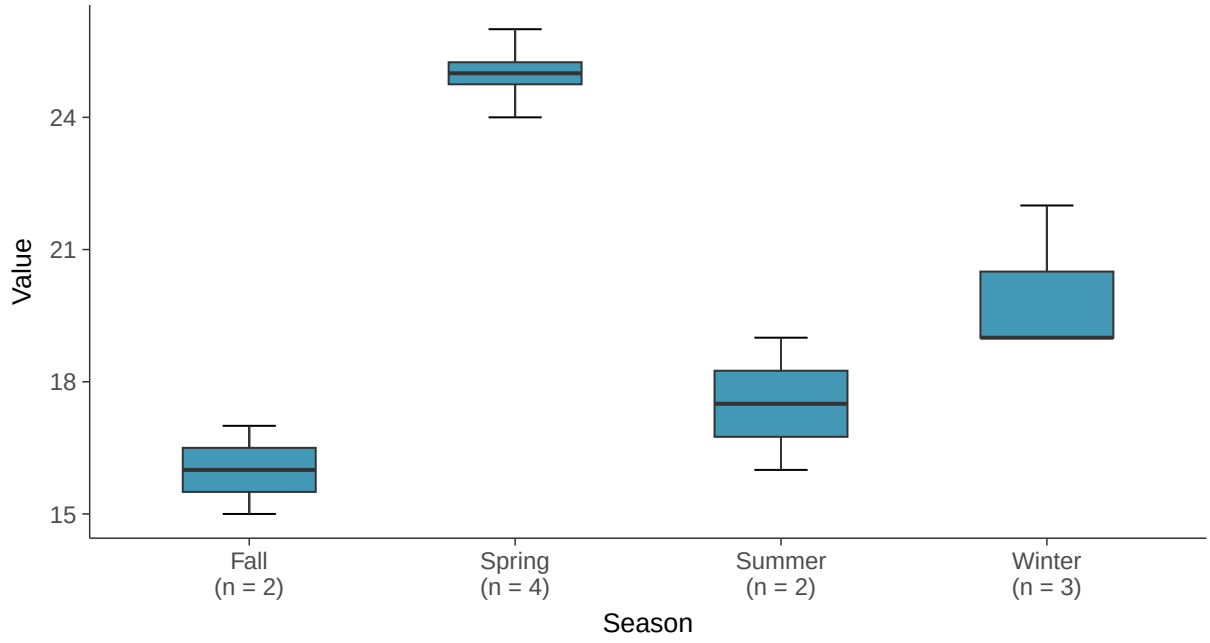
Boxplot

Iron, MW-09 (mg/L)



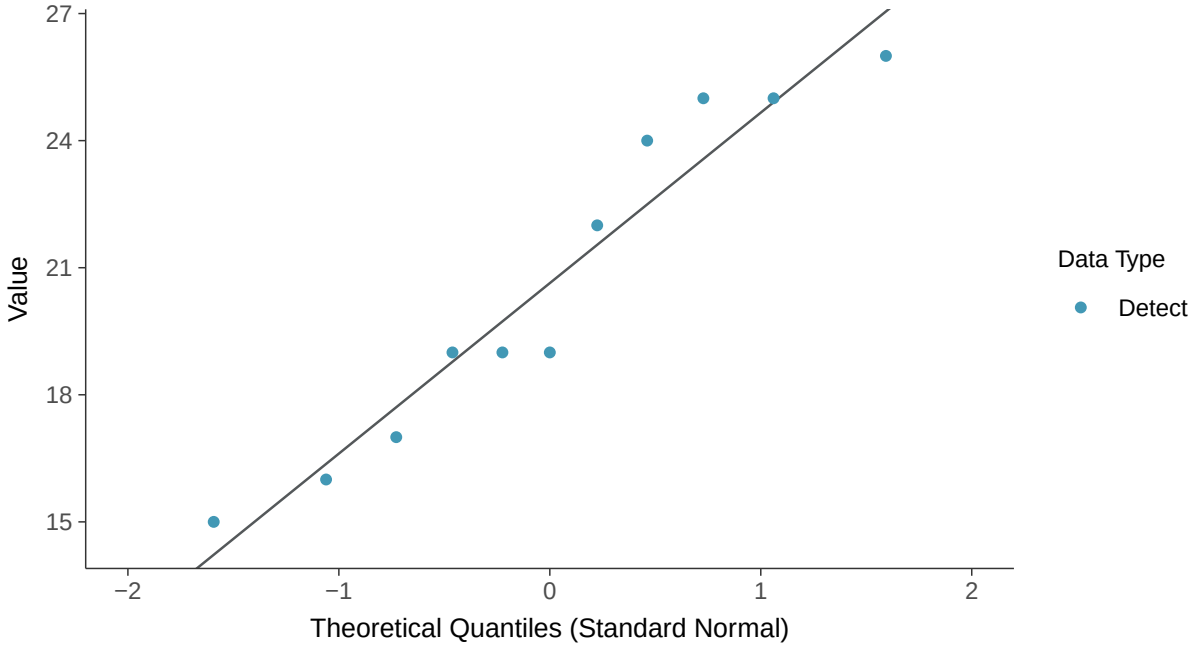
Boxplot by Season

Iron, MW-09 (mg/L)



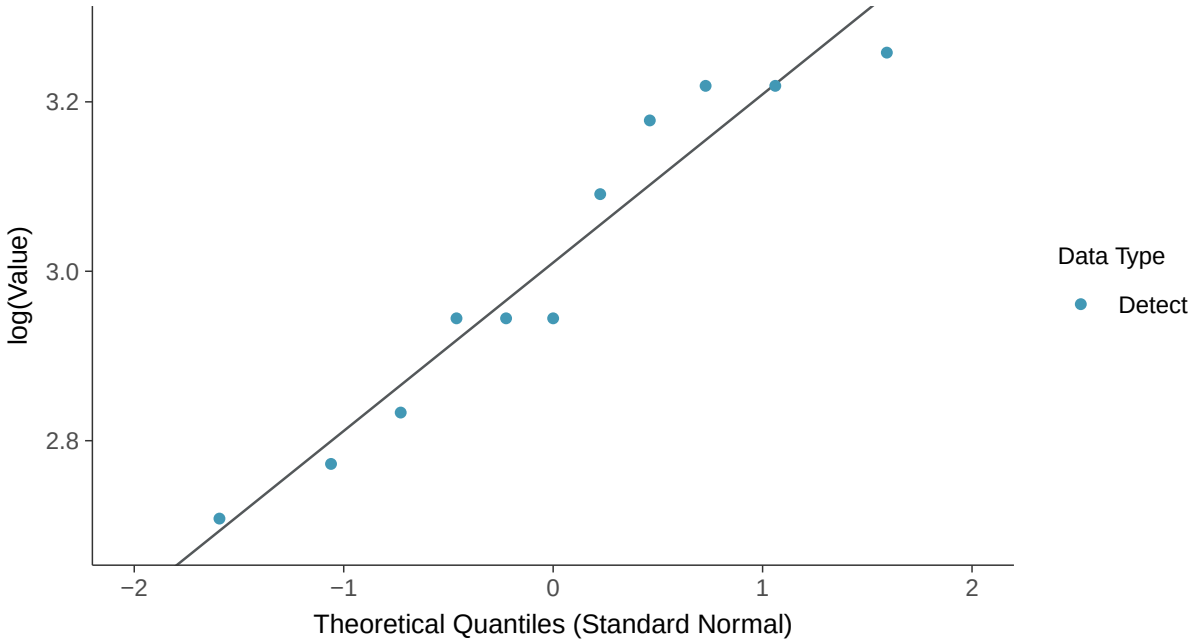
Normal Q-Q plot

Iron, MW-09 (mg/L)



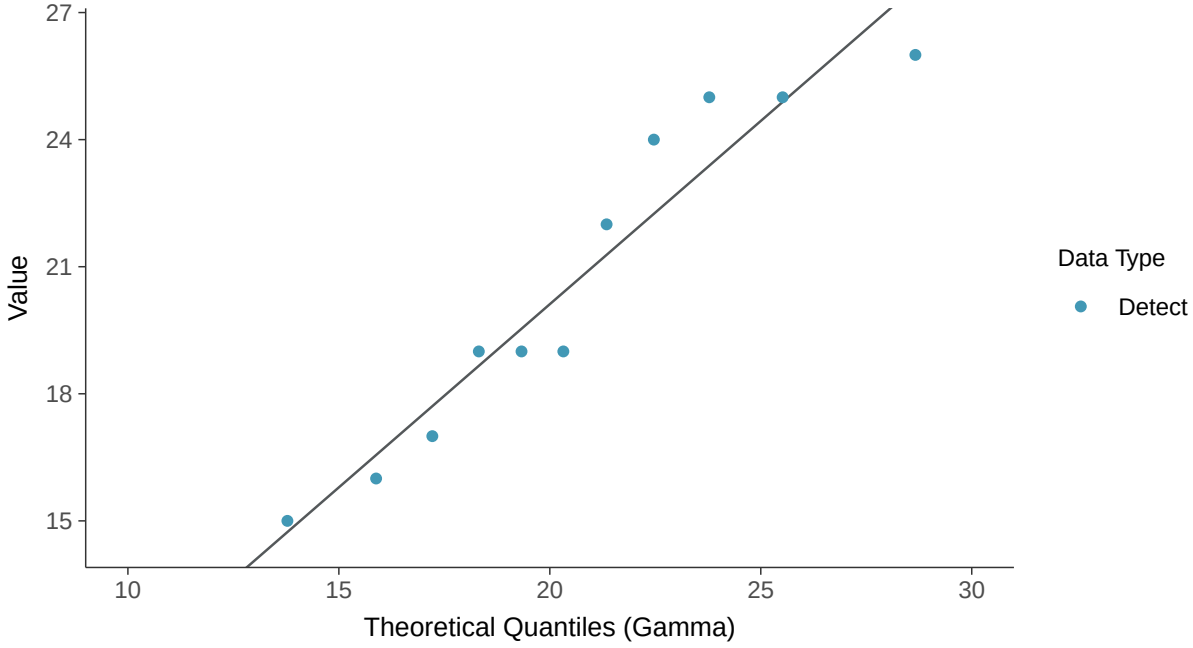
Lognormal Q-Q plot

Iron, MW-09 (mg/L)



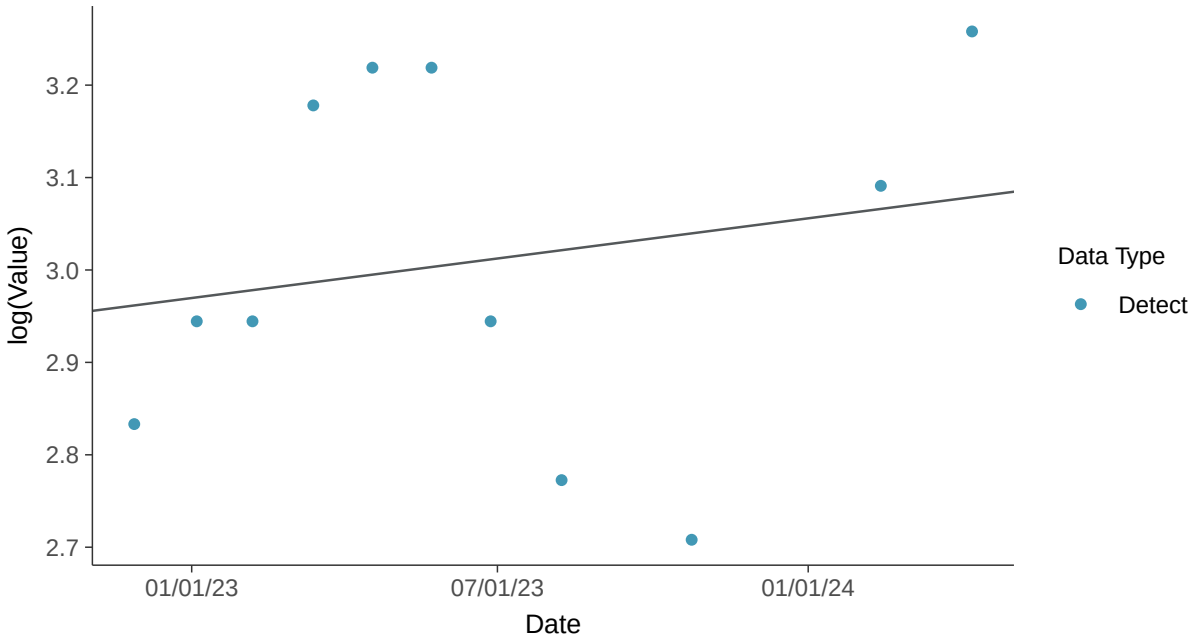
Gamma Q-Q plot

Iron, MW-09 (mg/L)



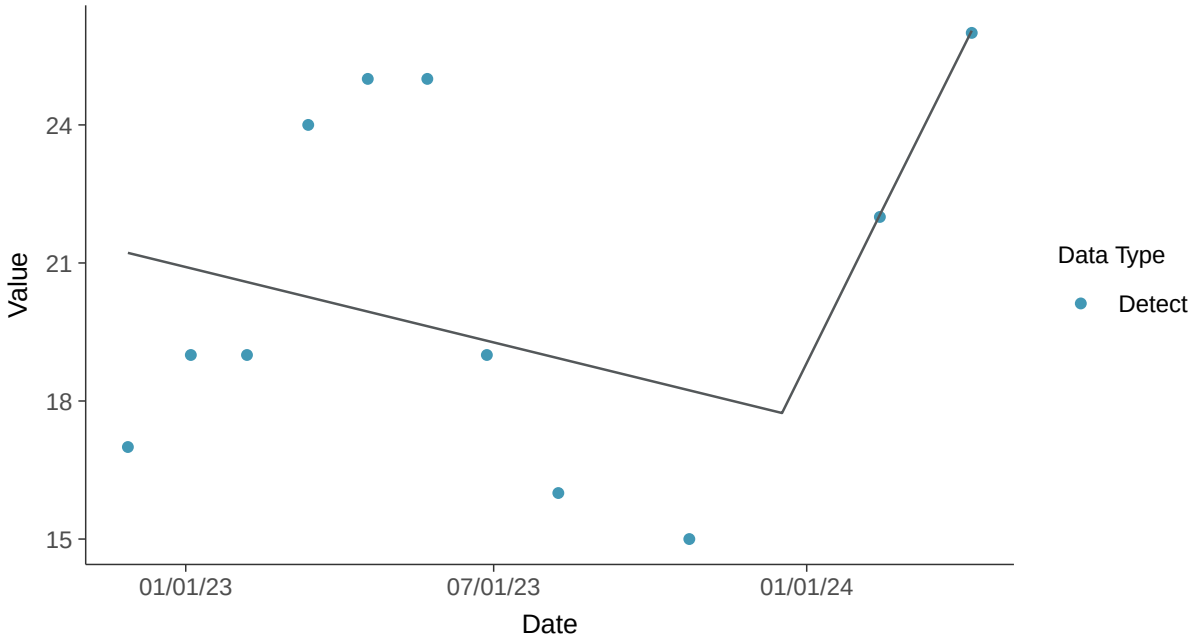
Trend Regression: Lognormal MLE

Iron, MW-09 (mg/L)



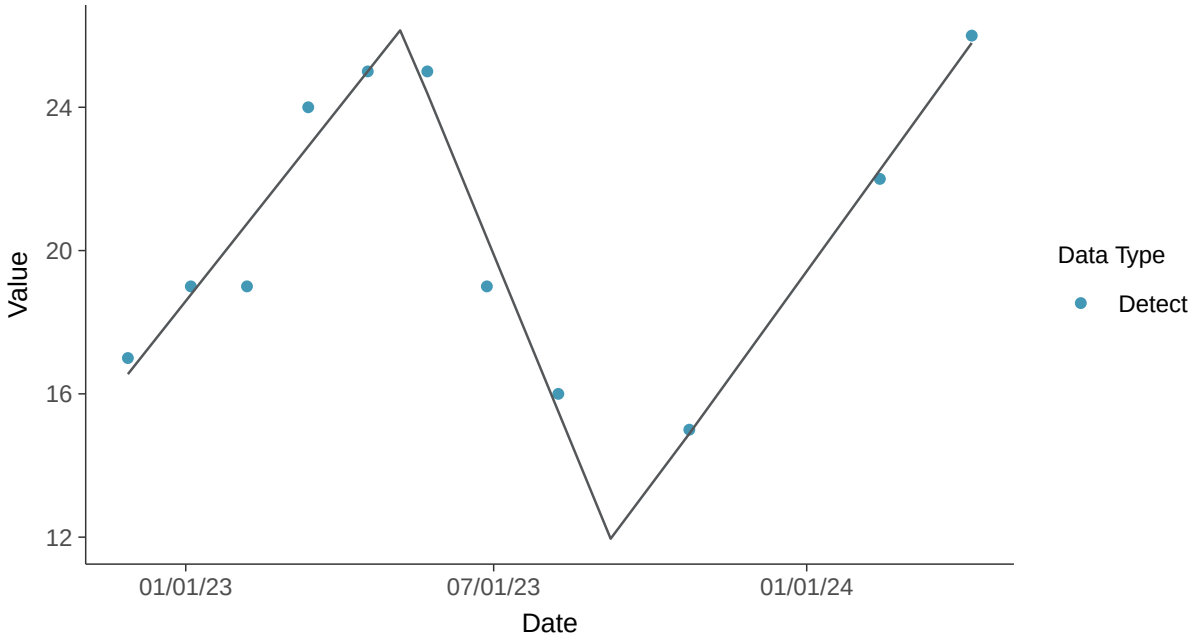
Trend Regression: Piecewise Linear-Linear

Iron, MW-09 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Iron, MW-09 (mg/L)

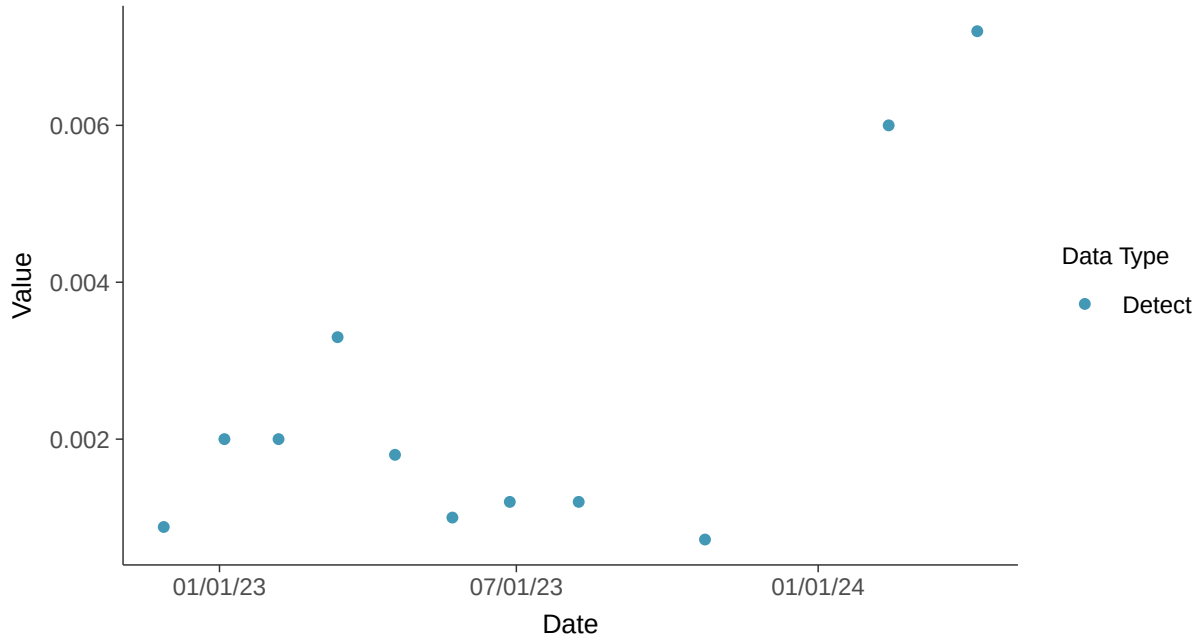


Part 115: Nickel, MW-09

ID: 2_19_6_119

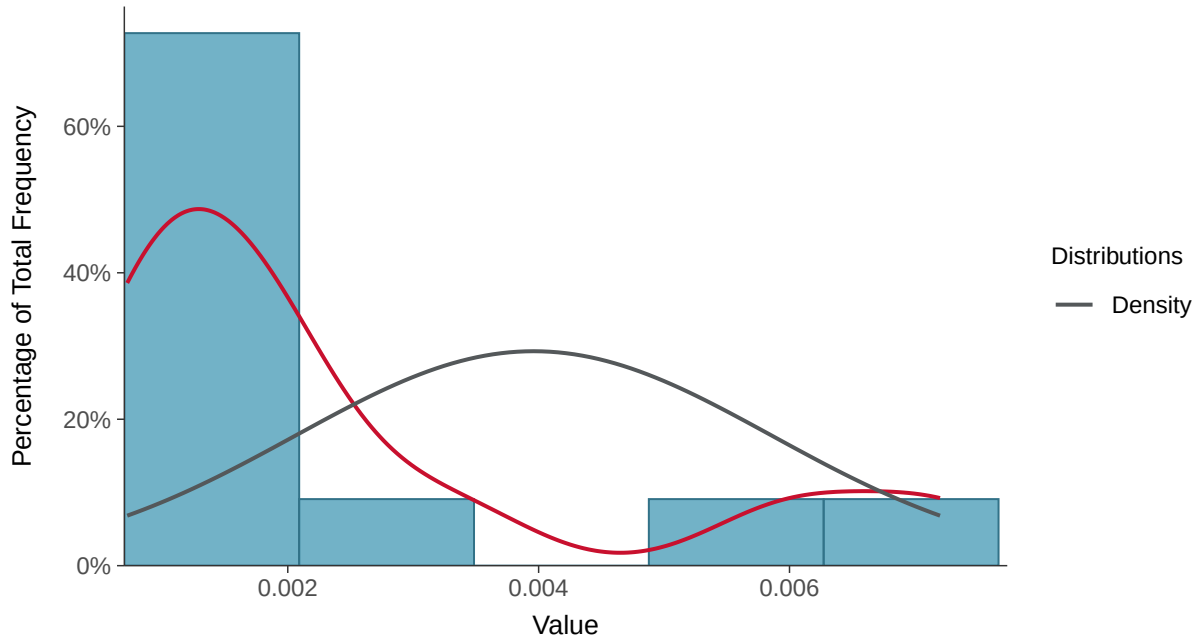
Scatter Plot

Nickel, MW-09 (mg/L)



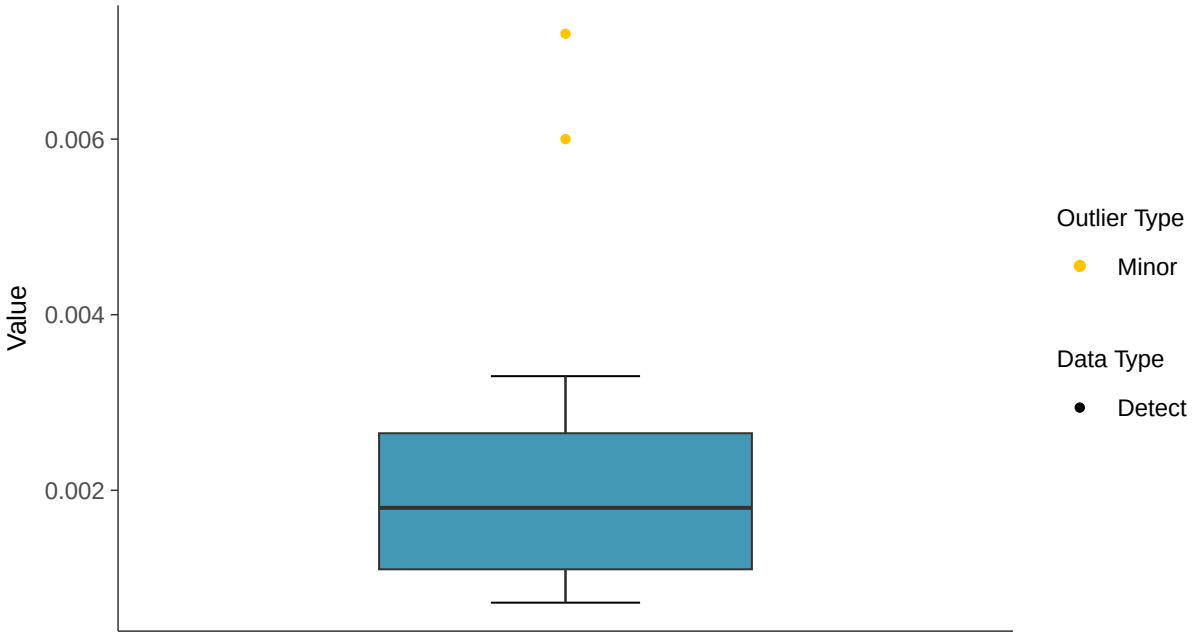
Histogram

Nickel, MW-09 (mg/L)



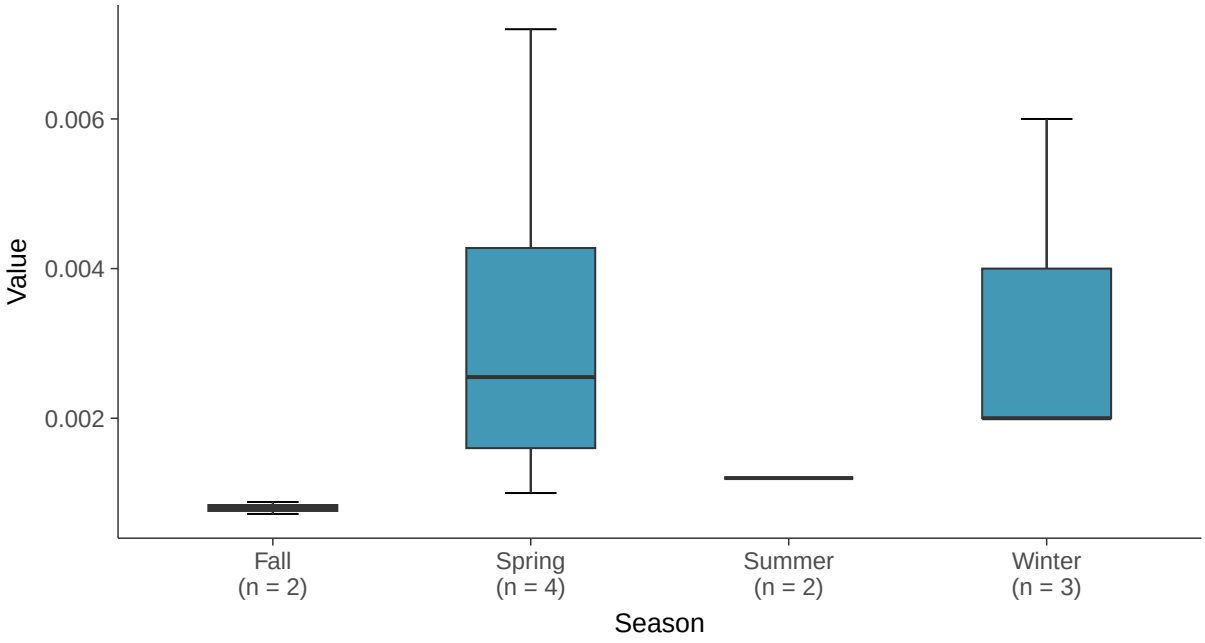
Boxplot

Nickel, MW-09 (mg/L)



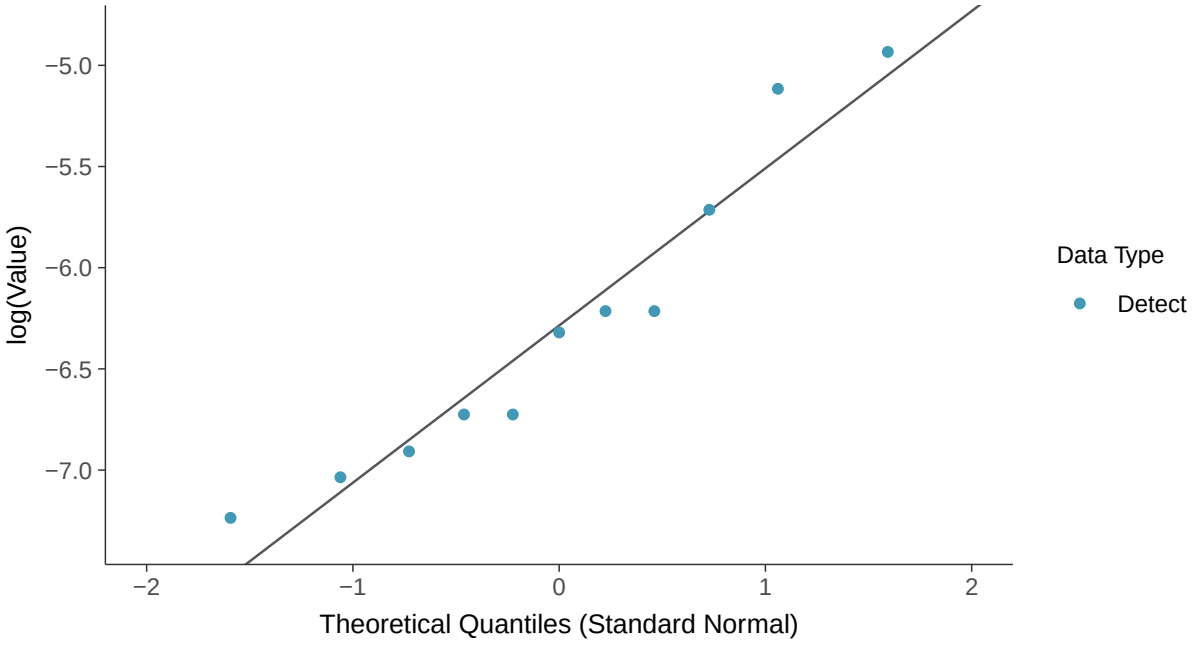
Boxplot by Season

Nickel, MW-09 (mg/L)



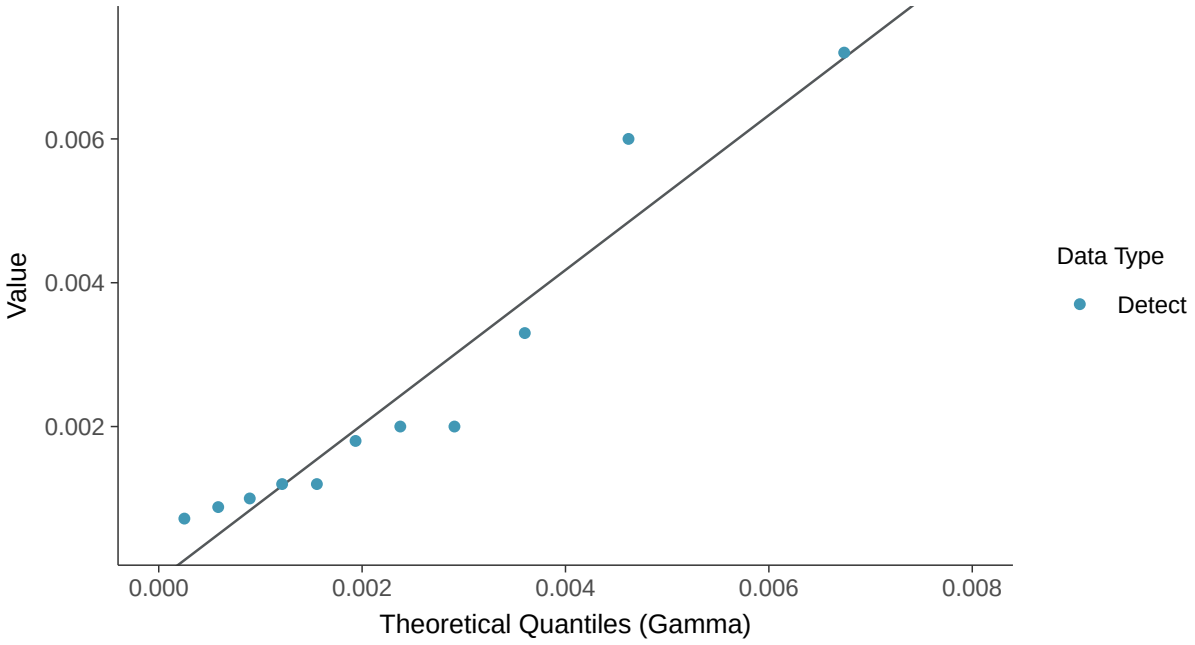
Lognormal Q-Q plot

Nickel, MW-09 (mg/L)



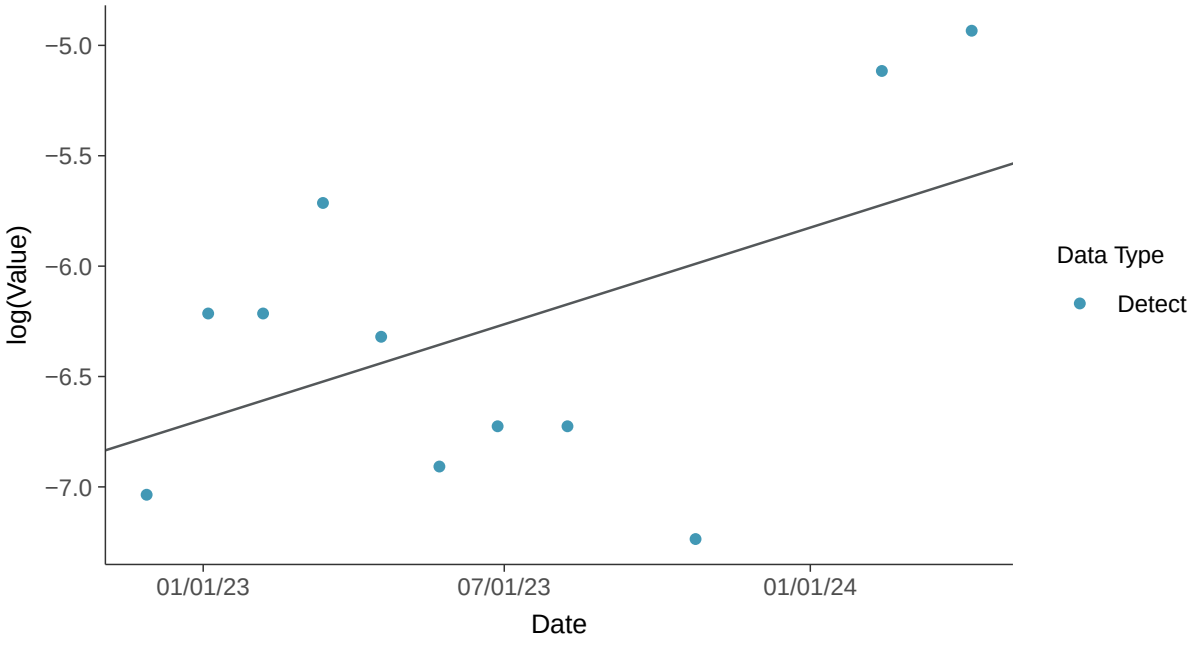
Gamma Q-Q plot

Nickel, MW-09 (mg/L)



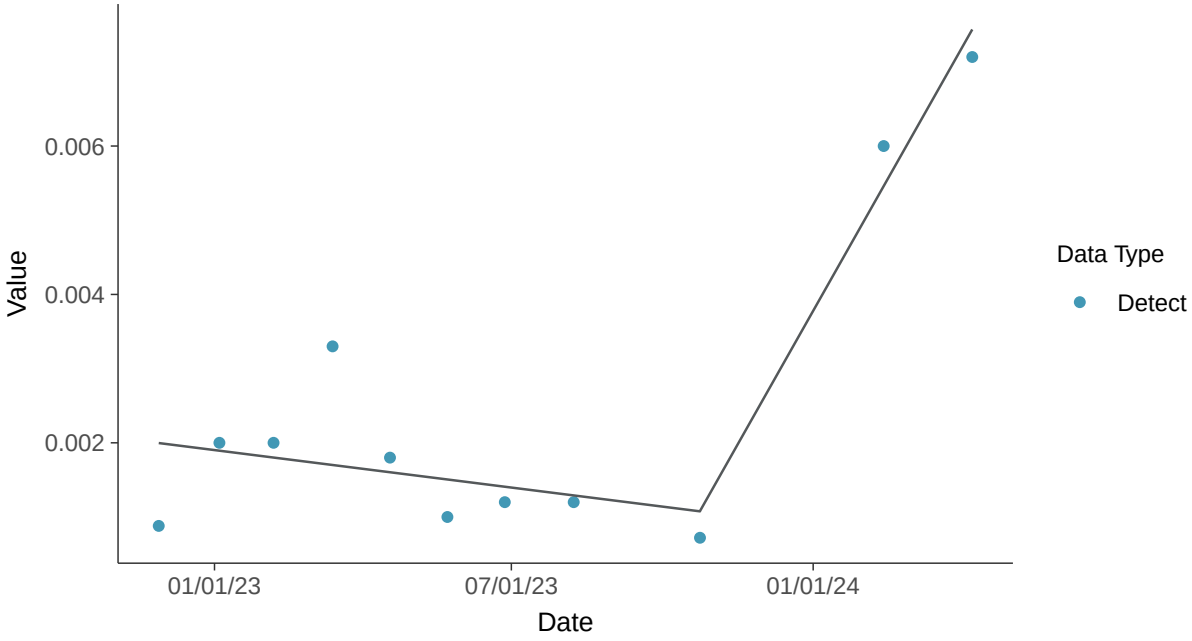
Trend Regression: Lognormal MLE

Nickel, MW-09 (mg/L)



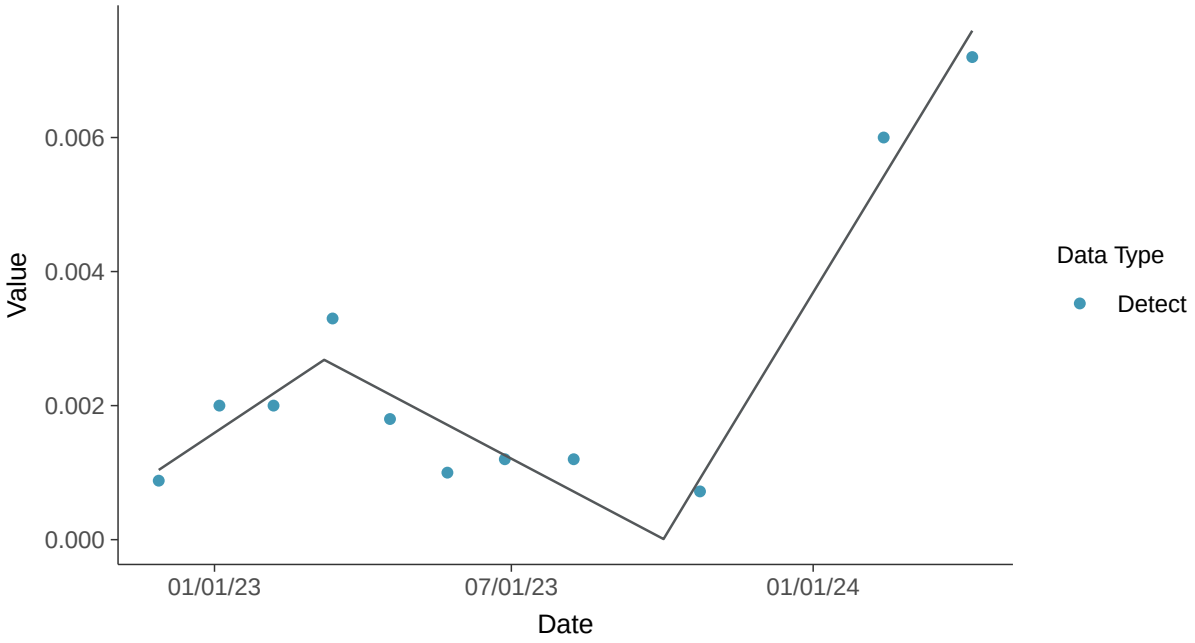
Trend Regression: Piecewise Linear-Linear

Nickel, MW-09 (mg/L)



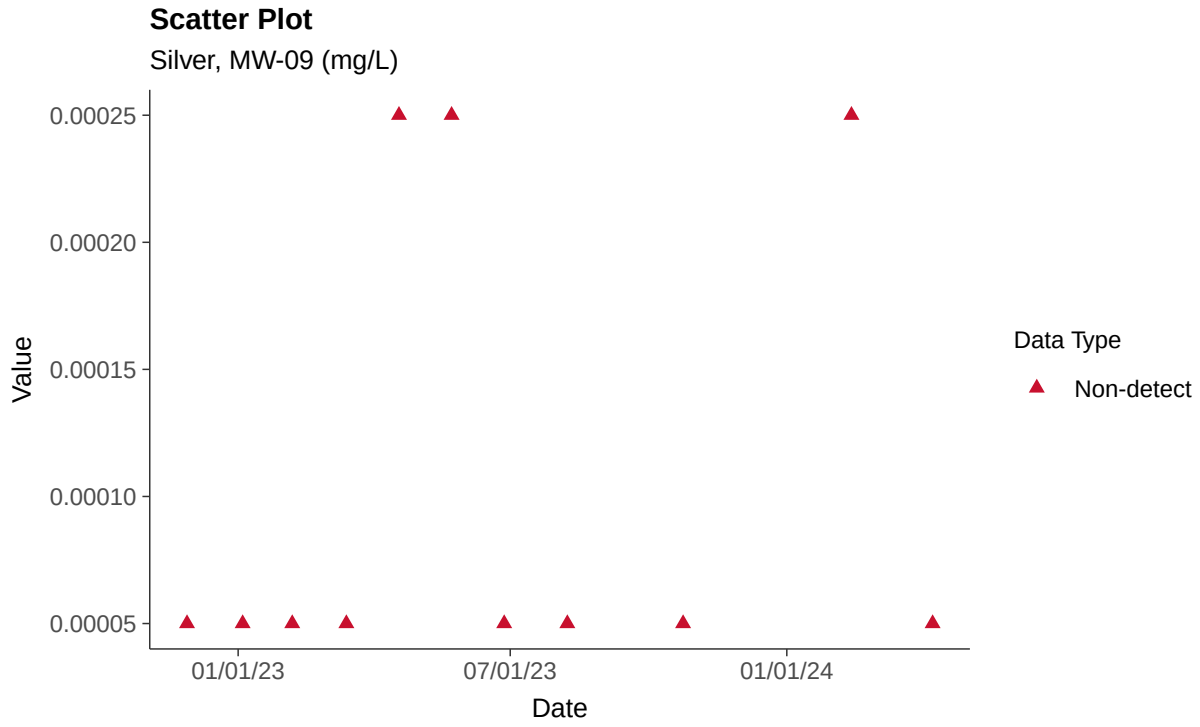
Trend Regression: Piecewise Linear-Linear-Linear

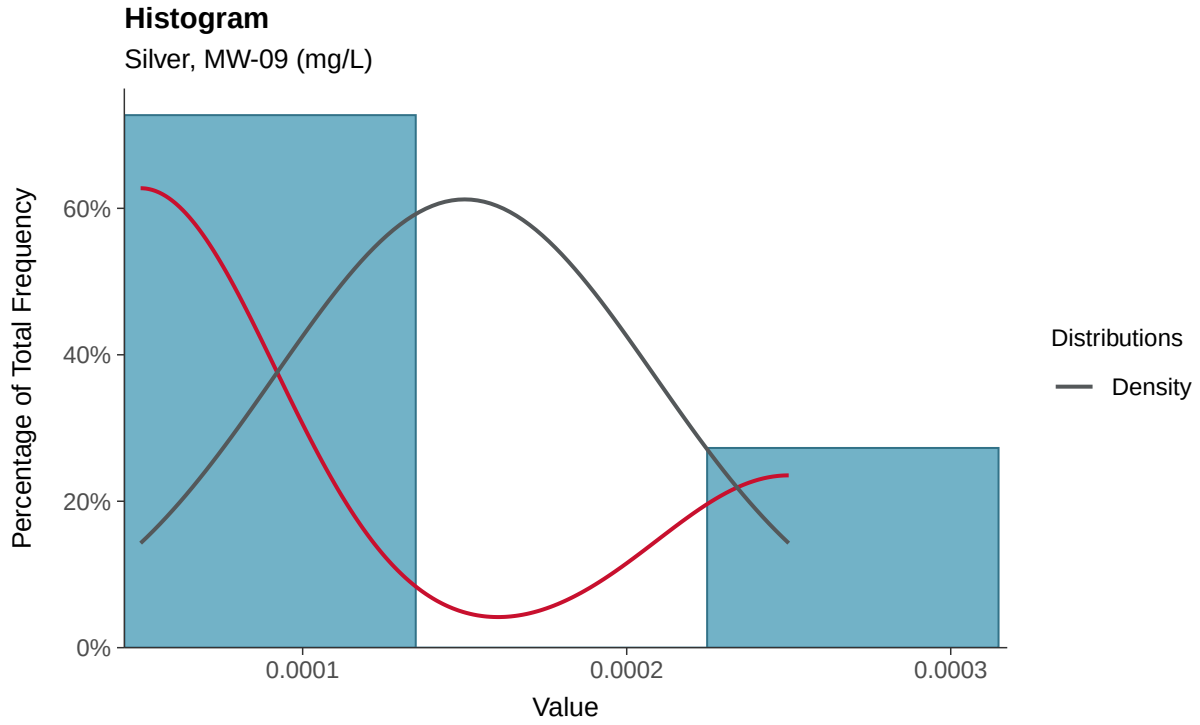
Nickel, MW-09 (mg/L)



Part 115: Silver, MW-09

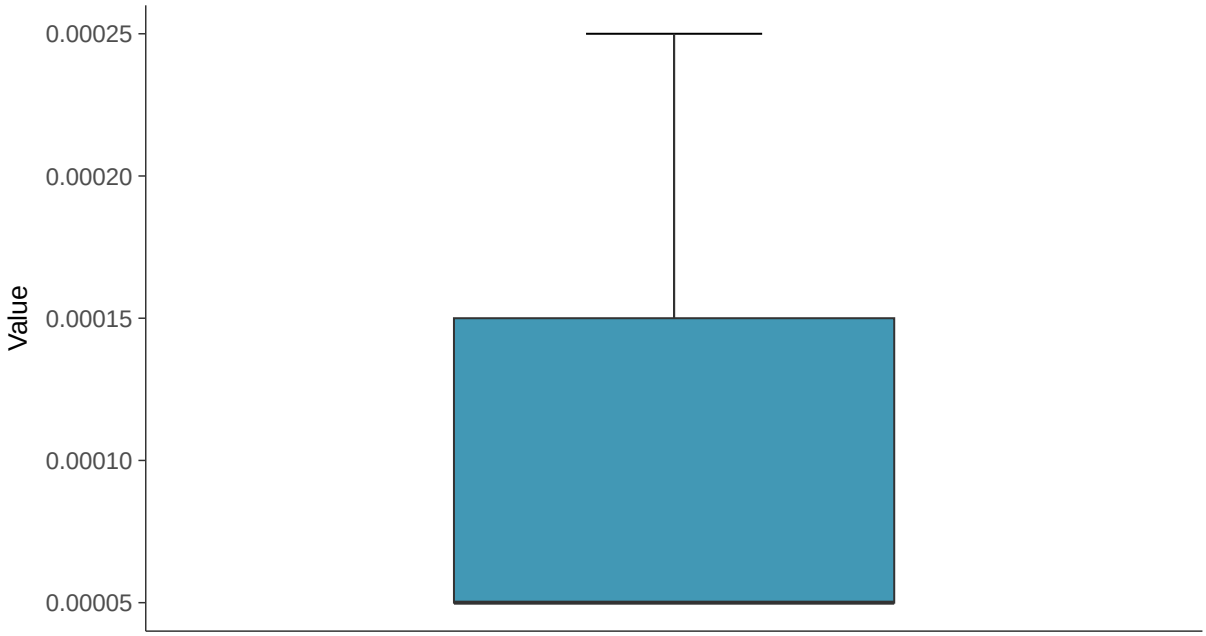
ID: 2_19_6_123





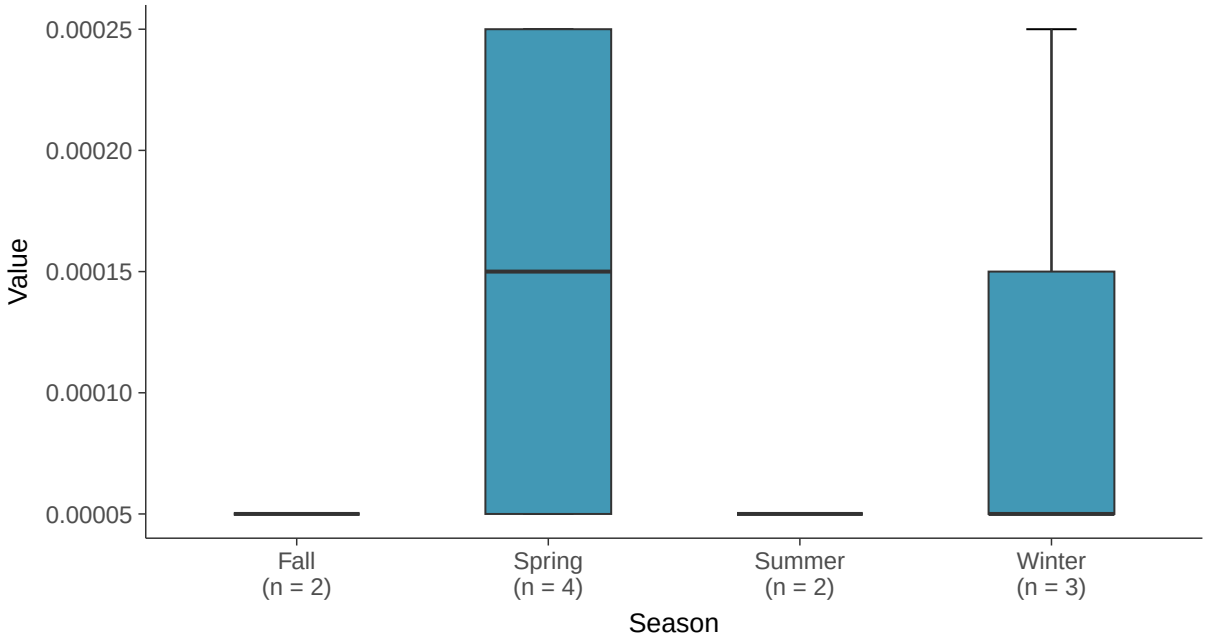
Boxplot

Silver, MW-09 (mg/L)



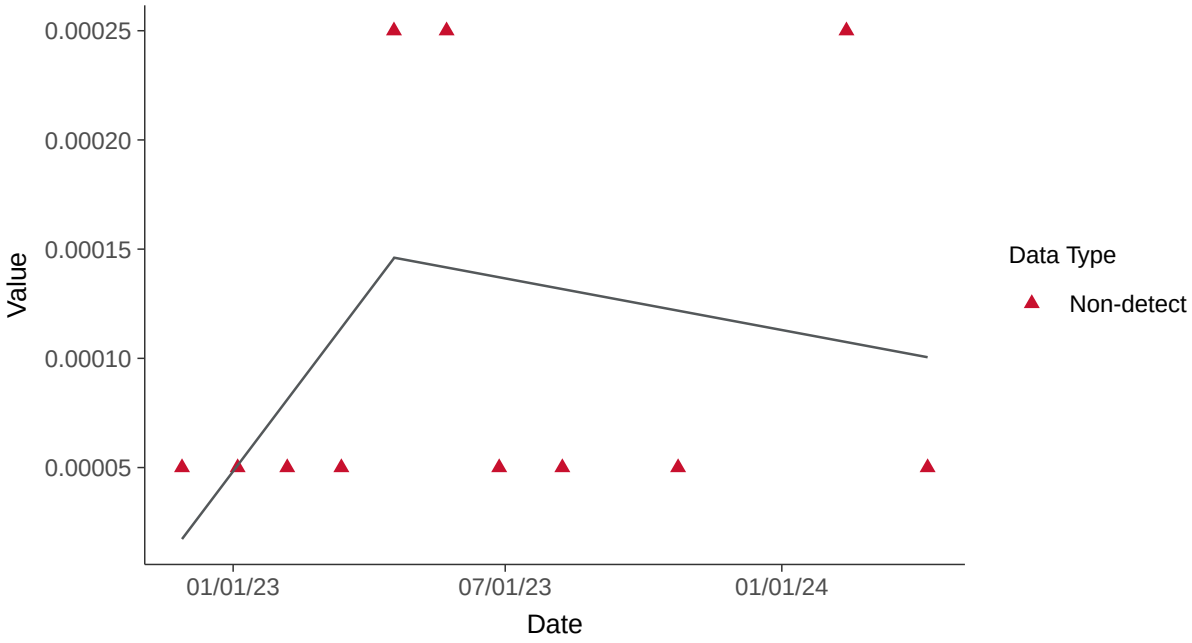
Boxplot by Season

Silver, MW-09 (mg/L)



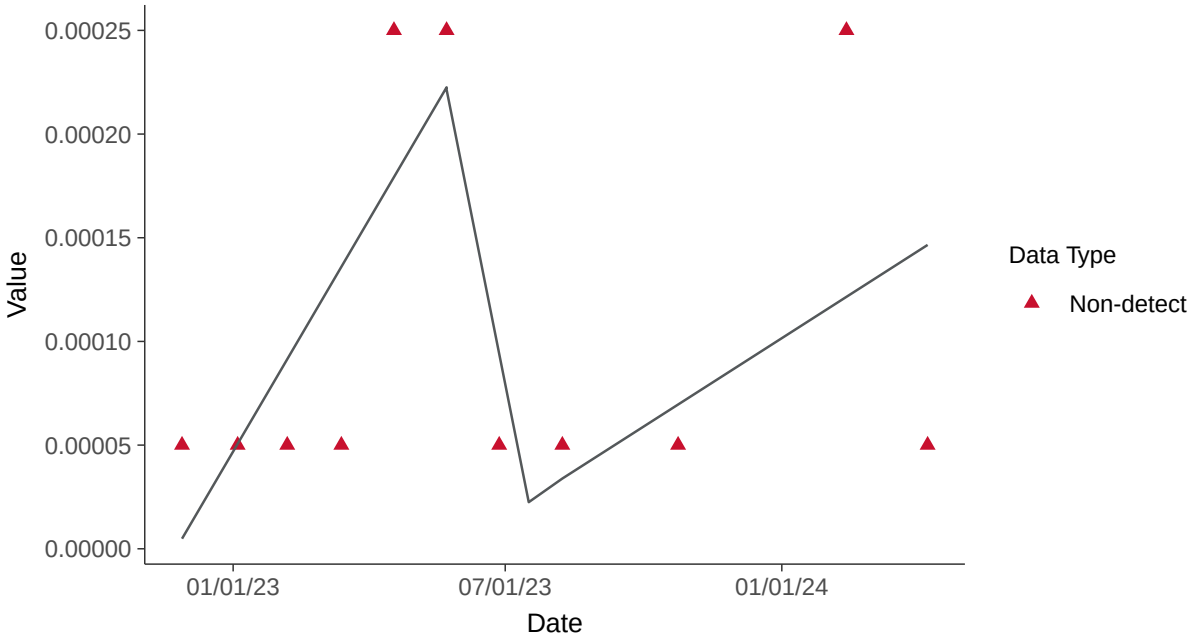
Trend Regression: Piecewise Linear-Linear

Silver, MW-09 (mg/L)



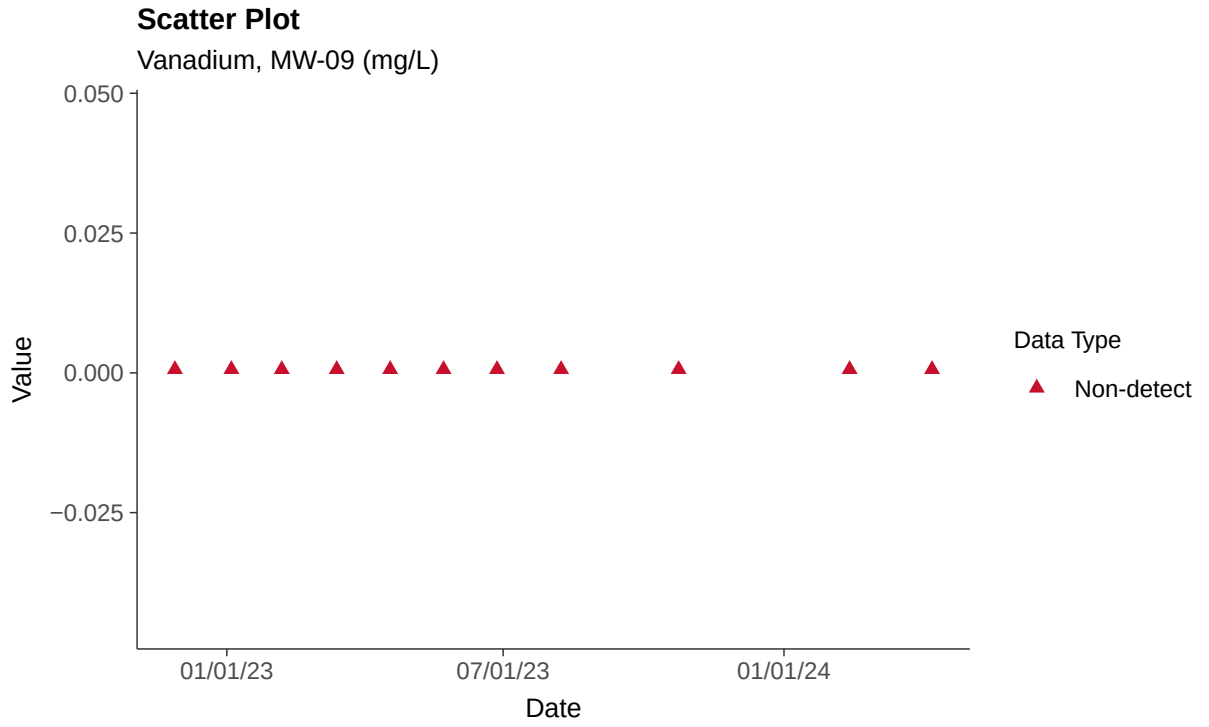
Trend Regression: Piecewise Linear-Linear-Linear

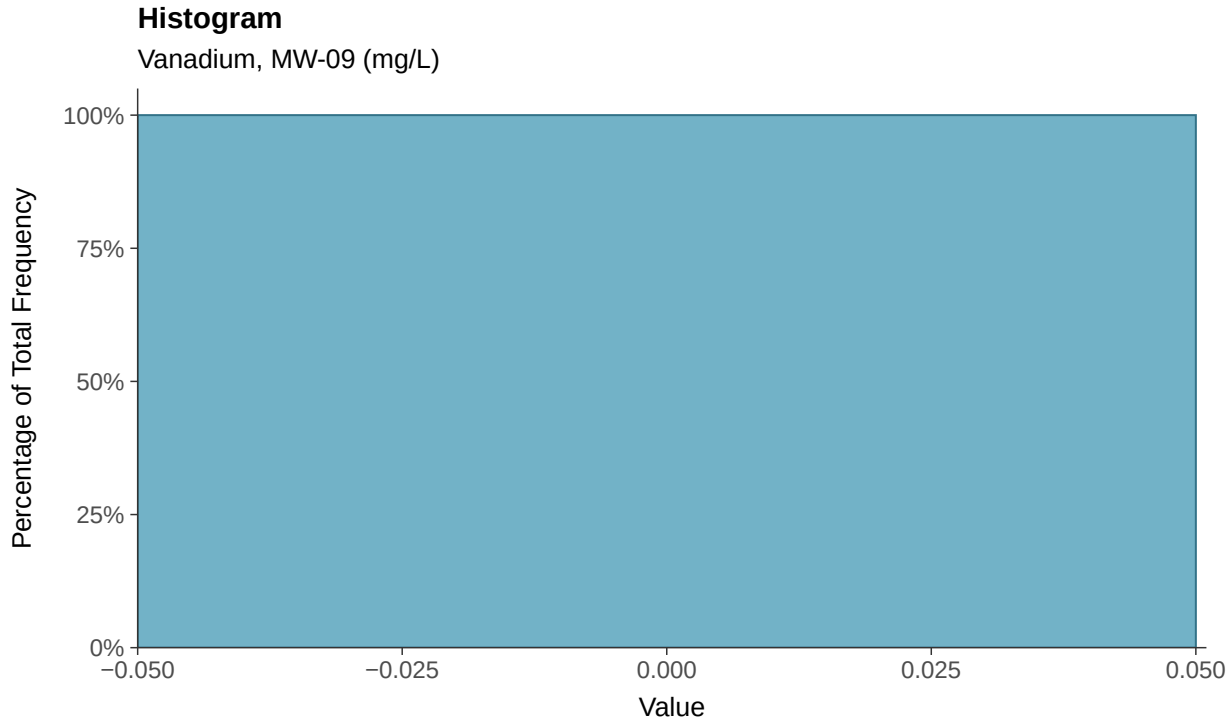
Silver, MW-09 (mg/L)



Part 115: Vanadium, MW-09

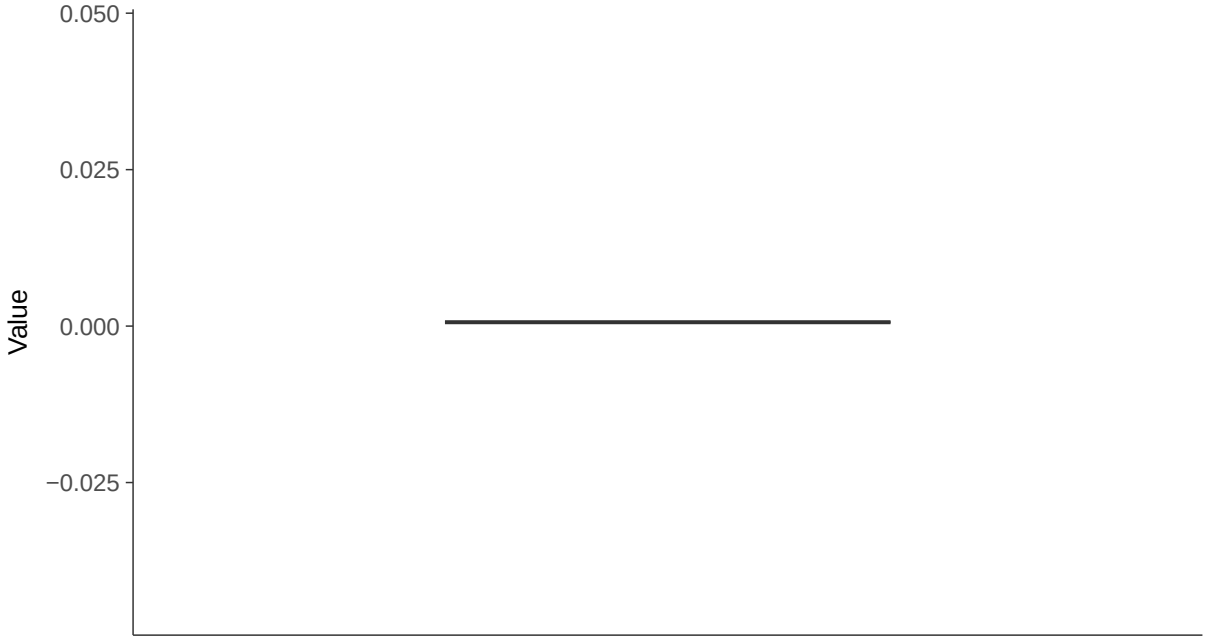
ID: 2_19_6_129





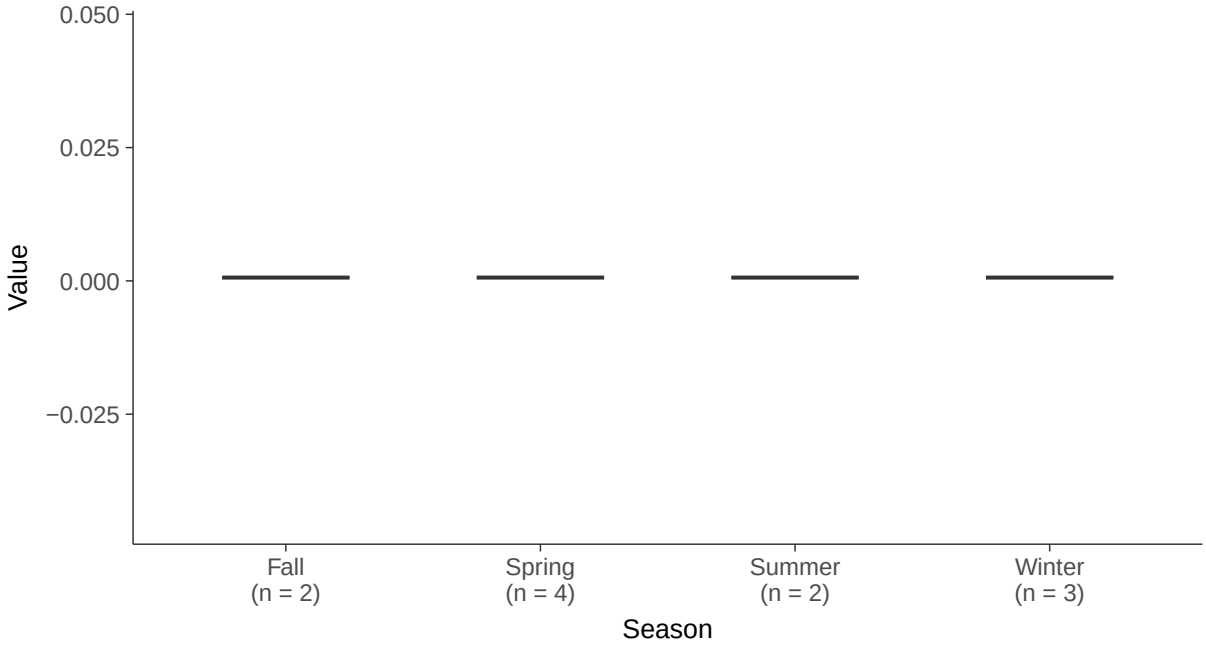
Boxplot

Vanadium, MW-09 (mg/L)



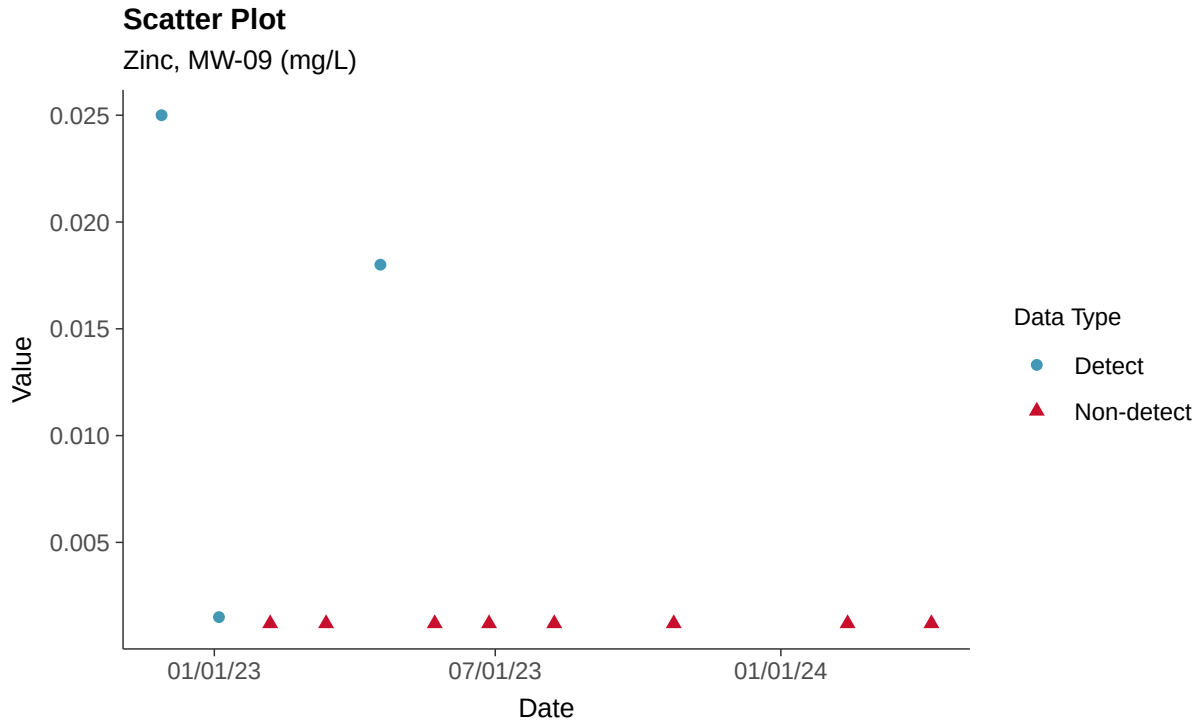
Boxplot by Season

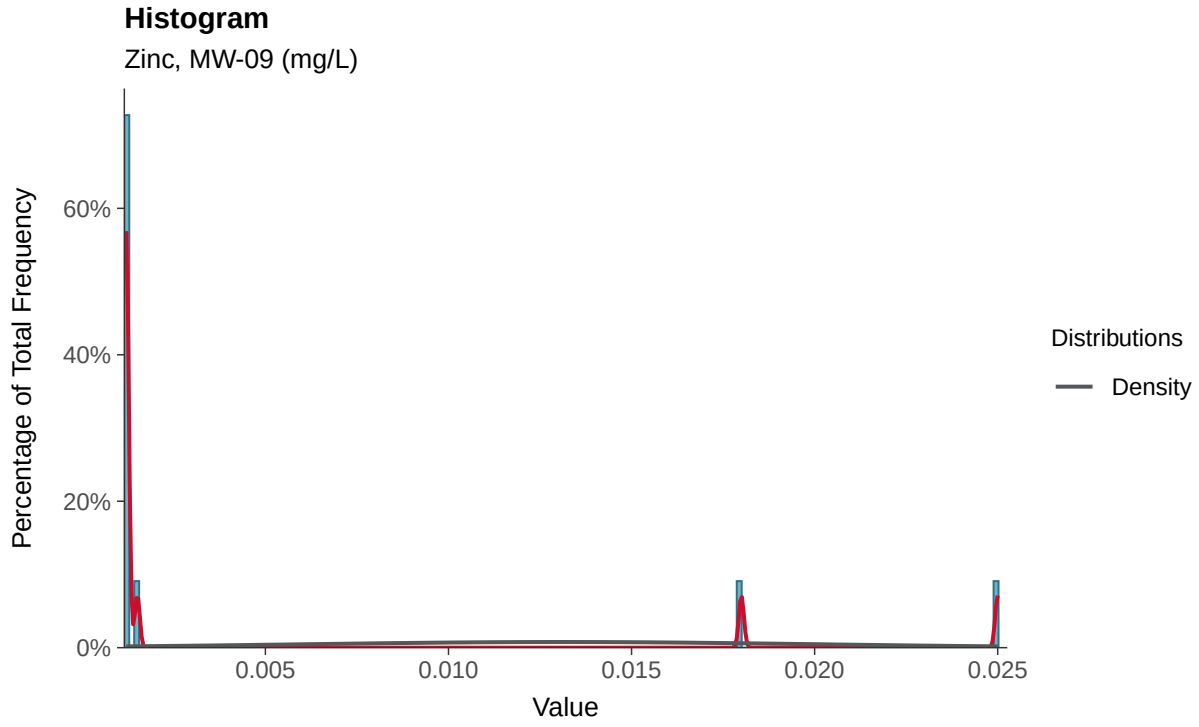
Vanadium, MW-09 (mg/L)



Part 115: Zinc, MW-09

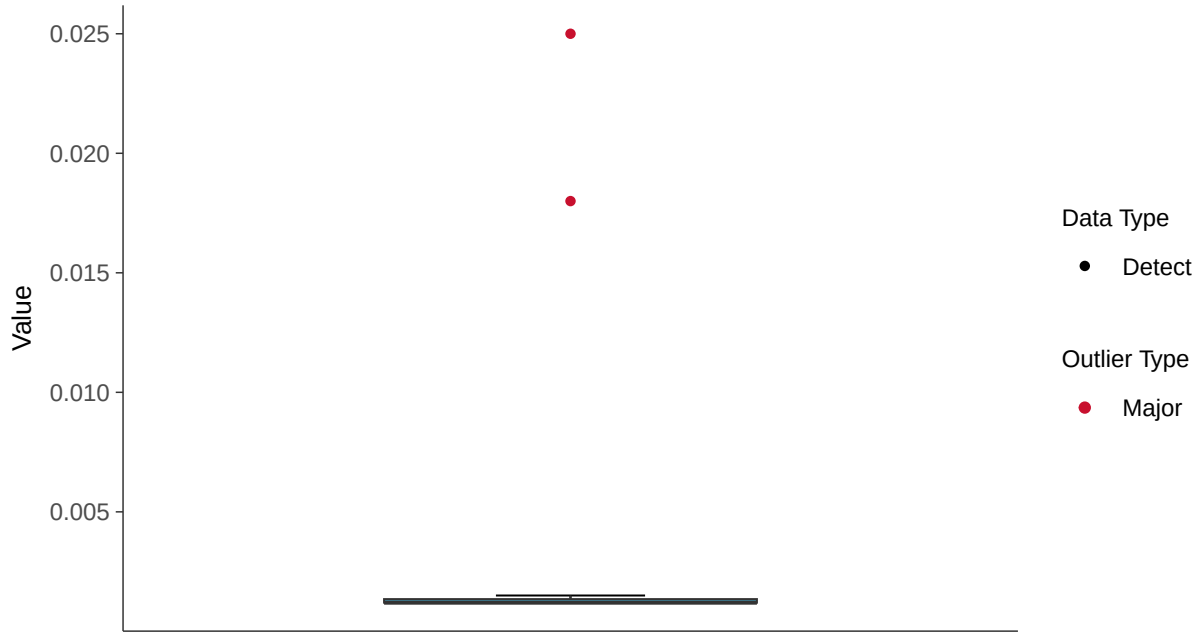
ID: 2_19_6_130





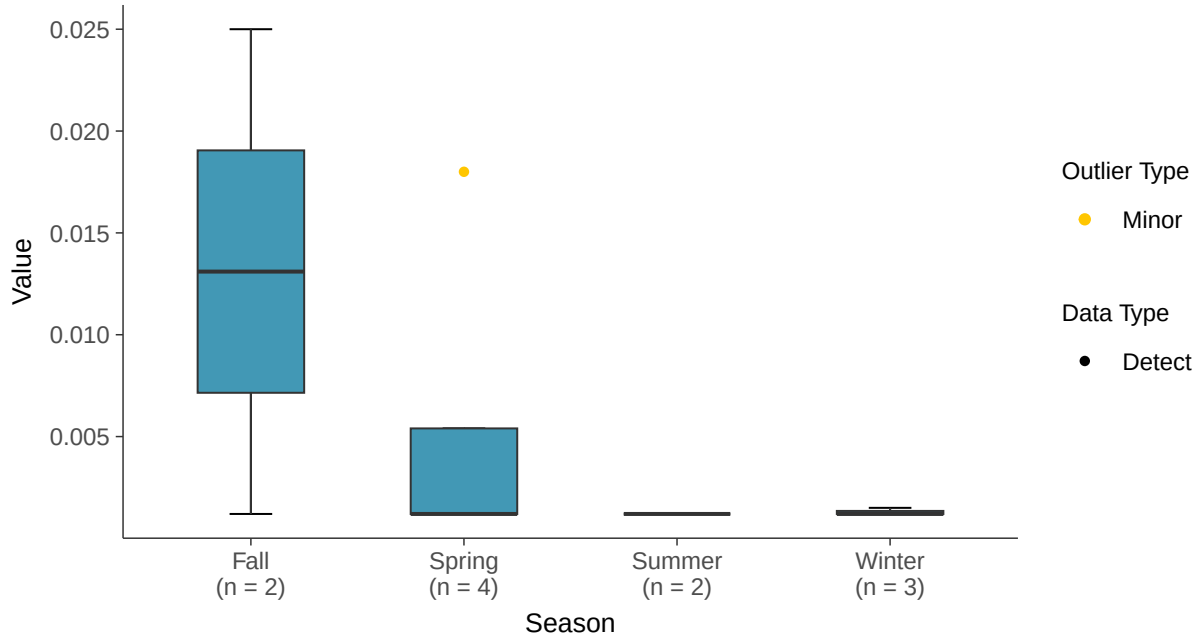
Boxplot

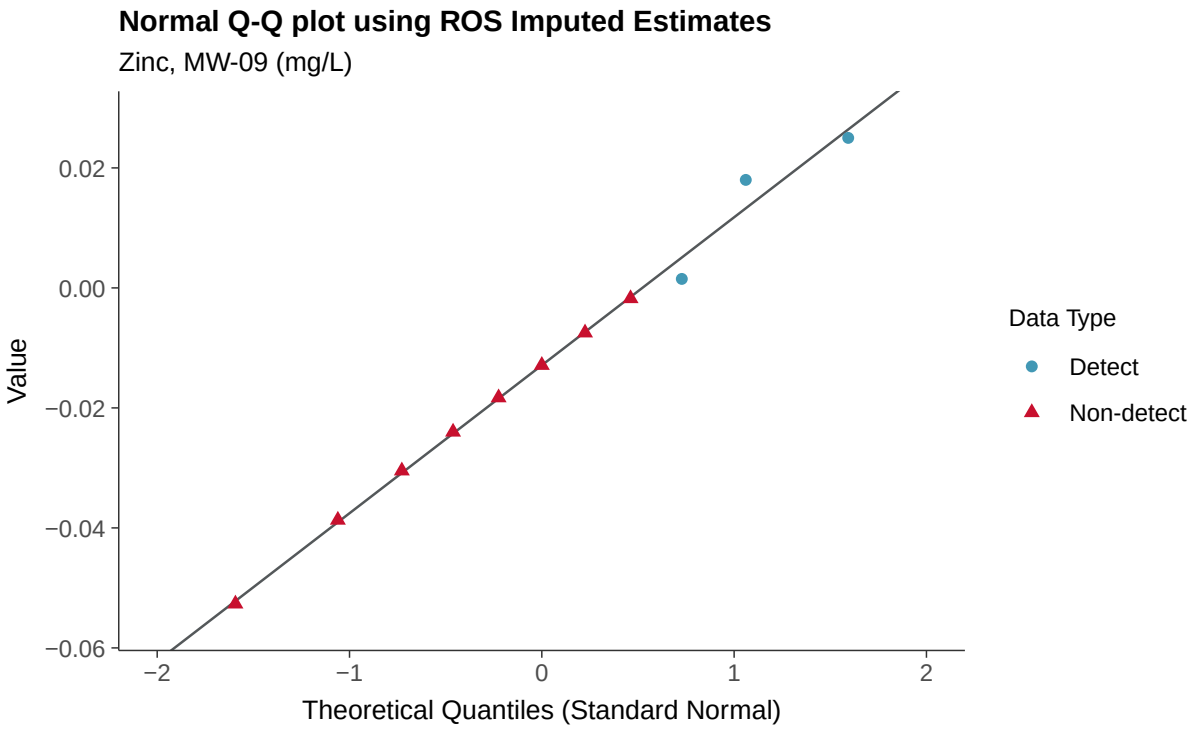
Zinc, MW-09 (mg/L)



Boxplot by Season

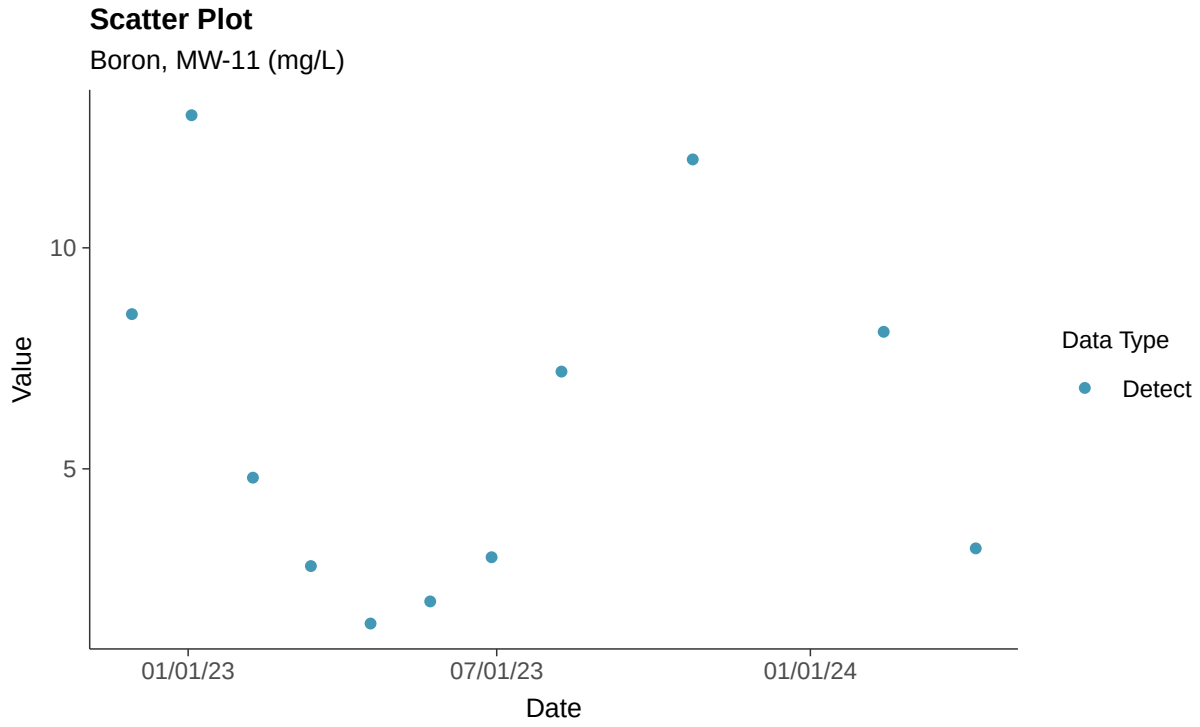
Zinc, MW-09 (mg/L)

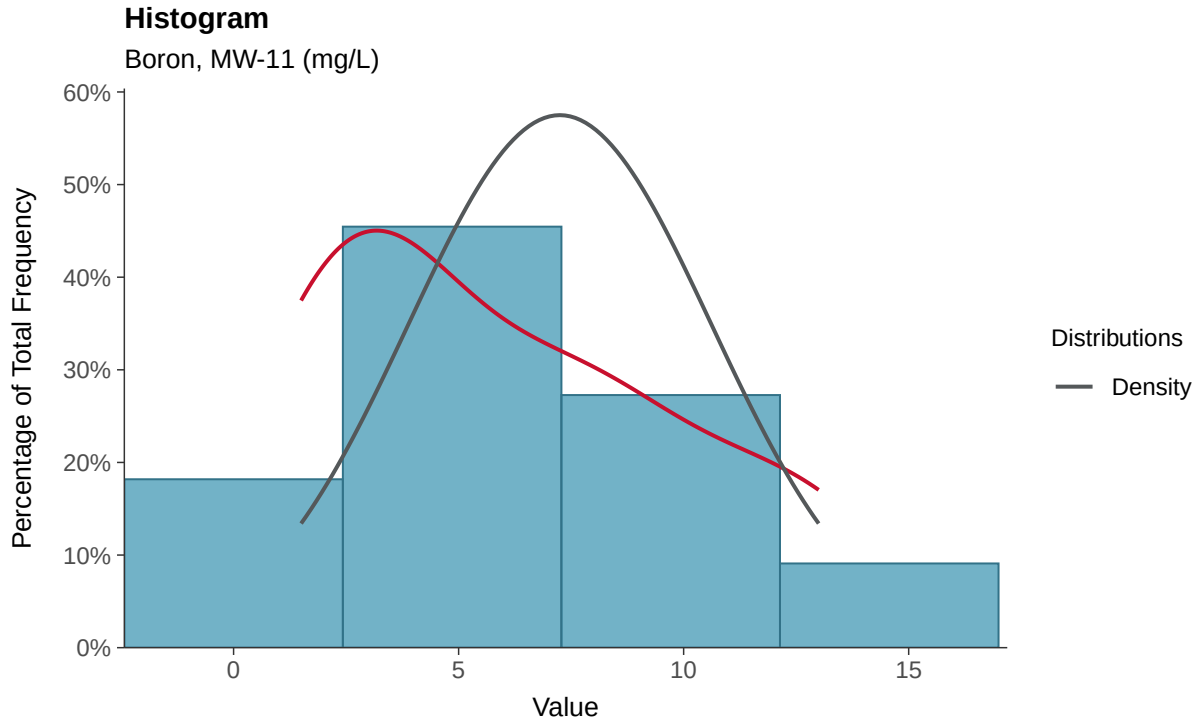



Normal Q-Q plot using ROS Imputed Estimates
Zinc, MW-09 (mg/L)
Value
0.02
0.00
−0.02
−0.04
−0.06
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect
Non-detect

Appendix III: Boron, MW-11

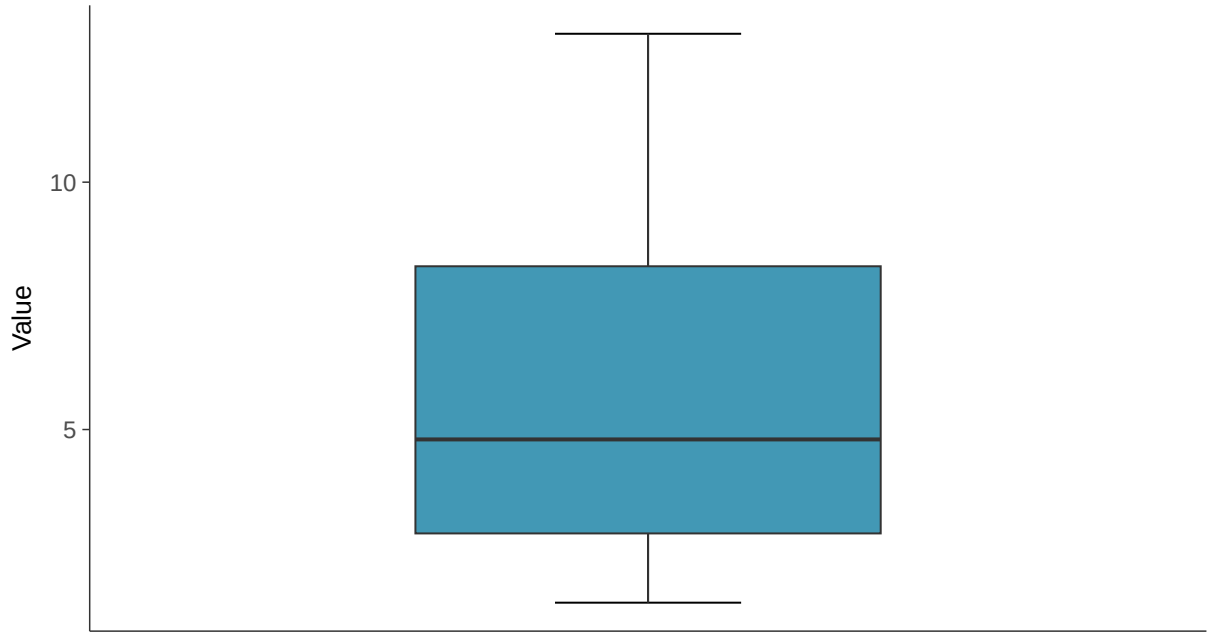
ID: 2_21_4_105





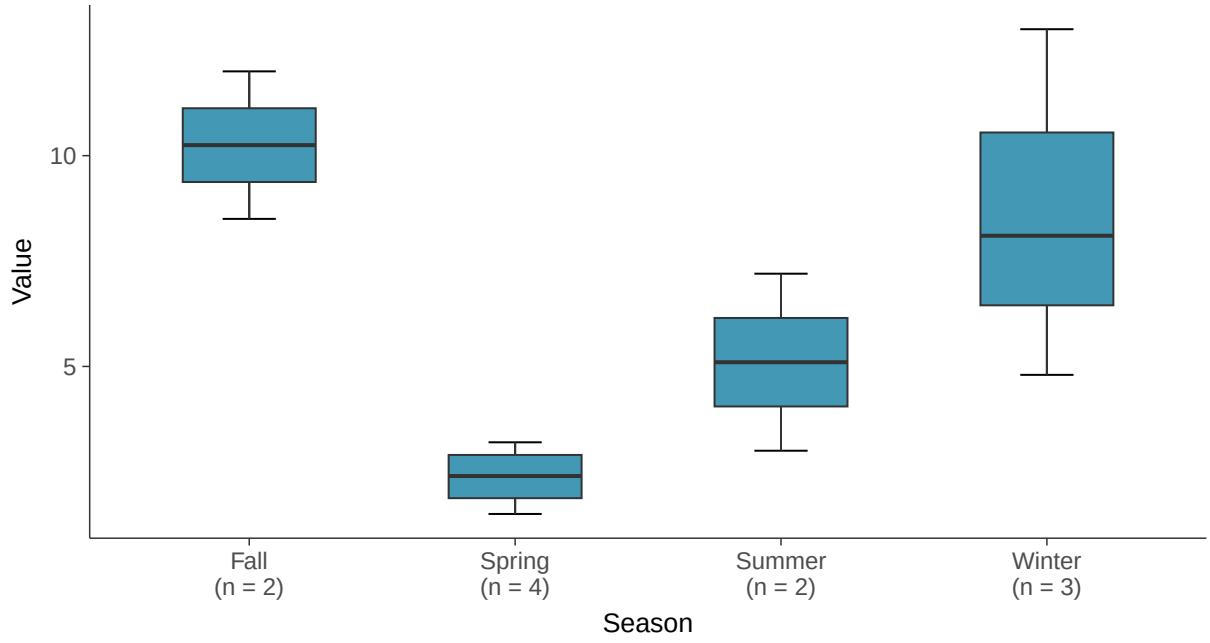
Boxplot

Boron, MW-11 (mg/L)



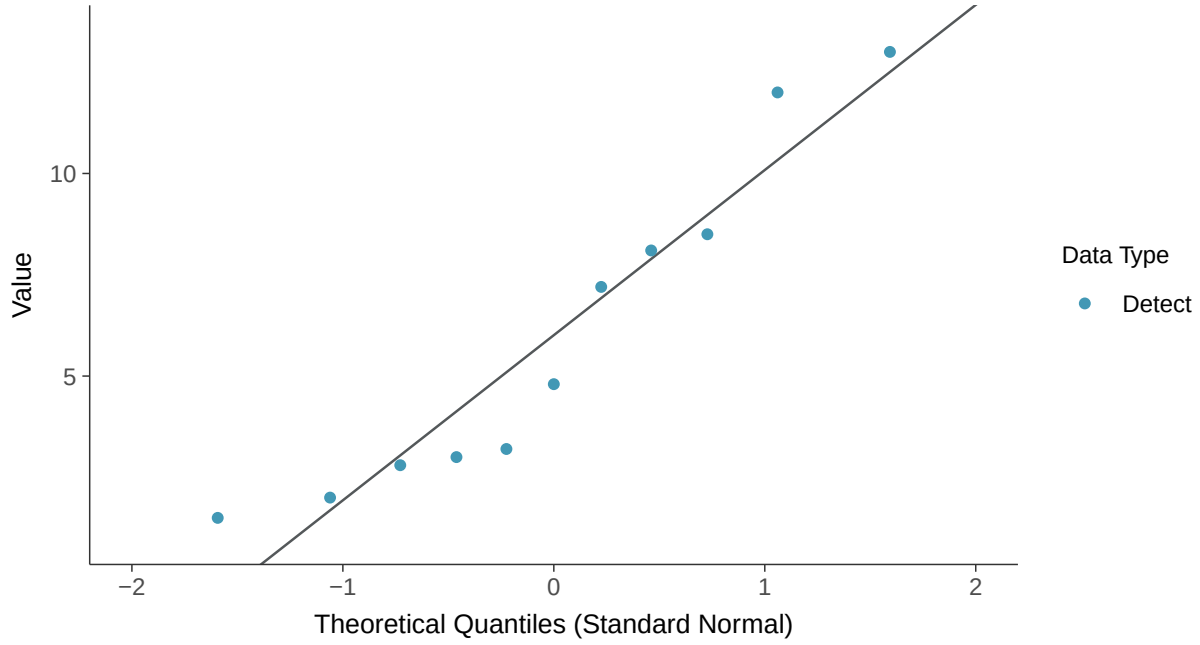
Boxplot by Season

Boron, MW-11 (mg/L)



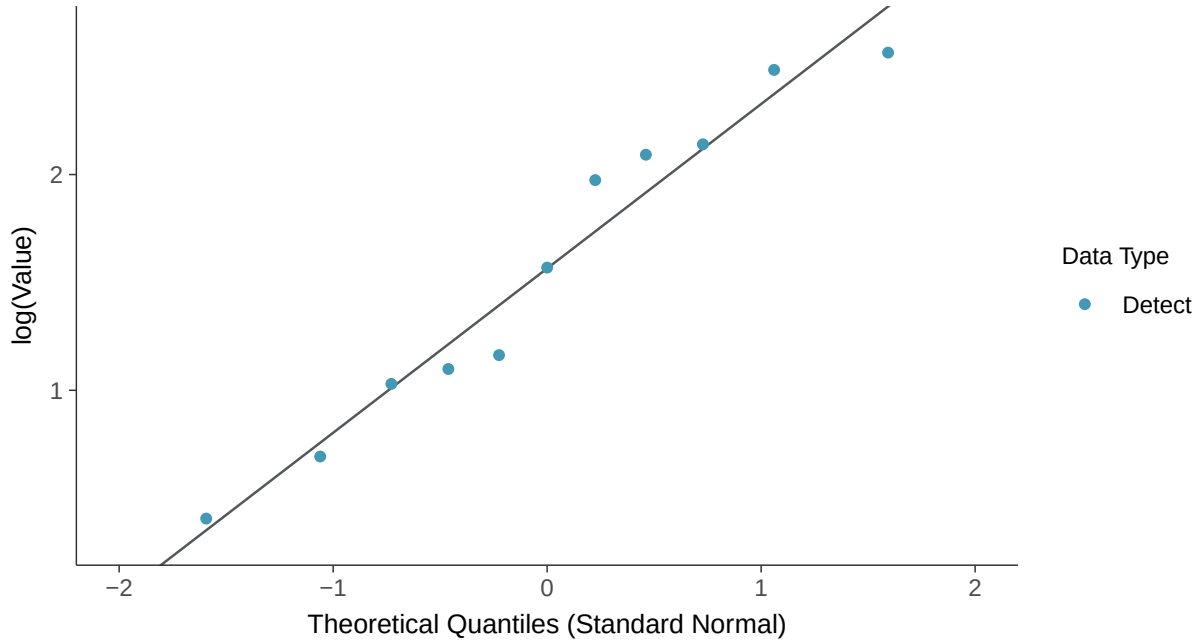
Normal Q-Q plot

Boron, MW-11 (mg/L)



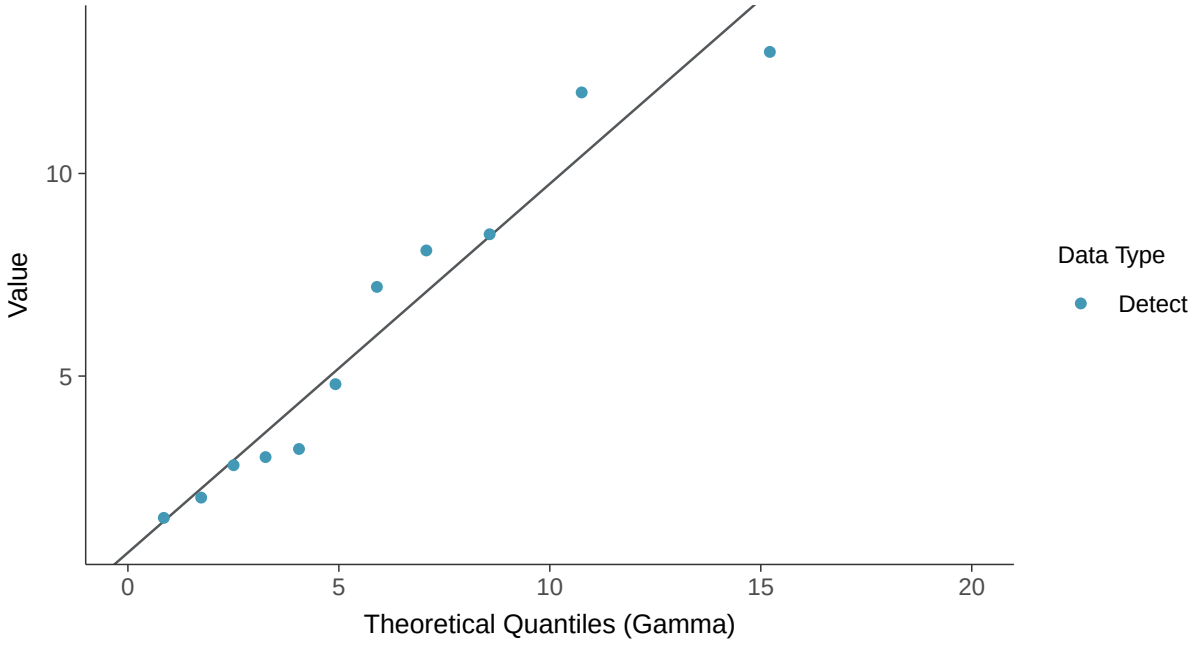
Lognormal Q-Q plot

Boron, MW-11 (mg/L)



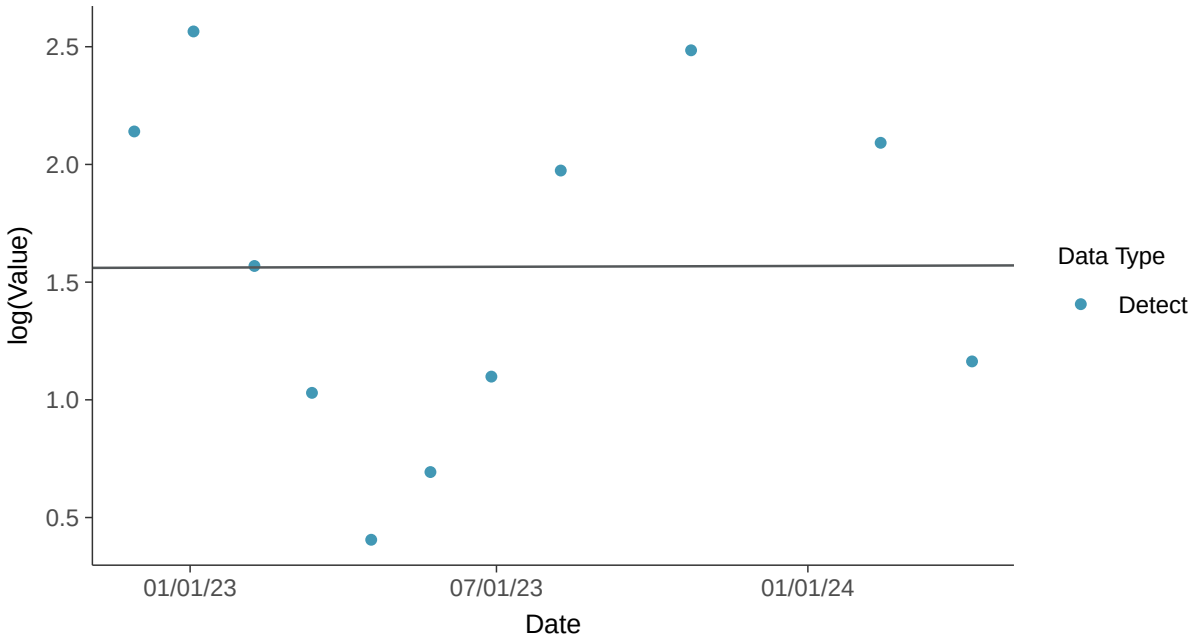
Gamma Q-Q plot

Boron, MW-11 (mg/L)



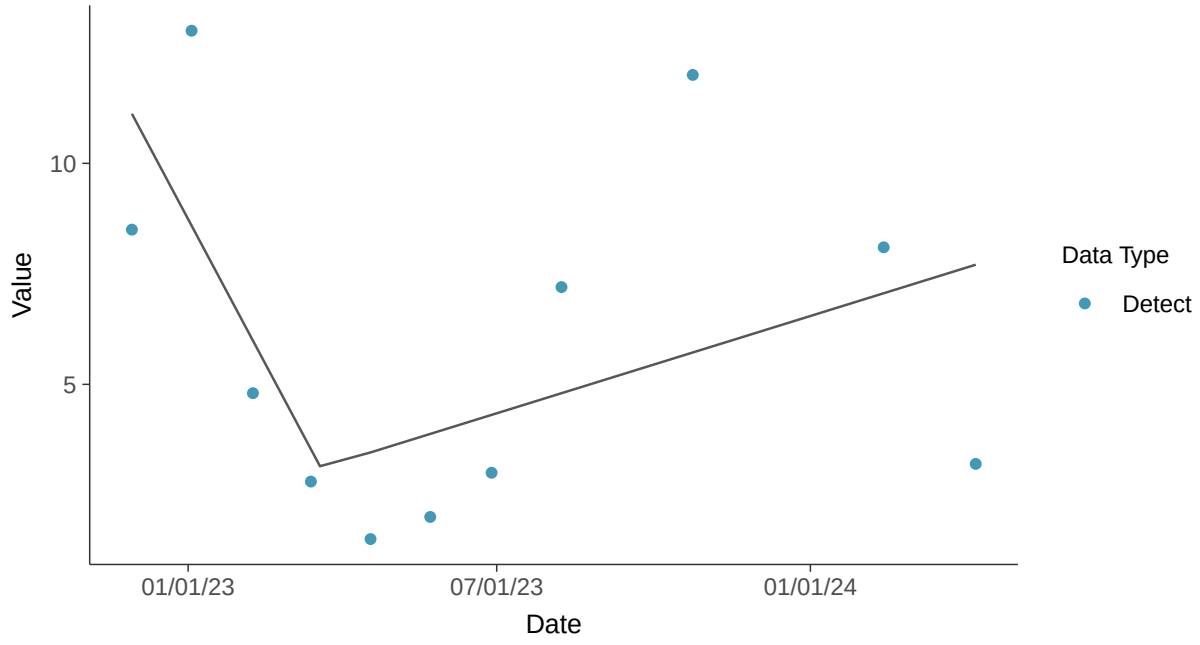
Trend Regression: Lognormal MLE

Boron, MW-11 (mg/L)



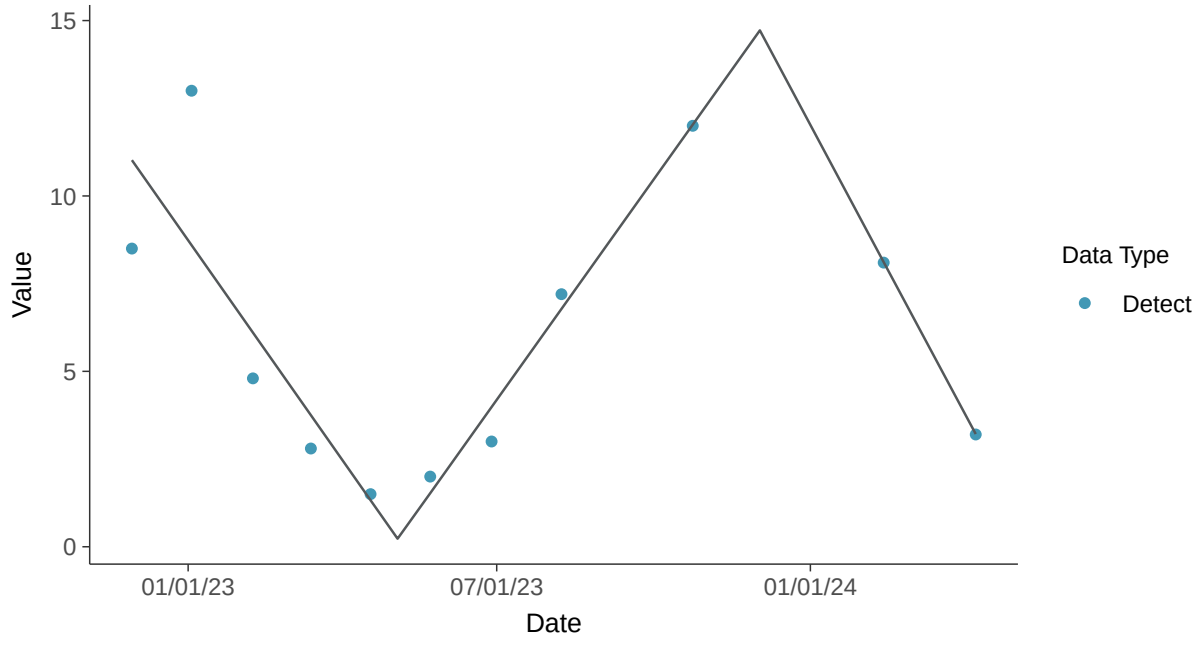
Trend Regression: Piecewise Linear-Linear

Boron, MW-11 (mg/L)



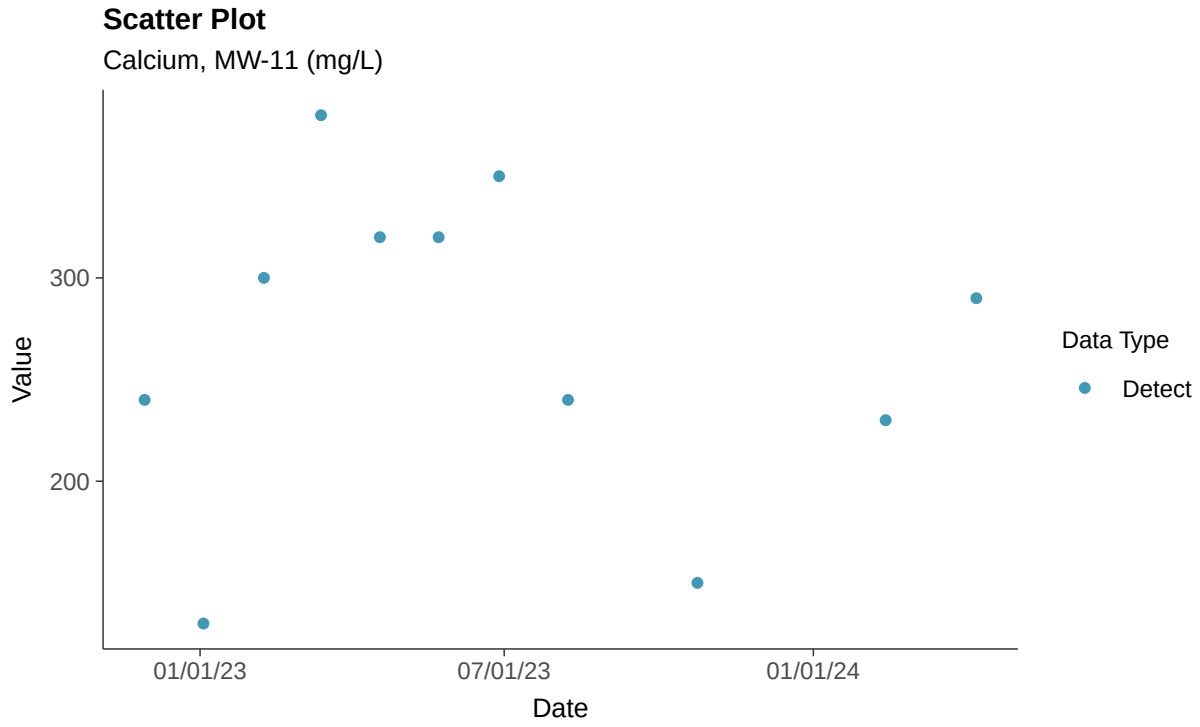
Trend Regression: Piecewise Linear-Linear-Linear

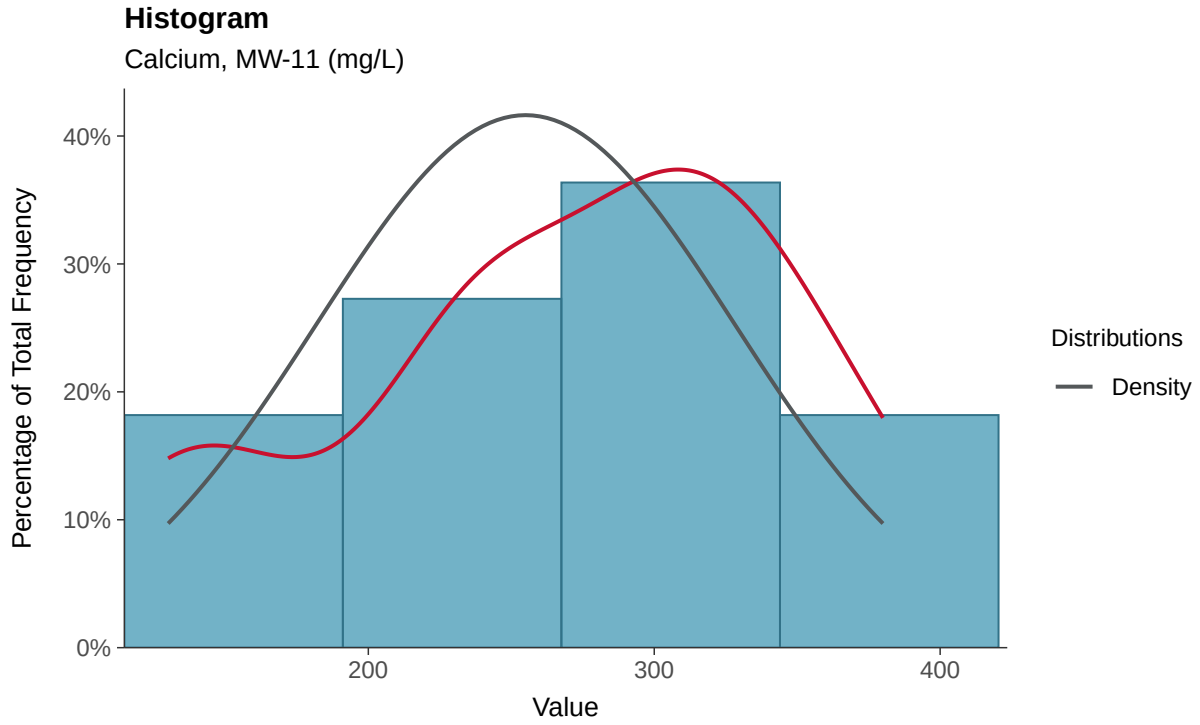
Boron, MW-11 (mg/L)



Appendix III: Calcium, MW-11

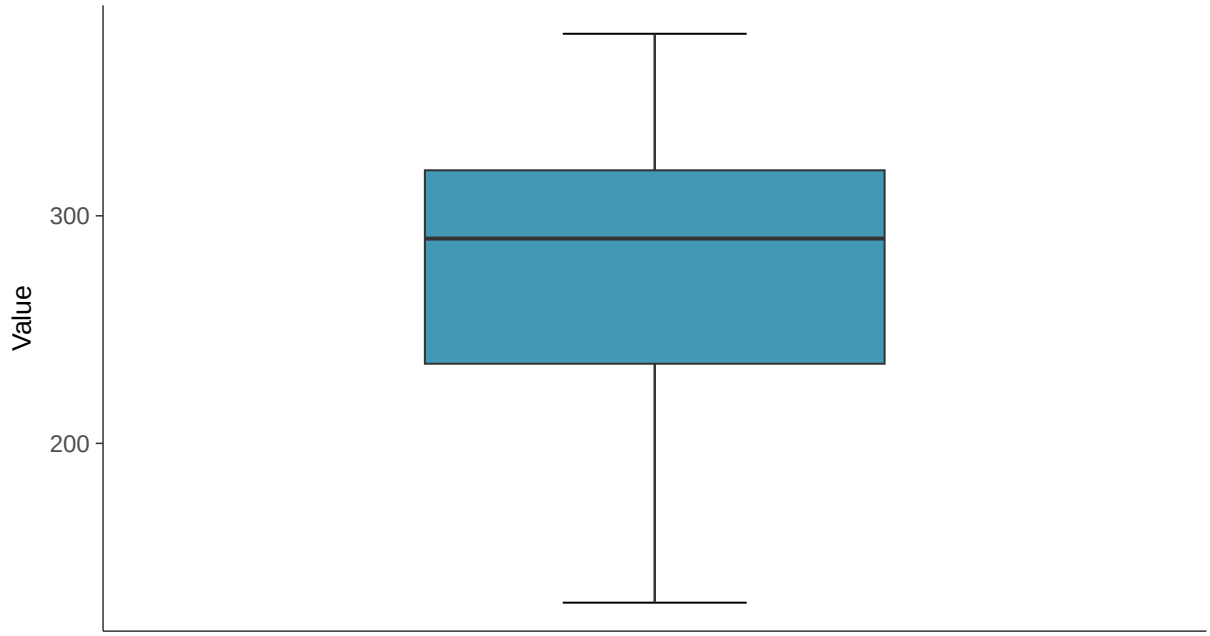
ID: 2_21_4_107





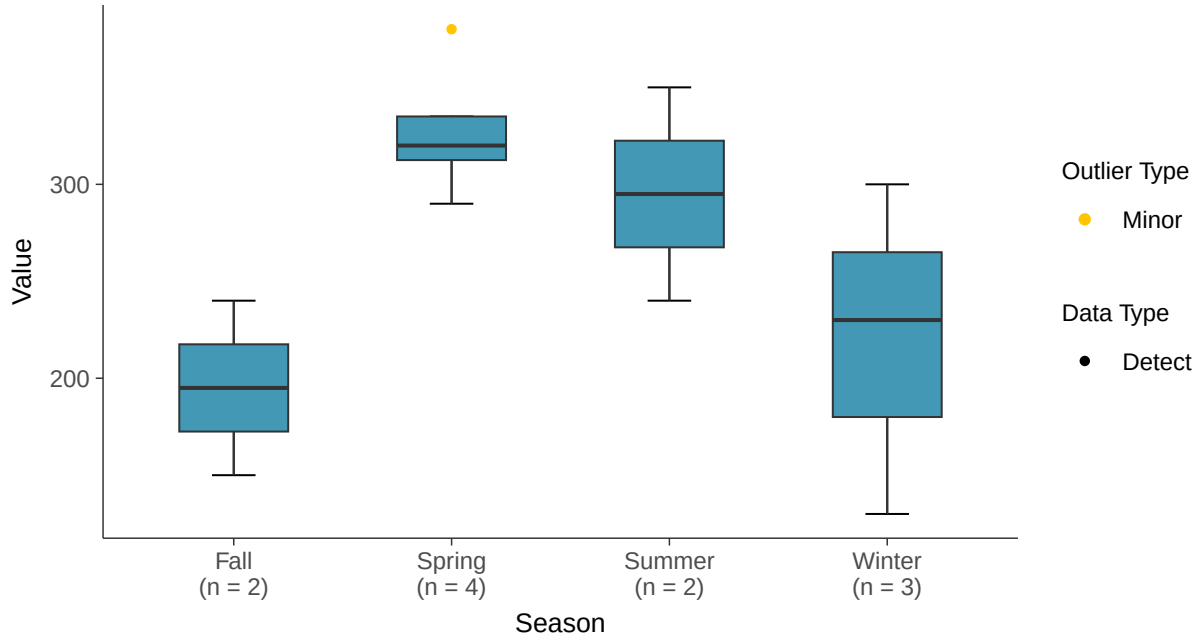
Boxplot

Calcium, MW-11 (mg/L)



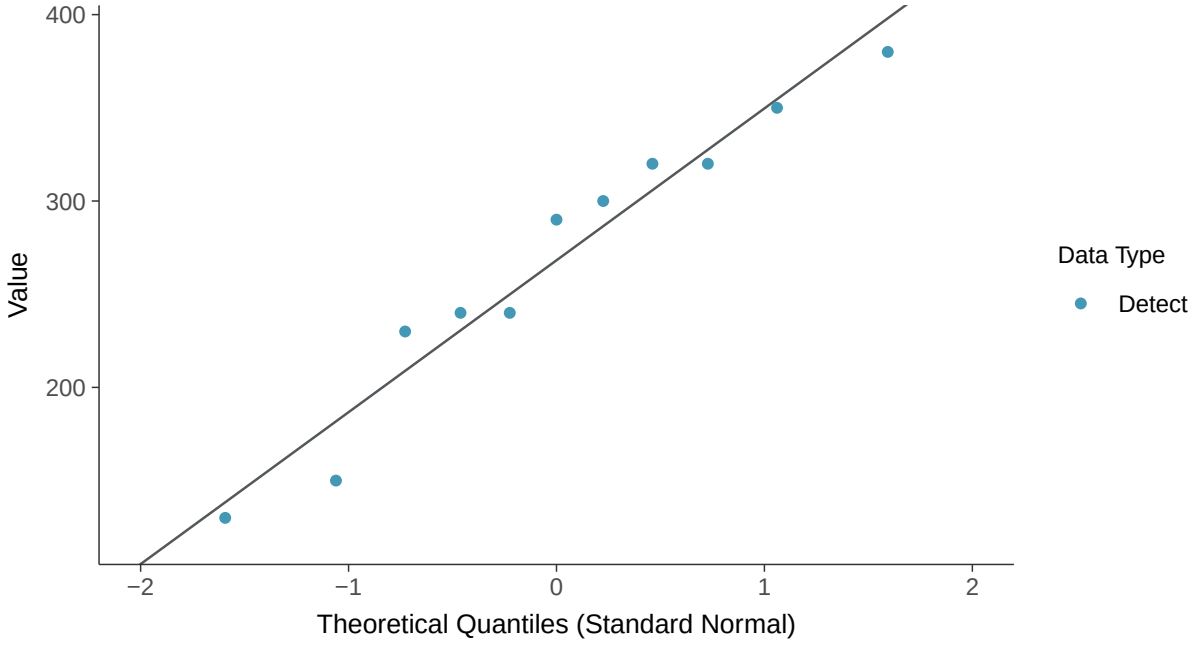
Boxplot by Season

Calcium, MW-11 (mg/L)



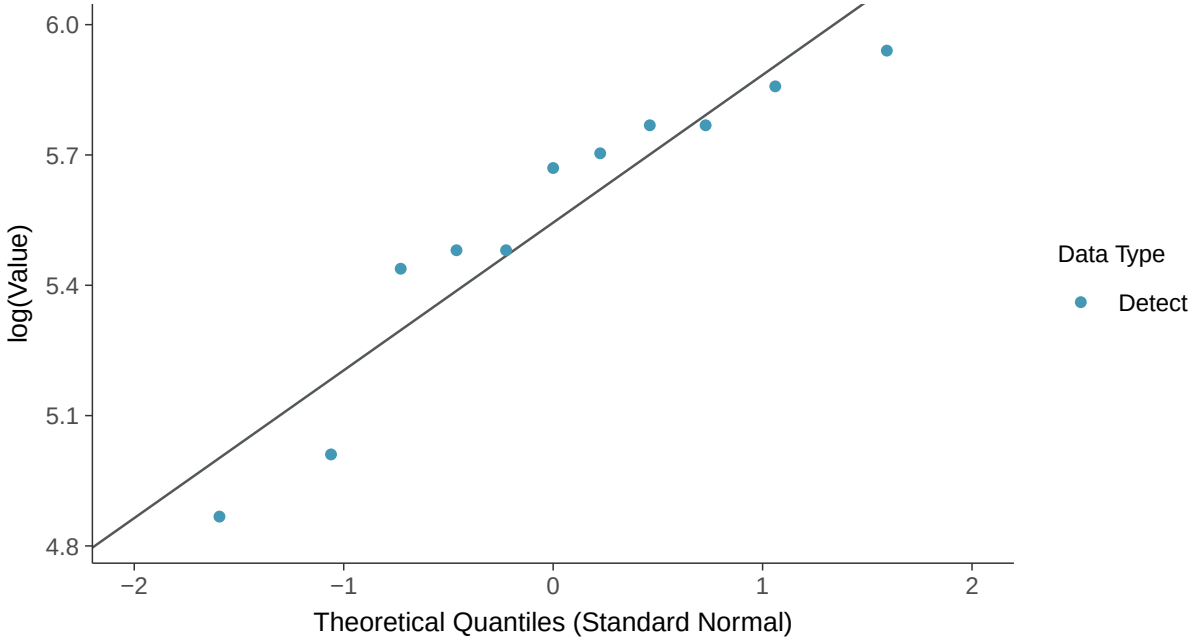
Normal Q-Q plot

Calcium, MW-11 (mg/L)



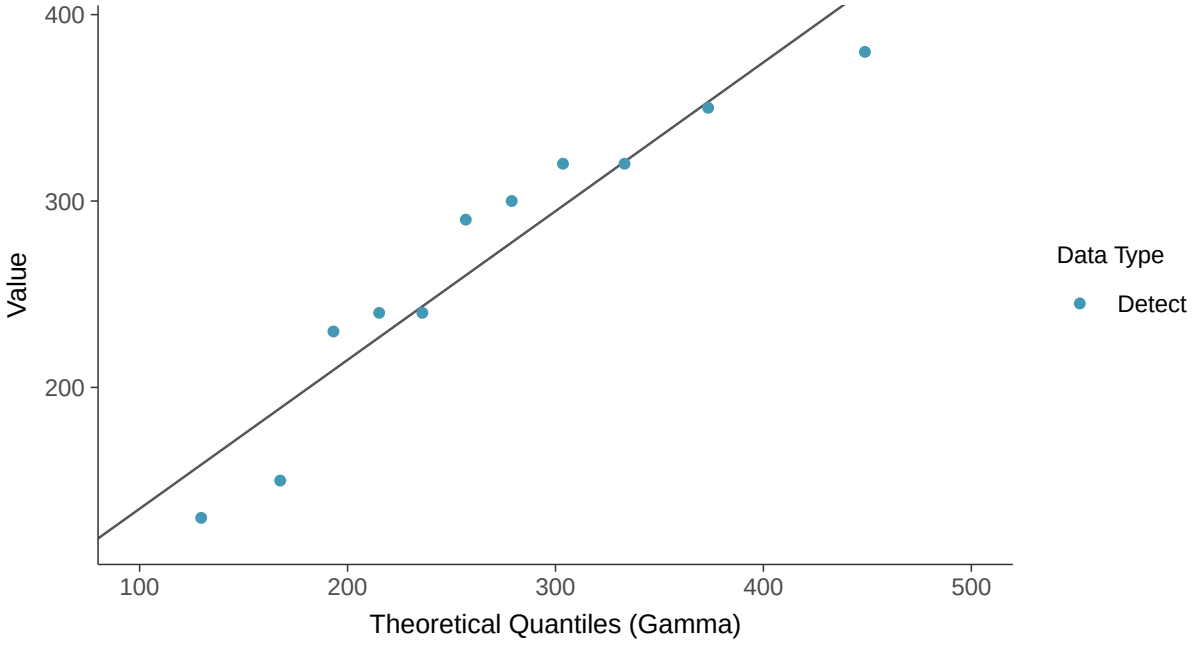
Lognormal Q-Q plot

Calcium, MW-11 (mg/L)



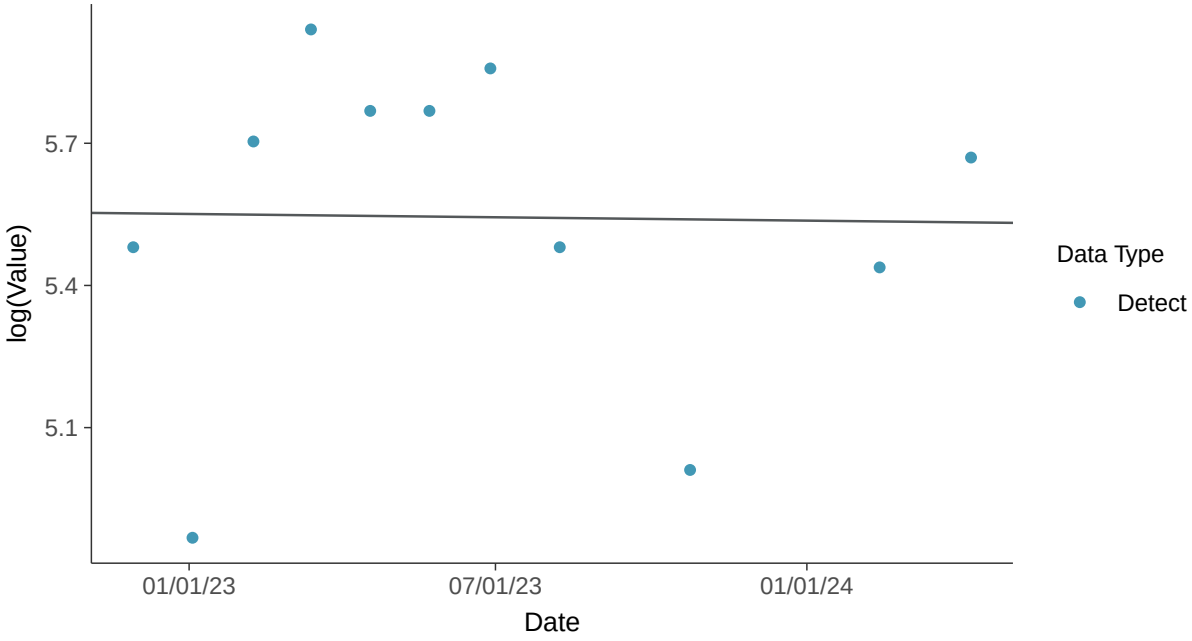
Gamma Q-Q plot

Calcium, MW-11 (mg/L)



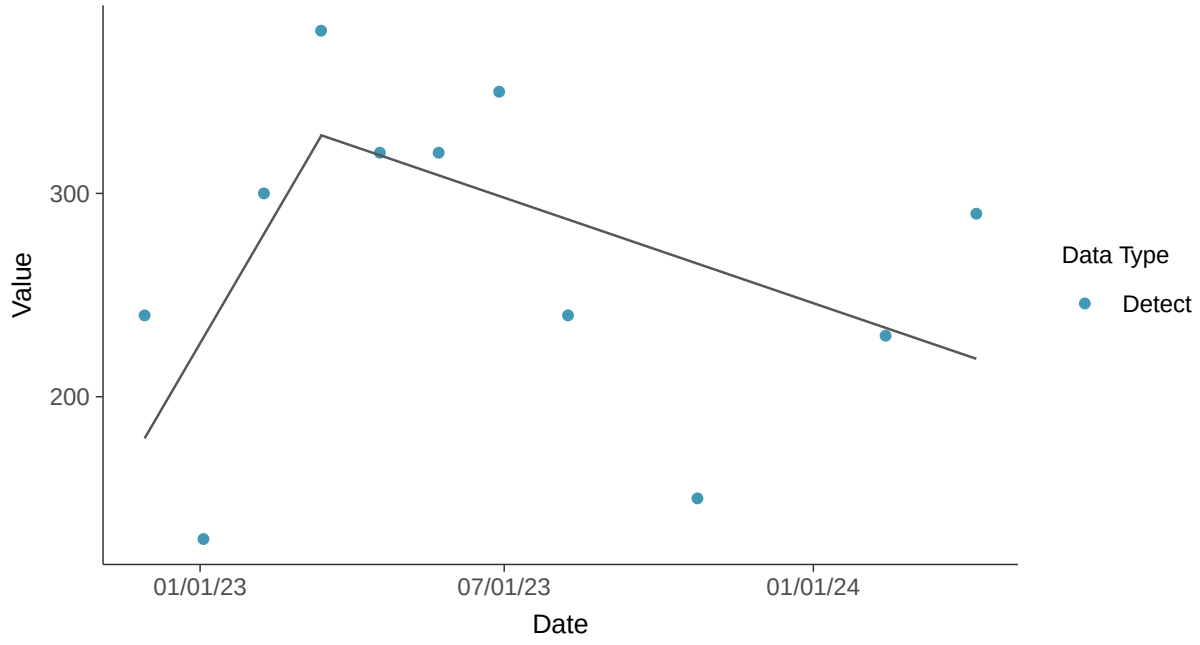
Trend Regression: Lognormal MLE

Calcium, MW-11 (mg/L)



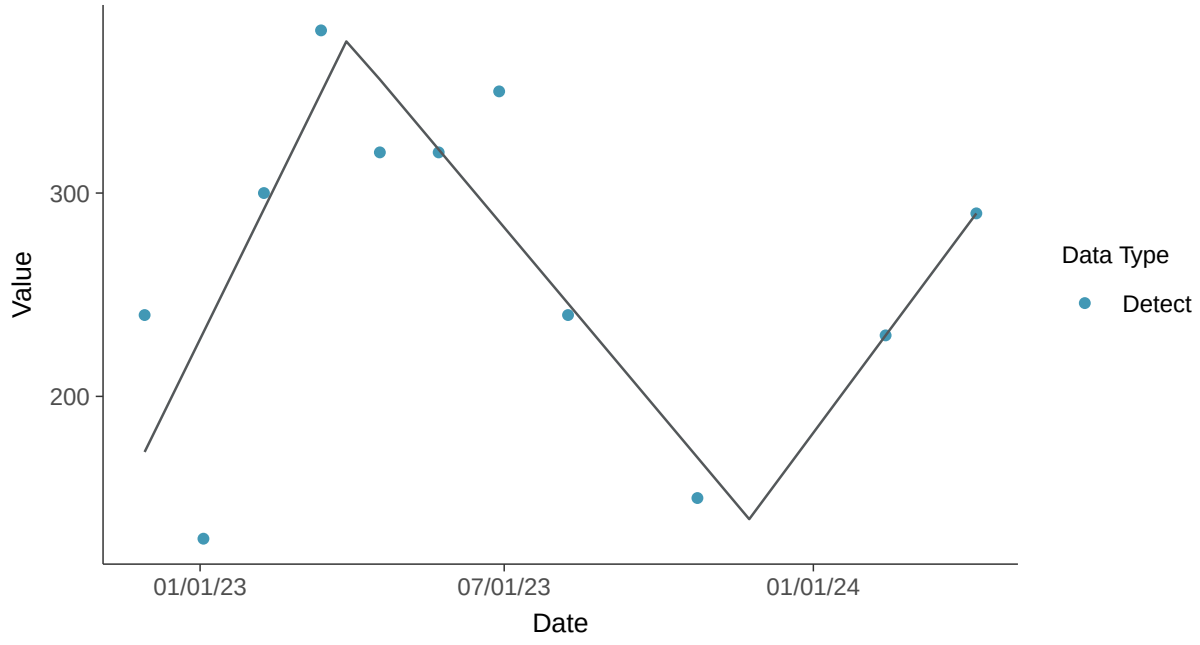
Trend Regression: Piecewise Linear-Linear

Calcium, MW-11 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Calcium, MW-11 (mg/L)

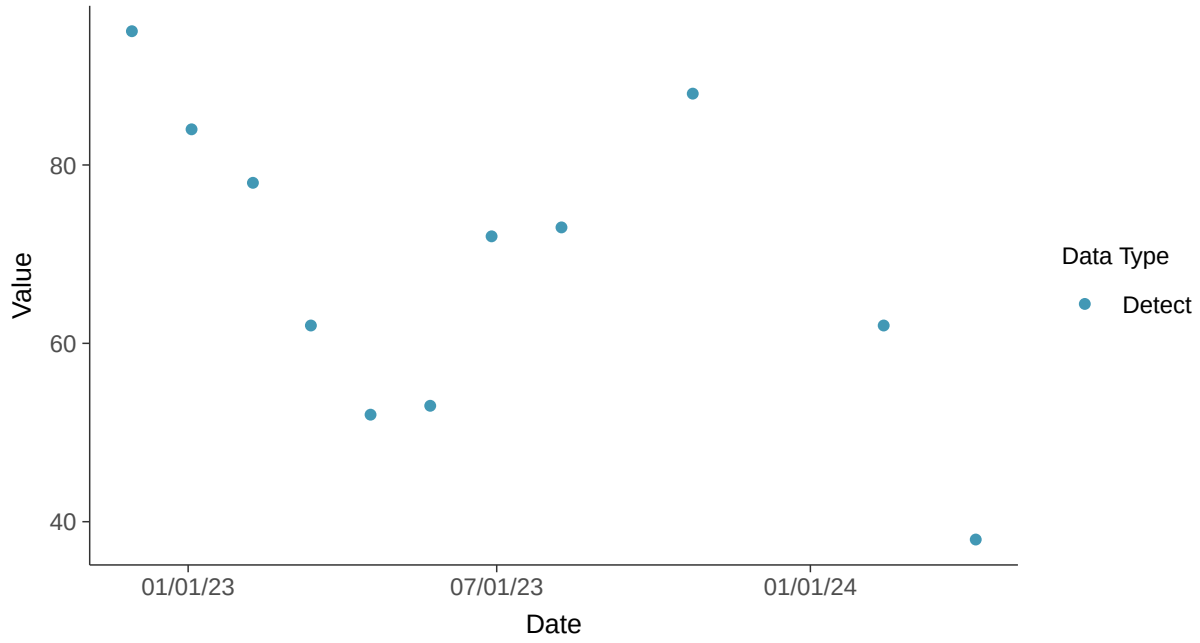


Appendix III: Chloride (as Cl), MW-11

ID: 2_21_4_108

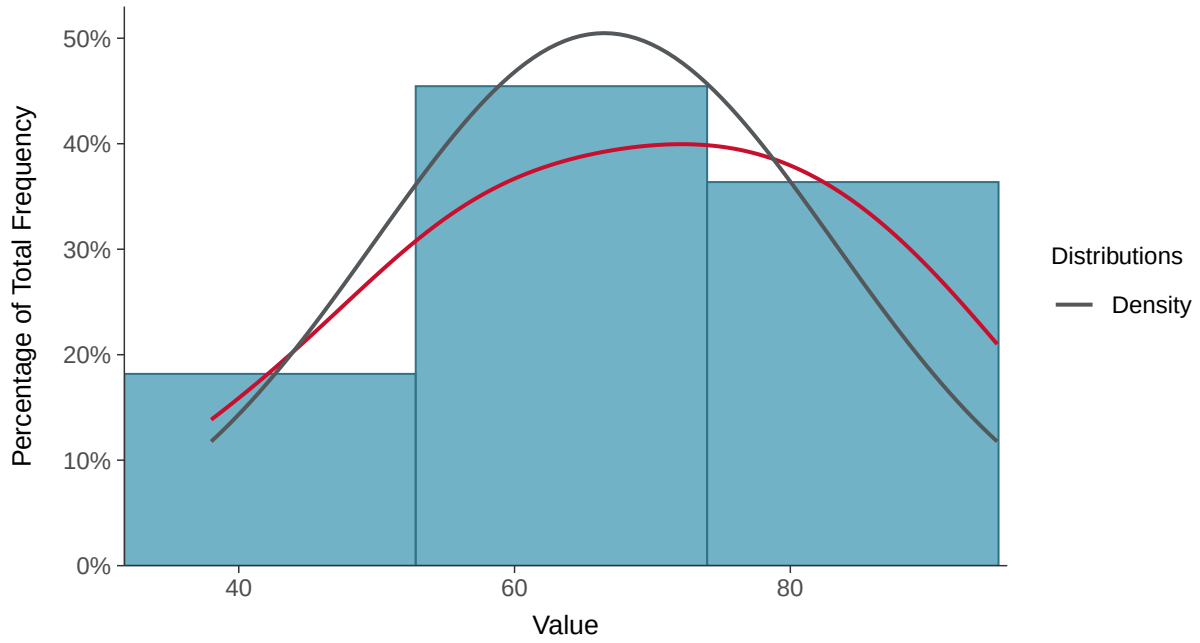
Scatter Plot

Chloride (as Cl), MW-11 (mg/L)



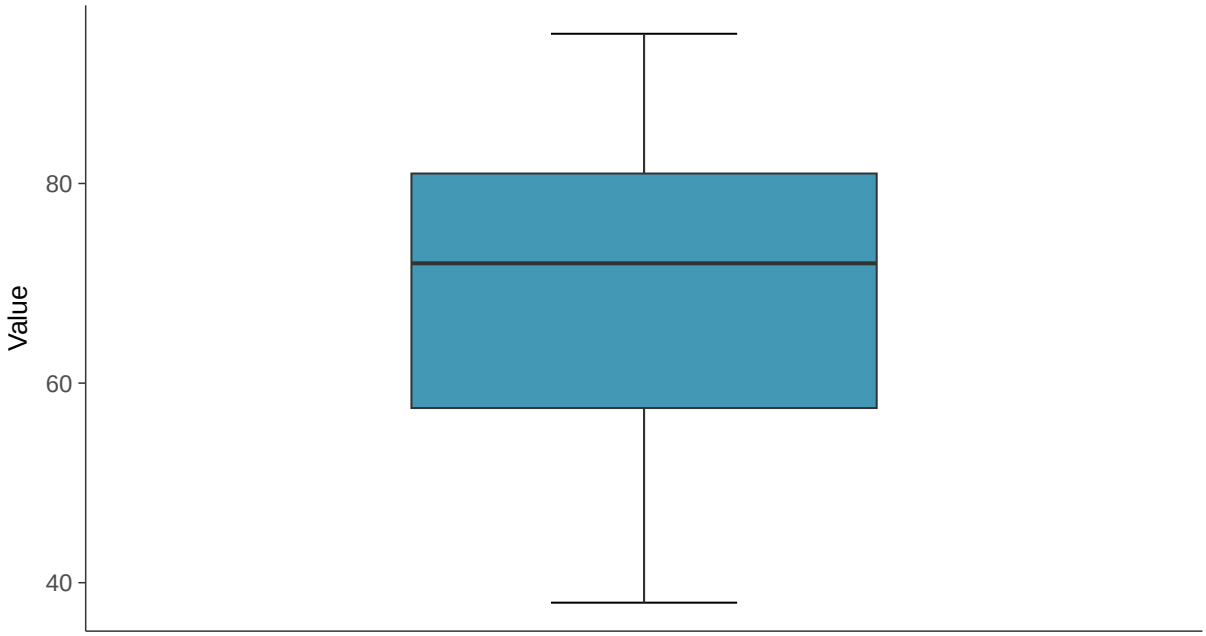
Histogram

Chloride (as Cl), MW-11 (mg/L)



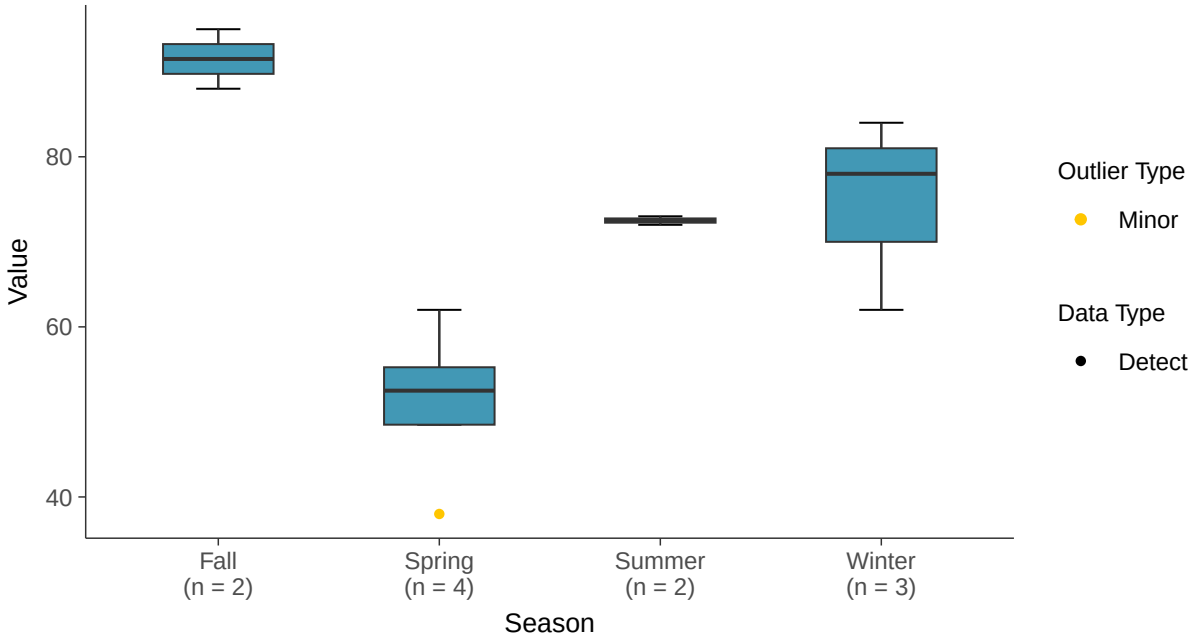
Boxplot

Chloride (as Cl), MW-11 (mg/L)



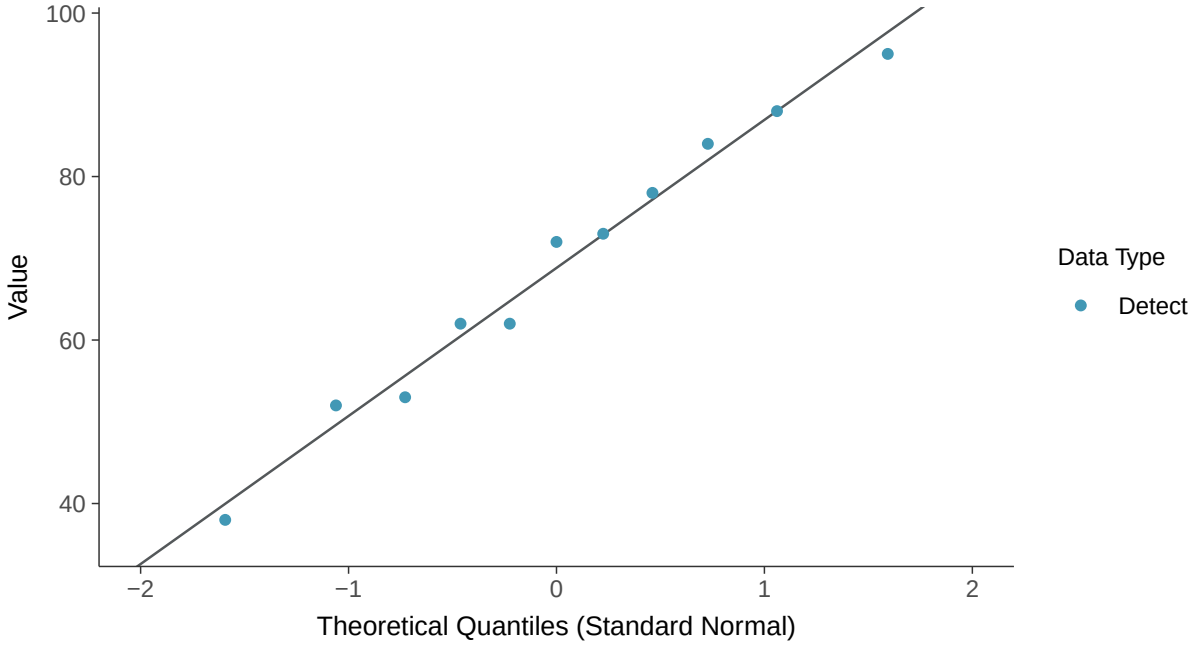
Boxplot by Season

Chloride (as Cl), MW-11 (mg/L)



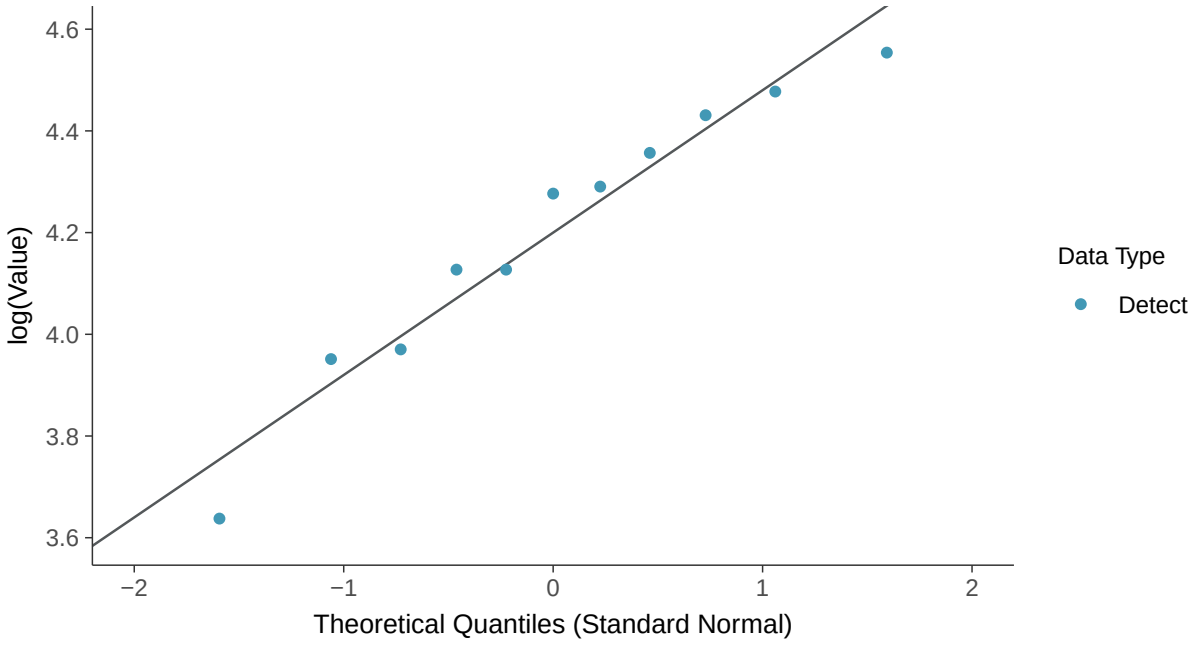
Normal Q-Q plot

Chloride (as Cl), MW-11 (mg/L)



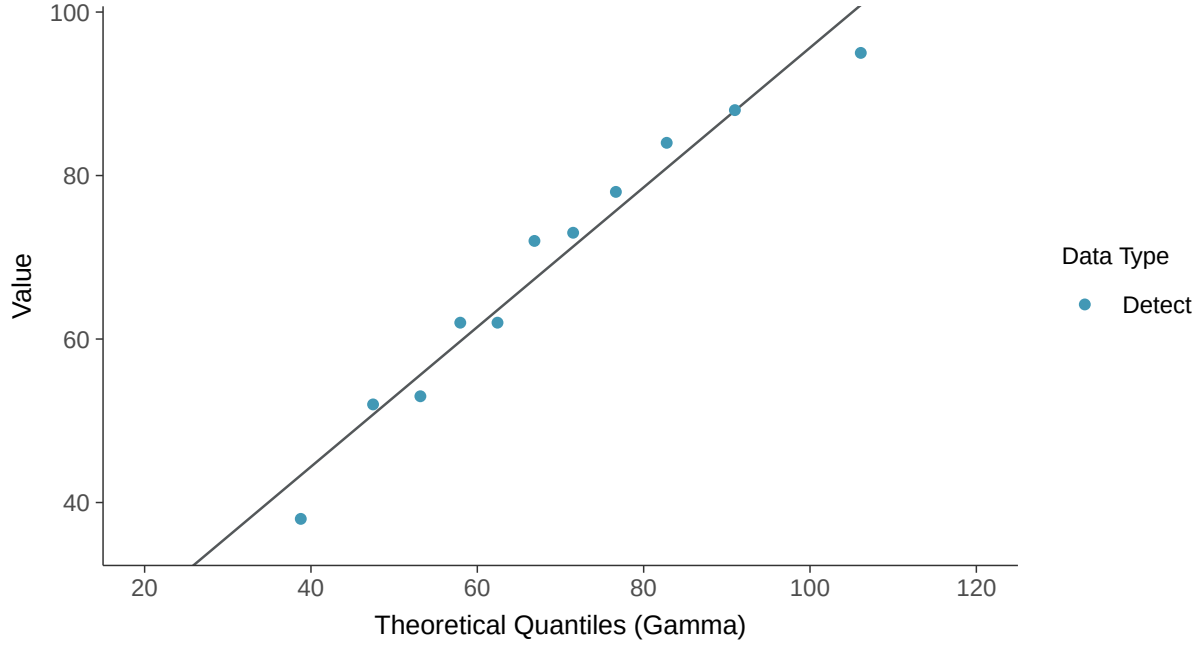
Lognormal Q-Q plot

Chloride (as Cl), MW-11 (mg/L)



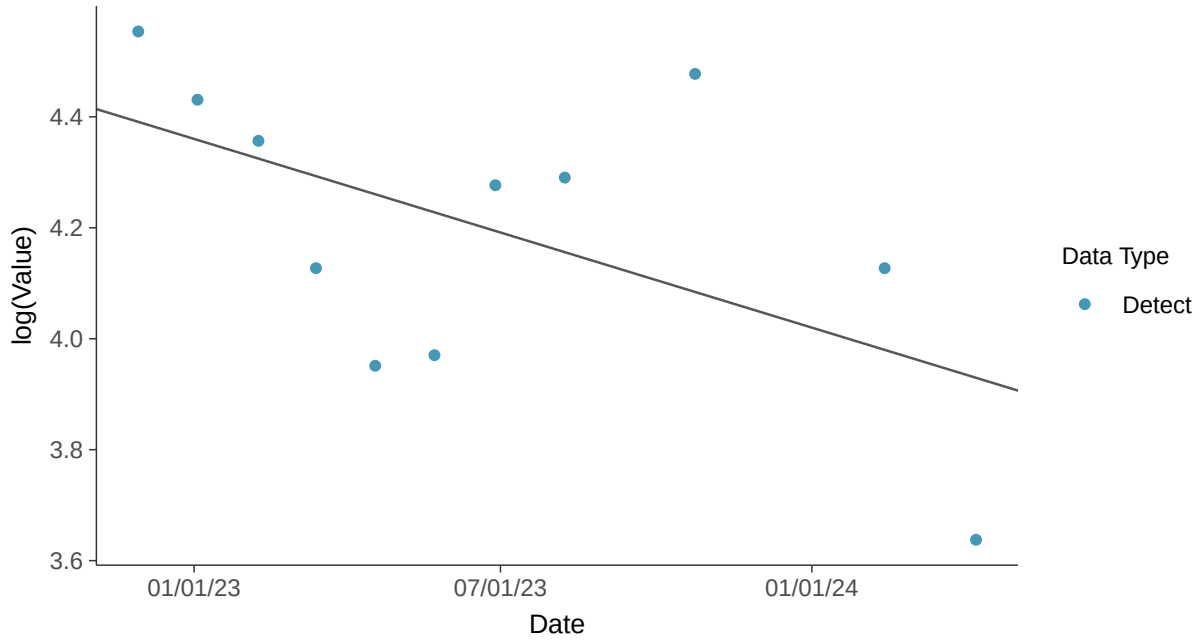
Gamma Q-Q plot

Chloride (as Cl), MW-11 (mg/L)



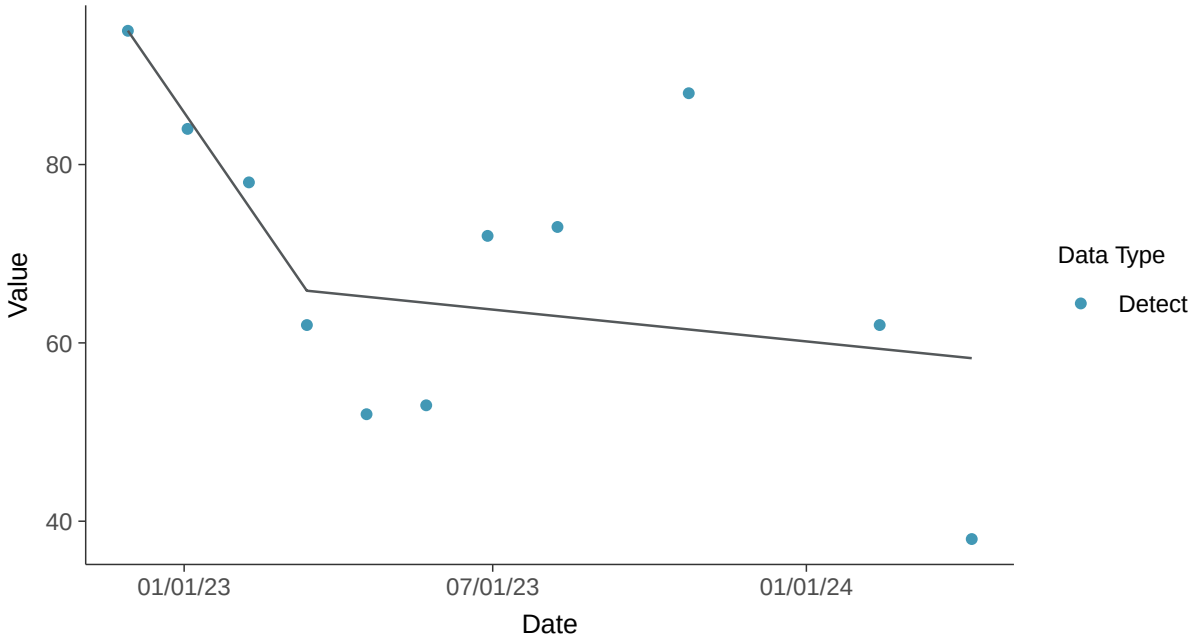
Trend Regression: Lognormal MLE

Chloride (as Cl), MW-11 (mg/L)



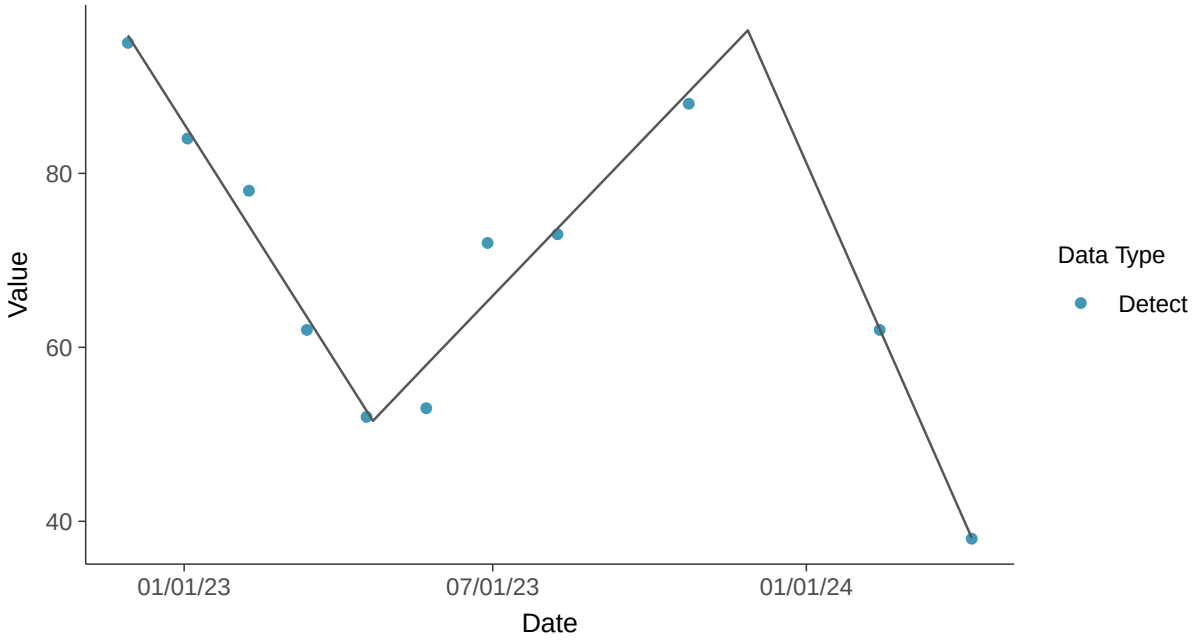
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-11 (mg/L)



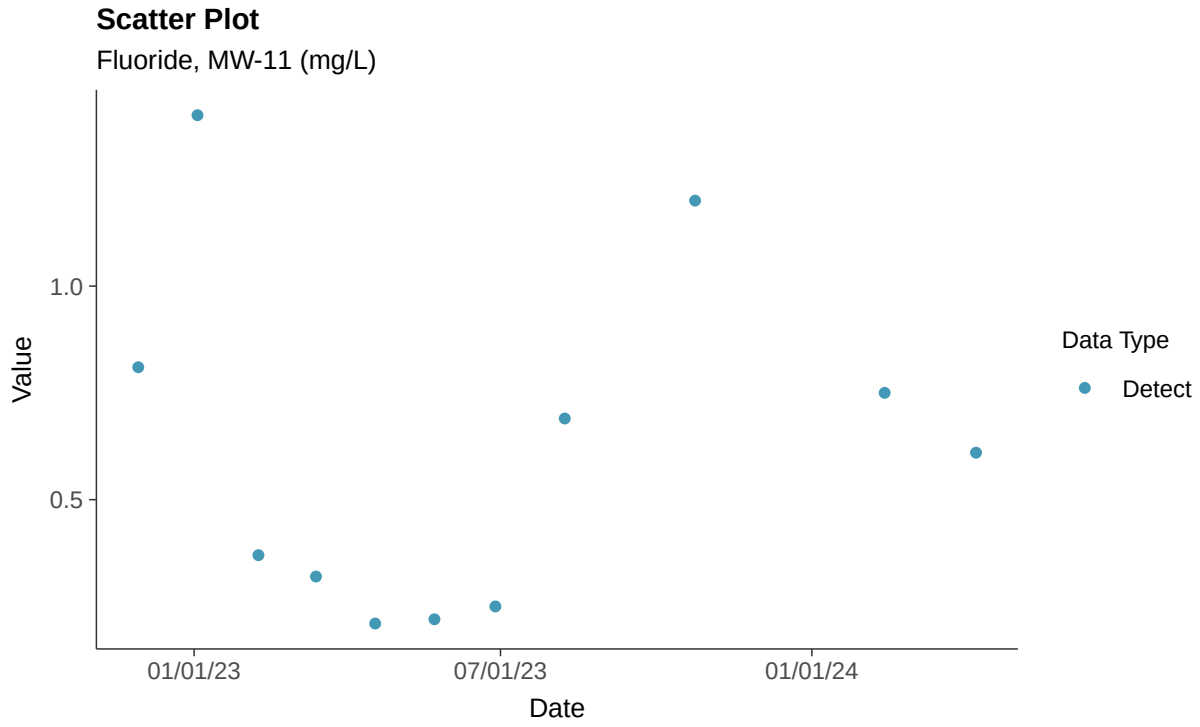
Trend Regression: Piecewise Linear-Linear-Linear

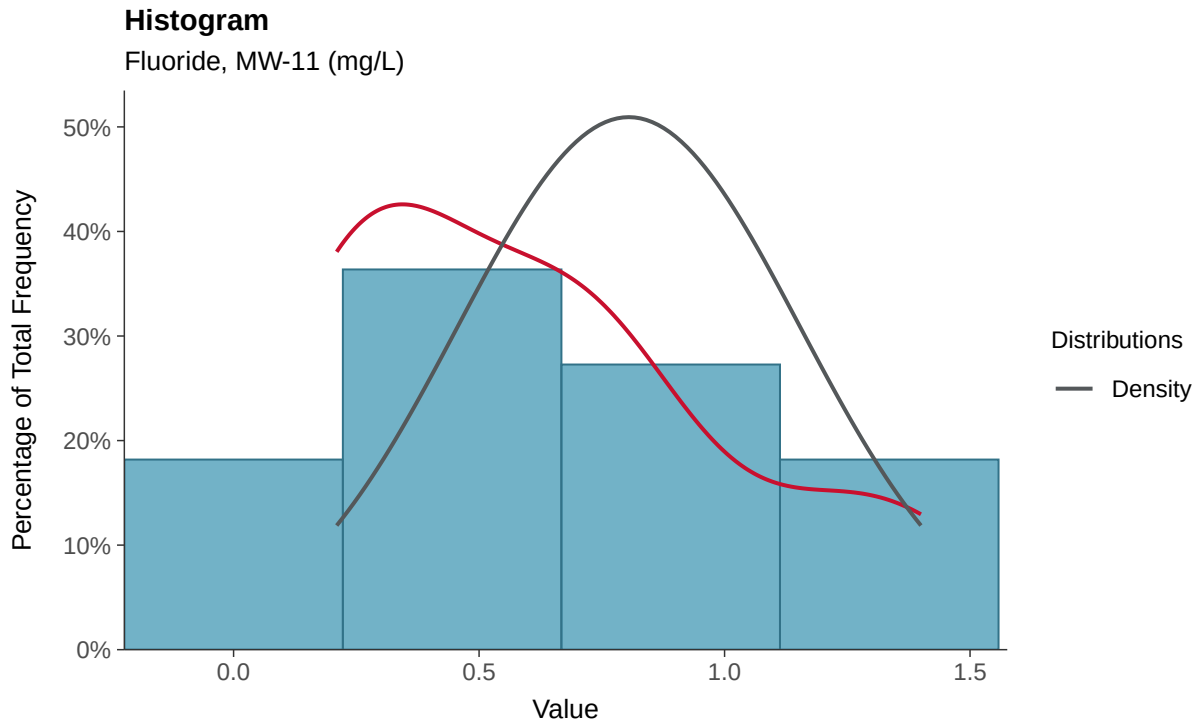
Chloride (as Cl), MW-11 (mg/L)



Appendix III: Fluoride, MW-11

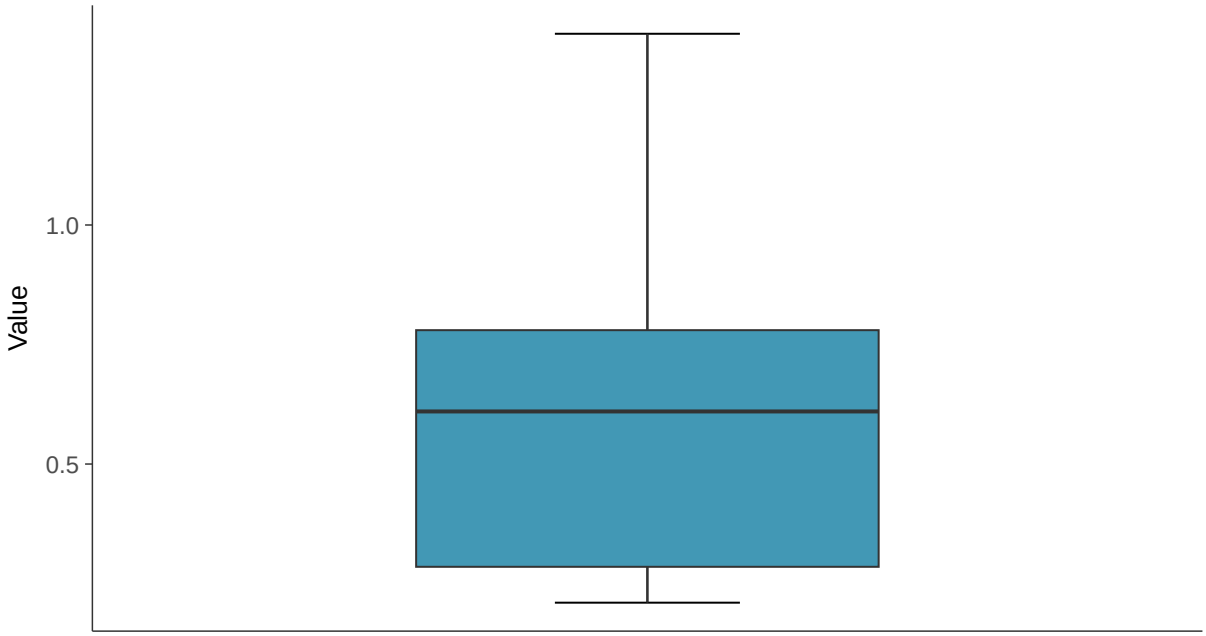
ID: 2_21_4_112





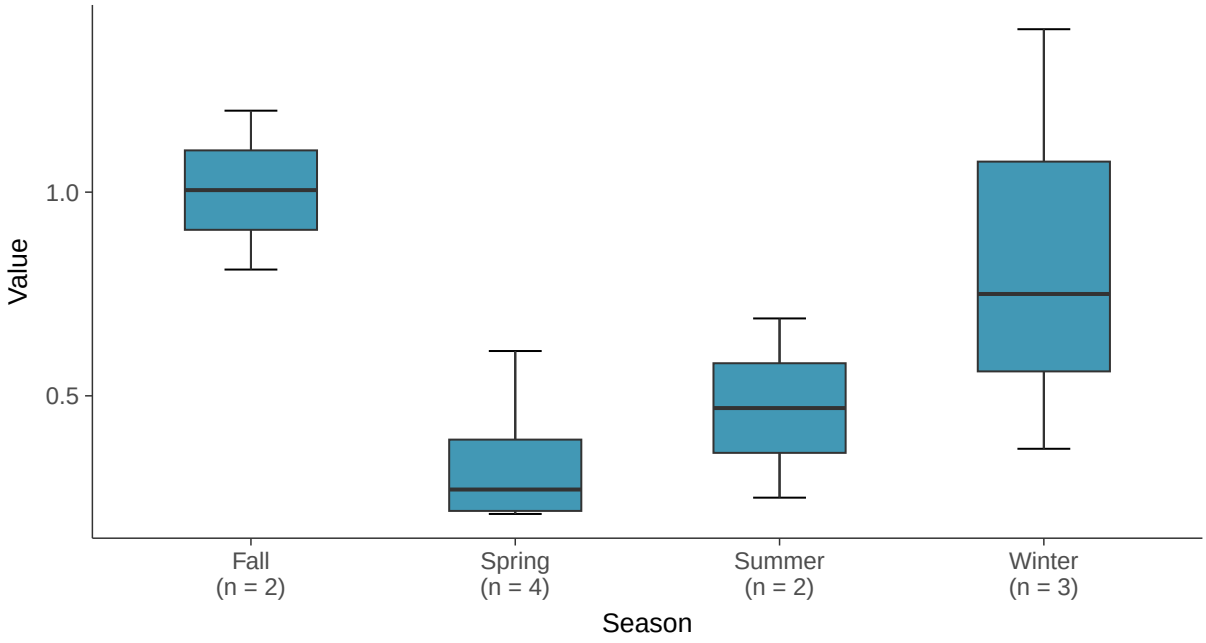
Boxplot

Fluoride, MW-11 (mg/L)



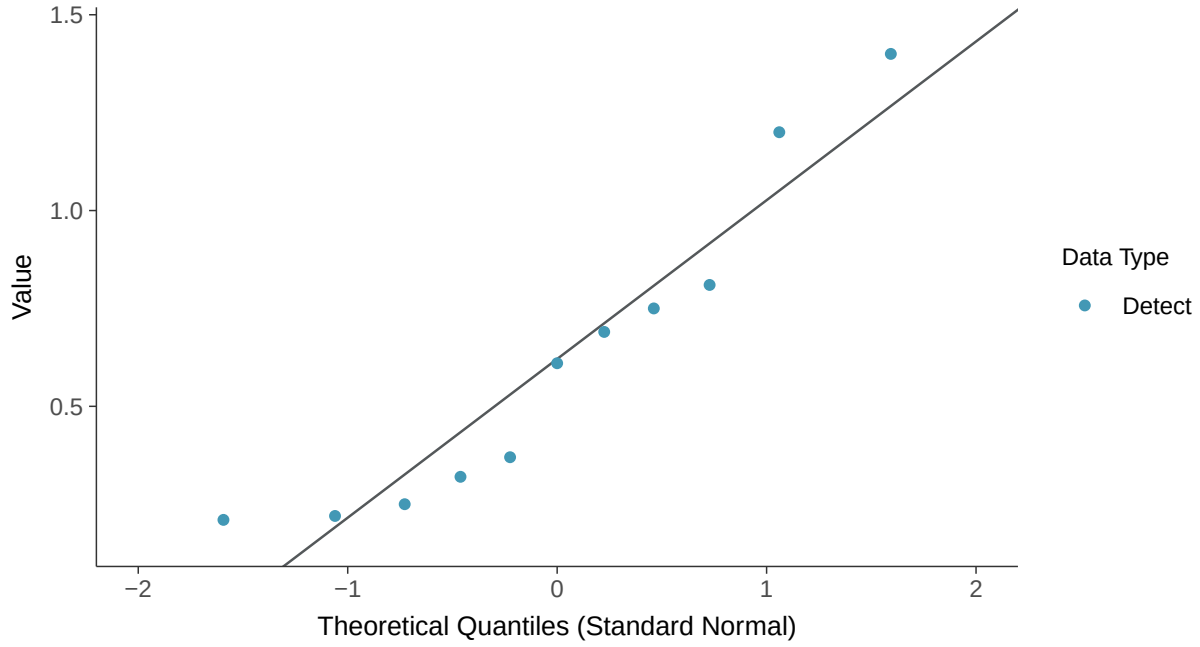
Boxplot by Season

Fluoride, MW-11 (mg/L)



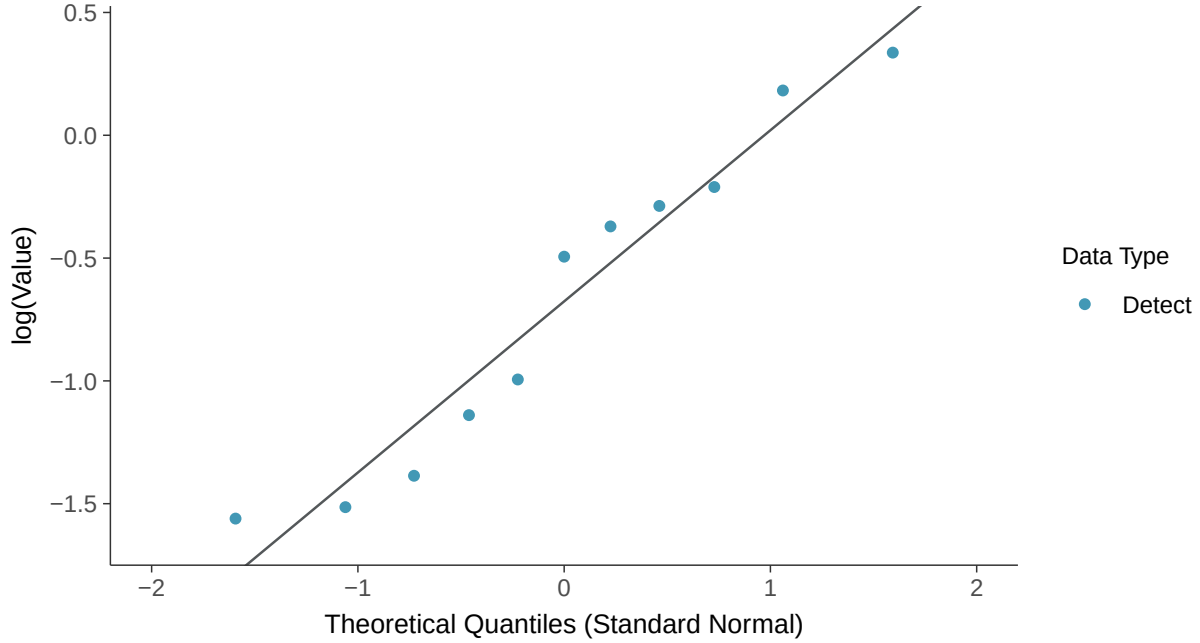
Normal Q-Q plot

Fluoride, MW-11 (mg/L)



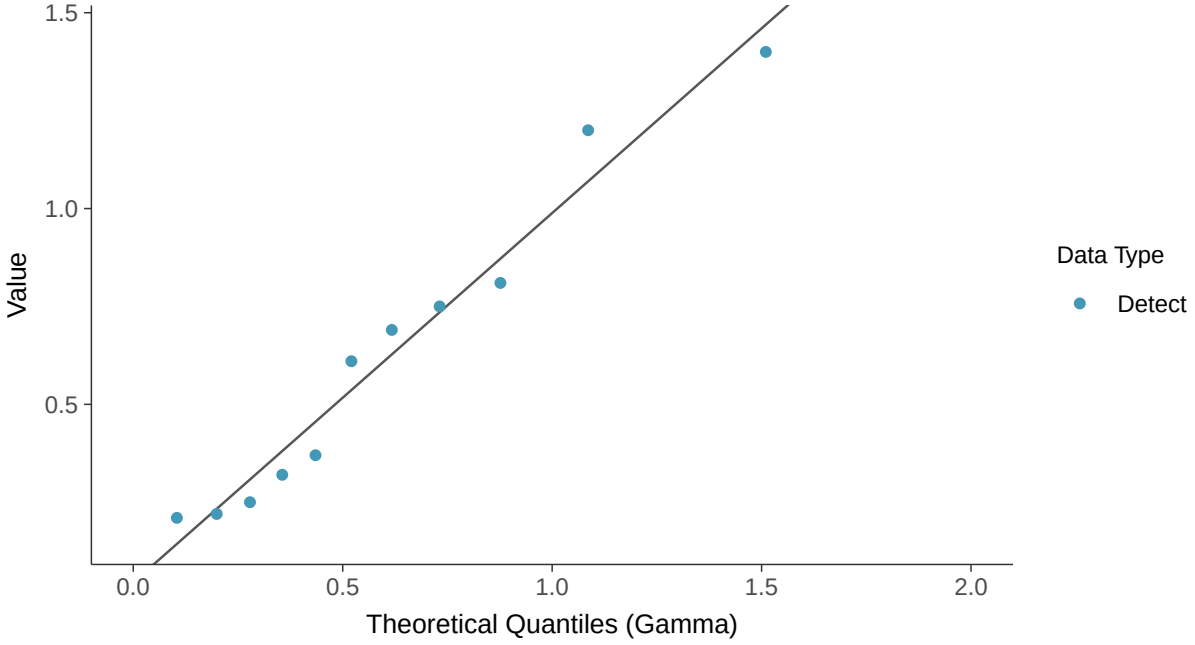
Lognormal Q-Q plot

Fluoride, MW-11 (mg/L)



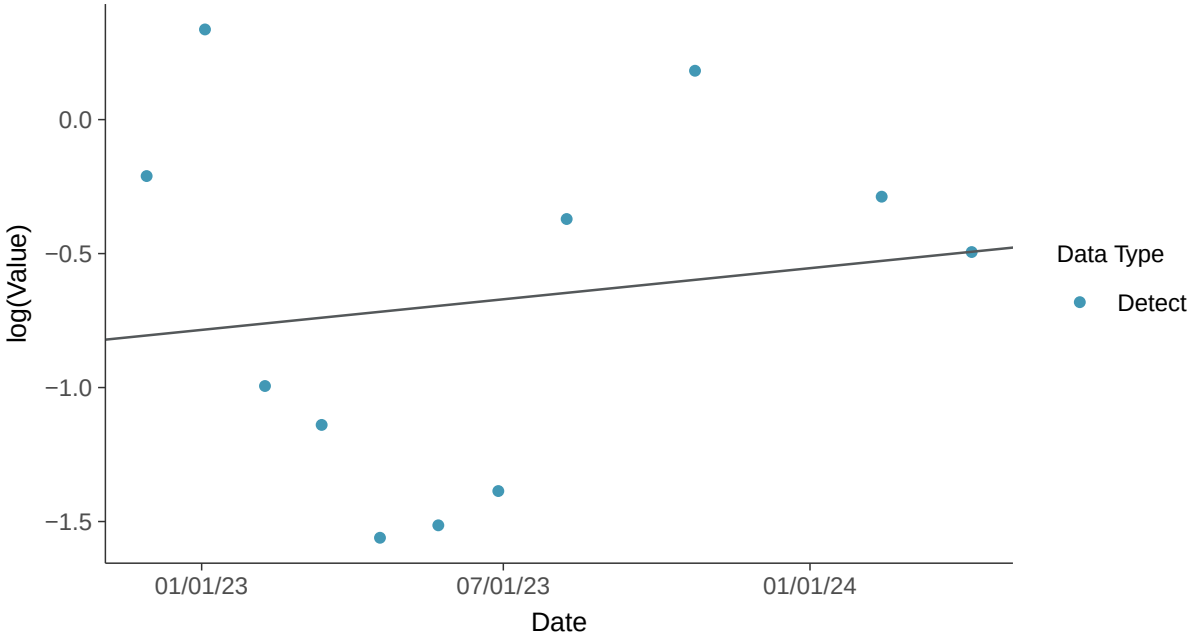
Gamma Q-Q plot

Fluoride, MW-11 (mg/L)



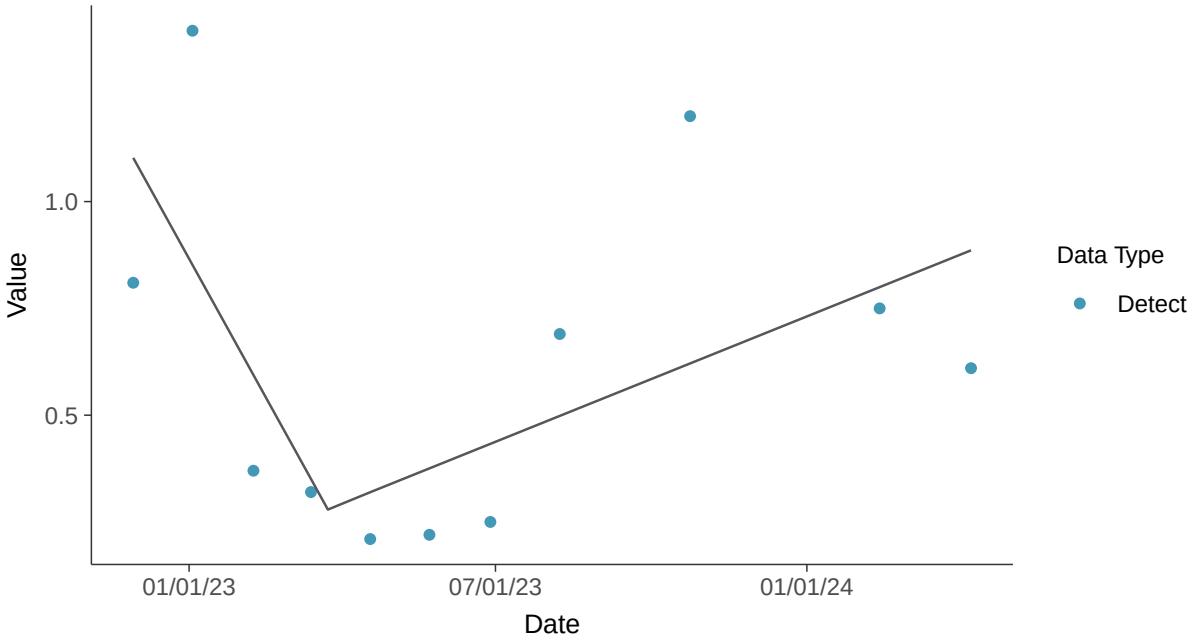
Trend Regression: Lognormal MLE

Fluoride, MW-11 (mg/L)



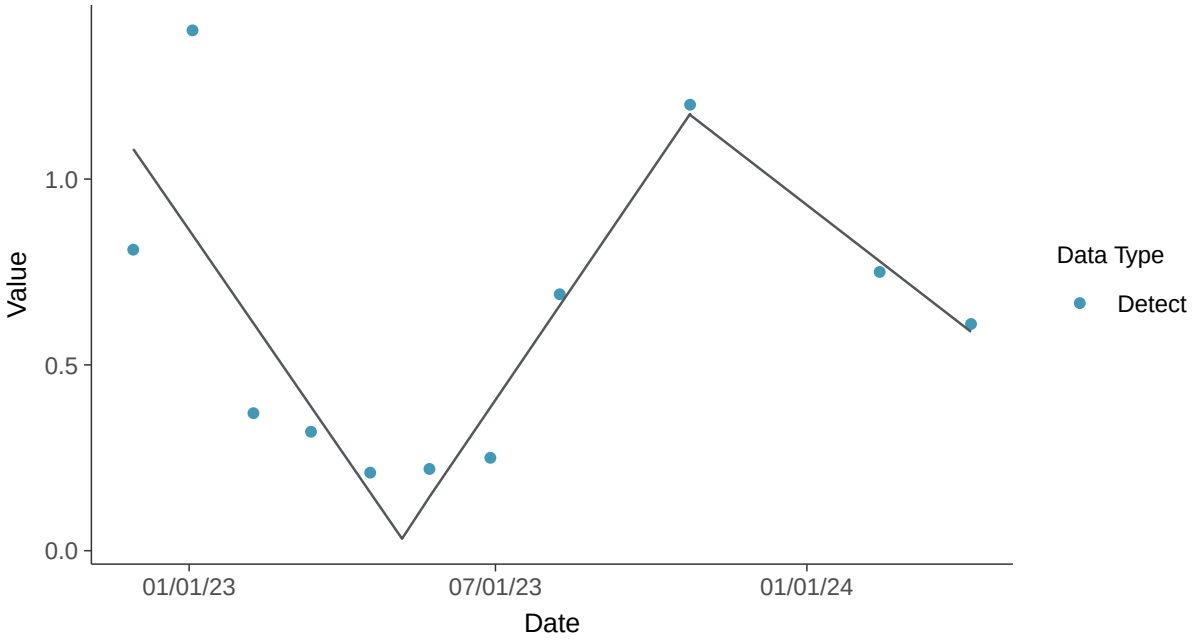
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-11 (mg/L)



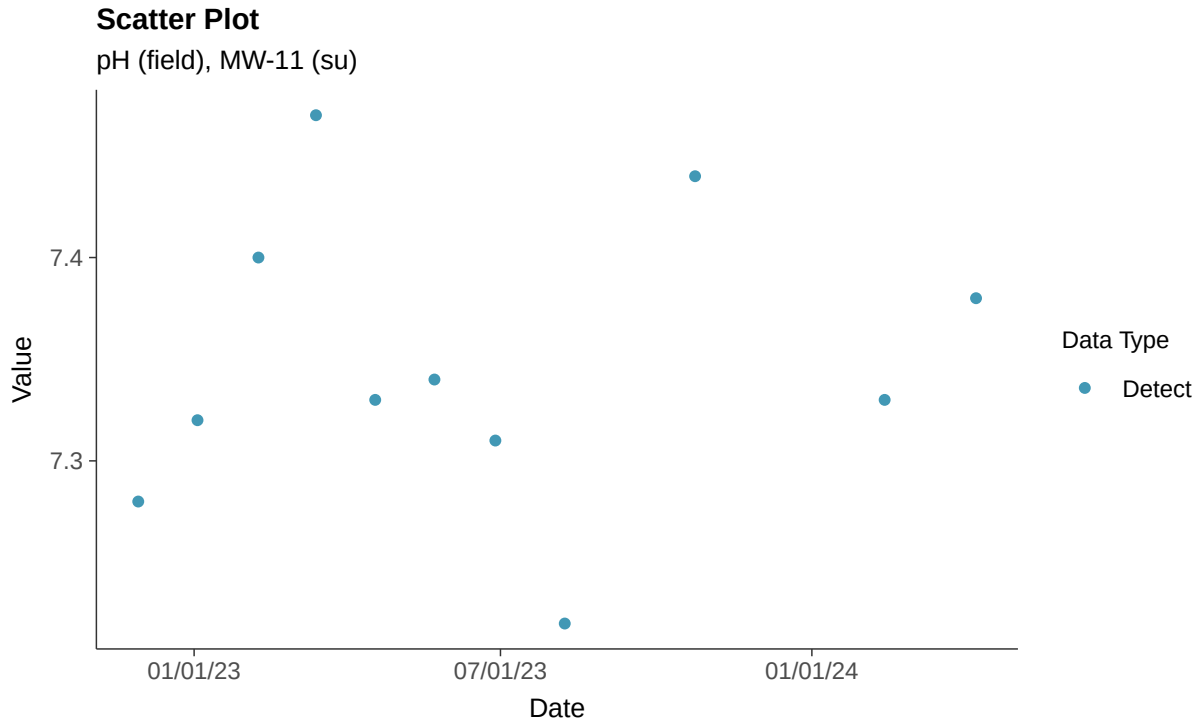
Trend Regression: Piecewise Linear-Linear-Linear

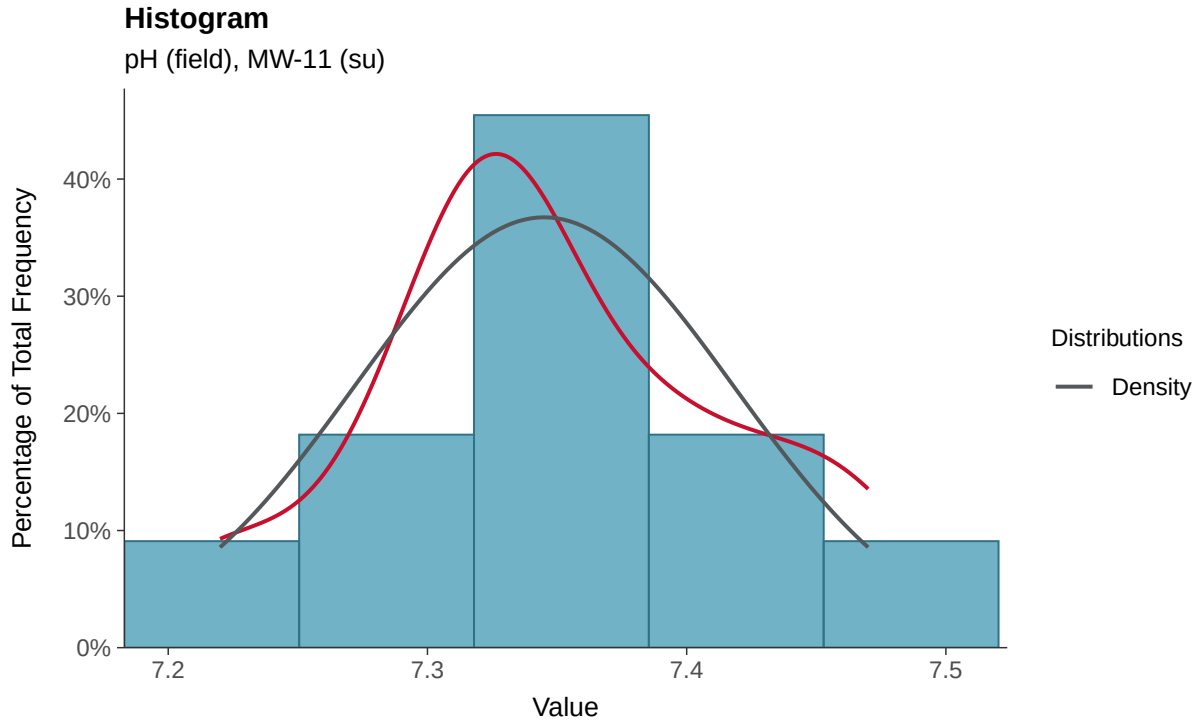
Fluoride, MW-11 (mg/L)



Appendix III: pH (field), MW-11

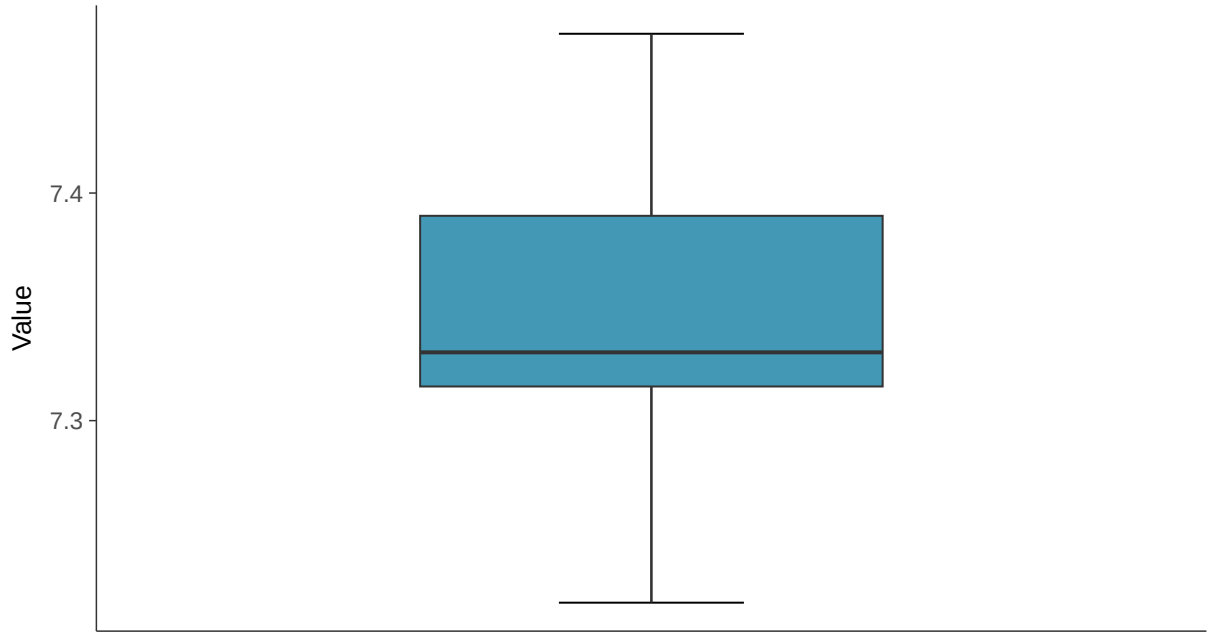
ID: 2_21_4_120





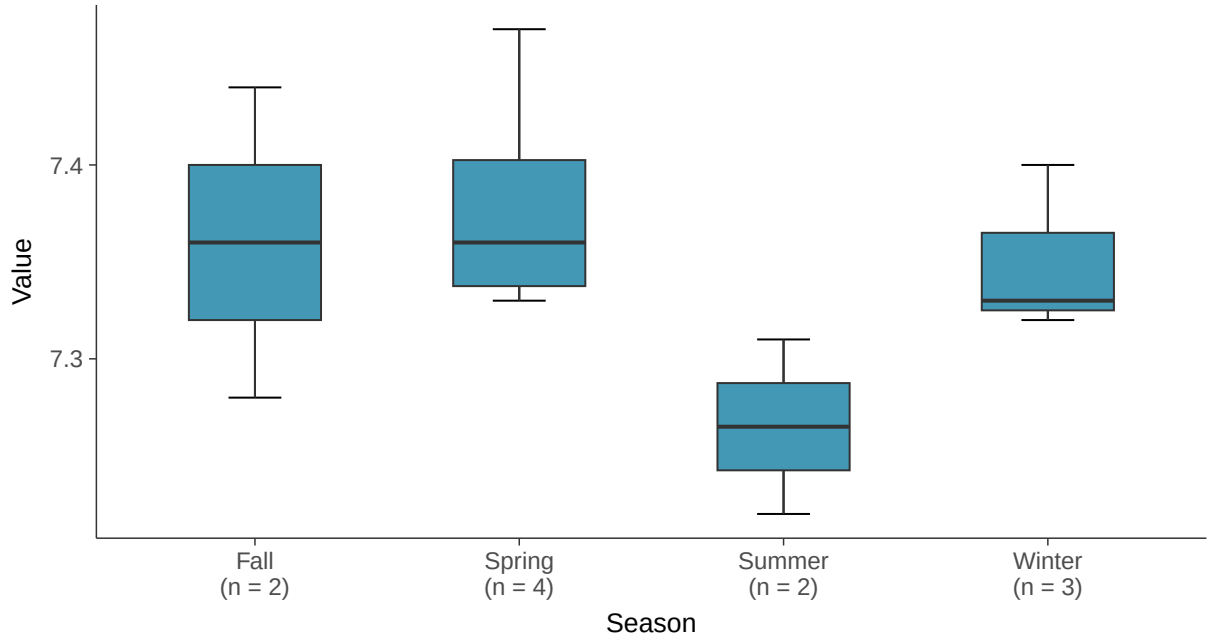
Boxplot

pH (field), MW-11 (su)



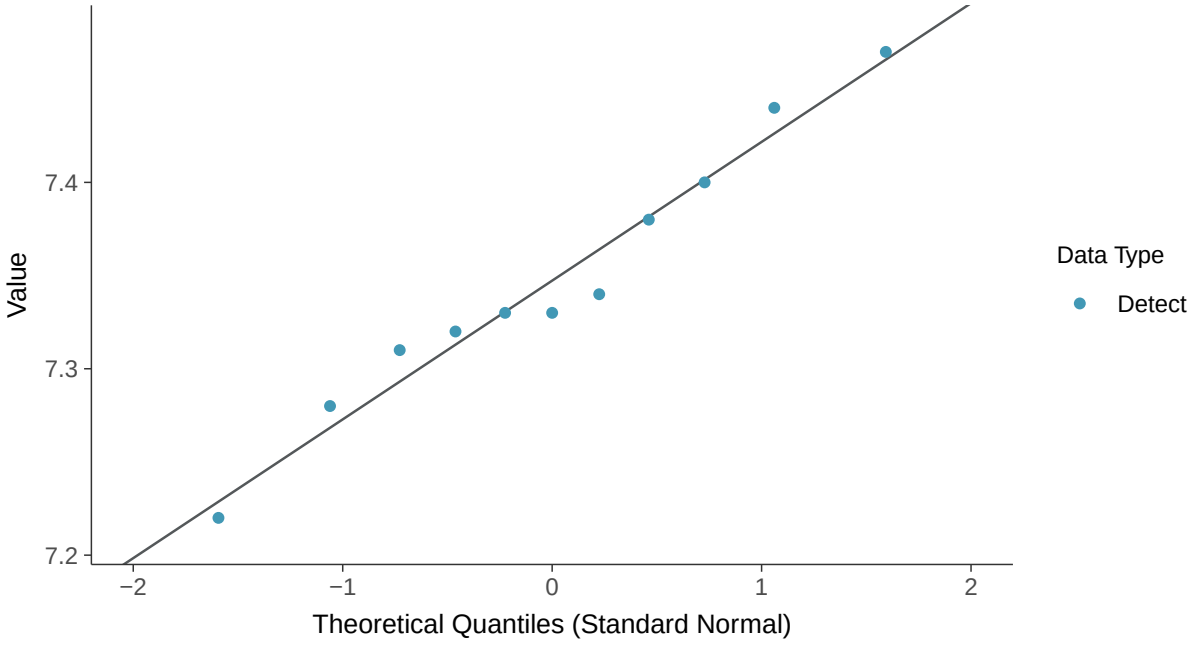
Boxplot by Season

pH (field), MW-11 (su)



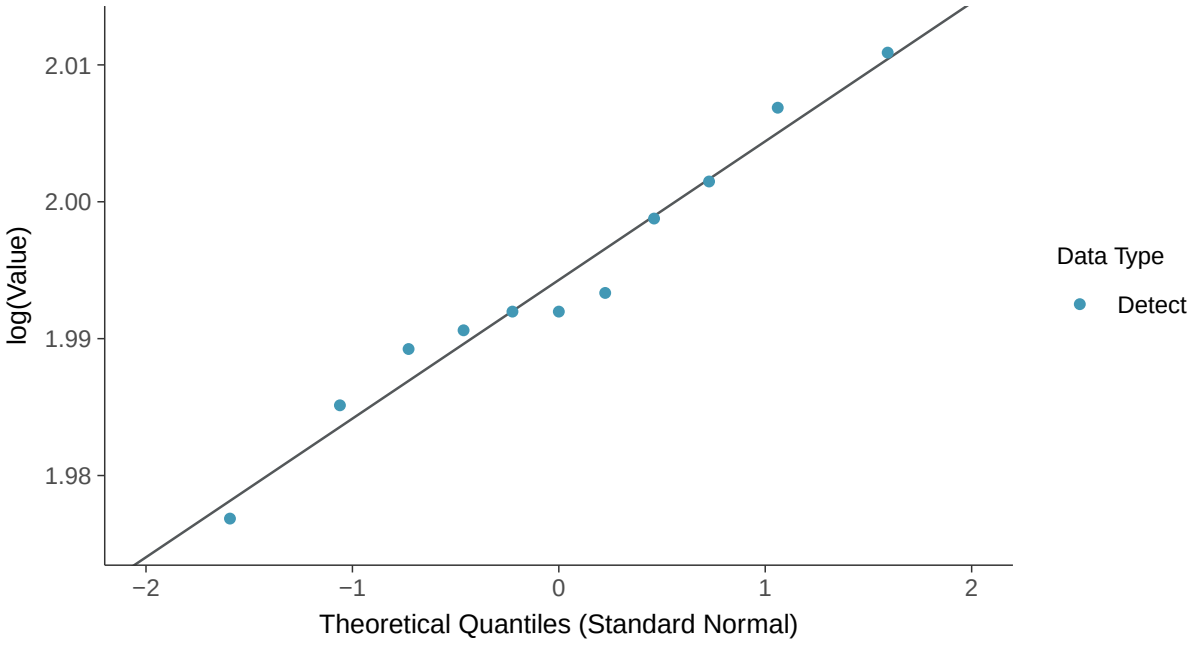
Normal Q-Q plot

pH (field), MW-11 (su)



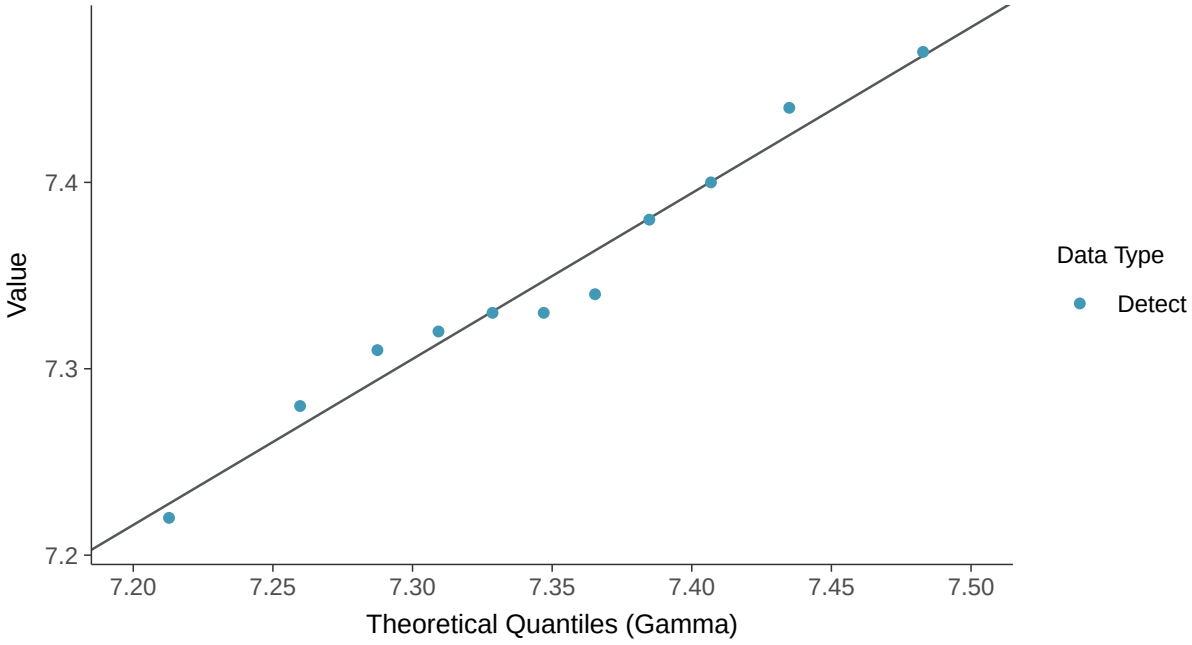
Lognormal Q-Q plot

pH (field), MW-11 (su)



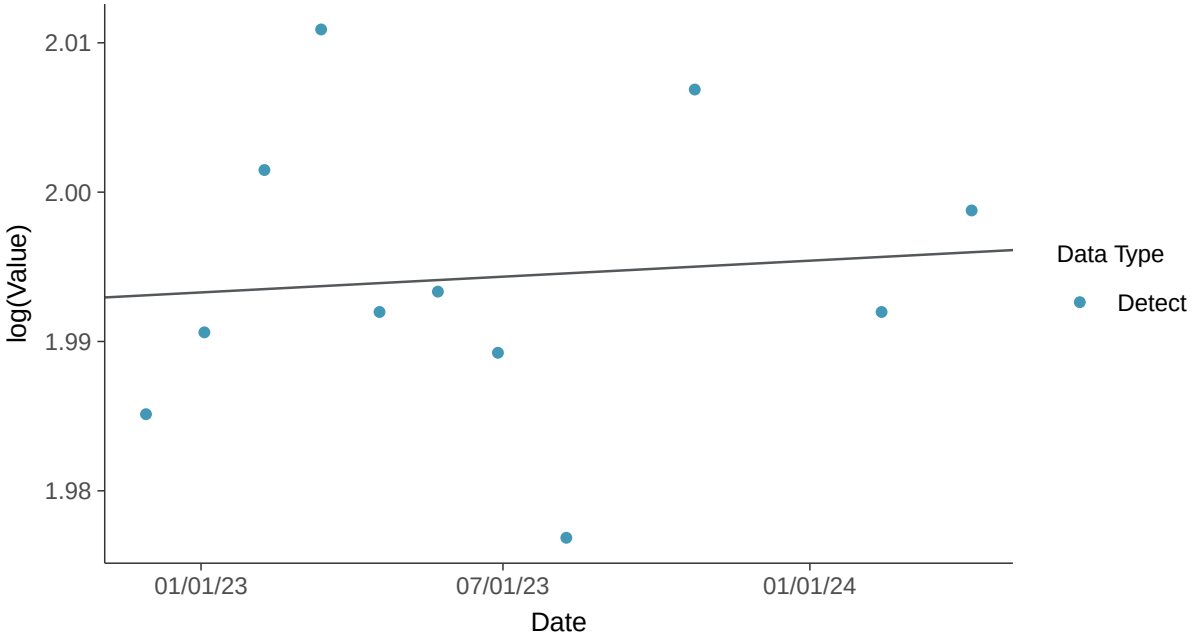
Gamma Q-Q plot

pH (field), MW-11 (su)



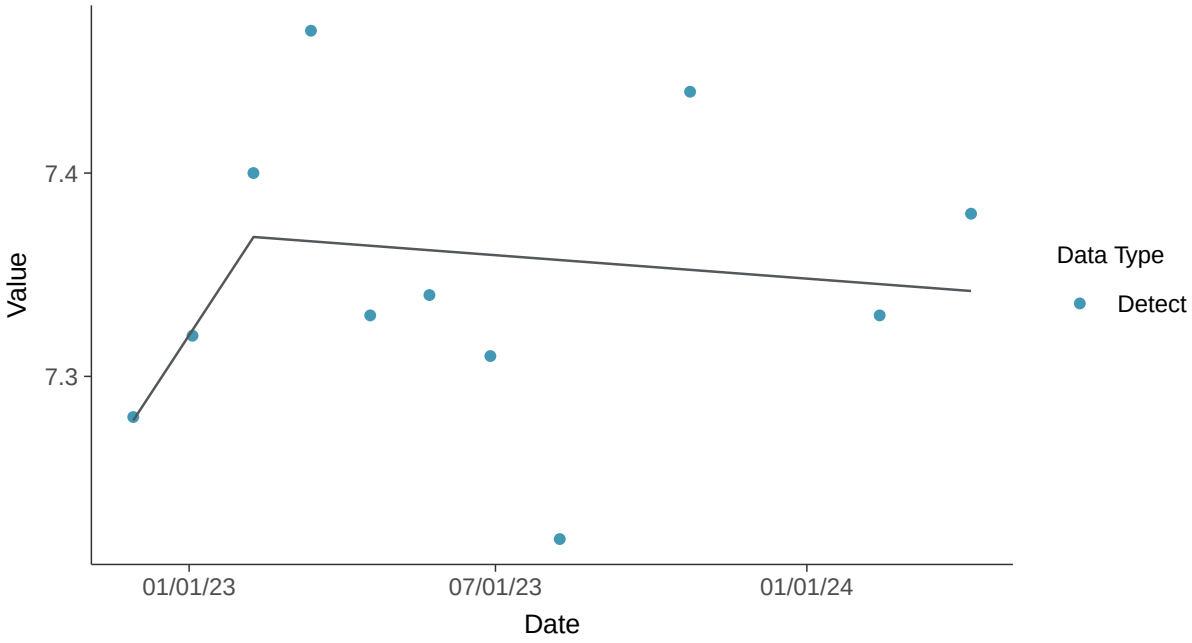
Trend Regression: Lognormal MLE

pH (field), MW-11 (su)



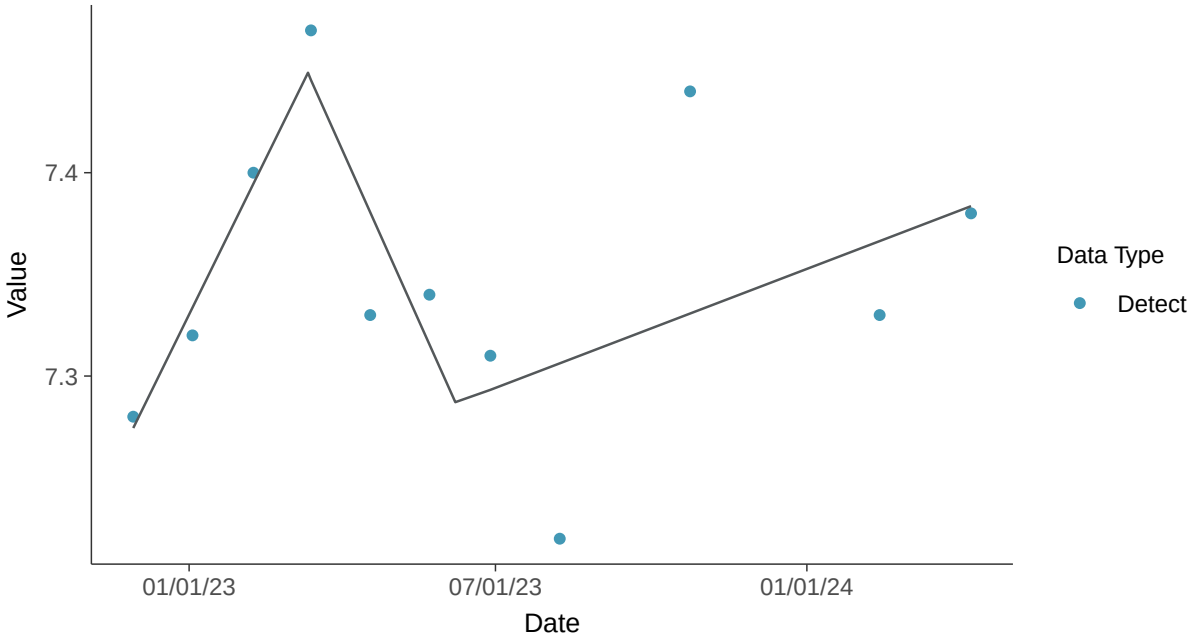
Trend Regression: Piecewise Linear-Linear

pH (field), MW-11 (su)



Trend Regression: Piecewise Linear-Linear-Linear

pH (field), MW-11 (su)

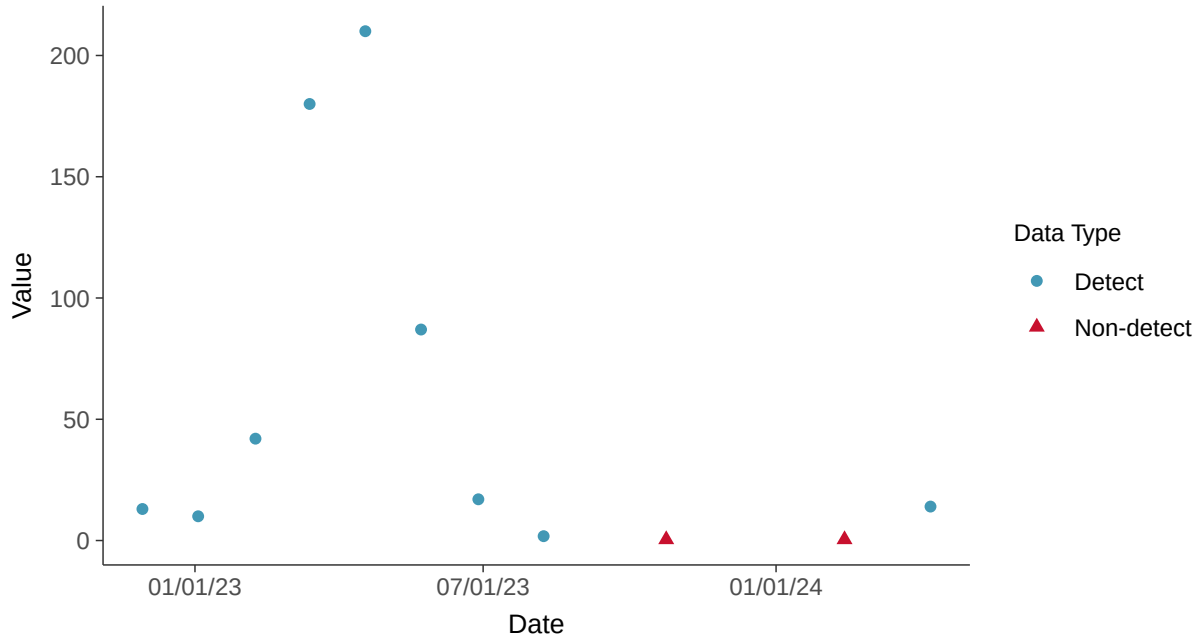


Appendix III: Sulfate (as SO4), MW-11

ID: 2_21_4_124

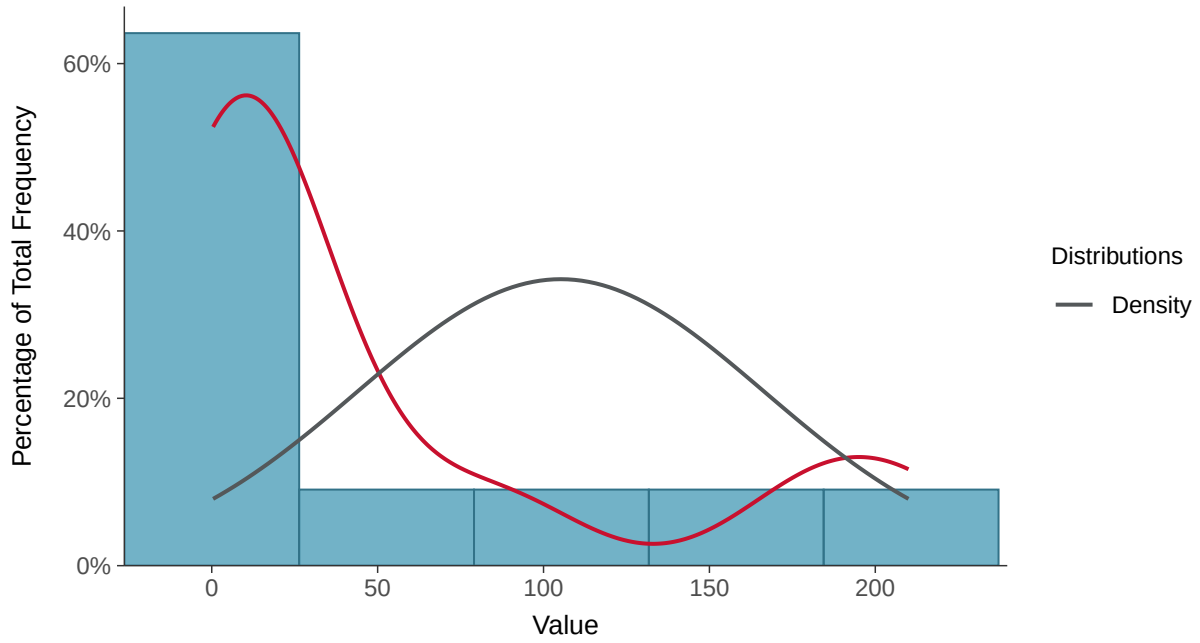
Scatter Plot

Sulfate (as SO4), MW-11 (mg/L)



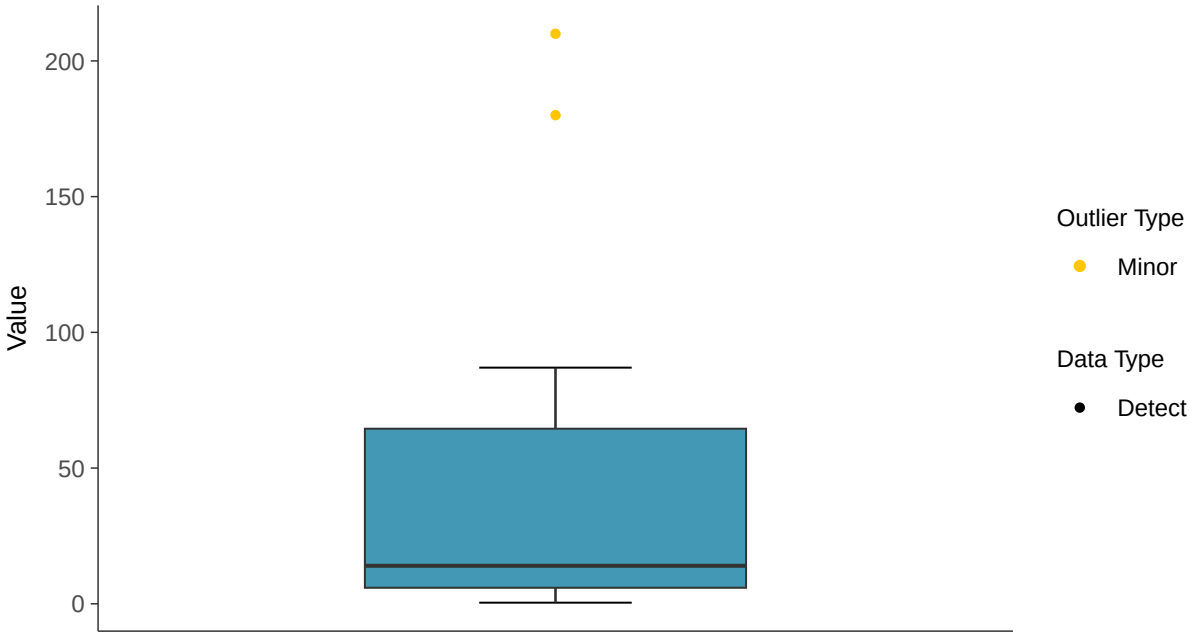
Histogram

Sulfate (as SO4), MW-11 (mg/L)



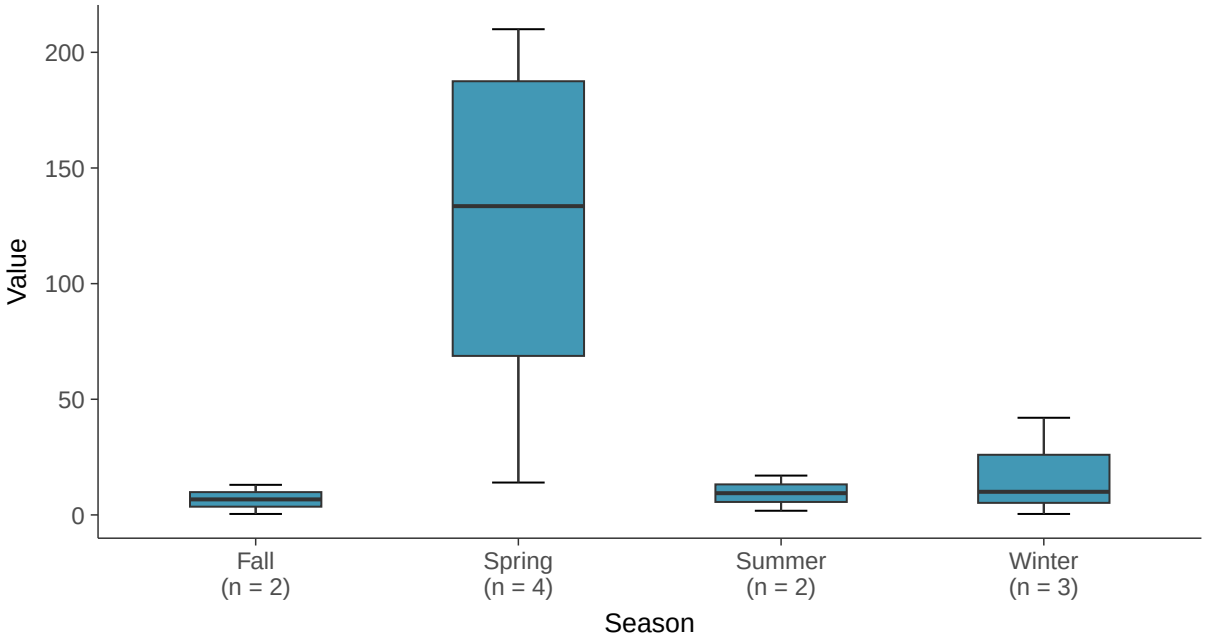
Boxplot

Sulfate (as SO4), MW-11 (mg/L)



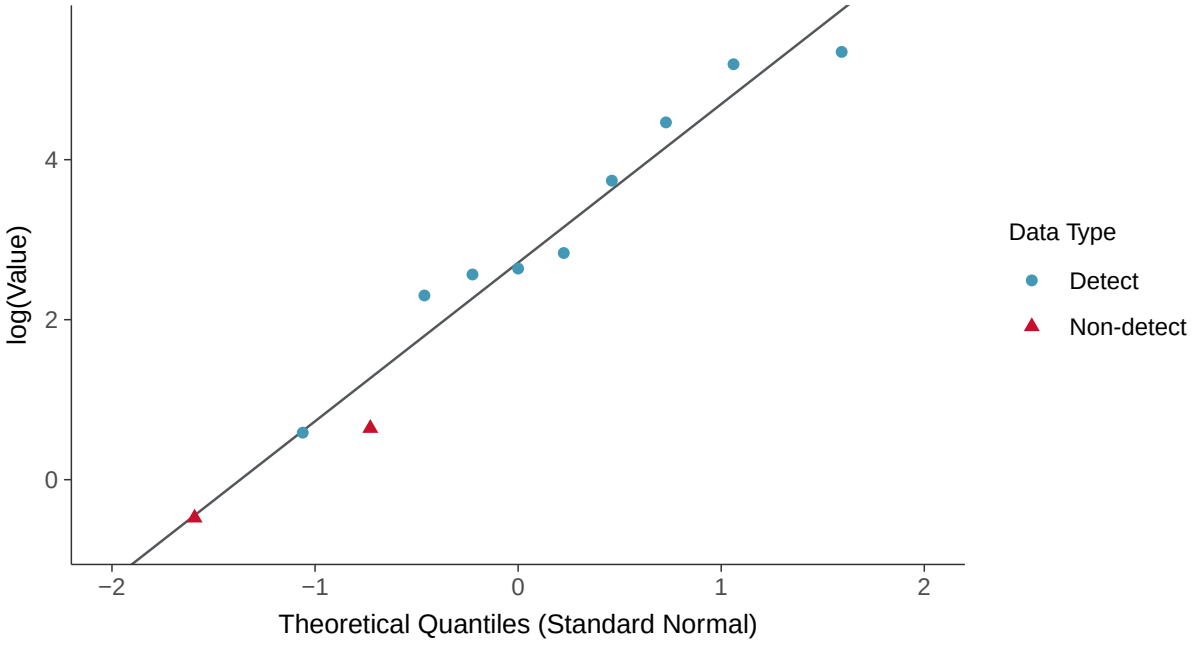
Boxplot by Season

Sulfate (as SO4), MW-11 (mg/L)



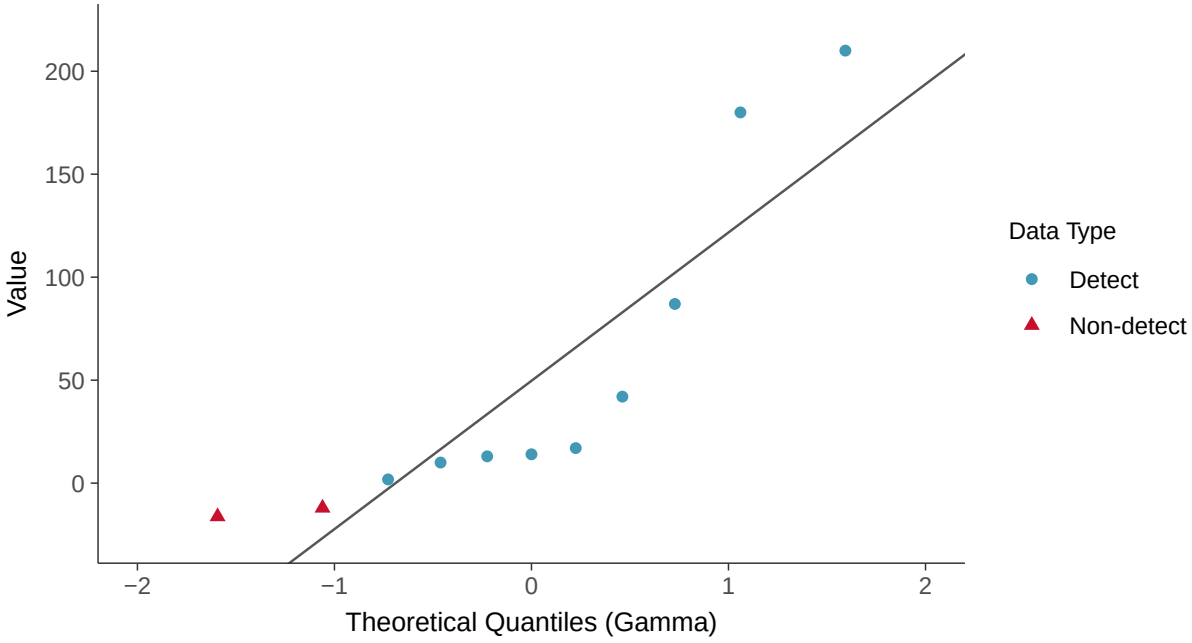
Lognormal Q-Q plot using ROS Imputed Estimates

Sulfate (as SO4), MW-11 (mg/L)



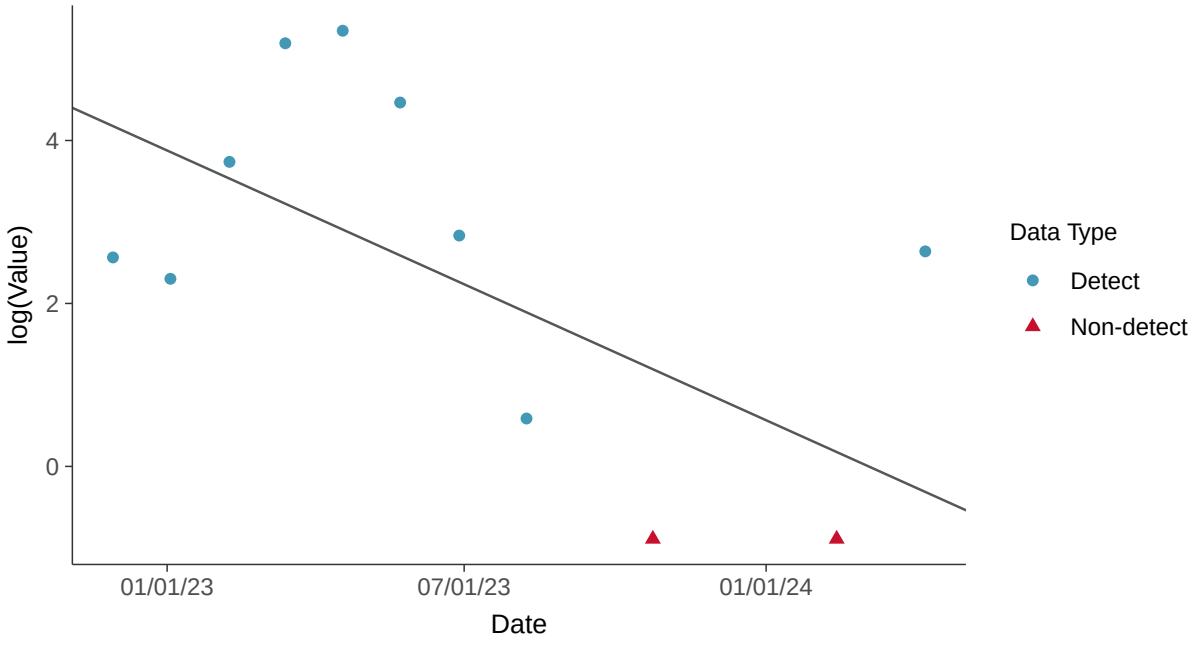
Gamma Q-Q plot using ROS Imputed Estimates

Sulfate (as SO4), MW-11 (mg/L)



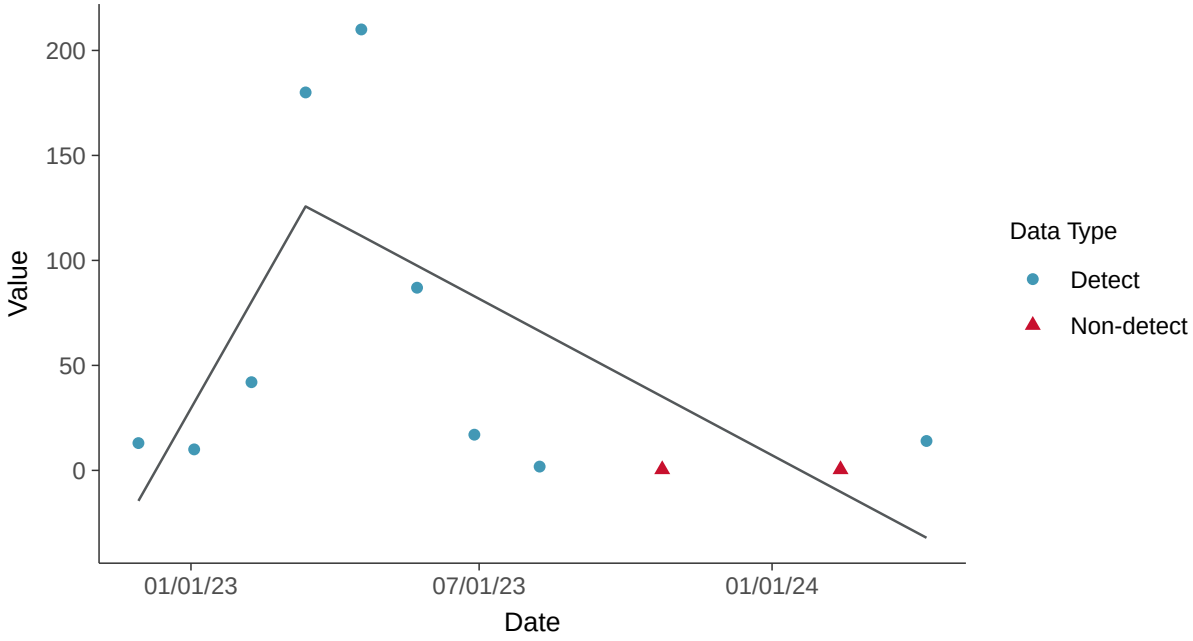
Trend Regression: Lognormal MLE

Sulfate (as SO4), MW-11 (mg/L)



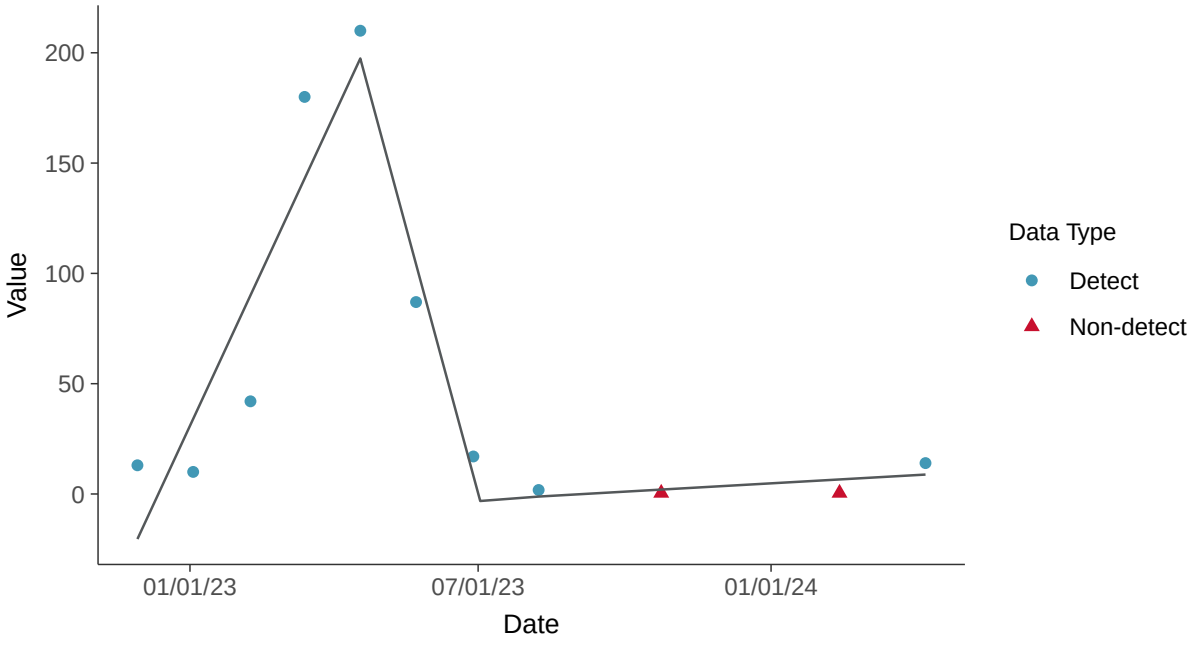
Trend Regression: Piecewise Linear-Linear

Sulfate (as SO4), MW-11 (mg/L)



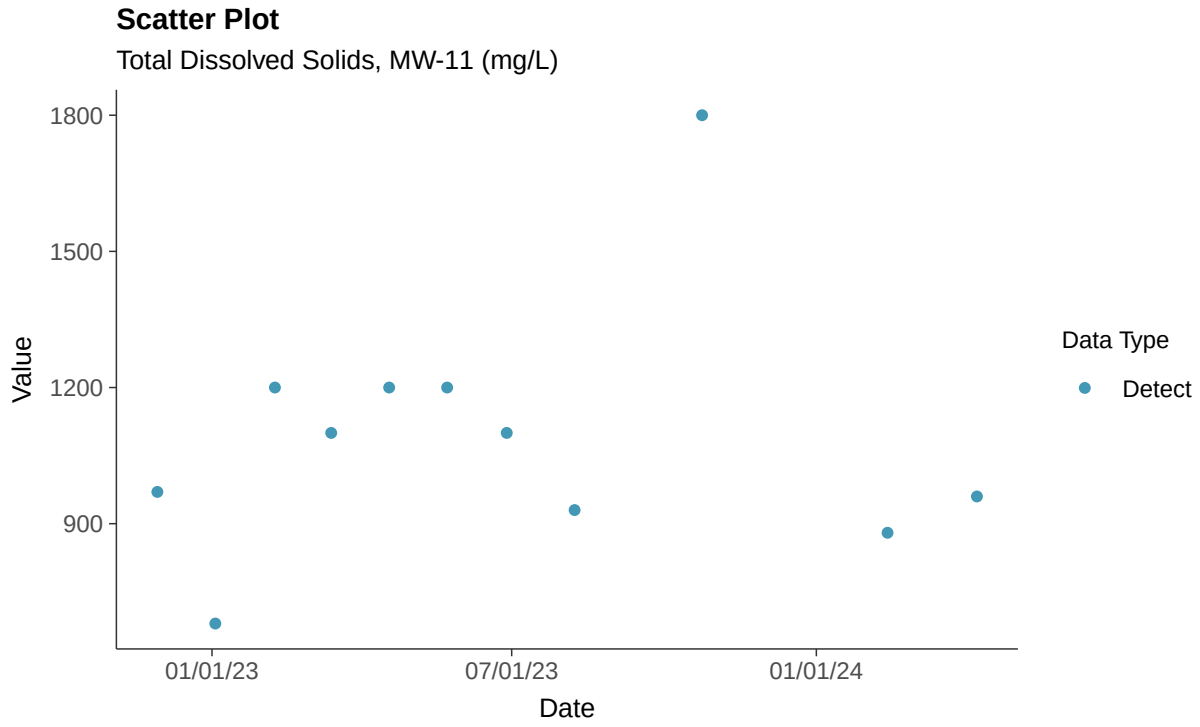
Trend Regression: Piecewise Linear-Linear-Linear

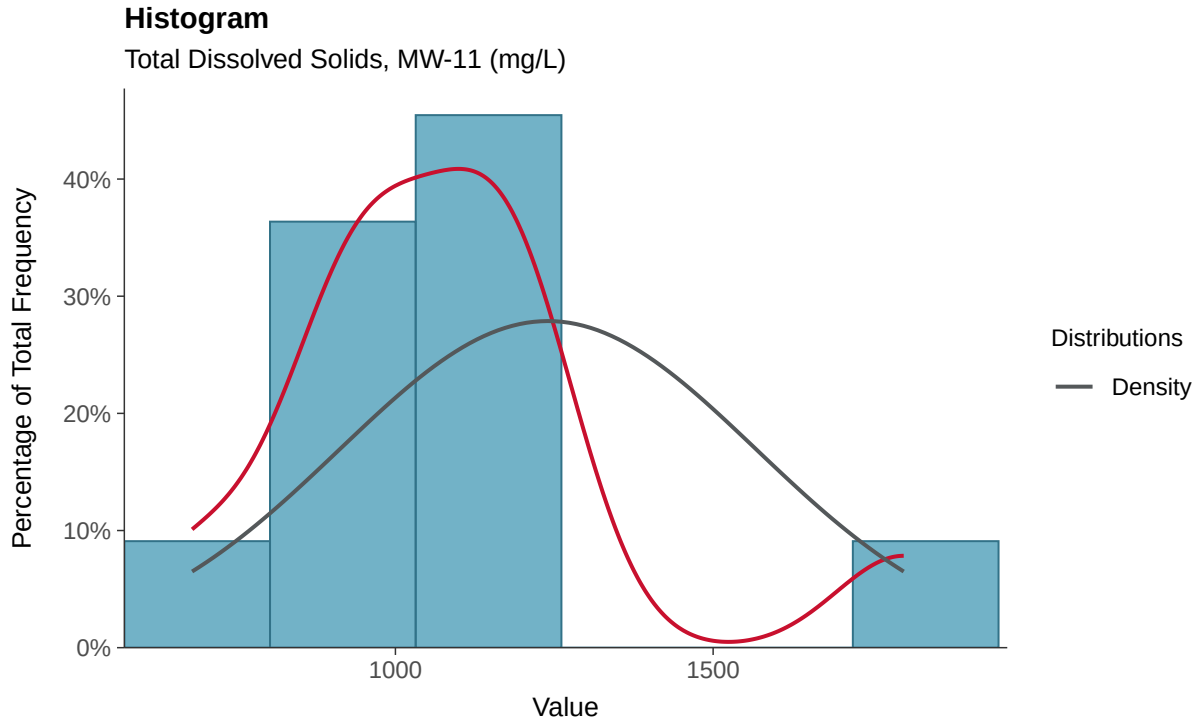
Sulfate (as SO4), MW-11 (mg/L)



Appendix III: Total Dissolved Solids, MW-11

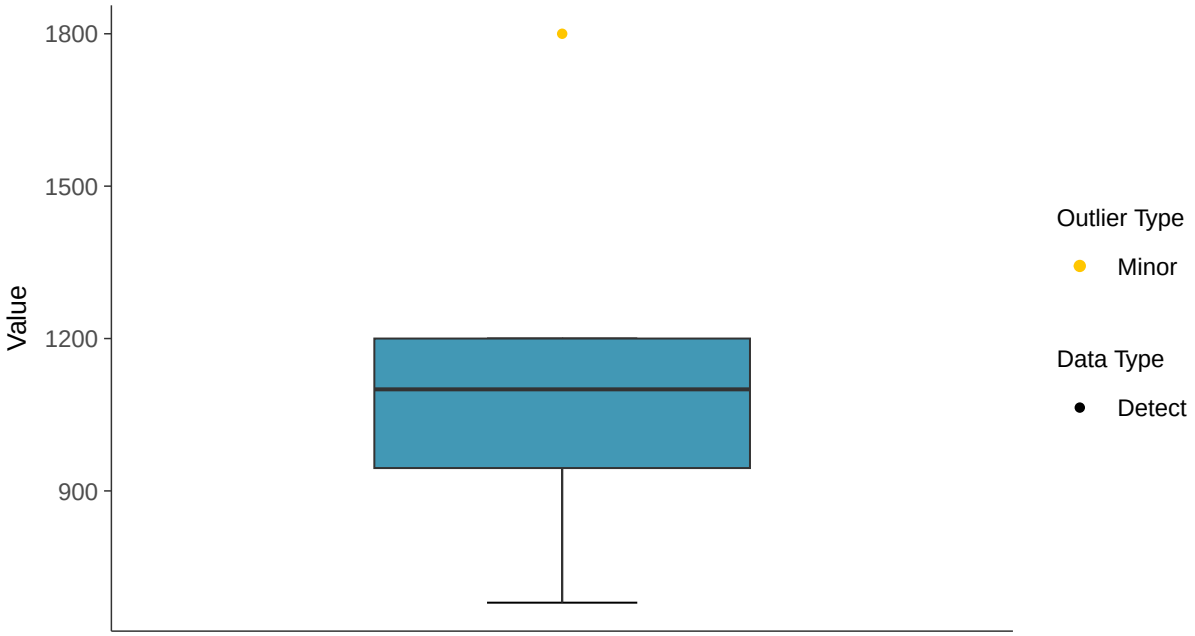
ID: 2_21_4_126





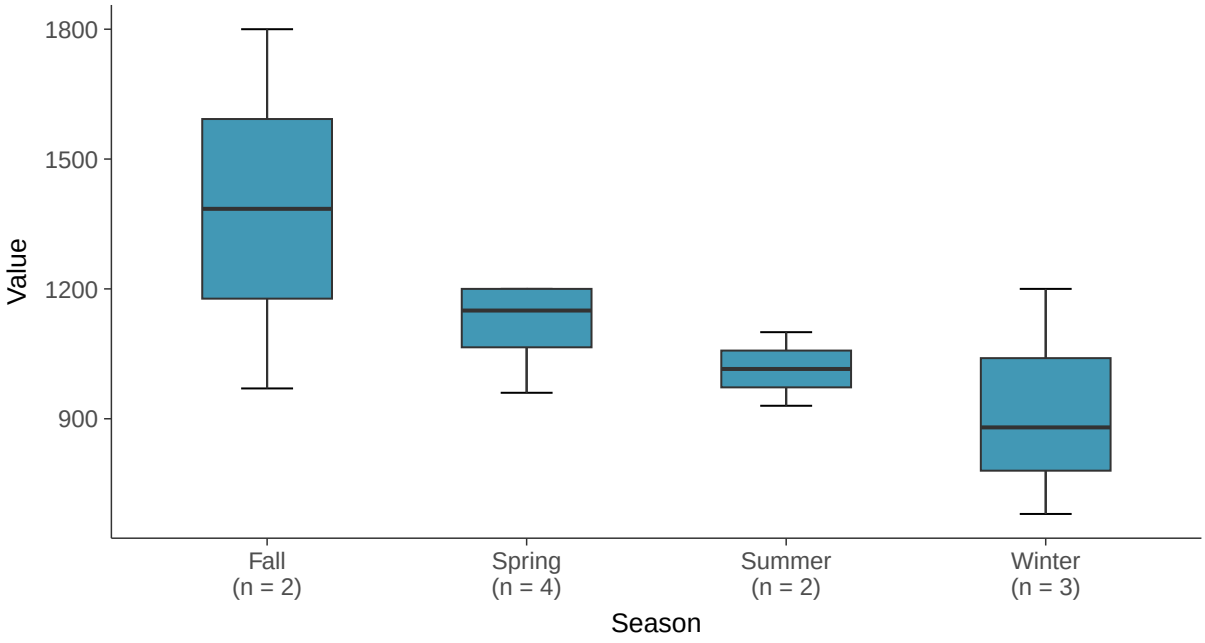
Boxplot

Total Dissolved Solids, MW-11 (mg/L)



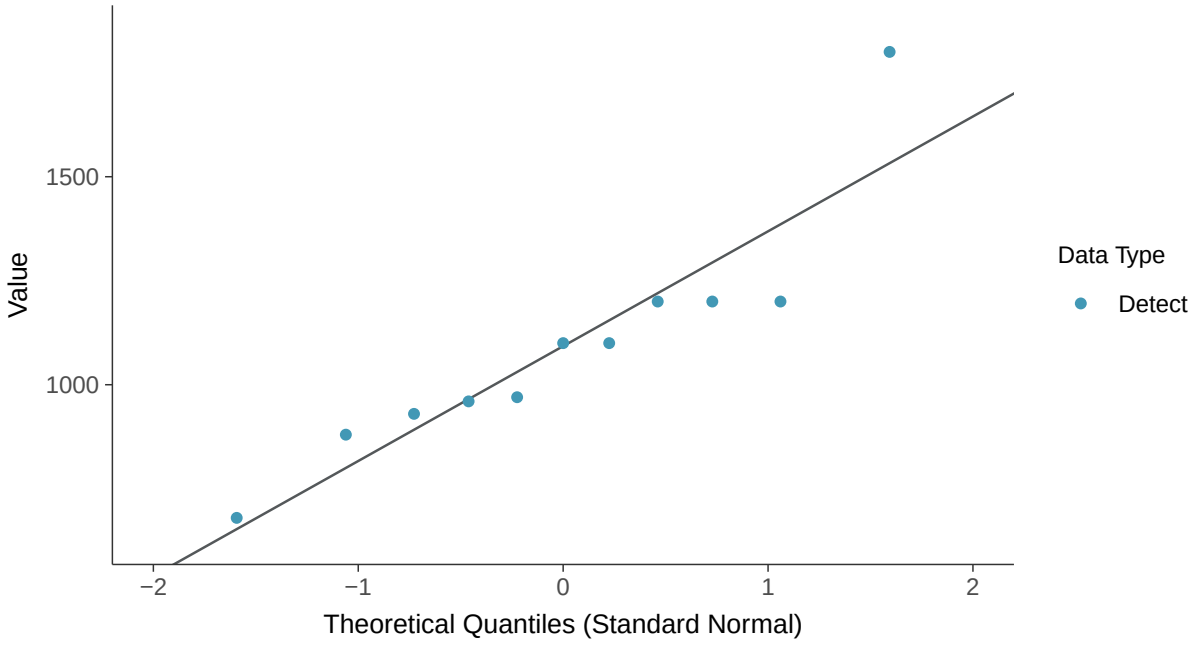
Boxplot by Season

Total Dissolved Solids, MW-11 (mg/L)



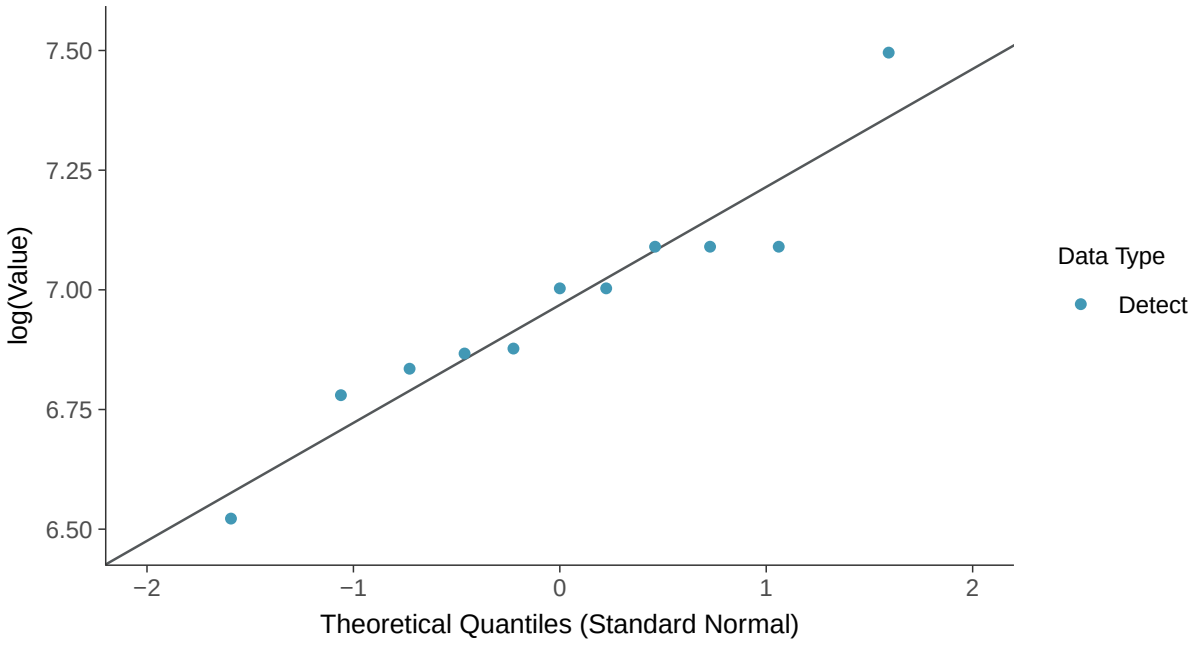
Normal Q-Q plot

Total Dissolved Solids, MW-11 (mg/L)



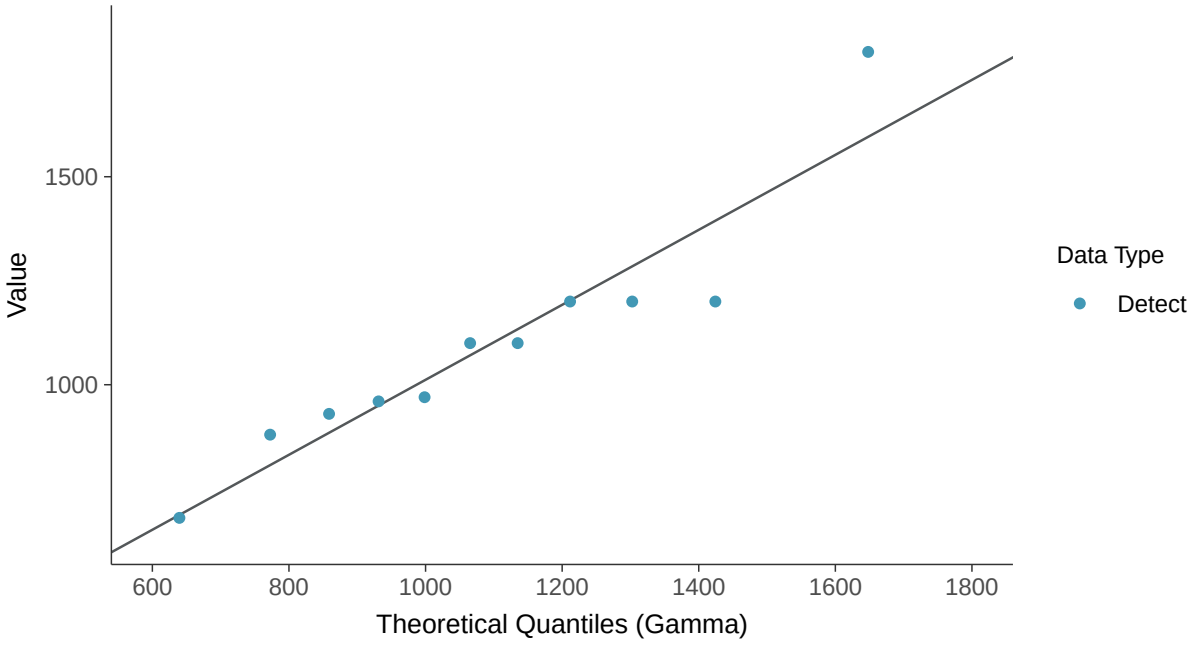
Lognormal Q-Q plot

Total Dissolved Solids, MW-11 (mg/L)



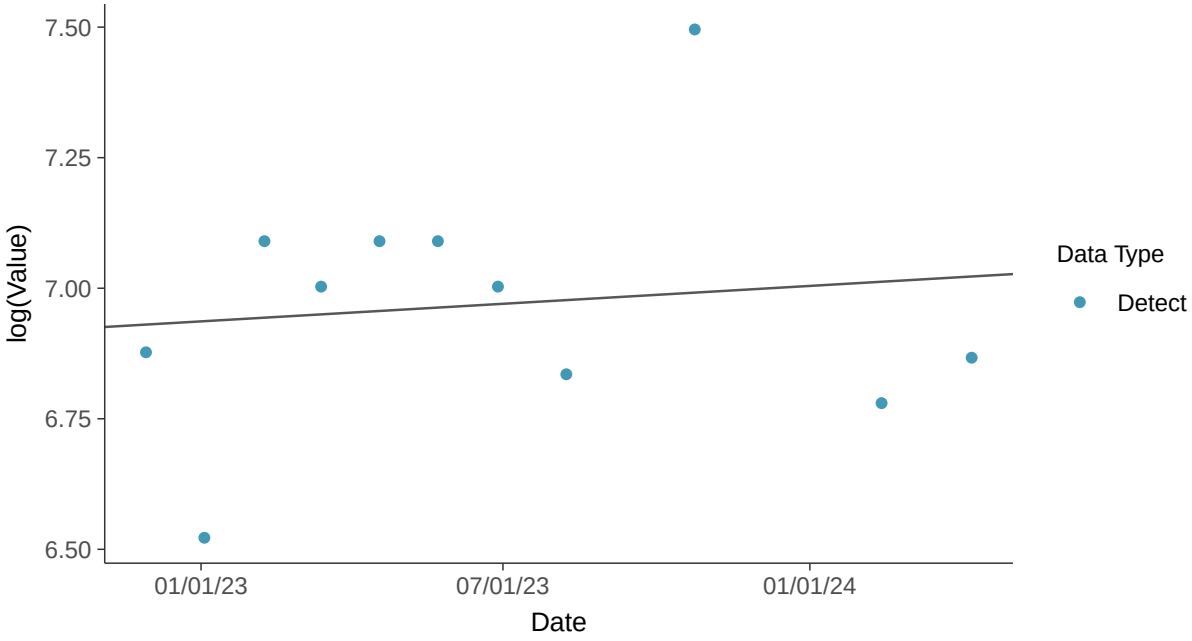
Gamma Q-Q plot

Total Dissolved Solids, MW-11 (mg/L)



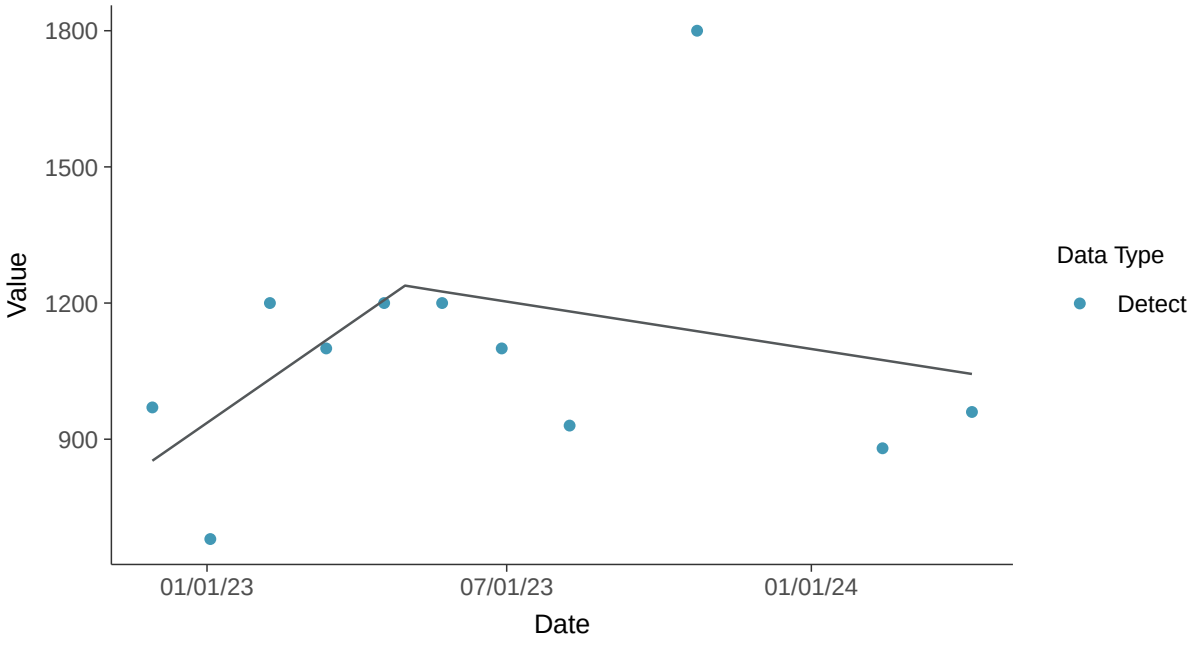
Trend Regression: Lognormal MLE

Total Dissolved Solids, MW-11 (mg/L)



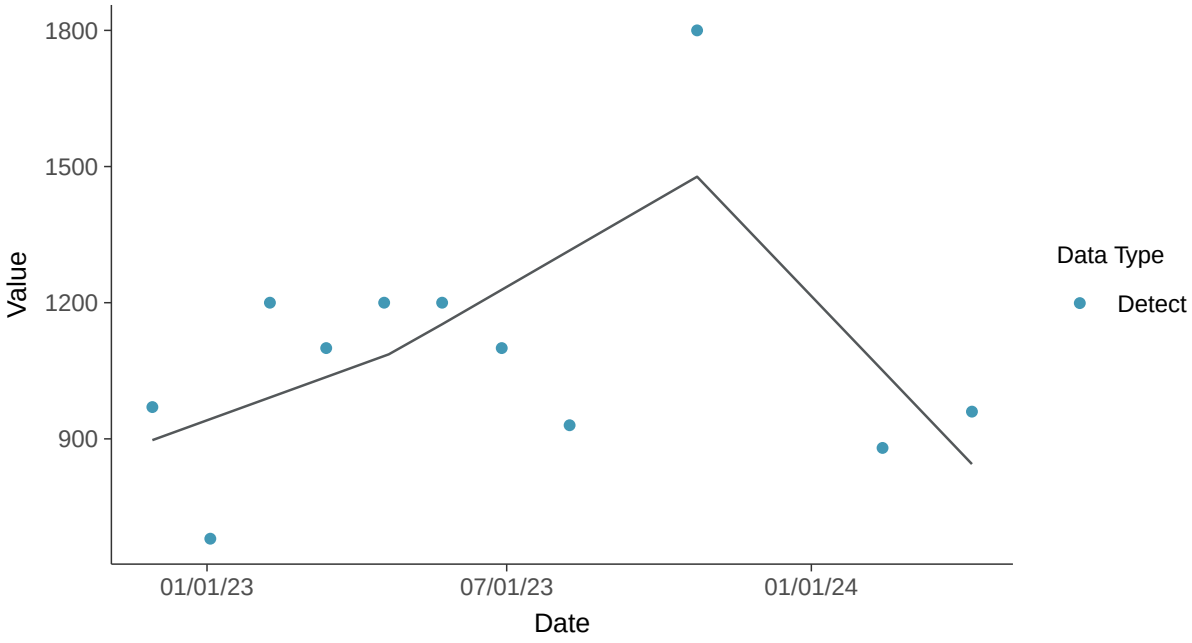
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-11 (mg/L)



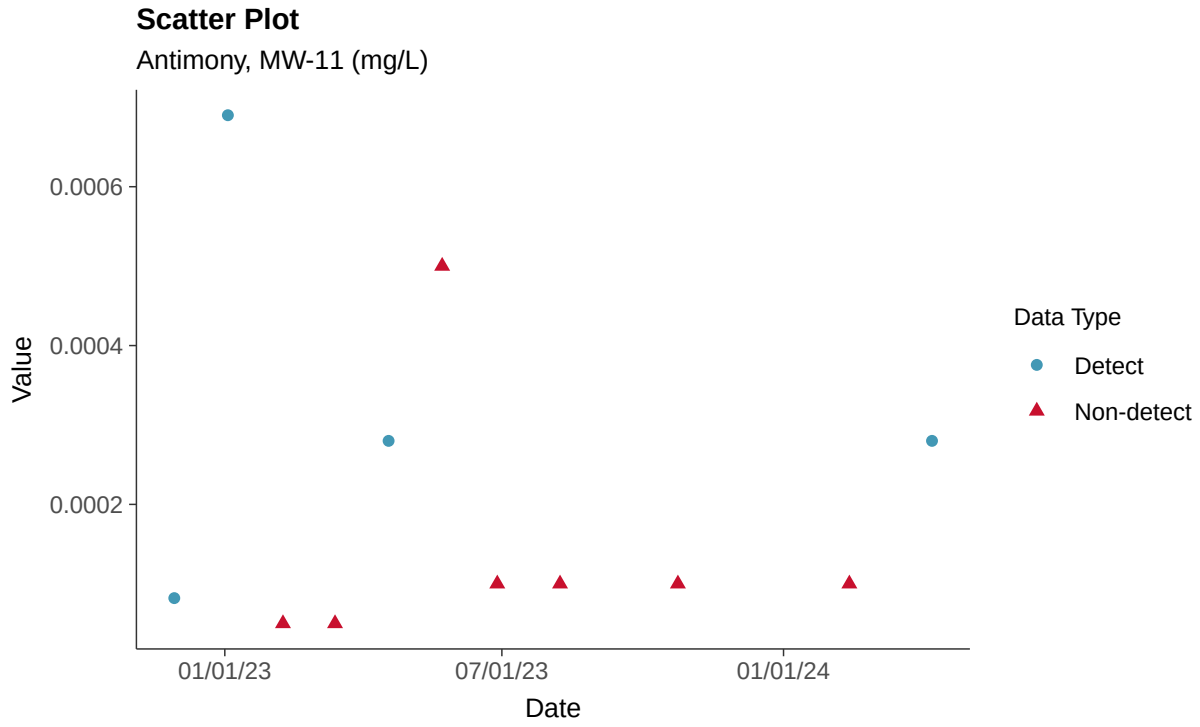
Trend Regression: Piecewise Linear-Linear-Linear

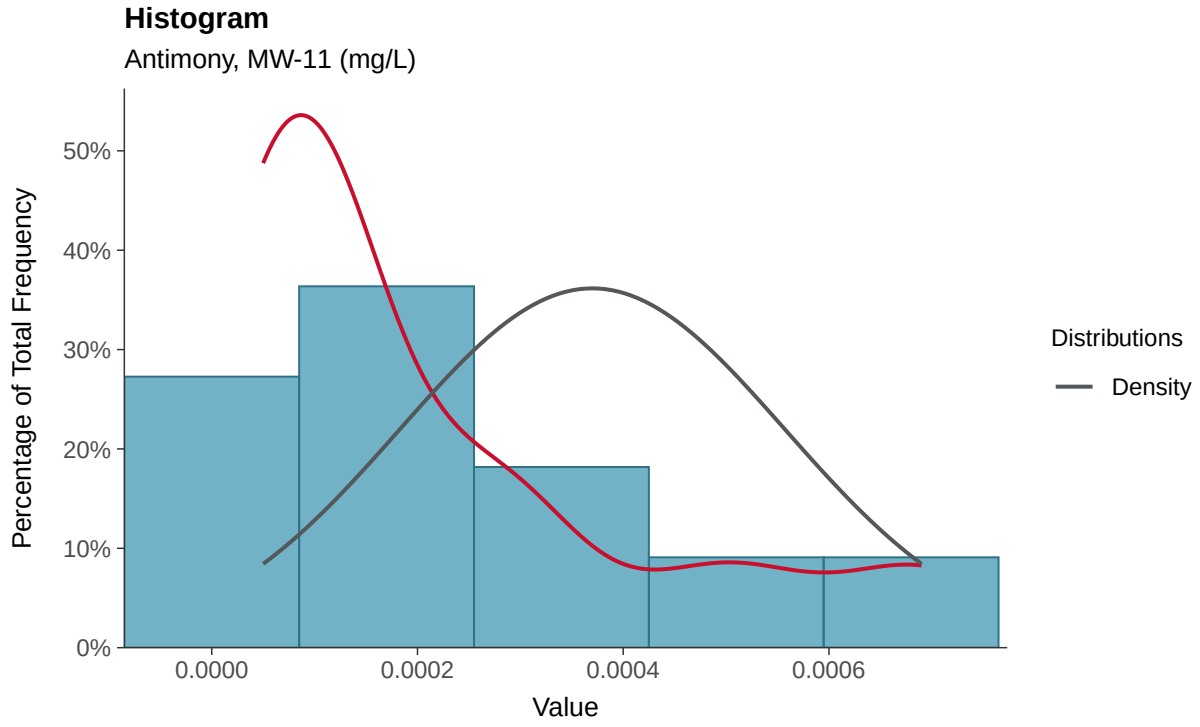
Total Dissolved Solids, MW-11 (mg/L)



Appendix IV: Antimony, MW-11

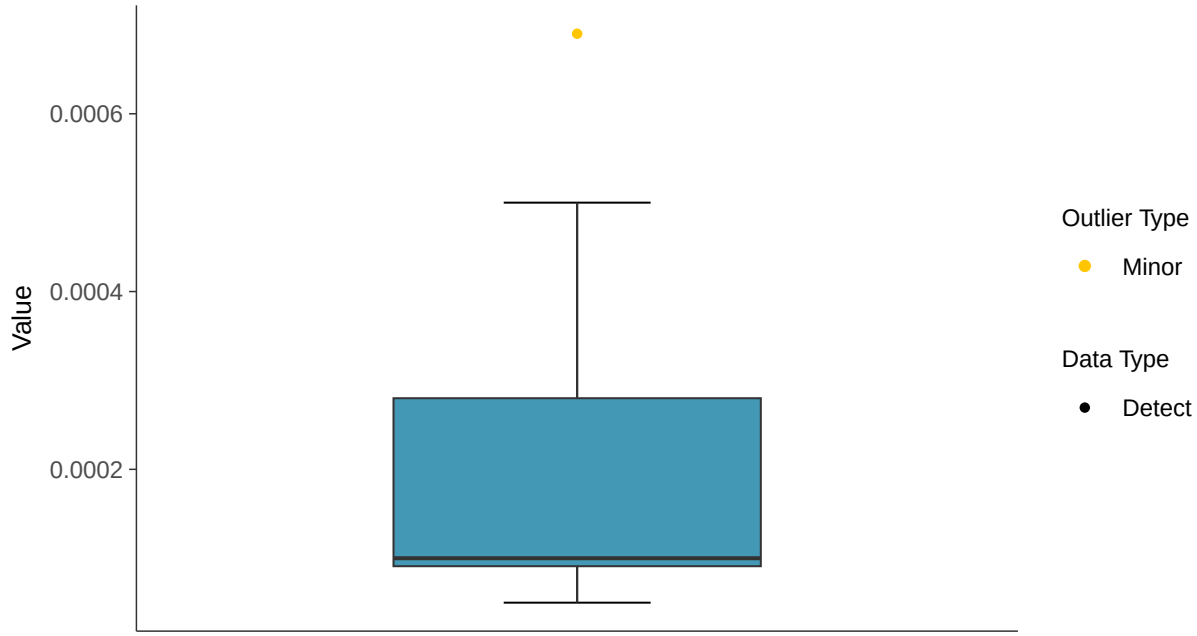
ID: 2_21_5_101





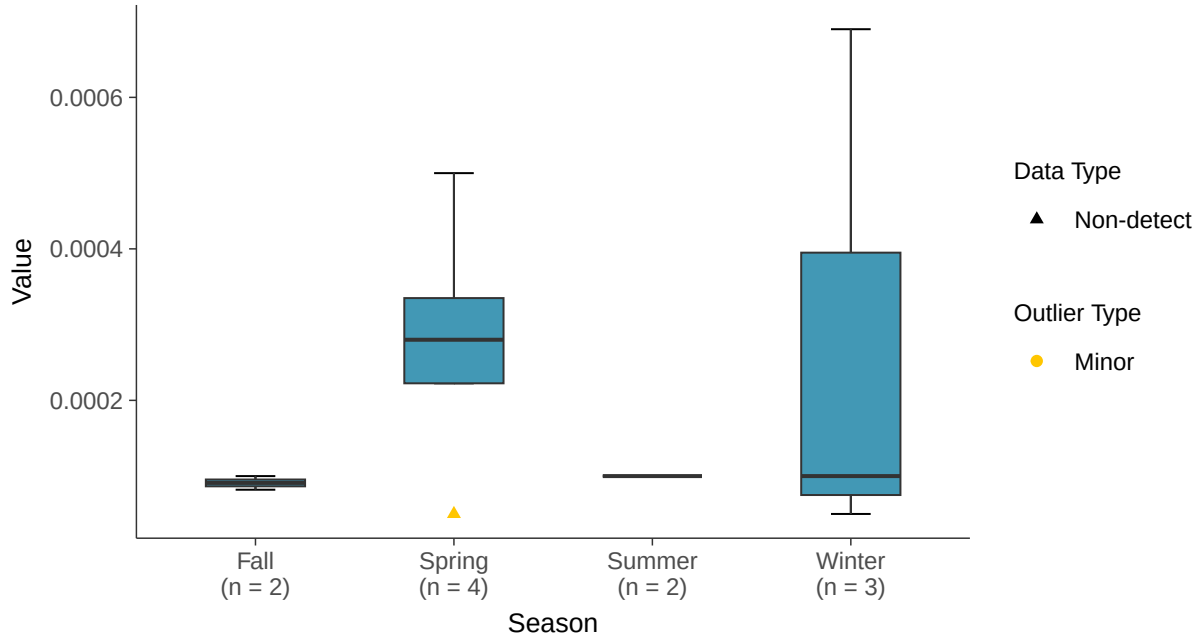
Boxplot

Antimony, MW-11 (mg/L)



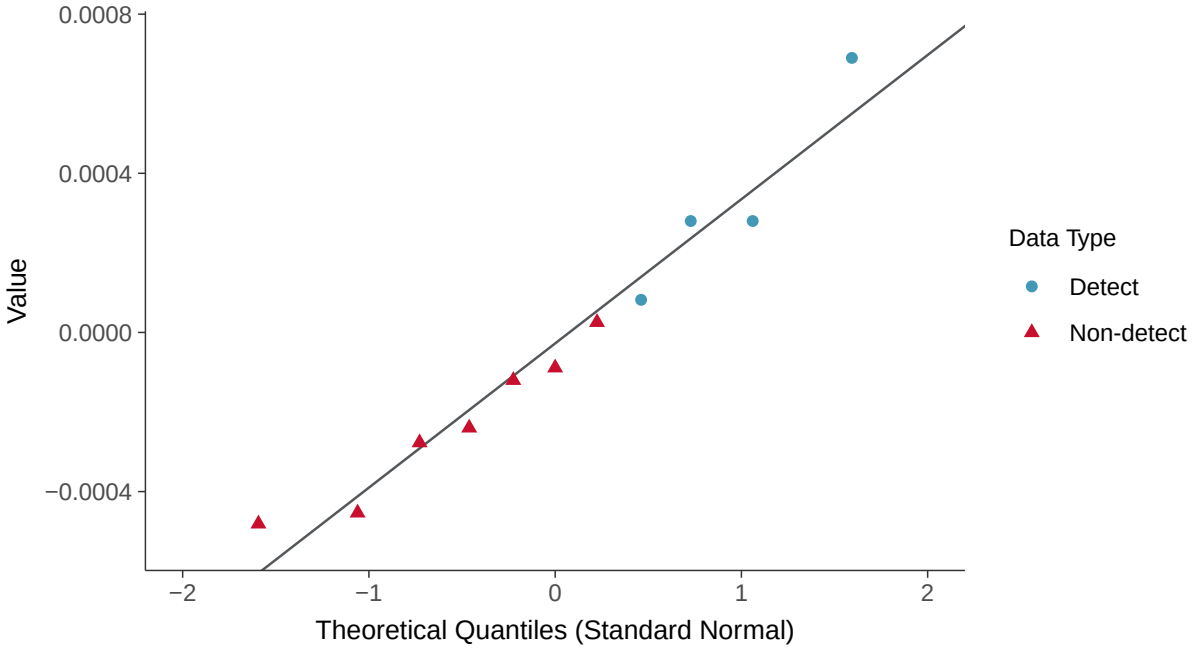
Boxplot by Season

Antimony, MW-11 (mg/L)



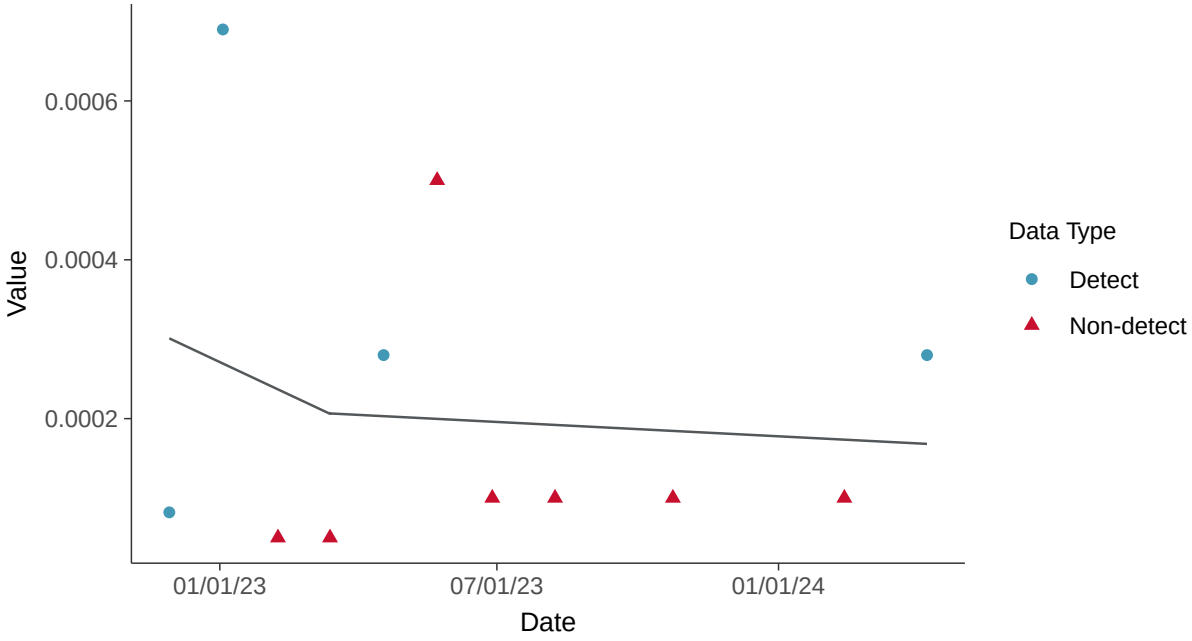
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-11 (mg/L)



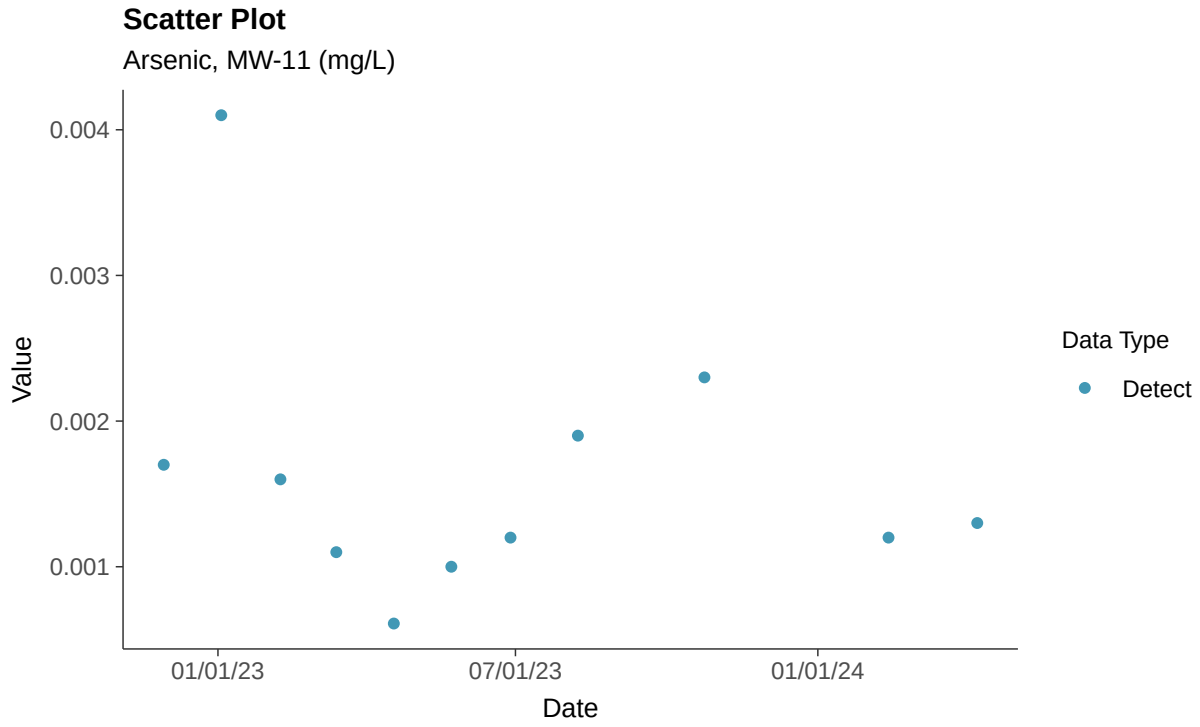
Trend Regression: Piecewise Linear-Linear

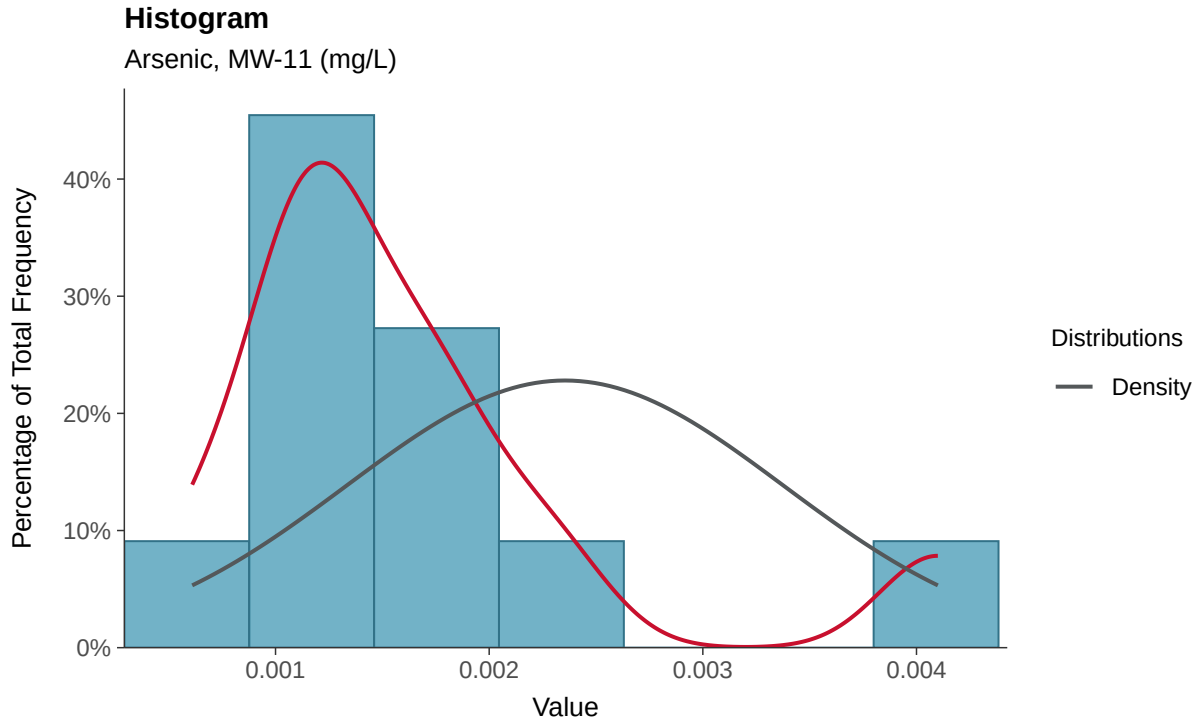
Antimony, MW-11 (mg/L)



Appendix IV: Arsenic, MW-11

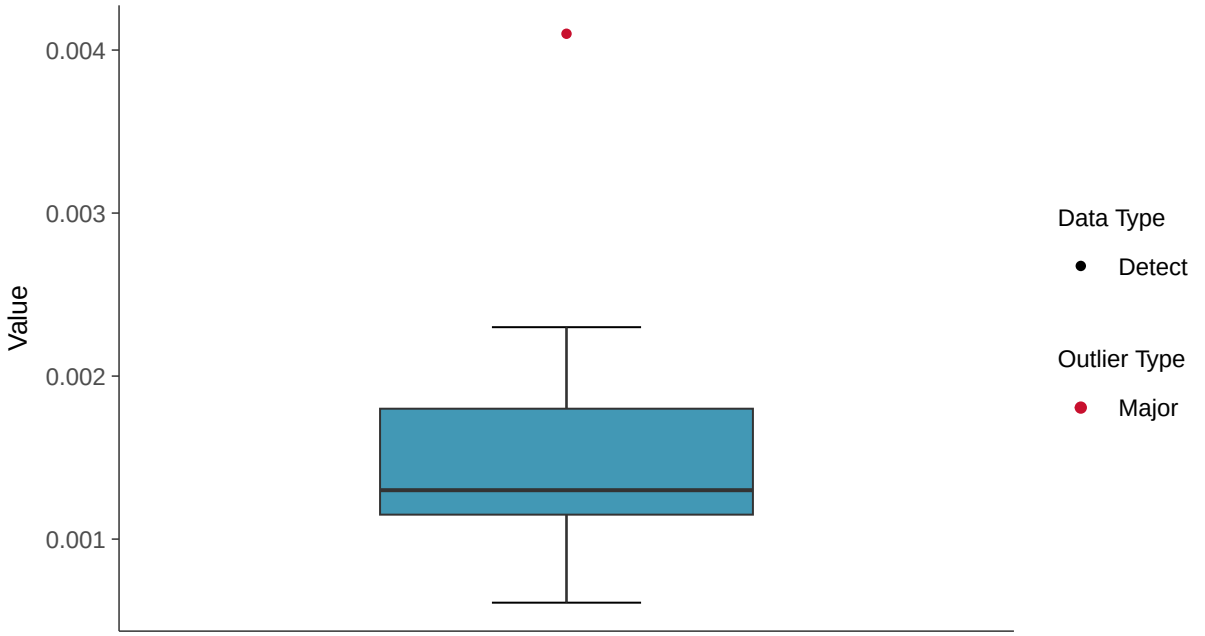
ID: 2_21_5_102





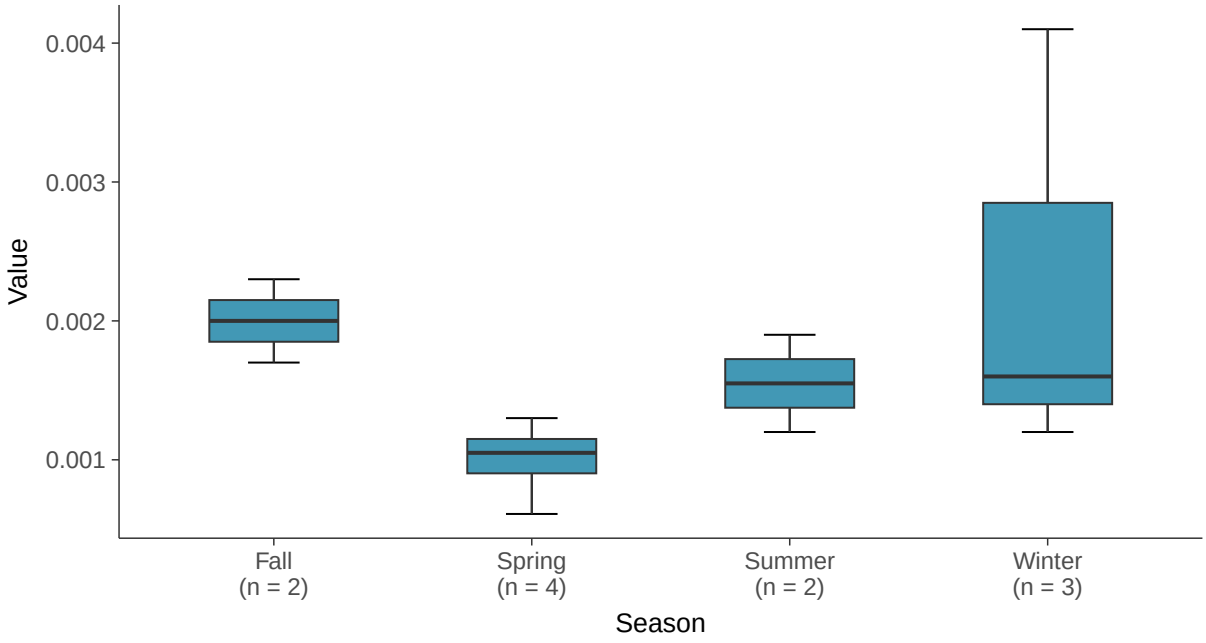
Boxplot

Arsenic, MW-11 (mg/L)



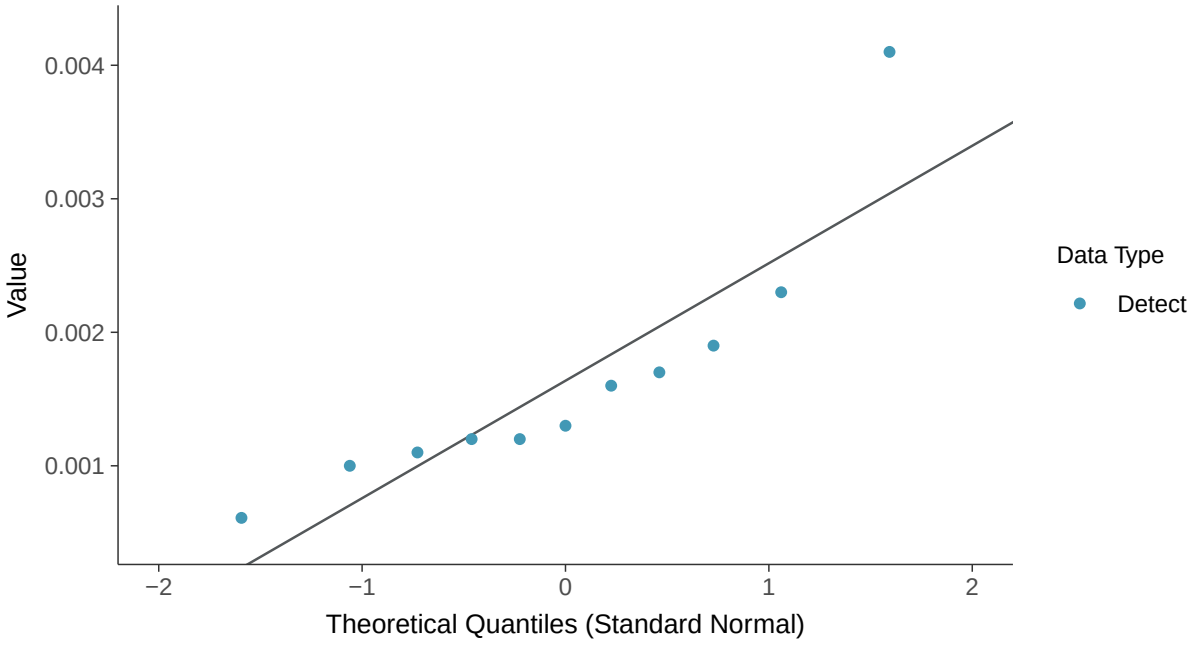
Boxplot by Season

Arsenic, MW-11 (mg/L)



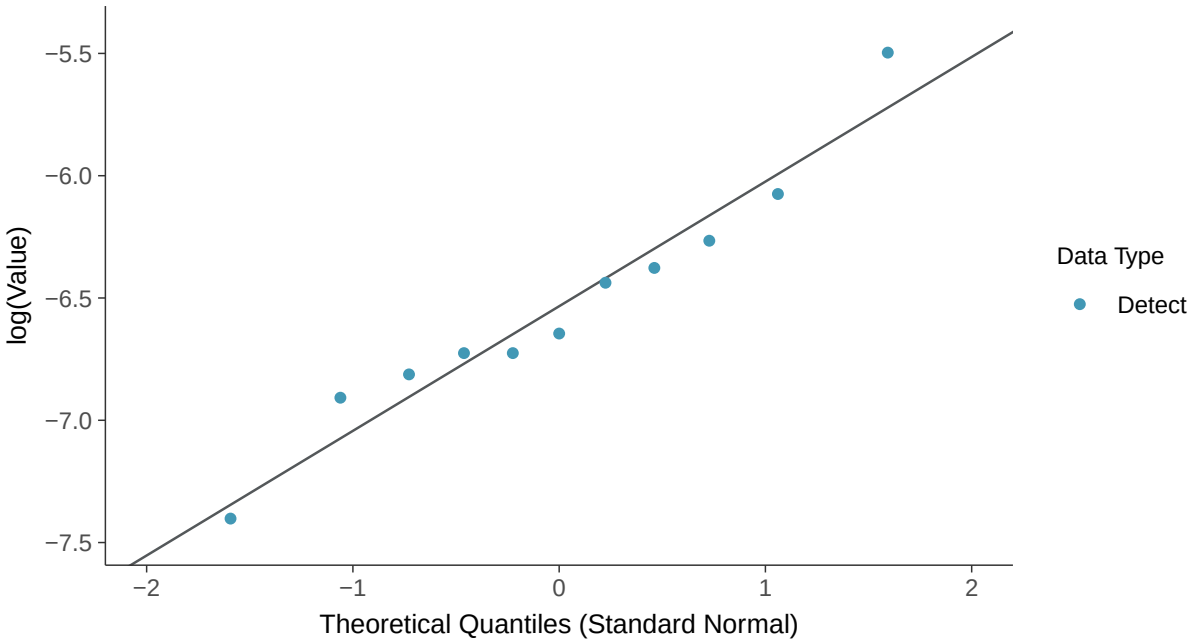
Normal Q-Q plot

Arsenic, MW-11 (mg/L)



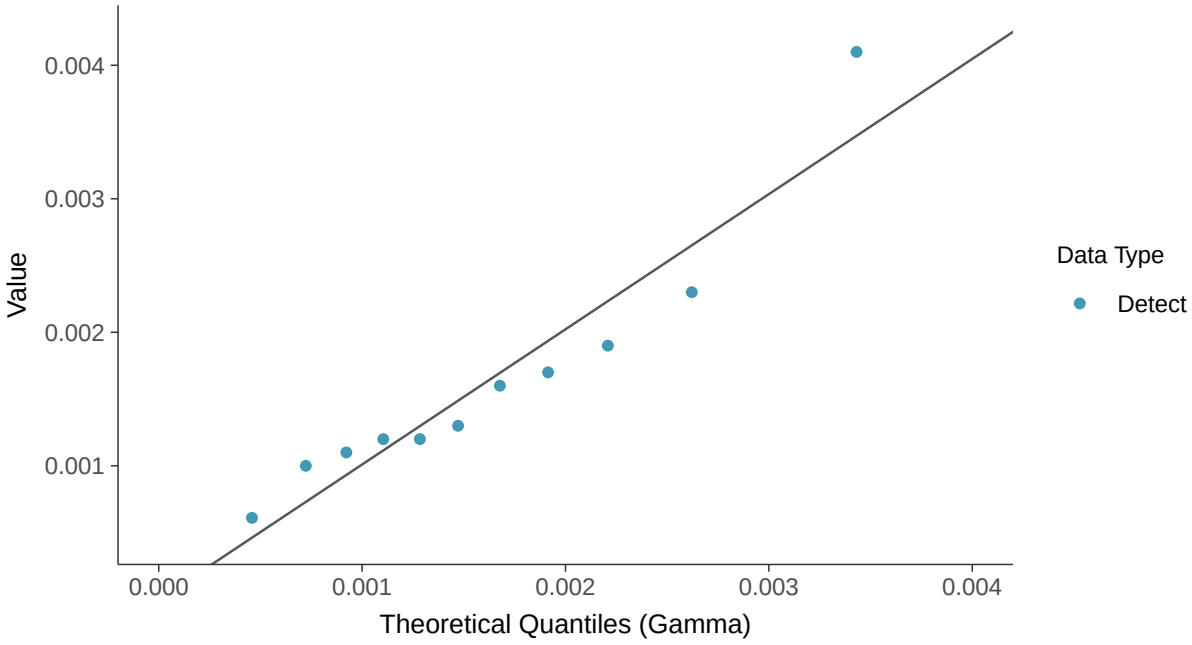
Lognormal Q-Q plot

Arsenic, MW-11 (mg/L)



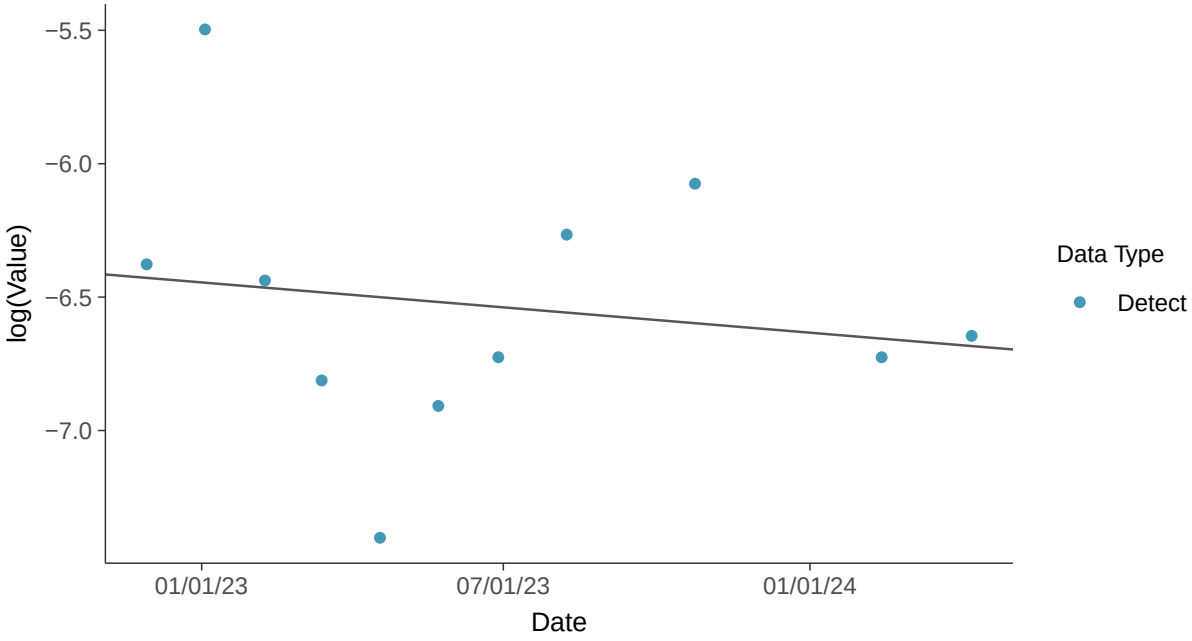
Gamma Q-Q plot

Arsenic, MW-11 (mg/L)



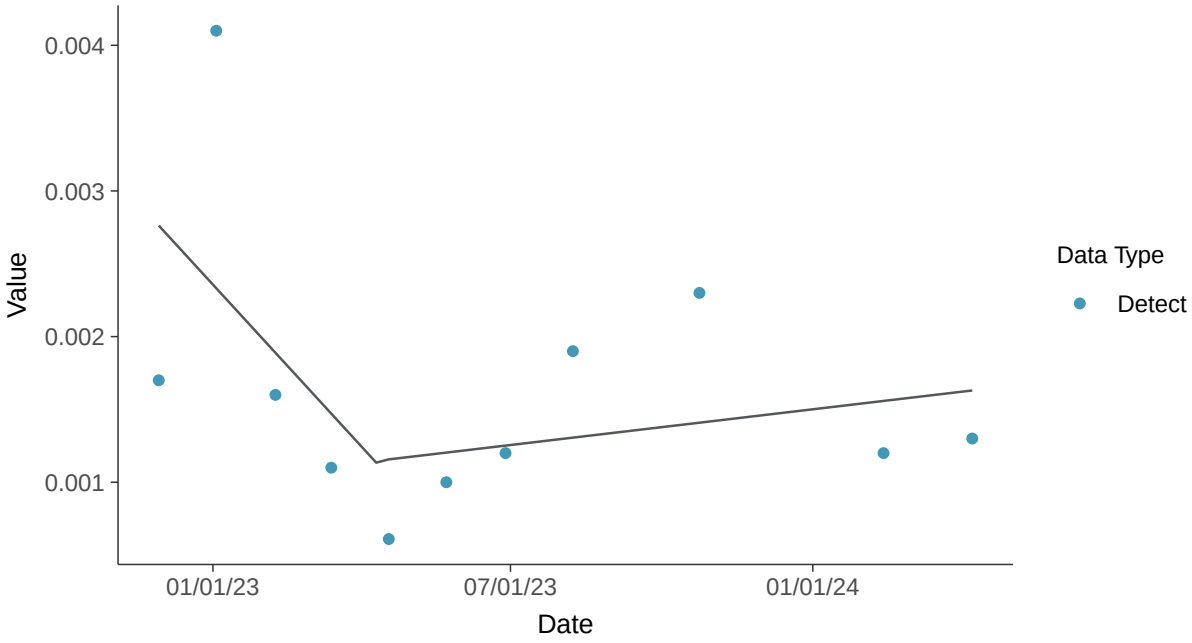
Trend Regression: Lognormal MLE

Arsenic, MW-11 (mg/L)



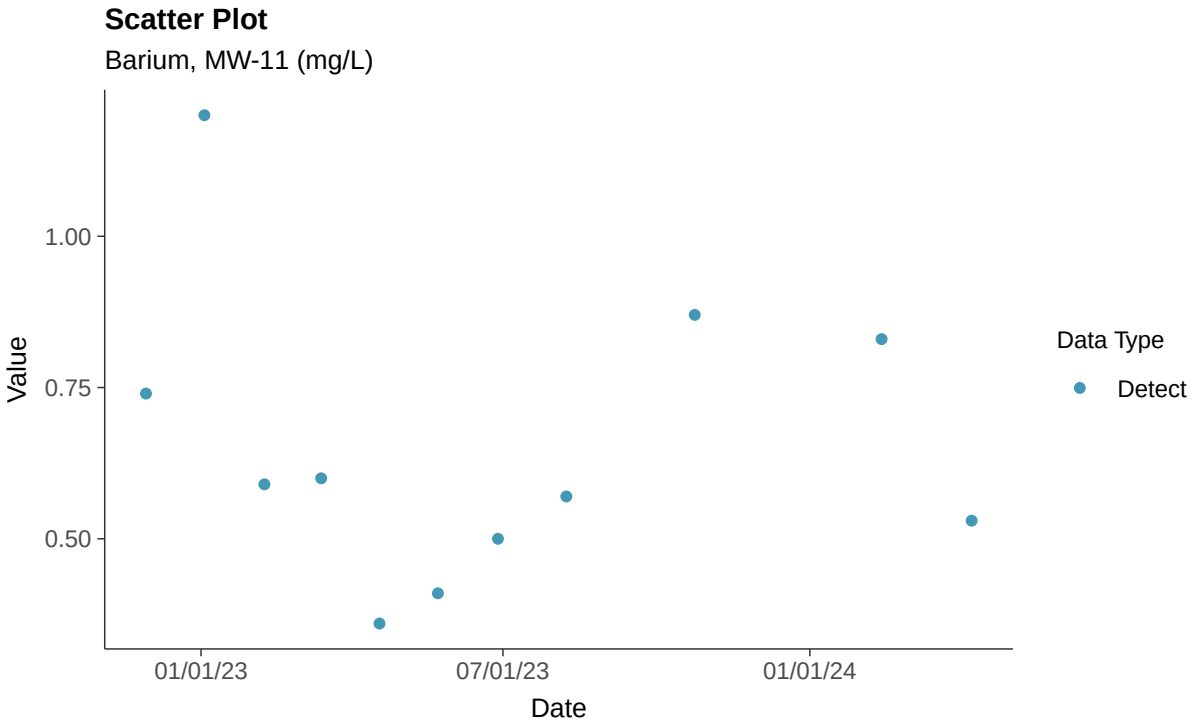
Trend Regression: Piecewise Linear-Linear

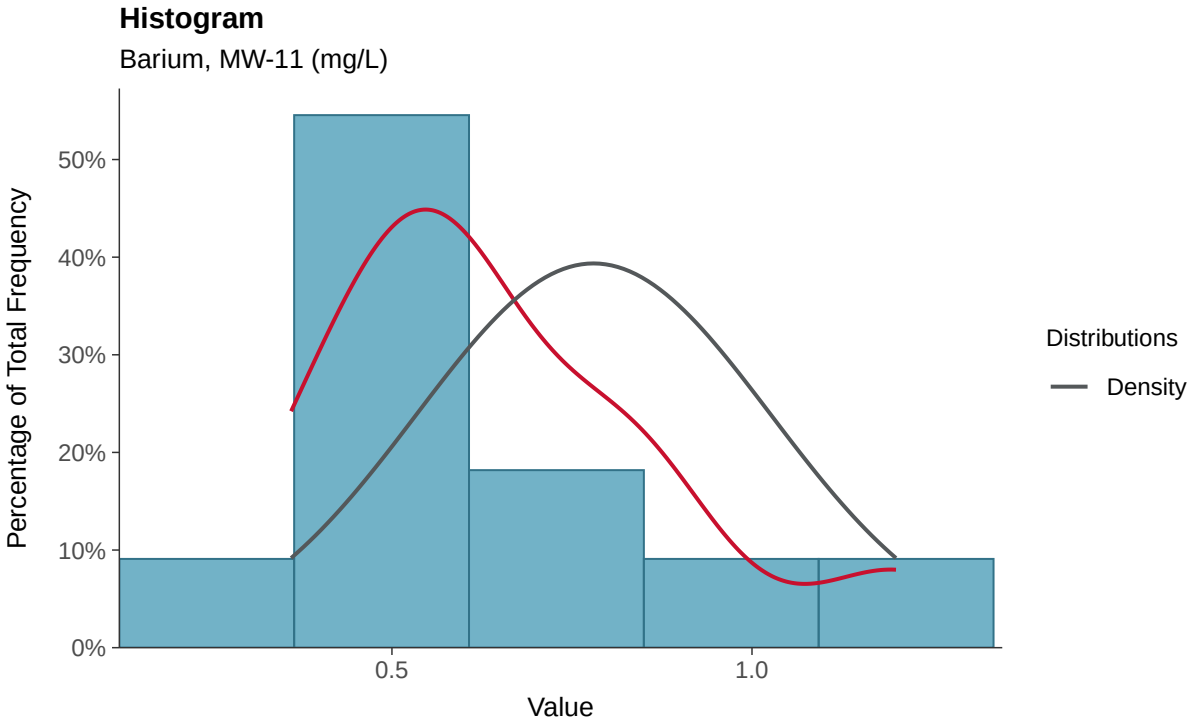
Arsenic, MW-11 (mg/L)



Appendix IV: Barium, MW-11

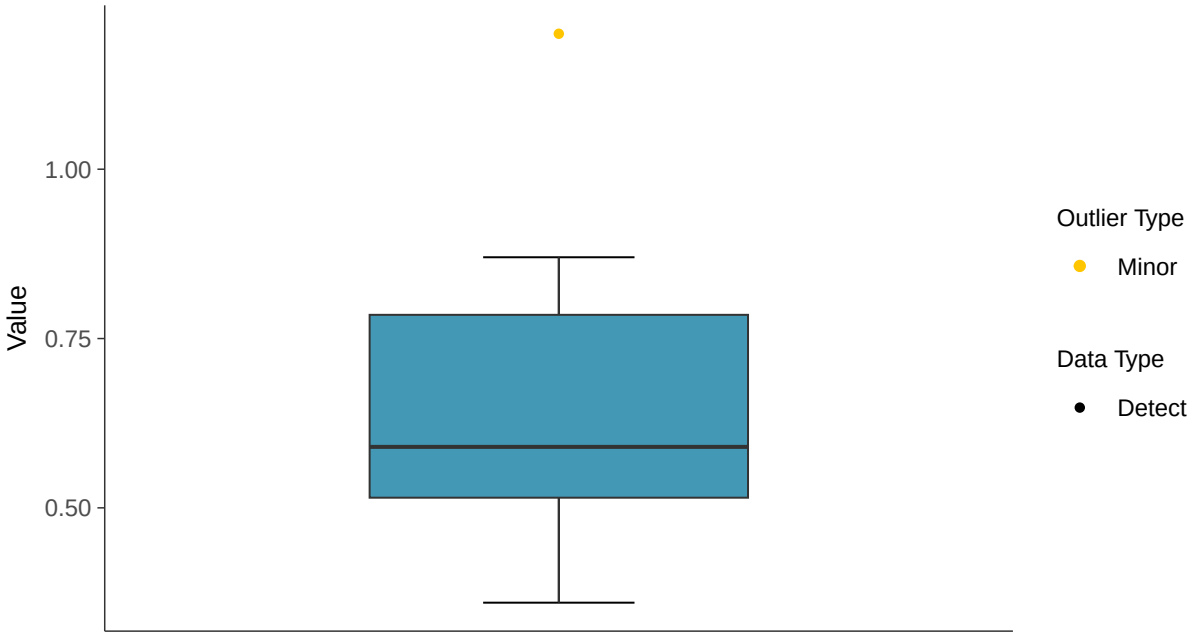
ID: 2_21_5_103





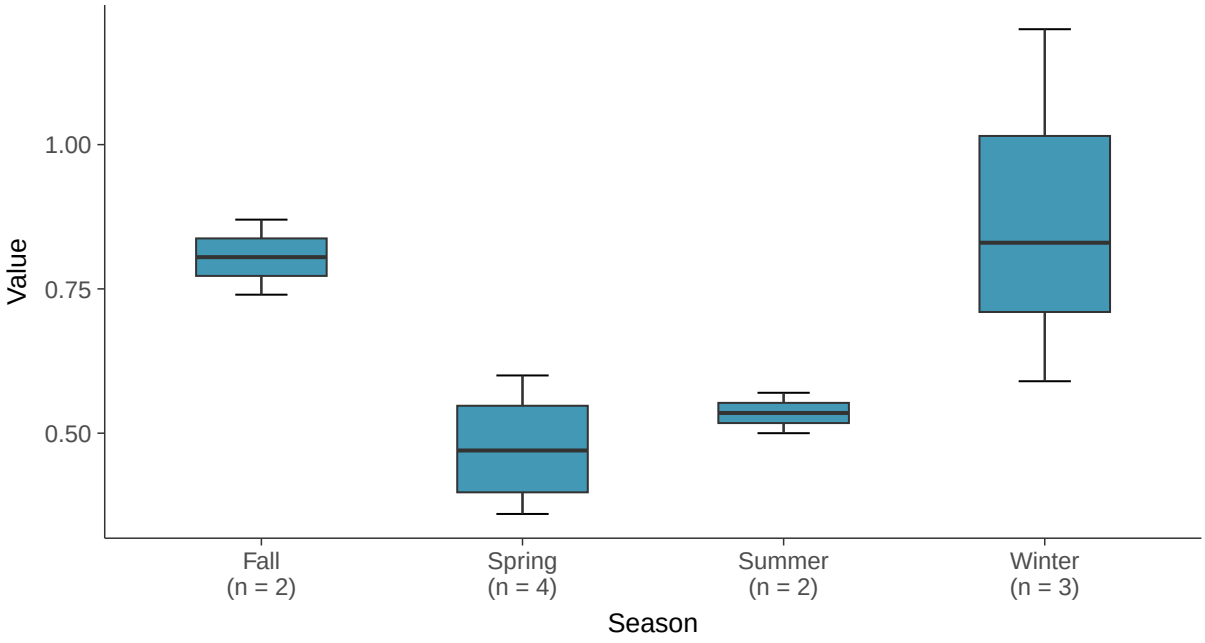
Boxplot

Barium, MW-11 (mg/L)



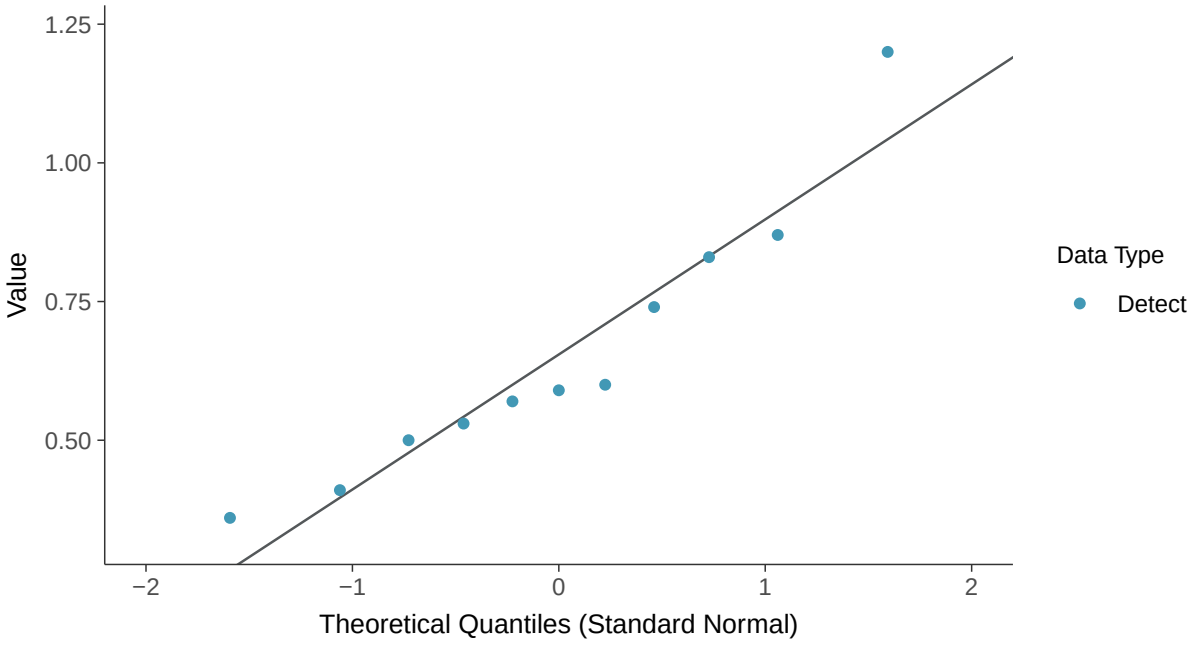
Boxplot by Season

Barium, MW-11 (mg/L)



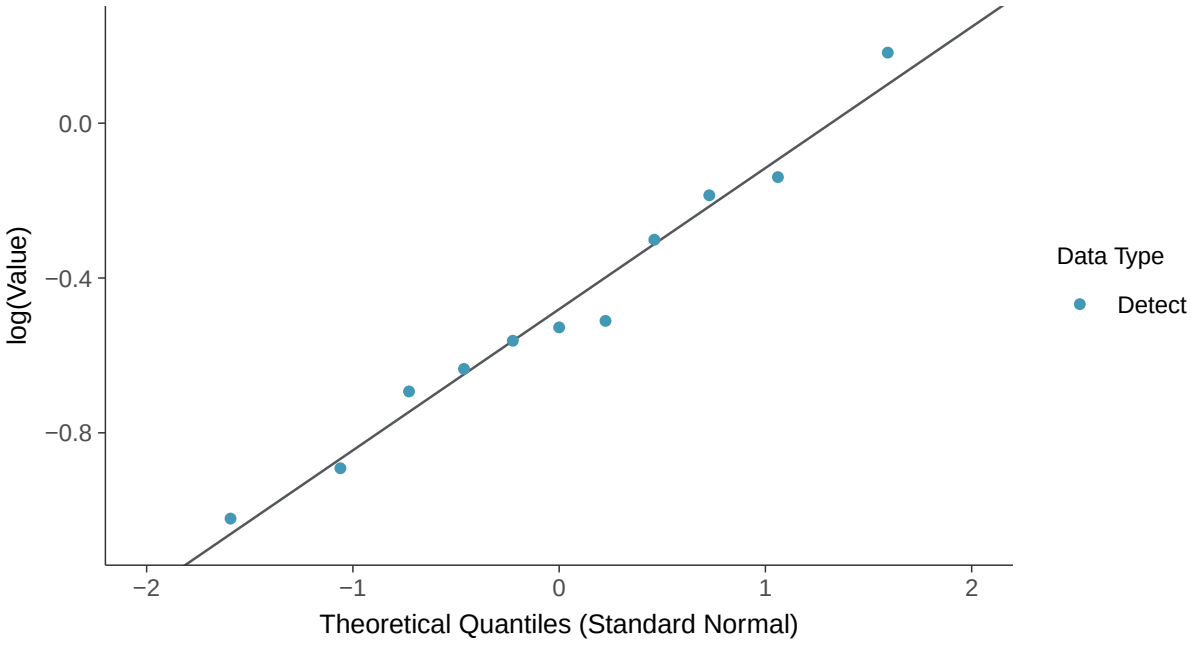
Normal Q-Q plot

Barium, MW-11 (mg/L)



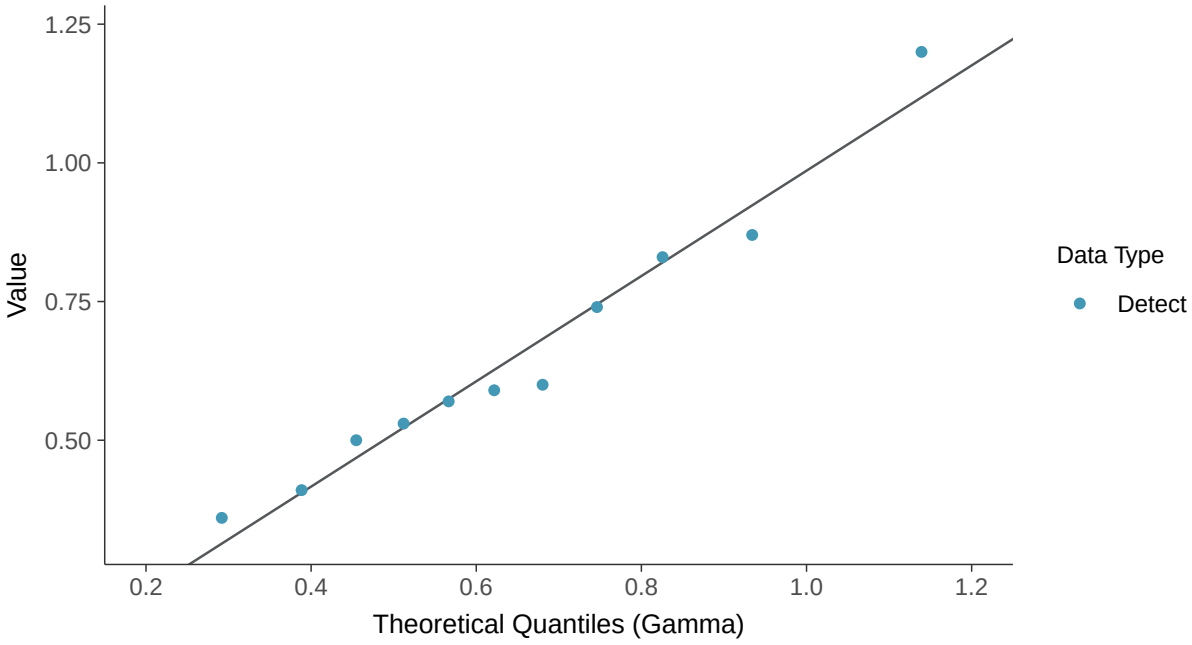
Lognormal Q-Q plot

Barium, MW-11 (mg/L)



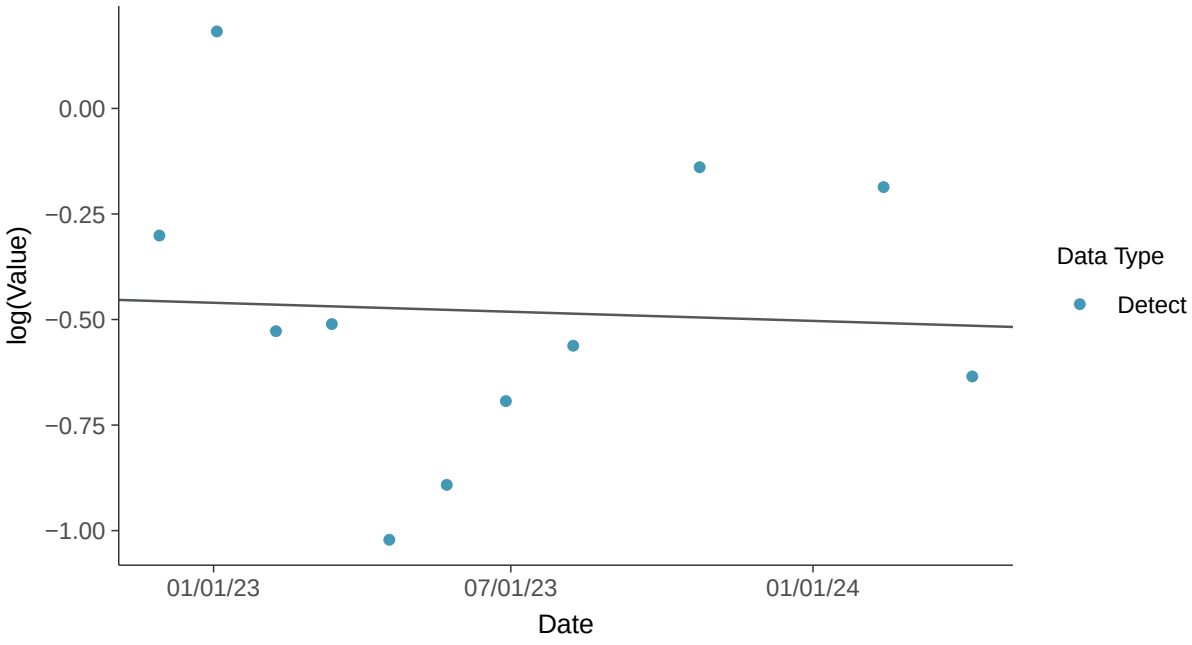
Gamma Q-Q plot

Barium, MW-11 (mg/L)



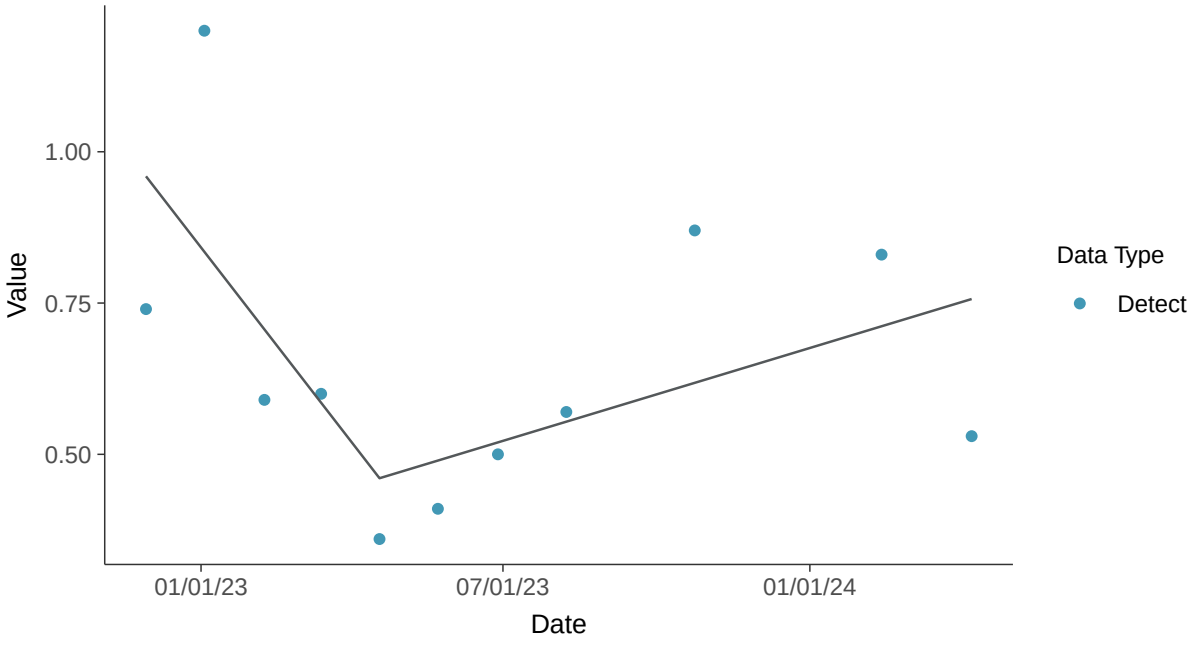
Trend Regression: Lognormal MLE

Barium, MW-11 (mg/L)



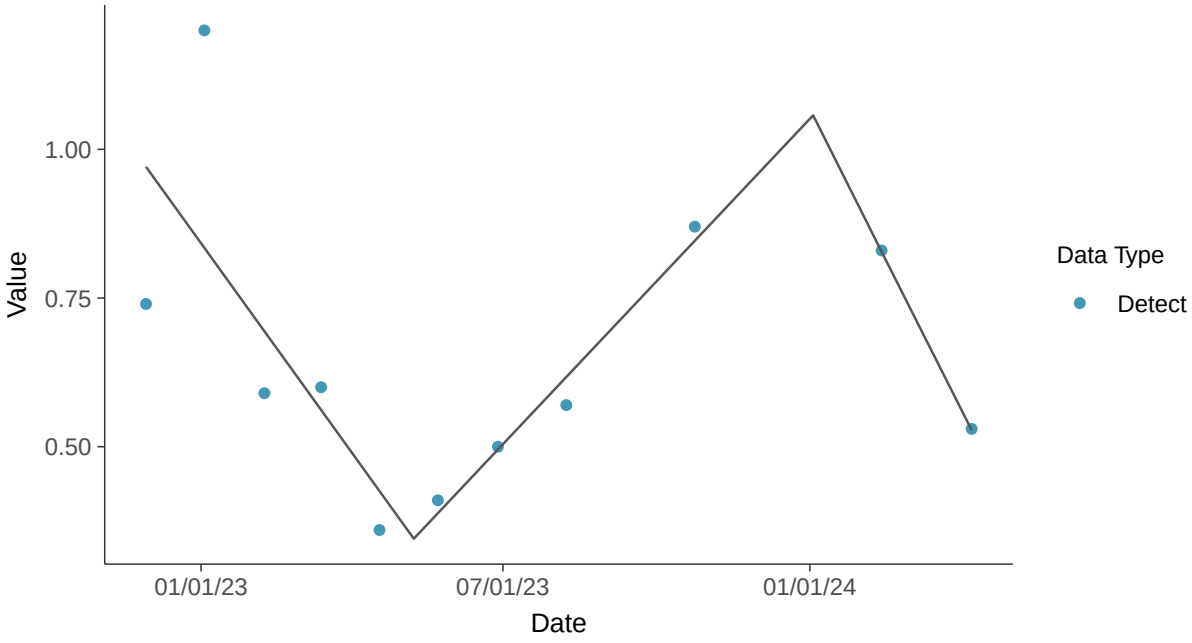
Trend Regression: Piecewise Linear-Linear

Barium, MW-11 (mg/L)



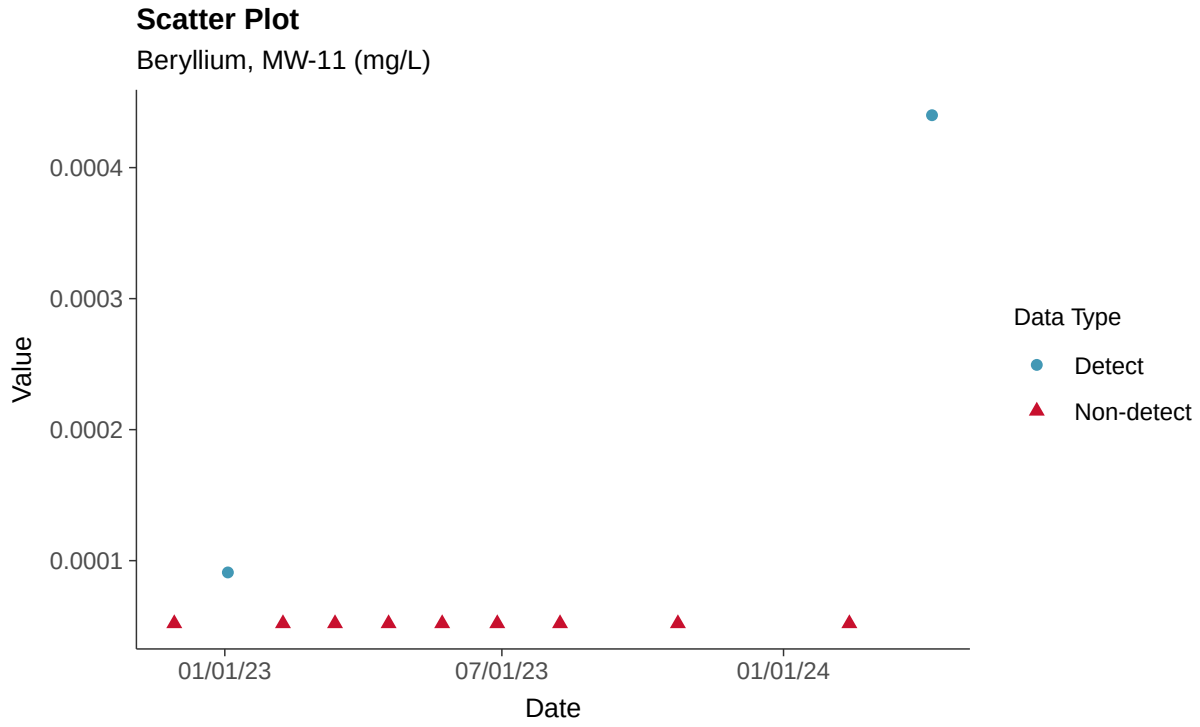
Trend Regression: Piecewise Linear-Linear-Linear

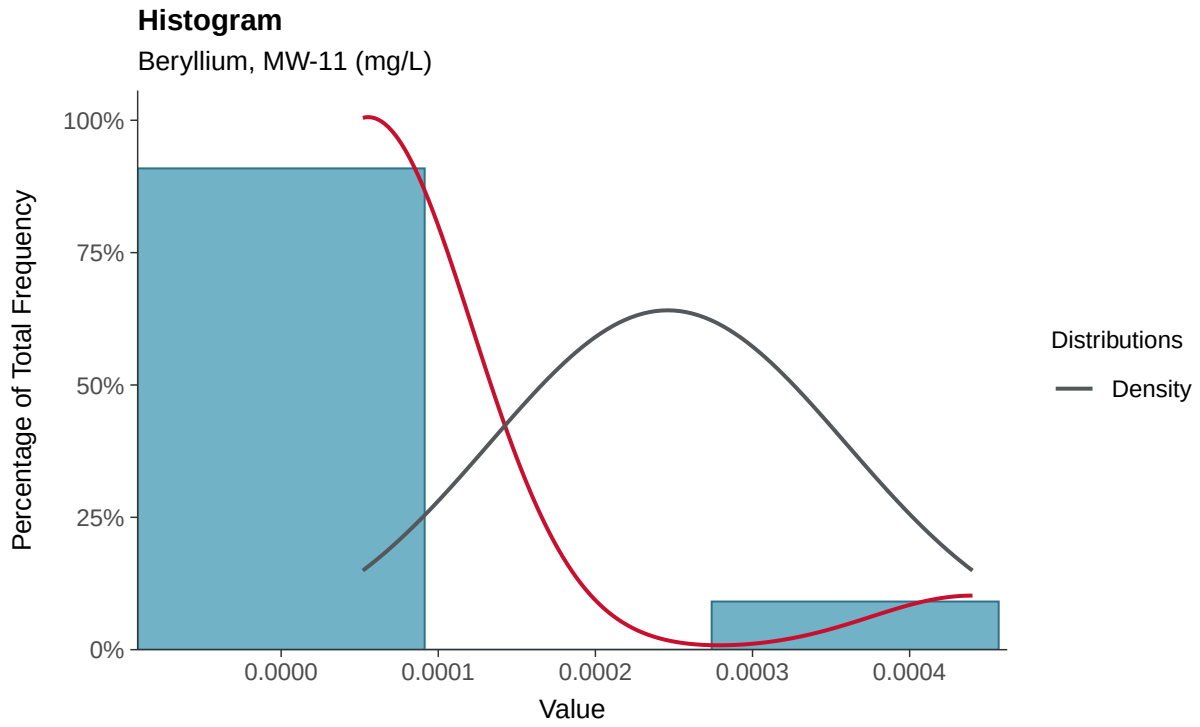
Barium, MW-11 (mg/L)



Appendix IV: Beryllium, MW-11

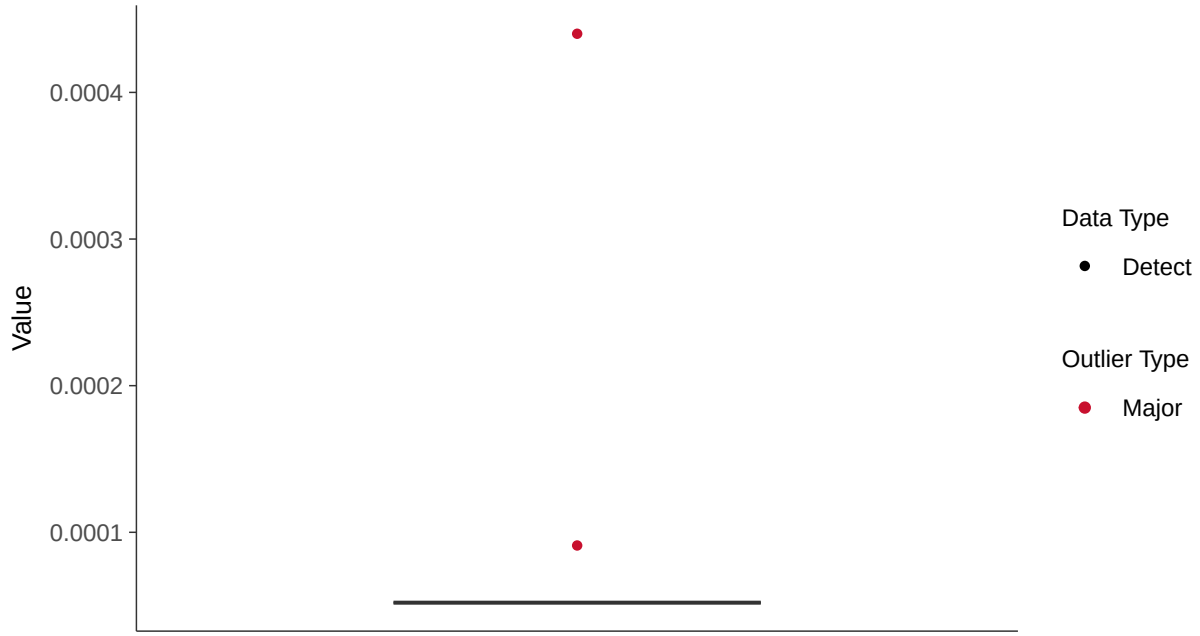
ID: 2_21_5_104





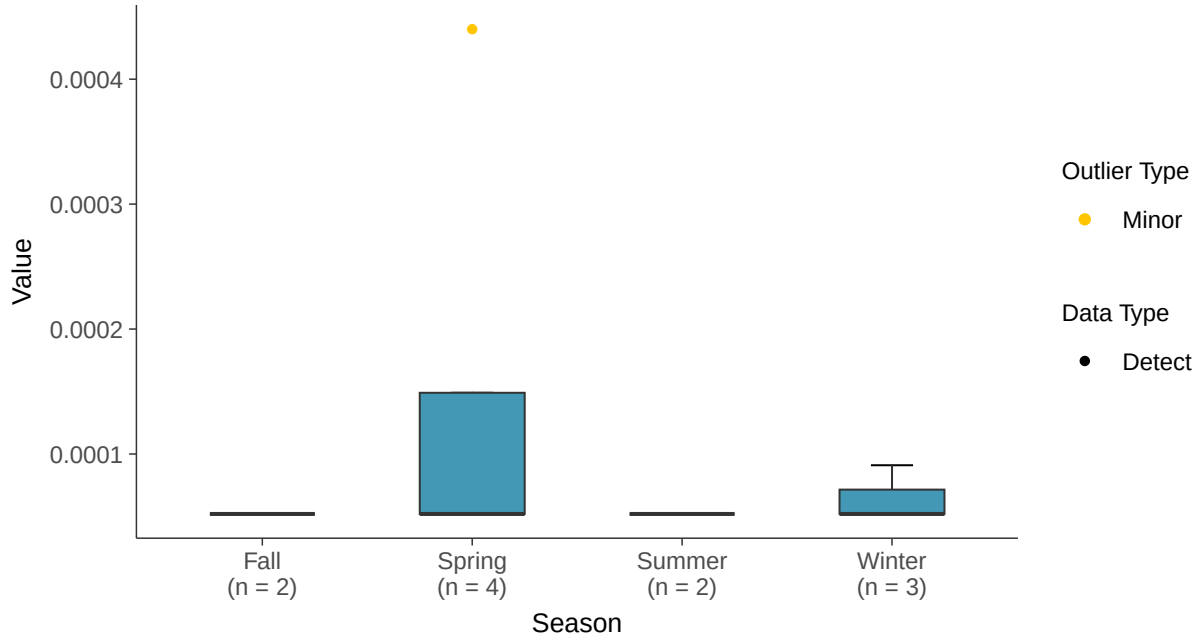
Boxplot

Beryllium, MW-11 (mg/L)



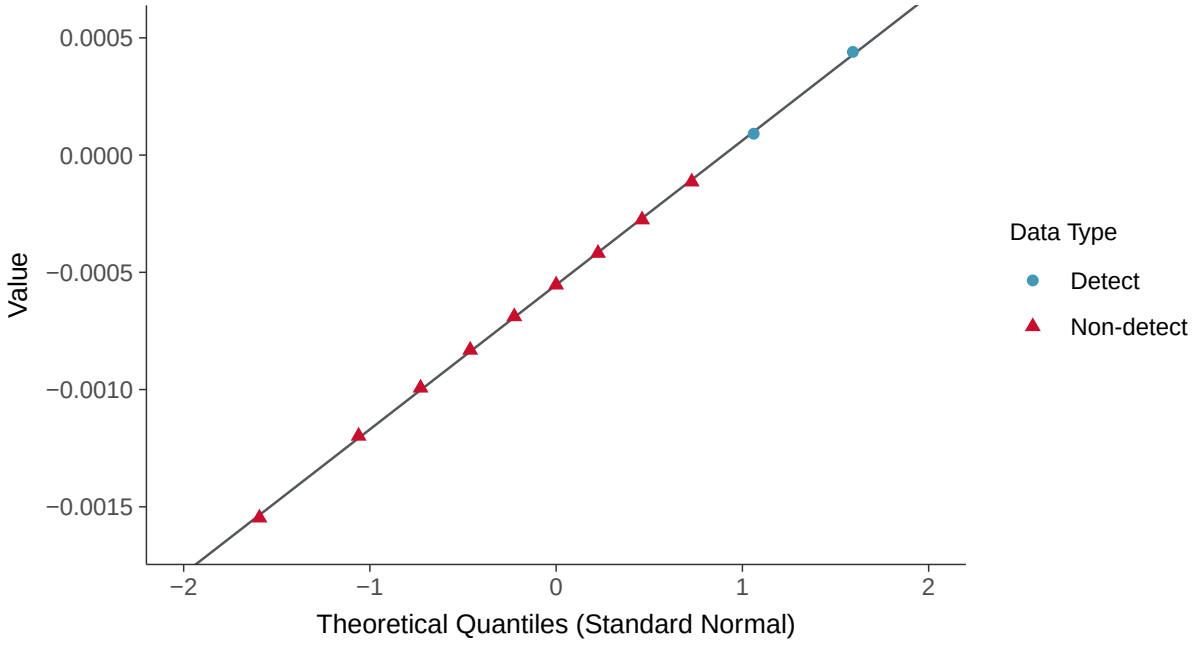
Boxplot by Season

Beryllium, MW-11 (mg/L)



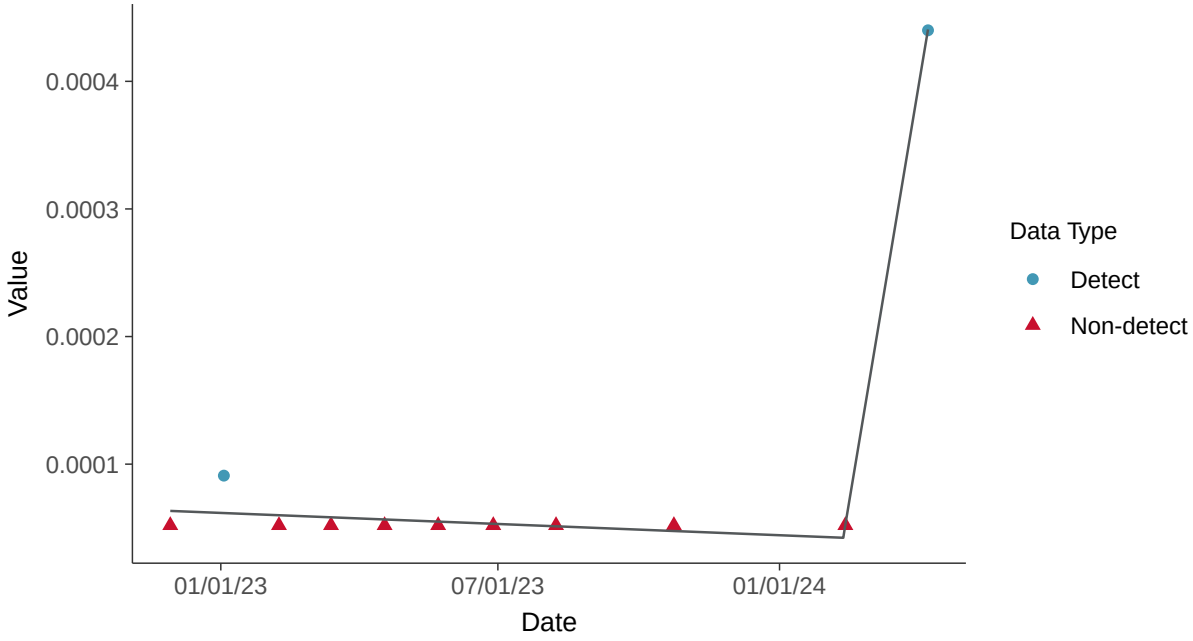
Normal Q-Q plot using ROS Imputed Estimates

Beryllium, MW-11 (mg/L)



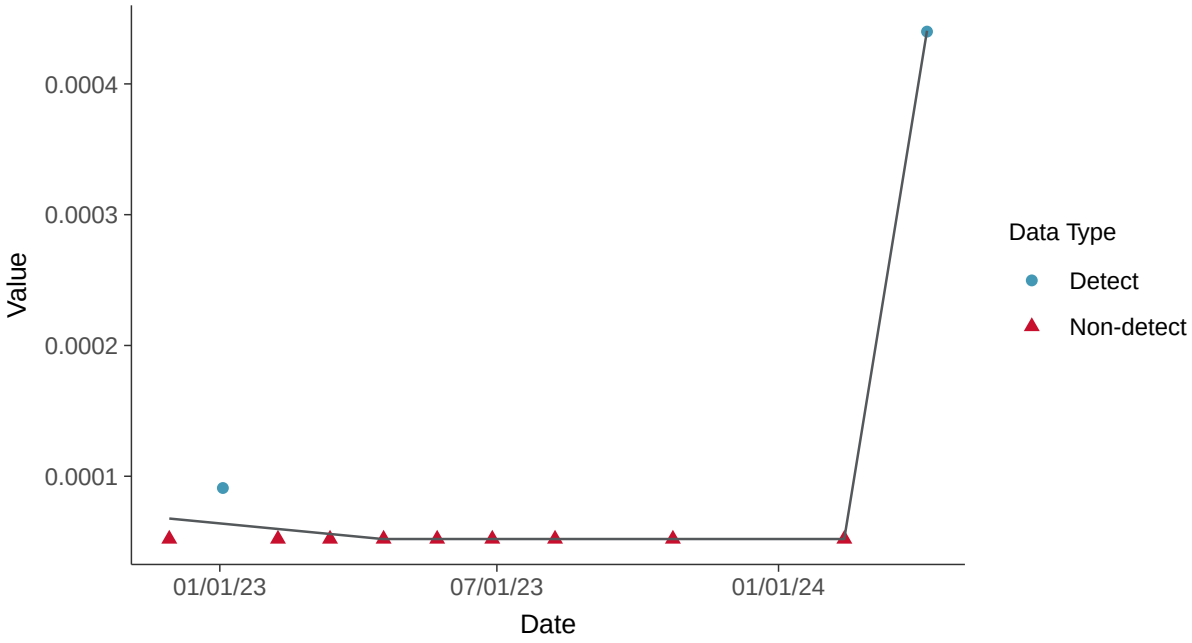
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-11 (mg/L)



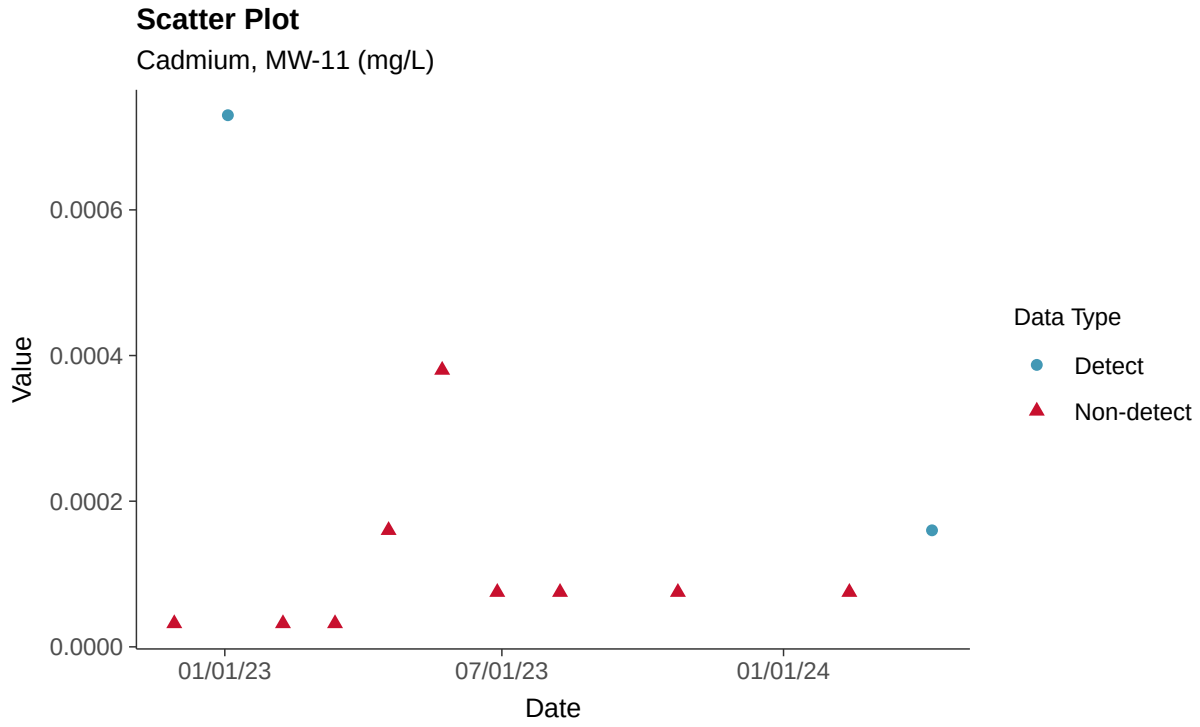
Trend Regression: Piecewise Linear-Linear-Linear

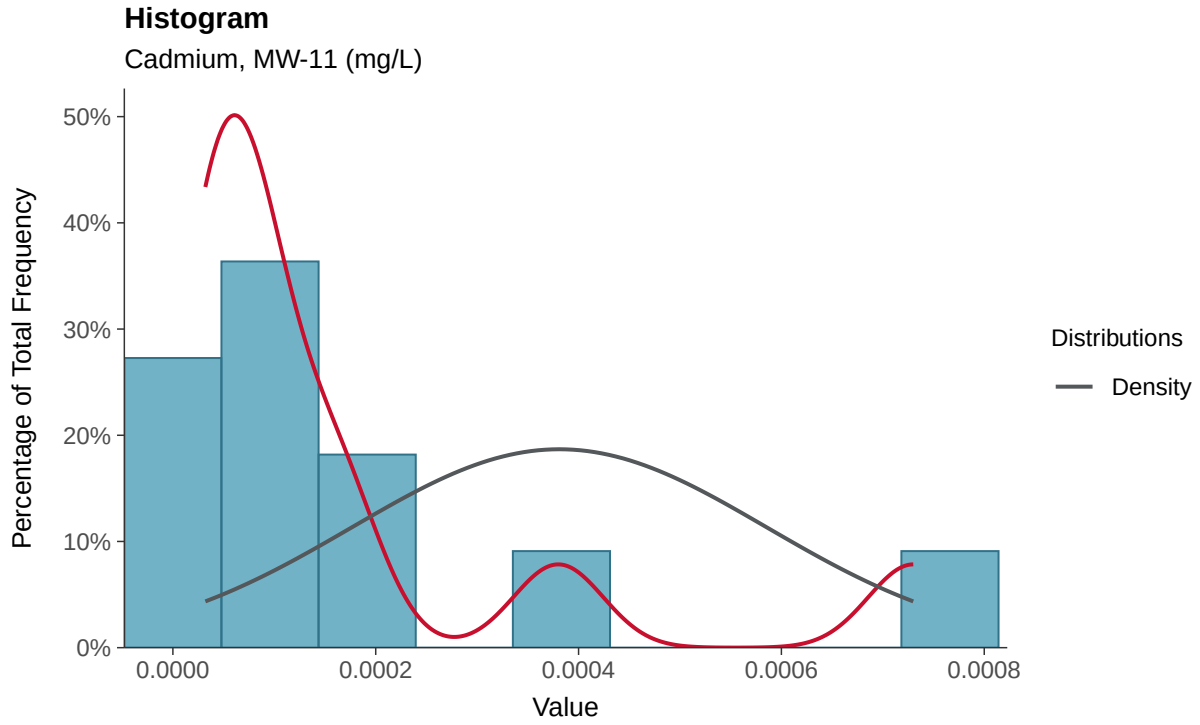
Beryllium, MW-11 (mg/L)



Appendix IV: Cadmium, MW-11

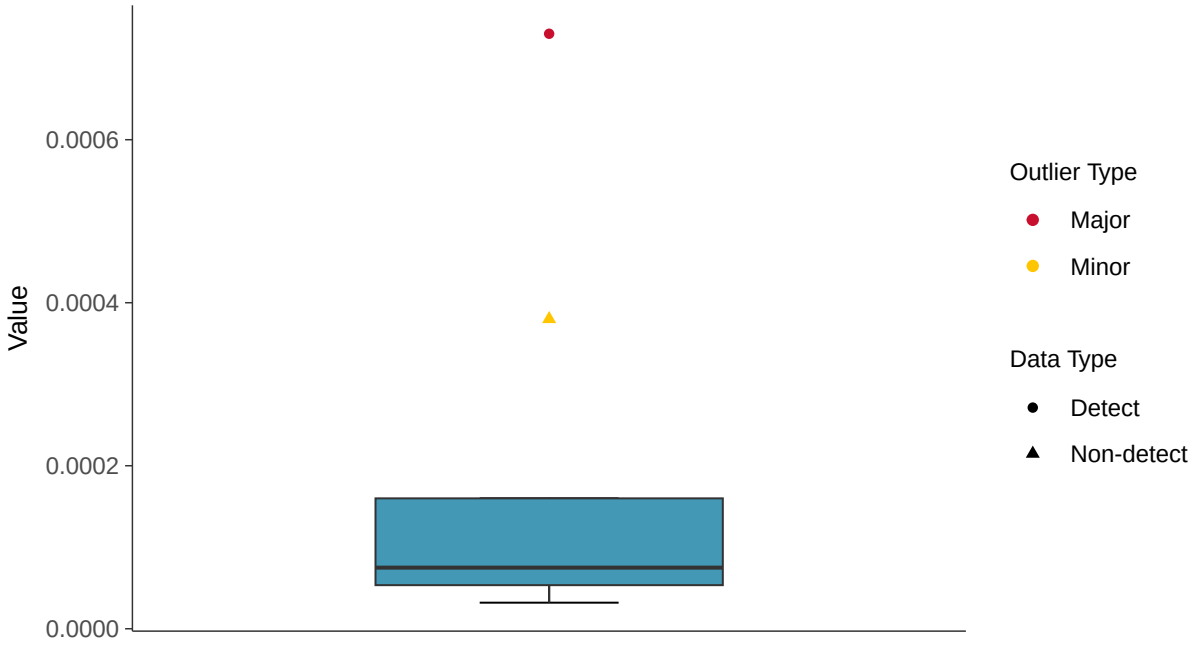
ID: 2_21_5_106





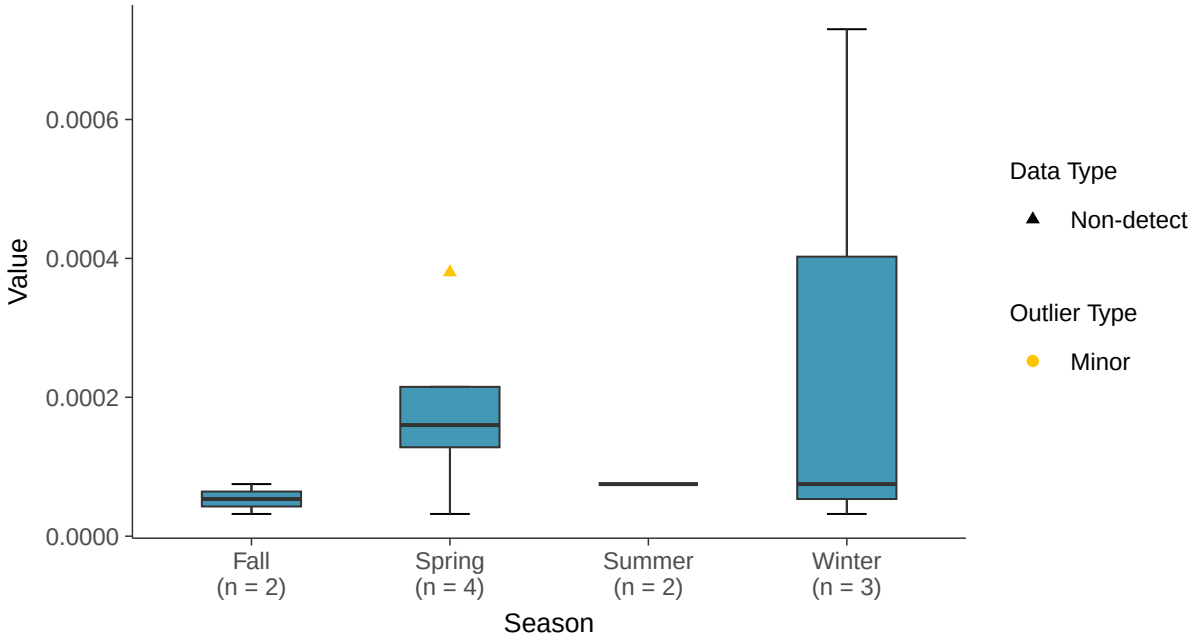
Boxplot

Cadmium, MW-11 (mg/L)



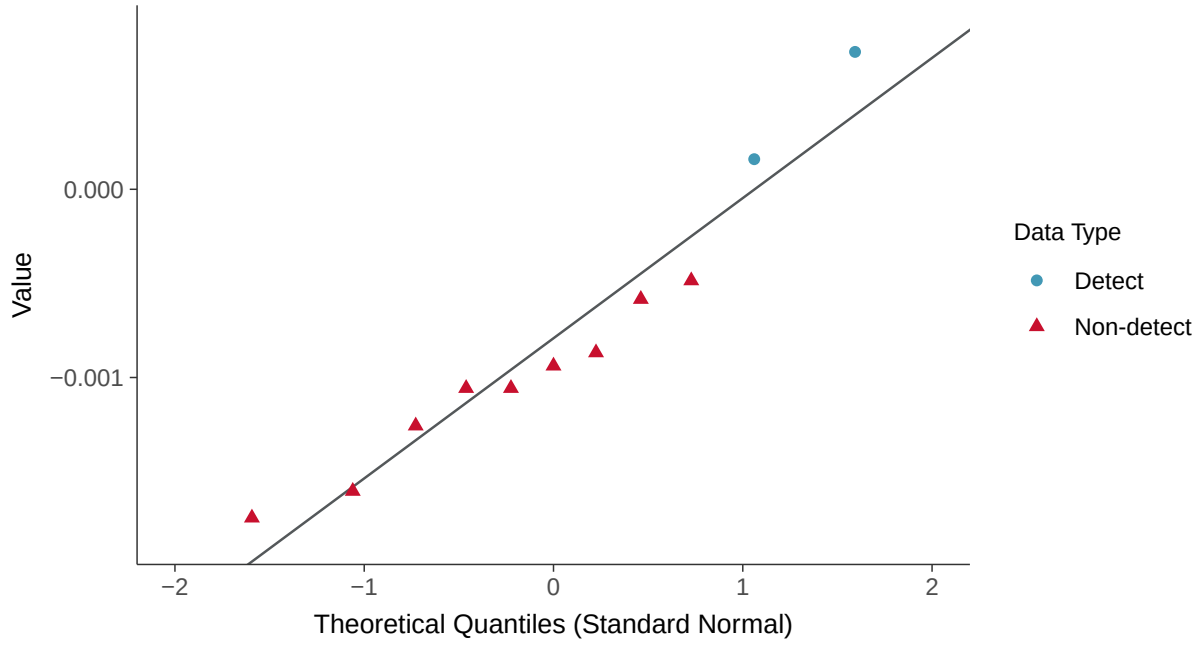
Boxplot by Season

Cadmium, MW-11 (mg/L)



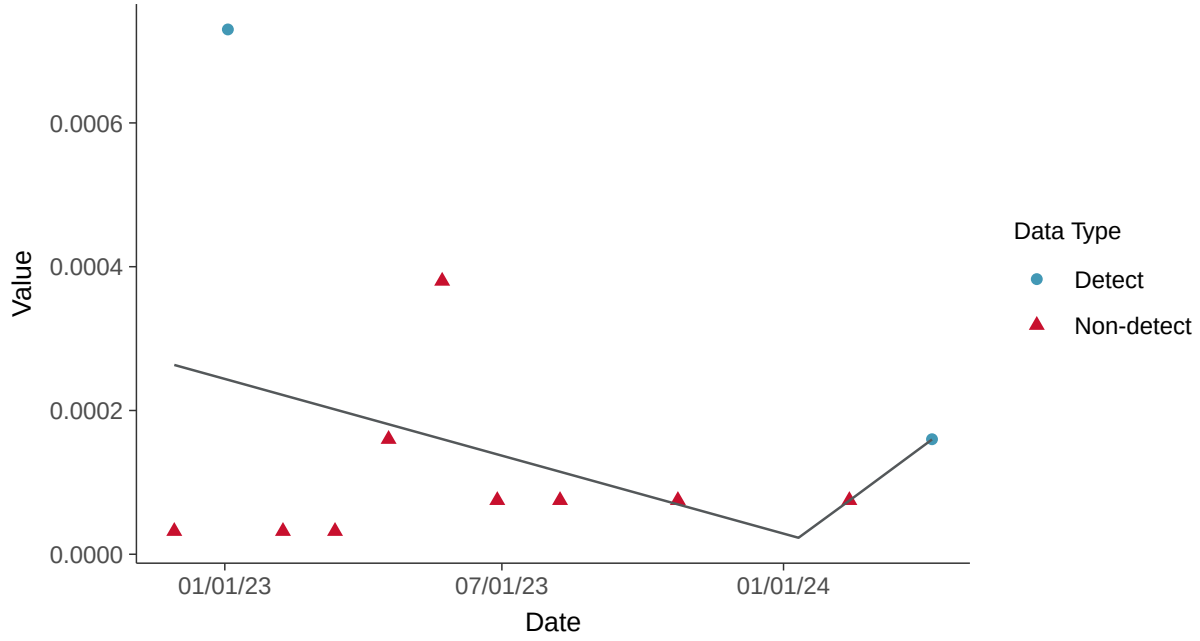
Normal Q-Q plot using ROS Imputed Estimates

Cadmium, MW-11 (mg/L)



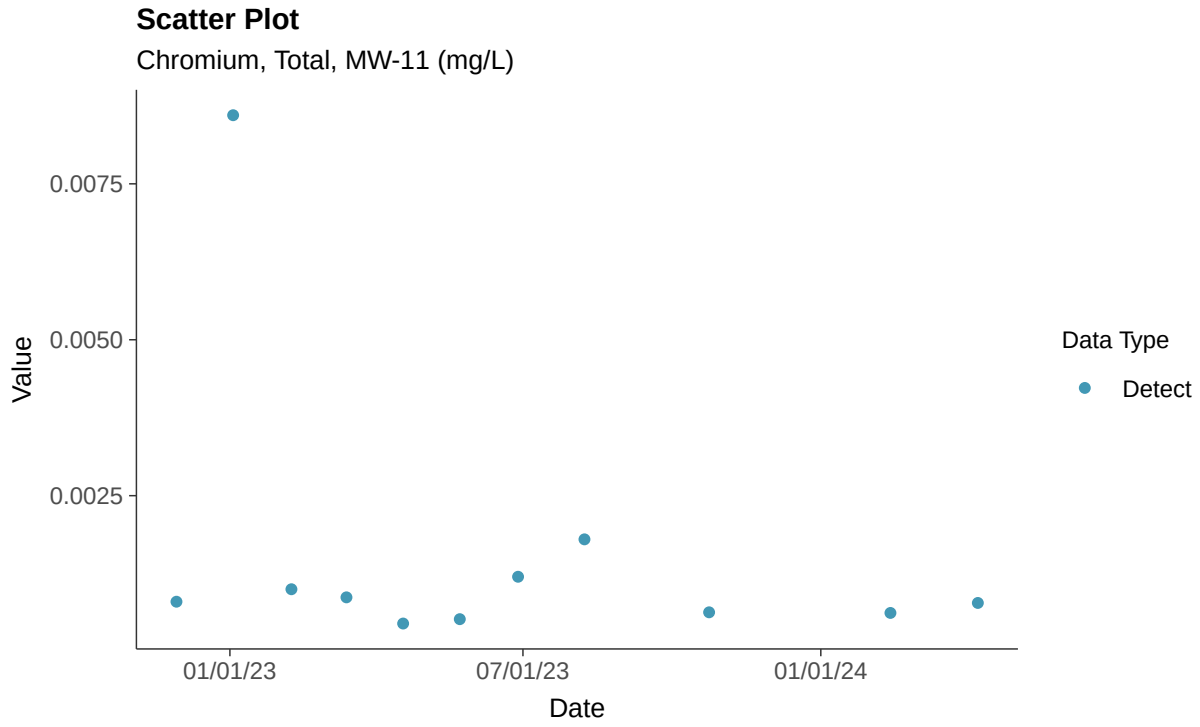
Trend Regression: Piecewise Linear-Linear

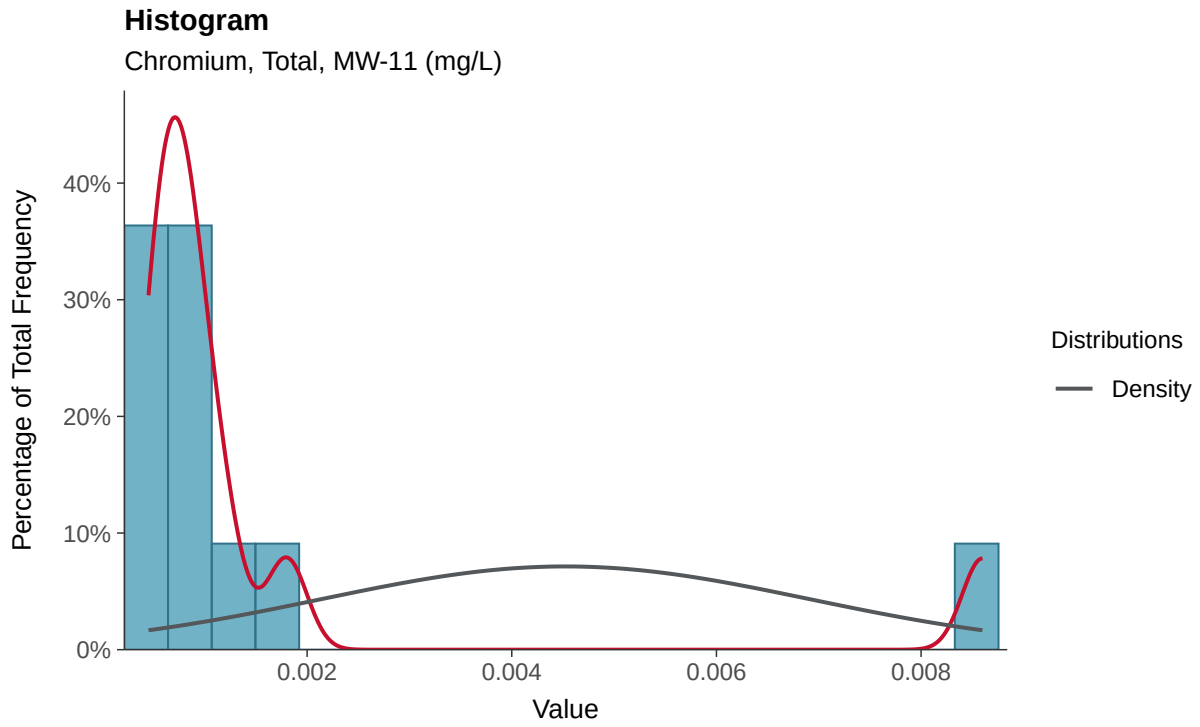
Cadmium, MW-11 (mg/L)



Appendix IV: Chromium, Total, MW-11

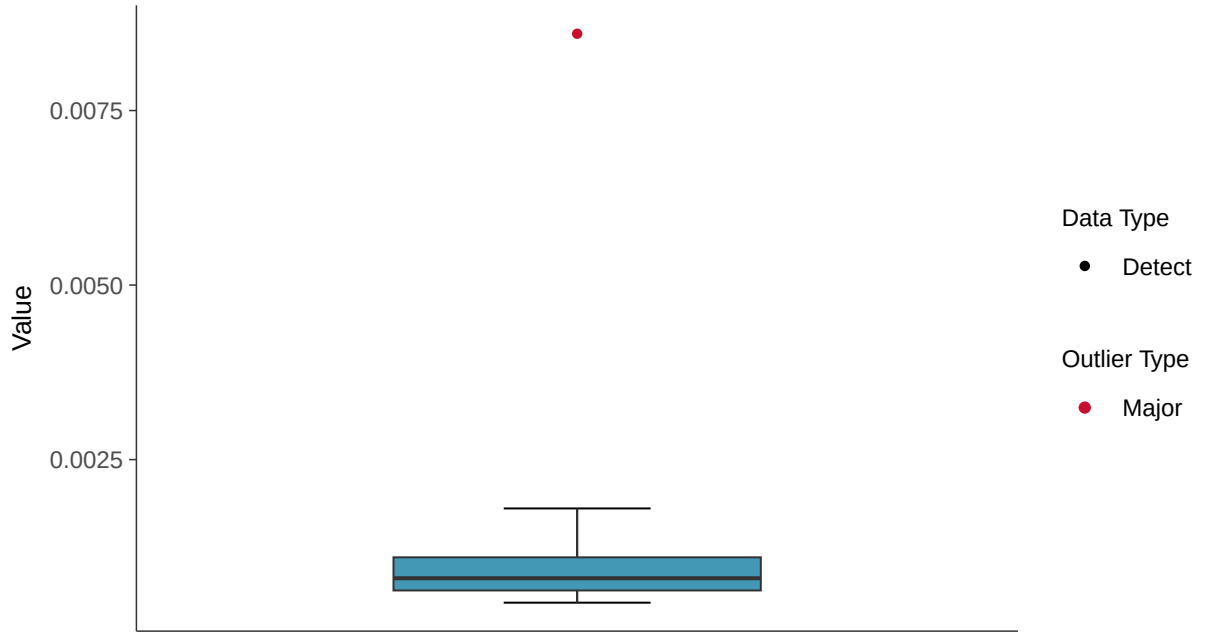
ID: 2_21_5_109





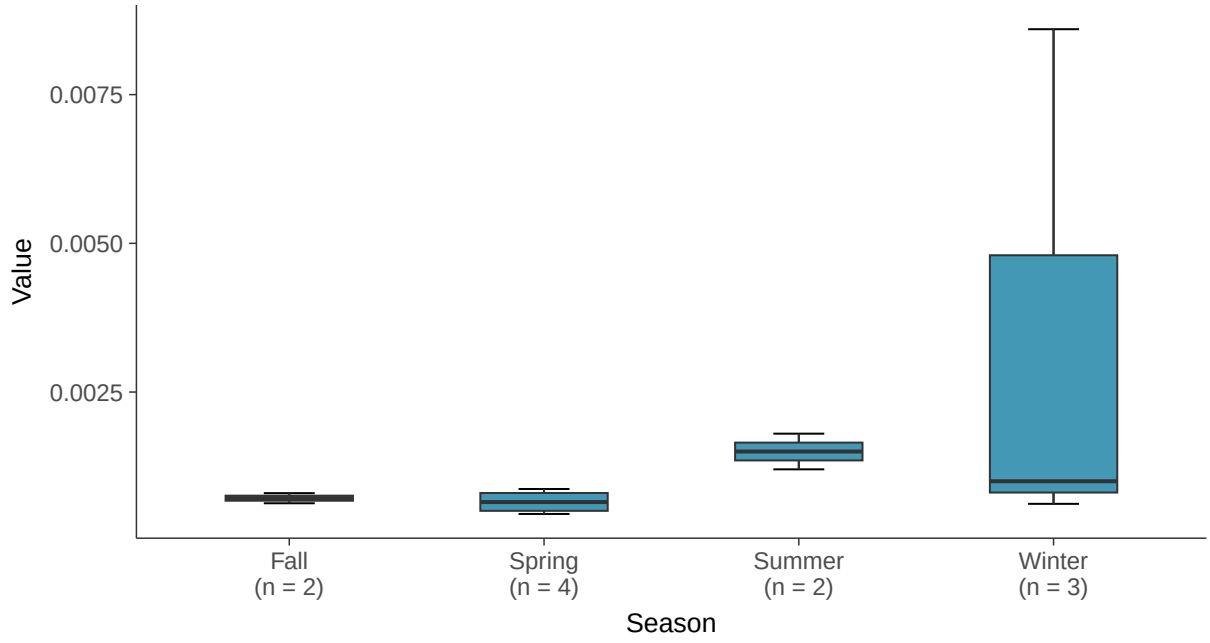
Boxplot

Chromium, Total, MW-11 (mg/L)



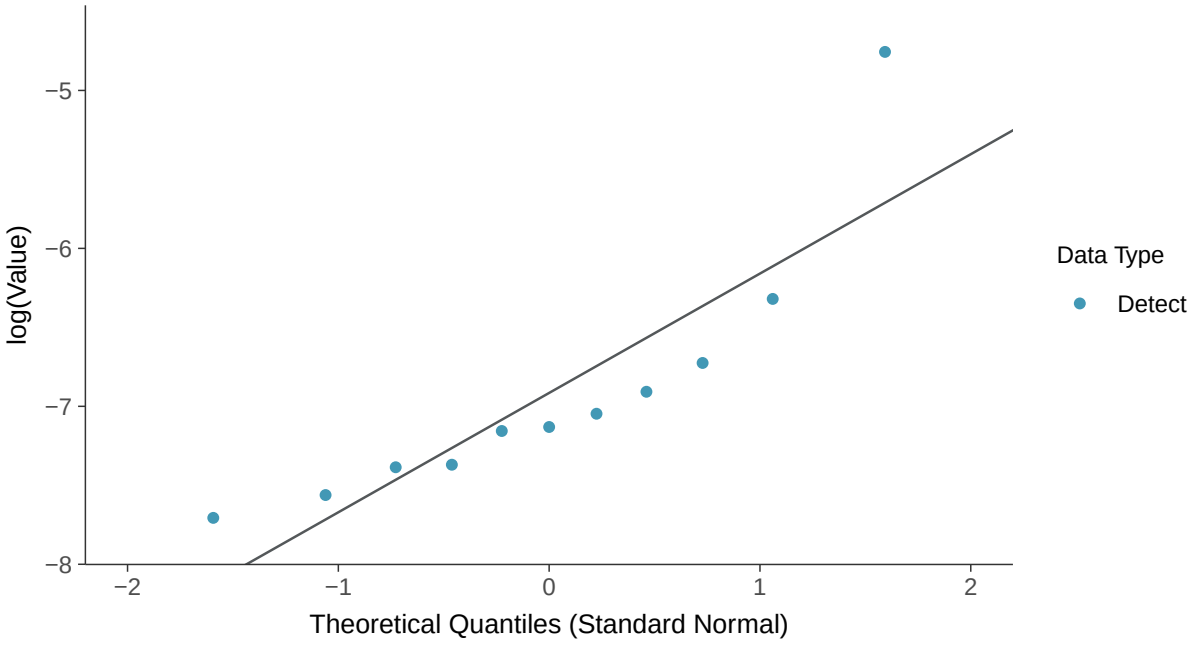
Boxplot by Season

Chromium, Total, MW-11 (mg/L)



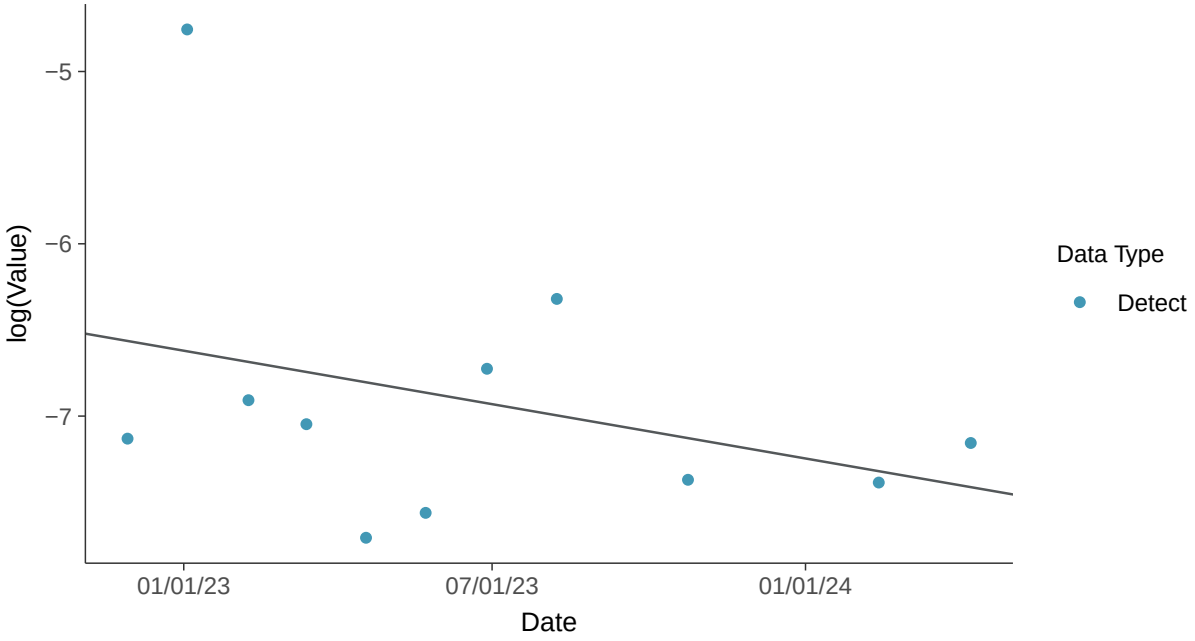
Lognormal Q-Q plot

Chromium, Total, MW-11 (mg/L)



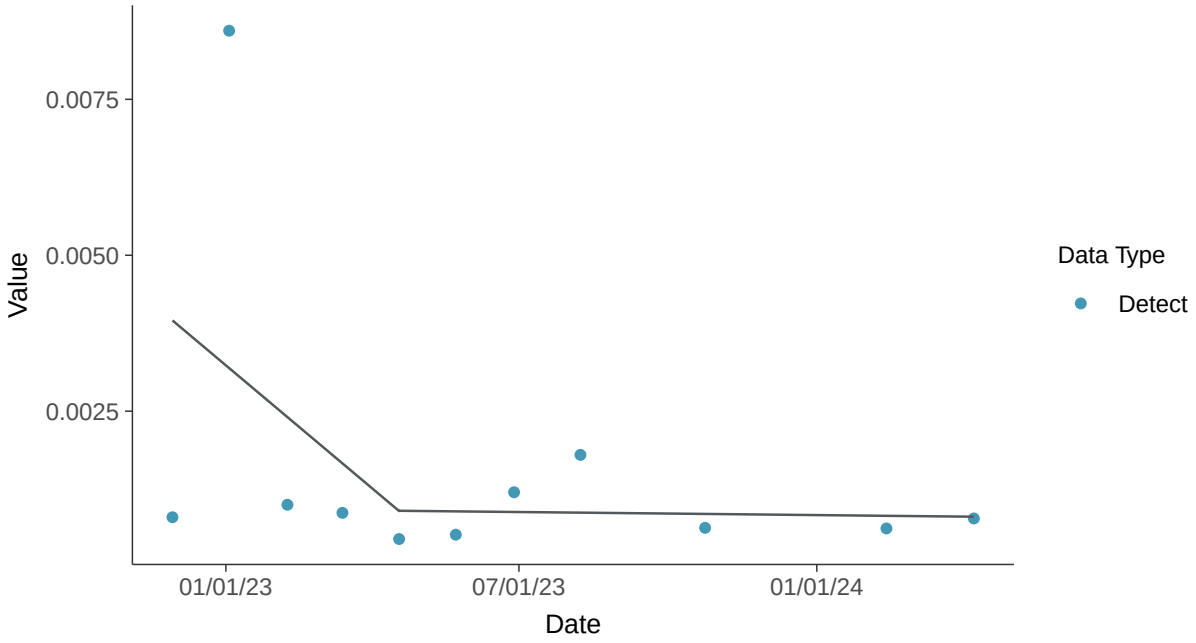
Trend Regression: Lognormal MLE

Chromium, Total, MW-11 (mg/L)



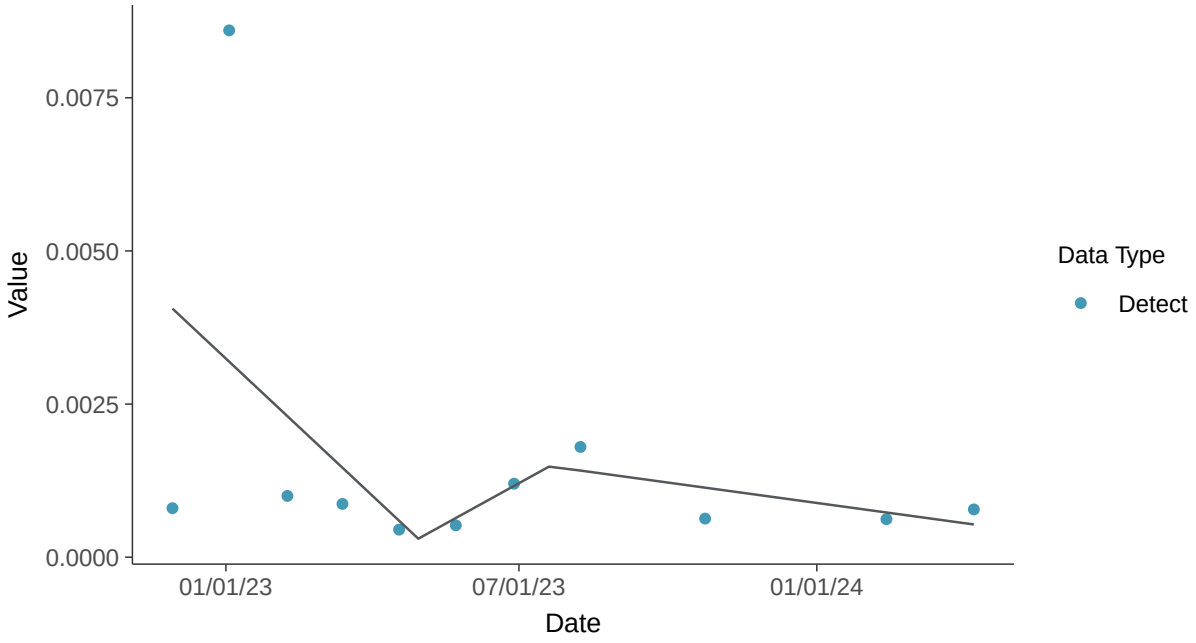
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-11 (mg/L)



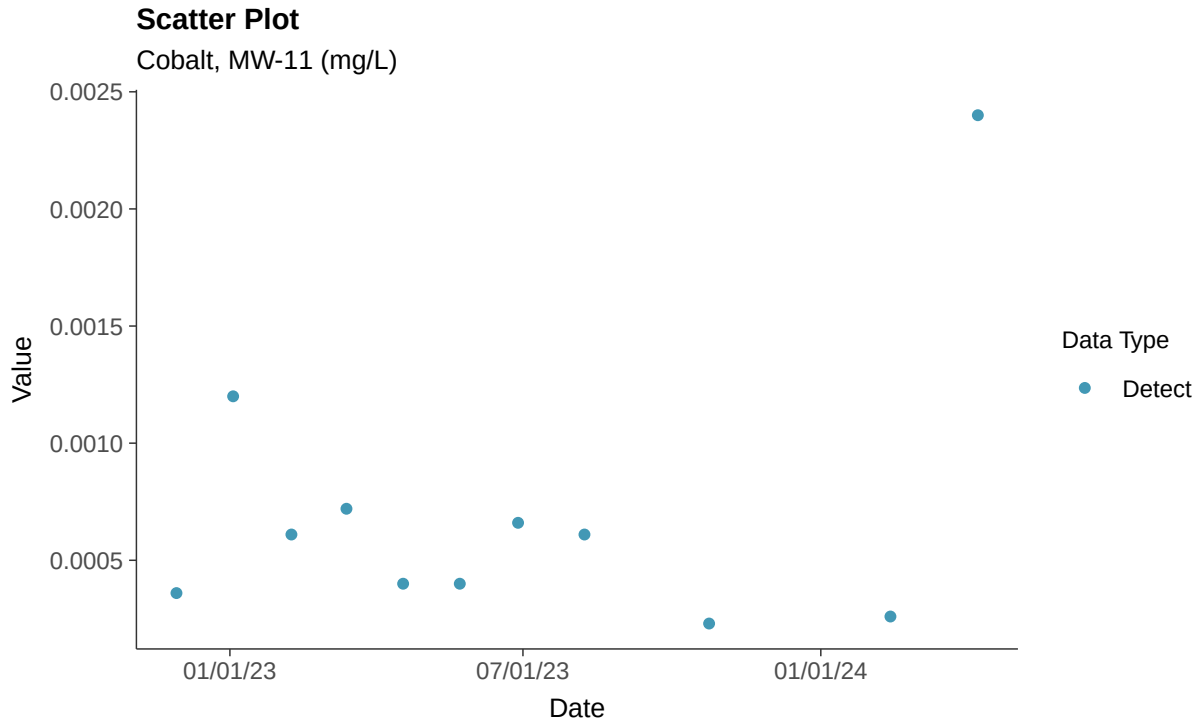
Trend Regression: Piecewise Linear-Linear-Linear

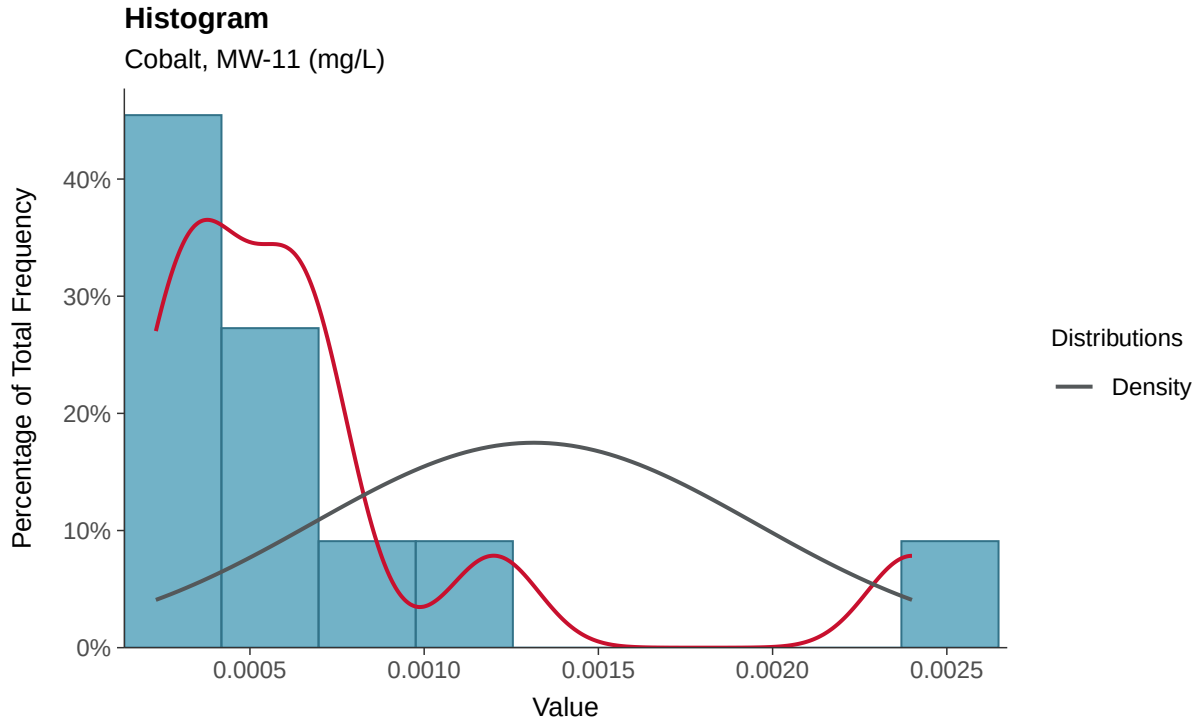
Chromium, Total, MW-11 (mg/L)



Appendix IV: Cobalt, MW-11

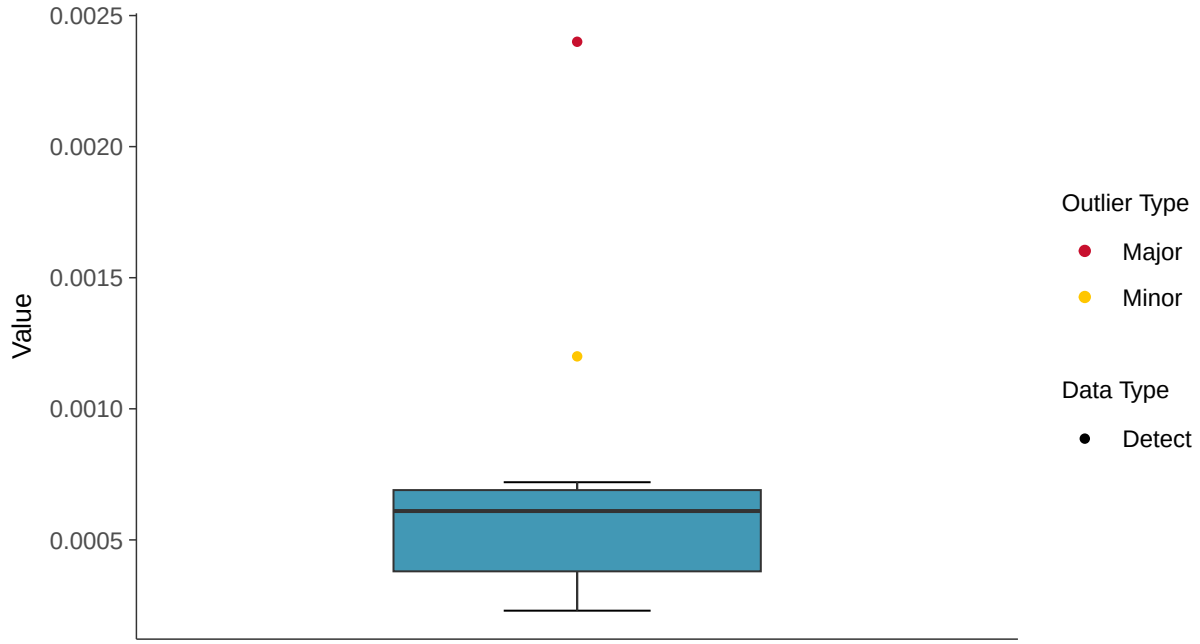
ID: 2_21_5_110





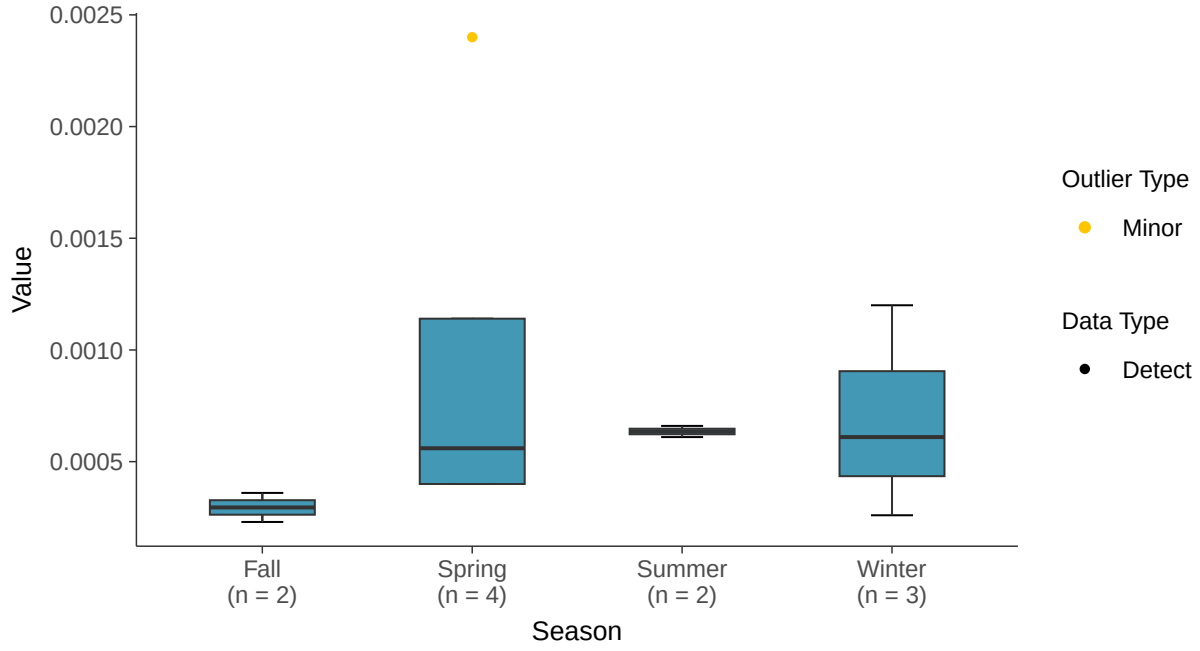
Boxplot

Cobalt, MW-11 (mg/L)



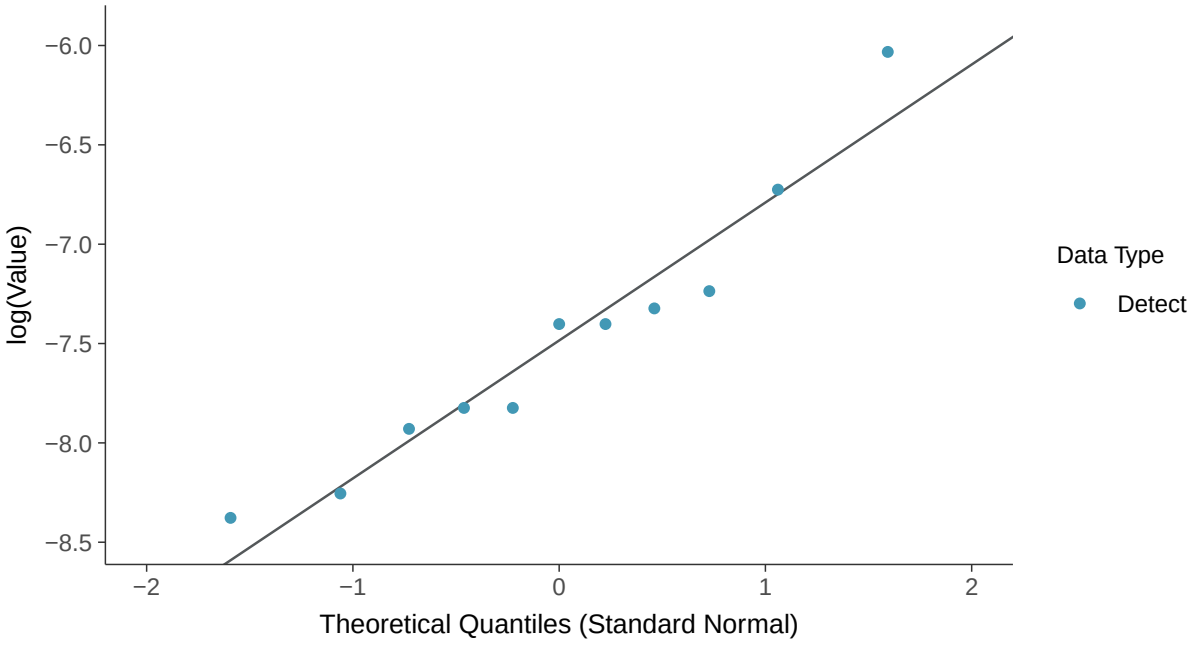
Boxplot by Season

Cobalt, MW-11 (mg/L)



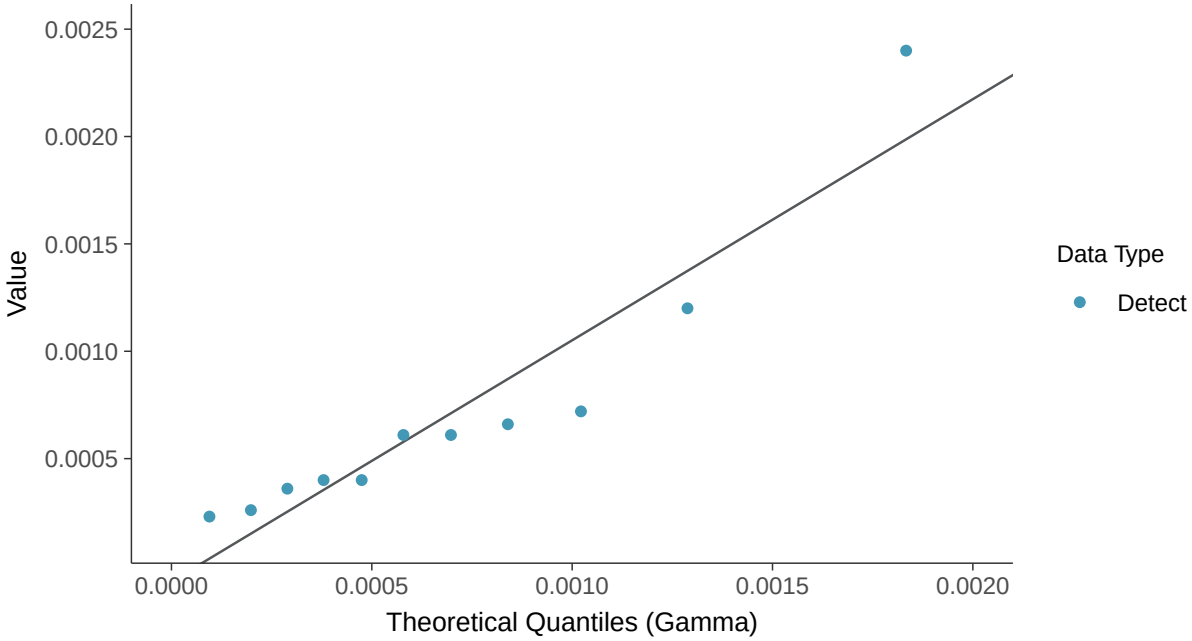
Lognormal Q-Q plot

Cobalt, MW-11 (mg/L)



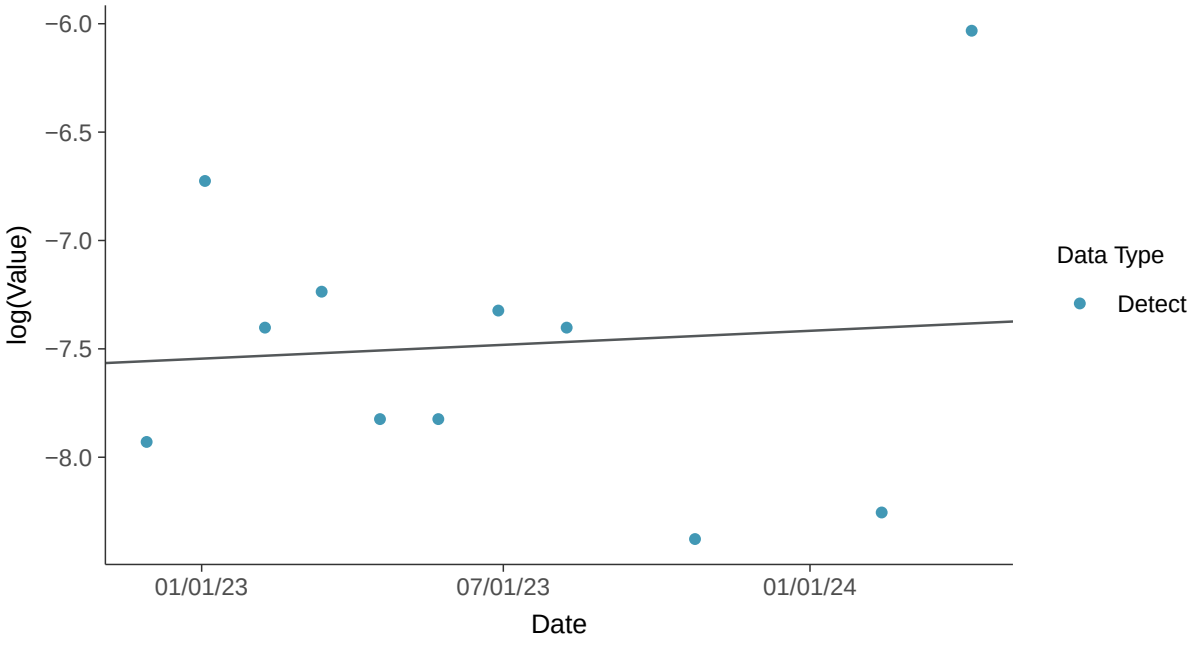
Gamma Q-Q plot

Cobalt, MW-11 (mg/L)



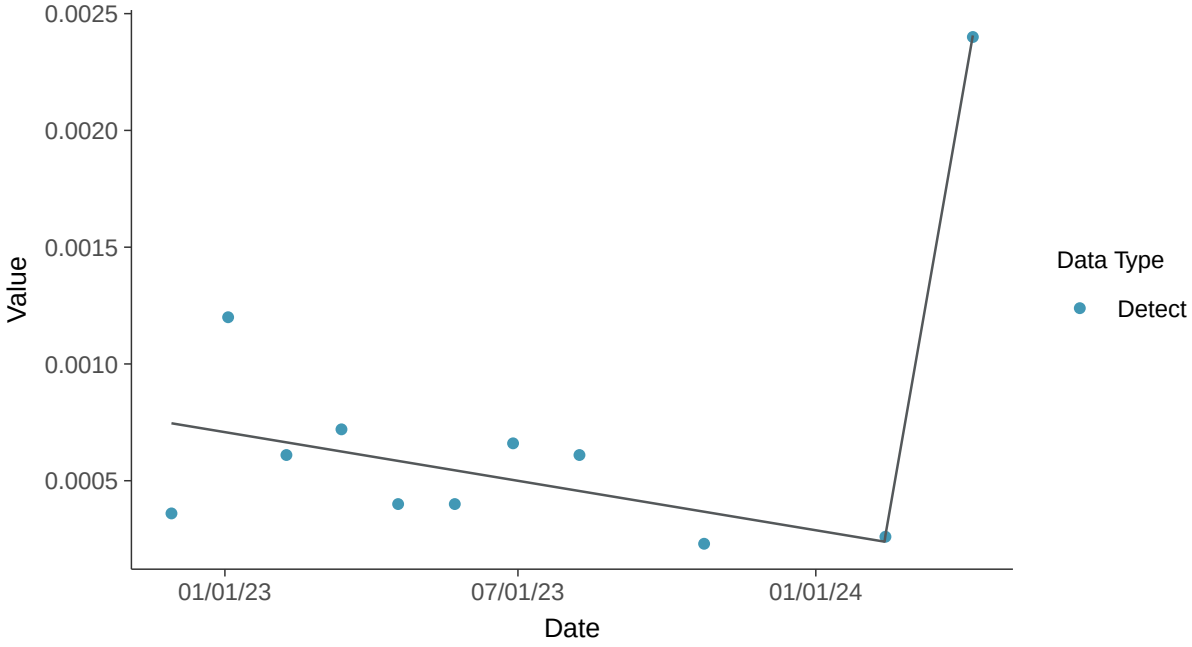
Trend Regression: Lognormal MLE

Cobalt, MW-11 (mg/L)



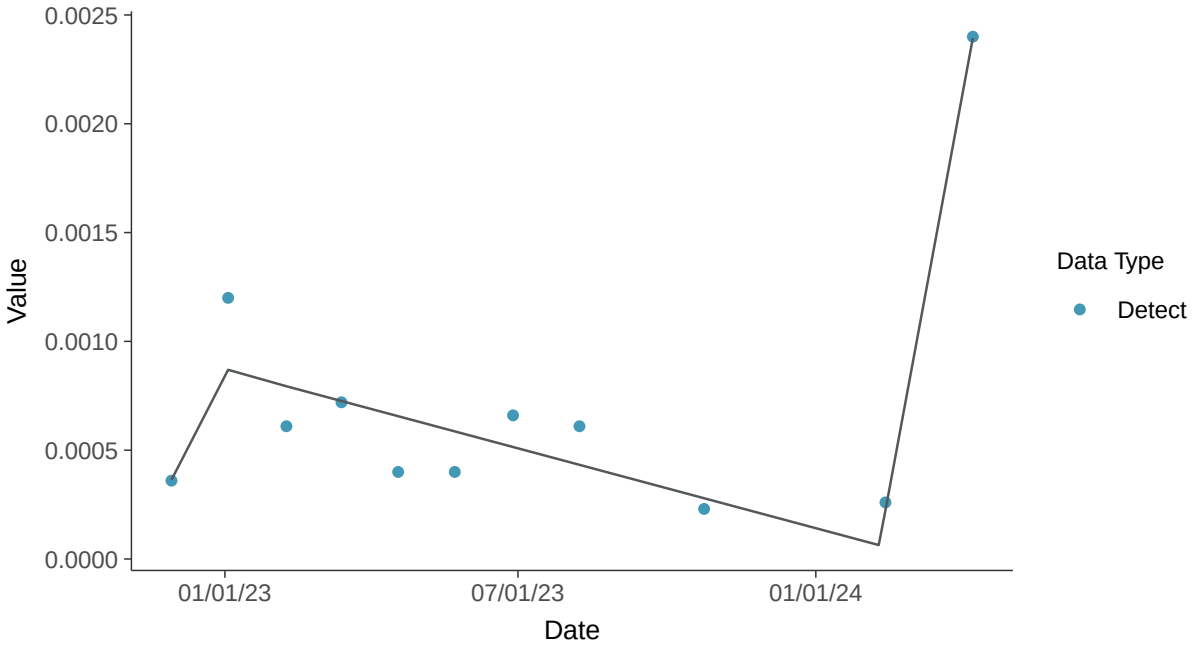
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-11 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cobalt, MW-11 (mg/L)

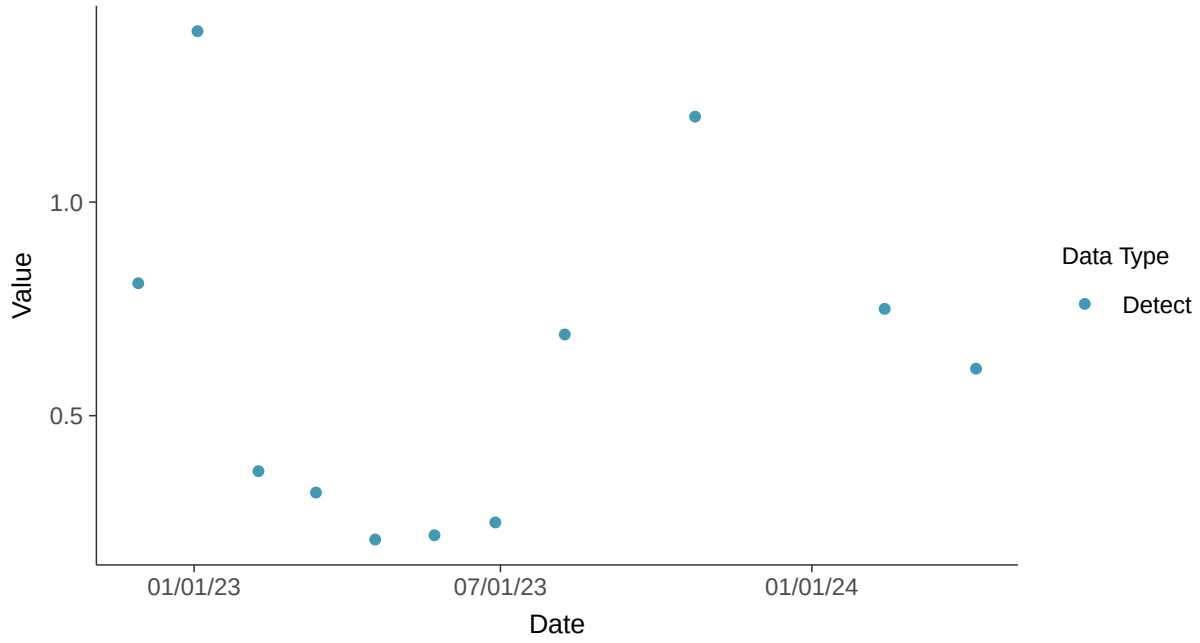


Appendix IV: Fluoride (App IV), MW-11

ID: 2_21_5_113

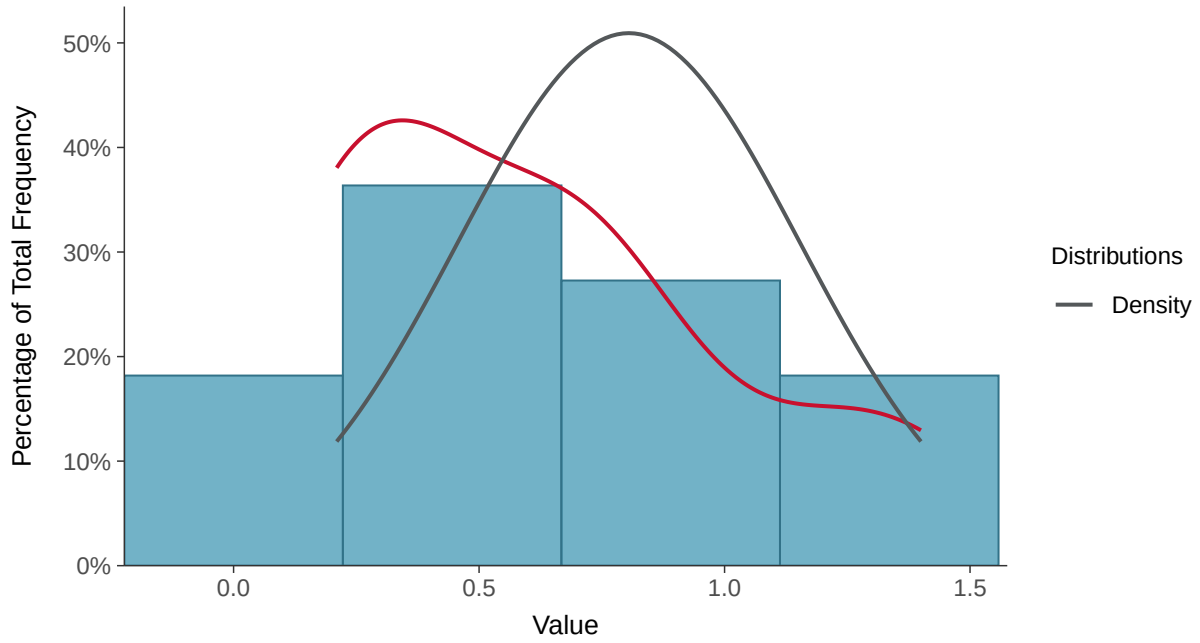
Scatter Plot

Fluoride (App IV), MW-11 (mg/L)



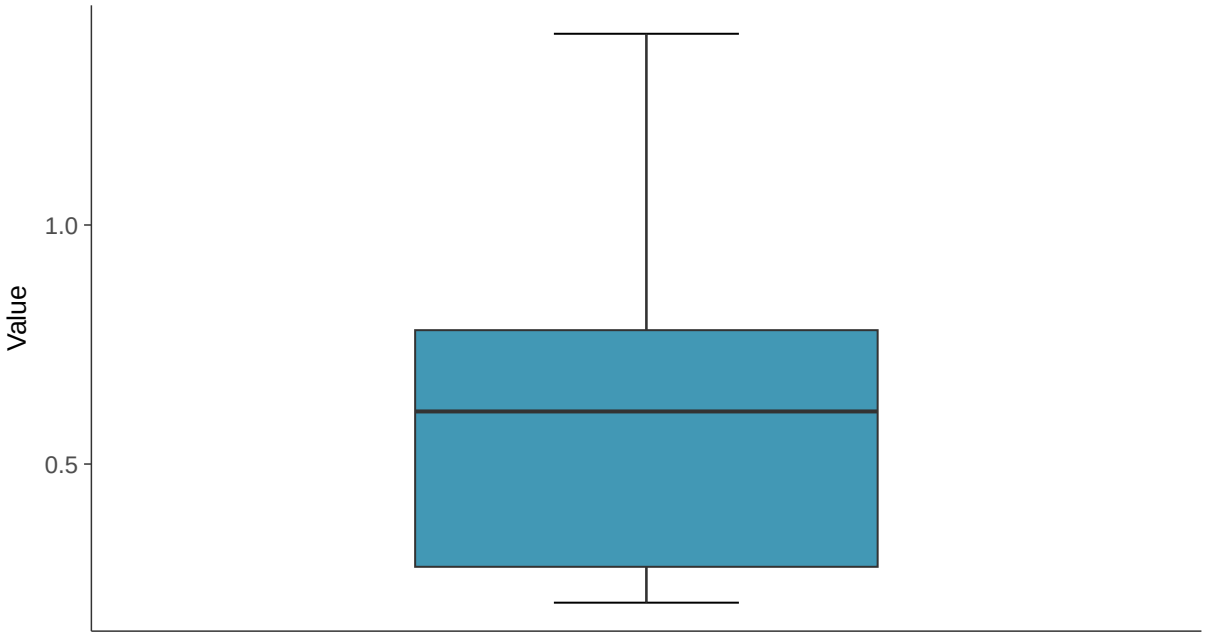
Histogram

Fluoride (App IV), MW-11 (mg/L)



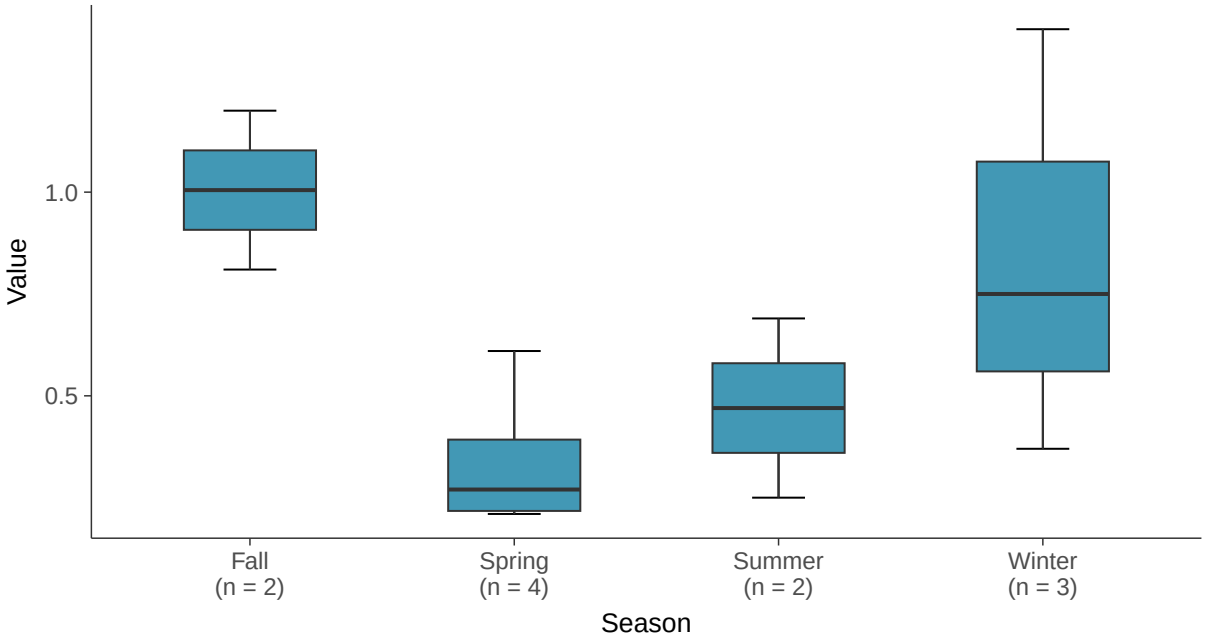
Boxplot

Fluoride (App IV), MW-11 (mg/L)



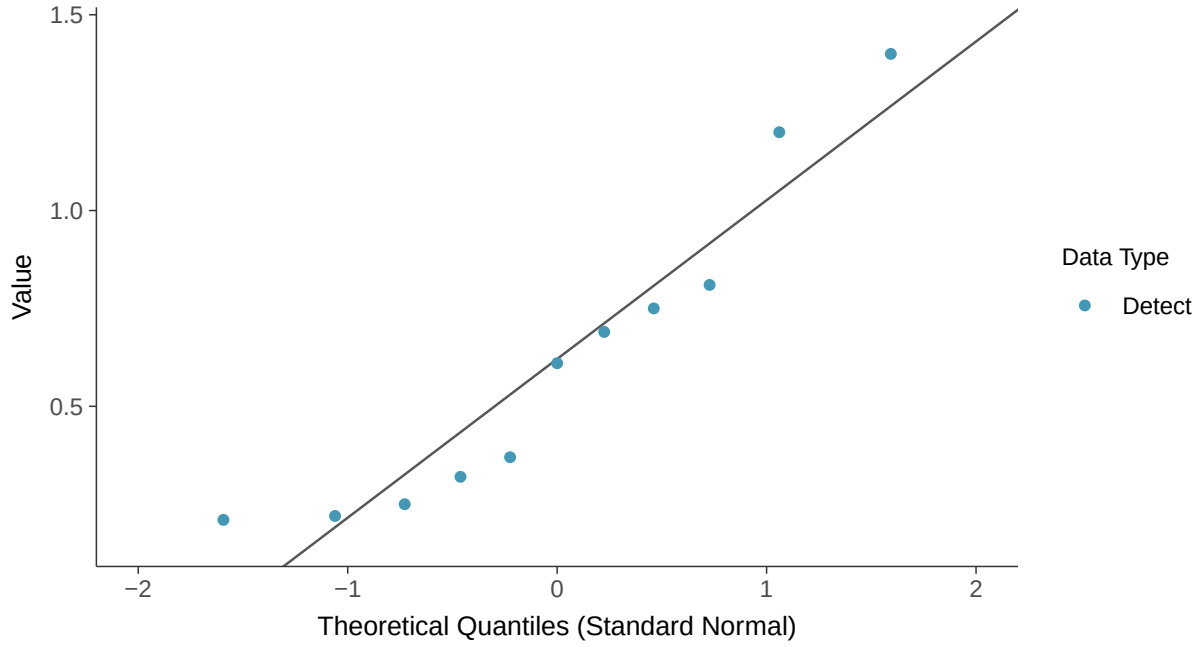
Boxplot by Season

Fluoride (App IV), MW-11 (mg/L)



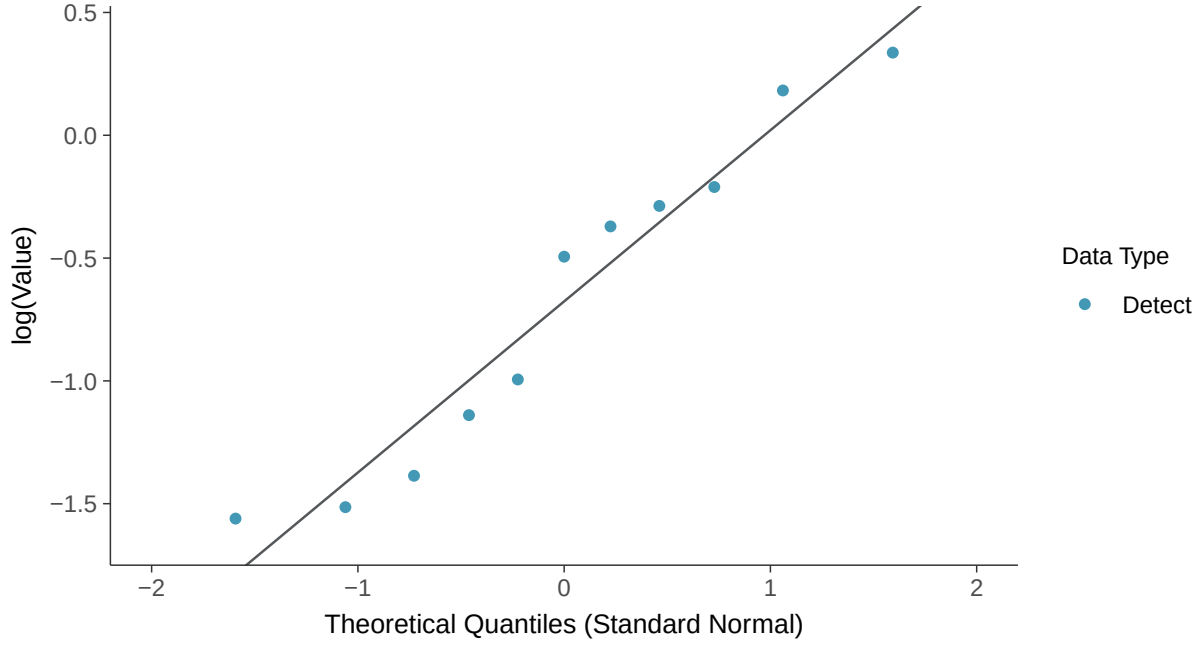
Normal Q-Q plot

Fluoride (App IV), MW-11 (mg/L)



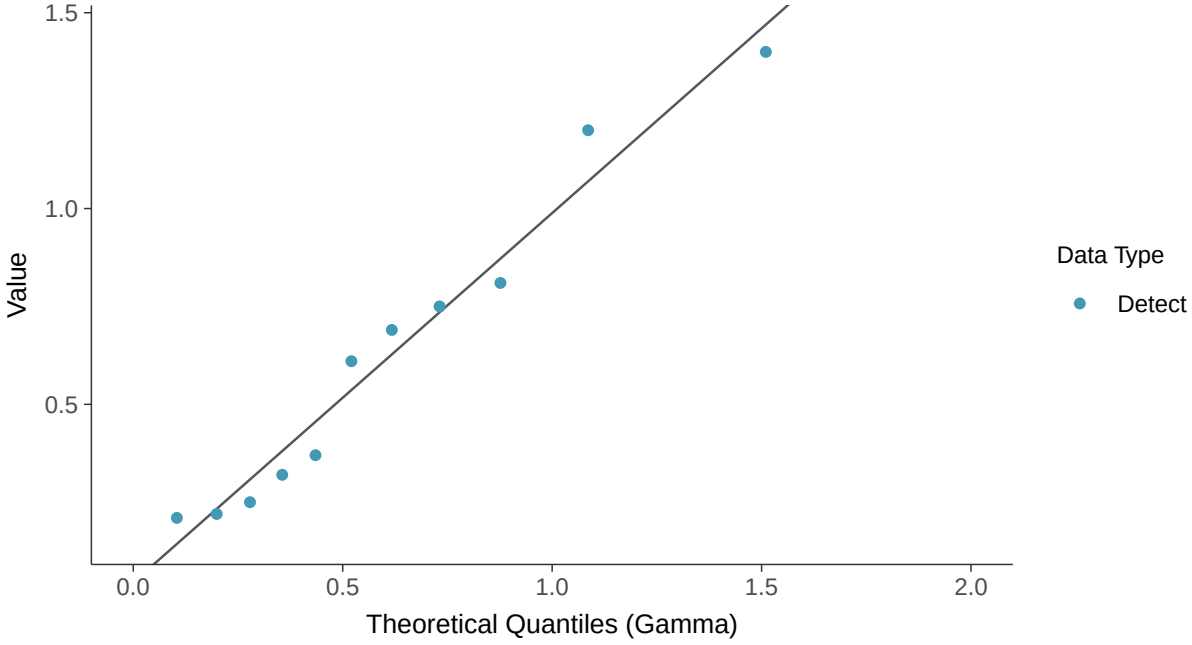
Lognormal Q-Q plot

Fluoride (App IV), MW-11 (mg/L)



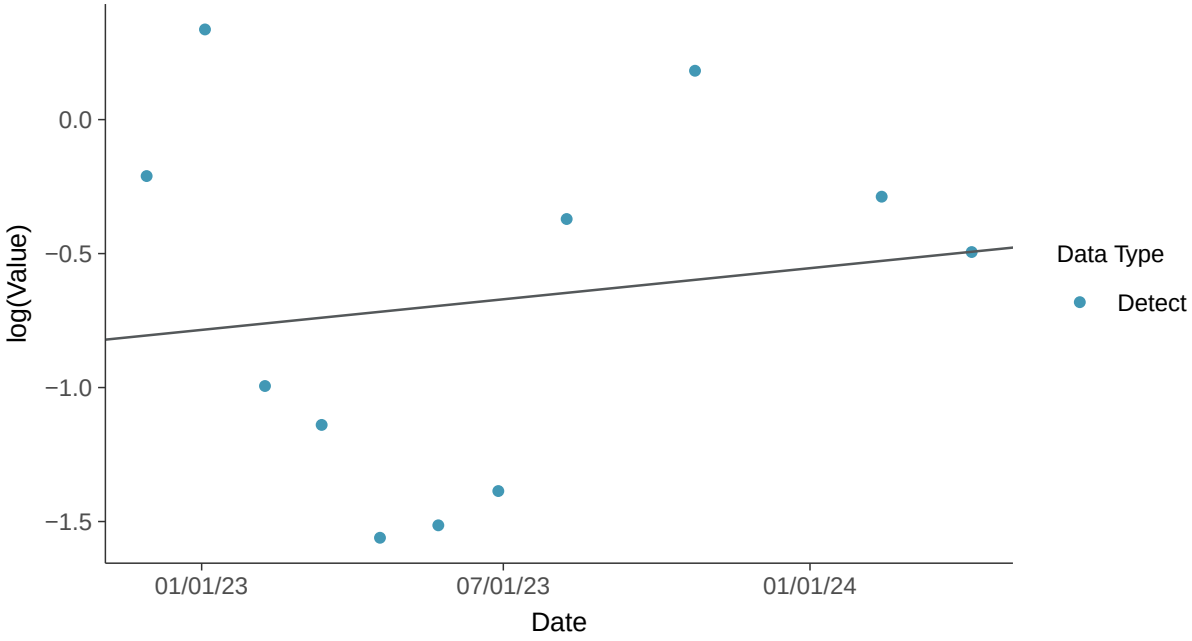
Gamma Q-Q plot

Fluoride (App IV), MW-11 (mg/L)



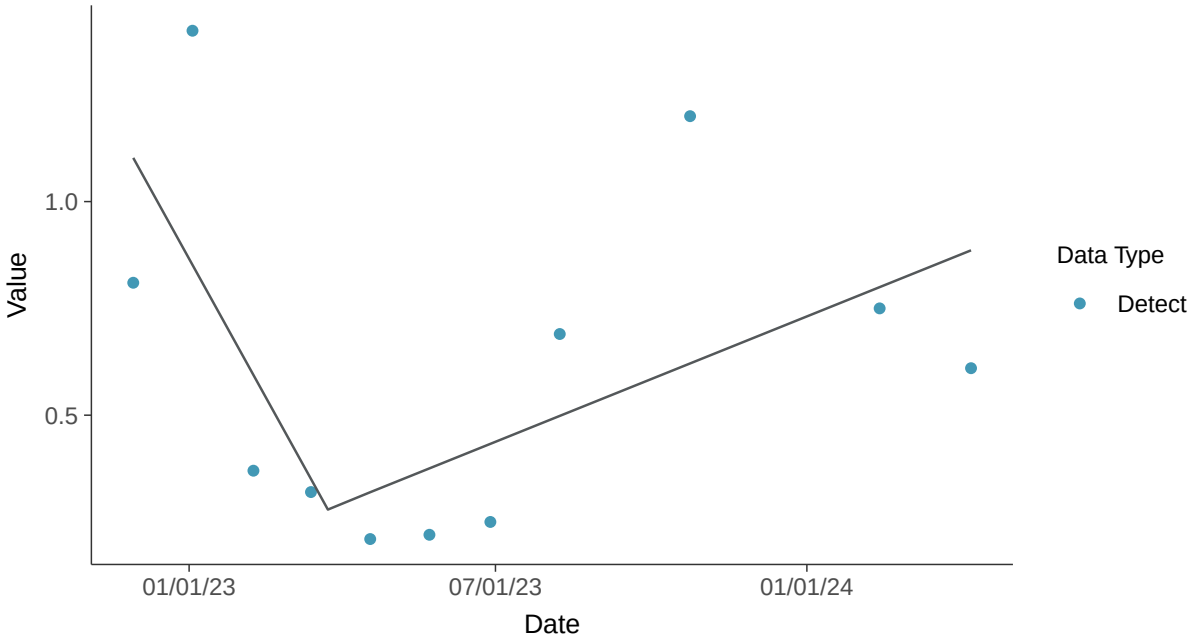
Trend Regression: Lognormal MLE

Fluoride (App IV), MW-11 (mg/L)



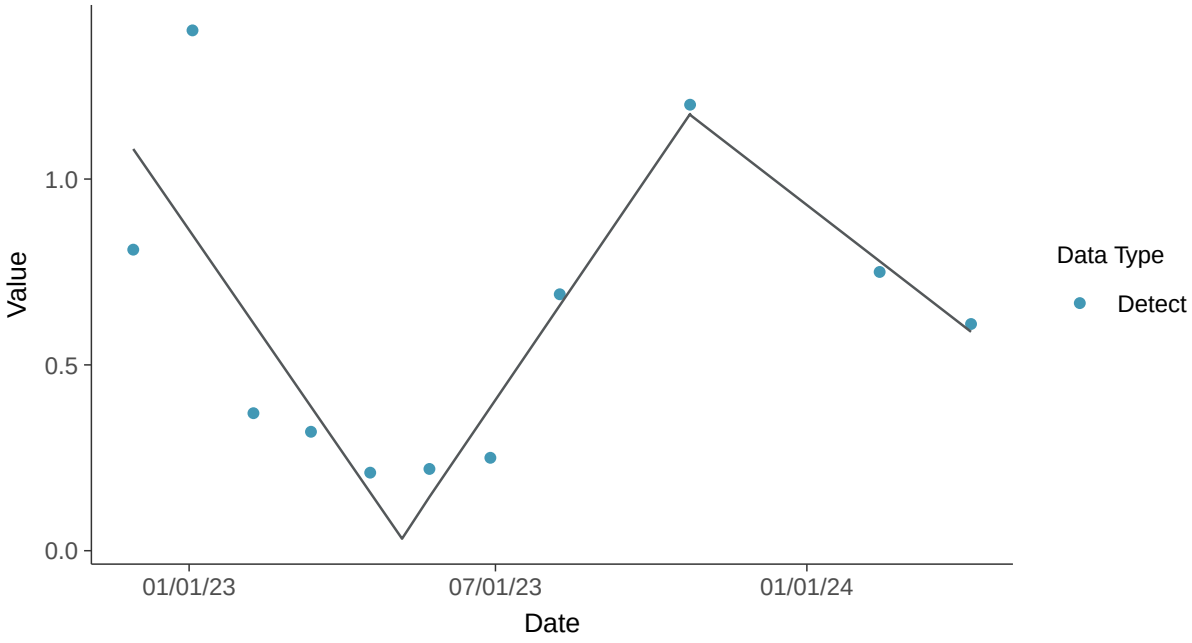
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-11 (mg/L)



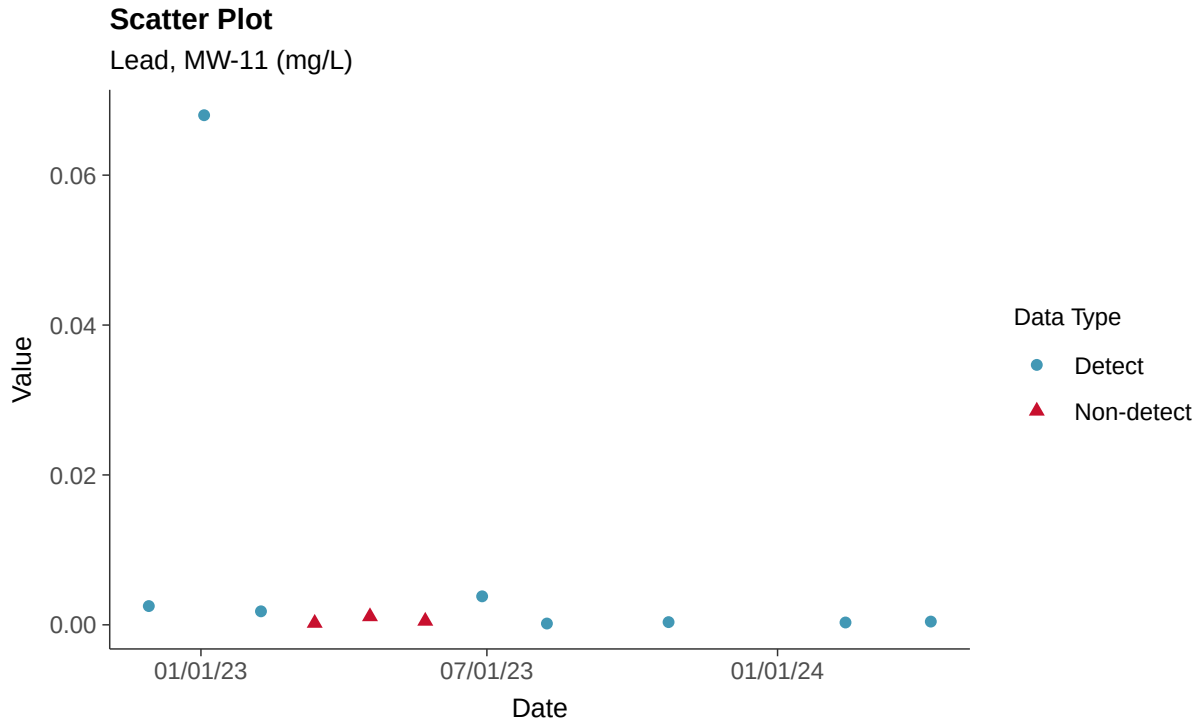
Trend Regression: Piecewise Linear-Linear-Linear

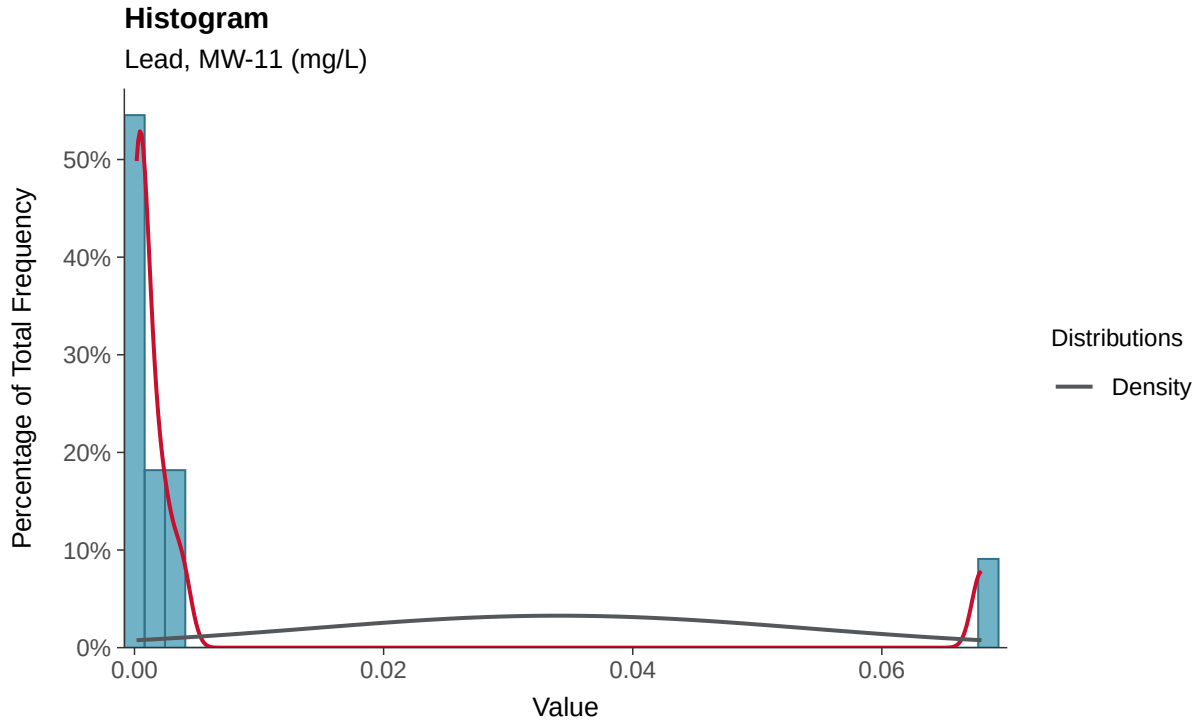
Fluoride (App IV), MW-11 (mg/L)



Appendix IV: Lead, MW-11

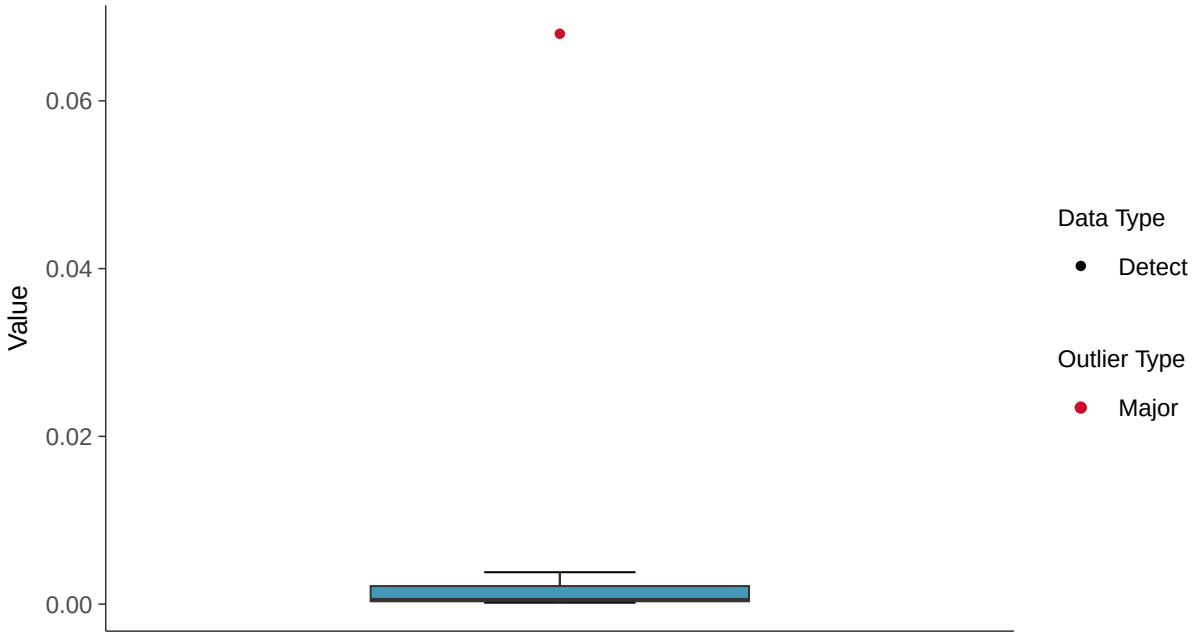
ID: 2_21_5_115





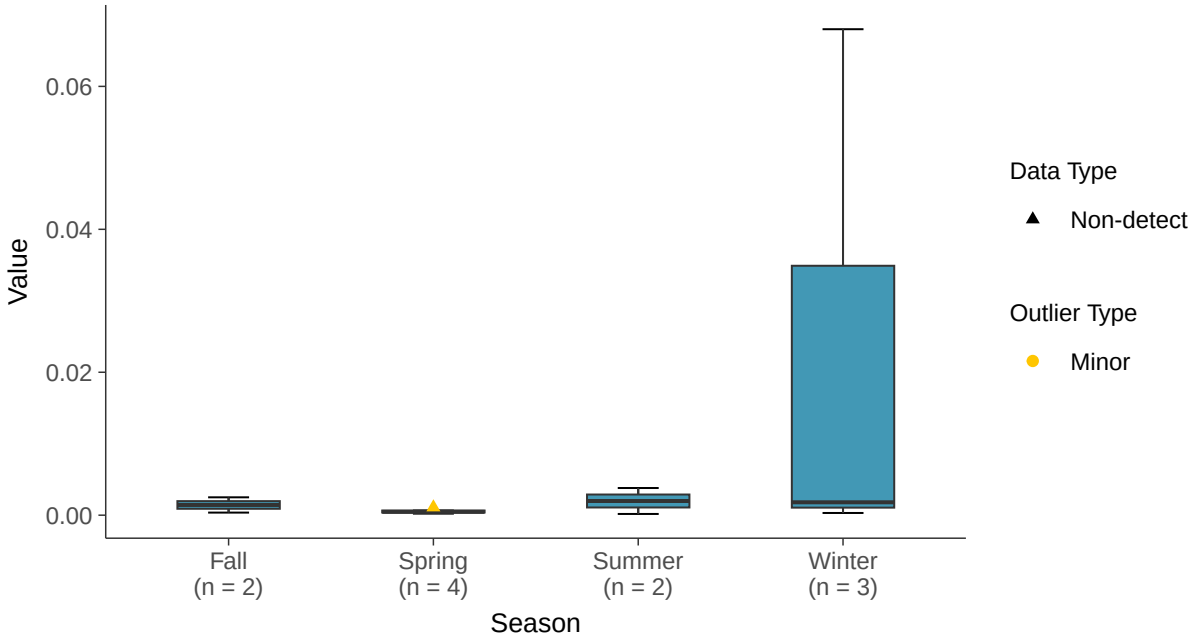
Boxplot

Lead, MW-11 (mg/L)



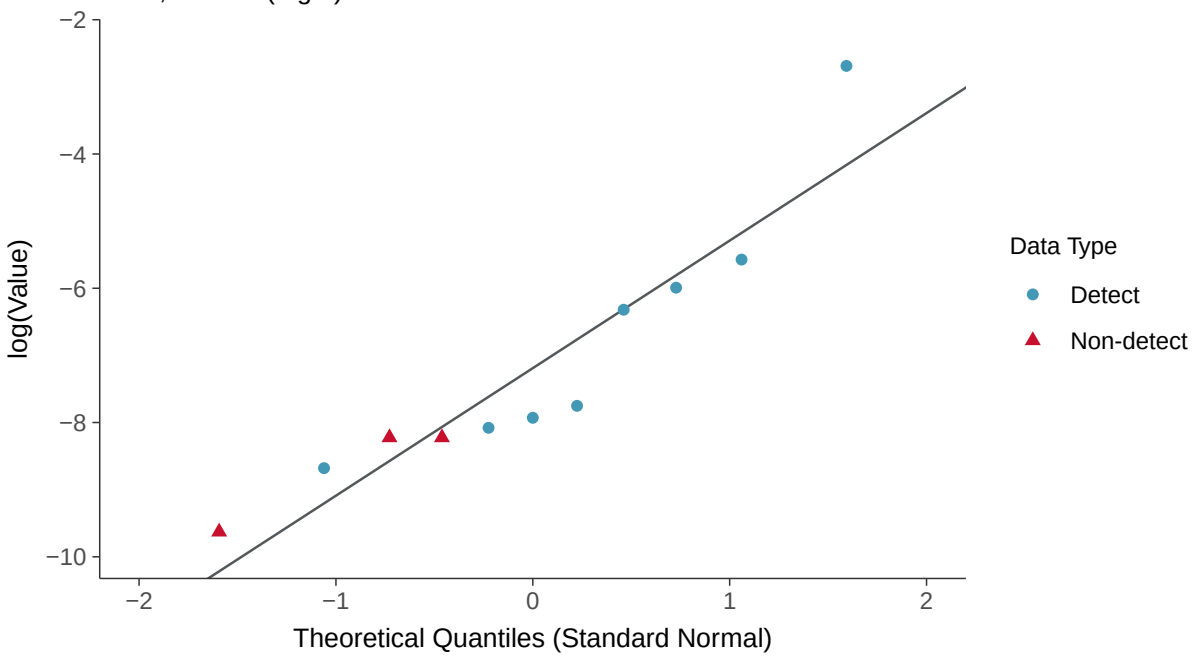
Boxplot by Season

Lead, MW-11 (mg/L)



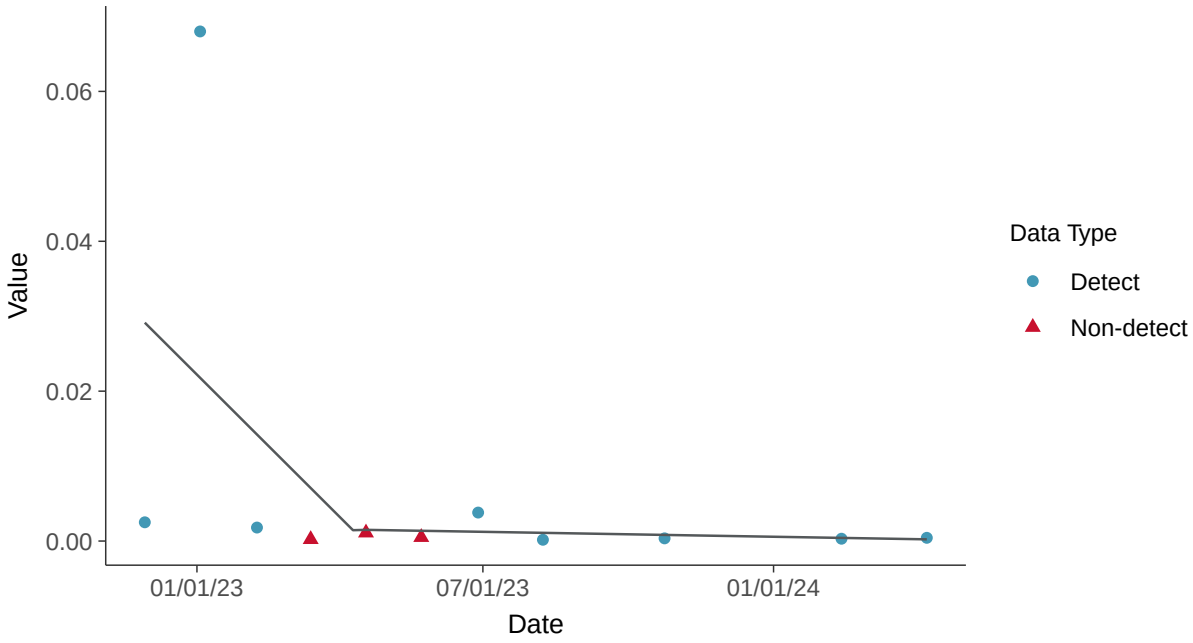
Lognormal Q-Q plot using ROS Imputed Estimates

Lead, MW-11 (mg/L)



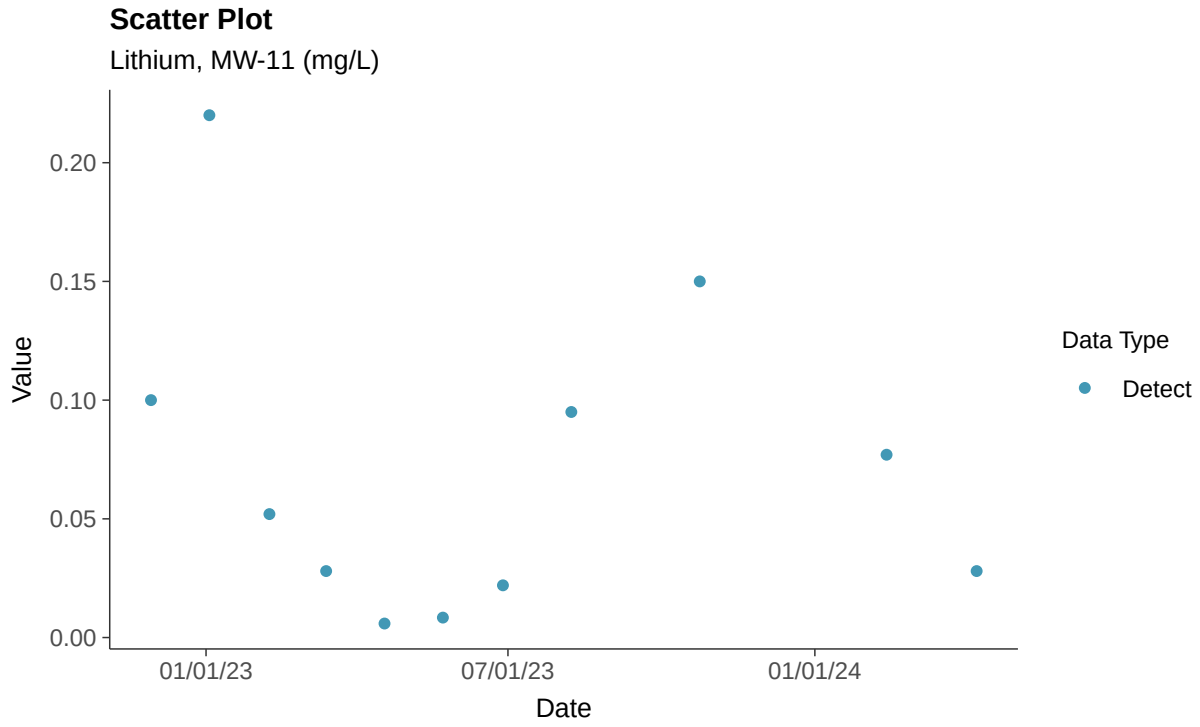
Trend Regression: Piecewise Linear-Linear

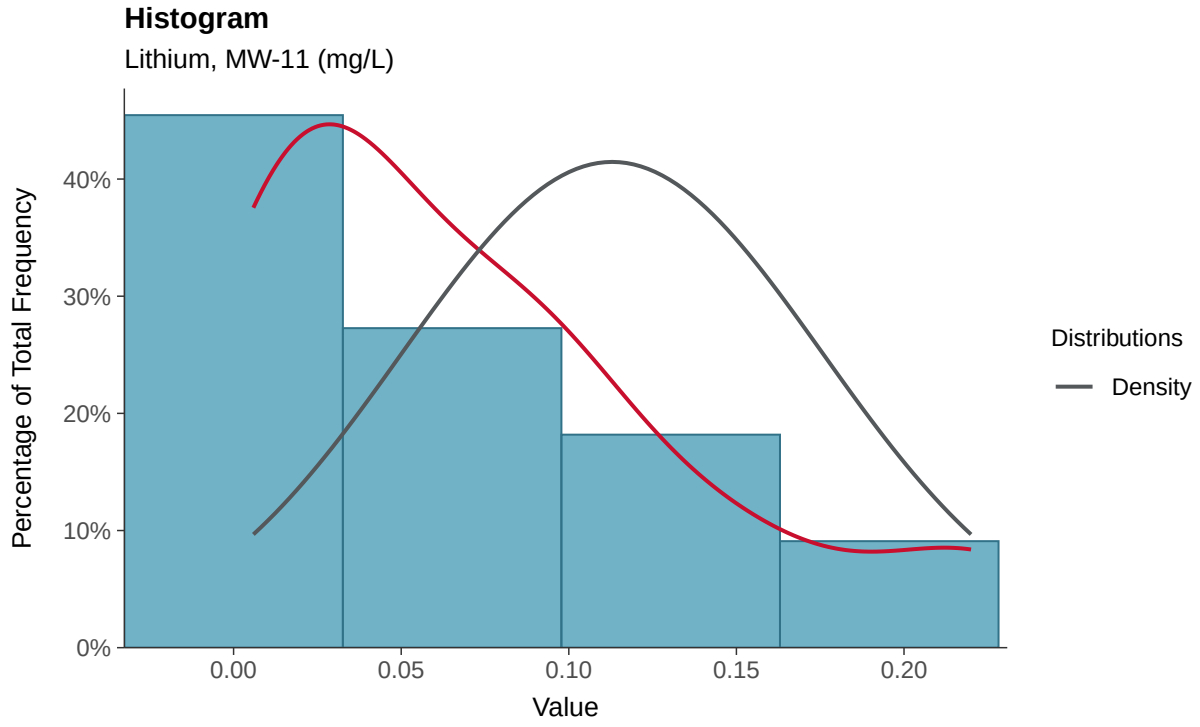
Lead, MW-11 (mg/L)



Appendix IV: Lithium, MW-11

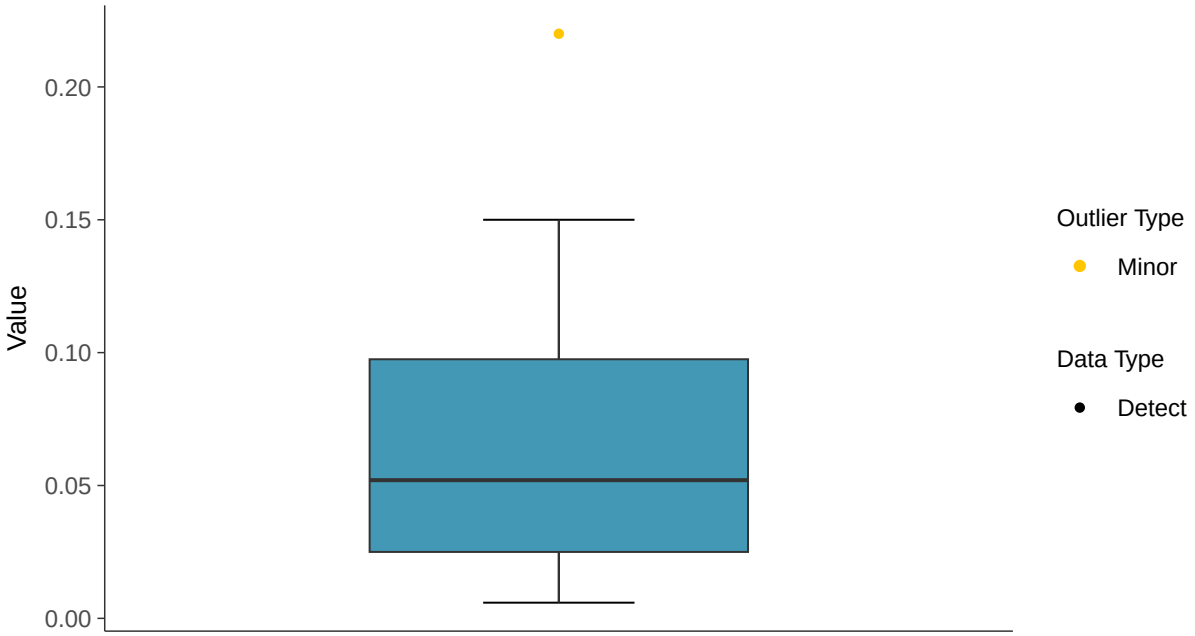
ID: 2_21_5_116





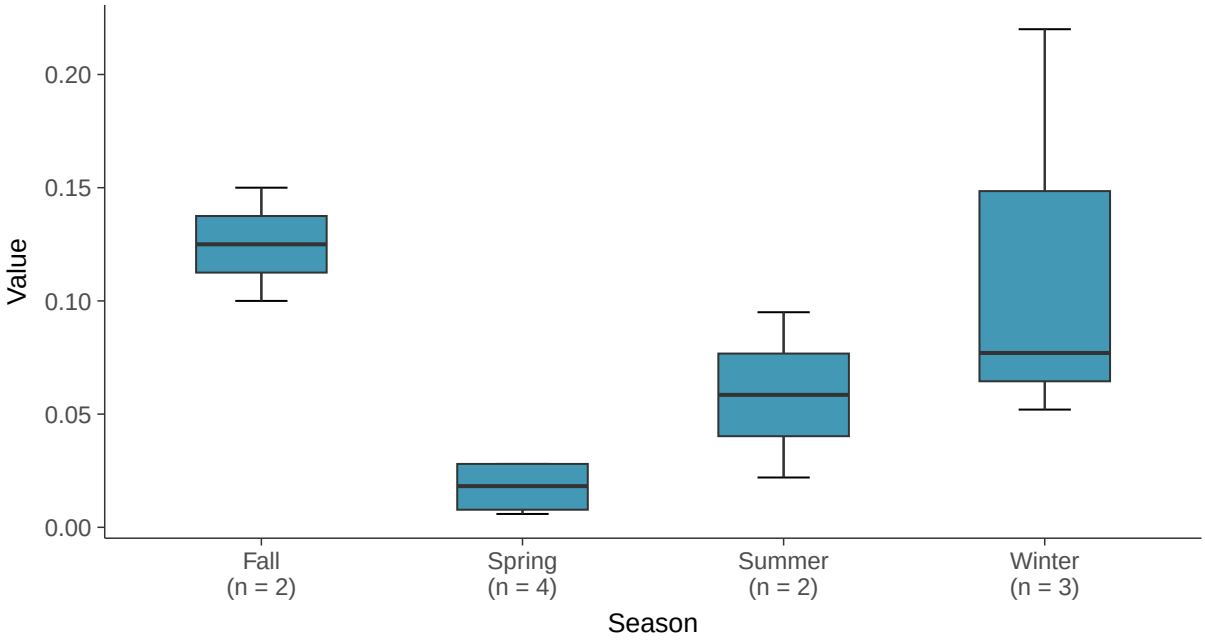
Boxplot

Lithium, MW-11 (mg/L)



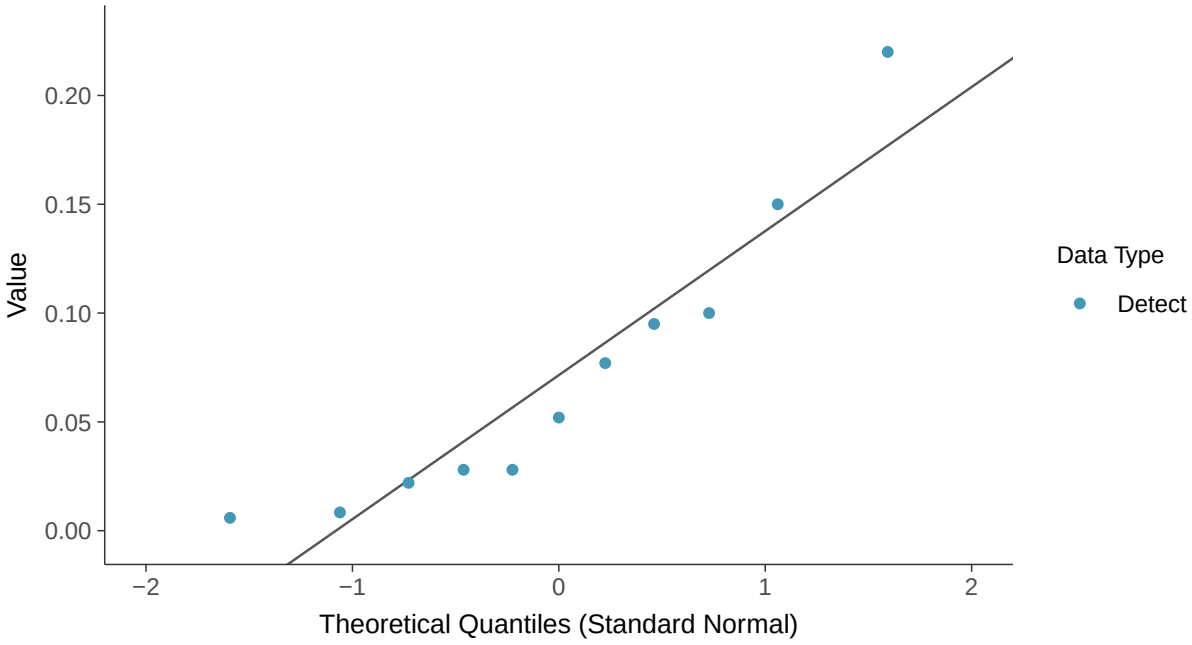
Boxplot by Season

Lithium, MW-11 (mg/L)



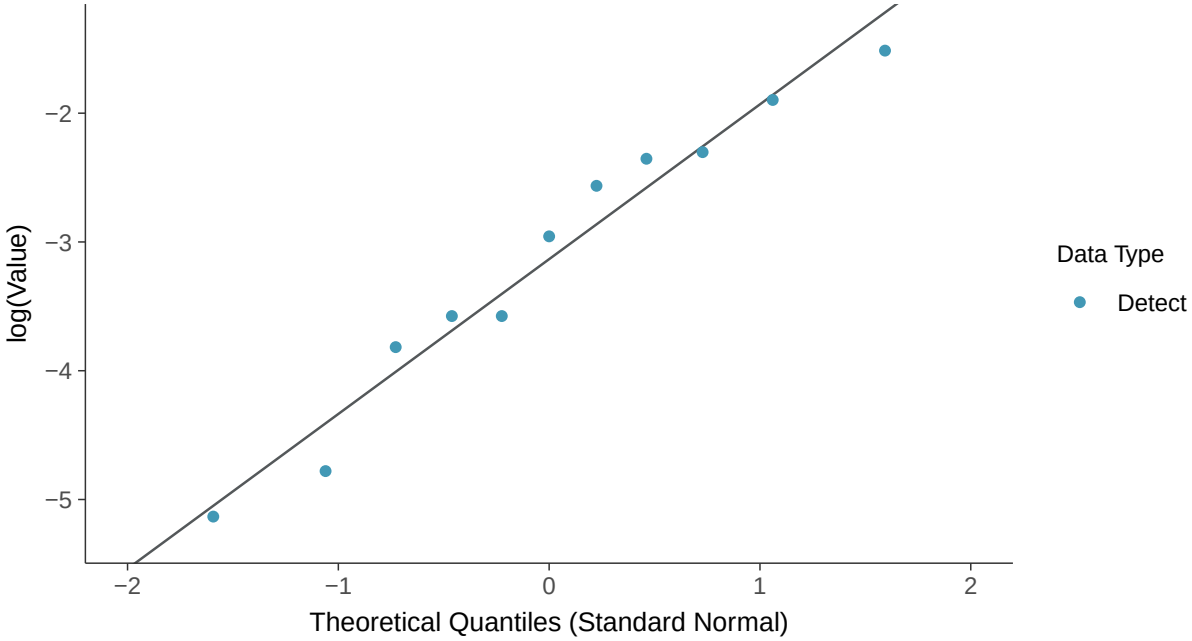
Normal Q-Q plot

Lithium, MW-11 (mg/L)



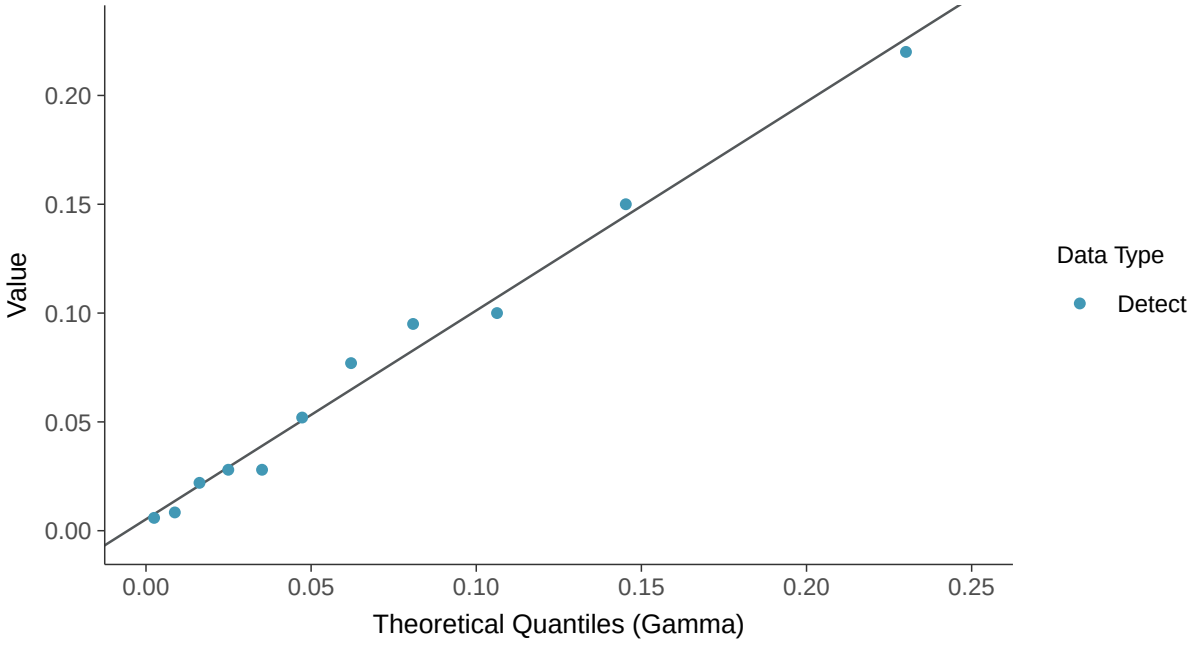
Lognormal Q-Q plot

Lithium, MW-11 (mg/L)



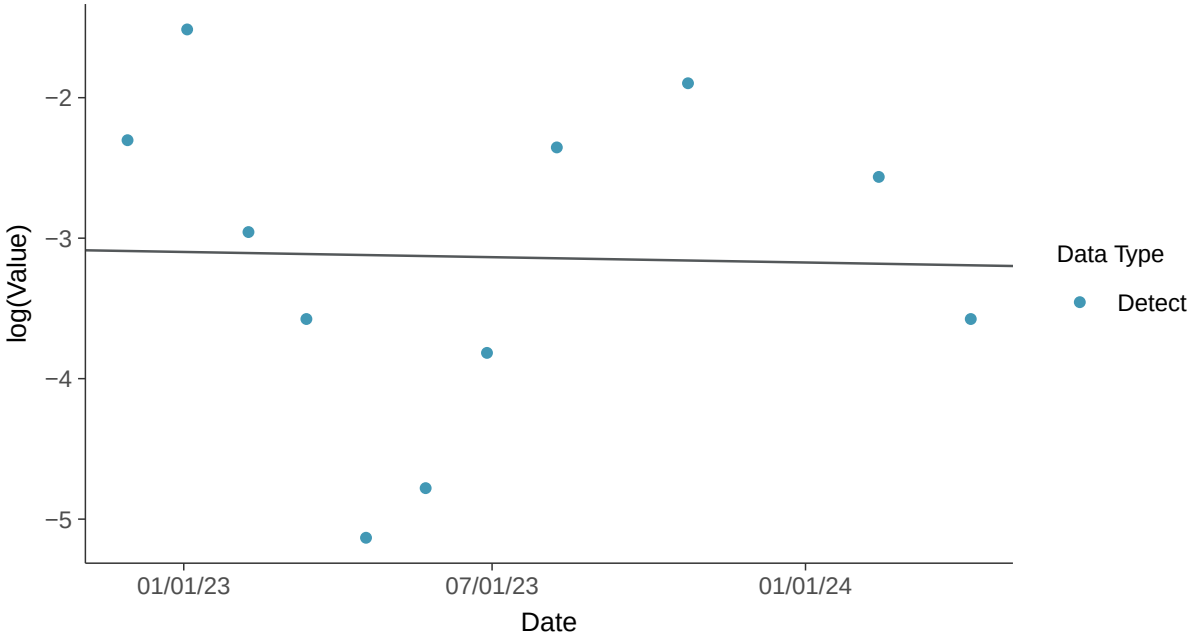
Gamma Q-Q plot

Lithium, MW-11 (mg/L)



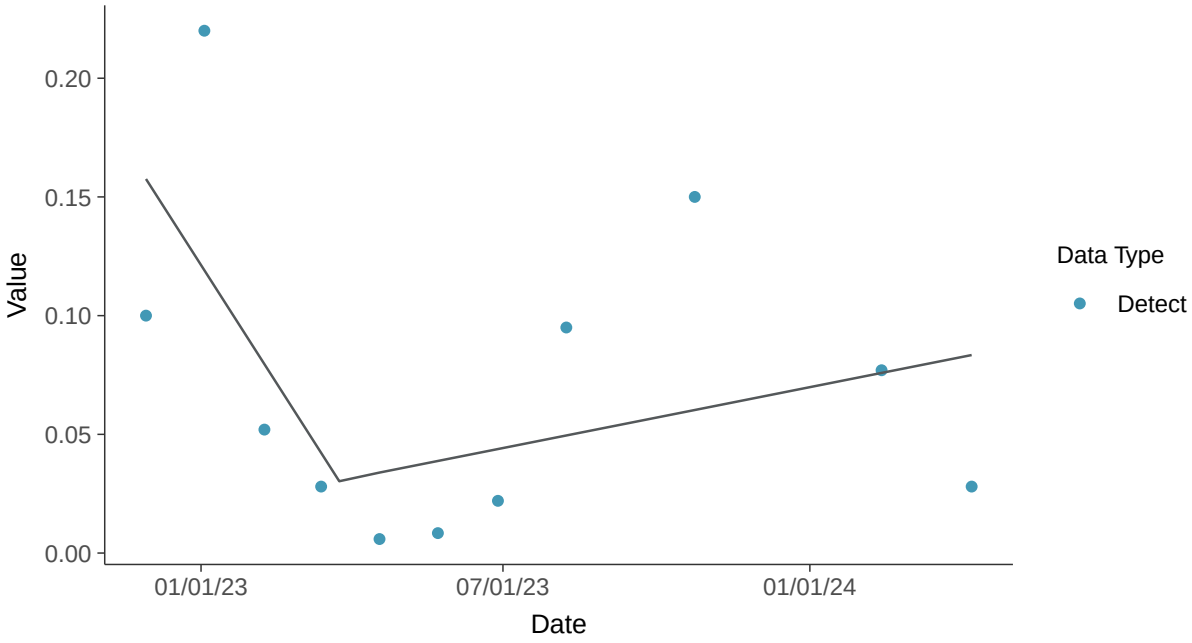
Trend Regression: Lognormal MLE

Lithium, MW-11 (mg/L)



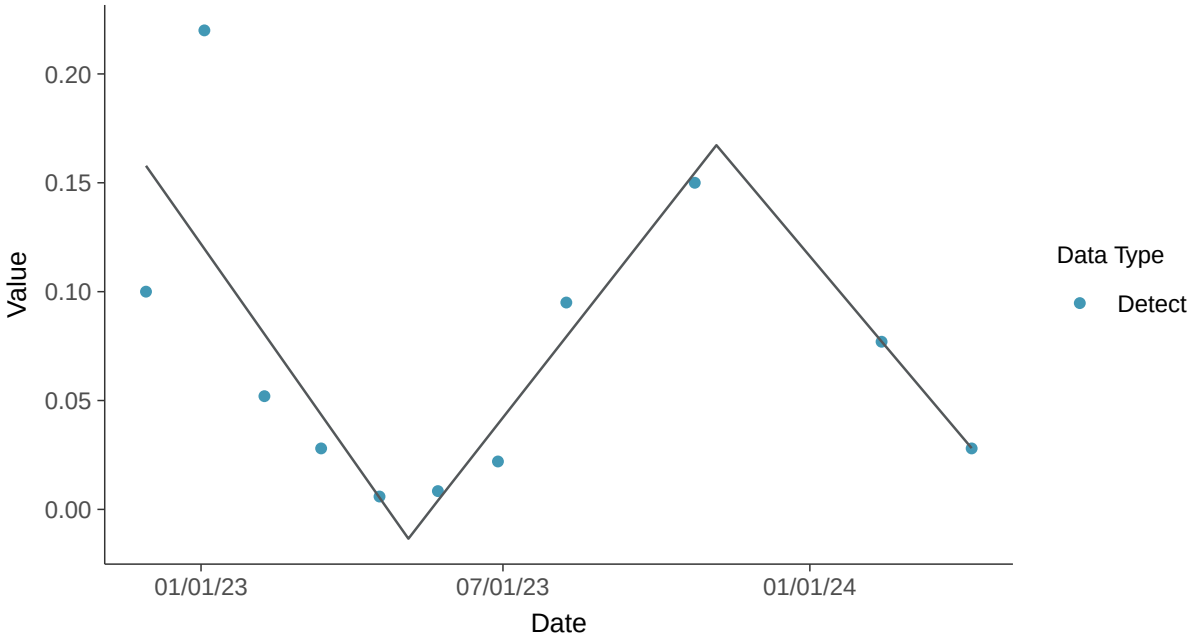
Trend Regression: Piecewise Linear-Linear

Lithium, MW-11 (mg/L)



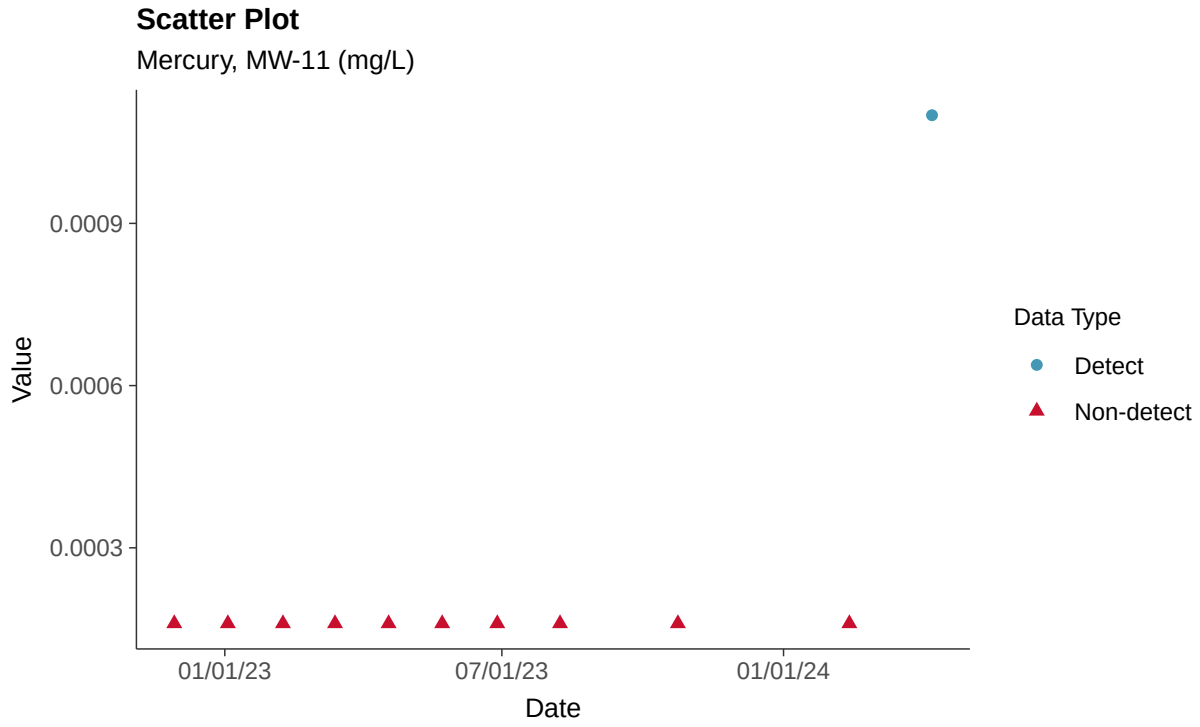
Trend Regression: Piecewise Linear-Linear-Linear

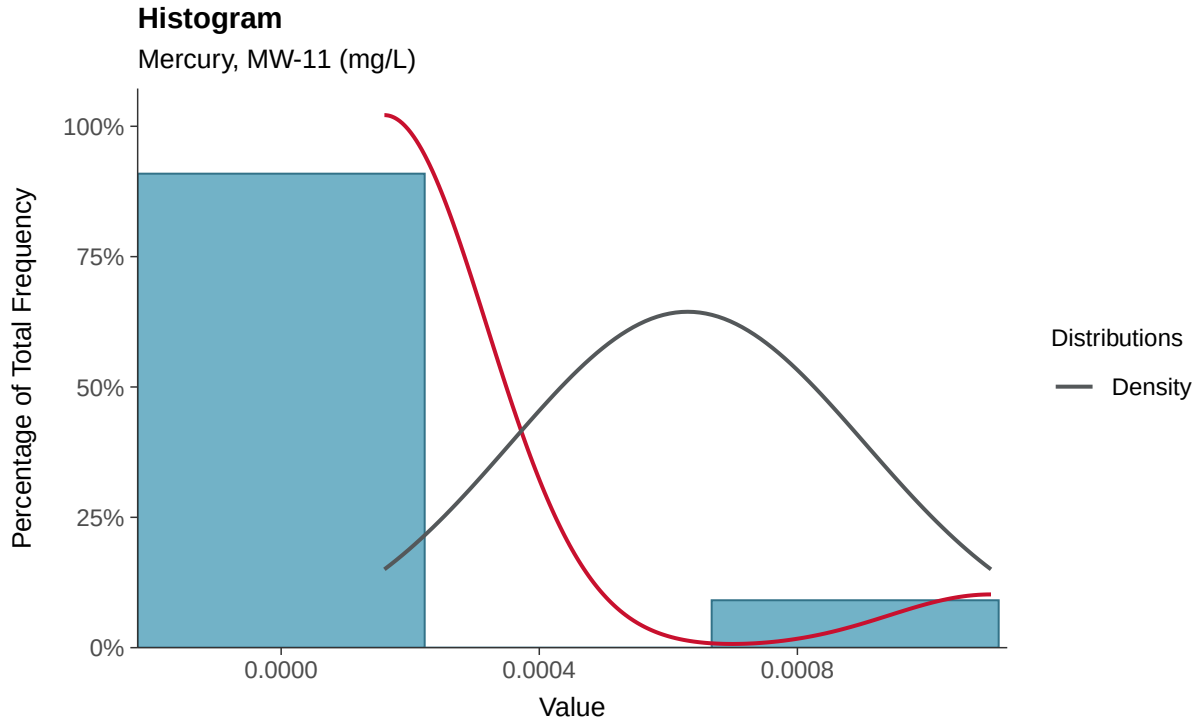
Lithium, MW-11 (mg/L)



Appendix IV: Mercury, MW-11

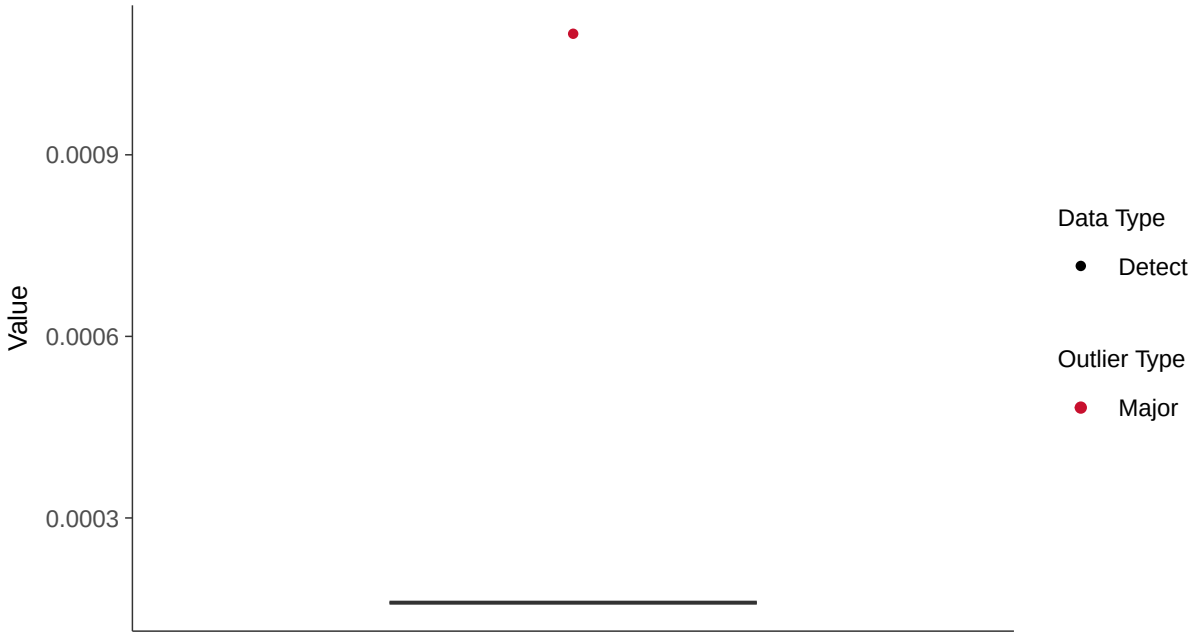
ID: 2_21_5_117





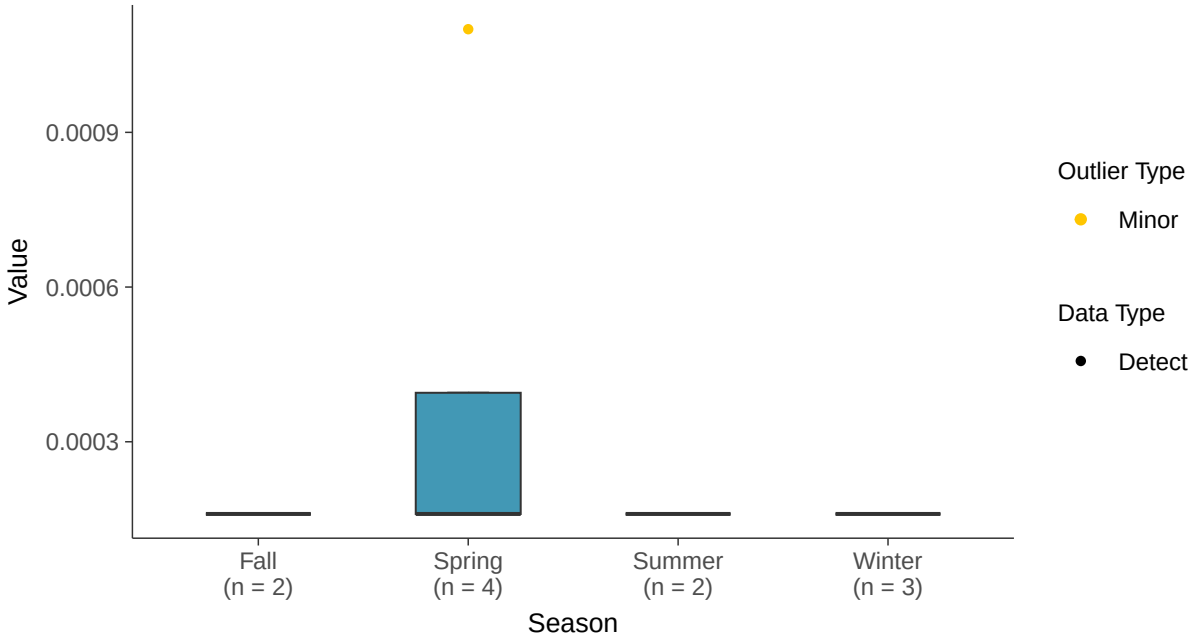
Boxplot

Mercury, MW-11 (mg/L)



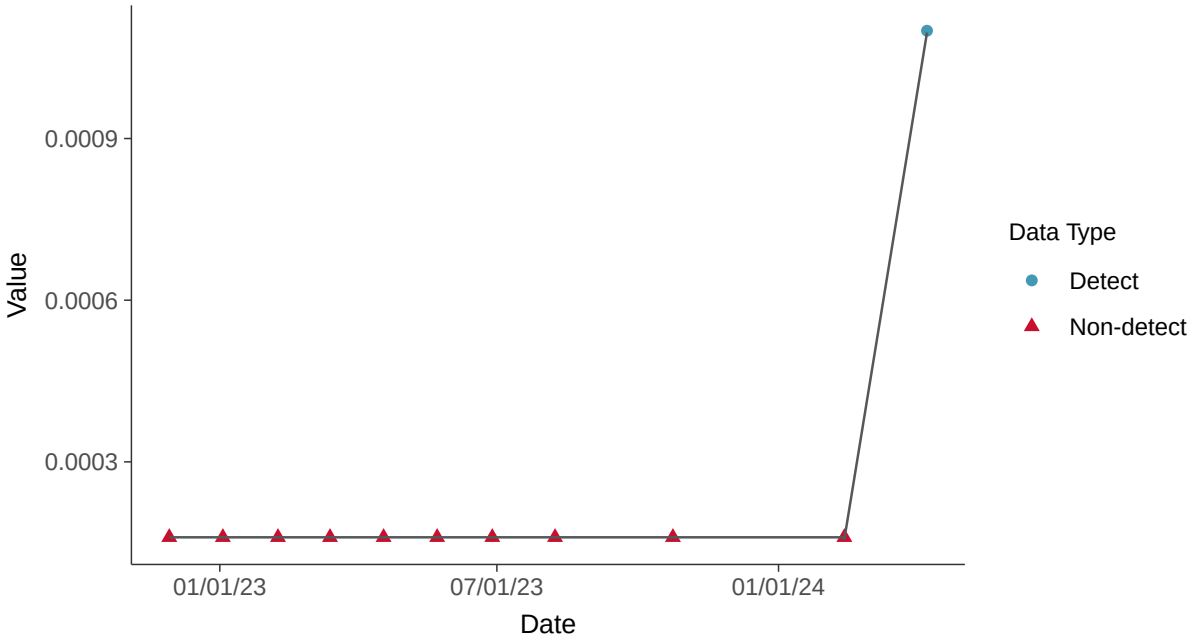
Boxplot by Season

Mercury, MW-11 (mg/L)



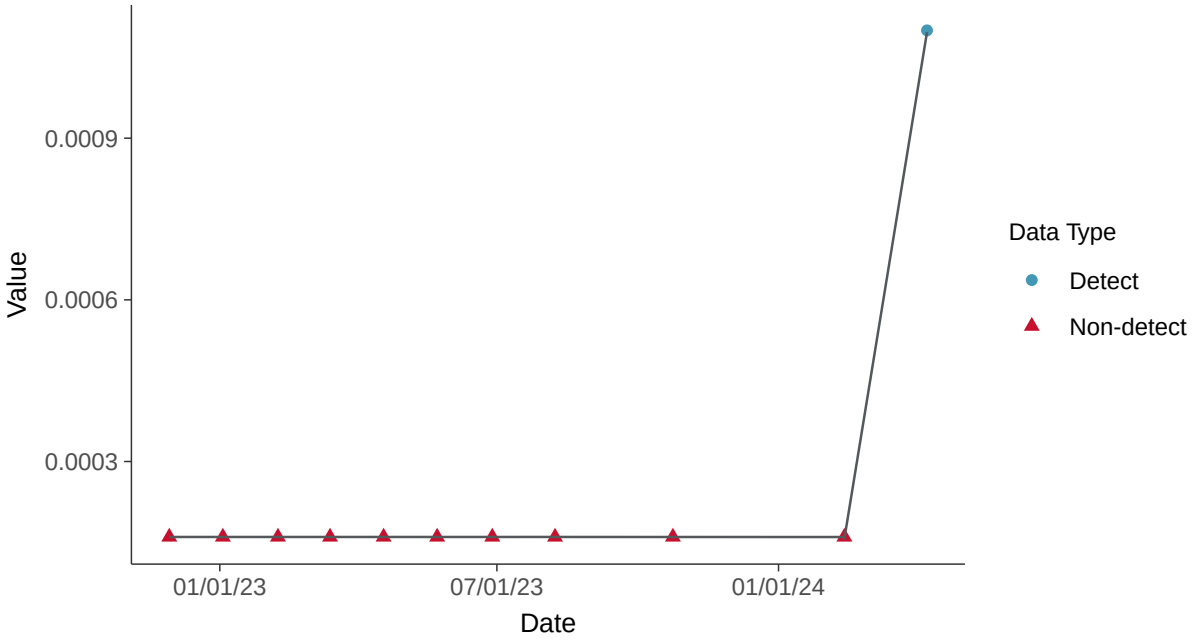
Trend Regression: Piecewise Linear-Linear

Mercury, MW-11 (mg/L)



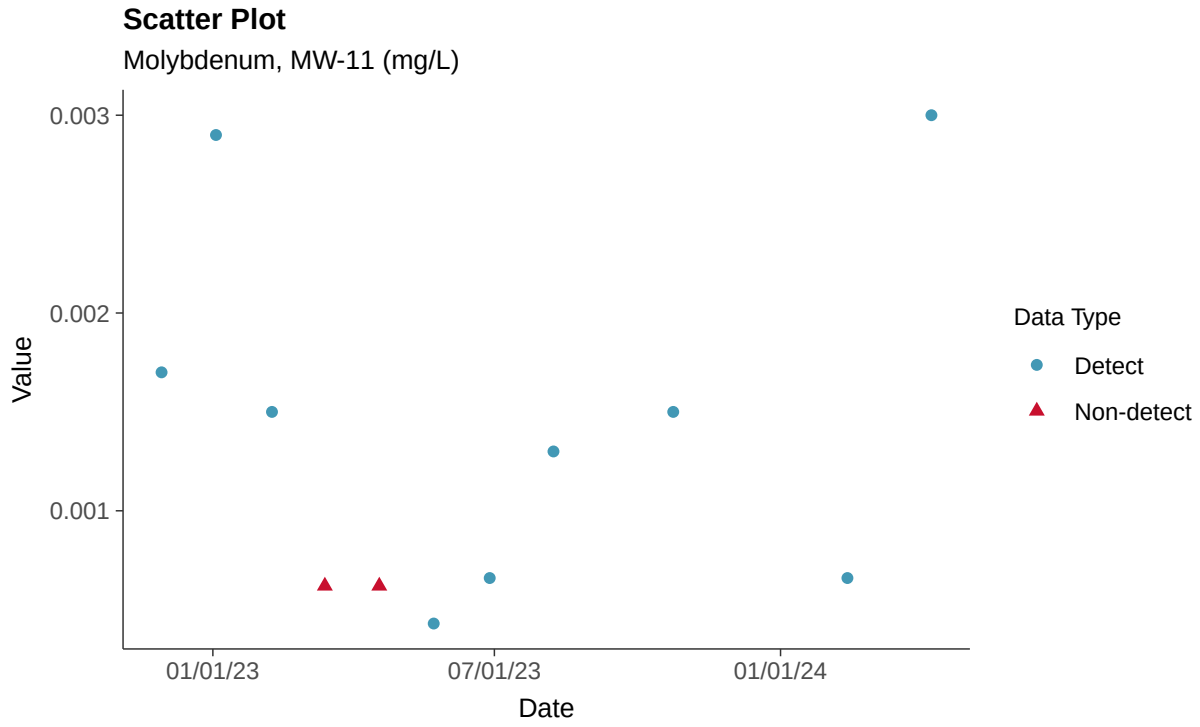
Trend Regression: Piecewise Linear-Linear-Linear

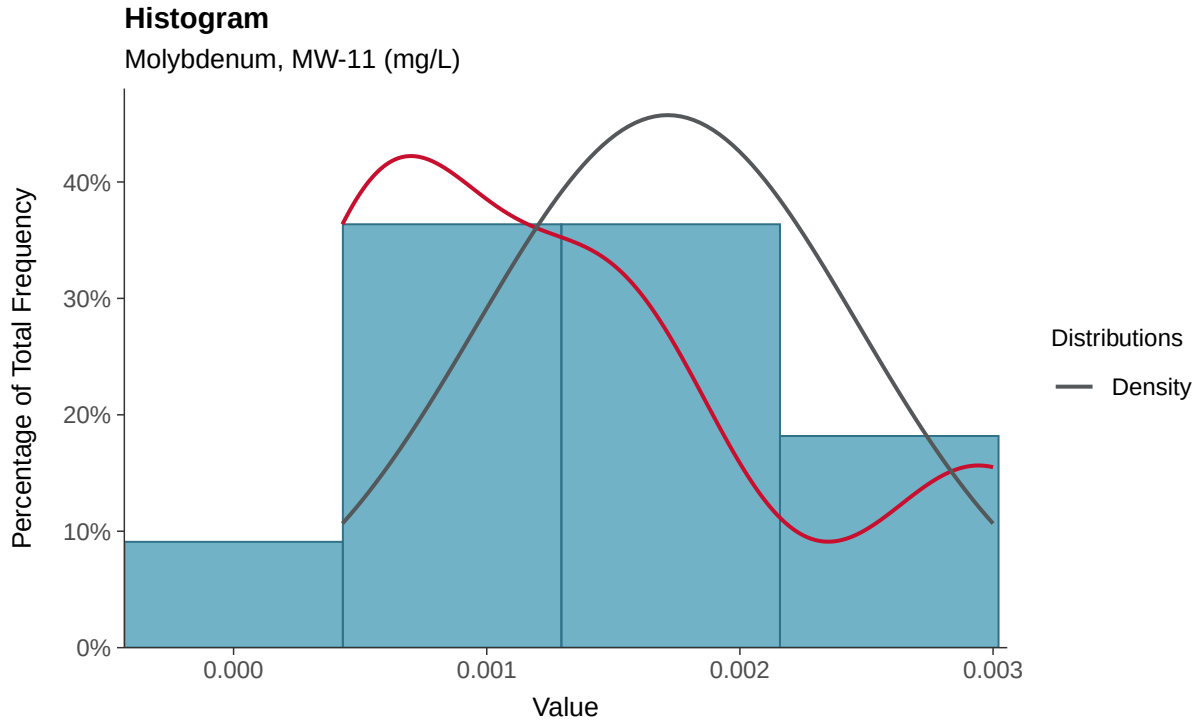
Mercury, MW-11 (mg/L)



Appendix IV: Molybdenum, MW-11

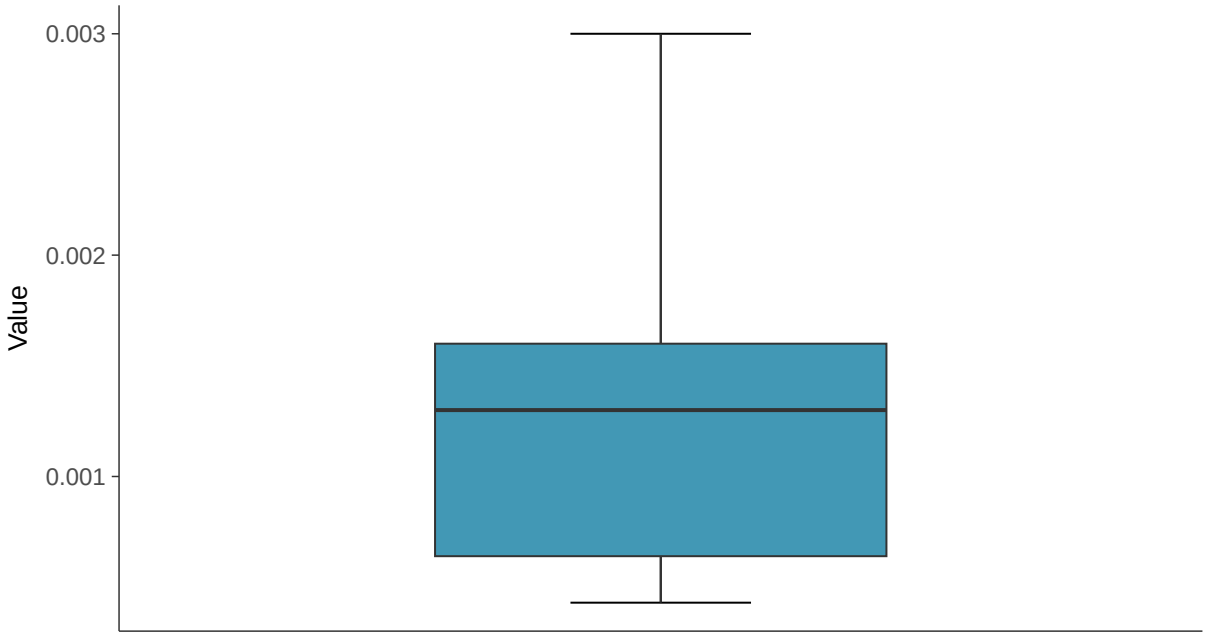
ID: 2_21_5_118





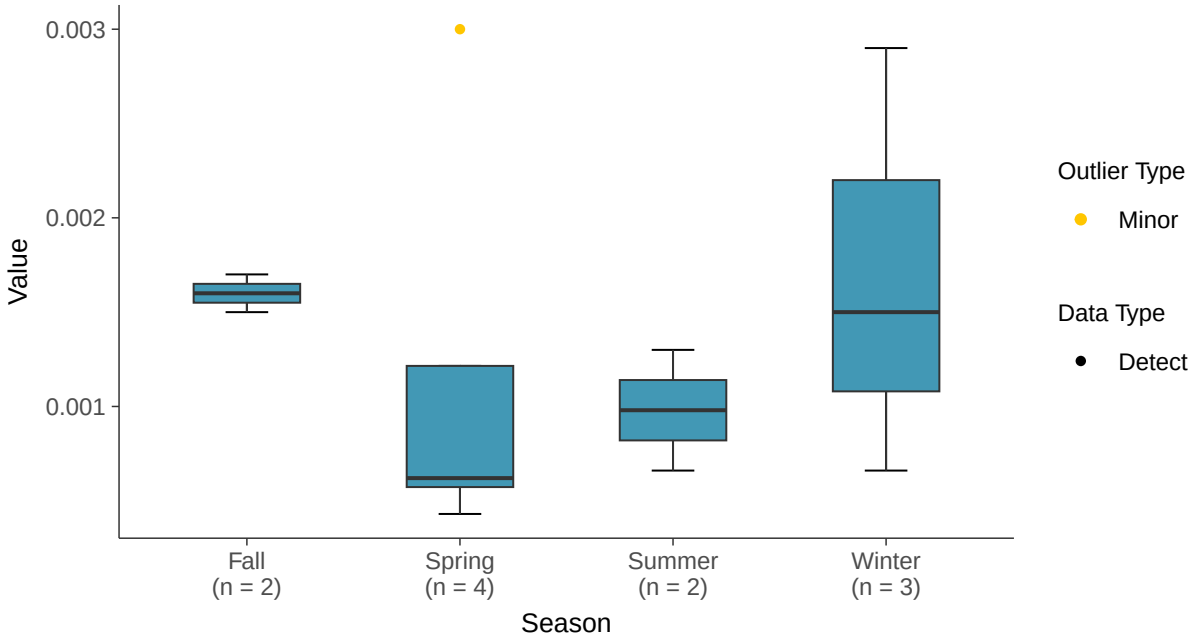
Boxplot

Molybdenum, MW-11 (mg/L)



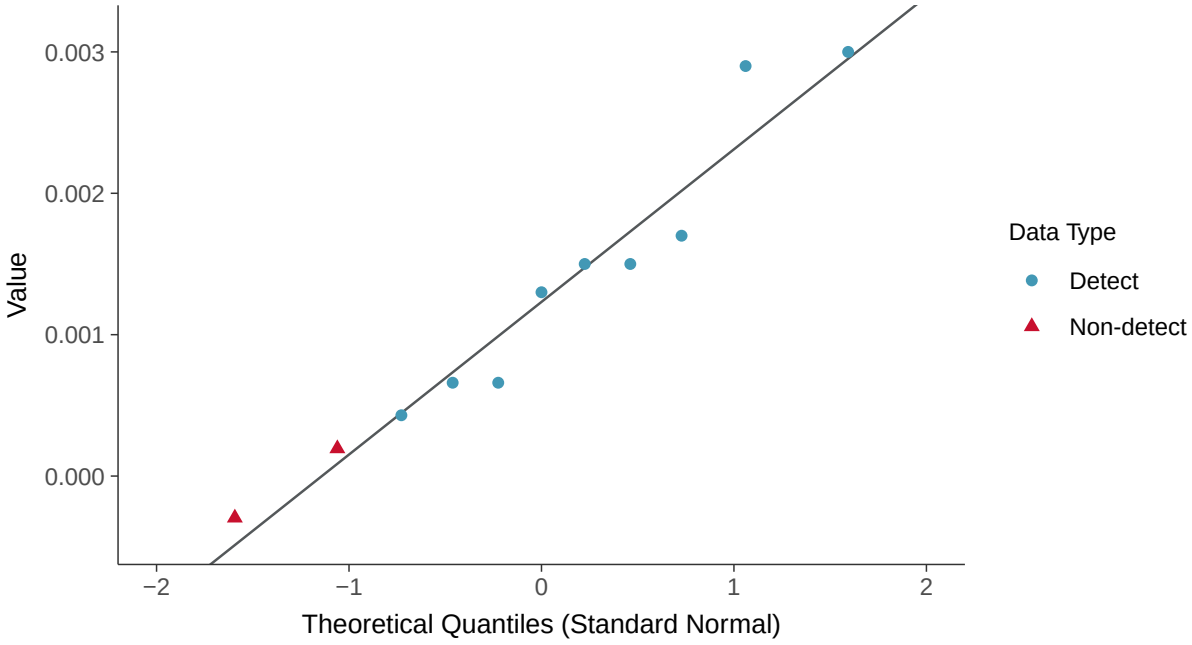
Boxplot by Season

Molybdenum, MW-11 (mg/L)



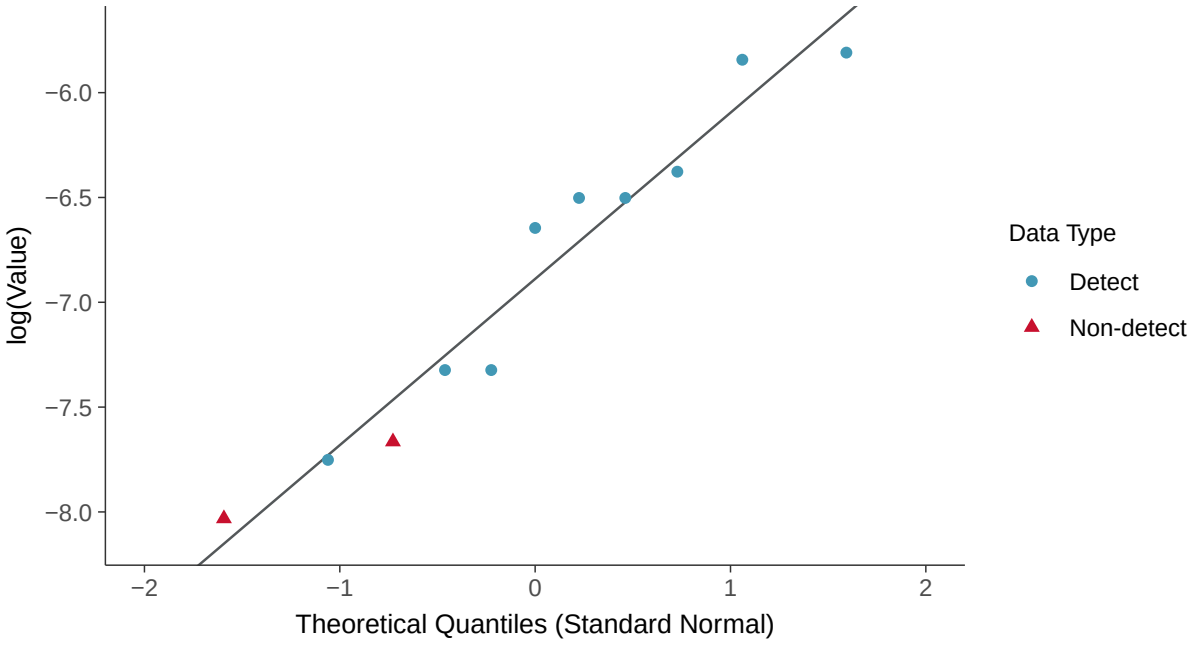
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-11 (mg/L)



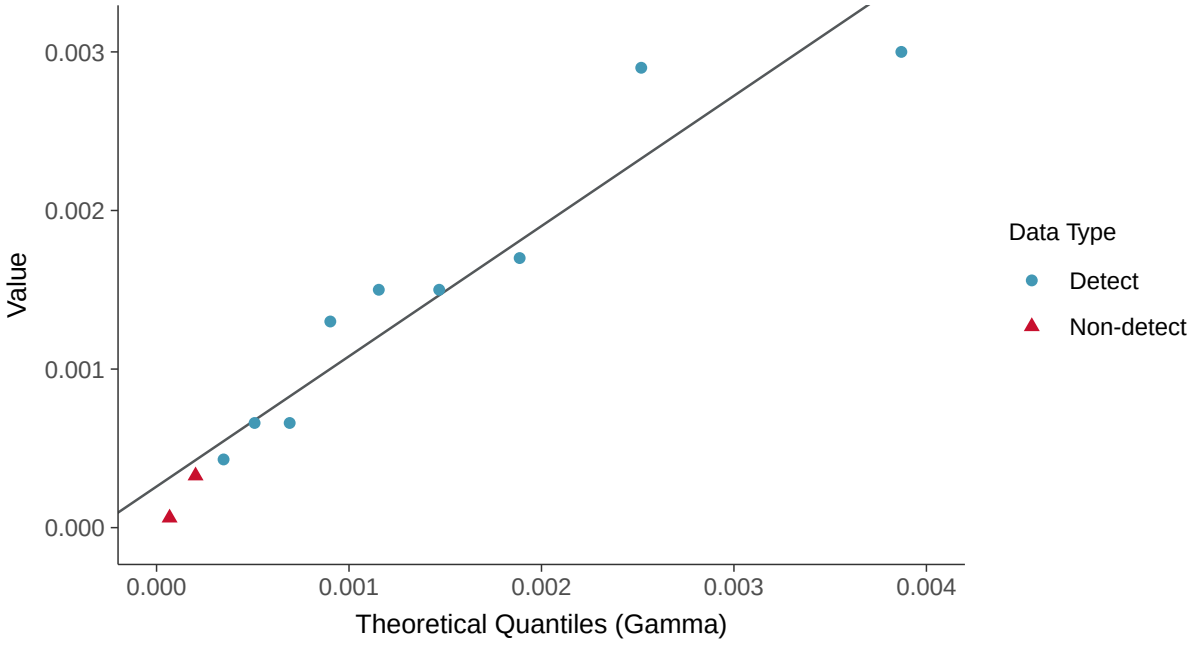
Lognormal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-11 (mg/L)



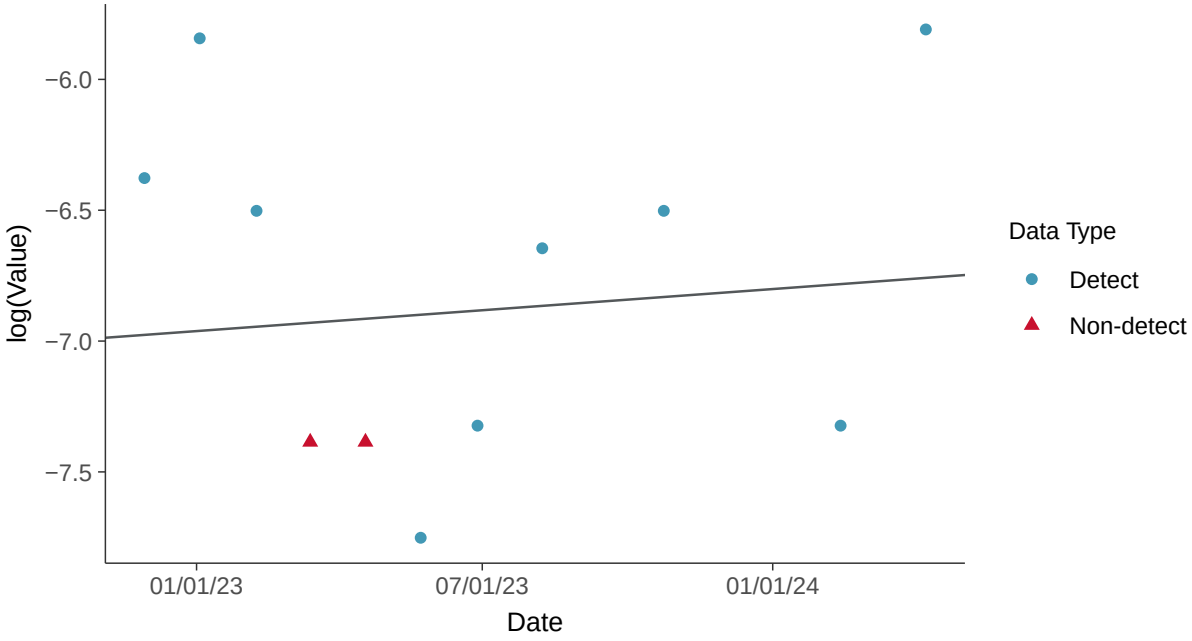
Gamma Q-Q plot using ROS Imputed Estimates

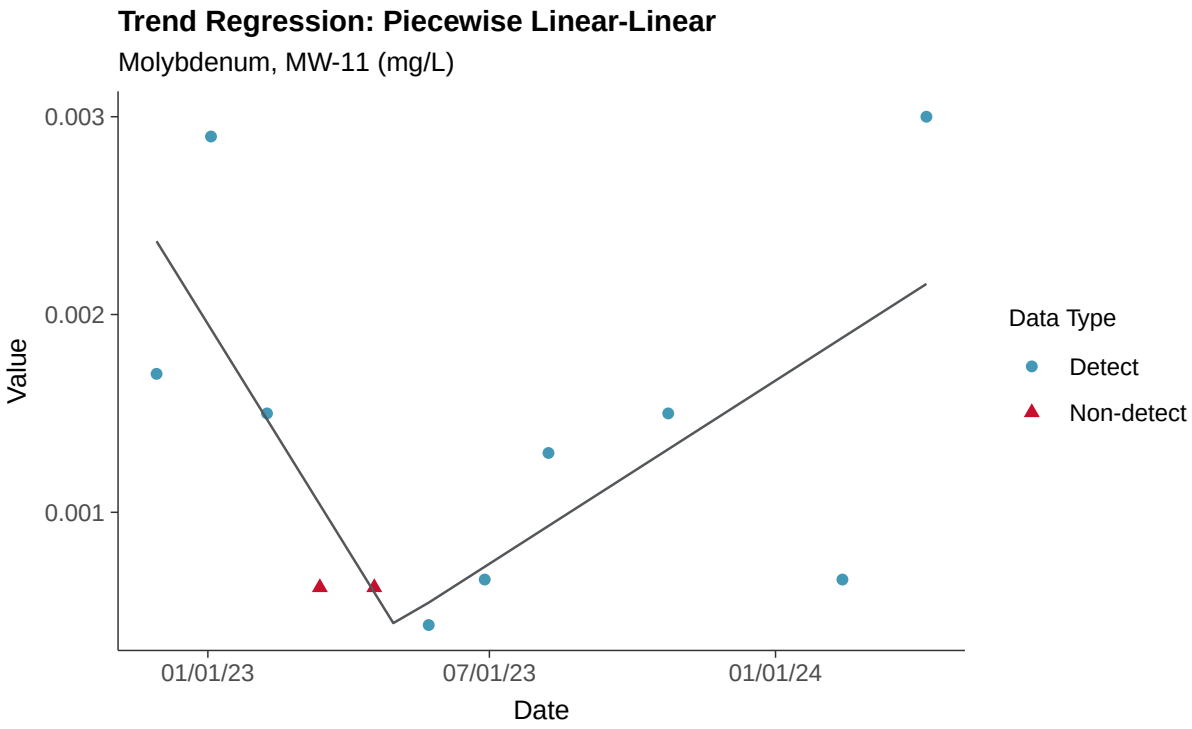
Molybdenum, MW-11 (mg/L)



Trend Regression: Lognormal MLE

Molybdenum, MW-11 (mg/L)



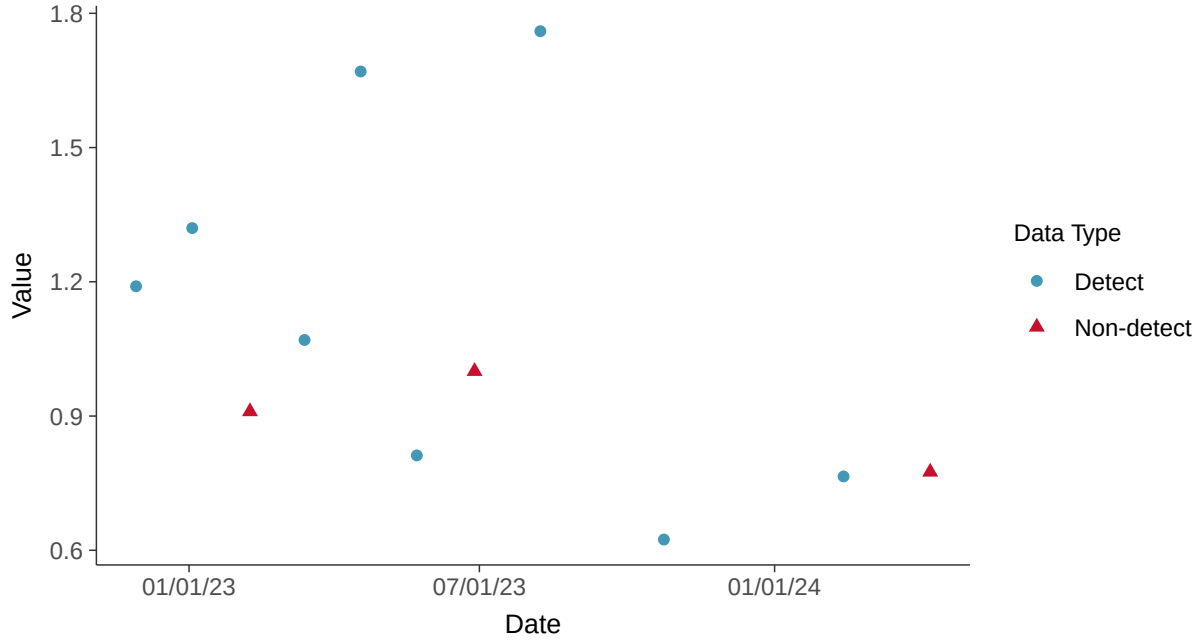

Trend Regression: Piecewise Linear-Linear
Molybdenum, MW-11 (mg/L)
0.003
0.002
0.001
Value
01/01/23
07/01/23
01/01/24
Date
Data Type
Detect
Non-detect

Appendix IV: Radium 226 and 228, MW-11

ID: 2_21_5_121

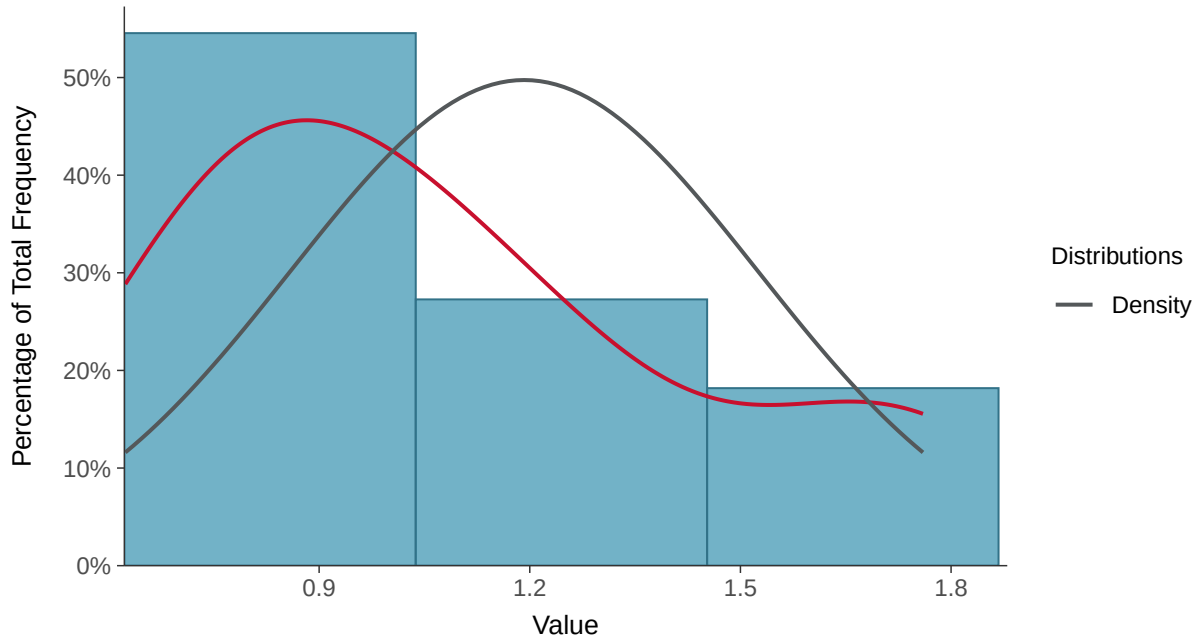
Scatter Plot

Radium 226 and 228, MW-11 (pCi/L)



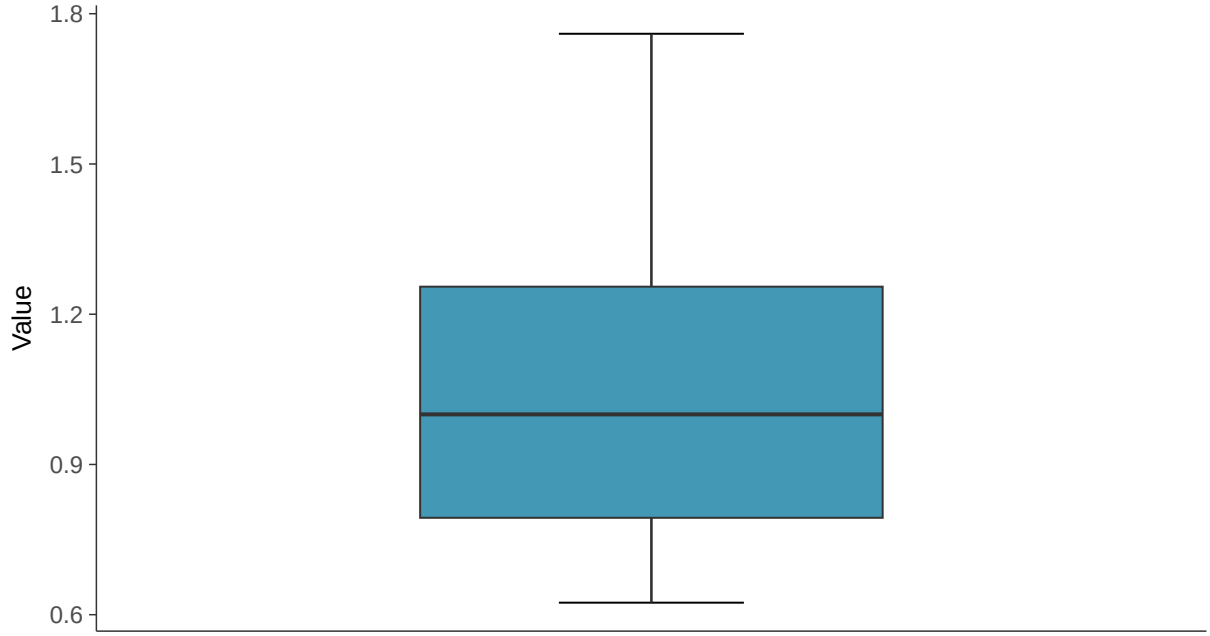
Histogram

Radium 226 and 228, MW-11 (pCi/L)



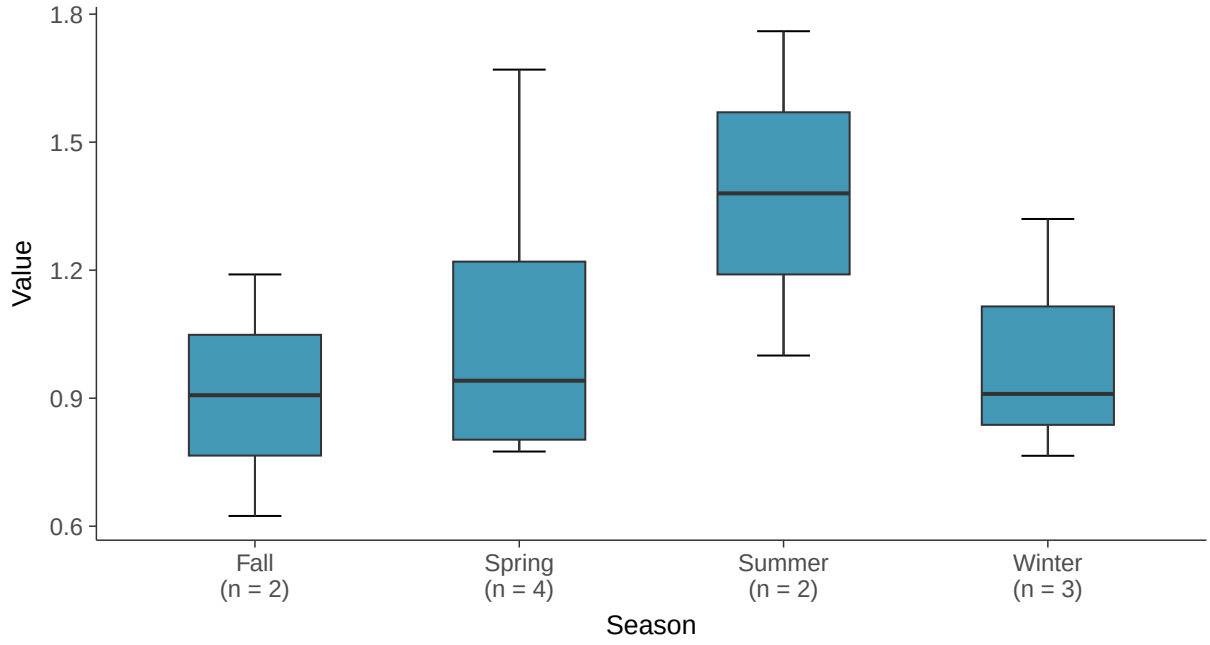
Boxplot

Radium 226 and 228, MW-11 (pCi/L)



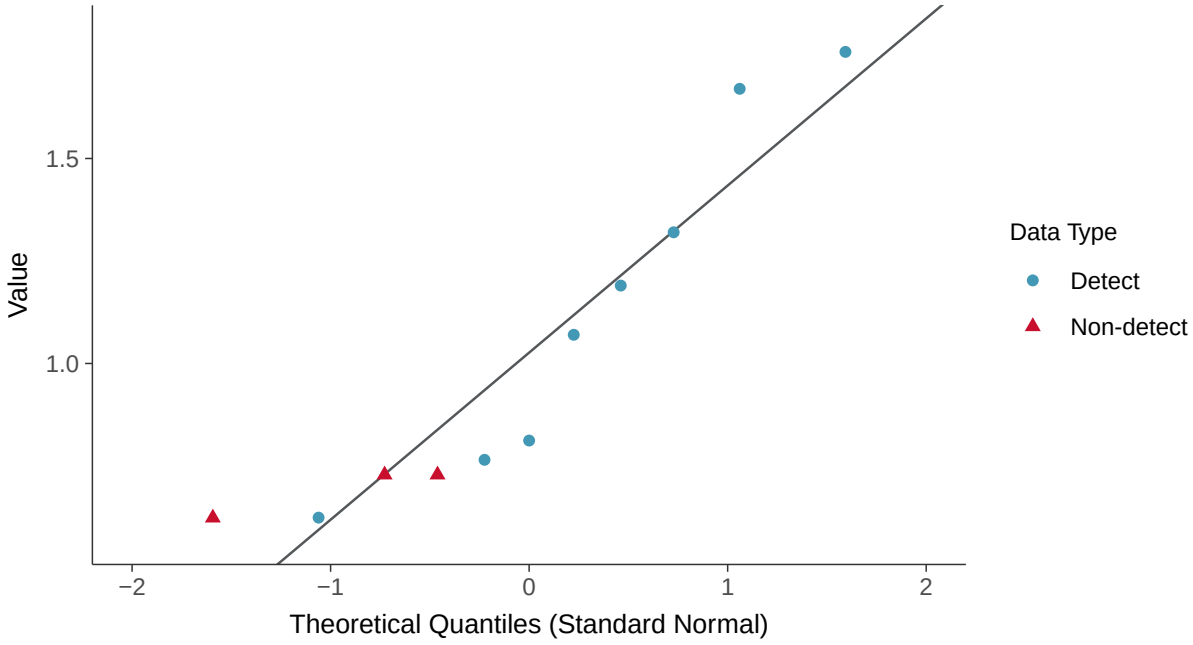
Boxplot by Season

Radium 226 and 228, MW-11 (pCi/L)



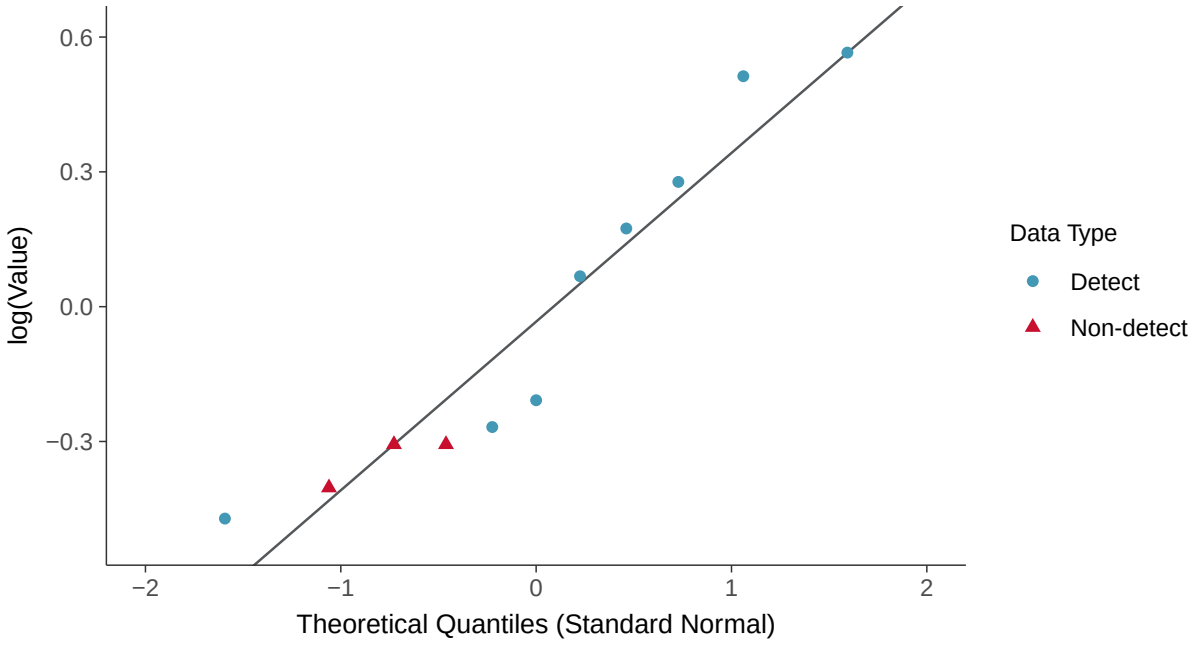
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-11 (pCi/L)



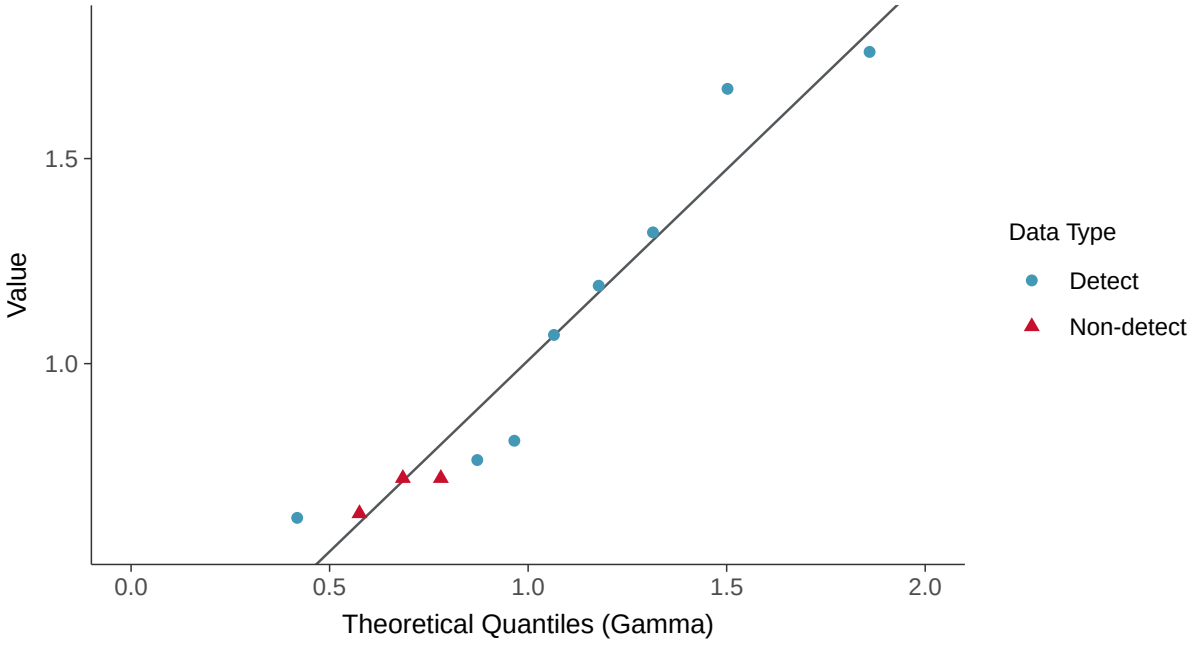
Lognormal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-11 (pCi/L)



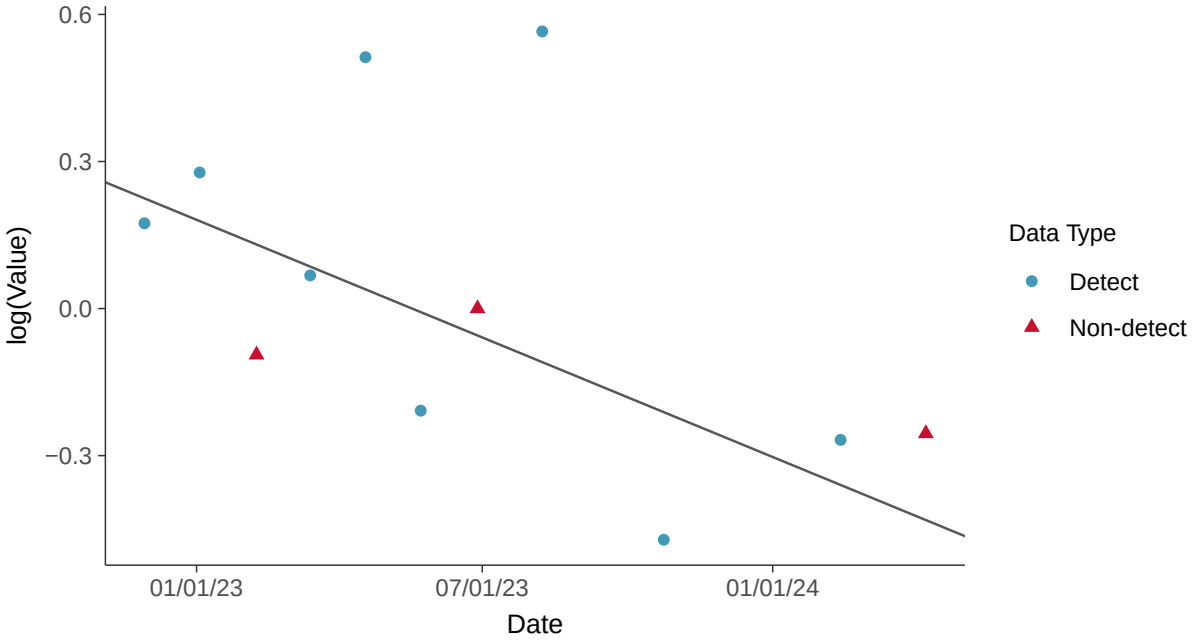
Gamma Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-11 (pCi/L)



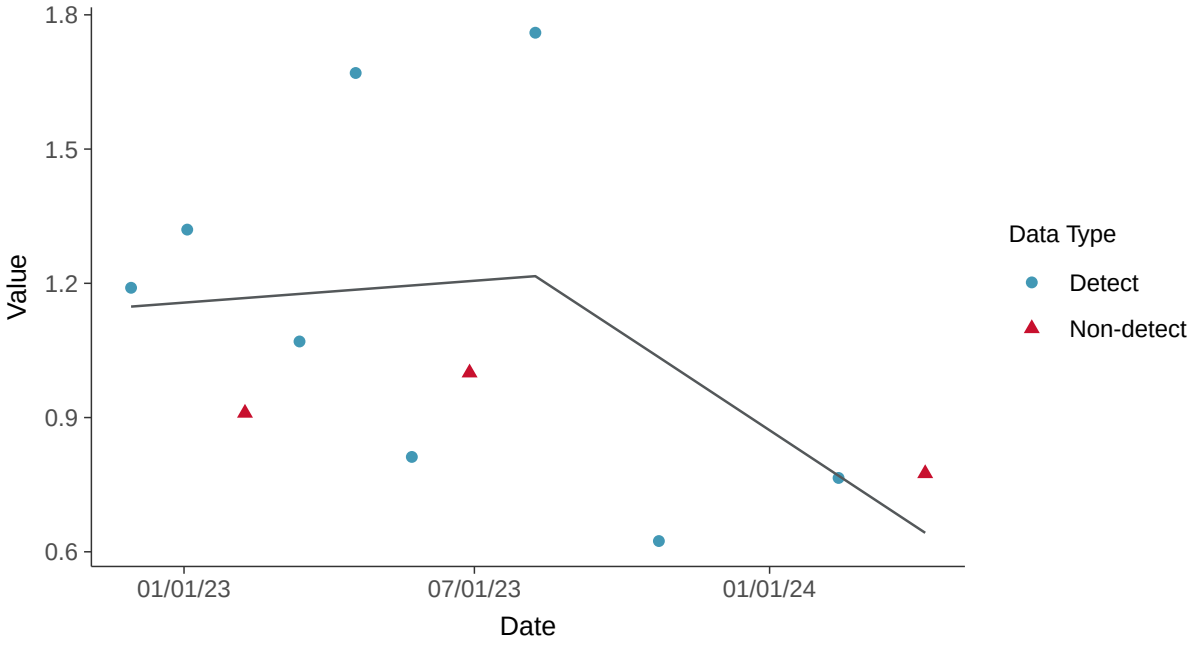
Trend Regression: Lognormal MLE

Radium 226 and 228, MW-11 (pCi/L)



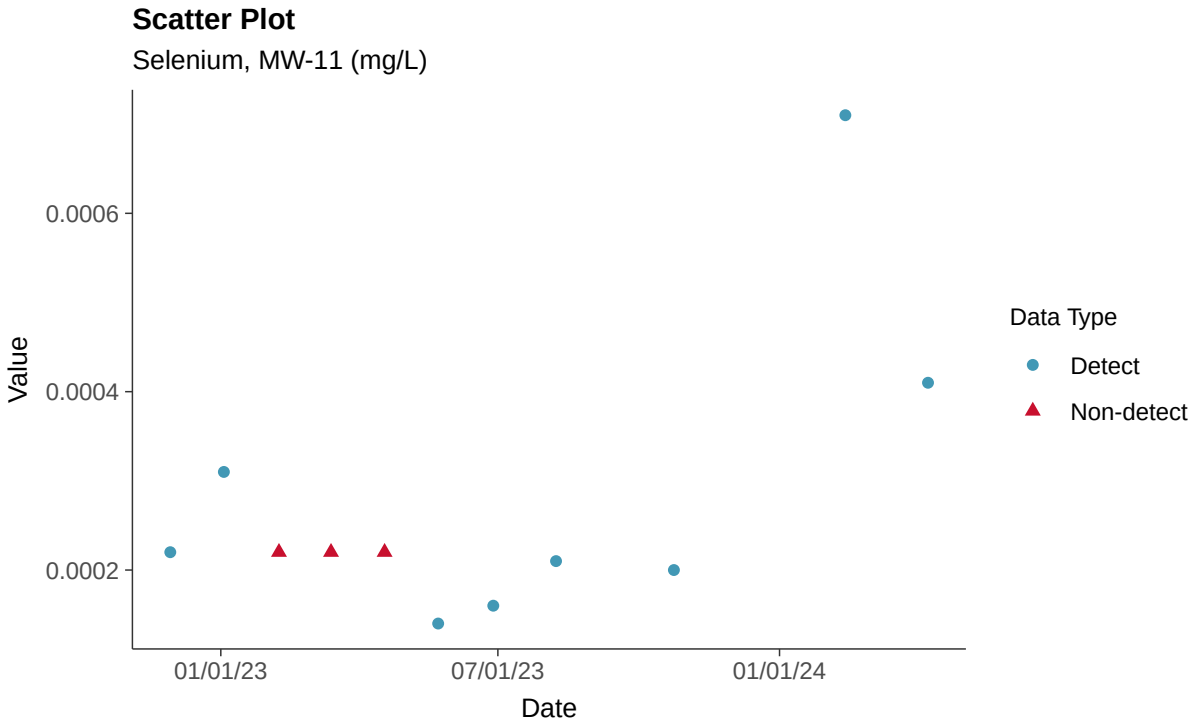
Trend Regression: Piecewise Linear-Linear

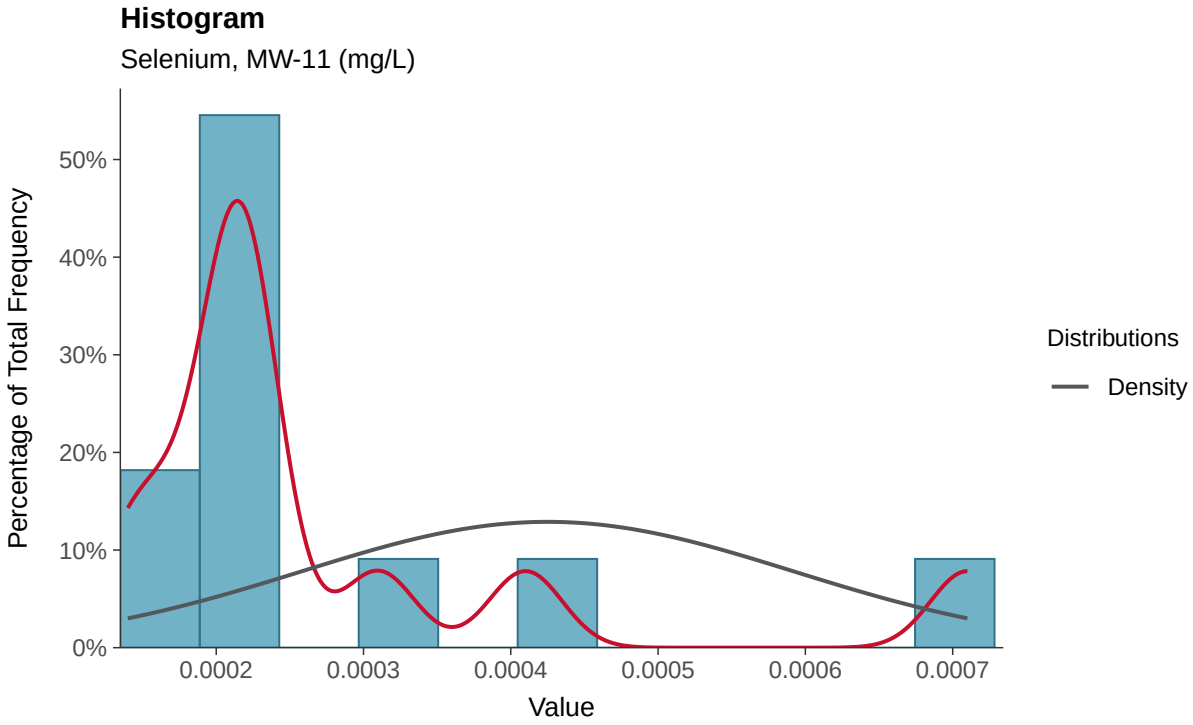
Radium 226 and 228, MW-11 (pCi/L)



Appendix IV: Selenium, MW-11

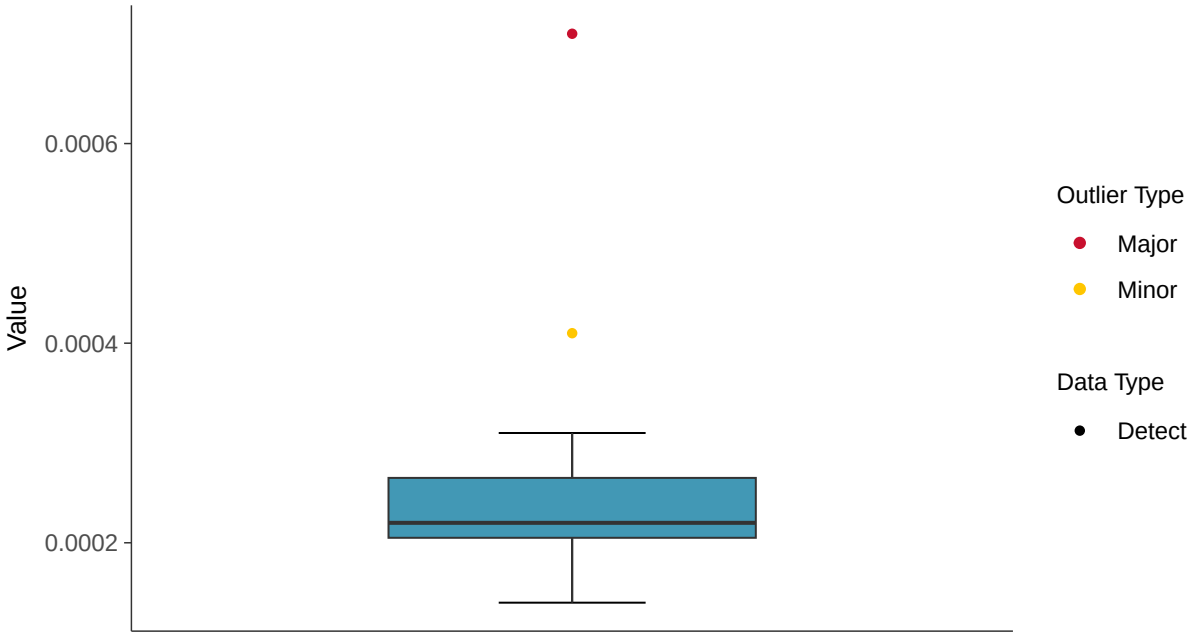
ID: 2_21_5_122





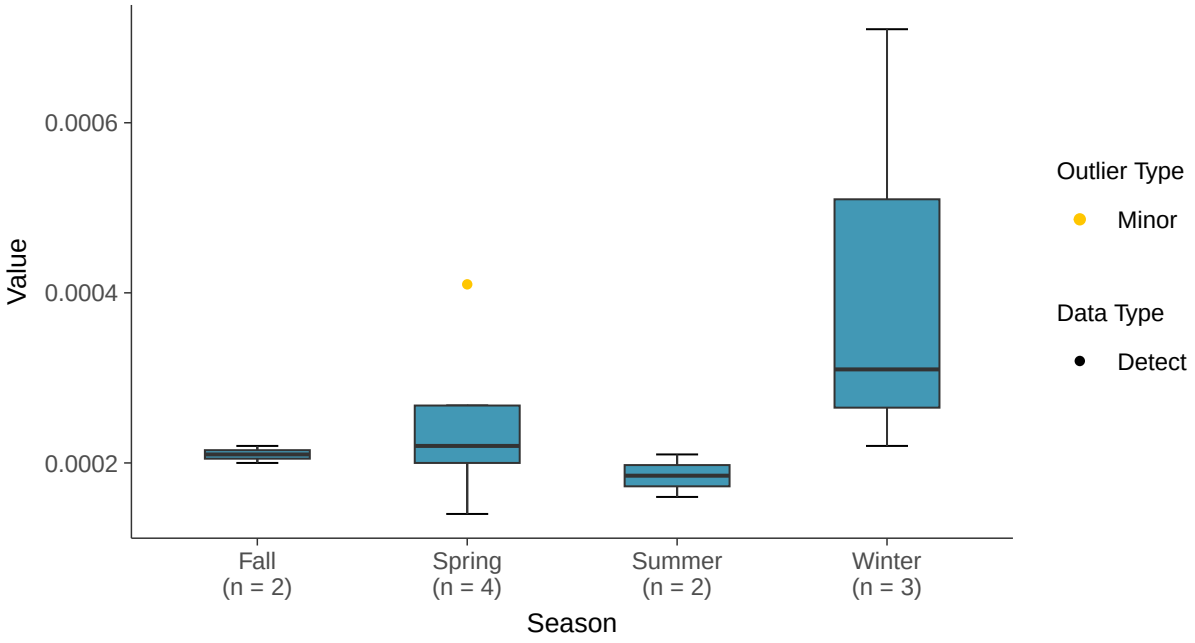
Boxplot

Selenium, MW-11 (mg/L)



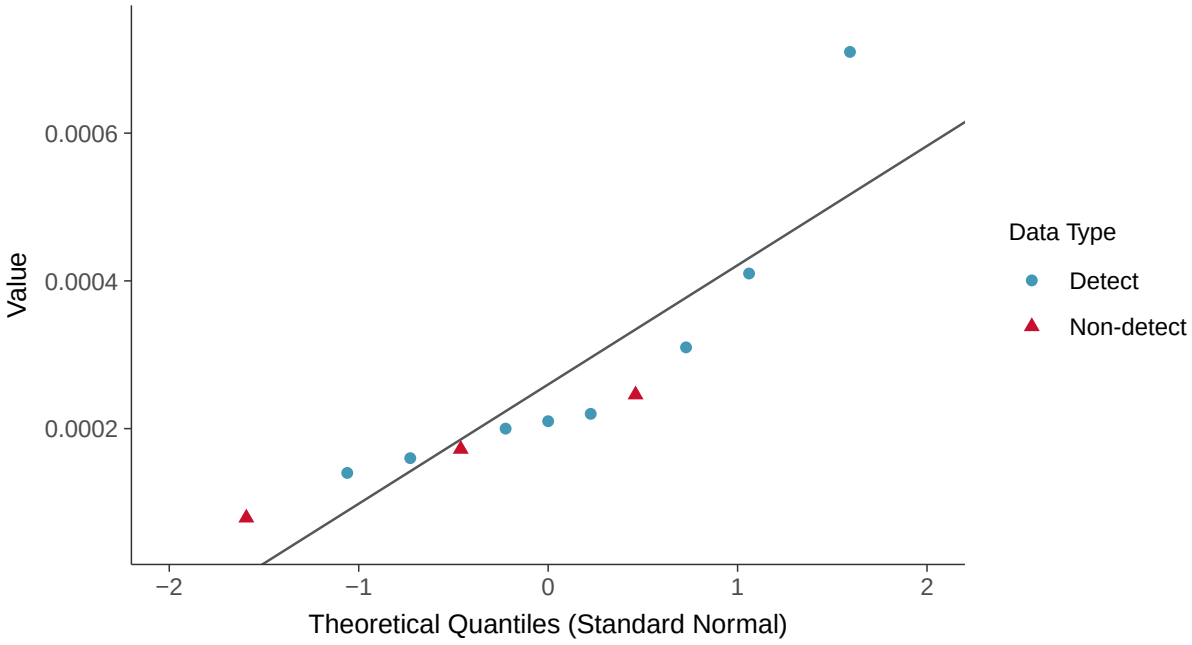
Boxplot by Season

Selenium, MW-11 (mg/L)



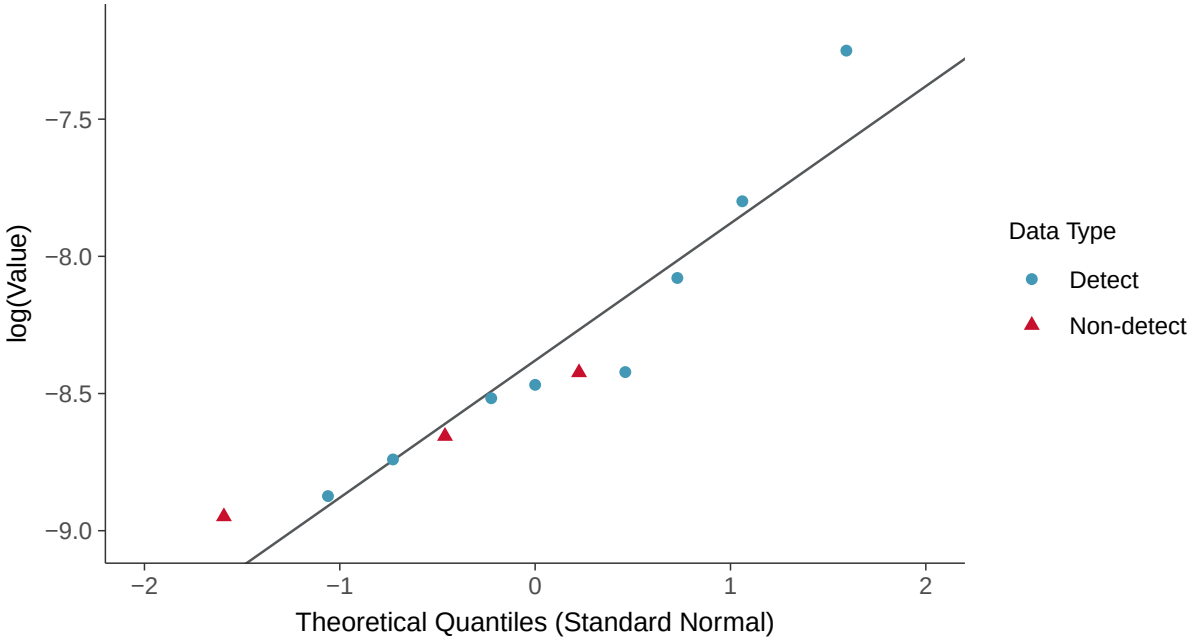
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-11 (mg/L)



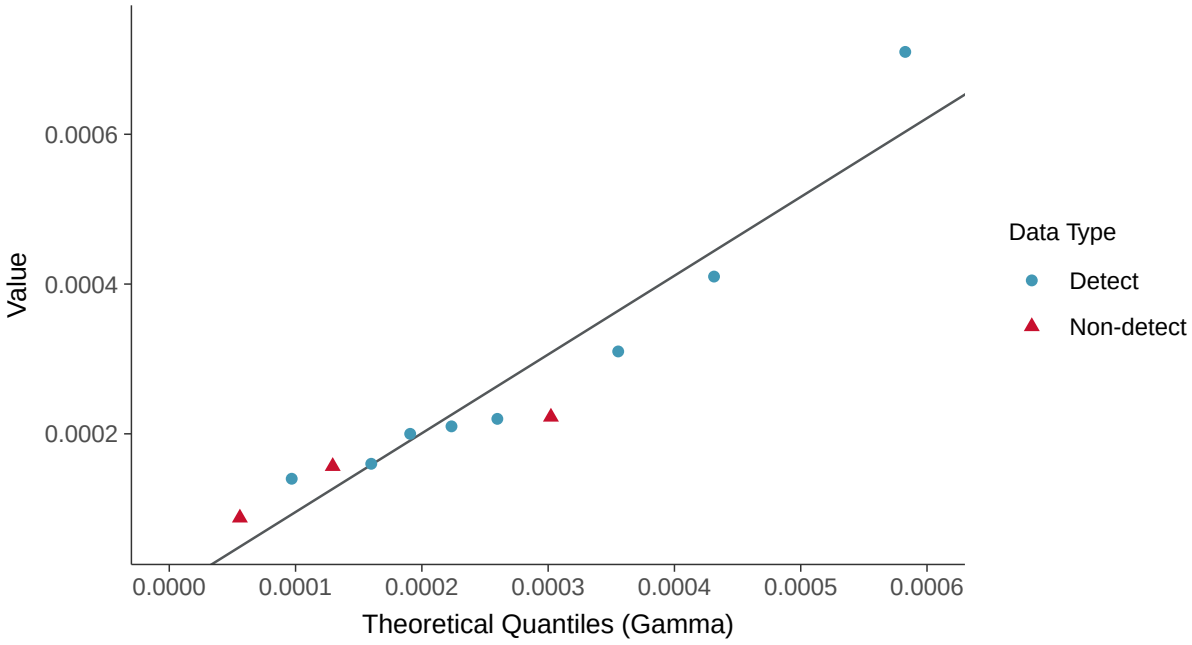
Lognormal Q-Q plot using ROS Imputed Estimates

Selenium, MW-11 (mg/L)



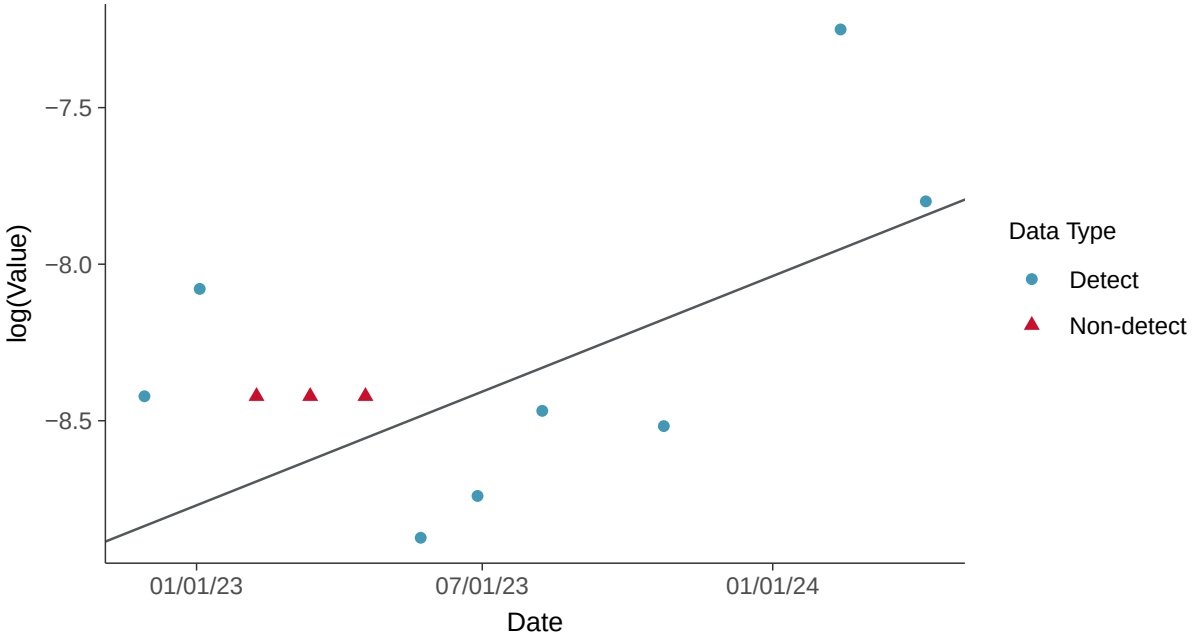
Gamma Q-Q plot using ROS Imputed Estimates

Selenium, MW-11 (mg/L)



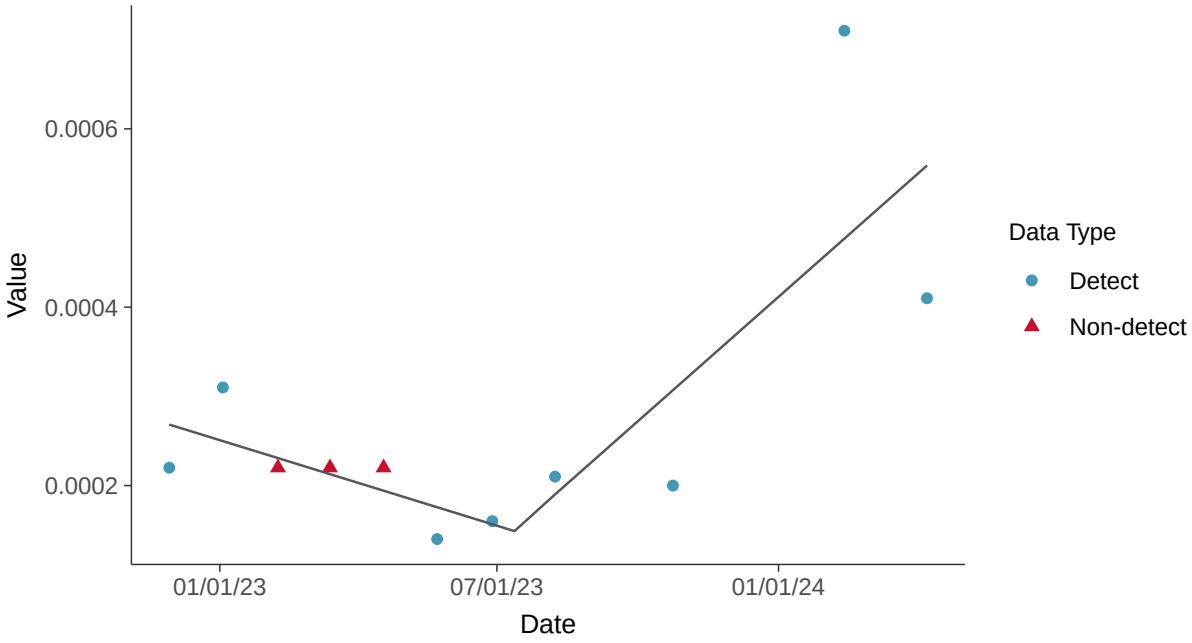
Trend Regression: Lognormal MLE

Selenium, MW-11 (mg/L)



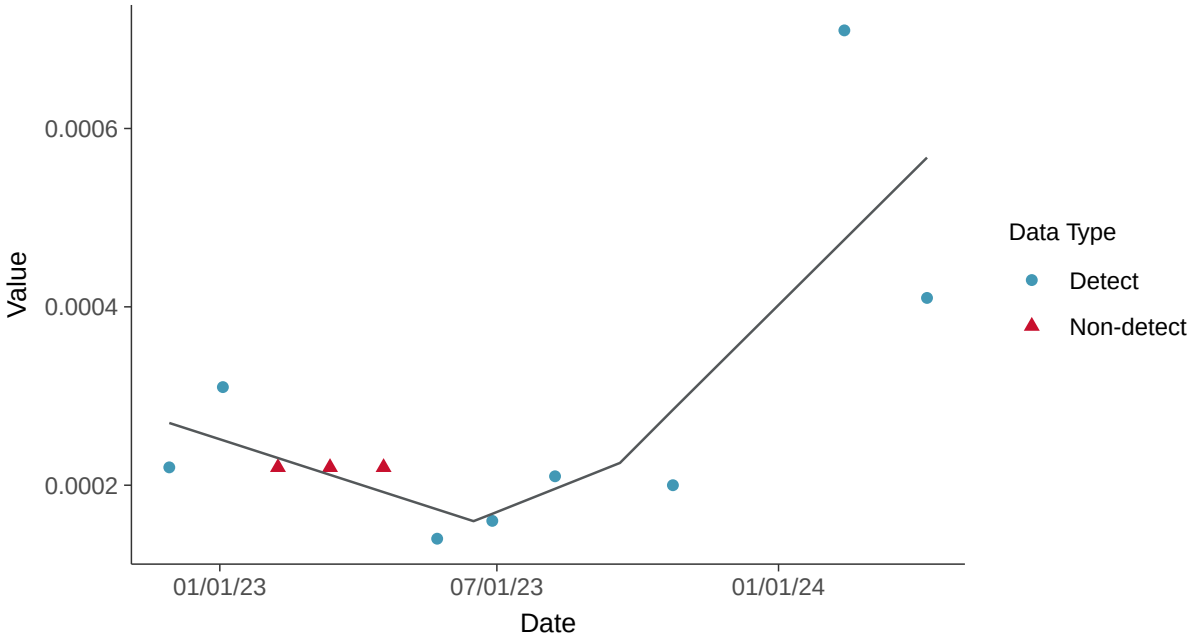
Trend Regression: Piecewise Linear-Linear

Selenium, MW-11 (mg/L)



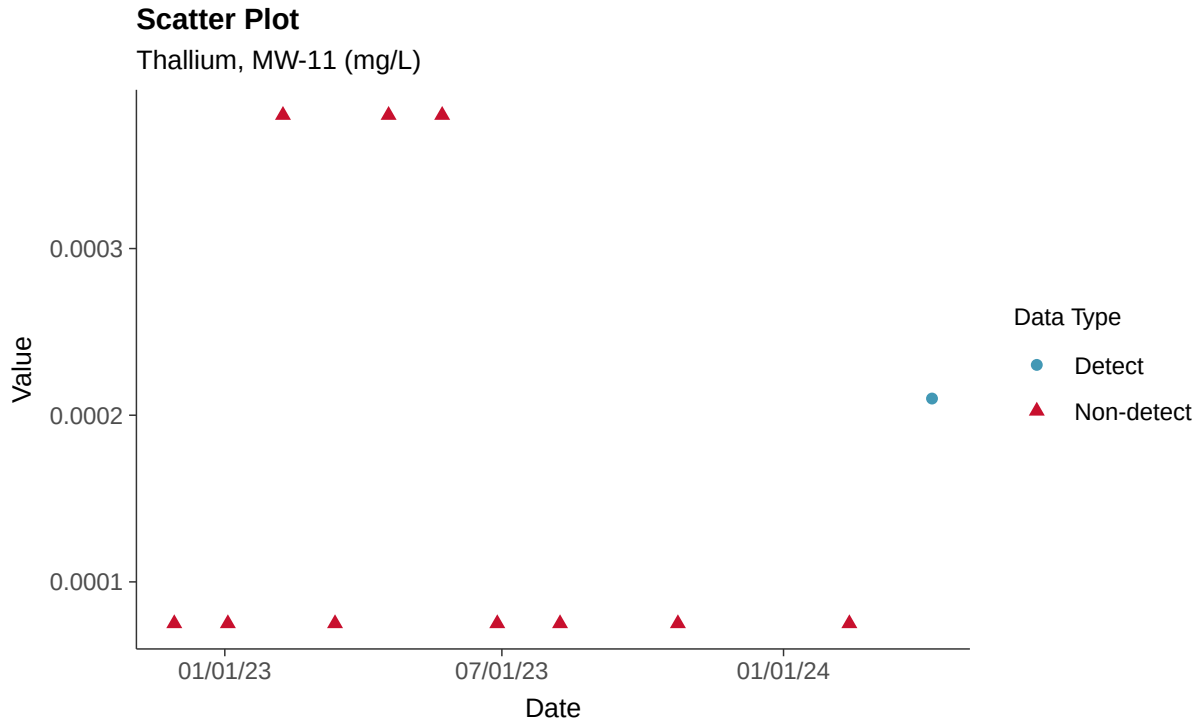
Trend Regression: Piecewise Linear-Linear-Linear

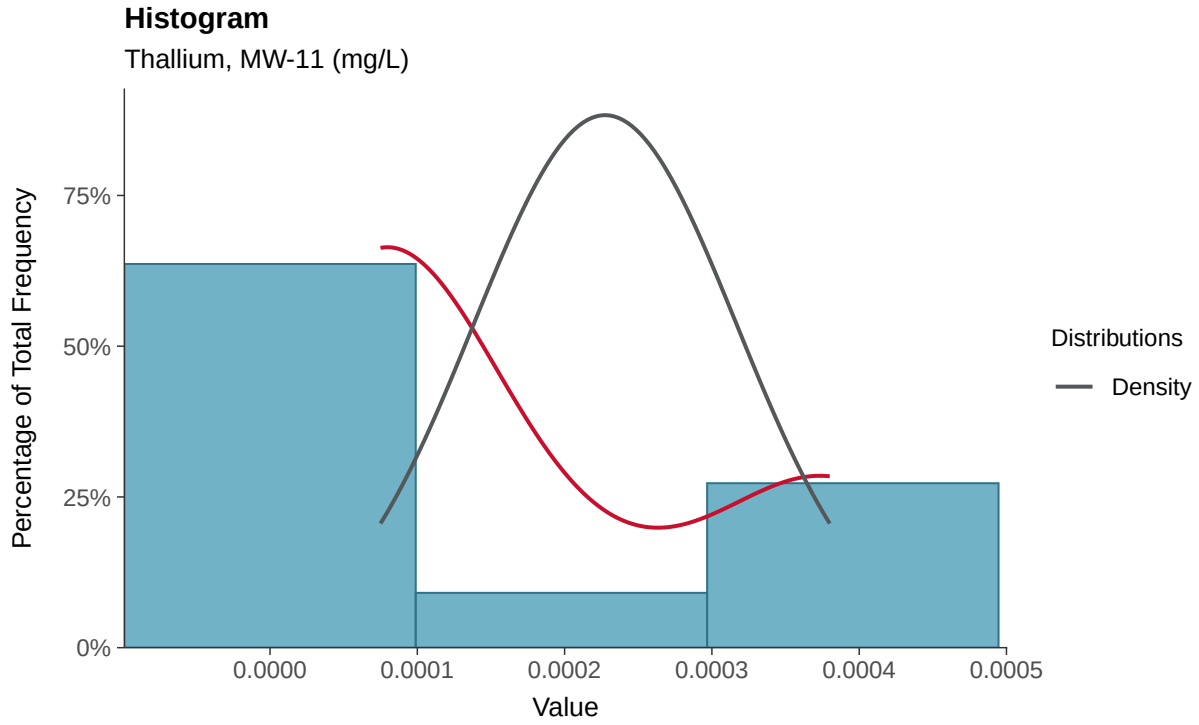
Selenium, MW-11 (mg/L)



Appendix IV: Thallium, MW-11

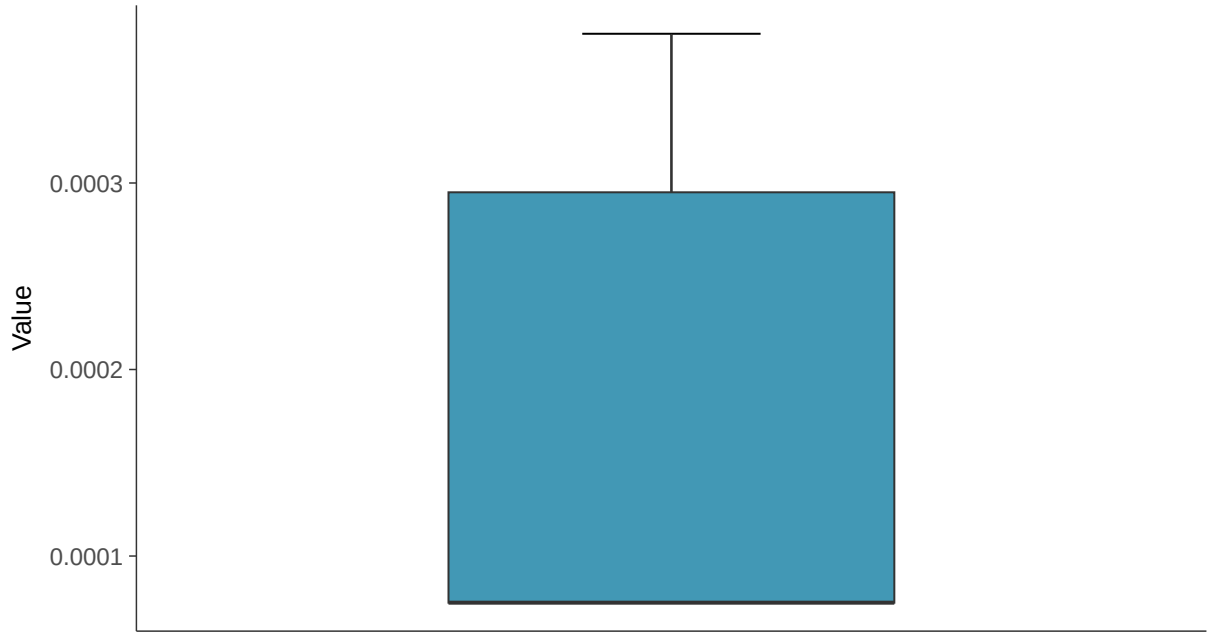
ID: 2_21_5_125





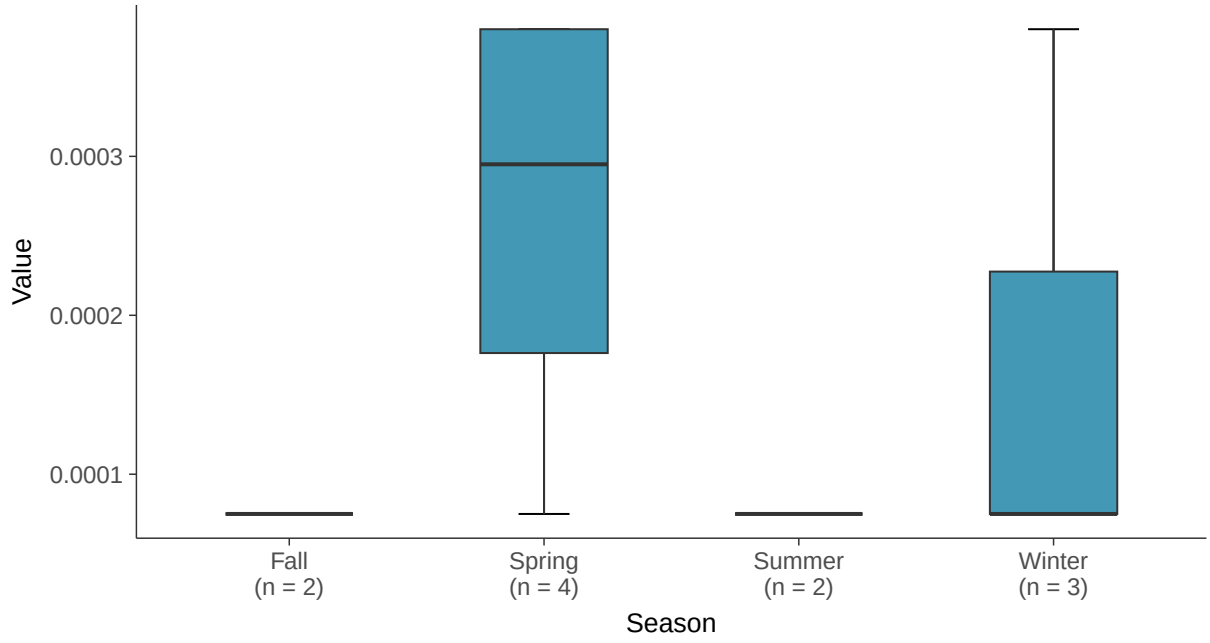
Boxplot

Thallium, MW-11 (mg/L)



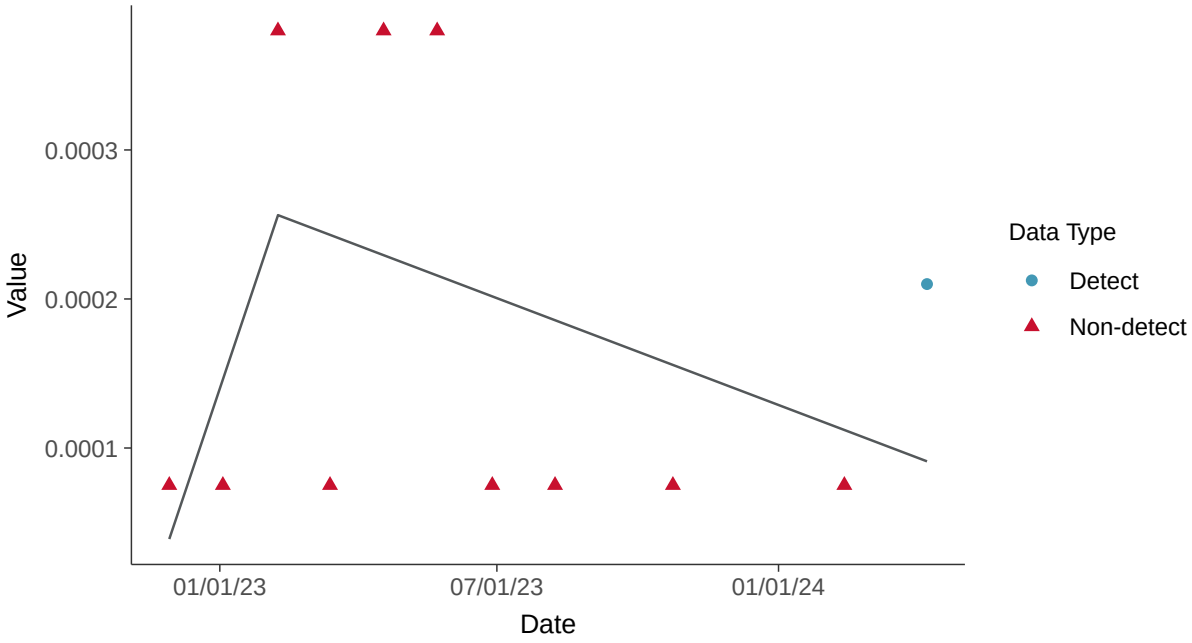
Boxplot by Season

Thallium, MW-11 (mg/L)



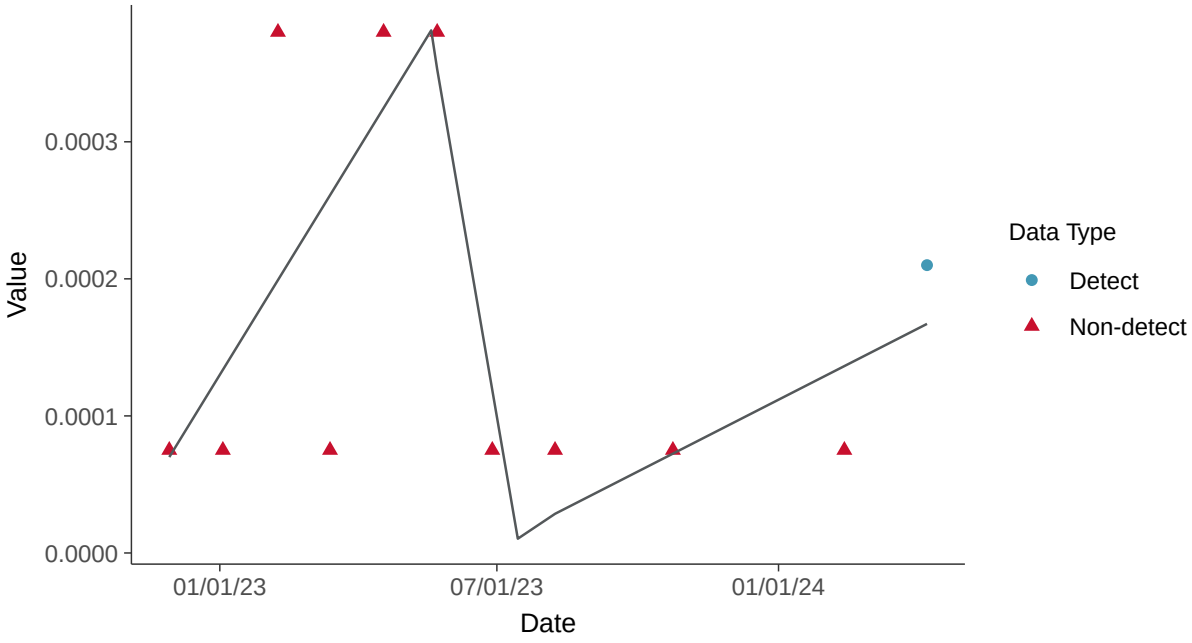
Trend Regression: Piecewise Linear-Linear

Thallium, MW-11 (mg/L)



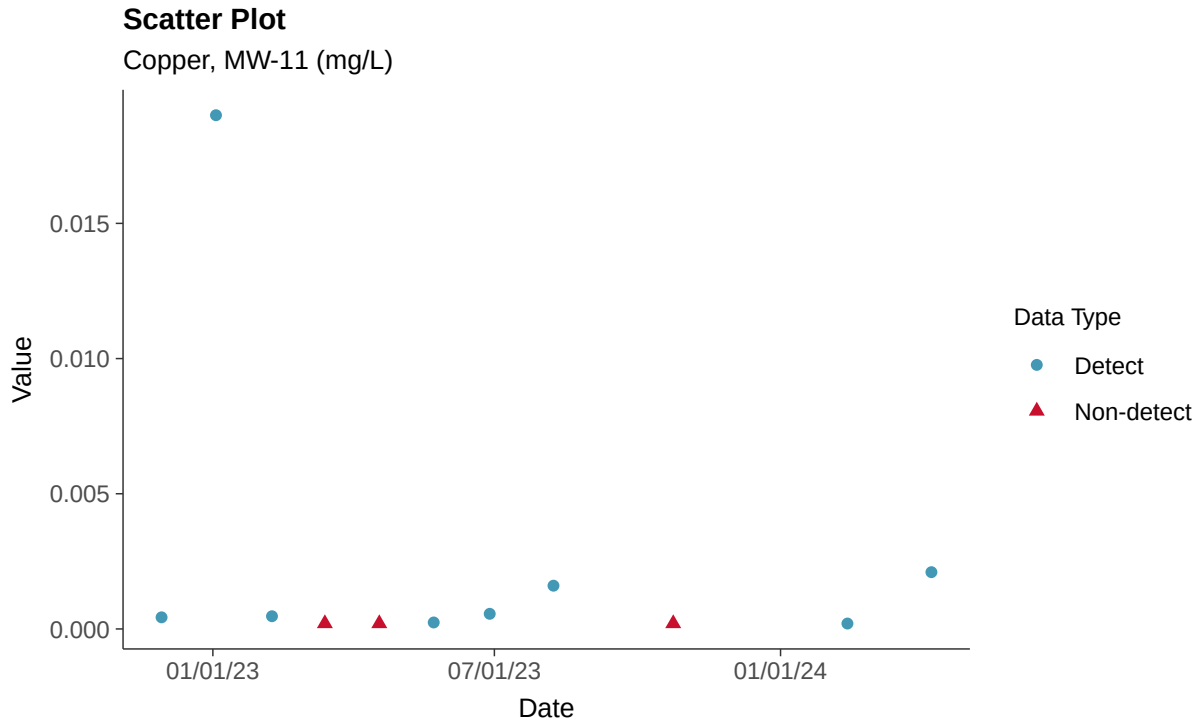
Trend Regression: Piecewise Linear-Linear-Linear

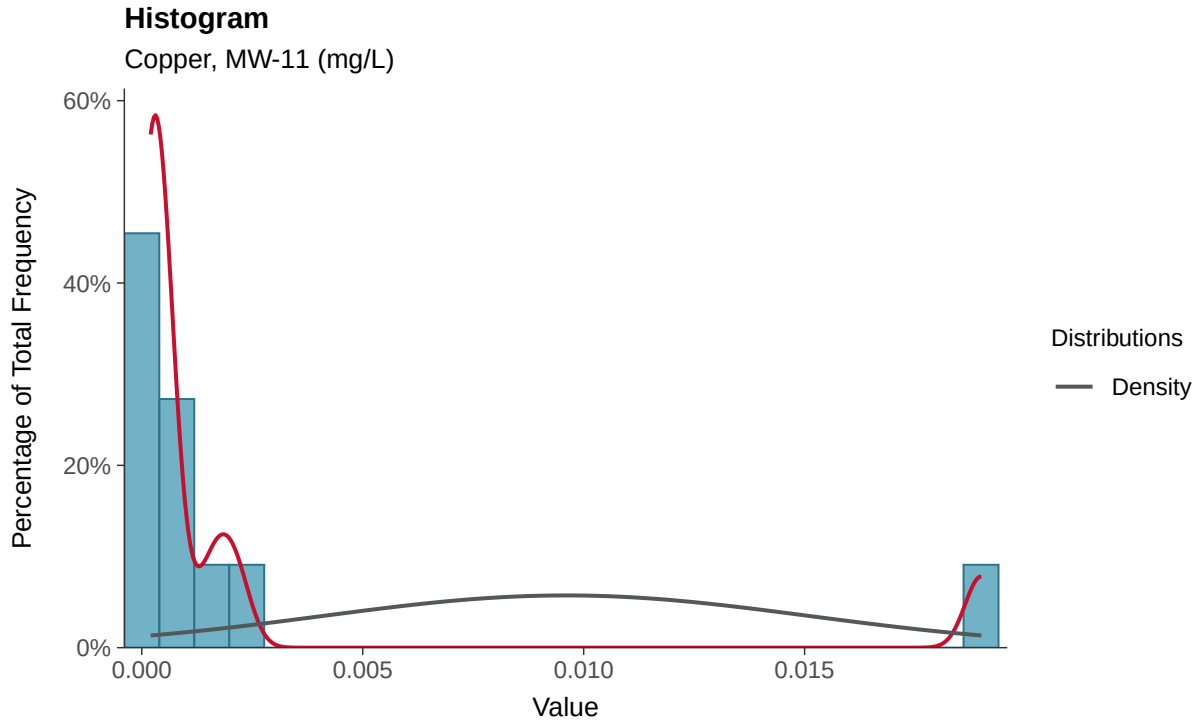
Thallium, MW-11 (mg/L)



Part 115: Copper, MW-11

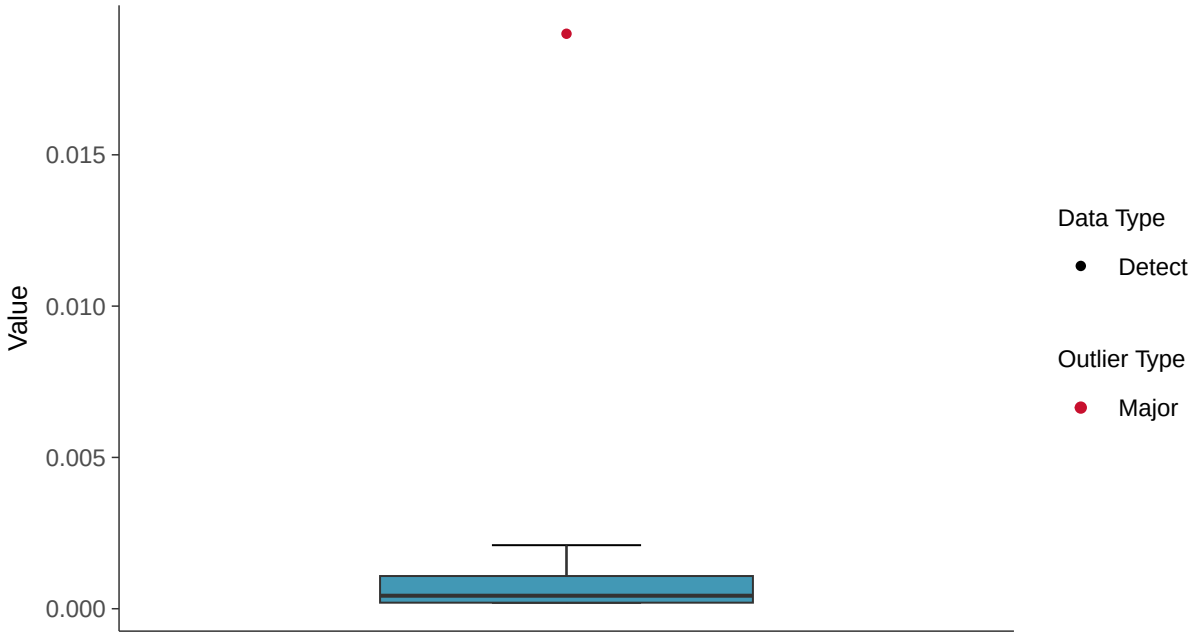
ID: 2_21_6_111





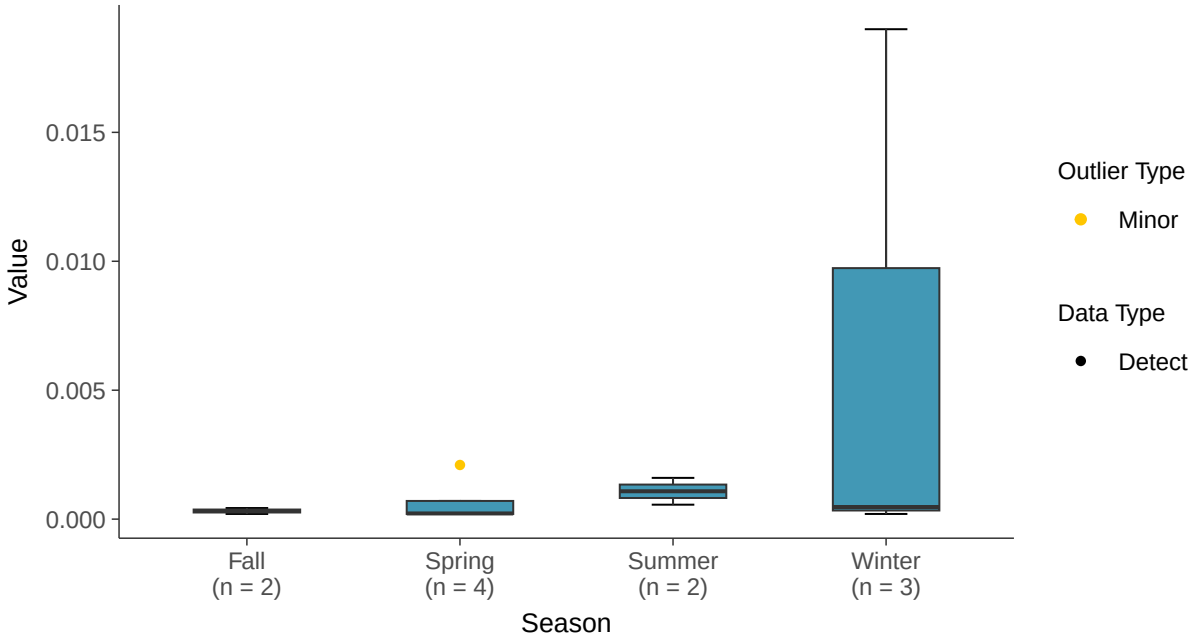
Boxplot

Copper, MW-11 (mg/L)



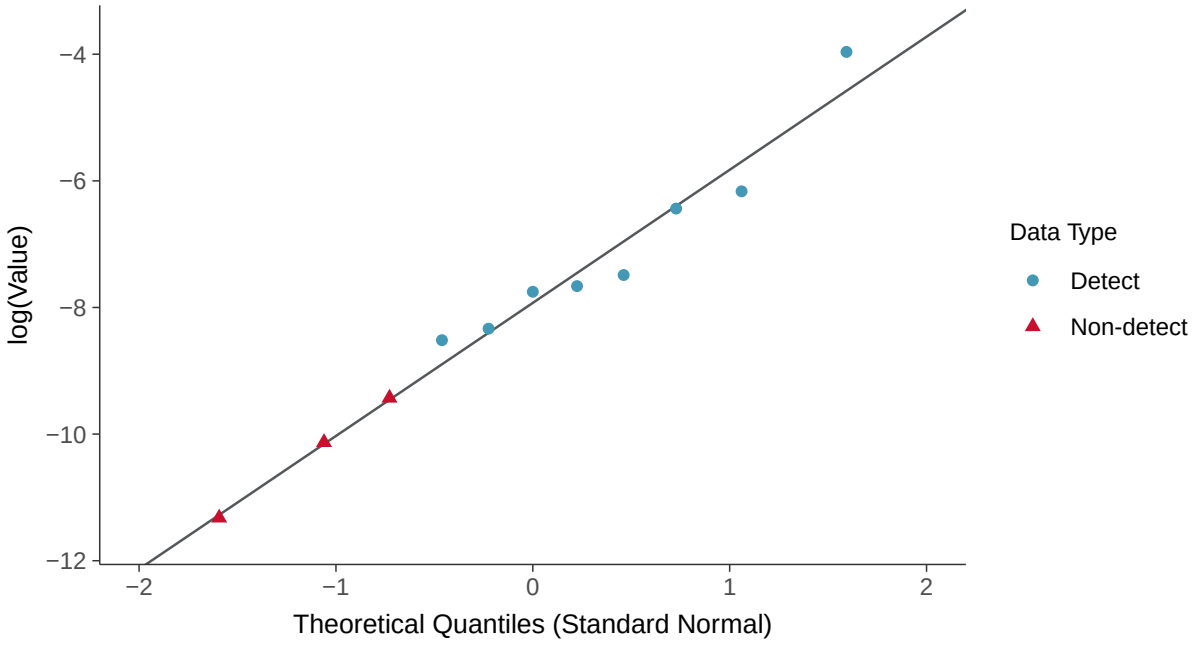
Boxplot by Season

Copper, MW-11 (mg/L)



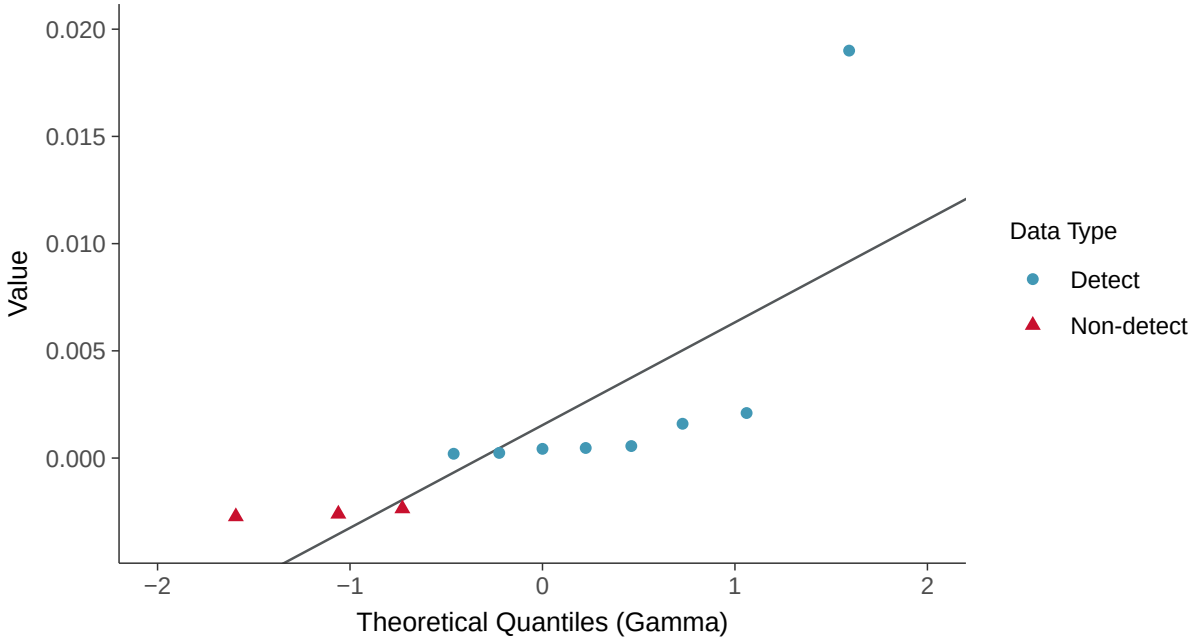
Lognormal Q-Q plot using ROS Imputed Estimates

Copper, MW-11 (mg/L)



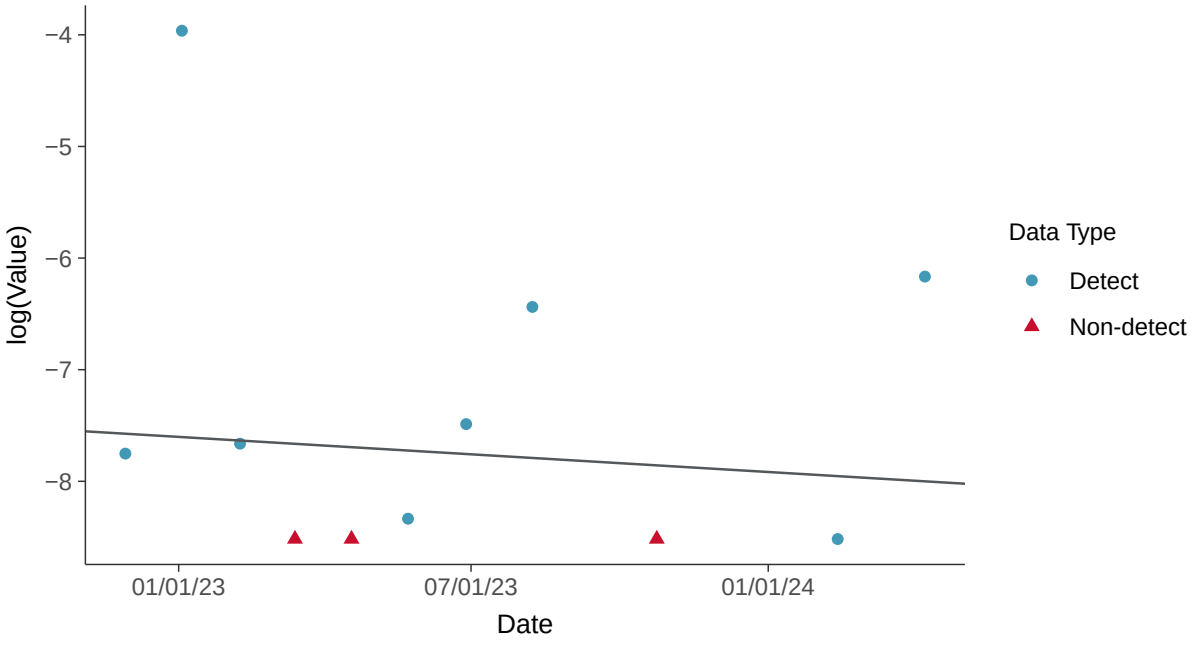
Gamma Q-Q plot using ROS Imputed Estimates

Copper, MW-11 (mg/L)



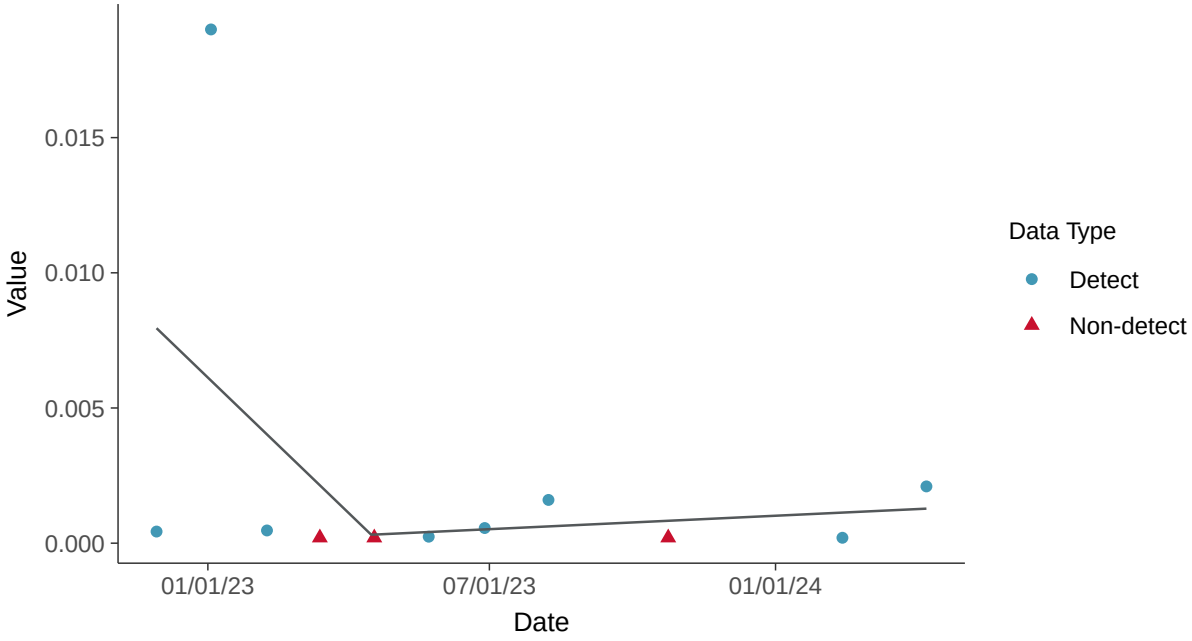
Trend Regression: Lognormal MLE

Copper, MW-11 (mg/L)



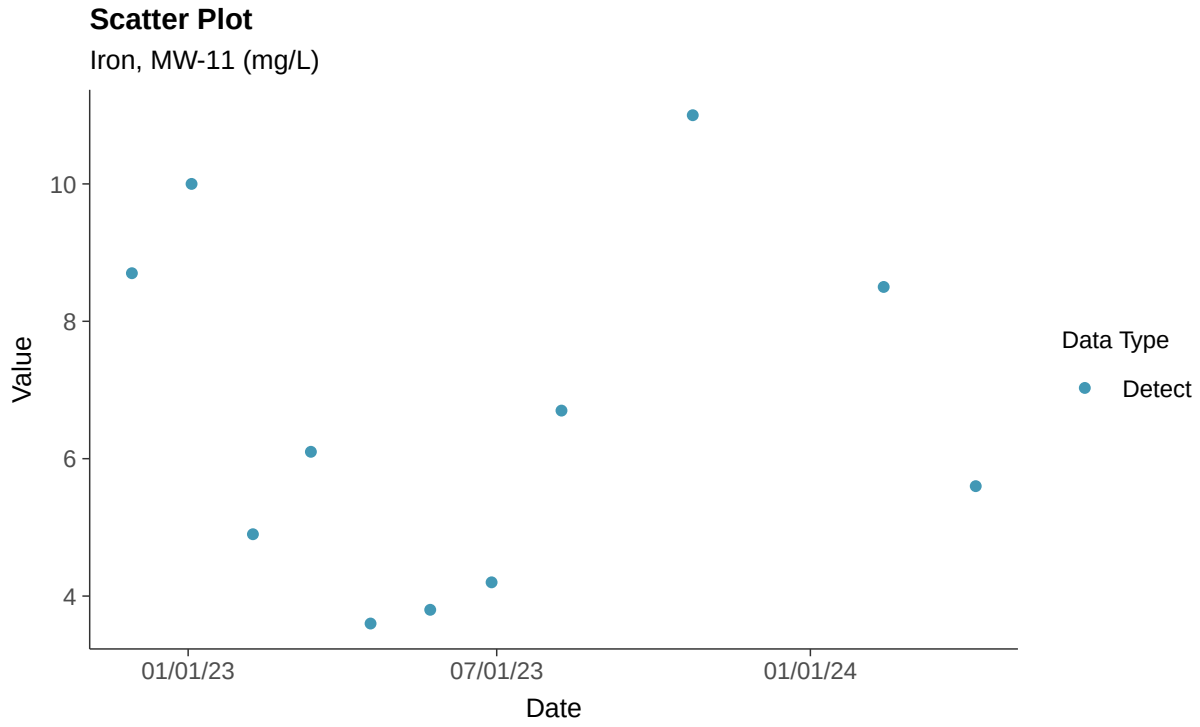
Trend Regression: Piecewise Linear-Linear

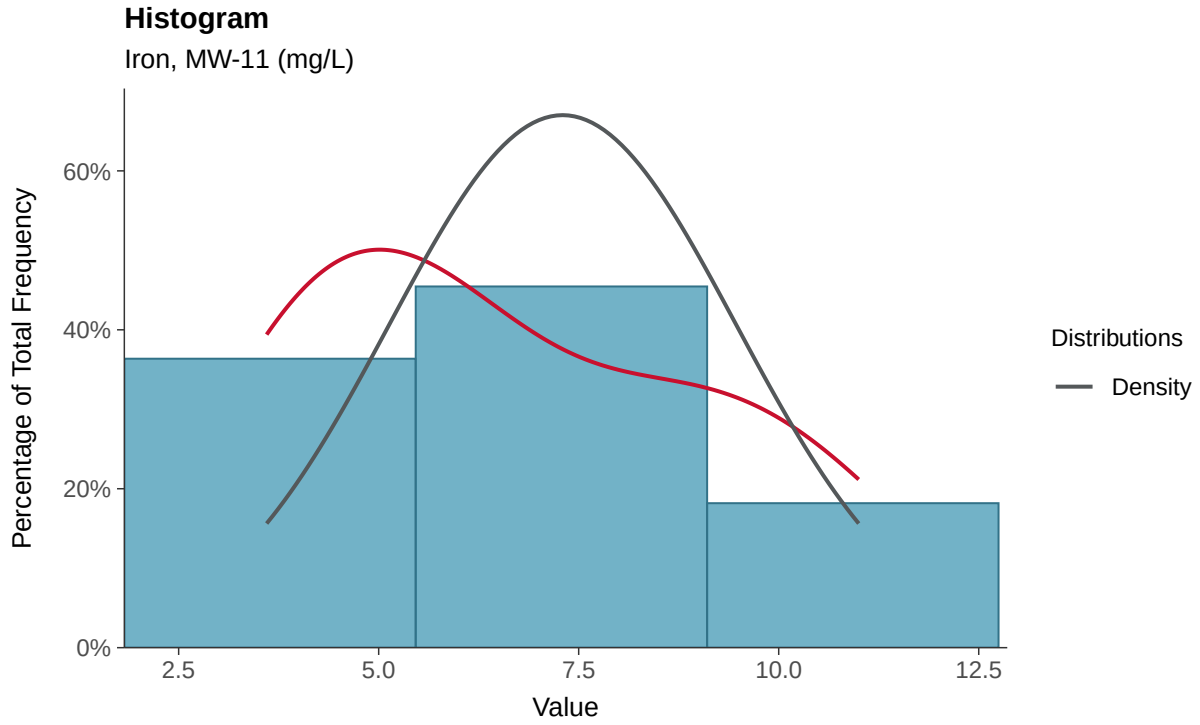
Copper, MW-11 (mg/L)



Part 115: Iron, MW-11

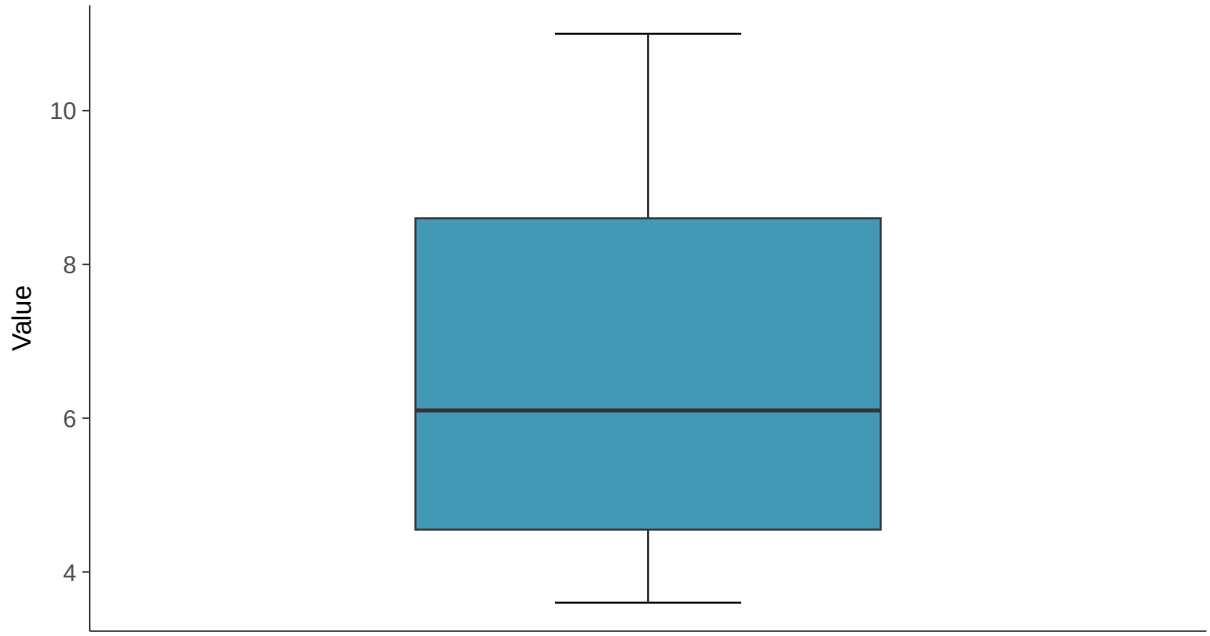
ID: 2_21_6_114





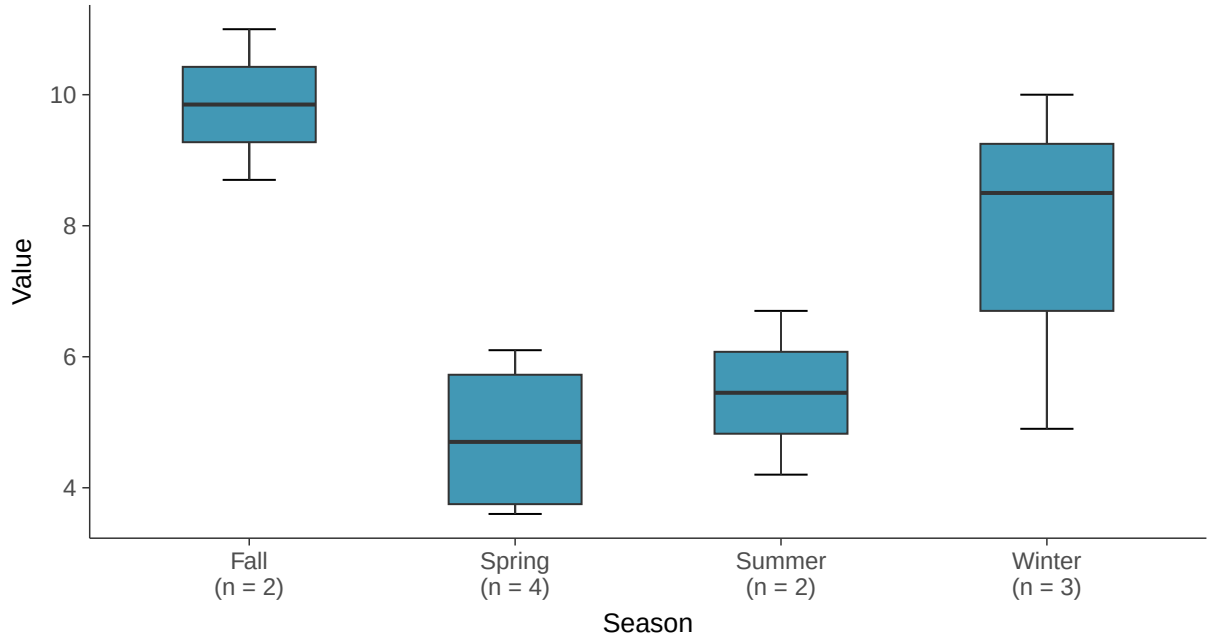
Boxplot

Iron, MW-11 (mg/L)



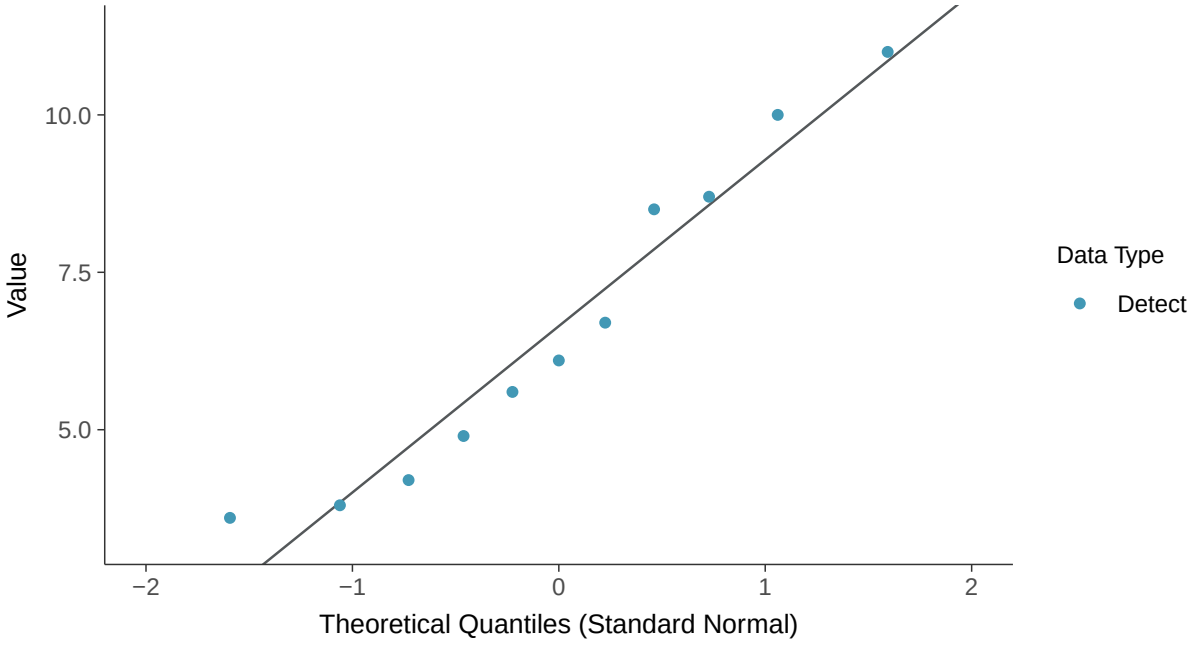
Boxplot by Season

Iron, MW-11 (mg/L)



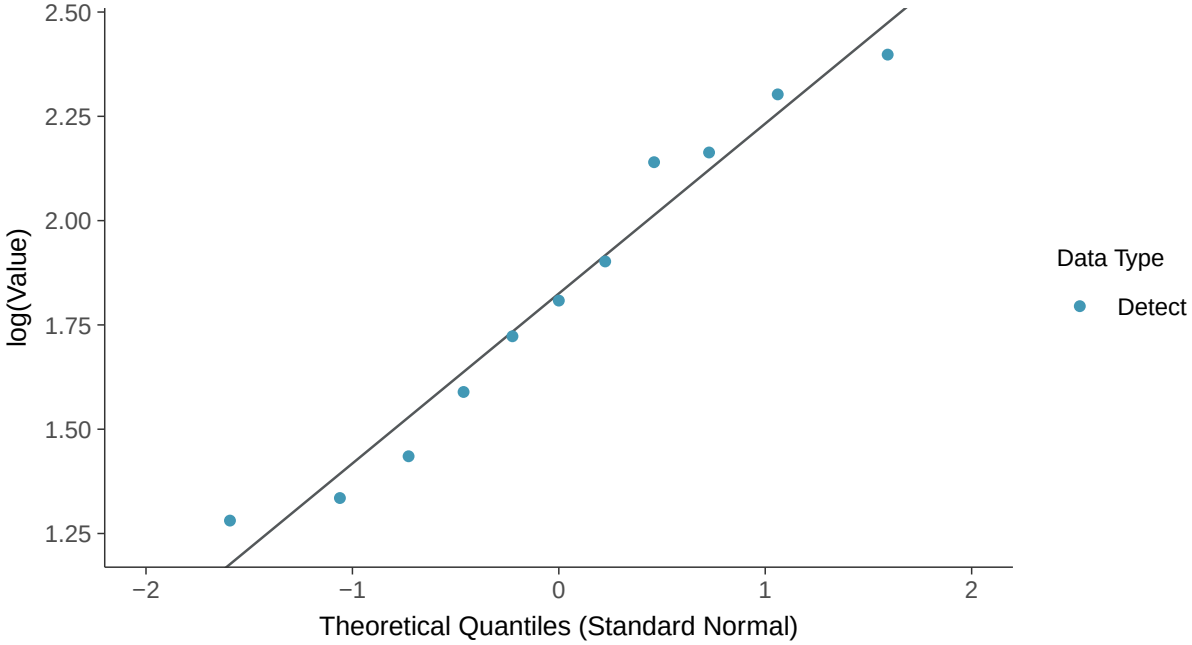
Normal Q-Q plot

Iron, MW-11 (mg/L)



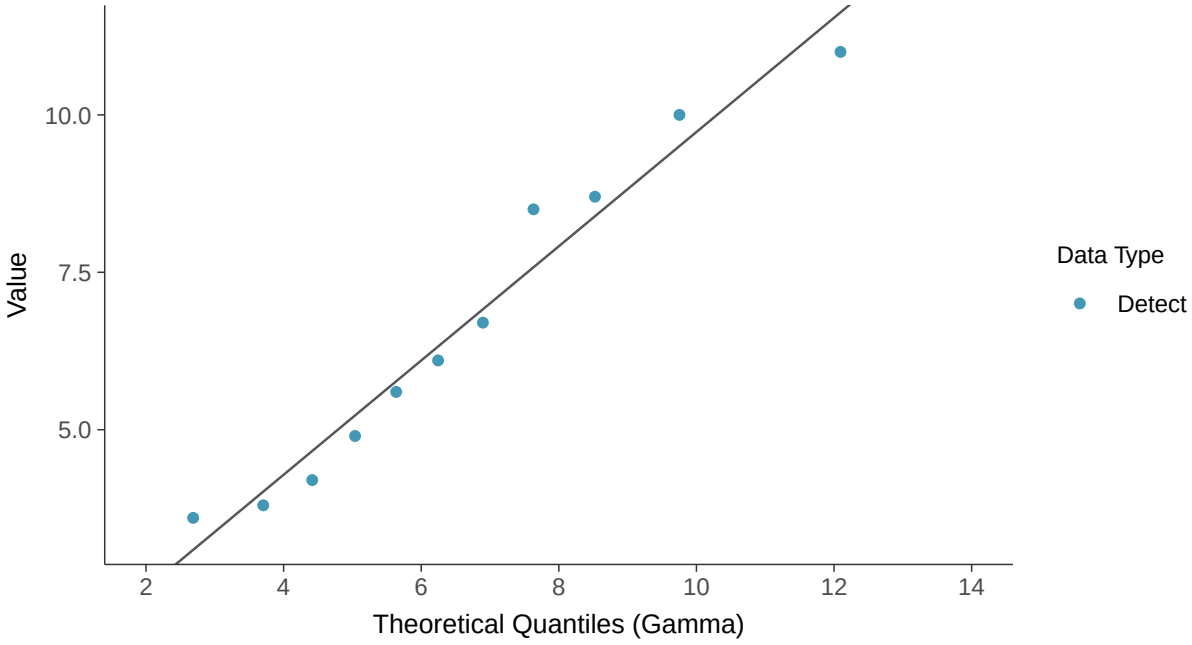
Lognormal Q-Q plot

Iron, MW-11 (mg/L)



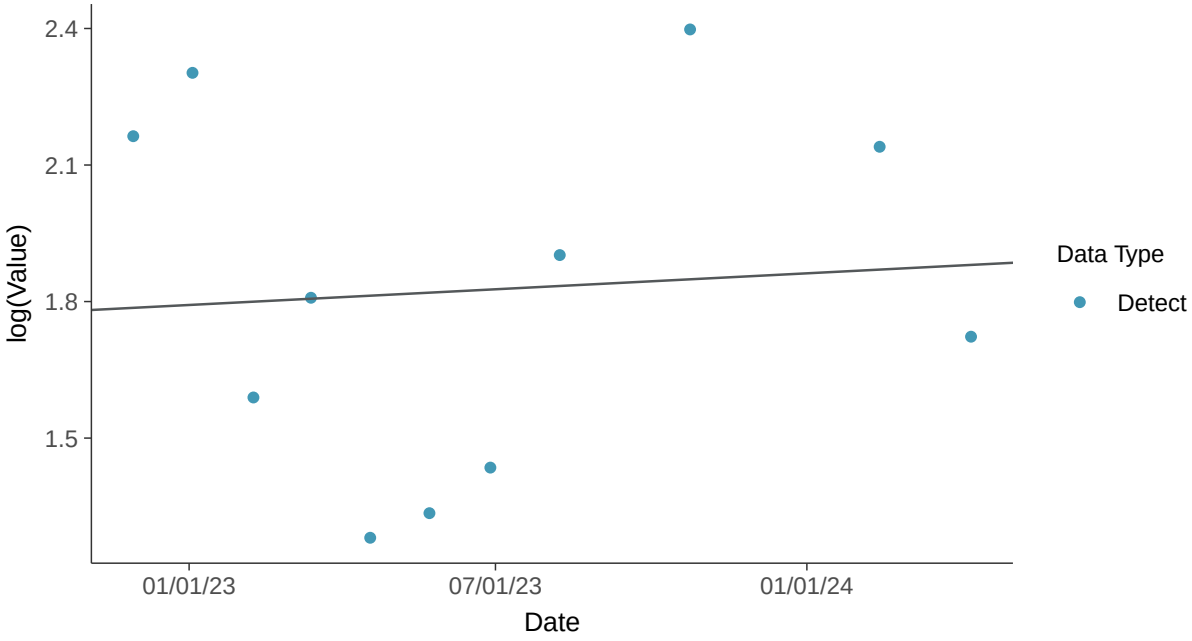
Gamma Q-Q plot

Iron, MW-11 (mg/L)



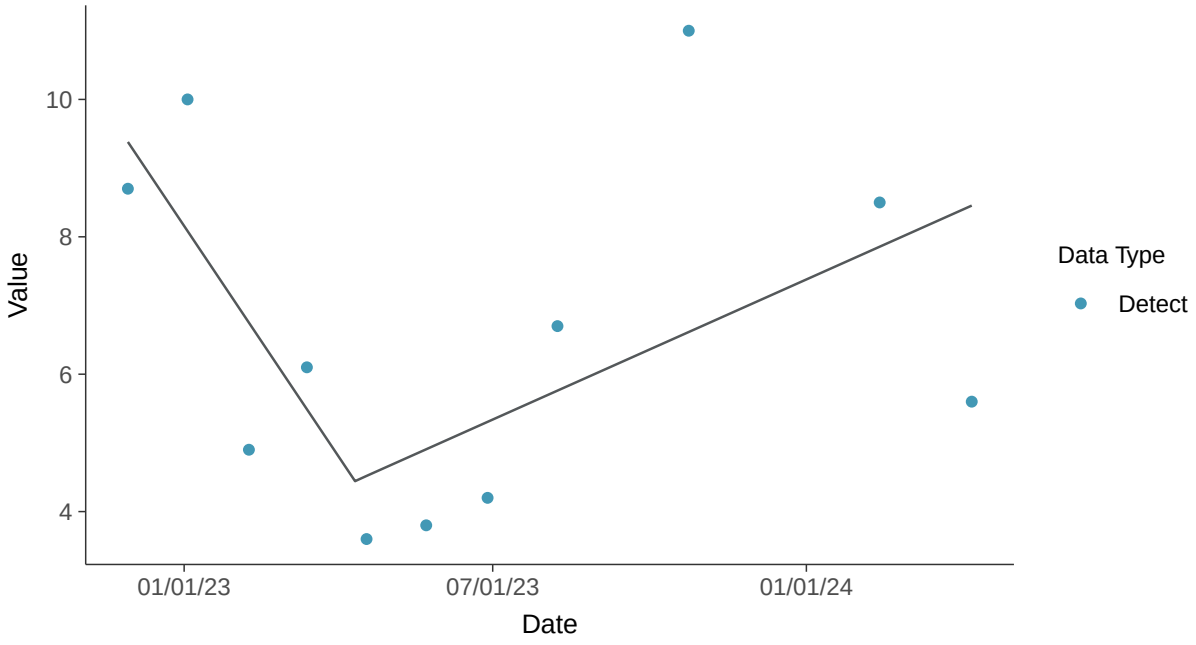
Trend Regression: Lognormal MLE

Iron, MW-11 (mg/L)



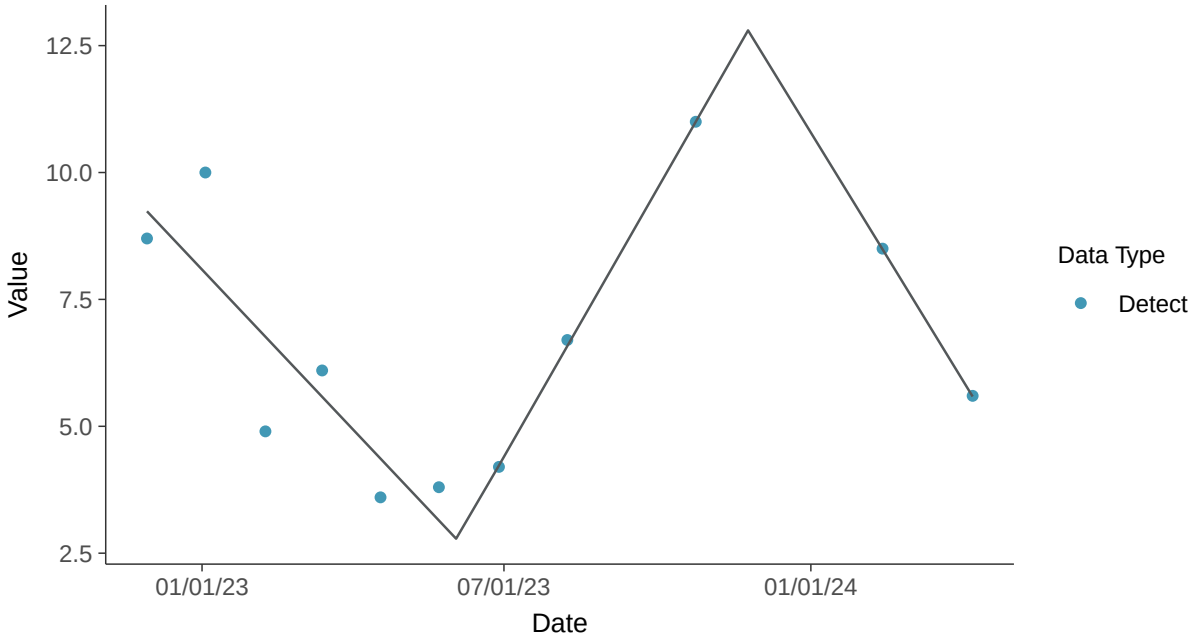
Trend Regression: Piecewise Linear-Linear

Iron, MW-11 (mg/L)



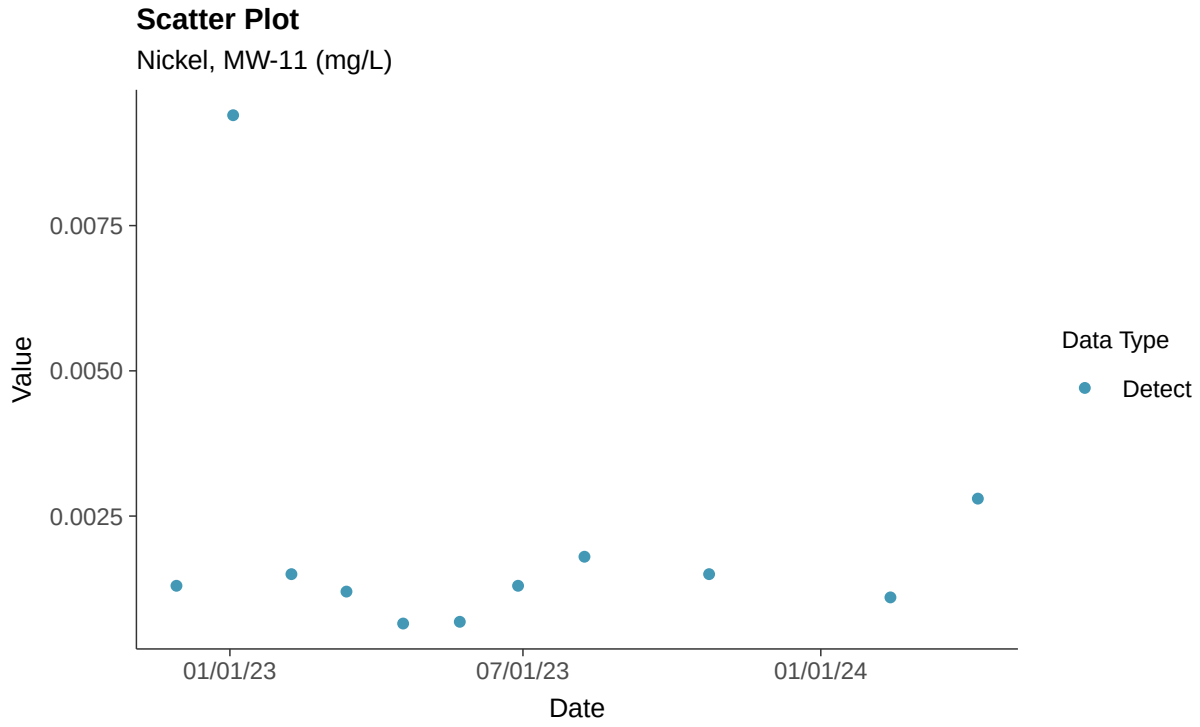
Trend Regression: Piecewise Linear-Linear-Linear

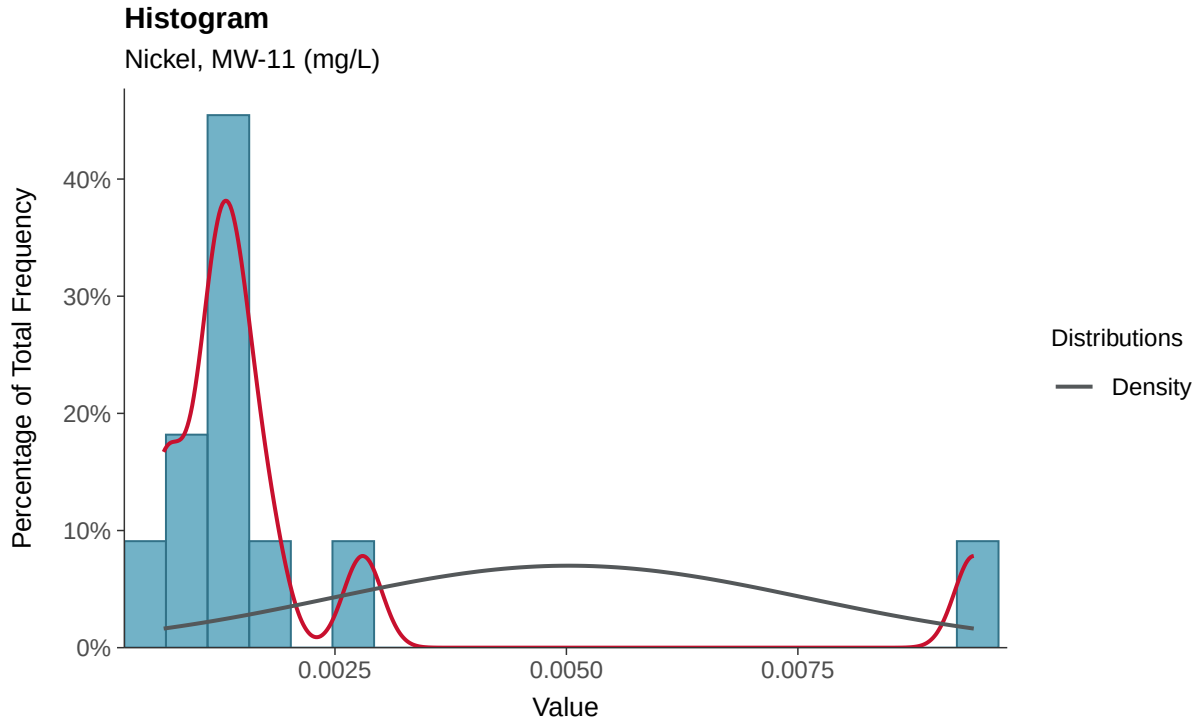
Iron, MW-11 (mg/L)



Part 115: Nickel, MW-11

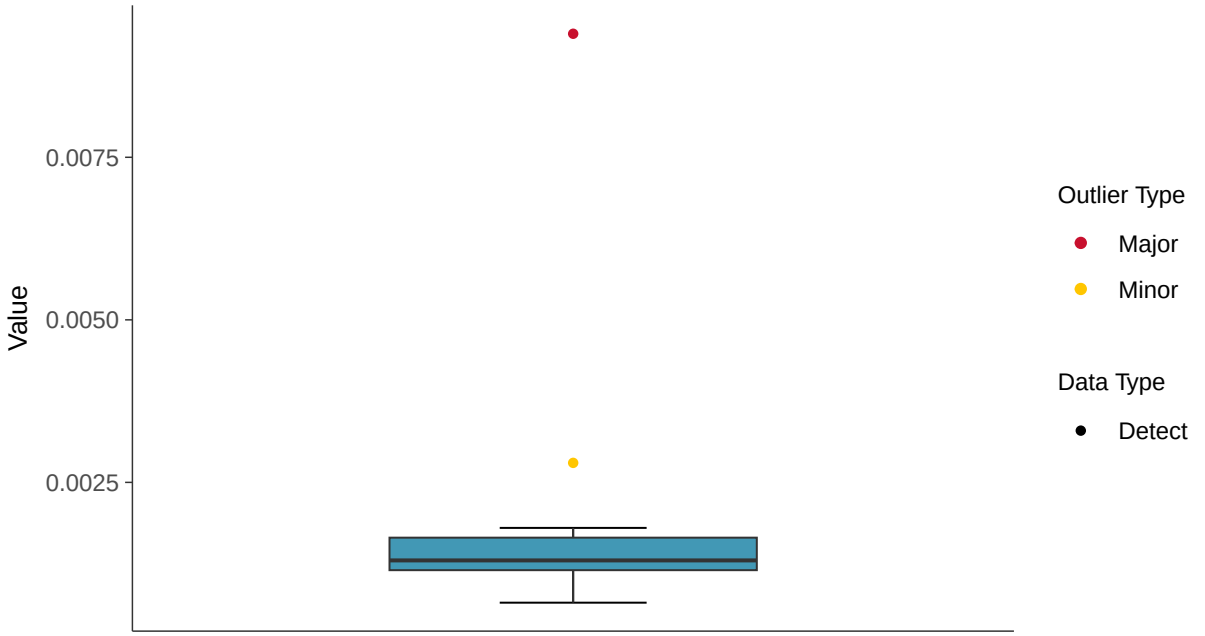
ID: 2_21_6_119





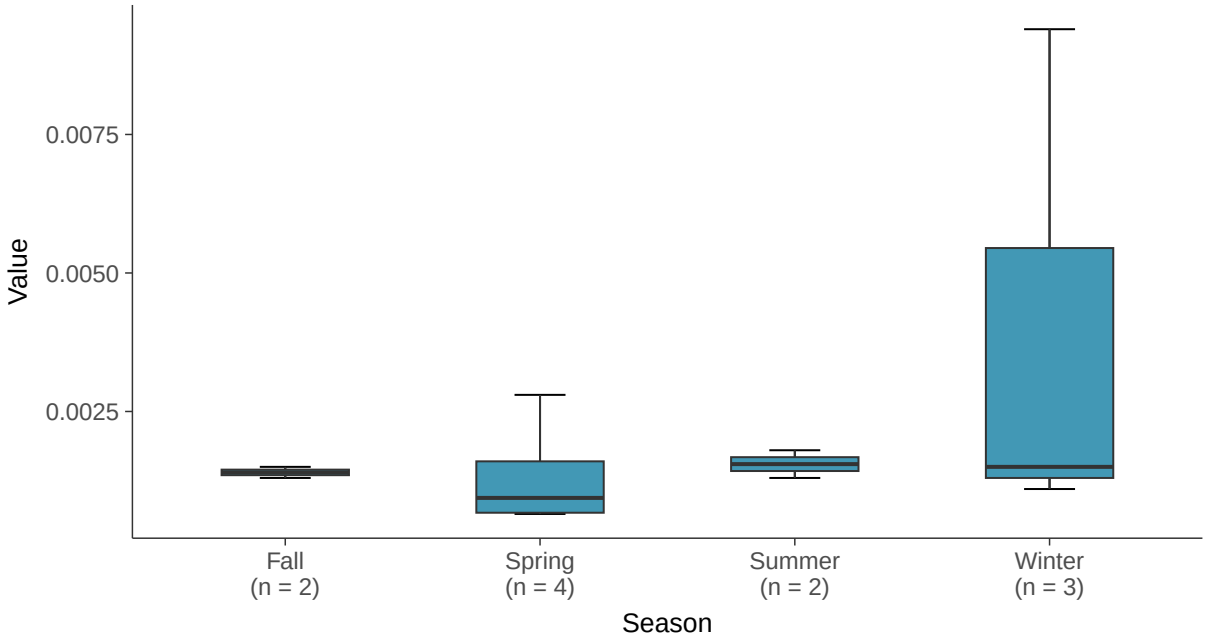
Boxplot

Nickel, MW-11 (mg/L)



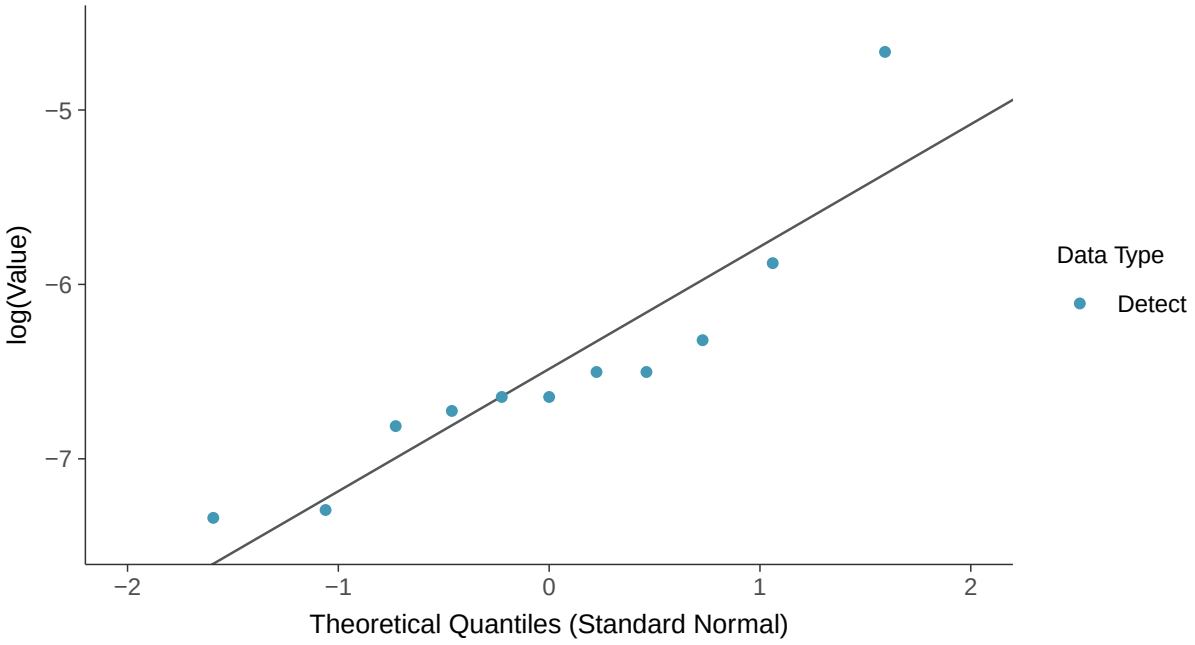
Boxplot by Season

Nickel, MW-11 (mg/L)



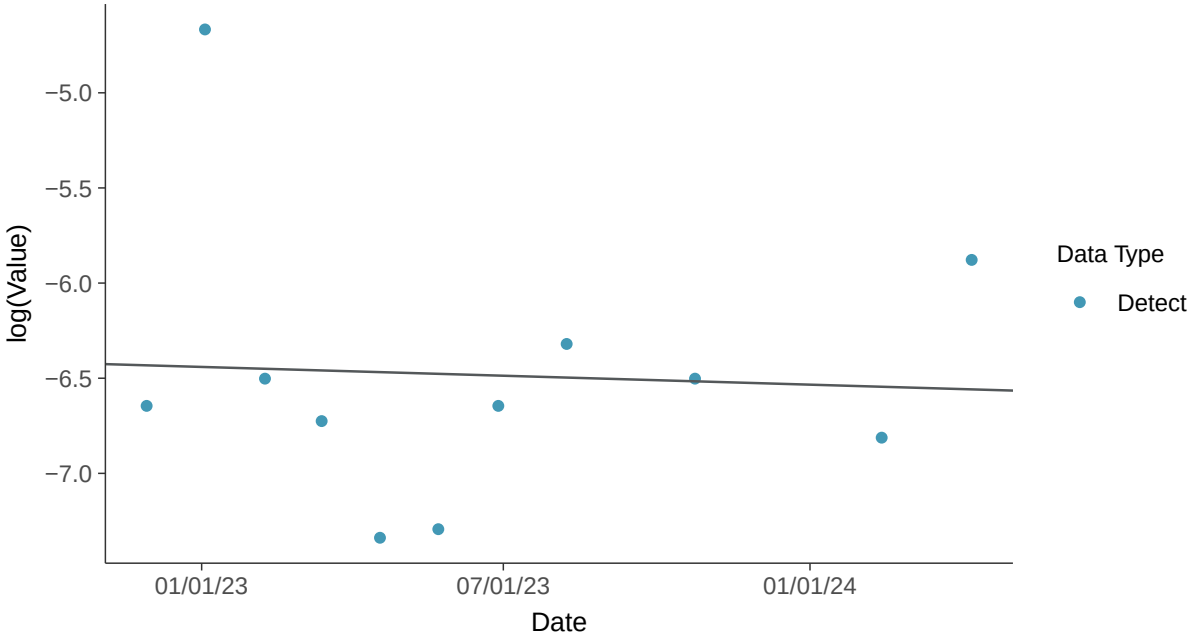
Lognormal Q-Q plot

Nickel, MW-11 (mg/L)



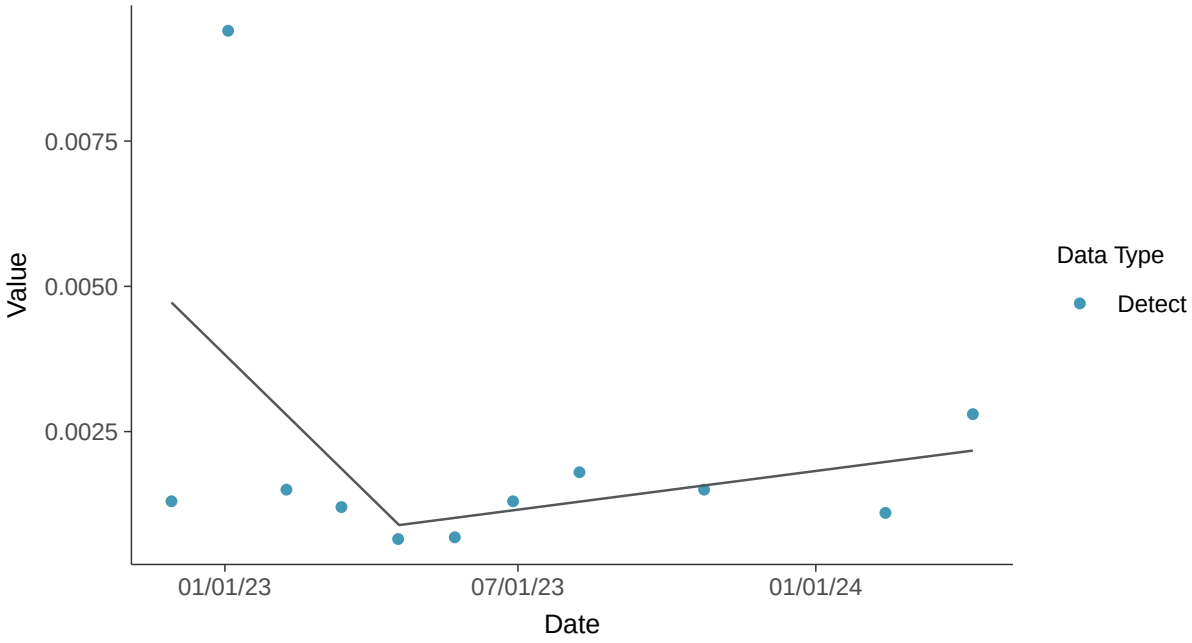
Trend Regression: Lognormal MLE

Nickel, MW-11 (mg/L)



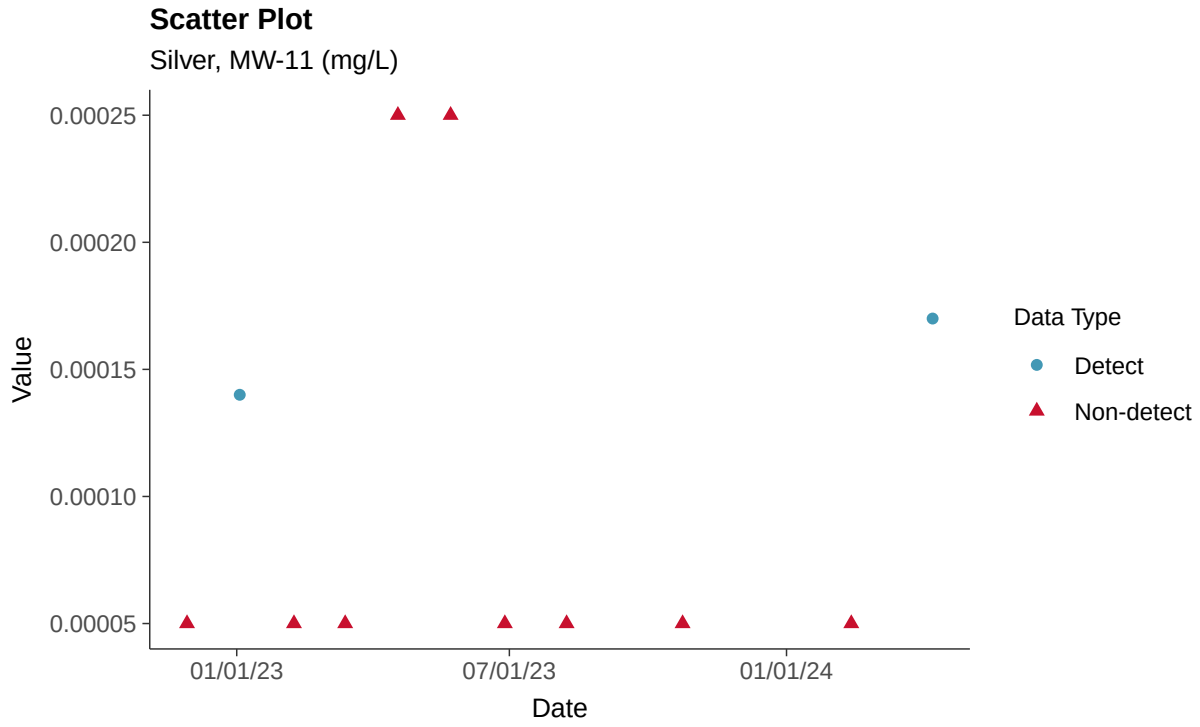
Trend Regression: Piecewise Linear-Linear

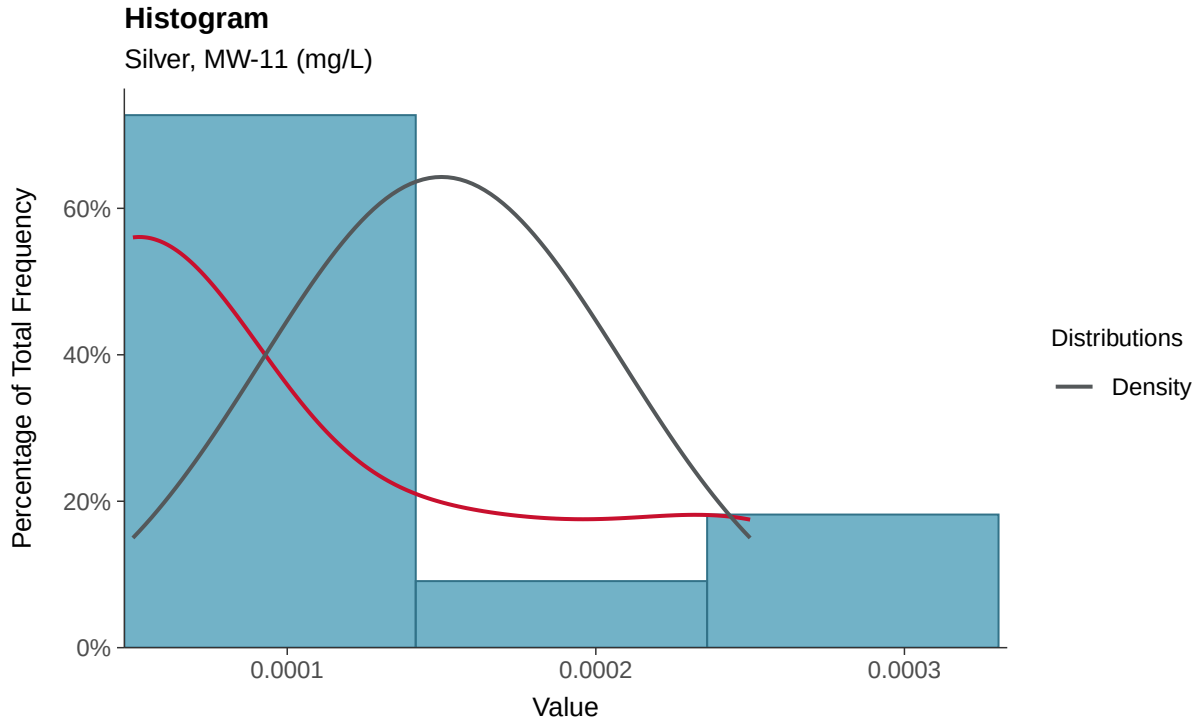
Nickel, MW-11 (mg/L)



Part 115: Silver, MW-11

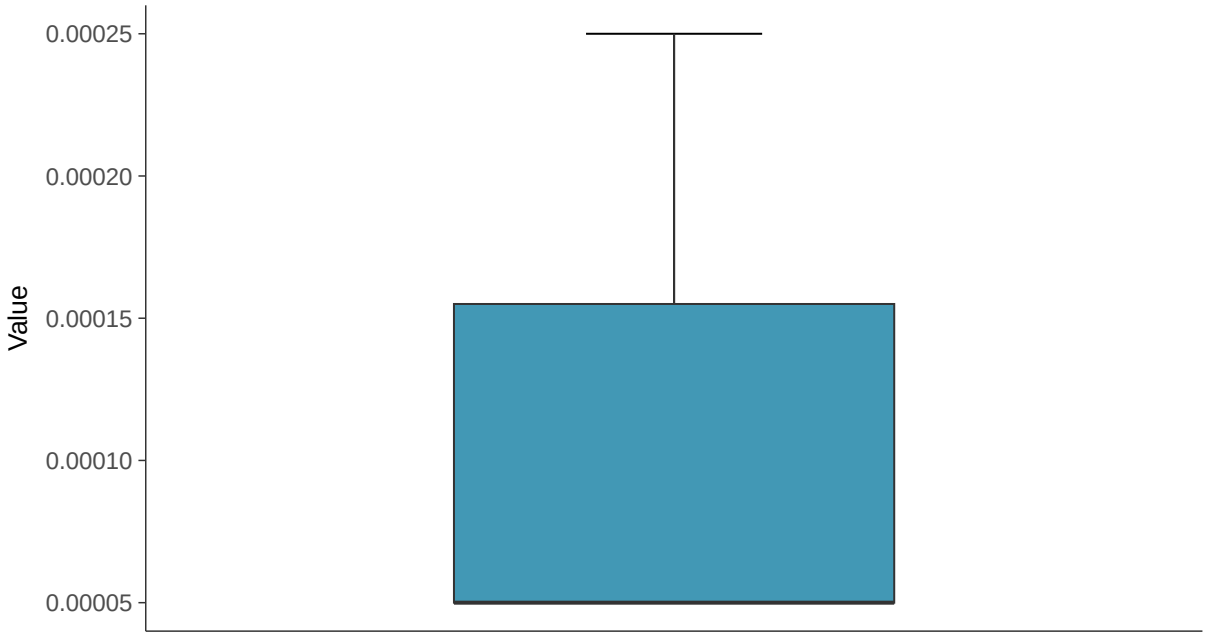
ID: 2_21_6_123





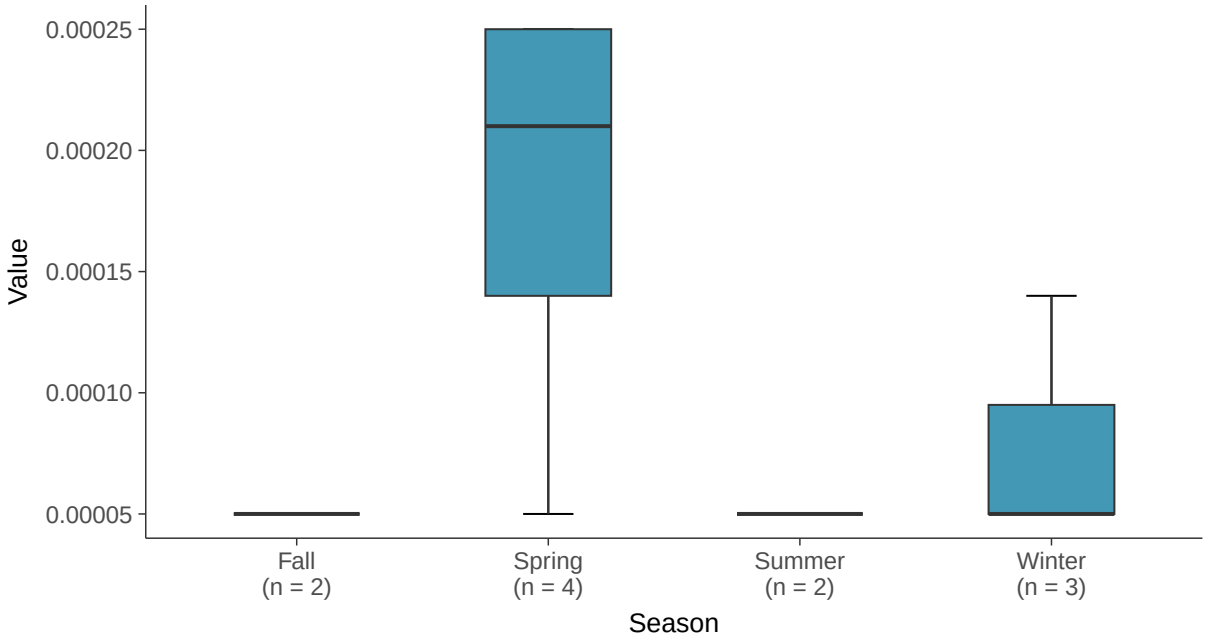
Boxplot

Silver, MW-11 (mg/L)



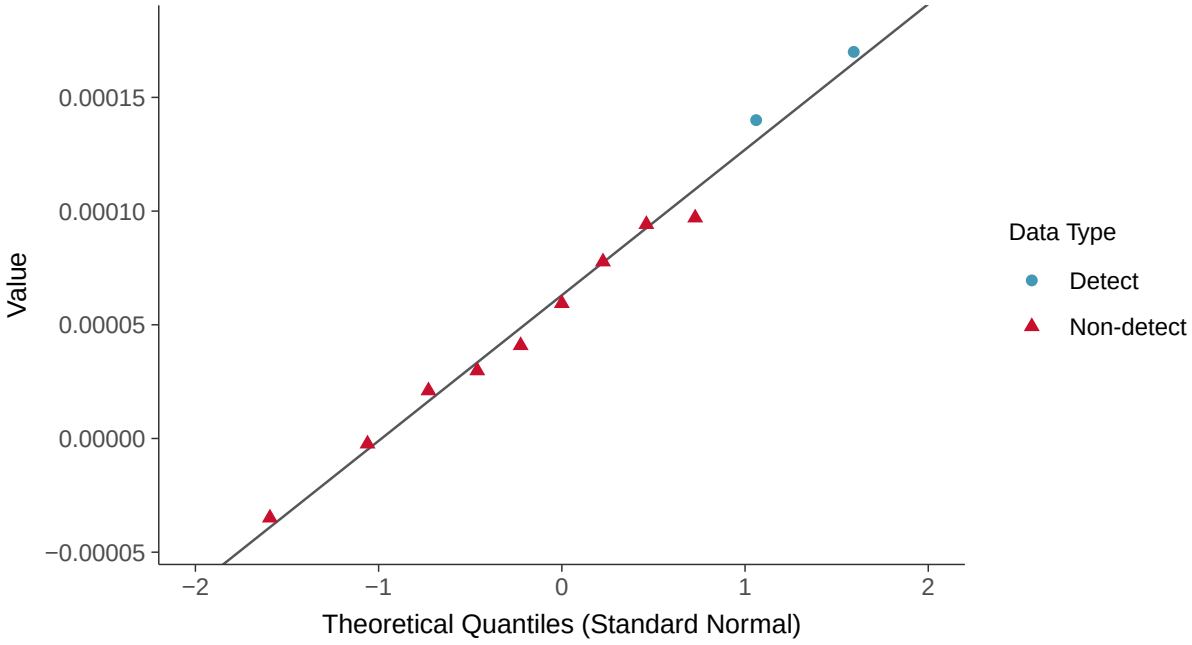
Boxplot by Season

Silver, MW-11 (mg/L)



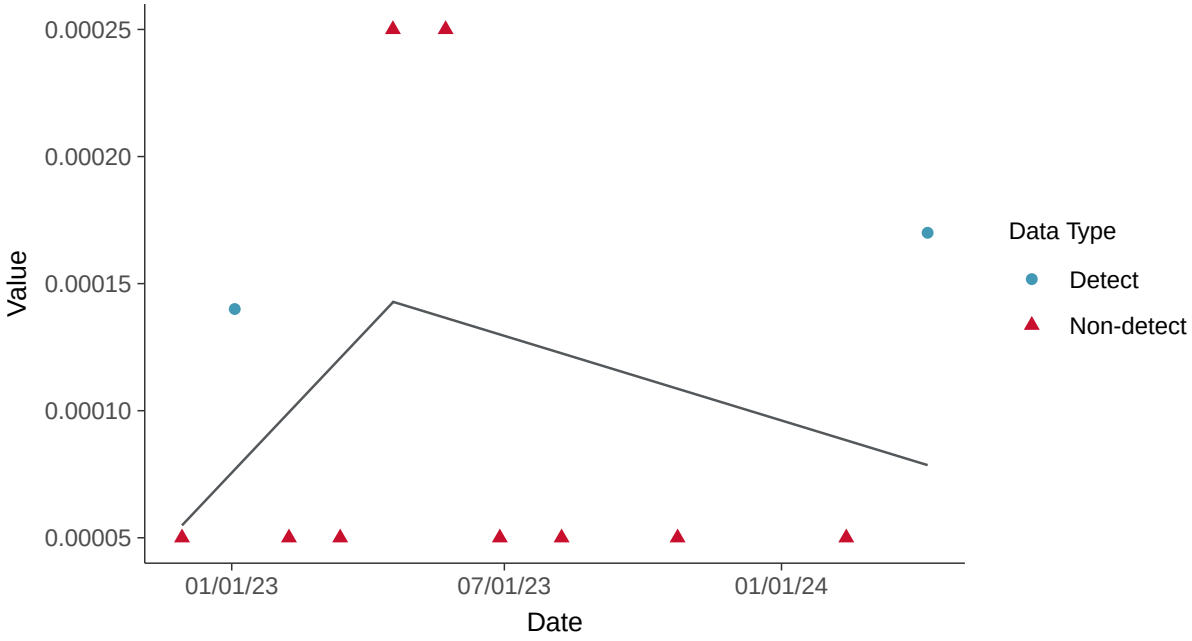
Normal Q-Q plot using ROS Imputed Estimates

Silver, MW-11 (mg/L)



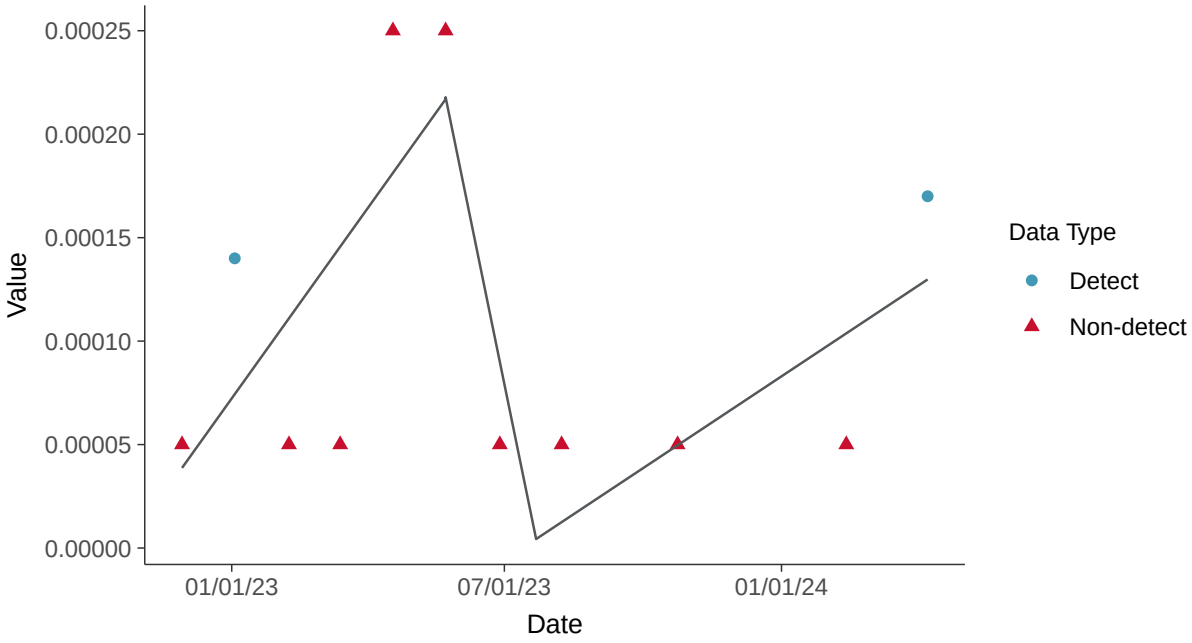
Trend Regression: Piecewise Linear-Linear

Silver, MW-11 (mg/L)



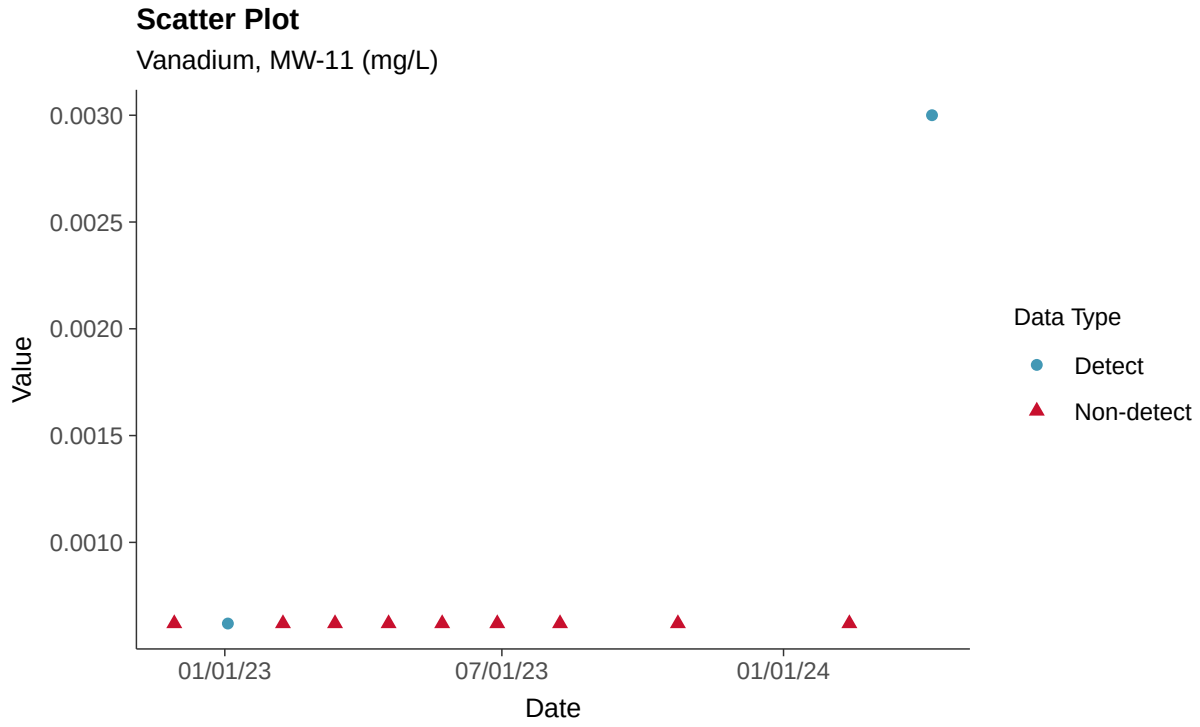
Trend Regression: Piecewise Linear-Linear-Linear

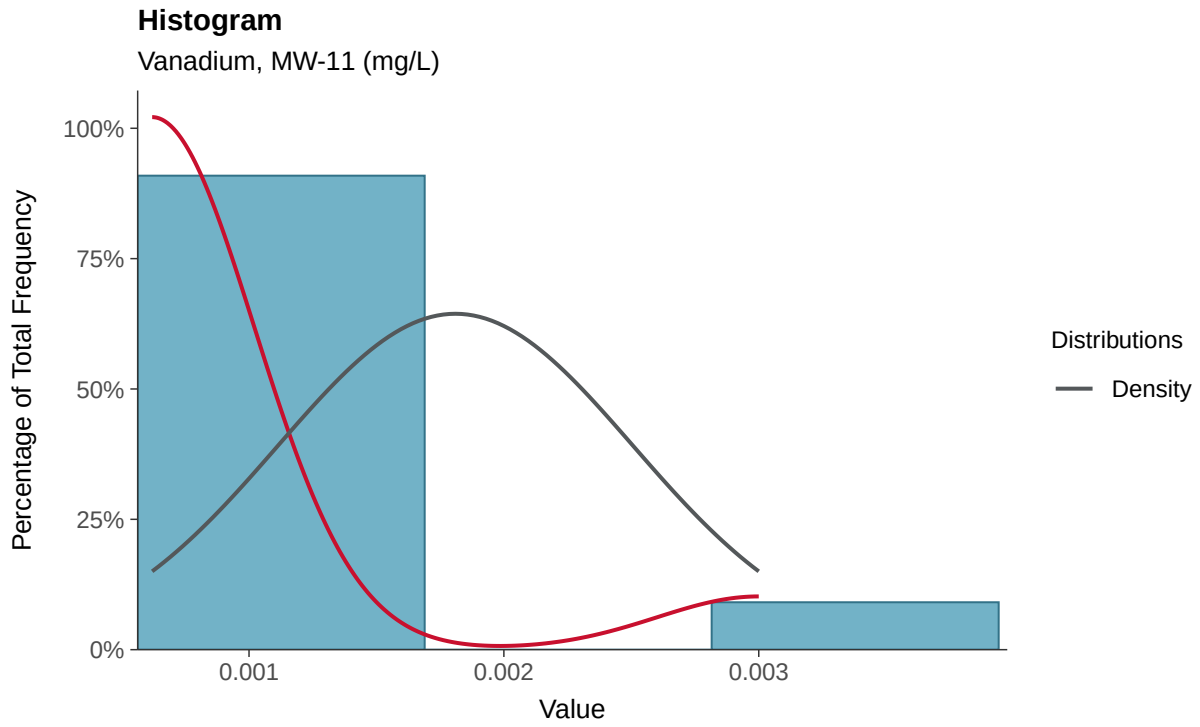
Silver, MW-11 (mg/L)



Part 115: Vanadium, MW-11

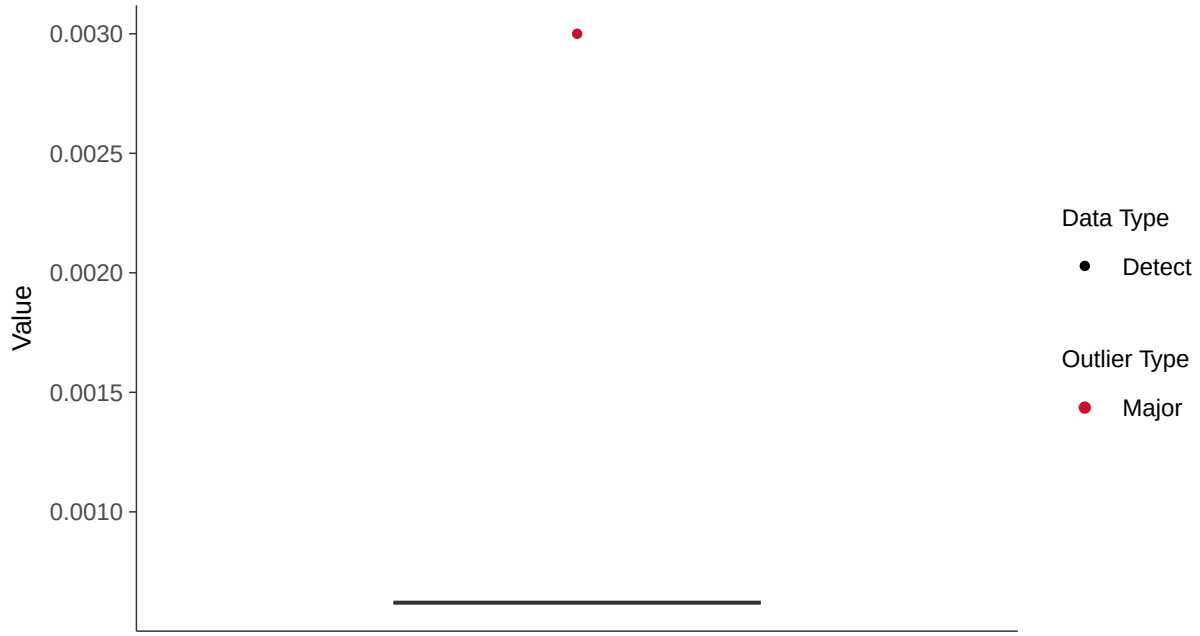
ID: 2_21_6_129





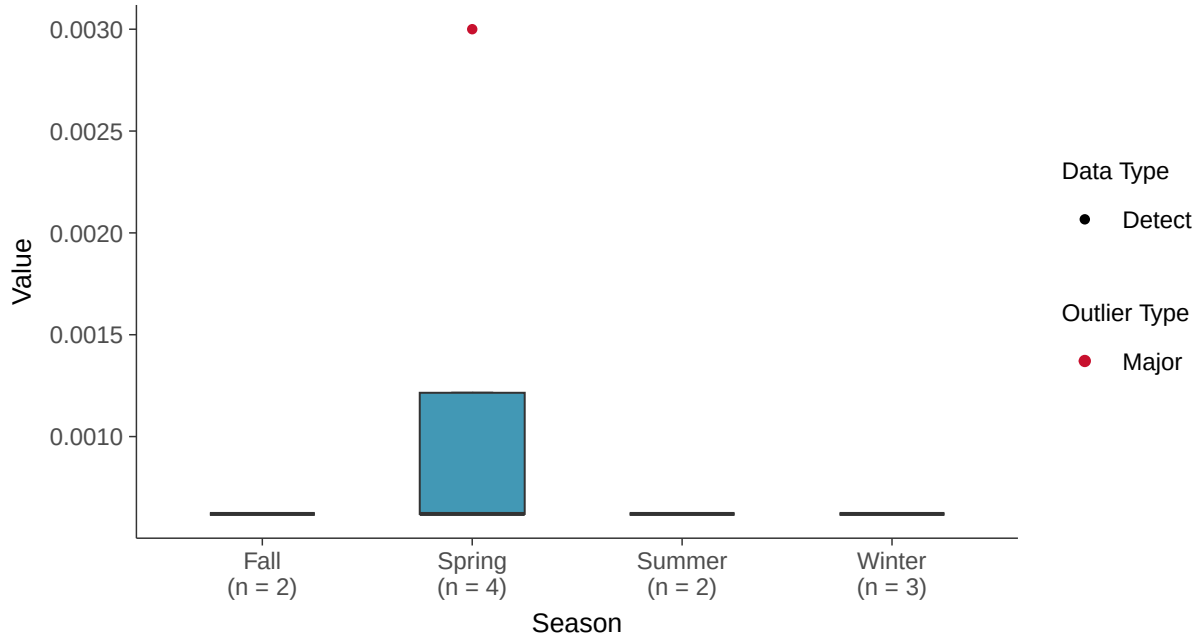
Boxplot

Vanadium, MW-11 (mg/L)



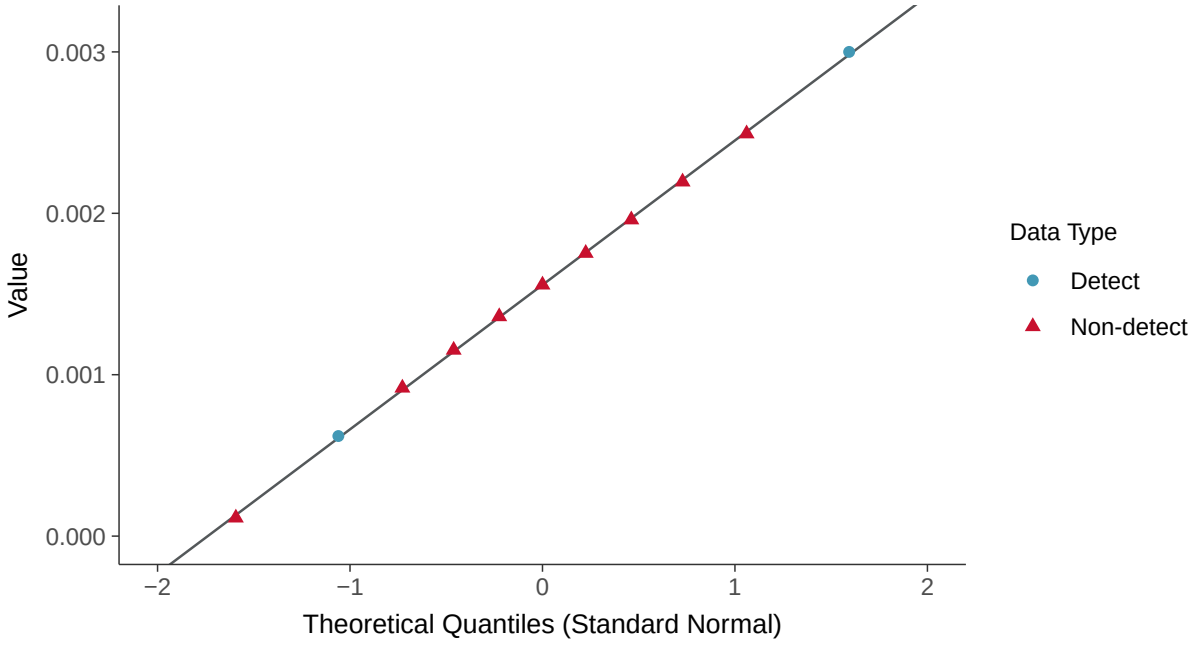
Boxplot by Season

Vanadium, MW-11 (mg/L)



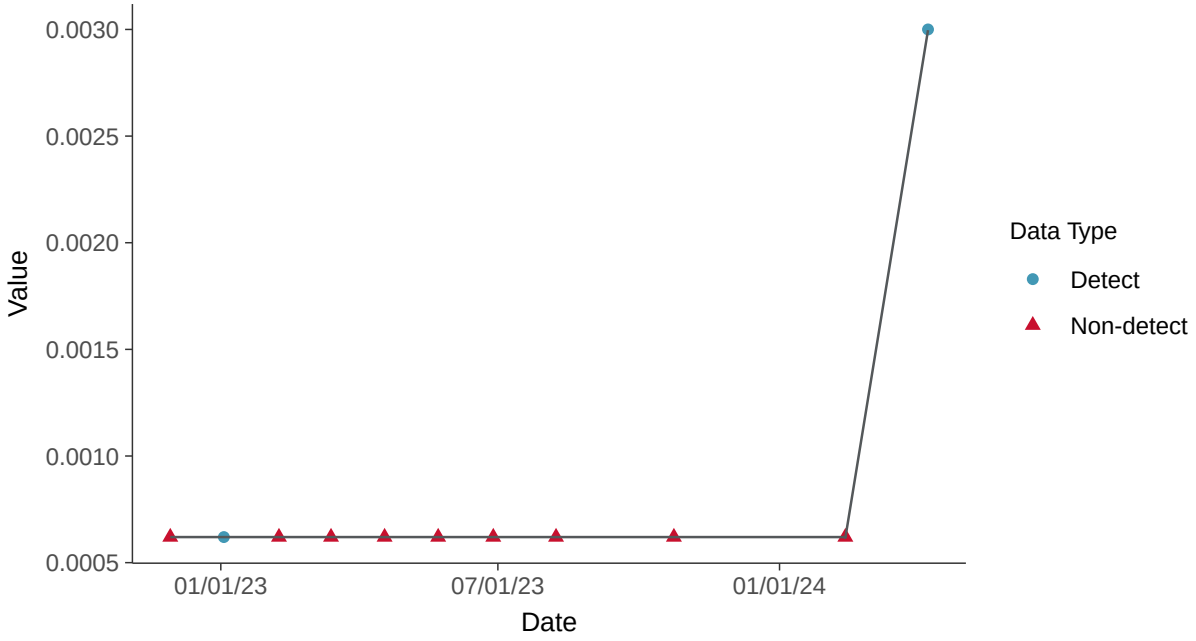
Normal Q-Q plot using ROS Imputed Estimates

Vanadium, MW-11 (mg/L)



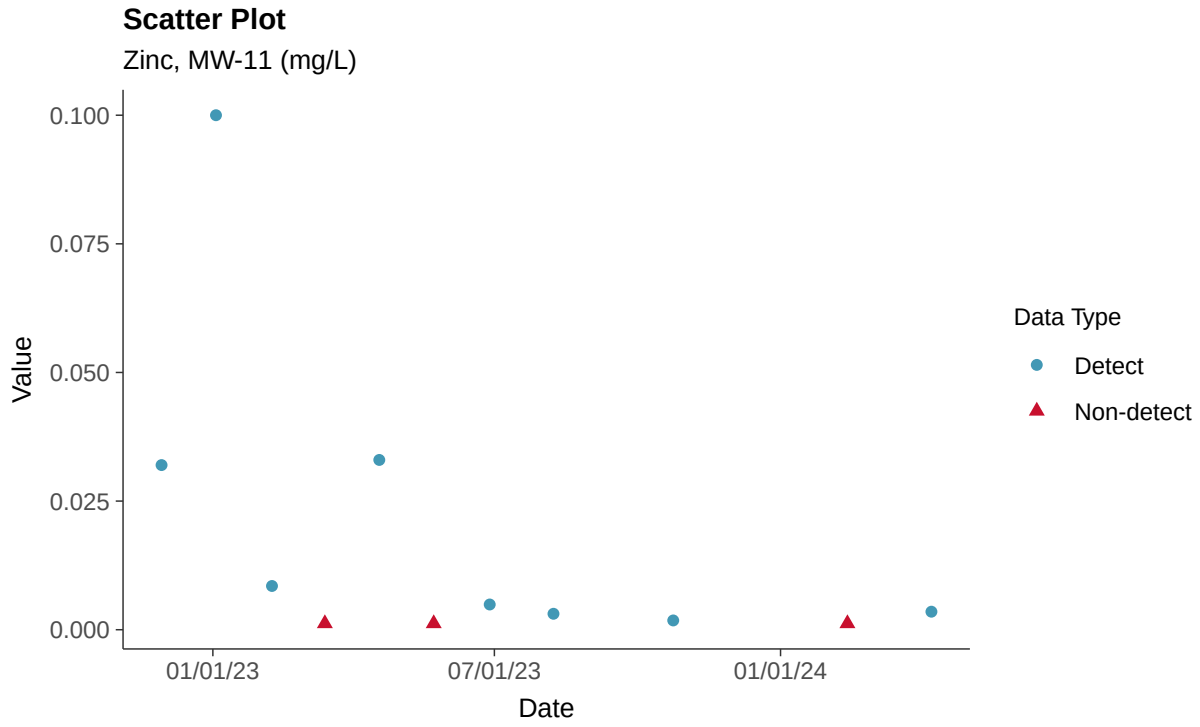
Trend Regression: Piecewise Linear-Linear

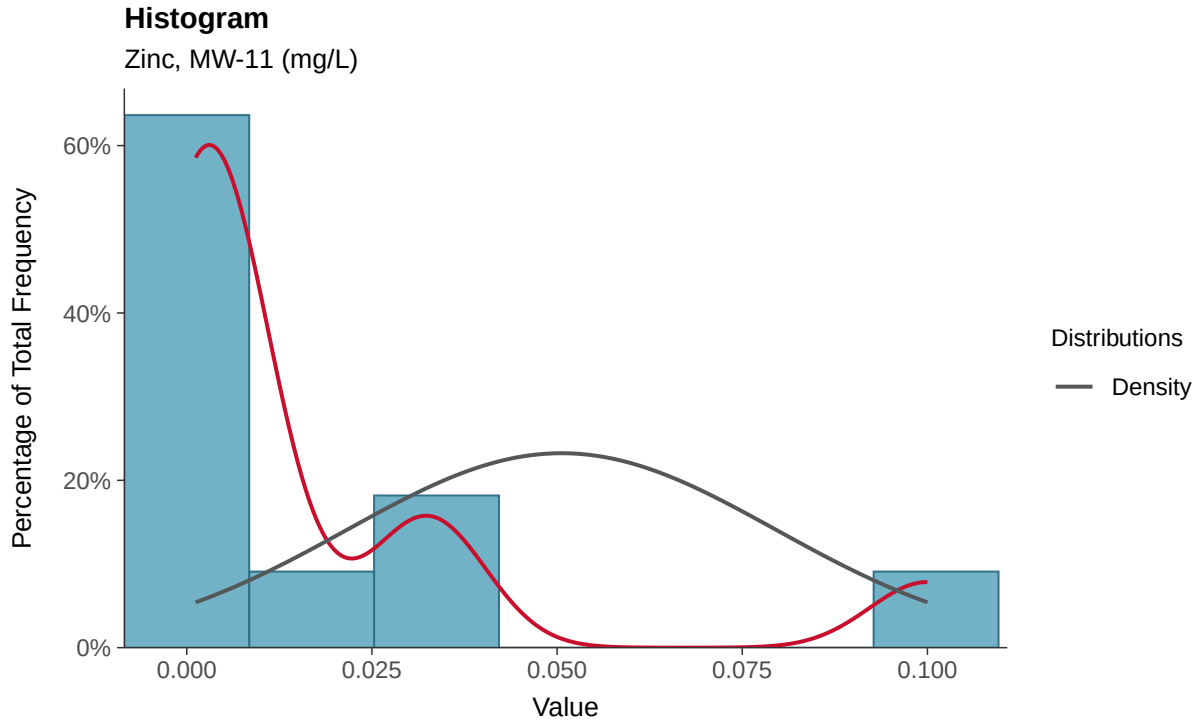
Vanadium, MW-11 (mg/L)



Part 115: Zinc, MW-11

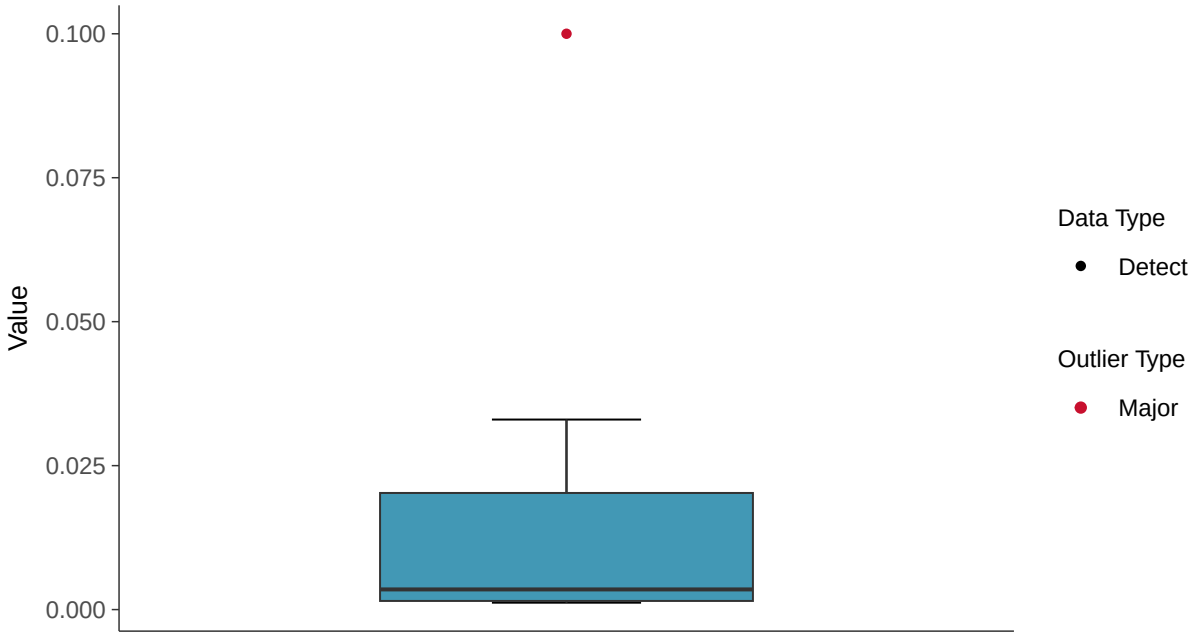
ID: 2_21_6_130





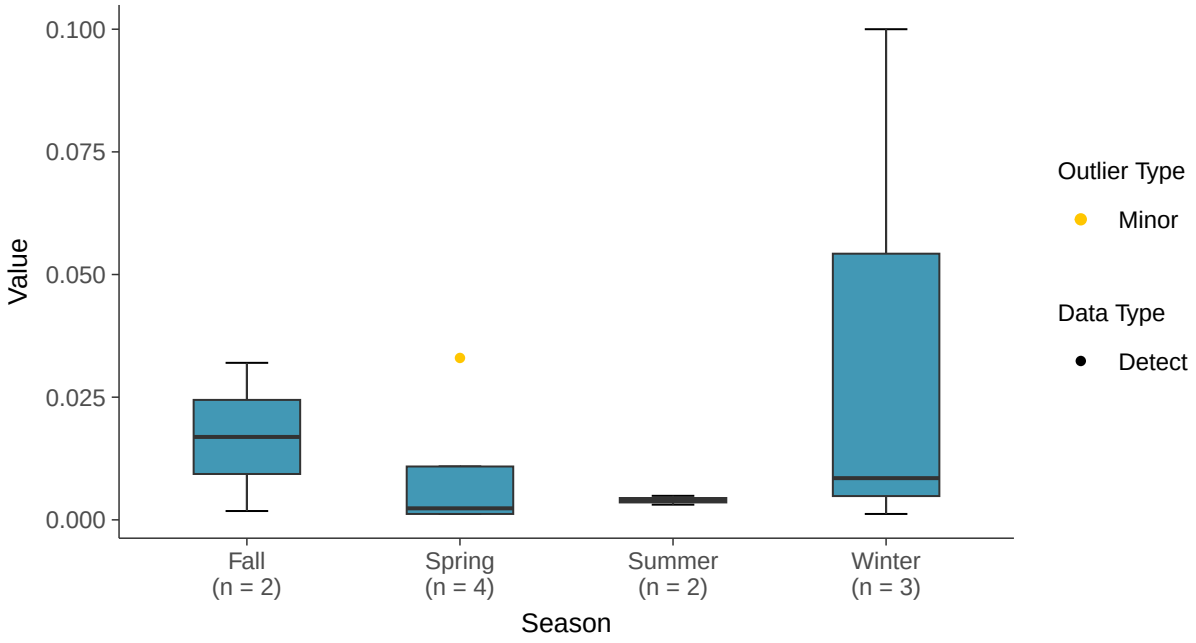
Boxplot

Zinc, MW-11 (mg/L)



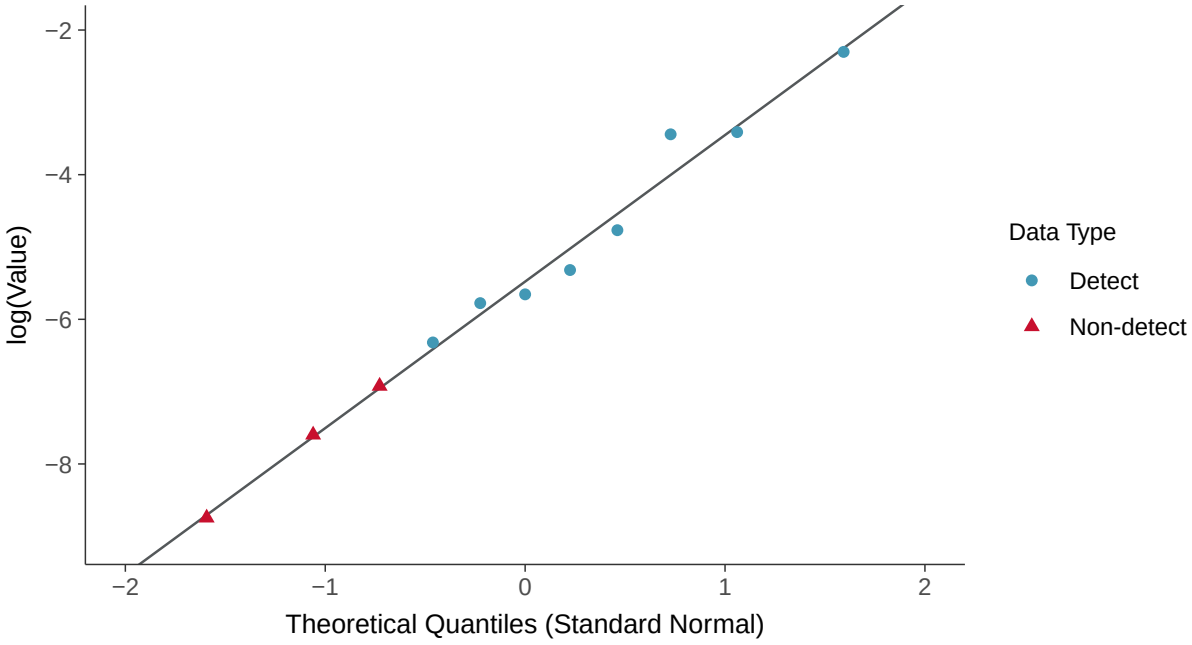
Boxplot by Season

Zinc, MW-11 (mg/L)



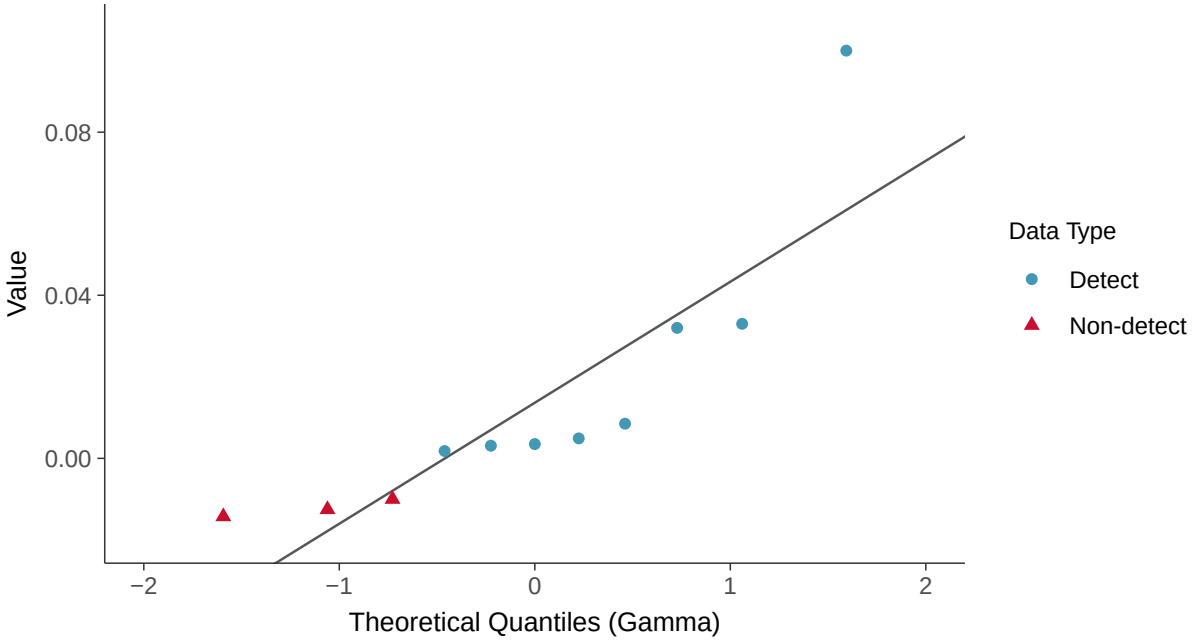
Lognormal Q-Q plot using ROS Imputed Estimates

Zinc, MW-11 (mg/L)



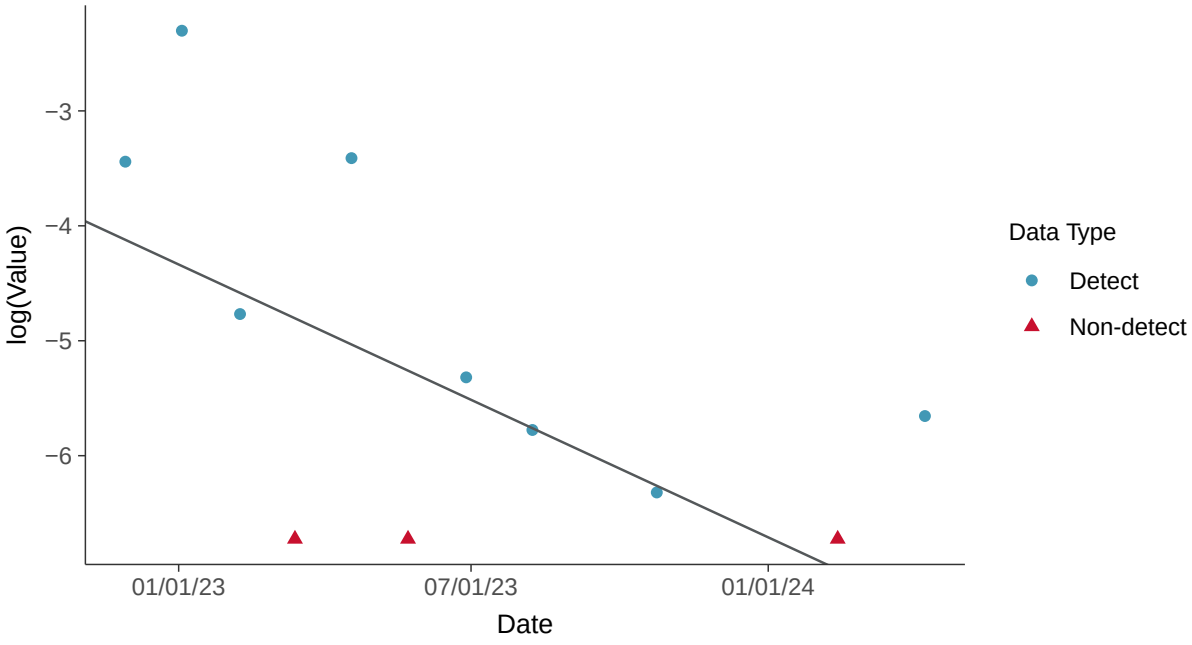
Gamma Q-Q plot using ROS Imputed Estimates

Zinc, MW-11 (mg/L)



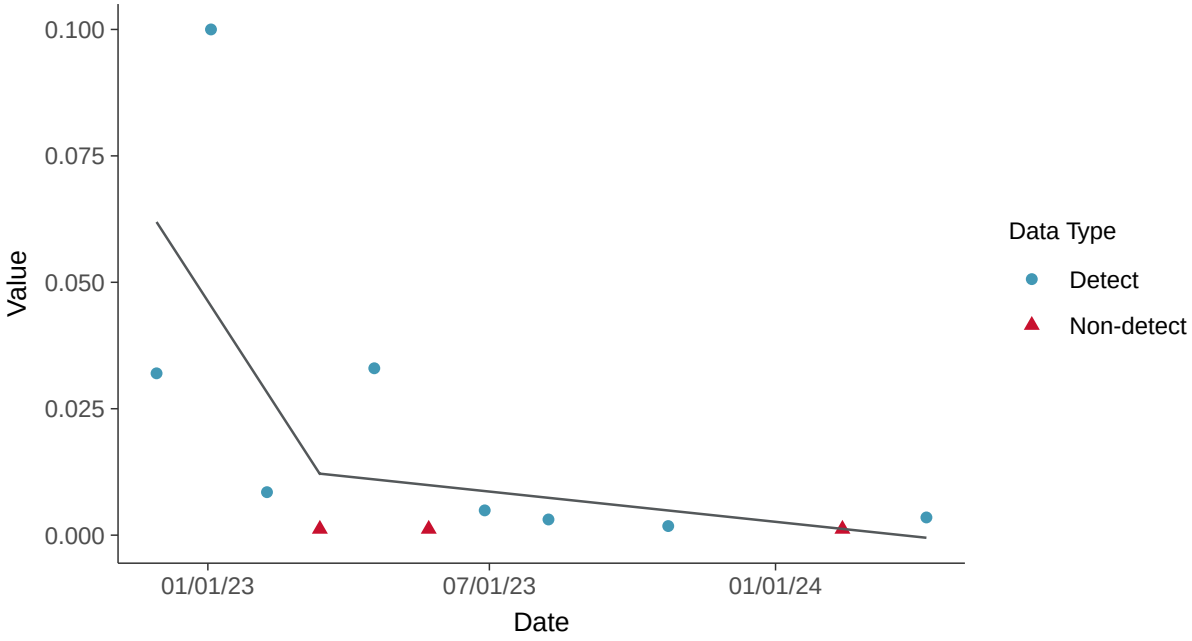
Trend Regression: Lognormal MLE

Zinc, MW-11 (mg/L)



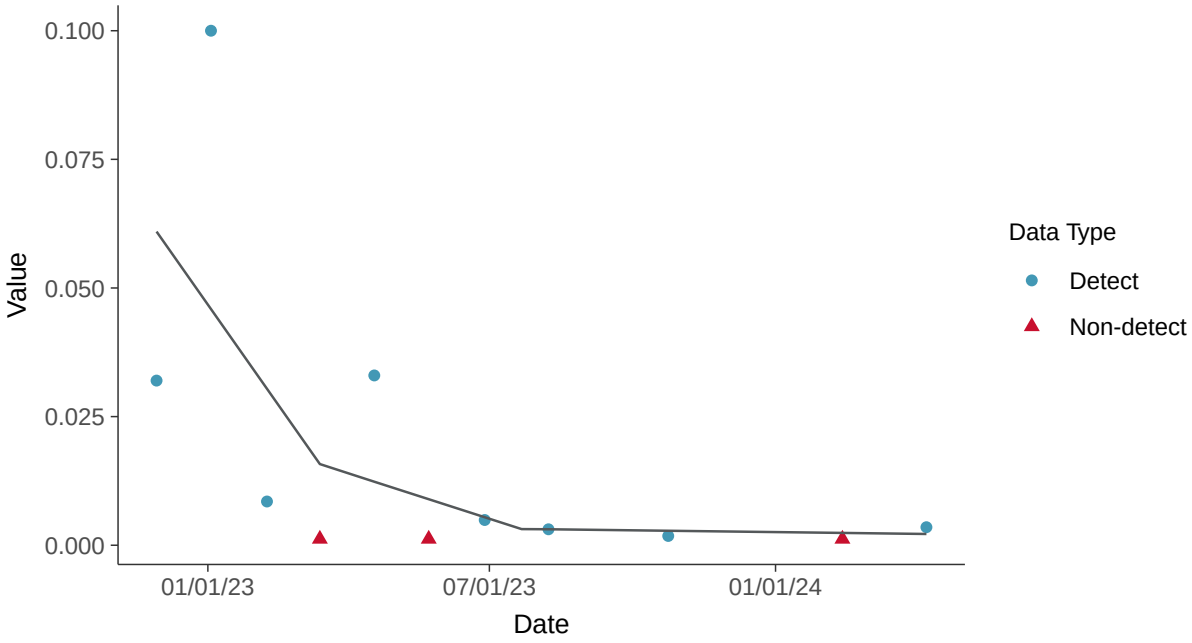
Trend Regression: Piecewise Linear-Linear

Zinc, MW-11 (mg/L)



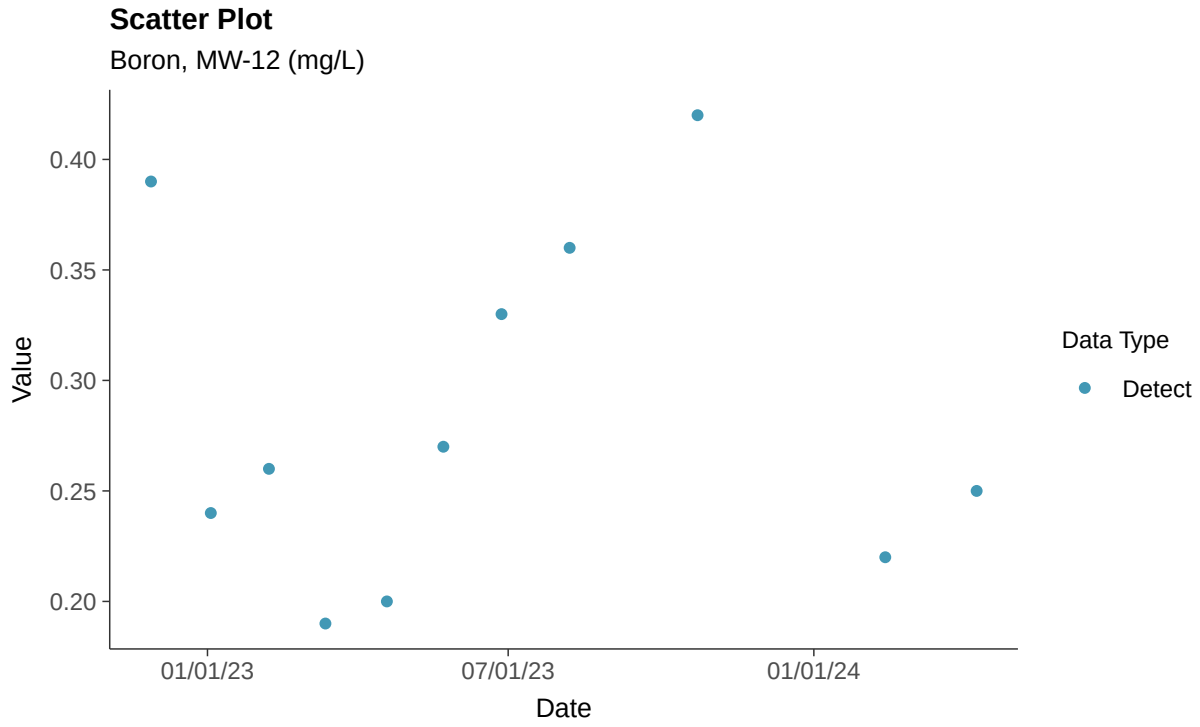
Trend Regression: Piecewise Linear-Linear-Linear

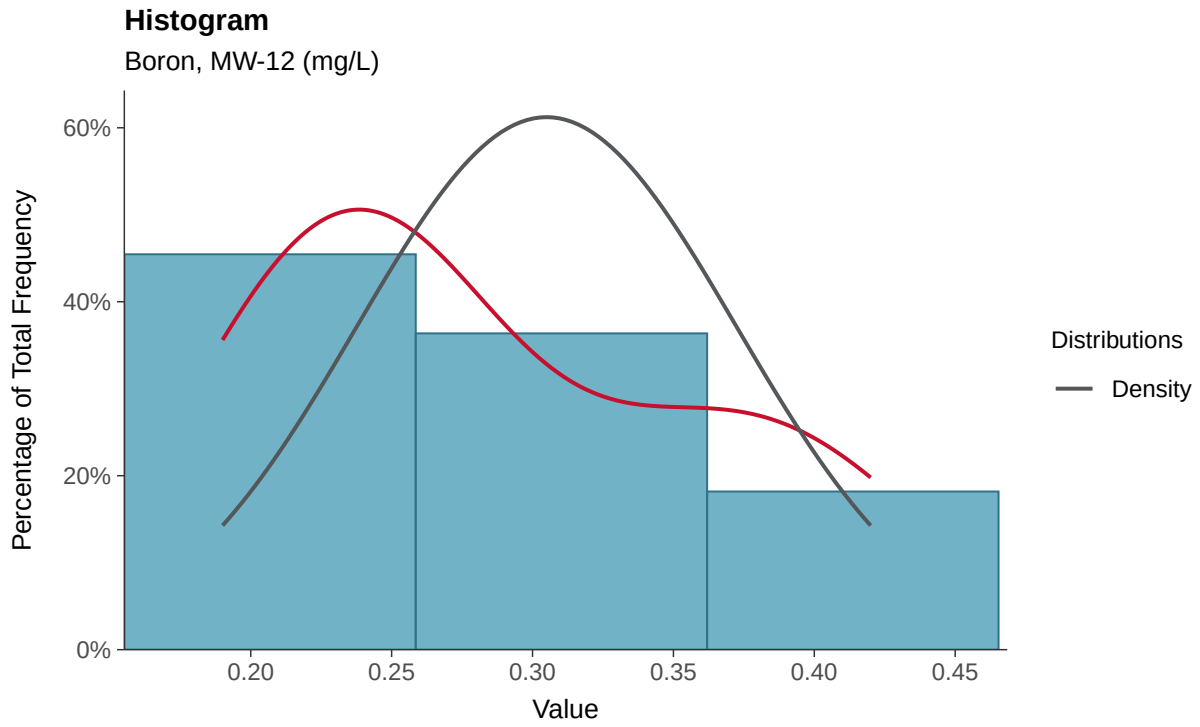
Zinc, MW-11 (mg/L)



Appendix III: Boron, MW-12

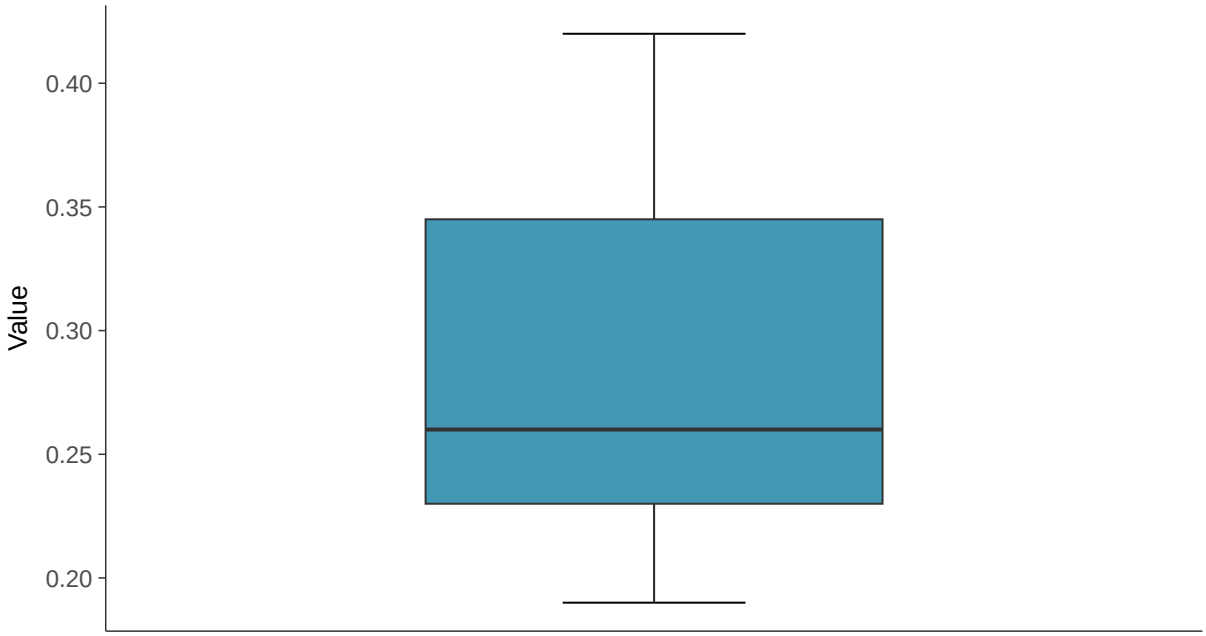
ID: 2_22_4_105





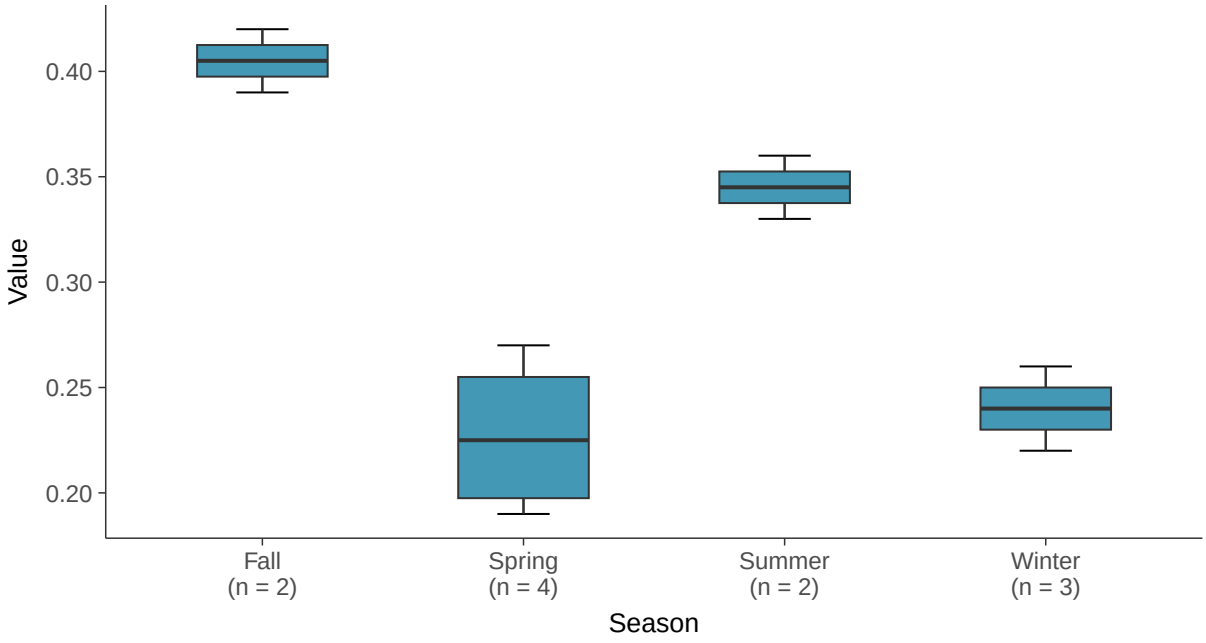
Boxplot

Boron, MW-12 (mg/L)



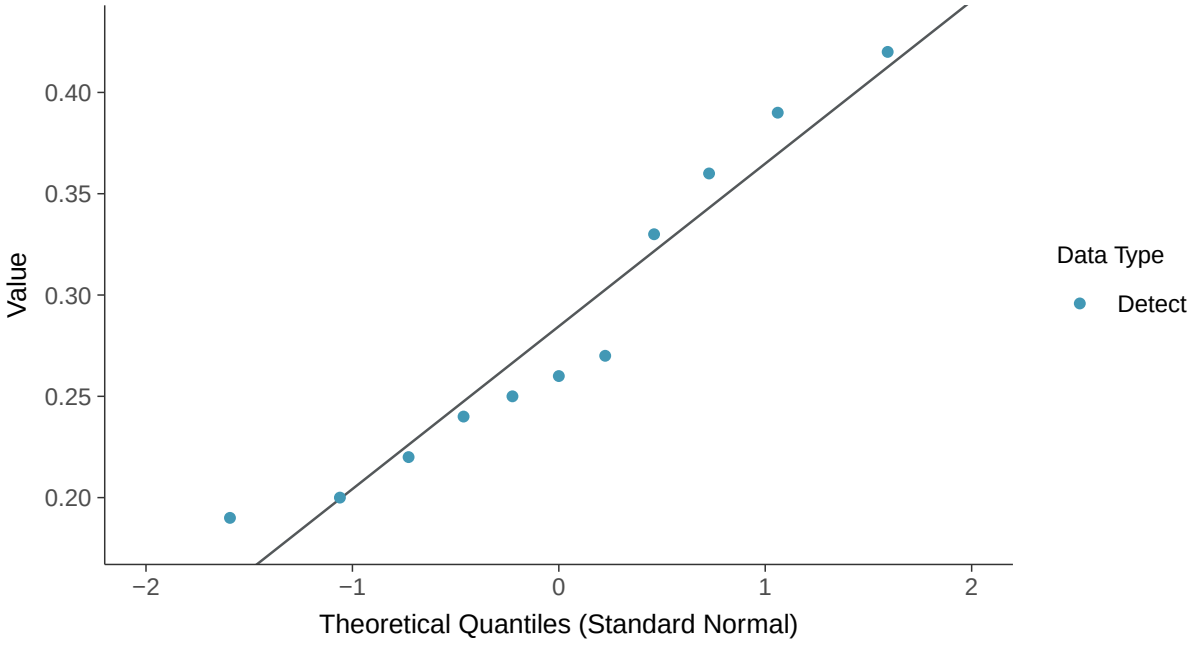
Boxplot by Season

Boron, MW-12 (mg/L)



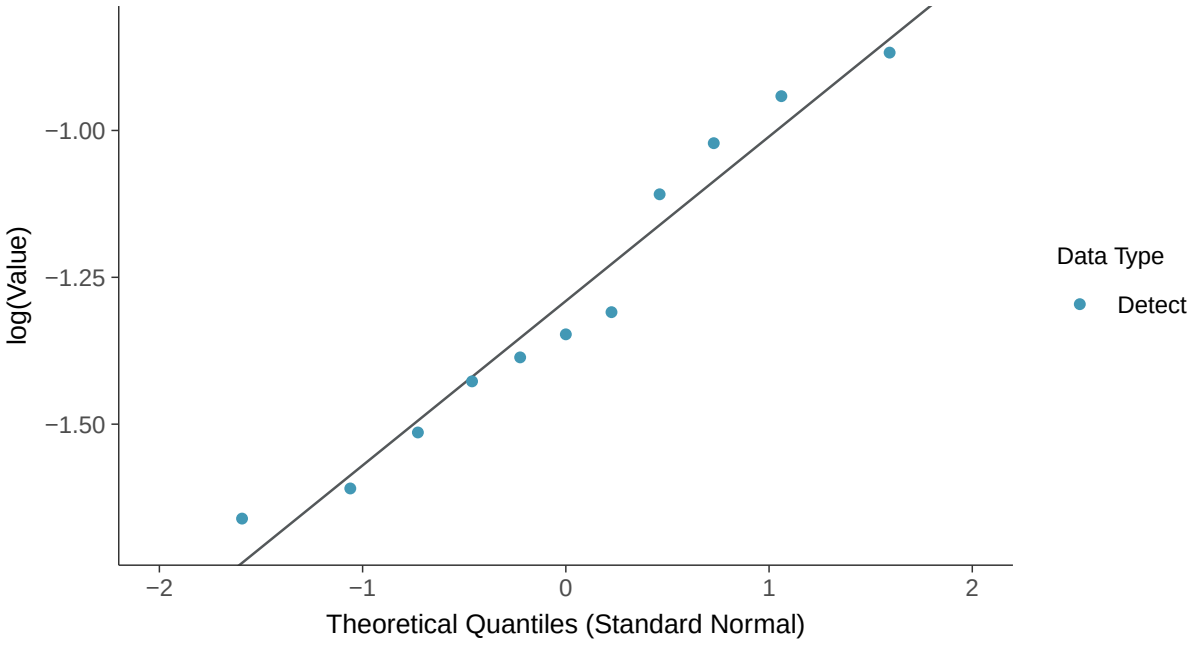
Normal Q-Q plot

Boron, MW-12 (mg/L)



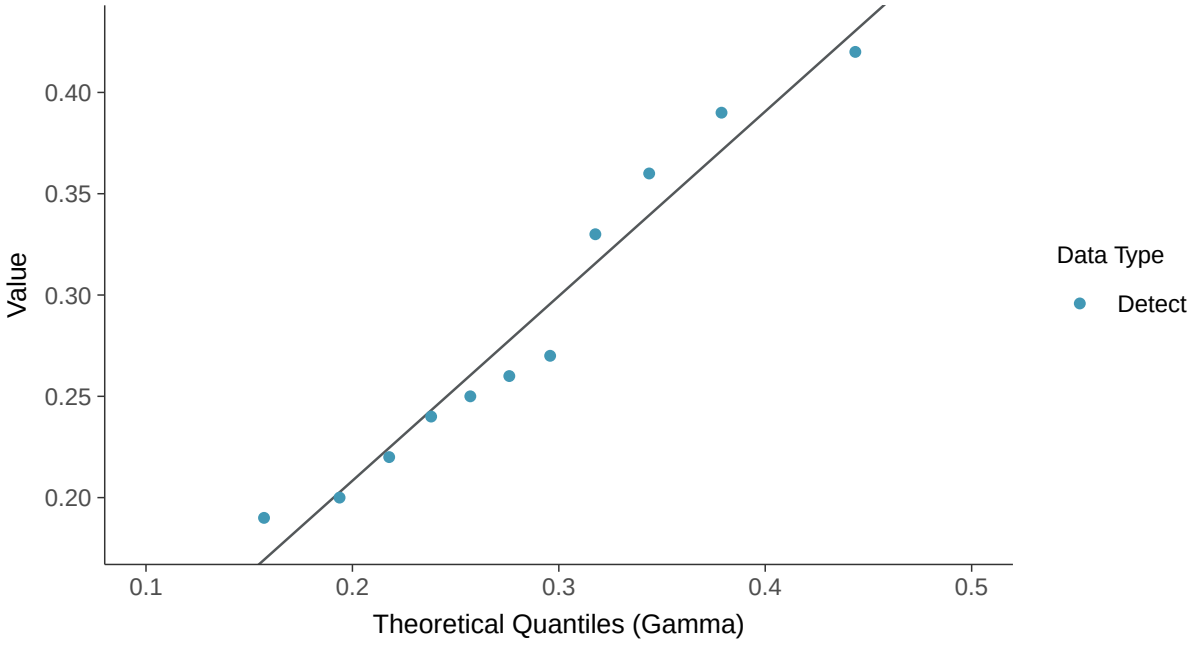
Lognormal Q-Q plot

Boron, MW-12 (mg/L)



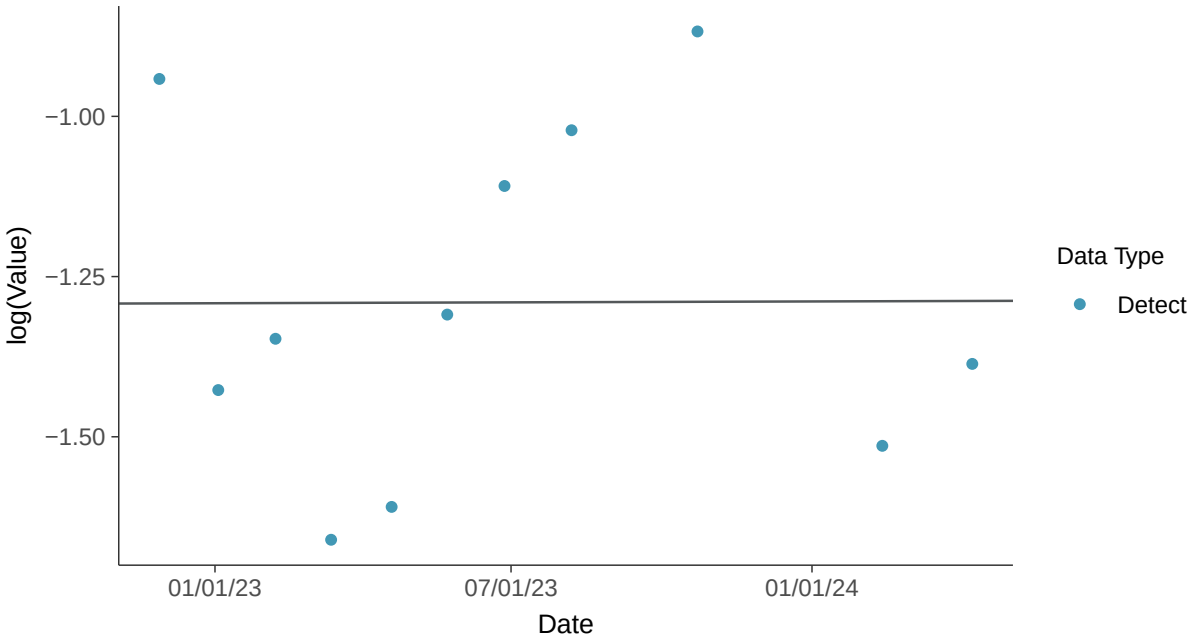
Gamma Q-Q plot

Boron, MW-12 (mg/L)



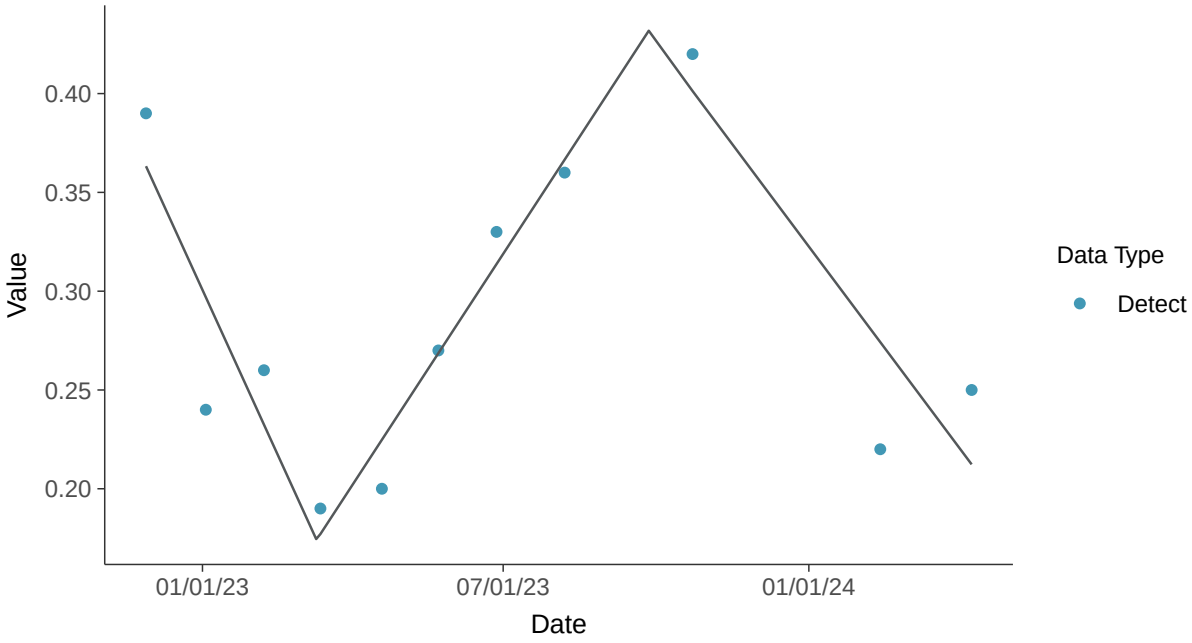
Trend Regression: Lognormal MLE

Boron, MW-12 (mg/L)



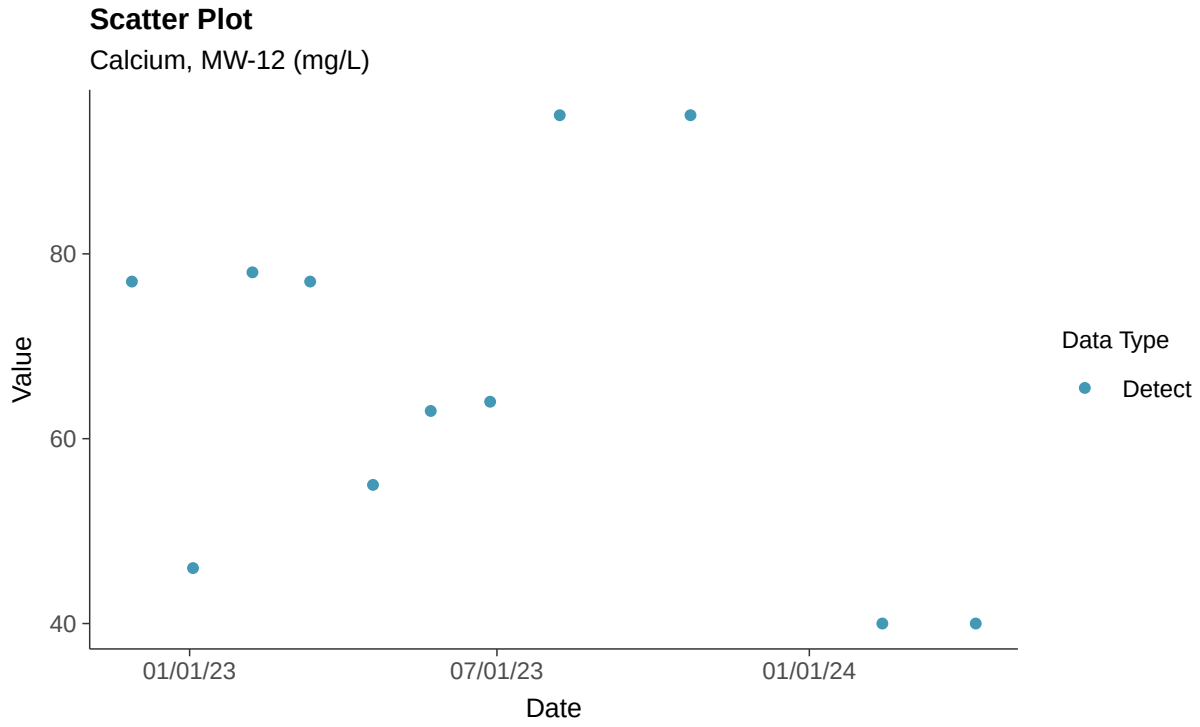
Trend Regression: Piecewise Linear-Linear-Linear

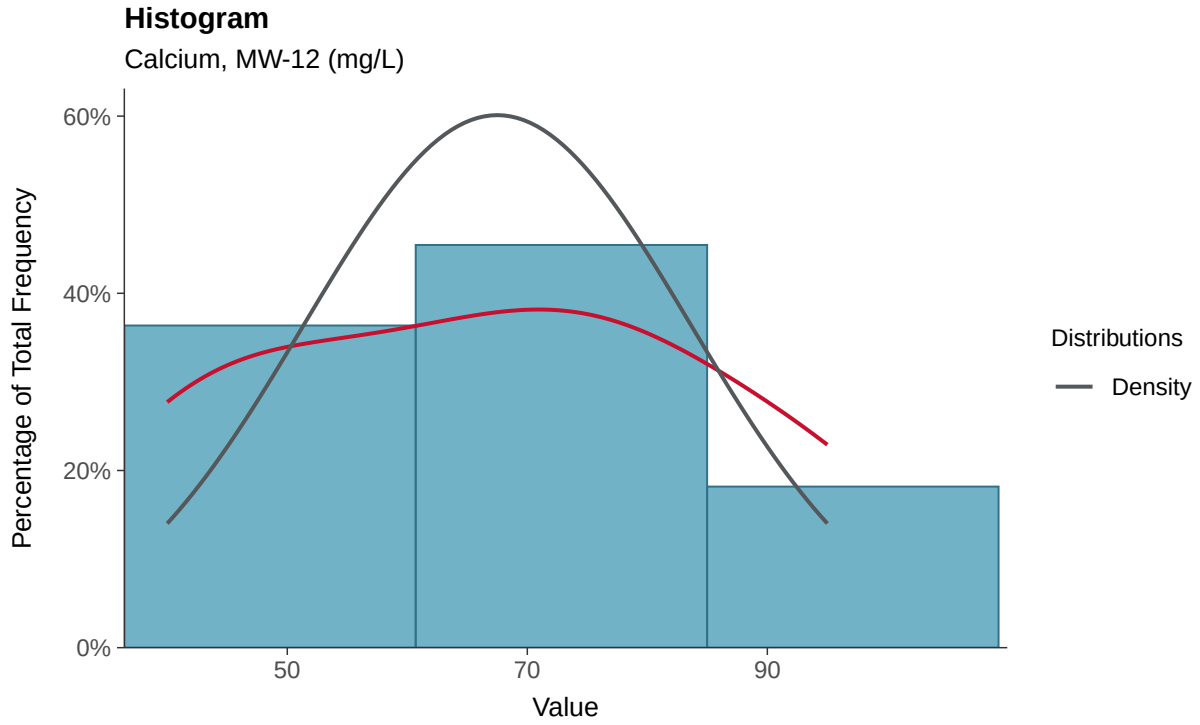
Boron, MW-12 (mg/L)



Appendix III: Calcium, MW-12

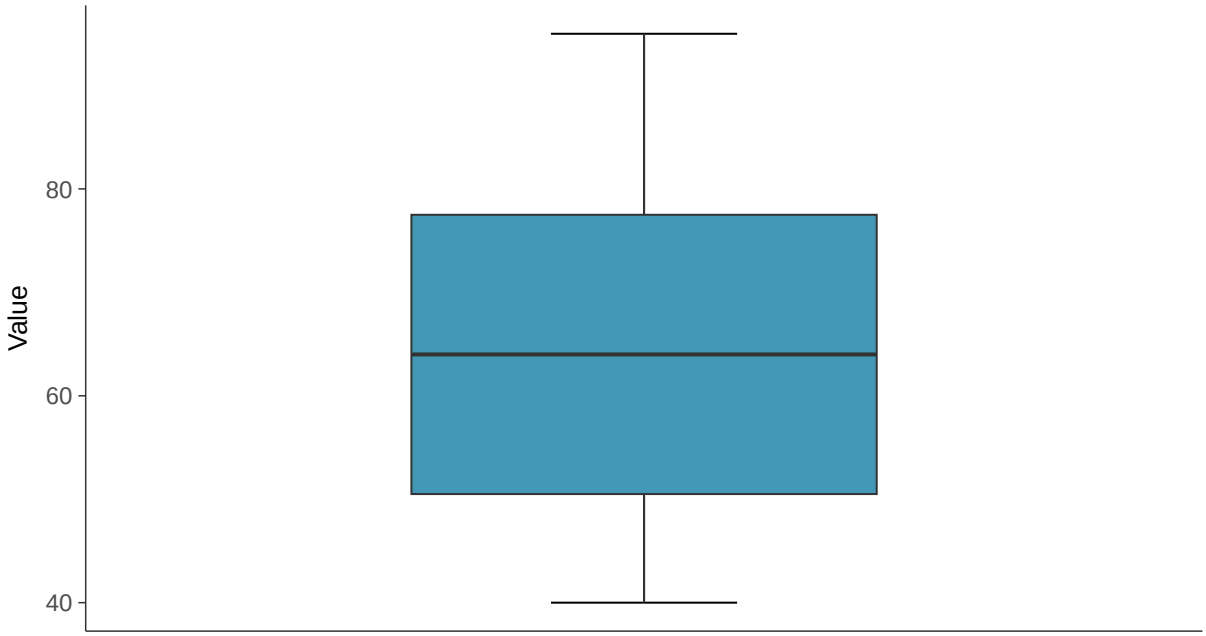
ID: 2_22_4_107





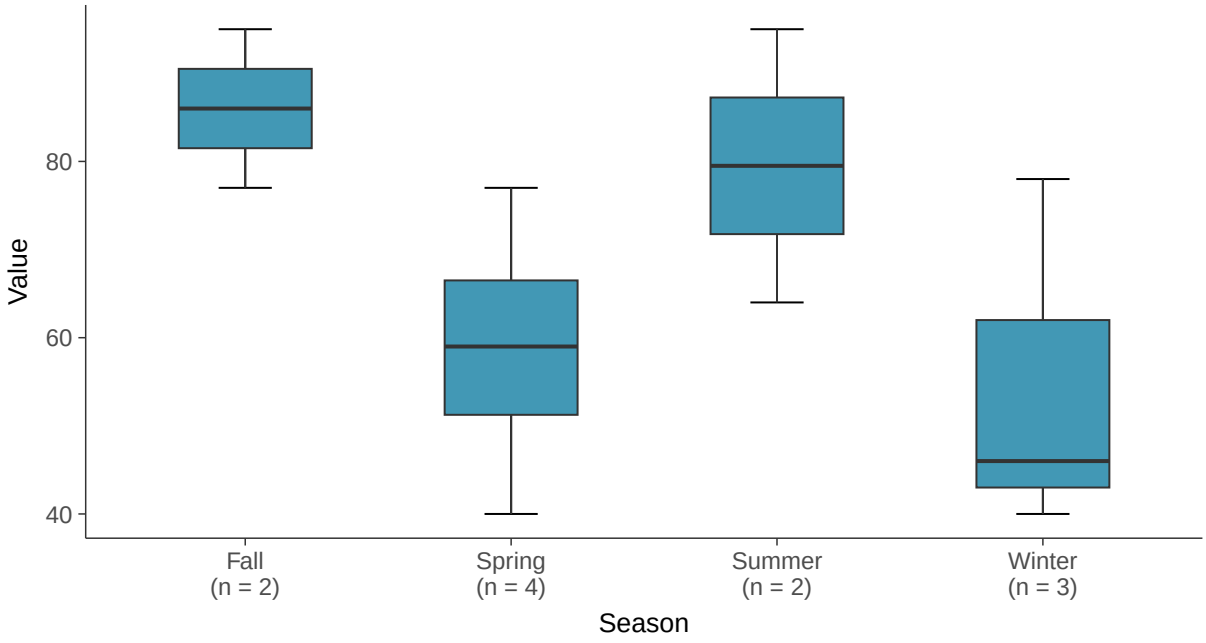
Boxplot

Calcium, MW-12 (mg/L)



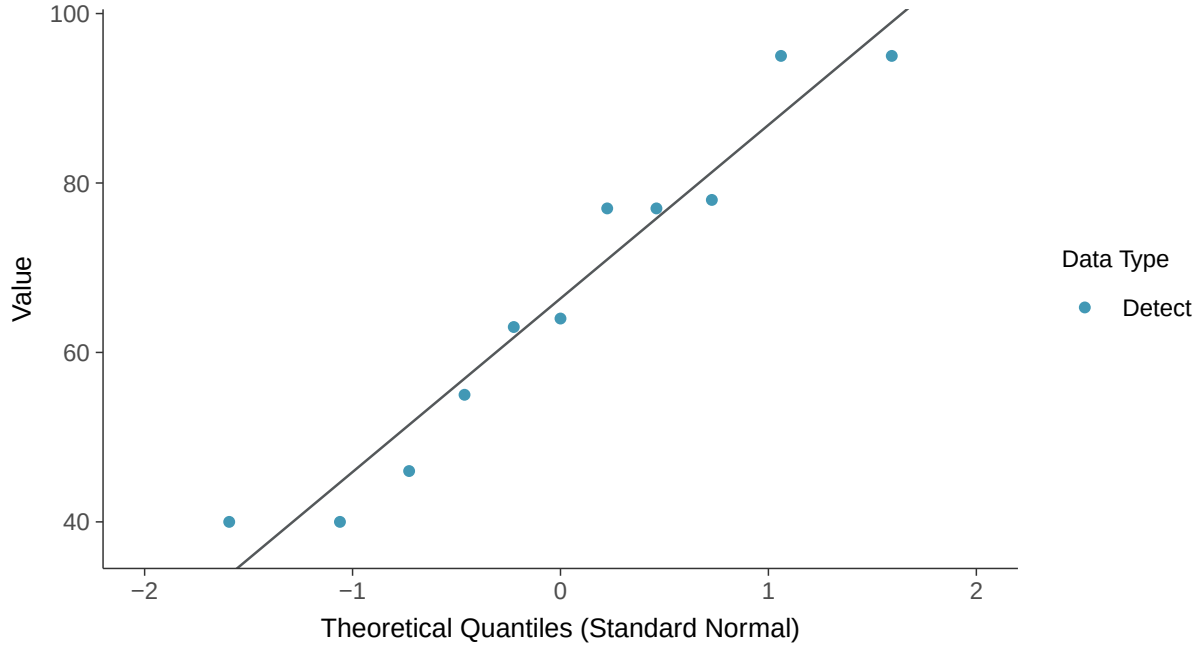
Boxplot by Season

Calcium, MW-12 (mg/L)



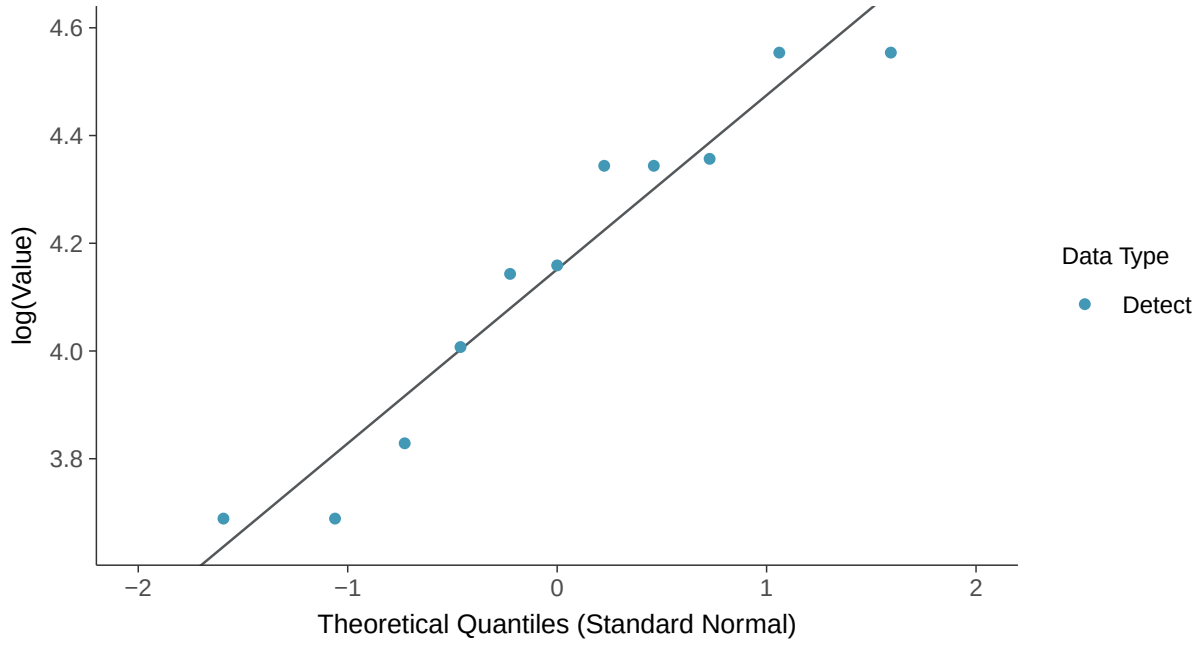
Normal Q-Q plot

Calcium, MW-12 (mg/L)



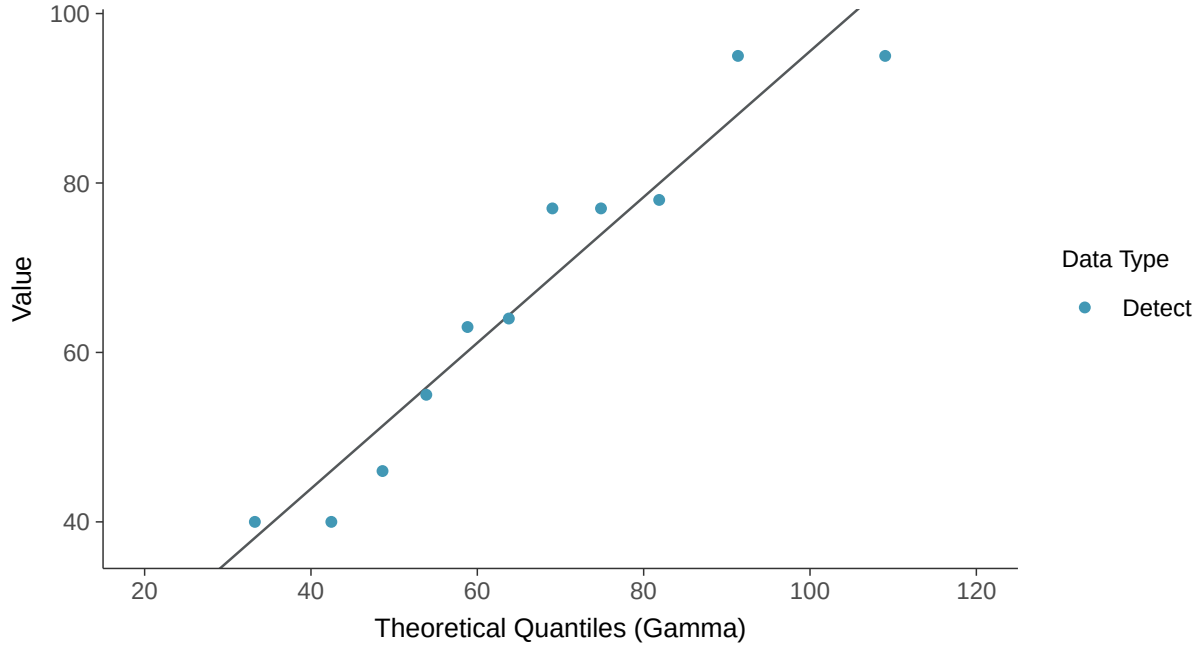
Lognormal Q-Q plot

Calcium, MW-12 (mg/L)



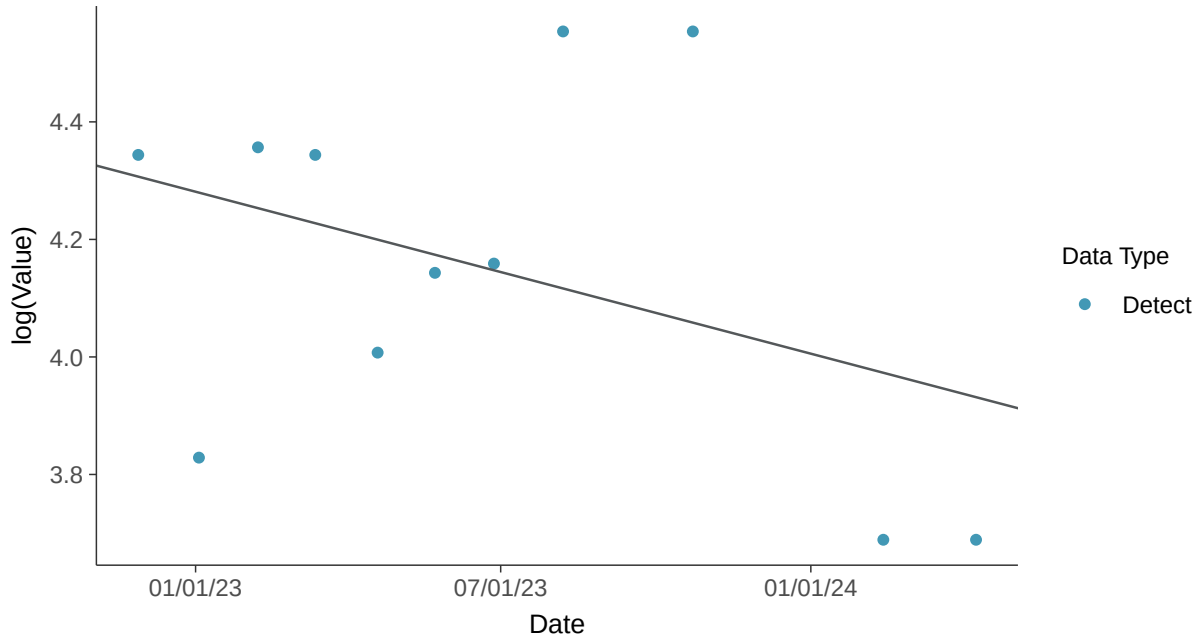
Gamma Q-Q plot

Calcium, MW-12 (mg/L)



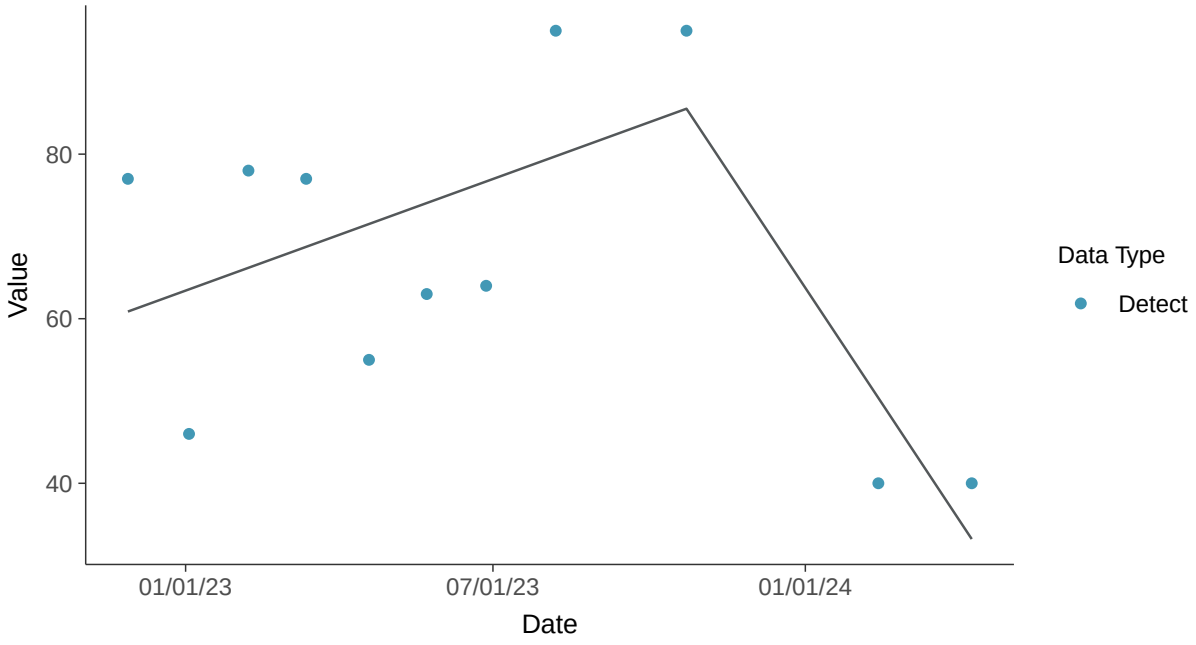
Trend Regression: Lognormal MLE

Calcium, MW-12 (mg/L)



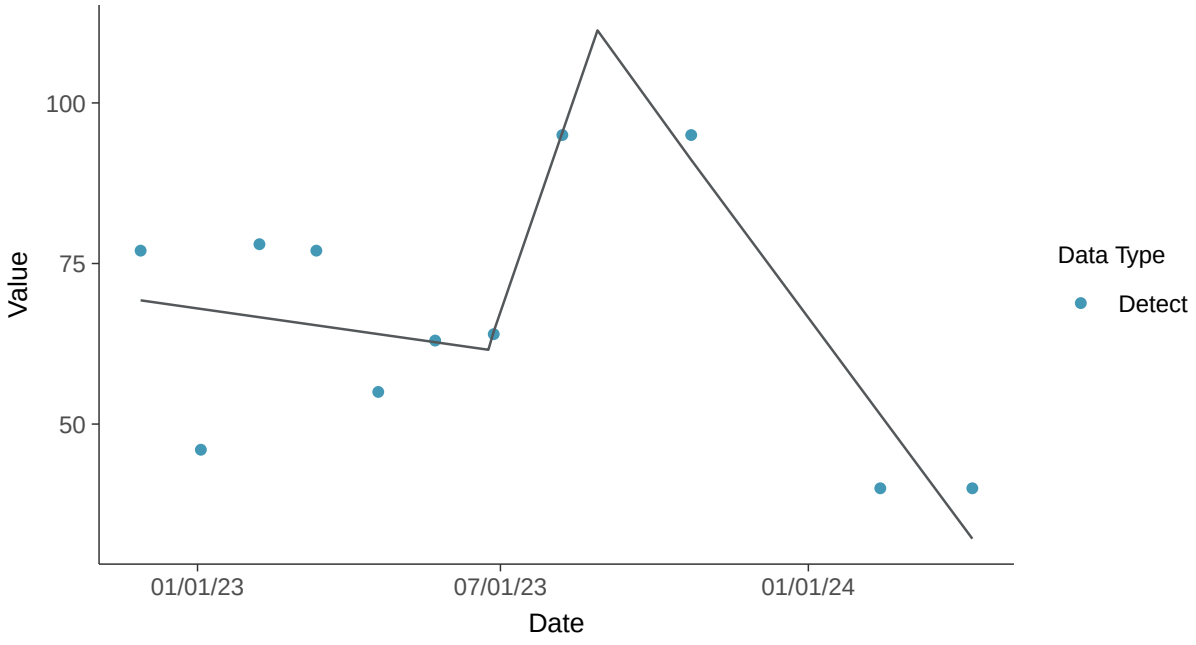
Trend Regression: Piecewise Linear-Linear

Calcium, MW-12 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Calcium, MW-12 (mg/L)

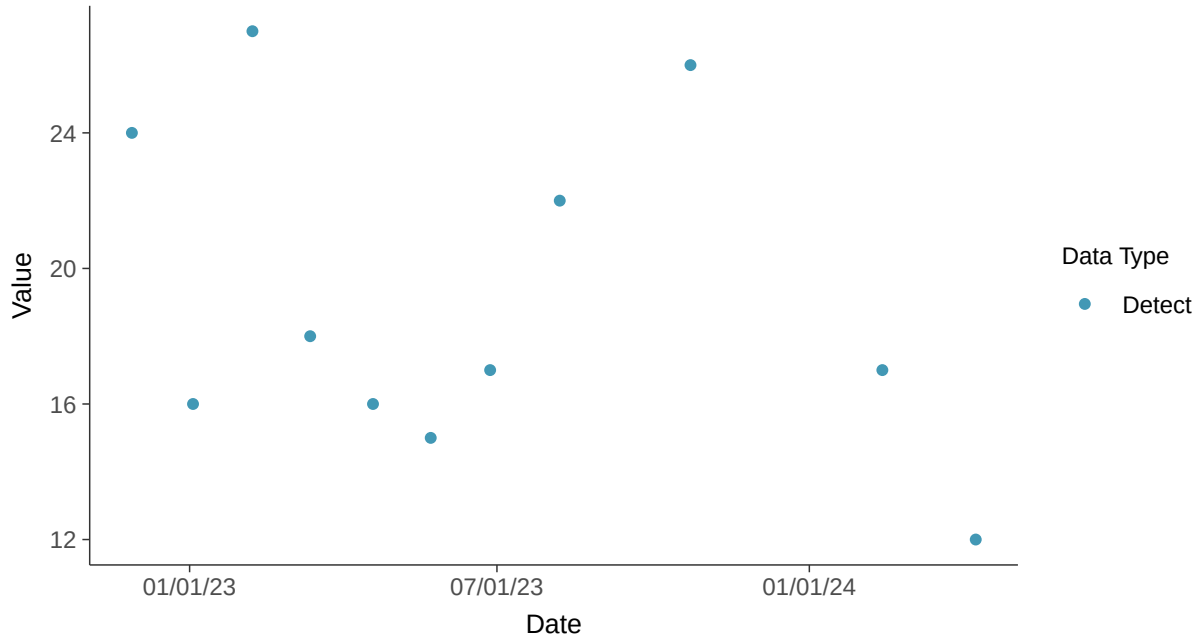


Appendix III: Chloride (as Cl), MW-12

ID: 2_22_4_108

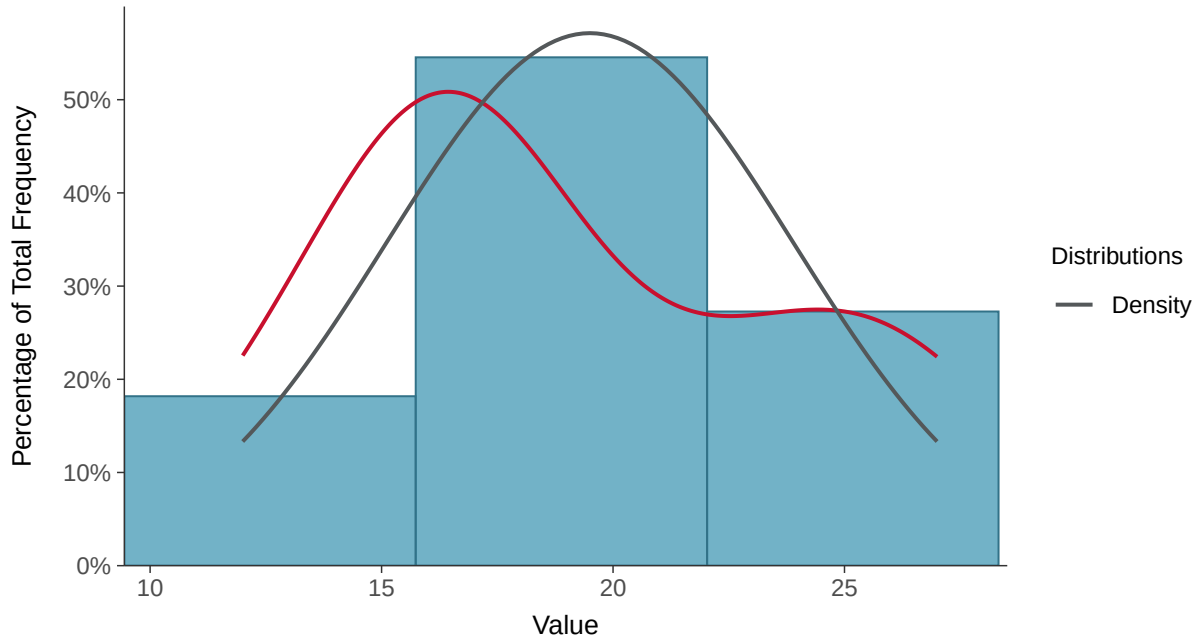
Scatter Plot

Chloride (as Cl), MW-12 (mg/L)



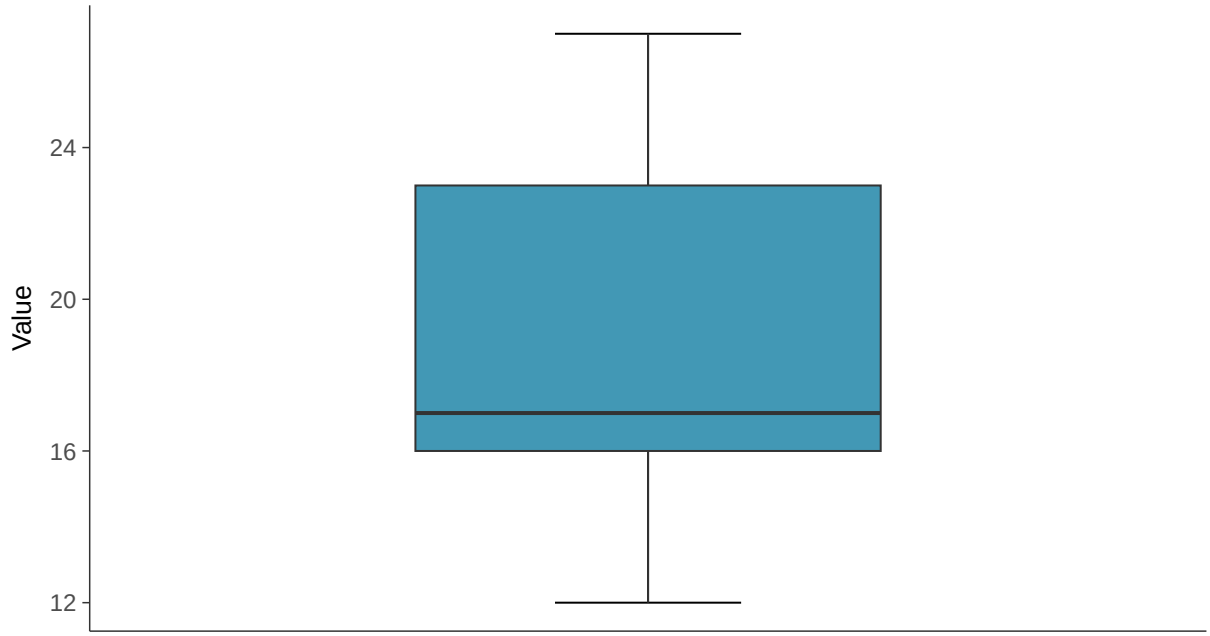
Histogram

Chloride (as Cl), MW-12 (mg/L)



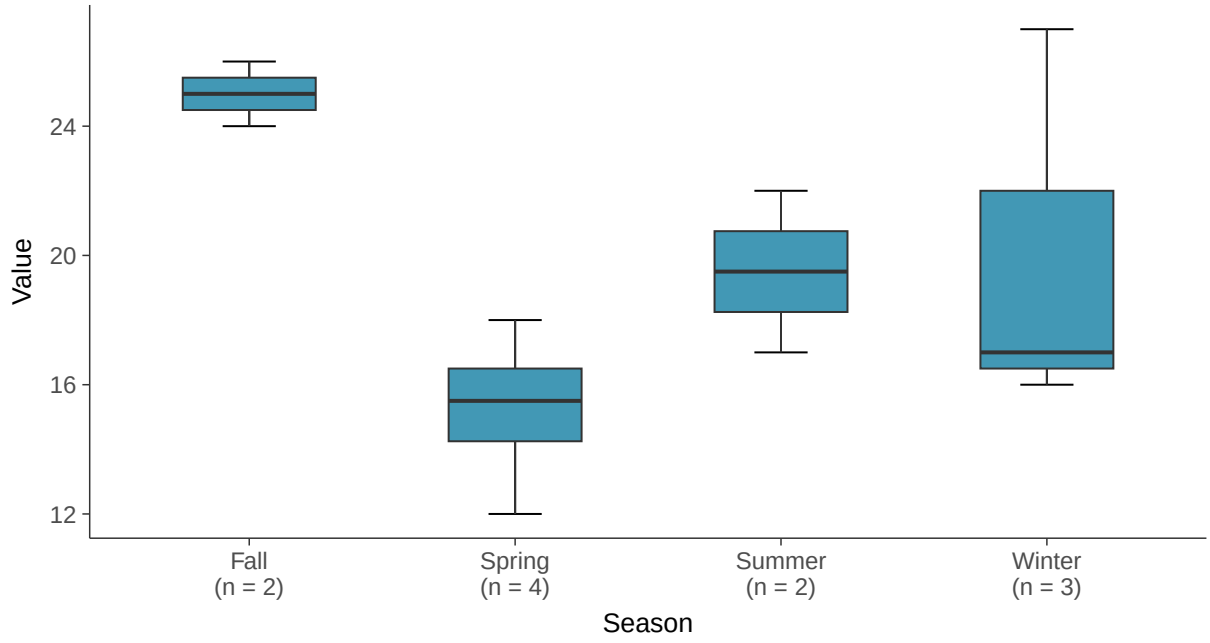
Boxplot

Chloride (as Cl), MW-12 (mg/L)



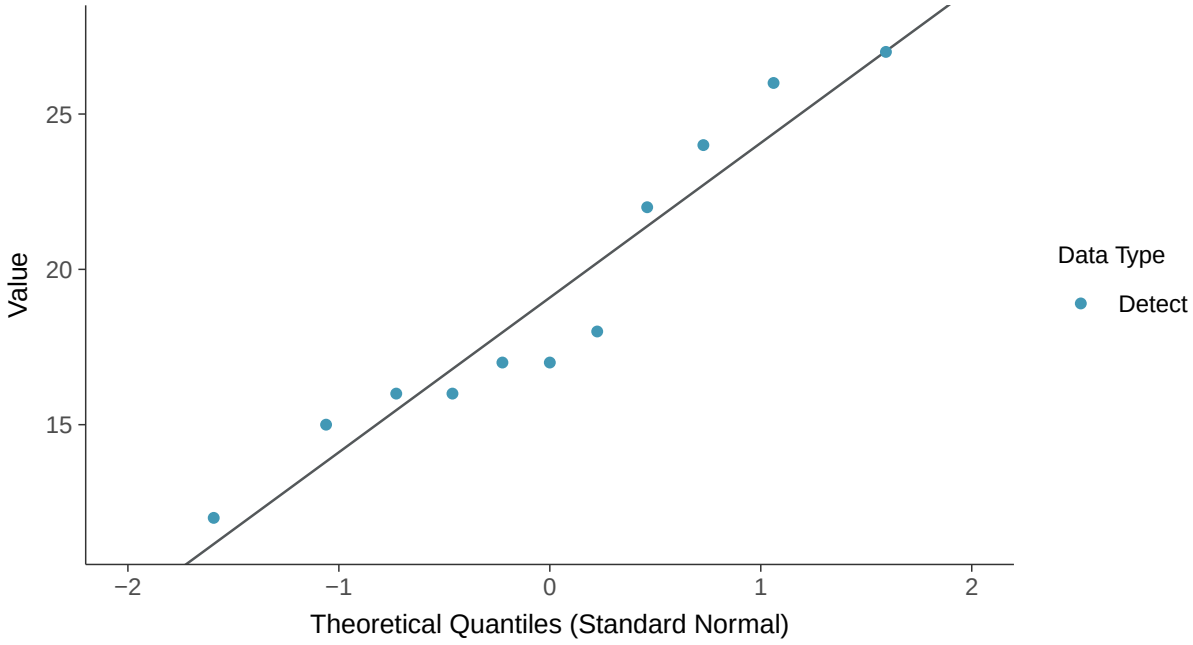
Boxplot by Season

Chloride (as Cl), MW-12 (mg/L)



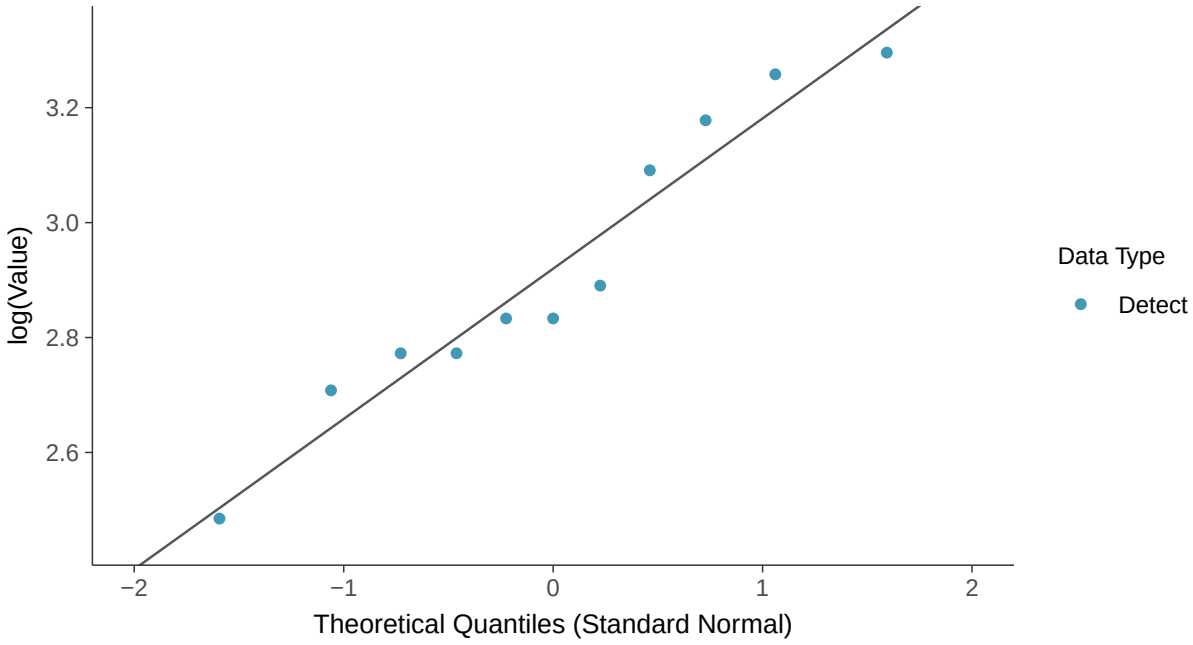
Normal Q-Q plot

Chloride (as Cl), MW-12 (mg/L)



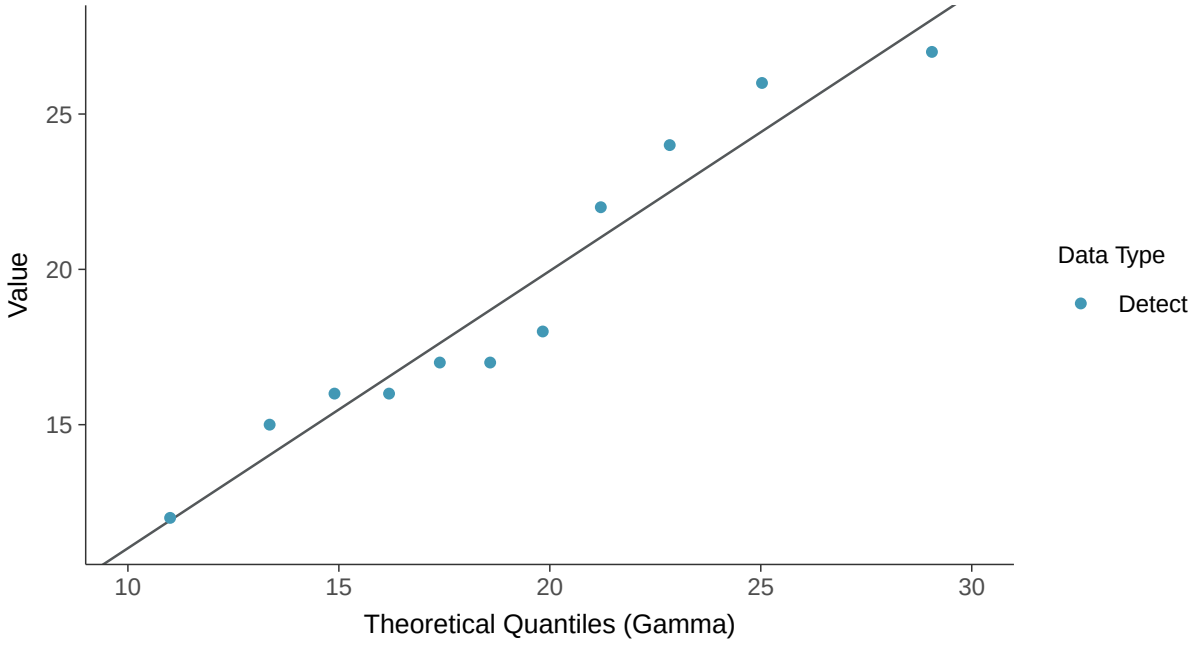
Lognormal Q-Q plot

Chloride (as Cl), MW-12 (mg/L)



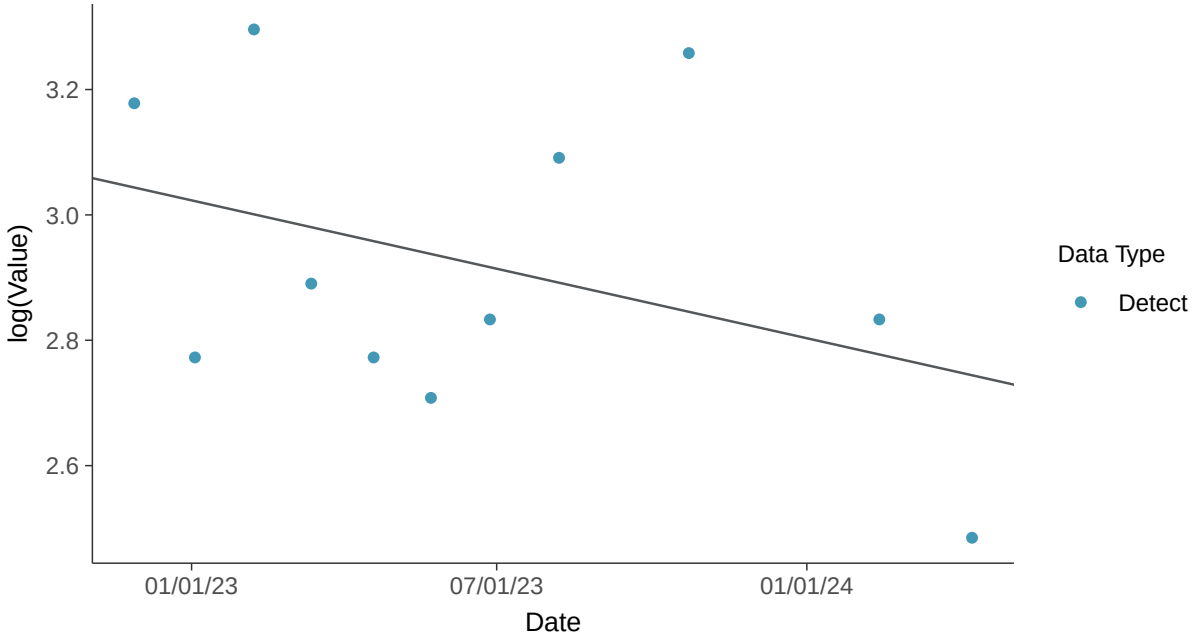
Gamma Q-Q plot

Chloride (as Cl), MW-12 (mg/L)



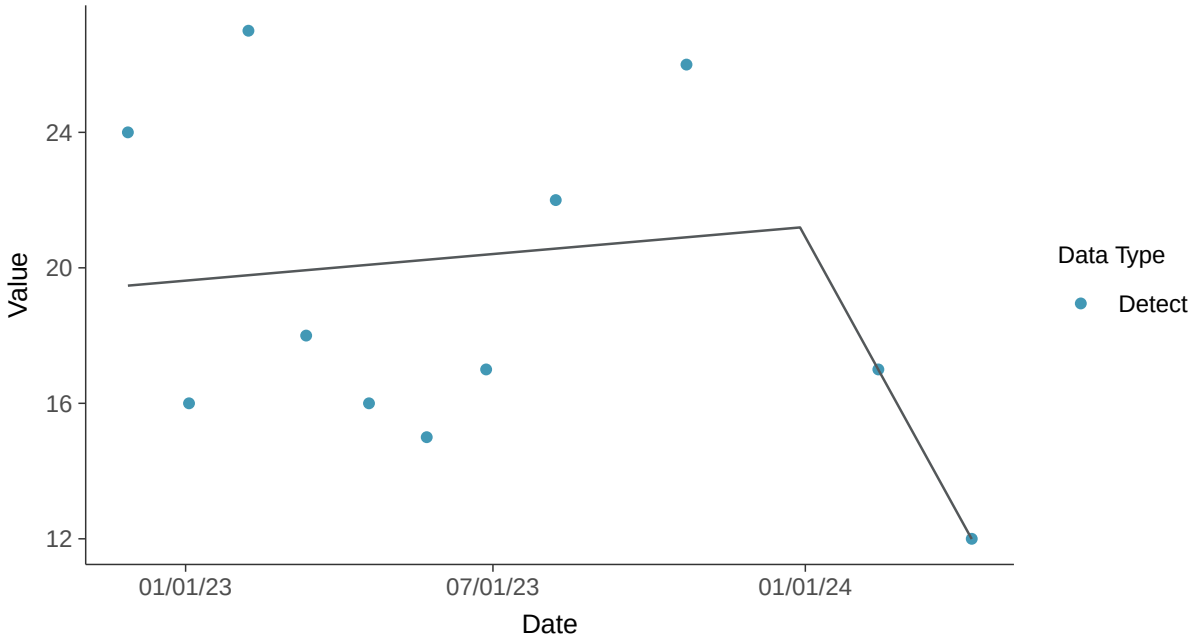
Trend Regression: Lognormal MLE

Chloride (as Cl), MW-12 (mg/L)



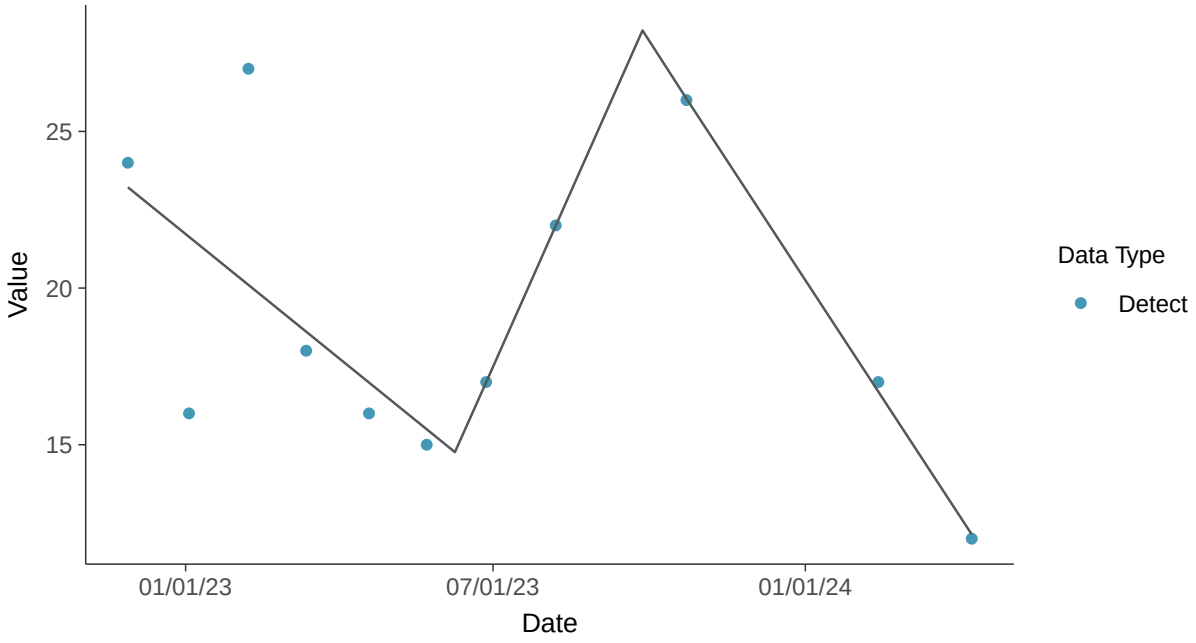
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-12 (mg/L)



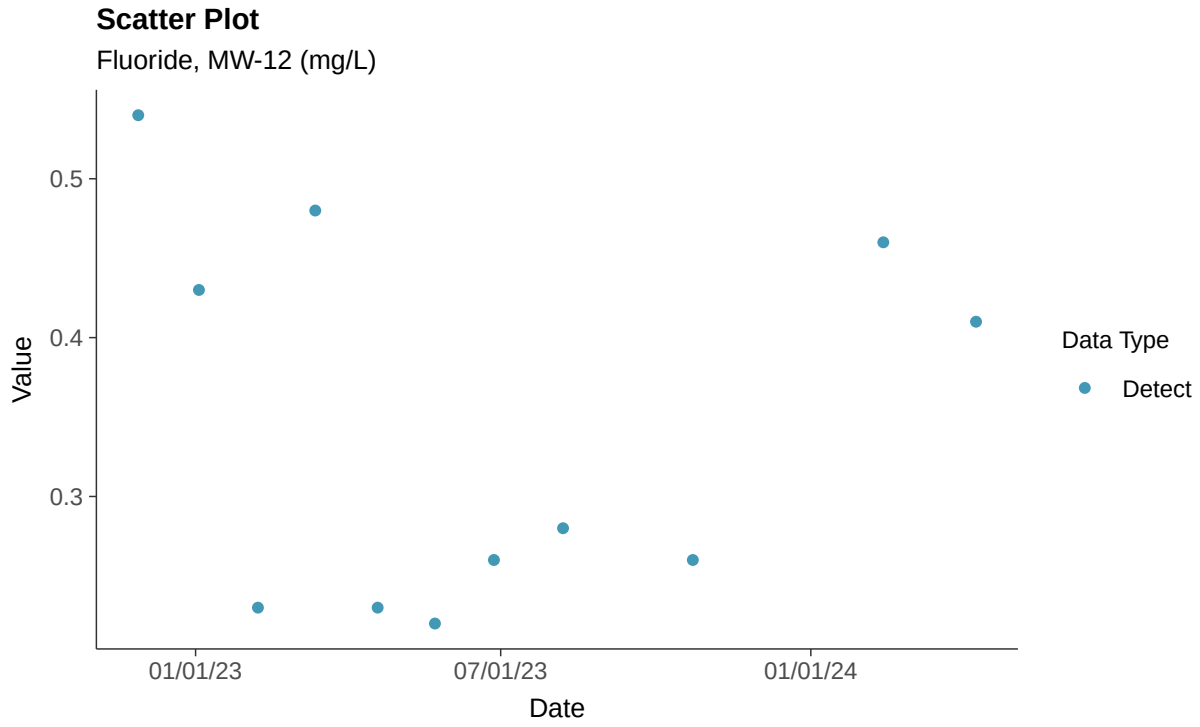
Trend Regression: Piecewise Linear-Linear-Linear

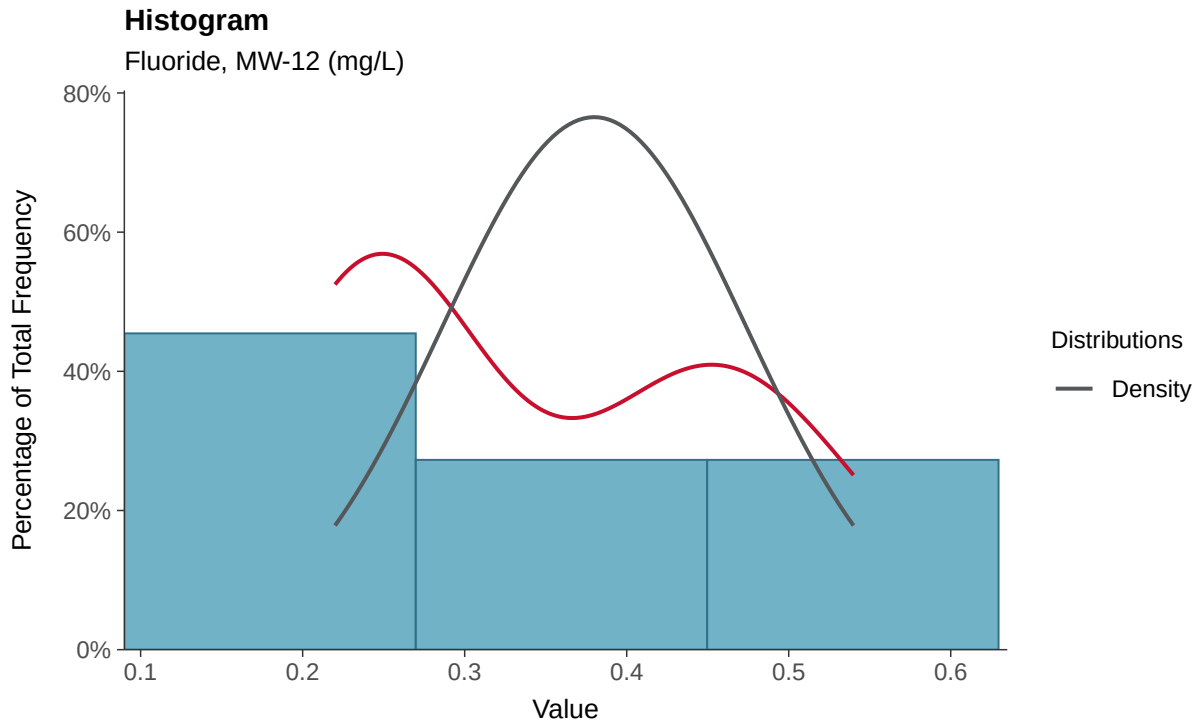
Chloride (as Cl), MW-12 (mg/L)



Appendix III: Fluoride, MW-12

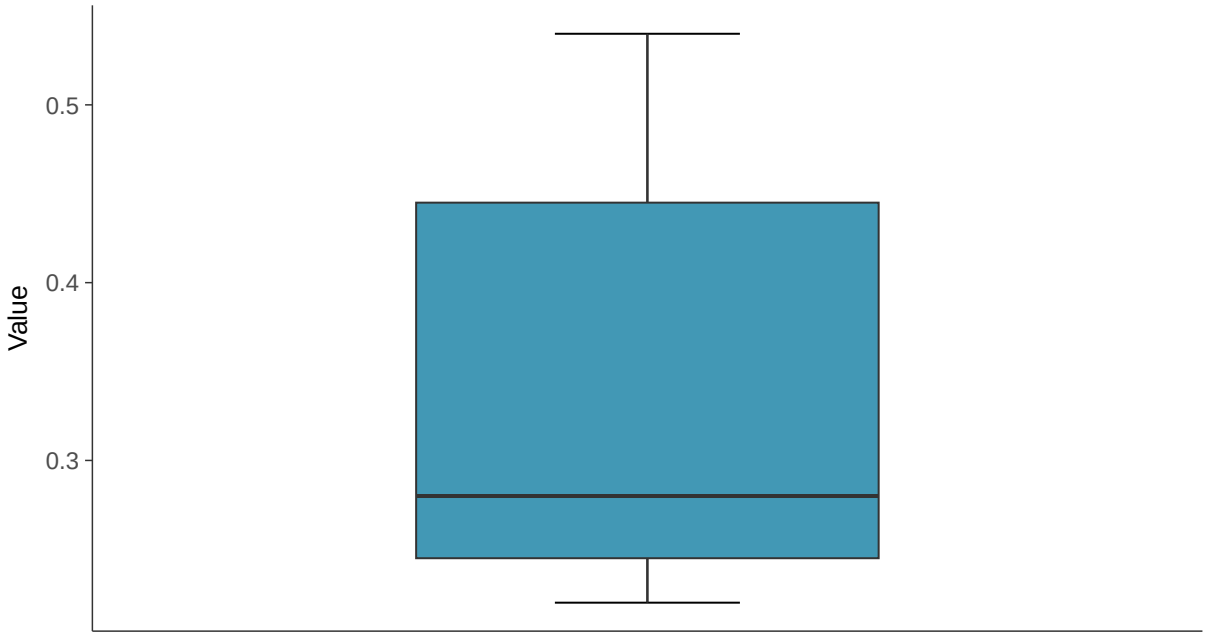
ID: 2_22_4_112





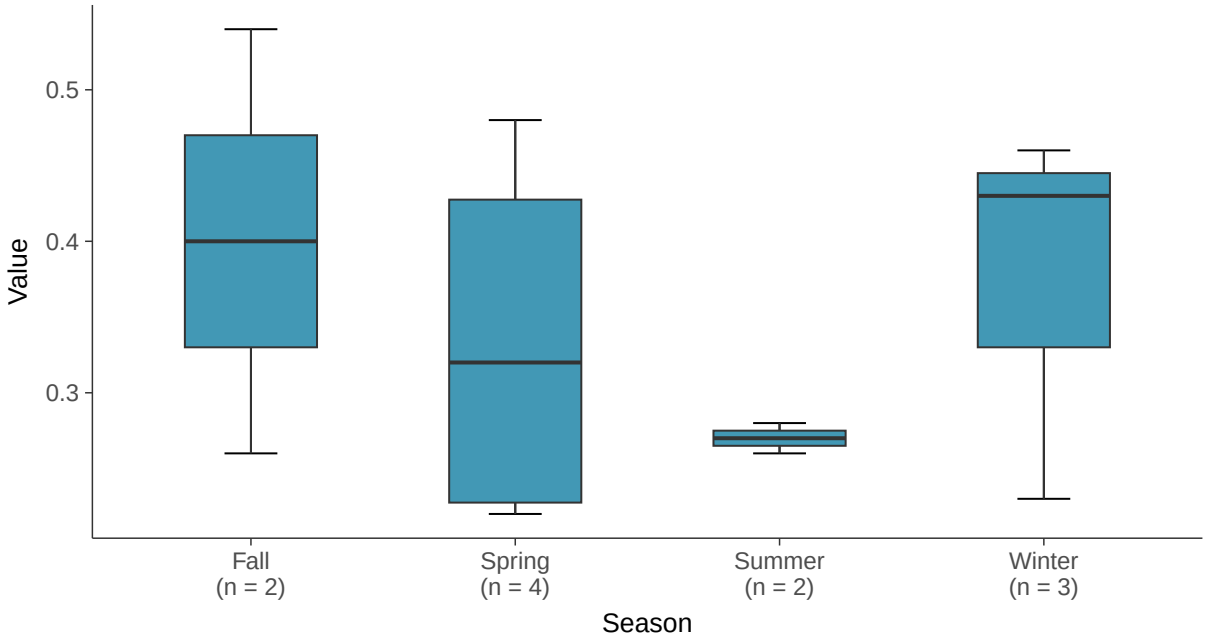
Boxplot

Fluoride, MW-12 (mg/L)



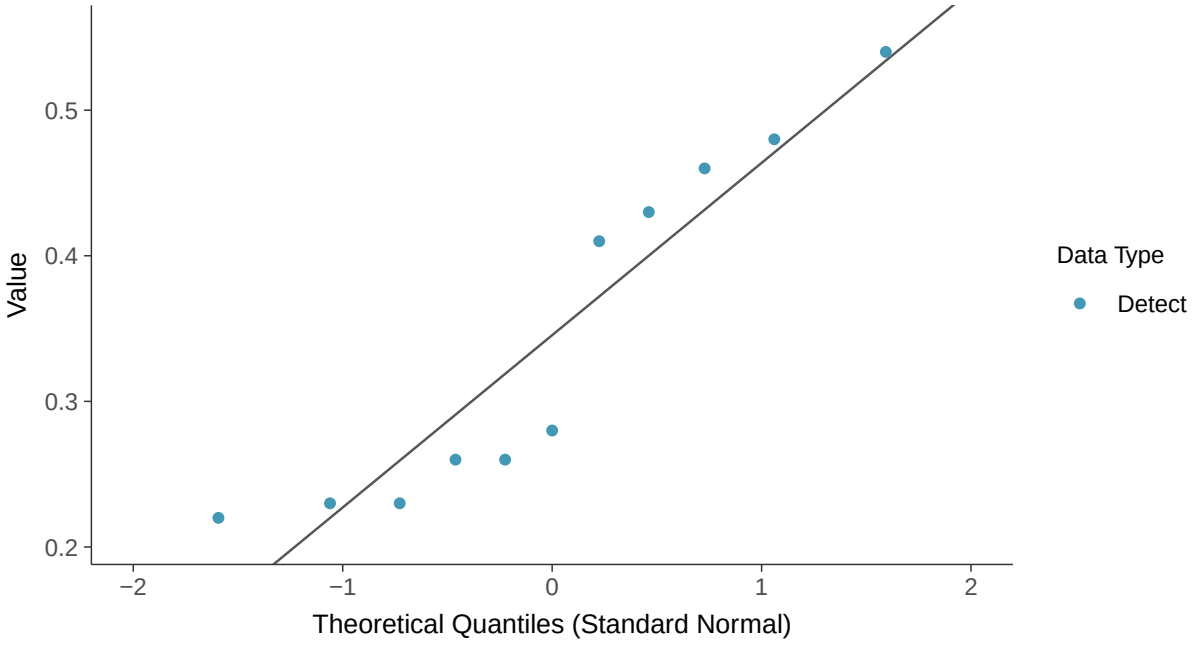
Boxplot by Season

Fluoride, MW-12 (mg/L)



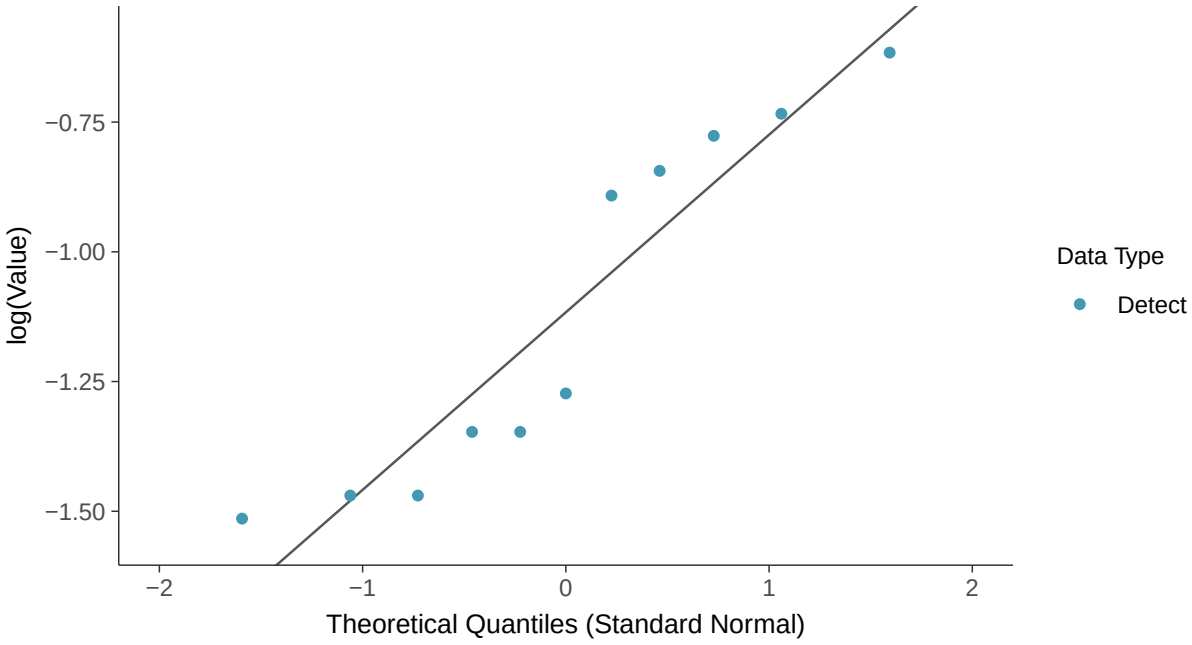
Normal Q-Q plot

Fluoride, MW-12 (mg/L)



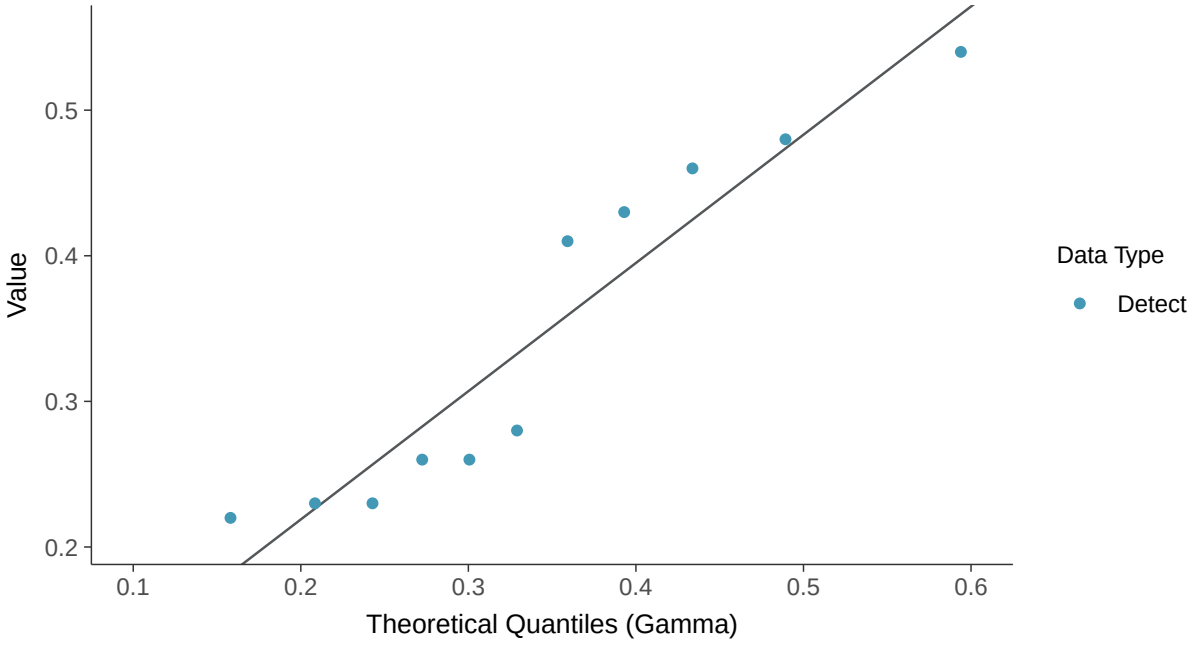
Lognormal Q-Q plot

Fluoride, MW-12 (mg/L)



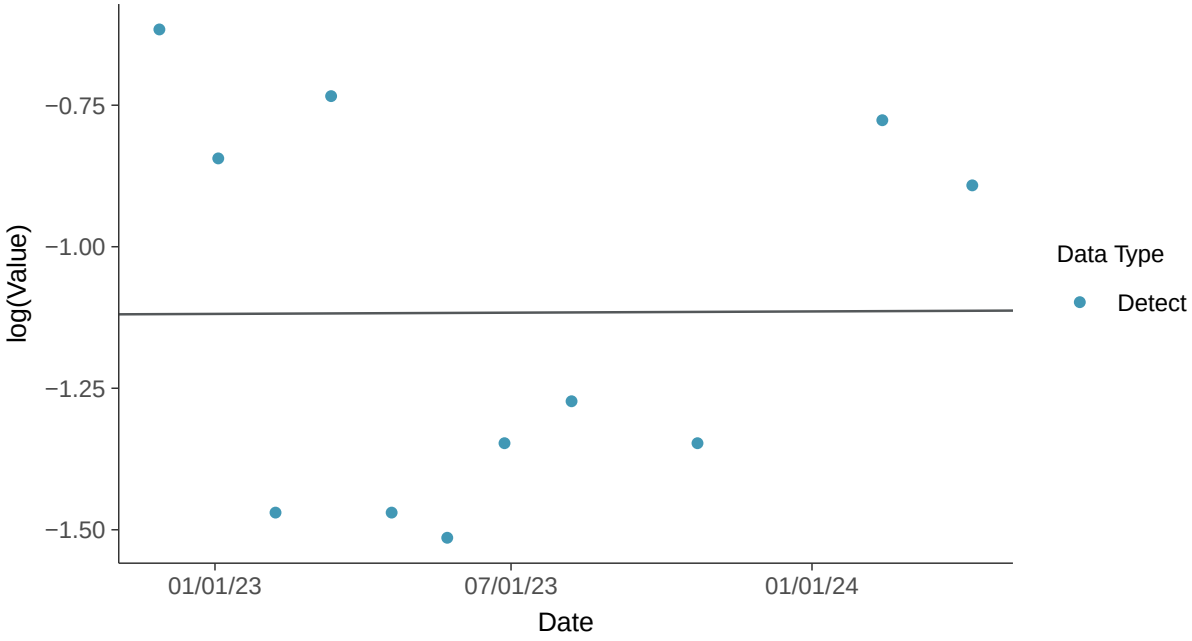
Gamma Q-Q plot

Fluoride, MW-12 (mg/L)



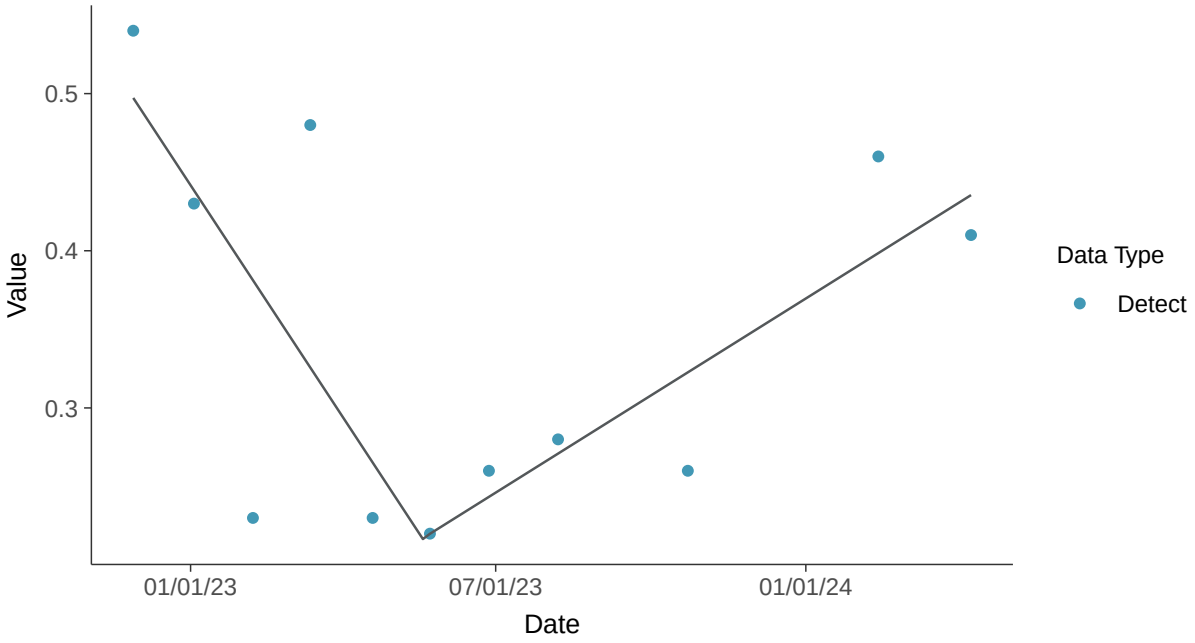
Trend Regression: Lognormal MLE

Fluoride, MW-12 (mg/L)



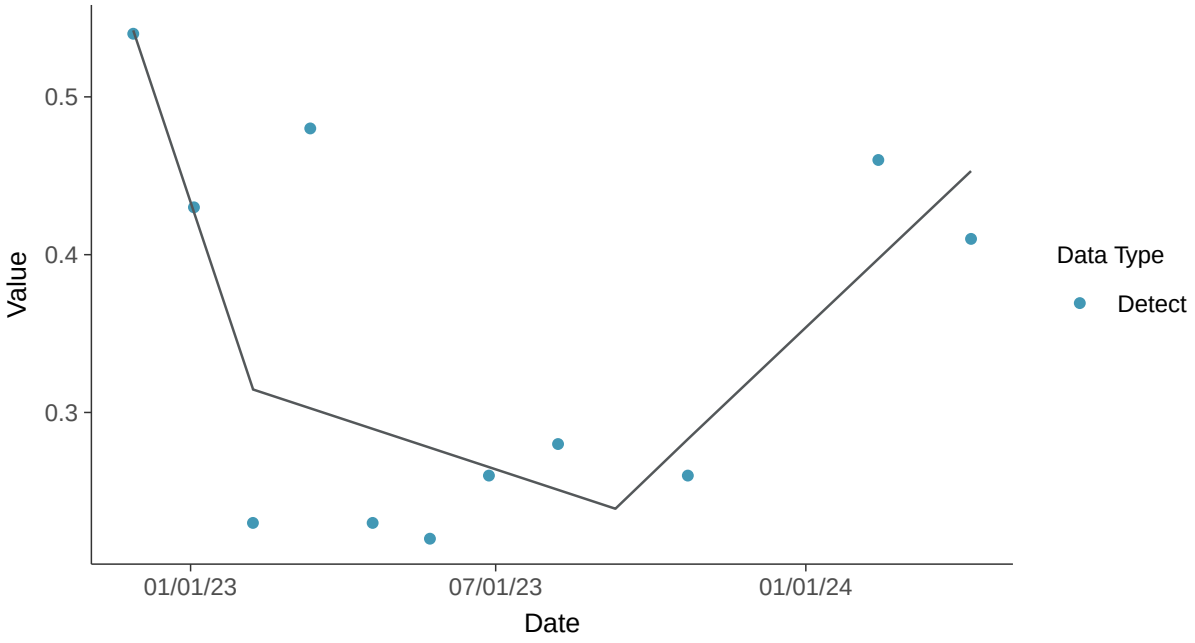
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-12 (mg/L)



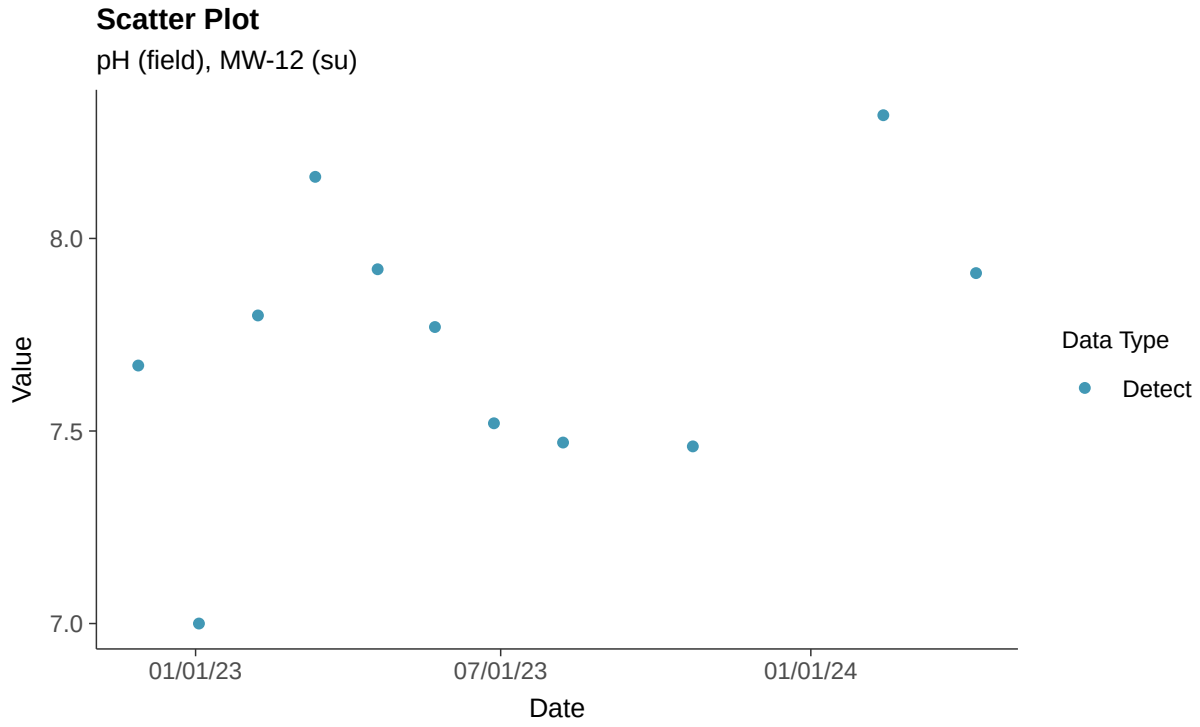
Trend Regression: Piecewise Linear-Linear-Linear

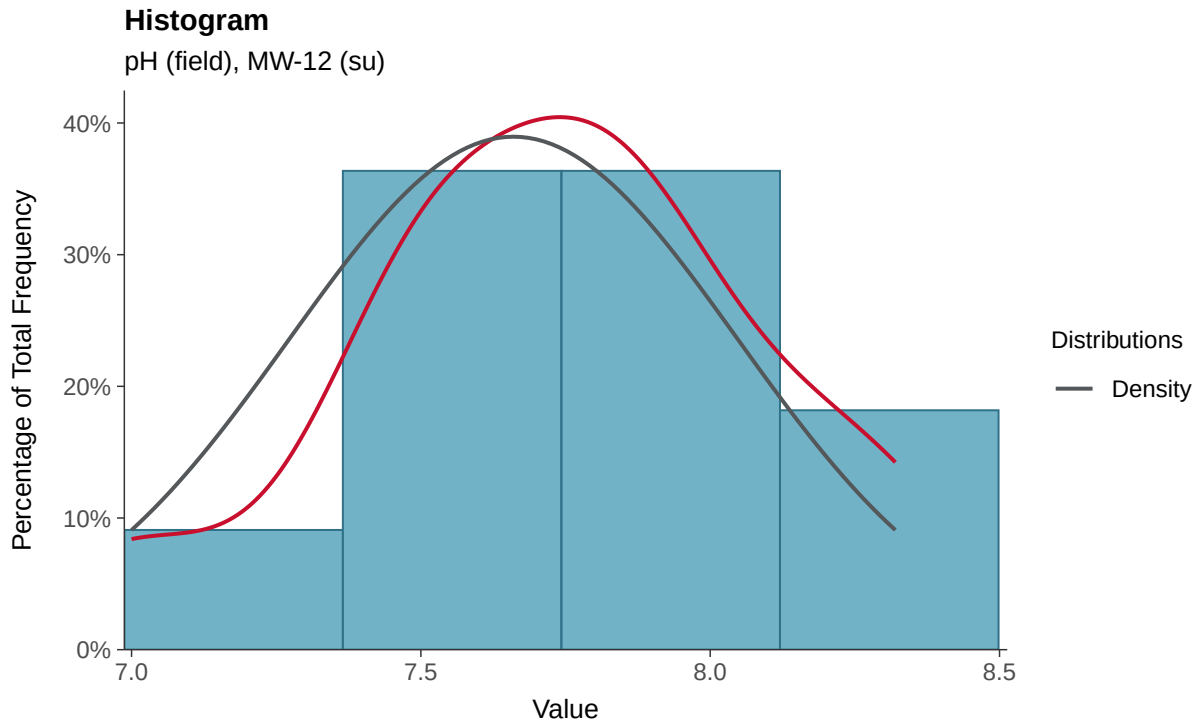
Fluoride, MW-12 (mg/L)



Appendix III: pH (field), MW-12

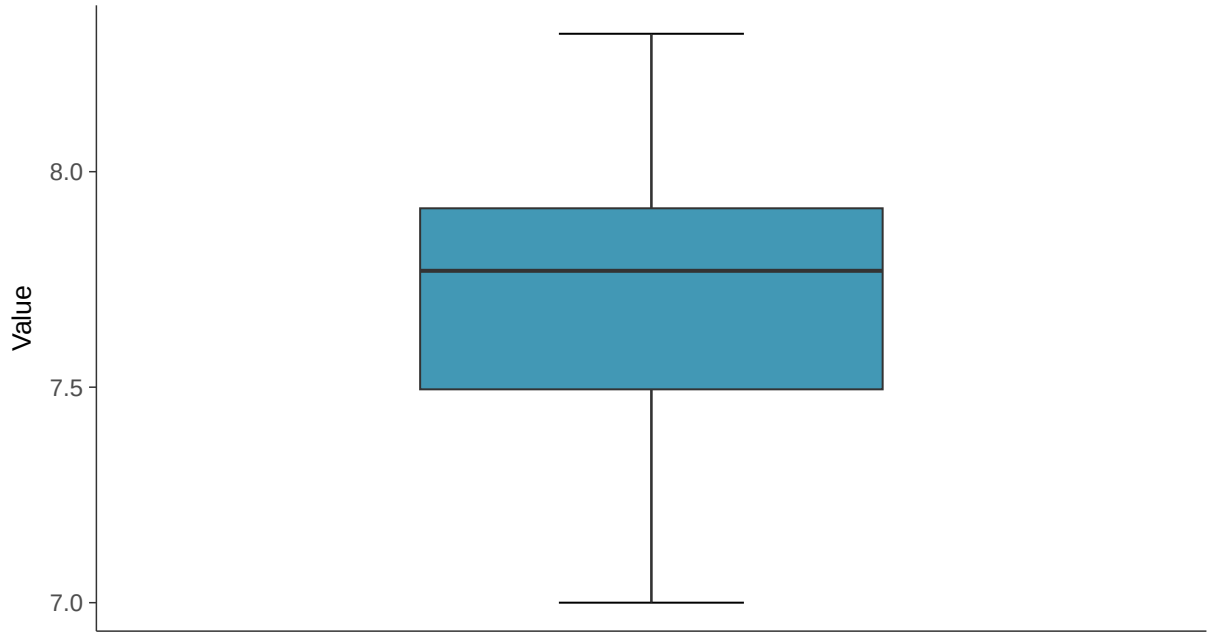
ID: 2_22_4_120





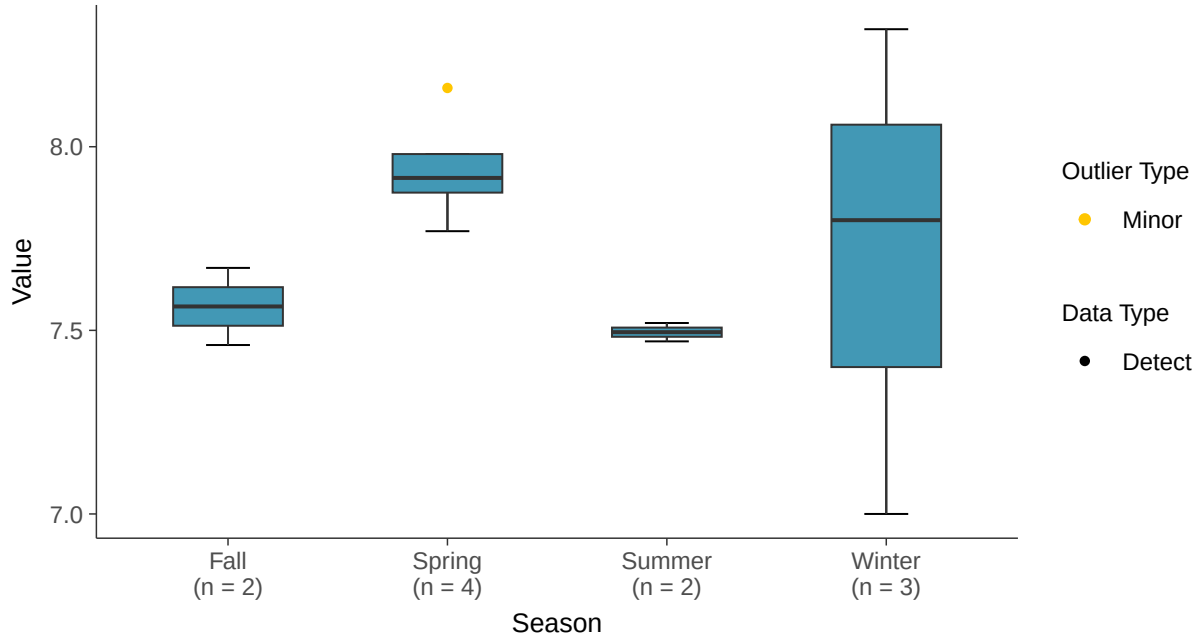
Boxplot

pH (field), MW-12 (su)



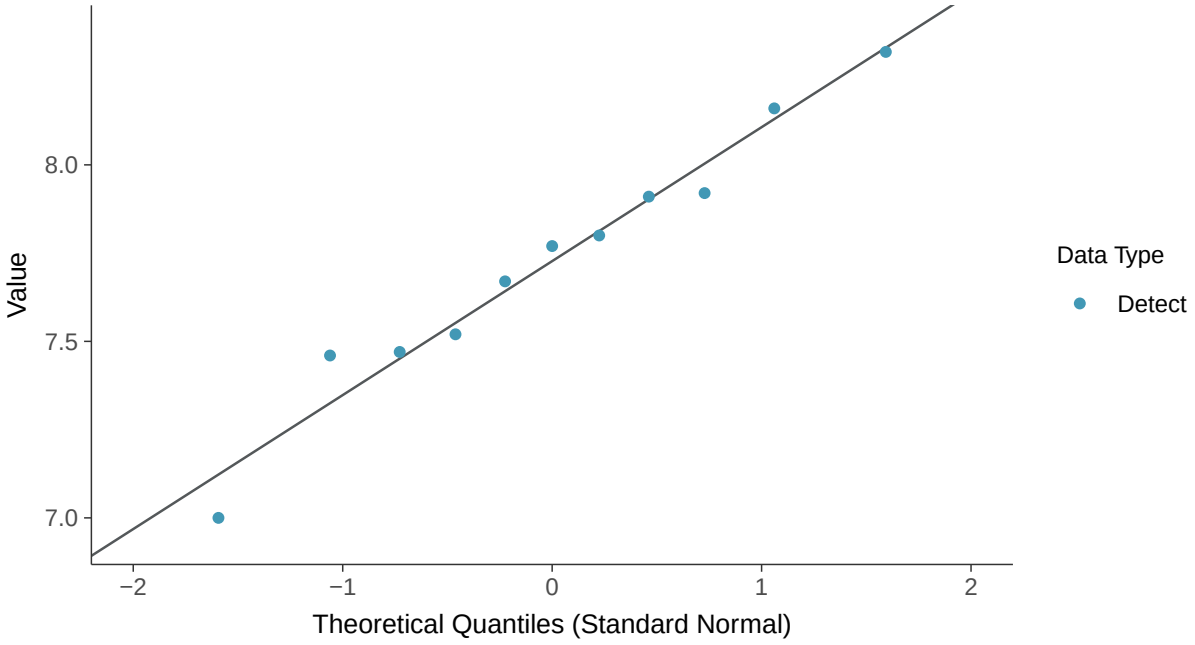
Boxplot by Season

pH (field), MW-12 (su)



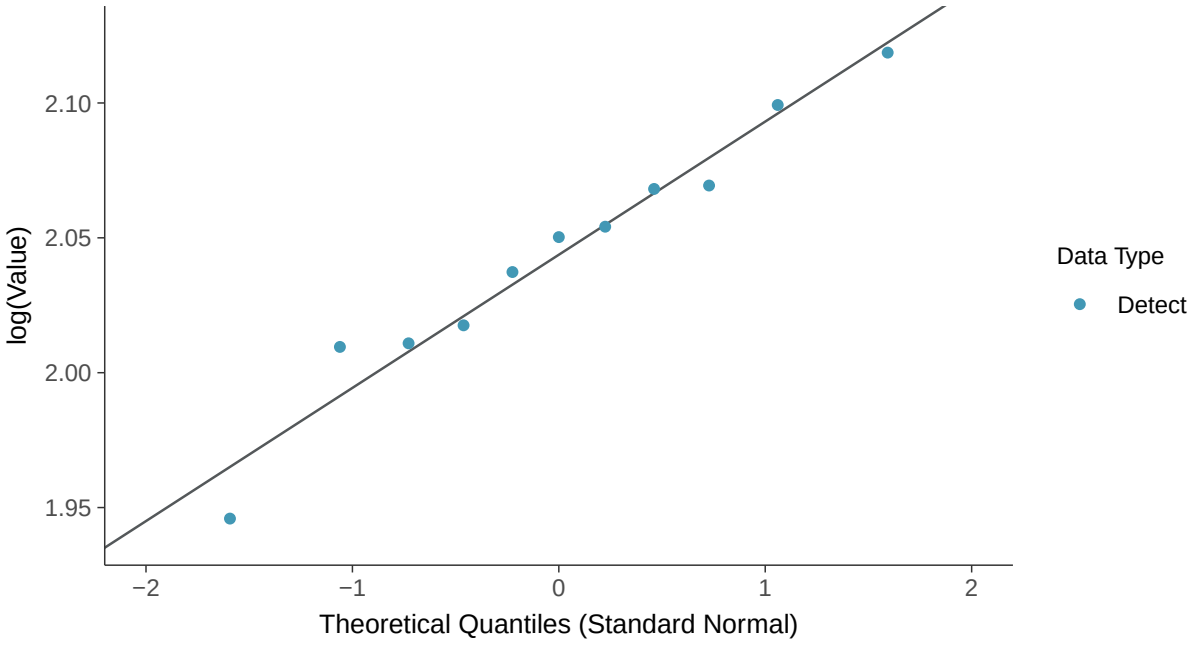
Normal Q-Q plot

pH (field), MW-12 (su)



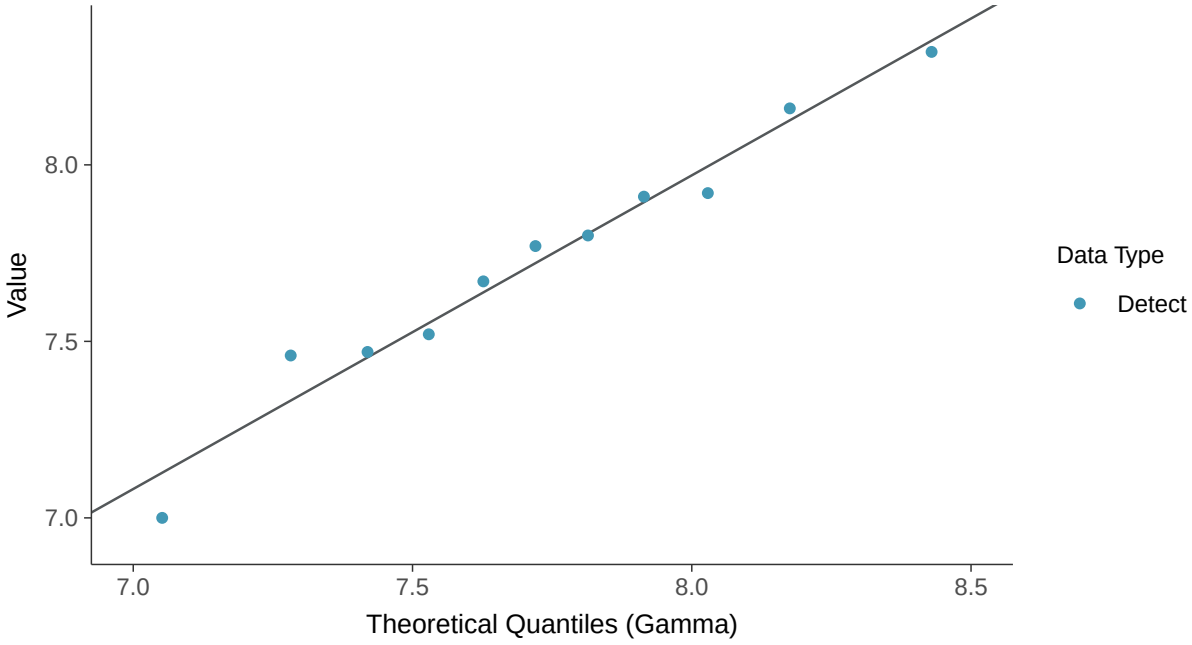
Lognormal Q-Q plot

pH (field), MW-12 (su)



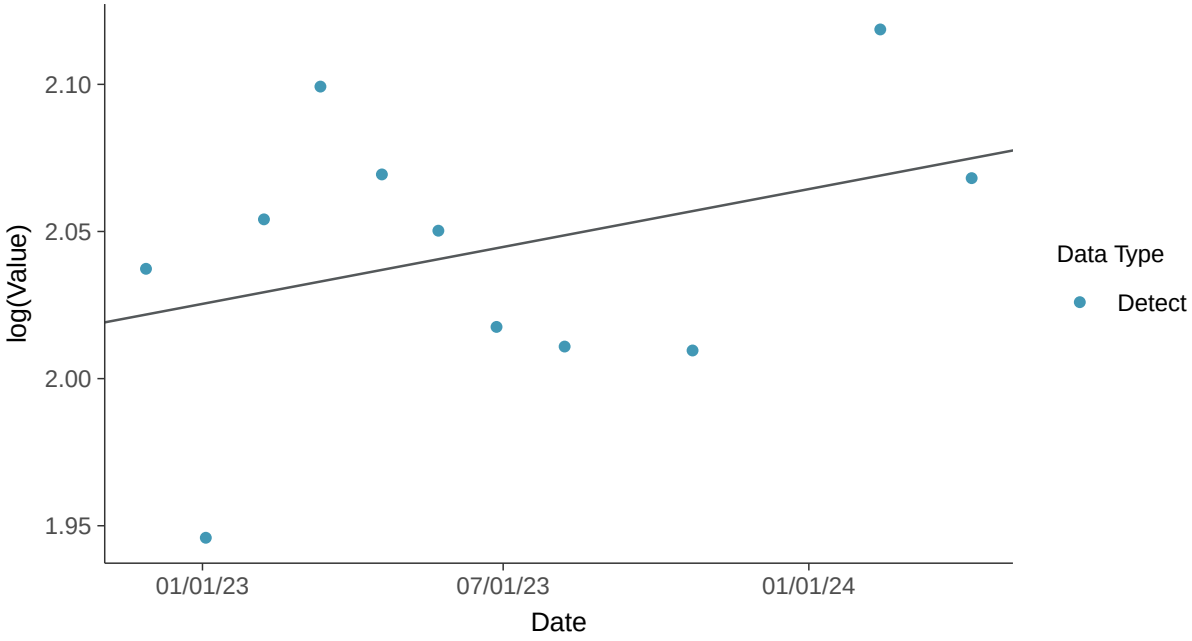
Gamma Q-Q plot

pH (field), MW-12 (su)



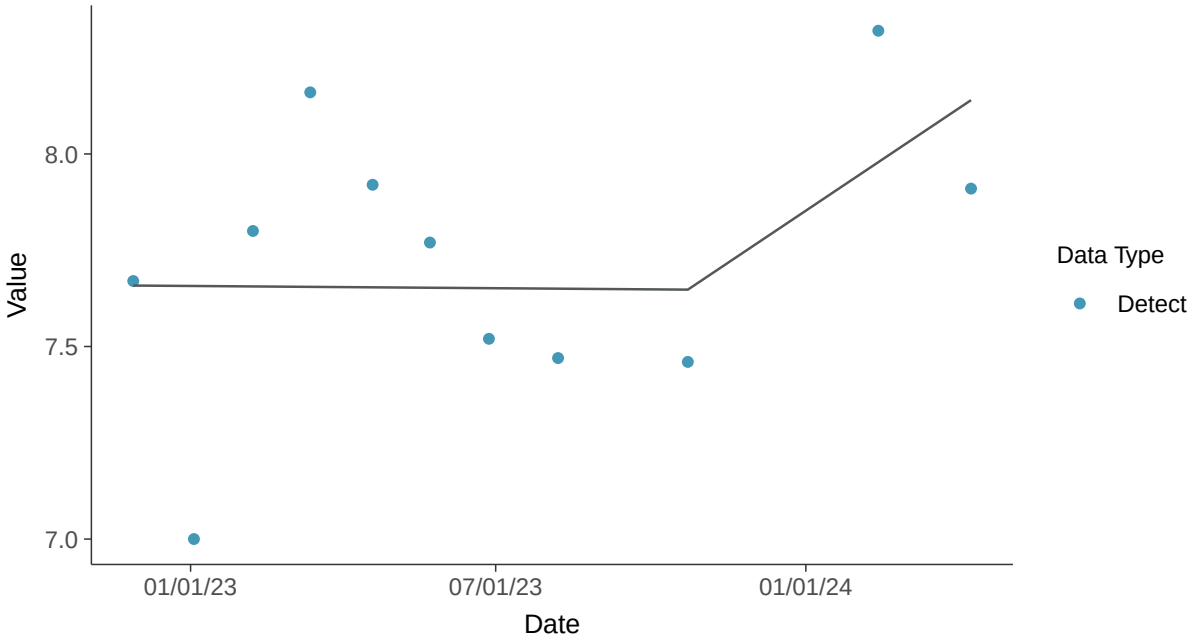
Trend Regression: Lognormal MLE

pH (field), MW-12 (su)



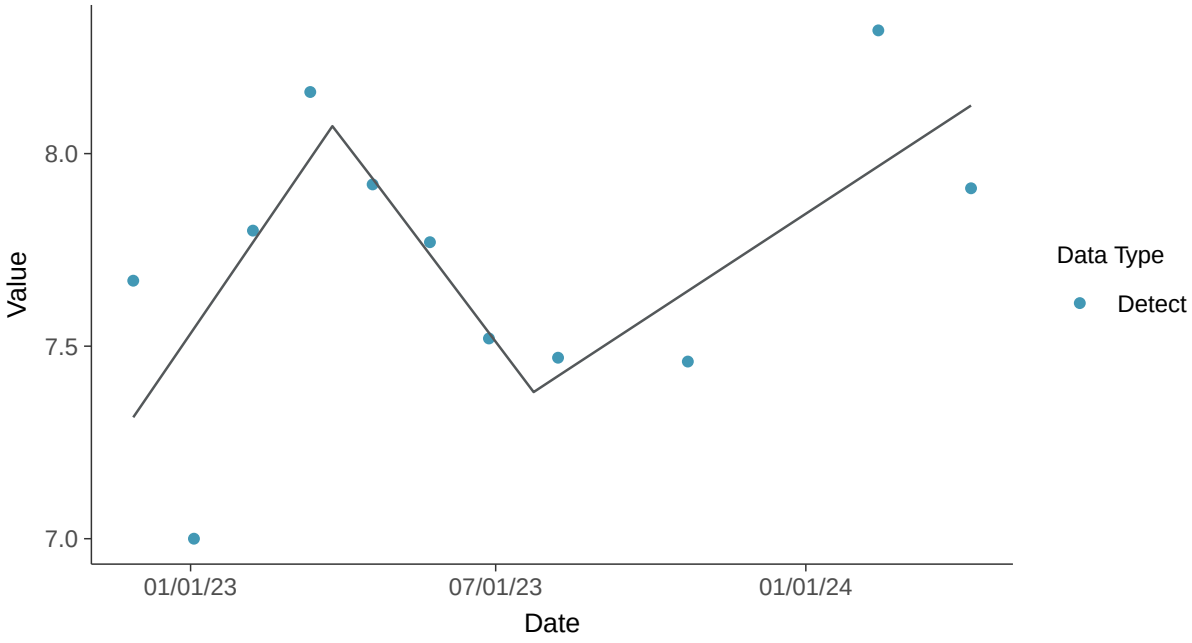
Trend Regression: Piecewise Linear-Linear

pH (field), MW-12 (su)



Trend Regression: Piecewise Linear-Linear-Linear

pH (field), MW-12 (su)

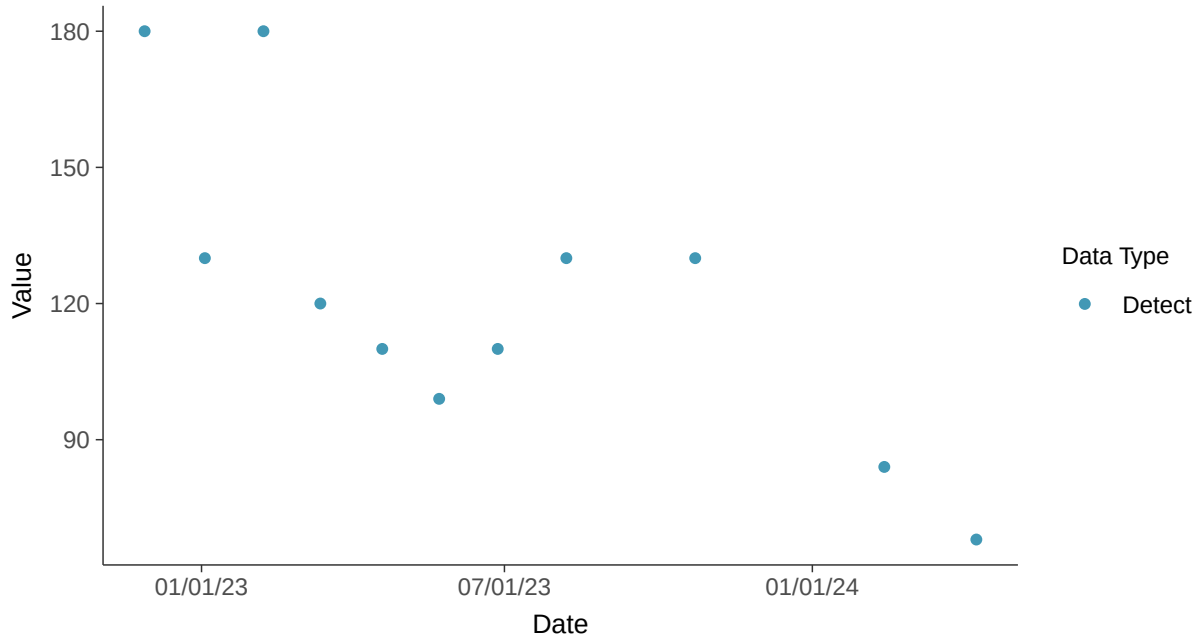


Appendix III: Sulfate (as SO4), MW-12

ID: 2_22_4_124

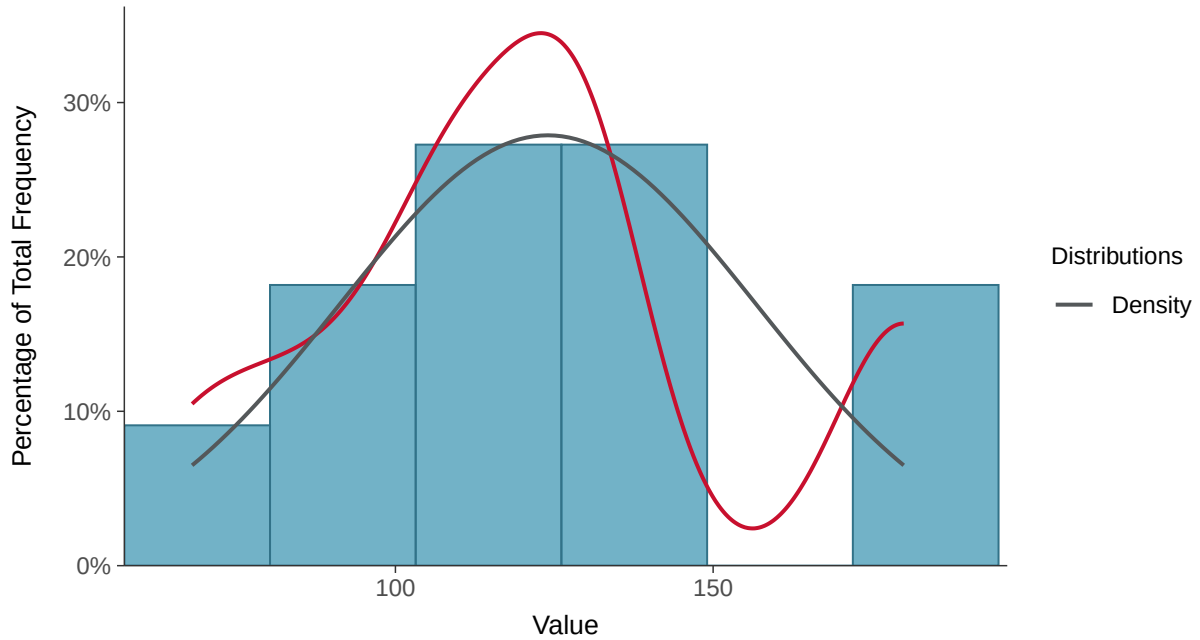
Scatter Plot

Sulfate (as SO4), MW-12 (mg/L)



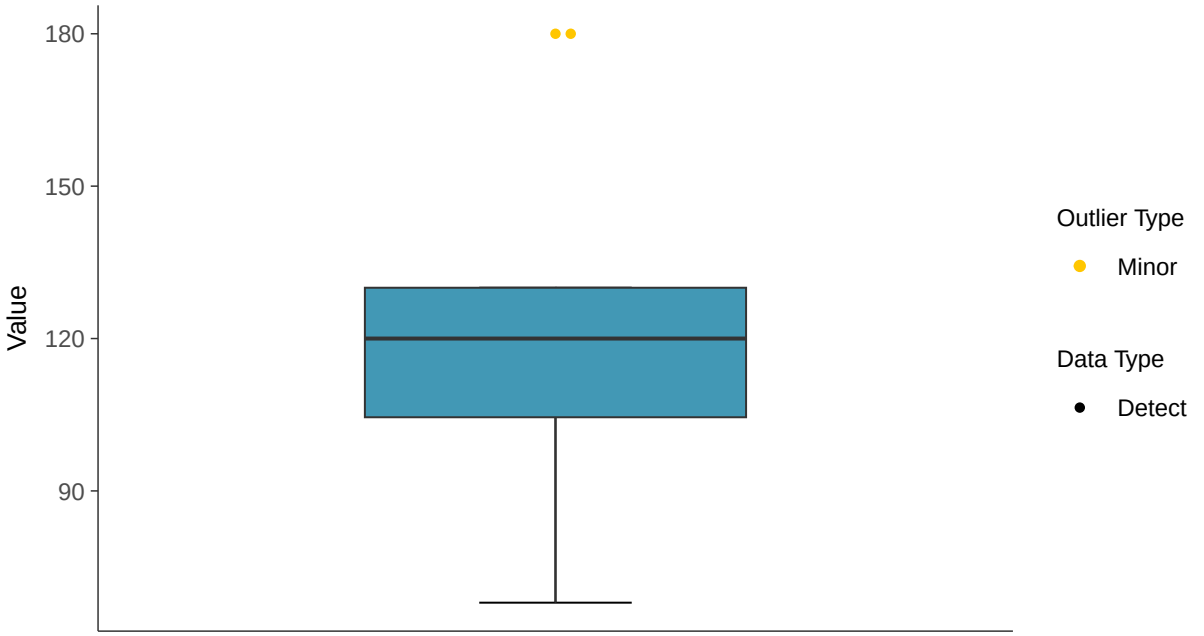
Histogram

Sulfate (as SO4), MW-12 (mg/L)



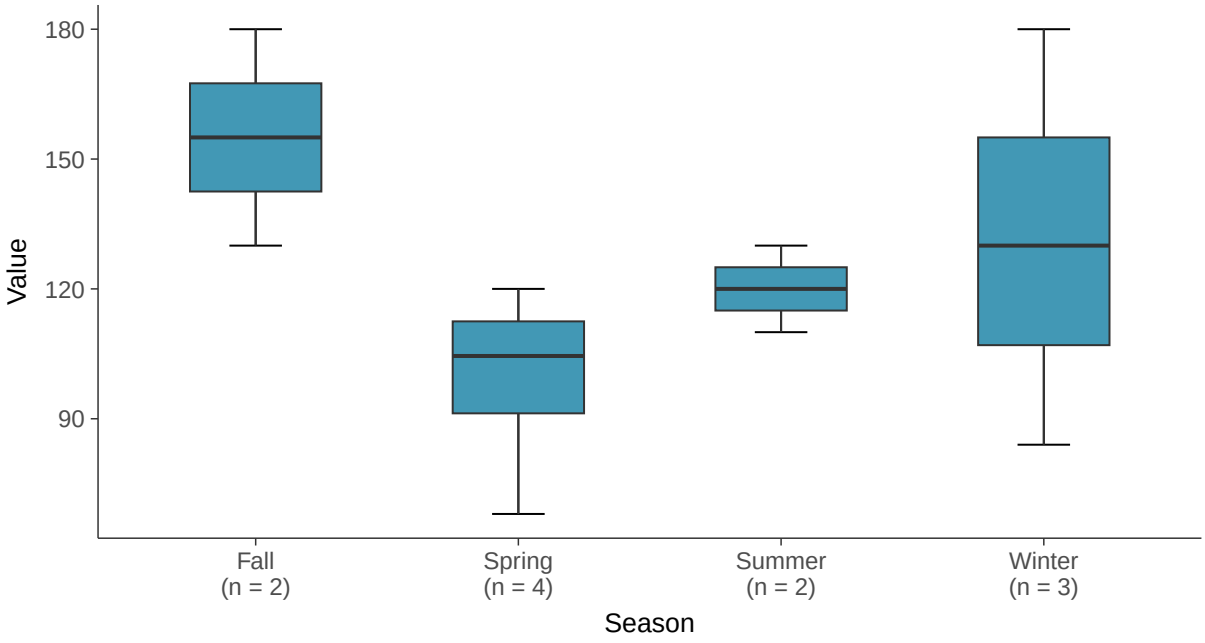
Boxplot

Sulfate (as SO4), MW-12 (mg/L)



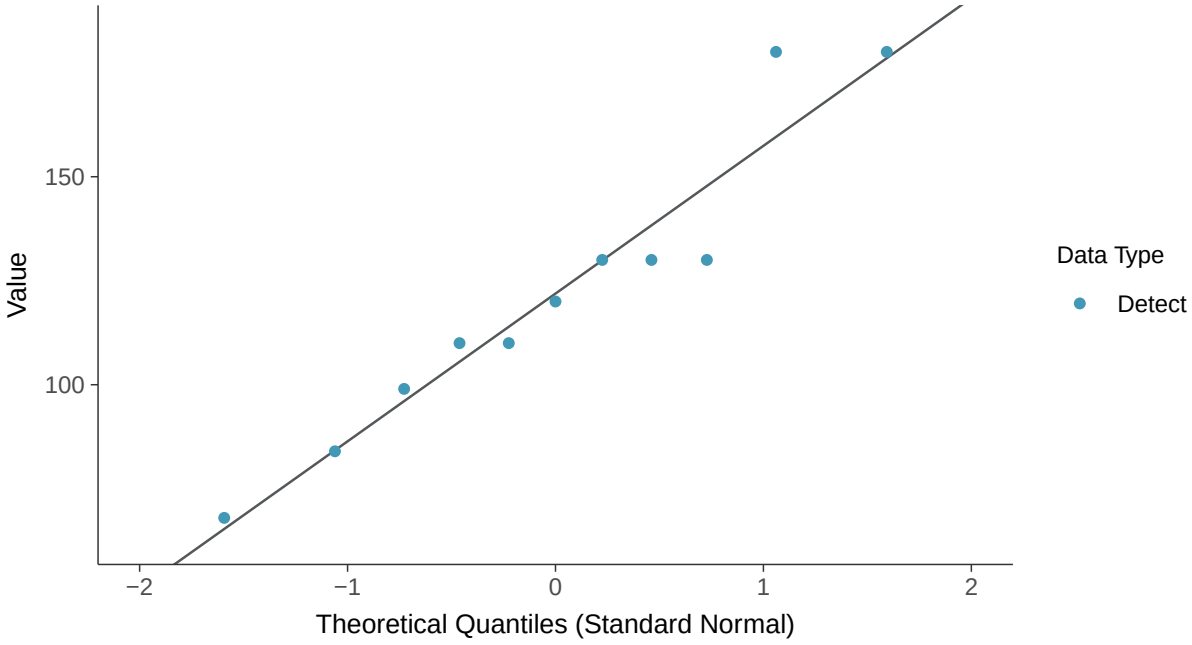
Boxplot by Season

Sulfate (as SO4), MW-12 (mg/L)



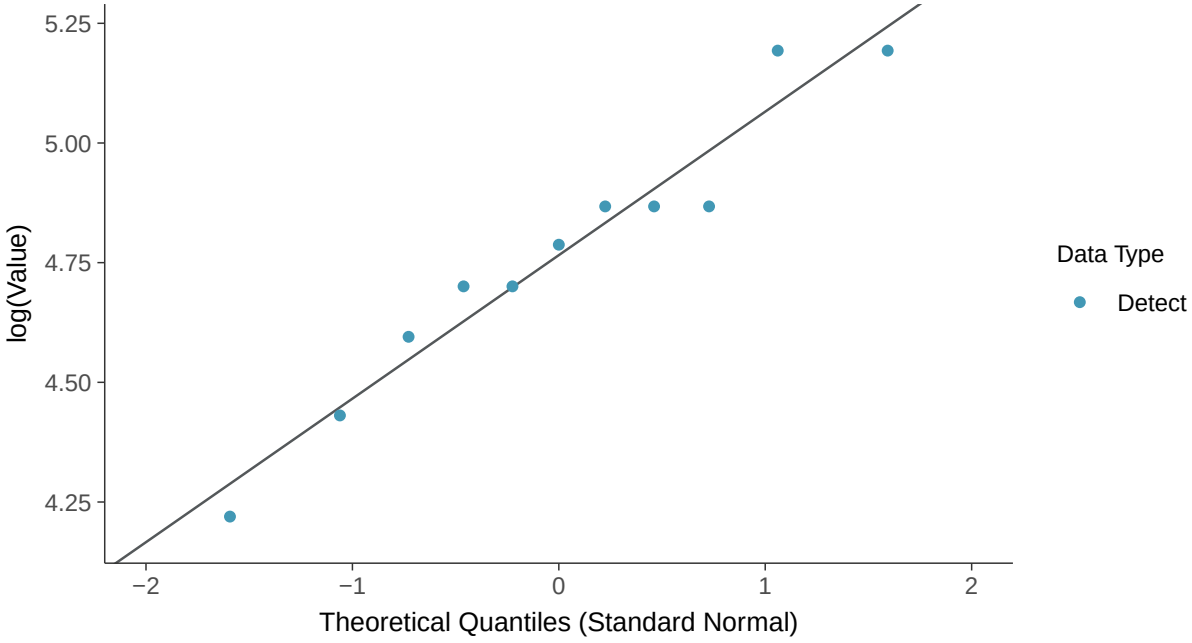
Normal Q-Q plot

Sulfate (as SO4), MW-12 (mg/L)



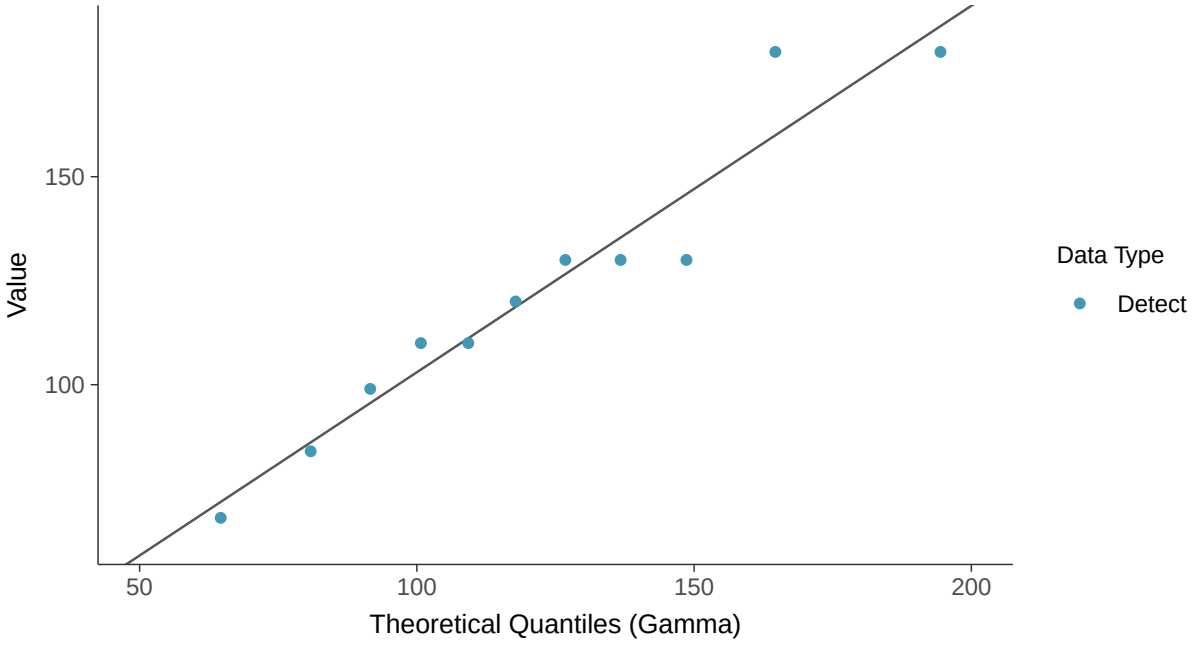
Lognormal Q-Q plot

Sulfate (as SO4), MW-12 (mg/L)



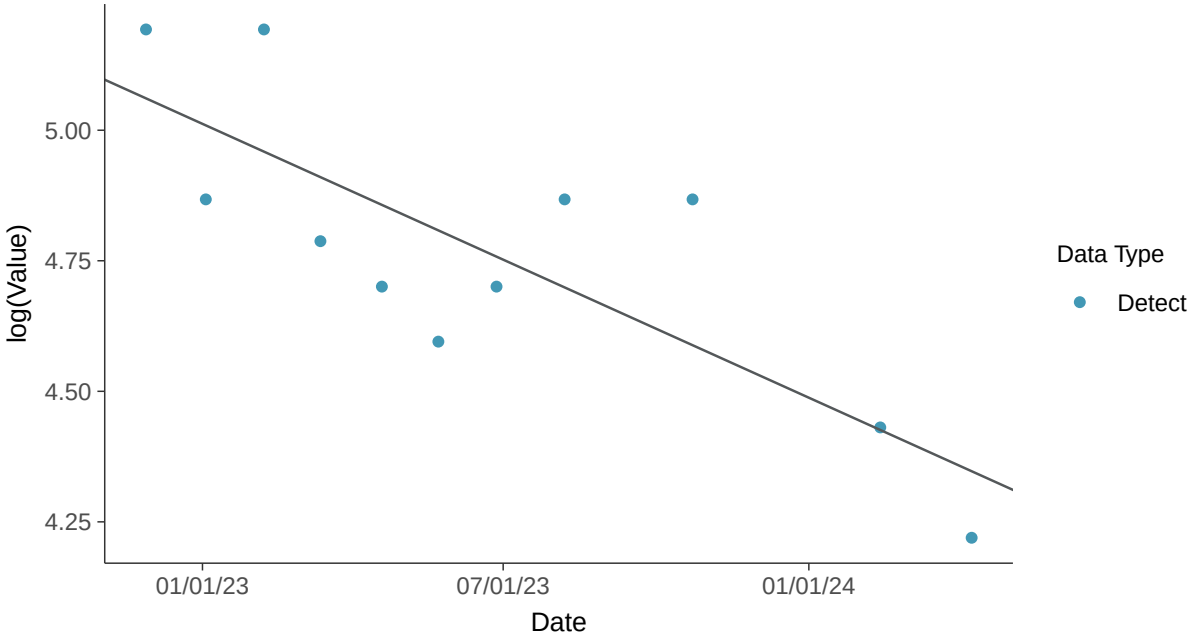
Gamma Q-Q plot

Sulfate (as SO4), MW-12 (mg/L)



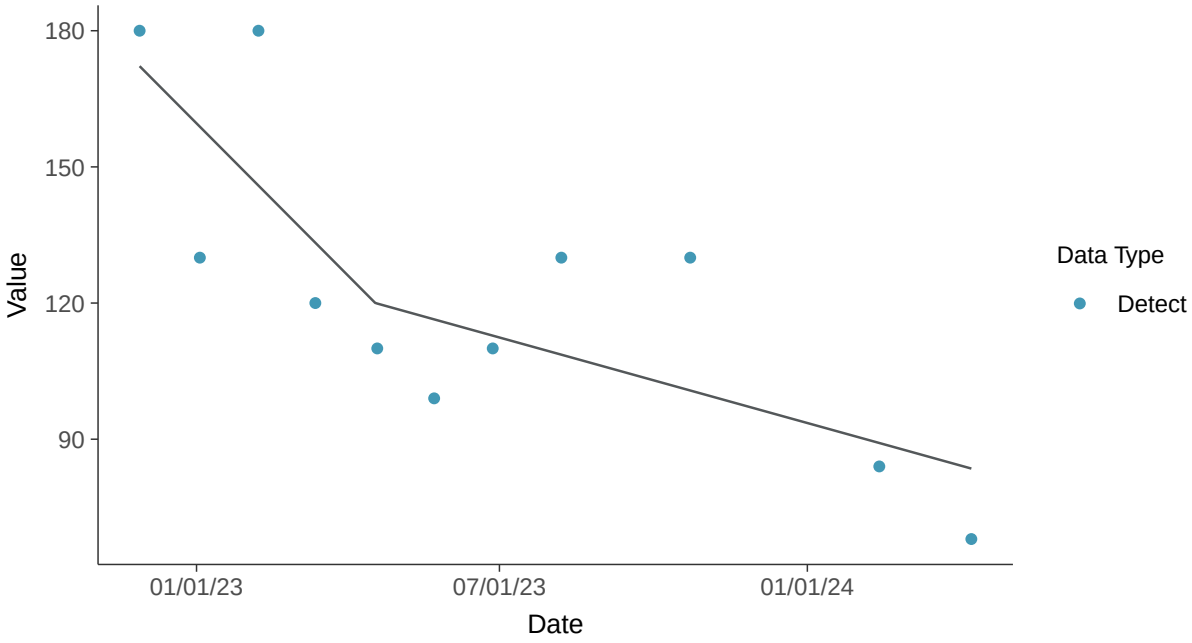
Trend Regression: Lognormal MLE

Sulfate (as SO4), MW-12 (mg/L)



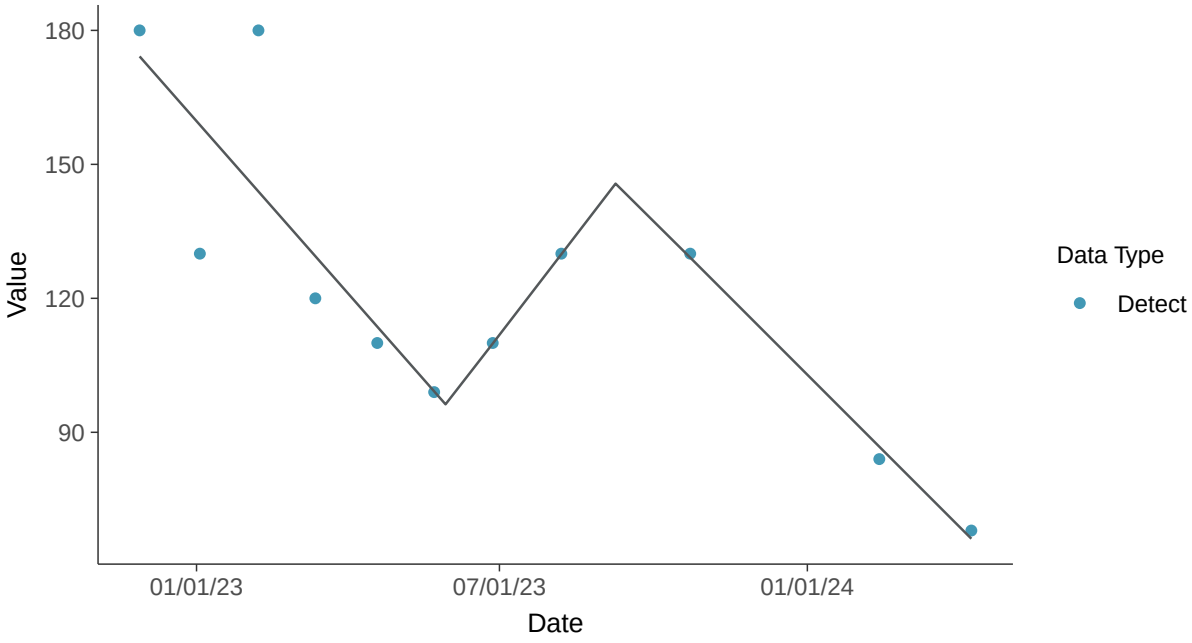
Trend Regression: Piecewise Linear-Linear

Sulfate (as SO4), MW-12 (mg/L)



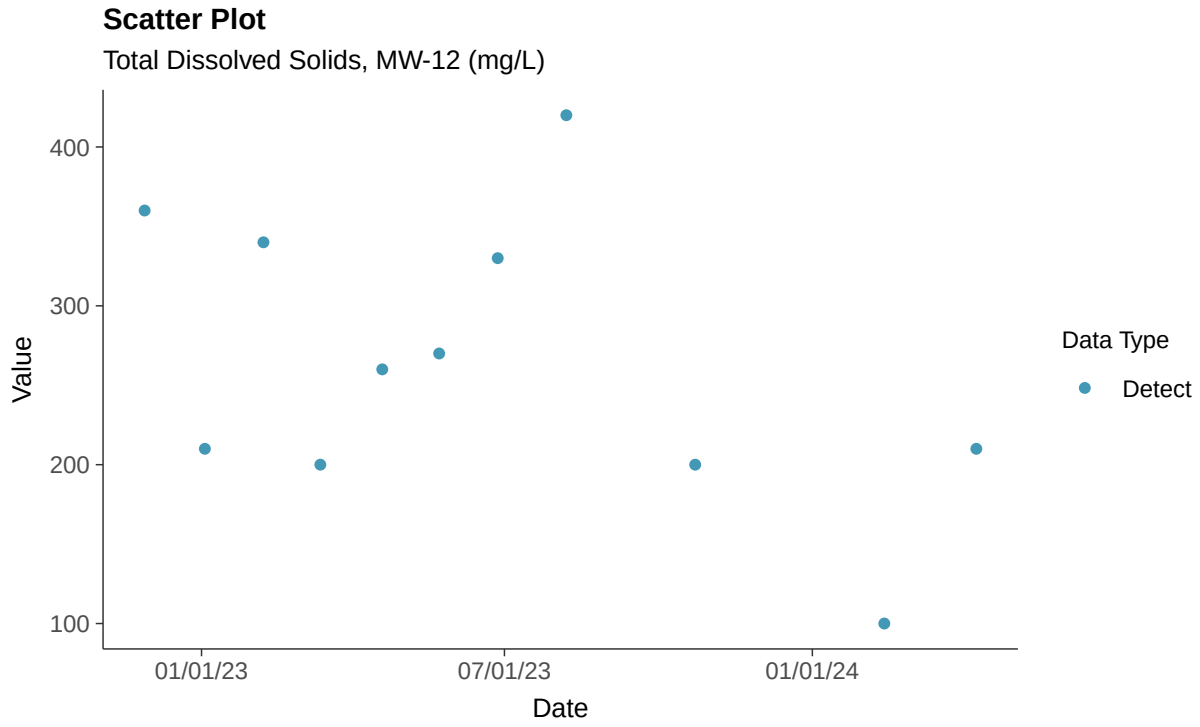
Trend Regression: Piecewise Linear-Linear-Linear

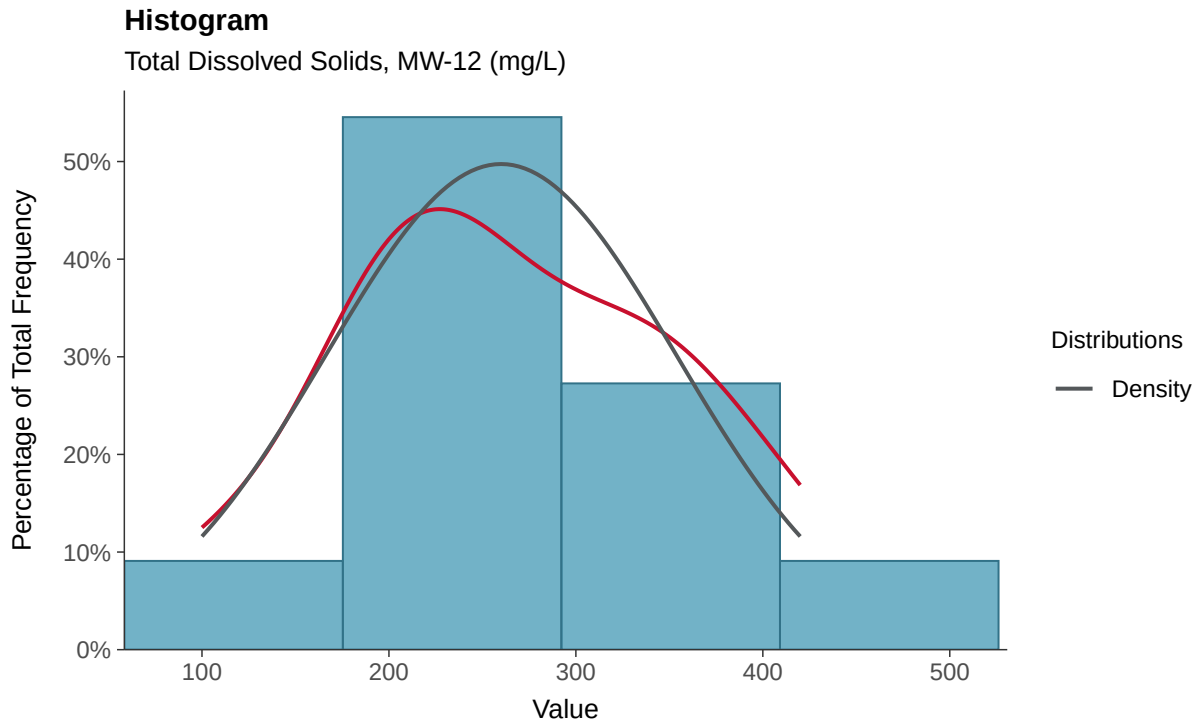
Sulfate (as SO4), MW-12 (mg/L)



Appendix III: Total Dissolved Solids, MW-12

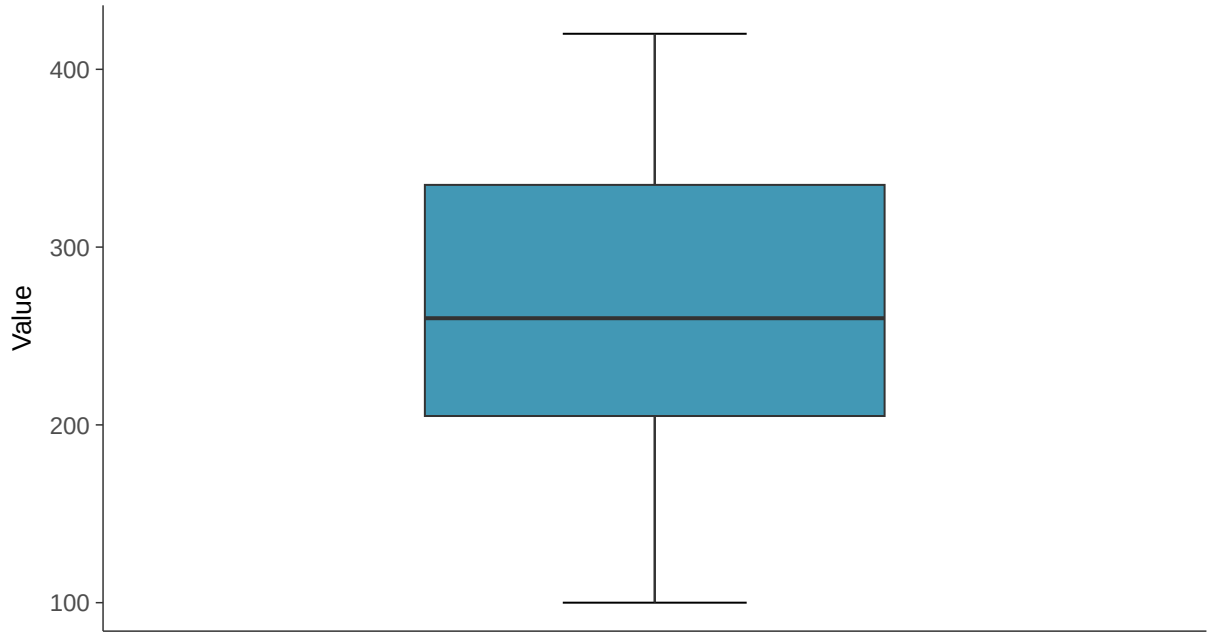
ID: 2_22_4_126





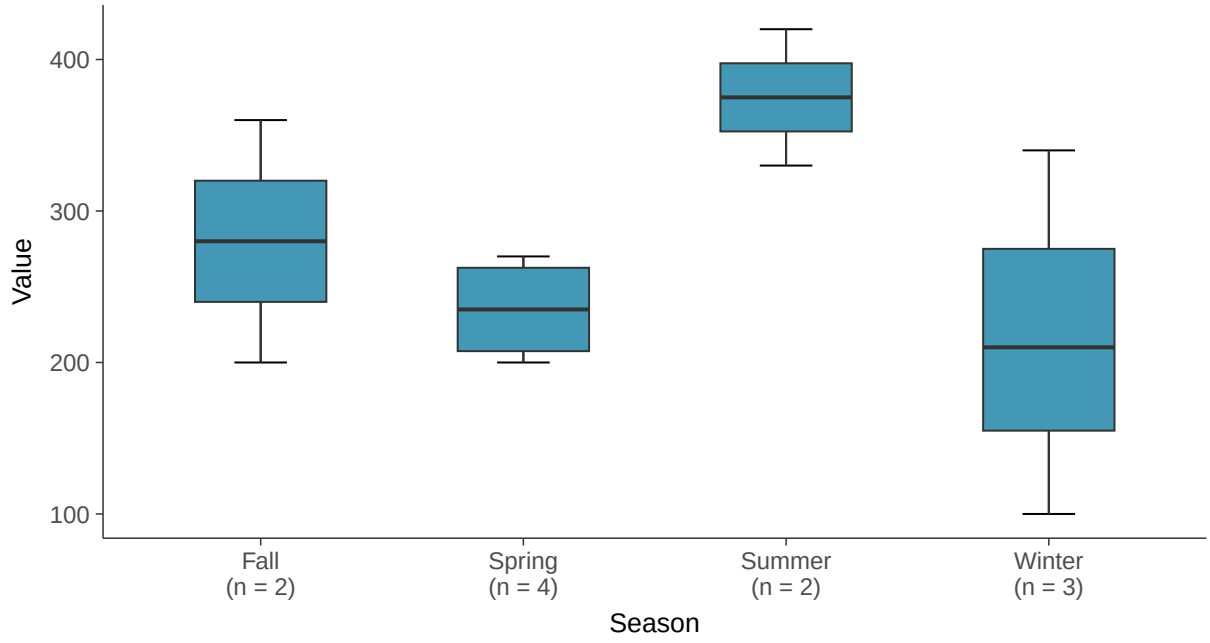
Boxplot

Total Dissolved Solids, MW-12 (mg/L)



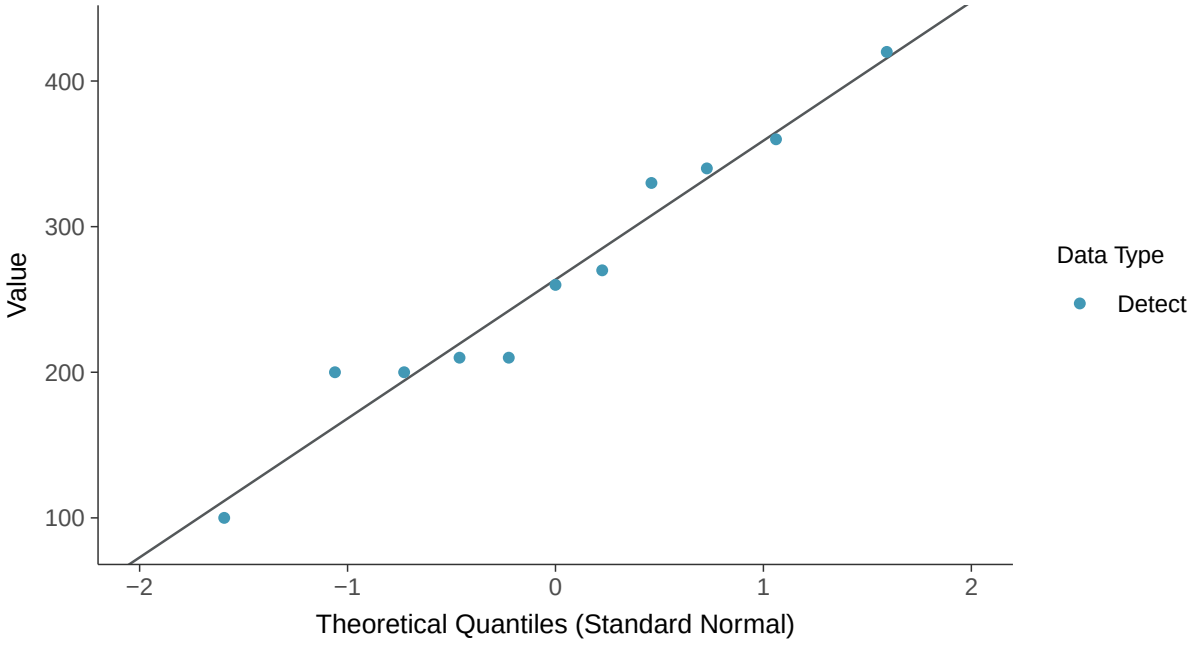
Boxplot by Season

Total Dissolved Solids, MW-12 (mg/L)



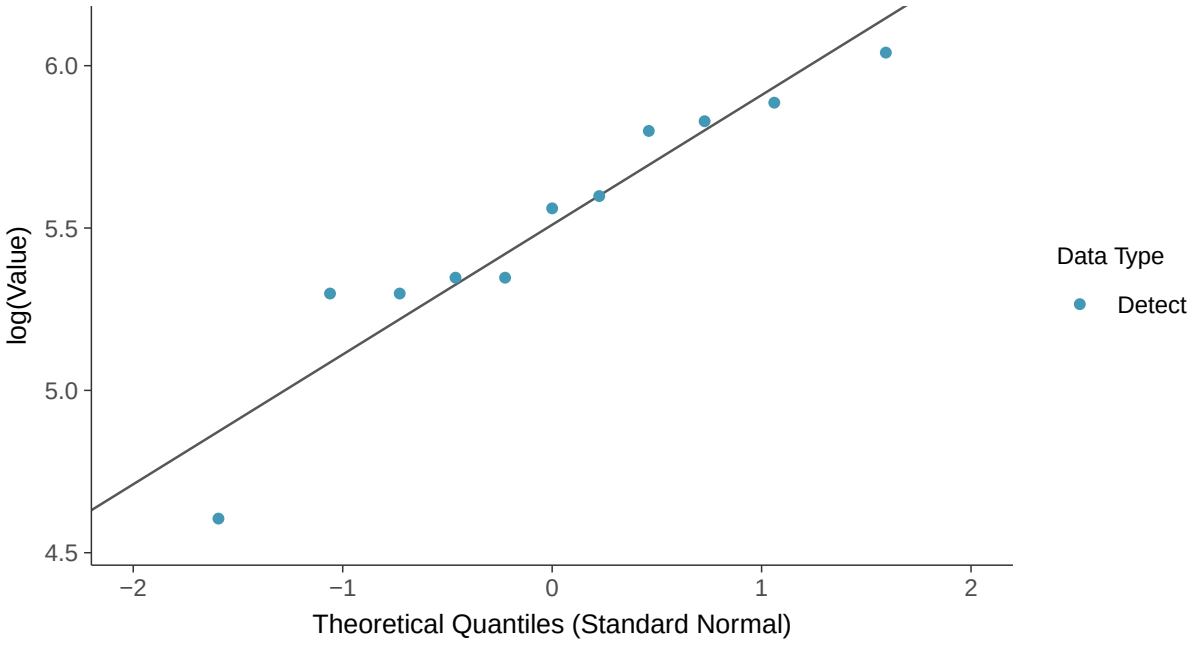
Normal Q-Q plot

Total Dissolved Solids, MW-12 (mg/L)



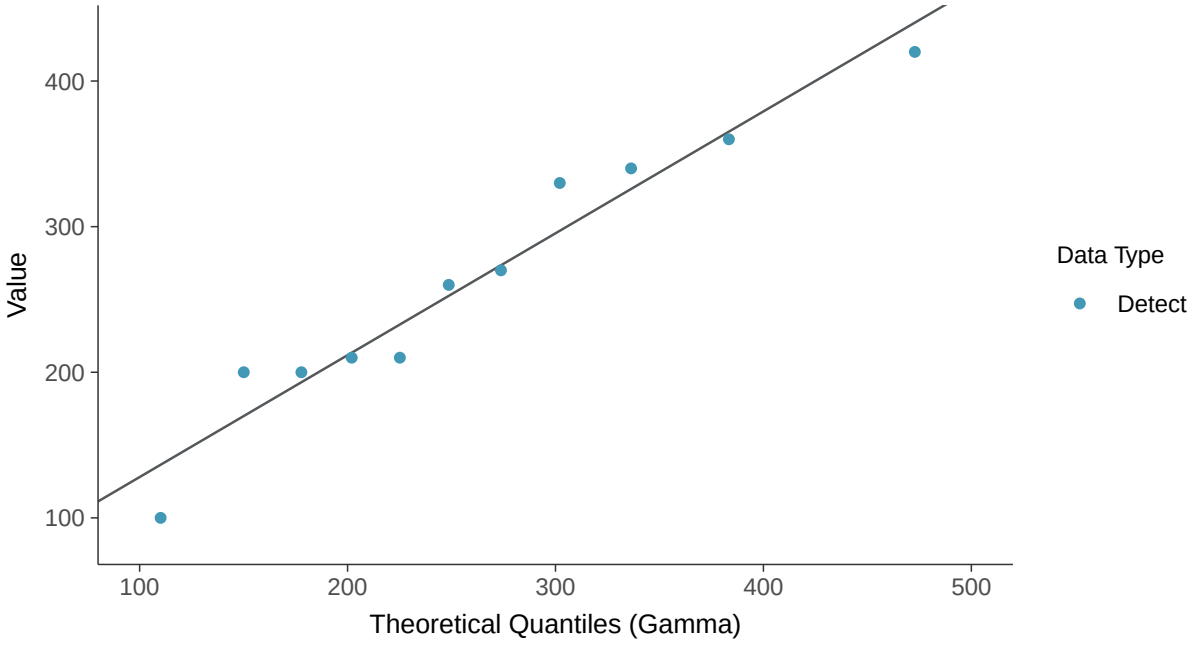
Lognormal Q-Q plot

Total Dissolved Solids, MW-12 (mg/L)



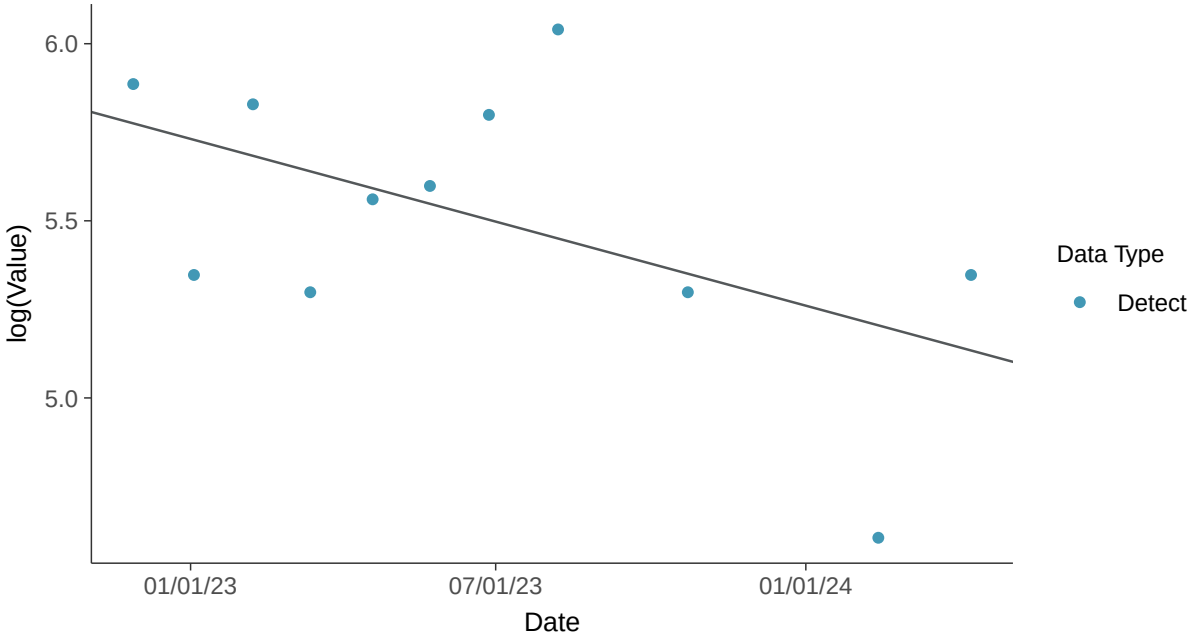
Gamma Q-Q plot

Total Dissolved Solids, MW-12 (mg/L)



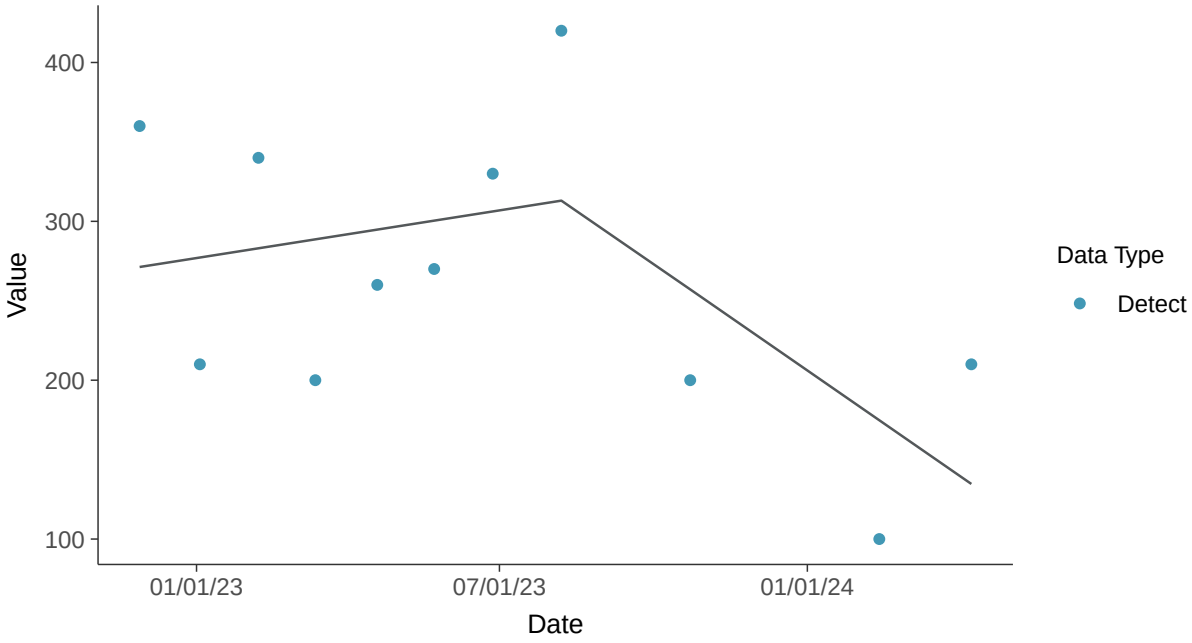
Trend Regression: Lognormal MLE

Total Dissolved Solids, MW-12 (mg/L)



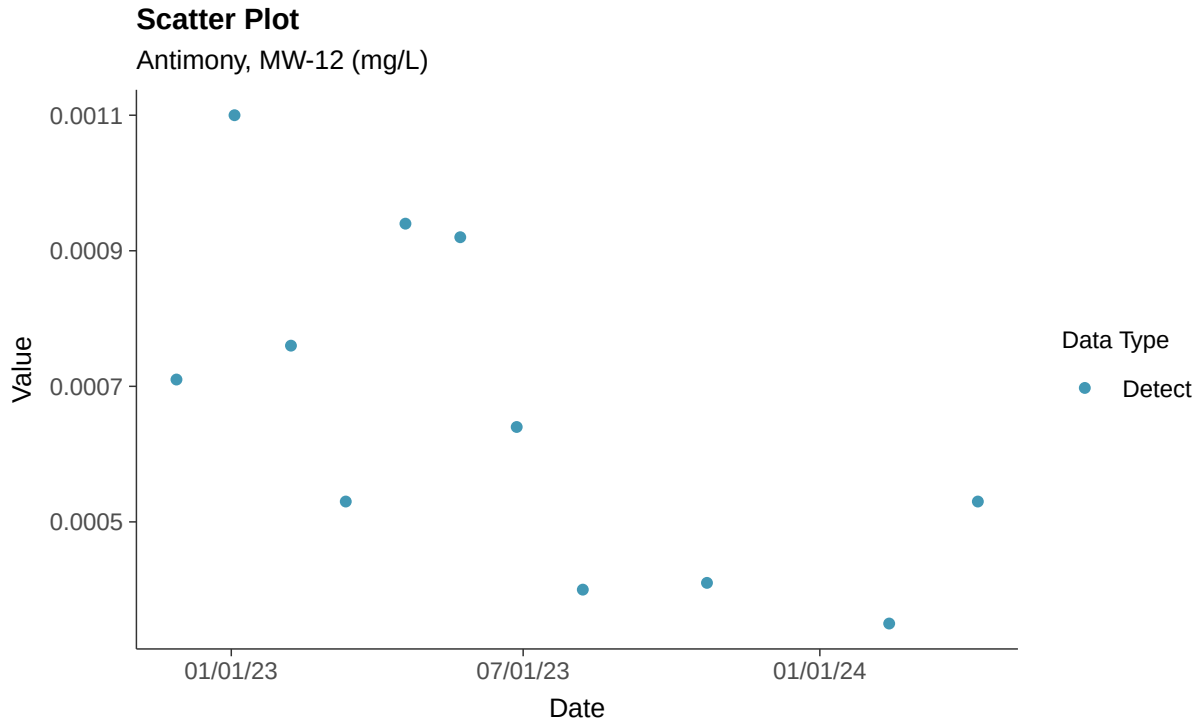
Trend Regression: Piecewise Linear-Linear

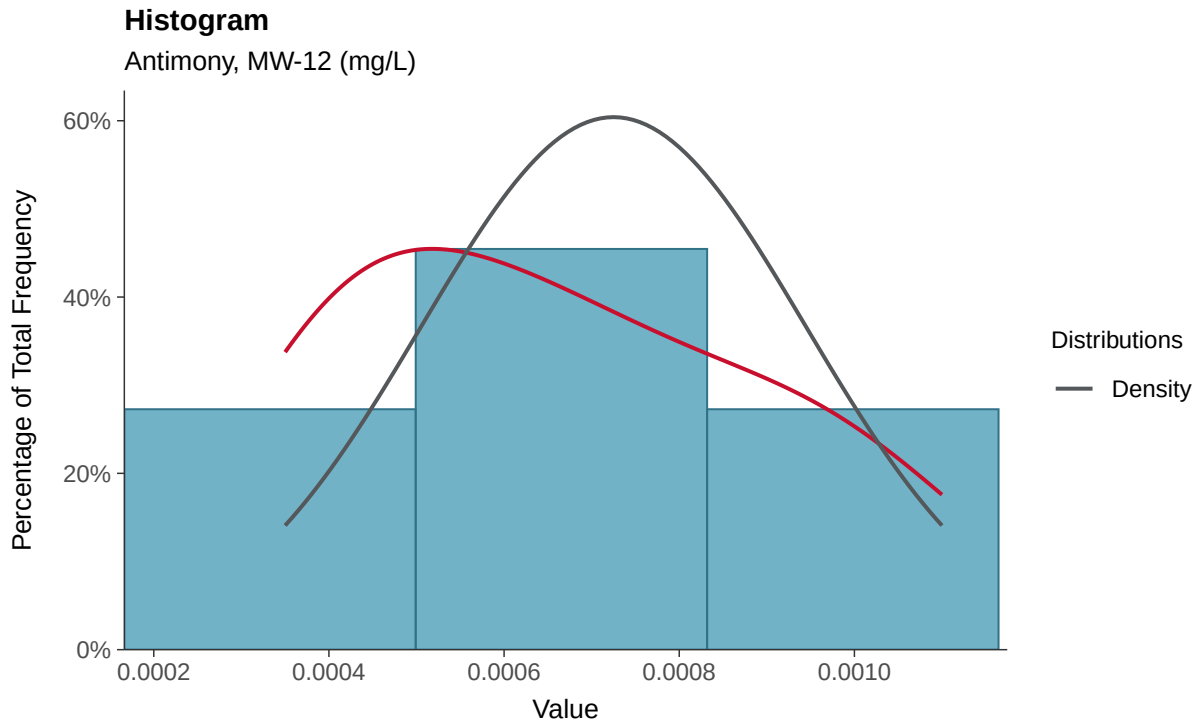
Total Dissolved Solids, MW-12 (mg/L)



Appendix IV: Antimony, MW-12

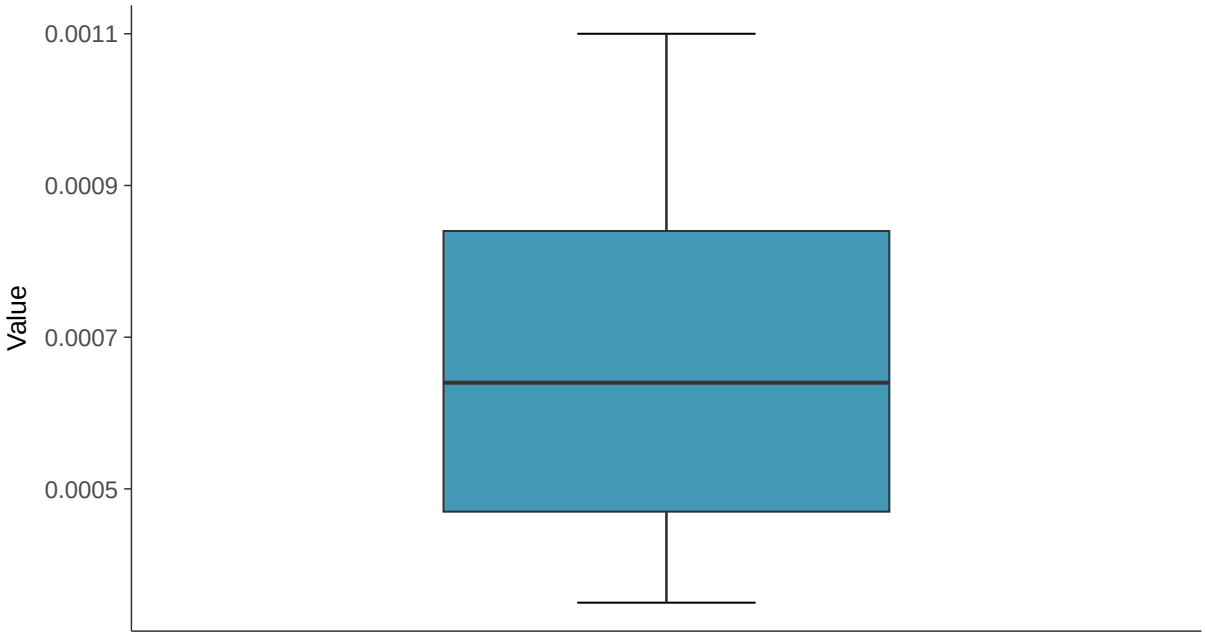
ID: 2_22_5_101





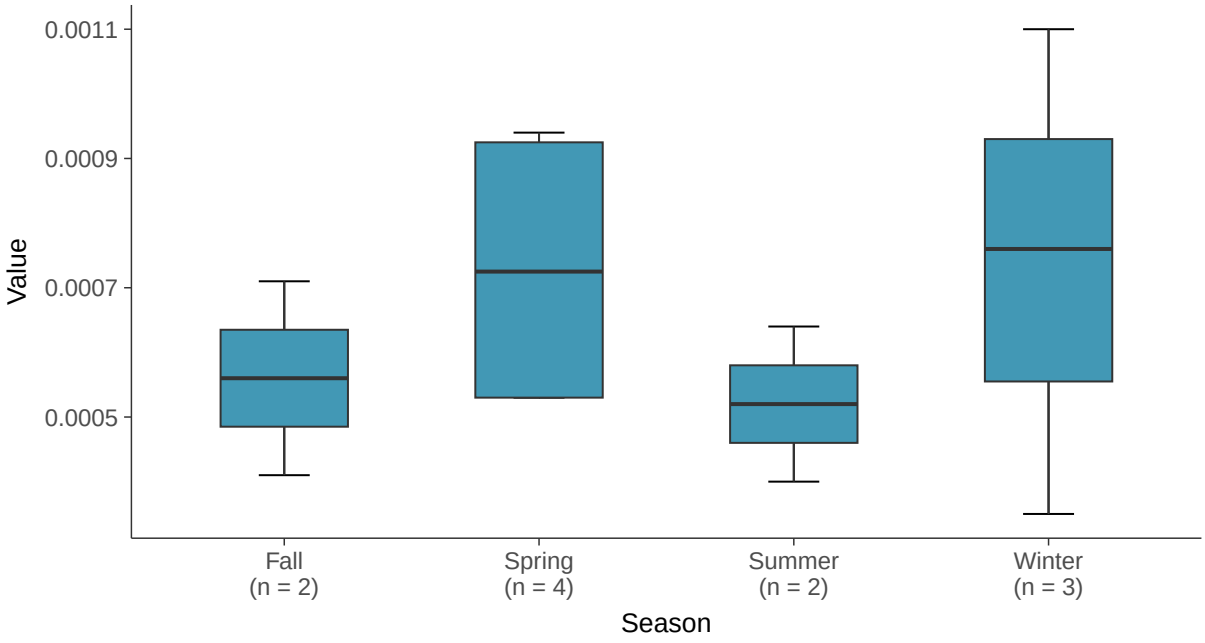
Boxplot

Antimony, MW-12 (mg/L)



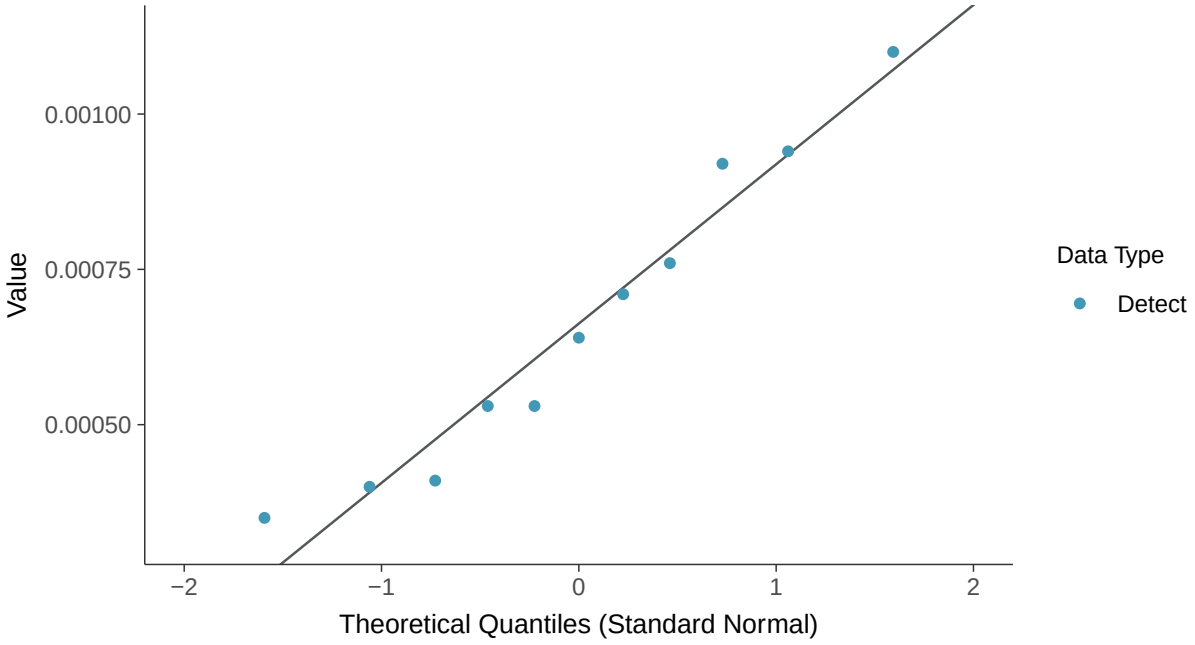
Boxplot by Season

Antimony, MW-12 (mg/L)



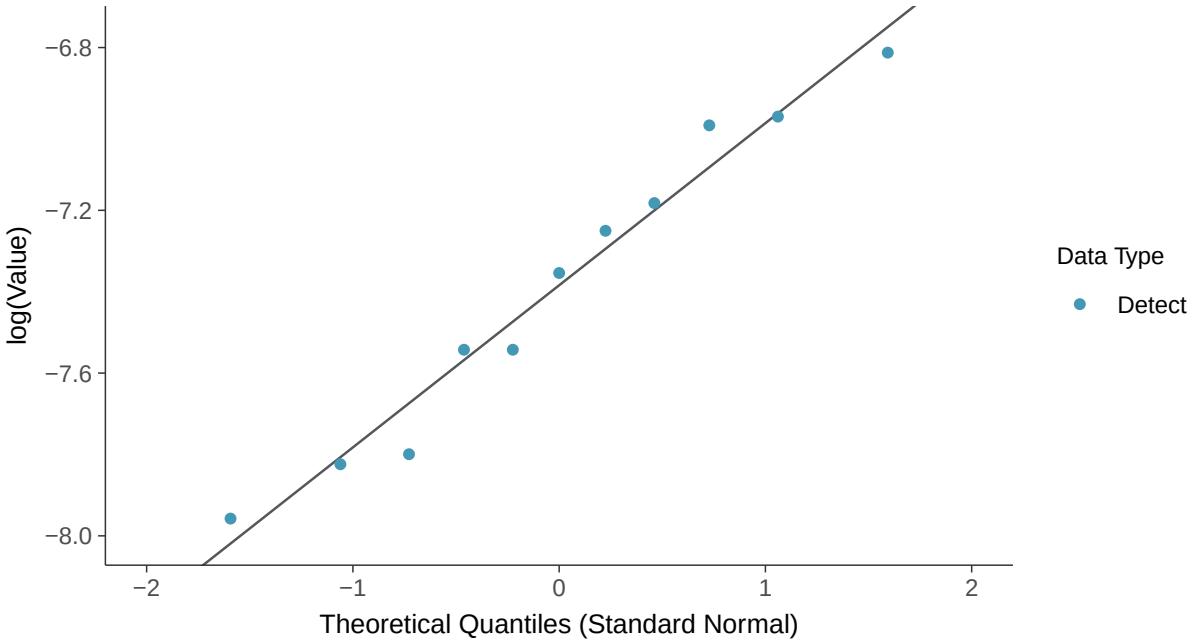
Normal Q-Q plot

Antimony, MW-12 (mg/L)



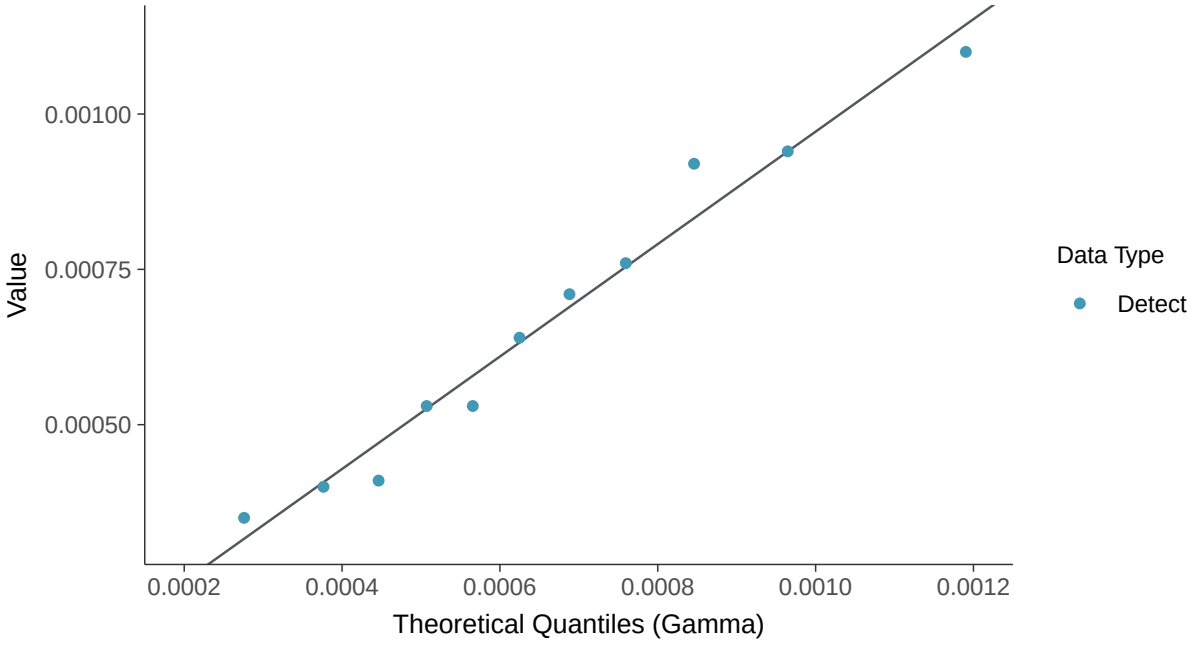
Lognormal Q-Q plot

Antimony, MW-12 (mg/L)



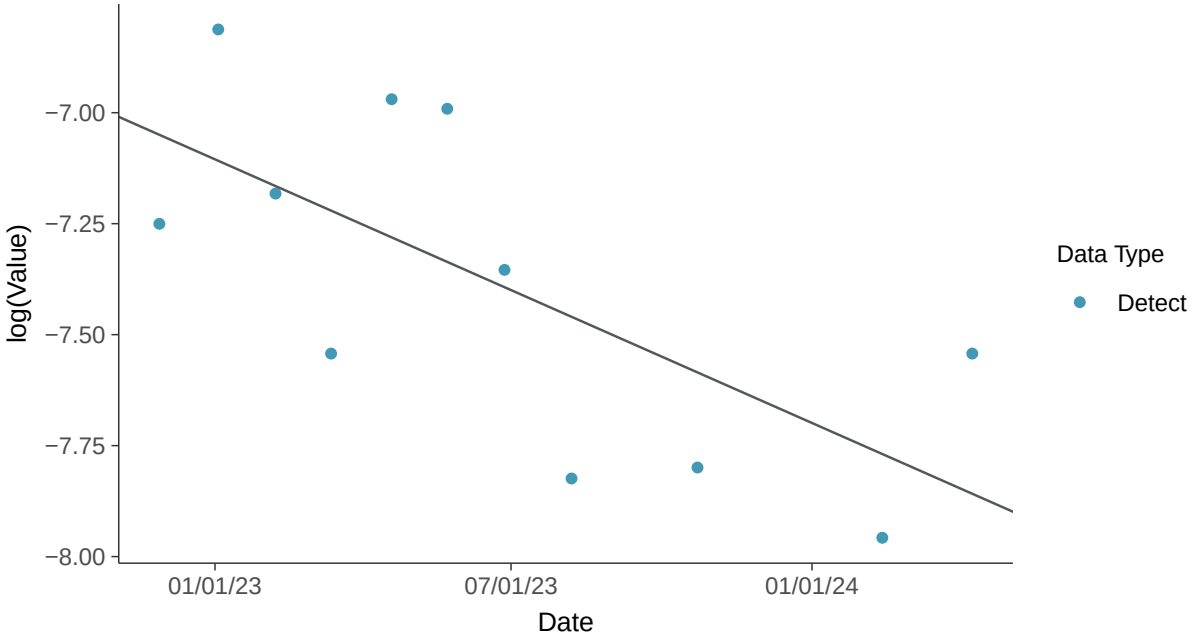
Gamma Q-Q plot

Antimony, MW-12 (mg/L)



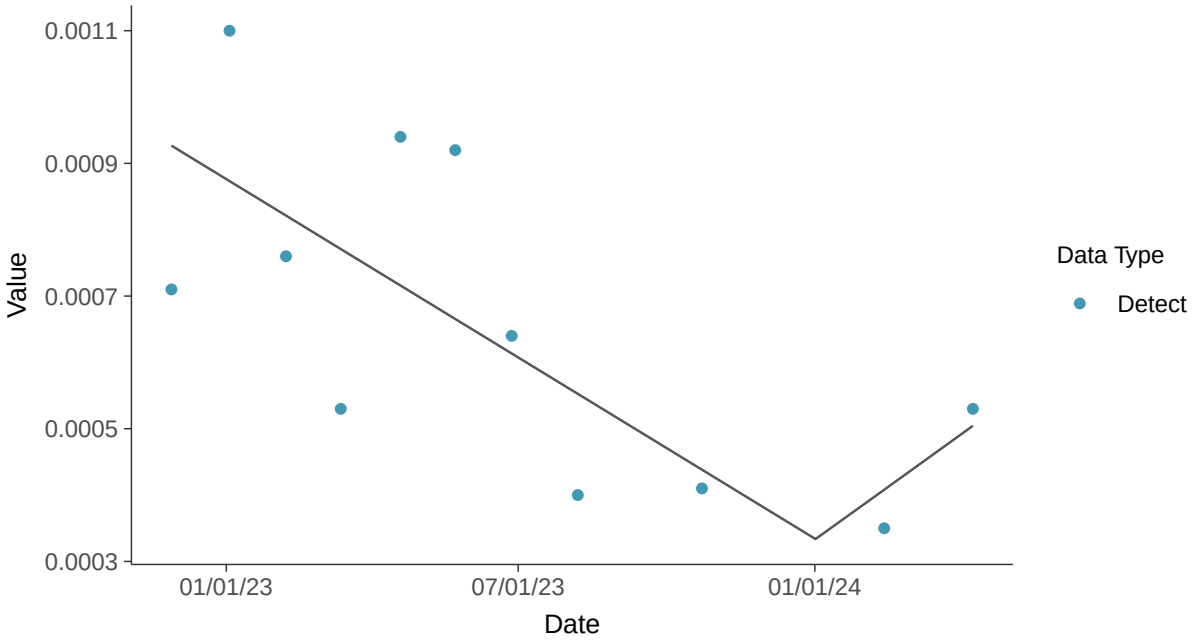
Trend Regression: Lognormal MLE

Antimony, MW-12 (mg/L)



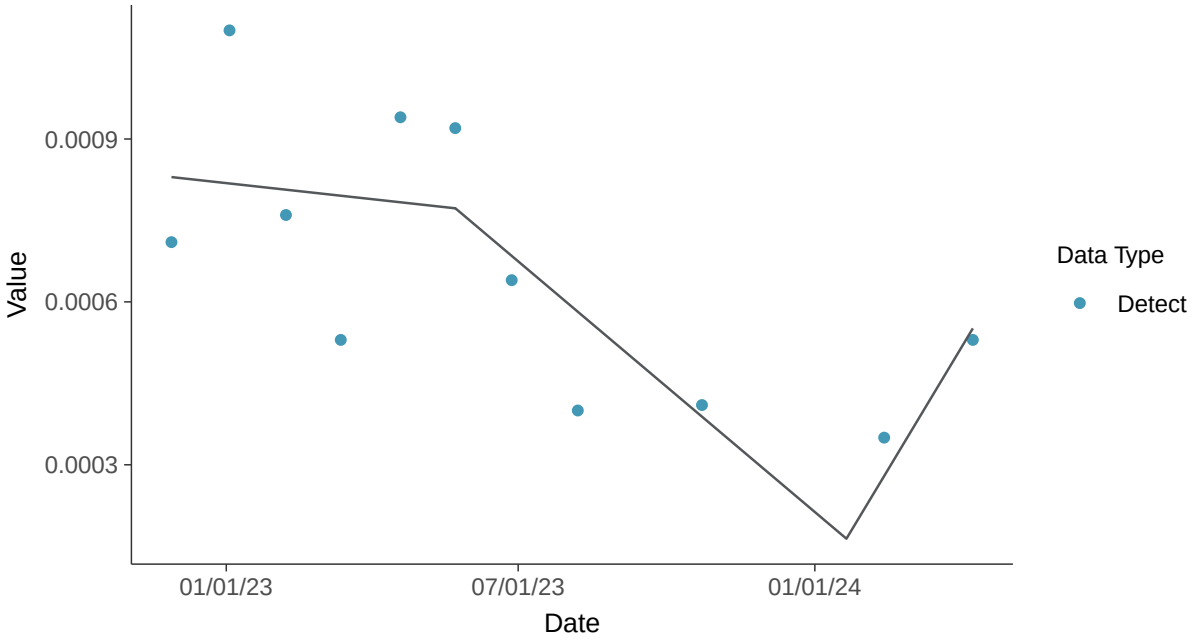
Trend Regression: Piecewise Linear-Linear

Antimony, MW-12 (mg/L)



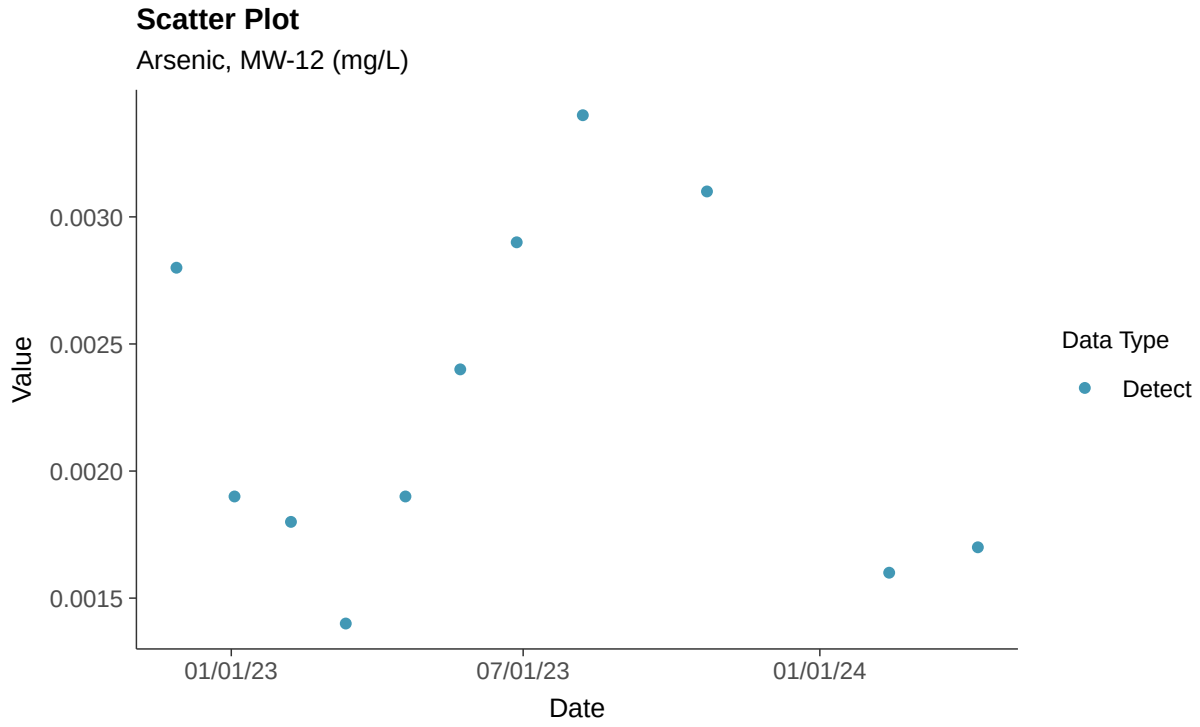
Trend Regression: Piecewise Linear-Linear-Linear

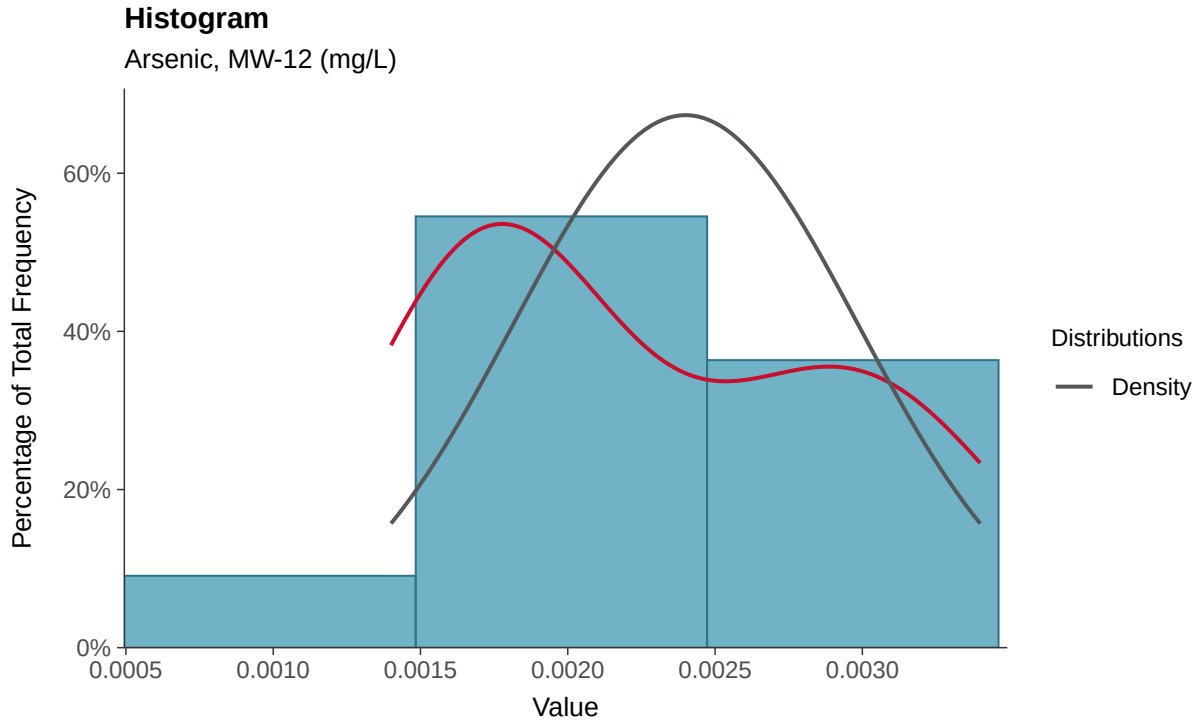
Antimony, MW-12 (mg/L)



Appendix IV: Arsenic, MW-12

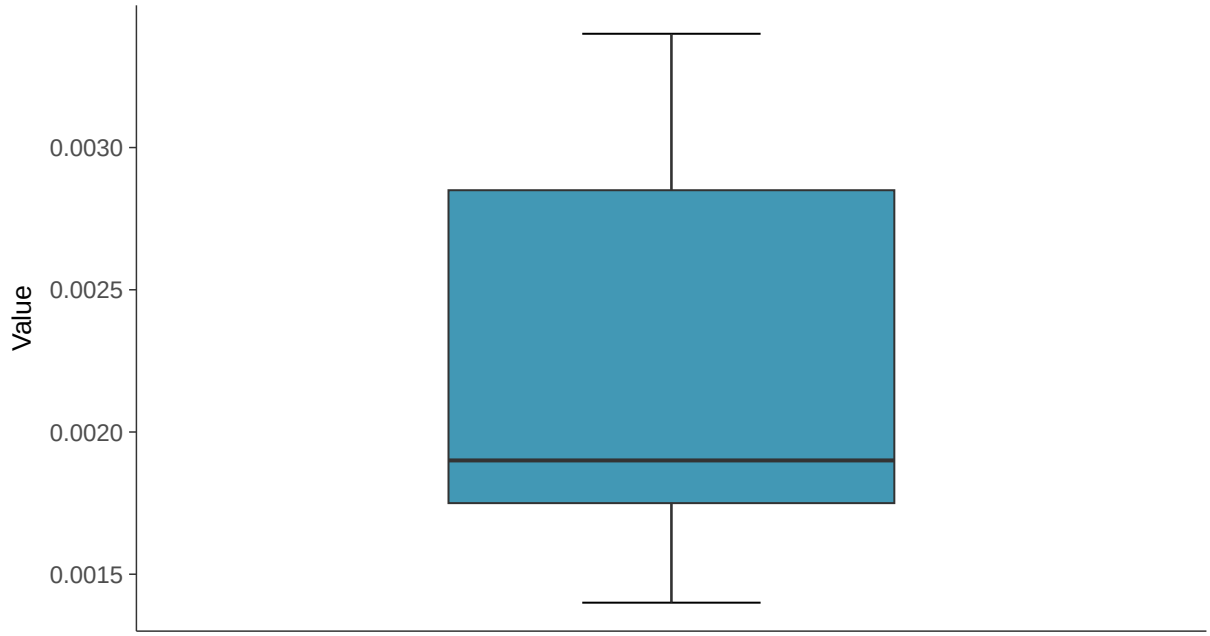
ID: 2_22_5_102





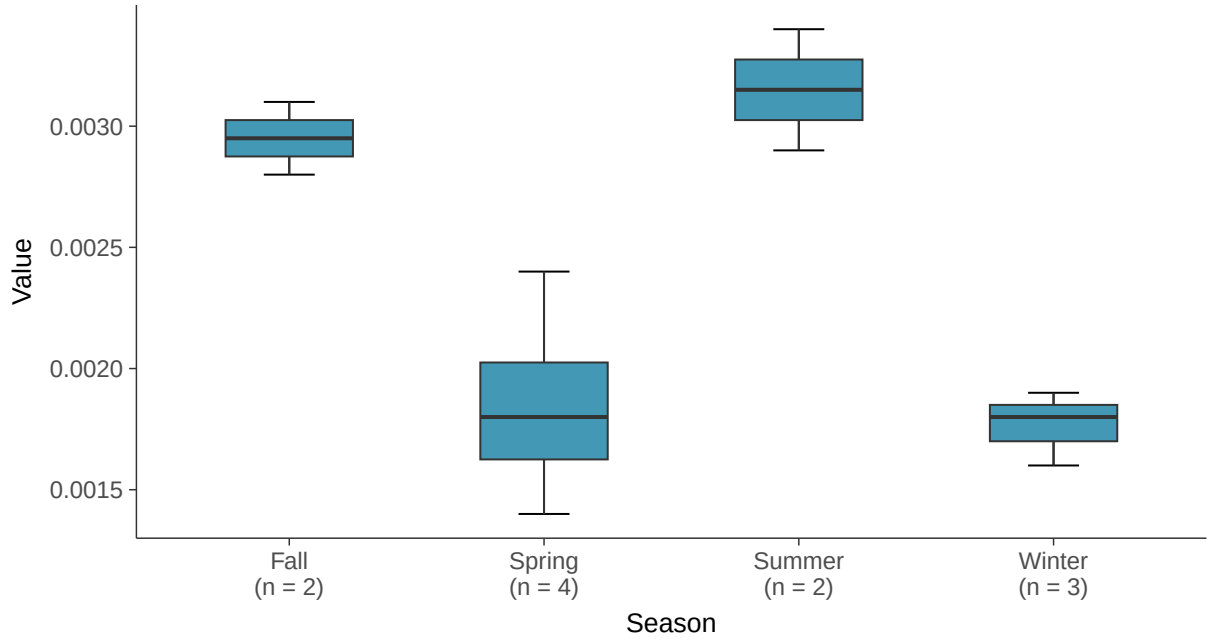
Boxplot

Arsenic, MW-12 (mg/L)



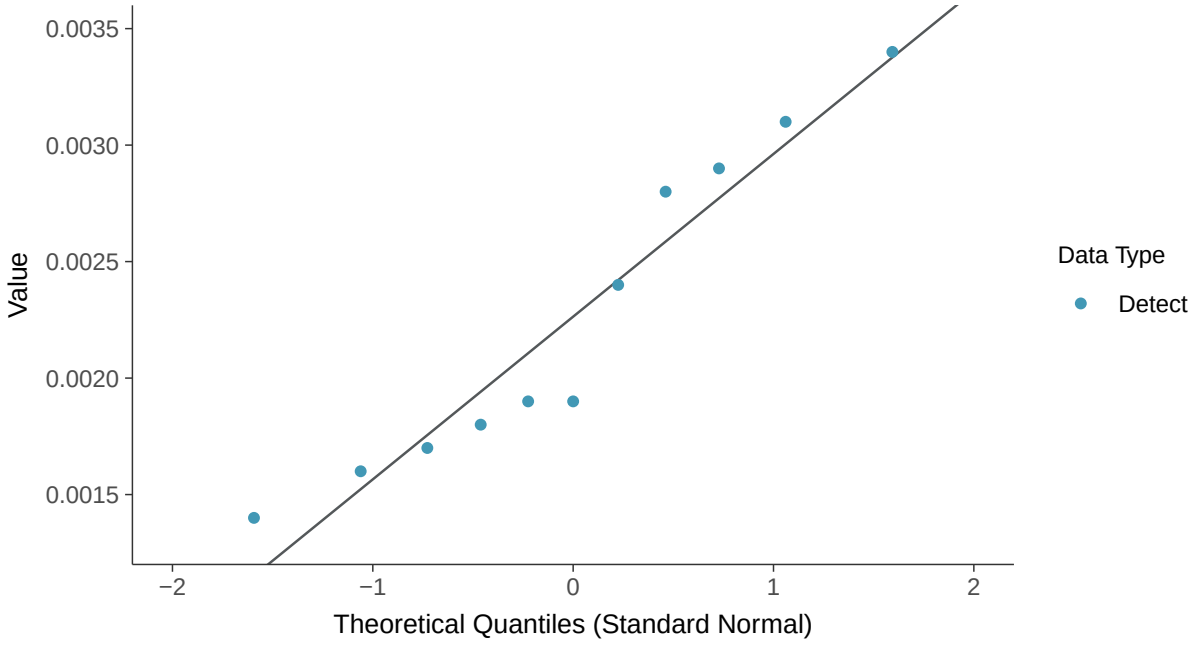
Boxplot by Season

Arsenic, MW-12 (mg/L)



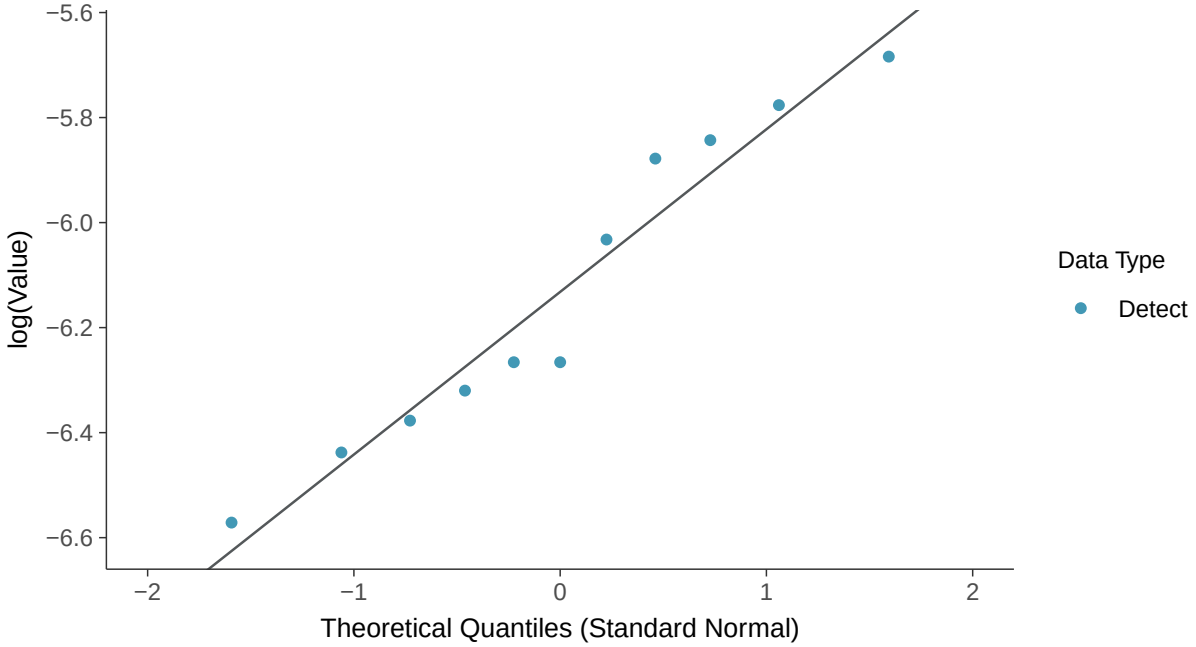
Normal Q-Q plot

Arsenic, MW-12 (mg/L)



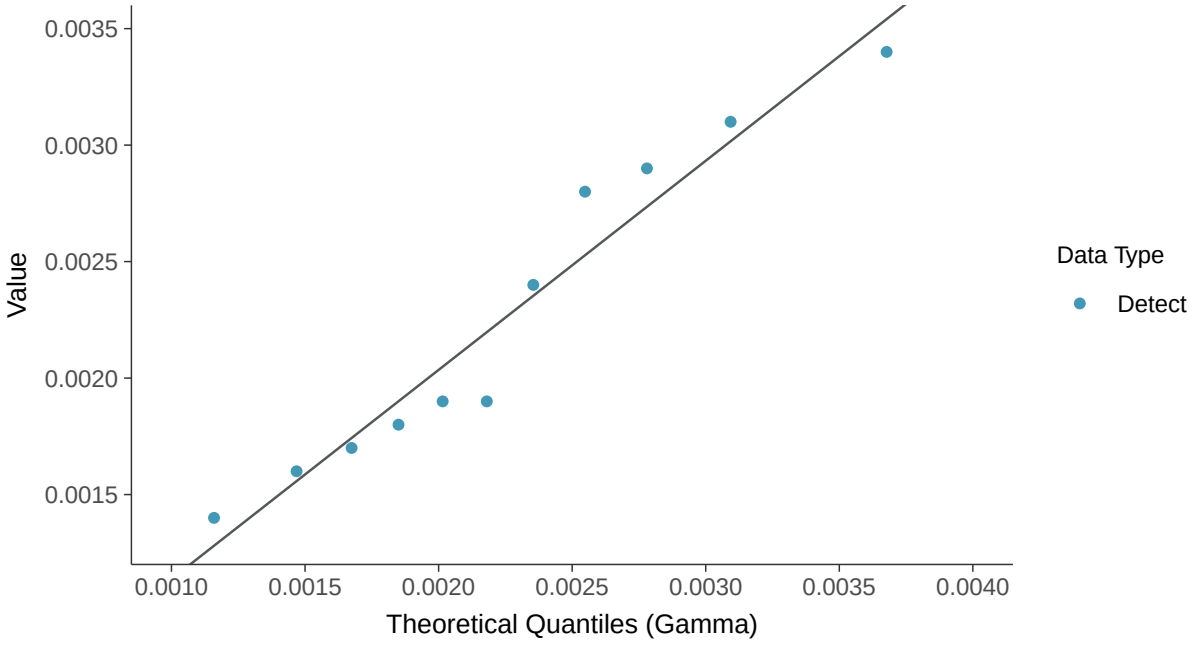
Lognormal Q-Q plot

Arsenic, MW-12 (mg/L)



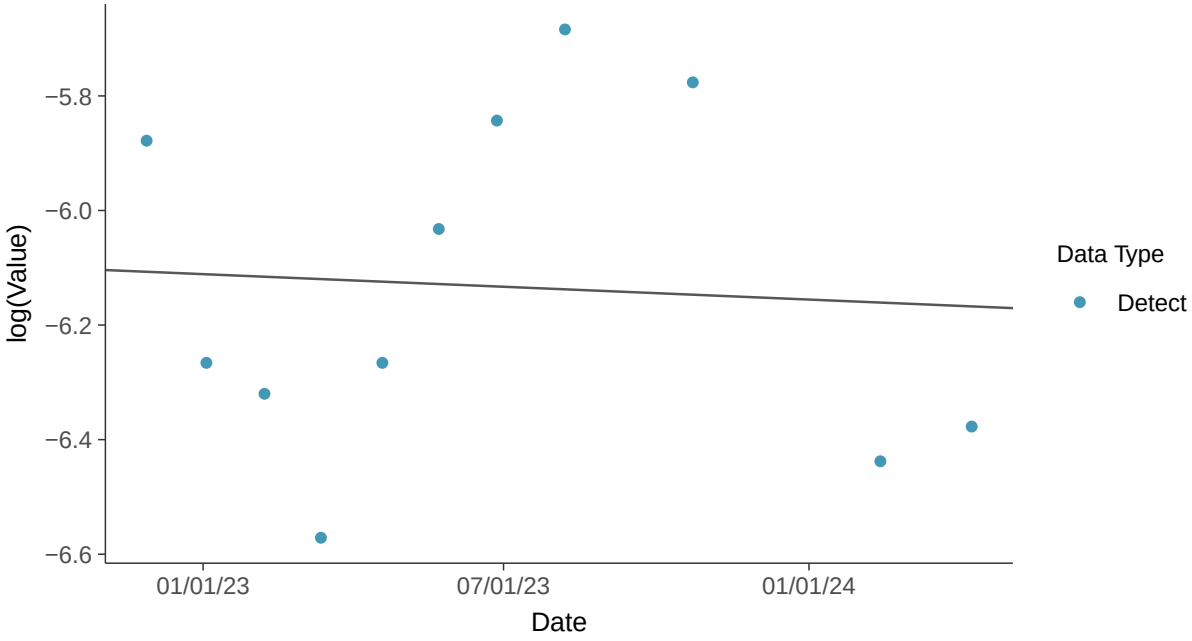
Gamma Q-Q plot

Arsenic, MW-12 (mg/L)



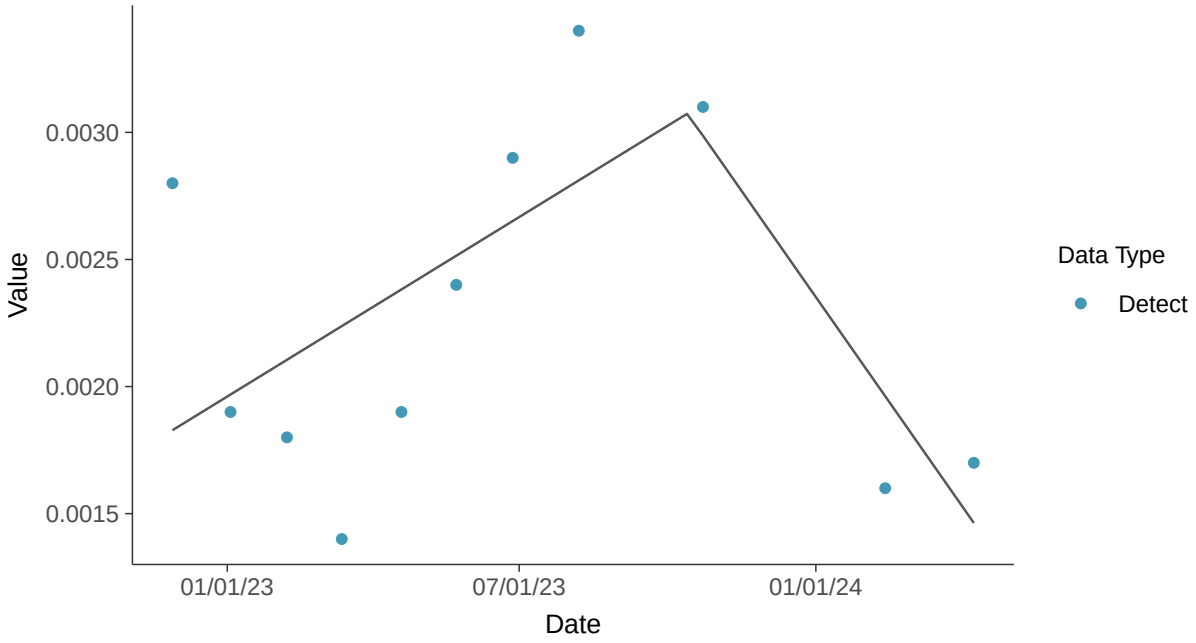
Trend Regression: Lognormal MLE

Arsenic, MW-12 (mg/L)



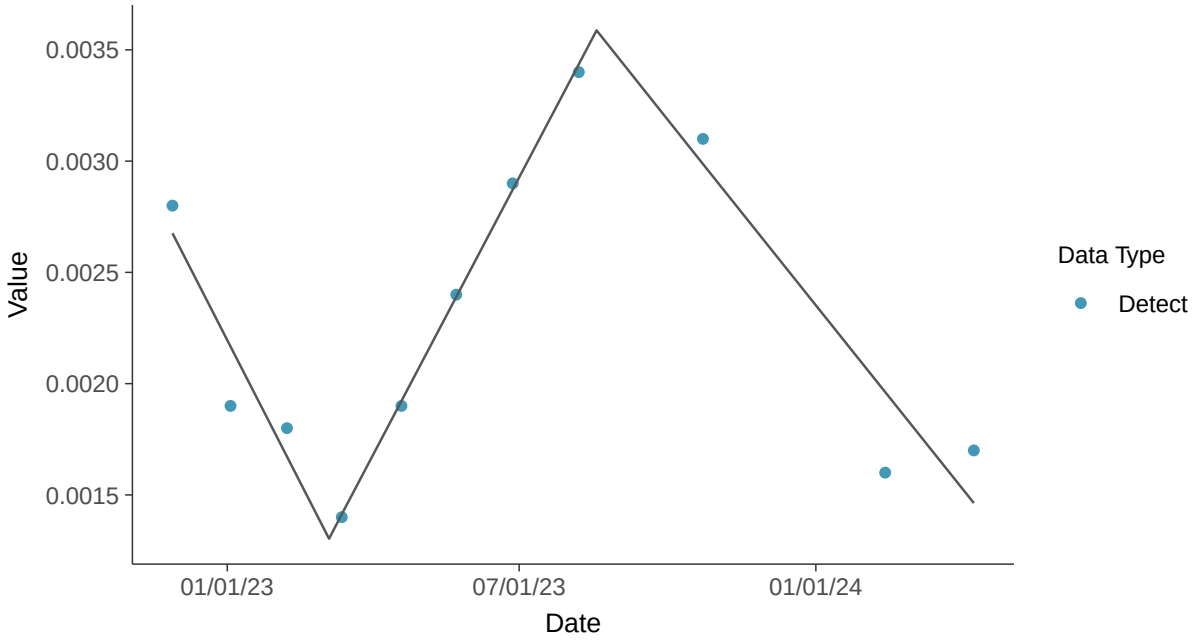
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-12 (mg/L)



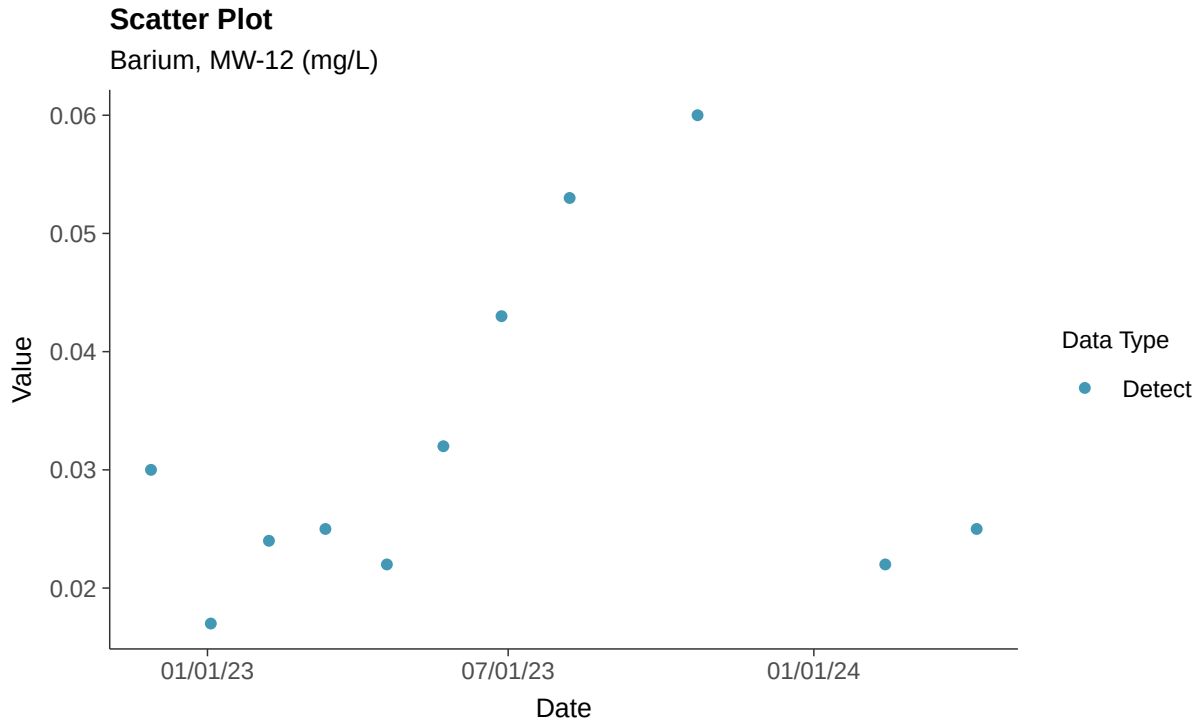
Trend Regression: Piecewise Linear-Linear-Linear

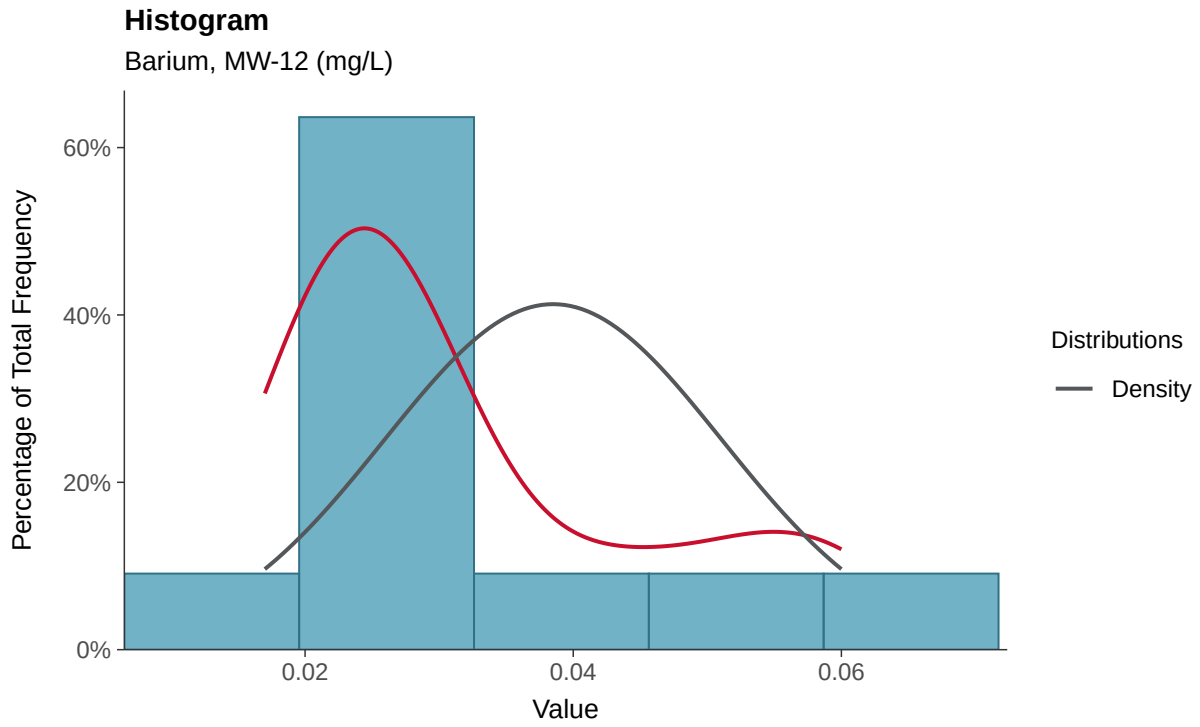
Arsenic, MW-12 (mg/L)



Appendix IV: Barium, MW-12

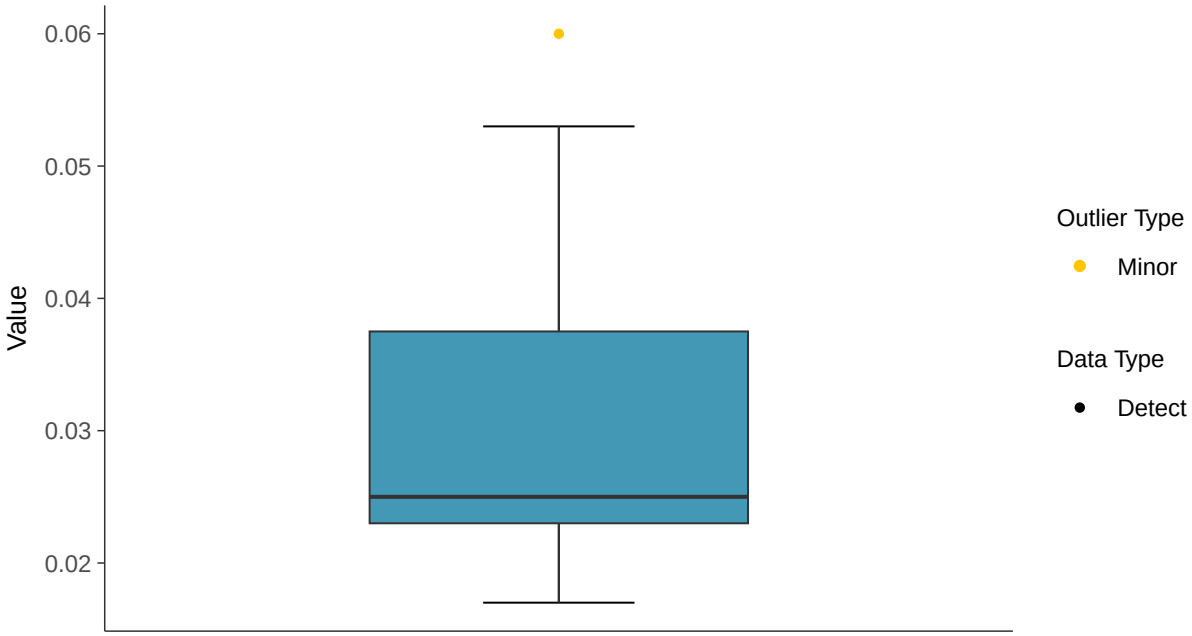
ID: 2_22_5_103





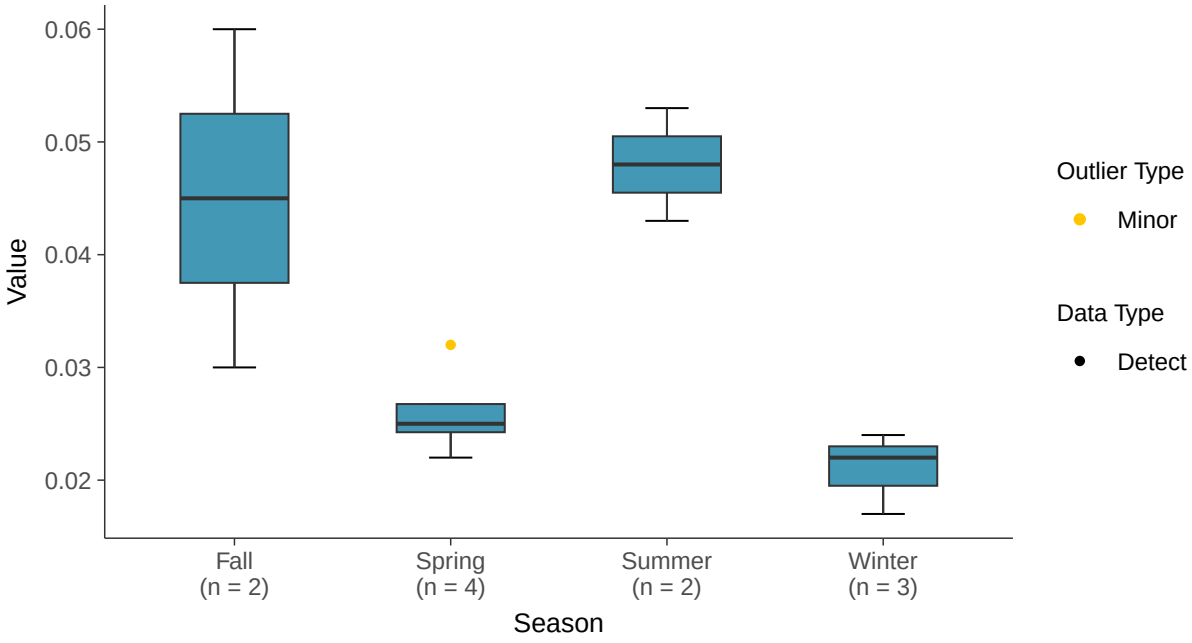
Boxplot

Barium, MW-12 (mg/L)



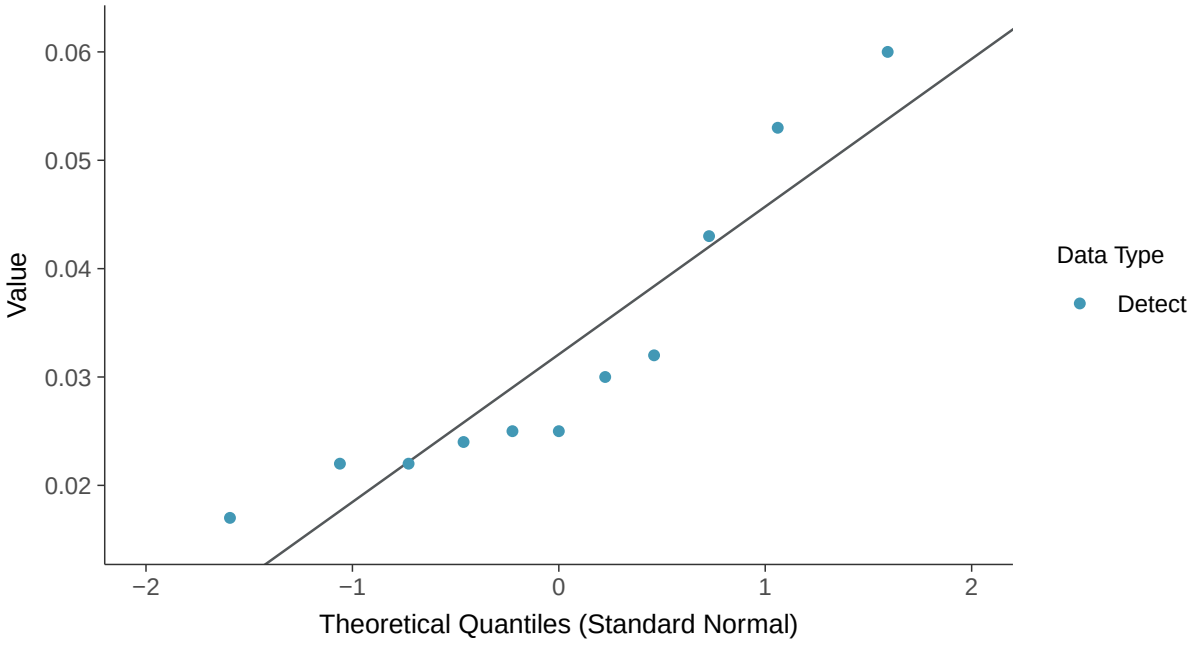
Boxplot by Season

Barium, MW-12 (mg/L)



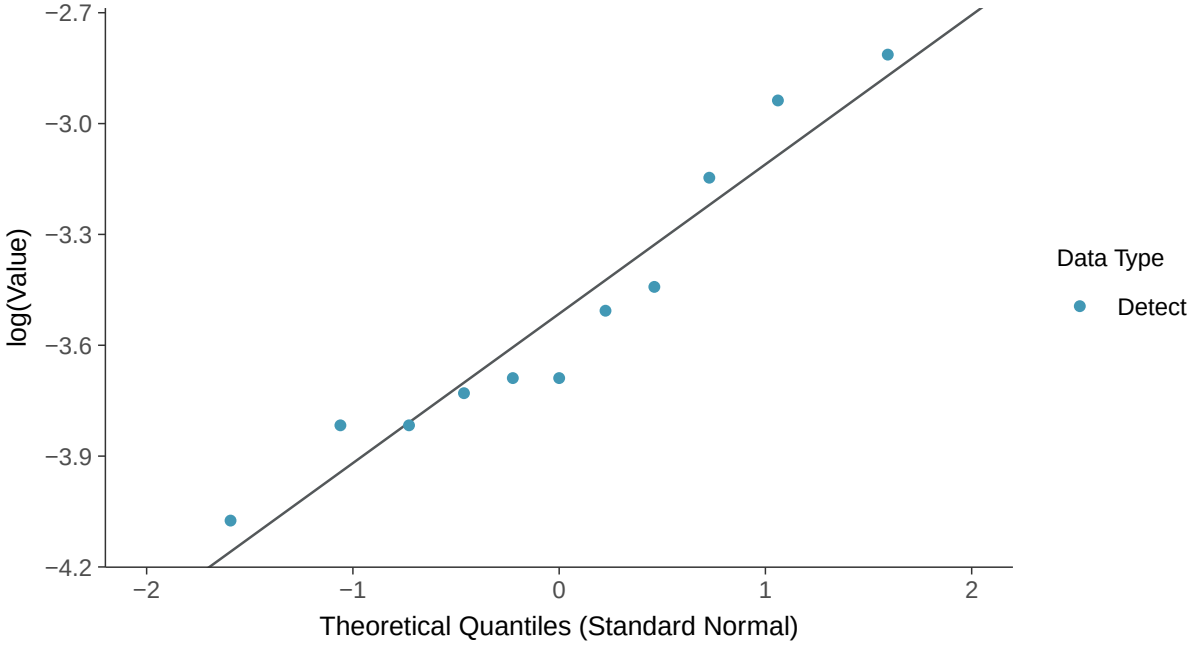
Normal Q-Q plot

Barium, MW-12 (mg/L)



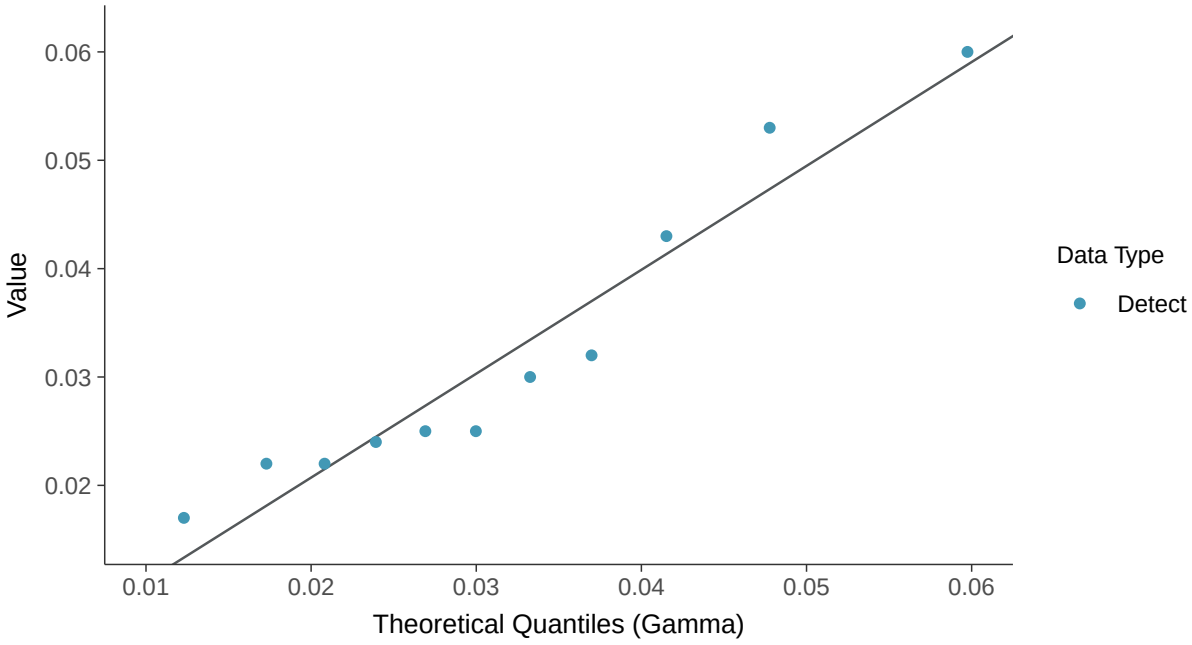
Lognormal Q-Q plot

Barium, MW-12 (mg/L)



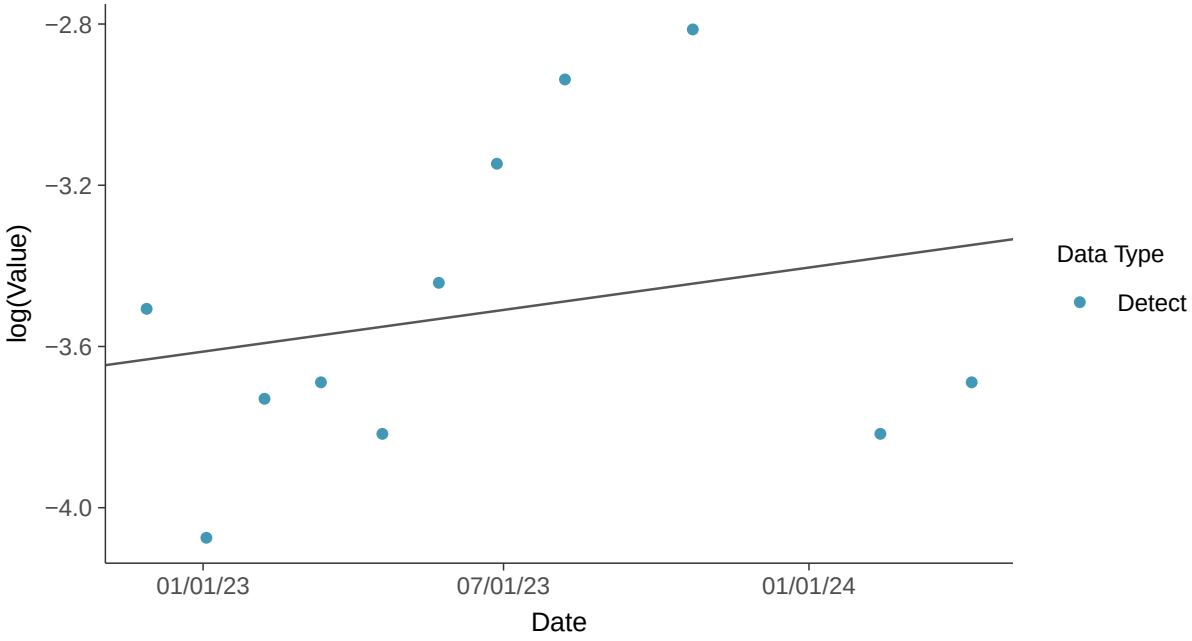
Gamma Q-Q plot

Barium, MW-12 (mg/L)



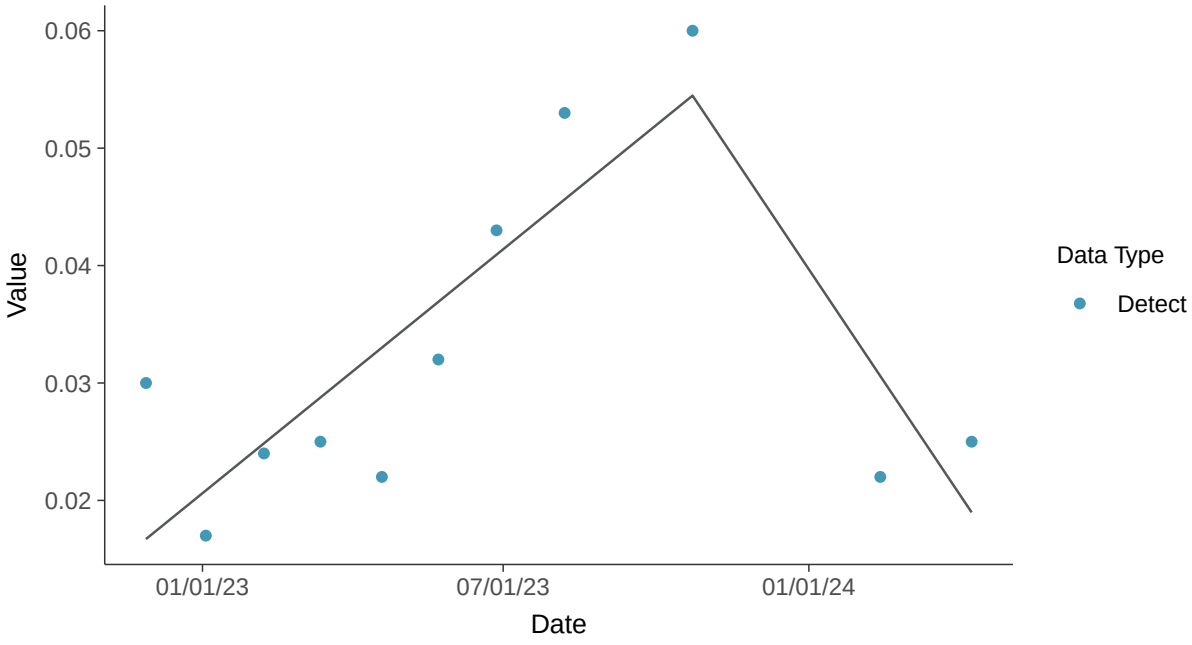
Trend Regression: Lognormal MLE

Barium, MW-12 (mg/L)



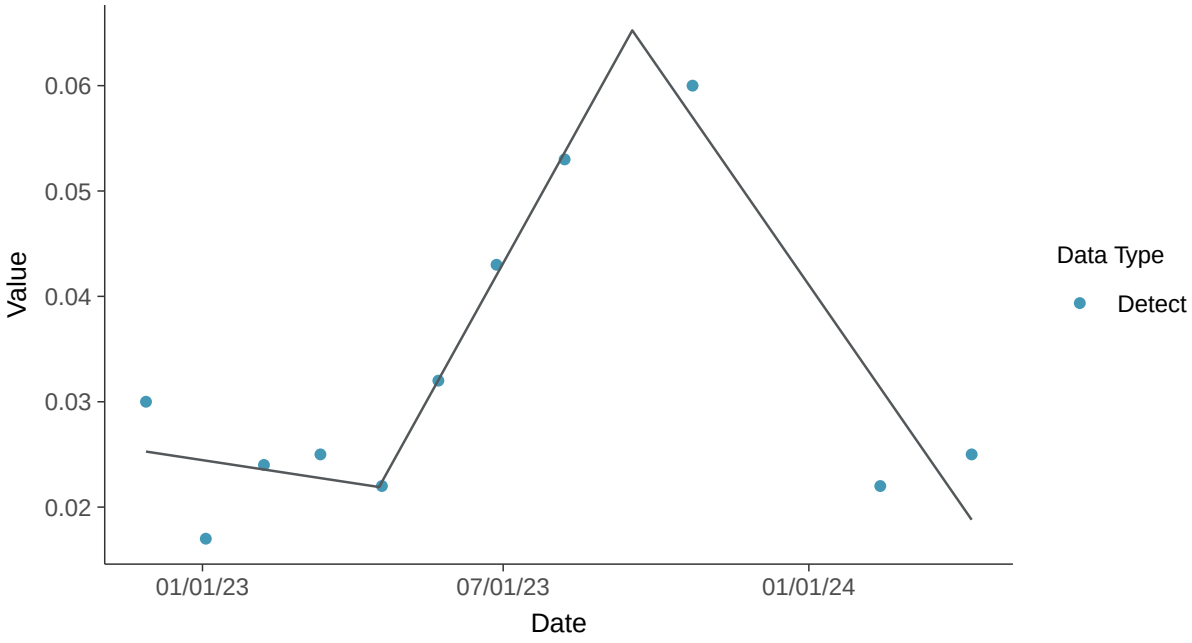
Trend Regression: Piecewise Linear-Linear

Barium, MW-12 (mg/L)



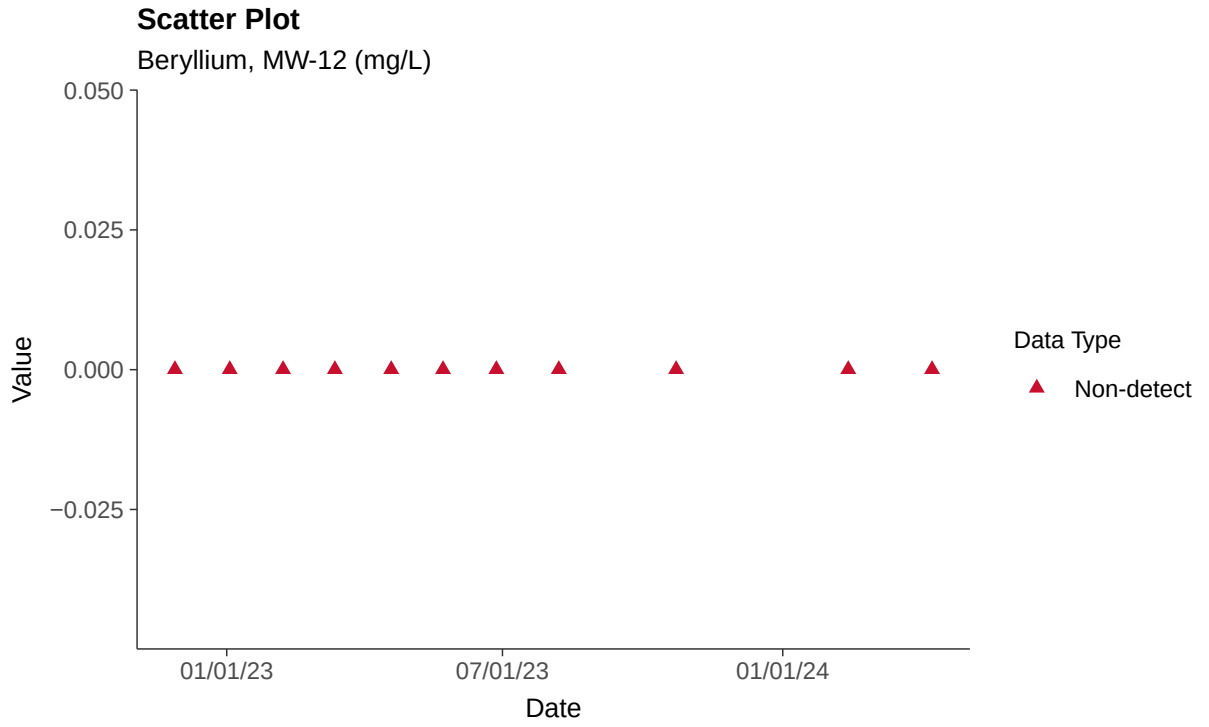
Trend Regression: Piecewise Linear-Linear-Linear

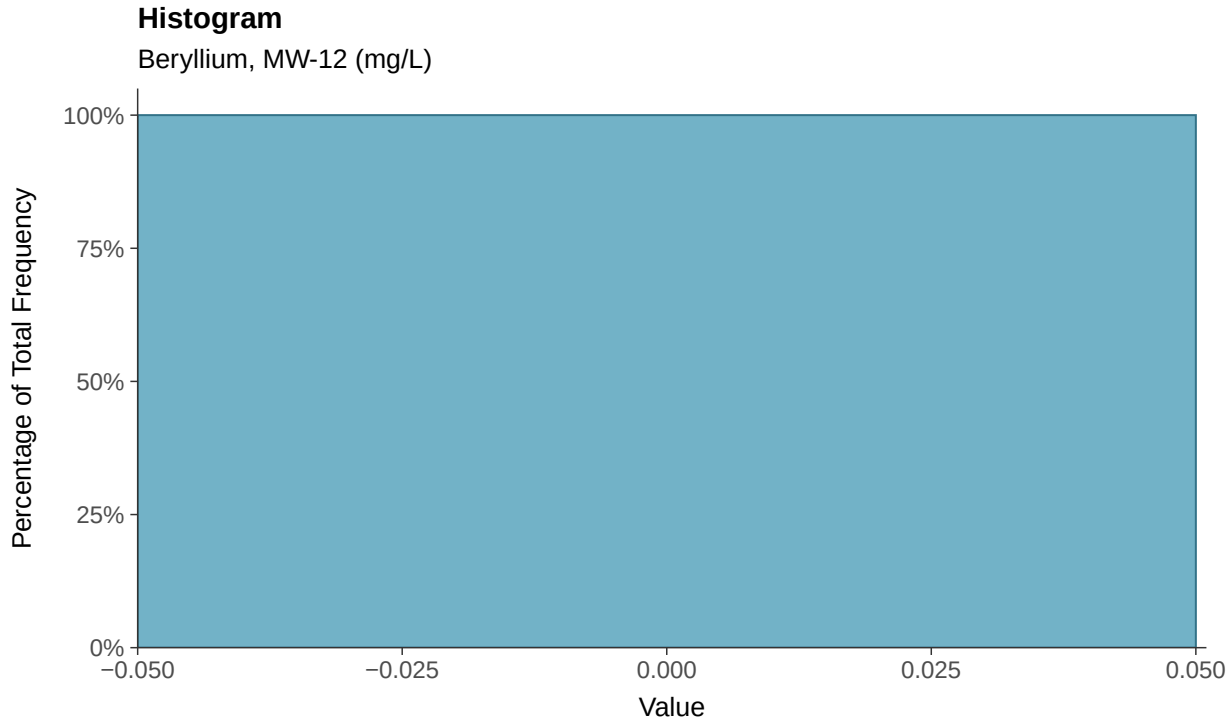
Barium, MW-12 (mg/L)



Appendix IV: Beryllium, MW-12

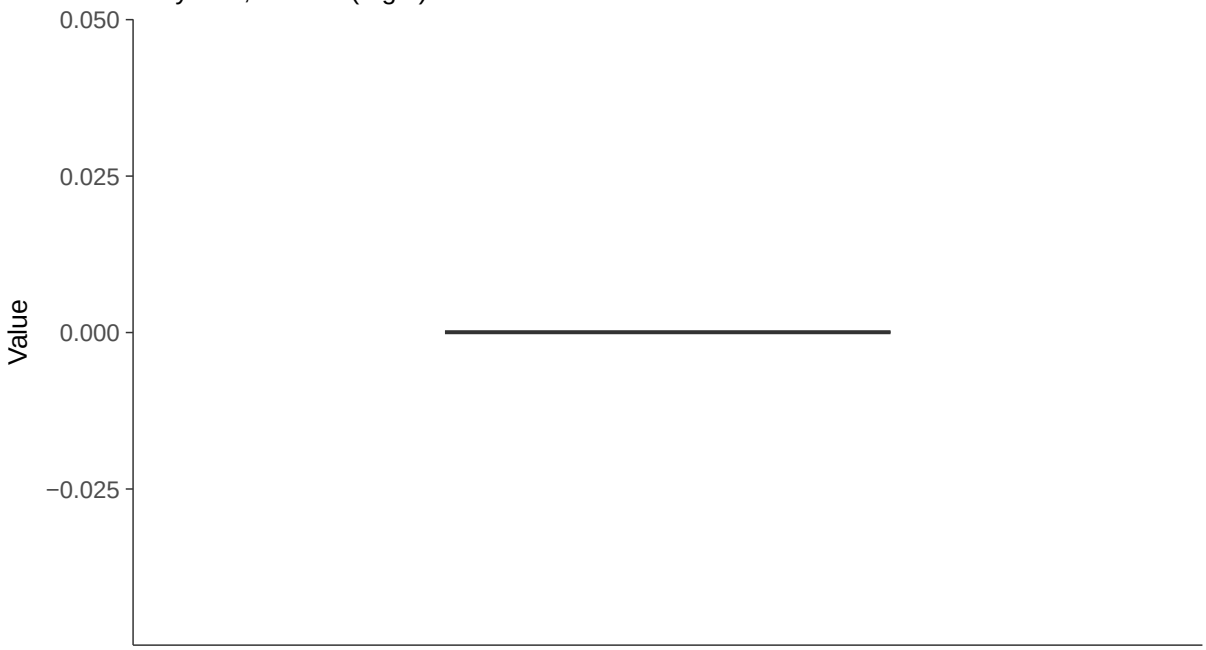
ID: 2_22_5_104





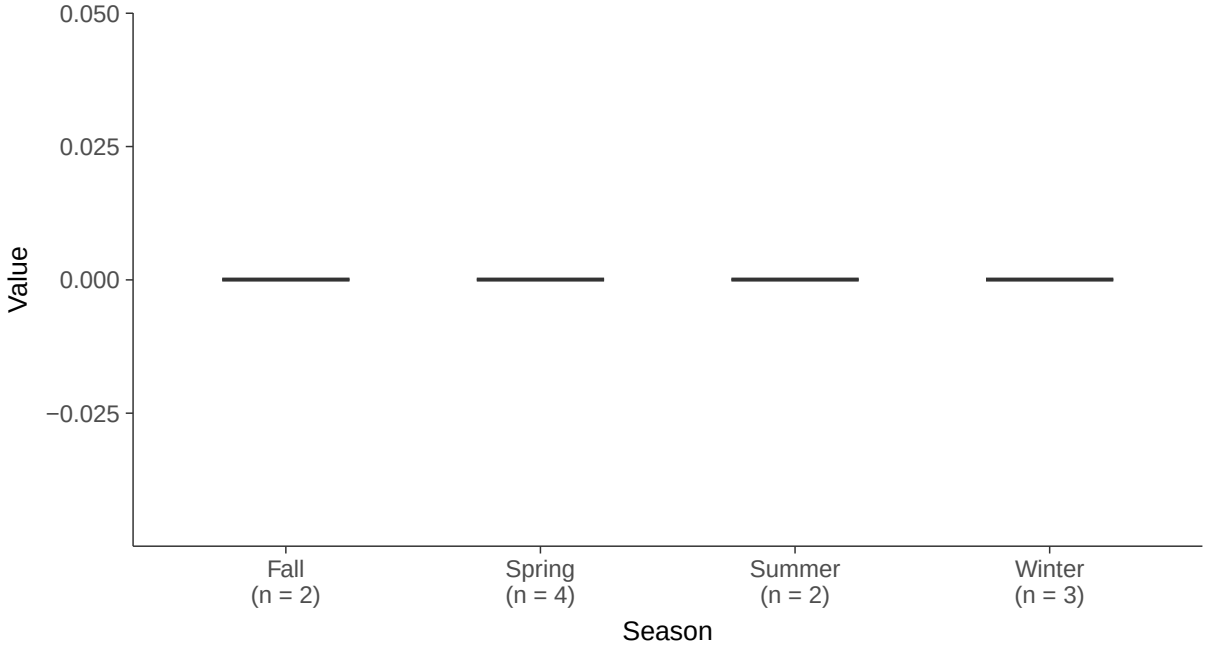
Boxplot

Beryllium, MW-12 (mg/L)



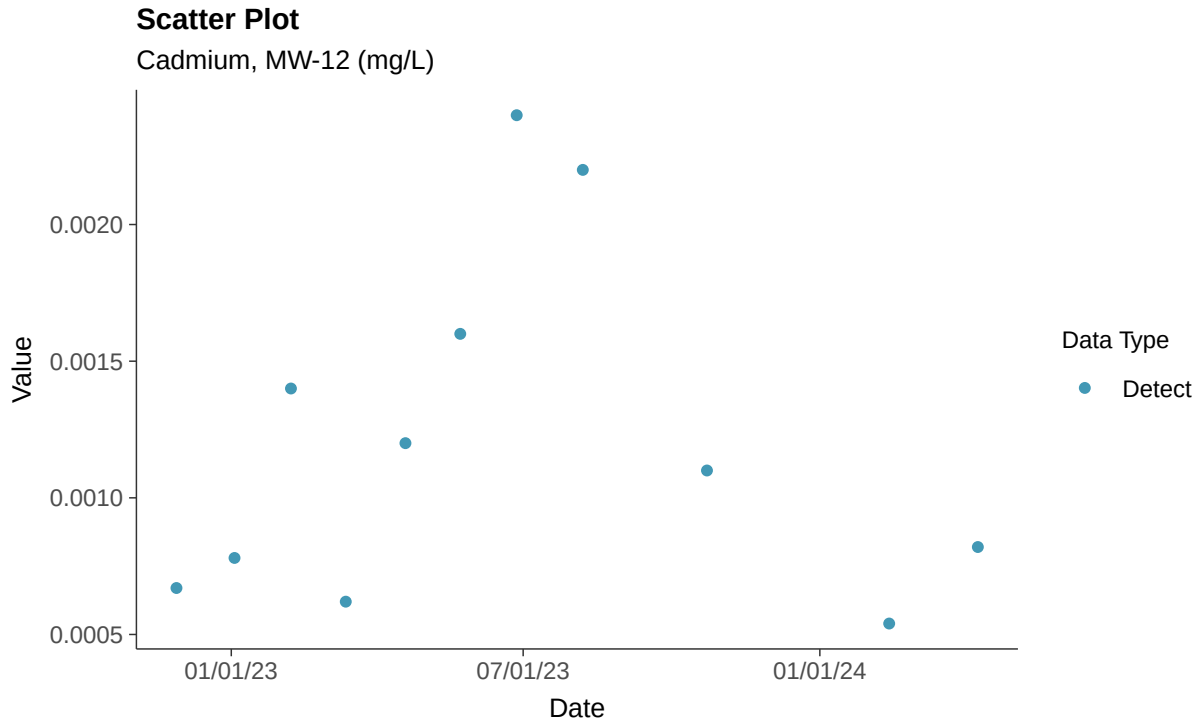
Boxplot by Season

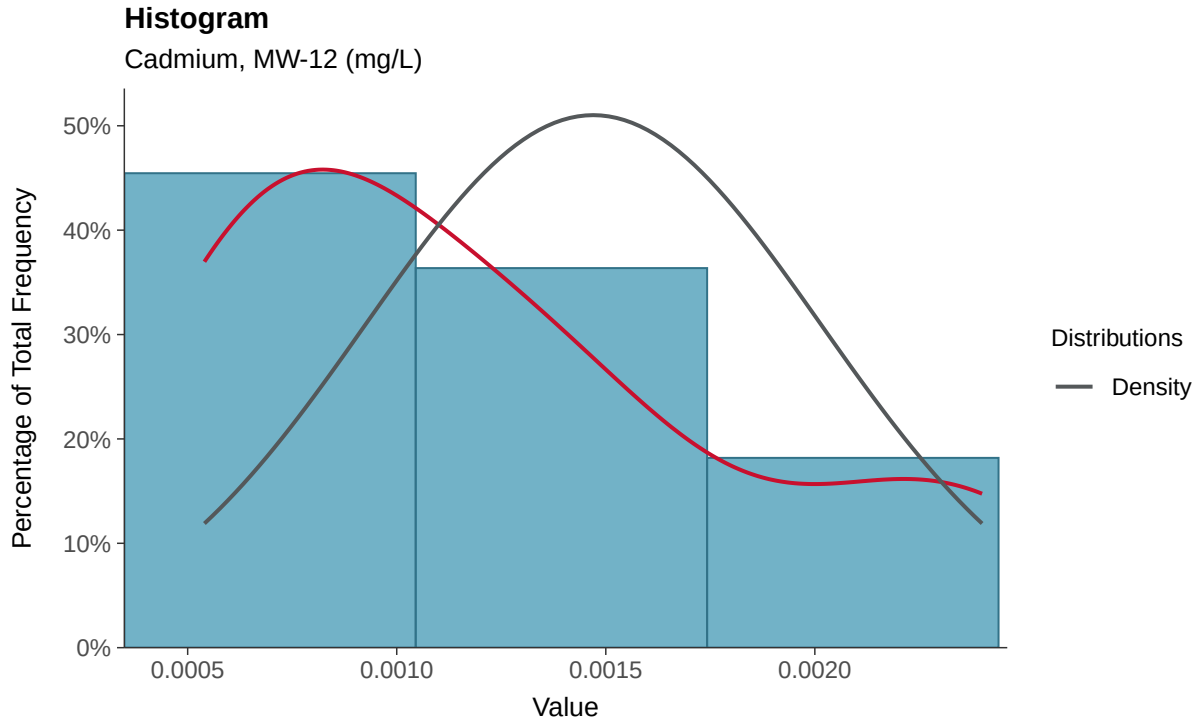
Beryllium, MW-12 (mg/L)



Appendix IV: Cadmium, MW-12

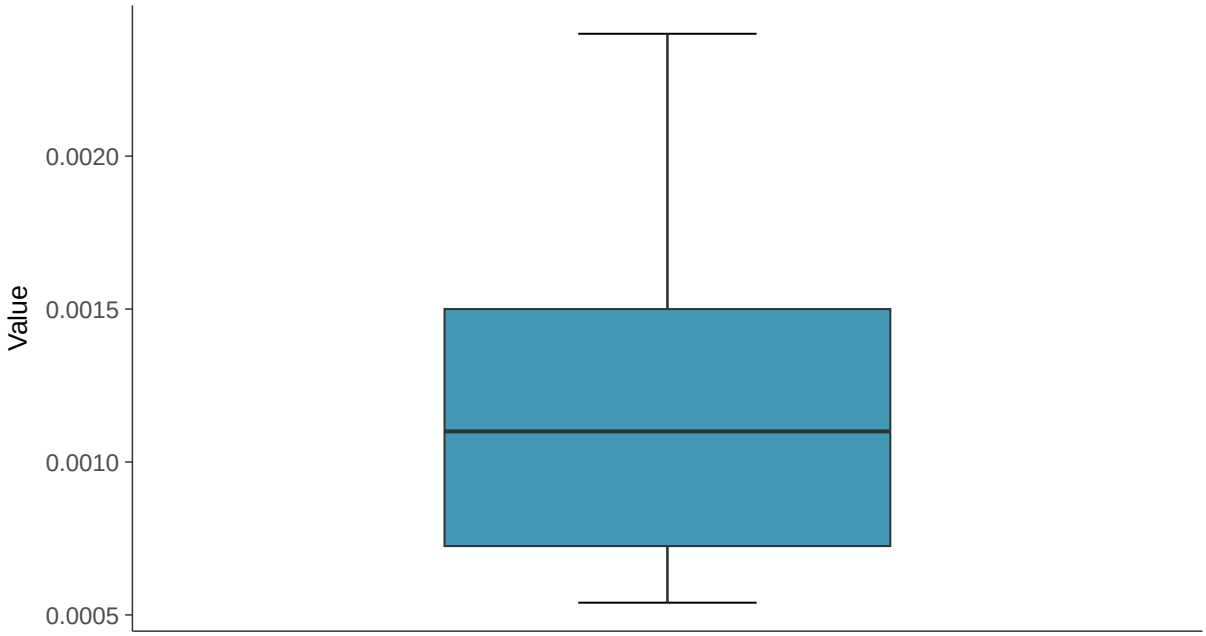
ID: 2_22_5_106





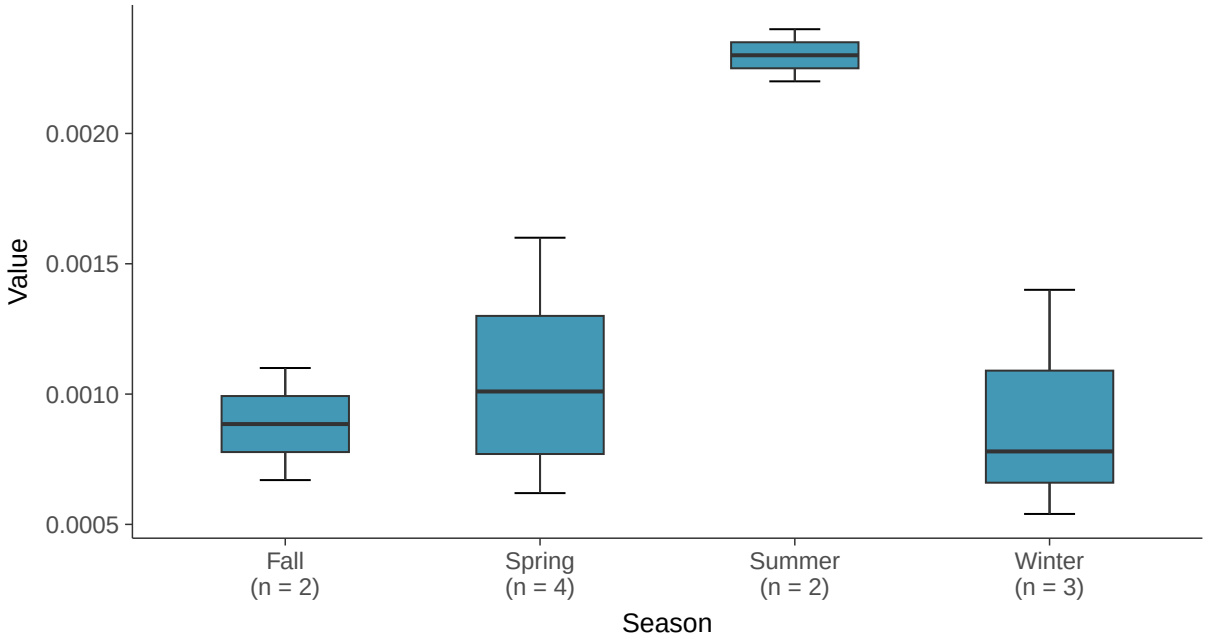
Boxplot

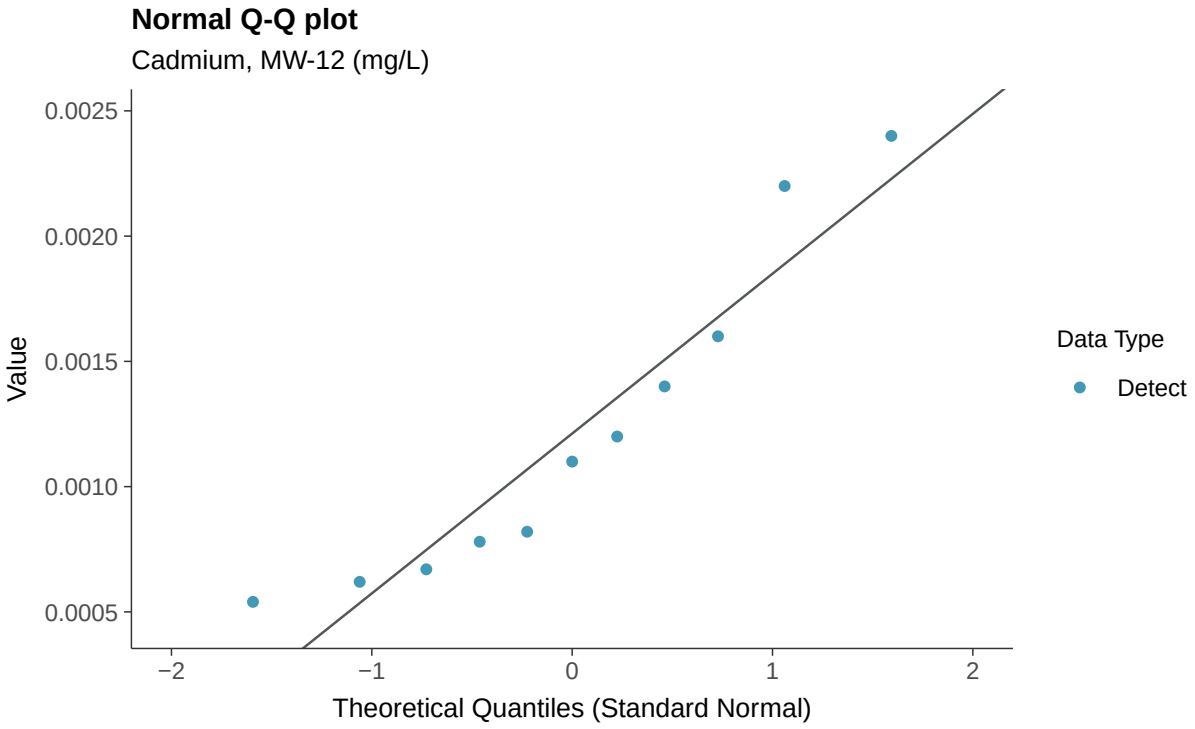
Cadmium, MW-12 (mg/L)

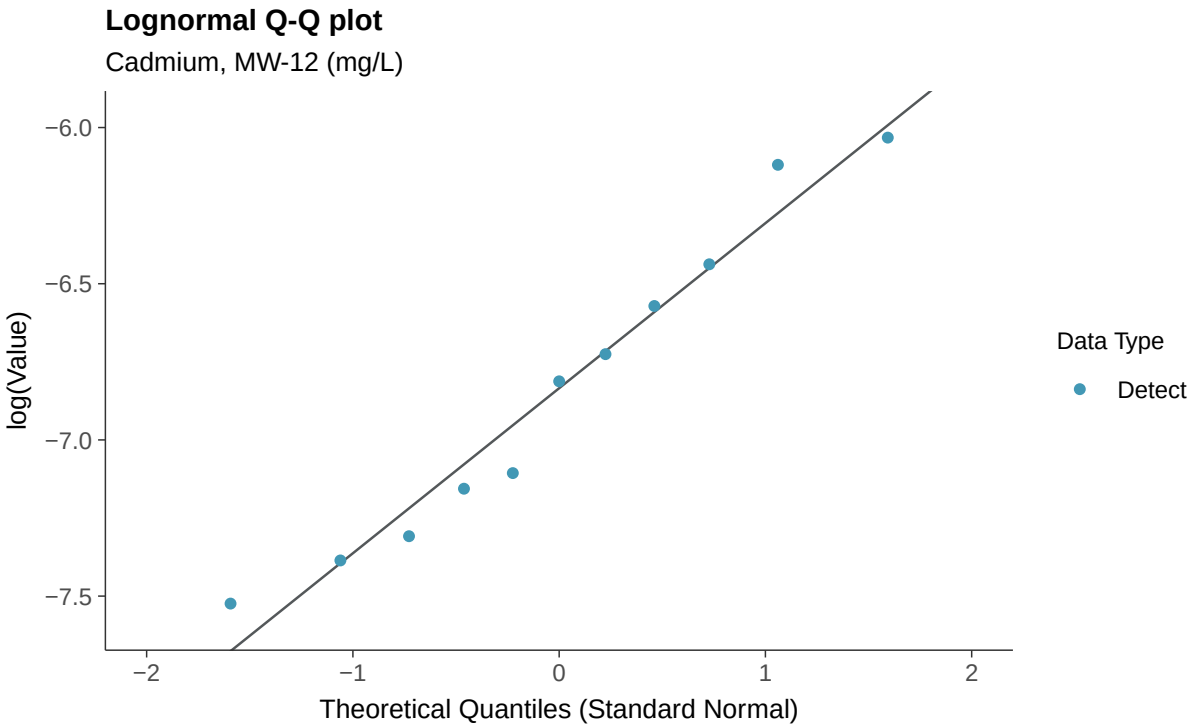


Boxplot by Season

Cadmium, MW-12 (mg/L)

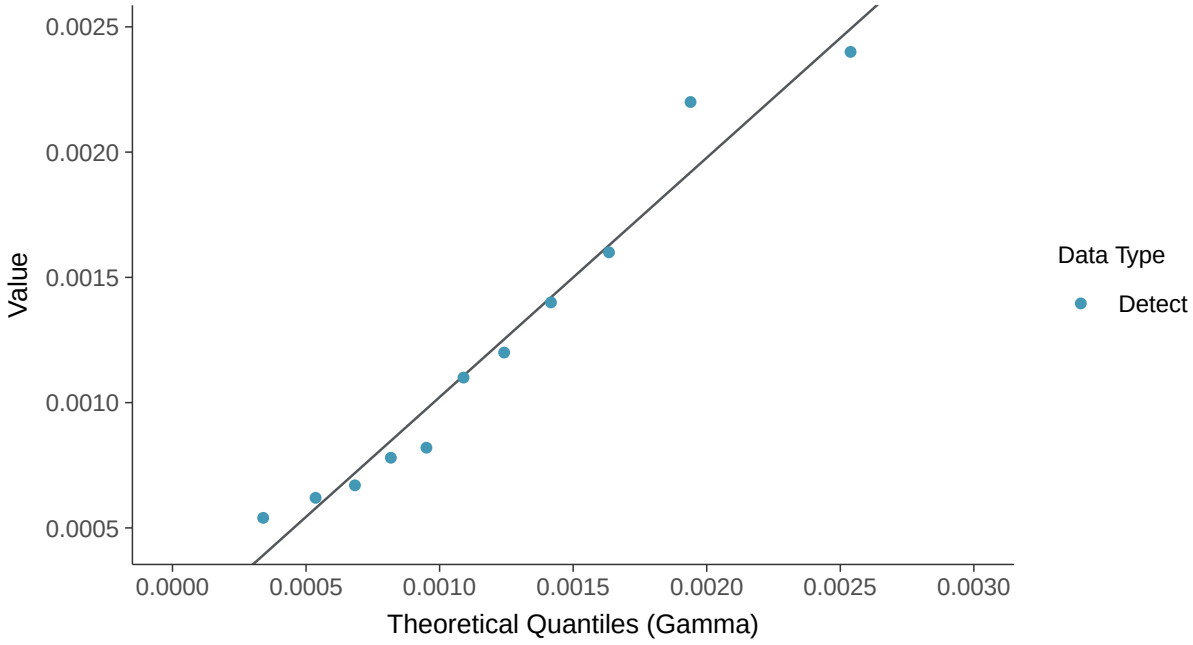



Normal Q-Q plot
Cadmium, MW-12 (mg/L)
Value
0.0025
0.0020
0.0015
0.0010
0.0005
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect


Lognormal Q-Q plot
Cadmium, MW-12 (mg/L)
log(Value)
−6.0
−6.5
−7.0
−7.5
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect

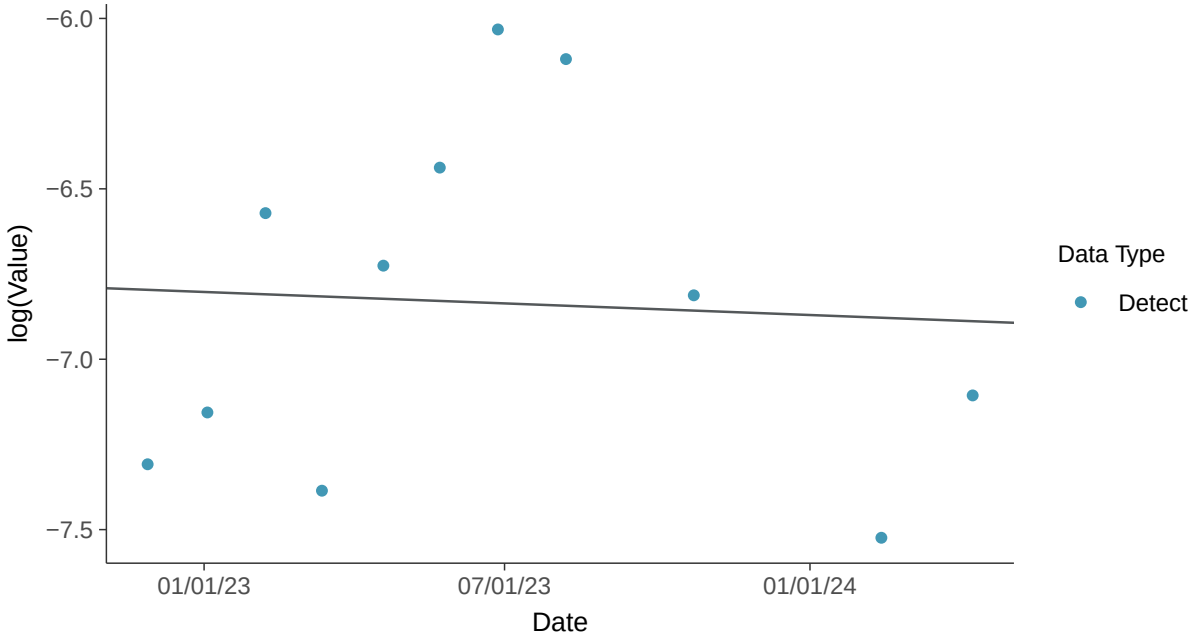
Gamma Q-Q plot

Cadmium, MW-12 (mg/L)



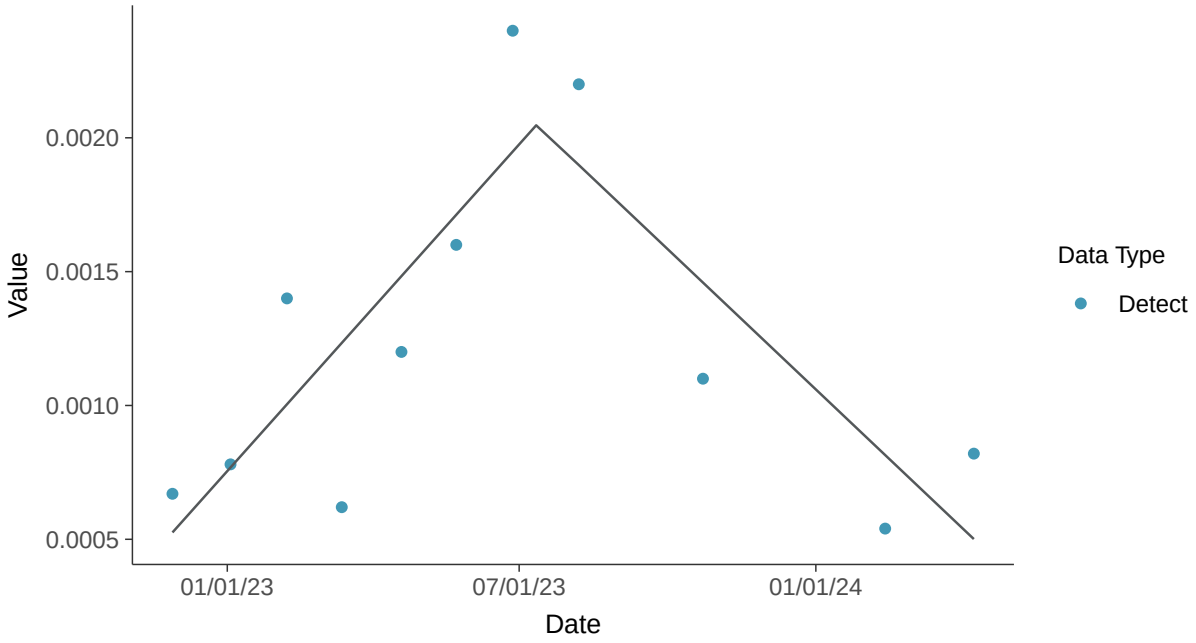
Trend Regression: Lognormal MLE

Cadmium, MW-12 (mg/L)



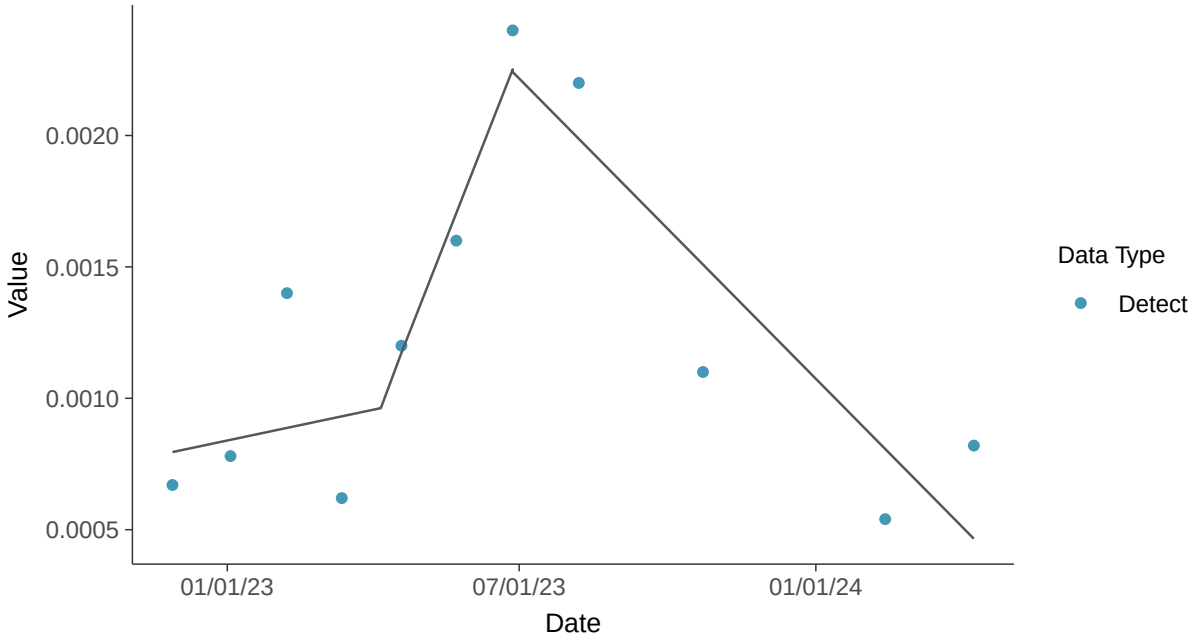
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-12 (mg/L)



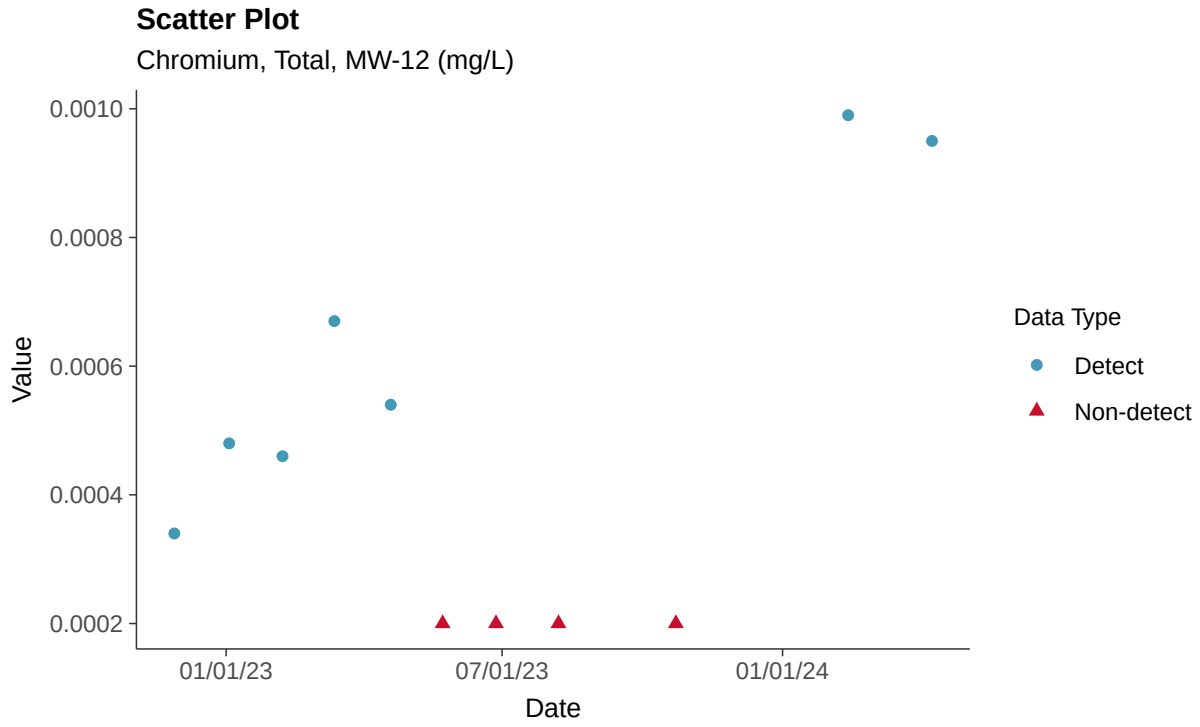
Trend Regression: Piecewise Linear-Linear-Linear

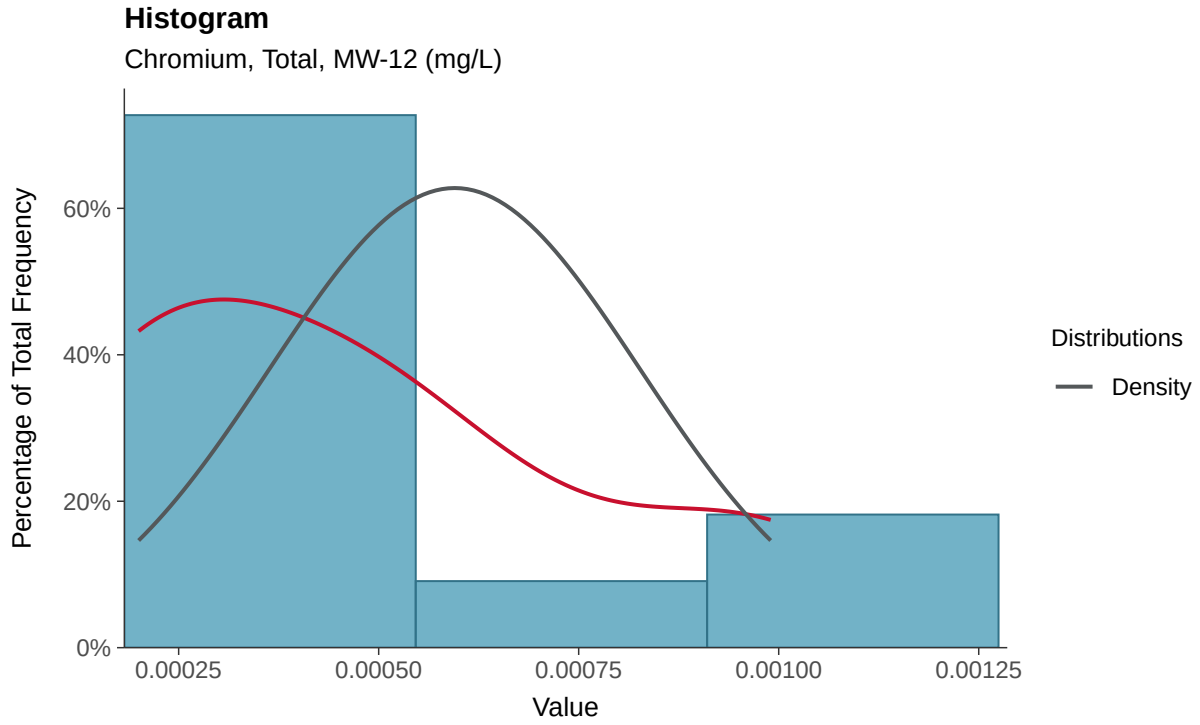
Cadmium, MW-12 (mg/L)



Appendix IV: Chromium, Total, MW-12

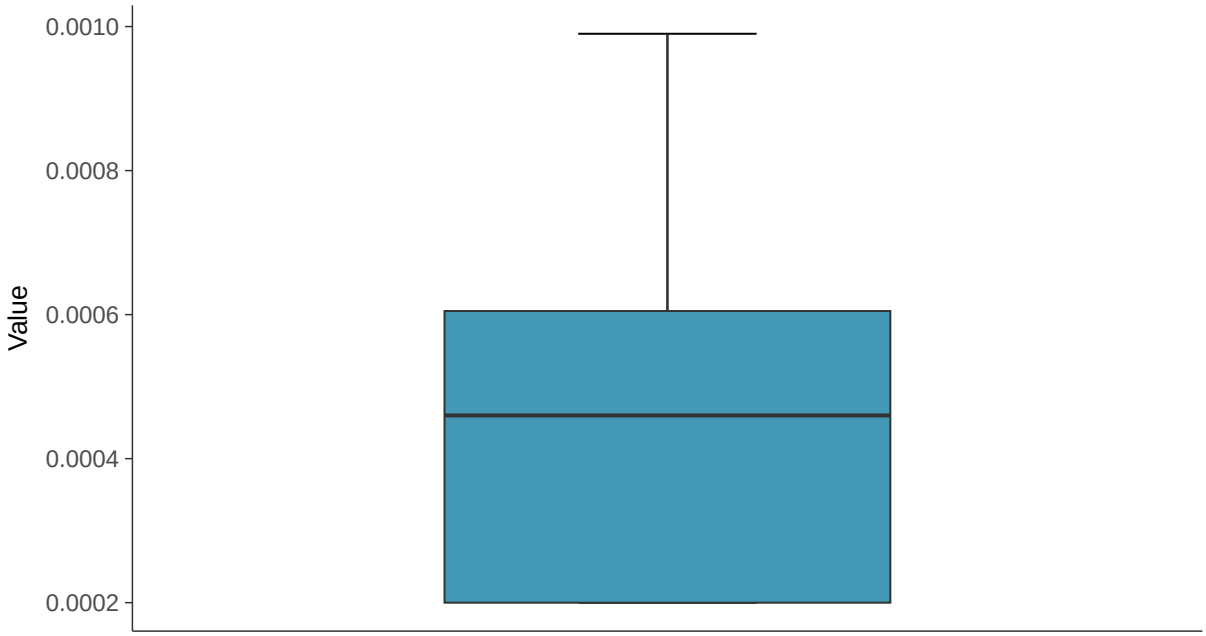
ID: 2_22_5_109





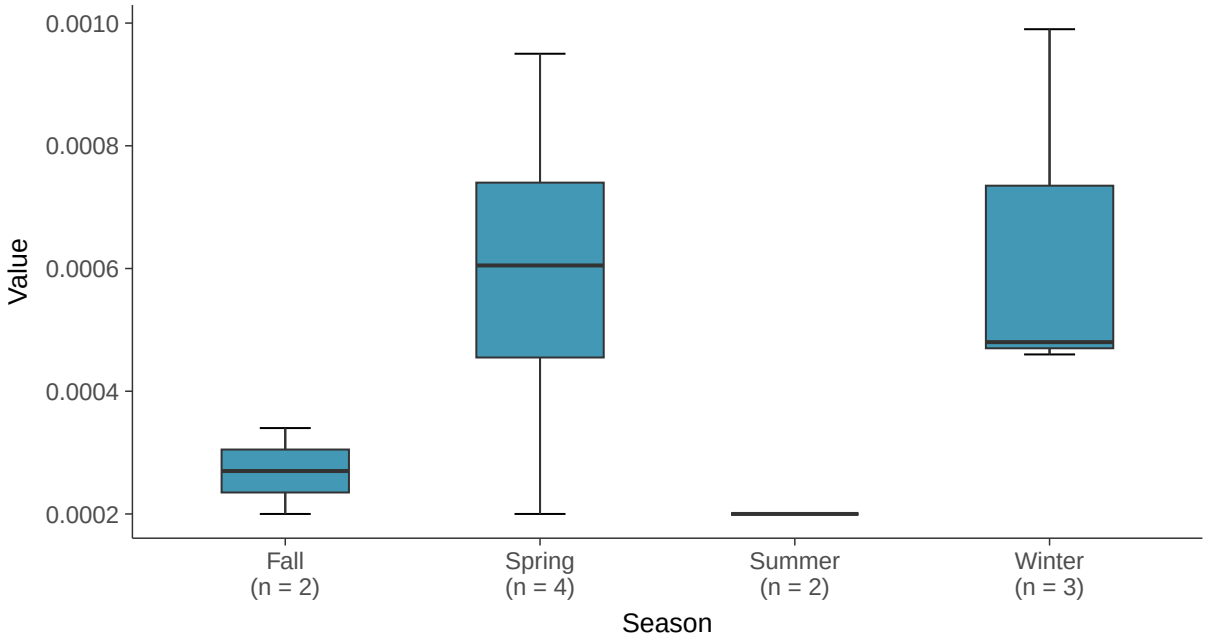
Boxplot

Chromium, Total, MW-12 (mg/L)



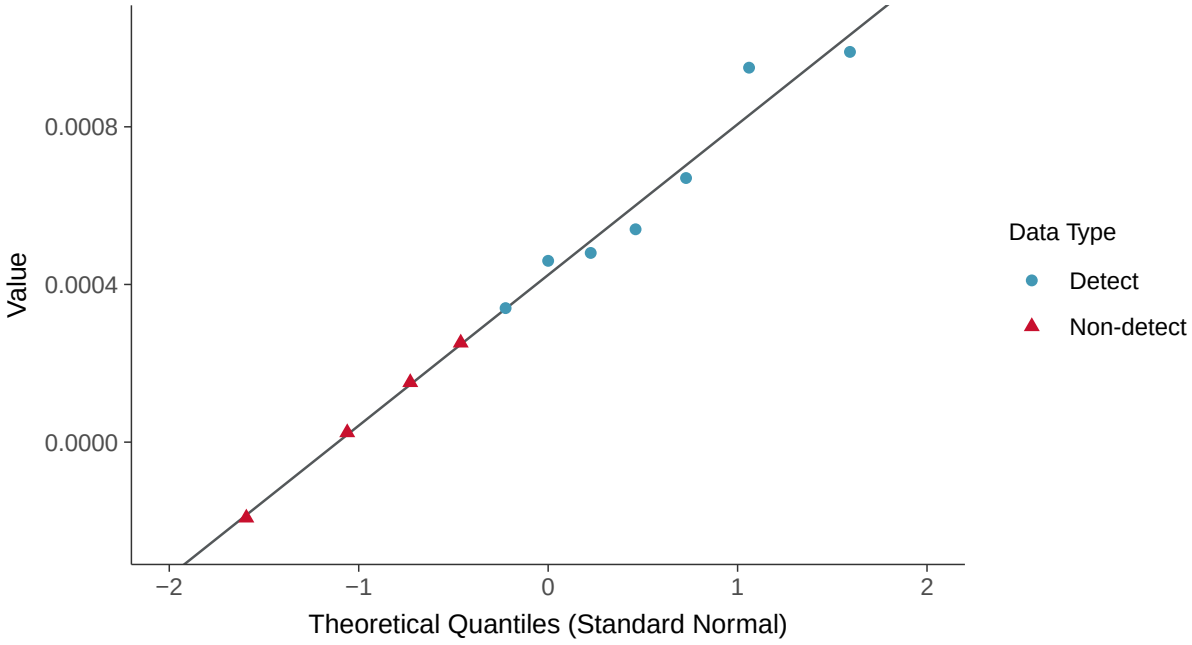
Boxplot by Season

Chromium, Total, MW-12 (mg/L)



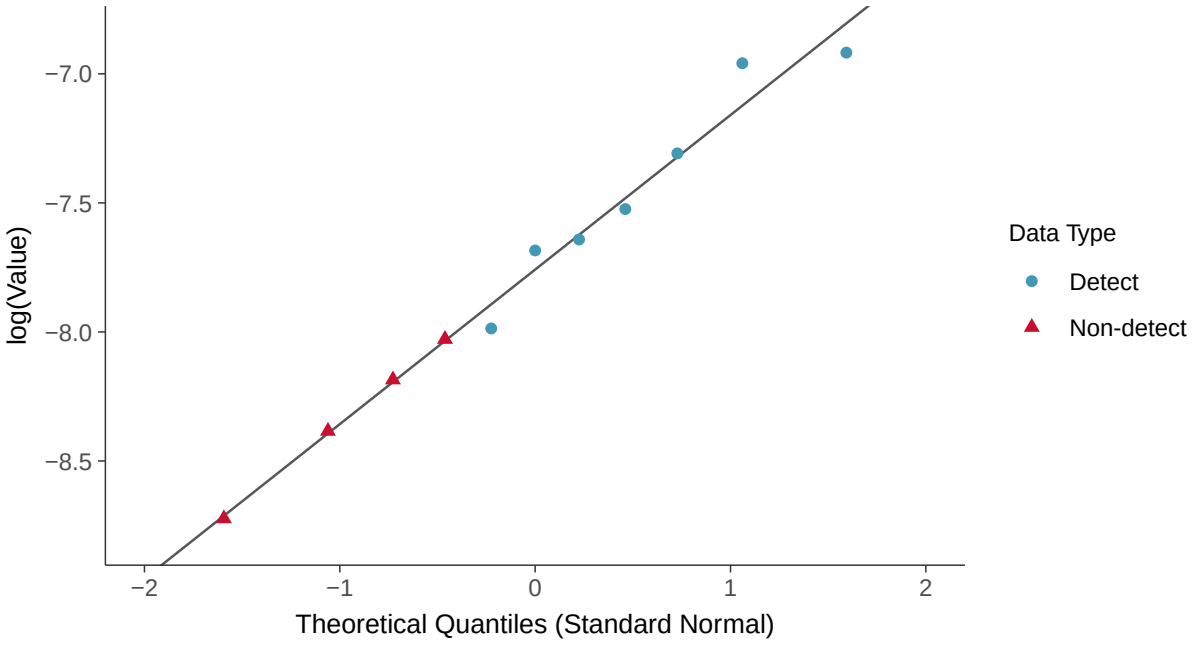
Normal Q-Q plot using ROS Imputed Estimates

Chromium, Total, MW-12 (mg/L)



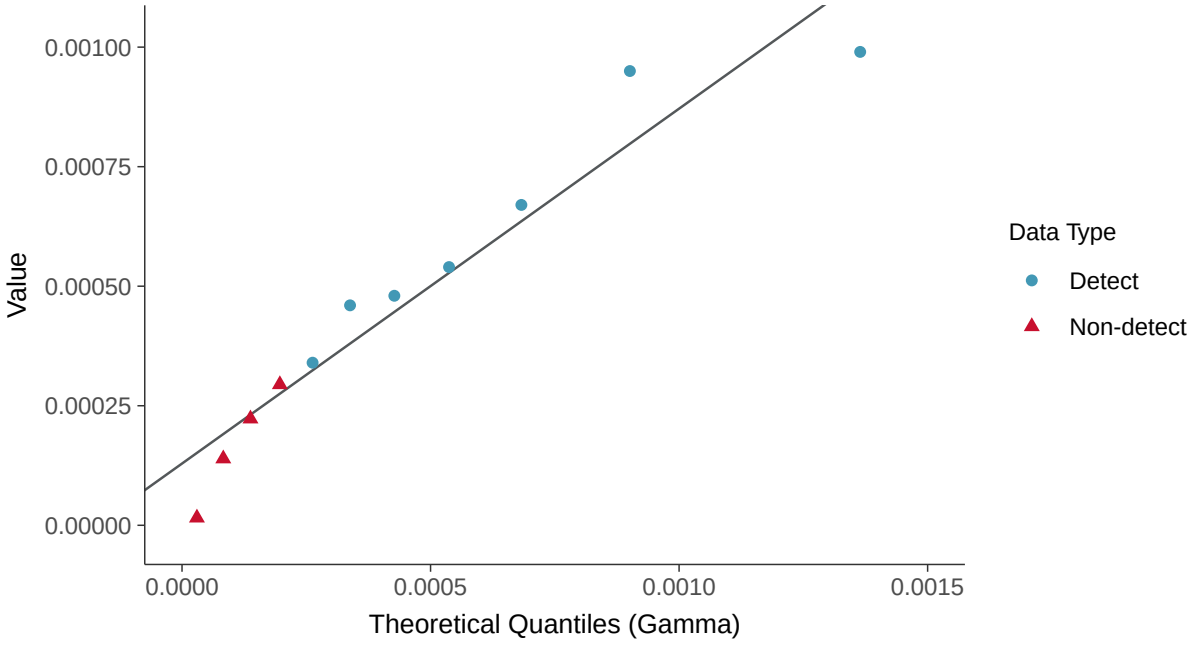
Lognormal Q-Q plot using ROS Imputed Estimates

Chromium, Total, MW-12 (mg/L)



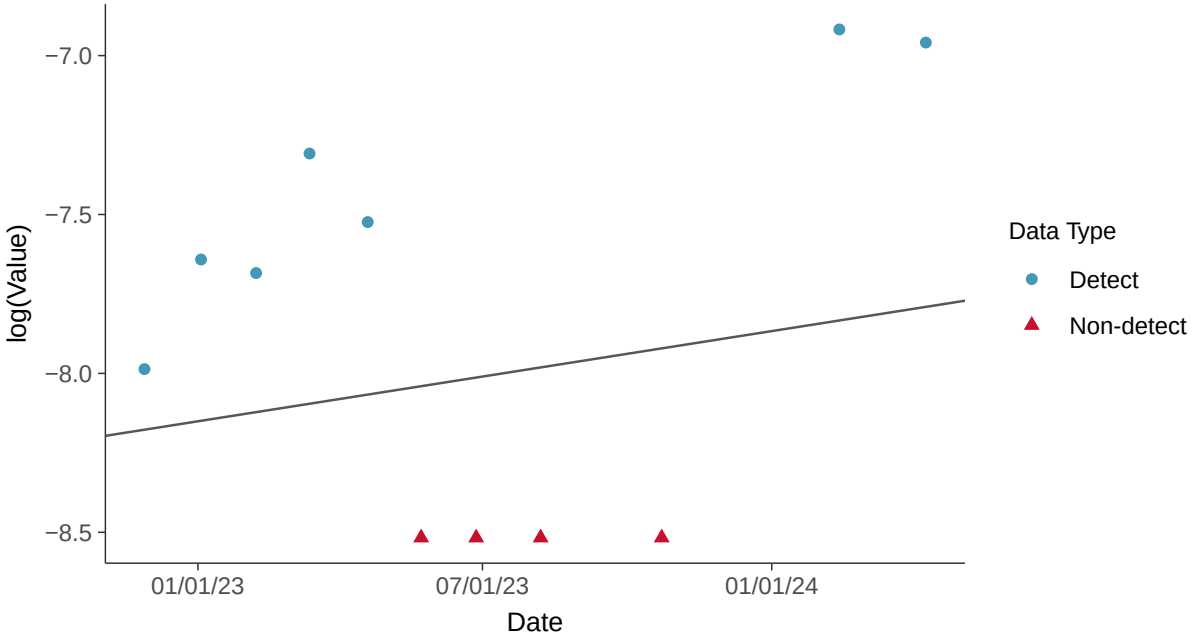
Gamma Q-Q plot using ROS Imputed Estimates

Chromium, Total, MW-12 (mg/L)



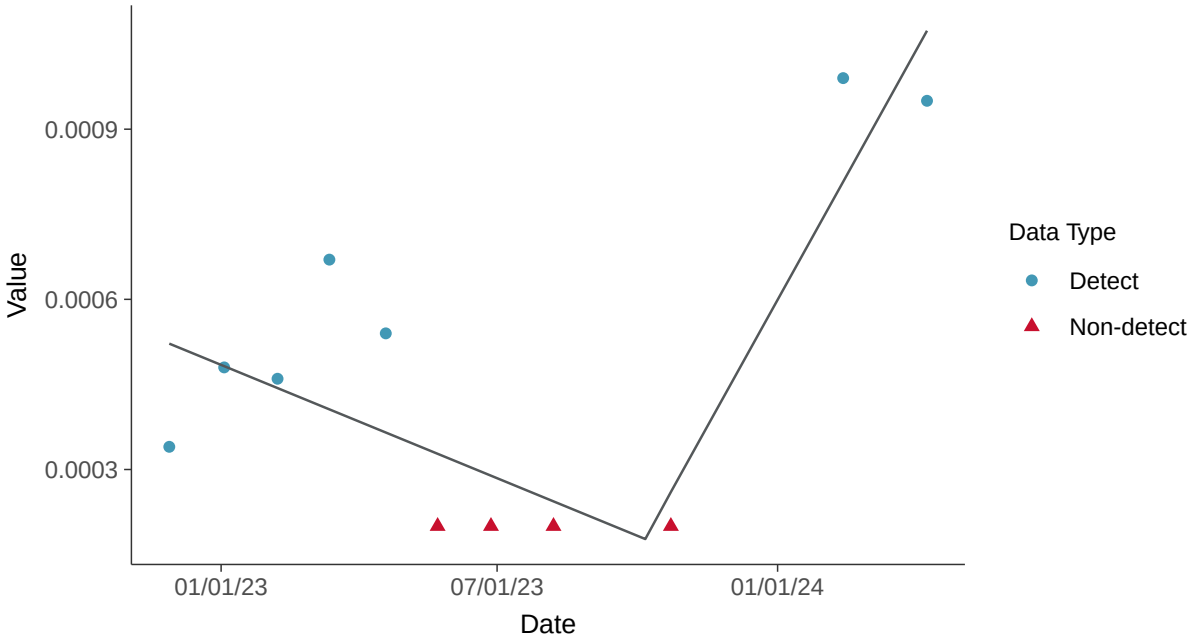
Trend Regression: Lognormal MLE

Chromium, Total, MW-12 (mg/L)



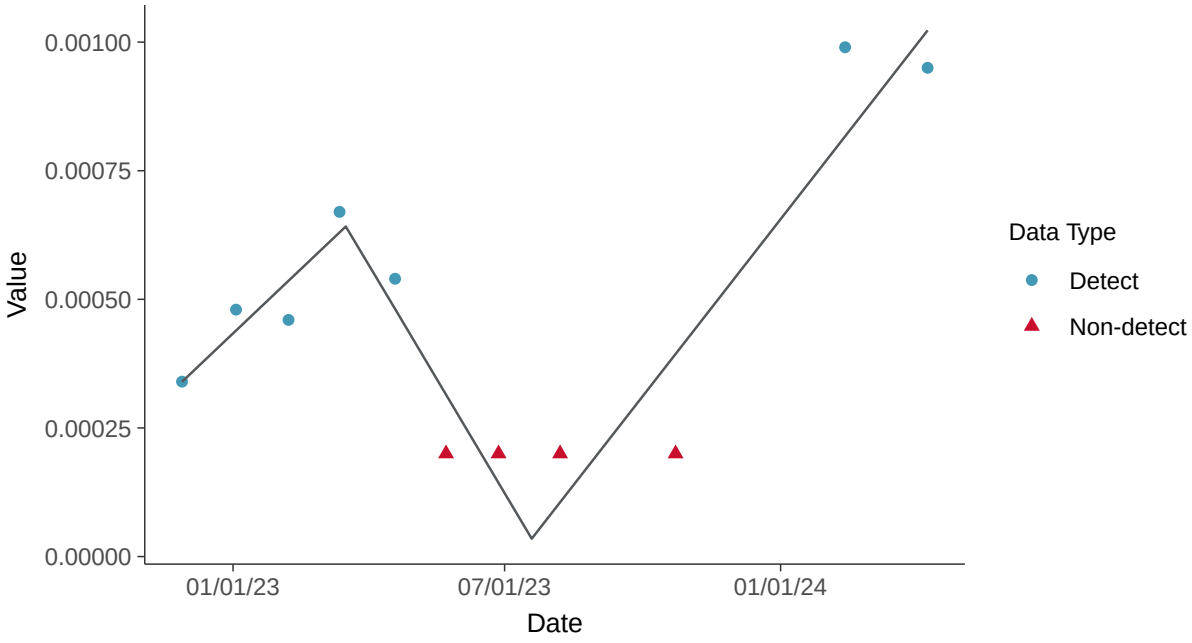
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-12 (mg/L)



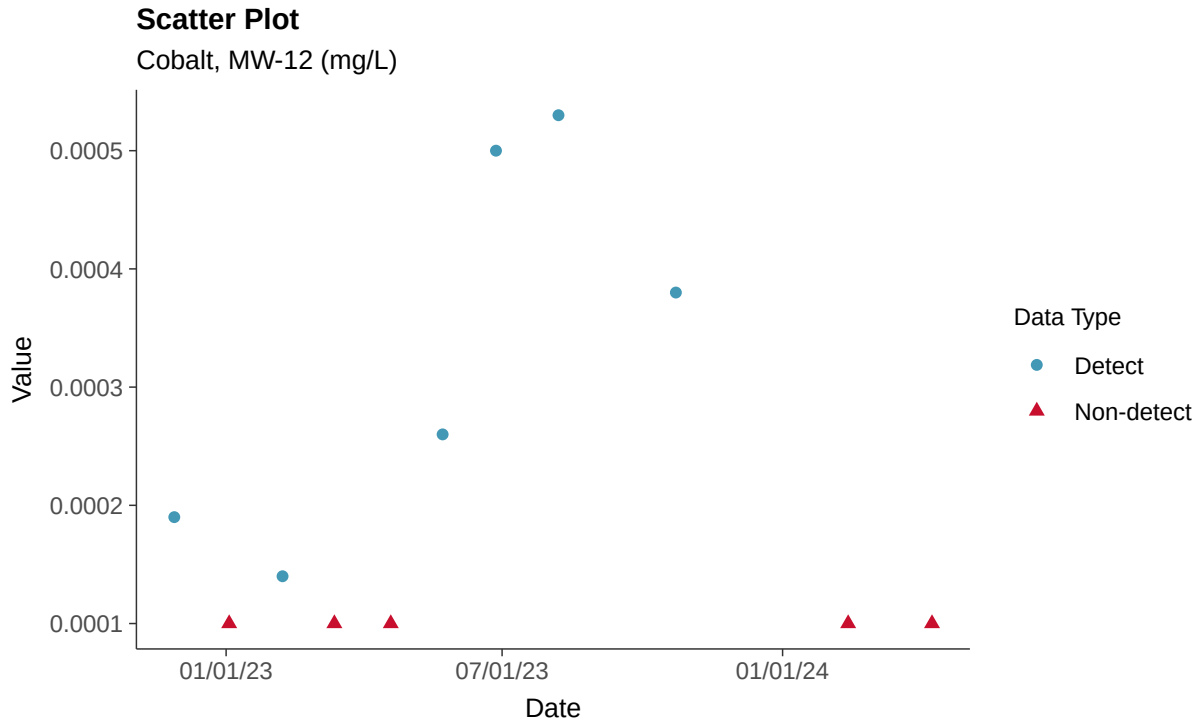
Trend Regression: Piecewise Linear-Linear-Linear

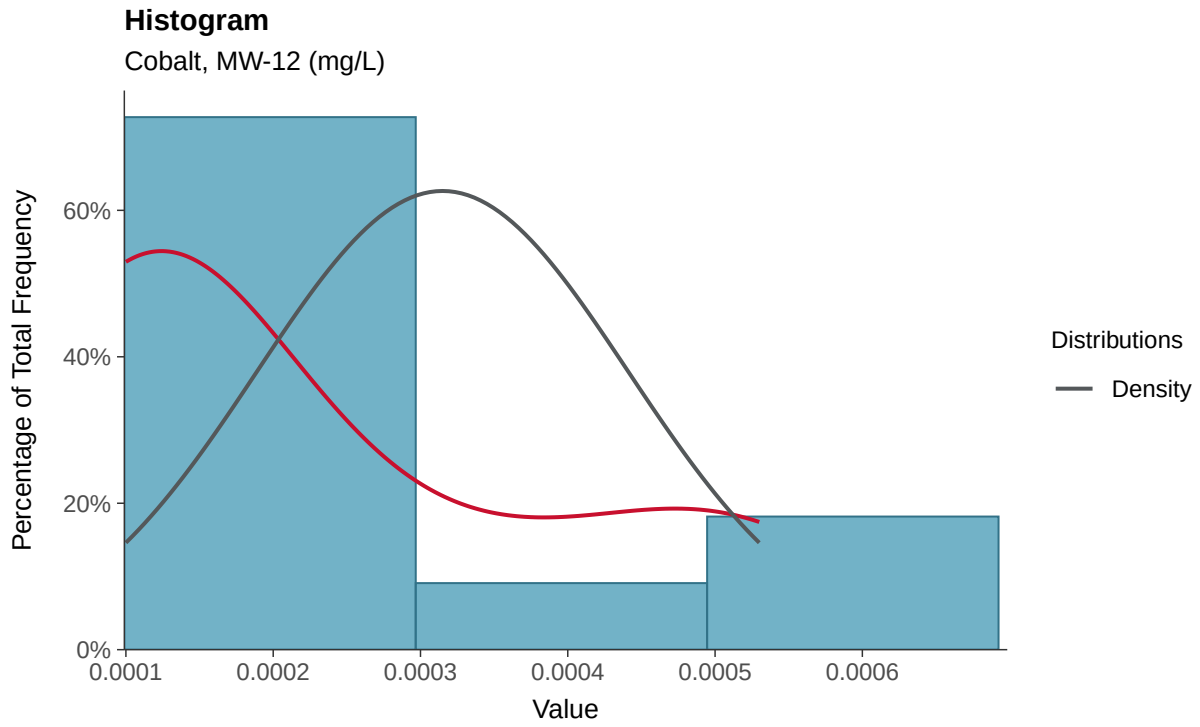
Chromium, Total, MW-12 (mg/L)



Appendix IV: Cobalt, MW-12

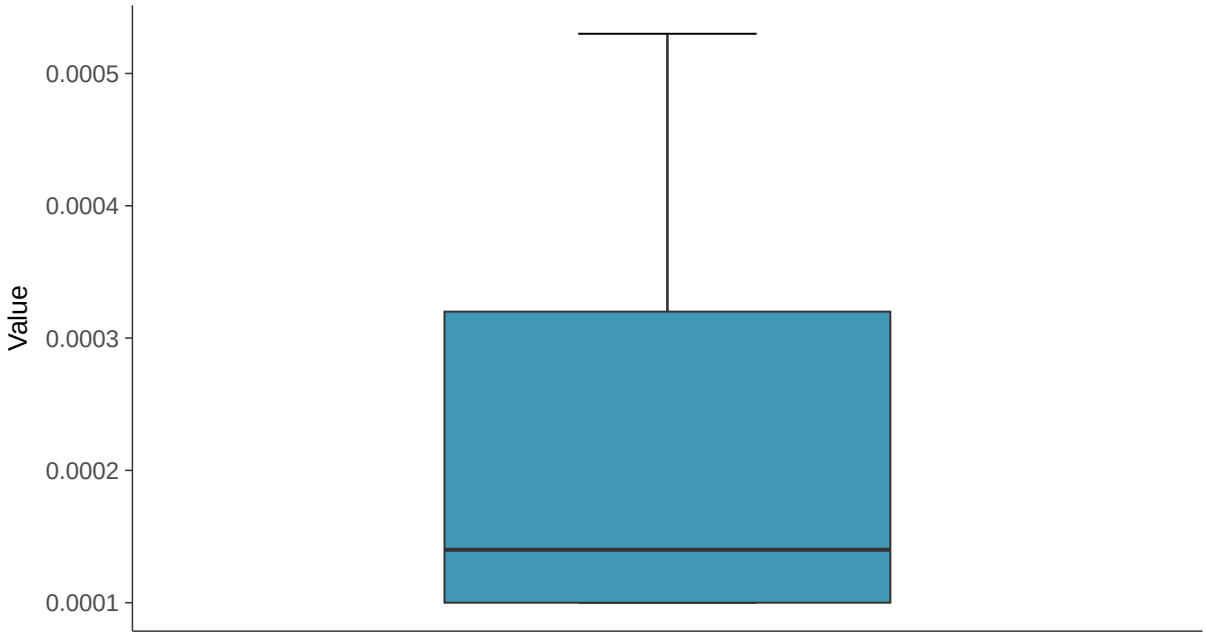
ID: 2_22_5_110





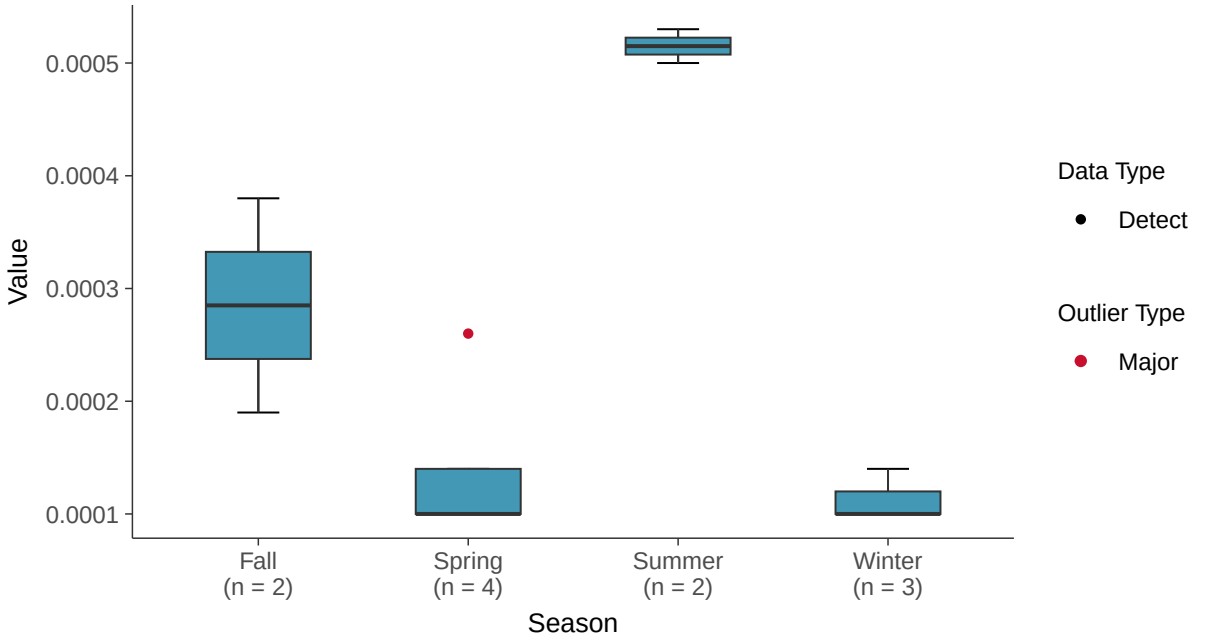
Boxplot

Cobalt, MW-12 (mg/L)



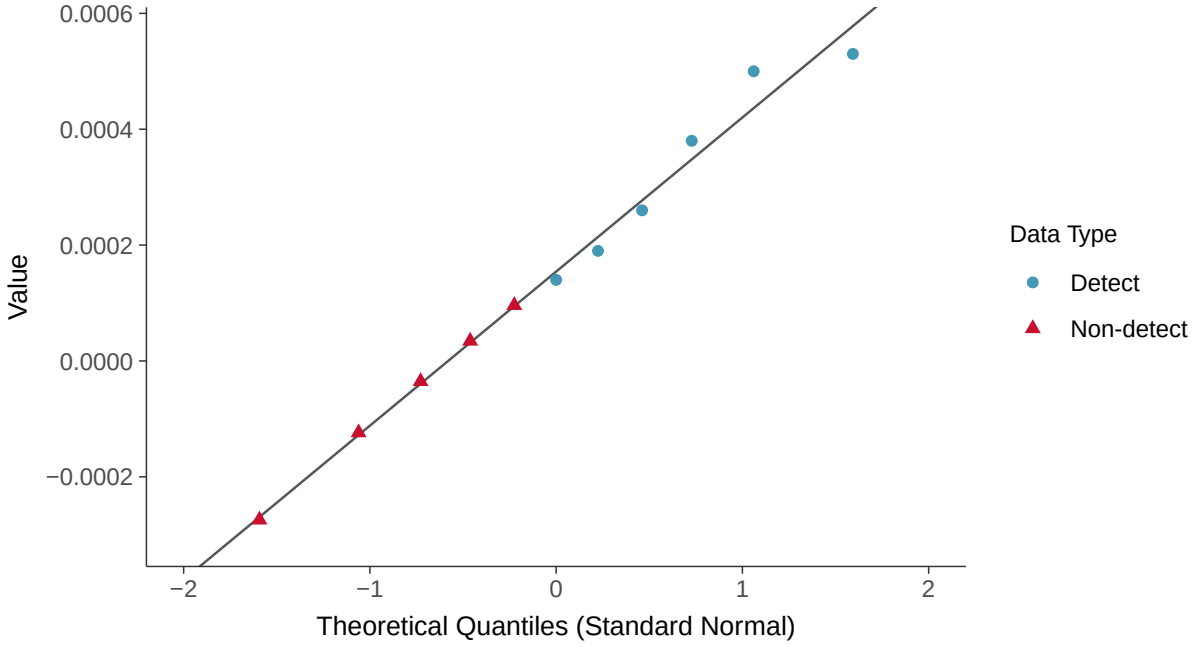
Boxplot by Season

Cobalt, MW-12 (mg/L)



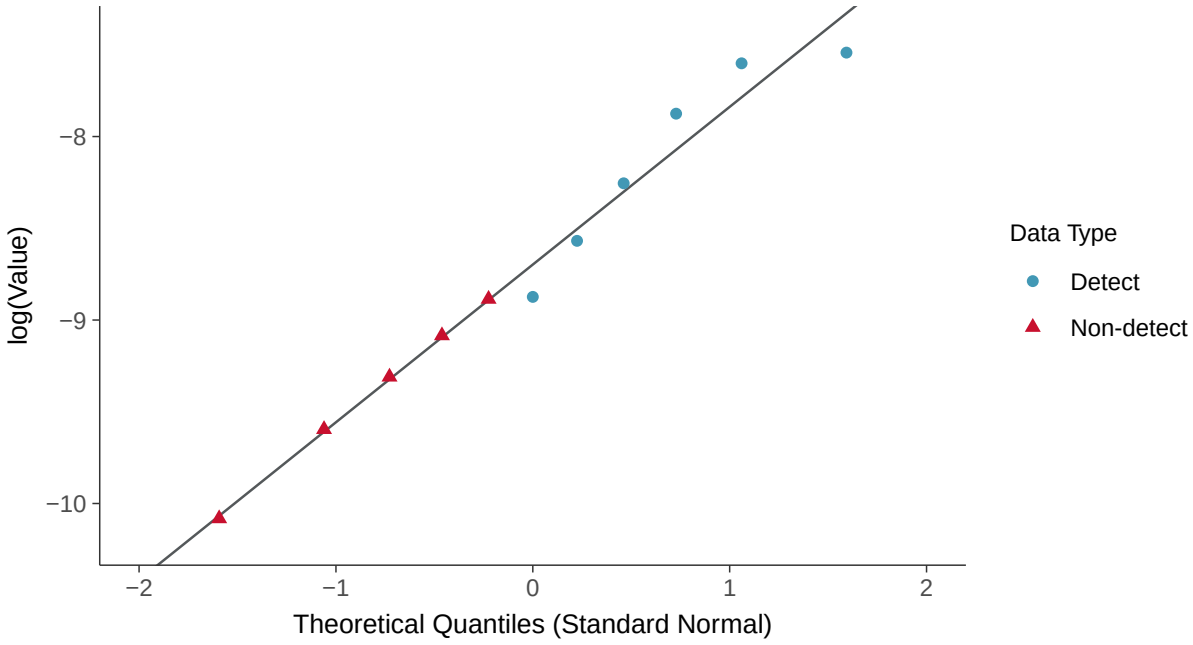
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-12 (mg/L)



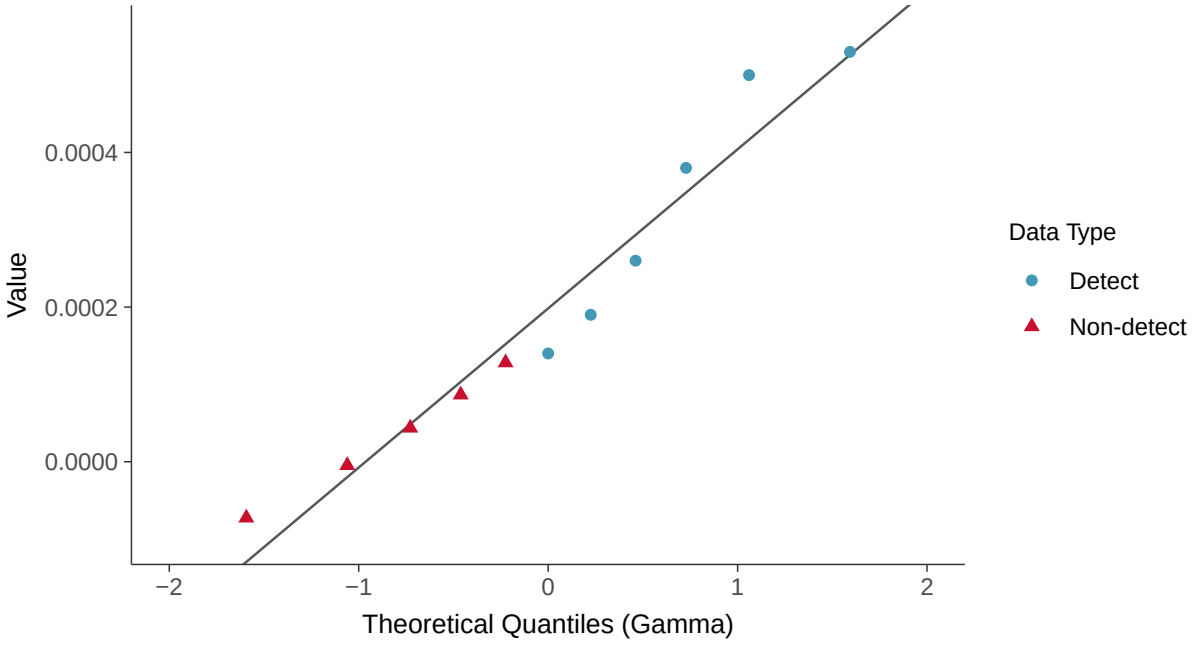
Lognormal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-12 (mg/L)



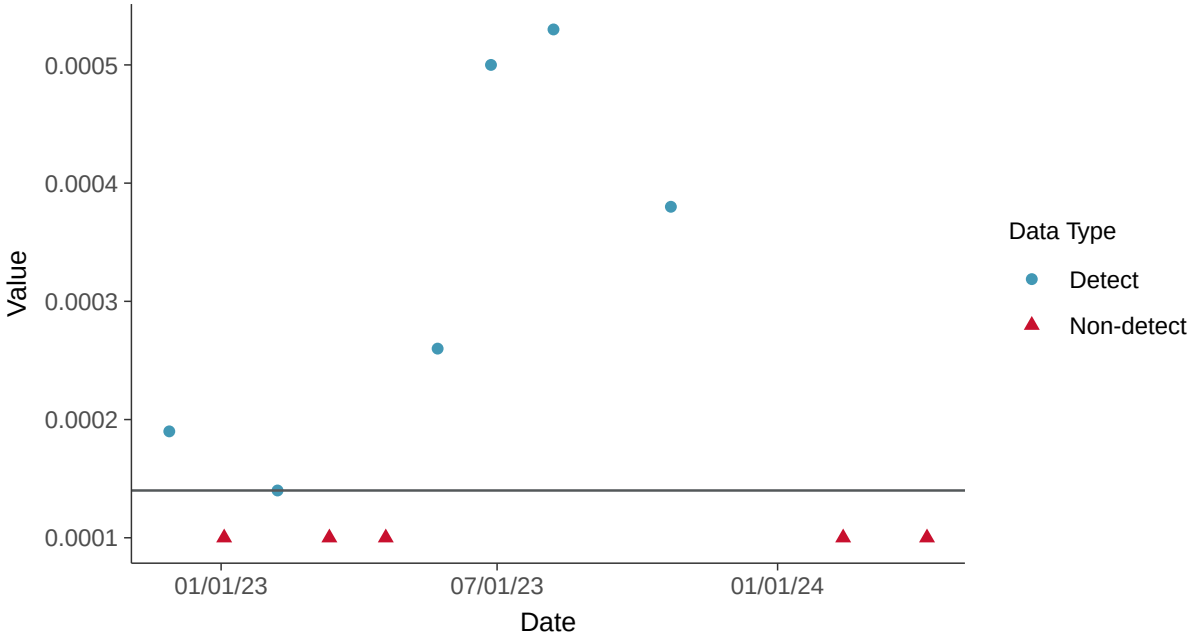
Gamma Q-Q plot using ROS Imputed Estimates

Cobalt, MW-12 (mg/L)



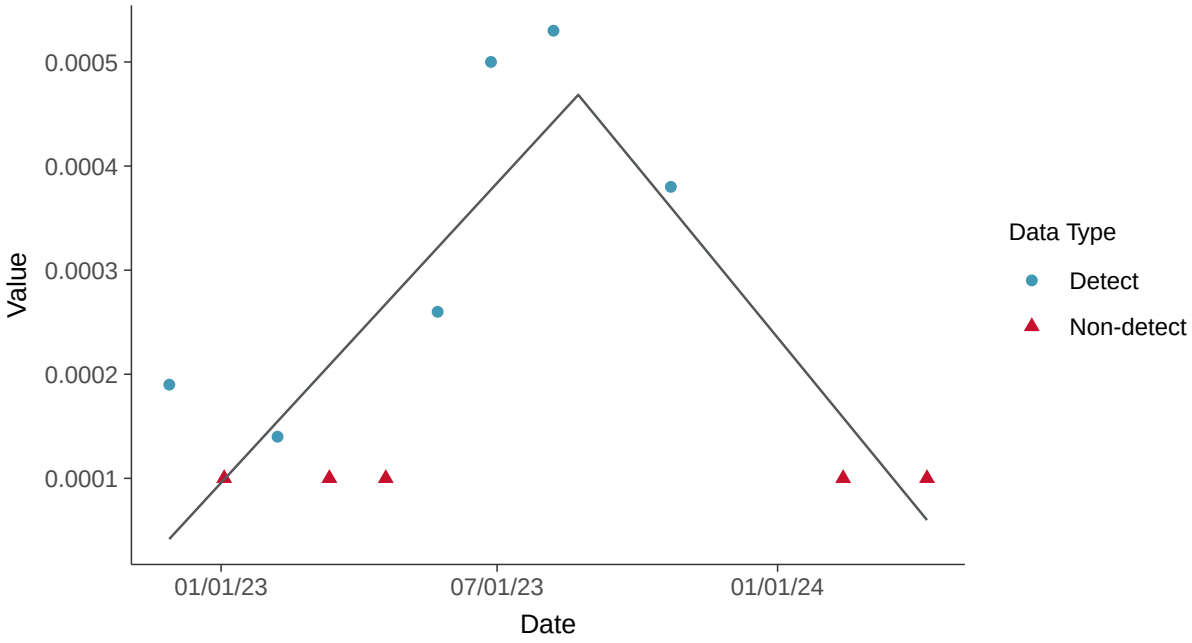
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Cobalt, MW-12 (mg/L)



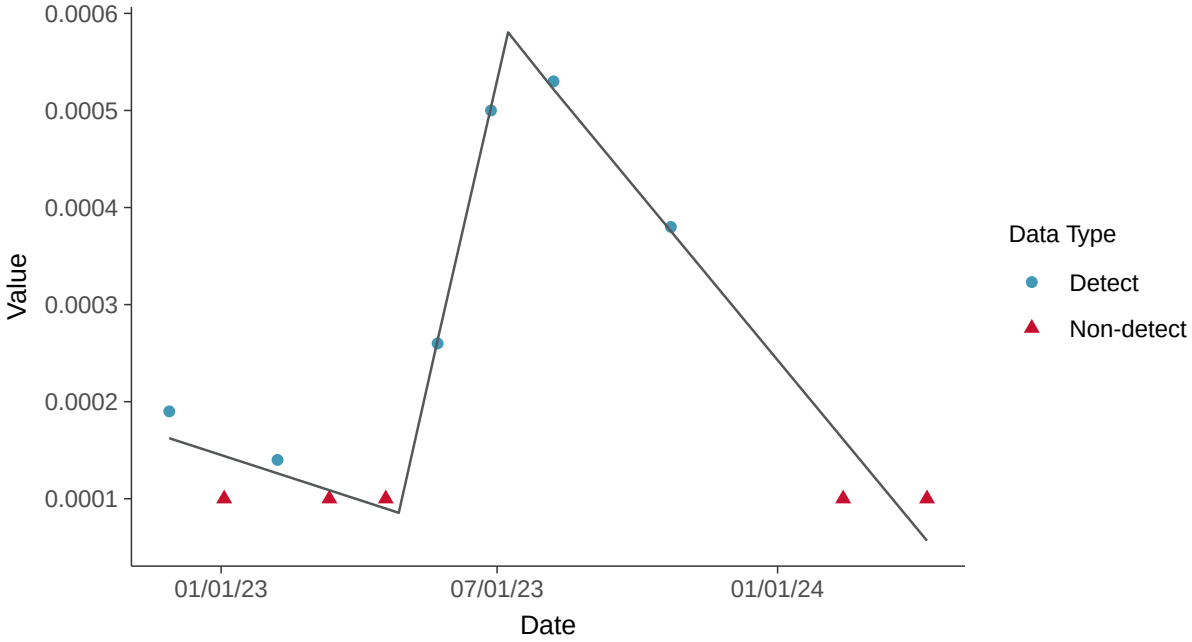
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-12 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cobalt, MW-12 (mg/L)

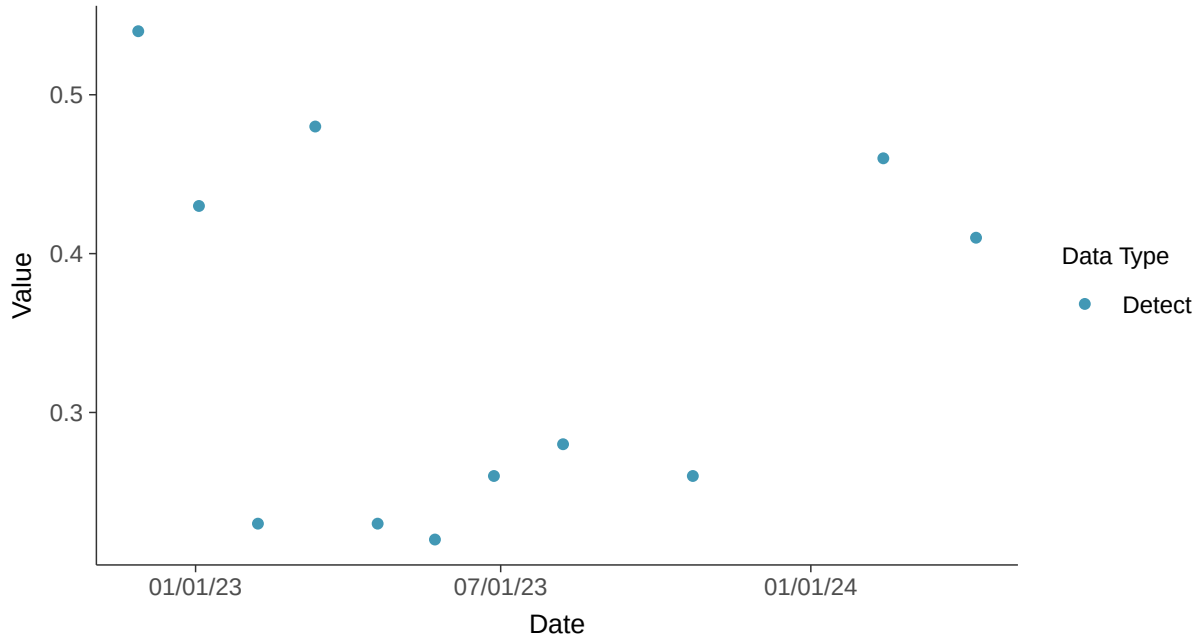


Appendix IV: Fluoride (App IV), MW-12

ID: 2_22_5_113

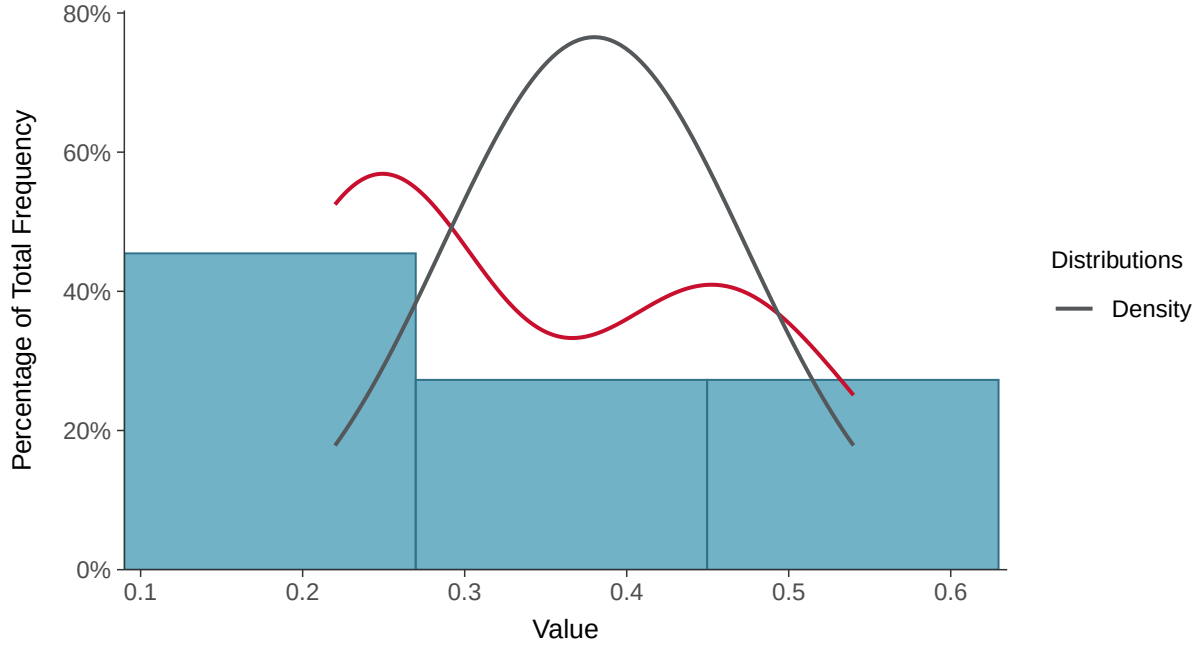
Scatter Plot

Fluoride (App IV), MW-12 (mg/L)



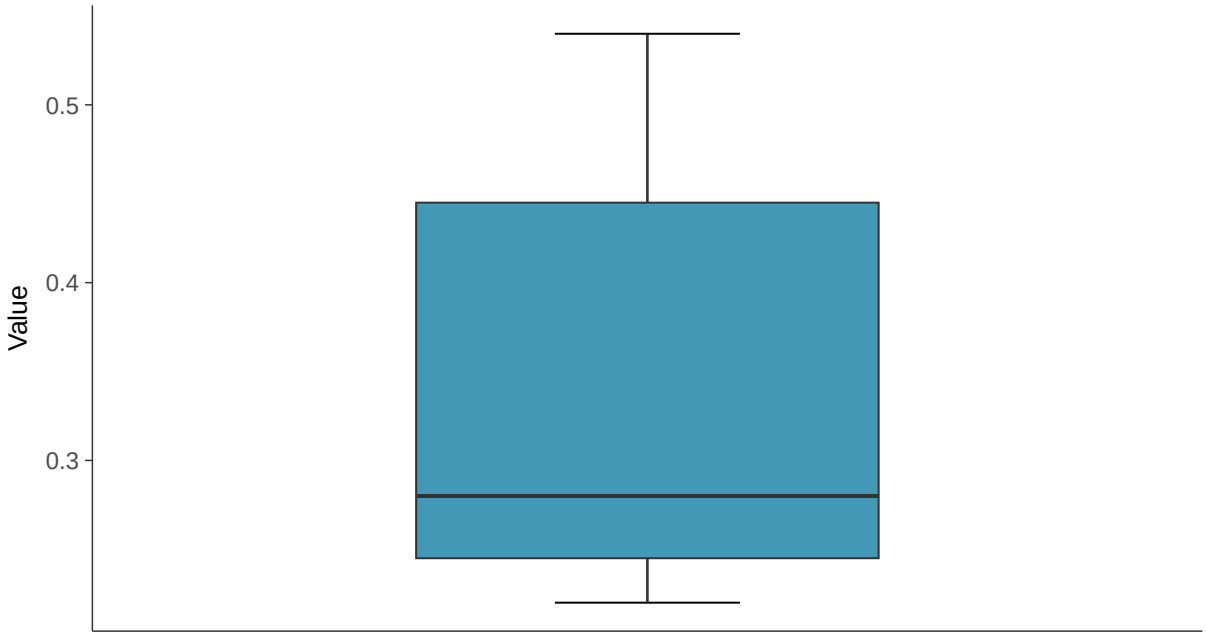
Histogram

Fluoride (App IV), MW-12 (mg/L)



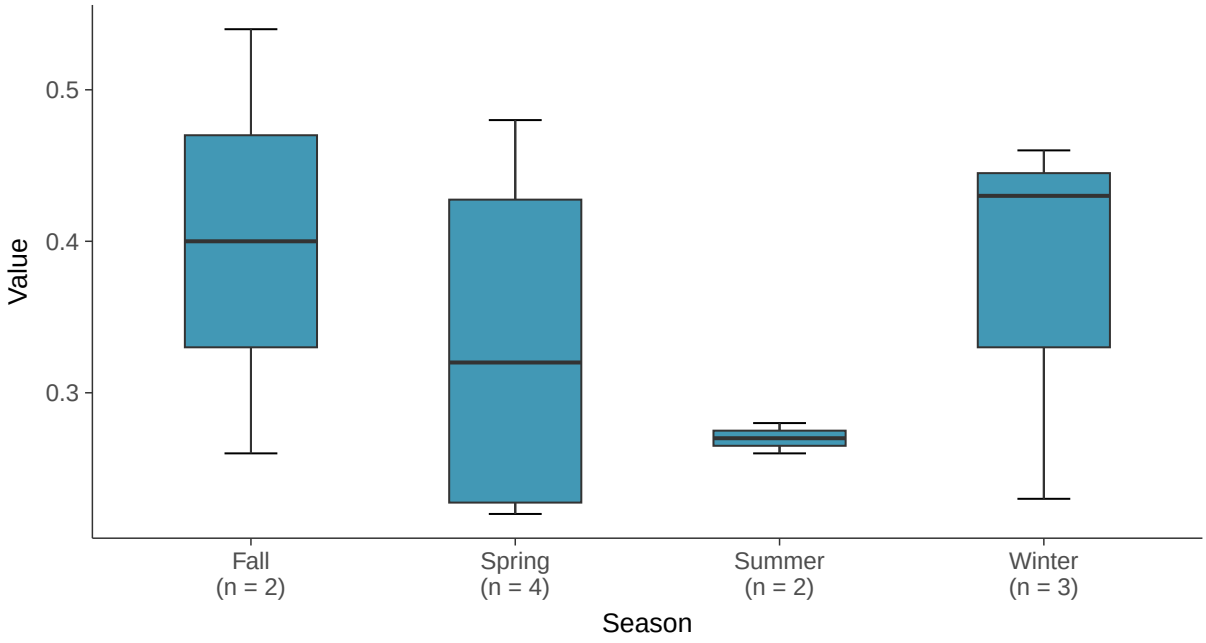
Boxplot

Fluoride (App IV), MW-12 (mg/L)



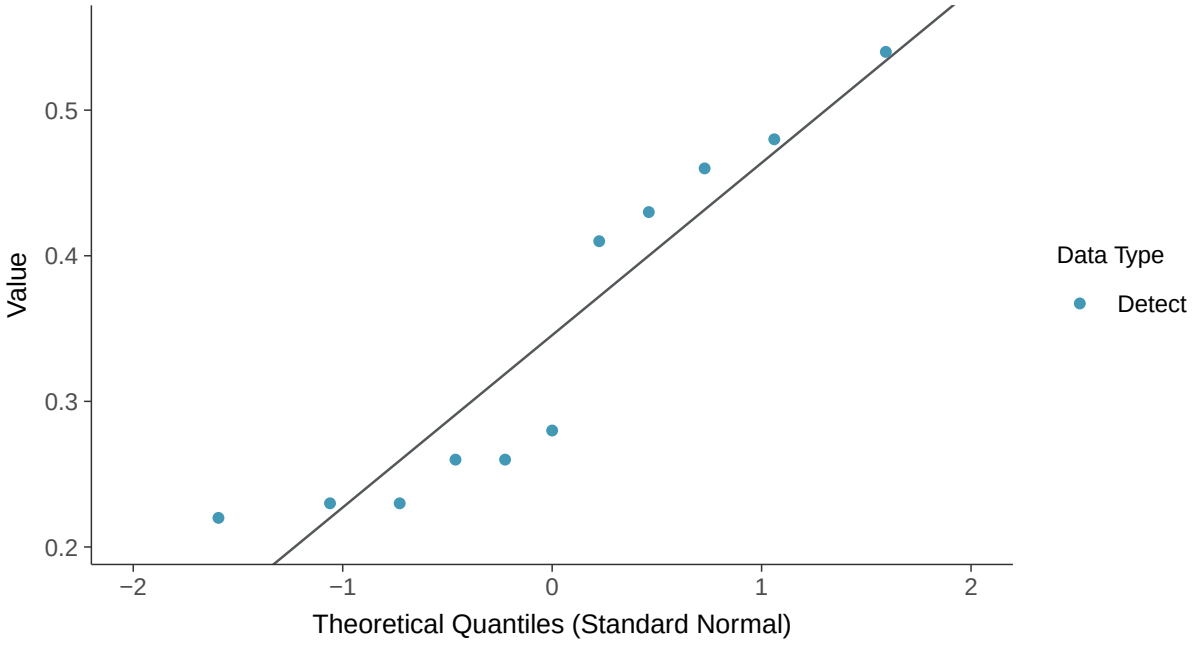
Boxplot by Season

Fluoride (App IV), MW-12 (mg/L)



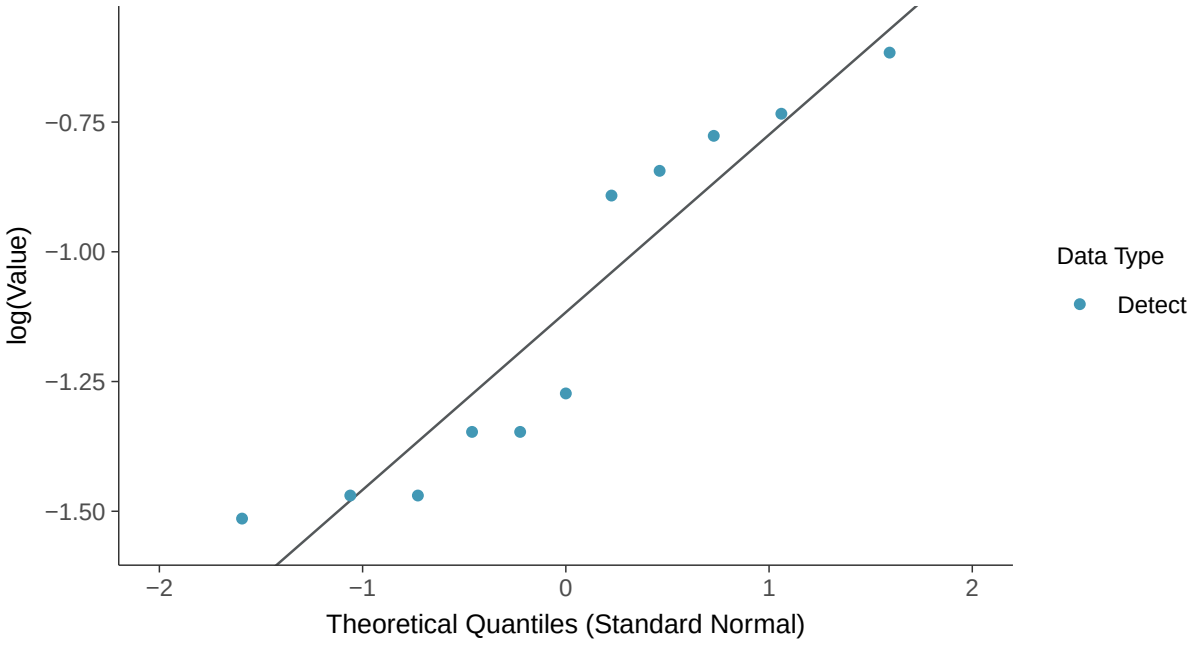
Normal Q-Q plot

Fluoride (App IV), MW-12 (mg/L)



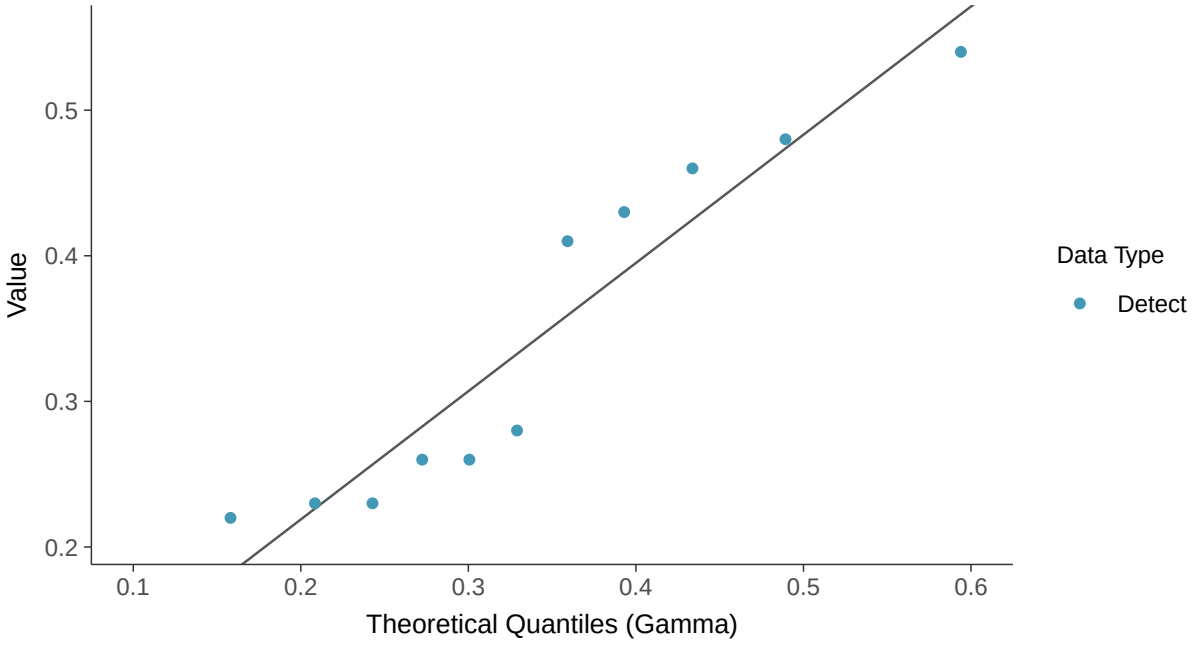
Lognormal Q-Q plot

Fluoride (App IV), MW-12 (mg/L)



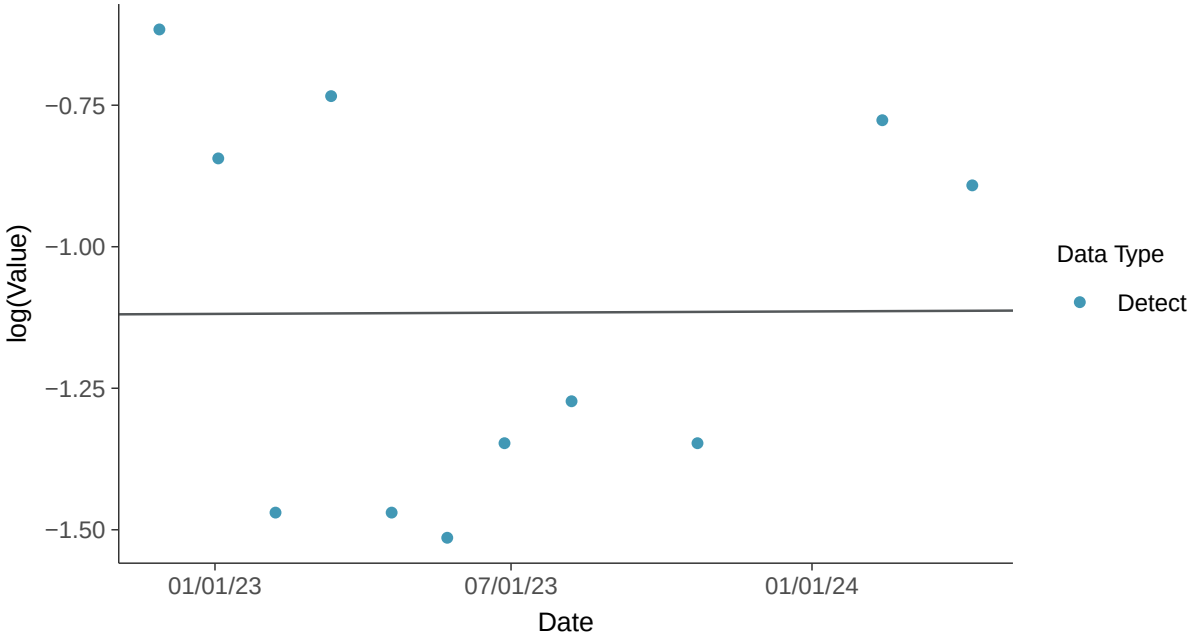
Gamma Q-Q plot

Fluoride (App IV), MW-12 (mg/L)



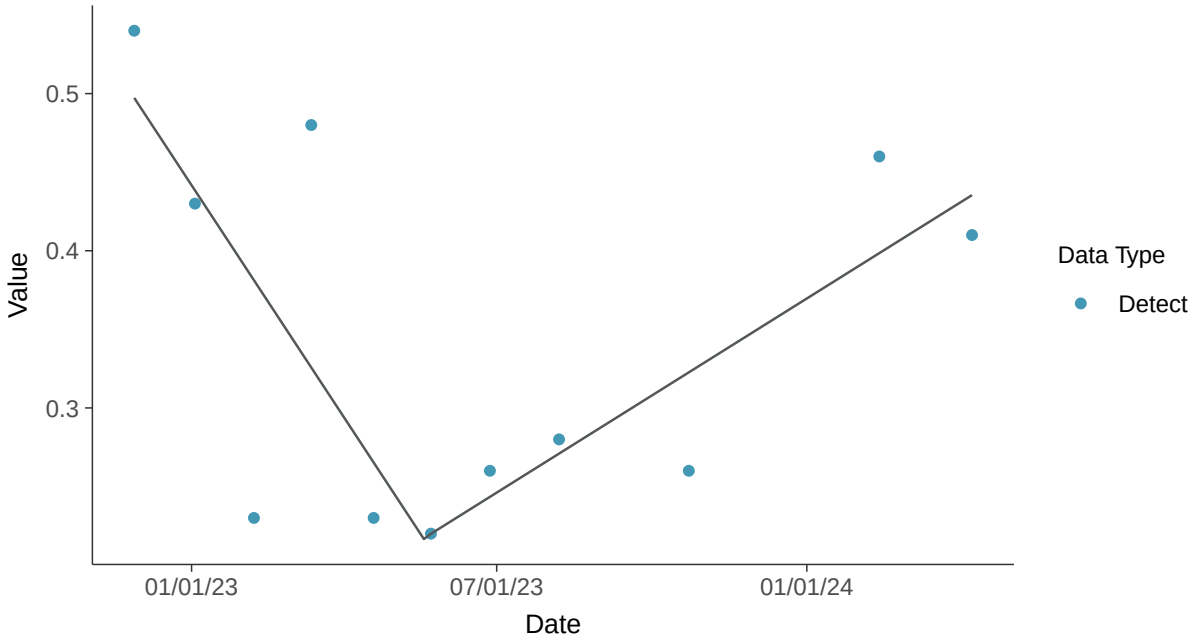
Trend Regression: Lognormal MLE

Fluoride (App IV), MW-12 (mg/L)



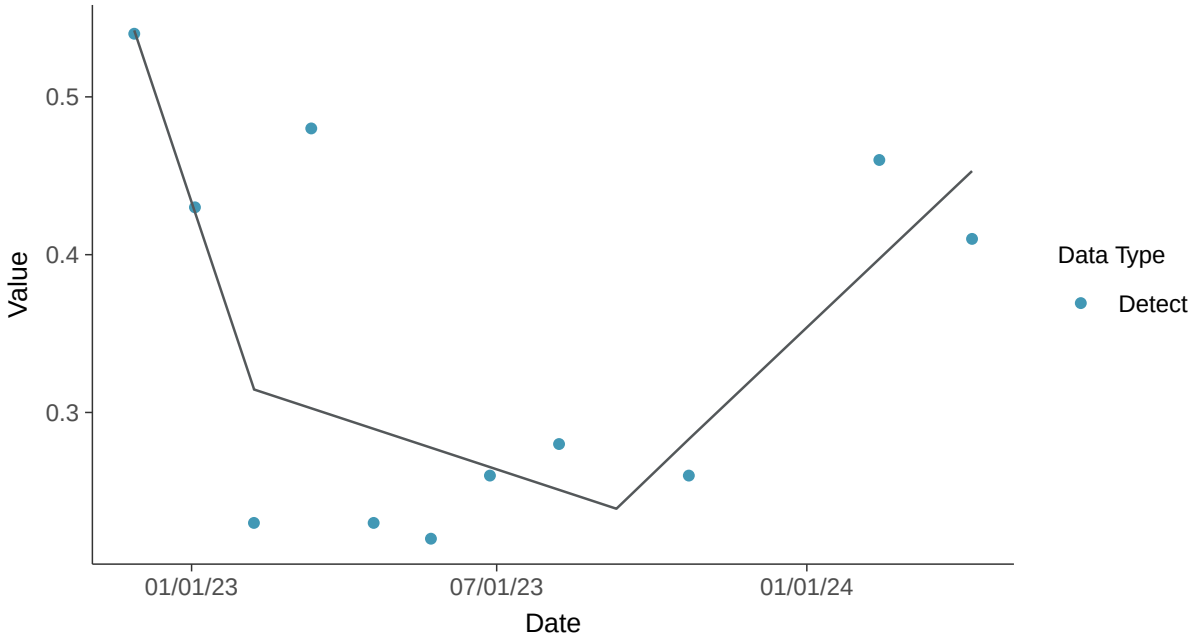
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-12 (mg/L)



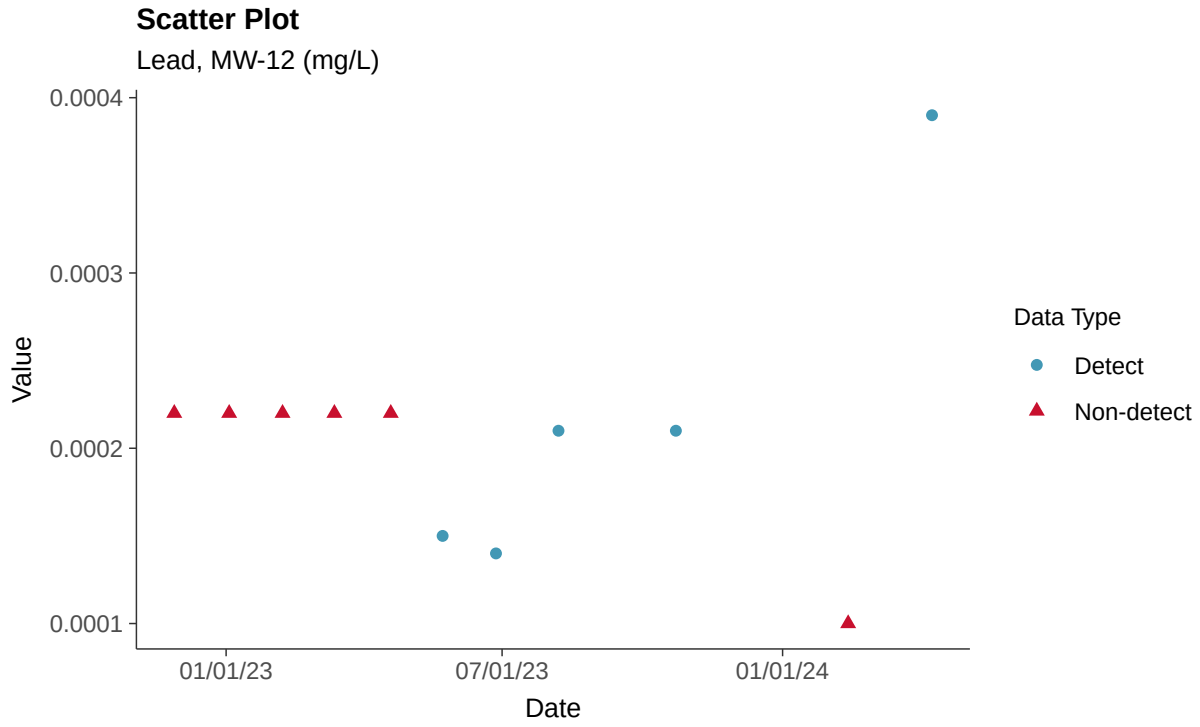
Trend Regression: Piecewise Linear-Linear-Linear

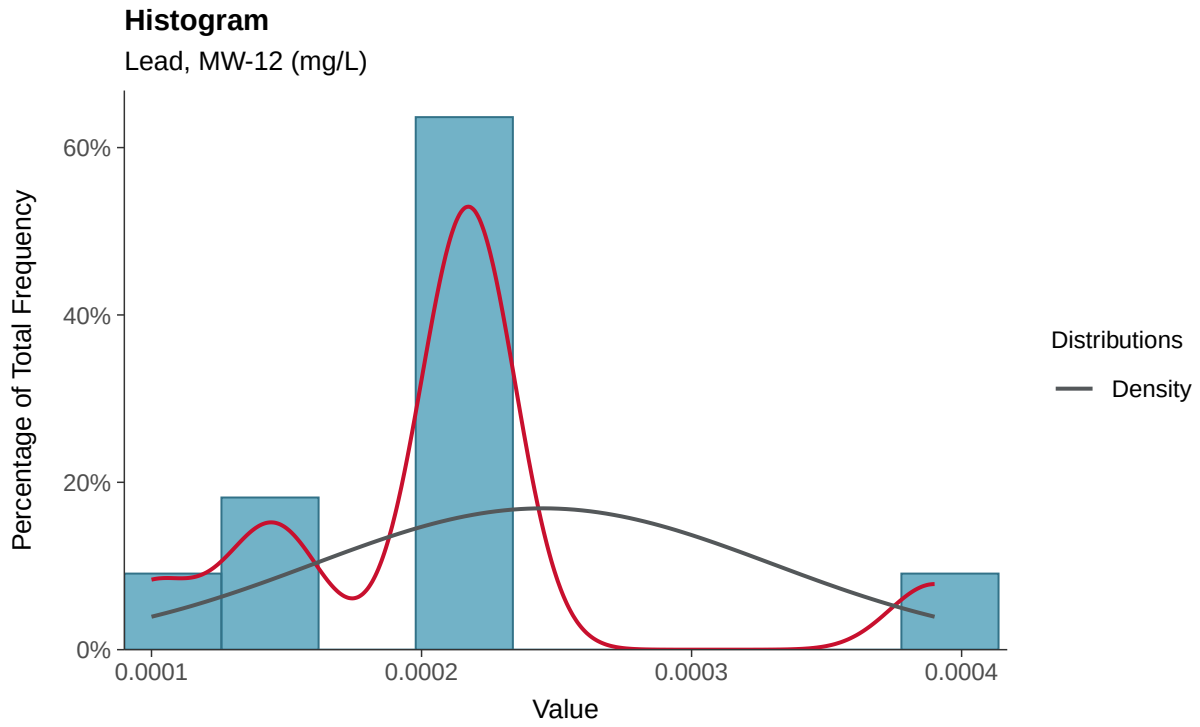
Fluoride (App IV), MW-12 (mg/L)



Appendix IV: Lead, MW-12

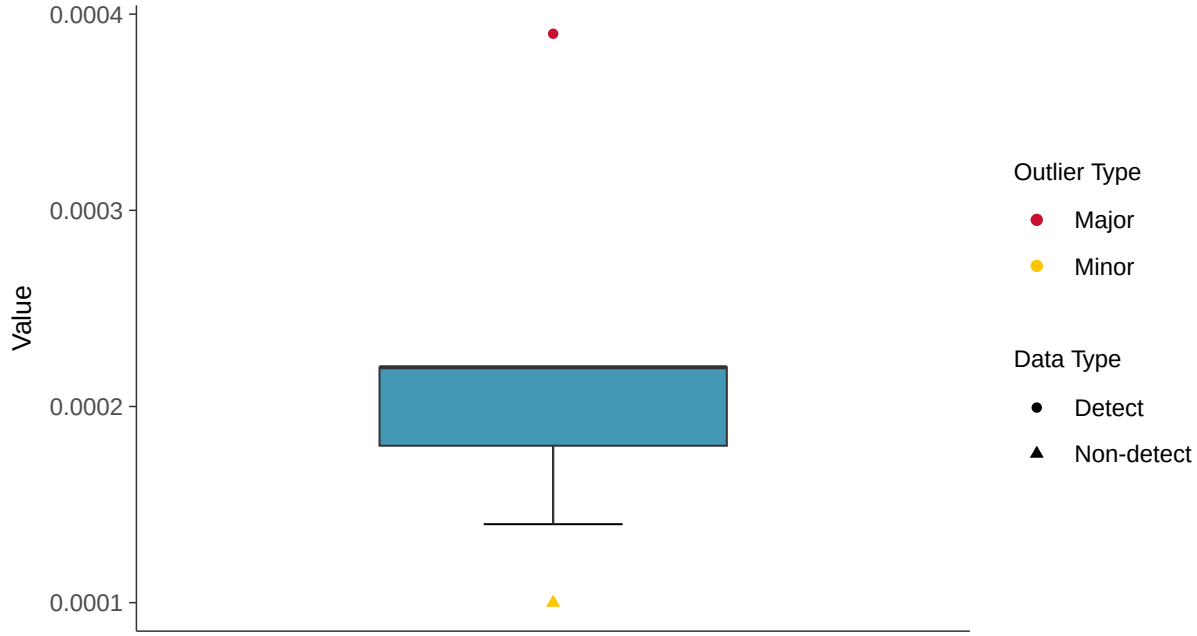
ID: 2_22_5_115





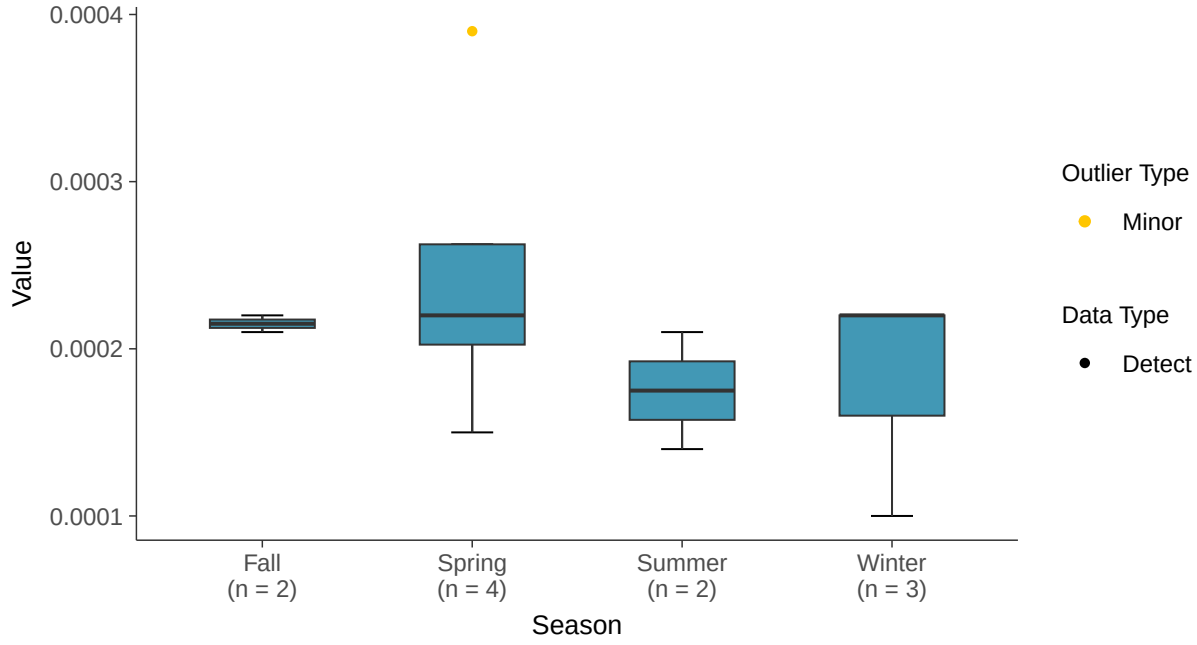
Boxplot

Lead, MW-12 (mg/L)



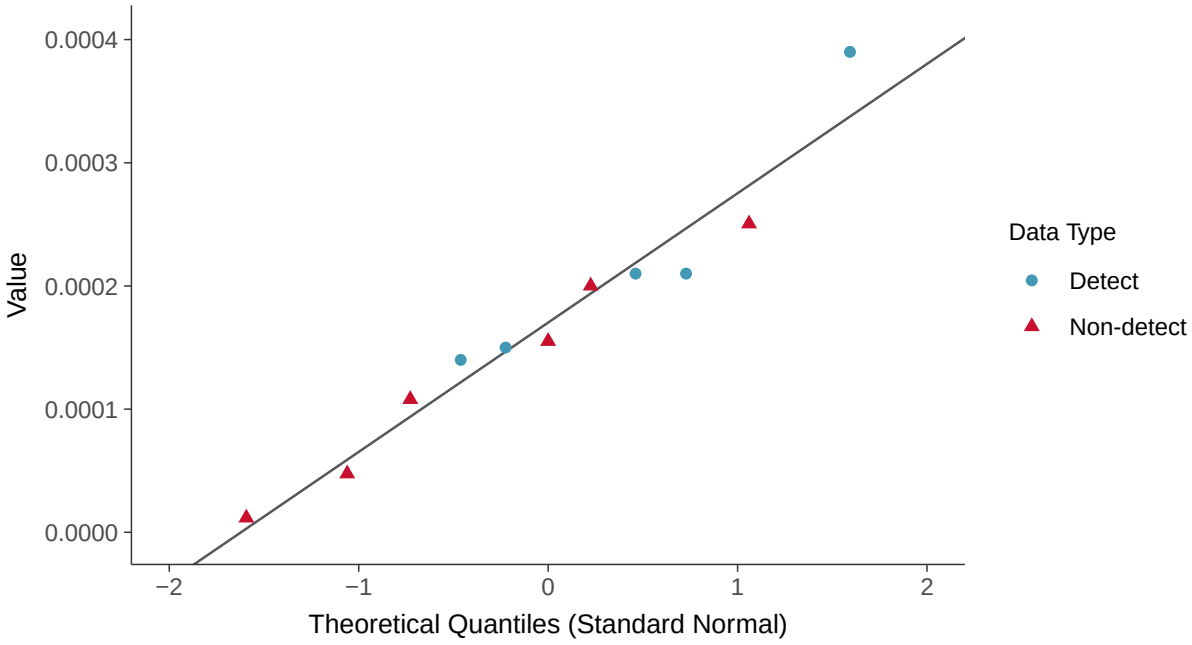
Boxplot by Season

Lead, MW-12 (mg/L)



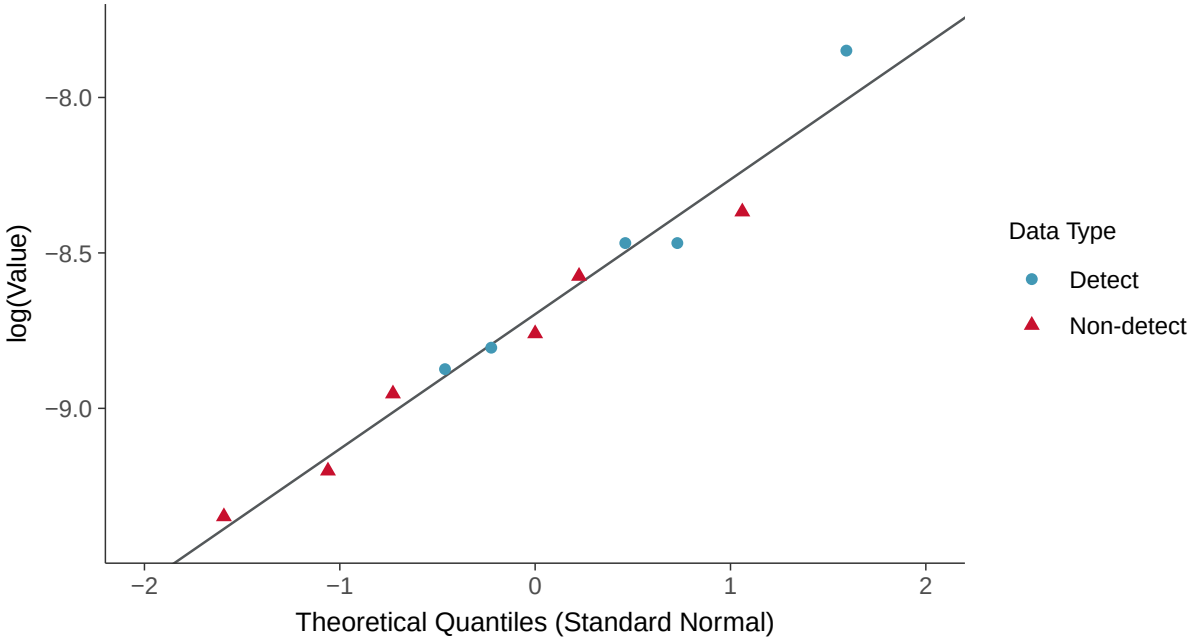
Normal Q-Q plot using ROS Imputed Estimates

Lead, MW-12 (mg/L)



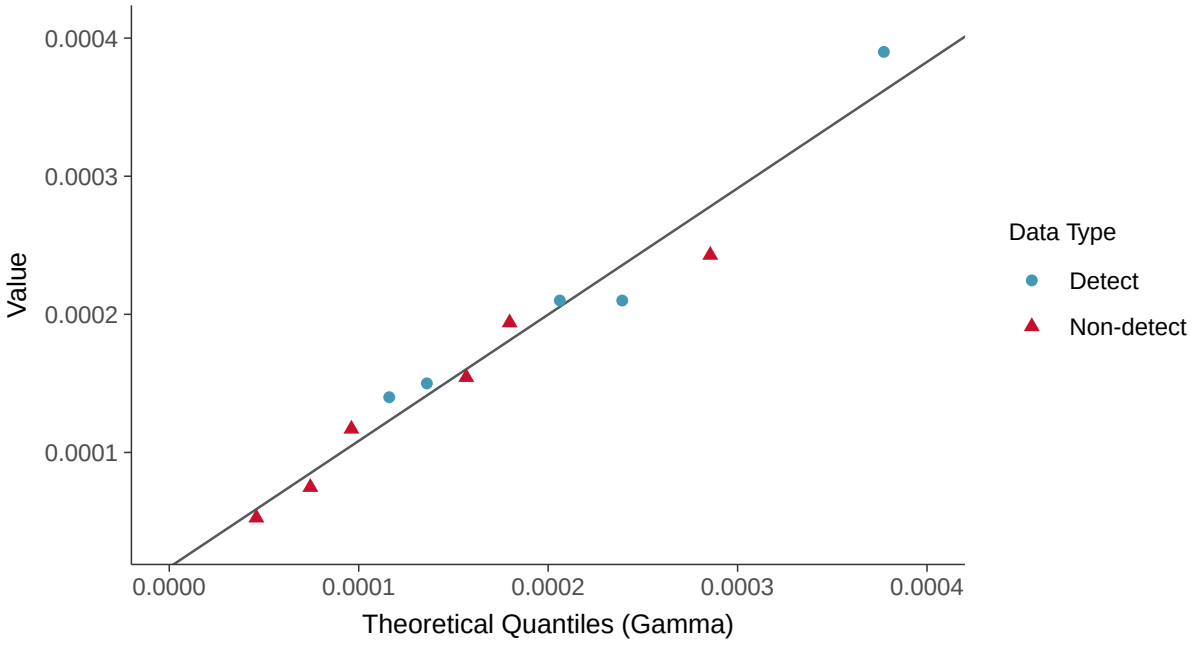
Lognormal Q-Q plot using ROS Imputed Estimates

Lead, MW-12 (mg/L)



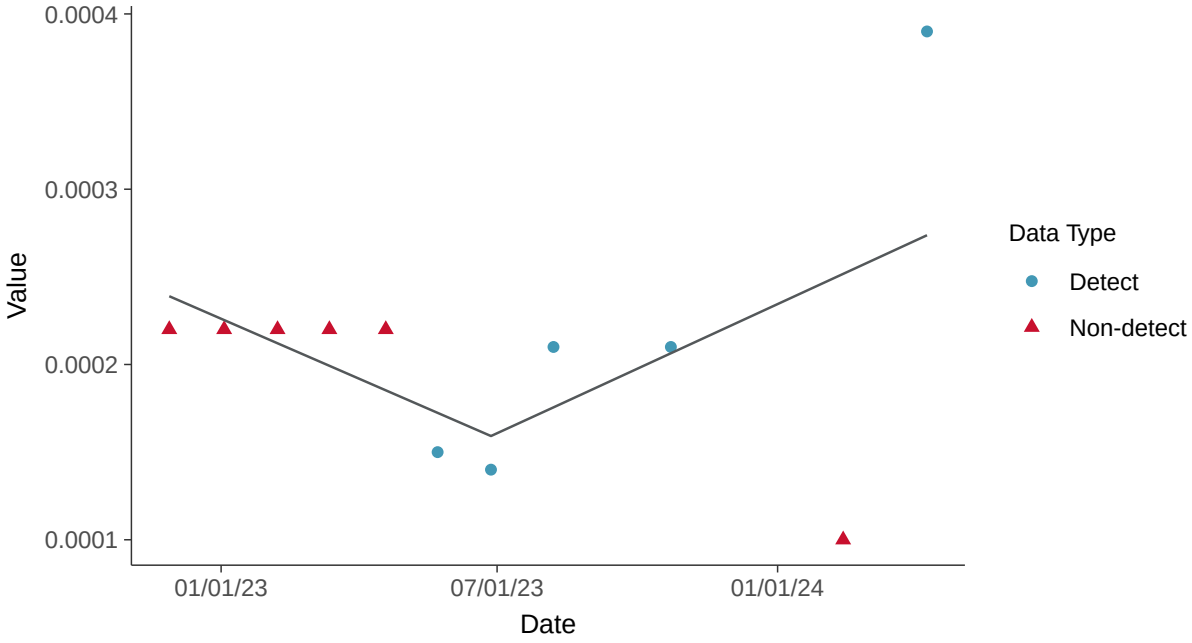
Gamma Q-Q plot using ROS Imputed Estimates

Lead, MW-12 (mg/L)



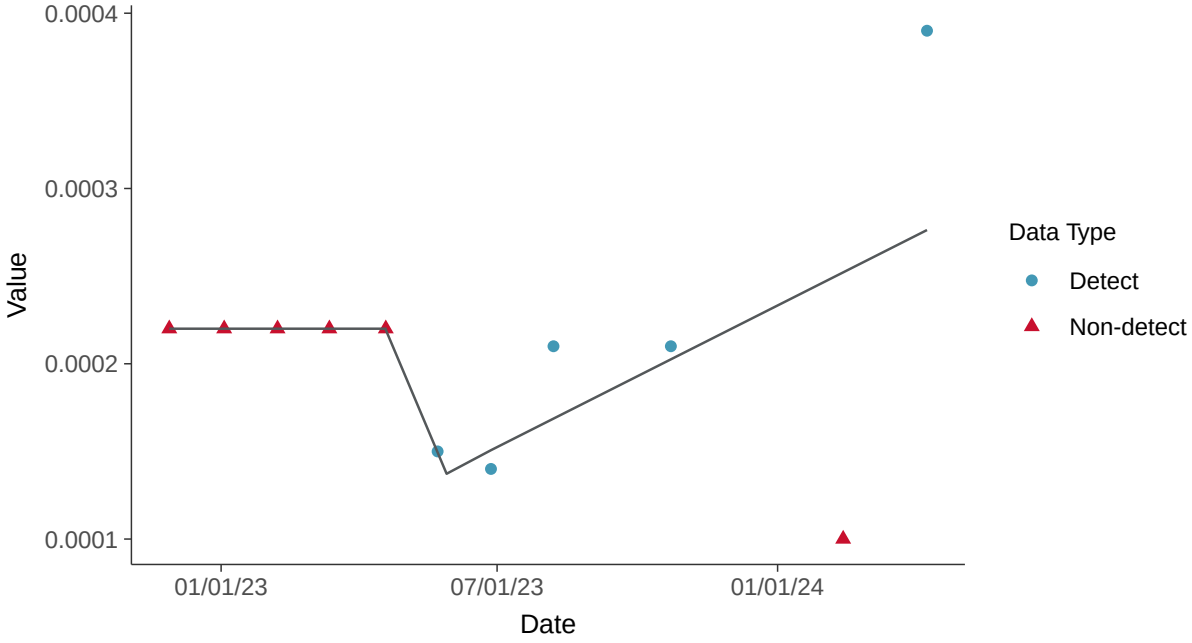
Trend Regression: Piecewise Linear-Linear

Lead, MW-12 (mg/L)



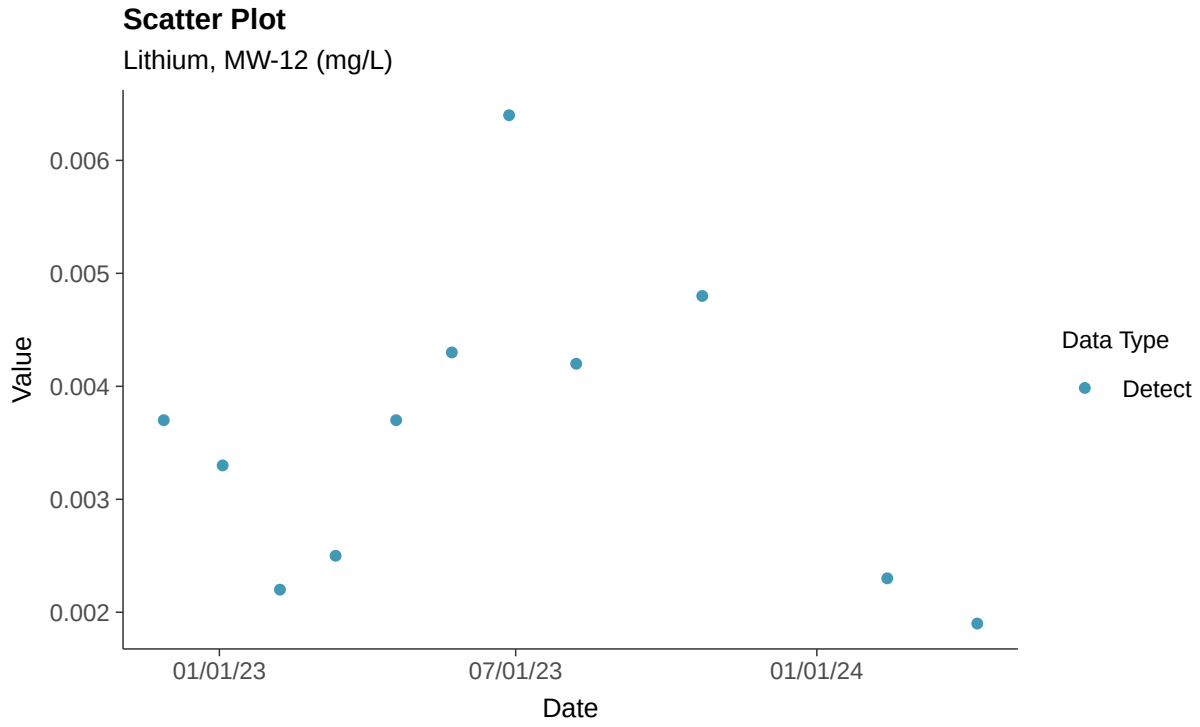
Trend Regression: Piecewise Linear-Linear-Linear

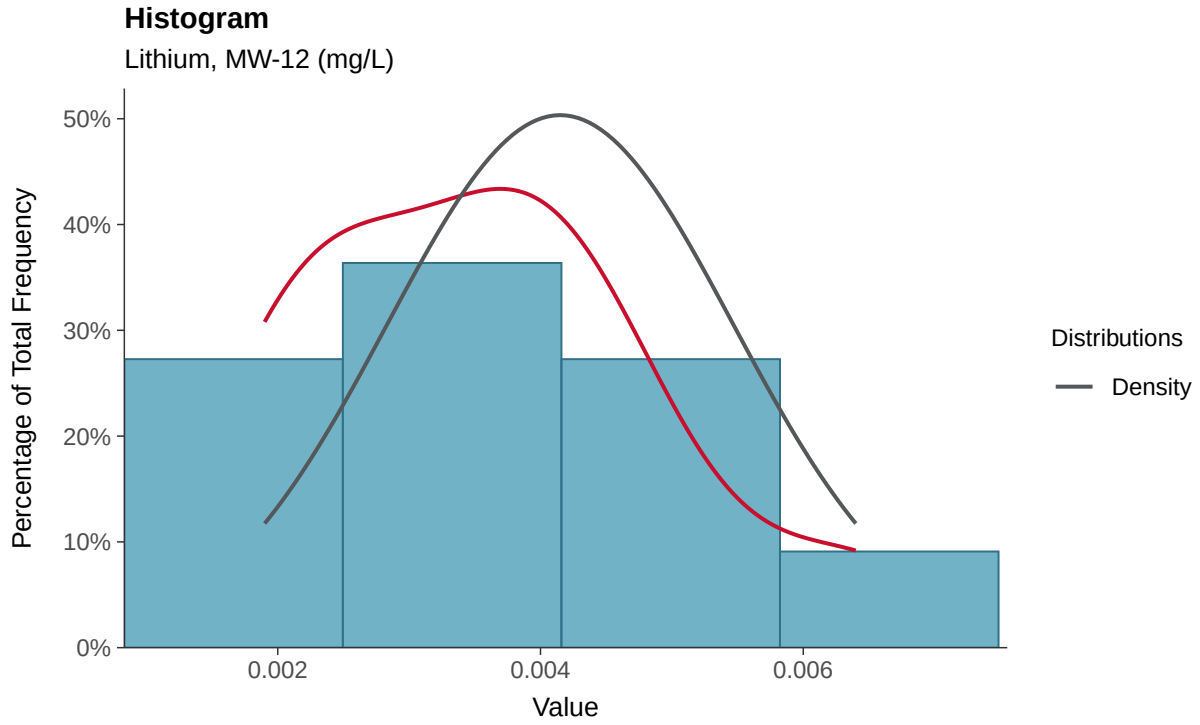
Lead, MW-12 (mg/L)



Appendix IV: Lithium, MW-12

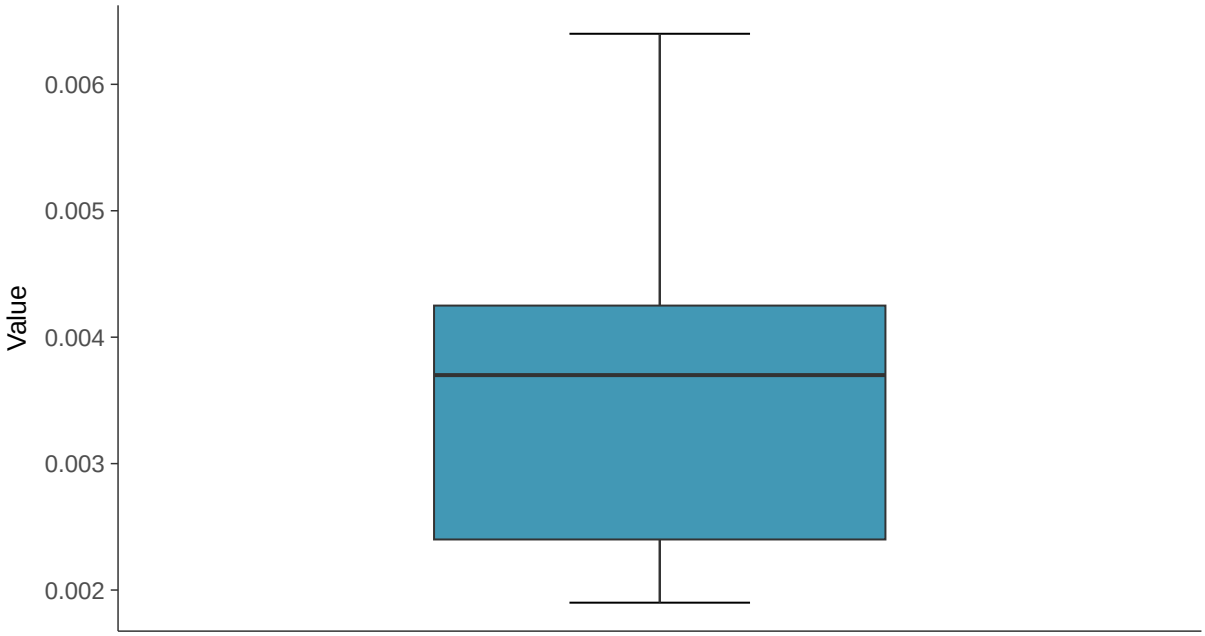
ID: 2_22_5_116





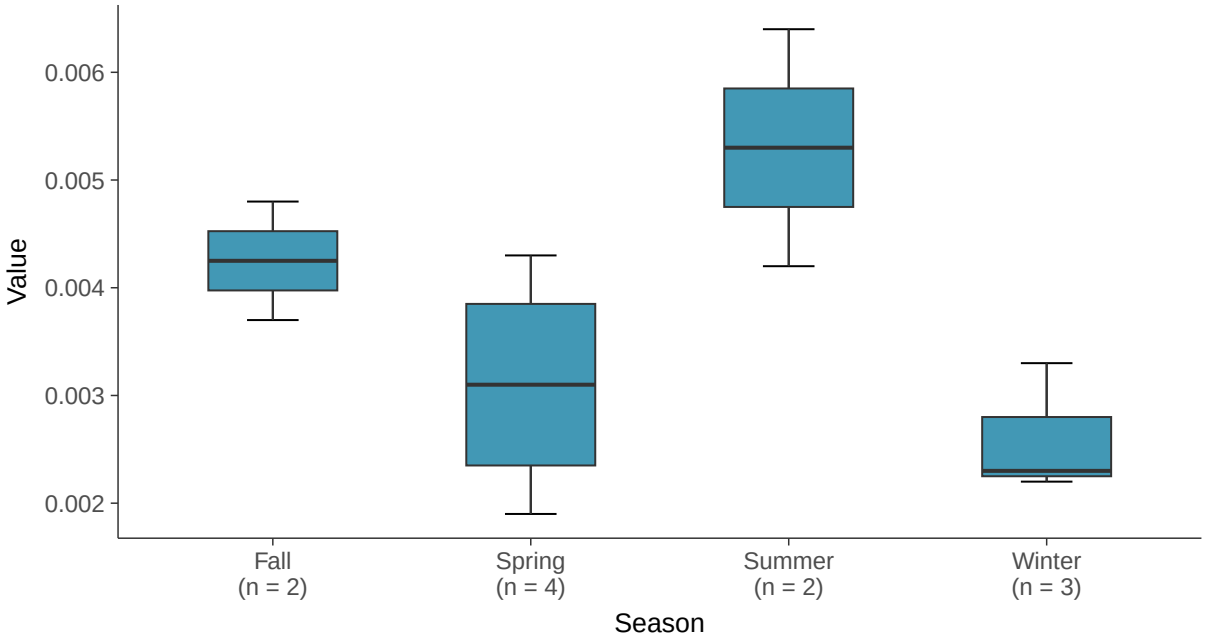
Boxplot

Lithium, MW-12 (mg/L)



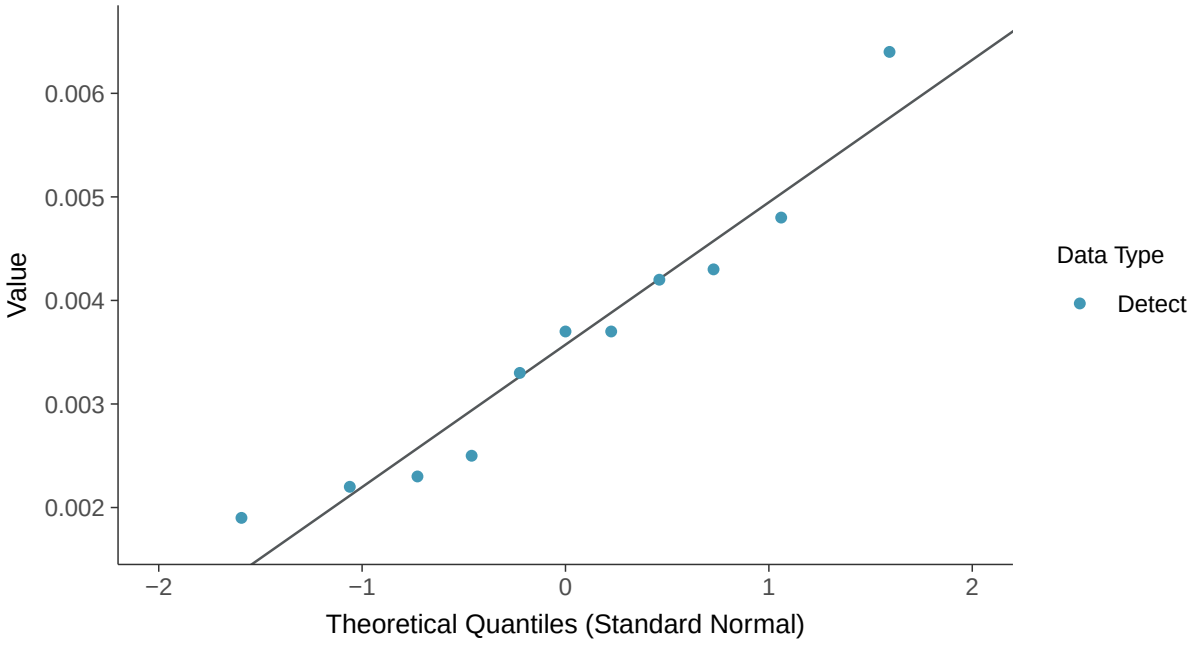
Boxplot by Season

Lithium, MW-12 (mg/L)



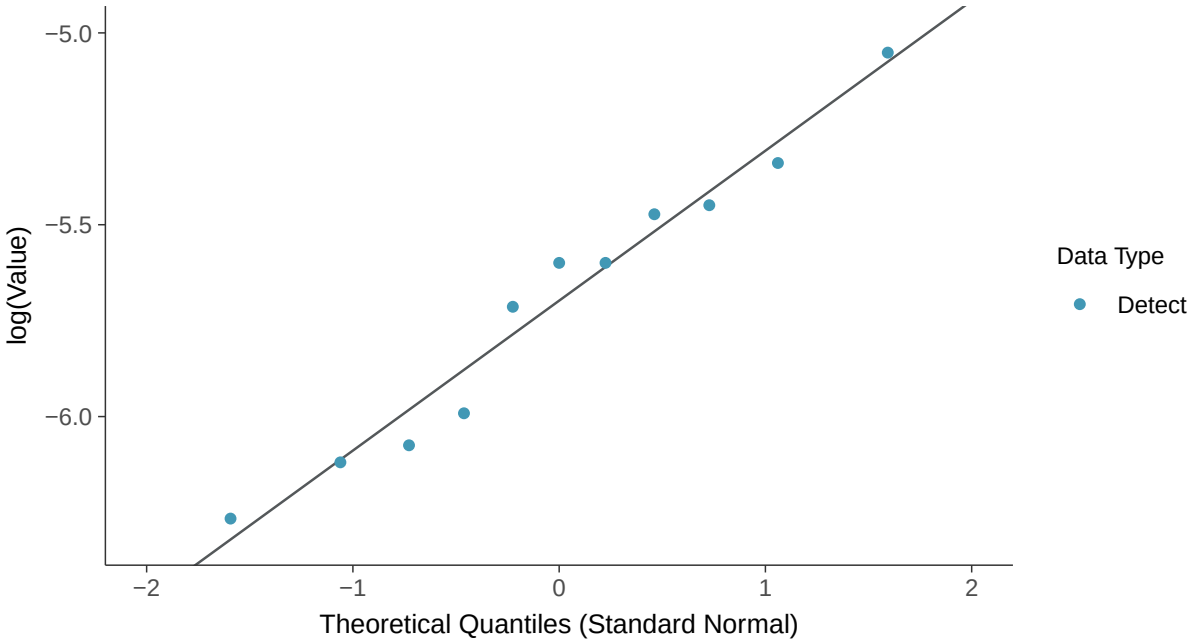
Normal Q-Q plot

Lithium, MW-12 (mg/L)



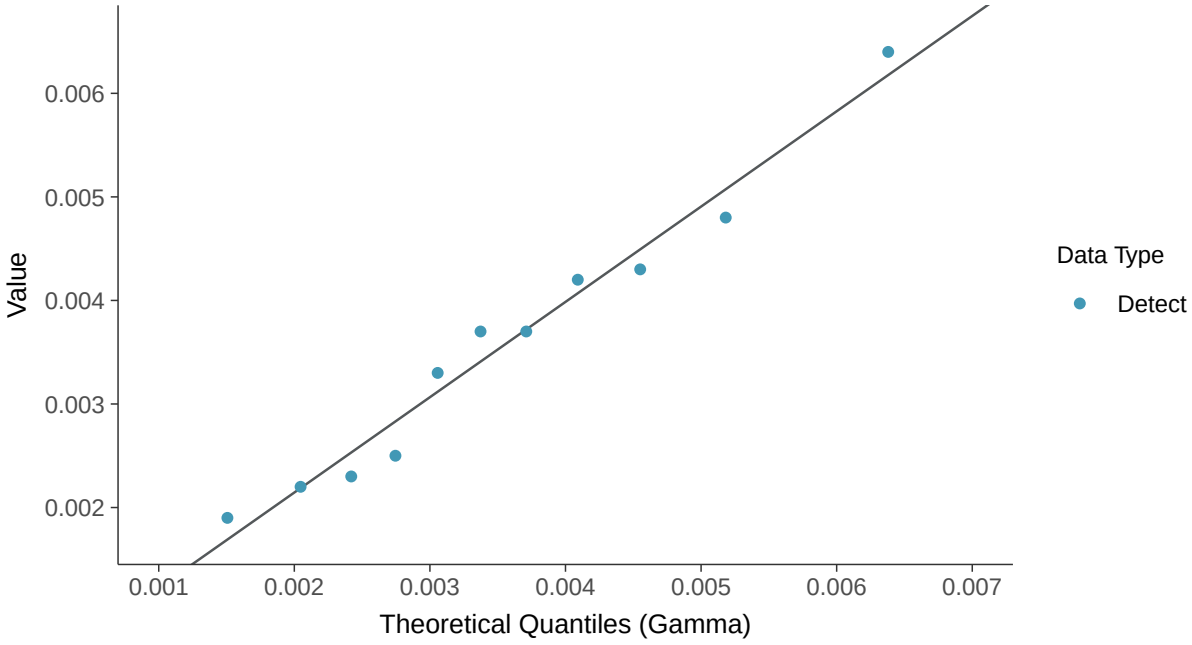
Lognormal Q-Q plot

Lithium, MW-12 (mg/L)



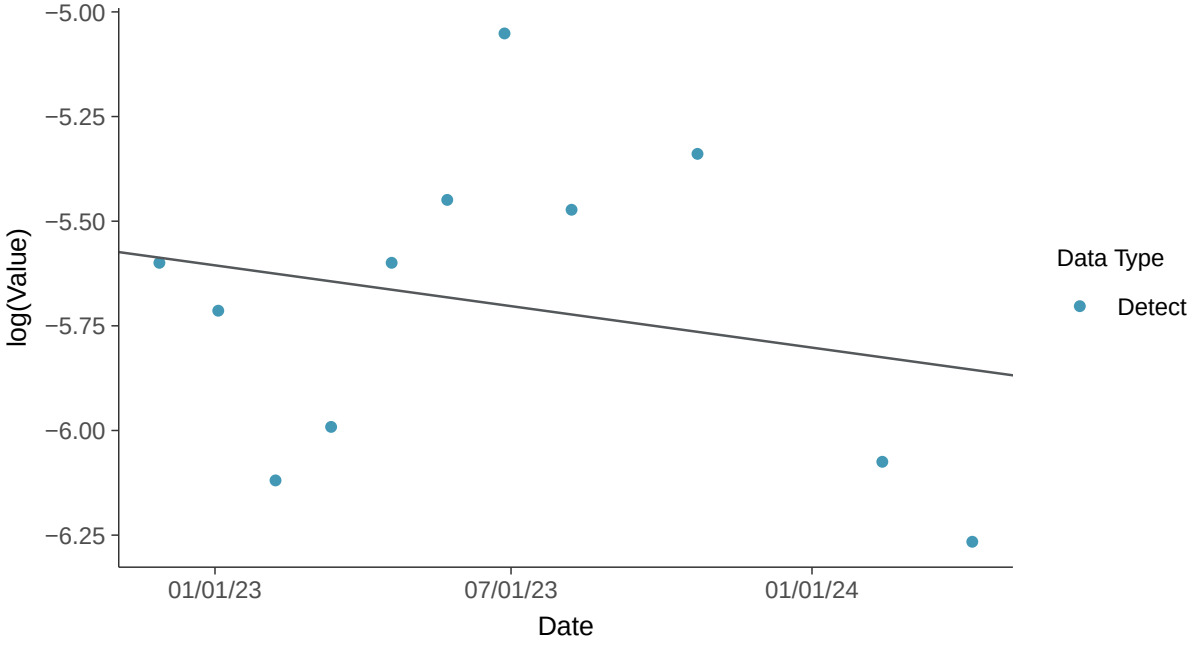
Gamma Q-Q plot

Lithium, MW-12 (mg/L)



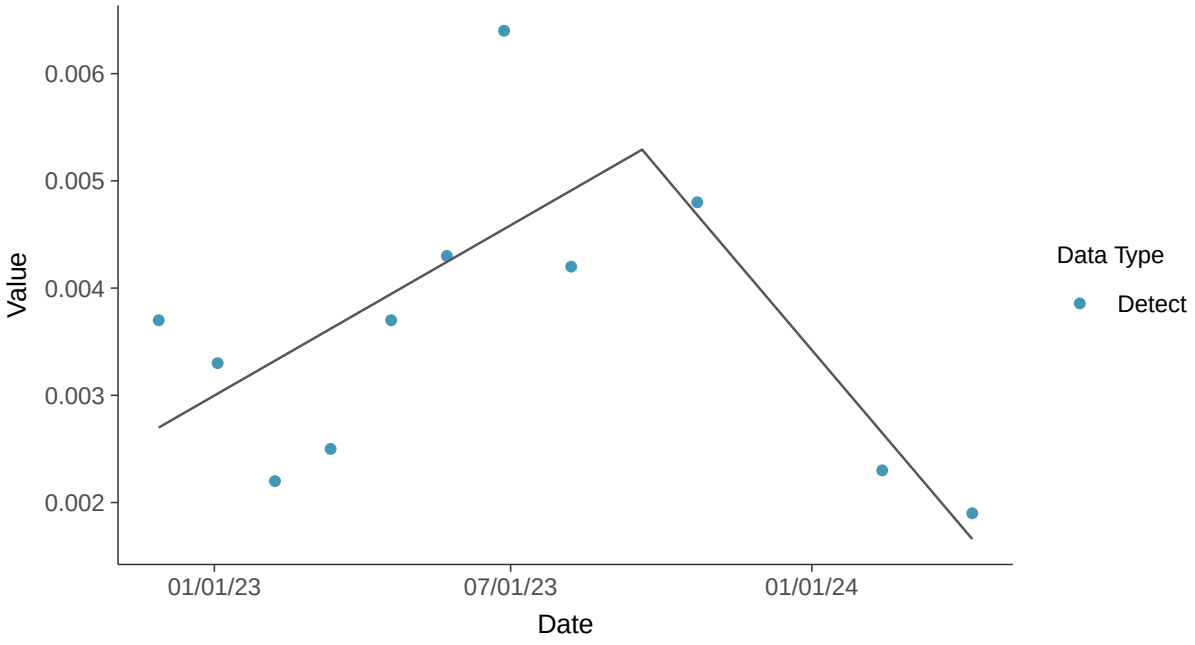
Trend Regression: Lognormal MLE

Lithium, MW-12 (mg/L)



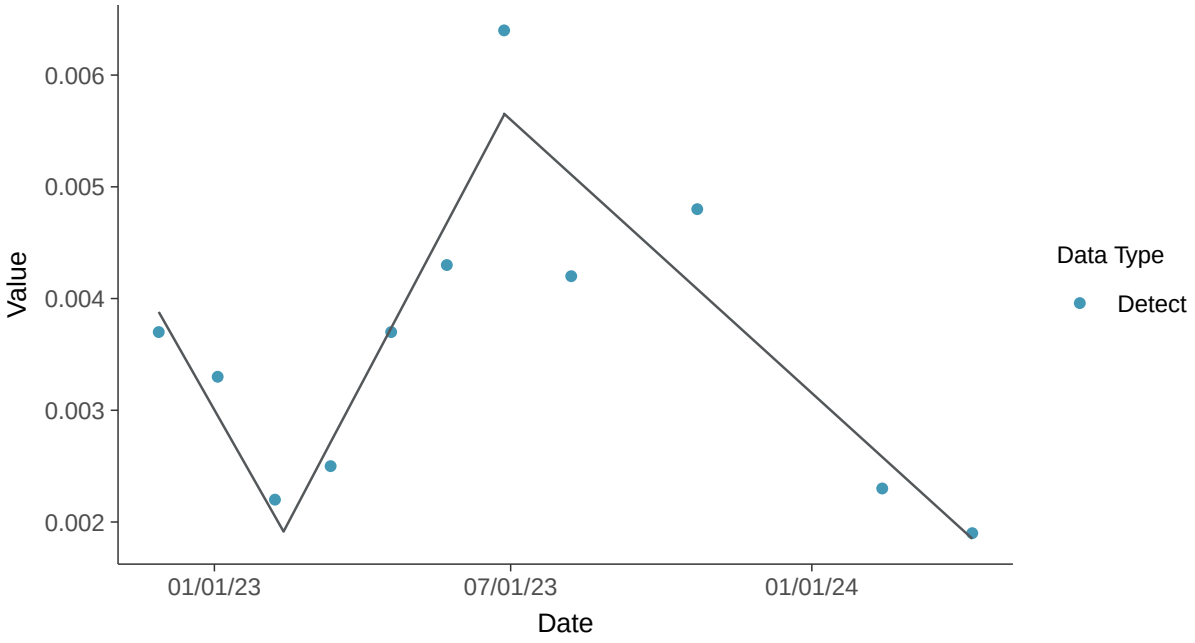
Trend Regression: Piecewise Linear-Linear

Lithium, MW-12 (mg/L)



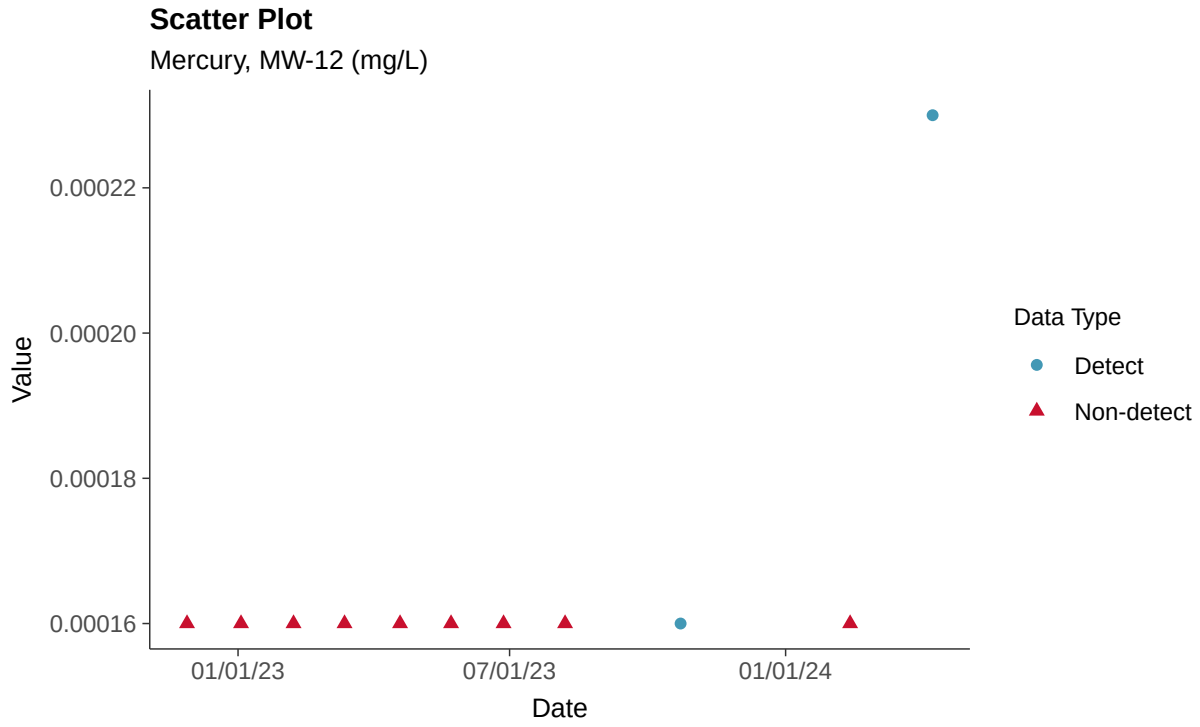
Trend Regression: Piecewise Linear-Linear-Linear

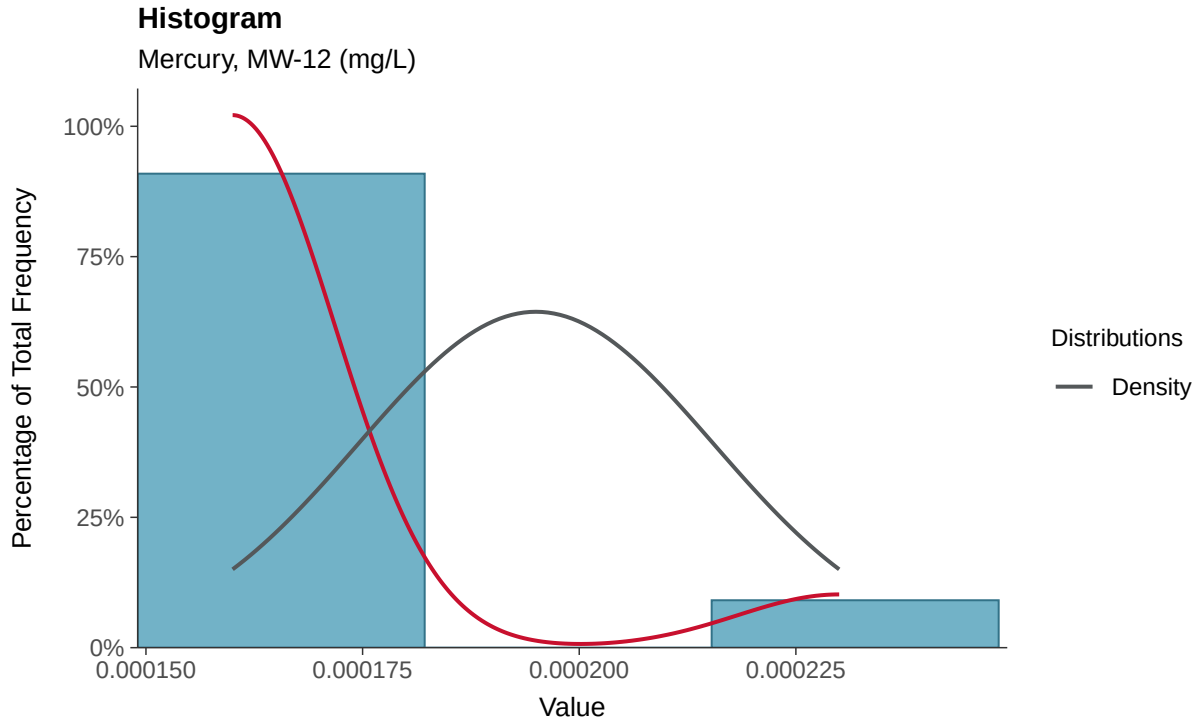
Lithium, MW-12 (mg/L)



Appendix IV: Mercury, MW-12

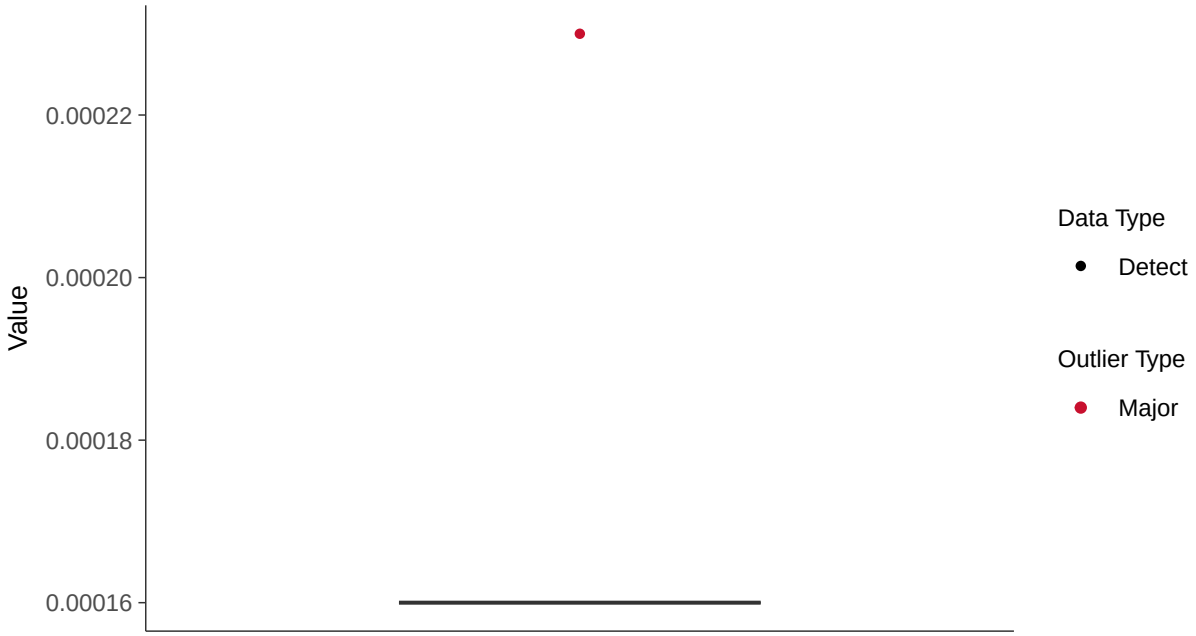
ID: 2_22_5_117





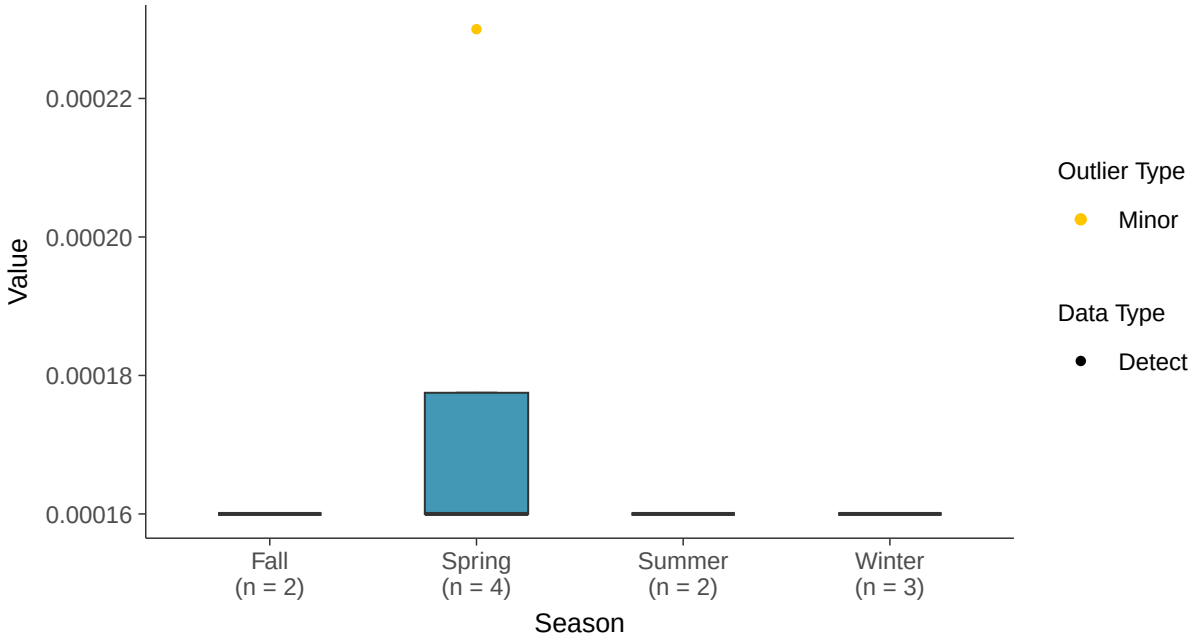
Boxplot

Mercury, MW-12 (mg/L)



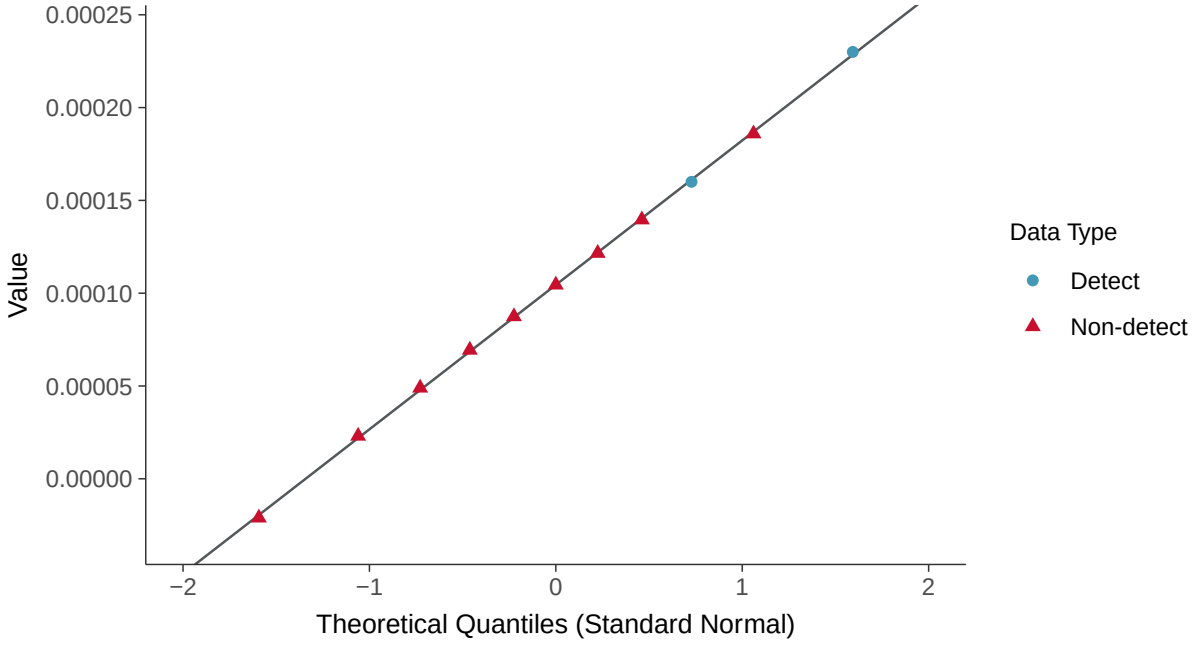
Boxplot by Season

Mercury, MW-12 (mg/L)



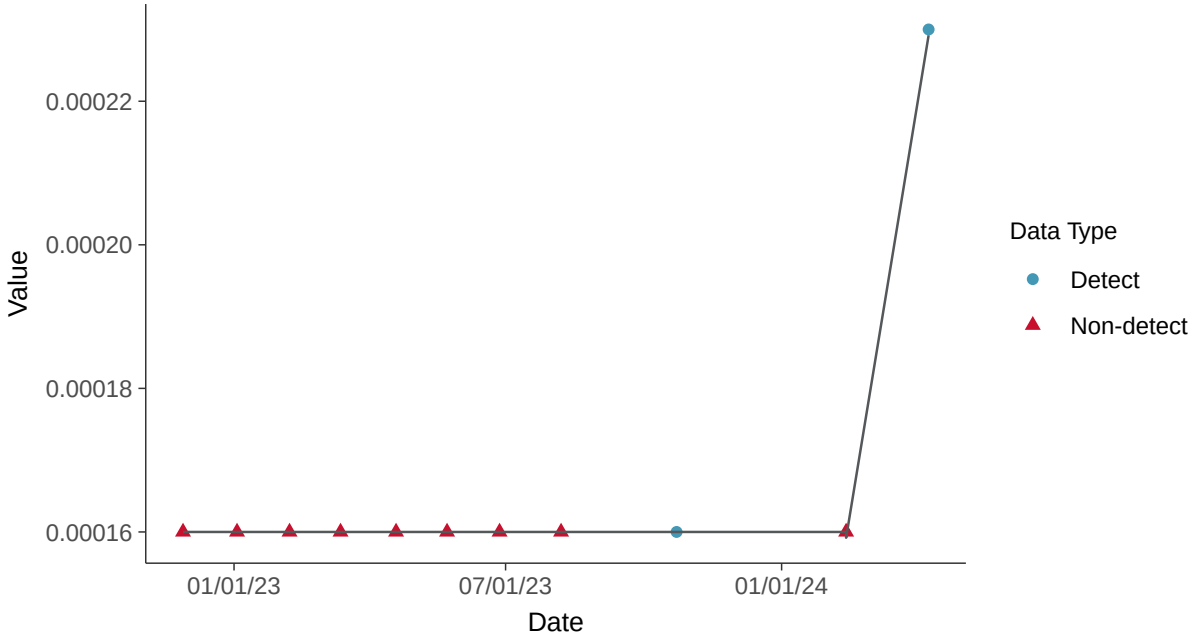
Normal Q-Q plot using ROS Imputed Estimates

Mercury, MW-12 (mg/L)



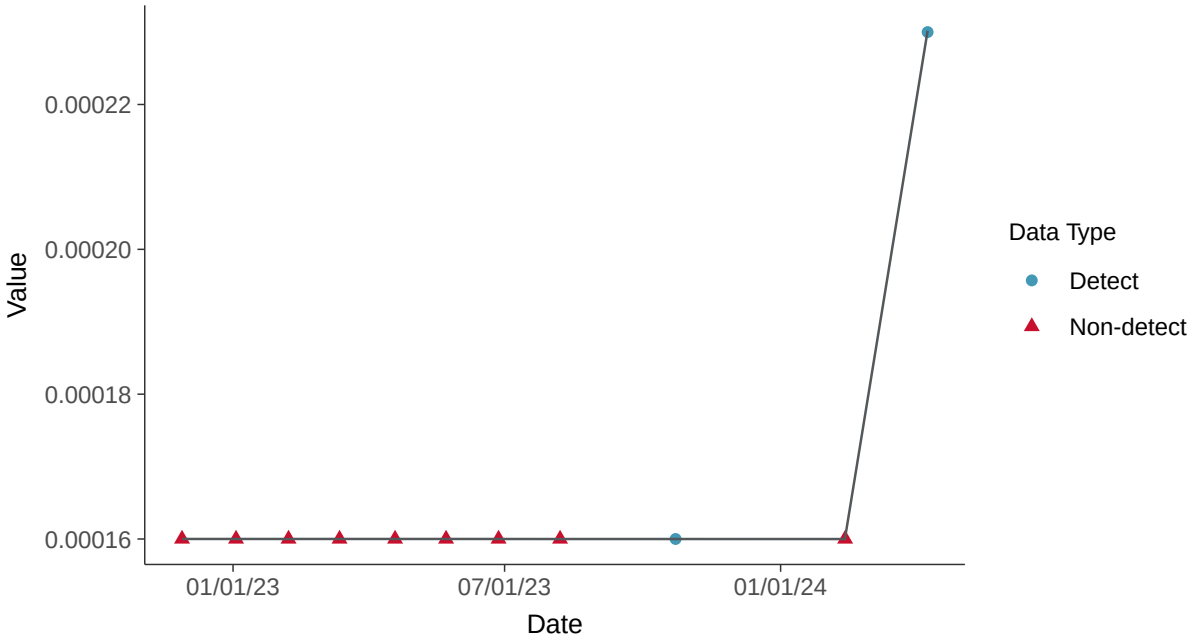
Trend Regression: Piecewise Linear-Linear

Mercury, MW-12 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Mercury, MW-12 (mg/L)

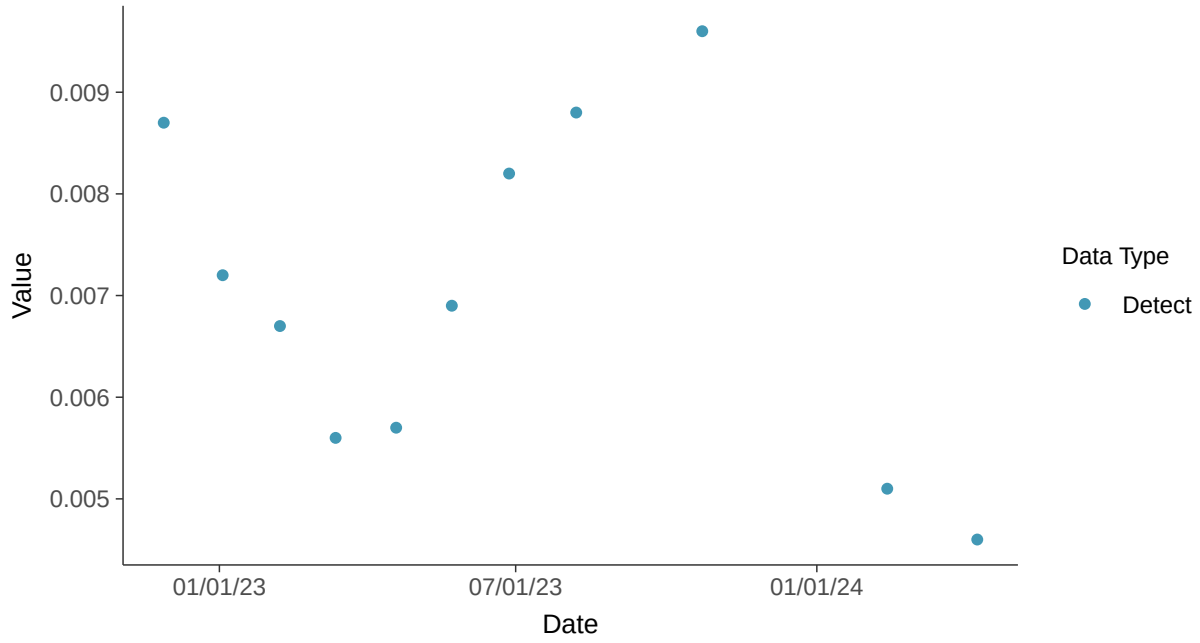


Appendix IV: Molybdenum, MW-12

ID: 2_22_5_118

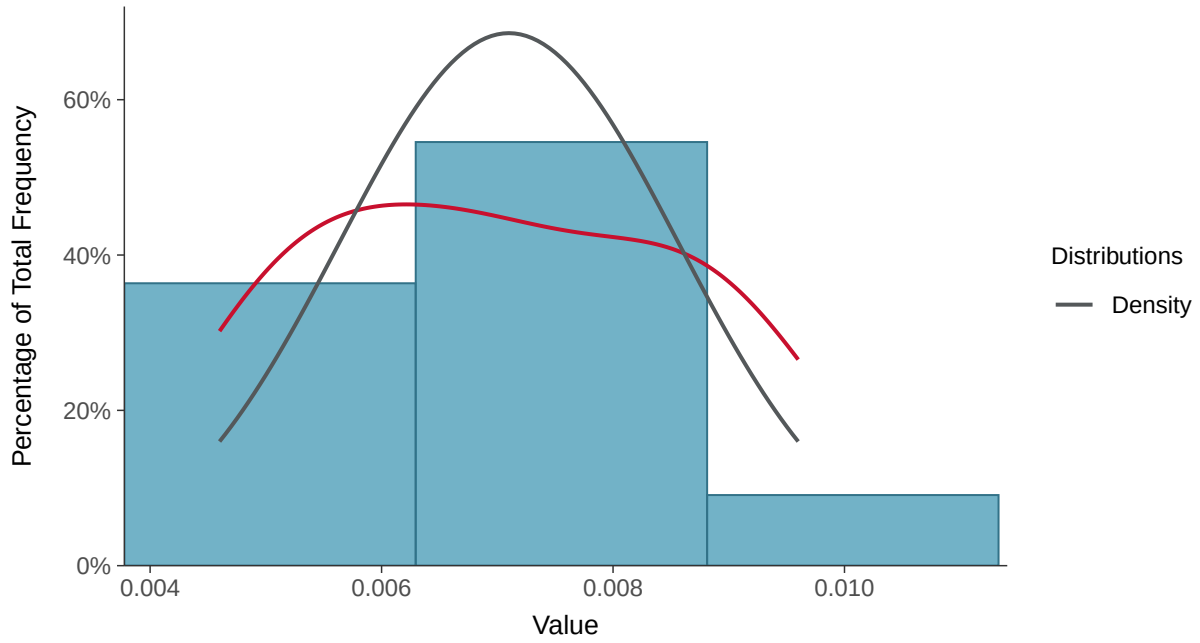
Scatter Plot

Molybdenum, MW-12 (mg/L)



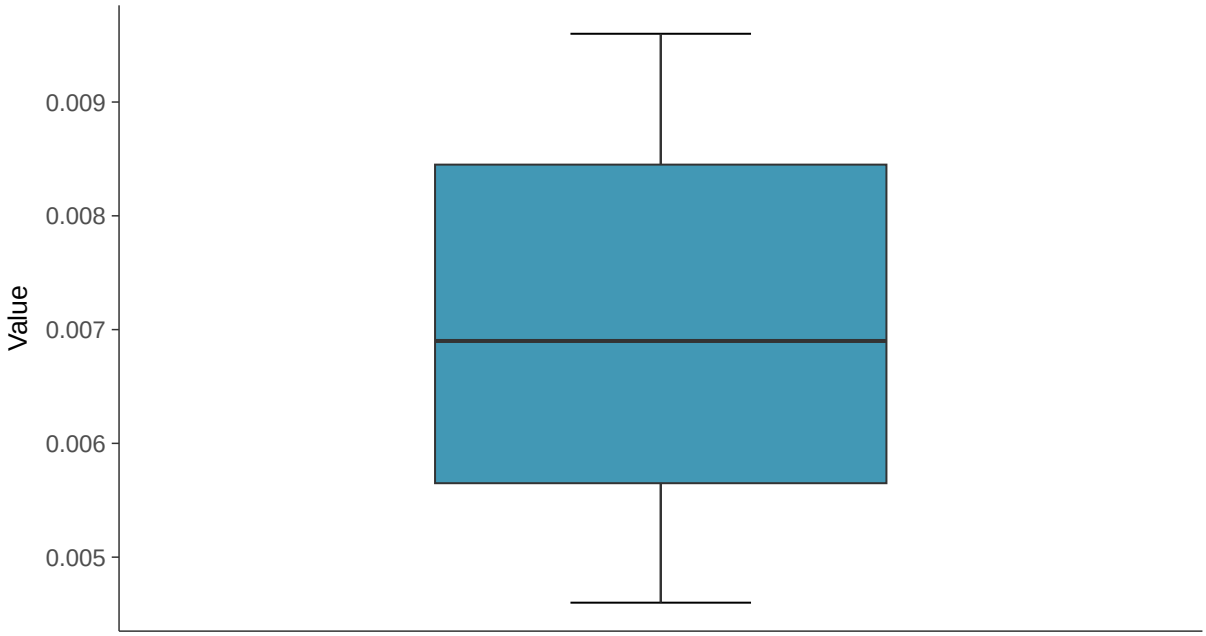
Histogram

Molybdenum, MW-12 (mg/L)



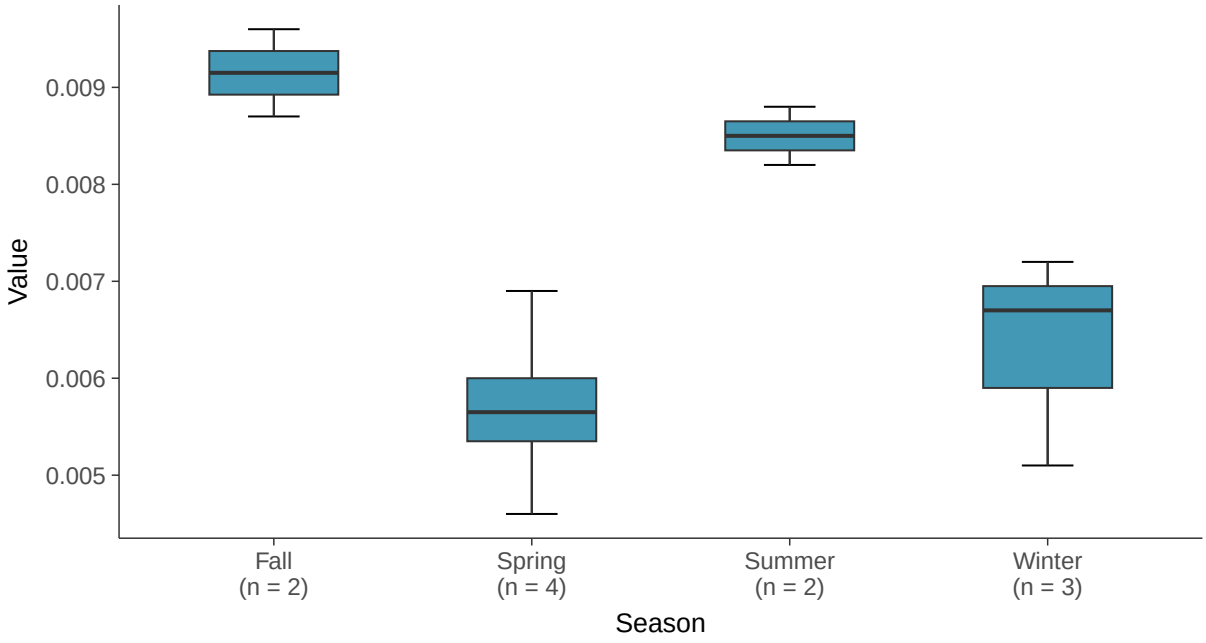
Boxplot

Molybdenum, MW-12 (mg/L)



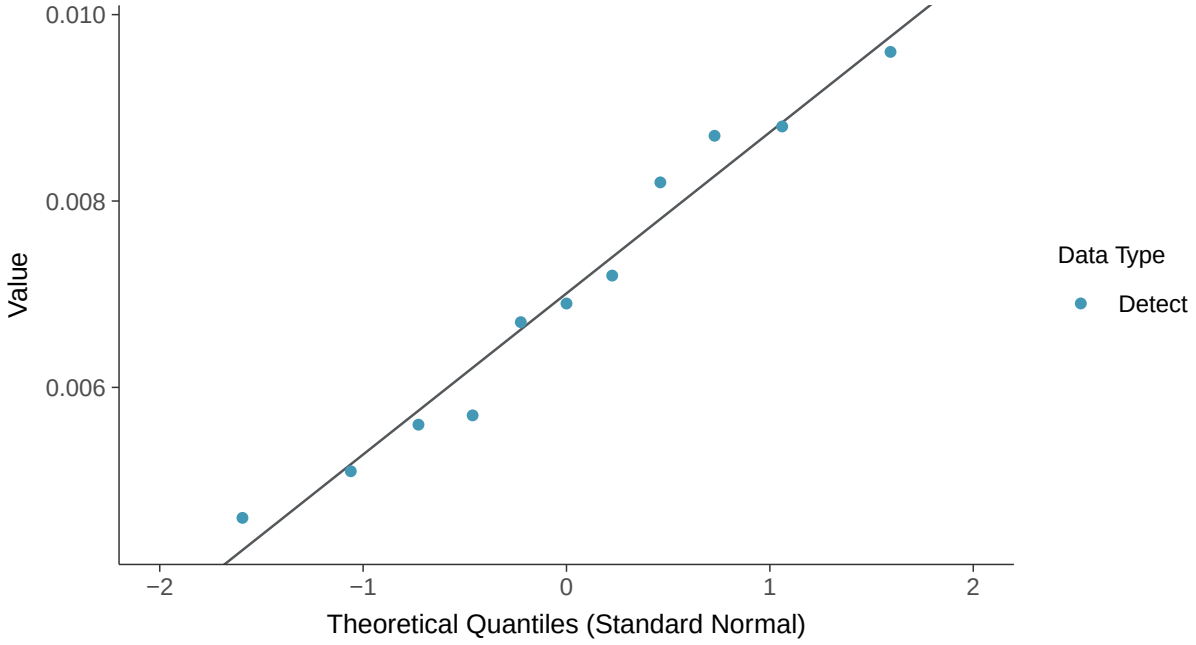
Boxplot by Season

Molybdenum, MW-12 (mg/L)



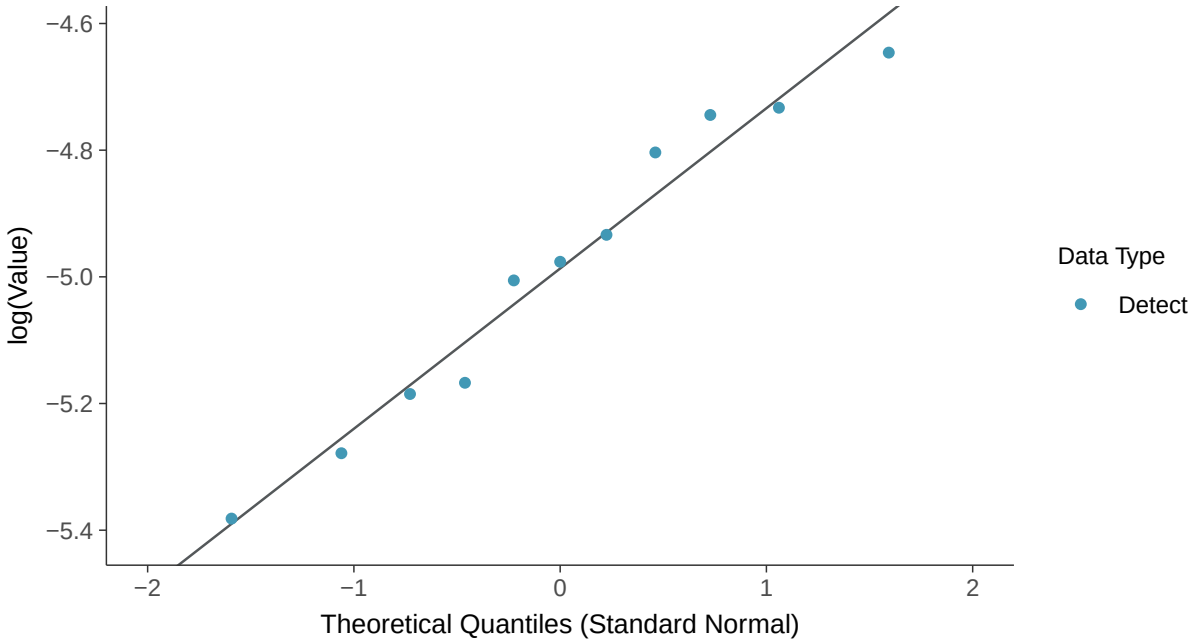
Normal Q-Q plot

Molybdenum, MW-12 (mg/L)



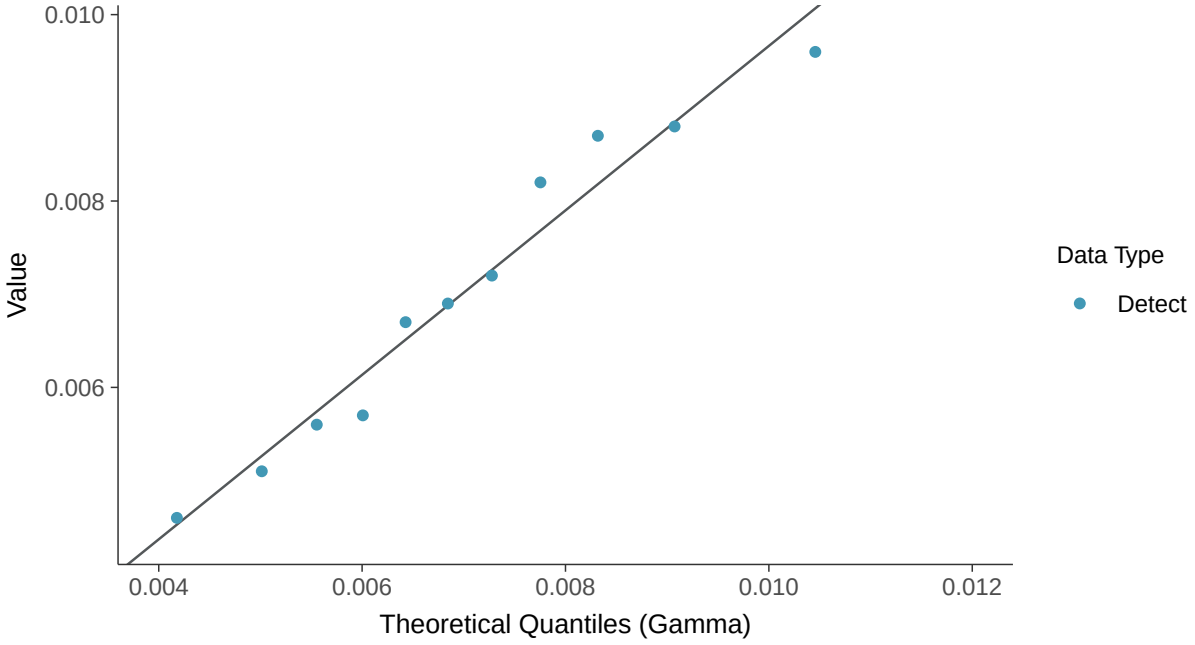
Lognormal Q-Q plot

Molybdenum, MW-12 (mg/L)



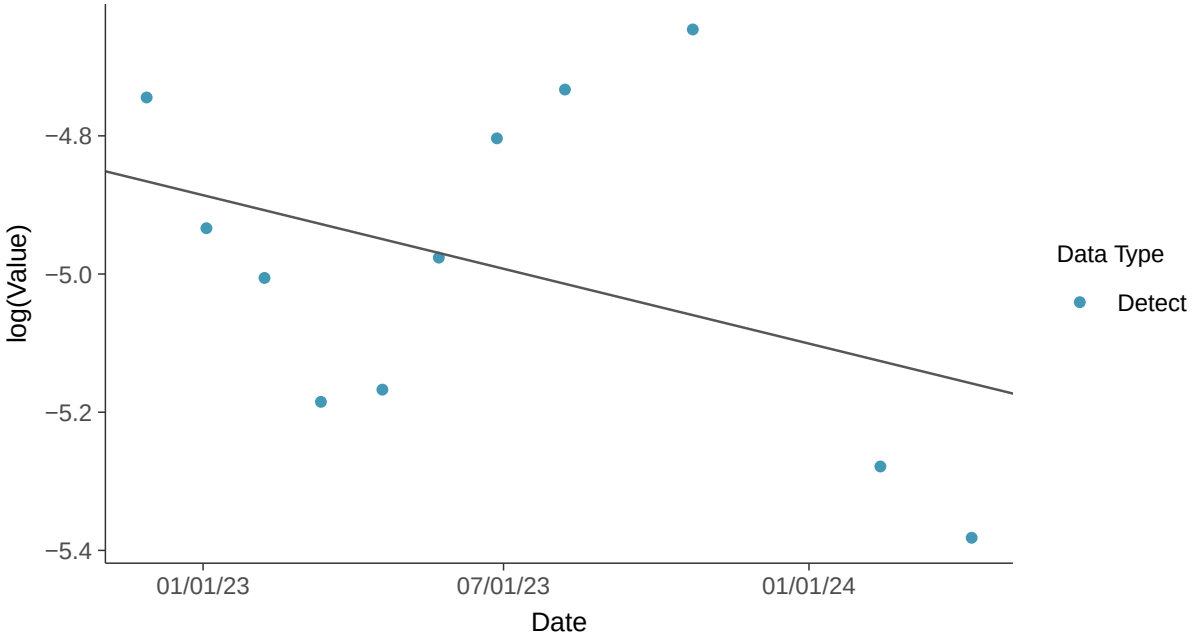
Gamma Q-Q plot

Molybdenum, MW-12 (mg/L)



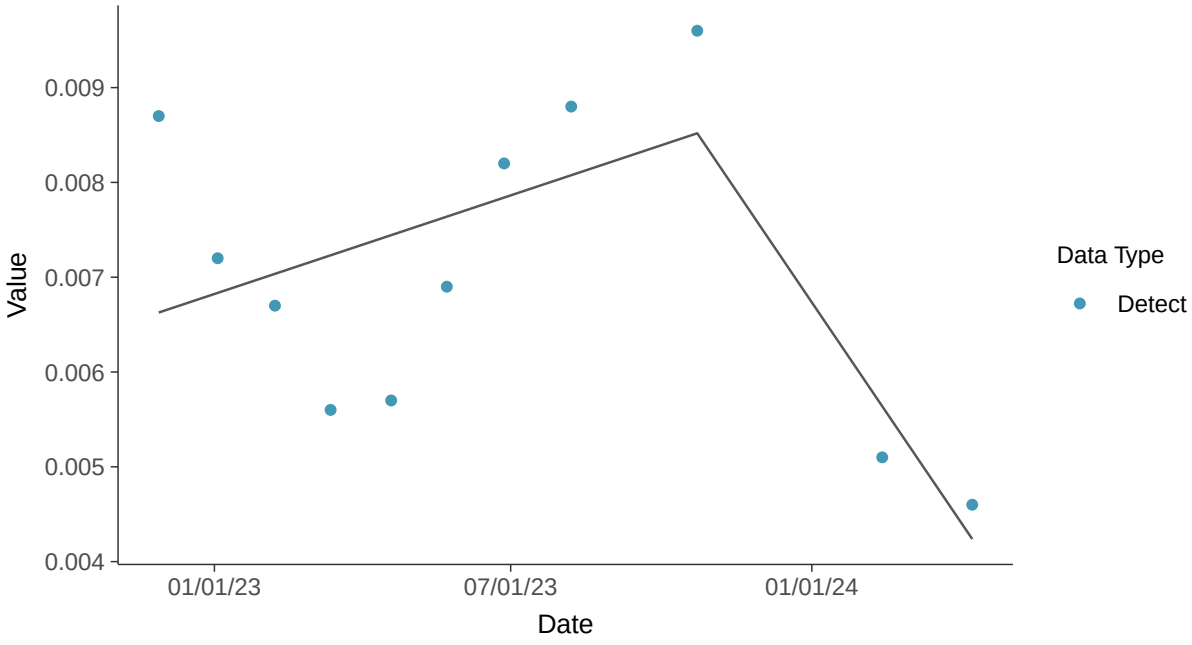
Trend Regression: Lognormal MLE

Molybdenum, MW-12 (mg/L)



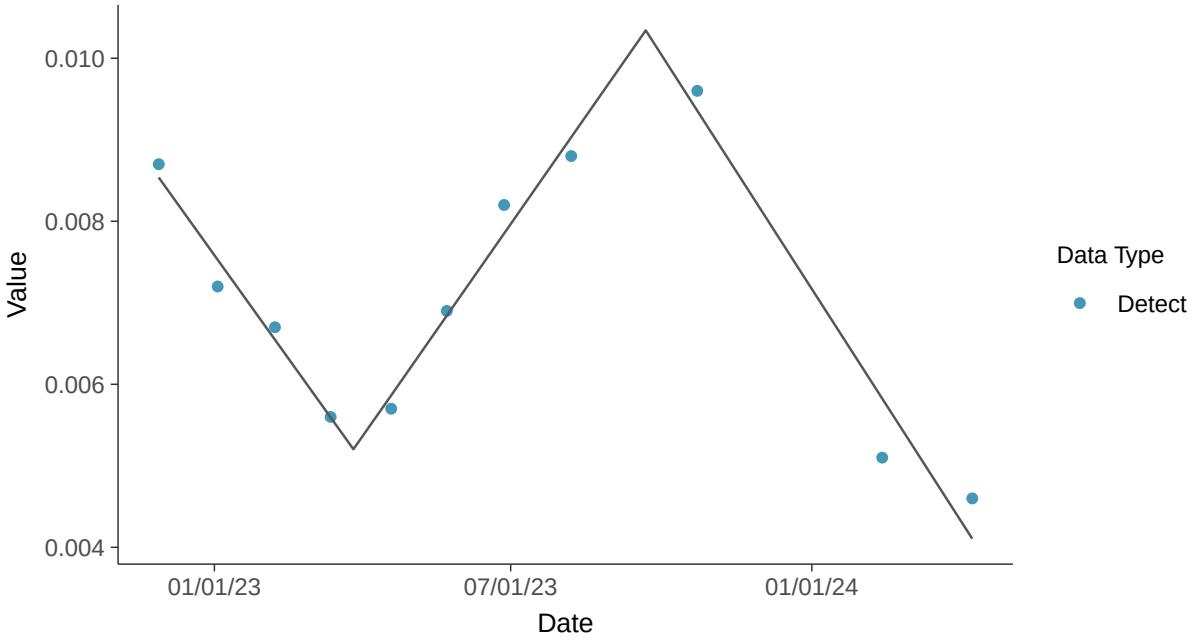
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-12 (mg/L)



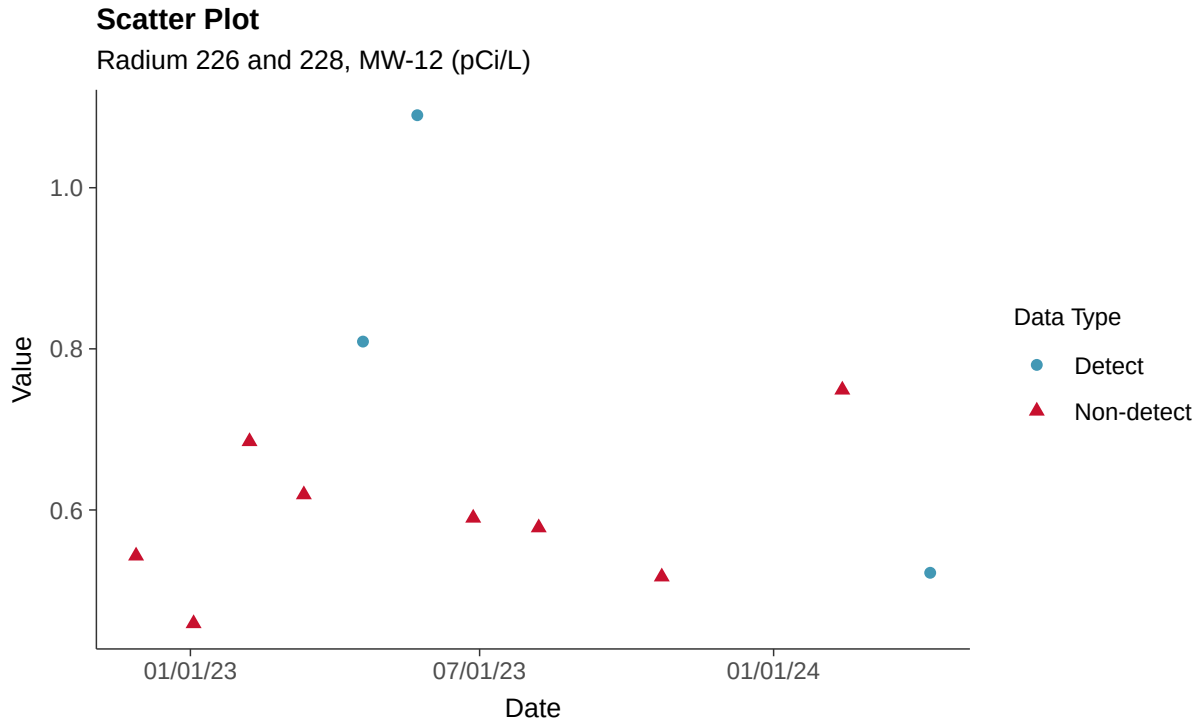
Trend Regression: Piecewise Linear-Linear-Linear

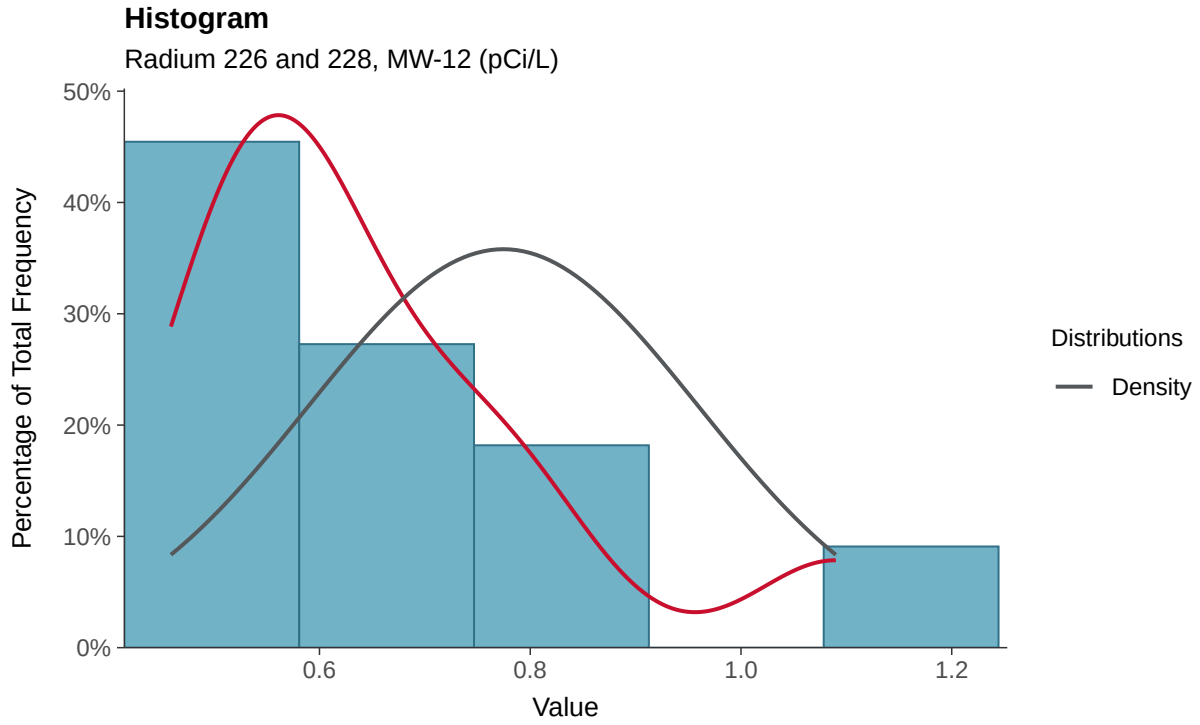
Molybdenum, MW-12 (mg/L)



Appendix IV: Radium 226 and 228, MW-12

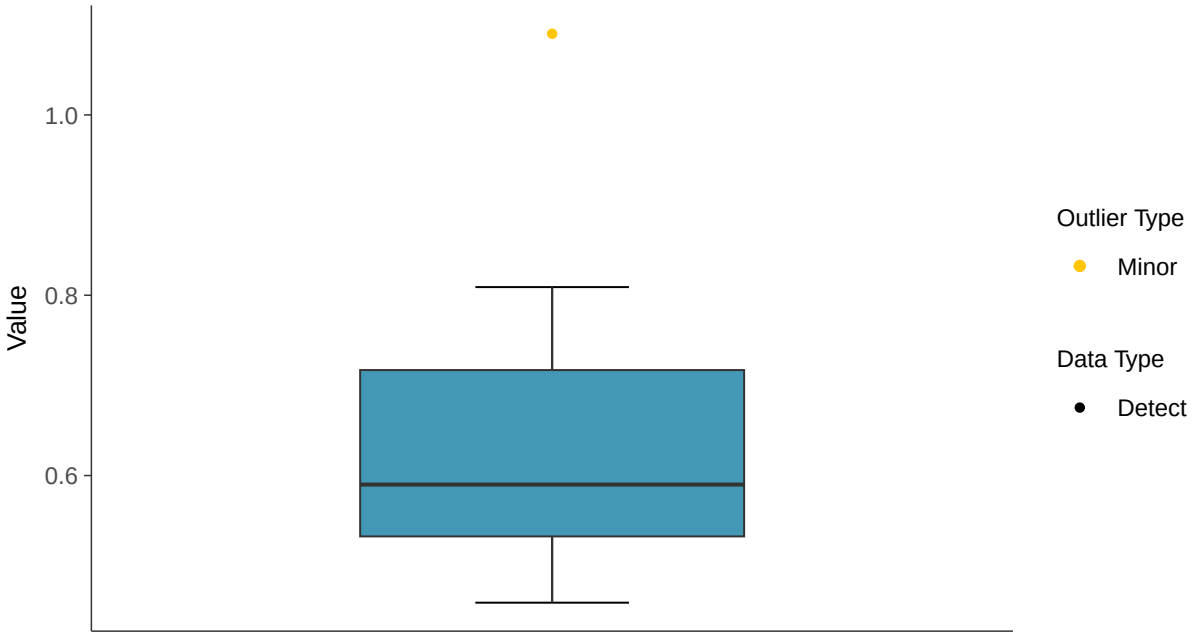
ID: 2_22_5_121





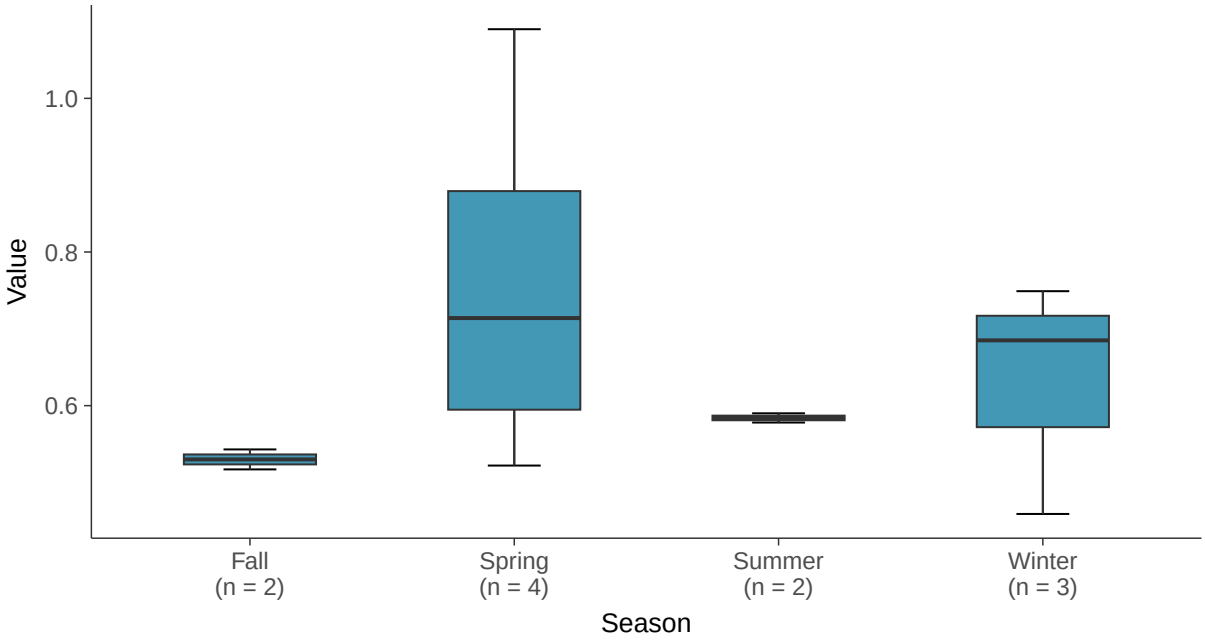
Boxplot

Radium 226 and 228, MW-12 (pCi/L)



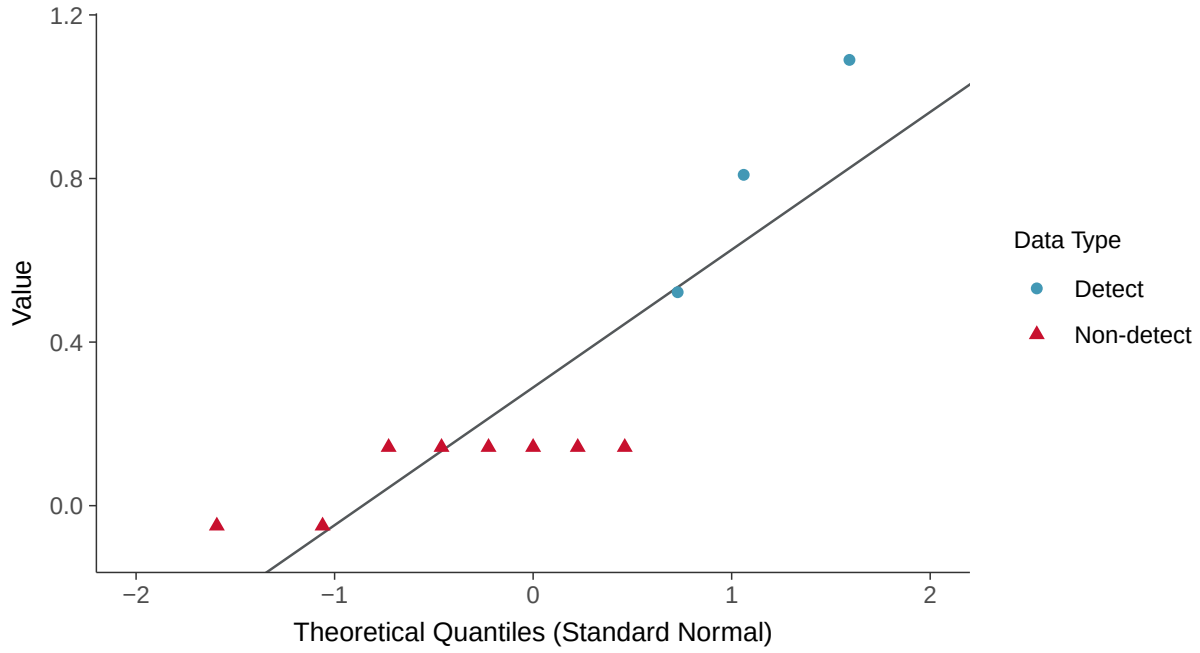
Boxplot by Season

Radium 226 and 228, MW-12 (pCi/L)



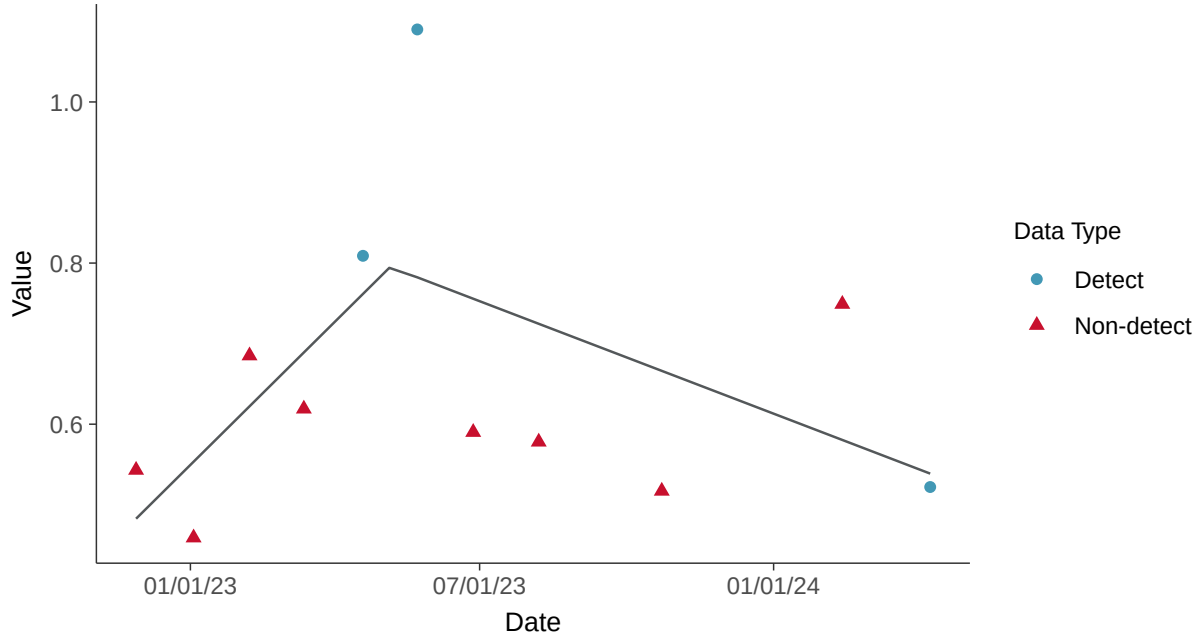
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-12 (pCi/L)



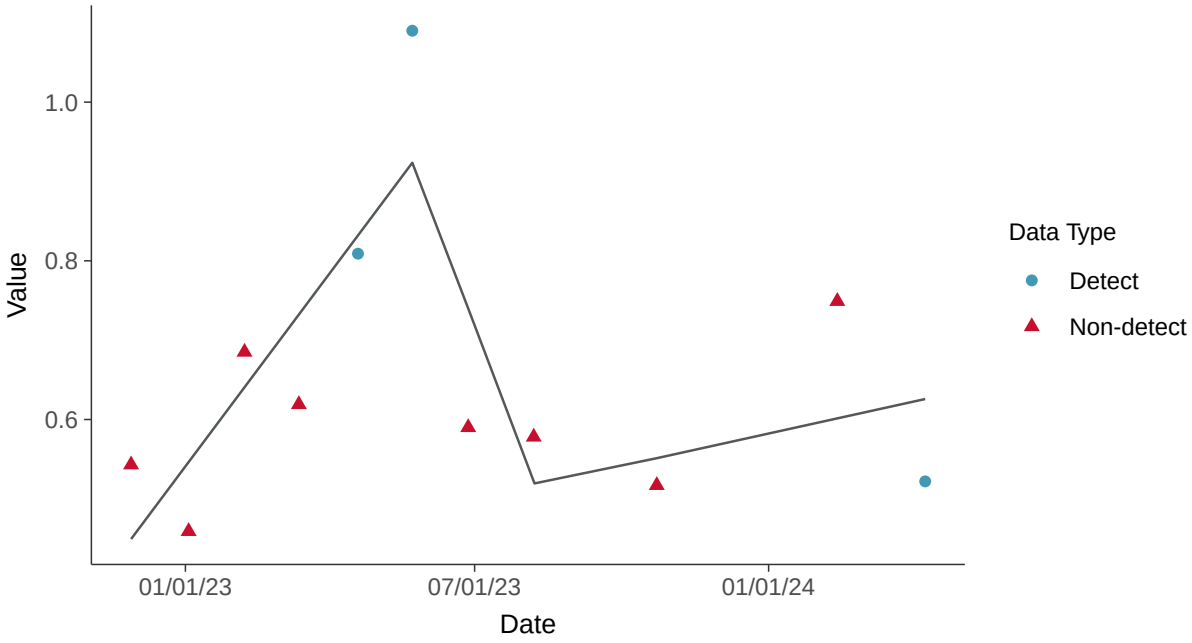
Trend Regression: Piecewise Linear-Linear

Radium 226 and 228, MW-12 (pCi/L)



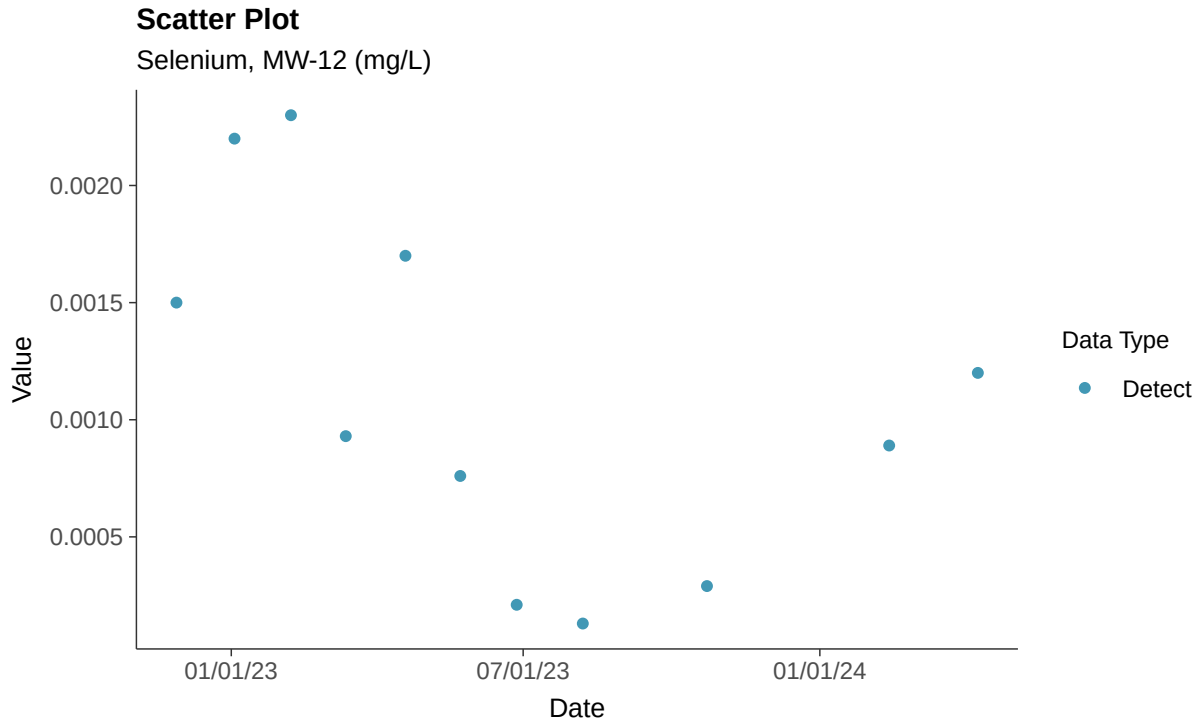
Trend Regression: Piecewise Linear-Linear-Linear

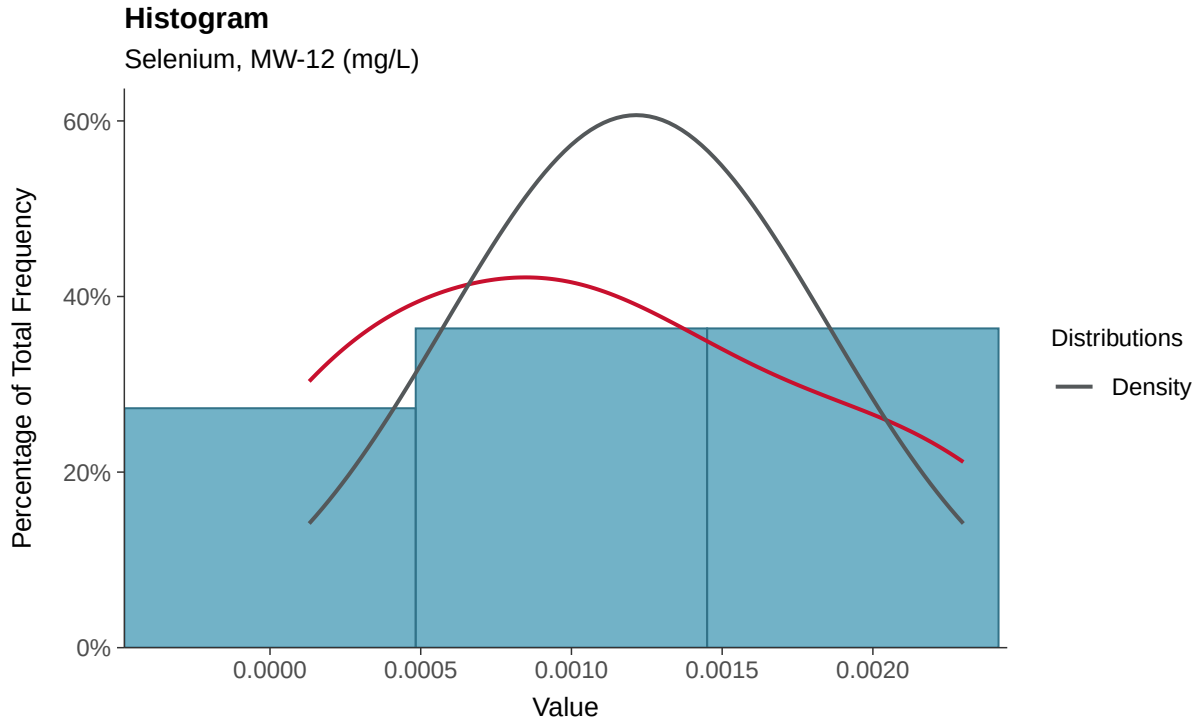
Radium 226 and 228, MW-12 (pCi/L)



Appendix IV: Selenium, MW-12

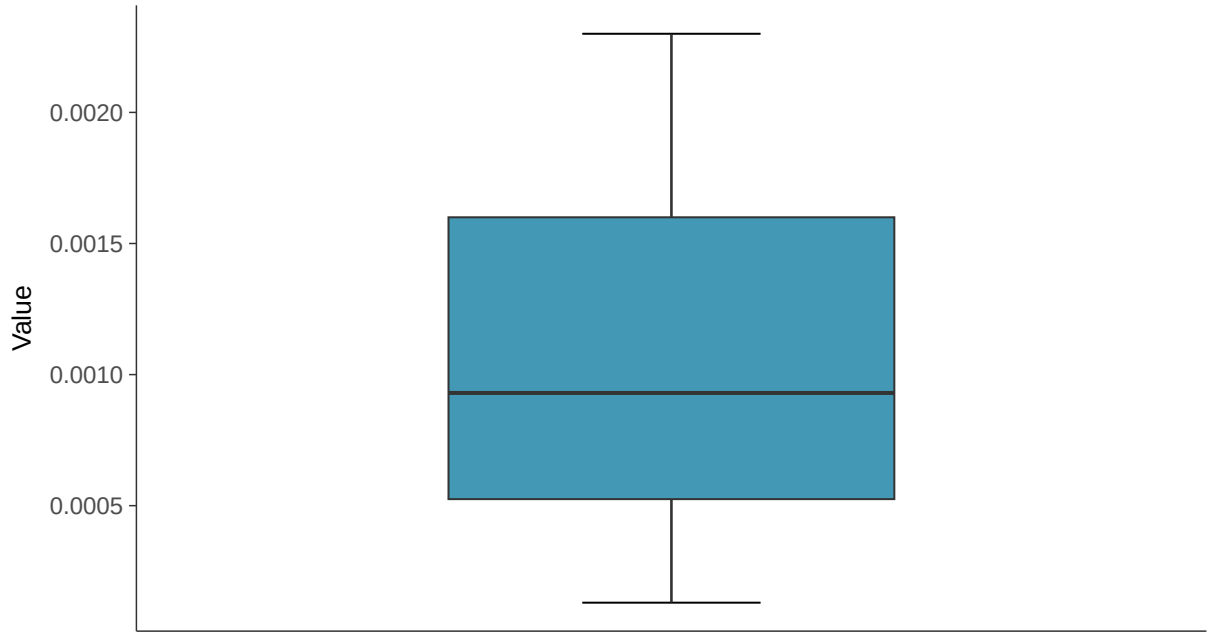
ID: 2_22_5_122





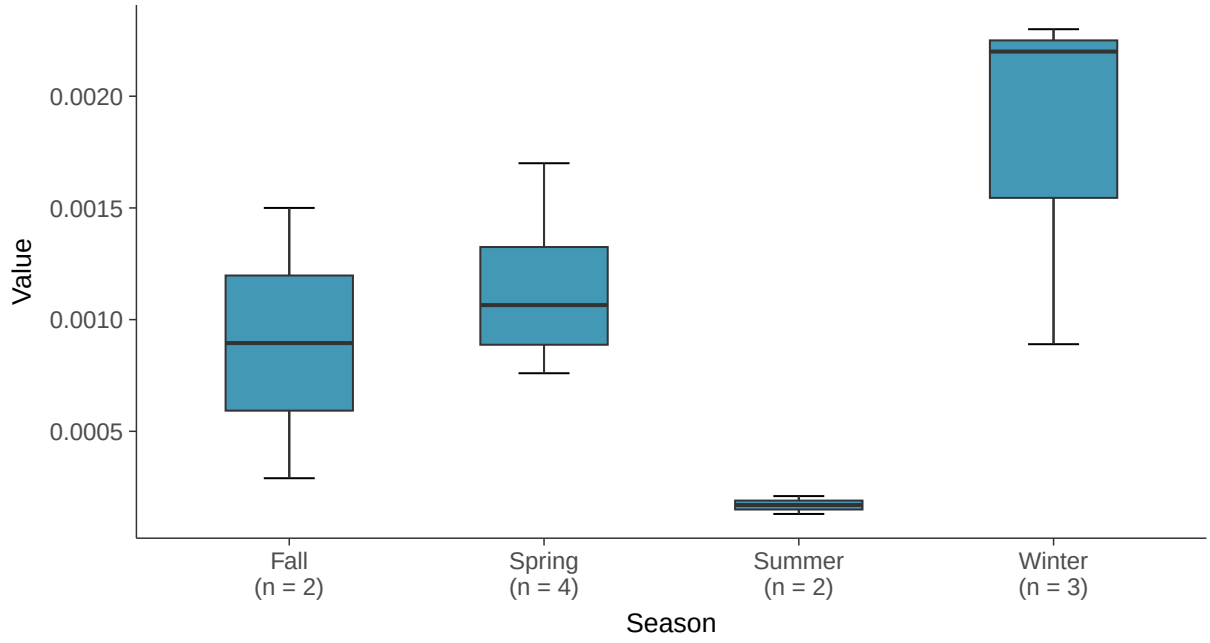
Boxplot

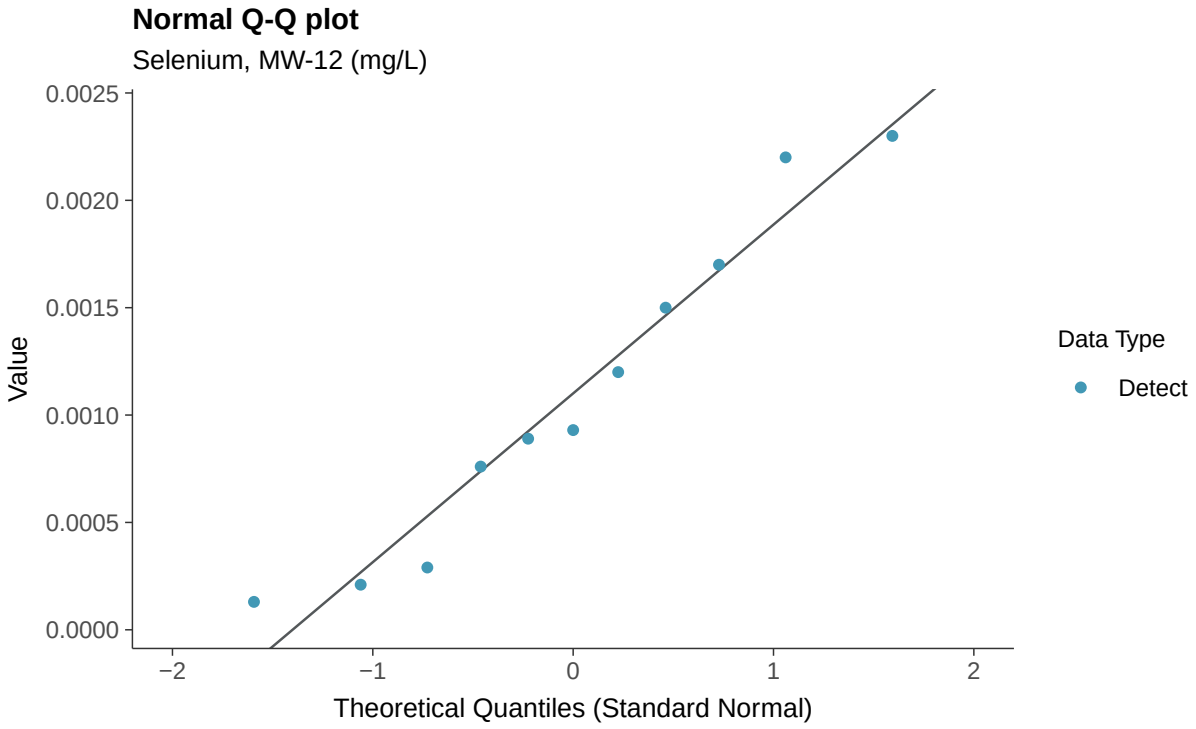
Selenium, MW-12 (mg/L)

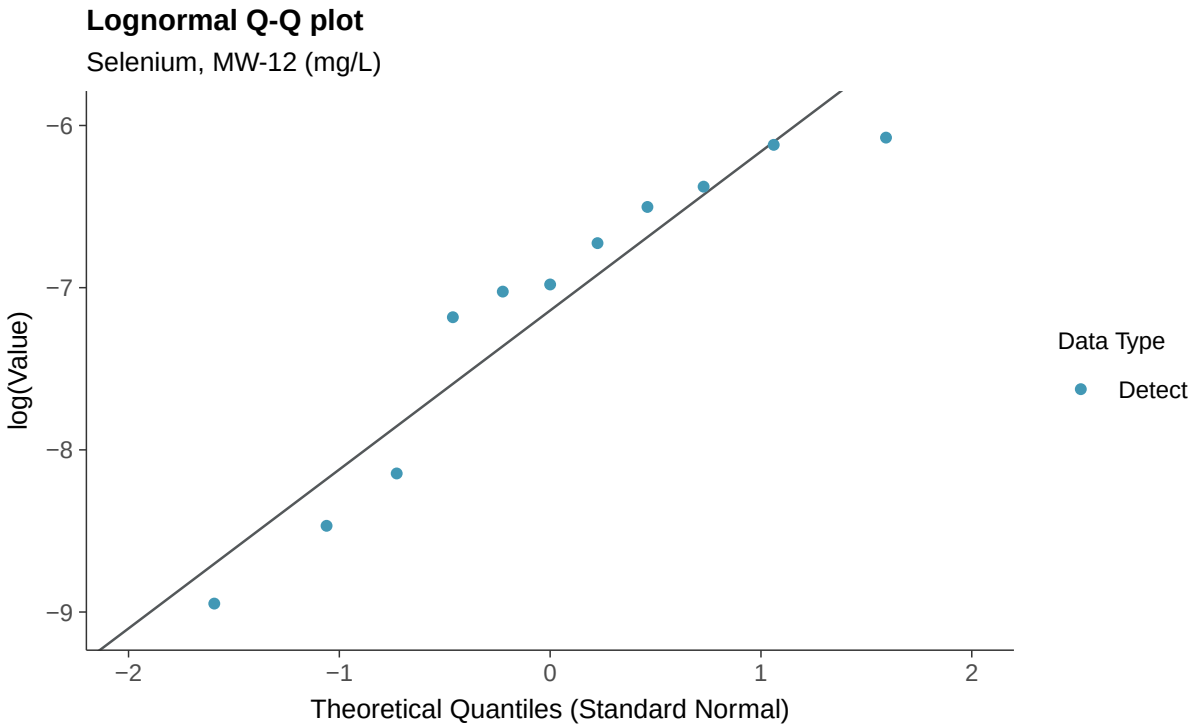


Boxplot by Season

Selenium, MW-12 (mg/L)

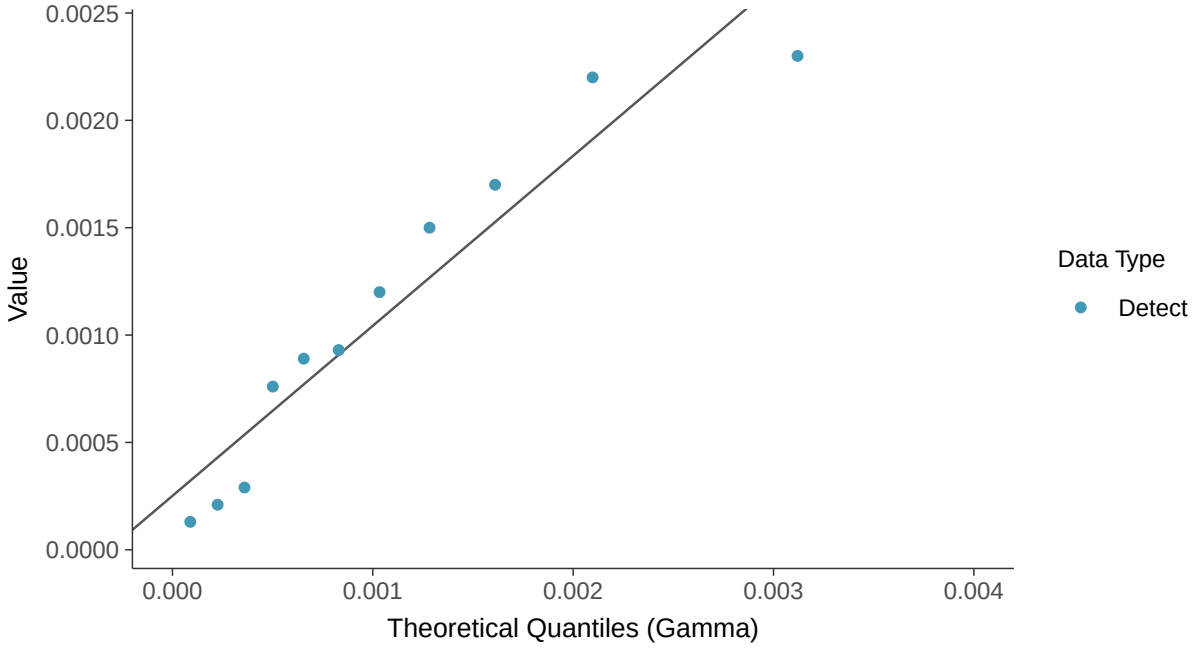



Normal Q-Q plot
Selenium, MW-12 (mg/L)
Value
0.0025
0.0020
0.0015
0.0010
0.0005
0.0000
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect


Lognormal Q-Q plot
Selenium, MW-12 (mg/L)
log(Value)
−6
−7
−8
−9
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect

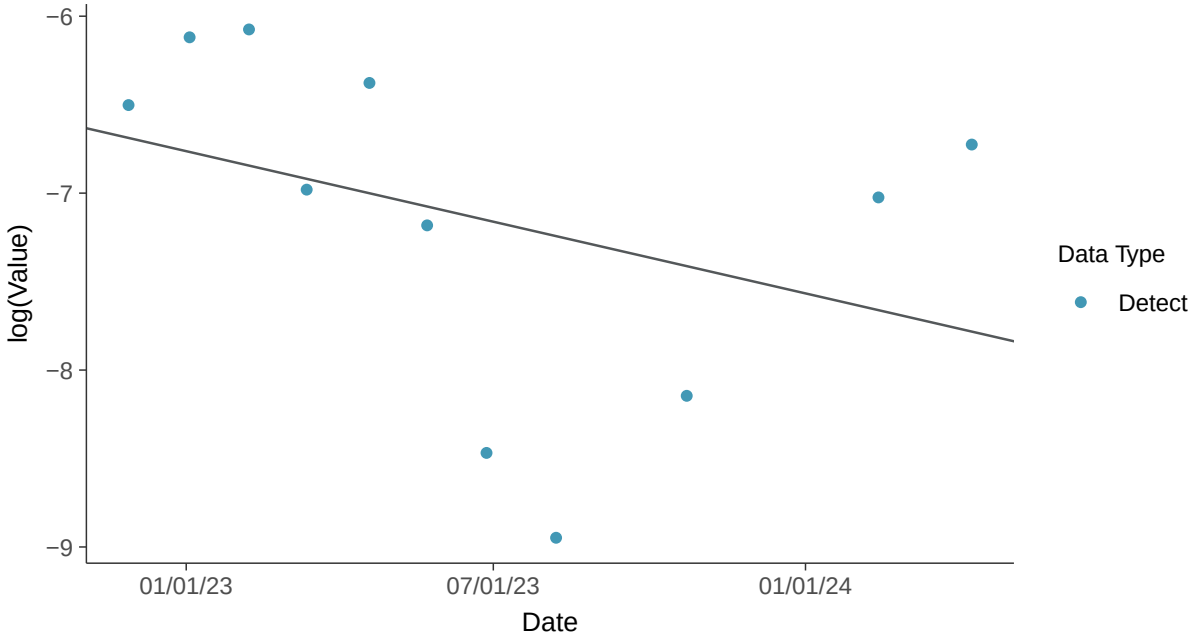
Gamma Q-Q plot

Selenium, MW-12 (mg/L)



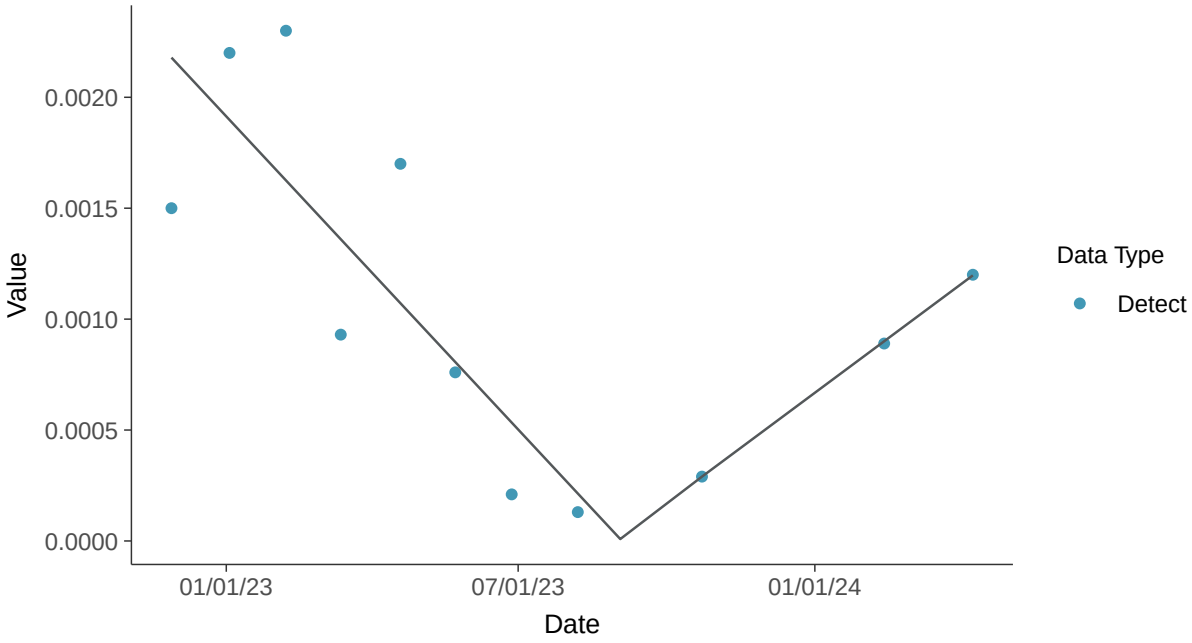
Trend Regression: Lognormal MLE

Selenium, MW-12 (mg/L)



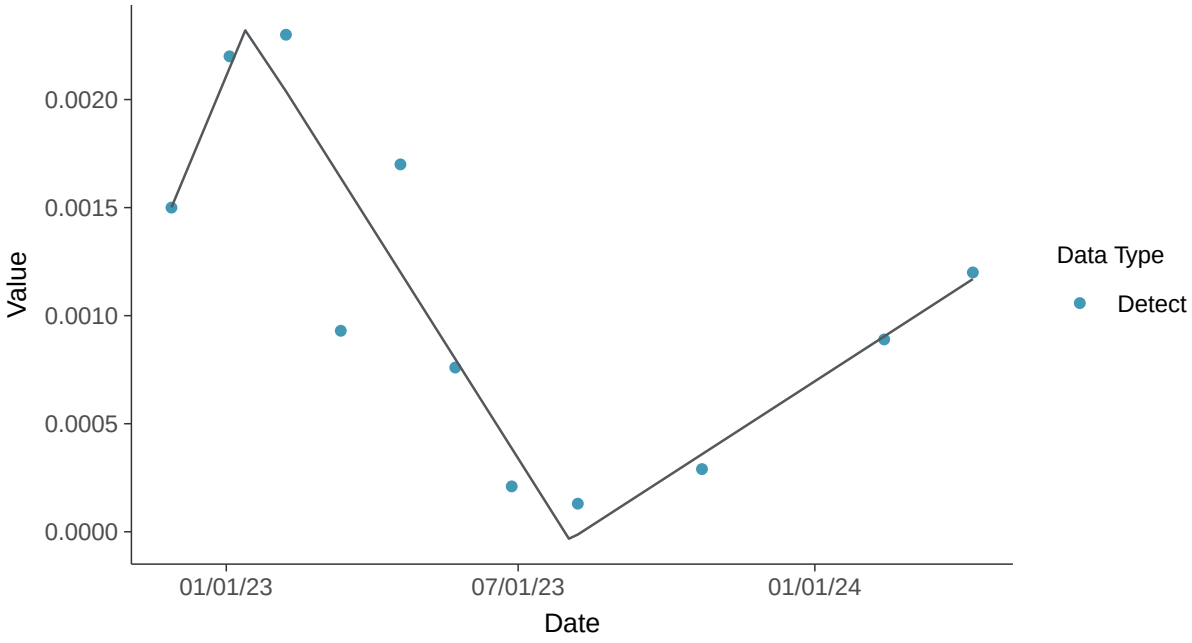
Trend Regression: Piecewise Linear-Linear

Selenium, MW-12 (mg/L)



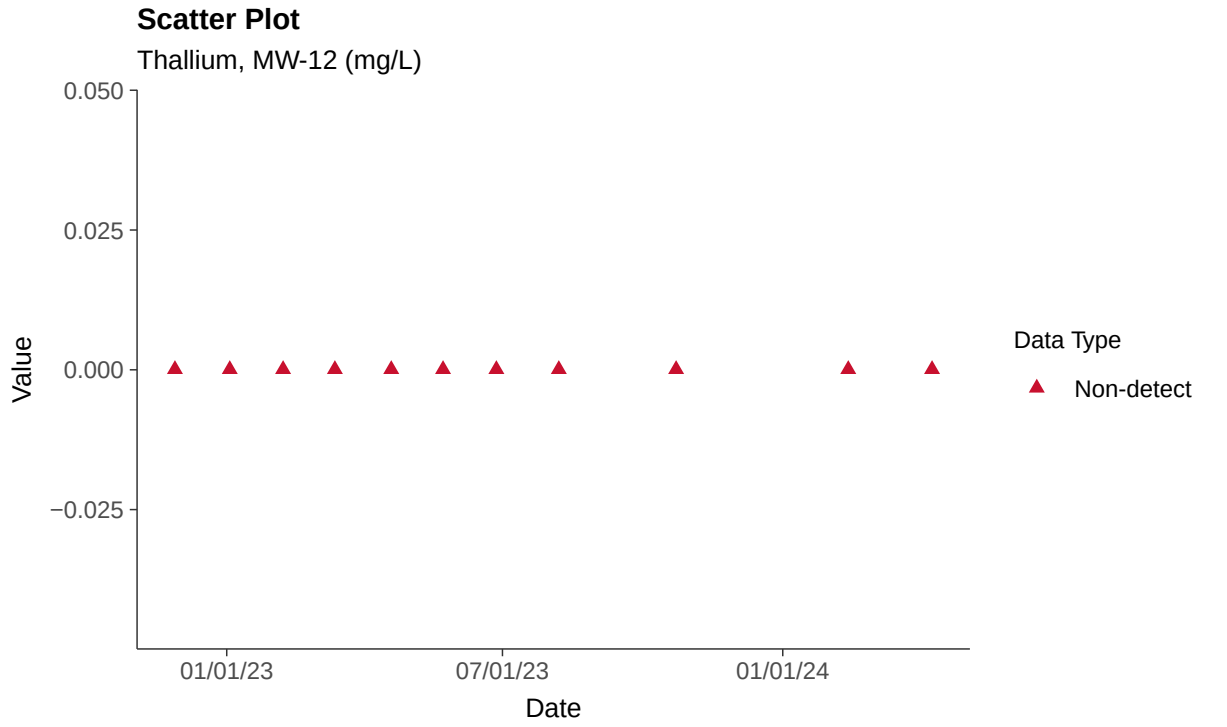
Trend Regression: Piecewise Linear-Linear-Linear

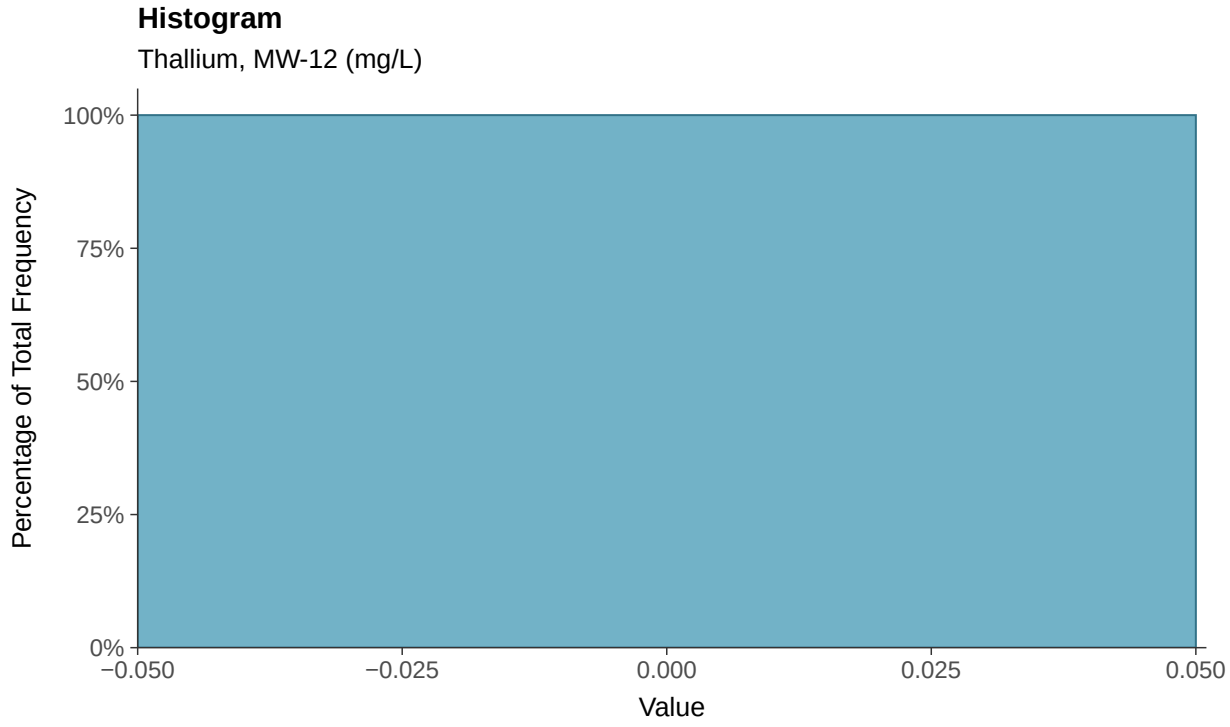
Selenium, MW-12 (mg/L)



Appendix IV: Thallium, MW-12

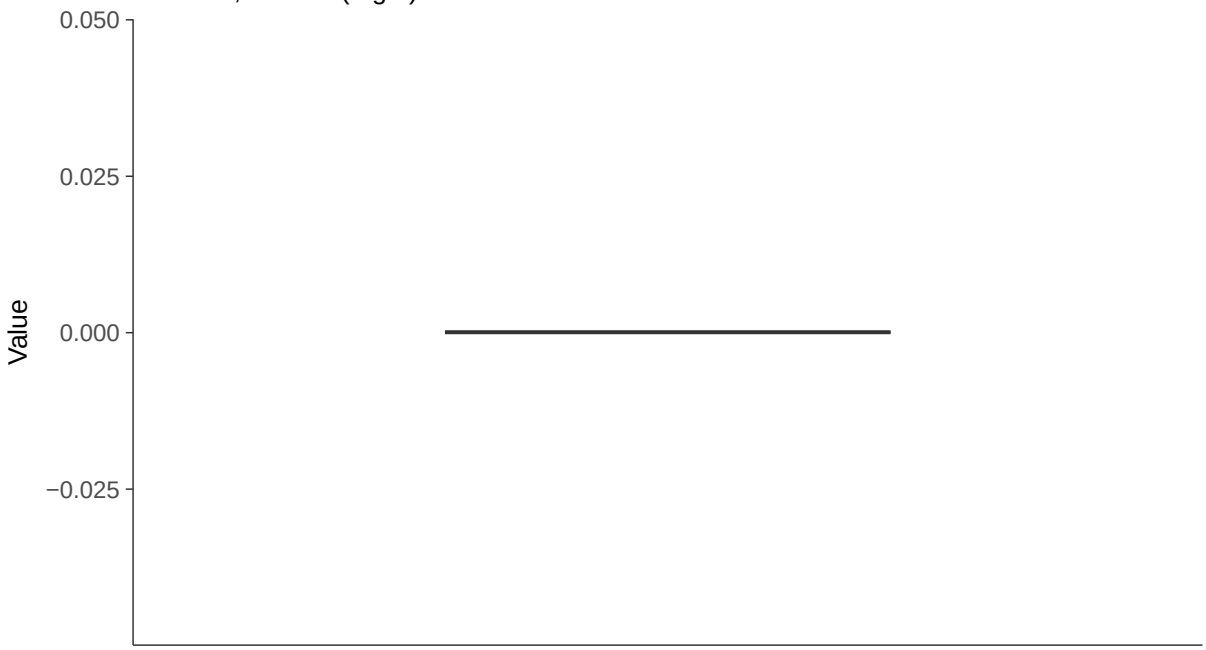
ID: 2_22_5_125





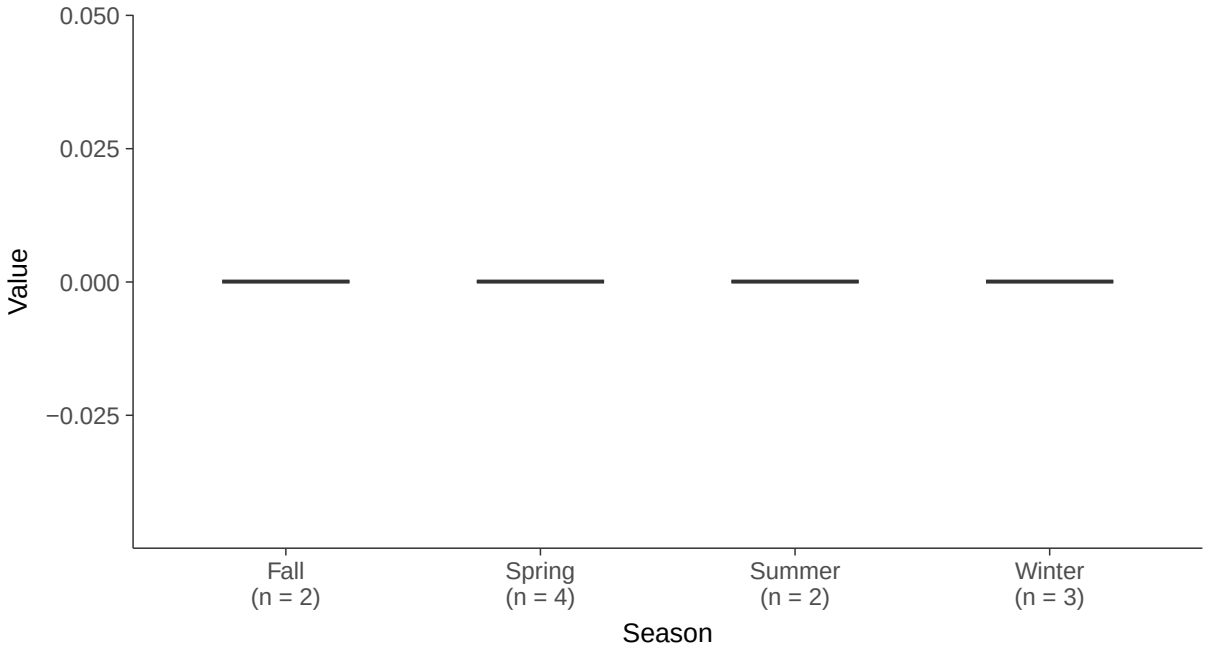
Boxplot

Thallium, MW-12 (mg/L)



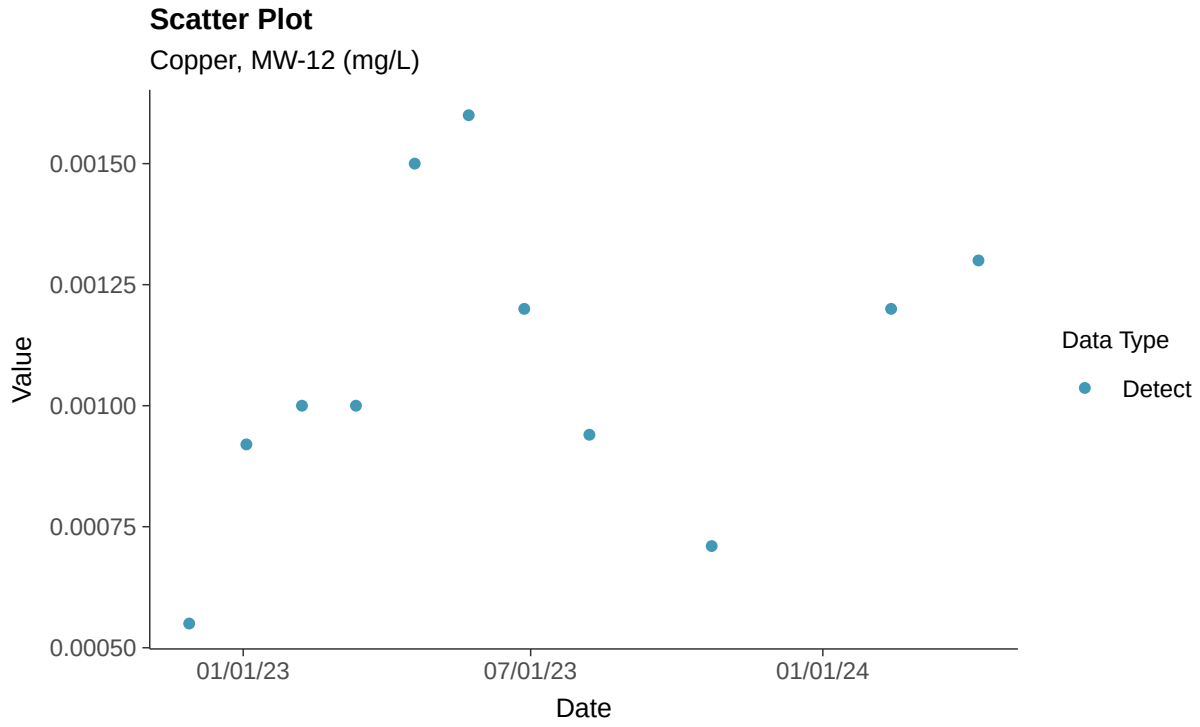
Boxplot by Season

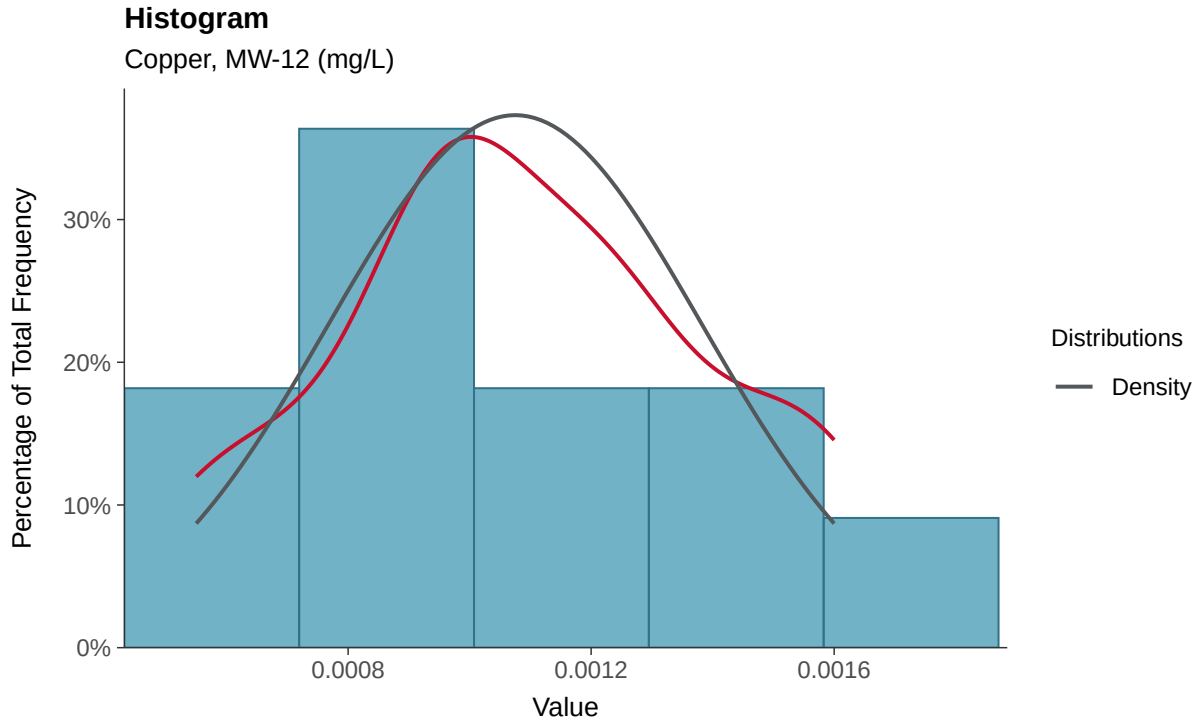
Thallium, MW-12 (mg/L)



Part 115: Copper, MW-12

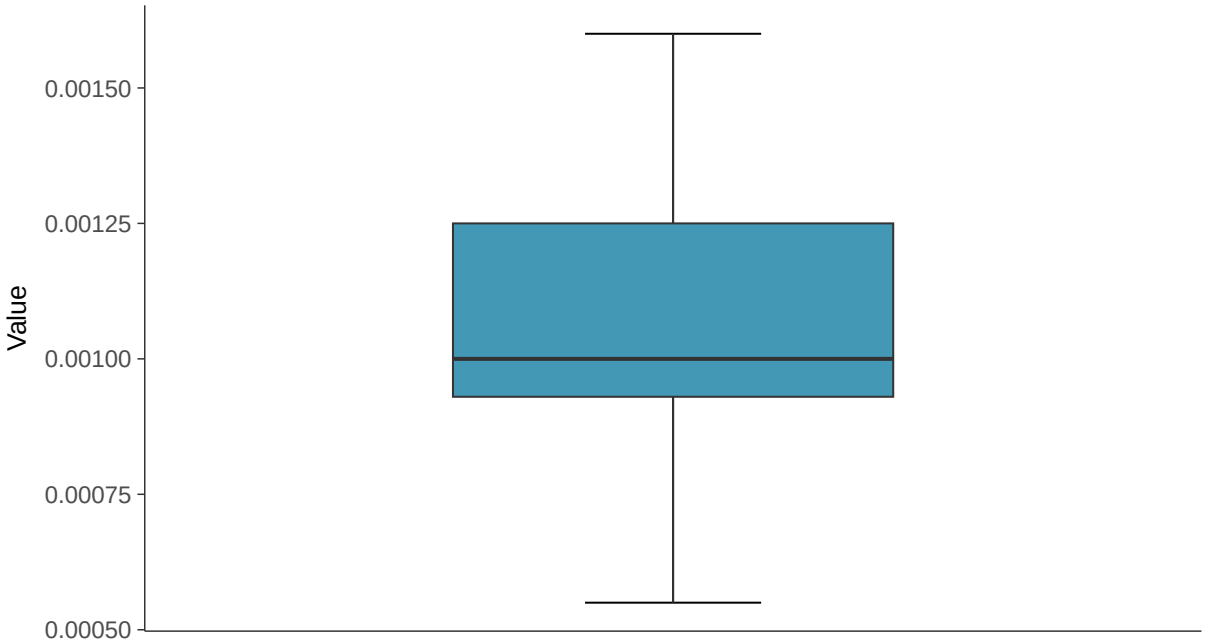
ID: 2_22_6_111





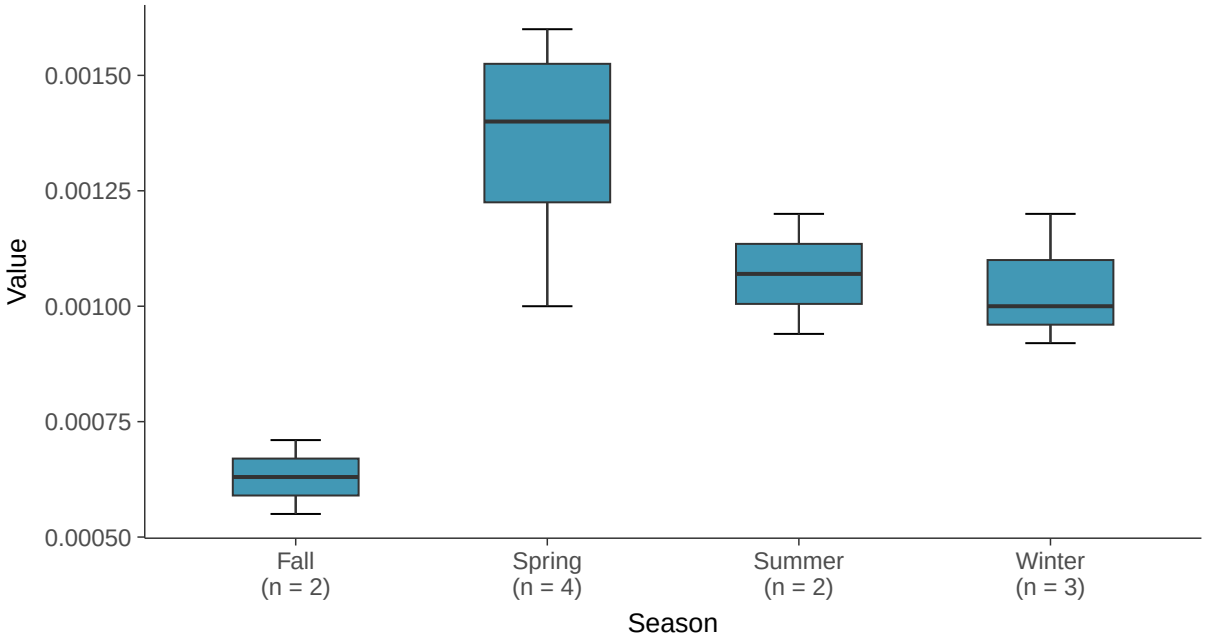
Boxplot

Copper, MW-12 (mg/L)



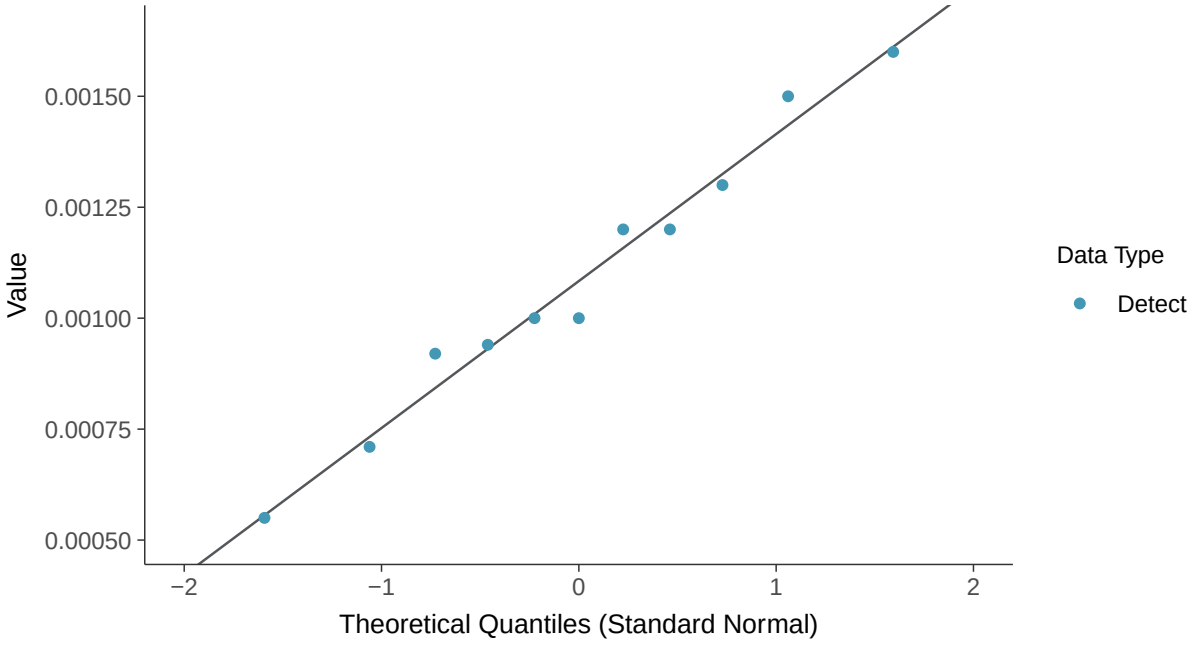
Boxplot by Season

Copper, MW-12 (mg/L)



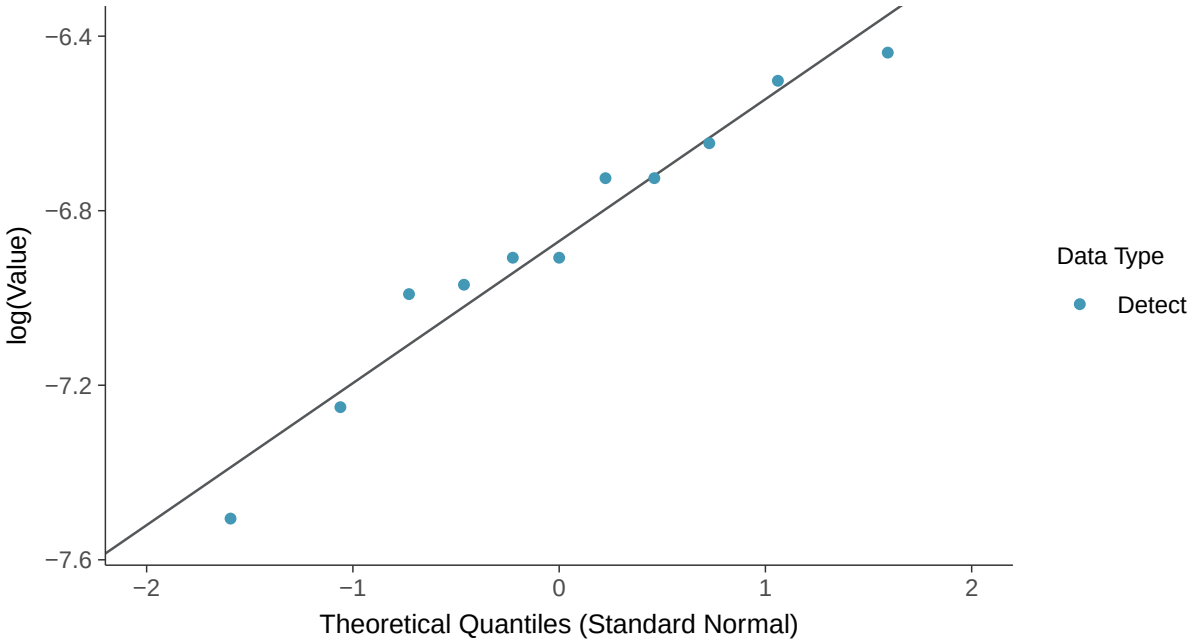
Normal Q-Q plot

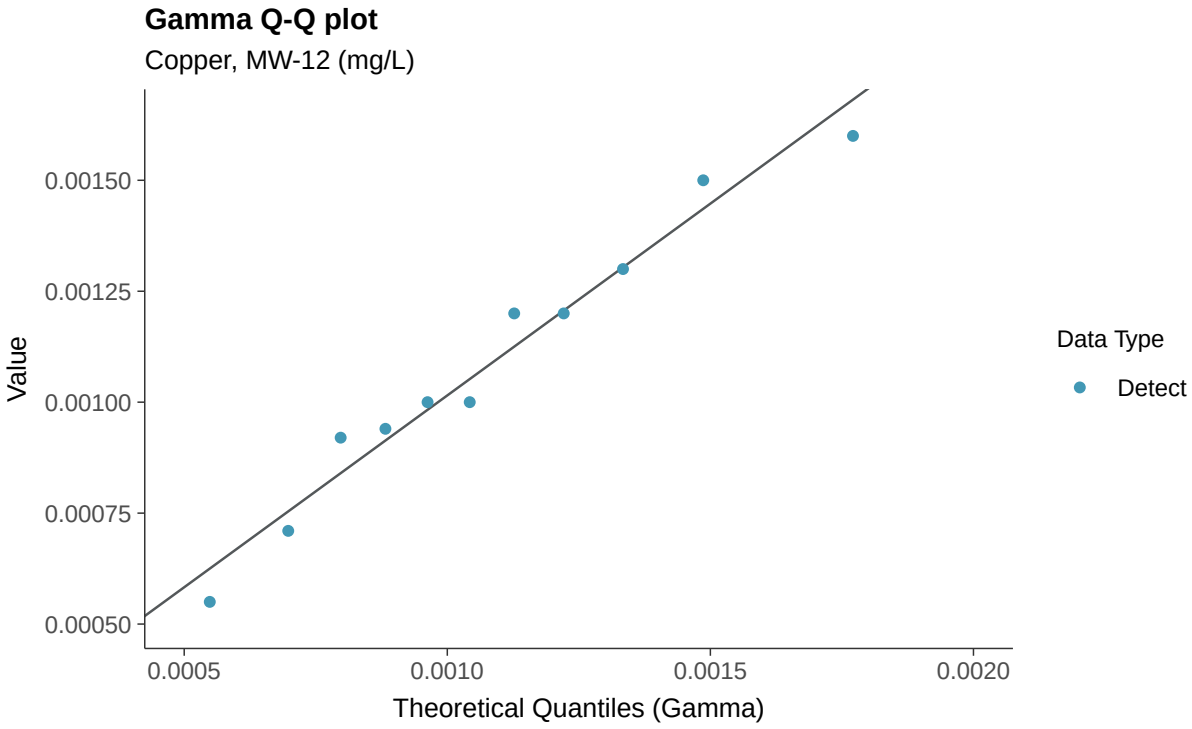
Copper, MW-12 (mg/L)

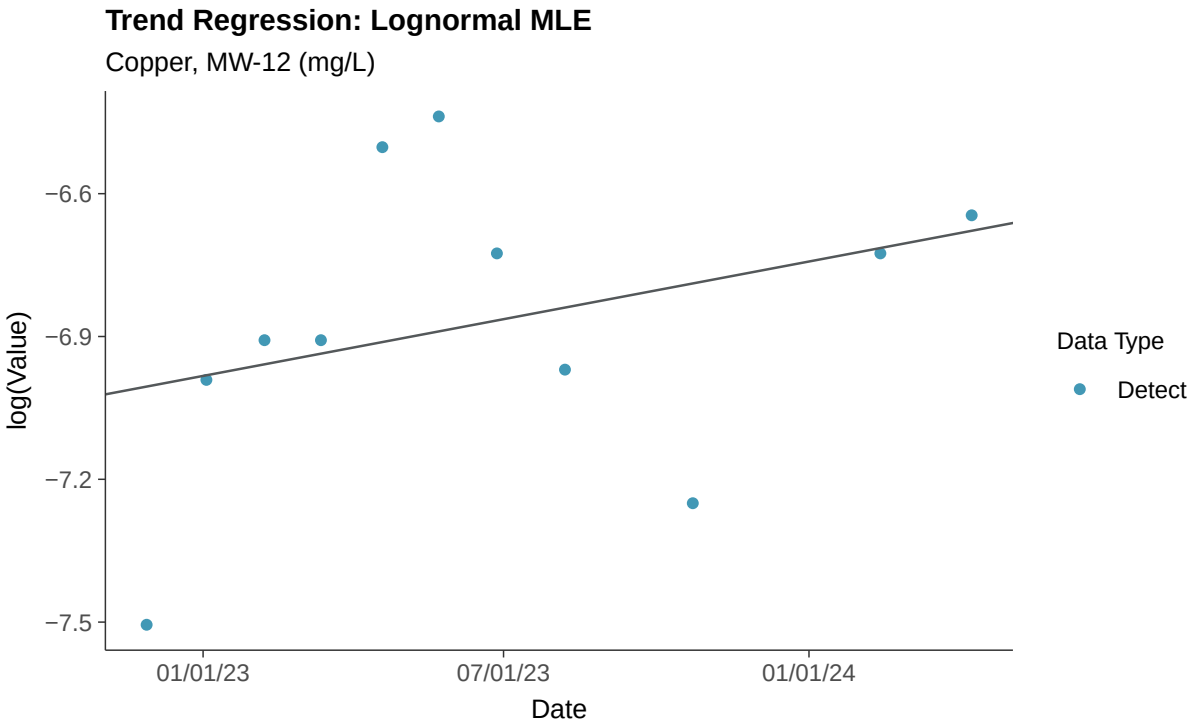


Lognormal Q-Q plot

Copper, MW-12 (mg/L)

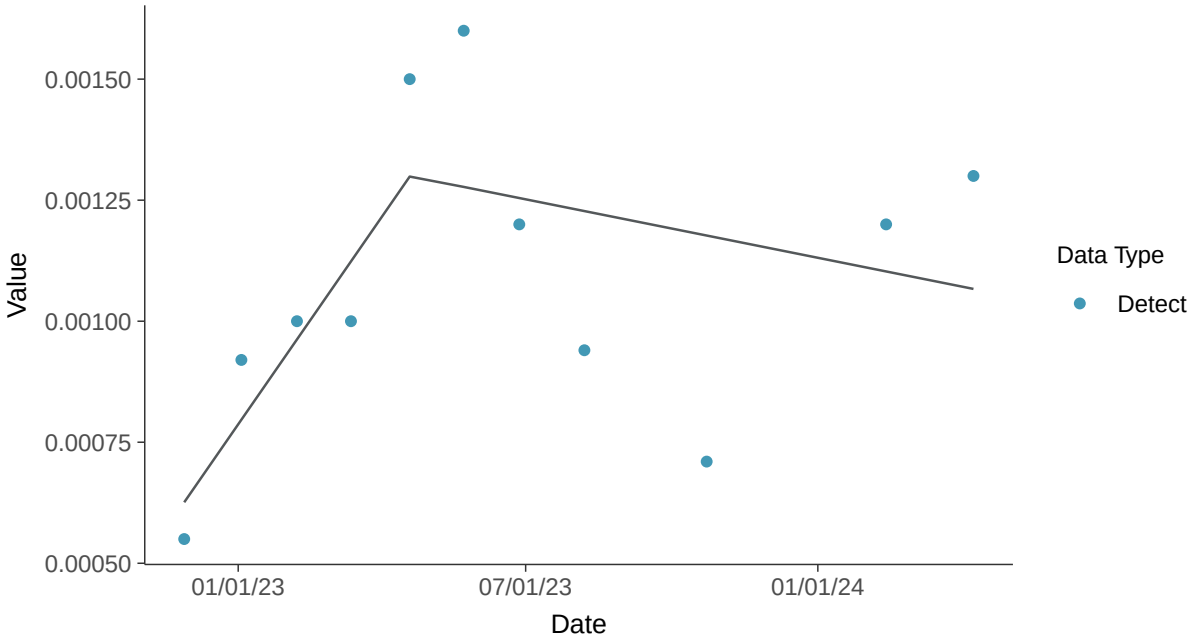



Gamma Q-Q plot
Copper, MW-12 (mg/L)
Value
0.00150
0.00125
0.00100
0.00075
0.00050
0.0005
0.0010
0.0015
0.0020
Theoretical Quantiles (Gamma)
Data Type
Detect


Trend Regression: Lognormal MLE
Copper, MW-12 (mg/L)
log(Value)
−6.6
−6.9
−7.2
−7.5
01/01/23
07/01/23
01/01/24
Date
Data Type
Detect

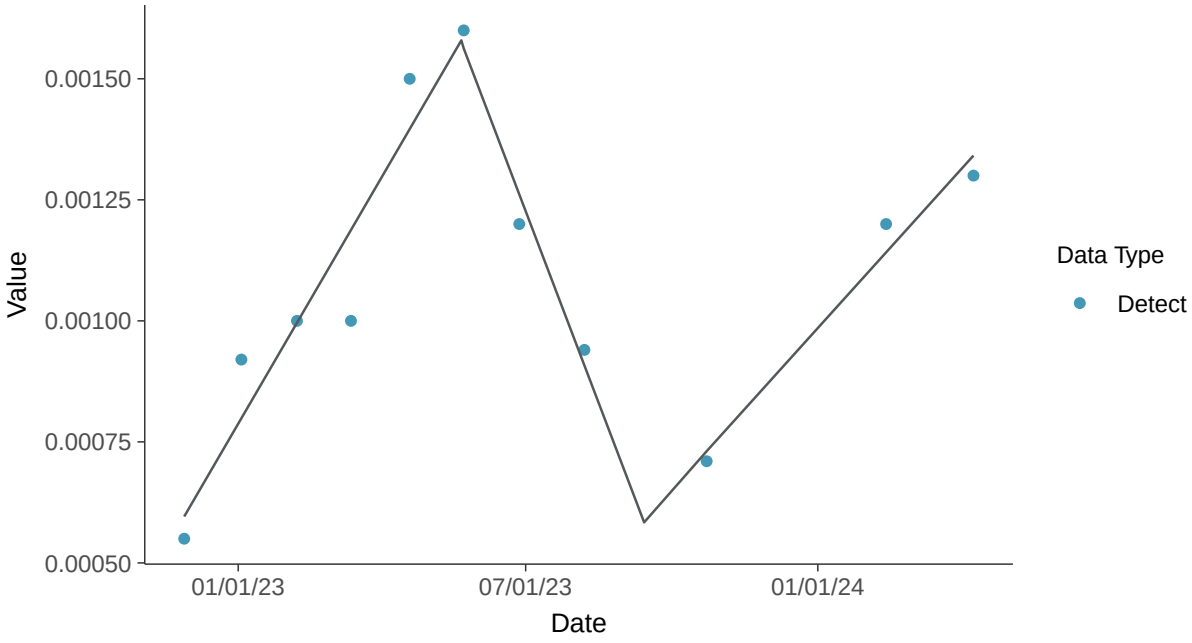
Trend Regression: Piecewise Linear-Linear

Copper, MW-12 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Copper, MW-12 (mg/L)

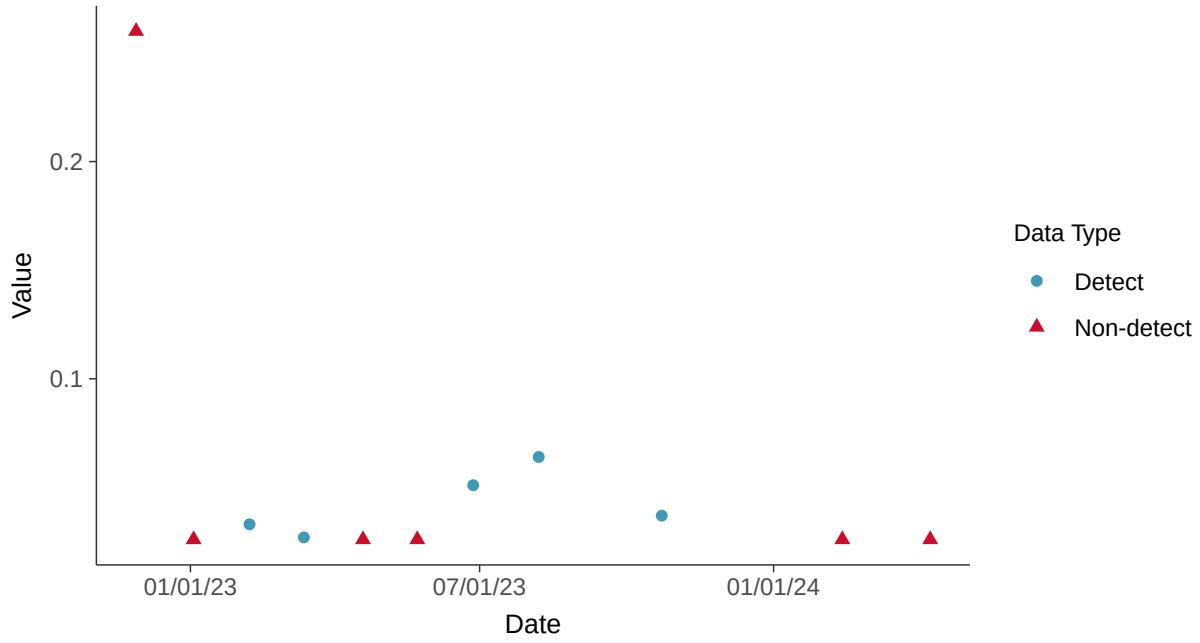


Part 115: Iron, MW-12

ID: 2_22_6_114

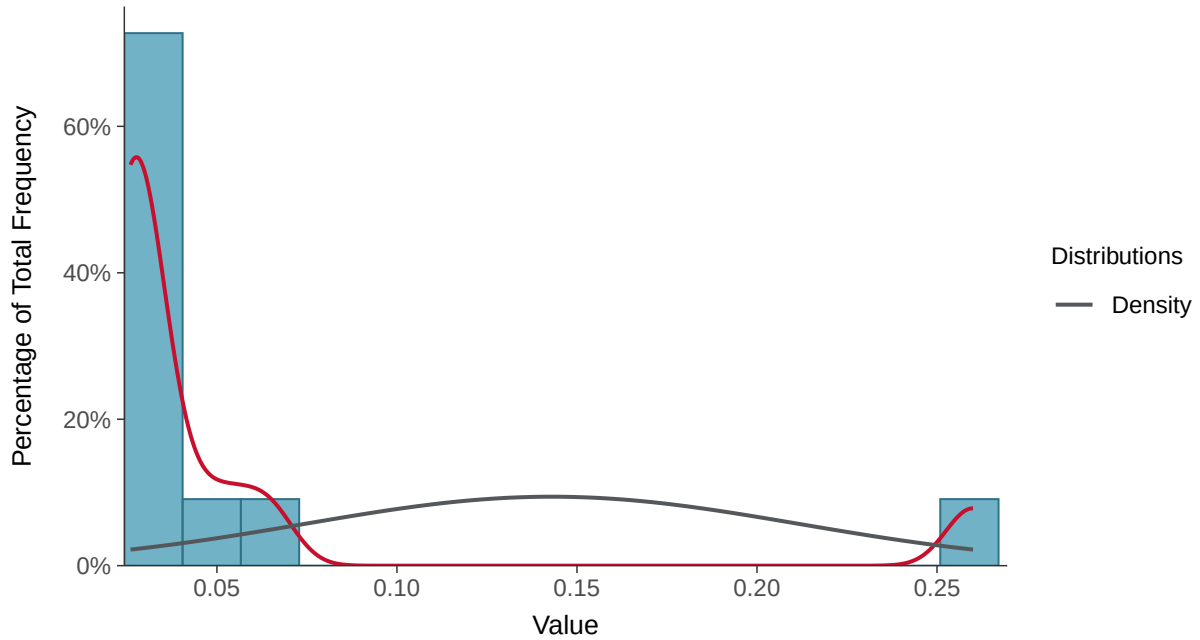
Scatter Plot

Iron, MW-12 (mg/L)



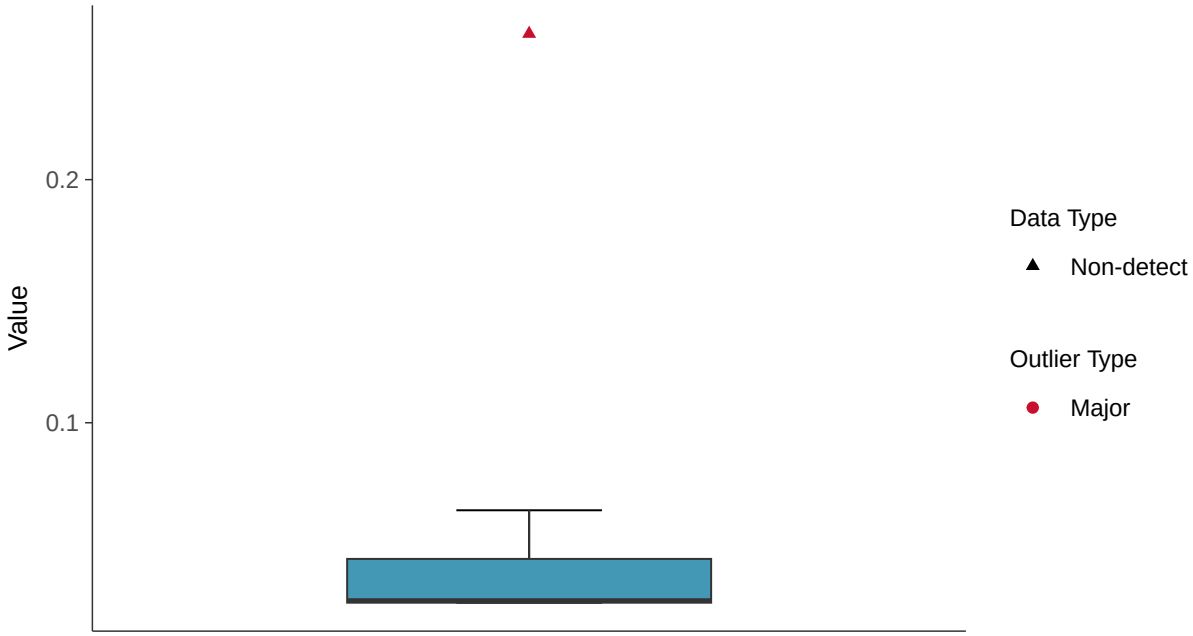
Histogram

Iron, MW-12 (mg/L)



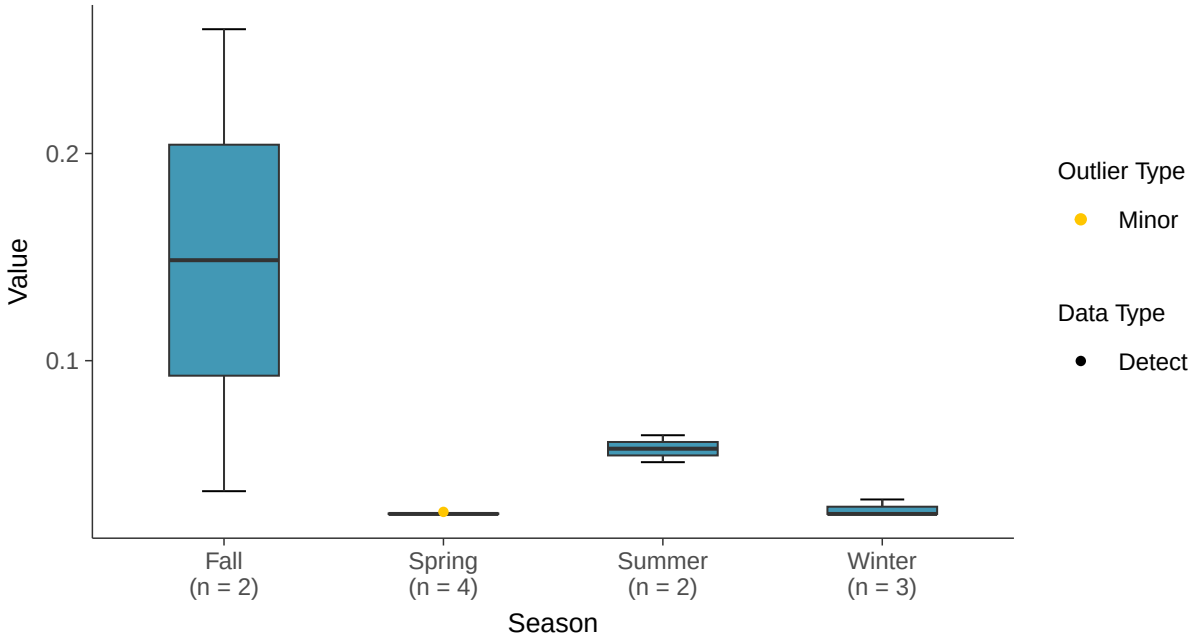
Boxplot

Iron, MW-12 (mg/L)



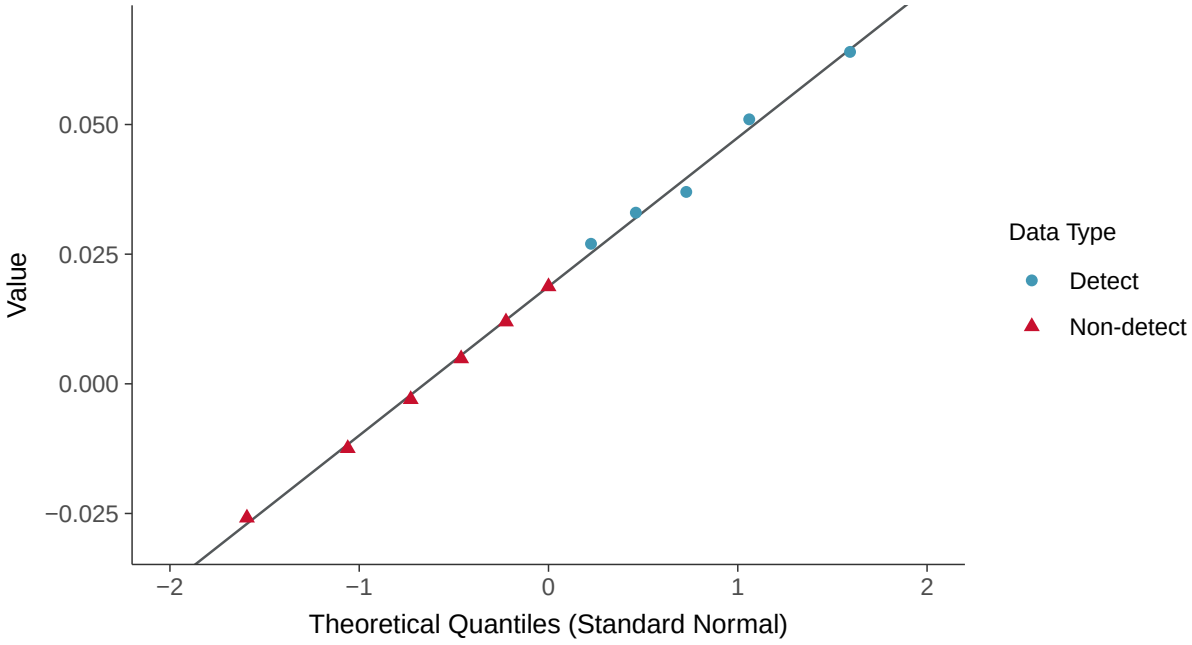
Boxplot by Season

Iron, MW-12 (mg/L)



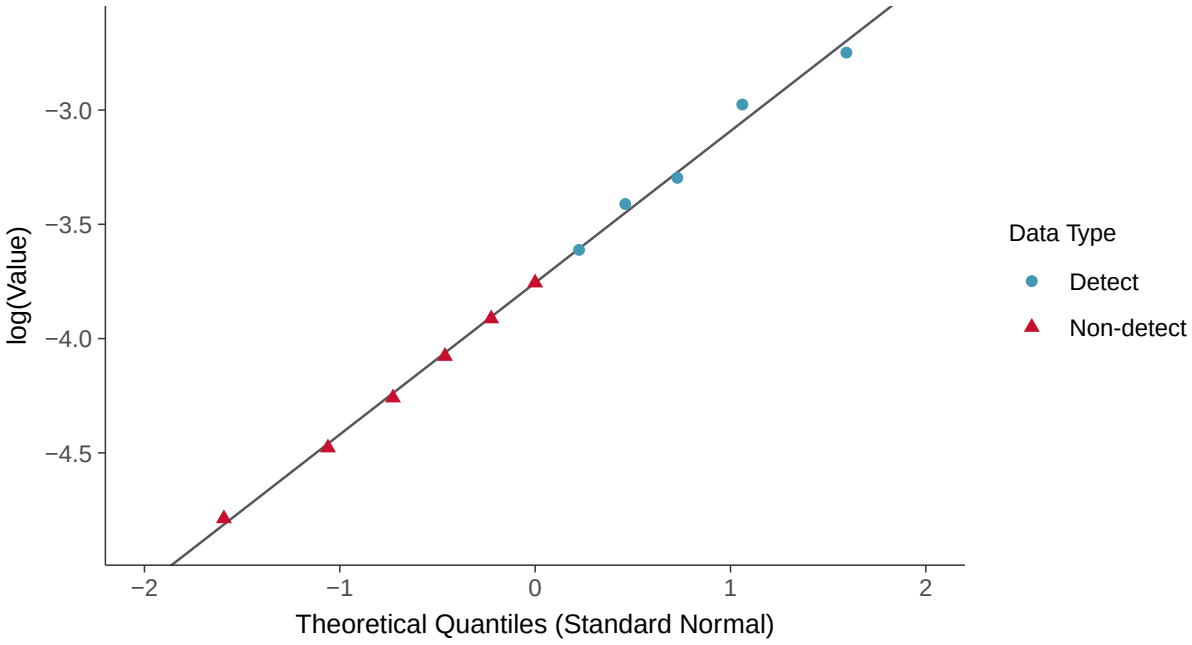
Normal Q-Q plot using ROS Imputed Estimates

Iron, MW-12 (mg/L)



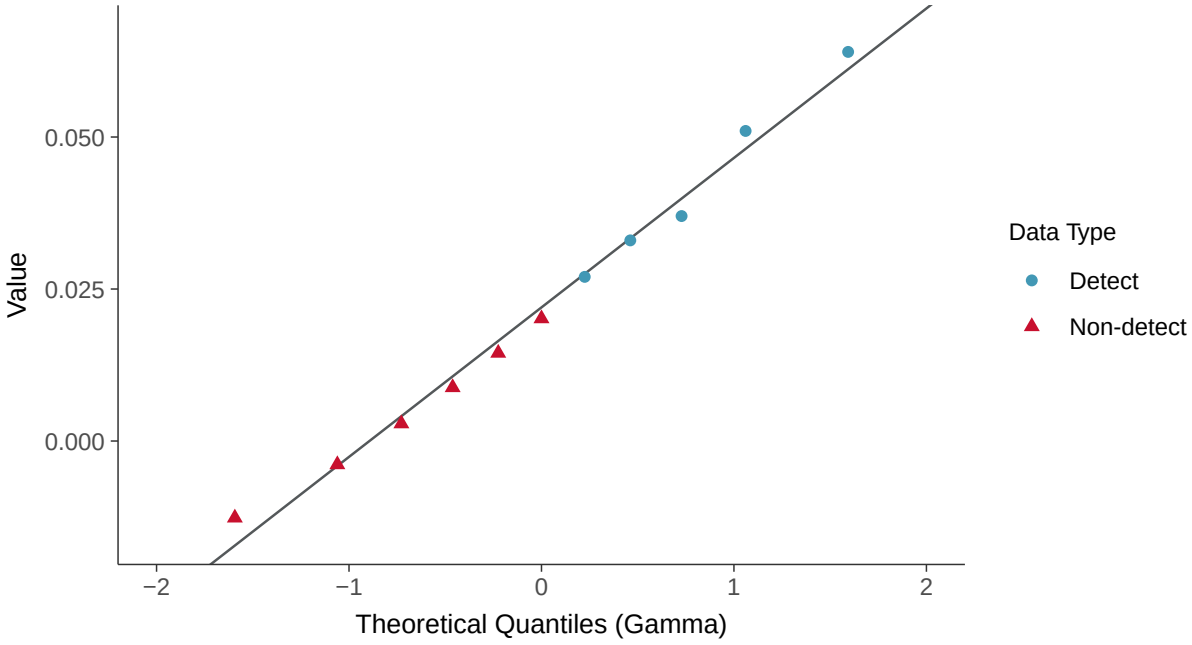
Lognormal Q-Q plot using ROS Imputed Estimates

Iron, MW-12 (mg/L)



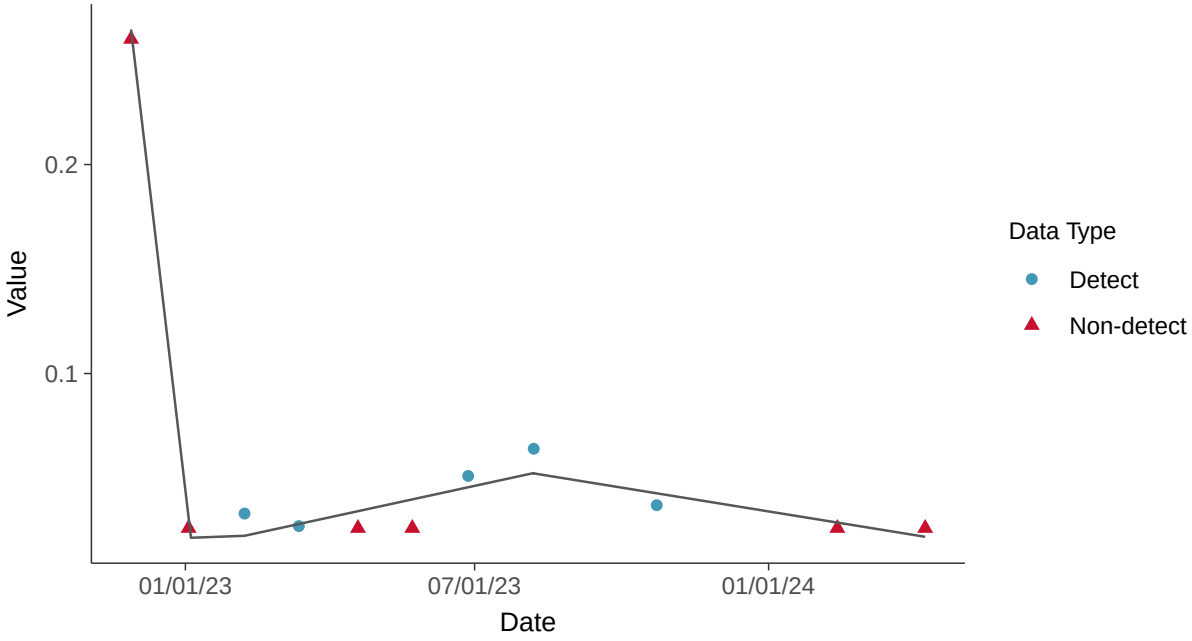
Gamma Q-Q plot using ROS Imputed Estimates

Iron, MW-12 (mg/L)



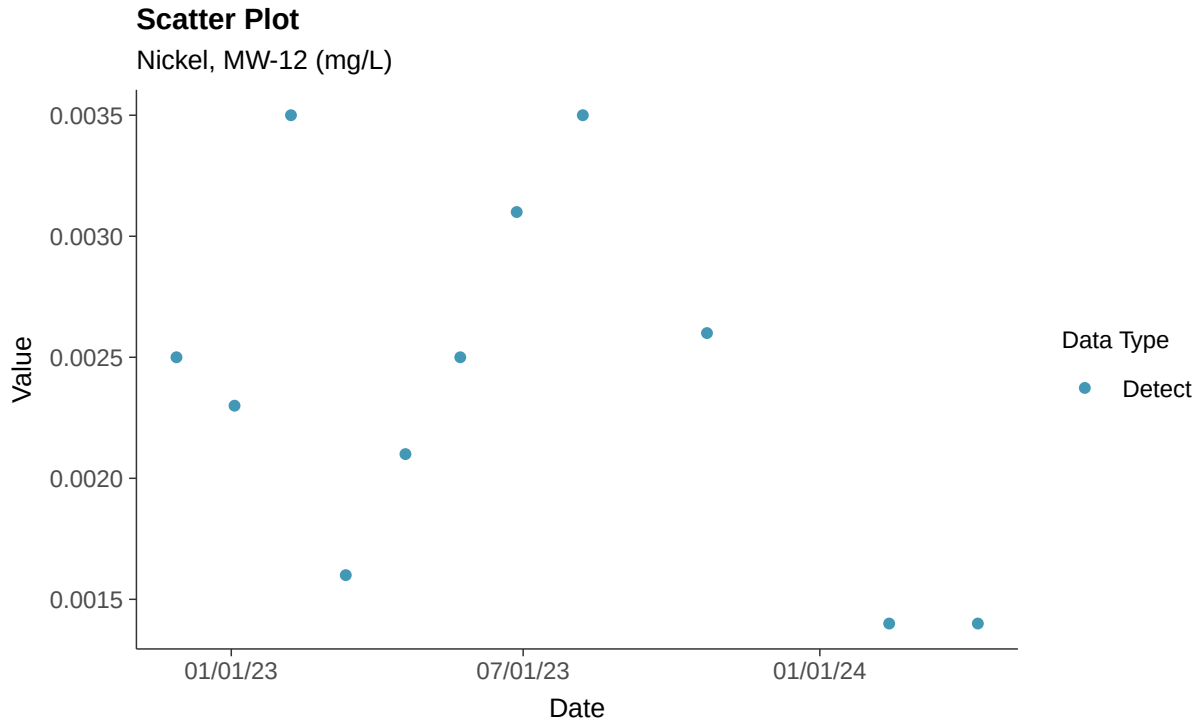
Trend Regression: Piecewise Linear-Linear-Linear

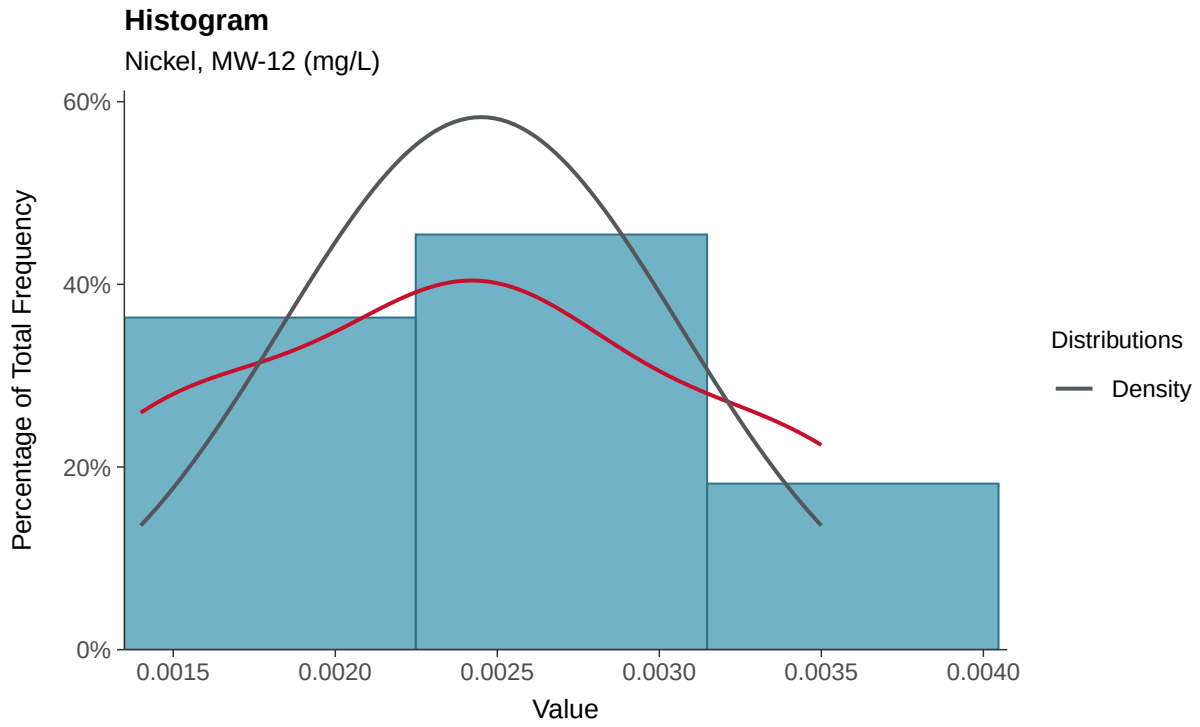
Iron, MW-12 (mg/L)



Part 115: Nickel, MW-12

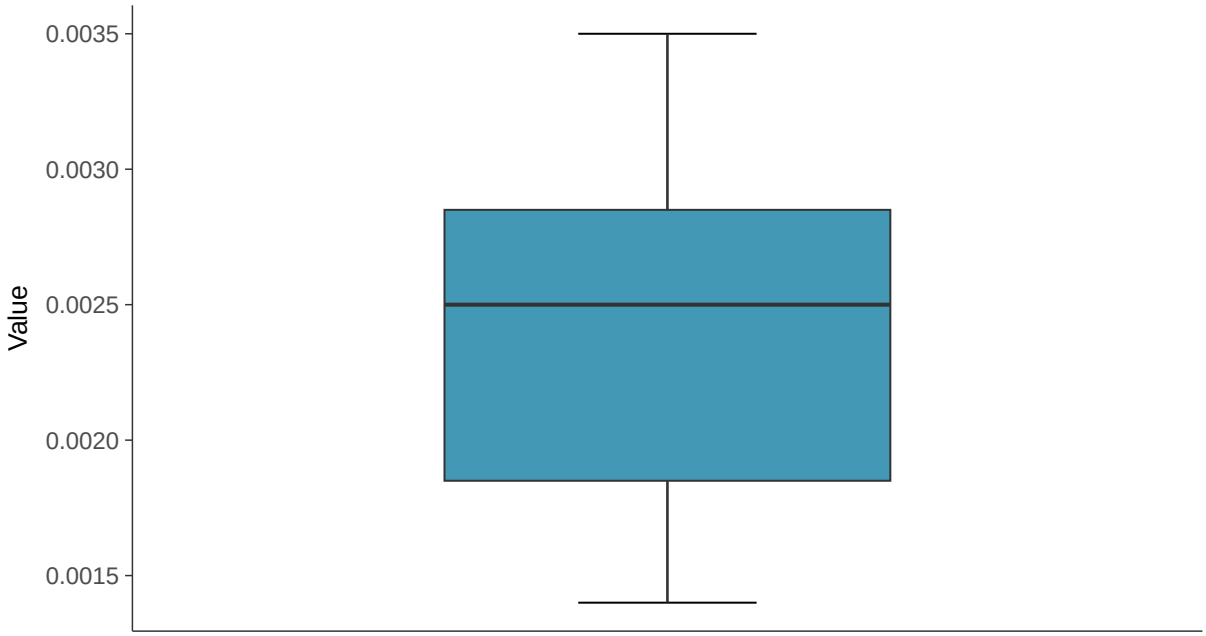
ID: 2_22_6_119





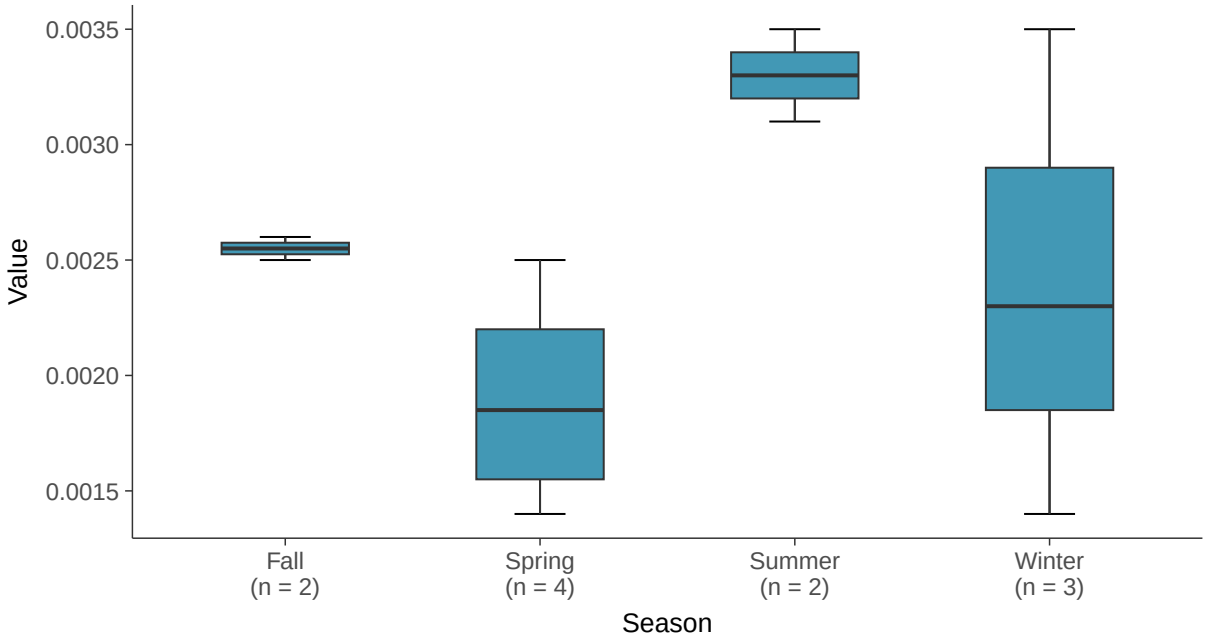
Boxplot

Nickel, MW-12 (mg/L)



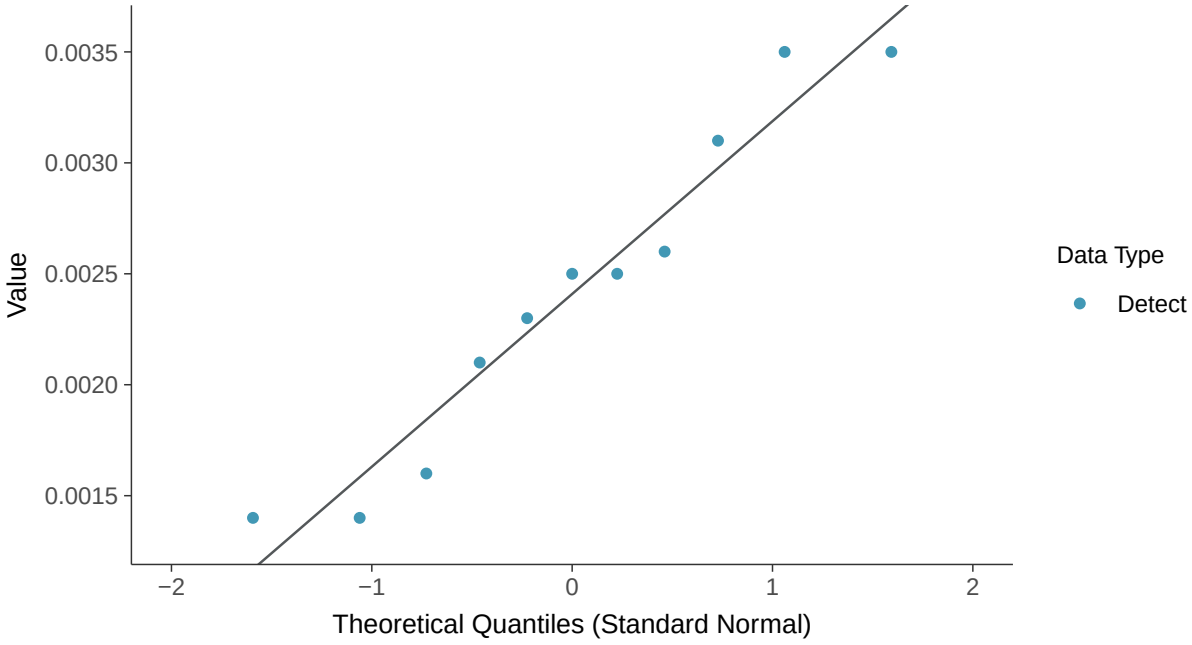
Boxplot by Season

Nickel, MW-12 (mg/L)



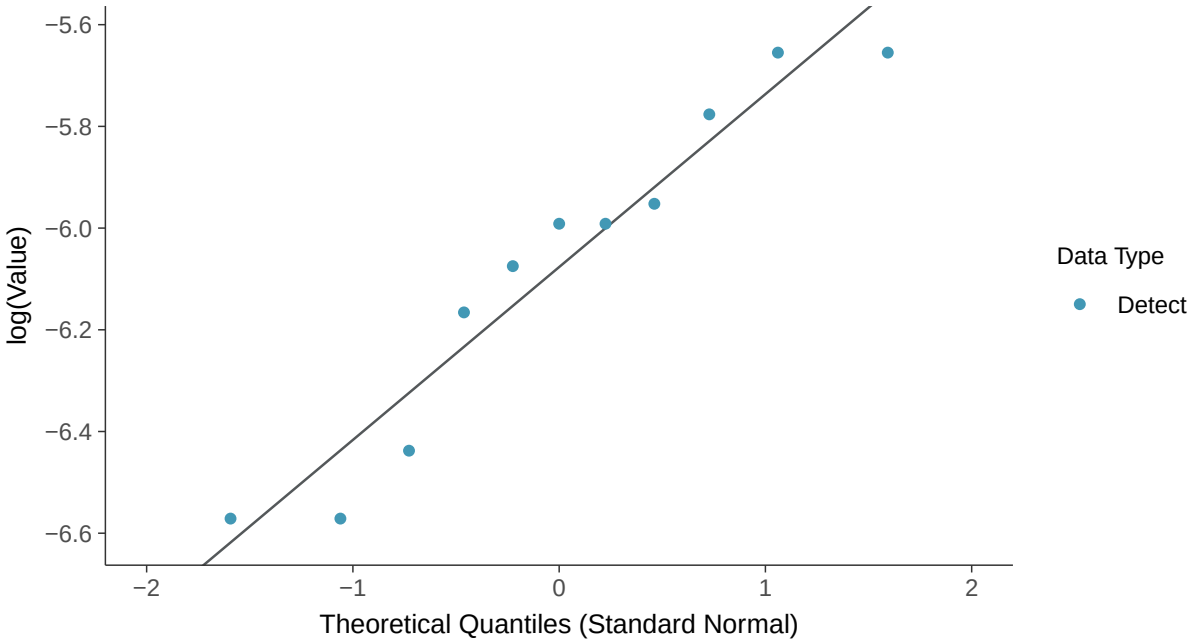
Normal Q-Q plot

Nickel, MW-12 (mg/L)



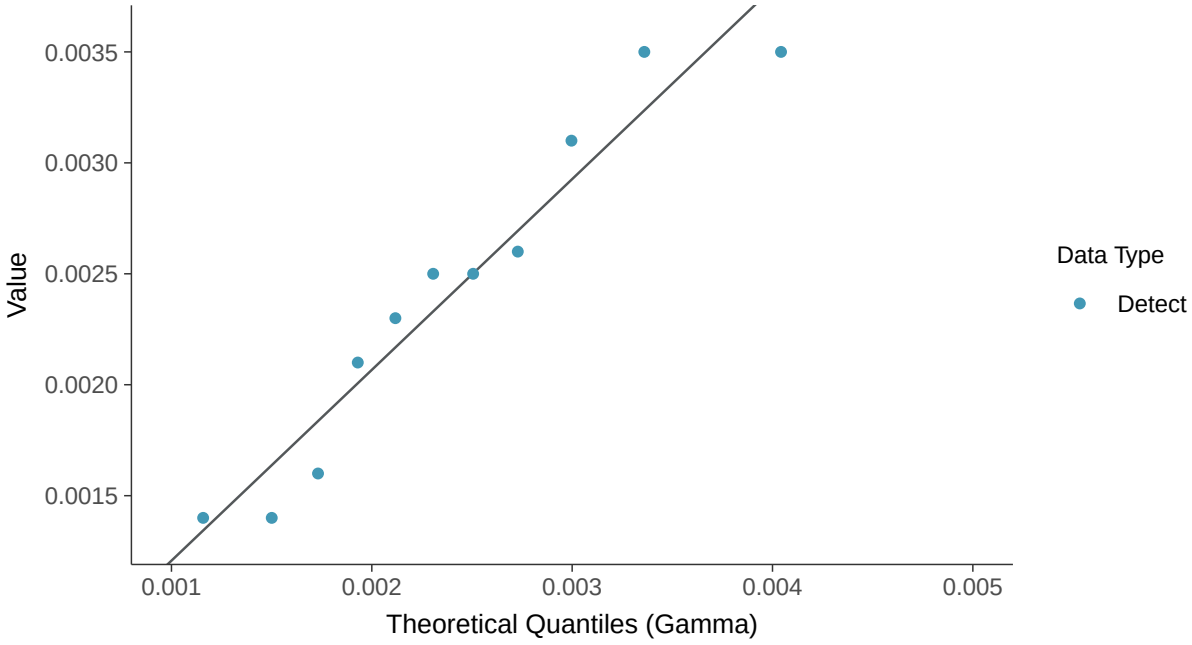
Lognormal Q-Q plot

Nickel, MW-12 (mg/L)



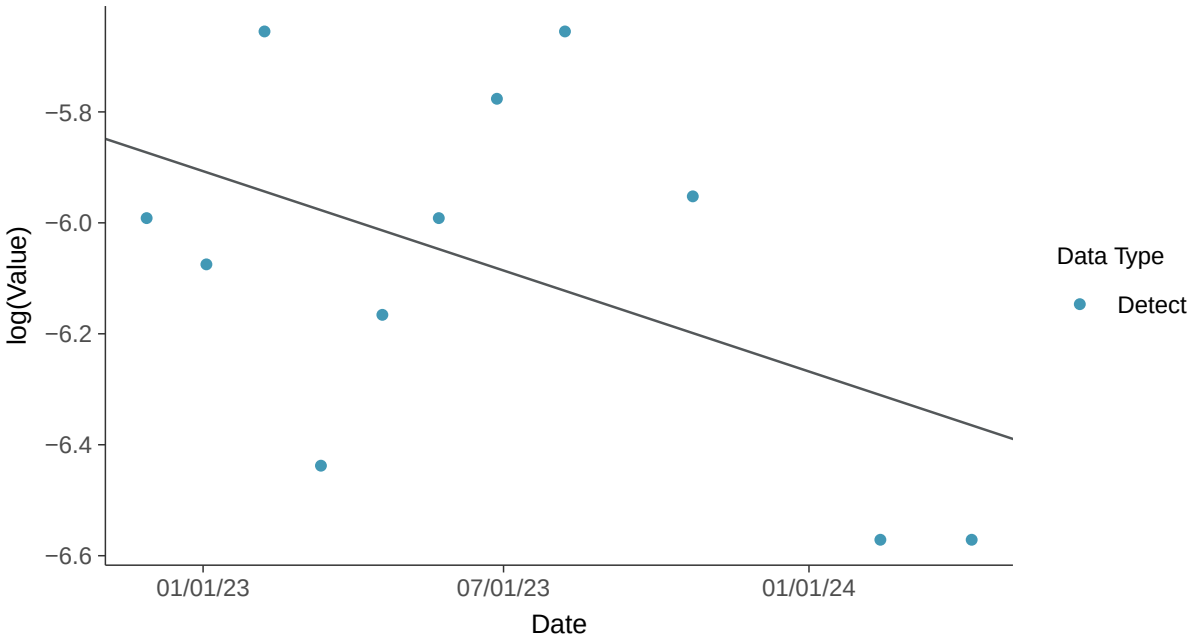
Gamma Q-Q plot

Nickel, MW-12 (mg/L)



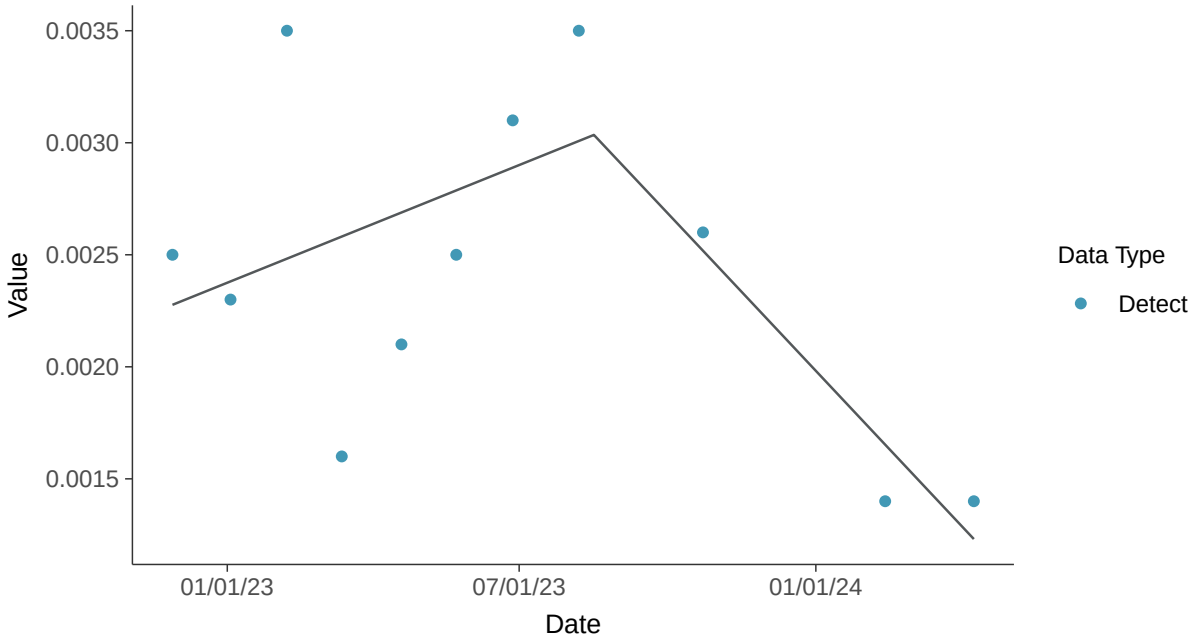
Trend Regression: Lognormal MLE

Nickel, MW-12 (mg/L)



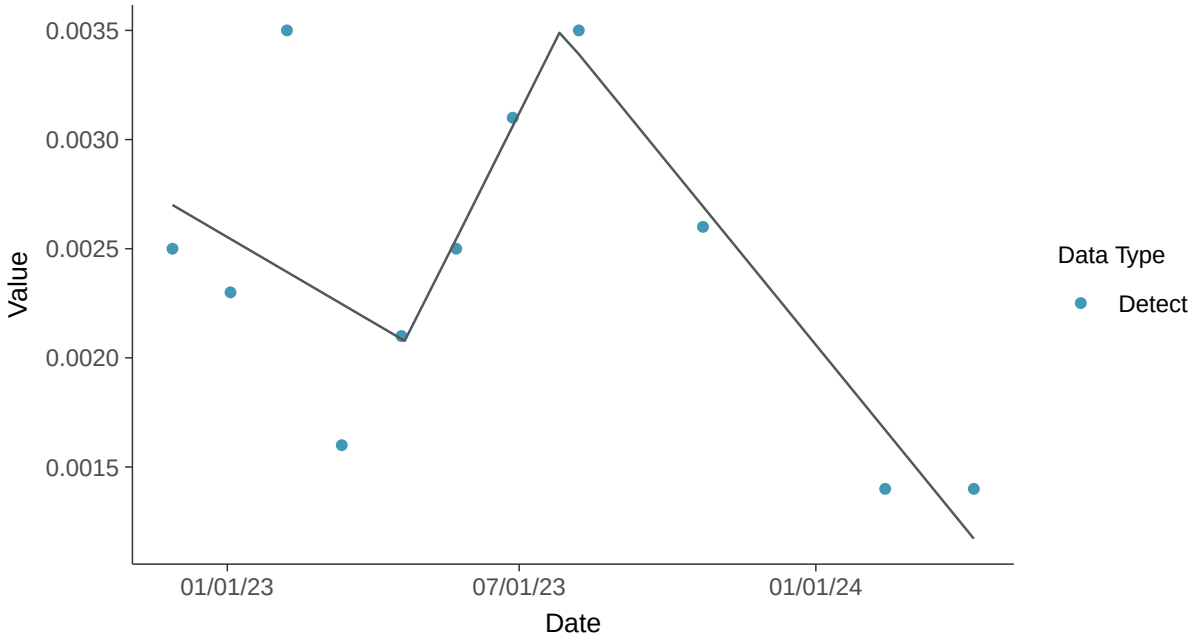
Trend Regression: Piecewise Linear-Linear

Nickel, MW-12 (mg/L)



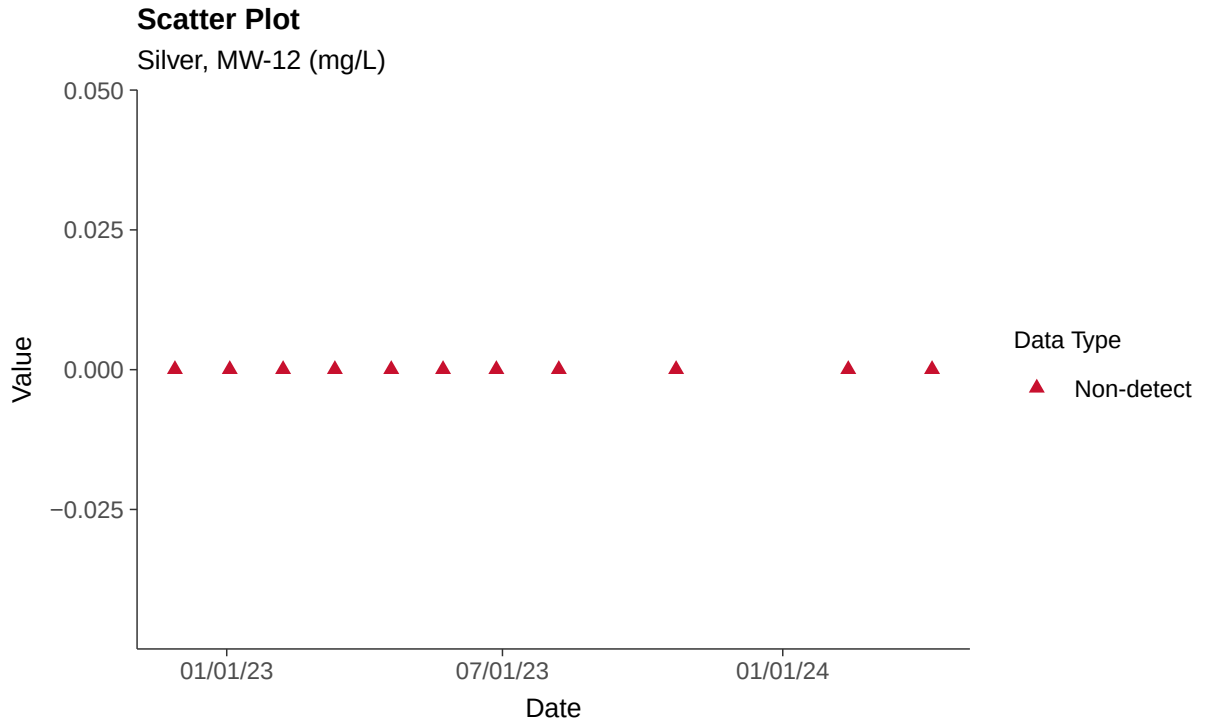
Trend Regression: Piecewise Linear-Linear-Linear

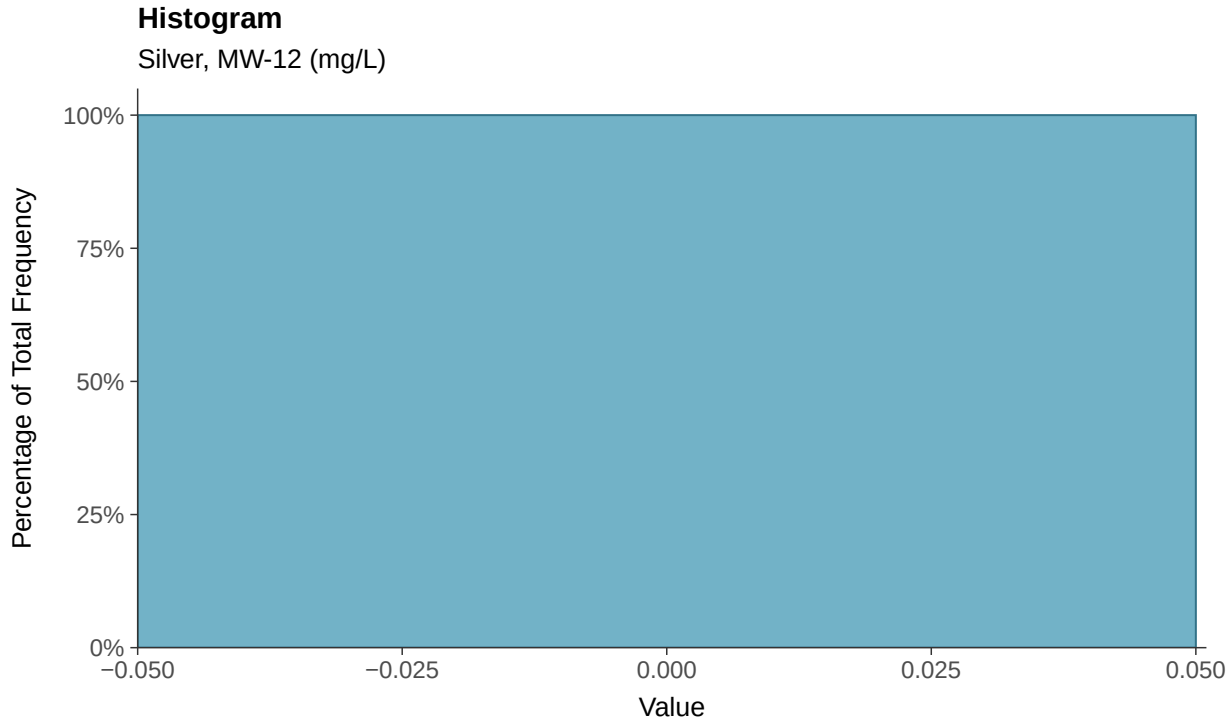
Nickel, MW-12 (mg/L)



Part 115: Silver, MW-12

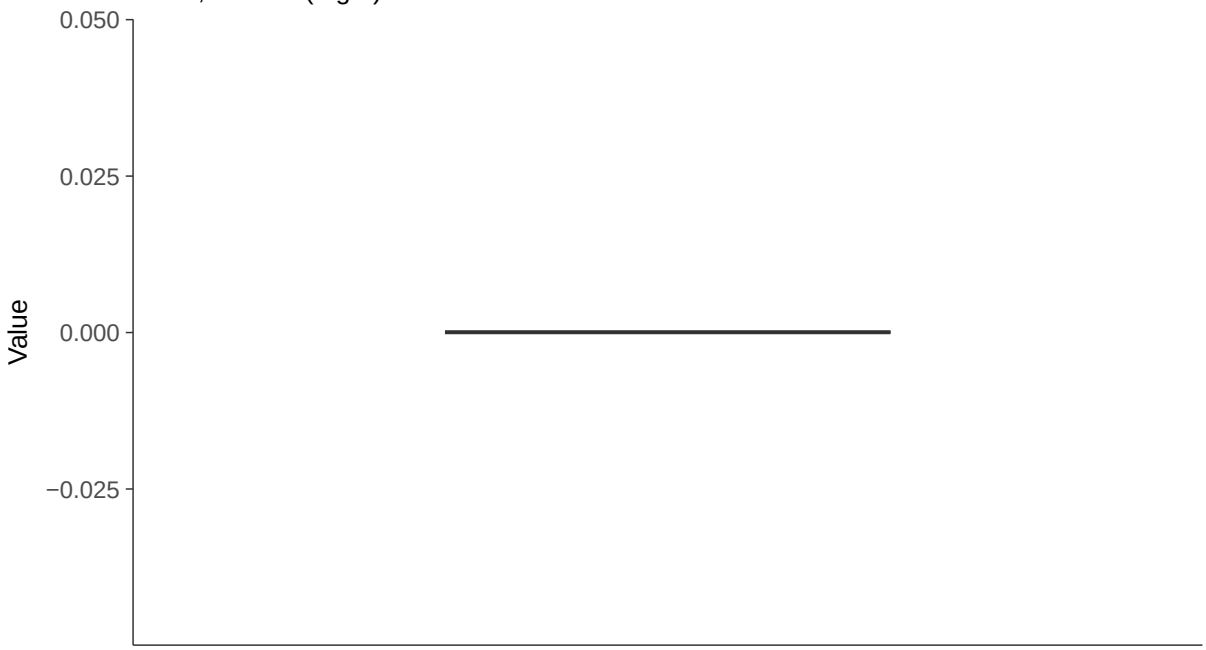
ID: 2_22_6_123





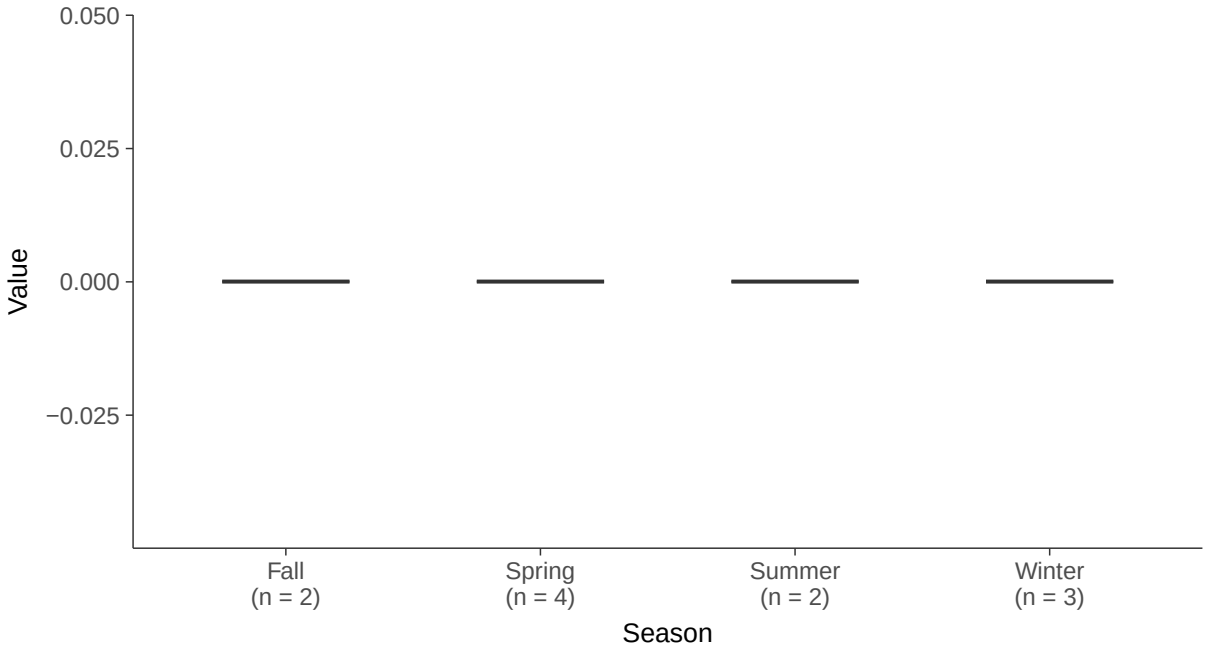
Boxplot

Silver, MW-12 (mg/L)



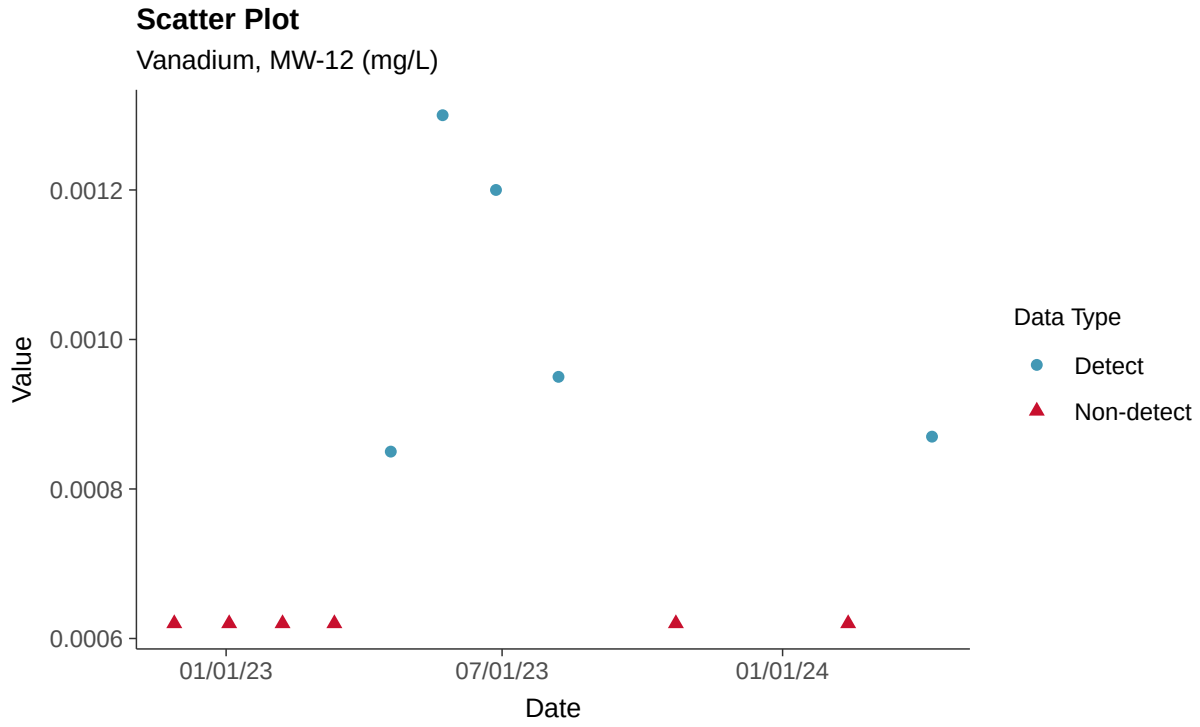
Boxplot by Season

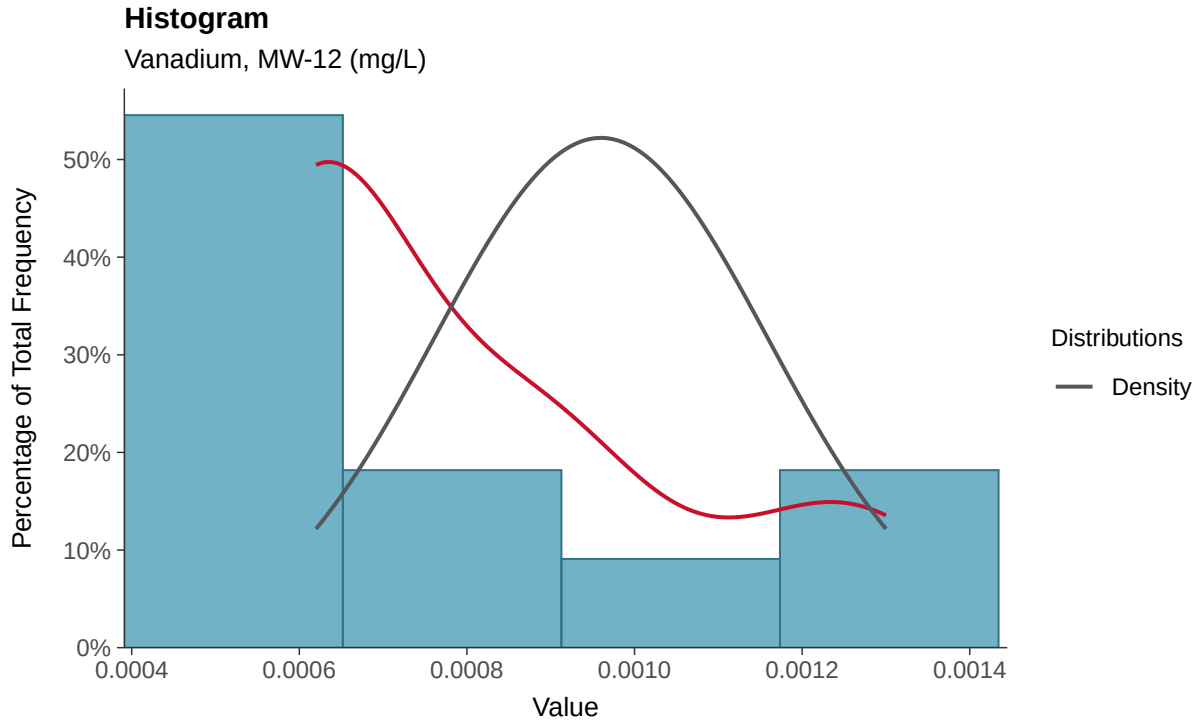
Silver, MW-12 (mg/L)



Part 115: Vanadium, MW-12

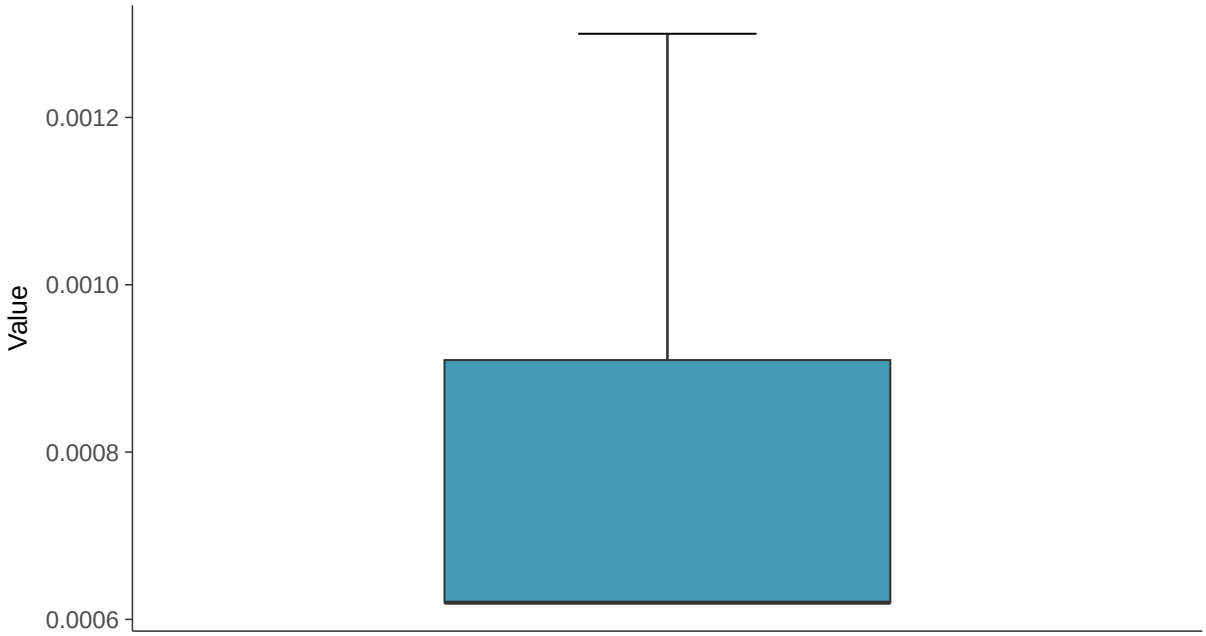
ID: 2_22_6_129





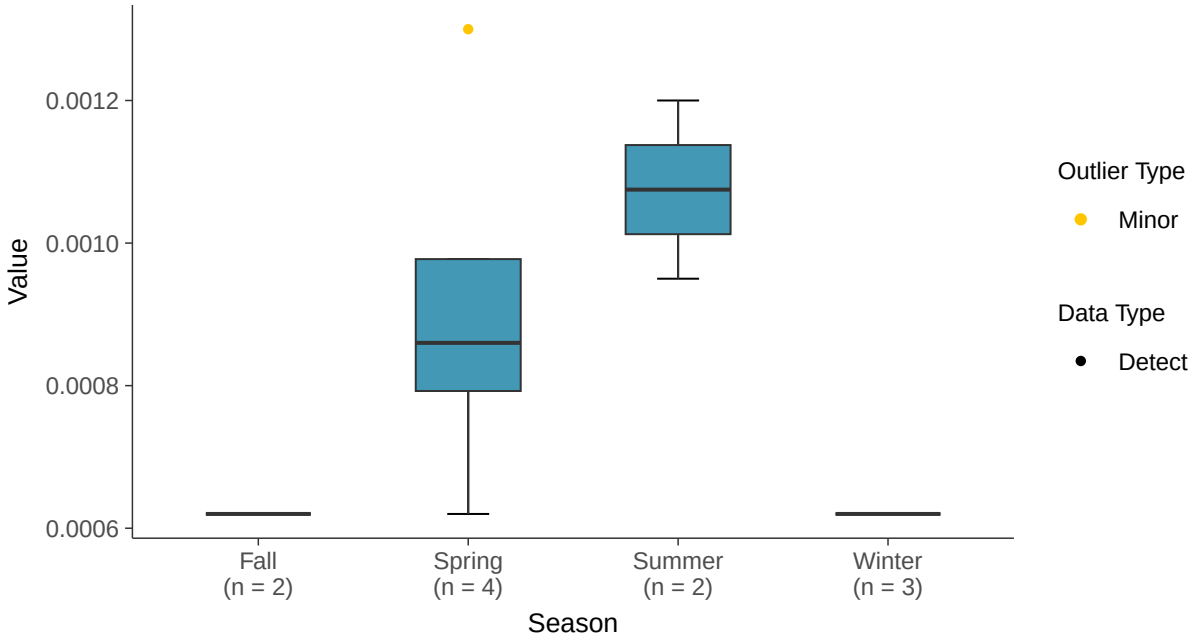
Boxplot

Vanadium, MW-12 (mg/L)



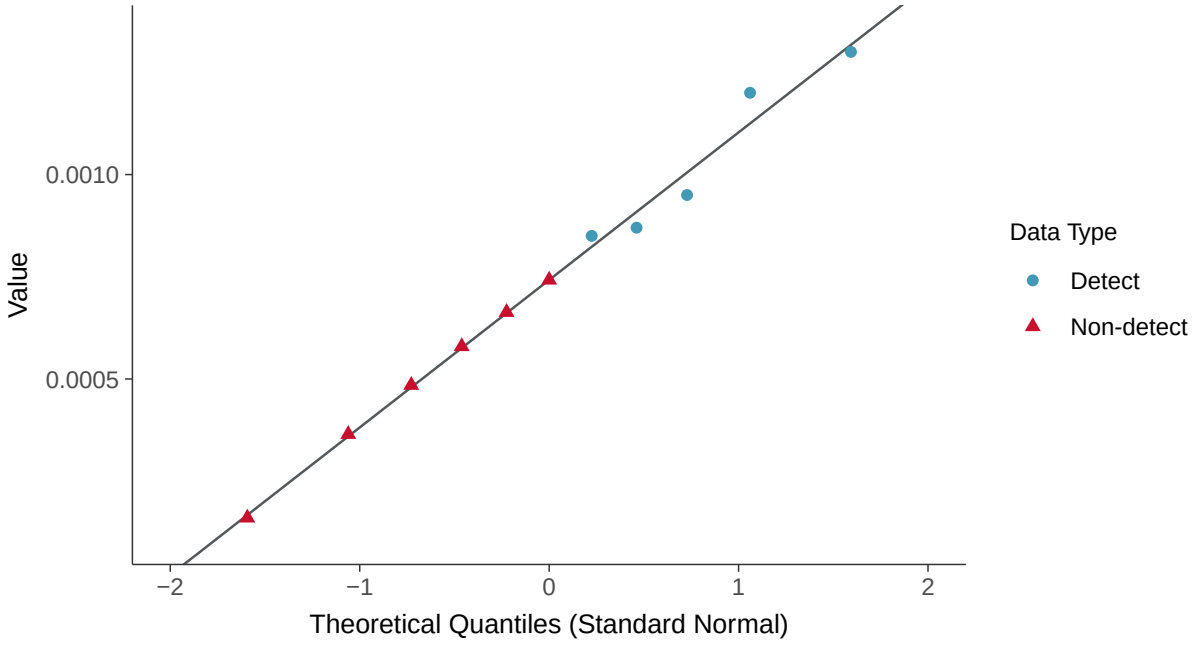
Boxplot by Season

Vanadium, MW-12 (mg/L)



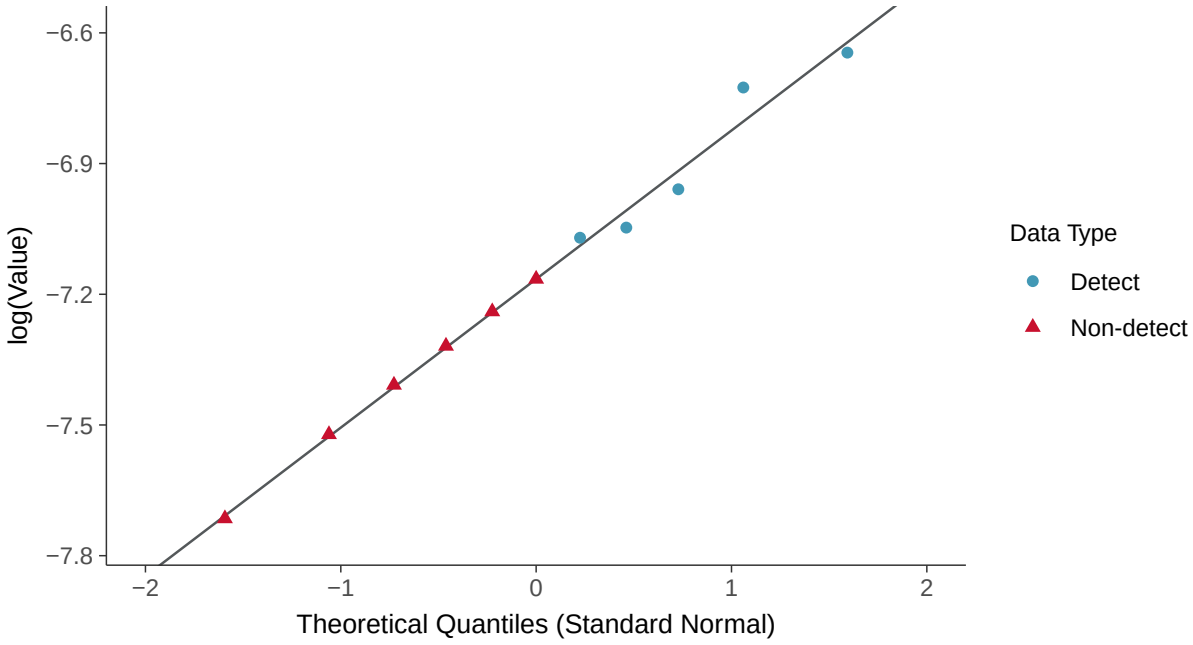
Normal Q-Q plot using ROS Imputed Estimates

Vanadium, MW-12 (mg/L)



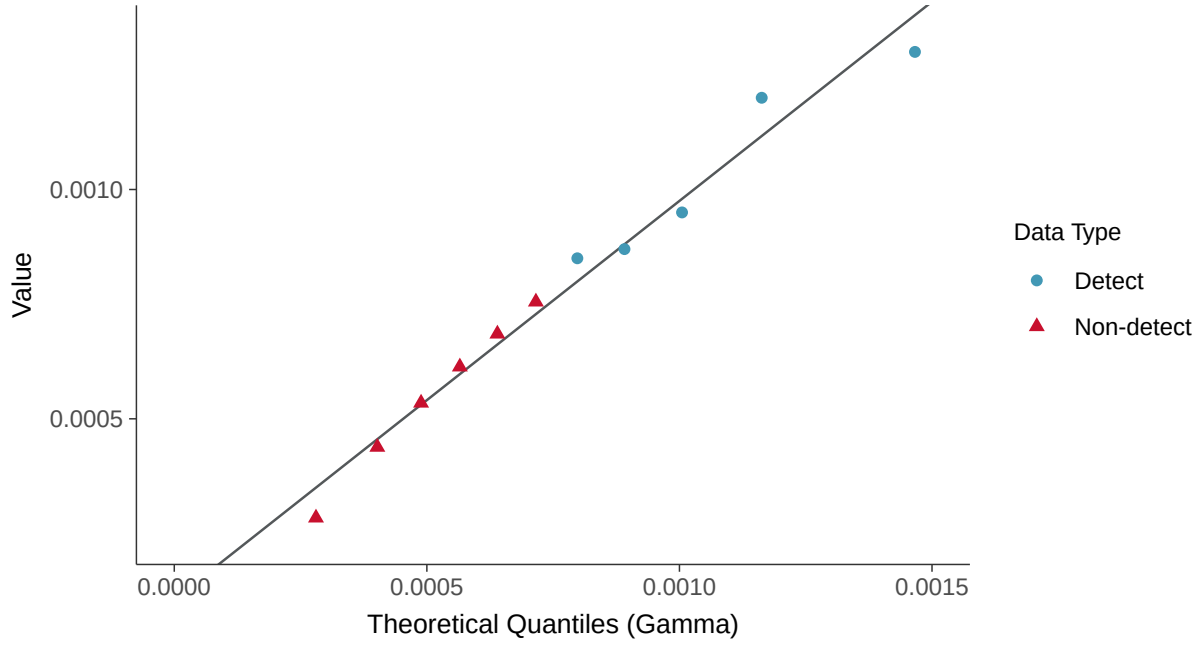
Lognormal Q-Q plot using ROS Imputed Estimates

Vanadium, MW-12 (mg/L)



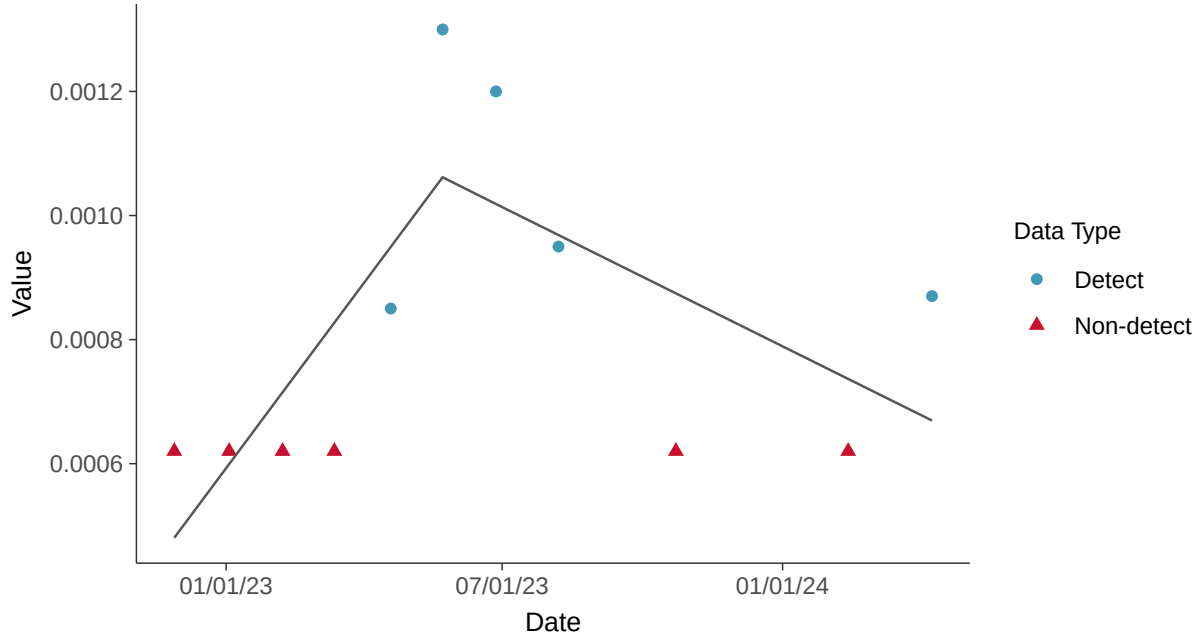
Gamma Q-Q plot using ROS Imputed Estimates

Vanadium, MW-12 (mg/L)



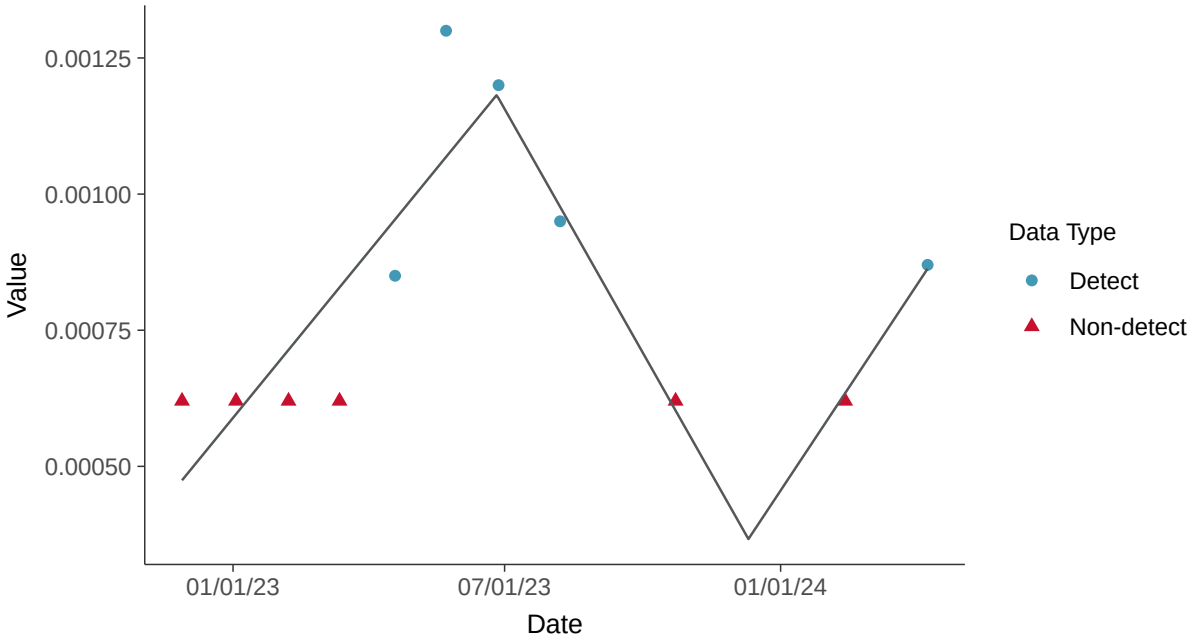
Trend Regression: Piecewise Linear-Linear

Vanadium, MW-12 (mg/L)



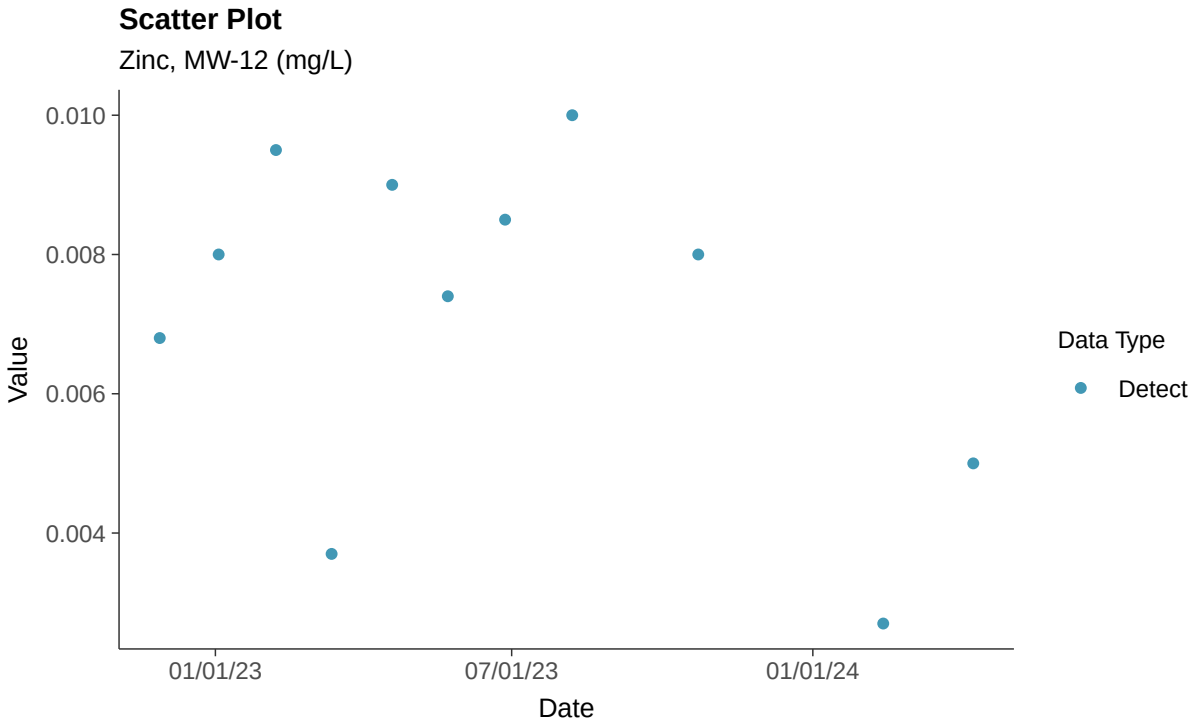
Trend Regression: Piecewise Linear-Linear-Linear

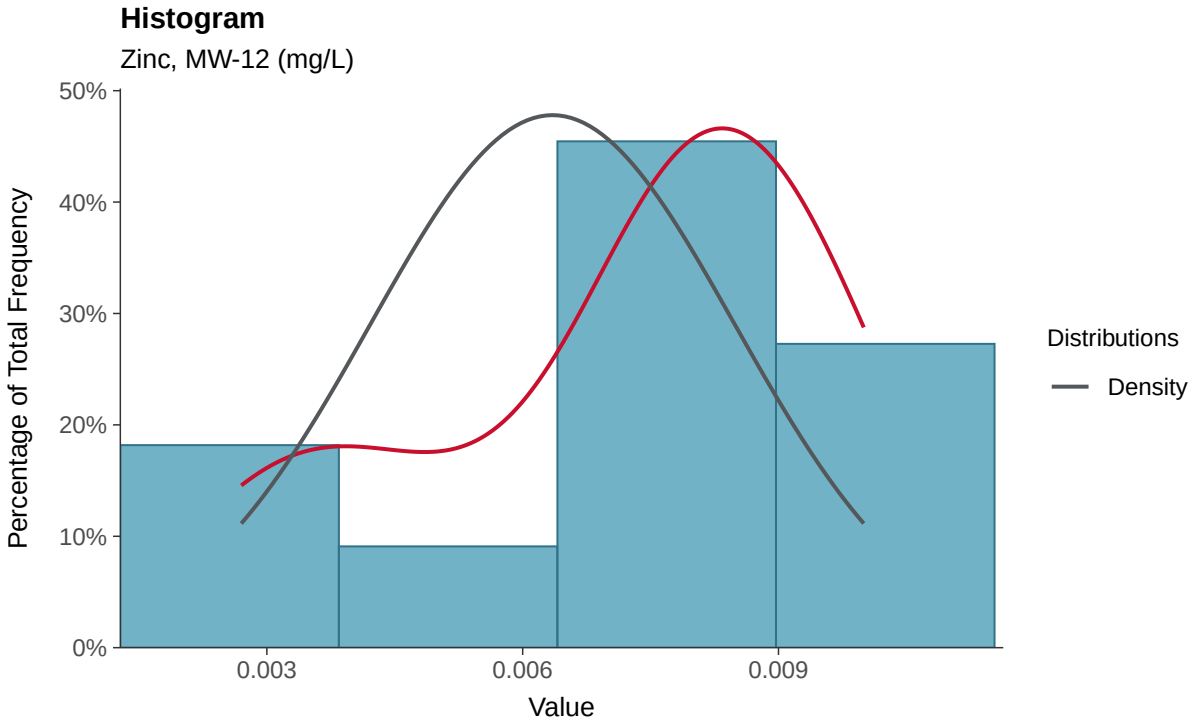
Vanadium, MW-12 (mg/L)



Part 115: Zinc, MW-12

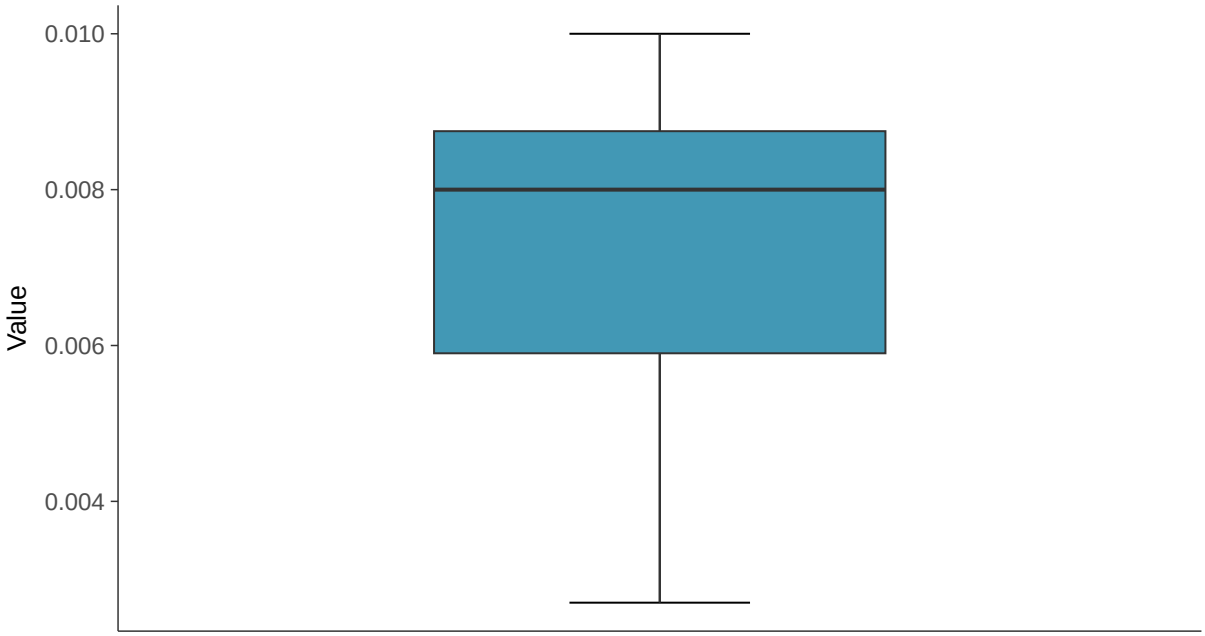
ID: 2_22_6_130





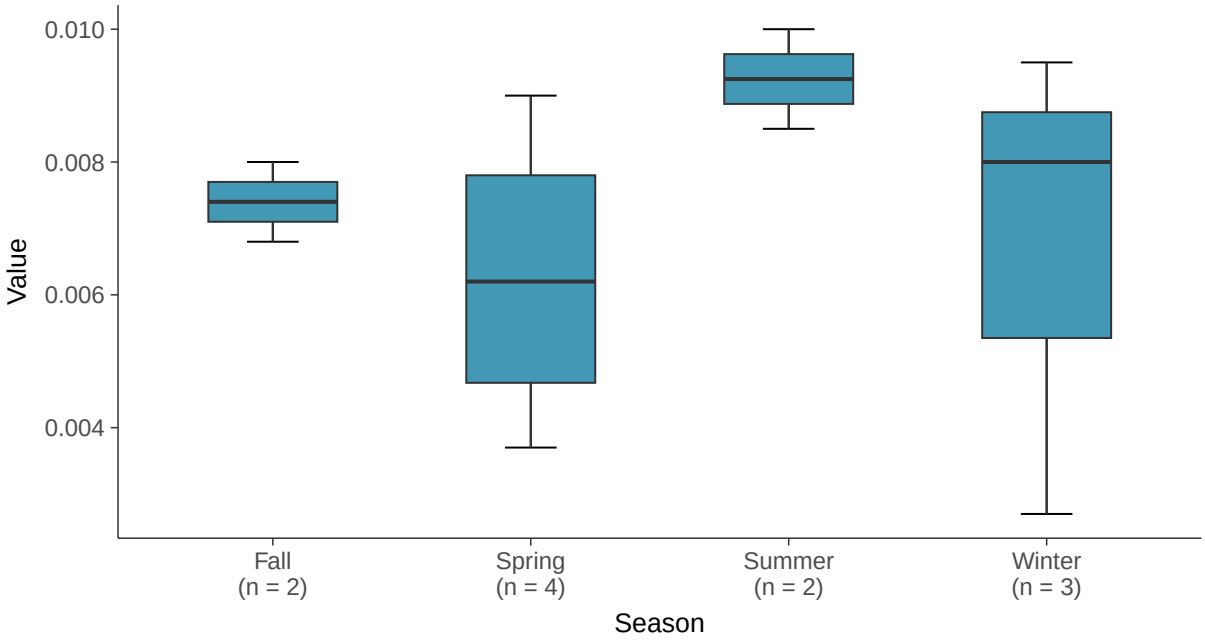
Boxplot

Zinc, MW-12 (mg/L)



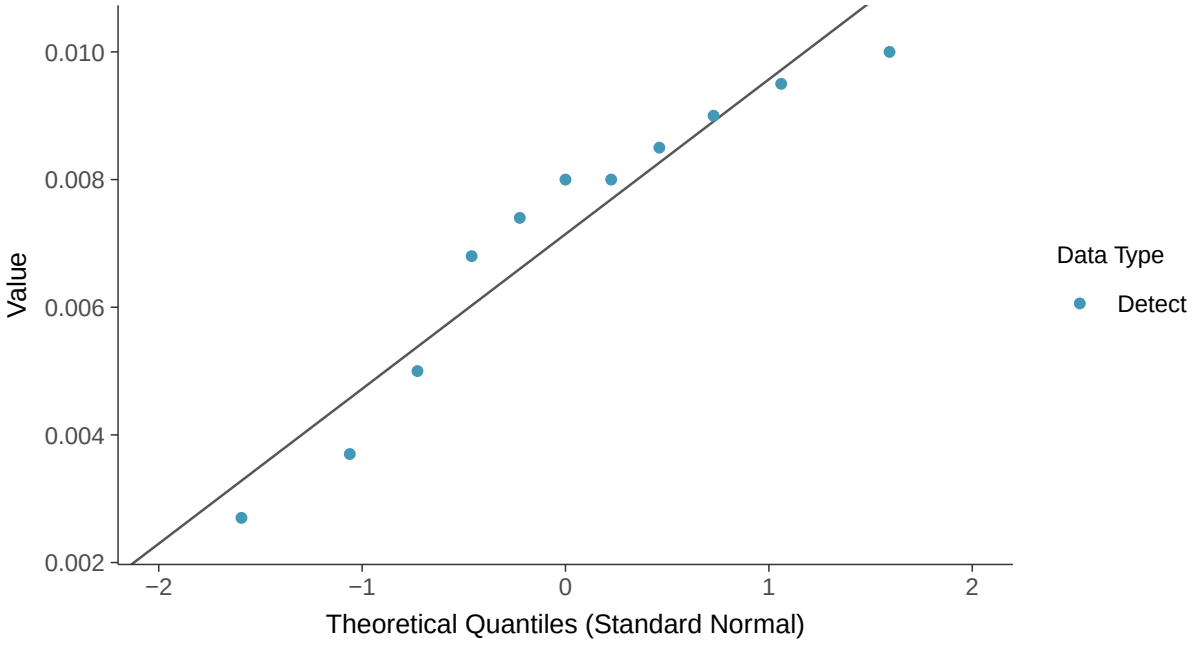
Boxplot by Season

Zinc, MW-12 (mg/L)



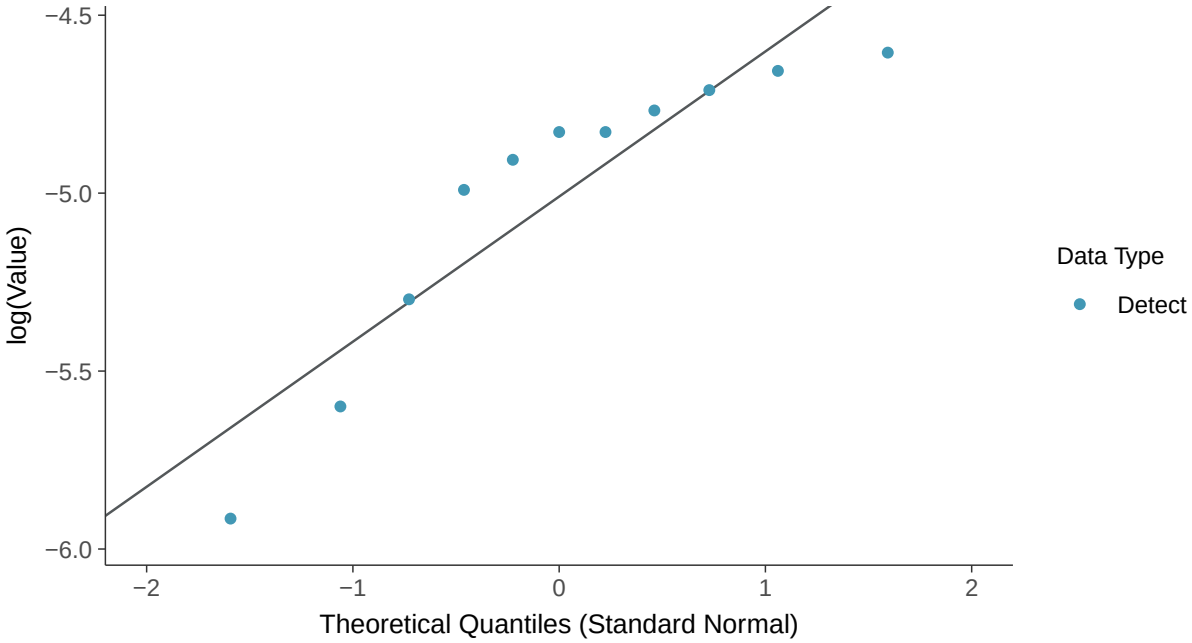
Normal Q-Q plot

Zinc, MW-12 (mg/L)



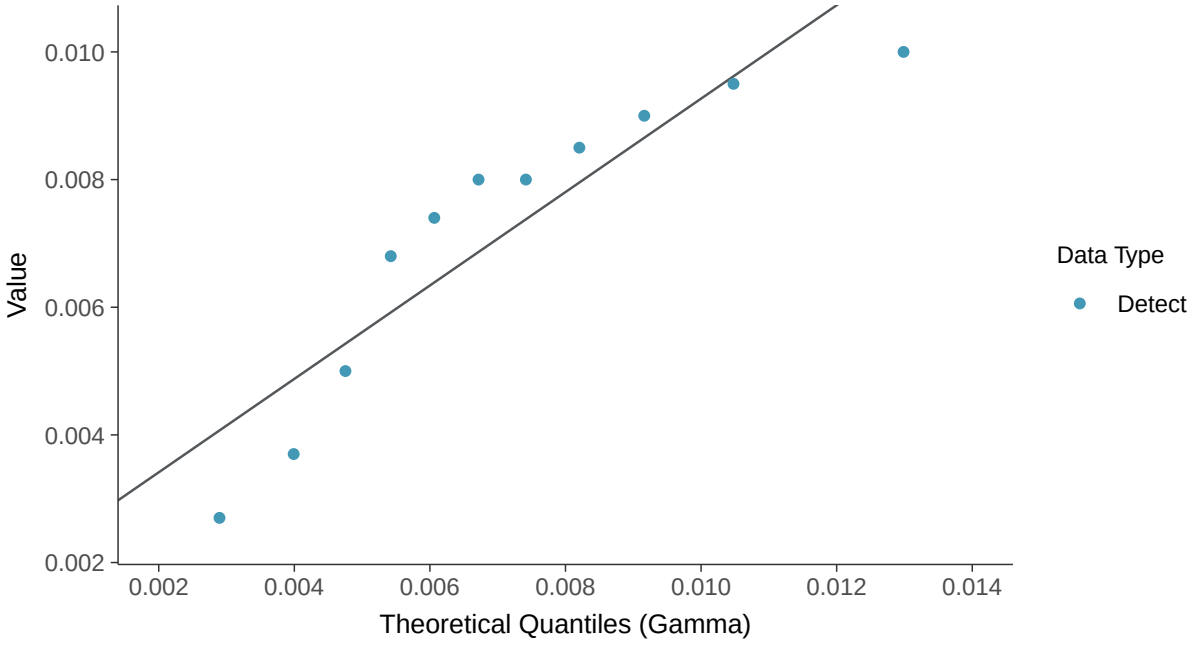
Lognormal Q-Q plot

Zinc, MW-12 (mg/L)



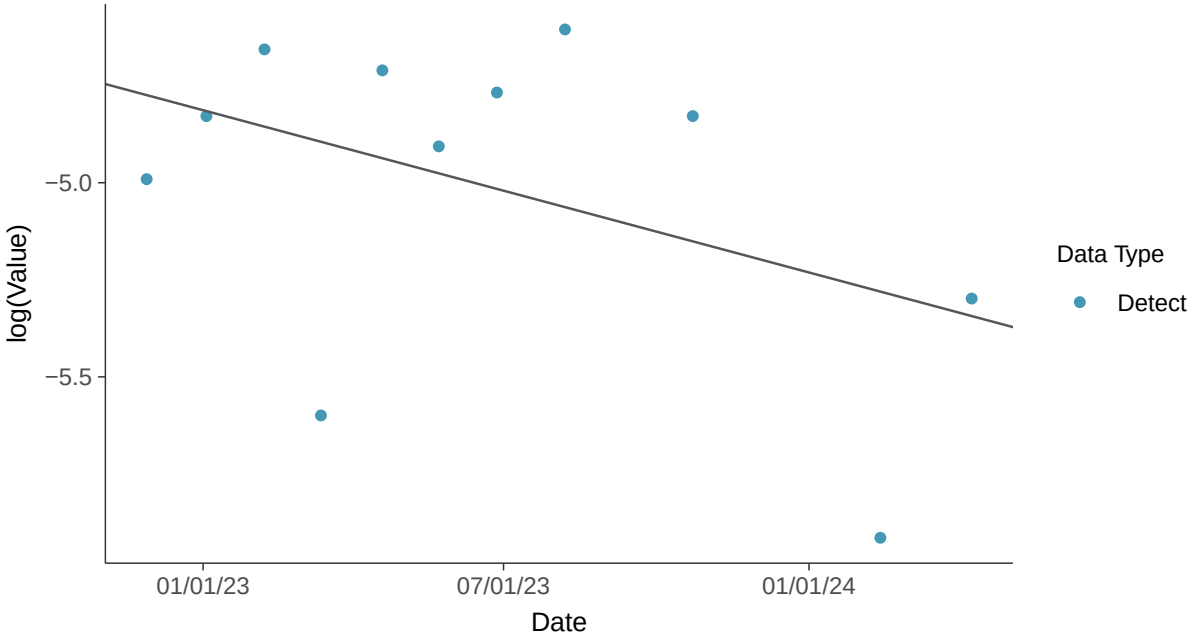
Gamma Q-Q plot

Zinc, MW-12 (mg/L)



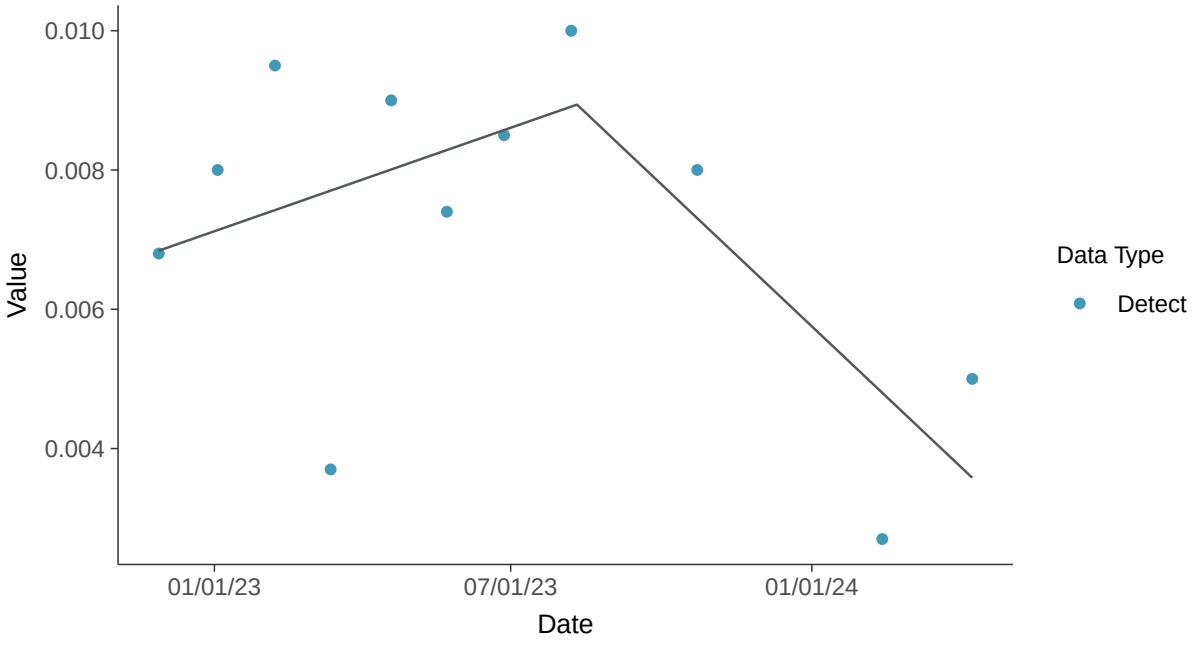
Trend Regression: Lognormal MLE

Zinc, MW-12 (mg/L)



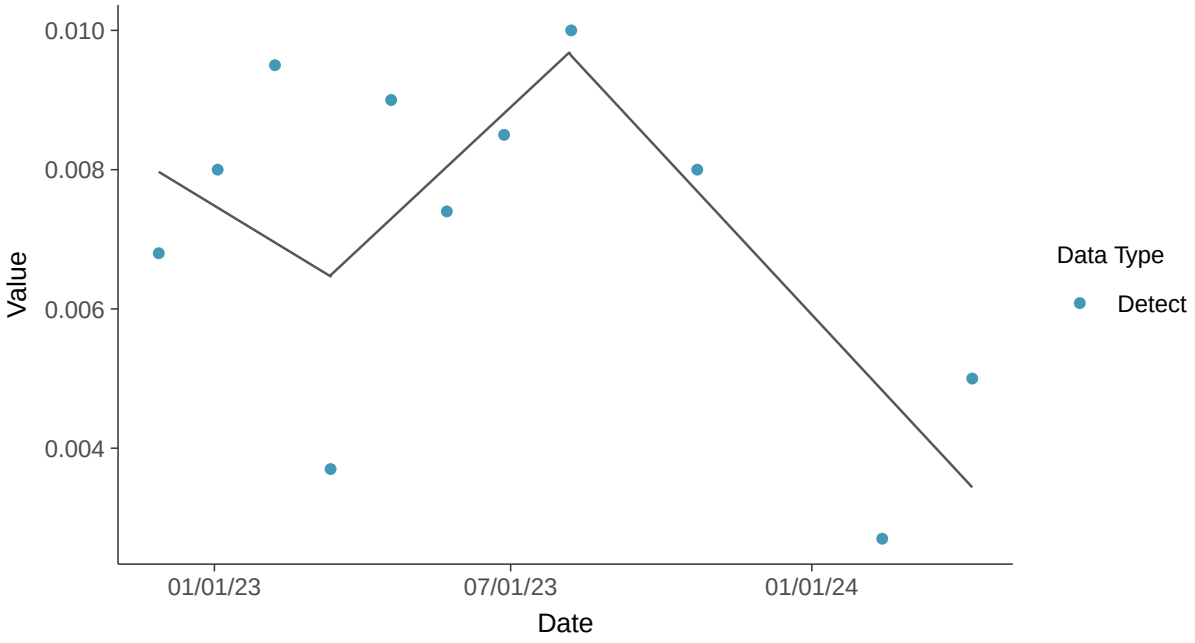
Trend Regression: Piecewise Linear-Linear

Zinc, MW-12 (mg/L)



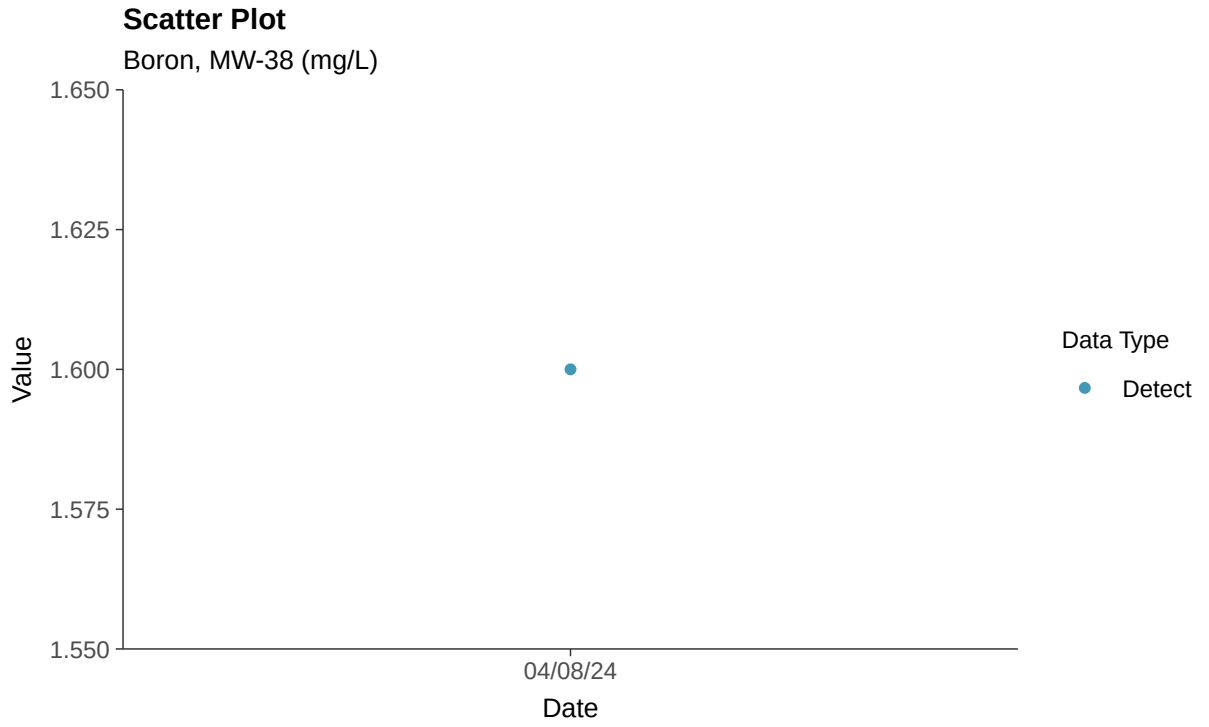
Trend Regression: Piecewise Linear-Linear-Linear

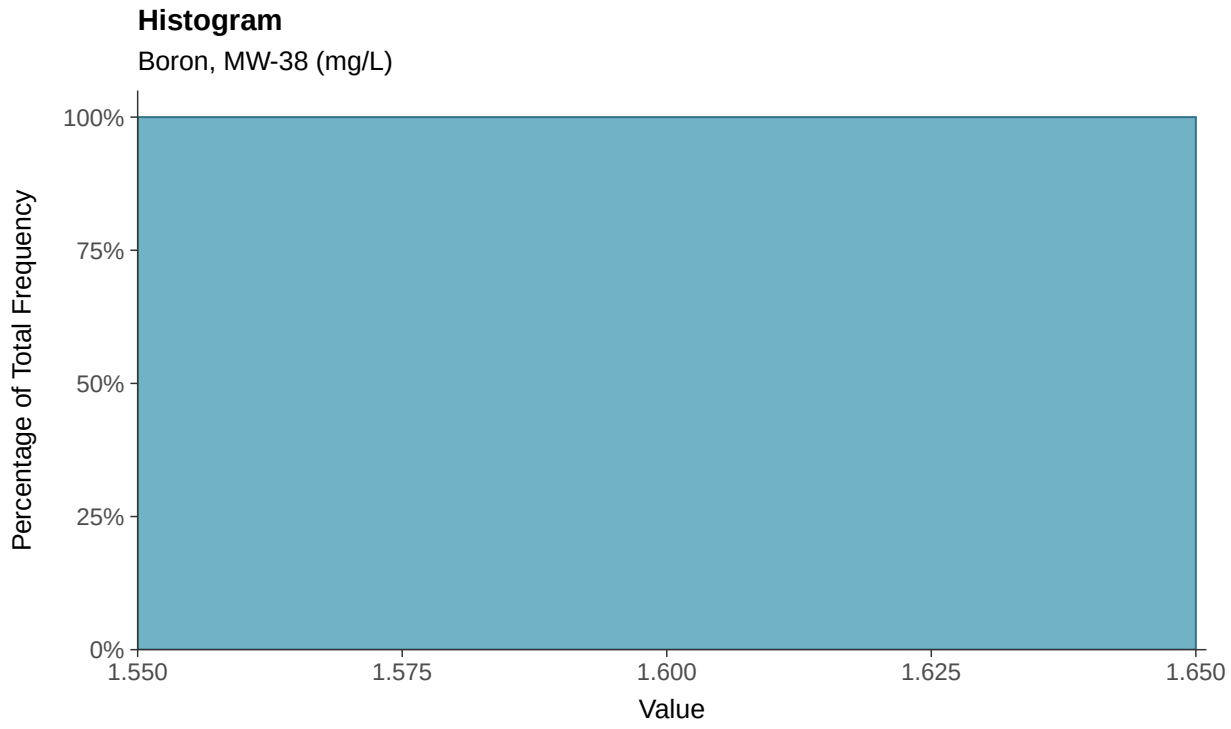
Zinc, MW-12 (mg/L)



Appendix III: Boron, MW-38

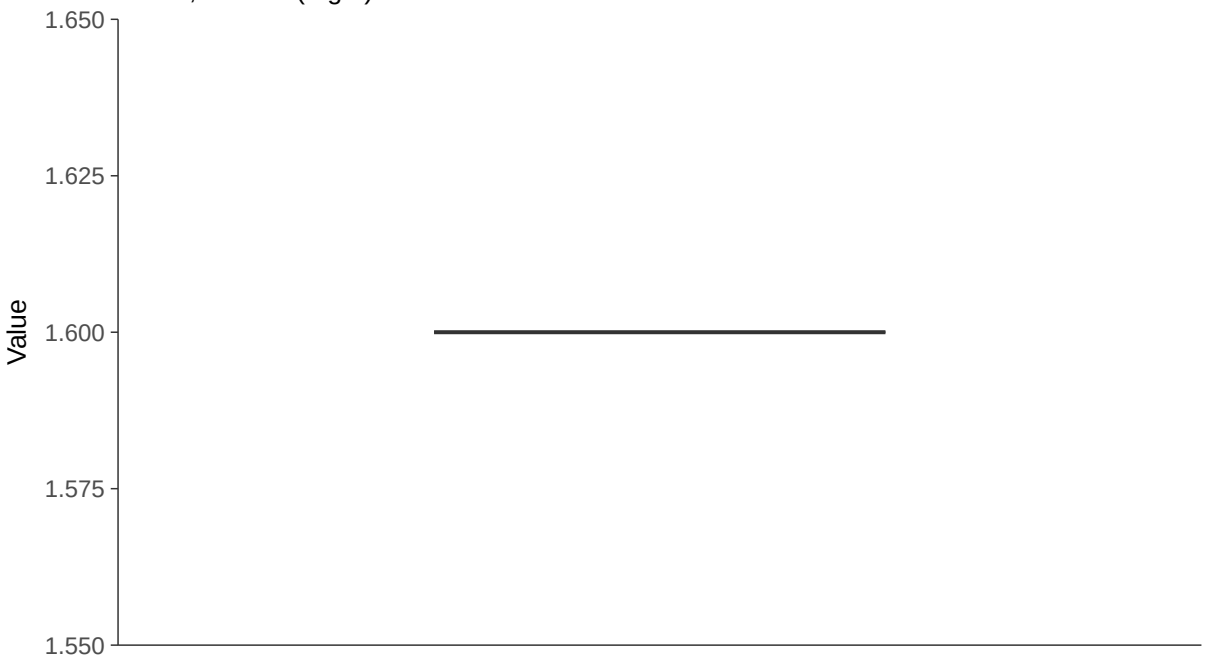
ID: 2_48_4_105





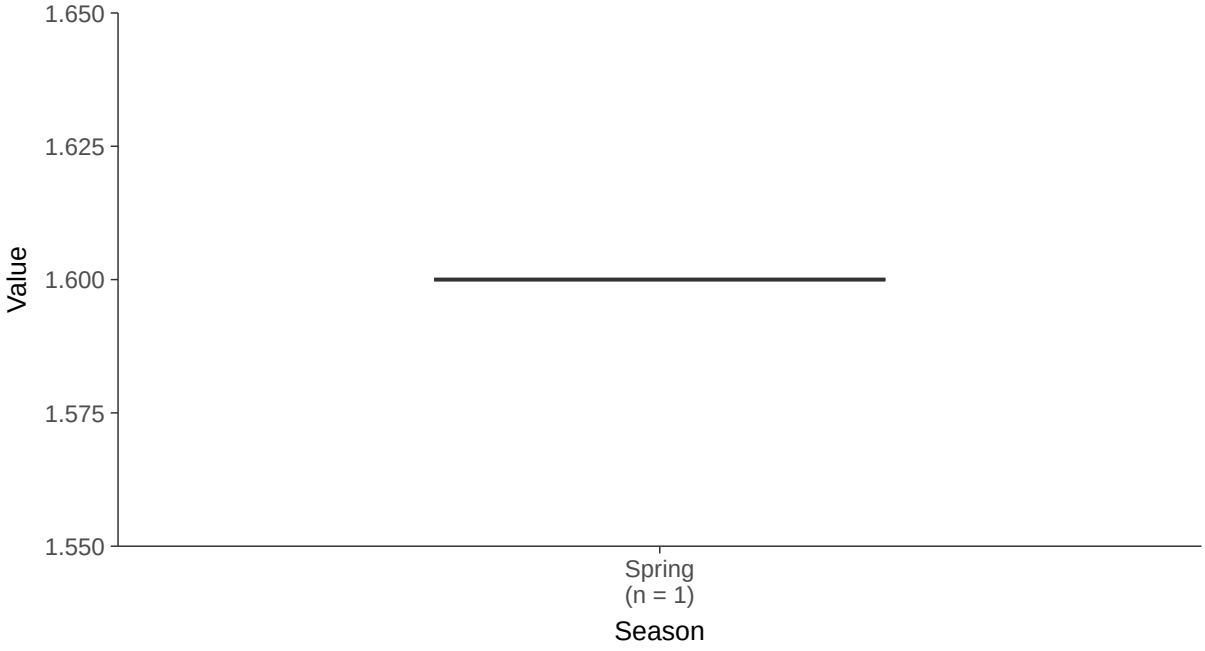
Boxplot

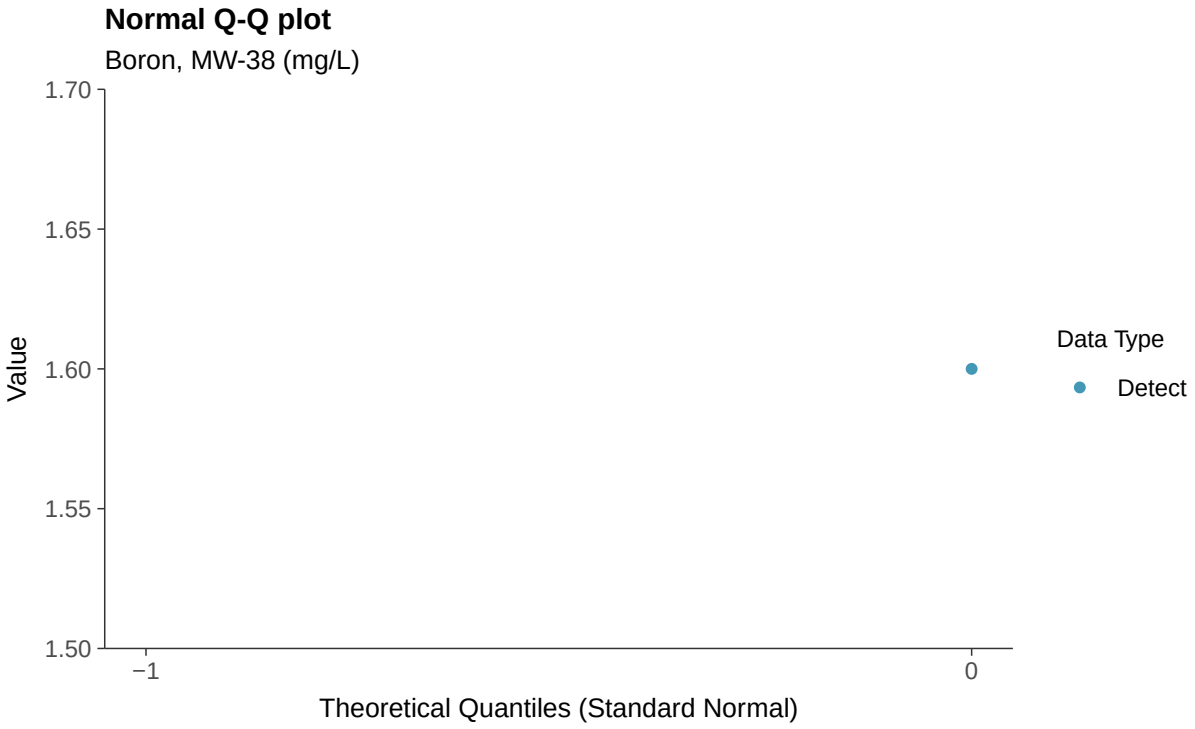
Boron, MW-38 (mg/L)



Boxplot by Season

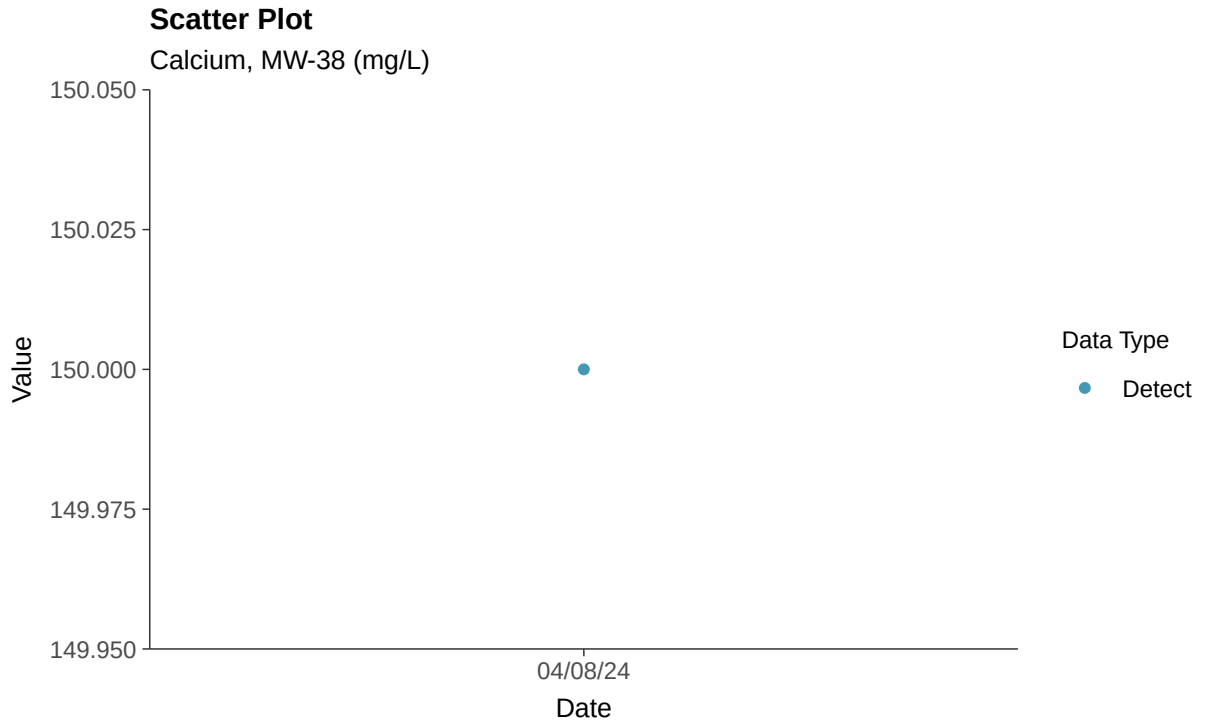
Boron, MW-38 (mg/L)

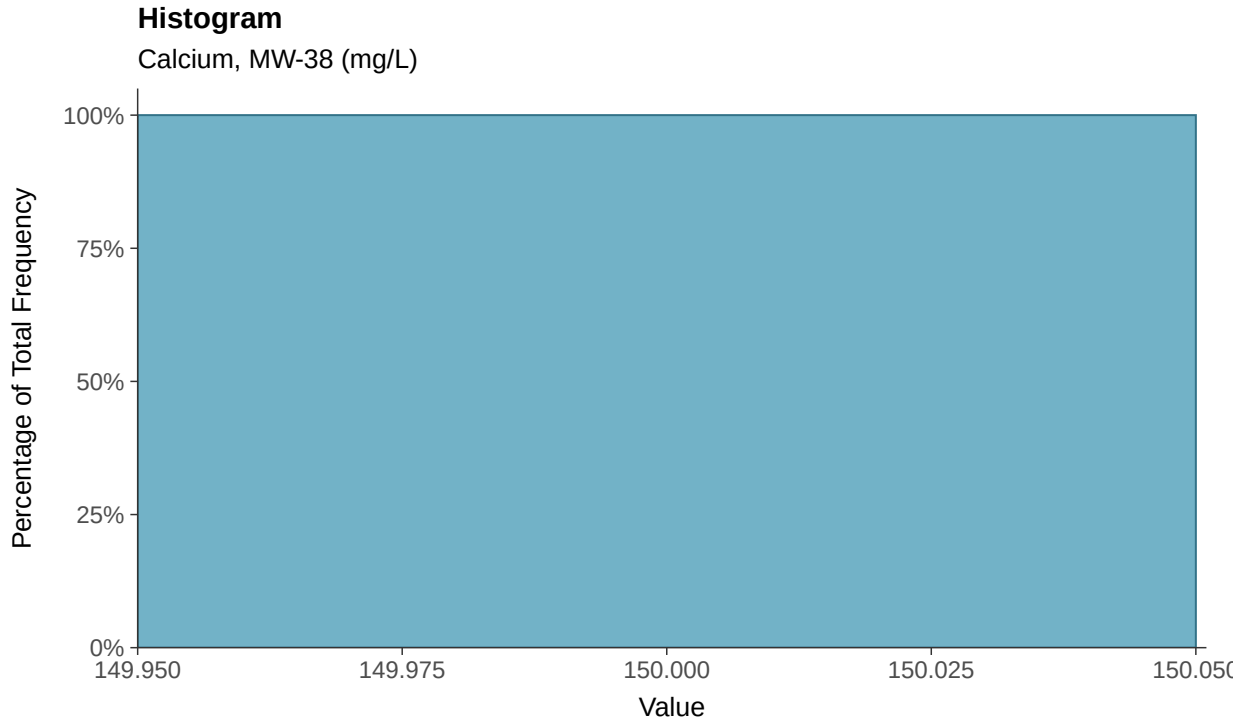



Normal Q-Q plot
Boron, MW-38 (mg/L)
Value
1.70
1.65
1.60
1.55
1.50
−1
0
Theoretical Quantiles (Standard Normal)
Data Type
Detect

Appendix III: Calcium, MW-38

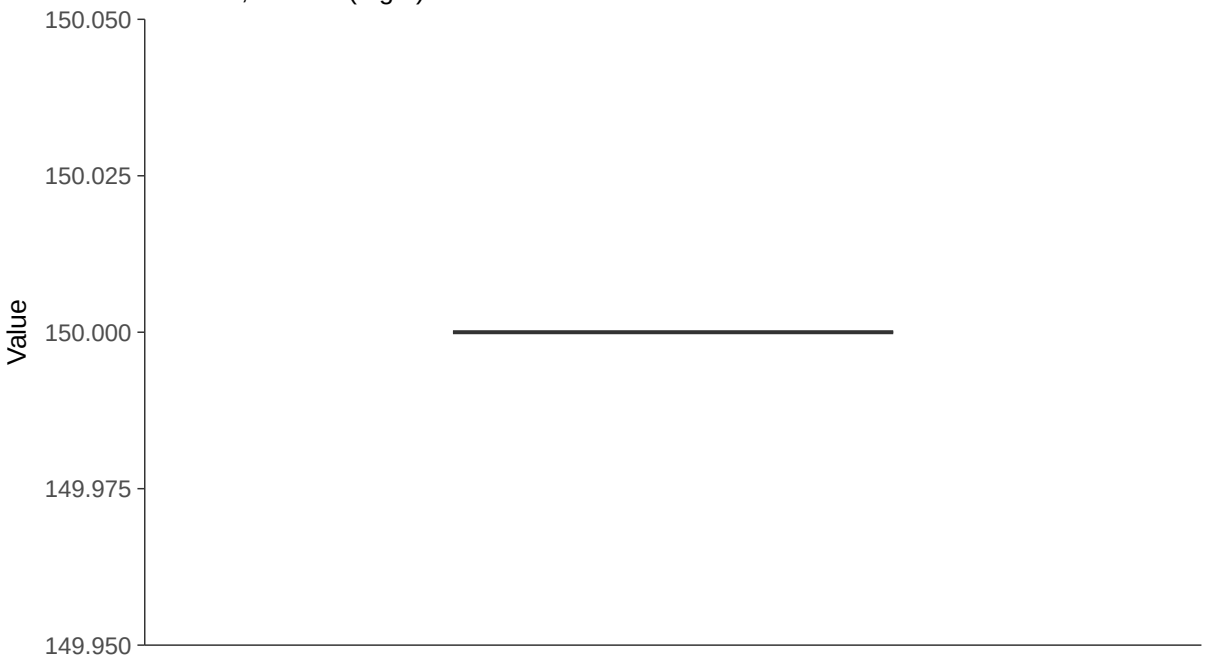
ID: 2_48_4_107





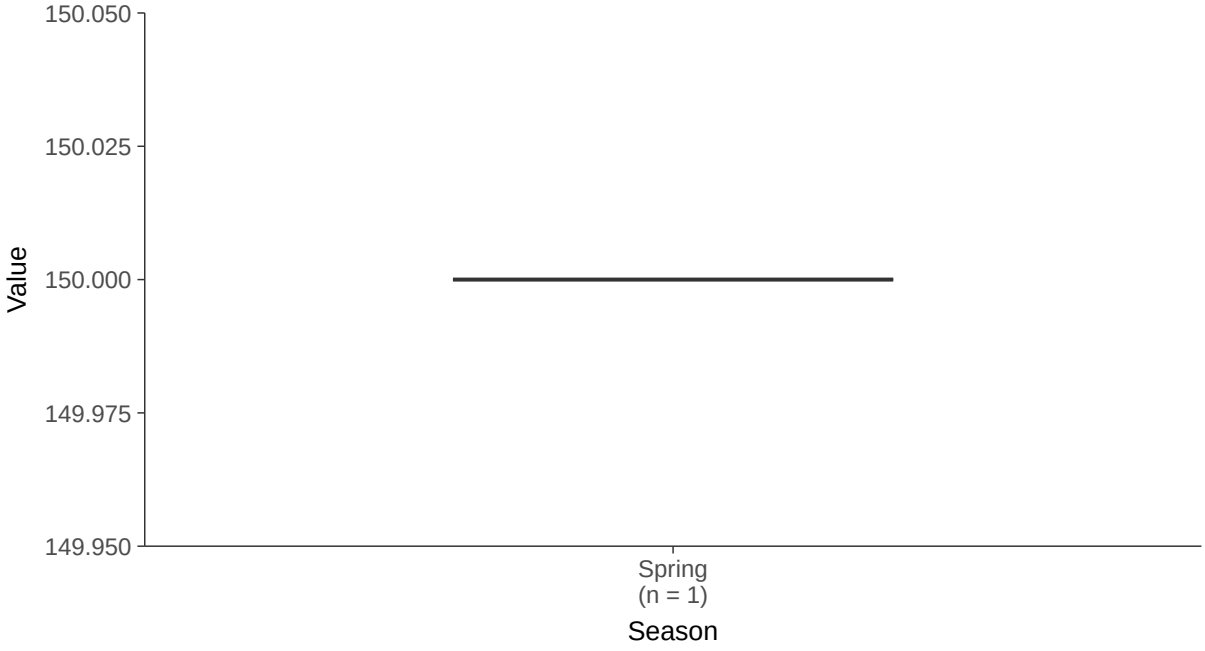
Boxplot

Calcium, MW-38 (mg/L)



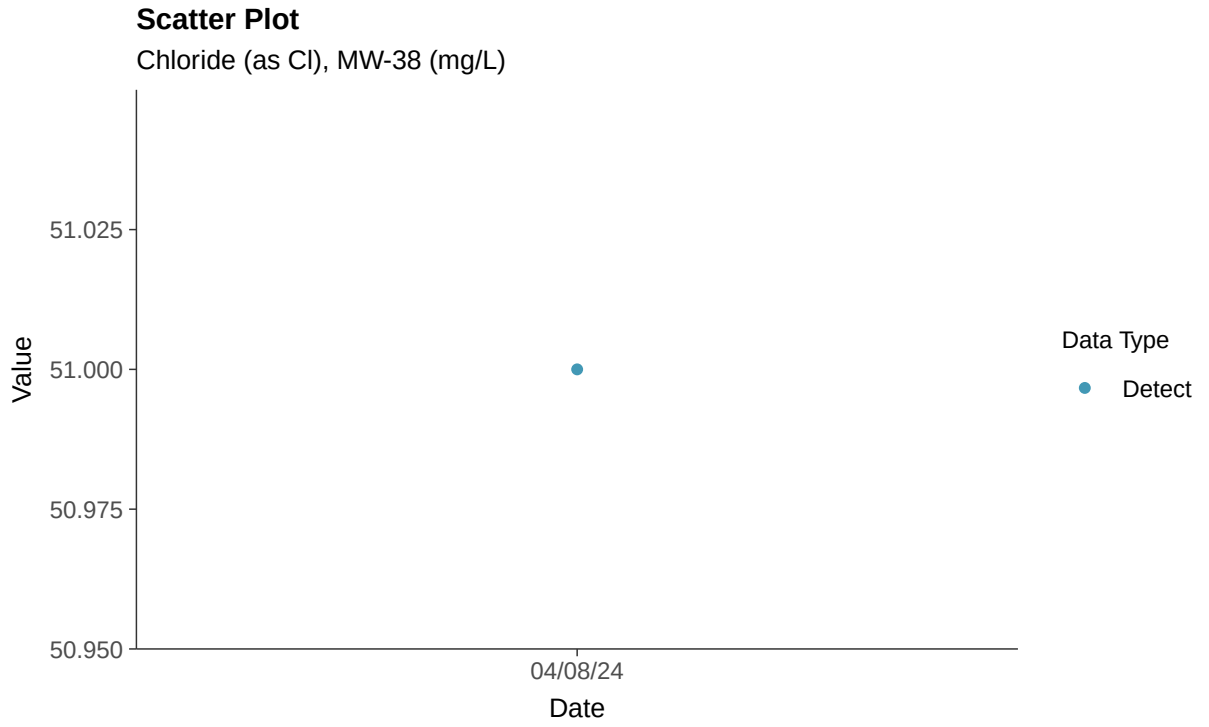
Boxplot by Season

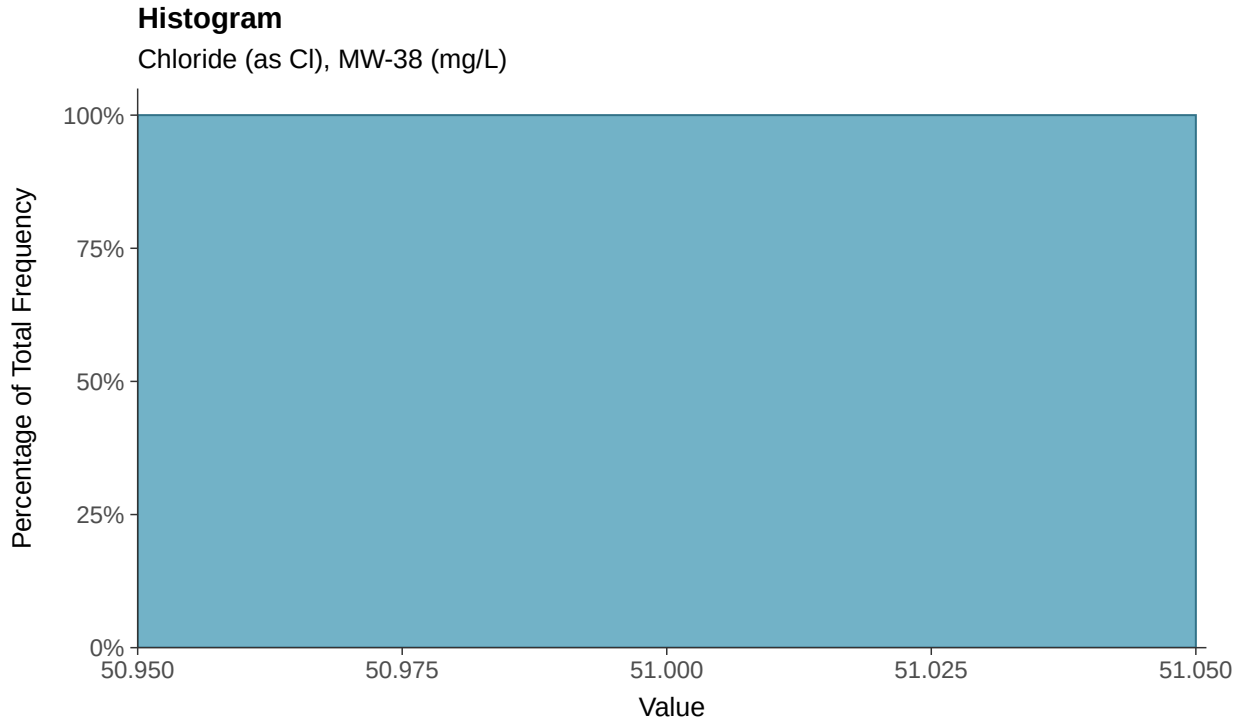
Calcium, MW-38 (mg/L)



Appendix III: Chloride (as Cl), MW-38

ID: 2_48_4_108



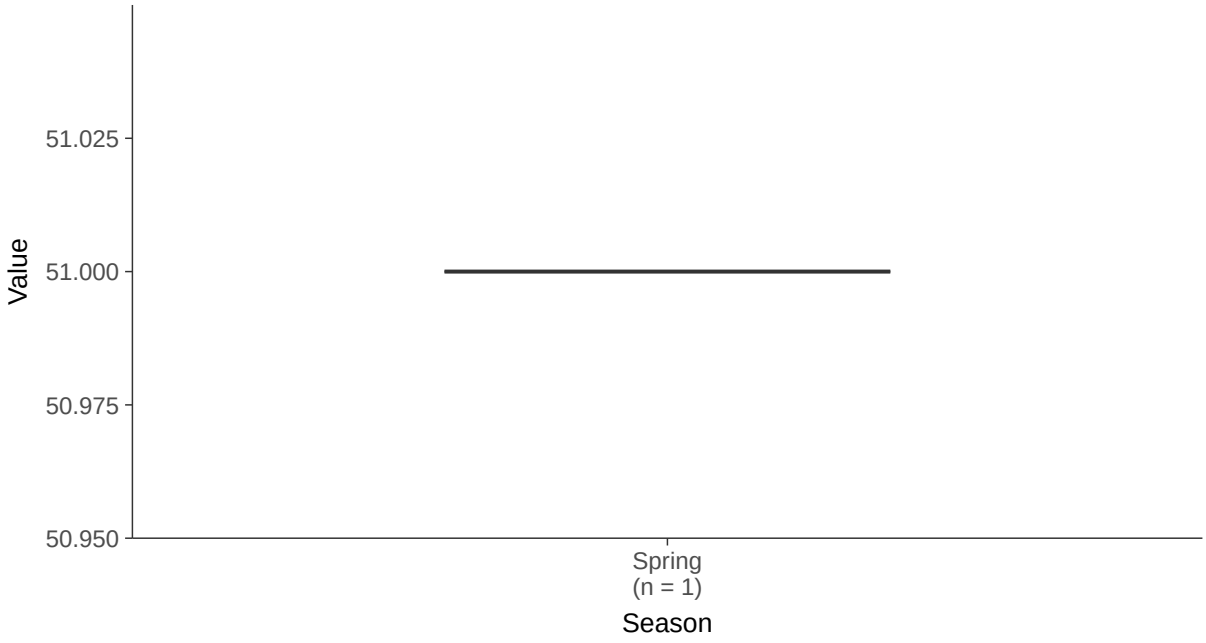


Boxplot

Chloride (as Cl), MW-38 (mg/L)

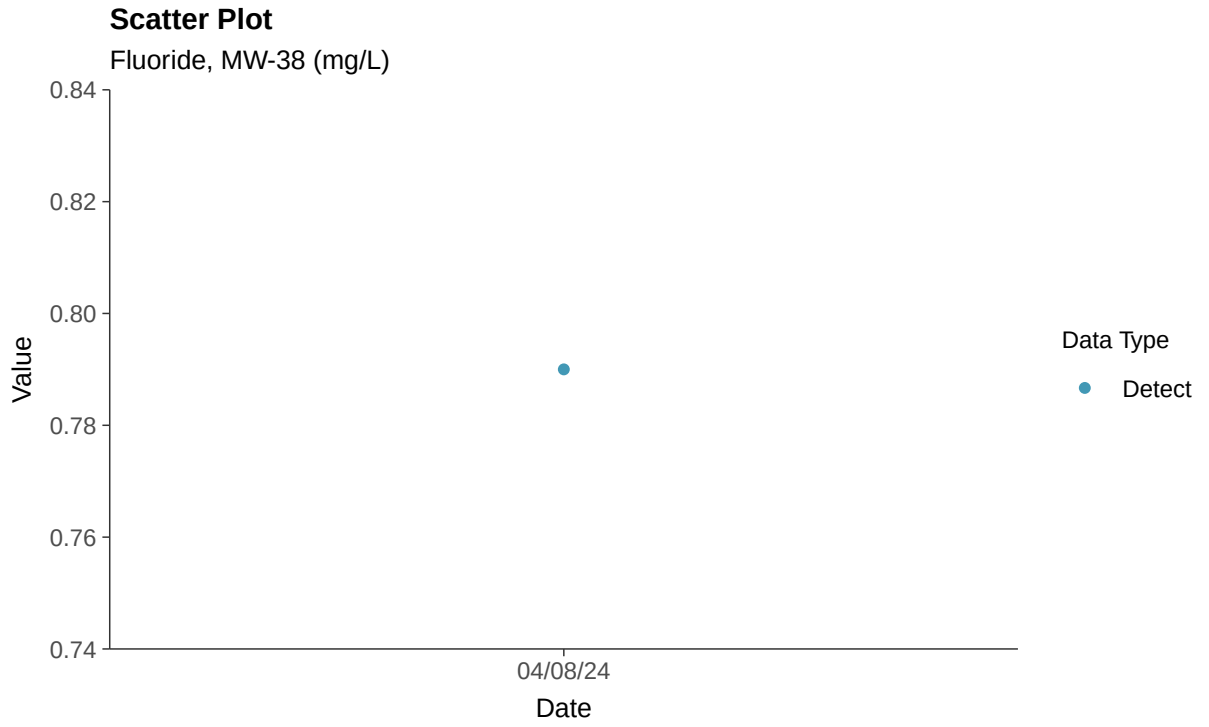
Boxplot by Season

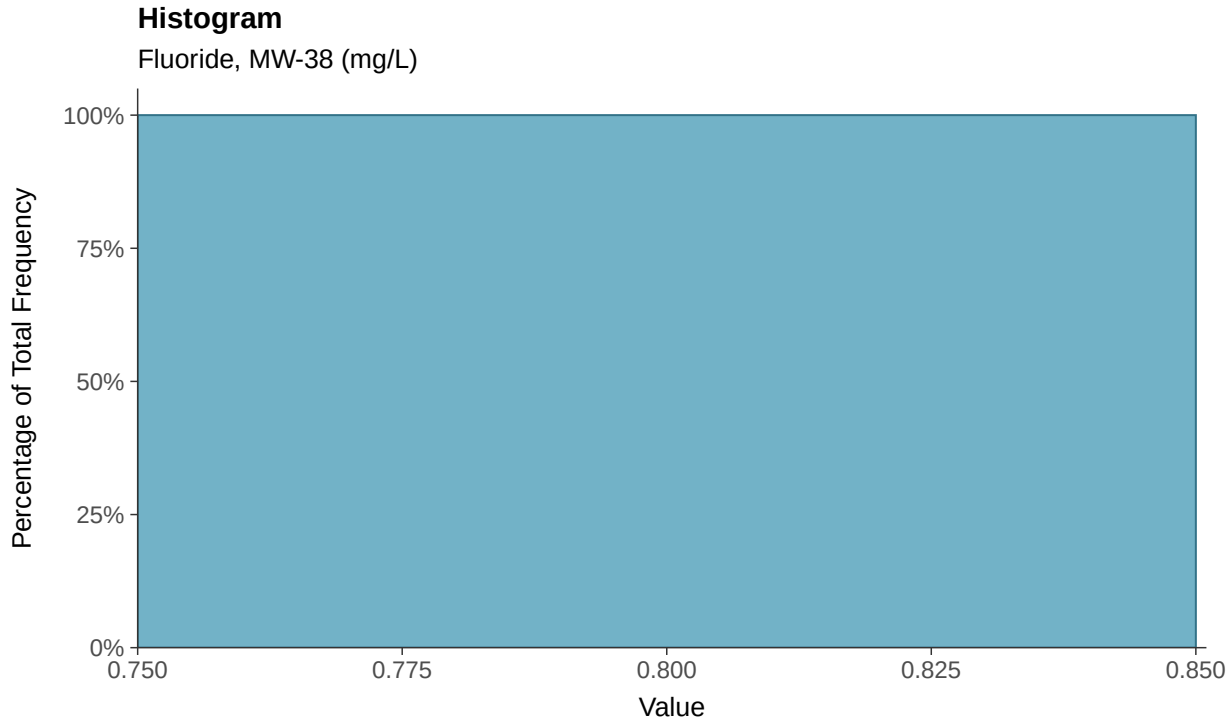
Chloride (as Cl), MW-38 (mg/L)



Appendix III: Fluoride, MW-38

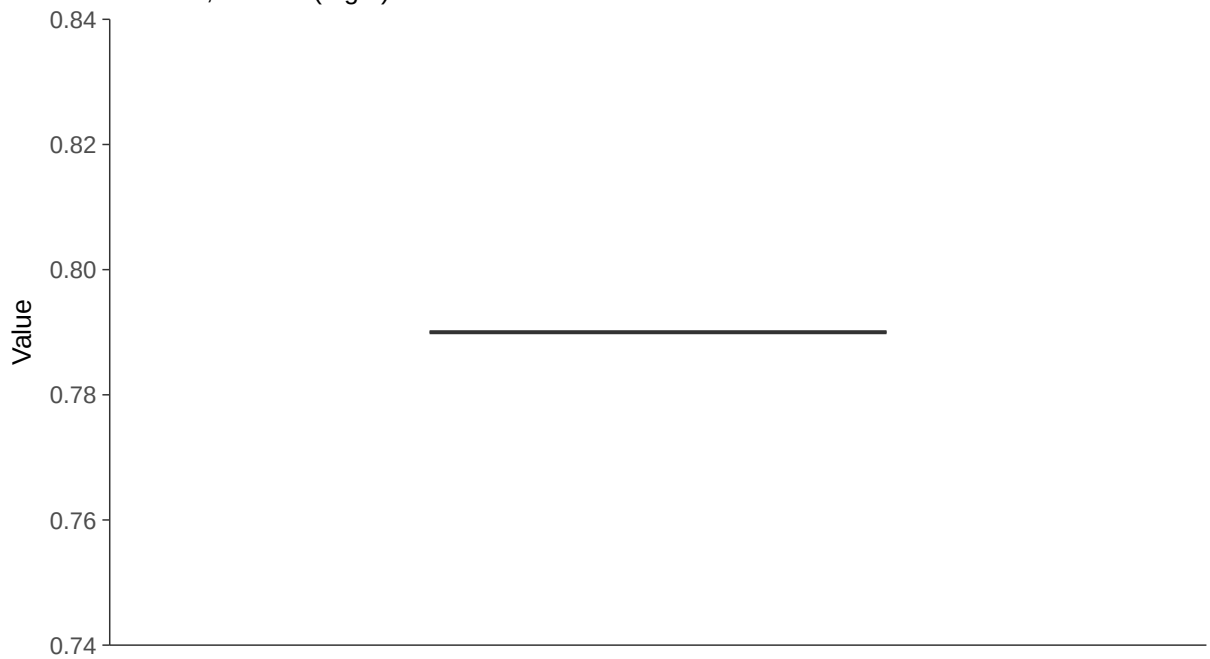
ID: 2_48_4_112





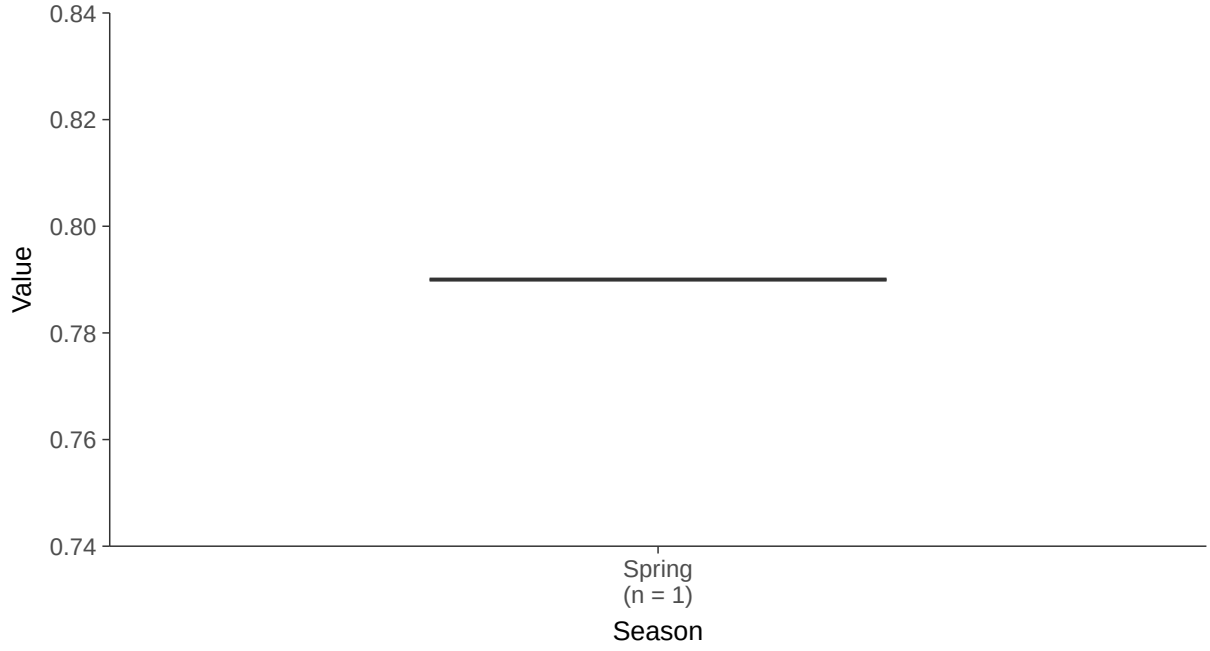
Boxplot

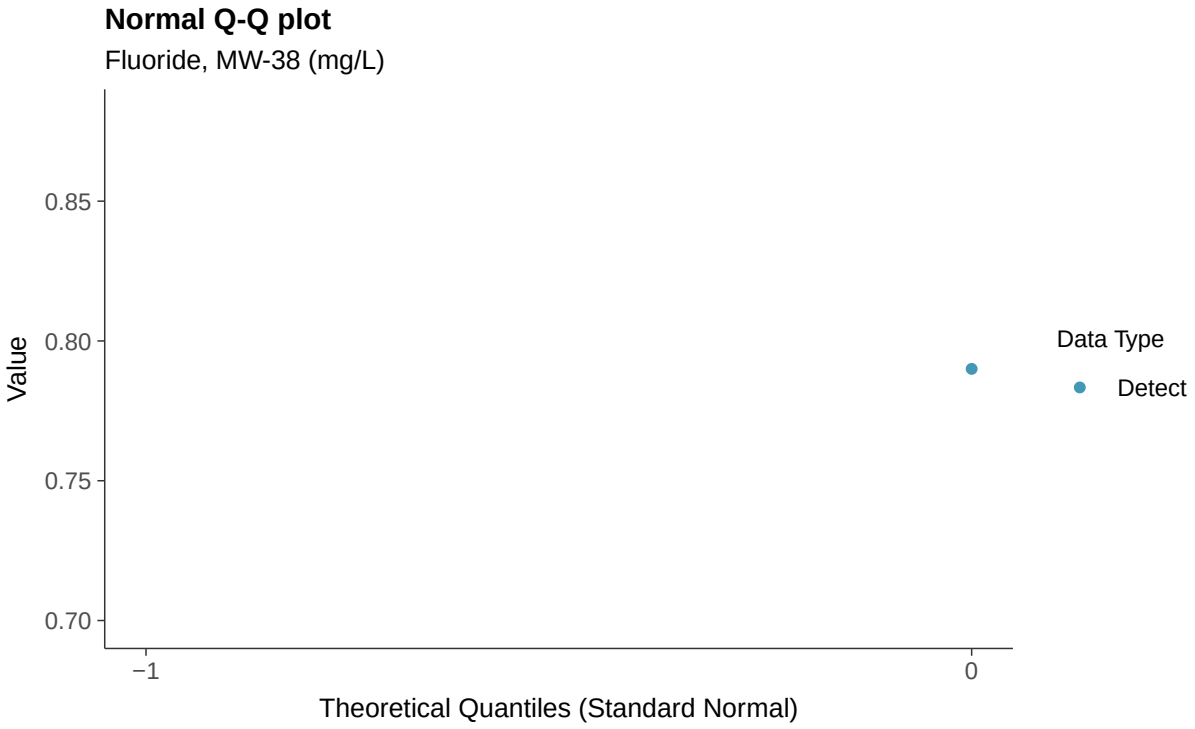
Fluoride, MW-38 (mg/L)



Boxplot by Season

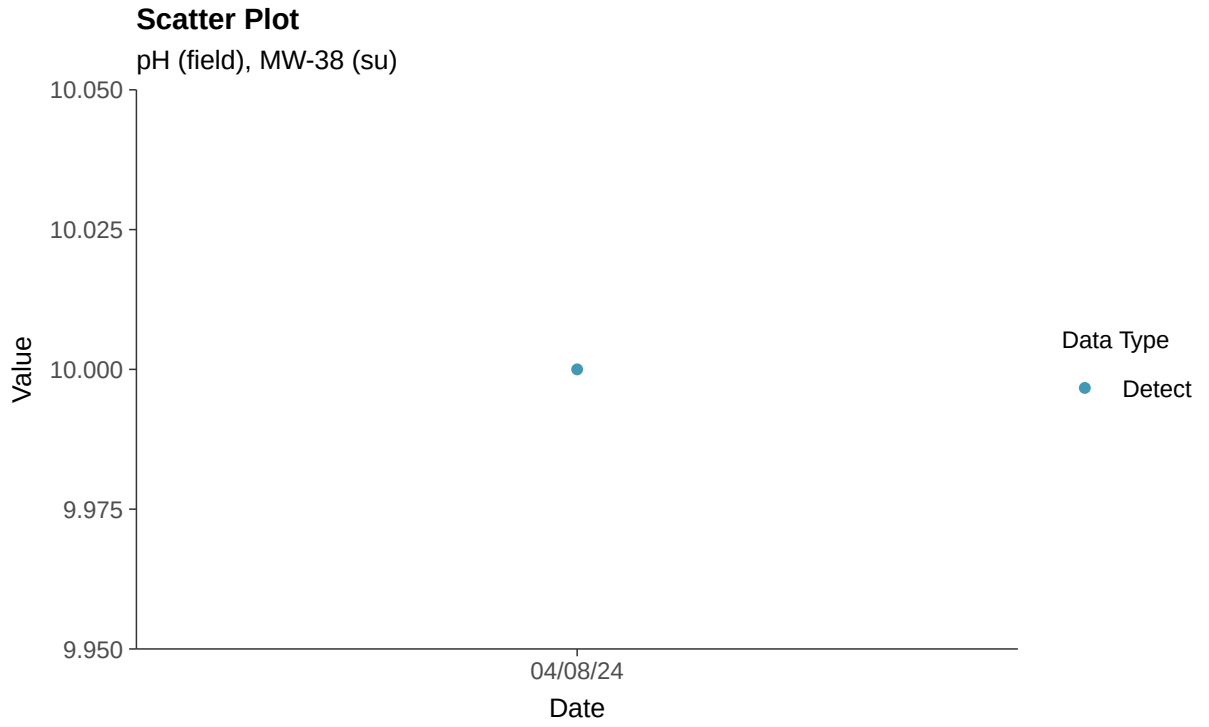
Fluoride, MW-38 (mg/L)

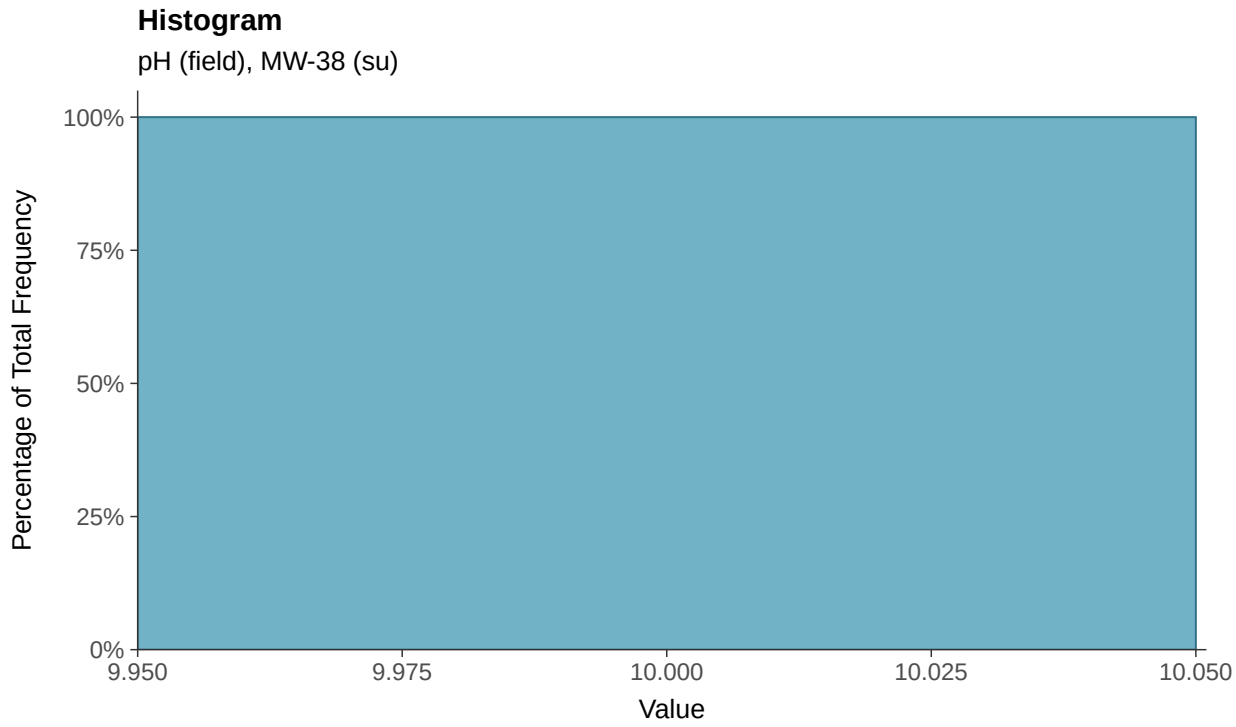



Normal Q-Q plot
Fluoride, MW-38 (mg/L)
Value
0.85
0.80
0.75
0.70
−1
0
Theoretical Quantiles (Standard Normal)
Data Type
Detect

Appendix III: pH (field), MW-38

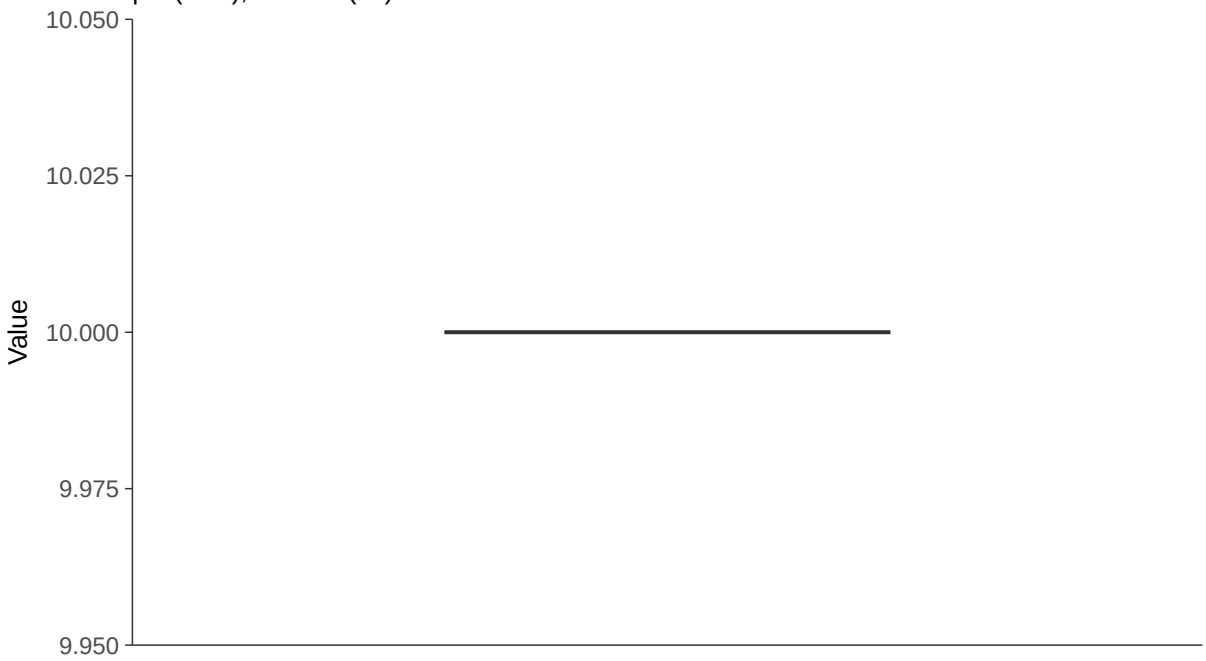
ID: 2_48_4_120





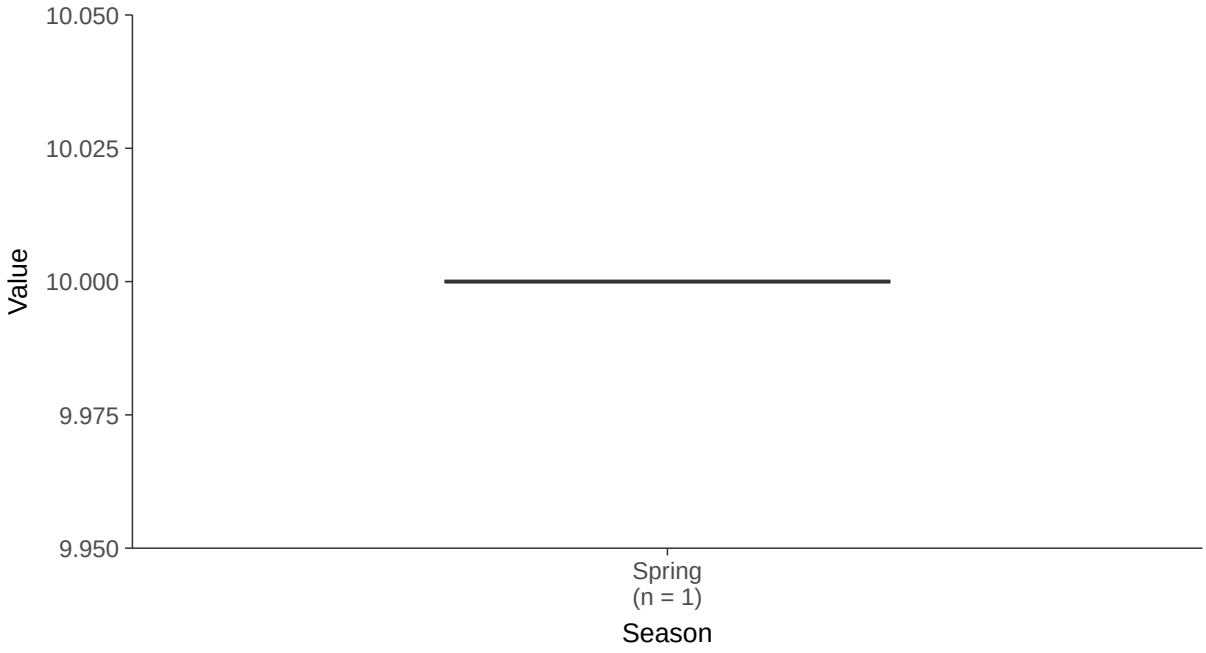
Boxplot

pH (field), MW-38 (su)



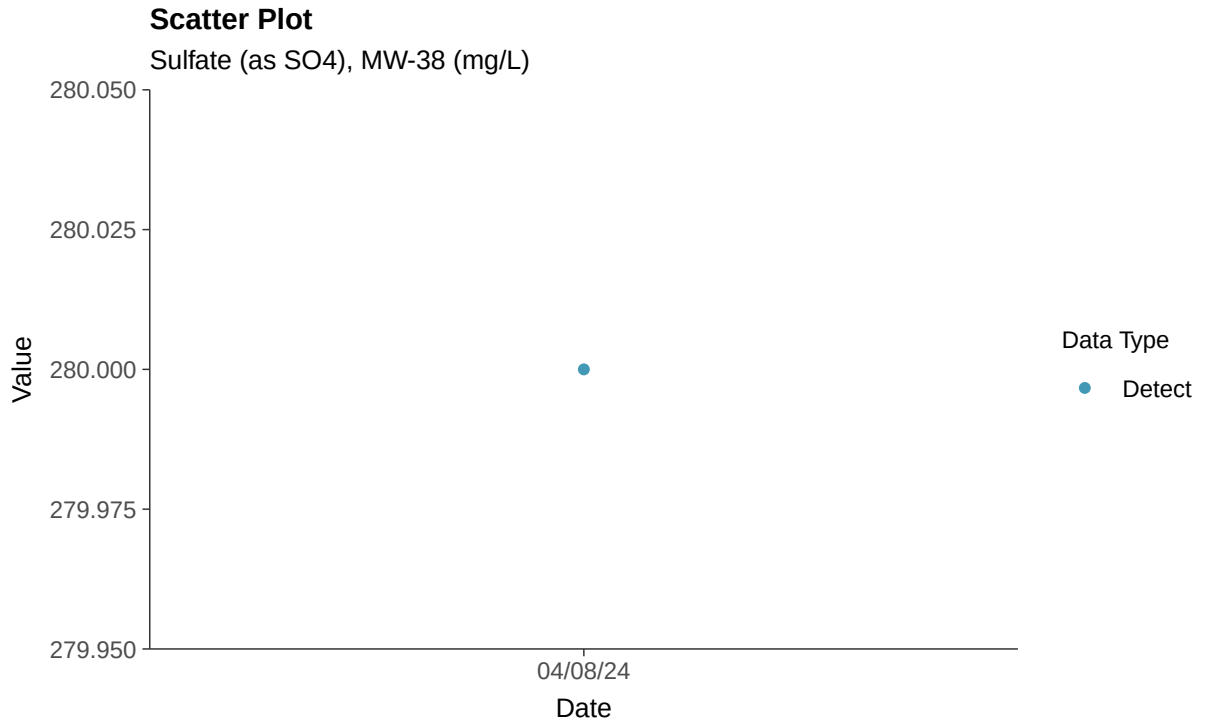
Boxplot by Season

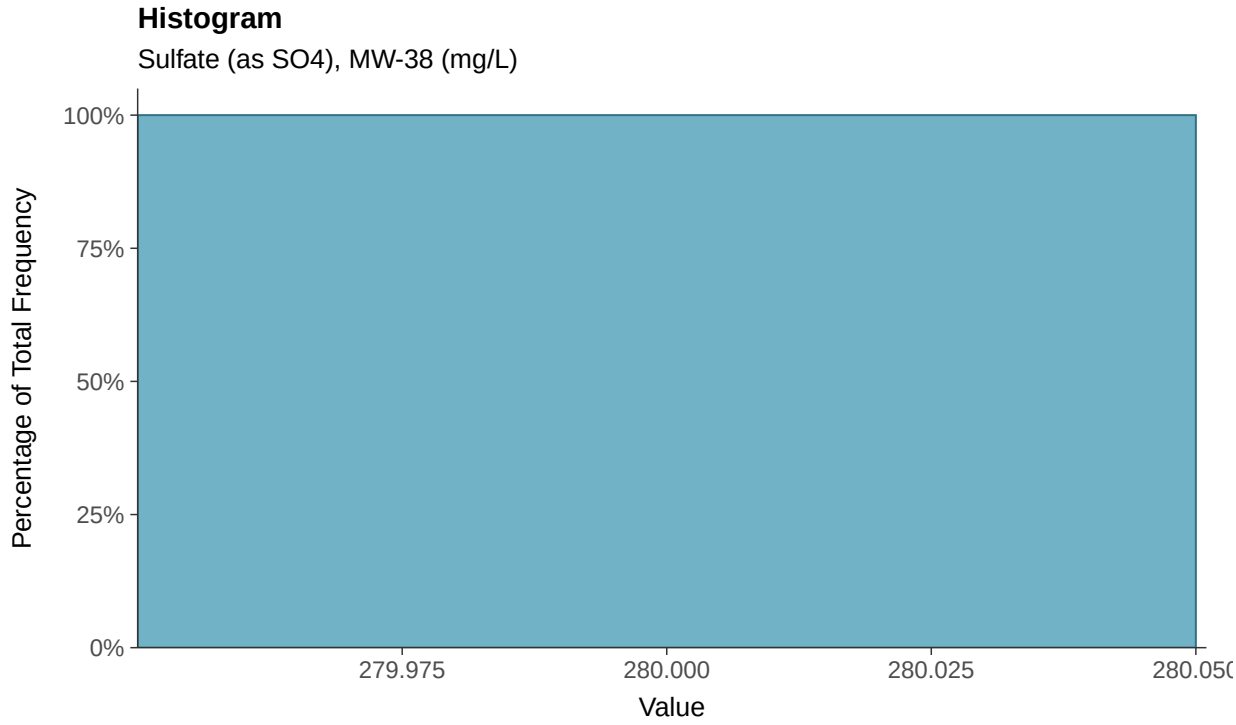
pH (field), MW-38 (su)



Appendix III: Sulfate (as SO4), MW-38

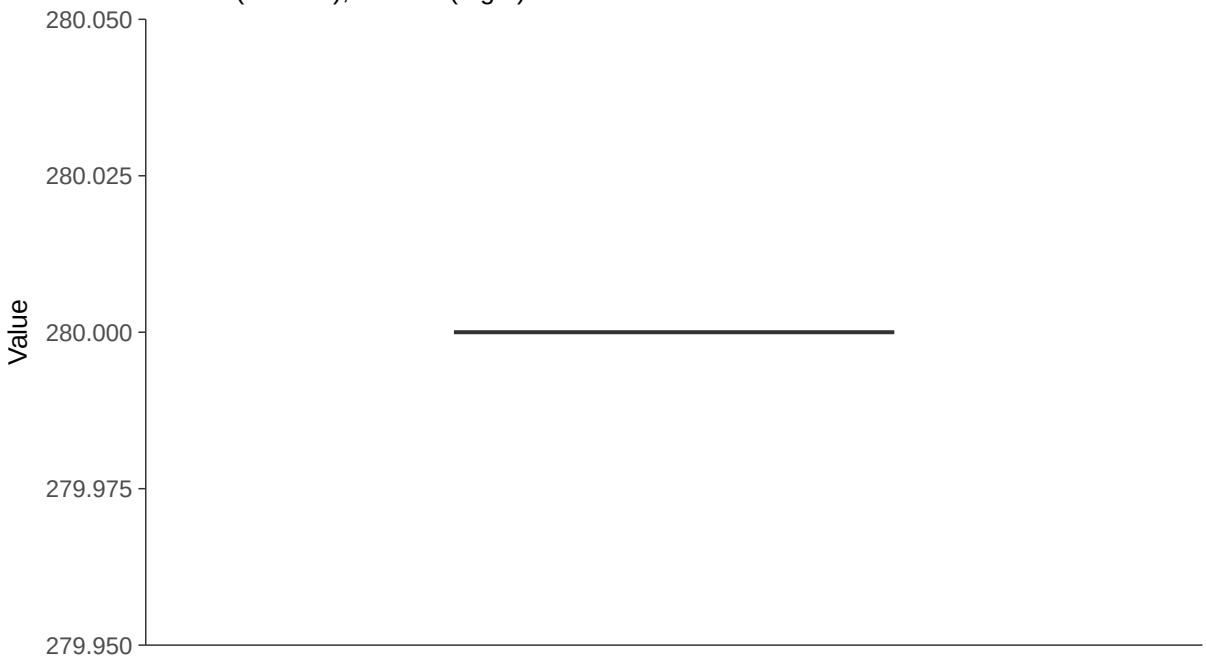
ID: 2_48_4_124





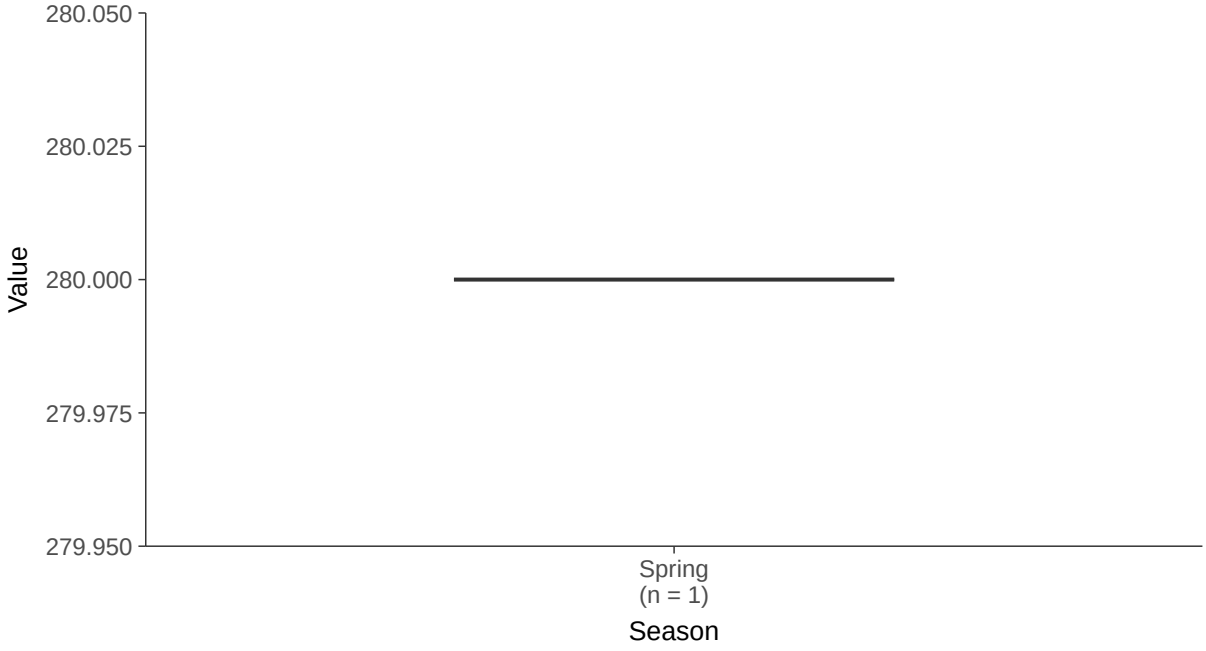
Boxplot

Sulfate (as SO4), MW-38 (mg/L)



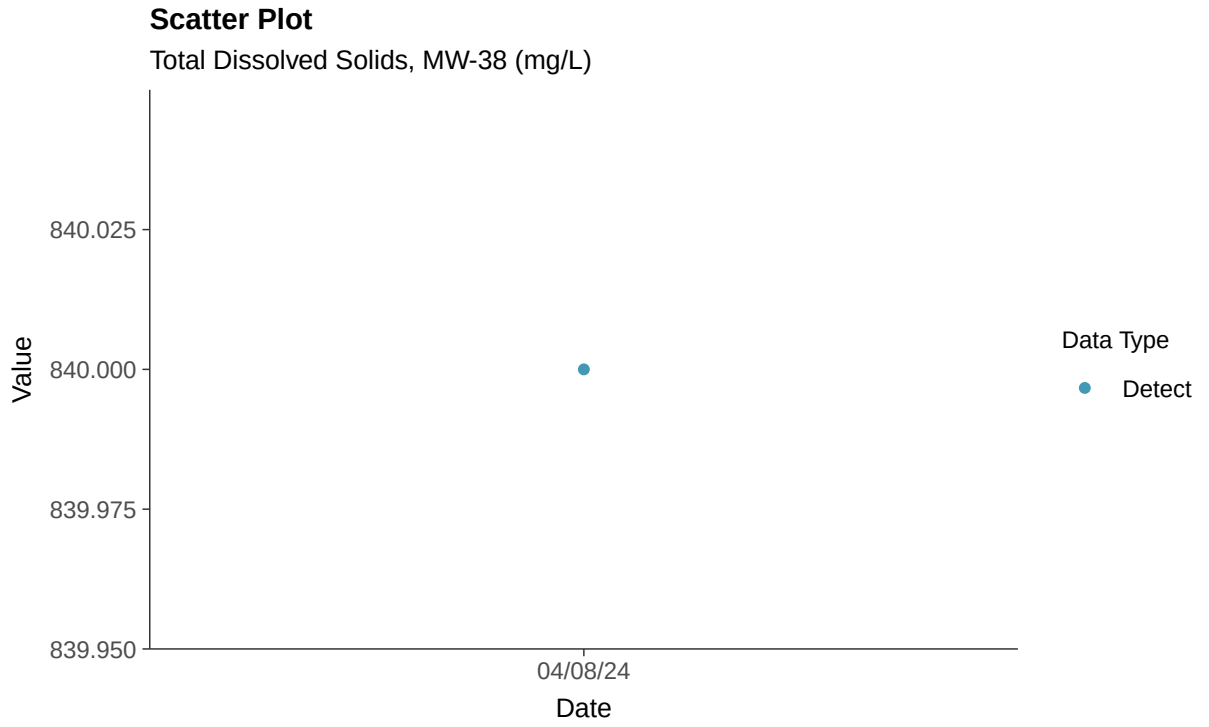
Boxplot by Season

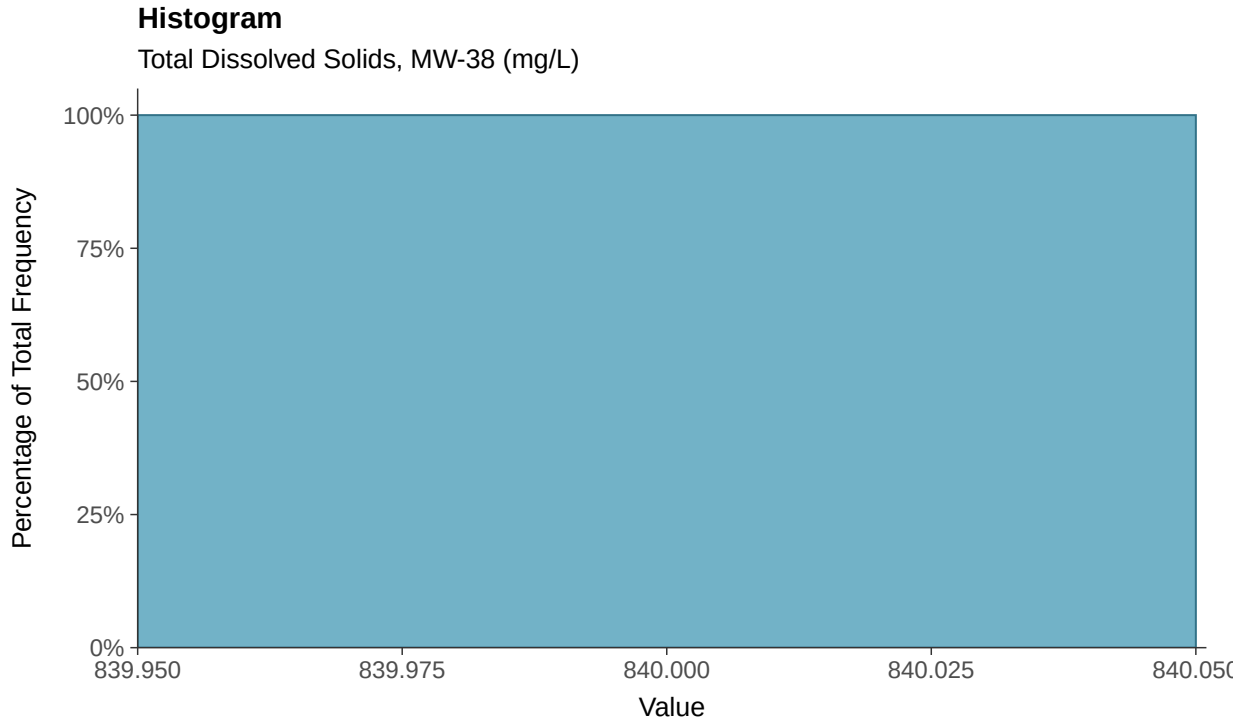
Sulfate (as SO4), MW-38 (mg/L)



Appendix III: Total Dissolved Solids, MW-38

ID: 2_48_4_126



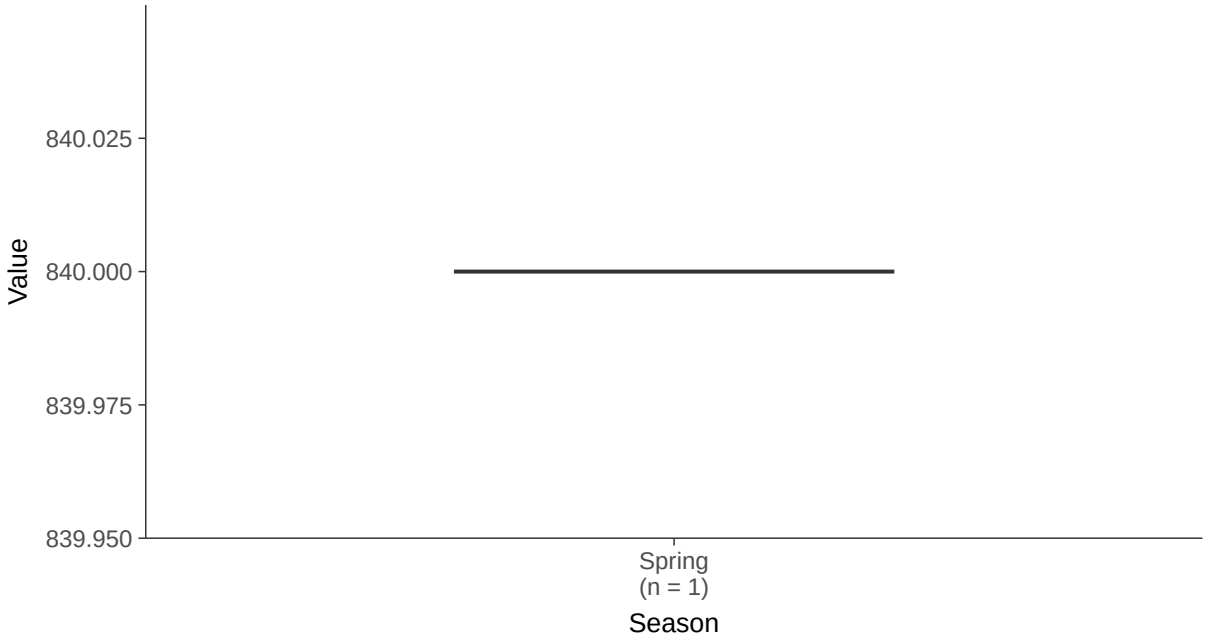


Boxplot

Total Dissolved Solids, MW-38 (mg/L)

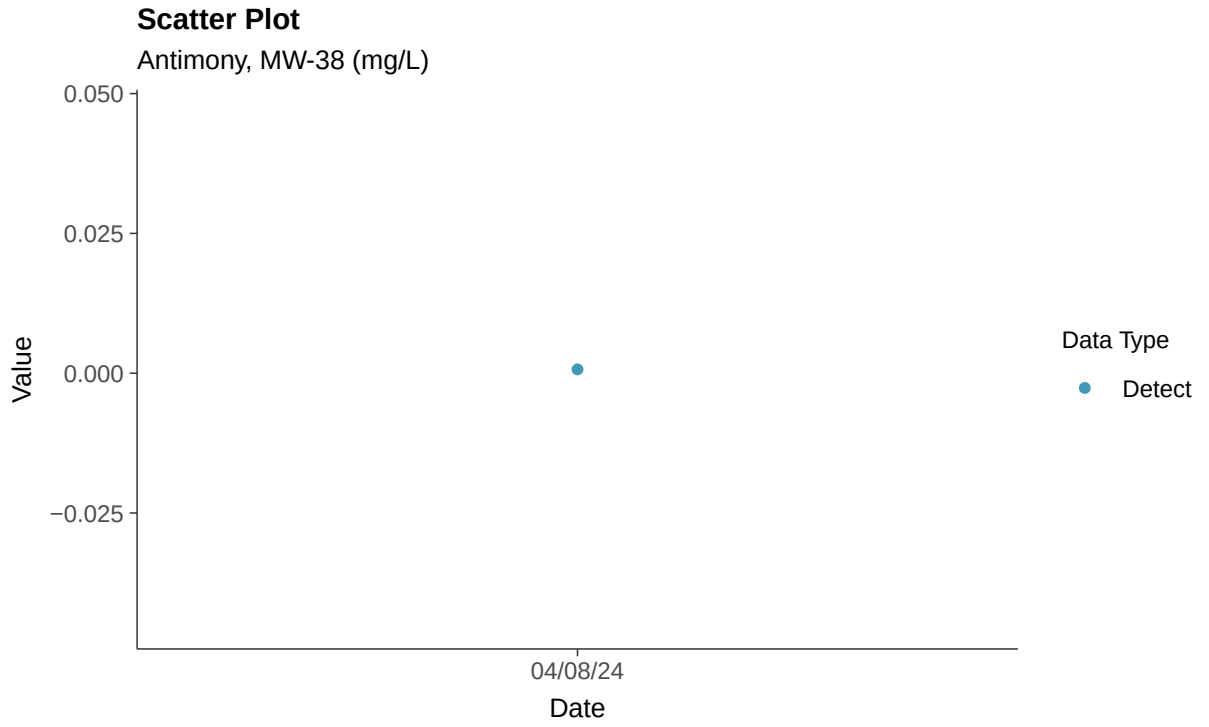
Boxplot by Season

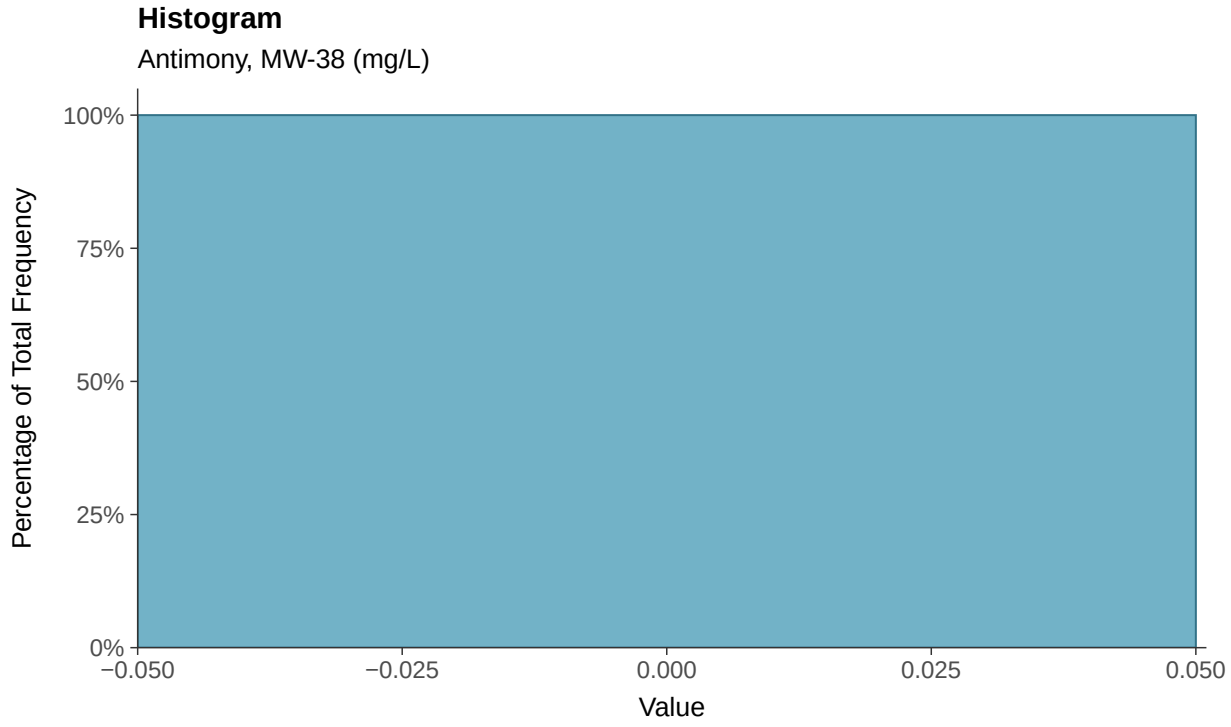
Total Dissolved Solids, MW-38 (mg/L)



Appendix IV: Antimony, MW-38

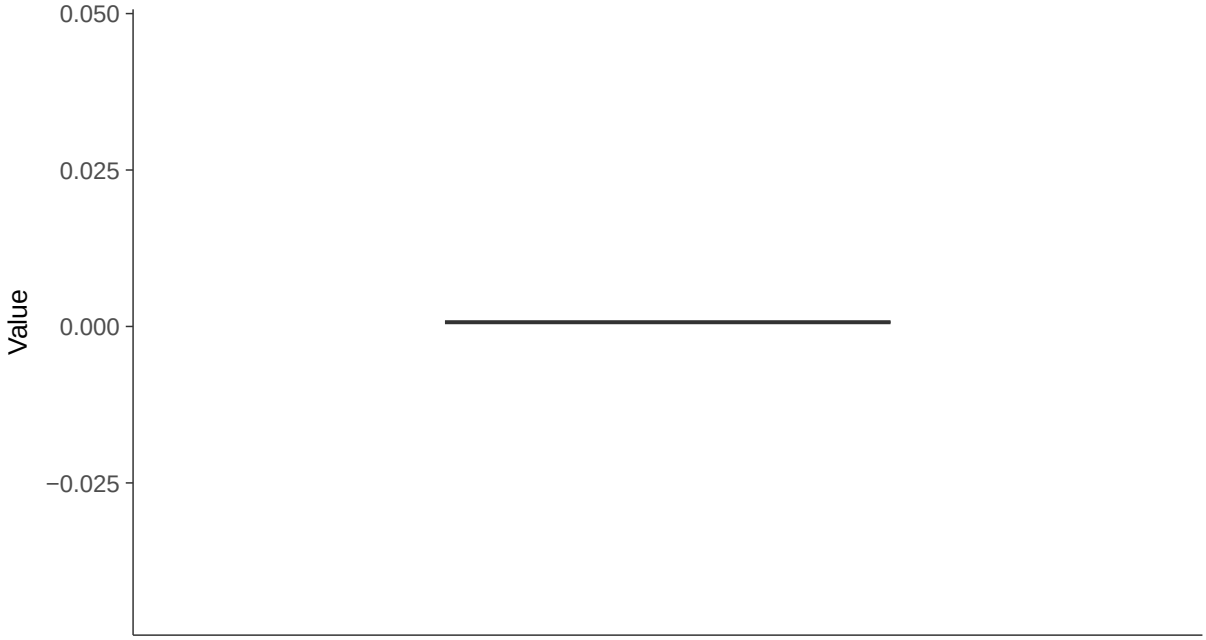
ID: 2_48_5_101





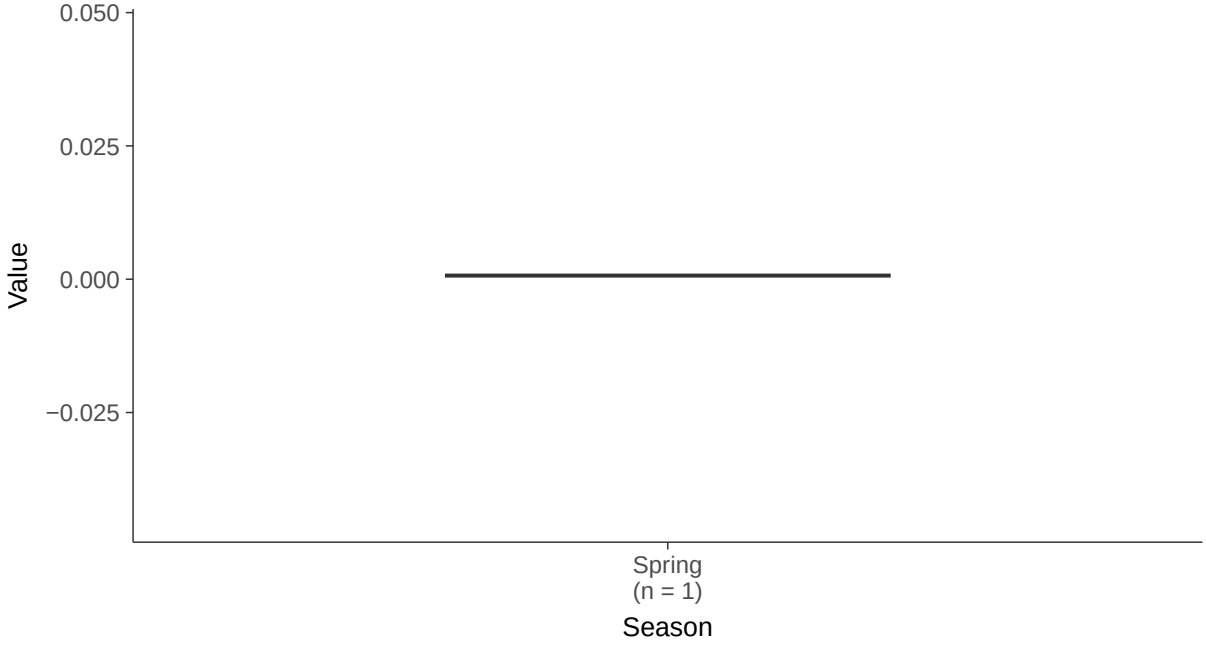
Boxplot

Antimony, MW-38 (mg/L)



Boxplot by Season

Antimony, MW-38 (mg/L)

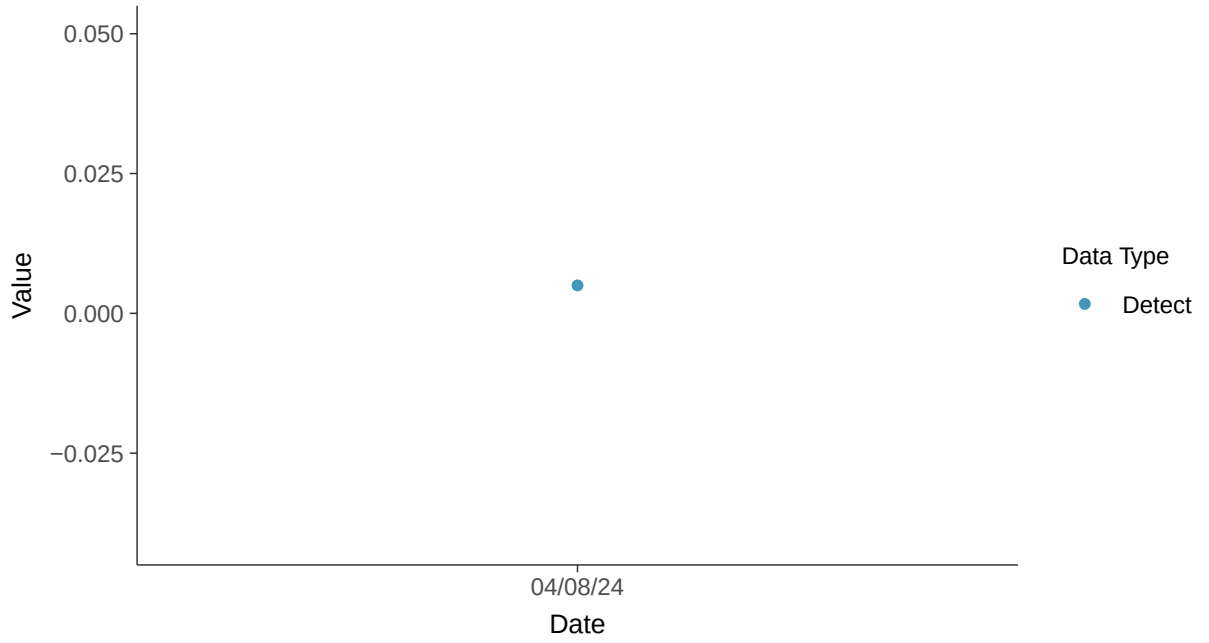


Appendix IV: Arsenic, MW-38

ID: 2_48_5_102

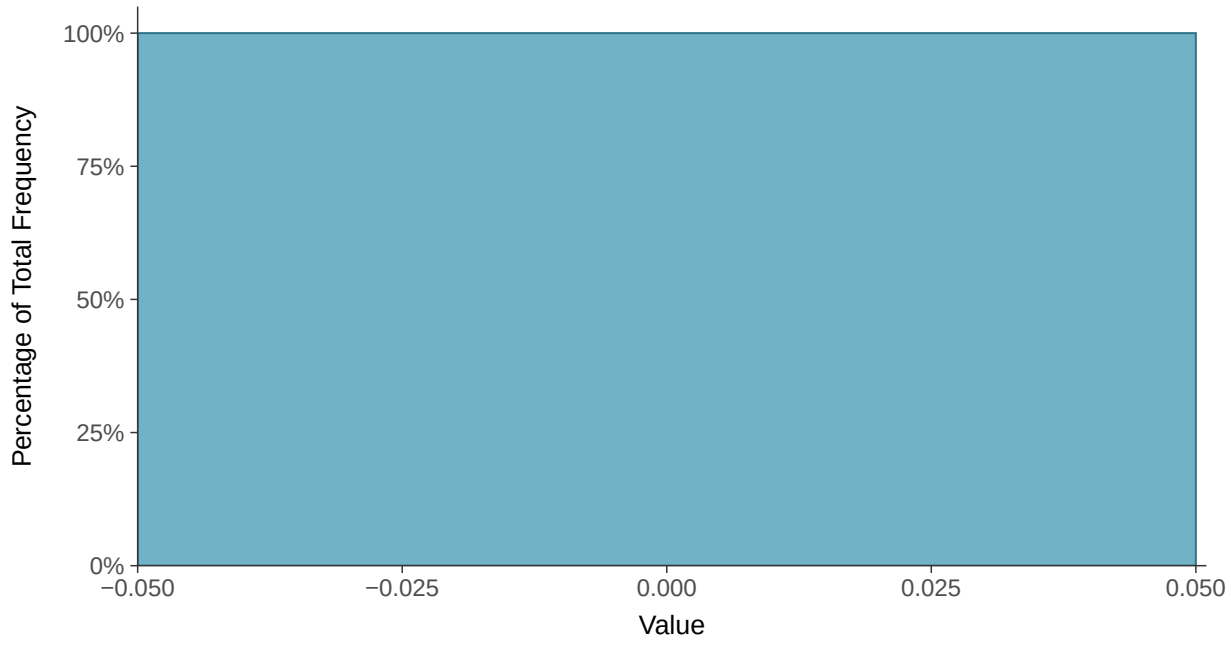
Scatter Plot

Arsenic, MW-38 (mg/L)



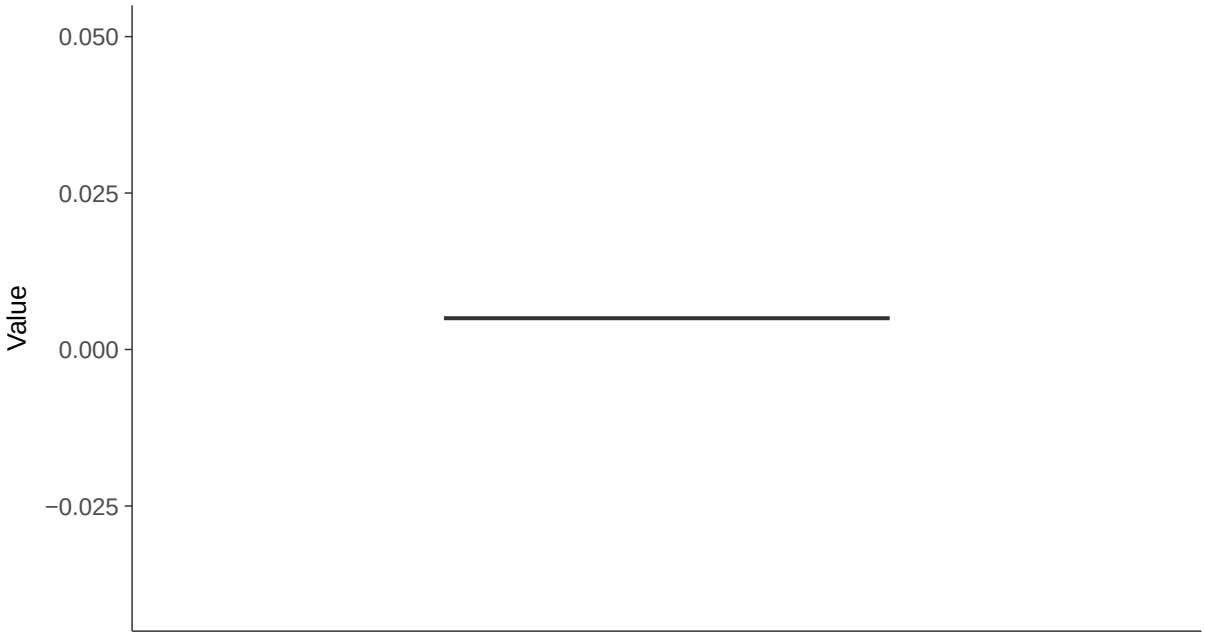
Histogram

Arsenic, MW-38 (mg/L)



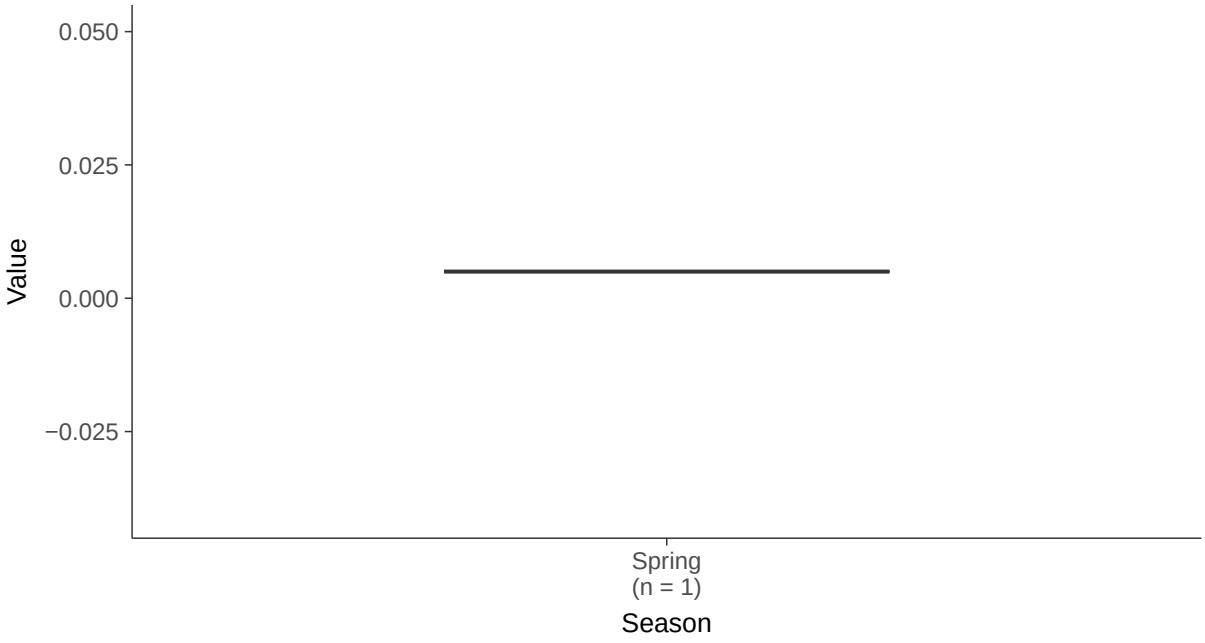
Boxplot

Arsenic, MW-38 (mg/L)



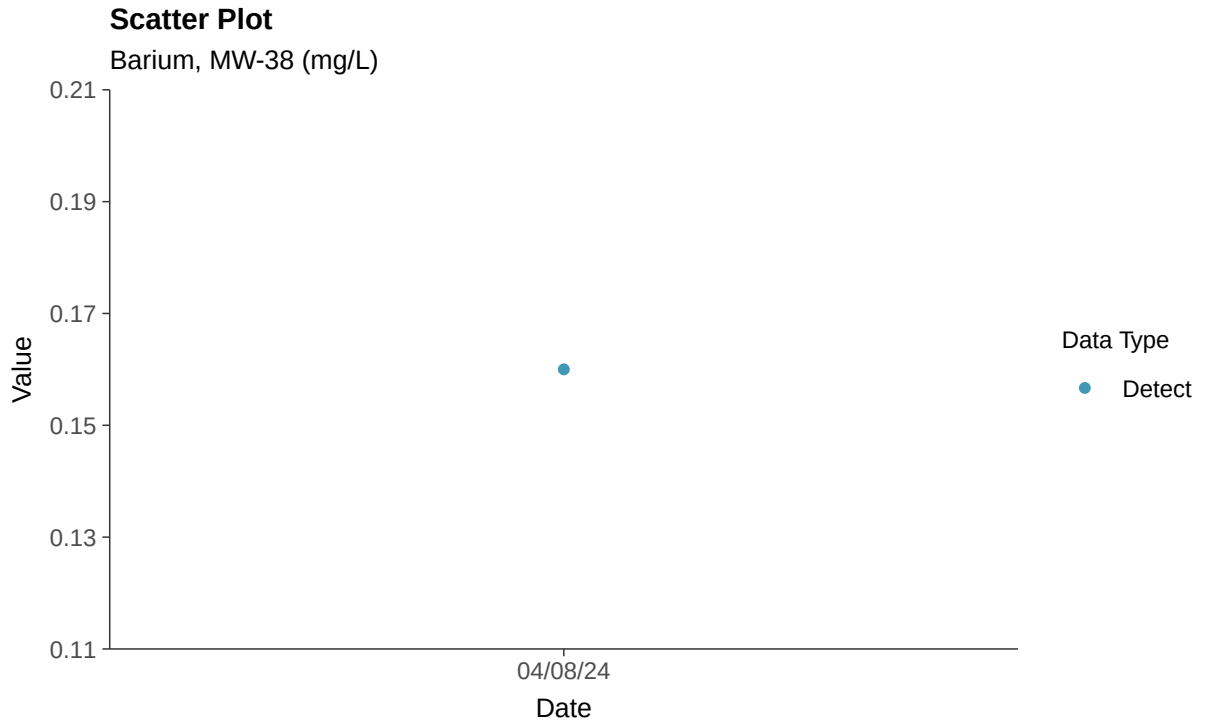
Boxplot by Season

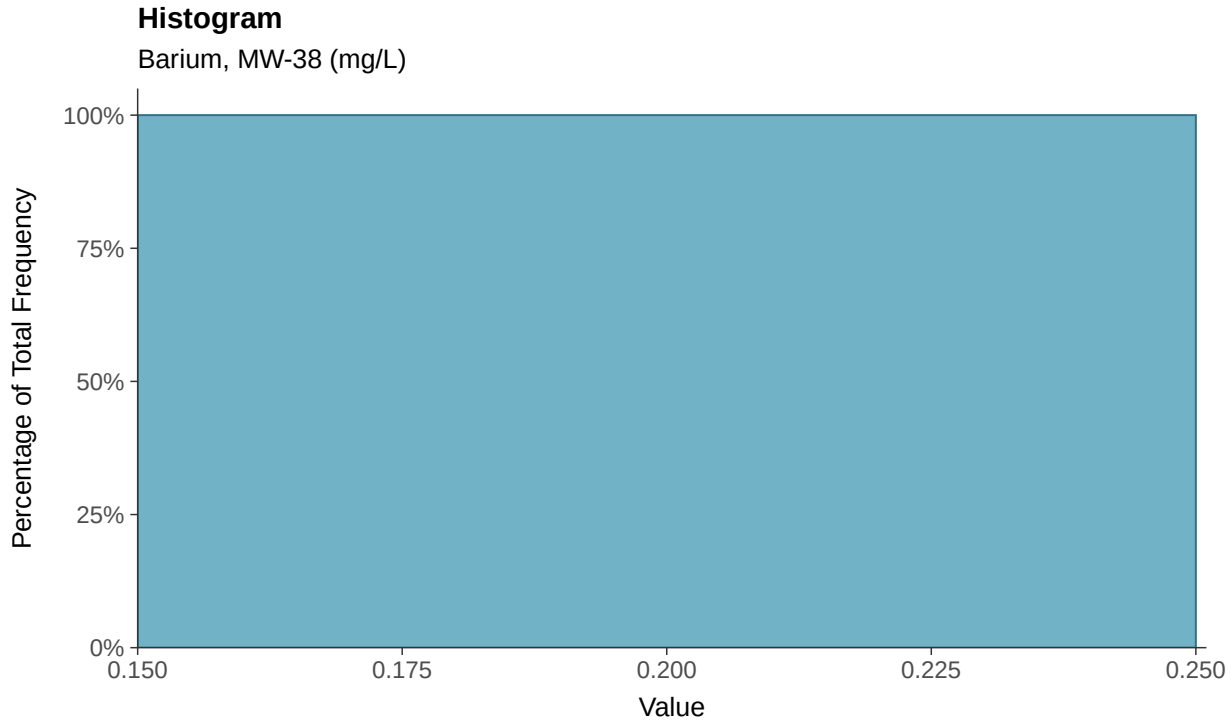
Arsenic, MW-38 (mg/L)



Appendix IV: Barium, MW-38

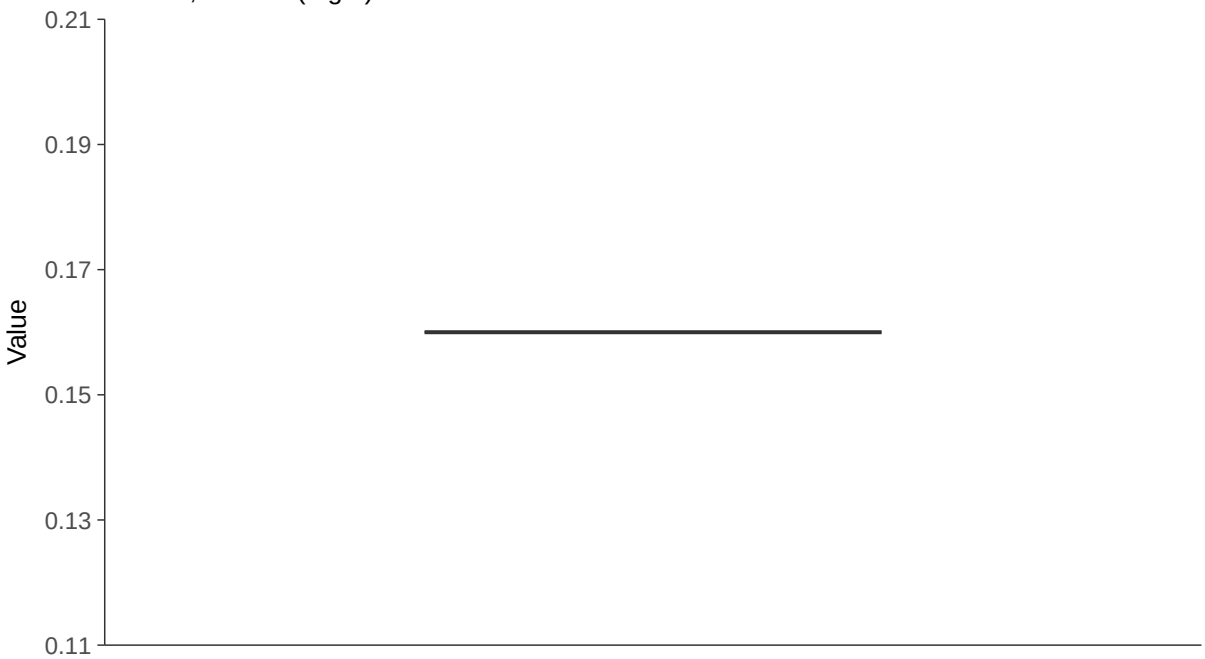
ID: 2_48_5_103





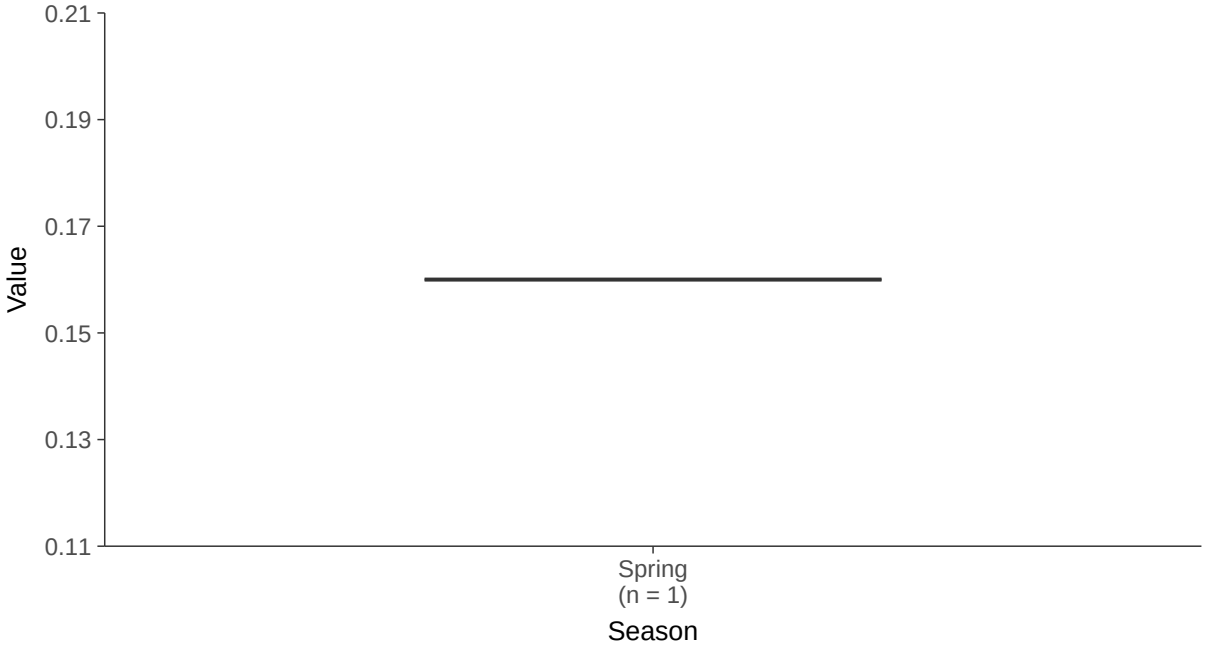
Boxplot

Barium, MW-38 (mg/L)



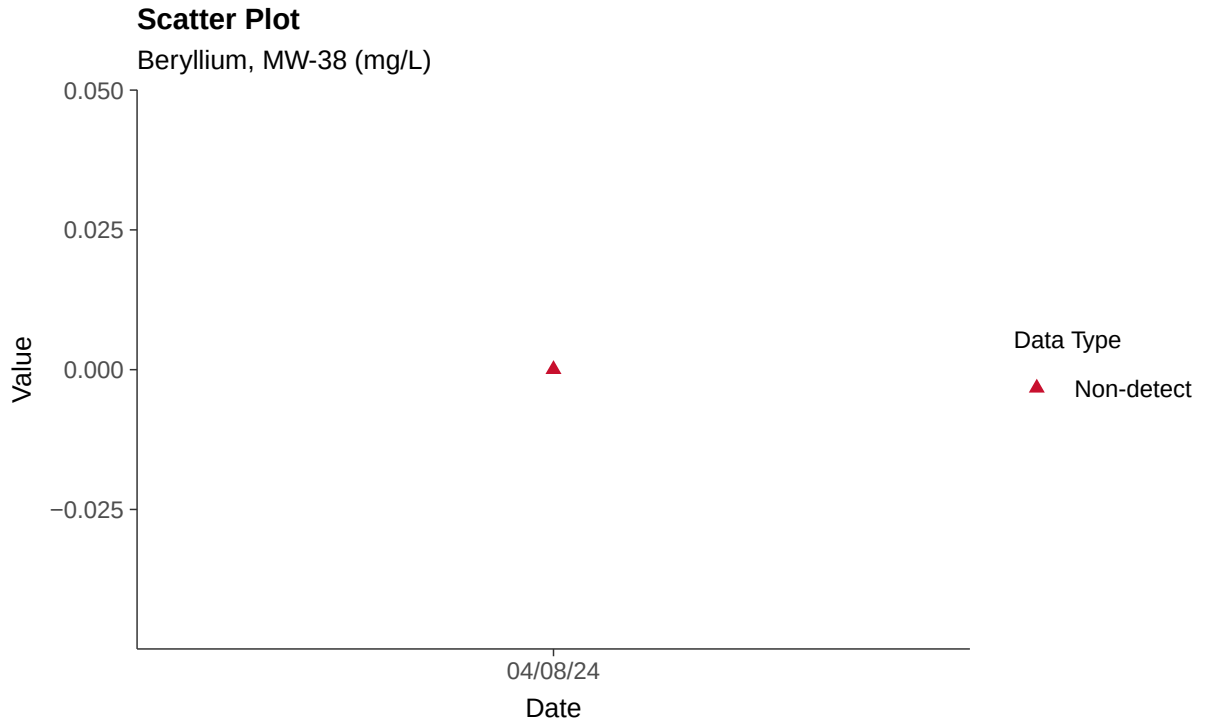
Boxplot by Season

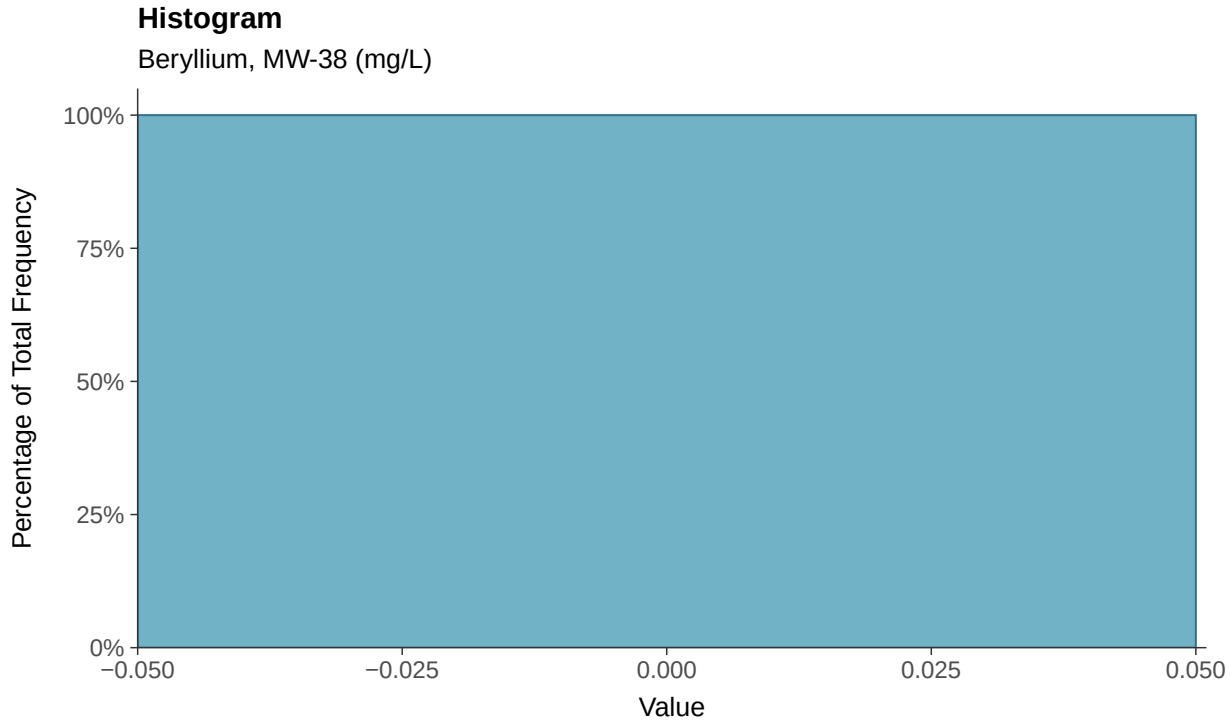
Barium, MW-38 (mg/L)



Appendix IV: Beryllium, MW-38

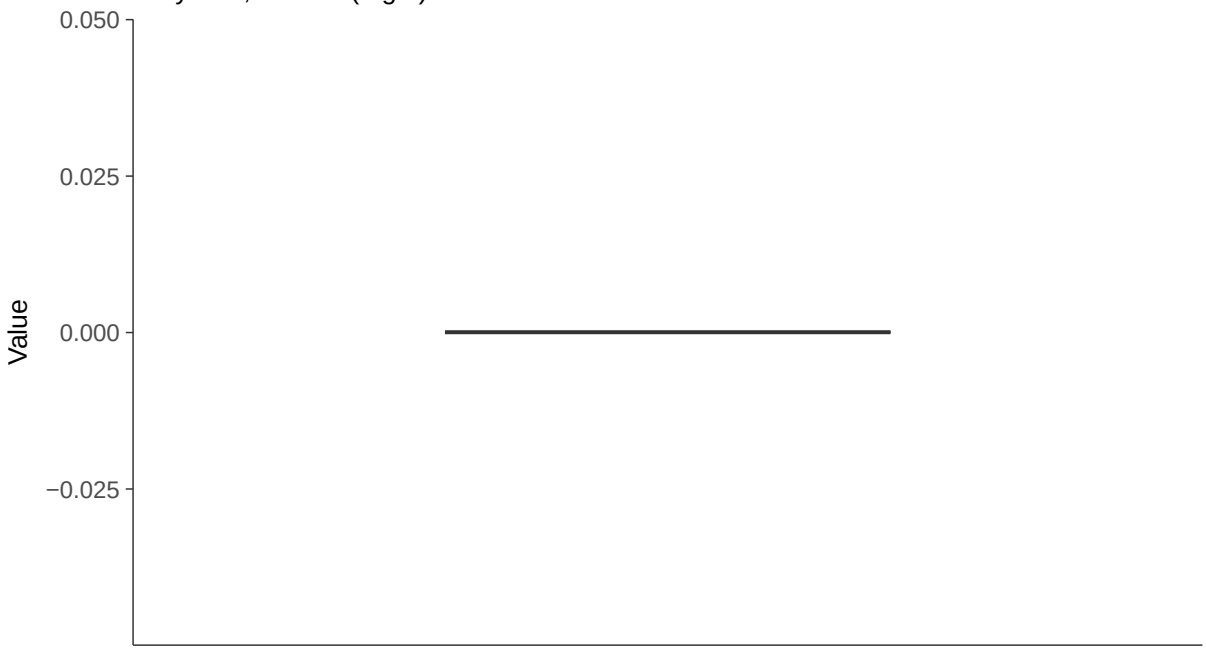
ID: 2_48_5_104





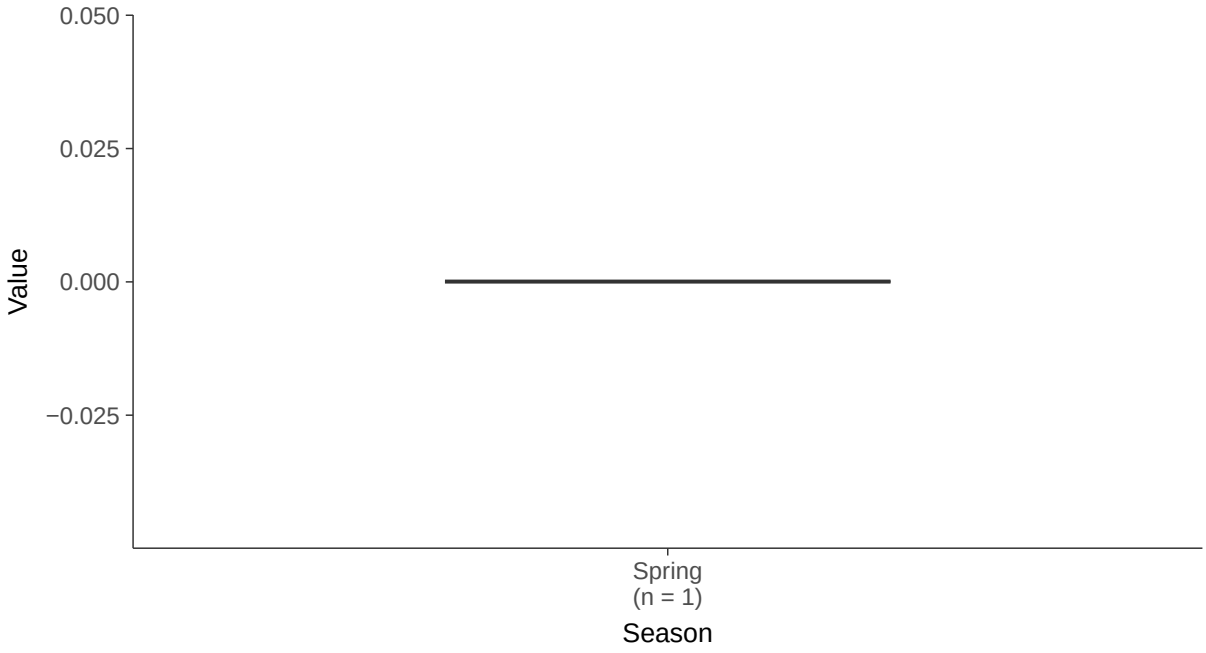
Boxplot

Beryllium, MW-38 (mg/L)



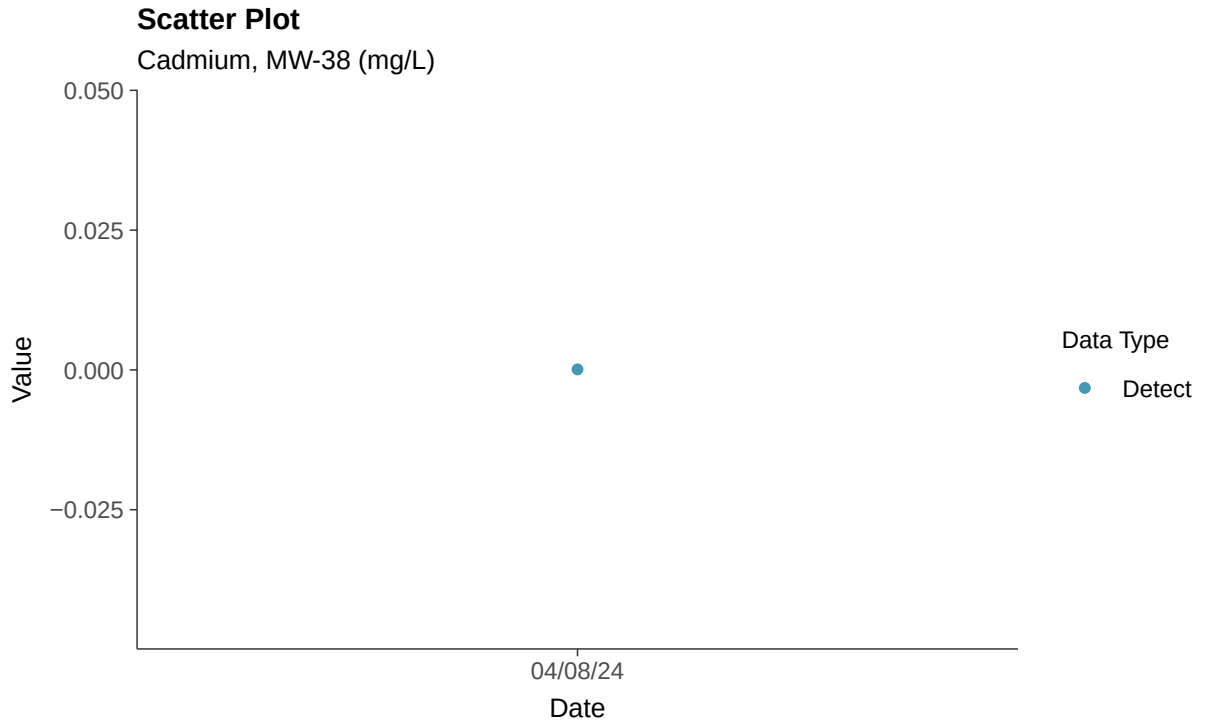
Boxplot by Season

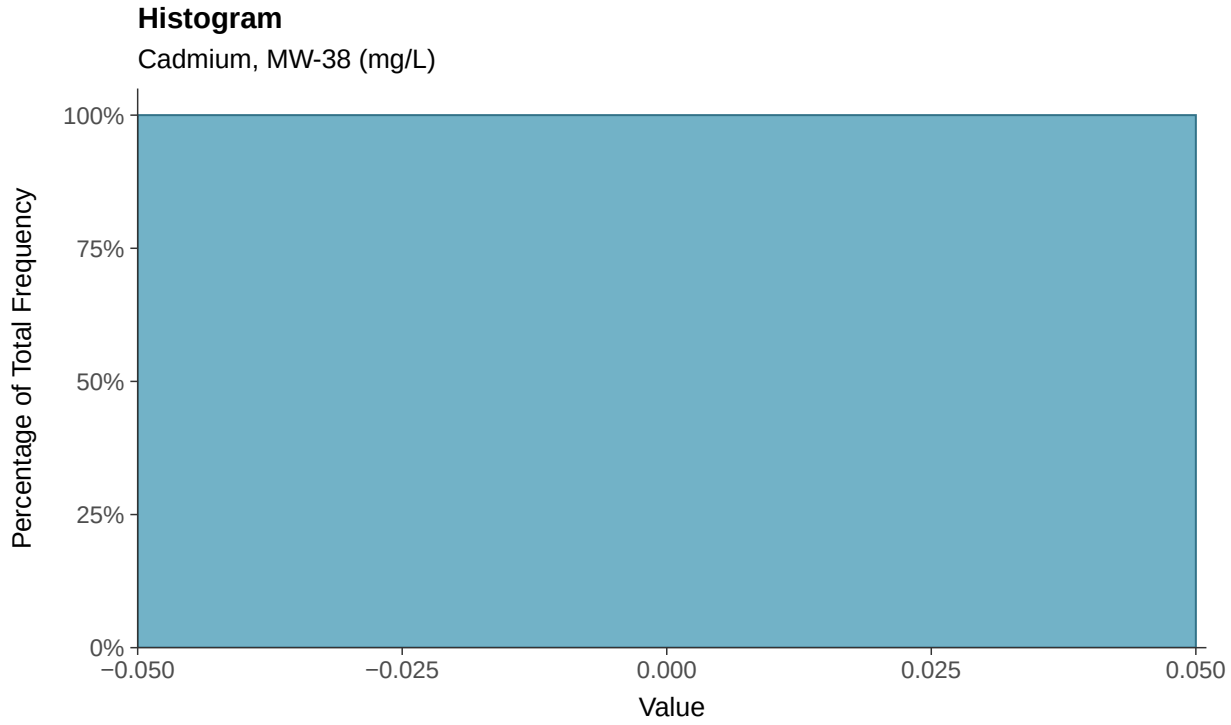
Beryllium, MW-38 (mg/L)



Appendix IV: Cadmium, MW-38

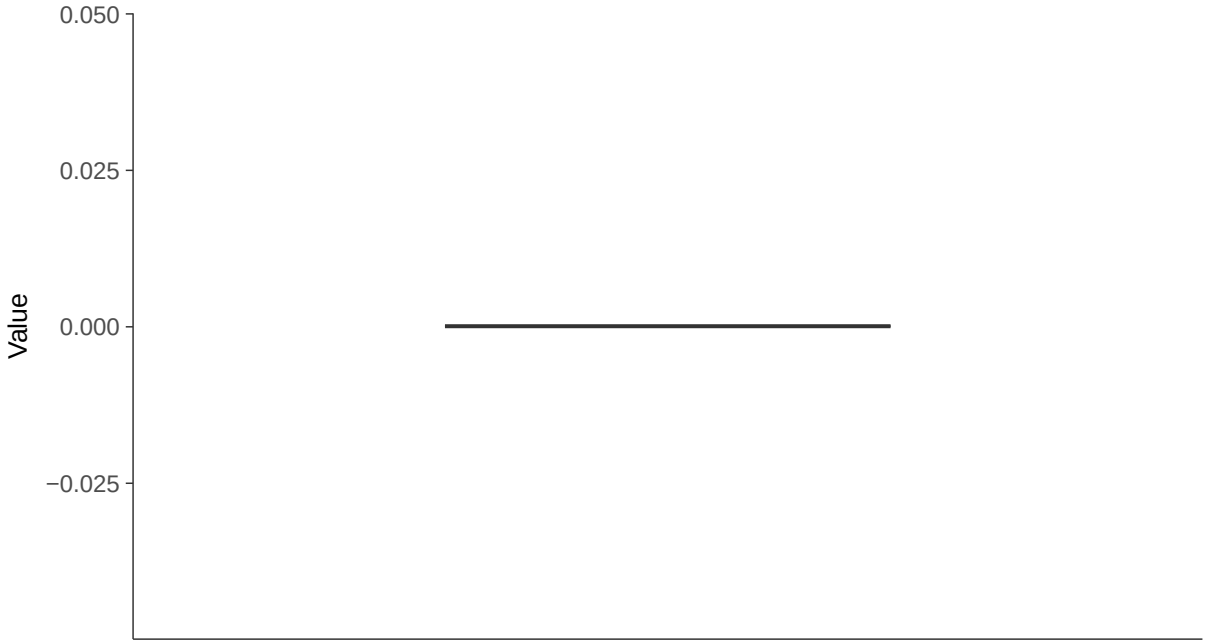
ID: 2_48_5_106





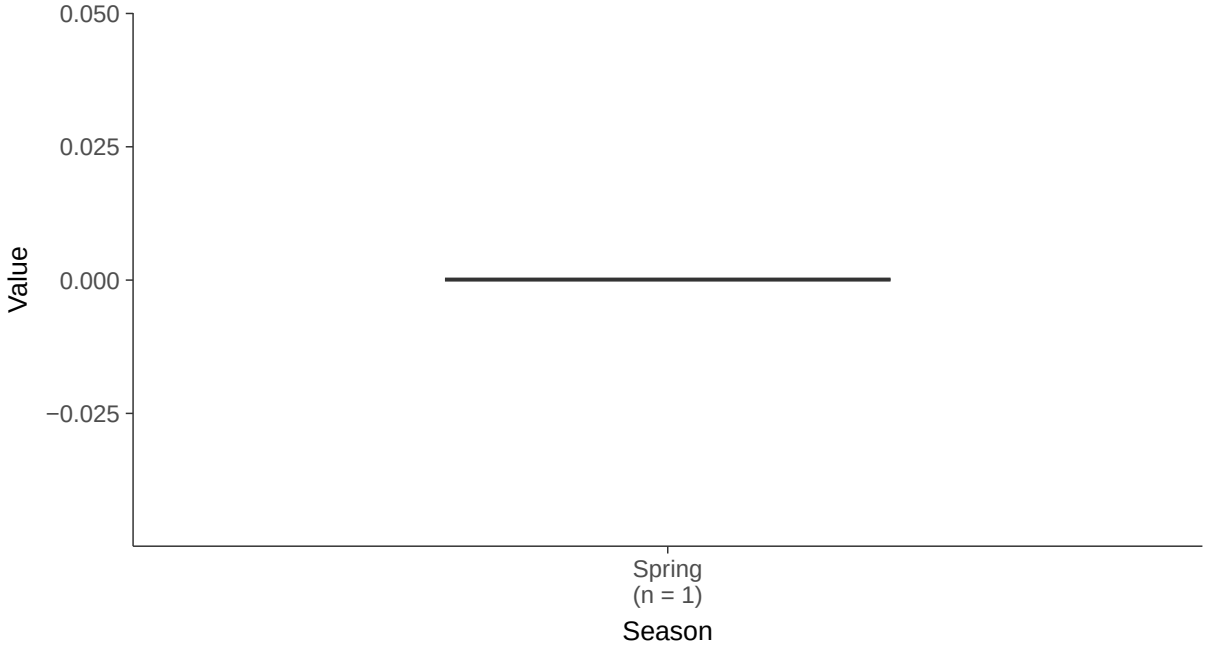
Boxplot

Cadmium, MW-38 (mg/L)



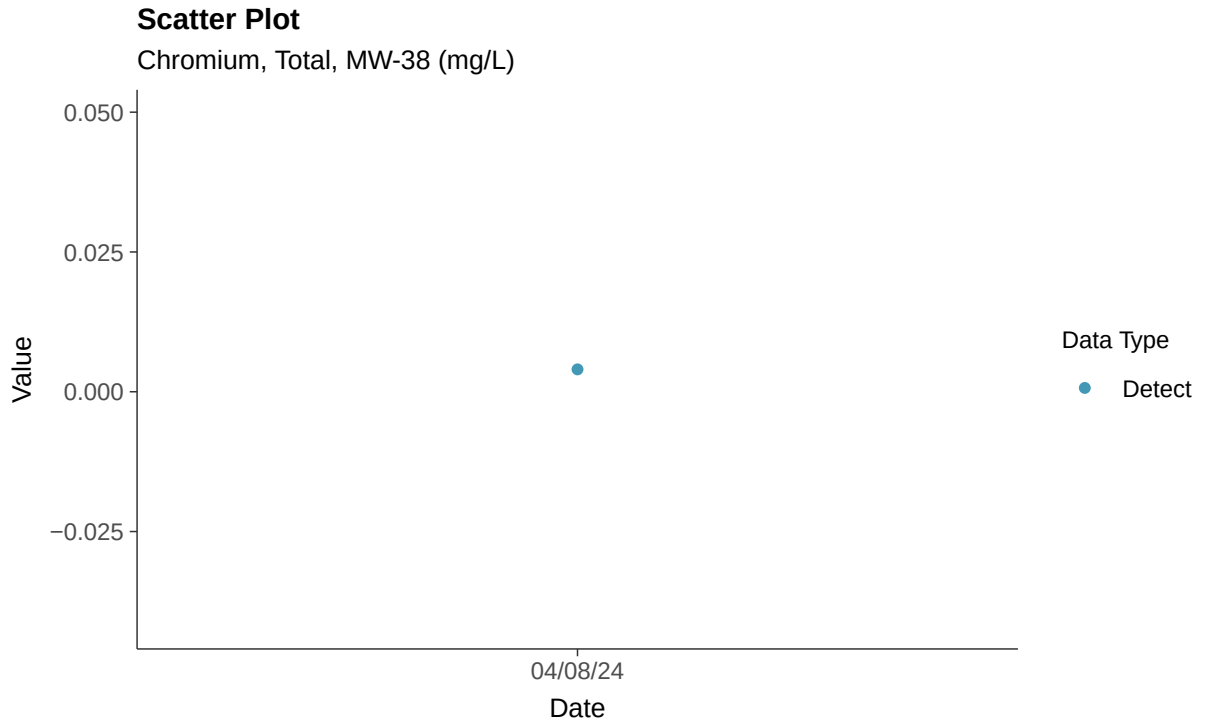
Boxplot by Season

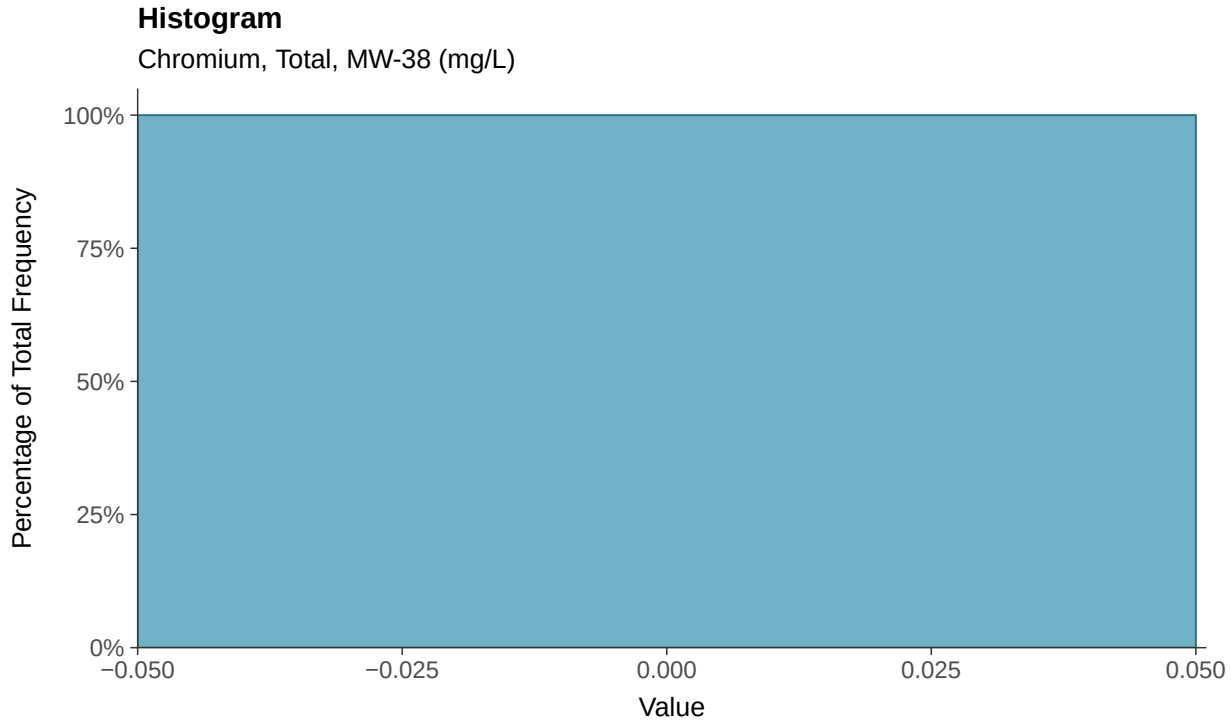
Cadmium, MW-38 (mg/L)



Appendix IV: Chromium, Total, MW-38

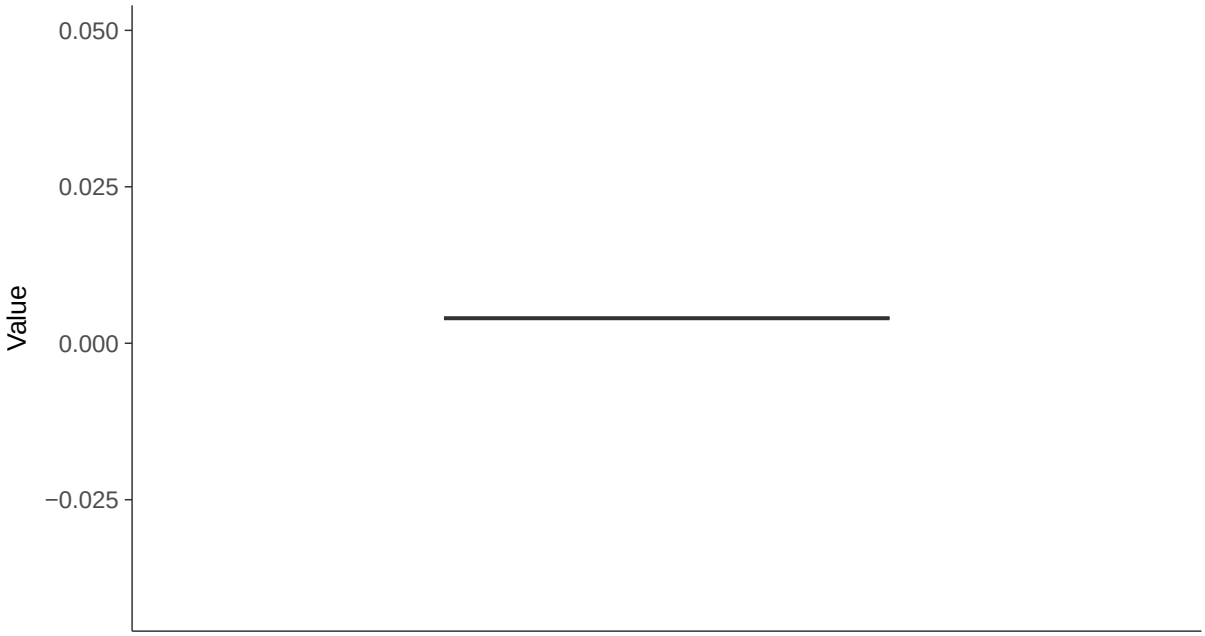
ID: 2_48_5_109





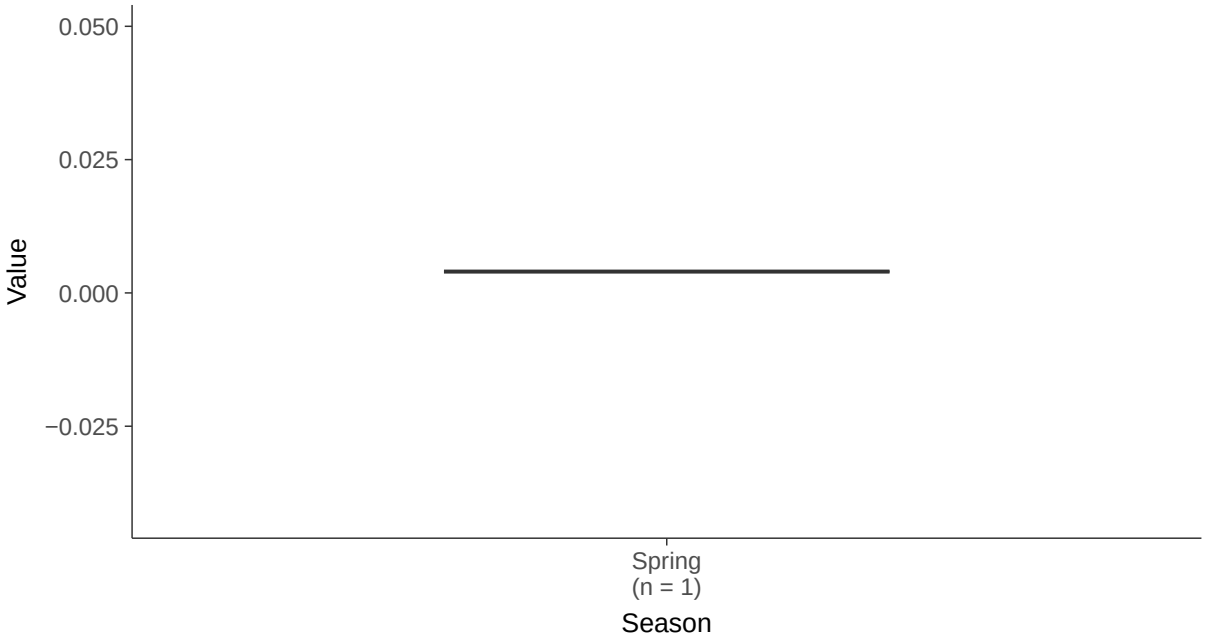
Boxplot

Chromium, Total, MW-38 (mg/L)



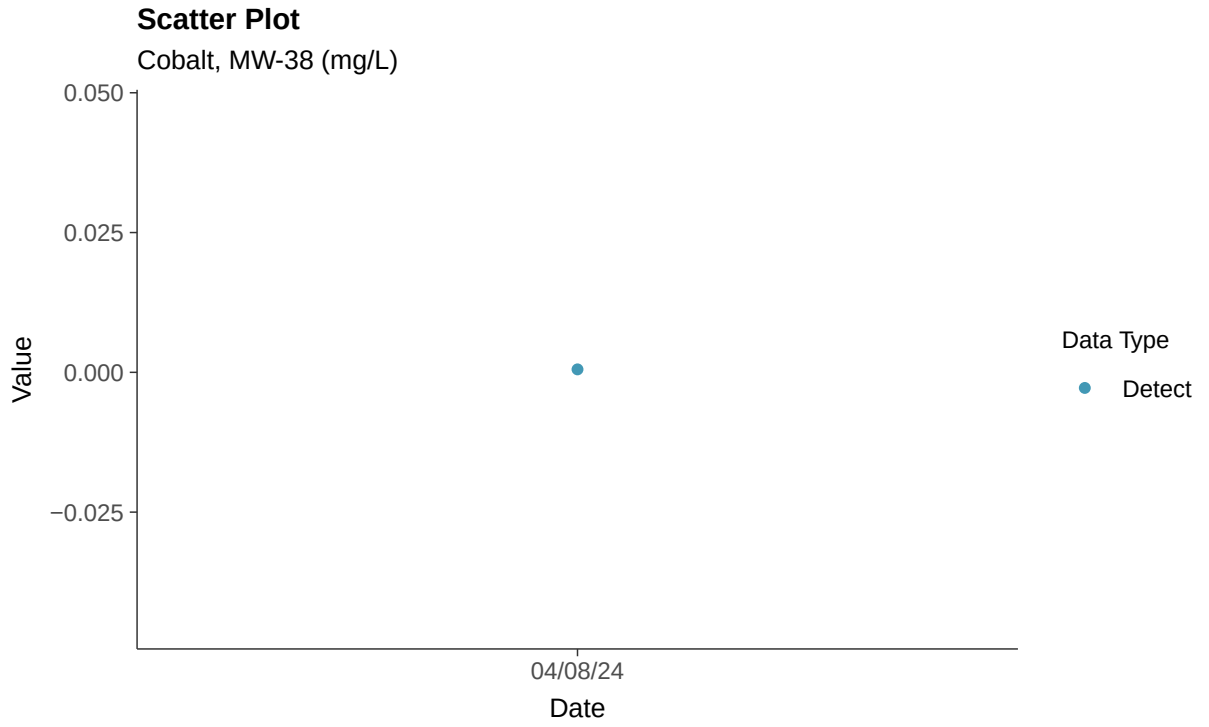
Boxplot by Season

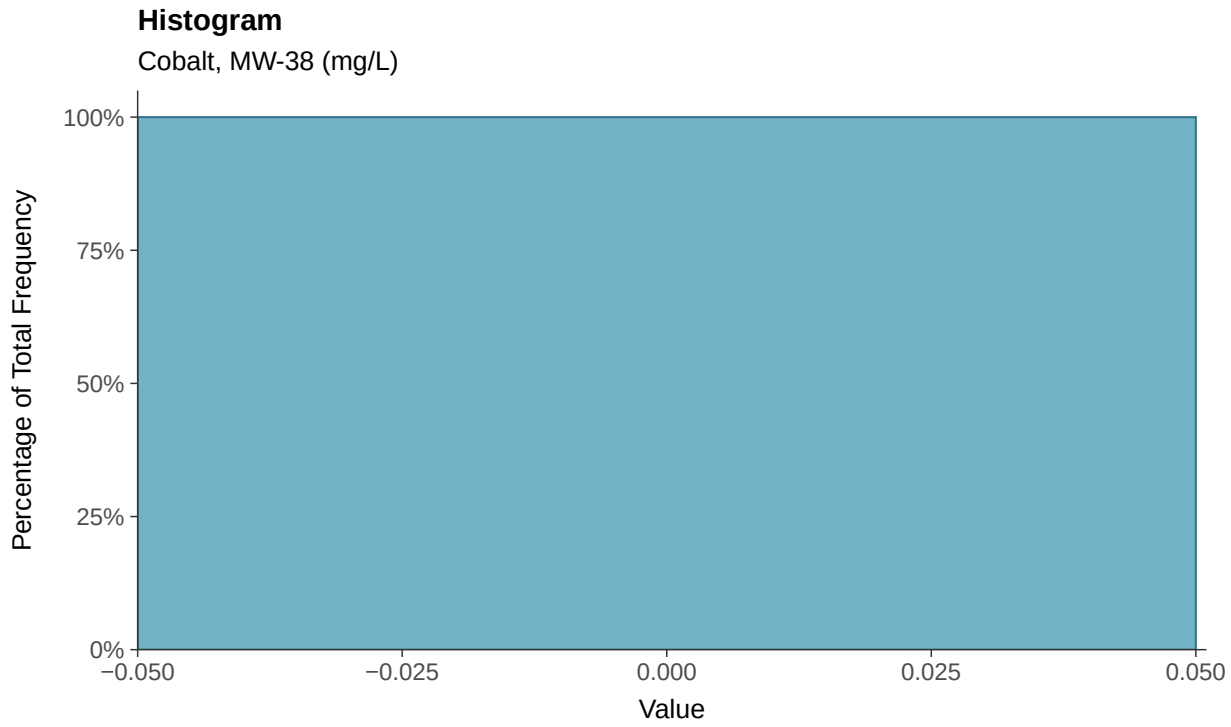
Chromium, Total, MW-38 (mg/L)



Appendix IV: Cobalt, MW-38

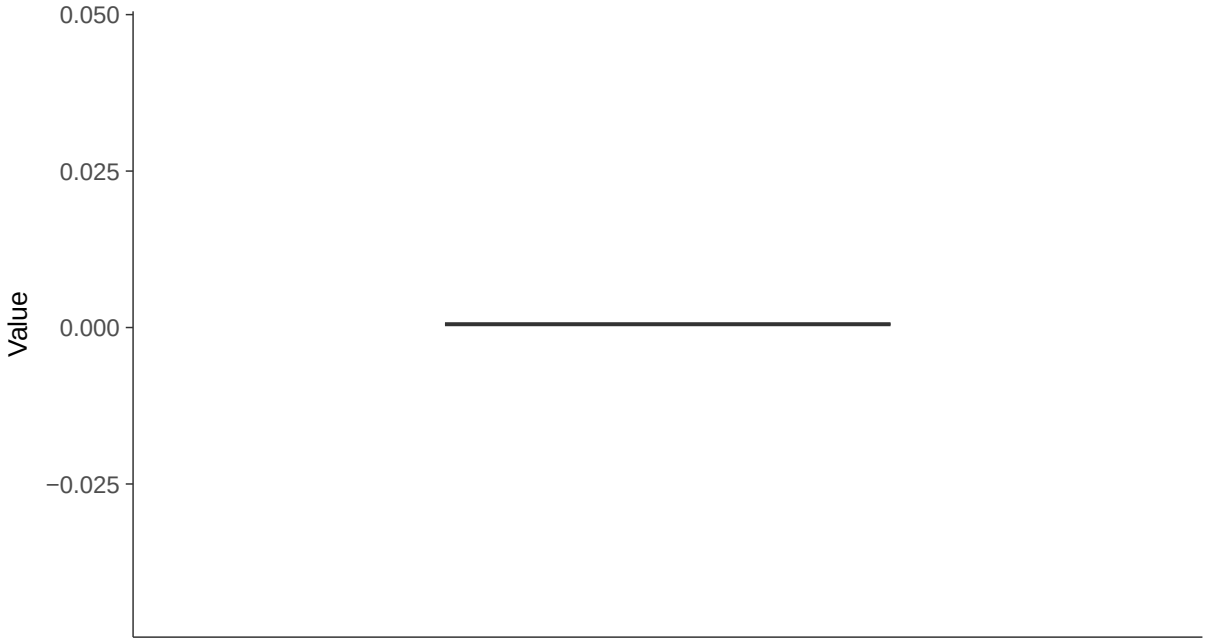
ID: 2_48_5_110





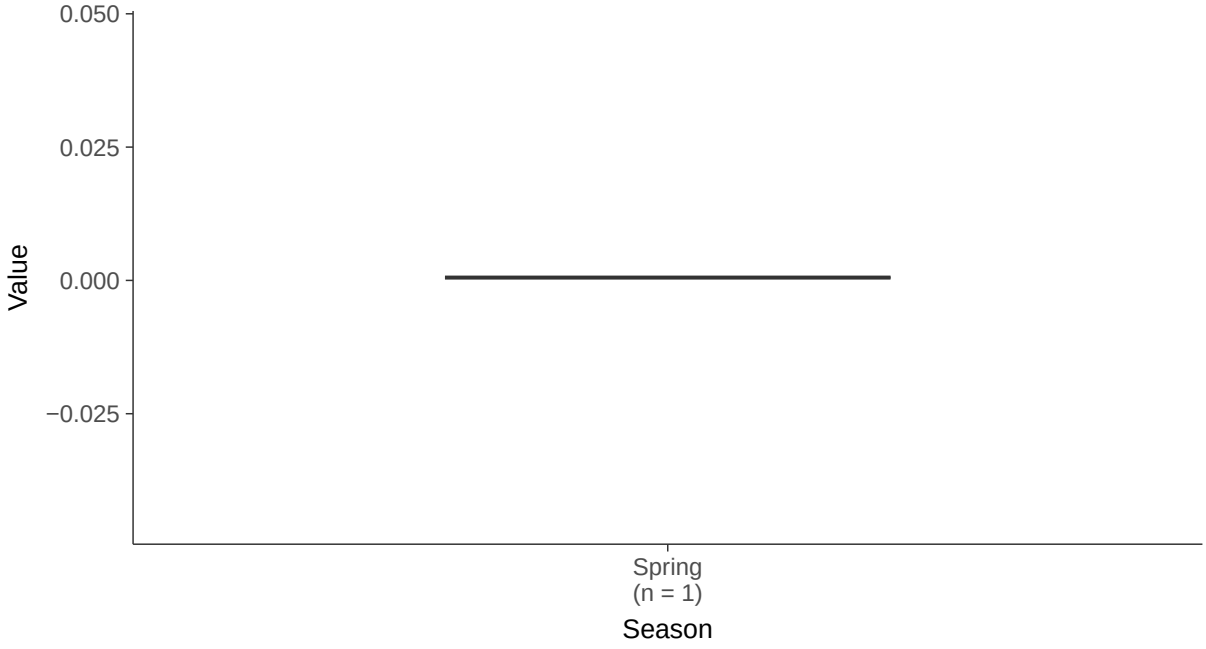
Boxplot

Cobalt, MW-38 (mg/L)



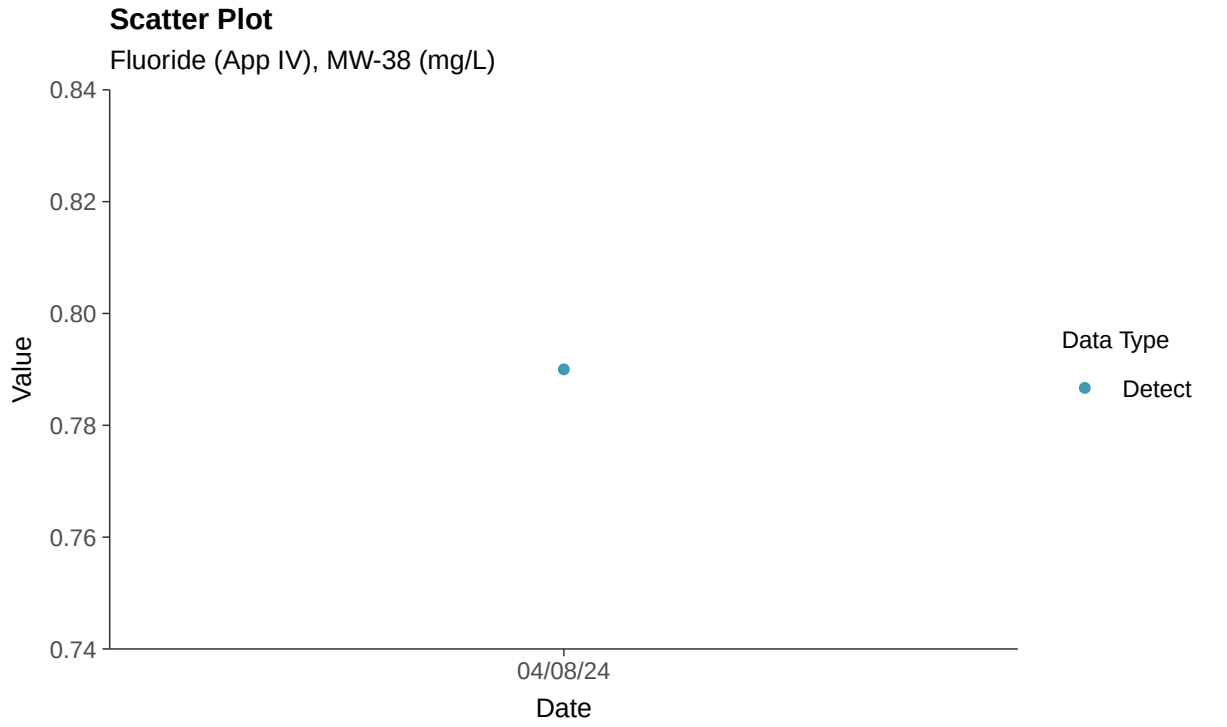
Boxplot by Season

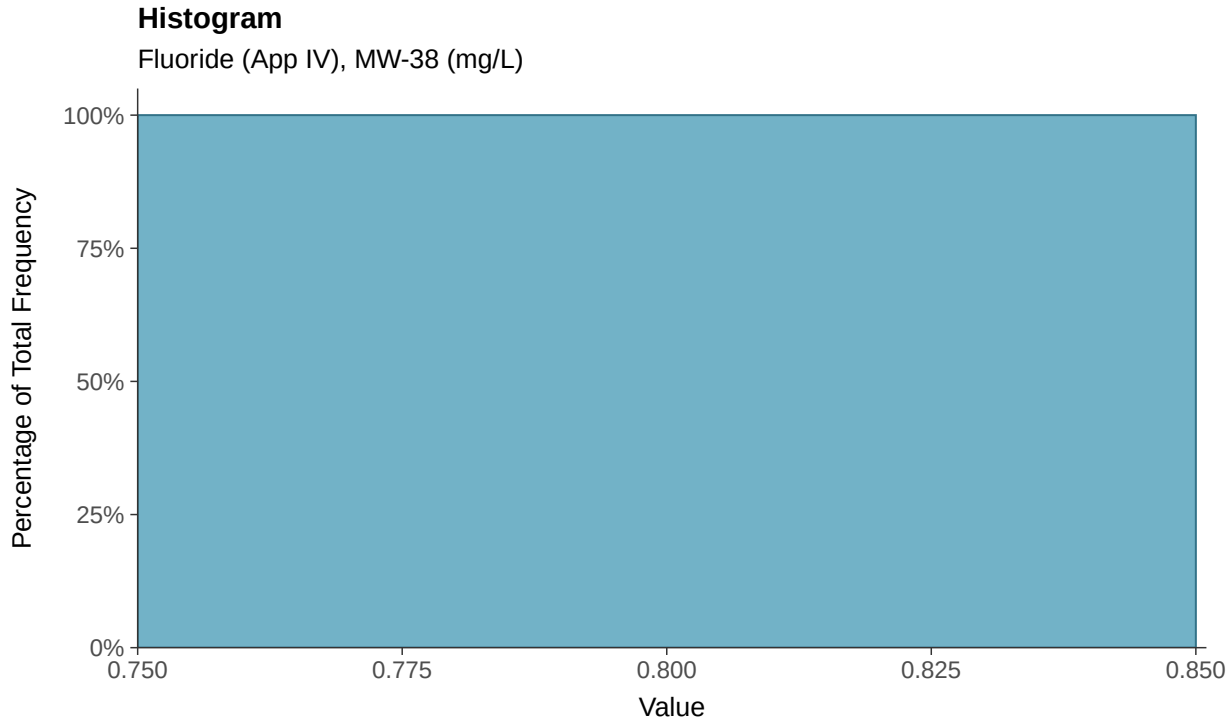
Cobalt, MW-38 (mg/L)



Appendix IV: Fluoride (App IV), MW-38

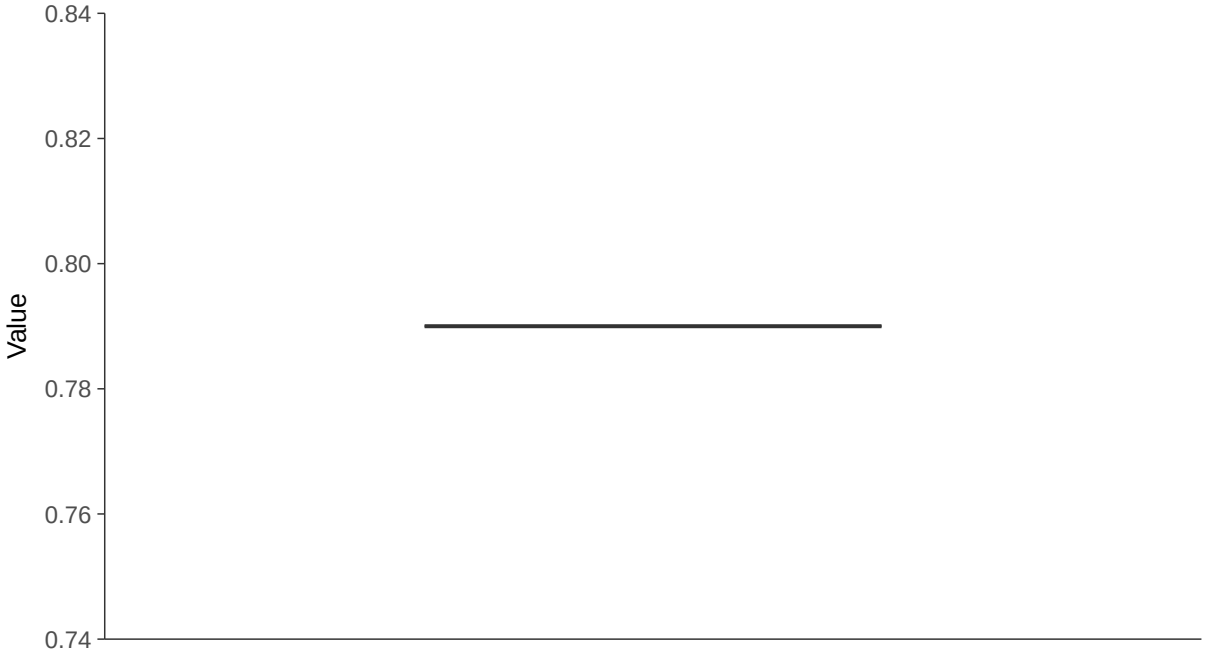
ID: 2_48_5_113





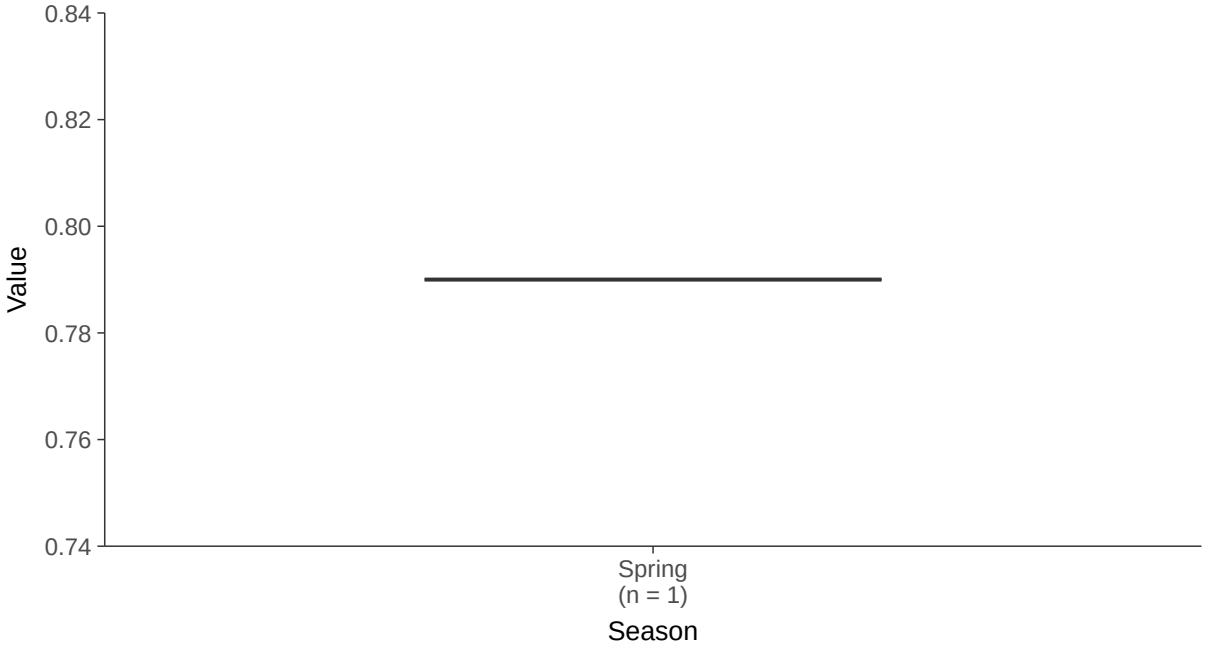
Boxplot

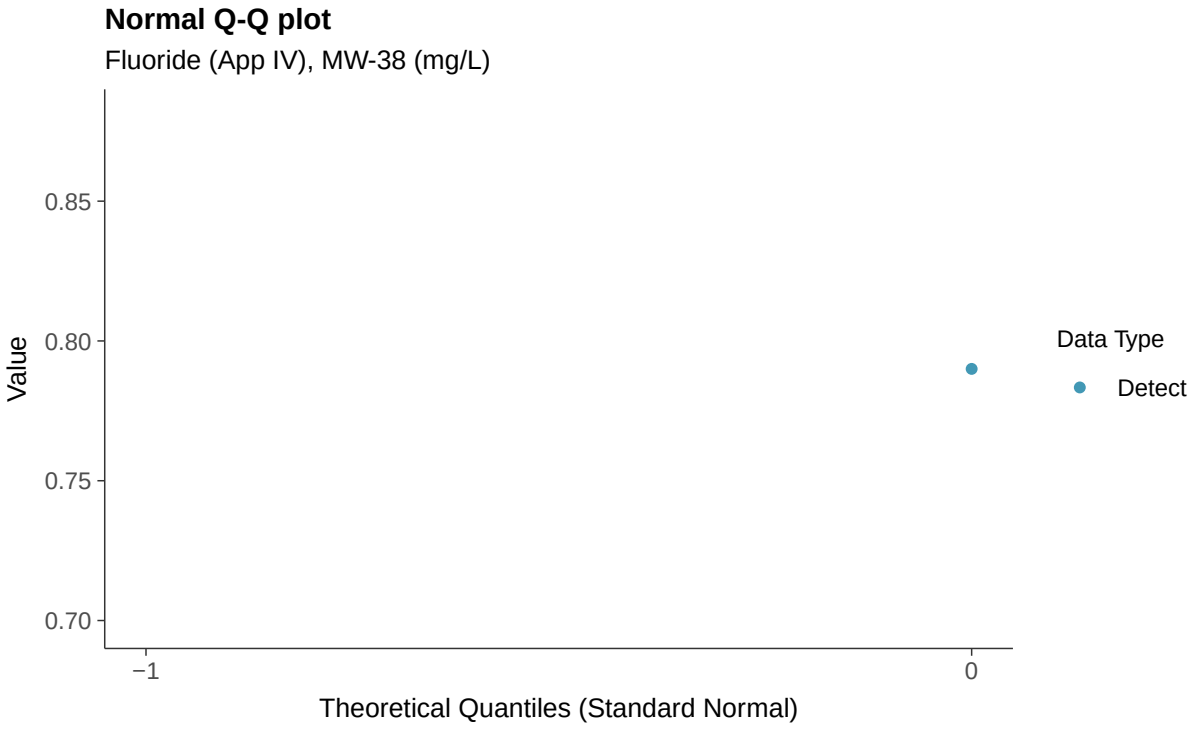
Fluoride (App IV), MW-38 (mg/L)



Boxplot by Season

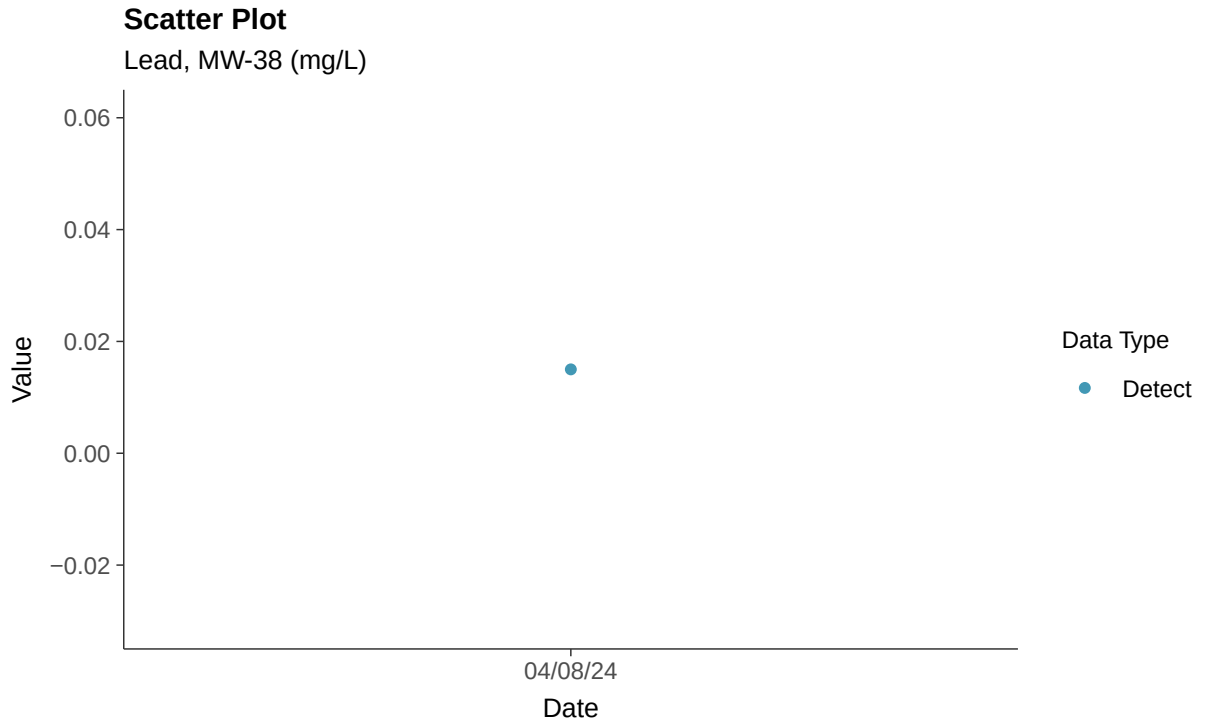
Fluoride (App IV), MW-38 (mg/L)

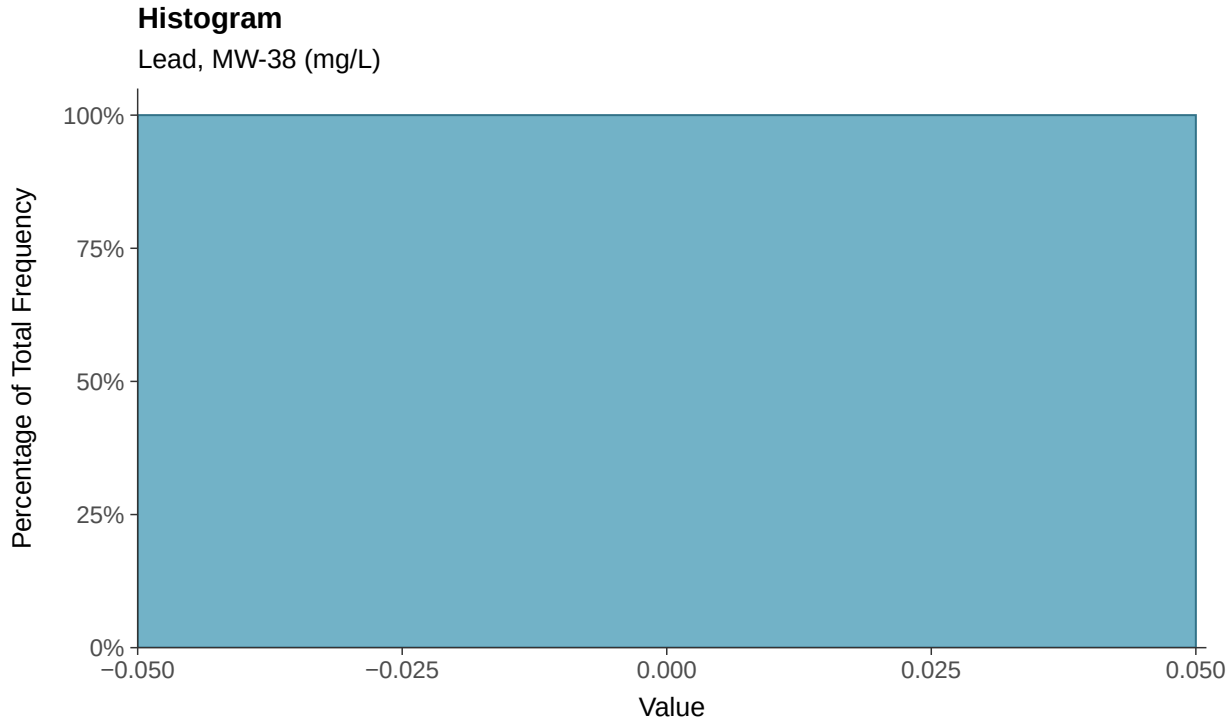



Normal Q-Q plot
Fluoride (App IV), MW-38 (mg/L)
Value
0.85
0.80
0.75
0.70
−1
0
Theoretical Quantiles (Standard Normal)
Data Type
Detect

Appendix IV: Lead, MW-38

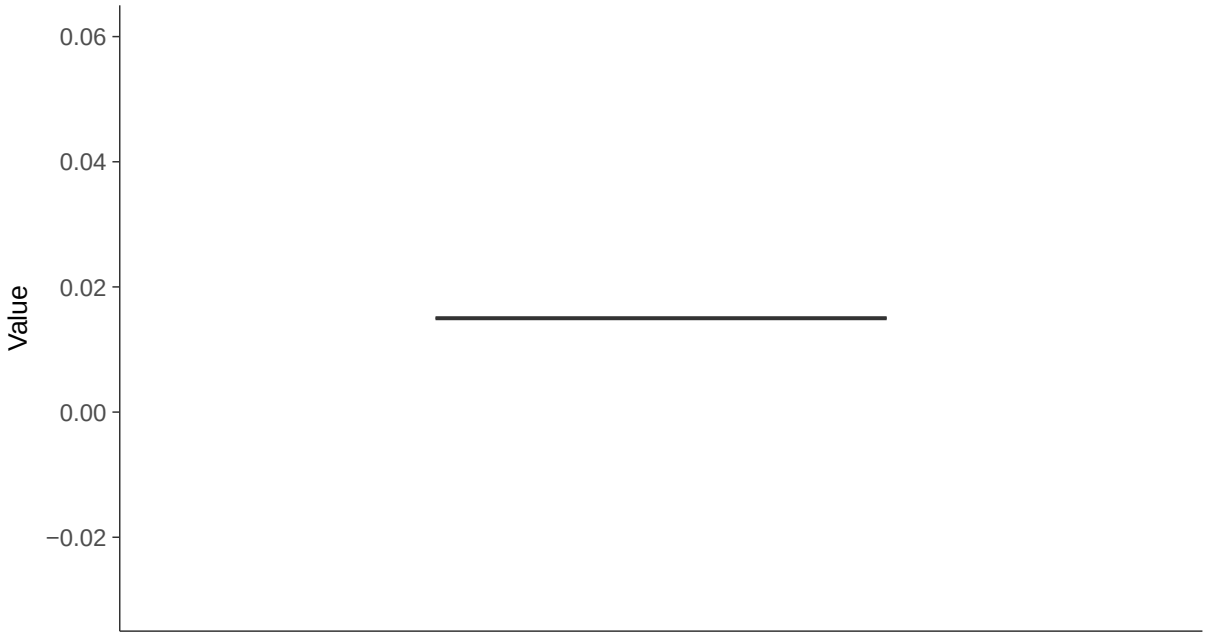
ID: 2_48_5_115





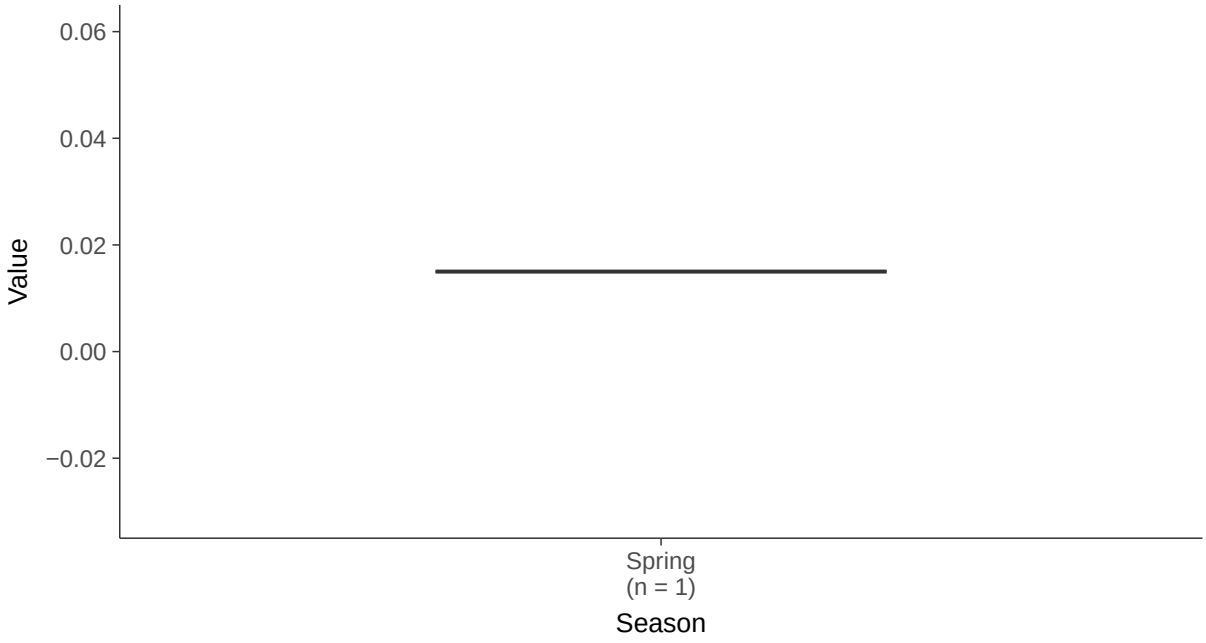
Boxplot

Lead, MW-38 (mg/L)



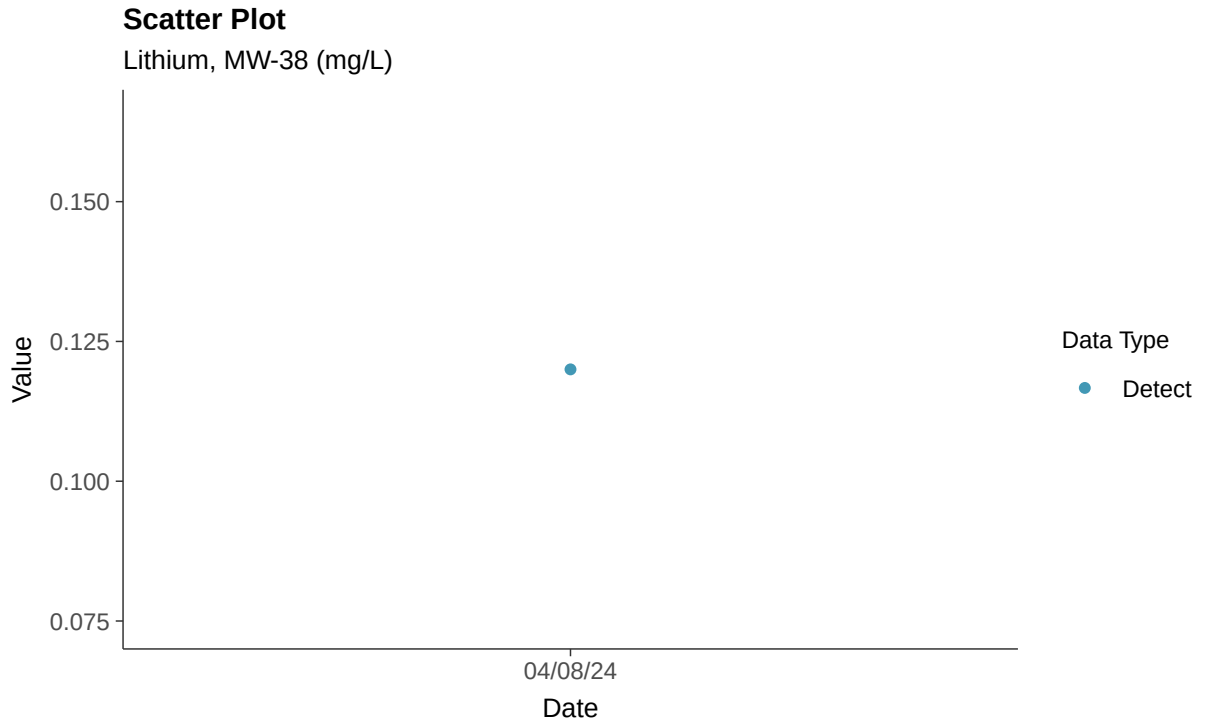
Boxplot by Season

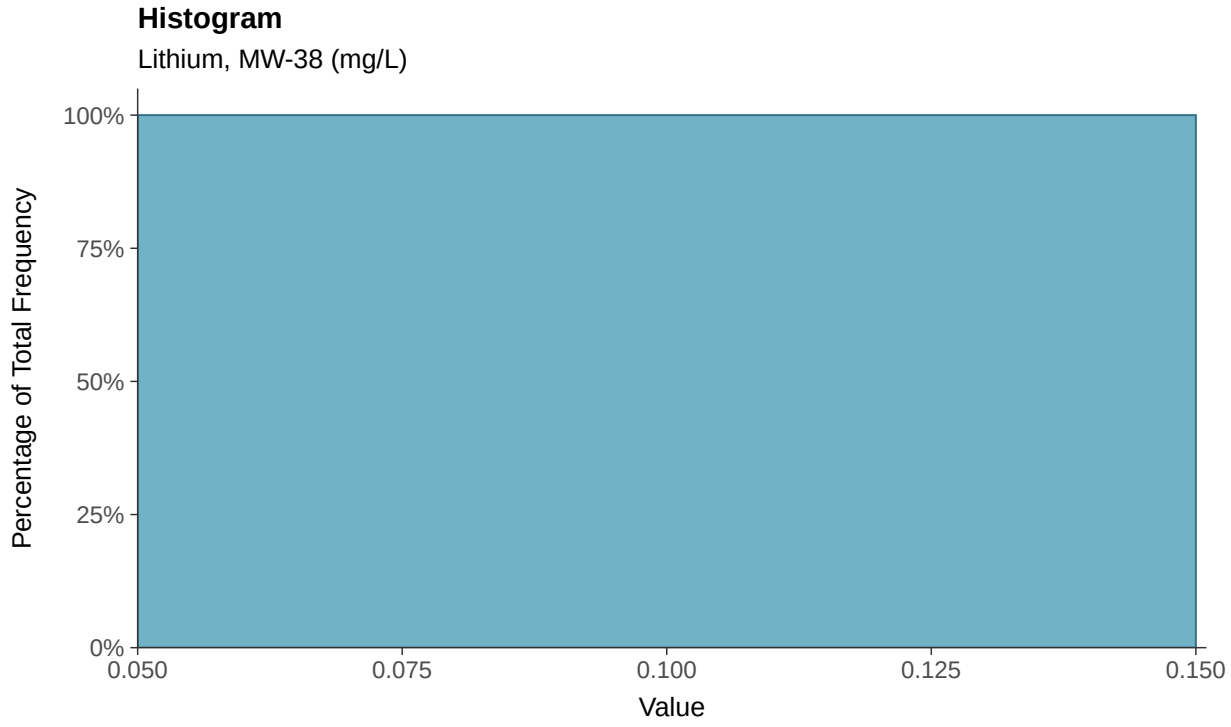
Lead, MW-38 (mg/L)



Appendix IV: Lithium, MW-38

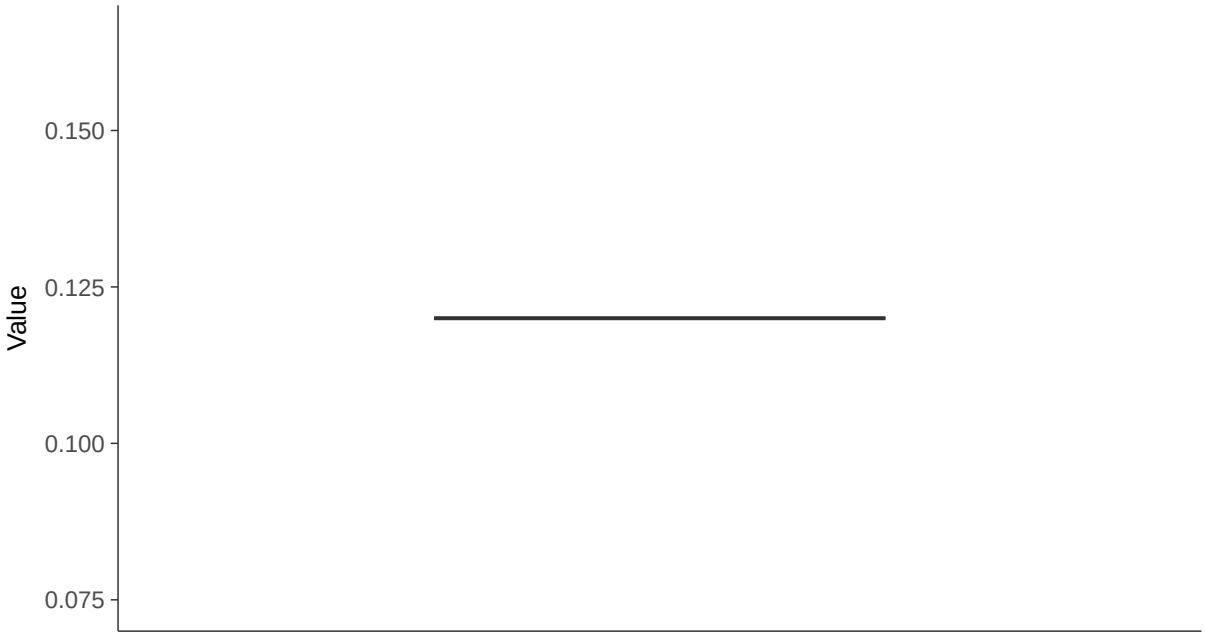
ID: 2_48_5_116





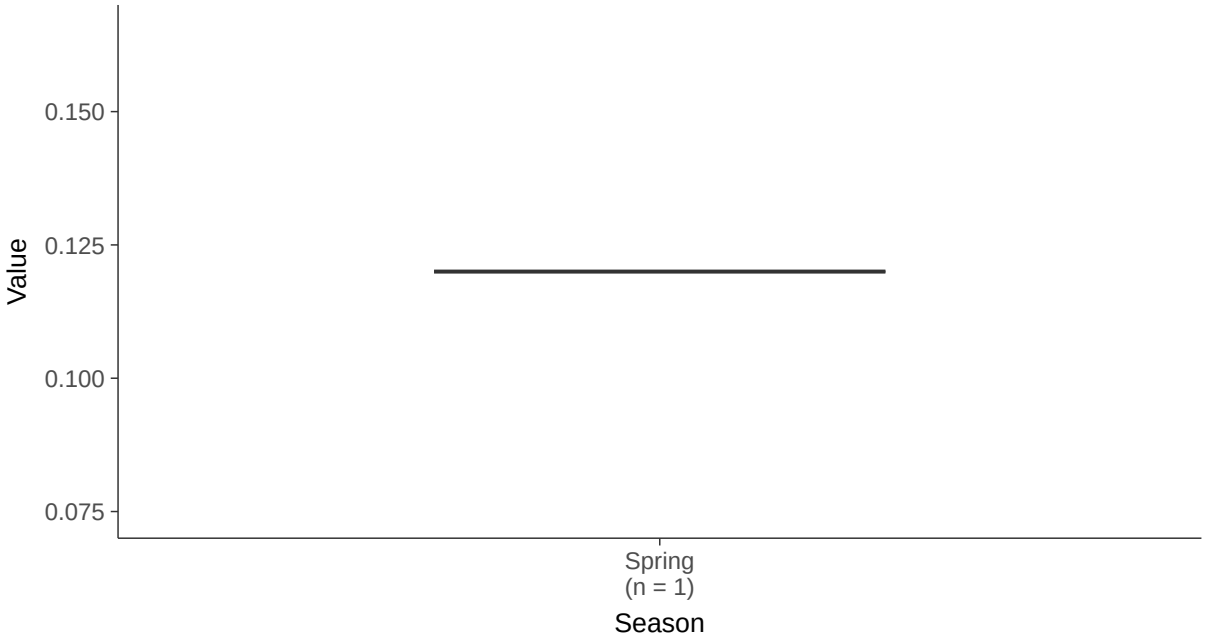
Boxplot

Lithium, MW-38 (mg/L)



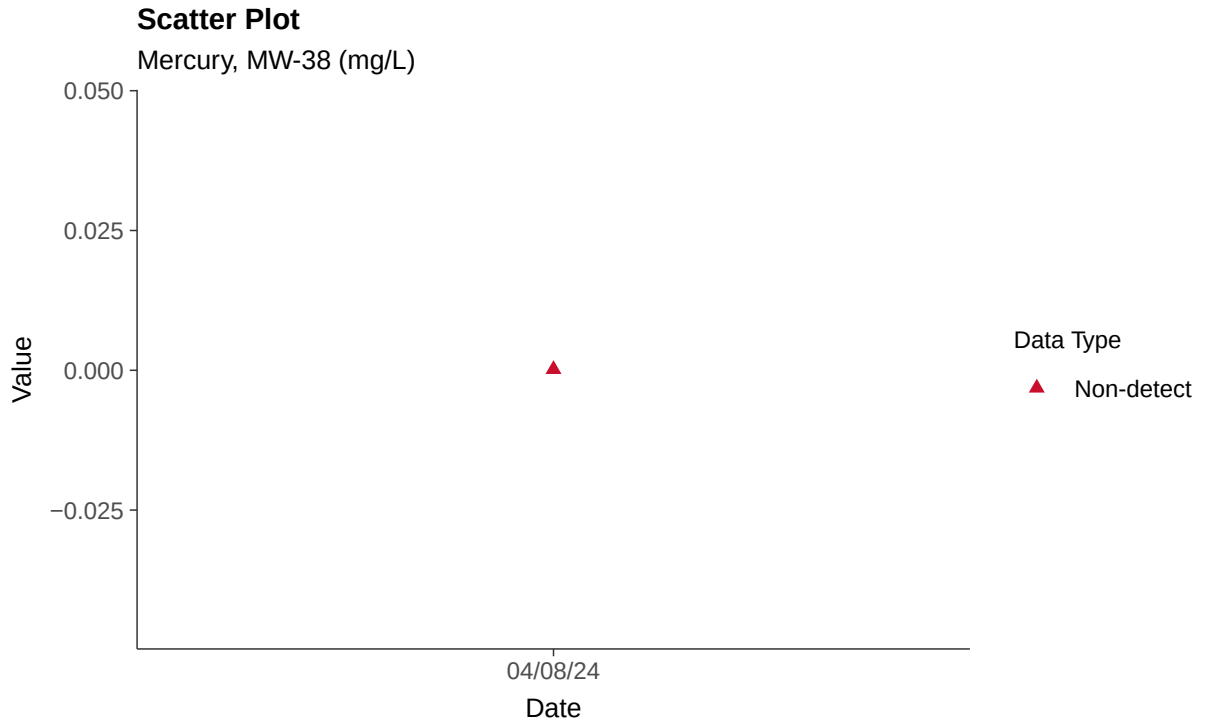
Boxplot by Season

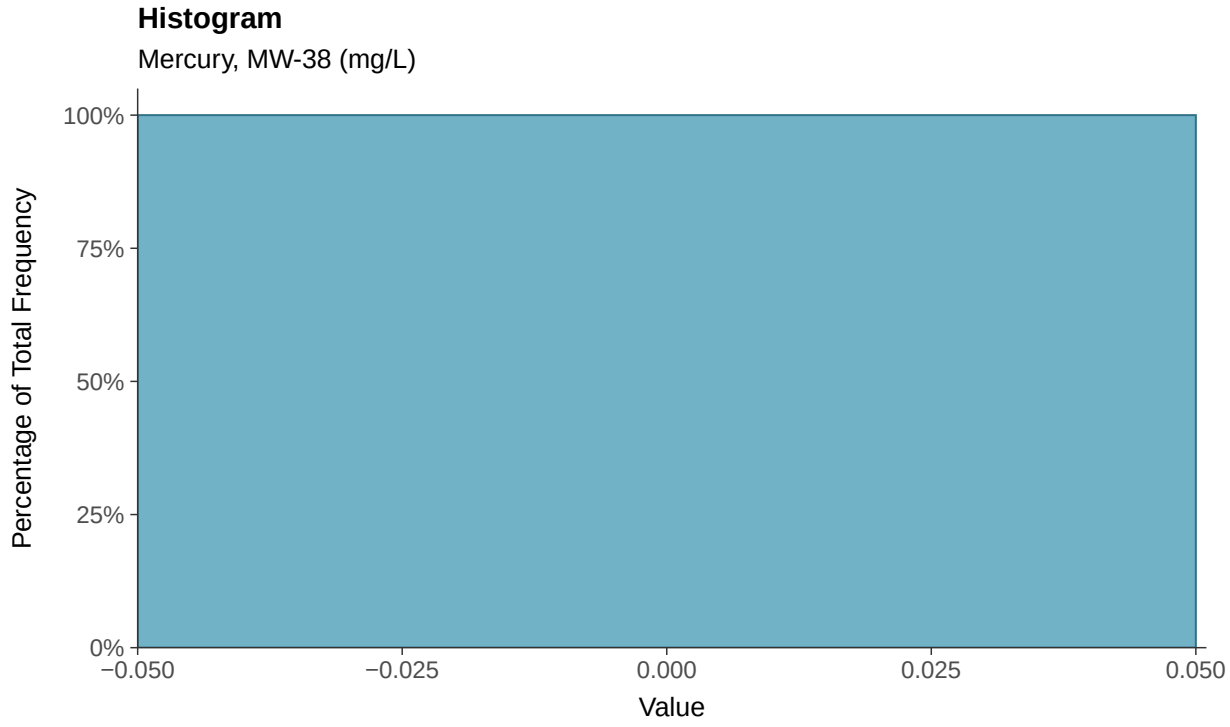
Lithium, MW-38 (mg/L)



Appendix IV: Mercury, MW-38

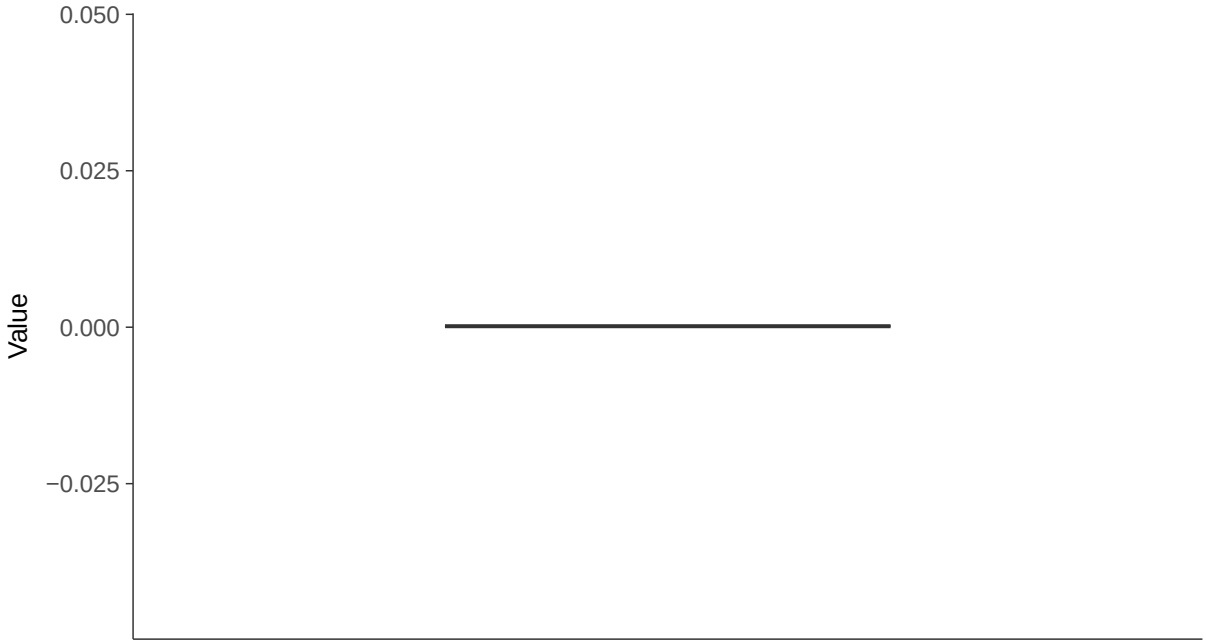
ID: 2_48_5_117





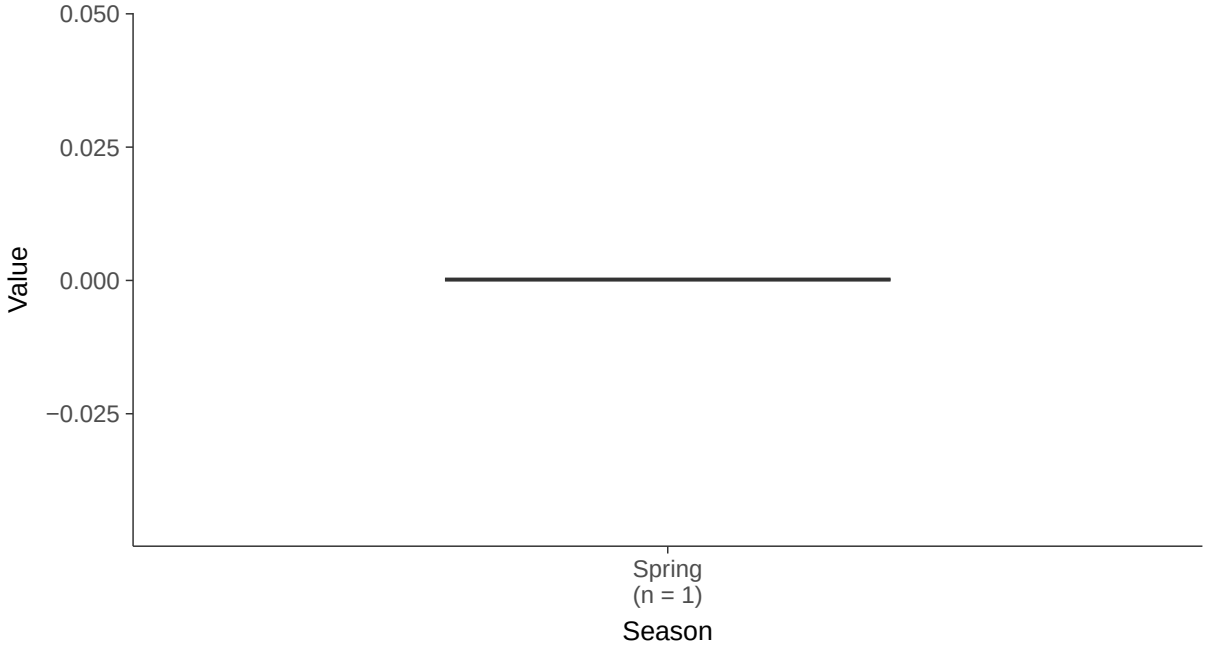
Boxplot

Mercury, MW-38 (mg/L)



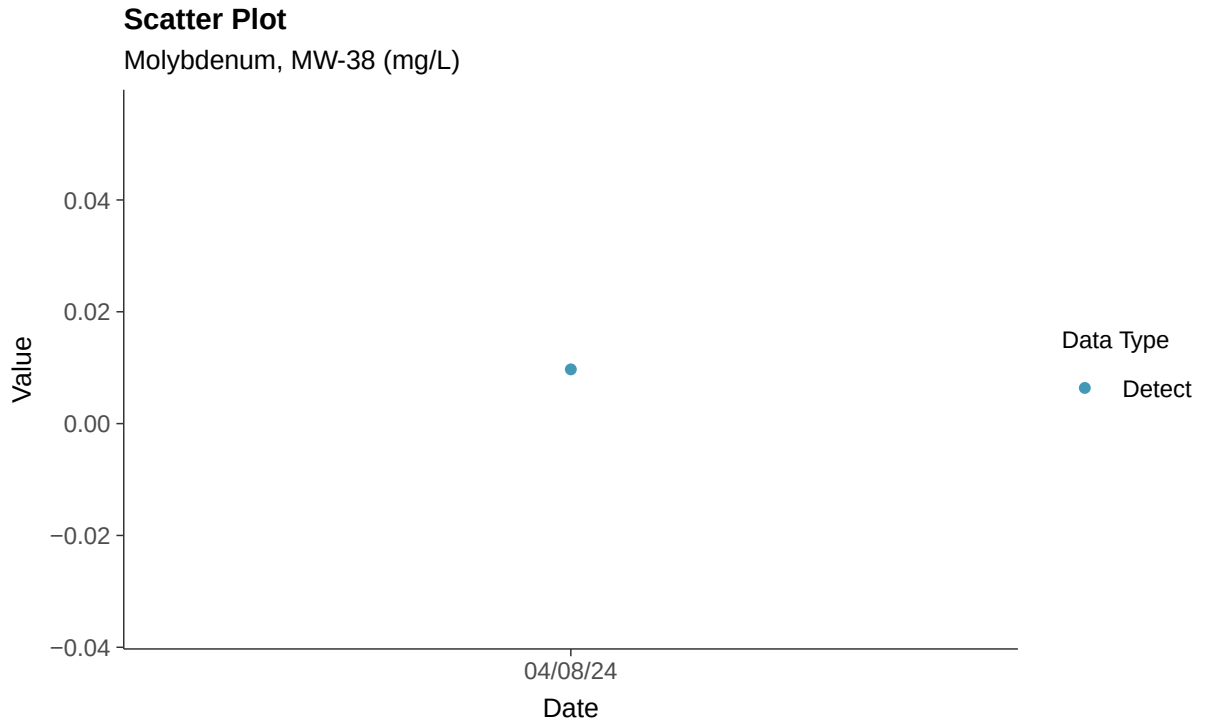
Boxplot by Season

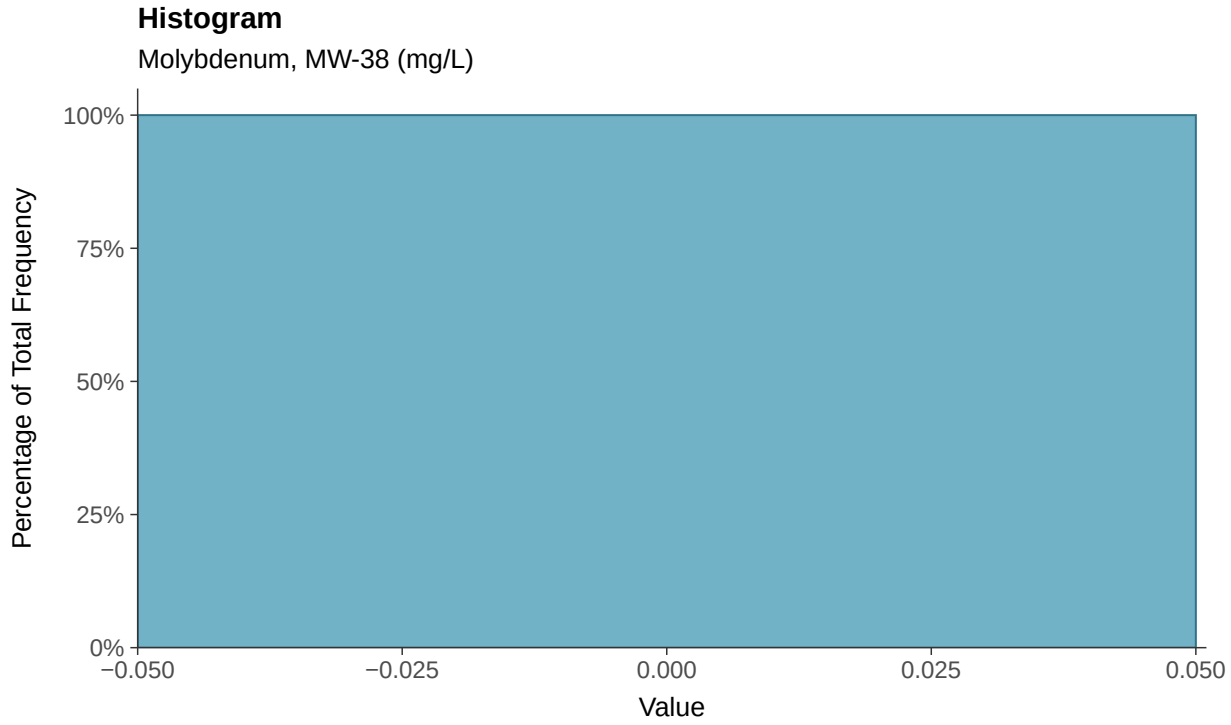
Mercury, MW-38 (mg/L)



Appendix IV: Molybdenum, MW-38

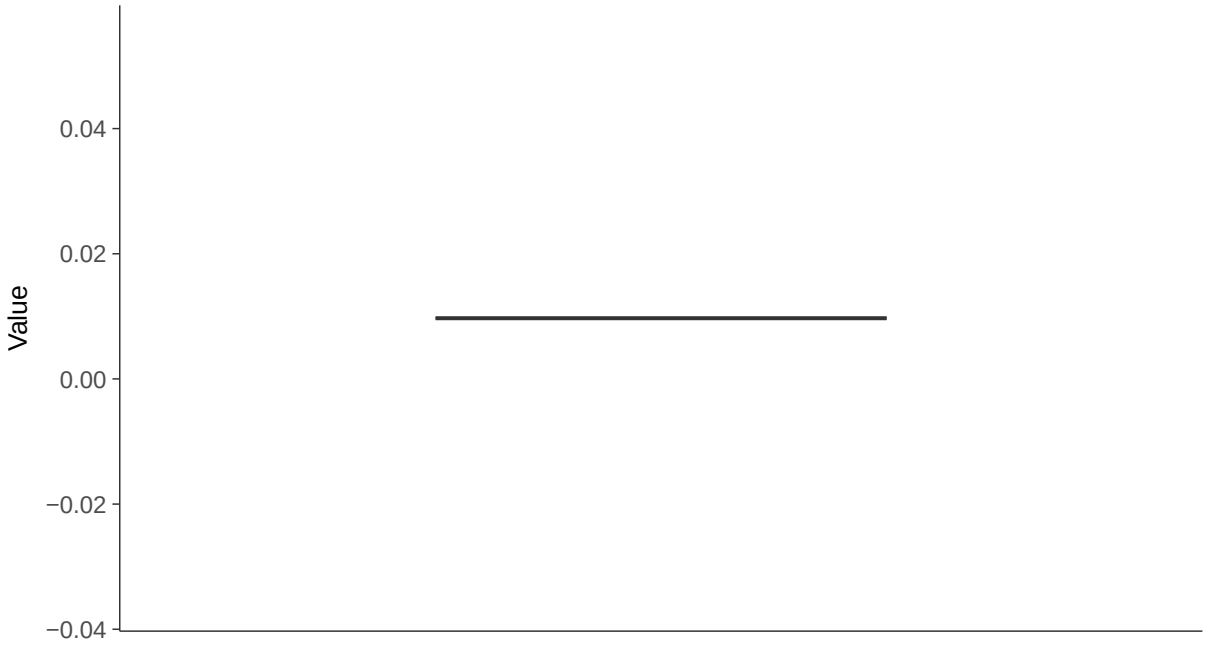
ID: 2_48_5_118





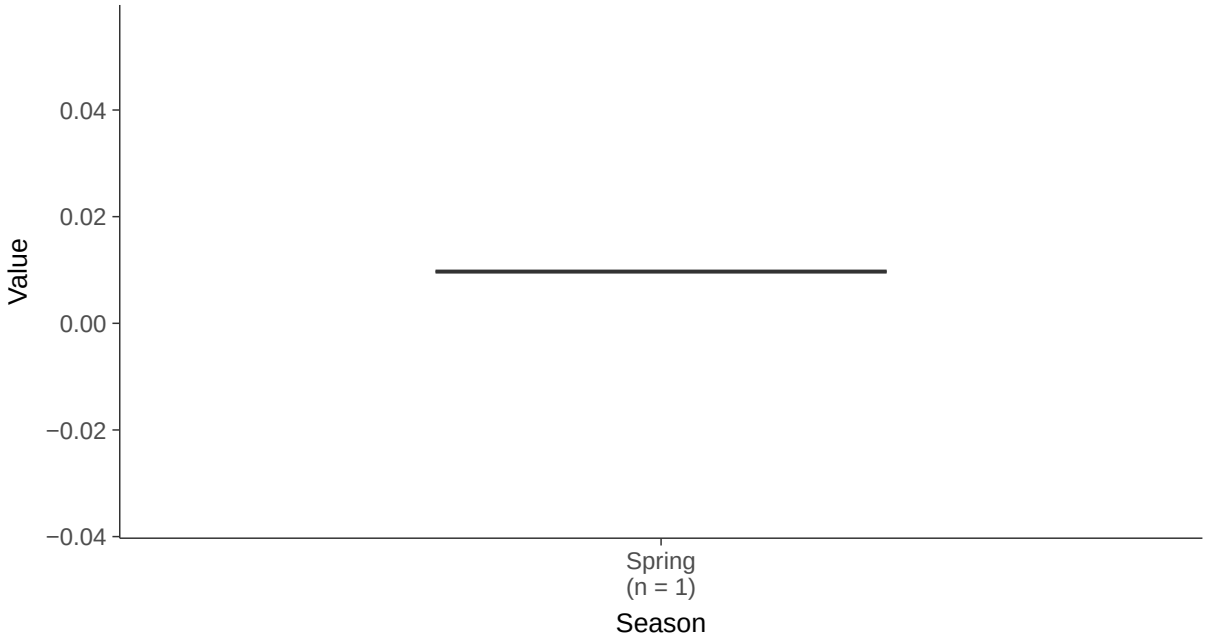
Boxplot

Molybdenum, MW-38 (mg/L)



Boxplot by Season

Molybdenum, MW-38 (mg/L)

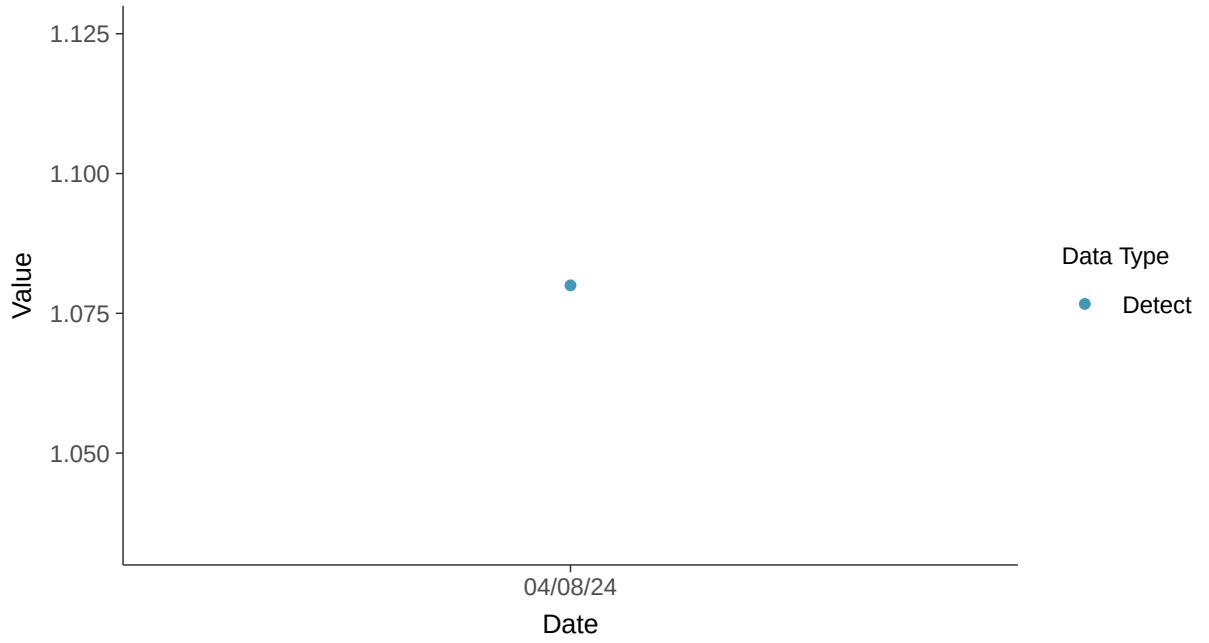


Appendix IV: Radium 226 and 228, MW-38

ID: 2_48_5_121

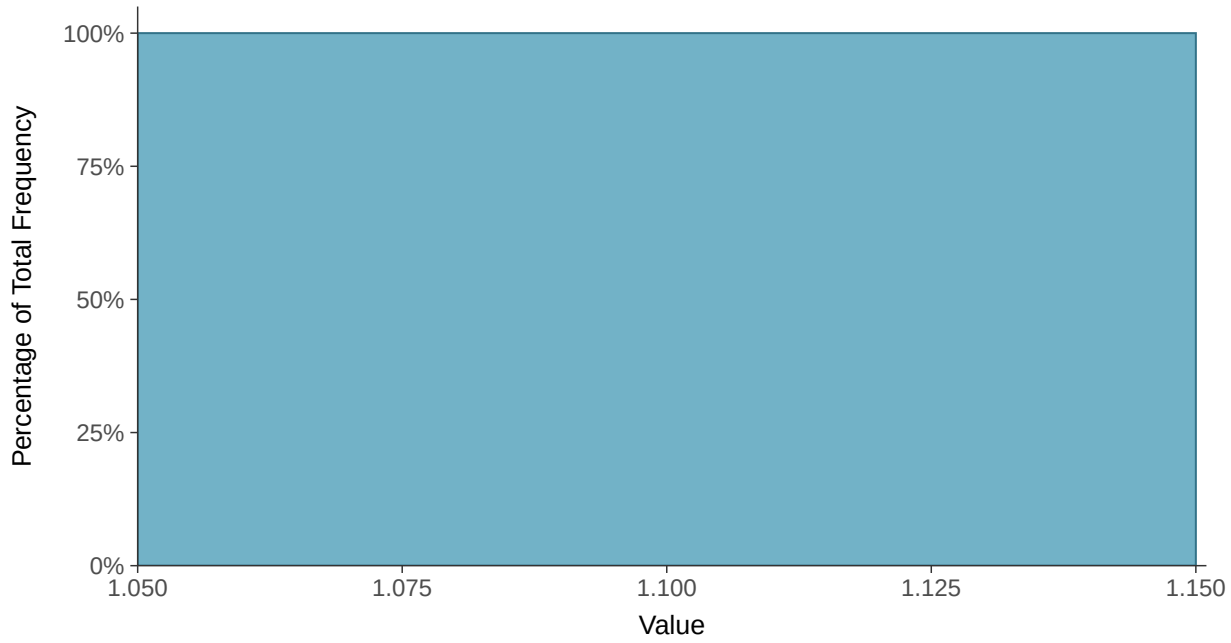
Scatter Plot

Radium 226 and 228, MW-38 (pCi/L)



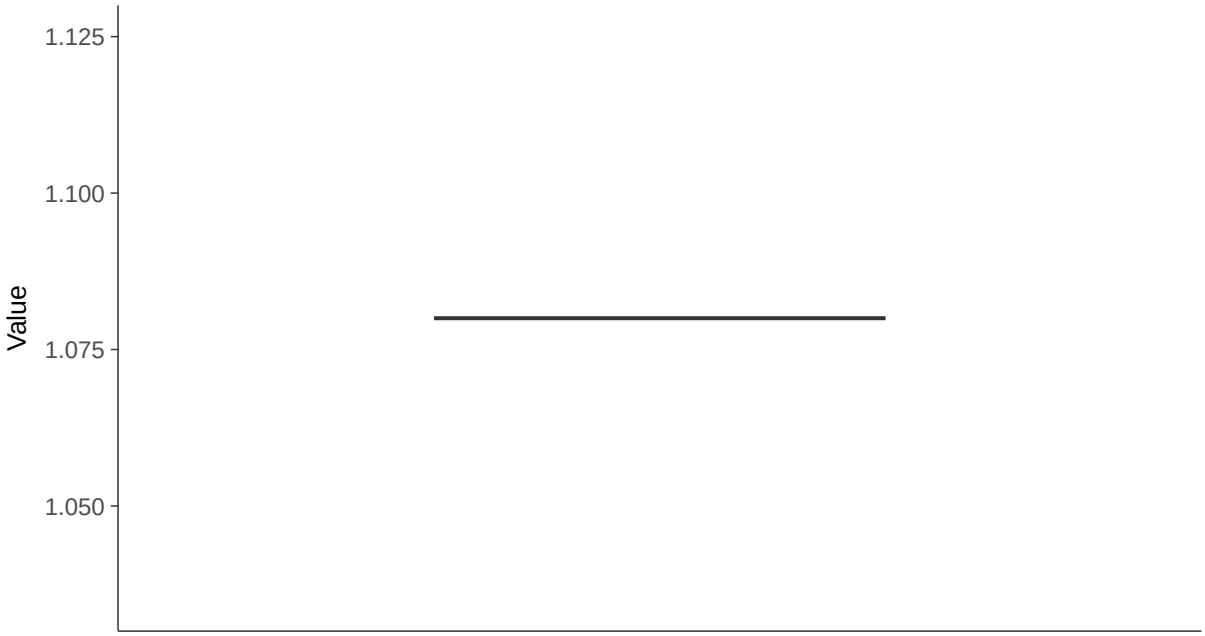
Histogram

Radium 226 and 228, MW-38 (pCi/L)



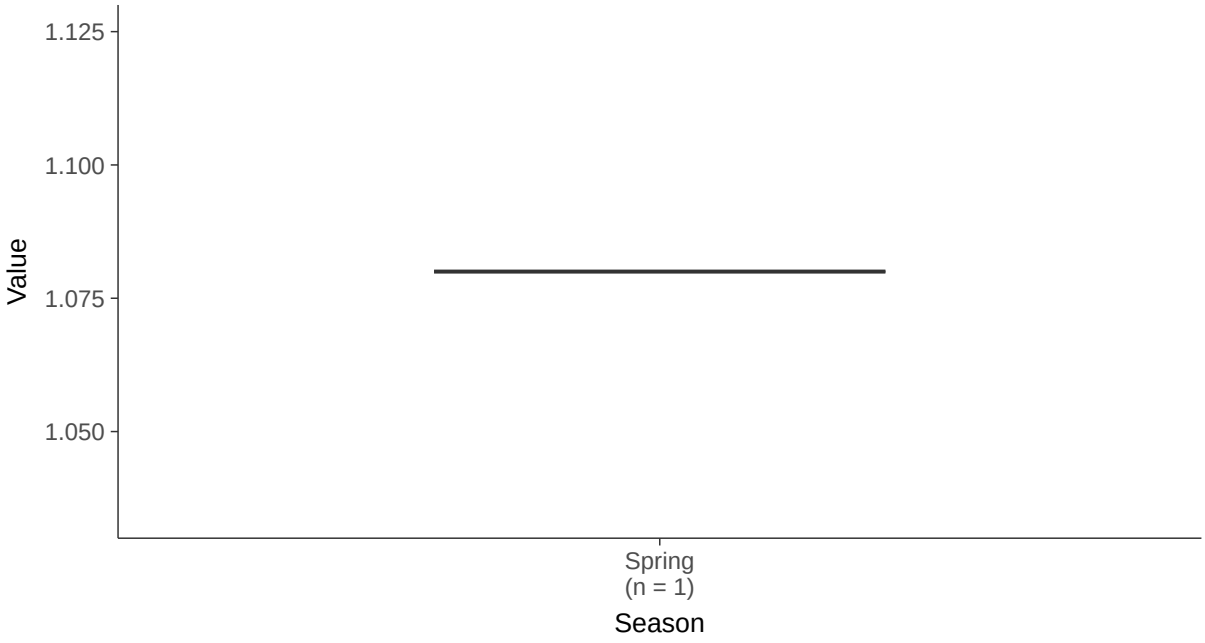
Boxplot

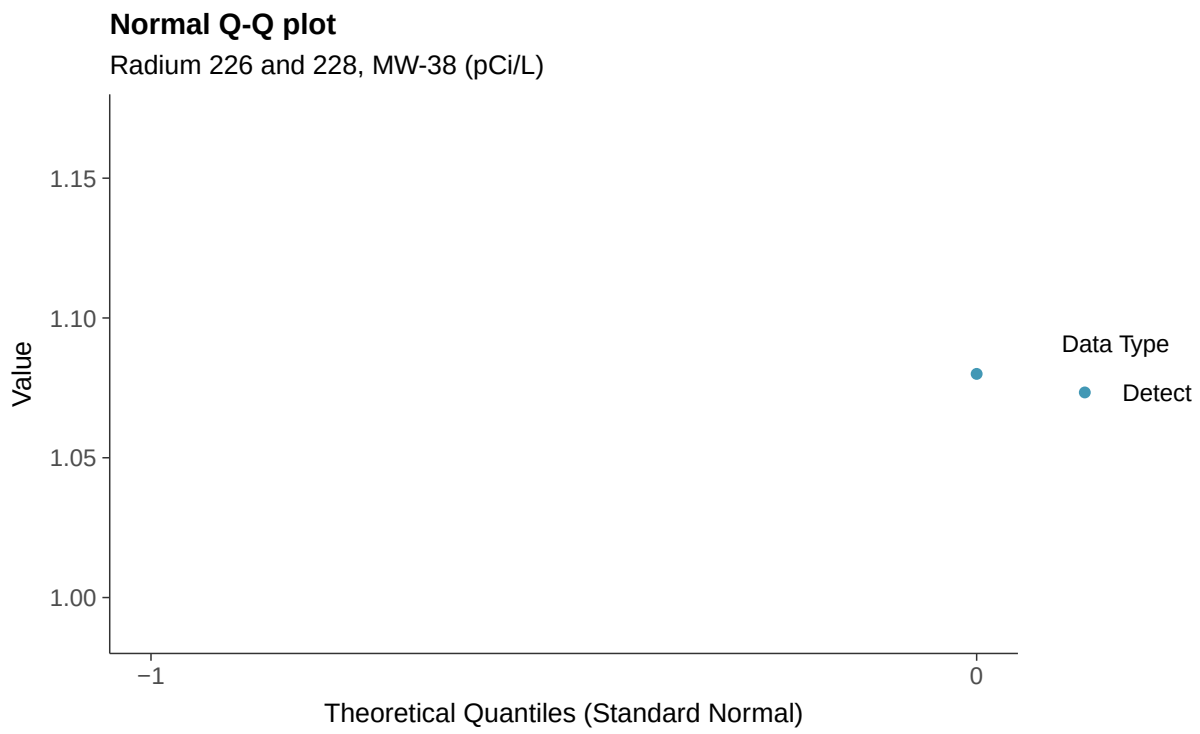
Radium 226 and 228, MW-38 (pCi/L)



Boxplot by Season

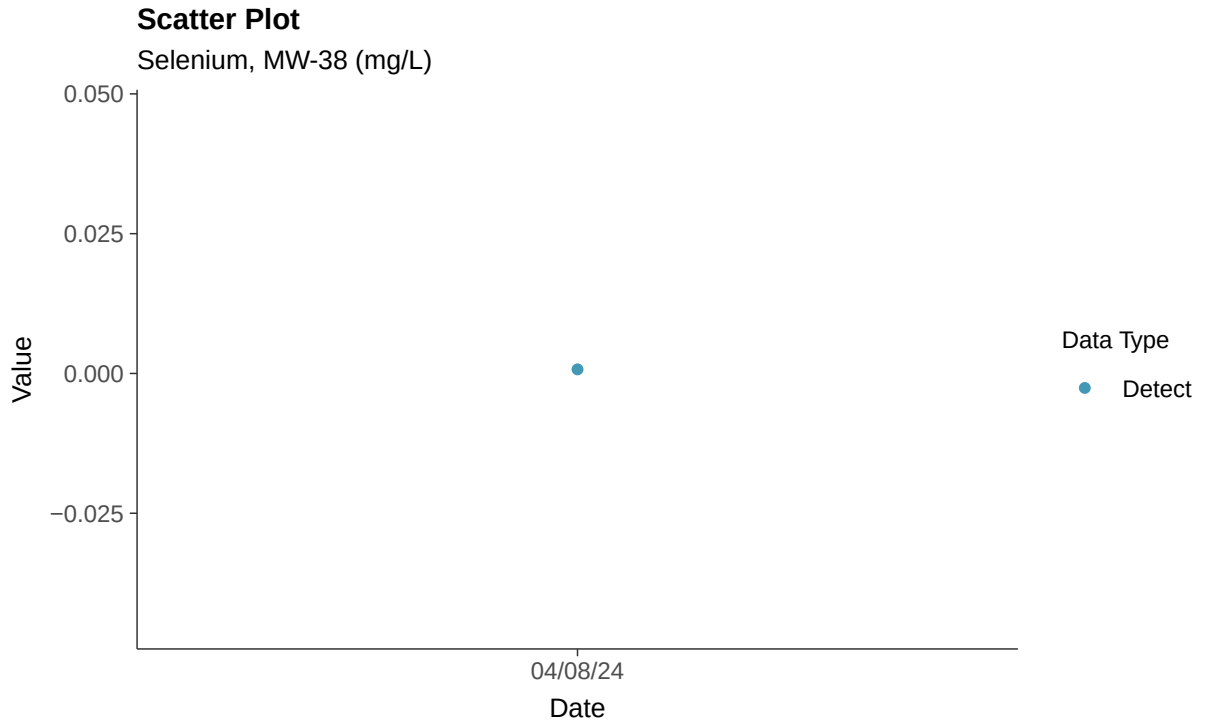
Radium 226 and 228, MW-38 (pCi/L)

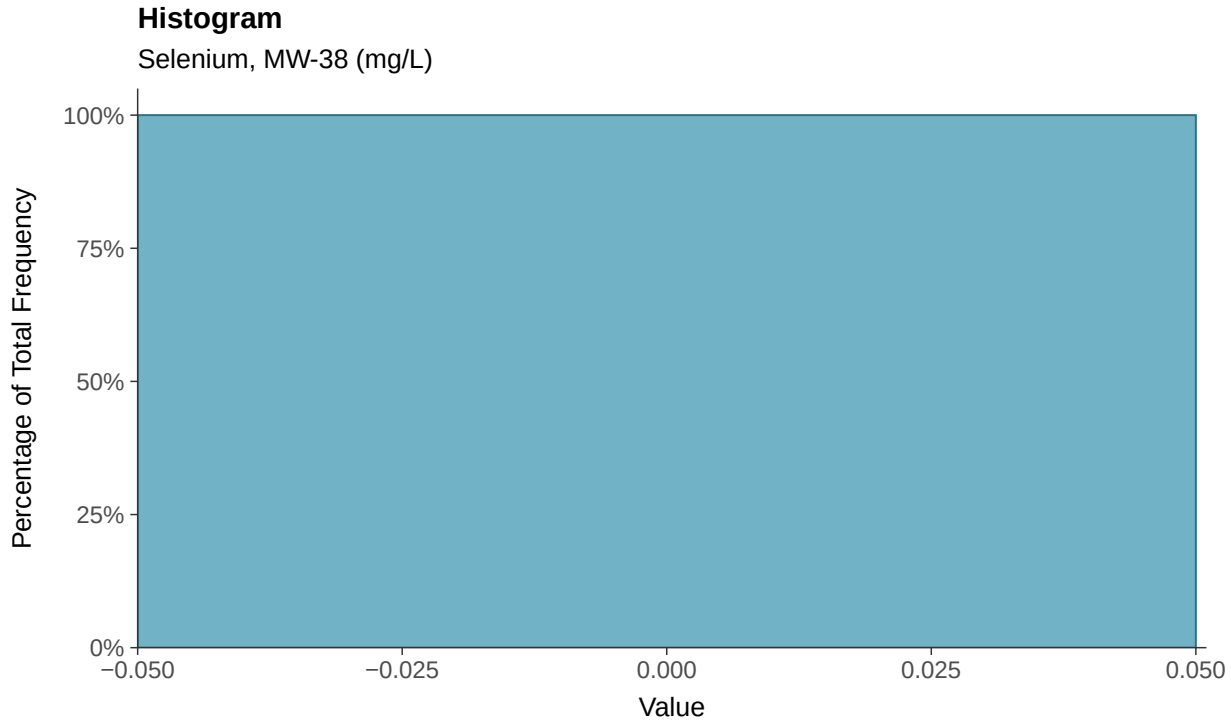



Normal Q-Q plot
Radium 226 and 228, MW-38 (pCi/L)
Value
1.15
1.10
1.05
1.00
−1
0
Theoretical Quantiles (Standard Normal)
Data Type
Detect

Appendix IV: Selenium, MW-38

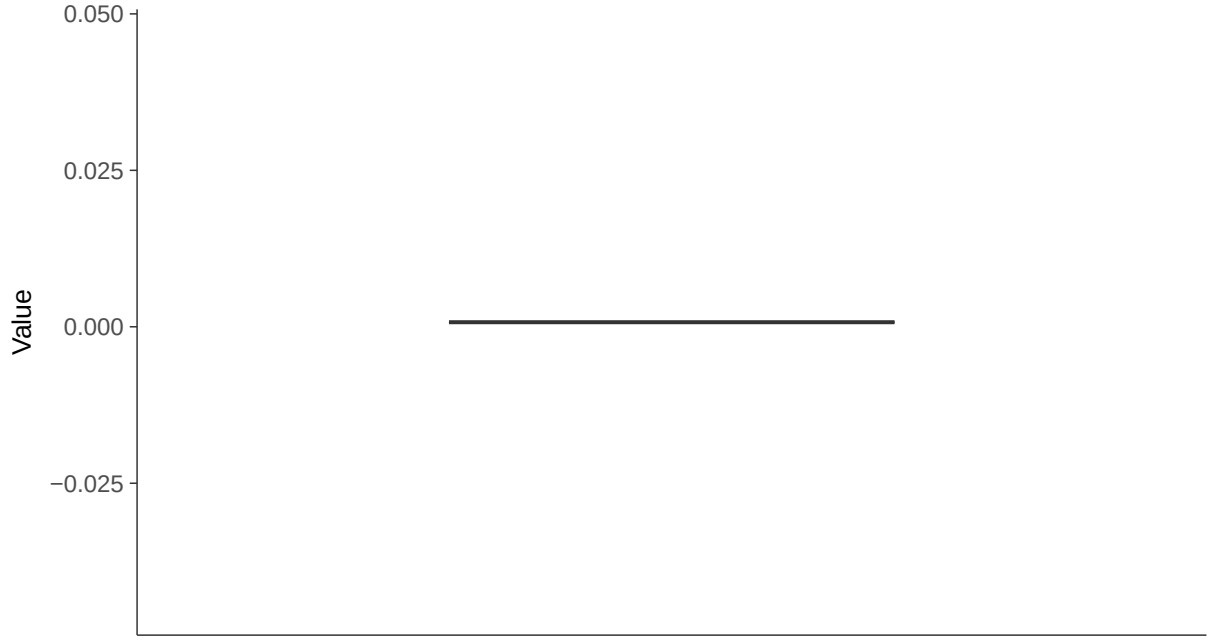
ID: 2_48_5_122





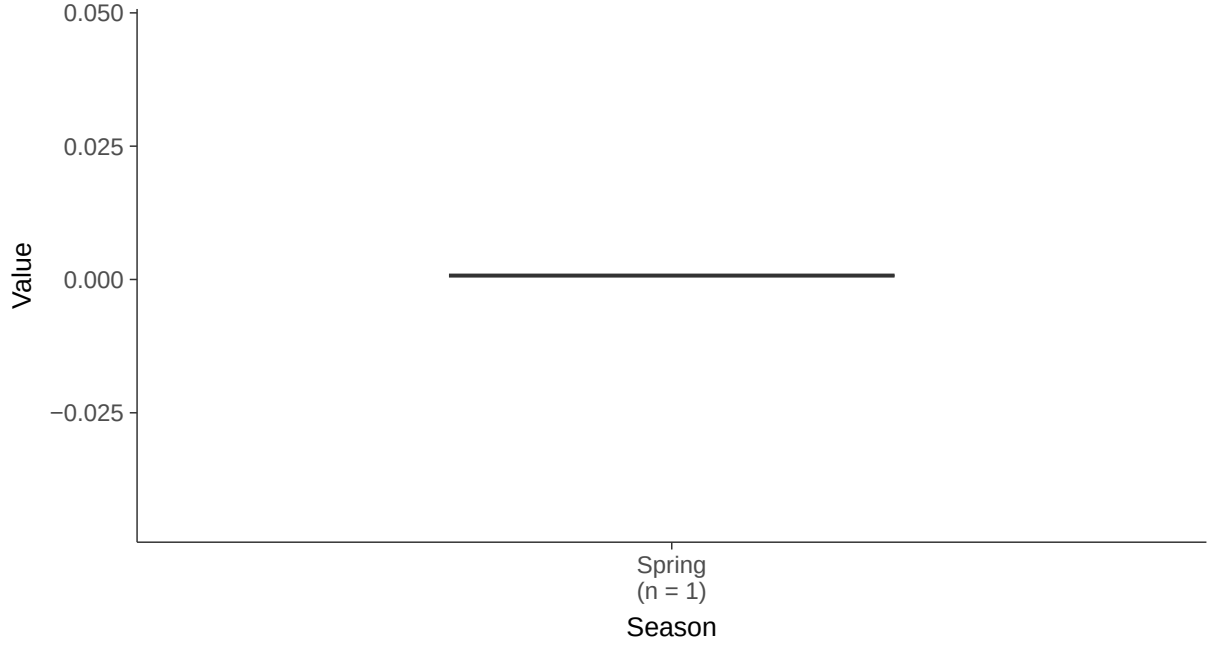
Boxplot

Selenium, MW-38 (mg/L)



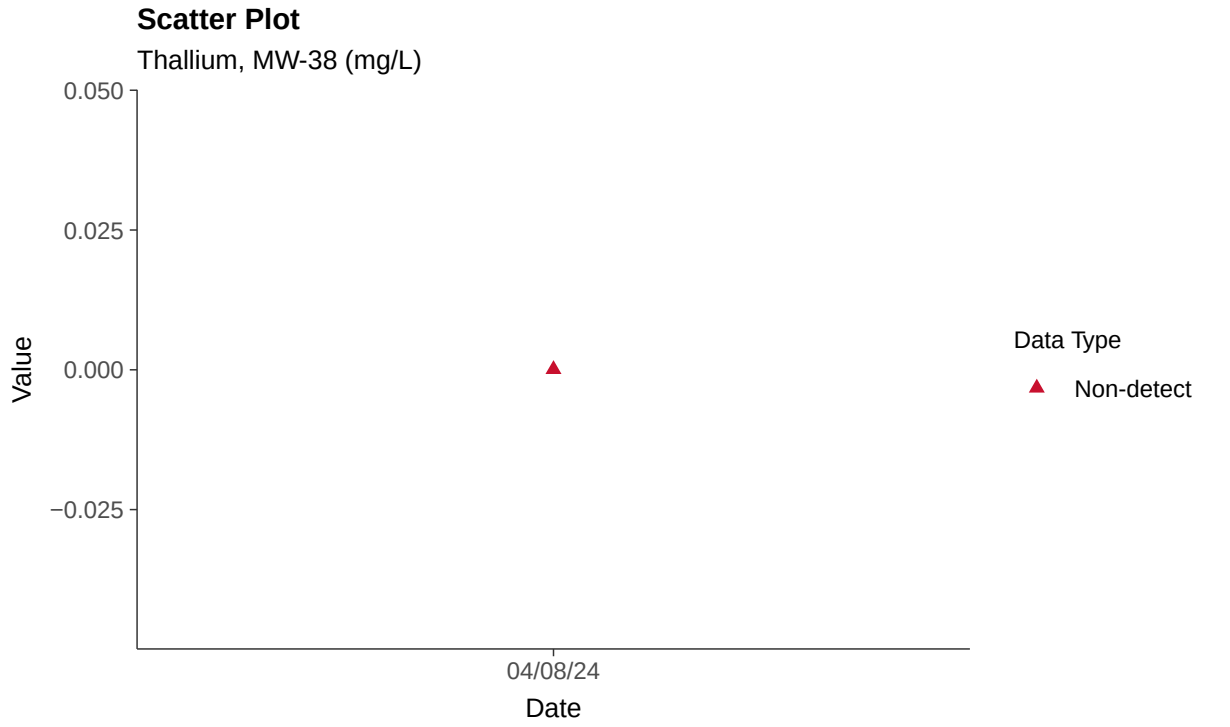
Boxplot by Season

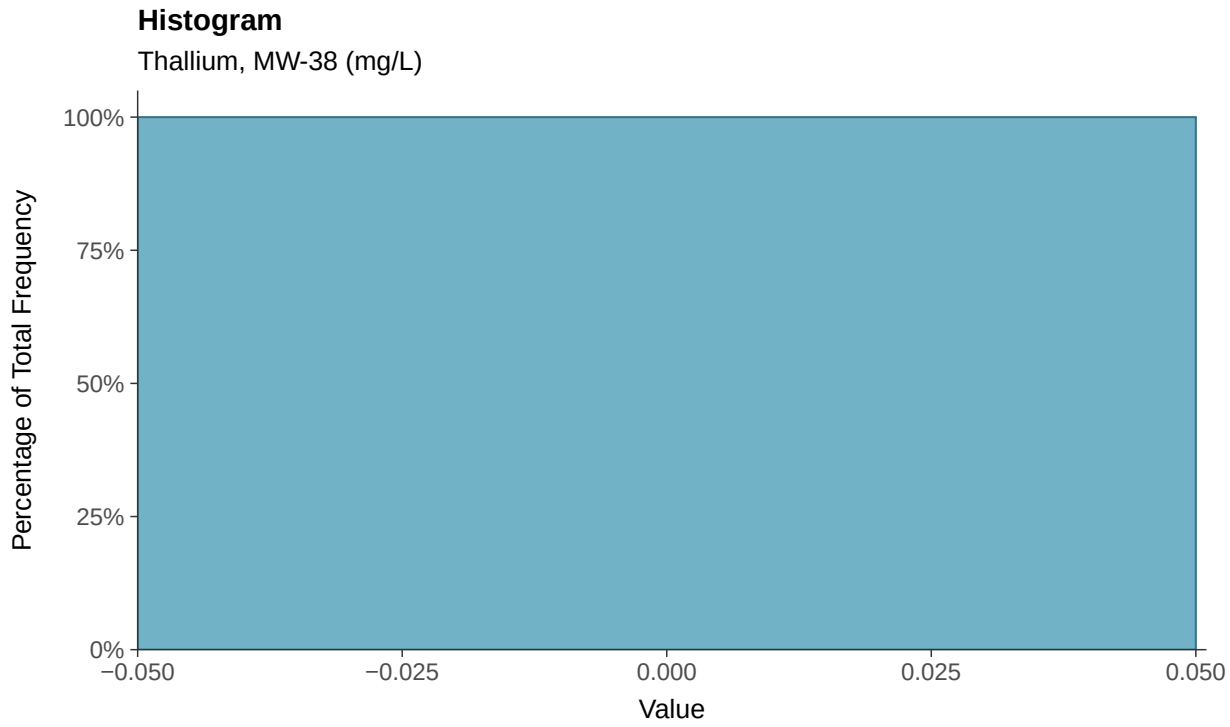
Selenium, MW-38 (mg/L)



Appendix IV: Thallium, MW-38

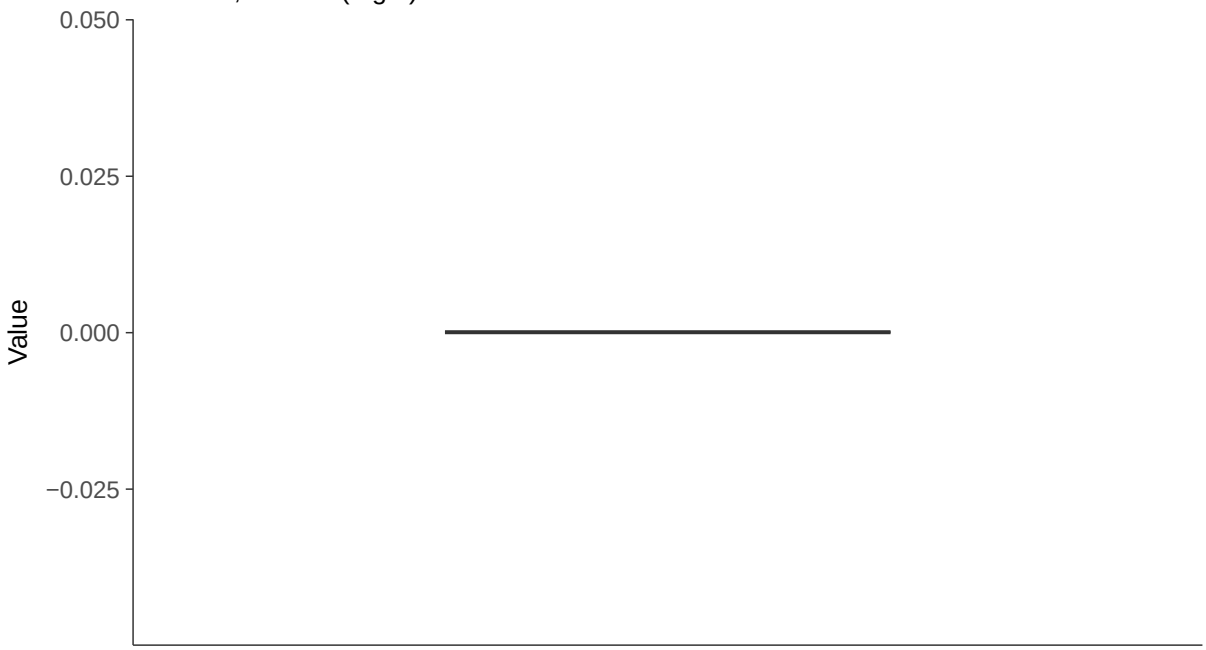
ID: 2_48_5_125





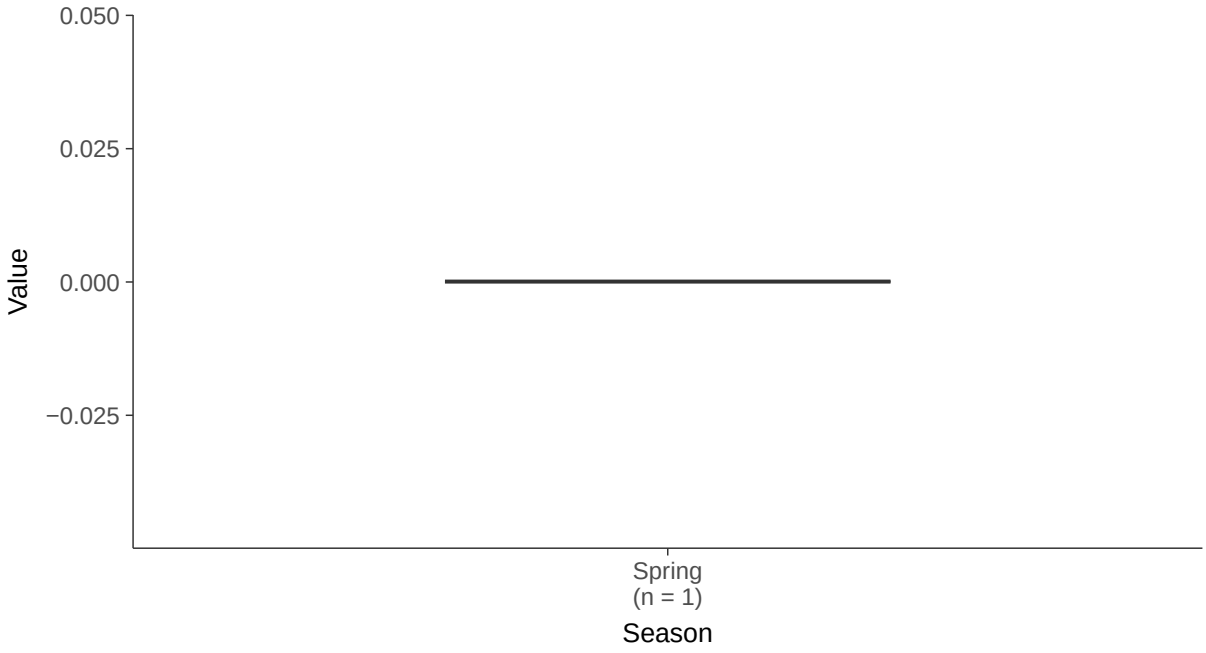
Boxplot

Thallium, MW-38 (mg/L)



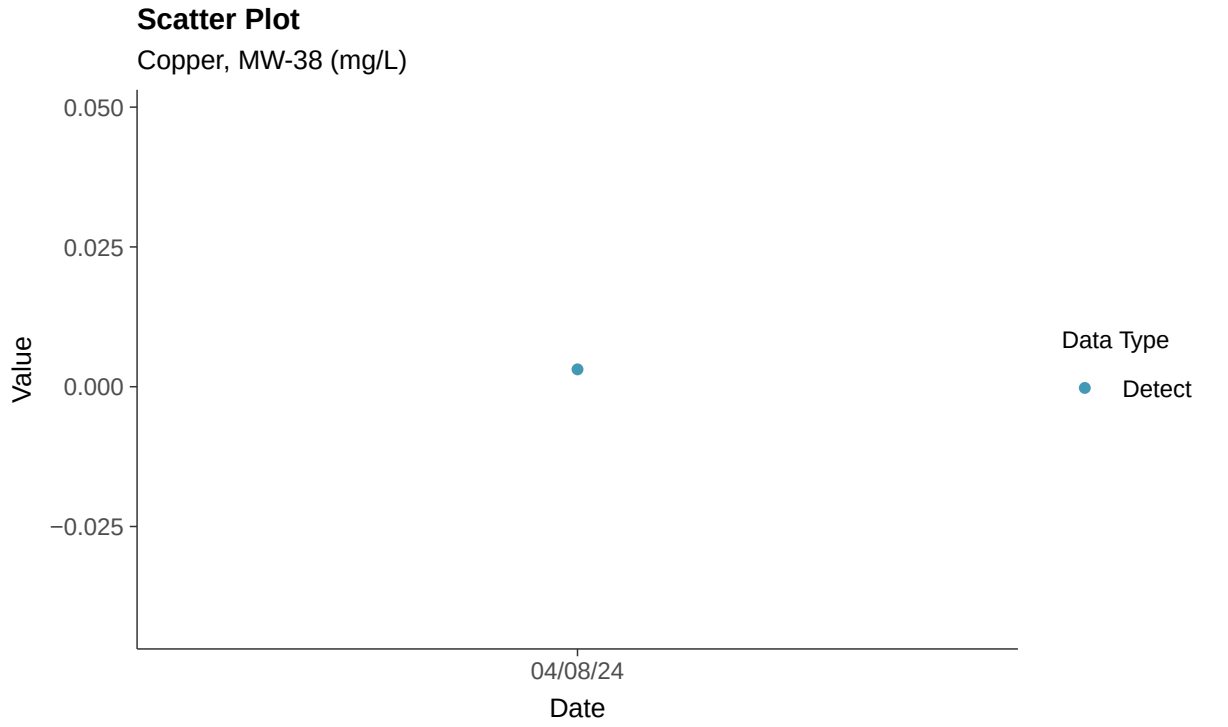
Boxplot by Season

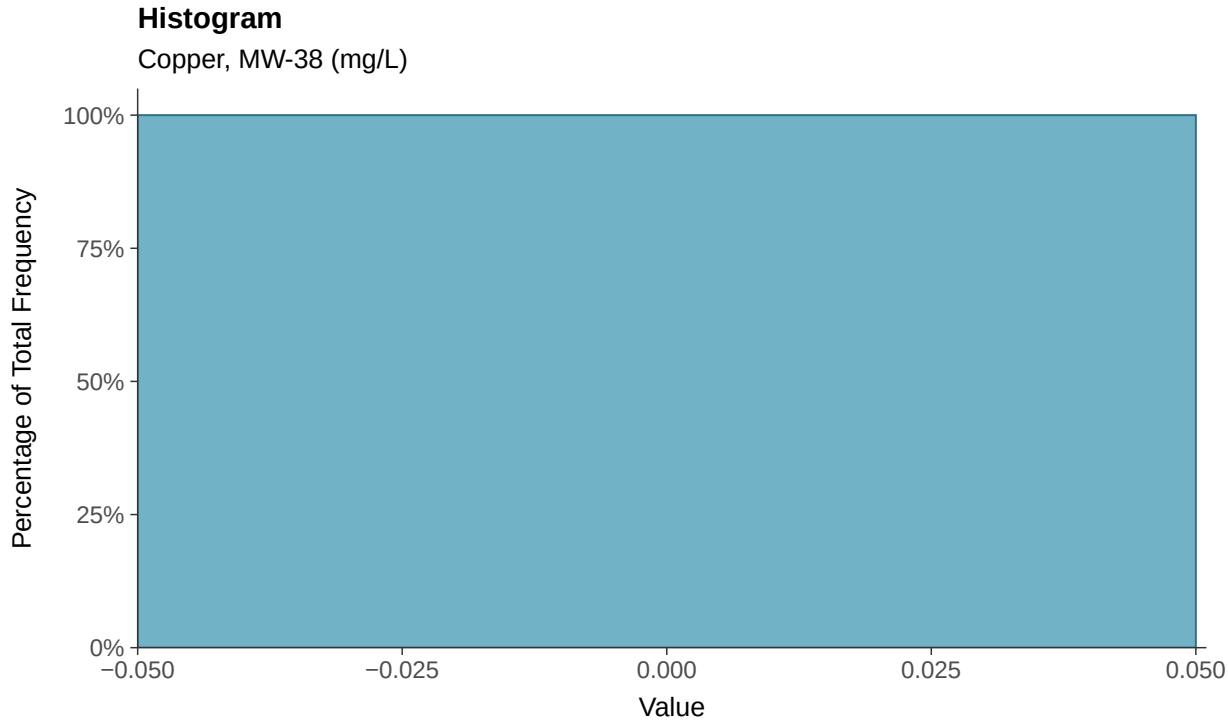
Thallium, MW-38 (mg/L)



Part 115: Copper, MW-38

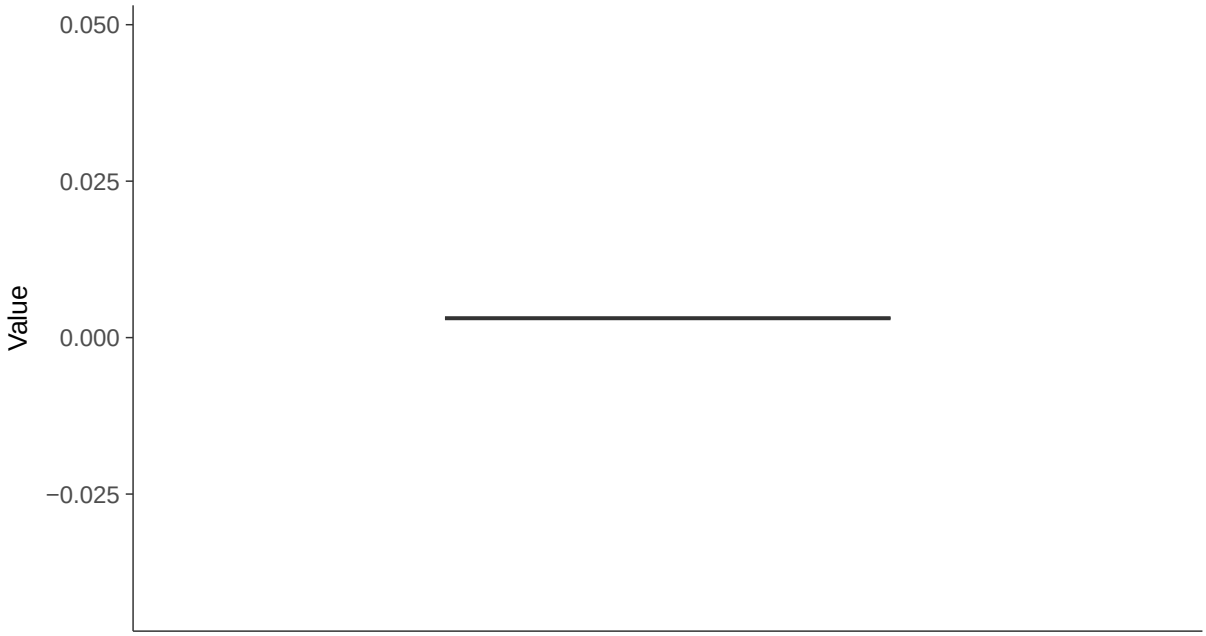
ID: 2_48_6_111





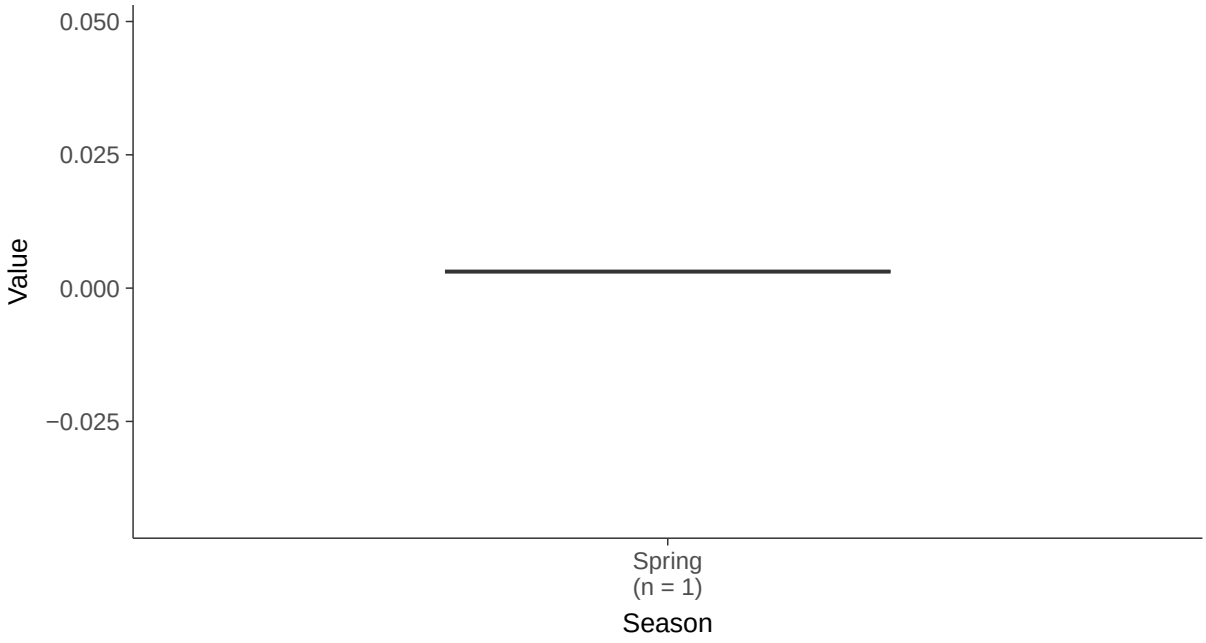
Boxplot

Copper, MW-38 (mg/L)



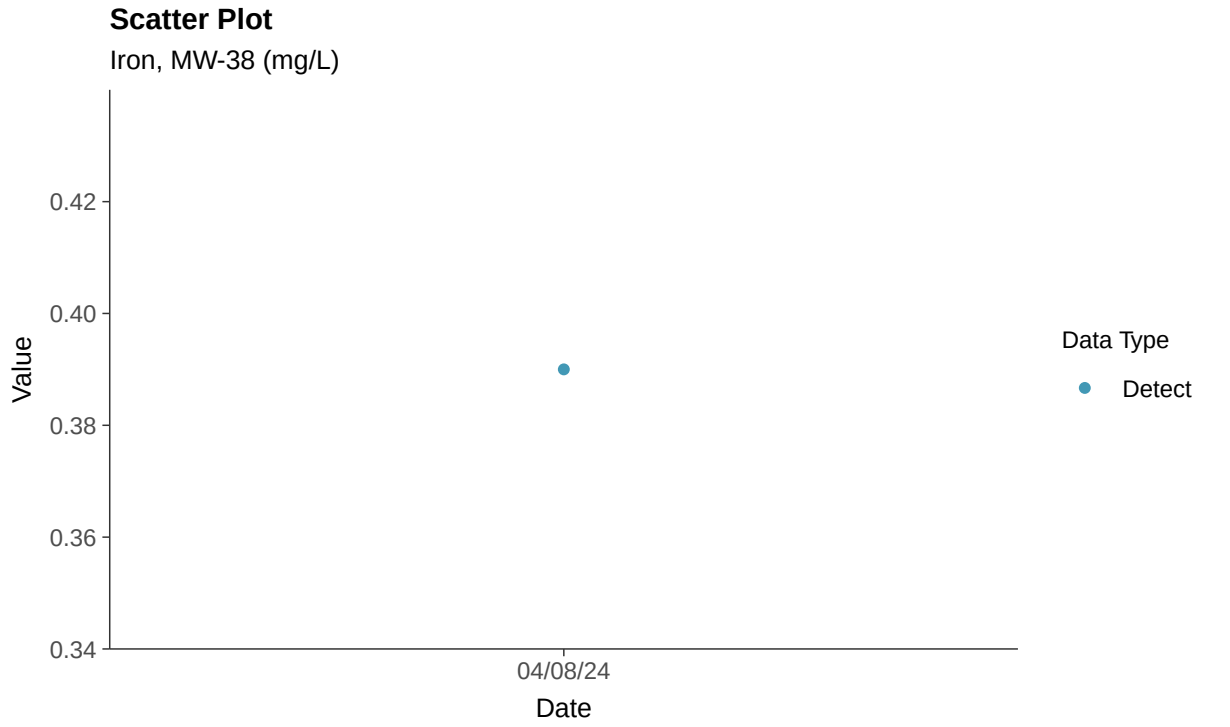
Boxplot by Season

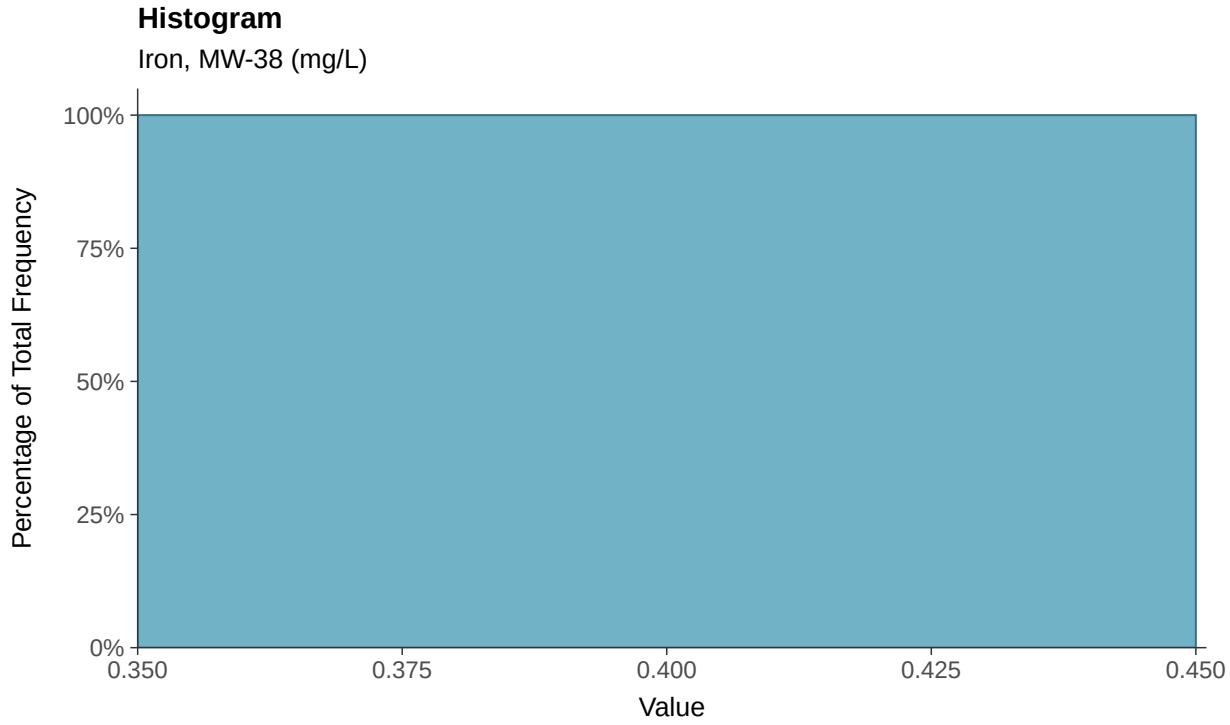
Copper, MW-38 (mg/L)



Part 115: Iron, MW-38

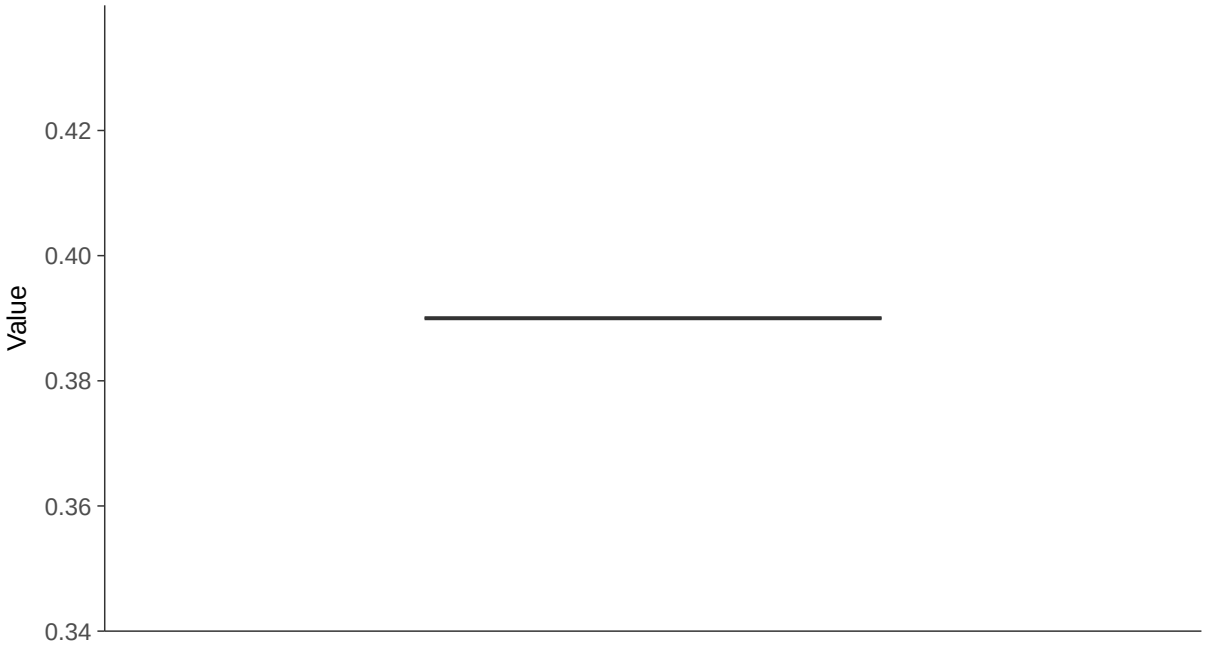
ID: 2_48_6_114





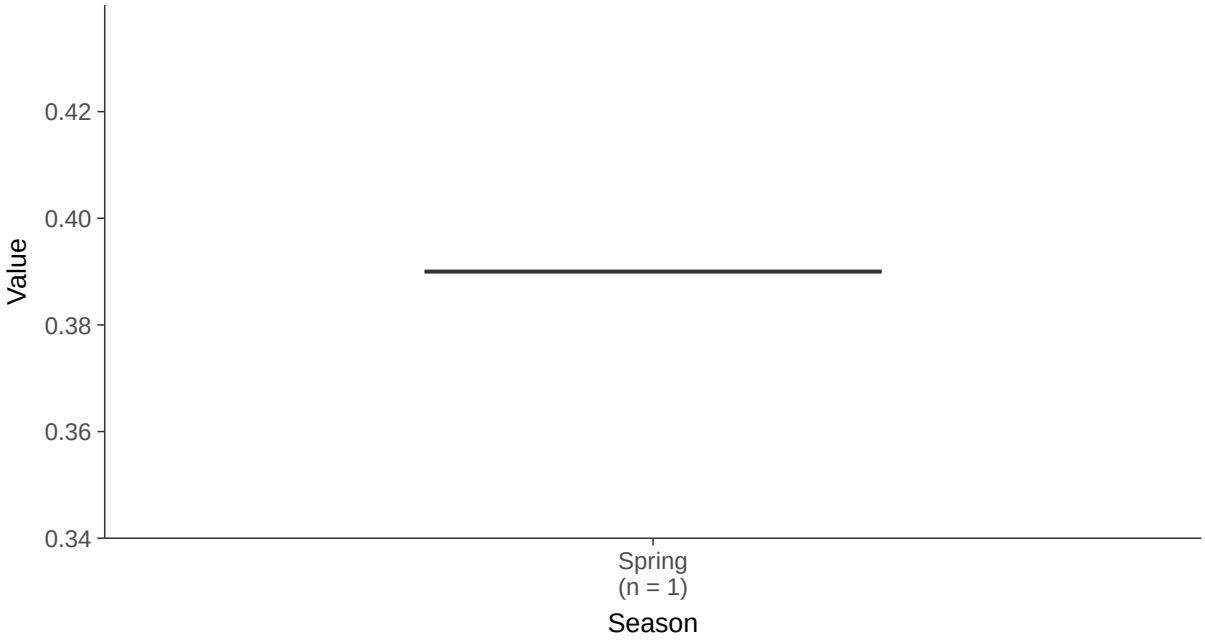
Boxplot

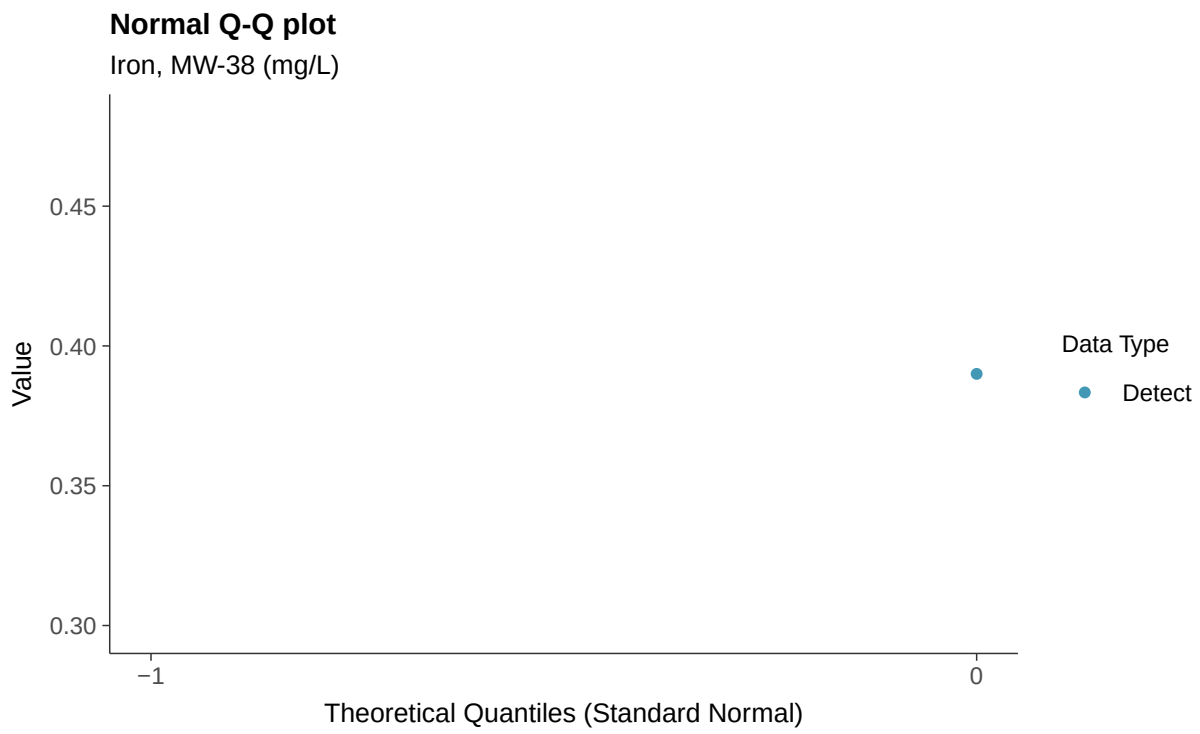
Iron, MW-38 (mg/L)



Boxplot by Season

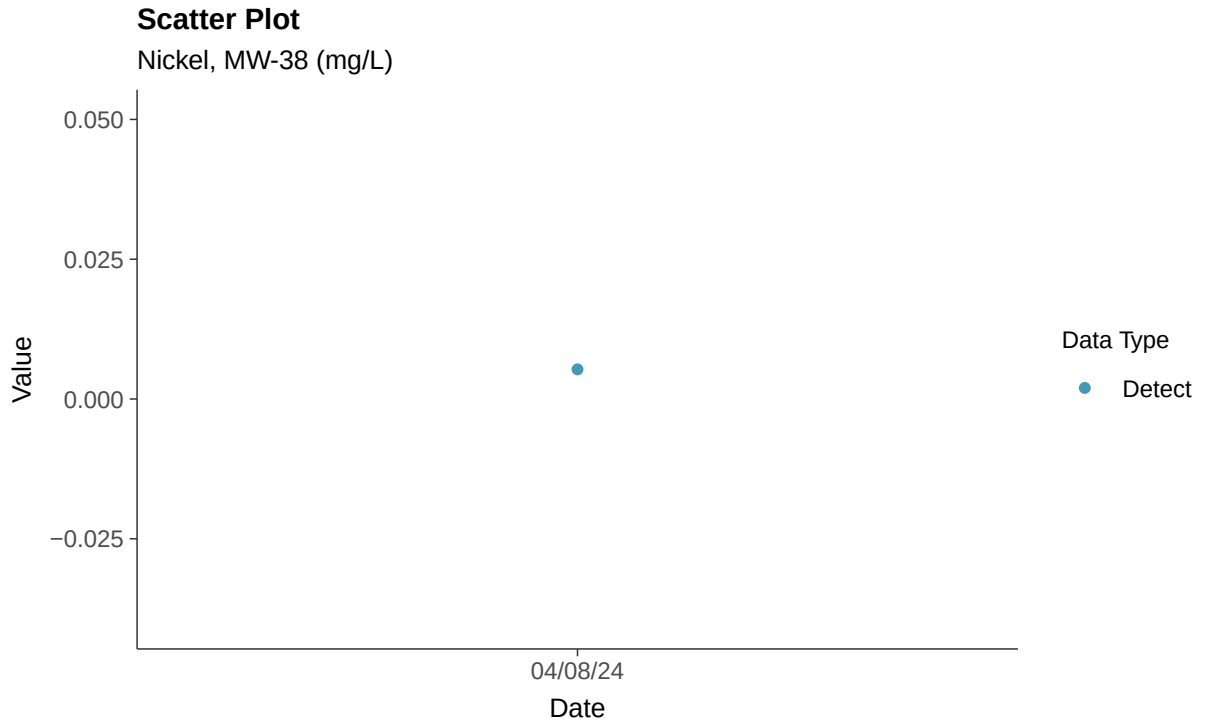
Iron, MW-38 (mg/L)

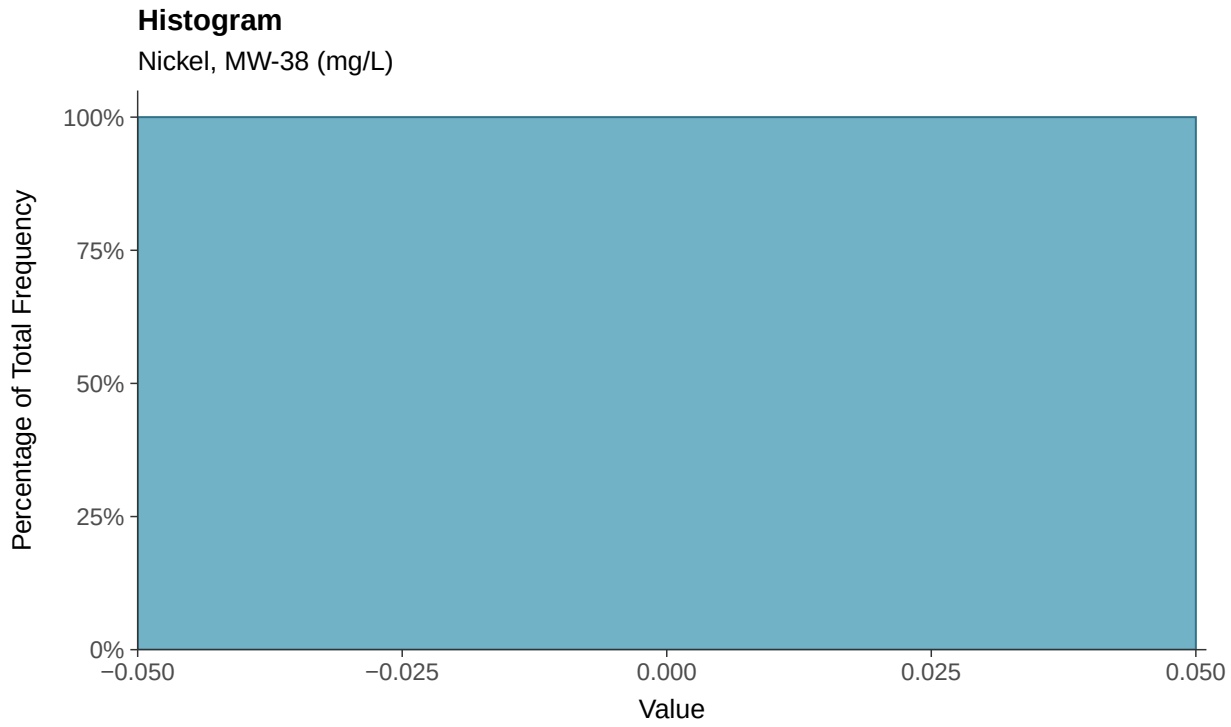



Normal Q-Q plot
Iron, MW-38 (mg/L)
Value
0.45
0.40
0.35
0.30
−1
0
Theoretical Quantiles (Standard Normal)
Data Type
Detect

Part 115: Nickel, MW-38

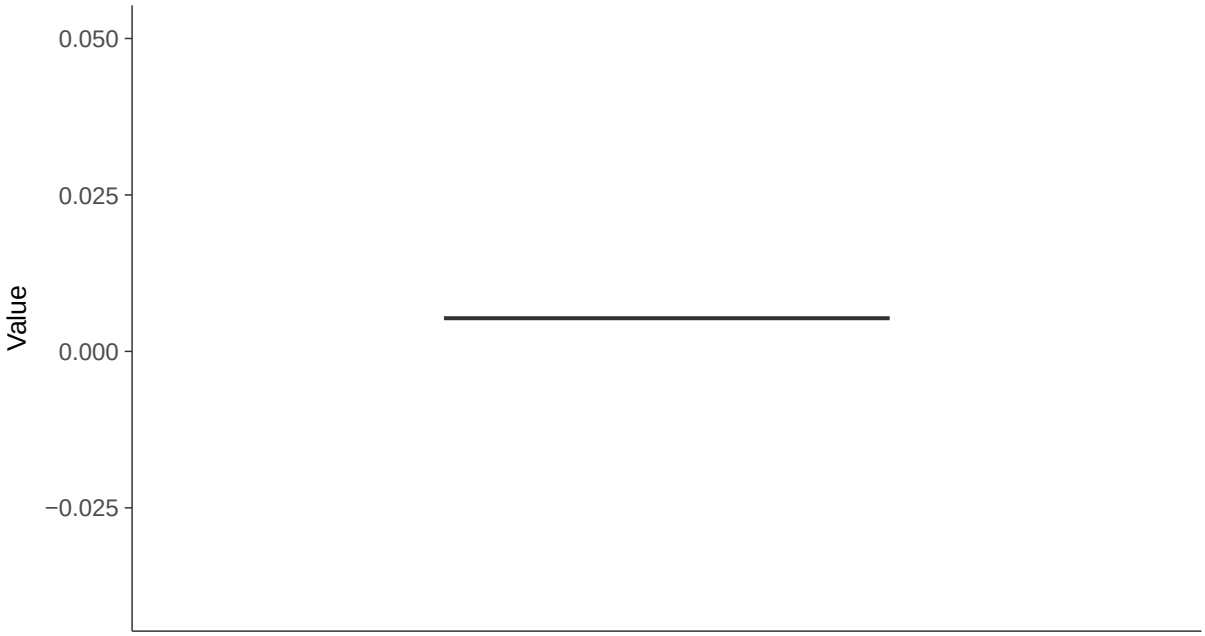
ID: 2_48_6_119





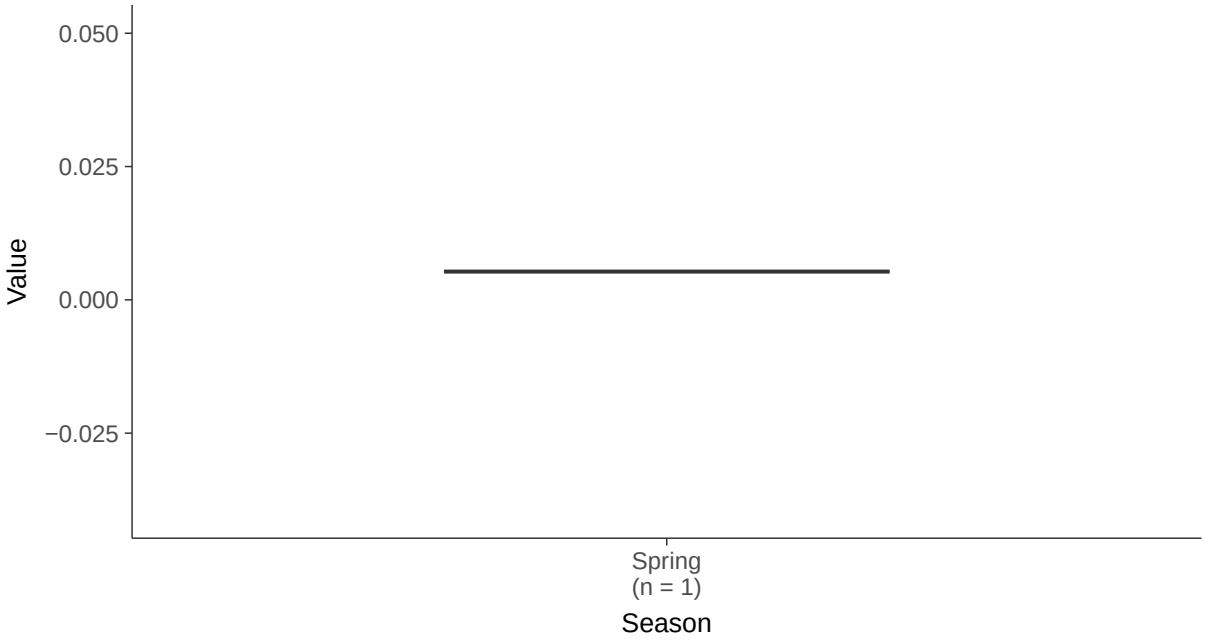
Boxplot

Nickel, MW-38 (mg/L)



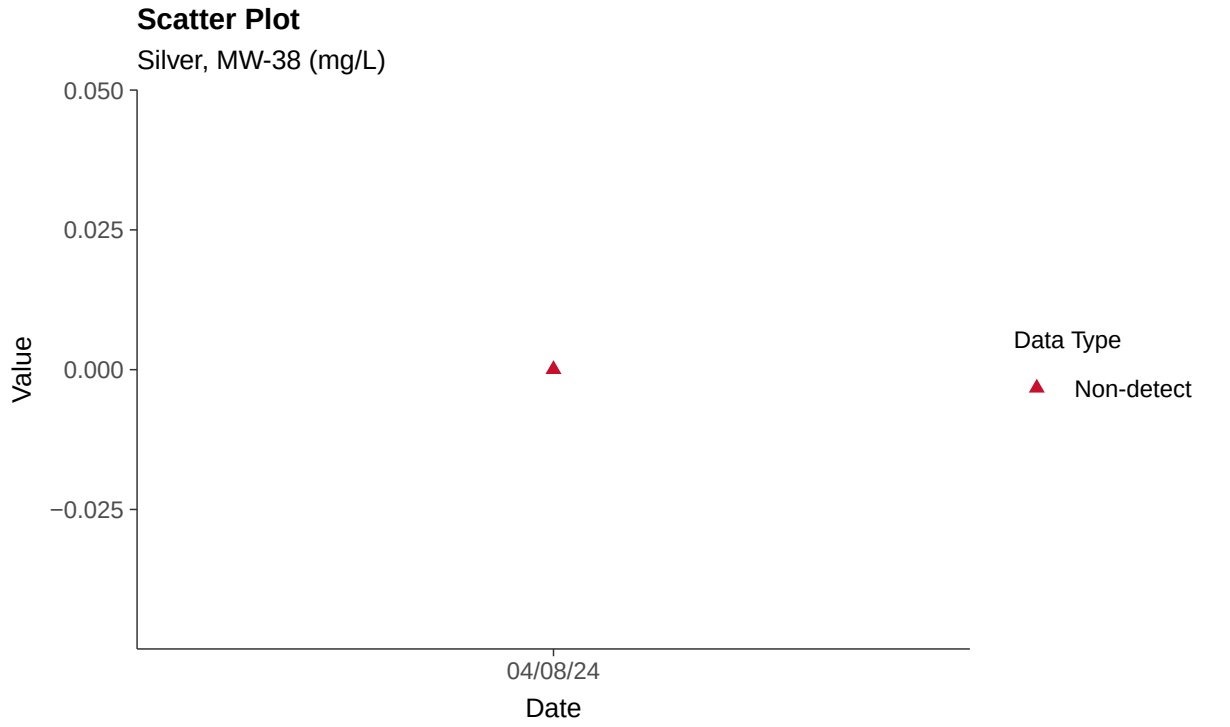
Boxplot by Season

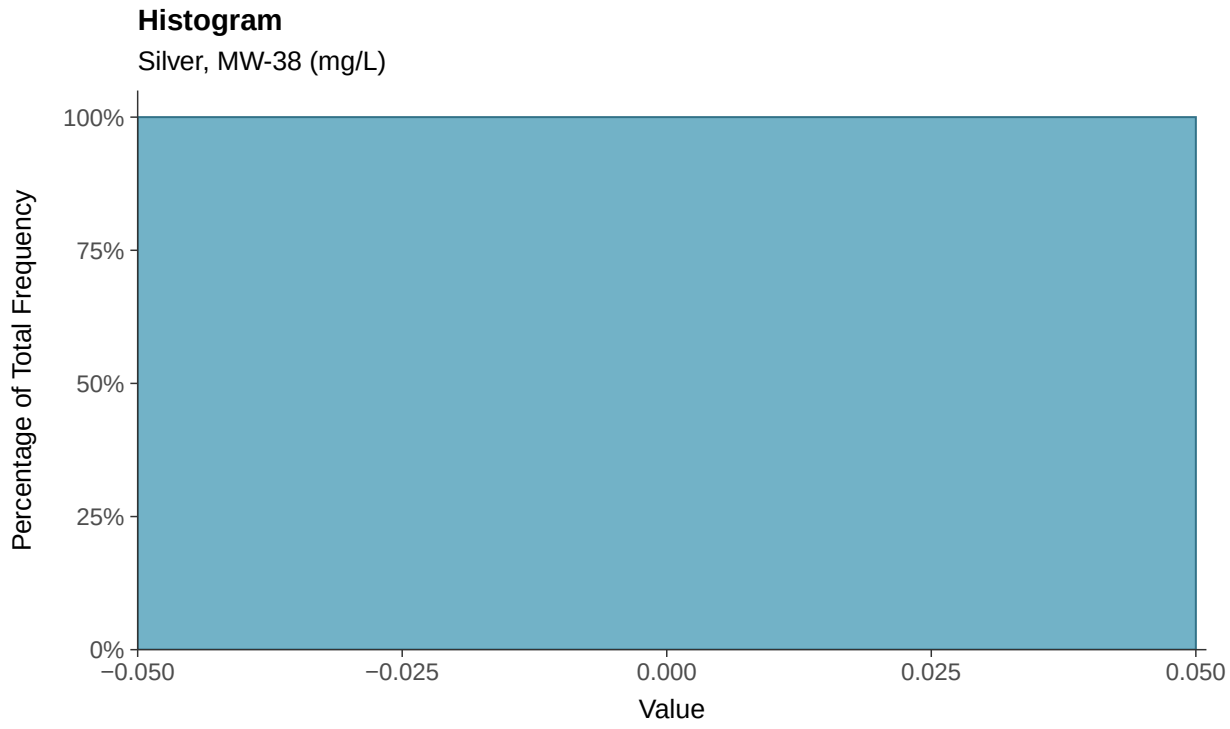
Nickel, MW-38 (mg/L)



Part 115: Silver, MW-38

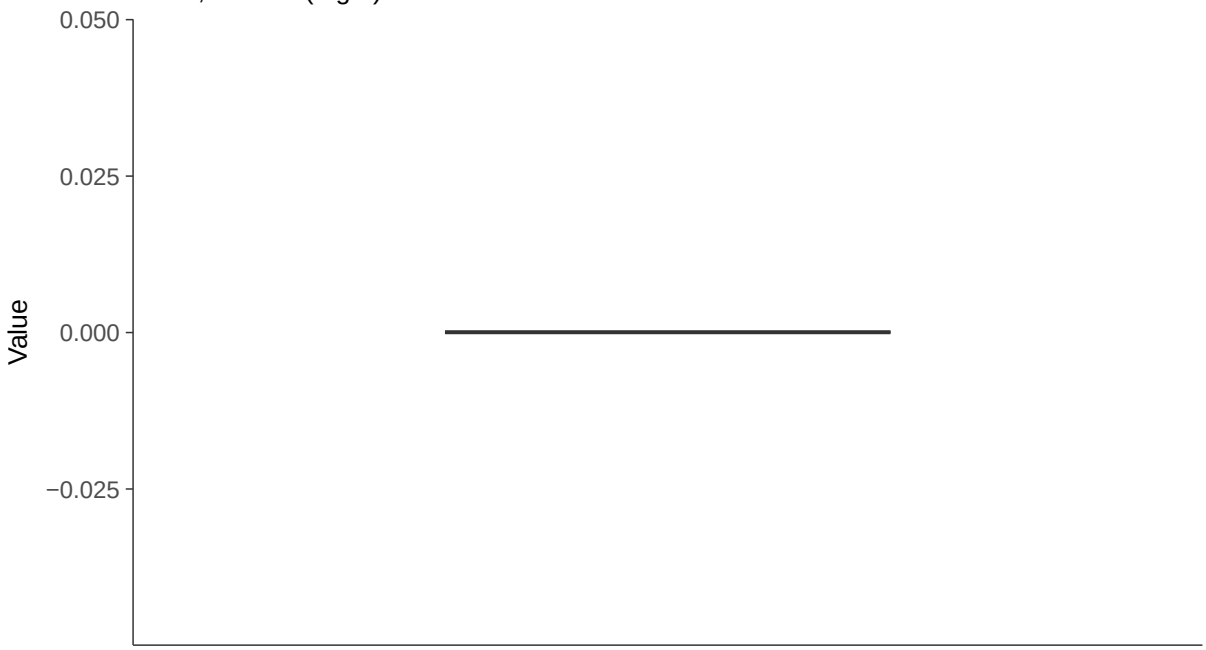
ID: 2_48_6_123





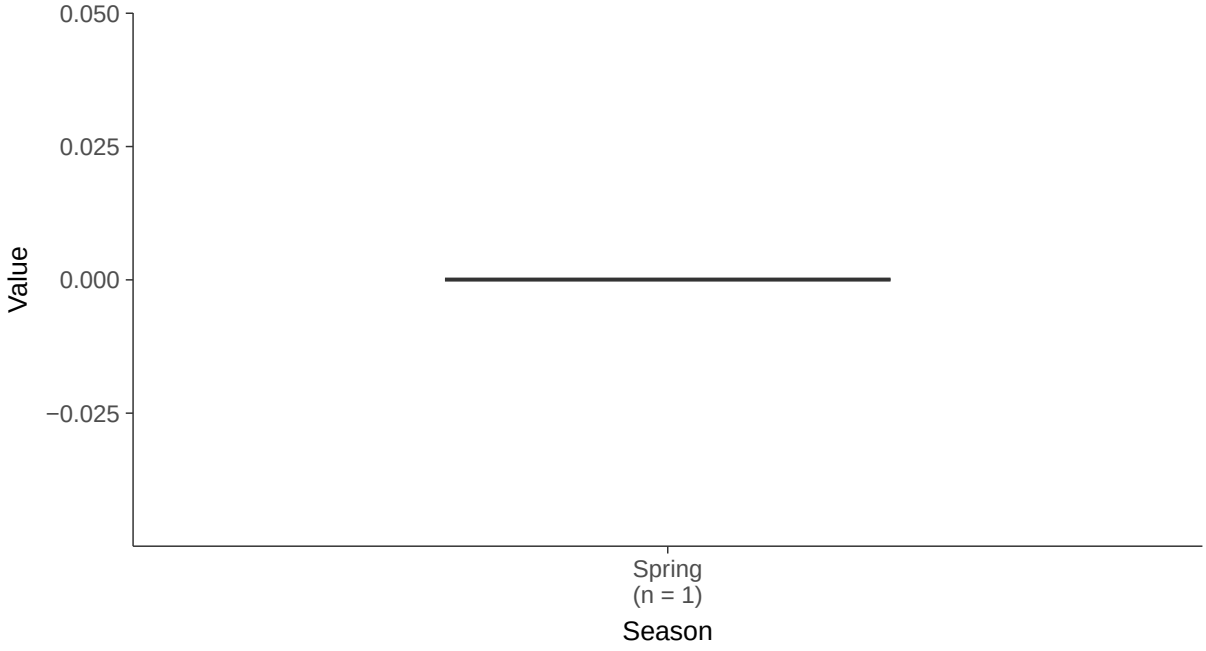
Boxplot

Silver, MW-38 (mg/L)



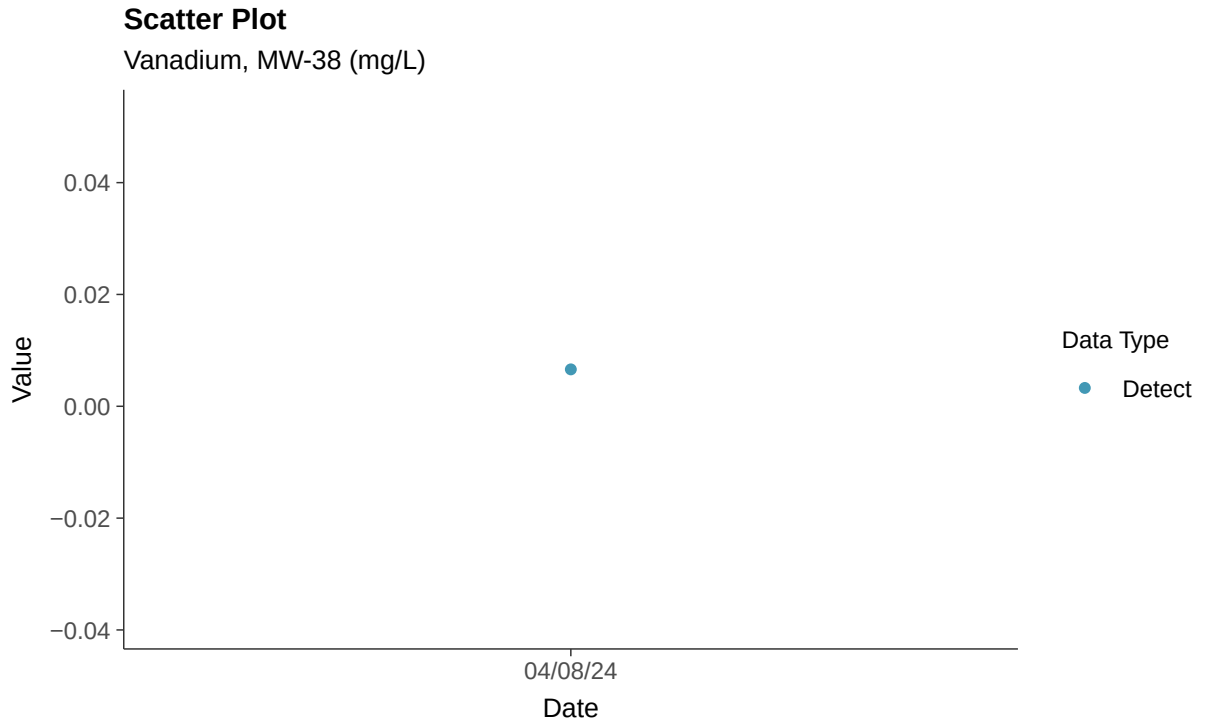
Boxplot by Season

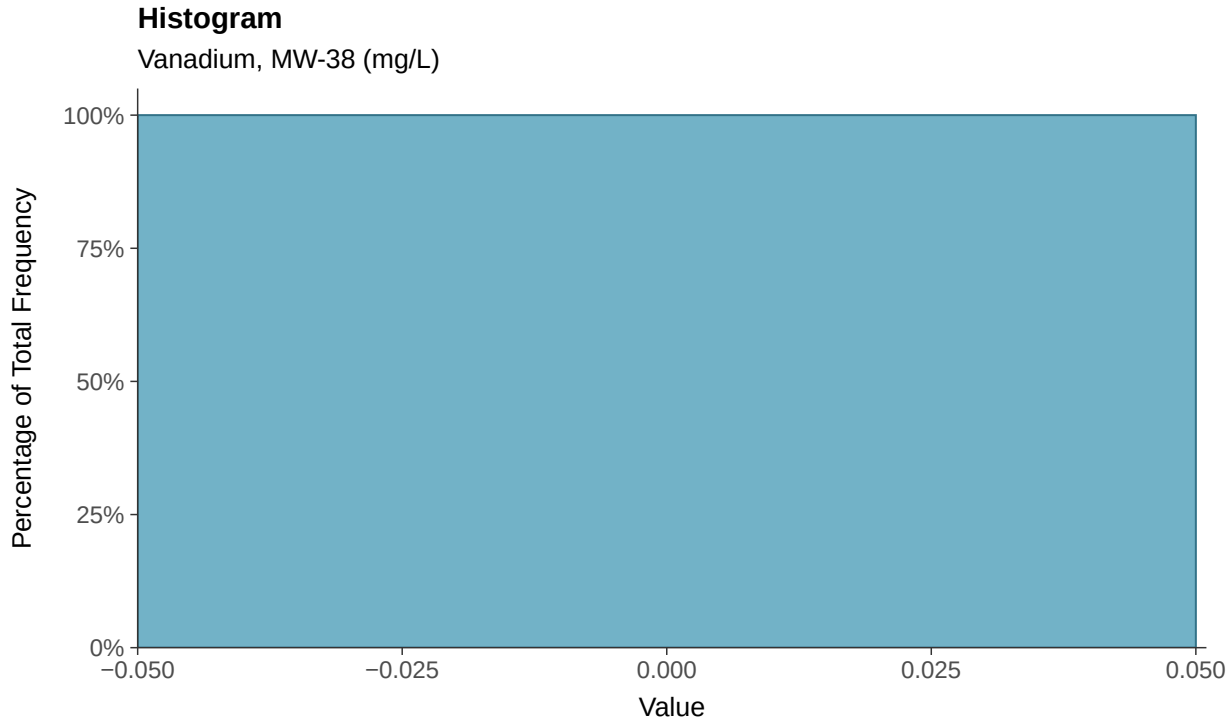
Silver, MW-38 (mg/L)



Part 115: Vanadium, MW-38

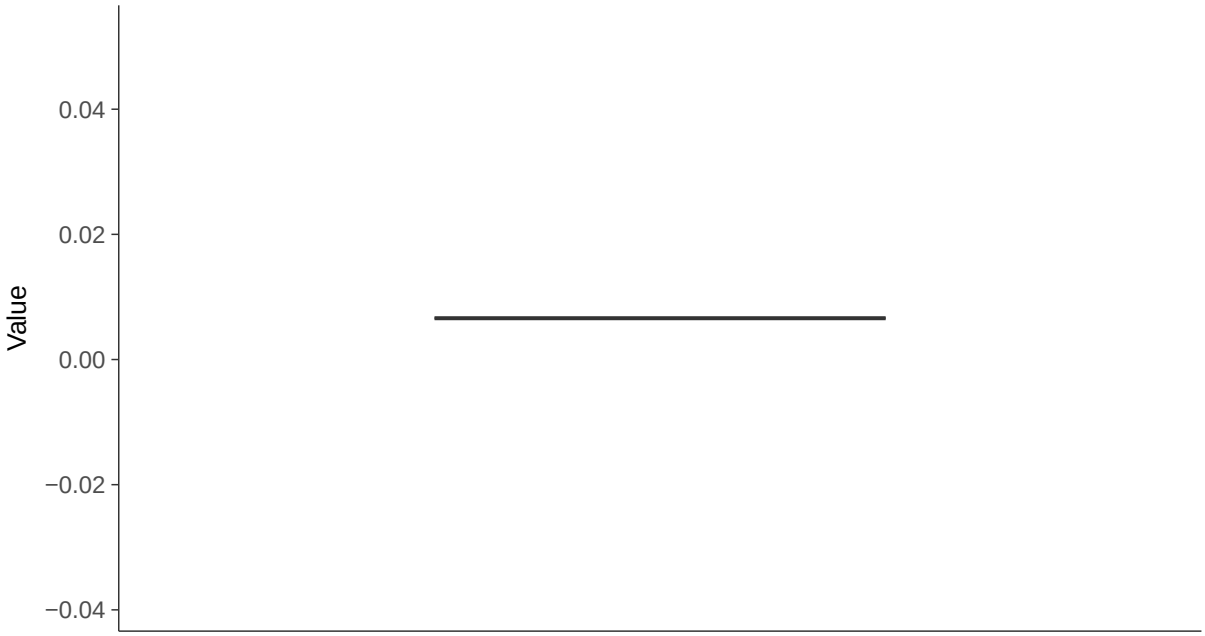
ID: 2_48_6_129





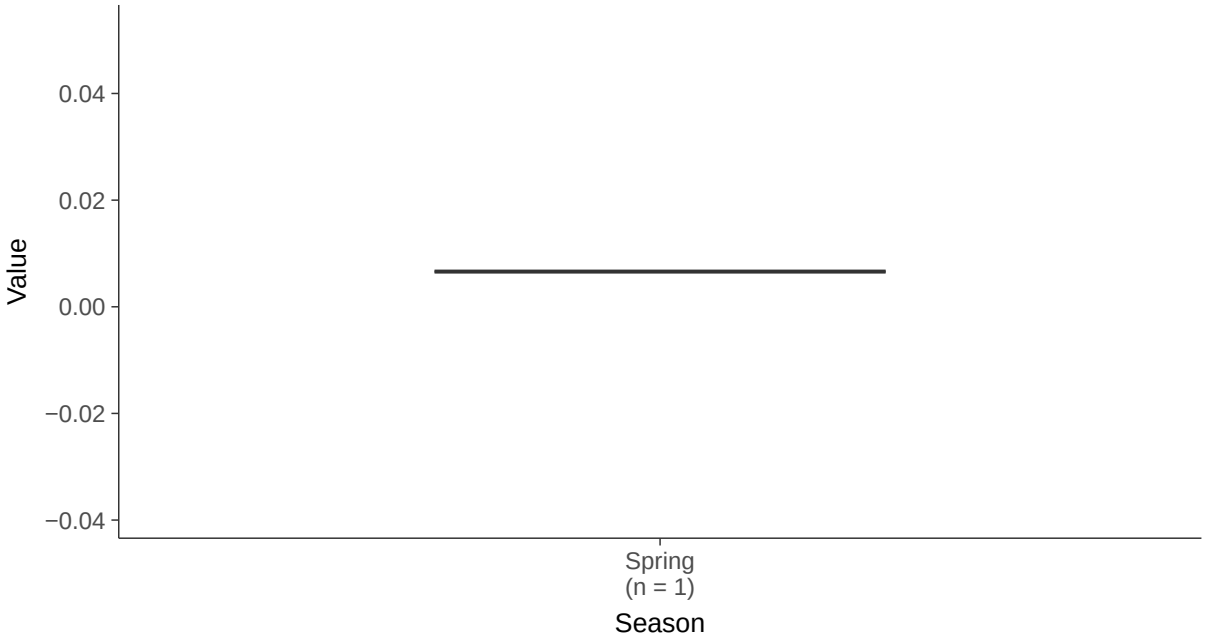
Boxplot

Vanadium, MW-38 (mg/L)



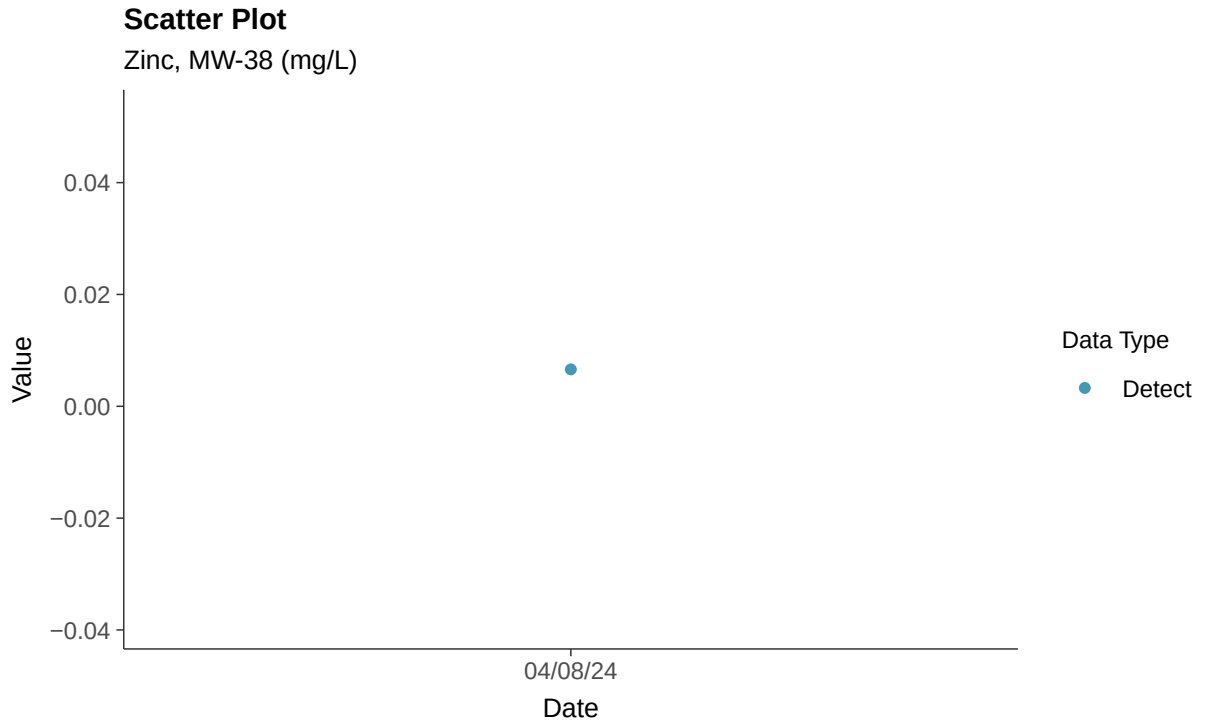
Boxplot by Season

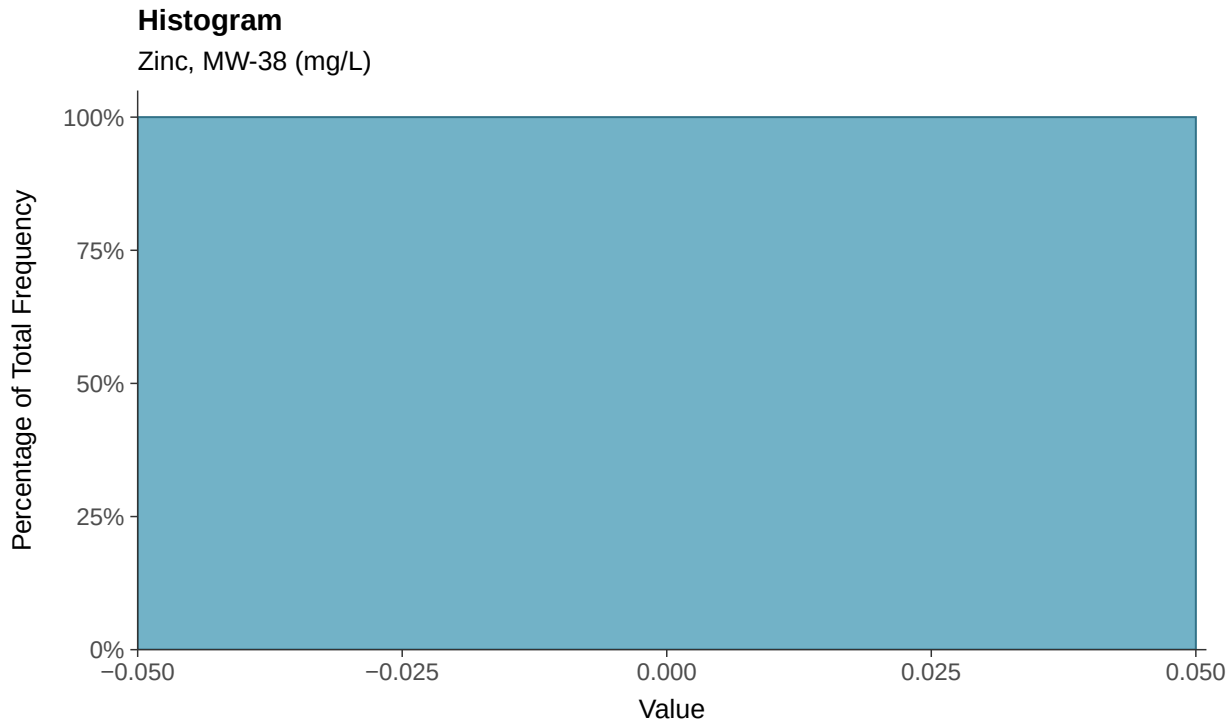
Vanadium, MW-38 (mg/L)



Part 115: Zinc, MW-38

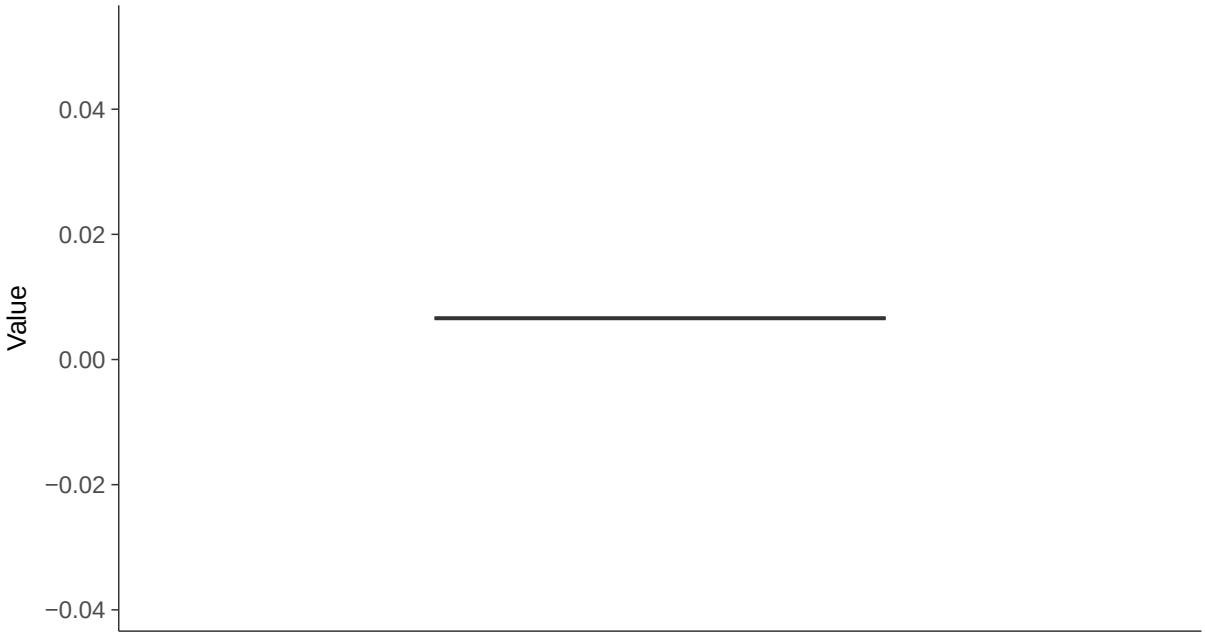
ID: 2_48_6_130





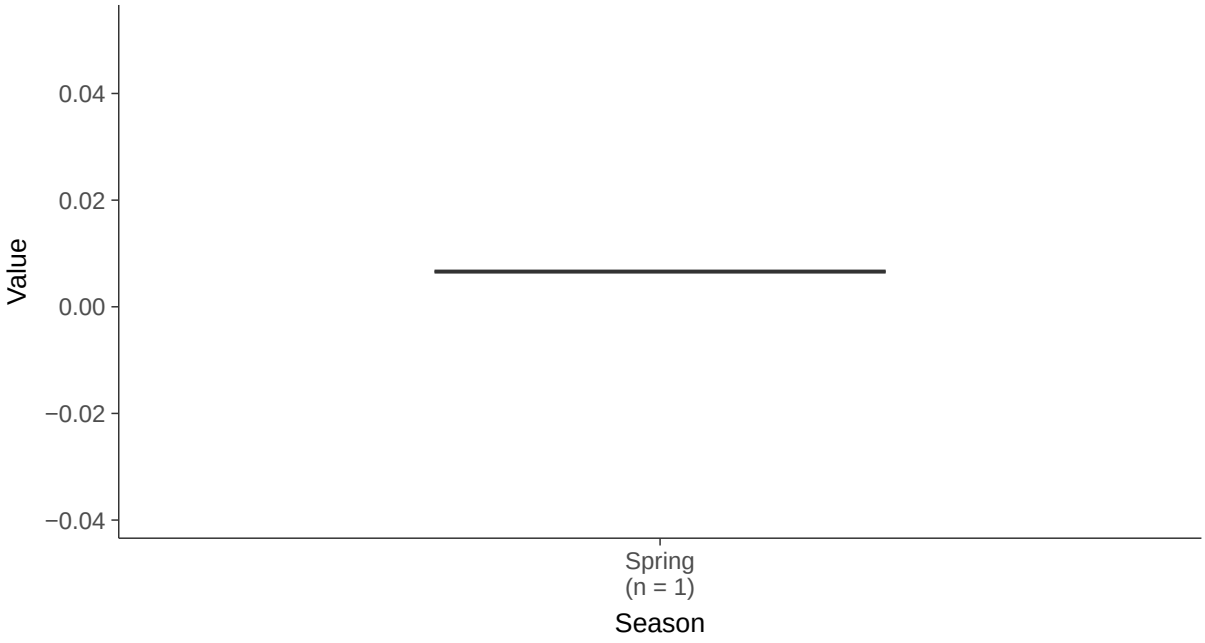
Boxplot

Zinc, MW-38 (mg/L)



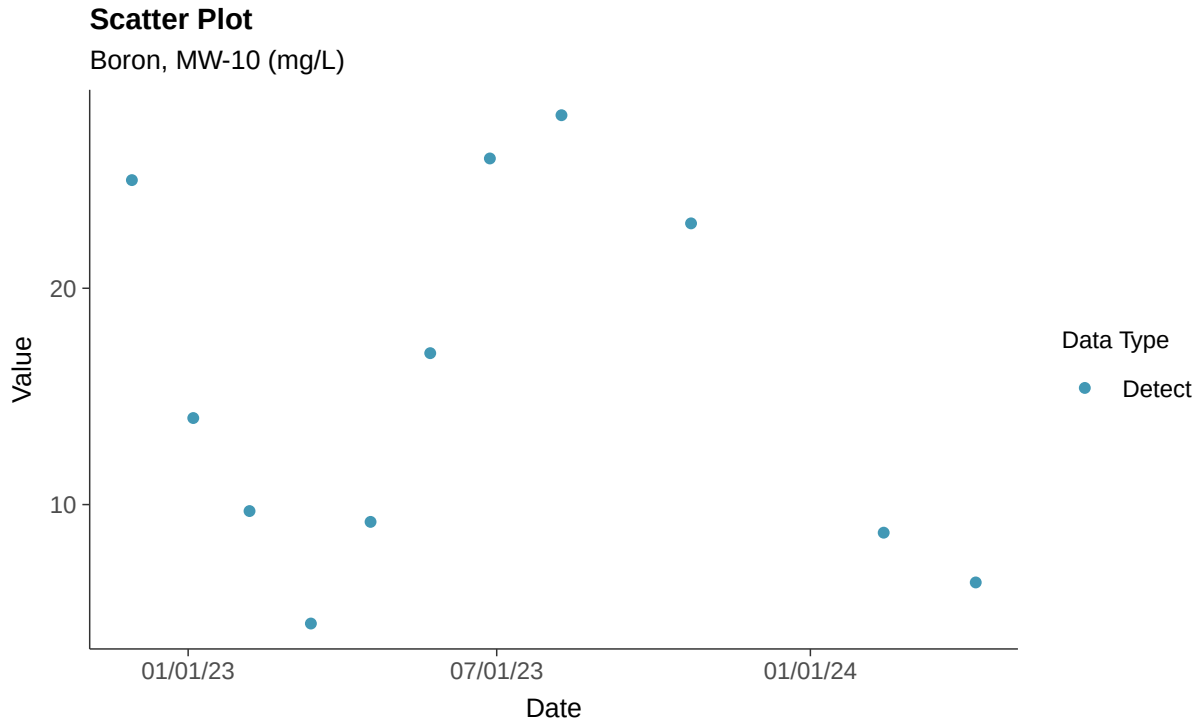
Boxplot by Season

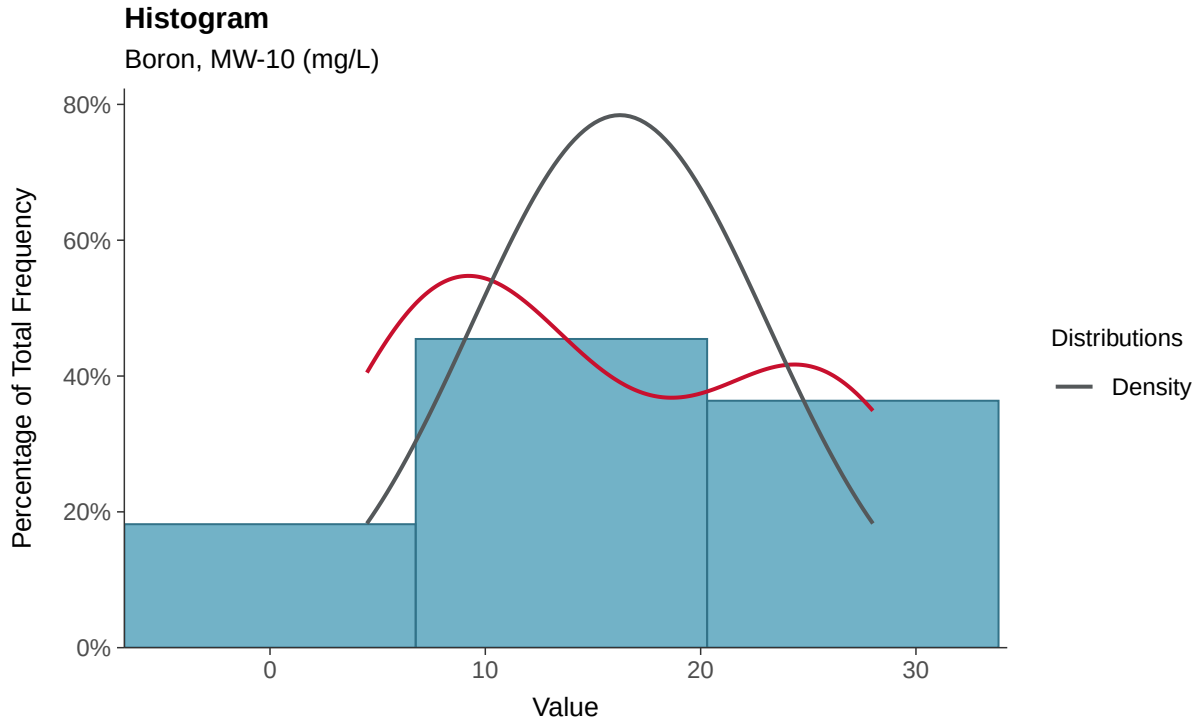
Zinc, MW-38 (mg/L)



Appendix III: Boron, MW-10

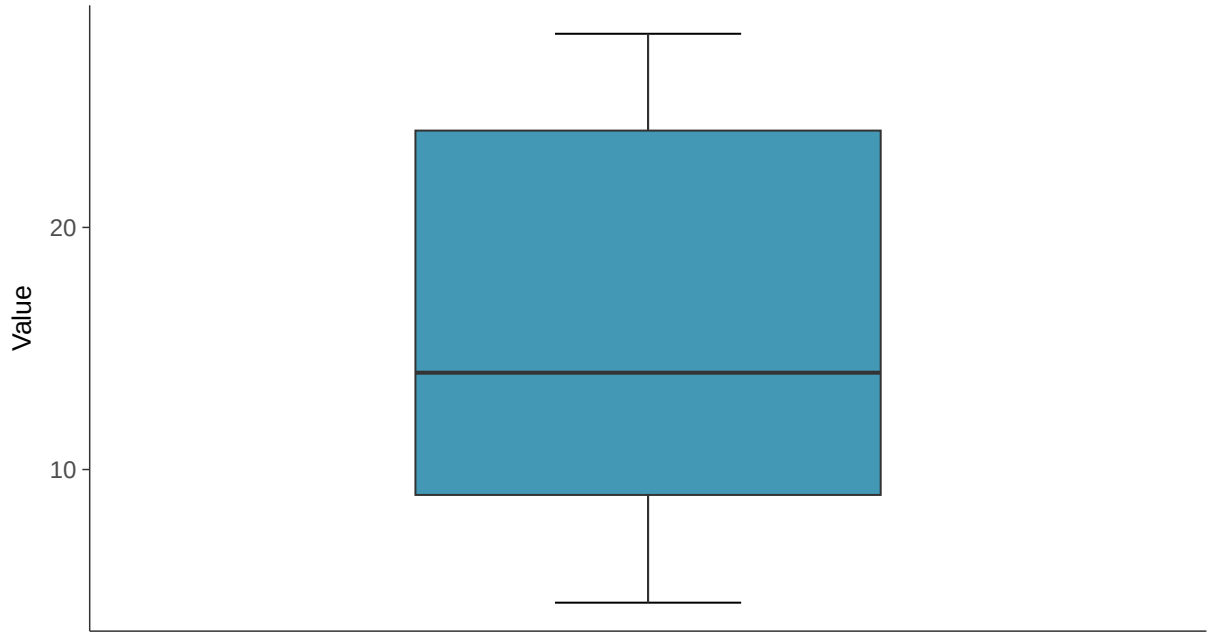
ID: 3_20_4_105





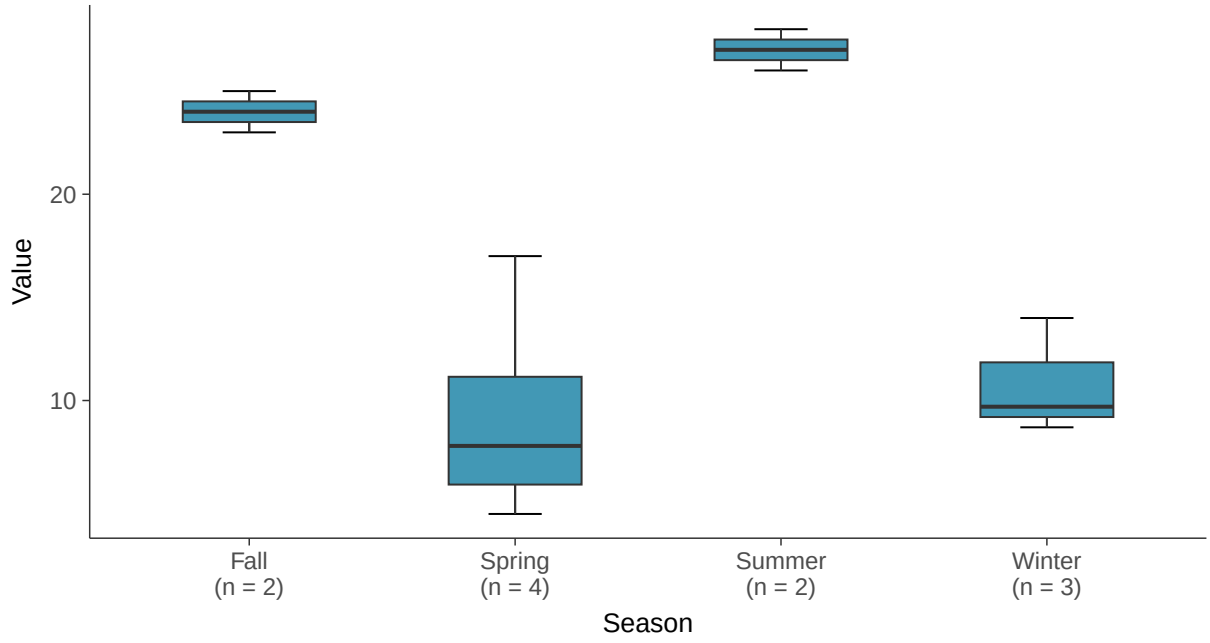
Boxplot

Boron, MW-10 (mg/L)



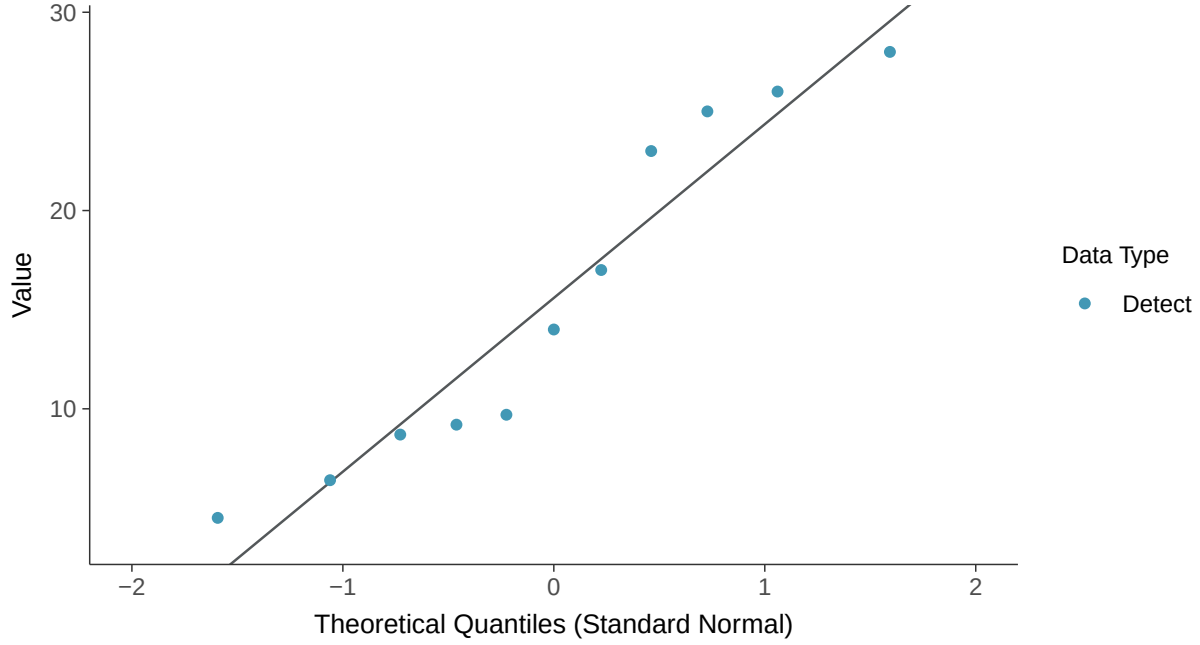
Boxplot by Season

Boron, MW-10 (mg/L)



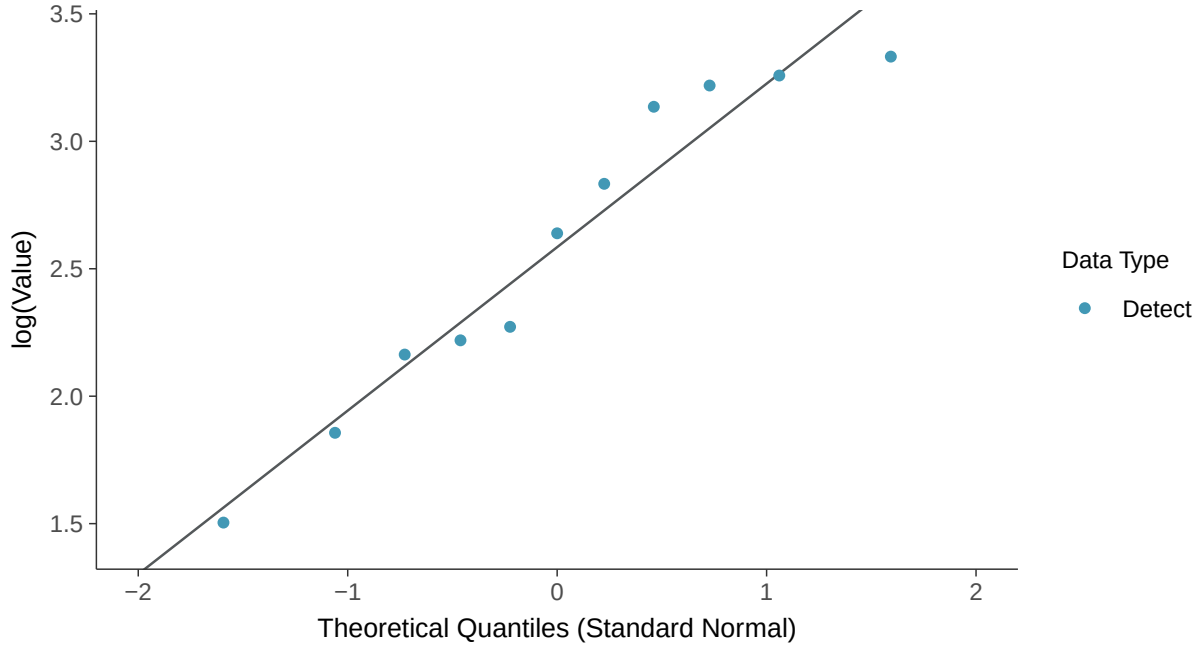
Normal Q-Q plot

Boron, MW-10 (mg/L)



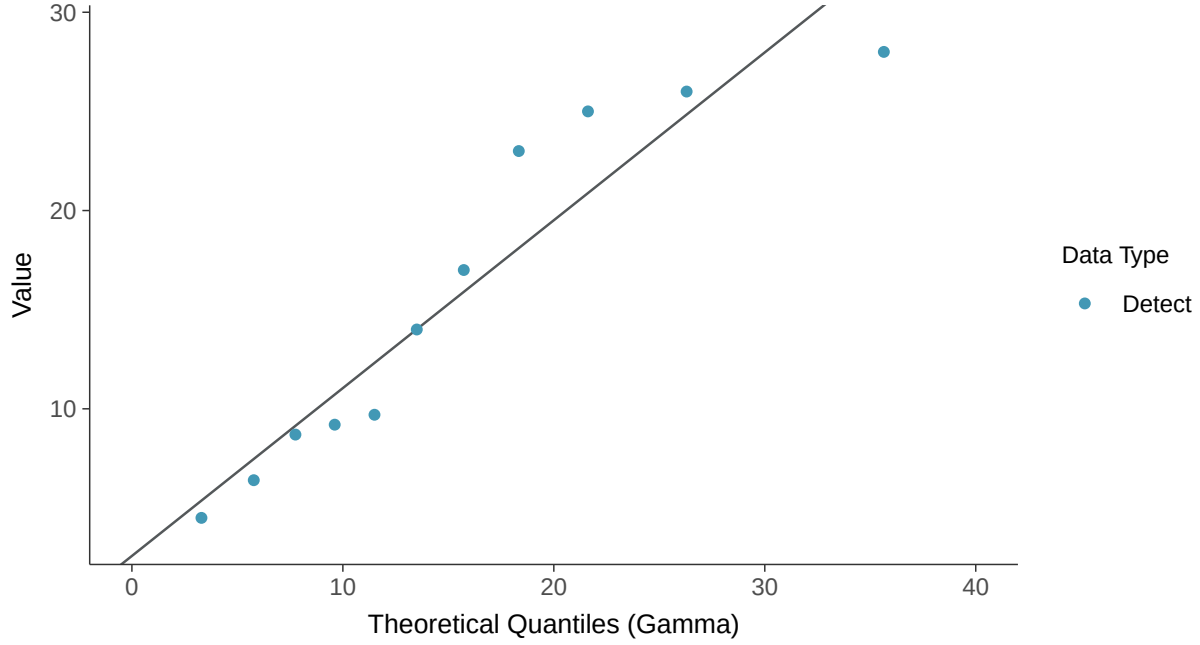
Lognormal Q-Q plot

Boron, MW-10 (mg/L)



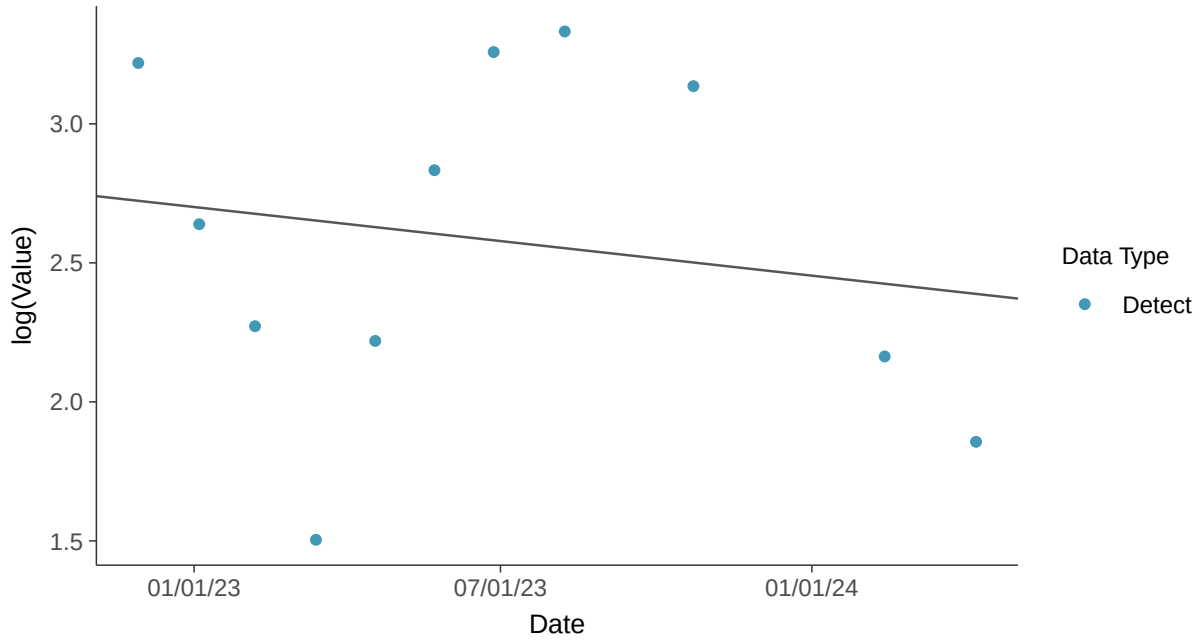
Gamma Q-Q plot

Boron, MW-10 (mg/L)



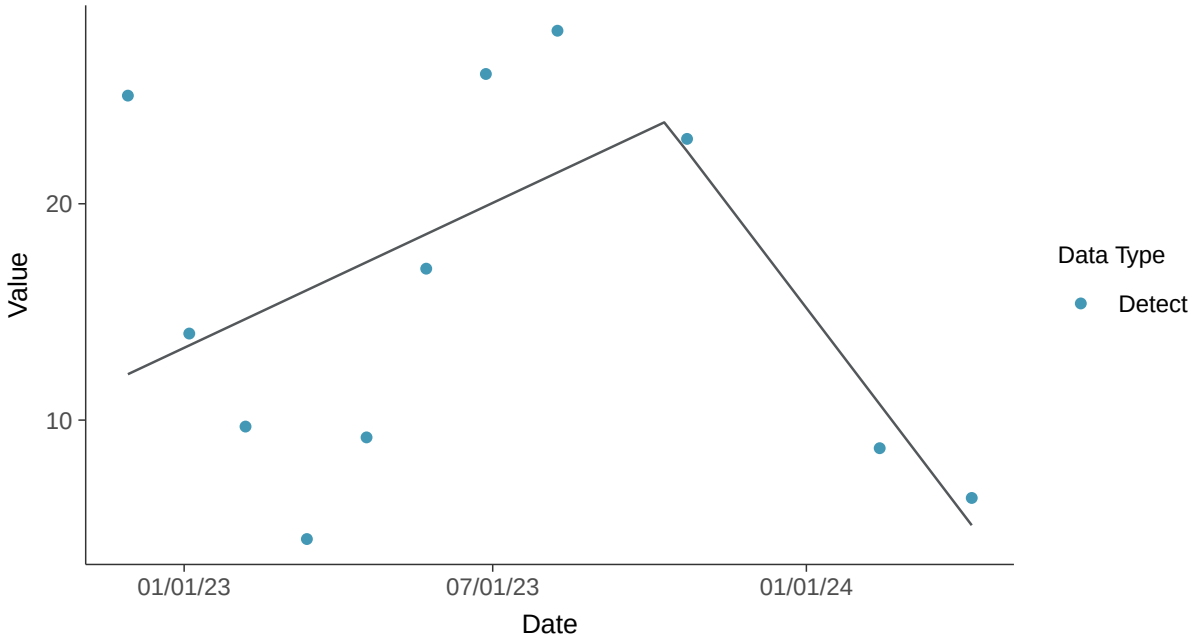
Trend Regression: Lognormal MLE

Boron, MW-10 (mg/L)



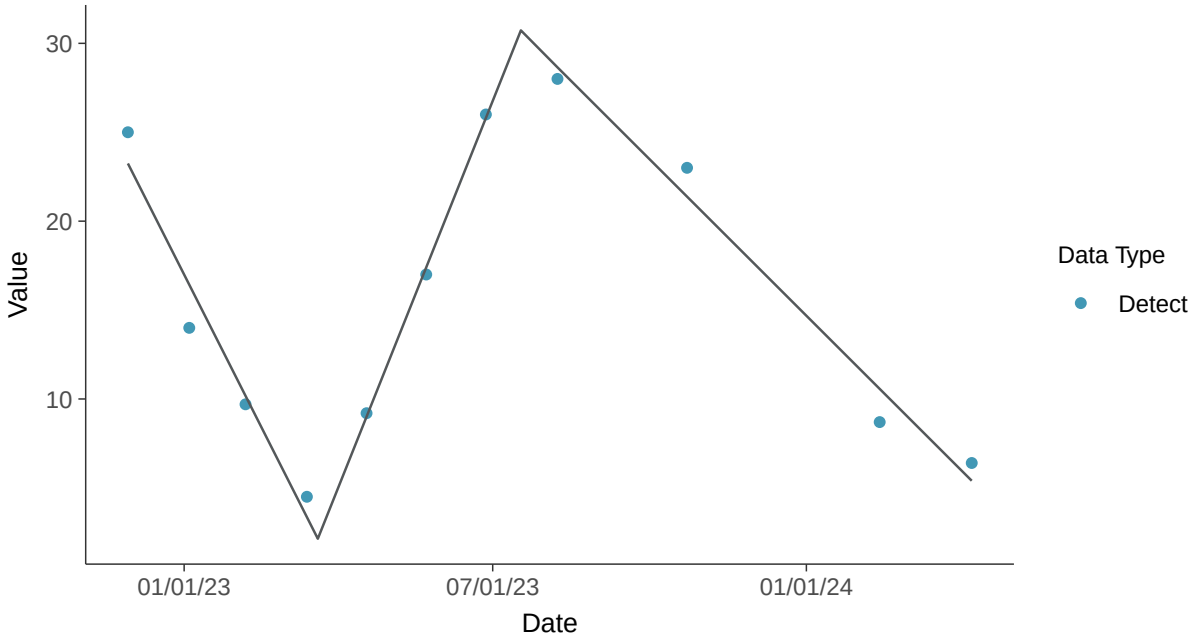
Trend Regression: Piecewise Linear-Linear

Boron, MW-10 (mg/L)



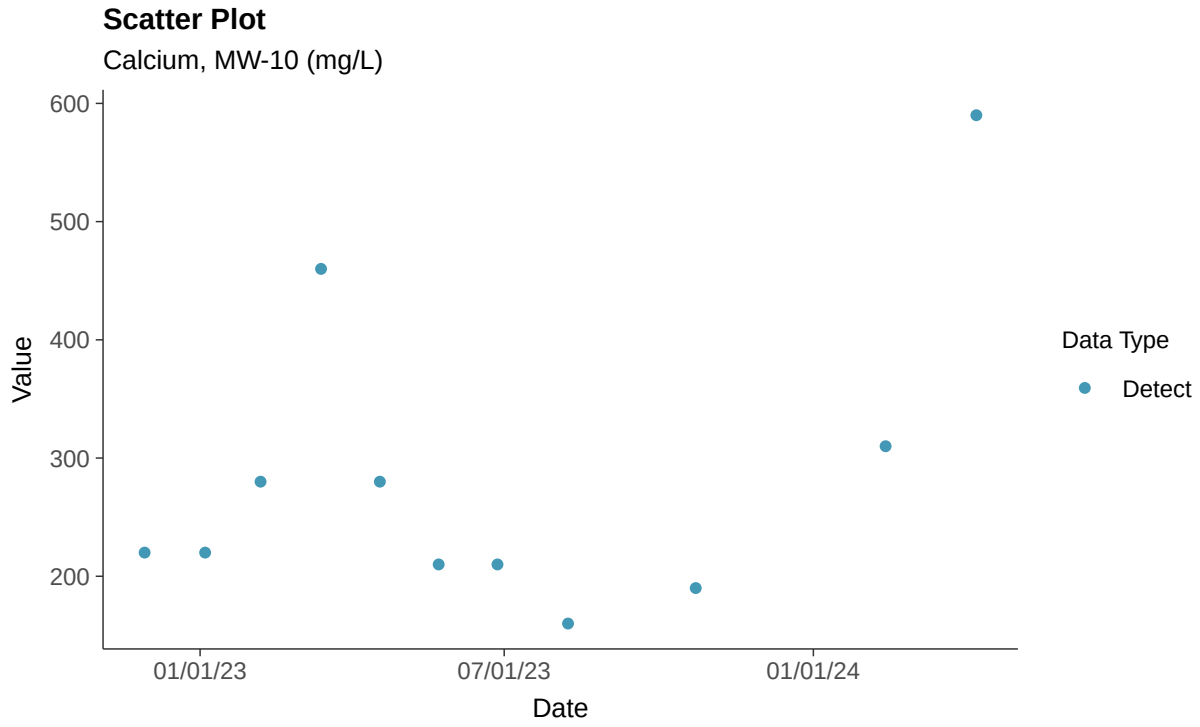
Trend Regression: Piecewise Linear-Linear-Linear

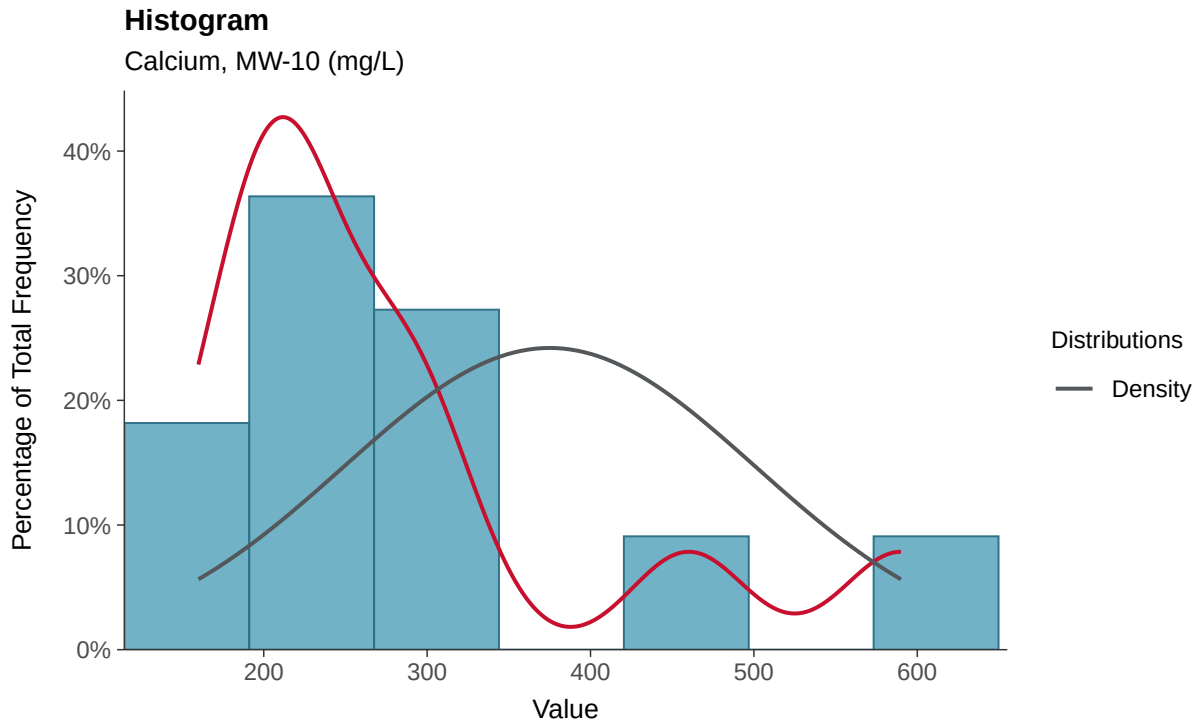
Boron, MW-10 (mg/L)



Appendix III: Calcium, MW-10

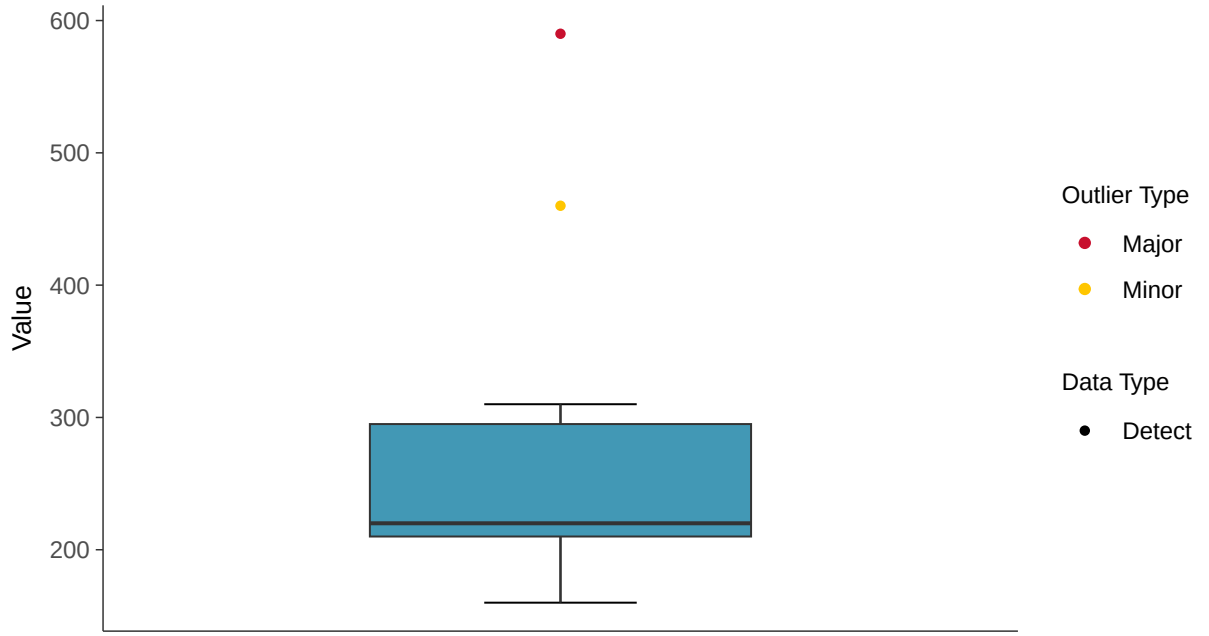
ID: 3_20_4_107





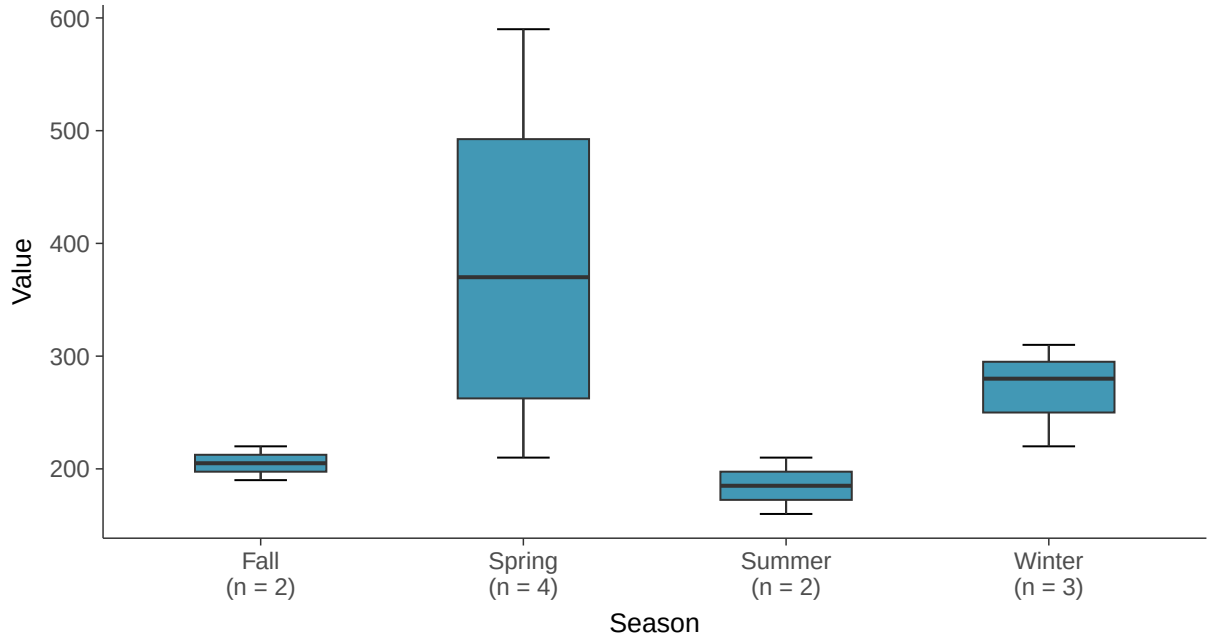
Boxplot

Calcium, MW-10 (mg/L)



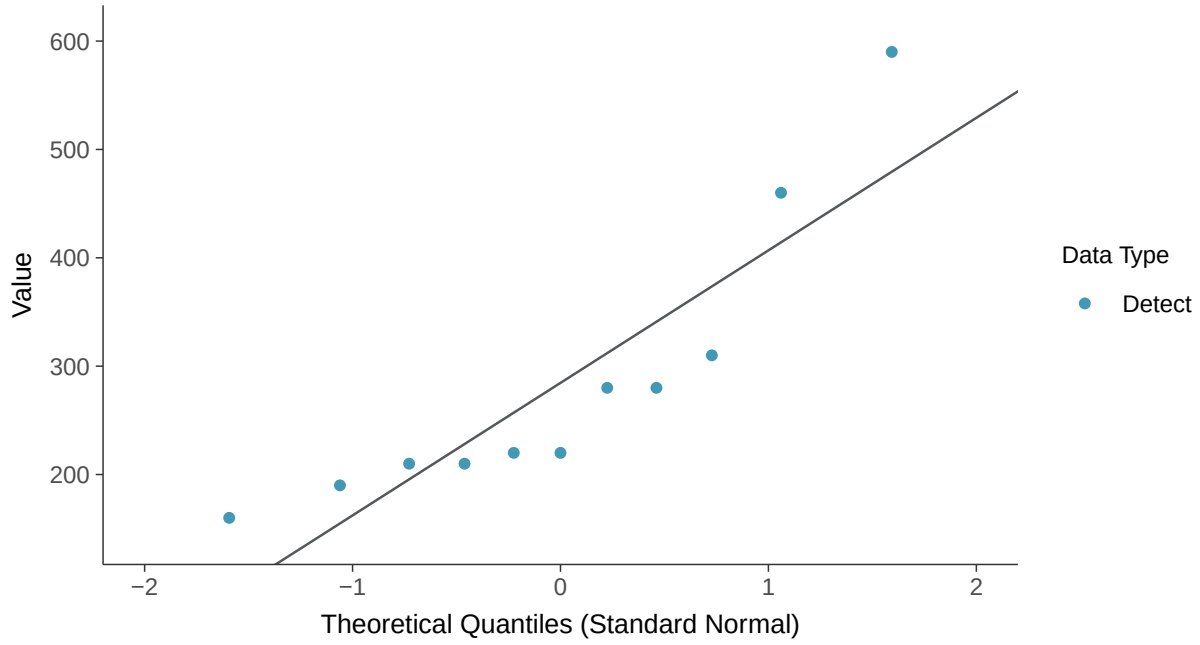
Boxplot by Season

Calcium, MW-10 (mg/L)



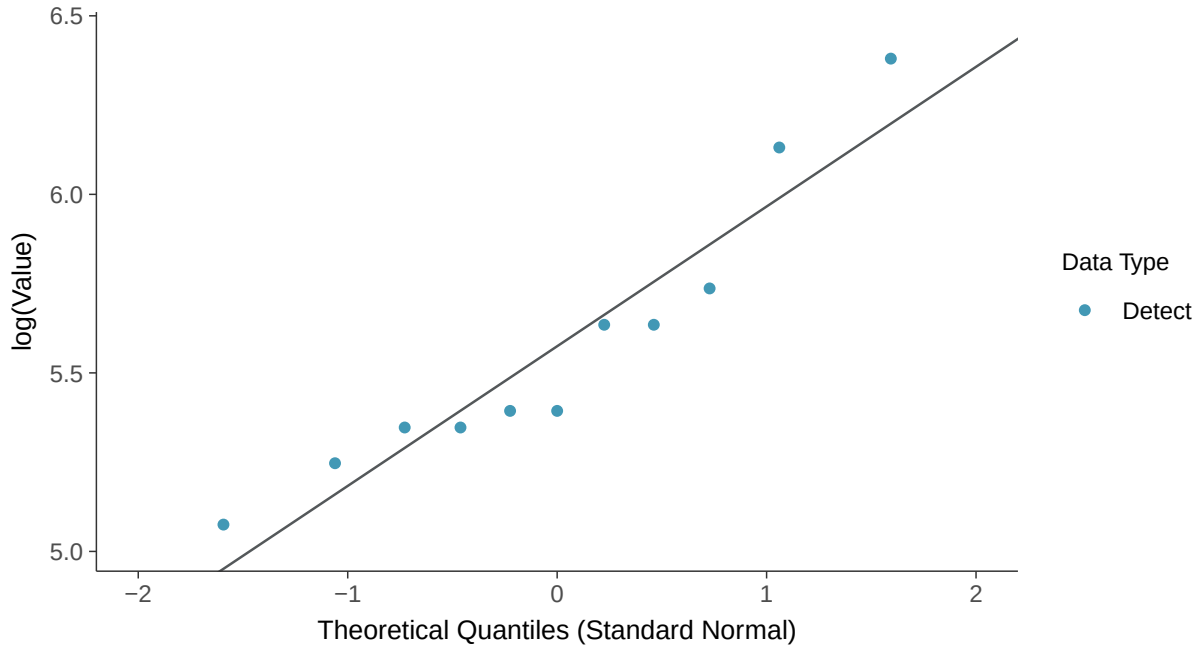
Normal Q-Q plot

Calcium, MW-10 (mg/L)



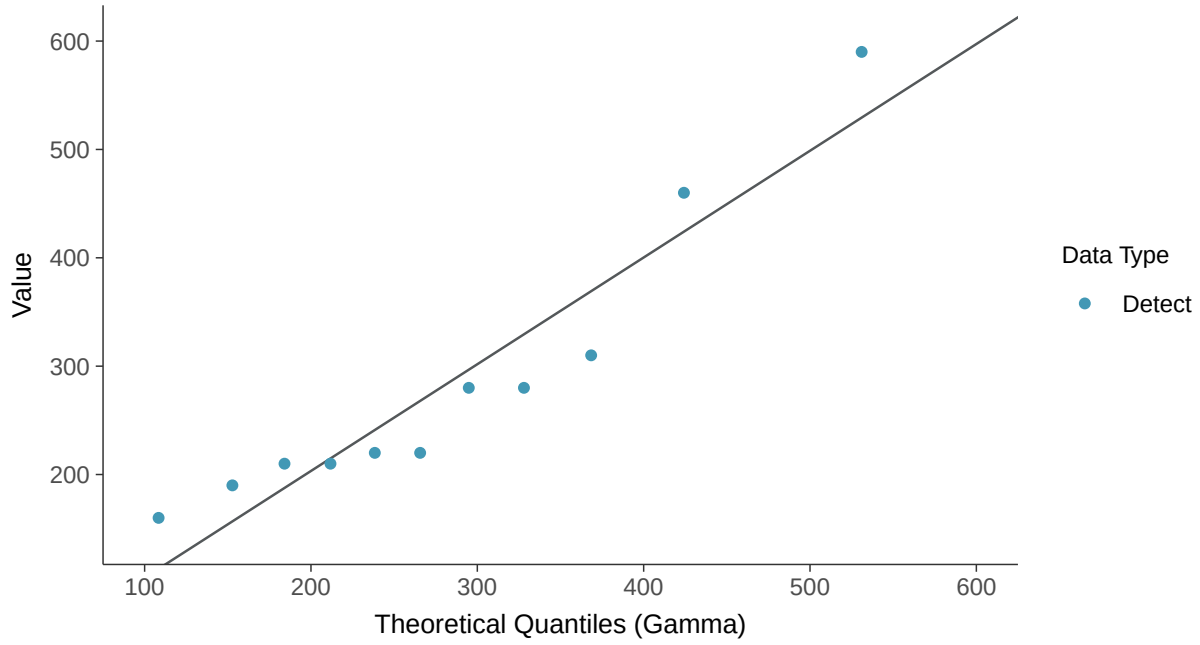
Lognormal Q-Q plot

Calcium, MW-10 (mg/L)



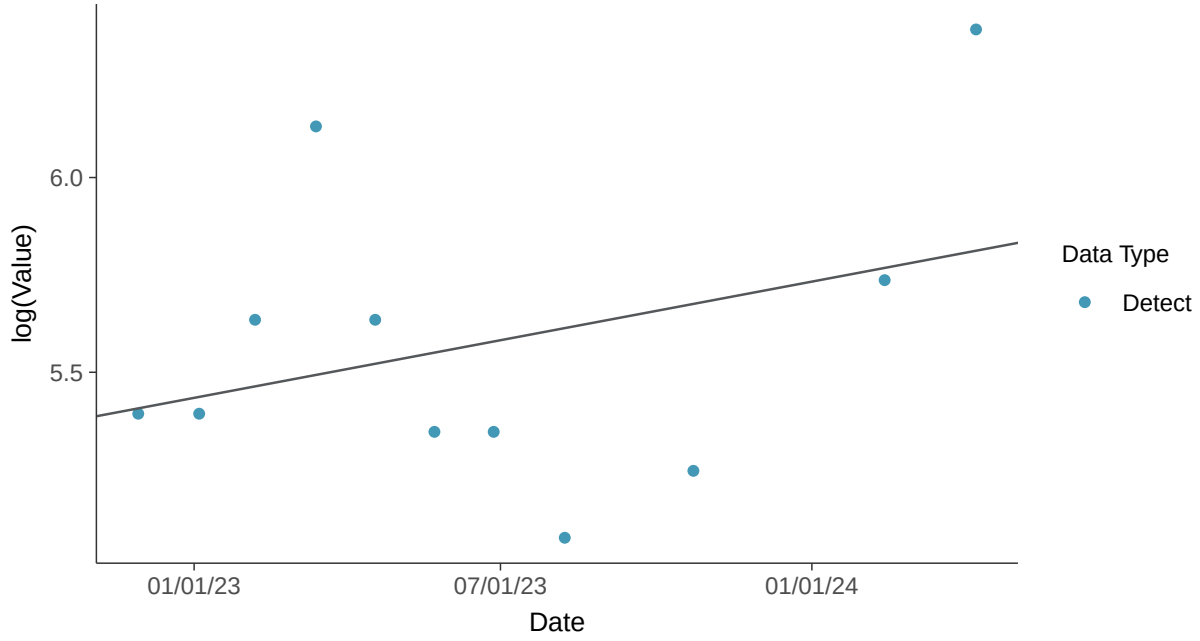
Gamma Q-Q plot

Calcium, MW-10 (mg/L)



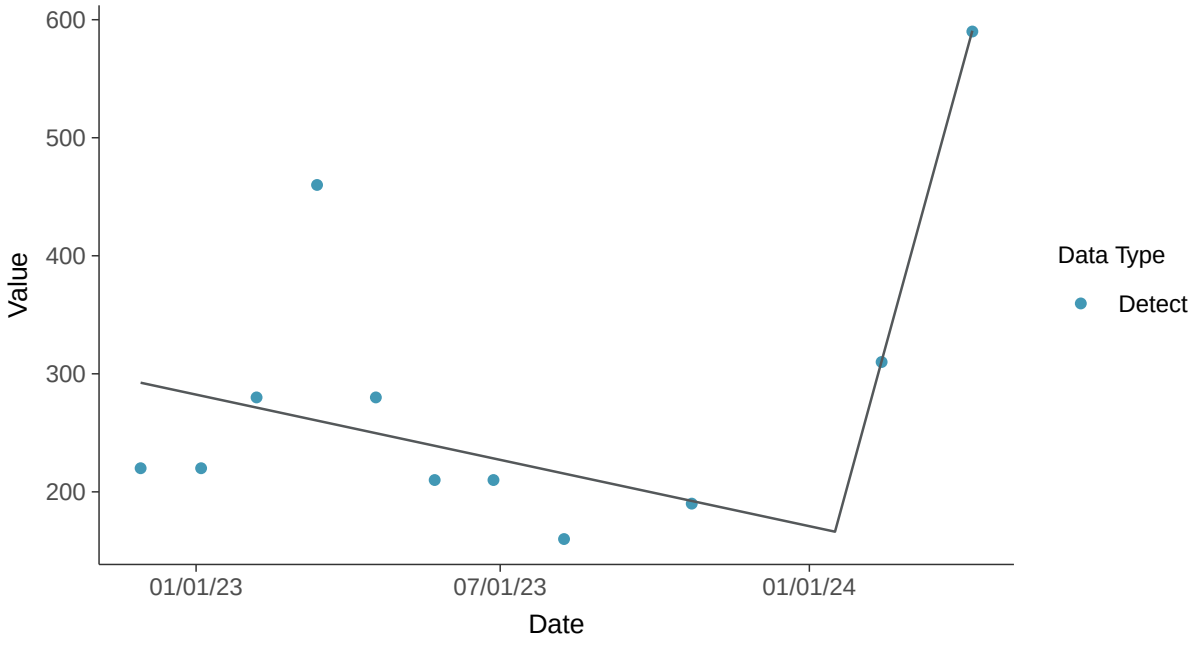
Trend Regression: Lognormal MLE

Calcium, MW-10 (mg/L)



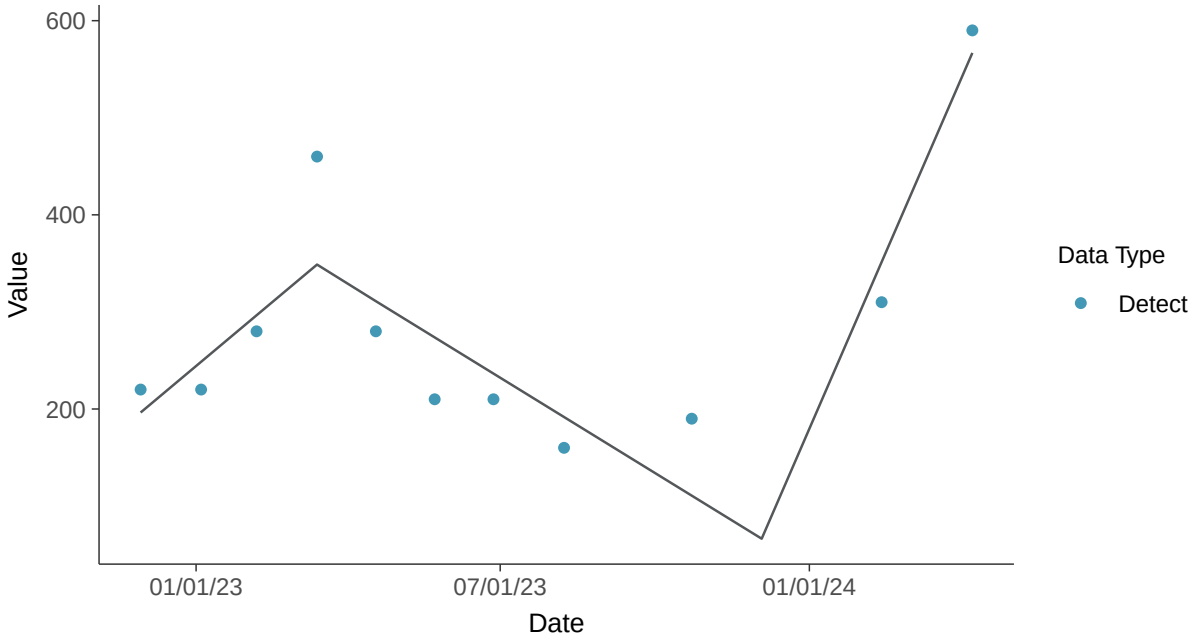
Trend Regression: Piecewise Linear-Linear

Calcium, MW-10 (mg/L)



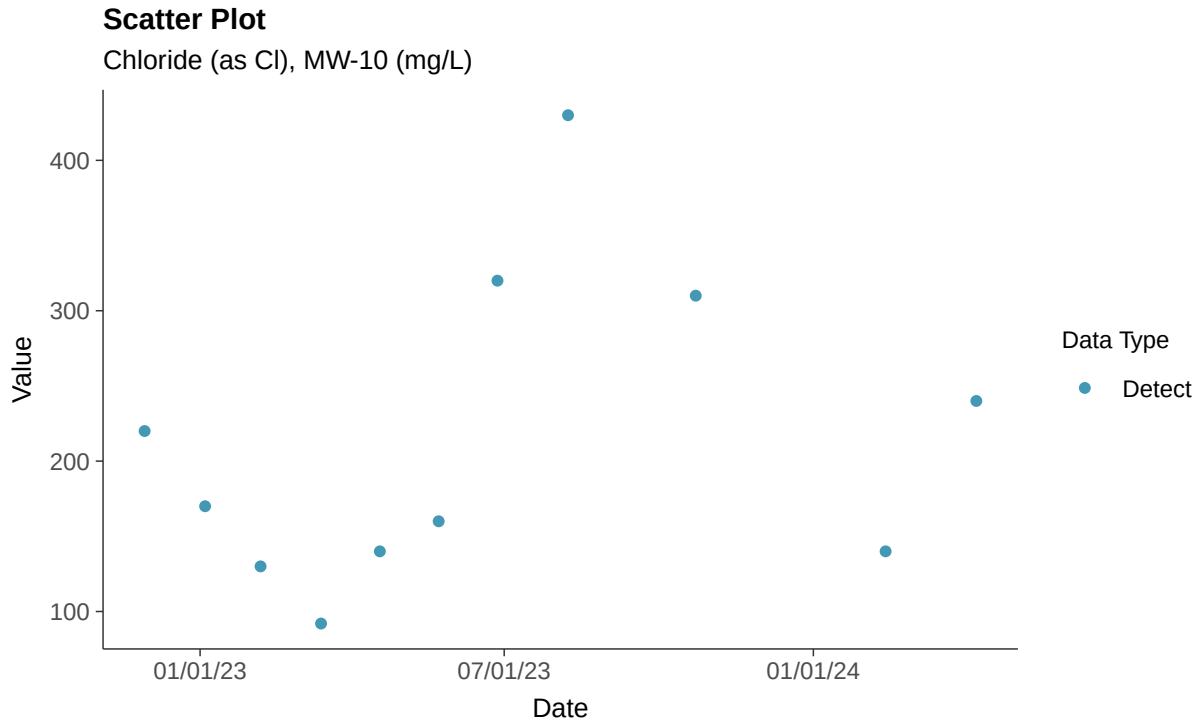
Trend Regression: Piecewise Linear-Linear-Linear

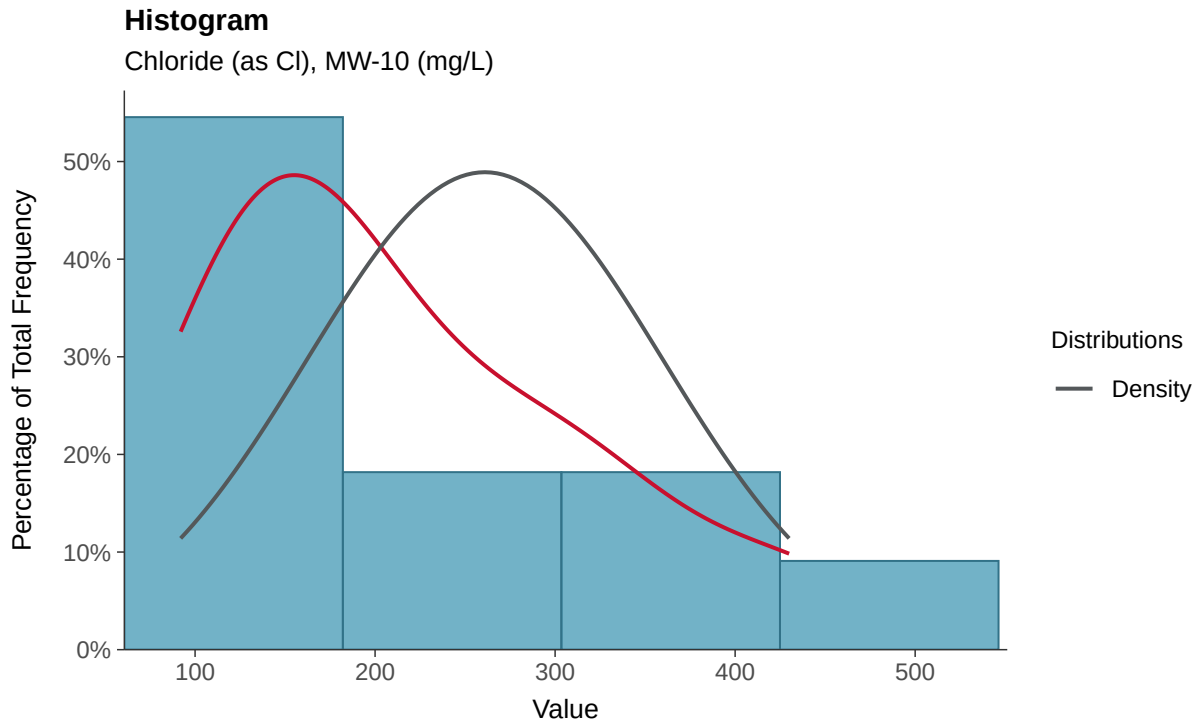
Calcium, MW-10 (mg/L)



Appendix III: Chloride (as Cl), MW-10

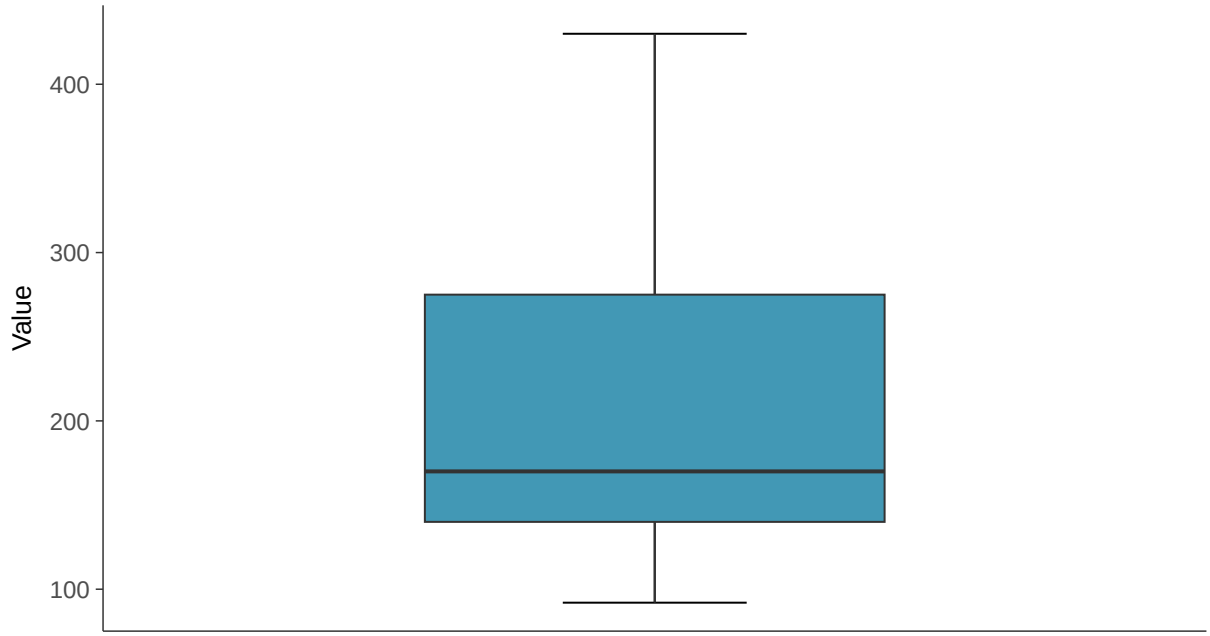
ID: 3_20_4_108





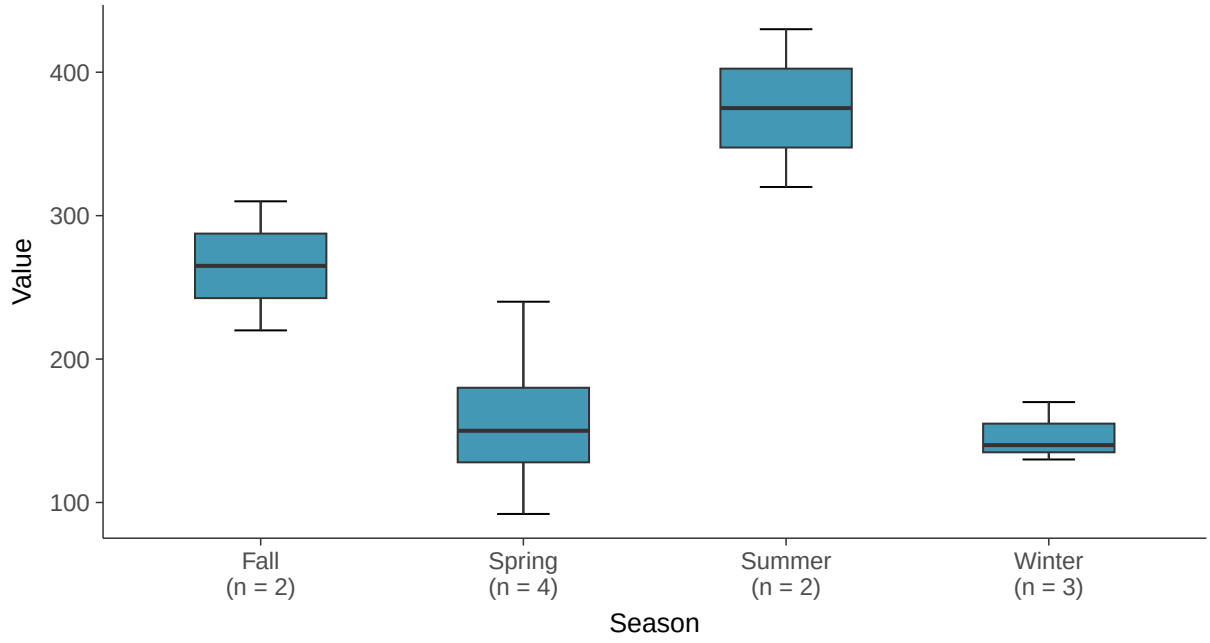
Boxplot

Chloride (as Cl), MW-10 (mg/L)



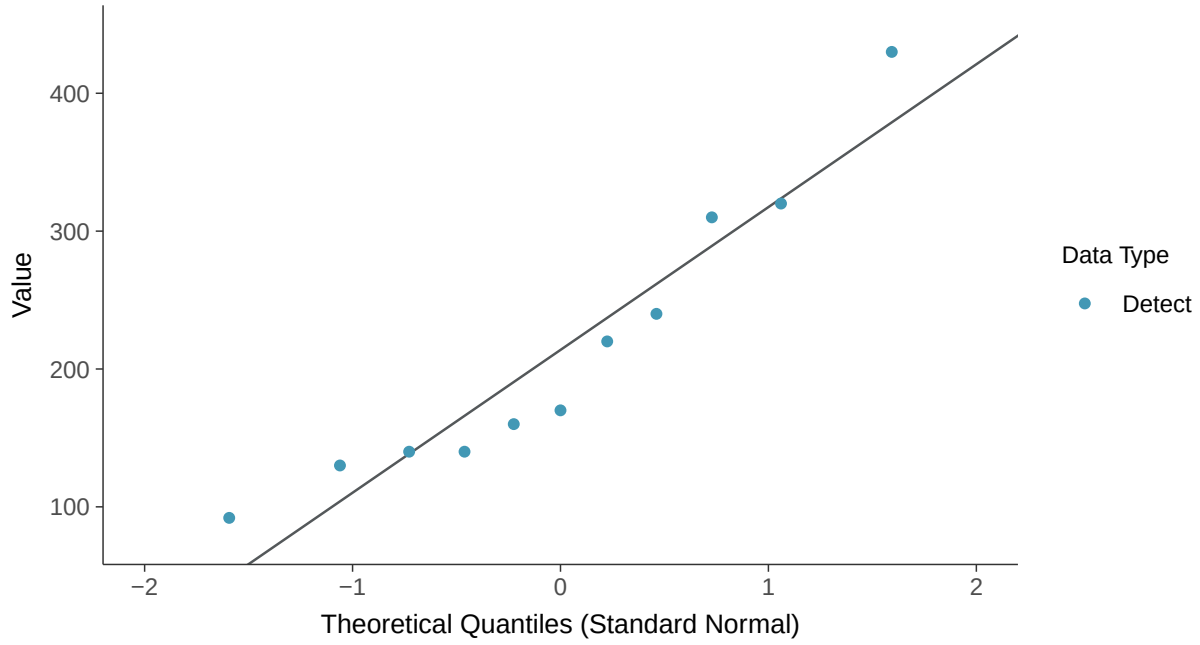
Boxplot by Season

Chloride (as Cl), MW-10 (mg/L)



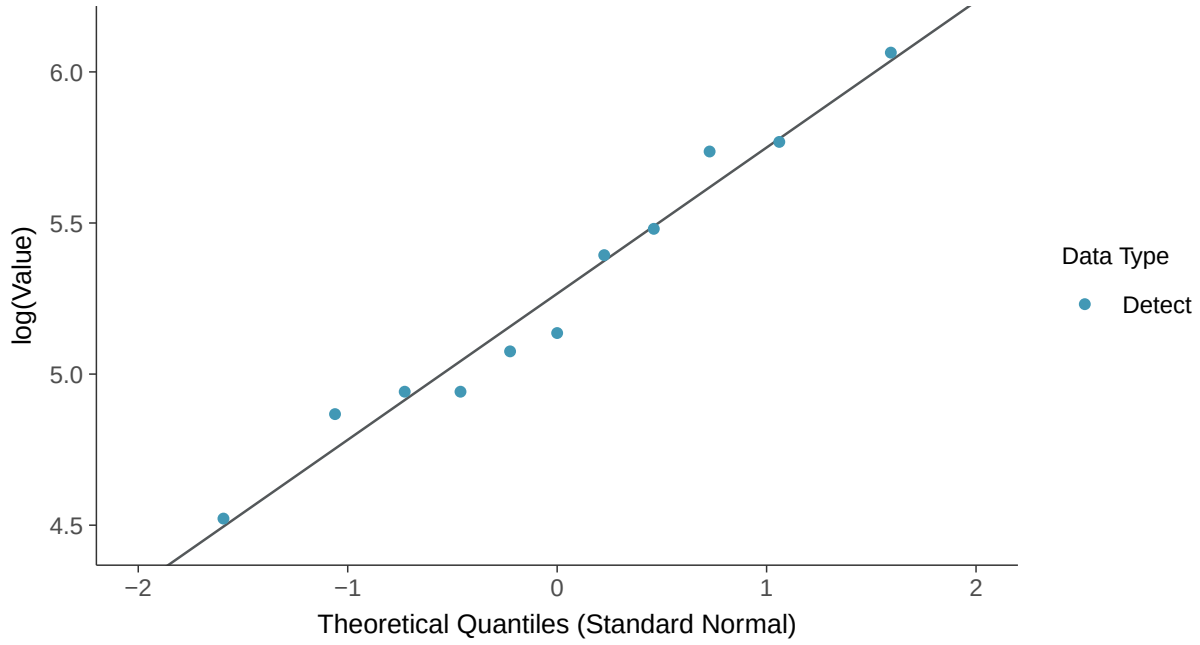
Normal Q-Q plot

Chloride (as Cl), MW-10 (mg/L)



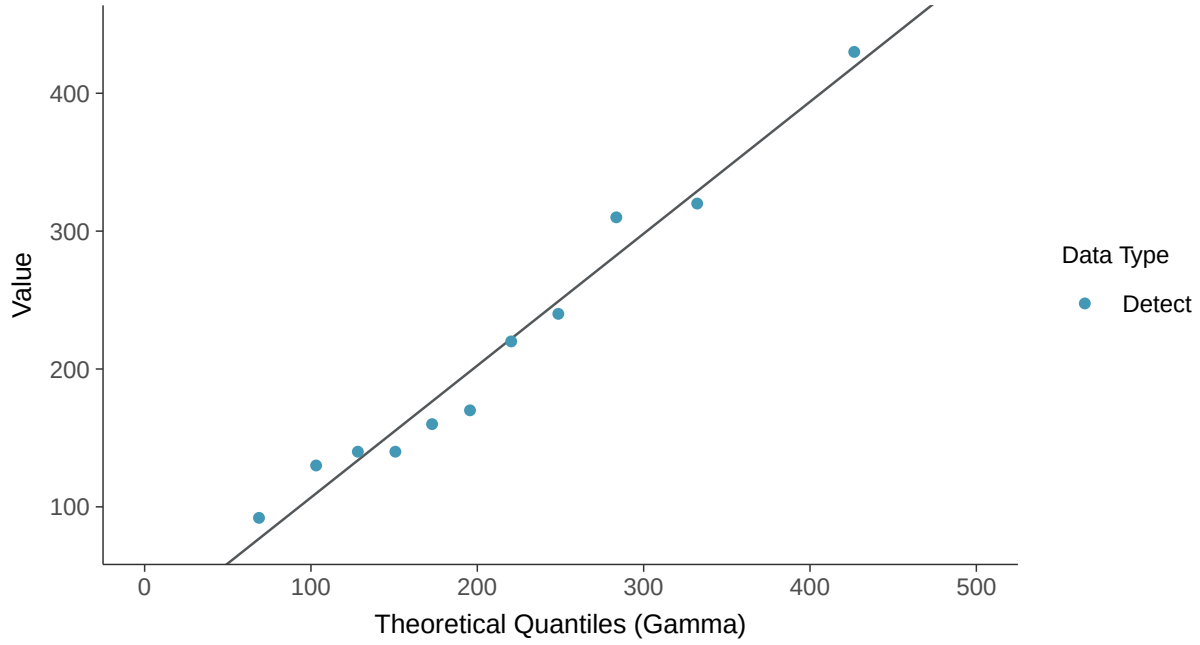
Lognormal Q-Q plot

Chloride (as Cl), MW-10 (mg/L)



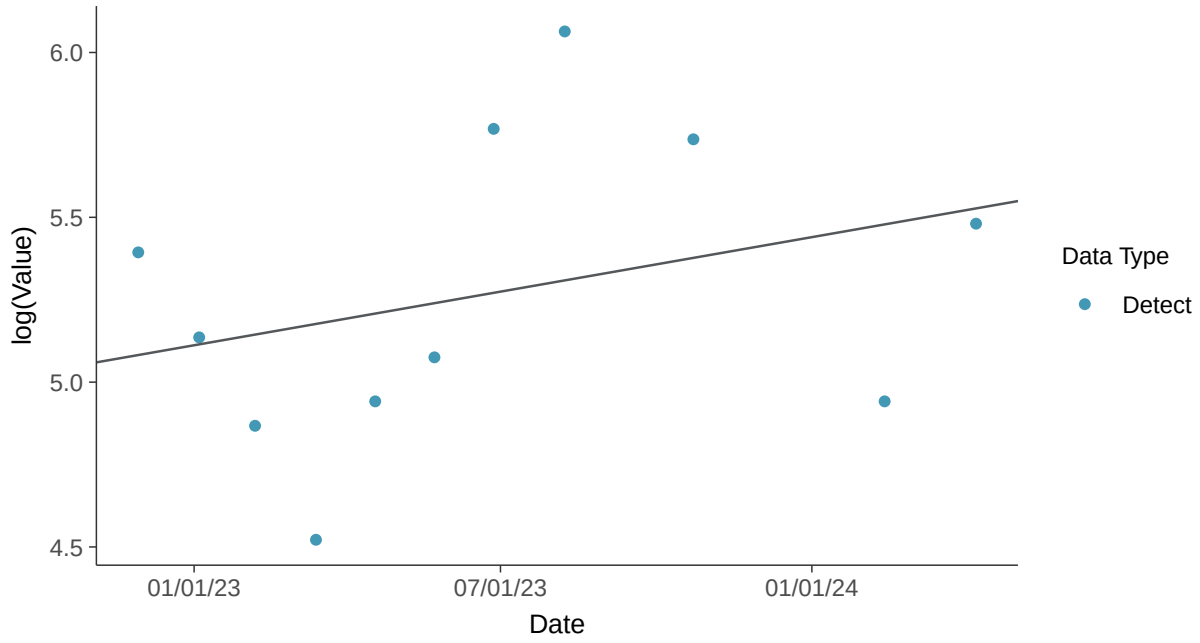
Gamma Q-Q plot

Chloride (as Cl), MW-10 (mg/L)



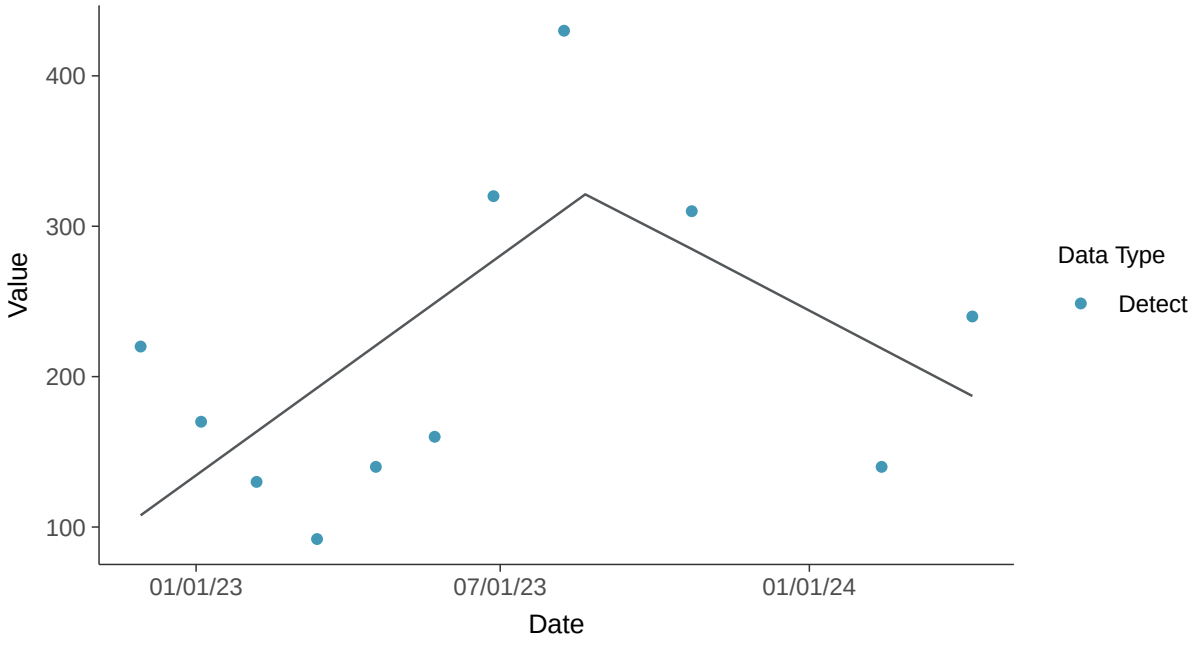
Trend Regression: Lognormal MLE

Chloride (as Cl), MW-10 (mg/L)



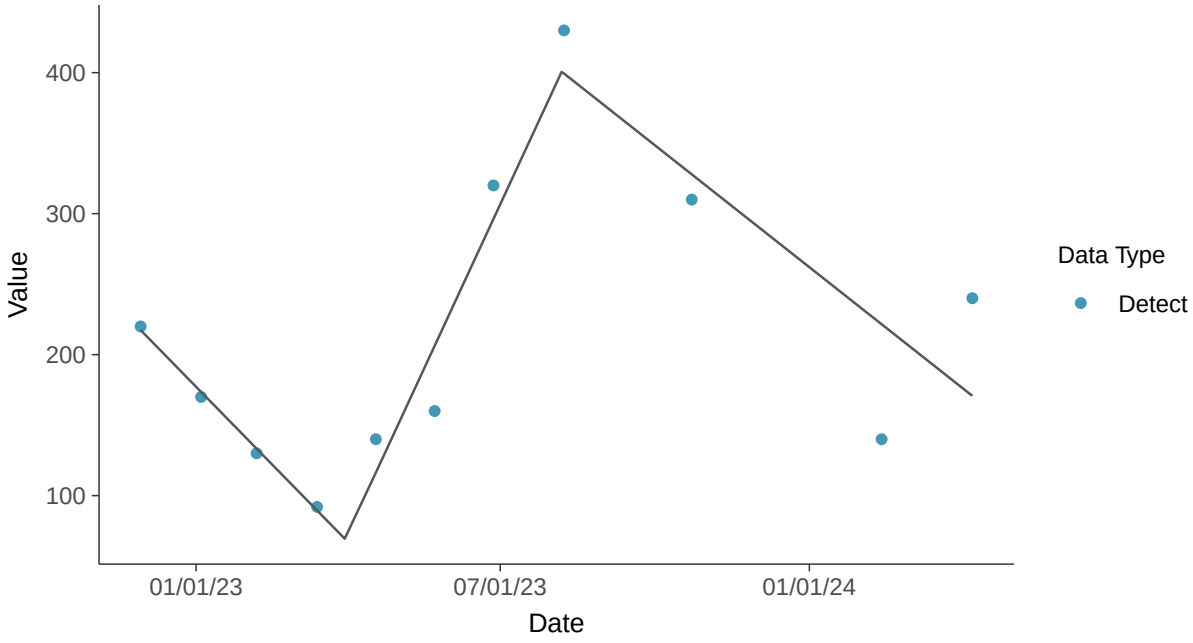
Trend Regression: Piecewise Linear-Linear

Chloride (as Cl), MW-10 (mg/L)



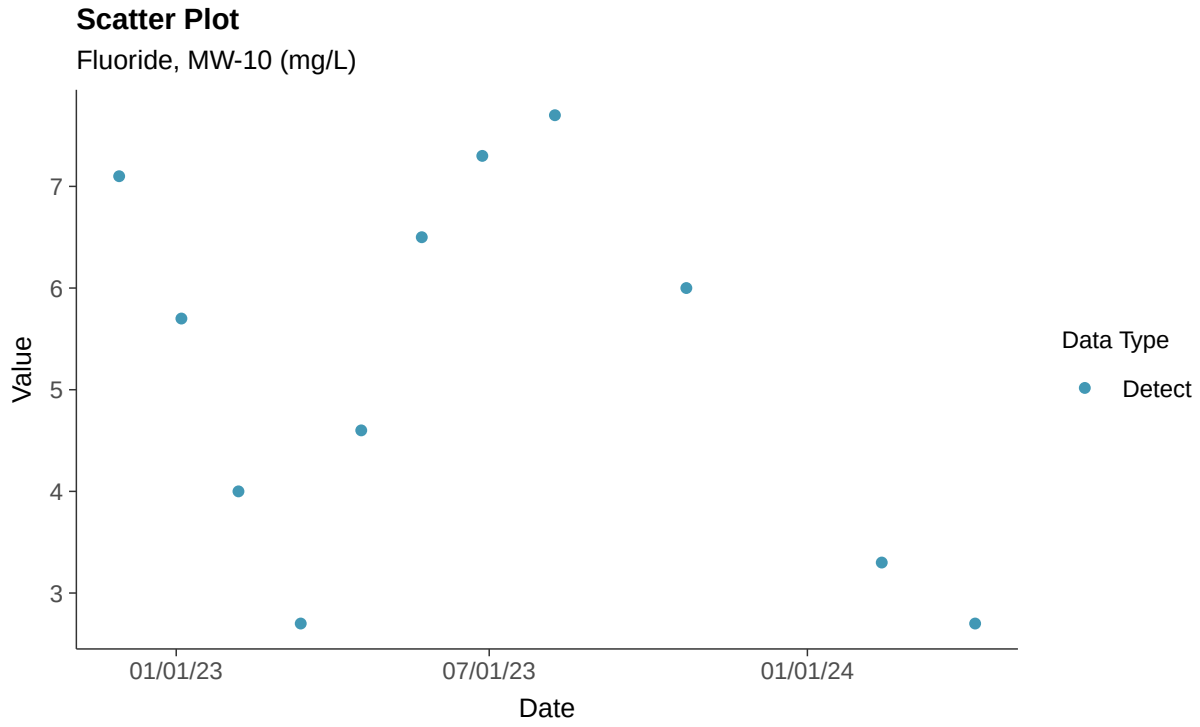
Trend Regression: Piecewise Linear-Linear-Linear

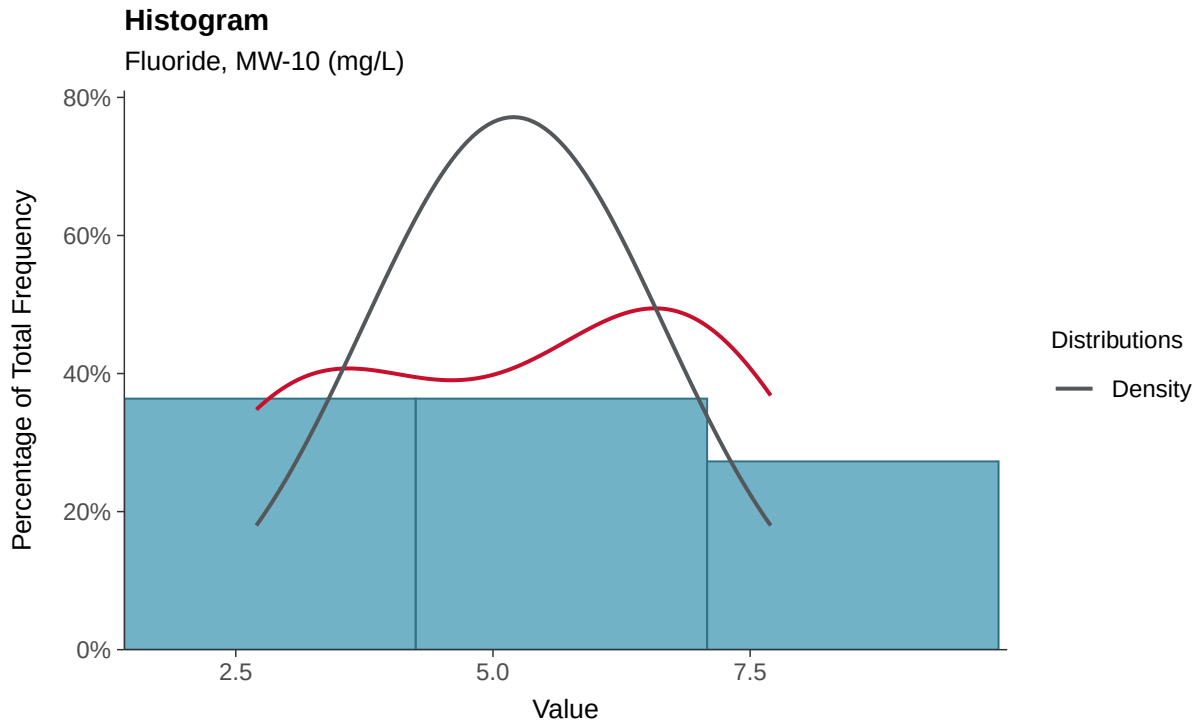
Chloride (as Cl), MW-10 (mg/L)



Appendix III: Fluoride, MW-10

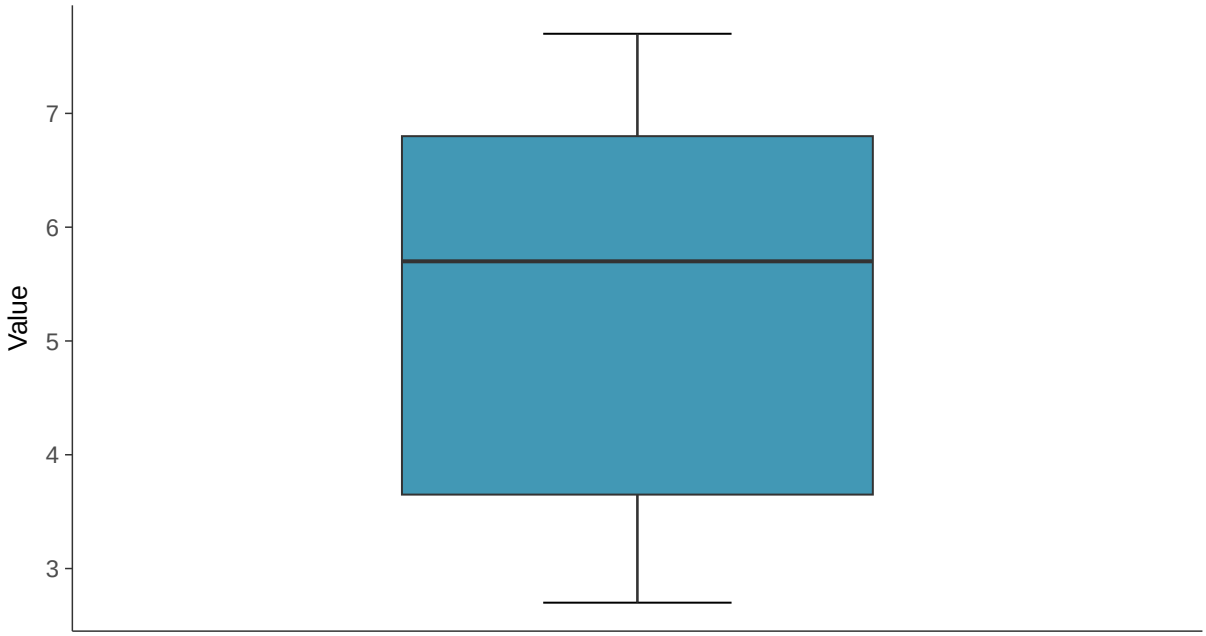
ID: 3_20_4_112





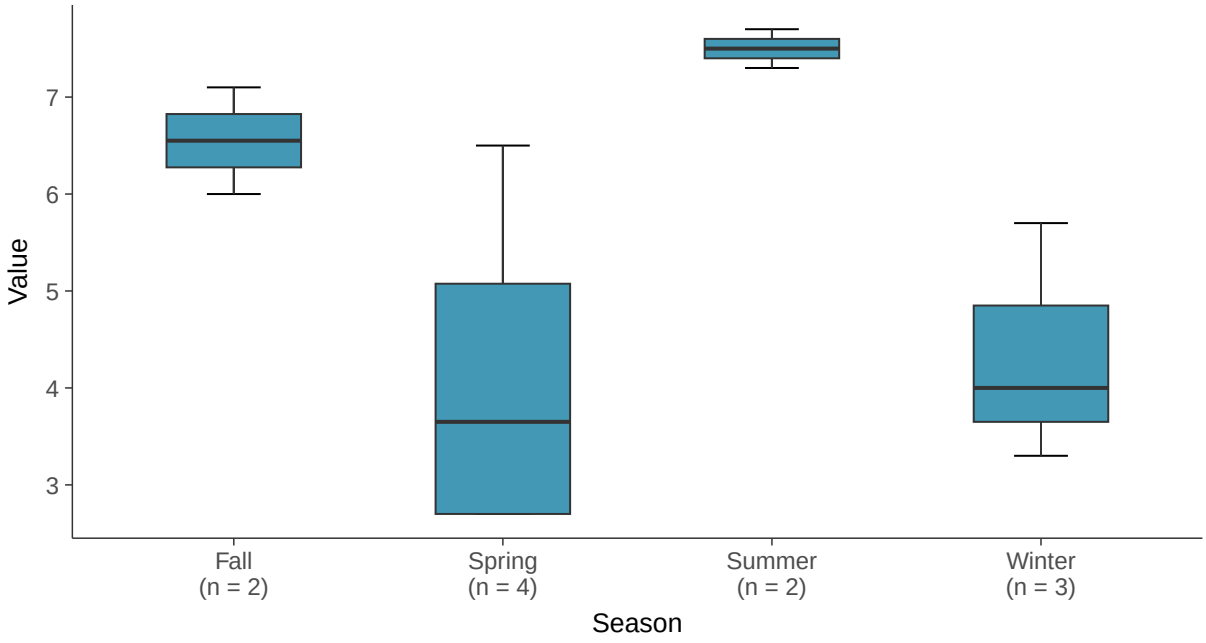
Boxplot

Fluoride, MW-10 (mg/L)



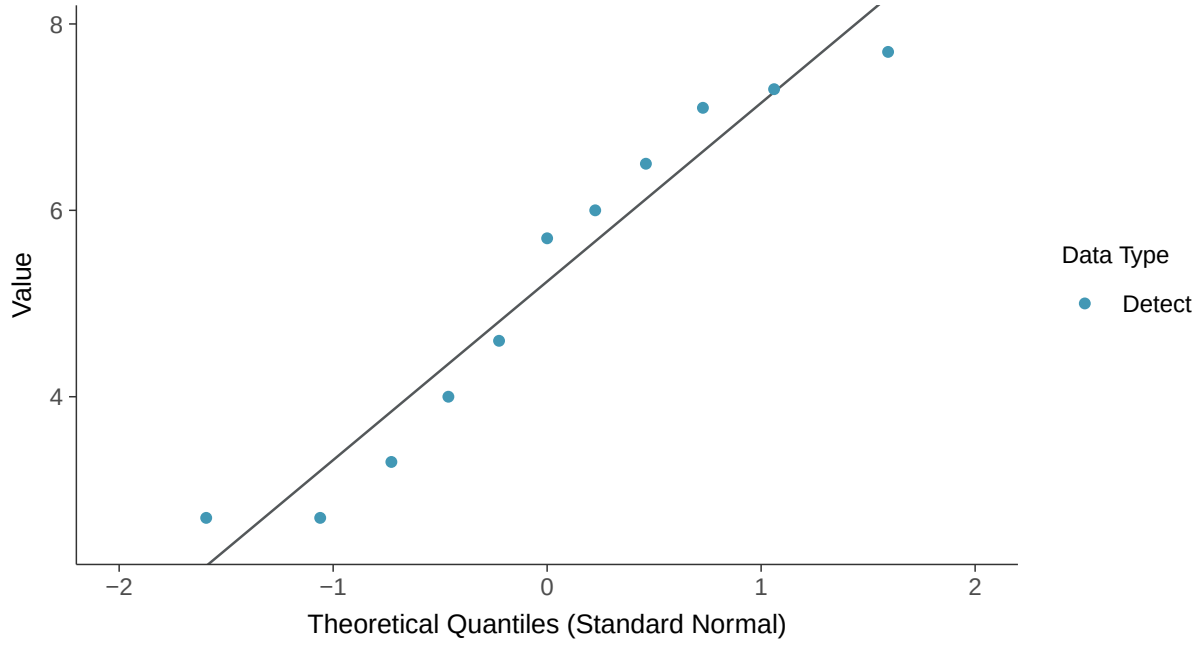
Boxplot by Season

Fluoride, MW-10 (mg/L)



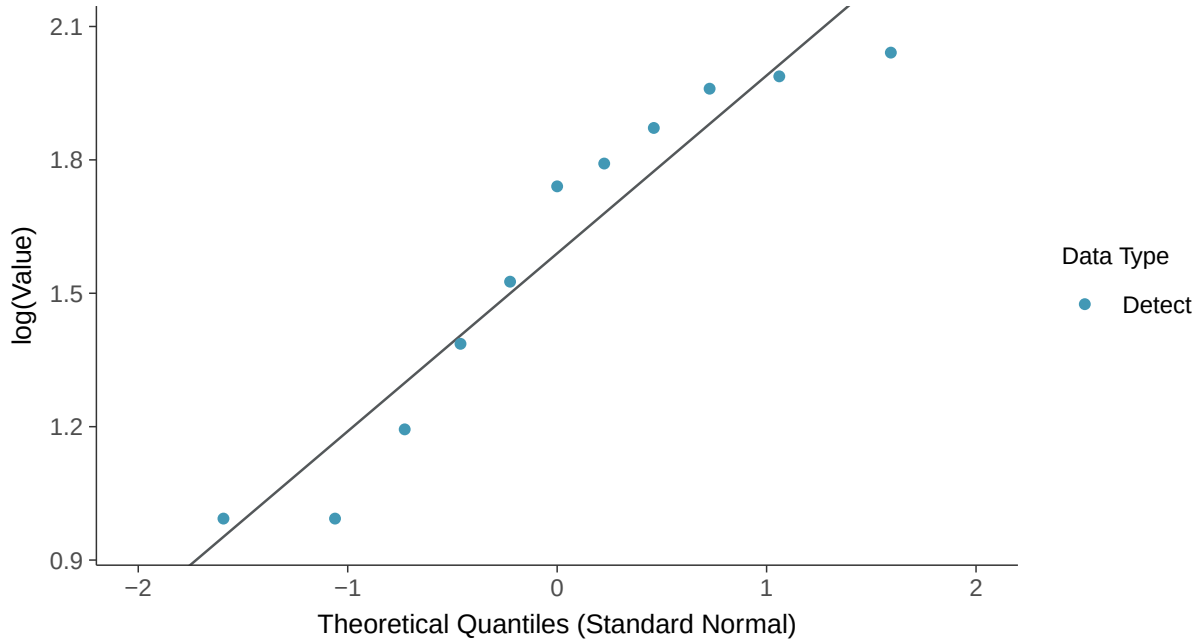
Normal Q-Q plot

Fluoride, MW-10 (mg/L)



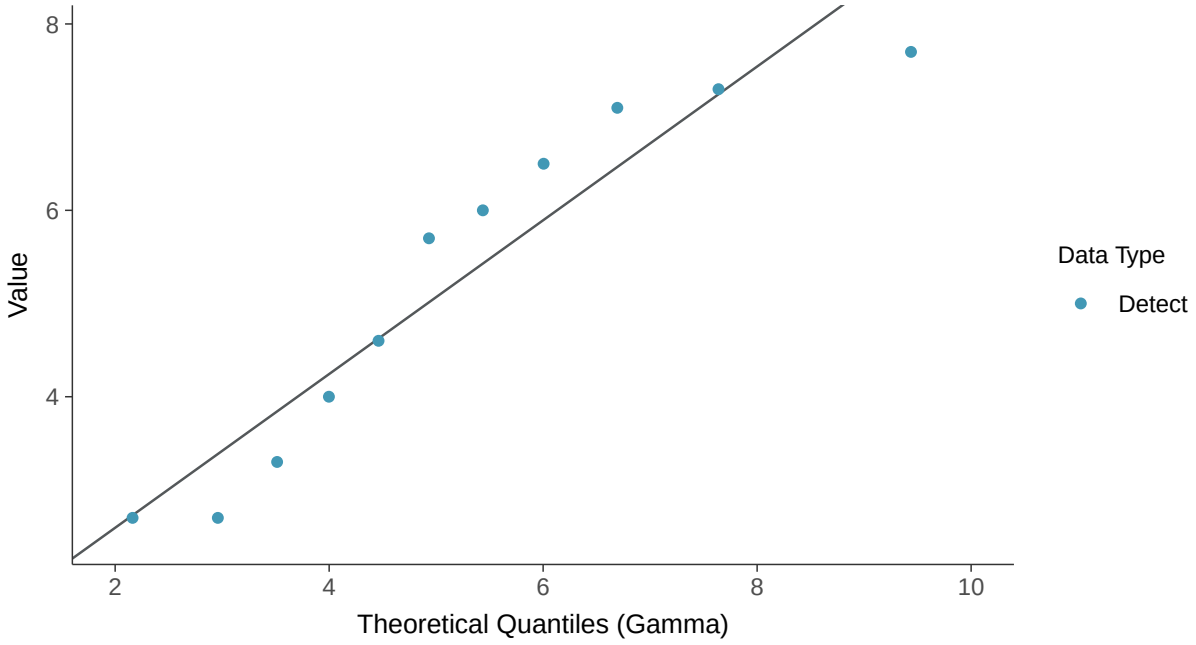
Lognormal Q-Q plot

Fluoride, MW-10 (mg/L)



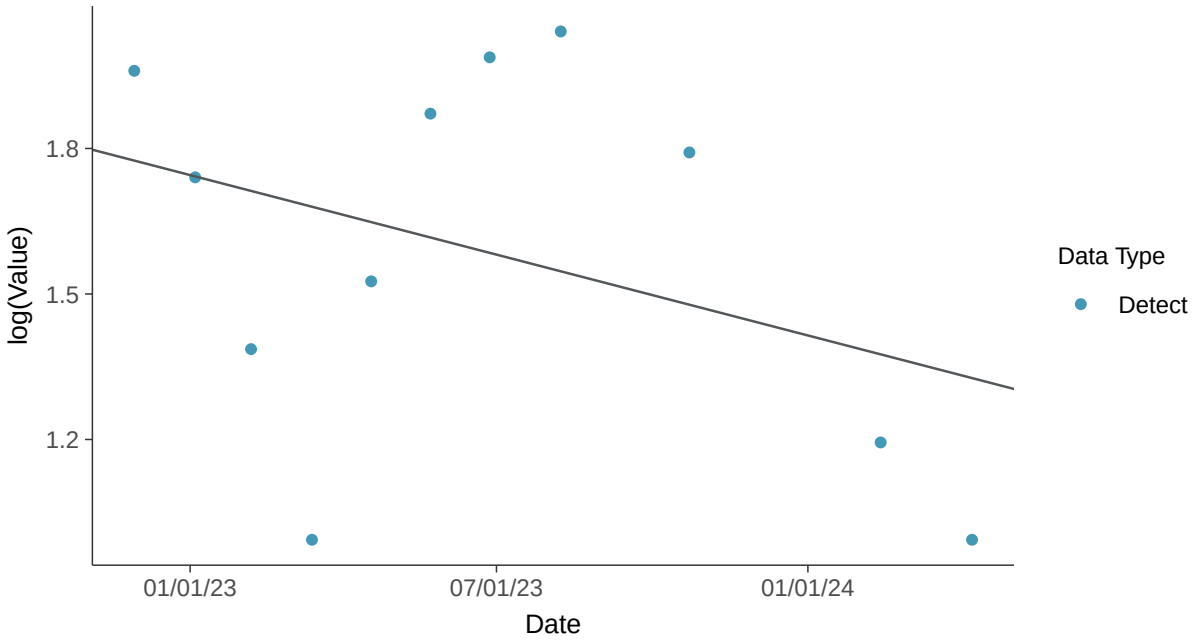
Gamma Q-Q plot

Fluoride, MW-10 (mg/L)



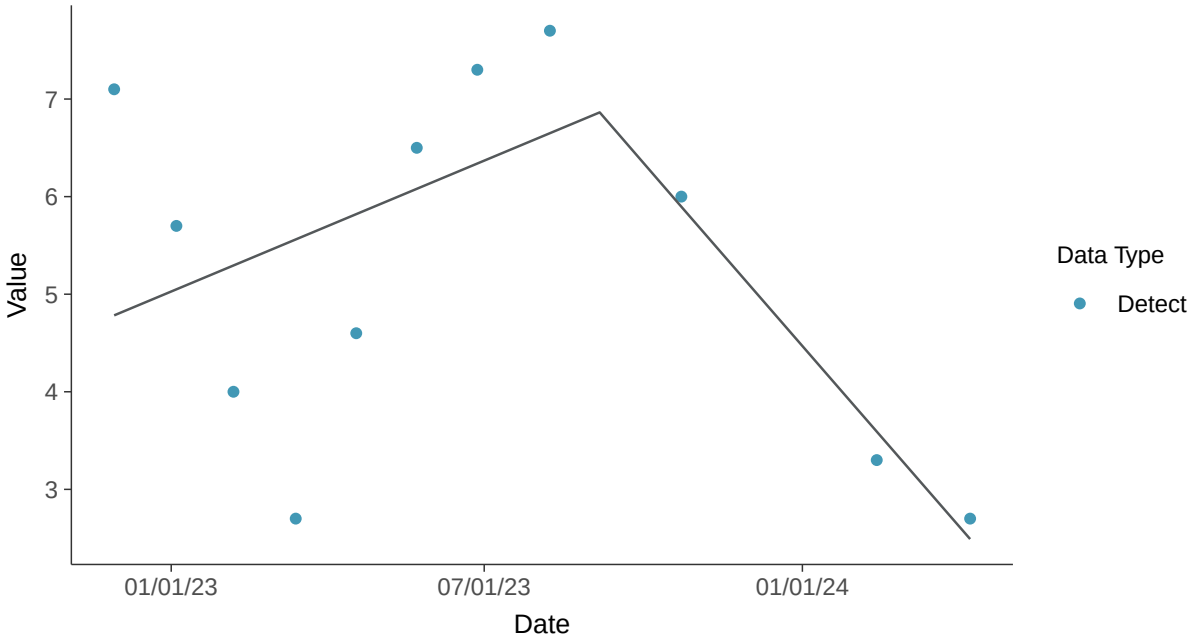
Trend Regression: Lognormal MLE

Fluoride, MW-10 (mg/L)



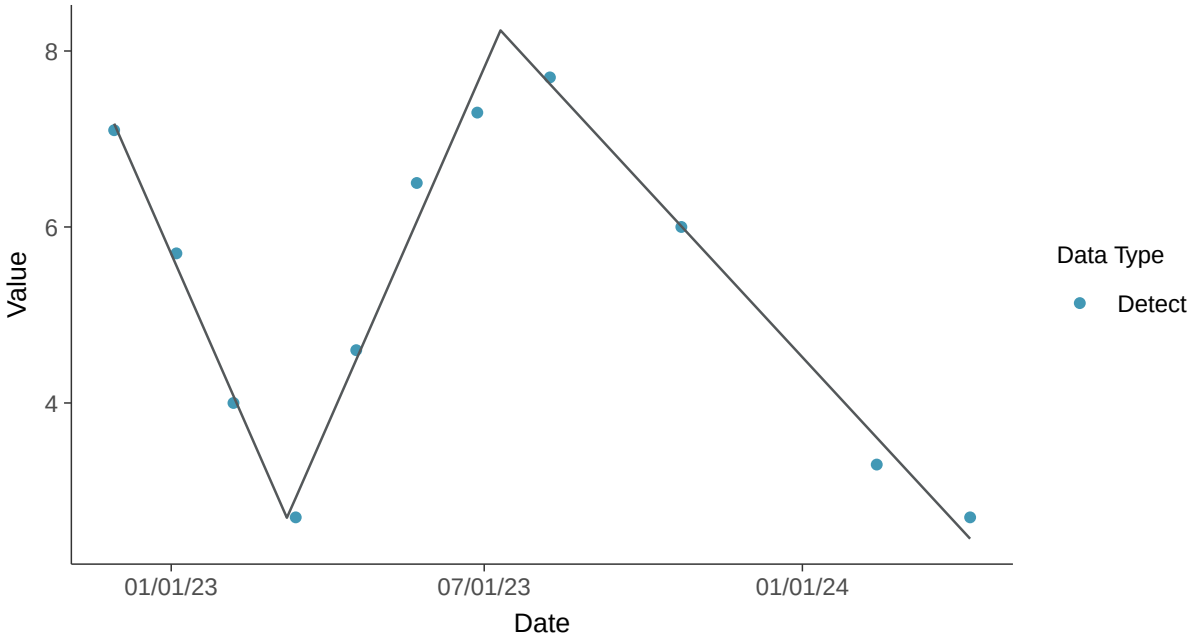
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-10 (mg/L)



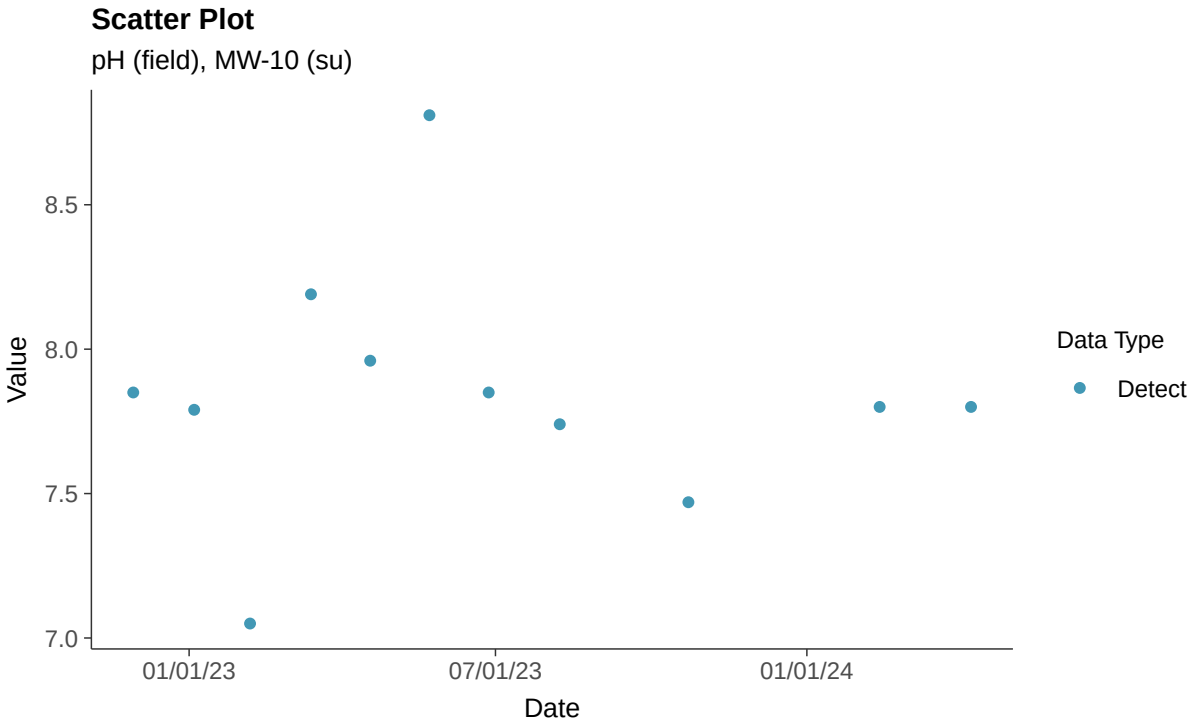
Trend Regression: Piecewise Linear-Linear-Linear

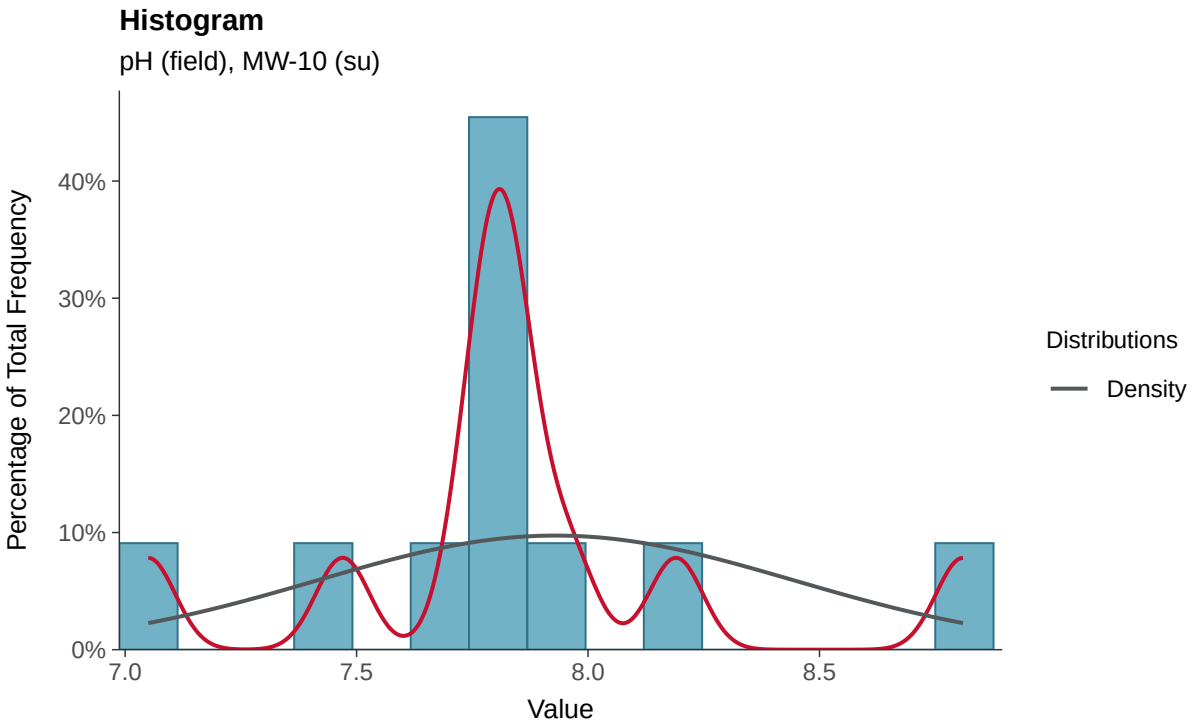
Fluoride, MW-10 (mg/L)



Appendix III: pH (field), MW-10

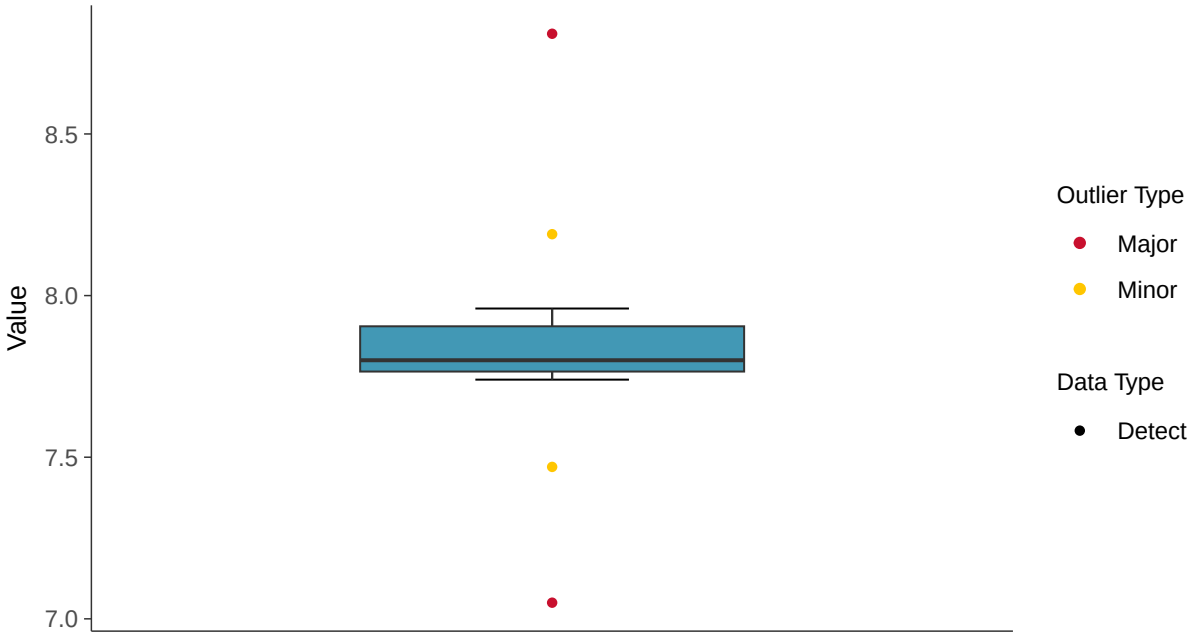
ID: 3_20_4_120





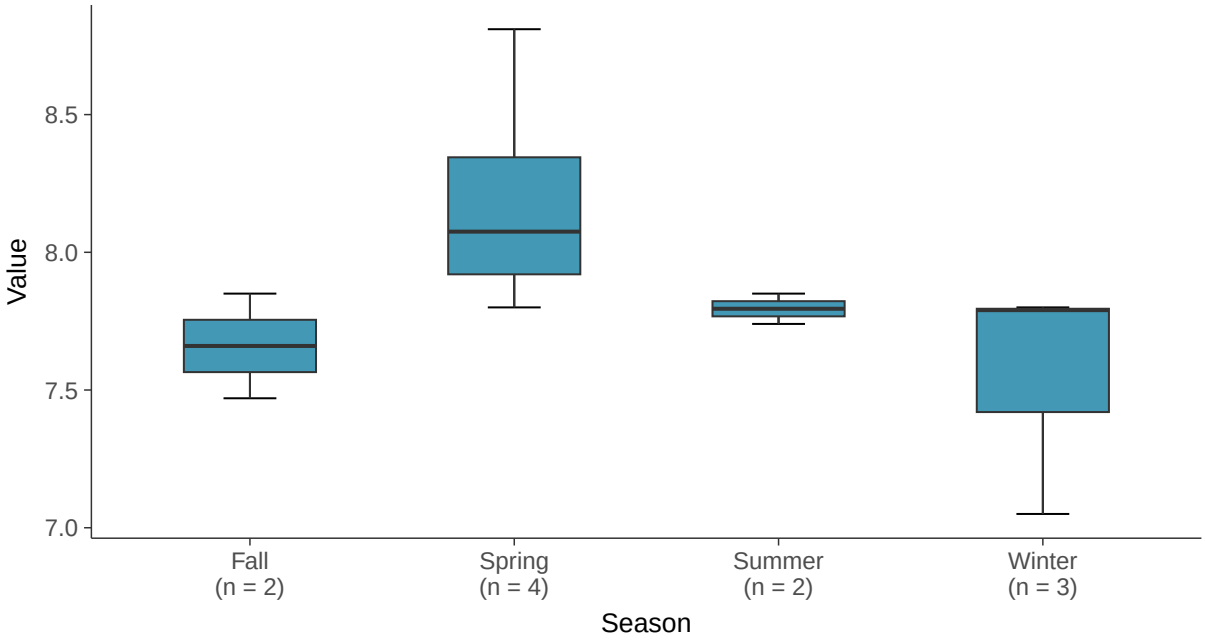
Boxplot

pH (field), MW-10 (su)



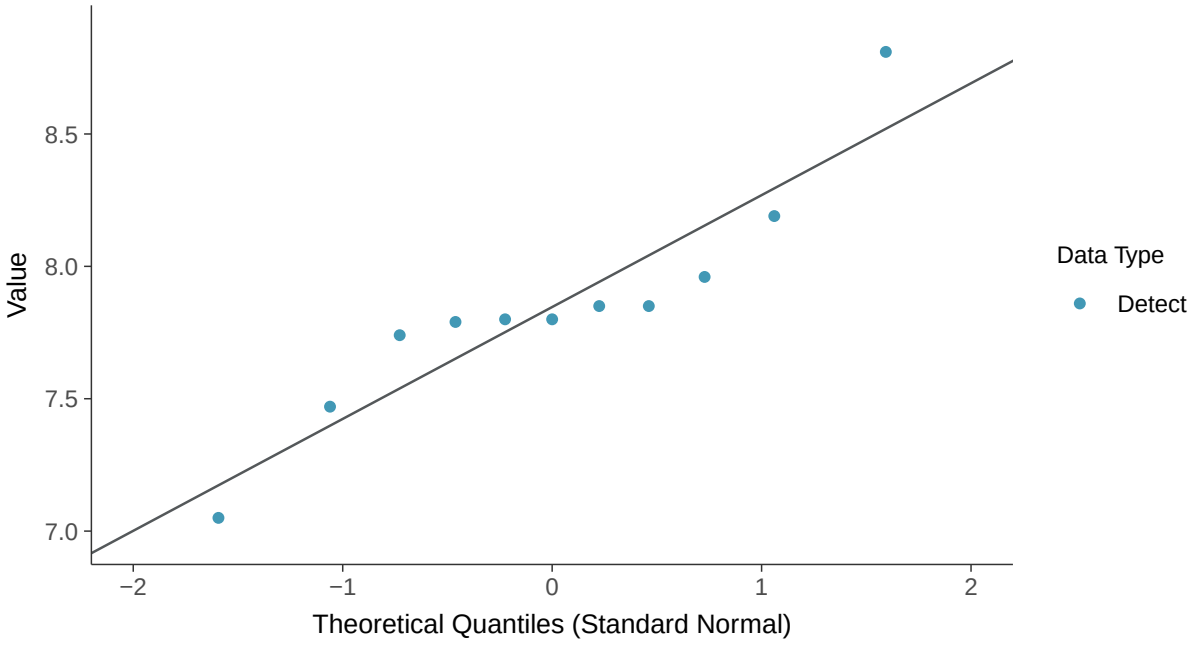
Boxplot by Season

pH (field), MW-10 (su)



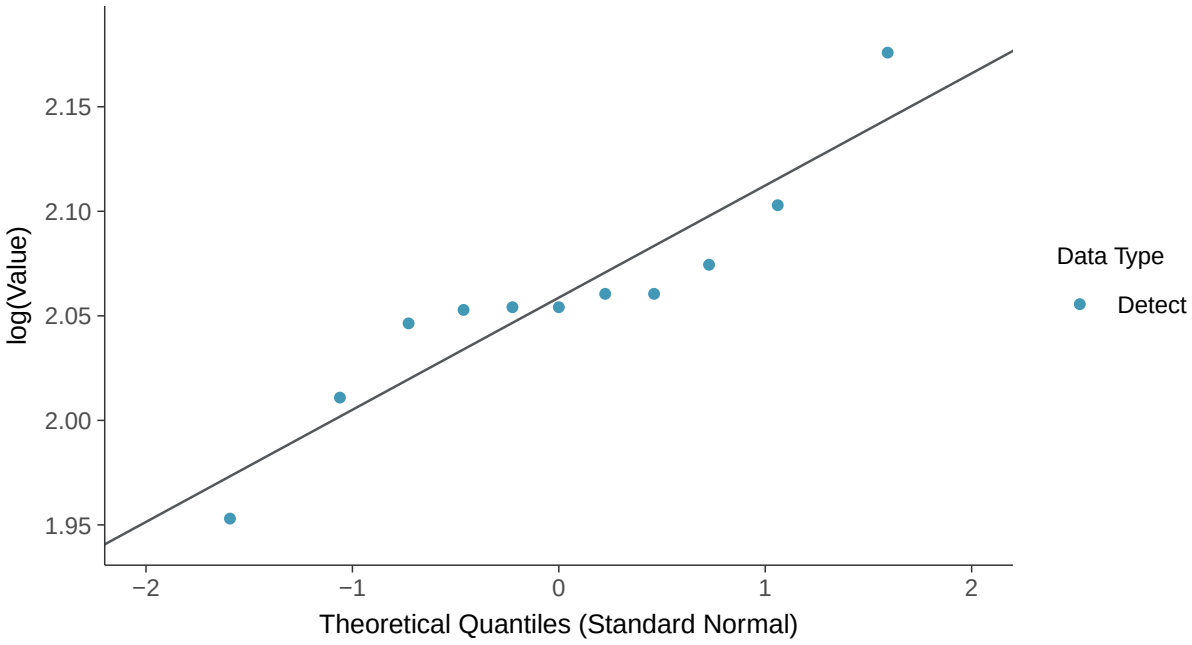
Normal Q-Q plot

pH (field), MW-10 (su)



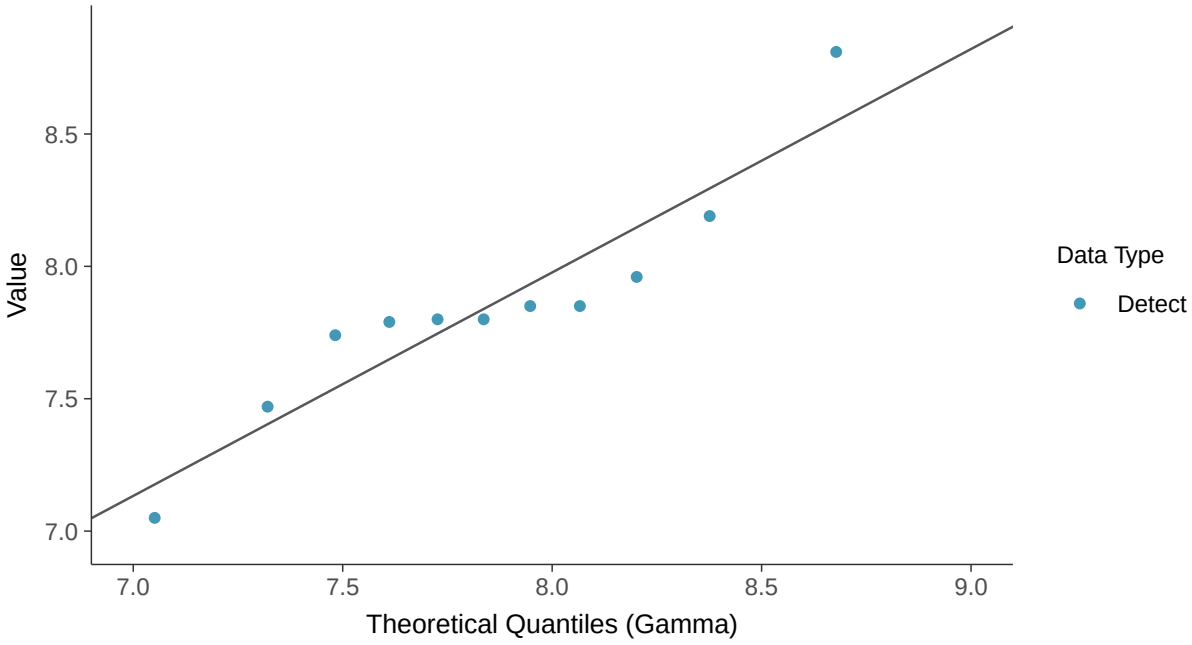
Lognormal Q-Q plot

pH (field), MW-10 (su)



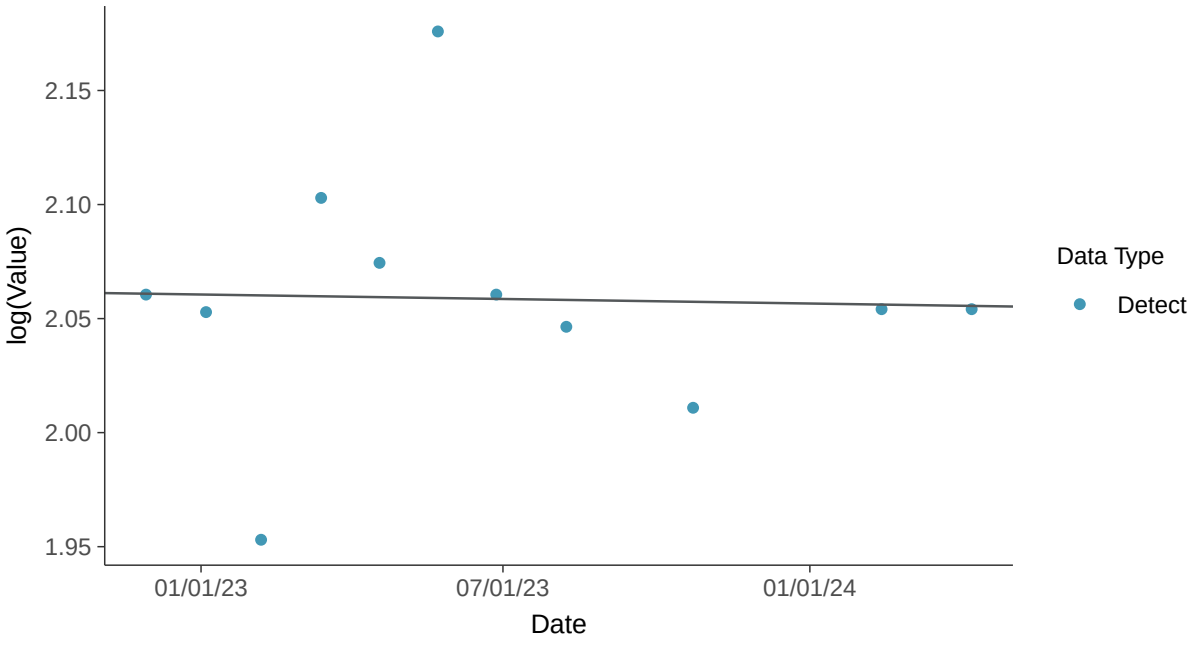
Gamma Q-Q plot

pH (field), MW-10 (su)



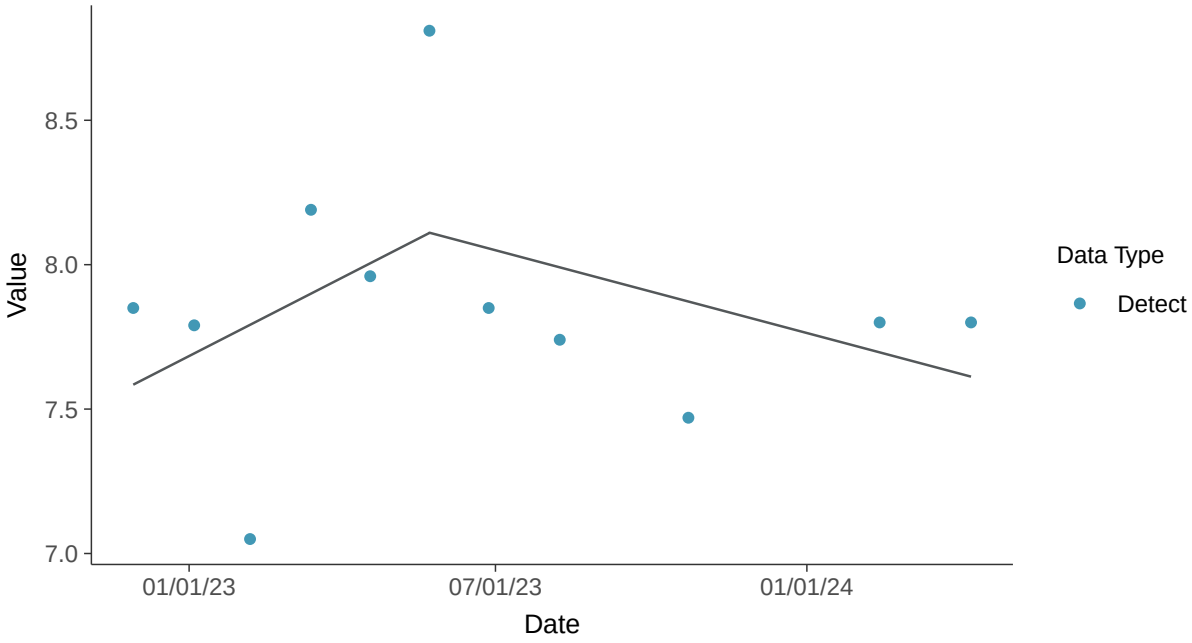
Trend Regression: Lognormal MLE

pH (field), MW-10 (su)



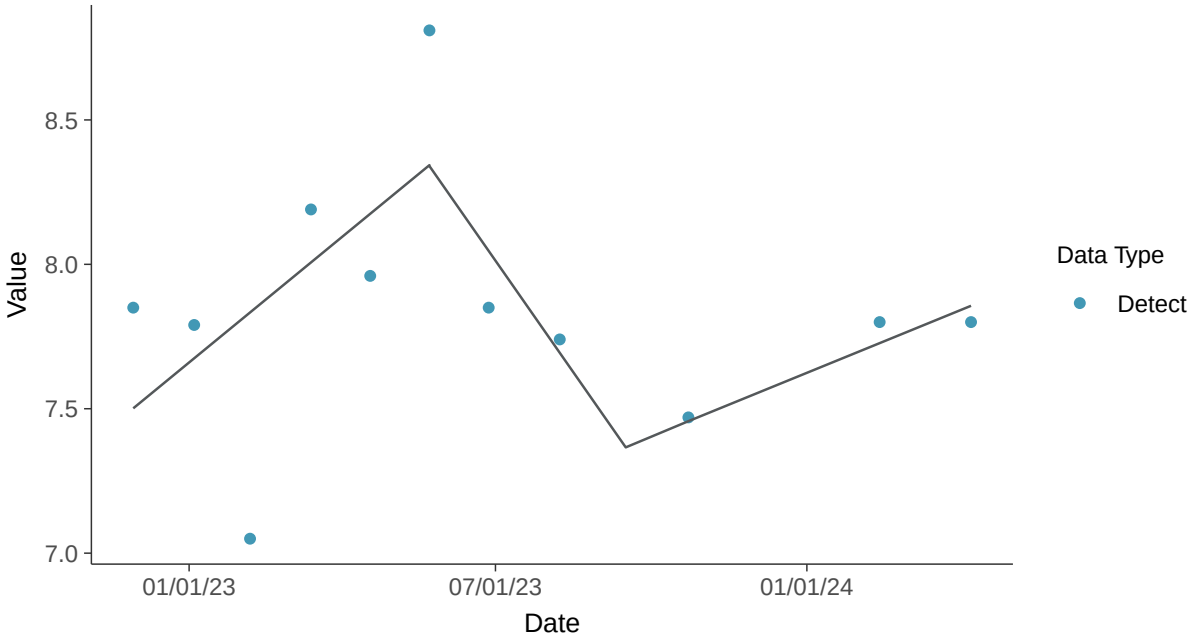
Trend Regression: Piecewise Linear-Linear

pH (field), MW-10 (su)



Trend Regression: Piecewise Linear-Linear-Linear

pH (field), MW-10 (su)

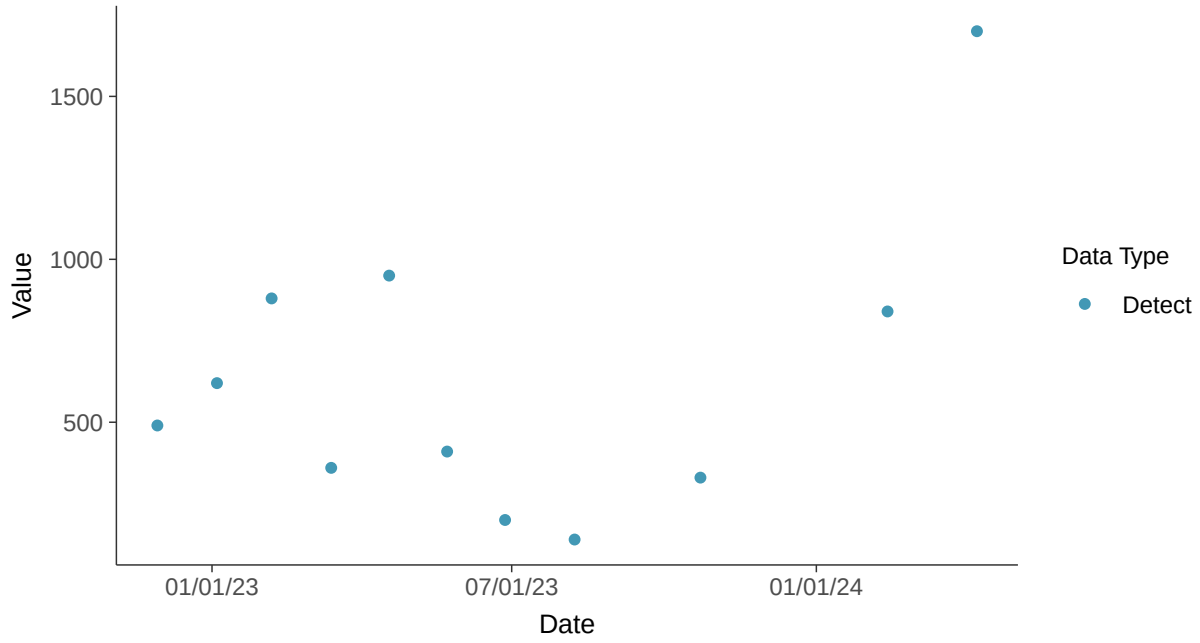


Appendix III: Sulfate (as SO4), MW-10

ID: 3_20_4_124

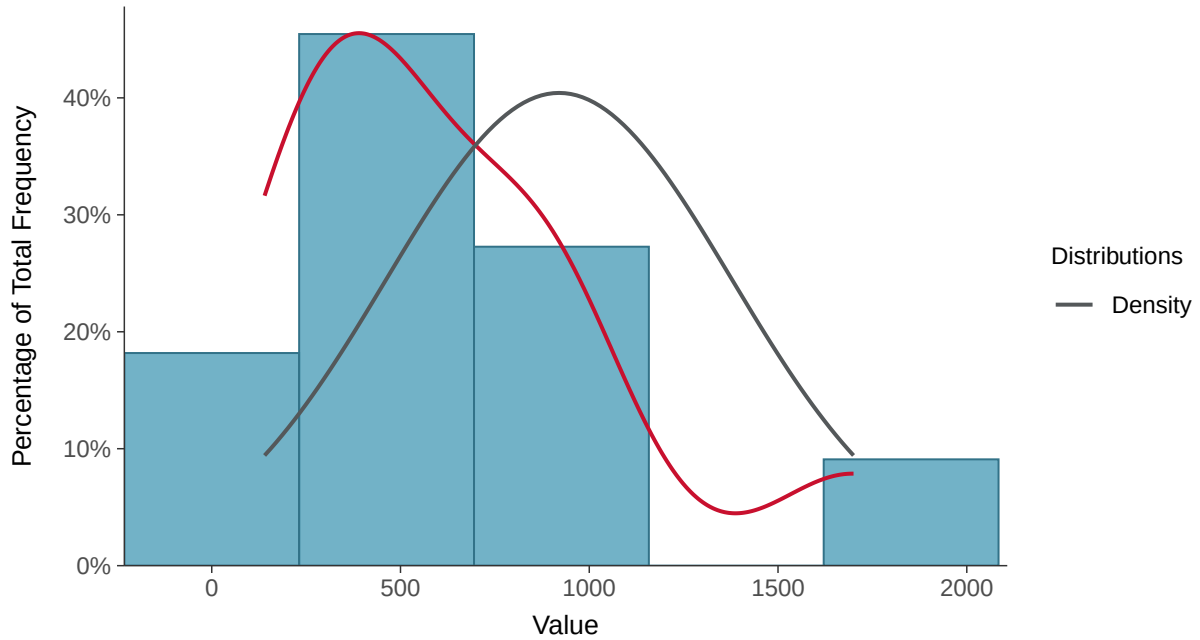
Scatter Plot

Sulfate (as SO4), MW-10 (mg/L)



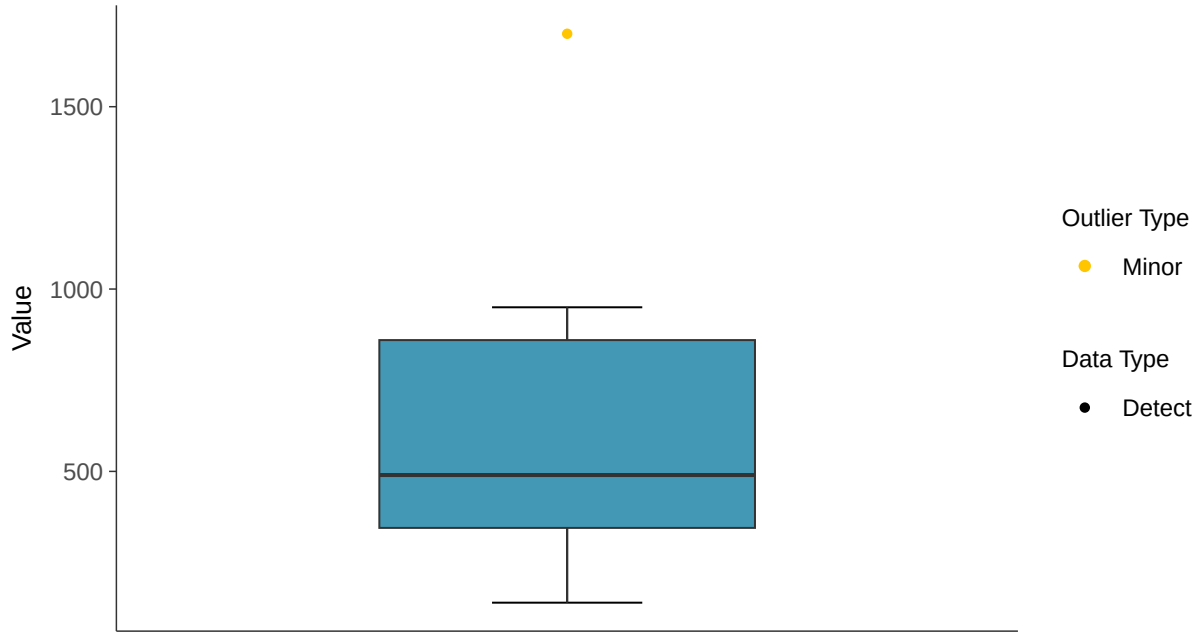
Histogram

Sulfate (as SO4), MW-10 (mg/L)



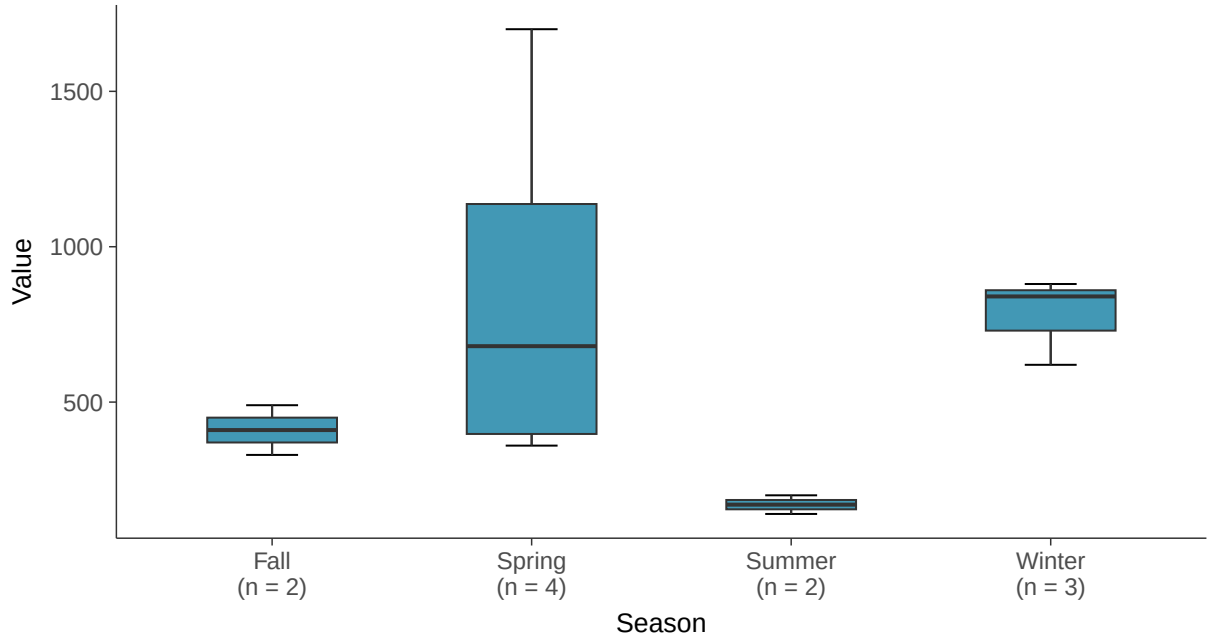
Boxplot

Sulfate (as SO4), MW-10 (mg/L)



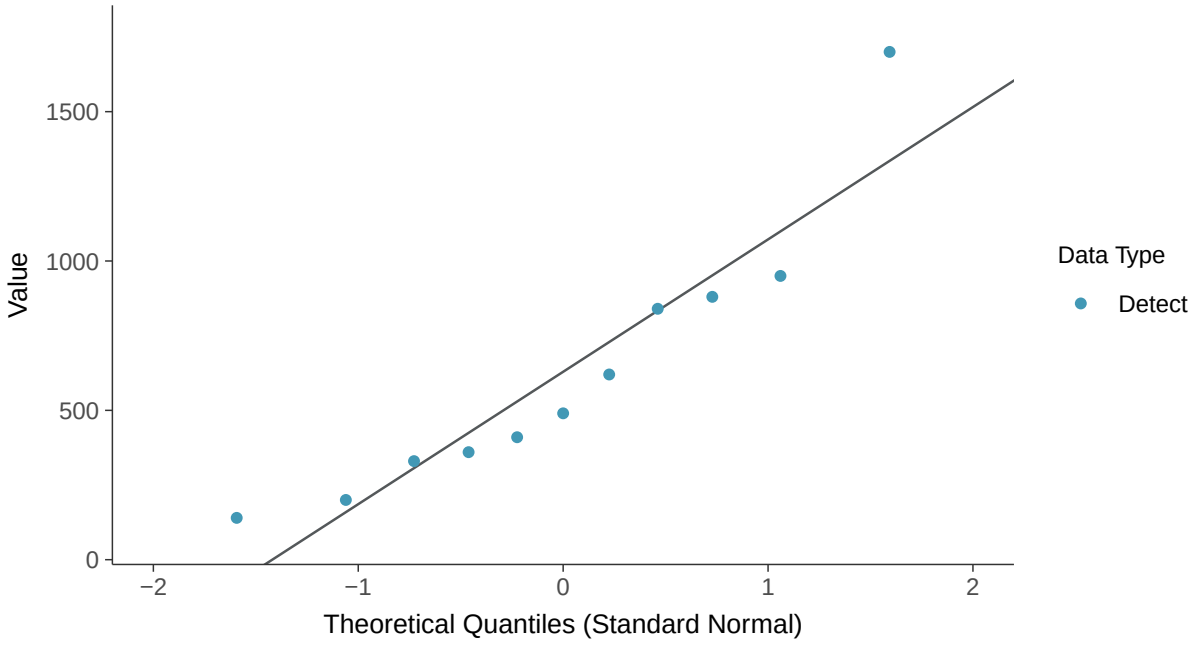
Boxplot by Season

Sulfate (as SO4), MW-10 (mg/L)



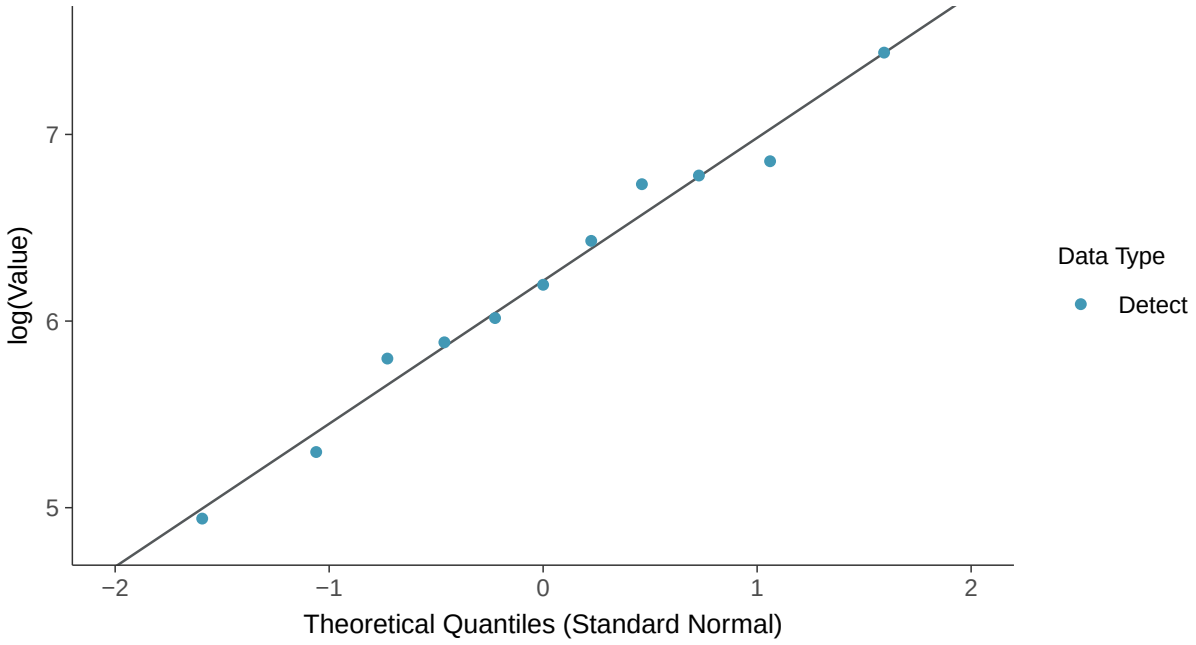
Normal Q-Q plot

Sulfate (as SO4), MW-10 (mg/L)



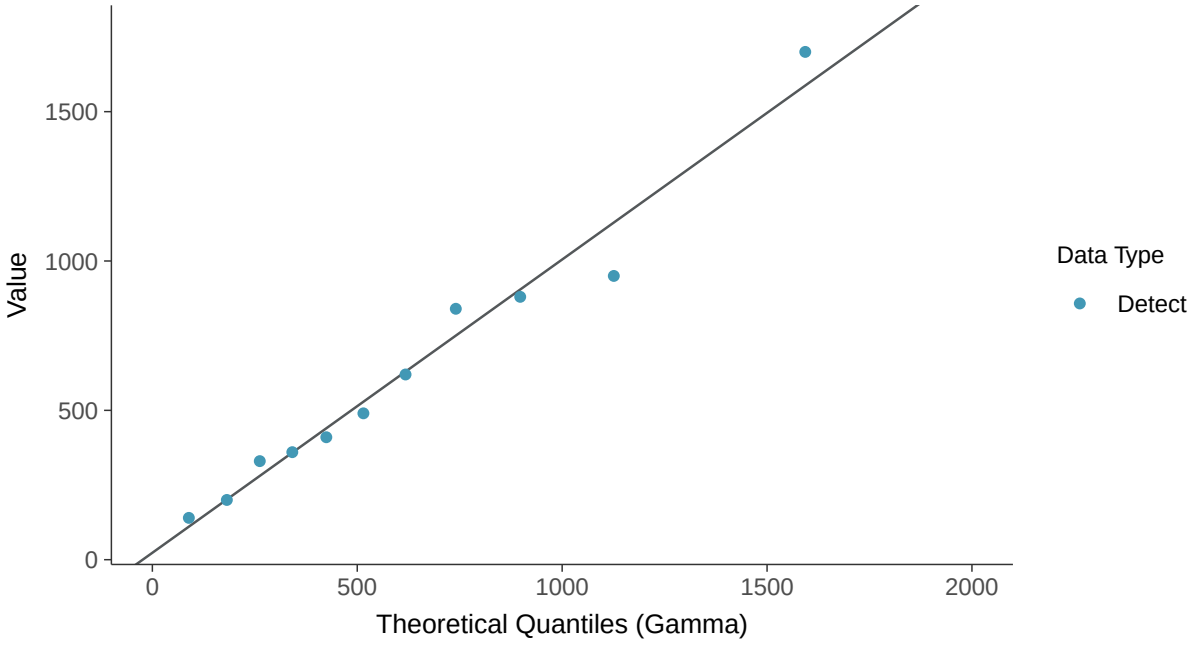
Lognormal Q-Q plot

Sulfate (as SO4), MW-10 (mg/L)



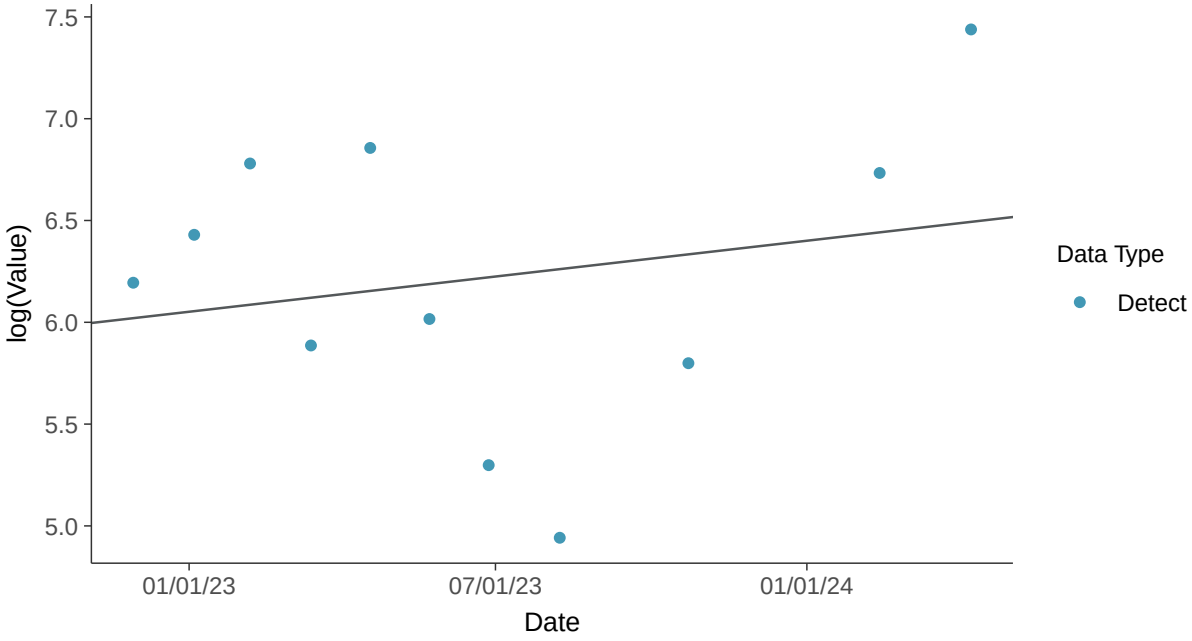
Gamma Q-Q plot

Sulfate (as SO4), MW-10 (mg/L)



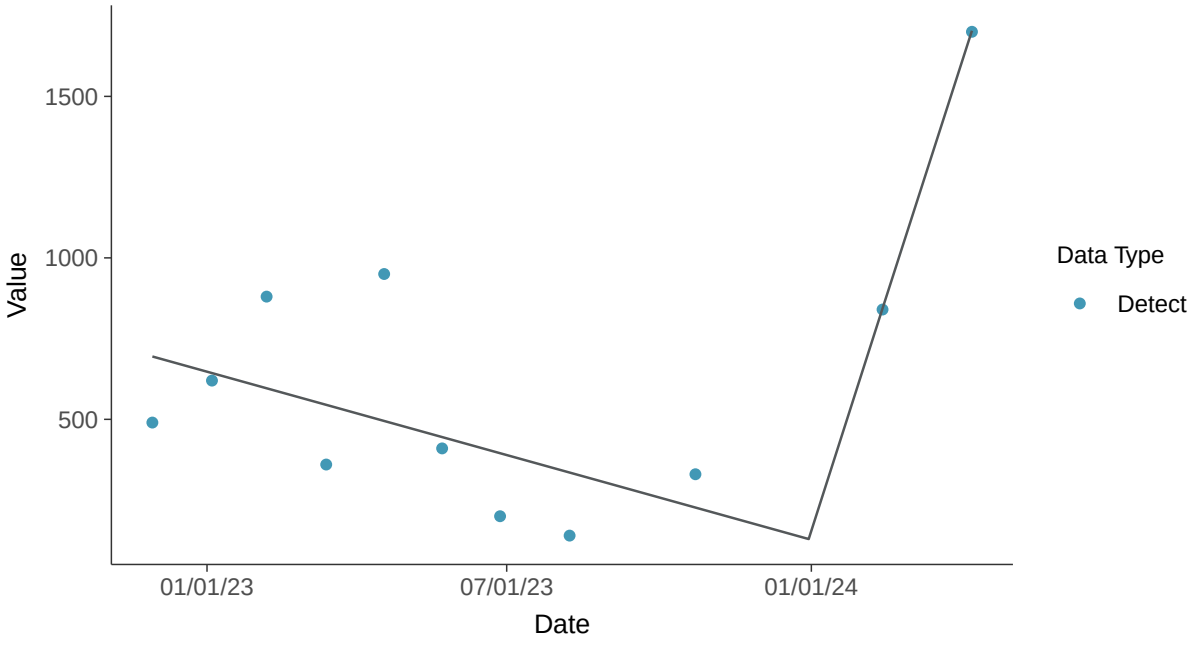
Trend Regression: Lognormal MLE

Sulfate (as SO4), MW-10 (mg/L)



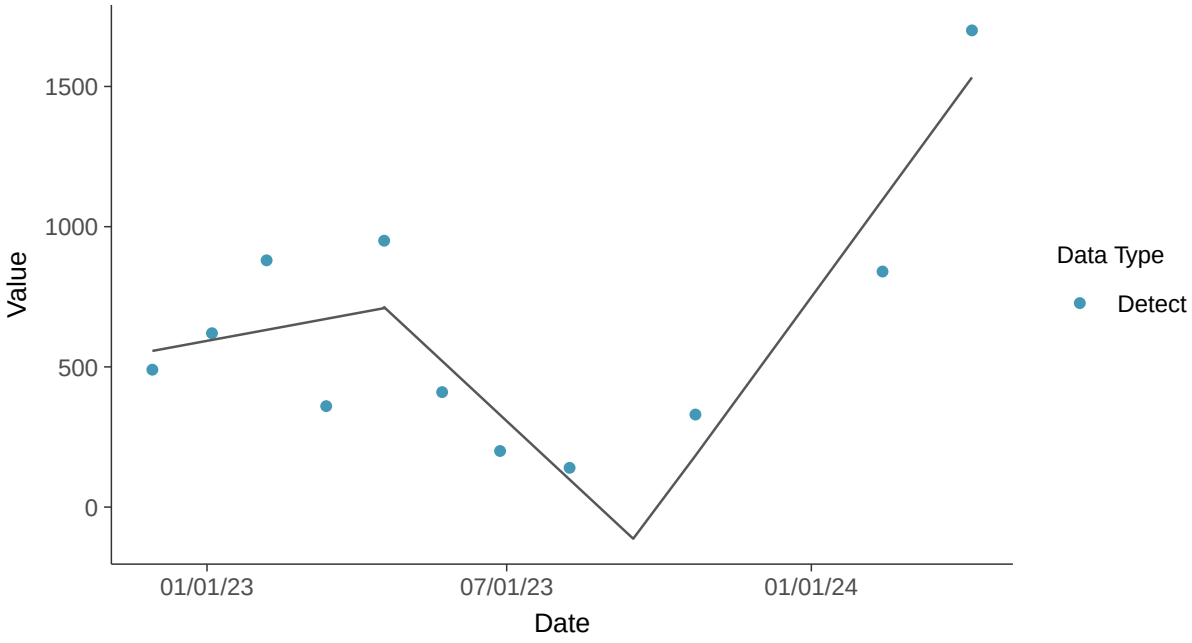
Trend Regression: Piecewise Linear-Linear

Sulfate (as SO4), MW-10 (mg/L)



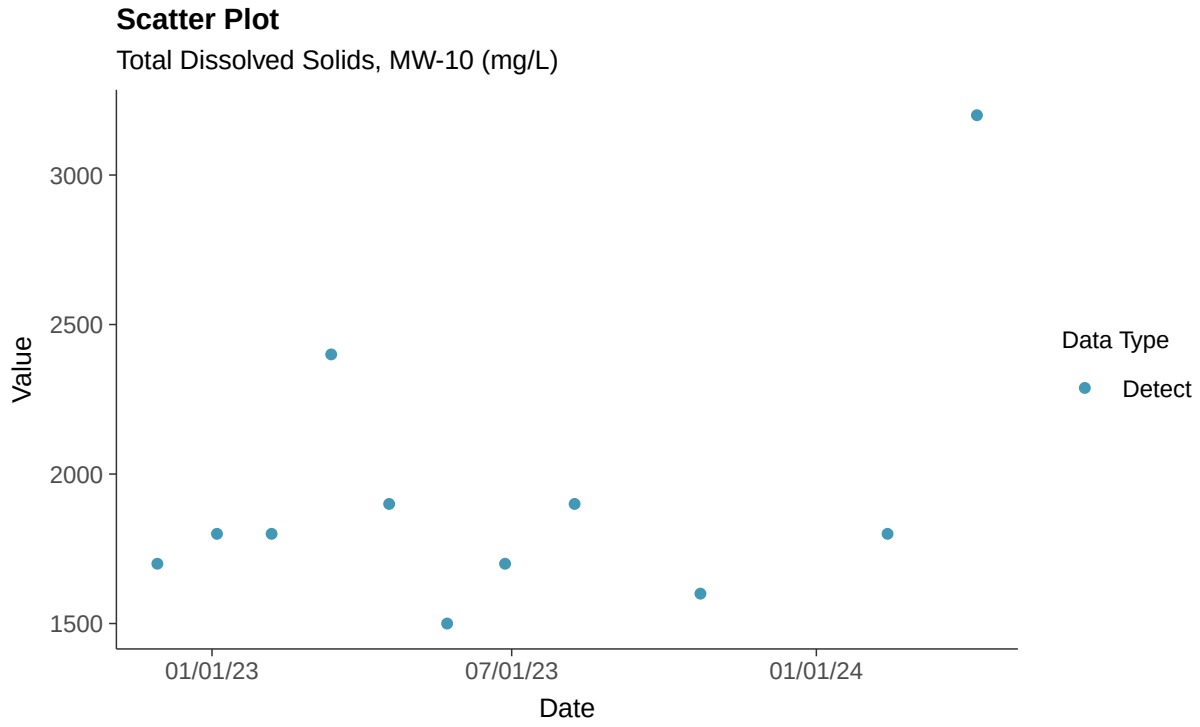
Trend Regression: Piecewise Linear-Linear-Linear

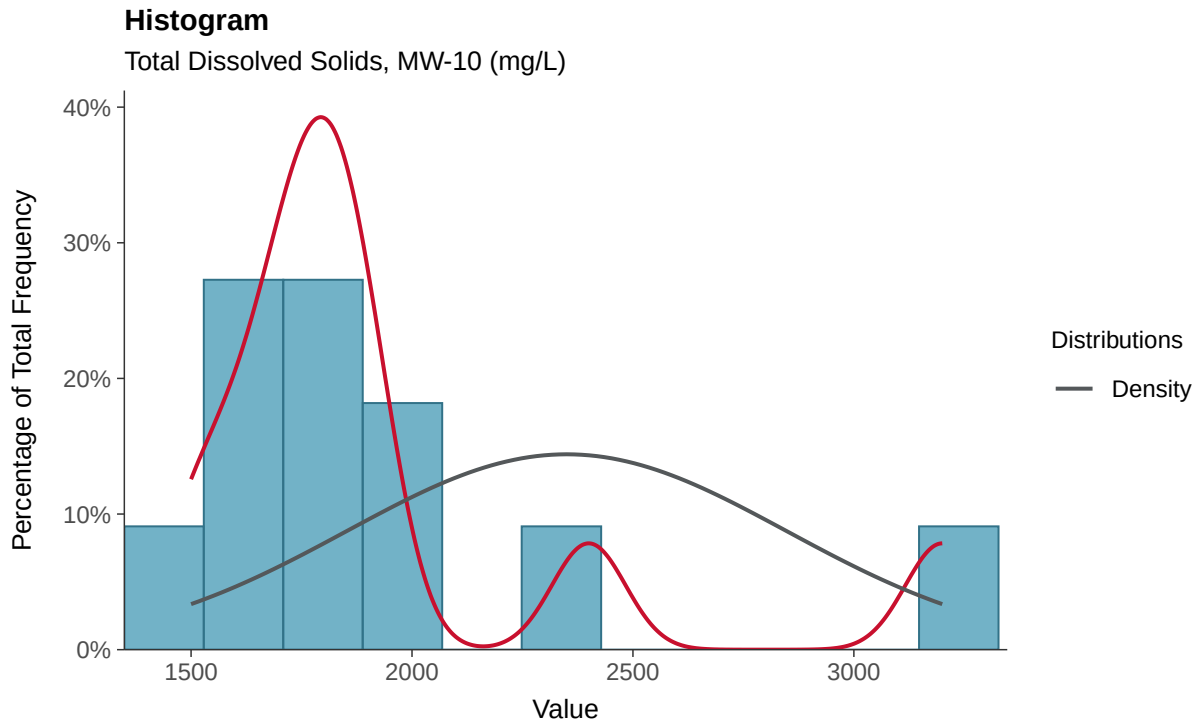
Sulfate (as SO4), MW-10 (mg/L)



Appendix III: Total Dissolved Solids, MW-10

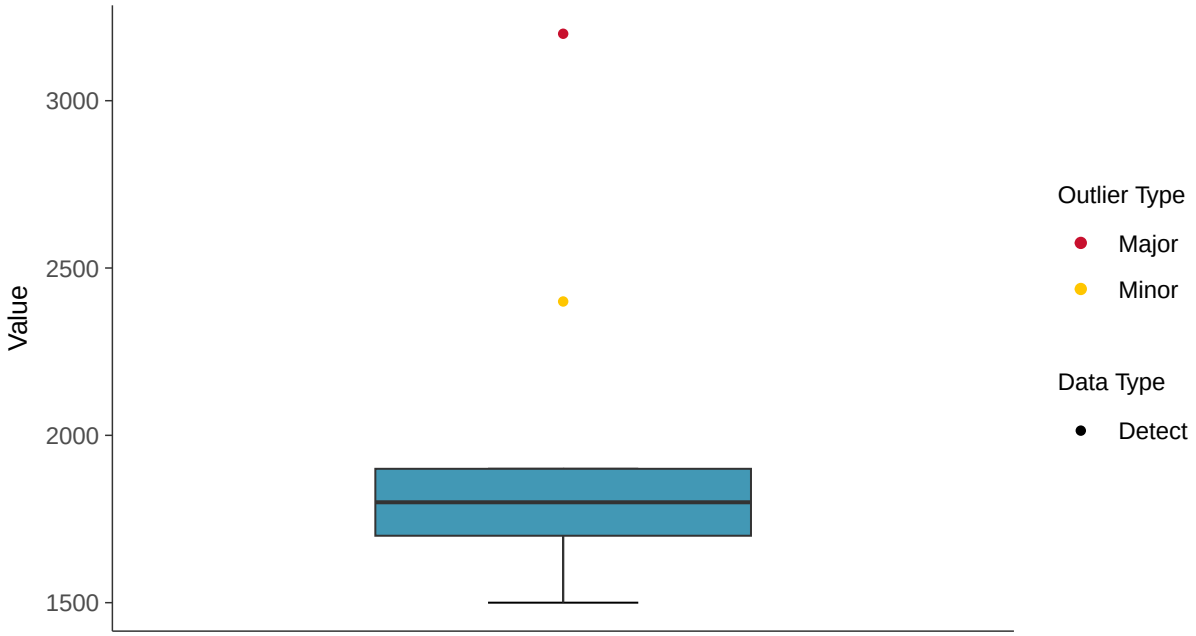
ID: 3_20_4_126





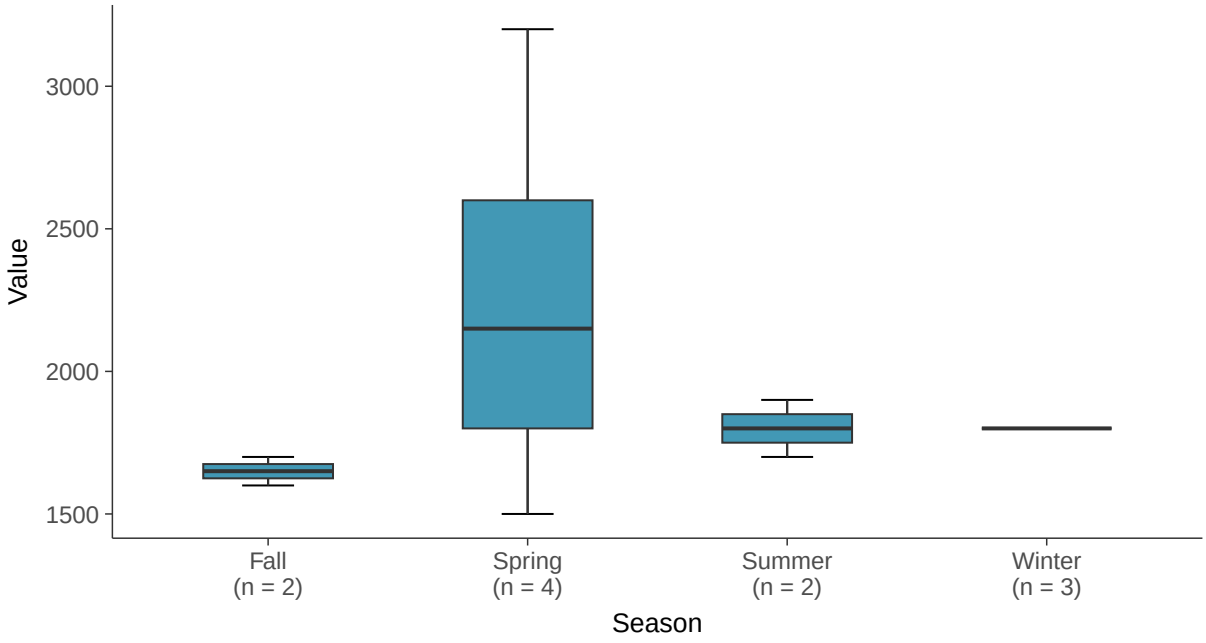
Boxplot

Total Dissolved Solids, MW-10 (mg/L)



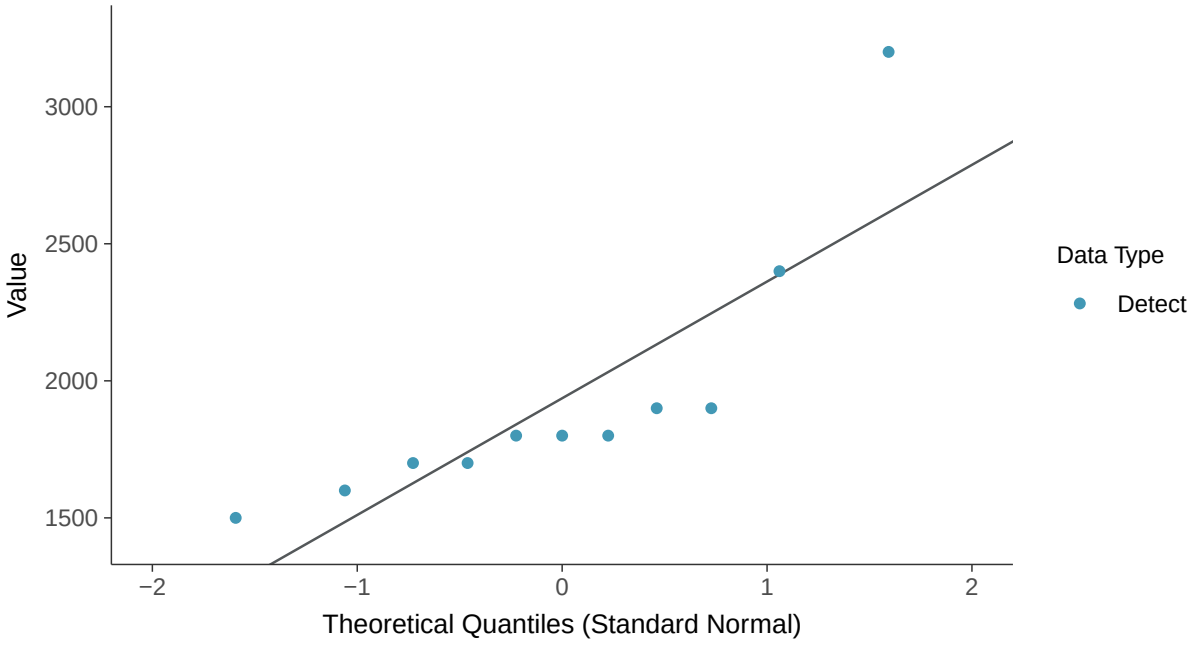
Boxplot by Season

Total Dissolved Solids, MW-10 (mg/L)



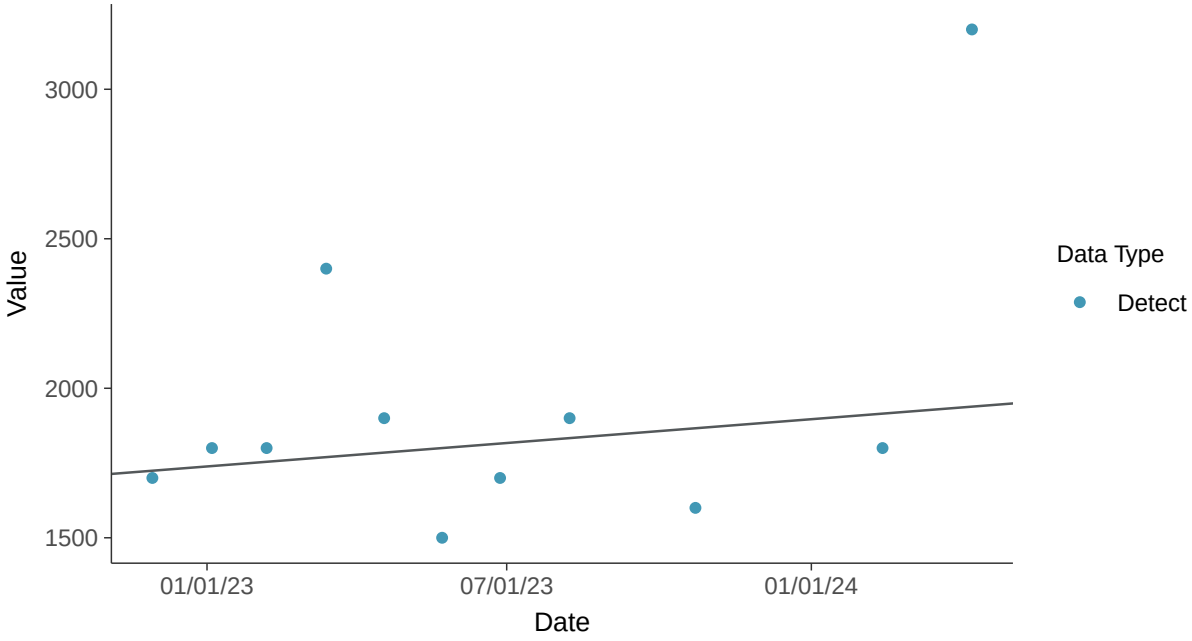
Normal Q-Q plot

Total Dissolved Solids, MW-10 (mg/L)



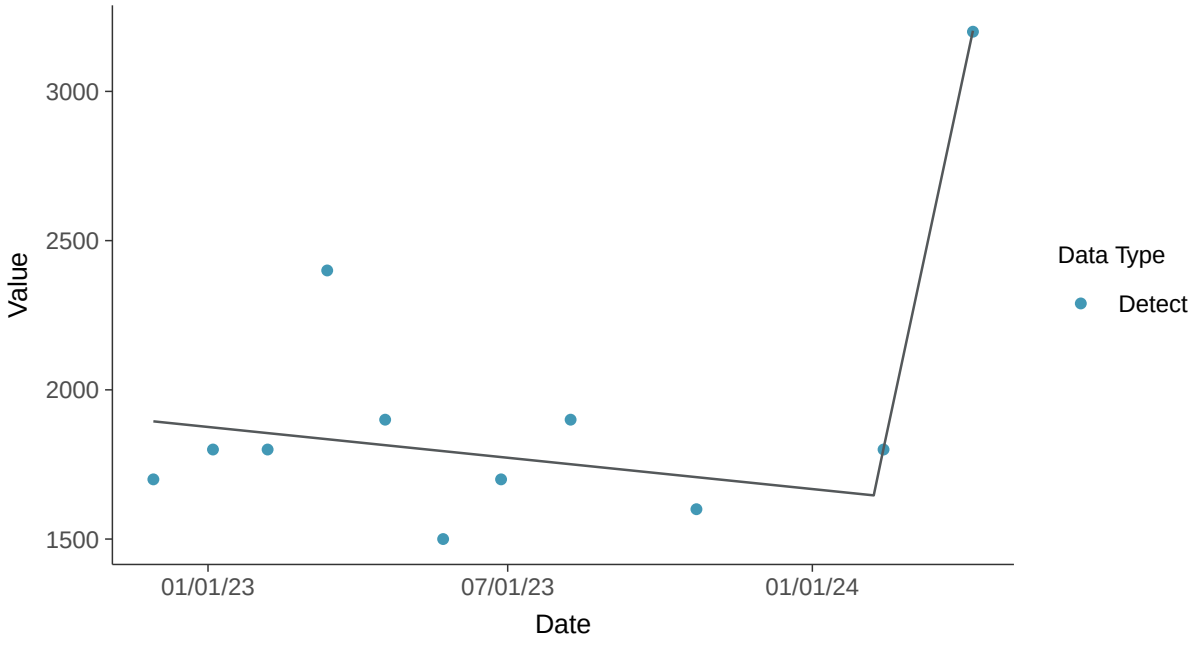
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Total Dissolved Solids, MW-10 (mg/L)



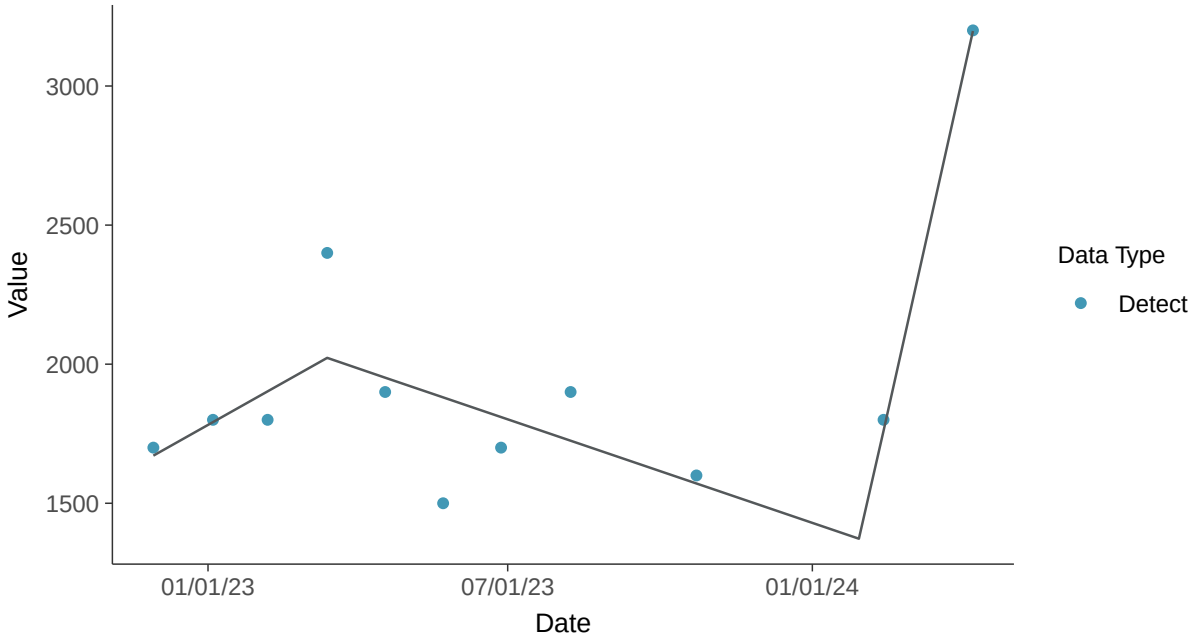
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-10 (mg/L)



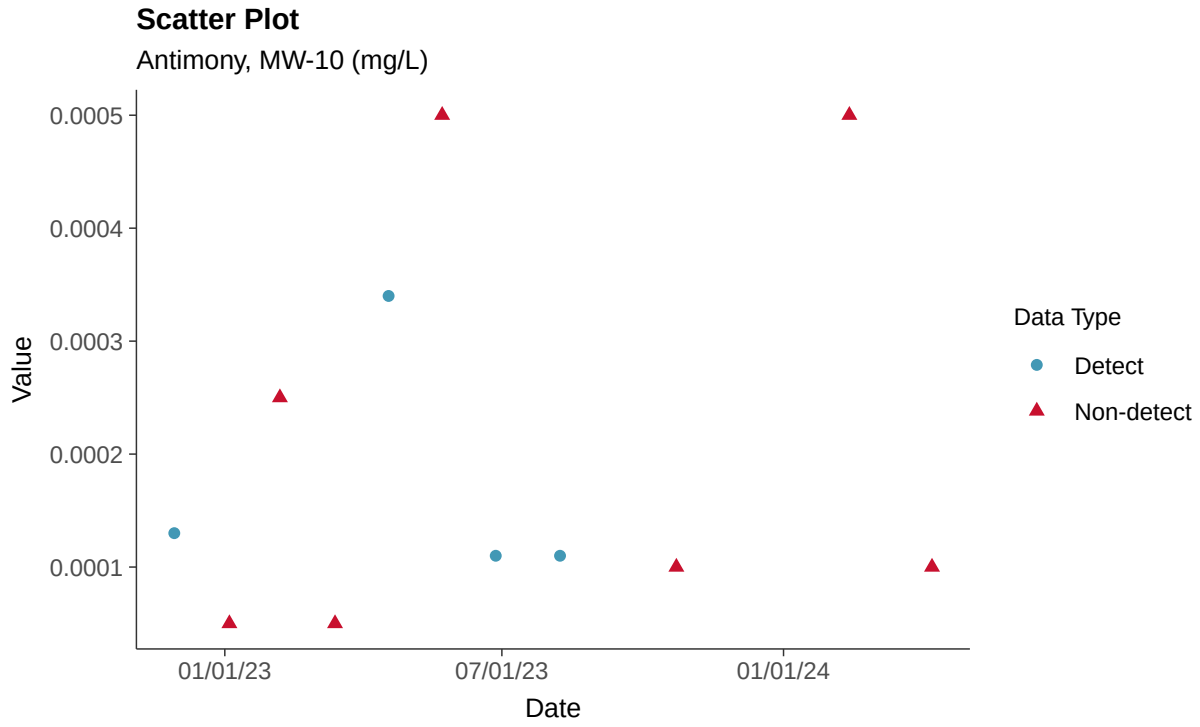
Trend Regression: Piecewise Linear-Linear-Linear

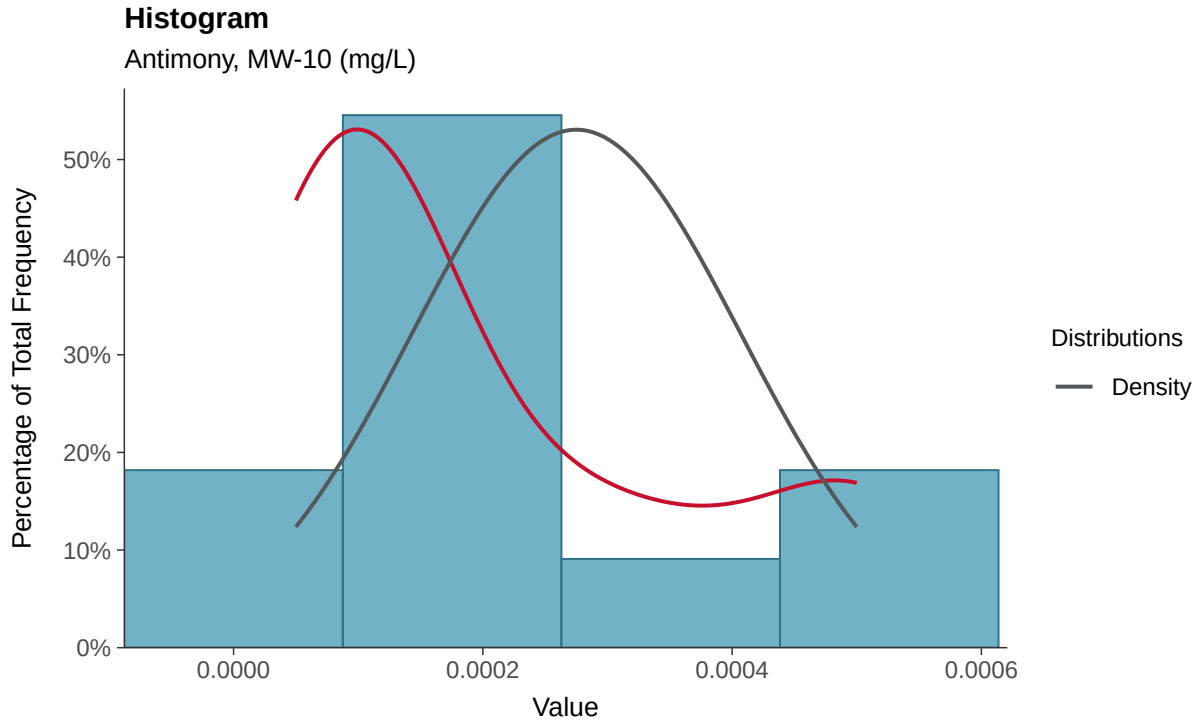
Total Dissolved Solids, MW-10 (mg/L)



Appendix IV: Antimony, MW-10

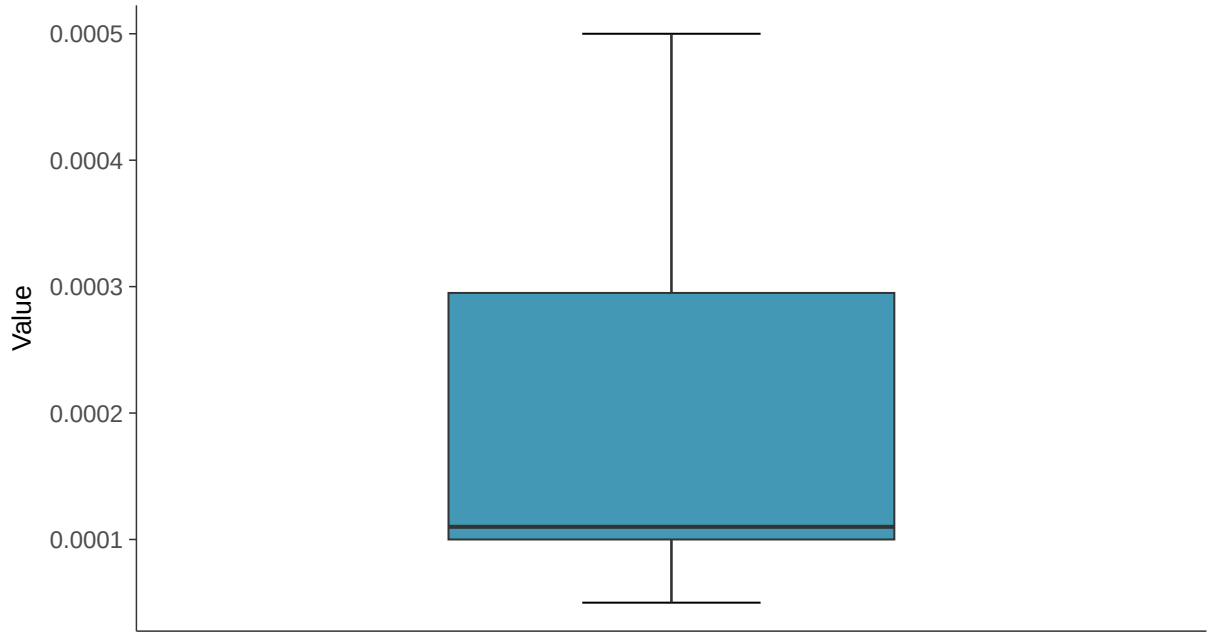
ID: 3_20_5_101





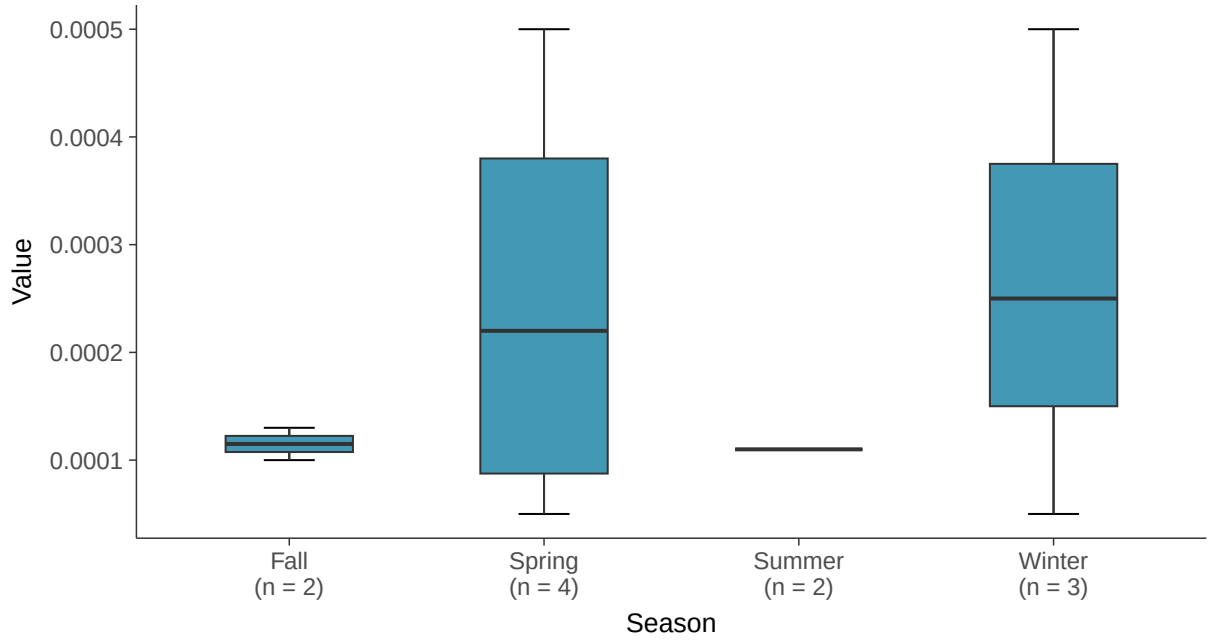
Boxplot

Antimony, MW-10 (mg/L)



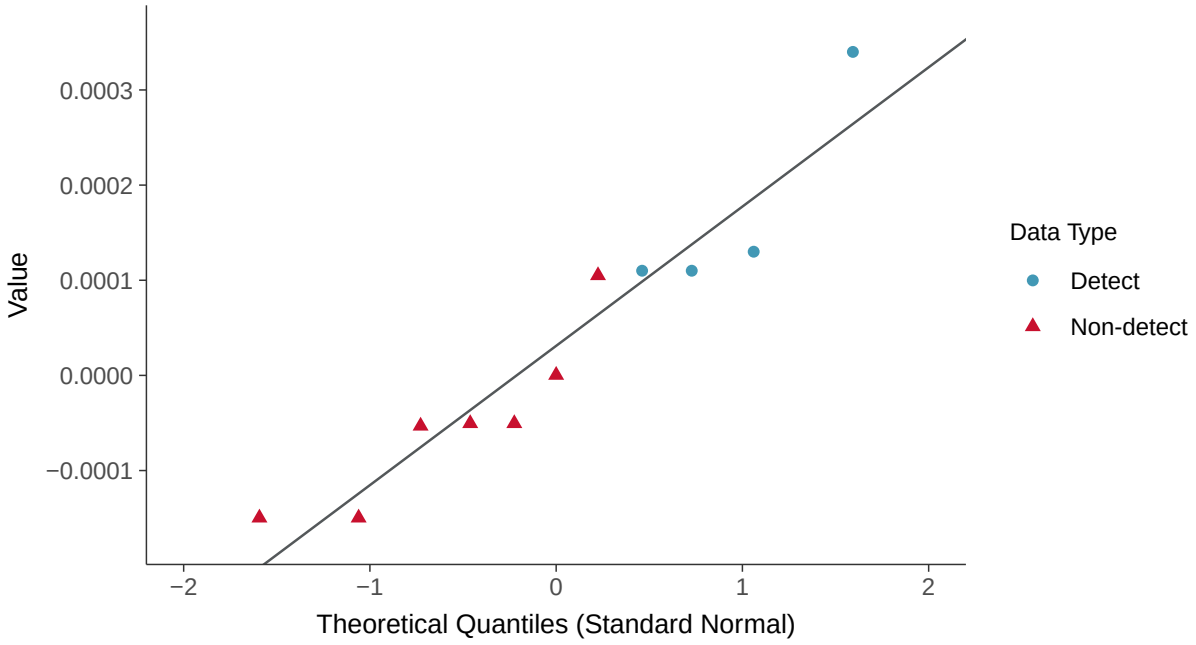
Boxplot by Season

Antimony, MW-10 (mg/L)



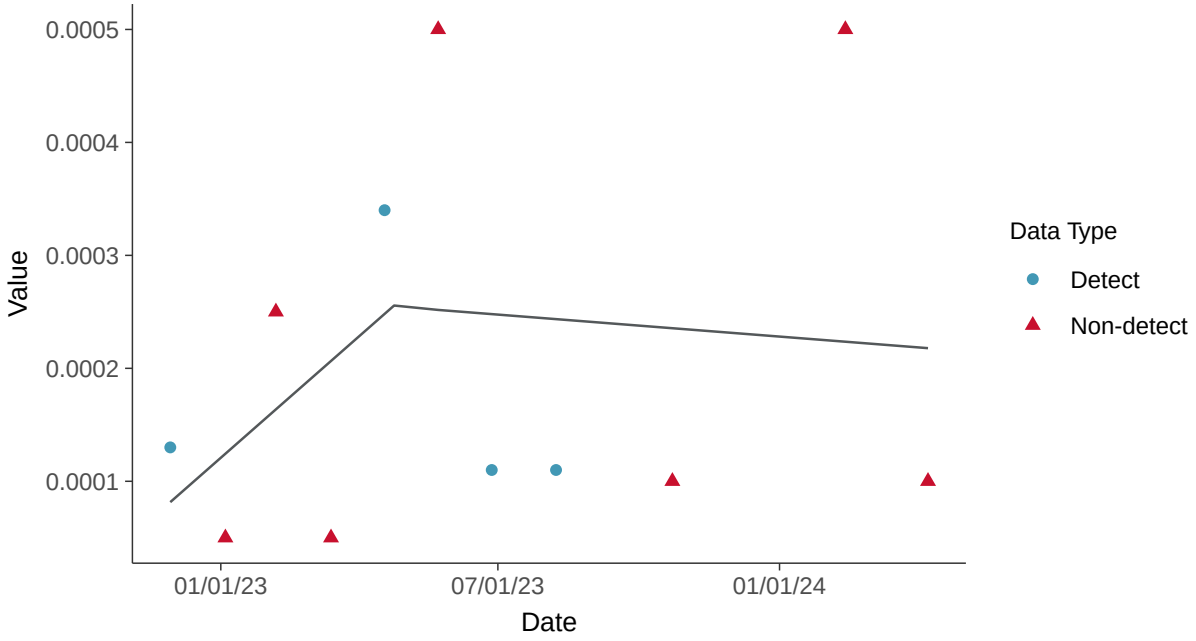
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-10 (mg/L)



Trend Regression: Piecewise Linear-Linear

Antimony, MW-10 (mg/L)

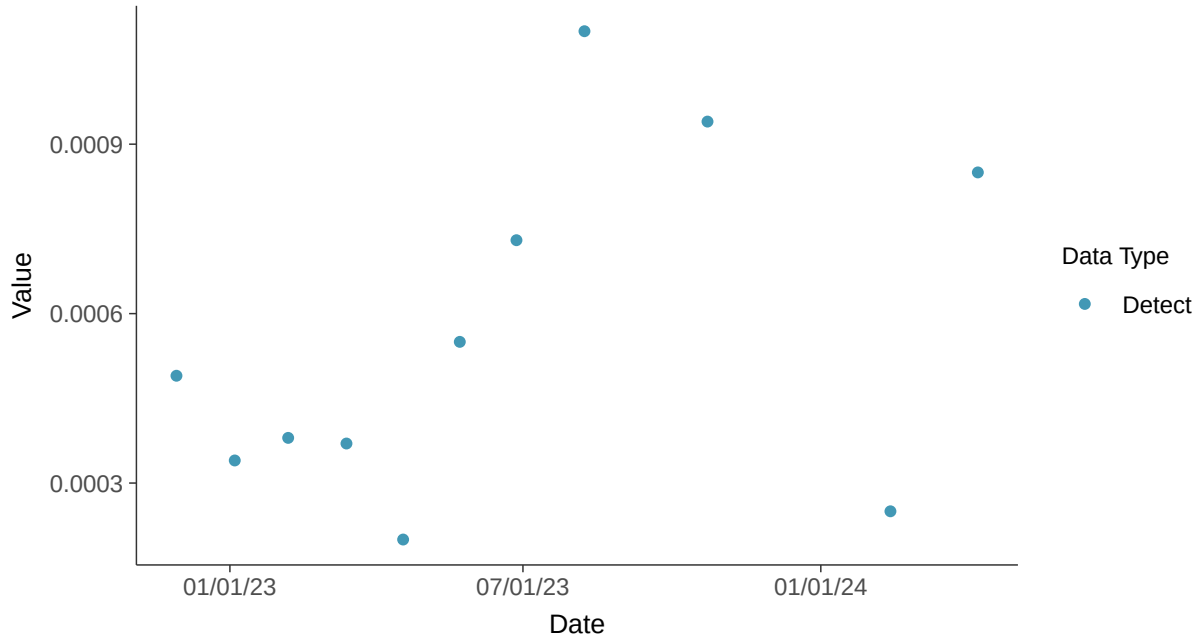


Appendix IV: Arsenic, MW-10

ID: 3_20_5_102

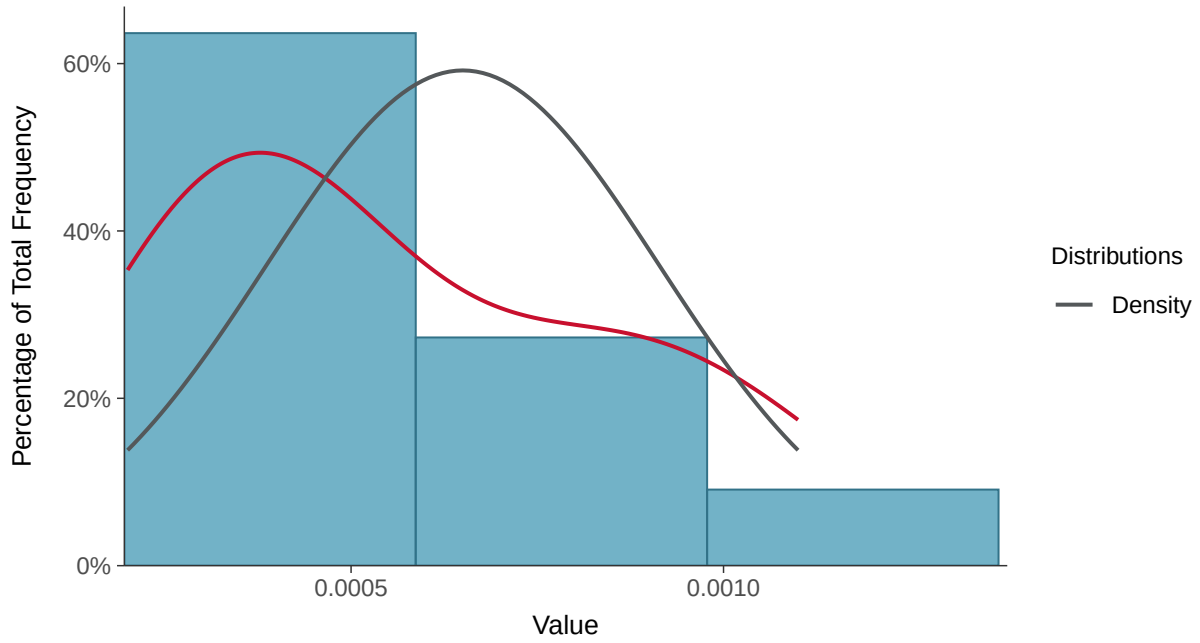
Scatter Plot

Arsenic, MW-10 (mg/L)



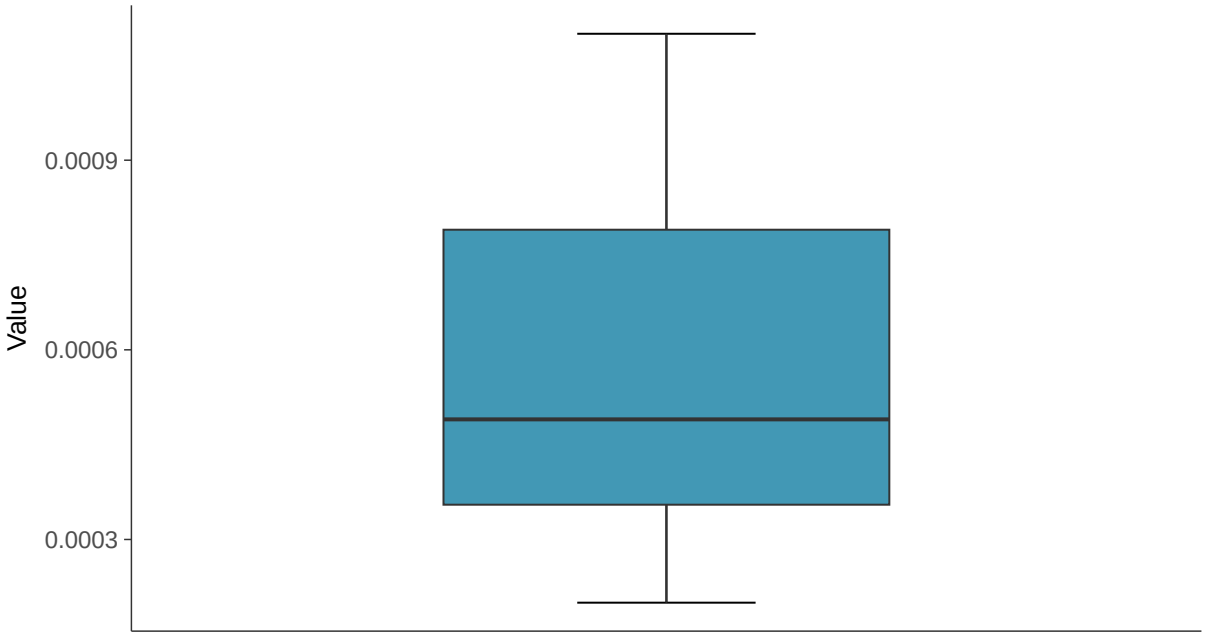
Histogram

Arsenic, MW-10 (mg/L)



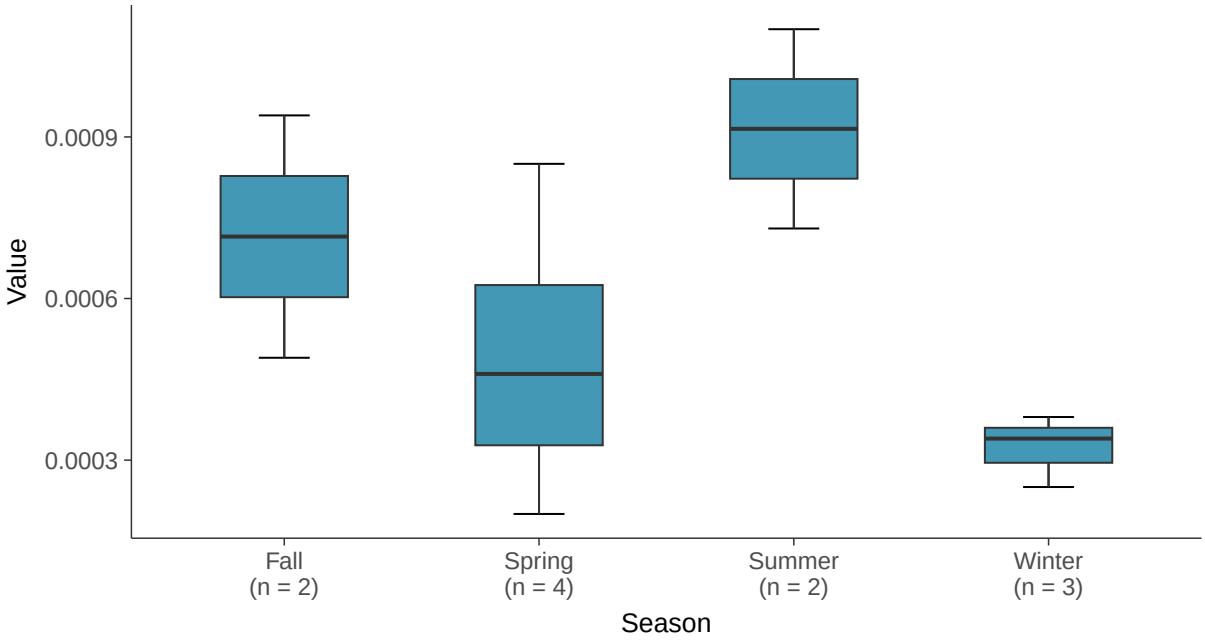
Boxplot

Arsenic, MW-10 (mg/L)



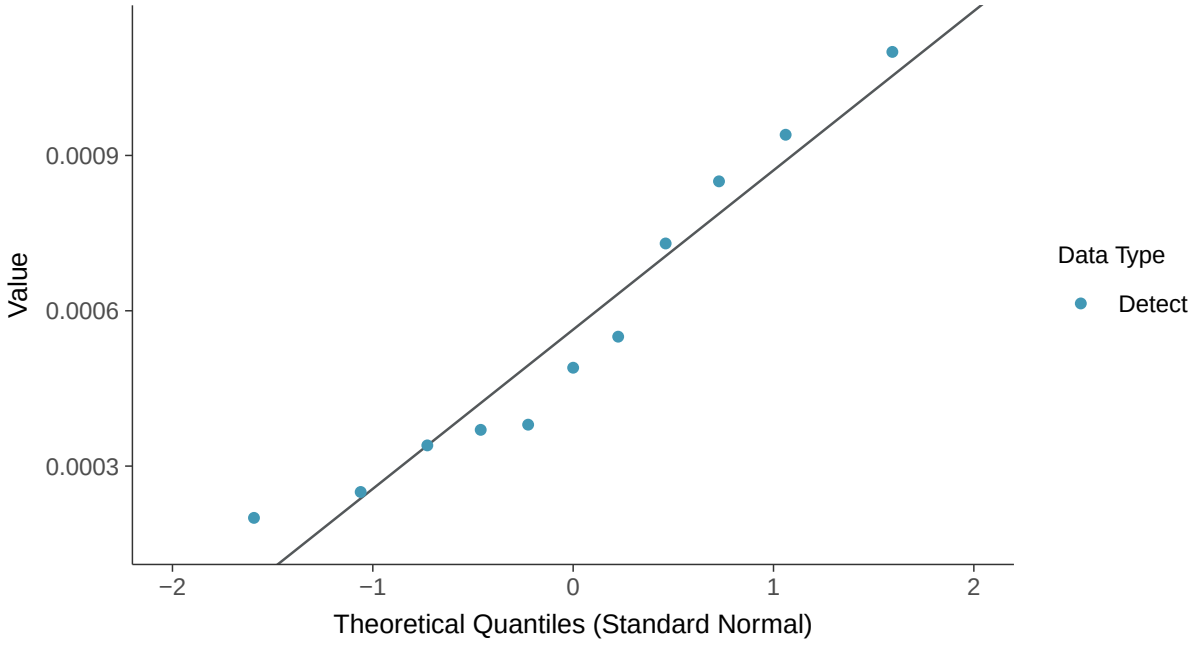
Boxplot by Season

Arsenic, MW-10 (mg/L)



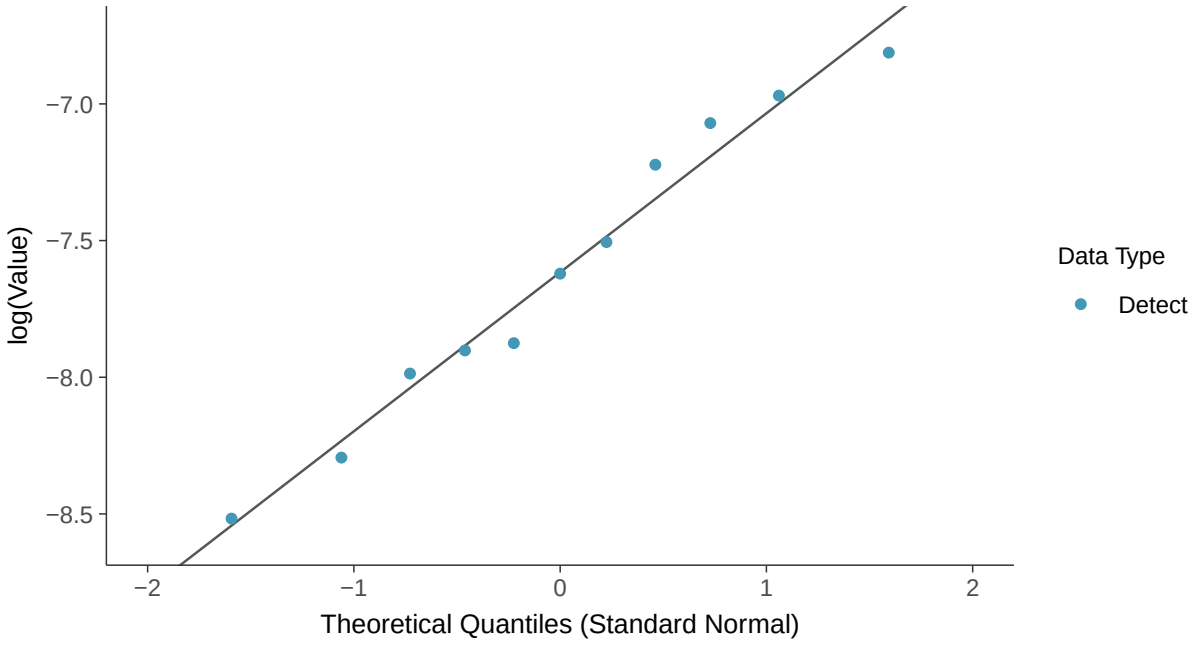
Normal Q-Q plot

Arsenic, MW-10 (mg/L)



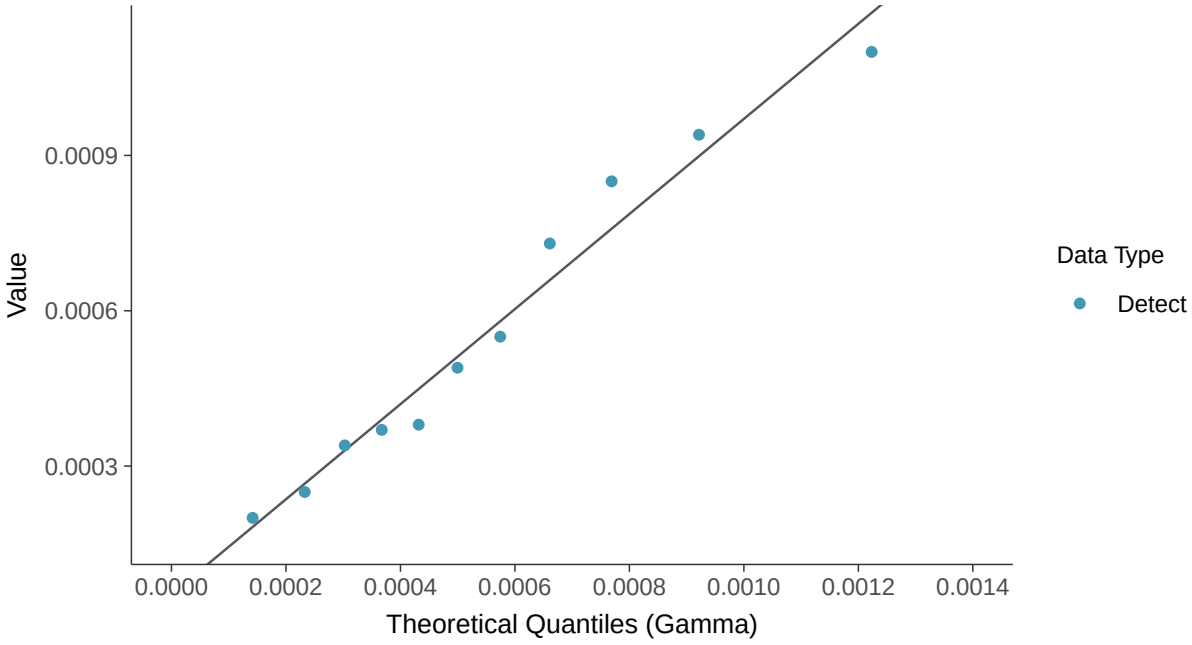
Lognormal Q-Q plot

Arsenic, MW-10 (mg/L)



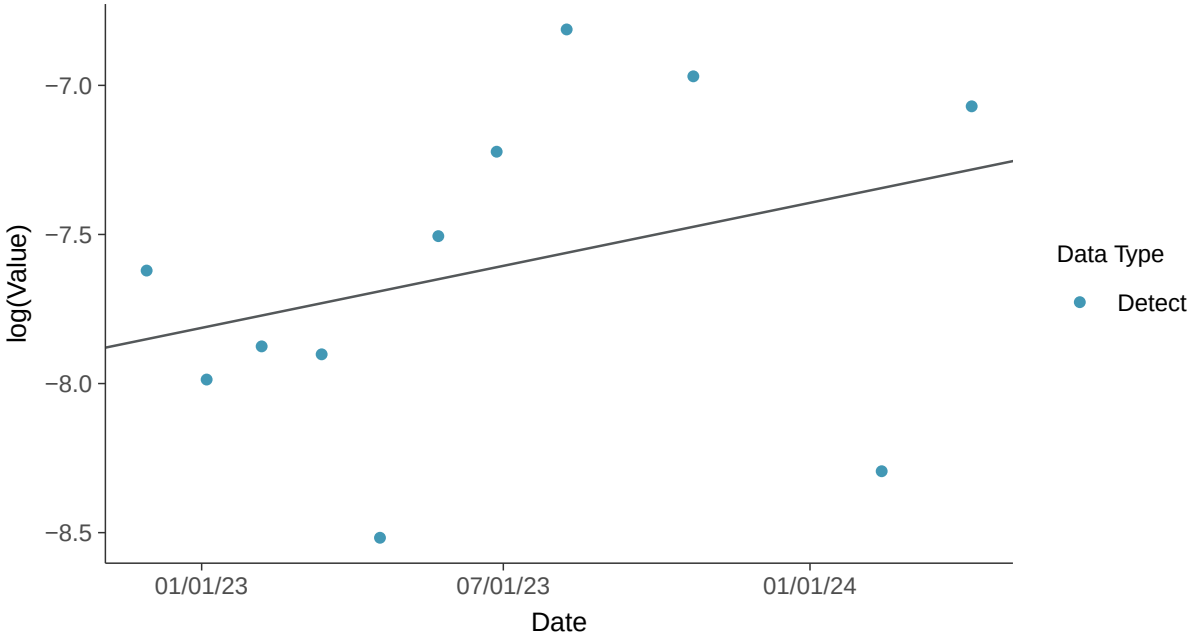
Gamma Q-Q plot

Arsenic, MW-10 (mg/L)



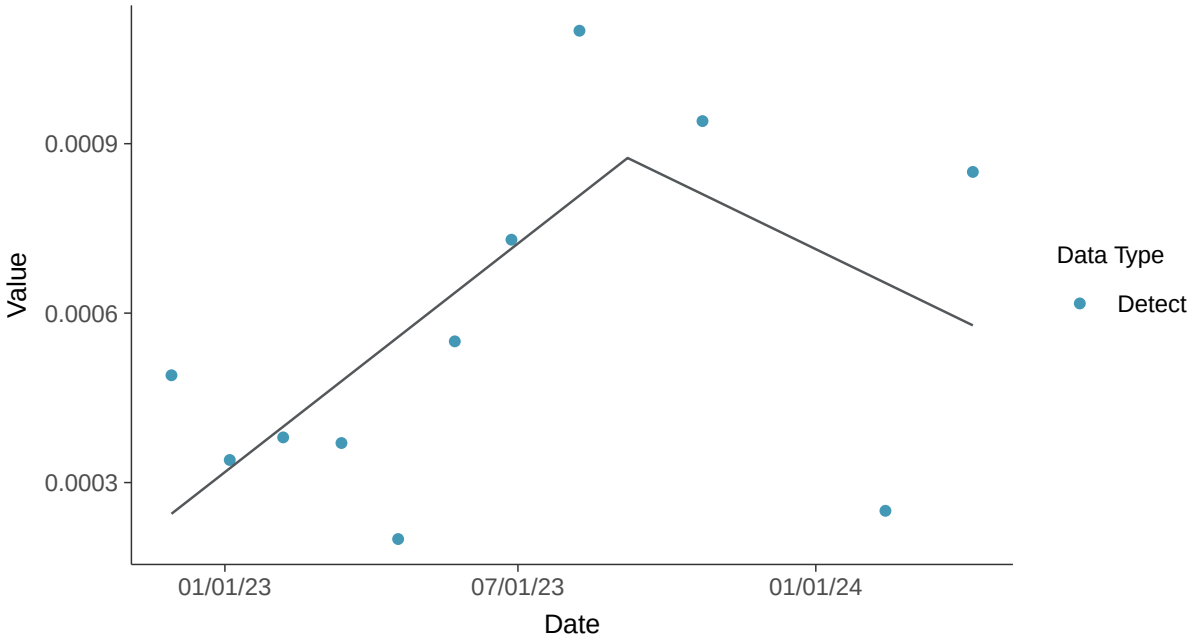
Trend Regression: Lognormal MLE

Arsenic, MW-10 (mg/L)



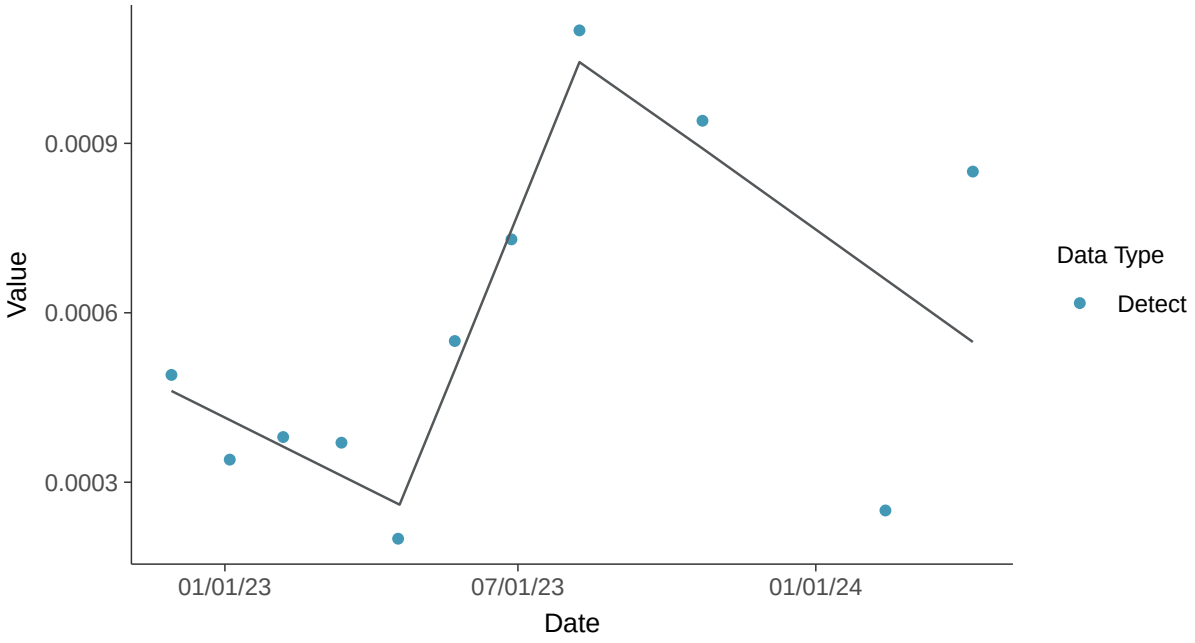
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-10 (mg/L)



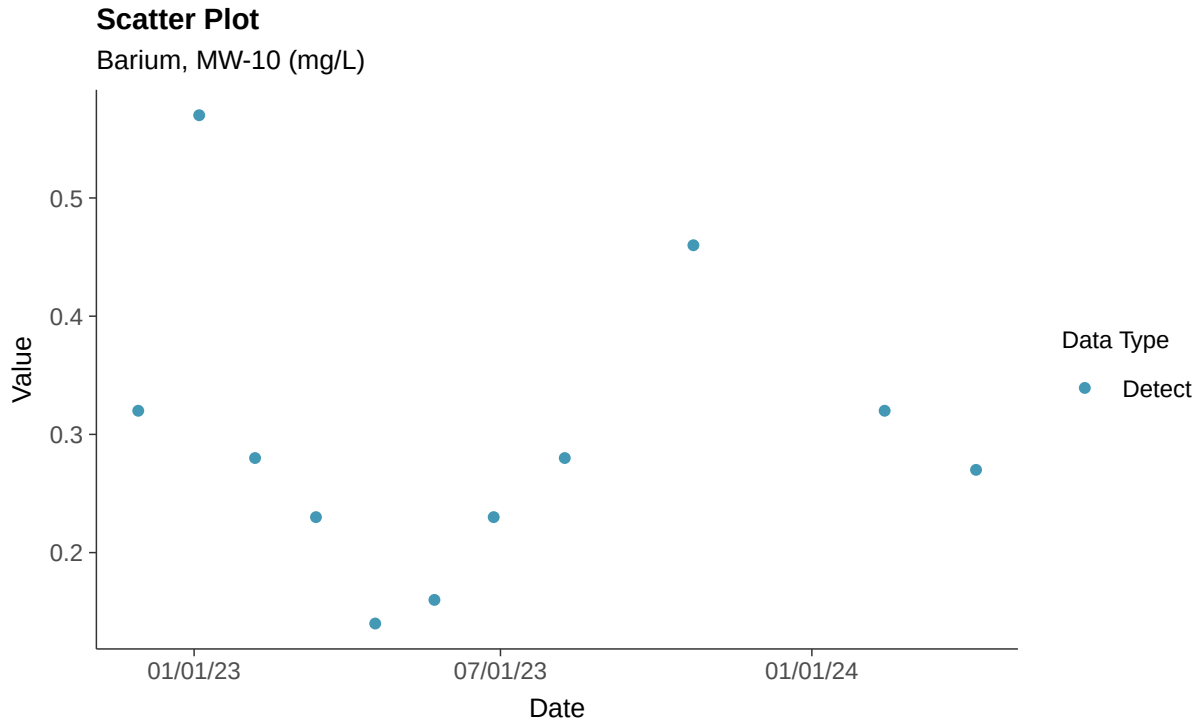
Trend Regression: Piecewise Linear-Linear-Linear

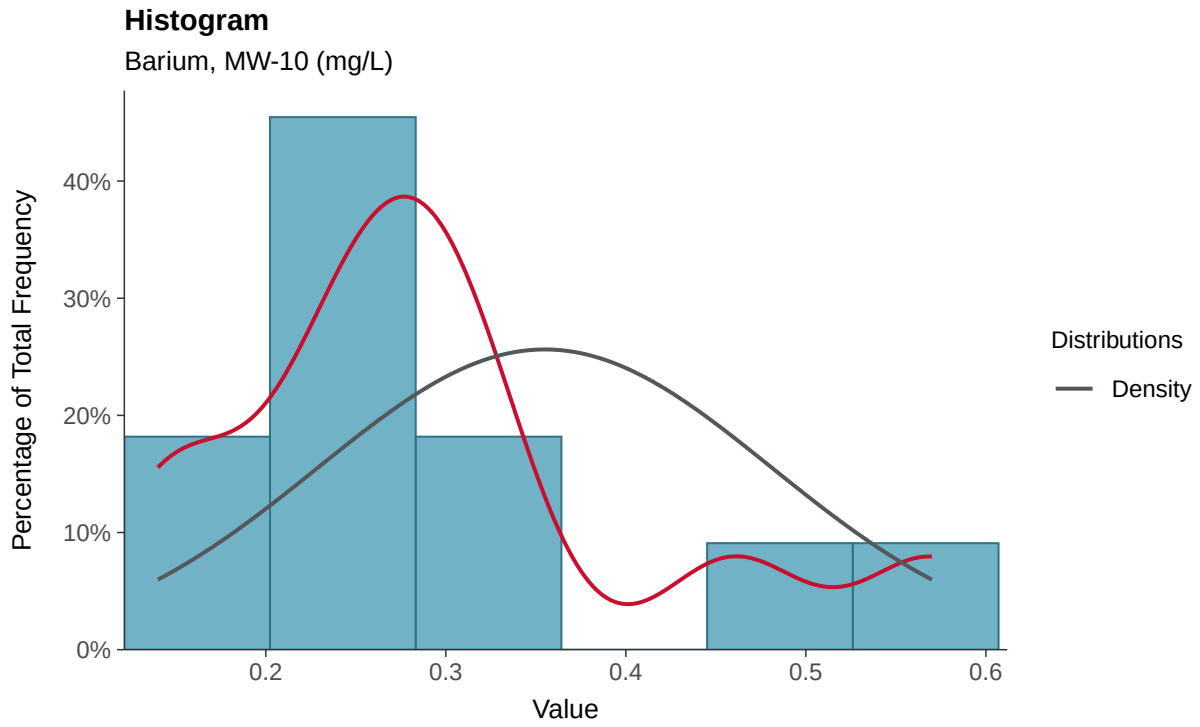
Arsenic, MW-10 (mg/L)



Appendix IV: Barium, MW-10

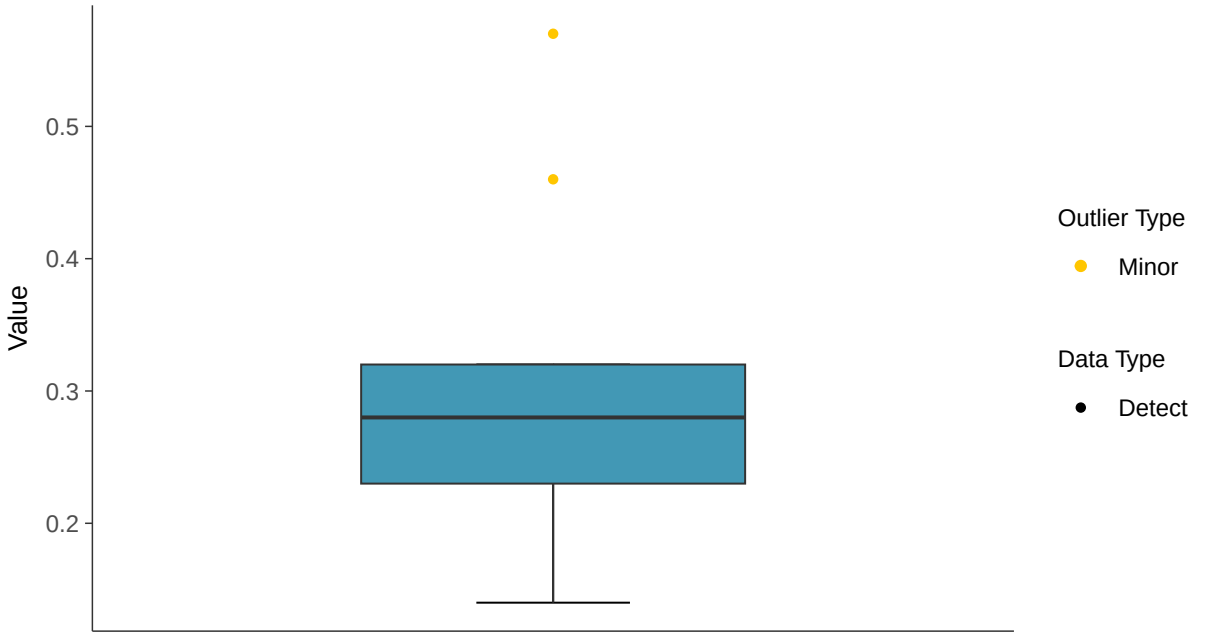
ID: 3_20_5_103





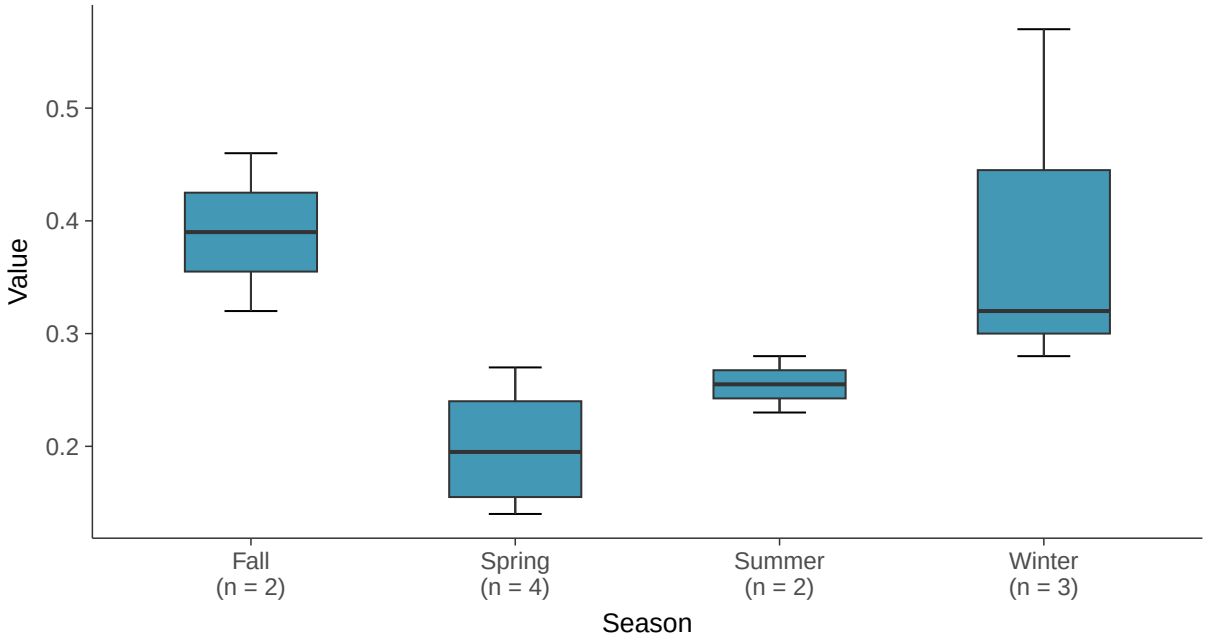
Boxplot

Barium, MW-10 (mg/L)



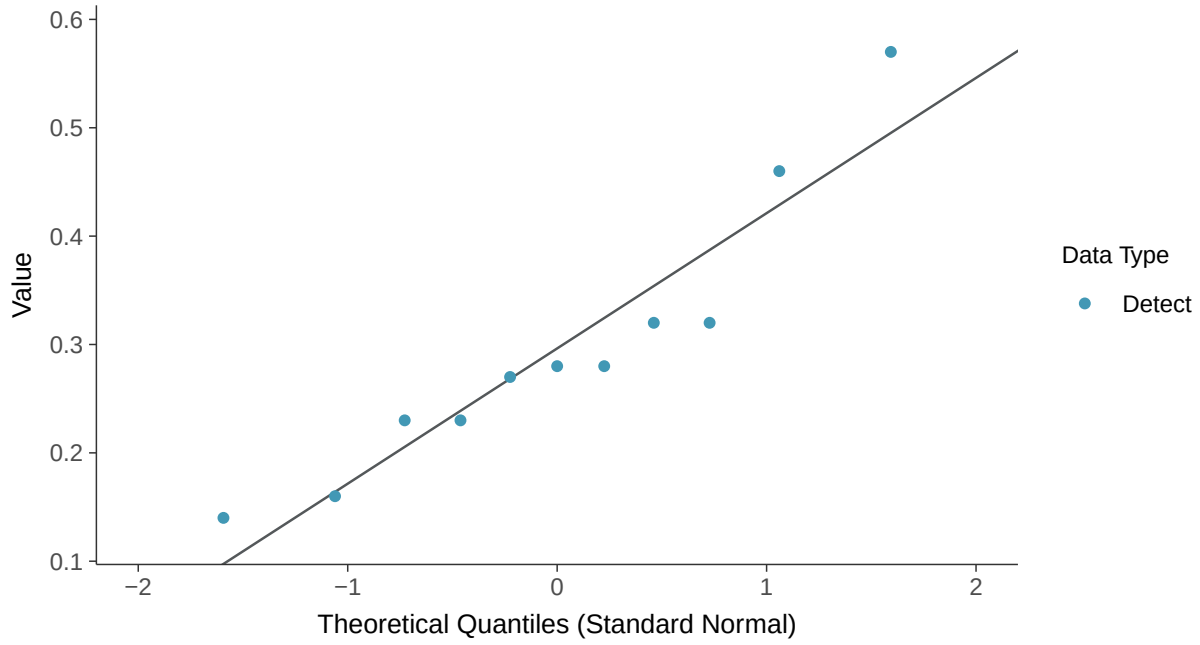
Boxplot by Season

Barium, MW-10 (mg/L)



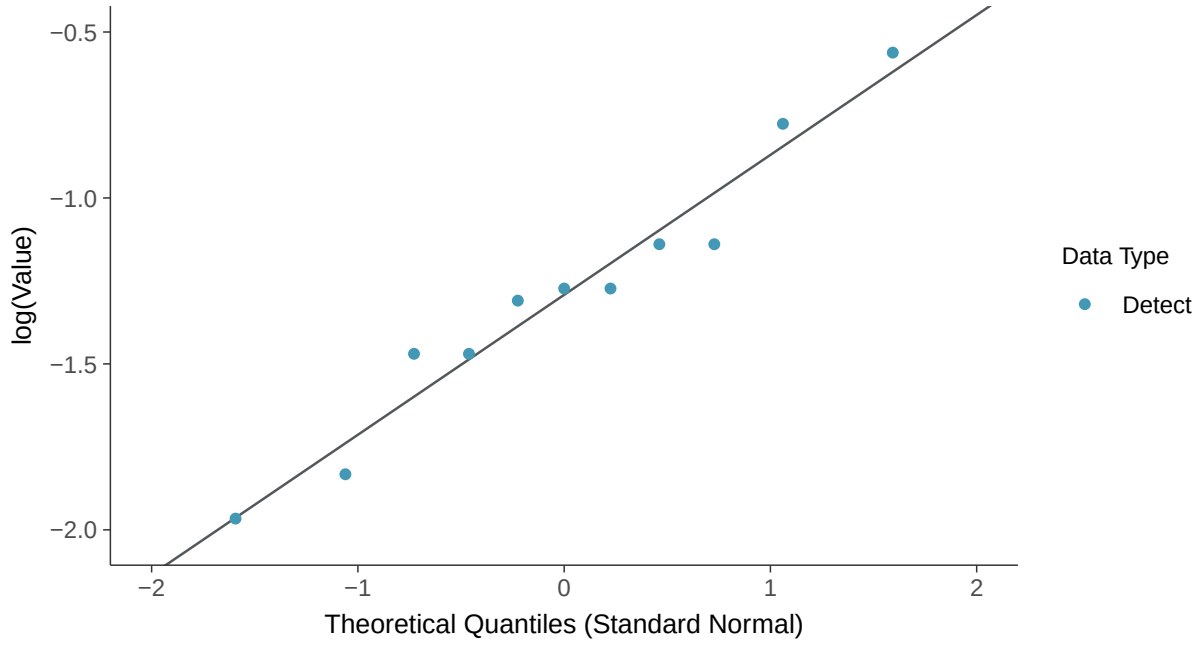
Normal Q-Q plot

Barium, MW-10 (mg/L)



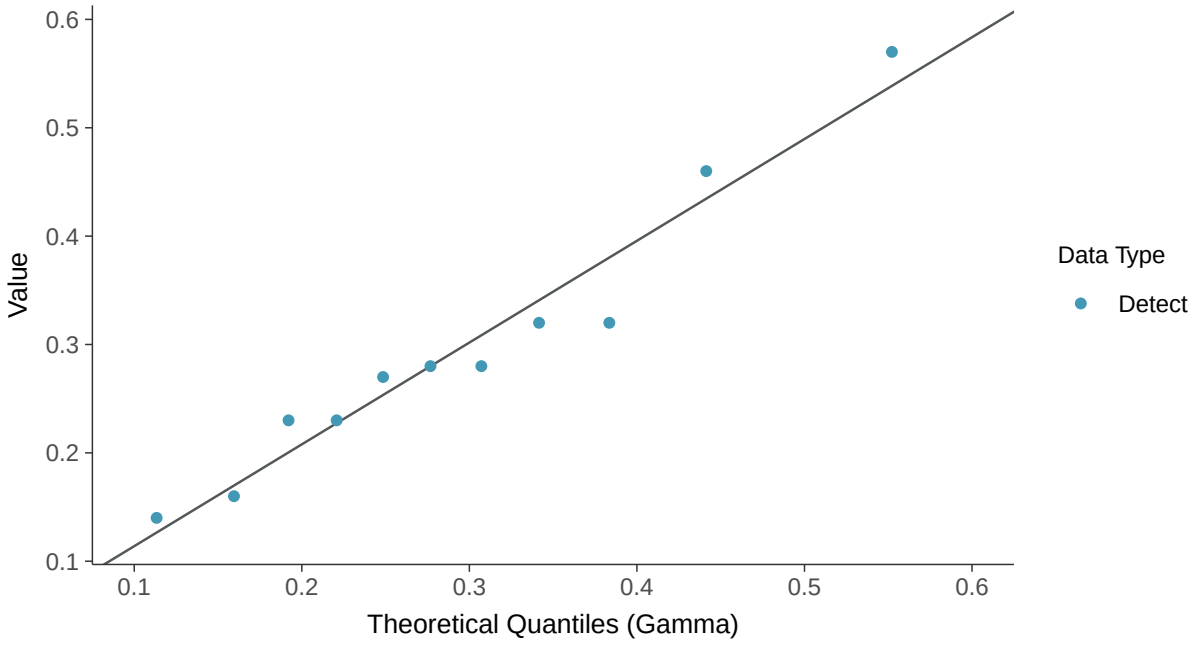
Lognormal Q-Q plot

Barium, MW-10 (mg/L)



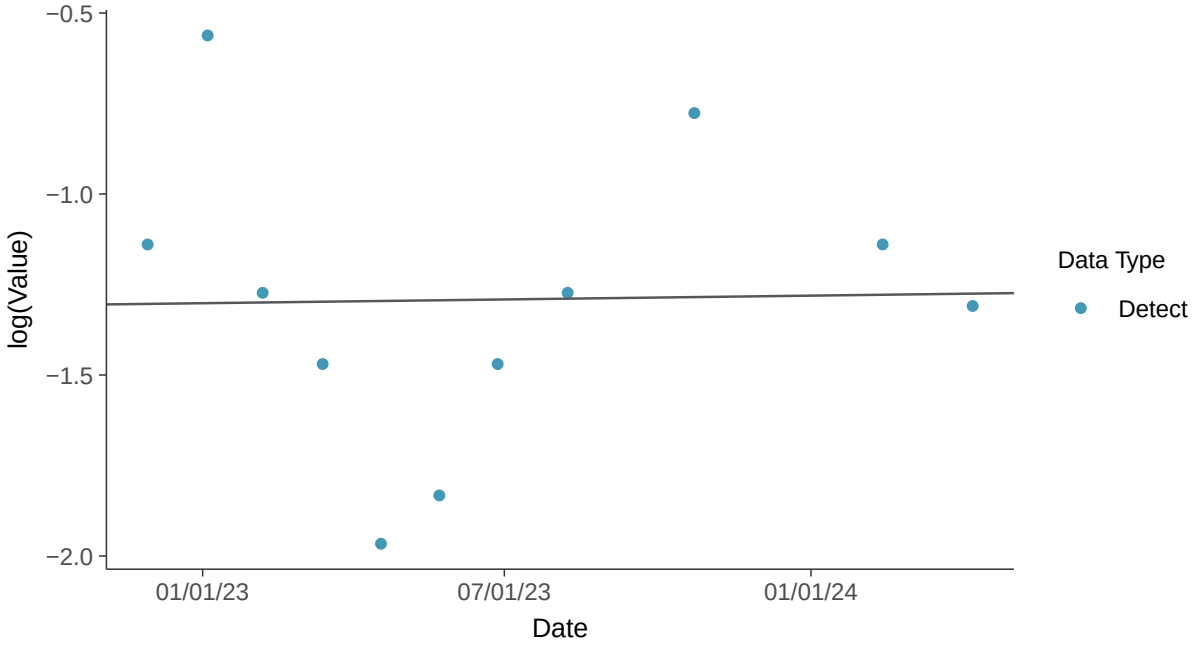
Gamma Q-Q plot

Barium, MW-10 (mg/L)



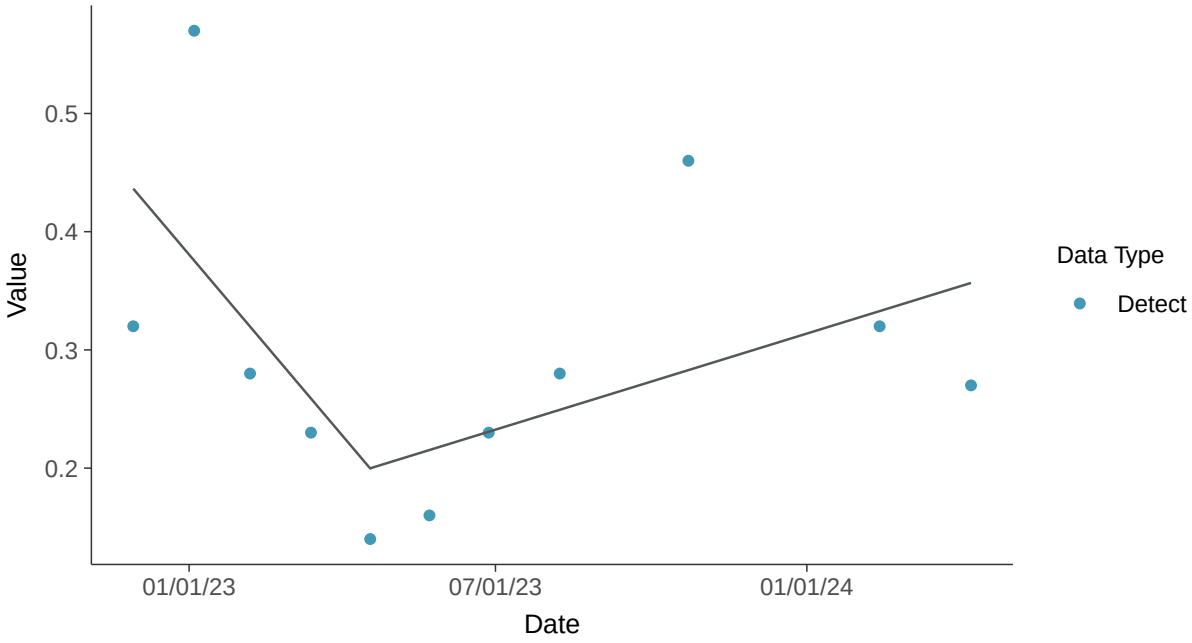
Trend Regression: Lognormal MLE

Barium, MW-10 (mg/L)



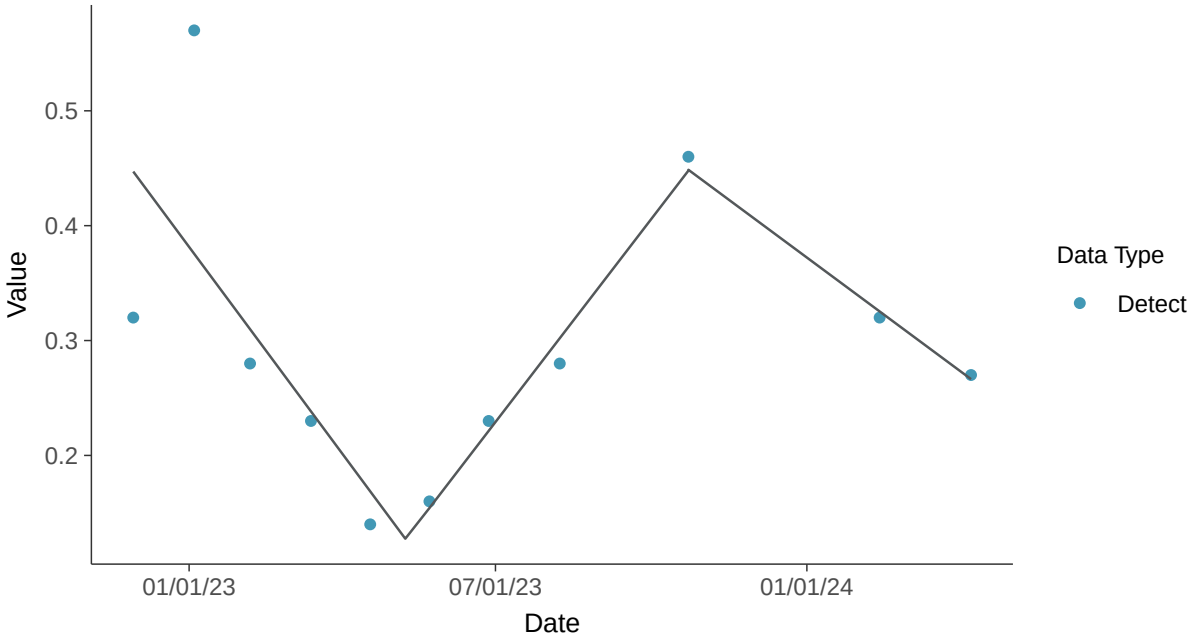
Trend Regression: Piecewise Linear-Linear

Barium, MW-10 (mg/L)



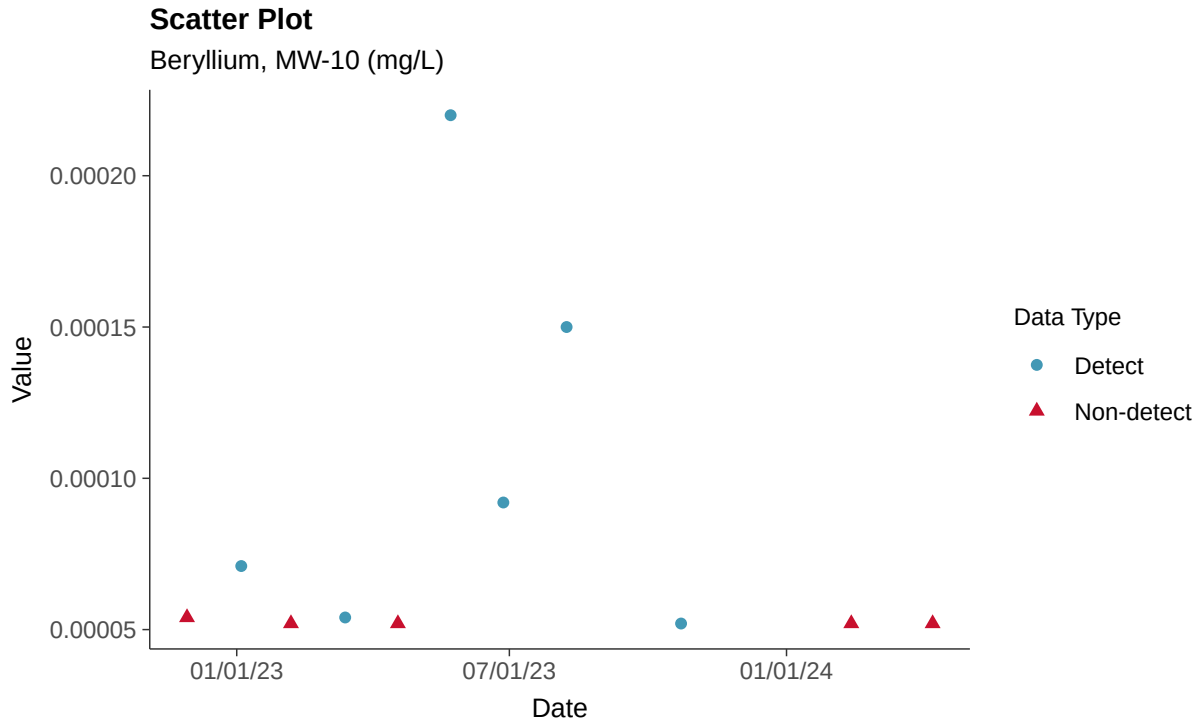
Trend Regression: Piecewise Linear-Linear-Linear

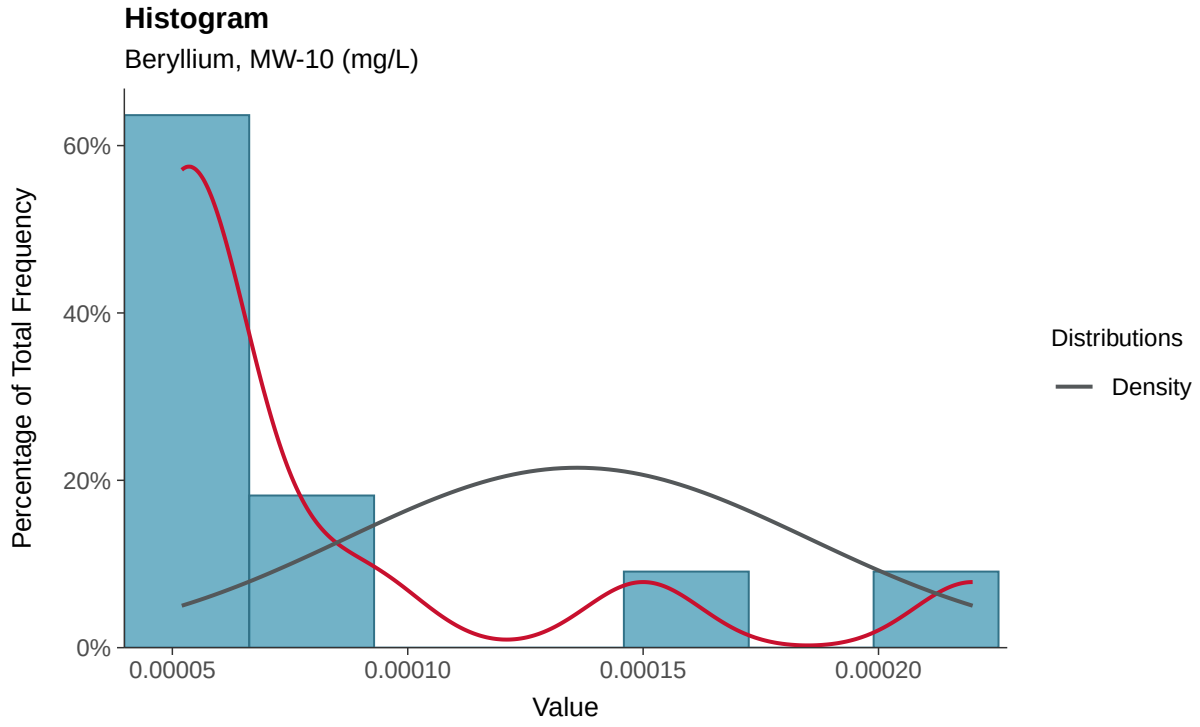
Barium, MW-10 (mg/L)



Appendix IV: Beryllium, MW-10

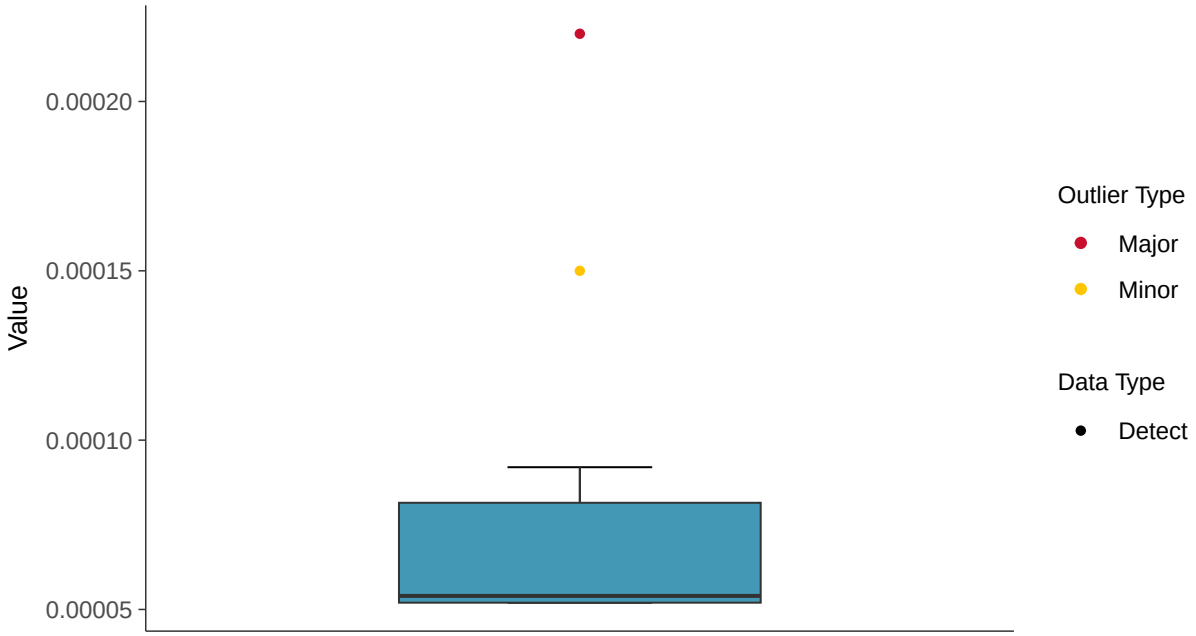
ID: 3_20_5_104





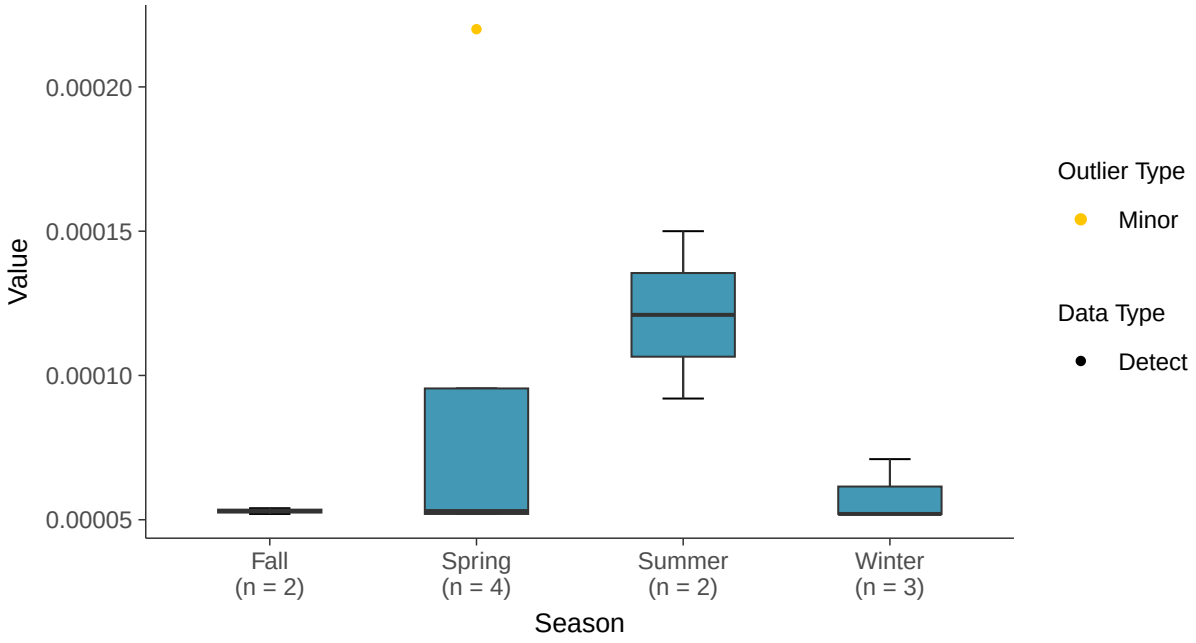
Boxplot

Beryllium, MW-10 (mg/L)



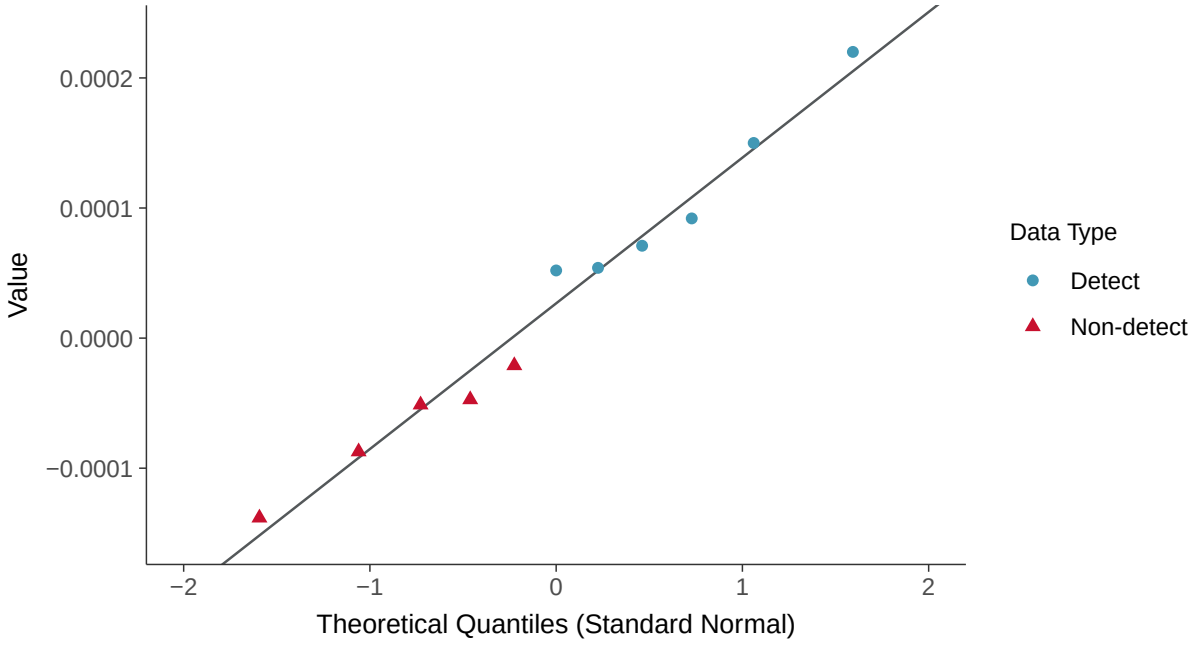
Boxplot by Season

Beryllium, MW-10 (mg/L)



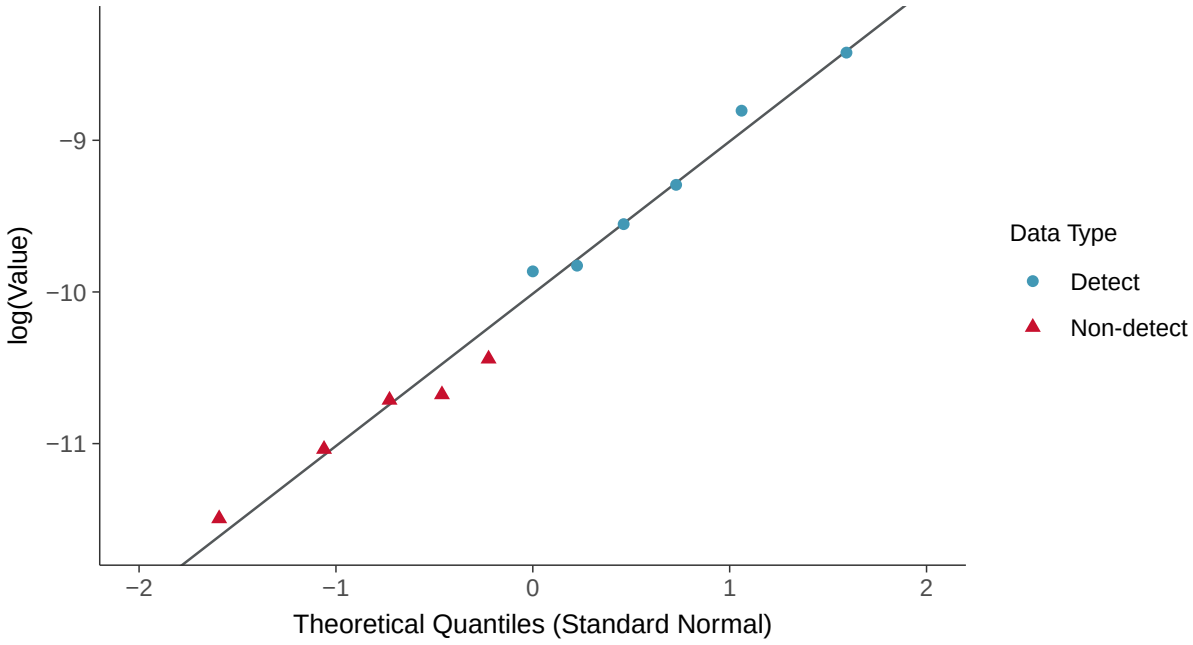
Normal Q-Q plot using ROS Imputed Estimates

Beryllium, MW-10 (mg/L)



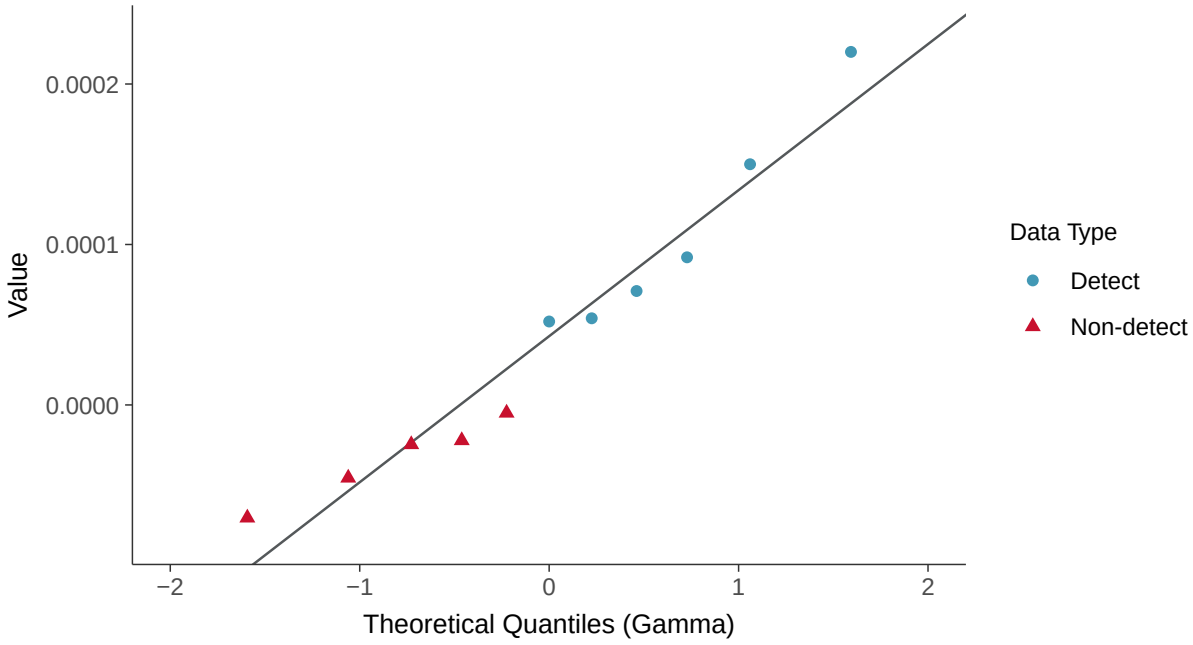
Lognormal Q-Q plot using ROS Imputed Estimates

Beryllium, MW-10 (mg/L)



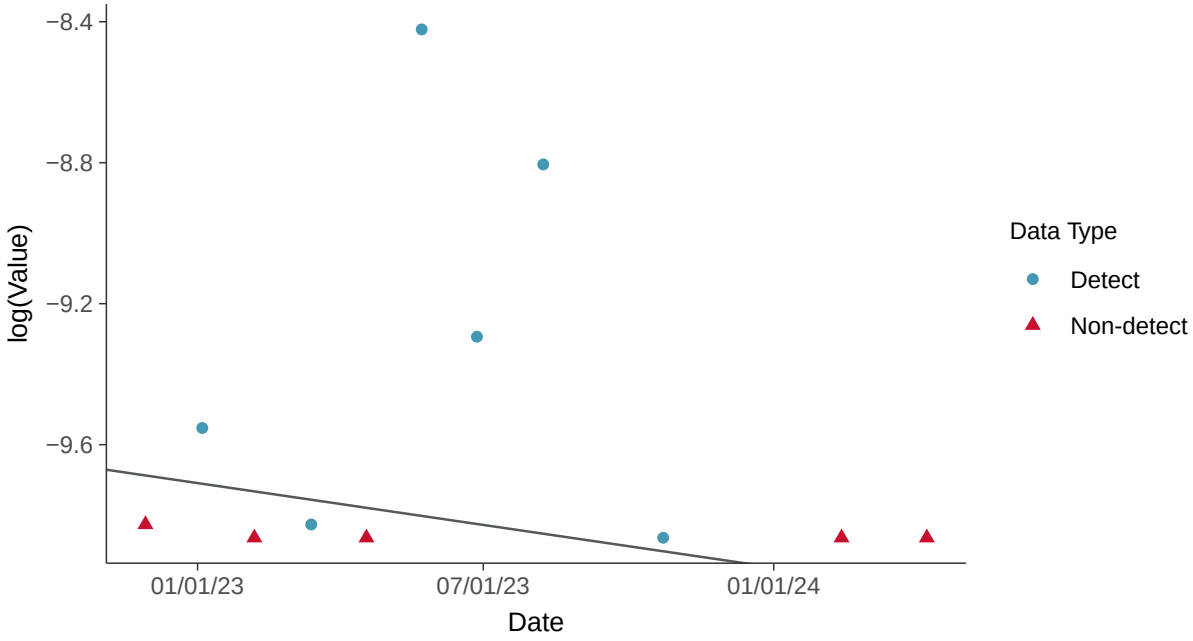
Gamma Q-Q plot using ROS Imputed Estimates

Beryllium, MW-10 (mg/L)



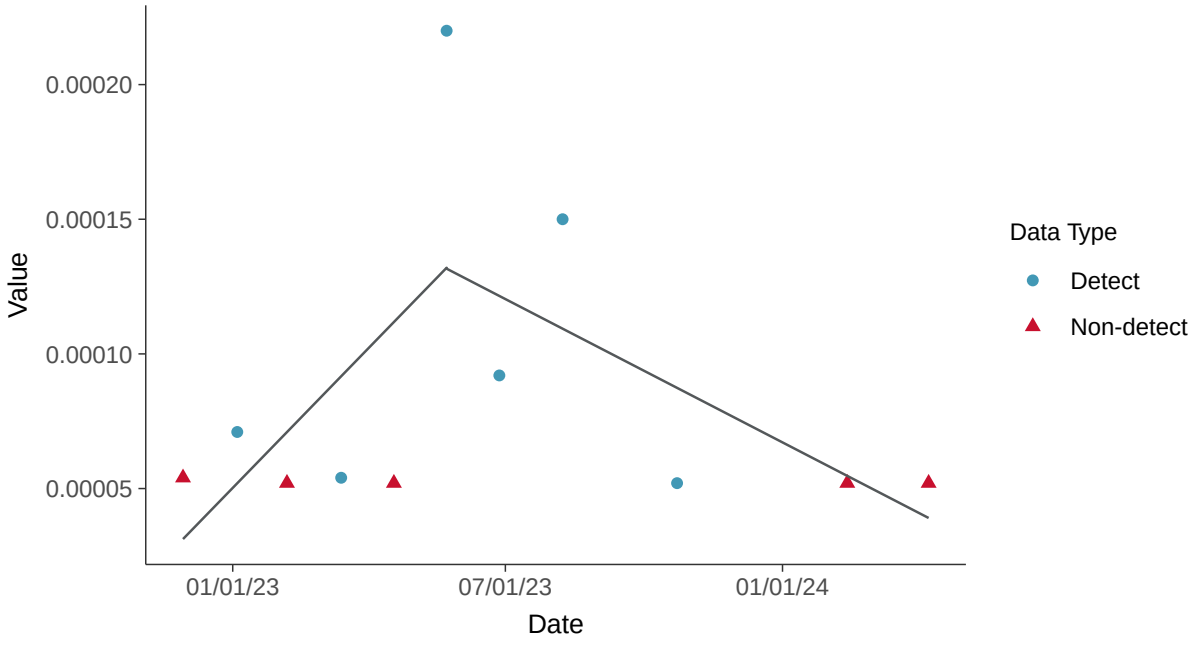
Trend Regression: Lognormal MLE

Beryllium, MW-10 (mg/L)



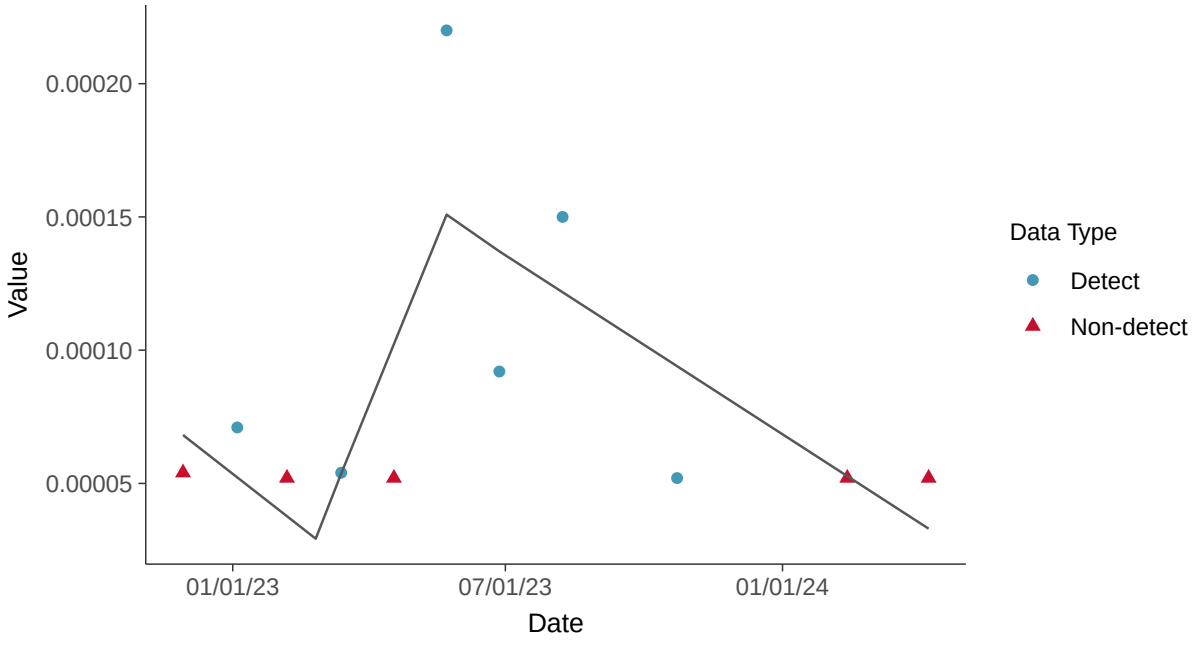
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-10 (mg/L)



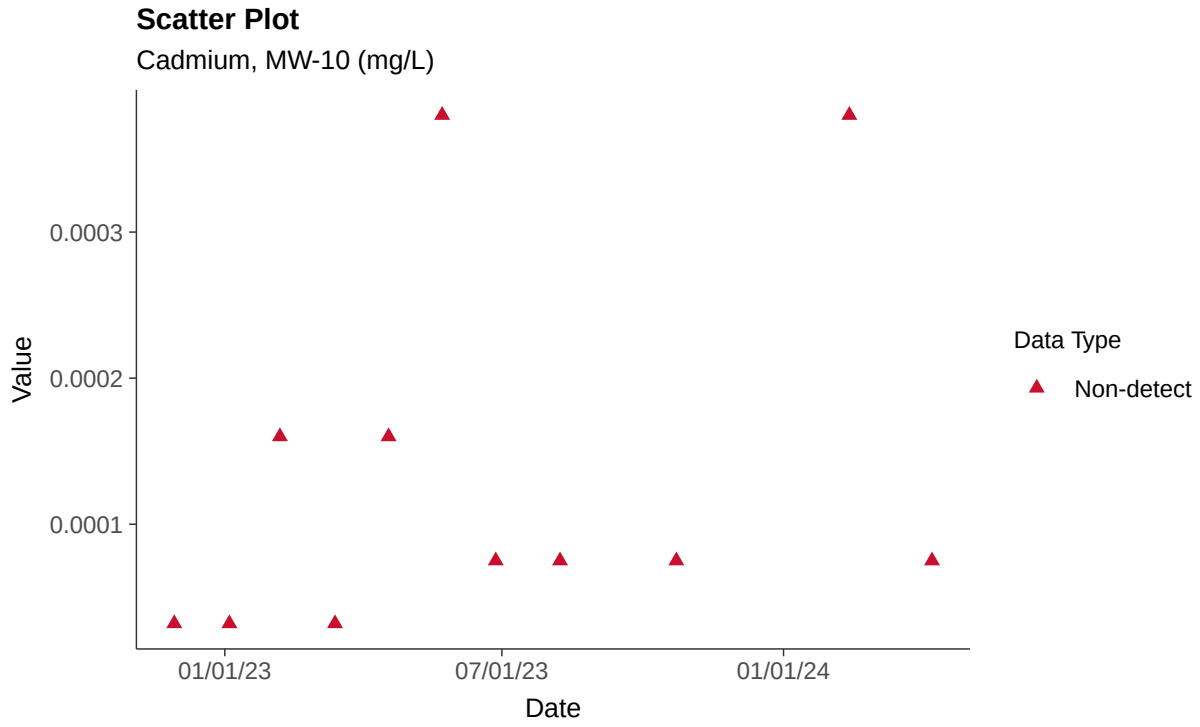
Trend Regression: Piecewise Linear-Linear-Linear

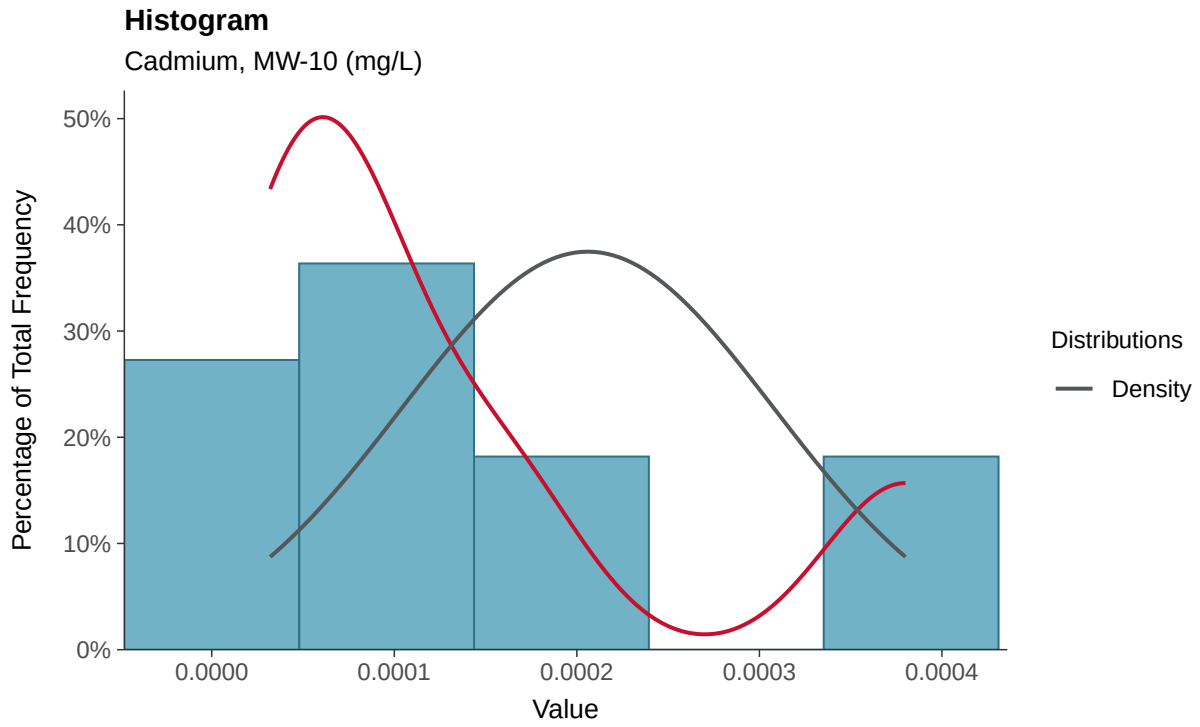
Beryllium, MW-10 (mg/L)



Appendix IV: Cadmium, MW-10

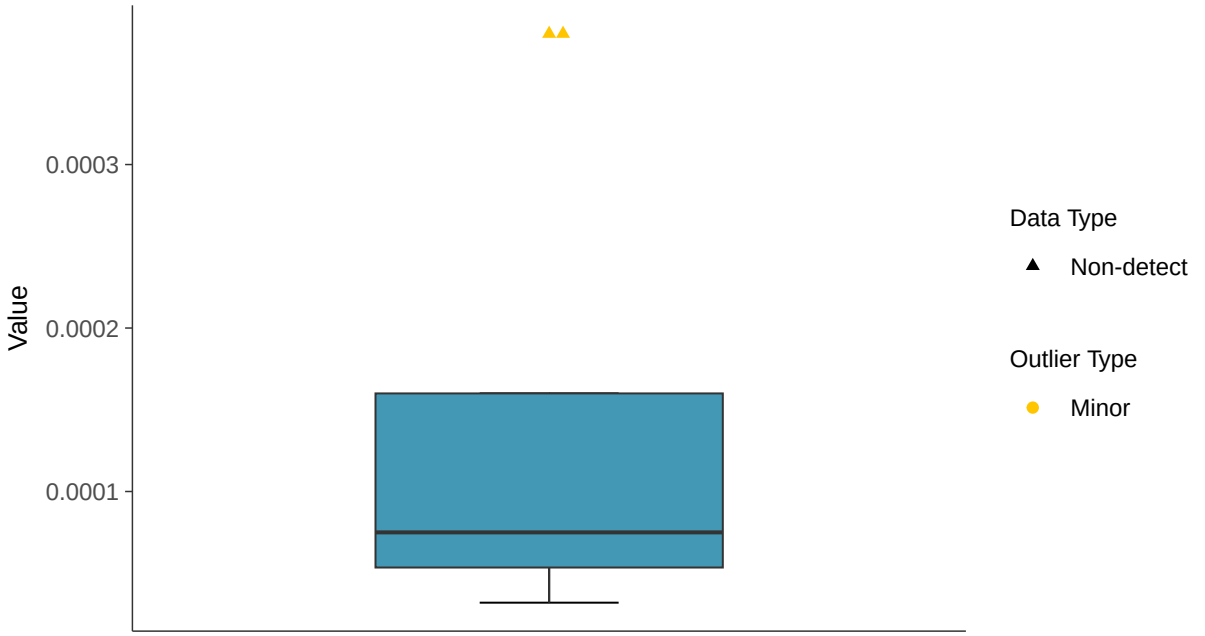
ID: 3_20_5_106





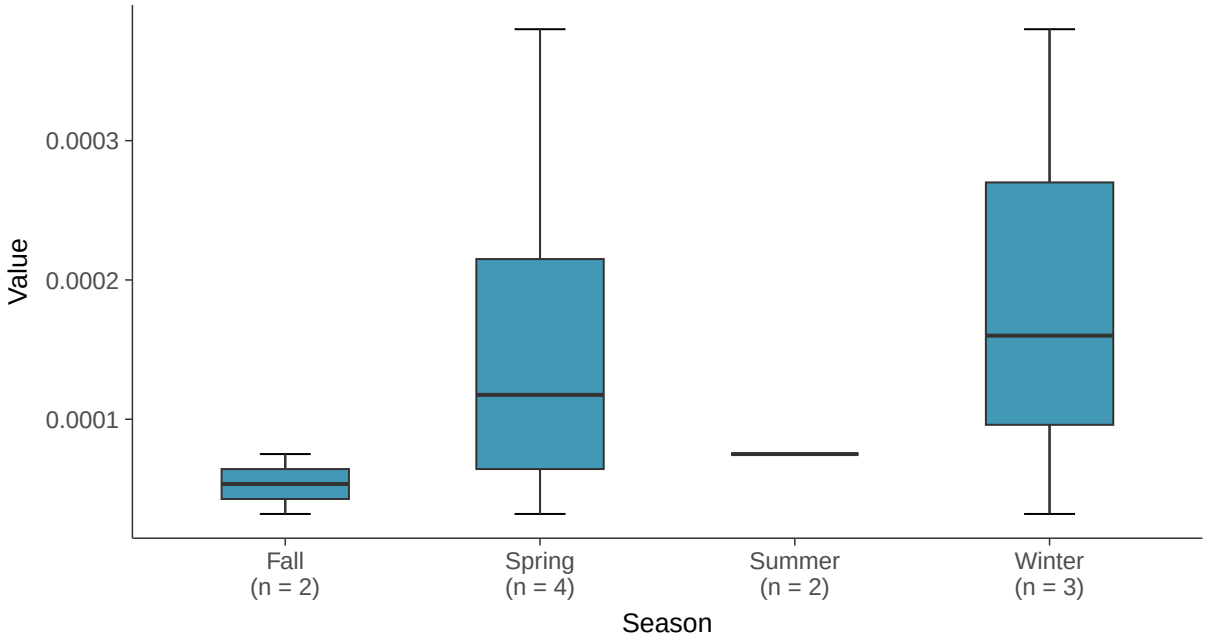
Boxplot

Cadmium, MW-10 (mg/L)



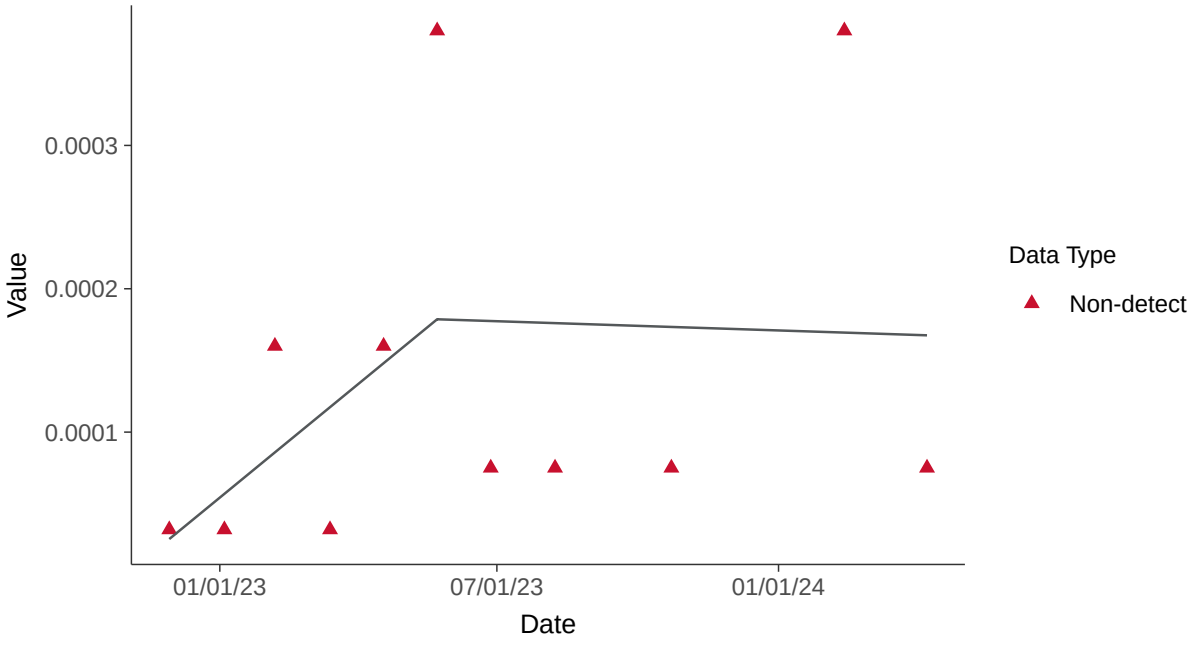
Boxplot by Season

Cadmium, MW-10 (mg/L)



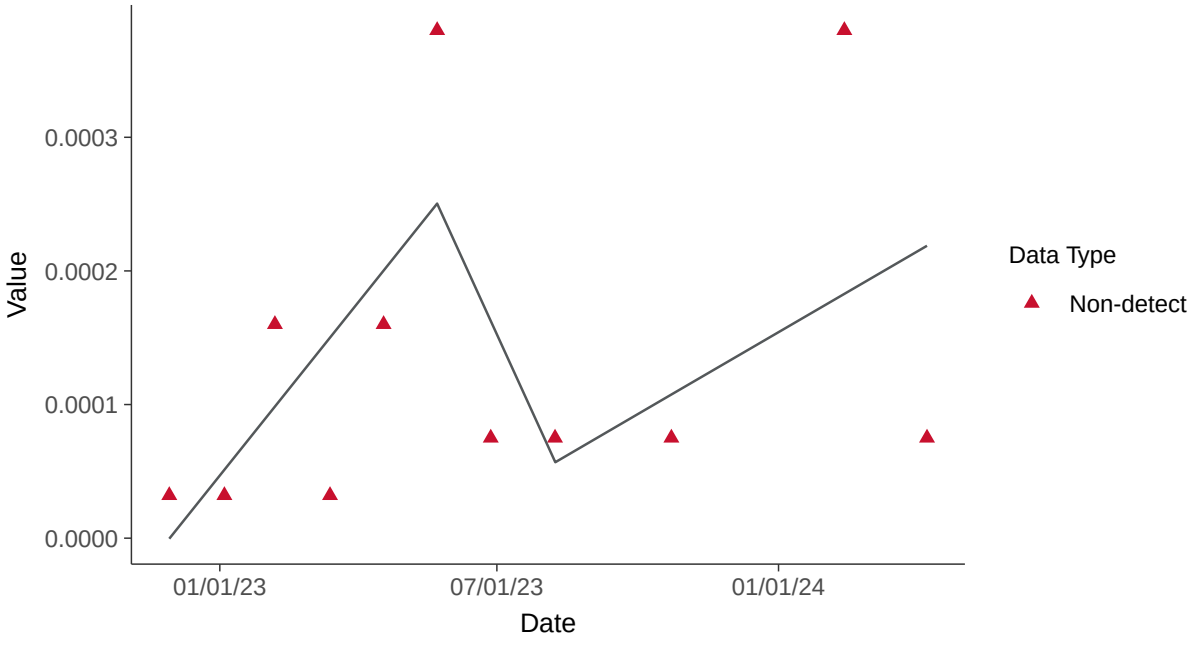
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-10 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cadmium, MW-10 (mg/L)

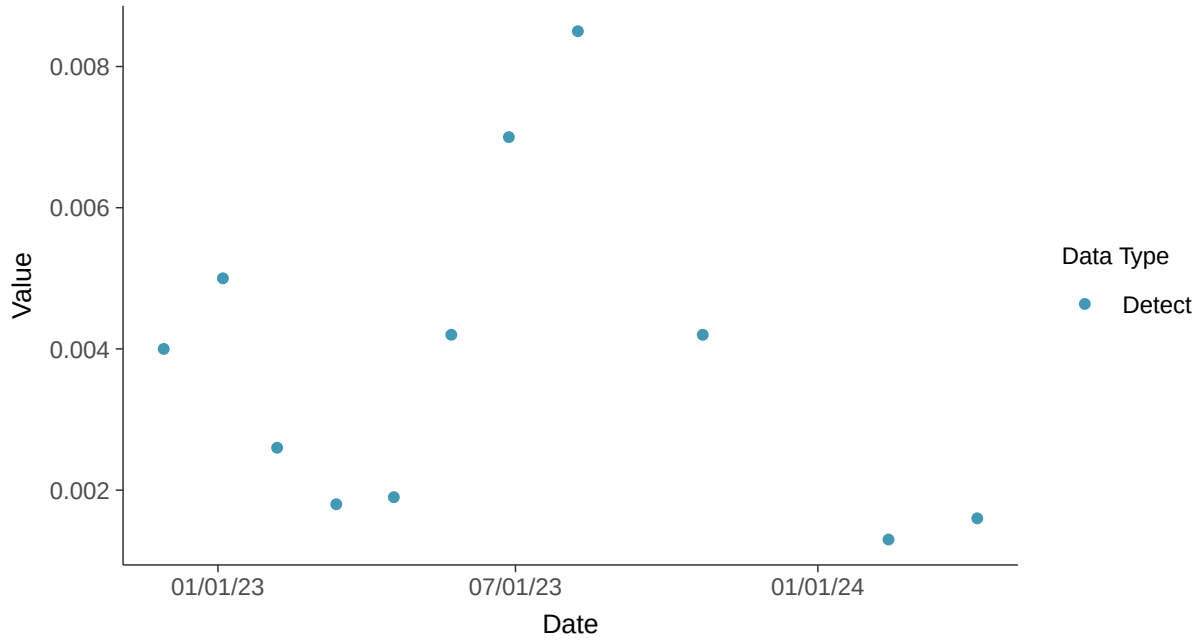


Appendix IV: Chromium, Total, MW-10

ID: 3_20_5_109

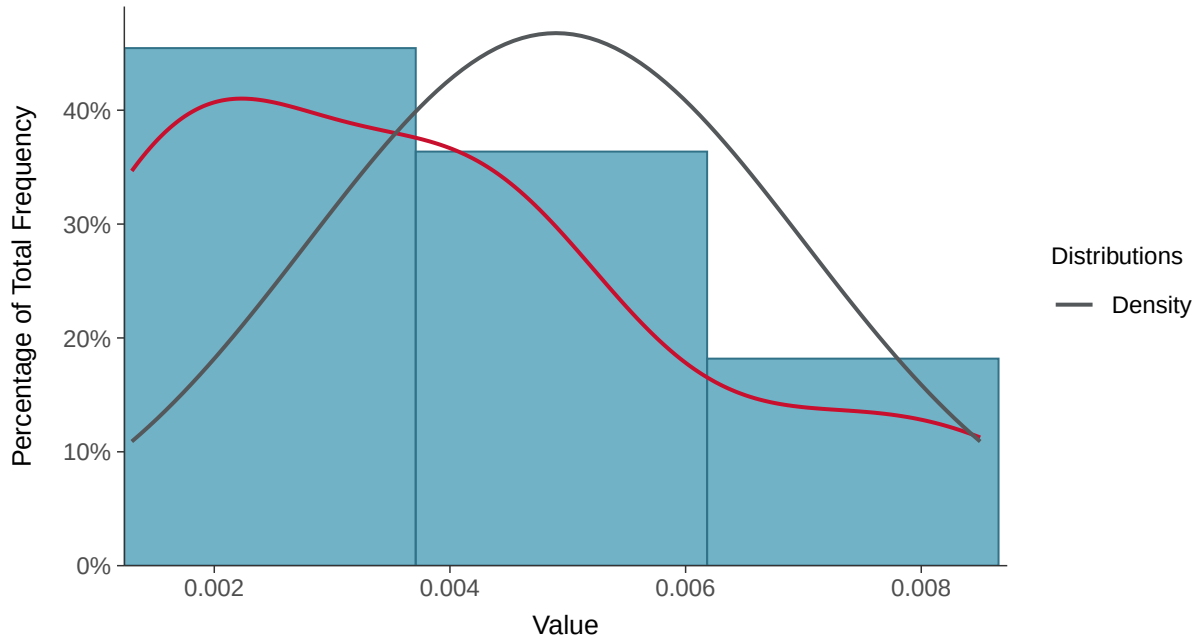
Scatter Plot

Chromium, Total, MW-10 (mg/L)



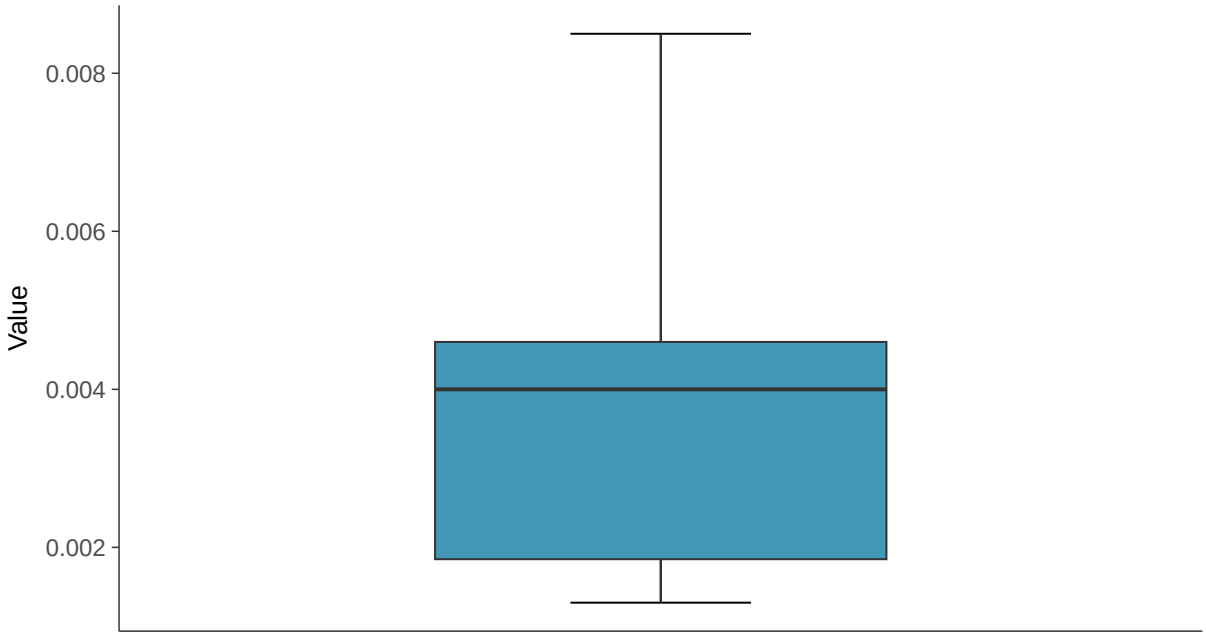
Histogram

Chromium, Total, MW-10 (mg/L)



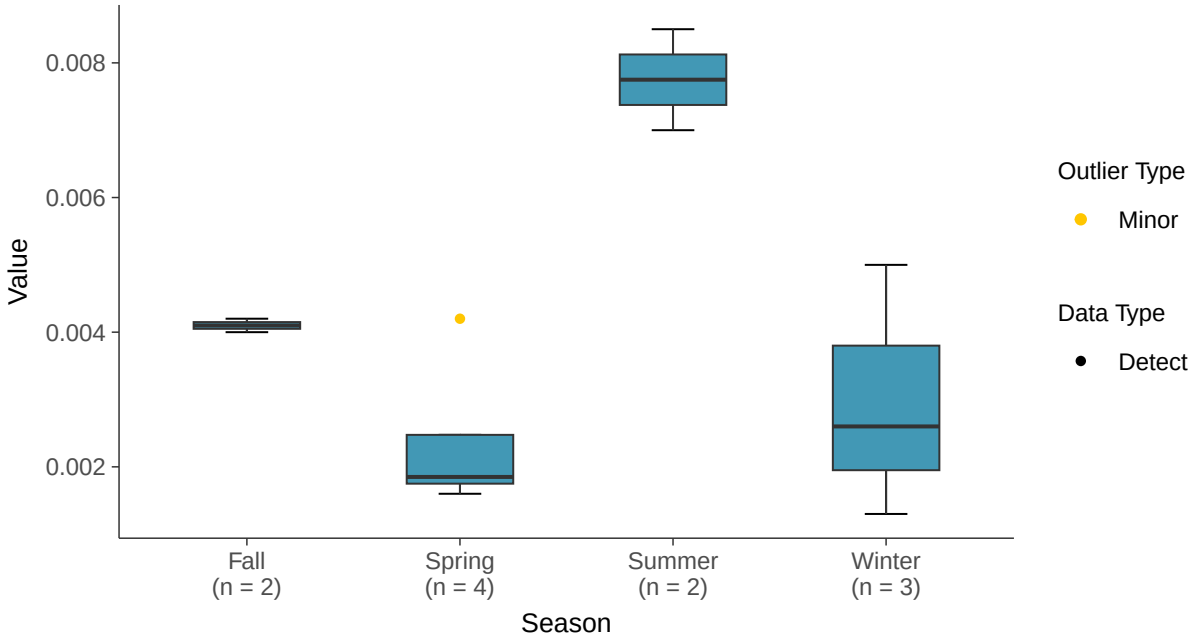
Boxplot

Chromium, Total, MW-10 (mg/L)



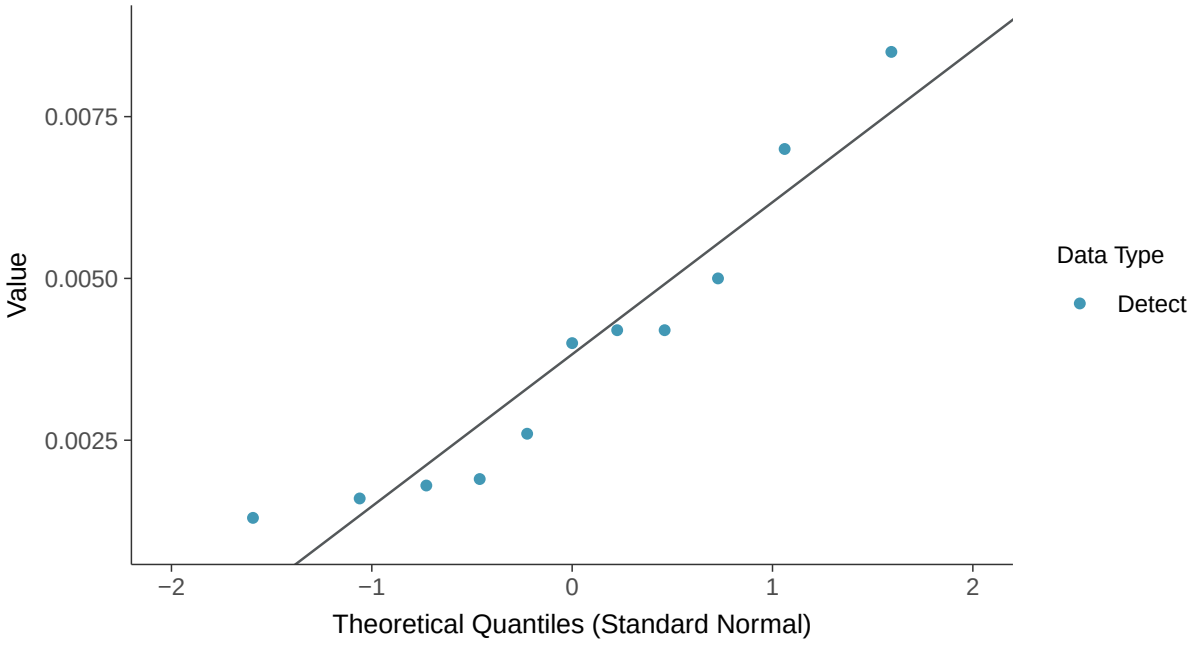
Boxplot by Season

Chromium, Total, MW-10 (mg/L)



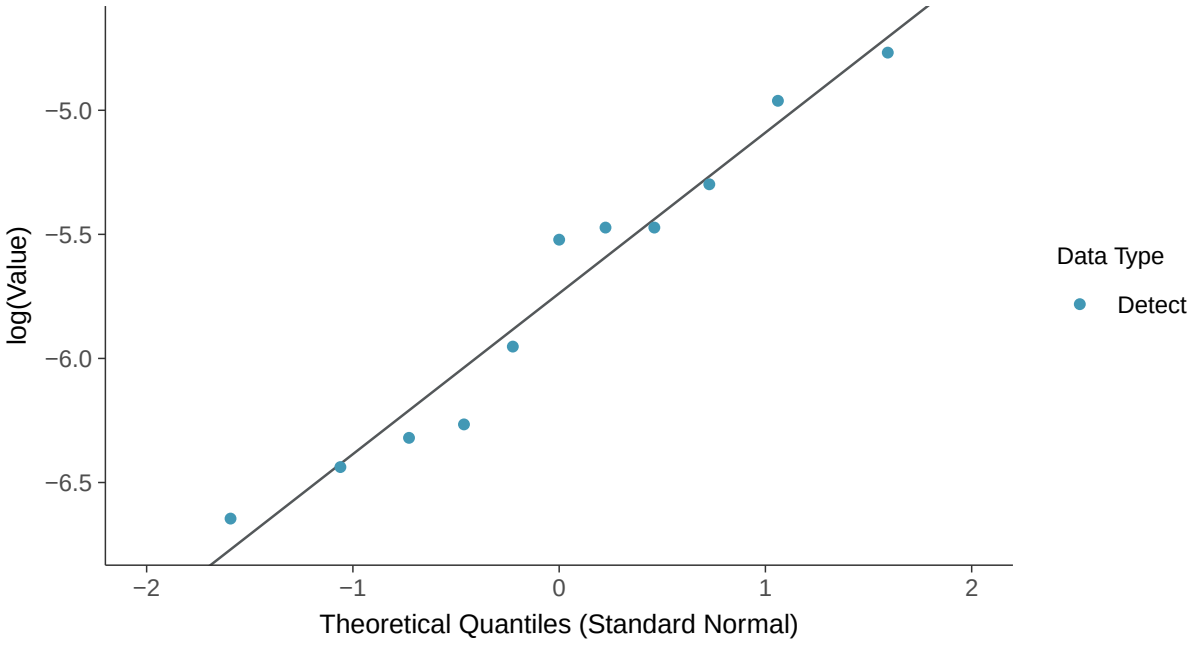
Normal Q-Q plot

Chromium, Total, MW-10 (mg/L)



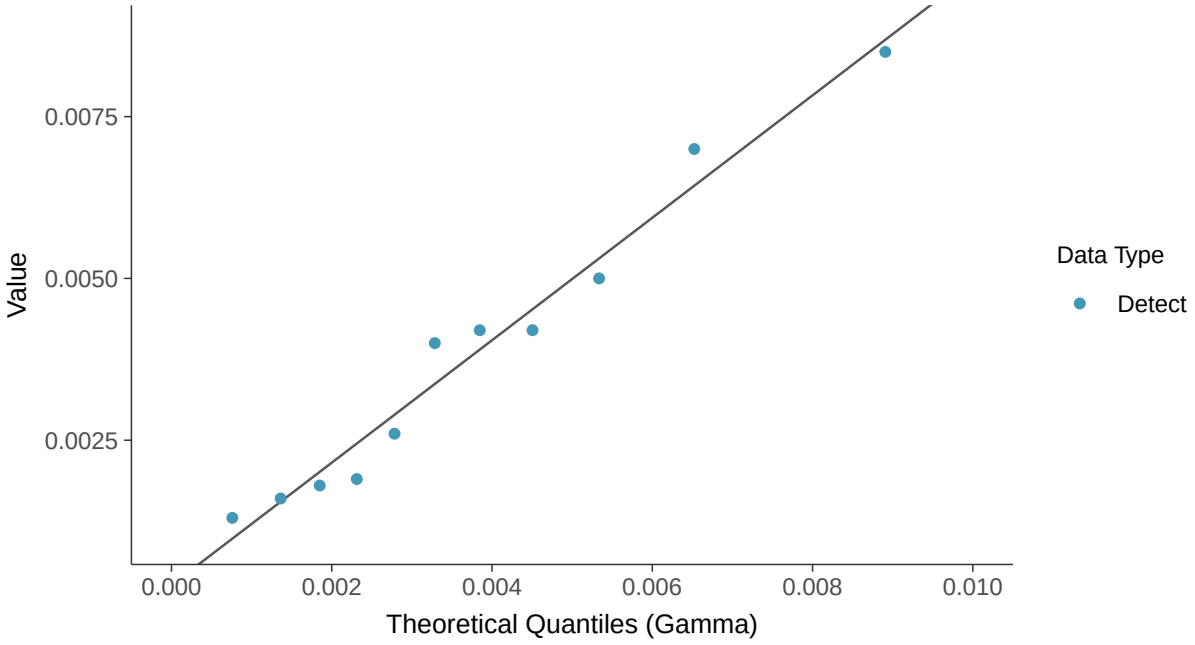
Lognormal Q-Q plot

Chromium, Total, MW-10 (mg/L)



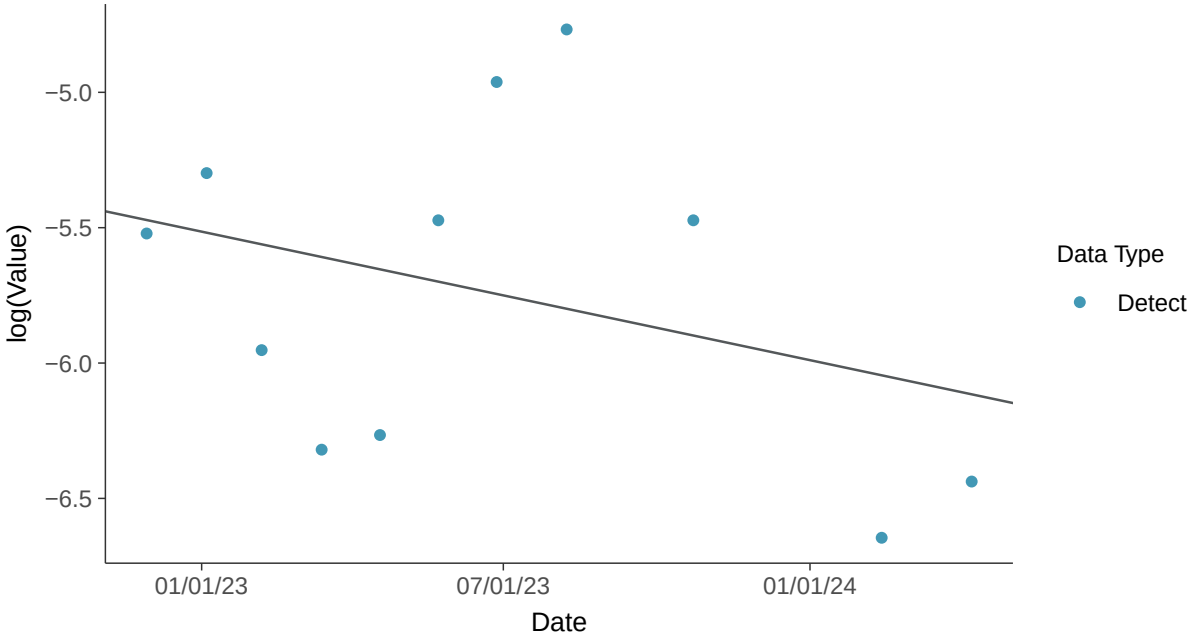
Gamma Q-Q plot

Chromium, Total, MW-10 (mg/L)



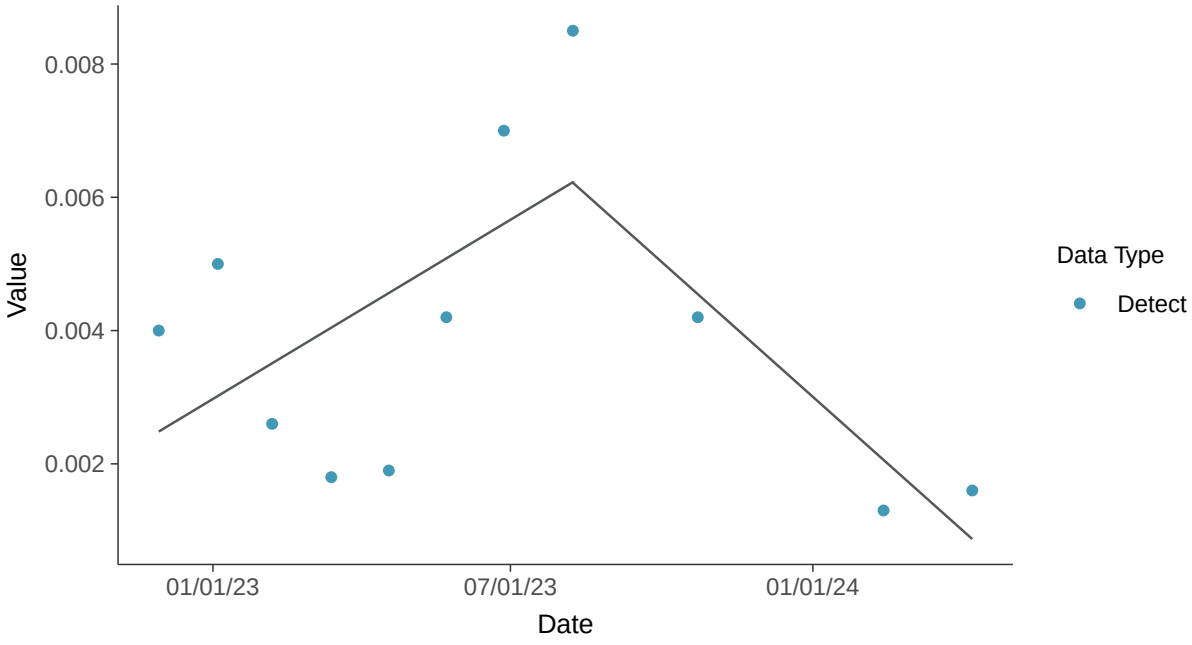
Trend Regression: Lognormal MLE

Chromium, Total, MW-10 (mg/L)



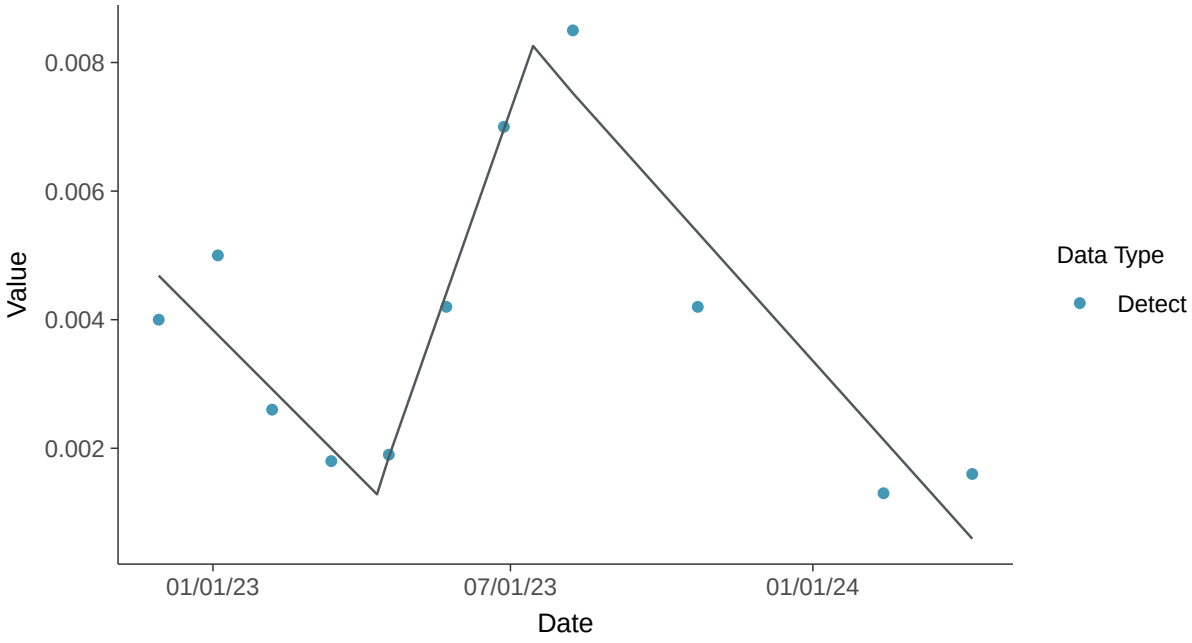
Trend Regression: Piecewise Linear-Linear

Chromium, Total, MW-10 (mg/L)



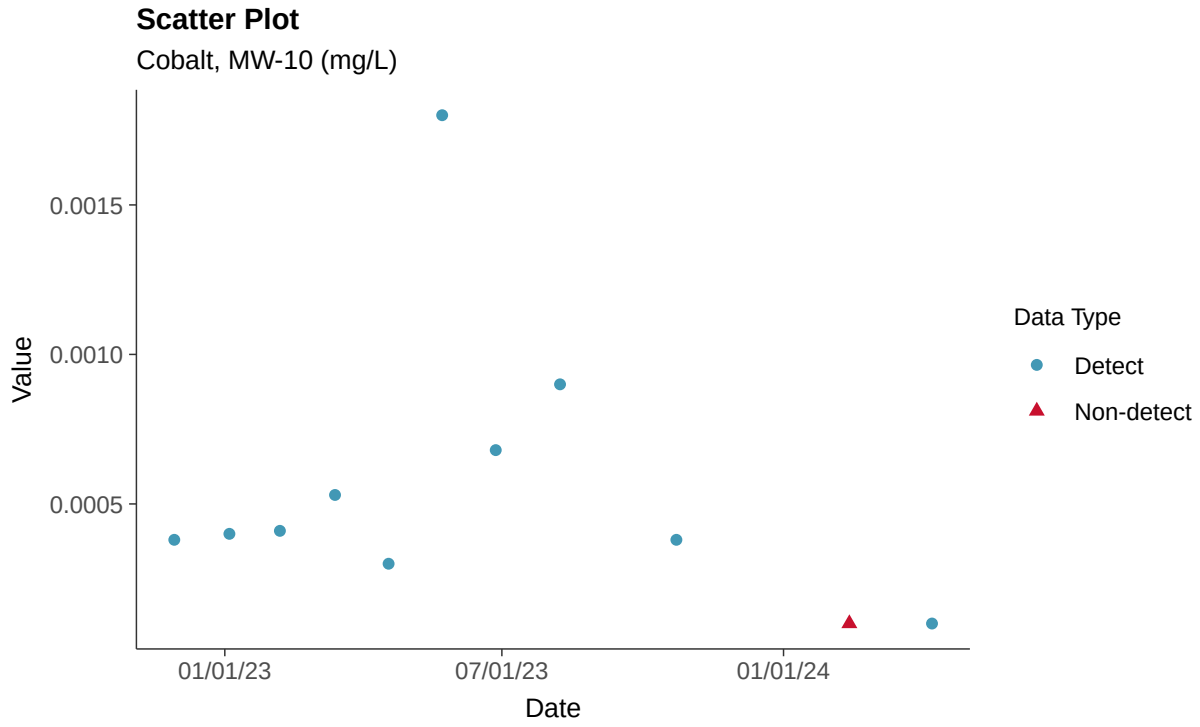
Trend Regression: Piecewise Linear-Linear-Linear

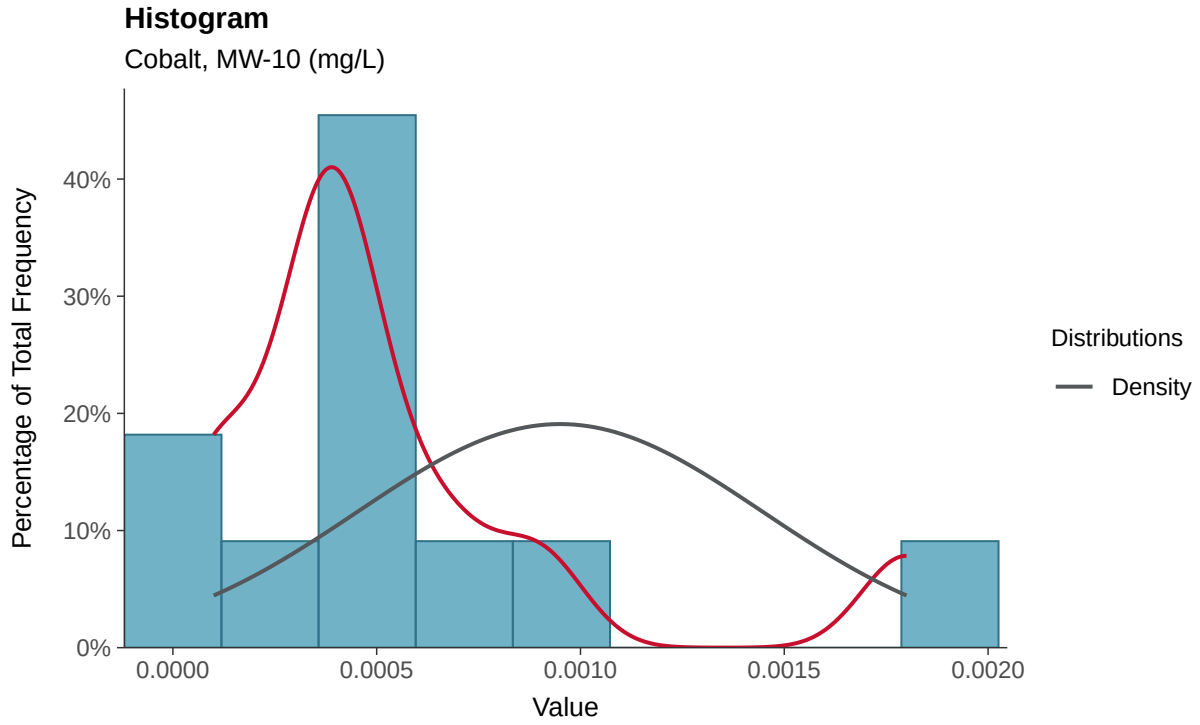
Chromium, Total, MW-10 (mg/L)



Appendix IV: Cobalt, MW-10

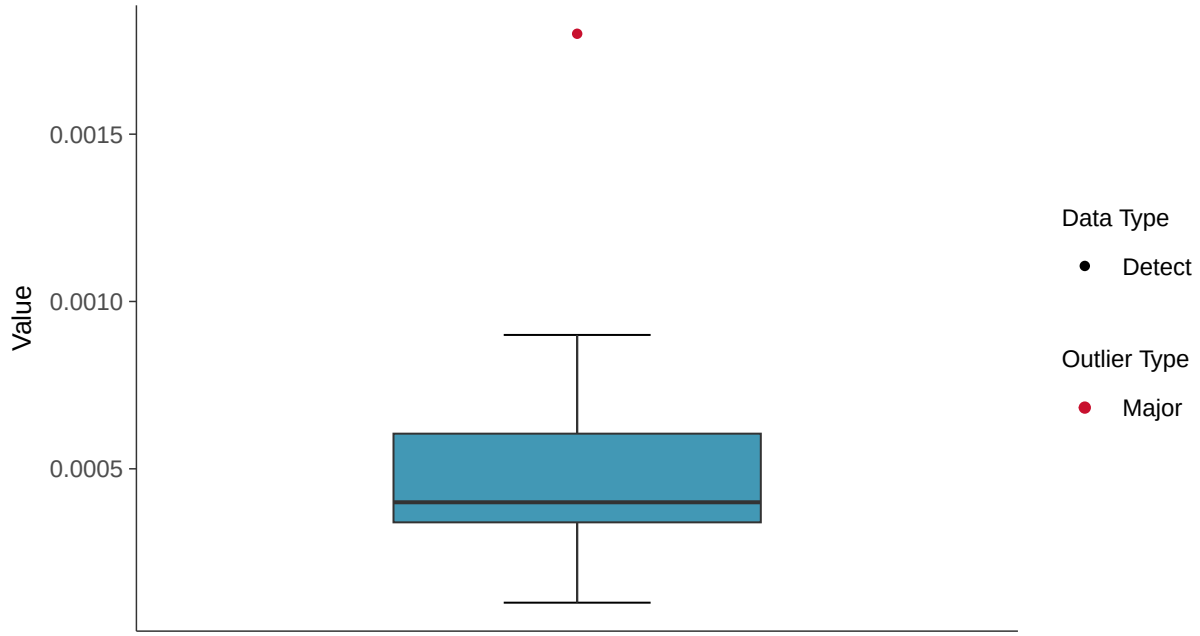
ID: 3_20_5_110





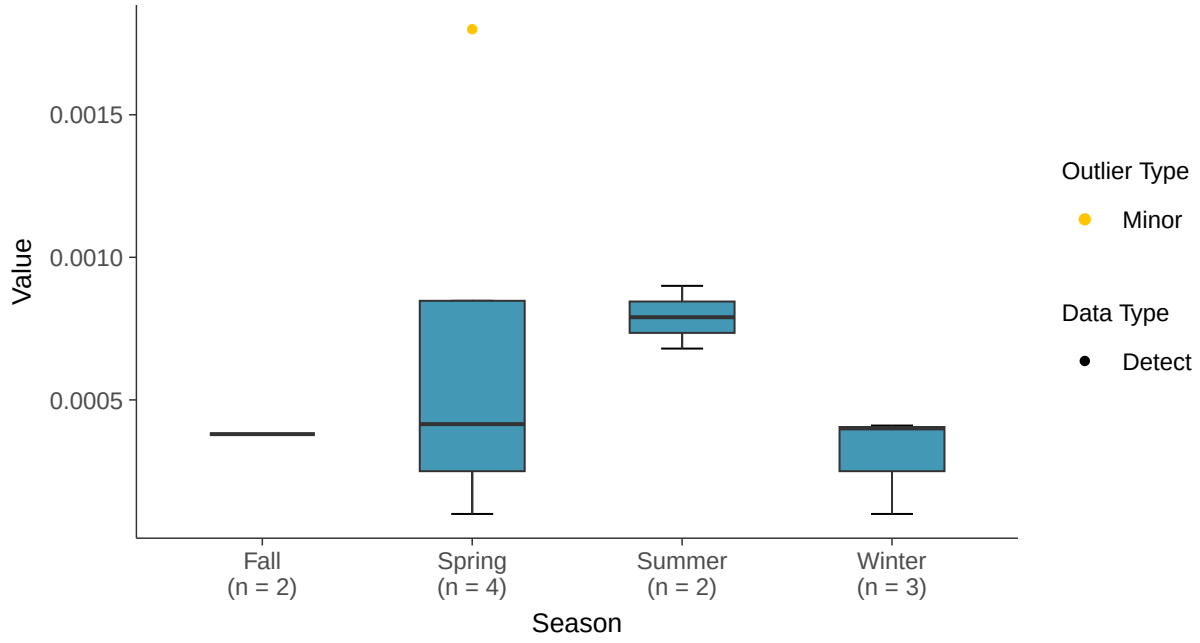
Boxplot

Cobalt, MW-10 (mg/L)



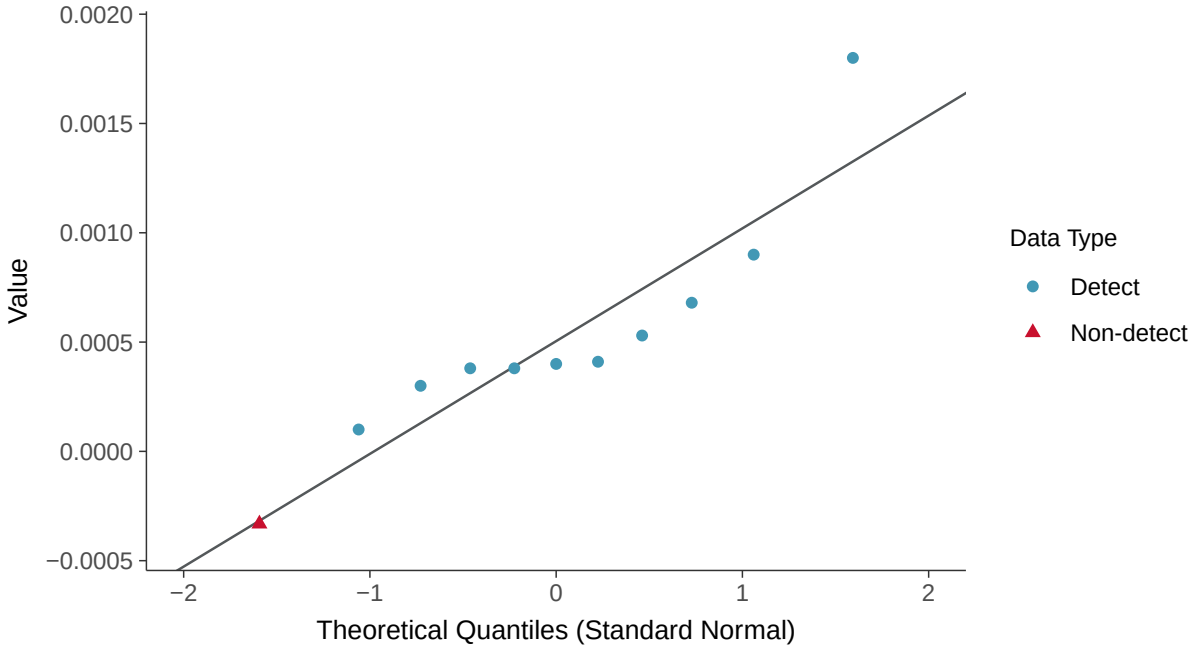
Boxplot by Season

Cobalt, MW-10 (mg/L)



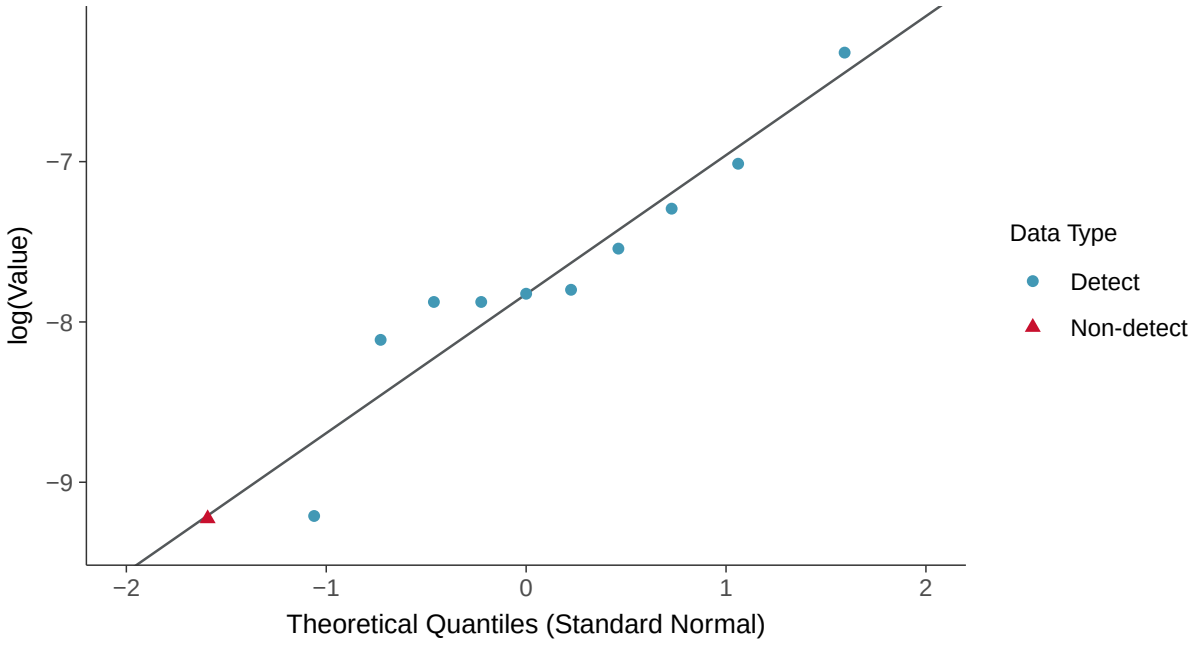
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-10 (mg/L)



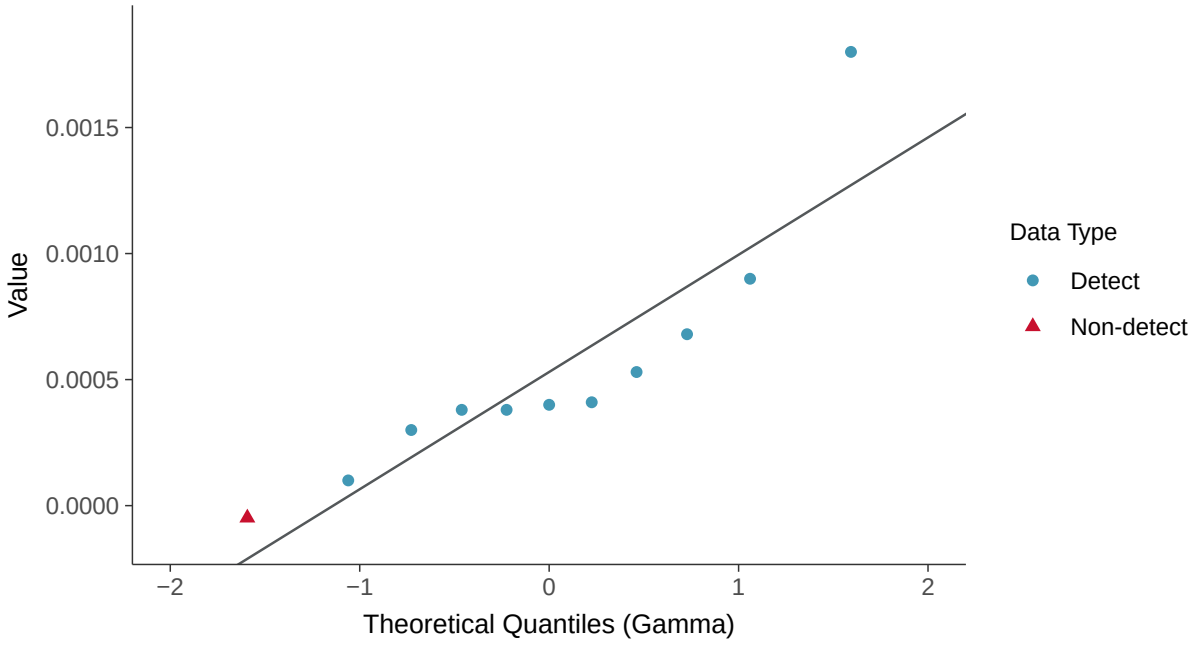
Lognormal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-10 (mg/L)



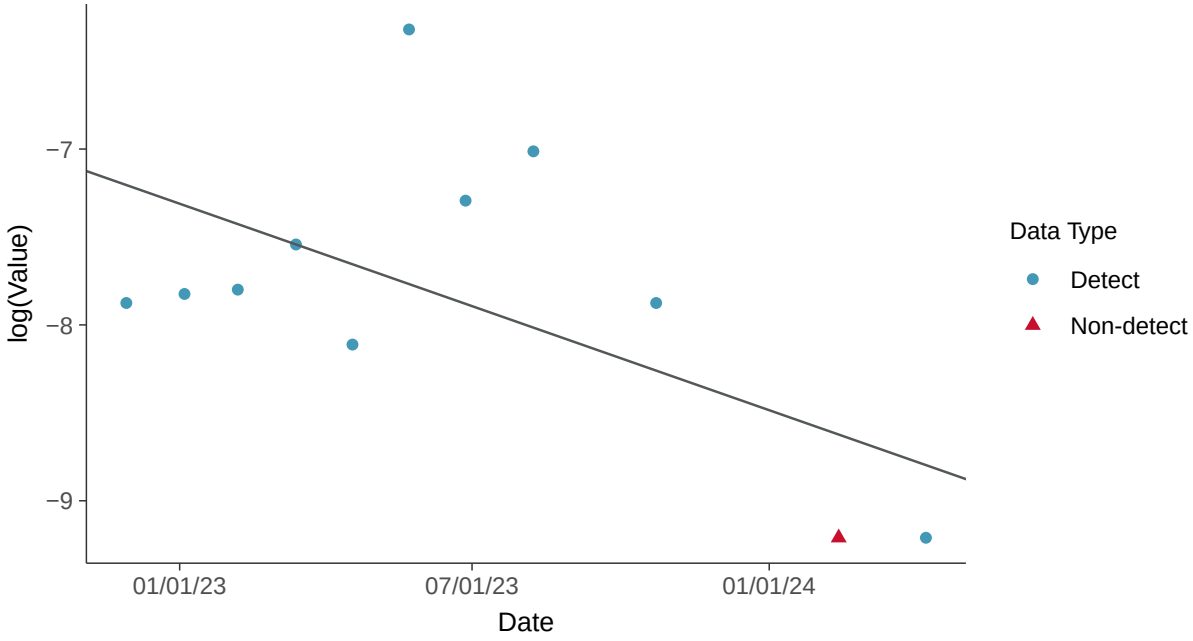
Gamma Q-Q plot using ROS Imputed Estimates

Cobalt, MW-10 (mg/L)



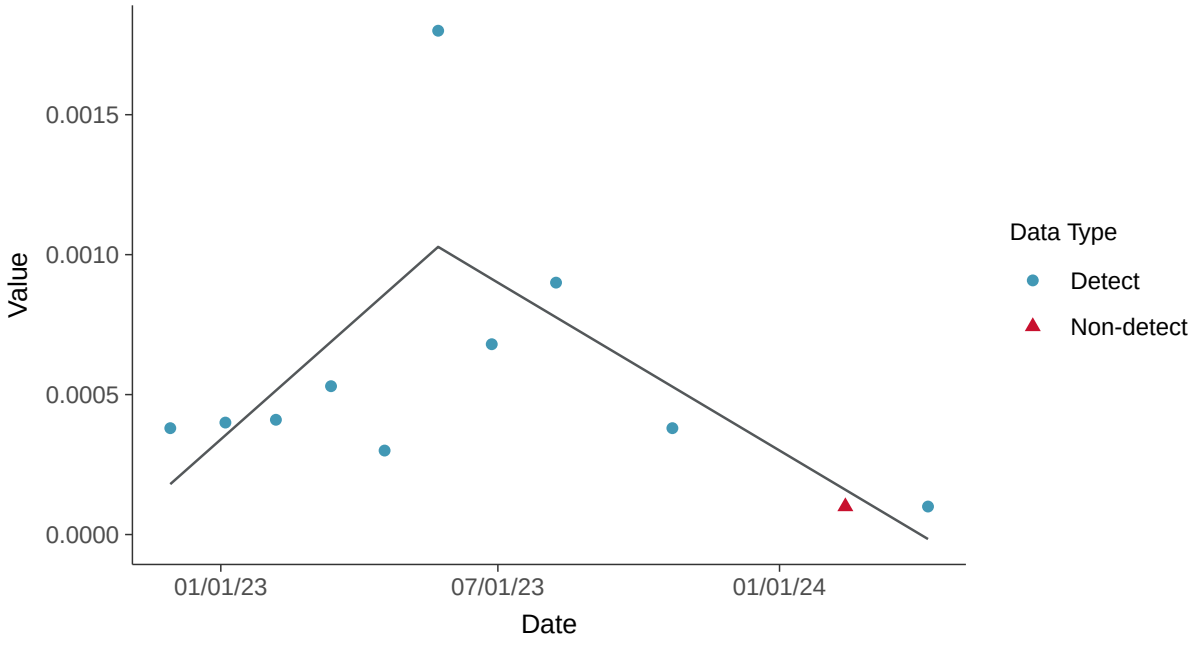
Trend Regression: Lognormal MLE

Cobalt, MW-10 (mg/L)



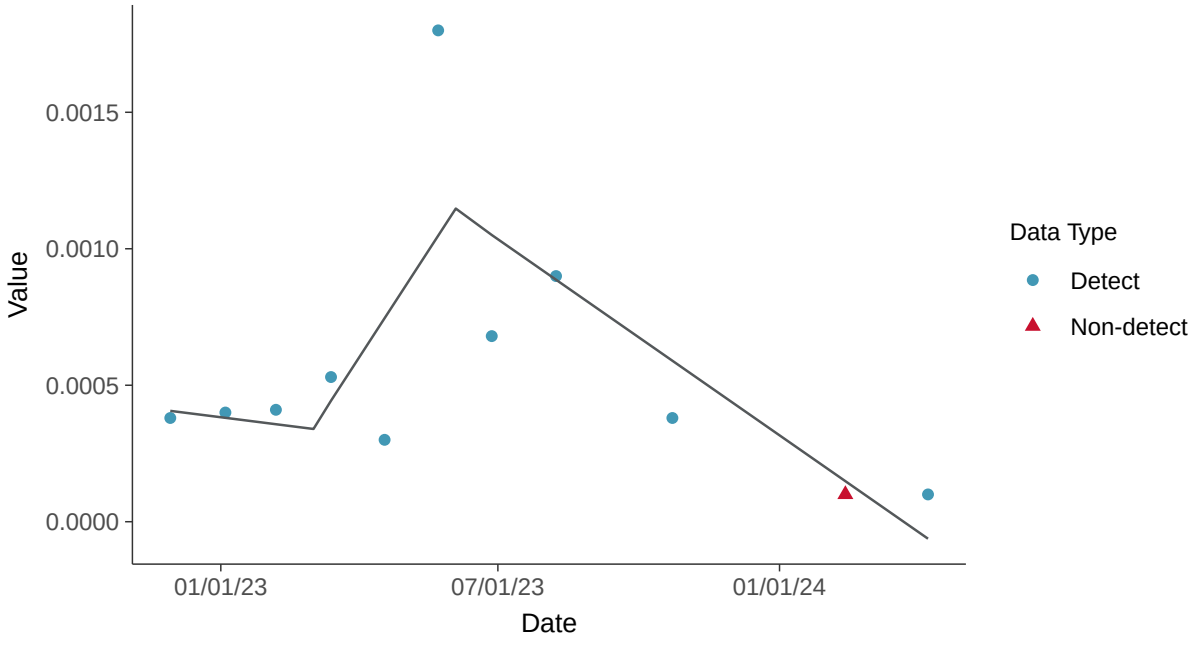
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-10 (mg/L)



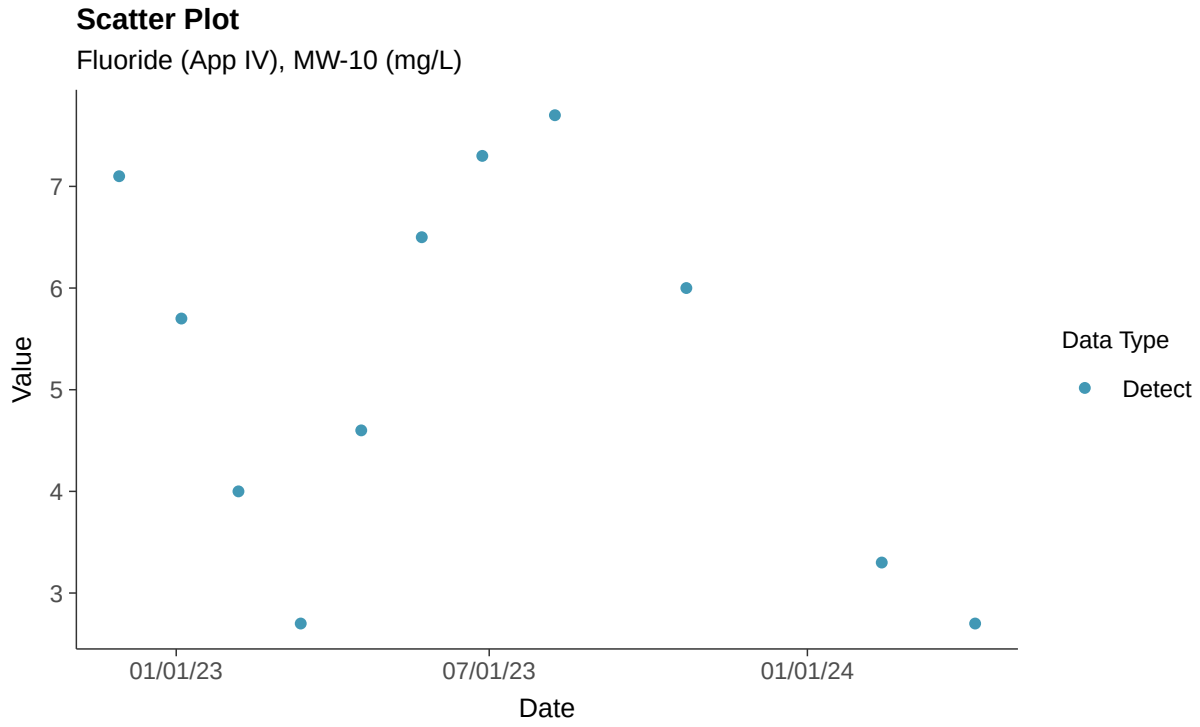
Trend Regression: Piecewise Linear-Linear-Linear

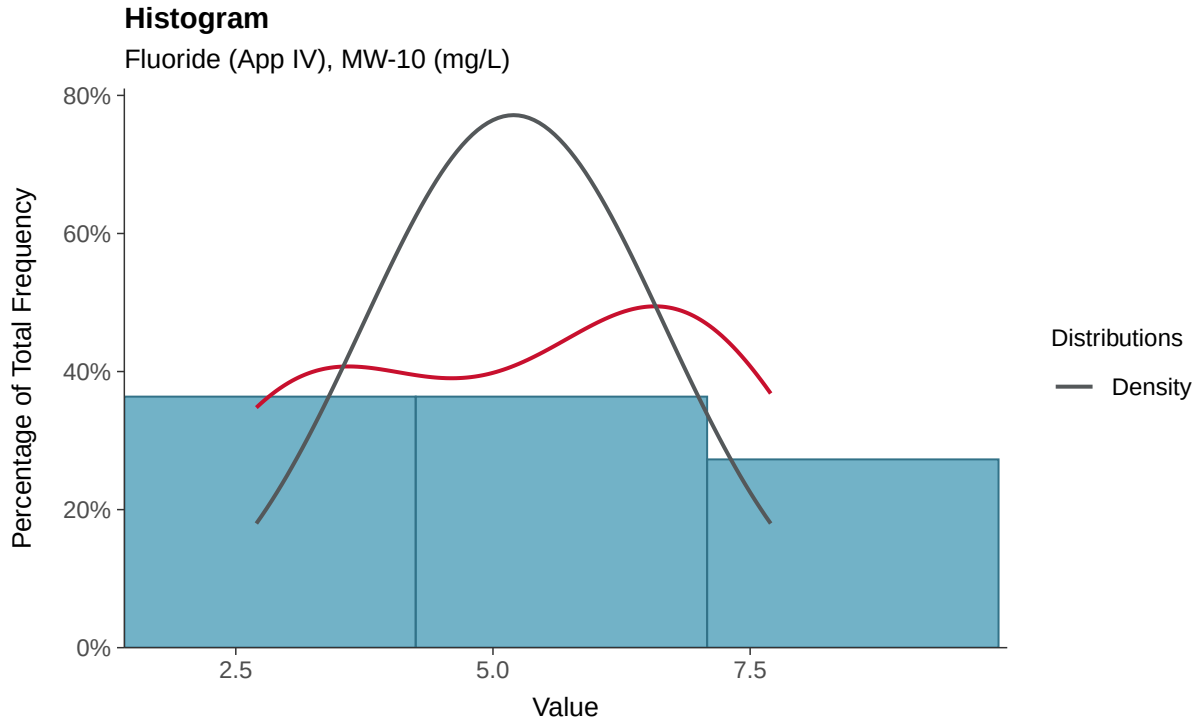
Cobalt, MW-10 (mg/L)



Appendix IV: Fluoride (App IV), MW-10

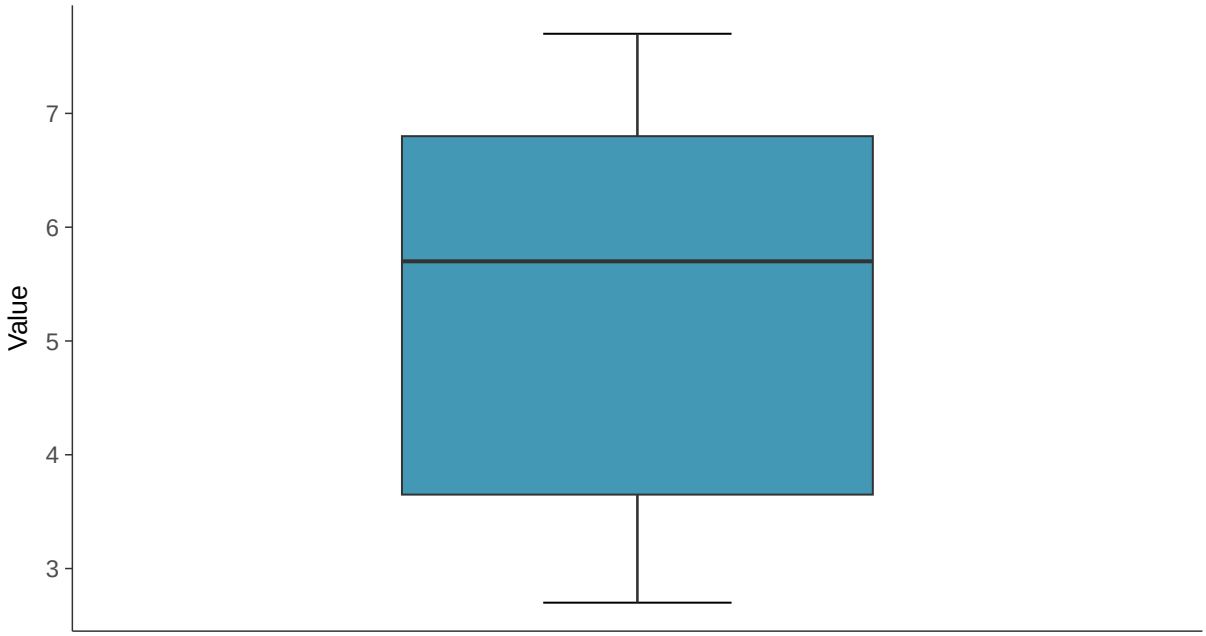
ID: 3_20_5_113





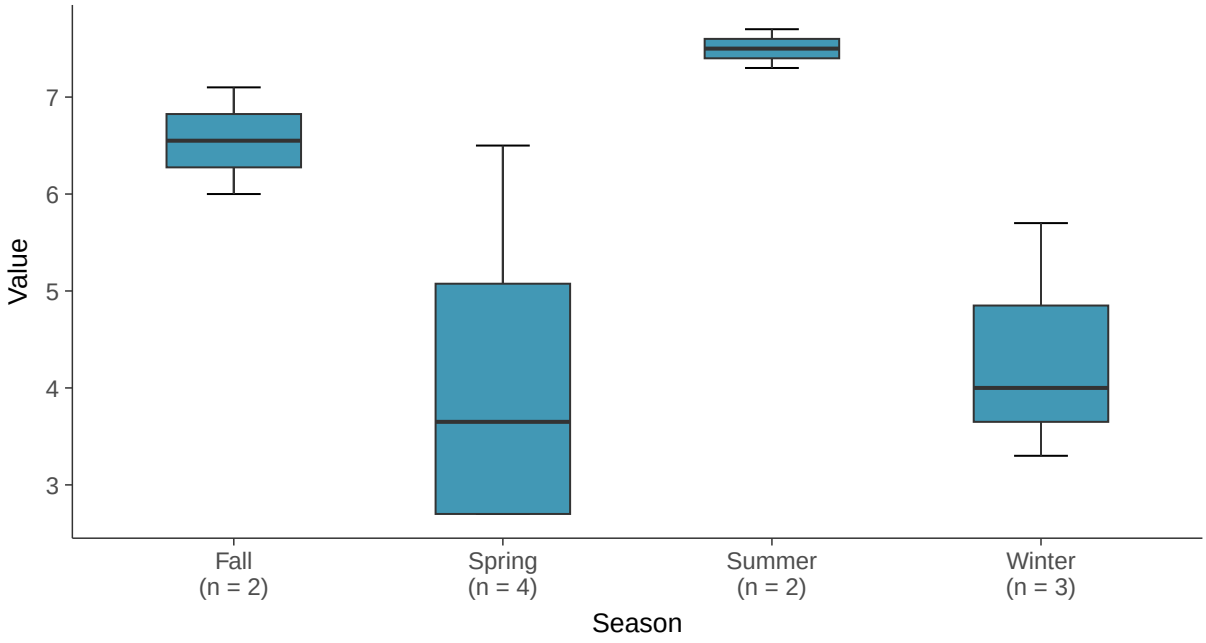
Boxplot

Fluoride (App IV), MW-10 (mg/L)



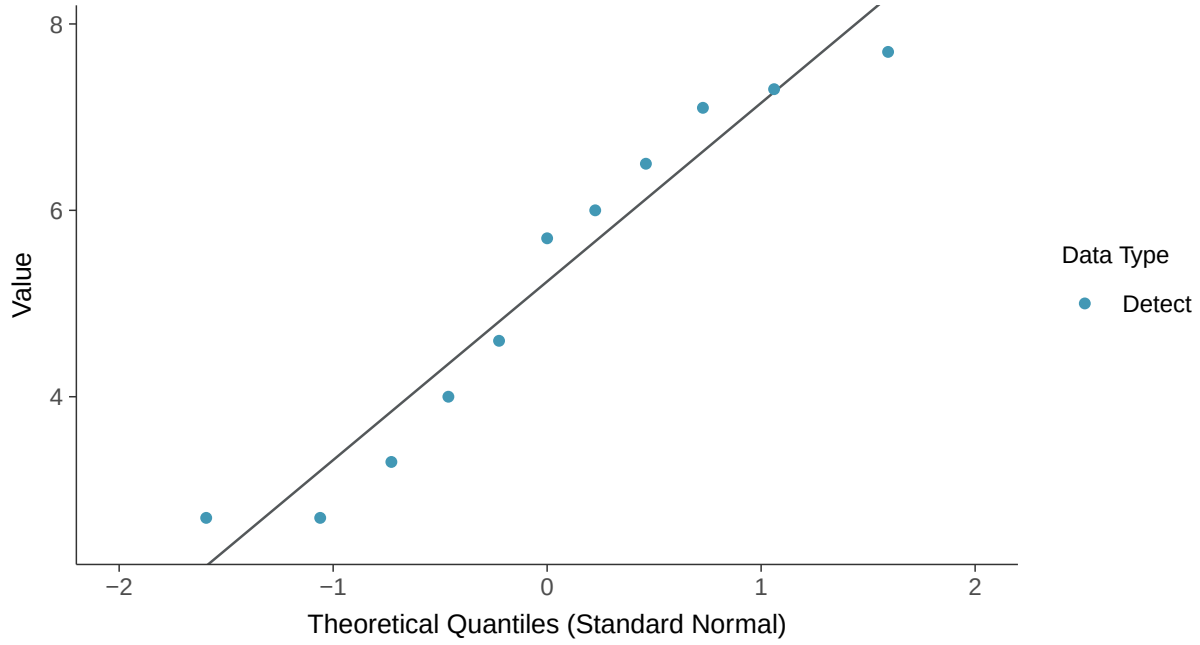
Boxplot by Season

Fluoride (App IV), MW-10 (mg/L)



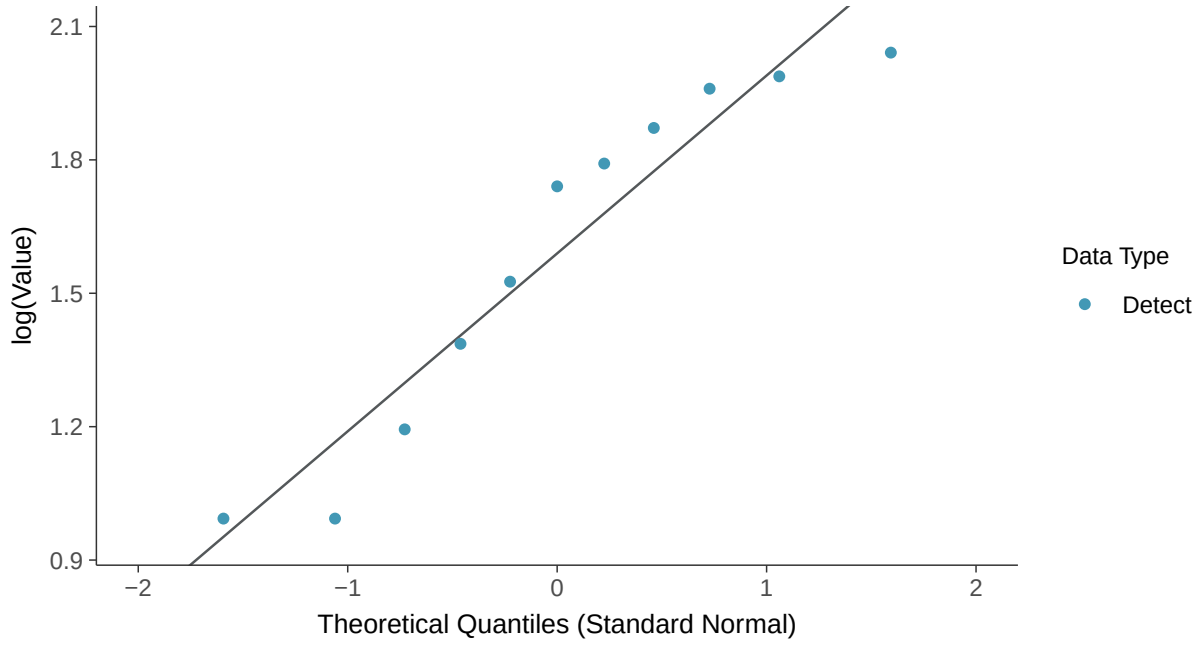
Normal Q-Q plot

Fluoride (App IV), MW-10 (mg/L)



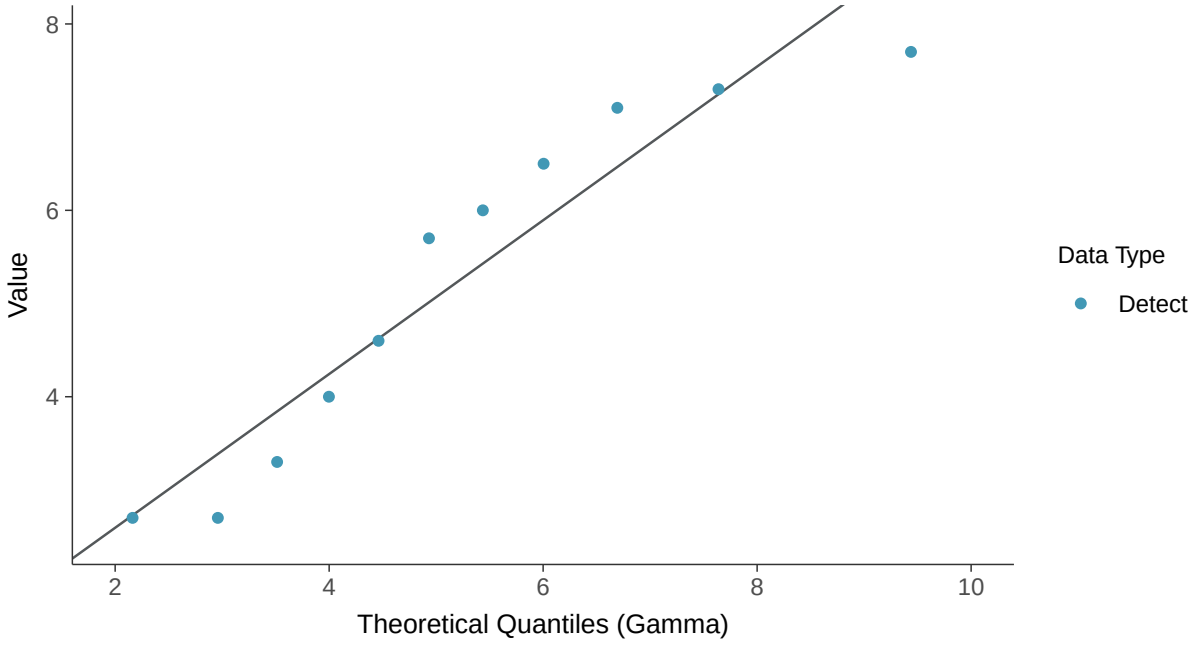
Lognormal Q-Q plot

Fluoride (App IV), MW-10 (mg/L)



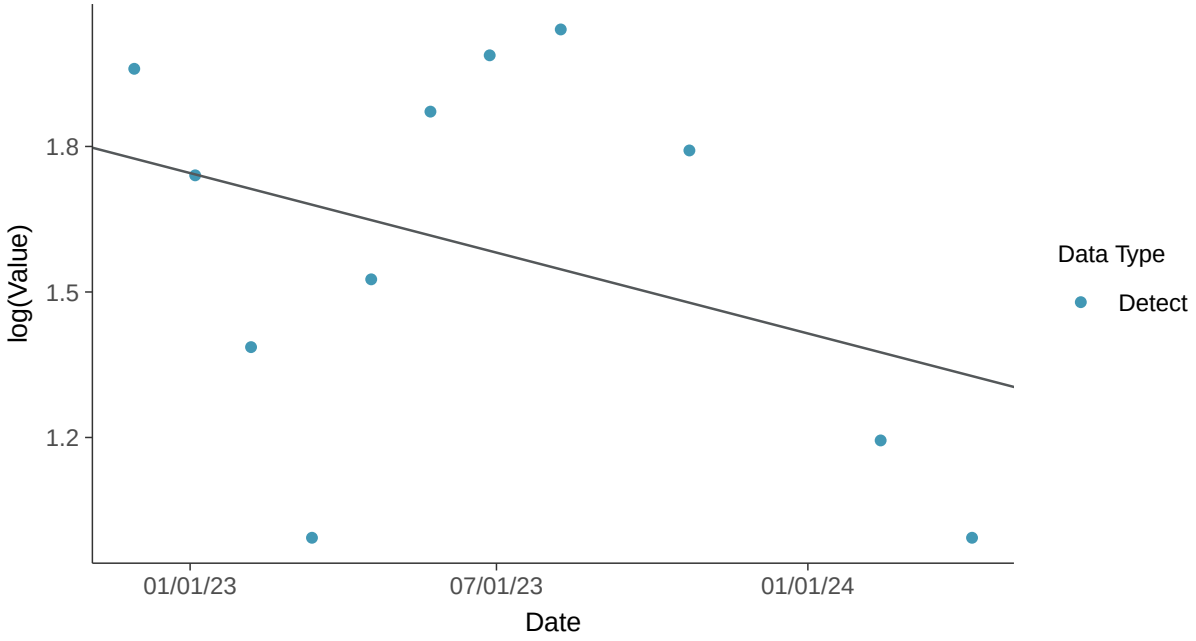
Gamma Q-Q plot

Fluoride (App IV), MW-10 (mg/L)



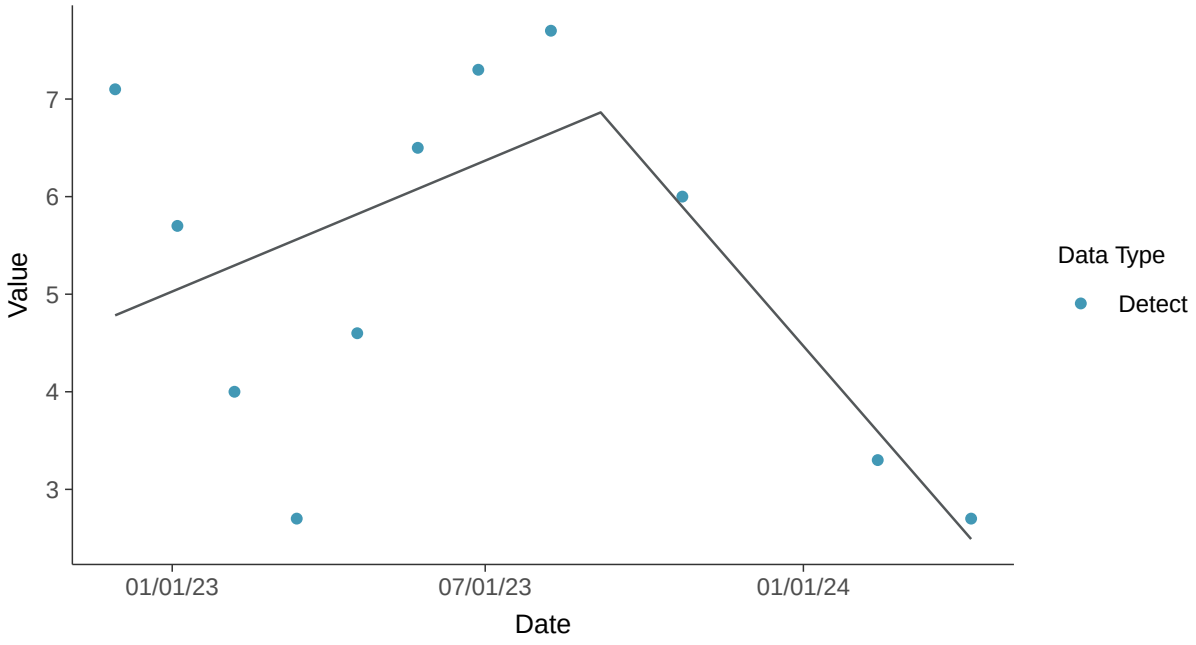
Trend Regression: Lognormal MLE

Fluoride (App IV), MW-10 (mg/L)



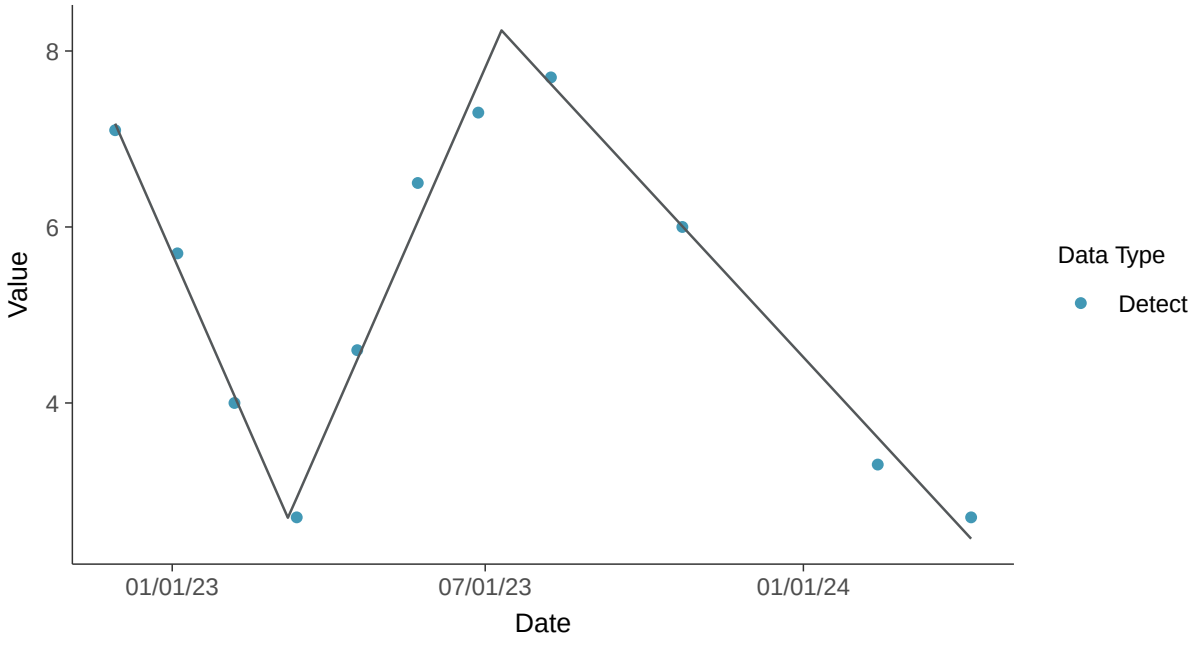
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-10 (mg/L)



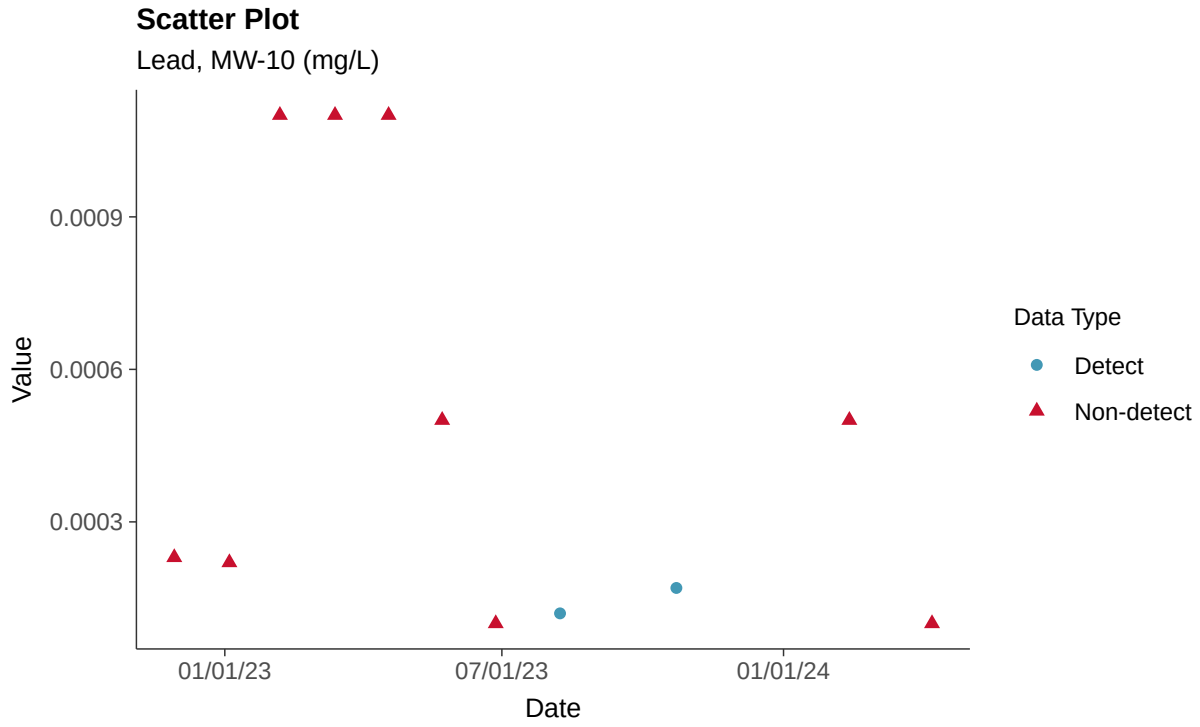
Trend Regression: Piecewise Linear-Linear-Linear

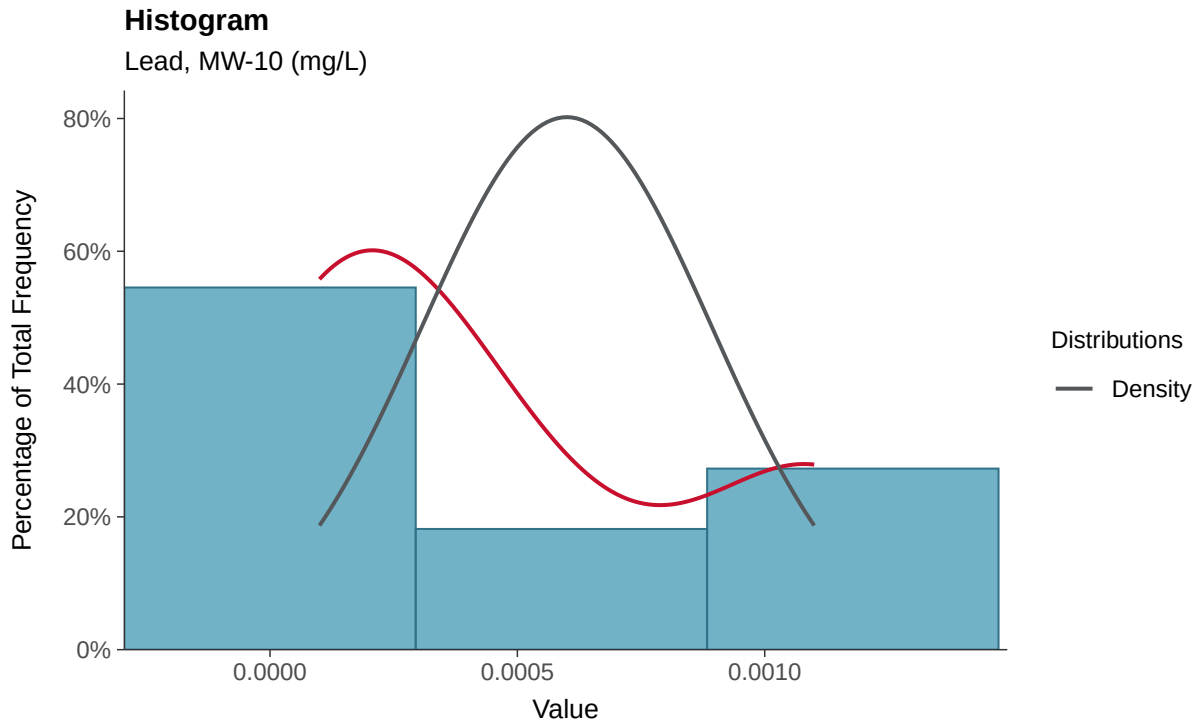
Fluoride (App IV), MW-10 (mg/L)



Appendix IV: Lead, MW-10

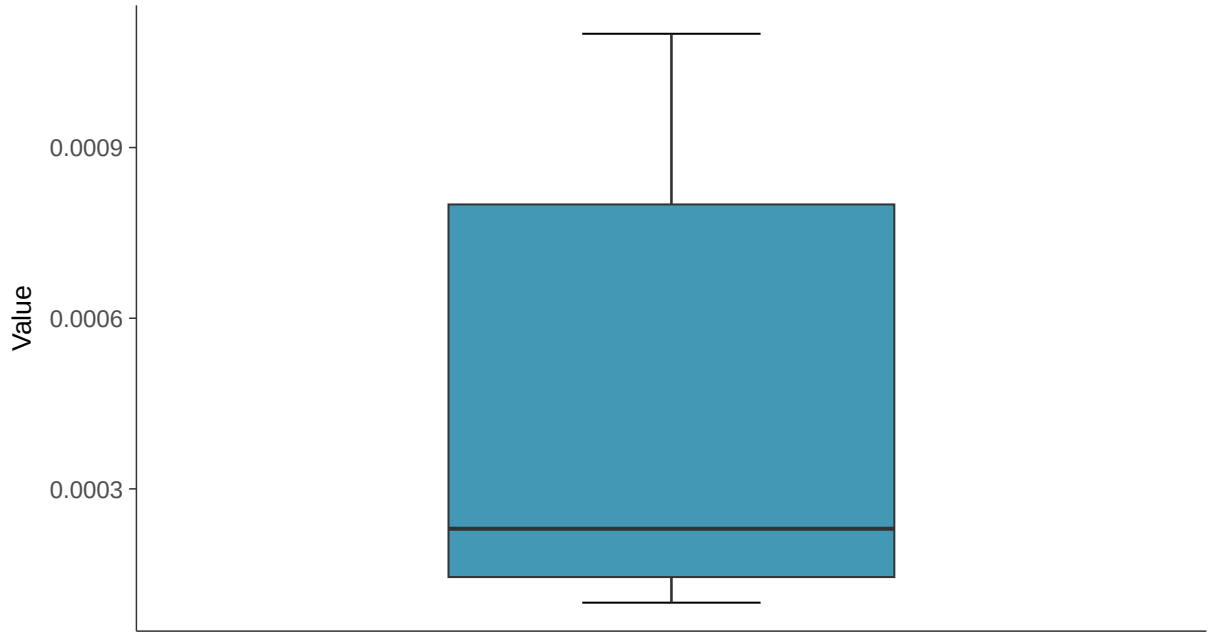
ID: 3_20_5_115





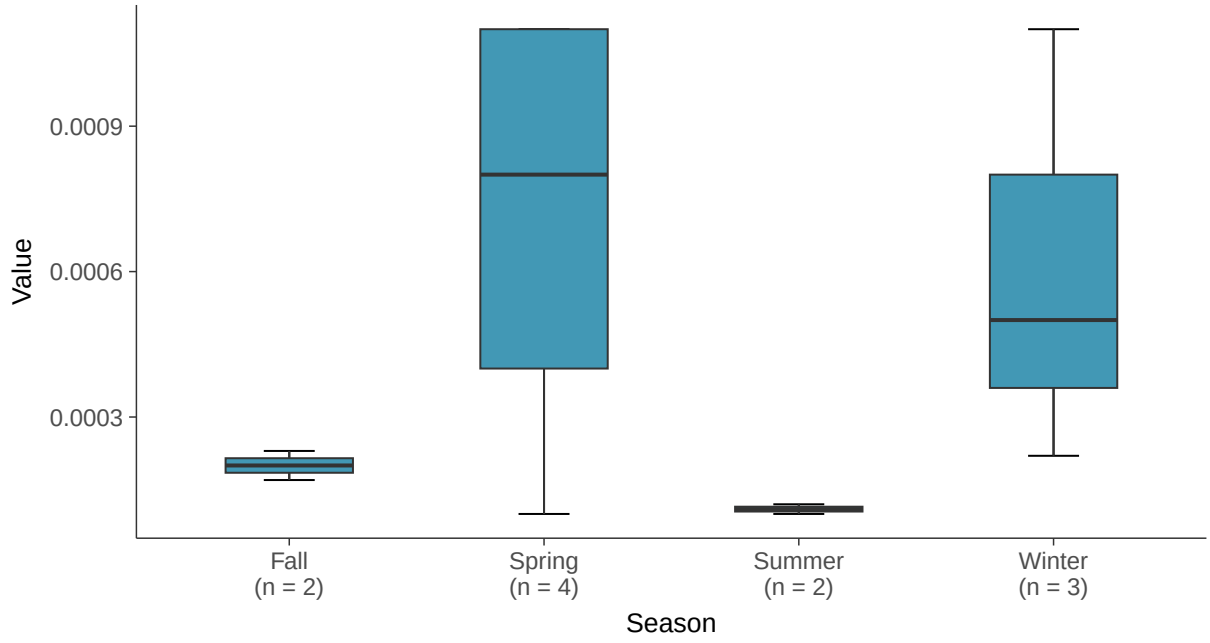
Boxplot

Lead, MW-10 (mg/L)



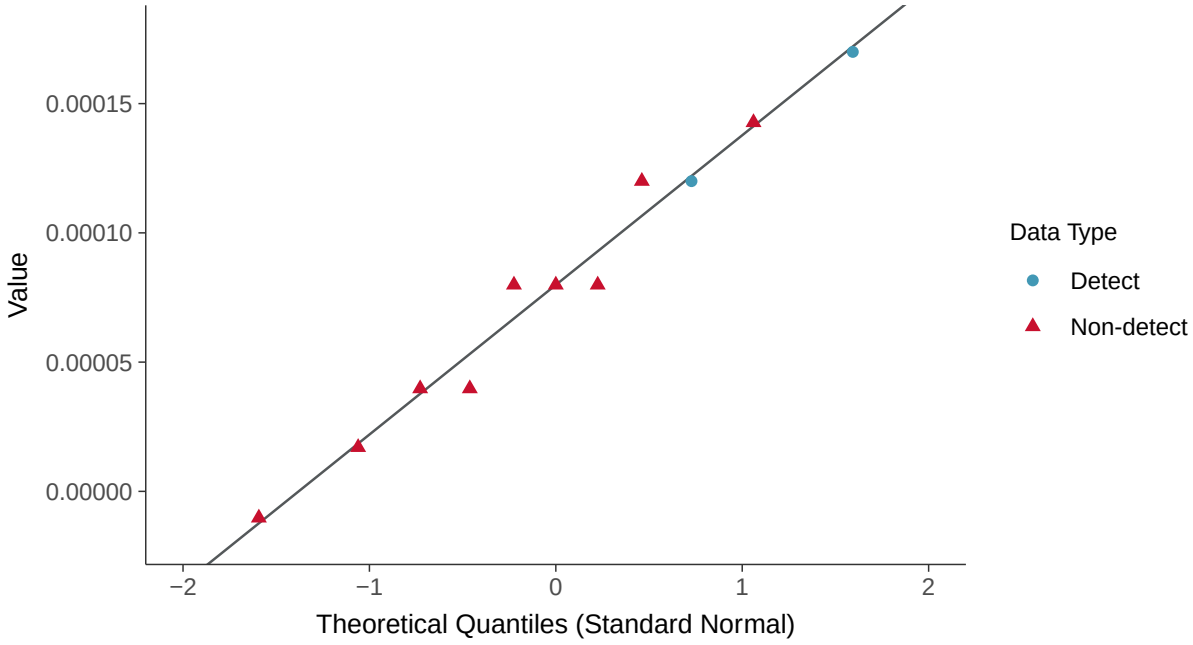
Boxplot by Season

Lead, MW-10 (mg/L)



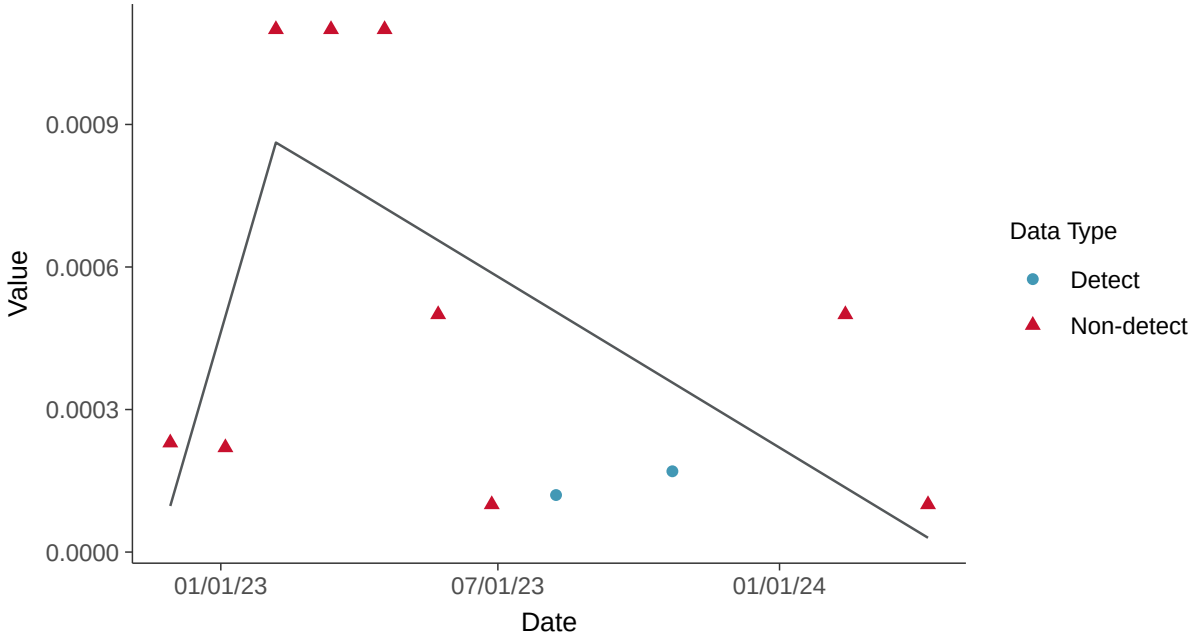
Normal Q-Q plot using ROS Imputed Estimates

Lead, MW-10 (mg/L)



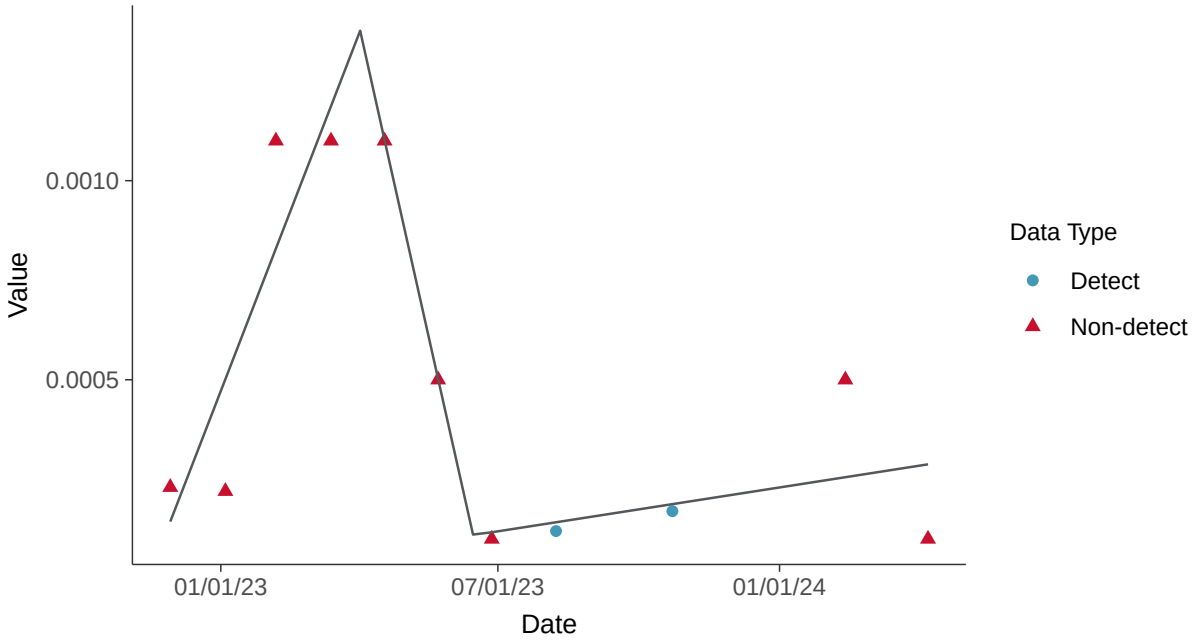
Trend Regression: Piecewise Linear-Linear

Lead, MW-10 (mg/L)



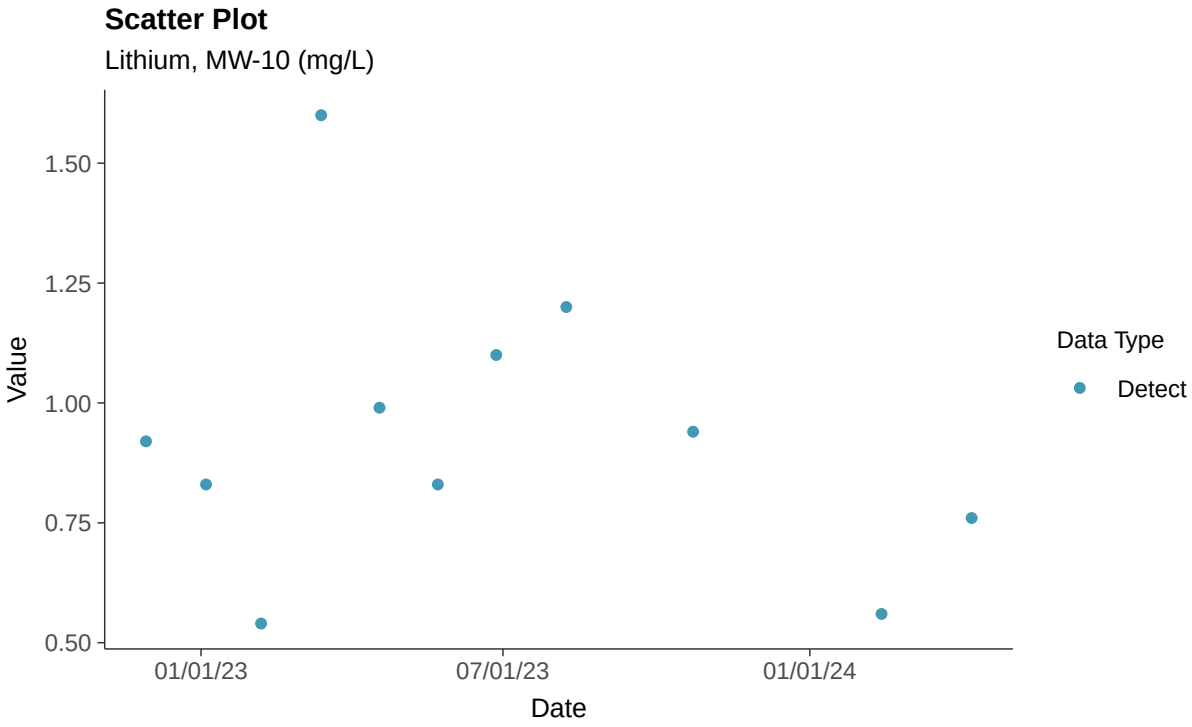
Trend Regression: Piecewise Linear-Linear-Linear

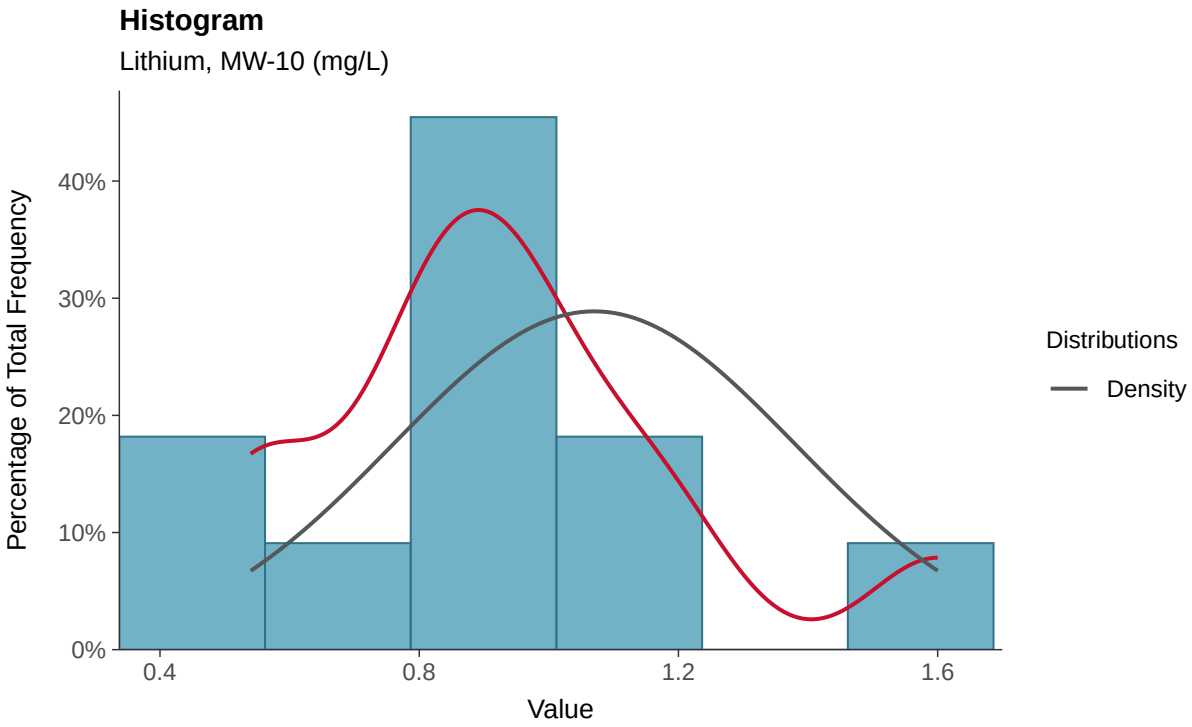
Lead, MW-10 (mg/L)



Appendix IV: Lithium, MW-10

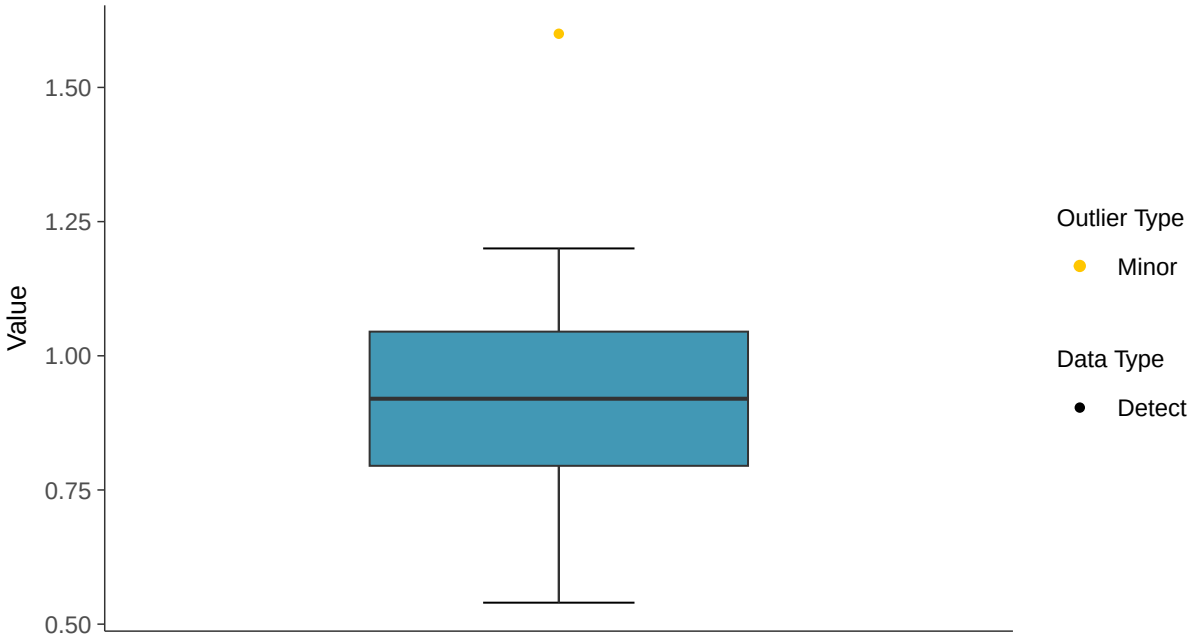
ID: 3_20_5_116





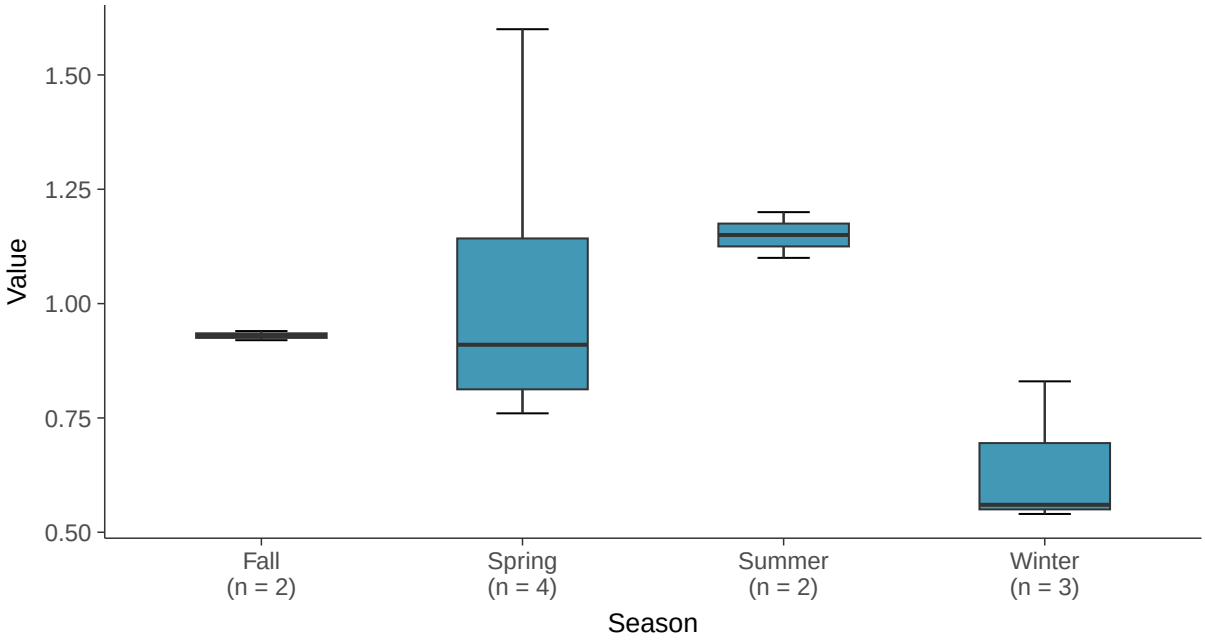
Boxplot

Lithium, MW-10 (mg/L)



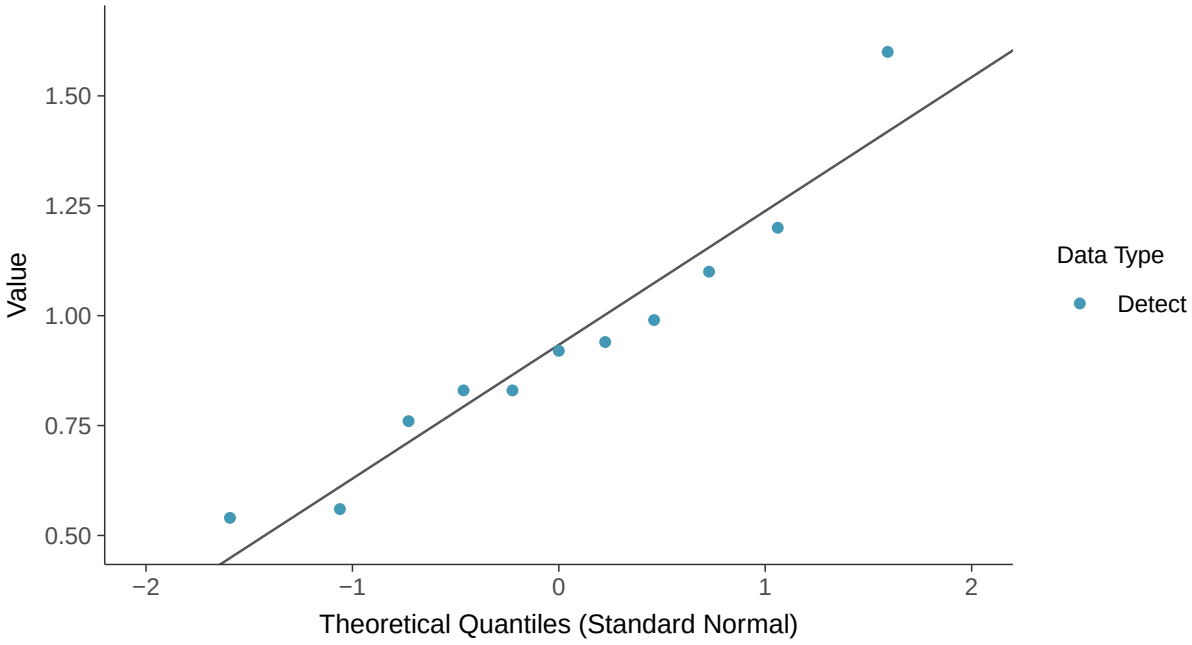
Boxplot by Season

Lithium, MW-10 (mg/L)



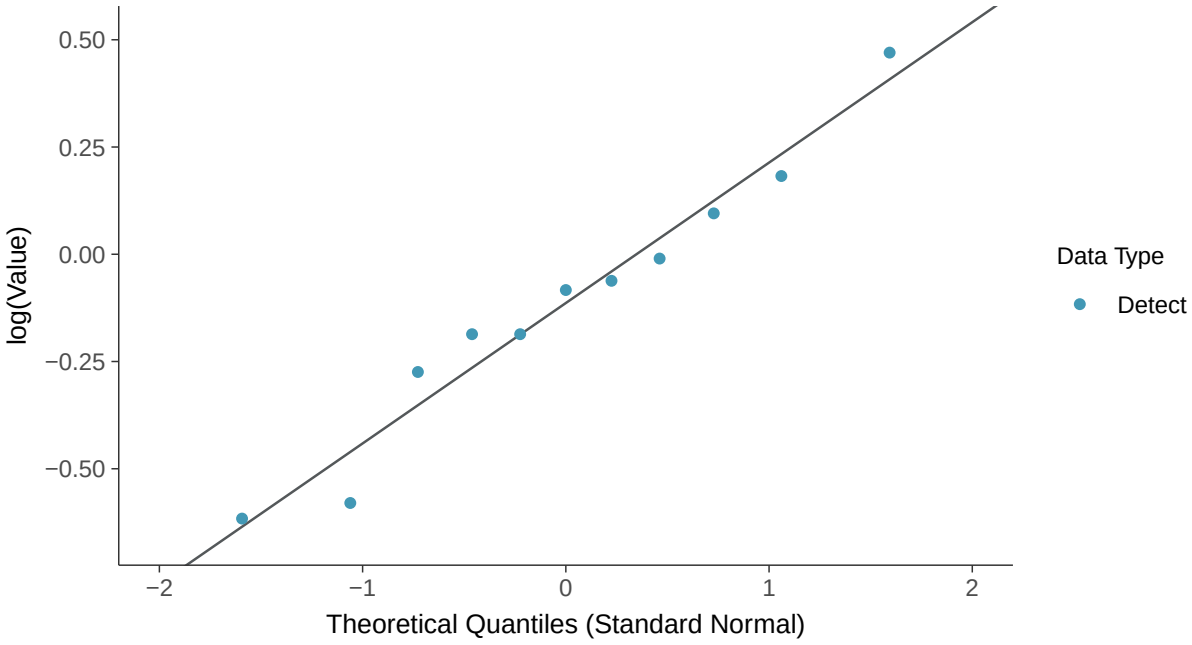
Normal Q-Q plot

Lithium, MW-10 (mg/L)



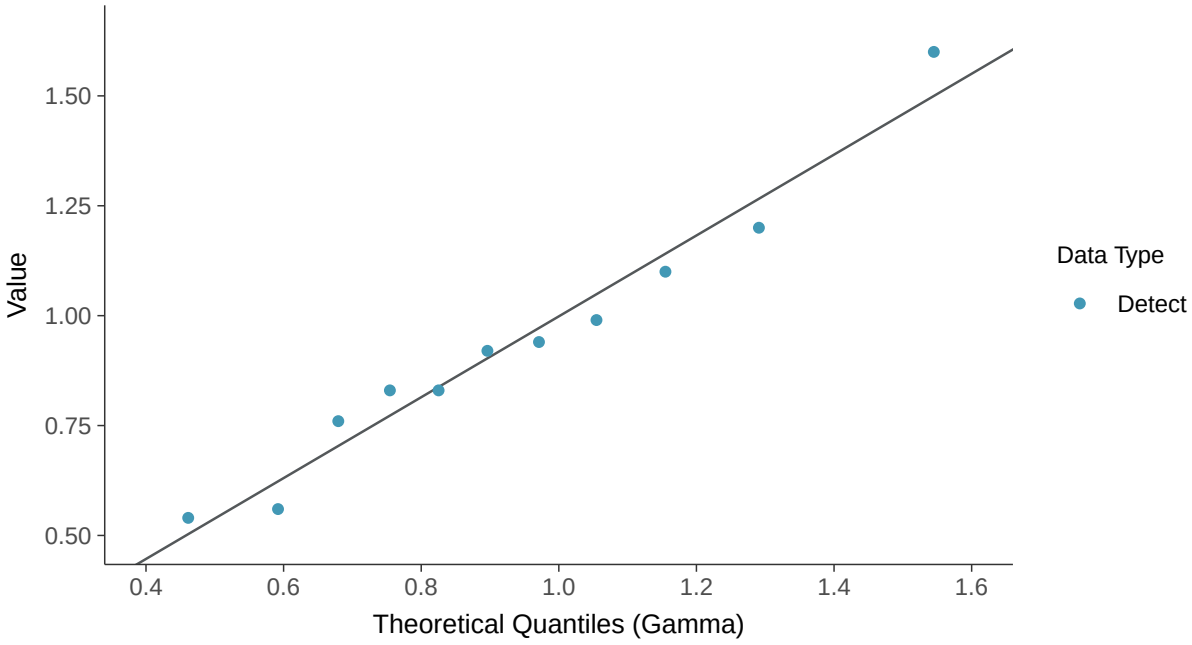
Lognormal Q-Q plot

Lithium, MW-10 (mg/L)



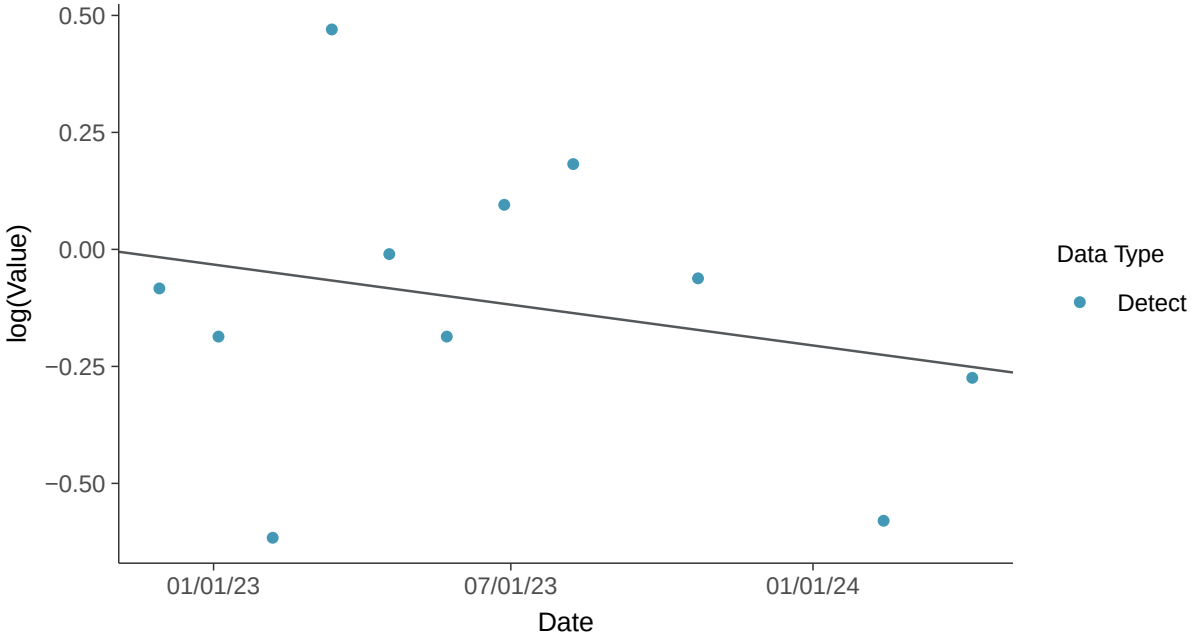
Gamma Q-Q plot

Lithium, MW-10 (mg/L)



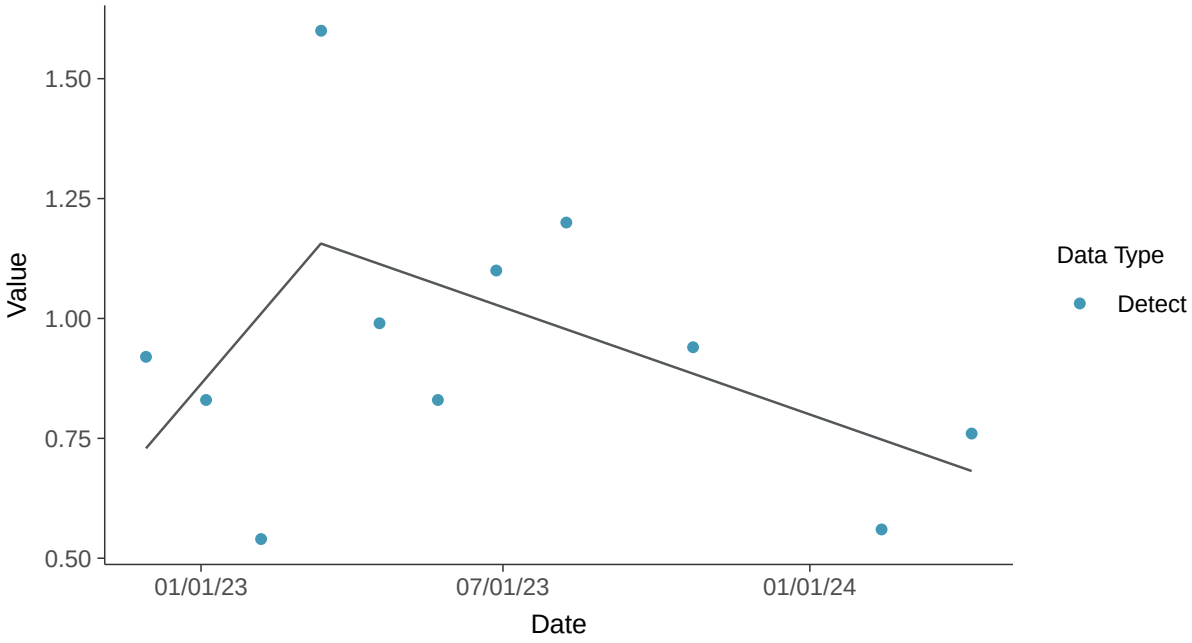
Trend Regression: Lognormal MLE

Lithium, MW-10 (mg/L)



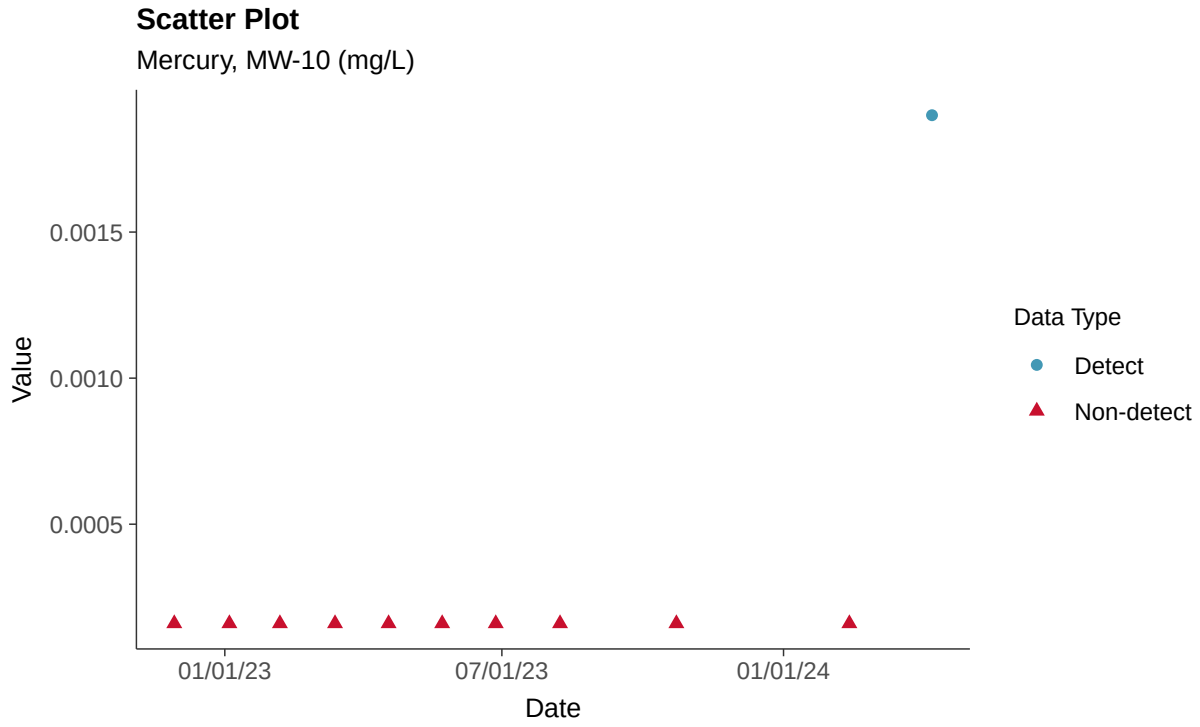
Trend Regression: Piecewise Linear-Linear

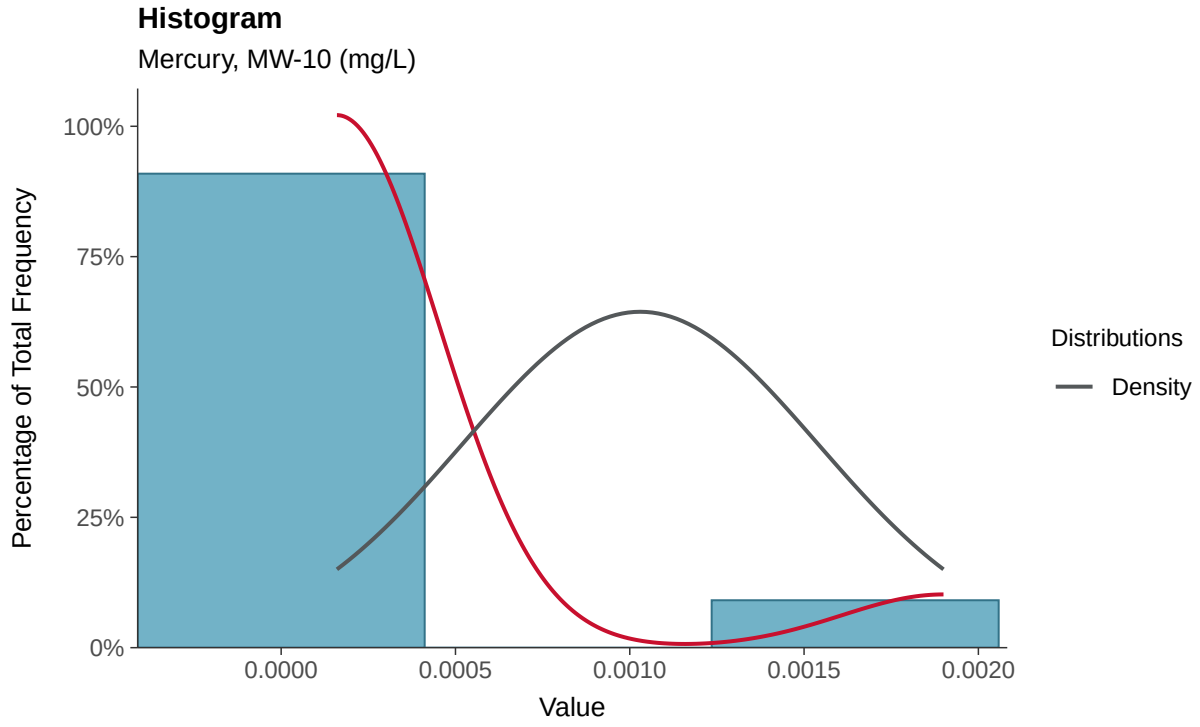
Lithium, MW-10 (mg/L)



Appendix IV: Mercury, MW-10

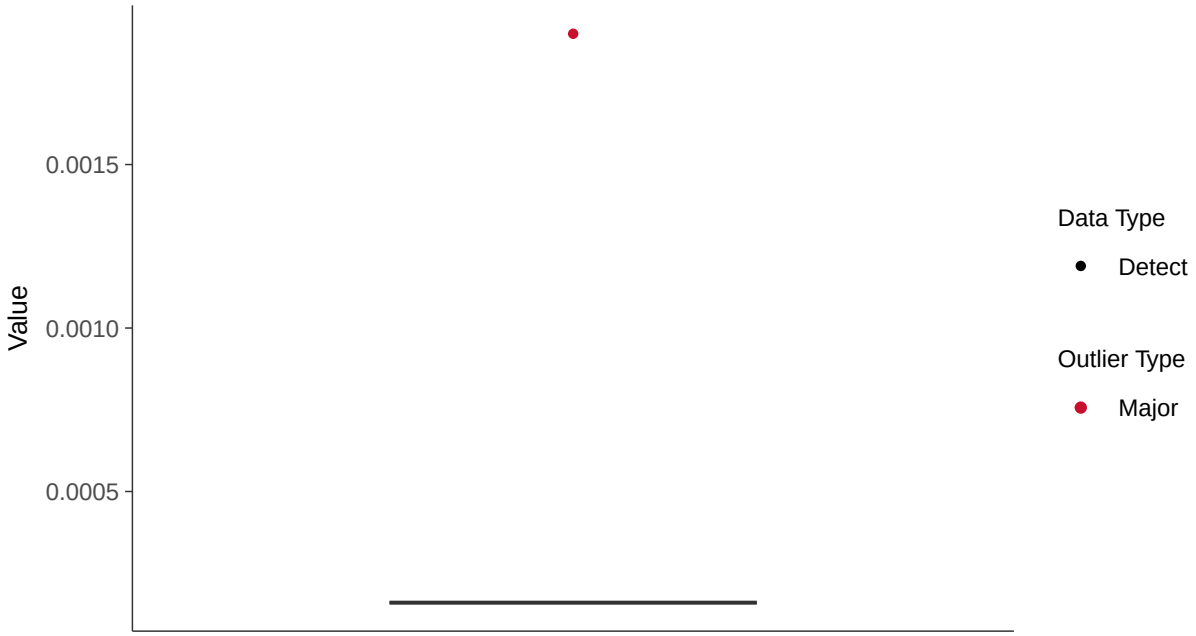
ID: 3_20_5_117





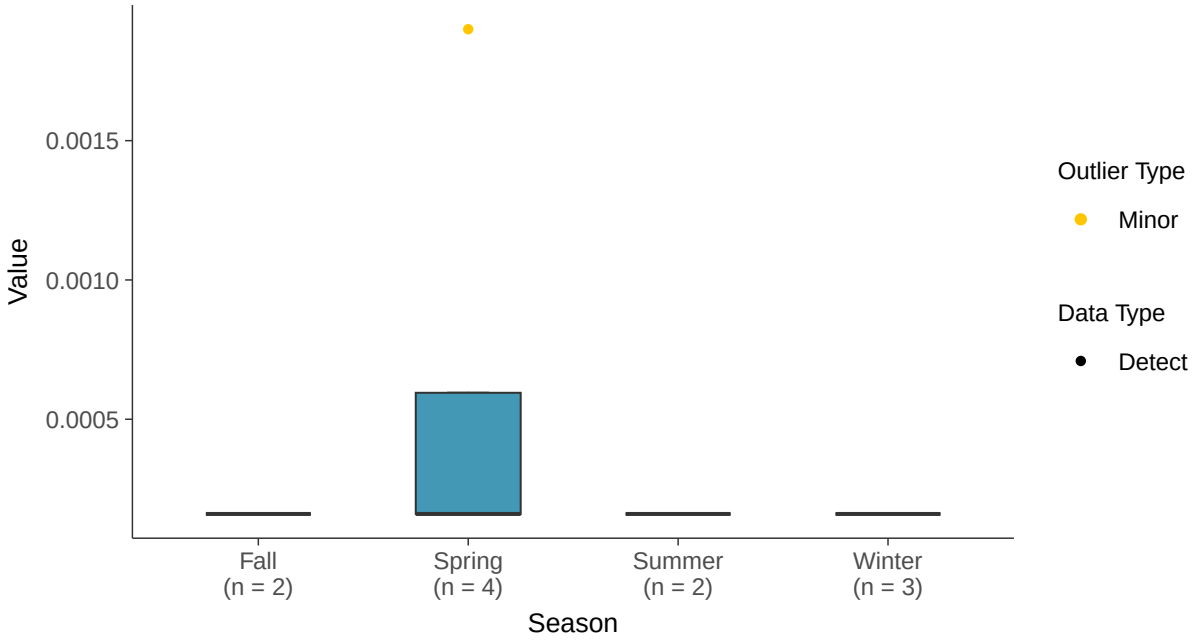
Boxplot

Mercury, MW-10 (mg/L)



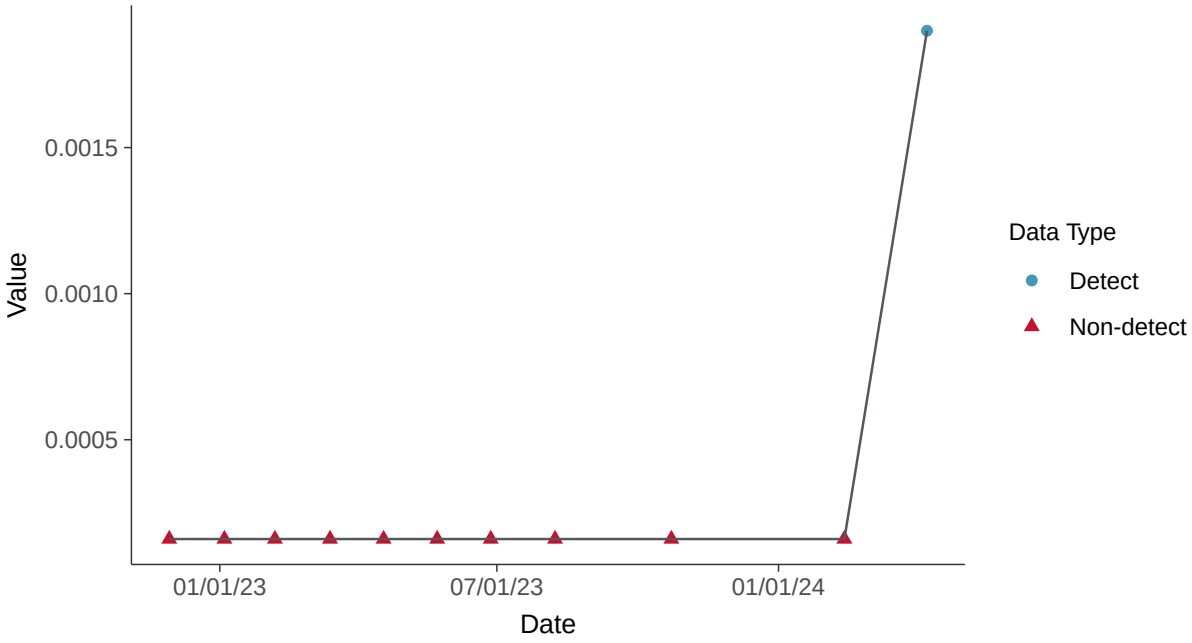
Boxplot by Season

Mercury, MW-10 (mg/L)



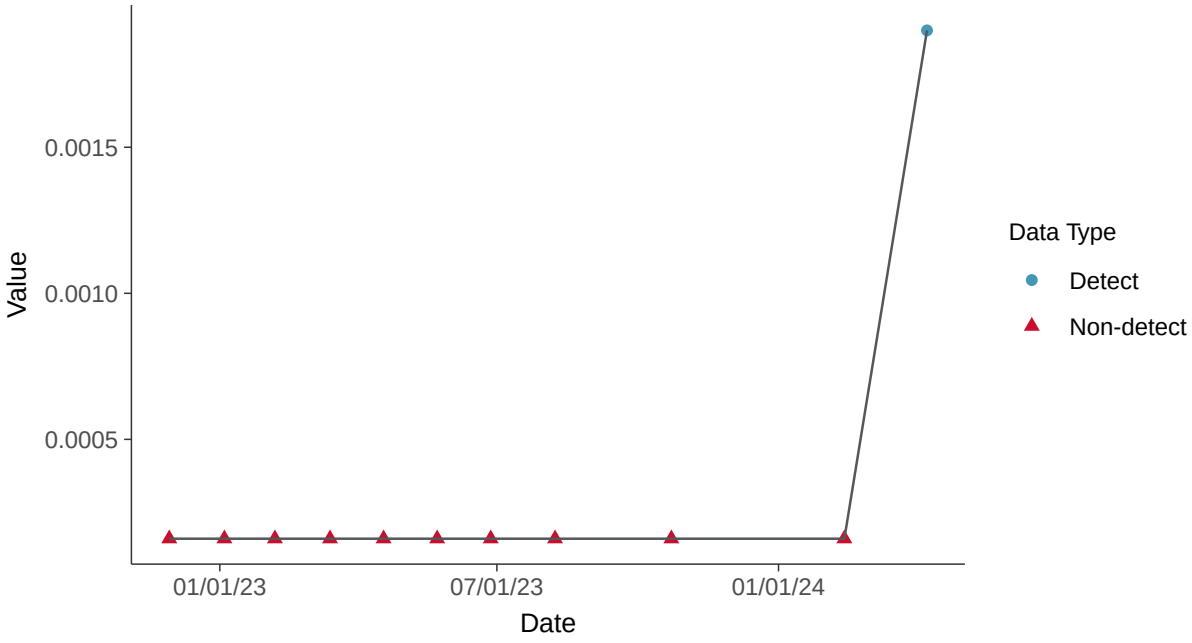
Trend Regression: Piecewise Linear-Linear

Mercury, MW-10 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Mercury, MW-10 (mg/L)

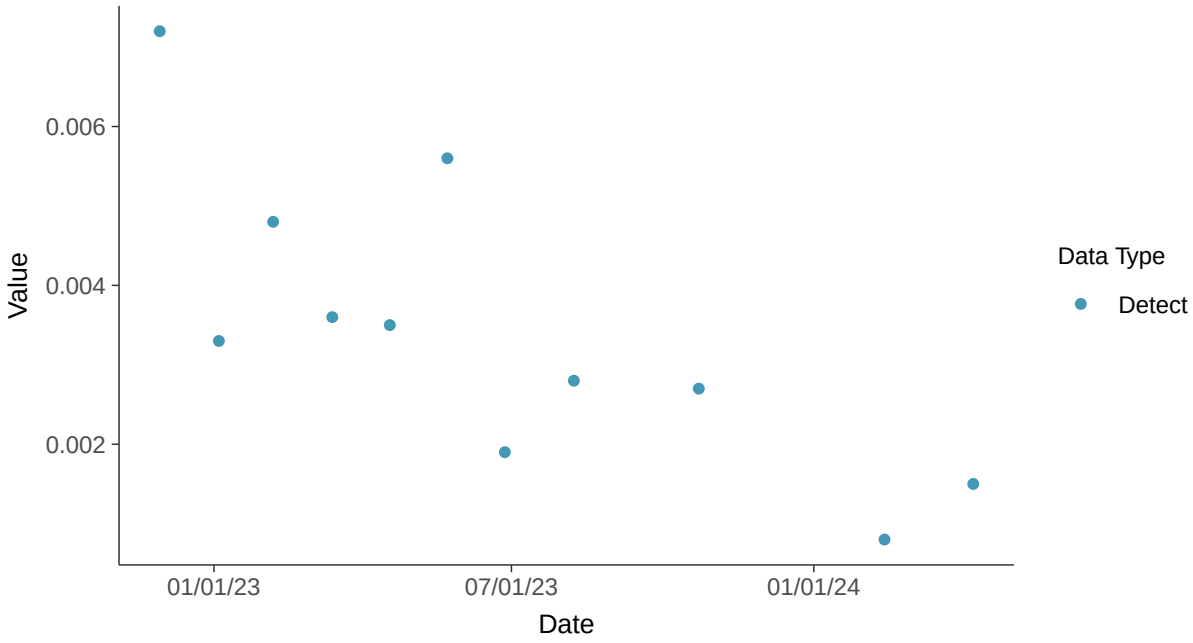


Appendix IV: Molybdenum, MW-10

ID: 3_20_5_118

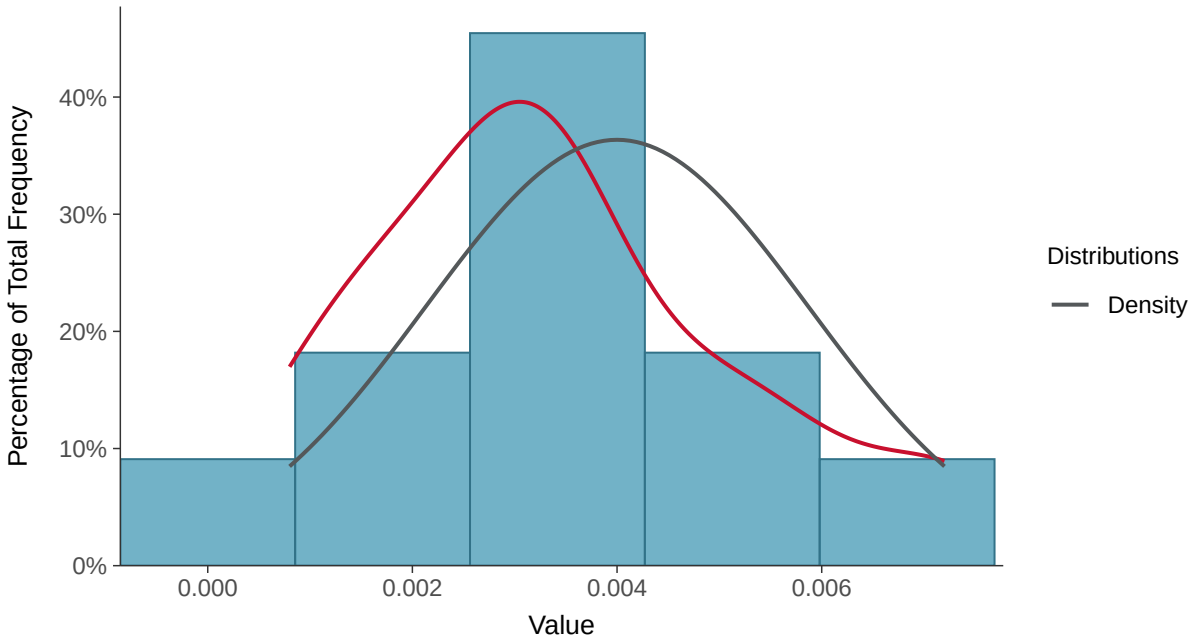
Scatter Plot

Molybdenum, MW-10 (mg/L)



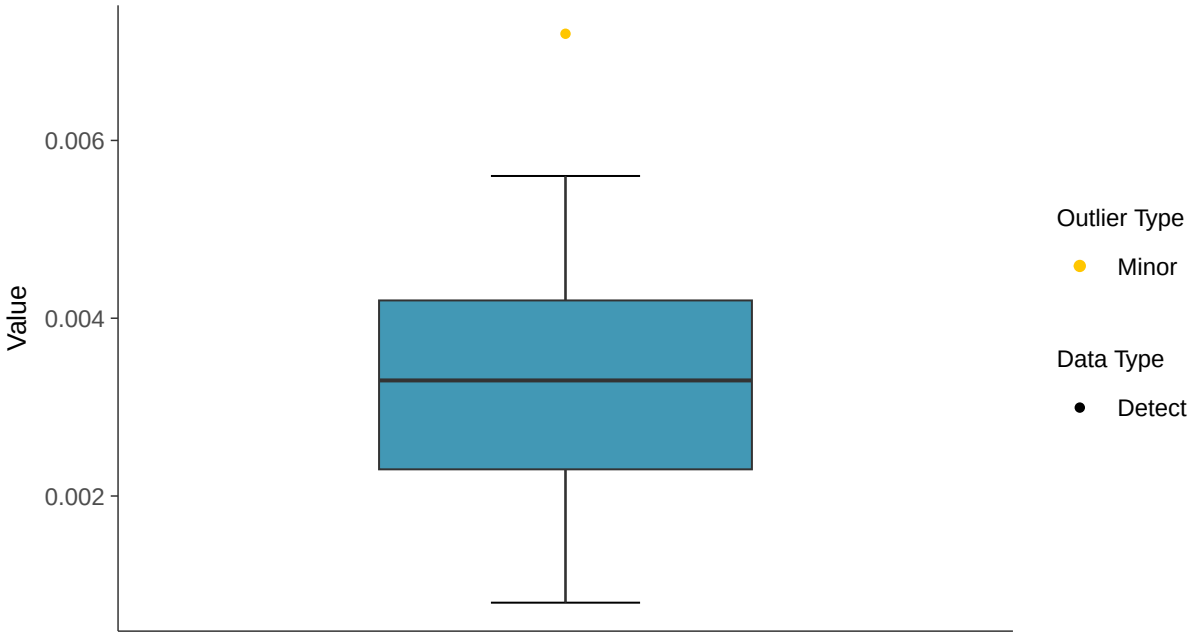
Histogram

Molybdenum, MW-10 (mg/L)



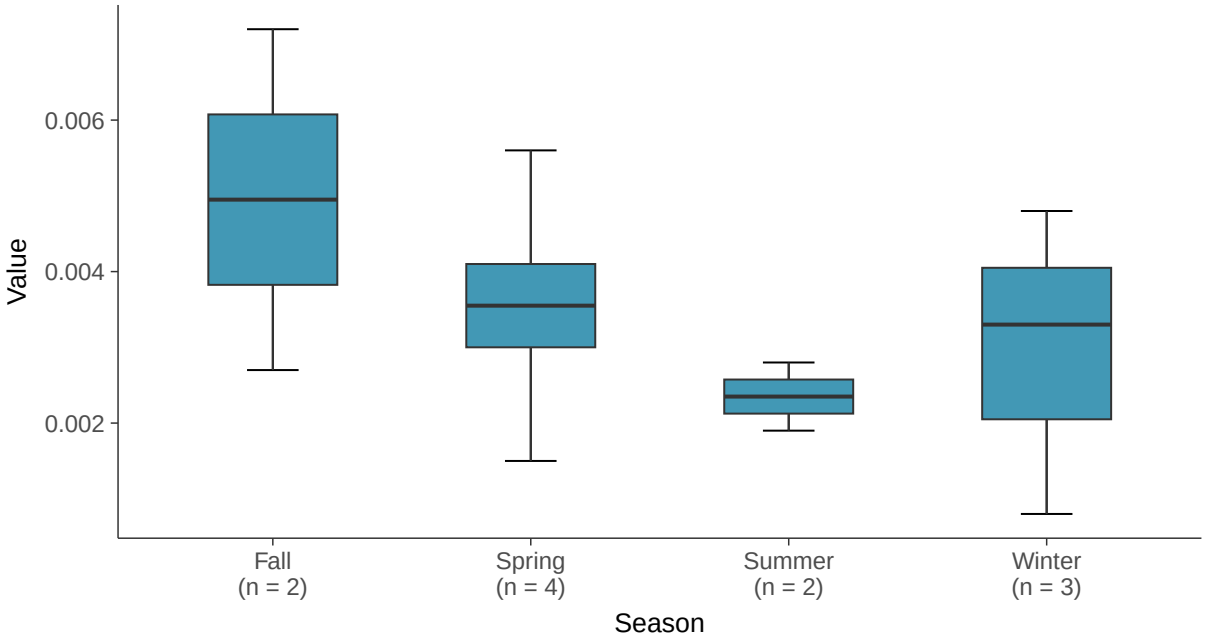
Boxplot

Molybdenum, MW-10 (mg/L)



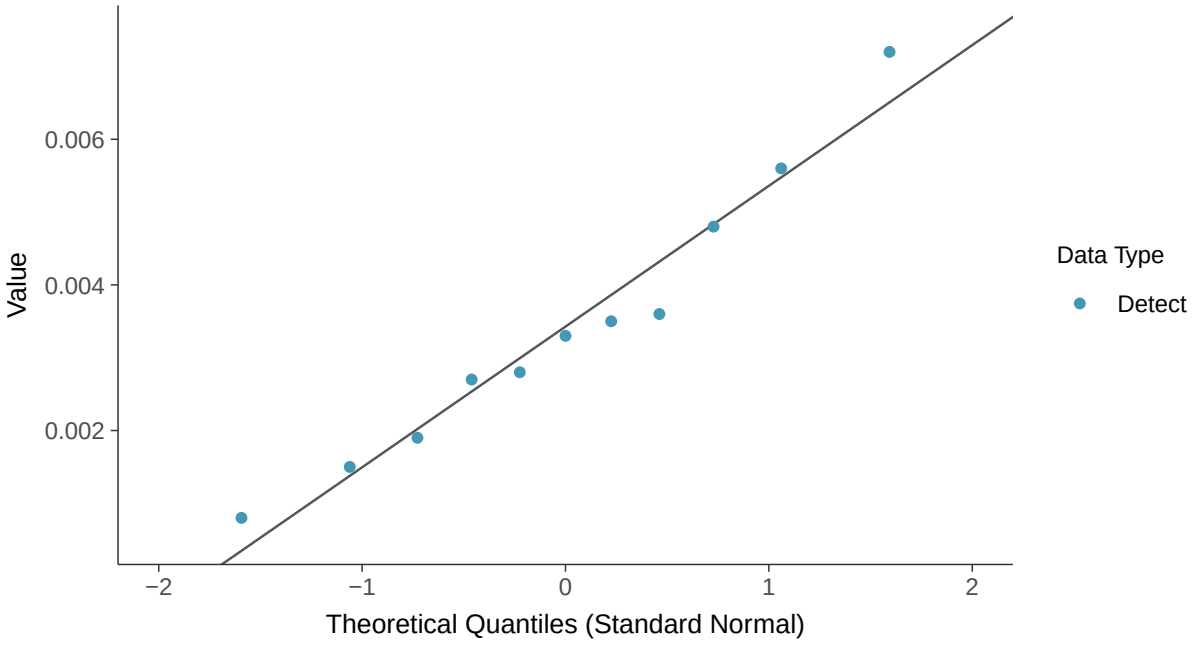
Boxplot by Season

Molybdenum, MW-10 (mg/L)



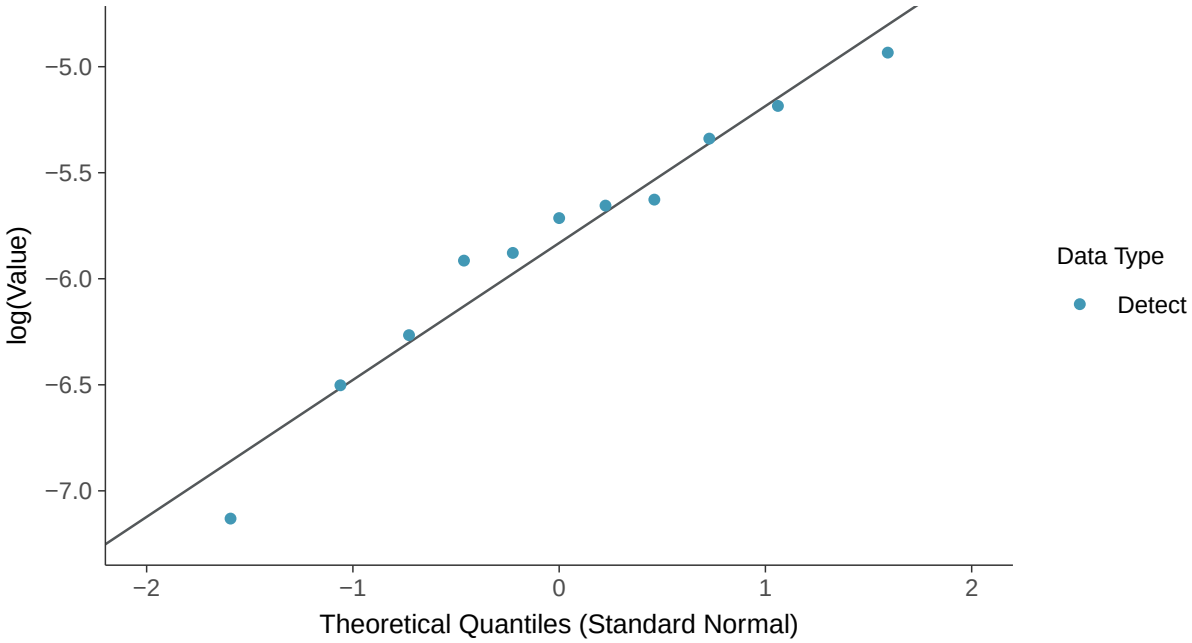
Normal Q-Q plot

Molybdenum, MW-10 (mg/L)



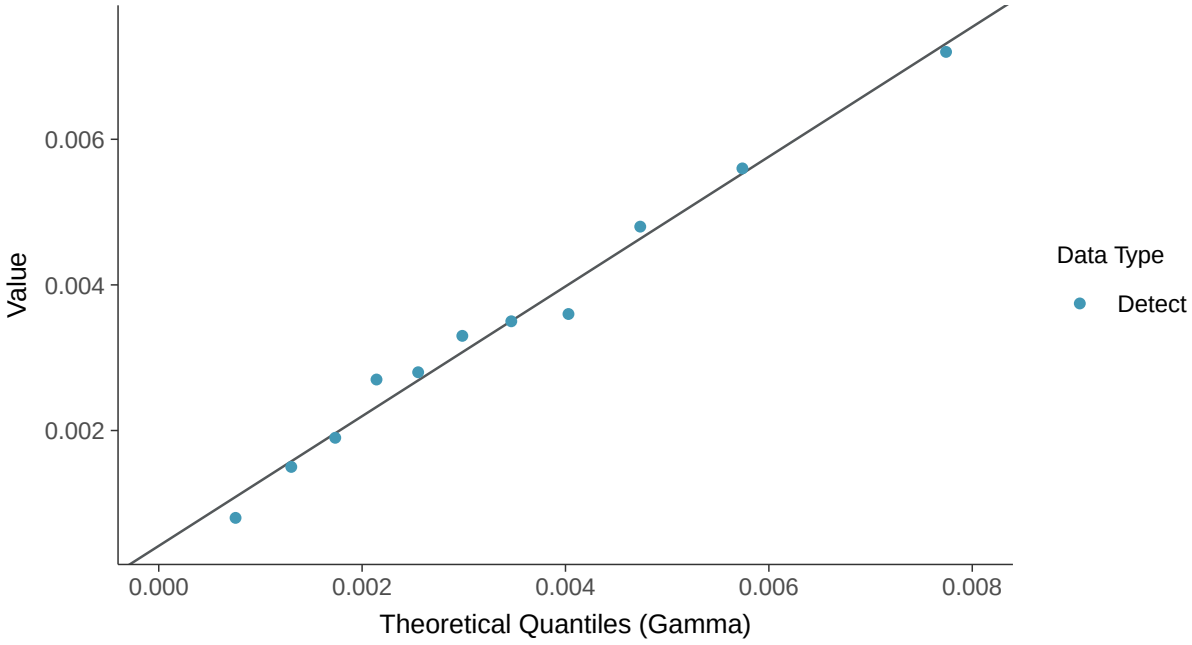
Lognormal Q-Q plot

Molybdenum, MW-10 (mg/L)



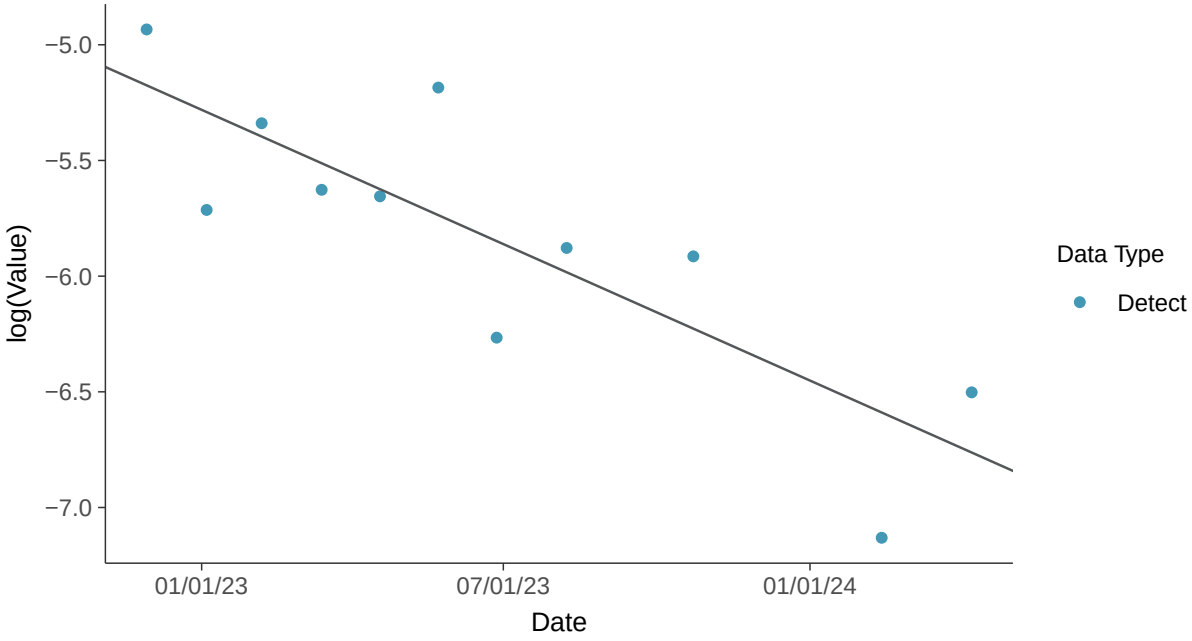
Gamma Q-Q plot

Molybdenum, MW-10 (mg/L)



Trend Regression: Lognormal MLE

Molybdenum, MW-10 (mg/L)

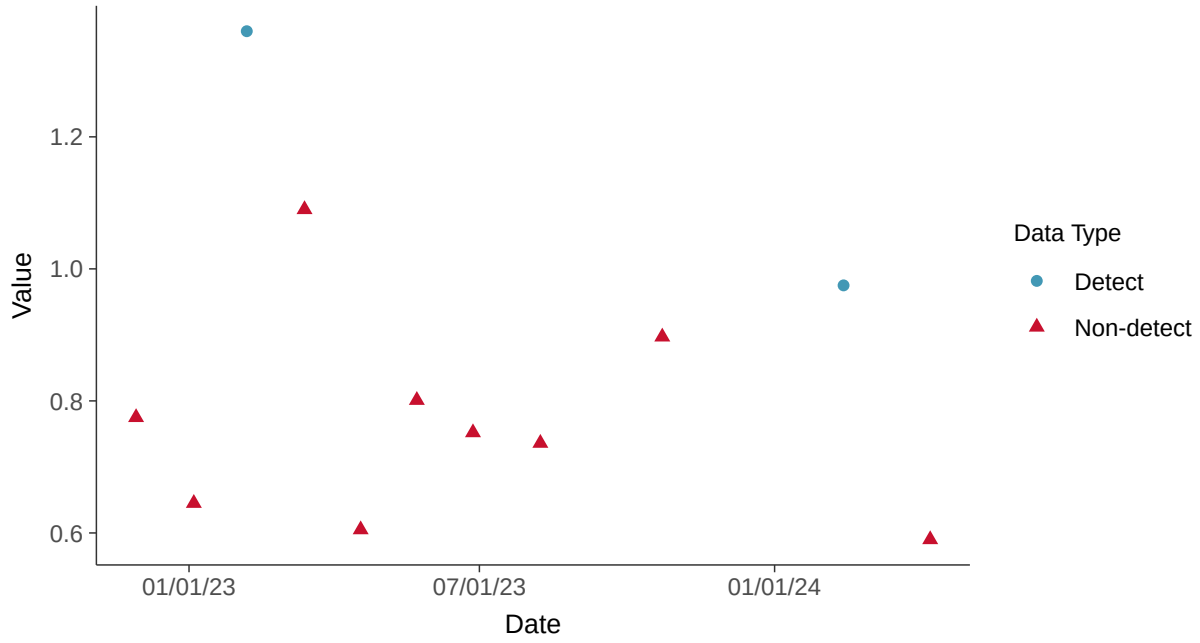


Appendix IV: Radium 226 and 228, MW-10

ID: 3_20_5_121

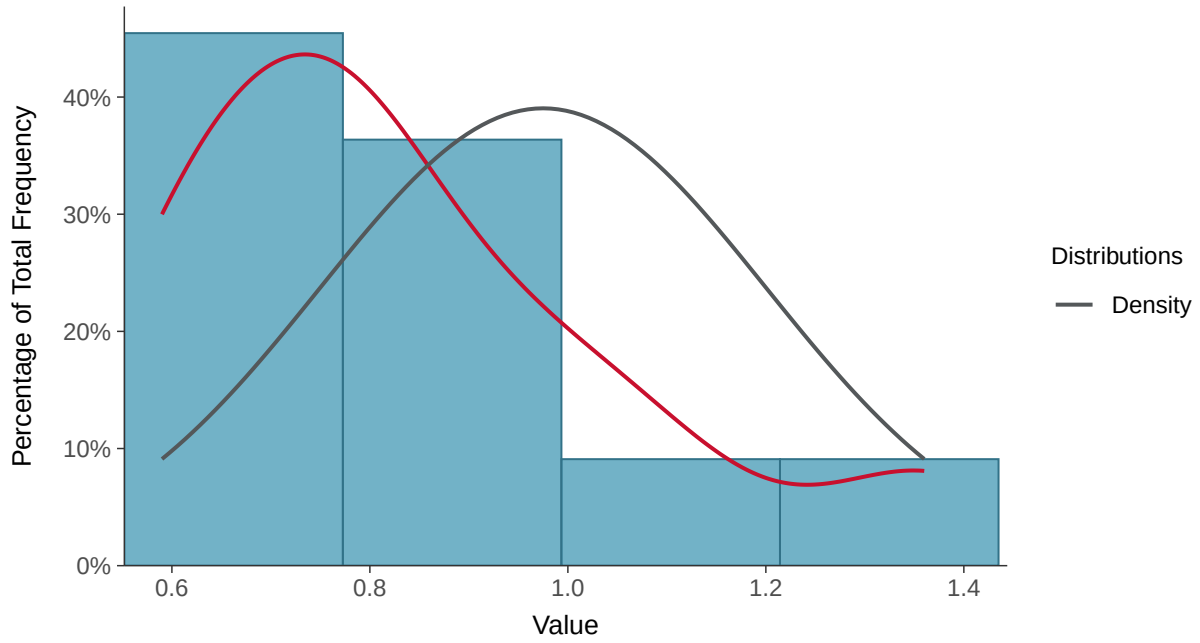
Scatter Plot

Radium 226 and 228, MW-10 (pCi/L)



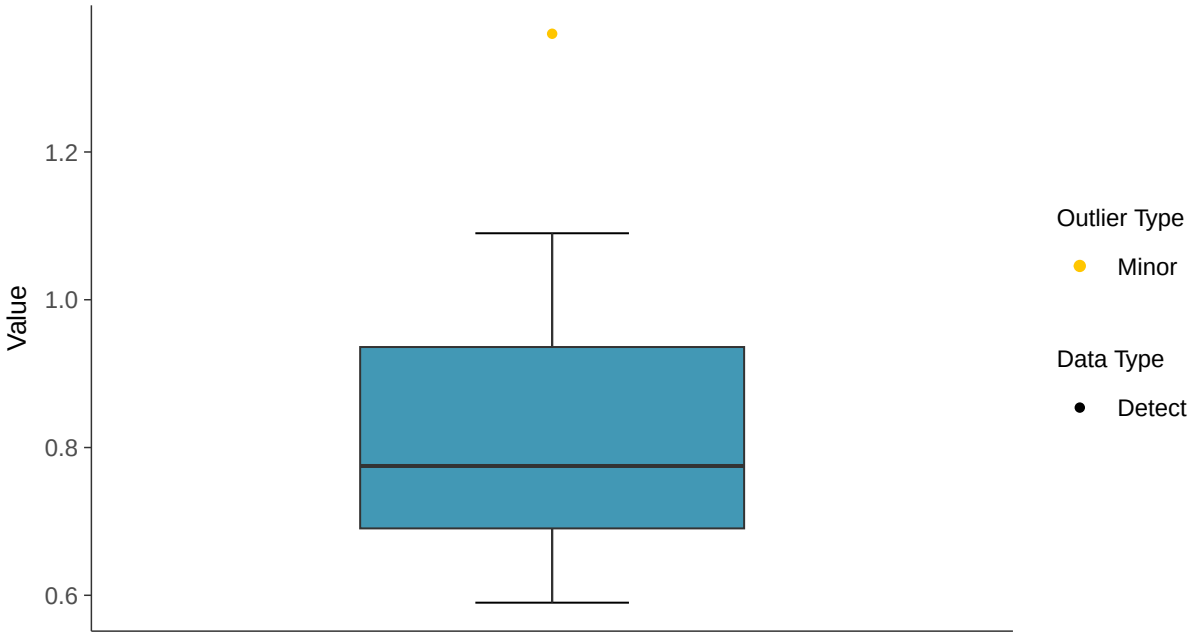
Histogram

Radium 226 and 228, MW-10 (pCi/L)



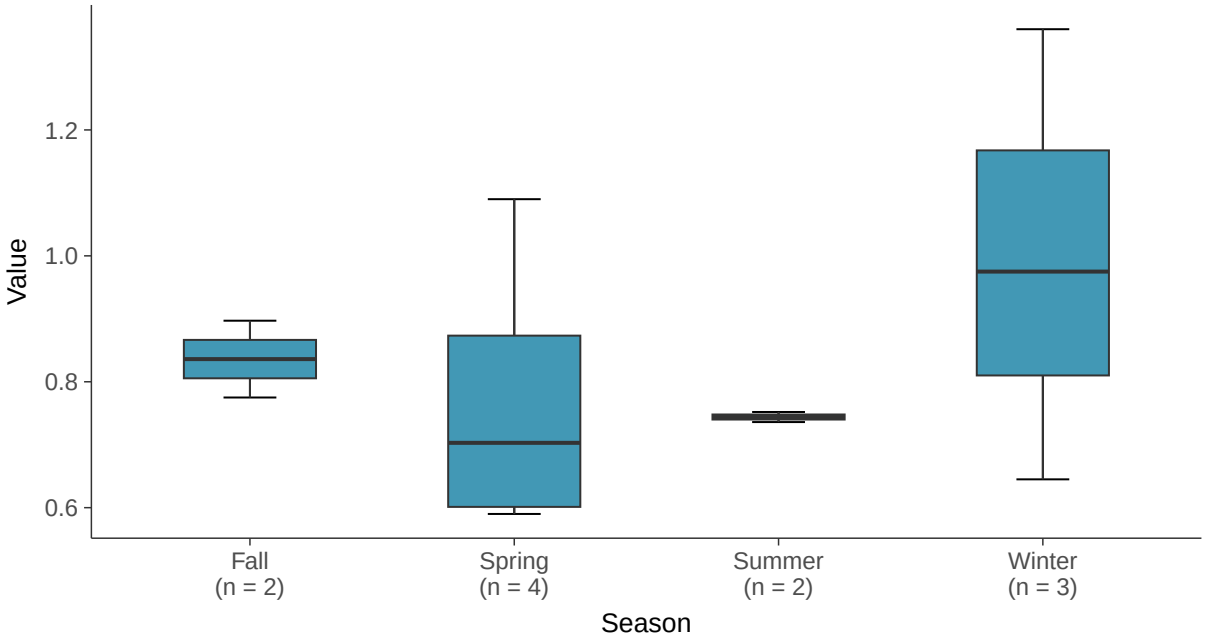
Boxplot

Radium 226 and 228, MW-10 (pCi/L)



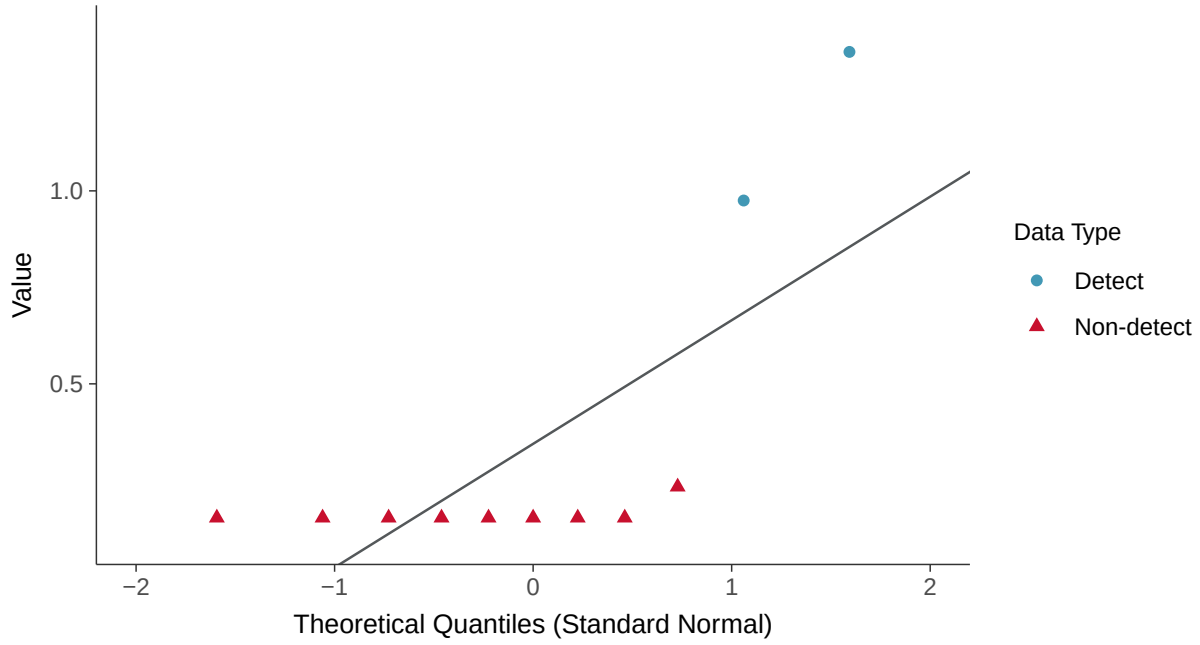
Boxplot by Season

Radium 226 and 228, MW-10 (pCi/L)



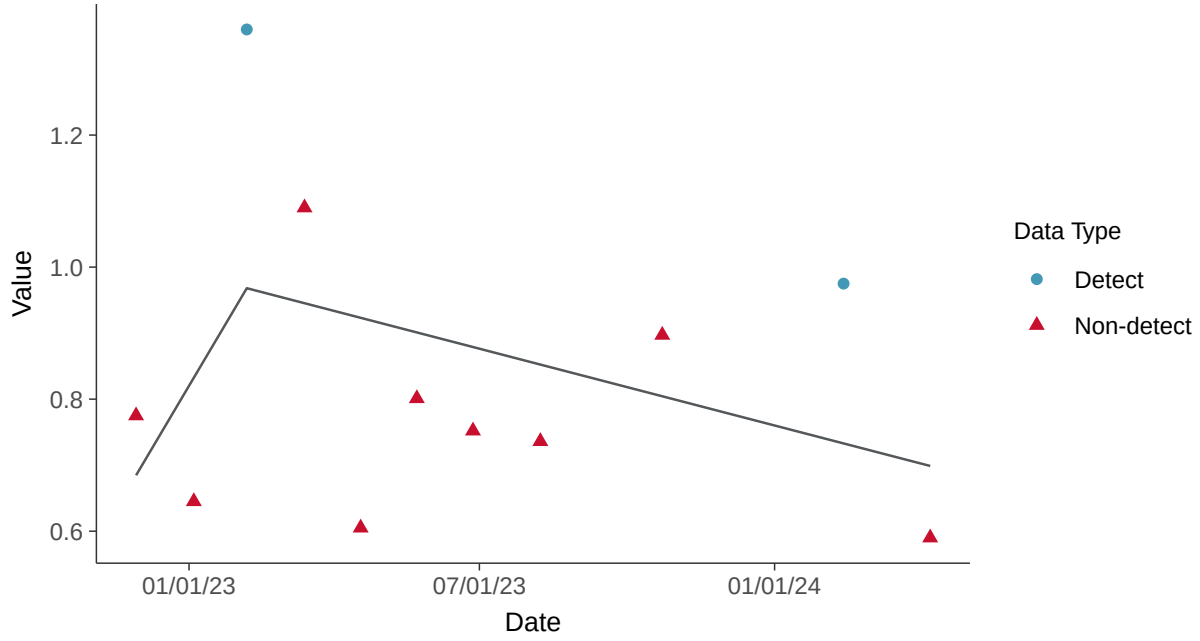
Normal Q-Q plot using ROS Imputed Estimates

Radium 226 and 228, MW-10 (pCi/L)



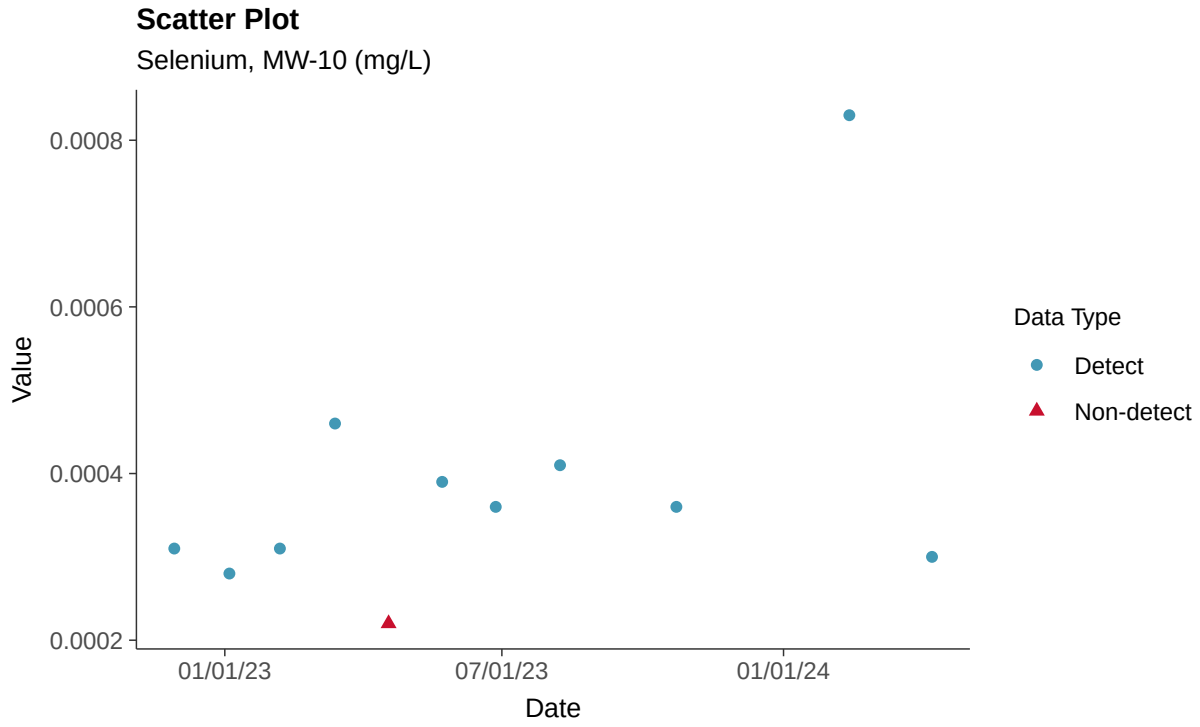
Trend Regression: Piecewise Linear-Linear

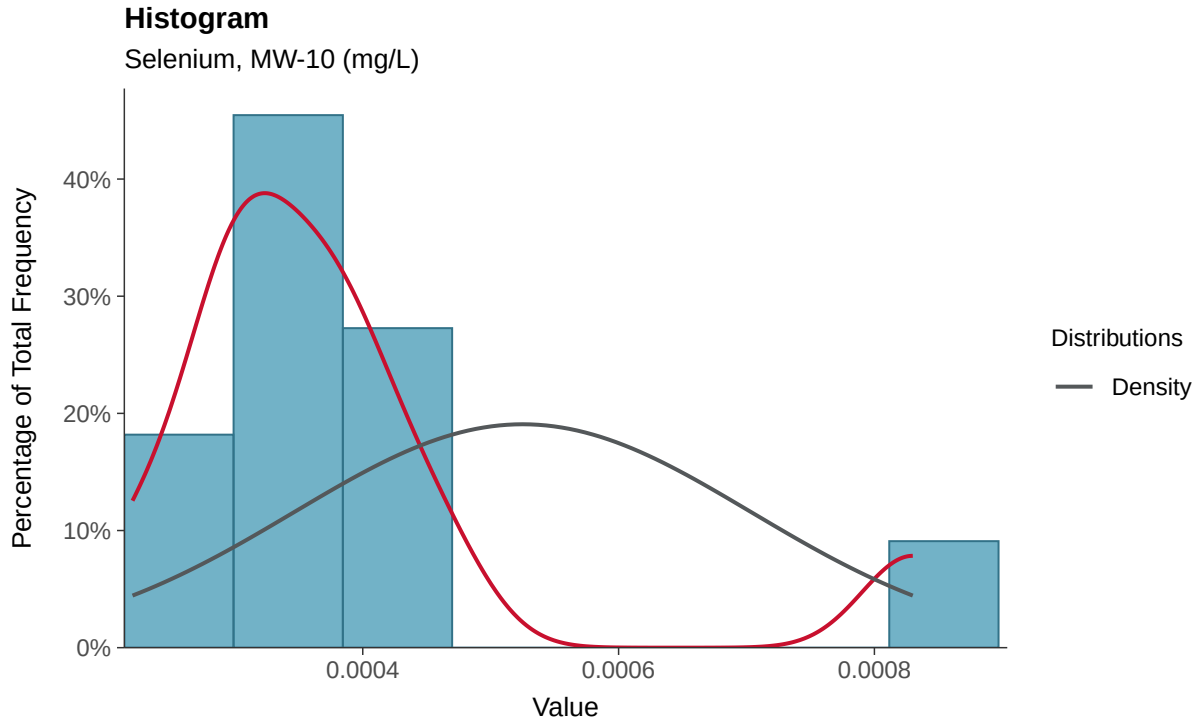
Radium 226 and 228, MW-10 (pCi/L)



Appendix IV: Selenium, MW-10

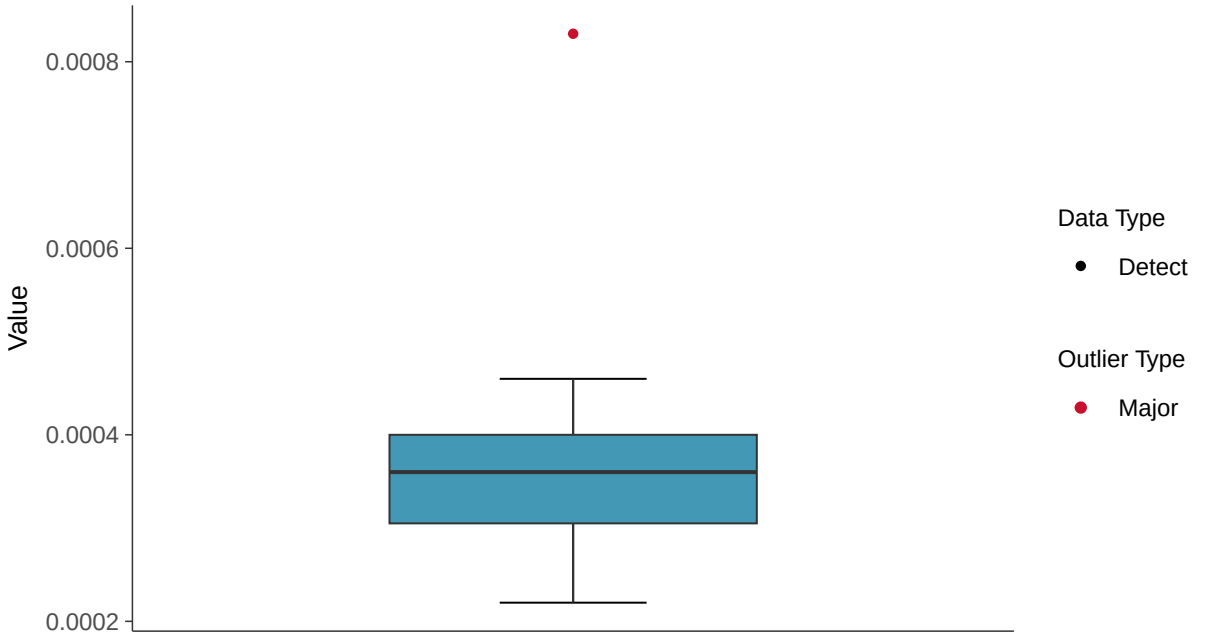
ID: 3_20_5_122





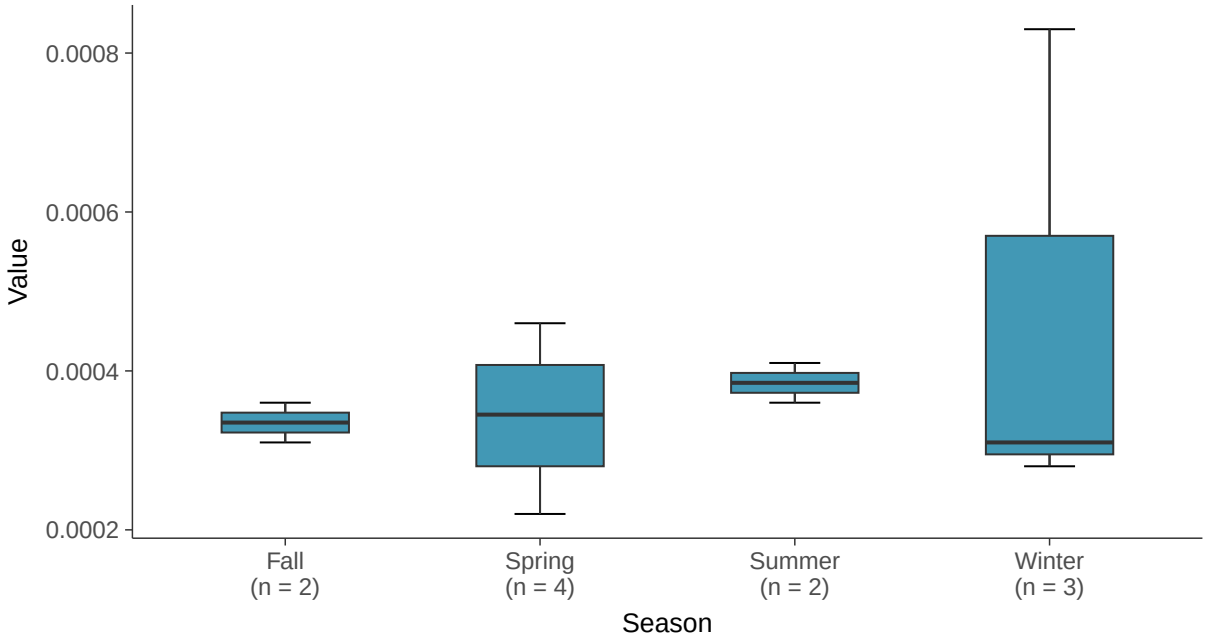
Boxplot

Selenium, MW-10 (mg/L)



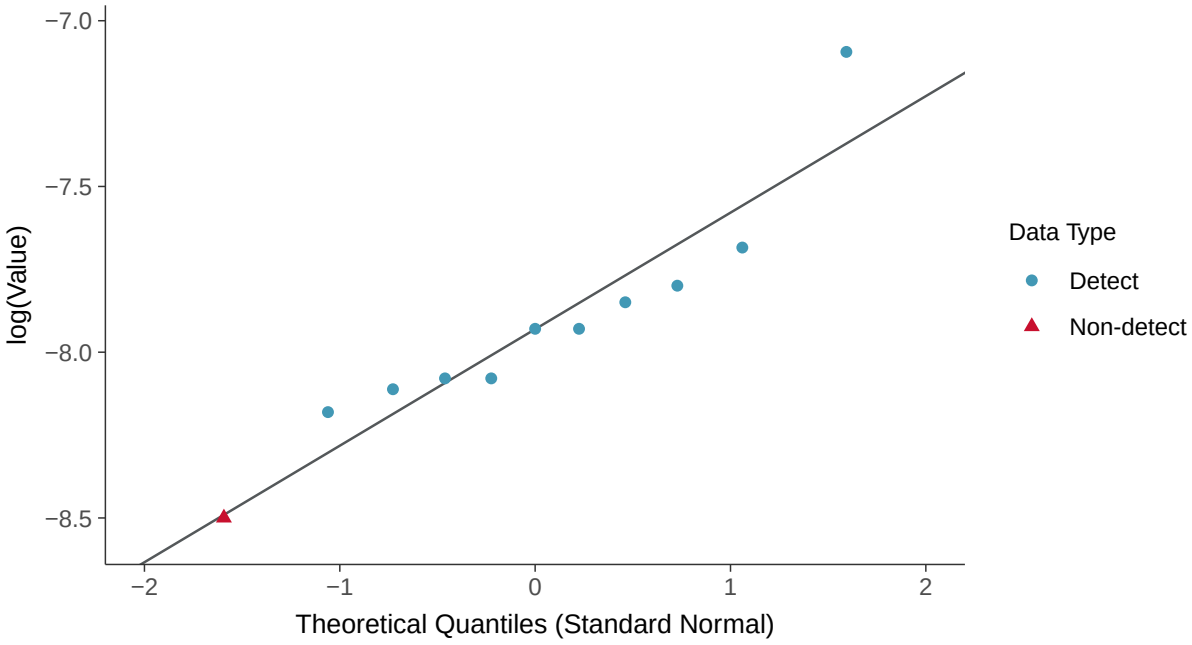
Boxplot by Season

Selenium, MW-10 (mg/L)



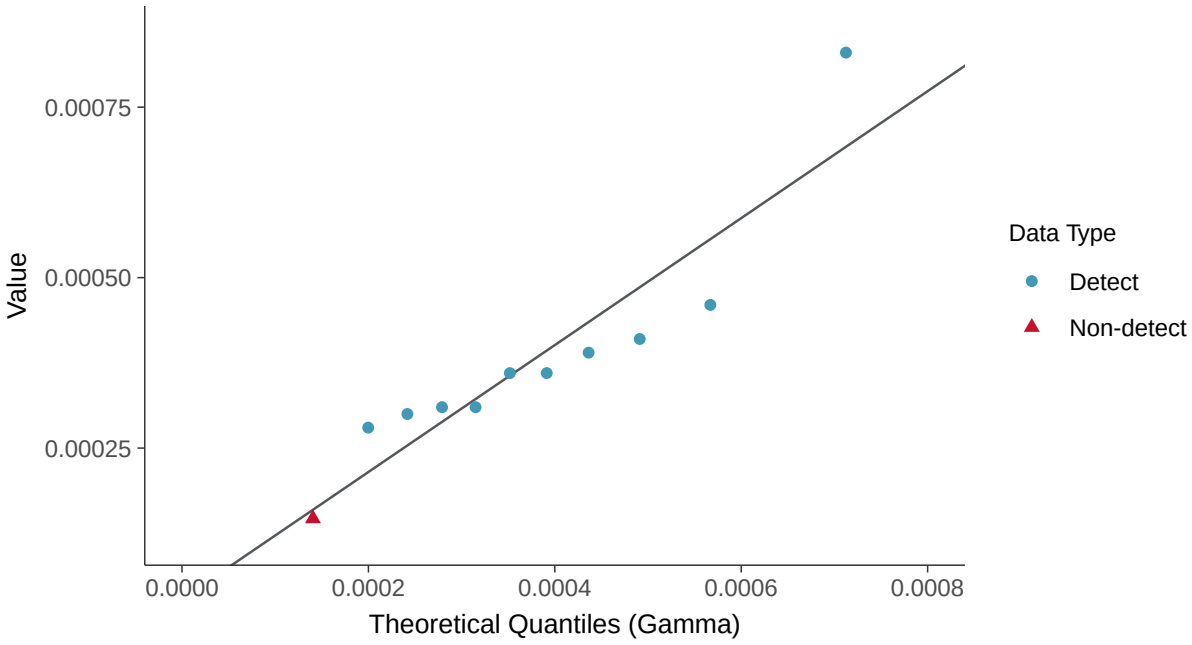
Lognormal Q-Q plot using ROS Imputed Estimates

Selenium, MW-10 (mg/L)



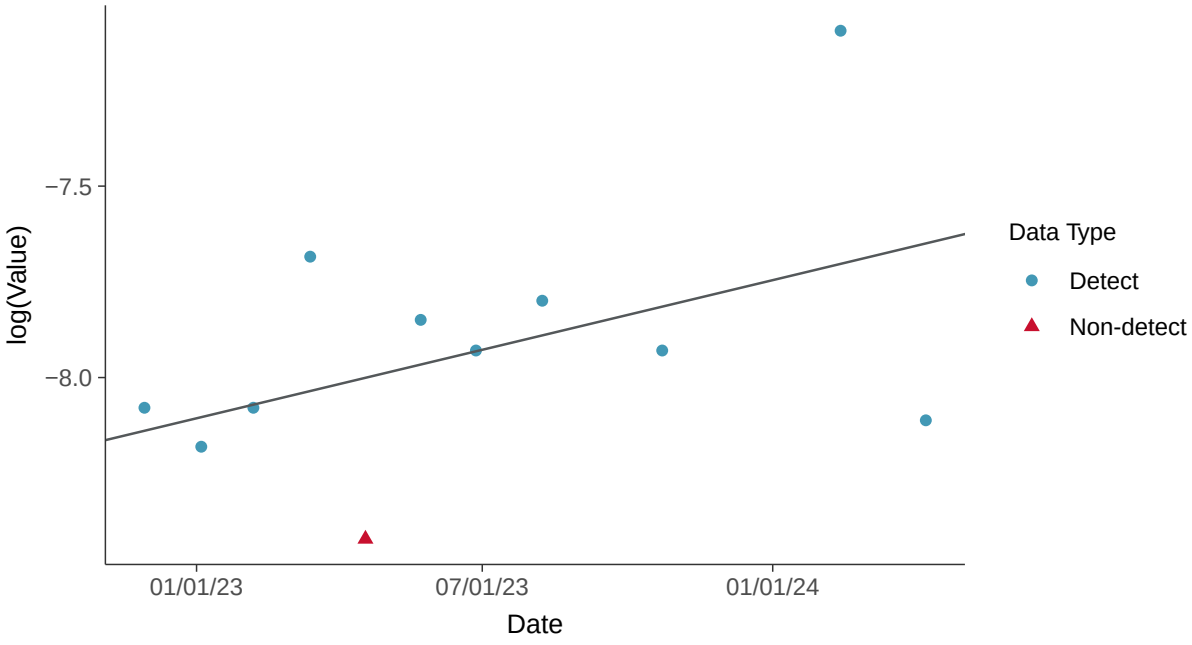
Gamma Q-Q plot using ROS Imputed Estimates

Selenium, MW-10 (mg/L)



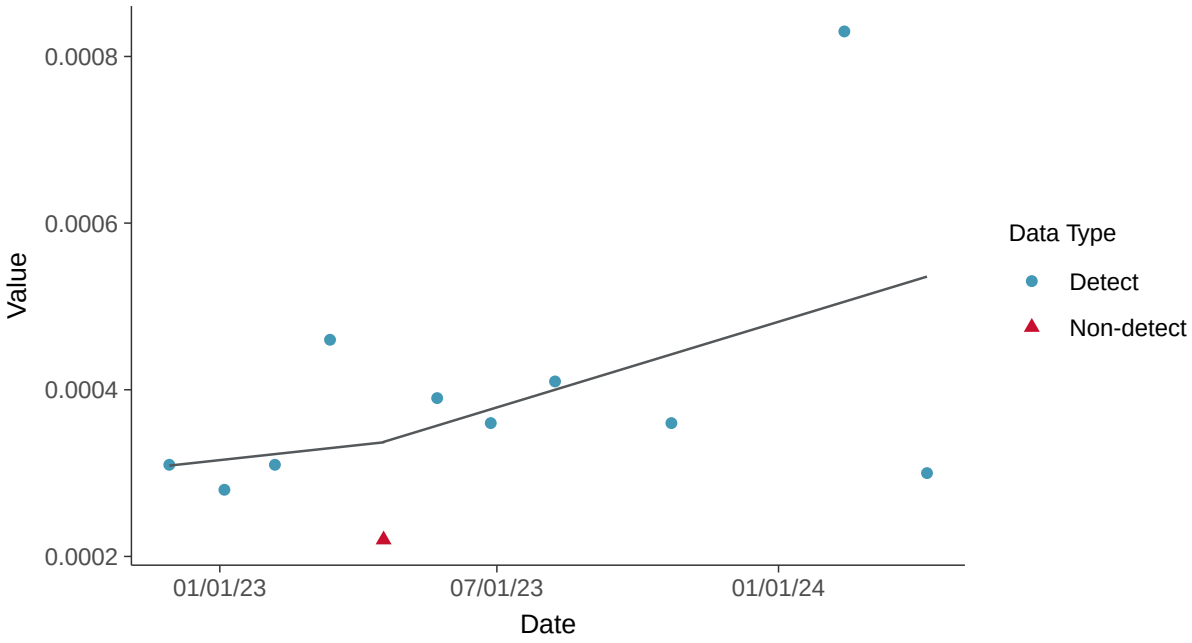
Trend Regression: Lognormal MLE

Selenium, MW-10 (mg/L)



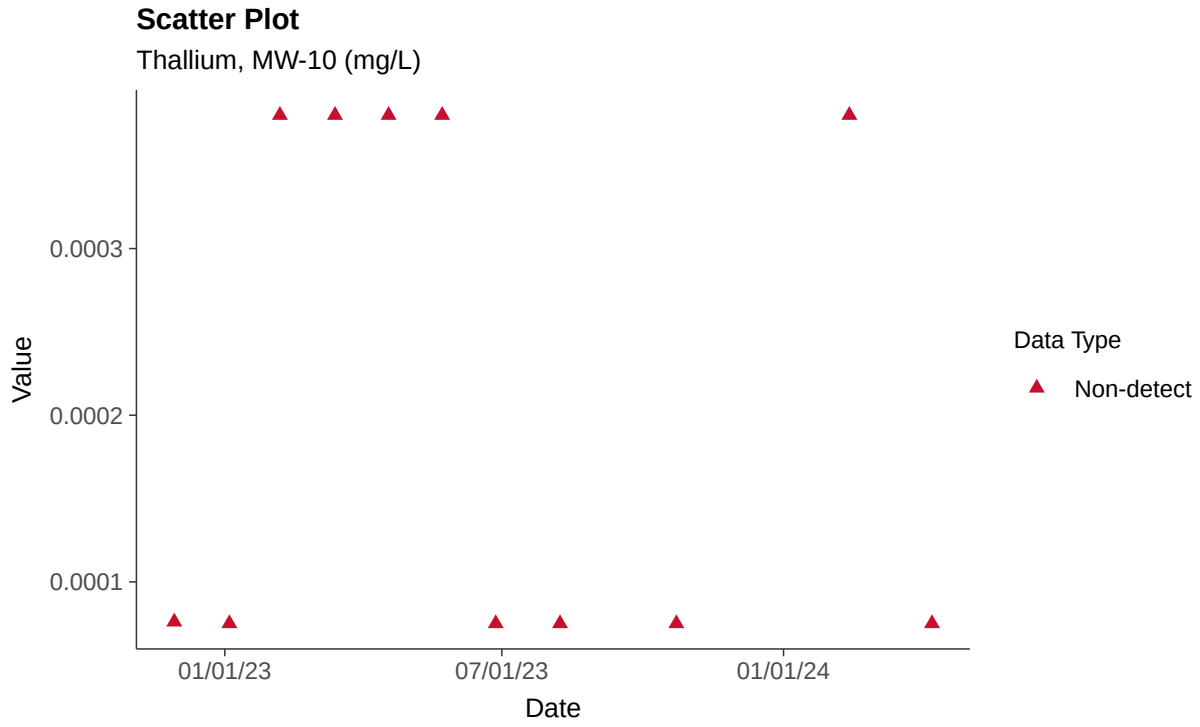
Trend Regression: Piecewise Linear-Linear

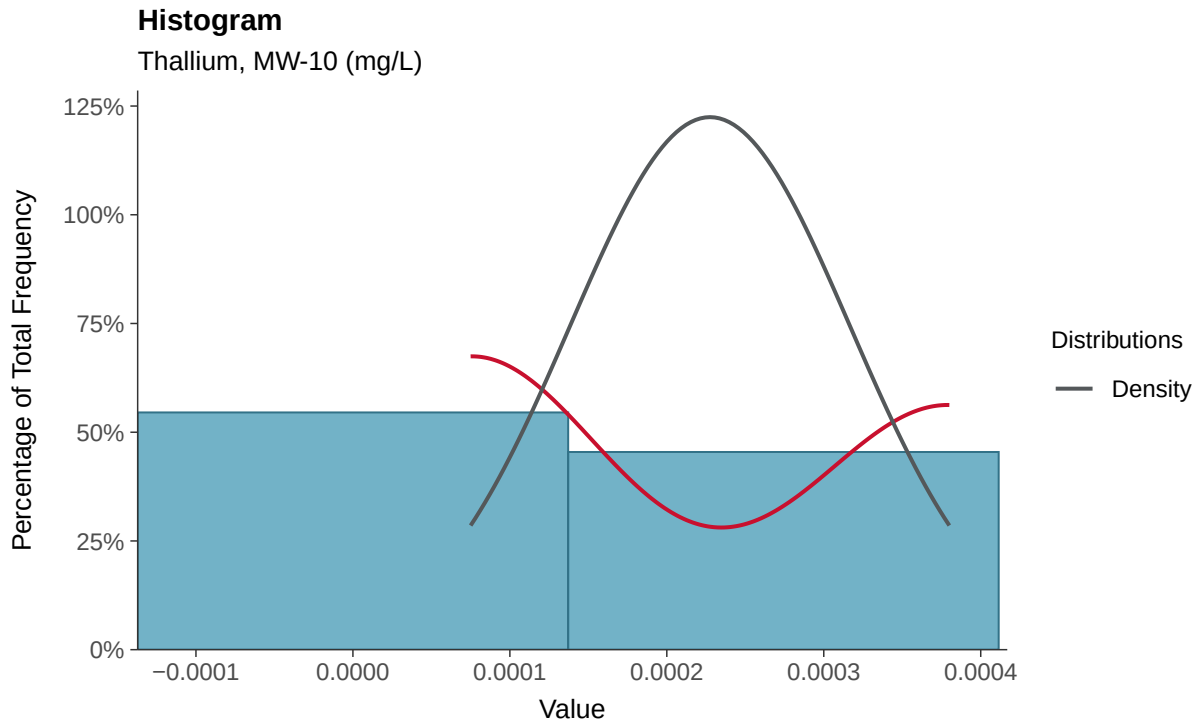
Selenium, MW-10 (mg/L)



Appendix IV: Thallium, MW-10

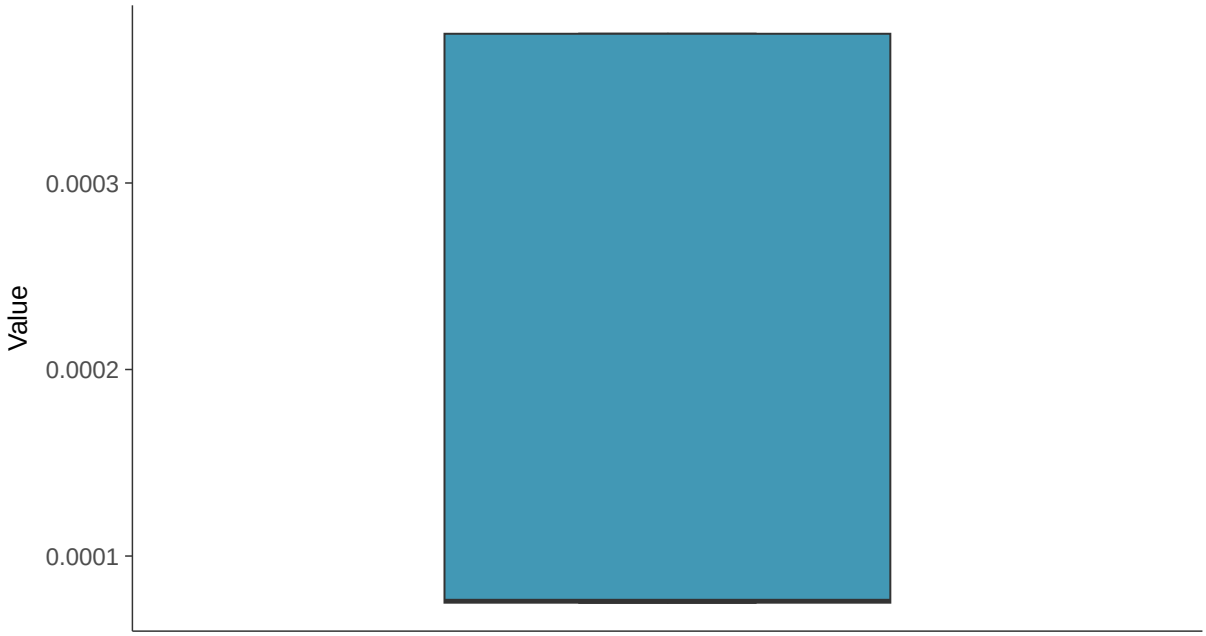
ID: 3_20_5_125





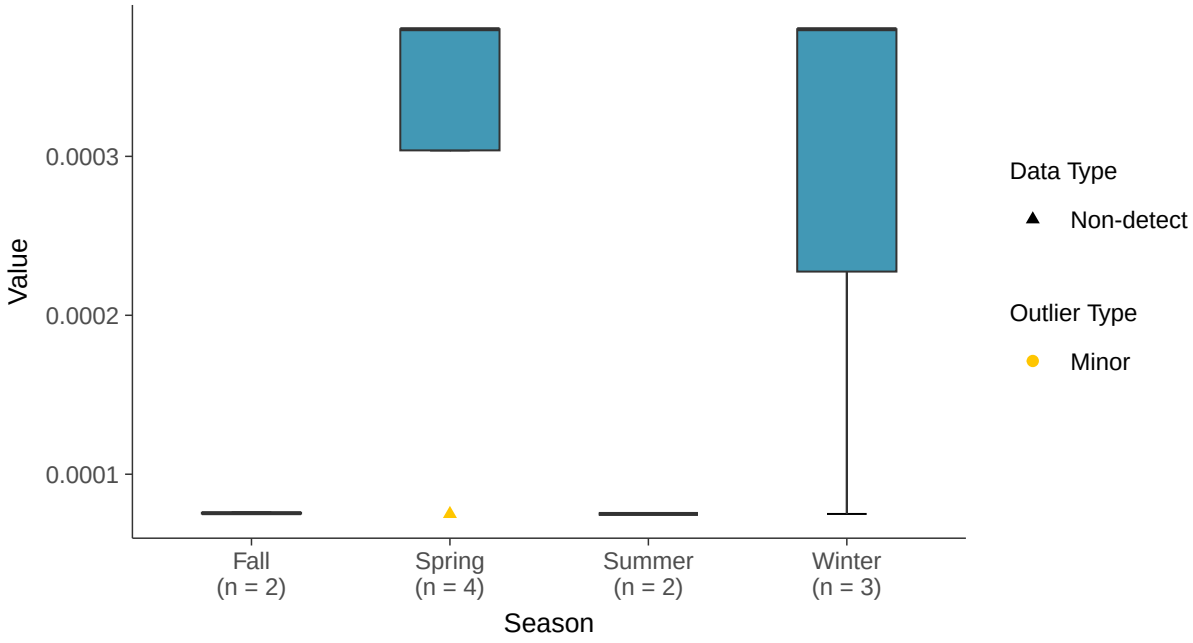
Boxplot

Thallium, MW-10 (mg/L)



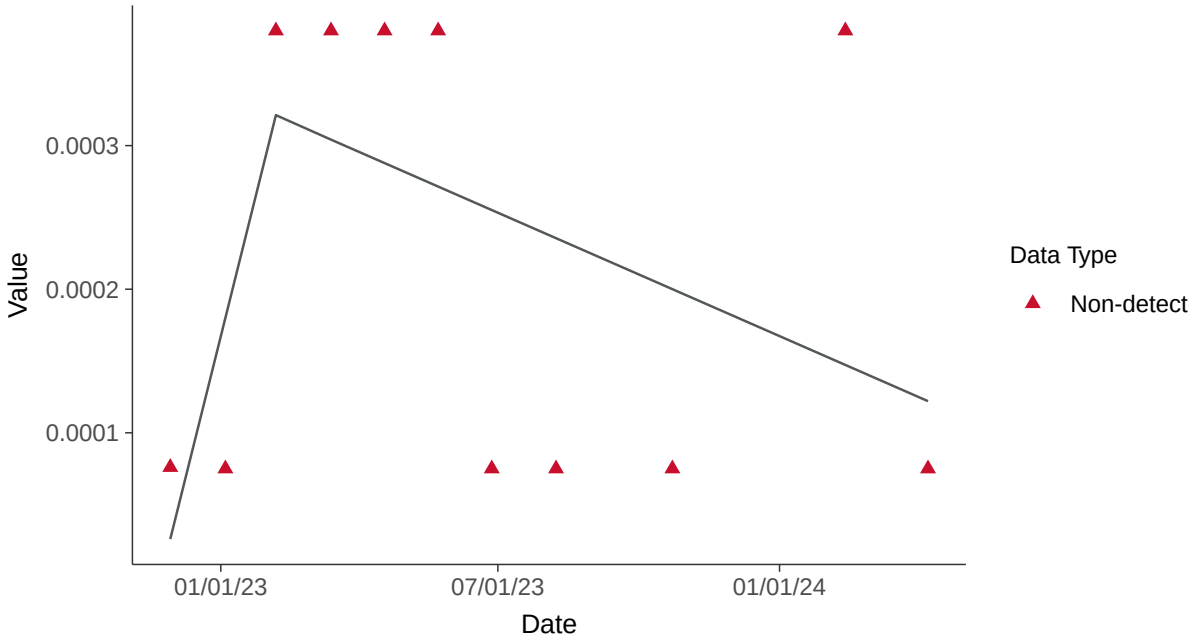
Boxplot by Season

Thallium, MW-10 (mg/L)



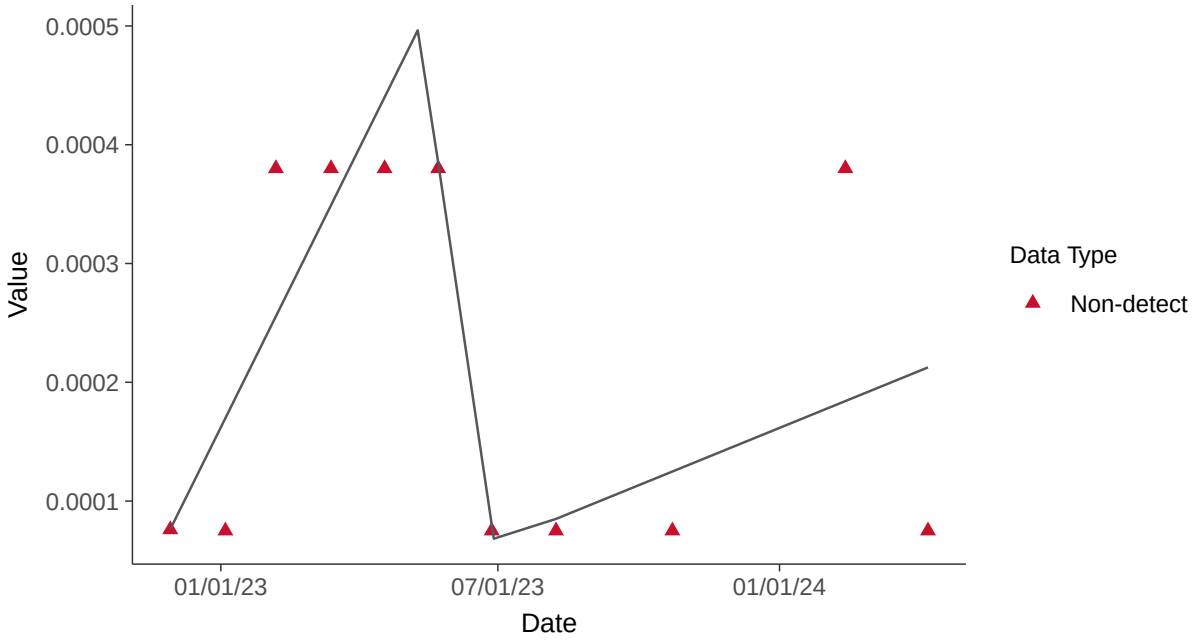
Trend Regression: Piecewise Linear-Linear

Thallium, MW-10 (mg/L)



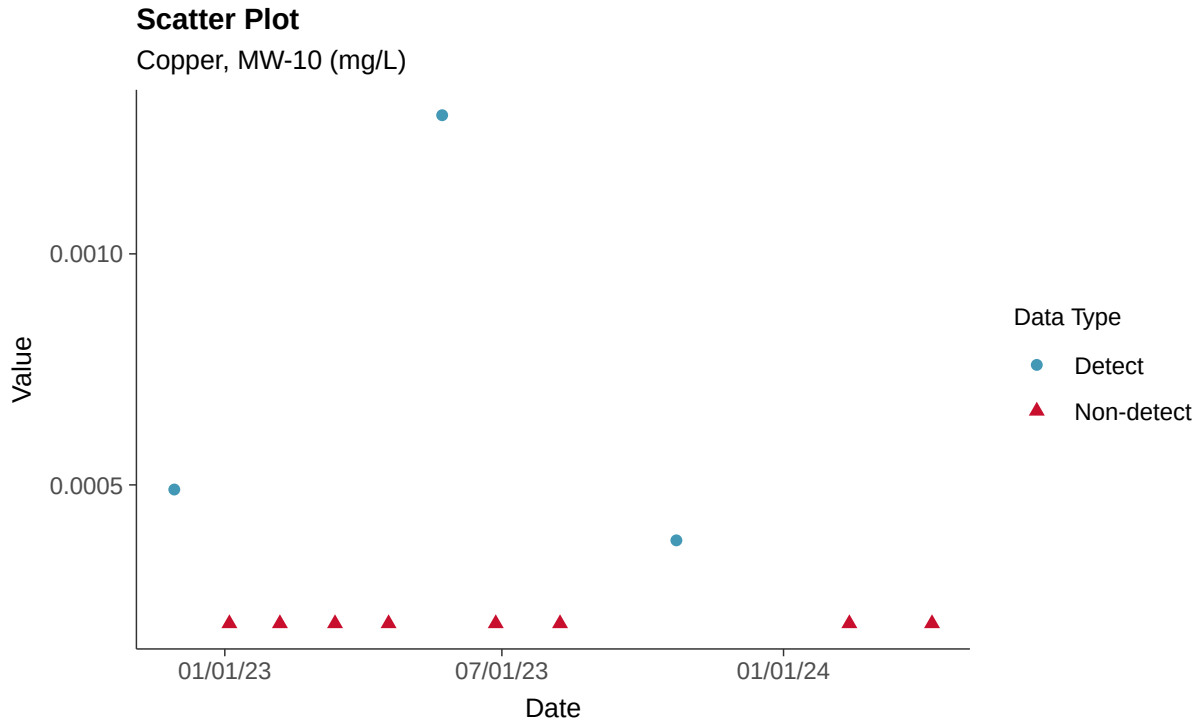
Trend Regression: Piecewise Linear-Linear-Linear

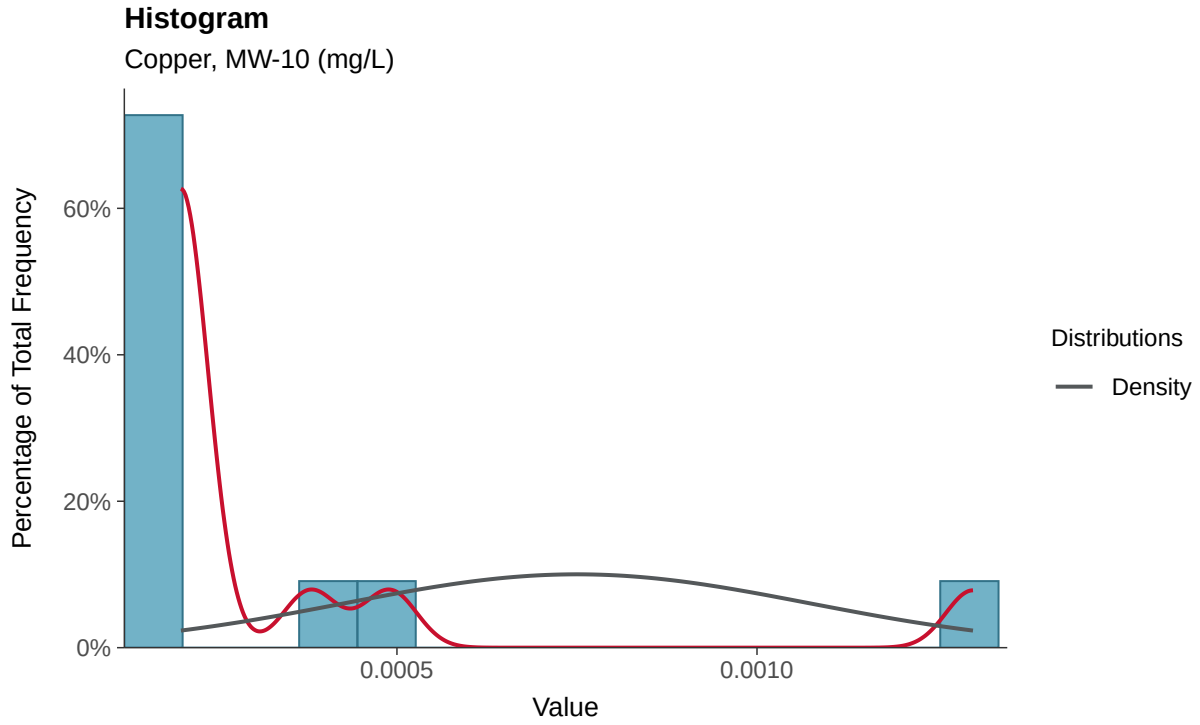
Thallium, MW-10 (mg/L)



Part 115: Copper, MW-10

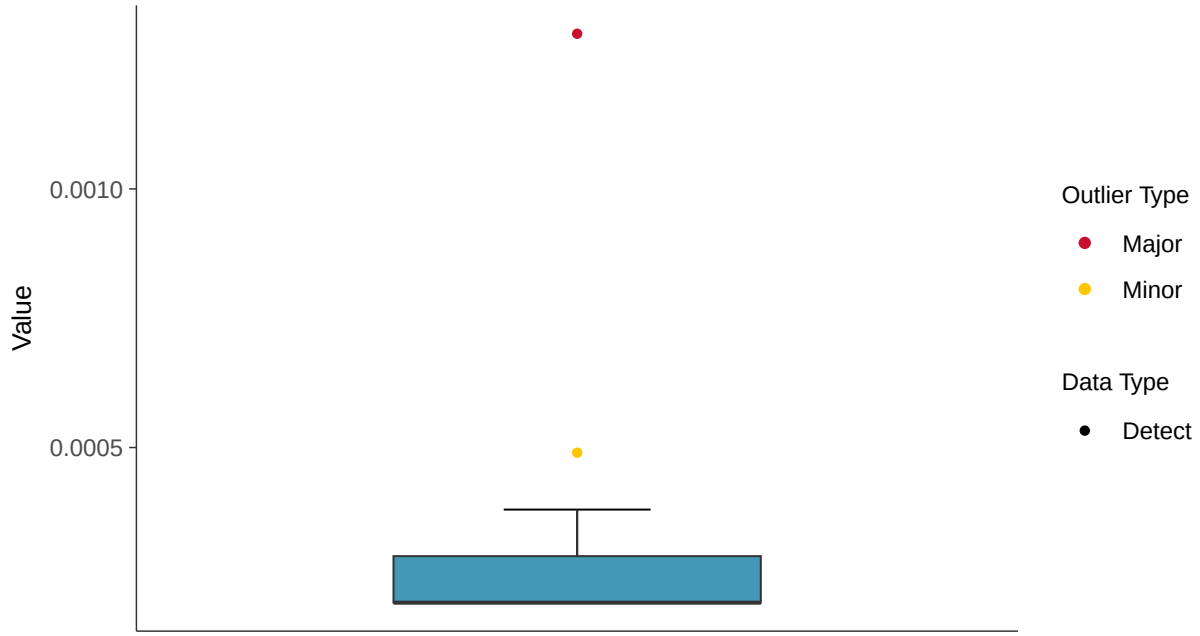
ID: 3_20_6_111





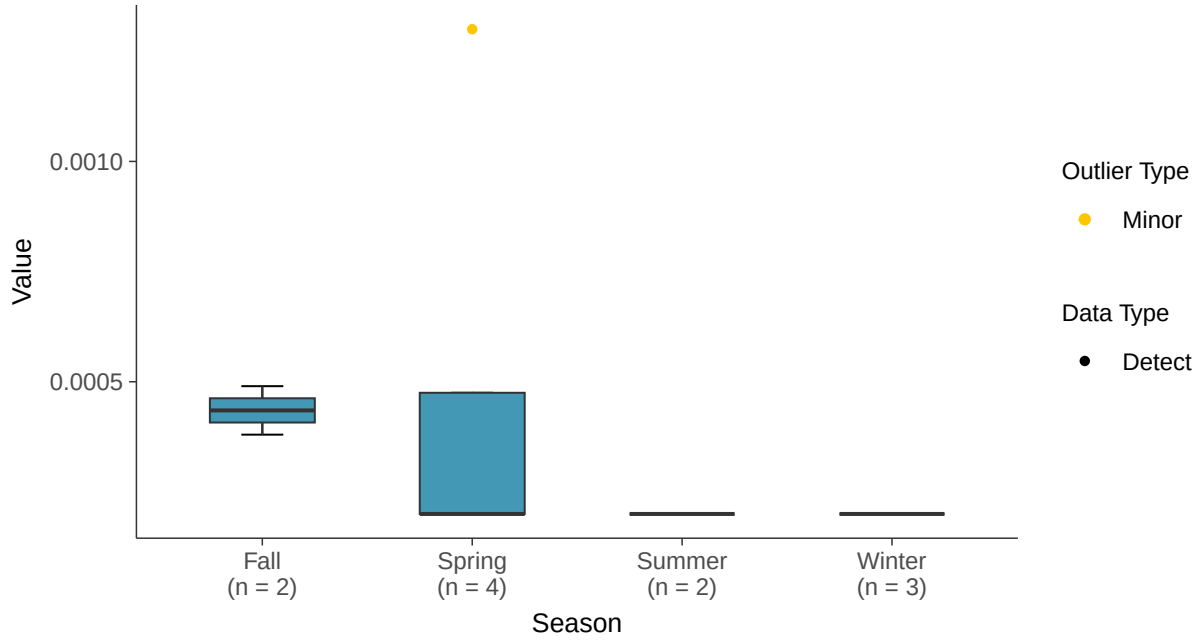
Boxplot

Copper, MW-10 (mg/L)



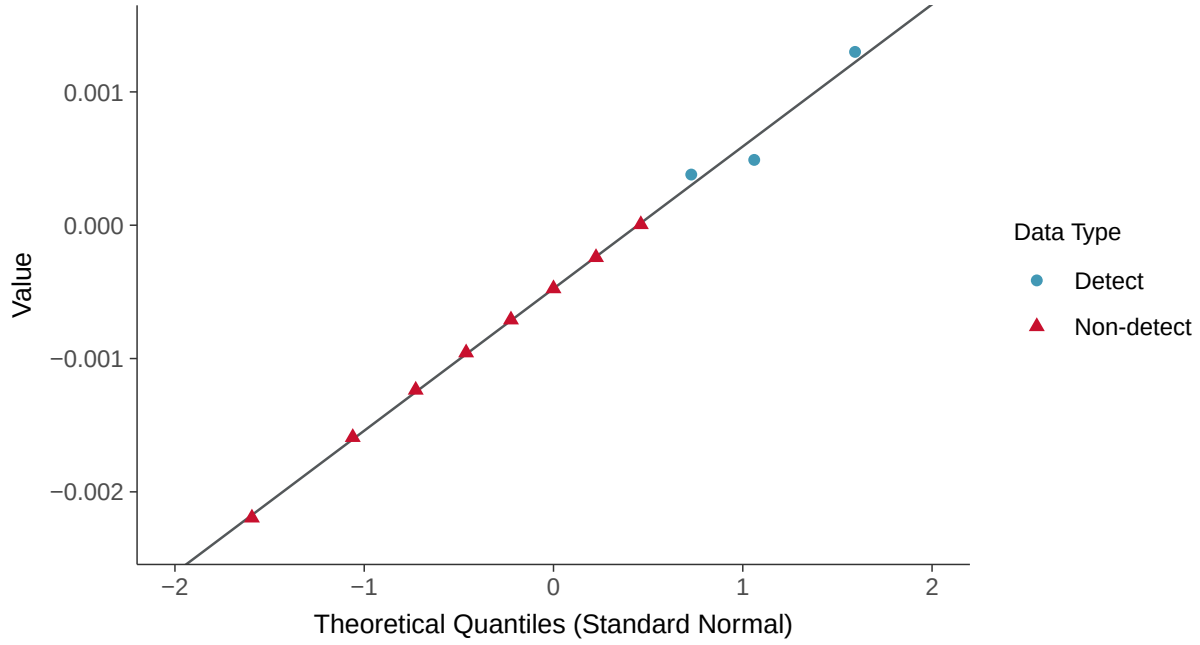
Boxplot by Season

Copper, MW-10 (mg/L)



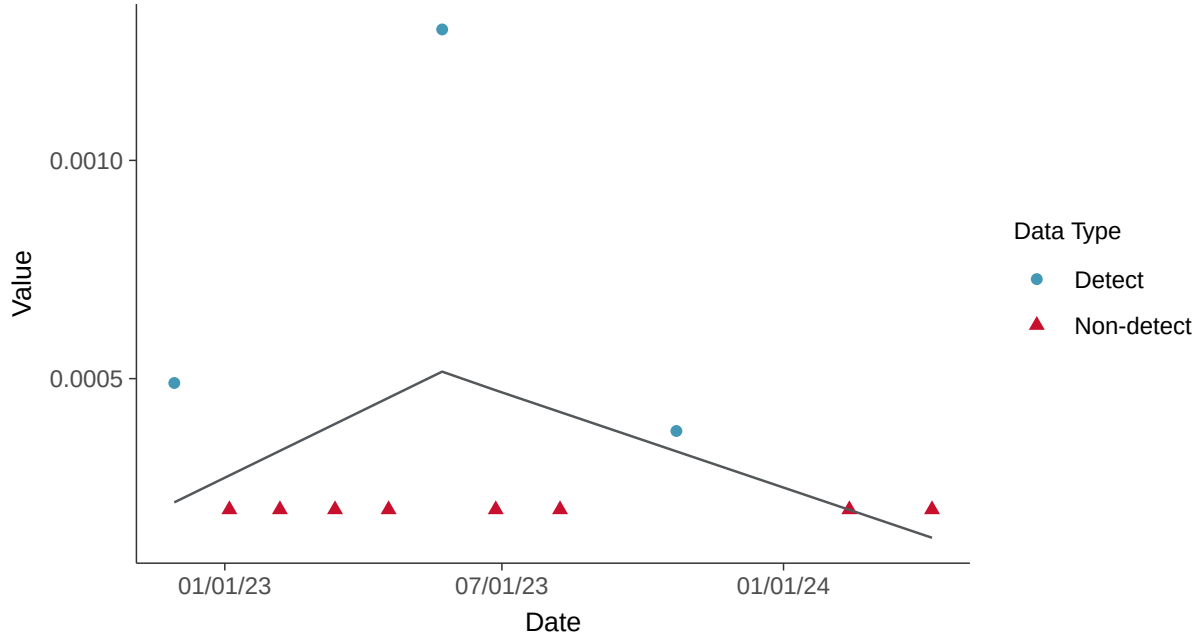
Normal Q-Q plot using ROS Imputed Estimates

Copper, MW-10 (mg/L)



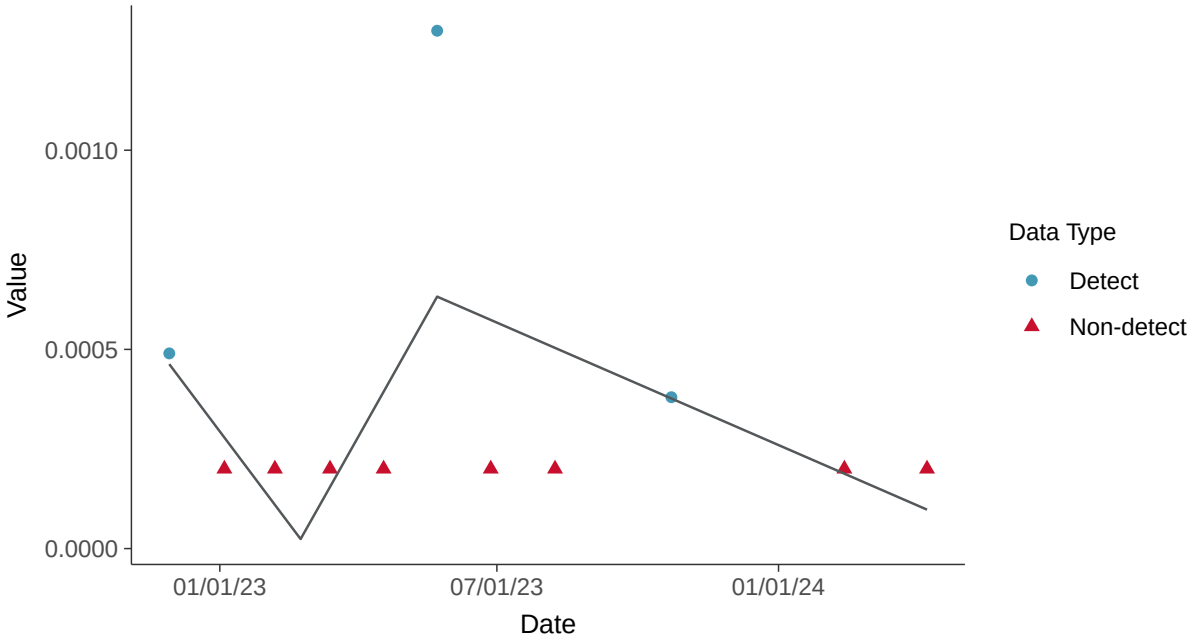
Trend Regression: Piecewise Linear-Linear

Copper, MW-10 (mg/L)



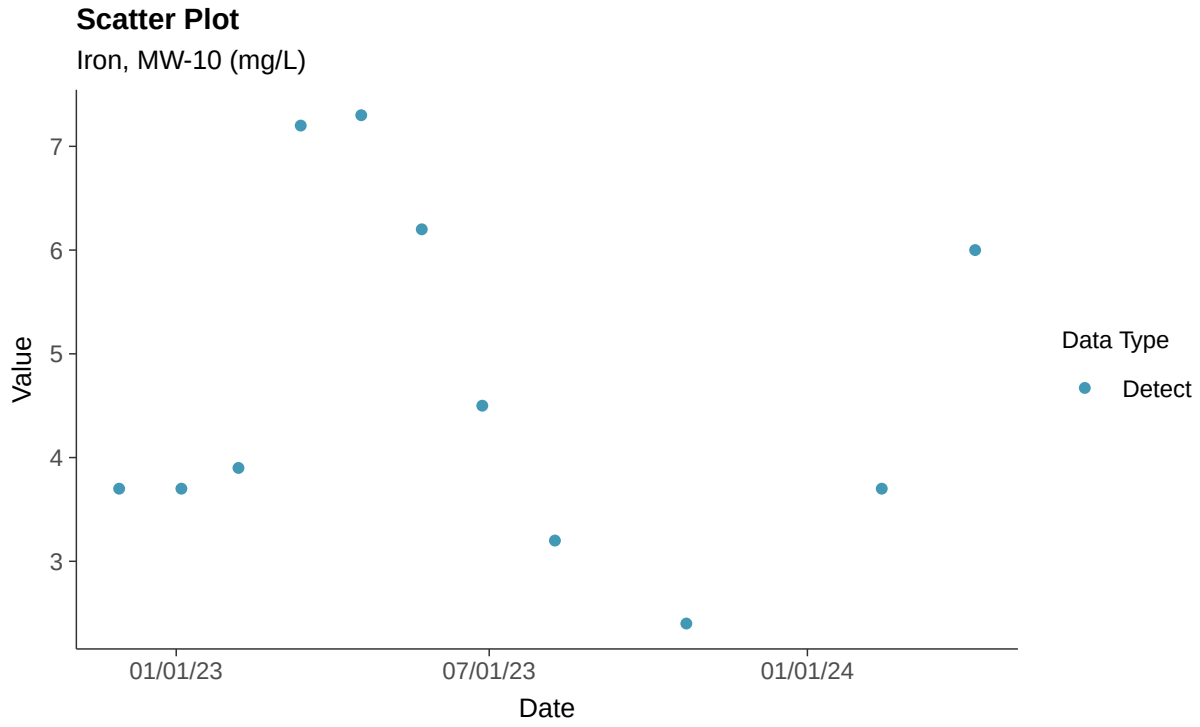
Trend Regression: Piecewise Linear-Linear-Linear

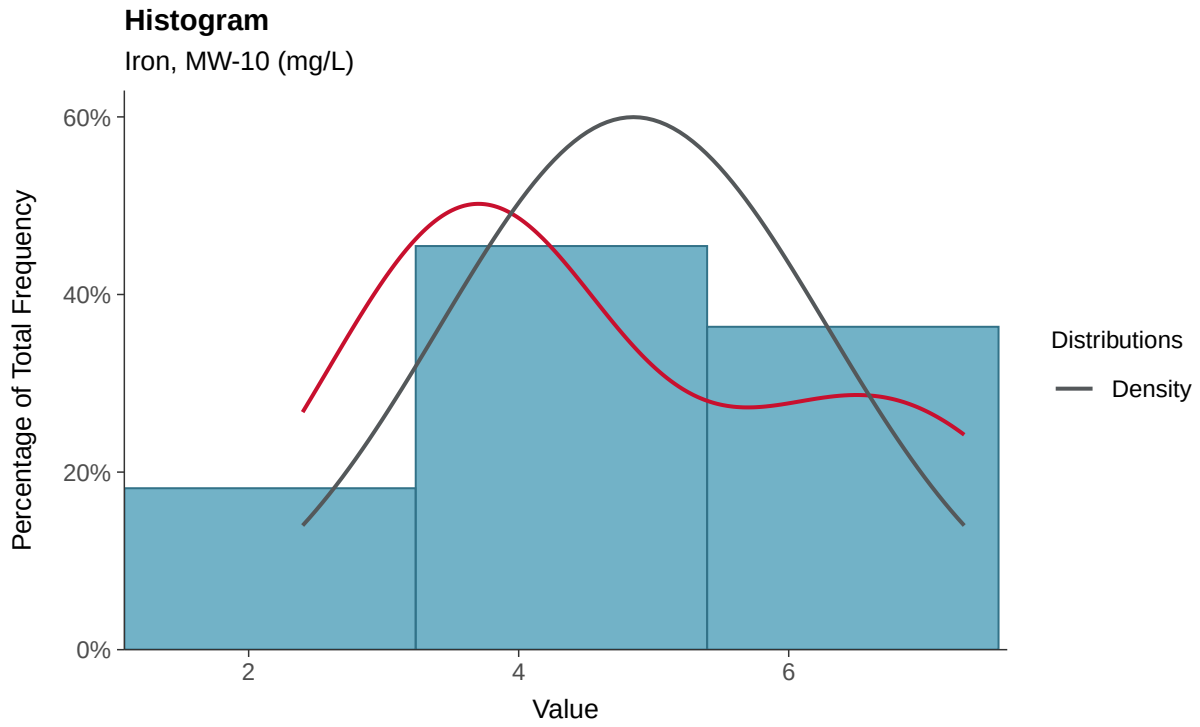
Copper, MW-10 (mg/L)



Part 115: Iron, MW-10

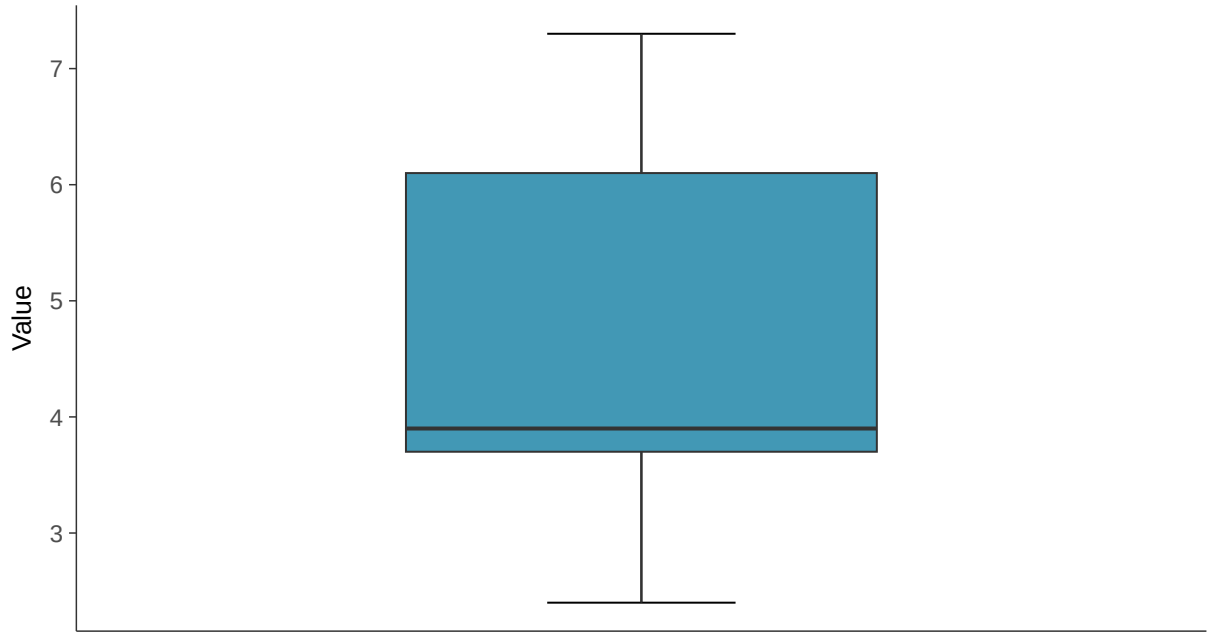
ID: 3_20_6_114





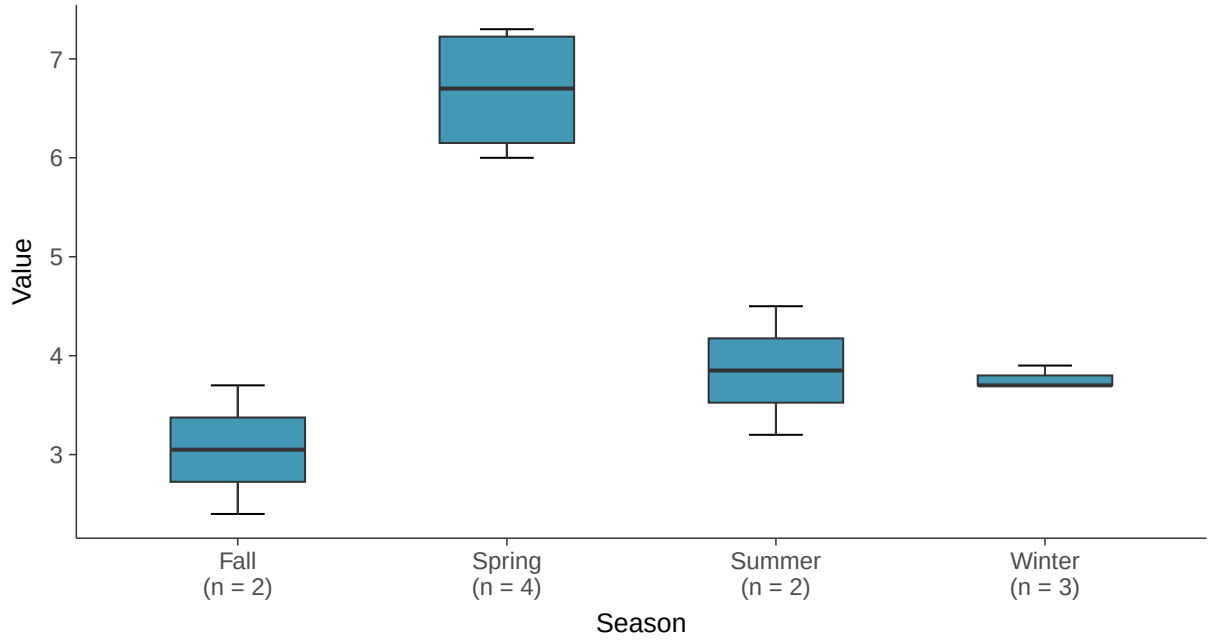
Boxplot

Iron, MW-10 (mg/L)



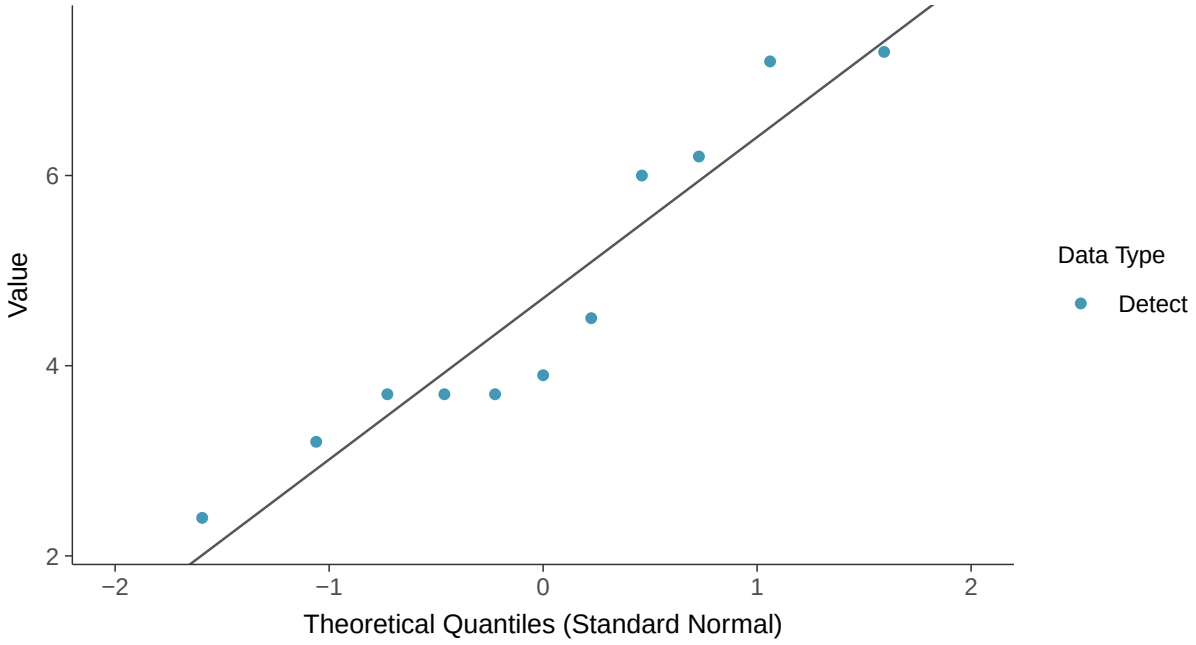
Boxplot by Season

Iron, MW-10 (mg/L)



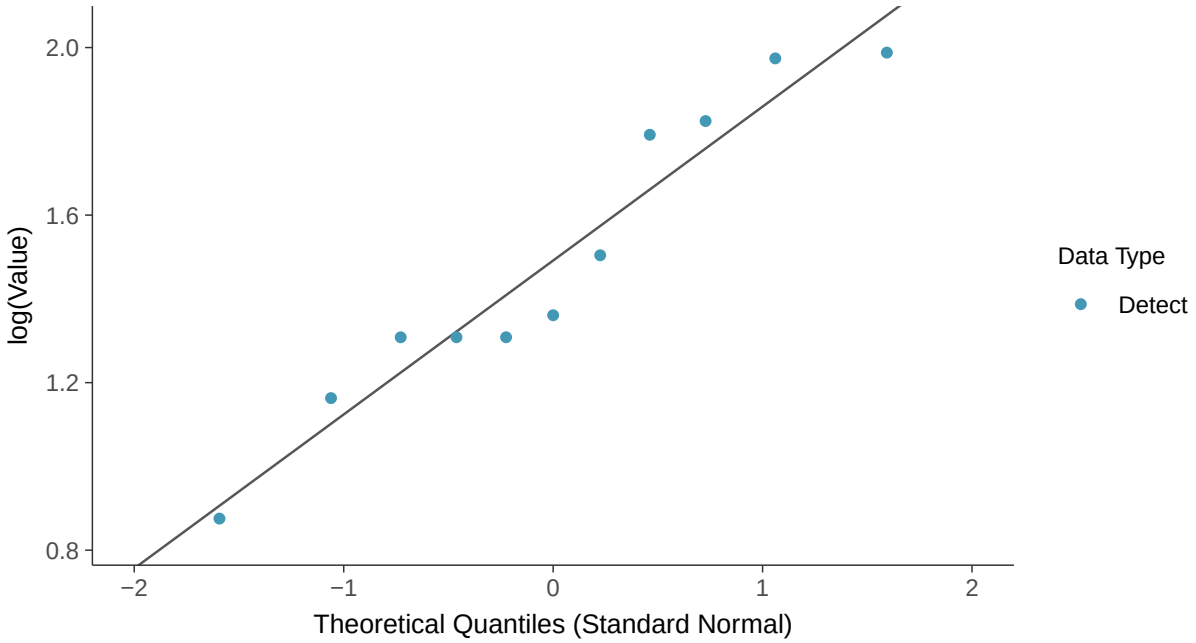
Normal Q-Q plot

Iron, MW-10 (mg/L)



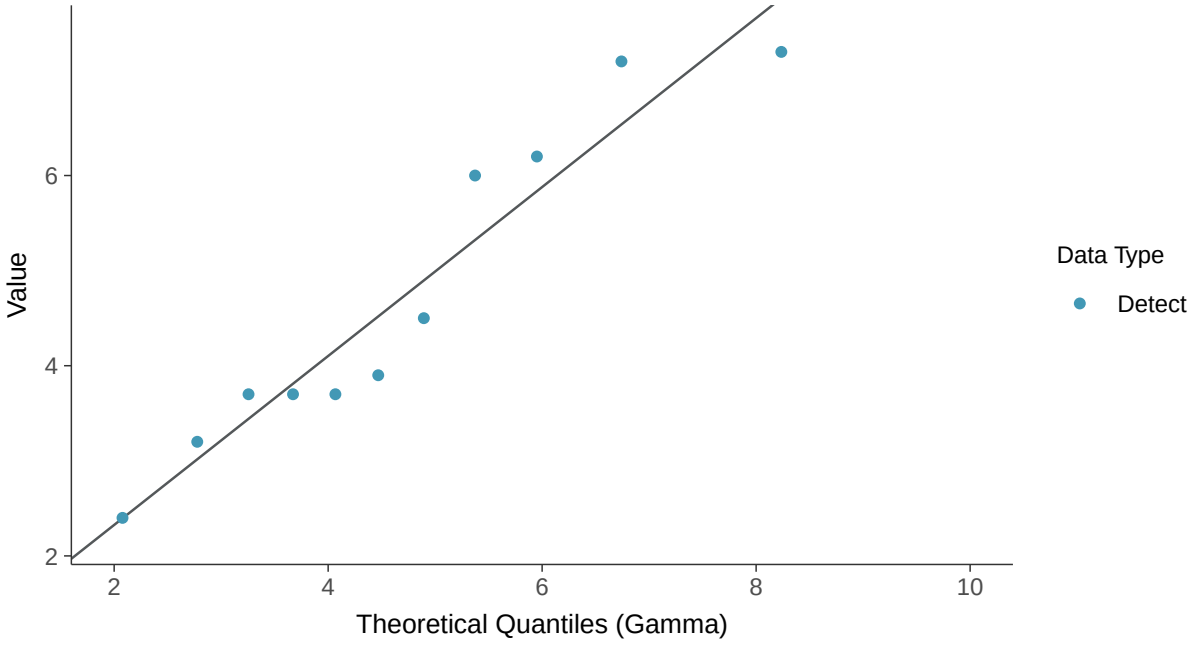
Lognormal Q-Q plot

Iron, MW-10 (mg/L)



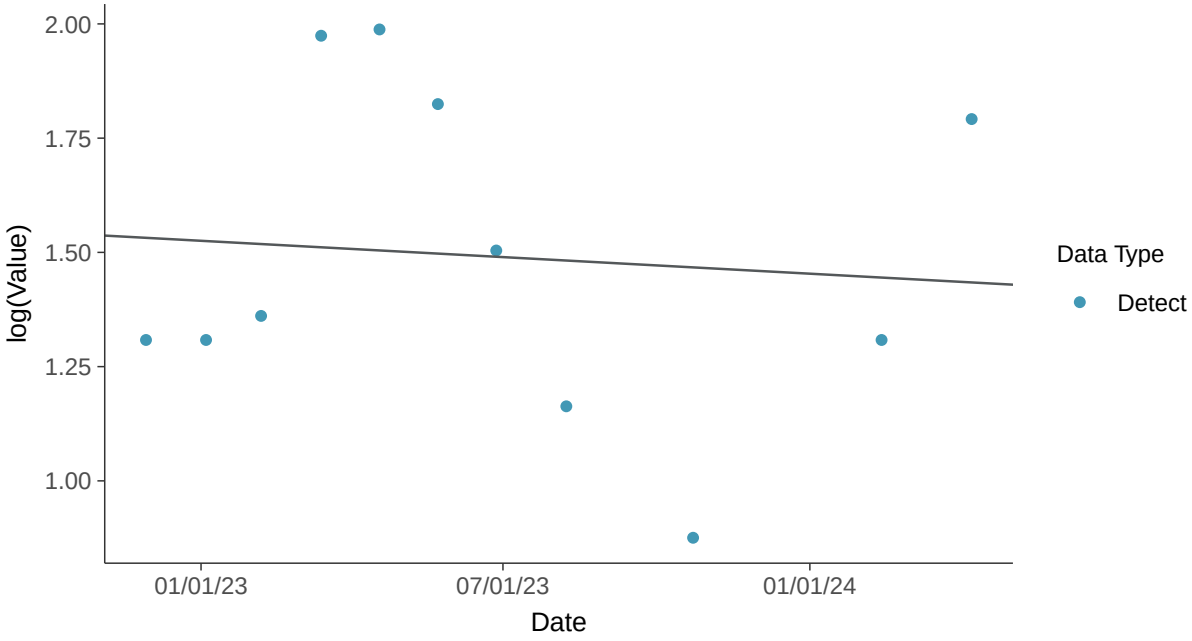
Gamma Q-Q plot

Iron, MW-10 (mg/L)



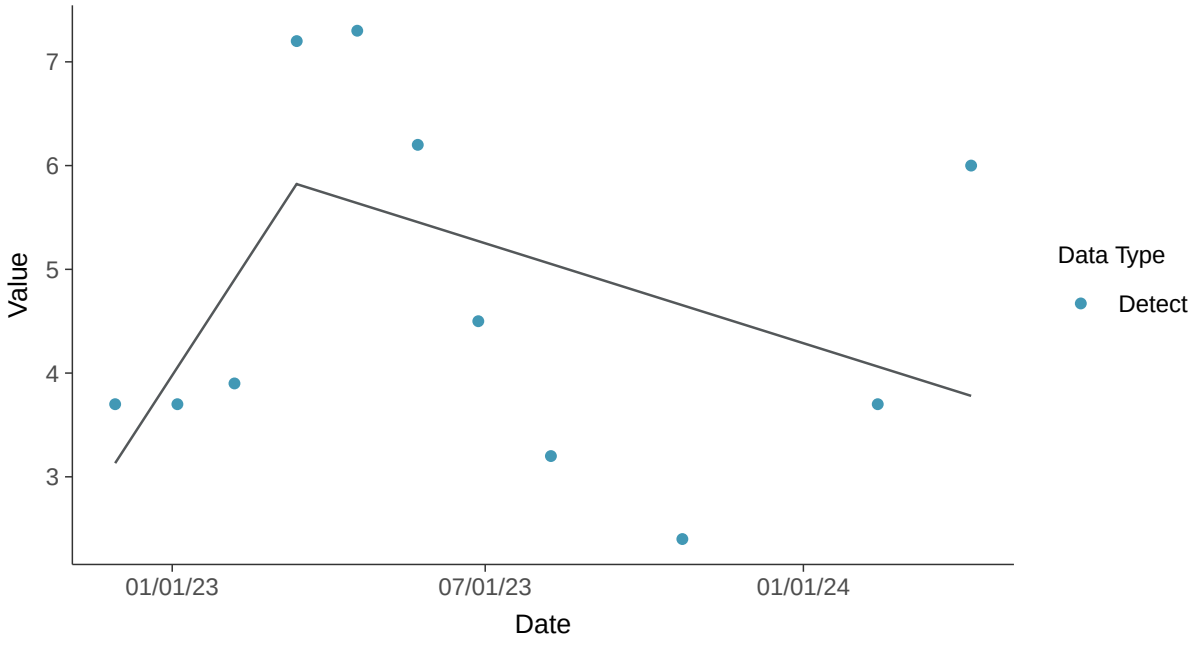
Trend Regression: Lognormal MLE

Iron, MW-10 (mg/L)



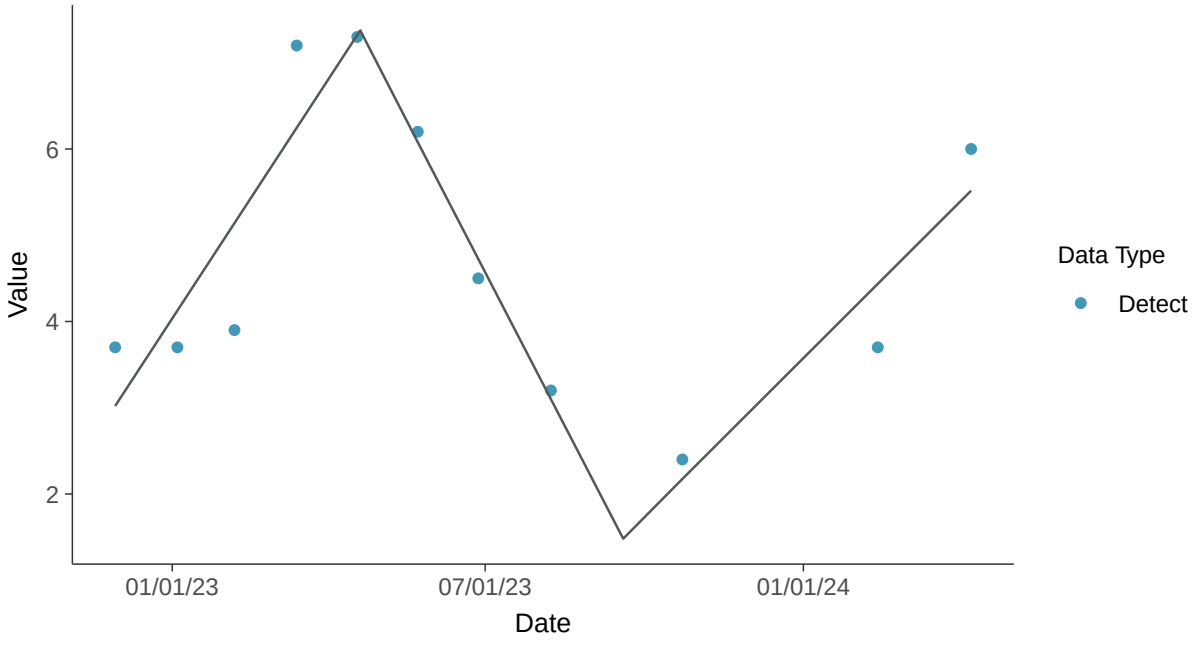
Trend Regression: Piecewise Linear-Linear

Iron, MW-10 (mg/L)



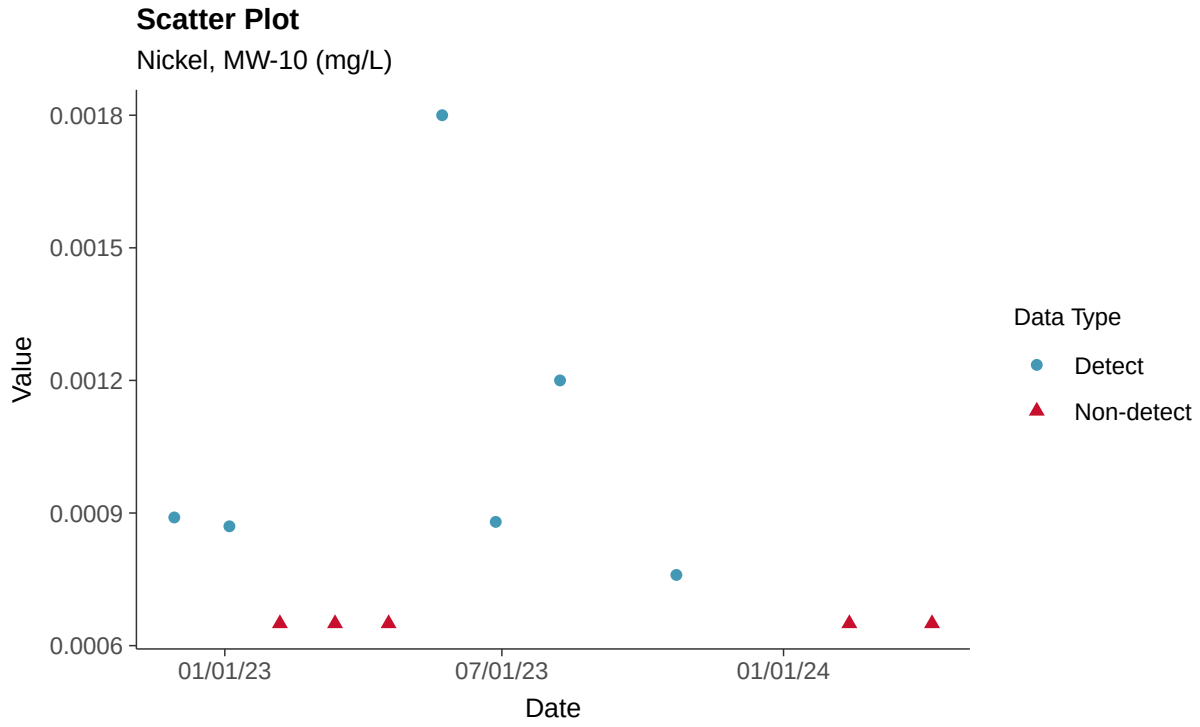
Trend Regression: Piecewise Linear-Linear-Linear

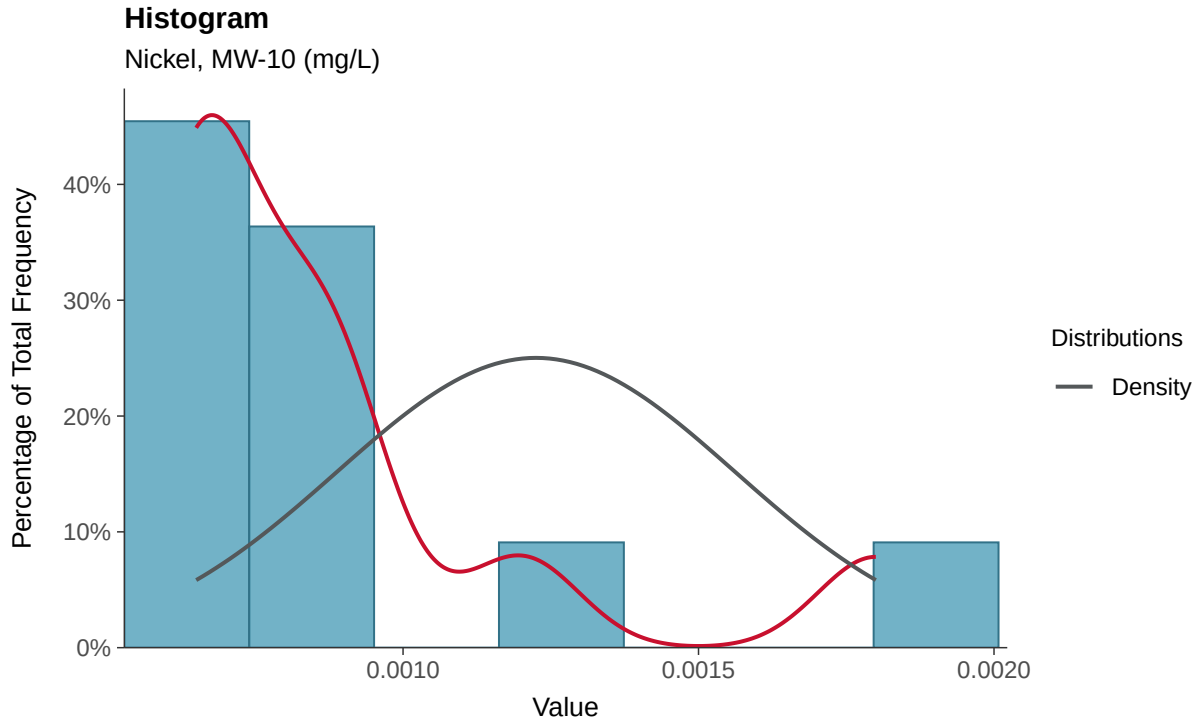
Iron, MW-10 (mg/L)



Part 115: Nickel, MW-10

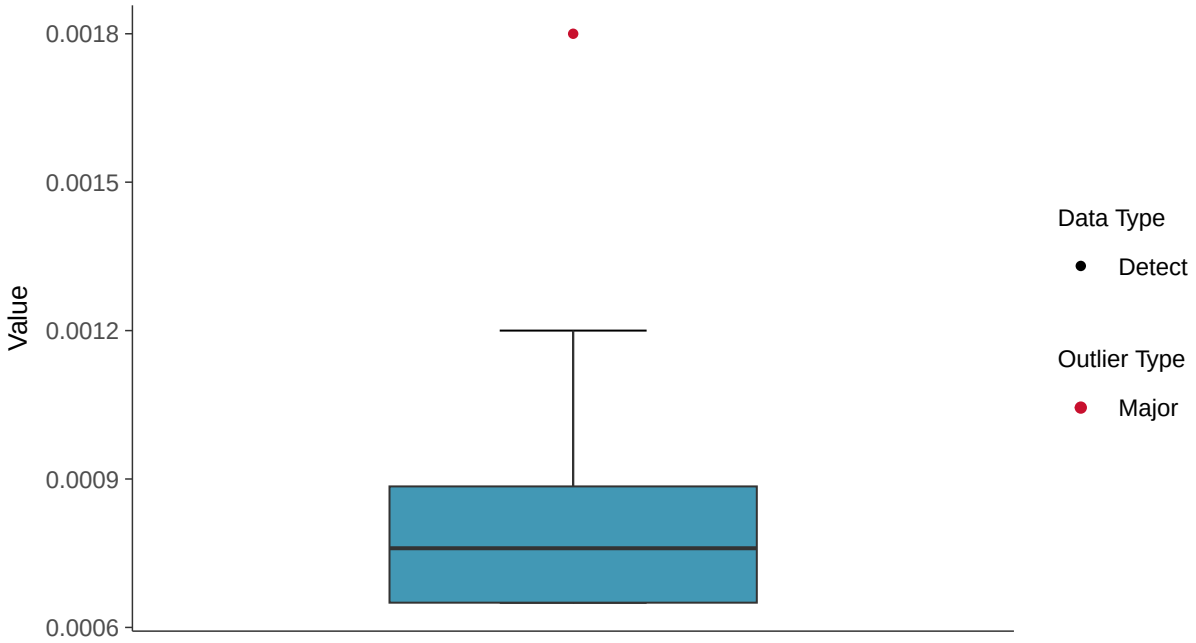
ID: 3_20_6_119





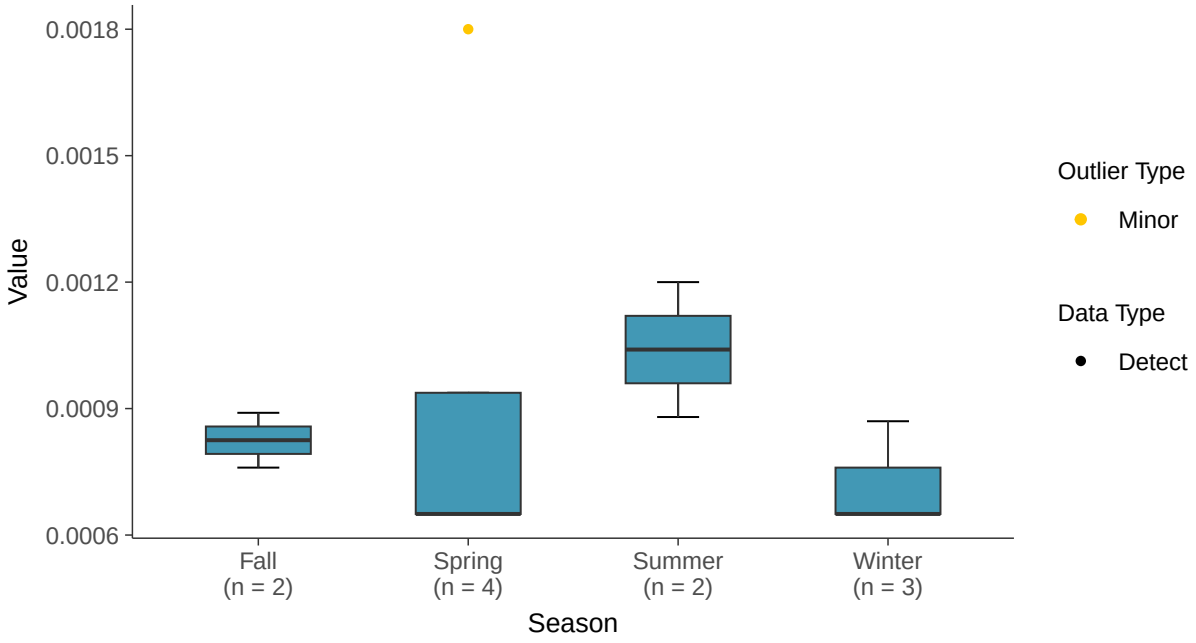
Boxplot

Nickel, MW-10 (mg/L)



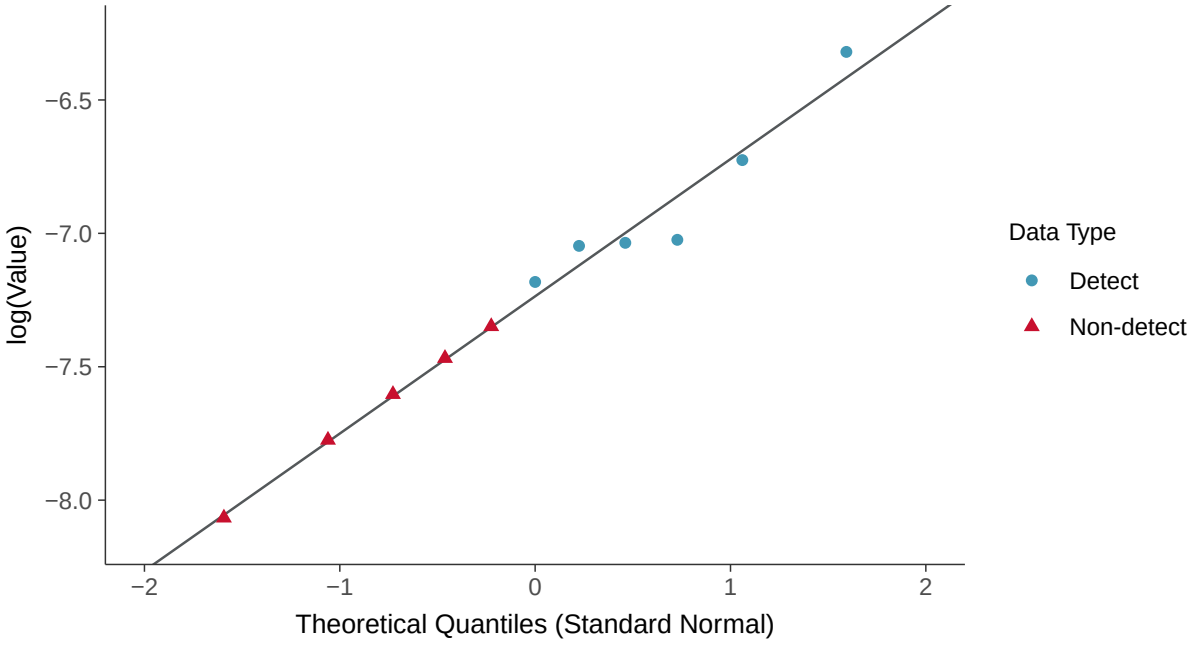
Boxplot by Season

Nickel, MW-10 (mg/L)



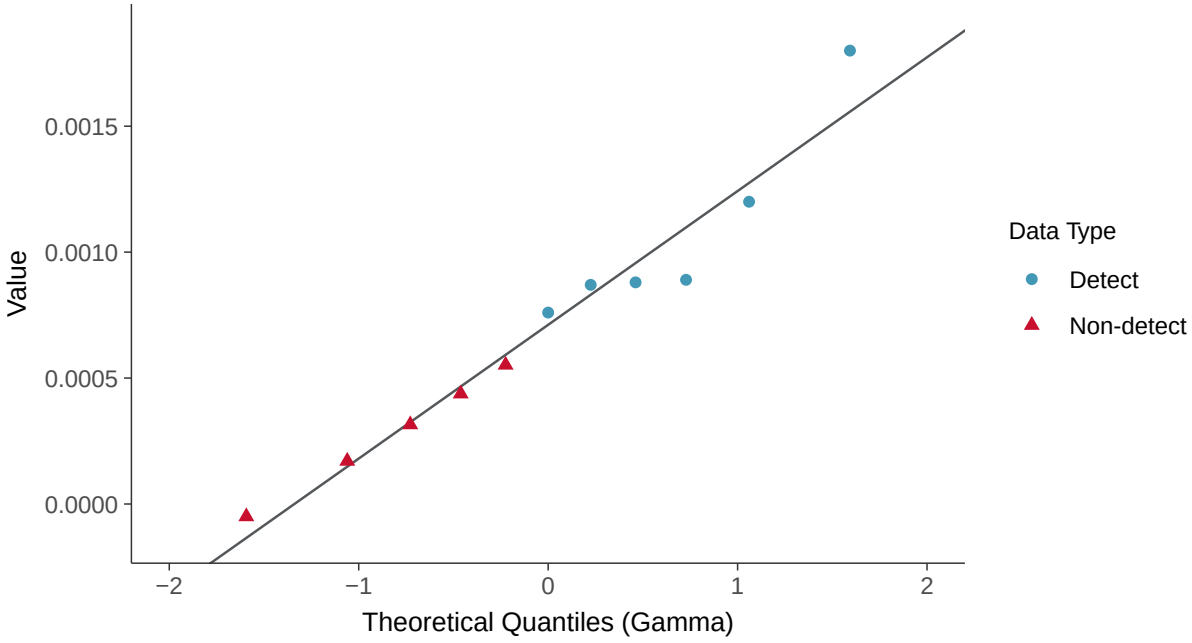
Lognormal Q-Q plot using ROS Imputed Estimates

Nickel, MW-10 (mg/L)



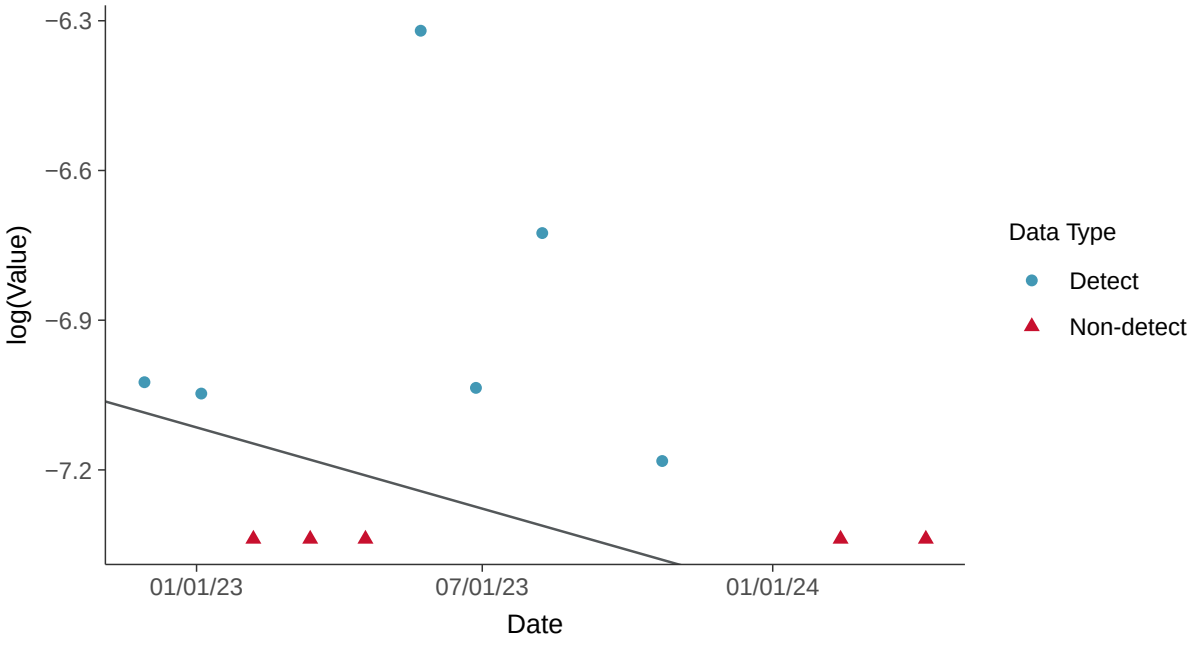
Gamma Q-Q plot using ROS Imputed Estimates

Nickel, MW-10 (mg/L)



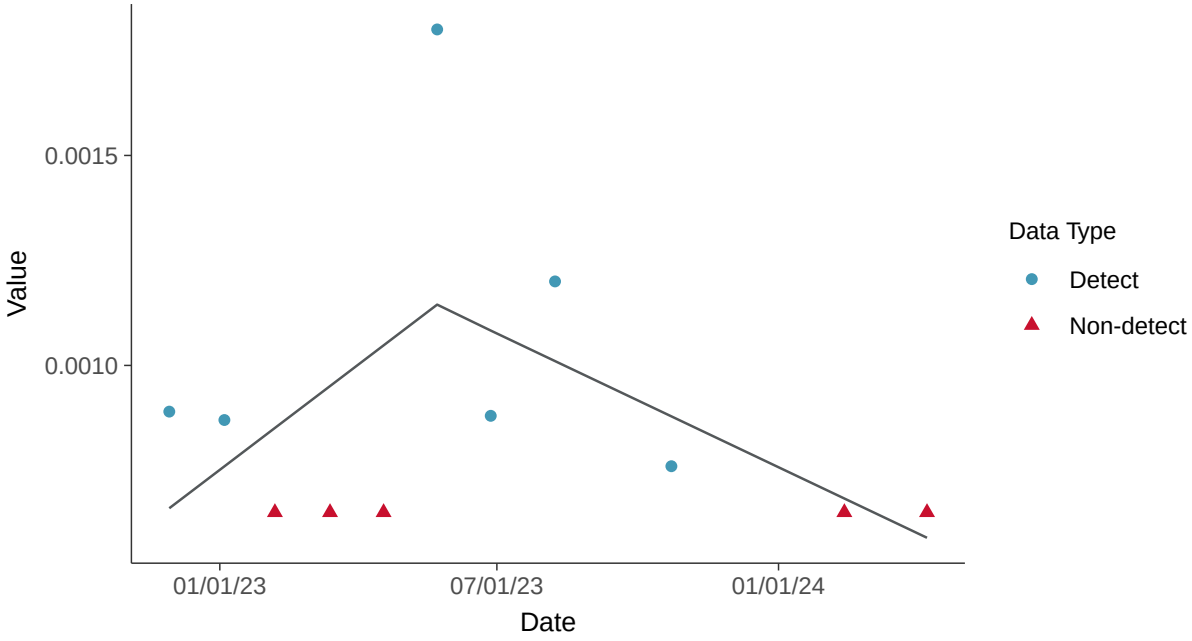
Trend Regression: Lognormal MLE

Nickel, MW-10 (mg/L)



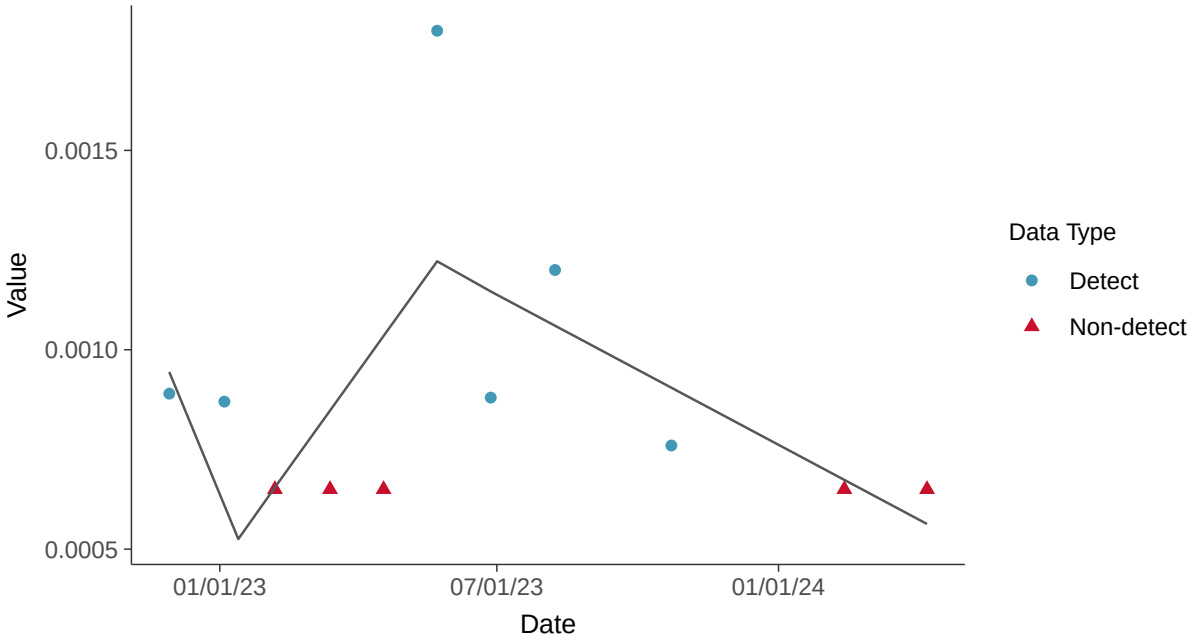
Trend Regression: Piecewise Linear-Linear

Nickel, MW-10 (mg/L)



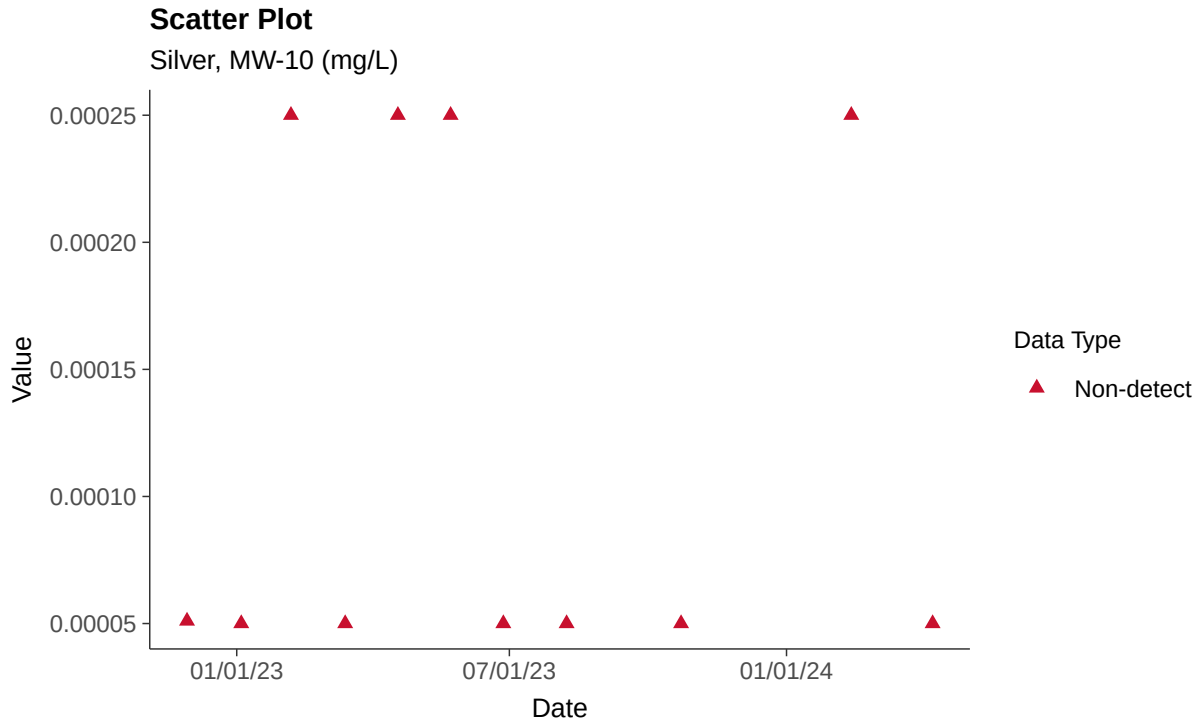
Trend Regression: Piecewise Linear-Linear-Linear

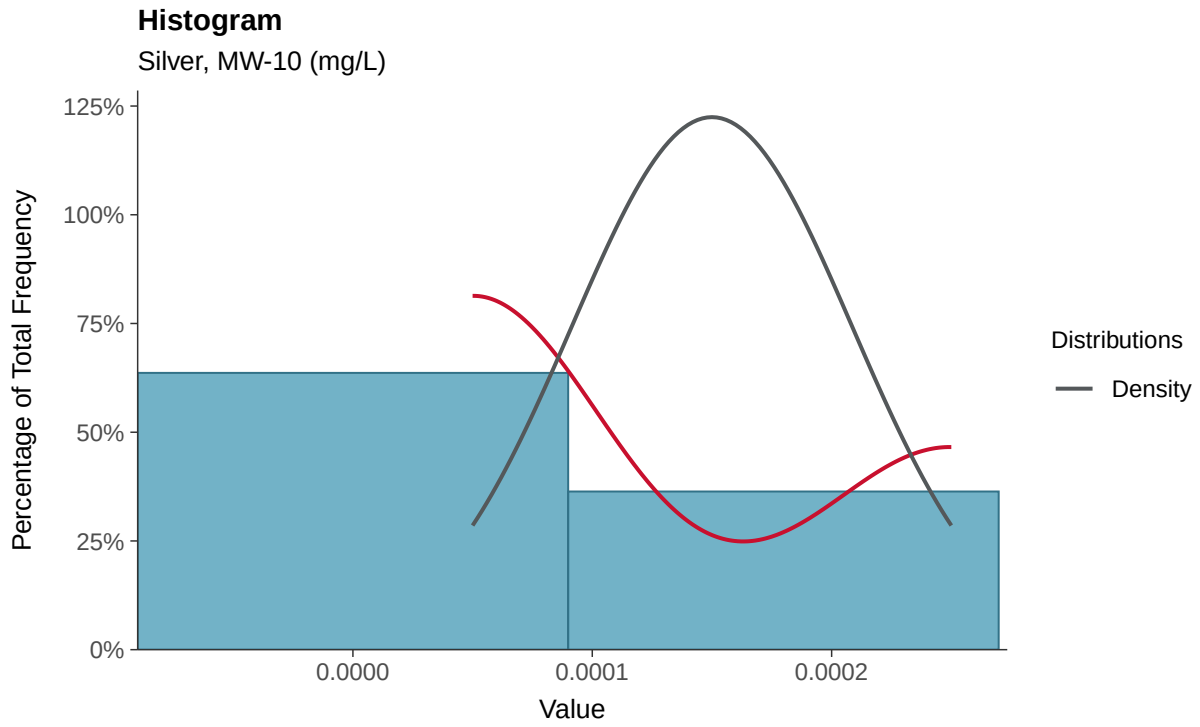
Nickel, MW-10 (mg/L)



Part 115: Silver, MW-10

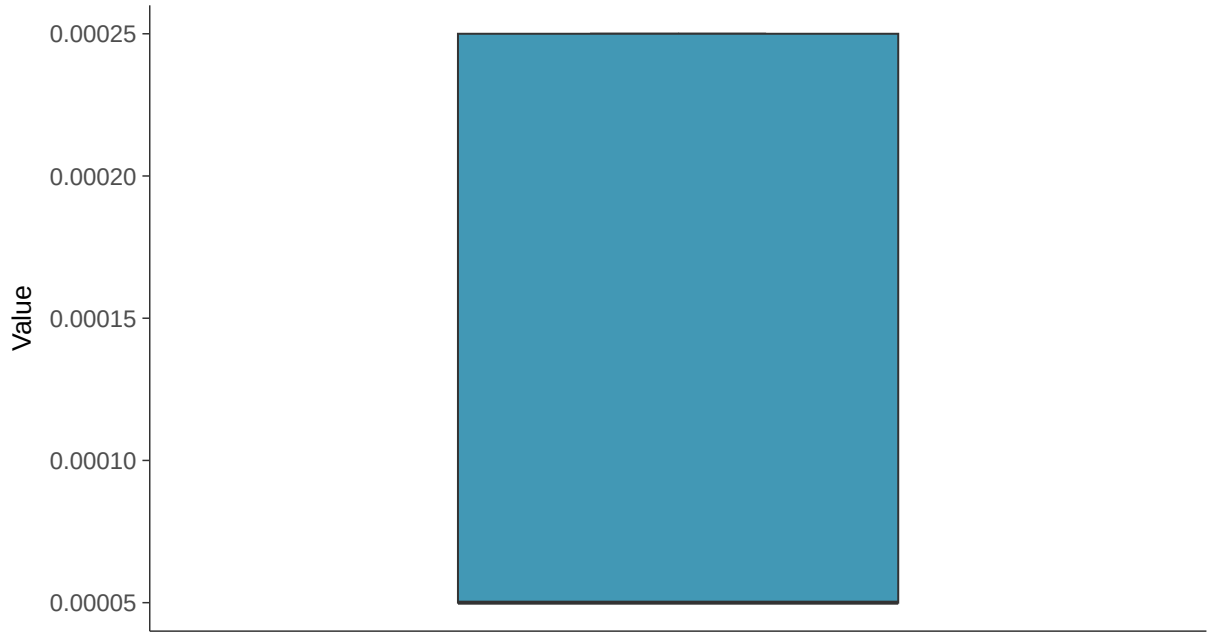
ID: 3_20_6_123





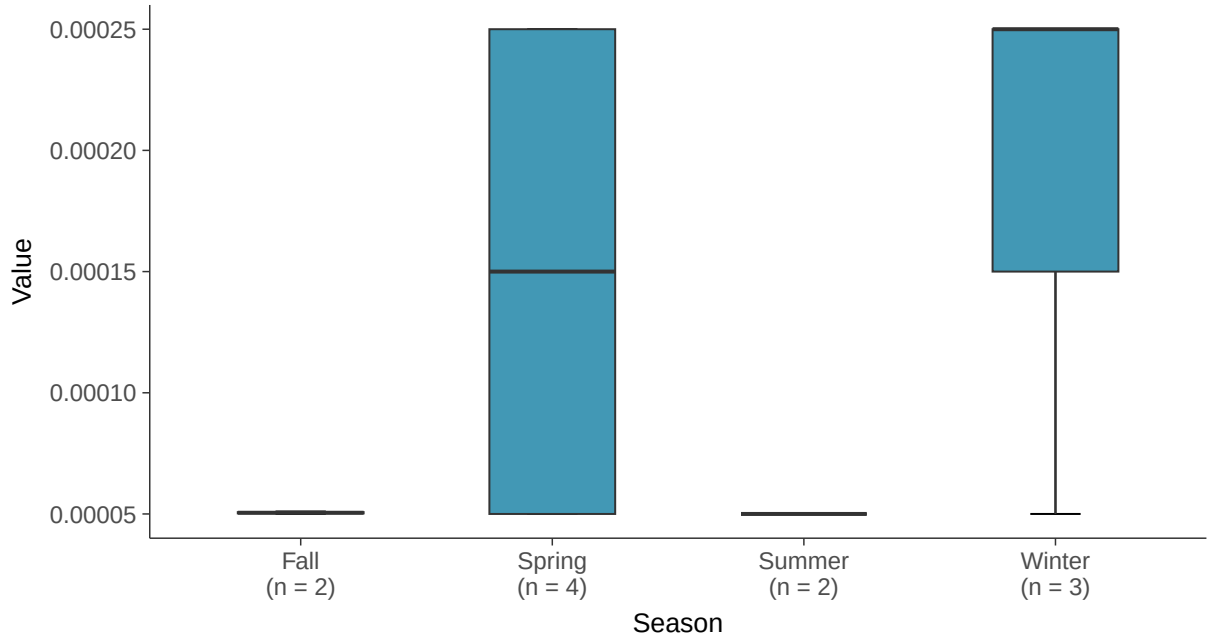
Boxplot

Silver, MW-10 (mg/L)



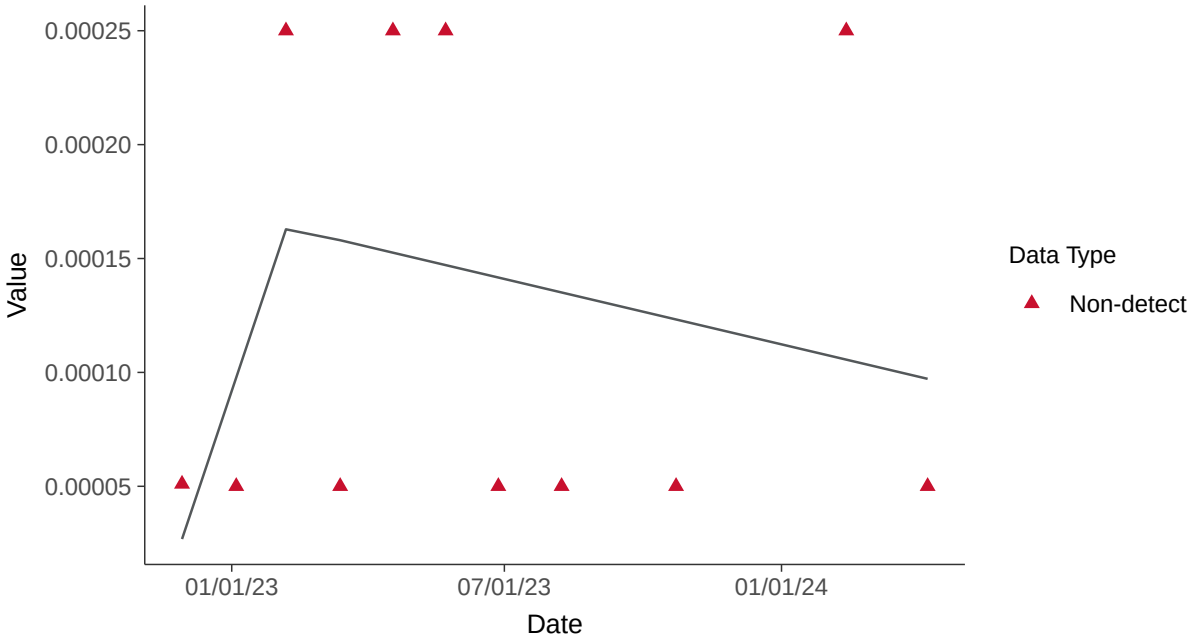
Boxplot by Season

Silver, MW-10 (mg/L)



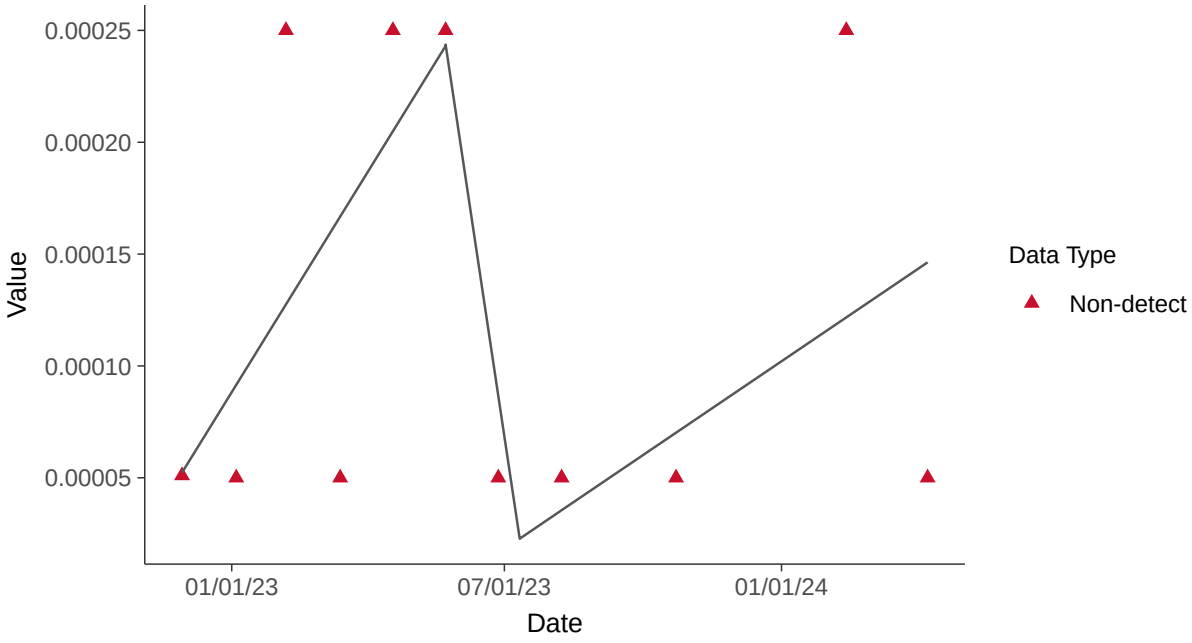
Trend Regression: Piecewise Linear-Linear

Silver, MW-10 (mg/L)



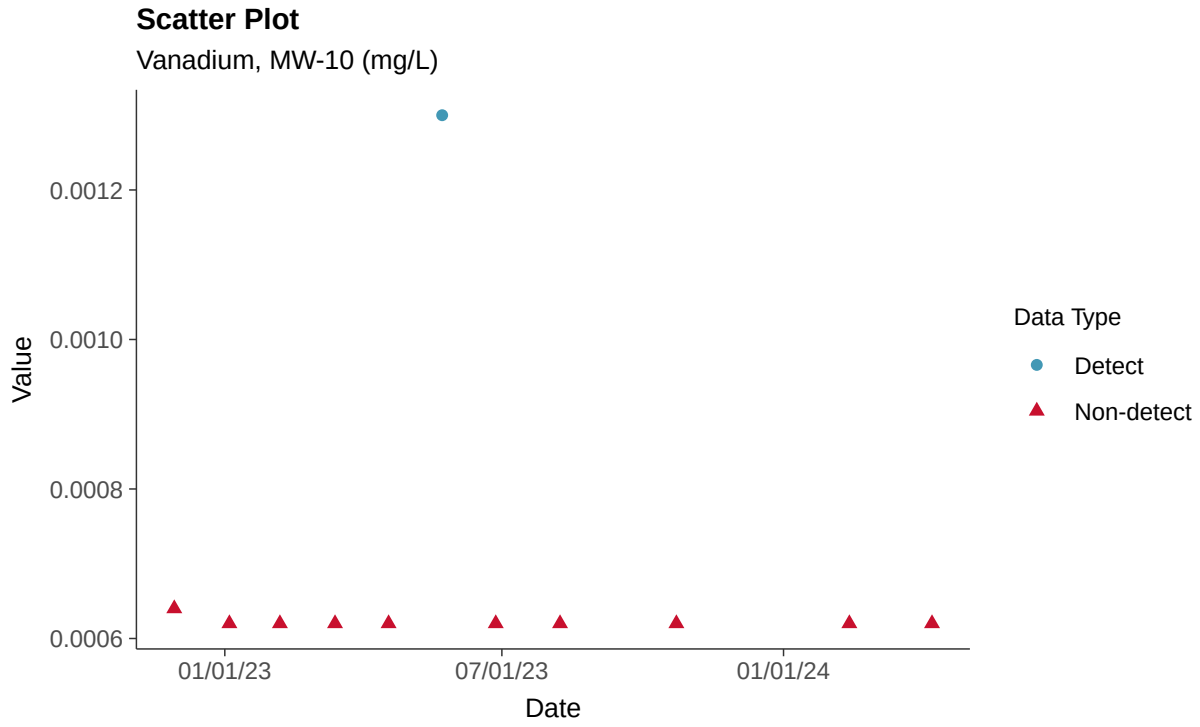
Trend Regression: Piecewise Linear-Linear-Linear

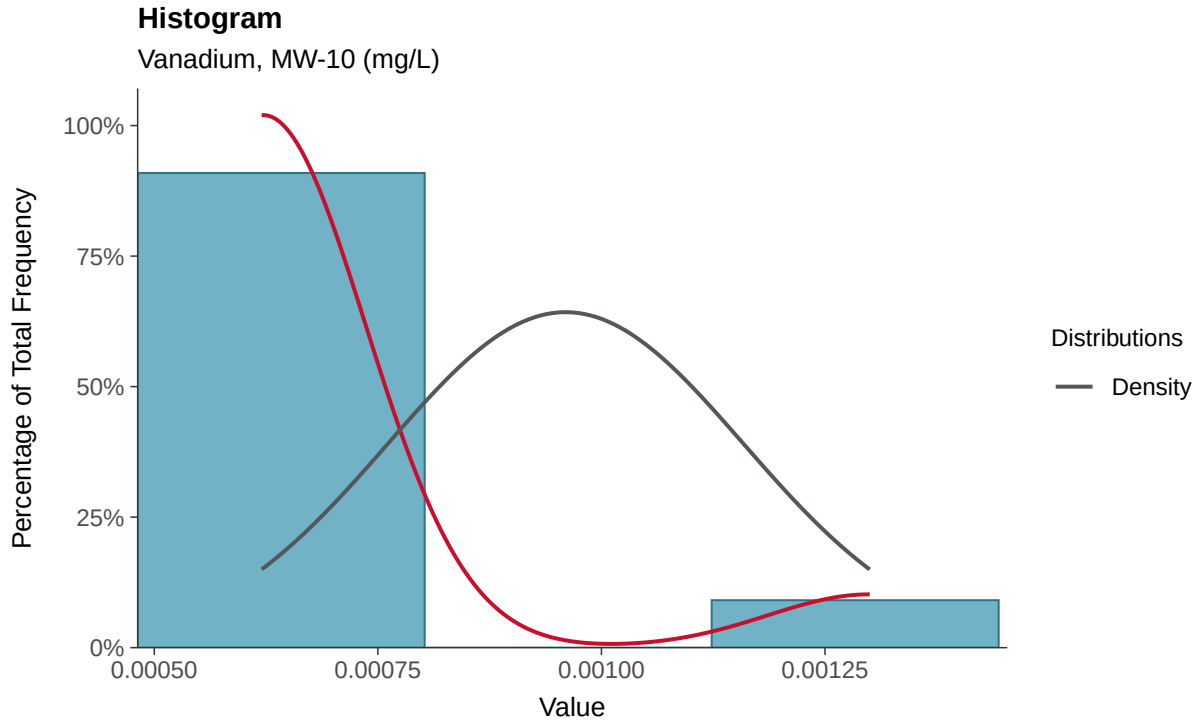
Silver, MW-10 (mg/L)



Part 115: Vanadium, MW-10

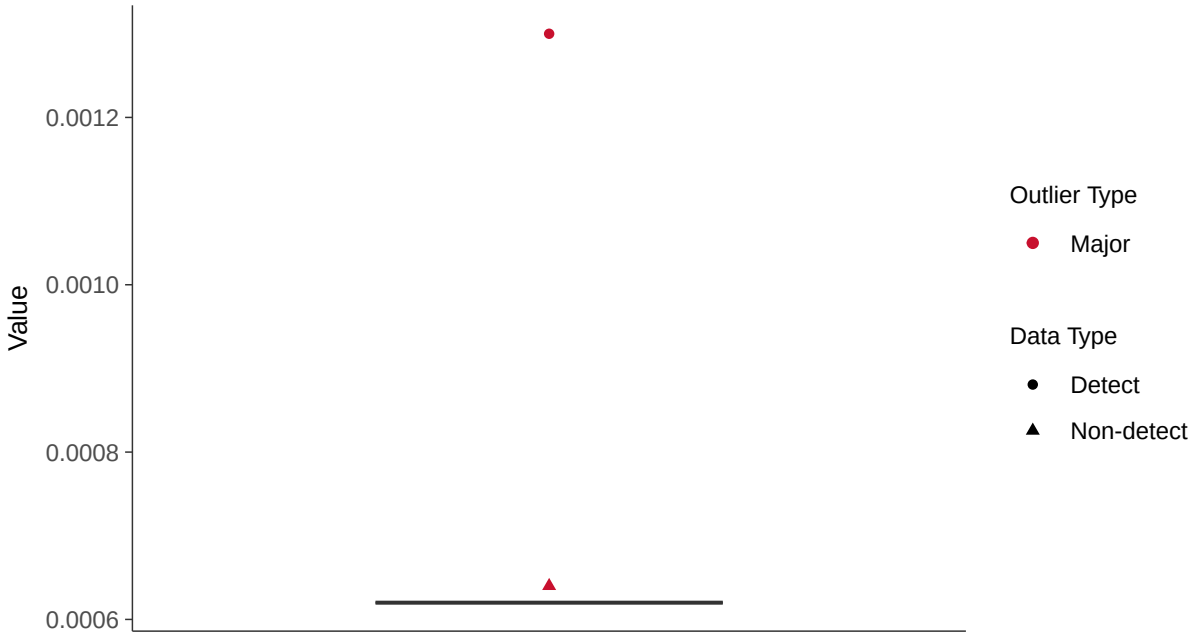
ID: 3_20_6_129





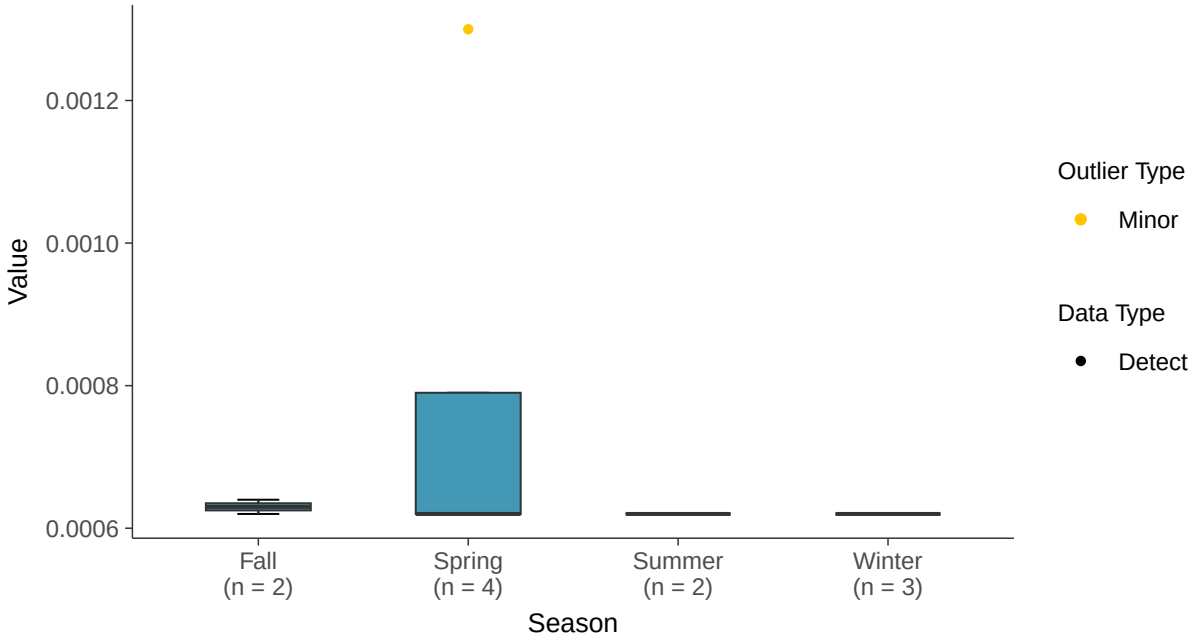
Boxplot

Vanadium, MW-10 (mg/L)



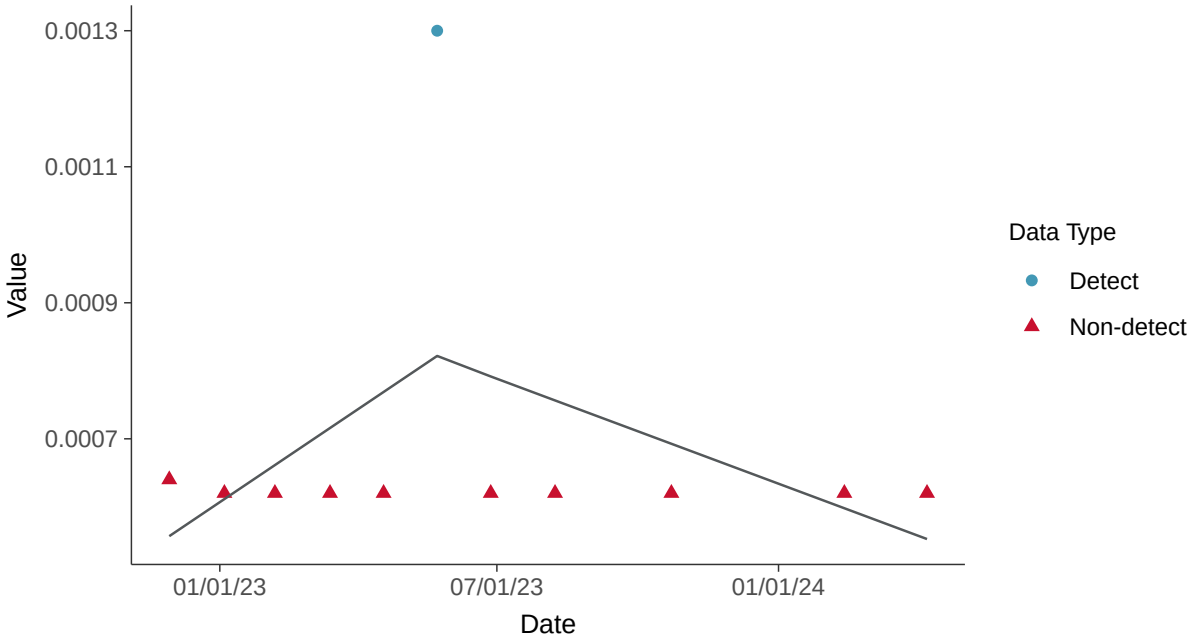
Boxplot by Season

Vanadium, MW-10 (mg/L)



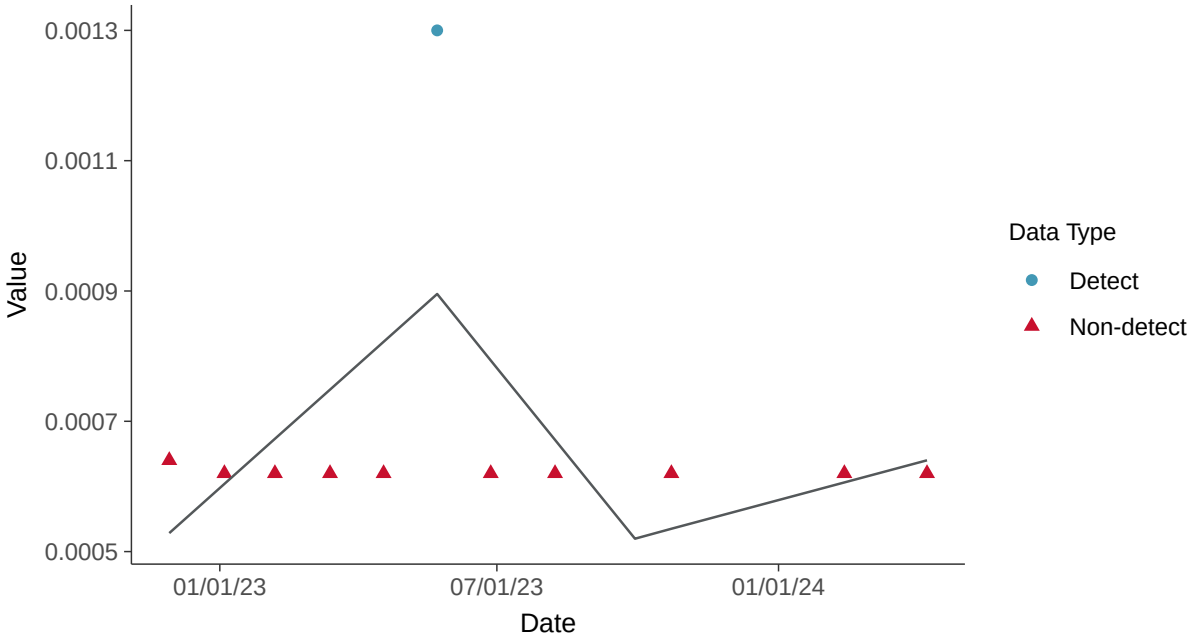
Trend Regression: Piecewise Linear-Linear

Vanadium, MW-10 (mg/L)



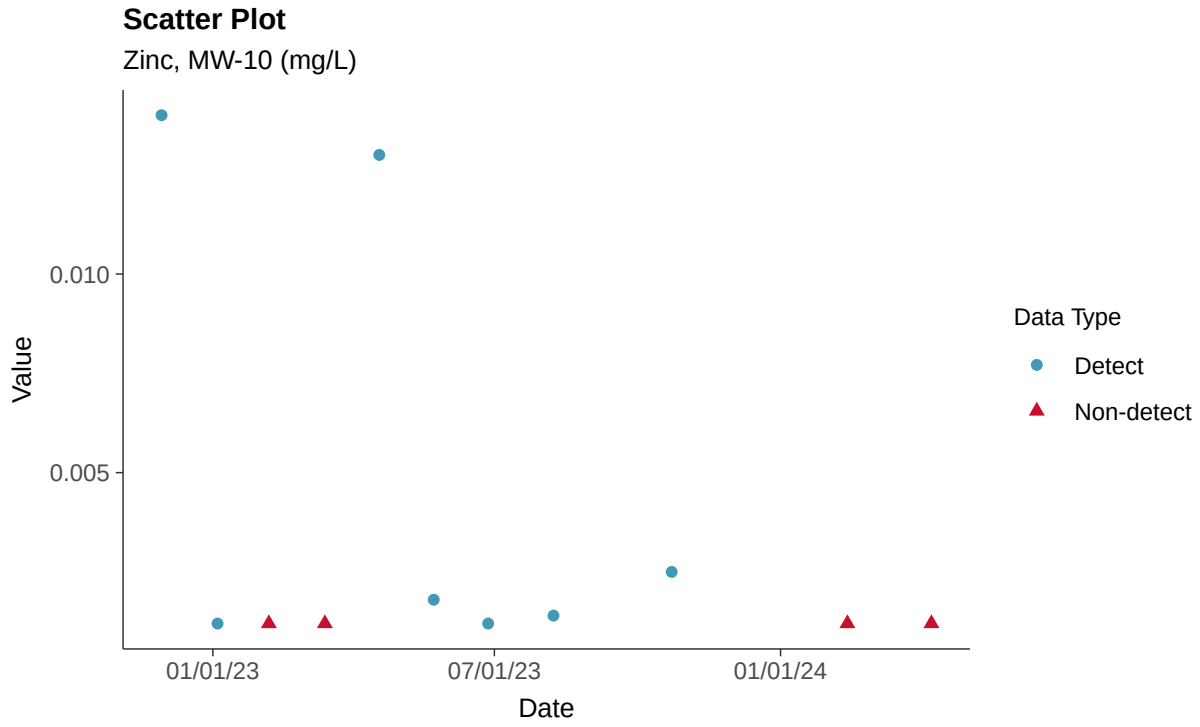
Trend Regression: Piecewise Linear-Linear-Linear

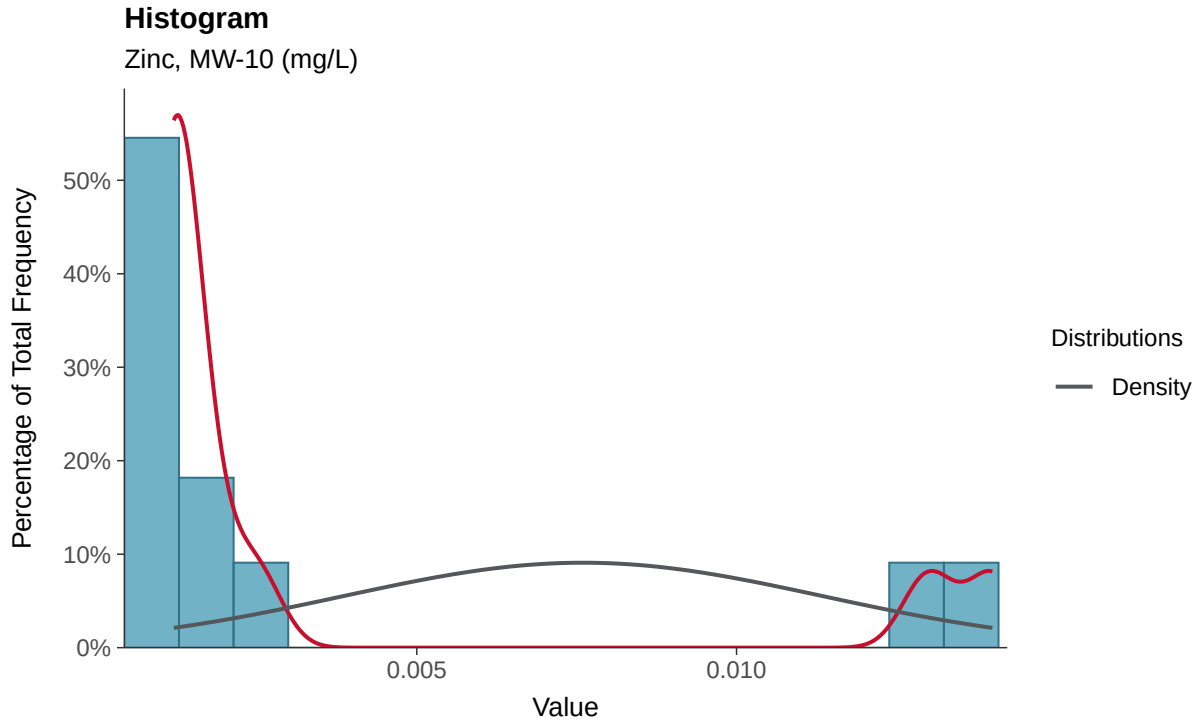
Vanadium, MW-10 (mg/L)



Part 115: Zinc, MW-10

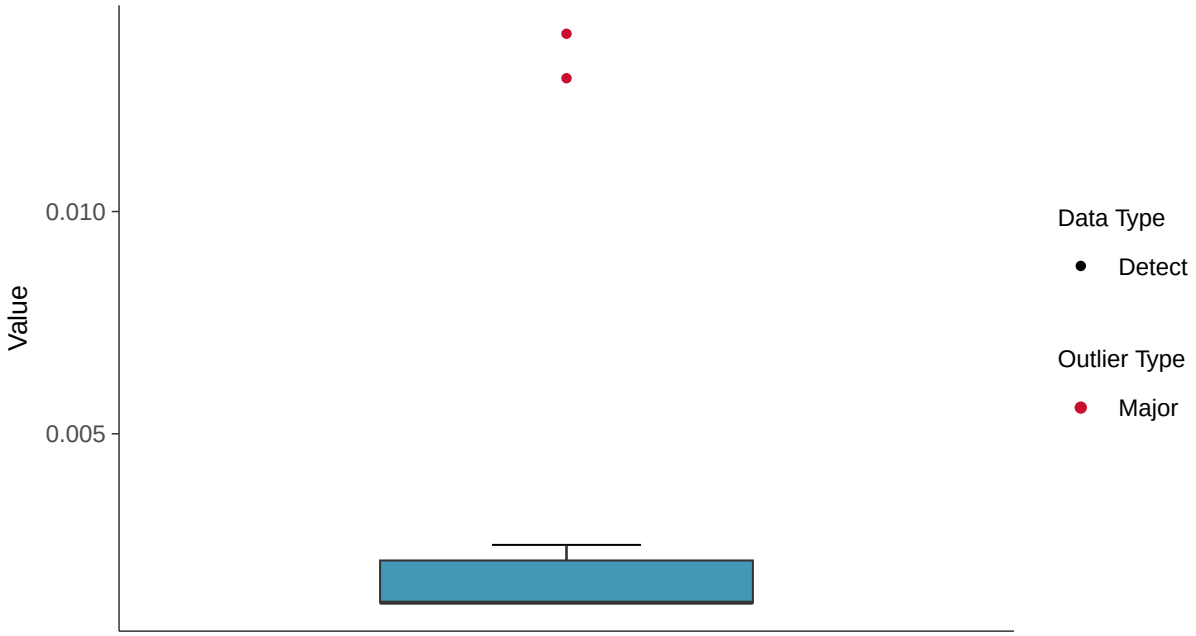
ID: 3_20_6_130





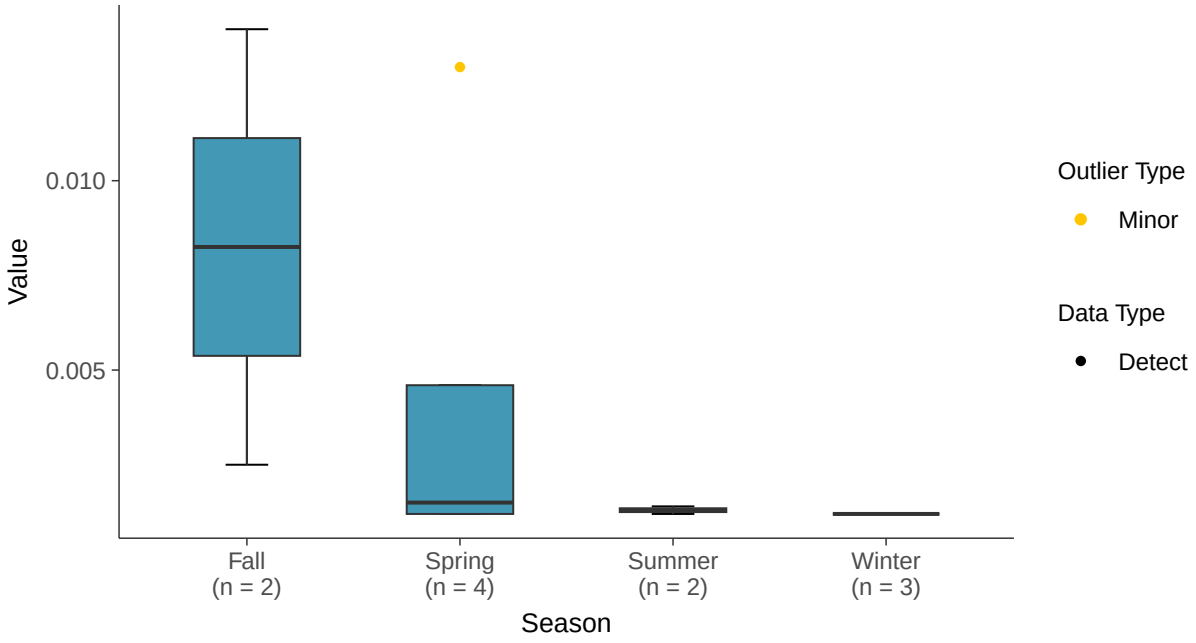
Boxplot

Zinc, MW-10 (mg/L)



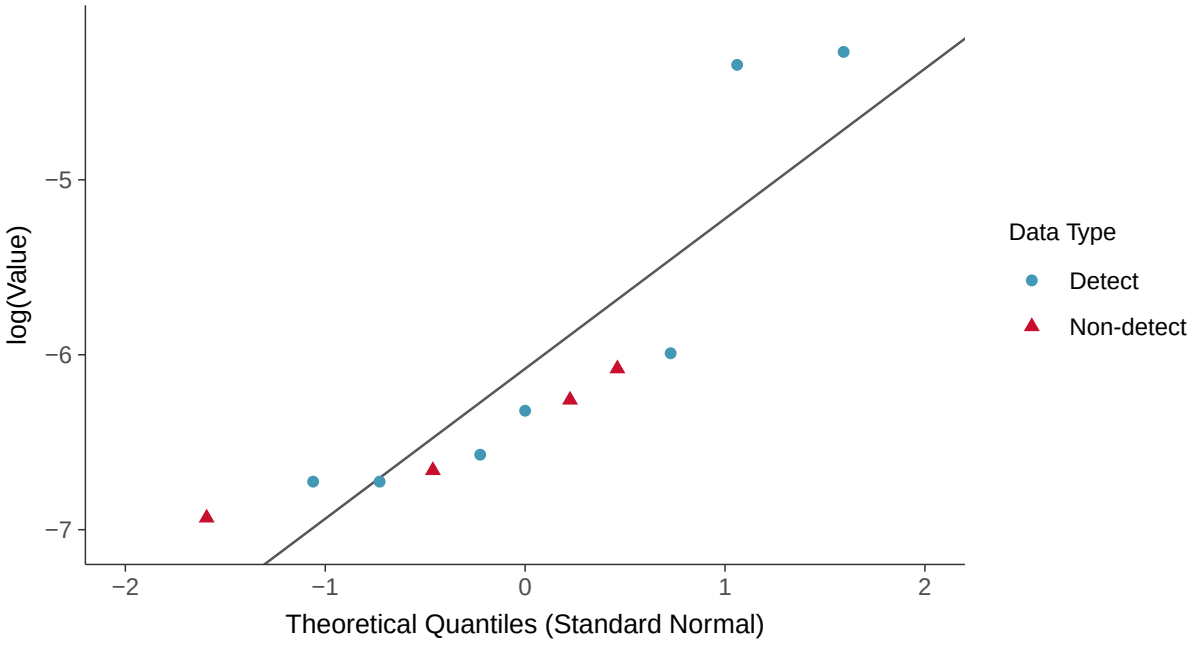
Boxplot by Season

Zinc, MW-10 (mg/L)



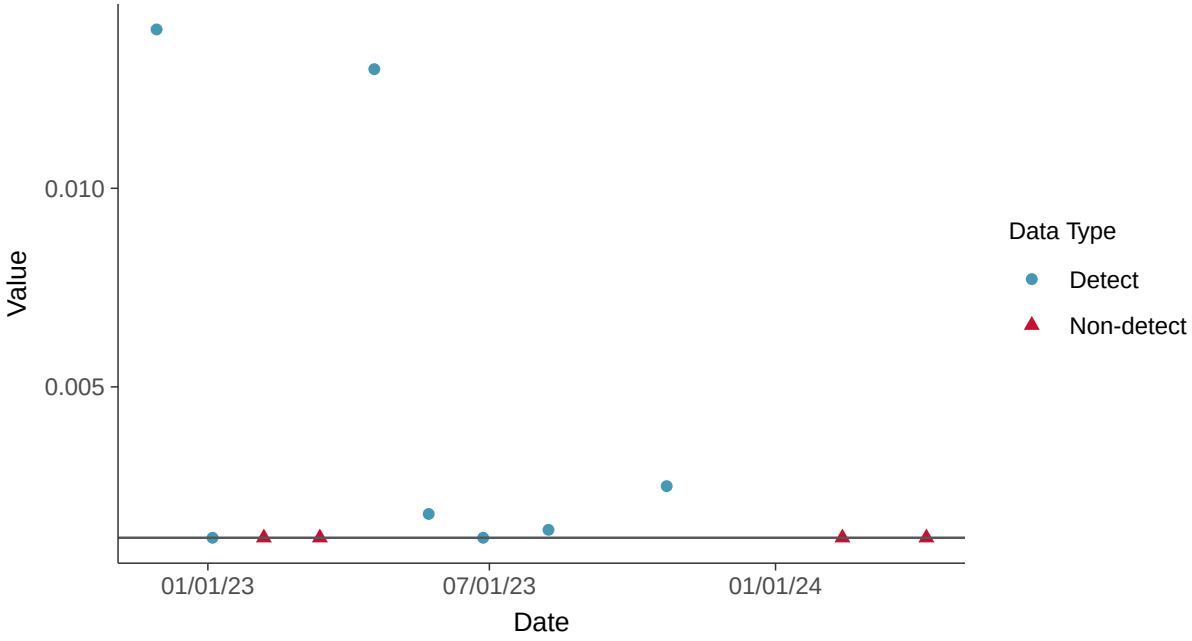
Lognormal Q-Q plot using ROS Imputed Estimates

Zinc, MW-10 (mg/L)



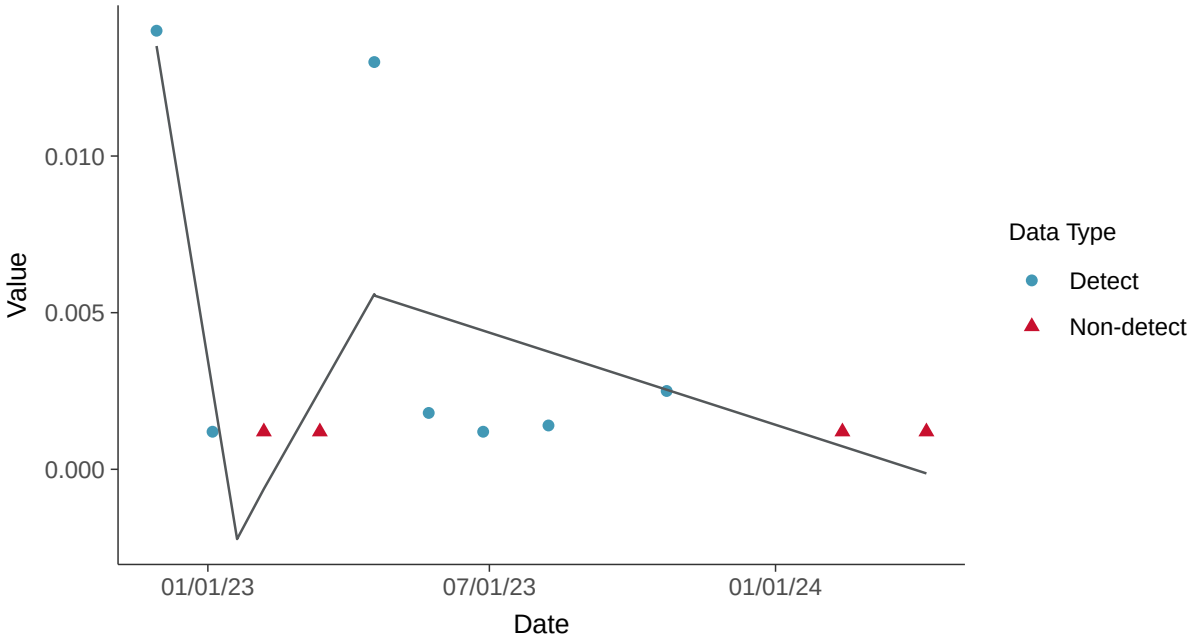
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Zinc, MW-10 (mg/L)



Trend Regression: Piecewise Linear-Linear-Linear

Zinc, MW-10 (mg/L)



Grand Haven: Unit 3A/B and Unit 1/2 as of April, 2024

95% Lower Confidence Limits for Assessment Monitoring

Site	Well	Type	Constituent	Unit	n	% NDs	Range of Sampling Period	Method	LCL
Unit 1/2	MW-06	Appendix III	Boron	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	8.3
Unit 1/2	MW-06	Appendix III	Calcium	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	240
Unit 1/2	MW-06	Appendix III	Chloride (as Cl)	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	55
Unit 1/2	MW-06	Appendix III	Fluoride	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	1.1
Unit 1/2	MW-06	Appendix III	pH (field)	su	11	0%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	7.18
Unit 1/2	MW-06	Appendix III	Sulfate (as SO4)	mg/L	11	9%	2022-11-29 to 2024-04-07	Gamma MLE Bootstrap LCL	6.6
Unit 1/2	MW-06	Appendix III	Total Dissolved Solids	mg/L	11	0%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	1,200
Unit 1/2	MW-06	Appendix IV	Antimony	mg/L	11	82%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.000075
Unit 1/2	MW-06	Appendix IV	Arsenic	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	0.00059
Unit 1/2	MW-06	Appendix IV	Barium	mg/L	11	0%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	1.3
Unit 1/2	MW-06	Appendix IV	Beryllium	mg/L	11	91%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.000052
Unit 1/2	MW-06	Appendix IV	Cadmium	mg/L	11	100%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.000032
Unit 1/2	MW-06	Appendix IV	Chromium, Total	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	0.0014
Unit 1/2	MW-06	Appendix IV	Cobalt	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	0.00048
Unit 1/2	MW-06	Appendix IV	Fluoride (App IV)	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	1.1
Unit 1/2	MW-06	Appendix IV	Lead	mg/L	11	73%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.00010
Unit 1/2	MW-06	Appendix IV	Lithium	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	0.16
Unit 1/2	MW-06	Appendix IV	Mercury	mg/L	11	100%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.00016
Unit 1/2	MW-06	Appendix IV	Molybdenum	mg/L	11	73%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.00025
Unit 1/2	MW-06	Appendix IV	Radium 226 and 228	pCi/L	11	18%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.65
Unit 1/2	MW-06	Appendix IV	Selenium	mg/L	11	45%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.00020
Unit 1/2	MW-06	Appendix IV	Thallium	mg/L	11	100%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.000075
Unit 1/2	MW-06	Part 115	Copper	mg/L	11	91%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.00020
Unit 1/2	MW-06	Part 115	Iron	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	17
Unit 1/2	MW-06	Part 115	Nickel	mg/L	11	36%	2022-11-29 to 2024-04-07	Normal MLE LCL	0.00050
Unit 1/2	MW-06	Part 115	Silver	mg/L	11	100%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.000050
Unit 1/2	MW-06	Part 115	Vanadium	mg/L	11	100%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.00062
Unit 1/2	MW-06	Part 115	Zinc	mg/L	11	18%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.0012
Unit 1/2	MW-07	Appendix III	Boron	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	11
Unit 1/2	MW-07	Appendix III	Calcium	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	140
Unit 1/2	MW-07	Appendix III	Chloride (as Cl)	mg/L	11	0%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	13
Unit 1/2	MW-07	Appendix III	Fluoride	mg/L	11	9%	2022-11-30 to 2024-04-08	Normal MLE LCL	0.079
Unit 1/2	MW-07	Appendix III	pH (field)	su	11	0%	2022-11-30 to 2024-04-08	Normal LCL	6.80
Unit 1/2	MW-07	Appendix III	Sulfate (as SO4)	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	21
Unit 1/2	MW-07	Appendix III	Total Dissolved Solids	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	590
Unit 1/2	MW-07	Appendix IV	Antimony	mg/L	11	91%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.000050
Unit 1/2	MW-07	Appendix IV	Arsenic	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	0.00019
Unit 1/2	MW-07	Appendix IV	Barium	mg/L	11	0%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.33
Unit 1/2	MW-07	Appendix IV	Beryllium	mg/L	11	73%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.000052
Unit 1/2	MW-07	Appendix IV	Cadmium	mg/L	11	100%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.000032
Unit 1/2	MW-07	Appendix IV	Chromium, Total	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	0.00031
Unit 1/2	MW-07	Appendix IV	Cobalt	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	0.00085
Unit 1/2	MW-07	Appendix IV	Fluoride (App IV)	mg/L	11	9%	2022-11-30 to 2024-04-08	Normal MLE LCL	0.079
Unit 1/2	MW-07	Appendix IV	Lead	mg/L	11	100%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.00010
Unit 1/2	MW-07	Appendix IV	Lithium	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	0.0051
Unit 1/2	MW-07	Appendix IV	Mercury	mg/L	11	100%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.00016
Unit 1/2	MW-07	Appendix IV	Molybdenum	mg/L	11	100%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.00025
Unit 1/2	MW-07	Appendix IV	Radium 226 and 228	pCi/L	11	18%	2022-11-30 to 2024-04-08	Normal MLE LCL	0.66
Unit 1/2	MW-07	Appendix IV	Selenium	mg/L	11	82%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.00010
Unit 1/2	MW-07	Appendix IV	Thallium	mg/L	11	100%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.000075
Unit 1/2	MW-07	Part 115	Copper	mg/L	11	82%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.00020
Unit 1/2	MW-07	Part 115	Iron	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	14
Unit 1/2	MW-07	Part 115	Nickel	mg/L	11	100%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.00065
Unit 1/2	MW-07	Part 115	Silver	mg/L	11	100%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.000050
Unit 1/2	MW-07	Part 115	Vanadium	mg/L	11	100%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.00062
Unit 1/2	MW-07	Part 115	Zinc	mg/L	11	73%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.0012
Unit 1/2	MW-08	Appendix III	Boron	mg/L	11	0%	2022-12-01 to 2024-04-07	Normal LCL	5.3
Unit 1/2	MW-08	Appendix III	Calcium	mg/L	11	0%	2022-12-01 to 2024-04-07	Normal LCL	130
Unit 1/2	MW-08	Appendix III	Chloride (as Cl)	mg/L	11	0%	2022-12-01 to 2024-04-07	Normal LCL	23
Unit 1/2	MW-08	Appendix III	Fluoride	mg/L	11	0%	2022-12-01 to 2024-04-07	Normal LCL	0.76
Unit 1/2	MW-08	Appendix III	pH (field)	su	11	0%	2022-12-01 to 2024-04-07	Nonparametric LCL around the Median	7.17
Unit 1/2	MW-08	Appendix III	Sulfate (as SO4)	mg/L	11	27%	2022-12-01 to 2024-04-07	Gamma MLE Bootstrap LCL	3.6
Unit 1/2	MW-08	Appendix III	Total Dissolved Solids	mg/L	11	0%	2022-12-01 to 2024-04-07	Normal LCL	500
Unit 1/2	MW-08	Appendix IV	Antimony	mg/L	11	45%	2022-12-01 to 2024-04-07	Normal MLE LCL	0.000016
Unit 1/2	MW-08	Appendix IV	Arsenic	mg/L	11	0%	2022-12-01 to 2024-04-07	Normal LCL	0.025
Unit 1/2	MW-08	Appendix IV	Barium	mg/L	11	0%	2022-12-01 to 2024-04-07	Normal LCL	1.1
Unit 1/2	MW-08	Appendix IV	Beryllium	mg/L	11	100%	2022-12-01 to 2024-04-07	Nonparametric LCL around the Median	0.000052
Unit 1/2	MW-08	Appendix IV	Cadmium	mg/L	11	100%	2022-12-01 to 2024-04-07	Nonparametric LCL around the Median	0.000032
Unit 1/2	MW-08	Appendix IV	Chromium, Total	mg/L	11	0%	2022-12-01 to 2024-04-07	Normal LCL	0.00077
Unit 1/2	MW-08	Appendix IV	Cobalt	mg/L	11	0%	2022-12-01 to 2024-04-07	Normal LCL	0.00042
Unit 1/2	MW-08	Appendix IV	Fluoride (App IV)	mg/L	11	0%	2022-12-01 to 2024-04-07	Normal LCL	0.76
Unit 1/2	MW-08	Appendix IV	Lead	mg/L	11	73%	2022-12-01 to 2024-04-07	Nonparametric LCL around the Median	0.00010

Unit 1/2	MW-08	Appendix IV	Lithium	mg/L	11	0%	2022-12-01 to 2024-04-07	Normal LCL	0.095
Unit 1/2	MW-08	Appendix IV	Mercury	mg/L	11	100%	2022-12-01 to 2024-04-07	Nonparametric LCL around the Median	0.00016
Unit 1/2	MW-08	Appendix IV	Molybdenum	mg/L	11	0%	2022-12-01 to 2024-04-07	Normal LCL	0.0010
Unit 1/2	MW-08	Appendix IV	Radium 226 and 228	pCi/L	11	27%	2022-12-01 to 2024-04-07	Normal MLE LCL	0.72
Unit 1/2	MW-08	Appendix IV	Selenium	mg/L	11	45%	2022-12-01 to 2024-04-07	Nonparametric LCL around the Median	0.00014
Unit 1/2	MW-08	Appendix IV	Thallium	mg/L	11	100%	2022-12-01 to 2024-04-07	Nonparametric LCL around the Median	0.000075
Unit 1/2	MW-08	Part 115	Copper	mg/L	11	45%	2022-12-01 to 2024-04-07	Normal MLE LCL	0.000099
Unit 1/2	MW-08	Part 115	Iron	mg/L	11	0%	2022-12-01 to 2024-04-07	Normal LCL	18
Unit 1/2	MW-08	Part 115	Nickel	mg/L	11	0%	2022-12-01 to 2024-04-07	Lognormal H-LCL	0.0012
Unit 1/2	MW-08	Part 115	Silver	mg/L	11	100%	2022-12-01 to 2024-04-07	Nonparametric LCL around the Median	0.000050
Unit 1/2	MW-08	Part 115	Vanadium	mg/L	11	100%	2022-12-01 to 2024-04-07	Nonparametric LCL around the Median	0.00062
Unit 1/2	MW-08	Part 115	Zinc	mg/L	11	27%	2022-12-01 to 2024-04-07	Nonparametric LCL around the Median	0.0012
Unit 1/2	MW-10	Appendix III	Boron	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	11
Unit 1/2	MW-10	Appendix III	Calcium	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	210
Unit 1/2	MW-10	Appendix III	Chloride (as Cl)	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	160
Unit 1/2	MW-10	Appendix III	Fluoride	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	4.2
Unit 1/2	MW-10	Appendix III	pH (field)	su	11	0%	2022-11-29 to 2024-04-07	Normal LCL	7.61
Unit 1/2	MW-10	Appendix III	Sulfate (as SO4)	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	380
Unit 1/2	MW-10	Appendix III	Total Dissolved Solids	mg/L	11	0%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	1,700
Unit 1/2	MW-10	Appendix IV	Antimony	mg/L	11	64%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.00010
Unit 1/2	MW-10	Appendix IV	Arsenic	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	0.00040
Unit 1/2	MW-10	Appendix IV	Barium	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	0.23
Unit 1/2	MW-10	Appendix IV	Beryllium	mg/L	11	45%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median*	0.000052
Unit 1/2	MW-10	Appendix IV	Cadmium	mg/L	11	100%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.000032
Unit 1/2	MW-10	Appendix IV	Chromium, Total	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	0.0026
Unit 1/2	MW-10	Appendix IV	Cobalt	mg/L	11	9%	2022-11-29 to 2024-04-07	Normal MLE LCL	0.00025
Unit 1/2	MW-10	Appendix IV	Fluoride (App IV)	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	4.2
Unit 1/2	MW-10	Appendix IV	Lead	mg/L	11	82%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.00012
Unit 1/2	MW-10	Appendix IV	Lithium	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	0.77
Unit 1/2	MW-10	Appendix IV	Mercury	mg/L	11	91%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.00016
Unit 1/2	MW-10	Appendix IV	Molybdenum	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	0.0024
Unit 1/2	MW-10	Appendix IV	Radium 226 and 228	pCi/L	11	82%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.65
Unit 1/2	MW-10	Appendix IV	Selenium	mg/L	11	9%	2022-11-29 to 2024-04-07	Gamma MLE Bootstrap LCL	0.00031
Unit 1/2	MW-10	Appendix IV	Thallium	mg/L	11	100%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.000075
Unit 1/2	MW-10	Part 115	Copper	mg/L	11	73%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.00020
Unit 1/2	MW-10	Part 115	Iron	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	3.8
Unit 1/2	MW-10	Part 115	Nickel	mg/L	11	45%	2022-11-29 to 2024-04-07	Gamma MLE Bootstrap LCL	0.00053
Unit 1/2	MW-10	Part 115	Silver	mg/L	11	100%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.000050
Unit 1/2	MW-10	Part 115	Vanadium	mg/L	11	91%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.00062
Unit 1/2	MW-10	Part 115	Zinc	mg/L	11	36%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.0012
Unit 1/2	MW-18	Appendix III	Boron	mg/L	11	0%	2022-11-30 to 2024-04-10	Normal LCL	2.2
Unit 1/2	MW-18	Appendix III	Calcium	mg/L	11	0%	2022-11-30 to 2024-04-10	Normal LCL	310
Unit 1/2	MW-18	Appendix III	Chloride (as Cl)	mg/L	11	0%	2022-11-30 to 2024-04-10	Normal LCL	20
Unit 1/2	MW-18	Appendix III	Fluoride	mg/L	11	0%	2022-11-30 to 2024-04-10	Normal LCL	3.4
Unit 1/2	MW-18	Appendix III	pH (field)	su	11	0%	2022-11-30 to 2024-04-10	Normal LCL	7.12
Unit 1/2	MW-18	Appendix III	Sulfate (as SO4)	mg/L	11	0%	2022-11-30 to 2024-04-10	Normal LCL	670
Unit 1/2	MW-18	Appendix III	Total Dissolved Solids	mg/L	11	0%	2022-11-30 to 2024-04-10	Normal LCL	1,300
Unit 1/2	MW-18	Appendix IV	Antimony	mg/L	11	27%	2022-11-30 to 2024-04-10	Nonparametric LCL around the Median	0.00012
Unit 1/2	MW-18	Appendix IV	Arsenic	mg/L	11	0%	2022-11-30 to 2024-04-10	Normal LCL	0.022
Unit 1/2	MW-18	Appendix IV	Barium	mg/L	11	0%	2022-11-30 to 2024-04-10	Normal LCL	0.016
Unit 1/2	MW-18	Appendix IV	Beryllium	mg/L	11	91%	2022-11-30 to 2024-04-10	Nonparametric LCL around the Median	0.000052
Unit 1/2	MW-18	Appendix IV	Cadmium	mg/L	11	36%	2022-11-30 to 2024-04-10	Normal MLE LCL	0.000071
Unit 1/2	MW-18	Appendix IV	Chromium, Total	mg/L	11	91%	2022-11-30 to 2024-04-10	Nonparametric LCL around the Median	0.00018
Unit 1/2	MW-18	Appendix IV	Cobalt	mg/L	11	0%	2022-11-30 to 2024-04-10	Adjusted Gamma LCL	0.0024
Unit 1/2	MW-18	Appendix IV	Fluoride (App IV)	mg/L	11	0%	2022-11-30 to 2024-04-10	Normal LCL	3.4
Unit 1/2	MW-18	Appendix IV	Lead	mg/L	11	73%	2022-11-30 to 2024-04-10	Nonparametric LCL around the Median	0.00016
Unit 1/2	MW-18	Appendix IV	Lithium	mg/L	11	0%	2022-11-30 to 2024-04-10	Normal LCL	0.029
Unit 1/2	MW-18	Appendix IV	Mercury	mg/L	11	100%	2022-11-30 to 2024-04-10	Nonparametric LCL around the Median	0.00016
Unit 1/2	MW-18	Appendix IV	Molybdenum	mg/L	11	0%	2022-11-30 to 2024-04-10	Normal LCL	0.012
Unit 1/2	MW-18	Appendix IV	Radium 226 and 228	pCi/L	11	64%	2022-11-30 to 2024-04-10	Nonparametric LCL around the Median	0.50
Unit 1/2	MW-18	Appendix IV	Selenium	mg/L	11	0%	2022-11-30 to 2024-04-10	Normal LCL	0.00035
Unit 1/2	MW-18	Appendix IV	Thallium	mg/L	11	100%	2022-11-30 to 2024-04-10	Nonparametric LCL around the Median	0.000075
Unit 1/2	MW-18	Part 115	Copper	mg/L	11	0%	2022-11-30 to 2024-04-10	Lognormal H-LCL	0.00048
Unit 1/2	MW-18	Part 115	Iron	mg/L	11	0%	2022-11-30 to 2024-04-10	Normal LCL	5.7
Unit 1/2	MW-18	Part 115	Nickel	mg/L	11	0%	2022-11-30 to 2024-04-10	Adjusted Gamma LCL	0.0057
Unit 1/2	MW-18	Part 115	Silver	mg/L	11	100%	2022-11-30 to 2024-04-10	Nonparametric LCL around the Median	0.000050
Unit 1/2	MW-18	Part 115	Vanadium	mg/L	11	100%	2022-11-30 to 2024-04-10	Nonparametric LCL around the Median	0.00062
Unit 1/2	MW-18	Part 115	Zinc	mg/L	11	0%	2022-11-30 to 2024-04-10	Normal LCL	0.044
Unit 1/2	MW-19	Appendix III	Boron	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	1.8
Unit 1/2	MW-19	Appendix III	Calcium	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	450
Unit 1/2	MW-19	Appendix III	Chloride (as Cl)	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	39
Unit 1/2	MW-19	Appendix III	Fluoride	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	1.8
Unit 1/2	MW-19	Appendix III	pH (field)	su	11	0%	2022-11-30 to 2024-04-08	Normal LCL	6.76
Unit 1/2	MW-19	Appendix III	Sulfate (as SO4)	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	910
Unit 1/2	MW-19	Appendix III	Total Dissolved Solids	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	1,800
Unit 1/2	MW-19	Appendix IV	Antimony	mg/L	11	91%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.000050
Unit 1/2	MW-19	Appendix IV	Arsenic	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	0.0042

Unit 1/2	MW-19	Appendix IV	Barium	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	0.037
Unit 1/2	MW-19	Appendix IV	Beryllium	mg/L	11	27%	2022-11-30 to 2024-04-08	Normal MLE LCL	0.000057
Unit 1/2	MW-19	Appendix IV	Cadmium	mg/L	11	100%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.000032
Unit 1/2	MW-19	Appendix IV	Chromium, Total	mg/L	11	45%	2022-11-30 to 2024-04-08	Normal MLE LCL	0.00012
Unit 1/2	MW-19	Appendix IV	Cobalt	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	0.00039
Unit 1/2	MW-19	Appendix IV	Fluoride (App IV)	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	1.8
Unit 1/2	MW-19	Appendix IV	Lead	mg/L	11	100%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.00010
Unit 1/2	MW-19	Appendix IV	Lithium	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	0.086
Unit 1/2	MW-19	Appendix IV	Mercury	mg/L	11	100%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.00016
Unit 1/2	MW-19	Appendix IV	Molybdenum	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	0.0082
Unit 1/2	MW-19	Appendix IV	Radium 226 and 228	pCi/L	11	27%	2022-11-30 to 2024-04-08	Normal MLE LCL	0.58
Unit 1/2	MW-19	Appendix IV	Selenium	mg/L	11	91%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.00010
Unit 1/2	MW-19	Appendix IV	Thallium	mg/L	11	100%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.000075
Unit 1/2	MW-19	Part 115	Copper	mg/L	11	91%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.00020
Unit 1/2	MW-19	Part 115	Iron	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	14
Unit 1/2	MW-19	Part 115	Nickel	mg/L	11	9%	2022-11-30 to 2024-04-08	Normal MLE LCL	0.0015
Unit 1/2	MW-19	Part 115	Silver	mg/L	11	100%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.000050
Unit 1/2	MW-19	Part 115	Vanadium	mg/L	11	100%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.00062
Unit 1/2	MW-19	Part 115	Zinc	mg/L	11	82%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.0012
Unit 1/2	MW-20	Appendix III	Boron	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	0.84
Unit 1/2	MW-20	Appendix III	Calcium	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	110
Unit 1/2	MW-20	Appendix III	Chloride (as Cl)	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	62
Unit 1/2	MW-20	Appendix III	Fluoride	mg/L	11	0%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.22
Unit 1/2	MW-20	Appendix III	pH (field)	su	11	0%	2022-11-30 to 2024-04-08	Normal LCL	7.28
Unit 1/2	MW-20	Appendix III	Sulfate (as SO4)	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	49
Unit 1/2	MW-20	Appendix III	Total Dissolved Solids	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	650
Unit 1/2	MW-20	Appendix IV	Antimony	mg/L	11	36%	2022-11-30 to 2024-04-08	Normal MLE LCL	0.000060
Unit 1/2	MW-20	Appendix IV	Arsenic	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	0.0013
Unit 1/2	MW-20	Appendix IV	Barium	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	0.40
Unit 1/2	MW-20	Appendix IV	Beryllium	mg/L	11	91%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.000052
Unit 1/2	MW-20	Appendix IV	Cadmium	mg/L	11	100%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.000032
Unit 1/2	MW-20	Appendix IV	Chromium, Total	mg/L	11	45%	2022-11-30 to 2024-04-08	Normal MLE LCL	0.00016
Unit 1/2	MW-20	Appendix IV	Cobalt	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	0.0012
Unit 1/2	MW-20	Appendix IV	Fluoride (App IV)	mg/L	11	0%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.22
Unit 1/2	MW-20	Appendix IV	Lead	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	0.0017
Unit 1/2	MW-20	Appendix IV	Lithium	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	0.053
Unit 1/2	MW-20	Appendix IV	Mercury	mg/L	11	100%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.00016
Unit 1/2	MW-20	Appendix IV	Molybdenum	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	0.0039
Unit 1/2	MW-20	Appendix IV	Radium 226 and 228	pCi/L	11	55%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.54
Unit 1/2	MW-20	Appendix IV	Selenium	mg/L	11	45%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.00011
Unit 1/2	MW-20	Appendix IV	Thallium	mg/L	11	91%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.000075
Unit 1/2	MW-20	Part 115	Copper	mg/L	11	9%	2022-11-30 to 2024-04-08	Normal MLE LCL	0.00025
Unit 1/2	MW-20	Part 115	Iron	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	18
Unit 1/2	MW-20	Part 115	Nickel	mg/L	11	0%	2022-11-30 to 2024-04-08	Normal LCL	0.0078
Unit 1/2	MW-20	Part 115	Silver	mg/L	11	100%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.000050
Unit 1/2	MW-20	Part 115	Vanadium	mg/L	11	100%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.00062
Unit 1/2	MW-20	Part 115	Zinc	mg/L	11	0%	2022-11-30 to 2024-04-08	Nonparametric LCL around the Median	0.024
Unit 1/2	MW-30	Appendix III	Boron	mg/L	11	0%	2022-11-30 to 2024-04-07	Adjusted Gamma LCL	1.8
Unit 1/2	MW-30	Appendix III	Calcium	mg/L	11	0%	2022-11-30 to 2024-04-07	Nonparametric LCL around the Median	430
Unit 1/2	MW-30	Appendix III	Chloride (as Cl)	mg/L	11	0%	2022-11-30 to 2024-04-07	Normal LCL	110
Unit 1/2	MW-30	Appendix III	Fluoride	mg/L	11	0%	2022-11-30 to 2024-04-07	Normal LCL	1.0
Unit 1/2	MW-30	Appendix III	pH (field)	su	11	0%	2022-11-30 to 2024-04-07	Nonparametric LCL around the Median	7.05
Unit 1/2	MW-30	Appendix III	Sulfate (as SO4)	mg/L	11	0%	2022-11-30 to 2024-04-07	Normal LCL	810
Unit 1/2	MW-30	Appendix III	Total Dissolved Solids	mg/L	11	0%	2022-11-30 to 2024-04-07	Normal LCL	2,100
Unit 1/2	MW-30	Appendix IV	Antimony	mg/L	11	91%	2022-11-30 to 2024-04-07	Nonparametric LCL around the Median	0.000050
Unit 1/2	MW-30	Appendix IV	Arsenic	mg/L	11	18%	2022-11-30 to 2024-04-07	Normal MLE LCL	0.00024
Unit 1/2	MW-30	Appendix IV	Barium	mg/L	11	0%	2022-11-30 to 2024-04-07	Normal LCL	0.055
Unit 1/2	MW-30	Appendix IV	Beryllium	mg/L	11	82%	2022-11-30 to 2024-04-07	Nonparametric LCL around the Median	0.000052
Unit 1/2	MW-30	Appendix IV	Cadmium	mg/L	11	100%	2022-11-30 to 2024-04-07	Nonparametric LCL around the Median	0.000032
Unit 1/2	MW-30	Appendix IV	Chromium, Total	mg/L	11	0%	2022-11-30 to 2024-04-07	Normal LCL	0.0074
Unit 1/2	MW-30	Appendix IV	Cobalt	mg/L	11	0%	2022-11-30 to 2024-04-07	Adjusted Gamma LCL	0.0010
Unit 1/2	MW-30	Appendix IV	Fluoride (App IV)	mg/L	11	0%	2022-11-30 to 2024-04-07	Normal LCL	1.0
Unit 1/2	MW-30	Appendix IV	Lead	mg/L	11	100%	2022-11-30 to 2024-04-07	Nonparametric LCL around the Median	0.00022
Unit 1/2	MW-30	Appendix IV	Lithium	mg/L	11	0%	2022-11-30 to 2024-04-07	Adjusted Gamma LCL	0.11
Unit 1/2	MW-30	Appendix IV	Mercury	mg/L	11	91%	2022-11-30 to 2024-04-07	Nonparametric LCL around the Median	0.00016
Unit 1/2	MW-30	Appendix IV	Molybdenum	mg/L	11	27%	2022-11-30 to 2024-04-07	Normal MLE LCL	0.00049
Unit 1/2	MW-30	Appendix IV	Radium 226 and 228	pCi/L	11	55%	2022-11-30 to 2024-04-07	Nonparametric LCL around the Median	0.56
Unit 1/2	MW-30	Appendix IV	Selenium	mg/L	11	55%	2022-11-30 to 2024-04-07	Nonparametric LCL around the Median	0.00011
Unit 1/2	MW-30	Appendix IV	Thallium	mg/L	11	100%	2022-11-30 to 2024-04-07	Nonparametric LCL around the Median	0.000075
Unit 1/2	MW-30	Part 115	Copper	mg/L	11	64%	2022-11-30 to 2024-04-07	Nonparametric LCL around the Median	0.00020
Unit 1/2	MW-30	Part 115	Iron	mg/L	11	0%	2022-11-30 to 2024-04-07	Normal LCL	1.9
Unit 1/2	MW-30	Part 115	Nickel	mg/L	11	18%	2022-11-30 to 2024-04-07	Normal MLE LCL	0.0010
Unit 1/2	MW-30	Part 115	Silver	mg/L	11	100%	2022-11-30 to 2024-04-07	Nonparametric LCL around the Median	0.000050
Unit 1/2	MW-30	Part 115	Vanadium	mg/L	11	100%	2022-11-30 to 2024-04-07	Nonparametric LCL around the Median	0.00062
Unit 1/2	MW-30	Part 115	Zinc	mg/L	11	82%	2022-11-30 to 2024-04-07	Nonparametric LCL around the Median	0.0012
Unit 1/2	MW-31	Appendix III	Boron	mg/L	11	0%	2022-12-01 to 2024-04-08	Normal LCL	4.2
Unit 1/2	MW-31	Appendix III	Calcium	mg/L	11	0%	2022-12-01 to 2024-04-08	Normal LCL	160

Unit 1/2	MW-31	Appendix III	Chloride (as Cl)	mg/L	11	0%	2022-12-01 to 2024-04-08	Normal LCL	96
Unit 1/2	MW-31	Appendix III	Fluoride	mg/L	11	0%	2022-12-01 to 2024-04-08	Normal LCL	4.7
Unit 1/2	MW-31	Appendix III	pH (field)	su	11	0%	2022-12-01 to 2024-04-08	Normal LCL	7.77
Unit 1/2	MW-31	Appendix III	Sulfate (as SO4)	mg/L	11	0%	2022-12-01 to 2024-04-08	Normal LCL	140
Unit 1/2	MW-31	Appendix III	Total Dissolved Solids	mg/L	11	0%	2022-12-01 to 2024-04-08	Normal LCL	780
Unit 1/2	MW-31	Appendix IV	Antimony	mg/L	11	55%	2022-12-01 to 2024-04-08	Nonparametric LCL around the Median	0.000080
Unit 1/2	MW-31	Appendix IV	Arsenic	mg/L	11	0%	2022-12-01 to 2024-04-08	Normal LCL	0.0012
Unit 1/2	MW-31	Appendix IV	Barium	mg/L	11	0%	2022-12-01 to 2024-04-08	Normal LCL	0.14
Unit 1/2	MW-31	Appendix IV	Beryllium	mg/L	11	91%	2022-12-01 to 2024-04-08	Nonparametric LCL around the Median	0.000052
Unit 1/2	MW-31	Appendix IV	Cadmium	mg/L	11	91%	2022-12-01 to 2024-04-08	Nonparametric LCL around the Median	0.000032
Unit 1/2	MW-31	Appendix IV	Chromium, Total	mg/L	11	0%	2022-12-01 to 2024-04-08	Normal LCL	0.0020
Unit 1/2	MW-31	Appendix IV	Cobalt	mg/L	11	9%	2022-12-01 to 2024-04-08	Normal MLE LCL	0.00015
Unit 1/2	MW-31	Appendix IV	Fluoride (App IV)	mg/L	11	0%	2022-12-01 to 2024-04-08	Normal LCL	4.7
Unit 1/2	MW-31	Appendix IV	Lead	mg/L	11	91%	2022-12-01 to 2024-04-08	Nonparametric LCL around the Median	0.00010
Unit 1/2	MW-31	Appendix IV	Lithium	mg/L	11	0%	2022-12-01 to 2024-04-08	Normal LCL	0.046
Unit 1/2	MW-31	Appendix IV	Mercury	mg/L	11	100%	2022-12-01 to 2024-04-08	Nonparametric LCL around the Median	0.00016
Unit 1/2	MW-31	Appendix IV	Molybdenum	mg/L	11	0%	2022-12-01 to 2024-04-08	Normal LCL	0.0010
Unit 1/2	MW-31	Appendix IV	Radium 226 and 228	pCi/L	11	27%	2022-12-01 to 2024-04-08	Normal MLE LCL	0.48
Unit 1/2	MW-31	Appendix IV	Selenium	mg/L	11	45%	2022-12-01 to 2024-04-08	Nonparametric LCL around the Median	0.00013
Unit 1/2	MW-31	Appendix IV	Thallium	mg/L	11	91%	2022-12-01 to 2024-04-08	Nonparametric LCL around the Median	0.000075
Unit 1/2	MW-31	Part 115	Copper	mg/L	11	73%	2022-12-01 to 2024-04-08	Nonparametric LCL around the Median	0.00020
Unit 1/2	MW-31	Part 115	Iron	mg/L	11	0%	2022-12-01 to 2024-04-08	Adjusted Gamma LCL	0.55
Unit 1/2	MW-31	Part 115	Nickel	mg/L	11	91%	2022-12-01 to 2024-04-08	Nonparametric LCL around the Median	0.00065
Unit 1/2	MW-31	Part 115	Silver	mg/L	11	100%	2022-12-01 to 2024-04-08	Nonparametric LCL around the Median	0.000050
Unit 1/2	MW-31	Part 115	Vanadium	mg/L	11	100%	2022-12-01 to 2024-04-08	Nonparametric LCL around the Median	0.00062
Unit 1/2	MW-31	Part 115	Zinc	mg/L	11	73%	2022-12-01 to 2024-04-08	Nonparametric LCL around the Median	0.0012
Unit 1/2	MW-32	Appendix III	Boron	mg/L	11	0%	2022-11-30 to 2024-04-07	Adjusted Gamma LCL	3.0
Unit 1/2	MW-32	Appendix III	Calcium	mg/L	11	0%	2022-11-30 to 2024-04-07	Normal LCL	170
Unit 1/2	MW-32	Appendix III	Chloride (as Cl)	mg/L	11	0%	2022-11-30 to 2024-04-07	Normal LCL	42
Unit 1/2	MW-32	Appendix III	Fluoride	mg/L	11	0%	2022-11-30 to 2024-04-07	Normal LCL	1.5
Unit 1/2	MW-32	Appendix III	pH (field)	su	11	0%	2022-11-30 to 2024-04-07	Normal LCL	7.56
Unit 1/2	MW-32	Appendix III	Sulfate (as SO4)	mg/L	11	0%	2022-11-30 to 2024-04-07	Normal LCL	64
Unit 1/2	MW-32	Appendix III	Total Dissolved Solids	mg/L	11	0%	2022-11-30 to 2024-04-07	Normal LCL	670
Unit 1/2	MW-32	Appendix IV	Antimony	mg/L	11	64%	2022-11-30 to 2024-04-07	Nonparametric LCL around the Median	0.000067
Unit 1/2	MW-32	Appendix IV	Arsenic	mg/L	11	0%	2022-11-30 to 2024-04-07	Nonparametric LCL around the Median	0.00046
Unit 1/2	MW-32	Appendix IV	Barium	mg/L	11	0%	2022-11-30 to 2024-04-07	Normal LCL	0.35
Unit 1/2	MW-32	Appendix IV	Beryllium	mg/L	11	91%	2022-11-30 to 2024-04-07	Nonparametric LCL around the Median	0.000052
Unit 1/2	MW-32	Appendix IV	Cadmium	mg/L	11	91%	2022-11-30 to 2024-04-07	Nonparametric LCL around the Median	0.000032
Unit 1/2	MW-32	Appendix IV	Chromium, Total	mg/L	11	0%	2022-11-30 to 2024-04-07	Lognormal H-LCL	0.00044
Unit 1/2	MW-32	Appendix IV	Cobalt	mg/L	11	0%	2022-11-30 to 2024-04-07	Nonparametric LCL around the Median	0.00034
Unit 1/2	MW-32	Appendix IV	Fluoride (App IV)	mg/L	11	0%	2022-11-30 to 2024-04-07	Normal LCL	1.5
Unit 1/2	MW-32	Appendix IV	Lead	mg/L	11	73%	2022-11-30 to 2024-04-07	Nonparametric LCL around the Median	0.00010
Unit 1/2	MW-32	Appendix IV	Lithium	mg/L	11	0%	2022-11-30 to 2024-04-07	Normal LCL	0.11
Unit 1/2	MW-32	Appendix IV	Mercury	mg/L	11	91%	2022-11-30 to 2024-04-07	Nonparametric LCL around the Median	0.00016
Unit 1/2	MW-32	Appendix IV	Molybdenum	mg/L	11	0%	2022-11-30 to 2024-04-07	Normal LCL	0.0038
Unit 1/2	MW-32	Appendix IV	Radium 226 and 228	pCi/L	11	64%	2022-11-30 to 2024-04-07	Nonparametric LCL around the Median	0.55
Unit 1/2	MW-32	Appendix IV	Selenium	mg/L	11	82%	2022-11-30 to 2024-04-07	Nonparametric LCL around the Median	0.00010
Unit 1/2	MW-32	Appendix IV	Thallium	mg/L	11	100%	2022-11-30 to 2024-04-07	Nonparametric LCL around the Median	0.000075
Unit 1/2	MW-32	Part 115	Copper	mg/L	11	73%	2022-11-30 to 2024-04-07	Nonparametric LCL around the Median	0.00020
Unit 1/2	MW-32	Part 115	Iron	mg/L	11	0%	2022-11-30 to 2024-04-07	Normal LCL	15
Unit 1/2	MW-32	Part 115	Nickel	mg/L	11	0%	2022-11-30 to 2024-04-07	Nonparametric LCL around the Median	0.00088
Unit 1/2	MW-32	Part 115	Silver	mg/L	11	100%	2022-11-30 to 2024-04-07	Nonparametric LCL around the Median	0.000050
Unit 1/2	MW-32	Part 115	Vanadium	mg/L	11	100%	2022-11-30 to 2024-04-07	Nonparametric LCL around the Median	0.00062
Unit 1/2	MW-32	Part 115	Zinc	mg/L	11	0%	2022-11-30 to 2024-04-07	Nonparametric LCL around the Median	0.0025
Unit 3A/B	MW-01R	Appendix III	Boron	mg/L	11	0%	2022-11-29 to 2024-04-10	Normal LCL	78
Unit 3A/B	MW-01R	Appendix III	Calcium	mg/L	11	0%	2022-11-29 to 2024-04-10	Normal LCL	210
Unit 3A/B	MW-01R	Appendix III	Chloride (as Cl)	mg/L	11	0%	2022-11-29 to 2024-04-10	Normal LCL	100
Unit 3A/B	MW-01R	Appendix III	Fluoride	mg/L	11	0%	2022-11-29 to 2024-04-10	Normal LCL	8.9
Unit 3A/B	MW-01R	Appendix III	pH (field)	su	11	0%	2022-11-29 to 2024-04-10	Nonparametric LCL around the Median	7.58
Unit 3A/B	MW-01R	Appendix III	Sulfate (as SO4)	mg/L	11	0%	2022-11-29 to 2024-04-10	Adjusted Gamma LCL	310
Unit 3A/B	MW-01R	Appendix III	Total Dissolved Solids	mg/L	11	0%	2022-11-29 to 2024-04-10	Normal LCL	2,300
Unit 3A/B	MW-01R	Appendix IV	Antimony	mg/L	11	27%	2022-11-29 to 2024-04-10	Gamma MLE Bootstrap LCL	0.00024
Unit 3A/B	MW-01R	Appendix IV	Arsenic	mg/L	11	0%	2022-11-29 to 2024-04-10	Normal LCL	0.0011
Unit 3A/B	MW-01R	Appendix IV	Barium	mg/L	11	0%	2022-11-29 to 2024-04-10	Adjusted Gamma LCL	0.26
Unit 3A/B	MW-01R	Appendix IV	Beryllium	mg/L	11	9%	2022-11-29 to 2024-04-10	Normal MLE LCL	0.00016
Unit 3A/B	MW-01R	Appendix IV	Cadmium	mg/L	11	73%	2022-11-29 to 2024-04-10	Nonparametric LCL around the Median	0.000075
Unit 3A/B	MW-01R	Appendix IV	Chromium, Total	mg/L	11	0%	2022-11-29 to 2024-04-10	Lognormal H-LCL	0.0023
Unit 3A/B	MW-01R	Appendix IV	Cobalt	mg/L	11	0%	2022-11-29 to 2024-04-10	Adjusted Gamma LCL	0.0013
Unit 3A/B	MW-01R	Appendix IV	Fluoride (App IV)	mg/L	11	0%	2022-11-29 to 2024-04-10	Normal LCL	8.9
Unit 3A/B	MW-01R	Appendix IV	Lead	mg/L	11	18%	2022-11-29 to 2024-04-10	Gamma MLE Bootstrap LCL	0.00072
Unit 3A/B	MW-01R	Appendix IV	Lithium	mg/L	11	0%	2022-11-29 to 2024-04-10	Normal LCL	1.7
Unit 3A/B	MW-01R	Appendix IV	Mercury	mg/L	11	100%	2022-11-29 to 2024-04-10	Nonparametric LCL around the Median	0.00016
Unit 3A/B	MW-01R	Appendix IV	Molybdenum	mg/L	11	9%	2022-11-29 to 2024-04-10	Gamma MLE Bootstrap LCL	0.00079
Unit 3A/B	MW-01R	Appendix IV	Radium 226 and 228	pCi/L	11	55%	2022-11-29 to 2024-04-10	Nonparametric LCL around the Median	0.67
Unit 3A/B	MW-01R	Appendix IV	Selenium	mg/L	11	0%	2022-11-29 to 2024-04-10	Adjusted Gamma LCL	0.00056
Unit 3A/B	MW-01R	Appendix IV	Thallium	mg/L	11	100%	2022-11-29 to 2024-04-10	Nonparametric LCL around the Median	0.000075
Unit 3A/B	MW-01R	Part 115	Copper	mg/L	11	45%	2022-11-29 to 2024-04-10	Nonparametric LCL around the Median*	0.00020

Unit 3A/B	MW-01R	Part 115	Iron	mg/L	11	0%	2022-11-29 to 2024-04-10	Normal LCL	0.47
Unit 3A/B	MW-01R	Part 115	Nickel	mg/L	11	0%	2022-11-29 to 2024-04-10	Nonparametric LCL around the Median	0.0015
Unit 3A/B	MW-01R	Part 115	Silver	mg/L	11	100%	2022-11-29 to 2024-04-10	Nonparametric LCL around the Median	0.000050
Unit 3A/B	MW-01R	Part 115	Vanadium	mg/L	11	18%	2022-11-29 to 2024-04-10	Normal MLE LCL	0.00071
Unit 3A/B	MW-01R	Part 115	Zinc	mg/L	11	18%	2022-11-29 to 2024-04-10	Nonparametric LCL around the Median	0.0012
Unit 3A/B	MW-02	Appendix III	Boron	mg/L	11	0%	2022-11-28 to 2024-04-10	Normal LCL	91
Unit 3A/B	MW-02	Appendix III	Calcium	mg/L	11	0%	2022-11-28 to 2024-04-10	Normal LCL	200
Unit 3A/B	MW-02	Appendix III	Chloride (as Cl)	mg/L	11	0%	2022-11-28 to 2024-04-10	Nonparametric LCL around the Median	140
Unit 3A/B	MW-02	Appendix III	Fluoride	mg/L	11	0%	2022-11-28 to 2024-04-10	Nonparametric LCL around the Median	9.2
Unit 3A/B	MW-02	Appendix III	pH (field)	su	11	0%	2022-11-28 to 2024-04-10	Normal LCL	7.17
Unit 3A/B	MW-02	Appendix III	Sulfate (as SO4)	mg/L	11	64%	2022-11-28 to 2024-04-10	Nonparametric LCL around the Median	0.41
Unit 3A/B	MW-02	Appendix III	Total Dissolved Solids	mg/L	11	0%	2022-11-28 to 2024-04-10	Normal LCL	1,700
Unit 3A/B	MW-02	Appendix IV	Antimony	mg/L	11	27%	2022-11-28 to 2024-04-10	Gamma MLE Bootstrap LCL	0.00017
Unit 3A/B	MW-02	Appendix IV	Arsenic	mg/L	11	0%	2022-11-28 to 2024-04-10	Nonparametric LCL around the Median	0.0075
Unit 3A/B	MW-02	Appendix IV	Barium	mg/L	11	0%	2022-11-28 to 2024-04-10	Normal LCL	0.45
Unit 3A/B	MW-02	Appendix IV	Beryllium	mg/L	11	9%	2022-11-28 to 2024-04-10	Normal MLE LCL	0.00020
Unit 3A/B	MW-02	Appendix IV	Cadmium	mg/L	11	73%	2022-11-28 to 2024-04-10	Nonparametric LCL around the Median	0.000046
Unit 3A/B	MW-02	Appendix IV	Chromium, Total	mg/L	11	0%	2022-11-28 to 2024-04-10	Adjusted Gamma LCL	0.024
Unit 3A/B	MW-02	Appendix IV	Cobalt	mg/L	11	0%	2022-11-28 to 2024-04-10	Normal LCL	0.0041
Unit 3A/B	MW-02	Appendix IV	Fluoride (App IV)	mg/L	11	0%	2022-11-28 to 2024-04-10	Nonparametric LCL around the Median	9.2
Unit 3A/B	MW-02	Appendix IV	Lead	mg/L	11	9%	2022-11-28 to 2024-04-10	Normal MLE LCL	0.0016
Unit 3A/B	MW-02	Appendix IV	Lithium	mg/L	11	0%	2022-11-28 to 2024-04-10	Normal LCL	1.2
Unit 3A/B	MW-02	Appendix IV	Mercury	mg/L	11	100%	2022-11-28 to 2024-04-10	Nonparametric LCL around the Median	0.00016
Unit 3A/B	MW-02	Appendix IV	Molybdenum	mg/L	11	0%	2022-11-28 to 2024-04-10	Adjusted Gamma LCL	0.0055
Unit 3A/B	MW-02	Appendix IV	Radium 226 and 228	pCi/L	11	27%	2022-11-28 to 2024-04-10	Normal MLE LCL	0.90
Unit 3A/B	MW-02	Appendix IV	Selenium	mg/L	11	0%	2022-11-28 to 2024-04-10	Normal LCL	0.00091
Unit 3A/B	MW-02	Appendix IV	Thallium	mg/L	11	91%	2022-11-28 to 2024-04-10	Nonparametric LCL around the Median	0.000075
Unit 3A/B	MW-02	Part 115	Copper	mg/L	11	0%	2022-11-28 to 2024-04-10	Normal LCL	0.0013
Unit 3A/B	MW-02	Part 115	Iron	mg/L	11	0%	2022-11-28 to 2024-04-10	Normal LCL	22
Unit 3A/B	MW-02	Part 115	Nickel	mg/L	11	0%	2022-11-28 to 2024-04-10	Normal LCL	0.016
Unit 3A/B	MW-02	Part 115	Silver	mg/L	11	100%	2022-11-28 to 2024-04-10	Nonparametric LCL around the Median	0.000050
Unit 3A/B	MW-02	Part 115	Vanadium	mg/L	11	9%	2022-11-28 to 2024-04-10	Normal MLE LCL	0.0023
Unit 3A/B	MW-02	Part 115	Zinc	mg/L	11	0%	2022-11-28 to 2024-04-10	Nonparametric LCL around the Median	0.0022
Unit 3A/B	MW-03	Appendix III	Boron	mg/L	11	0%	2022-11-28 to 2024-04-07	Normal LCL	3.9
Unit 3A/B	MW-03	Appendix III	Calcium	mg/L	11	0%	2022-11-28 to 2024-04-07	Normal LCL	350
Unit 3A/B	MW-03	Appendix III	Chloride (as Cl)	mg/L	11	0%	2022-11-28 to 2024-04-07	Normal LCL	150
Unit 3A/B	MW-03	Appendix III	Fluoride	mg/L	11	0%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.54
Unit 3A/B	MW-03	Appendix III	pH (field)	su	11	0%	2022-11-28 to 2024-04-07	Normal LCL	7.31
Unit 3A/B	MW-03	Appendix III	Sulfate (as SO4)	mg/L	11	0%	2022-11-28 to 2024-04-07	Normal LCL	320
Unit 3A/B	MW-03	Appendix III	Total Dissolved Solids	mg/L	11	0%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	2,000
Unit 3A/B	MW-03	Appendix IV	Antimony	mg/L	11	55%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.00010
Unit 3A/B	MW-03	Appendix IV	Arsenic	mg/L	11	0%	2022-11-28 to 2024-04-07	Normal LCL	0.00079
Unit 3A/B	MW-03	Appendix IV	Barium	mg/L	11	0%	2022-11-28 to 2024-04-07	Normal LCL	0.32
Unit 3A/B	MW-03	Appendix IV	Beryllium	mg/L	11	64%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.000052
Unit 3A/B	MW-03	Appendix IV	Cadmium	mg/L	11	91%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.000032
Unit 3A/B	MW-03	Appendix IV	Chromium, Total	mg/L	11	0%	2022-11-28 to 2024-04-07	Normal LCL	0.0041
Unit 3A/B	MW-03	Appendix IV	Cobalt	mg/L	11	0%	2022-11-28 to 2024-04-07	Normal LCL	0.00065
Unit 3A/B	MW-03	Appendix IV	Fluoride (App IV)	mg/L	11	0%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.54
Unit 3A/B	MW-03	Appendix IV	Lead	mg/L	11	91%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.00022
Unit 3A/B	MW-03	Appendix IV	Lithium	mg/L	11	0%	2022-11-28 to 2024-04-07	Normal LCL	0.036
Unit 3A/B	MW-03	Appendix IV	Mercury	mg/L	11	91%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.00016
Unit 3A/B	MW-03	Appendix IV	Molybdenum	mg/L	11	73%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.00025
Unit 3A/B	MW-03	Appendix IV	Radium 226 and 228	pCi/L	11	9%	2022-11-28 to 2024-04-07	Normal MLE LCL	0.96
Unit 3A/B	MW-03	Appendix IV	Selenium	mg/L	11	27%	2022-11-28 to 2024-04-07	Normal MLE LCL	0.00026
Unit 3A/B	MW-03	Appendix IV	Thallium	mg/L	11	91%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.000075
Unit 3A/B	MW-03	Part 115	Copper	mg/L	11	45%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.00020
Unit 3A/B	MW-03	Part 115	Iron	mg/L	11	0%	2022-11-28 to 2024-04-07	Adjusted Gamma LCL	1.1
Unit 3A/B	MW-03	Part 115	Nickel	mg/L	11	9%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.00094
Unit 3A/B	MW-03	Part 115	Silver	mg/L	11	100%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.000050
Unit 3A/B	MW-03	Part 115	Vanadium	mg/L	11	82%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.00062
Unit 3A/B	MW-03	Part 115	Zinc	mg/L	11	55%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.0012
Unit 3A/B	MW-04	Appendix III	Boron	mg/L	11	0%	2022-11-28 to 2024-04-07	Normal LCL	3.9
Unit 3A/B	MW-04	Appendix III	Calcium	mg/L	11	0%	2022-11-28 to 2024-04-07	Normal LCL	350
Unit 3A/B	MW-04	Appendix III	Chloride (as Cl)	mg/L	11	0%	2022-11-28 to 2024-04-07	Normal LCL	160
Unit 3A/B	MW-04	Appendix III	Fluoride	mg/L	11	0%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	1.2
Unit 3A/B	MW-04	Appendix III	pH (field)	su	11	0%	2022-11-28 to 2024-04-07	Normal LCL	7.33
Unit 3A/B	MW-04	Appendix III	Sulfate (as SO4)	mg/L	11	0%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	530
Unit 3A/B	MW-04	Appendix III	Total Dissolved Solids	mg/L	11	0%	2022-11-28 to 2024-04-07	Normal LCL	1,800
Unit 3A/B	MW-04	Appendix IV	Antimony	mg/L	11	73%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.000071
Unit 3A/B	MW-04	Appendix IV	Arsenic	mg/L	11	0%	2022-11-28 to 2024-04-07	Normal LCL	0.00076
Unit 3A/B	MW-04	Appendix IV	Barium	mg/L	11	0%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.11
Unit 3A/B	MW-04	Appendix IV	Beryllium	mg/L	11	100%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.000052
Unit 3A/B	MW-04	Appendix IV	Cadmium	mg/L	11	100%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.000032
Unit 3A/B	MW-04	Appendix IV	Chromium, Total	mg/L	11	0%	2022-11-28 to 2024-04-07	Normal LCL	0.0032
Unit 3A/B	MW-04	Appendix IV	Cobalt	mg/L	11	0%	2022-11-28 to 2024-04-07	Normal LCL	0.00038
Unit 3A/B	MW-04	Appendix IV	Fluoride (App IV)	mg/L	11	0%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	1.2
Unit 3A/B	MW-04	Appendix IV	Lead	mg/L	11	100%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.00010

Unit 3A/B	MW-04	Appendix IV	Lithium	mg/L	11	0%	2022-11-28 to 2024-04-07	Normal LCL	0.057
Unit 3A/B	MW-04	Appendix IV	Mercury	mg/L	11	100%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.00016
Unit 3A/B	MW-04	Appendix IV	Molybdenum	mg/L	11	18%	2022-11-28 to 2024-04-07	Normal MLE LCL	0.00058
Unit 3A/B	MW-04	Appendix IV	Radium 226 and 228	pCi/L	11	18%	2022-11-28 to 2024-04-07	Normal MLE LCL	0.87
Unit 3A/B	MW-04	Appendix IV	Selenium	mg/L	11	45%	2022-11-28 to 2024-04-07	Normal MLE LCL	0.000070
Unit 3A/B	MW-04	Appendix IV	Thallium	mg/L	11	100%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.000075
Unit 3A/B	MW-04	Part 115	Copper	mg/L	11	82%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.00020
Unit 3A/B	MW-04	Part 115	Iron	mg/L	11	0%	2022-11-28 to 2024-04-07	Normal LCL	5.6
Unit 3A/B	MW-04	Part 115	Nickel	mg/L	11	0%	2022-11-28 to 2024-04-07	Normal LCL	0.011
Unit 3A/B	MW-04	Part 115	Silver	mg/L	11	100%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.000050
Unit 3A/B	MW-04	Part 115	Vanadium	mg/L	11	91%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.00062
Unit 3A/B	MW-04	Part 115	Zinc	mg/L	11	73%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.0012
Unit 3A/B	MW-09	Appendix III	Boron	mg/L	11	0%	2022-11-28 to 2024-04-07	Normal LCL	5.5
Unit 3A/B	MW-09	Appendix III	Calcium	mg/L	11	0%	2022-11-28 to 2024-04-07	Normal LCL	320
Unit 3A/B	MW-09	Appendix III	Chloride (as Cl)	mg/L	11	0%	2022-11-28 to 2024-04-07	Normal LCL	13
Unit 3A/B	MW-09	Appendix III	Fluoride	mg/L	11	0%	2022-11-28 to 2024-04-07	Normal LCL	2.4
Unit 3A/B	MW-09	Appendix III	pH (field)	su	11	0%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	7.20
Unit 3A/B	MW-09	Appendix III	Sulfate (as SO4)	mg/L	11	0%	2022-11-28 to 2024-04-07	Normal LCL	300
Unit 3A/B	MW-09	Appendix III	Total Dissolved Solids	mg/L	11	0%	2022-11-28 to 2024-04-07	Normal LCL	1,200
Unit 3A/B	MW-09	Appendix IV	Antimony	mg/L	11	64%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.000092
Unit 3A/B	MW-09	Appendix IV	Arsenic	mg/L	11	0%	2022-11-28 to 2024-04-07	Normal LCL	0.0019
Unit 3A/B	MW-09	Appendix IV	Barium	mg/L	11	0%	2022-11-28 to 2024-04-07	Lognormal H-LCL	0.29
Unit 3A/B	MW-09	Appendix IV	Beryllium	mg/L	11	91%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.000052
Unit 3A/B	MW-09	Appendix IV	Cadmium	mg/L	11	100%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.000032
Unit 3A/B	MW-09	Appendix IV	Chromium, Total	mg/L	11	0%	2022-11-28 to 2024-04-07	Normal LCL	0.0021
Unit 3A/B	MW-09	Appendix IV	Cobalt	mg/L	11	0%	2022-11-28 to 2024-04-07	Normal LCL	0.00045
Unit 3A/B	MW-09	Appendix IV	Fluoride (App IV)	mg/L	11	0%	2022-11-28 to 2024-04-07	Normal LCL	2.4
Unit 3A/B	MW-09	Appendix IV	Lead	mg/L	11	100%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.00010
Unit 3A/B	MW-09	Appendix IV	Lithium	mg/L	11	0%	2022-11-28 to 2024-04-07	Normal LCL	0.29
Unit 3A/B	MW-09	Appendix IV	Mercury	mg/L	11	82%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.00016
Unit 3A/B	MW-09	Appendix IV	Molybdenum	mg/L	11	0%	2022-11-28 to 2024-04-07	Normal LCL	0.017
Unit 3A/B	MW-09	Appendix IV	Radium 226 and 228	pCi/L	11	91%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.69
Unit 3A/B	MW-09	Appendix IV	Selenium	mg/L	11	18%	2022-11-28 to 2024-04-07	Normal MLE LCL	0.00020
Unit 3A/B	MW-09	Appendix IV	Thallium	mg/L	11	100%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.000075
Unit 3A/B	MW-09	Part 115	Copper	mg/L	11	82%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.00020
Unit 3A/B	MW-09	Part 115	Iron	mg/L	11	0%	2022-11-28 to 2024-04-07	Normal LCL	18
Unit 3A/B	MW-09	Part 115	Nickel	mg/L	11	0%	2022-11-28 to 2024-04-07	Adjusted Gamma LCL	0.0016
Unit 3A/B	MW-09	Part 115	Silver	mg/L	11	100%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.000050
Unit 3A/B	MW-09	Part 115	Vanadium	mg/L	11	100%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.00062
Unit 3A/B	MW-09	Part 115	Zinc	mg/L	11	73%	2022-11-28 to 2024-04-07	Nonparametric LCL around the Median	0.0012
Unit 3A/B	MW-10	Appendix III	Boron	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	11
Unit 3A/B	MW-10	Appendix III	Calcium	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	210
Unit 3A/B	MW-10	Appendix III	Chloride (as Cl)	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	160
Unit 3A/B	MW-10	Appendix III	Fluoride	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	4.2
Unit 3A/B	MW-10	Appendix III	pH (field)	su	11	0%	2022-11-29 to 2024-04-07	Normal LCL	7.61
Unit 3A/B	MW-10	Appendix III	Sulfate (as SO4)	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	380
Unit 3A/B	MW-10	Appendix III	Total Dissolved Solids	mg/L	11	0%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	1,700
Unit 3A/B	MW-10	Appendix IV	Antimony	mg/L	11	64%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.00010
Unit 3A/B	MW-10	Appendix IV	Arsenic	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	0.00040
Unit 3A/B	MW-10	Appendix IV	Barium	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	0.23
Unit 1/2	MW-10	Appendix IV	Beryllium	mg/L	11	45%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median*	0.000052
Unit 3A/B	MW-10	Appendix IV	Cadmium	mg/L	11	100%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.000032
Unit 3A/B	MW-10	Appendix IV	Chromium, Total	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	0.0026
Unit 3A/B	MW-10	Appendix IV	Cobalt	mg/L	11	9%	2022-11-29 to 2024-04-07	Normal MLE LCL	0.00025
Unit 3A/B	MW-10	Appendix IV	Fluoride (App IV)	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	4.2
Unit 3A/B	MW-10	Appendix IV	Lead	mg/L	11	82%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.00012
Unit 3A/B	MW-10	Appendix IV	Lithium	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	0.77
Unit 3A/B	MW-10	Appendix IV	Mercury	mg/L	11	91%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.00016
Unit 3A/B	MW-10	Appendix IV	Molybdenum	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	0.0024
Unit 3A/B	MW-10	Appendix IV	Radium 226 and 228	pCi/L	11	82%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.65
Unit 3A/B	MW-10	Appendix IV	Selenium	mg/L	11	9%	2022-11-29 to 2024-04-07	Gamma MLE Bootstrap LCL	0.00031
Unit 3A/B	MW-10	Appendix IV	Thallium	mg/L	11	100%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.000075
Unit 3A/B	MW-10	Part 115	Copper	mg/L	11	73%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.00020
Unit 3A/B	MW-10	Part 115	Iron	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	3.8
Unit 3A/B	MW-10	Part 115	Nickel	mg/L	11	45%	2022-11-29 to 2024-04-07	Gamma MLE Bootstrap LCL	0.00053
Unit 3A/B	MW-10	Part 115	Silver	mg/L	11	100%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.000050
Unit 3A/B	MW-10	Part 115	Vanadium	mg/L	11	91%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.00062
Unit 3A/B	MW-10	Part 115	Zinc	mg/L	11	36%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.0012
Unit 3A/B	MW-11	Appendix III	Boron	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	3.8
Unit 3A/B	MW-11	Appendix III	Calcium	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	230
Unit 3A/B	MW-11	Appendix III	Chloride (as Cl)	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	59
Unit 3A/B	MW-11	Appendix III	Fluoride	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	0.40
Unit 3A/B	MW-11	Appendix III	pH (field)	su	11	0%	2022-11-29 to 2024-04-07	Normal LCL	7.31
Unit 3A/B	MW-11	Appendix III	Sulfate (as SO4)	mg/L	11	18%	2022-11-29 to 2024-04-07	Gamma MLE Bootstrap LCL	19
Unit 3A/B	MW-11	Appendix III	Total Dissolved Solids	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	940
Unit 3A/B	MW-11	Appendix IV	Antimony	mg/L	11	64%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.000082
Unit 3A/B	MW-11	Appendix IV	Arsenic	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	0.0011

Unit 3A/B	MW-11	Appendix IV	Barium	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	0.52
Unit 3A/B	MW-11	Appendix IV	Beryllium	mg/L	11	82%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.000052
Unit 3A/B	MW-11	Appendix IV	Cadmium	mg/L	11	82%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.000032
Unit 3A/B	MW-11	Appendix IV	Chromium, Total	mg/L	11	0%	2022-11-29 to 2024-04-07	Lognormal H-LCL	0.00091
Unit 3A/B	MW-11	Appendix IV	Cobalt	mg/L	11	0%	2022-11-29 to 2024-04-07	Adjusted Gamma LCL	0.00048
Unit 3A/B	MW-11	Appendix IV	Fluoride (App IV)	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	0.40
Unit 3A/B	MW-11	Appendix IV	Lead	mg/L	11	27%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.00031
Unit 3A/B	MW-11	Appendix IV	Lithium	mg/L	11	0%	2022-11-29 to 2024-04-07	Adjusted Gamma LCL	0.042
Unit 3A/B	MW-11	Appendix IV	Mercury	mg/L	11	91%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.00016
Unit 3A/B	MW-11	Appendix IV	Molybdenum	mg/L	11	18%	2022-11-29 to 2024-04-07	Normal MLE LCL	0.00066
Unit 3A/B	MW-11	Appendix IV	Radium 226 and 228	pCi/L	11	27%	2022-11-29 to 2024-04-07	Normal MLE LCL	0.72
Unit 3A/B	MW-11	Appendix IV	Selenium	mg/L	11	27%	2022-11-29 to 2024-04-07	Normal MLE LCL	0.00010
Unit 3A/B	MW-11	Appendix IV	Thallium	mg/L	11	91%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.000075
Unit 3A/B	MW-11	Part 115	Copper	mg/L	11	27%	2022-11-29 to 2024-04-07	Gamma MLE Bootstrap LCL	0.00037
Unit 3A/B	MW-11	Part 115	Iron	mg/L	11	0%	2022-11-29 to 2024-04-07	Normal LCL	5.2
Unit 3A/B	MW-11	Part 115	Nickel	mg/L	11	0%	2022-11-29 to 2024-04-07	Lognormal H-LCL	0.0014
Unit 3A/B	MW-11	Part 115	Silver	mg/L	11	82%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.000050
Unit 3A/B	MW-11	Part 115	Vanadium	mg/L	11	82%	2022-11-29 to 2024-04-07	Nonparametric LCL around the Median	0.00062
Unit 3A/B	MW-11	Part 115	Zinc	mg/L	11	27%	2022-11-29 to 2024-04-07	Gamma MLE Bootstrap LCL	0.0049
Unit 3A/B	MW-12	Appendix III	Boron	mg/L	11	0%	2022-11-28 to 2024-04-08	Normal LCL	0.24
Unit 3A/B	MW-12	Appendix III	Calcium	mg/L	11	0%	2022-11-28 to 2024-04-08	Normal LCL	55
Unit 3A/B	MW-12	Appendix III	Chloride (as Cl)	mg/L	11	0%	2022-11-28 to 2024-04-08	Normal LCL	16
Unit 3A/B	MW-12	Appendix III	Fluoride	mg/L	11	0%	2022-11-28 to 2024-04-08	Normal LCL	0.28
Unit 3A/B	MW-12	Appendix III	pH (field)	su	11	0%	2022-11-28 to 2024-04-08	Normal LCL	7.53
Unit 3A/B	MW-12	Appendix III	Sulfate (as SO4)	mg/L	11	0%	2022-11-28 to 2024-04-08	Normal LCL	100
Unit 3A/B	MW-12	Appendix III	Total Dissolved Solids	mg/L	11	0%	2022-11-28 to 2024-04-08	Normal LCL	210
Unit 3A/B	MW-12	Appendix IV	Antimony	mg/L	11	0%	2022-11-28 to 2024-04-08	Normal LCL	0.00053
Unit 3A/B	MW-12	Appendix IV	Arsenic	mg/L	11	0%	2022-11-28 to 2024-04-08	Normal LCL	0.0019
Unit 3A/B	MW-12	Appendix IV	Barium	mg/L	11	0%	2022-11-28 to 2024-04-08	Normal LCL	0.024
Unit 3A/B	MW-12	Appendix IV	Beryllium	mg/L	11	100%	2022-11-28 to 2024-04-08	Nonparametric LCL around the Median	0.000052
Unit 3A/B	MW-12	Appendix IV	Cadmium	mg/L	11	0%	2022-11-28 to 2024-04-08	Normal LCL	0.00087
Unit 3A/B	MW-12	Appendix IV	Chromium, Total	mg/L	11	36%	2022-11-28 to 2024-04-08	Normal MLE LCL	0.000094
Unit 3A/B	MW-12	Appendix IV	Cobalt	mg/L	11	45%	2022-11-28 to 2024-04-08	Nonparametric LCL around the Median*	0.00010
Unit 3A/B	MW-12	Appendix IV	Fluoride (App IV)	mg/L	11	0%	2022-11-28 to 2024-04-08	Normal LCL	0.28
Unit 3A/B	MW-12	Appendix IV	Lead	mg/L	11	55%	2022-11-28 to 2024-04-08	Nonparametric LCL around the Median	0.00015
Unit 3A/B	MW-12	Appendix IV	Lithium	mg/L	11	0%	2022-11-28 to 2024-04-08	Normal LCL	0.0028
Unit 3A/B	MW-12	Appendix IV	Mercury	mg/L	11	82%	2022-11-28 to 2024-04-08	Nonparametric LCL around the Median	0.00016
Unit 3A/B	MW-12	Appendix IV	Molybdenum	mg/L	11	0%	2022-11-28 to 2024-04-08	Normal LCL	0.0061
Unit 3A/B	MW-12	Appendix IV	Radium 226 and 228	pCi/L	11	73%	2022-11-28 to 2024-04-08	Nonparametric LCL around the Median	0.52
Unit 3A/B	MW-12	Appendix IV	Selenium	mg/L	11	0%	2022-11-28 to 2024-04-08	Normal LCL	0.00069
Unit 3A/B	MW-12	Appendix IV	Thallium	mg/L	11	100%	2022-11-28 to 2024-04-08	Nonparametric LCL around the Median	0.000075
Unit 3A/B	MW-12	Part 115	Copper	mg/L	11	0%	2022-11-28 to 2024-04-08	Normal LCL	0.00091
Unit 3A/B	MW-12	Part 115	Iron	mg/L	11	55%	2022-11-28 to 2024-04-08	Nonparametric LCL around the Median	0.026
Unit 3A/B	MW-12	Part 115	Nickel	mg/L	11	0%	2022-11-28 to 2024-04-08	Normal LCL	0.0020
Unit 3A/B	MW-12	Part 115	Silver	mg/L	11	100%	2022-11-28 to 2024-04-08	Nonparametric LCL around the Median	0.000050
Unit 3A/B	MW-12	Part 115	Vanadium	mg/L	11	55%	2022-11-28 to 2024-04-08	Nonparametric LCL around the Median	0.00062
Unit 3A/B	MW-12	Part 115	Zinc	mg/L	11	0%	2022-11-28 to 2024-04-08	Normal LCL	0.0058

* While one or more parametric distributions fit the data, nonparametric methods were used to computed confidence limits due to non-convergence or negative LCLs.